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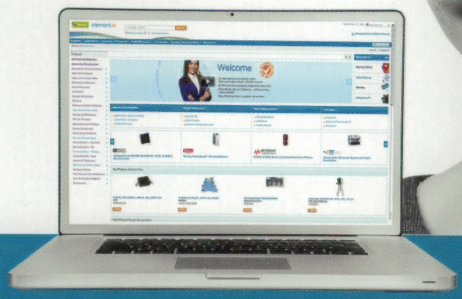

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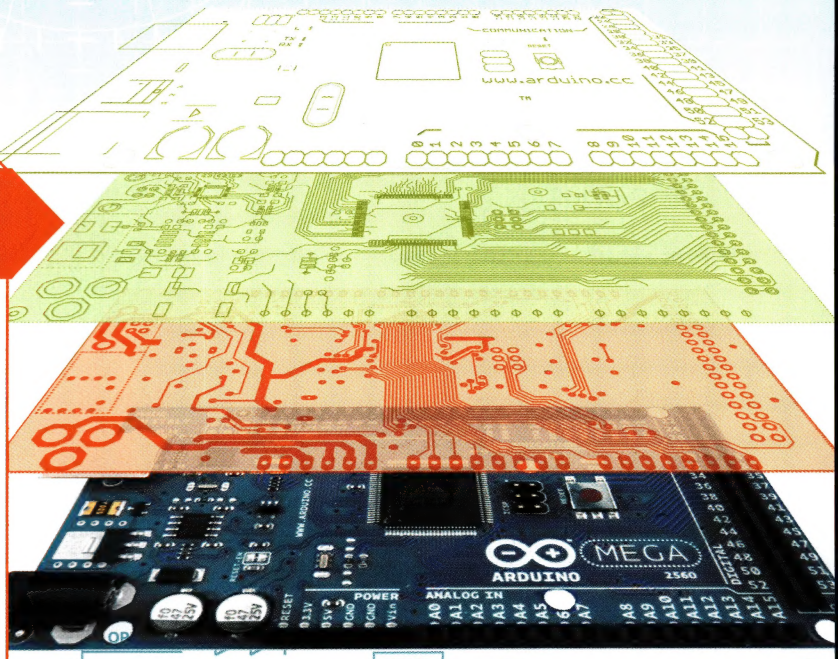

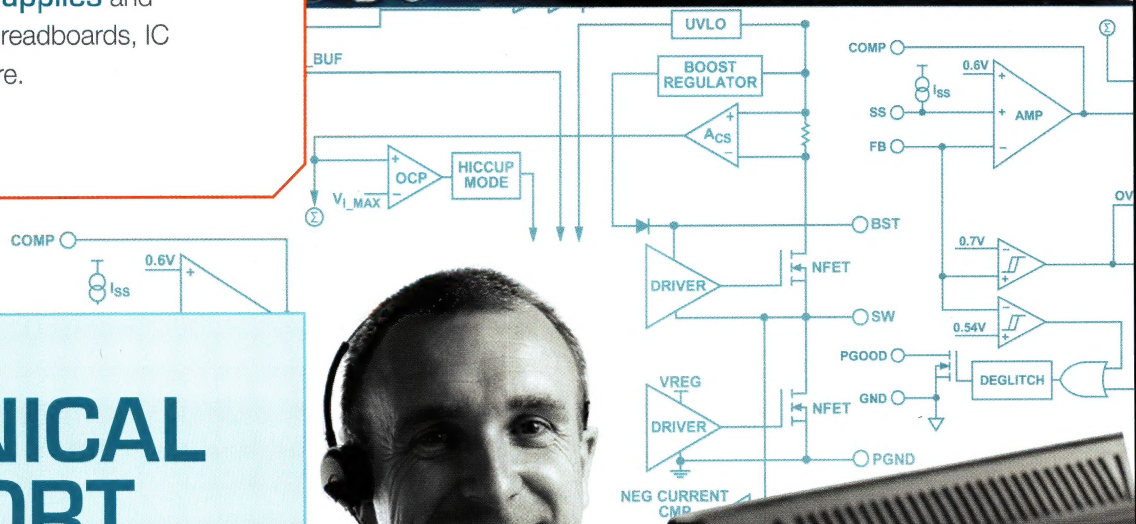

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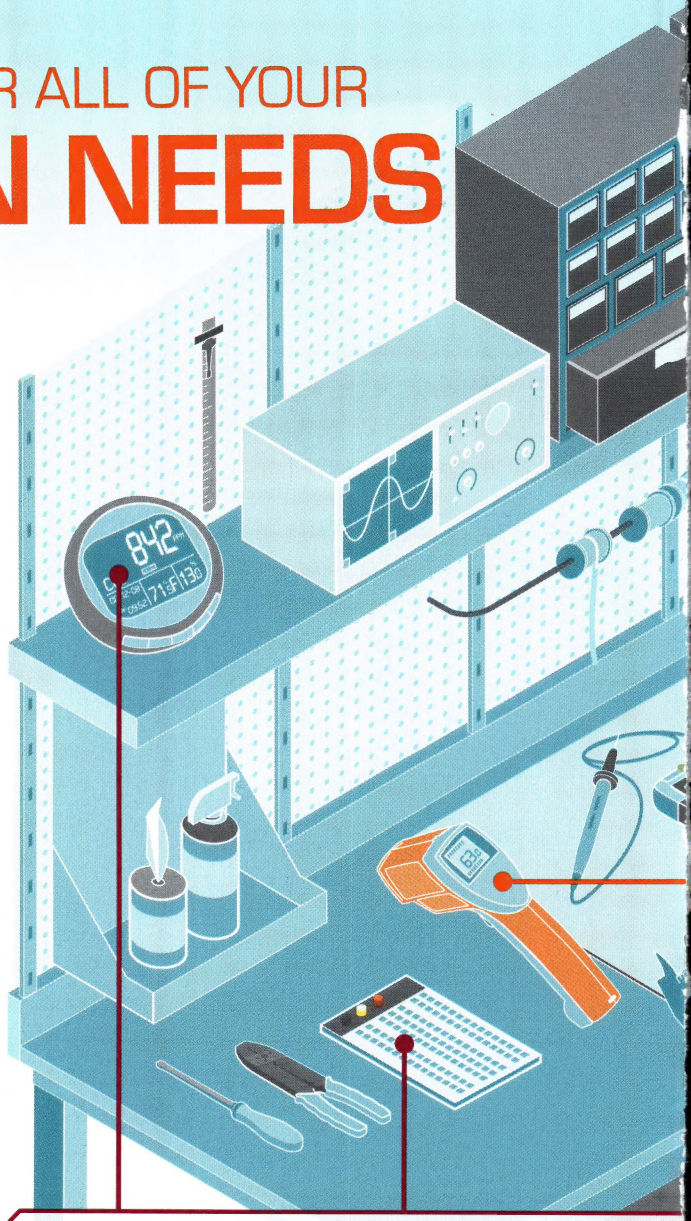

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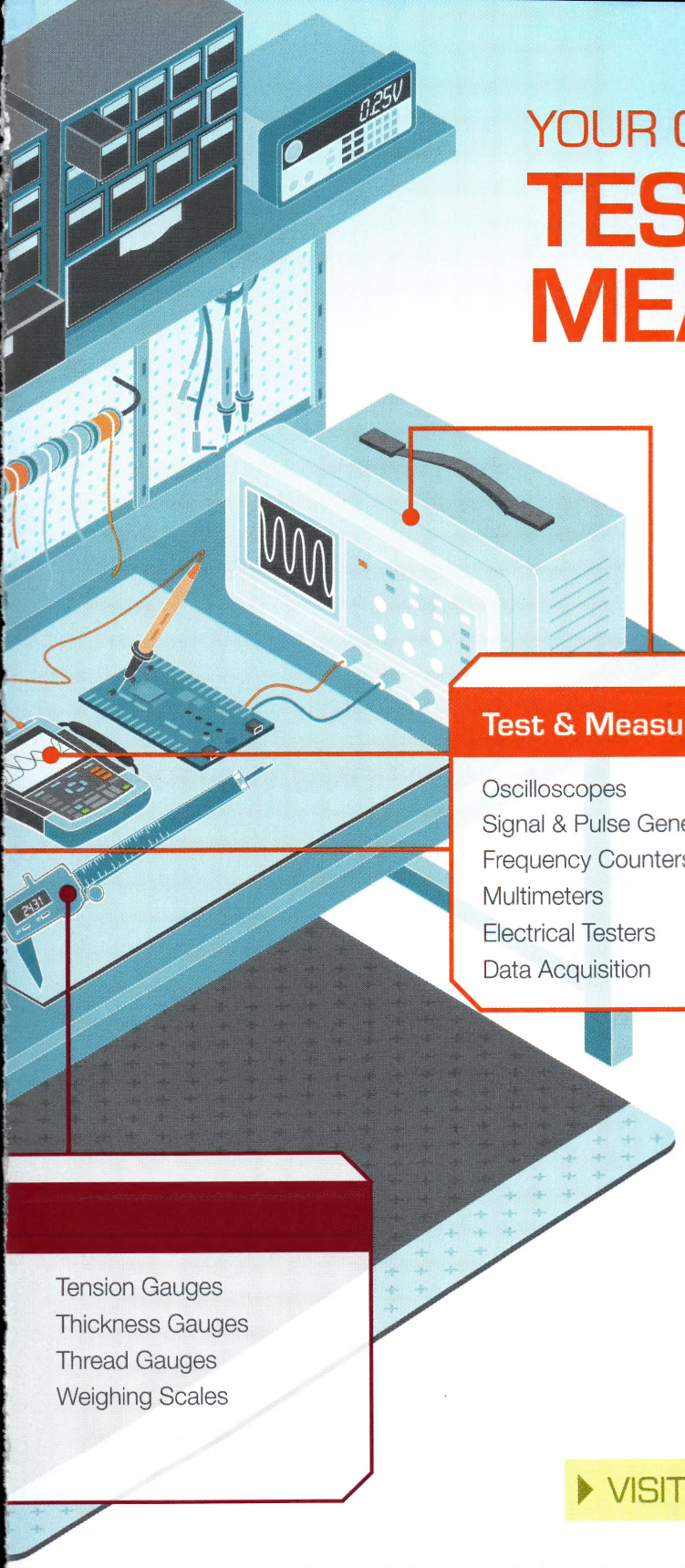

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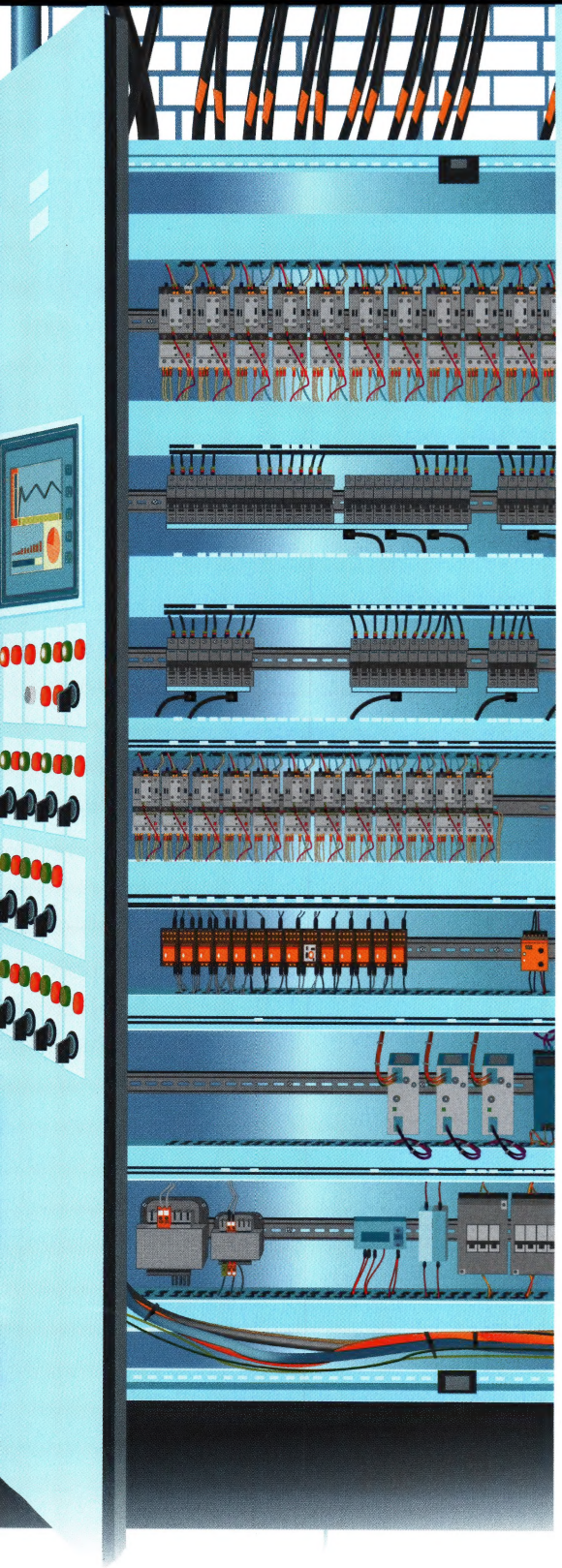

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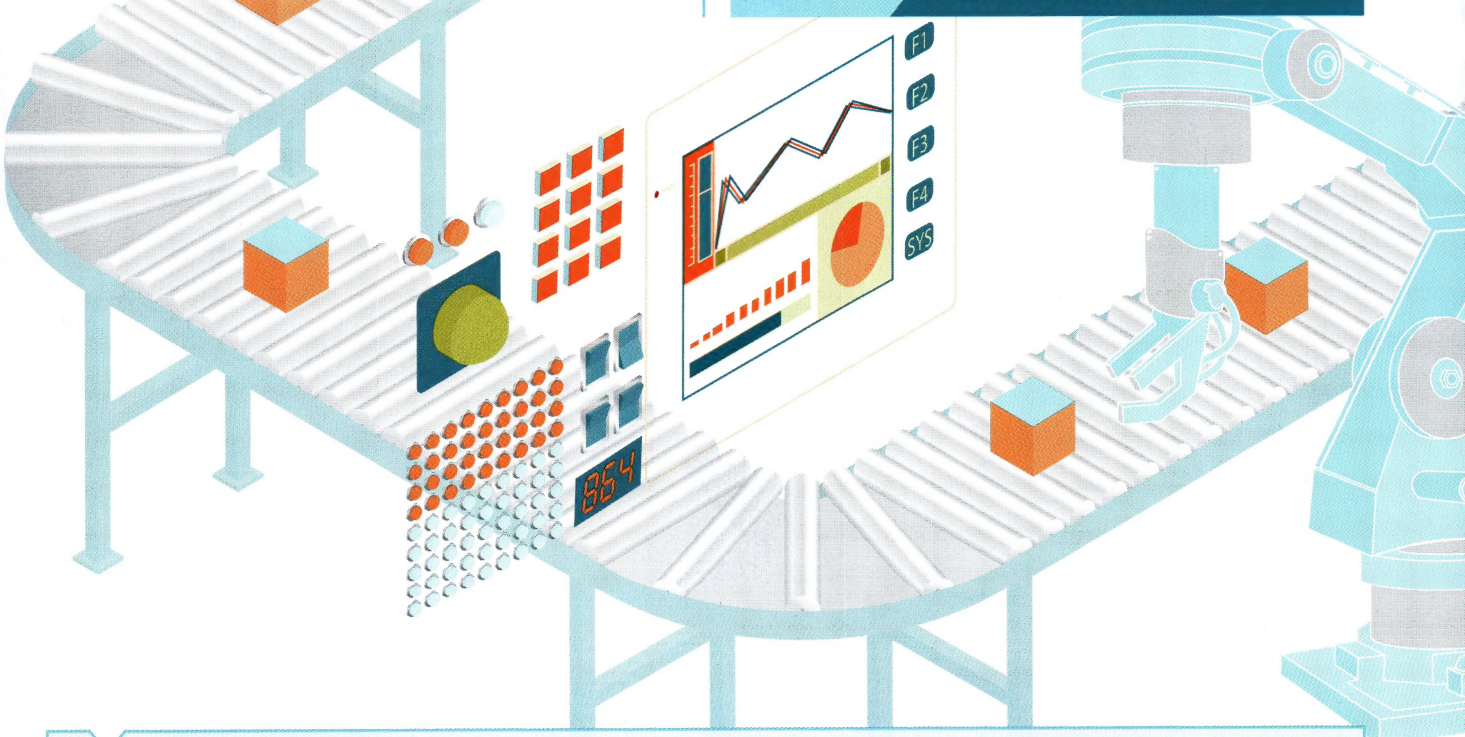

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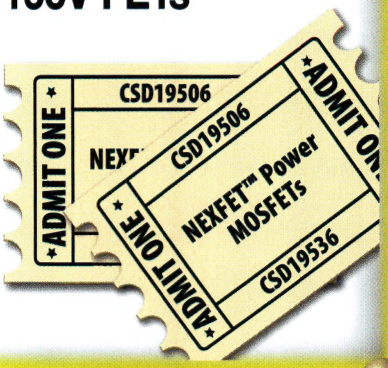

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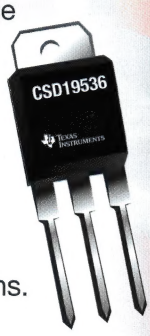

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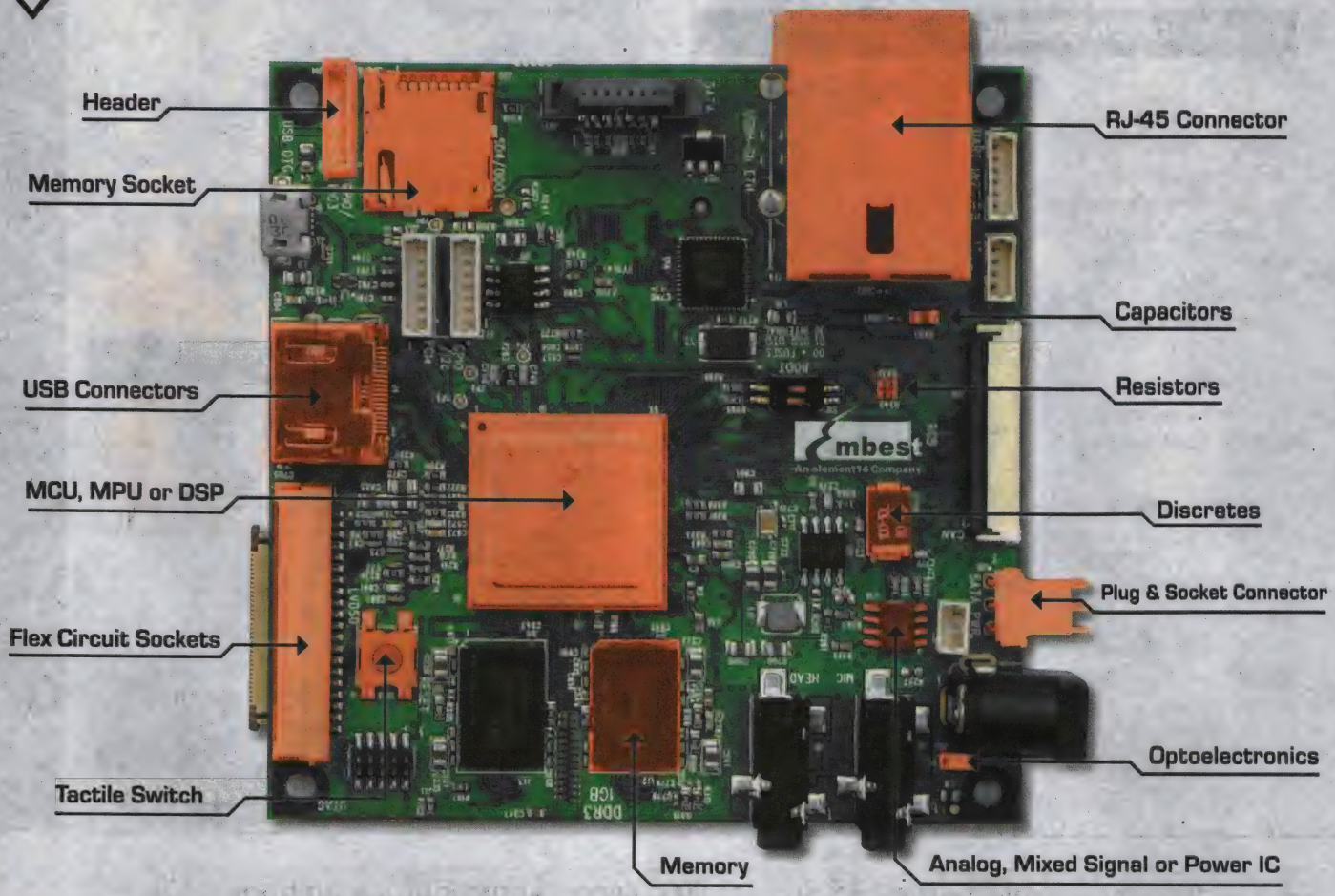

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		PIC16
		PIC18
	16-bit	PIC24F
		dsPIC30F
		dsPIC33F/E
	32-bit	PIC32
freescale	8-bit	SO8
		RS08
		HC08
		8bit Intelligent Distributed Controllers
		HC05
		HC11
	16-bit	S12 MAGNiv
		HCS12&S12X
		HC12
		HC16
	32-bit	Qorivva
		mobileGT
		Kinetis
		i.MX
		Vybrid
Atmel	8-bit	AVR
		AT83
		AT89
		AT80
	32-bit	AVRU3
		SAM3x
		SAM D20
		SAM G
		SAM4x
		SAM7x
		SAM9x
Texas Instruments	16-bit	MSP430
	32-bit	C2000
		Tiva
		Hercules
NXP	8-bit	LPC900
		LPC700
		80C51
	16-bit	XA
	32-bit	LPC
ST	8-bit	STM8
		ST6
		ST7
		ST9
	16-bit	ST10
	32-bit	STM32
		ST40
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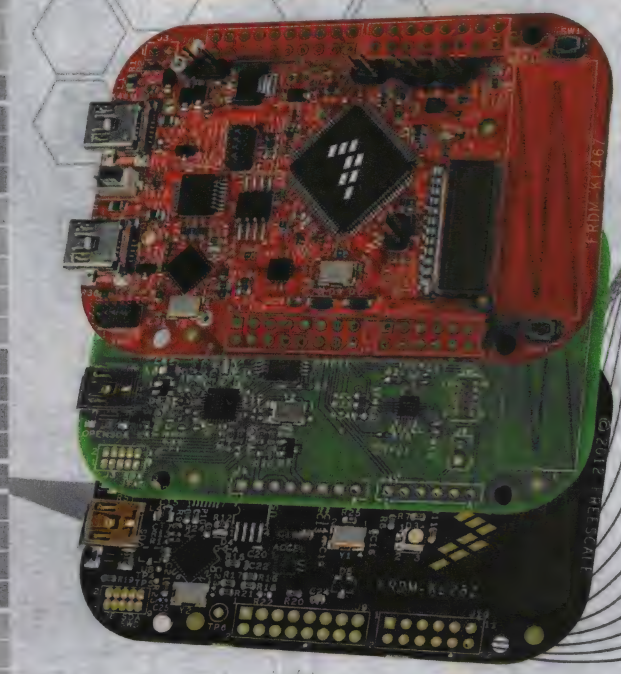

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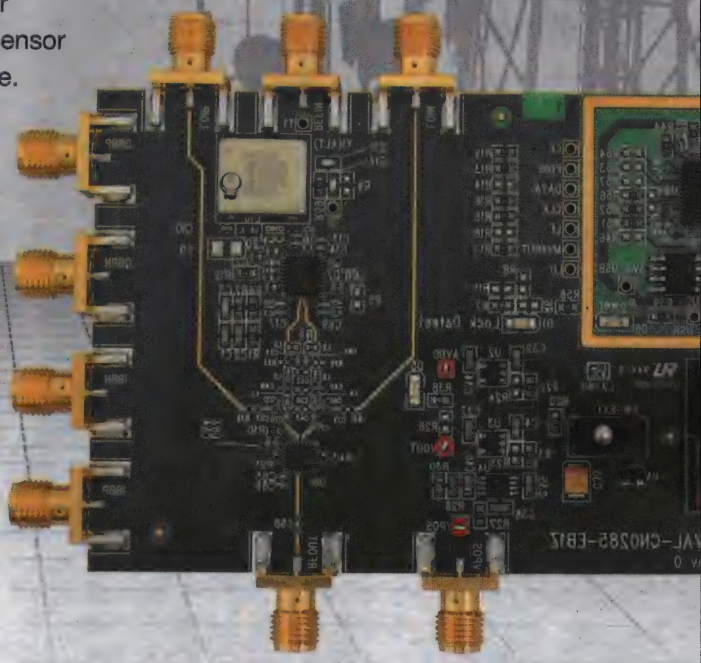

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1

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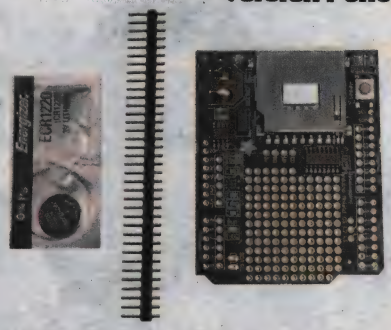

An inexpensive but well-rounded Arduino data logging shield. Not only is it easy to assemble and customize, it also comes with great documentation and libraries. The sheild now comes with all the components soldered on and tested but does not have headers installed. You'll need some basic soldering skills to put it together, but even if you don't have much experience you can get it done in under 15 minutes.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
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(210343)

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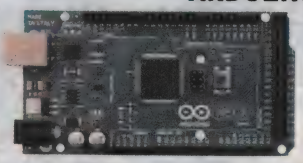
RoHS Compliant Available

ARDUINO

Arduino is an open-source electronics prototyping platform based on flexible, easy-to-use hardware and software. Boards come with defferent controllers and features. Additional functionalities can be added with premade shields (daugther cards) or a designer can make custom shields with the available prototyping shields.



ARDUINO BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
● A000066	ARDUINO UNO R3, ATMEGA328 DIP	78T1601	27.27
● A000073	ARDUINO UNO R3, ATMEGA328 SMD	63W3545	28.32
● A000052	ARDUINO LEONARDO R3 NO HEADERS, ATMEGA32U4	07W3935	23.08
● A000057	ARDUINO LEONARDO R3, ATMEGA32U4	07W3936	25.17
A000005	ARDUINO NANO, ATMEGA328	13T9275	47.20
● A000067	ARDUINO MEGA 2560 R3, ATMEGA2560	45W6205	48.25
● A000069	ARDUINO ANDROID ADK R3, ATMEGA2560	45W6207	75.52
● A000062	ARDUINO DUE, SAM3X8E ARM Cortex-M3	47W2961	49.99
● A000053	ARDUINO MICRO, ATMEGA32U4	63W3544	25.17
● A000093	ARDUINO MICRO NO HEADERS, ATMEGA32U4	63W3548	23.08
● A000095	ARDUINO ESPLORA, ATMEGA32U4	63W3549	65.03
● A000061	ARDUINO ETHERNET R2 W/ USB2SERIAL + POE	78T1598	96.07
● A000068	ARDUINO ETHERNET R3	45W6206	58.74
● A000074	ARDUINO ETHERNET R3 + POE MODULE	45W6209	83.70
ARDUINO KITS INCLUDES ARDUINO BOARDS			
A000010	Arduino UNO 65pcs Workshop Set	13T9277	84.40
● K000007	Arduino UNO 219pcs Starter Lab Set	47W2965	115.61
● K000005	Tinkerkit Sensor 150pcs Set	78T2134	1572.96
ARDUINO SHIELDS DO NOT INCLUDE ARDUINO BOARDS			
● A000082	PROTOSHIELD R3, BLANK PCB	76T4685	4.20
● A000083	PROTOSHIELD R3, BLANK PCB + KIT	44W8114	11.33
A000039	MEGA PROTOSHIELD R2, BLANK PCB + KIT	13T9284	13.22
● A000080	MEGA PROTOSHIELD R3, BLANK PCB	63W3546	4.72
● A000081	MEGA PROTOSHIELD R3, BLANK PCB + KIT	63W3547	11.54
● A000065	WIRELESS PROTO SHIELD R2, W/ SD CRD SLOT	78T1600	27.27
● A000058	WIFI SHIELD R3, INT ANT	45W6204	109.08
● A000079	MOTOR SHIELD R3, L298P	78T1603	28.32
ARDUINO ACCESSORIES			
A000036	Arduino, Making Things Talk Book	13T9282	35.12
A000009	Enclosure for UNO or Mega w/ Ethernet Shield	13T9276	10.28

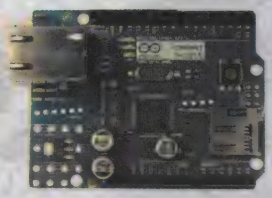
(194890)

ARDUINO ETHERNET SHIELD

RoHS Compliant Available

ARDUINO

Ethernet Shield connects your Arduino to the internet in mere minutes. Just plug this module onto your Arduino board, connect it to your network with an RJ45 cable (not included) and follow a few simple instructions to start controlling your world through the internet. As always with Arduino, every element of the platform – hardware, software and documentation – is freely available and open-source. This means you can learn exactly how it's made and use its design as the starting point for your own circuits.



Mfg. Part No.	Description	Stock No.	Price Each
● A000072	W5100 ENET SHIELD R3, NO POE	45W6208	41.54
● A000075	W5100 ENET SHIELD R3, W/POE	45W6210	66.92

(207478)

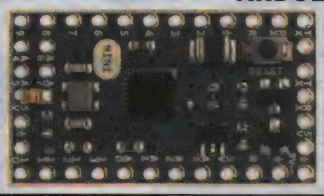
ARDUINO MINI 05

RoHS Compliant Available

ARDUINO

Features
- 14 digital input/output pins (6 can be used as PWM outputs)
- 8 analog inputs
- 16 MHz crystal oscillator

The **Arduino Mini** is a small microcontroller board intended for use on breadboards and when space is at a premium. The revision 05 has a new package for the ATmega328, which enables all components to be on the top of the board. Besides an onboard reset button, the 05 version has the same pin configuration as revision 04 and is sold with the pre-soldered pin headers on the two long sides.



Mfg. Part No.	Description	Stock No.	Price Each
● A000087	ARDUINO MINI 05 W/ HEADERS	07W3937	20.98
● A000088	ARDUINO MINI 05 W/O HEADERS	07W3938	15.74

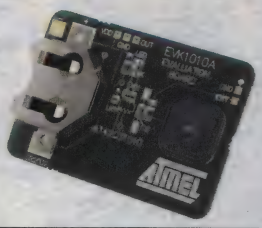
(208175)

TOUCH SENSOR CONTROLLER EVALUATION KITS

RoHS Compliant Available

Atmel

Touch sensor evaluation kits allow the user to evaluate all functions of their corresponding touch sensor controller. The kits provide a convenient reference design and allows the user to visualize discrete touch buttons and LEDs for per channel touch indication. There are movable jumpers on the board so that the Adjacent Key Suppression® (AKS®) functionality and speed settings can be evaluated. The kits are battery powered and work stand-alone. For the EVK1040A: Connections are included on the board which can be used to access debug data from the chip. The EVK1060A and EVK2160A can be connected to a PC using the 9206 USB Plug-in card.



Mfg. Part No.	Supported Devices	Stock No.	Price Each
● ATEVK1012A	AT42QT1012	68T2353	18.80
● EVK1060A	AT42QT1060	70T7040	76.25

USB PLUG-IN CARD

Mfg. Part No.	Description	Stock No.	Price Each
● AT9206 USBPLUGINCARD	9206 USB Plug-in Card	68T5236	30.00

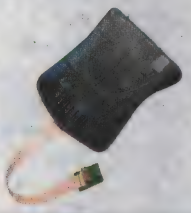
(177525)

JTAGICE MKII MID-RANGE DEVELOPMENT TOOL FOR 8 AND 32-BIT AVR DEVICES WITH ON-CHIP DEBUGGING

RoHS Compliant Available

Atmel

The **AVR® JTAGICE mkII** is a powerful development tool for On-chip Debugging of all AVR 8-bit RISC microcontrollers with IEEE 1149.1 compliant JTAG interface or debugWIRE interface. DebugWIRE enables on chip debug of AVR microcontrollers in small pin count packages, using only a single wire for the debug interface. The **JTAGICE mkII** and the AVR Studio® user interface give the user complete control of the internal resources of the microcontroller, helping to reduce development time by making debugging easier.



Mfg. Part No.	Description	Stock No.	Price Each
● ATJTAGICE2	AVR JTAGICE mkII On-chip Debug System	68T2494	436.25

(197952)

COMPLETE TOUCH DEVELOPMENT KIT FOR BUTTONS, SLIDERS, AND WHEELS

RoHS Compliant Available

Atmel

The **ATQT600** is a complete touch development kit for buttons, sliders, and wheels. It allows designers to experiment with touch technology and serves as the easiest way to analyse and validate touch products. Both QTouch® and QMatrix® acquisition methods are supported. The kit uses QTouch Studio as its front-end software. It includes a USB-powered interface board, three MCU boards (ATtiny88, ATmega324PA, and ATxmega128A1), three sensor boards that support up to 64-channels, and cables.

Mfg. Part No.	Description	Stock No.	Price Each
ATQT600	QT600 Complete Touch Development Kit	68T3304	217.50

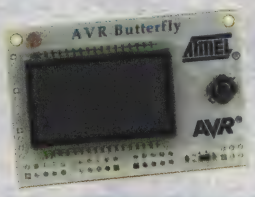
(197954)

AVR BUTTERFLY EVALUATION KIT

RoHS Compliant Available

Atmel

AVR Butterfly is an evaluation tool demonstrating the capabilities of the latest AVR Technology. The tool is shipped with preloaded firmware supporting temperature sensing, light measurement, voltage readings and music playback. AVR Butterfly can also be used as a nametag. AVR Butterfly can be reprogrammed from AVR Studio using just a serial cable. This allows the tool to be used as a development kit for the onboard ATmega169PV, or even as target hardware for simple applications.



Mfg. Part No.	Description	Stock No.	Price Each
ATAVRBFLY	AVR Butterfly Evaluation Kit	68T2059	21.25

(177508)

AVR EVALUATION KIT FOR AT90CAN128/6

RoHS Compliant Available

Atmel

The **ATDVK90CAN1** is a development kit for AT90CAN AVR microcontrollers. The board is designed to easily evaluate the product using demonstration software. To complement evaluation and enable additional development, the board can also be plugged into the STK500 starter kit. The standalone board has numerous serial interfaces (dual RS232, CAN, LIN, SPI & TWI) and resources such as keyboard, LEDs, voltage reading, light and temperature sensors, and speaker.

Mfg. Part No.	Description	Stock No.	Price 1-24
ATDVK90CAN1	ATDVK90CAN1 Development Kit	68T2349	115.00

(197938)

STK500 AVR STARTER KIT

RoHS Compliant Available

Atmel

STK500 starter kit and development system for AVR Flash microcontrollers enables designers to quickly begin AVR code development, engineer prototypes, and test new designs. The kit interfaces with AVR Studio an Integrated Development Environment (IDE) for code writing and debugging.

Mfg. Part No.	Description	Stock No.	Price Each
ATSTK500	STK500 Starter Kit	68T3407	81.42

(197940)

megaAVR® SERIES 8-BIT MCUs

RoHS Compliant Available

Atmel

megaAVR family offers the widest selection of devices in terms of memories, pin counts and peripherals and offers substantial program and data memories, as well as performance approaching 1 MIPS per MHz. Built-in support for in-system programming and on-chip debug is also included.

Mfg. Part No.	Flash (KB)	RAM (KB)	EEPROM (Byte)	CPU Freq (MHz)	I/O (Pins)	PWM (Ch)	Timers	Interface	Peripherals	Pkg.	Stock No.	Price Each 1-9
ATMEGA48-20AU	4	0.512	256	20	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC	32-TQFP	68T2999	2.73
ATMEGA48-20MMH	4	0.512	256	20	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC	32-VQFN	68T3001	3.50
ATMEGA48-20MMU	4	0.512	256	20	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC	32-VQFN	68T3002	3.50
ATMEGA48-20MU	4	0.512	256	20	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC	32-VQFN	68T3003	2.73
ATMEGA48-20PU	4	0.512	256	20	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC	28-PDIP	68T3005	2.84
ATMEGA48A-AU	4	0.512	256	20	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC, Temp. Sensor	32-TQFP	68T3006	2.04
ATMEGA48A-MMHR	4	0.512	256	20	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC, Temp. Sensor	32-VQFN	72T3145	2.66
ATMEGA48A-MU	4	0.512	256	20	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC, Temp. Sensor	32-VQFN	68T3010	1.94
ATMEGA48A-PU	4	0.512	256	20	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC, Temp. Sensor	28-PDIP	68T3012	2.16
ATMEGA48V-10AU	4	0.512	256	10	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC	32-TQFP	68T3043	2.73
ATMEGA48V-10MMH	4	0.512	256	10	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC	32-VQFN	68T3045	3.50
ATMEGA48V-10MMUR	4	0.512	256	10	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC	32-VQFN	72T3146	3.63
ATMEGA48V-10MU	4	0.512	256	10	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC	32-VQFN	68T3048	2.88
ATMEGA48V-10PU	4	0.512	256	10	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC	28-PDIP	68T3050	2.99
ATMEGA8515-16AU	8	0.512	512	16	35	3	2	SPI, UART	...	44-TQFP	68T3219	3.96
ATMEGA8515-16JU	8	0.512	512	16	35	3	2	SPI, UART	...	44-PLCC	68T3221	3.87
ATMEGA8515-16PU	8	0.512	512	16	35	3	2	SPI, UART	...	40-PDIP	68T3225	4.03
ATMEGA8515L-8AU	8	0.512	512	8	35	3	2	SPI, UART	...	44-TQFP	68T3226	3.76
ATMEGA8515L-8JU	8	0.512	512	8	35	3	2	SPI, UART	...	44-PLCC	68T3228	4.08
ATMEGA8515L-8PU	8	0.512	512	8	35	3	2	SPI, UART	...	40-PDIP	68T3232	4.03
ATMEGA8535-16AU	8	0.512	512	16	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	44-TQFP	68T3233	4.21
ATMEGA8535-16JU	8	0.512	512	16	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	44-PLCC	68T3235	4.37
ATMEGA8535-16PU	8	0.512	512	16	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	40-PDIP	68T3239	4.37
ATMEGA8535L-8AU	8	0.512	512	8	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	44-TQFP	68T3240	4.27
ATMEGA8535L-8JU	8	0.512	512	8	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	44-PLCC	68T3242	4.37
ATMEGA8535L-8MU	8	0.512	512	8	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	44-VQFN	68T3244	4.21
ATMEGA8535L-8PU	8	0.512	512	8	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	40-PDIP	68T3246	4.37
ATMEGA8-16AU	8	1	512	16	23	3	3	I2C, SPI, UART	ADC, Comparator, RTC	32-TQFP	68T3193	3.69
ATMEGA8-16MU	8	1	512	16	23	3	3	I2C, SPI, UART	ADC, Comparator, RTC	32-VQFN	68T3195	3.55
ATMEGA8-16PU	8	1	512	16	23	3	3	I2C, SPI, UART	ADC, Comparator, RTC	28-PDIP	68T3197	3.86
ATMEGA88-20AU	8	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC	32-TQFP	68T3255	4.09
ATMEGA88-20MU	8	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC	32-VQFN	68T3257	4.01
ATMEGA88-20PU	8	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC	28-PDIP	68T3259	3.96
ATMEGA88A-AU	8	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC, Temp. Sensor	32-TQFP	68T3260	2.25

CONTINUED

megaAVR® SERIES 8-BIT MCUs (CONT.)

Mfg. Part No.	Flash (KB)	RAM (KB)	EEPROM (Byte)	CPU Freq (MHz)	I/O (Pins)	PWM (Ch)	Timers	Interface	Peripherals	Pkg.	Stock No.	Price Each 1-9
● ATMEGA88A-MMHR	8	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC, Temp. Sensor	32-VQFN	72T3158	2.90
● ATMEGA88A-MU	8	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC, Temp. Sensor	32-VQFN	68T3265	2.13
● ATMEGA88A-PU	8	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC, Temp. Sensor	28-PDIP	68T3267	2.33
● ATMEGA88V-10AU	8	1	512	10	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC	32-TQFP	68T3296	3.85
● ATMEGA88V-10MU	8	1	512	10	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC	32-VQFN	68T3298	3.85
● ATMEGA88V-10PU	8	1	512	10	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC	28-PDIP	68T3300	4.84
● ATMEGA8A-AU	8	1	512	16	23	3	3	I2C, SPI, UART	ADC, Comparator, RTC	32-TQFP	68T3200	3.39
● ATMEGA8A-MU	8	1	512	16	23	3	3	I2C, SPI, UART	ADC, Comparator, RTC	32-VQFN	68T3204	3.22
● ATMEGA8A-PU	8	1	512	16	23	3	3	I2C, SPI, UART	ADC, Comparator, RTC	28-DIP	68T3207	3.46
● ATMEGA8L-8AU	8	1	512	8	23	3	3	I2C, SPI, UART	ADC, Comparator, RTC	32-TQFP	68T3210	3.55
● ATMEGA8L-8MU	8	1	512	8	23	3	3	I2C, SPI, UART	ADC, Comparator, RTC	32-VQFN	68T3212	3.55
● ATMEGA8L-8PU	8	1	512	8	23	3	3	I2C, SPI, UART	ADC, Comparator, RTC	28-PDIP	68T3214	3.86
● ATMEGA88-20AUR	8	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, Timer	32-TQFP	87W8117	3.96
● ATMEGA8A-AUR	8	1	512	16	23	3	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	32-TQFP	87W8115	3.53
● ATMEGA8L-8AUR	8	1	512	8	23	3	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	32-TQFP	87W8116	3.66
● ATMEGA16HVA-4TU	16	0.512	256	4	6	...	2	SPI	ADC, Temp. Sensor	28-TSOP	68T2583	9.37
● ATMEGA16U2-AU	16	0.512	512	16	22	4	2	QSPI, UART, USB	Comparator, PWM, Timer, Counter	32-TQFP	68T2598	3.93
● ATMEGA16-16AQR	16	1	512	16	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	44-TQFP	72T3109	8.66
● ATMEGA16-16AU	16	1	512	16	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	44-TQFP	68T2570	7.00
● ATMEGA16-16MQR	16	1	512	16	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	44-VQFN	72T3110	8.66
● ATMEGA16-16MU	16	1	512	16	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	44-VQFN	68T2574	8.24
● ATMEGA16-16PU	16	1	512	16	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	40-DIP	68T2576	6.84
● ATMEGA162-16AU	16	1	512	16	35	6	4	SPI, UART	Comparator, RTC	44-TQFP	68T2606	6.67
● ATMEGA162-16MU	16	1	512	16	35	6	4	SPI, UART	Comparator, RTC	44-VQFN	68T2608	6.67
● ATMEGA162-16PU	16	1	512	16	35	6	4	SPI, UART	Comparator, RTC	40-PDIP	68T2610	7.12
● ATMEGA162V-8AU	16	1	512	8	35	6	4	SPI, UART	Comparator, RTC	44-TQFP	68T2611	6.67
● ATMEGA162V-8MU	16	1	512	8	35	6	4	SPI, UART	Comparator, RTC	44-VQFN	68T2613	8.16
● ATMEGA162V-8PU	16	1	512	8	35	6	4	SPI, UART	Comparator, RTC	40-PDIP	68T2615	6.78
● ATMEGA164A-AU	16	1	512	20	32	6	3	I2C, SPI, UART	ADC, Comparator, RTC	44-TQFP	68T2616	4.90
● ATMEGA164A-CU	16	1	512	20	32	6	3	I2C, SPI, UART	ADC, Comparator, RTC	49-PBGA	68T2618	6.16
● ATMEGA164A-MCHR	16	1	512	20	32	6	3	I2C, SPI, UART	ADC, Comparator, RTC	44-VQFN	72T3111	6.02
● ATMEGA164A-MU	16	1	512	20	32	6	3	I2C, SPI, UART	ADC, Comparator, RTC	44-VQFN	68T2622	5.68
● ATMEGA164A-PU	16	1	512	20	32	6	3	I2C, SPI, UART	ADC, Comparator, RTC	40-PDIP	68T2624	5.01
● ATMEGA168-20AU	16	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC	32-TQFP	68T2692	4.56
● ATMEGA168-20MQR	16	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC	32-VQFN	72T3122	5.63
● ATMEGA168-20MU	16	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC	32-VQFN	68T2696	4.51
● ATMEGA168-20PU	16	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC	28-DIP	68T2698	4.70
● ATMEGA168A-AU	16	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC, Temp. Sensor	32-TQFP	68T2699	2.58
● ATMEGA168A-MMHR	16	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC, Temp. Sensor	32-VQFN	72T3123	3.27
● ATMEGA168A-MU	16	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC, Temp. Sensor	32-VQFN	68T2703	2.56
● ATMEGA168A-PU	16	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC, Temp. Sensor	28-PDIP	68T2705	2.68
● ATMEGA168V-10AU	16	1	512	10	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC	32-TQFP	68T2736	4.33
● ATMEGA168V-10MQR	16	1	512	10	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC	32-VQFN	72T3129	5.63
● ATMEGA168V-10MU	16	1	512	10	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC	32-VQFN	68T2740	4.33
● ATMEGA168V-10PU	16	1	512	10	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC	28-PDIP	68T2742	4.67
● ATMEGA169A-AU	16	1	512	16	54	4	3	I2C, SPI, UART	ADC, Comparator, RTC	64-TQFP	68T2743	4.95
● ATMEGA169A-MCHR	16	1	512	16	54	4	3	I2C, SPI, UART	ADC, Comparator, RTC	64-VQFN	72T3130	6.45
● ATMEGA169A-MU	16	1	512	16	54	4	3	I2C, SPI, UART	ADC, Comparator, RTC	64-VQFN	68T2746	6.05
● ATMEGA169A-MUR	16	1	512	16	54	4	3	I2C, SPI, UART	ADC, Comparator, RTC	64-VQFN	72T3131	6.32
● ATMEGA16A-AU	16	1	512	16	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	44-TQFP	68T2577	4.65
● ATMEGA16A-MU	16	1	512	16	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	44-VQFN	68T2579	4.84
● ATMEGA16A-PU	16	1	512	16	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	40-PDIP	68T2581	4.94
● ATMEGA16L-8AQ	16	1	512	8	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	44-TQFP	68T2585	8.45
● ATMEGA16L-8AU	16	1	512	8	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	44-TQFP	68T2587	6.73
● ATMEGA16L-8MU	16	1	512	8	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	44-VQFN	68T2589	6.73
● ATMEGA16L-8PU	16	1	512	8	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	40-PDIP	68T2591	6.84
● ATMEGA165A-AU	16	1	512	16	54	4	3	SPI, USART	ADC, Comparator	64-TQFP	68T2660	5.34
● ATMEGA165A-MU	16	1	512	16	54	4	3	SPI, USART	ADC, Comparator	64-QFN	68T2662	5.34
● ATMEGA16HVB-8X3	16	1	512	8	32	4	2	I2C, SPI	ADC	44-TSSOP	68T2584	7.91
● ATMEGA168-20AUR	16	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, Timer	32-TQFP	87W8105	4.43
● ATMEGA168PA-AUR	16	1	512	20	23	6	3	I2C, SPI, USART	ADC, Comparator, PWM, Timer	32-TQFP	87W8106	2.99
● ATMEGA168PA-MUR	16	1	512	20	23	6	3	I2C, SPI, USART	ADC, Comparator, PWM, Timer	32-QFN	87W8107	2.78
● ATMEGA168PA-PU	16	1	512	20	23	6	3	I2C, SPI, USART	ADC, Comparator, PWM, Timer	28-DIP	68T2726	2.99
● ATMEGA16M1-AU	16	1	512	16	27	10	2	CAN, SPI, UART	ADC, Comparator, DAC, Temperature Sensor, Timer	32-TQFP	68T2592	4.10
● ATMEGA32-16AU	32	2	1	16	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	44-TQFP	68T2802	8.48
● ATMEGA32-16MU	32	2	1024	16	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	44-VQFN	68T2804	8.58
● ATMEGA32-16PU	32	2	1	16	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	40-DIP	68T2806	8.75
● ATMEGA324A-AU	32	2	1024	20	32	6	3	I2C, SPI, UART	ADC, Comparator, RTC	44-TQFP	68T2846	5.69
● ATMEGA324A-CU	32	2	1024	20	32	6	3	I2C, SPI, UART	ADC, Comparator, RTC	49-PBGA	68T2848	6.90
● ATMEGA324A-MCHR	32	2	1024	20	32	6	3	I2C, SPI, UART	ADC, Comparator, RTC	44-VQFN	72T3140	6.77
● ATMEGA324A-MU	32	2	1024	20	32	6	3	I2C, SPI, UART	ADC, Comparator, RTC	44-VQFN	68T2852	6.42
● ATMEGA324A-PU	32	2	1024	20	32	6	3	I2C, SPI, UART	ADC, Comparator, RTC	40-PDIP	68T2854	5.63
● ATMEGA3250-16AU	32	2	1024	16	69	4	3	I2C, SPI, UART	ADC, Comparator, RTC	100-TQFP	68T2913	8.87
● ATMEGA3250A-AU	32	2	1024	20	69	4	3	I2C, SPI, UART	ADC, Comparator, RTC	100-TQFP	68T2916	7.76

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megaAVR® SERIES 8-BIT MCUs (CONT.)

Mfg. Part No.	Flash (KB)	RAM (KB)	EEPROM (Byte)	CPU Freq (MHz)	I/O (Pins)	PWM (Ch)	Timers	Interface	Peripherals	Pkg.	Stock No.	Price Each 1-9
ATMEGA325-16AU	32	2	1024	16	54	4	3	I2C, SPI, UART	ADC, Comparator, RTC	64-TQFP	68T2885	7.07
ATMEGA325-16MU	32	2	1024	16	54	4	3	I2C, SPI, UART	ADC, Comparator, RTC	64-VQFN	68T2887	6.88
ATMEGA325A-AU	32	2	1024	20	54	4	3	I2C, SPI, UART	ADC, Comparator, RTC	64-TQFP	68T2891	6.10
ATMEGA325A-MU	32	2	1024	20	54	4	3	I2C, SPI, UART	ADC, Comparator, RTC	64-VQFN	68T2895	7.11
ATMEGA325V-8AU	32	2	1024	8	54	4	3	I2C, SPI, UART	ADC, Comparator, RTC	64-TQFP	68T2909	6.88
ATMEGA325V-8MU	32	2	1024	8	54	4	3	I2C, SPI, UART	ADC, Comparator, RTC	64-VQFN	68T2911	8.42
ATMEGA328-AU	32	2	1024	20	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC, Temp. Sensor	32-TQFP	68T2926	2.89
ATMEGA328-MU	32	2	1024	20	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC, Temp. Sensor	32-VQFN	68T2930	2.78
ATMEGA328-PU	32	2	1	20	23	6	3	I2C, SPI, UART	ADC, Comparator, RTC, Temp. Sensor	28-DIP	68T2932	3.00
ATMEGA3290-16AU	32	2	1024	16	69	4	3	I2C, SPI, UART	ADC, Comparator, RTC	100-TQFP	68T2979	10.58
ATMEGA329-16AU	32	2	1024	16	54	4	3	I2C, SPI, UART	ADC, Comparator, RTC	64-TQFP	68T2947	9.31
ATMEGA329V-8AU	32	2	1024	8	54	4	3	I2C, SPI, UART	ADC, Comparator, RTC	64-TQFP	68T2975	9.31
ATMEGA32A-AU	32	2	1024	16	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	44-TQFP	68T2809	5.25
ATMEGA32A-MU	32	2	1024	16	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	44-VQFN	68T2813	5.45
ATMEGA32A-PU	32	2	1024	16	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	40-PDIP	68T2816	5.46
ATMEGA32HVB-8X3	32	2	1024	8	32	4	2	I2C, SPI	ADC	44-TSSOP	68T2821	10.28
ATMEGA32L-8AU	32	2	1024	8	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	44-TQFP	68T2822	8.58
ATMEGA32L-8MU	32	2	1024	8	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	44-VQFN	68T2824	8.17
ATMEGA32L-8PU	32	2	1024	8	32	4	3	I2C, SPI, UART	ADC, Comparator, RTC	40-PDIP	68T2826	8.28
ATMEGA328P-AN	32	2	1024	20	23	6	3	I2C, SPI, USART	ADC, Comparator, PWM, Timer	32-TQFP	68T2933	3.24
ATMEGA328P-ANR	32	2	1024	20	23	6	3	I2C, SPI, USART	ADC, Comparator, PWM, Timer	32-TQFP	68T2934	3.11
ATMEGA328P-AUR	32	2	1024	20	23	6	3	I2C, SPI, USART	ADC, Comparator, PWM, Timer	32-TQFP	87W8111	3.16
ATMEGA328P-PN	32	2	1024	20	23	6	3	I2C, SPI, USART	ADC, Comparator, PWM, Timer	28-DIP	68T2943	3.30
ATMEGA32U4RC-AU	32	2.5	1024	16	26	8	4	I2C, SPI, UART, USB	ADC, Comparator, PWM, Timer	44-TQFP	68T2842	6.46
ATMEGA406-1AAU	40	2	512	1	18	1	2	I2C	ADC	48-LQFP	68T2991	11.98
ATMEGA64-16AU	64	4	2048	16	53	7	4	I2C, SPI, UART	ADC, Comparator, RTC	64-TQFP	68T3051	12.16
ATMEGA64-16MU	64	4	2048	16	53	7	4	I2C, SPI, UART	ADC, Comparator, RTC	64-VQFN	68T3053	13.04
ATMEGA644-20AU	64	4	2048	20	32	6	3	I2C, SPI, UART	ADC, Comparator, RTC	44-TQFP	68T3094	8.26
ATMEGA644-20MU	64	4	2048	20	32	6	3	I2C, SPI, UART	ADC, Comparator, RTC	44-VQFN	68T3096	9.63
ATMEGA644-20PU	64	4	2	20	32	6	3	I2C, SPI, UART	ADC, Comparator, RTC	40-DIP	68T3098	8.28
ATMEGA644A-AU	64	4	2048	20	32	6	3	I2C, SPI, UART	ADC, Comparator, RTC	44-TQFP	68T3099	6.35
ATMEGA644A-PU	64	4	2048	20	32	6	3	I2C, SPI, UART	ADC, Comparator, RTC	40-PDIP	68T3103	6.45
ATMEGA644V-10AU	64	4	2048	10	32	6	3	I2C, SPI, UART	ADC, Comparator, RTC	44-TQFP	68T3140	7.87
ATMEGA644V-10MU	64	4	2048	10	32	6	3	I2C, SPI, UART	ADC, Comparator, RTC	44-VQFN	68T3142	9.63
ATMEGA644V-10PU	64	4	2048	10	32	6	3	I2C, SPI, UART	ADC, Comparator, RTC	40-PDIP	68T3144	8.38
ATMEGA6450-16AU	64	4	2048	16	69	4	3	I2C, SPI, UART	ADC, Comparator, RTC	100-TQFP	68T3161	12.68
ATMEGA6450A-AU	64	4	2048	20	69	4	3	I2C, SPI, UART	ADC, Comparator, RTC	100-TQFP	68T3163	7.68
ATMEGA645-16AU	64	4	2048	16	54	4	3	I2C, SPI, UART	ADC, Comparator, RTC	64-TQFP	68T3145	9.01
ATMEGA645A-AU	64	4	2048	20	54	4	3	I2C, SPI, UART	ADC, Comparator, RTC	64-TQFP	68T3149	8.97
ATMEGA645A-MU	64	4	2048	20	54	4	3	I2C, SPI, UART	ADC, Comparator, RTC	64-VQFN	68T3151	8.97
ATMEGA645V-8AU	64	4	2048	8	54	4	3	I2C, SPI, UART	ADC, Comparator, RTC	64-TQFP	68T3157	9.01
ATMEGA645V-8MU	64	4	2048	8	54	4	3	I2C, SPI, UART	ADC, Comparator, RTC	64-VQFN	68T3159	11.02
ATMEGA6490-16AU	64	4	2048	16	69	4	3	I2C, SPI, UART	ADC, Comparator, RTC	100-TQFP	68T3185	13.89
ATMEGA6490A-AU	64	4	2048	16	69	4	3	I2C, SPI, UART	ADC, Comparator, RTC	100-TQFP	68T3187	8.64
ATMEGA6490V-8AU	64	4	2048	8	69	4	3	I2C, SPI, UART	ADC, Comparator, RTC	100-TQFP	68T3191	13.89
ATMEGA649-16MU	64	4	2048	16	54	4	3	I2C, SPI, UART	ADC, Comparator, RTC	64-VQFN	68T3171	12.11
ATMEGA649A-AU	64	4	2048	16	54	4	3	I2C, SPI, UART	ADC, Comparator, RTC	64-TQFP	68T3173	9.87
ATMEGA649A-MU	64	4	2048	16	54	4	3	I2C, SPI, UART	ADC, Comparator, RTC	64-VQFN	68T3175	9.87
ATMEGA649V-8MU	64	4	2048	8	54	4	3	I2C, SPI, UART	ADC, Comparator, RTC	64-VQFN	68T3183	12.11
ATMEGA64A-AU	64	4	2048	16	53	7	4	I2C, SPI, UART	ADC, Comparator, RTC	64-TQFP	68T3057	7.34
ATMEGA64L-8AU	64	4	2048	8	53	7	4	I2C, SPI, UART	ADC, Comparator, RTC	64-TQFP	68T3069	12.42
ATMEGA64L-8MU	64	4	2048	8	53	7	4	I2C, SPI, UART	ADC, Comparator, RTC	64-VQFN	68T3073	11.83
ATMEGA64-16AUR	64	4	2048	16	53	7	4	I2C, SPI, UART	ADC, Comparator, PWM, Timer	64-TQFP	87W8112	12.04
ATMEGA644P-20AUR	64	4	2048	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-TQFP	87W8113	8.26
ATMEGA649-16AU	64	4	2048	16	54	4	3	I2C, SPI, UART, USB	ADC, Comparator, LCD Driver, PWM, RTC, Timer	64-TQFP	68T3169	11.76
ATMEGA64A-MU	64	4	2048	16	53	7	4	I2C, SPI, USART	ADC, Comparator, PWM, Timer	64-QFN	68T3061	7.34
ATMEGA64M1-AU	64	4	2048	16	27	10	2	CAN, SPI, UART	ADC, Comparator, DAC, Temperature Sensor, Timer	32-TQFP	68T3075	8.47
ATMEGA640-16AU	64	8	4096	16	86	15	6	I2C, SPI, UART	ADC, Comparator, RTC	100-TQFP	68T3086	12.40
ATMEGA640-16CU	64	8	4096	16	86	15	6	I2C, SPI, UART	ADC, Comparator, RTC	100-PBGA	68T3088	14.20
ATMEGA640V-8AU	64	8	4096	8	86	15	6	I2C, SPI, UART	ADC, Comparator, RTC	100-TQFP	68T3090	12.40
ATMEGA640V-8CU	64	8	4096	8	86	15	6	I2C, SPI, UART	ADC, Comparator, RTC	100-PBGA	68T3092	14.20
ATMEGA128-16ANR	128	4	4096	16	53	7	4	I2C, SPI, UART	ADC, Comparator, RTC	64-TQFP	72T3103	20.04
ATMEGA128-16AU	128	4	4	16	53	7	4	I2C, SPI, UART	ADC, Comparator, RTC	64-TQFP	68T2499	17.86
ATMEGA128-16MNR	128	4	4096	16	53	7	4	I2C, SPI, UART	ADC, Comparator, RTC	64-VQFN	72T3104	20.04
ATMEGA128-16MU	128	4	4096	16	53	7	4	I2C, SPI, UART	ADC, Comparator, RTC	64-VQFN	68T2503	17.21
ATMEGA128A-AU	128	4	4	16	53	7	4	I2C, SPI, UART	ADC, Comparator, RTC	64-TQFP	68T2507	9.58
ATMEGA128A-MU	128	4	4096	16	53	7	4	I2C, SPI, UART	ADC, Comparator, RTC	64-VQFN	68T2511	9.69
ATMEGA128L-8ANR	128	4	4096	8	53	7	4	I2C, SPI, UART	ADC, Comparator, RTC	64-TQFP	72T3105	20.04
ATMEGA128L-8AU	128	4	4096	8	53	7	4	I2C, SPI, UART	ADC, Comparator, RTC	64-TQFP	68T2515	17.86
ATMEGA128L-8MNR	128	4	4096	8	53	7	4	I2C, SPI, UART	ADC, Comparator, RTC	64-VQFN	72T3106	20.04
ATMEGA128L-8MU	128	4	4096	8	53	7	4	I2C, SPI, UART	ADC, Comparator, RTC	64-VQFN	68T2519	17.86
ATMEGA128-16AN	128	4	4096	16	53	7	4	I2C, SPI, USART	ADC, Comparator, PWM, Timer	64-TQFP	68T2497	18.07
ATMEGA128-16AUR	128	4	4096	16	53	7	4	I2C, SPI, USART	ADC, Comparator, PWM, Timer	64-TQFP	87W8104	17.43
ATMEGA1280-16AU	128	8	4096	16	86	15	6	I2C, SPI, UART	ADC, Comparator, RTC	100-TQFP	68T2527	16.13

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megaAVR® SERIES 8-BIT MCUs (CONT.)

Mfg. Part No.	Flash (KB)	RAM (KB)	EEPROM (Byte)	CPU Freq (MHz)	I/O (Pins)	PWM (Ch)	Timers	Interface	Peripherals	Pkg.	Stock No.	Price Each 1-9
● ATMEGA1280-16CU	128	8	4096	16	86	15	6	I2C, SPI, UART	ADC, Comparator, RTC	100-PBGA	68T2529	18.97
● ATMEGA1280V-8AU	128	8	4096	8	86	15	6	I2C, SPI, UART	ADC, Comparator, RTC	100-TQFP	68T2535	16.13
● ATMEGA1280V-8CU	128	8	4096	8	86	15	6	I2C, SPI, UART	ADC, Comparator, RTC	100-PBGA	68T2537	18.97
● ATMEGA1281-16AU	128	8	4096	16	54	8	6	I2C, SPI, UART	ADC, Comparator, RTC	64-TQFP	68T2539	13.12
● ATMEGA1281-16MU	128	8	4096	16	54	8	6	I2C, SPI, UART	ADC, Comparator, RTC	64-VQFN	68T2541	13.12
● ATMEGA1281V-8AU	128	8	4096	8	54	8	6	I2C, SPI, UART	ADC, Comparator, RTC	64-TQFP	68T2547	13.12
● ATMEGA1281V-8MU	128	8	4096	8	54	8	6	I2C, SPI, UART	ADC, Comparator, RTC	64-VQFN	68T2549	13.78
● ATMEGA1284-AUR	128	16	4096	20	32	6	3	I2C, SPI, UART	ADC, Comparator, RTC	44-TQFP	72T3107	7.44
● ATMEGA1284-MUR	128	16	4096	20	32	6	3	I2C, SPI, UART	ADC, Comparator, RTC	44-VQFN	72T3108	9.05
● ATMEGA1284-AU	128	16	4096	20	32	6	3	I2C, SPI, USART, USB	ADC, Comparator, PWM, RTC, Timer	44-TQFP	68T2551	7.63
● ATMEGA1284-PU	128	16	4096	20	32	6	3	I2C, SPI, USART, USB	ADC, Comparator, PWM, RTC, Timer	40-DIP	68T2555	7.34
● ATMEGA2560-16AU	256	8	4096	16	86	15	6	I2C, SPI, USART	ADC, Comparator, RTC	100-TQFP	68T2776	18.67
● ATMEGA2560-16AUR	256	8	4096	16	86	15	6	I2C, SPI, UART	ADC, Comparator, RTC	100-TQFP	72T3135	20.05
● ATMEGA2560V-8AU	256	8	4096	8	86	15	6	I2C, SPI, UART	ADC, Comparator, RTC	100-TQFP	68T2784	17.98
● ATMEGA2560V-8CU	256	8	4096	8	86	15	6	I2C, SPI, UART	ADC, Comparator, RTC	100-PBGA	68T2786	21.00
● ATMEGA2561-16AU	256	8	4096	16	54	8	6	I2C, SPI, UART	ADC, Comparator, RTC	64-TQFP	68T2788	18.80
● ATMEGA2561-16MU	256	8	4096	16	54	8	6	I2C, SPI, UART	ADC, Comparator, RTC	64-VQFN	68T2790	19.61
● ATMEGA2561V-8AU	256	8	4096	8	54	8	6	I2C, SPI, UART	ADC, Comparator, RTC	64-TQFP	68T2796	17.79
● ATMEGA2561V-8MU	256	8	4096	8	54	8	6	I2C, SPI, UART	ADC, Comparator, RTC	64-VQFN	68T2798	17.79
● ATMEGA2561-16AUR	256	8	4096	16	54	8	6	I2C, SPI, UART	ADC, Comparator, PWM, Timer	64-TQFP	87W8109	18.01

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megaAVR® SERIES 8-BIT MCUs WITH PICOPOWER

RoHS Compliant Available

Atmel

The **megaAVR®** family offers an extremely wide selection of devices in terms of memories, pin counts and peripherals which are ideal for applications requiring large amounts of code. Offering substantial program and data memories with performance up to 20MIPS, all devices feature self-programmability for fast, secure, cost-effective in-circuit upgrades.

Mfg. Part No.	Flash (KB)	RAM (KB)	EEPROM (Byte)	CPU Freq (MHz)	I/O (Pins)	PWM (Ch)	Timers	Interface	Peripherals	Pkg.	Stock No.	Price Each 1-9
● ATMEGA48P-20AU	4	0.5	256	20	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-TQFP	68T3013	3.05
● ATMEGA48P-20MU	4	0.5	256	20	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-QFN	68T3017	3.73
● ATMEGA48P-20PU	4	0.5	256	20	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-PDIP	68T3019	3.16
● ATMEGA48PA-AU	4	0.5	256	20	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-TQFP	68T3022	2.13
● ATMEGA48PA-MMH	4	0.5	256	20	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-QFN	68T3024	2.77
● ATMEGA48PA-MU	4	0.5	256	20	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-QFN	68T3030	2.13
● ATMEGA48PA-PU	4	0.5	256	20	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-PDIP	68T3033	2.24
● ATMEGA48PV-10AU	4	0.5	256	10	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-TQFP	68T3036	3.05
● ATMEGA48PV-10MMU	4	0.5	256	10	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-MLF	68T3038	3.89
● ATMEGA48PV-10MU	4	0.5	256	10	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-QFN	68T3040	3.73
● ATMEGA48PV-10PU	4	0.5	256	10	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-PDIP	68T3042	3.16
● ATMEGA88P-20AU	8	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-TQFP	68T3268	4.21
● ATMEGA88P-20PU	8	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-PDIP	68T3272	5.01
● ATMEGA88PA-AU	8	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-TQFP	68T3275	2.44
● ATMEGA88PA-MMH	8	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-QFN	68T3278	3.03
● ATMEGA88PA-MU	8	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-QFN	68T3285	2.47
● ATMEGA88PA-PU	8	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-PDIP	68T3288	2.60
● ATMEGA88PV-10AU	8	1	512	10	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-TQFP	68T3291	4.88
● ATMEGA164P-20AQR	16	1	512	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-TQFP	72T3112	7.14
● ATMEGA164P-20AU	16	1	512	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-TQFP	68T2631	5.76
● ATMEGA164P-20MQR	16	1	512	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-QFN	72T3113	7.14
● ATMEGA164P-20MU	16	1	512	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-QFN	68T2635	5.49
● ATMEGA164P-20PQ	16	1	512	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-PDIP	68T2637	7.06
● ATMEGA164P-20PU	16	1	512	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-PDIP	68T2638	5.88
● ATMEGA164PA-AU	16	1	512	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-TQFP	68T2641	5.37
● ATMEGA164PA-AUR	16	1	512	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-TQFP	72T3114	5.28
● ATMEGA164PA-CUR	16	1	512	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-BGA	72T3115	6.93
● ATMEGA164PA-MCHR	16	1	512	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-QFN	72T3116	6.59
● ATMEGA164PA-MU	16	1	512	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-QFN	68T2649	6.25
● ATMEGA164PA-MUR	16	1	512	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-QFN	72T3117	6.46
● ATMEGA164PA-PU	16	1	512	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-PDIP	68T2651	5.22
● ATMEGA164PV-10AQ	16	1	512	10	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-TQFP	68T2652	6.93
● ATMEGA164PV-10AU	16	1	512	10	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-TQFP	68T2654	5.76
● ATMEGA164PV-10MU	16	1	512	10	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-QFN	68T2656	6.72
● ATMEGA164PV-10PQ	16	1	512	10	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-PDIP	68T2658	7.06
● ATMEGA164PV-10PU	16	1	512	10	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-PDIP	68T2659	6.85
● ATMEGA165P-16AU	16	1	512	16	54	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	64-TQFP	68T2666	6.41
● ATMEGA165P-16MN	16	1	512	16	54	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	64-QFN	68T2668	8.24
● ATMEGA165P-16MU	16	1	512	16	54	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	64-QFN	68T2670	7.84
● ATMEGA165PV-8AU	16	1	512	16	54	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	64-TQFP	68T2678	6.41
● ATMEGA165PV-8MU	16	1	512	8	54	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	64-QFN	68T2682	7.84
● ATMEGA168P-20AN	16	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-TQFP	68T2706	6.10
● ATMEGA168P-20AU	16	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-TQFP	68T2708	5.01
● ATMEGA168P-20AUR	16	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-TQFP	72T3124	5.94

➤ CONTINUED ➤

megaAVR® SERIES 8-BIT MCUs WITH PICOPOWER (CONT.)

Mfg. Part No.	Flash (KB)	RAM (KB)	EEPROM (Byte)	CPU Freq (MHz)	I/O (Pins)	PWM (Ch)	Timers	Interface	Peripherals	Pkg.	Stock No.	Price Each 1-9
ATMEGA168P-20MQR	16	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-QFN	72T3125	6.15
ATMEGA168P-20MUR	16	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-QFN	72T3126	5.94
ATMEGA168P-20PU	16	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-DIP	68T2714	4.86
ATMEGA168PA-AU	16	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-TQFP	68T2717	2.79
ATMEGA168PA-MMH	16	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-QFN	68T2719	2.81
ATMEGA168PA-MU	16	1	512	20	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-QFN	68T2723	2.82
ATMEGA168PV-10AN	16	1	512	10	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-TQFP	68T2729	6.10
ATMEGA168PV-10AU	16	1	512	10	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-TQFP	68T2731	4.75
ATMEGA168PV-10AUR	16	1	512	10	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-TQFP	72T3127	5.94
ATMEGA168PV-10MU	16	1	512	10	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-QFN	68T2733	5.81
ATMEGA168PV-10MUR	16	1	512	10	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-QFN	72T3128	5.94
ATMEGA168PV-10PU	16	1	512	10	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-PDIP	68T2735	5.94
ATMEGA169P-16AU	16	1	512	16	54	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	64-TQFP	68T2750	6.00
ATMEGA169P-16MCHR	16	1	512	16	54	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	64-QFN	72T3134	7.47
ATMEGA169PV-8AU	16	1	512	8	54	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	64-TQFP	68T2766	7.49
ATMEGA169PV-8MCH	16	1	512	8	54	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	64-QFN	68T2768	8.85
ATMEGA169PV-8MU	16	1	512	8	54	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	64-QFN	68T2770	7.49
ATMEGA324P-20AQ	32	2	1024	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-TQFP	68T2859	8.84
ATMEGA324P-20AU	32	2	1024	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-TQFP	68T2861	7.06
ATMEGA324P-20MQ	32	2	1024	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-QFN	68T2863	8.84
ATMEGA324P-20MU	32	2	1024	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-QFN	68T2865	7.41
ATMEGA324P-20PU	32	2	1024	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	40-DIP	68T2867	7.16
ATMEGA324PA-AU	32	2	1024	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-TQFP	68T2869	5.78
ATMEGA324PA-CU	32	2	1024	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-BGA	68T2871	7.54
ATMEGA324PA-MCH	32	2	1024	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-QFN	68T2873	7.20
ATMEGA324PA-MU	32	2	1024	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-QFN	68T2876	5.78
ATMEGA324PA-PU	32	2	1024	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-PDIP	68T2879	5.88
ATMEGA324PV-10AU	32	2	1024	10	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-TQFP	68T2880	7.06
ATMEGA324PV-10MU	32	2	1024	10	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-QFN	68T2882	7.06
ATMEGA324PV-10PU	32	2	1024	10	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-PDIP	68T2884	7.16
ATMEGA325P-20AU	32	2	1024	20	54	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	64-TQFP	68T2897	8.55
ATMEGA325P-20MU	32	2	1024	20	54	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	64-QFN	68T2899	8.55
ATMEGA325PV-10AU	32	2	1024	10	54	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	64-TQFP	68T2905	8.55
ATMEGA325PV-10MU	32	2	1024	10	54	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	64-QFN	68T2907	8.55
ATMEGA328P-AU	32	2	1024	20	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-TQFP	68T2935	3.18
ATMEGA328P-MU	32	2	1024	20	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	32-QFN	68T2941	3.21
ATMEGA328P-PU	32	2	1024	20	23	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	28-PDIP	68T2944	3.22
ATMEGA329P-20AN	32	2	1024	20	54	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	64-TQFP	68T2955	9.78
ATMEGA329P-20AU	32	2	1024	20	54	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	64-TQFP	68T2957	9.31
ATMEGA329P-20MN	32	2	1024	20	54	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	64-QFN	68T2959	9.78
ATMEGA329PV-10AN	32	2	1024	10	54	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	64-TQFP	68T2967	9.78
ATMEGA329PV-10AU	32	2	1024	10	54	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	64-TQFP	68T2969	9.31
ATMEGA329PV-10MN	32	2	1024	10	54	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	64-QFN	68T2971	9.78
ATMEGA329PV-10MU	32	2	1024	10	54	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	64-QFN	68T2973	9.31
ATMEGA3250P-20AU	32	2	1024	20	69	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	100-TQFP	68T2918	8.87
ATMEGA3250PV-10AU	32	2	1024	10	69	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	100-TQFP	68T2922	8.87
ATMEGA3290PV-10AU	32	2	1024	10	69	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	64-TQFP	68T2987	10.58
ATMEGA644P-20AQ	64	4	2048	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-TQFP	68T3108	10.10
ATMEGA644P-20AU	64	4	2048	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-TQFP	68T3110	8.40
ATMEGA644P-20MQ	64	4	2048	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-QFN	68T3112	10.10
ATMEGA644P-20MU	64	4	2048	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-QFN	68T3114	8.49
ATMEGA644P-20PQ	64	4	2048	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-PDIP	68T3116	8.37
ATMEGA644P-20PU	64	4	2048	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	40-DIP	68T3117	8.20
ATMEGA644PA-AU	64	4	2048	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-TQFP	68T3119	7.77
ATMEGA644PA-MU	64	4	2048	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-QFN	68T3123	7.77
ATMEGA644PA-PU	64	4	2048	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-PDIP	68T3125	7.78
ATMEGA644PV-10AQ	64	4	2048	10	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-TQFP	68T3130	10.10
ATMEGA644PV-10AU	64	4	2048	10	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-TQFP	68T3132	8.49
ATMEGA644PV-10MQ	64	4	2048	10	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-QFN	68T3134	10.10
ATMEGA644PV-10PQ	64	4	2048	10	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-PDIP	68T3138	10.23
ATMEGA644PV-10PU	64	4	2048	10	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-PDIP	68T3139	10.02
ATMEGA645P-AU	64	4	2048	20	54	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	64-TQFP	68T3153	9.87
ATMEGA645P-MU	64	4	2048	16	54	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	64-QFN	68T3155	9.87
ATMEGA649P-AU	64	4	2048	16	54	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	64-TQFP	68T3177	10.77
ATMEGA649P-MU	64	4	2048	16	54	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	64-QFN	68T3179	10.77
ATMEGA6490P-AU	64	4	2048	20	69	4	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	100-TQFP	68T3189	9.60
ATMEGA1284P-AU	128	16	4096	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-TQFP	68T2556	8.43
ATMEGA1284P-MU	128	16	4096	20	32	6	3	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-QFN	68T2558	8.03
ATMEGA1284P-PU	128	16	4096	20	32	6	3	SPI, USART	ADC, Comparator, PWM, RTC, Timer	40-DIP	68T2560	8.61

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8-BIT MCUS & DEVELOPMENT TOOLS

1

AVR XPLAIN KIT FOR ATXMEGA128A1

RoHS Compliant Available

Atmel

The **ATAVRXPLAIN** kit contains complete hardware for evaluating the highly accurate analog functionality of AVR devices and demonstrating how to interface external memories. The kit includes 8MB SDRAM and 8MB DataFlash connected to the ATxmega128A1, and eight push buttons and eight LEDs for user interaction. The USB interface is a communication gateway between the ATxmega128A1 USB COM port and power source. The ADC can be used to read a temperature sensor and potentiometer, and the DAC can be used to generate sound on a mono speaker.

Mfg. Part No.	Description	Stock No.	Price Each
● ATAVRXPLAIN	AVR XMEGA-A1 Xplained MCU Evaluation Kit	68T2094	29.50

(197939)

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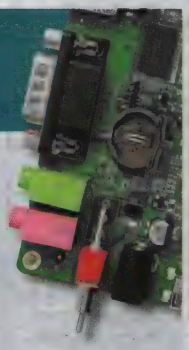

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xmegaAVR® SERIES 8-BIT MCUs

RoHS Compliant Available

Atmel

Features:
- High-precision analog
- Real-time performance
- picoPower® technology
- High Integration
- AVR Software Library
- QTouch® Sensing
- USB Connectivity

xmegaAVR® microcontrollers deliver the best possible combination of real-time performance, high integration and low power consumption for 8/16-bit MCU applications. Some with peripherals like DMA Controller, an innovative event system, crypto engine and high speed ADC and DAC, **xmegaAVR®** pushes the boundaries for high performance 8 bit MCUs while still remaining highly compatible with tinyAVR® and megaAVR®.

Mfg. Part No.	Flash (KB)	RAM (KB)	EEPROM (Byte)	CPU Freq (MHz)	I/O (Pins)	PWM (Ch)	Timers	Interface	Peripherals	Pkg.	Stock No.	Price Each 1-9
● ATXMEGA16D4-AU	16	2	1024	32	34	14	4	I2C, SPI, UART	ADC / Comparator / RTC / Temperature Sensor	44-TQFP	68T3906	2.52
● ATXMEGA16D4-CU	16	2	1024	32	34	14	4	I2C, SPI, UART	ADC / Comparator / RTC / Temperature Sensor	49-PBGA	68T3908	3.16
● ATXMEGA16D4-MH	16	2	1024	32	34	14	4	I2C, SPI, UART	ADC / Comparator / RTC / Temperature Sensor	44-VQFN	68T3910	2.52
● ATXMEGA16A4-AU	16	2	1024	32	34	16	5	I2C, SPI, UART	ADC / DAC / Comparator / Temperature Sensor / RTC	44-TQFP	68T3897	5.20
● ATXMEGA16A4-CU	16	2	1024	32	34	16	5	I2C, SPI, UART	ADC / DAC / Comparator / Temperature Sensor / RTC	49-PBGA	68T3899	6.84
● ATXMEGA16A4-MH	16	2	1024	32	34	16	5	I2C, SPI, UART	ADC / DAC / Comparator / Temperature Sensor / RTC	44-VQFN	68T3901	5.20
● ATXMEGA16A4U-AU	16	2	1024	32	34	16	5	I2C, SPI, UART, USB	ADC, Comparator, DAC, Temperature Sensor, Timer	44-TQFP	68T3903	3.04
● ATXMEGA32A4-AU	32	4	1024	32	34	16	5	I2C, SPI, UART	ADC / DAC / Comparator / Temperature Sensor / RTC	44-TQFP	68T3938	5.88
● ATXMEGA32A4-CU	32	4	1024	32	34	16	5	I2C, SPI, UART	ADC / DAC / Comparator / Temperature Sensor / RTC	49-PBGA	68T3942	6.27
● ATXMEGA32A4-MH	32	4	1024	32	34	16	5	I2C, SPI, UART	ADC / DAC / Comparator / Temperature Sensor / RTC	44-VQFN	68T3944	5.88
● ATXMEGA32D4-AU	32	4	1024	32	34	14	4	I2C, SPI, UART	ADC / Comparator / RTC / Temperature Sensor	44-TQFP	68T3949	3.01
● ATXMEGA32D4-CU	32	4	1024	32	34	14	4	I2C, SPI, UART	ADC / Comparator / RTC / Temperature Sensor	49-PBGA	68T3951	3.78
● ATXMEGA32D4-MH	32	4	1024	32	34	14	4	I2C, SPI, UART	ADC / Comparator / RTC / Temperature Sensor	44-VQFN	68T3953	2.86
● ATXMEGA32A4U-AU	32	4	1024	32	34	16	5	I2C, SPI, UART, USB	ADC, Comparator, DAC, Temperature Sensor, Timer	44-TQFP	68T3946	3.44
● ATXMEGA32A4U-MH	32	4	1024	32	34	16	5	I2C, SPI, UART, USB	ADC, Comparator, DAC, Temperature Sensor, Timer	44-QFN	68T3948	3.44
● ATXMEGA64A3U-AU	64	4	1024	32	50	22	7	I2C, SPI, UART, USB	ADC, Comparator, DAC, Temperature Sensor, Timer	64-TQFP	68T3964	4.69
● ATXMEGA64A1-AU	64	4	2048	32	78	24	8	I2C, SPI, UART	ADC / DAC / Comparator / Temperature Sensor / RTC	100-TQFP	68T3955	8.07
● ATXMEGA64A1-C7U	64	4	2048	32	78	24	8	I2C, SPI, UART	ADC / DAC / Comparator / Temperature Sensor / RTC	100-PBGA	68T3959	11.18
● ATXMEGA64A1-CU	64	4	2048	32	78	24	8	I2C, SPI, UART	ADC / DAC / Comparator / Temperature Sensor / RTC	100-PBGA	68T3957	11.18
● ATXMEGA64A3-AU	64	4	2048	32	50	22	7	I2C, SPI, UART	ADC / DAC / Comparator / Temperature Sensor / RTC	64-TQFP	68T3960	8.52
● ATXMEGA64A3-MH	64	4	2048	32	50	22	7	I2C, SPI, UART	ADC / DAC / Comparator / Temperature Sensor / RTC	64-VQFN	68T3962	10.05
● ATXMEGA64D3-AU	64	4	2048	32	50	18	5	I2C, SPI, UART	ADC / Comparator / RTC / Temperature Sensor	64-TQFP	68T3966	3.84
● ATXMEGA64D3-MH	64	4	2048	32	50	18	5	I2C, SPI, UART	ADC / Comparator / RTC / Temperature Sensor	64-VQFN	68T3968	4.45
● ATXMEGA128A1-AU	128	8	2048	32	78	24	8	I2C, SPI, UART	ADC / DAC / Comparator / Temperature Sensor / RTC	100-TQFP	72T3200	10.58
● ATXMEGA128A1-C7U	128	8	2048	32	78	24	8	I2C, SPI, UART	ADC / DAC / Comparator / Temperature Sensor / RTC	100-PBGA	72T3202	12.43
● ATXMEGA128A1-CU	128	8	2048	32	78	24	8	I2C, SPI, UART	ADC / DAC / Comparator / Temperature Sensor / RTC	100-PBGA	72T3201	11.84
● ATXMEGA128A3-AU	128	8	2048	32	50	22	7	I2C, SPI, UART	ADC / DAC / Comparator / Temperature Sensor / RTC	64-TQFP	68T3888	10.44
● ATXMEGA128A3-MH	128	8	2048	32	50	22	7	I2C, SPI, UART	ADC / DAC / Comparator / Temperature Sensor / RTC	64-VQFN	68T3890	10.73
● ATXMEGA128D3-AU	128	8	2048	32	50	18	5	I2C, SPI, UART	ADC / Comparator / RTC / Temperature Sensor	64-TQFP	68T3893	3.87
● ATXMEGA128D3-MH	128	8	2048	32	50	18	5	I2C, SPI, UART	ADC / Comparator / RTC / Temperature Sensor	64-VQFN	68T3895	3.87
● ATXMEGA128A1U-AU	128	8	2	32	78	24	8	I2C, SPI, UART, USB	ADC, Comparator, DAC, Temperature Sensor, Timer	100-TQFP	92T0881	5.23
● ATXMEGA128A3U-AU	128	8	2	32	50	22	7	I2C, SPI, UART, USB	ADC, Comparator, DAC, Temperature Sensor, Timer	64-TQFP	68T3892	5.00
● ATXMEGA128A4U-AU	128	8	2	32	34	16	5	I2C, SPI, UART, USB	ADC, Comparator, DAC, Temperature Sensor, Timer	44-TQFP	92T0887	4.67
● ATXMEGA128A4U-MH	128	8	2	32	34	16	5	I2C, SPI, UART, USB	ADC, Comparator, DAC, Temperature Sensor, Timer	44-VQFN	92T0889	4.41
● ATXMEGA128D4-AU	128	8	2	32	34	14	4	I2C, SPI, UART	ADC, Comparator, PWM, RTC, Timer	44-TQFP	92T0893	3.67
● ATXMEGA192A3-AU	192	16	2048	32	50	22	7	I2C, SPI, UART	ADC / DAC / Comparator / Temperature Sensor / RTC	64-TQFP	68T3912	11.52
● ATXMEGA192A3-MH	192	16	2048	32	50	22	7	I2C, SPI, UART	ADC / DAC / Comparator / Temperature Sensor / RTC	64-VQFN	68T3914	11.52
● ATXMEGA192D3-AU	192	16	2048	32	50	18	5	I2C, SPI, UART	ADC / Comparator / RTC / Temperature Sensor	64-TQFP	68T3918	5.92
● ATXMEGA192D3-MH	192	16	2048	32	50	18	5	I2C, SPI, UART	ADC / Comparator / RTC / Temperature Sensor	64-VQFN	68T3920	5.92
● ATXMEGA192A3U-AU	192	16	2048	32	50	22	7	I2C, SPI, UART, USB	ADC, Comparator, DAC, Temperature Sensor, Timer	64-TQFP	68T3916	5.81
● ATXMEGA256A3-AU	256	16	4096	32	50	22	7	I2C, SPI, UART	ADC / DAC / Comparator / Temperature Sensor / RTC	64-TQFP	68T3922	13.55
● ATXMEGA256A3-MH	256	16	4096	32	50	22	7	I2C, SPI, UART	ADC / DAC / Comparator / Temperature Sensor / RTC	64-VQFN	68T3924	13.55
● ATXMEGA256A3B-AU	256	16	4096	32	49	22	7	I2C, SPI, UART	ADC / DAC / Comparator / Temperature Sensor / RTC	64-TQFP	68T3926	15.23
● ATXMEGA256A3B-MH	256	16	4096	32	47	22	7	I2C, SPI, UART	ADC / DAC / Comparator / Temperature Sensor / RTC	64-VQFN	68T3928	14.50
● ATXMEGA256D3-AU	256	16	4096	32	50	18	5	I2C, SPI, UART	ADC / Comparator / RTC / Temperature Sensor	64-TQFP	68T3934	6.08
● ATXMEGA256D3-MH	256	16	4096	32	50	18	5	I2C, SPI, UART	ADC / Comparator / RTC / Temperature Sensor	64-VQFN	68T3936	7.08
● ATXMEGA256A3BU-AU	256	16	4096	32	49	22	7	I2C, SPI, UART, USB	ADC, Comparator, DAC, Temperature Sensor, Timer	64-TQFP	68T3930	7.70
● ATXMEGA256A3BU-MH	256	16	4096	32	49	22	7	I2C, SPI, UART, USB	ADC, Comparator, DAC, Temperature Sensor, Timer	64-QFN	68T3931	7.29

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xmegaAVR® SERIES 8-BIT MCUs (CONT.)

Mfg. Part No.	Flash (KB)	RAM (KB)	EEPROM (Byte)	CPU Freq (MHz)	I/O (Pins)	PWM (Ch)	Timers	Interface	Peripherals	Pkg.	Stock No.	Price Each 1-9
ATXMEGA256A3U-AU	256	16	4096	32	50	22	7	I2C, SPI, UART, USB	ADC, Comparator, DAC, Temperature Sensor, Timer	64-TQFP	68T3932	7.43
ATXMEGA256A3U-MH	256	16	4096	32	50	22	7	I2C, SPI, UART, USB	ADC, Comparator, DAC, Temperature Sensor, Timer	64-QFN	68T3933	6.94

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tinyAVR® 8-BIT MICROCONTROLLERS

RoHS Compliant Available

Atmel

tinyAVR® offers a combination of, processing power, analog performance, system-level integration and ease of use in a small package based on the same compatible architecture as other AVR® devices. Designers will find significantly shorter time to market with integrated features and peripherals like flash memory, ADC, EEPROM and Brown out detector and on-chip debug for fast, secure, cost-effective in-circuit upgrades. The **tinyAVR®** is the most compact device in the AVR® family and is capable of operating at just 0.7V.

Mfg. Part No.	Flash (KB)	RAM (Byte)	EEPROM (Byte)	CPU Freq (MHz)	I/O (Pins)	PWM (Ch)	Timers	Interface	Peripherals	Pkg.	Stock No.	Price Each 1-99
ATTINY4-MAHR	0.512	30	...	12	4	2	1	...	Comparator, PWM, Timer	6-SOT23	68T3673	1.10
ATTINY4-TSHR	0.512	30	...	12	4	2	1	...	Comparator, PWM, Timer	6-UDFN	68T3674	0.68
ATTINY4-TS8R	0.512	30	...	10	4	2	1	...	Comparator, PWM, Timer	6-UDFN	68T3675	1.07
ATTINY5-MAHR	0.512	30	...	12	4	2	1	...	ADC, Comparator, PWM, Timer	6-SOT23	68T3777	1.13
ATTINY5-TSHR	0.512	30	...	12	4	2	1	...	ADC, Comparator, PWM, Timer	6-UDFN	68T3778	0.67
ATTINY5-TS8R	0.512	30	...	10	4	2	1	...	ADC, Comparator, PWM, Timer	6-UDFN	68T3779	1.11
ATTINY12-8PU	1	...	64	8	6	...	1	SPI	Comparator	8-PDIP	68T3474	1.92
ATTINY12L-4SU	1	...	64	4	6	...	1	SPI	Comparator	8-SOIC	68T3477	1.91
ATTINY12V-1SU	1	...	64	1.2	6	...	1	SPI	Comparator	8-SOIC	68T3480	2.21
ATTINY10-MAHR	1	30	...	12	4	2	1	...	ADC, Comparator, PWM, Timer	6-SOT23	68T3471	0.78
ATTINY10-TSHR	1	30	...	12	4	2	1	...	ADC, Comparator, PWM, Timer	6-UDFN	68T3472	0.72
ATTINY10-TS8R	1	30	...	10	4	2	1	...	ADC, Comparator, PWM, Timer	6-UDFN	68T3473	0.76
ATTINY9-MAHR	1	30	...	12	4	2	1	...	Comparator, PWM, Timer	6-SOT23	68T3863	1.13
ATTINY9-TSHR	1	30	...	12	4	2	1	...	Comparator, PWM, Timer	6-UDFN	68T3864	0.67
ATTINY9-TS8R	1	30	...	10	4	2	1	...	Comparator, PWM, Timer	6-UDFN	68T3865	1.11
ATTINY13-20MMU	1	60	64	20	6	2	1	...	ADC, Comparator, PWM, Timer	8-MLF	68T3482	2.40
ATTINY13-20MU	1	64	64	20	6	2	1	...	ADC, Comparator, PWM, Timer	8-QFN	68T3484	2.32
ATTINY13-20PU	1	64	64	20	6	2	1	...	ADC, Comparator, PWM, Timer	8-DIP	68T3486	1.92
ATTINY13-20SQ	1	60	64	20	6	2	1	...	ADC, Comparator, PWM, Timer	8-SOIC	68T3487	2.42
ATTINY13-20SSU	1	64	64	20	6	2	1	...	ADC, Comparator, PWM, Timer	8-SOIC	68T3491	1.81
ATTINY13-20SU	1	64	64	20	6	2	1	...	ADC, Comparator, PWM, Timer	8-SOIC	68T3493	1.81
ATTINY13A-MMU	1	60	64	20	6	2	1	...	ADC, Comparator, PWM, Timer	8-MLF	68T3495	1.08
ATTINY13A-MU	1	60	64	20	6	2	1	...	ADC, Comparator, PWM, Timer	8-QFN	68T3497	1.39
ATTINY13A-PU	1	60	64	20	6	2	1	...	ADC, Comparator, PWM, Timer	8-DIP	68T3499	0.95
ATTINY13A-SF	1	60	64	20	6	2	1	...	ADC, Comparator, PWM, Timer	8-SOIC	68T3500	0.93
ATTINY13A-SH	1	60	64	20	6	2	1	...	ADC, Comparator, PWM, Timer	8-SOIC	68T3502	0.89
ATTINY13A-SN	1	60	64	20	6	2	1	...	ADC, Comparator, PWM, Timer	8-SOIC	68T3504	1.33
ATTINY13A-SSH	1	60	64	20	6	2	1	...	ADC, Comparator, PWM, Timer	8-SOIC	68T3506	0.84
ATTINY13A-SSU	1	60	64	20	6	2	1	...	ADC, Comparator, PWM, Timer	8-SOIC	68T3508	0.88
ATTINY13A-SS7	1	60	64	20	6	2	1	...	ADC, Comparator, PWM, Timer	8-SOIC	68T3510	0.93
ATTINY13A-SU	1	60	64	20	6	2	1	...	ADC, Comparator, PWM, Timer	8-SOIC	68T3512	0.84
ATTINY13V-10MMU	1	60	64	10	6	2	1	...	ADC, Comparator, PWM, Timer	8-MLF	68T3514	1.96
ATTINY13V-10MU	1	64	64	10	6	2	1	...	ADC, Comparator, PWM, Timer	8-QFN	68T3516	2.32
ATTINY13V-10PU	1	64	64	10	6	2	1	...	ADC, Comparator, PWM, Timer	8-PDIP	68T3519	2.00
ATTINY13V-10SSU	1	64	64	10	6	2	1	...	ADC, Comparator, PWM, Timer	8-SOIC	68T3520	1.81
ATTINY13V-10SU	1	64	64	10	6	2	1	...	ADC, Comparator, PWM, Timer	8-SOIC	68T3522	1.81
ATTINY13A-MMUR	1	64	64	20	6	2	1	SPI	ADC, Comparator, PWM, RTC, Timer	10-MLF	87W8121	1.14
ATTINY28L-4AU	2	30	...	4	11	...	1	...	Comparator, Timer	28-TQFP	68T3662	3.55
ATTINY28L-4MU	2	30	...	4	11	...	1	...	Comparator, Timer	28-QFN	68T3664	3.66
ATTINY28L-4PU	2	30	...	4	11	...	1	...	Comparator, Timer	28-PDIP	68T3666	3.01
ATTINY28V-1MU	2	30	...	1.2	11	...	1	...	Comparator, Timer	28-QFN	68T3669	3.66
ATTINY28V-1PU	2	30	...	1.2	11	...	1	...	Comparator, Timer	28-PDIP	68T3671	3.69
ATTINY28V-1AU	2	30	...	1.2	11			-	Comparator, PWM, Timer, Counter	32-TQFP	68T3667	3.13
ATTINY20-CCU	2	120	...	12	12	3	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	15-BGA	68T3535	1.50
ATTINY20-MMH	2	120	...	12	12	3	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	14-VQFN	68T3538	1.44
ATTINY20-SSU	2	128	...	12	12	3	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	14-SOIC	68T3540	0.98
ATTINY20-XU	2	120	...	12	12	3	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	14-TSSOP	68T3542	0.98
ATTINY2313-20MU	2	128	128	20	18	4	2	I2C, SPI, UART	Comparator, PWM, Timer	20-QFN	68T3544	2.65
ATTINY2313-20PU	2	128	128	20	18	4	2	I2C, SPI, UART	Comparator, PWM, Timer	20-DIP	68T3546	2.79
ATTINY2313-20SU	2	128	128	20	18	4	2	I2C, SPI, UART	Comparator, PWM, Timer	20-SOIC	68T3547	2.67
ATTINY2313A-MMH	2	120	128	20	18	4	2	I2C, SPI, UART	Comparator, PWM, Timer	20-VQFN	68T3549	1.80
ATTINY2313A-MU	2	128	128	20	18	4	2	I2C, SPI, UART	Comparator, PWM, Timer	20-QFN	68T3551	1.37
ATTINY2313A-PU	2	128	128	20	18	4	2	I2C, SPI, UART	Comparator, PWM, Timer	20-PDIP	68T3553	1.40
ATTINY2313V-10MU	2	128	128	10	18	4	2	I2C, SPI, UART	Comparator, PWM, Timer	20-QFN	68T3556	2.65
ATTINY2313V-10PU	2	128	128	10	18	4	2	I2C, SPI, UART	Comparator, PWM, Timer	20-DIP	68T3558	2.79
ATTINY2313V-10SU	2	128	128	10	18	4	2	I2C, SPI, UART	Comparator, PWM, Timer	20-SOIC	68T3559	2.71
ATTINY24-20MU	2	128	128	20	12	4	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	14-QFN	68T3563	2.51
ATTINY24-20PU	2	128	128	20	12	4	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	14-PDIP	68T3565	2.53
ATTINY24-20SSU	2	128	128	20	12	4	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	14-SOIC	68T3566	2.42
ATTINY24A-MMH	2	128	128	20	12	4	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	14-MLF	68T3572	1.55
ATTINY24A-MU	2	128	128	20	12	4	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	14-QFN	68T3574	1.10

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tinyAVR® 8-BIT MICROCONTROLLERS (CONT.)

Mfg. Part No.	Flash (KB)	RAM (Byte)	EEPROM (Byte)	CPU Freq (MHz)	I/O (Pins)	PWM (Ch)	Timers	Interface	Peripherals	Pkg.	Stock No.	Price Each 1-99
● ATTINY24A-PU	2	128	128	20	12	4	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	14-PDIP	68T3576	1.18
● ATTINY24A-SSN	2	120	128	20	12	4	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	14-SOIC	68T3579	1.12
● ATTINY24A-SSU	2	128	128	20	12	4	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	14-SOIC	68T3581	1.07
● ATTINY24V-10MU	2	128	128	10	12	4	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	14-QFN	68T3583	3.07
● ATTINY24V-10PU	2	128	128	10	12	4	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	14-PDIP	68T3585	2.53
● ATTINY24V-10SSU	2	128	128	10	12	4	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	14-SOIC	68T3586	2.42
● ATTINY25-20PU	2	128	128	20	6	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	8-PDIP	68T3598	1.12
● ATTINY25-20SH	2	128	128	20	6	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	8-SOIC	68T3599	1.43
● ATTINY25-20SSH	2	128	128	20	6	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	8-SOIC	68T3602	1.00
● ATTINY25-20SSN	2	120	128	20	6	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	8-SOIC	68T3603	1.50
● ATTINY25-20SSU	2	128	128	20	6	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	8-SOIC	68T3605	1.00
● ATTINY25-20SU	2	128	128	20	6	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	8-SOIC	68T3607	0.99
● ATTINY25V-10MU	2	120	128	10	6	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	8-QFN	68T3611	2.42
● ATTINY25V-10PU	2	128	128	10	6	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	8-PDIP	68T3613	2.00
● ATTINY25V-10SH	2	128	128	10	6	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	8-SOIC	68T3614	2.32
● ATTINY25V-10SSH	2	128	128	10	6	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	8-SOIC	68T3617	2.32
● ATTINY25V-10SSU	2	128	128	10	6	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	8-SOIC	68T3620	1.99
● ATTINY25V-10SU	2	128	128	10	6	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	8-SOIC	68T3622	1.89
● ATTINY26-16MU	2	120	128	16	16	4	2	I2C, SPI	ADC, Comparator, PWM, Timer	20-QFN	68T3628	3.61
● ATTINY26-16PU	2	128	128	16	16	4	2	I2C, SPI	ADC, Comparator, PWM, Timer	20-DIP	68T3630	3.06
● ATTINY26-16SU	2	128	128	16	16	4	2	I2C, SPI	ADC, Comparator, PWM, Timer	20-SOIC	68T3631	2.95
● ATTINY26L-8MU	2	128	128	8	16	4	2	I2C, SPI	ADC, Comparator, PWM, Timer	20-QFN	68T3633	2.95
● ATTINY26L-8PU	2	128	128	8	16	4	2	I2C, SPI	ADC, Comparator, PWM, Timer	20-PDIP	68T3635	3.23
● ATTINY26L-8SU	2	128	128	8	16	4	2	I2C, SPI	ADC, Comparator, PWM, Timer	20-SOIC	68T3636	2.95
● ATTINY261A-MN	2	120	128	20	16	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	20-QFN	68T3649	2.04
● ATTINY2313-20SUR	2	128	128	20	18	4	2	I2C, SPI, UART	Comparator, PWM, Timer, Counter	20-SOIC	87W8124	2.84
● ATTINY2313A-SU	2	128	128	20	18	4	2	I2C, SPI, UART	Comparator, PWM, Timer, Counter	20-SOIC	68T3554	1.30
● ATTINY2313V-10SUR	2	128	128	10	18	4	2	I2C, SPI, UART	Comparator, PWM, Timer, Counter	20-SOIC	87W8125	2.64
● ATTINY25-15SZ	2	128	128	16	6	6	2	I2C, SPI	ADC, Comparator, Temperature Sensor, Timer	8-SOIC	68T3593	2.46
● ATTINY261A-PU	2	128	128	20	16	6	2	I2C, SPI	ADC, Comparator, PWM, Timer	20-DIP	68T3652	1.66
● ATTINY40-MMH	4	250	...	12	18	2	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	20-VQFN	68T3676	1.77
● ATTINY43U-MU	4	256	64	8	16	4	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	20-QFN	68T3682	3.59
● ATTINY43U-SU	4	256	64	8	16	4	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	20-SOIC	68T3684	3.48
● ATTINY48-AU	4	256	64	12	28	2	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	32-TQFP	68T3768	0.88
● ATTINY48-MMH	4	256	64	12	28	2	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	32-QFN	68T3770	1.26
● ATTINY48-MMU	4	256	64	12	24	2	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	32-MLF	68T3772	1.26
● ATTINY48-MU	4	256	64	12	28	2	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	32-QFN	68T3773	0.80
● ATTINY48-PU	4	256	64	12	24	2	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	32-PDIP	68T3775	1.66
● ATTINY4313-MMH	4	250	256	20	18	4	2	I2C, SPI, UART	Comparator, PWM, Timer	20-VQFN	68T3686	2.06
● ATTINY4313-MU	4	256	256	20	18	4	2	I2C, SPI, UART	Comparator, PWM, Timer	20-QFN	68T3688	1.49
● ATTINY4313-PU	4	256	256	20	18	4	2	I2C, SPI, UART	Comparator, PWM, Timer	20-PDIP	68T3689	1.57
● ATTINY4313-SU	4	256	256	20	18	4	2	I2C, SPI, UART	Comparator, PWM, Timer	20-SOIC	68T3690	1.48
● ATTINY44A-MF	4	250	256	20	12	4	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	14-QFN	68T3700	1.79
● ATTINY44A-MMH	4	256	256	20	12	4	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	14-MLF	68T3702	1.34
● ATTINY44A-MU	4	256	256	20	12	4	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	14-QFN	68T3704	1.32
● ATTINY44A-PU	4	256	256	20	12	4	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	14-PDIP	68T3706	1.32
● ATTINY44A-SSN	4	250	256	20	12	4	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	14-SOIC	68T3709	1.29
● ATTINY44A-SSU	4	256	256	20	12	4	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	14-SOIC	68T3711	1.24
● ATTINY45-20PU	4	256	256	20	6	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	8-PDIP	68T3729	1.21
● ATTINY45-20SH	4	256	256	20	6	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	8-SOIC	68T3730	1.09
● ATTINY45-20SU	4	256	256	20	6	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	8-SOIC	68T3731	1.09
● ATTINY45V-10MU	4	256	256	10	6	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	8-QFN	68T3735	2.29
● ATTINY45V-10PU	4	250	256	10	6	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	8-PDIP	68T3737	2.45
● ATTINY45V-10SH	4	256	256	10	6	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	8-SOIC	68T3738	2.70
● ATTINY45V-10SU	4	256	256	10	6	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	8-SOIC	68T3739	2.21
● ATTINY45V-10XU	4	250	256	10	6	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	8-TSSOP	68T3741	2.21
● ATTINY461-20MU	4	256	256	20	16	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	20-QFN	68T3751	3.35
● ATTINY461-20PU	4	256	256	20	16	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	20-PDIP	68T3753	2.91
● ATTINY461-20SU	4	256	256	20	16	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	20-SOIC	68T3754	2.80
● ATTINY461A-MU	4	250	256	20	16	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	20-QFN	68T3756	2.08
● ATTINY461A-PU	4	256	256	20	16	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	20-PDIP	68T3758	1.81
● ATTINY461A-SU	4	256	256	20	16	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	20-SOIC	68T3759	1.62
● ATTINY461A-XU	4	250	256	20	16	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	20-TSSOP	68T3761	1.98
● ATTINY461V-10MU	4	256	256	10	16	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	20-QFN	68T3763	2.95
● ATTINY461V-10PU	4	256	256	10	16	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	20-PDIP	68T3765	3.74
● ATTINY461V-10SU	4	256	256	10	16	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	20-SOIC	68T3766	2.95
● ATTINY40-SU	4	256	...	12	18	2	2	I2C, SPI	ADC, Comparator, PWM, RTC, Timer	20-SOIC	68T3678	1.19
● ATTINY44-20SSU	4	256	256	20	12	4	2	I2C, SPI	ADC, Comparator, PWM, RTC, Timer	14-SOIC	68T3696	2.71
● ATTINY45-20XU	4	256	256	16	6	6	2	I2C, SPI	ADC, Comparator, Temperature Sensor, Timer	20-TSSOP	68T3733	1.09
● ATTINY88-AU	8	500	64	12	28	2	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	32-TQFP	68T3851	0.86
● ATTINY88-MMH	8	500	64	12	28	2	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	32-QFN	68T3853	1.30
● ATTINY88-MMU	8	500	64	12	24	2	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	32-MLF	68T3855	1.30
● ATTINY88-MU	8	500	64	12	28	2	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	32-QFN	68T3857	0.78
● ATTINY88-PU	8	500	64	12	24	2	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	32-PDIP	68T3859	1.97

➤CONTINUED➤

tinyAVR® 8-BIT MICROCONTROLLERS (CONT.)

Mfg. Part No.	Flash (KB)	RAM (Byte)	EEPROM (Byte)	CPU Freq (MHz)	I/O (Pins)	PWM (Ch)	Timers	Interface	Peripherals	Pkg.	Stock No.	Price Each 1-99
ATTINY84-20MU	8	500	512	20	12	4	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	14-QFN	68T3781	2.99
ATTINY84-20PU	8	512	512	20	12	4	2	SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	14-PDIP	68T3783	3.20
ATTINY84-20SSU	8	500	512	20	12	4	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	14-SOIC	68T3784	2.91
ATTINY84V-10MU	8	500	512	10	12	4	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	14-QFN	68T3795	2.99
ATTINY84V-10SSU	8	500	512	10	12	4	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	14-SOIC	68T3798	3.07
ATTINY85-20PU	8	500	512	20	6	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	8-PDIP	68T3808	1.32
ATTINY85-20SH	8	500	512	20	6	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	8-SOIC	68T3809	1.25
ATTINY85-20SU	8	500	512	20	6	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	8-SOIC	68T3810	1.24
ATTINY85V-10PU	8	500	512	10	6	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	8-DIP	68T3814	2.40
ATTINY85V-10SH	8	500	512	10	6	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	8-SOIC	68T3815	2.63
ATTINY85V-10SU	8	500	512	10	6	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	8-SOIC	68T3816	2.27
ATTINY861-20MU	8	500	512	20	16	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	20-QFN	68T3826	3.82
ATTINY861-20SU	8	500	512	20	16	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	20-SOIC	68T3829	3.04
ATTINY861V-10MU	8	500	512	10	16	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	20-QFN	68T3838	3.04
ATTINY861V-10PU	8	500	512	10	16	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	20-PDIP	68T3839	3.14
ATTINY861V-10SU	8	500	512	10	16	6	2	I2C, SPI	ADC, Comparator, PWM, Timer, Temp. Sensor	20-SOIC	68T3840	3.04
ATTINY87-SU	8	512	512	16	16	9	2	I2C, LIN, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	20-SOIC	68T3847	1.72
ATTINY84A-PU	8	512	512	20	12	4	2	SPI	ADC, Comparator, PWM, RTC, Timer	14-DIP	68T3792	1.39
ATTINY84A-SSU	8	512	512	20	12	4	2	SPI	ADC, Comparator, PWM, RTC, Timer	14-SOIC	68T3793	1.29
ATTINY84A-SSUR	8	512	512	20	12	4	2	SPI	ADC, Comparator, PWM, RTC, Timer	14-SOIC	68T3794	1.34
ATTINY84V-10PU	8	512	512	10	12	4	2	I2C, SPI	ADC, Comparator, PWM, RTC, Timer	14-DIP	68T3797	3.04
ATTINY861-20PU	8	512	512	20	16	6	2	SPI	ADC, Comparator, PWM, RTC, Timer	20-DIP	68T3828	3.38
ATTINY861A-PU	8	512	512	20	16	6	2	I2C, SPI	ADC, Comparator, PWM, Timer	20-DIP	68T3833	1.94
ATTINY167-XU	16	512	512	16	16	9	2	I2C, LIN, SPI, UART	ADC, Comparator, PWM, RTC, Timer, Temp. Sensor	20-TSSOP	68T3533	2.02
ATTINY167-A15SZ	16	512	512	16	16	9	2	I2C, LIN, SPI, UART, USART	ADC, Comparator, Temperature Sensor, Timer	20-SOIC	68T3526	3.03
ATTINY167-SU	16	512	512	20	16	9	2	I2C, SPI, UART, USB	ADC, Comparator, Temperature Sensor, Timer	20-SOIC	68T3531	1.94
ATTINY1634R-SU	16	1024	256	12	18	4	2	I2C, SPI, UART	ADC, Comparator, Temperature Sensor, Timer	20-SOIC	92T0831	1.95

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AT89STK-11 STARTER KIT

RoHS Compliant Available

Atmel

Features
- Flash ISP Single cycle core
- On-board Voltage Regulator
- Microcontroler on its sockets
- PLCC44-pin package
- On-board 3V or 5V power supply circuitry
- On-board RESET
- External MCU clock connector
- External PCA clock connector
- Expansion area with prototyping facilities
- Temperature Range: 0°C to +70°C
- Dimension: 95mm x 120mm

AT89STK-11 Starter kit for easy product evaluation of ISP-standard Flash C51 microcontrollers. This kit replaces the discontinued AT89STK-08

Mfg. Part No.	Description	Stock No.	Price Each
AT89STK-11	AT89C51, AUTO ISP, STARTER KIT	68T5012	123.75

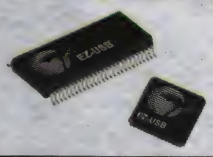
(210303)

MICROCONTROLLERS OPTIMIZED FOR USB APPLICATIONS

RoHS Compliant Available

CYPRESS PERFORM

USB Microcontrollers are optimized for USB applications ranging from hubs to high-speed peripherals.



USB HUB (4 PORTS)

Mfg. Part No.	I/O Pins	Description	Package	Stock No.	Price Each 1-24
LOW SPEED USB PERIPHERALS - UP TO 1.5Mbps					
CY7C63723C-SXC	10	USB and PS/2 Peripheral Controller	18-SOIC	19M7049	4.74
CY7C63743C-SXC	16	USB and PS/2 Peripheral Controller	24-SOIC	19M7053	4.29
FULL SPEED USB PERIPHERALS - UP TO 12Mbps					
CY7C64215-28PVXC	22		28-SSOP	19M7068	3.72
CY7C64713-100AXC	40	FX1, Low power	100-TQFP	19M7072	9.93
HIGH SPEED USB PERIPERALS - UP TO 480Mbps					
CY7C68013A-56PVXC	24	FX2LP, Low power	56-SSOP	19M7114	10.37
CY7C68013A-56PVXI	24	FX2LP, Low power	56-SSOP	19M7116	14.80
CY7C68001-56PVXC	35	Embedded USB Host/Slave Controller	56-SSOP	19M7104	12.40
CY7C68013A-100AXC	40	FX2LP, Low power	100-TQFP	19M7106	15.06
CY7C68013A-128AXC	40	FX2LP, Low power	128-TQFP	19M7108	16.09
CY7C68013A-128AXI	40	FX2LP, Low power	128-TQFP	19M7109	17.90
EMBEDDED HOST CONTROLLERS					
CY7C67300-100AXI	32	USB Host and Peripheral Controller with Automotive AEC Grade Option	100-TQFP	19M7094	16.08

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PSOC™ MIXED-SIGNAL CONTROLLERS

RoHS Compliant Available

CYPRESS PERFORM

PSoC(R) mixed-signal arrays are programmable systems-on-chips (SOCs) that integrate a microcontroller and the analog and digital components that typically surround it in an embedded system. A single PSoC device can integrate as many as 100 peripheral functions with a microcontroller, saving engineers design time, board space, and power consumption.

M8C PROCESSOR SPEEDS UP TO 24 MHZ

Mfg. Part No.	Flash (kB)	RAM (Bytes)	I/O Pins	Package	Stock No.	Price Each 1-24
CY8C21123-24SXI	4	256	6	8-SOIC	19M7156	1.61
CY8C24123A-24PXI	4	256	6	8-DIP	19M7178	2.40
CY8C27143-24PXI	16	256	6	8-DIP	19M7207	4.69
CY8C27243-24PVXIT	16	256	16	20-SSOP	10R5760	5.09
CY8C27443-24PVXI	16	256	24	28-SSOP	19M7216	5.42
CY8C27443-24PVXIT	16	256	24	28-SSOP	10R5761	5.42
CY8C27443-24PXI	16	256	24	28-DIP	19M7218	5.55
CY8C27643-24PVXI	16	256	44	48-SSOP	19M7227	6.30
CY8C27543-24AXI	16	256	40	44-TQFP	19M7221	6.52
CY8C27443-24SXI	16	256	24	28-SOIC	19M7219	5.42
CY8C29466-24PXI	32	2K	24	28-DIP	19M7231	8.89
CY8C29466-24PVXI	32	2K	24	28-SSOP	19M7229	7.18
CY8C29466-24SXI	32	2K	24	28-SOIC	19M7232	8.39
CY8C29666-24PVXI	32	2K	44	48-SSOP	19M7238	7.95

(89660)

STAR-XL-S08 DEVELOPMENT KIT

element14

Features:
- The STAR-XL-S08 offers a complete MCU development environment
- The tools are supported and maintained by Freescale Semiconductor
- The MC9S08MM128 offers industry leading peripheral on-chip modules like the 16-bit ADC
- Ideal for applications that require more processing performance without a PCB re-design

➤ CONTINUED ➤

STAR-XL-S08 DEVELOPMENT KIT (CONT.)

Mfg. Part No.	Description	Kit Contents	Stock No.	Price Each
STAR-XL-S08	XL-STAR MC9S08MM128 MCU board, S08MM Core, MMA8451Q accelerometer, star array of LEDs	Board, CD, USB cable	27T2966	32.91

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TOWER SYSTEM PERIPHERIAL BOARDS

RoHS Compliant Available

freescale

Peripheral boards are used in the Tower System to provided added functionality and connectivity to the system.

Mfg. Part No.	Description	Stock No.	Price Each
● TWR-ELEV	Elevator Boards	11R0867	29.00
● TWR-SER	Serial Module Board	11R0870	49.00
● TWR-PROTO	Blank Prototyping Board	51R8552	14.99
● TWR-LCD	LCD Controller Board	68R1767	99.00
● TWR-MEM	Memory Controller Board	68R1768	89.00
● TWR-SENSOR-PAK	Sensors Controller Board	69R0538	149.00

(148760)

UNIVERSAL TOWER SYSTEM MODULE FOR S08 & RS08 DEVICES

RoHS Compliant Available

freescale

Features

- Tower system module:
  Stand-alone mode
  Swappable MCU daughter cards
  Available as a kit with six initial daughter boards
- Daughter cards:
  unique ID associated with MCU
  Automatic identification by development tools
  5V MCU cards have the option to select between 3V and 5V
  Control the system voltage on the TWR-S08UNIV module board

TWR-S08UNIV provides a Tower System development solution for pre-existing S08 and RS08 devices, initially including the RS08KA family, the S08AC, QD, QE, QG and SH families. This combination of Tower module and attachable daughter cards provides an easy way to switch between different S08 and RS08 MCUs without purchasing the same development board over and over again. The TWR-S08UNIV should always be ordered in combination with one or more of the plug-in daughter cards (TWR-(R)S08DC-xxxx). The **TWR-S08UNIV-DEMO** is also available, providing the TWR-S08UNIV main module along with all six initial daughter cards.

TOWER UNIVERSAL MCU MODULE BASE BOARD

Mfg. Part No.	Description	Stock No.	Price Each
● TWR-S08UNIV-DEMO	Universal RS08/S08 Tower Module Kit	47T9555	99.00
● TWR-S08UNIV	Universal RS08/S08 Tower Module only	47T9554	35.00
TOWER UNIVERSAL MCU MODULE DAUGTHER BOARDS			
● TWR-RS08DC-KA8	RS08KA MCU Module	47T9548	14.00
● TWR-S08DC-AC60	S08AC60 MCU Module	47T9549	14.00
● TWR-S08DC-QD4	S08QD4 MCU Module	47T9550	14.00
● TWR-S08DC-QE64	S08QE64 MCU Module	47T9551	14.00
● TWR-S08DC-QG8	S08QG8 MCU Module	47T9552	14.00
● TWR-S08DC-SH8	S08SH8 MCU Module	47T9553	14.00

(196689)

MC9S08PT60 RUGGED 5V 8-BIT MODULE AND KIT

RoHS Compliant Available

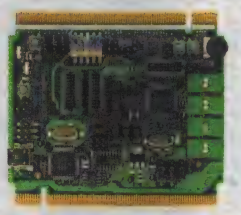
freescale

Features

- MC9S08PT60 MCU
- 8 MHz Crystal for system clock
- Potentiometer for ADC input
- Low-G sensor (MA8451) through IIC connection
- Infra-red Tx/Rx through SCI
- RS232 port
- 4 touch pads each with LED indicator
- Reset button and 3 functional switches
- Sockets for touch sensing & motor control daughter card expansion
- On-board OSBDM debug support with Mini-B USB connector

Kit contents

- TWR-S08PT60 board with MC9S08PT60 8-bit MCU
- Necessary cables
- DVD with lab tutorials, software, training and collateral
- Quick Start Guide document
- Tower System kit also includes:



TWR-PROTO- Tower System Prototyping Module
TWR-ELEV- Tower System Elevator Modules

TWR-S08PT60 development tool is part of the Tower System and features the new rugged 5V MC9S08PT60, combining exceptional EMC/ESD performance with integrated touch sensing and EEPROM. It provides everything a designer needs to develop and evaluate application code. The integrated OSBDM allows a designer to communicate with the board and target device with only a USB cable and the board highlights the MCU's touch sensing and motor control features. Available as a Tower System kit or just the MCU module.

Mfg. Part No.	Description	Stock No.	Price Each
● TWR-S08PT60	Tower System Module, MC0S08PT60	73T5795	99.00
● TWR-S08PT60-KIT	Tower System Kit, MC0S08PT60	73T5796	139.00

(202251)

RUGGED S08P FAMILY STAND-ALONE DEMONSTRATION BOARD

RoHS Compliant Available

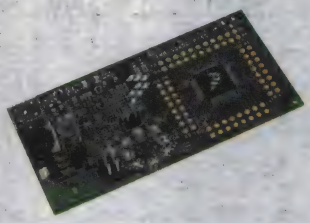
freescale

Features

- MC9S08PT60 MCU
- GPIO output through LEDs
- Touch Sensing Interface (TSI) with one touch pad
- ADC from potentiometer input
- IIC to low-g inertial sensor (accelerometer)
- Flash/EEPROM operation on silicon
- Additional functionality in conjunction with TWR-S08UNIV mother board

Kit contents

- TWR-S08PT60 board with MC9S08PT60 8-bit MCU
- Necessary cables
- DVD with lab tutorials, software, training and collateral
- Quick Start Guide document



TWR-S08DC-PT60 daughter card is a low-cost stand-alone demo board with on-board debugger designed to demonstrate the capabilities of the MC9S08P family. It comes pre-programmed with a potentiometer demo, accelerometer demo with orientation/shake/tap/transient modes, flash and EEPROM demo, and a BDM debugger demo. It enables quick and cost-effective product evaluation and application development, and can be used in stand-alone mode or mounted to the TWR-S08UNIV module to gain access to the full breadth of our Tower ecosystem. The TWR-S08UNIV module is not included but can be ordered separately.

Mfg. Part No.	Description	Stock No.	Price Each
● TWR-S08DC-PT60	MC0S08PT60 Demo board	89T6888	14.00

(203522)

RS08 SERIES 8-BIT MICROCONTROLLER DEVELOPMENT TOOLS

RoHS Compliant Available

freescale

RS08 FAMILY DEVELOPMENT TOOLS

Development tools allow the user to demonstrate and evaluate the capabilities of the **RS08** family of microcontrollers.

Mfg. Part No.	Description	Stock No.	Price Each
● DEM09RS08KA2	RS08 Demo Board w/ cables, software, and docs	01M5526	50.00

(89715)

FLEXIS™ QE 8-BIT MICROCONTROLLERS

RoHS Compliant Available

freescale

Flexis™ QE series 8-bit to 32-bit compatible microcontrollers are also some of the lowest power devices in the marketplace. Using the new ultra-low-power technology that reduces power consumption while meeting your target performance needs. These Flexis devices also share common sets of peripherals and development tools to deliver the ultimate in migration flexibility.

Mfg. Part No.	Flash (Bytes)	RAM (Bytes)	I/O Pins	ADC	Oper. Freq. (MHz)	Package	Stock No.	Price Each 1-9
● MC9S08QE4CTG	4	256	12	10	20	16-TSSOP	69M3826	1.03
● MC9S08QE8CLC	8	512	26	10	20	32-LQFP	69M3830	2.25
● MC9S08QE16CLD	16	1K	34	10	50	44-LQFP	12N7245	2.96
● MC9S08QE32CLD	32	2K	40	10	50	44-LQFP	12N7248	3.33

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AMICUS18 DEVELOPMENT TOOLS

RoHS Compliant Available

Amicus 18

Amicus18 board consists of an 8-bit Microchip PIC® microcontroller with complementary components to facilitate programming and incorporation into other circuits. The board includes both 5-volt and 3-volt linear regulators and a 16 MHz crystal oscillator, thus allowing 16MIPS (Million Instructions Per second) operation. The Amicus18's microcontroller is also pre-programmed with a bootloader that simplifies uploading of programs to the on-chip flash memory programmed via a USB cable and serves as a means of power and communication to the board. The entry level shield is labelled **The Companion Shield**. This is a PCB laid out in the pattern of a solderless breadboard.

Mfg. Part No.	Description	Stock No.	Price Each
● AMICUS18	Amicus18 Board	79R5806	42.92

(180081)

LOW PIN COUNT USB DEVELPMENT KITS

MICROCHIP

The low pin count USB development kits provides an easy, low cost way to evaluate the functionality of the PIC18F14K50 and PIC18F13K50 20-pin USB microcontrollers. The all-inclusive kit contains the hardware, software, and code examples necessary to bring your next USB design from concept to prototype including a self-directed course and lab material designed to ease the learning curve associated with adding USB connectivity to embedded systems. The **DM164127** kit contains one fully populated low pin count USB Development Board, one unpopulated spare development board, one PIC18F14K50 Debug Header, and a CD containing the user guide, course materials, and product documentation.

Mfg. Part No.	Description	Stock No.	Price Each
DM164127	PIC18F14K50, USB, with debug header, dev kit	45P4598	39.99

(148800)

MPLAB® STARTER KIT FOR PIC18F MCU

MICROCHIP

Features

- PIC18F46J50 8-bit MCU w/ 64KB Flash & 4KB RAM and nanoWatt XLP™
- USB mouse, joystick or mass storage device functions
- On-board capacitive touch sense pads availible to all functions
- MicroSD memory card, potentiometer, acceleration sensor, and OLED display
- On-board debugger & programming
- Completely USB-powered
- mTouch capacitive touch sensing
- USB communication
- FREE USB bootloader and software framework

PIC18F Starter Kit contains everything needed to experience the high performance and versatility of the PIC18F microcontroller family. It includes an on-board debugger/programming capability as well as USB communication, a capacitive touch pad, potentiometer, acceleration sensor, MicroSD™ memory card, and an OLED display. The board can function as a USB mouse, joystick or mass storage device (thumb drive) all using the on-board capacitive touch sense pads.

Mfg. Part No.	Description	Stock No.	Price Each
DM180021	PIC18F, Capacitive touch pad, MPLAB starter kit	29R0931	59.98

(156280)

PIC18F26J50 EVK FLOWCODE DEVELOPMENT KIT

RoHS Compliant Available

element14

Board Specifications

- MCU: PIC18F26J50 PIC18F26J50
- On-chip memory: 32KB ROM & 3776bytes SRAM
- One ICSP interface
- One high-speed Mini USB Host Port
- One PICKit interface
- One power output port
- Two User buttons
- 8 Users LED
- 8 I/O Pins User Extension Interface
- On board touch key
- On board potentiometer
- On board temperature sensor
- Power: 5VDC from Mini USB port
- Working temperature: -10 to 70 Deg C
- Dimension: 88x 52 mm

Kit contents

- PIC18F26J50 PIC18F26J50 EVK board
- USB Cable (Mini USB type)
- CD-ROM
- One page Package list

PIC18F26J50 EVK Flowcode Development Kit is a development and demonstration platform designed to provide developers a easier hands-on approach to learning Flowcode 4. The kit is based on PIC18F26J50 microcontroller, and integrates temperature sensor, capacitor touch sensor and potentiometer to help developers verify their programs designed by Flowcode 4. Flowcode 4 is an advanced graphical programming language that allows those with little to no programming experience to create complex electronic systems in minutes. The included Flowcode 4 supports code generation for the PIC12, PIC16, PIC18 series, PIC24 and dsPIC® for microcontrollers and is compatible with PICkit® programmers, third party programmers, as well as compatible with the Hi-TECH C compiler. The professional edition includes drivers for a wide range of subsystems like LCDs, keypads, 7-segment displays, ADC, and PWM, as well as communication protocols including I2C, SPI, RS-232 RS-232 , Zigbee, TCP/IP, etc.

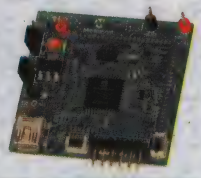
Mfg. Part No.	Description	Stock No.	Price Each
PIC18F26J50-EVK	PIC18 Flowcode dev kit	65T9233	26.56

(202215)

PIC18 FULL SPEED USB DEMONSTRATION BOARDS

MICROCHIP

These full speed USB demo boards are USB 2.0 full speed and low speed demonstration and development boards featuring the PIC18F microcontrollers. They are recommended as an initial USB development platform for applications that will be using any of the PIC18F family microcontrollers. These boards can also be used as a Plug-In Module (PIM) to the HPC Explorer Board (DM183022) or the PIC18 Explorer Board (DM183032).



Mfg. Part No.	Description	Stock No.	Price Each
MA180024	PIC18F46J50, FS USB Plug in module, Demo board	07R7710	45.00

(148865)

PIC18 DEVELOPMENT KIT

MICROCHIP

Contents

- PIC18 Explorer Board
- PICkit 3 Debugger/Programmer
- USB cable
- 9V power supply

PIC18 Explorer Board is a low-cost demo board is for evaluation of our PIC18 MCU families. The PIC18 is our highest performance 8-bit architecture and has three different families: standard PIC18, PIC18 J-series and PIC18 K-series. This single development board supports dozens of the general purpose PIC18 families using various processor Plug-In Modules (PIMs).

Mfg. Part No.	Description	Stock No.	Price Each
DV164136	PIC18 Explorer Board	12R3151	165.00

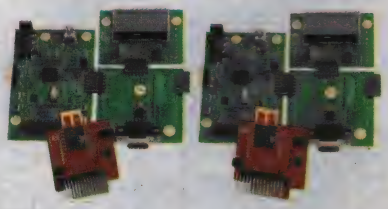
(176997)

8-BIT WIRELESS DEVELOPMENT KIT - 2.4GHZ MRF24J40

MICROCHIP

Kit Contains

- Two PIC18 Wireless Development Boards
- Two MRF24J40MA transceiver PICtail daughter boards
- Two RS-232 Serial Accessory boards
- Two LCD Serial Accessory boards
- Two Mini B USB cables
- Two RS-232 serial cables



Features

- MiWi Stack support - MiWi, MiWi P2P and MiWI Pro
- PIC18F46J50 MCU featuring nanoWatt XLP Technology for extreme low power
- MRF24J40MA FCC/IC/ETSI certified module with 25AA02E48 EUI Node Identity serial EEPROM on PICtail daughter board
- MCP9700A Temperature sensor
- LCD display to develop interactive wireless demos (Removable for lower power)
- Board can be powered by either AA batteries or 9V power supply or External Power supply or USB
- RS-232 Serial Accessory board - for debug purposes
- Support other radios - both in 2.4GHz and Sub-GHz frequencies through PICtail connector

8-bit Wireless Development Kit w/ 2.4 GHz MRF24J40 is an easy-to-use evaluation and development platform for IEEE 802.15.4 application designers. This kit includes MRF24J40 transceiver module and also features the PIC18 XLP microcontroller family with complete hardware needed to rapidly prototype wireless applications. The demonstration kit is pre-programmed with MiWi™ protocol stack.

Mfg. Part No.	Description	Stock No.	Price Each
DM182015-1	2.4 GHz 8-bit Wireless Dev Kit	29T9433	299.00

(200550)

PIC12/16 F1 EVALUATION KIT

MICROCHIP

Features

- 44-pin development board with generous prototyping area
- Populated with a PIC16LF1937 featuring nanoWatt XLP technology
- 3 Volt, 40 segment multimeter LCD glass
- Potentiometer
- Mechanical button
- MCP9800 temperature sensor
- 32kHz low power crystal
- Current monitoring connector to measure low power XLP capabilities
- In Circuit Serial Programming Interface for PICkit3
- PICkit serial interface
- Expansion header for the F1 BLDC Motor add-on
- Included Demos:
- Low Power Demonstration
- LCD Demonstration
- LEDs

Kit Contents

- F1 Evaluation Platform
- PICkit 3 In-Circuit Debugger
- USB Cable
- Platform & Demonstration Guide
- Source code for included demonstrations
- Board schematics

F1 Evaluation Platform is a simple development tool for Enhanced Mid-range PIC microcontrollers (PIC12F1xxx/PIC16F1xxx) and demonstrates the capabilities & low power enhancements of these new PIC microcontrollers. Included with a PICkit3 for quick programming, this kit provides a platform for general purpose development and offers the ability to develop code for any PIC12F1xxx/PIC16F1xxx microcontroller.

Mfg. Part No.	Description	Stock No.	Price Each
DV164132	PIC12/16 F1 Evaluation Kit	65R5413	69.99

(196444)

8-BIT PIC12 MICROCONTROLLERS

RoHS Compliant Available

MICROCHIP

FLASH MEMORY - STANDARD VOLTAGE VERSIONS w/ 12-BIT INSTRUCTIONS

Mfg. Part No.	Program Memory (KBytes)	Program Memory (Words)	EEPROM Data Memory (Bytes)	RAM (Bytes)	I/O Pins	ADC 10-Bit (Ch)	Comparators	Max. Speed (MHz)	Intern. Osc. (MHz)	Timers 8-Bit	Timers 16-Bit	Supply Voltage	Package	Stock No.	Price Each 1-25
PIC12F508-E/P	0.75	512	...	25	6	...	...	4	4	1	...	2 to 5.5	8-PDIP	89H0417	0.71
PIC12F508-E/SN	0.75	512	...	25	6	...	...	4	4	1	...	2 to 5.5	8-SOIC	89H0418	0.61
PIC12F508-I/MC	0.75	512	...	25	6	...	...	4	4	1	...	2 to 5.5	8-DFN	17M0914	0.64
PIC12F508-I/MS	0.75	512	...	25	6	...	...	4	4	1	...	2 to 5.5	8-MSOP	08J9610	0.62
PIC12F508-I/P	0.75	512	...	25	6	...	...	4	4	1	...	2 to 5.5	8-DIP	96K3770	0.66
PIC12F508-I/SN	0.75	512	...	25	6	...	...	4	4	1	...	2 to 5.5	8-SOIC	89H0420	0.56
PIC12F510-I/MS	1.5	1024	...	38	6	3	1	8	8	1	...	2 to 5.5	8-MSOP	71J7194	0.73

CONTINUED

8-BIT PIC12 MICROCONTROLLERS (CONT.)

Mfg. Part No.	Program Memory (KBytes)	Program Memory (Words)	EEPROM Data Memory (Bytes)	RAM (Bytes)	I/O Pins	ADC 10-Bit (Ch)	Comparators	Max. Speed (MHz)	Intern. Osc. (MHz)	Timers 8-Bit	Timers 16-Bit	Supply Voltage	Package	Stock No.	Price Each 1-25
● PIC12F510-I/P	1.5	1024	...	38	6	3	1	8	8	1	...	2 to 5.5	8-DIP	71J7195	0.77
● PIC12F510-I/SN	1.5	1024	...	38	6	3	1	8	8	1	...	2 to 5.5	8-SOIC	71J7196	0.67
● PIC12F509-E/P	1.5	1024	...	41	6	...	...	4	4	1	...	2 to 5.5	8-PDIP	89H0422	0.77
● PIC12F509-E/SN	1.5	1024	...	41	6	...	...	4	4	1	...	2 to 5.5	8-SOIC	89H0423	0.68
● PIC12F509-I/P	1.5	1024	...	41	6	...	...	4	4	1	...	2 to 5.5	8-DIP	89H0424	0.71
● PIC12F509-I/SN	1.5	1024	...	41	6	...	...	4	4	1	...	2 to 5.5	8-SOIC	96K3771	0.62
● PIC12F510-E/P	1.5	1024	...	38	6	3	1	8	8	1	...	2 to 5.5	8-DIP	71J7192	0.84
● PIC12F510-E/SN	1.5	1024	...	38	6	3	1	8	8	1	...	2 to 5.5	8-SOIC	71J7193	0.74
● PIC12F519-I/P	1.5	1024	64	41	6	...	...	8	8	1	...	2 to 5.5	8-DIP	40M1387	0.77
● PIC12F752-I/P	1.75	1024	...	64	6	4	2	20	8	3	1	2 to 5.5	8-DIP	30T3368	0.91
● PIC12F752-I/SN	1.75	1024	...	64	6	4	2	20	8	3	1	2 to 5.5	8-SOIC	30T3369	0.81
● PIC12HV752-I/P	1.75	1024	...	64	6	4	2	20	8	3	1	2 to 5	8-DIP	30T3376	0.96
● PIC12HV752-I/SN	1.75	1024	...	64	6	4	2	20	8	3	1	2 to 5	8-SOIC	30T3377	0.87
● PIC12LF1501-E/MC	1.75	1024	...	64	6	4	1	20	16	2	1	1.8 to 3.6	8-DFN	73T1184	0.82
● PIC12LF1501-E/MS	1.75	1024	...	64	6	4	1	20	16	2	1	1.8 to 3.6	8-MSOP	66T9116	0.74
● PIC12LF1501-E/P	1.75	1024	...	64	6	4	1	20	16	2	1	1.8 to 3.6	8-DIP	66T9117	0.84
● PIC12LF1501-E/SN	1.75	1024	...	64	6	4	1	20	16	2	1	1.8 to 3.6	8-SOIC	66T9118	0.74
● PIC12LF1501-I/MC	1.75	1024	...	64	6	4	1	20	16	2	1	1.8 to 3.6	8-DFN	73T1185	0.75
● PIC12LF1501-I/MS	1.75	1024	...	64	6	4	1	20	16	2	1	1.8 to 3.6	8-MSOP	66T9119	0.67
● PIC12LF1501-I/P	1.75	1024	...	64	6	4	1	20	16	2	1	1.8 to 3.6	8-DIP	66T9120	0.77
● PIC12LF1501-I/SN	1.75	1024	...	64	6	4	1	20	16	2	1	1.8 to 3.6	8-SOIC	66T9121	0.67
● PIC12F1501-E/MC	1.75	1024	...	64	6	4	1	20	16	2	1	2.3 to 5.5	8-DFN	73T1181	0.82
● PIC12F1501-E/MS	1.75	1024	...	64	6	4	1	20	16	2	1	2.3 to 5.5	8-MSOP	66T9108	0.74
● PIC12F1501-E/P	1.75	1024	...	64	6	4	1	20	16	2	1	2.3 to 5.5	8-DIP	66T9109	0.84
● PIC12F1501-E/SN	1.75	1024	...	64	6	4	1	20	16	2	1	2.3 to 5.5	8-SOIC	66T9110	0.74
● PIC12F1501-I/MC	1.75	1024	...	64	6	4	1	20	16	2	1	2.3 to 5.5	8-DFN	73T1182	0.75
● PIC12F1501-I/MS	1.75	1024	...	64	6	4	1	20	16	2	1	2.3 to 5.5	8-MSOP	66T9111	0.67
● PIC12F1501-I/P	1.75	1024	...	64	6	4	1	20	16	2	1	2.3 to 5.5	8-DIP	66T9112	0.77
● PIC12F1501-I/SN	1.75	1024	...	64	6	4	1	20	16	2	1	2.3 to 5.5	8-SOIC	66T9113	0.67
FLASH MEMORY - STANDARD VOLTAGE VERSIONS w/ 14-BIT INSTRUCTIONS															
● PIC12F609-I/SN	1.75	1024	...	64	6	...	1	20	8	1	1	2 to 5.5	8-SOIC	17M0925	0.71
● PIC12F609-I/MS	1.75	1024	...	64	6	...	1	8	8	1	1	2 to 5.5	8-MSOP	27M0485	0.77
● PIC12F615-I/MF	1.75	1024	...	64	5	4	1	8	8	2	1	2 to 5.5	8-DFN	45P4743	0.85
● PIC12F615-E/SN	1.75	1024	...	64	6	4	1	20	20	2	1	2 to 5.5	8-SOIC	74K8514	0.83
● PIC12F615-I/P	1.75	1024	...	64	6	4	1	20	8	2	1	2 to 5.5	8-DIP	74K8517	0.85
● PIC12F615-I/SN	1.75	1024	...	64	6	4	1	20	8	2	1	2 to 5.5	8-SOIC	74K8518	0.75
● PIC12F629-E/SN	1.75	1024	128	64	6	...	1	20	4	1	1	2 to 5.5	8-SOIC	92C4334	0.92
● PIC12F629-I/P	1.75	1024	128	64	6	...	1	20	4	1	1	2 to 5.5	8-DIP	67K0822	0.92
● PIC12F629-I/SN	1.75	1024	128	64	6	...	1	20	4	1	1	2 to 5.5	8-SOIC	61K3433	0.84
● PIC12F629T-E/SN	1.75	1024	128	64	6	...	1	20	20	1	1	2 to 5.5	8-SOIC	92C4336	0.97
● PIC12F635-I/SN	1.75	1024	128	64	6	...	1	20	8	1	1	2 to 5.5	8-SOIC	01M8475	1.01
● PIC12F635-E/P	1.75	1024	128	64	6	...	...	8	8	1	1	2 to 5.5	8-DIP	89H0428	1.19
● PIC12F675-I/P	1.75	1024	128	64	6	4	1	20	4	1	1	2 to 5.5	8-DIP	77C6296	1.01
● PIC12F617-I/P	3.5	2048	...	128	5	4	1	20	8	2	1	2 to 5.5	8-DIP	53R0208	0.91
● PIC12F683-E/P	3.5	2048	256	128	6	4	1	20	8	2	1	2 to 5.5	8-DIP	89H0439	1.29
● PIC12F683-I/P	3.5	2048	256	128	6	4	1	20	8	2	1	2 to 5.5	8-DIP	89H0442	1.18
● PIC12F683-I/SN	3.5	2048	256	128	6	4	1	20	8	2	1	2 to 5.5	8-SOIC	61K3434	1.09
● PIC12F683-E/SN	3.5	2048	256	128	6	4	1	20	8	2	1	2 to 5.5	8-SOIC	89H0440	1.20
● PIC12F683T-I/SN	3.5	2048	256	128	6	4	1	20	20	2	1	2 to 5.5	8-SOIC	89H0447	1.13
PIC12F SERIES - HIGH SUPPLY VOLTAGE VERSIONS w/ nanoWATT TECHNOLOGY															
● PIC12F1822-I/MF	3.5	2048	256	128	6	4	1	32	32	2	1	1.8 to 5.5	8-DFN	63R7787	1.10
● PIC12LF1822-I/MF	3.5	2048	256	128	6	4	1	32	32	2	1	1.8 to 3.6	8-DFN	63R7789	1.10
● PIC12F1822-I/P	3.5	2048	256	256	6	4	1	32	32	2	1	2.3 to 5.5	8-PDIP	53R0196	1.10
● PIC12F1822-I/SN	3.5	2048	256	128	6	4	1	32	32	2	1	1.8 to 5.5	8-PDIP	53R0197	1.00
● PIC12LF1822-I/SN	3.5	2048	256	128	6	4	1	32	32	2	1	1.8 to 3.6	8-SOIC	53R0214	1.00
● PIC12F1840-E/MF	7	4096	256	256	6	4	1	32	32	2	1	2.3 to 5.5	8-DFN	13T4702	1.28
● PIC12F1840-E/P	7	4096	256	256	6	4	1	32	32	2	1	2.3 to 5.5	8-DIP	13T4703	1.28
● PIC12F1840-E/SN	7	4096	256	256	6	4	1	32	32	2	1	2.3 to 5.5	8-SOIC	13T4704	1.19
● PIC12F1840-I/MF	7	4096	256	256	6	4	1	32	32	2	1	2.3 to 5.5	8-DFN	13T4705	1.18
● PIC12F1840-I/P	7	4096	256	256	6	4	1	32	32	2	1	1.8 to 5.5	8-DIP	13T4706	1.18
● PIC12F1840-I/SN	7	4096	256	256	6	4	1	32	32	2	1	1.8 to 5.5	8-SOIC	13T4707	1.08
● PIC12LF1840T48A-I/ST	7	4096	256	256	6	4	1	32	32	2	1	2.5 to 3.6	14-TSSOP	55T3626	1.54
PIC12HV SERIES - HIGH SUPPLY VOLTAGE VERSIONS w/ 8-BIT CMOS															
● PIC12HV615-I/MF	1.75	1024	...	64	6	4	1	8	8	2	1	2 to 5	8-DFN	45P4749	0.91
● PIC12HV615-I/P	1.75	1024	...	64	6	4	1	20	8	2	1	2 to 5	8-DIP	27M9656	0.91
● PIC12HV615-I/SN	1.75	1024	...	64	6	4	1	20	8	2	1	2 to 5	8-SOIC	74K8529	0.81

PIC12C SERIES WITH OTP(EPROM) MEMORY

Mfg. Part No.	Program Memory (kBytes)	Program Memory (Words)	EEPROM Data Memory (Bytes)	RAM (Bytes)	I/O Pins	ADC 10-Bit (Ch)	Max. Speed (MHz)	Intern. Osc. (MHz)	Timers 8-Bit	Supply Voltage	Package	Stock No.	Price Each 1-25
● PIC12C509A-04E/SN	1.5	1024	...	41	6	...	4	4	1	3 to 5.5	8-SOIC	23C2957	1.27

(70546)

8-BIT PIC16 FLASH MICROCONTROLLERS

PIC16 family offers a wide range of options, from completely upward compatible devices in 18- to 44-pin packages to devices with digital peripheral integration at varying levels.

RoHS Compliant Available

MICROCHIP

OTP MEMORY

Mfg. Part No.	Program Memory (KB)	Program Memory (kWrds)	RAM (Bytes)	EEPROM (Bytes)	I/Os	ADC (Ch)	Timers (8/16Bit)	Max Freq. (MHz)	Oper. Temp (°C)	Features	Pkg.	Stock No.	Price Each 1-25
PIC16C55A-04I/P	768	0.5	24	...	20	...	1 / 0	4	-40 to 85	ICSP, POR, WDT	28-DIP	23C3393	1.99
PIC16C55A-20/P	768	0.5	24	...	20	...	1 / 0	20	0 to 70	ICSP, POR, WDT	28-DIP	12C1881	2.02
PIC16C55A-20/SO	896	0.5	24	...	20	...	1 / 0	20	0 to 70	ICSP, POR, WDT	28-SOIC	12C1882	2.10
PIC16C55-HS/P	768	0.5	24	...	20	...	1 / 0	20	0 to 70	ICSP, POR, WDT	28-DIP	23C3324	4.03
PIC16C55-HS/SO	896	0.5	24	...	20	...	1 / 0	20	0 to 70	ICSP, POR, WDT	28-SOIC	23C3325	4.19
PIC16C55-HSI/P	768	0.5	24	...	20	...	1 / 0	20	-40 to 85	ICSP, POR, WDT	28-DIP	23C3332	4.45
PIC16C55-RC/P	896	0.5	24	...	20	...	1 / 0	4	0 to 70	ICSP, POR, WDT	28-DIP	96K3790	3.30
PIC16C55-XTI/P	768	0.5	24	...	20	...	1 / 0	4	-40 to 85	ICSP, POR, WDT	28-DIP	65K1036	3.88
PIC16C54-10/P	768	0.5	25	...	12	...	1 / 0	10	0 to 70	ICSP, POR, WDT	18-DIP	23C3215	2.87
PIC16C54A-04/SO	768	0.5	25	...	12	...	1 / 0	4	0 to 70	ICSP, POR, WDT	18-SOIC	12C1873	2.74
PIC16C54A-04I/SO	768	0.5	25	...	12	...	1 / 0	4	-40 to 85	ICSP, POR, WDT	18-SOIC	23C3231	3.01
PIC16C54C-04/SS	768	0.5	25	...	12	...	1 / 0	4	0 to 70	ICSP, POR, WDT	20-SSOP	23C3269	1.62
PIC16C54C-04I/P	768	0.5	25	...	12	...	1 / 0	4	-40 to 85	ICSP, POR, WDT	18-DIP	61K3439	1.48
PIC16C54C-20/P	768	0.5	25	...	12	...	1 / 0	20	0 to 70	ICSP, POR, WDT	18-DIP	69K7624	1.59
PIC16C54C-20I/P	768	0.5	25	...	12	...	1 / 0	20	-40 to 85	ICSP, POR, WDT	18-DIP	54K2822	1.59
PIC16C54C-40/P	768	0.5	25	...	12	...	1 / 0	40	0 to 70	ICSP, POR, WDT	18-DIP	89C7755	1.64
PIC16C54C-40/SO	768	0.5	25	...	12	...	1 / 0	40	0 to 70	ICSP, POR, WDT	18-SOIC	89C7756	1.67
PIC16C54-HS/SO	768	0.5	25	...	12	...	1 / 0	20	0 to 70	ICSP, POR, WDT	18-SOIC	23C3183	2.94
PIC16C54-LP/P	768	0.5	25	...	12	...	1 / 0	40	0 to 70	ICSP, POR, WDT	18-DIP	23C3191	2.81
PIC16C54-RC/P	768	0.5	25	...	12	...	1 / 0	4	0 to 70	ICSP, POR, WDT	18-DIP	12C1871	2.69
PIC16C54-RC/SO	768	0.5	25	...	12	...	1 / 0	20	0 to 70	ICSP, POR, WDT	18-SOIC	23C3199	2.74
PIC16C54-XT/SO	768	0.5	25	...	12	...	1 / 0	4	0 to 70	ICSP, POR, WDT	18-SOIC	23C3207	2.74
PIC16C710-04/SO	896	0.5	36	...	13	4	1 / 0	4	0 to 70	ICSP, POR, BOR, WDT	18-SOIC	96K3824	2.23
PIC16C710-04I/P	896	0.5	36	...	13	4	1 / 0	4	-40 to 85	ICSP, POR, BOR, WDT	18-DIP	23C4443	2.40
PIC16C710-04I/SO	896	0.5	36	...	13	4	1 / 0	4	-40 to 85	ICSP, POR, BOR, WDT	18-SOIC	23C4444	2.46
PIC16C710-20/P	896	0.5	36	...	13	4	1 / 0	20	0 to 70	ICSP, POR, BOR, WDT	18-DIP	23C4446	2.34
PIC16C710-20/SO	896	0.5	36	...	13	4	1 / 0	20	0 to 70	ICSP, POR, BOR, WDT	18-SOIC	23C4447	2.39
PIC16C620A-04/P	896	0.5	96	...	13	...	1 / 0	4	0 to 70	POR, BOR, WDT	18-DIP	23C3856	1.44
PIC16C620A-04I/SO	896	0.5	96	...	13	...	1 / 0	4	-40 to 85	POR, BOR, WDT	18-SOIC	23C3863	1.48
PIC16HV540-04/P	768	0.5	25	...	12	...	1 / 0	4	0 to 70	...	18-DIP	23C5118	1.48
PIC16HV540-04/SO	1.5	0.5	25	...	12	...	1 / 0	4	0 to 70	...	18-SOIC	23C5119	1.51
PIC16C56-10/P	1.5	1	25	...	12	...	1 / 0	10	0 to 70	ICSP, POR, WDT	18-DIP	23C3546	3.94
PIC16C56A-04/SO	1.5	1	25	...	12	...	1 / 0	4	0 to 70	ICSP, POR, WDT	18-SOIC	23C3556	1.70
PIC16C56A-04I/P	1.5	1	25	...	12	...	1 / 0	4	-40 to 85	ICSP, POR, WDT	18-DIP	23C3561	1.83
PIC16C56A-20/SO	1.5	1	25	...	12	...	1 / 0	40	0 to 70	ICSP, POR, WDT	18-SOIC	65K1037	1.81
PIC16C56-HS/P	1.5	1	25	...	12	...	1 / 0	20	0 to 70	ICSP, POR, WDT	18-DIP	23C3511	4.21
PIC16C56-HSI/P	1.5	1	25	...	12	...	1 / 0	20	-40 to 85	ICSP, POR, WDT	18-DIP	23C3517	4.63
PIC16C56-RC/P	1.5	1	25	...	12	...	1 / 0	4	0 to 70	ICSP, POR, WDT	18-DIP	59K0242	3.43
PIC16C505-04/P	1.5	1	72	...	12	...	1 / 0	4	0 to 70	ICSP, POR, WDT	14-DIP	61K3435	1.32
PIC16C505-04/SL	1.5	1	72	...	12	...	1 / 0	4	0 to 70	ICSP, POR, WDT	14-SOIC	96K3781	1.32
PIC16C505-04I/SL	1.5	1	72	...	12	...	1 / 0	4	-40 to 85	ICSP, POR, WDT	14-SOIC	12C1867	1.32
PIC16C505-20I/P	1.5	1	72	...	12	...	1 / 0	20	-40 to 85	ICSP, POR, WDT	14-DIP	23C3174	1.36
PIC16C712-04/P	1.75	1	128	...	13	4	2 / 1	4	0 to 70	1-CCP, ICSP	18-DIP	23C4494	1.93
PIC16C712-04/SS	1.75	1	128	...	13	4	2 / 1	4	0 to 70	1-CCP, ICSP	20-SSOP	23C4496	2.16
PIC16C712-20/P	1.75	1	128	...	13	4	2 / 1	20	0 to 70	1-CCP, ICSP	18-DIP	23C4503	2.06
PIC16C712-20/SS	1.75	1	128	...	13	4	2 / 1	20	0 to 70	1-CCP, ICSP	20-SSOP	23C4505	2.32
PIC16C781-I/P	1.75	1	128	...	16	8	2 / 1	20	-40 to 85	ICSP, BOR, WDT, PBOR, PLVD	20-DIP	89C2849	3.14
PIC16C71-04/P	1.75	1	36	...	13	4	1 / 0	4	0 to 70	ICSP, POR, WDT	18-DIP	69K7626	3.92
PIC16C71-04/SO	1.75	1	36	...	13	4	1 / 0	4	0 to 70	ICSP, POR, WDT	18-SOIC	88K1153	4.00
PIC16C71-20/P	1.75	1	36	...	13	4	1 / 0	20	0 to 70	ICSP, POR, WDT	18-DIP	80K6045	4.19
PIC16C71-20I/P	1.75	1	36	...	13	4	1 / 0	20	-40 to 85	ICSP, POR, WDT	18-DIP	73K1290	4.61
PIC16C71-20I/SO	1.75	1	36	...	13	4	1 / 0	20	-40 to 85	ICSP, POR, WDT	18-SOIC	23C4431	4.70
PIC16C711-04/P	1.75	1	68	...	13	4	1 / 0	4	0 to 70	ICSP, POR, BOR, WDT	18-DIP	12C1915	2.39
PIC16C711-04/SS	1.75	1	68	...	13	4	1 / 0	4	0 to 70	ICSP, POR, BOR, WDT	20-SSOP	23C4469	2.67
PIC16C711-04I/P	1.75	1	68	...	13	4	1 / 0	4	-40 to 85	ICSP, POR, BOR, WDT	18-DIP	68K5331	2.63
PIC16C711-04I/SO	1.75	1	68	...	13	4	1 / 0	4	-40 to 85	ICSP, POR, BOR, WDT	18-SOIC	12C1916	2.67
PIC16C711-20/P	1.75	1	68	...	13	4	1 / 0	20	0 to 70	ICSP, POR, BOR, WDT	18-DIP	61K3444	2.56
PIC16C711-20/SO	1.75	1	68	...	13	4	1 / 0	20	0 to 70	ICSP, POR, BOR, WDT	18-SOIC	12C1918	2.60
PIC16C711-20/SS	1.75	1	68	...	13	4	1 / 0	20	0 to 70	ICSP, POR, BOR, WDT	20-SSOP	23C4475	2.87
PIC16C711-20I/P	1.75	1	68	...	13	4	1 / 0	20	-40 to 85	ICSP, POR, BOR, WDT	18-DIP	59K0244	2.81
PIC16C711-20I/SO	1.75	1	68	...	13	4	1 / 0	20	-40 to 85	ICSP, POR, BOR, WDT	18-SOIC	23C4480	2.87
PIC16C621A-04/SO	1.75	1	96	...	13	...	1 / 0	4	0 to 70	POR, BOR, WDT	18-SOIC	65K1039	1.65
PIC16C621A-04I/P	1.75	1	96	...	13	...	1 / 0	20	-40 to 85	POR, BOR, WDT	18-DIP	23C3922	1.78
PIC16C621A-20/P	1.75	1	96	...	13	...	1 / 0	20	0 to 70	POR, BOR, WDT	18-DIP	96K3806	1.73
PIC16C621A-20/SO	1.75	1	96	...	13	...	1 / 0	20	0 to 70	POR, BOR, WDT	18-SOIC	23C3926	1.77
PIC16CE624-04/P	1.75	1	96	128	13	...	1 / 0	4	0 to 70	POR, BOR, WDT	18-DIP	23C3107	2.31
PIC16CE624-04/SO	1.75	1	96	128	13	...	1 / 0	4	0 to 70	POR, BOR, WDT	18-SOIC	23C3108	2.36
PIC16C57-10/P	3	2	72	...	20	...	1 / 0	10	0 to 70	ICSP, POR, WDT	28-DIP	23C3659	4.79
PIC16C57-10/SO	3	2	72	...	20	...	1 / 0	10	0 to 70	ICSP, POR, WDT	28-SOIC	23C3660	4.99
PIC16C57C-04/P	3	2	72	...	20	...	1 / 0	4	0 to 70	ICSP, POR, WDT	28-DIP	61K3441	2.10
PIC16C57C-04/SP	3	2	72	...	20	...	1 / 0	4	0 to 70	ICSP, POR, WDT	28-NDIP	23C3674	2.10

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8-BIT PIC16 FLASH MICROCONTROLLERS (CONT.)

Mfg. Part No.	Program Memory (KB)	Program Memory (kWrds)	RAM (Bytes)	EEPROM (Bytes)	I/Os	ADC (Ch)	Timers (8/16Bit)	Max Freq. (MHz)	Oper. Temp (°C)	Features	Pkg.	Stock No.	Price Each 1-25
● PIC16C57C-04I/SO	3	2	72	...	20	...	1 / 0	4	-40 to 85	ICSP, POR, WDT	28-SOIC	23C3681	2.41
● PIC16C57C-20/P	3	2	72	...	20	...	1 / 0	20	0 to 70	ICSP, POR, WDT	28-DIP	12C1892	2.36
● PIC16C57C-20/SO	3	2	72	...	20	...	1 / 0	20	0 to 70	ICSP, POR, WDT	28-SOIC	12C1893	2.46
● PIC16C57C-20/SP	3	2	72	...	20	...	1 / 0	40	0 to 70	ICSP, POR, WDT	28-NDIP	23C3684	2.36
● PIC16C57C-40/SO	3	2	72	...	20	...	1 / 0	40	0 to 70	ICSP, POR, WDT	28-SOIC	33C0952	2.50
● PIC16C57-HS/P	3	2	72	...	20	...	1 / 0	20	0 to 70	ICSP, POR, WDT	28-DIP	61K3440	5.14
● PIC16C57-HS/SO	3	2	72	...	20	...	1 / 0	20	0 to 70	ICSP, POR, WDT	28-SOIC	23C3614	5.34
● PIC16C57-HSI/P	3	2	72	...	20	...	1 / 0	20	-40 to 85	ICSP, POR, WDT	28-DIP	65K1038	5.64
● PIC16C57-LP/P	3	2	72	...	20	...	1 / 0	40	0 to 70	ICSP, POR, WDT	28-DIP	23C3625	4.39
● PIC16C57-XT/P	3	2	72	...	20	...	1 / 0	4	0 to 70	ICSP, POR, WDT	28-DIP	12C1890	4.48
● PIC16C57-XT/SO	3	2	72	...	20	...	1 / 0	4	0 to 70	ICSP, POR, WDT	28-SOIC	23C3649	4.66
● PIC16C57-XTI/P	3	2	72	...	20	...	1 / 0	20	-40 to 85	ICSP, POR, WDT	28-DIP	88K1971	4.94
● PIC16C58B-20/P	3	2	73	...	12	...	1 / 0	20	0 to 70	ICSP, POR, WDT	18-DIP	12C1895	1.89
● PIC16C58B-20/SO	3	2	73	...	12	...	1 / 0	20	0 to 70	ICSP, POR, WDT	18-SOIC	12C1896	1.93
● PIC16C58B-20I/P	3	2	73	...	12	...	1 / 0	20	-40 to 85	ICSP, POR, WDT	18-DIP	23C3749	2.09
● PIC16C622A-04I/P	3.5	2	128	...	13	...	1 / 0	4	-40 to 85	POR, BOR, WDT	18-DIP	23C3984	2.01
● PIC16C622A-20/P	3.5	2	128	...	13	...	1 / 0	20	0 to 70	POR, BOR, WDT	18-DIP	54K2824	1.96
● PIC16C62B-04/SO	3.5	2	128	...	22	...	2 / 1	4	0 to 70	1-CCP, ICSP	28-SOIC	12C1898	2.82
● PIC16C64A-04I/L	3.5	2	128	...	33	...	2 / 1	4	-40 to 85	1-CCP / 0-ECCP	44-PLCC	23C4084	7.58
● PIC16C64A-04I/P	3.5	2	128	...	33	...	2 / 1	4	-40 to 85	1-CCP / 0-ECCP	40-DIP	23C4085	5.60
● PIC16C64A-10/L	3.5	2	128	...	33	...	2 / 1	10	0 to 70	1-CCP / 0-ECCP	44-PLCC	23C4088	6.64
● PIC16C64A-10/P	3.5	2	128	...	33	...	2 / 1	10	0 to 70	1-CCP / 0-ECCP	40-DIP	23C4089	5.46
● PIC16C64A-20/L	3.5	2	128	...	33	...	2 / 1	20	0 to 70	1-CCP / 0-ECCP	44-PLCC	23C4099	7.40
● PIC16C64A-20/P	3.5	2	128	...	33	...	2 / 1	20	0 to 70	1-CCP / 0-ECCP	40-DIP	23C4100	5.46
● PIC16C715-04/P	3.5	2	128	...	13	4	1 / 0	4	0 to 70	ICSP, POR, BOR, WDT	18-DIP	12C1921	2.68
● PIC16C715-04/SS	3.5	2	128	...	13	4	1 / 0	4	0 to 70	ICSP, POR, BOR, WDT	20-SSOP	23C4525	3.00
● PIC16C715-04I/P	3.5	2	128	...	13	4	1 / 0	4	-40 to 85	ICSP, POR, BOR, WDT	18-DIP	23C4529	3.01
● PIC16C715-20/P	3.5	2	128	...	13	4	1 / 0	20	0 to 70	ICSP, POR, BOR, WDT	18-DIP	69K7627	2.87
● PIC16C715-20/SO	3.5	2	128	...	13	4	1 / 0	20	0 to 70	ICSP, POR, BOR, WDT	18-SOIC	23C4533	2.93
● PIC16C716-04/SS	3.5	2	128	...	13	4	2 / 1	4	0 to 70	1-CCP, ICSP	20-SSOP	23C4555	2.40
● PIC16C72A-04/SP	3.5	2	128	...	22	5	2 / 1	20	0 to 70	1-CCP, ICSP	28-NDIP	12C1924	3.35
● PIC16C72A-04/SS	3.5	2	128	...	22	5	2 / 1	4	0 to 70	1-CCP, ICSP	28-SSOP	23C4612	3.55
● PIC16C72A-04I/SO	3.5	2	128	...	22	5	2 / 1	4	-40 to 85	1-CCP, ICSP	28-SOIC	23C4616	3.71
● PIC16C72A-20/SP	3.5	2	128	...	22	5	2 / 1	20	0 to 70	1-CCP, ICSP	28-NDIP	69K7628	3.58
● PIC16C72A-20I/SO	3.5	2	128	...	22	5	2 / 1	20	-40 to 85	1-CCP, ICSP	28-SOIC	23C4625	3.95
● PIC16CE625-04/P	3.5	2	128	128	13	...	1 / 0	4	0 to 70	POR, BOR, WDT	18-DIP	23C3138	2.63
● PIC16C770-I/P	3.5	2	256	...	16	6	2 / 1	20	-40 to 85	1-ECCP, ICSP	20-DIP	19C7266	2.46
● PIC16C770-I/SO	3.5	2	256	...	16	6	2 / 1	20	-40 to 85	1-ECCP, ICSP	20-SOIC	19C7267	2.50
● PIC16C642-04/SO	7	4	176	...	22	...	1 / 0	4	0 to 70	ICSP, POR, BOR, WDT	28-SOIC	23C4139	4.08
● PIC16C662-04/L	7	4	176	...	33	...	1 / 0	4	0 to 70	ICSP, POR, BOR, WDT	44-PLCC	23C4297	6.13
● PIC16C924-04/L	7	4	176	...	25	5	2 / 1	4	0 to 70	1-CCP, ICSP	68-PLCC	23C4943	5.14
● PIC16C63A-04I/SO	7	4	192	...	22	...	2 / 1	4	-40 to 85	2-CCP, ICSP	28-SOIC	23C4045	3.80
● PIC16C63A-20I/SP	7	4	192	...	22	...	2 / 1	20	-40 to 85	2-CCP, ICSP	28-NDIP	61K3442	4.08
● PIC16C65A-20/L	7	4	192	...	33	...	2 / 1	20	0 to 70	1-CCP / 0-ECCP	44-PLCC	23C4191	10.55
● PIC16C65B-04/P	7	4	192	...	33	...	2 / 1	4	0 to 70	2-CCP, ICSP	40-DIP	23C4232	3.87
● PIC16C65B-04I/L	7	4	192	...	33	...	2 / 1	4	-40 to 85	2-CCP, ICSP	44-PLCC	23C4239	6.17
● PIC16C65B-04I/P	7	4	192	...	33	...	2 / 1	4	-40 to 85	2-CCP, ICSP	40-DIP	23C4240	4.27
● PIC16C65B-20/P	7	4	192	...	33	...	2 / 1	20	0 to 70	2-CCP, ICSP	40-DIP	12C1910	4.14
● PIC16C65B-20I/P	7	4	192	...	33	...	2 / 1	20	-40 to 85	2-CCP, ICSP	40-DIP	88K1152	4.56
● PIC16C73A-04/SP	7	4	192	...	22	5	2 / 1	4	0 to 70	2-CCP, ICSP	28-NDIP	23C4659	5.97
● PIC16C73A-04I/SP	7	4	192	...	22	5	2 / 1	10	-40 to 85	2-CCP, ICSP	28-NDIP	23C4663	6.56
● PIC16C73A-10I/SP	7	4	192	...	22	5	2 / 1	10	-40 to 85	2-CCP, ICSP	28-NDIP	23C4669	7.03
● PIC16C73A-20/SP	7	4	192	...	22	5	2 / 1	20	0 to 70	2-CCP, ICSP	28-NDIP	69K7069	6.39
● PIC16C73B-04/SO	7	4	192	...	22	5	2 / 1	4	0 to 70	2-CCP, ICSP	28-SOIC	23C4686	4.33
● PIC16C73B-04/SP	7	4	192	...	22	5	2 / 1	4	0 to 70	2-CCP, ICSP	28-NDIP	54K2826	4.33
● PIC16C73B-04/SS	7	4	192	...	22	5	2 / 1	4	0 to 70	2-CCP, ICSP	28-SSOP	23C4688	4.49
● PIC16C73B-04I/SP	7	4	192	...	22	5	2 / 1	4	-40 to 85	2-CCP, ICSP	28-NDIP	96K3842	4.77
● PIC16C73B-04I/SS	7	4	192	...	22	5	2 / 1	4	-40 to 85	2-CCP, ICSP	28-SSOP	23C4694	4.94
● PIC16C73B-20/SO	7	4	192	...	22	5	2 / 1	20	0 to 70	2-CCP, ICSP	28-SOIC	12C1926	4.64
● PIC16C73B-20/SP	7	4	192	...	22	5	2 / 1	20	0 to 70	2-CCP, ICSP	28-NDIP	73K1291	4.64
● PIC16C73B-20/SS	7	4	192	...	22	5	2 / 1	20	0 to 70	2-CCP, ICSP	28-SSOP	12C1928	4.81
● PIC16C73B-20I/SP	7	4	192	...	22	5	2 / 1	20	-40 to 85	2-CCP, ICSP	28-NDIP	54K2827	5.10
● PIC16C74A-04/P	7	4	192	...	33	8	2 / 1	10	0 to 70	2-CCP, ICSP	40-DIP	23C4714	7.22
● PIC16C74A-20/P	7	4	192	...	33	8	2 / 1	20	0 to 70	2-CCP, ICSP	40-DIP	23C4738	7.74
● PIC16C74A-20I/L	7	4	192	...	33	8	2 / 1	20	-40 to 85	2-CCP, ICSP	44-PLCC	23C4745	9.19
● PIC16C74B-04/L	7	4	192	...	33	8	2 / 1	4	0 to 70	2-CCP, ICSP	44-PLCC	23C4777	7.42
● PIC16C74B-04/P	7	4	192	...	33	8	2 / 1	4	0 to 70	2-CCP, ICSP	40-DIP	01M8479	5.26
● PIC16C74B-20/P	7	4	192	...	33	8	2 / 1	20	0 to 70	2-CCP, ICSP	40-DIP	12C1931	5.63
● PIC16C771-I/P	7	4	256	...	16	6	2 / 1	20	-40 to 85	1-ECCP, ICSP	20-DIP	19C7268	2.67
● PIC16C771-I/SO	7	4	256	...	16	6	2 / 1	20	-40 to 85	1-ECCP, ICSP	20-SOIC	19C7269	2.71
● PIC16C771-I/SS	7	4	256	...	16	6	2 / 1	20	-40 to 85	1-ECCP, ICSP	20-SSOP	61K3445	2.98
● PIC16C773-I/SP	7	4	256	...	22	6	2 / 1	20	-40 to 85	2-CCP, ICSP	28-NDIP	23C4904	4.77
● PIC16C774-I/P	7	4	256	...	33	10	2 / 1	20	-40 to 85	2-CCP, ICSP	40-DIP	23C4914	5.79
● PIC16C745-I/SP	14	8	256	...	22	5	2 / 1	24	-40 to 85	2-CCP, ICSP	28-NDIP	72K7297	3.08

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8-BIT PIC16 FLASH MICROCONTROLLERS (CONT.)

Mfg. Part No.	Program Memory (KB)	Program Memory (kWrds)	RAM (Bytes)	EEPROM (Bytes)	I/Os	ADC (Ch)	Timers (8/16Bit)	Max Freq. (MHz)	Oper. Temp (°C)	Features	Pkg.	Stock No.	Price Each 1-25
PIC16C765-I/P	14	8	256	...	33	8	2 / 1	24	-40 to 85	2-CCP, ICSP	40-DIP	33C0962	3.68
PIC16C66-04/SO	14	8	368	...	22	...	2 / 1	4	0 to 70	2-CCP / 0-ECCP	28-SOIC	23C4271	5.02
PIC16C66-04I/SP	14	8	368	...	22	...	2 / 1	4	-40 to 85	2-CCP / 0-ECCP	28-NDIP	23C4276	5.54
PIC16C66-10/SP	14	8	368	...	22	...	2 / 1	10	0 to 70	2-CCP / 0-ECCP	28-NDIP	23C4277	5.38
PIC16C66-20I/SP	14	8	368	...	22	...	2 / 1	20	-40 to 85	2-CCP / 0-ECCP	28-NDIP	23C4286	5.92
PIC16C67-04/PQ	14	8	368	...	33	...	2 / 1	4	0 to 70	2-CCP / 0-ECCP	44-MQFP	23C4363	6.24
PIC16C67-20/L	14	8	368	...	33	...	2 / 1	20	0 to 70	2-CCP / 0-ECCP	44-PLCC	23C4385	7.02
PIC16C67-20/P	14	8	368	...	33	...	2 / 1	20	0 to 70	2-CCP / 0-ECCP	40-DIP	72K7295	5.87
PIC16C67-20I/L	14	8	368	...	33	...	2 / 1	20	-40 to 85	2-CCP / 0-ECCP	44-PLCC	23C4393	7.66
PIC16C76-04/SO	14	8	368	...	22	5	2 / 1	4	0 to 70	2-CCP, ICSP	28-SOIC	23C4817	5.49
PIC16C76-10/SP	14	8	368	...	22	5	2 / 1	10	0 to 70	2-CCP, ICSP	28-NDIP	23C4824	5.87
PIC16C76-20/SO	14	8	368	...	22	5	2 / 1	20	0 to 70	2-CCP, ICSP	28-SOIC	65K1040	5.87
PIC16C76-20/SP	14	8	368	...	22	5	2 / 1	20	0 to 70	2-CCP, ICSP	28-NDIP	12C1934	5.87
PIC16C77-04/L	14	8	368	...	33	8	2 / 1	4	0 to 70	2-CCP, ICSP	44-PLCC	88K1155	7.01
PIC16C77-04/P	14	8	368	...	33	8	2 / 1	4	0 to 70	2-CCP, ICSP	40-DIP	69K7630	5.89
PIC16C77-04I/L	14	8	368	...	33	8	2 / 1	4	-40 to 85	2-CCP, ICSP	44-PLCC	74K8534	7.70
PIC16C77-20/L	14	8	368	...	33	8	2 / 1	10	0 to 70	2-CCP, ICSP	44-PLCC	96K3853	7.50
PIC16C77-20/P	14	8	368	...	33	8	2 / 1	20	0 to 70	2-CCP, ICSP	40-DIP	12C1937	6.31
PIC16C77-20I/P	14	8	368	...	33	8	2 / 1	10	-40 to 85	2-CCP, ICSP	40-DIP	96K3855	6.93
PIC16C77-20I/PT	14	8	368	...	33	8	2 / 1	20	-40 to 85	2-CCP, ICSP	44-TQFP	23C4875	7.91

FLASH MEMORY

Mfg. Part No.	Program Memory (KB)	Program Memory (kWrds)	RAM (Bytes)	EEPROM (Bytes)	I/Os	ADC (Ch)	Timers (8/16Bit)	Max Freq. (MHz)	Internal Oscillator (MHz)	Oper. Temp (°C)	Features	Pkg.	Stock No.	Price Each 1-25
PIC16F54-E/P	768	0.5	25	...	12	...	1 / 0	20	...	-40 to 125	ICSP	18-DIP	89H0456	0.61
PIC16F54-I/P	768	0.5	25	...	12	...	1 / 0	20	...	-40 to 85	nanoWatt, ICSP, POR, WDT	18-DIP	89H0459	0.55
PIC16F54-I/SO	768	0.5	25	...	12	...	1 / 0	20	...	-40 to 85	nanoWatt, ICSP, POR, WDT	18-SOIC	96K3870	0.48
PIC16F54-I/SS	768	0.5	25	...	12	...	1 / 0	20	...	-40 to 85	nanoWatt, ICSP, POR, WDT	20-SSOP	96K3871	0.48
PIC16F83-04/P	896	0.5	36	64	13	...	1 / 0	4	...	0 to 70	ICSP, POR, WDT	18-DIP	96K3882	3.92
PIC16F83-04/SO	896	0.5	36	64	13	...	1 / 0	4	...	0 to 70	ICSP, POR, WDT	18-SOIC	23C4997	3.98
PIC16F83-10/P	896	0.5	36	64	13	...	1 / 0	10	...	0 to 70	ICSP, POR, WDT	18-DIP	23C5000	4.20
PIC16F506-I/P	1.5	1	67	...	12	3	1 / 0	20	8	-40 to 85	nanoWatt, ICSP, POR, WDT	14-DIP	71J7202	0.86
PIC16F506-I/SL	1.5	1	67	...	12	3	1 / 0	20	8	-40 to 85	nanoWatt, ICSP, POR, WDT	14-SOIC	71J7203	0.71
PIC16F526-E/P	1.5	1	67	64	12	3	1 / 0	20	8	-40 to 125	nanoWatt, ICSP, POR, WDT	14-DIP	40M1392	0.97
PIC16F526-E/SL	1.5	1	67	64	12	3	1 / 0	20	8	-40 to 125	nanoWatt, ICSP, POR, WDT	14-SOIC	40M1393	0.83
PIC16F526-I/P	1.5	1	67	64	12	3	1 / 0	20	8	-40 to 85	nanoWatt, ICSP, POR, WDT	14-DIP	40M1395	0.90
PIC16F526-I/SL	1.5	1	67	64	12	3	1 / 0	20	8	-40 to 85	nanoWatt, ICSP, POR, WDT	14-SOIC	40M1396	0.75
PIC16F505-I/P	1.5	1	72	...	12	...	1 / 0	20	4	-40 to 85	nanoWatt, ICSP, POR, WDT	14-DIP	96K3869	0.80
PIC16F505-I/SL	1.5	1	72	...	12	...	1 / 0	20	4	-40 to 85	nanoWatt, ICSP, POR, WDT	14-SOIC	89H0452	0.66
PIC16F818-I/P	1.75	1	128	128	16	5	2 / 1	20	8	-40 to 85	1-CCP, nanoWatt, ICSP	18-DIP	89C2858	1.85
PIC16F818-I/SO	1.75	1	128	128	16	5	2 / 1	20	8	-40 to 85	1-CCP, nanoWatt, ICSP	18-SOIC	89C2859	1.87
PIC16F627-04/P	1.75	1	224	128	16	...	2 / 1	4	...	0 to 70	1-CCP, ICSP	18-DIP	23C4960	2.05
PIC16F627-04/SS	1.75	1	224	128	16	...	2 / 1	4	...	0 to 70	1-CCP, ICSP	20-SSOP	23C4962	2.25
PIC16F627-04I/P	1.75	1	224	128	16	...	2 / 1	4	...	-40 to 85	1-CCP, ICSP	18-DIP	61K3448	2.25
PIC16F627-04I/SO	1.75	1	224	128	16	...	2 / 1	4	...	-40 to 85	1-CCP, ICSP	18-SOIC	19C7271	2.30
PIC16F627-20I/P	1.75	1	224	128	16	...	2 / 1	20	...	-40 to 85	1-CCP, ICSP	18-DIP	23C4967	2.41
PIC16F627-20I/SO	1.75	1	224	128	16	...	2 / 1	20	...	-40 to 85	1-CCP, ICSP	18-SOIC	23C4968	2.46
PIC16F627A-E/P	1.75	1	224	128	16	...	2 / 1	20	4	-40 to 125	1-CCP, nanoWatt, ICSP	18-DIP	03H5914	1.65
PIC16F627A-I/P	1.75	1	224	128	16	...	2 / 1	20	4	-40 to 85	1-CCP, nanoWatt, ICSP	18-DIP	92C4515	1.53
PIC16F627A-I/SO	1.75	1	224	128	16	...	2 / 1	20	4	-40 to 85	1-CCP, nanoWatt, ICSP	18-SOIC	60K6712	1.56
PIC16F630-I/P	1.75	1	64	128	12	...	1 / 1	20	4	-40 to 85	nanoWatt, ICSP, POR, BOR, WDT	14-DIP	92C2421	1.22
PIC16F630-I/SL	1.75	1	64	128	12	...	1 / 1	20	4	-40 to 85	nanoWatt, ICSP, POR, BOR, WDT	14-SOIC	80K6046	1.09
PIC16F676-E/P	1.75	1	64	128	12	8	1 / 1	20	4	-40 to 125	nanoWatt, ICSP, POR, BOR, WDT	14-DIP	92C4550	1.42
PIC16F676-I/P	1.75	1	64	128	12	8	1 / 1	20	4	-40 to 85	nanoWatt, ICSP, POR, BOR, WDT	14-DIP	54K2829	1.30
PIC16F676-I/SL	1.75	1	64	128	12	8	1 / 1	20	4	-40 to 85	nanoWatt, ICSP, POR, BOR, WDT	14-SOIC	92C4557	1.18
PIC16F84-04/P	1.75	1	68	64	13	...	1 / 0	4	...	0 to 70	ICSP, POR, WDT	18-DIP	61K3454	4.55
PIC16F84-04/SO	1.75	1	68	64	13	...	1 / 0	4	...	0 to 70	ICSP, POR, WDT	18-SOIC	96K3883	4.63
PIC16F84-04I/P	1.75	1	68	64	13	...	1 / 0	4	...	-40 to 85	ICSP, POR, WDT	18-DIP	23C5010	5.01
PIC16F84-04I/SO	1.75	1	68	64	13	...	1 / 0	4	...	-40 to 85	ICSP, POR, WDT	18-SOIC	88K1156	5.11
PIC16F84-10/P	1.75	1	68	64	13	...	1 / 0	10	...	0 to 70	ICSP, POR, WDT	18-DIP	23C5011	4.88
PIC16F84-10/SO	1.75	1	68	64	13	...	1 / 0	10	...	0 to 70	ICSP, POR, WDT	18-SOIC	23C5012	4.96
PIC16F84-10I/P	1.75	1	68	64	13	...	1 / 0	10	...	-40 to 85	ICSP, POR, WDT	18-DIP	59K0250	5.37
PIC16F84-10I/SO	1.75	1	68	64	13	...	1 / 0	10	...	-40 to 85	ICSP, POR, WDT	18-SOIC	23C5014	5.47
PIC16F84A-04/P	1.75	1	68	64	13	...	1 / 0	4	...	0 to 70	ICSP, POR, BOR, WDT	18-DIP	23C5015	3.61
PIC16F84A-04/SS	1.75	1	68	64	13	...	1 / 0	4	...	0 to 70	ICSP, POR, BOR, WDT	18-SSOP	96K3884	3.92
PIC16F84A-04I/P	1.75	1	68	64	13	...	1 / 0	4	...	-40 to 85	ICSP, POR, BOR, WDT	18-DIP	69K7635	3.96
PIC16F84A-04I/SO	1.75	1	68	64	13	...	1 / 0	4	...	-40 to 85	ICSP, POR, BOR, WDT	18-SOIC	68K5332	4.03
PIC16F84A-20/P	1.75	1	68	64	13	...	1 / 0	20	...	0 to 70	ICSP, POR, BOR, WDT	18-DIP	72K7298	3.85
PIC16F84A-20/SO	1.75	1	68	64	13	...	1 / 0	20	...	0 to 70	ICSP, POR, BOR, WDT	18-SOIC	12C1943	3.92
PIC16F84A-20I/P	1.75	1	68	64	13	...	1 / 0	20	...	-40 to 85	ICSP, POR, BOR, WDT	18-DIP	61K3456	4.24
PIC16F84A-20I/SO	1.75	1	68	64	13	...	1 / 0	20	...	-40 to 85	ICSP, POR, BOR, WDT	18-SOIC	73K1294	4.30
PIC16F59-I/P	3	2	134	...	32	...	1 / 0	20	...	-40 to 85	nanoWatt, ICSP, POR, WDT	40-DIP	56J7493	1.02
PIC16F59-I/PT	3	2	134	...	32	...	1 / 0	20	...	-40 to 85	nanoWatt, ICSP, POR, WDT	44-TQFP	56J7494	1.04
PIC16F57-I/P	3	2	72	...	20	...	1 / 0	20	...	-40 to 85	nanoWatt, ICSP, POR, WDT	28-DIP	89H0470	0.85

➤ CONTINUED ➤

8-BIT PIC16 FLASH MICROCONTROLLERS (CONT.)

Mfg. Part No.	Program Memory (KB)	Program Memory (kWrds)	RAM (Bytes)	EEPROM (Bytes)	I/Os	ADC (Ch)	Timers (8/16Bit)	Max Freq. (MHz)	Internal Oscillator (MHz)	Oper. Temp (°C)	Features	Pkg.	Stock No.	Price Each 1-25
PIC16F57-I/SP	3	2	72	...	20	...	1 / 0	20	...	-40 to 85	nanoWatt, ICSP, POR, WDT	28-NDIP	61K3447	0.85
PIC16F1503-I/MG	3.5	2	128	...	12	8	2 / 1	20	16	-40 to 85	ICD-Debug, Self-write	16-QFN	55T3632	0.85
PIC16F1503-I/P	3.5	2	128	...	12	8	2 / 1	20	16	-40 to 85	ICD-Debug, Self-write	14-DIP	55T3633	0.90
PIC16F1503-I/SL	3.5	2	128	...	12	8	2 / 1	20	16	-40 to 85	ICD-Debug, Self-write	14-SOIC	55T3634	0.75
PIC16F1503-I/ST	3.5	2	128	...	12	8	2 / 1	20	16	-40 to 85	ICD-Debug, Self-write	14-TSSOP	55T3635	0.81
PIC16F1507-E/ML	3.5	2	128	...	18	12	2 / 1	20	16	-40 to 125	ICD-Debug, ICSP	20-QFN	39T6719	1.14
PIC16F1507-E/P	3.5	2	128	...	18	12	2 / 1	20	16	-40 to 125	ICD-Debug, ICSP	20-DIP	39T6720	1.38
PIC16F1507-E/SO	3.5	2	128	...	18	12	2 / 1	20	16	-40 to 125	ICD-Debug, ICSP	20-SOIC	39T6721	1.19
PIC16F1507-E/SS	3.5	2	128	...	18	12	2 / 1	20	16	-40 to 125	ICD-Debug, ICSP	20-SSOP	39T6722	1.04
PIC16F1507-I/ML	3.5	2	128	...	18	12	2 / 1	20	16	-40 to 85	ICD-Debug, ICSP	20-QFN	39T6723	1.04
PIC16F1507-I/P	3.5	2	128	...	18	12	2 / 1	20	16	-40 to 85	ICD-Debug, ICSP	20-DIP	39T6724	1.28
PIC16F1507-I/SO	3.5	2	128	...	18	12	2 / 1	20	16	-40 to 85	ICD-Debug, ICSP	20-SOIC	39T6725	1.10
PIC16F1507-I/SS	3.5	2	128	...	18	12	2 / 1	20	16	-40 to 85	ICD-Debug, ICSP	20-SSOP	39T6726	0.94
PIC16F636-I/ML	3.5	2	128	256	12	...	1 / 1	20	8	-40 to 85	nanoWatt, ICSP, BOR, PLVD	16-QFN	56K7265	1.24
PIC16F636-I/P	3.5	2	128	256	12	...	1 / 1	20	8	-40 to 85	nanoWatt, ICSP, BOR, PLVD	14-DIP	80K6047	1.24
PIC16F639-I/SS	3.5	2	128	256	12	...	1 / 1	20	8	-40 to 85	nanoWatt, ICSP, BOR, PLVD	20-SSOP	89H0492	2.52
PIC16F684-E/P	3.5	2	128	256	12	8	2 / 1	20	8	-40 to 125	1-ECCP, nanoWatt, ICSP	14-DIP	29H9638	1.44
PIC16F684-E/SL	3.5	2	128	256	12	8	2 / 1	20	8	-40 to 125	1-ECCP, nanoWatt, ICSP	14-SOIC	29H9639	1.32
PIC16F684-E/ST	3.5	2	128	256	12	8	2 / 1	20	8	-40 to 125	1-ECCP, nanoWatt, ICSP	14-TSSOP	29H9640	1.48
PIC16F684-I/P	3.5	2	128	256	12	8	2 / 1	20	8	-40 to 85	1-ECCP, nanoWatt, ICSP	14-DIP	59K0247	1.32
PIC16F684-I/SL	3.5	2	128	256	12	8	2 / 1	20	8	-40 to 85	1-ECCP, nanoWatt, ICSP	14-SOIC	61K3450	1.19
PIC16F684-I/ST	3.5	2	128	256	12	8	2 / 1	20	8	-40 to 85	1-ECCP, nanoWatt, ICSP	14-TSSOP	60K6713	1.36
PIC16F716-I/P	3.5	2	128	...	13	4	2 / 1	20	...	-40 to 85	1-ECCP, nanoWatt, ICSP	18-DIP	89H0509	1.01
PIC16F716-I/SO	3.5	2	128	...	13	4	2 / 1	20	...	-40 to 85	1-ECCP, nanoWatt, ICSP	18-SOIC	96K3878	0.92
PIC16F72-I/ML	3.5	2	128	...	22	5	2 / 1	20	...	-40 to 85	1-CCP, nanoWatt, ICSP	28-QFN	73K1292	2.21
PIC16F72-I/SP	3.5	2	128	...	22	5	2 / 1	20	...	-40 to 85	1-CCP, nanoWatt, ICSP	28-NDIP	72C4304	2.21
PIC16F785-I/ML	3.5	2	128	256	18	12	2 / 1	20	8	-40 to 85	1-CCP, nanoWatt, ICSP	20-QFN	56K7289	1.79
PIC16F785-I/P	3.5	2	128	256	18	12	2 / 1	20	8	-40 to 85	1-CCP, nanoWatt, ICSP	20-DIP	56J7566	1.83
PIC16F870-I/SO	3.5	2	128	64	22	5	2 / 1	20	...	-40 to 85	1-CCP, nanoWatt, ICSP	28-SOIC	61K3457	2.97
PIC16F870-I/SP	3.5	2	128	64	22	5	2 / 1	20	...	-40 to 85	1-CCP, nanoWatt, ICSP	28-NDIP	19C7275	2.97
PIC16F871-I/P	3.5	2	128	64	33	8	2 / 1	20	...	-40 to 85	1-CCP, nanoWatt, ICSP	40-DIP	80K6048	3.19
PIC16F872-I/SO	3.5	2	128	64	22	5	2 / 1	20	...	-40 to 85	1-CCP, nanoWatt, ICSP	28-SOIC	96K3886	2.97
PIC16F872-I/SP	3.5	2	128	64	22	5	2 / 1	20	...	-40 to 85	1-CCP, nanoWatt, ICSP	28-NDIP	12C1945	2.97
PIC16F872-I/SS	3.5	2	128	64	22	5	2 / 1	20	...	-40 to 85	1-CCP, nanoWatt, ICSP	28-SSOP	96K3887	3.07
PIC16F628-04/P	3.5	2	224	128	16	...	2 / 1	4	...	0 to 70	1-CCP, ICSP	18-DIP	54K2828	2.33
PIC16F628-04/SO	3.5	2	224	128	16	...	2 / 1	4	...	0 to 70	1-CCP, ICSP	18-SOIC	59K0246	2.38
PIC16F628-20/P	3.5	2	224	128	16	...	2 / 1	20	...	0 to 70	1-CCP, ICSP	18-DIP	23C4982	2.49
PIC16F628-20/SO	3.5	2	224	128	16	...	2 / 1	20	...	0 to 70	1-CCP, ICSP	18-SOIC	23C4983	2.54
PIC16F628-20/SS	3.5	2	224	128	16	...	2 / 1	20	...	0 to 70	1-CCP, ICSP	20-SSOP	23C4984	2.74
PIC16F628-20I/P	3.5	2	224	128	16	...	2 / 1	20	...	-40 to 85	1-CCP, ICSP	18-DIP	61K3449	2.74
PIC16F628A-E/P	3.5	2	224	128	16	...	2 / 1	20	4	-40 to 125	1-CCP, nanoWatt, ICSP	18-DIP	03H5921	1.86
PIC16F628A-E/SO	3.5	2	224	128	16	...	2 / 1	20	4	-40 to 125	1-CCP, nanoWatt, ICSP	18-SOIC	03H5922	1.90
PIC16F628A-I/P	3.5	2	224	128	16	...	2 / 1	20	4	-40 to 85	1-CCP, nanoWatt, ICSP	18-DIP	92C4532	1.73
PIC16F628A-I/SO	3.5	2	224	128	16	...	2 / 1	20	4	-40 to 85	1-CCP, nanoWatt, ICSP	18-SOIC	92C4533	1.78
PIC16F628A-I/SS	3.5	2	224	128	16	...	2 / 1	20	4	-40 to 85	1-CCP, nanoWatt, ICSP	20-SSOP	01M8480	1.92
PIC16F1782-I/ML	3.5	2	256	256	25	11	4 / 1	32	32	-40 to 85	2-CCP, ICD-Debug, OpAmps	28-QFN	76T2322	1.81
PIC16F1782-I/MV	3.5	2	256	256	25	11	4 / 1	32	32	-40 to 85	2-CCP, ICD-Debug, OpAmps	28-UQFN	76T2323	1.79
PIC16F1782-I/SO	3.5	2	256	256	25	11	4 / 1	32	32	-40 to 85	2-CCP, ICD-Debug, OpAmps	28-SOIC	76T2324	1.73
PIC16F1782-I/SP	3.5	2	256	256	25	11	4 / 1	32	32	-40 to 85	2-CCP, ICD-Debug, OpAmps	28-NDIP	76T2325	1.93
PIC16F1782-I/SS	3.5	2	256	256	25	11	4 / 1	32	32	-40 to 85	2-CCP, ICD-Debug, OpAmps	28-SSOP	76T2326	1.70
PIC16F819-I/ML	3.5	2	256	256	16	5	2 / 1	20	8	-40 to 85	1-CCP, nanoWatt, ICSP	28-QFN	73K1293	2.49
PIC16F819-I/P	3.5	2	256	256	16	5	2 / 1	20	8	-40 to 85	1-CCP, nanoWatt, ICSP	18-DIP	89C2861	2.10
PIC16F819-I/SO	3.5	2	256	256	16	5	2 / 1	20	8	-40 to 85	1-CCP, nanoWatt, ICSP	18-SOIC	61K3453	2.13
PIC16F73-I/SO	7	4	192	...	22	5	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	28-SOIC	28C7558	3.45
PIC16F73-I/SP	7	4	192	...	22	5	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	28-NDIP	61K3451	3.45
PIC16F73T-I/SO	7	4	192	...	22	5	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	28-SOIC	28C7561	3.55
PIC16F73T-I/SS	7	4	192	...	22	5	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	28-SSOP	28C7562	3.64
PIC16F74-I/P	7	4	192	...	33	8	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	40-DIP	28C7564	4.19
PIC16F74-I/PT	7	4	192	...	33	8	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	44-TQFP	96K3880	5.02
PIC16F74T-I/L	7	4	192	...	33	8	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	44-PLCC	28C7566	4.99
PIC16F74T-I/PT	7	4	192	...	33	8	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	44-TQFP	28C7567	5.17
PIC16F873-04/SO	7	4	192	128	22	5	2 / 1	4	...	0 to 70	2-CCP, ICSP	28-SOIC	60K6716	4.57
PIC16F873-04/SP	7	4	192	128	22	5	2 / 1	4	...	0 to 70	2-CCP, ICSP	28-NDIP	64K0483	4.57
PIC16F873-04I/SO	7	4	192	128	22	5	2 / 1	4	...	-40 to 85	2-CCP, ICSP	28-SOIC	96K3888	5.68
PIC16F873-04I/SP	7	4	192	128	22	5	2 / 1	4	...	-40 to 85	2-CCP, ICSP	28-NDIP	61K3458	5.18
PIC16F873-20/SO	7	4	192	128	22	5	2 / 1	20	...	0 to 70	2-CCP, ICSP	28-SOIC	12C1946	5.54
PIC16F873-20/SP	7	4	192	128	22	5	2 / 1	20	...	0 to 70	2-CCP, ICSP	28-NDIP	61K3459	5.04
PIC16F873-20I/SP	7	4	192	128	22	5	2 / 1	20	...	-40 to 85	2-CCP, ICSP	28-NDIP	23C5051	5.54
PIC16F874-04/L	7	4	192	128	33	8	2 / 1	4	...	0 to 70	2-CCP, ICSP	44-PLCC	23C5056	7.04
PIC16F874-04I/P	7	4	192	128	33	8	2 / 1	4	...	-40 to 85	2-CCP, ICSP	40-DIP	23C5061	5.65
PIC16F874-20I/P	7	4	192	128	33	8	2 / 1	20	...	-40 to 85	2-CCP, ICSP	40-DIP	23C5067	6.05
PIC16F1508-E/ML	7	4	256	...	18	12	2 / 1	20	16	-40 to 125	ICD-Debug, Self-write	20-QFN	64T1034	1.26
PIC16F1508-E/P	7	4	256	...	18	12	2 / 1	20	16	-40 to 125	ICD-Debug, Self-write	20-DIP	64T1035	1.50
PIC16F1508-E/SO	7	4	256	...	18	12	2 / 1	20	16	-40 to 125	ICD-Debug, Self-write	20-SOIC	64T1036	1.32

➤ CONTINUED ➤

8-BIT PIC16 FLASH MICROCONTROLLERS (CONT.)

Mfg. Part No.	Program Memory (KB)	Program Memory (kWrds)	RAM (Bytes)	EEPROM (Bytes)	I/Os	ADC (Ch)	Timers (8/16Bit)	Max Freq. (MHz)	Internal Oscillator (MHz)	Oper. Temp (°C)	Features	Pkg.	Stock No.	Price Each 1-25
PIC16F1508-E/SS	7	4	256	...	18	12	2 / 1	20	16	-40 to 125	ICD-Debug, Self-write	20-SSOP	64T1037	1.17
PIC16F1508-I/ML	7	4	256	...	18	12	2 / 1	20	16	-40 to 85	ICD-Debug, Self-write	20-QFN	64T1038	1.16
PIC16F1508-I/P	7	4	256	...	18	12	2 / 1	20	16	-40 to 85	ICD-Debug, Self-write	20-DIP	64T1039	1.40
PIC16F1508-I/SO	7	4	256	...	18	12	2 / 1	20	16	-40 to 85	ICD-Debug, Self-write	20-SOIC	64T1040	1.21
PIC16F648A-E/P	7	4	256	256	16	...	2 / 1	20	4	-40 to 125	1-CCP, nanoWatt, ICSP	18-DIP	03H5928	2.12
PIC16F648A-I/P	7	4	256	256	16	...	2 / 1	20	4	-40 to 85	1-CCP, nanoWatt, ICSP	18-DIP	69K7633	1.97
PIC16F648A-I/SO	7	4	256	256	16	...	2 / 1	20	4	-40 to 85	1-CCP, nanoWatt, ICSP	18-SOIC	03H5933	2.02
PIC16F688-E/ML	7	4	256	256	12	8	1 / 1	20	8	-40 to 125	nanoWatt, ICSP, POR, BOR	16-QFN	56K7279	1.52
PIC16F688-E/P	7	4	256	256	12	8	1 / 1	20	8	-40 to 125	nanoWatt, ICSP, POR, BOR	14-DIP	89H0496	1.52
PIC16F688-E/ST	7	4	256	256	12	8	1 / 1	20	8	-40 to 125	nanoWatt, ICSP, POR, BOR	14-TSSOP	89H0498	1.57
PIC16F688-I/P	7	4	256	256	12	8	1 / 1	20	8	-40 to 85	nanoWatt, ICSP, POR, BOR	14-DIP	60K6714	1.39
PIC16F688-I/SL	7	4	256	256	12	8	1 / 1	20	8	-40 to 85	nanoWatt, ICSP, POR, BOR	14-SOIC	89H0500	1.26
PIC16F688-I/ST	7	4	256	256	12	8	1 / 1	20	8	-40 to 85	nanoWatt, ICSP, POR, BOR	14-TSSOP	59K0248	1.43
PIC16F688T-I/SL	7	4	256	256	12	8	1 / 1	20	8	-40 to 85	nanoWatt, ICSP, POR, BOR	14-SOIC	89H0504	1.31
PIC16F721-I/ML	7	4	256	...	18	12	2 / 1	16	16	-40 to 85	1-CCP, nanoWatt, ICSP	20-QFN	73R8410	1.12
PIC16F721-I/P	7	4	256	...	18	12	2 / 1	16	16	-40 to 85	1-CCP, nanoWatt, ICSP	20-DIP	73R8411	1.36
PIC16F737-I/SP	7	4	368	...	25	11	2 / 1	20	8	-40 to 85	3-CCP, nanoWatt, ICSP	28-NDIP	61H5177	3.47
PIC16F747-I/P	7	4	368	...	36	14	2 / 1	20	8	-40 to 85	3-CCP, nanoWatt, ICSP	40-DIP	61H5183	3.99
PIC16F747-I/PT	7	4	368	...	36	14	2 / 1	20	8	-40 to 85	3-CCP, nanoWatt, ICSP	44-TQFP	61H5184	4.06
PIC16F87-I/P	7	4	368	256	16	...	2 / 1	20	8	-40 to 85	1-CCP, nanoWatt, ICSP	18-DIP	92C2425	2.43
PIC16F88-E/P	7	4	368	256	16	7	2 / 1	20	8	-40 to 125	1-CCP, nanoWatt, ICSP	18-DIP	92C4722	3.74
PIC16F88-E/SO	7	4	368	256	16	7	2 / 1	20	8	-40 to 125	1-CCP, nanoWatt, ICSP	18-SOIC	92C4723	3.80
PIC16F88-I/P	7	4	368	256	16	7	2 / 1	20	8	-40 to 85	1-CCP, nanoWatt, ICSP	18-DIP	54K2830	2.60
PIC16F88-I/SO	7	4	368	256	16	7	2 / 1	20	8	-40 to 85	1-CCP, nanoWatt, ICSP	18-SOIC	61K3467	2.66
PIC16F88-I/SS	7	4	368	256	16	7	2 / 1	20	8	-40 to 85	1-CCP, nanoWatt, ICSP	20-SSOP	72K7299	2.86
PIC16F1508-I/SS	7	4	512	...	18	12	2 / 1	20	16	-40 to 85	ICD-Debug, Self-write	20-SSOP	64T1041	1.06
PIC16F1783-I/ML	7	4	512	256	25	11	4 / 1	32	32	-40 to 85	2-CCP, ICD-Debug, OpAmps	28-QFN	76T2336	1.91
PIC16F1783-I/MV	7	4	512	256	25	11	4 / 1	32	32	-40 to 85	2-CCP, ICD-Debug, OpAmps	28-UQFN	76T2337	1.89
PIC16F1783-I/SO	7	4	512	256	25	11	4 / 1	32	32	-40 to 85	2-CCP, ICD-Debug, OpAmps	28-SOIC	76T2338	1.83
PIC16F1783-I/SP	7	4	512	256	25	11	4 / 1	32	32	-40 to 85	2-CCP, ICD-Debug, OpAmps	28-NDIP	76T2339	2.02
PIC16F1783-I/SS	7	4	512	256	25	11	4 / 1	32	32	-40 to 85	2-CCP, ICD-Debug, OpAmps	28-SSOP	76T2340	1.79
PIC16F873A-E/SP	7	4	192	128	22	5	2 / 1	20	...	-40 to 125	2-CCP, nanoWatt, ICSP	28-NDIP	92C4641	4.62
PIC16F873A-I/ML	7	4	192	128	22	5	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	28-QFN	65K1042	4.48
PIC16F873A-I/SO	7	4	192	128	22	5	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	28-SOIC	89C2864	4.21
PIC16F873A-I/SP	7	4	192	128	22	5	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	28-NDIP	89C2865	4.21
PIC16F873A-I/SS	7	4	192	128	22	5	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	28-SSOP	63K6088	4.30
PIC16F874A-I/L	7	4	192	128	33	8	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	44-PLCC	89C2866	5.31
PIC16F874A-I/P	7	4	192	128	33	8	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	40-DIP	89C2867	4.59
PIC16F767-I/SO	14	8	368	...	25	11	2 / 1	20	8	-40 to 85	3-CCP, nanoWatt, ICSP	28-SOIC	61H5188	4.11
PIC16F767-I/SP	14	8	368	...	25	11	2 / 1	20	8	-40 to 85	3-CCP, nanoWatt, ICSP	28-NDIP	61H5189	4.03
PIC16F767-I/SS	14	8	368	...	25	11	2 / 1	20	8	-40 to 85	3-CCP, nanoWatt, ICSP	28-SSOP	61H5190	4.24
PIC16F76-I/SP	14	8	368	...	22	5	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	28-NDIP	28C7569	4.33
PIC16F76T-I/SO	14	8	368	...	22	5	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	28-SOIC	28C7571	4.43
PIC16F76T-I/SS	14	8	368	...	22	5	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	28-SSOP	28C7572	4.53
PIC16F777-I/P	14	8	368	...	36	14	2 / 1	20	8	-40 to 85	3-CCP, nanoWatt, ICSP	40-DIP	61H5195	4.43
PIC16F77-I/L	14	8	368	...	33	8	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	44-PLCC	28C7573	5.52
PIC16F77-I/P	14	8	368	...	33	8	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	40-DIP	28C7574	4.78
PIC16F77T-I/L	14	8	368	...	33	8	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	44-PLCC	28C7576	5.69
PIC16F876-04/SO	14	8	368	256	22	5	2 / 1	4	...	0 to 70	2-CCP, ICSP	28-SOIC	23C5082	5.08
PIC16F876-04/SP	14	8	368	256	22	5	2 / 1	4	...	0 to 70	2-CCP, ICSP	28-NDIP	23C5083	5.08
PIC16F876-04I/SO	14	8	368	256	22	5	2 / 1	4	...	-40 to 85	2-CCP, ICSP	28-SOIC	23C5084	5.59
PIC16F876-20/SO	14	8	368	256	22	5	2 / 1	20	...	0 to 70	2-CCP, ICSP	28-SOIC	12C1950	5.44
PIC16F876-20/SP	14	8	368	256	22	5	2 / 1	20	...	0 to 70	2-CCP, ICSP	28-NDIP	12C1951	5.44
PIC16F876-20I/SO	14	8	368	256	22	5	2 / 1	20	...	-40 to 85	2-CCP, ICSP	28-SOIC	23C5086	5.99
PIC16F876-20I/SP	14	8	368	256	22	5	2 / 1	20	...	-40 to 85	2-CCP, ICSP	28-NDIP	69K7638	5.99
PIC16F877-04/P	14	8	368	256	33	8	2 / 1	4	...	0 to 70	2-CCP, ICSP	40-DIP	61K3463	5.39
PIC16F877-04/PQ	14	8	368	256	33	8	2 / 1	4	...	0 to 70	2-CCP, ICSP	44-MQFP	23C5094	6.84
PIC16F877-04/PT	14	8	368	256	33	8	2 / 1	4	...	0 to 70	2-CCP, ICSP	44-TQFP	23C5095	7.27
PIC16F877-04I/L	14	8	368	256	33	8	2 / 1	4	...	-40 to 85	2-CCP, ICSP	44-PLCC	80K6050	8.35
PIC16F877-04I/P	14	8	368	256	33	8	2 / 1	4	...	-40 to 85	2-CCP, ICSP	40-DIP	61K3464	5.92
PIC16F877-04I/PT	14	8	368	256	33	8	2 / 1	4	...	-40 to 85	2-CCP, ICSP	44-TQFP	23C5099	7.99
PIC16F877-20/L	14	8	368	256	33	8	2 / 1	20	...	0 to 70	2-CCP, ICSP	44-PLCC	12C1952	8.13
PIC16F877-20/P	14	8	368	256	33	8	2 / 1	20	...	0 to 70	2-CCP, ICSP	40-DIP	69K7639	5.76
PIC16F877-20/PQ	14	8	368	256	33	8	2 / 1	20	...	0 to 70	2-CCP, ICSP	44-MQFP	23C5100	7.32
PIC16F877-20/PT	14	8	368	256	33	8	2 / 1	20	...	0 to 70	2-CCP, ICSP	44-TQFP	61K3465	7.78
PIC16F877-20I/L	14	8	368	256	33	8	2 / 1	20	...	-40 to 85	2-CCP, ICSP	44-PLCC	61K3466	8.94
PIC16F877-20I/P	14	8	368	256	33	8	2 / 1	20	...	-40 to 85	2-CCP, ICSP	40-DIP	23C5103	6.34
PIC16F877-20I/PT	14	8	368	256	33	8	2 / 1	20	...	-40 to 85	2-CCP, ICSP	44-TQFP	23C5105	8.55
PIC16F1509-E/ML	14	8	512	...	18	12	2 / 1	20	16	-40 to 125	ICD-Debug, Self-write	20-QFN	64T1045	1.33
PIC16F1509-E/P	14	8	512	...	18	12	2 / 1	20	16	-40 to 125	ICD-Debug, Self-write	20-DIP	64T1046	1.57
PIC16F1509-E/SO	14	8	512	...	18	12	2 / 1	20	16	-40 to 125	ICD-Debug, Self-write	20-SOIC	64T1047	1.38
PIC16F1509-E/SS	14	8	512	...	18	12	2 / 1	20	16	-40 to 125	ICD-Debug, Self-write	20-SSOP	64T1048	1.23
PIC16F1509-I/ML	14	8	512	...	18	12	2 / 1	20	16	-40 to 85	ICD-Debug, Self-write	20-QFN	64T1049	1.21
PIC16F1509-I/SO	14	8	512	...	18	12	2 / 1	20	16	-40 to 85	ICD-Debug, Self-write	20-SOIC	64T1051	1.27

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8-BIT PIC16 FLASH MICROCONTROLLERS (CONT.)

Mfg. Part No.	Program Memory (KB)	Program Memory (kWrds)	RAM (Bytes)	EEPROM (Bytes)	I/Os	ADC (Ch)	Timers (8/16Bit)	Max Freq. (MHz)	Internal Oscillator (MHz)	Oper. Temp (°C)	Features	Pkg.	Stock No.	Price Each 1-25
● PIC16F1509-I/SS	14	8	512	...	18	12	2 / 1	20	16	-40 to 85	ICD-Debug, Self-write	20-SSOP	64T1052	1.12
● PIC16F876A-E/SP	14	8	368	256	22	5	2 / 1	20	...	-40 to 125	2-CCP, nanoWatt, ICSP	28-NDIP	92C4679	4.98
● PIC16F876A-I/ML	14	8	368	256	22	5	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	28-QFN	96K3889	4.53
● PIC16F876A-I/SO	14	8	368	256	22	5	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	28-SOIC	89C2870	4.53
● PIC16F876A-I/SP	14	8	368	256	22	5	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	28-NDIP	61K3462	4.53
● PIC16F876A-I/SS	14	8	368	256	22	5	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	28-SSOP	96K3890	4.62
● PIC16F877A-E/P	14	8	368	256	33	8	2 / 1	20	...	-40 to 125	2-CCP, nanoWatt, ICSP	40-DIP	92C4704	5.44
● PIC16F877A-I/L	14	8	368	256	33	8	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	44-PLCC	89C2872	5.70
● PIC16F877A-I/P	14	8	368	256	33	8	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	40-DIP	69K7640	4.94
● PIC16F877A-I/PT	14	8	368	256	33	8	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	44-TQFP	89C2873	5.70

FLASH MEMORY W/ LCD SEGMENT DRIVERS

Mfg. Part No.	Program Memory (KB)	Program Memory (kWrds)	RAM (Bytes)	EEPROM (Bytes)	I/Os	ADC (Ch)	Timers (8/16Bit)	Max Freq. (MHz)	Internal Oscillator (MHz)	Oper. Temp (°C)	Features	Pkg.	Stock No.	Price Each 1-25
● PIC16F913-I/ML	7	4	256	256	25	5	2 / 1	20	8	-40 to 85	1-CCP, LCD-60, PLVD	28-QFN	56J7582	2.66
● PIC16F913-I/SO	7	4	256	256	24	5	2 / 1	20	8	-40 to 85	1-CCP, LCD-60, PLVD	28-SOIC	56J7583	2.41
● PIC16F946-I/PT	14	8	336	256	53	8	2 / 1	20	8	-40 to 85	2-CCP, LCD-168, PLVD	64-TQFP	31K5002	3.18
● PIC16F916-I/SP	14	8	352	256	24	5	2 / 1	20	8	-40 to 85	1-CCP, LCD-60, PLVD	28-NDIP	56J7603	2.89
● PIC16F917-I/P	14	8	352	256	35	8	2 / 1	20	8	-40 to 85	2-CCP, LCD-60, PLVD	40-DIP	56J7612	3.08
● PIC16F917-I/PT	14	8	352	256	35	8	2 / 1	20	8	-40 to 85	2-CCP, LCD-60, PLVD	44-TQFP	56J7613	2.99

FLASH MEMORY W/ TOUCH DRIVERS

Mfg. Part No.	Program Memory (KB)	Program Memory (kWrds)	RAM (Bytes)	EEPROM (Bytes)	I/Os	ADC (Ch)	Timers (8/16Bit)	Max Freq. (MHz)	Internal Oscillator (MHz)	Oper. Temp (°C)	Features	Pkg.	Stock No.	Price Each 1-25
● PIC16F882-I/ML	3.5	2	128	128	25	11	2 / 1	20	8	-40 to 85	1-CCP / 1-ECCP, nanoWatt, ICSP	28-QFN	27M0494	1.89
● PIC16F882-I/SO	3.5	2	128	128	24	11	2 / 1	20	8	-40 to 85	1-CCP / 1-ECCP, nanoWatt, ICSP	28-SOIC	27M0495	1.64
● PIC16F882-I/SP	3.5	2	128	128	24	11	2 / 1	20	8	-40 to 85	1-CCP / 1-ECCP, nanoWatt, ICSP	28-NDIP	27M0496	1.83
● PIC16F882-I/SS	3.5	2	128	128	24	11	2 / 1	20	8	-40 to 85	1-CCP / 1-ECCP, nanoWatt, ICSP	28-SSOP	27M0497	1.54
● PIC16F677-E/SS	3.5	2	128	256	18	12	1 / 1	20	8	-40 to 125	nanoWatt, ICSP, POR, BOR	20-SSOP	56J7508	1.33
● PIC16F677-I/P	3.5	2	128	256	18	12	1 / 1	20	8	-40 to 85	nanoWatt, ICSP, POR, BOR	20-DIP	56J7509	1.45
● PIC16F677-I/SO	3.5	2	128	256	18	12	1 / 1	20	8	-40 to 85	nanoWatt, ICSP, POR, BOR	20-SOIC	56J7510	1.41
● PIC16F687-I/P	3.5	2	128	256	18	12	1 / 1	20	8	-40 to 85	nanoWatt, ICSP, POR, BOR	20-DIP	56J7529	1.55
● PIC16F687-I/SS	3.5	2	128	256	18	12	1 / 1	20	8	-40 to 85	nanoWatt, ICSP, POR, BOR	20-SSOP	56J7531	1.45
● PIC16F616-E/P	3.5	2	128	...	12	8	2 / 1	20	8	-40 to 125	1-ECCP, nanoWatt, ICSP	14-DIP	74K8536	1.18
● PIC16F616-E/SL	3.5	2	128	...	12	8	2 / 1	20	8	-40 to 125	1-ECCP, nanoWatt, ICSP	14-SOIC	74K8537	1.04
● PIC16F616-I/P	3.5	2	128	...	12	8	2 / 1	20	8	-40 to 85	1-ECCP, nanoWatt, ICSP	14-DIP	74K8540	1.09
● PIC16F616-I/SL	3.5	2	128	...	12	8	2 / 1	20	8	-40 to 85	1-ECCP, nanoWatt, ICSP	14-SOIC	74K8541	0.94
● PIC16F616-I/ST	3.5	2	128	...	12	8	2 / 1	20	8	-40 to 85	1-ECCP, nanoWatt, ICSP	14-TSSOP	74K8542	1.06
● PIC16F1823-I/P	3.5	2	128	256	12	8	2 / 1	32	32	-40 to 85	1-ECCP, 8CH-Touch	14-DIP	53R0221	1.22
● PIC16F1823-I/ST	3.5	2	128	256	12	8	2 / 1	32	32	-40 to 85	1-ECCP, 8CH-Touch	14-TSSOP	53R0223	1.19
● PIC16F722-E/SO	3.5	2	128	...	25	11	2 / 1	20	16	-40 to 125	2-CCP, 8CH-Touch	28-SOIC	54M4990	1.48
● PIC16F722-I/ML	3.5	2	128	...	25	11	2 / 1	20	16	-40 to 85	2-CCP, 8CH-Touch	28-QFN	54M4993	1.60
● PIC16F722-I/SP	3.5	2	128	...	25	11	2 / 1	20	16	-40 to 85	2-CCP, 8CH-Touch	28-NDIP	54M4995	1.54
● PIC16F1826-E/P	3.5	2	256	256	16	12	2 / 1	32	32	-40 to 125	1-ECCP, 12-CH mTouch	18-DIP	24R7059	1.56
● PIC16F723A-I/ML	7	4	192	...	25	11	2 / 1	20	16	-40 to 85	2-CCP, 8CH-Touch	28-QFN	73R8436	1.33
● PIC16F723A-I/SO	7	4	192	...	25	11	2 / 1	20	16	-40 to 85	2-CCP, 8CH-Touch	28-SOIC	73R8438	1.21
● PIC16F723A-I/SP	7	4	192	...	25	11	2 / 1	20	16	-40 to 85	2-CCP, 8CH-Touch	28-NDIP	73R8439	1.41
● PIC16F723A-I/SS	7	4	192	...	25	11	2 / 1	20	16	-40 to 85	2-CCP, 8CH-Touch	28-SSOP	73R8440	1.18
● PIC16F883-E/SO	7	4	256	256	25	11	2 / 1	20	8	-40 to 125	1-CCP / 1-ECCP, nanoWatt, ICSP	28-SOIC	74K8553	1.94
● PIC16F883-E/SP	7	4	256	256	25	11	2 / 1	20	8	-40 to 125	1-CCP / 1-ECCP, nanoWatt, ICSP	28-NDIP	74K8554	2.11
● PIC16F883-E/SS	7	4	256	256	25	11	2 / 1	20	8	-40 to 125	1-CCP / 1-ECCP, nanoWatt, ICSP	28-SSOP	74K8555	1.90
● PIC16F883-I/SO	7	4	256	256	24	11	2 / 1	20	8	-40 to 85	1-CCP / 1-ECCP, nanoWatt, ICSP	28-SOIC	74K8557	1.74
● PIC16F883-I/SP	7	4	256	256	24	11	2 / 1	20	8	-40 to 85	1-CCP / 1-ECCP, nanoWatt, ICSP	28-NDIP	74K8558	1.90
● PIC16F883-I/SS	7	4	256	256	24	11	2 / 1	20	8	-40 to 85	1-CCP / 1-ECCP, nanoWatt, ICSP	28-SSOP	74K8559	1.70
● PIC16F884-I/P	7	4	256	256	35	14	2 / 1	20	8	-40 to 85	1-CCP / 1-ECCP, nanoWatt, ICSP	40-DIP	74K8567	2.01
● PIC16F1828-I/ML	7	4	256	256	18	12	4 / 1	32	32	-40 to 85	1-CCP / 2-ECCP, 12-CH Touch	20-QFN	73R8382	1.48
● PIC16F1828-I/P	7	4	256	256	18	12	4 / 1	32	32	-40 to 85	1-CCP / 2-ECCP, 12-CH Touch	20-DIP	73R8383	1.71
● PIC16F1828-I/SO	7	4	256	256	18	12	4 / 1	32	32	-40 to 85	1-CCP / 2-ECCP, 12-CH Touch	20-SOIC	73R8384	1.50
● PIC16F1828-I/SS	7	4	256	256	18	12	4 / 1	32	32	-40 to 85	1-CCP / 2-ECCP, 12-CH Touch	20-SSOP	73R8385	1.37
● PIC16F685-E/SS	7	4	256	256	18	12	2 / 1	20	8	-40 to 125	1-ECCP, nanoWatt, ICSP	20-SSOP	56J7519	1.70
● PIC16F685-I/P	7	4	256	256	18	12	2 / 1	20	8	-40 to 85	1-ECCP, nanoWatt, ICSP	20-DIP	56J7520	1.81
● PIC16F689-I/ML	7	4	256	256	18	12	1 / 1	20	8	-40 to 85	nanoWatt, ICSP, POR, BOR	20-QFN	56K7283	1.77
● PIC16F689-I/P	7	4	256	256	18	12	1 / 1	20	8	-40 to 85	nanoWatt, ICSP, POR, BOR	20-DIP	56J7539	1.81
● PIC16F689-I/SS	7	4	256	256	18	12	1 / 1	20	8	-40 to 85	nanoWatt, ICSP, POR, BOR	20-SSOP	56J7541	1.52
● PIC16F690-E/ML	7	4	256	256	18	12	2 / 1	20	8	-40 to 125	1-ECCP, nanoWatt, ICSP	20-QFN	56K7285	2.04
● PIC16F690-E/P	7	4	256	256	18	12	2 / 1	20	8	-40 to 125	1-ECCP, nanoWatt, ICSP	20-DIP	56J7545	2.08
● PIC16F690-E/SO	7	4	256	256	18	12	2 / 1	20	8	-40 to 125	1-ECCP, nanoWatt, ICSP	20-SOIC	56J7546	2.04
● PIC16F690-E/SS	7	4	256	256	18	12	2 / 1	20	8	-40 to 125	1-ECCP, nanoWatt, ICSP	20-SSOP	56J7547	1.79
● PIC16F690-I/P	7	4	256	256	18	12	2 / 1	20	8	-40 to 85	1-ECCP, nanoWatt, ICSP	20-DIP	56J7548	1.91
● PIC16F690-I/SO	7	4	256	256	18	12	2 / 1	20	8	-40 to 85	1-ECCP, nanoWatt, ICSP	20-SOIC	56J7549	1.87
● PIC16F690-I/SS	7	4	256	256	18	12	2 / 1	20	8	-40 to 85	1-ECCP, nanoWatt, ICSP	20-SSOP	56J7550	1.62
● PIC16F1824-I/ML	7	4	256	256	12	8	4 / 1	32	32	-40 to 85	2-CCP / 2-ECCP, 8CH-Touch	16-QFN	65R5963	1.25
● PIC16F1824-I/P	7	4	256	256	12	8	4 / 1	32	32	-40 to 85	2-CCP / 2-ECCP, 8CH-Touch	14-DIP	65R5964	1.30
● PIC16F1824-I/SL	7	4	256	256	12	8	4 / 1	32	32	-40 to 85	2-CCP / 2-ECCP, 8CH-Touch	14-SOIC	65R5965	1.16

➤ CONTINUED ➤

8-BIT PIC16 FLASH MICROCONTROLLERS (CONT.)

Mfg. Part No.	Program Memory (KB)	Program Memory (kWrds)	RAM (Bytes)	EEPROM (Bytes)	I/Os	ADC (Ch)	Timers (8/16Bit)	Max Freq. (MHz)	Internal Oscillator (MHz)	Oper. Temp (°C)	Features	Pkg.	Stock No.	Price Each 1-25
PIC16F1824-I/ST	7	4	256	256	12	8	4 / 1	32	32	-40 to 85	2-CCP / 2-ECCP, 8CH-Touch	14-TSSOP	65R5966	1.27
PIC16F1827-E/P	7	4	384	256	16	12	4 / 1	32	32	-40 to 125	1-CCP / 2-ECCP, 12-CH Touch	18-DIP	24R7073	1.67
PIC16F1827-I/P	7	4	384	256	16	12	4 / 1	32	32	-40 to 85	1-CCP / 2-ECCP, 12-CH Touch	18-DIP	24R7078	1.52
PIC16F1827-I/SO	7	4	384	256	16	12	4 / 1	32	32	-40 to 85	1-CCP / 2-ECCP, 12-CH Touch	18-SOIC	24R7079	1.43
PIC16F1827-I/SS	7	4	384	256	16	12	4 / 1	32	32	-40 to 85	1-CCP / 2-ECCP, 12-CH Touch	20-SSOP	24R7080	1.43
PIC16F1825-E/ML	14	8	1024	256	12	8	4 / 1	32	32	-40 to 125	1-CCP / 2-ECCP, 12-CH Touch	16-QFN	82R4366	1.50
PIC16F1825-E/P	14	8	1024	256	12	8	4 / 1	32	32	-40 to 125	1-CCP / 2-ECCP, 12-CH Touch	14-DIP	82R4367	1.54
PIC16F1825-E/SL	14	8	1024	256	12	8	4 / 1	32	32	-40 to 125	1-CCP / 2-ECCP, 12-CH Touch	14-SOIC	82R4368	1.40
PIC16F1825-E/ST	14	8	1024	256	12	8	4 / 1	32	32	-40 to 125	1-CCP / 2-ECCP, 12-CH Touch	14-TSSOP	82R4369	1.46
PIC16F1825-I/ML	14	8	1024	256	12	8	4 / 1	32	32	-40 to 85	1-CCP / 2-ECCP, 12-CH Touch	16-QFN	82R4370	1.37
PIC16F1825-I/P	14	8	1024	256	12	8	4 / 1	32	32	-40 to 85	1-CCP / 2-ECCP, 12-CH Touch	14-DIP	82R4371	1.42
PIC16F1825-I/SL	14	8	1024	256	12	8	4 / 1	32	32	-40 to 85	1-CCP / 2-ECCP, 12-CH Touch	14-SOIC	82R4372	1.27
PIC16F1825-I/ST	14	8	1024	256	12	8	4 / 1	32	32	-40 to 85	1-CCP / 2-ECCP, 12-CH Touch	14-TSSOP	82R4373	1.33
PIC16F886-E/ML	14	8	368	256	25	11	2 / 1	20	8	-40 to 125	1-CCP / 1-ECCP, nanoWatt, ICSP	28-QFN	74K8571	2.40
PIC16F886-E/SO	14	8	368	256	25	11	2 / 1	20	8	-40 to 125	1-CCP / 1-ECCP, nanoWatt, ICSP	28-SOIC	74K8572	2.10
PIC16F886-E/SP	14	8	368	256	24	11	2 / 1	20	8	-40 to 125	1-CCP / 1-ECCP, nanoWatt, ICSP	28-NDIP	74K8573	2.27
PIC16F886-I/SO	14	8	368	256	24	11	2 / 1	20	8	-40 to 85	1-CCP / 1-ECCP, nanoWatt, ICSP	28-SOIC	74K8576	1.88
PIC16F886-I/SP	14	8	368	256	24	11	2 / 1	20	8	-40 to 85	1-CCP / 1-ECCP, nanoWatt, ICSP	28-NDIP	74K8577	2.05
PIC16F886-I/SS	14	8	368	256	24	11	2 / 1	20	8	-40 to 85	1-CCP / 1-ECCP, nanoWatt, ICSP	28-SSOP	74K8578	1.85
PIC16F887-E/P	14	8	368	256	35	14	2 / 1	20	8	-40 to 125	1-CCP / 1-ECCP, nanoWatt, ICSP	40-DIP	74K8583	2.45
PIC16F887-E/PT	14	8	368	256	35	14	2 / 1	20	8	-40 to 125	1-CCP / 1-ECCP, nanoWatt, ICSP	44-TQFP	74K8584	2.46
PIC16F887-I/P	14	8	368	256	35	14	2 / 1	20	8	-40 to 85	1-CCP / 1-ECCP, nanoWatt, ICSP	40-DIP	27M9657	2.20
PIC16F887-I/PT	14	8	368	256	35	14	2 / 1	20	8	-40 to 85	1-CCP / 1-ECCP, nanoWatt, ICSP	44-TQFP	74K8587	2.21
PIC16F727-I/P	14	8	368	...	36	14	2 / 1	20	16	-40 to 85	2-CCP / 0-ECCP, mTouch-16	40-DIP	40M1421	2.22
PIC16F727-I/PT	14	8	368	...	36	14	2 / 1	20	16	-40 to 85	2-CCP / 0-ECCP, mTouch-16	44-TQFP	40M1422	2.12
PIC16F707-I/P	14	8	368	...	36	14	3 / 1	20	16	-40 to 85	2-CCP, 30CH-Touch	40-DIP	63R7804	2.51
PIC16F707-I/PT	14	8	368	...	36	14	3 / 1	20	16	-40 to 85	2-CCP, 30CH-Touch	44-TQFP	63R7805	2.31
PIC16F726-I/SP	14	8	368	...	25	11	2 / 1	20	16	-40 to 85	2-CCP, 8CH-Touch	28-NDIP	54M5012	1.93
PIC16F1516-I/MV	14	8	512	...	25	17	2 / 1	20	16	-40 to 85	2-CCP, mTouch-17	28-UQFN	91R2988	1.43
PIC16F1516-I/SO	14	8	512	...	25	17	2 / 1	20	16	-40 to 85	2-CCP, mTouch-17	28-SOIC	91R2989	1.35
PIC16F1516-I/SP	14	8	512	...	25	17	2 / 1	20	16	-40 to 85	2-CCP, mTouch-17	28-NDIP	91R2990	1.54
PIC16F1516-I/SS	14	8	512	...	25	17	2 / 1	20	16	-40 to 85	2-CCP, mTouch-17	28-SSOP	91R2991	1.31
PIC16F1517-I/P	14	8	512	...	36	28	2 / 1	20	16	-40 to 85	2-CCP, 28CH-Touch	40-DIP	91R2999	2.02
PIC16F1517-I/PT	14	8	512	...	36	28	2 / 1	20	16	-40 to 85	2-CCP, 28CH-Touch	44-TQFP	91R3000	1.83
PIC16F1526-I/PT	14	8	768	...	54	30	6 / 3	20	16	-40 to 85	1-CCP, 30CH-Touch	64-TQFP	13T4720	2.02
PIC16F1518-I/SO	28	16	1024	...	25	17	2 / 1	20	16	-40 to 85	2-CCP, mTouch-17	28-SOIC	91R3008	1.43
PIC16F1518-I/SP	28	16	1024	...	25	17	2 / 1	20	16	-40 to 85	2-CCP, mTouch-17	28-NDIP	91R3009	1.62
PIC16F1518-I/SS	28	16	1024	...	25	17	2 / 1	20	16	-40 to 85	2-CCP, mTouch-17	28-SSOP	91R3010	1.39
PIC16F1519-I/P	28	16	1024	...	36	28	2 / 1	20	16	-40 to 85	2-CCP, 28CH-Touch	40-DIP	91R3018	2.10
PIC16F1519-I/PT	28	16	1024	...	36	28	2 / 1	20	16	-40 to 85	2-CCP, 28CH-Touch	44-TQFP	91R3019	1.91
PIC16F1527-I/PT	28	16	1536	...	54	30	6 / 3	20	16	-40 to 85	1-CCP, 30CH-Touch	64-TQFP	13T4723	2.12

FLASH MEMORY W/ TOUCH AND LCD DRIVERS

Mfg. Part No.	Program Memory (KB)	Program Memory (kWrds)	RAM (Bytes)	EEPROM (Bytes)	I/Os	ADC (Ch)	Timers (8/16Bit)	Max Freq. (MHz)	Internal Oscillator (MHz)	Oper. Temp (°C)	Features	Pkg.	Stock No.	Price Each 1-25
PIC16F1934-I/ML	7	4	256	256	36	14	4 / 1	32	32	-40 to 85	2-CCP / 3-ECCP, mTouch-16, LCD-96	44-QFN	45P4754	2.14
PIC16F1934-I/P	7	4	256	256	36	14	4 / 1	32	32	-40 to 85	2-CCP / 3-ECCP, mTouch-16, LCD-96	40-DIP	45P4755	2.22
PIC16F1934-I/PT	7	4	256	256	36	14	4 / 1	32	32	-40 to 85	2-CCP / 3-ECCP, mTouch-16, LCD-96	44-TQFP	45P4756	2.02
PIC16F1933-I/SO	7	4	256	256	25	11	4 / 1	32	32	-40 to 85	2-CCP / 3-ECCP, 60-LCD, 8CH-Touch	28-SOIC	08R1937	1.73
PIC16F1933-I/SP	7	4	256	256	25	11	4 / 1	32	32	-40 to 85	2-CCP / 3-ECCP, 60-LCD, 8CH-Touch	28-NDIP	08R1938	1.93
PIC16F1937-I/ML	14	8	512	256	36	14	4 / 1	32	32	-40 to 85	2-CCP / 3-ECCP, mTouch-16, LCD-96	44-QFN	45P4773	2.24
PIC16F1937-I/P	14	8	512	256	36	14	4 / 1	32	32	-40 to 85	2-CCP / 3-ECCP, mTouch-16, LCD-96	40-DIP	45P4774	2.31
PIC16F1937-I/PT	14	8	512	256	36	14	4 / 1	32	32	-40 to 85	2-CCP / 3-ECCP, mTouch-16, LCD-96	44-TQFP	45P4775	2.12
PIC16F1946-I/PT	14	8	512	256	53	17	4 / 1	32	32	-40 to 85	2-CCP / 3-ECCP, mTouch-17, LCD-184	64-TQFP	14R8975	2.41
PIC16F1936-I/ML	14	8	512	256	25	11	4 / 1	32	32	-40 to 85	2-CCP / 3-ECCP, 60-LCD, 8CH-Touch	28-QFN	45P4763	1.95
PIC16F1936-I/MV	14	8	512	256	25	11	4 / 1	32	32	-40 to 85	2-CCP / 3-ECCP, 60-LCD, 8CH-Touch	28-UQFN	53R0237	1.95
PIC16F1936-I/SO	14	8	512	256	25	11	4 / 1	32	32	-40 to 85	2-CCP / 3-ECCP, 60-LCD, 8CH-Touch	28-SOIC	45P4764	1.83
PIC16F1936-I/SP	14	8	512	256	25	11	4 / 1	32	32	-40 to 85	2-CCP / 3-ECCP, 60-LCD, 8CH-Touch	28-NDIP	45P4765	2.02
PIC16F1936-I/SS	14	8	512	256	25	11	4 / 1	32	32	-40 to 85	2-CCP / 3-ECCP, 60-LCD, 8CH-Touch	28-SSOP	45P4766	1.79
PIC16F1939-I/P	28	16	1024	256	36	14	4 / 1	32	32	-40 to 85	2-CCP / 3-ECCP, mTouch-16, LCD-96	40-DIP	08R1958	2.41
PIC16F1939-I/PT	28	16	1024	256	36	14	4 / 1	32	32	-40 to 85	2-CCP / 3-ECCP, mTouch-16, LCD-96	44-TQFP	08R1959	2.22
PIC16F1947-I/MR	28	16	1024	256	54	17	4 / 1	32	32	-40 to 85	2-CCP / 3-ECCP, mTouch-17, LCD-184	64-QFN	73R8393	2.62
PIC16F1947-I/PT	28	16	1024	256	53	17	4 / 1	32	32	-40 to 85	2-CCP / 3-ECCP, mTouch-17, LCD-184	64-TQFP	14R8978	2.51
PIC16F1938-I/SO	28	16	1024	256	25	11	4 / 1	32	32	-40 to 85	2-CCP / 3-ECCP, 60-LCD, 8CH-Touch	28-SOIC	08R1948	1.93
PIC16F1938-I/SP	28	16	1024	256	25	11	4 / 1	32	32	-40 to 85	2-CCP / 3-ECCP, 60-LCD, 8CH-Touch	28-NDIP	08R1949	2.12
PIC16F1938-I/SS	28	16	1024	256	25	11	4 / 1	32	32	-40 to 85	2-CCP / 3-ECCP, 60-LCD, 8CH-Touch	28-SSOP	08R1950	1.89

FLASH MEM - LOW SUPPLY RANGE

Mfg. Part No.	Program Memory (KB)	Program Memory (kWrds)	RAM (Bytes)	EEPROM (Bytes)	I/Os	ADC (Ch)	Timers (8/16Bit)	Max Freq. (MHz)	Internal Oscillator (MHz)	Oper. Temp (°C)	Features	Pkg.	Stock No.	Price Each 1-25
PIC16LF818-I/P	1.75	1	128	128	16	5	2 / 1	20	...	-40 to 85	1-CCP, nanoWatt, ICSP	18-DIP	96K3900	1.93
PIC16LF818-I/SO	1.75	1	128	128	16	5	2 / 1	20	...	-40 to 85	1-CCP, nanoWatt, ICSP	18-SOIC	92C4878	1.97
PIC16LF627A-I/P	1.75	1	224	128	16	...	2 / 1	20	4	-40 to 85	1-CCP, nanoWatt, ICSP	18-DIP	92C4840	1.61
PIC16LF627A-I/SO	1.75	1	224	128	16	...	2 / 1	20	4	-40 to 85	1-CCP, nanoWatt, ICSP	18-SOIC	92C4841	1.65

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8-BIT PIC16 FLASH MICROCONTROLLERS (CONT.)

Mfg. Part No.	Program Memory (KB)	Program Memory (kWrds)	RAM (Bytes)	EEPROM (Bytes)	I/Os	ADC (Ch)	Timers (8/16Bit)	Max Freq. (MHz)	Internal Oscillator (MHz)	Oper. Temp (°C)	Features	Pkg.	Stock No.	Price Each 1-25
● PIC16LF627A-I/SS	1.75	1	224	128	16	...	2 / 1	20	4	-40 to 85	1-CCP, nanoWatt, ICSP	20-SSOP	92C4842	1.78
● PIC16LF84-04/P	1.75	1	68	64	13	...	1 / 0	4	...	0 to 70	ICSP, POR, WDT	18-DIP	80K6051	4.76
● PIC16LF84-04/SO	1.75	1	68	64	13	...	1 / 0	4	...	0 to 70	ICSP, POR, WDT	18-SOIC	23C5687	4.84
● PIC16LF84-04I/P	1.75	1	68	64	13	...	1 / 0	4	...	-40 to 85	ICSP, POR, WDT	18-DIP	23C5688	5.24
● PIC16LF84-04I/SO	1.75	1	68	64	13	...	1 / 0	4	...	-40 to 85	ICSP, POR, WDT	18-SOIC	68K5333	5.32
● PIC16LF84A-04/SS	1.75	1	68	64	13	...	1 / 0	4	...	0 to 70	ICSP, POR, BOR, WDT	20-SSOP	23C5692	4.11
● PIC16LF84A-04I/SS	1.75	1	68	64	13	...	1 / 0	4	...	-40 to 85	ICSP, POR, BOR, WDT	20-SSOP	23C5695	4.46
● PIC16LF1503-I/MG	3.5	2	128	...	12	8	2 / 1	20	16	-40 to 85	ICD-Debug, Self-write	16-QFN	55T3652	0.85
● PIC16LF1503-I/P	3.5	2	128	...	12	8	2 / 1	20	16	-40 to 85	ICD-Debug, Self-write	14-DIP	55T3653	0.90
● PIC16LF1503-I/SL	3.5	2	128	...	12	8	2 / 1	20	16	-40 to 85	ICD-Debug, Self-write	14-SOIC	55T3654	0.75
● PIC16LF1503-I/ST	3.5	2	128	...	12	8	2 / 1	20	16	-40 to 85	ICD-Debug, Self-write	14-TSSOP	55T3655	0.81
● PIC16LF1507-E/ML	3.5	2	128	...	18	12	2 / 1	20	16	-40 to 125	ICD-Debug, ICSP	20-QFN	39T6730	1.14
● PIC16LF1507-E/P	3.5	2	128	...	18	12	2 / 1	20	16	-40 to 125	ICD-Debug, ICSP	20-DIP	39T6731	1.38
● PIC16LF1507-E/SO	3.5	2	128	...	18	12	2 / 1	20	16	-40 to 125	ICD-Debug, ICSP	20-SOIC	39T6732	1.19
● PIC16LF1507-E/SS	3.5	2	128	...	18	12	2 / 1	20	16	-40 to 125	ICD-Debug, ICSP	20-SSOP	39T6733	1.04
● PIC16LF1507-I/ML	3.5	2	128	...	18	12	2 / 1	20	16	-40 to 85	ICD-Debug, ICSP	20-QFN	39T6734	1.04
● PIC16LF1507-I/P	3.5	2	128	...	18	12	2 / 1	20	16	-40 to 85	ICD-Debug, ICSP	20-DIP	39T6735	1.28
● PIC16LF1507-I/SO	3.5	2	128	...	18	12	2 / 1	20	16	-40 to 85	ICD-Debug, ICSP	20-SOIC	39T6736	1.10
● PIC16LF1507-I/SS	3.5	2	128	...	18	12	2 / 1	20	16	-40 to 85	ICD-Debug, ICSP	20-SSOP	39T6737	0.94
● PIC16LF72-I/SP	3.5	2	128	...	22	5	2 / 1	20	...	-40 to 85	1-CCP, nanoWatt, ICSP	28-NDIP	96K3895	2.33
● PIC16LF72-I/SS	3.5	2	128	...	22	5	2 / 1	20	...	-40 to 85	1-CCP, nanoWatt, ICSP	28-SSOP	96K3896	2.42
● PIC16LF871-I/P	3.5	2	128	64	33	8	2 / 1	20	...	-40 to 85	1-CCP, nanoWatt, ICSP	40-DIP	96K3903	3.35
● PIC16LF871-I/PT	3.5	2	128	64	33	8	2 / 1	20	...	-40 to 85	1-CCP, nanoWatt, ICSP	44-TQFP	23C5709	4.51
● PIC16LF628-04/P	3.5	2	224	128	16	...	2 / 1	4	...	0 to 70	1-CCP, ICSP	18-DIP	96K3893	2.44
● PIC16LF628-04I/P	3.5	2	224	128	16	...	2 / 1	4	...	-40 to 85	1-CCP, ICSP	18-DIP	96K3894	2.68
● PIC16LF628A-I/P	3.5	2	224	128	16	...	2 / 1	20	4	-40 to 85	1-CCP, nanoWatt, ICSP	18-DIP	92C4847	1.83
● PIC16LF628A-I/SO	3.5	2	224	128	16	...	2 / 1	20	4	-40 to 85	1-CCP, nanoWatt, ICSP	18-SOIC	92C4848	1.86
● PIC16LF1782-I/ML	3.5	2	256	256	25	11	4 / 1	32	32	-40 to 85	2-CCP, ICD-Debug, OpAmps	28-QFN	76T2353	1.81
● PIC16LF1782-I/MV	3.5	2	256	256	25	11	4 / 1	32	32	-40 to 85	2-CCP, ICD-Debug, OpAmps	28-UQFN	76T2354	1.79
● PIC16LF1782-I/SO	2	2	256	256	25	11	4 / 1	32	32	-40 to 85	2-CCP, ICD-Debug, OpAmps	28-SOIC	76T2355	1.73
● PIC16LF1782-I/SP	2	2	256	256	25	11	4 / 1	32	32	-40 to 85	2-CCP, ICD-Debug, OpAmps	28-NDIP	76T2356	1.93
● PIC16LF1782-I/SS	3.5	2	256	256	25	11	4 / 1	32	32	-40 to 85	2-CCP, ICD-Debug, OpAmps	28-SSOP	76T2357	1.70
● PIC16LF819-I/SS	3.5	2	256	256	16	5	2 / 1	20	...	-40 to 85	1-CCP, nanoWatt, ICSP	20-SSOP	92C4886	2.41
● PIC16LF73-I/SP	7	4	192	...	22	5	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	28-NDIP	96K3897	3.63
● PIC16LF74-I/P	7	4	192	...	33	8	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	40-DIP	96K3898	4.40
● PIC16LF873-04/SP	7	4	192	128	22	5	2 / 1	4	...	0 to 70	2-CCP, ICSP	28-NDIP	96K3905	4.94
● PIC16LF873A-I/SS	7	4	192	128	22	5	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	28-SSOP	92C4900	4.64
● PIC16LF874-04/P	7	4	192	128	33	8	2 / 1	4	...	0 to 70	2-CCP, ICSP	40-DIP	96K3907	5.39
● PIC16LF874A-I/L	7	4	192	128	33	8	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	44-PLCC	74K8611	5.57
● PIC16LF1508-E/ML	7	4	256	...	18	12	2 / 1	20	16	-40 to 125	ICD-Debug, Self-write	20-QFN	64T1056	1.26
● PIC16LF1508-E/P	7	4	256	...	18	12	2 / 1	20	16	-40 to 125	ICD-Debug, Self-write	20-DIP	64T1057	1.50
● PIC16LF1508-E/SO	7	4	256	...	18	12	2 / 1	20	16	-40 to 125	ICD-Debug, Self-write	20-SOIC	64T1058	1.32
● PIC16LF1508-E/SS	7	4	256	...	18	12	2 / 1	20	16	-40 to 125	ICD-Debug, Self-write	20-SSOP	64T1059	1.17
● PIC16LF1508-I/ML	7	4	256	...	18	12	2 / 1	20	16	-40 to 85	ICD-Debug, Self-write	20-QFN	64T1060	1.16
● PIC16LF1508-I/P	7	4	256	...	18	12	2 / 1	20	16	-40 to 85	ICD-Debug, Self-write	20-DIP	64T1061	1.40
● PIC16LF1508-I/SO	7	4	256	...	18	12	2 / 1	20	16	-40 to 85	ICD-Debug, Self-write	20-SOIC	64T1062	1.21
● PIC16LF1508-I/SS	7	4	256	...	18	12	2 / 1	20	16	-40 to 85	ICD-Debug, Self-write	20-SSOP	66T9124	1.06
● PIC16LF721-I/ML	7	4	256	...	18	12	2 / 1	16	16	-40 to 85	1-CCP, nanoWatt, ICSP	20-QFN	73R8493	1.12
● PIC16LF721-I/P	7	4	256	...	18	12	2 / 1	16	16	-40 to 85	1-CCP, nanoWatt, ICSP	20-DIP	73R8494	1.36
● PIC16LF721-I/SO	7	4	256	...	18	12	2 / 1	16	16	-40 to 85	1-CCP, nanoWatt, ICSP	20-SOIC	73R8495	1.18
● PIC16LF737-I/SS	7	4	368	...	25	11	2 / 1	20	8	-40 to 85	3-CCP, nanoWatt, ICSP	28-SSOP	61H5216	3.93
● PIC16LF87-I/SO	7	4	368	256	16	...	2 / 1	20	8	-40 to 85	1-CCP, nanoWatt, ICSP	18-SOIC	92C4892	2.60
● PIC16LF88-I/P	7	4	368	256	16	7	2 / 1	20	8	-40 to 85	1-CCP, nanoWatt, ICSP	18-DIP	92C4922	2.73
● PIC16LF1783-I/ML	7	4	512	256	25	11	4 / 1	32	32	-40 to 85	2-CCP, ICD-Debug, OpAmps	28-QFN	76T2367	1.91
● PIC16LF1783-I/MV	7	4	512	256	25	11	4 / 1	32	32	-40 to 85	2-CCP, ICD-Debug, OpAmps	28-UQFN	76T2368	1.89
● PIC16LF1783-I/SO	7	4	512	256	25	11	4 / 1	32	32	-40 to 85	2-CCP, ICD-Debug, OpAmps	28-SOIC	76T2369	1.83
● PIC16LF1783-I/SP	7	4	512	256	25	11	4 / 1	32	32	-40 to 85	2-CCP, ICD-Debug, OpAmps	28-NDIP	76T2370	2.02
● PIC16LF1783-I/SS	7	4	512	256	25	11	4 / 1	32	32	-40 to 85	2-CCP, ICD-Debug, OpAmps	28-SSOP	76T2371	1.79
● PIC16LF767-I/SO	14	8	368	...	25	11	2 / 1	20	8	-40 to 85	3-CCP, nanoWatt, ICSP	28-SOIC	61H5226	4.47
● PIC16LF767-I/SP	14	8	368	...	25	11	2 / 1	20	8	-40 to 85	3-CCP, nanoWatt, ICSP	28-NDIP	61H5227	4.43
● PIC16LF76-I/SP	14	8	368	...	22	5	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	28-NDIP	92C4867	4.54
● PIC16LF777-I/P	14	8	368	...	36	14	2 / 1	20	8	-40 to 85	3-CCP, nanoWatt, ICSP	40-DIP	96K3899	4.86
● PIC16LF777-I/PT	14	8	368	...	36	14	2 / 1	20	8	-40 to 85	3-CCP, nanoWatt, ICSP	44-TQFP	61H5234	4.97
● PIC16LF876-04/SO	14	8	368	256	24	5	2 / 1	4	...	0 to 70	2-CCP, ICSP	28-SOIC	23C5737	5.34
● PIC16LF876-04I/SO	14	8	368	256	22	5	2 / 1	4	...	-40 to 85	2-CCP, ICSP	28-SOIC	23C5739	5.87
● PIC16LF877-04/L	14	8	368	256	33	8	2 / 1	4	...	0 to 70	2-CCP, ICSP	44-PLCC	96K3910	7.99
● PIC16LF877-04/PT	14	8	368	256	33	8	2 / 1	4	...	0 to 70	2-CCP, ICSP	44-TQFP	23C5746	7.64
● PIC16LF877-04I/L	14	8	368	256	33	8	2 / 1	4	...	-40 to 85	2-CCP, ICSP	44-PLCC	23C5747	8.77
● PIC16LF877-04I/PQ	14	8	368	256	33	8	2 / 1	4	...	-40 to 85	2-CCP, ICSP	44-MQFP	23C5749	7.90
● PIC16LF877-04I/PT	14	8	368	256	33	8	2 / 1	4	...	-40 to 85	2-CCP, ICSP	44-TQFP	23C5750	8.39
● PIC16LF1509-E/ML	14	8	512	...	18	12	2 / 1	20	16	-40 to 125	ICD-Debug, Self-write	20-QFN	64T1066	1.33
● PIC16LF1509-E/P	14	8	512	...	18	12	2 / 1	20	16	-40 to 125	ICD-Debug, Self-write	20-DIP	64T1067	1.57
● PIC16LF1509-E/SO	14	8	512	...	18	12	2 / 1	20	16	-40 to 125	ICD-Debug, Self-write	20-SOIC	64T1068	1.38
● PIC16LF1509-E/SS	14	8	512	...	18	12	2 / 1	20	16	-40 to 125	ICD-Debug, Self-write	20-SSOP	64T1069	1.23

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8-BIT PIC16 FLASH MICROCONTROLLERS (CONT.)

Mfg. Part No.	Program Memory (KB)	Program Memory (kWrds)	RAM (Bytes)	EEPROM (Bytes)	I/Os	ADC (Ch)	Timers (8/16Bit)	Max Freq. (MHz)	Internal Oscillator (MHz)	Oper. Temp (°C)	Features	Pkg.	Stock No.	Price Each 1-25
PIC16LF1509-I/ML	14	8	512	...	18	12	2 / 1	20	16	-40 to 85	ICD-Debug, Self-write	20-QFN	64T1070	1.21
PIC16LF1509-I/P	14	8	512	...	18	12	2 / 1	20	16	-40 to 85	ICD-Debug, Self-write	20-DIP	64T1071	1.46
PIC16LF1509-I/SO	14	8	512	...	18	12	2 / 1	20	16	-40 to 85	ICD-Debug, Self-write	20-SOIC	64T1072	1.27
PIC16LF1509-I/SS	14	8	512	...	18	12	2 / 1	20	16	-40 to 85	ICD-Debug, Self-write	20-SSOP	64T1073	1.12
PIC16LF876A-I/SS	14	8	368	256	22	5	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	28-SSOP	59K0251	4.85
PIC16LF877A-I/ML	14	8	368	256	33	8	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	44-QFN	29H9670	5.97
PIC16LF877A-I/PT	14	8	368	256	33	8	2 / 1	20	...	-40 to 85	2-CCP, nanoWatt, ICSP	44-TQFP	92C4918	5.97

FLASH MEM - LOW SUPPLY RANGE W/ LCD SEGMENT DRIVERS

Mfg. Part No.	Program Memory (KB)	Program Memory (kWrds)	RAM (Bytes)	I/Os	ADC (Ch)	Timers (8/16Bit)	Max Freq. (MHz)	Internal Oscillator (MHz)	Oper. Temp (°C)	Features	Pkg.	Stock No.	Price Each 1-25
PIC16LF1902-I/SO	3.5	2	128	25	11	1 / 1	20	16	-40 to 85	ICSP, LCD DRV-72	28-SOIC	91R3067	1.12
PIC16LF1902-I/SP	3.5	2	128	25	11	1 / 1	20	16	-40 to 85	ICSP, LCD DRV-72	28-NDIP	91R3068	1.31
PIC16LF1902-I/SS	3.5	2	128	25	11	1 / 1	20	16	-40 to 85	ICSP, LCD DRV-72	28-SSOP	91R3069	1.08
PIC16LF1903-I/SO	7	4	256	25	11	1 / 1	20	16	-40 to 85	ICSP, LCD DRV-72	28-SOIC	91R3081	1.21
PIC16LF1903-I/SP	7	4	256	25	11	1 / 1	20	16	-40 to 85	ICSP, LCD DRV-72	28-NDIP	91R3082	1.41
PIC16LF1903-I/SS	7	4	256	25	11	1 / 1	20	16	-40 to 85	ICSP, LCD DRV-72	28-SSOP	91R3083	1.18
PIC16LF1904-I/MV	7	4	256	36	14	1 / 1	20	16	-40 to 85	ICD-Debug, ICSP, LCD-116	40-UQFN	23T3129	1.62
PIC16LF1904-I/P	7	4	256	36	14	1 / 1	20	16	-40 to 85	ICD-Debug, ICSP, LCD-116	40-DIP	23T3130	1.83
PIC16LF1904-I/PT	7	4	256	36	14	1 / 1	20	16	-40 to 85	ICD-Debug, ICSP, LCD-116	44-TQFP	23T3131	1.64
PIC16LF1906-I/MV	14	8	512	25	11	1 / 1	20	16	-40 to 85	ICD-Debug, ICSP, LCD-72	28-UQFN	23T3138	1.37
PIC16LF1906-I/SO	14	8	512	25	11	1 / 1	20	16	-40 to 85	ICD-Debug, ICSP, LCD-72	28-SOIC	23T3139	1.29
PIC16LF1906-I/SP	14	8	512	25	11	1 / 1	20	16	-40 to 85	ICD-Debug, ICSP, LCD-72	28-NDIP	23T3140	1.48
PIC16LF1906-I/SS	14	8	512	25	11	1 / 1	20	16	-40 to 85	ICD-Debug, ICSP, LCD-72	28-SSOP	23T3141	1.25
PIC16LF1907-I/MV	14	8	512	36	14	1 / 1	20	16	-40 to 85	ICD-Debug, ICSP, LCD-116	40-UQFN	23T3148	1.70
PIC16LF1907-I/P	14	8	512	36	14	1 / 1	20	16	-40 to 85	ICD-Debug, ICSP, LCD-116	40-DIP	23T3149	1.91
PIC16LF1907-I/PT	14	8	512	36	14	1 / 1	20	16	-40 to 85	ICD-Debug, ICSP, LCD-116	44-TQFP	23T3150	1.72

FLASH MEM - LOW SUPPLY RANGE W/ TOUCH DRIVERS

Mfg. Part No.	Program Memory (KB)	Program Memory (kWrds)	RAM (Bytes)	EEPROM (Bytes)	I/Os	ADC (Ch)	Timers (8/16Bit)	Max Freq. (MHz)	Internal Oscillator (MHz)	Oper. Temp (°C)	Features	Pkg.	Stock No.	Price Each 1-25
PIC16LF1823-I/SL	3.5	2	128	256	12	8	2 / 1	32	32	-40 to 85	1-ECCP, 8CH-Touch	14-SOIC	53R0256	1.08
PIC16LF722-E/SS	3.5	2	128	...	25	11	2 / 1	20	16	-40 to 125	2-CCP, 8CH-Touch	28-SSOP	07P9613	1.45
PIC16LF722-I/SO	3.5	2	128	...	25	11	2 / 1	20	16	-40 to 85	2-CCP, 8CH-Touch	28-SOIC	07P9615	1.35
PIC16LF1826-I/MV	3.5	2	256	256	16	12	2 / 1	32	32	-40 to 85	1-ECCP, 12-CH mTouch	28-UQFN	53R0262	1.52
PIC16LF723A-I/ML	7	4	192	...	25	11	2 / 1	20	16	-40 to 85	2-CCP, 8CH-Touch	28-QFN	73R8519	1.33
PIC16LF723A-I/SO	7	4	192	...	25	11	2 / 1	20	16	-40 to 85	2-CCP, 8CH-Touch	28-SOIC	73R8521	1.21
PIC16LF723A-I/SP	7	4	192	...	25	11	2 / 1	20	16	-40 to 85	2-CCP, 8CH-Touch	28-NDIP	73R8522	1.41
PIC16LF723A-I/SS	7	4	192	...	25	11	2 / 1	20	16	-40 to 85	2-CCP, 8CH-Touch	28-SSOP	73R8523	1.18
PIC16LF1828-I/ML	7	4	256	256	18	12	4 / 1	32	32	-40 to 85	1-CCP / 2-ECCP, 12-CH Touch	20-QFN	73R8465	1.48
PIC16LF1828-I/P	7	4	256	256	18	12	4 / 1	32	32	-40 to 85	1-CCP / 2-ECCP, 12-CH Touch	20-DIP	73R8466	1.71
PIC16LF1828-I/SO	7	4	256	256	18	12	4 / 1	32	32	-40 to 85	1-CCP / 2-ECCP, 12-CH Touch	20-SOIC	73R8467	1.50
PIC16LF1828-I/SS	7	4	256	256	18	12	4 / 1	32	32	-40 to 85	1-CCP / 2-ECCP, 12-CH Touch	20-SSOP	73R8468	1.37
PIC16LF1824-I/ML	7	4	256	256	12	8	4 / 1	32	32	-40 to 85	2-CCP / 2-ECCP, 8CH-Touch	16-QFN	65R5971	1.25
PIC16LF1824-I/P	7	4	256	256	12	8	4 / 1	32	32	-40 to 85	2-CCP / 2-ECCP, 8CH-Touch	14-DIP	65R5972	1.30
PIC16LF1824-I/SL	7	4	256	256	12	8	4 / 1	32	32	-40 to 85	2-CCP / 2-ECCP, 8CH-Touch	14-SOIC	65R5973	1.16
PIC16LF1824-I/ST	7	4	256	256	12	8	4 / 1	32	32	-40 to 85	2-CCP / 2-ECCP, 8CH-Touch	14-TSSOP	65R5974	1.27
PIC16LF1827-I/P	7	4	384	256	16	12	4 / 1	32	32	-40 to 85	1-CCP / 2-ECCP, 12-CH Touch	18-DIP	24R7096	1.52
PIC16LF707-I/PT	14	8	368	...	36	14	3 / 1	20	16	-40 to 85	2-CCP, 30CH-Touch	44-TQFP	63R7813	2.31
PIC16LF726-I/SO	14	8	368	...	25	11	2 / 1	20	16	-40 to 85	2-CCP, 8CH-Touch	28-SOIC	07P9645	1.73
PIC16LF1516-I/MV	14	8	512	...	25	17	2 / 1	20	16	-40 to 85	2-CCP, mTouch-17	28-UQFN	91R3026	1.43
PIC16LF1516-I/SO	14	8	512	...	25	17	2 / 1	20	16	-40 to 85	2-CCP, mTouch-17	28-SOIC	91R3027	1.35
PIC16LF1516-I/SP	14	8	512	...	25	17	2 / 1	20	16	-40 to 85	2-CCP, mTouch-17	28-NDIP	91R3028	1.54
PIC16LF1516-I/SS	14	8	512	...	25	17	2 / 1	20	16	-40 to 85	2-CCP, mTouch-17	28-SSOP	91R3029	1.31
PIC16LF1517-I/MV	14	8	512	...	36	28	2 / 1	20	16	-40 to 85	2-CCP, 28CH-Touch	40-UQFN	91R3036	1.81
PIC16LF1517-I/P	14	8	512	...	36	28	2 / 1	20	16	-40 to 85	2-CCP, 28CH-Touch	40-DIP	91R3037	2.02
PIC16LF1517-I/PT	14	8	512	...	36	28	2 / 1	20	16	-40 to 85	2-CCP, 28CH-Touch	44-TQFP	91R3038	1.83
PIC16LF1526-I/MR	14	8	768	...	54	30	6 / 3	20	16	-40 to 85	1-CCP, 30CH-Touch	64-QFN	23T3113	2.14
PIC16LF1526-I/PT	14	8	768	...	54	30	6 / 3	20	16	-40 to 85	1-CCP, 30CH-Touch	64-TQFP	13T4738	2.02
PIC16LF1518-I/MV	28	16	1024	...	25	17	2 / 1	20	16	-40 to 85	2-CCP, mTouch-17	28-UQFN	91R3045	1.50
PIC16LF1518-I/SO	28	16	1024	...	25	17	2 / 1	20	16	-40 to 85	2-CCP, mTouch-17	28-SOIC	91R3046	1.43
PIC16LF1518-I/SP	28	16	1024	...	25	17	2 / 1	20	16	-40 to 85	2-CCP, mTouch-17	28-NDIP	91R3047	1.62
PIC16LF1518-I/SS	28	16	1024	...	25	17	2 / 1	20	16	-40 to 85	2-CCP, mTouch-17	28-SSOP	91R3048	1.39
PIC16LF1519-I/MV	28	16	1024	...	36	28	2 / 1	20	16	-40 to 85	2-CCP, 28CH-Touch	40-UQFN	91R3055	1.89
PIC16LF1519-I/P	28	16	1024	...	36	28	2 / 1	20	16	-40 to 85	2-CCP, 28CH-Touch	40-DIP	91R3056	2.10
PIC16LF1519-I/PT	28	16	1024	...	36	28	2 / 1	20	16	-40 to 85	2-CCP, 28CH-Touch	44-TQFP	91R3057	1.91
PIC16LF1527-I/MR	28	16	1536	...	54	30	6 / 3	20	16	-40 to 85	1-CCP, 30CH-Touch	64-QFN	13T4742	2.24
PIC16LF1527-I/PT	28	16	1536	...	54	30	6 / 3	20	16	-40 to 85	1-CCP, 30CH-Touch	64-TQFP	13T4743	2.12

FLASH MEM - LOW SUPPLY RANGE W/ TOUCH AND LCD DRIVERS

Mfg. Part No.	Program Memory (KB)	Program Memory (kWrds)	RAM (Bytes)	EEPROM (Bytes)	I/Os	ADC (Ch)	Timers (8/16Bit)	Max Freq. (MHz)	Internal Oscillator (MHz)	Oper. Temp (°C)	Features	Pkg.	Stock No.	Price Each 1-25
PIC16LF1933-I/MV	7	4	128	256	25	11	4 / 1	32	32	-40 to 85	2-CCP / 3-ECCP, 60-LCD, 8CH-Touch	28-UQFN	55T3676	1.85
PIC16LF1937-I/P	14	8	512	256	36	14	4 / 1	32	32	-40 to 85	2-CCP / 3-ECCP, mTouch-16, LCD-96	40-DIP	45P4801	2.31

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8-BIT PIC16 FLASH MICROCONTROLLERS (CONT.)

Mfg. Part No.	Program Memory (KB)	Program Memory (kWrds)	RAM (Bytes)	EEPROM (Bytes)	I/Os	ADC (Ch)	Timers (8/16Bit)	Max Freq. (MHz)	Internal Oscillator (MHz)	Oper. Temp (°C)	Features	Pkg.	Stock No.	Price Each 1-25
● PIC16LF1936-I/MV	14	8	512	256	25	11	4 / 1	32	32	-40 to 85	2-CCP / 3-ECCP, 60-LCD, 8CH-Touch	28-UQFN	55T3679	1.95
● PIC16LF1947-I/PT	28	16	1024	256	53	17	4 / 1	32	32	-40 to 85	2-CCP / 3-ECCP, mTouch-17, LCD-184	64-TQFP	14R8984	2.51
● PIC16LF1938-I/ML	28	16	1024	256	25	11	4 / 1	32	32	-40 to 85	2-CCP / 3-ECCP, 60-LCD, 8CH-Touch	28-QFN	08R1977	2.04
● PIC16LF1938-I/MV	28	16	1024	256	25	11	4 / 1	32	32	-40 to 85	2-CCP / 3-ECCP, 60-LCD, 8CH-Touch	28-UQFN	55T3682	2.04

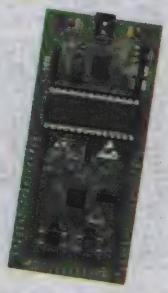
FLASH MEMORY - HIGH SUPPLY RANGE

Mfg. Part No.	Program Memory (KB)	Program Memory (kWrds)	RAM (Bytes)	EEPROM (Bytes)	I/Os	ADC (Ch)	Timers (8/16Bit)	Max Freq. (MHz)	Internal Oscillator (MHz)	Oper. Temp (°C)	Features	Pkg.	Stock No.	Price Each 1-25
● PIC16HV610-I/P	1.75	1	64	...	12	...	1 / 1	20	8	-40 to 85	1-ECCP, nanoWatt, ICSP	14-DIP	17M0953	1.01
● PIC16HV785-I/P	3.5	2	128	256	18	12	2 / 1	20	8	-40 to 85	1-CCP, nanoWatt, ICSP	20-DIP	74K8605	1.65

(70543)

STM8L ULTRALOW POWER DISCOVERY KIT

RoHS Compliant Available



Features

- STM8L152C6T6 MCU, 32 KB Flash, 2 KB RAM, 1 KB EEPROM in 48-pin LQFP
- On-board ST-Link with selection mode switch
- Two red LEDs; LD1 for USB communication, LD2 for 3.3 V power on
- Can be powered by USB or an external supply of 5 V or 3.3 V
- Can supply target application with 5 V and 3 V
- Two user LEDs, LD3 and LD4 (green and blue)
- Two push buttons (User and Reset)
- IDD current measurement
- LCD 28-pin DIP (24 segments, 4 commons)
- Extension header for all QFP48 I/Os

STM8L-DISCOVERY helps you to discover the STM8L ultralow power features and to develop and share your applications. It is based on an STM8L152C6T6 and includes an ST-Link embedded debug tool interface, LCD (24 segments, 4 commons), LEDs and push buttons.

Mfg. Part No.	Description	Stock No.	Price Each
● STM8L-DISCOVERY	STM8L ultralow power Discovery Kit	21T4027	9.88

(190036)

STM8 SERIES 8-BIT DEVELOPMENT TOOLS

RoHS Compliant Available

STM8L and STM8S microcontrollers are supported by a complete range of high-end and low-cost development tools. This complete line includes evaluation, software, debugging and programming tools.

Mfg. Part No.	Description	Stock No.	Price Each
● STM8/128-SK/RAIS	STM8S208 Starter Kit	57P1438	228.75
● STM8/128-EVAL	STM8S208 Evaluation Kit	57P1437	162.50
● STM8L101-EVAL	STM8L101 Evaluation Kit	55R6965	162.50

(148873)

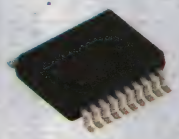
EMBEDDED DESIGN TOOLS

IDEs, Compilers, Debuggers and programming tools for all your MCU/DSP/FPGA needs.

newark.com/dev-tools-software

(196530)

8-BIT PIC18 MICROCONTROLLERS



RoHS Compliant Available

MICROCHIP

PIC18 family of microcontrollers are ideal for applications requiring 10-16 MIPS performance, with up to 128KB program memory, ranging from 18-100 pins and include: C compiler efficiency, 16-bit program word, self programming Flash, Industry leading peripherals and firmware including USB, ZigBee™, Ethernet, and CAN. **PIC18F series** microcontrollers utilize low-power, high-speed FLASH technology in a fully static design. Upwardly compatible with the **PIC16C5X, PIC12CXXX, PIC6CXX** and **PIC17CXX series** MCUs. Wide operating voltage range (2.0V to 5.5V). 'C' compiler friendly development environment. 77 single-word instructions and up to 10 MIPS operation: DC 40MHz oscillator/clock input, 4-10MHz oscillator/clock input with PLL active. 16-bit wide instructions, 8-bit wide data path. 8 x 8 single cycle hardware multiplier. 31 levels of hardware stack; software stack capability. Analog features include programmable brown-out reset and programmable 16-level voltage detection module with interrupt on low voltage detection. Additional features: programmable code protection, selectable oscillator options, Power-On Reset (POR), Power-Up Timer (PWRT), Oscillator Start-up Timer (OST), ICSP™ via 2 pins. Ideal for use in instrumentation and monitoring, data acquisition, power conditioning, environmental monitoring, telecom and consumer audio/video applications. LF versions are optimized for low power consumption. 'I' suffix denotes -40°C to +85°C. 'E' suffix denotes -40°C to +125°C.

PIC18 w/ OPT MEMORY

Mfg. Part No.	Program Memory (KBytes)	Program Memory (kWords)	Data Memory (Bytes)	RAM (Bytes)	I/O Pins	ADC (Ch)	Max. Speed (MHz)	Timers 8 (Bit)	Timers 16 (Bit)	Interface	Package	Stock No.	Price Each 1-25
PIC18 w/ STANDARD FLASH													
● PIC18F6310-I/PT	8	4	...	768	54	12	40	1	3	AUSART, EUSART, I2C, PSP, SPI	64-TQFP	08J9637	3.02
● PIC18F8410-I/PT	16	8	...	768	70	12	40	2	3	I2C, SPI, USART	80-TQFP	08J9659	4.03
● PIC18F2410-I/SP	16	8	...	768	25	10	40	1	3	EUSART, I2C, SPI	28-NDIP	89H0566	3.19
● PIC18F2420-E/SO	16	8	256	768	25	10	...	1	3	EUSART, I2C, SPI	28-SOIC	89H0568	3.60
● PIC18F4410-I/PT	16	8	...	768	36	13	32	1	3	EUSART, I2C, SPI	44-TQFP	89H0636	3.28
● PIC18F2510-I/SP	32	16	...	1536	25	10	40	1	3	I2C, SPI	28-DIP	89H0584	3.73
PIC18 w/ ENCHANCED FLASH													
● PIC18F242-I/SO	16	8	256	768	23	5	40	2	2	AUSART, I2C, SPI	28-SOIC	89C2880	4.99
● PIC18F242-I/SP	16	8	256	768	23	5	40	2	2	AUSART, I2C, SPI	28-NDIP	61K3470	4.99
● PIC18F442-I/P	16	8	256	768	34	8	40	2	2	AUSART, I2C, PSP, SPI	40-DIP	69K7644	5.55
● PIC18F252-E/SP	32	16	256	1536	23	5	40	2	2	AUSART, I2C, SPI	28-NDIP	96K3935	6.53
● PIC18F252-I/SO	32	16	256	1536	23	5	40	2	2	AUSART, I2C, SPI	28-SOIC	89C2881	5.44
● PIC18F252-I/SP	32	16	256	1536	23	5	40	2	2	AUSART, I2C, SPI	28-NDIP	61K3471	5.44
● PIC18F452-I/P	32	16	256	1536	34	8	40	2	2	AUSART, I2C, PSP, SPI	40-DIP	77C5219	6.02
● PIC18LF452-I/PT	32	16	256	1536	34	8	40	2	2	AUSART, I2C, PSP, SPI	44-TQFP	54K2834	7.22
● PIC18F258-I/SO	32	16	256	1536	22	5	40	1	3	AUSART, CAN, I2C, SPI	28-SOIC	96K3939	6.52
● PIC18LF258-I/SO	32	16	256	1536	22	5	40	1	3	AUSART, CAN, I2C, SPI	28-SOIC	96K3971	6.85
● PIC18F458-I/L	32	16	256	1536	33	8	40	1	3	AUSART, CAN, I2C, PSP, SPI	44-PLCC	61K3474	7.42
● PIC18F452-E/P	32	16	256	1536	34	8	40	2	2	AUSART, I2C, PSP, SPI	40-DIP	72C4328	7.21
● PIC18F452I/L	32	16	256	1536	34	8	40	2	2	AUSART, I2C, PSP, SPI	44-PLCC	34C8340	6.86
● PIC18F452-I/PT	32	16	256	1536	34	8	40	2	2	AUSART, I2C, PSP, SPI	44-TQFP	81C8383	6.87

➤CONTINUED➤

8-BIT PIC18 MICROCONTROLLERS (CONT.)

Mfg. Part No.	Program Memory (KBytes)	Program Memory (kWords)	Data Memory (Bytes)	RAM (Bytes)	I/O Pins	ADC (Ch)	Max. Speed (MHz)	Timers 8 (Bit)	Timers 16 (Bit)	Interface	Package	Stock No.	Price Each 1-25
PIC18 w/ ENCHANCED FLASH													
PIC18F258-I/SP	32	16	256	1536	22	5	40	1	3	AUSART, CAN, I2C, SPI	28-NDIP	77C5218	6.52
PIC18F458-I/P	32	16	256	1536	33	8	40	1	3	AUSART, CAN, I2C, PSP, SPI	40-DIP	69K7645	6.61
PIC18F452-E/PT	32	16	256	1536	34	8	40	2	2	AUSART, I2C, PSP, SPI	44-TQFP	72C4329	8.25
PIC18 w/ SELF PROGRAMMABLE FLASH													
PIC18F1220-E/P	4	2	256	256	16	7	40	1	3	SCI, USART	18-PDIP	92C4993	2.67
PIC18F1220-I/P	4	2	256	256	16	7	40	1	3	EUSART	18-DIP	92C2429	2.44
PIC18F1220-I/SO	4	2	256	256	16	7	40	1	3	EUSART	18-SOIC	92C2430	2.35
PIC18LF1220-I/P	4	2	256	256	16	7	40	1	3	EUSART	18-DIP	96K3961	2.55
PIC18F2221-I/SP	4	2	256	512	25	10	40	1	3	EUSART, I2C, SPI	28-NDIP	31K5007	2.89
PIC18F2220-I/SO	4	2	256	512	25	10	40	1	3	AUSART, I2C, SPI	28-SOIC	73K1295	4.70
PIC18LF2221-I/SS	4	2	256	512	25	10	40	1	3	EUSART, I2C, SPI	28-SSOP	88K6107	2.79
PIC18F1220-E/SS	4	2	256	256	16	7	40	1	3	SCI, USART	20-SSOP	92C4995	2.59
PIC18F1320-E/P	8	4	256	256	16	7	40	1	3	SCI, USART	18-PDIP	92C5005	2.95
PIC18F1320-I/ML	8	4	256	256	16	7	40	1	3	SCI, USART	28-QFN	92C5008	2.90
PIC18F1320-I/P	8	4	256	256	16	7	40	1	3	EUSART	18-DIP	92C2431	2.69
PIC18F1320-I/SO	8	4	256	256	16	7	40	1	3	EUSART	18-SOIC	59K0253	2.60
PIC18F2320-I/SP	8	4	256	512	25	10	40	1	3	AUSART, I2C, SPI	28-NDIP	89C2879	5.09
PIC18F2321-I/SP	8	4	256	512	25	10	40	1	3	EUSART, I2C, SPI	28-NDIP	31K5012	3.06
PIC18F4321-I/P	8	4	256	512	36	13	40	1	3	EUSART, I2C, PSP, SPI	40-DIP	31K5040	3.26
PIC18F4321-I/PT	8	4	256	512	36	13	40	1	3	EUSART, I2C, PSP, SPI	44-TQFP	31K5041	3.16
PIC18F2320-I/SO	8	4	256	512	25	10	40	1	3	AUSART, I2C, SPI	28-SOIC	89C2878	5.09
PIC18LF2321-I/SO	8	4	256	512	25	10	40	1	3	EUSART, I2C, SPI	28-SOIC	31K5064	3.01
PIC18F4320-I/PT	8	4	256	512	36	13	40	1	3	AUSART, I2C, PSP, SPI	44-TQFP	89C2887	6.37
PIC18F2321-I/SS	8	4	256	512	25	10	40	1	3	EUSART, I2C, SPI	28-SSOP	88K5960	2.83
PIC18F1320-E/SS	8	4	256	256	16	7	40	1	3	SCI, USART	20-SSOP	92C5007	2.86
PIC18F2420-I/SO	16	8	256	768	25	10	40	1	3	EUSART, I2C, SPI	28-SOIC	89H0570	3.28
PIC18F2420-I/SP	16	8	256	768	25	10	40	1	3	EUSART, I2C, SPI	28-NDIP	96K3930	3.44
PIC18F2423-I/SO	16	8	256	768	25	10	40	1	3	EUSART, I2C, SPI	28-SOIC	88K5977	4.16
PIC18F4420-I/P	16	8	256	768	36	13	40	1	3	EUSART, I2C, PSP, SPI	40-DIP	96K3949	3.61
PIC18F4420-I/PT	16	8	256	768	36	13	40	1	3	EUSART, I2C, PSP, SPI	44-TQFP	89H0644	3.53
PIC18LF4420-I/PT	16	8	256	768	36	13	40	1	3	EUSART, I2C, PSP, SPI	44-TQFP	89H0781	3.70
PIC18F2423-E/SO	16	8	256	768	25	10	40	1	3	EUSART, I2C, SPI	28-SOIC	88K5974	4.59
PIC18F2420-I/ML	16	8	256	768	25	10	40	1	3	EUSART, I2C, SPI	28-QFN	08J9623	3.49
PIC18F2423-I/SP	16	8	256	768	25	10	40	1	3	EUSART, I2C, SPI	28-NDIP	27M9659	4.36
PIC18F4423-I/P	16	8	256	768	36	13	40	1	3	EUSART, I2C, PSP, SPI	40-DIP	27M9662	4.55
PIC18F2520-I/SO	32	16	256	1536	25	10	40	1	3	EUSART, I2C, SPI	28-SOIC	89H0593	3.81
PIC18F2520-I/SP	32	16	256	1536	25	10	40	1	3	EUSART, I2C, SPI	28-NDIP	89H0594	3.98
PIC18F2523-I/SP	32	16	256	1536	25	10	40	1	3	EUSART, I2C, SPI	28-NDIP	27M9660	4.95
PIC18F2523-I/ML	32	16	256	1536	25	10	40	1	3	I2C, SPI, USART	28-QFN	88K5995	5.01
PIC18F2523-I/SO	32	16	256	1536	25	10	40	1	3	EUSART, I2C, SPI	28-SOIC	88K5996	4.76
PIC18F4520-I/P	32	16	256	1536	36	13	40	1	3	EUSART, I2C, PSP, SPI	40-DIP	01M8488	4.15
PIC18F4520-I/PT	32	16	256	1536	36	13	40	1	3	EUSART, I2C, PSP, SPI	44-TQFP	89H0676	4.07
PIC18F4523-I/P	32	16	256	1536	36	13	40	1	3	EUSART, I2C, PSP, SPI	40-DIP	27M9663	5.15
PIC18F4523-I/PT	32	16	256	1536	36	13	40	1	3	EUSART, I2C, PSP, SPI	44-TQFP	88K6050	5.05
PIC18F2520-I/ML	32	16	256	1536	25	10	40	1	3	EUSART, I2C, SPI	28-QFN	08J9626	4.02
PIC18LF2520-I/SO	32	16	256	1536	25	10	40	1	3	EUSART, I2C, SPI	28-SOIC	89H0749	4.00
PIC18LF2520-I/SP	32	16	256	1536	25	10	40	1	3	EUSART, I2C, SPI	28-NDIP	96K3967	4.17
PIC18LF4520-I/P	32	16	256	1536	36	13	40	1	3	EUSART, I2C, PSP, SPI	40-DIP	89H0800	4.35
PIC18LF4520-I/PT	32	16	256	1536	36	13	40	1	3	EUSART, I2C, PSP, SPI	44-TQFP	96K3985	4.27
PIC18LF2523-I/SP	32	16	256	1536	25	10	40	1	3	EUSART, I2C, SPI	28-NDIP	29M8601	5.18
PIC18F4520-E/P	32	16	256	1536	36	13	40	1	3	EUSART, I2C, PSP, SPI	40-DIP	89H0672	4.56
PIC18F4520-I/ML	32	16	256	1536	36	13	40	1	3	EUSART, I2C, PSP, SPI	44-QFN	89H0674	4.28
PIC18F6520-I/PT	32	16	1024	2048	52	12	40	2	3	AUSART, I2C, PSP, SPI	64-TQFP	29H9720	6.89
PIC18F8520-I/PT	32	16	1024	2048	68	16	40	2	3	AUSART, I2C, PSP, SPI	80-TQFP	69K7647	7.24
PIC18LF6520-I/PT	32	16	1024	2048	52	12	40	2	3	AUSART, I2C, PSP, SPI	64-TQFP	29H9748	7.22
PIC18F2520-E/ML	32	16	256	1536	25	10	40	1	3	EUSART, I2C, SPI	28-QFN	56J7629	4.40
PIC18LF2523-I/ML	32	16	256	1536	25	10	40	1	3	EUSART, I2C, SPI	28-QFN	88K6112	5.24
PIC18F6527-I/PT	48	24	1024	3936	54	12	40	2	3	EUSART, I2C, PSP, SPI	64-TQFP	71J7265	6.36
PIC18LF6527-I/PT	48	24	1024	3936	54	12	40	2	3	EUSART, I2C, PSP, SPI	64-TQFP	71J7293	6.69
PIC18F8527-I/PT	48	24	1024	3936	70	16	40	2	3	EUSART, I2C, PSP, SPI	80-TQFP	71J7281	6.94
PIC18F2525-I/SO	48	24	1024	3968	25	10	40	1	3	EUSART, I2C, SPI	28-SOIC	89H0598	4.33
PIC18F2525-I/SP	48	24	1024	3968	25	10	40	1	3	EUSART, I2C, SPI	28-NDIP	96K3936	4.50
PIC18F4525-I/PT	48	24	1024	3968	36	13	40	1	3	EUSART, I2C, PSP, SPI	44-TQFP	89H0684	4.59
PIC18LF4525-I/P	48	24	1024	3968	36	13	40	1	3	EUSART, I2C, PSP, SPI	40-DIP	89H0805	4.90
PIC18LF4525-I/PT	48	24	1024	3968	36	13	40	1	3	EUSART, I2C, PSP, SPI	44-TQFP	89H0806	4.82
PIC18F4525-I/ML	48	24	1024	3968	36	13	40	1	3	I2C, SPI, USART	44-QFN	89H0682	4.80
PIC18F4525-I/P	48	24	1024	3968	36	13	40	1	3	EUSART, I2C, PSP, SPI	40-DIP	96K3955	4.67
PIC18F4525-E/P	48	24	1024	3968	36	13	40	1	3	I2C, SPI, USART	40-DIP	89H0680	5.13
PIC18LF8527-I/PT	48	24	1024	3936	70	16	40	2	3	EUSART, I2C, PSP, SPI	80-TQFP	71J7299	7.29
PIC18F6620-I/PT	64	32	1024	3840	52	12	25	2	3	AUSART, I2C, PSP, SPI	64-TQFP	81C9057	10.19
PIC18F6621-I/PT	64	32	1024	3840	53	12	40	2	3	EUSART, I2C, PSP, SPI	64-TQFP	61H5264	8.31
PIC18F8621-I/PT	64	32	1024	3840	70	16	40	2	3	EUSART, I2C, PSP, SPI	80-TQFP	61H5284	8.71

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8-BIT PIC18 MICROCONTROLLERS (CONT.)

PIC18 w/ SELF PROGRAMMABLE FLASH

Mfg. Part No.	Program Memory (KBytes)	Program Memory (kWords)	Data Memory (Bytes)	RAM (Bytes)	I/O Pins	ADC (Ch)	Max. Speed (MHz)	Timers 8 (Bit)	Timers 16 (Bit)	Interface	Package	Stock No.	Price Each 1-25
● PIC18F6622-I/PT	64	32	1024	3936	54	12	40	2	3	EUSART, I2C, PSP, SPI	64-TQFP	71J7270	7.03
● PIC18LF6622-I/PT	64	32	1024	3936	54	12	40	2	3	EUSART, I2C, PSP, SPI	64-TQFP	71J7294	7.38
● PIC18F2620-E/SP	64	32	1024	3968	25	10	40	1	3	I2C, SPI, USART	28-SPDIP	89H0614	5.53
● PIC18F2620-I/SO	64	32	1024	3968	25	10	40	1	3	EUSART, I2C, SPI	28-SOIC	89H0615	4.87
● PIC18F2620-I/SP	64	32	1024	3968	25	10	40	1	3	EUSART, I2C, SPI	28-NDIP	89H0616	5.04
● PIC18F4620-I/P	64	32	1024	3968	36	13	40	1	3	EUSART, I2C, PSP, SPI	40-DIP	89H0709	5.21
● PIC18F4620-I/PT	64	32	1024	3968	36	13	40	1	3	EUSART, I2C, PSP, SPI	44-TQFP	89H0710	5.12
● PIC18LF2620-I/SO	64	32	1024	3968	25	10	40	1	3	EUSART, I2C, SPI	28-SOIC	89H0763	5.12
● PIC18F4620-E/P	64	32	1024	3968	36	13	40	1	3	I2C, SPI, USART	40-PDIP	89H0706	5.72
● PIC18F4620-E/PT	64	32	1024	3968	36	13	40	1	3	I2C, SPI, USART	44-TQFP	89H0707	5.64
● PIC18LF4620-I/P	64	32	1024	3968	36	13	40	1	3	EUSART, I2C, PSP, SPI	40-DIP	96K3989	5.46
● PIC18LF4620-I/PT	64	32	1024	3968	36	13	40	1	3	EUSART, I2C, PSP, SPI	44-TQFP	89H0823	5.38
● PIC18LF2620-I/SP	64	32	1024	3968	25	10	40	1	3	EUSART, I2C, SPI	28-NDIP	96K3973	5.28
● PIC18F2620-E/SO	64	32	1024	3968	25	10	40	1	3	EUSART, I2C, SPI	28-SOIC	89H0613	5.36
● PIC18F6627-I/PT	96	48	1024	3936	54	12	40	2	3	EUSART, I2C, PSP, SPI	64-TQFP	71J7271	7.22
● PIC18LF6627-I/PT	96	48	1024	3936	54	12	40	2	3	EUSART, I2C, PSP, SPI	64-TQFP	71J7295	7.59
● PIC18LF6720-I/PT	128	64	1024	3840	52	12	25	2	3	AUSART, I2C, PSP, SPI	64-TQFP	92C5165	11.89
● PIC18F8720-I/PT	128	64	1024	3840	68	16	25	2	3	AUSART, I2C, PSP, SPI	80-TQFP	89C2894	11.51
● PIC18LF8720-I/PT	128	64	1024	3840	68	16	25	2	3	AUSART, I2C, PSP, SPI	80-TQFP	92C5169	12.09
● PIC18F6720-I/PT	128	64	1024	3840	52	12	25	2	3	AUSART, I2C, PSP, SPI	64-TQFP	89C2892	11.33
● PIC18F6722-I/PT	128	64	1024	3936	54	12	40	2	3	EUSART, I2C, PSP, SPI	64-TQFP	71J7275	8.23
● PIC18F8722-I/PT	128	64	1024	3936	70	16	40	2	3	EUSART, I2C, PSP, SPI	80-TQFP	71J7291	8.74
● PIC18F8723-I/PT	128	64	1024	3936	70	16	40	2	3	EUSART, I2C, SPI	80-TQFP	54M5047	11.62
● PIC18LF6722-I/PT	128	64	1024	3936	54	12	40	2	3	EUSART, I2C, PSP, SPI	64-TQFP	71J7297	8.64
● PIC18LF8722-I/PT	128	64	1024	3936	70	16	40	2	3	EUSART, I2C, PSP, SPI	80-TQFP	71J7303	9.17
PIC18 w/ CAN PERIPERIALS													
● PIC18F2480-I/SO	16	8	256	768	25	8	40	1	3	ECAN, EUSART, I2C, PSP, SPI	28-SOIC	71J7236	4.47
● PIC18F2480-I/SP	16	8	256	768	25	8	40	1	3	ECAN, EUSART, I2C, PSP, SPI	28-NDIP	71J7237	4.64
● PIC18F2480-I/ML	16	8	256	768	25	8	40	1	3	ECAN, EUSART, I2C, PSP, SPI	28-QFN	71J7235	4.68
● PIC18F4480-I/PT	16	8	256	768	36	11	40	1	3	ECAN, EUSART, I2C, PSP, SPI	44-TQFP	71J7251	4.72
● PIC18LF2480-I/ML	16	8	256	768	25	8	40	1	3	EUSART, I2C, SPI	28-QFN	31K5079	4.90
● PIC18LF2580-I/ML	32	16	256	1536	25	8	40	1	3	I2C, SPI, USART	28-QFN	31K5091	5.47
● PIC18LF2580-I/SO	32	16	256	1536	25	11	40	1	3	I2C, SPI, USART	28-SOIC	56K7319	5.26
● PIC18LF4580-I/PT	32	16	256	1536	36	8	40	1	3	I2C, SPI, USART	44-TQFP	31K5120	5.52
● PIC18F2580-I/SO	32	16	256	1536	25	8	40	1	3	ECAN, EUSART, I2C, PSP, SPI	28-SOIC	71J7243	5.01
● PIC18F2580-I/SP	32	16	256	1536	25	8	40	1	3	ECAN, EUSART, I2C, PSP, SPI	28-NDIP	71J7244	5.17
● PIC18F4580-I/P	32	16	256	1536	36	11	40	1	3	ECAN, EUSART, I2C, PSP, SPI	40-DIP	71J7257	5.34
● PIC18F4580-I/PT	32	16	256	1536	36	11	40	1	3	ECAN, EUSART, I2C, PSP, SPI	44-TQFP	71J7258	5.26
● PIC18F2585-I/SO	48	24	1024	3328	25	8	40	1	3	ECAN, EUSART, I2C, SPI	28-SOIC	89H0605	5.73
● PIC18F2585-I/SP	48	24	1024	3328	25	8	40	1	3	ECAN, EUSART, I2C, SPI	28-NDIP	89H0606	5.90
● PIC18F4585-I/P	48	24	1024	3328	36	11	40	1	3	ECAN, EUSART, I2C, PSP, SPI	40-DIP	89H0693	6.06
● PIC18F4585-I/PT	48	24	1024	3328	36	11	40	1	3	ECAN, EUSART, I2C, PSP, SPI	44-TQFP	89H0694	5.98
● PIC18F6585-I/L	48	24	1024	3328	53	12	40	1	3	AUSART, ECAN, I2C, PSP, SPI	68-PLCC	61H5257	8.41
● PIC18F8585-I/PT	48	24	1024	3328	69	16	40	1	3	AUSART, ECAN, I2C, PSP, SPI	80-TQFP	61H5280	8.71
● PIC18LF4585-I/PT	48	24	1024	3328	36	11	40	1	3	ECAN, EUSART, I2C, PSP, SPI	44-TQFP	89H0813	6.28
● PIC18F2680-I/SO	64	32	1024	3328	25	8	40	1	3	ECAN, EUSART, I2C, SPI	28-SOIC	89H0620	6.06
● PIC18F2680-I/SP	64	32	1024	3328	25	8	40	1	3	ECAN, EUSART, I2C, SPI	28-NDIP	96K3941	6.23
● PIC18F4680-I/P	64	32	1024	3328	36	11	40	1	3	ECAN, EUSART, I2C, PSP, SPI	40-DIP	89H0717	6.40
● PIC18F4680-I/PT	64	32	1024	3328	36	11	40	1	3	ECAN, EUSART, I2C, PSP, SPI	44-TQFP	89H0718	6.32
● PIC18F6680-I/PT	64	32	1024	3328	53	12	40	1	3	AUSART, ECAN, I2C, PSP, SPI	64-TQFP	61H5270	8.91
● PIC18LF8680-I/PT	64	32	1024	3328	39	16	40	1	3	I2C, SPI, USART	64-TQFP	61H5308	9.76
● PIC18F6680-I/L	64	32	1024	3328	53	12	40	1	3	AUSART, ECAN, I2C, PSP, SPI	68-PLCC	68K5336	9.15
● PIC18F4680-E/P	64	32	1024	3328	36	11	40	1	3	I2C, SPI, USART	40-DIP	89H0714	7.03
● PIC18F2682-I/SP	80	40	1024	3328	25	8	40	1	3	ECAN, EUSART, I2C, SPI	28-NDIP	88K6014	7.77
● PIC18F4682-I/P	80	40	1024	3328	36	11	40	1	3	ECAN, EUSART, I2C, PSP, SPI	40-DIP	88K6065	7.96
● PIC18F2685-I/SO	96	48	1024	3328	25	8	40	1	3	ECAN, EUSART, I2C, SPI	28-SOIC	88K6018	8.08
● PIC18F2685-I/SP	96	48	1024	3328	25	8	40	1	3	ECAN, EUSART, I2C, SPI	28-NDIP	27M9661	8.27
● PIC18F4685-I/ML	96	48	1024	3328	36	11	40	1	3	I2C, SPI, USART	44-QFN	88K6072	8.62
● PIC18F4685-I/P	96	48	1024	3328	36	11	40	1	3	ECAN, EUSART, I2C, PSP, SPI	40-DIP	88K6073	8.46
● PIC18F4685-I/PT	96	48	1024	3328	36	11	40	1	3	ECAN, EUSART, I2C, PSP, SPI	44-TQFP	88K6074	8.36
● PIC18LF4685-I/PT	96	48	1024	3328	36	11	40	1	3	ECAN, EUSART, I2C, PSP, SPI	44-TQFP	17M0998	8.79
● PIC18LF2685-I/SP	96	48	1024	3328	28	8	40	1	3	EUSART, I2C, SPI	28-DIP	17M0991	8.67
PIC18 w/ MOTOR CONTROL PERIPERIALS													
● PIC18F1330-I/P	8	4	128	256	16	4	40	...	2	EUSART	18-DIP	88K5949	3.18
● PIC18F1330-I/SS	8	4	128	256	13	7	40	...	2	EUSART	20-SSOP	88K5951	3.08
● PIC18F2331-I/SO	8	4	256	768	24	5	40	1	3	EUSART, I2C, SPI	28-SOIC	89H0559	3.70
● PIC18F2331-I/SP	8	4	256	768	24	5	40	1	3	EUSART, I2C, SPI	28-NDIP	96K3928	3.86
● PIC18F4331-I/P	8	4	256	768	36	9	40	1	3	EUSART, I2C, SPI	40-DIP	96K3947	4.19
● PIC18F2431-I/SO	16	8	256	768	24	5	40	1	3	EUSART, I2C, SPI	28-SOIC	89H0577	3.86
● PIC18F2431-I/SP	16	8	256	768	24	5	40	1	3	EUSART, I2C, SPI	28-NDIP	80K6053	4.03
● PIC18F4431-I/P	16	8	256	768	36	9	40	1	3	EUSART, I2C, SPI	40-DIP	89H0651	4.38

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8-BIT PIC18 MICROCONTROLLERS (CONT.)

Mfg. Part No.	Program Memory (KBytes)	Program Memory (kWords)	Data Memory (Bytes)	RAM (Bytes)	I/O Pins	ADC (Ch)	Max. Speed (MHz)	Timers 8 (Bit)	Timers 16 (Bit)	Interface	Package	Stock No.	Price Each 1-25
PIC18 w/ MOTOR CONTROL PERIPERIALS													
PIC18F4431-I/PT	16	8	256	768	36	9	40	1	3	EUSART, I2C, SPI	44-TQFP	61K3473	4.33
PIC18LF4431-I/PT	16	8	256	768	36	9	40	1	3	EUSART, I2C, SPI	44-TQFP	89H0786	4.55
PIC18 w/ USB PERIPERIALS													
PIC18F2450-I/SO	16	8	...	768	23	10	48	1	2	EUSART	28-SOIC	74K8613	3.06
PIC18F2450-I/SP	16	8	...	768	23	10	48	1	2	EUSART	28-NDIP	74K8614	3.26
PIC18F4450-I/P	16	8	...	768	34	13	48	1	2	EUSART	40-DIP	74K8619	3.39
PIC18F4450-I/PT	16	8	...	768	34	13	48	1	2	EUSART	44-TQFP	74K8620	3.30
PIC18LF2450-I/SP	16	8	...	768	23	10	48	1	2	EUSART	28-DIP	74K8629	3.41
PIC18F2455-I/SO	24	12	256	2048	24	10	48	1	3	EUSART, I2C, SPI, USB	28-SOIC	64J3768	3.96
PIC18F2455-I/SP	24	12	256	2048	24	10	48	1	3	EUSART, I2C, SPI, USB	28-NDIP	01M8485	4.13
PIC18F4455-I/P	24	12	256	2048	35	13	48	1	3	EUSART, I2C, SPI, SPP, USB	40-DIP	05K2028	4.30
PIC18F2458-I/SP	24	12	256	2048	24	10	48	1	3	EUSART, I2C, SPI, SPP, USB	28-NDIP	77M3111	5.13
PIC18F2458-I/SO	24	12	256	2048	24	10	48	1	3	EUSART, I2C, SPI, USB	28-SOIC	77M3110	4.93
PIC18F2550-I/SO	32	16	256	2048	24	10	48	1	3	EUSART, I2C, SPI, USB	28-SOIC	73K1297	4.13
PIC18F2550-I/SP	32	16	256	2048	24	10	48	1	3	EUSART, I2C, SPI, USB	28-NDIP	80K6054	4.30
PIC18F4550-I/P	32	16	256	2048	35	13	48	1	3	EUSART, I2C, SPI, SPP, USB	40-DIP	74K8623	4.47
PIC18F4550-I/PT	32	16	256	2048	35	13	48	1	3	EUSART, I2C, SPI, SPP, USB	44-TQFP	08J9633	4.38
PIC18LF2550-I/SO	32	16	256	2048	24	10	48	1	3	EUSART, I2C, SPI, USB	28-SOIC	96K3969	4.34
PIC18LF2550-I/SP	32	16	256	2048	24	10	48	1	3	EUSART, I2C, SPI, USB	28-NDIP	96K3970	4.51
PIC18F2553-I/SP	32	16	256	2048	24	10	48	1	3	EUSART, I2C, SPI, SPP, USB	28-NDIP	54M5018	5.86
PIC18LF4550-I/P	32	16	256	2048	35	13	48	1	3	EUSART, I2C, SPI, SPP, USB	40-DIP	08J9678	4.69
PIC18LF4550-I/PT	32	16	256	2048	35	13	48	1	3	EUSART, I2C, SPI, SPP, USB	44-TQFP	08J9679	4.60
PIC18F4553-I/P	32	16	256	2048	35	13	48	1	3	EUSART, I2C, SPI, SPP, USB	40-DIP	54M5025	6.05
PIC18LF4550-I/ML	32	16	256	2048	35	13	48	1	3	EUSART, I2C, SPI, SPP, USB	44-QFN	08J9677	4.81
PIC18F4553-I/PT	32	16	256	2048	35	13	48	1	3	EUSART, I2C, SPI, SPP, USB	44-TQFP	54M5026	5.96
PIC18LF4553-I/P	32	16	256	2048	35	13	48	1	3	EUSART, I2C, SPI, USB	40-DIP	54M5069	6.34
PIC18 J-SERIES w/ STANDARD FLASH													
PIC18F24J10-I/ML	16	8	...	1024	21	10	40	1	2	I2C, SPI, USART	28-QFN	31K5015	1.81
PIC18F24J10-I/SP	16	8	...	1024	21	10	40	1	2	EUSART, I2C, SPI	28-NDIP	31K5017	1.89
PIC18F44J10-I/PT	16	8	...	1024	32	13	40	1	2	EUSART, I2C, PSP, SPI	44-TQFP	31K5045	1.99
PIC18F65J10-I/PT	32	16	...	2048	50	11	40	2	3	EUSART, I2C, PSP, SPI	64-TQFP	71J7261	2.51
PIC18F25J10-I/ML	32	16	...	1024	21	10	40	1	2	EUSART, I2C, SPI	28-QFN	31K5026	1.91
PIC18F85J10-I/PT	32	16	...	2048	66	12	40	1	3	EUSART, I2C, SPI	80-TQFP	71J7277	2.83
PIC18F66J11-I/PT	64	64	...	3930	52	11	48	2	3	EUSART, I2C, SPI	64-TQFP	17M0962	2.39
PIC18F66J16-I/PT	96	48	...	3930	52	11	48	2	3	EUSART, I2C, PSP, SPI	64-TQFP	17M0964	2.56
PIC18F87J11-I/PT	128	64	...	3930	68	12	48	2	3	EUSART, I2C, SPI	80-TQFP	17M0984	3.89
PIC18F67J10-I/PT	128	64	...	3936	50	11	40	2	3	EUSART, I2C, PSP, SPI	64-TQFP	71J7273	3.18
PIC18F87J10-I/PT	128	64	...	3936	66	15	40	2	3	EUSART, I2C, PSP, SPI	80-TQFP	71J7289	3.51
PIC18 J-SERIES nanoWATT XLP ENHANCED w/ STANDARD FLASH													
PIC18F24J50-I/SO	16	8	...	3776	16	10	48	2	3	EUSART, I2C, SPI, USB	28-SOIC	98M1772	2.60
PIC18F26J11-I/SS	64	16	...	3776	16	10	48	2	3	EUSART, I2C, SPI	28-SSOP	98M1799	2.85
PIC18F26J11-I/ML	64	32	...	3776	16	10	48	2	3	EUSART, I2C, SPI	28-QFN	98M1796	3.05
PIC18F67J60-I/PT	128	64	...	3808	39	11	42	2	3	EUSART, I2C, SPI	64-TQFP	56K7302	4.55
PIC18 J-SERIES w/ Ethernet PERIPERIALS													
PIC18F66J65-I/PT	96	48	...	3808	39	11	40	2	3	I2C, SPI, USART	64-TQFP	56K7298	4.39
PIC18F87J60-I/PT	128	64	...	3808	55	15	42	2	3	EUSART, I2C, SPI	80-TQFP	56K7312	4.90
PIC18F97J60-I/PF	128	64	...	3808	70	16	42	2	3	EUSART, I2C, PSP, SPI	100-TQFP	74K8625	5.67
PIC18F97J60-I/PT	128	64	...	3808	70	16	42	2	3	EUSART, I2C, PSP, SPI	100-TQFP	56K7318	5.18
PIC18 J-SERIES w/ LCD PERIPERIALS													
PIC18F67J93-I/PT	128	64	...	3923	51	12	48	1	3	EUSART, I2C, SPI	64-TQFP	14R8988	3.93
PIC18F87J90-I/PT	128	64	...	3923	67	12	48	1	3	AUSART, EUSART, I2C, SPI	80-TQFP	07P9687	4.11
PIC18F87J93-I/PT	128	64	...	3923	67	12	48	1	3	EUSART, I2C, SPI	80-TQFP	14R8992	4.30
PIC18 J-SERIES w/ USB PERIPERIALS													
PIC18F66J50-I/PT	64	64	...	3904	49	8	48	2	3	EUSART, I2C, SPI, USB	64-TQFP	17M0966	3.57
PIC18F66J55-I/PT	96	48	...	3904	49	8	48	2	3	I2C, SPI, USART	64-TQFP	17M0968	3.74
PIC18F67J50-I/PT	128	64	...	3904	49	8	48	2	3	EUSART, I2C, SPI, USB	64-TQFP	17M0972	3.89
PIC18F87J50-I/PT	128	64	...	3904	65	12	48	2	3	EUSART, I2C, SPI, USB	80-TQFP	17M0986	4.26
PIC18 J-SERIES nanoWATT XLP ENHANCED w/ USB PERIPERIALS													
PIC18F26J50-I/ML	64	16	...	3776	16	10	48	2	3	EUSART, I2C, SPI, USB	28-QFN	98M1803	3.33
PIC18F26J50-I/SP	64	16	...	3776	16	10	48	2	3	EUSART, I2C, SPI, USB	28-NDIP	98M1805	3.37
PIC18F46J50-I/PT	64	16	...	3776	22	13	48	2	3	EUSART, I2C, SPI, USB	44-TQFP	98M1834	3.55
PIC18LF46J50-I/PT	64	32	...	3776	22	13	48	2	3	EUSART, I2C, SPI, USB	44-TQFP	98M1901	3.55
PIC18 K-SERIES w/ SELF PROGRAMMABLE FLASH													
PIC18F23K20-I/SS	8	4	256	512	25	11	64	1	3	EUSART, I2C, SPI	28-SSOP	27M0508	1.70
PIC18F23K20-I/SP	8	4	256	512	25	11	64	1	3	EUSART, I2C, SPI	28-NDIP	27M0507	1.93
PIC18F14K22-I/ML	16	8	256	512	18	12	64	1	3	EUSART, I2C, SPI	20-QFN	07P9674	1.77
PIC18F24K20-I/SS	16	8	256	768	25	11	64	1	3	EUSART, I2C, SPI	28-SSOP	88K5969	1.79
PIC18F14K22-I/P	16	8	256	512	18	12	64	1	3	EUSART, I2C, SPI	20-DIP	07P9675	2.07
PIC18F14K22-I/SO	16	8	256	512	18	12	64	1	3	EUSART, I2C, SPI	20-SOIC	07P9676	1.89
PIC18F14K22-I/SS	16	8	256	512	18	12	64	1	3	EUSART, I2C, SPI	20-SSOP	07P9677	1.73
PIC18F24K20-E/ML	16	8	256	768	25	11	64	1	3	EUSART, I2C, SPI	28-QFN	88K5962	2.13

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8-BIT PIC18 MICROCONTROLLERS (CONT.)

Mfg. Part No.	Program Memory (KBytes)	Program Memory (kWords)	Data Memory (Bytes)	RAM (Bytes)	I/O Pins	ADC (Ch)	Max. Speed (MHz)	Timers 8 (Bit)	Timers 16 (Bit)	Interface	Package	Stock No.	Price Each 1-25
PIC18 K-SERIES w/ SELF PROGRAMMABLE FLASH													
● PIC18F24K20-E/SO	16	8	256	768	25	11	64	1	3	EUSART, I2C, SPI	28-SOIC	88K5963	2.01
● PIC18F24K20-E/SS	16	8	256	768	25	11	64	1	3	EUSART, I2C, SPI	28-SSOP	88K5965	1.98
● PIC18F44K20-E/P	16	8	256	768	36	14	64	1	3	EUSART, I2C, SPI	40-DIP	88K6022	2.52
● PIC18F44K20-I/P	16	8	256	768	36	14	64	1	3	EUSART, I2C, SPI	40-DIP	88K6025	2.31
● PIC18LF14K22-I/ML	16	8	256	512	18	12	64	1	3	EUSART, I2C, SPI	20-QFN	07P9710	1.77
● PIC18LF14K22-I/P	16	8	256	512	18	12	64	1	3	EUSART, I2C, SPI	20-DIP	07P9711	2.07
● PIC18LF14K22-I/SO	16	8	256	512	18	12	64	1	3	EUSART, I2C, SPI	20-SOIC	07P9712	1.89
● PIC18LF14K22-I/SS	16	8	256	512	18	12	64	1	3	EUSART, I2C, SPI	20-SSOP	07P9713	1.73
● PIC18F25K20-E/ML	32	16	256	1536	25	10	64	1	3	I2C, SPI, USART	28-QFN	88K5981	2.24
● PIC18F25K20-E/SP	32	16	256	1536	25	10	64	1	3	I2C, SPI, USART	28-SPDIP	88K5983	2.31
● PIC18F25K20-I/SP	32	16	256	1536	25	11	64	1	3	EUSART, I2C, SPI	28-NDIP	88K5987	2.12
● PIC18F25K20T-I/SS	32	16	256	1536	25	10	64	1	3	I2C, SPI, USART	28-SSOP	88K5991	1.94
● PIC18F45K20-I/ML	32	16	256	1536	36	14	64	1	3	I2C, SPI, USART	44-QFN	88K6040	2.33
● PIC18F45K20-I/P	32	16	256	1536	36	14	64	1	3	EUSART, I2C, PSP, SPI	40-DIP	88K6041	2.41
● PIC18F26K20-I/SO	64	32	1024	3936	25	11	64	1	3	EUSART, I2C, SPI	28-SOIC	88K6005	2.31
● PIC18F26K20-I/SP	64	32	1024	3936	25	11	64	1	3	EUSART, I2C, SPI	28-NDIP	88K6006	2.51
● PIC18F46K20-I/P	64	32	1024	3936	36	14	64	1	3	EUSART, I2C, PSP, SPI	40-DIP	88K6057	2.70
● PIC18F46K20-I/PT	64	32	1024	3936	36	14	64	1	3	EUSART, I2C, PSP, SPI	44-TQFP	88K6058	2.51
● PIC18F26K20-E/ML	64	32	1024	3936	25	11	64	1	3	EUSART, I2C, SPI	28-QFN	88K6000	2.66
PIC18 K-SERIES w/ USB PERIPERIALS													
● PIC18F13K50-I/P	8	4	256	512	15	11	48	1	3	EUSART, I2C, SPI, USB	20-DIP	77M3098	2.20
● PIC18F13K50-I/SO	8	4	256	512	15	11	48	1	3	EUSART, I2C, SPI, USB	20-SOIC	77M3099	2.16
● PIC18F13K50-I/SS	8	4	256	512	15	11	48	1	3	EUSART, I2C, SPI, USB	20-SSOP	77M3100	1.91
● PIC18F14K50-I/P	16	8	256	768	15	11	48	1	3	EUSART, I2C, SPI, USB	20-DIP	77M3103	2.39
● PIC18F14K50-I/SS	16	8	256	768	15	11	48	1	3	EUSART, I2C, SPI, USB	20-SSOP	77M3105	2.10
● PIC18F14K50-I/SO	16	8	256	768	15	11	48	1	3	EUSART, I2C, SPI, USB	20-SOIC	77M3104	2.35
● PIC18LF14K50-I/SS	16	8	256	768	15	11	48	1	3	EUSART, I2C, SPI, USB	20-SSOP	07P9719	2.10
● PIC18F14K50-I/MQ	16	8	256	768	15	11	48	1	3	EUSART, I2C, SPI, USB	20-QFN	24R7104	2.04
PIC18 K-SERIES w/ LCD and CAPACITIVE TOUCH PERIPHERALS													
● PIC18F86K22-I/PTRSL	64	32	1024	3862	69	24	64	6	5	EUSART, I2C, SPI	80-TQFP	25R8358	4.09
● PIC18F66K22-I/PTRSL	64	32	1024	3862	53	16	64	6	5	EUSART, I2C, SPI	64-TQFP	25R8339	3.72
● PIC18F67K22-I/MRRSL	128	64	1024	3862	53	16	64	6	5	EUSART, I2C, SPI	64-QFN	25R8346	4.16
● PIC18F67K22-I/PTRSL	128	64	1024	3862	53	16	64	6	5	EUSART, I2C, SPI	64-TQFP	25R8347	4.05
● PIC18F87K22-I/PTRSL	128	64	1024	3862	69	24	64	6	5	EUSART, I2C, SPI	80-TQFP	25R8362	4.41
● PIC18F87K90-I/PTRSL	128	64	1024	4096	69	24	64	6	5	EUSART, I2C, SPI	80-TQFP	25R8364	4.61
PIC18 ENHANCED FLASH MICROCONTROLLERS WITH 12-BIT A/D nanoWATT XLP TECHNOLOGY AND USB PERIPHERALS													
● PIC18F4458-I/PT	24	12	256	2048	35	13	48	1	3	EUSART, I2C, SPI, USB	44-TQFP	77M3117	5.22
PIC18 J-SERIES FLASH MICROCONTROLLERS WITH nanoWATT XLP TECHNOLOGY													
● PIC18F65J15-I/PT	48	24	...	2048	50	11	40	2	3	EUSART, I2C, SPI	64-TQFP	71J7263	2.70
PIC18 J-SERIES HIGH-PERFORMANCE nanoWATT XLP ENHANCED w/ USB PERIPERIALS													
● PIC18F27J53-I/ML	128	64	...	...	...	10	48	4	4	I2C, SPI, USART	28-QFN	63R7837	3.82
● PIC18F27J53-I/SO	128	64	...	...	...	10	48	4	4	I2C, SPI, USART	28-SOIC	63R7838	3.70
● PIC18F27J53-I/SP	128	64	...	...	...	10	48	4	4	I2C, SPI, USART	28-DIP	63R7839	3.89
● PIC18F27J53-I/SS	128	64	...	...	...	10	48	4	4	I2C, SPI, USART	28-SSOP	63R7840	3.66
● PIC18F47J53-I/ML	128	64	...	...	...	13	48	4	4	I2C, SPI, USART	44-QFN	63R7855	4.20
● PIC18F47J53-I/PT	128	64	...	3896	...	13	48	4	4	I2C, SPI, USART	44-TQFP	63R7856	4.09
● PIC18LF27J53-I/ML	128	64	...	...	...	10	48	4	4	I2C, SPI, USART	28-QFN	63R7875	3.82
● PIC18LF27J53-I/SO	128	64	...	...	...	10	48	4	4	I2C, SPI, USART	28-SOIC	63R7876	3.70
● PIC18LF27J53-I/SP	128	64	...	...	...	10	48	4	4	I2C, SPI, USART	28-DIP	63R7877	3.89
● PIC18LF27J53-I/SS	128	64	...	...	...	10	48	4	4	I2C, SPI, USART	28-SSOP	63R7878	3.66
● PIC18LF47J53-I/ML	128	64	...	...	...	13	48	4	4	I2C, SPI, USART	44-QFN	63R7890	4.20
● PIC18LF47J53-I/PT	128	64	...	...	...	13	48	4	4	I2C, SPI, USART	44-TQFP	63R7891	4.09
PIC18 J-SERIES LOW-POWER HIGH-PERFORMANCE nanoWATT XLP ENHANCED w/ USB PERIPERIALS													
● PIC18F44J50-I/PT	16	8	...	3776	22	13	48	1	3	EUSART, I2C, SPI	44-TQFP	98M1815	2.97
● PIC18F25J50-I/SO	32	16	...	3776	16	10	48	2	3	EUSART, I2C, SPI, USB	28-SOIC	98M1787	2.79
● PIC18F25J50-I/SP	32	16	...	3776	16	10	48	2	3	EUSART, I2C, SPI, USB	28-DIP	98M1788	2.99
● PIC18F25J50-I/SS	32	16	...	3776	16	10	48	2	3	EUSART, I2C, SPI, USB	28-SSOP	98M1789	2.76
● PIC18F45J50-I/PT	32	16	...	3776	22	13	48	2	3	EUSART, I2C, SPI	44-TQFP	98M1823	3.16
PIC18 J-SERIES WITH nanoWATT XLP TECHNOLOGY													
● PIC18F27J13-I/SP	128	64	...	...	...	10	48	4	4	I2C, SPI, USART	28-DIP	63R7835	3.60
● PIC18F27J13-I/SS	128	64	...	...	...	10	48	4	4	I2C, SPI, USART	28-SSOP	63R7836	3.37
● PIC18F47J13-I/ML	128	64	...	...	...	13	48	4	4	I2C, SPI, USART	44-QFN	63R7853	3.91
● PIC18F47J13-I/PT	128	64	...	...	...	13	48	4	4	I2C, SPI, USART	44-TQFP	63R7854	3.80
● PIC18LF27J13-I/ML	128	64	...	...	...	10	48	4	4	I2C, SPI, USART	28-QFN	63R7871	3.53
● PIC18LF27J13-I/SS	128	64	...	...	...	10	48	4	4	I2C, SPI, USART	28-SSOP	63R7874	3.37
● PIC18LF47J13-I/ML	128	64	...	...	...	13	48	4	4	I2C, SPI, USART	44-QFN	63R7888	3.91
● PIC18LF47J13-I/PT	128	64	...	...	...	13	48	4	4	I2C, SPI, USART	44-TQFP	63R7889	3.80
PIC18 J-SERIES WITH nanoWATT XLP TECHNOLOGY AND DUAL-CHANNEL AFE LCD DRIVER													
● PIC18F86J72-I/PT	64	32	...	3923	51	2	48	1	3	EUSART, I2C, SPI	80-TQFP	85R2395	5.67

➤CONTINUED➤

8-BIT PIC18 MICROCONTROLLERS (CONT.)

PIC18 K-SERIES FLASH MICROCONTROLLERS WITH nanoWATT XLP TECHNOLOGY

Mfg. Part No.	Program Memory (KBytes)	Program Memory (kWords)	Data Memory (Bytes)	RAM (Bytes)	I/O Pins	ADC (Ch)	Max. Speed (MHz)	Timers 8 (Bit)	Timers 16 (Bit)	Interface	Package	Stock No.	Price Each 1-25
PIC18F13K22-I/ML	8	4	256	256	18	12	64	1	3	EUSART, I2C, SPI	20-QFN	07P9663	1.64
PIC18F13K22-I/P	8	4	256	256	18	12	64	1	3	EUSART, I2C, SPI	20-DIP	07P9664	1.94
PIC18F13K22-I/SO	8	4	256	256	18	12	64	1	3	EUSART, I2C, SPI	20-SOIC	07P9665	1.75
PIC18F13K22-I/SS	8	4	256	256	18	12	64	1	3	EUSART, I2C, SPI	20-SSOP	07P9666	1.60
PIC18LF13K22-I/P	8	4	256	256	18	12	64	1	3	EUSART, I2C, SPI	20-DIP	07P9695	1.94
PIC18LF13K22-I/SS	8	4	256	256	18	12	64	1	3	EUSART, I2C, SPI	20-SSOP	07P9697	1.60
PIC18 K-SERIES LOW POWER HIGH-PERFORMANCE WITH nanoWATT XLP TECHNOLOGY													
PIC18F24K22-I/ML	16	8	256	768	25	17	64	1	3	EUSART, I2C, SPI	28-QFN	73R8547	2.20
PIC18F24K22-I/SO	16	8	256	768	25	17	64	1	3	EUSART, I2C, SPI	28-SOIC	73R8549	2.08
PIC18F24K22-I/SP	16	8	256	768	25	17	64	1	3	EUSART, I2C, SPI	28-DIP	73R8550	2.27
PIC18F24K22-I/SS	16	8	256	768	25	17	64	1	3	EUSART, I2C, SPI	28-SSOP	73R8551	2.04
PIC18F44K22-I/ML	16	8	256	768	36	28	64	1	3	EUSART, I2C, SPI	44-QFN	73R8567	2.52
PIC18F44K22-I/P	16	8	256	768	36	28	64	1	3	EUSART, I2C, SPI	40-DIP	73R8568	2.60
PIC18F44K22-I/PT	16	8	256	768	36	28	64	1	3	EUSART, I2C, SPI	44-TQFP	73R8569	2.41
PIC18LF24K22-I/ML	16	8	256	768	25	17	64	1	3	EUSART, I2C, SPI	28-QFN	73R8591	2.20
PIC18LF24K22-I/SO	16	8	256	768	25	17	64	1	3	EUSART, I2C, SPI	28-SOIC	73R8593	2.08
PIC18LF24K22-I/SP	16	8	256	768	25	17	64	1	3	EUSART, I2C, SPI	20-DIP	73R8594	2.27
PIC18LF24K22-I/SS	16	8	256	768	25	17	64	1	3	EUSART, I2C, SPI	28-SSOP	73R8595	2.04
PIC18LF44K22-I/ML	16	8	256	768	36	28	64	1	3	EUSART, I2C, SPI	44-QFN	73R8611	2.52
PIC18LF44K22-I/P	16	8	256	768	36	28	64	1	3	EUSART, I2C, SPI	40-DIP	73R8612	2.60
PIC18LF44K22-I/PT	16	8	256	768	36	28	64	1	3	EUSART, I2C, SPI	44-TQFP	73R8613	2.41
PIC18F25K22-I/ML	32	16	256	1536	25	17	64	1	3	EUSART, I2C, SPI	28-QFN	63R7819	2.39
PIC18F25K22-I/SO	32	16	256	1536	25	17	64	1	3	EUSART, I2C, SPI	28-SOIC	63R7820	2.27
PIC18F25K22-I/SP	32	16	256	1536	25	17	64	1	3	EUSART, I2C, SPI	28-DIP	65R5980	2.47
PIC18F25K22-I/SS	32	16	256	1536	25	17	64	1	3	EUSART, I2C, SPI	28-SSOP	63R7821	2.24
PIC18F45K22-I/ML	32	16	256	1536	36	28	64	1	3	EUSART, I2C, SPI	44-QFN	63R7844	2.72
PIC18F45K22-I/P	32	16	256	1536	36	28	64	1	3	EUSART, I2C, SPI	40-DIP	63R7845	2.79
PIC18F45K22-I/PT	32	16	256	1536	36	28	64	1	3	EUSART, I2C, SPI	44-TQFP	63R7846	2.60
PIC18LF25K22-I/ML	32	16	256	1536	25	17	64	1	3	EUSART, I2C, SPI	28-QFN	63R7857	2.39
PIC18LF25K22-I/SO	32	16	256	1536	25	17	64	1	3	EUSART, I2C, SPI	28-SOIC	63R7858	2.27
PIC18LF25K22-I/SP	32	16	256	1536	25	17	64	1	3	EUSART, I2C, SPI	28-DIP	65R6024	2.47
PIC18LF25K22-I/SS	32	16	256	1536	25	17	64	1	3	EUSART, I2C, SPI	28-SSOP	63R7859	2.24
PIC18LF45K22-I/PT	32	16	256	1536	36	28	64	1	3	EUSART, I2C, SPI	44-TQFP	63R7881	2.60
PIC18F26K22-I/ML	64	32	1024	3896	25	17	64	1	3	EUSART, I2C, SPI	28-QFN	65R5991	2.78
PIC18F26K22-I/SO	64	32	1024	3896	25	17	64	1	3	EUSART, I2C, SPI	28-SOIC	65R5992	2.66
PIC18F46K22-I/ML	64	32	1024	3896	36	28	64	1	3	EUSART, I2C, SPI	44-QFN	65R6011	3.10
PIC18F46K22-I/P	64	32	1024	3896	36	28	64	1	3	EUSART, I2C, SPI	40-DIP	65R6012	3.18
PIC18F46K22-I/PT	64	32	1024	3896	36	28	64	1	3	EUSART, I2C, SPI	44-TQFP	65R6013	2.99
PIC18LF26K22-I/ML	64	32	1024	3896	25	17	64	1	3	EUSART, I2C, SPI	28-QFN	65R6035	2.78
PIC18LF26K22-I/SO	64	32	1024	3896	25	17	64	1	3	EUSART, I2C, SPI	28-SOIC	65R6036	2.66
PIC18LF26K22-I/SP	64	32	1024	3896	25	17	64	1	3	EUSART, I2C, SPI	28-DIP	65R6037	2.85
PIC18LF26K22-I/SS	64	32	1024	3896	25	17	64	1	3	EUSART, I2C, SPI	28-SSOP	65R6038	2.62
PIC18LF46K22-I/ML	64	32	1024	3896	36	28	64	1	3	EUSART, I2C, SPI	44-QFN	65R6058	3.10
PIC18LF46K22-I/P	64	32	1024	3896	36	28	64	1	3	EUSART, I2C, SPI	40-DIP	65R6059	3.18
PIC18LF46K22-I/PT	64	32	1024	3896	36	28	64	1	3	EUSART, I2C, SPI	44-TQFP	65R6060	2.99
PIC18 K-SERIES nanoWATT XLP ENHANCED FLASH w/ECAN™													
PIC18F26K80-I/SO	64	32	...	4096	...	8	16	2	3	I2C, SPI, USART	28-SOIC	76R6686	3.05
PIC18F46K80-I/PT	64	32	...	4096	...	11	16	2	3	I2C, SPI, USART	44-TQFP	76R6705	3.37
PIC18F66K80-I/PT	64	32	...	4096	...	11	16	2	3	I2C, SPI, USART	64-TQFP	76R6717	4.11

(72445)

EMBEDDED DESIGN TOOLS

IDEs, Compilers, Debuggers and programming tools for all your MCU/DSP/FPGA needs.

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(196534)

PSoC™ 3 DEVELOPMENT KITS

RoHS Compliant Available

CYPRESS PERFORM

Kit Contents
- PSoC Development Board
- PSoC3 CY8C38 Family processor module
- PSoC CY8C29 Family processor module
- MiniProg3 Debug and Evaluation Device
- Prototyping Cable Kit
- USB Cable
- 12V AC Power Adapter
- Quick Start Guide
- Kit CD, which includes: PSoC Creator™, PSoC Designer™, PSoC Programmer, Projects, and Documentation

PSoC™ 3 is a single-cycle, pipelined 8-bit 8051 core and a high-performance configurable digital system provide unmatched analog and digital BOM integration with the flexibility to handle late design changes anywhere in the design process. The **CY8CKIT-001** PSoC® Development Kit provides a common development platform to prototype and evaluate different solutions using the PSoC3 architecture. In addition, the kit gives several example projects with step-by-step instructions and includes a PSoC CY8C29 family processor module for PSoC 1 development. **PSoC® 3 FirstTouch™** is a full-featured starter kit that includes an array of sensors, I/O's, projects, and software to allow you to evaluate to help users get acquainted PSoC® programmable system-on-chip design methodology and architecture. **PSoC® CY8C29** for PSoC 1 and **PSoC® CY8C38** for PSoC 3 are family processor modules can be used in conjunction with the PSoC Development Kit (CY8CKIT-001) is designed to evaluate and experiment with PSoC 1 design methodology and architecture.

Mfg. Part No.	Description	Stock No.	Price Each
● CY8CKIT-002	PSOC 1, PSOC 3, PSOC 5, MINIPROG3, PROG/DEBUG KIT	26R2364	89.00
● CY8CKIT-001C	DEV KIT, PSOC 1/3/5, MINIPROG3	56W4907	248.94
● CY8CKIT-029A	LCD SEGMENT, EXPANSION BOARD, FOR CY8CKIT-001 KIT	58T0042	49.97

(155085)

S12ZVH MAGNIV MIXED SIGNAL MCU

RoHS Compliant Available

NEW

freescale

Features:
- S12Z core at 32 MHz bus speed
- Up to four stepper motor drivers
- Segment LCD driver
- Real time clock
- Temperature sensor

The S12ZVH platform is for automotive instrument cluster applications. It integrates a sophisticated MCU together with a voltage regulator, CAN and LIN physical layer, display controller and instrument gage drivers to address entry level requirements for automotive instrument clusters.

Mfg. Part No.	CPU Speed (MHz)	Prog. Mem (KB)	Interface	Pkg	Stock No.	Price Each 1-9
● S912ZVMC12F1MKH	25	32	I2C, SCI, SPI	64-QFP	33X3914	9.39
● S912ZVHY32F1VLL	32	32	CAN, I2C, SCI, SPI	100-LQFP	44X7029	4.41
● S912ZVFP64F1VLL	32	64	CAN, I2C, SCI, SPI	100-LQFP	44X7027	5.53
● S912ZVFP64F1VLQ	32	64	CAN, I2C, SCI, SPI	144-LQFP	44X7028	5.89
● S912ZVHY64F1VLL	32	64	CAN, I2C, SCI, SPI	100-LQFP	44X7030	4.77
● S912ZVHY64F1VLQ	32	64	CAN, I2C, SCI, SPI	144-LQFP	44X7031	5.14
● S912ZVH128F2VLL	32	128	CAN	100-LQFP	44X7032	6.08
● S912ZVH128F2VLQ	32	128	CAN	144-LQFP	44X7033	7.89
● S912ZVML12F1MKH	50	32	I2C, SCI, SPI	64-QFP	33X3915	9.39

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EXPLORER 16 STARTER KIT W/ MPLAB ICD 3

MICROCHIP

MPLAB ICD 3 with Explorer 16 Kit is a complete set of tools for application development using Microchip PIC24F, PIC24H, and dsPIC33 16-bit MCUs. It also includes a 9V universal power supply for the Explorer 16 Development Board, a PIC24FJ128GA010 and a dsPIC33F256GP710 device (mounted on plug-in modules for quick replacement). Also included with the kit is Microchips MPLAB IDE. MPLAB C Compiler for 16-bit decies Lite Edition, tutorials and user manuals on CD-ROM. The complete kit introduces the developer to Microchips family of 16-bit microcontrollers with all the tools for writing code in C, hardware debugging the application and programming devices.

Mfg. Part No.	Description	Stock No.	Price Each
DV164037	Explorer 16 Kit w/ MPLAB ICD3	25R7377	299.99

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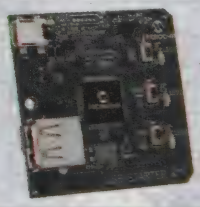
PIC24E STARTER KIT

RoHS Compliant Available

MICROCHIP

Explore the PIC24E family using the 60 MIPS PIC24EP512GU810 MCU with USB-OTG. Pre-loaded demo software, USB mini-B and USB Micro B are included with the kit.



Mfg. Part No.	Description	Stock No.	Price Each
DM240012	MPLAB Starter Kit for PIC24E MCUs	55T2291	64.99

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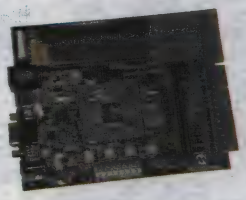
PIC24/dsPIC33 EXPLORER 16 KIT

RoHS Compliant Available

MICROCHIP

Features
- PIC24FJ128GA010 microcontroller and dsPIC33FJ256GP710 digital signal controller PIMs included
- Alpha-numeric 16 x 2 LCD display
- Interfaces to MPLAB ICD 2, USB, and RS-232
- Includes Microchip's TC1047A high accuracy, analog output temperature sensor
- Expansion connector to access full devices pin-out and bread board prototyping area
- PICTailTM Plus connector for future expansion boards
- Full documentation CD includes user's guide, schematics and PWB layout



The Explorer 16 is a low cost, efficient development board to evaluate the features and performance of Microchip's new PIC24 Microcontroller and dsPIC33 Digital Signal Controller (DSC) families. Coupled with the MPLAB ICD 2 In Circuit Debugger, real-time emulation and debug facilities speed evaluation and prototyping of application circuitry. The Explorer 16 features two interchangeable Plug-In Modules (PIMs), one each for the PIC24FJ128GA010 and the dsPIC33FJ256GP710 DSC.

Mfg. Part No.	Description	Stock No.	Price Each
● DM240001	Board, 2x PIM Cards	04M6008	129.99
DM240002	Explorer 16 kit(44-PIN) w/ PIC24FJ64GA004 and dsPIC33FJ32GP204 PIMs	54M4471	129.99

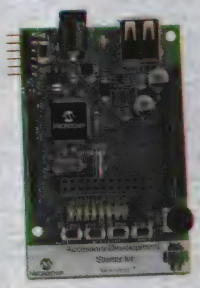
(87543)

PIC24F ACCESSORY DEVELOPMENT STARTER KIT FOR ANDROID

MICROCHIP

Features
- PIC24F 16-bit PIC® MCU with USB OTG
- Type A USB connector
- User interface buttons
- LEDs and potentiometer
- Device charger circuitry up to 500mA
- Arduino footprint compatible for prototyping

Kit Contains
- 16-bit PIC24F Development Board
- PICkit 3 In-Circuit Debugger (PG164130)
- RJ-11 to ICSP Adapter (AC164110)
- 9V Power Supply (AC002014)
- Royalty Free, No Fee Licensed Software Library



PIC24F Accessory Development Start Kit for Android™ is a standalone board used for evaluating and developing electronic accessories for Google's Android operating system for smartphones and tablets.

Mfg. Part No.	Description	Stock No.	Price Each
DM240415	PIC24 Android Accessory Dev Kit	47T4879	79.99

(200551)

dsPICDEM™ MCLV-2 DEVELOPMENT BOARD

RoHS Compliant Available

MICROCHIP

Features
- Three-phase inverter bridge with a power rating of 48V/15A
- Hall sensors/Quadrature encoder interface for sensored motor control
- Phase voltage feedback for sensorless BLDC operation
- DC bus current sense resistor for single shunt vector control
- Phase current sense resistor for dual shunt vector control
- Overcurrent protection
- Two push buttons
- Reset push button
- 10 kΩ potentiometer
- LED indicator for PWM outputs
- Communication Ports: CAN, LIN, UART
- Auxiliary Power Tab Fast-On connectors

The **dsPICDEM MCLV** Development Board is targeted to control a Brushless DC (BLDC) motor or Permanent Magnet Synchronous Motor (PMSM) in sensor or sensorless operation. This board can be configured in different ways for use with specialized motor control digital signal controllers. The **dsPICDEM MCLV** Development Board supports the dsPIC33F motor control device family. It offers a mounting option to connect either a 28-pin SOIC device or a generic 100-pin Plug-In Module (PIM). The board also has a three-phase inverter bridge circuit. The circuit drives a BLDC or PMSM motor using different control techniques without requiring any additional hardware.

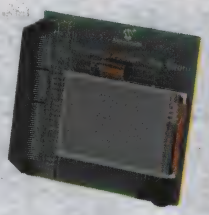
Mfg. Part No.	Description	Stock No.	Price Each
DM330021-2	DSPICEDERM Motor Control Evaluation Board	28W5783	199.99

(210339)

GRAPHICS PICTAIL™ PLUS DAUGHTER BOARD

RoHS Compliant Available

MICROCHIP



Features
- 65K color support
- Supports portrait and landscape orientations
- Stand-alone graphics controller, Solomon Systech SSD1906, supporting ⅛-bit STN, ⅛-bit CSTN, 18-bit HR-TFT and 9/12/18-bit TFT interfaces via connector
- 4MB (512Kx8) flash memory for graphic data storage
- Sound buzzer

Kit contents
- QVGA (320x240) LCD module with built-in graphics controller and resistive touch screen
- Horizontal PICtail™ Plus Daughter Board connection interface
- AC164127-3: 3.2 Display Kit

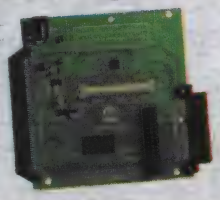
AC164127 is a demonstration board for evaluating Microchip Technology's graphic LCD display solution and Graphics Library for 16-bit microcontrollers. It is an expansion board compatible with the Explorer 16 Development Board. **AC164127-3** contains a 3.2 Display Kit which allows evaluating Microchip Technologys solution and graphics library for 16- and 32-bit microcontrollers. This is a bundle kit of the AC164127-4 and AC164127-5. The kit provides a cost-effective method of evaluating and developing graphics display applications and support both Explorer-16 and PIC32 Starter Kits.

Mfg. Part No.	Description	Supported	Stock No.	Price Each
AC164127-3	Graphics Display Truly 3.2 Board, LCD Controller Board, Display & Starter Kit Connectors, Interface	Explorer 16 Dev Board or PIC32 Starter Boards	08R1077	160.00

(113833)

LOW-COST CONTROLLERLESS (LCC) GRAPHICS PICTAIL PLUS DAUGHTER BOARD

MICROCHIP



Features
- Can drive QVGA 8bpp with PIC32 alone
- Can drive WQVGA 16bpp with external 256KB SRAM Frame buffer
- Display connector for interfacing with different display boards
- PICtail Plus Interface for connecting to Explorer 16 Development Board
- Starter Kit Connector

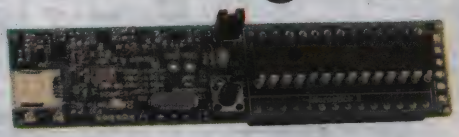
Low-Cost Controllerless (LCC) Graphics PICtail Plus Daughter Board enables development of graphics solutions without an external graphics controller, thus reducing system BOM cost for many applications. The board is designed to attach to a PIC32 starter kit (DM320001, DM320003-2, DM320004) or an Explorer16 development board (DM240001) and one of Microchip LCD Modules including the Truly 3.2" QVGA board (AC164127-4) and the 4.3" WQVGA Powertip display panel (AC164127-6).

Mfg. Part No.	Description	Stock No.	Price Each
AC164144	Graphics Pigtail Daughter Card	55T1443	89.99

(196694)

MICROSTICK II

MICROCHIP



Features
- Low Cost
- Integrated USB programmer / debugger
- USB Powered
- MPLAB support
- DUT Socket
- 0.025" Pin headers
- Easy access to all device signals for probing
- Small size, easily Portable
- On board user LED and reset switch
- Free demo code

Kit contents
- Microstick II Board
- USB Cable
- 1x14 header pins (2)
- PIC24FJ64GB002
- PIC24HJ64GP502
- dsPIC33FJ64MC802
- PIC32MX220F032
- Guides and instructions

Microstick II delivers a complete development hardware platform for 16-bit and 32-bit PIC MCUs and dsPICs. It's the perfect solution to those looking for a low-cost, easy-to-use development platform. The USB-powered kit includes an on-board debugger/programmer, a DUT socket for easy device swapping, a user LED and reset button. It is designed for insertion into a standard prototyping board for easy connection to additional circuitry. The kit is extremely portable as well and is still about the size of a stick of gum!

Mfg. Part No.	Description	Stock No.	Price Each
DM330013-2	MICROSTICK II, For DSPIC33, PIC24F, PIC32, PIC24H	66T7937	34.95

(198007)

MPLAB ICD 3 EVALUATION KIT W/ PICDEM 2 PLUS DEMO BOARD

MICROCHIP

Contents
- PICDEM 2 Plus demonstration board (DM163022)
- MPLAB ICD 3 Debugger
- 9V universal power supply
- CD w/ MPLAB(IDE), tutorials & user manuals

Mfg. Part No.	Description	Stock No.	Price Each
DV164036	PICDEM 2 Plus Board w/ MPLAB ICD3	25R7376	239.99

(176995)

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(196545)

16-BIT PIC24 MICROCONTROLLERS

RoHS Compliant Available

MICROCHIP

With 16 MIPS performance and an extensive peripheral set, the PIC24F microcontrollers are a highly cost-effective solution for all but the most demanding 16-bit applications. The PIC24F also offers a new migration option for design engineers whose applications may be outgrowing the performance offered by 8-bit microcontrollers, and need to stay cost competitive. For more demanding applications, the PIC24H offers 40 MIPS performance, more memory and additional peripherals. The PIC24H family adds up to 2 CAN communication modules, user selectable 10/12-bit Analog-to-Digital (A/D) converter and enhanced timer functions. And integrated Direct Memory Access (DMA) between peripherals and dual-port RAM provides zero overhead data transfers, optimizing CPU throughput.

PIC24F FAMILY - GENERAL PURPOSE APPLICATIONS (16MIPS)

Mfg. Part No.	Prog. Mem. (KB)	RAM (KB)	I/O Pins	ADC (Ch)	Comp.	Max. Speed (MHz)	Timers 16-Bit	Timers 32-Bit	Interface	Package	Stock No.	Price Each 1-25
PIC24FJ16GA002-E/SS	16	4	21	10	2	32	5	...	I2C, SPI, USART	28-SSOP	98M1907	2.46
PIC24FJ16GA002-I/SP	16	4	21	10	2	32	5	...	I2C, SPI, UART	28-DIP	40M1427	2.47
PIC24FJ16GA002-I/SS	16	4	21	10	2	32	5	...	I2C, SPI, UART	28-SSOP	40M1428	2.24
PIC24FJ16GA002-I/ML	16	4	21	10	2	32	5	...	I2C, SPI, UART	28-QFN	40M1425	2.35
PIC24FJ16GA002-I/SO	16	4	21	10	2	32	5	...	I2C, SPI, UART	28-SOIC	40M1426	2.27
PIC24FJ16GA004-I/PT	16	4	35	13	2	32	5	...	I2C, SPI, UART	44-TQFP	40M1433	2.58
PIC24FJ16GA004-E/PT	16	4	35	13	2	32	5	...	...	44-TQFP	98M1909	2.84
PIC24FJ32GA002-I/SP	32	8	21	10	2	32	5	...	I2C, SPI, UART	28-DIP	88K6123	2.68
PIC24FJ32GA002-I/SO	32	8	21	10	2	32	5	...	I2C, SPI, UART	28-SOIC	88K6122	2.49
PIC24FJ48GA004-I/PT	48	8	35	13	2	32	5	...	I2C, SPI, UART	44-TQFP	40M1446	2.97
PIC24FJ64GA002-E/SS	64	8	21	10	2	32	5	...	I2C, SPI, USART	28-SSOP	98M1925	3.12
PIC24FJ64GA002-I/SP	64	8	21	10	2	32	5	...	I2C, SPI, UART	28-DIP	88K6132	3.06
PIC24FJ64GA002-I/SS	64	8	21	10	2	32	5	...	I2C, SPI, UART	28-SSOP	40M1449	2.83
PIC24FJ64GA004-I/PT	64	8	35	13	2	32	5	...	I2C, SPI, UART	44-TQFP	88K6136	3.16
PIC24FJ64GA004-I/ML	64	8	35	13	2	32	5	...	I2C, SPI, UART	44-QFN	88K6135	3.28
PIC24FJ64GA006-I/PT	64	8	53	16	2	32	5	...	I2C, SPI, UART	64-TQFP	56K7343	3.01
PIC24FJ64GA008-I/PT	64	8	69	16	2	32	5	...	I2C, SPI, USART	80-TQFP	56K7345	3.35
PIC24FJ128GA006-I/PT	128	8	53	16	2	32	5	...	I2C, SPI, UART	64-TQFP	56K7337	3.33
PIC24FJ128GA010-I/PF	128	8	84	16	2	32	5	...	EUART, I2C, PSP, SPI	100-TQFP	74K8638	4.45
PIC24FJ128GA010-I/PT	128	8	84	16	2	32	5	...	EUART, I2C, PSP, SPI	100-TQFP	56K7341	3.97
PIC24FJ128GA106-I/PT	128	16	53	16	3	32	5	...	I2C, SPI, UART	64-TQFP	54M5089	4.61
PIC24FJ128GA106-I/MR	128	16	53	16	3	32	5	...	...	64-QFN	08R1994	4.72

CONTINUED

16-BIT PIC24 MICROCONTROLLERS (CONT.)

Mfg. Part No.	Prog. Mem. (KB)	RAM (KB)	I/O Pins	ADC (Ch)	Comp.	Max. Speed (MHz)	Timers 16-Bit	Timers 32-Bit	Interface	Package	Stock No.	Price Each 1-25
● PIC24FJ192GA106-I/PT	192	16	53	16	3	32	5	...	I2C, SPI, UART	64-TQFP	54M5105	4.90
● PIC24FJ256GA106-I/PT	256	16	53	16	3	32	5	...	I2C, SPI, UART	64-TQFP	54M5121	5.18
● PIC24FJ256GA110-I/PF	256	16	85	16	3	32	5	...	I2C, SPI, UART	100-TQFP	54M5125	6.32
● PIC24FJ256GA110-I/PT	256	16	85	16	3	32	5	...	I2C, SPI, UART	100-TQFP	54M5126	5.84
PIC24F FAMILY - GENERAL PURPOSE APPLICATIONS (16MIPS) w/ nanoWATT XLP												
● PIC24F16KA101-I/MQ	16	1.5	18	9	2	32	3	...	I2C, SPI, UART	20-QFN	08R2015	2.25
● PIC24F16KA102-I/ML	16	1.5	24	9	2	32	3	...	I2C, SPI, UART	28-QFN	40M1461	2.36
● PIC24F16KA102-I/SP	16	1.5	24	9	2	32	3	...	I2C, SPI, UART	28-DIP	40M1463	2.40
● PIC24F16KA102-I/SS	16	1.5	24	9	2	32	3	...	I2C, SPI, UART	28-SSOP	40M1464	2.18
● PIC24F16KA301-I/SS	16	2	18	12	3	32	5	...	I2C, SPI, UART	20-SSOP	79R3576	2.56
● PIC24F16KA302-I/SO	16	2	24	13	3	32	5	...	I2C, SPI, UART	28-SOIC	79R3580	2.83
● PIC24F16KA302-I/SS	16	2	24	13	3	32	5	...	I2C, SPI, UART	28-SSOP	79R3582	2.79
● PIC24F32KA301-I/SS	32	2	18	12	3	32	5	...	I2C, SPI, UART	20-SSOP	79R3594	2.76
● PIC24F32KA302-I/ML	32	2	24	13	3	32	5	...	I2C, SPI, UART	28-QFN	79R3597	3.10
● PIC24F32KA302-I/SO	32	2	24	13	3	32	5	...	I2C, SPI, UART	28-SOIC	79R3598	3.03
● PIC24F32KA302-I/SP	32	2	24	13	3	32	5	...	I2C, SPI, UART	28-DIP	79R3599	3.22
● PIC24F32KA304-I/PT	32	2	39	16	3	32	5	...	I2C, SPI, UART	44-TQFP	79R3606	3.35
● PIC24FJ32GA004-I/ML	32	8	35	13	2	32	5	...	...	44-QFN	88K6126	2.89
● PIC24FJ32GB002-I/SO	32	8	19	9	3	32	5	...	...	28-SOIC	07P9728	3.06
● PIC24FJ32GB002-I/SP	32	8	19	9	3	32	5	...	...	28-DIP	07P9729	3.26
● PIC24FJ32GB004-I/PT	32	8	33	13	3	32	5	...	...	44-TQFP	45P4819	3.35
● PIC24FJ64GA102-I/ML	64	8	...	10	3	32	5	...	I2C, LIN, SPI, USART	28-QFN	07P9732	3.24
● PIC24FJ64GA102-I/SP	64	8	...	10	3	32	5	...	I2C, LIN, SPI, USART	28-DIP	07P9734	3.35
● PIC24FJ64GB002-I/ML	64	8	...	9	3	32	5	...	I2C, LIN, SPI, UART, USB	28-QFN	07P9737	3.53
● PIC24FJ64GB002-I/SO	64	8	...	9	3	32	5	...	I2C, LIN, SPI, UART, USB	28-SOIC	07P9738	3.45
● PIC24FJ64GB002-I/SP	64	8	...	9	3	32	5	...	I2C, LIN, SPI, UART, USB	28-NDIP	07P9739	3.64
● PIC24FJ64GB004-I/PT	64	8	...	13	3	32	5	...	I2C, LIN, SPI, UART, USB	44-TQFP	45P4827	3.74
PIC24H FAMILY - HIGH PERFORMANCE APPLICATIONS (40MIPS)												
● PIC24HJ32GP204-I/PT	32	2	35	13	...	80	3	1	I2C, SPI, UART	44-TQFP	40M1514	3.45
● PIC24HJ64GP204-I/PT	64	4	35	13	2	80	5	2	I2C, SPI, UART	44-TQFP	40M1536	4.53
● PIC24HJ64GP504-I/PT	64	4	35	13	2	80	5	2	CAN, I2C, SPI, UART	44-TQFP	40M1547	4.93
● PIC24HJ64GP506A-I/PT	64	8	53	...	...	40	9	4	CAN, I2C, SPI, UART	64-TQFP	45P4882	4.95
● PIC24HJ128GP202-I/SP	128	8	21	10	2	80	5	2	I2C, SPI, UART	28-NDIP	40M1478	4.93
● PIC24HJ128GP210-I/PF	128	8	85	...	...	40	9	4	...	100-TQFP	74K8641	6.19
● PIC24HJ128GP306-I/PT	128	16	53	18	...	80	9	4	I2C, SPI, UART	64-TQFP	56K7358	5.22
● PIC24HJ128GP306A-I/PT	128	16	53	...	...	40	9	4	...	64-TQFP	45P4840	5.22
● PIC24HJ128GP502-I/SP	128	8	21	10	2	80	5	2	I2C, SPI, UART	28-SPDIP	40M1489	5.22
● PIC24HJ128GP504-I/PT	128	8	35	13	2	80	5	2	CAN, I2C, SPI, UART	44-TQFP	40M1494	5.34
● PIC24HJ128GP506-I/PT	128	8	53	18	...	80	9	4	CAN, I2C, SPI, UART	64-TQFP	56K7361	5.30
● PIC24HJ128GP506A-I/PT	128	8	53	...	...	40	9	4	CAN, I2C, SPI, UART	64-TQFP	45P4849	5.30
● PIC24HJ128GP510-I/PT	128	9	85	32	...	40	9	4	...	100-TQFP	56K7363	5.94
● PIC24HJ256GP206A-I/PT	256	16	...	18	...	80	9	...	I2C, LIN, SPI, UART	64-TQFP	45P4858	5.57
● PIC24HJ256GP206-I/PT	256	16	53	18	...	80	9	4	I2C, SPI, UART	64-TQFP	56K7364	5.57
● PIC24HJ256GP210-I/PF	256	16	85	32	...	80	9	4	I2C, SPI, UART	100-TQFP	74K8644	6.86
● PIC24HJ256GP610-I/PF	256	16	85	32	...	80	9	4	CAN, I2C, SPI, UART	100-TQFP	74K8645	7.48
● PIC24HJ256GP610-I/PT	256	16	85	32	...	80	9	4	CAN, I2C, SPI, UART	100-TQFP	56K7367	7.00
PIC24F FAMILY - GENERAL PURPOSE APPLICATIONS (16MIPS) w/ USB On-The-Go												
● PIC24FJ64GB106-I/PT	64	16	51	16	3	32	5	...	I2C, SPI, UART, USB	64-TQFP	54M5137	4.53
● PIC24FJ128GB106-I/PT	128	16	51	16	3	32	5	...	I2C, SPI, UART	64-TQFP	54M5097	4.86
● PIC24FJ128GB206-I/PT	128	96	52	16	3	32	5	...	I2C, SPI, UART, USB	64-TQFP	73R8639	5.92
● PIC24FJ256GB106-I/PT	256	16	51	16	3	32	5	...	I2C, SPI, UART	64-TQFP	54M5129	5.43
● PIC24FJ256GB108-I/PT	256	16	65	16	3	32	5	...	I2C, SPI, UART, USB	80-TQFP	54M5131	5.80
● PIC24FJ256GB110-I/PF	256	16	83	16	3	32	5	...	I2C, SPI, UART	100-TQFP	54M5133	6.57
● PIC24FJ256GB110-I/PT	256	16	83	16	3	32	5	...	I2C, SPI, UART	100-TQFP	54M5134	6.09
● PIC24FJ256DA110-I/PT	256	24	84	24	3	32	5	...	I2C, SPI, UART, USB	100-TQFP	73R8651	7.13
● PIC24FJ256DA206-I/PT	256	96	52	16	3	32	5	...	I2C, SPI, UART, USB	64-TQFP	73R8655	7.03
● PIC24FJ256GB206-I/PT	256	96	52	16	3	32	5	...	I2C, SPI, UART, USB	64-TQFP	73R8663	6.40
● PIC24FJ256GB210-I/PT	256	96	84	24	3	32	5	...	I2C, SPI, UART, USB	100-TQFP	73R8667	7.07
● PIC24FJ256DA210-I/PT	256	96	84	24	3	32	5	...	I2C, SPI, UART, USB	100-TQFP	73R8659	7.71
PIC24F FAMILY - EXTREME LOW POWER CONSUMPTION APPLICATIONS (16MIPS) w/ nanoWATT XLP												
● PIC24F04KL101-I/SO	4	0.5	17	0	1	32	2	...	I2C, SPI, UART	20-SOIC	64T1082	1.31
● PIC24F04KL101-I/SS	4	0.5	17	...	1	32	2	...	I2C, SPI, UART	20-SSOP	64T1083	1.16
● PIC24F08KL201-I/SS	8	0.5	17	12	1	32	2	...	I2C, SPI, UART	20-SSOP	64T1093	1.62
● PIC24F08KL201-I/SO	8	0.5	17	12	1	32	2	...	I2C, SPI, UART	20-SOIC	64T1092	1.76
● PIC24F08KL301-I/MQ	8	1	18	...	2	32	2	...	I2C, SPI, UART	20-QFN	64T1097	1.45
● PIC24F08KL301-I/P	8	1	18	...	2	32	2	...	I2C, SPI, UART	20-DIP	64T1098	1.72
● PIC24F08KL302-I/SS	8	1	24	...	2	32	2	...	I2C, SPI, UART	28-SSOP	64T1107	1.45
● PIC24F08KL302-I/SO	8	1	24	0	2	32	2	...	I2C, SPI, UART	28-SOIC	64T1105	1.49
● PIC24F16KL401-I/MQ	16	1	24	12	2	32	2	...	I2C, SPI, UART	20-QFN	64T1125	2.02
● PIC24F16KL401-I/P	16	1	18	12	2	32	2	...	I2C, SPI, UART	20-DIP	64T1126	2.30
● PIC24F16KL402-I/SO	16	1	24	12	2	32	2	...	I2C, SPI, UART	28-SOIC	64T1133	2.06
● PIC24F16KL402-I/SP	16	1	24	12	2	32	2	...	I2C, SPI, UART	28-SPDIP	64T1134	2.25
● PIC24F16KL402-I/SS	16	1	24	12	2	32	2	...	I2C, SPI, UART	28-SSOP	64T1135	2.02

➤CONTINUED➤

16-BIT PIC24 MICROCONTROLLERS (CONT.)

PIC24F FAMILY - EXTREME LOW POWER CONSUMPTION APPLICATIONS (16MIPS) w/ nanoWATT XLP

Mfg. Part No.	Prog. Mem. (KB)	RAM (KB)	I/O Pins	ADC (Ch)	Comp.	Max. Speed (MHz)	Timers 16-Bit	Timers 32-Bit	Interface	Package	Stock No.	Price Each 1-25
PIC24FJ64GA306-I/PT	64	8	53	16	3	32	5	...	I2C, SPI, UART	64-TQFP	39T6767	3.53
PIC24FJ64GA310-I/PT	64	8	85	24	3	32	5	...	I2C, SPI, UART	100-TQFP	39T6771	4.07
PIC24FJ128GA306-I/PT	128	8	53	16	3	32	5	...	I2C, SPI, UART	64-TQFP	39T6753	3.84
PIC24FJ128GA310-I/PT	128	8	85	24	3	32	5	...	I2C, SPI, UART	100-TQFP	39T6757	4.41
PIC24FV FAMILY - GENERAL PURPOSE APPLICATIONS (16MIPS) w/ nanoWATT XLP												
PIC24FV08KM202-I/ML	8	2	24	19	3	32	1	...	I2C, SPI, UART, USB	28-QFN	47W7469	2.58
PIC24F08KM202-I/ML	8	2	24	19	3	32	1	...	I2C, SPI, UART, USB	28-QFN	47W7520	2.58
PIC24F16KM102-I/ML	16	1	24	19	1	32	1	...	I2C, SPI, UART, USB	28-QFN	47W7532	2.58
PIC24FV16KM102-I/ML	16	1	24	19	1	32	1	...	I2C, SPI, UART, USB	28-QFN	47W7482	2.58
PIC24FV16KM202-I/ML	16	2	24	19	3	32	1	...	I2C, SPI, UART, USB	28-QFN	47W7495	2.68
PIC24FV16KM202-I/SO	16	2	24	19	3	32	1	...	I2C, SPI, UART, USB	28-SOIC	47W7496	2.60
PIC24FV16KM202-I/SP	16	2	24	19	3	32	1	...	I2C, SPI, UART, USB	28-SPDIP	47W7497	2.79
PIC24FV16KM204-I/ML	16	2	38	22	3	32	1	...	I2C, SPI, UART, USB	44-QFN	47W7502	3.05
PIC24FV16KM204-I/PT	16	2	38	22	3	32	1	...	I2C, SPI, UART, USB	44-TQFP	47W7504	2.93
PIC24F16KM202-I/ML	16	2	24	19	3	32	1	...	I2C, SPI, UART, USB	28-QFN	47W7545	2.68
PIC24F16KM202-I/SO	16	2	24	19	3	32	1	...	I2C, SPI, UART, USB	28-SOIC	47W7546	2.60
PIC24F16KM202-I/SP	16	2	24	19	3	32	1	...	I2C, SPI, UART, USB	28-SPDIP	47W7547	2.79
PIC24F16KM204-I/ML	16	2	38	22	3	32	1	...	I2C, SPI, UART, USB	44-QFN	47W7552	3.05
PIC24F16KM204-I/PT	16	2	38	22	3	32	1	...	I2C, SPI, UART, USB	44-TQFP	47W7554	2.93
PIC24FV16KA301-I/P	16	2	17	12	3	32	5	...	I2C, SPI, UART	20-DIP	13T4780	2.90
PIC24FV16KA301-I/SO	16	2	17	12	3	32	5	...	I2C, SPI, UART	20-SOIC	13T4781	2.72
PIC24FV16KA302-I/ML	16	2	23	13	3	32	5	...	I2C, SPI, UART	28-QFN	13T4789	2.91
PIC24FV16KA302-I/SO	16	2	23	13	3	32	5	...	I2C, SPI, UART	28-SOIC	13T4790	2.83
PIC24FV16KA302-I/SP	16	2	23	13	3	32	5	...	I2C, SPI, UART	28-DIP	13T4791	3.03
PIC24FV16KA302-I/SS	16	2	23	13	3	32	5	...	I2C, SPI, UART	28-SSOP	13T4792	2.79
PIC24FV16KA304-I/ML	16	2	38	16	3	32	5	...	I2C, SPI, UART	44-QFN	13T4799	3.28
PIC24FV16KA304-I/PT	16	2	38	16	3	32	5	...	I2C, SPI, UART	44-TQFP	13T4801	3.16
PIC24FV32KA301-I/P	32	2	17	12	3	32	5	...	I2C, SPI, UART	20-DIP	13T4808	3.09
PIC24FV32KA301-I/SS	32	2	17	12	3	32	5	...	I2C, SPI, UART	20-SSOP	13T4810	2.76
PIC24FV32KA302-I/ML	32	2	23	13	3	32	5	...	I2C, SPI, UART	28-QFN	13T4817	3.10
PIC24FV32KA302-I/SO	32	2	23	13	3	32	5	...	I2C, SPI, UART	28-SOIC	13T4818	3.03
PIC24FV32KA302-I/SP	32	2	23	13	3	32	5	...	I2C, SPI, UART	28-SPDIP	13T4819	3.22
PIC24FV32KA302-I/SS	32	2	23	13	3	32	5	...	I2C, SPI, UART	28-SSOP	13T4820	2.99
PIC24FV32KA304-I/ML	32	2	38	16	3	32	5	...	I2C, SPI, UART	44-QFN	13T4827	3.47
PIC24FV32KA304-I/MV	32	2	38	16	3	32	5	...	I2C, SPI, UART	44-UQFN	13T4828	3.45
PIC24FV32KA304-I/PT	32	2	38	16	3	32	5	...	I2C, SPI, UART	44-TQFP	13T4829	3.35
PIC24EP FAMILY - GENERAL PURPOSE APPLICATIONS (70MIPS)												
PIC24EP256GU810-I/PT	256	28	83	2	3	140	9	...	CAN, I2C, SPI, UART, USB	100-TQFP	65R6070	7.56
PIC24EP256GU814-I/PH	256	28	122	2	3	140	9	...	CAN, I2C, SPI, UART, USB	144-TQFP	65R6075	8.40
PIC24EP256GU814-I/PL	256	28	122	2	3	140	9	...	CAN, I2C, SPI, UART, USB	144-LQFP	65R6076	8.65
PIC24EP512GU810-I/PF	512	52	83	2	3	140	9	...	CAN, I2C, SPI, UART, USB	100-TQFP	65R6079	8.96
PIC24EP512GU810-I/PT	512	52	83	2	3	140	9	...	CAN, I2C, SPI, UART, USB	100-TQFP	65R6080	8.48

(87546)

16-BIT DSPIC DIGITAL SIGNAL CONTROLLERS

16-bit dsPIC® Digital Signal Controllers (DSCs) make your demanding applications more competitive by providing lower system cost and improved efficiency. Choose from either the dsPIC30(30MIPS) or dsPIC33(40MIPS) for higher performance.

RoHS Compliant Available

MICROCHIP

GENERAL PURPOSE FAMILY

Mfg. Part No.	Program Memory (KB)	RAM (Bytes)	EEPROM (Bytes)	I/O Pins	ADC	Comp-arators	Timers 16-Bit	Timers 32-Bit	Interface	Package	Stock No.	Price Each 1-25
DSPIC33FJ06GS001-I/P	6	256	...	13	6 x 16bit	2	3	1	I2C, SPI, UART	18-DIP	72T9351	2.37
DSPIC33FJ06GS001-I/SO	6	256	...	13	6 x 16bit	2	3	1	I2C, SPI, UART	18-SOIC	72T9352	2.23
DSPIC33FJ06GS001-I/SS	6	256	...	13	6 x 16bit	2	3	1	I2C, SPI, UART	20-SSOP	72T9353	2.23
DSPIC33FJ06GS101A-I/P	6	256	...	13	6 x 16bit	...	3	1	I2C, SPI, UART	18-DIP	72T9361	2.55
DSPIC33FJ06GS101A-I/SO	6	256	...	13	6 x 16bit	...	3	1	I2C, SPI, UART	18-SOIC	72T9362	2.42
DSPIC33FJ06GS101A-I/SS	6	256	...	13	6 x 16bit	...	3	1	I2C, SPI, UART	20-SSOP	72T9363	2.42
DSPIC33FJ06GS102A-I/TL	6	256	...	21	6 x 16bit	...	3	1	I2C, SPI, UART	36-VTLA	72T9377	2.91
DSPIC33FJ06GS202A-I/TL	6	1K	...	21	6 x 16bit	2	3	1	I2C, SPI, UART	36-VTLA	72T9395	3.06
DSPIC33FJ09GS302-I/TL	9	1K	...	21	9 x 16bit	2	3	1	I2C, SPI, UART	36-VTLA	72T9413	3.22
DSPIC33FJ12GP201-I/P	12	1K	...	13	6 x 12bit	...	3	1	I2C, JTAG, SPI, UART	18-DIP	16M5785	2.97
DSPIC33FJ16MC102-I/SP	16	1K	...	21	6 x 10bit	...	3	1	I2C, SPI, UART	28-DIP	13T3166	2.54
DSPIC30F3014-20I/PT	24	2K	1K	30	13 x 12bit	...	3	1	I2C, SPI, UART	44-TQFP	71J3747	4.49
DSPIC30F3014-20I/P	24	2K	1K	30	13 x 12bit	...	3	1	I2C, SPI, UART	40-DIP	71J3746	4.62
DSPIC30F3014-30I/PT	24	2K	1K	30	13 x 12bit	...	3	1	I2C, SPI, UART	44-TQFP	71J3750	4.49
DSPIC30F4013-20I/P	48	2K	1K	30	13 x 12bit	...	5	2	CAN, I2C, SPI, UART	40-DIP	71J3767	5.55
DSPIC30F4013-30I/P	48	2K	1K	30	13 x 12bit	...	5	2	CAN, I2C, SPI, UART	40-DIP	71J3770	5.55
DSPIC30F4013-30I/PT	48	2K	1K	30	13 x 12bit	...	5	2	CAN, I2C, SPI, UART	44-TQFP	71J3771	5.41
DSPIC30F4013-20I/PT	48	2K	1K	30	13 x 12bit	...	5	2	CAN, I2C, SPI, UART	44-TQFP	71J3768	5.41
DSPIC33FJ64GP802-I/SP	64	16K	...	21	10 x 12bit	2	5	2	CAN, I2C, SPI, UART	28-DIP	39M8225	4.90
DSPIC33FJ64GP802-I/SO	64	16K	...	21	10 x 12bit	2	5	2	CAN, I2C, SPI, UART	28-SOIC	39M8224	4.70
DSPIC30F5011-20I/PTG	66	4K	1K	52	16 x 12bit	...	5	2	CAN, I2C, SPI, UART	64-TQFP	18J1120	6.87
DSPIC30F5011-30I/PT	66	4K	1K	52	16 x 12bit	...	5	2	CAN, I2C, SPI, UART	64-TQFP	88H5554	7.21

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16-BIT DSPIC DIGITAL SIGNAL CONTROLLERS (CONT.)

Mfg. Part No.	Program Memory (KB)	RAM (Bytes)	EEPROM (Bytes)	I/O Pins	ADC	Comp-arators	Timers 16-Bit	Timers 32-Bit	Interface	Package	Stock No.	Price Each 1-25
● DSPIC30F5013-20I/PT	66	4K	1K	68	16 x 12bit	...	5	2	CAN, I2C, SPI, UART	80-TQFP	96K3653	7.58
● DSPIC33FJ128GP204-I/PT	128	8K	...	35	13 x 12bit	2	5	2	I2C, SPI, UART	44-TQFP	39M8113	4.93
● DSPIC33FJ128GP802-E/MM	128	16K	...	21	10 x 12bit	2	5	2	...	28-QFN-S	54M4500	5.75
● DSPIC33FJ128GP802-E/SP	128	16K	...	21	10 x 12bit	2	5	2	CAN, I2C, SPI, UART	28-DIP	39M8117	5.83
● DSPIC33FJ128GP802-I/SP	128	16K	...	21	10 x 12bit	2	5	2	CAN, I2C, SPI, UART	28-SPDIP	39M8119	5.32
● DSPIC33FJ128GP804-E/PT	128	16K	...	35	13 x 12bit	2	5	2	...	44-TQFP	39M8122	6.00
● DSPIC33FJ128GP804-I/PT	128	16K	...	35	13 x 12bit	2	5	2	CAN, I2C, SPI, UART	44-TQFP	39M8124	5.45
● DSPIC30F6011A-30I/PF	132	6K	2K	52	16 x 12bit	...	5	2	CAN, I2C, SPI, UART	64-TQFP	74K4945	10.45
● DSPIC30F6011A-30I/PT	132	6K	2K	52	16 x 12bit	...	5	2	I2C, SPI, UART	64-TQFP	71J3800	9.54
● DSPIC30F6012A-30I/PF	144	8K	4K	52	16 x 12bit	...	5	2	CAN, I2C, SPI, UART	64-TQFP	74K4947	10.54
● DSPIC30F6012A-30I/PT	144	8K	4K	52	16 x 12bit	...	5	2	CAN, I2C, SPI, UART	64-TQFP	71J3806	9.63
● DSPIC30F6014A-20E/PT	144	8K	4K	68	16 x 12bit	...	5	2	I2C, SPI, UART	80-TQFP	71J3816	11.03
● DSPIC30F6014A-30I/PT	144	8K	4K	68	16 x 12bit	...	5	2	CAN, I2C, SPI, UART	80-TQFP	71J3818	10.03
● DSPIC33EP256MU806-I/PT	256	28K	...	51	24 x 10bit	3	9	4	I2C, SPI, USB, UART	64-TQFP	65R5390	6.90
● DSPIC33EP256MU806-I/MR	256	28K	...	51	24 x 10bit	3	9	4	I2C, SPI, USB, UART	64-QFN	65R5389	7.02
● DSPIC33EP256MU810-I/PT	256	28K	...	83	24 x 10bit	3	9	4	I2C, SPI, USB, UART	100-TQFP	65R5396	7.56
● DSPIC33FJ256GP710-I/PF	256	32K	...	85	32 x 12bit	...	9	4	DCI, ECAN, I2C, SPI, UART	100-TQFP	74K4957	7.81
● DSPIC33FJ256GP710-I/PT	256	32K	...	85	32 x 12bit	...	9	4	DCI, ECAN, I2C, SPI, UART	100-TQFP	56K6750	7.32
● DSPIC33FJ256GP710A-I/PF	256	30K	...	85	32 x 12bit	...	9	4	CAN, I2C, SPI, UART	100-TQFP	45P4655	7.81
● DSPIC33EP512MU810-I/PT	512	52K	...	83	2 x 32bit	3	9	4	I2C, SPI, USB, UART	100-TQFP	65R5406	8.48
● DSPIC33EP512MU810-I/PF	512	52K	...	83	2 x 32bit	3	9	4	I2C, SPI, USB, UART	100-TQFP	65R5405	8.96
● DSPIC33EP512MU810-I/BG	512	52K	...	83	2 x 32bit	3	9	4	I2C, SPI, USB, UART	100-TFBGA	73R8366	8.69
● DSPIC33EP512MU814-I/PH	512	52K	...	122	2 x 32bit	3	9	4	I2C, SPI, USB, UART	144-TQFP	65R5411	9.33
● DSPIC33EP512MU814-I/PL	512	52K	...	122	2 x 32bit	3	9	4	I2C, SPI, USB, UART	144-LQFP	65R5412	9.58
MOTOR CONTROL AND POWER CONVERSION FAMILY												
● DSPIC30F2010-20I/SP	12	512	1K	20	6 x 10bit	...	3	1	I2C, SPI, UART	28-NDIP	88H5548	3.54
● DSPIC30F2010-30I/SP	12	512	1K	20	6 x 10bit	...	3	1	I2C, SPI, UART	28-NDIP	88H5550	3.71
● DSPIC33FJ12MC202-I/ML	12	1K	...	21	6 x 10bit	...	3	1	I2C, JTAG, SPI, UART	28-QFN	88K3897	3.33
● DSPIC30F3010-30I/SP	24	1K	1K	20	6 x 10bit	...	5	2	I2C, SPI, UART	28-NDIP	71J3690	4.36
● DSPIC30F3011-20I/P	24	1K	1K	30	9 x 10bit	...	5	2	I2C, SPI, UART	40-DIP	71J3701	4.73
● DSPIC30F3011-30I/P	24	1K	1K	30	9 x 10bit	...	5	2	I2C, SPI, UART	40-DIP	71J3704	4.73
● DSPIC30F3011-30I/PT	24	1K	1K	30	9 x 10bit	...	5	2	I2C, SPI, UART	44-TQFP	71J3705	4.60
● DSPIC33FJ32MC204-E/PT	32	2K	...	35	...	...	3	1	I2C, SPI, UART	44-TQFP	39M8195	4.18
● DSPIC33FJ32MC204-I/ML	32	2K	...	35	9 x 10bit	...	3	1	I2C, SPI, UART	QFN	39M8196	3.91
● DSPIC33FJ32MC204-I/PT	32	2K	...	35	9 x 10bit	...	3	1	I2C, SPI, UART	TQFP	39M8197	3.80
● DSPIC30F4011-20I/P	48	2K	1K	30	9 x 10bit	...	5	2	CAN, I2C, SPI, UART	40-DIP	56J7040	5.70
● DSPIC30F4011-20E/P	48	2K	1K	30	9 x 10bit	...	5	2	I2C, SPI, UART	40-PDIP	56J7037	6.25
● DSPIC30F4011-30I/P	48	2K	1K	30	9 x 10bit	...	5	2	CAN, I2C, SPI, UART	40-DIP	68K3309	5.70
● DSPIC30F4011-30I/PT	48	2K	1K	30	9 x 10bit	...	5	2	CAN, I2C, SPI, UART	44-TQFP	56J7044	5.56
● DSPIC30F4011-20I/PT	48	2K	1K	30	9 x 10bit	...	5	2	CAN, I2C, SPI, UART	44-TQFP	56J7041	5.56
● DSPIC30F4012-30I/SP	48	2K	1K	20	6 x 10bit	...	5	2	CAN, I2C, SPI, UART	28-NDIP	68K3310	5.32
● DSPIC30F4012-30I/SO	48	2K	1K	20	6 x 10bit	...	5	2	CAN, I2C, SPI, UART	28-SOIC	56J7055	5.14
● DSPIC30F4013-20E/PT	48	2K	1K	30	13 x 12bit	...	3	1	I2C, SPI, UART	44-TQFP	71J3765	5.95
● DSPIC33FJ64MC506-I/PT	64	8K	...	53	16 x 12bit	...	9	4	CAN, I2C, SPI, UART	64-TQFP	56K6763	5.28
● DSPIC33FJ64MC804-I/PT	64	16K	...	35	9 x 10bit	2	5	2	CAN, I2C, SPI, UART	44-TQFP	39M8252	5.36
● DSPIC30F5015-30I/PT	66	2K	1K	52	16 x 10bit	...	5	2	CAN, I2C, SPI, UART	64-TQFP	71J3782	7.03
● DSPIC33FJ128MC506-I/PT	128	8K	...	53	16 x 12bit	...	9	4	CAN, I2C, SPI, UART	64-TQFP	56K6739	5.65
● DSPIC33FJ128MC706-I/PT	128	16K	...	53	16 x 12bit	...	9	4	CAN, I2C, SPI, UART	64-TQFP	56K6742	6.19
● DSPIC33FJ128MC708-I/PT	128	16K	...	69	18 x 12bit	...	9	4	CAN, I2C, SPI, UART	80-TQFP	56K6744	6.88
● DSPIC33FJ128MC802-E/SP	128	16K	...	21	6 x 10bit	2	5	2	CAN, I2C, SPI, UART	28-SPDIP	39M8139	5.98
● DSPIC33FJ128MC804-E/ML	128	16K	...	35	9 x 10bit	2	5	2	...	44-QFN	39M8143	6.52
● DSPIC33FJ128MC804-E/PT	128	16K	...	35	9 x 10bit	2	5	2	...	44-TQFP	39M8144	6.40
● DSPIC33FJ128MC804-I/PT	128	16K	...	35	9 x 10bit	2	5	2	CAN, I2C, SPI, UART	44-TQFP	39M8146	5.82
● DSPIC30F6010A-30I/PF	144	8K	4K	68	16 x 10bit	...	5	2	CAN, I2C, SPI, UART	80-TQFP	74K4943	11.10
● DSPIC30F6010A-30I/PT	144	8K	4K	68	16 x 10bit	...	5	2	CAN, I2C, SPI, UART	80-TQFP	71J3794	10.19
● DSPIC30F6015-30I/PT	144	8K	4K	52	16 x 10bit	...	5	2	CAN, I2C, SPI, UART	64-TQFP	71J3824	9.94
● DSPIC33FJ256MC710-I/PF	256	32K	...	85	24 x 12bit	...	9	4	CAN, I2C, SPI, UART	100-TQFP	74K4959	8.29
SENSOR FAMILY												
● DSPIC30F3012-20I/P	24	2K	1K	12	8 x 12bit	...	3	1	I2C, SPI, UART	18-DIP	54K2748	3.80
● DSPIC30F3012-30I/P	24	2K	1K	12	8 x 12bit	...	3	1	I2C, SPI, UART	18-DIP	68K3305	3.80
● DSPIC30F3012-30I/SO	24	2K	1K	12	8 x 12bit	...	3	1	I2C, SPI, UART	18-SOIC	68K3306	3.71
● DSPIC30F3013-30I/SP	24	2K	1K	20	10 x 12bit	...	3	1	I2C, SPI, UART	28-NDIP	71J3735	4.01
● DSPIC30F3013-20I/SP	24	2K	1K	20	10 x 12bit	...	3	1	I2C, SPI, UART	28-NDIP	68K3308	4.01
● DSPIC30F3013-30I/SO	24	2K	1K	20	10 x 12bit	...	3	1	I2C, SPI, UART	28-SOIC	71J3734	3.83
SMPS & DIGITAL POWER CONVERSION FAMILY												
● DSPIC30F1010-30I/SP	6	256	...	20	...	2	2	0	I2C, SPI, UART	28-SPDIP	88K3875	4.09
● DSPIC30F2020-20E/SP	12	512	...	21	8 x 10bit	4	3	1	I2C, SPI, UART	28-NDIP	88K3880	5.70
● DSPIC30F2020-30I/SP	12	512	...	21	8 x 10bit	4	3	1	I2C, SPI, UART	28-NDIP	88K3883	5.20
SWITCH MODE POWER SUPPLY FAMILY												
● DSPIC33FJ16GS502-I/SO	16	2048	...	21	8 x 10bit	4	3	1	I2C, SPI, UART	28-SOIC	77M2354	4.18
● DSPIC33FJ16GS502-I/SP	16	2048	...	21	8 x 10bit	4	3	1	I2C, SPI, UART	28-DIP	77M2355	4.37
● DSPIC33FJ16GS504-I/PT	16	2048	...	35	12 x 10bit	4	3	1	I2C, SPI, UART	44-TQFP	77M2361	4.70

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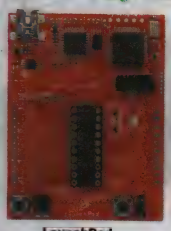
MSP430 LAUNCHPAD VALUE LINE DEVELOPMENT KIT

RoHS Compliant Available

TEXAS INSTRUMENTS

Features
- 14-/20-pin DIP (N) socket
- Built-in flash emulation for debugging and programming
- 2 programmable LEDs
- 1 power LED
- 1 programmable button
- 1 reset button
- Preloaded sample programs.



LaunchPad

Capacitive Touch BoosterPack

Kit Contents
- 10-pin PCB Connector (2 male/2 female)
- 32kHz crystal
- LaunchPad Development board (MSP-EXP430G2)
- LaunchPad sticker
- MSP430G2211IN14 flash device (preloaded with sample program)
- MSP430G2231IN14 flash device (preloaded with sample program)
- Mini USB cable
- QuickStart Guide

MSP-EXP430G2 LaunchPad is an easy-to-use flash programmer and debugging tool that provides everything you need to start developing on MSP430 Value Line devices. It includes a 14-/20-pin DIP socketed target board with integrated emulation to quickly program and debug MSP430 Value Line devices in-system through the Spy Bi-Wire (2-wire JTAG) protocol. The flash memory can be erased and programmed in seconds with no external power supply required due to the MSP430's ultra-low power flash. LaunchPad interfaces MSP430 devices to an free and unrestricted integrated software environment such as Code Composer Studio Version 4 or IAR Embedded Workbench for all MSP430G2xx flash parts in a 14 or 20 pin DIP package.

MSP430 LAUNCHPAD

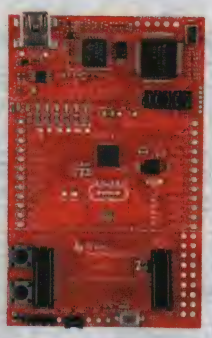
Mfg. Part No.	Description	Stock No.	Price Each
MSP-EXP430G2	LaunchPad Value Line Development Tool	77R3863	10.01
BOOSTER PAKS (DAUGHTER CARDS)			
430BOOST-SENSE1	Capacitive Touch BoosterPack	34T5679	10.20
● 430BOOST-TMP006	Contactless Temp Sensor	06W4605	25.50
TPL0501EVM	256pos Single Linear Digital Pot	64T4197	20.40
430BOOST-C55AUDIO1	Audio Capacitive Touch	94T1965	35.10
● 430BOOST-CC110L	CC110L Low-Power RF TX/RX (2pcs)	74T6826	19.40
● A2530E24A-LPZ	Boosterpack Kit with range extender	47W2934	135.85
● A2530R24A-LPZ	Air Module Boosterpack kit	47W2936	135.85

(178813)

MSP-EXP430FR5739 EXPERIMENTERS BOARD

TEXAS INSTRUMENTS

Features
- MSP430FR5739, 16Bit, 16KB FRAM, 8MHz
- 3 axis accelerometer
- NTC Thermister
- 8 Display LED's
- Footprint for additional through-hole LDR sensor
- 2 User input Switches
- Connection to MSP-EXP430F5438
- Connection to most Wireless Daughter Cards (CCxxxx RF)



MSP-EXP430FR5739 Experimenter Board is a development platform for the MSP430FR57xx devices which features integrated Ferroelectric Random Access Memory (FRAM). MSP430FR57xx MCUs provides very low overall power consumption, fast data read /write and unbeatable memory endurance. The Experimenter Board can help evaluate and drive development for data logging applications, energy harvesting, wireless sensing, automatic metering infrastructure (AMI) and many others. The MSP430FR5739 device on the experimenter board can be powered and debugged via the integrated ezFET, or via TI Flash Emulation Tool, like the MSP-FET430UIF.

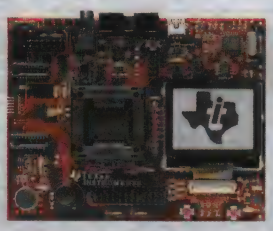
Mfg. Part No.	Description	Stock No.	Price Each
MSP-EXP430FR5739	FRAM Device Eval Board	45T9740	35.70
MSP-FET430U40A	FRAM FET Tool and 40-Pin Target Board	45T9743	178.50

(200565)

MSP430F5438 EXPERIMENTER BOARD

TEXAS INSTRUMENTS

TAS3108EVM2 features
- 100-pin socket for MSP430F5438
- 256KB Flash Memory
- 16KB RAM
- 18MHz Clock Speed
- 4x UART/LIN/IrDA/SPI
- 4x I2C/SPI
- 5-position joystick (up, down, left, right, push down)
- 138x110 grayscale, dot-matrix LCD
- 3-Axis Accelerometer (ADXL330)
- Microphone (Amplified by TLV2760)
- 3.5mm audio output jack (Features TPA301, 350mW Mono Audio Power Amplifier)
- Support for TI Low Power RF Wireless Evaluation Modules and eZ430-RF2500T
- USB connectivity for data transfer
- JTAG header for real-time, in-system programming



➤CONTINUED➤

MSP430F5438 EXPERIMENTER BOARD (CONT.)

MSP430F5438 experimenter board is a development platform for the latest generation MSP430 MCUs. The experimenter board helps designers quickly learn and develop using the new F5xx MCUs, which provide low active power consumption, more memory and leading integration for applications such as energy harvesting, wireless sensing and automatic metering infrastructure (AMI). A Flash Emulation Tool, like the MSP-FET430UIF, is required to program and debug the MSP430 devices on the experimenter board.

Mfg. Part No.	Description	Stock No.	Price Each
MSP-EXP430F5438	MSP430 Experimenter Board	09R4951	178.50

(148611)

CC3000 FRAM EVALUATION MODULE KIT

TEXAS INSTRUMENTS

Features
- Embedded Wi-Fi and networking software including drivers, stack, and supplicant
- Universal IP connectivity enabled anywhere
- Pair easily with low-memory, low-cost, low-power microcontroller systems
- Implement Wi-Fi quickly without previous Wi-Fi or RF experience
- Long range, reliable coverage throughout the entire house
- Proven Wi-Fi interoperability
- Complete platform solution and certified modules
- Get started quickly with sample applications on multiple platforms
- Comprehensive documentation and support community
- Wi-Fi, FCC /IC /ETSI certified
- Porting documentation available to allow MCU flexibility

CC3000 FRAM Evaluation Module Kit is a full turn-key Wi-Fi evaluation and demonstration tool for MSP430 FRAM MCUs and Simplelink Wi-Fi modules and includes all of the necessary hardware and software to get started quickly. SimpleLink™ CC3000 Wi-Fi is a self-contained wireless solution that simplifies the process of implementing Internet connectivity and minimizes host microcontroller (MCU) software requirements making it the ideal solution for embedded applications. The kit also allows users to take advantage of the new gnereation of MSP430 microcontroller devices with integrated Ferroelectric Random Access Memory (FRAM). **CC3000 FRAM Evaluation Module Kit** is available with the LS Research(LSR) CC3000-TiWi-SL module and/or the Murata CC3000-Type VK module. The EM boards have standard RF1 & RF2 headers that connect to many TI platforms including some kits for MSP430, Stellaris and C5000 DSP. SimpleLink™ CC3000 Wi-Fi modules can also be purchased separately.

Mfg. Part No.	Description	Stock No.	Price Each
CC3000FRAMEMK-M	FRAM Wi-FI Eval Kit w/ Murata VK module and EM	92T2025	159.00

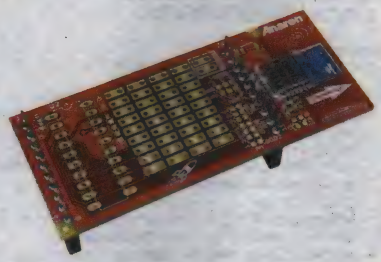
(210342)

CC110L RF BOOSTERPACK FOR MSP-EXP430G2 LAUNCHPAD

RoHS Compliant Available

TEXAS INSTRUMENTS

Features
- 1.8 to 3.6 V operation
- Low power consumption
- SPI interface between RF module and MSP430
- Prototyping area
- MCU, pushbutton switch, and LED footprints
- ROHS and REACH compliant
- Module is ETSI compliant and FCC/IC certified



Kit Contains
- Two CC110L RF BoosterPack boards
- Two MSP430G2553 devices (preloaded with a sample program)
- Quick Start Guide
- CD with software and documentation

CC110L RF BoosterPack is a low-power wireless transceiver extension kit for use with the MSP-EXP430G2 LaunchPad development kit. Based on the CC110L device, the on-board Anaren Integrated Radio (AIR) A110LR09A radio module with integrated antenna operates in the European 868-870MHz and US 902-928MHz ISM bands. The included software application, called AIR BoosterStack, demonstrates an example sensor network as well as network status reporting.

Mfg. Part No.	Description	Stock No.	Price Each
● 430BOOST-CC110L	CC110L RF BoosterPack	74T6826	19.40

(200553)

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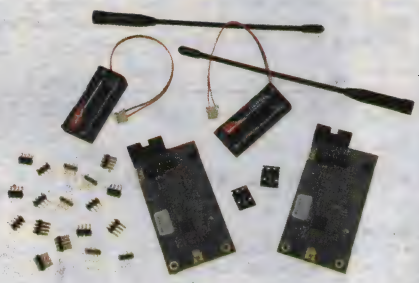
(196560)

CC430 WIRELESS DEVELOPMENT TOOL

TEXAS INSTRUMENTS

Features
- 2 XCC430F6137
- AES-128 hardware encryption module
- 96 segment LCD Driver
- 1 USCI (UART, 2xSPI, I2C, IrDA)
- 12-bit ADC, 200 ksps
- 2 LEDs / CC430 wireless target board
- 2 pushbuttons / CC430 wireless target board
- 18 4x2 pin headers
- 2 AAA battery packs with 2-wire power connectors

Kit Contents
- 2 CC430 wireless target boards
- 2 868/915 MHz Antennas
- Software
- Full Documentation



EM430F6137RF900 is a complete wireless development tool for the CC430 that includes all the hardware required to develop an entire wireless project. The sample kit includes two sub-1GHz wireless target boards (including antennas) featuring the highly integrated MSP430F6137IRGC RF System-on-chip. Projects may be developed and instantly deployed using the included batteries. The EM430F6137RF900 development board supports all CC430F613x and CC430F612x flash parts in the 64-pin QFN (RGC) package. It also supports software development for the CC430F513x parts (48-pin QFN (RGZ) package).

Mfg. Part No.	Description	Stock No.	Price Each
EM430F6137RF900	CC430 Wireless Development Tool	63R9909	151.98

(196448)

MSP430F2013 EZDSP USB STICK DEVELOPMENT TOOL

TEXAS INSTRUMENTS

Features:
- **eZ430-F2013** development tool including a USB debugging interface and detachable **MSP430F2013** target board
- LED indicator
- Removable USB stick enclosure
- Debugging interface supports development with all **MSP430F20xx** devices
- Integrated IAR Kickstart user interface which includes an assembler, linker, simulator, source-level debugger and limited C-compiler
- Full documentation on CD-ROM

The **eZ430-F2013** is a complete **MSP430** development tool including all the hardware and software to evaluate the MSP430F2013 and develop a complete project in a convenient USB stick form factor. The IAR Embedded Workbench Integrated Development Environment (IDE) provides full emulation with the option of designing with a stand-alone system or detaching the removable target board to integrate into an existing design. The USB port provides enough power to operate the ultra-low-power **MSP430** so no external power supply is required.

Mfg. Part No.	Decription	Stock No.	Price Each
EZ430-F2013	MSP430 USB Stick Development Tool	87K7632	24.48

(100980)

eZ430 - CHRONOS WIRELESS WATCH DEVELOPMENT TOOL

TEXAS INSTRUMENTS

Features
- Fully functional sports watch based on the CC430F6137, an MSP430 with integrated <1GHz wireless transceiver
- Watch reprogrammable for custom wireless applications
- Highly integrated watch includes on-board 3-axis accelerometer, pressure sensor, temperature sensor, battery voltage sensor
- 96-Segment LCD display driven directly by CC430
- Can be paired wirelessly with heart rate monitors, pedometers or other devices based RF transceivers like the CC1101 or SoCs such as the CC430 or CC111x
- Includes an eZ430 USB emulator that connects the Chronos to a PC for real-time, in-system programming and debugging
- Includes IAR Kickstart and Code Composer Studio integrated development environments which includes an assembler, linker, simulator, source-level debugger, and code limited C-compiler

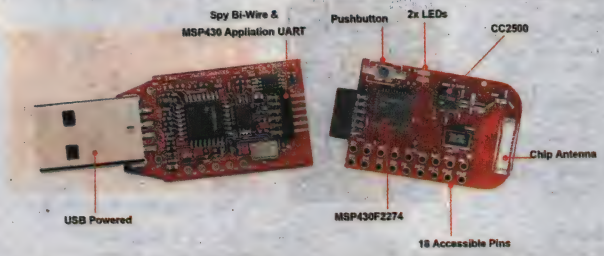
eZ430-Chronos is a highly integrated, CC430F6137 based wearable wireless development system based for the CC430 in a sports watch. It may be used as a reference platform for watch systems, a personal display for personal area networks, or as a wireless sensor node for remote data collection. The integrated wireless feature allows the Chronos to act as a central hub for nearby wireless sensors such as pedometers and heart rate monitors. The eZ430-Chronos offers temperature and battery voltage measurement and is complete with a USB-based CC1111 wireless interface to a PC. The eZ430-Chronos watch may be disassembled to be reprogrammed with a custom application and includes an eZ430 USB programming interface.

Mfg. Part No.	Description	Stock No.	Price Each
EZ430-CHRONOS-433	eZ430-Chronos 433MHz RF	55R3045	59.16
EZ430-CHRONOS-868	eZ430-Chronos 868MHz RF	55R3046	59.16
EZ430-CHRONOS-915	eZ430-Chronos 915MHz RF	51R4690	59.16

(163829)

EZ430-RF2500 WIRELESS DEVELOPMENT TOOLS

TEXAS INSTRUMENTS



eZ430-RF2500 is a complete wireless development tool for the MSP430 and CC2500 that includes all the hardware and software required to develop an entire wireless project with the MSP430 in a convenient USB stick. The **eZ430-RF2500T** is an additional wireless target board for the eZ430-RF2500 wireless development tool. The **eZ430-RF2500-SEH** is a complete solar energy harvesting development kit to help create a perpetually powered wireless sensor network based on the ultra-low-power MSP430 microcontroller.

Mfg. Part No.	Description	Stock No.	Price Each
EZ430-RF2500	Two wireless target boards(eZ430-RF2500T), USB debug interface(eZ430-RF), battery pack, software	55M5474	122.40
EZ430-RF2500T	Target Board and Battery Expansion Board ONLY	08N6141	40.80

(102142)

MSP430 PROGRAMMING AND DEBUGGING TOOLS

TEXAS INSTRUMENTS

Mfg. Part No.	Description	Stock No.	Price Each
STARTER KITS w/ USB PROGRAMMER, TARGET BOARD AND IDE			
MSP-FET430U28	20-/28-Pin PW (TSSOP)	65J5970	178.50
MSP-FET430U23X0	40-Pin MSP430F23x0 RHA (QFN)	36M8811	178.50
MSP-FET430U48	48-Pin DL (SSOP)	28K3609	178.50
MSP-FET430U64	64-Pin PM (QFP)	65J5971	178.50
MSP-FET430U64A	64-Pin PM (QFP) Pinout A	24R9817	178.50
MSP-FET430U64USB	64-Pin PM (QFP) w/ USB	50R7794	175.36
MSP-FET430U100	100-Pin PZ (QFP)	65J5969	178.50
MSP-FET430U100A	100-Pin PZ (QFP) Pinout A	24R9816	178.50
TARGET BOARD ONLY			
MSP-TS430QFN23X0	40-Pin MSP430F23x0 RHA (QFN)	55R4419	90.78
MSP-TS430PM64	64-Pin PM (QFP)	19P9559	90.78
MSP-TS430PM64A	64-Pin PM (QFP) Pinout A	24R9820	90.78
MSP-TS430RGC64USB	64-Pin PM (QFP) w/ USB	50R7795	117.23
MSP-TS430PN80	80-Pin PN (QFP)	55R4417	90.78
MSP-TS430PN80USB	80-Pin MSP430F552x PN (LQFP) w/ USB	24R9821	90.78
MSP-TS430PZ100	100-Pin PZ (QFP)	24R9822	90.78
MSP-TS430PZ100A	100-Pin PZ (QFP) Pinout A	24R9823	90.78
MSP-TS430PZ5X100	100-Pin MSP430F54x PZ (QFP)	12N4390	90.78
PROGRAMMING AND DEBUGGING INTERFACE ONLY			
MSP-FET430PIF	Parallel Port to JTAG	98J0246	59.16
MSP-FET430UIF	USB to JTAG	43J9575	117.30

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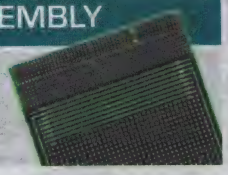

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MSP430 ULTRA-LOW POWER 16-BIT MICROCONTROLLERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Prog. MEM (KB)	RAM (KB)	I/O (Pins)	Compa-rators	Timers	ADC	Interface	Features	Pkg	Stock No.	Price Each 1-9
MSP430X1XX 8MHZ SERIES											
MSP430F1101AIPW	1	128	14	1	1	Slope	...	Comp, WDT	20-TSSOP	75C4003	2.89
MSP430F1121AIDW	4	256	14	1	1	Slope	...	Comp, WDT	20-SOIC	72K8925	3.72
MSP430F1232IDW	8	256	22	...	1	10-bit SAR	SPI, UART	ADC, BOR, TS, WDT	28-SOIC	02E6697	4.80
MSP430F1232IPW	8	256	22	...	1	10-bit SAR	SPI, UART	ADC, BOR, TS, WDT	28-TSSOP	34K8184	4.80
MSP430F123IRHBT	8	256	22	1	1	Slope	SPI, UART	Comparator, WDT	32-VQFN	95H1672	4.51
MSP430F133IPM	8	256	48	1	2	12-bit SAR	SPI, UART	ADC, Comp, SVS, TS, WDT	64-LQFP	75C4034	6.86
MSP430F135IPM	16	512	48	1	2	12-bit SAR	SPI, UART	ADC, Comp, SVS, TS, WDT	64-LQFP	75C4036	7.67
MSP430F147IPM	32	1024	48	1	2	12-bit SAR	SPI, UART, USART	ADC, Comp, MTPLR, TS, WDT	64-LQFP	34K8185	9.35
MSP430F167IPM	32	1024	48	1	2	12-bit SAR	I2C, SPI, UART	ADC, BOR, Comp, DAC, DMA, MTPLR, TS	64-LQFP	01J0586	12.88
MSP430F1611IPM	48	1024	48	1	2	12-bit SAR	I2C, SPI, UART	ADC, BOR, Comp, DAC, DMA, MTPLR, TS	64-LQFP	21J8845	17.15
MSP430F148IPM	48	2048	48	1	2	12-bit SAR	SPI, UART, USART	ADC, Comp, MTPLR, TS, WDT	64-LQFP	75C4039	10.11
MSP430F168IPM	48	2048	48	1	2	12-bit SAR	I2C, SPI, UART	ADC, BOR, Comp, DAC, DMA, MTPLR, TS	64-LQFP	01J0588	14.25
MSP430F1612IPM	55	5120	48	1	2	12-bit SAR	I2C, SPI, UART	ADC, BOR, Comp, DAC, DMA, MTPLR, TS	64-LQFP	19J7319	17.79
MSP430F1491IPM	60	2048	48	1	2	Slope	SPI, UART, USART	Comp, MTPLR, WDT	64-LQFP	34K8186	10.86
MSP430F149IPAG	60	2048	48	1	2	12-bit SAR	SPI, UART	ADC, Comp, MTPLR, TS, WDT	64-TQFP	75C4041	10.90
MSP430F149IPM	60	2048	48	1	2	12-bit SAR	SPI, UART	ADC, Comp, MTPLR, TS, WDT	64-LQFP	27C4967	10.90
MSP430F169IPM	60	2048	48	1	2	12-bit SAR	I2C, SPI, UART	ADC, BOR, Comp, DAC, DMA, MTPLR, TS	64-LQFP	01J0590	15.28
MSP430F2XX 12/16MHZ SERIES											
MSP430F2001IN	1	128	10	1	1	Slope	...	BOR, Comp, WDT	14-DIP	85K1053	1.38
MSP430F2001IPW	1	128	10	1	1	Slope	...	BOR, Comp, WDT	14-TSSOP	85K1054	1.38
MSP430F2012IN	2	128	10	...	1	10-bit SAR	I2C, SPI	ADC, BOR, TS, WDT	14-DIP	02P6866	2.31
MSP430F2012IPW	2	128	10	...	1	10-bit SAR	I2C, SPI	ADC, BOR, TS, WDT	14-TSSOP	99K3820	2.31
MSP430F2012IRSAT	2	128	10	...	1	10-bit SAR	I2C, SPI	ADC, BOR, TS, WDT	16-VQFN	88K5740	2.45
MSP430F2013IN	2	128	10	...	1	16-bit Sig-D	I2C, SPI	ADC, BOR, TS, WDT	14-DIP	02P6867	2.99
MSP430F2013IPW	2	128	10	...	1	16-bit Sig-D	I2C, SPI	ADC, BOR, TS, WDT	14-TSSOP	66K3842	2.99
MSP430F2013TN	2	128	10	...	1	16-bit Sig-D	I2C, SPI	ADC, BOR, TS, WDT	14-DIP	85K1074	2.87
MSP430AFE221IPW	4	256	11	...	1	24-bit Sig-D	SPI, UART, USART	ADC, BOR, MTPLR, SVS, TS, WDT	24-TSSOP	45T9748	4.30
MSP430F2122TRTVT	4	512	24	1	2	10-bit SAR	I2C, LIN, SPI, UART	ADC, BOR, Comp, TS, WDT	32-VQFN	74T4605	3.82
MSP430F2131IPWR	8	256	16	1	1	Slope	...	BOR, Comp, WDT	20-TSSOP	43K4034	2.87
MSP430AFE232IPW	8	512	11	...	1	24-bit Sig-D	SPI, UART, USART	ADC, BOR, MTPLR, SVS, TS, WDT	24-TSSOP	45T9752	4.77
MSP430F2132IPW	8	512	24	1	2	10-bit SAR	I2C, LIN, SPI, UART	ADC, BOR, Comp, TS, WDT	28-TSSOP	96M3653	3.58
MSP430F2232IDA	8	512	32	...	2	10-bit SAR	I2C, LIN, SPI, UART	ADC, BOR, WDT	38-TSSOP	28M6312	3.94
MSP430AFE253IPW	16	512	11	...	1	24-bit Sig-D	SPI, UART, USART	ADC, BOR, MTPLR, SVS, TS, WDT	24-TSSOP	45T9754	5.25
MSP430F235TPM	16	2048	48	1	2	12-bit SAR	I2C, LIN, SPI, UART	ADC, BOR, Comp, MTPLR, SVS, TS	64-LQFP	65M1698	6.21
MSP430F235TRGCT	16	2048	48	1	2	12-bit SAR	I2C, LIN, SPI, UART	ADC, BOR, Comp, MTPLR, SVS, TS	64-VQFN	65M1700	6.32
MSP430F2272IYFFT	32	1024	32	...	2	10-bit SAR	I2C, LIN, SPI, UART	ADC, BOR, WDT	49-DSBGA	82T4002	5.49
MSP430F2274IDA	32	1024	32	...	2	10-bit SAR	I2C, LIN, SPI, UART	ADC, BOR, WDT	38-TSSOP	28M6350	5.97
MSP430F2274IRHAT	32	1024	32	...	2	10-bit SAR	I2C, LIN, SPI, UART	ADC, BOR, WDT	40-VQFN	28M6353	5.97
MSP430F2274TDA	32	1024	32	...	2	10-bit SAR	I2C, LIN, SPI, UART	ADC, BOR, WDT	38-TSSOP	28M6354	6.44
MSP430F2370TRHAT	32	2048	32	1	2	Slope	I2C, LIN, SPI, UART	BOR, Comp, MTPLR, WDT	40-VQFN	45M9665	5.61
MSP430F247TPM	32	4096	48	1	2	12-bit SAR	I2C, LIN, SPI, UART	ADC, BOR, Comp, MTPLR, SVS, TS	64-LQFP	65M1705	6.56
MSP430F248TPM	48	4096	48	1	2	12-bit SAR	I2C, LIN, SPI, UART	ADC, BOR, Comp, MTPLR, SVS, TS	64-LQFP	65M1713	7.23
MSP430F2410TPM	56	4096	48	1	2	12-bit SAR	I2C, LIN, SPI, UART	ADC, BOR, Comp, MTPLR, SVS, TS	64-LQFP	65M1701	9.77
MSP430F249TPM	60	2048	48	1	2	12-bit SAR	I2C, LIN, SPI, UART	ADC, BOR, Comp, MTPLR, SVS, TS	64-LQFP	65M1721	7.86
MSP430F2417TPM	92	8192	48	1	2	12-bit SAR	I2C, LIN, SPI, UART	ADC, BOR, Comp, MTPLR, SVS, TS	64-LQFP	61M7888	10.20
MSP430F2617TPM	92	8192	48	1	2	12-bit SAR	I2C, LIN, SPI, UART	ADC, BOR, Comp, DAC, DMA, MTPLR, TS	64-LQFP	61M7904	11.33
MSP430F2418TPM	116	8192	48	1	2	12-bit SAR	I2C, LIN, SPI, UART	ADC, BOR, Comp, MTPLR, SVS, TS	64-LQFP	61M7892	10.62
MSP430F2618TPM	116	8192	48	1	2	12-bit SAR	I2C, LIN, SPI, UART	ADC, BOR, Comp, DAC, DMA, MTPLR, TS	64-LQFP	61M7908	11.89
MSP430F2619TPM	120	4096	48	1	2	12-bit SAR	I2C, LIN, SPI, UART	ADC, BOR, Comp, DAC, DMA, MTPLR, TS	64-LQFP	61M7912	12.45
MSP430F2619TPN	120	4096	64	1	2	12-bit SAR	I2C, LIN, SPI, UART	ADC, BOR, Comp, DAC, DMA, MTPLR, TS	80-LQFP	61M7914	12.45
MSP430F5XX 20-25MHZ SERIES											
MSP430F5500IRGZT	8	8192	31	1	4	...	I2C, SPI, UART, USB	BOR, Comp, RTC, SVS	48-VQFN	45T9764	3.46
MSP430F5309IRGZT	24	6144	31	...	4	10-bit SAR	I2C, SPI, UART	ADC, Comp, DMA, MTPLR	48-VQFN	74T4606	4.65
MSP430F5171IDAR	32	2048	27	...	3	...	I2C, SPI, UART	BOR, Comp, DMA, SVS	38-TSSOP	61T5921	3.82
MSP430F5172IDAR	32	2048	27	...	3	10-bit SAR	I2C, SPI, UART	ADC, BOR, Comp, DMA, SVS	38-TSSOP	61T5925	4.06
MSP430F5171IRSBT	32	2048	29	...	3	...	I2C, SPI, UART	BOR, Comp, DMA, SVS	40-VQFN	61T5923	3.82
MSP430F5172IRSBT	32	2048	29	...	3	10-bit SAR	I2C, SPI, UART	ADC, BOR, Comp, DMA, SVS	40-VQFN	61T5927	4.06
MSP430F5341IRGZT	96	8192	38	1	4	12-bit SAR	I2C, SPI, UART	ADC, Comp, DMA, RTC, SVS	48-VQFN	74T4611	5.85
MSP430F5342IRGZT	128	10240	38	1	4	12-bit SAR	I2C, SPI, UART	ADC, Comp, DMA, RTC, SVS	48-VQFN	64T3691	6.21
MSP430F5328IRGCT	128	10240	47	1	4	12-bit SAR	I2C, SPI, UART	ADC, BOR, Comp, DMA, RTC, SVS	64-VQFN	74T4608	5.95
MSP430F5637IPZ	192	18432	74	1	4	12-bit SAR	I2C, SPI, UART, USB	ADC, Comp, DAC, DMA, RTC, SVS	100-LQFP	61T5931	10.03
MSP430F5635IPZ	256	18432	74	1	4	12-bit SAR	I2C, SPI, UART, USB	ADC, Comp, DMA, RTC, SVS	100-LQFP	61T5928	9.33
MSP430FR - FRAM SERIES											
MSP430FR5720IRGET	4	1024	17	1	3	10-bit SAR	I2C, SPI, UART	ADC, Comp, DMA, MTPLR, RTC	24-VQFN	87T1063	4.30
MSP430FR5730IRGET	4	1024	17	1	3	10-bit SAR	I2C, SPI, UART	ADC, Comp, DMA, MTPLR, RTC	24-VQFN	87T1080	4.65
MSP430FR5728IRGET	16	1024	17	1	3	10-bit SAR	I2C, SPI, UART	ADC, Comp, DMA, MTPLR, RTC	24-VQFN	74T4599	5.13

➤CONTINUED➤

MSP430 ULTRA-LOW POWER 16-BIT MICROCONTROLLERS

(CONT.)

MSP430FR - FRAM SERIES

Mfg. Part No.	Prog. MEM (KB)	RAM (KB)	I/O (Pins)	Compa-rators	Timers	ADC	Interface	Features	Pkg	Stock No.	Price Each 1-9
● MSP430FR5738IRGET	16	1024	17	1	3	10-bit SAR	I2C, SPI, UART	ADC, Comp, DMA, MTPLR, RTC	24-VQFN	87T1097	5.61
● MSP430FR5739IRHAT	16	1024	33	1	5	10-bit SAR	I2C, SPI, UART	ADC, Comp, DMA, MTPLR, RTC	40-VQFN	64T3684	5.97
MSP430G2XX VALUE SERIES											
● MSP430G2153IRHB32T	1	256	24	1	2	10-bit SAR	I2C, LIN, SPI, UART	ADC, Cap Touch, Comp, TS	32-VQFN	48T4350	1.91
● MSP430G2230IDR	2	128	4	...	1	10-bit SAR	I2C, SPI	ADC, BOR, TS, WDT	8-SOIC	82T4004	1.23
● MSP430G2211IN14	2	128	10	1	1	Slope	...	BOR, Comp, WDT	14-DIP	67R1937	2.04
● MSP430G2231IPW14	2	128	10	...	1	10-bit SAR	I2C, SPI	ADC, BOR, TS, WDT	14-TSSOP	90R9896	1.69
● MSP430G2253IRHB32T	2	256	24	...	2	10-bit SAR	I2C, LIN, SPI, UART	ADC, Cap Touch, Comp, TS	32-VQFN	48T4358	2.04
● MSP430G2303IRHB32T	4	256	24	...	2	...	I2C, LIN, SPI, UART	BOR, Cap Touch, WDT	32-VQFN	48T4360	2.04
● MSP430G2403IRHB32T	8	512	24	...	2	...	I2C, LIN, SPI, UART	BOR, Cap Touch, WDT	32-VQFN	48T4368	2.31
● MSP430G2553IRHB32T	16	512	24	1	2	10-bit SAR	I2C, LIN, SPI, UART	ADC, Cap Touch, Comp, TS	32-VQFN	48T4379	2.72
MSP430 - LOW VALTAGE SERIES											
● MSP430L092SPWR	2	2048	11	...	2	8-bit SAR	...	ADC, BOR, WDT	14-TSSOP	79R7482	2.18

MSP430X4XX 8/16MHZ LCD SERIES

Mfg. Part No.	Prog. MEM (KB)	RAM (KB)	I/O (Pins)	Compa-rators	Timers	ADC	LCD DRV (Seg)	Interface	Features	Pkg	Stock No.	Price Each 1-9
● MSP430F435IPN	16	512	48	1	0	12-bit SAR	160	SPI, UART	ADC, BOR, Comp, LCD-128/160	80-LQFP	34K8188	7.23
● MSP430FW425IPM	16	512	48	1	2	Slope	96	...	BOR, Comp, LCD-96	64-LQFP	87H2028	5.95
● MSP430F437IPN	32	1024	48	1	2	12-bit SAR	160	SPI, UART	ADC, BOR, Comp, LCD-128/160	80-LQFP	02E6705	9.14
● MSP430F447IPZ	32	1024	48	1	0	12-bit SAR	160	SPI, UART	ADC, BOR, Comp, LCD-160, MTPLR, TS	100-LQFP	34K8191	9.56
● MSP430F438IPN	48	2048	48	...	2	12-bit SAR	128	SPI, UART	ADC, LCD-128	80-LQFP	91R2087	11.47
● MSP430F448IPZ	48	2048	48	1	0	12-bit SAR	160	SPI, UART	ADC, BOR, Comp, LCD-160, MTPLR, TS	100-LQFP	35K4769	10.09
● MSP430F449IPZ	60	2048	48	1	0	12-bit SAR	160	SPI, UART	ADC, BOR, Comp, LCD-160, MTPLR, TS	100-LQFP	34K8192	10.94
● MSP430FG439IPN	60	2048	48	1	2	12-bit SAR	128	SPI, UART	ADC, BOR, Comp, DAC, DMA, LCD-128, OPA, SVS, TS	80-LQFP	05J2133	10.86
● MSP430FG4618IPZ	116	8192	80	1	1	12-bit SAR	160	I2C, LIN, SPI, UART, USART	ADC, BOR, Comp, DAC, DMA, LCD-160, MTPLR, RTC,TS	100-LQFP	22M1151	15.64
MSP430X6XX 20/25MHZ LCD SERIES												
● MSP430F6731IPN	32	2048	52	...	4	10-bit SAR	320	I2C, LIN, SPI, UART	ADC, DMA, LCD-320, MTPLR, RTC, TS	80-LQFP	76T6272	6.09
● MSP430F6731IPZ	32	2048	72	...	4	10-bit SAR	320	I2C, LIN, SPI, UART	ADC, DMA, LCD-320, MTPLR, RTC, TS	100-LQFP	76T6274	6.06
● MSP430F6734IPZ	96	4096	72	...	4	10-bit SAR	320	I2C, LIN, SPI, UART	ADC, DMA, LCD-320, MTPLR, RTC, TS	100-LQFP	64T3700	7.01
● MSP430F6725IPN	128	4096	52	...	4	10-bit SAR	320	I2C, LIN, SPI, UART	ADC, DMA, LCD-320, MTPLR, RTC, TS	80-LQFP	76T6261	6.21
● MSP430F6735IPN	128	4096	52	...	4	10-bit SAR	320	I2C, LIN, SPI, UART	ADC, DMA, LCD-320, MTPLR, RTC, TS	80-LQFP	76T6282	6.69
● MSP430F6735IPZ	128	4096	72	...	4	10-bit SAR	320	I2C, LIN, SPI, UART	ADC, DMA, LCD-320, MTPLR, RTC, TS	100-LQFP	76T6284	7.44
● MSP430F6726IPZ	128	8192	72	...	4	10-bit SAR	320	I2C, LIN, SPI, UART	ADC, DMA, LCD-320, MTPLR, RTC, TS	100-LQFP	76T6266	6.38
● MSP430F6636IPZ	128	16384	74	1	4	12-bit SAR	164	I2C, LIN, SPI, UART, USB	ADC, BOR, Comp, DAC, DMA, LCD, MTPLR, RTC, SVS, TS	100-TQFP	64T3697	9.65
● MSP430F6632IPZ	256	16384	74	1	4	...	161	I2C, LIN, SPI, UART, USB	BOR, Comp, DMA, LCD, MTPLR, RTC, SVS, WDT	100-LQFP	61T5940	10.03
● MSP430F6635IPZ	256	16384	74	1	4	12-bit SAR	162	I2C, LIN, SPI, UART, USB	ADC, BOR, Comp, DMA, LCD, MTPLR, RTC, SVS, TS	100-LQFP	61T5946	10.18
● MSP430F6635IZQWR	256	16384	74	1	4	12-bit SAR	163	I2C, LIN, SPI, UART, USB	ADC, BOR, Comp, DMA, LCD, MTPLR, RTC, SVS, TS	113-VFBGA	61T5948	10.39

(83053)

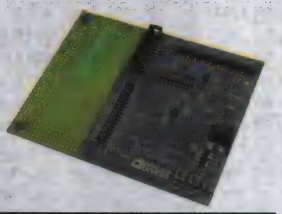
ADUC7XXX EVAL BOARD

RoHS Compliant Available

ANALOG DEVICES

The **EVAL-ADUC7029QSZ EVAL** QuickStart Plus Kit is for evaluating the ADuC7029 Precision Analog Microcontrollers, fully integrated, 1 MSPS, 12-bit data acquisition systems incorporating high performance multichannel ADCs, 16-bit/32-bit MCUs, and Flash/EE memory on a single chip. The QuickStart Plus Kit features debug via UART and an assembly & C-source debugging environment. In addition it allows true non-intrusive JTAG emulation.

This kit is intended for any new users who want to have a comprehensive hardware development environment. It also contains general purpose prototye areas which are provided at the bottom of the evaluation board for adding external components as required in the user's application.



Mfg. Part No.	Descriptoin	Stock No.	Price Each
● EVAL-ADUC7029QSZ	ADuC7029 QuickStart Plus Kit	06W2257	55.32

(210275)

DSTREAM + DS-5 PROFESSIONAL BUNDLES

RoHS Compliant Available

ARM DS Development Tools

DSTREAM + DS-5 bundles include DSTREAM hardware and DS-5 software tools into a complementary solution package to save cost.

Mfg. Part No.	Description	Stock No.	Price Each
BUNDS-KT-3PE00	DSTREAM + DS-5 Pro, Node-Locked License	93T4557	9100.00
● BUNDS-KT-4PE00	DSTREAM + DS-5 Pro, Floating License	93T4558	10750.00

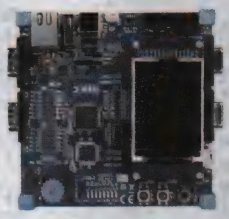
(203733)

NXP LPC1768 SERIES (CORTEX-M3) EVALUATION BOARD

ARM DS Development Tools

Features

- 100MHz LPC1768 ARM Cortex™-M3 MCU
- On-Chip Memory: 512KB Flash & 64KB RAM
- Color QVGA TFT LCD
- 10/100 Ethernet-Port
- USB 2.0 Full Speed - USB, USB-OTG, & USB Host
- 2 CAN Interfaces
- 2 Serial Ports
- SD/MMC Card Interface
- 5-position Joystick and push-button
- Analog Voltage Control for ADC Input
- Amplifier and Speaker
- 70 GPIO pins
- Debug Interface Connectors
  20 pin JTAG (0.1 inch connector)
  10 pin Cortex debug (0.05 inch connector)
  20-pin Cortex debug + ETM Trace (0.05 inch connector)



MCB1760 evaluation board introduces the NXP LPC1760 family of ARM Cortex-M3 processor-based devices, allowing you to create and test working programs for this advanced architecture. The MCB1760 has a wide range of interfaces making it a great starting point for your next Cortex-M3 project.

Mfg. Part No.	Description	Stock No.	Price Each
MCB1760	NXP LPC1768 series (Cortex-M3) Evaluation Board	74T4584	320.00

(199457)

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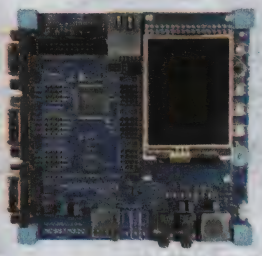
(212565)

STM32F107VC (CORTEX-M3) EVALUATION BOARD

ARM®DS Development Tools

Features

- 72MHz STM32F107VC ARM Cortex™-M3 processor-based MCU in 100-pin LQFP
- On-Chip Memory: 256KB Flash & 64KB RAM
- External Memory: 8KB I2C Flash
- Color QVGA TFT LCD with touchscreen
- 10/100 Ethernet Port
- USB 2.0 Full Speed - USB, USB-OTG, & USB Host
- 2 CAN Interfaces
- Serial/UART Port
- MicroSD Card Interface
- 5-position Joystick and push-button
- 3-axis Motion sensor / Accelerometer
- Analog Voltage Control for ADC Input
- Audio CODEC with Line-In/Out and Speaker
- 80 GPIO pins
- Debug Interface Connectors
  20 pin JTAG (0.1 inch connector)
  10 pin Cortex debug (0.05 inch connector)
  20-pin Cortex debug + ETM Trace (0.05 inch connector)



MCBSTM32C evaluation board enables you to create and test working programs based on the STMicroelectronics STM32 Connectivity Line family of ARM Cortex™-M3 processor-based devices.

Mfg. Part No.	Description	Stock No.	Price Each
MCBSTM32C	STM32F107VC (Cortex-M3) Evaluation Board	74T4580	320.00

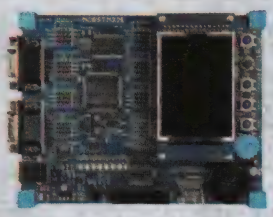
(199453)

STM32F107VC (CORTEX-M3) EVALUATION BOARD

ARM®DS Development Tools

Features

- 72MHz STM32F103ZG ARM Cortex™-M3 MCU
- On-Chip Memory: 1MB Flash and 96KB RAM
- External Memory: 8MB SPI Flash and 1MB RAM
- USB 2.0 Full speed Device Interface
- CAN 2.0 and Serial Interfaces
- Potentiometer for ADC Input
- Up to 42 GPIO
- QVGA LCD-TFT color display with 16-bit interface
- MicroSD Card Interface
- Speaker for analog output
- Joystick with 5 positions
- 8 User LEDs and 4 push-buttons
- Power via USB connector
- Debug Interface Connectors
  20-pin ARM JTAG (0.1 inch connector)
  20-pin Cortex debug + ETM Trace (0.05 inch connector)



MCBSTM32EXL evaluation boards enable you to create and test working programs based on the STMicroelectronics STM32 family of ARM Cortex™-M3 processor-based devices.

Mfg. Part No.	Description	Stock No.	Price Each
MCBSTM32EXL	STM32F103ZE/ZG (Cortex-M3) Evaluation Board	74T4581	290.00

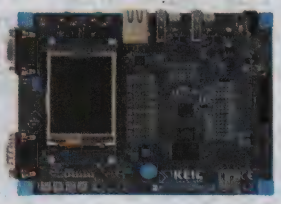
(199454)

STM32F207IG (CORTEX-M3) EVALUATION BOARD

ARM®DS Development Tools

Features

- 120MHz STM32F207IG ARM Cortex™-M3 MCU
- On-Chip Memory: 1MB Flash & 128KB RAM
- External Memory: 8MB NOR Flash, 512MB NAND Flash,
- External Memory: 2MB SRAM, 8KB I2C EEPROM with NFC interface
- 2.4 inch Color QVGA TFT LCD with resistive touchscreen
- 10/100 Ethernet Port
- USB 2.0 Full Speed - USB, USB-OTG, & USB Host
- USB 2.0 High Speed - USB, USB-OTG, & USB Host
- 1 CAN Interface
- Serial/UART Port
- MicroSD Card Interface
- 5-position Joystick
- 3-axis digital Accelerometer
- 3-axis digital Gyroscope
- Analog Voltage Control for ADC Input (potentiometer)
- Audio CODEC with Line-In/Out and Speaker/Microphone
- Digital Microphone
- Digital VGA Camera
- Push-Buttons for Reset, Wakeup, Tamper and User
- 8 LEDs directly connected to port pins
- Power Supply via:
  High Speed and Full Speed USB (micro) connectors
  Power jack (8V-12V) with Voltage Regulator supplying both USB host interfaces (500mA each)
- Debug Interface Connectors
  20 pin JTAG (0.1 inch connector)
  10 pin Cortex debug (0.05 inch connector)
  20-pin Cortex debug + ETM Trace (0.05 inch connector)



MCBSTM32F200 evaluation board enables you to create and test working programs based on the STMicroelectronics STM32 F2xx series of ARM Cortex™-M3 processor-based devices.

Mfg. Part No.	Description	Stock No.	Price Each
MCBSTM32F200	STM32F207IG (Cortex-M3) Evaluation Board	74T4582	360.00

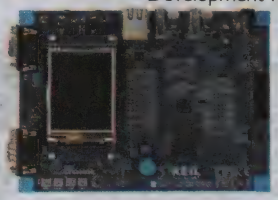
(199455)

STM32F407IG (CORTEX-M4) EVALUATION BOARD

ARM®DS Development Tools

Features

- 168MHz STM32F407IG ARM Cortex™-M4 processor-based MCU in 176-pin BGA
- On-Chip Memory: 1MB Flash & 192KB RAM
- External Memory: 8MB NOR Flash, 512MB NAND Flash, 2MB SRAM, 8KB I2C EEPROM with NFC interface
- 2.4 inch Color QVGA TFT LCD with resistive touchscreen
- 10/100 Ethernet Port
- USB 2.0 Full Speed - USB, USB-OTG, & USB Host
- USB 2.0 High Speed - USB, USB-OTG, & USB Host
- 1 CAN Interface
- Serial/UART Port
- MicroSD Card Interface
- 5-position Joystick
- 3-axis digital Accelerometer
- 3-axis digital Gyroscope
- Analog Voltage Control for ADC Input (potentiometer)
- Audio CODEC with Line-In/Out and Speaker/ Microphone
- Digital Microphone
- Digital VGA Camera
- Push-Buttons for Reset, Wakeup, Tamper and User



- 8 LEDs directly connected to port pins
- Power Supply via:
  High Speed and Full Speed USB (micro) connectors
  Power jack (8V-12V) with Voltage Regulator supplying both USB host interfaces (500mA each)
- Debug Interface Connectors
  20 pin JTAG (0.1 inch connector)
  10 pin Cortex debug (0.05 inch connector)
  20-pin Cortex debug + ETM Trace (0.05 inch connector)

MCBSTM32F400 evaluation board enables you to create and test working programs based on the STMicroelectronics STM32 F4xx series of ARM Cortex™-M4 processor-based devices.

Mfg. Part No.	Description	Stock No.	Price Each
MCBSTM32F400	STM32F407IG (Cortex-M4) Evaluation Board	74T4583	360.00

(199456)

STM32 ARM CORTEX-M EVALUATION BOARDS WITH ULINK-ME DEBUG ADAPTER

ARM®DS Development Tools

Features

- 8MB NOR Flash, 512MB NAND Flash, 2MB SRAM, 8KB I2C EEPROM on Board
- 2.4 inch Color QVGA TFT resistive touchscreen LCD
- 10/100 Ethernet Port
- USB 2.0 Full Speed - USB, USB-OTG, & USB Host
- USB 2.0 High Speed - USB, USB-OTG, & USB Host
- CAN Interface
- Serial/UART Port
- MicroSD Card Interface
- 5-position Joystick
- 3-axis digital Accelerometer
- 3-axis digital Gyroscope
- Analog Voltage Control
- Audio CODEC with Line-In/Out and Speaker/Microphone
- Digital Microphone
- Digital VGA Camera

- Push-Buttons for Reset, Wakeup, Tamper and User
- 8 LEDs directly connected to port pins
- Powered by High / Full Speed USB or Power jack (8V-12V)
- ULINK-ME Debug adapter

Keil MCBSTM32F evaluation boards enables you to create and test working programs based on the STMicroelectronics STM32 series of ARM Cortex™-M processor devices.

Mfg. Part No.	Description	Stock No.	Price Each
MCBSTM32F200UME	STM32F207IG Cortex-M3 128KB RAM, 120MHz	93T1345	420.00
MCBSTM32F400UME	STM32F407IG Cortex-M4 192KB RAM, 168MHz	93T1346	420.00

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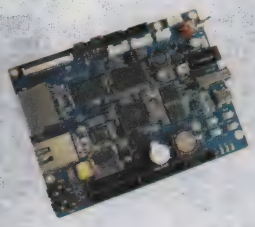
(196527)

32-BIT MCUS & DEVELOPMENT TOOLS

AT91SAM9G45-EVK EVALUATION KIT

RoHS Compliant Available

element14 Atmel



Kit contents
- AT91SAM9G45-EVK Board
- IDC10 Cable
- Mini USB Cable
- 10/100 Ethernet Cable
- DB9-IDC10 Cable
- 20Pins-10Pins JTAG Converter
- TFT LCD Panel
- Power Adapter

Hardware specifications
- Support Andriod2.3, Linux2.6 and WinCE6.0 OS, with free relevant board support packages (BSPs)
- Includes one 4.3" QVGA 480x272 LCD panel with Resistive touch screen
- CPU: Atmel AT91SAM9G45 AT91SAM9G45 (ARM926EJ-S Core), 400MHz
- On-chip memory: 64KB ROM & 64KB SRAM
- External memory: 256MBNandFlash, 2MB NorFlash, 4MB DataFlash & two 64MB DDR2 SDRAM
- Four UART interfaces
- One high-speed USB Host Port
- One high-speed Host Device Port
- One JTAG Debug Interface
- One 10/100 Ethernet interface
- One SD/MMC card interface
- One Micro SD card interface
- One IIS Audio output port
- One IIS Audio input port
- Two User buttons
- One Wake-up button
- One Reset button
- One User LED
- One Power LED
- 60 I/O Pins User Extention Interface
- Power: 5VDC from connector, with back-up battery on board
- Working temperature: -10 to 70 Deg C
- Dimension: 120 x 90 mm

AT91SAM9G45-EVK is a full-featured evaluation board based on the Atmel AT91SAM9G45 running at up to 400MHz, with 128 Mbytes DDR2 memory and 256 Mbytes SLC NAND Flash. The board provides a wide range of peripherals, including a high-speed USB host/device port, an Ethernet 10/100 interface, two high-speed SD/MMC slots and a QVGA 320x240 LCD panel with Resistive touch screen. In addition, the board supports Linux, WinCE and Android OS with plenty of example applications help to develop the AT91SAM9G45 processor into your application.

Mfg. Part No.	Description	Stock No.	Price Each
● AT91SAM9G45-EVK	AT91SAM9G45-EVK EVALUATION KIT	64T2409	255.79

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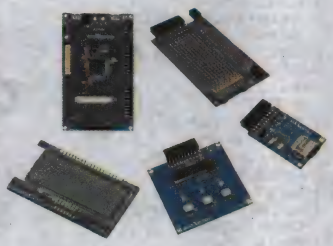
XPLAINED PRO MCU EVALUATION KITS

RoHS Compliant Available

Atmel



Xplained Pro boards provide everything needed to start designing new microcontroller (MCU) based applications in minutes. These boards are easy to connect using an embedded debugger through USB, easy to develop with automatic recognition in Atmel Studio 6 integrated development platform (IDP), easy to extend with hardware extension boards and a large set of software drivers and components. Xplained Pro kits are available as *evaluation kits* for evaluating MCUs and developing with example projects in the Atmel Studio IDP, *starter kit* bundle of MCU and extension boards for rapid application prototyping and development with Atmel Studio and Atmel Software Framework, *extension boards* to connect with Xplained Pro MCU boards adding functionality.

Mfg. Part No.	Description	Stock No.	Price Each
EVALUATION KITS			
● ATMEGA256RFR2-XPRO	ATMEGA256RFR2 Eval Kit	66W5519	42.65
● ATSAM4L-XPRO	SAM4L Eval Kit	66W5523	42.65
● ATSAM4S-XPRO	SAM4S Eval Kit	66W5525	42.65
STARTER KITS INCLUDES EXTENSION BOARDS			
● ATMEGA256RFR2-XSTK	ATMEGA256RFR2 Starter Kit w/ Ext Boards	66W5520	108.26
● ATSAM4L-XSTK	SAM4L Starter Kit w/ Ext Boards	66W5524	119.20
● ATSAM4S-XSTK	SAM4S Starter Kit w/ Ext Boards	66W5526	108.26
EXTENSION BOARDS			
● ATSLCD1-XPRO	Segment LCD add-on wing	66W5527	24.06
● ATIO1-XPRO	I/O evaluation add-on wing	66W5518	27.00
● ATOLED1-XPRO	128x32 OLED add-on wing	66W5521	24.06
● ATPROTO1-XPRO	prototyping add-on wing	66W5522	19.69

(209464)

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(212569)

AT91SAM7SE-EK EVALUATION BOARD

RoHS Compliant Available

Atmel

Features
- SAM7SE512 (128-pin LQFP package)
- 256 Mbytes of NAND Flash memory
- One USB device port interface
- One DBGU serial communication port
- One additional serial communication port with RTS/CTS handshake control
- One JTAG/ICE debug interface
- One Atmel® AT73C213 Stereo Audio DAC
- One power LED and two general-purpose LEDs
- One joystick and two user input pushbuttons
- One EBI expansion BGA-like footprint connector
- 32 Mbytes of SDRAM memory

AT91SAM7SE-EK enables the evaluation of and code development for applications running on an AT91SAM7SE device.

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● AT91SAM7SE-EK	AT91SAM7SE512 ARM Core, JTAG, DBGU, Evaluation Kit	68T5123	200.00

(210282)

AT91SAM9G20-EK EVALUATION BOARD

RoHS Compliant Available

Atmel

Features
- 256 Mbytes of NAND Flash memory
- One Atmel® serial DataFlash®
- One Atmel TWI serial EEPROM
- One USB Device port interface
- Two USB Host port interfaces
- One DBGU serial communication port
- One complete MODEM serial communication port
- One additional serial communication port with RTS/CTS handshake control
- JTAG/ICE debug interface
- One PHY Ethernet 100-base TX with three status LEDs
- One on-board Audio DAC
- Two DataFlash SD/MMC card slots

AT91SAM9G20-EK evaluation Kit enables the evaluation of and code development for applications running on an AT91SAM9G20 device. The board supports the AT91SAM9G20 in a 217-ball LFBGA RoHS-compliant Package.

Mfg. Part No.	Description	Stock No.	Price Each
● AT91SAM9G20-EK	AT91SAM9G20 ARM Core ENET, JTAG, Eval Kit	68T5197	546.73

(210284)

AT91SAM7S-EK EVALUATION BOARD

RoHS Compliant Available

Atmel

Features
- SAM7S256 (64-pin QFP package)
- USB device port interface
- Two serial communication ports
- JTAG/ICE debug interface
- Four buffered analog inputs
- Four general-purpose LEDs and pushbuttons
- Expansion connector
- Prototyping area

AT91SAM7S-EK evaluation board enables the evaluation of and code development for applications running on an AT91SAM7Sxx device

Mfg. Part No.	Description	Stock No.	Price Each
● AT91SAM7S-EK	AT91SAM7S256 ARM Core, JTAG, USB, Evaluation Kit	68T5122	100.00

(210331)

AT91SAM7X-EK EVALUATION BOARD FOR AT91SAM7X AND AT91SAM7XC

RoHS Compliant Available

Atmel

Features
- SAM7X256(100-pin LQFP Green package)
- USB device port
- DBGU serial communication port
- RS232 serial communication port with RTS/CTS
- JTAG/ICE debug interface connector
- Serial CAN communication ports
- MII Ethernet 100-base TX with auto MDIX capability
- Buffered analog input and PWM output
- Power LED and general-purpose LEDs
- DataFlash® card slot
- Expansion connector
- One footprint for Atmel Serial EEPROM (MN11)

AT91SAM7X-EK evaluation kit enables evaluation capabilities and code development of applications running on the AT91SAM7X or the AT91SAM7XC microcontroller.

Mfg. Part No.	Description	Stock No.	Price Each
● AT91SAM7X-EK	AT91SAM7X ARM Core, ENET, JTAG, CAN, Evaluation Kit	68T5169	218.70

(210332)

AT91SAM7SE-EK EVALUATION BOARD

RoHS Compliant Available

Atmel

Features
- SAM7SE512 (128-pin LQFP package)
- 256 Mbytes of NAND Flash memory
- One USB device port interface
- One DBGU serial communication port
- One additional serial communication port with RTS/CTS handshake control
- One JTAG/ICE debug interface
- One Atmel® AT73C213 Stereo Audio DAC
- One power LED and two general-purpose LEDs
- One joystick and two user input pushbuttons
- One EBI expansion BGA-like footprint connector
- 32 Mbytes of SDRAM memory

AT91SAM7SE-EK enables the evaluation of and code development for applications running on an AT91SAM7SE device.

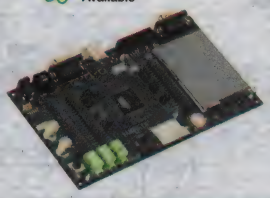
Mfg. Part No.	Description	Stock No.	Price Each 1-24
● AT91SAM9260-EK	AT91SAM9260 ARM Core, ENET, DBGU, Evauluaton Kit	68T5227	500.00

(210333)

ATSAM3U EVALUATION KIT

RoHS Compliant Available

Atmel



SAM3U-EK evaluation kit enables evaluation capabilities and code development of applications running on an ATSAM3U device.

Mfg. Part No.	Description	Stock No.	Price Each
ATSAM3U-EK	ATSAM3U evaluation kit	68T3384	217.60

(177523)

FULL-FEATURED SAMA5D3 CORTEX A5 MCU EVALUATION PLATFORMS

RoHS Compliant Available

Atmel

Kit Contents
- 5" display module (not included with SAMA5D35-EK)
- Power supply
- USB cable
- Crossed ethernet cable

SAMA5D3 evaluation kits enable you to fully evaluate SAMA5D3 devices. The kits are pre-loaded with Linux and Qt. Except for the SAM5D35-EK, all boards feature a 5" WVGA display module.

Mfg. Part No.	Description	Stock No.	Price Each
ATSAMA5D31-EK	SAMA5D31 CORTEX A5 EVAL KIT	66W6047	614.18
ATSAMA5D33-EK	SAMA5D33 CORTEX A5 EVAL KIT	66W6048	614.18
ATSAMA5D34-EK	SAMA5D34 CORTEX A5 EVAL KIT	66W6049	614.18
ATSAMA5D35-EK	SAMA5D35 CORTEX A5 EVAL KIT	66W6050	459.34

(209465)

32-BIT ARM BASED MCUs

RoHS Compliant Available

Atmel

ARM-based Flash Microcontrollers offer different flavours of ARM® that allow you to take control of your application development. With ranges from low-cost, entry-level devices to advanced, highly integrated microcontrollers with extensive connectivity, refined interfaces and iron-clad security, these MCUs also benefit from a worldwide ecosystem consisting of development tools, operating systems and protocol stacks, Flash programming, software and technical support from industry-leading suppliers.

ARM7TDMI CORE

Mfg. Part No.	Flash (KB)	RAM (KB)	I/O (Pins)	PWM (Ch)	Timers	Pkg.	Stock No.	Price Each 1-9
AT91M40800-33AU	...	8	32	...	3	100-LQFP	68T5102	8.86
AT91M42800A-33CJ-999	...	8	54	...	...	144-BGA	72T3233	18.13
AT91M42800A-33AU	...	8	54	...	...	144-LQFP	68T5104	13.46
AT91M55800A-33CJ	...	8	58	...	...	176-LFBGA	68T5109	17.87
AT91M55800A-33CJ-999	...	8	58	...	...	176-LFBGA	72T3234	20.27
AT91M55800A-33AU	...	8	58	...	...	176-LQFP	68T5108	16.39
AT91R40008-66AU	...	256	32	...	...	100-LQFP	68T5113	15.45
AT91SAM7S32B-AU	32	8	21	4	3	48-LQFP	68T5153	6.02
AT91SAM7S32B-MU	32	8	21	4	3	48-QFN	68T5155	7.76
AT91SAM7S64C-AU	64	16	32	4	3	64-LQFP	68T5165	8.32
AT91SAM7S64C-MU	64	16	32	4	3	64-QFN	68T5167	9.08
AT91SAM7X128B-AU	128	32	62	4	3	100-LQFP	68T5177	11.14
AT91SAM7X128B-CU	128	32	62	4	3	100-TFBGA	68T5179	13.75
AT91SAM7SE256-AU	256	32	88	4	3	128-LQFP	68T5124	14.86
AT91SAM7X256B-CU	256	64	62	4	3	100-TFBGA	68T5185	15.12
AT91SAM7X512B-AU	512	128	62	4	3	100-LQFP	68T5189	20.38
AT91SAM7X512B-CU	512	128	62	4	3	100-TFBGA	68T5191	21.60
ARM9 CORE								
AT91SAM9260B-QU	32	8	96	...	6	208-PQFP	68T5230	14.15
AT91SAM9260B-CU	32	8	96	2	6	217-LFBGA	68T5228	14.15
AT91SAM9G10-CU	32	16	96		3	217-BGA	68T5192	12.39
AT91SAM9G25-CU	32	32	105	4	6	217-BGA	68T5201	11.40
AT91SAM9G35-CU	32	32	105	4	6	217-BGA	68T5203	11.98
AT91SAM9X25-CU	32	32	105	4	6	217-BGA	68T5223	13.16
AT91SAM9X35-CU	32	32	105	4	6	217-BGA	68T5225	13.16
AT91SAM9RL64-CU	32	64	118	4	3	217-LFBGA	68T5213	13.27
AT91SAM9261B-CU	32	192	96	...	3	217-LFBGA	68T5232	18.10
AT91SAM9G20B-CU	64	32	96	2	6	217-LFBGA	68T5199	15.98
AT91RM9200-QU-002	128	48	122	...	...	208-PQFP	68T5112	28.92
AT91RM9200-CJ-002	128	48	122	...	...	256-BGA	68T5111	31.98
AT91SAM9263B-CU-100	128	96	160	4	5	324-TFBGA	69W8071	24.28

➤CONTINUED➤

32-BIT ARM BASED MCUs (CONT.)

CORTEX-M3 CORE

Mfg. Part No.	Flash (KB)	RAM (KB)	I/O (Pins)	PWM (Ch)	Timers	Pkg.	Stock No.	Price Each 1-9
ATSAM3N00AA-AU	16	4	34	4	6	48-LQFP	92T0785	2.77
ATSAM3N00AA-MU	16	4	34	4	6	48-QFN	92T0786	2.83
ATSAM3N00BA-AU	16	4	47	4	6	64-LQFP	92T0787	2.92
ATSAM3N00BA-MU	16	4	47	4	6	64-QFN	92T0788	2.98
ATSAM3N0AA-AU	32	8	34	4	6	48-LQFP	92T0779	2.86
ATSAM3N0AA-MU	32	8	34	4	6	48-QFN	92T0780	3.01
ATSAM3N0BA-AU	32	8	47	4	6	64-LQFP	92T0781	3.02
ATSAM3N0BA-MU	32	8	47	4	6	64-QFN	92T0782	3.08
ATSAM3N0CA-AU	32	8	79	4	6	100-LQFP	92T0783	3.37
ATSAM3N0CA-CU	32	8	79	4	6	100-TFBGA	92T0784	3.45
ATSAM3N1AB-AU	64	8	34	4	6	48-LQFP	92T0789	3.31
ATSAM3N1AB-MU	64	8	34	4	6	48-QFN	92T0790	3.55
ATSAM3N1BB-AU	64	8	47	4	6	64-LQFP	92T0791	3.68
ATSAM3N1BB-MU	64	8	47	4	6	64-QFN	92T0792	3.56
ATSAM3N1CB-AU	64	8	79	4	6	100-LQFP	92T0793	3.68
ATSAM3N1CB-CU	64	8	79	4	6	100-TFBGA	92T0794	3.97
ATSAM3S1AA-MU	64	16	34	4	3	48-QFN	68T3367	4.06
ATSAM3S1BA-MU	64	16	47	4	3	64-QFN	68T3369	4.28
ATSAM3S1CA-CU	64	16	79	4	6	100-TFBGA	68T3371	4.79
ATSAM3U1CB-AU	64	20	57	4	3	100-LQFP	92T0804	4.87
ATSAM3U1CB-CU	64	20	57	4	3	100-TFBGA	92T0805	5.26
ATSAM3U1EB-AU	64	20	96	4	3	144-LQFP	92T0806	5.90
ATSAM3U1EB-CU	64	20	96	4	3	144-TFBGA	92T0807	6.37
ATSAM3N2AA-AU	128	16	34	4	6	48-LQFP	68T3353	4.04
ATSAM3N2AA-MU	128	16	47	4	6	48-QFN	68T3354	4.12
ATSAM3N2BA-AU	128	16	47	4	6	64-LQFP	68T3355	4.26
ATSAM3N2BA-MU	128	16	47	4	6	64-QFN	68T3356	4.34
ATSAM3N2CA-AU	128	16	79	4	6	100-LQFP	68T3357	4.49
ATSAM3N2CA-CU	128	16	47	4	6	100-TFBGA	68T3358	4.85
ATSAM3S2AA-AU	128	32	34	4	3	48-LQFP	68T3372	5.12
ATSAM3S2AA-MU	128	32	34	4	3	48-QFN	68T3373	4.96
ATSAM3S2BA-AU	128	32	47	4	3	64-LQFP	68T3374	5.13
ATSAM3S2BA-MU	128	32	47	4	3	64-QFN	68T3375	5.49
ATSAM3S2CA-AU	128	32	47	4	6	100-LQFP	68T3376	5.41
ATSAM3S2CA-CU	128	32	79	4	6	100-TFBGA	68T3377	5.84
ATSAM3U2CA-AU	128	36	57	4	3	100-LQFP	68T3389	6.17
ATSAM3U2CA-CU	128	36	57	4	3	100-TFBGA	68T3390	6.75
ATSAM3U2EA-AU	128	36	96	4	3	144-LQFP	68T3391	7.20
ATSAM3U2EA-CU	128	36	96	4	3	144-LFBGA	68T3392	7.78
ATSAM3N4AA-AU	256	24	34	4	6	48-QFN	68T3359	5.70
ATSAM3N4AA-MU	256	24	79	4	6	48-QFN	68T3360	5.81
ATSAM3N4BA-AU	256	24	47	4	6	64-LQFP	68T3361	6.01
ATSAM3N4BA-MU	256	24	79	4	6	64-QFN	68T3362	6.36
ATSAM3N4CA-AU	256	24	79	4	6	100-LQFP	68T3363	6.37
ATSAM3N4CA-CU	256	24	79	4	6	100-TFBGA	68T3364	6.88
ATSAM3S4AA-AU	256	48	34	4	3	48-LQFP	68T3378	7.12
ATSAM3S4AA-MU	256	48	34	4	3	48-QFN	68T3379	7.00
ATSAM3S4BA-AU	256	48	47	4	3	64-LQFP	68T3380	7.65
ATSAM3S4BA-MU	256	48	47	4	3	64-QFN	68T3381	7.38
ATSAM3S4CA-AU	256	48	79	4	6	100-LQFP	68T3382	7.67
ATSAM3S4CA-CU	256	48	79	4	6	100-TFBGA	68T3383	8.52
ATSAM3U4CA-AU	256	50	57	4	3	100-LQFP	68T3393	8.86
ATSAM3U4CA-CU	256	50	57	4	3	100-TFBGA	68T3394	9.12
ATSAM3U4EA-AU	256	50	96	4	3	144-LQFP	68T3395	10.21
ATSAM3U4EA-CU	256	52	96	4	3	144-TFBGA	68T3396	11.58
ATSAM3A4CA-AU	256	64	63	8	9	100-LQFP	92T0775	9.26
ATSAM3A4CA-CU	256	64	63	8	9	100-LFBGA	92T0776	9.53
ATSAM3X4CA-AU	256	64	63	8	9	100-LQFP	92T0809	9.67
ATSAM3X4CA-CU	256	64	63	8	9	100-LFBGA	92T0810	9.94
ATSAM3X4EA-AU	256	64	103	8	9	144-LQFP	92T0811	11.14
ATSAM3X4EA-CU	256	64	103	8	9	144-LFBGA	92T0812	12.63
ATSAM3S8BA-AU	512	64	47	4	6	64-QFP	92T0800	8.58
ATSAM3S8BA-MU	512	64	47	4	6	64-QFN	92T0801	8.75
ATSAM3S8CA-AU	512	64	79	4	6	100-QFP	92T0802	9.10
ATSAM3S8CA-CU	512	64	79	4	6	100-BGA	92T0803	9.83
ATSAM3SD8BA-AU	512	64	47	4	6	64-QFP	92T0796	9.44
ATSAM3SD8BA-MU	512	64	47	4	6	64-QFN	92T0797	9.63
ATSAM3SD8CA-AU	512	64	79	4	6	100-QFP	92T0798	10.00
ATSAM3SD8CA-CU	512	64	79	4	6	100-BGA	92T0799	10.80
ATSAM3A8CA-AU	512	96	63	8	9	100-LQFP	92T0777	10.97
ATSAM3A8CA-CU	512	96	63	8	9	100-LFBGA	92T0778	11.29
ATSAM3X8CA-AU	512	96	63	8	9	100-LQFP	92T0813	11.48
ATSAM3X8CA-CU	512	96	63	8	9	100-LFBGA	92T0814	12.39

➤CONTINUED➤

32-BIT ARM BASED MCUs (CONT.)

CORTEX-M3 CORE

Mfg. Part No.	Flash (KB)	RAM (KB)	I/O (Pins)	PWM (Ch)	Timers	Pkg.	Stock No.	Price Each 1-9
ATSAM3X8EA-AU	512	96	103	8	9	144-LQFP	92T0815	13.58
ATSAM3X8EA-CU	512	96	103	8	9	144-LFBGA	92T0816	14.97
CORTEX-M4 CORE								
AT91SAM9R64-CU	32	64	49	3	3	144-LFBGA	68T5214	11.68
ATSAM4LC2AA-MU	128	32	27	...	3	48-QFN	69W7978	6.07
ATSAM4LC2BA-MU	128	32	43	...	3	64-QFN	69W7982	6.40
ATSAM4LS2AA-MU	128	32	32	...	3	48-QFN	69W8002	5.73
ATSAM4LS2BA-MU	128	32	48	...	3	64-QFN	69W8006	6.04
ATSAM4LC2AA-AU	128	32	27	...	3	48-TQFP	69W7976	5.95
ATSAM4LC2BA-AU	128	32	43	...	3	64-TQFP	69W7980	6.28
ATSAM4LC2CA-AU	128	32	75	...	6	100-TQFP	69W7984	6.63
ATSAM4LC2CA-CFU	128	32	75	...	6	100-VFBGA	69W7986	7.15
ATSAM4LS2AA-AU	128	32	32	...	3	48-TQFP	69W8000	5.62
ATSAM4LS2BA-AU	128	32	48	...	3	64-TQFP	69W8004	5.93
ATSAM4LS2CA-AU	128	32	80	...	6	100-TQFP	69W8008	6.25
ATSAM4LS2CA-CFU	128	32	80	...	6	100-VFBGA	69W8010	6.75
ATSAM4LC4AA-MU	256	32	27	...	3	48-QFN	69W7990	8.57
ATSAM4LC4BA-MU	256	32	43	...	3	64-QFN	69W7994	9.04
ATSAM4LC4CA-CFU	256	32	75	...	6	100-VFBGA	69W7998	10.15
ATSAM4LS4AA-MU	256	32	32	...	3	48-QFN	69W8014	8.08
ATSAM4LS4BA-MU	256	32	48	...	3	64-QFN	69W8018	8.53
ATSAM4LC4AA-AU	256	32	27	...	3	48-TQFP	69W7988	8.40
ATSAM4LC4BA-AU	256	32	43	...	3	64-TQFP	69W7992	8.86
ATSAM4LC4CA-AU	256	32	75	...	6	100-TQFP	69W7996	9.40
ATSAM4LS4AA-AU	256	32	32	...	3	48-TQFP	69W8012	7.92
ATSAM4LS4BA-AU	256	32	48	...	3	64-TQFP	69W8016	8.36
ATSAM4LS4CA-AU	256	32	80	...	6	100-TQFP	69W8020	8.86
ATSAM4LS4CA-CFU	256	32	80	...	6	100-VFBGA	69W8022	9.57
ATSAM4E8CA-AU	512	128	79	4	9	100-LQFP	86W6916	9.21
ATSAM4E8CA-CU	512	128	79	4	3	100-TFBGA	86W6918	9.94
ATSAM4E8EA-AU	512	128	117	4	9	144-LQFP	86W6920	11.70
ATSAM4E8EA-CU	512	128	117	4	9	144-LFBGA	86W6922	12.03
ATSAM4S8BA-AU	512	128	47	4	6	64-LQFP	06W2058	7.90
ATSAM4S8BA-MU	512	128	47	4	6	64-QFN	06W2059	7.53
ATSAM4S8CA-AU	512	128	79	4	6	100-LQFP	06W2060	8.38

➤CONTINUED➤

32-BIT ARM BASED MCUs (CONT.)

CORTEX-M4 CORE

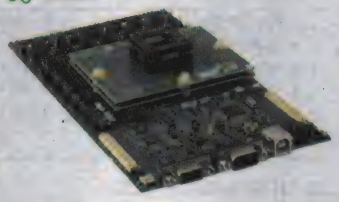
Mfg. Part No.	Flash (KB)	RAM (KB)	I/O (Pins)	PWM (Ch)	Timers	Pkg.	Stock No.	Price Each 1-9
ATSAM4S8CA-CU	512	128	79	4	6	100-TFBGA	06W2062	9.05
ATSAM4E16CA-AU	1024	128	79	4	3	100-LQFP	86W6908	11.38
ATSAM4E16CA-CU	1024	128	79	4	3	100-TFBGA	86W6910	11.71
ATSAM4E16EA-AU	1024	128	117	4	9	144-LQFP	86W6912	13.78
ATSAM4E16EA-CU	1024	128	117	4	9	144-LFBGA	86W6914	14.88
ATSAM4S16BA-AU	1024	128	47	4	6	64-LQFP	06W2053	8.86
ATSAM4S16BA-MU	1024	128	47	4	6	64-QFN	06W2054	9.67
ATSAM4S16CA-AU	1024	128	79	4	6	100-LQFP	06W2055	10.10
ATSAM4S16CA-CU	1024	128	79	4	6	100-TFBGA	06W2057	10.20
ATSAM4SD16BA-AU	1024	160	47	4	6	64-LQFP	86W6934	11.90
ATSAM4SD16BA-MU	1024	160	47	4	6	64-QFN	86W6936	12.14
ATSAM4SD16CA-AU	1024	160	79	4	6	100-LQFP	86W6938	12.66
ATSAM4SD16CA-CFU	1024	160	79	4	6	100-VFBGA	86W6940	14.35
ATSAM4SD16CA-CU	1024	160	79	4	6	100-TFBGA	86W6942	13.67
ATSAM4SD32BA-AU	2048	160	47	4	6	64-LQFP	86W6944	16.06
ATSAM4SD32BA-MU	2048	160	47	4	6	64-QFN	86W6946	16.38
ATSAM4SD32CA-AU	2048	160	79	4	6	100-LQFP	86W6948	17.09
ATSAM4SD32CA-CFU	2048	160	79	4	6	100-VFBGA	86W6950	19.37
ATSAM4SD32CA-CU	2048	160	79	4	6	100-TFBGA	86W6952	18.45

(197975)

STK600 AVR STARTER KIT

RoHS Compliant Available

Atmel



STK600 is a complete starter kit and development system for the 8-bit and 32-bit AVR microcontrollers that gives designers a quick start to develop code on the AVR, with advanced features for prototyping and testing new designs. The AVR device connects to the board using an innovative routing and socketcard sandwich system, which routes the signals from the device to the appropriate hardware. The system consists of a generic socket-card, on which the AVR device is inserted, and a device specific signal routing card, which routes the signals from the socket pins to the different functions on the main board dependant on the device.

Mfg. Part No.	Description	Stock No.	Price Each
ATSTK600	STK600 Starter Kit	68T3413	217.50

(197941)

AVR32 32-BIT MICROCONTROLLERS

RoHS Compliant Available

Atmel

The **AVR32** line of MCUs takes efficiency to a new level, going beyond high performance and low power consumption with intelligent peripherals moving performance and power consumption to the next step. Ideal for high throughput applications, selected UC3 devices include an integrated Floating Point Unit (FPU) which improves arithmetic performance on decimal numbers, with better precision and wider dynamic range.

Mfg. Part No.	Flash (KB)	RAM (KB)	CPU Freq (MHz)	I/O (Pins)	PWM (Ch)	Timers	Interface	Peripherals	Pkg.	Stock No.	Price Each 1-99
AT32UC3L016-AUR	16	8	50	36	35	6	I2C, LIN, SPI, UART, USART	WDT	48-TQFP	72T3220	6.27
AT32UC3L016-AUT	16	8	50	36	35	6	I2C, LIN, SPI, UART, USART	WDT	48-TQFP	68T4608	4.98
AT32UC3L016-ZAUR	16	8	50	36	35	6	I2C, LIN, SPI, UART, USART	WDT	48-VQFN	72T3221	6.27
AT32UC3L016-ZAUT	16	8	50	36	35	6	I2C, LIN, SPI, UART, USART	WDT	48-VQFN	68T4612	6.09
AT32UC3L032-AUR		16	50	36	35	6	I2C, LIN, SPI, UART, USART	WDT	48-TQFP	72T3222	8.30
AT32UC3L032-AUT	32	16	50	36	35	6	I2C, LIN, SPI, UART, USART	WDT	48-TQFP	68T4620	8.09
AT32UC3L032-ZAUR		16	50	36	35	6	I2C, LIN, SPI, UART, USART	WDT	48-VQFN	72T3223	8.30
AT32UC3L032-ZAUT		16	50	36	35	6	I2C, LIN, SPI, UART, USART	WDT	48-VQFN	68T4624	8.09
AT32UC3B164-AUR		16	60	28	13	10	I2C, SPI, UART, USART	POR, WDT	48-TQFP	68T4560	8.87
AT32UC3B164-Z1UT		16	60	28	13	10	I2C, SPI, UART, USART	POR, WDT	48-VQFN	68T4563	8.68
AT32UC3L064-AUR		16	50	36	35	6	I2C, LIN, SPI, UART, USART	WDT	48-TQFP	72T3224	9.76
AT32UC3L064-AUT	64	16	50	36	35	6	I2C, LIN, SPI, UART, USART	WDT	48-TQFP	68T4626	8.19
AT32UC3L064-ZAUR		16	50	36	35	6	I2C, LIN, SPI, UART, USART	WDT	48-VQFN	72T3225	9.76
AT32UC3L064-ZAUT		16	50	36	35	6	I2C, LIN, SPI, UART, USART	POR, WDT	48-VQFN	68T4630	9.55
AT32UC3B064-A2UR		16	60	44	13	10	I2C, SPI, SSC, UART, USART	POR, WDT	64-TQFP	68T4546	9.39
AT32UC3B064-A2UT	64	16	60	44	13	10	I2C, SPI, SSC, UART, USART	POR, WDT	64-TQFP	68T4547	7.49
AT32UC3B064-Z2UR		16	60	44	13	10	I2C, SPI, SSC, UART, USART	POR, WDT	64-VQFN	68T4548	9.39
AT32UC3B064-Z2UT		16	60	44	13	10	I2C, SPI, SSC, UART, USART	POR, WDT	64-VQFN	68T4549	9.16
AT32UC3A364-ALUR		128	66	110	12	6	EBI, EMI, I2C, LIN, SPI, SSC, UART, USART	POR, WDT	144-LQFP	72T3214	14.19
AT32UC3A364-ALUT	64	128	66	110	12	6	EBI, EMI, I2C, LIN, SPI, SSC, UART, USART	POR, WDT	144-LQFP	68T4512	13.95
AT32UC3A364-CTUR		128	66	110	12	6	EBI, EMI, I2C, LIN, SPI, SSC, UART, USART	POR, WDT	144-TFBGA	72T3215	14.43
AT32UC3A364-CTUT		128	66	110	12	6	EBI, EMI, I2C, LIN, SPI, SSC, UART, USART	POR, WDT	144-TFBGA	68T4514	14.19
AT32UC3A364S-ALUR		128	66	110	12	6	EBI, EMI, I2C, LIN, SPI, SSC, UART, USART	POR, WDT	144-LQFP	72T3216	14.96
AT32UC3A364S-CTUR		128	66	110	12	6	EBI, EMI, I2C, LIN, SPI, SSC, UART, USART	POR, WDT	144-TFBGA	72T3217	15.20
AT32UC3A364S-CTUT		128	66	110	12	6	EBI, EMI, I2C, LIN, SPI, SSC, UART, USART	POR, WDT	144-TFBGA	68T4518	14.96
AT32UC3B1128-AUR	128	32	60	28	13	10	I2C, SPI, UART, USART	POR, WDT	48-TQFP	68T4550	10.46
AT32UC3B1128-Z1UR	128	32	60	28	13	10	I2C, SPI, UART, USART	POR, WDT	48-VQFN	68T4552	10.46
AT32UC3B1128-Z1UT	128	32	60	28	13	10	I2C, SPI, UART, USART	POR, WDT	48-VQFN	68T4553	10.28

➤CONTINUED➤

AVR32 32-BIT MICROCONTROLLERS (CONT.)

Mfg. Part No.	Flash (KB)	RAM (KB)	CPU Freq (MHz)	I/O (Pins)	PWM (Ch)	Timers	Interface	Peripherals	Pkg.	Stock No.	Price Each 1-99
AT32UC3B0128-A2UR	128	32	60	44	13	10	I2C, SPI, SSC, UART, USART	POR, WDT	64-TQFP	68T4531	11.08
AT32UC3B0128-A2UT	128	32	60	44	13	10	I2C, SPI, SSC, UART, USART	POR, WDT	64-TQFP	68T4532	10.85
AT32UC3A1128-AUR	128	32	66	69	13	10	ENET, I2C, LIN, SPI, SSC, UART, USART	POR, WDT	100-TQFP	68T4485	12.42
AT32UC3A1128-AUT	128	32	66	69	13	10	ENET, I2C, LIN, SPI, SSC, UART, USART	POR, WDT	100-TQFP	68T4486	11.46
AT32UC3A0128-ALUT	128	32	66	109	13	10	EBI, EMI, ENET, I2C, SPI, SSC, UART, USART	POR, WDT	144-LQFP	68T4469	13.59
AT32UC3A0128-CTUR	128	32	66	109	13	10	EBI, EMI, ENET, I2C, SPI, SSC, UART, USART	POR, WDT	144-TFBGA	72T3203	14.06
AT32UC3A3128-ALUR	128	128	66	110	12	6	EBI, EMI, I2C, LIN, SPI, SSC, UART, USART	POR, WDT	144-LQFP	72T3207	16.17
AT32UC3A3128-CTUR	128	128	66	110	12	6	EBI, EMI, I2C, LIN, SPI, SSC, UART, USART	POR, WDT	144-TFBGA	72T3208	16.17
AT32UC3A3128-CTUT	128	128	66	110	12	6	EBI, EMI, I2C, LIN, SPI, SSC, UART, USART	POR, WDT	144-TFBGA	68T4497	15.93
AT32UC3A3128S-ALUR	128	128	66	110	12	6	EBI, EMI, I2C, LIN, SPI, SSC, UART, USART	POR, WDT	144-LQFP	72T3209	17.10
AT32UC3A3128S-CTUR	128	128	66	110	12	6	EBI, EMI, I2C, LIN, SPI, SSC, UART, USART	POR, WDT	144-TFBGA	72T3210	17.34
AT32UC3A3128S-CTUT	128	128	66	110	12	6	EBI, EMI, I2C, LIN, SPI, SSC, UART, USART	POR, WDT	144-TFBGA	68T4501	17.10
AT32UC3B1256-AUR	256	32	60	28	13	10	I2C, SPI, UART, USART	POR, WDT	48-TQFP	68T4554	11.88
AT32UC3B1256-AUT	256	32	60	28	13	10	I2C, SPI, UART, USART	POR, WDT	48-TQFP	68T4555	9.92
AT32UC3B1256-Z1UR	256	32	60	28	13	10	I2C, SPI, UART, USART	POR, WDT	48-VQFN	68T4556	11.88
AT32UC3B1256-Z1UT	256	32	60	28	13	10	I2C, SPI, UART, USART	POR, WDT	48-VQFN	68T4557	11.69
AT32UC3B0256-A2UR	256	32	60	44	13	10	I2C, SPI, SSC, UART, USART	POR, WDT	64-TQFP	68T4537	12.55
AT32UC3B0256-A2UT	256	32	60	44	13	10	I2C, SPI, SSC, UART, USART	POR, WDT	64-TQFP	68T4538	10.09
AT32UC3B0256-Z2UR	256	32	60	44	13	10	I2C, SPI, SSC, UART, USART	POR, WDT	64-VQFN	68T4539	12.55
AT32UC3B0256-Z2UT	256	32	60	44	13	10	I2C, SPI, SSC, UART, USART	POR, WDT	64-VQFN	68T4540	12.34
AT32UC3A0256-ALUT	256	64	66	109	13	10	EBI, EMI, ENET, I2C, SPI, SSC, UART, USART	POR, WDT	144-LQFP	68T4474	15.14
AT32UC3A0256-CTUR	256	64	66	109	13	10	EBI, EMI, ENET, I2C, SPI, SSC, UART, USART	POR, WDT	144-TFBGA	72T3204	17.16
AT32UC3A1256-AUR	256	64	66	69	13	10	ENET, I2C, LIN, SPI, SSC, UART, USART	POR, WDT	100-TQFP	68T4487	15.20
AT32UC3A1256-AUT	256	64	66	69	13	10	ENET, I2C, LIN, SPI, SSC, UART, USART	POR, WDT	100-TQFP	68T4488	14.25
AT32UC3A3256-ALUR	256	128	66	110	12	6	EBI, EMI, I2C, LIN, SPI, SSC, UART, USART	POR, WDT	144-LQFP	72T3211	19.80
AT32UC3A3256-ALUT	256	128	66	110	12	6	EBI, EMI, I2C, LIN, SPI, SSC, UART, USART	POR, WDT	144-LQFP	68T4503	18.42
AT32UC3A3256-CTUT	256	128	66	110	12	6	EBI, EMI, I2C, LIN, SPI, SSC, UART, USART	POR, WDT	144-TFBGA	68T4505	17.96
AT32UC3A3256S-ALUR	256	128	66	110	12	6	EBI, EMI, I2C, LIN, SPI, SSC, UART, USART	POR, WDT	144-LQFP	72T3212	20.95
AT32UC3A3256S-ALUT	256	128	66	110	12	6	EBI, EMI, I2C, LIN, SPI, SSC, UART, USART	POR, WDT	144-LQFP	68T4508	18.79
AT32UC3A3256S-CTUR	256	128	66	110	12	6	EBI, EMI, I2C, LIN, SPI, SSC, UART, USART	POR, WDT	144-TFBGA	72T3213	21.18
AT32UC3A3256S-CTUT	256	128	66	110	12	6	EBI, EMI, I2C, LIN, SPI, SSC, UART, USART	POR, WDT	144-TFBGA	68T4510	20.95
AT32UC3A0512-ALTRA		64	66	109	13	10	EBI, EMI, ENET, I2C, SPI, SSC, UART, USART	POR, WDT	144-LQFP	72T3205	19.70
AT32UC3A0512-ALUR		64	66	109	13	10	EBI, EMI, ENET, I2C, SPI, SSC, UART, USART	POR, WDT	144-LQFP	68T4480	18.14
AT32UC3A0512-ALUT	512	64	66	109	13	10	EBI, EMI, ENET, I2C, SPI, SSC, UART, USART	POR, WDT	144-LQFP	68T4481	16.71
AT32UC3A0512-CTUR		64	66	109	13	10	EBI, EMI, ENET, I2C, SPI, SSC, UART, USART	POR, WDT	144-TFBGA	72T3206	19.58
AT32UC3A1512-AUR		64	66	69	13	10	ENET, I2C, LIN, SPI, SSC, UART, USART	POR, WDT	100-TQFP	68T4490	17.90
AT32UC3A1512-AUT	512	64	66	69	13	10	ENET, I2C, LIN, SPI, SSC, UART, USART	POR, WDT	100-TQFP	68T4491	16.02
AT32UC3C0512C-ALZR	512	64	66	123	8	8	CAN, Ethernet, I2C, I2S, SPI, UART, USB	ADC, Comparator, DAC, DMA, PWM, Timer	144-LQFP	87W8129	18.86
AT32UC3C0512C-ALUT	512	64	66	123	20	6	CAN, ENET, I2C, I2S, SPI, UART, USB	ADC, DAC, DMA	144-LQFP	68T4570	19.33
AT32UC3C1512C-AUT	512	64	66	81	19	6	CAN, ENET, I2C, I2S, SPI, UART, USB	ADC, DAC, DMA	100-TQFP	68T4582	18.46
AT32UC3B0512-A2UR		96	60	44	13	10	I2C, SPI, SSC, UART, USART	POR, WDT	64-TQFP	72T3218	12.56
AT32UC3B0512-Z2UR		96	60	44	13	10	I2C, SPI, SSC, UART, USART	POR, WDT	64-VQFN	72T3219	13.84
AT32UC3B1512-Z1UR		96	60	28	13	10	I2C, SPI, UART, USART	POR, WDT	48-VQFN	68T4558	13.10
AT32UC3B0512-A2UT	512	96	60	44	13	10	I2C, SPI, USART, USB	ADC, DAC, DMA	64-TQFP	68T4542	13.07

(197979)

SAMD20 SERIES 32-BIT MCUs

NEW

RoHS Compliant Available

Atmel

Features:

- ARM Cortex-M0+ based MCU running up to 48MHz
- Low power consumption at <70µA/MHz
- 12-bit ADC
- Hardware touch support
- Flexible serial communication modules (SERCOM)

A rich set of peripherals, flexibility and ease-of-use combined with low power consumption make the Atmel SAM D20 ARM Cortex-M0+ based microcontroller series ideal for a wide range of home automation, consumer, metering and industrial applications. The SAM D20 is designed for simple and intuitive migration between SAM D devices with identical peripheral modules, hex compatible code and a linear address map.

Mfg. Part No.	Flash Mem (KB)	SRAM (KB)	No. of I/O's	Pkg.	Stock No.	Price Each 1-9
ATSAMD20E14A-AU	16	2	26	32-TQFP	19X7606	2.23
ATSAMD20E14A-MU	16	2	26	32-QFN	19X7607	2.19
ATSAMD20J14A-AU	16	2	52	64-TQFP	19X7618	2.48
ATSAMD20G14A-MU	16	2	38	48-QFN	19X7613	2.30
ATSAMD20G14A-AU	16	2	38	48-TQFP	19X7612	2.34
ATSAMD20J14A-MU	16	2	52	64-QFN	19X7619	2.43
ATSAMD20E16A-MU	64	8	26	32-QFN	19X7609	2.84
ATSAMD20E16A-AU	64	8	26	32-TQFP	19X7608	2.90
ATSAMD20G16A-MU	64	8	38	48-QFN	19X7615	2.98
ATSAMD20G16A-AU	64	8	38	48-TQFP	19X7614	3.04
ATSAMD20J16A-MU	64	8	52	64-QFN	19X7621	3.15
ATSAMD20J16A-AU	64	8	52	64-TQFP	19X7620	3.21
ATSAMD20E17A-MU	128	16	26	32-QFN	19X7611	3.04
ATSAMD20E17A-AU	128	16	26	32-TQFP	19X7610	3.10
ATSAMD20G18A-MU	256	32	38	48-QFN	19X7617	4.48
ATSAMD20G18A-AU	256	32	38	48-TQFP	19X7616	4.57

CONTINUED

SAMD20 SERIES 32-BIT MCUs (CONT.)

Mfg. Part No.	Flash Mem (KB)	SRAM (KB)	No. of I/O's	Pkg.	Stock No.	Price Each 1-9
ATSAMD20J18A-MU	256	32	52	64-QFN	19X7623	4.72
ATSAMD20J18A-AU	256	32	52	64-TQFP	19X7622	4.82

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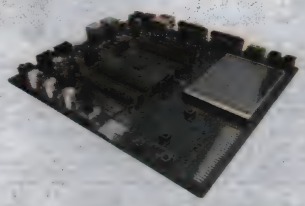
SAM4E ARM COERTEX-M4 MCU DEVELOPMENT BOARD

NEW

RoHS Compliant Available

Atmel



Features:

- SAM4E16 chip BGA144 package with optional socket footprint
- NAND Flash
- 2.8 inch TFT color LCD display with touch panel and backlight
- Ethernet physical transceiver layer with RJ45 connector
- UART port with RS232 driver
- ZigBee connector
- QTouch buttons: Left, Right and Slider

Mfg. Part No.	Description	Stock No.	Price Each
ATSAM4E-EK	SAM4E Development Board	69W7975	272.27

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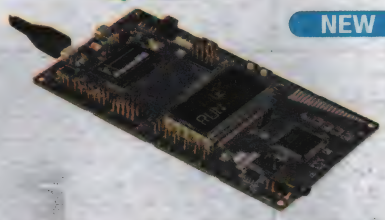
32-BIT MCUS & DEVELOPMENT TOOLS

SAM4L ARM CORTEX-M4 MCU DEVELOPMENT BOARD

RoHS Compliant Available

Atmel

NEW



Features:
- ATSAM4LC4C Cortex-M4 device
- OLED color display
- QTouch slider and button
- Segment LCD (4x40)
- Wireless 10-pin interface
- Light sensor
- Audio jack connector

Mfg. Part No.	Description	Stock No.	Price Each
● ATSAM4L-EK	SAM4L Development Board	55W5854	162.93

(212477)

SAM4S ARM CORTEX-M4 MCU DEVELOPMENT BOARD

NEW

RoHS Compliant Available

Atmel

These kit lets designers quickly evaluate and develop code for applications running on Atmel SAM4S with the ARM-based Cortex-M4 core. The ATSAM4S-WPIR-RD reference design kit provides everything you need to get a quick start designing passive infrared motion detector camera solution. The ATSAM4S-XPLD Xplained board contains four QTouch® button sensors, LEDs and a USB port. The Xplained expansion headers provide easy access to analog and digital I/O pins.

Mfg. Part No.	Description	Stock No.	Price Each
● ATSAM4S-EK2	SAM4S Evaluation Board	69W8024	162.93
● ATSAM4S-WPIR-RD	SAM4S Wireless PIR Camera Ref Design Board	06W2051	272.27
● ATSAM4S-XPLD	SAM4S Xplained Baord	06W2052	31.71

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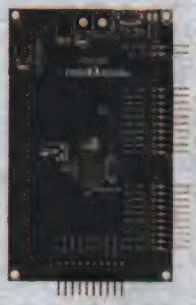
SAM D20 XPLAINED PRO EVALUATION KIT

NEW

RoHS Compliant Available

Atmel



Features:
- SAMD20J18 Cortex-M0+ MCU
- Xplained Pro extension headers
- Embedded Debugger
- 32.768kHz crystal
- Program/debug interface for external targets

Mfg. Part No.	Description	Stock No.	Price Each
● ATSAMD20-XPRO	SAM D20 Xplained Pro Evaluation Kit	95W9928	42.65

(212479)

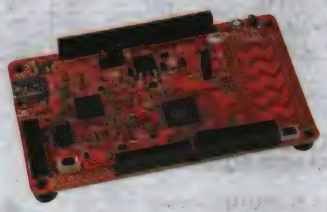
PSOC 4 PIONEER KIT

RoHS Compliant Available

CYPRESS PERFORM

Features:
- Infinitely Expandable
- Includes connectors for **Arduino™** compatible shields
- Designed for Low Power
- Debug like a Pro

Kit Contents:
- PSoC 4 Pioneer Kit Board
- Quick Start Guide
- USB A to mini-B Cable
- Jumper Wires (x6)



PSoC 4 Pioneer Kit is an easy-to-use and inexpensive development platform enabling you to create unique designs with the flexibility of **PSoC®4**. Featuring the PSoC 4200 device family, this kit gives you the power of an ARM Cortex-M0 combined with the fully customizable analog and digital fabric of the PSoC in the palm of your hands. Use it with **PSoC Creator™** to create unique designs, shorten development schedules, and accelerate your time-to-market. Kit includes connectors for Arduino™ compatible shields and Digilent® Pmod™ daughter cards, enabling you to pick from a variety of 3rd party expansion boards. The board also features a CapSense® slider, an RGB LED, a user button, and more!

Mfg. Part No.	Description	Stock No.	Price Each
● CY8CKIT-042	PSOC 4 EVAL KIT	69W7455	24.99

(210246)

PSOC 4 PROGRAMABLE SYSTEM ON CHIP

RoHS Compliant Available

CYPRESS PERFORM

Features:
- Reconfigurable ARM Cortex-M0
- Truly Scalable Architecture
- Limitless Possibilities

PSoC® 4 is an ARM-based PSoC, featuring the low-power Cortex-M0 core combined with PSoC's unique programmable mixed-signal hardware IP. Use it with **PSoC Creator™** to create unique designs, shorten development schedules, and accelerate your time-to-market.

Mfg. Part No.	CPU Speed MHz	Prog. Mem.	RAM Memory (KB)	I/O (Pins)	Pkg.	Stock No.	Price Each 1-24
● CY8C4125AXI-483	24	32KB	4	36	44-TQFP	86W0163	3.15
● CY8C4125LQI-483	24	32KB	4	34	40-QFN	86W0162	2.70
● CY8C4125PVI-482	24	32KB	4	22	28-SSOP	86W0161	2.42
● CY8C4245AXI-483	48	32KB	4	36	44-LQFP	86W0170	3.62
● CY8C4245LQI-483	48	32KB	4	34	40-UFQFN	86W0169	3.62
● CY8C4245PVI-482	48	32KB	4	24	28-SSOP	86W0168	3.28

(210245)

PSOC 5 PROGRAMABLE SYSTEM ON CHIP

RoHS Compliant Available

CYPRESS PERFORM

Features:
- Precision analog integration
- Flexible low power PSoC
- Many production-ready components

PSoC 5LP is a family of low power ARM® Cortex™ - M3 based programmable system on chip devices offering unmatched high-precision analog and the flexibility to design custom system solutions. Use PSoC 5LP with PSoC Creator components to shorten design schedules accelerating your time-to-market. PSoC devices employ a highly configurable system-on-chip architecture for embedded control design, offering a flash-based equivalent of a field-programmable ASIC without lead-time or NRE penalties. PSoC devices integrate configurable analog and digital circuits, controlled by an on-chip microcontroller, providing both enhanced design revision capability and component count savings.

Mfg. Part No.	CPU Speed MHz	Prog. Mem.	RAM Memory (KB)	I/O (Pins)	Pkg.	Stock No.	Price Each 1-24
● CY8C5267AXI-LP051	67	128KB	32	62	100-TQFP	69W1658	9.93
● CY8C5467AXI-LP108	67	128KB	32	62	100-TQFP	69W1659	12.52
● CY8C5667AXI-LP006	67	128KB	32	62	100-TQFP	69W1660	16.94
● CY8C5867LTI-LP025	67	128KB	32	46	68-QFN	63W4982	15.92
● CY8C5668AXI-LP010	67	256KB	64	62	100-TQFP	69W1661	17.54
● CY8C5868AXI-LP032	67	256KB	64	72	100-TQFP	63W4983	19.33
● CY8C5868AXI-LP035	67	256KB	64	72	100-TQFP	63W4984	20.45
● CY8C5868LTI-LP038	67	256KB	64	48	68-QFN	63W4985	17.71
● CY8C5868LTI-LP039	67	256KB	64	48	68-QFN	63W4986	17.80

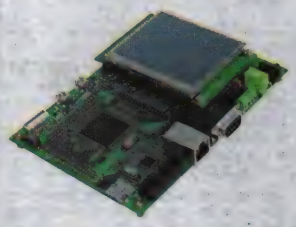
(210255)

STM32F207XX FAMILY ARM CORTEX-M3 DEVELOPMENT BOARD

RoHS Compliant Available

Embest

Features
- 120MHz STM32F207IGT6 ARM Cortex-M3 32-bit Flash Microcontroller
- CPU Internal 1MBytes of Flash and 128 (system) +4 (backup) KBytes of SRAM
- USB2.0 OTG Full-speed Port and USB2.0 OTG High-speed Port
- 3.5-inch TFT LCD and 4-wire Resistive Touch Screen
- 10/100 Ethernet with IEEE 1588v2, CAN2.0B, Serial Port, IrDA, TF, Audio, JTAG
- G-sensor 3-Axis Acceleration Sensor
- Supports for uC/OS-II and FreeRTOS Real-time Operating Systems
- Optional 1.3 megapixel Digital Camera Module



DevKit1207 Evaluation Kit is a complete development platform for STM32F207IGT6 device, a 120MHz high-performance ARM Cortex-M3 32-bit RISC MCU, which enables engineers to easily and rapidly evaluate, prototype and test designs built around the STMicroelectronics STM32F207xx series MCUs. The DevKit1207 board features a full range of hardware peripherals to support HS/FS USB OTG, Ethernet, CAN, Serial port, IrDA, TF card, LCD, Touch screen, Camera, Audio, G-sensor, RTC, JTAG, etc. The kit is also provided with an industrial-level 3.5 inch LCD with resistive touch screen and all other necessary accessories to help user observe the testing result and use the platform more conveniently.

Mfg. Part No.	Description	Stock No.	Price Each
● DEVKIT1207	STM32 Cortex-M3 Eval Kit w/ LCD	77T2812	223.63

(200566)

EMBEDDED DESIGN TOOLS

IDEs, Compilers, Debuggers and programming tools for all your MCU/DSP/FPGA needs.

newark.com/dev-tools-software

(196530)

PROCESSOR CARDS

RoHS Compliant Available

mbest

ATMEL DEVICES

Mfg. Part No.	Supported Devices	Stock No.	Price Each
MBC-SAM9G15	AT91SAM9G15	08W3718	99.02
MBC-SAM9G25	AT91SAM9G25	08W3719	99.02
MBC-SAM9G35	AT91SAM9G25	08W3720	99.02
MBC-SAM9G45	AT91SAM9G45	08W3721	99.02
MBC-SAM9X25	AT91SAM9X25	08W3722	99.38
MBC-SAM9X35	AT91SAM9X35	08W3723	101.74
MBS-SAM9G15	AT91SAM9G15	08W3724	321.74
MBS-SAM9G25	AT91SAM9G25	08W3725	297.10
MBS-SAM9G35	AT91SAM9G35	08W3726	321.74
MBS-SAM9X25	AT91SAM9X25	08W3727	257.40
MBS-SAM9X35	AT1SAM9xxx	08W3728	321.74
MINI6245 PROCESSOR CARD	AT1SAM9xxx	08W3731	98.03
MINI6045 PROCESSOR CARD	SBC6045	08W3730	137.62
NXP DEVICES			
MINI3250 PROCESSOR CARD	LPC3250	08W3729	88.12
TEXAS INSTRUMENTS DEVICES			
MINI8510 PROCESSOR CARD	SBC8100	08W3732	98.03
MINI8100	OMAP3530	63R5731	174.99

(177075)

ADD-ON CARDS FOR EMBEST TOOLS

RoHS Compliant Available

mbest

These daugther cards add various functional capabilities to the Embest SBC8530 development kit including VGA, WiFi, Analog Camera, GPS, GPRS, 3G and Digital Camera module which greatly extends the functions of the board and is a flexible option for customers to select the right functions that will fit their needs.

Mfg. Part No.		Stock No.	Price Each
CAM8100-U MODULE	Digital Camera Module for OMAP35x ARM CORTEX-A8	07W9768	38.61
GPRS8000-S MODULE	GPRS Daughter Board for OMAP35x ARM CORTEX-A8	08W3141	63.65
VGA8000 MODULE	VGA Module for OMAP35x ARM CORTEX-A8	17W5517	24.76

(210280)

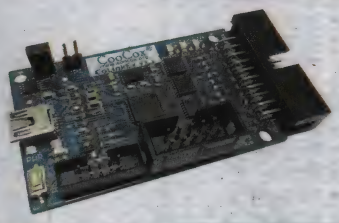
ARM CORTEX M COOCOX COLINKEX DEBUGGER TOOL

RoHS Compliant Available

mbest

Features

- Supports Cortex M devices
- Supports SW debugging
- Supports JTAG debugging
- Supports CoFlash, CoIDE, MDK and IAR



CooCox CoLinkEx is a hardware debugging adapter which supports SW debugging and supports ARM Cortex M devices, it supports debugging in CooCox software and Keil Realview MDK.

Mfg. Part No.	Description	Stock No.	Price Each
COLINKEX	CoLinkEx Hardware Debug Tool	07W9770	32.01

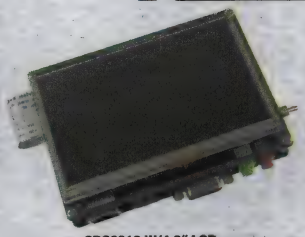
(210289)

SBC8018 KIT

RoHS Compliant Available

mbest

The **SBC8018** Single Board Computer is a compact, low-cost and high-performance controller board that is based on Texas Instruments' **AM1808** ARM9 low-power application processor which enables OEMs and ODMs to quickly bring to market devices featuring robust operating systems support, rich user interfaces, and high processing performance life through the maximum flexibility of a fully integrated mixed processor solution. The **SBC8018** Single Board Computer takes full features of the **AM1808** microprocessor and has 128MB DDR2 SDRAM and 128MB Nand Flash on board.



SBC8018 W/4.3" LCD

Mfg. Part No.	Description	Stock No.	Price Each
SBC8018 WIHOUT LCD	Board for AM1801 ARM9 w/o LCD	10W2167	98.03
SBC8018 WITH 4.3"LCD	Board for AM1801 ARM9 w/ 4.3" LCD	10W2168	206.91

(210294)

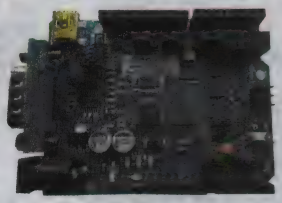
CO-SHINING EVALUATION BOARD

RoHS Compliant Available

mbest

Features:

- Hardware CAD design files open under CC BY-SA 3.0 license n Eagle format.
- Fully compatible with Arduino, hundreds of Shields can be reused.
- Types of 32-bit ARM Cortex MCUs avaible (M0/M3/M4).
- Working on both 3.3V and 5V, selectable with jumper.
- CoLinkEX (USB-JTAG/SW depub probe) onboard, depug IN/Out selectable with jumper
- A set of free development tools provided by CooCox.
- Component platform makes it easy to share code.



Cookie is an open-source Arduino compatible ARM prototyping platform based on 32-bit ARM Cortex M0/3/4 MCUs lus hardwarde and software building blocks.

Mfg. Part No.	Description	Stock No.	Price Each
COOKIE NUMICRO EVB	M0516LBN EVB-Board Only	07W9769	40.01

(210302)

COLINKEX_LPC11C14 EVALUATION BOARD

RoHS Compliant Available

mbest

CoLinkEx_LPC11C14 EVB Kit uses the LPC11C14x301FBD48 from NXP. The LPC11Cxx series are ARM Cortex-M0 based microcontrollers for embedded applications featuring a high level of integration and low power consumption.The LPC11xx operate at CPU frequencies up to 50 MHz, the peripheral complement of the LPC11xx series includes up to 32KB of flash memory, up to 8 KB of data memory, one Fast-mode Plus I2C-bus interface, one RS-485/EIA-485 UART, up to two SPI interfaces with SSP features, four general purpose timers, a 10-bit ADC, and up to 42 general purpose I/O pins. It integrated ARM Cortex-M0 built-in Nested Vectored Interrupt Controller (NVIC), integrated PMU (Power Management Unit) to minimize power consumption during Sleep, Deep-sleep, and Deep power-down modes.

Mfg. Part No.	Description	Stock No.	Price Each
COLINKEX_LPC11C14 EVB	LPC11C14 EVB Kit for NXP	07W9771	40.01

(210307)

NXP LPC1768 ARM CORTEX-M3 BOARD

RoHS Compliant Available

mbest

EM-LPC1700 is a full function evaluation board for NXP ARM Cortex-M3 core-based processors. The board features comprehensive interfaces, which not only provides a good platform for application development, but also is the first choice for learners.

Mfg. Part No.	Description	Stock No.	Price Each
EM-LPC1768	LPC1768 Eval Board for NXP	08W0182	138.61

(210319)

SBC6000X SINGLE BOARD COMPUTER

RoHS Compliant Available

mbest

SBC6000X is an embedded single board computer using Atmel's AT91SAM9261S microprocessor with low power and high reliability. The board is a compact board with various peripheral interfaces including USB Host/Device, Ethernet, LCD/Touch Screen, Serial ports, Keyboard, Audio, SPI, SD and BUS. It's peripheral interfaces features ESD protection. The board is capable of supporting both Windows CE 6.0 and Linux 2.6.24 OS and Embest provides BSP package, user manual and some other tools and documents to help customer better understand this board. User can use Microsoft EVC or provided linux tool chain for development to speed your time to market.

Mfg. Part No.	Description	Stock No.	Price Each
SBC6000X WITH 4.3"LCD	SBC6000X Board + 4.3" LCD	10W2165	206.91

(210322)

XDS100V2 USB JTAG EMULATOR

RoHS Compliant Available

mbest

Features:

- All of the XDS100 General Features
- Support for USB High Speed (480 Mbit/s)
- Support targets with 14-pin TI JTAG connector or 20-pin TI JTAG connector as used by Texas Instruments embedded processors. (Please check your vendor for hardware details)
- Supports processor cores: TMS320C28x, TMS320C54x, TMS320C55x, TMS320C64x+, TMS320C674x, TMS320C66x, ARM 9, ARM Cortex R4, ARM Cortex A8, ARM Cortex A9 and Cortex M3 (requires CCSv4.2.2 or later).
- Supports cable-break detection
- Supports target power loss detection
- Support for multiple FTDI devices
- Adaptive clocking
- LED light to indicate active USB connection
- Support for Code Composer Studio v4 and newer (Does not support Code Composer Studio v3.3)

XDS100v2 USB JTAG Emulator is the second release of the XDS100 JTAG emulator technology supporting debug of a variety of Texas Instruments devices. It allows the user direct access between the host computer and the DSP through a 14-pin JTAG header. It is compatible with Code Composer Studio (CCS) V4 IDE and compatible with Windows 2000/XP/Vista. It can be used for debugging Embest DevKit8000, SBC8100, DevKit8500D/A and SBC8018 Boards.

➤ CONTINUED ➤

XDS100V2 USB JTAG EMULATOR (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
● XDS100V2	USB-interface JTAG emulator for TI	17W5519	68.33

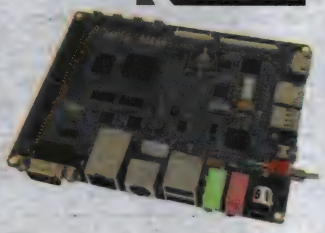
(210337)

DEVKIT8500D EVALUATION KIT

RoHS Compliant Available

Embest

Features:
- TI DM3730/AM3715 Processor based on 1GHz ARM Cortex-A8 core
- Onboard 512MByte DDR SDRAM and 512MByte NAND Flash
- UART, 4 USB Host, USB OTG, Ethernet, Audio, TF, Keyboard, Jtag...
- Supports 24-bit TFT LCD, DVI-D and S-Video Output Display
- Supports VGA, Camera, WiFi, GPS, GPRS, 3G Functions through Modules
- Supports for Linux2.6.32, Android 2.2 and WinCE 6.0.15



Embest **DevKit8500D** Evaluation Kit is an ideal hardware and software platform with the incorporation of Texas Instruments' DaVinci DM3730 media processor, as well as supporting running high-level operating systems such as Linux, WinCE and Android. It's a complete development system accelerating time to market for more media-rich, portable applications include navigation systems, media players, medical patient monitoring devices, industrial test and measurement devices, industrial vision and portable communications.

Mfg. Part No.	Description	Stock No.	Price Each
● DEVKIT8500D WITHOUT LCD	TI DM3730 Processor Eval Board w/ LCD Module	08W0177	305.90
● DEVKIT8500D WITH 4.3"LCD	TI DM3730 Processor Eval Board w/out LCD Module	08W0178	197.01

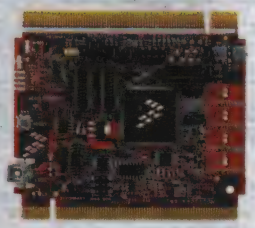
(210251)

KINETIS K60 MCU MODULE KIT

RoHS Compliant Available

freescale

Features
- MK60FN1M0VLQ12: K60FN1M in a 144 LQFP with 120 MHz operation
- S08JM60 based Open Source BDM (OSBDM) circuit
- NAND flash
- 4 user-controlled status LEDs
- 4 Capacitive Touch Pads and 2 mechanical push buttons
- Socket for Capacitive Touch Pad daughter board (Touch TWRPI)
- Socket for Tower Plugin (TWRPI, e.g. sensor board)
- Potentiometer
- Three-axis digital accelerometer (MMA8451Q)
- SD Card slot



MCU Module Board Kit Contains
- TWR-K60F120M MCU module board
- DVD with software installers and documentation
- Quick Start Guide document
- Tower System Kit also includes:
  TWR-ELEV – Tower System Elevator Modules
  TWR-SER – Tower System Serial Module

The K60 MCU module demonstrates the capabilities of the 120/150MHz K60, K20 and K10 families of Kinetis microcontrollers and can operate as a standalone debug tool and can be purchased separately from the kit or purchased as part of a Tower System kit.

Mfg. Part No.	Description	Stock No.	Price Each
● TWR-K60F120M	K60 MCU Module Board Only	73T5791	99.00
● TWR-K60F120M-KIT	K60 MCU Module Board w/ Tower System Kit	73T5792	169.00

(200563)

TWR-K60D100M: KINETIS K60 MCU MODULE

RoHS Compliant Available

freescale

Features:
- MK60DN512VMD10 Kinetis MCU with 512 KB flash and 128 KB SRAM
- Integrated open-source JTAG via USB
- SD card slot
- MMA8451Q 3-axis accelerometer
- General purpose TWRPI socket for expansion (sensors, etc.)
- Touch TWRPI socket adds support for various capacitive touch boards
- Tower connectivity for access to USB, Ethernet, RS232/RS485, CAN, SPI, I²C, Flexbus, etc.
- Four capacitive touch pads
- Potentiometer, four LEDs, two push buttons and infrared port

Kit contents
- TWR-K53N512 board with a MK60DN512VMD10 (144 MAPBGA) 32-bit MCU
- DVD with IDE software, training materials and collateral
- Quick Start Guide document

The **TWR-K60D100M** is a development tool for the 100 MHz K60, K20, and K10 families of Kinetis microcontrollers. The TWR-K60D100M operates as a standalone debug tool and can also be combined and used as part of the modular Tower System development platform. TWR-K60D100M is also available as a Tower System Kit that includes Elevator and Serial Modules

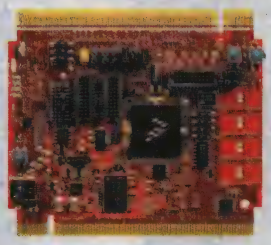
Mfg. Part No.	Description	Stock No.	Price Each
● TWR-K60D100M-KIT	COLDFIRE+MCF51QM MCU Module	05W3715	169.99

(207477)

KINETIS K70 MCU MODULE KIT

RoHS Compliant Available

freescale



Features
- MK70FN1M0VMJ12: K70FN1M in a 256 MAPBGA with 120 MHz operation
- Touch Tower Plug-in Socket
- General purpose Tower Plug-in (TWRPI) socket
- On-board JTAG debug circuit (OSJTAG) with virtual serial port
- 1Gb of DDR2 SDRAM memory
- 2Gb of SLC NAND flash memory
- Three axis accelerometer (MMA8451Q)
- Potentiometer
- Micro-SD Card slot

MCU Module Board Kit Contains
- TWR-K70F120M MCU module board
- DVD with software installers and documentation
- Quick Start Guide document
- Tower System Kit also includes:
  TWR-ELEV – Tower System Elevator Modules
  TWR-SER – Tower System Serial Module

The K70 MCU module demonstrates the capabilities of the K70 and K61 families of Kinetis microcontrollers and can operate as a standalone debug tool and can be purchased separately from the kit or purchased as part of a Tower System kit.

Mfg. Part No.	Description	Stock No.	Price Each
● TWR-K70F120M	K70 MCU Module Board Only	73T5793	109.00
● TWR-K70F120M-KIT	K70 MCU Module Board w/ Tower System Kit	73T5794	179.00

(200564)

KINETIS K10 FAMILY OF BASELINE MCUS

RoHS Compliant Available

freescale

Features:
- Low Power
- Mixed Signal
- Encryption and Tamper Detect

K10 MCU family is the entry point into the Kinetis portfolio with a rich suite of analog, communication, timing and control peripherals. High memory density K10 family devices include a single precision floating point unit and NAND flash controller. Pin compatibility, flexible low-power capabilities and innovative FlexMemory help to solve many of the major pain points for system implementation.

Mfg. Part No.	Prog. Mem. (KB)	RAM Memory (KB)	I/O (Pins)	Pkg.	Stock No.	Price Each 1-9
50 MHz						
● MK10DN32VFM5	32	16	24	32-QFN	89T6135	2.97
● MK10DN32VFT5	32	16	33	48-QFN	05W7973	3.08
● MK10DN32VLF5	32	16	33	48-LQFP	05W7974	2.96
● MK10DN32VLH5	32	16	44	64-LQFP	05W7975	3.37
● MK10DN32VMP5	32	16	44	64-MAPBGA	89T6136	3.91
● MK10DX32VFM5	32	8	24	32-QFN	89T6155	3.08
● MK10DX32VFT5	32	8	33	48-QFN	05W7993	3.37
● MK10DX32VLF5	32	8	33	48-LQFP	05W7994	3.26
● MK10DX32VLH5	32	8	44	64-LQFP	05W7995	3.66
● MK10DX32VMP5	32	8	44	64-MAPBGA	05W7996	4.18
● MK10DN64VFM5	64	16	24	32-QFN	05W7978	3.17
● MK10DN64VFT5	64	16	33	48-QFN	05W7979	3.46
● MK10DN64VLF5	64	16	33	48-LQFP	05W7980	3.37
● MK10DN64VLH5	64	16	44	64-LQFP	05W7981	3.75
● MK10DN64VMP5	64	16	44	64-MAPBGA	05W7982	4.32
● MK10DX64VFM5	64	16	24	32-QFN	05W7997	3.42
● MK10DX64VFT5	64	16	33	48-QFN	05W7998	3.71
● MK10DX64VLF5	64	16	33	48-LQFP	05W7999	3.62
● MK10DX64VLH5	64	16	44	64-LQFP	89T6156	4.00
● MK10DX64VMP5	64	16	44	64-MAPBGA	05W8004	4.54
● MK10DN128VFM5	128	16	24	32-QFN	89T6133	3.82
● MK10DN128VFT5	128	16	33	48-QFN	05W7970	4.11
● MK10DN128VLF5	128	16	33	48-LQFP	05W7971	4.00
● MK10DN128VLH5	128	16	44	64-LQFP	89T6134	4.38
● MK10DN128VMP5	128	16	44	64-MAPBGA	05W7972	4.92
● MK10DX128VFM5	128	16	24	32-QFN	89T6146	4.00
● MK10DX128VFT5	128	16	33	48-QFN	89T6147	4.32
● MK10DX128VLF5	128	16	33	48-LQFP	05W7983	4.18
● MK10DX128VLH5	128	16	44	64-LQFP	05W7984	4.61
● MK10DX128VMP5	128	16	44	64-MAPBGA	89T6148	5.13
72 MHz						
● MK10DX64VLH7	64	16	44	64-LQFP	05W8000	4.86
● MK10DX64VLK7	64	16	56	80-LQFP	05W8001	5.19
● MK10DX64VMB7	64	16	57	81-MAPBGA	05W8003	5.48
● MK10DX128VLH7	128	32	44	64-LQFP	05W7985	5.80
● MK10DX128VLL7	128	32	70	100-LQFP	05W7986	6.25
● MK10DX128VMB7	128	32	57	81-MAPBGA	05W7987	6.12
● MK10DX128VML7	128	32	74	104-MAPBGA	05W7988	6.34
● MK10DX256VLH7	256	64	44	64-LQFP	89T6149	6.77
● MK10DX256VLK7	256	64	56	80-LQFP	89T6150	7.08

➤ CONTINUED ➤

KINETIS K10 FAMILY OF BASELINE MCUS (CONT.)

72 MHz

Mfg. Part No.	Prog. Mem. (KB)	RAM Memory (KB)	I/O (Pins)	Pkg.	Stock No.	Price Each 1-9
MK10DX256VLL7	256	64	70	100-LQFP	89T6151	7.19
MK10DX256VMB7	256	128	57	81-MAPBGA	05W7992	6.98
MK10DX256VML7	256	128	74	104-MAPBGA	89T6154	7.20
100 MHz						
MK10DX128ZVMD10	128	16	104	144-MAPBGA	05W7989	10.35
MK10DX256VLQ10	256	128	104	144-LQFP	89T6152	9.78
MK10DX256VMD10	256	128	104	144-MAPBGA	89T6153	9.90
MK10DX256ZVLQ10	256	128	104	144-LQFP	61T9413	10.99
MK10DX256ZVMD10	256	128	104	144-MAPBGA	48T4329	11.17
MK10DN512VLK10	512	128	56	80-LQFP	89T6137	9.22
MK10DN512VLL10	512	128	70	100-LQFP	89T6138	9.31
MK10DN512VLQ10	512	128	104	144-LQFP	89T6139	10.17
MK10DN512VMD10	512	128	104	144-MAPBGA	89T6140	10.30
MK10DN512ZVLK10	512	128	56	80-LQFP	89T6142	11.81
MK10DN512ZVLL10	512	128	70	100-LQFP	75T7577	12.25
MK10DN512ZVLQ10	512	128	104	144-LQFP	75T7578	13.95
MK10DN512ZVMB10	512	128	57	81-MAPBGA	89T6143	9.54
MK10DN512ZVMC10	512	128	90	121-MAPBGA	89T6144	12.15
MK10DN512ZVMD10	512	128	104	144-MAPBGA	61T9412	11.60
120 MHz						
MK10FX512VLQ12	512	128	104	144-LQFP	89T6159	12.44
MK10FX512VMD12	512	128	104	144-MAPBGA	89T6160	12.60
MK10FN1M0VLQ12	1024	128	104	144-LQFP	89T6157	12.44
MK10FN1M0VMD12	1024	128	104	144-MAPBGA	89T6158	12.60

(208450)

KINETIS K40 FAMILY OF USB & SEGMENT LCD MCUS

RoHS Compliant Available

freescale

Features:
- Low Power
- Mixed Signal
- USB
- Segment LCD

K40 MCU family is pin, peripheral and software compatible with the K10 MCU family and adds full-speed USB 2.0 On-The-Go with device charge detect capability and a flexible low-power segment LCD controller.

72 MHz

Mfg. Part No.	Prog. Mem. (KB)	RAM Memory (KB)	I/O (Pins)	Pkg.	Stock No.	Price Each 1-9
MK40DX64VLH7	64	128	36	64-LQFP	05W8053	6.34
MK40DX64VMB7	64	16	52	81-MAPBGA	05W8054	7.04
MK40DX128VLH7	128	32	36	64-LQFP	05W8048	7.28
MK40DX128VLL7	128	32	66	100-LQFP	05W8049	7.69
MK40DX128VMB7	128	32	52	81-MAPBGA	05W8050	7.68
MK40DX256VLH7	256	64	36	64-LQFP	89T6192	8.21
MK40DX256VLK7	256	64	52	80-LQFP	89T6193	4.75
PK40DX256VLK7	256	64	52	80-LQFP	66W1068	23.42
MK40DX256VLL7	256	64	66	100-LQFP	89T6194	4.81
PK40DX256VLL7	256	64	66	100-LQFP	66W1069	23.91
MK40DX256VMB7	256	64	52	81-MAPBGA	05W8052	8.54
MK40DX256VML7	256	64	68	104-MAPBGA	89T6197	8.76
100 MHz						
MK40DX128ZVLQ10	128	128	98	144-LQFP	89T6191	12.09
MK40DX256VLQ10	256	64	98	144-LQFP	89T6195	11.24
MK40DX256VMD10	256	64	98	144-MAPBGA	89T6196	11.40
MK40DX256ZVLQ10	256	64	98	144-LQFP	89T6198	12.67
MK40DX256ZVMD10	256	64	98	144-MAPBGA	89T6200	12.83
MK40DN512VLK10	512	128	52	80-LQFP	89T6188	10.71
MK40DN512VLL10	512	128	64	100-LQFP	89T6189	10.84
MK40DN512VLQ10	512	128	98	144-LQFP	89T6190	11.65
MK40DN512VMD10	512	128	98	144-MAPBGA	05W8047	11.81
MK40DN512ZVLL10	512	128	64	100-LQFP	75T7582	19.29
MK40DN512ZVLQ10	512	128	98	144-LQFP	75T7583	19.39
MK40DN512ZVMD10	512	128	98	144-MAPBGA	61T9420	13.28

(208454)

KINETIS K60 FAMILY OF ETHERNET CRYPTO MCUS

RoHS Compliant Available

freescale

Features:
- Low Power
- Mixed Signal
- USB
- Ethernet
- Encryption and Tamper Detect
- DDR

K60 MCU family includes IEEE® 1588 Ethernet, full- and high-speed USB 2.0 On-The-Go with device charge detect capability, hardware encryption and tamper detection capabilities. These devices come with a rich suite of analog, communication, timing and control peripherals. High memory density devices include an optional single precision floating point unit, NAND flash controller and DRAM controller.

100 MHz

Mfg. Part No.	Prog. Mem. (KB)	RAM Memory (KB)	I/O (Pins)	Pkg.	Stock No.	Price Each 1-9
MK60DN256ZVLL10	256	128	66	100-LQFP	61T9421	11.37
MK60DN256ZVLQ10	256	128	100	144-LQFP	89T6218	12.45
MK60DX256VLL10	256	64	66	100-LQFP	89T6224	10.43
MK60DX256VLQ10	256	64	100	144-LQFP	89T6225	11.24
MK60DX256VMD10	256	64	100	144-MAPBGA	89T6226	11.40
MK60DX256ZVLL10	256	64	66	100-LQFP	48T4339	11.72
MK60DX256ZVLQ10	256	64	100	144-LQFP	48T4340	12.67
MK60DX256ZVMC10	256	64	86	121-MAPBGA	89T6227	11.90
MK60DX256ZVMD10	256	64	100	144-MAPBGA	89T6228	12.83
MK60DN512VLL10	512	128	66	100-LQFP	89T6219	10.84
MK60DN512VLQ10	512	128	100	144-LQFP	89T6220	11.65
MK60DN512VMC10	512	128	100	121-MAPBGA	66W7726	10.98
MK60DN512VMD10	512	128	100	144-MAPBGA	89T6221	11.81
MK60DN512ZVLL10	512	128	66	100-LQFP	61T9422	12.20
MK60DN512ZVMC10	512	128	86	121-MAPBGA	89T6223	12.37
MK60DN512ZVMD10	512	128	100	144-MAPBGA	48T4338	13.28
100 MHz						
MK60FX512VLQ12	512	128	100	144-LQFP	89T6233	14.17
MK60FX512VMD12	512	128	100	144-MAPBGA	89T6235	14.31
MK61FX512VMD12	512	128	95	144-MAPBGA	89T6240	14.96
MK61FX512VMJ12	512	128	128	256-MAPBGA	89T6241	16.01
MK60FN1M0VLQ12	1024	128	100	144-LQFP	89T6229	14.17
MK60FN1M0VMD12	1024	128	100	144-MAPBGA	89T6231	14.31
MK61FN1M0VMD12	1024	128	95	144-MAPBGA	89T6237	14.96
MK61FN1M0VMJ12	1024	128	128	256-MAPBGA	89T6238	16.01
120 MHz						
MK60FX512VLQ15	512	128	100	144-LQFP	89T6234	14.73
MK60FX512VMD15	512	128	100	144-MAPBGA	89T6236	14.84
MK61FX512VMD15	512	128	95	144-MAPBGA	05W8072	15.48
MK61FX512VMJ15	512	128	128	256-MAPBGA	05W8073	16.55
MK60FN1M0VLQ15	1024	128	100	144-LQFP	89T6230	14.73
MK60FN1M0VMD15	1024	128	100	144-MAPBGA	89T6232	14.84
MK61FN1M0VMD15	1024	128	95	144-MAPBGA	05W8071	15.48
MK61FN1M0VMJ15	1024	128	128	256-MAPBGA	89T6239	16.55
MK64FN1M0VMD12	1024	256	100	144-MAPBGA	08X2801	12.32
MK63FN1M0VMD12	1024	256	95	144-MAPBGA	08X2797	11.79
MK64FN1M0VLQ12	1024	256	100	144-LQFP	08X2800	12.21
MK64FN1M0VLL12	1024	256	66	100-LQFP	08X2799	11.56
MK64FN1M0VDC12	1024	256	83	121-XFBGA	08X2798	12.75

(208461)

TWR-K20D72M: KINETIS K20 72 MHZ MCU MODULE

RoHS Compliant Available

freescale

Features:
- Stand-alone USB host and device function
- S08JM60 based Open Source BDM (OSBDM) circuit
- Four user-controlled status LEDs
- Two Capacitive Touch Pads and two mechanical push buttons
- Socket for Capacitive Touch Pad daughter board (Touch TWRPI)
- Socket for Tower Plug-in
- Microphone, buzzer, potentiometer and MMA8451Q 3-axis accelerometer
- Battery holder for 20mm lithium battery (e.g. 2032, 2025)
- Board power select with 3.3-volt or 1.8-volt MCU operation

Mfg. Part No.	Description	Stock No.	Price Each
TWR-K20D72M	Tower Module, K20 Family, MCU	94T2730	119.00

(207463)

32-BIT MCUS & DEVELOPMENT TOOLS

FREESCALE FREEDOM PLATFORM DEVELOPMENT HARDWARE

RoHS Compliant Available

freescale

Features
- Low–cost
- Designed in an industry-standard compact form factor
- Easy access to the MCU I/O pins
- Integrated open-standard serial and debug interface (OpenSDA)
- Compatible with a rich-set of third-party expansion boards

Freedom development platform is a small, low-power, cost-effective evaluation and development system perfect for quick application prototyping and demonstration of Kinetis MCU families. The platform offers an easy-to-use mass-storage device mode flash programmer, a virtual serial port and classic programming and run-control capabilities.

FRDM-K20D50M

Mfg. Part No.	Description	Stock No.	Price Each
FREEDOM PLATFORM BOARDS ONLY			
● FRDM-K20D50M	Kinetis K20 ARM Cortex-M4F	66W5899	20.56
FREEDOM PLATFORM BUNDLES			
FRDM-KL25Z MOTOR SHIELD KIT	Kinetis KL25Z Basic Kit	66W8364	37.99
FRDM-KL25Z WIFI SHIELD KIT	Kinetis KL25Z Motor Control Kit	66W8366	102.65
FREEDOM PLATFORM BUNDLES ACCESSORY BUNDLES			
FRDM-KL25Z SHIELD KIT W/O BRD	Arduino Proto Shld Kit + Components	54W6566	15.00
FRDM-KL25Z BASIC KIT W/O BOARD	Basic Kit, Connectors and Cable	54W6564	5.22

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KINETIS M SERIES TOWER SYSTEM MODULE

RoHS Compliant Available

freescale

NEW

Features:
- MKM34Z5128CLL5 MCU (50 MHz, 128 KB flash, 16 KB RAM, low power, LQFP100 package)
- USB interface with mini-AB USB connector
- Large 160-segment glass LCD
- Onboard debug circuit
- Three-axis accelerometer
- Four user-controllable LEDs
- Potentiometer
- Independent, battery-operated power supply for real-time clock (RTC)

Kit Contents:
- TWR-KM34Z50M board
- A to mini-B USB cable
- CR2025 coin cell battery

Mfg. Part No.	Description	Stock No.	Price Each
● TWR-KM34Z50M	Kinetis M Series Module Kit	08X2857	159.00

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KINETIS M SERIES MCUS

RoHS Compliant Available

freescale

NEW

Features:
- 32-bit ARM Cortex-M0+ core
- Up to 50 MHz of core clock frequency
- 24-bit Sigma Delta ADCs
- Programmable gain amplifiers
- High precision internal voltage reference
- Designed for single-chip one-two- and three -phase electricity meters

Kinetis KM1x Series

Mfg. Part No.	Prog. Mem. (KB)	SRAM. Mem. (KB)	GPIO	Pkg	Stock No.	Price Each 1-9
● MKM14Z128CHH5	128	16	20	44-LGA	96W1228	4.48
Kinetis KM3x Series						
● MKM34Z128CLL5	128	16	68	100-LQFP	96W1230	6.02
● MKM33Z128CLH5	128	16	38	64-LQFP	96W1229	5.38

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XTRINSIC SENSORS FREEDOM PLATFORM EVALUATION KIT

RoHS Compliant Available

freescale

Applications
- eCompass
- Mobile Phones/Tablet Computers
- Remote Control/Wireless Mouse
- Game Consoles
- Navigation Devices
- Medical Devices

Kit Contents
- Xtrinsic Sensors Board
- FRDM-KL25Z board
- USB cable
- Quick Start Guide

Xtrinsic Sensor Board comes with XTRINSIC MEMS sensors designed for accurate measuring of altitude and pressure, as well as detection of magnetic fields and physical positions - including MPL3115, MAG3110 and MMA8491.

Mfg. Part No.	Description	Stock No.	Price Each
● XTRINSIC-SENSORS-EVK	XTRINSIC Sensor Eval Kit + KL25 Board	69W6392	26.99

(210253)

KINETIS KL2 TOWER SYSTEM MODULE

RoHS Compliant Available

freescale

Features
- Tower compatible MCU module
- MKL25Z128VLK4 MCU (48 MHz, 128 KB flash, 16 KB RAM, low-power, 80LQFP package)
- Dual role USB interface with micro-AB USB connector
- Touch Tower plug-in socket
- General purpose Tower plug-in (TWRPI) socket
- On-board debug circuit MK20 openSDA serial debug interface with virtual serial port and mass storage device bootloader
- Three-axis accelerometer (MMA8451Q)
- Four user-controllable LEDs

Kit Contents
- TWR-KL25Z48M 32-bit MCU module with MKL25Z128VLK4 MCU (80LQFP)
- 3ft A to mini-B USB cable for debug interface and power
- 3ft A to micro-B USB cable for MKL25Z128VLK4 USB interface
- Micro-B to A adapter for MKL25Z128VLK4 USB host applications
- Quick Start Guide

The **TWR-KL25Z48M** MCU module is designed to work either in standalone mode or as part of the Freescale Tower System, a modular development platform that enables rapid prototyping and tool re-use through reconfigurable hardware.
The **TWR-KL25Z48M** is supported by a range of Freescale and third-party development software.

Mfg. Part No.	Description	Stock No.	Price Each
● TWR-KL25Z48M	Eval Kit for MKL25Z128VLK4 MCU	48W4973	99.00

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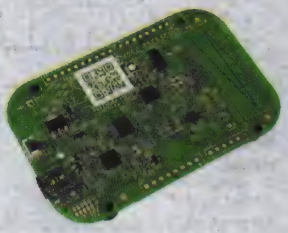
KL05 BASED NEW FREEDOM DEVELOPMENT BOARD

RoHS Compliant Available

freescale

Features
- Low Power MCU Architecture
- Energy-Saving Peripherals
- Ultra-Low Power Modes

The new Freedom Development Platform for the Kinetis® KL0 MCUs. This platform is a small, low-power, cost-efficient evaluation and development system for quick application prototyping and demonstration based on the Kinetis L series, the industry's first microcontrollers built on the ARM Cortex-M0+ processor. The development platform combines an industry-standard form factor with a rich set of third-party expansion board options. Using this platform to speed development, applications such as small appliances, gaming accessories, portable medical systems, audio systems, smart meters, lighting and power control, can now leverage 32-bit capabilities and the scalability needed to expand future product lines, all at 8- and 16-bit price and power consumption levels.



Mfg. Part No.	Description	Stock No.	Price Each
● FRDM-KL05Z	Evaluation Board for KL05Z MCU	53W2646	8.99

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KINETIS L SERIES MCUS

RoHS Compliant Available

freescale

Kinetis L series are a line of MCUs that combine the exceptional energy-efficiency and ease-of-use of the new ARM® Cortex™-M0+ processor with the performance, peripheral sets, enablement and scalability of the Kinetis 32-bit MCUs. This arrangement frees power-critical designs from 8- and 16-bit MCU limitations by combining excellent dynamic and stop currents with superior processing performance, a broad selection of on-chip flash memory densities and extensive analog, connectivity and HMI peripheral options. They are also hardware and software compatible with the ARM Cortex-M4-based Kinetis K series, providing a scalable migration path to more performance, memory and feature integration.

KL0: KINETIS KL0 ENTRY-LEVEL MCUS

Mfg. Part No.	Prog. Mem. (KB)	SRAM Mem. (KB)	GPIO	Pkg	Stock No.	Price Each Each
● MKL05Z32VFK4	32	4	22	24-QFN	45W3657	1.91
● MKL02Z32VFK4	32	4	22	24-QFN	61W9887	1.73
KL1: KINETIS KL1 GENERAL PURPOSE MCUS						
● MKL15Z128VFM4	128	16	28	32-QFN	45W3666	3.55
● MKL15Z128VFT4	128	16	40	48-QFN	45W3667	3.73
● MKL15Z128VLK4	128	16	70	80-LQFP	44W0179	2.28
● MKL15Z128VLK4	128	16	70	80-LQFP	44W0179	2.28
● MKL16Z128VFM4	128	16	28	32-QFN	69W2657	3.21
● MKL16Z128VFT4	128	16	40	48-QFN	69W2658	3.41
● MKL16Z128VLH4	128	16	54	64-LQFP	69W2659	3.51
● MKL16Z256VMP4	256	32	54	64-MAPBGA	08X2419	4.74
● MKL16Z256VLH4	256	32	54	64-LQFP	69W2660	4.14
● MKL16Z256VMP4	256	32	54	64-MAPBGA	08X2419	4.74
KL2: KINETIS KL2 USB MCUS						
● MKL25Z128VLK4	128	16	66	80-LQFP	44W0180	4.63
● MKL25Z128VFM4	128	16	23	32-QFN	45W3673	4.05
● MKL25Z128VFT4	128	16	36	48-QFN	45W3674	4.27
● MKL25Z128VLK4	128	16	66	80-LQFP	44W0180	4.63
● MKL26Z128VFT4	128	16	36	48-QFN	69W2669	3.87
● MKL26Z256VMP4	256	32	50	64-MAPBGA	08X2420	5.24
● MKL26Z256VLH4	256	32	50	64-LQFP	69W2673	4.61
● MKL26Z256VLL4	256	32	80	100-LQFP	69W2675	4.86

➤ CONTINUED ➤

KINETIS L SERIES MCUS (CONT.)

KL2: KINETIS KL2 USB MCUS

Mfg. Part No.	Prog. Mem. (KB)	SRAM Mem. (KB)	GPIO	Pkg	Stock No.	Price Each Each
MKL26Z256VMC4	256	32	80	121-MAPBGA	69W2676	4.86
MKL26Z256VMP4	256	32	50	64-MAPBGA	08X2420	5.24
KL3: KINETIS KL3 SEGMENT LCD MCUS						
MKL36Z256VLH4	256	32	54	64-LQFP	69W2688	5.08
MKL36Z256VMC4	256	32	84	121-MAPBGA	69W2690	5.33
KL4: KINETIS KL4 USB AND SEGMENT LCD MCUS						
MKL46Z256VLH4	256	32	50	64-LQFP	69W2696	5.55
MKL46Z256VMC4	256	32	84	121-MAPBGA	69W2698	5.78

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i.MX6Q SABRE LITE BOARD

RoHS Compliant Available

freescale

Features:

- Quad-Core ARM® Cortex A9 processor at 1GHz per core
- 1GByte of 64-bit wide DDR3 @ 532MHz
- Three display ports (RGB, LVDS, and HDMI 1.4a)
- Two camera ports (1xParallel, 1x MIPI CSI-2)
- Multi-stream-capable HD video engine
- Triple Play Graphics system
- Serial ATA 2.5 (SATA) at 3Gbps
- Dual SD 3.0/SDXC card slots
- PCIe port (1 lane)
- Analog (headphone/mic) and Digital (HDMI) audio
- 10/100/Gb Ethernet
- 3 High speed USB ports (2xHost, 1xOTG)
- 1xCAN2 port,10-pin JTAG and I2C
- General Purpose I/O for Device Control

Kit Contents

- SABRE-Lite Board
- 4GB SD card preloaded with Timesys Linux BSP
- Power Adaptor
- USB cable
- Quick start guide

i.MX6x SABRE Lite Board, a low-cost development platform featuring the powerful i.MX 6Quad application processor.

Mfg. Part No.	Description	Stock No.	Price Each
MCIMX6Q-SL	i.MX6Q SABRE LITE BOARD	05W6138	179.00

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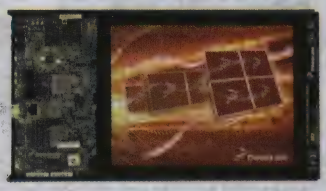
i.MX6 SABRE DEVELOPMENT TOOLS

RoHS Compliant Available

freescale

i.MX6 SABRE Tools allow for evaluating the i.MX 6 series of processors, a truly scalable multicore platform which includes single-, dual- and quad-core families based on the ARM® Cortex™-A9 architecture. Together with a robust ecosystem, i.MX 6 series provides the ideal platform to develop a portfolio of end devices based on a single hardware design. With high-performance multimedia processing, pin*- and software- compatible product families and integrated power management, i.MX 6 series is purpose built for the new era of smart devices.



Mfg. Part No.	Description	Stock No.	Price Each 1-9
MCIMX6SLEVK	i.MX 6 SOLOLITE SABRE BOARD ONLY	45W3625	399.00
MCIMX6DL-SDP	i.MX 6 DUAL SABRE PLATFORM KIT	45W3608	999.00
MCIMX6Q-SDP	i.MX 6 QUAD SABRE PLATFORM KIT	45W3617	999.00
MCIMX6Q-SDB	i.MX 6 QUAD SABRE BOARD ONLY	45W3616	399.00
DAUGHTER CARD			
IMXEB00KDC3-E	ELECTRONIC PAPER DISPLAY MODULE	45W2320	499.00

(208468)

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Get inspired, collaborate, design, research, ask experts questions.

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i.MX 6 SERIES OF APPICATION PROCESSORS

RoHS Compliant Available

freescale

The **i.MX 6** series of applications processors unleashes a scalable multicore platform that includes single-, dual- and quad-core families based on the ARM® Cortex™-A9 architecture for consumer, industrial and automotive applications. By combining the power-efficient processing capabilities of the ARM Cortex-A9 architecture with 3D and 2D graphics, as well as high-definition video, the i.MX 6 series provides a high level of multimedia performance to enable an unbounded user experience.

SOLOLITE FAMILY

Mfg. Part No.	L2 Cache	Graphics Engine Features	CPU Speed (Hz)	Stock No.	Price Each 1-9
MCIMX6L3DVN10AA	256KB	2D graphics	1GHz	31W8709	17.98
SOLO FAMILY					
MCIMX6S5DVM10AB	512KB	3D w/ shader and 2D	1GHz	31W8717	23.66
MCIMX6S5EVM10AB	512KB	3D w/ shader and 2D	1GHz	31W8718	26.03
MCIMX6S7CVM08AB	512KB	3D w/ shader and 2D	800MHz	31W8720	27.22
DUALLITE FAMILY					
MCIMX6U5DVM10AB	512KB	3D w/ shader and 2D	1GHz	31W8724	29.58
MCIMX6U5EVM10AB	512KB	3D w/ shader and 2D	1GHz	31W8725	32.53
MCIMX6U7CVM08AB	512KB	3D w/ shader and 2D	800MHz	31W8727	34.02
DUAL FAMILY					
MCIMX6D5EYM10AC	1MB	3D w/ 4x shaders and 2x 2D	1GHz	45W3611	43.89
MCIMX6D7CVT08AC	1MB	3D w/ 4x shaders and 2D	800MHz	45W3615	50.46
QUAD FAMILY					
MCIMX6Q5EYM10AC	1MB	3D w/ 4x shaders and 2x 2D	1GHz	45W3620	54.85

(208464)

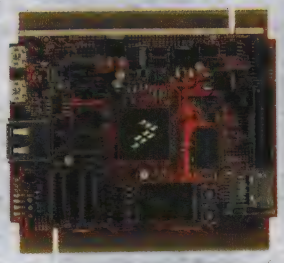
VYBRID CONTROLLER SOLUTION EVALUTATION KITS

RoHS Compliant Available

freescale

Features

- Vybrid VF61NS151CMK50 dual-core processor
- Kinetis K20DX128VFM5-based OpenSDA circuit
- 1 Gb x 16 (128 MB) DDR3 in 96 FBGA package (Samsung)
- 2 Gb x 16 (256 MB) NAND flash (Micron)
- Two 128 Mb (16 MB) quad I/O serial flash (Spansion)
- Dual USB with on-chip PHY
- Interfaces to TWR-LCD-RGB board
- Four user-controlled status LEDs
- Two mechanical push buttons for user input and one for reset
- Potentiometer and MMA8451Q 3-axis digital accelerometer
- Micro SD card slot
- Independent battery-operated power supply for real-time clock and tamper detection module
- Enablement Solutions
  ARM DS-5 Starter Kit for Vybrid Controller Tower System module/kit
  Timesys Linux BSP
  IAR Embedded Workbench for ARM
  Processor Expert (PEx)
  PEG Graphical User Interface Solutions
  Qt UI Framework



The TWR-VF65GS10-PRO professional kit contains:

- TWR-VF65GS10 module
- TWR-SER2 Enhanced Serial module (dual Ethernet)
- TWR-LCD-RGB Graphical LCD module
- TWR-ELEV Elevator modules
- Quick Start Guide
- ARM DS-5 Starter Kit (256 KB code size limitation)

TWR-VF65GS10 controller module kit contains:

- TWR-VF65GS10 module
- Quick Start Guide
- ARM DS-5 Starter Kit (256 KB code size limitation)

TWR-VF65GS10-KIT Tower System Kit contains:

- TWR-VF65GS10 module
- TWR-SER Serial module (single Ethernet)
- TWR-ELEV Elevator modules
- Quick Start Guide
- ARM DS-5 Starter Kit (256 KB code size limitation)

TWR-VF65GS10 processor module, based on the Vybrid VF6xx dual heterogeneous core solution that utilize ARM® Cortex™-A5 and optional ARM Cortex-M4 together with a peripheral set commonly required for control and communications in a broad range of industrial applications. This processor module (or development board) can operate as a standalone debug tool or as part of an assembled Tower System development platform. Add full support from MQX™ RTOS Software Solutions, Timesys Linux® BSP and the ARM® DS-5™ Starter Kit for Vybrid Controller Tower System module and your next application-rich design is at your fingertips. For more robust functionality, the TWR-VF65GS10 is availble in three bundled kits to suite your development needs. Each kit comes with the free ARM DS-5 Starter Kit for Vybrid Controller Tower System module.

Mfg. Part No.	Description	Stock No.	Price Each
TWR-VF65GS10	Vybrid Tower System Board	45W4113	199.00
TWR-VF65GS10-KIT	Vybrid Tower Kit	45W4115	269.00
TWR-VF65GS10-PRO	Vybrid Tower Pro Kit	69W4047	399.00

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32-BIT MCUS & DEVELOPMENT TOOLS

1

TWR-MCF51JF COLDFIRE+ MCF51JX MCU MODULE KIT

RoHS Compliant Available

freescale

Features:

- Based on the MCF51JF128 device in a 64 LQFP package
- On-board debugger (OSBDM)
- Full-speed USB 2.0 dual-role interface
- Capacitive touch and push buttons
- Potentiometer
- Audio Input/Output
- Power plug-in sockets
- Three Axis Accelerometer
- On Board Debug Circuit
- Infrared Transmit & Receive

The **TWR-MCF51JF** module is a development board for the ColdFire+ MCF51Jx 32-bit MCUs and is designed to enable rapid prototyping and development of consumer and industrial applications. The TWR-MCF51JF operates as a standalone debug tool and can also be combined and used as part of the modular Tower System development platform. TWR-MCF51JF module is also available as a Tower System Kit that include elevator and serial boards.

Mfg. Part No.	Description	Stock No.	Price Each
● TWR-MCF51JF	COLDFIRE+MCP51JX MCU Module	45T2779	79.00
● TWR-MCF51JF-KIT	COLDFIRE+ MCP51JX Tower System Kit	45T2780	119.00

(207465)

MCF5225X 32-BIT MICROCONTROLLERS

RoHS Compliant Available

freescale

Features:

- V2 ColdFire® core with 66 MHz and 80 MHz options
- Complimentary Freescale MQX™ software solutions
- Connectivity: USB 2.0 full-speed host/device/OTG controller; FlexCAN controller; 10/100 Ethernet controller
- External Mini-FlexBus interface
- Cryptographic accelerator unit
- Up to 512Kbytes of flash memory
- Up to 64Kbytes SRAM

Applications:

- Industrial Control
- Industrial Networking
- Human Machine Interface (HMI)
- High End Lighting Control
- Fire & Alarm System/ Applications
- Security Panels
- HVAC System/ Applications
- Medical devices

The **MCF5225x** family consists of highly integrated devices with on-chip USB, Ethernet, CAN and encryption functions, featuring the complete Freescale MQX RTOS software at no additional cost.

Mfg. Part No.	System Clock (MHz)	Flash (KB)	SRAM (KB)	Package	Stock No.	Price Each 1-9
● MCF52254CAF66	66	512	64	100-LQFP	09P3965	11.65
● MCF52255CAF80	80	512	64	100-LQFP	09P3966	12.84
● MCF52258AG80	80	512	64	144-LQFP	09P3971	12.12
● MCF52258CAG66	66	512	64	144-LQFP	09P3972	12.69
● MCF52259CAG80	80	512	64	144-LQFP	09P3975	13.88

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CODEWARRIOR DEVELOPMENT TOOLS

RoHS Compliant Available

freescale

Development tool suites

- CodeWarrior Professional Suite - Full featured development suites
- CodeWarrior Standard Suite - Selectively featured development suites
- CodeWarrior Basic Suite - Compiler upgrades to special editions, Linux Applications Editions and Flash programmers

CodeWarrior Development Studio is a complete integrated Development Environment (IDE) suite that provides a highly visual and automated framework to accelerate the development of the most complex embedded applications. These suites allow ready access to any or all of the CodeWarrior products contained within each suite. This means you can license the entire portfolio of CodeWarrior tools within the suite you purchase. Each suite also contains all functionality of the products in the suites below it.

Mfg. Part No.	Description	Stock No.	Price Each
PERPETUAL LICENSES			
CWP-BASIC-FL	CW Basic Edition - Floating Node	89M1207	995.00
CWP-BASIC-NL	CW Basic Edition - Node Locked	89M1208	995.00
CWP-STANDARD-FL	CW STD Edition - Floating Node	89M1211	2495.00
CWP-STANDARD-NL	CW STD Edition - Node Locked	89M1212	2495.00
CWP-PRO-FL	CW PRO Edition - Floating Node	89M1209	4995.00
CWP-PRO-NL	CW PRO Edition - Node Locked	89M1210	4995.00
ANNUAL SUBSCRIPTION LICENSES			
CWA-BASIC-NL	CW Basic Edition - Node Locked	89M1199	395.00
CWA-STANDARD-FL	CW STD Edition - Floating Node	89M1204	995.00
CWA-STANDARD-NL	CW STD Edition - Node Locked	89M1205	995.00
CWA-PRO-FL	CW PRO Edition - Floating Node	89M1201	1995.00
CWA-PRO-NL	CW PRO Edition - Node Locked	89M1202	1995.00
ACCESSORIES AND MAINTENANCE			
CWT-STANDARD	CW STD Edition Tech Support Pkg	89M1215	495.00
CWT-PRO	CW PRO Edition Tech Support Pkg	89M1214	995.00
● CWH-DONGLE	USB Security Dongle for Node Locked CW	14M4516	99.00

(80437)

KINETIS KV10 FAMILY OF MOTOR CONTROL MCUS

RoHS Compliant Available

freescale

NEW

Features:

- ARM Cortex-M0+
- Multiple motor control timers
- 4-channel DMA controller
- 16-bit SPI module
- I2C module
- UART modules
- 16-bit SAR ADCs
- 12-bit DAC

Kinetis KV10 MCU family is the entry point into the V Series and provides a solution for 3-phase sensorless BLDC and PMSM motor control.

75 MHz

Mfg. Part No.	Prog. Mem. (KB)	RAM Memory (KB)	I/O (Pins)	Pkg.	Stock No.	Price Each 1-9
● MKV10Z32VFM7	32	8	28	32-QFN	41X4368	2.48
● MKV10Z32VLF7	32	8	40	100-LQFP	41X4370	2.68
● MKV10Z16VLF7	16	8	40	48-LQFP	41X4367	2.48
● MKV10Z16VLC7	16	8	28	32-LQFP	41X4366	2.30
● MKV10Z32VLC7	32	8	28	32-LQFP	41X4369	2.48
● MKV10Z16VFM7	16	8	28	32-QFN	41X4365	2.30

(211884)

KINETIS E SERIES MCUS

RoHS Compliant Available

freescale

NEW

Features:

- 32-bit ARM Cortex-M0+ core
- Analog Comparator
- 12bit ADC
- Serial communication interfaces
- Single power supply

The Kinetis E series is the most scalable portfolio of ARM Cortex-M0+ microcontrollers in the industry. Designed to maintain high robustness for complex electrical noise environments and high-reliability applications.

KE02: KINETIS KE02 ENTRY LEVEL MCUS

Mfg. Part No.	Prog. Mem. (KB)	SRAM. Mem. (KB)	GPIO	Pkg	Stock No.	Price Each 1-9
● MKE04Z8VFK4	8	1	22	24-QFN	08X2777	1.18
● MKE04Z8VTG4	8	1	14	16-TSSOP	08X2778	0.88
● MKE04Z8VWJ4	8	1	18	20-SOIC	08X2779	1.09
● MKE02Z64VLC2	64	4	28	32-LQFP	69W2649	1.93
● MKE02Z64VLD2	64	4	37	44-LQFP	69W2650	2.08
● MKE02Z64VQH2	64	4	57	64-QFP	69W2651	2.20
● MKE02Z64VLC4	64	4	28	32-LQFP	44X7019	1.93
● MKE02Z64VLD4	64	4	37	44-LQFP	44X7020	2.08
● MKE02Z64VLH4	64	4	57	64-LQFP	44X7021	2.18
● MKE02Z64VQH4	64	4	57	64-QFP	44X7022	2.20
● MKE06Z128VLD4	128	16	38	44-LQFP	44X7023	3.22
● MKE06Z128VLH4	128	16	58	64-LQFP	44X7024	3.32
● MKE06Z128VLK4	128	16	71	80-LQFP	44X7025	3.57
● MKE06Z128VQH4	128	16	58	64-QFP	44X7026	3.34

(212054)

VYBRID CONTROLLER SERIES MCUS

NEW

RoHS Compliant Available

freescale

Vybrid controller solutions are built on an asymmetrical-multiprocessing architecture using ARM cores as the anchor for the platform, and are ideal for many industrial applications.

VF3: SINGLE CORE ARM CORTEX-A5 MCUS

Mfg. Part No.	CPU Speed (MHz)	GPIO	Pkg	Stock No.	Price Each 1-9
● MVF30NN151CKU26	266	125	176-LQFP	96W1277	20.09
● MVF30NS151CKU26	266	125	176-LQFP	96W1278	20.83
VF6: HETEROGENOUS DUAL CORE ARM CORTEX-A5 / M4 MCUS					
● MVF62NN151CMK40	400	141	364-MAPBGA	96W1291	23.26
● MVF60NN151CMK50	500	141	364-MAPBGA	96W1286	23.66
● MVF60NS151CMK50	500	141	364-MAPBGA	96W1288	24.41
● MVF61NN151CMK50	500	141	364-MAPBGA	96W1289	24.93
● MVF61NS151CMK50	500	141	364-MAPBGA	96W1290	25.67

(212057)

56800/E 32-BIT DIGITAL SIGNAL CONTROLLERS

RoHS Compliant Available

freescale

NEW

Features:

- Low-power operation enables higher system efficiency
- 50/100 MHz 32-bit core
- Single-cycle math computations
- High-resolution PWM with 312 pico-second resolution
- 12-bit high-speed ADC

Mfg. Part No.	Core Frequency	Flash Memory Size	RAM Memory Size	Pkg	Stock No.	Price Each 1-9
● MC56F82743VFM	100MHz	64KB	8KB	32-QFN	96W1206	4.92
● MC56F82743VLC	100MHz	64KB	8KB	32-LQFP	96W1207	4.43

➤CONTINUED➤

56800/E 32-BIT DIGITAL SIGNAL CONTROLLERS (CONT.)

Mfg. Part No.	Core Frequency	Flash Memory Size	RAM Memory Size	Pkg	Stock No.	Price Each 1-9
MC56F82746VLF	100MHz	64KB	8KB	48-LQFP	96W1208	5.16
MC56F82748VLH	100MHz	64KB	8KB	64-LQFP	96W1209	4.86

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KINETIS W SERIES MCUS

RoHS Compliant Available

freescale

NEW

Features:

- sub 1Ghz (KW0) and 2.4GHz (KW2) RF transceivers
- ARM Cortex M0+ Core (KW0)
- ARM Cortex M4 Core (KW2)
- IEEE 802.15.4 Protocol
- O-QPSK Modulation
- Point-to-point or full mesh networking

KW0x: ARM CORTEX M0+

Mfg. Part No.	Core Frequency	Flash Memory Size	RAM Memory Size	No. of GPIO	Pkg	Stock No.	Price Each 1-9
MKW01Z128CHN	48MHz	128KB	16KB	-	60-LGA	39X0760	5.48
KW2x FAMILY: ARM CORTEX M4							
MKW24D512VHA5	50MHz	512KB	64KB	24	63-LGA	20X5323	12.37
MKW21D256VHA5	50MHz	256KB	32KB	24	63-LGA	61W9889	9.70
MKW21D512VHA5	50MHz	512KB	64KB	24	63-LGA	61W9890	12.46
MKW22D512VHA5	50MHz	512KB	64KB	24	63-LGA	61W9891	12.64

(212424)

KINETIS KV1X FAMILY TOWER SYSTEM MODULE

NEW

freescale

Features

- MKV10Z32VLF7 MCU (ARM® Cortex™-M0+ 75 MHz, 32 KB Flash, 8 KB SRAM, 12-bit ADC, 48 LQFP)
- Three-axis accelerometer (MMA8451Q)
- Eight user-controllable LEDs
- Two user push-button switch
- Four thermistors for single ended or differential analog inputs
- Power selectable 3.3 V/1.8 V
- Motor control auxiliary connectors
- Can be powered by external supply such as APMOTOR56F800E motor board and TWRMCLV3PH
- OpenSDA debug interface

TWR-KV10Z32 is a development tool for the Kinetis V series KV1x family built on the ARM® Cortex™-M0+ processor. The TWR-KV10Z32 MCU module is designed to work either in standalone mode or as part of the Freescale Tower System, a modular development platform that enables rapid prototyping and tool re-use through reconfigurable hardware.

Mfg. Part No.	Description	Stock No.	Price Each Each
TWR-KV10Z32	MKV10Z32VLF7 MCU Tower Module	43X4103	99.00

(212428)

KINETIS E SERIES FREEDOM DEVELOPMENT PLATFORM

RoHS Compliant Available

freescale

NEW

Features

- MKE02Z64VQH2 MCU – 20 MHz, 64 KB Flash, 4 KB SRAM, 64QFP
- Capacitive touch slider, MMA8451Q accelerometer, tri-color LED
- USB or external power supply options
- Easy access to MCU I/O
- IrDA transmitter and receiver
- Thermistor sensor to measuring temperature
- Form factor compatible with Arduino™ R3 pin layout
- New, OpenSDA debug interface

Freescale Freedom development platform is a set of software and hardware tools for evaluation and development. It is ideal for rapid prototyping of MCU-based applications. The Freescale Freedom KE02Z hardware, FRDM-KE02Z, is a simple, yet sophisticated design featuring a Kinetis E series MCU, the industry's first 5-volt MCU built on the ARM® Cortex™-M0+ core.

Mfg. Part No.	Description	Stock No.	Price Each
FRDM-KE02Z	KINETIS E SERIES FREEDOM DEVELOPMENT PLATFORM	97W2173	12.95

(212440)

KINETIS K21 120 MHZ TOWER SYSTEM MODULE

RoHS Compliant Available

freescale

Features

- MK21FN1M0VMC12 MCU (120 MHz, 1 MB flash, 128 KB RAM, FPU, USB OTG,121 MAPBGA)
- Dual-role USB interface with Micro-AB USB connector
- On-board open source JTAG (OSJTAG) circuit with virtual serial port
- General-purpose Tower plug-in (TWRPI) socket
- Three-axis accelerometer (MMA8451Q)
- Four user-controlled status LEDs
- Push buttons for GPIO interrupts and MCU reset
- Potentiometer, SD card socket and coin cell battery holder
- Independent, battery operated power supply for real-time clock and tamper detection modules

NEW

TWR-K21F120M is a development board for the Kinetis K21 and K22 120 MHz 32-bit ARM® Cortex™-M4 MCUs with floating point unit. The board provides rapid prototyping for applications requiring high feature integration, as low as 240uA/MHz low-power consumption and mid/high flash memory density (up to 1 MB) that need to support multiple communication stacks.

➤CONTINUED➤

KINETIS K21 120 MHZ TOWER SYSTEM MODULE (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
TWR-K21F120M	K21 120 MHZ TOWER SYSTEM MODULE	96W1516	99.00

(212441)

KINETIS K64 FAMILY TOWER SYSTEM MODULE

RoHS Compliant Available

freescale

Features

- MK64FN1M0VMD12 (120 MHz, 1 MB Flash, 256 KB RAM, FPU, USB, encryption, low power, 144 MAPBGA)
- Dual-role USB interface with Micro-AB USB connector
- Onboard open-standard serial and debug adaptor (OpenSDA)
- General-purpose Tower plug-in (TWRPI) socket
- Three-axis accelerometer (MMA8451Q)
- Four user-controlled status LEDs
- Pushbuttons for GPIO interrupts and MCU reset
- Potentiometer, SD card socket and coin cell battery holder
- Independent, battery-operated power supply for real-time clock and tamper detection modules

NEW

TWR-K64F120M is a development board for the Kinetis K24, K63 and K64 120 MHz 32-bit ARM® Cortex™-M4 MCUs. It features the Kinetis MK64FN1M0VMD12 low-power MCU with 1MB Flash, 256 KB SRAM, USB USB and Ethernet MAC. Board can operates as a standalone debug tool and can also be combined and used as part of the modular Tower System development platform.

Mfg. Part No.	Description	Stock No.	Price Each Each
TWR-K64F120M	K64 FAMILY TOWER SYSTEM MODULE	38X6218	149.00

(212442)

KINETIS K20 FAMILY OF USB MCUS

RoHS Compliant Available

freescale

Features:

- Low Power
- Mixed Signal
- Encryption and Tamper Detect
- USB

K20 MCU family is pin, peripheral and software compatible with the K10 MCU family and adds full and high-speed USB 2.0 On-The-Go with device charge detect capability. These devices come with a rich suite of analog, communication, timing and control peripherals. High memory density K20 family devices include a single precision floating point unit and NAND flash controller.

50 MHz

Mfg. Part No.	Prog. Mem. (KB)	RAM Memory (KB)	I/O (Pins)	Pkg.	Stock No.	Price Each Each
MK20DN32VFM5	32	8	20	32-QFN	05W8006	1.89
MK20DN32VFT5	32	8	29	48-QFN	05W8007	3.68
MK20DN32VLF5	32	8	29	48-LQFP	05W8008	3.59
MK20DN32VLH5	32	8	40	64-LQFP	05W8009	3.96
MK20DN32VMP5	32	16	40	64-MAPBGA	05W8010	4.52
MK20DX32VFM5	32	8	20	32-QFN	05W8021	3.68
MK20DX32VFT5	32	8	29	48-QFN	05W8022	3.96
MK20DX32VLF5	32	8	29	48-LQFP	05W8023	3.87
MK20DX32VLH5	32	8	40	64-LQFP	05W8024	4.27
MK20DX32VMP5	32	8	40	64-MAPBGA	05W8025	4.83
MK20DN64VFM5	64	16	20	32-QFN	89T6172	3.78
MK20DN64VFT5	64	16	29	48-QFN	05W8012	4.07
MK20DN64VLF5	64	16	29	48-LQFP	05W8013	3.96
MK20DN64VLH5	64	16	40	64-LQFP	05W8014	4.36
MK20DN64VMP5	64	16	40	64-MAPBGA	05W8015	4.88
MK20DX64VFM5	64	16	20	32-QFN	05W8026	4.04
MK20DX64VFT5	64	16	29	48-QFN	05W8027	4.34
MK20DX64VLF5	64	16	29	48-LQFP	05W8028	4.22
MK20DX64VLH5	64	16	40	64-LQFP	05W8029	4.61
MK20DX64VMP5	64	16	40	64-MAPBGA	05W8032	5.15
MK20DN128VFM5	128	16	20	32-QFN	89T6161	4.41
MK20DN128VFT5	128	16	29	48-QFN	05W8005	4.68
MK20DN128VLF5	128	16	29	48-LQFP	89T6162	4.61
MK20DN128VLH5	128	16	40	64-LQFP	89T6163	5.03
MK20DN128VMP5	128	16	40	64-MAPBGA	89T6164	5.55
PK20DN128VMP5	128	16	40	64-MAPBGA	28W2282	8.66
MK20DX128VFM5	128	16	20	32-QFN	89T6173	4.63
PK20DX128VFM5	128	16	20	32-QFN	28W2283	6.24
MK20DX128VFT5	128	16	29	48-QFN	89T6174	4.88
PK20DX128VFT5	128	16	29	48-QFN	28W2284	7.63
MK20DX128VLF5	128	16	29	48-LQFP	89T6175	4.83
PK20DX128VLF5	128	16	29	48-LQFP	28W2285	7.53
MK20DX128VLH5	128	16	40	64-LQFP	89T6176	5.19
PK20DX128VLH5	128	16	40	64-LQFP	28W2286	7.00
MK20DX128VMP5	128	16	40	64-MAPBGA	89T6177	5.75
PK20DX128VMP5	128	16	40	64-MAPBGA	28W2287	8.97
PK21DN512VLK5	512	64	56	80-LQFP	28W2289	13.73
PK22DN512VLK5	512	64	56	80-LQFP	28W2290	8.68
MK21DN512VLK5	512	64	56	80-LQFP	31W9105	7.69
MK21DN512VMC5	512	64	64	121-MAPBGA	47W6689	7.89
MK22DN512VLH5	512	64	40	64-LQFP	31W9108	6.84

➤CONTINUED➤

KINETIS K20 FAMILY OF USB MCUS (CONT.)

72 MHz

Mfg. Part No.	Prog. Mem. (KB)	RAM Memory (KB)	I/O (Pins)	Pkg.	Stock No.	Price Each Each
● MK20DX64VLH7	64	16	40	64-LQFP	05W8030	5.55
● MK20DX64VMB7	64	16	53	81-MAPBGA	05W8031	6.08
● MK20DX128VLH7	128	16	40	64-LQFP	05W8016	6.47
● MK20DX128VLL7	128	16	66	100-LQFP	05W8017	6.88
● MK20DX128VMB7	128	16	53	81-MAPBGA	05W8018	6.72
● MK20DX256VLH7	256	128	40	64-LQFP	89T6178	7.40
● MK20DX256VLK7	256	64	52	80-LQFP	89T6180	7.73
● PK20DX256VLK7	256	64	52	80-LQFP	66W1066	21.62
● MK20DX256VLL7	256	64	66	100- LQFP	89T6181	7.85
● PK20DX256VLL7	256	64	68	100- LQFP	66W1067	22.14
● MK20DX256VMB7	256	128	53	81-MAPBGA	05W8020	7.58
● MK20DX256VML7	256	128	70	104-MAPBGA	89T6182	7.80
● PK20DX256VML7	256	128	70	104-MAPBGA	28W2288	12.10
100 MHz						
● MK20DX128ZVLQ10	128	16	100	144-LQFP	48T4332	11.05
● MK20DX256VLK10	256	128	100	80-LQFP	89T6179	7.73
● MK20DX256ZVLK10	256	128	52	80-LQFP	48T4333	12.15
● MK20DX256ZVLL10	256	128	66	100-LQFP	61T9415	12.29
● MK20DX256ZVLQ10	256	128	100	144-LQFP	61T9416	11.74
● MK20DX256ZVMC10	256	128	86	121-MAPBGA	89T6183	12.50
● MK20DX256ZVMD10	256	128	100	144-MAPBGA	48T4334	11.90
● MK20DN512VLK10	512	128	52	80-LQFP	89T6165	9.90
● MK20DN512ZVLK10	512	128	52	80-LQFP	89T6167	11.17
● MK20DN512ZVLL10	512	128	66	100-LQFP	75T7579	11.48
● MK20DN512ZVLQ10	512	128	100	144-LQFP	75T7580	14.72
● MK20DN512ZVMB10	512	128	53	81-MAPBGA	89T6169	10.32
● MK20DN512ZVMC10	512	128	86	121-MAPBGA	89T6170	11.47
● MK20DN512ZVMD10	512	128	100	144-MAPBGA	89T6171	12.37
120 MHz						
● MK20FX512VLQ12	512	128	100	144-LQFP	05W8035	13.36
● MK20FX512VMD12	512	128	100	144-MAPBGA	05W8036	13.52
● MK20FN1M0VLQ12	1024	128	100	144-LQFP	05W8033	13.36
● MK20FN1M0VMD12	1024	128	100	144-MAPBGA	05W8034	13.52
● MK21FN1M0VLQ12	1024	128	100	144-LQFP	96W1234	11.56
● MK21FN1M0VMC12	1024	128	64	121-MAPBGA	96W1235	11.02
● MK21FN1M0VMD12	1024	128	100	144-MAPBGA	96W1236	11.69
● MK22FN1M0VLH12	1024	128	40	64-LQFP	96W1240	9.98
● MK22FN1M0VLK12	1024	128	56	80-LQFP	96W1241	10.23
● MK22FN1M0VLL12	1024	128	66	100-LQFP	96W1242	10.32
● MK22FN1M0VLQ12	1024	128	100	144-LQFP	96W1243	11.02
● MK22FN1M0VMD12	1024	128	100	144-MAPBGA	96W1245	11.13

(208451)

KINETIS K30 FAMILY OF SEGMENT LCD MCUS

RoHS Compliant Available

freescale

Features:
- Low Power
- Mixed Signal
- Segment LCD

K30 MCU family is pin, peripheral and software compatible with the K10 MCU family of Kinetis microcontrollers and adds a flexible low-power segment LCD controller.

72 MHz

Mfg. Part No.	Prog. Mem. (KB)	RAM Memory (KB)	I/O (Pins)	Pkg.	Stock No.	Price Each 1-9
● MK30DX64VLH7	64	16	40	64-LQFP	05W8045	5.67
● MK30DX64VMB7	64	16	56	81-MAPBGA	05W8046	6.44
● MK30DX128VLH7	128	32	40	64-LQFP	05W8037	6.63
● MK30DX128VMB7	128	32	57	81-MAPBGA	05W8038	7.10
● MK30DX256VLH7	256	64	40	64-LQFP	05W8040	7.55
● MK30DX256VLK7	256	64	56	80-LQFP	05W8041	7.85
● MK30DX256VLL7	256	64	70	100-LQFP	05W8042	7.98
● PK30DX256VLL7	256	128	70	100-LQFP	28W2291	12.02
● MK30DX256VMB7	256	64	56	81-MAPBGA	05W8043	7.94
100 MHz						
● MK30DX256ZVLQ10	256	128	102	144-LQFP	48T4335	11.90
● MK30DX256ZVMD10	256	128	102	144-MAPBGA	89T6187	11.32
● MK30DN512ZVLK10	512	128	56	80-LQFP	89T6184	11.31
● MK30DN512ZVLL10	512	128	68	100-LQFP	89T6185	10.58
● MK30DN512ZVLQ10	512	128	102	144-LQFP	75T7581	18.63
● MK30DN512ZVLQ10R	512	128	102	144-LQFP	61T9418	12.37
● MK30DN512ZVMD10	512	128	102	144-MAPBGA	89T6186	11.96

(208452)

KINETIS K50 FAMILY OF MEASUREMENT MCUS

RoHS Compliant Available

freescale

Features:
- Low Power
- Mixed Signal
- USB
- Segment LCD
- Ethernet
- Encryption and Tamper Detect
- Operational & transimpedance amplifiers

K50 MCU family is pin-, peripheral- and software-compatible with other Kinetis microcontrollers and provides designers with an Analog Measurement Engine consisting of integrated operational and transimpedance amplifiers and high-resolution ADC and DAC modules. The family also features IEEE® 1588 Ethernet and hardware encryption, full-speed USB 2.0 On-The-Go with device charger detect capability and a flexible low-power segment LCD controller.

72 MHz

Mfg. Part No.	Prog. Mem. (KB)	RAM Memory (KB)	I/O (Pins)	Pkg.	Stock No.	Price Each 1-9
● MK50DX128CLH7	128	32	35	64-LQFP	89T6203	7.69
● MK50DX128CLL7	128	32	59	100-LQFP	05W8055	8.91
● MK51DX128CLH7	128	32	31	64-LQFP	05W8063	8.48
● MK51DX128CMB7	128	32	39	81-MAPBGA	05W8064	9.22
● MK50DX256CLK7	256	64	39	80-LQFP	89T6204	8.97
● MK50DX256CLL7	256	64	59	100-LQFP	89T6205	9.08
● MK51DX256CLK7	256	64	39	80-LQFP	05W8065	9.74
● MK51DX256CLL7	256	64	57	100-LQFP	05W8066	9.83
● MK51DX256CMB7	256	64	39	81-MAPBGA	05W8067	10.06
● MK51DX256CML7	256	64	78	104-MAPBGA	89T6209	10.28
● PK51DX256CML7	256	64	79	104-MAPBGA	28W2294	13.56
100 MHz						
● MK50DX256ZCLL10	256	64	59	100-LQFP	89T6206	11.51
● MK50DX256ZCLQ10	256	64	96	144-LQFP	05W8059	12.57
● MK51DN256ZCMD10	256	128	94	144-MAPBGA	05W8060	11.80
● MK51DX256ZCLL10	256	64	57	100-LQFP	89T6210	12.45
● MK51DX256ZCMB10	256	64	39	81-MAPBGA	05W8068	11.32
● MK51DX256ZCMC10	256	64	78	121-MAPBGA	89T6211	12.63
● MK53DX256CLQ10	256	64	94	144-LQFP	89T6217	12.69
● MK53DX256ZCLQ10	256	64	94	144-LQFP	05W8069	14.27
● MK53DX256ZCMD10	256	64	94	144-MAPBGA	05W8070	13.30
● MK50DN512ZCLL10	512	128	59	100-LQFP	89T6201	11.96
● MK50DN512ZCLQ10	512	128	96	144-LQFP	89T6202	12.91
● MK51DN512CLL10	512	128	57	100-LQFP	89T6207	11.43
● MK51DN512ZCLL10	512	128	57	100-LQFP	05W8061	12.87
● MK51DN512ZCLQ10	512	128	94	144-LQFP	89T6208	13.83
● MK51DN512ZCMC10	512	128	78	121-MAPBGA	05W8062	13.08
● MK52DN512ZCLQ10	512	128	96	144-LQFP	89T6212	13.83
● MK52DN512ZCMD10	512	128	96	144-MAPBGA	89T6213	13.97
● MK53DN512CMD10	512	128	94	144-MAPBGA	89T6214	13.23
● MK53DN512ZCLQ10	512	128	94	144-LQFP	89T6215	14.76
● MK53DN512ZCMD10	512	128	94	144-MAPBGA	89T6216	14.88
● PK53N512CLQ100	512	128	94	144-LQFP	28W2295	18.30

(208460)

KINETIS K70 FAMILY OF GRAPHIC LCD MCUS

RoHS Compliant Available

freescale

Features:
- Low Power
- Mixed Signal
- USB
- Ethernet
- Encryption and Tamper Detect
- DDR
- Graphic LCD

K70 MCU family includes high densities of flash memory, a single precision floating point unit, Graphic LCD Controller, IEEE 1588 Ethernet, full- and high-speed USB 2.0 On-The-Go with device charge detect, hardware encryption, tamper detection capabilities and a NAND flash controller.

120 MHz

Mfg. Part No.	Prog. Mem. (KB)	RAM Memory (KB)	I/O (Pins)	Pkg.	Stock No.	Price Each 1-9
● MK70FX512VMJ12	512	128	128	256-MAPBGA	89T6244	16.96
● MK70FN1M0VMJ12	1024	128	128	256-MAPBGA	89T6242	16.96
150 MHz						
● MK70FX512VMJ15	512	128	128	256-MAPBGA	05W8074	9.71
● MK70FN1M0VMJ15	1024	128	128	256-MAPBGA	89T6243	17.48

(208462)

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(196560)

CEREBOT ROBOTIC DEVELOPMENT KITS AND BOARDS

RoHS Compliant Available

DIGILENT BEYOND THEORY

Cerebot boards are powerful low cost microcontroller boards ideal for robotic applications in both academic and hobbyist settings.

ROBOTIC DEVELOPMENT KITs W/ HARDWARE

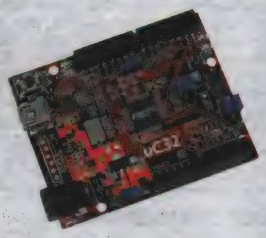
Mfg. Part No.	Description	Stock No.	Price Each
240-031	BASIC ROBOT W/ CEREBOT™ MX4CK	65T6372	195.81
240-032	LINE SENSOR ROBOT W/ CEREBOT™ MX4CK	65T6373	201.88
240-033	REMOTE CONTROL ROBOT W/ CEREBOT™ 32MX4	65T6374	208.33
ROBOTIC DEVELOPMENT BOARDS			
410-173	CEREBOT 32MX4 BOARD	65T6387	92.42
410-186	CEREBOT 32MX7 BOARD	65T6391	113.82
410-227	CEREBOT, MX3CK BOARD	82T9827	57.26
410-220	CEREBOT, MX4CK BOARD	82T9825	99.23
410-223	CEREBOT, MX7CK BOARD	82T9826	124.03

(210292)

CHIPKIT UC32 PROTOTYPING PLATFORM

RoHS Compliant Available

DIGILENT BEYOND THEORY



Features
- Microchip® PIC32MX340F512H microcontroller
- Compatible with many existing Arduino™ code examples, reference materials and other resources
- Arduino™ "Uno" form factor
- Compatible with many Arduino™ shields
- 42 available I/O
- Two user LEDs
- PC connection uses a USB A > mini B cable (not included)
- 12 analog inputs
- 3.3V operating voltage
- 75mA typical operating current
- 7V to 15V input voltage (recommended)
- 20V input voltage (maximum)
- 0V to 3.3V analog input voltage range
- +/-18mA DC current per pin

The **chipKIT uC32** is based on the popular Arduino™ open-source hardware prototyping platform and adds the performance of the Microchip PIC32 microcontroller. The **uC32** is the same form factor as the Arduino™ Uno board and is compatible with many Arduino™ shields. It features a USB serial port interface for connection to the IDE and can be powered via USB or an external power supply. The **uC32** board takes advantage of the powerful PIC32MX340F512 microcontroller. This microcontroller features a 32-bit MIPS processor core running at 80Mhz, 512K of Flash program memory and 32K of SRAM data memory. The **uC32** can be programmed using the Multi-Platform Integrated Development Environment (MPIDE), an environment based on the original Arduino IDE modified to support PIC32. It contains everything needed to start developing embedded applications. In addition, the uC32 is fully compatible with the advanced Microchip MPLAB® IDE and the PICKit3 in-system programmer/debugger. The uC32 provides 42 I/O pins that support a number of peripheral functions, such as UART, SPI, and I2C ports and pulse width modulated outputs. Twelve of the I/O pins can be used as analog inputs or as digital inputs and outputs.

Mfg. Part No.	Description	Stock No.	Price 1-2
CHIPKIT UC32	chipKIT uC32 Prototyping Platform	44W3829	41.75

(210298)

CHIPKIT WIFI SHIELD

RoHS Compliant Available

DIGILENT BEYOND THEORY

Features
- IEEE 802.11b/g-compliant RF transceiver
- Serialized unique MAC address
- Data rates: 1 - 11 Mbps for 802.11b; 6 - 54 Mbps for 802.11g
- IEEE 802.11b/g/n-compatible networks
- Integrated PCB antenna
- Wi-Fi certified as an application specific device
- Radio regulation certification for the United States (FCC), Canada (IC), Europe (ETSI), and Japan (ARIB)
- Micro SD card connector
- Four LEDs

The **chipKIT™ WiFi Shield** is an interface board designed for use with Digilent's chipKIT line of microcontroller boards such as the **Uno32™**, **uC32™**, or **Max32™**. The **chipKIT** line is a family of microcontroller boards based on the high performance Microchip PIC32 family of microcontrollers. The WiFi Shield makes use of the Microchip MRF24WB0MA WiFi module and provides chipKIT microcontroller boards the ability to connect to and communicate via IEEE 802.11 compatible wireless networks. The WiFi Shield is intended for use with the Digilent network libraries, DNETcK and DWIFIcK, available for free download from the Digilent web site. These libraries make use of, and include a custom version of the Microchip Applications Library licensed from Microchip. The WiFi Shield also provides a micro-SD card connector for use with micro-SD flash memory cards. The **chipKIT** MPIDE SD library can be used to read/write files stored on the micro-SD card.

Mfg. Part No.	Description	Stock No.	Price 1-2
CHIPKIT WIFI SHIELD	chipKit WiFi Shield	44W3830	62.23

(210299)

PIC32 ACCESSORY DEVELOPMENT STARTER KIT FOR ANDROID

MICROCHIP

Features
- PIC32 PIC® MCU with USB OTG
- Type A USB connector and micro A/B/ connectors
- I/O expansion board
- On-board programming/debugging

Kit contents
- PIC32 USB Starter Kit II (DM320003-2)
- PIC32 I/O Expansion Board (DM320002)
- 9V Power Supply (AC002014)
- Royalty Free, No Fee Licensed Software Library

PIC32 Accessory Development Start Kit for Android™ is used for evaluating and developing accessories for Google's Android operating system for smartphones and tablets.

CONTINUED

PIC32 ACCESSORY DEVELOPMENT STARTER KIT FOR ANDROID (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
DM320412	PIC32 Android Accessory Dev Starter Kit	72T9151	139.99

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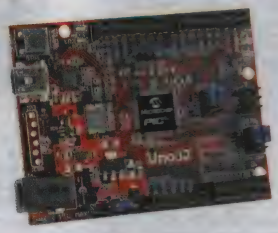
CHIPKIT UNO32™ ARDUINO™ - COMPATIBLE PROTOTYPING PLATFORM

MICROCHIP



Features
- Microchip® PIC32MX320F128 processor
- Compatible with existing Arduino™ code examples, reference materials and other resources
- Can also be programmed using Microchip's MPLAB (along with a PICkit 3 or 6-pin header)
- Arduino™ "Uno" form factor
- Compatible with Arduino™ shields
- 42 available I/O
- User LED

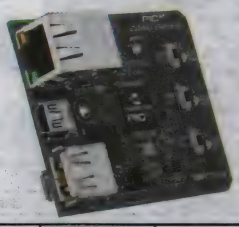
chipKIT™ Uno32™ combines compatibility with the popular Arduino™ open source hardware prototyping platform with the performance of the powerful Microchip PIC32MX320F128 microcontroller in the same form factor as the Arduino™ Uno board and is compatible with Arduino™ shields. This microcontroller features a 32-bit MIPS processor core running at 80Mhz, 128K of flash program memory and 16K of SRAM data memory. The board can be programmed using an environment based on the original Arduino™ IDE modified to support PIC32. In addition, the Uno32 is fully compatible with the advanced Microchip MPLAB development environment and the PICKit3 in-system programmer/debugger.

Mfg. Part No.	Description	Stock No.	Price Each
TDGL002	chipKIT Uno32™	47T5671	26.95

(196685)

PIC32 ETHERNET STARTER KIT

MICROCHIP



Kit contents
- PIC32 Ethernet Starter Board
- Standard A to mini B cable for debugger
- Standard A to micro B cable for USB application development
- Ethernet cable
- Software CD

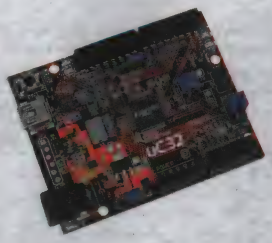
PIC32 Ethernet Starter Kit provides the easiest and lowest cost method to experience 10/100 ethernet development with PIC32. Combined with free TCP/IP software, your project will be running in no time. The PIC32 has an available CAN2.0b peripheral and USB host/device/OTG.

Mfg. Part No.	Description	Stock No.	Price Each
DM320004	PIC32 Ethernet Starter Kit	51R8564	74.99

(164440)

CHIPKIT UC32 ARDUINO - COMPATIBLE PROTOTYPING PLATFORM

MICROCHIP



Features
- Microchip® PIC32MX340F512H microcontroller
  80 Mhz 32-bit MIPS
  512K Flash
  32K SRAM
- Compatible with many Arduino™ shields
- 42 available I/O
- Two user LEDs
- 12 analog inputs
- 3.3V operating voltage
- 75mA typical operating current
- 7V to 15V input voltage (recommended)
- 20V input voltage (maximum)
- 0V to 3.3V analog input voltage range
- ±18mA DC current per pin

chipKIT uC32 is based on the popular Arduino™ open-source hardware prototyping platform that takes advantage of the powerful PIC32MX340F512 microcontroller featuring a 32-bit MIPS processor core running at 80MHz. Using the same form factor as the Arduino™ Uno board, uC32 is compatible with many Arduino™ shields, features a USB serial port interface for connection to the IDE and can be powered via USB or an external power supply. The uC32 is programmed by the Multi-Platform Integrated Development Environment (MPIDE), an modified! Arduino IDE but is also fully compatible with the advanced Microchip MPLAB® IDE and the PICKit3 in-system programmer/debugger. Requires a USB A to mini B cable (not included).

Mfg. Part No.	Description	Stock No.	Price Each
TDGL017	chipKIT uC32 Board	27W2153	34.99

(209285)

PCB FABRICATION & ASSEMBLY

Quality US-based manufacturers—
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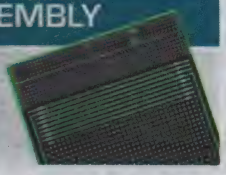


(197415)

32-BIT MCUS & DEVELOPMENT TOOLS

1

CHIPKIT MAX32™ ARDUINO™ - COMPATIBLE PROTOTYPING PLATFORM

MICROCHIP

Features
- Microchip® PIC32MX795F512 processor
- Provides additional memory and advanced communications peripherals
- Compatible with existing Arduino code examples, reference materials and other resources
- Can also be programmed using Microchip's MPLAB (along with a PICkit 3 or 6-pin header)
- Arduino™ "Mega" form factor
- Compatible with Arduino™ shields
- 83 available I/O
- User LED

chipKIT™ Max32™ combines compatibility with the popular Arduino™ open source hardware prototyping platform with the performance of the powerful Microchip PIC32MX795F512 microcontroller in the same form factor as the Arduino Mega board and is compatible with standard Arduino™ shields as well as larger shields for use with the Mega boards. This microcontroller features a 32-bit MIPS processor core running at 80Mhz, 512K of flash program memory and 128K of SRAM data memory. The board can be programmed using an environment based on the original Arduino™ IDE modified to support PIC32. In addition, the Uno32 is fully compatible with the advanced Microchip MPLAB development environment and the PICKit3 in-system programmer/debugger.

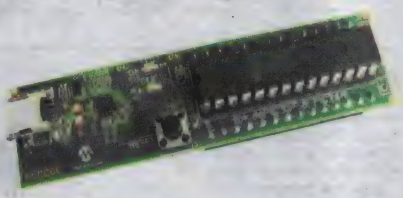
Mfg. Part No.	Description	Stock No.	Price Each
TDGL003	chipKIT Max32™	47T5672	49.50

(196686)

MICROSTICK DEVELOPMENT BOARD FOR DSPIC33F AND PIC24H

MICROCHIP

Features
- Low Cost development
- Integrated USB programmer / debugger
- USB Powered
- Socketed dsPIC/PIC24
- 0.025" Pin headers
- Easy access to all device signals for probing
- Small size
- Status LEDs and Reset Switch
- Free demo code



Microstick for dsPIC33F and PIC24H devices is designed to provide designers with an easy to use, economical development environment for 16-bit Digital Signal Controllers and Microcontrollers. It has never been more affordable to get started with 16-bit, dsPIC33F and PIC24H devices! Microstick includes a socket for the device under test for quick and easy chang-out and can be used stand-alone or plugged into a prototyping board for extremely flexible development. MPLAB Integrated Development Environment also supports Microstick.

Mfg. Part No.	Description	Stock No.	Price Each
DM330013	Microstick for dsPIC33F and PIC24H Development Board	83R7946	24.99

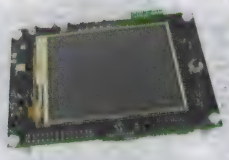
(190012)

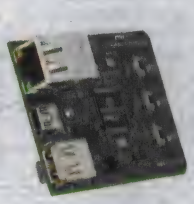
MULTIMEDIA EXPANSION BOARD AND PIC32 STARTER KIT

RoHS Compliant Available

MICROCHIP

Features - PIC32 Ethernet Starter Kit
- PIC32MX795F512L 32-bit MCU
- PIC32MX440F512H USB MCU for on-board debugging
- Green power indicator LED
- On-board crystal for precision microcontroller clocking (8 MHz)
- USB connectivity for on-board debugger communications
- Ethernet 10/100 bus speed indicator LED
- 50 MHz Ethernet PHY oscillator





Features - Multimedia Expansion Board
- 3.2 inch (8.1 cm) QVGA touch screen display with backlight
- Solomon Systech Graphics Controller (SSD1926)
- Accelerometer and temperature sensor (BMA150)
- 24LC08 EEPROM
- SPI Flash (SST25VF016)
- 24-bit audio codec (WM8731)
- PICtail expansion connector
- microSD card slot
- Integrated 802.11 wireless connectivity

Kit Contains
- PIC32 Ethernet Starter Kit
- Multimedia Expansion Board
- Standard A to mini B cable for debugger
- Standard A to micro B cable for USB application development
- Ethernet cable
- Information Sheet and Documentation

Multimedia Bundle Kit includes a PIC32 Ethernet Starter Kit and Multimedia Expansion Board providing PIC32 users with a powerful interface and great connectivity when two boards are fitted together with a PICTail socket providing access to various I/O if extra functionality is needed. **Multimedia Expansion Board** provides PIC32 Starter Kit users with an integrated yet flexible solution for developing high impact user interfaces. The board comes with a 3.2 Color TFT touch-screen QVGA display, an onboard FCC certified WiFi module, a 24-bit stereo audio code, a three-axis accelerometer, a joystick and a MicroSD memory card slot.

Mfg. Part No.	Description	Stock No.	Price Each
● MEB-PIC32ENET	PIC32 Multimedia Bundle Kit	77T3134	222.20

(200552)

PIC32 I/O EXPANSION BOARD

MICROCHIP

The **PIC32 I/O Expansion Board** provides Starter Kit and Starter Board users with full access to MCU signals, additional debug headers, and connection of PICtail Plus daughter cards. MCU signals are available for attaching prototype circuits or monitoring signals with logic probes. Headers are provided for connecting JTAG tools or Microchip tools using the 2-wire (ICSP) interface.

Mfg. Part No.	Description	Stock No.	Price Each
DM320002	Board only	03P1607	72.00

(136200)

32-BIT PIC32 FLASH MICROCONTROLLERS

RoHS Compliant Available

MICROCHIP

Building on Microchip's 8-& 16-bit PIC microcontrollers, the PIC32 MCU family delivers 32-bit performance with more memory to solve your increasingly complex embedded designs. Supported by MPLAB development environment and well-known industry tools and software providers, the PIC32 products are pin, peripheral and software compatible with Microchip's 16-bit PIC MCU families and also across the PIC32 MCU family.

Mfg. Part No.	Prog. Mem (KB)	RAM (KB)	I/O Pins	ADC 10-Bit (Ch)	Comp-arators	Max. Freq. (MHz)	Intn. Osc. (MHz)	Timers 16-Bit	Interface	Package	Stock No.	Price Each 1-25
PIC32 - AUDIO, GRAPHICS AND ADVANCED ANALOG APPLICATIONS												
● PIC32MX210F016B-I/SP	16	32	19	9	3	40	8	5	I2C, LIN, SPI, UART, USB	28-NDIP	73T1407	2.47
● PIC32MX110F016B-I/SO	16	32	21	10	3	40	8	5	I2C, SPI, UART	28-SOIC	39T6775	2.12
● PIC32MX110F016D-I/PT	16	32	34	13	3	40	8	5	I2C, SPI, UART	44-TQFP	39T6778	2.41
● PIC32MX220F032B-I/SP	32	32	19	9	3	40	8	5	I2C, LIN, SPI, UART, USB	28-NDIP	73T1414	2.74
● PIC32MX220F032B-I/SS	32	32	21	9	3	40	8	5	I2C, LIN, SPI, UART, USB	28-SSOP	39T6794	2.51
● PIC32MX220F032D-I/PT	32	32	34	13	3	40	8	5	I2C, LIN, SPI, UART, USB	44-TQFP	39T6796	2.81
● PIC32MX130F064B-I/SP	64	32	21	10	3	40	8	5	I2C, SPI, UART	28-NDIP	73T1349	3.03
● PIC32MX130F064D-I/PT	64	32	34	13	3	40	8	5	I2C, SPI, UART	44-TQFP	73T1366	3.08
● PIC32MX250F128B-I/SP	128	32	19	9	3	40	8	5	I2C, LIN, SPI, UART, USB	28-NDIP	73T1453	3.80
● PIC32MX150F128B-I/SP	128	32	21	10	3	40	8	5	I2C, SPI, UART	28-NDIP	73T1379	3.41
● PIC32MX150F128D-I/PT	128	32	34	13	3	40	8	5	I2C, SPI, UART	44-TQFP	73T1396	3.47
● PIC32MX250F128D-I/PT	128	32	33	13	3	40	8	5	I2C, LIN, SPI, UART, USB	44-TQFP	73T1470	3.85
PIC32 HIGH PERFORMANCE - GENERALPURPOSE FEATURES												
● PIC32MX320F032H-40I/PT	32	32	53	16	2	40	8	5	I2C, SPI, UART	64-TQFP	98M1928	4.26
● PIC32MX320F064H-80I/PT	64	32	53	16	2	80	8	5	I2C, SPI, UART	64-TQFP	77M3147	4.84
● PIC32MX360F256L-80I/PT	256	32	85	16	2	80	8	5	I2C, SPI, UART	100-TQFP	77M3151	5.94
● PIC32MX360F512L-80I/PT	512	32	85	16	2	80	8	5	I2C, SPI, UART	100-TQFP	77M3152	6.15
● PIC32MX340F512H-80I/PT	512	32	51	16	2	80	8	5	I2C, SPI, UART	64-TQFP	98M1931	5.59
PIC32 HIGH PERFORMANCE - USB PERIPHERIALS												
● PIC32MX440F128H-80I/PT	128	32	51	16	2	80	8	5	I2C, SPI, UART, USB	64-TQFP	98M1933	5.53
● PIC32MX440F256H-80I/PT	256	32	53	16	2	80	8	5	I2C, SPI, UART, USB	64-TQFP	98M1935	5.67
● PIC32MX460F512L-80I/PT	512	32	85	16	2	80	8	5	I2C, SPI, UART, USB	100-TQFP	98M1938	6.46

➤ CONTINUED ➤

32-BIT PIC32 FLASH MICROCONTROLLERS (CONT.)

Mfg. Part No.	Prog. Mem (KB)	RAM (KB)	I/O Pins	ADC 10-Bit (Ch)	Comp-arators	Max. Freq. (MHz)	Intn. Osc. (MHz)	Timers 16-Bit	Interface	Package	Stock No.	Price Each 1-25
PIC32 HIGH PERFORMANCE - USB + CAN PERIPHERIALS												
PIC32MX575F256H-80I/PT	256	32	53	16	2	80	8	5	CAN, I2C, SPI, UART, USB	64-TQFP	25R8379	6.82
PIC32MX575F512L-80I/PT	512	32	85	16	2	80	8	5	CAN, I2C, SPI, UART, USB	100-TQFP	25R8391	8.11
PIC32MX575F512H-80I/PT	512	32	53	16	2	80	8	5	CAN, I2C, SPI, UART, USB	64-TQFP	25R8387	7.46
PIC32 HIGH PERFORMANCE - USB + ETHERNET PERIPHERIALS												
PIC32MX675F512H-80I/PT	512	32	53	16	2	80	8	5	ENET, I2C, SPI, USB	64-TQFP	25R8399	7.79
PIC32MX695F512L-80I/PT	512	32	85	16	2	80	8	5	ENET, I2C, SPI, USB	100-TQFP	53R0322	9.10
PIC32MX695F512H-80I/PT	512	32	53	16	2	80	8	5	ENET, I2C, SPI, USB	64-TQFP	53R0317	8.44
PIC32 HIGH PERFORMANCE - USB + ETHERNET + CAN PERIPHERIALS												
PIC32MX795F512L-80I/PF	512	32	85	16	2	80	8	5	CAN, ENET, I2C, SPI, UART, USB	100-TQFP	53R0338	9.89
PIC32MX795F512H-80I/PT	512	32	53	16	2	80	8	5	CAN, ENET, I2C, SPI, UART, USB	64-TQFP	25R8415	8.75
PIC32MX775F512L-80I/PF	512	32	85	16	2	80	8	5	CAN, ENET, I2C, SPI, UART, USB	100-TQFP	53R0335	9.23

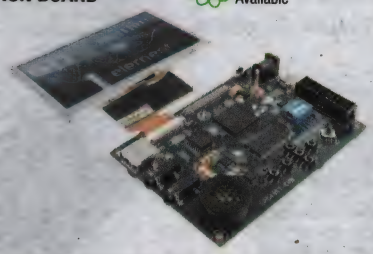
(110556)

LPC4357 DUAL CORE CORTEX M4/M0 EVALUATION BOARD

RoHS Compliant Available

element14

NXP



LPC4357-EVB is is equipped with the dual-core LPC4357 microcontroller based on the ARM® Cortex™-M4 and Cortex™-M0 processors. The LPC4357 is an ARM Cortex-M4 based microcontroller for embedded applications and includes an ARM Cortex-M0 coprocessor. It also features 256 Mbit (32 MB) of serial Flash memory from Spansion. The QSPI Flash is connected to the LPC4357's unique SPI Flash Interface which allows the M4 or M0 core to execute from the QSPI or access large tables of data or images.

Mfg. Part No.	Description	Stock No.	Price Each
LPC4357-EVB	LPC4357 Dual Core Multimedia Eval Board	28W4943	79.00
LPC4357-K43WQA	LPC4357 Dual Core Multimedia Eval Brd w/ LCD module	46W2370	112.00

(210308)

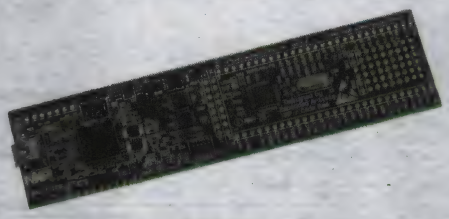
LPCXPRESSO EVALUATION BOARDS FOR LPC SERIES MCUS

RoHS Compliant Available

NXP

Features

- Eclipse-based IDE using very low-cost target boards.
- The target boards comes with an integrated JTAG Debugger. No need for a separate debug probe!
- Easy upgrade options to full-blown suites (from Code Red) and hardware kits (from Embedded Artists).
- End-to-end solution for creating applications all the way from evaluation through to production.



Target Board

LPCXpresso™ is a low-cost development platform supporting ARM-based LPC microcontrollers. LPCXpresso is an end-to-end solution enabling embedded engineers to develop their applications from initial evaluation to final production. The platform is comprised of a simplified Eclipse-based IDE and low-cost target boards which include an attached JTAG debugger. Designed for simplicity and ease of use, the LPCXpresso IDE (powered by Code Red) will provide software engineers a quick and easy way to develop their applications.

Mfg. Part No.	Supported Device	Stock No.	Price Each
OM13053,598	LPC812 ARM CORTEX-M0	48W7346	18.75
OM13035,598	LPC1115 ARM CORTEX-M0	46W5453	20.63
OM13012,598	LPC11C2x ARM CORTEX-M0	46W5434	20.63
OM13014,598	LPC11U14 ARM CORTEX-M0	46W5436	20.63
OM13008,598	LPC1200 ARM CORTEX-M0	46W5431	20.63
OM11048,598	LPC1343 ARM CORTEX-M3	72R6114	18.75
OM13045,598	LPC1347 ARM CORTEX-M3	46W5461	20.63
OM13000,598	LPC1768 ARM CORTEX-M3	46W5427	26.13
LPCXPRESSO ADD-ON BOARDS			
OM13016,598	NGX mbed-LPCXPRESSO baseboard	46W5437	50.89
OM13009,598	EA Motor Control Kit for LPCXPRESSO	46W5432	456.67
OM11083,598	Embedded Artist Base Board for LPCXPRESSO	72R6117	123.75

(178495)

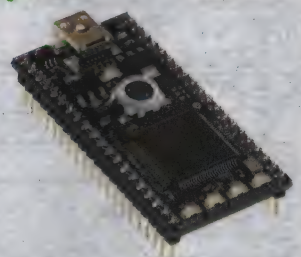
mbed RAPID PROTOTYPING MICROCONTROLLERS

RoHS Compliant Available

NXP

Features:

- USB Drag 'n' Drop Programming Interface
- Entry-level Online Compiler
- High-level Peripheral Abstraction Libraries



mbed platform is designed as a sketch pad for quick experimentation of new ideas for anyone from professional embedded engineers to people exploring microcontrollers for the first time. mbed is not a replacement for professional embedded development tools rather its focus is an eazy to use prototyping platform. Therefore, traditional embedded tools such as JTAG interface, a breakpoint debugger, integrated peripherals, or even a standard offline compiler are not included with mbed.

Mfg. Part No.	Description	Stock No.	Price Each
OM13022,598	IAR KSK for LPC11U2x ARM CORTEX-M0	46W5442	215.96
OM13032,598	mbed board for LPC11U24 CORTEX-M0	46W5450	50.89
OM13033,598	NGX Board for LPC11U24 ARM CORTEX-M0	46W5451	86.66

(177814)

LPC4330 XPLORER BOARD

RoHS Compliant Available

NXP

Features

- Controller: LPC4330, 100 pin BGA
- PCB: 4-layer (86mm x 40mm, RoHS Compliant)
- Two LEDs
- One user switch and one reset switch
- Boot select switch
- 32Mb Quad SPI flash
- On board crystals for controller, RTC and audio codec
- On board Ethernet PHY, 50 MHz Oscillator and RJ45 connector with magnetics
- On board audio codec and audio jacks
- On board USB host power switch
- On board Micro SD card slot
- Two USB ports, one HS (High speed) port and one FS (Full Speed) port
- 10-pin cortex debug header
- Unused I/Os brought to a header

LPC4330-Xplorer features the dual-core LPC4330 cortex-M4/M0 microcontroller from NXP. It is bundled with a ULINK-ME debug adapter from Keil, as well as all needed USB cables, to enable development to get started quickly.

Mfg. Part No.	Description	Stock No.	Price Each
OM13027,598	LPC4330-Xplorer development board	27W5660	66.25

(210277)

LPC1114 EVALUATION BOARD MODULES

RoHS Compliant Available

NXP

OM11085 Kit Contents:

- IAR LPC1114 Evaluation Board
- IAR Embedded Workbench for ARM, 8K KickStart edition
- IAR visualSTATE evaluation edition, 20-state limitation
- Example projects included
- Associated Software included

OM11086 Kit Contents:

- Keil LPC1114 Evaluation Board
- MDK-Lite (evaluation version)
- ULINK-ME debug adapter
- Associated Software included

LPC1114 Evaluation Board lets you get up-and-running quickly in evaluating the performance and capability of the **LPC1114**. The **LPC1114** is designed for 8/16-bit microcontroller applications, offering performance, low power, simple instruction set and memory addressing together with reduced code size compared to existing 8/16-bit architectures. The LPC1114 evaluation board is available with either IAR or Keil tools.

Mfg. Part No.	Description	Stock No.	Price Each
OM11085,598	IAR KS Board for LPC1114 ARM CORTEX-M0	72R6119	147.50
OM11086,598	Keil Eval Board for MCB1114 ARM CORTEX-M0	46W5426	176.07

(210278)

32-BIT MCUS & DEVELOPMENT TOOLS

1

LPC11C1x EVALUATION BOARD MODULES

RoHS Compliant Available

OM13003 Kit Contents:
- IAR LPC11C14 Evaluation Board
- IAR J-link lite for ARM
- IAR Embedded Workbench for ARM, 8K KickStart edition
- IAR visualSTATE evaluation edition, 20-state limitation
- Associated Software included

OM13004 Kit Contents:
- Keil LPC11C14 Evaluation Board
- MDK ARM (evaluation version)
- Associated Software included

LPC11C14 Evaluation Board lets you get up-and-running quickly in evaluating the superior performance and capability of the **LPC11C14**. The **LPC11C14** is designed for low-cost, low-power CAN-based applications. On-chip CAN and CANopen drivers provide design engineers with easy-to-use API commands to the CANopen protocol, enabling rapid integration of the **LPC11C00** series into CAN-based networks and thereby greatly simplifying the plug-and-play integration process. The LPC11C14 evaluation board is available with either IAR or Keil tools.

Mfg. Part No.	Description	Stock No.	Price Each
● OM13003,598	Eval Board for IAR LPC11C1x ARM CORTEX-M0	46W5429	163.69
● OM13004,598	Keil Eval Board for MCB11C1x ARM CORTEX-M0	46W5430	176.07

(210283)

LPC11U1 EVALUATION BOARD MODULES

RoHS Compliant Available

LPC11U14 Evaluation Board lets you get up-and-running quickly in evaluating the superior performancea and capability of the **LPC11U14**. The **LPC11U14** is developed with a highly flexible USB architecture featuring simplicity and diversity of design for a wide range of USB solutions. The LPC11U14 evaluation board is available with either IAR, Keil or NGX tools.

Mfg. Part No.	Description	Stock No.	Price Each
● OM13017,598	IAR LPC11U1x KSK with J-Link lite	46W5438	206.33
● OM13018,598	Keil LPC11U1x Eval Board	46W5439	176.07
● OM13021,598	NGX LPC11U1x Eval Board	46W5441	38.51

(210285)

LPC1200 EVALUATION BOARD MODULES

RoHS Compliant Available

OM13013 Kit Contents:
- IAR LPC1227 Evaluation Board
- IAR J-Link-Lite for ARM
- IAR Embedded Workbench for ARM, 8K KickStart edition for Cortex-M0
- IAR visualSTATE evaluation edition, 20-state limitation
- Example applications made for the evaluation board from IAR Systems
- RTOS board support from the IAR RTOS partner program

OM13011 Kit Contents:
- MCB1200 Evaluation board
- ULINK-ME Debug adapter
- MDK-ARM (evaluation version)
- MDK-ARM Evaluation Tools
- ULINK-ME

LPC1227 Evaluation Board lets you get up-and-running quickly in evaluating the performance and capability of the **LPC1227**. The **LPC1227** is specifically designed with flexibility and customization in mind, making it particularly suitable for a wide variety of energy-efficient system and power management requirements. The **LPC1200** series offers a wide range of Flash memory sizes, spanning 32KB to 128KB in 8KB increments. The LPC1227 evaluation board is available with either IAR or Keil tools.

Mfg. Part No.	Description	Stock No.	Price Each
● OM13011,598	IAR LPC1200 KSK with J-link Lite	46W5433	176.07
● OM13013,598	Keil LPC1200 Eval board	46W5435	198.07

(210288)

KEIL LPC1768 EVALUATION BOARD

RoHS Compliant Available

Features
- Color QVGA TFT LCD
- 10/100 Ethernet Port
- USB 2.0 Full Speed - USB, USB-OTG, and USB Host
- 2 CAN interfaces
- 2 Serial Ports
- SD/MMC Card Interface
- 5-position Joystick and push-button
- Analog Voltage Control for ACD Input
- Amplifier and Speaker
- Up to 70 GPIO
- Debug Interface Connectors

LPC1768 Evaluation Board lets you get up-and-running quickly in evaluating the performance and capability of the **LPC1768**. The **LPC1768** is developed with an extensive set of peripherals that allow for a broad array of designs and applications. The microcontroller, board, and accompanying features make it a great starting point for your next Cortex-M3 project. Populated with the **LPC1768** to demonstrate LPC176x features, the LPC1768 board allows the evaluation of the high level integration and low power consumption of the **LPC1768**.

Mfg. Part No.	Description	Stock No.	Price Each
● OM11032,598	LPC1768 evaluation board	72R6098	320.00

(210309)

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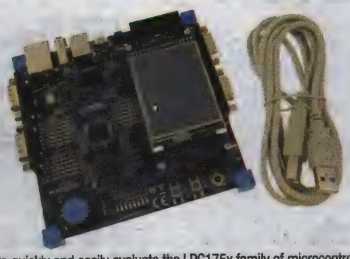
(212565)

KEIL LPC1758 EVALUATION BOARD

RoHS Compliant Available

Features
- Color QVGA TFT LCD
- 10/100 Ethernet Port
- USB 2.0 Full Speed - USB, USB-OTG, and USB Host
- 2 CAN interfaces
- 2 Serial Ports
- SD/MMC Card Interface
- 5-position Joystick and push-button
- Analog Voltage Control for ACD Input
- Amplifier and Speaker
- Up to 70 GPIO
- Debug Interface Connectors



The Keil **LPC1758** Evaluation Board allows you to quickly and easily evaluate the LPC175x family of microcontrollers. The microcontroller, board, and accompanying features make it a great starting point for your next Cortex-M3 project. Populated with the **LPC1758** to demonstrate LPC175x features, the LPC1758 board allows the evaluation of the high level integration and low power consumption of the **LPC1758**. The **LPC1758** is developed with an extensive set of peripherals that allow for a broad array of designs and applications.

Mfg. Part No.	Description	Stock No.	Price Each
● OM11036,598	LPC1758 Evaluation board	72R6102	320.00

(210310)

KEIL LPC1343 EVALUATION BOARD

RoHS Compliant Available

Features
- Controller: LPC4330, 100 pin BGA
- PCB: 4-layer (86mm x 40mm, RoHS Compliant)
- Two LEDs
- One user switch and one reset switch
- Boot select switch
- 32Mb Quad SPI flash
- On board crystals for controller, RTC and audio codec
- On board Ethernet PHY, 50 MHz Oscillator and RJ45 connector with magnetics
- On board audio codec and audio jacks
- On board USB host power switch
- On board Micro SD card slot
- Two USB ports, one HS (High speed) port and one FS (Full Speed) port
- 10-pin cortex debug header
- Unused I/Os brought to a header

LPC4330-Xplorer features the dual-core LPC4330 cortex-M4/M0 microcontroller from NXP. It is bundled with a ULINK-ME debug adapter from Keil, as well as all needed USB cables, to enable development to get started quickly.

Mfg. Part No.	Description	Stock No.	Price Each
● OM13027,598	LPC4330-Xplorer development board	27W5660	66.25

(210311)

KEIL LPC1343 EVALUATION BOARD

RoHS Compliant Available

Features
- USB 2.0 Device
- Serial Interface
- Potentiometer for ADC Input
- Up to 42 GPIO
- 8 User LEDs + power
- 4 push-buttons (2 GPIO, ISP, & reset)
- Power via USB connector
- Debug Interface Connectors

Keil's **LPC1343** Evaluation Board lets you get up-and-running quickly in evaluating the superior performance and capability of the **LPC1343**. The **LPC1343** is developed with a highly flexible USB architecture featuring a high level of integration and low power consumption. The **LPC1343** includes on-chip USB drivers for mass storage class (MSC) and human interface device (HID).

Mfg. Part No.	Description	Stock No.	Price Each
● OM11039,598	LPC1343 Evaluation board	72R6105	160.00

(210313)

KEIL LPC1769 EVALUATION BOARD

RoHS Compliant Available

Features
- Color QVGA TFT LCD
- 10/100 Ethernet Port
- USB 2.0 Full Speed - USB, USB-OTG, and USB Host
- 2 CAN interfaces
- 2 Serial Ports
- SD/MMC Card Interface
- 5-position Joystick and push-button
- Analog Voltage Control for ACD Input
- Amplifier and Speaker
- Up to 70 GPIO
- Debug Interface Connectors

Keil's **LPC1769** Evaluation Board lets you get up-and-running quickly in evaluating the superior performance and capability of the LPC1769. The **LPC1769** is developed with an extensive set of peripherals that allow for a broad array of designs and applications.

Mfg. Part No.	Description	Stock No.	Price Each
● OM11084,598	LPC1769 Evaluation Board	72R6118	320.00

(210315)

CODE RED LPC4078 RDB BOARD

RoHS Compliant Available

Features
- 120 MHz ARM® Cortex-M4
- Floating point in hardware and DSP extensions
- 512 KB Flash
- 96 KB SRAM
- 4032 bytes EEPROM

An excellent platform for evaluating and developing with NXP's LPC40xx series microcontrollers. It features an on-board debug connection suitable for use with Red Suite or LPCXpresso IDE without need for additional debug probe, 20-pin 0.05" JTAG/SWD/ETM connector for use with external debug probe also provided and a suite of example applications, including an embedded web server, audio examples, and an SD-card filing system.

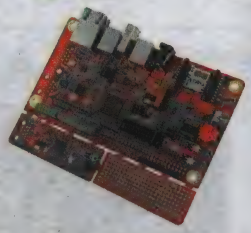
Mfg. Part No.	Description	Stock No.	Price Each
● 0M13038,598	Code Red LPC4078 Evaluation Board	46W5455	220.00

(210316)

EA ANDROID EVALUATION BOARD

RoHS Compliant Available

The Android™ Open Accessory Application Kit ("AOAA") kit from Embedded Artists lets you get up-and-running with AOA experiments immediately. It is a standalone platform for evaluation and prototyping electronic accessories for Google's Android operating system. The AOAA kit is also suitable for experimenting with CAN, Ethernet and RF networks.



Mfg. Part No.	Description	Stock No.	Price Each
● 0M13036,598	Android Open Accessory Application (AOAA) Kit	46W5454	99.04

(210317)

EA LPC11D14 EVALUATION BOARD

RoHS Compliant Available

Features
- All LPC11D14 pins are available on expansion connectors around the processor
- UART-to-USB bridge interface for LPC11D14 UART, with mini-B USB connector and proper ESD protection
- Flexible powering, with on-board 800mA 3.3V voltage regulator
- All LPC11D14 pins are available on connector
- mini-B USB connector
- SWD/JTAG connector
- LCD with 8 14-segment characters
- LM75 I2C temperature sensor
- Trimming potentiometer on analog input
- 4 capacitive sensors
- Onboard reset generation and reset push-button
- Push-button for enabling Bootloader mode of the LPC11D14
- Push-button for enabling start logic of the LPC11D14
- Push-button for wakeup logic of the LPC11D14
- Possibility to measure current consumption for LPC11D14 core, I/O and LCD controller parts individually
- LED on pin PIO0_7

EA's **LPC11C14** Evaluation Board lets you get up-and-running quickly in evaluating the superior performance and capability of the **LPC11D14**. The **LPC11D14** is designed for low-cost, low-power LCD-based applications. In contrast to typical segment LCD driver solutions today, the highly reliable NXP PCF8576D LCD driver, a wide LCD supply range from 2.5 V to 6.5 V making the LPC11D00 series an ideal choice for interfacing with both low threshold and high-threshold LCDs. The integrated PCF8576D increases system reliability and quality, reduces electrical interconnect and compatibility issues while incorporating key features such as on-chip display RAM and versatile blinking modes.

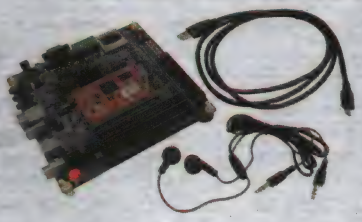
Mfg. Part No.	Description	Stock No.	Price Each
● 0M13023,598	LPC11D14 QuickStart Evaluation Board	46W5443	72.90

(210320)

LPC4088 DEVELOPER KIT

RoHS Compliant Available

Features
- NXP's ARM Cortex-M4 LPC4088 microcontroller in BGA package
- 32 MBit QSPI flash on SPIFI interface
- External FLASH memories: 128 MB NAND FLASH
- External data memory: 32 MB SDRAM
- 12 MHz crystal
- 32.768kHz RTC crystal
- 00/10M Ethernet PHY/interface based on SMSC LAN8720
- Onboard reset generation
- +3.3V only powering



Embedded Artists' **LPC4088** OEM Board lets you get up-and-running quickly. The small form factor OEM board offers many unique features that ease your learning curve and program development.

Mfg. Part No.	Description	Stock No.	Price Each
● 0M13029,598	LPC4088 Developer Kit	46W5448	273.73

(210323)

KEIL MCB4357 EVALUATION BOARD

RoHS Compliant Available

Features
- 204 MHz LPC4357 device with ARM Cortex-M4 processor and Cortex-M0 coprocessor (LBGA256)
- 136 KB On-Chip SRAM
- 1MB dual bank On-Chip Flash
- On-Board Memory
- Color QVGA TFT LCD with touchscreen
- 10/100 Ethernet Port
- High-speed USB 2.0 Host/Device/OTG interface
- Full-speed USB 2.0 Host/Device interface
- CAN interfaces
- Serial/UART Port
- MicroSD Card Interface
- 4 user push-buttons + reset
- Digital Temperature Sensor (I2C)
- Analog Voltage Control for ACD Input
- Audio CODEC
- Debug Interface Connectors

The Keil **MCB4357** Evaluation Board enables you to create and test working programs based on the LPC4300 family of Dual Core ARM Cortex™-M4/M0 devices. The **MCB4357** Evaluation Board and Starter Kit includes the MDK-ARM Lite Edition Tools. These tools help you get started writing programs and testing the microcontroller and its capabilities

Mfg. Part No.	Description	Stock No.	Price Each
● 0M13040,598	KEIL MCB4357 Evaluation Board	46W5457	397.52

(210329)

IAR LPC11A14 KSK W/ J-LINK LITE

RoHS Compliant Available

Features
- Mounted with LPC11A14 (Cortex-M0) device
- 32 kB flash, 8 kB SRAM, 4 kB EEPROM
- configurable analog/mixed-signal
- 50MHz CPU frequency
- Debug, user and communication interface
- 3-axis accelerometer
- Prototyping area

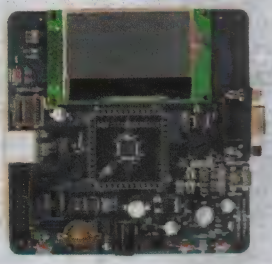
IAR KickStart Kit for NXP LPC11A14 contains all the necessary hardware and software and and allows you to design, integrate and test your applications. The IAR KickStart Kit for LPC11A14 mounted with LPC11A14 (Cortex-M0) device, 32 kB flash, 8 kB SRAM, 4 kB EEPROM; configurable analog/mixed-signal, 50MHz CPU frequency. The **LPC11A14** is an ARM Cortex-M0 based, low-cost 32-bit MCU family, designed for 8/16-bit microcontroller applications, offering performance, low power, simple instruction set and memory addressing together with reduced code size compared to existing 8/16-bit architectures. The LPC11Axx operate at CPU frequencies of up to 50 MHz.

Mfg. Part No.	Description	Stock No.	Price Each
● 0M13025,598	IAR LPC11A14 Kick Start Kit with J-LINK LITE	46W5445	235.21

(210330)

NGX BLUEBOARD LPC11U37 EVALUATION BOARD

RoHS Compliant Available



The **BLUEBOARD-LPC11U37**, is a low cost ARM Cortex-M0 based board by NGX Technologies.

Mfg. Part No.	Description	Stock No.	Price Each
● 0M13041,598	BLUEBOARD LPC11U37 Evaluation Board	46W5458	92.16

(210335)

LPC177x/178x EVALUATION BOARD MODULES

RoHS Compliant Available

0M13001 Kit Contents:
- One LPC1788 OEM Board
- One OEM Base Board
- One USB cable, type A to mini-B
- Headset with microphone
- Serial number that gives you access to the EA's support site for this product, which includes: User's Manual, LPC1788 OEM Board Datasheet, LPC1788 OEM Board Schematics, OEM Base Board Schematics, Links to datasheets for key components, Software examples

0M13020 Kit Contents:
- LPC1788-SK Evaluation Board
- IAR J-Link Lite for ARM
- IAR Embedded Workbench for ARM 32K limited edition
- IAR visualSTATE 20-state evaluation edition
- Example applications from IAR
- Example code from NXP
- RTOS board support

Embedded Artists' **LPC1788** Developer's Kit lets you get up-and-running quickly with the **LPC1788** OEM Board. The **LPC1788** OEM Board is equipped with NXP's Cortex-M3 based **LPC1788** microcontroller suitable for a wide range of applications that require advanced communication and high quality graphic displays. IAR's **LPC1788** Developer's Kit contains all the necessary hardware and software and and allows you to design, integrate and test your applications. The **LPC1788** Evaluation Board is equipped with the Cortex-M3 **LPC1788** microcontroller and is suitable for a wide range of applications that requires advanced communication and high quality graphic displays.

Mfg. Part No.	Description	Stock No.	Price Each
● 0M13001,598	EA LPC177x/8x Eval Board	46W5428	273.73
● 0M13020,598	IAR LPC1788 KSK with j-link lite	46W5440	447.04

(210290)

32-BIT ARM CORTEX-M4/M0 MICROCONTROLLERS

RoHS Compliant Available

Features

- 204 MHz, 32-bit ARM Cortex-M4
- 204 MHz, 32-bit ARM Cortex-M0 asymmetrical coprocessor
- Up to 1 MB Flash
- Up to 264 kB SRAM
- Two High-speed USB 2.0 interfaces (on-chip High-speed PHY)
- LCD Interface
- Ethernet MAC
- Unique Quad-SPI Flash Interface
- Unique State Configurable Timer Subsystem
- Unique Serial GPIO
- Up to 164 GPIO

LPC4300 Digital Signal Control (DSC) processors, bring high-performance signal processing capabilities within the reach of the typical MCU programmer. These DSC processors offer a high level of system integration, reducing system design cost and complexity, while simplifying the design cycle using a single tool chain. These products are an ideal single-chip solution for applications such as motor control, power conversion, audio, and communications. The **LPC4300 series** combines an ARM Cortex-M4 based digital signal controller with an ARM Cortex-M0 coprocessor designed for embedded applications requiring signal processing. The ARM Cortex-M4 core offers single-cycle Multiply-Accumulate and SIMD instructions and a hardware floating-point unit to support signal processing while the M0 coprocessor handles I/O and digital control processing.

Mfg. Part No.	Flash	RAM (KB)	12-Bit ADC (Inputs)	I/O (Pins)	PWM (Ch)	Pkg	Stock No.	Price Each 1-9
● LPC4357FET256,551	1MB	136	8	164	6	256-LBGA	**24W9081**	16.42
● LPC4357JET256,551	1MB	136	8	164	6	256-LBGA	**45W8452**	16.53

(210296)

32-BIT ARM CORTEX-M3 MICROCONTROLLERS

RoHS Compliant Available

Features

- ARM Cortex™ processor core
- Speeds up to 100MHz from flash or RAM
- Low power consumption
- New Wake-up Interrupt Controller (WIC)
- Memory Protection Unit

LPC1300 Series

Mfg. Part No.	Flash	RAM (KB)	12-Bit ADC (Inputs)	I/O (Pins)	PWM (Ch)	Pkg	Stock No.	Price Each 1-9
● LPC1315FBD48,551	32KB	8	8	40	11	48-LQFP	**90T5847**	4.33
● LPC1345FBD48,151	32KB	10	8	40	11	48-LQFP	**90T5854**	5.34
● LPC1316FBD48,551	48KB	8	8	40	11	48-LQFP	**90T5849**	4.73
● LPC1317FBD48,551	64KB	10	8	40	11	48-LQFP	**90T5851**	5.11
LPC1500 Series								
● LPC1517JBD48E	64KB	12	9	32	4	48-LQFP	**41X4141**	5.56
● LPC1547JBD48QL	64KB	12	9	30	4	48-LQFP	**41X4147**	6.77
● LPC1517JBD64E	64KB	12	12	46	4	64-LQFP	**41X4142**	6.05
● LPC1547JBD64QL	64KB	12	12	44	4	64-LQFP	**41X4148**	6.48
● LPC1518JBD100E	128KB	20	12	78	4	100-LQFP	**41X4143**	6.77
● LPC1548JBD64QL	128KB	20	12	44	4	64-LQFP	**41X4150**	7.13
● LPC1518JBD64E	128KB	20	12	46	4	64-LQFP	**41X4144**	6.29
● LPC1549JBD100E	256KB	36	12	76	4	100-LQFP	**41X4151**	8.42
● LPC1519JBD100E	256KB	36	12	78	4	100-LQFP	**41X4145**	6.69
● LPC1549JBD48QL	256KB	36	9	30	4	48-LQFP	**41X4152**	7.56
● LPC1549JBD64QL	256KB	36	12	44	4	64-LQFP	**41X4153**	7.99
● LPC1519JBD64E	256KB	36	12	46	4	64-LQFP	**41X4146**	7.01
LPC1700 Series								
● LPC1765FBD100	256KB	64	8	70	6	100-LQFP	**15R1838**	10.07
● LPC1766FBD100,551	256KB	64	8	70	6	100-LQFP	**70R5600**	10.36
● LPC1768FBD100,551	512KB	64	8	70	6	100-LQFP	**70R5602**	11.66
● LPC1768UKJ	512KB	64	8	70	6	100-WLCSP	**46X5460**	11.66
LPC1800 Series								
● LPC1857FET256,551	1MB	136	8	164	6	256-LBGA	**24T8438**	14.60

(163129)

32-BIT ARM CORTEX-M0 MICROCONTROLLERS

NEW

RoHS Compliant Available

The LPC1100 series are Cortex-M0 based MCUs running at speeds up to 50 MHz. This group of MCUs covers industry standard features like USB, LCD, and CAN.

LPC11U00 USB Series

Mfg. Part No.	Flash Memory Size	RAM Memory Size	No. of GPIO	Pkg	Stock No.	Price Each 1-9
● LPC11U67JBD48E	128KB	20KB	34	48-LQFP	**23X6679**	6.26
● LPC11U68JBD100E	256KB	36KB	80	100-LQFP	**23X6680**	6.59
● LPC11U68JBD64E	256KB	36KB	48	64-LQFP	**23X6681**	7.01

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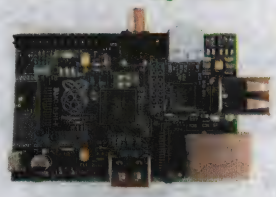
RASPBERRY PI MINI COMPUTER

RoHS Compliant Available



Features

- Broadcom BCM2835 SoC (CPU, GPU, DSP, and SDRAM)
  CPU: 700 MHz ARM1176JZF-S core (ARM11 family)
  GPU: Broadcom VideoCore IV, OpenGL ES 2.0, 1080p30 h.264/MPEG-4 AVC high-profile decoder
- Memory (SDRAM): 512 Megabytes (MB)
- Video outputs: Composite RCA, HDMI
- Audio outputs: 3.5 mm jack, HDMI
- Onboard storage: SD, MMC, SDIO card slot
- 10/100 Ethernet RJ45 onboard network
- Storage via SD/ MMC/ SDIO card slot

Raspberry Pi is a low-cost small form factor mini computer intended for students to learning programing. This system capable of many functions as standard PC like spreadsheets, word-processing, games and video playback in full HD. Extremely low-cost, the unit can function with only the addition of a screen, keyboard, mouse and memory card.

Mfg. Part No.	Description	Stock No.	Price Each
● RASPBRRY-MODB-512M.	Raspberry PI Model B Board Only	**43W5302**	35.00
EXPANSION BOARDS			
● PIFACE DIGITAL	PI Face I/O Expansion Board	**48W3976**	32.99

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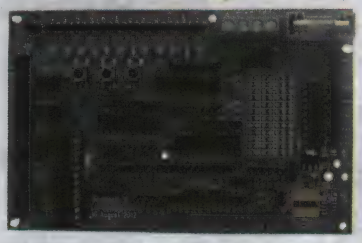
GERTBOARD

RoHS Compliant Available



The **Gertboard** is an add-on GPIO expansion board for the Raspberry Pi computer. It comes with a large variety of components, including buttons, LEDs, A/D and D/A converters, a motor controller, and an Atmel AVR microcontroller. There are test programs for the **Gertboard** written in C and Python, which are freely available on the Web.

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● GERTBOARD	(I/O) extension board for the Raspberry Pi	**46W9829**	39.99

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STM32F4 HIGH-PERFORMANCE DISCOVERY BOARD

RoHS Compliant Available

element14

Features

- STM32F407VGT6 MCU featuring 32-bit ARM Cortex-M4F core
- On-board ST-LINK/V2 with selection mode switch to use as a standalone ST-LINK/V2
- Board powered through USB bus or ext 5V supply
- LIS302DL, motion sensor, 3-axis digital output accelerometer
- MP45DT02, audio sensor, omni-directional digital microphone
- CS43L22, audio DAC with integrated class D speaker driver
- Eight LEDs
- Two push buttons (user and reset)
- USB OTG FS with micro-AB connector
- Extension header for all LQFP100 I/Os

STM32F4DISCOVERY helps you to discover the STM32F4 high-performance features and to develop your applications easily. It includes everything required for beginners and experienced users to get started quickly.

Mfg. Part No.	Description	Stock No.	Price Each
● STM32F4DISCOVERY	STM32 F4 EVAL KIT W/ STM32F407 MCU	**87T3791**	14.88
EXPANSION BOARDS			
● STM32F4DIS-BB	STM32F4DIS-BB Base Board	**47W1731**	30.96
● STM32F4DIS-CAM	STM32F4DIS-CAM Camera module	**47W1732**	24.13
● STM32F4DIS-LCD	STM32F4DIS-LCD LCD module	**47W1734**	43.35
● STM32F4DIS-WIFI	STM32F4DIS-WIFI Wireless module	**87W8233**	39.90

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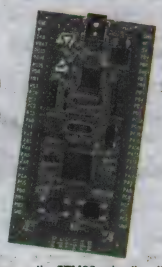
STM32 VALUE LINE DISCOVERY KIT

RoHS Compliant Available



Features

- 128 KB Flash, 8 KB RAM in 64-pin LQFP MCU
- On-board ST-Link with selection mode switch
- Can be powered by USB or an external supply of 5 V or 3.3 V
- Can supply target application with 5 V and 3 V
- Two user LEDs (green and blue)
- One user push button
- Extension header for all QFP64 I/Os

STM32VLDISCOVERY is a low-cost and quick way to discover the STM32 value line. It includes everything required for beginners and experienced users to get started quickly. The STM32 value line Discovery includes an STM32F100 value line microcontroller in a 64-pin LQFP and an incircuit ST-Link debugger / programmer to debug Discovery applications and other target board applications. A large number of free ready-to-run application firmware examples are available on www.st.com/stm32-discovery to support quick evaluation and development using the LEDs, button and extension header for connection to other boards or devices.

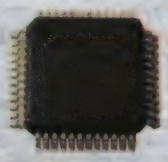
Mfg. Part No.	Description	Stock No.	Price Each
STM32VLDISCOVERY	STM32 Value Line Discovery Kit	21T4023	9.88

(189991)

STM32 F1 SERIES MCUs FOR MAINSTREAM APPLICATIONS

RoHS Compliant Available

STM32 F1 is a series of mainstream MCUs based on the ARM Cortex™-M3 core - a core specifically developed for 32-bit embedded applications and offers many degrees of freedom by combining high-performance, real-time, low-power and low-voltage operation, while maintaining full integration and ease of development and covering the needs of a large variety of applications in the industrial, medical and consumer markets. The series consists of product lines which are pin-to-pin, peripheral and software compatible.



VALUE LINE - 24MHZ CPU WITH MOTOR CONTROL AND CEC FUNCTIONS

Mfg. Part No.	Flash (KB)	Ram (KB)	GPIOs	Package	Stock No.	Price Each 1-9
STM32F100R6T6B	32	4	51	64-LQFP	76R0991	3.75
STM32F100C8T6B	64	8	37	48-LQFP	76R0988	3.84
STM32F100R8T6B	64	8	51	64-LQFP	76R0992	4.20
STM32F100V8T6B	64	8	80	100-LQFP	76R0994	4.98
STM32F100RBT6B	128	8	51	64-LQFP	76R0989	4.79
STM32F100VBT6B	128	8	80	100-LQFP	76R0993	5.16
ACCESS LINE - 36 MHZ CPU, UP TO 1 MB FLASH						
STM32F101C4T6A	16	4	37	48-LQFP	57P1181	4.20
STM32F101C8T6	64	10	37	48-LQFP	57P1185	5.19
STM32F101V8T6	64	10	80	100-LQFP	57P1205	6.40
STM32F101CBT6	128	16	37	48-LQFP	11N8293	5.69
STM32F101RDT6	384	48	51	64-LQFP	57P1189	9.13
STM32F101RFT6	768	80	51	64-LQFP	39T7134	11.41
STM32F101VFT6	768	80	80	100-LQFP	39T7136	11.84
STM32F101VGT6	1024	80	80	100-LQFP	21T4014	11.29
STM32F101RGT6	1024	80	51	64-LQFP	39T7135	13.35
STM32F101ZGT6	1024	80	112	144-LQFP	21T4015	13.42
PERFORMANCE LINE - 72MHZ WITH MOTOR CONTROL, USB AND CAN						
STM32F103C4T6A	16	6	26	48-LQFP	57P1217	5.15
STM32F103T4U6A	16	6	26	36-VFQFPN	57P1244	5.15
STM32F103T8U6	64	20	26	36-VFQFPN	11N8298	7.59
STM32F103R8T6	64	20	51	64-LQFP	57P1241	7.19
STM32F103CBT6	128	20	37	48-LQFP	11N8296	6.93
STM32F103VBT6	128	20	80	100-LQFP	57P1252	9.20
STM32F103RCT6	256	32	51	64-LQFP	01P4099	6.47
STM32F103VCT6	256	48	80	100-LQFP	57P1255	10.24
STM32F103ZCT6	256	48	112	144-LQFP	57P1265	11.17
STM32F103VDT6	384	48	80	100-LQFP	01P4103	8.15
STM32F103RET6	512	64	51	64-LQFP	01P4101	11.32
STM32F103ZEH6	512	64	112	144-BGA	57P1268	11.49
STM32F103ZET6	512	64	112	144-LQFP	57P1270	12.16
STM32F103RFT6	768	96	51	64-LQFP	39T7137	12.49
STM32F103ZFT6	768	96	112	144-LQFP	21T4020	12.51
STM32F103VFT6	786	96	80	100-LQFP	21T4017	13.21
STM32F103RGT6	1024	96	51	64-LQFP	21T4016	11.90
STM32F103VGT6	1024	96	80	100-LQFP	21T4018	12.60
STM32F103ZGH6	1024	96	112	144-LFBGA	39T7138	14.64
STM32F103ZGT6	1024	96	112	144-LQFP	21T4021	14.64
USB ACCESS LINE - 48 MHZ CPU WITH USB FS						
STM32F102C6T6A	32	6	37	48-LQFP	57P1211	4.50

➤CONTINUED➤

STM32 F1 SERIES MCUs FOR MAINSTREAM APPLICATIONS (CONT.)

CONNECTIVITY LINE - 72MHZ WITH ETHERNET, CAN AND USB 2.0 OTG

Mfg. Part No.	Flash (KB)	Ram (KB)	GPIOs	Package	Stock No.	Price Each 1-9
STM32F105RBT6	128	64	51	64-LQFP	25R9437	8.10
STM32F107RBT6	128	64	51	64-LQFP	25R9443	8.91
STM32F105VBT6	128	64	80	100-LQFP	25R9440	9.02
STM32F107VBT6	128	64	80	100-LQFP	25R9445	9.92
STM32F105RCT6	256	64	51	64-LQFP	25R9438	9.29
STM32F107RCT6	256	64	51	64-LQFP	25R9444	10.22
STM32F105VCT6	256	64	80	100-LQFP	25R9441	10.16
STM32F107VCT6	256	64	80	100-LQFP	25R9446	11.18

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STM32 F2 HIGH PERFORMANCE SERIES OF MCUs

RoHS Compliant Available

STM32 F2 series of high-performance microcontrollers are ARM® Cortex™-M3 based and is built on an advanced 90 nm NVM process technology with the innovative adaptive real-time memory accelerator (ART Accelerator™) and the multi-layer bus matrix. This series is characterized by a high degree of integration combining high density Flash memory and SRAM with communications peripherals, hardware encryption and external memory support. ART Accelerator technology enables these MCUs to achieve up to 150 DMIPS at 120 MHz FCPU which is equivalent to zero wait state execution, while keeping the dynamic current consumption at the outstandingly low level of 188 µA/MHz.

Mfg. Part No.	Flash (KB)	RAM (KB)	GPIOs	Package	Stock No.	Price Each 1-9
STM32F205RBT6	128	64	51	64-LQFP	47T9327	8.92
STM32F205VBT6	128	64	82	100-LQFP	47T9332	9.94
STM32F205RCT6	256	96	51	64-LQFP	47T9328	10.30
STM32F205VCT6	256	96	82	100-LQFP	47T9333	10.65
STM32F207VCT6	256	128	82	100-LQFP	47T9342	11.50
STM32F205ZCT6	256	96	114	144-LQFP	47T9337	12.29
STM32F207ZCT6	256	128	114	144-LQFP	47T9346	12.91
STM32F207ICH6	256	128	140	176-UFBGA	73T2320	11.44
STM32F207ICT6	256	128	140	176-LQFP	59T6686	11.57
STM32F205RET6	512	128	51	64-LQFP	47T9329	12.64
STM32F205VET6	512	128	82	100-LQFP	47T9334	13.38
STM32F207VET6	512	128	82	100-LQFP	47T9343	14.05
STM32F205ZET6	512	128	114	144-LQFP	47T9338	12.63
STM32F207ZET6	512	128	114	144-LQFP	47T9347	13.26
STM32F207IET6	512	128	140	176-LQFP	59T6687	14.59
STM32F205RFT6	768	128	51	64-LQFP	47T9330	11.19
STM32F205VFT6	768	128	82	100-LQFP	47T9335	12.38
STM32F207VFT6	768	128	82	100-LQFP	47T9344	12.44
STM32F205ZFT6	768	128	114	144-LQFP	47T9339	13.76
STM32F207ZFT6	768	128	114	144-LQFP	47T9348	14.45
STM32F207IFT6	768	128	140	176-LQFP	59T6688	15.89
STM32F205VGT6	1024	128	82	100-LQFP	47T9336	14.67
STM32F205ZGT6	1024	128	114	144-LQFP	47T9340	17.04
STM32F207ZGT6	1024	128	114	144-LQFP	47T9349	17.67

(203524)

STM32 F4 HIGH PERFORMANCE SERIES OF MCUs w/ DSP AND FPU

RoHS Compliant Available

STM32 F4 series of high-performance devices combine the real-time control capabilities of an MCU and the signal processing performance of a DSP into a class of digital signal controller (DSC) devices complementing the STM32 portfolio of microcontrollers. Based on a ARM® Cortex™-M4 core with DSP instructions and a floating point unit, they feature more SRAM, peripheral improvements such as full duplex PS, improved RTC and faster ADCs. Like the STM32 F2 series, they leverage an advanced 90 nm NVM process and ART Accelerator™ technology to reach the highest benchmark scores for Cortex-M-based microcontrollers and remains pin-to-pin and software compatible with the STM32 F2 series.

Mfg. Part No.	Flash (KB)	RAM (KB)	GPIOs	Package	Stock No.	Price Each 1-9
STM32F407VET6	512	192	82	100-LQFP	73T2332	12.59
STM32F405RGT6	1024	192	51	64-LQFP	73T2329	15.25
STM32F415RGT6	1024	192	51	64-LQFP	73T2335	16.01
STM32F407VGT6	1024	192	82	100-LQFP	73T2333	17.15
STM32F417VGT6	1024	192	82	100-LQFP	73T2338	17.41
STM32F407ZGT6	1024	192	114	144-LQFP	73T2334	18.59
STM32F417ZGT6	1024	192	114	144-LQFP	73T2339	20.67
STM32F407IGH6	1024	192	140	176-UFBGA	73T2330	19.52
STM32F407IGT6	1024	192	140	176-LQFP	73T2331	21.65
STM32F417IGH6	1024	192	140	176-UFBGA	73T2336	20.50
STM32F417IGT6	1024	192	140	176-UFBGA	73T2337	22.74

(203525)

SITARA ARM CORTEX-A8 PROCESSORS

RoHS Compliant Available

TEXAS INSTRUMENTS

Features

- Low-cost solutions
- High-level operating systems and RTOS support
- Production-ready reference platforms
- Large 3P ecosystem for support and additional resources
- Comprehensive integration
- Software and hardware enablement
- Advanced 3D graphics acceleration
- Flexible communications interfaces
- Robust display options

Sitara ARM Cortex-A8 processors offer power and cost optimized solutions that go beyond the core, delivering a broad portfolio of ARM Cortex-A8 devices that help innovators create a variety feature-rich, low-power applications. With the ability to scale in speed from 275MHz to 1.35GHz, the ARM Cortex-A8 processor can meet the requirements for power optimized devices with a power budget of less than 300mW and enables performance-optimized consumer applications requiring greater than 2500 Dhrystone MIPS. Compared to the ARM11 core, the Cortex-A8 processor is a dual-issue superscalar, achieving twice the instructions executed per clock cycle at 2 DMIPS/MHz.

Mfg. Part No.	Freq. (MHz)	Oper. Temp. (°C)	Package / Case	Stock No.	Price Each 1-9
● AM3352BZCE30	300	0 to 90	298-BGA	85W3980	17.65
● AM3352BZCEA30	300	-40 to 105	298-BGA	85W3977	21.32
● AM3352BZCED30	300	-40 to 90	298-BGA	85W3979	20.40
● AM3352BZCZ60	600	0 to 90	324-BGA	85W3984	20.22
● AM3352BZCZA100	1000	-40 to 105	324-BGA	73W9675	30.90
● AM3352ZCE50	500	0 to 90	298-BGA	94T9516	18.37
● AM3352BZCZD60	600	-40 to 90	324-BGA	73W9676	20.88
● AM3352ZCZD72	720	-40 to 90	324-BGA	94T0250	26.72
● AM3354ZCED50	720	-40 to 90	298-BGA	94T0251	22.88
● AM3354ZCZD72	720	-40 to 90	324-BGA	94T0252	28.86
● AM3354BZCZ80	800	0 to 90	324-BGA	73W9694	25.88
● AM3354BZCZA80	800	-40 to 105	324-BGA	73W9687	29.86
● AM3354BZCZD80	800	-40 to 90	324-BGA	73W9690	28.86
● AM3357BZCZA80	800	-40 to 105	324-BGA	73W9706	37.34
● AM3358BZCZ100	1000	0 to 90	324-BGA	73W9711	41.67
● AM3358BZCZA100	1000	-40 to 105	324-BGA	73W9709	46.72
● AM3359BZCZA80	800	-40 to 105	324-BGA	85W3986	42.22
● AM3505AZCN	600	0 to 90	491-NFBGA	83R9388	27.50
● AM3505AZCNA	600	-40 to 105	491-NFBGA	83R9389	33.00
● AM3505AZER	600	0 to 90	484-BGA	27T6181	27.50
● AM3505AZERA	600	-40 to 105	484-BGA	27T6182	33.00
● AM3517AZCNA	600	-40 to 105	491-NFBGA	83R9391	38.10
● AM3517AZCNAC	600	-40 to 105	491-NFBGA	52T7514	38.10
● AM3517AZER	600	0 to 90	484-BGA	27T6183	31.70
● AM3517AZERA	600	-40 to 105	484-BGA	27T6184	38.10
● AM3517AZERC	600	0 to 90	484-BGA	52T7517	31.70

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BEAGLEBONE CAPES

RoHS Compliant Available

TEXAS INSTRUMENTS

BeagleBone Capes are add on boards that can be connected to the BeagleBone to add functionality. BeagleBone is a bare-bones BeagleBoard that acts as a USB or Ethernet connected expansion companion for your current BeagleBoard and BeagleBoard-xM or works stand-alone. The BeagleBone brings full-featured Linux to places it has never gone before.

Mfg. Part No.	Description	Stock No.	Price Each
● BB-BONE-AUDI-01	BeagleBone Audio Cape	26W8115	55.95
● BB-BONE-CAM3-01	BeagleBone Camera 3.1MP Cape	26W8116	87.95
● BB-BONE-DVID-02	BeagleBone DVI-D w/Audio Cape	26W8117	58.95
● BB-BONE-LCD3-01	BeagleBone 3.5" TFT LCD3 Cape	26W8118	69.95
● BB-BONE-LCD4-01	BeagleBone 4.3" TFT LCD4 Cape	26W8119	88.95
● BB-BONE-SERL-03	BeagleBone RS232 Cape	26W8121	38.95
● BB-BONE-WTHR-01	BeagleBone Weather Cape	26W8122	74.95
● BB-BONE-BATT-01	BeagleBone Battery Cape	27W5797	49.95
● BB-BONE-NINJA-01	BeagleBone NINJA CAPE	61W8601	38.48
● BB-BONE-SERL-04	BeagleBone RS485 CAPE	61W8602	38.95
● BB-BONE-MOTOR-01	BeagleBone MOTOR CAPE, NXT CONN	63W3551	72.14
● BB-BONE-MOTOR-02	BeagleBone MOTOR CAPE, SCREW BLOCKS	63W3552	84.16
● BB-BONE-RF-01	BeagleBone RF CAPE, NO RADIO INCLUDED	63W3553	60.12
● BB-BONE-WIFI-01	BeagleBone TIWI-BLE CAPE, W/ CHIP ANT	63W3554	68.57
● BB-BONE-WIFI-02	BeagleBone TIWI-BLE CAPE, W/ EXT ANT	63W3555	72.14
● BB-BONE-WIFI-03	BeagleBone TIWI-5E CAPE, W/ CHIP ANT	63W3556	68.57
● BB-BONE-WIFI-04	BeagleBone TIWI-5E CAPE, W/ EXT ANT	63W3557	82.86
BEAGLEBONE BREADBOARD	BeagleBone BREADBOARD CAPE + WIRE SET	78T1608	32.39

(207669)

TMS320F28335 EZDSP STARTER KIT

TEXAS INSTRUMENTS

Features

- TMS320F28335 Floating-Point Digital Signal Controller(DSC)
  150 MHz operation
  512 KB on-chip flash memory
  68 KB on-chip RAM
  12-bit ADC with 16 input channels
- 128k x 16 off-chip SRAM
- Clamshell socket for the F28335 DSC
- RS-232 interface with on-board transceiver and 9-pin DSUB connector
- CAN interface with on-board transceiver and 9-pin DSUB connector
- Multiple expansion connectors provide access to all F28335 I/O signals
- Embedded USB JTAG Controller
- Operates from a single 5V supply with provided AC adapter
- IEEE 1149.1 JTAG emulation connector
- Code Composer Studio™ Integrated Development Environment for C2000 including C compiler, assembler, linker, real-time debug support, data visualization, a profiler and a flexible project manager.
- eZdsp diagnostic software, including test examples for UART, CAN, I2C, and memory
- Texas Instruments' Flash APIs to support the F28335
- Texas Instruments' F28335 header files and example software

Kit Contents

- Code Composer Studio v3.3 for C2000, eZdsp diagnostic software, and code examples on CD
- Quick Start Guide
- Target board for the F28335 DSC
- Technical Reference Manual
- USB Cable
- Universal 5v power supply w/ power cord

The **F28335** eZdsp starter kit is a complete software development platform for the **TMS320F2833x** series of floating-point Digital Signal Controllers. The eZdsp kit includes an **F28335** target board that features integrated JTAG emulation, 128Kx16 asynchronous SRAM, CAN 2.0 and RS-232 interfaces, and expansion headers that provide access to all **F28335** I/O signals. Also included in the kit is the Code Composer Studio™ Integrated Development Environment, USB interface to the host PC, and a universal power supply.

Mfg. Part No.	Description	For Use With	Stock No.	Price Each
TMDSEZ28335	Board, Cables, CD, Docs		12P7914	495.10

(102146)

C2000 PICCOLO LAUNCHPAD

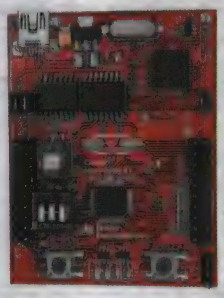
TEXAS INSTRUMENTS

Features:

- Pre-programmed C2000 Piccolo F28027 MCU
- Built in isolated XDS100 JTAG Emulator enables real-time in-system programming and debugging via USB
- CPU reset button and programmable push button
- Enables development on any Piccolo F2802x device
- Free unrestricted version of Code Composer Studio integrated development environment (IDE) v5
- Free download of controlSUITE™ software with examples, libraries, application software and more

Kit Contents:

- C2000 Piccolo LaunchPad Evaluation Board (LAUNCHXL-F28027)
- Mini USB Cable
- Quick Start Guide



C2000 Piccolo LaunchPad evaluation kit, based on the F28027 microcontroller (MCU), is a modular, quick-launch evaluation kit that contains device, emulation and software to explore the latest digital control techniques in areas such as power, lighting and motor control.

Mfg. Part No.	Description	Stock No.	Price Each
LAUNCHXL-F28027	C2000 Piccolo LaunchPad	26W7560	17.08

(207662)

C2000 LED BOOSTERPACK FOR PICCOLO LAUNCHPAD

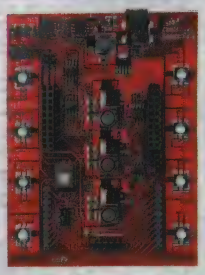
TEXAS INSTRUMENTS

Features:

- 3 Booster Converters
- 8 RGB LEDs
- MSP430 Capacitive Touch Interface

Kit Contents:

- LED BoosterPack
- Power Supply
- Quick Start Guide



C2000 LED BoosterPack demonstrates the control of 3 boost converters to drive 3 LED (Red, Green, and Blue) strings. A variety of user interface options are provided included capacitive touch control using an MSP430 and the MSP430 Cap Touch BoosterPack (430BOOST-SENSE1), as well as, a PC GUI application. This boosterpack is ideal to learn about real time digital control techniques and LED lighting. This kit requires a C2000 LaunchPad to function as intended.

Mfg. Part No.	Description	Stock No.	Price Each
BOOSTXL-C2KLED	LED BoosterPack for C2000 Piccolo LaunchPad	26W7559	30.10

(207663)

C2000 SERIES MCU DEVELOPMENT KITS

TEXAS INSTRUMENTS

Mfg. Part No.	Description	Stock No.	Price Each
TMDSCNCD2808	MODULE BRD, PICCOLO F2808, CONTROLCARD	11N9804	59.10
TMDSDOCK2808	TMS320F2808, USB JTAG EMULATION, EXPERIMENTER KIT	11N9808	89.10

(148779)

Delfino SERIES MCU DEVELOPMENT KITS

Texas Instruments

Mfg. Part No.	Description	Stock No.	Price Each
TMDSCNCD28335	ADD-ON BRD, DELFINO F28335, CONTROLCARD	11N9805	69.15
TMDSDOCK28335	EVAL KIT, DELFINO F28335 EXPERIMENTER	11N9809	99.20

(148769)

Piccolo™ SERIES MICROCONTROLLERS

RoHS Compliant Available

Texas Instruments

Features
- 32-bit, fixed-point C28x™ core
- 60 to 100 MIPS operation
- 1.8-V core and 3.3-V peripherals
- Easy-to-use software and development tools speed time-to-market

Applications
- Digital motor control
- Digital industrial power supplies
- Advanced sensing in industrial

Piccolo™ family of microcontrollers provide the power of the C28x™ core coupled with highly integrated control peripherals in low pincount devices. This family is code compatible with previous C28-based code, as well as providing the highest level of analog integration to date for the C28x family.

Mfg. Part No.	Flash (KB)	OTP (KB)	RAM (KB)	Freq. (MHz)	I/O (Pins)	PWM (CH)	Pkg.	Stock No.	Price Each 1-9
TMS320F28027DAS	64	2 KB	12	60	20	8	38-TSSOP	25R0073	6.91
TMS320F28035PAGT	128	2 KB	20	60	33	12	64-TQFP	55R7537	10.20
TMS320F28035PNT	128	2 KB	20	60	45	14	80-LQFP	55R7540	10.52

(139066)

C2000™ MICROCONTROLLERS

RoHS Compliant Available

Texas Instruments

Applications
- Digital motor control
- Digital power supplies
- Intelligent sensors

The TMS320C2000™ Platform of real-time signal processing controllers combines the control peripheral integration and ease of use of a microcontroller (MCU) with the processing power and C efficiency of TI's leading DSP technology. This makes them ideal for embedded industrial applications. Supply Voltage Max: 3.3V

Mfg. Part No.	Freq. (MHz)	Flash (KB)	RAM (KB)	I/O Pins	PWM (Ch)	Pkg.	Stock No.	Price Each 1-9
C2000 - F24x 16-bit Series								
TMS320F240PQS	20	32	1	28	12	132-BQFP	35C2198	31.85
TMS320LF2401AVFA	40	16	2	13	8	32-LQFP	83C7630	9.67
TMS320LF2403APAGS	40	32	2	21	8	64-TQFP	72K9582	15.07
TMS320LF2406APZA	40	64	5	41	16	100-LQFP	67C3455	13.86
TMS320LF2406APZS	40	64	5	41	16	100-LQFP	72K9583	15.26
TMS320LF2407APGEA	40	64	5	41	16	144-LQFP	62K3471	14.70
C2000 - F28x FIXED-POINT SERIES								
TMS320F28016PZA	60	32	12	35	8	100-LQFP	94M9994	8.80
TMS320F2801PZA-60	60	32	12	35	8	100-LQFP	03M1089	10.65
TMS320F2808PZA	100	128	36	35	16	100-LQFP	40K9764	20.69
TMS320F2809PZA	100	256	36	35	16	100-LQFP	94M9997	22.67
TMS320F2810PBKA	150	128	36	56	16	128-LQFP	67K1285	22.46
TMS320F2811PBKA	150	256	36	56	16	128-LQFP	87H2861	23.90
TMS320F2812PGFA	150	256	36	56	16	176-LQFP	61H3323	24.24
TMS320F2812PGFQ	150	256	36	56	16	176-LQFP	10J9719	30.79
TMS320F2812PGFS	150	256	36	56	16	176-LQFP	82H5853	26.71
TMS320F2812ZHHA	150	256	36	56	16	179-BGA	10J9720	24.24
C2000 - F28x FLOATING-POINT SERIES								
TMS320F28332PGFA	100	128	26	88	16	176-LQFP	11N7230	22.46
TMS320F28334PGFA	150	256	32	88	16	176-LQFP	11N7233	23.90
TMS320F28335PGFA	150	512	32	88	18	176-LQFP	11N7235	26.03
TMS320F28335ZHHA	150	512	32	88	18	179-BGA	03P5122	24.24

(80449)

WL1271 WI-FI AND BLUETOOTH DAUGHTER CARD FOR EVMs WITH COM CONNECTOR

Texas Instruments

Features:
- IEEE 802.11 b/g/n Wi-Fi
- v4.0 with Bluetooth Low Energy (BLE)
- On module 38.4MHz Reference Oscillator, DC-DC Voltage Regulation, and U.FL Coaxial
- Hardware and Linux/Android Software Pre-integration With TI's DM814x/AM387x, AM335x and other Evaluation Modules
- Software Upgradable for ANT
- FCC/IC/ETSI Certified

The **Wi-Fi and BlueTooth ®** daughter card for the AM335x EVM (TMDXEVM3358) is a combo wireless connectivity add-on card, based on the Murata Type-TN Module (WL1271-TYPETN) with Texas Instruments WiLink 6.0 (WL1271) solution.

Mfg. Part No.	Description	Stock No.	Price Each
TMDXWL1271COM6M	Daughter card for the AM335x EVM	95T1064	80.01

(210287)

SAMA5D3 SERIES 32-BIT MPU

NEW

RoHS Compliant Available

Atmel

The **SAMA5D3** series is a high-performance, power-efficient embedded MPU based on the ARM® Cortex®-A5 processor, achieving 536 MHz with power consumption levels below 0.5 mW in low-power mode. The device features a floating point unit for high-precision computing and accelerated data processing, and a high data bandwidth architecture. It integrates advanced user interface and connectivity peripherals and security features.

Mfg. Part No.	SRAM	Embedded Interface Type	Pkg.	Stock No.	Price Each 1-9
ATSAMA5D34A-CU	128KB	CAN, Ethernet, I2C, SPI, UART, USB	324-LFBGA	69W7949	17.27
ATSAMA5D31A-CU	128KB	I2C, SPI, UART, USB	324-LFBGA	69W7945	14.95
ATSAMA5D33A-CU	128KB	Ethernet, I2C, SPI, UART, USB	324-LFBGA	69W7947	15.70
ATSAMA5D34A-CU	128KB	CAN, Ethernet, I2C, SPI, UART, USB	324-LFBGA	69W7949	17.27
ATSAMA5D35A-CU	128KB	CAN, Ethernet, I2C, SPI, UART, USB	324-LFBGA	69W7951	17.27

(212256)

I.MX28 EVALUATION KIT

RoHS Compliant Available

freescale

Features
- i.MX287 Applications Processor
- DDR2 memory
- DC/DC Converter components
- 4.3" WVGA Touchscreen LCD Display (add-on module)
- Navigation keys
- NAND socket—48 pin TSOP package
- Debug Serial Port
- JTAG

Applications
- Consumer
- Industrial
- Automotive

i.MX28 evaluation kit (EVK) offers developers a price effective platform to ultimately develop, debug and demonstrate the personality of their next great product without compromising performance. The EVK supports all the features of the i.MX28 Family in a small, single-board design. An optional LCD add-on module is available to enable developers with a complete development platform at a low price point.

Mfg. Part No.	Description	Stock No.	Price Each
MCIMX28EVK	i.MX28 Evaluation Kit	87R1026	399.00
MCIMX28LCD	Touch LCD Option 4.3" 800x600	84R7256	199.00

(196437)

I.MX51 APPLICATIONS PROCESSOR EVALUATION KIT (EVK)

RoHS Compliant Available

freescale

Features:
- i.MX51 Applications Processor (529 BGA)
- Audio In/Out connectors
- 2 SD/MMC Card Slots
- USB Host x2 / USB OTG x1
- Ethernet Port
- Mini PCI express
- SATA HDD connector
- SIM Card connector
- USB Camera connector
- RGB output through DVI-I connector
- Expansion Header
- Ambient light sensor footprint
- FM receiver footprint
- Debug Serial Port
- JTAG
- Power Measurement Header

The **i.MX51 evaluation kit** enables the cost-effective development, debug and demonstration of the i.MX51 ARM Cortex-A8 core processor. The i.MX51 EVK delivers extreme performance and provides long battery life helping developers design products that meet today's demands for energy efficiency. A range of connectivity options makes the i.MX51 EVK suitable for developing many different types of user applications. The i.MX51 EVK has two optional add-on modules; an LCD and an expansion board.

Mfg. Part No.	Description	Stock No.	Price Each
MCIMX51EVKJ	I.MX51, USB HOST/OTG, LCD DISPLAY, JTAG, EVAL KIT	29R0561	699.00
MCIMX51LCD	LCD MODULE, I.MX51, W / RESISTIVE TOUCHSCREEN	52R7576	250.00

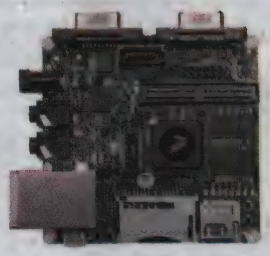
(176049)

I.MX53 QUICK START BOARD

RoHS Compliant Available

freescale

Features
- i.MX53 1 GHz ARM Cortex-A8 Processor
- 1 GB DDR3 memory
- VGA connector
- SPDIF output via HDMI add-on card
- Freescale SGTL5000 audio codec
- Enables parallel LCD or HDMI output
- Full-size SD/MMC card slot
- 7-pin SATA data connector
- Two High-Speed USB host ports
- JTAG connector
- 3-axis Freescale accelerometer



Contents
- i.MX53 1 GHz ARM Cortex-A8 processor
- 4 GB microSD card with Linux image
- 5V power supply with worldwide adapters
- Micro USB cable
- Quick Start Guide
- DVD with VMware player, getting started video, demos and other documents

i.MX53 Quick Start board is a open source development platform integrated with an ARM® CortexTM™-A8 1 GHz processor. The Quick Start board includes a display controller, hardware-accelerated graphics, 1080p video decode and 720p encode as well as numerous connectivity options ideally suited for applications such as human machine interface in embedded consumer, industrial and medical markets. Can be used with the i.MX28 LCD module (MCIMX28LCD) to create a low cost development platform.

CONTINUED

I.MX53 QUICK START BOARD (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
● MCIMX53-START-R	i.MX53 Quick Start Board	71T7342	149.00
● MCIMXHDMICARD	HDMI Output add-on Board	38T2571	49.00
● MCIMX-LVDS1	Touch LCD Option 10.1" 1024x768	45T2344	499.00

(196438)

PowerQuicc™ II COMMUNICATION PROCESSORS

RoHS Compliant Available

freescale

PowerQUICC™ II series integrates Power Architecture™ technology PowerPC 603e core with system logic required for networking, telecommunications, and wireless infrastructure applications. These processors combine system-level support for industry-standard interfaces with processors that implement the embedded category of the Power Architecture technology.

Mfg. Part No.	CPU/CPM/ Bus Speed (MHz)	Rev	10/100	Channels HDLC	Channels SCC	Package	Stock No.	Price Each 1-9
● MPC8247CVRTIEA	400/200/100	A	2	64	3	516-BGA	53J3346	66.41
● MPC8247VRTIEA	400/200/100	A	2	64	3	516-BGA	11J9574	60.38
● MPC8248CVRTIEA	400/200/100	A	2	64	3	516-BGA	53J3352	69.68
MPC8260ACZUMHBB	200/166/133	B	Up to 3	Up to 256	4	480-TBGA	93C3285	222.42
MPC8270CZUUPEA	450/300/100	A	Up to 3	Up to 128	4	480-TBGA	62K5396	80.79
● MPC8270VRMIBA	266/200/66	A	Up to 3	Up to 128	4	516-BGA	73J1285	80.36
MPC8270ZUUPEA	450/300/100	A	Up to 3	Up to 128	4	480-TBGA	62K5398	73.45

(136919)

COLDFIRE® 32-BIT EMBEDDED MICROPROCESSORS

RoHS Compliant Available

freescale

The ColdFire 32-Bit Embedded Microprocessors family combines a ColdFire Processor core with several peripheral functions such as a timers, parallel and serial interfaces, and system integration. Designed for embedded control applications, the ColdFire core delivers enhanced performance. The processor performs up to 159 MIPS with Ethernet, USB device, and Encryption features.

ColdFire® V2 EMBEDDED PROCESSORS

Mfg. Part No.	Interfaces	Internal RAM (KB)	Bus Freq. (MHz)	I/O Pins	Oper. Temp. (°C)	Pkg.	Stock No.	Price Each 1-9
● MCF5206EAB40	UART	8	40	8	0 to 70	160-QFP	25K5851	17.92
ColdFire® V4 EMBEDDED PROCESSORS								
● MCF5474VR266	I2C, UART, DMA	32	266	99	0 to 70	388-PBGA	11J9326	44.80
● MCF5475VR266	I2C, UART, DMA	32	266	99	0 to 70	388-PBGA	11J9330	51.54
● MCF5484CVR200	I2C, UART, DMA	32	200	99	-40 to 85	388-PBGA	11J9341	52.72
● MCF5485CVR200	I2C, UART, DMA	32	200	99	-40 to 85	388-PBGA	11J9343	59.44
● MCF54415CMJ250	CAN, ETHERNET, I2C, SPI, UART, USB	64	250	87	-40 to 85	256-MAPBGA	87R1022	12.69
● MCF54416CMJ250	CAN, ETHERNET, I2C, SPI, UART, USB	64	250	87	-40 to 85	256-MAPBGA	87R1023	14.80
● MCF54417CMJ250	CAN, ETHERNET, I2C, SPI, UART, USB	64	250	87	-40 to 85	256-MAPBGA	87R1024	18.00
● MCF54418CMJ250	CAN, ETHERNET, I2C, SPI, UART, USB	64	250	87	-40 to 85	256-MAPBGA	87R1025	20.13

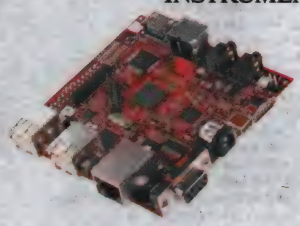
(113747)

BEAGLE BOARD XM

RoHS Compliant Available

TEXAS INSTRUMENTS

Features
- Super-scalar ARM Cortex-A8
- 512-MB LPDDR RAM
- USB 2.0 OTG port optionally powers the board
- Four-port USB 2.0 hub w/ 10/100 Ethernet
- DVI-D (digital computer monitors and HDTVs)
- S-video (TV out)
- Stereo audio out/in
- microSD slot and 4-GB microSD card
- JTAG
- Camera port



Kit contents
- BeagleBoard
- uSD card
- uSD Card to MMC Adapter

BeagleBoard-xM delivers extra ARM® Cortex TM -A8 MHz now at 1 GHz and extra memory with 512MB of low-power DDR RAM, enabling hobbyists, innovators and engineers to go beyond their current imagination and be inspired by the BeagleBoard.org community. Designed with the community inputs in mind, this open hardware design improves upon the laptop-like performance and expandability, while keeping at hand-held power levels. Direct connectivity is supported by the on-board four-port hub with 10/100 Ethernet, while maintaining a tiny 3.25" × 3.25" footprint.

➤CONTINUED➤

BEAGLE BOARD XM (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
● BEAGLE XM	BeagleBoard-xM, DM3730, Dev Kit	78R8860	149.00

(198149)

CRANE BOARD FEATURING AM3517 Sitara ARM Cortex-A8

TEXAS INSTRUMENTS

Features
- AM3517 Sitara ARM Cortex-A8 – 600MHz
- Integrated 3D Graphics Accelerator
- Support for on-chip peripherals like 10/100 EMAC, USB OTG, 3.3V I/O, CAN, and DDR2
- Power over Ethernet and other power options including USB and DC
- Fully open-source four-layer PCB
- Fully Open Source Linux Board Support package (2.6.32)
- Based on existing AM3517 Sitara ARM evaluation module (EVM) software
- All software available via GIT
- Arago File System
- Flashing tool and board diagnostics
- Ethernet / Power Over Ethernet (POE) utilizing on-processor 10/100 EMAC
- DVI-D (HDMI Connector)
- RS-232
- JTAG
- TV Out (CVBS)
- Expansion

CraneBoard is a low-cost, open-source hardware development platform based on the AM3517 Sitara™ ARM® Cortex™-A8 microprocessor. The CraneBoard provides robust processor performance while delivering integrated peripherals not found on existing low-cost development boards.

Mfg. Part No.	Description	Stock No.	Price Each
CRANE	CraneBoard w/ ARM Cortex-A8	27T6221	203.00

(192442)

BLACKFIN® SERIES DEVELOPMENT TOOLS

RoHS Compliant Available

ANALOG DEVICES

BLACKFIN® development tools feature an RS-232 interface, I/O and Memory Expansion Ports as well as an evaluation suite of Visual DSP++ software. The ADSP-BF537 STAMP board support package has been specifically designed to support the development and porting of open source uClinux applications, while maintaining the same functionality as other BLACKFIN® boards.

The ADSP-BF548 EZ-KIT Lite® provides developers with a cost-effective method for initial evaluation of the ADSP-BF54x Blackfin® Processors via a USB-based, PC-hosted tool set. With this EZ-KIT Lite, users can learn more about the Analog Devices ADSP-BF548 hardware and software development, and quickly prototype a wide range of applications. The EZ-KIT Lite includes an ADSP-BF548 Blackfin Processor desktop evaluation board along with an evaluation suite of the VisualDSP++® development and debugging environment, including the C/C++ compiler, assembler, and linker. The evaluation suite of VisualDSP++ is designed to be used with the EZ-KIT Lite only.

Mfg. Part No.	For use with	Description	Stock No.	Price Each
● ADZS-BF533-EZLITE	ADSP-BF533	Desktop Development Tool	28M3961	489.38
● ADZS-BF537-EZLITE	ADSP-BF537	Desktop Development Tool	21M6778	380.63
● ADZS-BF537-STAMP	ADSP-BF537	Board Support Package	30M0364	220.10

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ADSP-BF537 BLACKFIN® EZ-KIT LITE EVALUATION KIT

RoHS Compliant Available

ANALOG DEVICES

Features
- ADSP-BF537 Blackfin® Processor
- Max. core clock rate of 600MHz
- 64 MB (32M x 16) SDRAM
- 4 MB (2M x 16) FLASH memory
- SMSC LAN83C185 10/100 PHY w/ RJ45 connector
- CAN TJA1041 transceiver w/ 2 RJ10 connectors
- AD1871 96 KHz stereo ADC w/ ⅛"Jack Connector
- AD1854 96 KHz stereo DAC w/ ⅛" Jack Connector
- RS-232 UART line driver/receiver
- National Instruments Educational Laboratory Virtual Instrumentation Suite (NI ELVIS) interface

Kit Contents
- ADSP-BF537 processor desktop evaluation board
- Evaluation suite of the VisualDSP++® development and debugging environment
- Sample processor application programs
- CE-approved power supply
- USB cable
- Straight through and cross-over Ethernet cables
- 3.5mm stereo cable
- Pair of stereo headphones

The ADSP-BF537 EZ-KIT Lite® provides developers with a cost-effective method for evaluation of the ADSP-BF537 Blackfin® processor and its rich set of system peripherals, including the IEEE 802.3 10/100 Ethernet MAC and CAN 2.0B controller. A TCP/IP stack with integrated device driver and example code is provided in VisualDSP++ release 4.0. Additionally, the ADSP-BF537 EZ-KIT Lite contains the National Instruments Educational Laboratory Virtual Instrumentation Suite (ELVIS) interface which allows the use of the DC voltage and current measurement modules, oscilloscope and bode analyzer modules, function generator, arbitrary waveform generator and digital I/O.

Mfg. Part No.	Description	Supported	Stock No.	Price Each
● ADZS-BF537-EZLITE	Evaluation Board w/ Evaluation version of VisualDSP++, cd, power supply, and a USB cable	ADSP-BF537	21M6778	380.63

(116589)

EZ-KIT LITE EVALUATION KIT FOR ADSP-218x PROCESSOR FAMILY

RoHS Compliant Available

ANALOG DEVICES

The **ADSP-2189M EZ-KIT Lite** provides developers with a cost-effective method for initial evaluation of the powerful ADSP-218x DSP family architecture. Includes a stand-alone ADSP-2189M DSP board and fundamental code generation debug software. With this EZ-KIT Lite, users can learn about DSP hardware and software development and evaluate potential applications of the ADSP-218X M family of DSPs. Provides an evaluation suite of the VisualDSP++ development environment with the C compiler, assembler, and linker. All software tools are limited to use with the EZ-KIT Lite product.

Mfg. Part No.	Description	Stock No.	Price Each
ADZS-2189M-EZLITE	EZ-KIT LITE Evaluation Kit for ADSP-218X	30M0502	326.25

(177429)

BLACKFIN® SERIES DIGITAL SIGNAL PROCESSORS

RoHS Compliant Available

ANALOG DEVICES

Blackfin® Processors using a 16-bit RISC programming model, are designed specifically to meet the computational demands and power constraints of today's embedded audio, video, and communications applications. Blackfin Processors are ideal for portable and networked digital media appliances, automotive telematics, communications and networks.

DSP Specifications	L1 Instruction Memory		L1 Data Memory			L2 Instruction/ Data Memory
	SRAM/ Cache	SRAM	SRAM/ Cache	SRAM	Scratchpad	
ADSP-BF531xx	16 kB	16 kB	16 kB	...	4 kB	...
ADSP-BF532xx	16 kB	32 kB	32 kB	...	4 kB	...
ADSP-BF533xx	16 kB	64 kB	32 kB	32 kB	4 kB	...
ADSP-BF534	16 kB	48 kB	32 kB	32 kB	4 kB	...
ADSP-BF536	16 kB	48 kB	32 kB	...	4 kB	...
ADSP-BF537xx	16 kB	48 kB	32 kB	32 kB	4 kB	...
ADSP-BF538	16 kB	64 kB	32 kB	32 kB	4 kB	...
ADSP-BF561xx	16 kB	16 kB	32 kB	32 kB	4 kB	128 kB
ADSP-BF592xx	...	32 kB	...	32 kB	4 kB	...

Mfg. Part No.	Clock Speed (MHz)	GPIOs	# of Timers	Oper. Temp. (°C)	Package	Stock No.	Price Each 1-9
ADSP-BF532SBSTZ400	400	16	3	-40 to 85	176-LQFP	19M0726	18.67
ADSP-BF533SBBCZ400	400	16	3	-40 to 85	160-BGA	50M0797	21.29
ADSP-BF537KBCZ-6AV	600	48	8	-40 to 85	182-BGA	64M7484	38.21
ADSP-BF561SKBCZ-6A	600	48	12	-40 to 85	256-BGA	41M1931	44.81
ADSP-BF592BCPZ	400	32	4	-40 to 85	64-LFCSP	51T1990	11.52
ADSP-BF592KCPZ	400	32	4	0 to 70	64-LFCSP	51T1991	9.44
ADSP-BF592KCPZ-2	200	32	4	0 to 70	64-LFCSP	59T9610	6.15

(89799)

BLACKFIN EMULATOR

RoHS Compliant Available

ANALOG DEVICES

Features

- 5MHz JTAG TCLK frequency
- Support ONLY ADI Blackfin processors
- USB 2.0 interface enabling download speeds of up to 255 KB/sec
- 1.8V, 2.5V, and 3.3V compliant and tolerant
- Multiprocessor support
- IEEE 1149.1 14-pin JTAG connector
- PlugFest Certified USB Bus-powered design
- CE-certified
- ROHS Compliant
- Solder points for attaching a wire to reset the target board

ADZS-ICE-100B is an easy, portable, nonintrusive, target-based debugging solution that facilitates communication with Blackfin processors using a high speed USB 2.0 port on the host PC. The emulator performs a wide range of emulation functions, including single-step and full-speed execution with predefined breakpoints, and viewing and/or altering of register and memory contents. Applications and data can easily and rapidly be tested and transferred between the emulator and the separately available VisualDSP++ development and debugging environment(sold separately).

Mfg. Part No.	Description	Stock No.	Price Each
ADZS-ICE-100B	Analog Devices Blackfin Emulator	51R0704	163.13

(164450)

VisualDSP++® DEVELOPMENT SOFTWARE

ANALOG DEVICES

VisualDSP++® is an easy-to-use integrated software development and debugging environment (IDDE). Efficiently manage projects from start to finish from within a single interface. Full licenses allow a single user to load the software on up to three computers. Floating licenses allow a user to access the software from a server. Mulitple license versions are also availible.

Mfg. Part No.	Supported Devices	License Type	Users	Stock No.	Price Each Each
VDSP-BLKFN-PC-FULL	BlackFIN	FULL	1	02H2720	3654.00
VDSP-BLKFN-PCFLOAT	BlackFIN	FLOAT	1	02H2721	4437.00
VDSP-SHARC-PCFLOAT	SHARC	FLOAT	1	02H2722	4489.20

(136917)

DSP STARTER KIT FOR THE TMS320C6713

RoHS Compliant Available

SPECTRUM DIGITAL INCORPORATED

Kit Contents:

- TMS320C6713 DSK Board
- Code Composer Studio for C6713 DSK
- USB Cable
- AC Power Cord(s) and Power Supply
- Quick Start Guide
- Technical Reference (includes schematics)
- Customer Support Guide

Mfg. Part No.	Stock No.	Price Each 1-4
C6713 DSP STARTER KIT	78R2860	466.88

(178974)

eZdsp™ F2812 STARTER KIT

RoHS Compliant Available

SPECTRUM DIGITAL INCORPORATED

Kit Contents:

- eZdsp F2812
- Power Supply
- Parallel port cable
- CD-ROM with eZdsp specific Code Composer for C2xxx
- CD-ROM with sample code, manual and schematics

Mfg. Part No.	Stock No.	Price Each
EZDSP F2812	78R2973	367.50

(178976)

eZdsp™ F28335 STARTER KIT

RoHS Compliant Available

SPECTRUM DIGITAL INCORPORATED

Kit Contents:

- eZdsp™ F28335 Board
- eZdsp™ F28335 Code Composer Studio DSK Tools.
- USB cable
- Quick Start Guide
- Technical Reference Manual
- +5V Power Supply with 3 line cords

Mfg. Part No.	Stock No.	Price Each 1-4
EZDSP F28335	78R2979	579.38

(178977)

C5000™ POWER-EFFICIENT DSPs

RoHS Compliant Available

TEXAS INSTRUMENTS

Applications

- Digital music players
- VoIP
- Hands-free accessories
- GPS receivers
- Portable medical equipment

The **TMS320C5000™** DSP platform is optimized for personal and portable products by offering the industry's lowest standby power and advanced automatic power management. **TMS320C54x™** DSPs provide a broad range of performance and peripheral options for personal and portable communications systems. **TMS320C55x™** DSPs feature advanced power management techniques which automatically power down inactive peripherals, memory and core functional units increasing battery life. Also included are the OMAP™ devices with low-power, real-time signal processing coupled with the command and control functionality of an ARM. Power dissipation: 40mW @ 50MHz.

TMS320C54x DSPs

Mfg. Part No.	Freq. (MHz)	Peak MMAC	No. of Timers	RAM (kB)	ROM (kB)	Pkg.	Stock No.	Price Each 1-9
TMS320VC5402PGE100	100	100	2	32	32 KB	144-LQFP	72K9586	13.12
TMS320VC5402APGE16	160	160	1	32	32 KB	144-LQFP	76C9603	23.70
TMS320VC5409PGE100	100	100	1	64	32 KB	144-LQFP	36K7654	22.74
TMS320VC5409APGE16	160	160	1	64	32 KB	144-LQFP	76C9610	29.78
TMS320VC5410APGE16	160	160	1	128	32 KB	144-LQFP	67K1286	35.84

CONTINUED

C5000™ POWER-EFFICIENT DSPs (CONT.)

TMS320C55x DSPs

Mfg. Part No.	Freq. (MHz)	Peak MMAC	No. of Timers	RAM (kB)	ROM (kB)	Pkg.	Stock No.	Price Each 1-9
● TMS320VC5502PGF300	300	600	2	64	32 KB	176-LQFP	10J9725	19.41
● TMS320VC5509APGE	200	400	2	256	64 KB	144-LQFP	21J9171	31.44
● TMS320VC5509AZHH	200	400	2	256	64 KB	179-BGA	92H7536	31.44

(80448)

TMS320C67x DSP STARTER KITS

TEXAS INSTRUMENTS

Hardware Included:
- C6713 DSP Development Board with 512K Flash and 8MB SDRAM
- C6713 DSK Code Composer Studio™ v2.2 IDE including the Fast Simulators and access to Analysis Toolkit on Update Advisor
- Quick Start Guide
- Technical Reference
- Customer Support Guide
- USB Cable
- Universal Power Supply
- AC Power Cord(s)
- MATLAB from The Mathworks 30 day free evaluation
- Ordering Information: TMDSDSK6713 includes a standard US power cord, TMDSDSK6713-0E version includes both UK & European power cords

The DSK features the **TMS320C6713** DSP, a 225 MHz device delivering up to 1800 million instructions per second (MIPs) and 1350 MFLOPS. This DSP generation is designed for applications that require high precision accuracy. The **C6713** is based on the **TMS320C6700** DSP platform designed to needs of high-performing high-precision applications such as pro-audio, medical and diagnostic. Other hardware features of the **TMS320C6713** DSK board include: Embedded JTAG support via USB ,high-quality 24-bit stereo codec, four 3.5mm audio jacks for microphone, line in, speaker and line out, 512K words of Flash and 8 MB SDRAM, expansion port connector for plug-in modules, on-board standard IEEE JTAG interface +5V universal power supply .

Mfg. Part No.	Description	Stock No.	Price Each
TMDSDSK6713	DSP Starter Kit	66H9223	395.02

(74634)

C6000™ PERFORMANCE VALUE DSPs

TEXAS INSTRUMENTS

These first-generation fixed-point DSPs represent breakthrough technology that enables new equipment and energizes existing implementations for multi-channel, multi-function applications, such as wireless base stations, remote access servers (RAS), digital subscriber loop (xDSL) systems, personalized home security systems, advanced imaging/biometrics, industrial scanners, precision instrumentation and multi-channel telephony systems.

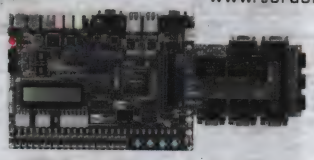
Mfg. Part No.	Data/Program Memory Space (Words)	Timers	Package	Stock No.	Price Each 1-9
TMS320C6204GHK200	...	(2) 32-Bit	288-BGA	30C5190	21.58

(74628)

CYCLONE IV INDUSTRIAL NETWORKING KIT (INK)

terasIC www.terasic.com

Kit Contents
- Altera DE2-115 Board
- Terasic industrial communications board
- USB programming cable
- Power DC adapter 12V / 2A
- Altera complete design suite DVD
- INK system CD
- Remote controller
- Black and red wire strips
- Two single pin headers
- Six silicon footstands



The **Industrial Networking Kit** (INK) offers a comprehensive development platform for industrial communications and automation applications. The kit consists of the DE2-115 board featuring the Altera Cyclone® IV device and an Industrial Communications Board (ICB-HSMC) that supports RS-485, RS-232, CAN, and additional I/O expansion. The INK gives industrial equipment designers greater flexibility in implementing real-time Ethernet communications with the availability of Industrial Ethernet IP cores.

Mfg. Part No.	Description	Stock No.	Price Each
P0061	Altera Cyclone IV Industrial Networking Kit (INK)	26T3806	813.93

(192386)

multicomp AT NEWARK ELEMENT14

Affordable, performance board level & box build components at

newark.com/multicomp

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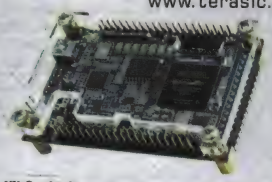
DE0-NANO CYCLONE IV DEVELOPMENT BOARD

RoHS Compliant Available

terasIC www.terasic.com

Features
- Featured device
- Altera Cyclone® IV EP4CE22F17C6N FPGA w/ 153 maximum I/O pins
- On-board USB-Blaster circuit for programming
- EPCS16 serial configuration device
- 72 I/O pins, 5V, 3.3V power pins and GND pins on 2x 40-pin GPIO headers
- 32MB SDRAM
- 2Kb I2C EEPROM
- 8 green LEDs
- 2 debounced pushbuttons
- 4-position DIP switch
- 3-axis accelerometer with high resolution (13-bit)
- 8-Channel, 12-bit, 50 Ksps to 200 Ksps ADC
- On-board 50MHz clock oscillator



Kit Contents
- DE0-Nano Board
- USB Mini-B Cable
- DE0-Nano system CD
- Altera Design Suite CD
- DE0-Nano Quick Start Guide

DE0-Nano board is a compact-sized development platform featuring a powerful Altera Cyclone IV FPGA with 22,320 logic elements that is suited for to a wide range of portable design projects, such as robots and mobile projects. The DE0-Nano board includes a built-in USB Blaster for FPGA programming, and the board can be powered either from this USB port or by an external power source. The board includes expansion headers that can be used to attach various Terasic daughter cards or other devices, such as motors and actuators.

Mfg. Part No.	Description	Stock No.	Price Each
● P0082	DE0-NANO CYCLONE IV DEVELOPMENT BOARD	78T4479	88.31

(207449)

NANOBOARD 3000

Altium

Features
- Rich IO capabilities including TFT touch screen, USB Hub connections for up to three devices, SPDIF, tri-color LEDs, ADCs/DACs, and high current drivers
- On-board user FPGA device
- Peripheral board expansion slot for additional system flexibility
- Inbuilt configuration memory for standalone deployment
- Prototyping area
- Includes Altium Designer 12 month Soft Design (Hardware linked) license complete with royalty free 32-bit soft processors, peripherals, source code libraries, C-compilers, debuggers and embedded instruments.

NanoBoard 3000 provides the perfect entry-point to explore the world of soft design in a low-cost, fun way. The NanoBoard 3000 makes it easy to harness the power of high-capacity, low-cost programmable devices and a range of peripherals without having to build your own hardware. Explore your ideas in this live development environment that together with Altium's software, provides you with rapid and interactive implementation/debugging capabilities.

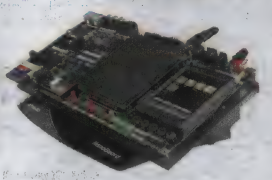
Mfg. Part No.	Description	Stock No.	Price Each
12-400-NB3000AL-01	Cyclone III Nanoboard 3000	08R0847	395.00
12-400-NB3000XN-01	Spartan-3AN Nanoboard 3000	10R0248	395.00
12-405-NB3000ME-01	Modular Enclosure for Nanoboard 3000	53R1417	129.00

(147796)

DESKTOP NANOBOARD NB2

Altium

Features
- Supports daughter boards for Actel, Altera, Lattice, and Xilinx devices
- Expansion slots for up to 3 peripheral boards.
- QVGA TFT touchscreen, PS2, Can, RS232, PS/2 and Analog IO.
- Live Voltage/Current monitoring to all major sub-systems.
- Complemented by Altium Designer's royalty free processors, peripherals, source code libraries, C-compilers, debuggers and embedded instruments
- Includes Altium Designer 12 month Soft Design (Hardware linked) license complete with royalty free 32-bit soft processors, peripherals, source code libraries, C-compilers, debuggers and embedded instruments



Desktop **NanoBoard NB2** is a unique, reconfigurable hardware platform that harnesses the power of today's programmable devices so that next generation products can be developed, implemented, tested and brought to market faster than ever before. Have the freedom to explore the complex design and device trade-offs, moving functionality between hardware and software at will, and rapidly develop systems within a graphical drag-and-drop, plug-and-play environment. Target devices are housed on plug-in swappable daughter boards supported by Altium's software providing you with a truly device and vendor-independent development solution.

DESTOP NANOBOARD

Mfg. Part No.	Description	Stock No.	Price Each
12-400-NB2DSK01 (XILINX)	NanoBoard NB2 with XILINX SPARTAN-3	10R0247	1995.00

PERIPHERIAL BOARDS AND ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
12-404-PB30-01	3PK Prototyping Boards	53R1322	99.00

(147797)

SPLD DEVICES

RoHS Compliant Available

Atmel

Features

- Industry-standard Architecture
- High speed Electrically-Erasable Programmable Logic Devices (EE PLD)
- CMOS and TTL compatible inputs and outputs
- Advanced Flash Technology
- High-reliability CMOS Process
- Commercial and Industrial Temperature Ranges

SPLD products consist of industry standard 16V8, 20V8 and 22V10s in a variety of voltage and power-saving options. Offering low-voltage, zero-power and quarter power versions as well as our proprietary "L" automatic power down low-power devices. All versions are EE-based for high-reliability and easy re-programming and are supported by all popular third party programmers.

SPLD-INDUSTRY STANDARD ULTRA LOW POWER

Mfg. Part No.	# I/O Pins	Prop. Delay (ns)	Freq. (MHz)	Supply Voltage	Pkg.	Stock No.	Price Each 1-9
ATF16LV8C-10JU	8	10	83.3	3V to 5.5V	20-PLCC	68T2421	1.97
ATF16LV8C-10XU	8	10	83.3	3V to 5.5V	20-TSSOP	68T2422	1.97
ATF16V8B-10JU	8	10	83	4.5V to 5.5V	20-PLCC	68T2423	1.23
ATF16V8B-15JU	8	15	62	4.5V to 5.5V	20-PLCC	68T2424	0.95
ATF16V8B-15PU	8	15	62	4.5V to 5.5V	20-DIP	68T2425	1.00
ATF16V8B-15SU	8	15	62	4.5V to 5.5V	20-SOIC	68T2426	1.07
ATF16V8BQL-15JU	8	15	62	4.5V to 5.5V	20-PLCC	68T2427	1.21
ATF16V8BQL-15PU	8	15	62	4.5V to 5.5V	20-DIP	68T2428	1.21
ATF16V8BQL-15SU	8	15	62	4.5V to 5.5V	20-SOIC	68T2429	1.17
ATF16V8BQL-15XU	8	15	62	4.5V to 5.5V	20-TSSOP	68T2430	1.56
ATF16V8C-5JX	8	5	166	4.75V to 5.25V	20-PLCC	68T2431	3.42
ATF16V8C-7JU	8	7.5	125	4.5V to 5.5V	20-PLCC	68T2432	2.45
ATF16V8C-7PU	8	7.5	125	4.5V to 5.5V	20-DIP	68T2433	1.89
ATF16V8CZ-15JU	8	15	62	4.5V to 5.5V	20-PLCC	68T2435	1.81
ATF16V8CZ-15PU	8	15	62	4.5V to 5.5V	20-DIP	68T2436	1.88
ATF16V8CZ-15SU	8	15	62	4.5V to 5.5V	20-SOIC	68T2437	3.03
ATF16V8CZ-15XU	8	15	62	4.5V to 5.5V	20-TSSOP	68T2438	2.36
ATF22LV10C-10JU	10	10	83.3	3V to 5.5V	28-PLCC	68T2441	1.57
ATF22LV10C-10PU	10	10	83.3	3V to 5.5V	24-DIP	68T2442	3.42
ATF22LV10C-10SU	10	10	83.3	3V to 5.5V	24-SOIC	68T2443	3.42
ATF22LV10C-10XU	10	10	83.3	3V to 5.5V	24-TSSOP	68T2444	2.05
ATF22LV10CQZ-30PU	10	30	33.3	3V to 5.5V	24-DIP	68T2446	2.36
ATF22LV10CQZ-30SU	10	30	33.3	3V to 5.5V	24-SOIC	68T2447	3.95
ATF22V10C-10JU	10	10	125	4.5V to 5.5V	28-PLCC	68T2454	2.06
ATF22V10C-10XU	10	10	125	4.5V to 5.5V	24-TSSOP	68T2458	3.45
ATF22V10C-15JU	10	15	83.3	4.5V to 5.5V	28-PLCC	68T2460	1.78
ATF22V10C-15PU	10	15	83.3	4.5V to 5.5V	24-DIP	68T2462	1.89
ATF22V10C-5JX	10	5	166	4.5V to 5.5V	28-PLCC	68T2463	4.71
ATF22V10C-7JU	10	7.5	166	4.5V to 5.5V	28-PLCC	68T2464	2.96
ATF22V10CQ-15JU	10	15	83.3	4.5V to 5.5V	28-PLCC	68T2467	1.66
ATF22V10CQZ-20JU	10	20	50	4.5V to 5.5V	28-PLCC	68T2468	2.45
ATF22V10CQZ-20PU	10	20	50	4.5V to 5.5V	24-DIP	68T2469	2.55
ATF22V10CQZ-20SU	10	20	50	4.5V to 5.5V	24-SOIC	68T2470	2.55
ATF22V10CQZ-20XU	10	20	50	4.5V to 5.5V	24-TSSOP	68T2471	2.58

(197964)

ATF15XX FAMILY CPLD DEVICES - INDUSTRY STANDARD COMPATIBLE

RoHS Compliant Available

Atmel

FEATURES

- Logic Doubling™
- Programmable SCHMITT Trigger
- Programmable Pin Keeper circuit enables Bus interfacing
- Programmable Pull Up
- 100,000 Program/Erase cycles

ATF15xxBE family of CPLDs are designed for applications that require ultra low power, blazing speed and operate at low voltages. They are also a pin compatible replacement for Xilinx CPLDs. The **ATF15xxAS/ASL/ASV/ASVL CPLD family** offers pin-compatible supersets of the popular Altera 7000 and 3000 series devices ranging from 32 to 128 macrocells with propagation delays from 7.5 to 15 ns for 5V standard power versions and 15 ns for 3.3V versions. Proprietary low-power ("L") versions use Input Transition Detection (ITD) to power down the device automatically when nothing is switching. All devices also support JTAG in-system programming (ISP).

Mfg. Part No.	# of Macrocells	# I/O Pins	Prop. Delay (ns)	Freq. (MHz)	Pkg.	Stock No.	Price Each 1-99
ATF1500A-10AU	32	32	10	125	44-TQFP	68T2373	4.97
ATF1502AS-10AU44	32	32	10	125	44-TQFP	68T2377	2.66
ATF1502AS-10JU44	32	32	10	125	44-PLCC	68T2378	2.66
ATF1500AL-20AU	32	32	20	91	44-TQFP	68T2375	5.19
ATF1502AS-7AX44	32	32	7.5	166.7	44-TQFP	68T2379	4.71
ATF1502AS-7JX44	32	32	7.5	166.7	44-PLCC	68T2380	4.71
ATF1502ASL-25AU44	32	32	25	60	44-TQFP	68T2381	2.66
ATF1502ASL-25JU44	32	32	25	60	44-PLCC	68T2382	2.12
ATF1502ASV-15AU44	32	32	15	100	44-TQFP	68T2383	1.96
ATF1502ASV-15JU44	32	32	15	100	44-PLCC	68T2384	3.16
ATF1504AS-10AU44	64	32	10	125	44-TQFP	68T2388	4.60
ATF1504AS-10JU44	64	32	10	125	44-PLCC	68T2389	3.81
ATF1504ASL-25AU44	64	32	25	60	44-TQFP	68T2395	8.26
ATF1504ASL-25JU44	64	32	25	60	44-PLCC	68T2396	8.47

➤CONTINUED➤

ATF15XX FAMILY CPLD DEVICES - INDUSTRY STANDARD COMPATIBLE (CONT.)

Mfg. Part No.	# of Macrocells	# I/O Pins	Prop. Delay (ns)	Freq. (MHz)	Pkg.	Stock No.	Price Each 1-99
ATF1504ASV-15AU44	64	32	15	100	44-TQFP	68T2398	3.51
ATF1504ASV-15JU44	64	32	15	100	44-PLCC	68T2399	5.53
ATF1504ASVL-20AU44	64	32	20	83.3	44-TQFP	68T2401	6.05
ATF1504ASVL-20JU44	64	32	20	83.3	44-PLCC	68T2402	5.92
ATF1504AS-10AU100	64	64	10	125	100-TQFP	68T2387	5.17
ATF1504ASL-25AU100	64	64	25	60	100-TQFP	68T2394	9.50
ATF1504ASV-15AU100	64	64	15	100	100-TQFP	68T2397	6.32
ATF1504ASVL-20AU100	64	64	20	83.3	100-TQFP	68T2400	8.16
ATF1508AS-10JU84	128	64	10	125	84-PLCC	68T2408	11.14
ATF1508ASV-15JU84	128	64	15	100	84-PLCC	68T2415	5.30
ATF1508AS-10AU100	128	80	10	125	100-TQFP	68T2407	13.79
ATF1508AS-10QU100	128	80	10	125	100-PQFP	68T2409	25.44
ATF1508ASL-25AU100	128	80	25	33.3	100-TQFP	68T2412	17.28

(197965)

CPLD DEVICES - PROPRIETARY

RoHS Compliant Available

Atmel

FEATURES

- ATF750C/CL: Advanced, High-speed
- ATF2500C: High-performance, High-density
- D- or T-type Flip-flop
- Product Term or Direct Input Pin Clocking
- Advanced Electrically-erasable Technology
- Flexible Design

ATF750C has twice the logic of a standard 22V10 in a pin-out compatible 24- or 28-pin package and is ideal for those 22V10 designs that need a bit more logic than is offered in a 22V10 device, but need to maintain the 22V10 pin-out. The **ATF2500C** is a very high-density (2500 usable gates) 44-pin CPLD, ideally suitable for the most difficult 44-pin designs and has replaced the ATV2500B/BQ/BQL/BL in commercial, industrial and military temperature grade offerings.

CPLD-2 22V10s FAMILY

Mfg. Part No.	# of Macrocells	# I/O Pins	Prop. Delay (ns)	Freq. (MHz)	Supply Voltage	Pkg.	Stock No.	Price Each 1-99
ATF750C-10JU	10	10	10	90	4.5V to 5.5V	28-PLCC	68T2477	7.89
ATF750C-10PU	10	10	10	90	4.5V to 5.5V	24-DIP	68T2479	5.15
ATF750CL-15JU	10	10	15	71	4.5V to 5.5V	28-PLCC	68T2486	3.43
ATF750CL-15PU	10	10	15	71	4.5V to 5.5V	24-DIP	68T2487	3.57
ATF750LVC-15SU	10	10	15	90	3V to 5.5V	24-SOIC	68T2492	3.43
ATF2500C - VERY HIGH DENSITY								
ATF2500C-15JU	24	24	15	83	4.5V to 5.5V	44-PLCC	68T2472	6.67
ATF2500C-20PU	24	24	20	71	4.5V to 5.5V	40-DIP	68T2475	9.24

(197966)

FPGA CONFIGURATION MEMORY

RoHS Compliant Available

Atmel

AT17LVxxx FAMILY - EEPROM BASED

Mfg. Part No.	Density	Frequency Max. (MHz)	Supply Voltage (V)	Package	Stock No.	Price Each 1-49
AT17F040-30JU	4 Mbit	33	3.3	20-PLCC	68T4018	16.59
AT17F040A-30CU	4 Mbit	33	3.3	8-LAP	68T4019	8.40
AT17F080-30CU	8 Mbit	33	3.3	8-LAP	68T4021	25.80
AT17F080-30JU	8 Mbit	33	3.3	20-PLCC	68T4022	22.08
AT17F16-30JU	16 Mbit	33	3.3	20-PLCC	68T4026	37.09
AT17LVxxx FAMILY - EEPROM BASED						
AT17LV256-10NU	256 Kbit	33	3.3, 5	8-SOIC	68T4042	9.41
AT17LV256-10PU	256 Kbit	33	3.3, 5	8-DIP	68T4043	9.30
AT17LV256-10SU	256 Kbit	33	3.3, 5	20-SOIC	68T4044	15.93
AT17LV512-10CU	512 Kbit	33	3.3, 5	8-LAP	68T4045	17.78
AT17LV512-10JU	512 Kbit	33	3.3, 5	20-PLCC	68T4046	12.60
AT17LV512A-10JU	512 Kbit	33	3.3, 5	20-PLCC	68T4047	9.87
AT17LV010-10CU	1 Mbit	33	3.3, 5	8-LAP	68T4034	21.33
AT17LV010-10JU	1 Mbit	33	3.3, 5	20-PLCC	68T4035	14.40
AT17LV010-10PU	1 Mbit	33	3.3, 5	8-DIP	68T4036	14.94
AT17LV010A-10JU	1 Mbit	33	3.3, 5	20-PLCC	68T4037	12.80
AT17LV010A-10PU	1 Mbit	33	3.3, 5	8-DIP	68T4038	10.08
AT17LV002-10CU	2 Mbit	33	3.3, 5	8-LAP	68T4029	19.20
AT17LV002-10JU	2 Mbit	33	3.3, 5	20-PLCC	68T4030	25.80
AT17LV040-10TQU	4 Mbit	33	3.3, 5	44-TQFP	68T4039	51.60

(197967)

MACHXO FAMILY OF NON-VOLATILE, INFINITELY RECONFIGURABLE PLDS

RoHS Compliant Available

LATTICE SEMICONDUCTOR

MachXO family of non-volatile, infinitely reconfigurable Programmable Logic Devices (PLDs) is designed for applications traditionally implemented using CPLDs or low-density FPGAs. Widely adopted in a broad range of applications that require general purpose I/O expansion, interface bridging and power-up management functions, MachXO PLDs offer the benefits of increased system integration by providing embedded memory, built-in PLLs, high performance LVDS I/O, remote field upgrade (TransFRTM technology) and a low power sleep mode, all in a single, low-cost device.

Mfg. Part No.	LUTs (No.)	Prop. Delay (nS)	Freq. (MHz)	I/O (No.)	Pkg	Stock No.	Price Each 1-24
● LCMXO256C-3MN100C	256	3.5	150	78	100-CSBGA	48W6169	5.75
● LCMXO256C-3MN100I	256	3.5	150	78	100-CSBGA	48W6170	6.55
● LCMXO256C-3TN100I	256	3.5	150	78	100-TQFP	48W6171	6.39
● LCMXO640C-3BN256C	640	4.9	420	159	256-CABGA	48W6172	11.66
● LCMXO640C-3BN256I	640	4.9	420	159	256-CABGA	48W6173	12.86
● LCMXO640C-3FTN256I	640	4.9	420	159	256-FTBGA	48W6174	14.30
● LCMXO640C-3MN100C	640	4.9	420	74	100-CSBGA	48W6175	9.91
● LCMXO640C-3MN100I	640	4.9	420	74	100-CSBGA	48W6176	11.28
● LCMXO640C-3MN132C	640	4.9	420	101	132-CSBGA	48W6177	10.62
● LCMXO640C-3MN132I	640	4.9	420	101	132-CSBGA	48W6178	11.58
● LCMXO640C-3TN100C	640	4.9	420	74	100-TQFP	48W6179	9.51
● LCMXO640C-3TN100I	640	4.9	420	74	100-TQFP	48W6180	10.94
● LCMXO640C-3TN144I	640	4.9	420	113	144-TQFP	48W6181	12.30
● LCMXO1200C-3BN256C	1200	5.1	420	211	256-CABGA	48W6042	14.62
● LCMXO1200C-3BN256I	1200	5.1	420	211	256-CABGA	48W6043	16.60
● LCMXO1200C-3FTN256I	1200	5.1	420	211	256-FTBGA	48W6044	19.25
● LCMXO1200C-3MN132C	1200	5.1	420	101	132-CSBGA	48W6045	13.66
● LCMXO1200C-3MN132I	1200	5.1	420	101	132-CSBGA	48W6046	15.82
● LCMXO1200C-3TN100C	1200	5.1	420	73	100-TQFP	48W6047	13.45
● LCMXO1200C-3TN100I	1200	5.1	420	73	100-TQFP	48W6048	15.18
● LCMXO1200C-3TN144I	1200	5.1	420	113	144-TQFP	48W6049	16.53
● LCMXO1200C-5TN144C	1200	3.6	420	113	144-TQFP	24M3302	18.69
● LCMXO2280C-3BN256C	2280	5.1	420	211	256-BGA	48W6159	20.89
● LCMXO2280C-3BN256I	2280	5.1	420	211	256-BGA	48W6160	22.64
● LCMXO2280C-3FTN256I	2280	5.1	420	211	256-BGA	48W6161	23.82
● LCMXO2280C-3FTN324C	2280	5.1	420	271	324-BGA	48W6162	23.99
● LCMXO2280C-3FTN324I	2280	5.1	420	271	324-BGA	48W6163	25.65
● LCMXO2280C-3MN132C	2280	5.1	420	101	132-BGA	48W6164	17.65
● LCMXO2280C-3MN132I	2280	5.1	420	101	132-BGA	48W6165	19.33
● LCMXO2280C-3TN100C	2280	5.1	420	73	100-TQFP	48W6166	17.68
● LCMXO2280C-3TN100I	2280	5.1	420	73	100-TQFP	48W6167	19.16
● LCMXO2280C-3TN144I	2280	5.1	420	113	144-TQFP	48W6168	21.00
● LCMXO2280C-5TN100C	2280	3.6	600	73	100-TQFP	24M3305	21.14

(210350)

MACHXO2 FAMILY OF NON-VOLATILE INFINITELY RECONFIGURABLE PLDS

RoHS Compliant Available

LATTICE SEMICONDUCTOR

MachXO2™ family of non-volatile, single chip reprogrammable FPGAs is optimized for applications that require the highest number of feature rich I/O for I/O expansion applications. Plus, with an on-chip regulator, embedded Flash and hard IP, MachXO2 devices are ideally suited for instant-on multi-voltage system control functionality. Combining an optimized SRAM based look-up table (LUT) architecture together with embedded Flash technology, the affordable MachXO2 family is the industry's most feature rich, ultra low density FPGAs for cost-sensitive system designs. MachXO2 FPGAs are available in three options: high performance (HC, HE) and low power (ZE).

2.5/3.3V SUPPLY VOLTAGE

Mfg. Part No.	LUTs (No.)	Prop. Delay (nS)	Freq. (MHz)	I/O (No.)	Pkg	Stock No.	Price Each 1-24
● LCMXO2-256HC-4MG132C	256	7.24	269	56	132-CSBGA	48W6088	4.83
● LCMXO2-256HC-4MG132I	256	7.24	269	56	132-CSBGA	48W6089	5.19
● LCMXO2-256HC-4TG100C	256	7.24	269	56	100-TQFP	48W6090	4.35
● LCMXO2-256HC-4TG100I	256	7.24	269	56	100-TQFP	48W6091	4.92
● LCMXO2-256HC-4UMG64C	256	7.24	269	45	64-UCBGA	48W6092	3.67
● LCMXO2-256HC-4UMG64I	256	7.24	269	45	64-UCBGA	48W6093	4.04
● LCMXO2-256HC-5SG32C	256	6.96	323	22	32-QFN	48W6094	3.29
● LCMXO2-640HC-4MG132C	640	7.24	269	80	132-CSBGA	48W6128	6.52
● LCMXO2-640HC-4MG132I	640	7.24	269	80	132-CSBGA	48W6129	7.13
● LCMXO2-640HC-4TG100C	640	7.24	269	79	100-TQFP	48W6130	6.04
● LCMXO2-640HC-4TG100I	640	7.24	269	79	100-TQFP	48W6131	6.91
● LCMXO2-640UHC-4TG144C	640	7.24	269	108	144-TQFP	48W6132	7.74
● LCMXO2-640UHC-4TG144I	640	7.24	269	108	144-TQFP	48W6133	8.20
● LCMXO2-256HC-5SG32I	256	6.96	323	22	32-QFN	48W6095	3.86
● LCMXO2-1200HC-4MG132C	1280	7.24	269	105	132-CSBGA	48W6051	8.19

➤CONTINUED➤

MACHXO2 FAMILY OF NON-VOLATILE INFINITELY RECONFIGURABLE PLDS (CONT.)

Mfg. Part No.	LUTs (No.)	Prop. Delay (nS)	Freq. (MHz)	I/O (No.)	Pkg	Stock No.	Price Each 1-24
● LCMXO2-1200HC-4MG132I	1280	7.24	269	105	132-CSBGA	48W6052	9.08
● LCMXO2-1200HC-4TG100C	1280	7.24	269	80	100-TQFP	48W6053	7.80
● LCMXO2-1200HC-4TG100I	1280	7.24	269	80	100-TQFP	48W6054	8.26
● LCMXO2-1200HC-4TG144C	1280	7.24	269	108	144-TQFP	48W6055	8.93
● LCMXO2-1200HC-4TG144I	1280	7.24	269	108	144-TQFP	48W6056	9.68
● LCMXO2-1200UHC-4FTG256C	1280	7.24	269	207	256-FTBGA	48W6057	11.30
● LCMXO2-1200UHC-4FTG256I	1280	7.24	269	207	256-FTBGA	48W6058	12.98
● LCMXO2-2000HC-4BG256C	2112	7.24	269	207	256-CABGA	48W6066	15.40
● LCMXO2-2000HC-4BG256I	2112	7.24	269	207	256-CABGA	48W6067	16.12
● LCMXO2-2000HC-4FTG256C	2112	7.24	269	207	256-FTBGA	48W6068	14.92
● LCMXO2-2000HC-4FTG256I	2112	7.24	269	207	256-FTBGA	48W6069	16.39
● LCMXO2-2000HC-4MG132C	2112	7.24	269	105	132-CSBGA	48W6070	10.88
● LCMXO2-2000HC-4MG132I	2112	7.24	269	105	132-CSBGA	48W6071	11.92
● LCMXO2-2000HC-4TG100C	2112	7.24	269	80	100-TQFP	48W6072	10.81
● LCMXO2-2000HC-4TG100I	2112	7.24	269	80	100-TQFP	48W6073	11.44
● LCMXO2-2000HC-4TG144C	2112	7.24	269	112	144-TQFP	48W6074	11.82
● LCMXO2-2000HC-4TG144I	2112	7.24	269	112	144-TQFP	48W6075	12.86
● LCMXO2-2000UHC-4FG484C	2112	7.24	269	279	484-FPBGA	48W6076	20.49
● LCMXO2-2000UHC-4FG484I	2112	7.24	269	279	484-FPBGA	48W6077	22.54
● LCMXO2-4000HC-4BG256C	4320	7.24	269	207	256-CABGA	48W6104	15.67
● LCMXO2-4000HC-4BG256I	4320	7.24	269	207	256-CABGA	48W6105	16.17
● LCMXO2-4000HC-4BG332C	4320	7.24	269	275	332-CABGA	48W6106	19.65
● LCMXO2-4000HC-4BG332I	4320	7.24	269	275	332-CABGA	48W6107	19.55
● LCMXO2-4000HC-4FG484C	4320	7.24	269	279	484-FPBGA	48W6108	21.40
● LCMXO2-4000HC-4FG484I	4320	7.24	269	279	484-FPBGA	48W6109	22.48
● LCMXO2-4000HC-4FTG256C	4320	7.24	269	207	256-FTBGA	48W6110	15.61
● LCMXO2-4000HC-4FTG256I	4320	7.24	269	207	256-FTBGA	48W6111	16.02
● LCMXO2-4000HC-4MG132C	4320	7.24	269	105	132-CSBGA	48W6112	11.52
● LCMXO2-4000HC-4MG132I	4320	7.24	269	105	132-CSBGA	48W6113	12.45
● LCMXO2-4000HC-4TG144C	4320	7.24	269	115	144-TQFP	48W6114	11.84
● LCMXO2-4000HC-4TG144I	4320	7.24	269	115	144-TQFP	48W6115	12.92
● LCMXO2-7000HC-4BG256C	6864	7.24	269	207	256-CABGA	48W6138	19.60
● LCMXO2-7000HC-4BG256I	6864	7.24	269	207	256-CABGA	48W6139	20.66
● LCMXO2-7000HC-4BG332C	6864	7.24	269	279	332-CABGA	48W6140	21.68
● LCMXO2-7000HC-4BG332I	6864	7.24	269	279	332-CABGA	48W6141	23.14
● LCMXO2-7000HC-4FG484I	6864	7.24	269	335	484-FPBGA	48W6143	28.42
● LCMXO2-7000HC-4FTG256C	6864	7.24	269	207	256-FTBGA	48W6144	19.38
● LCMXO2-7000HC-4FTG256I	6864	7.24	269	207	256-FTBGA	48W6145	20.45
● LCMXO2-7000HC-4TG144C	6864	7.24	269	115	144-TQFP	48W6146	15.34
● LCMXO2-7000HC-4TG144I	6864	7.24	269	115	144-TQFP	48W6147	16.86
1.2V SUPPLY VOLTAGE							
● LCMXO2-256ZE-1MG132C	256	10.21	104	56	132-CSBGA	48W6096	4.83
● LCMXO2-256ZE-1MG132I	256	10.21	104	56	132-CSBGA	48W6097	5.19
● LCMXO2-256ZE-1TG100C	256	10.21	104	56	100-TQFP	48W6098	4.35
● LCMXO2-256ZE-1TG100I	256	10.21	104	56	100-TQFP	48W6099	4.72
● LCMXO2-256ZE-1UMG64C	256	10.21	104	45	64-UCBGA	48W6100	3.69
● LCMXO2-256ZE-1UMG64I	256	10.21	104	45	64-UCBGA	48W6101	4.06
● LCMXO2-256ZE-2SG32C	256	9.78	125	22	32-QFN	48W6102	3.29
● LCMXO2-256ZE-2SG32I	256	9.78	125	22	32-QFN	48W6103	3.69
● LCMXO2-640ZE-1MG132C	640	10.21	104	80	132-CSBGA	48W6134	6.52
● LCMXO2-640ZE-1MG132I	640	10.21	104	80	132-CSBGA	48W6135	7.13
● LCMXO2-640ZE-1TG100C	640	10.21	104	79	100-TQFP	48W6136	6.04
● LCMXO2-640ZE-1TG100I	640	10.21	104	79	100-TQFP	48W6137	6.65
● LCMXO2-1200ZE-1MG132C	1280	10.21	104	105	132-CSBGA	48W6060	7.99
● LCMXO2-1200ZE-1MG132I	1280	10.21	104	105	132-CSBGA	48W6061	8.74
● LCMXO2-1200ZE-1TG100C	1280	10.21	104	80	100-TQFP	48W6062	7.29
● LCMXO2-1200ZE-1TG100I	1280	10.21	104	80	100-TQFP	48W6063	8.26
● LCMXO2-1200ZE-1TG144C	1280	10.21	104	108	144-TQFP	48W6064	9.28
● LCMXO2-1200ZE-1TG144I	1280	10.21	104	108	144-TQFP	48W6065	9.68
● LCMXO2-2000ZE-1BG256C	2112	10.21	104	207	256-CABGA	48W6078	14.39
● LCMXO2-2000ZE-1BG256I	2112	10.21	104	207	256-CABGA	48W6079	15.43
● LCMXO2-2000ZE-1FTG256C	2112	10.21	104	207	256-FTBGA	48W6080	14.28
● LCMXO2-2000ZE-1FTG256I	2112	10.21	104	207	256-FTBGA	48W6081	15.31
● LCMXO2-2000ZE-1MG132C	2112	10.21	104	105	132-CSBGA	48W6082	10.88
● LCMXO2-2000ZE-1MG132I	2112	10.21	104	105	132-CSBGA	48W6083	11.92
● LCMXO2-2000ZE-1TG100C	2112	10.21	104	80	100-TQFP	48W6084	10.40
● LCMXO2-2000ZE-1TG100I	2112	10.21	104	80	100-TQFP	48W6085	11.44
● LCMXO2-2000ZE-1TG144C	2112	10.21	104	112	144-TQFP	48W6086	11.82
● LCMXO2-2000ZE-1TG144I	2112	10.21	104	112	144-TQFP	48W6087	12.86
● LCMXO2-4000ZE-1BG256C	4320	10.21	104	207	256-CABGA	48W6116	15.00
● LCMXO2-4000ZE-1BG256I	4320	10.21	104	207	256-CABGA	48W6117	16.08
● LCMXO2-4000ZE-1BG332C	4320	10.21	104	275	332-CABGA	48W6118	18.36
● LCMXO2-4000ZE-1BG332I	4320	10.21	104	275	332-CABGA	48W6119	19.44

➤CONTINUED➤

MACHX02 FAMILY OF NON-VOLATILE INFINITELY RECONFIGURABLE PLDS

(CONT.)

1.2V SUPPLY VOLTAGE

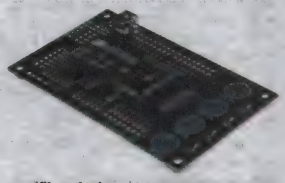
Mfg. Part No.	LUTs (No.)	Prop. Delay (nS)	Freq. (MHz)	I/O (No.)	Pkg	Stock No.	Price Each 1-24
LCMX02-4000ZE-1FG484C	4320	10.21	104	279	484-FPBGA	48W6120	21.40
LCMX02-4000ZE-1FG484I	4320	10.21	104	279	484-FPBGA	48W6121	22.48
LCMX02-4000ZE-1FTG256C	4320	10.21	104	207	256-FTBGA	48W6122	14.85
LCMX02-4000ZE-1FTG256I	4320	10.21	104	207	256-FTBGA	48W6123	15.93
LCMX02-4000ZE-1MG132C	4320	10.21	104	105	132-CSBGA	48W6124	10.90
LCMX02-4000ZE-1MG132I	4320	10.21	104	105	132-CSBGA	48W6125	11.98
LCMX02-4000ZE-1TG144C	4320	10.21	104	115	144-TQFP	48W6126	11.84
LCMX02-4000ZE-1TG144I	4320	10.21	104	115	144-TQFP	48W6127	12.92
LCMX02-7000ZE-1BG256C	6864	10.21	104	207	256-CABGA	48W6148	18.32
LCMX02-7000ZE-1BG256I	6864	10.21	104	207	256-CABGA	48W6149	19.78
LCMX02-7000ZE-1BG332C	6864	10.21	104	279	332-CABGA	48W6150	21.68
LCMX02-7000ZE-1BG332I	6864	10.21	104	279	332-CABGA	48W6151	21.19
LCMX02-7000ZE-1FG484C	6864	10.21	104	335	484-FPBGA	48W6152	26.96
LCMX02-7000ZE-1FG484I	6864	10.21	104	335	484-FPBGA	48W6153	28.42
LCMX02-7000ZE-1FTG256C	6864	10.21	104	207	256-FTBGA	48W6154	18.11
LCMX02-7000ZE-1FTG256I	6864	10.21	104	207	256-FTBGA	48W6155	19.57
LCMX02-7000ZE-1TG144C	6864	10.21	104	115	144-TQFP	48W6156	14.76
LCMX02-7000ZE-1TG144I	6864	10.21	104	115	144-TQFP	48W6157	16.23

(210351)

ICEBLINK40-HX1K EVALUATION KIT

RoHS Compliant Available

LATTICE SEMICONDUCTOR



Features
- High-performance, low-power iCE40HX1K FPGA in 100-TQFP
- USB programming, debugging, virtual I/O functions, and power supply
- Four user LEDs
- Four capacitive-touch buttons
- 3.3 MHz clock source
- 1Mbit SPI serial configuration PROM
- Supported by Lattice iCEcube2 design software
- 68 LVCMOS/LVTTL (3.3V) digital I/O connections on 0.1" through-hole connections
- Supports third-party I/O expansion boards and modules; like 3.3V Arduino Shield boards (requires additional sockets, not supplied)

Kit contents
- iCEblink40 HX1K Board
- USB Mini Cable for power & programming
- QuickStart Guide

iCEblink40-HX1K Evaluation Kit is a low-cost platform for evaluating and developing with the low-power iCE40HX1K FPGA. The board provides access to general-purpose I/O and includes capacitive-touch buttons and LEDs. The board is powered and programmed via USB. An on-board microcontroller enables 2-way communication with the iCE40HX1K FPGA.

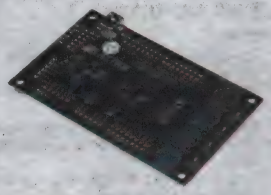
Mfg. Part No.	Description	Stock No.	Price Each Each
ICE40HX1K-BLINK-EVN	iCEblink40-HX1K Evaluation Kit	48W5876	34.94

(210357)

ICEBLINK40-LP1K EVALUATION KIT

RoHS Compliant Available

LATTICE SEMICONDUCTOR



Features
- Low power, small Footprint iCE40LP1K FPGA in 84-pin QFNS package
- USB programming, debugging, virtual I/O functions, and power supply
- Four user LEDs
- Four capacitive-touch buttons
- 3.3 MHz clock source
- 1Mbit SPI serial configuration PROM
- Supported by Lattice iCEcube2 design software
- 63 LVCMOS/LVTTL (3.3V) digital I/O connections on 0.1" through-hole connections
- Supports third-party I/O expansion boards and modules, including 3.3V Arduino Shield boards (requires additional sockets, not supplied)

Kit contents
- iCEblink40 LP1K Board
- USB Mini Cable for power & programming
- QuickStart Guide

iCEblink40-LP1K Evaluation Kit is a low-cost platform for evaluating and developing with the low-power iCE40LP1K FPGA. The board provides access to general-purpose I/O and includes capacitive-touch buttons and LEDs. The board is powered and programmed via USB. An on-board microcontroller enables 2-way communication with the iCE40LP1K FPGA.

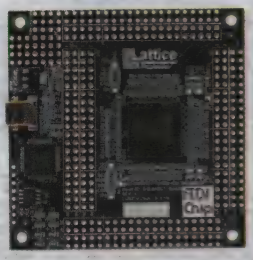
Mfg. Part No.	Description	Stock No.	Price Each Each
LC4256ZE-B-EVN	iCEblink40-LP1K Evaluation Kit	48W6199	26.87

(210358)

MACHX02280 BREAKOUT BOARD EVALUATION KIT

RoHS Compliant Available

LATTICE SEMICONDUCTOR



Features
- MachX02280 PLD (LCMX02280C-3FTN256C)
- USB mini-B connector for power and programming
- Eight LEDs
- 40-hole prototype area
- Eight 2x20 expansion header landings for general I/O, JTAG, and external power
- 1x8 expansion header landing for JTAG
- 3.3V supply rail

Kit contents
- MachX02 Breakout Board
- USB Connector Cable

MACHX02280 Breakout board includes a pre-loaded counter design that highlights use of the embedded MachX02 oscillator and programmable I/Os configured for LED drive.

Mfg. Part No.	Description	Stock No.	Price Each Each
LCMX02280C-B-EVN	MACHX02280 Breakout board	48W6158	26.87

(210361)

ICESTICK EVALUATION KIT

RoHS Compliant Available

LATTICE SEMICONDUCTOR

NEW

Features
- USB thumb drive form factor
- iCE40HX-1k on board
- 2 x 6 position Digilent Pmod™ connector for other peripheral connections
- FTDI 2232H USB device allows iCE device programming and UART interface to a PC
- Vishay TFDU4101 IrDA transceiver
- Five user LEDs
- Discera 12 Mhz MEMS oscillator
- Micron 32 Mbit N25Q32 SPI flash
- USB connector provides the power supply
- 16 LVCMOS/LVTTL (3.3 V) digital I/O connections on 0.1" through-hole connections

Mfg. Part No.	Description	Stock No.	Price Each 1-4
ICE40HX1K-STICK-EVN	ICESTICK EVALUATION KIT	07X1682	29.05

(212473)

LATTICEECP3 FPGA FAMILY

RoHS Compliant Available

LATTICE SEMICONDUCTOR

Features
- Low Power process
- Optimized FPGA Architecture
- Cascadable sysDSP™ With ALU
- High Speed Embedded SERDES
- Flexible sysIO™ Buffers

LatticeECP3 family is the third generation high value FPGA offering multi-protocol 3.2G SERDES with XAUI jitter compliance, DDR3 memory interfaces, powerful DSP capabilities and high density on-chip memory, all at a lower with half the power consumption and half the price of competitive SERDES-capable FPGAs.

Mfg. Part No.	LUTs (No.)	RAM (KBit)	Freq. (MHz)	I/O (No.)	Pkg	Stock No.	Price Each 1-24
LFE3-17EA-6FN484C	17000	700	250	222	484-FPBGA	48W6211	38.95
LFE3-17EA-6FN484I	17000	700	250	222	484-FPBGA	48W6212	43.66
LFE3-17EA-6FTN256C	17000	700	250	133	256-FTBGA	48W6213	32.40
LFE3-17EA-6FTN256I	17000	700	250	133	256-FTBGA	48W6214	37.78
LFE3-35EA-6FTN256C	33000	1327	250	133	256-FTBGA	48W6219	66.71
LFE3-35EA-6FTN256I	33000	1327	250	133	256-FTBGA	48W6220	73.38
LFE3-35EA-6FN484C	33000	1327	250	295	484-FPBGA	48W6215	73.90
LFE3-35EA-6FN484I	33000	1327	250	295	484-FPBGA	48W6216	80.16
LFE3-35EA-6FN672C	33000	1327	250	310	672-FPBGA	48W6217	82.86
LFE3-35EA-6FN672I	33000	1327	250	310	672-FPBGA	48W6218	89.53

(210348)

DEV KIT HQ™

Newest technology, Development Kits & Evaluation Boards from the best suppliers.

newark.com/dev-kits

(196525)

ICE40 ULTRA LOW DENSITY NON-VOLATILE FPGAS

RoHS Compliant Available

LATTICE SEMICONDUCTOR

iCE40™ family of FPGAs is designed for applications that have the most aggressive power, cost and footprint requirements. Ideally architected for smartphones, tablets, digital still cameras, and other space and power constrained systems, the iCE40 family uses a highly cost optimized fabric. This family is a popular choice for functions such as sensor management, video and imaging, custom connectivity, memory / storage expansion and glue logic. iCE40 FPGAs are available in two series: low power (LP) and high performance (HX).

HX-SERIES FOR TABLET APPLICATIONS

Mfg. Part No.	LUTs (No.)	RAM (KBit)	Freq. (MHz)	I/O (No.)	Pkg	Stock No.	Price Each 1-24
● ICE40HX1K-CB132	0	64	133	95	132-CSBGA	48W5877	5.97
● ICE40HX4K-CB132	3520	80	133	95	132-CSBGA	48W5878	7.42
LP-SERIES FOR SMART PHONE APPLICATIONS							
● ICE40LP1K-CM36	1280	64	133	95	36-UCBGA	48W5881	3.88
● ICE40LP4K-CM81	3520	80	133	167	81-UCBGA	48W5883	7.24

(210349)

ISPMACH 4000ZE CPLD FAMILY

RoHS Compliant Available

LATTICE SEMICONDUCTOR

Features
- Ultra Low Power CPLD
- Small Form Factor
- Easy System Integration
- High Performance CPLD
- Easy to Design

ispMACH 4000ZE CPLD family is ideal for ultra low-power, high-volume portable applications. Based on the low power ispMACH® 4000Z CPLD family architecture, the second-generation ispMACH 4000ZE offers ultra-small, space saving Ball Grid Array packages; 3.3V, 2.5V, and 1.8V I/O standards support; and 5-volt tolerant I/Os.

Mfg. Part No.	LUTs (No.)	Prop. Delay (nS)	Freq. (MHz)	I/O (No.)	Pkg	Stock No.	Price Each 1-24
● LC4032ZE-7MN64C	32	7.5	260	32	64-CSBGA	48W6182	1.59
● LC4032ZE-7MN64I	32	7.5	260	32	64-CSBGA	48W6183	1.68
● LC4032ZE-7TN48C	32	7.5	260	32	48-TQFP	48W6184	1.33
● LC4032ZE-7TN48I	32	7.5	260	32	48-TQFP	48W6185	1.45
● LC4064ZE-7MN144C	64	7.5	241	64	144-CSBGA	48W6187	3.90
● LC4064ZE-7MN144I	64	7.5	241	64	144-CSBGA	48W6188	4.23
● LC4064ZE-7MN64C	64	7.5	241	48	64-CSBGA	48W6189	3.03
● LC4064ZE-7MN64I	64	7.5	241	48	64-CSBGA	48W6190	3.46
● LC4064ZE-7TN100C	64	7.5	241	64	100-TQFP	48W6191	3.30
● LC4064ZE-7TN48C	64	7.5	241	32	48-TQFP	48W6192	2.77
● LC4064ZE-7TN48I	64	7.5	241	32	48-TQFP	48W6193	3.03
● LC4128ZE-7MN144C	128	7.5	200	96	144-CSBGA	48W6195	6.86
● LC4128ZE-7MN144I	128	7.5	200	96	144-CSBGA	48W6196	7.80
● LC4128ZE-7TN144C	128	7.5	200	96	144-TQFP	48W6197	7.25
● LC4128ZE-7TN144I	128	7.5	200	96	144-TQFP	48W6198	7.89
● LC4256ZE-7MN144C	256	7.5	200	108	144-CSBGA	48W6200	14.08
● LC4256ZE-7MN144I	256	7.5	200	108	144-CSBGA	48W6201	15.46
● LC4256ZE-7TN100C	256	7.5	200	64	100-TQFP	48W6202	14.11
● LC4256ZE-7TN100I	256	7.5	200	64	100-TQFP	48W6203	14.85
● LC4256ZE-7TN144C	256	7.5	200	96	144-TQFP	48W6204	15.09
● LC4256ZE-7TN144I	256	7.5	200	96	144-TQFP	48W6205	15.88

(210353)

ISPMACH 4A5 FAMILY OF CPLDS

RoHS Compliant Available

LATTICE SEMICONDUCTOR

Features
- Vcc 5.0 volts
- 182 MHz System Performance
- 5.0 ns Pin-to-Pin Delay
- SpeedLocking Performance - Guaranteed Fixed Timing
- High Density (32-256 Macrocells)
- 44 Pin to 208 Pin Package Options
- Low Power Consumption
- Excellent Routability and Pin-Locking
- Flexible Architecture
- Hot-Socketing Capability
- Programmable Bus-FriendlyTM or Pull-up I/Os
- In-System Programmable

ispMACH 4A5 family family features high operating frequencies combined with its SpeedLocked performance and low power consumption, make it the best choice for most system logic applications.

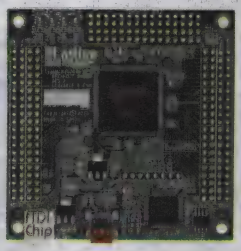
Mfg. Part No.	LUTs (No.)	Prop. Delay (nS)	Freq. (MHz)	I/O (No.)	Pkg	Stock No.	Price Each 1-24
● M4A5-32/32-10VNC	32	10	100	32	44-TQFP	24M5126	3.87
● M4A5-64/32-10VNC	64	10	100	32	44-TQFP	24M5127	4.95
● M4A5-192/96-10VNC	192	10	100	96	144-TQFP	92K7258	28.73

(210354)

ISPMACH 4256ZE BREAKOUT BOARD EVALUATION KIT

RoHS Compliant Available

LATTICE SEMICONDUCTOR



Features
- ispMACH 4256ZE CPLD (LC4256ZE-5TN144C)
- USB mini-B connector for power and programming
- Eight LEDs
- 4x15 prototype area
- Four 2x20 expansion header landings for general I/O, JTAG, and external power
- 1x8 expansion header landing for JTAG
- 3.3V and 1.8V supply rails

ISPMACH 4256ZE evaluation kit provides a pre-programmed demo to illustrate basic operation of the ispMACH 4256ZE CPLD device. The design integrates an up-counter with the on-chip oscillator and timer (OSCTIMER) hardware feature. The design alternates to CPLD outputs, illuminating LEDs D1, D3, D5 and D7 then LEDs D2, D4, D6 and D8.

Mfg. Part No.	Description	Stock No.	Price Each Each
● LC4256ZE-B-EVN	ISPMACH 4256ZE evaluation kit	48W6199	26.87

(210359)

USB-BASED EMULATORS FOR JTAG PROCESSORS

CE

RoHS Compliant Available

ANALOG DEVICES

Features
- ADZS-USB-ICE specific
  Full speed USB 1.1 interface up to 150 KB/Sec
- ADZS-HPUSB-ICE specific
  High speed USB 2.0 interface up to 1.5MB/sec
  Background Telemetry Channel (BTC) for data exchange at up to 2.0 MB/sec
- 1.8V, 2.5V, and 3.3V compliant and tolerant
- Support for all ADI JTAG processors and DSPs
- 5V tolerant and 3.3V compliant for 5V processors and DSPs
- Multiprocessor support
- 14-pin JTAG connector
- 3-meter USB cable for difficult-to-reach targets
- CE-certified

Kit Contents
- USB-based emulator w/ 14-pin JTAG connector
- 3-meter USB cable

USB-based emulators provide an easy, portable, non-intrusive, target-based debugging solution for Analog Devices JTAG processors and DSPs. These powerful USB-based emulators perform a wide range of emulation functions, including single-step and full speed execution with pre-defined breakpoints, and viewing and/or altering of register and memory contents. Applications and data can easily and rapidly be tested and transferred between the emulators and the separately available VisualDSP++ development and debugging environment(sold separately). With the ability to automatically detect and support multiple I/O voltages, these emulators enable users to communicate with all of the Analog Devices JTAG processors and DSPs through USB. **ADZS-USB-ICE** supports full speed USB 1.1 and **ADZS-HPUSB-ICE** supports high speed USB 2.0 in addition to a Background Telemetry Channel (BTC), a non-intrusive method for exchanging data between the host and target application without affecting the target system's real-time characteristics.

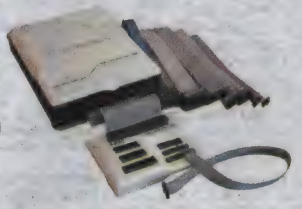
Mfg. Part No.	Interface	Stock No.	Price Each
● ADZS-USB-ICE	USB 1.1, up to 150Kbps	21M6780	1305.00
● ADZS-HPUSB-ICE	USB 2.0, up to 1.5MB/sec	14M7074	4176.00

(89619)

DSTREAM HIGH-PERFORMANCE DEBUG AND TRACE

RoHS Compliant Available

ARM DS Development Tools



Features
- Run control debug and trace unit supporting all ARM and Cortex processors
- USB 2.0 and Ethernet interface allows direct and remote connections from the host PC
- Support for JTAG and Serial-Wire Debug target interfaces
- Code download at speeds of up to 2500 KBytes per second
- JTAG clocks of up to 60 MHz provide fast software upload over the existing debug port
- 16-bit wide trace capture at 300 MHz DDR (600 Mbit/s per pin)
- Flexible trace clock positioning (relative to trace data)
- Large 4 GB trace buffer enables long-time trace on fast targets
- Device bring-up and test utilities
- Support for Virtual Ethernet link over JTAG
- Third party IP and debugger support

DSTREAM™ high-performance debug and trace unit enables software debug and optimization on any ARM processor-based hardware target. DSTREAM extends the functionality of RVI and RVT2 with faster memory download and trace capture, as well as wider support for physical debug and trace interfaces and enables the connection of DS-5 Debugger, RVD and third party debuggers to ARM-based devices via JTAG or Serial-Wire Debug.

Mfg. Part No.	Description	Stock No.	Price Each
● DSTRM-KT-0181A	DSTREAM Debug and Trace Unit	75T9199	3500.00

(199451)

ENERGY PROBE FOR EMBEDDED SYSTEMS

RoHS Compliant Available

ARM DS Development Tools

Features

- Lightweight power measurement for software developers
- Correlates power consumption with software execution in Streamline
- Monitor up to three probe points simultaneously
- Helps developers to make informed decisions at all layers of the software stack

Energy probe is part of the DS5 tool chain that allows monitoring of power consumption to software activity. Used in conjuction with ARM Streamline, the engery probe has a small form factor and is easy to setup with very low impact on development.

Mfg. Part No.	Description	Stock No.	Price Each
AEP03-KT-0311A	ARM DS5 Energy Probe	91T7810	199.00

(203730)

ULINK FAMILY OF DEBUG AND TRACE ADAPTERS

KEIL Tools by ARM

ULINK2

ULINK Pro

Features

- Download programs to your target hardware
- Examine memory and registers
- Single-step through programs and insert multiple breakpoints
- Run programs in real-time
- Program Flash Memory
- Connect using JTAG or Serial Wire modes
- On-the-fly debug of ARM Cortex-M based devices
- Examine Trace information from ARM Cortex-M3 and Cortex-M4 devices

ULINKpro Debug and Trace Unit connects to a PC's USB port and a target system (via a JTAG, Cortex Debug, or Cortex Debug+ETM connector) and allows the programming, debugging, and analysis of embedded applications using its unique streaming trace technology. Processor control, setting breakpoints, and read/write memory contents while the processor is running at full speed. Together with MDK-ARM, ULINKpro provides extended on-the-fly debug capabilities for Cortex-M devices. **ULINK2** Debug Adapter connects between a PC's USB port and target system (via JTAG, SWD, or OCDS) and allows for Flash memory programming (using user-configurable Flash programming algorithms) and on-chip debugging of embedded programs on target hardware using on-chip JTAG, SWD, or SWV. ULINK2 supports various ARM7, ARM9, Cortex-M, 8051, and C166 devices.

ULINK DEBUG AND TRACE UNITS

Mfg. Part No.	Description	Stock No.	Price Each
ULINK2	ULINK2 Debug Adapter	74T5673	395.00
ULINKPRO	ULINKpro Debug and Trace Unit	74T5672	1250.00
ULINK ACCESSORIES			
ISO-ADPT	ULINKpro Target Isolation Adapter	74T3812	250.00

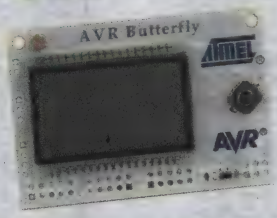
(199452)

AVRISP MKII ISP AND PDI INTERFACE PROGRAMMER

RoHS Compliant Available

Atmel

The **AVRISP mkII** tool is used for field upgrades of 8-bit AVR microcontrollers with ISP or PDI interfaces. Using the included AVR Studio® software, designers can program tinyAVR and megaAVR devices using the ISP Interface, tinyAVR devices using the TPI interface, and AVR XMEGA devices using the PDI Interface.



Mfg. Part No.	Description	Stock No.	Price Each
ATAVRISP2	AVRISP Programmer	68T2065	37.50

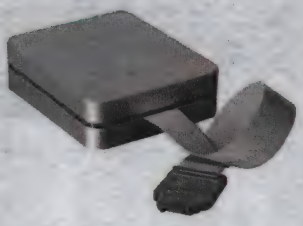
(197950)

AVR ONE! PROFESSIONAL DEBUGGER FOR 8 AND 32-BIT AVR DEVICES WITH ON-CHIP DEBUGGING

RoHS Compliant Available

Atmel

AVR ONE! is a professional development tool for all 8-bit and 32-bit AVR devices with On-Chip Debug capability. It is used for source level symbolic debugging, program trace and device programming and supports the complete development cycle. It supports SPI, JTAG, PDI, and aWire programming modes and debugging using debugWIRE, JTAG, PDI, and aWire interfaces. It also supports LiveDebug, which makes it possible to attach to a running target non-intrusively, and the Nexus auxiliary interface for high-speed program, data or ownership trace at up to 200MHz in either buffered or streaming mode. Driven by a powerful FPGA, this tool provides high-speed data transfer between the host PC and the target AVR device, facilitating rapid program download and a most responsive debugging experience.



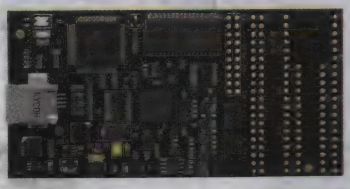
Mfg. Part No.	Description	Stock No.	Price Each
ATAVRONEKIT	AVR ONE! Development Tool	68T2076	655.00

(197951)

AVR DRAGON ON-CHIP DEBUGGER AND PROGRAMMER

RoHS Compliant Available

Atmel



The **AVR Dragon** sets a new standard for low cost development tools for 8-bit and 32-bit AVR devices with On Chip Debug (OCD) capability. It can perform a symbolic debug on all devices with OCD with SPI, JTAG, PDI (selected devices), high voltage serial programming, parallel programming, and aWire modes, and supports debugging using SPI, JTAG, PDI interfaces. A development area lets designers build their own circuitry or add sockets for the desired device footprint. The debugger also supports NanoTrace, depending on the OCD module on the AVR device, using the target device's memory.

Mfg. Part No.	Description	Stock No.	Price Each Each
ATAVRDRAGON	AVR DRAGON JTAG Debugger Starter Kit	68T2063	50.74

(197953)

SAM-ICE™ JTAG EMULATOR FOR SAM3/7/9 ARM-BASED MCUs

RoHS Compliant Available

Atmel

SAM-ICE™ is a JTAG emulator designed for SAM3, SAM7 and SAM9 ARM-based microcontrollers, including the Thumb® mode. It supports download speeds up to 720K Bytes per second and maximum JTAG speeds up to 12 MHZ. It also supports Serial Wire Debug (SWD) and Serial Wire Viewer (SWV) from SAM-ICE hardware V6.

Mfg. Part No.	Description	Stock No.	Price Each
AT91SAM-ICE	USB JTAG Emulator	68T5115	109.35

(197949)

DATAMAN-40PRO UNIVERSAL ISP 40-PIN PROGRAMMER

DATAMAN

Features

- Universal 40 pin ZIF socket accepts both 300/600 mil DIP devices up to 40 pin
- Intelligent pin drivers allow varying voltages to be applied to any pin delivering signals without overshoot, increasing programming yield
- Pin drivers operate down to 1.8V so you'll be ready to program the full range of tomorrow's advanced low-voltage devices
- ISP capable using the JTAG interface
- USB 2.0/1.1 connectivity allowing fast and easy connection to PC's and laptops

Kit contents

- Dataman 40Pro Universal ISP Production Programmer
  Dimensions: 160x95x35 mm (6.3x3.7x1.4 inches)
  Weight: 500g (17.65 oz)
- Switching Power Supply Adaptor
  Input: 100-240V @ 50-60Hz & 400mA
  Output: 15V @ 0.5A, 7.5W
- Moulded USB Cable
- ISP cable
- Diagnostic POD for self test of the programmer
- Anti-dust cover for ZIF socket
- User manual
- Software
- Optional range of adapters and socket converters also available

40Pro is a universal 40 pin driver, PC based programmer with in-circuit serial programming (ISP) capabilities and USB 2.0 connectivity. Built to meet the demands of development labs and field engineers it offers fast and powerful programming of a wide range of programmable devices in a small portable package. **40Pro** isn't only a programmer, but also a static RAMs tester.

Mfg. Part No.	Description	Supported	Stock No.	Price Each
DATAMAN-40PRO	Programmer, Power Supply, Cables, Manual, Software	40-pin 300/600 mil devices	89M4593	595.00

(109710)

EMBEDDED DESIGN TOOLS

IDEs, Compilers, Debuggers and programming tools for all your MCU/DSP/FPGA needs.

newark.com/dev-tools-software

(196530)

DEBUGGERS, PROGRAMMERS, EMULATORS & COMPILERS

DATAMAN 48PRO2C SUPER FAST UNIVERSAL ISP PROGRAMMER

Features
- USB 2.0 high-speed compatible port
- Banana jack for ESD wrist strap connection
- Banana jack for connection to ground
- Powerful microprocessor and FPGA based state machine
- Selftest capability
- 48-DIP ZIF socket for both 300/600 mil devices
- Current limitation, overcurrent shutdown, power failure shutdown
- 20-pin male ISP Connector
- 2V to 6V/250mA Target system supply voltage

The **Dataman 48Pro2C** is a super fast universal 48-pin chip programmer with ISP capabilities, USB 2.0 connectivity and built to meet the demands of development labs and field engineers for super fast universal programming. This model can program without the need for a family-specific module, giving you the freedom to choose the optimal device for your design.

Mfg. Part No.	Description	Stock No.	Price Each
DATAMAN-48PRO2C	48Pro2C Universal 48-Pin Programmer w/ ISP	48W1877	995.00

(209427)

DATAMAN S6 USB POWERED UNIVERSAL 48-PIN PROGRAMMER

Features
- USB powered - no additional power supply is required
- Over 14,000 (April 2013) devices supported with new devices added monthly
- Intelligent pin drivers operate down to 1.8V
- Hi-speed USB 2.0 connectivity
- Easy to use software compatible with the latest operating systems including Windows 8
- Comprehensive 3 years parts and labour warranty
- Free life-time software updates

Package Contents
- Dataman S6 Compact USB Programmer
- Moulded USB Y Cable
- Carry Case
- User Manual
- Software

Dataman S6 is a USB powered universal 48-pin programmer with compact dimensions and minimal weight. The S6 is built to meet the demands of development labs and field engineers for universal programming. Supporting over 14,000 (April 2013) devices with new support being added monthly, the Dataman S6 can program without the need for family-specific modules, giving you the freedom to choose the optimal device for your design.

Mfg. Part No.	Description	Stock No.	Price Each Each
DATAMAN-S6	Dataman S6 48-pin USB Programmer	95W2833	895.00

(210347)

448PRO2 SUPER FAST MULTI-SOCKET GANG PROGRAMMER

Features:
- Up to 70% faster programming of highcapacity memory devices
- Over 51,000 devices supported
- Independent modules supporting concurrent programming
- ISP capable using the JTAG interface
- Hi-speed USB 2.0 connectivity
- Easy to use software
- Compatible with latest operating systems including Windows 7

Specifications:
- 4 x 48-pin DIL ZIF sockets and 4 x ISP connectors
- Dimensions: 361 x 234 x 56mm (14.2 x 9.2 x 2.2in)
- Weight: 3.5Kg (7.72lbs)
- Operating voltage: 100-240VAC
- Power consumption: 60W max.
- Power and operation status LEDs
- USB 2.0 high-speed compatible port
- Surge and ESD protection on power supply input
- Banana jack for ESD wrist strap connection
- Banana jack for connection to ground

Kit Contents:
- Programmer
- Moulded USB cable
- (4) ISP cable
- Programmer diagnostic POD
- ISP connector diagnostic POD
- (4) Anti-dust cover for ZIF socket
- ESD wrist strap w/ cord and banana plug
- Vacuum pen
- User manual
- Software
- Transport case

Mfg. Part No.	Description	Stock No.	Price Each
DATAMAN-448PRO2	448Pro2 Multi Socket 48-Pin Programmer w/ ISP	83R7198	3595.00

(180082)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

48PRO2 SUPER FAST UNIVERSAL 48-PIN PROGRAMMER

Features:
- Up to 70% faster programming of highcapacity memory devices
- Over 51,000 devices supported
- Intelligent pin drivers operate down to 1.8V
- ISP capable using the JTAG interface
- Hi-speed USB 2.0 connectivity
- Easy to use software
- Compatible with latest operating systems including Windows 7

Specifications:
- Dimensions: 195 x 140 x 55mm (7.7 x 5.5 x 2.2in)
- Weight: 0.9Kg (1.98lbs)
- Operating voltage: 100-240VAC
- Power consumption: 20W max
- 1 x 48-pin DIL ZIF socket and 1 x ISP connectors
- Power and operation status LEDs
- USB 2.0 high-speed compatible port
- FPGA based IEEE 1284 slave printer port
- Surge and ESD protection on power supply input and parallel port connection
- Banana jack for ESD wrist strap connection
- Banana jack for connection to ground

Kit Contents:
- Dataman 48Pro2 Super Fast Universal ISP Programmer
- Moulded USB cable
- ISP cable
- Diagnostic POD for selftest of the programmer
- Diagnostic POD for selftest of the ISP connector
- Anti-dust cover for ZIF socket
- User manual
- Software

Mfg. Part No.	Description	Stock No.	Price Each
DATAMAN-48PRO2	48Pro2 Universal 48-Pin Programmer w/ ISP	83R7199	1195.00

(180083)

USB TAP FOR COLDFIRE

RoHS Compliant Available

Features
- High-speed USB 2.0 connectivity
- Self-powered from USB
- Run-control visibility and control
- Flash memory programming
- Low voltage target support
- Fully integrated with CodeWarrior tools and supports all run-control debug features
- Software or hardware breakpoints
- On-chip debug (OCD) features support
- Powerful C/C++ symbolic debugger with an integrated debugging interface
- Debug code in ROM, RAM, and flash
- Low-voltage processor compatible

CodeWarrior USB TAP® host target interface is a feature-packed, run control tool that allows developers to save precious development time during target bring-up and debugging of ColdFire processors. The USB TAP integrates seamlessly with the CodeWarrior integrated development environment, giving the developer a powerful tool for complex debug tasks and providing excellent visibility into, and control of, on-chip debug features. With the USB TAP, you will have complete run control functionality and easy flash programming for fast downloads and convenient production testing.

Mfg. Part No.	Description	Stock No.	Price Each
● CWH-UTP-CF-HE	USB TAP for Coldfire	01M5519	249.00

(196435)

CYCLONE MAX STAND-ALONE IN-CIRCUIT PROGRAMMER AND DEBUGGER

RoHS Compliant Available

Features
- USB, Serial, and Ethernet communications interfaces
- Pre-programmed with a non-volatile programming image
- Controlled via the LCD/Buttons or remotely from a PC
- Stores mutiple images
- Stand-alone operation
- Backlit liquid crystal display
- Autodetects target voltage 1.8v-5.25v

Contents
- CycloneMAX unit
- Power Supply
- DB9 Serial Cable
- Ethernet Cable
- USB 2.0 A/B Cable
- Target connection cables

Cyclone MAX is a powerful stand-alone in-circuit programmer and debugger for Freescale's high-end ColdFire (5xxx), Power Architecture (MPC5xx/8xx), Power Architecture Nexus (MPC55xx), and ARM (MAC7xxx) architectures. Once configured, programming operations are completed in one touch. Processor control avalable thru the processor's debug port and communication occurs via Ethernet, USB, or Serial Port, allowing the user to quickly debug code and program it onto a microprocessor.

Mfg. Part No.	Description	Stock No.	Price Each
● CYCLONEMAX	Cyclone MAX in-circuit programmer/debugger	51M5184	898.90

(196436)

USB POWERPC® BDM MULTILINK FOR FREESCALE MPC5XX/8XX MCUS

RoHS Compliant Available

freescale

Features
- USB 2.0 interface from PC to Multilink
- Draws power from USB interface
- Target Voltage: 1.8V-5.0V
- Compatible with MPC5xx and MPC8xx families of microcontrollers.
- Supported by P&E software, Freescale Codewarrior, and other third party development suites

USB PowerPC® BDM Multilink is an easy-to-use debug and programming interface, which allow the PC to communicate with a target processor through the USB port of the PC for the PowerPC MPC5xx/8xx line of microprocessors. The Multilink controls the microprocessor by accessing the Background Debug Mode (BDM) of the target. USB cable is included.

Mfg. Part No.	Description	Stock No.	Price Each
USBMLPPCBDM	BDM Multilink for MPC5xx/8xx MCUs	01M6487	249.00

(196440)

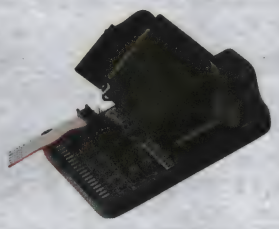
UNIVERSAL MULTILINK DEVELOPMENT INTERFACE

RoHS Compliant Available

freescale

Features
- Fast, hassle-free USB 2.0 communications interface
- Draws power directly from the USB port – no external power supply needed
- Multi-voltage support for targets ranging from 1.6 to 5.25 Volts
- Includes ribbon cables for supported architectures
- Natively supported by recent versions of CodeWarrior®
- Compact size

Supported architectures
- Kinetis
- HCS08
- RS08
- HC(S)12(X)
- ColdFire +/V1
- ColdFire V2-4
- Qorivva MPC55xx/56xx



The **USB Multilink Universal** is an easy-to-use debug and programming interface which allows the PC to communicate through the USB port with a target processor through the debug port. It combines support, in a single interface, for many Freescale architectures, including: HCS08, HC(S)12(X), ColdFire® V1/ColdFire+ V1, ColdFire V2-4, Qorivva® MPC55xx/56xx, and Kinetis® by featuring multiple headers that are accessed by simply flipping open the plastic case. It is natively supported by recent versions of CodeWarrior®, current P&E software applications, and Kinetis toolchains from IAR, Keil, and Mentor Graphics.

Mfg. Part No.	Description	Stock No.	Price Each
U-MULTILINK	Universal Multilink Interface	38T3448	119.00

(203425)

USB MULTILINK INTERFACE FOR Qorivva® MCUs

RoHS Compliant Available

freescale

Features
- Fast, hassle-free USB 2.0 communications interface
- Draws power directly from the USB port – no external power supply needed
- Multi-voltage support for targets ranging from 1.8 to 5.5 Volts
- Compact size

USB Power Architecture® Nexus Multilink is an easy-to-use debug and programming interface for the Qorivva 55xx/56xx line of Power Architecture microprocessors. It is the hardware interface between a USB port on a Windows 2000, 2003, XP, Vista, or Windows 7 machine and the standard 14-pin "Berg" debug connector on the target. By providing access to the JTAG/Nexus port on Qorivva MPC55xx/56xx processors, the user can take advantage of the JTAG/Nexus debug mode to halt normal processor execution and use a PC to control the processor. The user can then directly control the target's execution, read/write registers and memory values, debug code on the processor, and program internal or external FLASH memory devices by using the appropriate software packages.

Mfg. Part No.	Description	Stock No.	Price Each
USBMLPPCNEXUS	USB Qorivva Multilink Interface	01M6488	249.00

(203426)

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element14.com

(196545)

USB HCS08/HCS12 IN-CIRCUIT DEBUGGER / PROGRAMMER

RoHS Compliant Available

freescale

Features
- Real-time in-circuit debug through HCS08/RS08 or HCS12 BDM interface
- Fast in-circuit Flash programming
- Supports 1.8 V to 5.5 V HCS08/RS08s and HCS12s
- USB-to-BDM interface

Kit Contents
- **USBMULTILINKBDME** in-circuit debugger/programmer
- USB cable
- CodeWarrior™ Development Studio for HC(S)08/RS08, Special Edition
- CodeWarrior™ Development Studio for HCS12, Special Edition

Interface provides access to the Background Debug Mode (BDM) on **HCS08, HC12 and HCS12** microcontrollers. Users can take advantage of the background debug mode to halt normal processor execution and use a PC to control the processor. The user can then directly control the target's execution, read/write registers and memory values, debug code on the processor, and program internal or external FLASH memory devices.

Mfg. Part No.	Description	Stock No.	Price Each
USBMULTILINKBDME	USB HCS08/HCS12 BDM Multilink In-Circuit Debugger/ Programmer	83K3802	99.00

(115528)

CYCLONE PRO IN-CIRCUIT DEBUGGER / PROGRAMMER

RoHS Compliant Available

freescale

Features
- Supports all HC08, HCS08, HC12, HC(S)12(X), ColdFire V1 and RS08
- Ethernet, USB, and serial interfaces
- Fast in-circuit Flash programming
- Scripting capability automates programming of test routines, test execution, erase and final SW programming
- Auto-detects baud rate and frequency of MCU
- Provides optional overdrive clock to MCU
- Automatically cycles power for security checks (up to 500 mA)
- Supports 1.8 V to 5.5 V

Kit Contents
- Cyclone Pro universal standalone in-circuit debugger/programmer
- Power supply
- DB9 serial cable, USB 2.0 A/B cable, Ethernet cable and IDE connection cables (6-pin and 16-pin)

The Cyclone PRO is able to debug and program Motorola 68HC908 targets in-circuit via the Monitor ROM (MON08 Port). In addition, the Cyclone PRO is able to program and debug the ColdFire V1, HC(S)12(X), HCS08, and RS08 families of microcontrollers through the on-board Background Debug Modules of those processors. It can communicate with a PC through either RS-232, Ethernet, or USB interfaces. The Cyclone PRO, once configured properly, can function as a stand-alone programmer independent of a PC.

Mfg. Part No.	Description	Stock No.	Price Each
M68CYCLONEPROE	USB HCS08/HCS12 BDM Multilink In-Circuit Debugger/ Programmer	01M6114	498.80

(115529)

USB COLDFIRE MULTILINK INTERFACE

RoHS Compliant Available

freescale

Features
- Compatible with MCF52xx, MCF53xx, and MCF54xx families of microcontrollers
- Target voltage: 1.8V-5.5V
- Synchronous and asynchronous operation
- USB 2.0 interface from PC to Multilink allows for fast, easy programming and debugging, with the ease and compatibility of the USB interface
- USB cable is included
- Draws power from the USB bus (draws less than 1mA from the target)

USB ColdFire® Multilink is an easy-to-use debug and programming interface for Freescale's ColdFire V2/V3/V4 line of microprocessors which allows the PC to communicate with a target processor through the USB port of the PC. The Multilink controls the microprocessor by accessing the Background Debug Mode (BDM) of the target.

Mfg. Part No.	Description	Stock No.	Price Each
USBMLCF	USB ColdFire Multilink	01M6486	249.00

(115530)

CODEWARRIOR USB TAP

RoHS Compliant Available

freescale

CodeWarrior USB TAP® host target interface is a feature-packed, run control tool that allows developers to save precious development time during target bring-up and debugging. The USB TAP integrates seamlessly with the CodeWarrior integrated development environment, giving the developer a powerful tool for complex debug tasks and providing excellent visibility into, and control of, Freescale on-chip debug features. With the USB TAP, you will have complete run control functionality and easy flash programming for fast downloads and convenient production testing.

Mfg. Part No.	Interface	Stock No.	Price Each
CWH-UTP-ONCE-HE	ONCE (DSC)	01M5407	99.00

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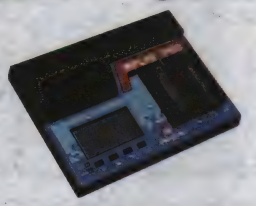
DEBUGGERS, PROGRAMMERS, EMULATORS & COMPILERS

MPLAB PM3 UNIVERSAL DEVICE PROGRAMMER

RoHS Compliant Available

MICROCHIP



Features
- RS-232 or USB Interface
- ICSP™ Integrated Circuit Serial Programming
- 3 Operating Modes (PC Host Mode, Safe Mode, Standalone Mode)

The **MPLAB® PM3** programs Microchip's entire line of PICmicro® MCU devices as well as the latest dsPIC30F DSC devices. The programmer has exceptional programming speed to allow high volume production, and includes a Secure Digital /Multimedia Card slot for easy and secure data storage and transfer. Programmer includes 40 socket pins, allowing each socket module to be configured to support many devices. The socket module adapter (AC164350) allows current PROMATE® II socket modules to be used with the **MPLAB® PM3 programmer**.

Mfg. Part No.	Description	Stock No.	Price Each
DV007004	MPLAB PM3 Programmer Unit	88H6738	895.00
● AC002021	ICSP CABLE	08J5777	23.00

(78734)

MPLAB C COMPILERS

RoHS Compliant Available

MICROCHIP

Features
- ANSI '89 compatibility
- Integration with the MPLAB IDE for easy-to-use project management and source-level debugging
- Generation of relocatable object modules for enhanced code reuse
- Compatibility with object modules generated by the MPASM assembler, allowing complete freedom in mixing assembly and C programming in a single project
- Strong support for inline assembly when total control is absolutely necessary
- Efficient code generator engine with multi-level optimization
- Extensive library support, including PWM, SPI, I2C, UART, USART, string manipulation and math libraries

Full-featured ANSI compliant C compilers, the C18 and C30 compilers are fully compatible with Microchip's MPLAB Integrated Development Environment (IDE), these compilers allow source level debugging with the MPLAB ICE In-Circuit Emulator, MPLAB ICD 2 In-Circuit Debugger and MPLAB SIM Simulator.

Mfg. Part No.	Description	Stock No.	Price Each
● SW006011	MPLAB C COMPILER, FOR PIC18 OTP/FLASH MCU	12C1964	495.00
● SW006012	MPLAB C COMPILER, FOR PIC24, DSPIC	92C5431	895.00

(87548)

MPLAB C COMPILER FOR PIC32 MCUS

MICROCHIP

Features
- up to 22% Faster 16- and 32-bit FFT functions
- Easier FFT - Eliminated setup function
- DSP Library Compatibility Wrapper eases migration between dsPIC DSCs and PIC32 MCUs.
- Linker Memory-Usage Report showes the program- and data-memory usage
- Assembler and Linker documentation added to the compiler help file

The MPLAB C Compiler for PIC32 is a full-featured ANSI compliant C compiler for Microchip's PIC32 family of 32-bit microcontrollers. The compiler is fully compatible with Microchip's MPLAB IDE and popular third party IDEs.

Mfg. Part No.	Description	Stock No.	Price Each
SW006015	MPLAB C Complier for PIC32 MCUS	75M9283	895.00

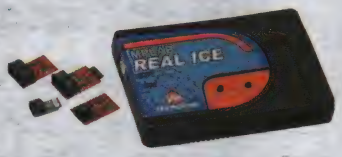
(162702)

MPLAB REAL ICE IN-CIRCUIT EMULATOR

RoHS Compliant Available

MICROCHIP

Features
- Real-time Execution
- Fast Programming
- USB 2.0 Interface to PC
- FREE MPLAB IDE
- Overvoltage / Short-circuit Monitor Protection
- Read/Write Program Memory Space with Verification
- Stopwatch
- Hard and Software Breakpoints
- Real-time Watch
- Capture Trace to Log Instruction Contents
- Port Trace for High-Speed Upload of Trace Data



MPLAB® REAL ICE is the next generation of emulator / programmer for Microchip flash products. Can be used to debug and program dsPIC® and PIC® microcontrollers with a powerful yet simple to use graphical user interface of the MPLAB integrated developement environment.

Mfg. Part No.	Description	Supported	Stock No.	Price Each
● DV244005	REAL ICE emulator pod and standard driver board, literature, cables and software	PIC and dsPIC Flash Microcontroller	16M6059	499.98

(90083)

MPLAB® ICD 3

MICROCHIP

Package Contents:
- MPLAB ICD 3 In-circuit debugger unit (1)
- Diagnostics Test Interface module (1)
- USB 2.0 to PC Interface cable (1)
- RJ-11 Cable from MPLAB ICD 3 to Target (1)
- MPLAB IDE CD with full documentation and User's Guide (1)
- MPLAB ICD 3 Poster (1)
- MPLAB ICD 3 Design Advisory (1)
- Notepad with Troubleshooting Guide (1)

Features:
- In-Circuit Debugging for Flash PIC microcontrollers and dsPIC Digital Signal Controllers
- Full-speed, Real-time emulation
- Source debugging, stopwatch, complex breakpoints, and in-circuit programming
- MPLAB IDE compatible
- Firmware upgrade via MPLAB IDE
- Overvoltage and undervoltage protection
- High Speed USB 2.0 (480 Mbps)
- USB powered
- Target power, up to 100 MA
- Internal 1MB memory buffer for increased download speed
- Vdd range 2-5.5V
- Vpp range 2-14V
- CE and RoHS compliant

The **MPLAB® ICD 3 In-Circuit Debugger System** is Microchip's latest and most cost effective high-speed programmer and debugger for Microchip Flash Digital Signal Controller (DSC) and microcontroller (MCU) devices. It debugs and programs 8-, 16- and 32-bit PIC® Flash microcontrollers and dsPIC® DSCs with the powerful, yet easy-to-use graphical user interface of MPLAB Integrated Development Environment (IDE). The **MPLAB ICD 3 In-circuit debugger** provides significant performance enhancements for embedded systems designers. Programming times are typically 15X faster than previous systems. Its onboard 40 MHz dsPIC33 and high-speed FPGA yield faster communications, downloads and debugging.

Mfg. Part No.	Description	Stock No.	Price Each
DV164035	MPLAB ICD 3 In-Circuit Debugger Kit	19P0223	189.99

(136295)

PICKIT™ 2 DEBUG EXPRESS

RoHS Compliant Available

MICROCHIP

Features
- PICkit 2 Device Programmer with 44-pin demo board
- Surface mount prototyping area

Kit contents
- 44-pin PIC16F917 Flash MCU
- PICkit CD-ROM
- MPLAB Integrated Development Environment CD
- UART Tool Software
- Logic Tool Software
- User's guide
- Code examples
- USB interface cable

PICkit 2 Debug Express is a low-cost development kit with an easy to use interface that allows in-circuit debugging on selected PIC microcontrollers. Designed to help developers get up to speed using PIC MCUs, it provides everything needed to program, evaluate, and develop applications.

Mfg. Part No.	Description	Supported	Stock No.	Price Each
● DV164121	PICkit 2 Device programmer, PIC16F917 Demo board, cables and software	PIC Micro MCUs	16M6058	54.99

(113820)

PICKIT™ 2 MICROCONTROLLER PROGRAMMER

RoHS Compliant Available

MICROCHIP

Kit contents
- PICkit 2 Programming Software
- MPLAB IDE Software
- A to mini-B USB cable
- Guide for programming PICmicro MCUs

The **PICkit 2 Microcontroller Programmer** takes advantage of Microchips Full-Speed USB device, significantly speeding up development programming.

Mfg. Part No.	Description	Stock No.	Price Each
● PG164120	PICKIT™ 2 Programmer	51M8937	39.99

(113821)

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(196560)

PICKIT™ 2 STARTER KIT

RoHS Compliant Available

MICROCHIP

Features
- Low pin count demo board
- 20-pin PIC16F690 Midrange microcontroller
- 4 LEDs, Pushbutton, Pot
- Guide on assembly programming that cover I/O, A/D converters, timers, interrupts, and data tables
- Microchip's MPLAB IDE software for a complete code development environment
- HI-TECH PICC™ LITE C Compiler

Kit contents
- PICkit 2 Microcontroller Programmer
- PICkit 2 Low Pin Count Demo Board with PIC16F690
- UART Tool Software
- Logic Tool Software
- User's guide
- Code examples
- USB interface cable

PICkit 2 Starter Kit takes advantage of Microchips Full-Speed USB device, significantly speeding up development programming.

Mfg. Part No.	Description	Supported	Stock No.	Price Each
● DV164120	Hardware, cables, literature and software	8/14/20-pin PICmicros	44K0230	54.99

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PICKIT 3 IN-CIRCUIT DEBUGGER ONLY

MICROCHIP

PICkit 3 In-Circuit Debugger/Programmer uses in-circuit debugging logic incorporated into each chip with Flash memory to provide a low-cost hardware debugger and programmer.

Mfg. Part No.	Description	Stock No.	Price Each
PG164130	PICKit 3 Debugger only	25R8311	44.95

(176998)

PICKIT 3 DEBUG EXPRESS

MICROCHIP

Features:
- Low cost
- Minimum of additional hardware needed for debug
- Expensive sockets or adapters are not required
- Production and post-production products can be re-flashed with firmware updates
- USB (Full speed 12 Mbits/s interface to host PC)
- Real-time execution
- MPLAB IDE compatible (free copy included)
- Built-in over-voltage/short circuit monitor
- Firmware upgradeable from PC/web download
- Totally enclosed
- Supports low voltage to 2.0 volts (2.0v to 6.0v range)
- Diagnostic LEDs (power, busy, error)
- Read/write program and data memory of microcontroller
- Erase of program memory space with verification
- Freeze-peripherals at breakpoint

Software Includes:
- PICkit 3 User's Guide
- A series of 12 Lessons on assembly programming that cover I/O, A/D converters, timers, interrupts, and data tables (All source code files are provided)
- A Debugging Tutorial on using the PICkit 3 as a debugger with the MPLAB IDE
- A FREE CCS compiler for the PIC18F45k20 (2kWord Program Limit)
- HI-TECH PICC™ LITE C Compiler
- Microchip's MPLAB IDE software

Microchip's **PICkit 3 In-Circuit Debugger/Programmer** uses in-circuit debugging logic incorporated into each chip with Flash memory to provide a low-cost hardware debugger and programmer. The **MPLAB PICkit 3** allows debugging and programming of PIC® and dsPIC® Flash microcontrollers at a most affordable price point using the powerful graphical user interface of the MPLAB Integrated Development Environment (IDE).

Mfg. Part No.	Description	Stock No.	Price Each
DV164131	PICkit 3, 44-pin demo board, PIC18F45k20 MCU, hookup cables, CDROM	50P9695	69.99

(142230)

SOCKET MODULES

RoHS Compliant Available

MICROCHIP

Socket modules enable Microchip programmers, emulators and debuggers to handle multiple package types. These socket modules can be ordered as accessories.

PM3 SOCKET MODULES

Mfg. Part No.	Supported	Stock No.	Price Each
● AC164301	18L/28L/40L DIP	29M7850	189.99
AC164302	16/28P SOIC UNIVERSAL	88H5604	189.99
PROMATE II TO PM3 SOCKET MODULE ADAPTER			
● AC164350	PROMATE II Socket Modules	88H5617	129.99

(63675)

PROCESSOR PLUG-IN MODULES

RoHS Compliant Available

MICROCHIP

Processor Plug-In Modules are small circuit boards to be used with the various Microchip Development Boards to evaluate PIC and dsPIC devices. These plug into the main processor socket of the development Boards so that different microcontrollers can be used for prototyping, demonstration or development quickly and easily. Microchip development tools such as the MPLAB© REAL ICE™ and MPLAB ICD 2 connect directly to these development boards and provide quick, full-featured hardware/software/firmware development environment using the free MPLAB Integrated Development Environment software.

Mfg. Part No.	Description	Supports	Stock No.	Price Each
MA160012	PIC16F1937 PIM for PICDEM PIC18 Explorer	PIC16F	52R9878	25.00
MA180020	PIC18F87J11 PIM FOR HPC EXPLORER	PIC18F	77M2534	25.00
MA180023	PIC18F46J11 Processor Plug-In Module	PIC18F	14R8813	25.00
MA180026	PIC18F46K20 for PICDEM PIC18 and HPC Explorer	PIC18F	24R6763	25.00
MA180031	PIC18F46K80 PIM for PIC18 Explorer	PIC18F	30T2363	25.00
MA180032	64-pin PIC18F66K80 MCU PIM	PIC18F	30T2364	25.00
● MA240011	PIC24FJ128GA010 100 to 100PIN TQFP PIM	PIC24F	56K6940	25.00
MA240013	PIC24F 44P to 100P TQFP PIM	PIC24F	54M4770	25.00
MA240014	PIC24FJ256GB110 USB PIM	PIC24F	88M9290	25.00
MA240015	PIC24F256GA PIM for Explorer 16	PIC24F	98M1509	25.00
MA240017	PIC24F16KA102 28-SOIC 100-pin PIM	PIC24F	08R1793	25.00
MA240019	PIC24FJ64GB004 USB PLUG-IN MODULE	PIC24F	50R8537	25.00
MA240020	PIC24FJ64GA104 PIM w/ NanoWatt XLP	PIC24F	50R8538	25.00
MA240022	PIC24F32KA304 44 -100P PIM	PIC24F	41T4108	25.00
● MA240012	PIC24HJ256GP610A 100P to 100P TQFP PIM	PIC24H	88K5499	25.00
MA240016	PIC24HJ128GP504 44P to 100P PIM	PIC24H	45P4719	25.00
MA240025-1	PIC24EP512GU810 100-TQFP to 100-pin USB PIM	PIC24E	55T3259	25.00
MA240025-2	EP512GU814 144-TQFP to 100-pin Graphics PIM	PIC24E	55T3260	30.00
● MA320001	PIC32MX360F512L PIM	PIC32MX360F512L	73M8723	25.00
MA320002	PIC32MX460F512L USB OTG PIM	PIC32MX	88M9291	25.00
● MA320003	PIC32MX795F512L CAN-USB PIM	PIC32MX	52R9879	25.00
● MA300015	dsPIC30F6010A 80L QFP PIM	dsPIC30F	88K5500	25.00
● MA330011	dsPIC33FJ256GP710 GP 100P to 100P TQFP PIM	dsPIC33F	56K6941	25.00
● MA330013	dsPIC33FJ256MC710 100-TQFP PIM	dsPIC33F	40M0533	25.00
MA330016	dsPIC33FJ256MC710 100P to 100-TQFP PIM	dsPIC33F	77M2537	25.00
MA330017	dsPIC33FJ32GP204 44-QFN to 100P PIM	dsPIC33F	77M2538	25.00
MA330018	dsPIC33FJ32MC204 44-QFN to 100P PIM	dsPIC33F	07P9495	25.00
MA330019	dsPIC33FJ128MC804 44-QFN TO 100P PIM	dsPIC33F	07P9496	25.00
MA330019-2	dsPIC33FJ128MC804 44-QFN TO 100P PIM	dsPIC33F	63R7779	25.00
MA330020	dsPIC33FJ16GS504 GS 44P QFN TO 100P PIM	dsPIC33F	08R1794	25.00
MA330024	dsPIC33FJ64GS610 SMPS PIM	dsPIC33F	63R7780	25.00
● MA330012	dsPIC33FJ256GP710 100P to 80P TQFP PIM	dsPIC33F	56K6942	25.00
MA330025-1	100-pin TQFP to 100-pin USB Plug-In Module	dsPIC33E	55T3261	25.00
MA330025-2	144-pin TQFP to 100-pin Graphics Plug-In Module	dsPIC33E	55T3262	30.00
MA330025-3	144-pin TQFP to 100-pin Motor Control PIM	dsPIC33E	55T3263	40.00
MA330027	Dual Motor Control Plug-In Module PIM	dsPIC33E	55T3264	175.00
MA330032	dsPIC33FJ32MC104 44-TQFP Motor Control PIM	dsPIC33F	47W6591	25.00

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DEBUGGERS, PROGRAMMERS, EMULATORS & COMPILERS

1

FLASHER FAMILY OF PRODUCTION TOOLS

Flasher ARM

Flasher is a line of production Flash programming tools available for ARM, Cortex, PowerPC, Renesas, ST Microelectronics, and Toshiba devices. They ease the implementation into a production site by allowing the flash programming to be triggered manually or remotely. Once set up, Flasher can be controlled without the use of PC application in stand-alone mode.

Mfg. Part No.	Description	Stock No.	Price Each
5.05.01 FLASHER 5	Flasher 5	91T5750	498.00
5.07.01 FLASHER ARM	Flasher ARM	91T5751	798.00
5.10.01 FLASHER PPC	Flasher PPC	91T5753	798.00
5.15.01 FLASHER RX	Flasher RX	91T5754	798.00
5.04.01 FLASHER ST7	Flasher ST7	91T5749	498.00
5.09.01 FLASHER STM8	Flasher STM8	91T5752	698.00
5.05.10 FLASHER 5 PRO	Flasher R32C	08X3005	498.00

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J-LINK™ DEVELOPMENT TOOLS

J-Link ULTRA

J-Link™ debug probe line consists of the J-Link, J-Link PRO, and J-Link ULTRA. These devices connect via USB or Ethernet to the Windows host development PC.

Mfg. Part No.	Description	Stock No.	Price Each
8.08.00 J-LINK	J-Link	91T5774	378.00
8.08.90 J-LINK EDU	J-Link EDU	91T5780	60.00
8.12.00 J-LINK PRO	J-Link PRO	91T5782	998.00
BUNDLED UNITS			
8.08.14 J-LINK/PRO BUNDLE (INC	J-Link/Pro Bundle (w/ ARM RDI, J-Flash, Flash Brkpts)	91T5778	898.00
8.16.14	J-Link ULTRA/Pro Bundle (w/ ARM RDI, J-Flash, Flash Brkpts)	91T5787	998.00
8.16.12 J-LINK ULTRA	J-Link ULTRA/ARM RDI Bundle	91T5786	848.00
8.16.27	J-Link ULTRA/Flash Breakpoints Bundle	91T5788	848.00
8.16.11	J-Link ULTRA/J-Flash Bundle	91T5785	898.00

(202225)

J-TRACE PROBES FOR ARM AND CORTEX-M

J-Trace is a line of high speed hardware Trace Probes for ARM and Cortex-M. It connects via USB to the PC host running Windows. J-Trace integrates seamlessly into a wide range of IDEs and are compatible to J-Link.

J-Trace for Cortex-M

Mfg. Part No.	Description	Stock No.	Price Each
8.10.00 J-TRACE ARM	J-Trace ARM	91T5781	1248.00
8.13.00 J-TRACE FOR CORTEX-M	J-Trace for Cortex-M	91T5783	1248.00

(202226)

J-LINK™ AND FLASHER RELATED ADAPTERS

These optional hardware adapters are used industry standard J-Link Debug Probe, and Flash Programmers. These adapters also supports the DIGI JTAG Link, Atmel SAM-ICE, and IAR J-Link.

10-Pin Needle Adapter

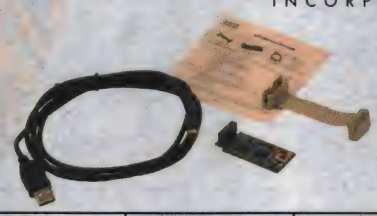
Mfg. Part No.	Description	Stock No.	Price Each
8.06.00 J-LINK 19-PIN CORTEX-M	J-Link 19-pin Cortex-M Adapter	91T5768	30.00
8.06.01 J-LINK RX ADAPTER	J-Link RX Adapter	91T5769	30.00
8.06.02 J-LINK 9-PIN CORTEX-M	J-Link 9-pin Cortex-M Adapter	91T5770	30.00
8.06.04 J-LINK NEEDLE ADAPTER	J-Link Needle Adapter	91T5771	98.00
8.06.03 J-LINK 14PIN TIADAPTER		08X3008	60.00
8.06.05 10-PIN NEEDLE ADAPTER	10-Pin Needle Adapter	91T5772	68.00
8.06.06 J-LINK TI CTI20ADAPTER		08X3009	60.00
8.07.00 JTAG ISOLATOR	J-Link JTAG Isolator	91T5773	248.00
8.07.01 SWD ISOLATOR		08X3011	248.00
8.08.01 J-LINK ARM-14 ADAPTER	J-Link ARM-14 Adapter	91T5775	65.00

(202227)

XDS100v2 USB JTAG EMULATOR

RoHS Compliant Available

Includes:
- XDS100v2 USB JTAG Emulator
- USB cable
- 14-pin JTAG extender cable
- Quick Start Guide



Mfg. Part No.	Stock No.	Price Each 1-9
● XDS100V2 JTAG	78R2896	100.13

(178981)

XDS510 USB JTAG EMULATOR

RoHS Compliant Available

Includes:
- XDS510 USB JTAG Emulator
- USB cable
- CD-ROM with drivers
- Setup instructions
- Warranty registration card

Mfg. Part No.	Stock No.	Price Each 1-4
● XDS510 USB JTAG EMULATOR	45M6803	989.00

(178982)

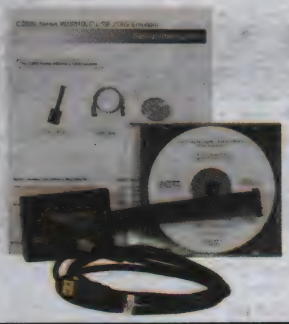
PCB FABRICATION & ASSEMBLY

Quality US-based manufacturers—as fast as 48-hour turnaround!

(197415)

C2000 SERIES XDS510LC JTAG EMULATOR

SPECTRUM DIGITAL INCORPORATED



Includes:
- C2000 Series XDS510LC JTAG Emulator
- USB cable
- CD-ROM with drivers
- Warranty registration card

Mfg. Part No.	Stock No.	Price Each
C2000 XDS510LC USB EMULATOR	78R2863	280.13

(178983)

XDS510 USB PLUS JTAG EMULATOR

RoHS Compliant Available

SPECTRUM DIGITAL INCORPORATED

Includes:
- XDS510 USB PLUS JTAG Emulator with 20 pin CTI Cable
- 20 pin CTI to 14 pin Adapter
- USB cable
- CD-ROM with drivers
- Setup instructions
- Warranty registration card
- Technical Reference Manual

Mfg. Part No.	Stock No.	Price Each 1-4
XDS510USB PLUS JTAG EMULATOR	78R2865	1199.00

(178984)

ST-LINK V2 IN-CIRCUIT DEBUGGER AND PROGRAMMER FOR STM8 AND STM32

RoHS Compliant Available

Features
- 5 V power supplied by a USB connector
- USB 2.0 full speed compatible interface
- USB standard A to mini B cable
- SWIM interface
- JTAG interface
- Direct firmware update feature supported (DFU)
- Status LED which blinks during communication with the PC
- Operating temperature 0 to 50 °C

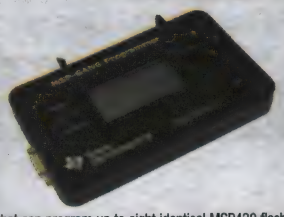
ST-LINK/V2 is an in-circuit debugger and programmer for the STM8 and STM32 microcontroller families. The single wire interface module (SWIM) and JTAG/serial wire debugging (SWD) interfaces are used to communicate with any STM8 or STM32 microcontroller located on an application board.

Mfg. Part No.	Description	Stock No.	Price Each
ST-LINK/V2	STM8 / STM32 In-Circuit Debugger / Programmer	59T6605	21.25

(203482)

MSP430 GANG PROGRAMMER

TEXAS INSTRUMENTS



Features
- 3x Faster than the previous MSP-GANG430 GANG programmer
- Quickly and reliably program Flash or FRAM-based MSP devices
- Both RS-232 and USB interface
- Several programming modes
- Intuitive GUI for configuring, programming and testing production setup
- SD Card slot for storing images
- LCD screen for easy programming without a PC
- Supports up to 8 targets simultaneously
- Supports all current and future MSP430 devices

MSP Gang Programmer is an MSP430 device programmer that can program up to eight identical MSP430 flash or FRAM devices at the same time. The MSP Gang Programmer connects to a host PC using a standard RS-232 or USB connection and provides flexible programming options that allow the user to fully customize the process. The MSP Gang Programmer is provided with an expansion board, called the Gang Splitter, that implements the interconnections

➤CONTINUED➤

MSP430 GANG PROGRAMMER (CONT.)

between the MSP Gang Programmer and multiple target devices. Eight cables are provided that connect the expansion board to eight target devices (via JTAG or Spy-Bi-Wire connectors). The programming can be done with a PC or as a standalone device. A PC-side Graphical User Interface is also available and is DLL-based.

Mfg. Part No.	Description	Stock No.	Price Each
MSP-GANG	MSP430 GANG Programmer	64T3682	254.00

(100982)

CODE COMPOSER DEVELOPMENT TOOLS

TEXAS INSTRUMENTS

Code Composer is a fully integrated development environment (IDE) with DSP-specific functionality. With its familiar MS-Visual C++ like environment, Code Composer lets you edit, build, debug, profile and manage projects from a single unified environment. Other unique features include graphical signal analysis, injection/extraction of data signals via file I/O, multi-processor debugging, automated testing and customization via a C-interpretive scripting language and much more.

Mfg. Part No.	Supports
TMDSCCS-MCUN01	MSP430, C28x and Stellaris
TMDSCCS-ALLN01	C6000, C55x, C54x, C28x, ARM, OMAP, DaVinci, Stellaris and MSP430
TMDSCCS-ALLF01	C6000, C55x, C54x, C28x, ARM, OMAP, DaVinci, Stellaris and MSP430
TMDS3240130	C3x, C4x
TMDSCCSALL-1	C6000/C5000/C2000/OMAP Processors

Mfg. Part No.	Description	Stock No.	Price Each
TMDSCCS-ALLN01	CCS IDE v4.x - Platinum Node Locked 1 User	25R0020	496.00
TMDSCCS-ALLF01	CCS IDE v4.x - Platinum Floating 1 User Pack	25R0015	796.59
TMDS3240130	CC IDE v4.x - C3x, C4x Devices	50B7926	1495.10
TMDSCCSALL-1	CCS IDE v3.3 for ALL TI Embedded Processors	37K4622	3602.19

(74640)

10-PIN TO 20-PIN JTAG ADAPTER MODULE

TEXAS INSTRUMENTS

MDL-ADA2 is a convenient 10-pin to 20-pin JTAG Adapter Module with flexible cable that is designed to convert between the new ARM mini-JTAG connector (10-pin) and the standard ARM JTAG connector (20-pin). With the included flexible 10-pin cable, it can easily connect to small modules using the 10-pin mini-JTAG connector in nearly any orientation.

Mfg. Part No.	Description	Stock No.	Price Each
MDL-ADA2	10 to 20-pin JTAG Adapter Module	45P3740	20.05

(196450)

XDS100 EMULATORS

TEXAS INSTRUMENTS

Features
- USB bus powered, no power supply required
- Supports USB 1.x and USB 2.0 (high speed)
- Compatible with +1.8V to +3.3V processors

XDS100 JTAG scan-based emulator is a robust and efficient JTAG emulation controller supporting debug of a variety of TI devices. It is compatible with Code Composer Studio™.

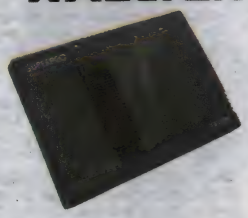
Mfg. Part No.	Description	Stock No.	Price Each
TMDSEMU100V2U-14T	XDS100v2 USB JTAG Emulator 14-pin	64R0681	79.20
TMDSEMU100V2U-20T	XDS100v2 USB JTAG Emulator 20-pin	64R0682	79.20

(196452)

SUPERPRO M UNIVERSAL IC DEVICE PROGRAMMER

RoHS Compliant Available

XELTEK



Features
- Supports 19,880 IC devices from 158 manufactures
- ARM7 MCU for an ultra-fast programming experience
- Programs devices with Vcc as low as 1.2V
- Built-in 48 universal pin drivers
- Over-current and over-voltage protection
- IC manufacturer approved programming algorithms
- ISP/ICP programming capability through optional ISP/ICP adapter
- Compatible with Windows 7 & Vista & XP 32/64 bit
- CE and ROHS Compliant

Specifications
- PC interface: USB2.0 (High speed)
- Stand-alone memory: Compact FLASH Card
- Power supply: AC Adapter: Input AC 90V- 250V, 50/60Hz; DC Output: 12V/2A; power 15W
- Main unit: Dimensions 70mm (L) * 52mm (W) * 15mm (H) Weight 0.85 lbs (0.4Kg)
- Package: Dimensions 150mm (L) * 120mm (W) * 30mm (H) Weight 3 lbs (1.4Kg)

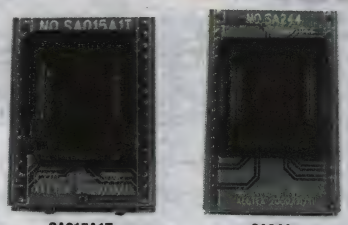
Kit contents
- SuperPro M Programmer with a DIP48 Adapter
- AC adapter
- Software CD

Mfg. Part No.	Description	Stock No.	Price Each
SUPERPRO M	SuperPro M IC Programmer	29T3221	495.00

(194409)

SOCKET ADAPTERS

XELTEK



SA015A1T SA244

Mfg. Part No.	Remark	Top PCB	Bottom PCB	Stock No.	Price Each
SA015A1T	Atmel 27C010,29F040	PL32/D32	B001	96J0342	105.00
SA244	PSD311,89C51, 27C1024,MACH111	PLCC44/D40	B002	96J0343	110.00

(87957)

SUPERPRO 5000/5004GP SOCKET ADAPTERS

RoHS Compliant Available

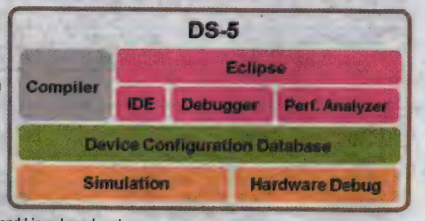
XELTEK

Mfg. Part No.	Description	Stock No.	Price Each
● CX3002	QFP44 (34*40 Socket Size) Adapter	15N3811	285.00
● CX1004	TSOP48 (20*28 Socket Size) Adapter	73P5447	235.00
● CX1031	SOIC20 (22*35.4 Socket Size) Adapter	73P5473	235.00
● CX2044	PLCC44 (28*28 Socket Size) Adapter	73P5502	185.00
● CX3011	QFP64 (32*35 Socket Size) Adapter	73P5520	400.00

(148805)

ARM® DEVELOPMENT STUDIO 5 (DS™-5)

ARM DS Development Tools



Features

- Integrated Development Environment & ARM Compilation Tools
  Customized Eclipse IDE, compatible with third party plug-ins
  ARM Compiler, optimized compilation tool co-developed with ARM cores
  Powerful C/C++ editor and project manager
  Integrated productivity utilities such as the Remote System Explorer, SSH and Telnet terminals, and more.
- DS-5 Debugger
  Debug support for bare-metal, RTOS and Linux-based systems
  Non-intrusive cycle-accurate ETM and PTM instruction trace
  Automated debug sessions for faster debug cycles
  ITM and STM instrumentation trace
  Support for pre-configured and custom platforms
- Streamline Performance Analyzer
  System-wide performance analysis for Linux and Android systems
  Data collection over network - No debug adapter required
  CPU usage statistics per process, thread, function and source code
  Event-based sampling allowing to assign PMU events, such as cache misses, to source code
  Critical path identification and dynamic memory usage analysis
- Real-Time Simulator
  Cortex™-A8 and dual-core Cortex-A9 model simulator
  Typical simulation speed over 250 MHz
  Stop-mode or run-mode debug connection to simulator
  ARM Embedded Linux distribution provided for Linux application debug on Cortex-A8
- ARM Quality on Product and Services
  All the information you need to start developing quality software from day one
  See Resources tab to see product documemtation, videos, blog posts, etc
  Specialist support to advise you on how to get the most out of your tools
  Wide choice of technical training courses

DS-5™ is the toolkit of choice for software developers who want to fully realize the benefits of the ARM Architecture. Comprising features such as the best-in-class ARM Compiler, powerful OS-aware debugger, system-wide performance analyzer, and real-time system simulator, DS-5 is an integrated development environment that assists engineers in delivering optimized and robust software for ARM processors.

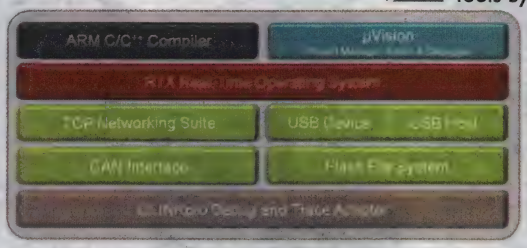
DS-5 PROFESSIONAL EDITION - PERPETUAL LICENSE

Mfg. Part No.	Description	Stock No.	Price Each
DS5PE-KD-30000	DS-5 PRO ED, DOWNLOAD, NL	74T7489	6600.00
DS5PE-KD-40000	DS-5 PRO ED, DOWNLOAD, FL LIC	74T7491	8250.00
DS5PE-KT-30000	DS-5 PRO ED, DVD/CD, NL	74T7493	6600.00
DS5PE-KT-40000	DS-5 PRO ED, DVD/CD, FL LIC	74T3211	8250.00
DS-5 PROFESSIONAL EDITION - TERM LICENSE - 1 YEAR			
DS5PE-KD-30001	DS-5 PRO ED, DOWNLOAD, NL/1YR	74T7490	3300.00
DS5PE-KD-40001	DS-5 PRO ED, DOWNLOAD, FL/1YR	74T7492	4125.00
DS5PE-KT-30001	DS-5 PRO ED, DVD/CD, NL/1YR	74T7494	3300.00
DS5PE-KT-40001	DS-5 PRO ED, DVD/CD, FL/1YR	74T3212	4125.00
SERVICE AND MAINTENANCE			
DS5PE-RD-30000	DS-5 PRO ED, SERV/MAINT, NL/1YR	75T9210	1320.00
DS5PE-RD-40000	DS-5 PRO ED, SERV/MAINT, FL/1YR	75T9211	1650.00

(199448)

MDK-ARM SOFTWARE DEVELOPMENT KIT

KEIL™ Tools by ARM



Features

- Complete support for Cortex-M, Cortex-R4, ARM7, and ARM9 devices
- Industry-leading ARM C/C++ Compilation Toolchain
- µVision4 IDE, debugger, and simulation environment
- Keil RTX deterministic, small footprint real-time operating system (with source code)
- TCP/IP Networking Suite offers multiple protocols and various applications
- USB Device and USB Host stacks are provided with standard driver classes
- ULINKpro enables on-the-fly analysis of running applications and records every executed Cortex-M instruction
- Complete Code Coverage information about your program's execution
- Execution Profiler and Performance Analyzer enable program optimization
- Numerous example projects help you quickly become familiar with MDK-ARM's powerful, built-in features
- CMSIS Cortex Microcontoller Software Interface Standard compliant

MDK-ARM is a complete software development environment for Cortex™-M, Cortex-R4, ARM7™ and ARM9™ processor-based devices that is specifically designed for microcontroller applications. The application is easy to learn and use, yet powerful enough for the most demanding embedded application. All editions provide a complete C/C++ development environment with MDK-Professional including extensive middleware libraries.

MDK-ARM SOFTWARE DEVELOPMENT KITS

Mfg. Part No.	Description	Stock No.	Price Each
MDK-PRO	MDK-PRO MCU NODE LOCKED	74T4589	9500.00
MDK-ARM	MDK-STANDARD MCU NODE LOCKED	74T4585	4895.00
MDK-ARM-F	MDK-STANDARD MCU FLOATING NODE	74T4587	17625.00
MDK-ARM-T	MDK-STANDARD MCU NODE LOCKED/1YR	74T4588	1960.00
MDK-ARM-CM	MDK-STANDARD CORTEX M NODE LOCKED	46W2361	3840.00

(199449)

PK51 PROFESSIONAL 8051 SOFTWARE DEVELOPMENT KIT

RoHS Compliant Available

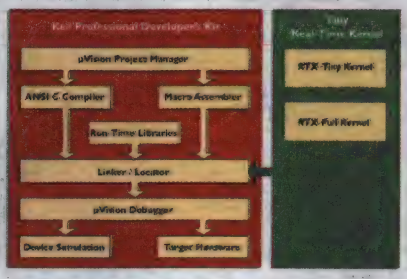
KEIL™ Tools by ARM

Features

- µVision IDE
- Keil Extended 8051 Compilation Tools
- Keil Classic 8051 Compilation Tools
- Target Debuggers
- RTX51 Tiny Real-Time Kernel

Benefits

- Work with a variety of 8051 microcontrollers
- Develop code in C
- Support for the Dallas 390 or Philips 51MX devices
- Create complex, single-chip applications that require a small real-time kernel



PK51 professional developer's kit for the 8051 microcontroller family supports all 8051 derivatives including new devices with extended memory and instruction sets (like the Dallas 390/5240/400, Philips 51MX, and Analog Devices MicroConverters) and classic devices and IP cores from companies like Analog Devices, Atmel, Cypress Semiconductor, Dallas Semiconductor, Goal, Hynix, Infineon, Intel, NXP (founded by Philips), OKI, Silicon Labs, SMSC, STMicroelectronics, Synopsis, TDK, Temic, Texas Instruments, and Winbond.

PK51 PRO EDITION 8051 SOFTWARE DEVELOPMENT KITS

Mfg. Part No.	Description	Stock No.	Price Each
PK51	PK51 PRO 8051 S/W DEV KIT, NL	74T4920	3295.00
PK51-F	PK51 PRO 8051 S/W DEV KIT, FL LIC	74T4921	11865.00
PK51-T	PK51 PRO 8051 S/W DEV KIT, NL/1YR	74T4922	1320.00

(199450)

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µC/OS-II™ REAL-TIME OPERATING SYSTEM

Micriµm
For the Way Engineers Work

Features
- Manages up to 250 application tasks
- Constant and deterministic execution time for most services provided
- Execution times do not depend on the number of tasks running in the application
- Unprecedented ease-of-use combined with an extremely short learning curve enables rapid time-to-market advantage.
- Runs on the largest number of processor architectures with ports easily downloaded.
- Scalability--Between 5 Kbytes to 24 Kbytes I Max interrupt disable time: 200 clock cycles (typical configuration, ARM9, no wait states).
- Sufficiently robust to meet rigorous safety-critical system requirements
- Complete ANSI C source code is available for a 30-day trial use.

Applications
- Avionics
- Medical Equipment/Devices
- Data Communications Equipment
- White Goods (Appliances)
- Mobile Phones, PDAs, MIDs
- Industrial Controls
- Consumer Electronics
- Automotive

µC/OS-II is a portable, ROMable, scalable, preemptive, real-time deterministic multitasking kernel for microprocessors, microcontrollers and DSPs delivered with complete 100% ANSI C source code and in-depth documentation. Offered in a royalty-free single product license which allow software components to be embedded into an unlimited number of units for the life-time of the end product. Also available in per product line or CPU platform licenses. Go online or call.

Mfg. Part No.	Supported Device	Single Product License Stock No.	Price Each
SUPPORTED DEVICES BY ACTEL			
KRN-K2XX-A2FX00-P-P1-A	A2Fx00	47T0319	7500.00
KRN-K2XX-M1FUSN-P-P1-A	M1 Fusion	47T0394	7500.00
SUPPORTED DEVICES BY ALTERA			
KRN-K2XX-CYCIII-P-P1-A	Cyclone III-EP3Cxxx	47T0328	7500.00
KRN-K2XX-CYCLIV-P-P1-A	Cyclone IV-EP4Exxx	47T0331	7500.00
SUPPORTED DEVICES BY ANALOG DEVICES			
KRN-K2XX-ADSPBF-P-P1-A	Blackfin ADSP-BF5xx	47T0304	7500.00
SUPPORTED DEVICES BY ATMEL			
KRN-K2XX-AP7000-P-P1-A	AP7000	47T0310	7500.00
KRN-K2XX-AVRUCA-P-P1-A	AVR2UC3A	47T0313	7500.00
KRN-K2XX-AVRUCB-P-P1-A	AVR2UC3B	47T0316	7500.00
KRN-K2XX-MEG128-P-P1-A	ATmega128	47T0388	7500.00
KRN-K2XX-MEG256-P-P1-A	ATmega256	47T0391	7500.00
KRN-K2XX-RM9200-P-P1-A	AT91RM9200	47T0427	7500.00
KRN-K2XX-SAM3NX-P-P1-A	AT91SAM3N	47T0439	7500.00
KRN-K2XX-SAM3SX-P-P1-A	AT91SAM3S	47T0442	7500.00
KRN-K2XX-SAM3UX-P-P1-A	AT91SAM3U	47T0445	7500.00
KRN-K2XX-SAM7LX-P-P1-A	AT91SAM7L	47T0448	7500.00
KRN-K2XX-SAM7SX-P-P1-A	AT91SAM7S	47T0451	7500.00
KRN-K2XX-SAM7XX-P-P1-A	AT91SAM7X	47T0454	7500.00
KRN-K2XX-SAM9GX-P-P1-A	AT91SAM9Gxx	47T0457	7500.00
KRN-K2XX-SAM9MX-P-P1-A	AT91SAM9Mxx	47T0460	7500.00
KRN-K2XX-SAM9RL-P-P1-A	AT91SAM9RL	47T0463	7500.00
KRN-K2XX-SAM9XX-P-P1-A	AT91SAM9x	47T0466	7500.00
KRN-K2XX-SM9160-P-P1-A	AT91SAM9160	47T0484	7500.00
KRN-K2XX-SM9261-P-P1-A	AT91SAM9261	47T0487	7500.00
KRN-K2XX-SM9263-P-P1-A	AT91SAM9263	47T0490	7500.00
KRN-K2XX-SM9G45-P-P1-A	AT91SAM9G45	47T0478	7500.00
KRN-K2XX-SM9M10-P-P1-A	AT91SAM9M10	47T0481	7500.00
KRN-K2XX-XME128-P-P1-A	XMEGA128	47T0550	7500.00
SUPPORTED DEVICES BY CYPRESS			
KRN-K2XX-PSOC5X-P-P1-A	PSoC5	47T0421	7500.00
SUPPORTED DEVICES BY FREESCALE			
KRN-K2XX-CFEMAC-P-P1-A	Coldfire with EMAC	47T0322	7500.00
KRN-K2XX-CFXXXX-P-P1-A	Coldfire	47T0325	7500.00
KRN-K2XX-FREIMX-P-P1-A	i.MX	47T0340	7500.00
KRN-K2XX-HCS08X-P-P1-A	HCS08	47T0343	7500.00
KRN-K2XX-HCS12A-P-P1-A	HCS12	47T0346	7500.00
KRN-K2XX-HCS12X-P-P1-A	HCS12X	47T0349	7500.00
KRN-K2XX-KINETI-P-P1-A	Kinetis	47T0358	7500.00
KRN-K2XX-PP55VL-P-P1-A	MPC55xx-VLE	47T0412	7500.00
KRN-K2XX-PP55XX-P-P1-A	MPC55xx	47T0415	7500.00
KRN-K2XX-PP8349-P-P1-A	MPC8349E	47T0418	7500.00
SUPPORTED DEVICES BY MICROCHIP			
KRN-K2XX-DPIC30-P-P1-A	dsPIC30	47T0334	7500.00
KRN-K2XX-DPIC33-P-P1-A	dsPIC33	47T0337	7500.00
KRN-K2XX-PIC24X-P-P1-A	PIC24xx	47T0406	7500.00
KRN-K2XX-PIC32X-P-P1-A	PIC32xx	47T0409	7500.00
SUPPORTED DEVICES BY NXP			
KRN-K2XX-LPC17X-P-P1-A	LPC17xx	47T0367	7500.00
KRN-K2XX-LPC21X-P-P1-A	LPC21xx	47T0370	7500.00
KRN-K2XX-LPC23X-P-P1-A	LPC23xx	47T0373	7500.00
KRN-K2XX-LPC24X-P-P1-A	LPC24xx	47T0376	7500.00
KRN-K2XX-LPC32X-P-P1-A	LPC32x0	47T0379	7500.00
SUPPORTED DEVICES BY RENESAS			
KRN-K2XX-78K0RX-P-P1-A	78K0R	47T0559	7500.00
KRN-K2XX-78K0XX-P-P1-A	78K0	47T0562	7500.00

➤CONTINUED➤

µC/OS-II™ REAL-TIME OPERATING SYSTEM (CONT.)

Mfg. Part No.	Supported Device	Single Product License Stock No.	Price Each
SUPPORTED DEVICES BY RENESAS			
KRN-K2XX-H8SAXX-P-P1-A	H8S	47T0352	7500.00
KRN-K2XX-H8SXAX-P-P1-A	H8SX	47T0355	7500.00
KRN-K2XX-M16CXX-P-P1-A	M16C	47T0397	7500.00
KRN-K2XX-M32CXX-P-P1-A	M32C	47T0400	7500.00
KRN-K2XX-R32CXX-P-P1-A	R32C	47T0436	7500.00
KRN-K2XX-RL78XX-P-P1-A	RL78	47T0424	7500.00
KRN-K2XX-RX610X-P-P1-A	RX610	47T0430	7500.00
KRN-K2XX-RX62XN-P-P1-A	RX62xxN	47T0433	7500.00
KRN-K2XX-SH2AFP-P-P1-A	SH2A FPU	47T0469	7500.00
KRN-K2XX-SH2AXX-P-P1-A	SH2A	47T0472	7500.00
KRN-K2XX-SH2XXX-P-P1-A	SH2	47T0475	7500.00
KRN-K2XX-V850ES-P-P1-A	V850ES	47T0547	7500.00
SUPPORTED DEVICES BY ST MICROELECTRONICS			
KRN-K2XX-STM100-P-P1-A	STM32F100xx	47T0499	7500.00
KRN-K2XX-STM101-P-P1-A	STM32F101xx	47T0502	7500.00
KRN-K2XX-STM102-P-P1-A	STM32F102xx	47T0505	7500.00
KRN-K2XX-STM103-P-P1-A	STM32F103xx	47T0508	7500.00
KRN-K2XX-STM105-P-P1-A	STM32F105xx	47T0511	7500.00
KRN-K2XX-STM107-P-P1-A	STM32F107xx	47T0514	7500.00
KRN-K2XX-STM205-P-P1-A	STM32F205xx	47T0517	7500.00
KRN-K2XX-STM207-P-P1-A	STM32F207xx	47T0520	7500.00
KRN-K2XX-STM215-P-P1-A	STM32F215xx	47T0523	7500.00
KRN-K2XX-STM217-P-P1-A	STM32F217xx	47T0526	7500.00
KRN-K2XX-STR7XX-P-P1-A	STR7xx	47T0529	7500.00
KRN-K2XX-STR9XX-P-P1-A	STR9xx	47T0532	7500.00
SUPPORTED DEVICES BY TEXAS INSTRUMENTS			
KRN-K2XX-430AXX-P-P1-A	MSP430X	47T0553	7500.00
KRN-K2XX-430XXX-P-P1-A	MSP430	47T0556	7500.00
KRN-K2XX-AM1XXX-P-P1-A	AM1x	47T0307	7500.00
KRN-K2XX-LM3S9B-P-P1-A	LM3S9Bxx	47T0364	7500.00
KRN-K2XX-LM3SXX-P-P1-A	LM3Sxxx	47T0361	7500.00
KRN-K2XX-OMAPL1-P-P1-A	OMAP-L1x	47T0403	7500.00
KRN-K2XX-TMS470-P-P1-A	TMS470xx	47T0538	7500.00
KRN-K2XX-TMS570-P-P1-A	TMS570	47T0541	7500.00
SUPPORTED DEVICES BY TOSHIBA			
KRN-K2XX-TMPM3X-P-P1-A	TMPM3xx	47T0535	7500.00
SUPPORTED DEVICES BY XILINX			
KRN-K2XX-LX16XX-P-P1-A	Spartan6-LX16	47T0382	7500.00
KRN-K2XX-LX9XXX-P-P1-A	Spartan6-LX9	47T0385	7500.00
KRN-K2XX-SP601X-P-P1-A	Spartan6-SP601	47T0493	7500.00
KRN-K2XX-SP605X-P-P1-A	Spartan6-SP605	47T0496	7500.00
KRN-K2XX-VIRTEX-P-P1-A	Virtex5-ML505	47T0544	7500.00

(196338)

µC/OS-II™ AND µC/OS-III™ DEVELOPMENT BOARDS AND REFERENCE BOOKS

Micriµm
For the Way Engineers Work

Mfg. Part No.	Description	Stock No.	Price Each
DEVELOPMENT BOARDS AND REFERENCE BOOK KITS			
KIT-K3XX-STF107-P-P1	STM32F107 Eval Brd w/ µC/OS-III Reference Book	47T0300	119.95
REFERENCE BOOKS			
BKX-K3XX-LP1700-P-P1	µC/OS-III Reference Book for the NXP LPC1700	46T9807	69.95
BKX-K3XX-RX62NX-P-P1	µC/OS-III Reference Book for the Renesas RX62N	46T9808	69.95
BKX-K3XX-SH7216-P-P1	µC/OS-III Reference Book for the Renesas SH7216	46T9809	69.95
BKX-K3XX-STF107-P-P1	µC/OS-III Reference Book for the STM32	46T9810	69.95
BKX-K3XX-TILM3S-P-P1	µC/OS-III Reference Book for the TI Stellaris	46T9811	69.95
BKX-TCPX-STF107-P-P1	µC/TCP-IP Reference Book for the STM32F107	46T9812	69.95
DEVELOPMENT BOARDS			
BRD-EVAL-STF107-P-P1	Micrium µC/Eval-STM32F107 Board	46T9813	59.95

(196351)

ISPMACH 4000 CPLD FAMILY

RoHS Compliant Available

LATTICE SEMICONDUCTOR

Features
- SuperFAST Performance
- Low Power Consumption
- Easy System Integration
- Easy to Design

Mfg. Part No.	LUTs (No.)	Prop. Delay (nS)	Freq. (MHz)	I/O (No.)	Pkg	Stock No.	Price Each 1-24
● LC4256V-75TN100C	256	7.5	322	64	100-TQFP	97K2842	21.45

(210352)

FLASH MEMORY ICS

SERIAL FLASH ICs

RoHS Compliant Available

Atmel

BLOCK ERASE

Mfg. Part No.	Mem. Size (Mbit)	Clock Freq. Max. (MHz)	Supply Voltage (V)	Package	Stock No.	Price Each 1-24
● AT25DF041A-SH-B	4	70	2.7V to 3.6V	8-SOIC	68T4166	1.16
● AT25DF041A-SSHF-B	4	70	2.3V to 3.6V	8-SOIC	68T4172	1.18
● AT25DF081A-SH-B	8	100	2.7V to 3.6V	8-SOIC	68T4180	1.61
● AT25DF641-S3H-B	64	100	2.7V to 3.6V	16-SOIC	68T4196	4.18
DATAFLASH						
● AT45DB011D-SH-T	1	66	2.7V to 3.6V	8-SOIC	72T3094	0.86
● AT45DB011D-SSH-B	1	66	2.7V to 3.6V	8-SOIC	68T4678	0.86
AT45DB041D-SSU-2.5	4	50	2.5V to 3.6V	8-SOIC	68T4689	1.50
● AT45DB041D-SU	4	66	2.7V to 3.6V	8-SOIC	68T4690	1.39
● AT45DB081D-MU	8	66	2.7V to 3.6V	8-DFN	68T4692	2.08
● AT45DB081D-SSU-2.5	8	50	2.5V to 3.6V	8-SOIC	68T4695	1.85
● AT45DB321D-MU	32	66	2.7V to 3.6V	8-DFN	68T4708	3.57
● AT45DB321D-TU	32	66	2.7V to 3.6V	28-TSOP	68T4712	3.69

(197969)

SST SERIAL FLASH MEMORY

RoHS Compliant Available

MICROCHIP

SST Serial Flash offers lower pin count means less space, smaller PCBs, reduced system costs and lower power consumption.

SERIAL FLASH MEMORY

Mfg. Part No.	Size (Mbit)	Freq (MHz)	Op-Temp. (°C)	Pkg.	Stock No.	Price Each 1-25
● SST25VF512A-33-4C-SAE	0.5	33	0 to 70	8-SOIC	92R4588	0.41
● SST25VF010A-33-4I-SAE	1	33	-40 to 85	8-SOIC	92R4536	0.63
● SST25VF020-20-4C-SAE	2	20	0 to 70	8-SOIC	92R4541	0.75
● SST25VF020B-80-4I-SAE	2	80	-40 to 85	8-SOIC	92R4555	0.68
● SST25VF040B-80-4I-S2AE	4	80	-40 to 85	8-SOIC	92R4566	0.93
● SST25VF016B-50-4C-S2AF	16	50	0 to 70	8-SOIC	82R4467	1.12
● SST25VF016B-50-4I-S2AF	16	50	-40 to 85	8-SOIC	82R4471	1.24
● SST25VF016B-75-4I-S2AF	16	80	-40 to 85	8-SOIC	82R4475	1.65
● SST25VF032B-80-4I-S2AF	32	80	-40 to 85	8-SOIC	92R4559	2.04
● SST25VF064C-80-4I-SCE	64	80	-40 to 85	16-SOIC	92R4572	3.87
FIRMWARE FLASH MEMORY						
● SST49LF008A-33-4C-NHE	8	33	0 to 70	32-PLCC	92R4948	4.84

(194887)

SST PARALLEL FLASH MEMORY

RoHS Compliant Available

MICROCHIP

SST Parallel Flash is based on SuperFlash® technology featuring high performance, superior reliability, and low power consumption. The MPF™ (Multi-Purpose Flash) products, including MPF+ and Advanced MPF+, provide fast read and program times with features such as erase-suspend/erase-resume, boot block, security ID, hardware reset and heightened protection features.

PARALLEL FLASH MEMORY

Mfg. Part No.	Size (Mbit)	Config.	Op-Temp. (°C)	Pkg.	Stock No.	Price Each 1-25
● SST39VF010-70-4C-WHE	1	128K x 8bit	0 to 70	32-TSOP	92R4739	0.95
● SST39SF020A-70-4C-PHE	2	256K x 8bit	0 to 70	32-PLCC	92R4710	1.43
● SST39SF040-70-4C-NHE	4	512K x 8	0 to 70	32-PLCC	92R4727	1.43
● SST39VF040-70-4C-NHE	4	512K x 8	0 to 70	32-PLCC	92R4755	1.75
● SST39VF040-70-4C-WHE	4	512K x 8	0 to 70	32-TSOP	92R4757	1.91
● SST39VF040-70-4I-NHE	4	512K x 8	-40 to 85	32-PLCC	92R4759	1.75
● SST39VF040-70-4I-WHE	4	512K x 8	-40 to 85	32-TSOP	92R4761	1.91
● SST39VF400A-70-4C-B3KE	4	256K x 16bit	0 to 70	48-BGA	92R4839	1.31
● SST39VF400A-70-4C-EKE	4	256K x 16bit	0 to 70	48-TSOP	92R4842	1.21
● SST39VF400A-70-4I-B3KE	4	256K x 16bit	-40 to 85	48-BGA	92R4845	1.48
● SST39VF400A-70-4I-EKE	4	256K x 16bit	-40 to 85	48-TSOP	92R4848	1.40
● SST39VF800A-70-4C-B3KE	8	512K x 16	0 to 70	48-BGA	92R4875	1.47
● SST39VF800A-70-4C-EKE	8	512K x 16	0 to 70	48-TSOP	92R4877	1.38
● SST39VF801C-70-4C-B3KE	8	512K x 16	0 to 70	48-BGA	66T9308	1.24
● SST39VF801C-70-4C-EKE	8	512K x 16	0 to 70	48-TSOP	66T9310	1.17
● SST39VF801C-70-4C-MAQE	8	512K x 16	0 to 70	48-WFBGA	66T9312	1.69
● SST39VF801C-70-4I-B3KE	8	512K x 16	-40 to 85	48-BGA	66T9314	1.24
● SST39VF801C-70-4I-EKE	8	512K x 16	-40 to 85	48-TSOP	66T9316	1.17
● SST39VF801C-70-4I-MAQE	8	512K x 16	-40 to 85	48-WFBGA	66T9318	1.69
● SST39VF802C-70-4C-B3KE	8	512K x 16	0 to 70	48-BGA	66T9320	1.24
● SST39VF802C-70-4C-EKE	8	512K x 16	0 to 70	48-TSOP	66T9322	1.17
● SST39VF802C-70-4C-MAQE	8	512K x 16	0 to 70	48-WFBGA	66T9324	1.69
● SST39VF802C-70-4I-B3KE	8	512K x 16	-40 to 85	48-BGA	66T9326	1.24
● SST39VF802C-70-4I-EKE	8	512K x 16	-40 to 85	48-TSOP	66T9328	1.17

➤CONTINUED➤

SST PARALLEL FLASH MEMORY (CONT.)

Mfg. Part No.	Size (Mbit)	Config.	Op-Temp. (°C)	Pkg.	Stock No.	Price Each 1-25
● SST39VF802C-70-4I-MAQE	8	512K x 16	-40 to 85	48-WFBGA	66T9330	1.69
● SST39VF1601C-70-4C-B3KE	16	1M x 16bit	0 to 70	48-BGA	92R4773	1.65
● SST39VF1601C-70-4I-EKE	16	1M x 16bit	-40 to 85	48-TSOP	92R4778	1.57
● SST39VF1681-70-4C-EKE	16	2M x 8bit	0 to 70	48-TSOP	92R4794	2.30
● SST39VF3201B-70-4C-EKE	32	2M x 16bit	0 to 70	48-TSOP	92R4824	2.39
● SST38VF6404-90-5C-B3KE	64	4M x 16bit	0 to 70	48-BGA	92R4636	5.34
● SST38VF6404-90-5C-EKE	64	4M x 16bit	0 to 70	48-TSOP	92R4637	5.14

(194888)

S29GL SERIES MIRRORBIT FLASH MEMORY

RoHS Compliant Available

SPANSION®

FEATURES

- Fast Page Access Time: 25ns
- 100,000 Erase Cycles (Typ.) per Sector
- 20 yr. Data Retention (Typ.)
- Hardware Reset Input Resets Device
- Support for CFI (Common Flash Interface)
- Single 3V Read/Program/Erase

DENSITY: 32 Mb

Mfg. Part No.	T_{acc} (ns)	Write Protection Feature	Pkg.	Stock No.	Price Each 1-9
● S29GL032N90BFI030	90	Highest Sector	48-FPBGA	72M5822	0.95
S29GL032N90FFI040	90	Lowest Sector	64-BGA	12P0106	1.54
● S29GL032N90TFI040	90	Lowest Sector	48-TSOP	14P9352	0.99
● S29GL032N90BFI040	90	Lowest Sector	48-BGA	59M8842	0.95
● S29GL032N90FFI010	90	Highest Sector	64-BGA	59M8843	1.09
● S29GL032N90FFI020	90	Lowest Sector	64-BGA	59M8844	1.09
● S29GL032N90FFI030	90	Highest Sector	64-BGA	59M8845	1.04
● S29GL032N90TFI010	90	Highest Sector	56-TSOP	59M8846	1.02
● S29GL032N90TFI020	90	Lowest Sector	56-TSOP	59M8847	1.09
● S29GL032N90TFI030	90	Highest Sector	48-TSOP	59M8848	0.99
DENSITY: 64 Mb					
● S29GL064S70BHI030	70	Highest Sector	48-BGA	44X7068	1.19
● S29GL064S70BHI040	70	Lowest Sector	48-BGA	44X7069	1.19
● S29GL064S70FHI010	70	Highest Sector	64-BGA	44X7070	1.19
● S29GL064S70FHI020	70	Lowest Sector	64-BGA	44X7071	1.19
● S29GL064S70TFI010	70	Highest Sector	56-TSOP	44X7072	1.10
● S29GL064S70TFI020	70	Lowest Sector	56-TSOP	44X7073	1.10
● S29GL064S70TFI030	70	Highest Sector	48-TSOP	44X7074	1.10
● S29GL064S70TFI040	70	Lowest Sector	48-TSOP	44X7075	1.10
● S29GL064N90TFI060	90	Highest Sector	48-TSOP	12P0110	1.42
● S29GL064N90TFI070	90	Lowest Sector	48-TSOP	89M2721	1.32
● S29GL064N90BFI030	90	Highest Sector	48-BGA	12P0108	1.20
● S29GL064N90FFI020	90	Lowest Sector	64-BGA	12P0109	1.39
● S29GL064N90FFI040	90	Lowest Sector	64-BGA	14P9353	1.29
● S29GL064N90FFI010	90	Highest Sector	64-BGA	32R8087	1.39
● S29GL064N90TFI010	90	Highest Sector	56-TSOP	59M8850	1.44
● S29GL064N90TFI020	90	Lowest Sector	56-TSOP	59M8851	1.44
● S29GL064N90TFI030	90	Highest Sector	48-TSOP	59M8852	1.20
● S29GL064N90TFI040	90	Lowest Sector	48-TSOP	59M8853	1.29
● S29GL064N11TFIV20	110	Lowest Sector	56-TSOP	14N7120	1.34
● S29GL064N11FFIV10	110	Highest Sector	64-FBGA	43P9772	1.39
● S29GL064N11TFIV10	110	Highest Sector	56-TSOP	83P3965	1.34
DENSITY: 128 Mb					
● S29GL128P90TFIR10	90	Highest Sector	56-TSOP	34M8722	2.67
● S29GL128P90TFIR20	90	Lowest Sector	56-TSOP	34M8723	2.67
S29GL128P90FAIR10	90	Highest Sector	64-FBGA	89M5366	2.83
● S29GL128S90TFI020	90	Lowest Sector	56-TSOP	63T2577	2.03
● S29GL128P10FFI010	100	Highest Sector	64-BGA	34M8714	2.83
● S29GL128P10TFI010	100	Highest Sector	56-TSOP	34M8716	2.67
● S29GL128P90FFIR20	90	Lowest Sector	64-BGA	72M6095	2.83
● S29GL128P90FFIR10	90	Highest Sector	64-BGA	14N7122	2.83
● S29GL128P10FFI010	100	Highest Sector	64-BGA	34M8714	2.83
● S29GL128P10FFI020	100	Lowest Sector	64-BGA	34M8715	2.83
● S29GL128P10TFI010	100	Highest Sector	56-TSOP	34M8716	2.67
● S29GL128P10TFI020	100	Lowest Sector	56-TSOP	34M8717	2.67
● S29GL128P11TFI020	110	Lowest Sector	56-TSOP	34M8721	2.87
● S29GL128P11FFIV10	110	Highest Sector	64-FBGA	89M5364	2.83
● S29GL128P11FFIV20	110	Lowest Sector	64-FBGA	89M5365	2.83
● S29GL128P11TFIV10	110	Highest Sector	56-TSOP	12P0112	2.67
● S29GL128P11FFI010	110	Highest Sector	64-BGA	34M8718	2.83
● S29GL128P11FFI020	110	Lowest Sector	64-BGA	34M8719	4.80
● S29GL128P11TFI010	110	Highest Sector	56-TSOP	34M8720	2.87
● S29GL128P11TFI020	110	Lowest Sector	56-TSOP	34M8721	2.87
● S29GL128P90TFIR10	90	Highest Sector	56-TSOP	34M8722	2.67

➤CONTINUED➤

S29GL SERIES MIRRORBIT FLASH MEMORY (CONT.)

DENSITY: 128 Mb

Mfg. Part No.	T_{acc} (ns)	Write Protection Feature	Pkg.	Stock No.	Price Each 1-9
S29GL128P90TFIR20	90	Lowest Sector	56-TSOP	34M8723	2.67
S29GL128P90TFCR10	90	Highest Sector	56-TSOP	89M5371	2.48
S29GL128S10DHIV20	100	Lowest Sector	64-FBGA	63T2563	1.91
S29GL128S10DHI010	100	Highest Sector	64-FBGA	63T2564	2.07
S29GL128S10DHI020	100	Lowest Sector	64-FBGA	63T2565	2.07
S29GL128S10TFI010	100	Highest Sector	56-TSOP	63T2568	2.03
S29GL128S10TFI020	100	Lowest Sector	56-TSOP	63T2569	2.03
S29GL128S90TFI010	90	Highest Sector	56-TSOP	63T2576	2.03
DENSITY: 256 Mb					
S29GL256S90TFI020	90	Lowest Sector	56-TSOP	63T2594	3.17
S29GL256P90TFIR10	90	Highest Sector	56-TSOP	34M8732	3.78
S29GL256P90TFIR20	90	Lowest Sector	56-TSOP	34M8733	3.78
S29GL256P90FFIR10	90	Highest Sector	64-BGA	14N7123	3.92
S29GL256P90FFIR20	90	Lowest Sector	64-BGA	14N7124	3.92
S29GL256P90TFCR10	90	Highest Sector	56-TSOP	89M5380	3.58
S29GL256S90TFI010	90	Highest Sector	56-TSOP	63T2593	3.17
S29GL256S10TFI010	100	Highest Sector	56-TSOP	51T5135	3.17
S29GL256S10DHIV10	100	Highest Sector	64-FBGA	63T2578	3.26
S29GL256S10DHIV20	100	Lowest Sector	64-FBGA	63T2579	3.26
S29GL256S10DHI010	100	Highest Sector	64-FBGA	63T2580	3.26
S29GL256S10TFI020	100	Lowest Sector	56-TSOP	63T2584	3.17
S29GL256P10FFI020	100	Lowest Sector	64-BGA	34M8725	3.92
S29GL256P10TFI010	100	Highest Sector	56-TSOP	34M8726	4.06
S29GL256P10TFI020	100	Lowest Sector	56-TSOP	34M8727	3.78
S29GL256P10TFI010	100	Highest Sector	56-TSOP	34M8726	4.06
S29GL256P10FFI010	100	Highest Sector	64-BGA	34M8724	3.92
S29GL256P11TFI010	110	Highest Sector	56-TSOP	34M8730	4.06
S29GL256P11TFI020	110	Lowest Sector	56-TSOP	34M8731	3.78
S29GL256P11FFIV10	110	Highest Sector	64-FBGA	89M5376	3.92
S29GL256P11TFIV20	110	Lowest Sector	56-TSOP	72M6096	3.78
S29GL256P11FFI010	110	Highest Sector	64-BGA	34M8728	4.21
S29GL256P11FFI020	110	Lowest Sector	64-BGA	34M8729	3.92
S29GL256P11TFI010	110	Highest Sector	56-TSOP	34M8730	4.06
S29GL256P11TFI020	110	Lowest Sector	56-TSOP	34M8731	3.78
DENSITY: 512 Mb					
S29GL512P10FFIR10	100	Highest Sector	64-BGA	14N7125	6.30
S29GL512S10FHI010	100	Highest Sector	64-FBGA	05W4746	5.30
S29GL512P10TFIR10	100	Highest Sector	56-TSOP	89M5388	6.03
S29GL512P10FFIR10	100	Highest Sector	64-BGA	14N7125	6.30
S29GL512P10FFIR20	100	Lowest Sector	64-BGA	14N7126	6.30
S29GL512P10FFCR10	100	Highest Sector	64-BGA	89M5383	6.10
S29GL512P10TFCR10	100	Highest Sector	56-TSOP	89M5385	5.83
S29GL512P10TFIR20	100	Lowest Sector	56-TSOP	89M5389	6.03
S29GL512S10DHI010	100	Highest Sector	64-FBGA	48T7580	5.30
S29GL512S10DHI020	100	Lowest Sector	64-FBGA	48T7581	5.30
S29GL512S10TFI010	100	Highest Sector	56-TSOP	48T7582	5.56
S29GL512S10TFI020	100	Lowest Sector	56-TSOP	48T7583	5.20
S29GL512S11TFI020	110	Lowest Sector	56-TSOP	48T7591	5.20
S29GL512S11DHIV10	110	Highest Sector	64-FBGA	48T7584	5.30
S29GL512S11DHIV20	110	Lowest Sector	64-FBGA	48T7585	5.30
S29GL512P11TFI010	110	Highest Sector	56-TSOP	34M8740	6.58
S29GL512P11FFI010	110	Highest Sector	64-BGA	34M8738	6.30
S29GL512P11FFI020	110	Lowest Sector	64-BGA	34M8739	6.30
S29GL512P11TFI010	110	Highest Sector	56-TSOP	34M8740	6.58
S29GL512P11TFI020	110	Lowest Sector	56-TSOP	34M8741	6.03
S29GL512S11TFI010	110	Highest Sector	56-TSOP	48T7590	5.20
S29GL512S11TFIV10	110	Highest Sector	56-TSOP	48T7588	5.20
S29GL512S11TFIV20	110	Lowest Sector	56-TSOP	48T7589	5.20
S29GL512P12FFIV20	120	Lowest Sector	64-FBGA	32R8090	6.30
S29GL512P12FFIV10	120	Highest Sector	64-FBGA	89M5390	6.30
DENSITY: 1 Gb					
S29GL01GS10DHI010	100	Highest Sector	64-FBGA	39T5692	7.44
S29GL01GS10DHI020	100	Lowest Sector	64-FBGA	39T5693	7.44
S29GL01GS10TFI010	100	Highest Sector	56-TSOP	39T5694	7.85
S29GL01GS10TFI020	100	Lowest Sector	56-TSOP	39T5695	7.34
S29GL01GS11DHI010	110	Highest Sector	64-FBGA	39T5696	7.44
S29GL01GS11DHI020	110	Lowest Sector	64-FBGA	39T5697	7.44
S29GL01GS11TFI010	110	Highest Sector	56-TSOP	39T5700	7.34
S29GL01GS11DHIV10	110	Highest Sector	64-FBGA	48T7576	7.44
S29GL01GS11TFI020	110	Lowest Sector	56-TSOP	39T5701	7.34
S29GL01GP11TFIR10	110	Highest Sector	56-TSOP	27M0849	9.36
S29GL01GP11FAIR10	110	Highest Sector	64-FBGA	63T2561	9.60

CONTINUED

S29GL SERIES MIRRORBIT FLASH MEMORY (CONT.)

DENSITY: 1 Gb

Mfg. Part No.	T_{acc} (ns)	Write Protection Feature	Pkg.	Stock No.	Price Each 1-9
S29GL01GP11FAIR20	110	Lowest Sector	64-FBGA	34M8702	9.60
S29GL01GP11FFCR10	110	Highest Sector	64-FBGA	89M5360	9.41
S29GL01GS11DHIV20	110	Lowest Sector	64-FBGA	48T7577	7.44
S29GL01GS11TFIV10	110	Highest Sector	56-TSOP	39T5698	7.34
S29GL01GP11FFIR10	110	Highest Sector	64-BGA	43P9768	9.60
S29GL01GP11FFIR20	110	Lowest Sector	64-BGA	34M8703	9.60
S29GL01GP11TFIR20	110	Lowest Sector	56-TSOP	77M0386	9.36
S29GL01GP11TFCR10	110	Highest Sector	56-TSOP	89M5362	9.17
S29GL01GP11TFIR10	110	Highest Sector	56-TSOP	27M0849	9.36
S29GL01GP12FFI010	120	Highest Sector	64-BGA	27M0850	9.60
S29GL01GP12FFI020	120	Lowest Sector	64-BGA	34M8704	13.36
S29GL01GP12TFI020	120	Lowest Sector	56-TSOP	34M8705	13.02
S29GL01GP12TFI010	120	Highest Sector	56-TSOP	27M0851	9.36
S29GL01GP13FFIV10	130	Highest Sector	64-BGA	27M0852	9.60
2 Gb					
S70GL02GS11FHI010	110	Highest Sector	64-FBGA	63T2595	15.16

(94358)

SERIAL NOR FLASH MEMORY DEVICES

NEW

RoHS Compliant Available

SPANSION®

FEATURES

- Fast Page Access Time: 25ns
- 100,000 Erase Cycles (Typ.) per Sector
- 20 yr. Data Retention (Typ.)
- Hardware Reset Input Resets Device
- Support for CFI (Common Flash Interface)
- Single 3V Read/Program/Erase

FL-K FAMILY

Mfg. Part No.	Size (Mbit)	Interface	Pkg.	Stock No.	Price Each 1-9
S25FL204K0TMFI011	4	Serial, SPI	8-SOIC	45W4062	0.25
S25FL204K0TMFI041	4	Serial, SPI	8-SOIC	45W4065	0.25
S25FL204K0TMFI010	4	SPI	8-SOIC	45W4061	0.24
S25FL204K0TMFI040	4	SPI	8-SOIC	45W4064	0.24
S25FL204K0TMFI010	4	SPI	8-SOIC	45W4061	0.24
S25FL204K0TMFI040	4	SPI	8-SOIC	45W4064	0.24
S25FL204K0TMFI011	4	Serial, SPI	8-SOIC	45W4062	0.25
S25FL204K0TMFI041	4	Serial, SPI	8-SOIC	45W4065	0.25
S25FL208K0RMFI010	8	SPI	8-SOIC	45W4067	0.27
S25FL208K0RMFI040	8	SPI	8-SOIC	45W4070	0.27
S25FL208K0RMFI011	8	Serial, SPI	8-SOIC	45W4068	0.27
S25FL208K0RMFI041	8	Serial, SPI	8-SOIC	45W4071	0.29
S25FL208K0RMFI010	8	SPI	8-SOIC	45W4067	0.27
S25FL208K0RMFI040	8	SPI	8-SOIC	45W4070	0.27
S25FL208K0RMFI011	8	Serial, SPI	8-SOIC	45W4068	0.27
S25FL208K0RMFI041	8	Serial, SPI	8-SOIC	45W4071	0.29
S25FL216K0PMFI010	16	SPI	8-SOIC	45W4073	0.32
S25FL216K0PMFI040	16	SPI	8-SOIC	45W4076	0.32
S25FL216K0PMFI011	16	Serial, SPI	8-SOIC	45W4074	0.34
S25FL216K0PMFI041	16	Serial, SPI	8-SOIC	45W4077	0.34
S25FL116K0XMFI011	16	SPI	8-SOIC	17X9753	0.42
S25FL116K0XMFI041	16	SPI	8-SOIC	17X9754	0.42
S25FL116K0XNFI011	16	SPI	8-WSON	18X3621	0.41
S25FL216K0PMFI010	16	SPI	8-SOIC	45W4073	0.32
S25FL216K0PMFI040	16	SPI	8-SOIC	45W4076	0.32
S25FL116K0XMFI011	16	SPI	8-SOIC	17X9753	0.42
S25FL116K0XMFI041	16	SPI	8-SOIC	17X9754	0.42
S25FL116K0XNFI011	16	SPI	8-WSON	18X3621	0.41
S25FL216K0PMFI011	16	Serial, SPI	8-SOIC	45W4074	0.34
S25FL216K0PMFI041	16	Serial, SPI	8-SOIC	45W4077	0.34
S25FL132K0XMFI011	32	SPI	8-SOIC	18X3622	0.51
S25FL132K0XMFI011	32	SPI	8-SOIC	18X3622	0.51
S25FL164K0XMFI001	64	SPI	16-SOIC	08X5952	0.90
S25FL164K0XMFI011	64	SPI	8-SOIC	08X5955	0.77
S25FL164K0XNFI011	64	SPI	8-WSON	08X5958	0.83
S25FL164K0XMFI001	64	SPI	16-SOIC	08X5952	0.90
S25FL164K0XMFI011	64	SPI	8-SOIC	08X5955	0.77
S25FL164K0XNFI011	64	SPI	8-WSON	08X5958	0.83
FL-P FAMILY					
S25FL032P0XNFI011	32	Serial, SPI	8-WSON	78R6723	0.73
S25FL032P0XMFI000	32	Serial, SPI	8-SOIC	83P3959	0.65
S25FL032P0XMFI013	32	SPI	8-SOIC	90R9322	0.65

CONTINUED

SERIAL NOR FLASH MEMORY DEVICES (CONT.)

FL-P FAMILY

Mfg. Part No.	Size (Mbit)	Interface	Pkg.	Stock No.	Price Each 1-9
● S25FL032P0XMFI001	32	Serial, SPI	8-SOIC	83P3960	0.70
● S25FL032P0XMFI010	32	Serial, SPI	16-SOIC	83P3961	0.61
● S25FL032P0XMFI011	32	Serial, SPI		83P3962	0.61
● S25FL032P0XBHI020	32	Serial, SPI	24-BGA	89T0806	0.65
● S25FL032P0XMFI013	32	SPI	8-SOIC	90R9322	0.65
● S25FL032P0XNFI011	32	Serial, SPI	8-WSON	78R6723	0.73
● S25FL032P0XMFI001	32	Serial, SPI	8-SOIC	83P3960	0.70
● S25FL032P0XMFI010	32	Serial, SPI	16-SOIC	83P3961	0.61
● S25FL032P0XMFI011	32	Serial, SPI		83P3962	0.61
● S25FL032P0XBHI020	32	Serial, SPI	24-BGA	89T0806	0.65
● S25FL032P0XMFI000	32	Serial, SPI	8-SOIC	83P3959	0.65
● S25FL064P0XMFI001	64	Serial, SPI	16-SOIC	25R3528	0.95
● S25FL064P0XMFI000	64	Serial, SPI	16-SOIC	32R8085	1.02
● S25FL064P0XBHI020	64	Serial, SPI	24-BGA	63T2557	0.95
● S25FL064P0XNFI001	64	Serial, SPI	8-WSON	78R6725	1.08
● S25FL064P0XNFI000	64	Serial, SPI	8-WSON	78R6724	1.00
● S25FL064P0XMFI003	64	SPI	16-SOIC	55R7078	1.00
● S25FL064P0XMFI001	64	Serial, SPI	16-SOIC	25R3528	0.95
● S25FL064P0XMFI000	64	Serial, SPI	16-SOIC	32R8085	1.02
● S25FL064P0XBHI020	64	Serial, SPI	24-BGA	63T2557	0.95
● S25FL064P0XNFI001	64	Serial, SPI	8-WSON	78R6725	1.08
● S25FL064P0XMFI003	64	SPI	16-SOIC	55R7078	1.00
● S25FL064P0XNFI000	64	Serial, SPI	8-WSON	78R6724	1.00
● S25FL129P0XMFI000	128	SPI	16-SOIC	55R7079	2.12
● S25FL128P0XNFI001	128	Serial, SPI	8-WSON	14N7118	2.02
● S25FL128P0XMFI001	128	Serial, SPI	16-SOIC	55M0116	1.80
● S25FL129P0XMFI000	128	SPI	16-SOIC	55R7079	2.12
● S25FL128P0XNFI001	128	Serial, SPI	8-WSON	14N7118	2.02
● S25FL128P0XMFI001	128	Serial, SPI	16-SOIC	55M0116	1.80
● S70FL256P0XMFI001	256	SPI	16-SOIC	08X5977	3.93
● S70FL256P0XMFI001	256	SPI	16-SOIC	08X5977	3.93

FL-S FAMILY

Mfg. Part No.	Size (Mbit)	Interface	Pkg.	Stock No.	Price Each 1-9
● S25FL128SAGMFIG01	128	SPI	16-SOIC	08X5946	2.17
● S25FL128SAGBHI200	128	Serial, SPI	24-BGA	76T1509	2.22
● S25FL128SAGMFI011	128	Serial, SPI	16-SOIC	76T1518	2.33
● S25FL128SAGNFI001	128	Serial, SPI	8-WSON	76T1520	2.38
● S25FL128SAGNFI011	128	Serial, SPI	8-WSON	76T1522	2.22
● S25FL127SABBHIC00	128	SPI	24-BGA	96W2387	1.80
● S25FL127SABBHID00	128	SPI	24-BGA	96W2388	1.80
● S25FL127SABMFI101	128	Serial, SPI	8-SOIC	96W2389	1.80
● S25FL128SAGMFI003	128	SPI	16-SOIC	45W4060	2.29
● S25FL128SAGBHIA10	128	SPI	24-BGA	76T1508	2.22
● S25FL128SAGMFIR01	128	SPI	16-SOIC	76T1514	2.17
● S25FL128SAGMFI000	128	SPI	16-SOIC	76T1515	2.17
● S25FL128SAGMFI001	128	Serial, SPI	16-SOIC	76T1516	2.33
● S25FL128SAGMFI010	128	SPI	16-SOIC	76T1517	2.17
● S25FL128SAGNFI000	128	SPI	8-WSON	76T1519	2.22
● S25FL127SABNFI101	128	SPI	8-USON	97W1394	1.80
● S25FL128SAGBHIA10	128	SPI	24-BGA	76T1508	2.22
● S25FL128SAGMFI000	128	SPI	16-SOIC	76T1515	2.17
● S25FL128SAGMFI003	128	SPI	16-SOIC	45W4060	2.29
● S25FL128SAGMFI010	128	SPI	16-SOIC	76T1517	2.17
● S25FL128SAGMFIR01	128	SPI	16-SOIC	76T1514	2.17
● S25FL128SAGNFI000	128	SPI	8-WSON	76T1519	2.22
● S25FL128SAGMFIG01	128	SPI	16-SOIC	08X5946	2.17
● S25FL128SAGBHI200	128	Serial, SPI	24-BGA	76T1509	2.22
● S25FL128SAGMFI011	128	Serial, SPI	16-SOIC	76T1518	2.33
● S25FL128SAGNFI001	128	Serial, SPI	8-WSON	76T1520	2.38
● S25FL128SAGNFI011	128	Serial, SPI	8-WSON	76T1522	2.22
● S25FL127SABBHIC00	128	SPI	24-BGA	96W2387	1.80
● S25FL127SABBHID00	128	SPI	24-BGA	96W2388	1.80
● S25FL127SABMFI101	128	Serial, SPI	8-SOIC	96W2389	1.80
● S25FL128SAGMFI001	128	Serial, SPI	16-SOIC	76T1516	2.33
● S25FL127SABNFI101	128	SPI	8-USON	97W1394	1.80
● S25FL256SAGBHI200	256	Serial, SPI	24-BGA	76T1523	2.97
● S25FL256SAGMFI011	256	Serial, SPI	16-SOIC	76T1530	3.16
● S25FL256SAGNFI001	256	Serial, SPI	8-WSON	89T3244	2.97
● S25FL256SAGBHIC00	256	SPI	24-BGA	96W2390	2.97
● S25FL256SAGMFIR01	256	SPI	16-SOIC	96W2392	3.16
● S25FL256SAGMFI001	256	Serial, SPI	16-SOIC	76T1528	3.16
● S25FL256SAGBHID00	256	SPI	24-BGA	96W2391	3.36
● S25FL256SAGBHI200	256	Serial, SPI	24-BGA	76T1523	2.97

➤CONTINUED➤

SERIAL NOR FLASH MEMORY DEVICES (CONT.)

FL-S FAMILY

Mfg. Part No.	Size (Mbit)	Interface	Pkg.	Stock No.	Price Each 1-9
● S25FL256SAGMFI011	256	Serial, SPI	16-SOIC	76T1530	3.16
● S25FL256SAGNFI001	256	Serial, SPI	8-WSON	89T3244	2.97
● S25FL256SAGBHIC00	256	SPI	24-BGA	96W2390	2.97
● S25FL256SAGMFIR01	256	SPI	16-SOIC	96W2392	3.16
● S25FL256SAGMFI000	256	SPI	16-SOIC	76T1527	2.94
● S25FL256SAGMFI001	256	Serial, SPI	16-SOIC	76T1528	3.16
● S25FL256SAGMFIG01	256	SPI	16-SOIC	89T3242	2.94
● S25FL256SAGNFI000	256	SPI	8-WSON	89T3243	2.97
● S25FL256SAGBHID00	256	SPI	24-BGA	96W2391	3.36
● S25FL256SAGMFI000	256	SPI	16-SOIC	76T1527	2.94
● S25FL256SAGMFIG01	256	SPI	16-SOIC	89T3242	2.94
● S25FL256SAGNFI000	256	SPI	8-WSON	89T3243	2.97
● S25FL512SAGBHIC10	512	SPI	24-BGA	89T3248	5.34
● S25FL512SAGBHI210	512	Serial, SPI	24-BGA	89T3252	5.34
● S25FL512SAGBHI310	512	Serial, SPI	24-BGA	89T3254	5.71
● S25FL512SAGMFIG11	512	Serial, SPI	16-SOIC	89T3257	5.64
● S25FL512SAGMFI011	512	Serial, SPI	16-SOIC	89T3260	5.34
● S25FL512SDPMFI011	512	Serial, SPI	16-SOIC	89T3267	5.17
● S25FL512SAGBHIC10	512	SPI	24-BGA	89T3248	5.34
● S25FL512SAGBHI210	512	Serial, SPI	24-BGA	89T3252	5.34
● S25FL512SAGBHI310	512	Serial, SPI	24-BGA	89T3254	5.71
● S25FL512SAGMFIG11	512	Serial, SPI	16-SOIC	89T3257	5.64
● S25FL512SAGMFI011	512	Serial, SPI	16-SOIC	89T3260	5.34
● S25FL512SDPMFI011	512	Serial, SPI	16-SOIC	89T3267	5.17

FS-S FAMILY

Mfg. Part No.	Size (Mbit)	Interface	Pkg.	Stock No.	Price Each 1-9
● S25FS128SAGMFI100	128	SPI	8-SOIC	20X1186	2.17
● S25FS128SAGMFI101	128	SPI	8-SOIC	20X1187	2.17
● S25FS128SAGNFI101	128	SPI	8-WSON	20X1188	2.22
● S25FS128SDSNFI101	128	SPI	8-WSON	20X1189	2.05
● S25FS256SAGMFI000	256	SPI	16-SOIC	20X1190	2.94
● S25FS256SAGMFI001	256	SPI	16-SOIC	20X1191	2.94
● S25FS256SAGNFI001	256	SPI	16-WSON	20X1192	3.19
● S25FS256SDSMFI001	256	SPI	16-SOIC	20X1193	2.94
● S25FS256SDSNFI001	256	SPI	16-WSON	20X1194	2.97

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PARALLEL NOR FLASH MEMORY DEVICES

NEW

RoHS Compliant Available

SPANSION®

FEATURES

- Single 3V power supply
- AL-J Family have Standard Interface
- JL-J / PL-J Family have Simultaneous read/write
- CFI (Common Flash Interface) compliant
- 1 million cycles endurance

AL-J FAMILY

Mfg. Part No.	Size (Mbit)	T_{acc} (ns)	Pkg.	Stock No.	Price Each 1-9
● S29AL008J70BFI020	8	70	48-BGA	43P9762	0.82
● S29AL008J70TFI010	8	70	48-TSOP	43P9763	0.77
● S29AL008J70TFI020	8	70	48-TSOP	43P9764	0.77
● S29AL008J70BFI010	8	70	48-FPBGA	43P9761	0.77
● S29AL008J55TFIR10	8	55	48-TSOP	43P9760	0.90
● S29AL016J70BFI010	16	70	48-BGA	12P0103	0.80
● S29AL016J70BFI020	16	70	48-BGA	43P9765	0.80
● S29AL016J70TFI010	16	70	48-TSOP	43P9766	0.75
● S29AL016J70TFI020	16	70	48-TSOP	43P9767	0.79
● S29AL016J55TFIR10	16	55	48-TSOP	55R7084	0.93

JL-J FAMILY

Mfg. Part No.	Size (Mbit)	T_{acc} (ns)	Pkg.	Stock No.	Price Each 1-9
● S29JL032J70TFI320	32	70	48-TSOP	90R9336	2.62
● S29JL032J70TFI020	32	70	48-TSOP	90R9332	2.44
● S29JL032J70TFI310	32	70	48-TSOP	90R9335	2.44
● S29JL032J70TFI420	32	70	48-TSOP	90R9338	2.44
● S29JL032J70TFI010	32	70	48-TSOP	90R9331	2.44
● S29JL032J70TFI210	32	70	48-TSOP	90R9333	2.44
● S29JL064J70TFI000	64	70	48-TSOP	90R9341	3.56
● S29JL064J55TFI000	64	55	48-TSOP	90R9339	3.76
● S29JL064J70TFI003	64	70	48-TSOP	84W9353	3.59

PL-J FAMILY

Mfg. Part No.	Size (Mbit)	T_{acc} (ns)	Pkg.	Stock No.	Price Each 1-9
● S29PL032J70BAI120	32	70	48-BGA	42K8639	2.81
● S29PL032J70BFI120	32	70	48-BGA	44J2245	2.81
● S29PL064J70BFI120	64	70	48-BGA	44J2247	5.01

➤CONTINUED➤

PARALLEL NOR FLASH MEMORY DEVICES (CONT.)

PL-J FAMILY

Mfg. Part No.	Size (Mbit)	T_{acc} (ns)	Pkg.	Stock No.	Price Each 1-9
S29PL064J70BAI120	64	70	48-BGA	64J8411	4.68
S29PL127J70BAI000	128	70	80-FPBGA	70K5152	7.41

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PARALLEL NAND FLASH MEMORY DEVICES

NEW

RoHS Compliant Available

SPANSION

FEATURES

- 100,000 Program / Erase cycles
- 10 Year Data retention
- Open NAND Flash Interface (ONFI) 1.0 compliant

ML-1 FAMILY

Mfg. Part No.	Size (Mbit)	T_{acc} (ns)	Pkg.	Stock No.	Price Each 1-9
S34ML02G104TFI010	256	25	48-TSOP	96W2394	2.59
S34ML08G101TFI000	1024	25	48-TSOP	96W2395	7.30
S34ML01G100TFI000	1024	25	48-TSOP	05W4747	2.10
S34ML01G100BHI000	1024	25	63-BGA	45W4082	2.26
S34ML01G100TFI003	1024	25	48-TSOP	05W4748	1.63
S34ML02G100TFI000	2048	25	48-TSOP	05W4749	2.79
S34ML02G100BHI000	2048	25	63-BGA	45W4083	2.59
S34ML04G100TFI000	4096	25	48-TSOP	05W4751	3.72
S34ML04G100BHI000	4096	25	63-BGA	45W4084	3.72
S34ML08G101BHI000	8192	25	63-BGA	55W7288	7.81
S34ML08G101TFI200	8192	25	48-TSOP	84W9360	7.30
ML-2 FAMILY					
S34ML08G201TFI000	1024	25	48-TSOP	08X5963	7.13
S34ML01G200BHI000	1024	25	63-BGA	55W7284	1.83
S34ML01G200TFI000	1024	25	48-TSOP	55W7286	1.97
S34ML04G200BHI000	2048	25	63-BGA	84W9357	3.55
S34ML04G200TFI000	2048	25	48-TSOP	84W9358	3.55
MS-1 FAMILY					
S34MS04G100BHI000	512	45	63-BGA	08X5965	4.09
S34MS01G104BHI010	1024	45	63-BGA	84W9362	2.20
S34MS02G104BHI010	2048	45	63-BGA	84W9363	2.72
MS-2 FAMILY					
S34MS04G200BHI000	512	45	63-BGA	08X5967	4.21
S34MS04G204BHI010	512	45	63-BGA	08X5968	3.92
S34MS04G204TFI010	512	45	48-TSOP	08X5970	3.92

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S25FL SERIES SPI FLASH MEMORY

RoHS Compliant Available

SPANSION

S25FL series are a 3V single power supply, Serial Interface Flash (SPI) memory devices.

Mfg. Part No.	Memory Size (MB)	Frequency (MHz)	Pkg.	Stock No.	Price Each 1-9
S25FL128P0XNFI001	128	104	8-WSON	14N7118	2.02

(94368)

MPLAB SERIAL MEMORY PRODUCTS STARTER KIT

MICROCHIP

Kit contents

- MPLAB Starter Kit for Serial Memory Products board
- MPLAB IDE
- Integrated Serial EEPROM interface tool
- Total Endurance™ software model
- User's Guide
- USB cable
- Serial EEPROM sample pack

Features

- 3.3V / 5.0V on-board voltage selection
- Supports Microchip UNI/O™ bus, I²C™, SPI, and Microwire Serial EEPROMs
- 1.8V to 5.5V external voltage support
- Includes free copy of MPLAB IDE
- USB interconnect

Designers of Serial EEPROM applications can enjoy the increased productivity, reduced time to market and rock-solid design that only a well thought out development system can provide. Microchip's MPLAB Starter Kit for Serial Memory Products includes everything necessary to quickly develop a robust and reliable Serial EEPROM design, and greatly reduces the time required for system integration and hardware/software fine-tuning.

Mfg. Part No.	Description	Supported	Stock No.	Price Each
DV243003	MPLAB Starter Kit, MPLAB IDE, interface tool, guide, cables	Serial Memory	98M0791	79.98

(115534)

CRYPTOCONTROLLER EMBEDDED DEVELOPMENT KIT

RoHS Compliant Available

Atmel

The **AT97SC3204T-X1K180 CryptoController Embedded Development Kit** is based on the AVR AT90USBKey kit with an added Embedded TWI (2-wire) TPM card and Embedded TWI TPM demonstration and evaluation software. The kit includes TPM TWI module, AT90USBKey, USB adapter cables, USB flash drive with sample code and documentation and an alternate 9V battery supply cable.

Mfg. Part No.	Description	Stock No.	Price Each
AT97SC3204T-X1K180	Embedded Development Kit	68T5306	99.95

(197959)

CRYPTOMEMORY (2.7V - 3.6V) STARTER KIT

RoHS Compliant Available

Atmel

The **AT88SC-ADK2 CryptoMemory Starter Kit** is a low-cost starter kit for prototyping, designing, and code development for CryptoMemory™ and CryptoCompanion™ chips on AVR®-based flash microcontroller platforms. It features the Crypto Evaluation Studio and the Crypto Core Development Library to let designers easily apply CryptoMemory security to their host and client-side applications. The library architecture permits code porting to other microcontroller platforms. The kit connects to the PC and power to the AT88SC-ADK2 board using a USB interface.

Mfg. Part No.	Description	Stock No.	Price Each
AT88SC-ADK2	CryptoMemory Starter Kit	68T4763	99.95

(197960)

PARALLEL EEPROM ICs

RoHS Compliant Available

Atmel

Mfg. Part No.	Size (Kbit)	Clock Freq. Max. (MHz)	Oper. Volt (V)	Package	Stock No.	Price Each 1-9
AT28C64B-15JU	64	5	5V	32-LCC	68T4373	4.45
AT28C64B-15PU	64	5	5V	28-DIP	68T4374	4.47
AT28C64B-15SU	64	...	4.5 to 5.5	28-SOIC	68T4375	4.69
AT28C64B-15TU	64	...	4.5 to 5.5	28-TSOP	68T4376	4.42
AT28C256-15JU	256	5	5V	32-LCC	68T4337	9.29
AT28C256-15PU	256	5	5V	28-DIP	68T4339	9.30
AT28C256-15SU	256	5	5V	28-SOIC	68T4340	9.11
AT28C010-12TU	1Mbit	5	5V	28-TSOP	68T4306	42.42
AT28C010-12JU	1Mbit	...	4.5 to 5.5	32-LCC	68T4304	42.44
AT28C010-15JU	1Mbit	...	4.5 to 5.5	32-LCC	68T4311	43.06
AT28C010E-12JU	1Mbit	...	4.5 to 5.5	32-LCC	68T4326	47.50
AT28C010E-12TU	1Mbit	...	4.5 to 5.5	32-TSOP	68T4328	45.01
BATTERY VOLTAGE						
AT28BV64B-20JU	64	5	2.7 to 3.6 V	32-LCC	68T4298	4.19
AT28BV64B-20TU	64	5	2.7 to 3.6 V	28-TSOP	68T4300	4.42
AT28BV256-20SU	256	5	2.7 to 3.6 V	32-LCC	68T4296	9.11
AT28BV256-20TU	256	5	2.7 to 3.6 V	28-TSOP	68T4297	9.11
FAST WRITE						
AT28C256F-15JU	256	5	5V	32-LCC	68T4368	12.27
AT28C256F-15TU	256	5	5V	28-TSOP	68T4371	12.29
HIGH ENDURANCE						
AT28C256E-15JU	256	5	5V	32-LCC	68T4353	9.11
AT28C256E-15TU	256	5	5V	28-TSOP	68T4356	12.29
HIGH SPEED						
AT28HC64B-12SU	64	5	5V	28-SOIC	68T4423	6.71
AT28HC64B-70JU	64	...	4.5 to 5.5	32-LCC	68T4424	7.21
AT28HC64B-70SU	64	5	5V	28-SOIC	68T4425	6.74
AT28HC64B-90TU	64	5	5V	28-TSOP	68T4429	8.81
AT28HC256-12JU	256	5	5V	32-LCC	68T4379	9.91
AT28HC256-12SU	256	5	5V	28-SOIC	68T4381	12.64
AT28HC256-12TU	256	5	5V	28-TSOP	68T4382	10.20
AT28HC256-70JU	256	...	4.5 to 5.5	32-LCC	68T4384	13.05
AT28HC256-70SU	256	5	5V	28-SOIC	68T4385	14.50
AT28HC256-90JU	256	5	5V	32-LCC	68T4389	10.62
AT28HC256-90SU	256	5	5V	28-SOIC	68T4391	13.03
AT28HC256F-90SU	256	5	5V	28-SOIC	68T4419	13.75
HIGH SPEED, HIGH ENDURANCE						
AT28HC64BF-12JU	64	...	4.5 to 5.5	32-LCC	68T4430	6.49
AT28HC64BF-12SU	64	...	4.5 to 5.5	28-SOIC	68T4431	7.29
AT28HC256E-90JU	256	5	5V	32-LCC	68T4406	12.73
LOW VOLTAGE						
AT28LV010-20JU	1Mbit	5	3.3V	32-LCC	68T4432	42.41
AT28LV010-20TU	1Mbit	...	3.3V	32-TSOP	68T4433	44.71

(197983)

SERIAL EEPROM MEMORY ICS

SERIAL EEPROM ICs

RoHS Compliant Available

Atmel

I2C INTERFACE

Mfg. Part No.	Mem Size (Kbit)	Density Org. (Bits)	Oper. Volt (V)	Pkg.	Stock No.	Price Each 1-9
● AT24C02C-PUM	2	256 x 8	1.7 - 5.5	8-DIP	68T4065	0.43
● AT24C02C-SSHM-B	2	256 x 8	1.7 - 5.5	8-SOIC	68T4066	0.31
● AT25020B-SSHL-B	2	256K x 8bit	1.8 - 5.5	8-SOIC	68T4213	0.46
● AT25040B-SSHL-B	4	512 x 8bit	1.8 - 5.5	8-SOIC	68T4218	0.48
● AT24C04B-TH-B	4	512 x 8	1.8 - 5.5	8-TSSOP	68T4072	0.90
● AT24C04B-TH-T	4	512 x 8	1.8 - 5.5	8-TSSOP	68T4073	0.90
● AT24HC04BN-SH-B	4	512 x 8	1.8 - 5.5	8-SOIC	68T4152	0.40
● AT24HC04B-PU	4	512 x 8	1.8 - 5.5	8-DIP	68T4149	0.73
● AT24HC04B-TH-B	4	512 x 8	1.8 - 5.5	8-TSSOP	68T4150	0.53
● AT24C04D-PUM	4	512 x 8bit	1.7 - 5.5	8-DIP	92T0914	0.38
● AT24C04D-SSHM-B	4	512 x 8bit	1.7 - 5.5	8-SOIC	92T0915	0.34
● AT24C08D-PUM	8	1K x 8bit	1.7 - 5.5	8-DIP	92T0921	0.44
● AT24C08D-SSHM-B	8	1K x 8bit	1.7 - 5.5	8-SOIC	92T0922	0.41
● AT24C08D-XHM-B	8	1K x 8bit	1.7 - 5.5	8-TSSOP	92T0925	0.49
● AT24C08B-PU	8	1K x 8bit	1.8 - 5.5	8-DIP	68T4078	0.90
● AT24C08B-TH-B	8	1K x 8bit	1.8 - 5.5	8-TSSOP	68T4079	0.54
● AT24C08BY6-YH-T	8	1K x 8bit	1.8 - 5.5	8-DFN	68T4084	1.04
● AT24C16C-SSHM-B	16	2K x 8bit	1.7 - 5.5	8-SOIC	68T4108	0.42
● AT24C16C-XHM-B	16	2K x 8bit	1.7 - 5.5	8-TSSOP	68T4111	0.53
● AT24C32D-SSHM-B	32	4K x 8bit	1.7 - 5.5	8-SOIC	68T4119	0.46
● AT24C32D-SSHM-T	32	4K x 8bit	1.7 - 5.5	8-SOIC	68T4120	0.46
● AT24C32D-XHM-B	32	4K x 8bit	1.7 - 5.5	8-TSSOP	68T4121	0.66
● AT24C64B-10PU-2.7	64	8K x 8bit	2.7 - 5.5	8-DIP	68T4135	0.96
● AT24C64B-10TU-2.7	64	8K x 8bit	2.7 - 5.5	8-TSSOP	68T4137	0.88
● AT24C64D-SSHM-B	64	8K x 8bit	1.7 - 5.5	8-SOIC	68T4140	0.58
● AT24C64D-SSHM-T	64	8K x 8bit	1.7 - 5.5	8-SOIC	68T4141	0.58
● AT24C64D-XHM-B	64	8K x 8bit	1.7 - 5.5	8-TSSOP	68T4142	0.69
● AT24C64D-XHM-T	64	8K x 8bit	1.7 - 5.5	8-TSSOP	68T4143	0.59
● AT24C64BN-10SU-2.7	64	8K x 8bit	2.7 - 5.5	8-SOIC	68T4138	0.95
● AT24C128C-MAHM-T	128	16K x 8bit	1.7 - 5.5	8-UDFN	68T4101	0.87
● AT24C128C-SSHM-B	128	16K x 8bit	1.7 - 5.5	8-SOIC	68T4102	0.70
● AT24C128C-XHM-B	128	16K x 8bit	1.7 - 5.5	8-TSSOP	68T4104	0.87
● AT24C256C-SSHL-B	256	32K x 8bit	1.7 - 5.5	8-SOIC	68T4114	1.18
● AT24C256C-SSHL-T	256	32K x 8bit	1.7 - 5.5	8-SOIC	68T4115	1.06
● AT24C256C-XHL-B	256	32K x 8bit	1.7 - 5.5	8-TSSOP	68T4116	1.14
● AT24C512C-SSHM-B	512	64K x 8bit	1.7 - 3.6	8-SOIC	68T4128	1.79
● AT24C512C-SSHM-T	512	64K x 8bit	1.7 - 3.6	8-SOIC	68T4129	1.79
● AT24C512C-XHD-B	512	64K x 8bit	2.5 - 5.5	8-TSSOP	68T4131	1.79
● AT24C512C-XHM-B	512	64K x 8bit	1.7 - 3.6	8-TSSOP	68T4133	1.76
● AT24C512C-SHD-B	512	64K x 8bit	2.5 - 5.5	8-SOIC	68T4124	1.81
● AT24C1024B-TH25-B	1024	128K x 8bit	1.8 - 3.6	8-TSSOP	68T4089	3.46
MICROWIRE INTERFACE						
● AT93C46DN-SH-B	1	128 x 8 / 64 x 16	1.8 - 5.5	8-SOIC	68T5240	0.28
● AT93C46DN-SH-T	1	128 x 8 / 64 x 16	1.8 - 5.5	8-SOIC	68T5241	0.28
● AT93C46D-PU	1	128 x 8 / 64 x 16	1.8 - 5.5	8-DIP	68T5237	0.30
● AT93C46D-TH-B	1	128 x 8 / 64 x 16	1.8 - 5.5	8-TSSOP	68T5238	0.29
● AT93C46DY6-YH-T	1	128 x 8 / 64 x 16	1.8 - 5.5	8-DFN	68T5242	0.39
● AT93C46EN-SH-B	1	64K x 16bit	1.8 - 5.5	8-SOIC	68T5246	0.29
● AT93C46EN-SH-T	1	64K x 16bit	1.8 - 5.5	8-SOIC	68T5247	0.29
● AT93C46E-PU	1	64K x 16bit	1.8 - 5.5	8-DIP	68T5243	0.33
● AT93C46E-TH-B	1	64K x 16bit	1.8 - 5.5	8-TSSOP	68T5244	0.35
● AT93C56A-10PU-2.7	2	256 x 8 / 128 x 16	2.7 - 5.5	8-DIP	68T5249	0.87
● AT93C56A-10SU-1.8	2	256 x 8 / 128 x 16	1.8 - 5.5	8-DIP	68T5250	0.79
● AT93C56A-10TU-1.8	2	256 x 8 / 128 x 16	1.8 - 5.5	8-TSSOP	68T5252	0.90
● AT93C56AW-10SU-2.7	2	256 x 8 / 128 x 16	2.7 - 5.5	8-SOIC	68T5254	0.79
● AT93C66A-10SU-1.8	4	512 x 8 / 256 x 16	1.8 - 5.5	8-SOIC	68T5258	0.81
● AT93C66A-10TU-1.8	4	512 x 8 / 256 x 16	1.8 - 5.5	8-TSSOP	68T5260	0.91
● AT93C66A-10TU-2.7	4	512 x 8 / 256 x 16	2.7 - 5.5	8-TSSOP	68T5261	0.91
● AT93C66AW-10SU-2.7	4	512 x 8 / 256 x 16	2.7 - 5.5	8-SOIC	68T5263	0.81
● AT93C86A-10PU-1.8	16	2K x 8 / 1K x 16	1.8 - 5.5	8-DIP	68T5265	0.90
● AT93C86A-10PU-2.7	16	2K x 8 / 1K x 16	2.7 - 5.5	8-DIP	68T5266	0.47
● AT93C86A-10SU-1.8	16	2K x 8 / 1K x 16	1.8 - 5.5	8-SOIC	68T5267	0.81
● AT93C86A-10SU-2.7	16	2K x 8 / 1K x 16	2.7 - 5.5	8-SOIC	68T5268	0.49
● AT93C86A-10TU-1.8	16	2K x 8 / 1K x 16	1.8 - 5.5	8-TSSOP	68T5269	1.01
● AT93C86A-10TU-2.7	16	2K x 8 / 1K x 16	2.7 - 5.5	8-TSSOP	68T5270	0.97
● AT93C86AY6-10YH-1.8	16	2K x 8 / 1K x 16	1.8 - 5.5	8-DFN	68T5271	0.56
SPI INTERFACE						
● AT25010B-SSHL-B	1	128 x 8	1.8 - 5.5	8-SOIC	68T4208	0.41
● AT25010B-SSHL-T	1	128 x 8	1.8 - 5.5	8-SOIC	68T4209	0.41
● AT25040B-SSHL-T	4	512 x 8	1.8 - 5.5	8-SOIC	68T4219	0.43
● AT93C66B-MAHM-T	4	512 x 8bit, 256 x 16bit	1.7 - 5.5	8-UDFN	92T0997	0.50
● AT93C66B-SSHM-B	4	512 x 8bit, 256 x 16bit	1.7 - 5.5	8-SOIC	92T0998	0.42

➤CONTINUED➤

SERIAL EEPROM ICs (CONT.)

SPI INTERFACE

Mfg. Part No.	Mem Size (Kbit)	Density Org. (Bits)	Oper. Volt (V)	Pkg.	Stock No.	Price Each 1-9
● AT25080B-SSHL-B	8	1K x 8bit	1.8 - 5.5	8-SOIC	68T4223	0.55
● AT25080B-SSHL-T	8	1K x 8bit	1.8 - 5.5	8-SOIC	68T4224	0.53
● AT25160B-SSHL-B	16	2K x 8bit	1.8 - 5.5	8-SOIC	68T4233	0.59
● AT25160B-XHL-B	16	2K x 8bit	1.8 - 5.5	8-TSSOP	68T4235	1.10
● AT25320B-SSHL-B	32	4K x 8bit	1.8 - 5.5	8-SOIC	68T4243	0.79
● AT25320B-XHL-B	32	4K x 8bit	1.8 - 5.5	8-TSSOP	68T4245	0.92
● AT25640B-SSHL-B	64	8K x 8bit	1.8 - 5.5	8-SOIC	68T4253	0.85
● AT25640B-SSHL-T	64	8K x 8bit	1.8 - 5.5	8-SOIC	68T4254	0.81
● AT25640B-XHL-T	64	8K x 8bit	1.8 - 5.5	8-TSSOP	68T4256	0.96
● AT25640B-XHL-B	64	8K x 8bit	1.8 - 5.5	8-TSSOP	68T4255	0.99
● AT25128B-SSHL-B	128	16K x 8bit	1.8 - 5.5	8-SOIC	68T4228	1.18
● AT25128B-SSHL-T	128	16K x 8bit	1.8 - 5.5	8-SOIC	68T4229	1.18
● AT25128B-XHL-B	128	16K x 8bit	1.8 - 5.5	8-TSSOP	68T4230	1.29
● AT25256B-SSHL-B	256	32K x 8bit	1.8 - 5.5	8-SOIC	68T4238	1.58
● AT25256B-SSHL-T	256	32K x 8bit	1.8 - 5.5	8-SOIC	68T4239	1.52
● AT25256B-XHL-B	256	32K x 8bit	1.8 - 5.5	8-TSSOP	68T4240	1.75
● AT25512N-SH-B	512	64K x 8bit	1.8 - 5.5	8-SOIC	68T4249	2.22
2-WIRE INTERFACE						
● AT34C02D-MAHM-T	2	256 x 8	1.7 - 5.5	8-DFN	68T4635	0.53
PROTO-BOARD DESIGN WORKSTATION SERIES (63487)						
● AT24C512C-SSHD-B	512	64K x 8bit	2.5 - 5.5	8-SOIC	68T4126	1.76
● AT24C512C-SSHD-T	512	64K x 8bit	2.5 - 5.5	8-SOIC	68T4127	1.80

(197986)

ONE TIME PROGRAMMABLE (OTP) EPROM ICs

RoHS Compliant Available

Atmel

STANDARD VOLTAGE

Mfg. Part No.	Memory Size (Kbit)	T_{ACC} (ns)	Mem. Config.	Package	Stock No.	Price Each 1-9
● AT27C256R-45JU	256	45	32K x 8bit	32-LCC	68T4279	2.66
● AT27C256R-45PU	256	45	32K x 8bit	28-DIP	68T4280	2.62
● AT27C256R-70JU	256	70	32K x 8bit	32-LCC	68T4281	2.62
● AT27C256R-70PU	256	70	32K x 8bit	28-DIP	68T4282	2.62
● AT27C512R-45JU	512	45	64K x 8bit	32-LCC	68T4286	2.97
● AT27C512R-45PU	512	45	64K x 8bit	28-DIP	68T4287	2.94
● AT27C512R-70JU	512	70	64K x 8bit	32-LCC	68T4288	3.01
● AT27C512R-70PU	512	70	64K x 8bit	28-DIP	68T4289	2.94
● AT27C010-45JU	1024	45	128K x 8bit	32-LCC	68T4260	2.67
● AT27C010-70JU	1024	70	128K x 8bit	32-LCC	68T4261	3.68
● AT27C010-70PU	1024	70	128K x 8bit	32-DIP	68T4262	3.68
● AT27C1024-45JU	1024	45	64K x 16bit	44-LCC	68T4273	4.75
● AT27C1024-45PU	1024	45	64K x 16bit	40-DIP	68T4274	4.75
● AT27C1024-70JU	1024	70	64K x 16bit	44-LCC	68T4275	4.69
● AT27C1024-70PU	1024	70	64K x 16bit	40-DIP	68T4276	4.51
● AT27C020-55JU	2048	55	256K x 8bit	32-LCC	68T4263	4.69
● AT27C020-55PU	2048	55	256K x 8bit	32-DIP	68T4264	4.51
● AT27C020-90JU	2048	90	256K x 8bit	32-LCC	68T4265	4.69
● AT27C020-90PU	2048	90	256K x 8bit	32-DIP	68T4266	4.65
● AT27C2048-55JU	2048	55	128K x 16bit	44-LCC	68T4277	6.34
● AT27C2048-90JU	2048	90	128K x 16bit	44-LCC	68T4278	6.46
● AT27C040-70JU	4096	70	512K x 8	32-LCC	68T4267	4.21
● AT27C040-70PU	4096	70	512K x 8	32-DIP	68T4268	7.14
● AT27C040-90JU	4096	90	512K x 8	32-LCC	68T4269	7.13
● AT27C040-90PU	4096	90	512K x 8	32-DIP	68T4270	7.26
● AT27C4096-55JU	4096	55	256K x 16bit	44-LCC	68T4283	10.03
● AT27C4096-90JU	4096	90	256K x 16bit	44-LCC	68T4284	10.15
● AT27C4096-90PU	4096	90	256K x 16bit	40-DIP	68T4285	7.65
● AT27C080-90PU	8192	90	1M x 8bit	32-DIP	68T4272	11.95
LOW VOLTAGE						
● AT27LV256A-90JU	256	90	32K x 8bit	32-LCC	68T4293	2.82
● AT27LV512A-90JU	512	90	64K x 8bit	32-LCC	68T4294	3.62
● AT27LV010A-70JU	1024	70	128K x 8bit	32-LCC	68T4290	4.02
● AT27LV020A-12JU	2048	120	256K x 8bit	32-LCC	68T4291	5.69
BATTERY VOLTAGE						
● AT27BV256-70JU	256	70	32K x 8bit	32-LCC	68T4259	3.47
● AT27BV010-90JU	1024	90	128K x 8bit	32-LCC	68T4257	4.69
● AT27BV1024-90JU	1024	90	64K x 16bit	44-LCC	68T4258	5.05

(197988)

CRYPTORF AT88CK201STK STARTER KIT

RoHS Compliant Available

Atmel

The **CryptoRF AT88CK201STK Starter Kit** adds secure HF RFID capabilities to prevent counterfeiting of medical and consumable products; track and record ownership, access control, and loyalty; and to conveniently store configuration and other sensitive data. The included pluggable CryptoRF® reader board contains the necessary circuitry and antenna to communicate with any HF RFID transponder compliant with the ISO 14443 type B standard. The kit's reference design makes it possible to include HF RFID capability in spaces smaller and more confined than previously possible. The core of the open-standards HF RFID reference design features the AT88RF1354 HF RFID reader IC, which supports ISO 14443 type B open standards for 13.56MHz RFID communications. The reader IC interoperates with any compliant HF RFID transponder, including the CryptoRF.

Mfg. Part No.	Description	Stock No.	Price Each
AT88CK201STK	CryptoRF Starter Kit	68T4746	99.95

(197961)

I2C™ COMPATIBLE SERIAL EEPROMS

RoHS Compliant Available

MICROCHIP

128-bit SINGLE BLOCK

Mfg. Part No.	Density Org. (Bits)	Oper. Volt. (V)	Write Speed (ms)	Clock Freq. Max. (Hz)	Package	Stock No.	Price Each 1-25
24AA00-I/SN	16 x 8	1.7 to 5.5	4	400K	8-SOIC	92C6779	0.20
24C00-I/SN	16 x 8	4.5 to 5.5	4	400K	8-SOIC	92C6931	0.20
1-Kbit SINGLE BLOCK							
24AA01T-I/OT	128 x 8	1.7 to 5.5	5	400K	5-SOT-23	72C4376	0.18
24AA01-I/ST	128 x 8	1.7 to 5.5	5	400K	8-TSSOP	92C6794	0.24
24LC01BT-I/OT	128 x 8	2.5 to 5.5	5	400K	5-SOT-23	12C1993	0.18
24LC01B-I/P	128 x 8	2.5 to 5.5	5	400K	8-DIP	12C1988	0.26
24LC014H-I/MS	128 x 8	2.5 to 5.5	5	1M	8-MSOP	77M3555	0.30
24LC21/P	128 x 8	2.5 to 5.5	5	400K	8-PDIP	92C7157	0.44
24LC014H-I/SN	128 x 8	2.5 to 5.5	5	1M	8-SOIC	77M3557	0.26
24LC01B-I/SN	128 x 8	2.5 to 5.5	5	400K	8-SOIC	12C1989	0.20
24LC21A-I/SN	128 x 8	2.5 to 5.5	5	400K	8-SOIC	92C7161	0.38
24LCS21A-I/SN	128 x 8	2.5 to 5.5	5	400K	8-SOIC	92C7022	0.38
24C01C-I/P	128 x 8	4.5 to 5.5	1	400K	8-DIP	92C6948	0.32
24C01C-I/SN	128 x 8	4.5 to 5.5	1	400K	8-SOIC	92C6949	0.26
2-Kbit SINGLE BLOCK							
24LCS52-I/SN	256 x 8	2.5 to 5.5	5	400K	8-SOIC	92C7032	0.32
24LC02B-I/P	256 x 8	2.5 to 5.5	5	400K	8-DIP	12C1996	0.28
24LC02B-E/SN	256 x 8	2.5 to 5.5	5	400K	8-SOIC	92C7078	0.28
24LC02B-I/SN	256 x 8	2.5 to 5.5	5	400K	8-SOIC	12C1997	0.22
24LC02B-I/SNG	256 x 8	2.5 to 5.5	5	400K	8-SOIC	30H1482	0.22
24C02C-I/P	256 x 8	4.5 to 5.5	1	400K	8-DIP	96K4062	0.32
32-Kbit SINGLE BLOCK							
24AA32AT-I/OT	4K x 8bit	1.7 to 5.5	5	400K	5-SOT-23	84R4149	0.32
24AA32A-I/P	4K x 8bit	1.7 to 5.5	5	400K	8-DIP	92C6885	0.40
24AA32AF-I/SN	4K x 8bit	1.7 to 5.5	5	400K	8-SOIC	08P0039	0.34
24LC32AT-I/MC	4K x 8bit	2.5 to 5.5	5	400K	8-DFN	01P1785	0.42
24LC32AF-I/P	4K x 8bit	2.5 to 5.5	5	400K	8-DIP	08P0095	0.40
24LC32A-I/P	4K x 8bit	2.5 to 5.5	5	400K	8-DIP	96K4078	0.40
24LC32AF-I/SN	4K x 8bit	2.5 to 5.5	5	400K	8-SOIC	08P0097	0.34
24LC32A-I/SN	4K x 8bit	2.5 to 5.5	5	400K	8-SOIC	12C2017	0.34
24LC32A-I/SM	4K x 8bit	2.5 to 5.5	5	400K	8-SOIJ	92C7182	0.36
64-Kbit SINGLE BLOCK							
24AA64FT-I/OT	8K x 8bit	1.7 to 5.5	5	400K	5-SOT-23	84R4151	0.36
24AA64T-I/OT	8K x 8bit	1.7 to 5.5	5	400K	5-SOT-23	08P0062	0.36
24AA64F-I/P	8K x 8bit	1.7 to 5.5	5	400K	8-DIP	08P0051	0.44
24AA64-I/SM	8K x 8bit	1.7 to 5.5	5	400K	8-SOIC	92C6910	0.40
24AA64-I/SN	8K x 8bit	1.7 to 5.5	5	400K	8-SOIC	85C2288	0.38
24LC64T-I/OT	8K x 8bit	2.5 to 5.5	5	400K	5-SOT-23	08P0142	0.36
24LC64T-I/MC	8K x 8bit	2.5 to 5.5	5	400K	8-DFN	31K5814	0.46
24LC64F-I/P	8K x 8bit	2.5 to 5.5	5	400K	8-DIP	08P0124	0.44
24LC64-I/P	8K x 8bit	2.5 to 5.5	5	400K	8-DIP	62K0584	0.44
24LC64-I/MS	8K x 8bit	2.5 to 5.5	5	400K	8-MSOP	40C2585	0.42
24LC64-E/SN	8K x 8bit	2.5 to 5.5	5	400K	8-SOIC	92C7217	0.44
24LC64F-I/SN	8K x 8bit	2.5 to 5.5	5	400K	8-SOIC	08P0126	0.38
24LC64-I/SN	8K x 8bit	2.5 to 5.5	5	400K	8-SOIC	12C2020	0.38
24LC64T-I/SN	8K x 8bit	2.5 to 5.5	5	400K	8-SOIC	12C2021	0.38
24LC65-I/P	8K x 8bit	2.5 to 6	2	400K	8-DIP	59K0361	1.64
24LC65-I/SM	8K x 8bit	2.5 to 6	2	400K	8-SOIC	89C9816	1.60
128-Kbit SINGLE BLOCK							
24FC128-I/P	16K x 8bit	1.7 to 5.5	5	1M	8-DIP	92C6993	0.60
24FC128-I/MS	16K x 8bit	1.7 to 5.5	5	1M	8-MSOP	92C6992	0.58
24AA128-I/SN	16K x 8bit	1.7 to 5.5	5	400K	8-SOIC	92C6842	0.54
24FC128-I/ST	16K x 8bit	1.7 to 5.5	5	1M	8-TSSOP	92C6997	0.58
24LC128-I/P	16K x 8bit	2.5 to 5.5	5	400K	8-DIP	12C2007	0.60
24LC128-I/SM	16K x 8bit	2.5 to 5.5	5	400K	8-SOIC	92C7134	0.56
24LC128-I/SN	16K x 8bit	2.5 to 5.5	5	400K	8-SOIC	12C2008	0.54

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I2C™ COMPATIBLE SERIAL EEPROMS (CONT.)

128-Kbit SINGLE BLOCK

Mfg. Part No.	Density Org. (Bits)	Oper. Volt. (V)	Write Speed (ms)	Clock Freq. Max. (Hz)	Package	Stock No.	Price Each 1-25
24LC128-I/SNG	16K x 8bit	2.5 to 5.5	5	400K	8-SOIC	30H1511	0.54
24LC128-E/ST	16K x 8bit	2.5 to 5.5	5	400K	8-TSSOP	30H1508	0.64
256-Kbit SINGLE BLOCK							
24AA256-I/P	32K x 8bit	1.7 to 5.5	5	400K	8-DIP	92C6872	0.82
24AA256-I/SN	32K x 8bit	1.7 to 5.5	5	400K	8-SOIC	92C6874	0.76
24AA256-I/ST	32K x 8bit	1.7 to 5.5	5	400K	8-TSSOP	92C6875	0.80
24LC256-I/P	32K x 8bit	2.5 to 5.5	5	400K	8-DIP	54K2864	0.82
24LC256-I/MS	32K x 8bit	2.5 to 5.5	5	400K	8-MSOP	54K2863	0.80
24LC256T-I/MS	32K x 8bit	2.5 to 5.5	5	400K	8-MSOP	92C7178	0.80
24LC256-I/SN	32K x 8bit	2.5 to 5.5	5	400K	8-SOIC	27C9144	0.76
24LC256-I/SM	32K x 8bit	2.5 to 5.5	5	400K	8-SOIJ	33C2973	0.78
24LC256-I/SMG	32K x 8bit	2.5 to 5.5	5	400K	8-SOIJ	68H9700	0.78
24LC256-E/ST	32K x 8bit	2.5 to 5.5	5	400K	8-TSSOP	68H9699	0.86
512-Kbit SINGLE BLOCK							
24FC512-I/P	64K x 8bit	1.7 to 5.5	5	1M	8-DIP	54K2862	1.34
24FC515-I/P	64K x 8bit	1.7 to 5.5	5	1M	8-DIP	69K7666	2.90
24AA512-I/SM	64K x 8bit	1.7 to 5.5	5	400K	8-SOIC	92C6900	1.30
24FC512-I/SM	64K x 8bit	1.7 to 5.5	5	1M	8-SOIC	92C7013	1.30
24AA512-I/ST	64K x 8bit	1.7 to 5.5	5	400K	8-TSSOP	08R2173	1.32
24LC512-I/P	64K x 8bit	2.5 to 5.5	5	400K	8-DIP	62K0581	1.34
24LC512-E/P	64K x 8bit	2.5 to 5.5	5	400K	8-PDIP	92C7201	1.40
24LC512-I/SN	64K x 8bit	2.5 to 5.5	5	400K	8-SOIC	08R2186	1.28
24LC512-I/SM	64K x 8bit	2.5 to 5.5	5	400K	8-SOIJ	62K0582	1.30
24LC512-I/SMG	64K x 8bit	2.5 to 5.5	5	400K	8-SOIJ	30H1539	1.30
1-Mbit SINGLE BLOCK							
24FC1025T-I/SM	128K x 8bit	1.8 to 5.5	5	1M	8-SOIJ	56K7666	2.88
24LC1025-I/P	128K x 8bit	2.5 to 5.5	5	400K	8-DIP	31K5810	2.92
24LC1025-E/P	128K x 8bit	2.5 to 5.5	5	400K	8-PDIP	69K0716	2.98
24LC1025-E/SM	128K x 8bit	2.5 to 5.5	5	400K	8-SOIJ	69K0717	2.94
24LC1025-I/SM	128K x 8bit	2.5 to 5.5	5	400K	8-SOIJ	31K5811	2.88
2-Kbit MULTIPLE BLOCKS							
24AA025E48-I/SN	2 BLK (128 x 8)	1.7 to 5.5	5	400K	8-SOIC	73R8707	0.28
24AA025E48T-I/OT	2 BLK (128 x 8)	1.7 to 5.5	5	400K	6-SOT-23	74R6951	0.26
24AA02E48-I/SN	2 BLK (128 x 8)	1.7 to 5.5	5	400K	8-SOIC	45P4894	0.24
24AA02E48T-I/OT	2 BLK (128 x 8)	1.7 to 5.5	5	400K	5-SOT-23	45P4895	0.22
4-Kbit MULTIPLE BLOCKS							
24LC04B-I/MS	2 BLK (256 x 8)	2.5 to 5.5	5	400K	8-MSOP	96K4070	0.28
24LC04B-I/P	2 BLK (256 x 8)	2.5 to 5.5	5	400K	8-DIP	62K0576	0.30
24LC04B-I/SN	2 BLK (256 x 8)	2.5 to 5.5	5	400K	8-SOIC	65K1125	0.24
24LC04BT-I/OT	2 BLK (256 x 8)	2.5 to 5.5	5	400K	5-SOT-23	89C9802	0.22
8-Kbit MULTIPLE BLOCKS							
24AA08T-I/OT	4 BLK (256 x 8)	1.7 to 5.5	5	400K	5-SOT-23	92C6833	0.24
24LC08B-I/SN	4 BLK (256 x 8)	2.5 to 5.5	5	400K	8-SOIC	80K6265	0.26
16-Kbit MULTIPLE BLOCKS							
24AA16T-I/OT	8 BLK (256 x 8)	1.7 to 5.5	5	400K	5-SOT-23	75M3685	0.26
24LC16B-E/SN	8 BLK (256 x 8)	2.5 to 5.5	5	400K	8-SOIC	92C7144	0.34
24LC16BH-I/P	8 BLK (256 x 8)	2.5 to 5.5	5	400K	8-DIP	98M5322	0.34
24LC16B-I/P	8 BLK (256 x 8)	2.5 to 5.5	5	400K	8-DIP	62K0579	0.34
24LC16B-I/SN	8 BLK (256 x 8)	2.5 to 5.5	5	400K	8-SOIC	69K7670	0.28
24LC16B-I/SNG	8 BLK (256 x 8)	2.5 to 5.5	5	400K	8-SOIC	03H7541	0.28
24LC16BT-I/MC	8 BLK (256 x 8)	2.5 to 5.5	5	400K	8-DFN	84R4153	0.36
24LC16BT-I/OT	8 BLK (256 x 8)	2.5 to 5.5	5	400K	5-SOT-23	62K0580	0.26

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MICROWIRE® COMPATIBLE SERIAL EEPROMS

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MICROCHIP

1-Kbit SINGLE WIDTH CONFIGURATIONS

Mfg. Part No.	Density Org. (Bits)	Oper. Volt. (V)	Write Speed (ms)	Clock Freq. Max. (MHz)	Package	Stock No.	Price Each 1-99
93LC46A-I/P	128 x 8	2.5 - 5.5V	6	3	8-DIP	96K4102	0.28
93LC46A-I/SN	128 x 8	2.5 - 5.5V	6	3	8-SOIC	90C0040	0.22
93LC46A-I/ST	128 x 8	2.5 - 5.5V	6	3	8-TSSOP	92C7645	0.26
93C46A-I/SN	128 x 8	4.5 V	2	3	8-SOIC	92C7592	0.22
93LC46BX/SN	64K x 16bit	2.5 V	6	3	8-SOIC	92C7666	0.22
93LC46BT-I/OT	64K x 16bit	2.5 - 5.5V	6	3	6-SOT-23	75M3689	0.20
93LC46B-I/P	64K x 16bit	2.5 - 5.5V	6	3	8-DIP	62K2083	0.28
93LC46B-I/SN	64K x 16bit	2.5 - 5.5V	6	3	8-SOIC	12C2033	0.22
93C46B-I/P	64K x 16bit	4.5 - 5.5V	2	3	8-DIP	54K2866	0.28

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MICROWIRE® COMPATIBLE SERIAL EEPROMS (CONT.)

Mfg. Part No.	Density Org. (Bits)	Oper. Volt. (V)	Write Speed (ms)	Clock Freq. Max. (MHz)	Package	Stock No.	Price Each 1-99
● 93C46B-I/SN	64K x 16bit	4.5 - 5.5V	2	3	8-SOIC	12C2023	0.22
● 93C46BT/SN	64K x 16bit	4.5 V	2	3	8-SOIC	12C2027	0.22
2-Kbit SINGLE WIDTH CONFIGURATIONS							
● 93AA56AT-I/OT	256 x 8	1.8 - 5.5V	6	3	6-SOT-23	30H4490	0.22
● 93LC56A-I/P	256 x 8	2.5 - 5.5V	6	3	8-DIP	96K4106	0.30
● 93C56A-I/SN	256 x 8	4.5 V	2	3	8-SOIC	61H6540	0.24
● 93LC56BT-I/OT	128 x 16	2.5 - 5.5V	6	3	6-SOT-23	30H4760	0.22
● 93LC56B-I/P	128 x 16	2.5 - 5.5V	6	3	8-DIP	62K2084	0.30
● 93LC56B-I/SN	128 x 16	2.5 - 5.5V	6	3	8-SOIC	62K2085	0.24
● 93C56B-I/P	128 x 16	4.5 - 5.5V	2	3	8-DIP	61H6567	0.30
● 93C56B-I/SN	128 x 16	4.5 - 5.5V	2	3	8-SOIC	61H6569	0.24
4-Kbit SINGLE WIDTH CONFIGURATIONS							
● 93LC66A-I/ST	512 x 8	2.5 - 5.5V	6	3	8-TSSOP	92C7707	0.30
● 93LC66A-I/P	512 x 8	2.5 - 5.5V	6	3	8-DIP	69K7677	0.32
● 93C66A-I/P	512 x 8	4.5 V	2	3	8-PDIP	61H6596	0.32
● 93LC66BT-I/OT	256 x 16	2.5 - 5.5V	6	3	6-SOT-23	30H4829	0.24
● 93LC66B-I/ST	256 x 16	2.5 - 5.5V	6	3	8-TSSOP	92C7718	0.30
● 93LC66B-I/P	256 x 16	2.5 - 5.5V	6	3	8-DIP	96K4111	0.32
● 93C66B-I/P	256 x 16	4.5 - 5.5V	2	3	8-DIP	61H6625	0.32
● 93C66B-I/SN	256 x 16	4.5 - 5.5V	2	3	8-SOIC	61H6627	0.26
1-Kbit MULTIPLE WIDTH CONFIGURATIONS							
● 93AA46/SN	128 x 8 / 64 x 16	1.8 - 5.5V	10	2	8-SOIC	96K4100	0.44
● 93LC46/SN	128 x 8 / 64 x 16	2.5 - 5.5V	10	2	8-SOIC	12C2030	0.44
● 93LC46C-I/P	128 x 8 / 64 x 16	2.5 - 5.5V	6	3	8-DIP	30H4712	0.30
● 93LC46C-I/SN	128 x 8 / 64 x 16	2.5 - 5.5V	6	3	8-SOIC	30H4714	0.24
● 93LC46C-I/ST	128 x 8 / 64 x 16	2.5 - 5.5V	6	3	8-TSSOP	30H4716	0.28
● 93C46C-I/SN	128 x 8 / 64 x 16	4.5 V	2	3	8-SOIC	30H4622	0.24
2-Kbit MULTIPLE WIDTH CONFIGURATIONS							
● 93AA56C-I/SN	256 x 8 / 128 x 16	1.8 - 5.5V	6	3	8-SOIC	30H4524	0.24
● 93LC56-I/SN	256 x 8 / 128 x 16	2.5 - 5.5V	10	2	8-SOIC	96K4104	0.50
● 93LC56T/SN	256 x 8 / 128 x 16	2.5 - 5.5V	10	2	8-SOIC	92C7699	0.50
4-Kbit MULTIPLE WIDTH CONFIGURATIONS							
● 93AA66C-I/SN	512 x 8 / 256 x 16	1.8 - 5.5V	6	3	8-SOIC	30H4582	0.26
● 93LC66-I/SN	256 x 16 / 512 x 8	2.5 V	10	2	8-SOIC	92C7705	0.50
● 93C66C-I/P	512 x 8 / 256 x 16	4.5 V	2	3	8-PDIP	30H4674	0.32
8-Kbit MULTIPLE WIDTH CONFIGURATIONS							
● 93C76C-I/SN	1K x 8 / 512 x 16	4.5 V	2	3	8-SOIC	61H6698	0.34
16-Kbit MULTIPLE WIDTH CONFIGURATIONS							
● 93LC86C-I/P	2K x 8 / 1K x 16	2.5 - 5.5V	6	3	8-DIP	96K4116	0.44
● 93C86C-I/SN	2K x 8 / 1K x 16	4.5 - 5.5V	2	3	8-SOIC	61H6767	0.38

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I2C SERIAL EEPROMS

RoHS Compliant Available

ON Semiconductor

Serial EEPROM products are used in many applications to store user reconfigurable data. Common applications are disk drives, modems, cellular phones, VCRs, CD players, hearing aids, PCMCIA cards, cordless phones, laser printers, computers and pagers. These serial EEPROMs are compatible with I²C™ bus protocol and are offered in high density, 1K to 256K, and wide voltage, 1.8V to 6V, ranges. These EEPROM products also meet the automotive specifications for both inside-the-cabin and under-the-hood applications and are specified over the entire voltage range of 1.8V to 6.0V at the automotive temperature extremes.

Mfg. Part No.	Mem. Size (Kbit)	Mem. Config.	Supply Voltage Range (V)	Pkg.	Stock No.	Price Each 1-9
● CAT24C01WI-GT3	1	128 x 8	1.7 to 5.5V	8-SOIC	08R5400	0.45
● CAT24C01YI-GT3	1	128 x 8	1.7 to 5.5V	8-TSSOP	08R5401	0.41
● CAT24C02WI-GT3	2	256 x 8	1.7 to 5.5V	8-SOIC	08R5403	0.58
CAT24C02WI-G.	2	256 x 8	1.7 to 5.5V	8-SOIC	06R0494	0.64
● CAT24AA02TDI-GT3	2	256 x 8	1.7 to 5.5V	5-SOT-23	08R5399	0.47
● CAT24C04YI-GT3	4	512 x 8	1.7 to 5.5V	8-TSSOP	08R5405	0.58
● CAT24C04WI-G	4	512 x 8	1.7 to 5.5V	8-SOIC	06R0507	0.55
● CAT24C04LI-G	4	512 x 8	1.7 to 5.5V	8-DIP	73P4460	0.49
● CAT24C08WI-G	8	1K x 8bit	1.7 to 5.5V	8-SOIC	06R0521	0.47
● CAT24C08WI-GT3	8	1K x 8bit	1.7 to 5.5V	8-SOIC	08R5408	0.41
● CAT24C208WI-G	8	1K x 8bit	2.5 to 5.5V	8-SOIC	06R0547	2.90
● CAT24C208WI-GT3	8	1K x 8bit	2.5 to 5.5V	8-SOIC	08R5411	2.86
● CAT24C16LI-G	16	2K x 8bit	1.7 to 5.5V	8-DIP	06R0533	0.54
● CAT24C164LI-G	16	2K x 8bit	1.7 to 5.5V	8-DIP	06R0541	1.50
● CAT24C164WI-G	16	2K x 8bit	1.7 to 5.5V	8-SOIC	06R0543	1.65
● CAT24C164WI-GT3	16	2K x 8bit	1.7 to 5.5V	8-SOIC	08R5410	1.45
● CAT24C32LI-G	32	4K x 8bit	1.7 to 5.5V	8-DIP	06R0558	0.64
● CAT24C32WI-GT3	32	4K x 8bit	1.7 to 5.5V	8-SOIC	08R5414	0.57
● CAT24C32YI-GT3	32	4K x 8bit	1.7 to 5.5V	8-TSSOP	08R5415	0.61

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I2C SERIAL EEPROMS (CONT.)

Mfg. Part No.	Mem. Size (Kbit)	Mem. Config.	Supply Voltage Range (V)	Pkg.	Stock No.	Price Each 1-9
● CAT24C64LI-G	64	8K x 8bit	1.7 to 5.5V	8-DIP	06R0570	0.85
● CAT24C64WI-G	64	8K x 8bit	1.7 to 5.5V	8-SOIC	06R0572	0.58
● CAT24C64WI-GT3	64	8K x 8bit	1.7 to 5.5V	8-SOIC	08R5417	0.64
● CAT24C64YI-GT3	64	8K x 8bit	1.7 to 5.5V	8-TSSOP	08R5418	0.60
● CAT24C128LI-G	128	16K x 8bit	1.7 to 5.5V	8-DIP	06R0528	0.92
● CAT24C128WI-GT3	128	16K x 8bit	1.7 to 5.5V	8-SOIC	08R5409	0.68
● CAT24C256LI-G	256	32K x 8bit	1.8 to 5.5V	8-DIP	06R0551	1.10
● CAT24C256WI-G	256	32K x 8bit	1.8 to 5.5V	8-SOIC	06R0552	0.86
● CAT24C256WI-GT3	256	32K x 8bit	1.8 to 5.5V	8-SOIC	08R5412	0.81
● CAT24C256XI	256	32K x 8bit	1.8 to 5.5V	8-SOIC	06R0554	1.36
● CAT24C256XI-T2	256	32K x 8bit	1.8 to 5.5V	8-SOIC	08R5413	1.05
● CAT24M01LI-G	1M	128K x 8bit	1.8 to 5.5V	8-DIP	52T7614	2.90

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UNI/O™ SERIAL EEPROMS

RoHS Compliant Available

MICROCHIP

1-Kbit

Mfg. Part No.	Density Org. (Bits)	Oper. Volt. (V)	Write Speed (ms)	Clock Freq. Max. (kHz)	Package	Stock No.	Price Each 1-25
● 11AA010T-I/TT	128 x 8	1.8 - 5.5 V	5	100	3-SOT-23	98M4927	0.18
● 11LC010T-I/TT	128 x 8	2.5 - 5.5 V	5	100	3-SOT-23	98M4975	0.18

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MICROWIRE SERIAL EEPROMS

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Serial EEPROM products are used in many applications to store user reconfigurable data. Common applications are disk drives, modems, cellular phones, VCRs, CD players, hearing aids, PCMCIA cards, cordless phones, laser printers, computers and pagers. These serial EEPROMs are compatible with Microwire™ bus protocol and are offered in high density, 1K to 256K, and wide voltage, 1.8V to 6V, ranges. These EEPROM products also meet the automotive specifications for both inside-the-cabin and under-the-hood applications and are specified over the entire voltage range of 1.8V to 6.0V at the automotive temperature extremes. These Microwire™ Serial EEPROMs also feature a selectable 8 or 16 bit wide word.

Mfg. Part No.	Mem. Size (Kbit)	Mem. Config.	Supply Voltage Range (V)	Pkg.	Stock No.	Price Each 1-9
● CAT93C46LI-G	1	128 x 8 / 64 x 16	1.8 to 5.5V	8-DIP	06R1436	0.67
● CAT93C46VI-G	1	128 x 8 / 64 x 16	1.8 to 5.5V	8-SOIC	06R1445	0.44
● CAT93C46VI-GT3	1	128 x 8 / 64 x 16	1.8 to 5.5V	8-SOIC	08R5453	0.47
● CAT93C46WI-G	1	128 x 8 / 64 x 16	1.8 to 5.5V	8-SOIC	06R1448	0.46
● CAT93C46WI-GT3	1	128 x 8 / 64 x 16	1.8 to 5.5V	8-SOIC	08R5454	0.44
● CAT93C46YI-G	1	128 x 8 / 64 x 16	1.8 to 5.5V	8-TSSOP	74P0100	0.49
● CAT93C56LI-G	2	256 x 8 / 128 x 16	1.8 to 5.5V	8-DIP	06R1453	0.70
● CAT93C56VI-GT3	2	256 x 8 / 128 x 16	1.8 to 5.5V	8-SOIC	08R5457	0.54
● CAT93C57LI-G	2	256 x 8 / 128 x 16	1.8 to 5.5V	8-DIP	06R1461	0.90
● CAT93C66VI-G	4	512 x 8 / 256 x 16	1.8 to 5.5V	8-SOIC	06R1467	0.58
● CAT93C66VI-GT3	4	512 x 8 / 256 x 16	1.8 to 5.5V	8-SOIC	08R5458	0.58
● CAT93C86LI-G	16	2K x 8 / 1K x 16	1.8 to 5.5V	8-DIP	06R1479	0.90
● CAT93C86VI-G	16	2K x 8 / 1K x 16	1.8 to 5.5V	8-SOIC	06R1480	0.65
● CAT93C86VI-GT3	16	2K x 8 / 1K x 16	1.8 to 5.5V	8-SOIC	08R5460	0.61

(147903)

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(196526)

SPI SERIAL EEPROMS

RoHS Compliant Available

ON Semiconductor

Serial EEPROM products are used in many applications to store user reconfigurable data. Common applications are disk drives, modems, cellular phones, VCRs, CD players, hearing aids, PCMCIA cards, cordless phones, laser printers, computers and pagers. These serial EEPROMs are compatible with SPI™ bus protocol and are offered in high density, 1K to 256K, and wide voltage, 1.8V to 6V, ranges. These EEPROM products also meet the automotive specifications for both inside-the-cabin and under-the-hood applications and are specified over the entire voltage range of 1.8V to 6.0V at the automotive temperature extremes.

Mfg. Part No.	Mem. Size (Kbit)	Mem. Config.	Supply Voltage Range (V)	Pkg.	Stock No.	Price Each 1-9
CAT25010VI-G	1	128 x 8	1.8 to 5.5V	8-SOIC	06R0577	0.54
CAT25010VI-GT3	1	128 x 8	1.8 to 5.5V	8-SOIC	08R5419	0.52
CAT25020LI-G	2	256 x 8	1.8 to 5.5V	8-DIP	06R0582	0.74
CAT25020VI-G	2	256 x 8	1.8 to 5.5V	8-SOIC	06R0583	0.52
CAT25020VI-GT3	2	256 x 8	1.8 to 5.5V	8-SOIC	08R5421	0.54
CAT25040LI-G	4	512 x 8	1.8 to 5.5V	8-DIP	06R0588	0.68
CAT25040VI-G	4	512 x 8	1.8 to 5.5V	8-SOIC	06R0589	0.66
CAT25040VI-GT3	4	512 x 8	1.8 to 5.5V	8-SOIC	08R5422	0.58
CAT25080LI-G	8	1K x 8bit	1.8 to 5.5V	8-DIP	06R0594	0.72
CAT25080VI-GT3	8	1K x 8bit	1.8 to 5.5V	8-SOIC	08R5424	0.49
CAT25080YI-GT3	8	1K x 8bit	1.8 to 5.5V	8-TSSOP	08R5425	0.49
CAT25160LI-G	16	2K x 8bit	1.8 to 5.5V	8-DIP	06R0608	0.99
CAT25160VI-GT3	16	2K x 8bit	1.8 to 5.5V	8-SOIC	08R5427	0.47
CAT25160YI-GT3	16	2K x 8bit	1.8 to 5.5V	8-TSSOP	08R5428	0.47
CAT25320LI-G	32	4K x 8bit	1.8 to 5.5V	8-DIP	06R0621	0.93
CAT25320VI-GT3	32	4K x 8bit	1.8 to 5.5V	8-SOIC	08R5430	0.71
CAT25640LI-G	64	8K x 8bit	1.8 to 5.5V	8-DIP	06R0627	0.99
CAT25640VI-G	64	8K x 8bit	1.8 to 5.5V	8-SOIC	06R0628	0.83
CAT25640VI-GT3	64	8K x 8bit	1.8 to 5.5V	8-SOIC	08R5431	0.69
CAT25128LI-G	128	16K x 8bit	1.8 to 5.5V	8-DIP	06R0600	1.21
CAT25128VI-G	128	16K x 8bit	1.8 to 5.5V	8-SOIC	06R0601	1.03
CAT25128VI-GT3	128	16K x 8bit	1.8 to 5.5V	8-SOIC	08R5426	0.95
CAT25256LI-G	256	32K x 8bit	1.8 to 5.5V	8-DIP	06R0614	1.40
CAT25256VI-G	256	32K x 8bit	1.8 to 5.5V	8-SOIC	06R0615	1.47
CAT25256XI-T2	256	32K x 8bit	1.8 to 5.5V	8-SOIC	08R5429	1.48

(147905)

SPI™ COMPATIBLE SERIAL EEPROMS

RoHS Compliant Available

MICROCHIP

Mfg. Part No.	Density Org. (Bits)	Oper. Volt. (V)	Write Speed (ms)	Clock Freq. Max. (MHz)	Package	Stock No.	Price Each 1-25
1-Kbit SINGLE BLOCK							
25LC010A-I/SN	128 x 8	2.5V to 5.5V	5	10	8-SOIC	72J3649	0.36
25LC010AT-I/OT	128 x 8	2.5V to 5.5V	5	10	6-SOT-23	72J3657	0.34
25LC010AT-I/SN	128 x 8	2.5V to 5.5V	5	10	8-SOIC	99M0829	0.36
2-Kbit SINGLE BLOCK							
25AA020A-I/SN	256 x 8	1.8V to 5.5V	5	10	8-SOIC	72J3627	0.38
25AA02E48-I/SN	256 x 8	1.8V to 5.5V	5	10	8-SOIC	45P4904	0.40
25AA02E48T-I/OT	256 x 8	1.8V to 5.5V	5	10	6-SOT-23	45P4905	0.38
25AA02E48T-I/SN	256 x 8	1.8V to 5.5V	5	10	8-SOIC	84R4155	0.40
4-Kbit SINGLE BLOCK							
25AA040AT-I/OT	512 x 8	1.8V to 5.5V	5	10	6-SOT-23	72J3640	0.38
25C040/P	512 x 8	4.5V to 5.5V	5	3	8-DIP	96K4084	0.54
25C040-I/SN	512 x 8	4.5V to 5.5V	5	3	8-SOIC	92C7386	0.48
25LC040A-I/P	512 x 8	2.5V to 5.5V	5	10	8-DIP	72J3682	0.46
25LC040A-I/SN	512 x 8	2.5V to 5.5V	5	10	8-SOIC	72J3683	0.40
25LC040AT-E/OT	512 x 8	2.5V to 5.5V	5	10	6-SOT-23	84R4159	0.44
8-Kbit SINGLE BLOCK							
25AA080A-I/SN	1K x 8bit	1.8V to 5.5V	5	10	8-SOIC	30H1550	0.48
25AA080A-I/ST	1K x 8bit	1.8V to 5.5V	5	10	8-TSSOP	30H1551	0.52
25AA080-I/SN	1K x 8bit	1.8V to 5.5V	5	1	8-SOIC	92C7347	0.76
25C080-I/P	1K x 8bit	4.5V to 5.5V	5	3	8-PDIP	92C7398	0.82
16-Kbit SINGLE BLOCK							
25AA160A-I/SN	2K x 8bit	1.8V to 5.5V	5	10	8-SOIC	30H1564	0.50
25AA160A-I/ST	2K x 8bit	1.8V to 5.5V	5	10	8-TSSOP	30H1565	0.54
25C160/SN	2K x 8bit	4.5V to 5.5V	5	3	8-SOIC	96K4089	0.78
25C160-I/SN	2K x 8bit	4.5V to 5.5V	5	3	8-SOIC	96K4087	0.78
32-Kbit SINGLE BLOCK							
25AA320A-I/MS	4K x 8bit	1.8V to 5.5V	5	10	8-MSOP	31K5817	0.58
25C320-I/P	4K x 8bit	4.5V to 5.5V	5	3	8-PDIP	96K4090	0.68
25C320-I/SN	4K x 8bit	4.5V to 5.5V	5	3	8-SOIC	92C7416	0.62
25LC320A-I/MS	4K x 8bit	2.5V to 5.5V	5	10	8-MSOP	31K5831	0.58

➤CONTINUED➤

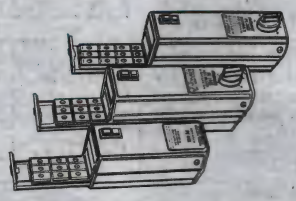
SPI™ COMPATIBLE SERIAL EEPROMS (CONT.)

Mfg. Part No.	Density Org. (Bits)	Oper. Volt. (V)	Write Speed (ms)	Clock Freq. Max. (MHz)	Package	Stock No.	Price Each 1-25
64-Kbit SINGLE BLOCK							
25AA640A-I/MS	8K x 8bit	1.8V to 5.5V	5	10	8-MSOP	27M1297	0.60
25AA640A-I/ST	8K x 8bit	1.8V to 5.5V	5	10	8-TSSOP	27M1300	0.60
25AA640-I/P	8K x 8bit	1.8V to 5.5V	5	1	8-DIP	96K4083	0.70
25LC640A-E/MS	8K x 8bit	2.5V to 5.5V	5	10	8-MSOP	27M1306	0.66
25LC640A-E/SN	8K x 8bit	2.5V to 5.5V	5	10	8-SOIC	27M1308	0.62
25LC640A-I/MS	8K x 8bit	2.5V to 5.5V	5	10	8-MSOP	27M1310	0.60
25LC640A-I/P	8K x 8bit	2.5V to 5.5V	5	10	8-DIP	27M1311	0.62
25LC640A-I/SN	8K x 8bit	2.5V to 5.5V	5	10	8-SOIC	27M1312	0.56
25LC640A-I/ST	8K x 8bit	2.5V to 5.5V	5	10	8-TSSOP	27M1313	0.60
128-Kbit SINGLE BLOCK							
25AA128-I/SN	16K x 8bit	1.8V to 5.5V	6	10	8-SOIC	17M3483	0.84
25AA128T-I/ST	16K x 8bit	1.8V to 5.5V	6	10	8-TSSOP	84R4156	0.88
256-Kbit SINGLE BLOCK							
25AA256-I/MF	32K x 8bit	1.8V to 5.5V	5	10	8-DFN	61H6045	1.36
25AA256-I/SM	32K x 8bit	1.8V to 5.5V	5	10	8-SOIC	56K7674	1.14
25AA256-I/SN	32K x 8bit	1.8V to 5.5V	5	10	8-SOIC	92C7370	1.12
25AA256-I/ST	32K x 8bit	1.8V to 5.5V	5	10	8-TSSOP	92C7371	1.16
25LC256-E/SN	32K x 8bit	2.5V to 5.5V	5	10	8-SOIC	92C7458	1.18
25LC256-I/P	32K x 8bit	2.5V to 5.5V	5	10	8-DIP	92C7459	1.18
25LC256-I/SM	32K x 8bit	2.5V to 5.5V	5	10	8-SOIC	56K7683	1.14
25LC256-I/SN	32K x 8bit	2.5V to 5.5V	5	10	8-SOIC	92C7460	1.12
25LC256-I/ST	32K x 8bit	2.5V to 5.5V	5	10	8-TSSOP	92C7461	1.16
512-Kbit SINGLE BLOCK							
25AA512-I/P	64K x 8bit	1.8V to 5.5V	5	20	8-DIP	17M3492	1.76
25AA512-I/SM	64K x 8bit	1.8V to 5.5V	5	20	8-SOIJ	17M3493	1.72
25AA512-I/SN	64K x 8bit	1.8V to 5.5V	5	20	8-SOIC	17M3494	1.70
25LC512-E/SN	64K x 8bit	2.5V to 5.5V	5	20	8-SOIC	17M3526	1.76
25LC512T-I/SN	64K x 8bit	2.5V to 5.5V	5	20	8-SOIC	30P1219	1.70
25LC512-I/SM	64K x 8bit	2.5V to 5.5V	5	20	8-SOIJ	17M3529	1.72
25A512-I/P	64K x 8bit	1.7V to 3V	5	10	8-DIP	55T4199	1.62
25A512-I/SN	64K x 8bit	1.7V to 3V	5	10	8-SOIC	55T4200	1.56
1-Mbit SINGLE BLOCK							
25AA1024-I/P	128K x 8bit	1.8V to 5.5V	6	20	8-DIP	89H3144	2.98
25LC1024-E/P	128K x 8bit	2.5V to 5.5V	6	20	8-DIP	89H3173	3.04
25LC1024-E/SM	128K x 8bit	2.5V to 5.5V	6	20	8-SOIJ	89H3174	3.00
25LC1024-I/P	128K x 8bit	2.5V to 5.5V	6	20	8-DIP	89H3176	2.98
25LC1024-I/SM	128K x 8bit	2.5V to 5.5V	6	20	8-SOIJ	89H3178	2.94

(108737)

PE SERIES UV EPROM ERASING LAMPS

SPECTROLINE®



- Small size
- Robust Design
- Efficient and Complete Erasing In As Little As 11 to 13 Minutes

Small capacity and medium intensity personal user lamps specially designed for small systems users. The are the fastest, most efficient unit of its size utilizing a single 4-watt tube (rated life of 6,000 hours). *Order replacement tubes* **BLE-2537S** *separately.* A UV-absorbing light indicator in the tray endcap shows tubes are operating, while protecting eyes from UV exposure. Tray has conductive foam pad to prevent electrostatic build-up and protect chips from possible static charge. **PE-140T** erases 9 chips with an erasing time of 12.5 minutes for 1 chip. Automatic timer included. Inside tray dimensions are 2.00W x 6.63L x 0.63"H (50.80 x 168.40 x 16.00). UL listed, CSA certified. *For specifications, refer to the chart shown online or call .*

Mfg. Part No.	Description	Stock No.	Price Each
PE-140T	9 chip erasing capacity	87F3962	270.00
BLE-2537S	Replacement tube	87F3967	32.40

(4458)

EMBEDDED DESIGN TOOLS

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(196530)

PL-265T UV EPROM ERASING LAMP

SPECTROLINE®

- Medium Capacity
- Medium Intensity
- Compact Size
- 30 Chip Erasing Capability
- Efficient and Complete Erasing in Under 11 Minutes

Ideal lamp for data-processing centers and medium capacity industrial requirements. Will erase up to thirty 24-pin EPROM chips at once. Erasing time: 10.4 minutes. Accommodates PC boards to 4.00 x 9.00" (101.60 x 228.60). Lamp with timer utilizes two 6-watt tubes with rated life of 6,000 hours. UV-absorbing light indicator in tray endcap shows tubes are operating, while protecting eyes from UV exposure. Tray insert adjusts to varying heights to maintain optimum exposure distance and has a conductive foam pad to prevent electrostatic build-up and to protect chips from possible static charge. Inside tray dimensions: 4.13W x 9.88L x 1.38"H (104.90 x 250.95 x 35.05). UL listed. *For specifications, refer to the chart shown online or call*. *Order* **Mfg. Part No. BLE-6254S** *replacement tube separately.*

Mfg. Part No.	Description	Stock No.	Price Each
PL-265T	UV EPROM erasing lamp	87F3964	415.00
BLE-6254S	Replacement tube	87F3968	38.00

(4459)

SRAM MEMORY

RoHS Compliant Available

CYPRESS PERFORM

FAST ASYNCHRONOUS SRAM

Mfg. Part No.	Mem Size (bits)	Mem. Config.	T_{acc} (ns)	V_{cc} (V)	PKG	Stock No.	Price Each 1-24
● CY7C185-20PXC	64K	8K x 8bit	20	5 V	28-DIP	19M3723	4.84
● CY7C1399BN-12VXC	256K	32K x 8bit	12	3.3 V	28-SOJ	19M3549	2.69
● CY7C199CN-15PXC	256K	32K x 8bit	15	5 V	28-DIP	19M3763	2.13
● CY7C1009D-10VXI	1M	128K x 8bit	10	5 V	32-SOJ	19M2831	3.30
● CY7C109D-10VXI	1M	128K x 8bit	10	5 V	32-SOJ	19M3184	3.30
● CY7C109D-10ZXI	1M	128K x 8bit	10	5 V	32-TSOP	19M3185	3.08
● CY7C1019DV33-10VXI	1M	128K x 8bit	10	3.3 V	32-SOJ	19M2882	3.48
● CY7C1021D-10VXI	1M	64K x 16bit	10	5 V	44-SOJ	19M3027	3.61
● CY7C1021D-10ZSXI	1M	64K x 16bit	10	5 V	44-TSOP	19M3028	3.30
● CY7C1021DV33-10VXI	1M	64K x 16bit	10	3.3 V	44-SOJ	19M3030	2.75
● CY7C1021DV33-10ZSXI	1M	64K x 16bit	10	3.3 V	44-TSOP	19M3031	2.75
● CY7C1021DV33-10ZSXIT	1M	64K x 16bit	10	3.3 V	44-TSOP	41M1365	2.75
● CY7C1011DV33-10ZSXI	2M	128K x 16bit	10	3.3 V	44-TSOP	19M2842	4.73
● CY7C1049D-10VXI	4M	512K x 8	10	5 V	36-SOJ	19M3097	6.52
● CY7C1049DV33-10VXI	4M	512K x 8	10	3.3 V	36-SOJ	19M3099	5.89
● CY7C1041D-10VXI	4M	256K x 16bit	10	5 V	44-SOJ	19M3067	7.15
● CY7C1041DV33-10VXI	4M	256K x 16bit	10	3.3 V	44-SOJ	19M3075	5.72
● CY7C1041DV33-10ZSXI	4M	256K x 16bit	10	3.3 V	44-TSOP	19M3077	5.33
● CY7C1069AV33-10ZXC	16M	2M x 8bit	10	3.3 V	54-TSOP	19M3139	46.53
DUAL-PORT STATIC RAM							
● CY7C024AV-25AXC	6K	4K x 16	25	3.3 V	100-TQFP	19M2716	26.61
HIGH-SPEED SYNCHRONOUS SRAM							
● CY7C1347G-133AXC	4M	128K x 36	4	3.3 V	100-TQFP	19M3296	8.39
● CY7C1370D-167AXI	18M	1M x 18 / 512K x 36	3.4	3.3 V	100-TQFP	19M3450	33.18
● CY7C1371D-100AXC	18M	1M x 18 / 512K x 36	8.5	3.3 V	100-TQFP	19M3474	34.11
● CY7C1380D-167AXC	18M	1M x 18 / 512K x 36	3.4	3.3 V	100-TQFP	19M3499	32.18
MicroPower SRAM							
● CY6264-70SNXC	64K	8K x 8bit	70	5 V	28-NSOIC	19M2607	4.51
● CY62256NLL-70PXC	256K	32K x 8bit	70	5 V	28-DIP	19M2552	4.23
● CY62256NLL-70SNXC	256K	32K x 8bit	70	5 V	28-NSOIC	19M2557	2.86
● CY62256VNLL-70SNXI	256K	32K x 8bit	70	3 V	28-NSOIC	19M2582	1.76
● CY62128ELL-45SXI	1M	128K x 8bit	45	5 V	32-SOIC	19M2395	3.19
● CY62128EV30LL-45SXI	1M	128K x 8bit	45	3 V	32-SOIC	19M2401	3.68
● CY62128EV30LL-45ZAXI	1M	128K x 8bit	45	3 V	32-STSOP	19M2403	1.98
● CY62148ELL-45ZSXI	4M	512K x 8	45	5 V	32-TSOP	19M2473	6.95
● CY62148ELL-55SXI	4M	512K x 8	55	5 V	32-SOIC	53M3489	5.81
● CY62146EV30LL-45ZSXI	4M	256K x 16bit	45	3 V	44-TSOP	19M2455	6.16
● CY62157EV30LL-45ZSXI	8M	512K x 16	45	3 V	44-TSOP	19M2496	9.90
● CY62157EV30LL-45ZXI	8M	512K x 16	45	3 V	48-TSOP	19M2498	10.67
● CY62167DV30LL-55BVXI	16M	2M x 8 / 1M x 16	55	3 V	48-BGA	19M2510	14.95
● CY62167DV30LL-55ZXI	16M	2M x 8 / 1M x 16	55	3 V	48-TSOP	19M2514	18.81
● CY62167EV30LL-45ZXI	16M	2M x 8 / 1M x 16	45	3 V	48-TSOP	41M1334	17.55
HIGH PERFORMANCE (HP) SRAM							
● CY7C4041KV13-667FCXC	72M	2M x 36bit	...	1.26 V	361-FBGA	49X8420	197.72
● CY7C4021KV13-667FCXC	72M	4M x 18bit	...	1.26 V	361-FBGA	49X8419	197.72
● CY7C4121KV13-600FCXC	144M	8M x 18bit	...	1.34 V	361-FBGA	49X8421	226.87
● CY7C4121KV13-667FCXC	144M	8M x 18bit	...	1.34 V	361-FBGA	49X8422	226.87
● CY7C4122KV13-106FCXC	144M	8M x 18bit	...	1.34 V	361-FBGA	49X8423	234.90

➤ CONTINUED ➤

SRAM MEMORY (CONT.)

HIGH PERFORMANCE (HP) SRAM

Mfg. Part No.	Mem Size (bits)	Mem. Config.	T_{acc} (ns)	V_{cc} (V)	PKG	Stock No.	Price Each 1-24
● CY7C4122KV13-933FCXC	144M	8M x 18bit	...	1.34 V	361-FBGA	49X8424	234.90
● CY7C4142KV13-106FCXC	144M	8M x 18bit	...	1.34 V	361-FBGA	49X8427	275.05
● CY7C4142KV13-933FCXC	144M	8M x 18bit	...	1.34 V	361-FBGA	49X8428	275.05
● CY7C4141KV13-600FCXC	144M	4M x 36bit	...	1.34 V	361-FBGA	49X8425	261.00
● CY7C4141KV13-667FCXC	144M	4M x 36bit	...	1.34 V	361-FBGA	49X8426	261.00

(149666)

SRAM

RoHS Compliant Available

ISSI Integrated Silicon Solution, Inc.

5V HIGH-SPEED ASYNCHRONOUS SRAM

Mfg. Part No.	Memory Size	Memory Config.	Speed (ns)	Pkg.	Stock No.	Price Each 1-24
● IS61C256AL-12JLI	256Kbit	32K x 8bit	12	28-SOJ	43M5035	1.47
● IS61C1024AL-12JLI	1Mbit	128K x 8bit	12	32-SOJ	43M5025	2.66
PIPELINED AND FLOW-THRU SYNCHRONOUS SRAM						
● IS61LPS25636A-200TQLI	8Mbit	256K x 36	3.1	100-TQFP	43M5125	17.00
HIGH SPEED LOW POWER ASYNCHRONOUS SRAM						
● IS61LV256AL-10TLI	256Kbit	32K x 8bit	10	28-TSOP-I	43M5207	1.37
● IS61LV6416-10TL	1Mbit	64K x 16bit	10	44-TSOP-II	43M5271	2.78
● IS61LV25616AL-10BLI	4Mbit	256K x 16bit	10	48-miniBGA	43M5211	5.76
● IS61LV25616AL-10TL	4Mbit	256K x 16bit	10	44-TSOP-2	43M5223	5.39
● IS61LV5128AL-10TLI	4Mbit	512K x 8	10	44-TSOP-II	43M5259	5.61
NO-WAIT SYNCHRONOUS SRAM (COMPATIBLE WITH ZERO BUS TURNAROUND DEVICES)						
● IS61NLP25636A-200TQLI	9Mbit	256K x 8bit	3.1	100-TQFP	43M5323	17.34
LOW POWER ASYNCHRONOUS SRAM						
● IS62C256AL-45ULI	256Kbit	32K x 8bit	45	28-SOP	43M5413	1.37
● IS62C1024AL-35QLI	1Mbit	128K x 8bit	35	32-SOP	43M5399	2.82
● IS62C1024AL-35TLI	1Mbit	128K x 8bit	35	32-TSOP	43M5403	2.66
POWERSAVER™ LOW POWER ASYNCHRONOUS SRAM						
● IS62LV256AL-45TLI	256Kbit	32K x 8bit	45	28-TSOP	43M5425	1.45
ULTRA LOW POWER CMOS STATIC RAM						
● IS62WV51216BLL-55TLI	8Mbit	512K x 16	55	44-TSOP-II	43M5479	10.00

(94348)

SPI™ COMPATIBLE SERIAL SRAM

RoHS Compliant Available

MICROCHIP

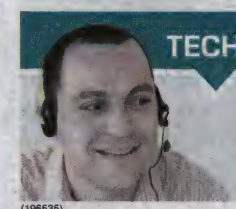
SPI-compatible Serial SRAM devices provide high-speed performance at low power making them ideal for embedded applications needing more RAM. The devices use fewer pins with fewer interface connections and smaller packages thus ensuring smaller designs and lower system costs.

64-Kbit

Mfg. Part No.	Density Org. (Bits)	Oper. Volt. (V)	Clock Freq. Max. (kHz)	Package	Stock No.	Price Each 1-25
● 23K640-I/P	8K x 8bit	3.3 V	20	8-DIP	08P0028	0.68
256-Kbit						
● 23K256-I/P	32K x 8bit	3.3 V	20	8-DIP	08P0023	1.12
● 23K256-I/SN	32K x 8bit	3.3 V	20	8-SOIC	08P0024	1.06
1024-Kbit						
● 23A1024-I/P	128K x 8bit	1.8V	20	8-DIP	27W2333	2.16
● 23A1024-I/SN	128K x 8bit	1.8V	20	8-SOIC	94T8191	2.10
● 23A1024-I/ST	128K x 8bit	1.8V	20	8-TSSOP	94T8192	2.14
● 23LC1024-I/P	128K x 8bit	3.3V, 5V	20	8-DIP	94T8230	2.16
● 23LC1024-I/SN	128K x 8bit	3.3V, 5V	20	8-SOIC	94T8231	2.10
● 23LC1024-I/ST	128K x 8bit	3.3V, 5V	20	8-TSSOP	94T8232	2.14

(142334)

TECHNICAL SUPPORT HOTLINE



Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

NON-VOLATILE MEMORY

RoHS Compliant Available

ZEROPOWER®

ZEROPOWER® NVRAMs combine Low Power SRAMs and Automatic Battery Switch-over and Write Protect circuits to implement Non-Volatile RAMs. They can be used just like standard SRAMs, but retain their contents when power is removed.

Mfg. Part No.	Memory Organization	Access Time (ns)	Operating Temp. (°C)	V_S (V)	Package	Stock No.	Price Each 1-9
M48Z02-70PC1	2K x 8bit	70	0 to 70	5.25	24-DIP	89K1473	11.43
M48Z02-150PC1	2K x 8bit	150	0 to 70	5.25	24-DIP	89K0828	11.88
M48Z12-150PC1	2K x 8bit	150	0 to 70	5.5	24-PCDIP	89K1475	11.44
M48Z58-70PC1	8K x 8bit	70	0 to 70	5.5	28-DIP	89K1482	23.33
M48Z08-100PC1	8K x 8bit	100	0 to 70	5.5	28-DIP	89K1474	16.86
M48Z18-100PC1	8K x 8bit	100	0 to 70	5.5	28-DIP	89K1478	16.45
M48Z35-70PC1	32K x 8bit	70	0 to 70	5.5	28-PCDIP	89K1479	16.45
M48Z35Y-70PC1	32K x 8bit	70	0 to 70	5.5	28-DIP	89K1480	18.05

TIMEKEEPER®

TIMEKEEPER NVRAMs are like ZEROPOWER® NVRAMs, but also include Non-Volatile Real-Time Clocks. Automatic Battery Switchover and Write Protect circuits supply continuous power to the Low-Power SRAM and RTC to keep time and retain the memory when power is removed.

Mfg. Part No.	Memory Organization	Access Time (ns)	Operating Temp. (°C)	V_S (V)	Package	Stock No.	Price Each 1-9
M48T58Y-70PC1	8K x 8bit	70	0 to 70	5.5	28-DIP	89K1469	19.24
M48T35Y-70PC1	32K x 8bit	70	0 to 70	5.5	28-DIP	89K1465	19.70

(83729)

NONVOLATILE SRAM AND CONTROLLERS

RoHS Compliant Available

TEXAS INSTRUMENTS

NONVOLATILE SRAM

	Configuration	Neg. Supply Tol. (%)	Package	Stock No.	Price Each 1-9
BQ4011YMA-100	32K x 8bit	10	28-DIP	74C7712	27.38

NV RAM CONTROLLERS

BQ2201SN	Use with 1 SRAM bank	...	SOIC	46M3116	5.51

(80474)

TIMEKEEPER SRAM

RoHS Compliant Available

Integrated ultra low power SRAM, real time clock and power-fail control circuit. Typical clock accuracy of ±1 min/month @ 25°C.

Mfg. Part No.	Access Time (ns)	Memory Size (kbits)	Package	Stock No.	Price Each 1-9
M48T02-150PC1	150	16	24-DIP	89K1452	18.05
M48T02-70PC1	70	16	24-DIP	89K1454	17.83
M48T12-150PC1	150	16	24-DIP	89K1457	16.31
M48T08-100PC1	100	64	28-DIP	89K1455	19.56
M48T08-150PC1	150	64	28-DIP	89K1456	19.69
M48T18-100PC1	100	64	28-DIP	89K1459	20.05
M48T18-150PC1	150	64	28-DIP	89K1460	22.88
M48T35-70PC1	70	32	28-DIP	89K1461	20.86
M48T37V-10MH1E	100	256	44-SOIC	89K1466	22.79

(83730)

ZIGBEE TRANSCEIVERS

RoHS Compliant Available

Atmel

2.4GHz TRANSCEIVERS

Mfg. Part No.	Supply Voltage	Data Rate Max.	Receive Current Consumption (mA)	Package	Stock No.	Price Each 1-9
AT86RF232-ZX	1.8V to 3.6V	250 Kbps	11.8	32-QFN	92T0949	2.71
AT86RF231-ZF	1.8V to 3.6V	2 Mbps	12.3	32-QFN	68T4734	6.32
AT86RF231-ZFR	1.8V to 3.6V	2 Mbps	12.3	32-QFN	68T4735	6.45
AT86RF231-ZU	1.8V to 3.6V	2 Mbps	12.3	32-QFN	68T4736	3.68
AT86RF231-ZUR	1.8V to 3.6V	2 Mbps	12.3	32-QFN	72T3087	3.76

(197999)

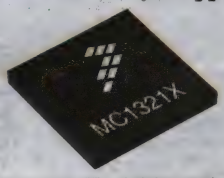
ZigBee™ TECHNOLOGY PRODUCTS

RoHS Compliant Available

freescale

TRANSCEIVERS

- Supply Voltage: 2.0 to 3.4V
- Supply Current @ 1% Duty Cycle: 1mA
- Standby Current: 500 µA
- Frequency: 2.4 to 2.5GHz
- Control Interface: SPI
- Data Rate: 250kbps
- Package: 32-QFN



Freescale Semiconductor draws on extensive radio frequency (RF) and wireless experience accumulated from more than 50 years of developing semiconductor products. To help you determine the best fit of transceiver and MCU, the products summary offers a matrix of ZigBee™ technology transceivers which may be paired with the Freescale 8-bit or 32-bit MCU's for system solutions.

Mfg. Part No.	Sensitivity @ 1% PER (Typ) dBm	TX/RX Switch	MAC Options	Stock No.	Price Each 1-9
MC13201FC	-91	Yes	SMAC	81K2741	3.82
MC13202FC	-92	Yes	SMAC, IEEE, 803.15.4, Zigbee	81K2743	5.18

SYSTEM IN A PACKAGE

- Supply Voltage: 2.0 to 3.4V
- Supply Current @ 1% Duty Cycle, CPU @ 20MHz: 31.1mA TX, 38.1mA RX
- Standby Current: 0.2 to 0.675mA
- Frequency: 2.4 to 2.5GHz
- Sensitivity @ 1% PER: -92 dBm
- Data Rate: 250kbps
- TX/RX Switch: Yes
- Core: HCS08
- Interfaces and Peripherals: I²C, SCI (2), Timer/Pwm(2), KBI,8-Ch., 10-bit ADC, Up to 32 GPIO
- Package: 71-LGA

Mfg. Part No.	MAC Options	Flash (KB)	RAM (KB)	Stock No.	Price Each Each
MC13212	SMAC, IEEE, 803.15.4	32	2	81K2749	3.58
MC13213	SMAC, IEEE, 803.15.4, Zigbee™	60	4	81K2751	8.14
MC13233C	SMAC, IEEE, 803.15.4, Zigbee™	82	5	38T2576	5.98

DEVELOPMENT TOOLS

Mfg. Part No.	Description	Stock No.	Price Each
1323XDSK	1323x Developer Starter Kit	47T9853	199.00
1323XDSK-BDM	1323x Developer Starter Kit w/ USB Multilink BDM	47T9854	279.00

(89417)

TRANSCEIVERS AND MCU SoCs

RoHS Compliant Available

Atmel

An IEEE 802.15.4 compliant single chip combines an industry-leading AVR microcontroller and best-in-class 2.4GHz RF transceiver. The device features wake-on radio, 32-bit MAC symbol counter, temperature sensor, automatic transmission modes, 128-bit AES crypto engine, true random number generator, high data rate modes, and antenna diversity support

Mfg. Part No.	Supply Voltage	Data Rate Max.	Flash (Kbytes)	Package	Stock No.	Price Each 1-9
ATMEGA128RFA1-ZU	1.8V to 3.6V	2 Mbps	128	64-QFN	68T2521	9.46

(198000)

ZigBee™ - IEEE® 802.15.4 Compliant Platform-in-Package for 2.4 GHz

RoHS Compliant Available

freescale

The **MC13224V(R2)** is a ZigBee platform which incorporates a complete, low power, 2.4 GHz radio frequency transceiver, 32-bit ARM7 core based MCU, hardware acceleration for both the IEEE 802.15.4 MAC and AES security, and a full set of MCU peripherals into a 99-pin LGA Platform-in-Package (PiP). This ZigBee solution can be used for wireless applications ranging from simple proprietary point-to-point connectivity to complete ZigBee mesh networking. The **MC13224V(R2)** is designed to provide a highly integrated, total solution, with premier processing capabilities and very low power consumption.

Mfg. Part No.	Flash (KB)	RAM (KB)	ROM (KB)	Package	Stock No.	Price Each
MC13224VR2	128	96	80	99-LGA	12N7146	8.54

(137222)

RFID E-BLOCKS™ BOARD

RoHS Compliant Available

matrix multimedia

Features

- RFID Wireless communications
- Flowcode macros available
- 125KHZ or 13.56MHz operating frequency (125KHz RFID Module and Antenna available separately)
- Onboard 13.56MHz PCB Antenna
- Status LEDs
- Tuning Capacitors
- Range of approx 10cm

The **EB052 RFID E-Block** provides a RFID interface that can communicate with all common RFID devices running at either 125KHz or 13.56MHz. The RFID E-Block interfaces RFID devices, also known as 'tags', through a high frequency radio wave. This radio frequency burst acts as a dual function: to simultaneously provide power to the RFID device, and to communicate with the device.

Mfg. Part No.	Description	Supported Family	Stock No.	Price Each
EB052	Daughter Card: RFID scanner	PIC16	01P3429	137.26

(137250)

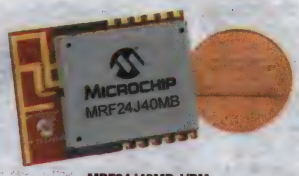
ZIGBEE™ AND MiWi™ TRANSCEIVERS

RoHS Compliant Available

MICROCHIP

Features

- Complete IEEE 802.15.4 Specification Compliant
- Supports MiWi™, ZigBee™ and Proprietary Protocols
- Simple, 4-Wire SPI Interface
- Integrated 20 MHz and 32.768 kHz Oscillator Drive
- 20 MHz Reference Clock Output: Available to drive microcontroller oscillator
- Supports Power-Saving mode
- Low-Current Consumption
- Typical 2 µA Sleep mode
- Available as a integrated module



MRF24J40MB-I/RM

IC DEVICE ONLY

Mfg. Part No.	Power Consumption (mA) TX	Power Consumption (mA) RX	Pkg.	Stock No.	Price Each 1-25
● MRF49XA-I/ST	15	11	16-TSSOP	65T6681	2.35
INTEGRATED SMD MODULE					
● MRF24J40MA-I/RM	23	19	Module	07P9585	9.12

(94569)

HORNET REMOTE CONTROL SYSTEM

RoHS Compliant Available

Radiocons

Features:

- 433MHz FM Technology
- Up to 3 Channels
- 1,000W per Output channel
- Relays Rated 5A @ 230Vac
- Up to 150metres Range
- 12-30Vdc Or 230Vac versions available
- Waterproof Receiver (IP68)
- High Security RF Protocol
- Outputs Momentary or Latching
- Any Switch Map to Any Relay Output
- Systems supplied 'ready to Go'

Applications:

- General Purpose Remote Switching
- Garage Doors
- Electric Gates, Shutters
- All current Lighting types
- Access Control

HORNET is a rugged IP68 weatherproof remote control system supplied complete and ready to go. Installation is easy via screw Terminals for Power and outputs. Each receiver has 3 relay outputs, each capable of switching 1000watts. Each output can be momentary or latching action. Additional transmitters may be added using the 'easy-learn' process, any button on the transmitter can be used to control one or many outputs of the receiver.

REMOTE CONTROL SYSTEM

Mfg. Part No.	Description	Stock No.	Price Each
● HORNET-S1M	Hornet 1-CH 230Vac System w/ Transmitter	34R3576	103.50
● HORNET-S2M	Hornet 2-CH 230Vac System w/ Transmitter	34R3577	110.51
ADDITIONAL TRANSMITTERS AND ACCESSORIES			
● HORNET-TX1	Hornet 1-CH Transmitter	34R3578	24.88
● HORNET -TX2	Hornet 2-CH Transmitter	34R3574	25.20
● HORNET TX3	Hornet 3-CH Transmitter	34R3575	25.53
● HORNET -TX-IPKIT	Hornet Transmitter IP65 conversion Kit	34R3573	7.78

(177045)

VIPER REMOTE CONTROL SYSTEMS

RoHS Compliant Available

Radiocons

Features:

- 433MHz FM technology
- 1-4 channels each 1000W rated
- Up to 150m range
- 12-30Vdc / 230Vac supply
- Waterproof (IP68)
- High security RF protocol
- 4 relays 5A @ 230Vac
- Outputs momentary or latching
- Any switch map to any relay output
- Systems supplied 'ready to go'
- EMC / FCC compliant for Europe / USA

Applications:

- General purpose remote switching
- Garage doors
- Electric gates, shutters
- All current lighting types
- Access control

VIPER system is housed in a rugged IP68 weatherproof enclosure which makes it ideally suited to any outside remote switch requirement. Each receiver has 4 relays, using the 'easy-learn' process each relay can be controlled from any switch on any transmitter.

Mfg. Part No.	Description	Stock No.	Price Each
● VIPER-S1	Viper - 1 Channel Remote Control System - 150M Range	34R5488	131.48
● VIPER-S4	Viper - 4 Channel Remote Control System - 150M Range	34R5490	136.80

(177046)

SINGLE CHIP RF TRANSCEIVERS

RoHS Compliant Available

TEXAS INSTRUMENTS

These highly integrated multichannel RF Transceivers offers a very low system cost radio and are designed for low-power wireless applications in the 868, 915 and 2.4 GHz Industrial Scientific Medial (ISM) band. Small footprint is ideal for wireless applications, home and building automation, industrial monitoring and control, and consumer electronics.

Mfg. Part No.	Operating Freq. (MHz)	Supply Voltage Max (V)	Modulation	Pkg.	Stock No.	Price Each 1-9
● CC1000PW	300MHz to 1GHz	3.6	FSK, OOK	28-TSSOP	74K4832	8.53
● CC1190RGVT	850MHz to 950MHz	3.7	ZIGBEE	16-QFN	64R4902	4.90

CONTINUED

SINGLE CHIP RF TRANSCEIVERS (CONT.)

Mfg. Part No.	Operating Freq. (MHz)	Supply Voltage Max (V)	Modulation	Pkg.	Stock No.	Price Each 1-9
● CC2500RTK	2.4GHz to 2.4835GHz	3.6	OOK, FSK, GFSK, MSK	20-QFN	81K0303	4.04
● CC2520RHDT	2.394GHz to 2.507GHz	3.8	DSSS	28-QFN	72M7124	5.88
● CC2591RGVT	2.4GHz to 2.4835GHz	3.6	ZIGBEE	16-QFN	14N9001	5.74
● CC8520RHAT	2.4GHz to 2.4835GHz	3.6	FSK	40-VQFN	76R0857	7.63

(80483)

RF/IF AND ZIGBEE® SOLUTIONS

RoHS Compliant Available

TEXAS INSTRUMENTS

2.4 GHz LOW POWER RF ICs

Mfg. Part No.	Device Type	Flash Size (KB)	RAM Size (KB)	Freq. Min/Max (MHz)	Pkg.	Stock No.	Price Each 1-9
● CC2530F256RHAT	Second Generation System-on-Chip Solution for 2.4 GHz IEEE 802.15.4 / RF4CE / ZigBee	256	8	2394/ 2507	40-QFN	10R6150	6.25
● CC2540F256RHAT	2.4GHz Bluetooth Low Energy System-on-Chip Solution	256	8	2402/ 2480	40-VQFN	12T2858	6.58

DEVELOPMENT TOOLS

Mfg. Part No.	Supported Devices	Description	Stock No.	Price Each
CC2530DK	CC2530	Development Kit	08R6190	304.98
CC2530EMK	CC2530	Evaluation Module Kit	08R6191	100.98
CC2530ZDK	CC2530	ZigBee Development Kit	11R6294	661.98
CC2540DK-MINI	CC2540	Development Kit for Low Energy Bluetooth (BLE) Applications	13T1956	101.00

(147933)

PUREPATH CC85xx WIRELESS DEVELOPMENT KIT

TEXAS INSTRUMENTS

Kit contents

- 2 x PurePath Wireless Audio Evaluation Boards
- 2 x CC85XXEM RF Evaluation Modules
- 2 x CC85XX-CC2590EM RF Evaluation Modules
- 2 x 2.4GHz antennas
- 1 x CC Debugger
- 2 x Mini USB cable
- 1 x Mini Jack to RCA male audio cable
- 1 x RCA male to RCA male audio cable
- Documentation

CC85XXDK will let the user fully evaluate PurePath Wireless technology and the CC8520 for wireless audio applications. Audio interfaces available with the kit include S/PDIF optical + coax input/output, line input/output, headphone output and microphone input. A TLV320AIC3101 audio codec is mounted on the PurePath Wireless Audio Evaluation Board, which also has connectors compatible with other TI Codecs. CC85XXDK works with PurePath Wireless Configurator PC tool which helps designers configure and test PurePath Wireless Audio devices.

Mfg. Part No.	Description	Stock No.	Price Each
CC85XXDK	PurePath CC85xx Wireless Development Kit	74R6093	305.00

(178376)

BLUETOOTH SERIAL PORT MODULE

RoHS Compliant Available

TEXAS INSTRUMENTS

Features:

- Bluetooth version 1.1 qualified
- Implemented in CMOS technology on FR4 substrate
- Temperature Range: -40°C to +85°C
- FCC certified on LMX9820ADONGLE,
- FCC ID ED9LMX9820ASM.

Applications:

- Personal data assistant
- POS terminals
- Data Logging Systems
- Audio gateway applications

The LMX9820A Bluetooth Serial Port module is a highly integrated radio, baseband controller, and memory device implemented on an FR4 substrate.

Mfg. Part No.	Dimensions	Package	Stock No.	Price Each 1-9
● LMX9838SB/NOPB	10 x 17 x 2.0mm	70-LTCC	64M6930	28.87

(85026)

element14 COMMUNITY

Get inspired, collaborate, design, research, ask experts questions.

element14.com

(196545)

DEBUGGER AND PROGRAMMER FOR RF SYSTEM-ON-CHIPS

TEXAS INSTRUMENTS

Kit contents
- CC Debugger
- Mini USB cable
- 10-pin flat cable with 2x5 2.54mm connector
- 10-pin flat cable with 2x5 1.27mm connector
- Converter board 2.54mm-1.27mm connector
- Documentation

CC Debugger is a small programmer and debugger for the Low Power RF System-on-Chips. It can be used together with IAR Embedded Workbench for 8051 for debugging and SmartRF Flash Programmer for flash programming. The CC Debugger can also be used for controlling selected devices from SmartRF Studio. Note: CC Debugger supports all RF System-on-Chips except: CC1010 and CC430 (which uses the MSP-FET430UIF)

Mfg. Part No.	Description	Stock No.	Price Each
CC-DEBUGGER	IN-CKT, DEBUG / PROG, CCxxxx RF TX/RX	24R9068	50.00

(156345)

INFRARED ENCODER/ DECODER DEVICES

RoHS Compliant Available

MICROCHIP

Mfr. Part No. MCP2120 high-performance, low-voltage, fully-static infrared encoder/decoders modulate data received from any standard UART, outputting it as electrical pulses to an IR transceiver. These devices also demodulate electrical pulses output by the transceiver for transmission via the UART. Low power consumption: 1mA @ 3.3V, 8MHz typical. Operating voltage: 2.5 to 5.5V. **Mfr. Part Nos. MCP2150** and **MCP2155** protocol stack controllers provide UART to IrDA encoder/decoder functionality with low power consumption, while also implementing IrDA standard, including IrLAP, IrLMP, IAS, TinyTP and IrCOMM (9-wire "cooked" class) layers in addition to the bit encoding/decoding portion of the IrPHY layer. 1.63µs transmit/receive format. Operating voltage: 3.0 to 5.5V. *Suitable development systems available, call or go on-line.*

Mfg. Part No.	Max. Baud Rate (kHz)	Description	Package	Stock No.	Price Each 1-25
MCP2120-I/P	312.5	Infrared Encoder/Decoder	14-DIP	65K1033	1.06
MCP2120-I/SL	312.5	Infrared Encoder/Decoder	14-SOIC	33C0867	1.06
MCP2122-E/P	115.2	Infrared Encoder/Decoder	8-DIP	40M0740	0.70
MCP2122-E/SN	115.2	Infrared Encoder/Decoder	8-SOIC	40M0741	0.70
MCP2150-I/P	115.2	IrDA® Protocol Handler plus Enc./Dec. for DTE Apps.	18-DIP	59K0223	4.02
MCP2150-I/SO	115.2	IrDA® Protocol Handler plus Enc./Dec. for DTE Apps.	18-SOIC	54K2815	4.02
MCP2150-I/SS	115.2	IrDA® Protocol Handler plus Enc./Dec. for DTE Apps.	20-SSOP	61K2941	4.02
MCP2155-I/P	115.2	IrDA® Protocol Handler plus Enc./Dec. for DCE Apps.	18-DIP	89C7121	4.02
MCP2155-I/SO	115.2	IrDA® Protocol Handler plus Enc./Dec. for DCE Apps.	18-SOIC	61K2942	4.02

(72660)

WiFi RF TRANSCEIVER MODULE 802.11b COMPATIBLE

RoHS Compliant Available

MICROCHIP

Features
- IEEE 802.11 Wi-Fi Transceiver Module
- Supports low-power, low data-rate Wi-Fi
- FCC (USA), IC (Canada), ETSI (Europe) Certified
- Integrated PCB Antenna
- Simple four-wire SPI interface to PIC® microcontroller
- WEP, WPA-PSK, WPA2-PSK Security
- 36-pin Surface Mountable Module

MRF24WB0MA is an agency certified IEEE 802.11 Wi-Fi radio transceiver module that includes an integrated PCB antenna, matching circuitry, and supports Wi-Fi with the free TCP/IP protocol stack. The module connects to hundreds of PIC® microcontrollers via a 4-wire SPI interface and is an ideal solution for low-power, low data-rate Wi-Fi sensor networks, home automation, building automation and consumer applications.

Mfg. Part No.	Description	Stock No.	Price Each 1-25
MRF24WB0MA/RM	WIFI MODULE, TXRX, 802.11, 2.4GHZ, SPI, PCB ANT	76R6666	23.74

(198547)

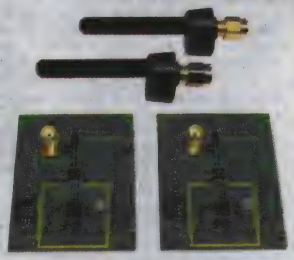
NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196562)

CC2520 ZIGBEE EVALUATION MODULE KIT

TEXAS INSTRUMENTS



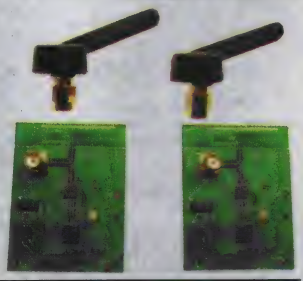
CC2520-CC2591EMK is used to evaluate the RF performance of the CC2520+CC2591 design, perform RF measurements and can be used as a ready-to-use module in existing designs. It includes two CC2520-CC2591EM evaluation modules and antennas. The CC2520-CC2591EM board combines the CC2520 802.15.4 transceiver and the CC2591 RF front end, providing a powerful solution for IEEE 802.15.4 and/or ZigBee™ applications requiring long range (higher output power) and improved sensitivity. To use the module, a motherboard where the EM can be plugged in is needed. Compatible moterhboards are SmartRF05EB and CCMSP-EM430F2618 (included in the CC2520DK).

Mfg. Part No.	Description	Stock No.	Price Each
CC2520-CC2591EMK	CC2520 Zigbee Evaluation Module Kit	12P7413	101.00

(196445)

CC2530 ZIGBEE EVALUATION MODULE KIT

TEXAS INSTRUMENTS



CC2530-CC2591EMK is used to evaluate the RF performance of the CC2530+CC2591 design, perform RF measurements and can be used as a ready-to-use module in existing designs. It includes two CC2530-CC2591EM evaluation modules and antennas. The CC2530-CC2591EM board combines the CC2530 802.15.4 transceiver and the CC2591 RF front end, providing a powerful solution for IEEE 802.15.4 and/or ZigBee™ applications requiring long range (higher output power) and improved sensitivity. To use the module, a motherboard where the evaluation module can be plugged in is needed. Compatible moterhboards are SmartRF05EB (Evaluation Board), SmartRF05BB (Battery Board) or SoC-BB (General Purpose System-on-Chip Battery Board).

Mfg. Part No.	Description	Stock No.	Price Each
CC2530-CC2591EMK	CC2530 Zigbee Evaluation Module Kit	63R9869	101.00

(196446)

LF RFID APPLICATION KIT

RoHS Compliant Available

Atmel

The **ATA2270-EK1 LF RFID Application Kit** is a self-contained introduction kit for RFID systems for designers with little prior RFID experience includes an LCD and control buttons to interact with the RFID system. The kit supports e5530/TK5530, T5551/TK5551, ATA5567 (T5557), ATA5570, ATA5575, ATA5577, and ATA5558 IDIC®s and the U2270B. For more in-depth evaluation purposes, a GUI (graphical user interface) is supplied on the CD and allows to configure the tags into all available modulation and coding schemes. The combination of source code, building blocks, and reference designs let designers to quickly evaluate and prototype complete system-level designs. The kit supports all standard AVR development tools such as AVR Studio®, STK500, JTAG-ICE mkII, and more.

Mfg. Part No.	Description	Stock No.	Price Each
ATA2270-EK1	OTP LF RFID Application Kit	68T2097	498.75

(197962)

CC11xxx EVALUATION MODULES

TEXAS INSTRUMENTS

Benefits:
- Evaluate the SmartRF®04 products. Right out of the box, the user can do range testing (PER testing) and transfer data from one PC to another using the SmartRF®04DK. This enables the user to quickly find out how well the SmartRF®04 products fit the intended application. A number of demonstration applications serve to highlight the innovative features of the SmartRF®04 ICs.
- Perform RF measurements. Using SmartRF® Studio, the user can configure the radio ICs with parameters that suit the intended application and easily measure sensitivity, output power and other RF parameters.
- Develop a prototype.

Contents of Kits:
- Two evaluation modules
- CC11xxx corresponding chip
- Required external components
- 2 Antennas

Mfg. Part No.	Description	Stock No.	Price Each
CC1101EMK868-915	CC1101 Evaluation Module 868-915MHz	50M8832	101.00
CC1110EMK868-915	CC1110 Evaluation Module 868-915MHz	58M0300	100.98

(177777)

COMMUNICATION IC & DEVELOPMENT KITS

1

CC1110 AND CC1111 DEVELOPMENT KIT

TEXAS INSTRUMENTS

Features:
- Evaluate the CC1110Fx and CC1111Fx: Right out of the box, the user can do range testing (PER testing) between two development boards with or without using a PC. This enables the user to quickly find out how well the CC1110Fx fits the intended application. A number of demonstration applications serve to highlight the innovative features of the SmartRF®04 ICs.
- Perform RF measurements: Using SmartRF® Studio, the user can configure the radio ICs with parameters that suit the intended application and easily measure sensitivity, output power and other RF parameters.
- Develop a prototype: By programming the CC1110Fx and utilizing the various peripherals included on the Evaluation Board, the user can easily make a prototype of the intended application. All signals are brought out on 0.1 pin-row connectors so easy connection of other required circuitry is possible. These connectors are also compatible with Agilent logic analyzer probes for easy debugging.

Contents of Kit:
- 2 SmartRF®04 evaluation boards
- 2 CC1110EM 433 MHz evaluation modules
- 2 CC1110EM 868/915 MHz evaluation modules
- 1 CC1111EM 868/915 MHz USB dongle
- Antennas
- Cables

The development kit is designed to help the user to achieve his/hers objectives as quickly as possible. A complete development kit can be used to evaluate both 433 MHz and 868/915 MHz operation.

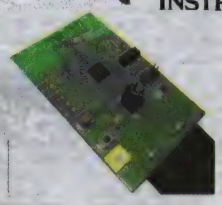
Mfg. Part No.	Description	Stock No.	Price Each
CC1110-CC1111DK	CC1110 and CC1111 Development Kit	64M7649	661.98

(177778)

CC1100 EVALUATION MODULES

TEXAS INSTRUMENTS

The CC110x evaluation modules allow the designer to evaluate the SmartRF®04 products, perform RF measurements, develop a prototypes. Kit includes two modules and two antennas.



Mfg. Part No.	Description	Stock No.	Price Each
CC1101EMK868-915	ADD-ON BRDS, CC1101, 868/915MHZ, ANT, EVAL MODULE	50M8832	101.00

(176250)

CC1110 MINI DEVELOPMENT KIT

TEXAS INSTRUMENTS

Features:
- PCB antenna pre-tested for ETSI and FCC compliance
- battery holders for 2x AAA or 1x CR2032 coincell operation
- footprint for 2.54 mm connector connnected to CC1110Fx GPIO pins
- 2 buttons & 2 LEDs for simple application development
- pre-programmed with Link Test for RF range measurement
- SmartRF Studio and Packet Sniffer runs on the board in combination with the CC Debugger (included in the kit)

Contents of Kit:
- 2 x SmartRFCC1110-868 target boards
- 1 x CC Debugger
- 1 x 10- pin flat cable with 2x5 2.54 mm connector
- 1 x 10-pin flat cable with 2x5 1.27 mm connector
- 1 x Converter board 2.54 mm to 1.27 mm connector
- 1 x Mini USB cable
- Batteries
- CD with Evaluation Version of the IAR EW8051 (a free 16kb kickstart version is also available for full evaluation of SimpliciTI software)
- Documentation

The CC1110 Mini Development kit is an inexpensive and flexible development platform for TI's CC1110Fx RF System-on-Chip solution. The CC1110Fx features a 26MHz single-cycle 8051 microcontroller with integrated CC1101 RF transceiver, FLASH, RAM, 5 DMA channels, ADC, PWM, UART, SPI, I2S, 4 timers, and 21 GPIO pins. This kit is all you need to build a prototype of a wireless sensor node application!

Mfg. Part No.	Description	Stock No.	Price Each
CC1110DK-MINI-868	CC1110 Mini Development Kit 868/915 MHz	34R6310	76.50

(177785)

CC1110 AND CC1111 DEVELOPMENT KIT

TEXAS INSTRUMENTS

Kit Contents:
- Two SmartRF®04 evaluation boards
- Two CC1110EM 433 MHz evaluation modules
- Two CC1110EM 868/915 MHz evaluation modules
- CC1111EM 868/915 MHz USB dongle
- Antennas
- Cables
- CD/DOCs

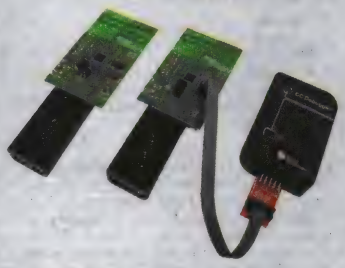
CC1110-CC1111DK allows the designer to evaluate the CC1110Fx and CC1111Fx RFICs. Right out of the box, the user can do range testing (PER testing) between two development boards perform RF measurements using SmartRF® Studio. The user can configure the radio ICs with parameters that suit the intended application and easily measure sensitivity, output power and other RF parameters and be able to develop a prototype.

Mfg. Part No.	Description	Stock No.	Price Each
CC1110-CC1111DK	CC1110, CC1111, TXRX, ANTENNA, DEV KIT	64M7649	661.98

(176251)

CC1110 MINI DEVELOPMENT KIT 868/915 MHZ

TEXAS INSTRUMENTS



Features:
- PCB antenna pre-tested for ETSI and FCC compliance
- battery holders for 2x AAA or 1x CR2032 coincell operation
- footprint for 2.54 mm connector connnected to CC1110Fx GPIO pins
- 2 buttons & 2 LEDs for simple application development
- pre-programmed with Link Test for RF range measurement
- SmartRF Studio and Packet Sniffer
- CC Debugger included

Kit Contents:
- Two SmartRFCC1110-868 target boards
- CC Debugger
- 10- pin flat cable with 2x5 2.54 mm connector
- 10-pin flat cable with 2x5 1.27 mm connector
- Converter board 2.54 mm to 1.27 mm connector
- Mini USB cable
- Batteries
- CD with Evaluation Version of the IAR EW8051
- Documentation

CC1110 Mini Development kit is an inexpensive and flexible development platform for TI's CC1110Fx RF System-on-Chip solution. The CC1110Fx features a 26MHz single-cycle 8051 microcontroller with integrated CC1101 RF transceiver, FLASH, RAM, 5 DMA channels, ADC, PWM, UART, SPI, I2S, 4 timers, and 21 GPIO pins. This kit is all you need to build a prototype of a wireless sensor node application!

Mfg. Part No.	Description	Stock No.	Price Each
CC1110DK-MINI-868	CC1110, WIRELESS, CC DEBUGGER, 868/915MHZ, DEV KIT	34R6310	76.50

(176252)

CC1110 EVALUATION MODULE 868-915MHZ

TEXAS INSTRUMENTS

Kit Contents:
- Two CC1110 modules with theCC1110 chip
- Required external components
- Two Antennas

CC1110EMK868-915 evaluation kit is a RF module to be used in combination with a CC1110 development kit purchased separately.

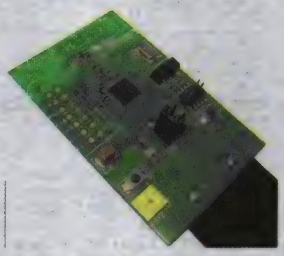
Mfg. Part No.	Description	Stock No.	Price Each
CC1110EMK868-915	CC1110, 868MHZ / 915MHZ, ANTENNA, EVAL MODULE	58M0300	100.98

(176253)

CC2510 MINI DEVELOPMENT KIT

TEXAS INSTRUMENTS

Features:
- Pre-tested PCB antenna for ETSI and FCC compliance
- Battery holders for 2x AAA or 1x CR2032 coincell operation
- Footprint for 2.54 mm connector connnected to CC2510Fx GPIO pins
- 2 buttons & 2 LEDs for simple application development
- Pre-programmed with Link Test for RF range measurement
- SmartRF Studio and Packet Sniffer runs on the board in combination with the CC Debugger (included in the kit)



Kit Contents:
- Two SmartRFCC2510 target boards
- CC Debugger
- 10- pin flat cable with 2x5 2.54 mm connector
- 10-pin flat cable with 2x5 1.27 mm connector
- Converter board 2.54 mm to 1.27 mm connector
- Mini USB cable
- Batteries
- CD / Documentation

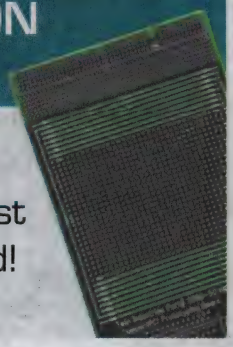
CC2510 Mini Development kit is an inexpensive and flexible development platform for the CC2510Fx RF System-on-Chip solution. The CC2510Fx features a 26MHz single-cycle 8051 microcontroller with integrated CC2500 RF transceiver, FLASH, RAM, 5 DMA channels, ADC, PWM, UART, SPI, I2S, 4 timers, and 21 GPIO pins. This kit is all you need to build a prototype of a wireless sensor node application!

Mfg. Part No.	Description	Stock No.	Price Each
CC2510DK-MINI	CC2510 Mini Development Kit	50R7570	76.50

(176248)

PCB FABRICATION & ASSEMBLY

Quality US-based manufacturers—as fast as 48-hour turnaround!



(197416)

CC2510 DEVELOPMENT KIT

TEXAS INSTRUMENTS

Features:
- PCB antenna pre-tested for ETSI and FCC compliance
- battery holders for 2x AAA or 1x CR2032 coincell operation
- footprint for 2.54 mm connector connnected to CC2510Fx GPIO pins
- 2 buttons & 2 LEDs for simple application development
- pre-programmed with Link Test for RF range measurement
- SmartRF Studio and Packet Sniffer runs on the board in combination with the CC Debugger (included in the kit)

Contents of Kit:
- 2 x SmartRFCC2510 target boards
- 1 x CC Debugger
- 1 x 10- pin flat cable with 2x5 2.54 mm connector
- 1 x 10-pin flat cable with 2x5 1.27 mm connector
- 1 x Converter board 2.54 mm to 1.27 mm connector
- 1 x Mini USB cable
- Batteries
- CD with Evaluation Version of the IAR EW8051 (a free 16kb kickstart version is also available for full evaluation of SimpliciTI software)
- Documentation

The CC2510 Mini Development kit is an inexpensive and flexible development platform for TI's CC2510Fx RF System-on-Chip solution. The CC2510Fx features a 26MHz single-cycle 8051 microcontroller with integrated CC2500 RF transceiver, FLASH, RAM, 5 DMA channels, ADC, PWM, UART, SPI, I2S, 4 timers, and 21 GPIO pins. This kit is all you need to build a prototype of a wireless sensor node application!

Mfg. Part No.	Description	Stock No.	Price Each
CC2510DK-MINI	CC2510 Mini Development Kit	50R7570	76.50

(177780)

CC2520 EVALUATION MODULE

TEXAS INSTRUMENTS

The CC2520EMK is an ad-on development kit for CC2520DK. The full stand-alone development kit is CC2520DK. The CC2520EMK development kit consists of 2 CC2520EM plug in modules and 2 antennas. The CC2520EMK is only usable together with a motherboard/host board, typically the SmartRF05EB and CCMSP-EM430F2618, which are both included in the CC2520DK. The board is also compatible with the MSP430F5438 Experimenter's Board.

Mfg. Part No.	Description	Stock No.	Price Each
CC2520EMK	CC2520 Evaluation Module Kit	45P6552	100.98

(177781)

CC2520 EVALUATION MODULE KIT

TEXAS INSTRUMENTS

CC2520EMK is an ad-on development kit for CC2520DK and MSP430F5438 Experimenter's Board. This development kit consists of two CC2520EM plug in modules and two antennas and is only usable together with a motherboard/host board, typically the SmartRF05EB and CCMSP-EM430F2618, which are both included in the CC2520DK kit sold separately.

Mfg. Part No.	Description	Stock No.	Price Each
CC2520EMK	CC2520 Evaluation Module Kit	45P6552	100.98

(176249)

CRYPTO PRODUCT AUTHENTICATION DEVICES

RoHS Compliant Available

Atmel

CryptoAuthentication™ family of solutions offers an extremely cost-effective hardware authentication capability to securely validate a wide variety of physical or logical elements in virtually any microprocessor-based system. The device family supports the latest algorithms like SHA-256 and AES approved by cryptographic experts and governments around the world. These devices feature hardware security fortifications like full active metal shields, multiple tamper detection schemes, internal encryption, and many other features designed to thwart the most determined attacks and include generous, secure storage segmented into zones which can be individually configured to meet a wide variety of applications.

BATTERY SIDE AUTHENTICATION

Mfg. Part No.	Supply Voltage	Operating Temperature	Package	Stock No.	Price Each 1-9
ATSHA204-MAH-CZ-T	2V to 5.5V	-40°C to 85°C	8-UDFN	68T3397	0.75
ATSHA204-SH-CZ-T	2V to 5.5V	-40°C to 85°C	8-SOIC	68T3400	0.82
ATSHA204-SH-DA-B	2V to 5.5V	-40°C to 85°C	8-SOIC	68T3401	0.88
ATSHA204-SH-DA-T	2V to 5.5V	-40°C to 85°C	8-SOIC	68T3402	0.82
ATSHA204-TH-CZ-T	2V to 5.5V	-40°C to 85°C	8-TSSOP	68T3403	1.00
ATSHA204-TH-DA-T	2V to 5.5V	-40°C to 85°C	8-TSSOP	68T3404	1.00
ATSHA204-TSU-T	2V to 5.5V	-40°C to 85°C	3-SOT-23	68T3405	0.93

(197992)

ENGINEERS START HERE
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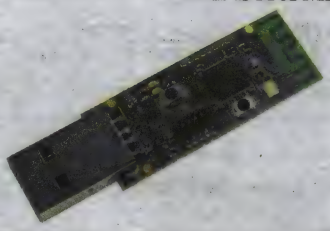
newark.com/design-resources

(212565)

CC2531 EVALUATION MODULE KIT

TEXAS INSTRUMENTS



Features
- CC2531 USB Firmware Library and Examples (downloadable from web)
- Works with RemoTI, TIMAC and ZStack for CC2530
- Supported by SmartRF® Studio, Packet Sniffer and Flash Programmer

The **CC2531EMK** kit provides one CC2531 USB Dongle and documentation to support a PC interface to 802.15.4 / ZigBee applications. The dongle can be plugged directly into your PC and can be used as an IEEE 802.15.4 packet sniffer or for other purposes. With the CC2531 USB Firmware Library available on the web you can develop your own software to utilize this part. To program the debugger, an external programmer (e.g. the SmartRF05EB) is required. This is not included in the kit. The USB dongle can be used as a reference module for prototyping of USB devices and for testing the RF performance of CC2531 with a small size PCB antenna.

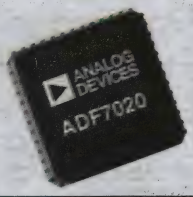
Mfg. Part No.	Description	Stock No.	Price Each
CC2531EMK	CC2531, ZIGBEE, USB DONGLE, EVALUATION KIT	41R3651	49.98

(182701)

RF/IF COMMUNICATION ICs

RoHS Compliant Available

ANALOG DEVICES



Mfg. Part No.	Output Frequency Max (MHz)	Supply Voltage (V) Min	Supply Voltage (V) Max	Package	Stock No.	Price Each 1-9
ADF7021BCPZ	950	2.3	3.6	48-LFCSP	34M4777	6.52
ADF7021-NBCPZ	916	2.3	3.6	48-LFCSP	89M4982	6.98
ADF7012BRUZ	1000	2.3	3.6	24-TSSOP	12M7724	3.92
AD9957BSVZ	1000	1.71	1.89	100-TQFP	50M0846	36.11

(133595)

HIGH PERFORMANCE ISM BAND TRANSMITTER EVALUATION KIT

RoHS Compliant Available

ANALOG DEVICES

EVAL-ADF7012DBZ2 is an evaluation board populated with an ADF7012. It is a low power FSK/GFSK/OOK/GOOK/ASK UHF transmitter designed for short-range devices (SRDs). The output power, output channels, deviation frequency, and mod-ulation type are programmable by using four, 32-bit registers.

Mfg. Part No.	Description	Stock No.	Price Each
EVAL-ADF7012DBZ2	860 to 880MHz TX Evaluation Kit	30M0699	54.40

(167520)

IEEE-1394 AND BUS TRANSCEIVERS

RoHS Compliant Available

TEXAS INSTRUMENTS

1394 TRANCEIVERS/ARBITERS

Mfg. Part No.	Description	Pkg.	Stock No.	Price Each 1-9	Price Each 10-24
TSB41AB1PHP	IEEE 1394a One-Port Cable Transceiver/ Arbiter	48-HTQFP	77C1438	3.58	3.19
TSB41AB2PAP	IEEE 1394a Two-Port Cable Transceiver/ Arbiter	64-HTQFP	77C1439	5.37	4.78
TSB41AB3PFP	IEEE 1394a Three-Port Cable Transceiver/Arbiter	80-HTQFP	77C1441	6.38	5.76
TSB41BA3BPFP	IEEE 1394b Three-Port Cable Transceiver/Arbiter	80-HTQFP	67K8706	17.67	16.06
TSB81BA3PFP	IEEE P1394b s800 Three-Port Cable Transceiver/Arbiter	80-HTQFP	26H0010	14.22	12.92
TSB81BA3DPFP	IEEE P1394b Three-Port Cable Transceiver Arbiter	80-HTQFP	02M4335	14.22	12.92

BUS TRANSCEIVERS

SN75160BDWR	Octal General-Purpose Interface Bus Transceiver	20-SOIC	76C5346	2.51	2.00
SN75161BDWR	Octal General-Purpose Interface Bus Transceiver	20-SOIC	76C5347	2.51	2.00
SN75162BDW	Octal General-Purpose Interface Bus Transceiver	24-SOIC	08F8095	2.80	2.25
SN75ALS160DWR	Octal General-Purpose Interface Bus Transceiver	20-SOIC	76C5086	2.98	2.38

CONTINUED

IEEE-1394 AND BUS TRANSCEIVERS (CONT.)

BUS TRANSCEIVERS

Mfg. Part No.	Description	Pkg.	Stock No.	Price Each 1-9	Price Each 10-24
● SN75ALS161DWR	Octal General-Purpose Interface Bus Transceiver	20-SOIC	76C5087	7.00	6.30
● SN75ALS162DW	Octal General-Purpose Interface Bus Transceiver	24-SOIC	92B7204	7.00	6.30

(177574)

2.4 GHZ ZIGBEE POWER OEM MODULES

RoHS Compliant Available

Atmel

Features:
- Ultra compact size
- High RX sensitivity
- Outperforming link budget
- Very low power consumption
- Ample memory resources (128K bytes of flash memory, 8K bytes RAM, 4K bytes EEPROM)
- Wide range of interfaces (both analog and digital)

Applications:
- Building automation & monitoring
- HVAC monitoring & control
- Inventory management
- Environmental monitoring
- Security
- Water metering
- Industrial monitoring
- Automated meter reading (AMR)

ZigBit™ is an ultra-compact, low-power, high-sensitivity IEEE 802.15.4/ZigBee® OEM module based on a mixed-signal hardware platform. It is designed for wireless sensing, control and data acquisition applications. ZigBit modules eliminate the need for costly and time-consuming RF development, and shortens time to market for a wide range of wireless applications.

ZigBit™ 2.4 GHz WIRELESS MODULES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● ATZB-24-A2R	Wireless OEM Module w/ dual chip antenna	72T3083	30.08
● ATZB-24-B0R	Wireless OEM Module w/ Balanced RF Port	72T3084	27.80
ZigBit™ 2.4 GHz WIRELESS AMPLIFIED MODULES			
● ATZB-A24-U0R	Wireless OEM Module w/ Unbalanced RF output	72T3082	48.38
● ATZB-A24-U0R	Wireless OEM Module w/ U.FL Antenna Connector	72T3082	48.38
ZigBit™ 700/800/900 MHz WIRELESS MODULE			
● ATZB-900-B0R	783/868/915 MHz Wireless Module w/ Balanced RF Port	72T3085	29.14

(177434)

2.4 GHZ RZ USB STICK

RoHS Compliant Available

Atmel

The **AVR RZUSBSTICK** starter kit accelerates development, debugging, and demonstration for a wide range of low power wireless applications including IEEE 802.15.4, 6LoWPAN, and ZigBee networks. The kit includes one USB stick with a 2.4GHz transceiver and a USB connector. The included AT86RF230 transceiver's high sensitivity supports the longest range for wireless products. The AT90USB1287 incorporates fast USB On-the-Go.

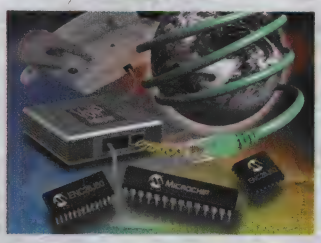
Mfg. Part No.	Description	Stock No.	Price Each
● ATAVRRZUSBSTICK	2.4 GHZ 802.15.4 USB Stick	68T2081	40.26

(197955)

STAND-ALONE ETHERNET CONTROLLERS

RoHS Compliant Available

MICROCHIP



These ethernet controllers feature an integrated MAC, PHY and free TCP/IP stack so you can quickly integrate Ethernet functions into your existing application reducing development risk, total system cost and time to market.

Mfg. Part No.	Interface	Temp. Range	Package	Stock No.	Price Each 1-25
● ENC28J60/SS	SPI	0°C to +70°C	28-SSOP	31K1708	2.79
● ENC28J60-I/SS	SPI	-40°C to +85°C	28-SSOP	73R4288	2.79
● ENC424J600-I/ML	SPI, Parallel	-45°C to +85°C	44-QFN	07P9119	3.76
● ENC424J600-I/PT	SPI, Parallel	-45°C to +85°C	44-TQFP	07P9120	3.58
● ENC624J600-I/PT	SPI, Flex Parallel	-45°C to +85°C	64-TQFP	07P9123	3.87

(84361)

PICDEM.net 2 DEVELOPMENT BOARD

RoHS Compliant Available

MICROCHIP

Features
- Web Server with HTML Support
- Microchip Free TCP/IP Stack Support
- 2 x Ethernet Interface (RJ-45 Connector)
- PICtailTM Connector for Future Expansion Boards
- 16 x 2 Character Alpha-numeric LCD Display
- ICSP™/MPLAB ICD 2 Interface Connector for In-circuit Programming and Debugging
- Programmable Buttons/LEDs
- Temp Sensor
- RS-232/RS-485 Interface
- Real Time Clock

The **PICDEM.net™ 2** Development Board is an Internet/Ethernet development board supporting both the popular ENC28J60 Ethernet Controller and the single-chip Ethernet microcontroller family, the PIC18F97J60. With this board, using Microchip's free TCP/IP stack, a web server can be developed showcasing the capability to remote monitor and control embedded applications over the Internet.

Mfg. Part No.	Description	Stock No.	Price Each
● DM163024	PICDEM.net 2 Development Board	26M9181	165.00

(90085)

USB ICs

RoHS Compliant Available

TEXAS INSTRUMENTS

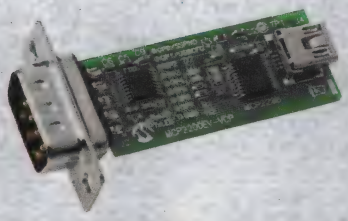
Mfg. Part No.	Description	Pkg.	Stock No.	Price Each 1-9
● TUSB1105RGTR	Advanced USB Transceiver; single-ended & differential input modes	16-QFN	78M6644	1.69
● TUSB1106PWR	Advanced USB Transceiver; only differential input mode	16-TSSOP	31M0466	1.69
● TUSB2046BVF	4-Port Hub for the Universal Serial Bus w/ optional Serial EEPROM Interface	32-LQFP	77C1805	3.39
● TUSB2046BIRHBT	4-Port USB Hub w/ Optional Serial EEPROM Interface	32-QFN	14N8499	3.53
● TUSB2077APT	7-Port USB Hub W/Optional Serial EEPROM Interface	48-LQFP	77C1807	5.61
● TUSB3210PM	General-Purpose USB Device Controller	64-LQFP	35K1366	6.69
● TUSB3410VF	USB-to-Serial Port Controller W/ 3 IN and 3 OUT endpoints	32-LQFP	36K2070	6.44
● TS3USB221ARSER	High-Speed USB 2.0 (480-Mbps) 1:2 MUX/ DEMUX Switch with Single Enable	10-QFN	46P4286	1.14
● TS3USB221EDRCR	High-Speed USB 2.0 (480-Mbps) 1:2 MUX/ DEMUX Switch with Single Enable	10-SON	91R2096	1.23
● TS3USB221ERSER	High-Speed USB 2.0 (480-Mbps) 1:2 MUX/ DEMUX Switch with Single Enable	10-UQFN	91R2097	1.23
● TS3USB31ERSER	High-Speed USB 2.0 (480-Mbps) 1-Port Switch With Single Enable	8-UQFN	91R2098	1.08
● TS5USBA224RSWR	High-Speed USB 2.0 (480Mbps) & Audio Switches with Negative Signal Capability	10-UQFN	13T5977	1.88

(80445)

USB TO RS232 DEMONSTRATION BOARD

MICROCHIP

Features:
- Powered via USB
- Test points for all GPIO pins
- RS232 device and 9-pin D-sub connector for connecting to RS232 applications
- Tx and Rx LEDs for indicating USB to UART traffic (when enabled)
- Software for configuring special features of the device



MCP2200EV-VCP is a USB to RS232 development and evaluation board for the MCP2200 USB to UART device. The accompanying software allows the special device features to be configured and controlled. In addition, two I/O are connected to LEDs which are used to indicate USB to UART traffic when the associated pins are configured as TxLED and RxLED pins respectively.

Mfg. Part No.	Description	Stock No.	Price Each
MCP2200EV-VCP	USB to RS232 Demonstration Board	69R7455	23.99

(169502)

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(212569)

XR21V1410 1-CH FULL SPEED USB UART DEVELOPMENT TOOLS

EXAR
A New Direction in Mixed-Signal

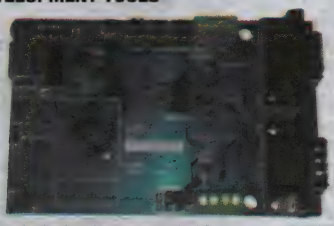
XR21V1410IL-XX-EB evaluation boards showcases the XR21V1410 enhanced 1-channel Universal Asynchronous Receiver and Transmitter (UART) with a USB 2.0 interface that supports 12 Mbps USB data transfer rate, USB suspend, resume and remote wakeup operations. Operating from an internal 48MHz clock therefore no external crystal/oscillator is required like previous generation UARTs. With the fractional baud rate generator, any baud rate can accurately be generated using the internal 48MHz clock.

Mfg. Part No.	Description	Stock No.	Price Each
XR21V1410IL-0B-EB	V1410 1-Ch USB UART Board w/ RS232 Support	34T4747	20.00
XR21V1410IL-0C-EB	V1410 1-Ch USB UART Board w/ RS485 Support	34T4748	20.00

(177836)

XR21V1412 2-CH FULL SPEED USB UART DEVELOPMENT TOOLS

EXAR
A New Direction in Mixed-Signal



XR21V1412IL-XX-EB evaluation boards showcases the XR21V1412 enhanced 2-channel Universal Asynchronous Receiver and Transmitter (UART) with a USB 2.0 interface that supports 12 Mbps USB data transfer rate, USB suspend, resume and remote wakeup operations. Operating from an internal 48MHz clock therefore no external crystal/oscillator is required like previous generation UARTs. With the fractional baud rate generator, any baud rate can accurately be generated using the internal 48MHz clock.

Mfg. Part No.	Description	Stock No.	Price Each
XR21V1412IL-0B-EB	V1412 2-CH USB UART Brd -RS485 Mode	34T4749	25.00

(177837)

XR21B1411 ENHANCED 1-CH FULL-SPEED USB UART DEVELOPMENT TOOL

EXAR
A New Direction in Mixed-Signal

XR21B1411IL-XX-EB evaluation boards showcases the XR21B1411(B1411) enhanced 1-channel Universal Asynchronous Receiver and Transmitter (UART) with a USB 2.0 interface that supports 12 Mbps USB data transfer rate, USB suspend, resume and remote wakeup operations. Operating from an internal clock that is programmable to 6, 12, 24 or 48 MHz therefore no external crystal/oscillator is required like previous generation UARTs. With the fractional baud rate generator, any baud rate can accurately be generated using the internal clock.

Mfg. Part No.	Description	Stock No.	Price Each
XR21B1411IL-0A-EB	B1411 1-CH Enhanced USB 2.0 UART Board w/ RS232/485 Modes Support	34T4746	20.00

(195537)

UARTs

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Description	Supply Current (mA)	Package	Stock No.	Price Each 1-9
PC16550DV/NOPB	Single Universal Asynchronous Receiver/Transmitter with FIFOs	15	44-PLCC	41K8301	8.98
PC16552DV/NOPB	Dual Universal Asynchronous Receiver/Transmitter with FIFOs	30	44-PLCC	41K8303	10.90

(113840)

UART ICs

RoHS Compliant Available

NXP

Universal Asynchronous Receiver/Transmitter (UART) is a single-chip CMOS-LSI communications device that provides a full-duplex asynchronous receiver/transmitter. It is fabricated with Philips Semiconductors CMOS technology, which combines the benefits of high density and low power consumption. The operating speed of the receiver and transmitter can be selected independently as one of the fixed baud rates, a 16X clock derived from a programmable counter/timer, or an external 1X or 16X clock. The baud rate generator and counter/timer can operate directly from a crystal or from external clock inputs. The ability to independently program the operating speed of the receiver and transmitter make the UART particularly attractive for dual-speed channel applications such as clustered terminal systems. In addition, a handshaking capability is provided to disable a remote UART transmitter when the receiver buffer is full. The UART provides a power-down mode in which the oscillator is frozen but the register contents are stored, which results in reduced power consumption on the order of several magnitudes.

Mfg. Part No.	Trans Rate (Baud)	Supply Voltage	Pkg.	Stock No.	Price Each 1-9
SINGLE CHANNEL					
SC16IS740IPW,112	5 Mbps	2.5V, 3.3V	16-TSSOP	70R8982	3.11
SCC2691AC1N24,602	115.2K Baud	5V	24-DIP	70R8795	7.00
DUAL CHANNEL					
SC26C92C1A	1 Mbps	5V	44-PLCC	24M7308	8.51
SC26C92C1A,512	1 Mbps	5V	44-PLCC	70R9029	8.29
SC28L92A1B,557	1 Mbps	3.3V, 5V	44-QFP	70R9066	11.97
SCC2681AC1A44,512	1 Mbps	5V	44-PLCC	70R8777	7.13
SCC68681C1A44,512	1 Mbps	5V	44-PLCC	70R8823	7.13
SCC68681E1N40,112	1 Mbps	5V	40-DIP	70R8830	9.72
SC16IS752IPW,112	5 Mbps	2.5V, 3.3V	28-TSSOP	70R8994	4.35
SC16IS762IPW,112	5 Mbps	2.5V, 3.3V	28-TSSOP	70R9004	5.80
QUAD CHANNEL					
SC16C654BIA68,512	5 Mbps	2.5V, 3.3V, 5V	68-PLCC	70R8893	12.25

(118092)

UARTs

RoHS Compliant Available

TEXAS INSTRUMENTS

- Programmable Serial Interface Characteristics
- Single, Dual, and Quad-Channel Devices Available
- Patented Hardware and Software Auto-Flow Control
- Programmable Sleep Mode and Low-Power Mode
- Operating Temperature: -40°C to +85°C
- Choice of 5V and 3.3V Supply

Mfg. Part No.	Ch.	Voltage	Features	Package	Stock No.	Price Each 1-9
TL16C750FN	Single	5/3.3	64-Byte FIFOs, Auto Flow Control, Low-Power Modes	44-PLCC	15M1972	11.63
TL16C550CFN	Single	5/3.3	16-Byte FIFOs & Auto Flow Control	24-PLCC	15M1968	6.44
TL16C550CPFB	Single	5/3.3	16-Byte FIFOs & Auto Flow Control	48-PQFP	76C9167	5.60
TL16C550CIPT	Single	5/3.3	16-Byte FIFOs & Auto Flow Control	48-PQFP	35C2178	6.16
TL16C550CPFBR	Single	5/3.3	16-Byte FIFOs & Auto Flow Control	48-TQFP	76C9168	4.62
TL16C550DPFB	Single	5/3.3	16-Byte FIFOs & Auto Flow Control	48-TQFP	24K5725	4.26
TL16C452FN	Dual	5	Parallel Port without FIFO	68-PLCC	15M1967	7.63
TL16C752BPT	Dual	3.3	64-Byte FIFO	48-LQFP	72C9530	7.48
TL16C554APN	Quad	5/3.3	16-Byte FIFOs	80-TQFP	35K4984	11.88
TL16C554FN	Quad	5	16-Byte FIFOs	68-PLCC	15M1971	15.18
TL16C554IFN	Quad	5	16-Byte FIFOs	68-PLCC	20C3479	15.62

(70334)

USB 2.0 to UART PROTOCOL CONVERTER

RoHS Compliant Available

MICROCHIP

Features:
- Universal Serial Bus (USB)
- USB Driver and Software Support
- Universal Asynchronous Receiver/Transmitter (UART)
- General Purpose Input/Output (GPIO) Pins
- EEPROM (256 bytes)
- Operating voltage: 3.0-5.5V
- Oscillator input: 12 MHz
- ESD protection more than 4 kV HBM

MCP2200 is a USB-to-UART serial converter which enables USB connectivity in applications that have a UART interface. The device reduces external components by integrating the USB termination resistors.

Mfg. Part No.	Package	Stock No.	Price Each 1-25
MCP2200-I/MQ	20-QFN	52R9946	2.10
MCP2200-I/SO	20-SOIC	52R9947	1.94
MCP2200-I/SS	20-SSOP	52R9948	1.94

(177527)

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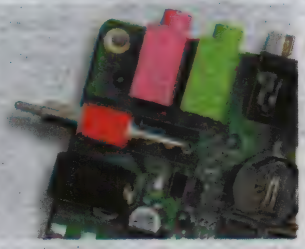
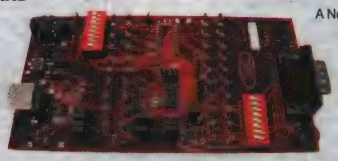


(196528)

RS-232/RS-485/RS-422 MULTIPROTOCOL TRANSCEIVER EVALUATION BOARD

EXAR
A New Direction in Mixed-Signal



SP337EXXX-0A-EB boards allow for the evaluation of the SP337E dual mode serial transceiver containing both RS-232 and RS-485/422 line drivers and receivers. The RS-232 mode provides three drivers and five receivers to support all eight signals commonly used in the DB9 serial port connector (3TX/5RX). In RS-485 mode the device features two independent high speed RS-485/422 transmit and receive channels (2TX/2RX). **SP337EB** models feature a maximum data rate of 250kbps in RS-232 mode and a maximum data rate of 15Mbps in RS-485. **SP337EU** models features a maximum data rate of 1Mbps in RS-232 mode and a maximum data rate of 15Mbps in RS-485 mode.

Mfg. Part No.	Description	Stock No.	Price Each
SP337EBET-0A-EB	SP337EB 28-WSOIC RS-232(250Kbps)/485/422 Eval Brd	34T4742	37.50
SP337EBEY-0A-EB	SP337EB 28-TSSOP RS-232(250Kbps)/485/422 Eval Brd	34T4743	37.50
SP337EUET-0A-EB	SP337EU 28-WSOIC RS-232(1Mbps)/485/422 Eval Brd	34T4744	37.50
SP337EUEY-0A-EB	SP337EU 28-TSSOP RS-232(1Mbps)/485/422 Eval Brd	34T4745	37.50

(195538)

INDUSTRIAL HART-PROTOCAL MODEMS

RoHS Compliant Available

ON Semiconductor

The **A5191HRT** is a single-chip, CMOS modem for use in highway addressable remote transducer (HART) field instruments and masters. The modem and a few external passive components provide all of the functions needed to satisfy HART physical layer requirements including modulation, demodulation, receive filtering, carrier detect, and transmit-signal shaping. The A5191HRT is pin-compatible with the SYM20C15.

Mfg. Part No.	Function	Drivers (#)	Receivers (#)	Supply Voltage (V)	Package	Stock No.	Price Each
● A5191HRTLG-XTD	HART Modem	1	1	3 to 5.5	32-LQFP	03P1166	11.38
● A5191HRTPG-XTD	HART Modem	1	1	3 to 5.5	28-PLCC	03P1167	10.78

(137226)

CAN DEVICES

CONTROLLERS

RoHS Compliant Available

MICROCHIP

The **MCP2510** is the easiest to use, most cost-effective stand-alone CAN 2.0B controller on the market today. It features an industry standard SPI™ serial interface, enabling an easy connection to virtually any microcontroller (MCU). Additional features: two-full message buffers with prioritized message storage, three full message transmit buffers with prioritization and abort features, masks and fillers for both recieve buffers, and interrupt generation.

Mfg. Part No.	Operating Temperature	Package	Stock No.	Price Each 1-25
● MCP2510-I/P	-40°C to +85°C	18-DIP	12C1807	3.11
● MCP2510-I/SO	-40°C to +85°C	18-SOIC	61K2944	3.11

The **MCP2515** is a second generation stand-alone CAN controller and successor to MCP2510. Intended for new designs, it's pin and function compatible with the MCP2510 and includes upgraded features like faster throughput, databyte filtering, and support for time triggered protocols. * Tape and reel packaging sold by the piece.

Mfg. Part No.	Package	Package	Stock No.	Price Each 1-25
● MCP2515-I/P	-40°C to +85°C	18-DIP	61K2945	1.82
● MCP2515-I/ST	-40°C to +85°C	20-TSSOP	61K2946	1.99
● MCP2515T-I/ST*	-40°C to +85°C	20-TSSOP	29H7140	1.99
● MCP2515T-I/SO*	-40°C to +85°C	18-SOIC	29H7139	1.82

I/O EXPANDERS

The **MCP2502X/5X** allows a simple CAN node to be implemented without the need for a microcontroller. Features a number of peripherals, including digital I/O, 4-channel 10-bit A/D (**MCP2505X**), and 2 PWM outputs, with automatic message transmission on change of input state, including when an analog input exceeds a preset threshold. Low power CMOS technology. Operates from 2.7V to 5.5V. 10mA active current typical. 30µA standby current (CAN Sleep mode).

Device	A/D	One-Wire CAN
MCP25020	No	No
MCP25050	Yes	No

Mfg. Part No.	Operating Temperature	Features	Package	Stock No.	Price Each 1-25
● MCP25020-I/SL	-40°C to +85°C	Digital CAN I/O Expander	14-SOIC	92C4173	2.55
● MCP25050-I/P	-40°C to +85°C	Mixed Signal CAN I/O Expander, 1-Wire Capable	14-DIP	59K0224	3.39

HIGH-SPEED TRANSCEIVERS

Externally controlled slope for reduced RFI emissions. Detection of ground fault (permanent dominant) on TXD input. Power-on reset and voltage brown-out protection. An unpowered node or brown-out event will not disturb the CAN bus. Low current standby operation. Protection against damage due to short circuit conditions (positive or negative battery voltage). Protection against high voltage transients. Automatic thermal shut-down protection. Up to 112 nodes can be connected. High noise immunity due to differential bus implementation.

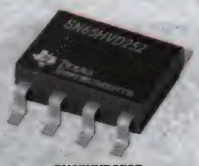
Mfg. Part No.	Operating Temperature	Package	Stock No.	Price Each 1-25
● MCP2551-E/P	-40°C to +125°C	8-DIP	69K7603	1.18
● MCP2551-E/SN	-40°C to +125°C	8-SOIC	92C4186	1.18
● MCP2551T-I/SN	-40°C to +85°C	8-SOIC	92C4188	1.02

(68808)

CAN TRANSCEIVERS

RoHS Compliant Available

TEXAS INSTRUMENTS



SN65HVD252D

Mfg. Part No.	Description	Pkg.	Stock No.	Price Each 1-9	Price Each 10-24
● SN65HVD1040D	Industrial CAN Transceiver with Ultra Low Power Sleep mode and Remote Bus Wake-up	8-SOIC	41M4283	1.63	1.47
● SN65HVD1040DR	Industrial CAN Transceiver with Ultra Low Power Sleep mode and Remote Bus Wake-up	8-SOIC	41M4285	1.53	1.36
● SN65HVD1040QDRQ1	Automotive Catalog EMC Optimized CAN Transceiver	8-SOIC	31M0414	1.73	1.56
● SN65HVD1050D	High-Speed EMC Optimized CAN Transceiver	8-SOIC	70K4439	1.47	1.30
● SN65HVD230D	3.3V CAN Transceiver with Standby Mode	8-SOIC	75C7744	2.72	2.45
● SN65HVD230DR	3.3V CAN Transceiver with Standby Mode	8-SOIC	75C7745	2.18	1.96
● SN65HVD230QD	Automotive Catalog 3.3-V CAN Transceiver	8-SOIC	75C7746	2.77	2.47
● SN65HVD231D	3.3V CAN Transceiver with Sleep Mode	8-SOIC	75C7748	2.72	2.45
● SN65HVD232D	3.3-V Can Transceiver	8-SOIC	35K4890	2.31	2.08
● SN65HVD233D	3.3V CAN Transceiver with Standby Mode, Loop-back	8-SOIC	54H4289	2.87	2.55
● SN65HVD234D	3.3V CAN Transceiver with Sleep Mode	8-SOIC	73H4407	2.75	2.45
● SN65HVD235D	3.3V CAN with Standby Mode, Autobaud Loop-back	8-SOIC	73H4409	2.87	2.55
● SN65HVD251D	Industrial CAN Transceiver	8-SOIC	16M2475	2.86	2.57
● SN65HVD251P	Industrial CAN Transceiver	8-DIP	87H2581	2.87	2.55
● SN65HVD252D	DeviceNet CAN Transceivers	8-SOIC	79R8396	2.72	2.45
● SN65HVD253D	High-Speed Controller Area Network (CAN) Transceiver	8-SOIC	79R8398	2.72	2.45

(177572)

CAN INTERFACE DEVICES

RoHS Compliant Available

NXP

These devices are the interface between the CAN protocol controller and the physical bus. They provide differential transmit capability to the bus and differential receive capability to the CAN controller.

Mfg. Part No.	Data Rate (Mbps)	No. of TX/RX	V_{CC} (V)	Package	Stock No.	Price Each 1-9
● PCA82C251T/YM,118	1	1/1	4.5 to 5.5	8-SO	61T7718	2.00

(118093)

CAN BUS ANALYZER TOOL

MICROCHIP

Features

- Supports CAN 2.0b and ISO11898-2
- Intuitive PC User Interface for functions such as configuration, trace, transmit, filter, log etc
- Enhanced features in the PC GUI for Microchip's PIC microcontroller support such as ECAN register view in the GUI
- Direct access to CAN H and CAN L, CAN TX and CAN RX signals for robust debugging
- Flexible CAN bus interface options i.e. standard DB9 connector or screw terminals
- Software control of termination resistance and LED display for status, traffic, BUS error

Kit Contents

- CAN BUS Analyzer tool
- USB mini cable for PC connection
- User Guide/Software CD

CAN BUS Analyzer Tool is a simple to use low cost CAN bus monitor which can be used to develop and debug a high speed CAN network. The tool supports CAN 2.0b and ISO11898-2 and a broad range of functions which allow it to be used across various market segments including automotive, industrial, medical and marine. The toolkit comes with all the hardware and software required to connect a CAN network to a PC. The Graphical User Interface makes it easy to quickly observe and interpret bus traffic.

Mfg. Part No.	Description	Stock No.	Price Each
APGDT002	CAN BUS Analyzer Tool	63R7680	99.99

(196441)

EMBEDDED DESIGN TOOLS

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(196530)

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ANALOG DEVICES

Applications:
- Current shunt monitors
- Active filters
- Portable medical equipment
- Buffer/level shifting
- High impedance sensor interfaces
- Battery powered instrumentation

Mfg. Part No.	Supply Voltage	Bandwidth (MHz)	Slew Rate (V/µs)	Package	Stock No.	Price Each 1-9
ADA4661-2ARMZ	3V to 18V	4	2	8-MSOP	06X4710	2.90
ADA4666-2ARMZ	3V to 18V	4	2	8-MSOP	06X4715	2.48

EVALUATION BOARD

Mfg. Part No.	Description	Stock No.	Price Each Each
EVAL-PRAOPAMP-1KSZ	Universal Operational Amplifier Eval Board	89M5157	18.98

(211443)

OPERATIONAL AMPLIFIERS

RoHS Compliant Available

ANALOG DEVICES

MILITARY/AEROSPACE

Mfg. Part No.	Slew Rate (V/uS)	V_{OS} Max. (mV)	V_{OS} TC Max. (µV/°C)	GBW Max. (MHz)	Package	Stock No.	Price Each 1-9
AD845JNZ	100	1.5	20	16	8-PDIP	19M0957	8.25
AD843JNZ	250	1	12	34	8-PDIP	59K6744	10.68
AD844ANZ	2000	0.5	...	60	8-PDIP	59K6750	7.49
QUAD - GENERAL PURPOSE OPERATIONAL AMPLIFIERS							
OP11EPZ	1	0.3	2	3	14-DIP	59K8757	12.44
SINGLE - WIDE BANDWIDTH OPERATIONAL AMPLIFIERS							
AD841JNZ	300	2	35	40	14-PDIP	59K6730	9.21
SINGLE - HIGH SPEED OPERATIONAL AMPLIFIERS							
AD847ARZ	300	0.5	15	50	8-SOIC	88H0244	7.49

(89803)

LOW BIAS CURRENT OPERATIONAL AMPLIFIERS

RoHS Compliant Available

ANALOG DEVICES

SINGLE

Mfg. Part No.	Slew Rate (V/uS)	VOS Max. (mV)	VOS TC Max. (µV/°C)	GBW Max. (MHz)	Package	Stock No.	Price Each 1-9
ADA4627-1ARZ	60	0.66	1	19	8-SOIC	26R2398	7.67
AD825ARZ	140	1	10	26	8-NSOIC	59K6528	4.73
AD8665ARJZ-R2	3.5	0.6	3	4	5-SOT-23	28M4137	3.06
DUAL							
AD823ANZ	25	0.8	2	16	8-PDIP	59K6515	6.24
AD823ARZ	25	0.7	2	16	8-NSOIC	12M9057	6.24
AD8662ARZ	3.5	0.1	9	4	8-SOIC	19M0994	3.53
AD8666ARZ	3.5	5	10	4	8-SOIC	19M0995	2.81

(168140)

LOW COST OPERATIONAL AMPLIFIERS

RoHS Compliant Available

ANALOG DEVICES

SINGLE

Mfg. Part No.	Slew Rate (V/uS)	VOS Max. (mV)	VOS TC Max. (µV/°C)	GBW Max. (MHz)	Package	Stock No.	Price Each 1-9
AD8519ARTZ-REEL7	2.9	1.2	2	8	8-SOIC	19M8911	2.37
AD8531ARTZ-REEL7	5	25	20	3	5-SOT-23	19M8913	0.89
AD8531ARZ	5	25	20	3	8-SOIC	19M0961	0.86
AD8538AUJZ-R2	0.4	0.03	0.03	0.43	5-TSOT	12M9112	3.85
AD8541AKSZ-R2	0.92	1	4	1	5-SC-70	59K6819	1.18
AD8541ARTZ-R2	0.92	1	4	1	5-SC-70	59K6820	1.17
AD8601ARTZ-R2	6	0.5	2	8.4	5-SOT-23	19M8922	2.29
AD8655ARZ	11	0.05	0.4	28	8-SOIC	59K7052	2.14
DUAL							
AD8532ARMZ-R2	5	30	20	3	8-MSOP	12M9106	1.73
AD8602ARZ	6	0.5	2	8.4	8-SOIC	19M0972	2.23
AD8602ARMZ	6	0.35	2	8.4	8-MSOP	19P8306	2.14
AD8532ARZ	5	25	20	3	8-SOIC	19M0962	1.41
AD8566ARMZ-R2	6	2	5	5	8-MSOP	12M9118	4.09
AD8646ARMZ	11	2.5	7.5	24	8-MSOP	34P3249	1.85

CONTINUED

LOW COST OPERATIONAL AMPLIFIERS (CONT.)

QUAD

Mfg. Part No.	Slew Rate (V/uS)	VOS Max. (mV)	VOS TC Max. (µV/°C)	GBW Max. (MHz)	Package	Stock No.	Price Each 1-9
AD8534ARZ	5	25	20	3	14-SOIC	19M8914	1.67
AD8544ARZ	0.92	6	4	1	14-SOIC	19M0966	1.51
AD8604ARUZ	6	0.6	2	8.4	14-TSSOP	19M8924	2.58
AD8604ARZ	6	0.6	2	8.4	14-SOIC	19M0973	2.65
AD8648ARUZ	11	2.5	...	24	14-TSSOP	19M0988	2.70
AD8694ARZ	5	0.4	6	10	14-SOIC	19M1003	2.65

(168141)

LOW CURRENT NOISE AMPLIFIERS

RoHS Compliant Available

ANALOG DEVICES

No. of Amplifiers: 1

Mfg. Part No.	Input Noise @ f=1kHz (fA / √Hz)	CMRR @ f=1kHz Typ. (dB)	V_{OS} Max. (mV)	V_{OS} TC Max. (µV/°C)	BW Typ. (MHz)	Package	Stock No.	Price Each 1-4
AD549LH	0.11	100	0.5	10	1	8-TO-99	05F6971	45.52
AD549KH	0.16	100	0.25	5	1	8-TO-99	05F6970	42.35
AD549JHZ	0.22	90	0.5	10	1	8-TO-99	50M0807	24.74
AD549LHZ	0.11	100	0.3	5	1	8-TO-99	50M0808	41.50
AD549KHZ	0.16	100	0.15	2	1	8-TO-99	61M4031	35.68
AD549JH	0.22	90	1	20	1	8-TO-99	05F6969	28.41
AD745JRZ-16	...	95	0.5	2	20	16-SOIC	59K4819	11.38

(10001)

LOW NOISE OPERATIONAL AMPLIFIERS

RoHS Compliant Available

ANALOG DEVICES

SINGLE

Mfg. Part No.	Slew Rate (V/uS)	VOS Max. (mV)	VOS TC Max. (µV/°C)	GBW Max. (MHz)	Package	Stock No.	Price Each 1-9
OP184FSZ-REEL7	4	0.125	...	4.25	8-SOIC	59K8786	4.04
AD743JRZ-16	2.8	0.25	2	4.5	16-SOIC	59K4806	9.77
AD8676BRZ	2.5	0.012	0.2	10	8-SOIC	28M4151	5.39
OP184ESZ	4	0.175	0.2	4.25	8-SOIC	59K8781	5.91
OP184FSZ	4	0.175	0.2	4.25	8-SOIC	59K8784	3.92
DUAL							
ADA4075-2ACPZ-R7	12	0.2	3	6.5	8-LFCSP	63W5356	2.09
ADA4610-2ARZ	17	1	8	16.3	8-SOIC	86T6049	4.18
ADA4610-2BRZ	17	0.4	4	16.3	8-SOIC	86T6052	8.78
ADA4610-2ARMZ	17	1	8	16.3	8-MSOP	86T6046	4.02
ADA4610-2ACPZ-RL	25	1	8	16.3	8-LFCSP	92T3177	3.61
ADA4001-2ARZ	25	2.5	5	16.7	8-SOIC	86T6041	3.04
ADA4897-2ARMZ	120	0.5	0.2	230	10-MSOP	72T3482	7.70
QUAD							
OP413ESZ	1.2	0.125	0.8	3.4	16-SOIC	59K8896	17.28
OP484ESZ	4	0.075	2	4.25	14-SOIC	19M8989	15.44
AD8624ARUZ	0.48	0.01	0.5	0.56	14-TSSOP	67R2270	9.32

(168139)

LOW POWER OPERATIONAL AMPLIFIERS

RoHS Compliant Available

ANALOG DEVICES

SINGLE

Mfg. Part No.	Slew Rate (V/uS)	VOS Max. (mV)	VOS TC Max. (µV/°C)	GBW Max. (MHz)	Package	Stock No.	Price Each 1-9
AD8502ARJZ-R2	0.004	0.5	5	0.007	8-SOT-23	34M5069	3.01
AD8515AKSZ-R2	2.7	1	4	5	5-SC-70	59K6787	1.61
OP193FSZ	0.015	0.15	...	0.035	8-SOIC	59K8791	4.02
OP495GPZ	0.03	0.03	1	0.085	14-DIP	59K8947	9.92
AD548JRZ	1.8	0.75	20	1	8-SOIC	59K4192	3.09
AD548KNZ	1.8	0.75	20	1	8-PDIP	59K4195	6.57
DUAL							
ADA4062-2ARZ	3.3	2.5	4	1.4	8-SOIC	34P2958	2.26
ADA4084-2ARMZ	4.6	100	0.5	13.9	8-MSOP	72T3468	6.97
ADA4084-2ARZ	4.6	130	0.5	13.9	8-SOIC	72T3471	6.97
AD8546ARMZ	0.07	14	3	0.2	8-MSOP	31T9323	2.31
ADA4096-2ARMZ	0.25	0.3	1	0.786	8-MSOP	55T8893	4.88
AD648JNZ	1.8	0.75	10	1	8-PDIP	59K4451	4.45
AD648JRZ	1.8	0.75	10	1	8-SOIC	59K4452	4.34
OP290GPZ	0.012	125	1.2	0.02	8-PDIP	59K8858	6.77

CONTINUED

LOW POWER OPERATIONAL AMPLIFIERS (CONT.)

DUAL

Mfg. Part No.	Slew Rate (V/uS)	VOS Max. (mV)	VOS TC Max. (µV/°C)	GBW Max. (MHz)	Package	Stock No.	Price Each 1-9
● OP295GPZ	0.03	0.03	1	0.085	8-DIP	59K8868	5.10
● OP295GSZ	0.03	0.03	1	0.085	8-SOIC	59K8869	5.00
● OP293FSZ	0.015	250	1.75	0.035	8-SOIC	59K8865	5.88
QUAD							
● OP495GSZ	0.03	0.3	5	0.085	16-SOIC	19M8990	9.92
● OP747ARUZ	0.2	0.03	0.4	0.7	14-TSSOP	59K8962	7.31
● AD8394AREZ	300	...	...	35	20-TSSOP	76T1835	5.05

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LOW-VOLTAGE NOISE OPERATIONAL AMPLIFIERS

RoHS Compliant Available

ANALOG DEVICES

SINGLE

Mfg. Part No.	Volt. Noise (f=1kHz) Typ. (nV / √(Hz))	VOS Typ. (mV)	GBW Typ. (MHz)	SR Typ. (V/µS)	Package	Stock No.	Price Each 1-9
● AD797ANZ	0.9	0.08	110	20	8-PDIP	59K6088	9.24
● AD797BRZ	0.9	0.06	110	20	8-SOIC	88H0088	10.61
● AD8597ARZ	1	0.12	10	14	8-SOIC	19P8303	5.77
● OP27EPZ	3	0.01	8	2.8	8-PDIP	59K8827	5.90
● OP37EPZ	3	0.01	63	17	8-PDIP	59K8884	5.96
● OP37GPZ	3	0.03	63	17	8-PDIP	59K8885	2.77
● OP27GPZ	3.2	0.03	8	2.8	8-PDIP	59K8828	3.04
● OP27GSZ	3.2	0.03	8	2.8	8-SOIC	59K8829	3.04
● OP113ESZ	4.7	0.075	3.4	1.2	8-SOIC	59K8759	7.47
● OP113FSZ	4.7	0.1	3.4	1.2	8-SOIC	19M8975	4.43
● AD848JNZ	...	0.2	175	200	8-PDIP	59K6759	6.63
● AD8022ARZ	...	1.5	130	50	8-SOIC	82H2949	5.69
● OP77FJZ	9.6	0.01	600	0.3	8-TO-99	89M5284	13.11
DUAL							
● AD8599ARZ	1	0.01	10	16.8	8-SOIC	34M5072	7.88
● OP270GPZ	3.2	0.05	5	2.4	8-PDIP	59K8832	5.84
● ADA4692-2ARZ	16	0.5	3.9	1.5	8-SOIC	05R6523	1.67
● ADA4692-2ARZ	...	0.5	3.9	1.5	8-SOIC	05R6523	1.67
● OP284EPZ	3.9	0.065	4.25	4	8-PDIP	59K8847	10.64
● OP284ESZ	3.9	0.065	4.25	4	8-SOIC	59K8848	10.23
● OP284FSZ	3.9	0.125	4.25	4	8-SOIC	59K8851	6.81
● OP213ESZ	4.7	0.25	3.4	1.2	8-SOIC	59K8800	12.28
● OP213FPZ	4.7	0.25	3.4	1.2	8-DIP	59K8803	5.26
● OP213FSZ	4.7	0.1	3.4	1.2	8-SOIC	19M1027	5.08
QUAD							
● OP470GPZ	3.2	0.4	6	2	14-DIP	59K8924	9.22
● OP470GSZ	3.2	0.4	6	2	16-SOIC	19M1033	9.87
● OP484FPZ	3.9	0.15	4.25	4	14-PDIP	59K8936	10.35
● OP484FSZ	3.9	0.15	4.25	4	14-SOIC	59K8937	9.85
● ADA4691-4ACPZ-R2	16	0.5	3.6	1.5	16-LFCSP	60R3273	4.11
● OP471GSZ	6.5	1	6.5	8	16-SOIC	59K8929	10.54

(9999)

CURRENT FEEDBACK OPERATIONAL AMPLIFIERS

RoHS Compliant Available

ANALOG DEVICES

Mfg. Part No.	No. of Amps	Slew Rate Typ. (V/µs)	BW (MHz)	VOS Typ. (mV)	Stock No.	Price Each 1-9
● AD8001ANZ	1	1200	800	2	19M0911	7.13
● AD8001ARZ	1	1200	800	2	19M0912	7.22
● AD711KRZ	1	20	4	0.3	59K4541	5.28
● AD8011ANZ	1	3500	300	2	19M0914	5.42
● AD8011ARZ	1	3500	300	2	19M8869	5.42
● AD8000YRDZ	1	4100	1.5	1	19M0910	4.00
● AD8009ARZ	1	5500	1	2	41K1257	4.61
● AD8008ARZ	2	1000	650	0.5	19M0913	5.74
● AD8002ARZ	2	1200	600	2	19M8867	7.17
● AD812ARZ	2	1600	145	2	19M8884	5.91

(175885)

CURRENT SENSE AMPLIFIERS

RoHS Compliant Available

ANALOG DEVICES

Mfg. Part No.	Supply Voltage Max (V)	Gain Max	CMRR	Package	Stock No.	Price Each 1-9
● AD8206YRZ	5.5	20	86	8-SOIC	59K6484	3.04
● AD8213YRMZ	5.5	20	120	10-MSOP	41M1966	4.93
● AD8211YRJZ-R2	5.5	20	120	5-SOT-23	52M2972	2.81
● AD8212YRMZ	5.5	1000	100	8-MSOP	41M1963	3.41
● AD8215YRZ	5.5	20	100	8-SOIC	77M9961	3.09
● AD629ANZ	18	1	88	8-PDIP	59K4426	6.90
● AD629ARZ	18	1	88	8-SOIC	59K4427	6.59
● AD629BNZ	18	1	96	8-PDIP	19M0847	11.04
● AD8218BRMZ	80	20	110	8-MSOP	31T9314	2.68
● AD8219BRMZ	80	60	110	8-MSOP	31T9316	2.65
● AD8217BRMZ	80	20	100	8-MSOP	85R6443	2.76

(101576)

DIFFERENTIAL AMPLIFIERS

RoHS Compliant Available

ANALOG DEVICES

Mfg. Part No.	No. of Amps	BW (MHz)	Gain Max. (V/V)	Slew Rate (V/us)	Package	Stock No.	Price Each 1-249
● ADA4927-1YCPZ-R2	1	2300	1	5000	16-LFCSP	34P2986	7.20
● ADA4932-1YCPZ-R2	1	560	1	2800	16-LFCSP	34P2992	5.62
● AD8476ARMZ	1	5	1	10	8-MSOP	67T0298	5.22
● ADA4940-1ACPZ-R7	1	260	...	95	16-LFCSP	92T1800	4.35
● ADA4960-1ACPZ-R2	1	5000	...	8700	16-LFCSP	92T3178	17.43
● AD8216YRZ	1	3	3	15	8-SOIC	71M1881	4.13
● AD8271ARMZ	1	15	...	30	10-MSOP	71P7873	3.19
● AD8271BRMZ	1	15	...	30	10-MSOP	71P7876	4.76
● AD8274ARMZ	1	20	0.5	20	8-MSOP	05R6593	2.67
● AD8274ARZ	1	20	0.5	20	8-SOIC	07P8972	2.78
● AD8276ARMZ	1	0.55	1	1.1	8-MSOP	08R6714	2.76
● AD8276ARZ	1	0.55	1	1.1	8-SOIC	08R6717	2.53
● AD8276BRMZ	1	0.55	1	1.1	8-MSOP	08R6720	3.70
● AD8276BRZ	1	0.55	1	1.1	8-SOIC	08R6723	3.70
● AD8476BRMZ	1	5	1	10	8-MSOP	67T0304	6.08
● ADA4940-1ARZ	1	260	1	95	8-SOIC	72T3487	4.23
● ADA4830-1BCPZ-R7	1	71	0.51	250	8-LFCSP	82T5454	1.70
● ADA4830-2BCPZ-R7	2	84	0.51	300	16-LFCSP	94T9072	2.46
● AD8207WBRZ	2	0.15	20	1	8-SOIC	85R6439	5.05
● AD8279ARZ	2	1	2	1.4	14-SOIC	52R8159	3.90
● ADA4940-2ACPZ-R7	2	260	...	95	24-LFCSP	82T5455	6.32
● AD8209WBRMZ	2	0.08	14	1	8-MSOP	52R8156	3.52
● AD8279BRZ	2	1	2	1.4	14-SOIC	52R8162	5.71
● AD8270ACPZ-WP	2	20	0.5	30	16-LFCSP	84M7820	4.86
● ADA4937-2YCPZ-R2	2	1900	1	6000	24-LFCSP	64M7458	11.46
● AD8277ARZ	2	0.5	1	1.1	14-SOIC	24R9024	4.26

(133596)

HIGH ACCURACY OPERATIONAL AMPLIFIERS

RoHS Compliant Available

ANALOG DEVICES

SINGLE

Mfg. Part No.	Slew Rate (V/uS)	VOS Max. (mV)	VOS TC Max. (µV/°C)	GBW Max. (MHz)	Package	Stock No.	Price Each 1-9
● AD8510ARZ	20	0.4	5	8	8-SOIC	19M8908	2.48
● OP37GSZ	17	0.03	1.8	63	8-SOIC	19M1031	2.74
● AD8551ARZ	0.4	0.005	0.04	1.5	8-SOIC	19M8917	3.03
● AD8571ARZ	0.4	0.005	0.04	1.5	8-SOIC	19M0969	2.86
● AD8610BRZ	60	0.045	0.5	25	8-SOIC	59K6944	17.92
● AD8615AUJZ-R2	12	0.06	10	24	5-TSOT-23	19M8931	3.10
● AD8616ARZ	12	0.06	7	24	8-SOIC	19M0977	3.42
● AD8627AKSZ-R2	5	0.5	2.5	5	5-SC-70	19M8933	5.77
● AD8627ARZ	5	0.5	2.5	5	8-SOIC	19M0979	4.17
● AD8628ARTZ-R2	1	0.005	0.02	2.5	5-SOT-23	19M8934	3.51
● AD8628ARZ	1	0.005	0.02	2.5	8-SOIC	19M0980	2.81
● AD8629ARZ	1	0.005	0.02	2.5	8-SOIC	19M0981	3.85
● AD8641AKSZ-R2	3	0.75	2.5	3.5	5-SC-70	19M8935	5.83
● OP162GSZ	13	0.325	1	15	8-SOIC	19M8977	4.02
● AD795JRZ	1	0.1	3	1.6	8-SOIC	59K6085	7.36
● AD8610ARZ	60	0.075	3.5	25	8-SOIC	59K6941	8.56
● AD8605ARTZ-REEL7	5	0.065	4.5	10	5-SOT-23	19M8925	1.64
● AD8628AUJZ-R2	1	3	0.002	2.5	5-TSOT	59K7002	3.85

➤ CONTINUED ➤

HIGH ACCURACY OPERATIONAL AMPLIFIERS (CONT.)

Mfg. Part No.	Slew Rate (V/uS)	VOS Max. (mV)	VOS TC Max. (µV/°C)	GBW Max. (MHz)	Package	Stock No.	Price Each 1-9
AD8638ARJZ-R2	2.5	3	0.004	1.5	5-SOT-23	89M5025	4.56
AD8638ARZ	2.5	3	0.001	1.5	8-SOIC	64M7591	2.83
AD8663ARZ	0.3	40	1.5	0.54	8-SOIC	61M4057	3.16
AD8671ARMZ	4	0.075	0.5	10	8-MSOP	19P8315	2.67
AD8675ARZ	2.5	0.075	0.6	10	8-MSOP	84K9788	3.10
ADA4004-1ARJZ-R2	2.7	0.125	1	12	5-SOT-23	34P2945	6.90
OP07CPZ	0.3	0.075	0.5	0.6	8-DIP	59K8752	1.60
OP07CSZ	0.3	0.075	0.5	0.6	8-SOIC	59K8753	1.60
OP07DNZ	0.3	0.075	1.8	0.6	8-DIP	19M1023	1.35
OP07EPZ	0.3	0.03	0.3	0.6	8-DIP	59K8756	3.88
OP177FPZ	0.3	0.025	0.1	0.6	8-PDIP	59K8776	5.57
OP177GPZ	0.3	0.025	0.1	0.6	8-PDIP	59K8777	2.01
AD8671ARZ	4	0.075	0.5	10	8-SOIC	19M0998	2.67
ADA4004-1ARZ	2.7	0.125	1	12	8-SOIC	34P2947	4.56
OP97EPZ	0.2	0.03	0.6	0.9	8-PDIP	59K8973	7.90
OP97FPZ	0.2	0.03	0.6	0.9	8-PDIP	59K8974	2.80
OP1177ARMZ-REEL	0.7	0.06	0.7	1.3	8-MSOP	19M8976	2.43
OP1177ARZ	0.7	0.06	0.7	1.3	8-SOIC	19M1025	2.37
OP177FSZ	0.3	0.025	0.3	0.6	8-SOIC	19M8978	5.57
OP177GSZ	0.3	0.025	1.2	0.6	8-SOIC	19M1026	2.01
OP77EZ	0.3	0.045	0.3	0.6	8-CDIP	05F8744	11.24
OP97FSZ	0.2	0.075	2	0.9	8-SOIC	19M1037	2.80
DUAL							
AD708JNZ	0.3	0.1	1	0.9	8-DIP	59K4537	6.72
AD8512BRZ	20	0.08	1	8	8-SOIC	59K6777	10.06
OP200EZ	0.15	0.075	0.5	0.5	8-CDIP	05F8551	15.88
AD8552ARZ	0.4	0.005	0.04	1.5	8-SOIC	19M0967	4.61
AD8572ARZ	0.4	0.005	0.04	1.5	8-SOIC	19M0970	4.56
AD8642ARZ	3	0.75	2.5	3.5	8-SOIC	19M0986	5.84
AD8606ACBZ-REEL7	5	0.065	4.5	10	8-WLCSP	64M7588	2.62
AD8606ARMZ-REEL	5	0.02	4.5	10	8-MSOP	96K2111	2.62
OP262GSZ	13	0.325	1	15	8-SOIC	19M1028	5.12
AD708AQ	0.3	0.1	1	0.9	8-CDIP	05F7250	12.11
AD8620ARZ	60	0.085	3.5	25	8-SOIC	59K6972	14.50
AD8620BRZ	60	80	0.5	25	8-SOIC	59K6975	29.30
AD8626ARZ	5	5000	2.5	5	8-SOIC	59K6986	5.75
AD8629ARMZ	1	1000	0.002	2.5	8-MSOP	19P8311	3.85
AD8652ARZ	41	0.1	4	50	8-SOIC	19M0991	5.17
AD8656ARMZ	11	0.25	2.3	28	8-MSOP	34P3252	3.11
AD8512ARZ	20	0.4	5	8	8-SOIC	19M0958	3.73
AD8672ARMZ	4	0.075	0.3	10	8-MSOP	19P8316	4.34
ADA4051-2ARMZ	0.04	0.015	0.02	0.125	8-MSOP	26R2382	3.85
OP2177ARZ	0.7	0.015	0.7	1.3	8-SOIC	59K8809	3.63
OP285GSZ	22	0.25	1	9	8-SOIC	19M8981	5.76
OP297FPZ	0.15	0.08	0.5	0.5	8-DIP	59K8876	6.81
AD8606ARZ	5	0.065	4.5	10	8-SOIC	19M0974	3.12
AD8607ARZ	0.1	0.050	4.5	0.4	8-SOIC	19M0975	2.64
AD8656ARZ	11	0.25	2.3	28	8-SOIC	19M0993	3.11
AD8672ARZ	4	0.075	0.8	10	8-SOIC	19M0999	4.34
OP297GSZ	0.15	0.08	0.6	0.5	8-SOIC	56K8267	5.61
OP297FSZ	0.15	0.05	2	0.5	8-SOIC	19M8982	6.59
OP297GPZ	0.15	0.05	2	0.5	8-DIP	19M8983	5.93
QUAD							
AD8574ARZ	0.4	0.005	0.04	1.5	14-SOIC	19M0971	7.05
AD8630ARUZ	1	0.001	0.002	2.5	14-TSSOP	19M0982	6.46
AD8630ARZ	1	0.001	0.002	2.5	14-SOIC	19M0983	6.24
AD8643ARZ	3	0.75	2.5	3.5	14-SOIC	19M0987	9.24
OP462GSZ	13	0.325	1	15	14-SOIC	19M8987	9.09
AD8609ARUZ	0.1	50	1	0.4	14-TSSOP	59K6934	4.87
AD8618ARZ	12	0.023	1.5	20	14-SOIC	59K6969	5.93
AD8625ARZ	5	0.5	2.5	5	14-SOIC	59K6981	9.57
OP4177ARZ	0.7	0.015	0.7	1.3	14-SOIC	59K8902	7.72
OP497FPZ	0.15	0.08	0.4	0.5	14-DIP	59K8951	11.96
OP497GPZ	0.15	0.08	0.5	0.5	14-PDIP	59K8954	9.69
AD8513ARZ	20	0.4	5	8	14-SOIC	19M0959	7.79
AD8608ARUZ	5	0.075	6	10	14-TSSOP	19M8928	4.00
AD8608ARZ	5	0.075	6	10	14-SOIC	19M8929	4.15
AD8609ARZ	0.1	0.05	4.5	0.4	14-SOIC	19M0976	4.68
AD8674ARZ	4	0.075	0.8	10	14-NSOIC	19M1000	7.41
OP4177ARUZ	0.7	0.06	0.9	1.3	14-TSSOP	19M8985	7.72
OP497FSZ	0.15	0.075	1	0.5	16-SOIC	19M8991	11.45
OP497GSZ	0.15	0.15	1.5	0.5	16-SOIC	19M8992	9.23

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HIGH SPEED OPERATIONAL AMPLIFIERS

RoHS Compliant Available

ANALOG DEVICES

SINGLE

Mfg. Part No.	Slew Rate (V/µs)	VOS Max. (mV)	VOS TC Max. (µV/°C)	GBW Max. (MHz)	Package	Stock No.	Price Each 1-24
AD8029AKSZ-R2	62	1.6	30	125	6-SC-70	59K6221	2.82
AD8031ANZ	30	1	5	80	8-DIP	59K6231	3.34
OP42GSZ	50	1.5	5	10	8-SOIC	19M8986	5.35
AD711JNZ	20	0.3	20	4	8-PDIP	59K4538	2.97
AD711JRZ	20	0.3	3	4	8-SOIC	59K4539	3.00
AD711KNZ	20	0.2	10	4	8-PDIP	59K4540	5.47
AD711KRZ	20	0.2	3	4	8-SOIC	59K4541	5.28
AD8031ARZ	30	1	5	80	8-SOIC	19M0917	3.21
AD8033ARZ	80	2	27	80	8-SOIC	59K6245	2.77
AD8036ARZ	1200	2	10	240	8-SOIC	88H0127	9.82
AD8037ARZ	1500	2	10	270	8-SOIC	59K6253	9.78
AD8038AKSZ-REEL7	425	3	...	350	5-SC70	63M0908	2.14
AD8038ARZ	425	0.5	4.5	350	8-SOIC	59K6260	2.55
AD8041ARZ	170	2	10	170	8-SOIC	88H0130	4.61
AD8047ARZ	750	1	5	250	8-SOIC	88H0132	6.17
AD8063ARZ	650	1	3.5	300	8-SOIC	59K6312	2.42
AD9631ARZ	1300	10	10	320	8-SOIC	19M8943	11.18
ADEL2020ANZ	500	7.5	7	90	8-DIP	19M0654	5.54
ADA4857-1YCPZ-R7	2800	2	2.3	850	8-LFCSP	63W5357	3.91
AD845KNZ	100	0.25	20	16	8-PDIP	59K6757	9.44
AD744JNZ	75	0.3	5	13	8-PDIP	59K4810	5.74
AD744JRZ	75	0.3	5	13	8-SOIC	59K4812	5.53
AD744KRZ	75	0.3	5	13	8-SOIC	59K4814	8.13
DUAL							
AD8032ANZ	30	1	5	80	8-DIP	59K6236	5.15
AD8022ARMZ	50	1.5	10	130	8-MSOP	59K6199	5.69
AD8028ARMZ	100	0.004	1.5	190	10-MSOP	59K6213	4.81
AD8032ARMZ	30	1	5	80	8-MSOP	19M8876	4.95
AD8032ARZ	30	1	5	80	8-SOIC	59K6237	5.08
OP249GPZ	22	0.4	6	4.7	8-PDIP	59K8818	4.56
OP249GSZ	22	0.4	6	4.7	8-SOIC	59K8819	4.56
AD712KNZ	20	0.3	10	4	8-SOIC	59K4555	7.84
AD712KRZ	20	0.3	10	4	8-SOIC	59K4556	7.58
AD8039ARZ	425	0.5	4.5	350	8-SOIC	59K6265	3.04
AD8042ARZ	200	3	12	160	8-SOIC	82H2955	5.71
AD8056ANZ	1400	3	6	300	8-DIP	19M0925	4.05
AD712JNZ	20	0.3	20	4	8-PDIP	59K4554	4.24
AD712JRZ	20	0.3	20	4	8-SOIC	19M0850	4.24
AD8397ARDZ	53	1	...	69	8-SOIC	59K6702	6.02
AD8397ARZ	53	1	...	69	8-SOIC	19M1201	5.83
QUAD							
AD713JNZ	20	0.3	5	4	14-PDIP	59K4559	10.06
AD713JRZ-16	20	0.3	5	4	16-SOIC	59K4560	10.30
OP467GPZ	170	0.5	3.5	28	14-PDIP	59K8921	13.79
AD8054ARUZ	170	1.7	15	150	14-TSSOP	88H0143	6.86
OP467GSZ	170	0.5	3.5	28	16-SOIC	19M1032	14.52
ADA4857-2YCPZ-R7	2800	2	2.3	850	16-LFCSP	63W5358	6.16

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INSTRUMENTATION AMPLIFIERS

RoHS Compliant Available

ANALOG DEVICES

GAIN SETTING METHOD: PIN

Mfg. Part No.	No. of Amps	BW (MHz)	Gain Range (V/V)	Slew Rate (V/us)	Package	Stock No.	Price Each 1-9
AD8557ARZ	1	2	28 to 1300	...	8-SOIC	52M2979	5.66
AD621ANZ	1	0.8	10 to 100	1.2	8-PDIP	59K4391	10.32
AD621BNZ	1	0.8	10 to 100	1.2	8-PDIP	59K4395	13.09
AD621ARZ	1	0.8	10 to 100	1.2	8-SOIC	19M8823	9.84
AD621BRZ	1	0.8	10 to 100	1.2	8-SOIC	59K4396	12.48
AD624ADZ	1	1	1 to 1000	5	16-CDIP	13M6189	36.16
AD624BDZ	1	0.4	1 to 1000	5	16-DIP	13M6190	47.66
AD626ARZ	1	0.1	10 to 100	0.22	8-SOIC	87H9950	8.07
AD8229HDZ	1	15	1 to 1000	22	8-DIP	31T9318	207.82
AD8429BRZ-R7	1	15	1 to 10000	22	8-SOIC	92T1811	11.86
AD626ANZ	1	0.1	...	0.22	8-DIP	59K4412	8.77
AD8278ARMZ	1	0.55	...	1.4	8-MSOP	24R9030	2.76
AD8278ARZ	1	0.55	...	1.4	8-SOIC	24R9033	2.53
AD5750-1ACPZ	1	...	...	2	32-LFCSP	51R0729	5.75
AD5750-1BCPZ	1	...	...	2	32-LFCSP	51R0730	7.72
AD8222ACPZ-WP	2	0.15	1 to 10000	2	16-LFCSP	28M4109	8.38

CONTINUED

INSTRUMENTATION AMPLIFIERS (CONT.)

Mfg. Part No.	No. of Amps	BW (MHz)	Gain Range (V/V)	Slew Rate (V/us)	Package	Stock No.	Price Each 1-9
● AD8295ACPZ-WP	2	1.2	1 to 1000	2	16-LFCSP	34P3238	5.31
● AD8295BCPZ-WP	2	1.2	1 to 1000	2	16-LFCSP	34P3241	8.89
● AD8420ARMZ	3	0.25	1 to 1000	1	8-MSOP	82T3701	2.70
● AD524ADZ	5	1	1 to 1000	5	16-CDIP	13M6165	30.06
● AD524CDZ	5	1	1 to 1000	5	16-CDIP	13M6167	53.88
● AD524ARZ-16	5	2.5	1 to 1000	5	16-WSOIC	59K3693	16.19
GAIN SETTING METHOD: PIN/RESISTOR							
● AD8428ARZ	1	3.5	10 to 2000	40	8-SOIC	67T0293	12.78
● AD628ARMZ	2	0.6	0.1 to 100	0.3	8-MSOP	19M8826	4.87
● AD628ARZ	2	0.6	0.1 to 100	0.3	8-SOIC	19M0846	4.68
GAIN SETTING METHOD: RESISTOR							
● AD521JDZ	1	2	1 to 1000	10	14-CDIP	13M6163	41.47
● AD521KDZ	1	2	1 to 1000	10	14-CDIP	13M6164	53.51
● AD620ANZ	1	1	1 to 10000	1.2	8-PDIP	59K4387	7.81
● AD620ARZ	1	1	1 to 10000	1.2	8-SOIC	82H2866	7.65
● AD620BNZ	1	1	1 to 10000	1.2	8-PDIP	59K4388	9.92
● AD620BRZ	1	1	1 to 10000	1.2	8-SOIC	56J9549	9.71
● AD622ANZ	1	1	2 to 1000	1.2	8-PDIP	59K4398	6.10
● AD622ARZ	1	1	2 to 1000	1.2	8-SOIC	59K4399	5.82
● AD623ANZ	1	0.8	1 to 1000	0.3	8-PDIP	59K4402	4.61
● AD623ARZ	1	0.8	1 to 1000	0.3	8-SOIC	59K4403	3.75
● AD623ARMZ	1	0.8	1 to 1000	0.3	8-uSOIC	19M8824	3.85
● AD623BRZ	1	0.8	1 to 1000	0.3	8-SOIC	59K4407	6.37
● AD627ANZ	1	0.08	5 to 1000	0.05	8-PDIP	19M0845	6.21
● AD627BNZ	1	0.08	5 to 1000	0.05	8-DIP	59K4418	9.00
● AD627BRZ	1	0.08	5 to 1000	0.05	8-SOIC	19M8825	8.27
● AD629BRZ	1	0.5	1	2.1	8-SOIC	59K4431	10.15
● AD8220ARMZ	1	0.8	1 to 1000	2	8-MSOP	19M0944	6.01
● AD8220BRMZ	1	0.8	1 to 1000	2	8-MSOP	19M0945	8.59
● AD8221ARMZ	1	0.562	1 to 1000	2	8-MSOP	19M0946	5.08
● AD8223ARMZ	1	0.2	5 to 1000	0.3	8-MSOP	34P3212	2.92
● AD8223ARZ	1	0.2	5 to 1000	0.3	8-SOIC	34P3215	2.78
● AD8223BRMZ	1	0.2	5 to 1000	0.3	8-MSOP	34P3224	3.98
● AD8223BRZ	1	0.2	5 to 1000	0.3	8-SOIC	34P3227	3.70
● AD8293G80ARJZ-R2	1	0.0005	80 to 80	...	8-SOT-23	07P8981	1.74
● AD8293G160ARJZ-R2	1	0.0005	160 to 160	...	8-SOT-23	07P8975	1.67
● AMP01GSZ	1	0.57	0.1 to 10000	4.5	20-SOIC	59K7585	17.11
● AMP02EPZ	1	1.2	1 to 10000	6	8-PDIP	59K7587	18.50
● AMP02FPZ	1	1.2	1 to 10000	6	8-PDIP	59K7588	11.65
● AD8226ARMZ-R7	1	1.5	1 to 1000	...	8-MSOP	24W8483	2.86
● AMP04EPZ	2	0.7	1 to 1000	...	8-PDIP	19M8955	15.37
● AMP04ESZ	1	0.7	1 to 1000	...	8-SOIC	19M8956	14.14
● AMP04FPZ	2	0.7	1 to 1000	...	8-PDIP	59K7598	10.97
● AMP04FSZ	1	0.7	1 to 1000	...	8-SOIC	19M8957	10.08
● AD625JNZ	5	0.08	1 to 10000	5	16-PDIP	59K4410	17.37
GAIN SETTING METHOD: SOFTWARE							
● AD526JNZ	1	0.35	1 to 16	24	16-PDIP	19M0797	12.77
CURRENT TRANSMITTERS							
● AD694BRZ	2	...	...	1.3	16-SOIC	59K4527	18.03

EVALUATION BOARDS

Mfg. Part No.	Supported Device	Stock No.	Price Each
● AD8231-EVALZ	AD8231	61M4045	75.84
● AD8224-EVALZ	AD8224	52M2973	75.84

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ISOLATION AMPLIFIERS

ANALOG DEVICES

Gain = 1 to 100 (V/V)

Mfg. Part No.	Peak Iso Volt. (V)	Gain (V/V) Min.	Gain (V/V) Max.	Gain Nonlin. Max. (%)	Freq. Resp. (kHz)	# of Chan.	Supply Volt. (V)	Package	Stock No.	Price Each 1-4
AD202JY	1000	1	100	0.05	2	4	5	11-SIP	05F6717	49.25
AD202KN	2000	1	100	0.025	2	4	5	10-DIP	05F6718	56.29
AD202KY	2000	1	100	0.025	2	4	5	11-SIP	05F6719	56.29
AD204KY	2000	1	100	0.025	5	4	...	11-SIP	05F6724	49.06
AD210BN	3500	1	100	0.012	20	3	15	12-DIP	05F6728	93.94
AD210JN	1500	1	100	0.025	20	3	15	12-DIP	05F6729	71.99

MATING SOCKETS

Mfg. Part No.	Description	Package	Stock No.	Price 1-4
AC1059	Mating Socket for AD210	12-DIP	05F6041	33.54

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LOGARITHMIC AMPLIFIERS

RoHS Compliant Available

ANALOG DEVICES

Logarithmic amplifiers can be used for both RF and IF applications, with the ability to measure signals up to 8 Decades in dynamic range from DC to 8GHz. These products are ideally suited for use in wireless infrastructure, for both Receive Signal Strength Indication (RSSI) and transmit power level detection. In addition the range includes parts optimized for optical power measurement, radar / military applications, low power ASK demodulation and instrumentation.

Mfg. Part No.	No. of Amps	RF Freq. Max (MHz)	Dyn. Range (Dec.)	Input Current Max. (mA)	Single Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-9
● AD8306ARZ	1	400	5	20	6.5	16-NSOIC	59K6558	27.70
● AD8307ANZ	1	500	4.6	10	5.5	8-PDIP	19M0950	11.99
● AD8304ARUZ	1	...	8	5.3	5.5	14-TSSOP	19M8895	21.51
● AD8307ARZ	1	500	4.6	10	5.5	8-NSOIC	59K6564	11.71
● AD8309ARUZ	1	500	5	20	6.5	16-TSSOP	19M8896	16.45
● AD8314ARMZ	1	2.7	2.25	5.7	5.5	8-MSOP	59K6586	9.58
● AD8302ARUZ	2	2.7	3	25	5.5	14-TSSOP	59K6548	23.27
● ADL5304ACPZ-R2	3	...	10	...	...	32-LFCSP	72T0886	17.58
● AD8310ARMZ	7	440	5	9.5	5.5	8-MSOP	59K6572	9.64

EVALUATION BOARDS

Type	Description	Stock No.	Price Each
● AD8318-EVALZ	AD8318 EVALUATION BOARD	80P3261	175.00

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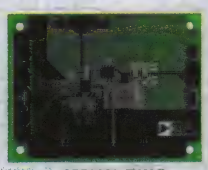
MICRO POWER OPERATIONAL AMPLIFIERS

RoHS Compliant Available

ANALOG DEVICES

AD8506ARMZ-R2



ADP2380-EVALZ

SINGLE

Mfg. Part No.	V_{OS} Max. (mV)	GBW Max. (MHz)	Slew Rate Typ. (V/µs)	Package	Stock No.	Price Each 1-9
● AD8603AUJZ-R2	0.012	0.4	0.1	5-TSOT-23	19M8923	2.83
● AD8237ARMZ	0.03	0.2	0.05	10-MSOP	43W5564	2.48
● ADA4841-1YRZ-R7	0.04	80	13	8-SOIC	59K0896	4.22
● OP113ESZ	0.075	3.4	1.2	8-SOIC	59K8759	7.47
● OP90GPZ	0.125	0.02	0.012	8-PDIP	59K8972	4.56
● OP90GSZ	0.125	0.02	0.012	8-SOIC	88H0682	4.74
● OP777ARZ	0.2	0.7	0.2	8-SOIC	19M1036	2.95
● OP196GSZ	0.3	0.45	0.3	8-SOIC	19M8979	3.70
● ADA4895-1ARZ	0.35	236	943	8-SOIC	64W2542	5.02
● AD8613AKSZ-R2	0.4	0.4	0.1	5-SC70	12M9122	1.82
● AD8613AUJZ-R2	0.4	0.4	0.1	5-TSOT-23	12M9125	1.76
● OP191GSZ	0.5	3	0.5	8-SOIC	59K8788	4.26
● AD820ANZ	0.5	1.8	3	8-PDIP	59K6465	4.41
● AD820ARZ	0.5	1.8	3	8-NSOIC	88H0196	4.32
● AD820BRZ	0.8	1800	3	8-SOIC	19M8888	5.84
● AD8505ARJZ-R2	2.5	0.095	0.013	5-SOT-23	58R2639	2.65
● AD8137YRZ	2.6	110	450	8-SOIC	19M0936	2.77
● AD8012ARZ	4	350	2250	8-SOIC	59K6174	5.32
● ADA4505-1ARJZ-R2	4	0.05	0.006	5-SOT-23	33R2223	2.51
● AD8515ARTZ-R2	6	5	2.7	5-SOT-23	19M8910	1.48
DUAL						
● ADA4096-2ACPZ-R7	0.3	0.786	0.4	8-LFCSP	92T3176	4.72
● OP200GSZ	0.075	0.5	0.15	16-SOIC	59K8798	6.26
● AD706ARZ	0.1	0.8	0.15	8-SOIC	87H9963	5.57
● AD706JNZ	0.1	0.8	0.15	8-DIP	19M8833	5.97
● OP200GPZ	0.2	0.5	0.15	8-DIP	59K8797	6.26
● OP296GSZ	0.3	0.45	0.3	8-SOIC	59K8872	4.44
● AD822BRZ	0.3	1.8	3	8-NSOIC	59K6493	9.26
● ADA4841-2YRMZ	0.3	80	13	8-MSOP	19M0647	6.02
● ADA4841-2YRZ	0.3	80	13	8-SOIC	19M0648	6.02
● AD822ARZ	0.4	1.8	3	8-NSOIC	59K6490	6.08
● OP221GSZ	0.4	0.6	0.3	8-SOIC	59K8815	5.17
● AD822ANZ	0.4	1.8	3	8-PDIP	59K6487	6.17
● ADA4091-2ARZ	0.5	1.2	0.46	8-SOIC	34P2964	5.75
● OP291GSZ	0.7	3	0.5	8-SOIC	19M1030	5.22
● ADA4075-2ARZ	1	6.5	12	8-SOIC	19P8164	2.20
● ADA4665-2ARMZ	1	1.2	1	8-MSOP	71P7787	2.14
● ADA4665-2ARZ	1	1.2	1	8-SOIC	71P7790	2.23

➤ CONTINUED ➤

MICRO POWER OPERATIONAL AMPLIFIERS (CONT.)

DUAL

Mfg. Part No.	V_{OS} Max. (mV)	GBW Max. (MHz)	Slew Rate Typ. (V/µs)	Package	Stock No.	Price Each 1-9
OP282GSZ	3	4	9	8-SOIC	19M8980	3.16
AD8030ARJZ-REEL7	6	125	62	8-SOT-23	19M8874	2.75
AD8030ARZ	6	125	62	8-SOIC	19M0916	3.16
QUAD						
OP400HSZ	0.07	0.5	0.15	16-SOIC	19M8984	10.27
OP491GPZ	0.07	3	0.5	14-DIP	59K8944	8.56
OP747ARZ	0.16	0.7	0.2	14-SOIC	19M1035	7.31
OP496GSZ	0.3	0.45	0.3	14-SOIC	59K8948	5.82
OP400GPZ	0.3	0.5	0.15	14-DIP	59K8889	9.43
OP400GSZ	0.3	0.5	0.15	16-SOIC	59K8890	9.66
AD824ARZ-14	0.5	2	2	14-SOIC	88H0202	10.41
AD8508ARUZ	2.5	0.095	0.013	14-TSSOP	07P8986	3.02
OP490GSZ	1	0.02	0.012	16-SOIC	59K8942	8.91
OP490GPZ	1	0.02	0.012	14-DIP	59K8940	9.12
OP482GPZ	3	4	9	14-DIP	19M8988	5.83
OP482GSZ	4	4	9	14-SOIC	88H0669	5.01
OP492GSZ	3	4	3	14-SOIC	88H0677	6.03

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
ADP2380-EVALZ	ADP2380 EVAL BOARD	64W2550	75.00

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PRECISION OPERATIONAL AMPLIFIERS

RoHS Compliant Available

ANALOG DEVICES

SINGLE

Mfg. Part No.	Vos. Max. (µV)	Vos TC Max. (µV/°C)	GBW Typ. (MHz)	Slew Rate Typ. (V/µs)	Package	Stock No.	Price Each 1-9
OP177FSZ	25	0.3	0.6	0.3	8-SOIC	19M8978	5.57
OP177GSZ	25	1.2	0.6	0.3	8-SOIC	19M1026	2.01
OP77EZ	45	0.3	0.6	0.3	8-CDIP	05F8744	11.24
OP1177ARMZ-REEL	60	0.7	1.3	0.7	8-MSOP	19M8976	2.43
AD8657ARMZ	350	2	0.2	0.07	8-MSOP	31T9330	2.55
OP1177ARZ	60	0.7	1.3	0.7	8-SOIC	19M1025	2.37
AD8671ARZ	75	0.5	10	4	8-SOIC	19M0998	2.67
OP97FSZ	75	2	0.9	0.2	8-SOIC	19M1037	2.80
OP42GSZ	1.5	5	10	50	8-SOIC	19M8986	5.35
ADA4638-1ARZ	12.5	0.05	2.5	1.5	8-SOIC	72T3476	3.42
ADA4638-1ACPZ-R7	14.5	0.08	2.5	1.5	8-LFCSP	82T5453	3.23
DUAL							
OP297FSZ	50	2	0.5	0.15	8-SOIC	19M8982	6.59
OP297GPZ	50	2	0.5	0.15	8-DIP	19M8983	5.93
AD8607ARZ	50	4.5	0.4	0.1	8-SOIC	19M0975	2.64
AD8606ARZ	65	4.5	10	5	8-SOIC	19M0974	3.12
AD8672ARZ	75	0.8	10	4	8-SOIC	19M0999	4.34
AD8656ARZ	250	2.3	28	11	8-SOIC	19M0993	3.11
ADA4896-2ARMZ	500	0.2	230	120	8-MSOP	58T8814	7.70
ADA4897-1ARZ	500	0.2	230	120	8-SOIC	58T8818	5.02
AD712JRZ	300	20	4	20	8-SOIC	19M0850	4.24
AD8512ARZ	400	5	8	20	8-SOIC	19M0958	3.73
AD8602ARZ	500	2	8.4	6	8-SOIC	19M0972	2.23
AD712JNZ	300	20	4	20	8-PDIP	59K4554	4.24
QUAD							
AD8609ARZ	50	4.5	0.4	0.1	14-SOIC	19M0976	4.68
OP4177ARUZ	60	0.9	1.3	0.7	14-TSSOP	19M8985	7.72
OP484ESZ	75	2	4.25	4	14-SOIC	19M8989	15.44
AD8674ARZ	75	0.8	10	4	14-NSOIC	19M1000	7.41
OP497FSZ	75	1	0.5	0.15	16-SOIC	19M8991	11.45
AD8608ARUZ	75	6	10	5	14-TSSOP	19M8928	4.00
AD8608ARZ	75	6	10	5	14-SOIC	19M8929	4.15
OP497GSZ	150	1.5	0.5	0.15	16-SOIC	19M8992	9.23
AD8513ARZ	400	5	8	20	14-SOIC	19M0959	7.79
AD8513ARUZ	400	5	8	20	14-TSSOP	59K6780	7.88
OP467GSZ	500	3.5	28	170	16-SOIC	19M1032	14.52
AD8604ARUZ	600	2	8.4	6	14-TSSOP	19M8924	2.58
AD8604ARZ	600	2	8.4	6	14-SOIC	19M0973	2.65

CONTINUED

PRECISION OPERATIONAL AMPLIFIERS (CONT.)

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
ADA4897-1AR-EBZ	ADA4897-1 Amplier Evaluation Board	72T3481	22.82

(9982)

PROGRAMMABLE GAIN AMPLIFIERS

RoHS Compliant Available

ANALOG DEVICES

Programmable gain amplifiers use technology which allows the amplifier gain to be varied as the dynamic range of the input signal changes. They can be used in a variety of remote sensing and communications equipment in an attempt to enhance dynamic performance. Applications include ultrasound, radar, lidar, wireless communications and even speech analysis.

ANALOG VOLTAGE GAIN CONTROL INTERFACE

Mfg. Part No.	No. of Amps	-3 dB BW (MHz)	Gain Range (dB) Min	Gain Range (dB) Max	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-9
AD8250ARMZ	1	10	1	10	15	10-MSOP	34M5062	9.94
AD8330ARQZ	1	150	0	50	6	16-QSOP	19M1199	10.19
AD8369ARUZ	1	380	-5	40	5.5	16-TSSOP	59K6674	10.03
AD8367ARUZ	1	500	-2.5	42.5	5.5	14-TSSOP	59K6672	10.17
AD8251ARMZ	1	10	1	8	15	10-MSOP	41M1973	10.06
AD603ARZ	1	90	-11	31	6.3	8-SOIC	82H2863	10.05
AD8336ACPZ-WP	1	115	-14	46	12	16-LFCSP	28M4118	11.27
AD8331ARQZ	2	120	4.5	43	5	20-QSOP	59K6617	10.56
AD8332ARUZ	2	120	-4.5	43.5	5.5	28-TSSOP	59K6622	18.76
AD600JRZ	3	35	0	40	5.25	16-WSOIC	59K4357	27.71
SSM2018TPZ	3	14	-100	40	18	16-PDIP	13M3005	8.45
SSM2018PZ	3	14	-100	40	18	16-PDIP	59K9090	6.91
AD8334ACPZ	4	120	-4.5	43.5	5.5	64-LFCSP	34M5066	26.88
AD8335ACPZ	4	20	-10	38	5.5	64-LFCSP	56K5705	21.08
DIGITAL SERIAL GAIN CONTROL INTERFACE								
AD526ADZ	1	0.35	...	...	16.5	16-DIP	13M6168	38.14
AD8370AREZ	1	750	-8	34	5.5	16-TSSOP	19M8904	10.03

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
AD603-EVALZ	AD603 Evaluation Board	41M1953	82.23
AD8260-EVALZ	AD8260 Evaluation Board	11N8878	221.88
AD8330-EVALZ	AD8330 Evaluation Board	61M4046	108.17
AD8331-EVALZ	AD8331 Evaluation Board	89M5020	88.55
AD8336-EVALZ	AD8336 Evaluation Board	28M4115	101.14

(89827)

SAMPLE AND HOLD AMPLIFIERS

RoHS Compliant Available

ANALOG DEVICES

Mfg. Part No.	Bandwidth (kHz)	Supply Voltage (V)	Acquisition Time (to 0.1%)	Package	Stock No.	Price Each 1-9
SMP04EPZ	85	5	3.5 uS	16-DIP	59K9072	9.82
AD783JRZ	1500	5.25	350 uS	8-SOIC	59K5614	22.93
AD781JNZ	4000	13.2	600 uS	8-DIP	59K5505	14.58

(90035)

TRANSIMPEDANCE AMPLIFIER

RoHS Compliant Available

ANALOG DEVICES

Specifications
- Operating Temperature Range: -40°C to 85°C
- Low Power Dissipation: 125 mW
- Minimum Data Rate: 155 Mbps

Features
- Differential Outputs
- Low Noise

The **AD8015 series** is a wide bandwidth, single supply transimpedance amplifier that converts photodiode current into a differential voltage output. It is optimized for use in a fiber optic receiver circuit (FDDI, SONET/SDH, Fiber Channel), as well as systems requiring a wide dynamic range preamplifier or single-ended to differential conversion.

Mfg. Part No.	Bandwidth Max (MHz)	Transimpedance (kΩ)	Supply Voltage Max (V)	Package	Stock No.	Price Each 1-9
AD8015ARZ	240	20	11	8-SOIC	19M8870	7.70

(89787)

DEV KIT HQ™

Newest technology, Development Kits & Evaluation Boards from the best suppliers.

newark.com/dev-kits

(196525)

AMPLIFIERS

AUDIO AMPLIFIERS

RoHS Compliant Available

ANALOG DEVICES

AUDIO AMPLIFIERS - MONO

Mfg. Part No.	THD+N (%)	Output Power (W)	Load Impedance Min. (Ohms)	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
● SSM2377ACBZ-R7	0.007	1.41	8	2.5 to 5.5	9-WLCSP	47T5663	1.64
● SSM2211SZ	0.15	1.5	8	2.7 to 5.5	8-NSOIC	19M1049	1.38

AUDIO AMPLIFIERS - STEREO, D CLASS

● SSM2301RMZ-R2	0.1	1.4	8	2.5 to 5	8-MSOP	61M4307	1.48
● SSM3302ACPZ	0.01	10	4	7 to 18	40-LFCSP	93T8498	5.93
● SSM2518CBZ-R7	0.04	2	8	1.62 to 3.6	16-WLCSP	82T5484	3.43

DUAL AUDIO OPERATIONAL AMPLIFIERS

Mfg. Part No.	BW Max (MHz)	THD+N (%)	Input Noise (nV/√Hz)	Slew Rate (V/us)	Offset Voltage (mV)	Package	Stock No.	Price Each 1-9
● OP275GPZ	9	0.006	6	22	1	8-PDIP	19M1029	2.70
● SSM2135SZ	3.5	0.005	5.2	0.9	0.2	8-SOIC	88H0688	5.87

AUDIO PREAMPLIFIERS

Mfg. Part No.	Noise Figure (dB)	BW Max. (MHz)	Slew Rate (V/µs)	Volt. Range (V)	Package	Stock No.	Price Each 1-9
● SSM2019BRWZ	1.5	2	16	5 to 18	16-SOIC	59K9092	4.77
● SSM2019BRNZ	1.5	2	16	5 to 18	8-SOIC	11N9782	4.59
● SSM2167-1RMZ-REEL	...	1	...	2.5 to 5.5	10-MSOP	88H0694	2.69

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
● EVAL-SSM2518Z	SSM2518 Class D Audio Amp Evaluation Board	76T2103	312.50

(9986)

TRIPLE DIFFERENTIAL DRIVERS FOR WIDEBAND VIDEO

RoHS Compliant Available

ANALOG DEVICES

Applications:
- Keyboard-video-mouse (KVM) networking
- Video distribution
- Digital signage
- Security cameras

The **AD8141ACPZ-R7** and **AD8142ACPZ-R7** are triple, low cost, differential or single-ended-input-to-differential-output drivers. Each amplifier has a fixed gain of 2 to compensate for the attenuation of the line termination resistors. The **AD8141ACPZ-R7** and **AD8142ACPZ-R7** are specifically designed for RGB signals but can be used for any type of signals. The amplifiers have very fast slew rate and settling time while being manufactured on a cost effective CMOS process.

Mfg. Part No.	Supply Voltage	Bandwidth (MHz)	Slew Rate (V/µs)	Package	Stock No.	Price Each 1-9
● AD8141ACPZ-R7	4.5V to 5.5V	275	1150	24-LFCSP	59T9898	4.16
● AD8142ACPZ-R7	4.5V to 5.5V	285	1250	24-LFCSP	59T9899	4.16

(202190)

VIDEO AMPLIFIERS

RoHS Compliant Available

ANALOG DEVICES

VIDEO BUFFER

Mfg. Part No.	No. of Amps	GBW Typ. (MHz)	Slew Rate Min. (V/µs)	Settling Time Typ (ns)	Package	Stock No.	Price Each 1-9
● AD8079ARZ	2	260	750	40	8-SOIC	59K6337	9.71

VIDEO DIFFERENCE AMPLIFIER

● AD830ANZ	1	15	360	35	8-PDIP	19M0949	6.72
● AD830ARZ	2	85	360	35	8-SOIC	59K6541	6.88

VIDEO OPERATIONAL AMPLIFIERS

● AD811ANZ	1	140	2500	50	8-PDIP	58K5191	7.74
● AD818ANZ	1	130	500	45	8-PDIP	19M0940	5.12
● AD818ARZ	1	130	500	45	8-SOIC	82H2988	4.93
● AD829ARZ	1	120	230	90	8-SOIC	82H3000	5.93
● AD829JNZ	1	120	230	65	8-PDIP	59K6536	7.13
● AD829JRZ	1	120	230	65	8-SOIC	19M8894	6.97
● AD810ANZ	1	80	1000	50	8-DIP	19M0933	5.49
● AD810ARZ	1	80	1000	50	8-SOIC	59K6365	5.49
● AD828ANZ	2	130	450	45	8-PDIP	59K6535	6.33
● AD828ARZ	2	130	450	45	8-SOIC	19M8893	6.10

VIDEO FILTER

● ADA4433-1BCPZ-R7	1	9.9	...	...	8-LFCSP	94T9071	2.37

CAT-5 VIDEO DRIVER

Mfg. Part No.	Type	Package	Stock No.	Price Each 1-9
● AD8131ARMZ	High Speed Differential Driver	8-MSOP	82H2983	4.77

(9872)

PRAOPAMP EVALUATION BOARD

RoHS Compliant Available

ANALOG DEVICES

The EVAL-PRAOPAMP evaluation board accommodates single op amps in many packages. It is meant to provide the user with multiple choices and extensive fl exibility for different applications circuits and confi gurations. For evaluation in smaller packages, we currently have boards available that will accommodate the following packages: SOIC, MSOP, SC-70, and SOT-23.

Mfg. Part No.	Description	Stock No.	Price Each
● EVAL-PRAOPAMP-1KSZ	Single 5 Lead SC70 (KS-5) Eval Board	89M5157	18.98
● EVAL-PRAOPAMP-1RZ	Single 8-Lead SOIC (R-8) Eval Board	89M5160	18.98
● EVAL-PRAOPAMP-2RMZ	Dual 8-Lead MSOP (RM-8) Eval Board	89M5161	18.98
● EVAL-PRAOPAMP-2RZ	Dual 8-Lead SOIC (R-8) Eval Board	89M5162	18.98
● EVAL-PRAOPAMP-4RUZ	Quad 14-Lead TSSOP (RU-14)	89M5163	18.98

(203969)

PLASTIC AUTOMOTIVE MINIATURE ISOLATION AMPLIFIERS

RoHS Compliant Available

AVAGO TECHNOLOGIES

Features:
- ±2% Gain Tolerance @ 25°C
- 15 kV/µs Common-Mode Rejection at VCM = 1000V
- 30ppm/°C Gain Drift vs. Temperature
- 0.3 mV Input Offset Voltage
- Supply Voltage: 4.5V to 5.5V
- 100 kHz Bandwidth
- Qualified to AEC-Q100 Test Guidelines
- Automotive Operating Temperature -40 to 125°C
- Advanced Sigma-Delta A/D Converter Technology
- Fully Differential Circuit Topology

Applications:
- Automotive Motor Inverter Current/Voltage Sensing
- Automotive AC/DC and DC/DC converter Current/Voltage sensing
- Automotive Battery ECU
- Automotive Motor Phase Current Sensing
- Isolation Interface for Temperature Sensing
- General Purpose Current Sensing and Monitoring

Mfg. Part No.	Surface Mount	Gullwing	Tape & Reel	Package	Stock No.	Price Each 1-9
● ACPL-782T-000E	...	...	...	8-DIP	19P8161	12.33
● ACPL-782T-300E	X	X	...	8-DIP	19P8162	12.37
● ACPL-782T-500E	X	X	X	8-SMD	79R1621	14.11
● ACPL-C78A-000E	X	...	...	SOIC	07P8822	13.93
● ACPL-C79B-000E	X	...	...	SOIC	74R5803	9.93

(178825)

OPERATIONAL AMPLIFIERS

RoHS Compliant Available

FAIRCHILD

Mfg. Part No.	Circuits	Supply Voltage Max. (V)	Input Offset Voltage Max. (mV)	Supply Current Typ. (mA)	Package	Stock No.	Price Each 1-9
● FAN4174IS5X	Single	5.5	1	0.2	5-SOT-23	60J0487	0.64
● LMV358AM8X	Dual	5.5	1	0.1	8-SOP	29H0537	0.46
● KA4558DTF	Dual	44	2	3.5	8-SOP	82C6490	0.45
● LM358AM	Dual	32	3	0.5	8-SOP	78K6006	0.49
● LM358AN	Dual	32	3	0.5	8-DIP	58K8941	0.52
● LM2904M	Dual	26	7	0.5	8-SOP	78K6002	0.47
● LM2904MX	Dual	26	7	0.8	8-DIP	38C7340	0.44
● LM2904N	Dual	26	7	0.5	8-DIP	58K8934	0.50
● LM358M	Dual	32	7	0.5	8-SOP	78K6007	0.49
● LM358N	Dual	32	7	0.5	8-DIP	58K8942	0.50
● L272M	Dual	40	60	7.5	8-DIP	58K1804	0.72
● LM324AM	Quad	32	3	0.7	14-SOP	34C1073	0.49
● LM2902M	Quad	26	7	0.7	14-SOP	82C8133	0.46
● LM2902N	Quad	26	7	0.7	14-DIP	58K8933	0.51
● LM324MX	Quad	32	7	0.7	14-SOP	38C7346	0.61
● LM324N	Quad	32	7	0.7	14-DIP	60K7966	0.55

(74492)

AMPLIFIERS

RoHS Compliant Available

intersil

SAMPLE AND HOLD AMPLIFIERS

Mfg. Part No.	Supply Voltage Max. (V)	Band-width (MHz)	Input Offset Voltage (mV)	Slew Rate (V/us)	Package	Stock No.	Price Each 1-24
● HA5023IBZ	15	125	0.8	475	8-SOIC	57K3738	7.25
● HA9P5002-5Z	44	110	5	1300	8-SOIC	57K3742	7.60
● HA9P5320-5Z	40	2	0.2	45	16-DIP	79K6756	16.91
● HA9P5002-9Z	20	110	5	1300	8-SOIC	01M5053	10.51

(74860)

AMPLIFIERS AND COMPARATORS

RoHS Compliant Available — intersil

Operating temperature: 0°C to +70°C.

PRECISION QUAD COMPARATOR

Mfg. Part No.	Offset Voltage	Offset Current	Response Time	Package	Stock No.	Price Each 1-24
HA9P4905-5Z	2mV	10nA	130ns	16-SOIC	79K6753	22.55

HIGH VOLTAGE AMPS

Mfg. Part No.	Input Offset Voltage	Offset Current	Supply Range	Package	Stock No.	Price Each 1-24
HA1-5104-2	0.5mV	30nA	±10V to 40V	14-CDIP	05B6329	30.95

(9900)

GENERAL-PURPOSE LINEAR CIRCUIT OPERATIONAL AMPLIFIERS

RoHS Compliant Available — intersil

WIDEBAND SINGLE-UNIT TYPES

Mfg. Part No.	I_I Max. (pA)	SR Typ. (V/µs)	Description	Package	Stock No.	Price Each 1-24
CA3140AEZ	30	9	BIMOS	8-DIP	57K3020	2.48
CA3130AMZ	5	30	BMOS	8-SOIC	57K3016	4.42
CA3130EZ	50	9	BIMOS	8-DIP	80K5721	2.64
CA3140EZ	50	9	BIMOS	8-DIP	57K3023	2.58
CA3140MZ	50	9	BIMOS	8-SOIC	57K3024	2.39
WIDEBAND DUAL-UNIT TYPES						
CA3260AEZ	30	10	BIMOS	8-DIP	80K5722	7.15
CA3240AEZ	40	9	BIMOS	8-DIP	57K3025	3.98
CA3240EZ	50	9	BIMOS	8-DIP	57K3026	2.88
CA3260EZ	50	10	BIMOS	8-DIP	57K3027	5.29

(9905)

OPERATIONAL AMPLIFIERS

RoHS Compliant Available — intersil

LOW/ULTRA-LOW-INPUT OFFSET VOLTAGES

CMOS super chopper-stabilized. Low long-term and temperature drifts of input offset voltage; high-gain, low-supply current.

Mfg. Part No.	V_{OS} Max. (µV)	I_{BIAS} Max. (pA)	I_{OS} Max. (pA)	Package	Stock No.	Price Each 1-24
ICL7650SCPA-1Z	+5	10	20	8-PDIP	57K3888	5.51
ICL7621DCBAZ	4	1000	30	8-SOIC	57K3885	2.70

LOW POWER/LOW INPUT BIAS CURRENT CMOS

Provide high performance at low supply voltages, selectable quiescent currents. Internal compensation. I_{BIAS} (max.) = 50pA; I_{OS} (max.) = 30pA. Single amps.

Mfg. Part No.	V_{OS} Max. (mV)	Package	Stock No.	Price Each 1-24
ICL7611DCPAZ*	15	8-DIP	57K3882	1.86

LOW-INPUT BIAS CURRENT

Internal compensation, commercial temp. range. **CPA** suffix = CMOS Dual amp.

ICL7621DCPAZ*	15	8-DIP	57K3887	2.54

(4236)

AMPLIFIERS

Intronics

The isolation amplifiers listed below are currently manufactured with the identical high-performance levels and wide bandwidth as when they were manufactured by Analog Devices. The operational amplifiers and log/antilog or log/ratio amplifiers, as well as the other listed parts, are now exclusively manufactured by Intronics to the exact Analog Devices Specifications. *Go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each 1-4
277J	Precision Isolation Amp., +/-0.05% nonlinearity	02C8606	1432.60
284J	High-Performance, Self-Contained Isolation Amp	92F576	494.00
286J	High CMV, High-Performance, Synchronized Isolation Amp	92F577	494.00
289J	Precision, Wide Bandwidth, Synchronized Isolation Amp	92F578	496.77
289K	Precision, Wide Bandwidth, Synchronized Isolation Amp	92F579	543.40
289L	Precision, Wide Bandwidth, Synchronized Isolation Amp	92F580	577.98
290A	Multichannel Isolation Amp	92F581	395.20
310J	Operational Amplifier	92F604	542.88
755N	Log/Antilog Amplifier	92F612	577.50
757N	Log Ratio Amplifier	92F614	577.50
757P	Log Ratio Amplifier	92F615	577.50
759N	Log/Antilog Amplifier	92F616	577.50

(34806)

CURRENT FEEDBACK OPERATIONAL AMPLIFIERS

RoHS Compliant Available — LINEAR TECHNOLOGY

SINGLE

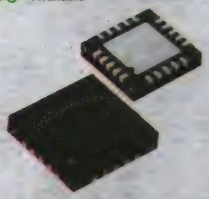
Mfg. Part No.	BW (MHz)	Supply (V)	Offset (mV)	Slew Rate (V/µs)	Package	Stock No.	Price Each 1-24
LT1204CSW#PBF	95	15	5	1000	16-SOIC	57M2660	9.72
LT1206CN8#PBF	60	36	3	900	8-DIP	57M2668	6.32
LT1206CR#PBF	60	36	3	900	7-TO-263	57M2670	8.46
LT1206CS8#PBF	60	18	10	900	8-SOIC	57M2674	7.31
LT1210CS#PBF	55	36	3	900	16-SOIC	57M2700	11.97
LT1210CT7#PBF	55	36	3	900	7-TO-220	57M2704	13.14
LT1223CN8#PBF	100	36	1	1000	8-DIP	57M2813	5.85
LT1227CS8#PBF	140	36	3	1100	8-NSOIC	57M2839	3.58
LT1228CS8#PBF	100	36	0.5	500	8-SOIC	57M2845	8.43
LT1252CS8#PBF	100	28	15	250	8-SOIC	57M3046	2.33
LT1395CS8#PBF	400	12.6	1	800	8-SOIC	57M3877	2.45
DUAL							
LT1229CN8#PBF	100	36	3	700	8-DIP	57M2850	6.88
LT1229CS8#PBF	100	36	3	700	8-NSOIC	57M2852	7.74
LT1253CS8#PBF	90	28	15	250	8-SOIC	57M3052	4.89
LT1259CN#PBF	130	36	2	1600	14-PDIP	57M3068	2.85
LT1396CMS8#PBF	400	12.6	1	800	8-MSOP	57M3885	3.53
LT1398CS#PBF	300	12.6	1.5	800	16-SOIC	57M3905	4.72
LT1497CS#PBF	59	36	3	900	16-SOIC	57M4552	7.90
TRIPLE							
LT1260CS#PBF	130	36	2	1600	16-SOIC	57M3082	5.13
LT1399HVCS#PBF	300	44	10	800	16-SOIC	57M3917	6.31
QUAD							
LT1230CS#PBF	100	36	3	700	14-NSOIC	57M2858	13.73
LT1254CS#PBF	90	28	15	250	14-SOIC	57M3058	5.75
LT1397CS#PBF	400	12.6	1	800	14-SOIC	57M3899	4.58

(175991)

DIFFERENTIAL AMPLIFIERS

RoHS Compliant Available — LINEAR TECHNOLOGY

Linear Technology's rapidly expanding line of differential amplifiers feature precision film resistors, integrated filters, simple output common mode adjustment, high Cload output drive circuitry, and rail-to-rail outputs.



Mfg. Part No.	BW (MHz)	Total Supply Volt. (V±)	Supply Current (mA)	Package	Stock No.	Price Each 1-24
LT1990ACS8#PBF	0.1	36	0.14	8-SOIC	57M7647	3.87
LT1990CS8#PBF	0.1	36	0.14	8-SOIC	57M7659	2.70
LT1991HMS#PBF	0.56	12.6	...	10-MSOP	57M7699	3.41
LTC6605CDJC-7#PBF	7	5.25	33.1	22-DFN	44P2424	9.73
LTC6605CDJC-10#PBF	10	5.25	33.1	22-DFN	44P2422	14.81
LTC6605CDJC-14#PBF	14	5.25	33.1	22-DFN	44P2423	14.81
LT6600CS8-20#PBF	20	11	46	8-SOIC	57M9568	5.92
LT1994CDD#PBF	70	12.6	14.8	8-DFN	57M7735	3.32
LT1994IDD#PBF	70	12.6	13.3	8-DFN	57M7743	3.83
LT1990AIS8#PBF	105	36	140	8-SOIC	57M7655	4.71
LT6350CDD#PBF	115	12	5.4	8-DFN	78R8470	5.55
LT6350CMS8#PBF	115	12	5.4	8-MSOP	78R8472	5.55
LTC6362HDD#PBF	180	5.25	1	8-DFN	24W5365	4.08
LTC6403CUD-1#PBF	200	5.25	11	16-QFN	95M6535	3.78
LTC6403IUD-1#PBF	200	5.25	11	16-QFN	95M6536	4.47
LT6402IUD-6#PBF	300	5.5	30	16-QFN	46P4020	5.49
LT6402IUD-12#PBF	300	5.5	30	16-QFN	46P4019	5.49
LT1993IUD-2#PBF	800	5	100	16-QFN	57M7727	6.79
LT6600CS8-15#PBF	...	11	38	8-SOIC	57M9560	5.92
LTC1992-1CMS8#PBF	3000	12	0.8	8-MSOP	56M4436	7.83
LTC1992-1HMS8#PBF	3000	12	0.9	8-MSOP	56M4440	9.98
LTC1992CMS8#PBF	3200	12	0.8	8-MSOP	56M4484	3.12
LTC1992HMS8#PBF	3200	12	0.9	8-MSOP	56M4488	3.77
LTC6400CUD-14#PBF	2400	2.85	85	16-QFN	95M6520	6.43
LTC6400IUD-20#PBF	1800	3.5	90	16-QFN	57M0108	7.41
LTC6406CUD#PBF	3000	3.5	18	16-QFN	57M0126	6.93
LTC6405CUD#PBF	2700	5.5	18	16-QFN	15N3551	6.96
LTC6405IUD#PBF	2700	5.5	18	16-QFN	15N3555	5.48
LTC6416IDDB#PBF	2000	3.9	42	10-DFN	46P4015	5.50
LTC6420CUDC-20#PBF	1800	3.5	80	20-QFN	12P6568	11.04

CONTINUED

DIFFERENTIAL AMPLIFIERS (CONT.)

Mfg. Part No.	BW (MHz)	Total Supply Volt. (V±)	Supply Current (mA)	Package	Stock No.	Price Each 1-24
● LTC6420IUDC-20#PBF	1800	3.5	80	20-QFN	12P7592	12.68
● LTC6421CUDC-20#PBF	1300	2.85	...	20-QFN	95M6544	10.19
● LTC6421IUDC-20#PBF	1300	2.85	40	20-QFN	95M6548	7.92
● LTC6409CUDB#PBF	10000	5.25	52	10-QFN	78T3480	9.78

HIGH SPEED DIFFERENTIAL AMPLIFIERS

Mfg. Part No.	BW (MHz)	Total Supply Volt. (V±)	No. of Circuits	Pkg.	Stock No.	Price Each 1-24
● LTC6400CUD-20#PBF	1800	3.5	90	16-QFN	57M0101	6.43
● LTC6400CUD-26#PBF	1900	...	85	16-QFN	57M0105	6.43
● LTC6401CUD-20#PBF	1300	3.5	50	16-QFN	57M0114	5.94

IF AMPLIFIERS/ADC DRIVERS

Mfg. Part No.	BW (MHz)	Total Supply Volt. (V±)	Supply Current (mA)	Package	Stock No.	Price Each 1-24
● LT1994CMS8#PBF	70	12.6	14.8	8-MSOP	57M7739	3.32
● LT1994IMS8#PBF	70	12.6	14.8	8-MSOP	57M7747	3.83
● LTC6406CUD#PBF	3	3.5	18	16-QFN	57M0126	6.93
● LT5524EFE#PBF	540	5.25	...	20-TSSOP	57M8800	8.81
● LT5514EFE#PBF	850	5.25	...	20-TSSOP	57M8764	10.44

DIFFERENTIAL AMPLIFIERS WITH LOW PASS FILTERS

Mfg. Part No.	BW (MHz)	Total Supply Voltage (V)	Supply Current (mA)	Package	Stock No.	Price Each 1-24
● LT6600IS8-2.5#PBF	2.5	11	28	8-SO	57M9584	6.79
● LT6600IS8-5#PBF	5	11	30	8-SO	57M9592	6.79
● LT6600IS8-10#PBF	10	11	36	8-SO	57M9576	6.79
● LT6600IS8-20#PBF	20	11	42	8-SOIC	57M9588	6.79
● LT6604CUFF-10#PBF	10	11	36	34-QFN	15N3670	13.86
● LT6604CUFF-15#PBF	15	11	38	34-QFN	15N3672	13.86
● LT6604CUFF-2.5#PBF	2.5	11	28	34-QFN	15N3674	13.86
● LT6604CUFF-5#PBF	5	11	30	34-QFN	15N3676	9.30
● LT6604IUFF-10#PBF	10	11	36	34-QFN	15N3678	15.86
● LT6604IUFF-15#PBF	15	11	38	34-QFN	15N3680	15.86
● LT6604IUFF-2.5#PBF	2.5	11	28	34-QFN	15N3682	15.86
● LT6604IUFF-5#PBF	5	11	30	34-QFN	15N3684	15.86
● LTC6601CUF-1#PBF	28	5.25	33.9	20-QFN	19P0741	8.42

DIFFERENTIAL AMPLIFIERS WITH RAIL TO RAIL INPUT/OUTPUT

Mfg. Part No.	No. of Circuits	BW (MHz)	Total Supply Volt. (V±)	Supply Current	Package	Stock No.	Price Each 1-24
● LTC6362CMS8#PBF	1	180MHz	5.25V	1mA	8-MSOP	93T2025	3.26
● LTC6362HMS8#PBF	1	180MHz	5.25V	1mA	8-MSOP	93T2026	4.08
● LTC6362IMS8#PBF	1	180MHz	5.25V	1mA	8-MSOP	93T2027	3.61

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GENERAL PURPOSE OPERATIONAL AMPLIFIERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Mfg. Part No.	No. of Amps	Supply (V)	Offset (mV)	Slew Rate (V/µs)	Package	Stock No.	Price Each 1-24
● LF398S8#PBF	1	18	1	...	8-SOIC	55M8772	3.28
● LT1028CN8#PBF	1	44	10	15	8-DIP	57M1055	9.51
● LT1077ACN8#PBF	1	44	9	0.08	8-DIP	57M1386	6.21
● LT1077IS8#PBF	1	44	9	0.08	8-SOIC	57M1394	4.71
● LT1128CS8#PBF	1	36	10	6	8-SOIC	57M2049	9.51
● LT1494CS8#PBF	1	36	150	0.001	8-SOIC	57M4502	3.39
● LT1494IN8#PBF	1	36	150	0.001	8-DIP	57M4514	3.89
● LT1494IS8#PBF	1	36	150	0.001	8-SOIC	57M4516	3.89
● LT1677CN8#PBF	1	18	20	2.5	8-DIP	57M5683	4.51
● LT1010CDD#PBF	1	22	150	75	8-DFN	57M0770	4.80
● LT1010CN8#PBF	1	22	150	75	8-DIP	57M0774	4.80
● LT1010CT#PBF	1	22	150	75	5-TO-220	57M0776	5.53
● LT1220CN8#PBF	1	36	0.5	250	8-PDIP	57M2791	6.79
● LT1782IS5#PBF	1	18	0.4	0.07	5-SOT-23	61M3360	3.06
● LT1783CS5#PBF	1	18	0.4	0.42	5-SOT-23	61M3361	2.59
● LT1783IS5#PBF	1	18	0.4	0.42	5-SOT-23	61M3362	3.10
● LT1800IS5#PBF	1	12.6	0.075	25	5-SOT-23	61M3366	3.37
● LT1806CS6#PBF	1	12.6	0.1	125	6-SOT-26	61M3367	4.64
● LTC2050HVCS5#TRMPBF	1	12	0.0005	2	5-SOT-23	59M8269	3.41
● LT1495CN8#PBF	2	36	150	0.001	8-DIP	57M4520	5.13
● LT1211CN8#PBF	2	36	0.075	7	8-PDIP	57M2709	3.25
● LT1807CS8#PBF	2	12.6	100	125	8-SOIC	57M6831	6.92

➤CONTINUED➤

GENERAL PURPOSE OPERATIONAL AMPLIFIERS (CONT.)

Mfg. Part No.	No. of Amps	Supply (V)	Offset (mV)	Slew Rate (V/µs)	Package	Stock No.	Price Each 1-24
● LT1807IS8#PBF	2	12.6	100	140	8-SOIC	57M6839	7.28
● LT1211IS8#PBF	2	36	75	7	8-SOIC	57M2717	7.69
● LT1002CN#PBF	2	44	0.02	0.25	14-PDIP	57M0688	5.73
● LT1213CN8#PBF	2	36	0.075	8.5	8-PDIP	57M2735	6.28
● LT1013IS8#PBF	2	22	0.15	0.4	8-SOIC	57M0833	8.14
● LT1215CN8#PBF	2	36	0.125	30	8-PDIP	57M2749	6.28
● LT1215CS8#PBF	2	36	125	30	8-SOIC	57M2751	6.79
● LT1057CN8#PBF	2	40	150	14	8-DIP	57M1220	4.90
● LT1368CS8#PBF	2	15.5	150	0.065	8-SOIC	57M3533	6.75
● LT1014IN#PBF	4	22	0.15	0.4	14-DIP	57M0847	9.22
● LT1014ISW#PBF	4	22	0.15	0.4	16-SOIC	57M0849	10.48
● LT1058ACN#PBF	4	40	180	14	14-DIP	57M1230	18.34
● LT1079ISW#PBF	4	40	35	0.07	16-SOIC	57M1430	10.95
● LT1212CN#PBF	4	36	100	7	14-DIP	57M2721	11.28
● LT1212CS#PBF	4	36	0.1	7	16-SOIC	57M2723	12.18
● LT1214CS#PBF	4	36	0.1	8.5	16-SOIC	57M2743	12.18
● LT1496IS#PBF	4	44	150	0.001	14-SOIC	57M4548	8.28

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HIGH SIDE CURRENT SENSE AMPLIFIERS

RoHS Compliant Available

LINEAR TECHNOLOGY

PRECISION CURRENT SENSE AMPLIFIERS W/ CONFIGURABLE GAIN

Mfg. Part No.	BW (MHz)	Oper. Temp. Min. (°C)	Oper. Temp. Max. (°C)	Gain Range Min.	Gain Range Max.	Package	Stock No.	Price Each 1-24
● LT1787CMS8#PBF	0.3	-40	85	7.76	8.24	8-MSOP	57M6431	4.78
● LT1787CS8#PBF	0.3	-40	85	7.76	8.24	8-SOIC	57M6435	4.38
● LT1787CS8#TRPBF	0.3	-40	85	7.76	8.24	8-SOIC	14N8611	3.86
● LT1787HVCMS8#PBF	0.3	-40	125	7.76	8.24	8-MSOP	57M6443	6.67
● LT1787HVCS8#PBF	0.3	-40	125	7.76	8.24	8-SO	57M6447	6.26
● LTC6102IDD#PBF	0.2	-40	85	...	...	8-DFN	56M9944	2.83
● LT1787HVIS8#PBF	0.3	-40	125	7.76	8.24	8-SOIC	57M6459	7.38
● LT1787HS8#PBF	0.3	-40	125	7.76	8.24	8-SOIC	57M6439	5.63
● LT1787HS8#TRPBF	0.3	-40	125	7.76	8.24	8-SOIC	14N8612	4.91
● LT1787IS8#TRPBF	0.3	-40	85	7.76	8.24	8-SOIC	14N8613	2.80
● LT6100CMS8#PBF	0.15	-40	85	10	10.05	8-MSOP	57M9117	2.37
● LT6100HMS8#PBF	0.15	-40	125	10	10.05	8-MSOP	57M9125	2.96
● LT6100IMS8#PBF	0.15	-40	85	10	10.05	8-MSOP	57M9133	2.74

CURRENT SENSE AMPLIFIERS GAIN CONFIGURABLE W/ EXTERNAL RESISTORS (*-40°C min)

Mfg. Part No.	BW (MHz)	Oper. Temp. *Max. (°C)	Supply Voltage Min. (V)	Supply Voltage Max. (V)	Offset Voltage (mV)	Package	Stock No.	Price Each 1-24
● LTC6101HVAHMS8#PBF	0.2	125	5	100	0.535	8-MSOP	56M9889	4.75
● LTC6102CMS8#PBF	200	85	4	60	0.05	8-MSOP	56M9926	3.46
● LTC6102CDD-1#PBF	0.2	70	4	60	0.003	8-DFN	71P2237	3.88
● LTC6102CMS8-1#PBF	0.2	70	4	60	0.003	8-MSOP	71P2238	3.88
● LTC6102HDD-1#PBF	0.2	125	4	60	0.003	8-DFN	71P2239	5.05
● LTC6102HMS8-1#PBF	0.2	125	4	60	0.003	8-MSOP	71P2240	5.05
● LTC6102IDD-1#PBF	0.2	85	4	60	0.003	8-DFN	71P2241	4.43
● LTC6102IMS8-1#PBF	0.2	85	4	60	0.003	8-MSOP	71P2242	4.43
● LTC6102HVIMS8#PBF	0.2	85	5	100	0.003	8-MSOP	56M9942	4.78
● LTC6104IMS8#PBF	0.2	85	4	60	0.085	8-MSOP	56M9958	3.18
● LT6106CS5#PBF	0.2	85	2.7	44	0.25	5-SOT-23	61M3378	2.07
● LT1787IMS8#PBF	0.3	85	2.5	36	0.25	8-MSOP	57M6463	5.78
● LTC4151CDD#PBF	...	70	7	80	...	10-DFN	79M3580	5.35
● LTC4151CMS#PBF	...	70	7	80	...	10-MSOP	79M3584	5.35
● LT1999CMS8-20#PBF	2	70	4.5	5.5	1.5	8-MSOP	24T0464	4.10
● LT1999CMS8-50#PBF	1.2	70	4.5	5.5	1.5	8-MSOP	24T0466	4.10
● LT1999CS8-10#PBF	2	70	4.5	5.5	1.5	8-SOIC	24T0468	4.10
● LT1999CS8-20#PBF	2	70	4.5	5.5	1.5	8-SOIC	24T0470	4.10
● LT1999CS8-50#PBF	1.2	70	4.5	5.5	1.5	8-SOIC	24T0472	4.10
● LT1999HMS8-20#PBF	2	125	4.5	5.5	1.5	8-MSOP	24T0474	5.37
● LT1999HMS8-50#PBF	1.2	125	4.5	5.5	1.5	8-MSOP	24T0476	5.37
● LT1999HS8-10#PBF	2	125	4.5	5.5	1.5	8-SOIC	24T0478	5.37
● LT1999HS8-20#PBF	2	125	4.5	5.5	1.5	8-SOIC	24T0480	3.52
● LT1999HS8-50#PBF	1.2	125	4.5	5.5	1.5	8-SOIC	24T0482	5.37
● LT1999IMS8-20#PBF	2	85	4.5	5.5	1.5	8-MSOP	24T0484	4.62
● LT1999IMS8-50#PBF	1.2	85	4.5	5.5	1.5	8-MSOP	24T0486	4.62
● LT1999IS8-10#PBF	2	85	4.5	5.5	1.5	8-SOIC	24T0488	4.62
● LT1999IS8-20#PBF	2	85	4.5	5.5	1.5	8-SOIC	24T0490	4.62
● LT1999IS8-50#PBF	1.2	85	4.5	5.5	1.5	8-SOIC	24T0492	4.62

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HIGH SPEED OPERATIONAL AMPLIFIERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Mfg. Part No.	No. of Amps	Supply (V)	Offset (mV)	Slew Rate (V/µs)	Package	Stock No.	Price Each 1-24
LT1220CS8#PBF	1	36	0.5	250	8-SOIC	57M2793	7.28
LT1190CS8#PBF	1	18	3	450	8-SOIC	57M2614	3.79
LT1191CS8#PBF	1	18	100	450	8-SOIC	57M2620	3.79
LT1192CS8#PBF	1	18	0.2	450	8-SOIC	57M2626	2.50
LT1195CS8#PBF	1	18	3	165	8-SOIC	57M2648	3.79
LTC6252CS6#TRMPBF	1	5.25	0.35	280	6-TSOT-23	24T2683	3.73
LTC6409CUDB#TRMPBF	1	5.25	1.4	3300	10-QFN	24T2686	10.80
LT1221CN8#PBF	1	36	0.5	250	8-DIP	57M2797	6.30
LT1222CN8#PBF	1	36	0.1	200	8-DIP	57M2803	6.23
LT1224CN8#PBF	1	36	0.5	400	8-DIP	57M2819	5.42
LT1226CN8#PBF	1	36	0.3	400	8-DIP	57M2831	5.42
LT1360CS8#PBF	1	36	0.3	800	8-SOIC	57M3487	4.63
LT1363CS8#PBF	1	36	0.5	1000	8-SOIC	57M3505	5.00
LT1368CN8#PBF	1	36	0.15	0.065	8-DIP	57M3531	6.48
LT1468CN8#PBF	1	36	0.03	22	8-DIP	57M4376	6.42
LT1809CS8#PBF	1	12.6	0.6	300	8-SOIC	57M6847	2.25
LT6200CS8#PBF	1	12.6	0.1	50	8-SOIC	57M9161	4.40
LT6200CS8-10#PBF	1	12.6	0.1	450	8-SOIC	57M9154	3.11
LT6200CS8-5#PBF	1	12.6	0.1	250	8-SOIC	57M9158	3.11
LT6202CS8#PBF	1	12.6	1	25	8-SOIC	57M9205	2.89
LT6202IS5#TRMPBF	1	12.6	0.5	25	5-TSOT-23	57M9210	4.59
LTC6404CUD-1#PBF	1	5.5	2	450	16-QFN	75M4559	6.93
LTC6404CUD-2#PBF	1	5.25	2	700	16-QFN	75M4561	6.93
LTC6404HUD-1#PBF	1	5.5	2	450	16-QFN	75M4563	8.73
LTC6404IUD-1#PBF	1	5.5	2	450	16-QFN	75M4567	7.60
LTC6404IUD-2#PBF	1	5.25	2	700	16-QFN	75M4569	7.60
LTC6404CUD-4#PBF	1	5.25	2	1200	16-QFN	95M6537	6.93
LTC6404IUD-4#PBF	1	5.25	2	1200	16-QFN	95M6541	7.65
LTC6410IUD-6#PBF	1	5.25	0.4	1500	16-QFN	75M4577	6.70
LT6552CS8#PBF	1	12.6	20	600	8-SOIC	57M9460	2.21
LT1010CT#PBF	1	22	150	75	5-TO-220	57M0776	5.53
LT1220CN8#PBF	1	36	0.5	250	8-PDIP	57M2791	6.79
LT1782IS5#PBF	1	18	0.4	0.07	5-SOT-23	61M3360	3.06
LT1783CS5#PBF	1	18	0.4	0.42	5-SOT-23	61M3361	2.59
LT1783IS5#PBF	1	18	0.4	0.42	5-SOT-23	61M3362	3.10
LT1357CS8#PBF	1	15	0.6	600	8-SOIC	57M3449	5.13
LT1809IS6#PBF	1	12.6	0.6	350	6-TSOT-23	48T7308	4.43
LTC6253CDC#TRMPBF	2	5.25	0.35	280	8-DFN	24T2684	5.45
LTC6253CMS#PBF	2	5.25	0.35	280	10-MSOP	13T4050	3.37
LTC6253CMS8#PBF	2	5.25	0.35	280	8-MSOP	13T4052	4.69
LTC6253CTS8#TRMPBF	2	5.25	0.35	280	8-TSOT-23	24T2685	5.45
LT1002CN#PBF	2	44	0.02	0.25	14-PDIP	57M0688	5.73
LT1355CN8#PBF	2	36	800	400	8-DIP	57M3435	7.67
LT1469IDF-2#PBF	2	15	0.1	22	12-DFN	12P6569	13.02
LT1364CN8#PBF	2	36	0.5	1000	8-DIP	57M3509	6.96
LT1739CFE#PBF	2	27	1	600	20-TSSOP	57M5939	7.40
LT1810CMS8#PBF	2	12.6	0.6	300	8-MSOP	57M6859	5.79
LT1819CMS8#PBF	2	12.6	0.2	2500	8-MSOP	57M7043	3.22
LT1969CMS#PBF	2	13.2	4	200	10-MSOP	57M7607	6.18
LT6206CMS8#PBF	2	12.6	1.3	600	8-MSOP	57M9265	2.10
LT6206IMS8#PBF	2	12.6	4.5	600	8-MSOP	57M9269	2.52
LT6211CMS#PBF	2	13.2	1	700	10-MSOP	57M9293	3.22
LT1399CS#PBF	3	12.6	1.5	800	16-SOIC	57M3913	5.13
LT1675CMS8-1#PBF	3	6	20	1100	8-MSOP	57M5663	4.51
LT6553CGN#PBF	3	12.6	10	2500	16-SSOP	57M9472	2.80
LT6554CGN#PBF	3	13.2	35	2500	16-SSOP	57M9480	2.80
LT6557CGN#PBF	3	7.5	40	2200	16-SSOP	57M9524	5.03
LTC6254CMS#PBF	4	5.25	0.35	280	16-MSOP	13T4066	7.56
LT1353CS#PBF	4	36	200	200	14-SOIC	57M3421	12.72
LT1362CS#PBF	4	36	0.3	800	16-SOIC	57M3499	11.81
LT1365CN#PBF	4	36	0.5	1000	16-DIP	57M3515	12.17
LT1724CS#PBF	4	12.6	0.1	70	14-SOIC	57M5891	4.37
LT6204CS#PBF	4	12.6	0.1	25	14-SOIC	57M9245	8.56
LT6207CGN#PBF	4	12.6	1.3	600	16-NSSOP	57M9273	3.14
LT1365CS#PBF	4	15	1.5	1000	16-SOIC	57M3517	12.72
HIGH SPEED, JFET INPUT							
LT1022CN8#PBF	1	40	0.08	26	8-PDIP	57M1009	5.02
LT1055S8#PBF	1	40	0.12	12	8-SOIC	57M1208	4.75
LT1056S8#PBF	1	40	0.14	14	8-SOIC	57M1214	4.75
LT1057S8#PBF	2	40	0.15	14	8-SOIC	57M1226	5.61
LT1058SW#PBF	4	44	0.18	14	16-SOIC	57M1238	9.60

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IF AMPLIFIERS/ADC DRIVERS

RoHS Compliant Available

LINEAR TECHNOLOGY

LT5514 FEATURES
- Output IP3 at 100MHz: 47dBm
- Maximum Output Power: 21dBm
- Bandwidth: LF to 850MHz
- Propagation Delay: 0.8ns
- Maximum Gain: 33dB
- Noise Figure: 7.3dB (Max Gain)
- Gain Control Range: 22.5dB
- Gain Control Step: 1.5dB

LT5524 FEATURES
- Output IP3 at 100MHz: 40dBm
- Maximum Output Power: 16dBm
- Bandwidth: LF to 540MHz
- Propagation Delay: 0.8ns
- Maximum Gain: 27dB
- Gain Control Range: 22.5dB
- Gain Control Step: 1.5dB

A broad selection of high linearity upconverting and downconverting active mixers, direct-conversion I-Q demodulators, digitally programmable gain ADC driver/amplifier, and modulators designed to meet the performance of wireless basestations and cable infrastructure equipment.

Mfg. Part No.	Supply Voltage	BW (MHz)	Package	Stock No.	Price Each 1-24
LT5524EFE#PBF	4.75V to 5.25V	540	20-TSSOP	57M8800	8.81
LT5514EFE#PBF	4.75V to 5.25V	850	20-TSSOP	57M8764	10.44

(103593)

LOW NOISE OPERATIONAL AMPLIFIERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Mfg. Part No.	No. of Amps	Supply (V)	Offset (mV)	Slew Rate (V/µs)	Package	Stock No.	Price Each 1-24
LT1001ACN8#PBF	1	22	0.025	0.25	8-DIP	57M0678	6.53
LT1001CN8#PBF	1	22	0.06	0.25	8-DIP	57M0680	3.31
LT1001CS8#PBF	1	44	0.01	0.25	8-SOIC	57M0682	4.13
LT1008S8#PBF	1	40	0.03	0.2	8-SOIC	57M0746	6.01
LT1806CS6#PBF	1	12.6	0.1	125	6-SOT-26	61M3367	4.64
LTC2050HVCS5#TRMPBF	1	12	0.0005	2	5-SOT-23	59M8269	3.41
LT1028CS8#PBF	1	44	0.01	15	8-NSOIC	57M1061	9.51
LT1037CN8#PBF	1	44	0.01	15	8-NPDIP	57M1143	3.67
LT1677IS8#PBF	1	44	0.02	2.5	8-NSOIC	57M5691	5.03
LT1970CFE#PBF	1	36	0.2	1.6	20-TSSOP	57M7611	9.95
LT1115CSW#PBF	1	44	0.05	15	16-SOIC	57M1767	4.67
LT1115CN8#PBF	1	44	0.2	15	8-DIP	57M1765	5.67
LT1970CFE#PBF	1	36	0.2	1.6	20-TSSOP	57M7611	9.95
LT1970ACFE#PBF	1	36	0.2	1.6	20-TSSOP	78T3775	9.95
LT1124CS8-1#PBF	2	18	0.1	4.5	8-SOIC	13T4212	7.40
LT1024CN#PBF	2	40	0.015	0.2	14-PDIP	57M1013	8.62
LT1113CS8#PBF	2	40	0.4	3.9	8-NSOIC	57M1747	6.50
LT1124CS8#PBF	2	44	0.02	4.5	8-NSOIC	57M2014	7.40
LT1058CN#PBF	4	44	0.18	14	14-NPDIP	57M1232	8.44
LOW NOISE, HIGH SPEED							
LT1007CS8#PBF	1	44	0.01	2.5	8-SOIC	57M0732	4.13
LT1007ACN8#PBF	1	18	0.025	2.5	8-DIP	57M0728	8.80
LT1037CS8#PBF	1	44	0.01	15	8-SOIC	57M1145	4.13
LT1028CSW#PBF	1	44	0.01	15	8-SOIC	57M1057	10.45
LT1128CN8#PBF	1	44	0.01	6	8-PDIP	57M2047	9.51
OP27GN8#PBF	1	22	0.03	2.8	8-DIP	57M9946	5.17
LT1124CN8#PBF	2	44	0.02	4.5	8-PDIP	57M2012	7.01
LT1126CN8#PBF	2	44	0.02	11	8-PDIP	57M2031	6.43
LT1125CSW#PBF	4	44	0.025	4.5	16-SOIC	57M2025	12.48
LT1127CSW#PBF	4	44	0.025	11	16-SOIC	57M2041	11.57
LOW NOISE, JFET INPUT							
LT1122CS8#PBF	1	18	0.9	75	8-SOIC	57M1988	6.24
LT1122DS8#PBF	1	18	0.9	75	8-SOIC	57M1994	5.30
LT1792CS8#PBF	1	40	0.2	3.4	8-SOIC	57M6637	4.76
LT1793CS8#PBF	1	40	0.25	3.4	8-SOIC	57M6661	4.76
LT1113CN8#PBF	2	40	0.4	3.9	8-PDIP	57M1745	6.02
LT1169CN8#PBF	2	40	0.6	4.2	8-PDIP	57M2339	7.31
LOW NOISE, RAIL-TO-RAIL							
LT1677CS8#PBF	1	44	0.02	2.5	8-SOIC	57M5685	4.51
LT1806CS8#PBF	1	12.6	0.1	125	8-SOIC	57M6815	4.38
LT1678CS8#PBF	2	36	0.035	6	8-SOIC	57M5695	5.03
LT1807CMS8#PBF	2	12.6	0.1	125	8-MSOP	57M6827	7.28
LT1679CS#PBF	4	36	0.035	6	14-SOIC	57M5703	7.71

(175936)

LOW POWER OPERATIONAL AMPLIFIERS

RoHS Compliant Available

LINEAR TECHNOLOGY

SINGLE

Mfg. Part No.	Supply Voltage Max. (V)	Offset (mV)	Slew Rate (V/µs)	Package	Stock No.	Price Each 1-24
● LTC6246CS6#PBF	5.25	0.05	90	6-TSOT-23	51R1518	3.06
● LTC6246HS6#PBF	5.25	0.05	90	6-TSOT-23	51R1519	3.81
● LTC6246HS6#TRMPBF	5.25	0.5	90	6-SOT-23	72R5713	4.25
● LTC6246IS6#PBF	5.25	0.05	90	6-TSOT-23	51R1520	3.52
● LTC6255CS6#PBF	5.25	0.1	1.8	6-TSOT-23	79R3060	2.73
● LTC6252HS6#TRMPBF	5.25	0.35	280	6-SOT-23	13T4044	4.57
● LT1800CS8#PBF	12.6	0.075	25	8-SOIC	57M6727	2.76
● LT6221CDD#PBF	12.6	0.35	20	8-DFN	44P2427	4.16
● LT1812CS8#PBF	12.6	0.4	750	8-SOIC	57M6883	1.85
● LT318AN8#PBF	20	0.5	50	8-DIP	57M8064	3.40
● LT1672IS8#PBF	36	0.15	5	8-SOIC	57M5631	3.89
● LT1351CMS8#PBF	36	0.2	200	8-MSOP	57M3399	5.13
● LT1351CS8#PBF	36	0.2	200	8-SOIC	57M3405	4.76
● LT1354CS8#PBF	36	0.3	400	8-SOIC	57M3427	4.76
● LT1354CN8#PBF	36	0.8	400	8-DIP	57M3425	4.23
● LT1354IS8#PBF	36	0.8	400	8-SOIC	57M3431	5.81
● LT1097CN8#PBF	40	0.01	0.2	8-NPDIP	57M1574	3.53
● LT1097S8#PBF	40	0.01	0.2	8-NSOIC	57M1576	3.83
● LT1077CN8#PBF	44	0.009	0.08	8-NPDIP	57M1390	3.21
● LT1077S8#PBF	44	0.009	0.08	8-NSOIC	57M1398	3.90
● LT1636CS8#PBF	44	50	0.07	8-SOIC	57M5428	3.01
● LT1636IS8#PBF	44	50	0.07	8-SOIC	57M5446	3.53
DUAL						
● LTC6256CTS8#PBF	5.25	0.1	1.8	8-TSOT-23	79R3061	3.48
● LTC6256CMS8#PBF	5.25	0.35	1.8	8-MSOP	78R8385	3.23
● LTC6256CMS#PBF	5.25	0.35	1.8	10-MSOP	78R8383	3.66
● LTC6078IMS8#PBF	6	7	0.05	8-MSOP	56M9759	3.40
● LT6231CS8#PBF	12.6	0.05	70	8-SOIC	57M9349	3.88
● LT6231CDD#PBF	12.6	0.05	70	8-DFN	57M9345	4.14
● LT1801CMS8#PBF	12.6	0.075	25	8-MSOP	57M6743	4.12
● LT6221CS8#PBF	12.6	0.35	20	8-SOIC	75M4771	3.71
● LT1813CS8#PBF	12.6	0.5	750	8-SOIC	57M6903	2.31
● LT6203CDD#PBF	12.6	0.5	24	8- DFN	57M9217	5.52
● LT6203CMS8#PBF	12.6	0.5	25	8-MSOP	57M9221	5.14
● LT1801CS8#PBF	12.6	75	25	8-SOIC	57M6747	3.87
● LT6203CS8#PBF	18	0.5	25	8-SOIC	57M9225	4.88
● LT1112S8#PBF	40	0.045	0.3	8-SO	57M1739	5.15
● LT1413S8#PBF	22	0.28	0.3	8-SOIC	57M3933	4.42
● LT1413CN8#PBF	22	0.28	0.3	8-PDIP	57M3931	4.02
● LT1492CN8#PBF	36	0.1	1.8	8-PDIP	57M4486	7.38
● LT1358CN8#PBF	36	0.2	600	8-PDIP	57M3453	7.30
● LT1490ACDD#PBF	44	110	0.06	8-DFN	57M4400	4.77
● LT1112ACN8#PBF	40	0.02	0.3	8-PDIP	57M1727	6.79
● LT1112CN8#PBF	40	0.02	0.3	8-NPDIP	57M1729	4.71
● LT1078CN8#PBF	44	0.03	0.07	8-NPDIP	57M1404	5.44
● LT1078IS8#PBF	44	0.03	0.07	8-NSOIC	57M1412	9.32
● LT1013CN8#PBF	44	0.04	0.4	8-NPDIP	57M0823	4.61
● LT1013DN8#PBF	44	0.04	0.4	8-NPDIP	57M0825	3.83
● LT1013DS8#PBF	44	0.04	0.4	8-NSOIC	57M0827	4.01
● LT1638CDD#PBF	44	0.2	0.4	8-DFN	57M5484	3.39
● LT1112IS8#PBF	40	20	0.3	8-SOIC	57M1733	5.49
QUAD						
● LTC6248HMS#PBF	5.25	0.5	90	16-MSOP	72R5730	5.39
● LTC6248IMS#PBF	5.25	0.05	90	16-MSOP	51R1521	7.54
● LTC6257CMS#PBF	5.25	0.35	1.8	16-MSOP	78R8399	5.31
● LTC6079IGN#PBF	5.5	7	0.05	16-SSOP	56M9779	5.82
● LT1814CS#PBF	12.5	0.5	750	14-SOIC	57M6943	3.92
● LT1805CS#PBF	12.6	0.35	100	14-SOIC	57M6803	7.05
● LT1356CN#PBF	36	0.8	400	14-PDIP	57M3441	11.80
● LT1356CS#PBF	36	0.8	400	16-SOIC	57M3443	12.72
● LT1359CN#PBF	36	0.2	600	14-PDIP	57M3465	8.00
● LT1359CS#PBF	36	0.2	600	16-SOIC	57M3467	14.03
● LT1114S#PBF	40	0.02	0.3	16-NSOIC	57M1761	8.93
● LT1079CN#PBF	44	0.035	0.07	14-NPDIP	57M1426	6.79
● LT1079SW#PBF	44	0.035	0.07	16-SOIC	57M1434	8.83
● LT1179SW#PBF	44	0.035	0.04	16-SOIC	57M2528	8.80
● LT1014CN#PBF	44	0.04	0.4	14-NPDIP	57M0839	10.38
● LT1014DN#PBF	44	0.04	0.4	14-NPDIP	57M0841	6.92
● LT1014DSW#PBF	44	0.04	0.4	16-WSOIC	57M0843	8.06
● LT1639IS#PBF	44	200	0.38	14-SOIC	57M5528	7.78

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MICROPOWER OPERATIONAL AMPLIFIERS

RoHS Compliant Available

LINEAR TECHNOLOGY

JFET INPUT

Mfg. Part No.	No. of Amps	Supply Voltage (V)	Offset (mV)	BW (MHz)	Slew Rate (V/µs)	Pkg.	Stock No.	Price Each 1-24
● LT1464ACS8#PBF	2	20	0.4	1	0.9	8-SOIC	57M4350	9.06
● LT1465CS#PBF	4	40	0.4	1	0.9	14-SOIC	57M4362	8.55
RAIL-TO-RAIL INPUT AND OUTPUT								
● LT1637CMS8#PBF	1	44	0.1	1	0.35	8-MSOP	57M5454	3.39
● LT1638CMS8#PBF	2	44	0.2	1.2	0.38	8-MSOP	57M5488	4.61
● LT1638IDD#PBF	2	44	0.6	1.2	0.38	8-DFN	57M5502	5.73
● LT1490ACMS8#PBF	2	44	0.11	0.18	0.06	8-MSOP	57M4404	4.62
● LT1490AHMS8#PBF	2	44	0.11	0.18	0.06	8-MSOP	57M4414	5.49
● LT1490AHS8#PBF	2	44	0.5	0.18	0.06	8-SOIC	57M4418	5.03
● LT1490AIMS8#PBF	2	44	0.11	0.18	0.06	8-MSOP	57M4426	5.28
● LT1490CMS8#PBF	2	44	0.11	0.18	0.06	8-MSOP	57M4436	4.61
● LTC6078CMS8#PBF	2	6	0.007	0.75	0.05	8-MSOP	56M9747	2.98
● LT1491ACS#PBF	4	44	0.22	0.18	0.06	14-SOIC	57M4458	6.37
● LT1491AIN#PBF	4	44	0.22	0.18	0.06	14-PDIP	57M4470	7.57
● LT1491CS#PBF	4	44	0.22	0.18	0.06	14-SOIC	57M4478	6.41
● LT1639CS#PBF	4	44	0.2	1.2	0.38	14-SOIC	57M5518	6.41
● LTC6079CGN#PBF	4	6	0.007	0.75	0.05	16-SSOP	56M9767	5.05
ZERO-DRIFT								
● LTC2055CMS8#PBF	2	7	0.0005	0.5	0.5	8-MSOP	56M4766	2.29
GENERAL								
● LT2078CS8#PBF	2	44	0.07	0.2	0.07	8-SOIC	57M7775	7.01
● LT2078IS8#PBF	2	15	0.07	0.2	0.07	8-SOIC	57M7779	9.32
● LT2079AIS#PBF	4	12	0.07	0.2	0.07	14-SOIC	57M7787	19.71

(101596)

POWER EFFICIENT DUAL RAIL-TO-RAIL I/O OP AMPS

RoHS Compliant Available

LINEAR TECHNOLOGY

Features:
- Gain bandwidth product: 180MHz
- Fast output recovery
- Input common mode range includes both rails
- Output swings rail-to-rail

Applications:
- Low voltage, high frequency signal processing
- Driving A/D converters
- Active filters
- Video amplifiers
- Battery powered equipment

Mfg. Part No.	No. of Amplifiers	Input Bias Current (nA)	Offset Voltage (µV)	Supply Voltage (V)	Package	Stock No.	Price Each 1-99
● LTC6247CKC#PBF	2	350	50	2.25 - 5.25	8-DFN	50R9864	2.78
● LTC6247CMS8#PBF	2	350	50	2.25 - 5.25	8-MSOP	50R9866	4.05
● LTC6247HTS8#PBF	2	350	50	2.25 - 5.25	8-SOT-23	50R9867	3.46
● LTC6247IKC#PBF	2	350	50	2.25 - 5.25	8-DFN	50R9869	3.19
● LTC6247IMS#PBF	2	350	50	2.25 - 5.25	10-MSOP	50R9871	4.93
● LTC6247IMS8#PBF	2	350	50	2.25 - 5.25	8-MSOP	50R9872	4.67
● LTC6247ITS8#PBF	2	350	50	2.25 - 5.25	8-SOT-23	50R9873	4.93

(176237)

PRECISION OPERATIONAL AMPLIFIERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Linear Technology's precision operational amplifiers (op amps) combine DC accuracy with low noise, low power, micro-packages, rail-to-rail in/out, and Over-the-Top circuitry. Precision amplifiers minimize post-assembly calibration and minimize drift over temperature and time. Precision amplifiers offer tested, guaranteed limits over the full operating temperature range for offset voltage, offset voltage drift, bias and offset currents, open loop voltage gain and more.

SINGLE

Mfg. Part No.	Supply Voltage Max. (V)	Offset (mV)	Slew Rate (V/µs)	Package	Stock No.	Price Each 1-24
● LTC6252HS6#PBF	5.25	0.05	280	6-TSOT-23	78T3465	4.10
● LTC6800HMS8#PBF	5.5	0.1	0.2	8-MSOP	57M0141	3.15
● LTC2053HDD#PBF	5.5	10	0.2	8-DFN	56M4718	6.20
● LTC2050HVCS6#PBF	5.5	0.0005	2	6-TSOT-23	78T2541	3.49
● LTC2050HVIS8#PBF	5.5	0.0005	2	8-SOIC	56M4562	3.27
● LTC2054CS5#PBF	6	0.0005	0.5	5-TSOT-23	78T2545	2.25
● LT6220CS5#PBF	12.6	0.07	20	5-TSOT-23	78T4176	2.62
● LT6200CS6#PBF	12.6	0.1	50	6-TSOT-23	78T4162	4.65
● LT6200IS8#PBF	12.6	0.1	50	8-SOIC	57M9185	5.22
● LT6230CS6#PBF	12.6	0.1	70	6-TSOT-23	78T4178	2.72
● LT1806IS8#PBF	12.6	0.1	140	8-SOIC	57M6823	4.78
● LT6003HS5#PBF	16	0.175	0.0013	5-TSOT-23	78T4150	2.06
● LT1056CN8#PBF	18	0.14	14	8-DIP	57M1212	3.83
● LT1920CN8#PBF	40	0.03	1.2	8-PDIP	57M7140	6.31
● LT1920CS8#PBF	40	0.03	1.2	8-NSOIC	57M7142	6.31
● LT1920IS8#PBF	18	0.03	1.2	8-SOIC	57M7148	6.86

➤ CONTINUED ➤

PRECISION OPERATIONAL AMPLIFIERS (CONT.)

Mfg. Part No.	Supply Voltage Max. (V)	Offset (mV)	Slew Rate (V/µs)	Package	Stock No.	Price Each 1-24
LT1167AIS8#PBF	18	0.0000003	1.2	8-SOIC	57M2299	12.77
LTC1050CN8#PBF	18	0.0005	4	8-NPDIP	55M8938	4.32
LTC1050CS8#PBF	18	0.0005	4	8-NSOIC	55M8940	5.44
LTC1052CN8#PBF	18	0.0005	4	8-NPDIP	55M8956	8.26
LT1167CS8#PBF	18	0.015	1.2	8-NSOIC	57M2305	6.41
LT1167IS8#PBF	20	60	1.2	8-SOIC	57M2311	7.40
LT1167ACS8#PBF	20	40	1.2	8-SOIC	57M2293	11.16
LT6105CMS8#PBF	36	300	2	8-MSOP	75M4760	2.11
LT6105CMS8#PBF	36	300	2	8-MSOP	75M4760	2.11
LT1468CS8#PBF	36	0.03	22	8-NSOIC	57M4378	6.42
LT1789CS8-1#PBF	36	0.015	0.023	8-NSOIC	57M6471	6.41
LT1789CS8-10#PBF	36	0.0001	0.062	8-SOIC	57M6475	6.38
LT1789IS8-1#PBF	36	0.0001	0.0026	8-SOIC	57M6479	7.40
LT1880IS5#PBF	36	0.04	0.4	5-TSOT-23	78T3756	4.62
LT1167CN8#PBF	40	0.0000003	1.2	8-DIP	57M2303	6.41
LT1097CN8#PBF	40	0.01	0.2	8-NPDIP	57M1574	3.53
LT1097S8#PBF	40	0.01	0.2	8-NSOIC	57M1576	3.83
LT1008CN8#PBF	40	0.03	0.2	8-NPDIP	57M0742	5.52
LT1012CN8#PBF	40	0.008	0.2	8-NPDIP	57M0807	5.34
LT1102CN8#PBF	40	0.18	30	8-DIP	57M1600	8.82
LT1168CN8#PBF	40	0.06	0.5	8-PDIP	57M2327	7.67
LT1168CS8#PBF	40	0.06	0.5	8-SOIC	57M2329	7.67
LT1006CN8#PBF	44	0.02	0.4	8-NPDIP	57M0722	3.11
LT1006S8#PBF	44	0.02	0.4	8-NSOIC	57M0724	3.83
LT1077CN8#PBF	44	0.009	0.08	8-NPDIP	57M1390	3.21
LT1077S8#PBF	44	0.009	0.08	8-NSOIC	57M1398	3.90
LT1636CDD#PBF	44	0.05	0.075	8-DFN	57M5418	2.68
LT1636HS8#PBF	44	0.05	0.075	8-SOIC	57M5432	2.15
LT1636IDD#PBF	44	0.05	0.075	8-DFN	57M5436	4.51
LT1637IDD#PBF	44	0.1	0.4	8-DFN	57M5468	3.11
DUAL						
LTC2051HVHS8#PBF	5.5	0.0005	2	8-SOIC	56M4622	5.79
LTC2051IS8#PBF	5.5	0.0005	2	8-SOIC	56M4654	4.52
LTC6078IDD#PBF	5.5	0.007	0.05	10-DFN	56M9755	3.40
LTC6241IDD#PBF	6	0.04	10	8-DFN	57M0018	2.81
LT1078IN8#PBF	12	0.07	0.1	8-DIP	57M1406	7.20
LT1078S8#PBF	12	0.18	0.1	8-SOIC	57M1420	7.01
LT6221IDD#PBF	12.6	0.07	20	8-DFN	44P4051	4.91
LT6221IS8#PBF	12.6	0.07	20	8-SOIC	44P4055	4.51
LT1013IN8#PBF	15	0.04	0.4	8-DIP	57M0831	7.51
LTC1051CN8#PBF	16.5	0.0005	4	8-NPDIP	55M8948	8.16
LT1124ACN8#PBF	18	0.07	4	8-DIP	57M2006	8.54
LT1101CN8#PBF	18	0.05	0.1	8-NPDIP	57M1584	9.51
LT1101AIN8#PBF	22	0.05	0.1	8-NPDIP	57M1582	16.71
LT1211CS8#PBF	36	0.075	7	8-NSOIC	57M2711	6.79
LT1213CS8#PBF	36	0.075	8.5	8-NSOIC	57M2737	6.79
LT1495IS8#PBF	36	0.15	0.001	8-NSOIC	57M4532	6.25
LT1498CS8#PBF	36	0.15	4.5	8-NSOIC	57M4562	6.93
LT1498IS8#PBF	36	0.15	4.5	8-NSOIC	57M4568	7.01
LT1881ACS8#PBF	36	0.025	0.4	8-SOIC	57M7070	4.40
LT1884IS8#PBF	36	0.025	1	8-SOIC	57M7120	6.27
LT6011ACDD#PBF	36	0.02	0.11	8-DFN	57M8977	5.03
LT6011AIDD#PBF	36	0.02	0.11	8-DFN	57M8985	6.04
LT1112CN8#PBF	40	0.02	0.3	8-NPDIP	57M1729	4.71
LT1002ACN#PBF	44	0.02	0.25	14-NPDIP	57M0686	12.20
LT1078IS8#PBF	44	0.03	0.07	8-NSOIC	57M1412	9.32
LT1078CN8#PBF	44	0.03	0.07	8-NPDIP	57M1404	5.44
LT1013CN8#PBF	44	0.04	0.4	8-NPDIP	57M0823	4.61
LT1013DN8#PBF	44	0.04	0.4	8-NPDIP	57M0825	3.83
LT1013DS8#PBF	44	0.04	0.4	8-NSOIC	57M0827	4.01
LT1490AIS8#PBF	44	0.11	0.07	8-SOIC	57M4432	4.72
QUAD						
LTC6079IDHC#PBF	5.5	0.007	0.05	16-DFN	56M9775	5.82
LTC6242IGN#PBF	6	0.04	10	16-SSOP	57M0062	3.57
LT6235CGN#PBF	12.6	0.05	17	16-SSOP	57M9401	8.30
LT1014ACN#PBF	15	0.04	0.4	14-DIP	57M0837	13.64
LT6005CDHC#PBF	16	0.19	0.0013	16-DFN	57M8923	2.49
LT1114S#PBF	40	0.02	0.3	16-NSOIC	57M1761	8.93
LT1079CN#PBF	44	0.035	0.07	14-NPDIP	57M1426	6.79
LT1014CN#PBF	44	0.04	0.4	14-NPDIP	57M0839	10.38
LT1014DN#PBF	44	0.04	0.4	14-NPDIP	57M0841	6.92
LT1014DSW#PBF	44	0.04	0.4	16-WSOIC	57M0843	8.06

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RAIL-TO-RAIL OPERATIONAL AMPLIFIERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Mfg. Part No.	Supply (V)	Offset (mV)	Slew Rate (V/µs)	Package	Stock No.	Price Each 1-24
SINGLE						
LTC1152IN8#PBF	14	0.001	0.5	8-PDIP	55M9414	6.78
LTC6240CS8#PBF	6	0.04	10	8-SOIC	56M9962	1.76
LTC6240HVCS8#PBF	11	0.06	10	8-SOIC	56M9970	3.10
LT1218CN8#PBF	36	0.025	0.1	8-PDIP	57M2767	9.61
LT1494CMS8#PBF	36	0.15	0.001	8-MSOP	57M4496	3.65
LT1637CS8#PBF	44	0.1	0.35	8-NSOIC	57M5460	3.01
LT1809CS8#PBF	12.6	0.6	300	8-SOIC	57M6847	2.25
LT1880IS5#TRMPBF	36	0.15	0.55	5-SOT-23	57M7065	5.14
LT6010CS8#PBF	40	0.01	0.09	8-SOIC	57M8967	2.20
LT6013CS8#PBF	40	0.01	0.2	8-SOIC	57M9069	2.20
DUAL						
LTC6081IMS8#PBF	6	0.07	1	8-MSOP	56M9790	4.21
LTC6087HMS8#PBF	6	0.33	7.2	8-MSOP	56M9815	2.23
LTC6241CS8#PBF	6	0.04	10	8-SOIC	56M9989	2.52
LTC6241HVCS8#PBF	12	0.04	10	8-SOIC	57M0002	4.40
LTC6244CMS8#PBF	3.5	0.04	35	8-MSOP	57M0070	3.32
LTC6244HDD#PBF	5	0.1	17	8-QFN	24R3335	3.82
LTC6244IMS8#PBF	6	0.04	35	8-MSOP	57M0098	3.82
LT1366CS8#PBF	36	0.15	0.13	8-NSOIC	57M3523	7.28
LT1490ACS8#PBF	44	0.11	0.06	8-NSOIC	57M4410	3.88
LT1490CS8#PBF	44	0.11	0.06	8-NSOIC	57M4442	4.13
LT1495IS8#PBF	36	0.15	0.001	8-NSOIC	57M4532	6.25
LT1498CS8#PBF	36	0.15	4.5	8-NSOIC	57M4562	6.93
LT1498IS8#PBF	36	0.15	4.5	8-NSOIC	57M4568	7.01
LT1495CS8#PBF	36	0.15	0.001	8-SOIC	57M4522	5.40
LT1498CN8#PBF	36	0.15	4.5	8-PDIP	57M4560	6.67
LT1630CN8#PBF	36	0.15	9.2	8-PDIP	57M5278	6.67
LT1632CN8#PBF	36	0.4	45	8-PDIP	57M5298	3.70
LT1632CS8#PBF	36	1.35	45	8-SOIC	57M5300	6.97
LT1638CS8#PBF	44	0.2	0.38	8-NSOIC	57M5494	4.13
LT1638HS8#PBF	44	0.2	0.38	8-NSOIC	57M5498	5.30
LT1638IS8#PBF	44	0.2	0.38	8-NSOIC	57M5512	5.10
LT1810CMS8#PBF	12.6	0.6	300	8-MSOP	57M6859	5.79
LT1881CS8#PBF	40	0.025	0.35	8-SOIC	57M7082	5.78
LT1884ACS8#PBF	40	0.025	1	8-SOIC	57M7102	8.10
LT6001IMS8#PBF	18	0.2	0.015	8-MSOP	57M8869	3.01
LT6004IMS8#PBF	16	0.175	0.0013	8-MSOP	57M8919	2.40
LT6011ACS8#PBF	40	0.02	0.09	8-SOIC	57M8981	4.37
LT6011CMS8#PBF	40	0.02	0.09	8-MSOP	57M8997	3.32
LT6014ACS8#PBF	40	0.02	0.2	8-SOIC	57M9085	4.37
LT6014CS8#PBF	40	0.02	0.2	8-SOIC	57M9101	3.32
LT1804CDD#PBF	12.6	0.35	100	8-DFN	57M6787	2.55
LT1804CS8#PBF	12.6	0.35	100	8-SOIC	57M6791	3.87
LT1884AIS8#PBF	36	0.05	1	8-SOIC	57M7108	5.05
LT6237CDD#PBF	12.6	0.1	70	8-DFN	55W6772	2.77
LT6237HDD#PBF	12.6	0.1	70	8-DFN	55W6776	3.69
LT6237HMS8#PBF	12.6	0.1	70	8-MSOP	55W6778	3.69
LT6237IDD#PBF	12.6	0.1	70	8-DFN	55W6780	3.21
LT6237IMS8#PBF	12.6	0.1	70	8-MSOP	55W6782	3.21
QUAD						
LT1367CS#PBF	36	0.15	0.13	14-NSOIC	57M3527	11.43
LT1496CS#PBF	36	0.15	0.001	14-SOIC	57M4538	7.02
LT1499IS#PBF	15	0.475	4.5	14-SOIC	57M4576	12.94
LT1674CS#PBF	36	0.15	0.005	14-SOIC	57M5649	7.02
LT1882CS#PBF	40	0.03	0.35	14-SOIC	57M7092	10.66
LT1882HS#PBF	40	0.3	0.35	14-SOIC	51R1533	14.03
LT1882MPS#PBF	40	0.3	0.35	14-SOIC	51R1534	28.92
LT1885CS#PBF	40	0.03	0.9	14-SOIC	57M7124	10.66
LT6005IGN#PBF	16	0.19	0.0013	16-TSSOP	57M8943	3.87
LT6012ACS#PBF	40	0.02	0.09	14-SOIC	57M9021	6.63
LT6012CS#PBF	40	0.02	0.09	14-SOIC	57M9037	5.89
LT1633CS#PBF	15	1350	45	14-SOIC	57M5310	12.69

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ZERO-DRIFT OPERATIONAL AMPLIFIERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Mfg. Part No.	No. of Circuits	Supply (V)	Slew Rate (V/µs)	Package	Stock No.	Price Each 1-24
● LTC1050HS8#PBF	1	18	4	8-SOIC	55M8944	6.48
● LTC2050IS8#PBF	1	7	2	8-SOIC	56M4574	2.65
● LTC1049CS8#PBF	1	18	0.8	8-SOIC	55M8930	5.44
● LTC1049CN8#PBF	1	16.5	0.8	8-DIP	55M8928	4.32
● LTC1052CSW#PBF	1	18	4	16-SOIC	55M8958	10.49
● LTC1150CN8#PBF	1	32	3	8-PDIP	55M9396	7.40
● LTC1150CS8#PBF	1	32	3	8-NSOIC	55M9398	8.83
● LTC2050CS8#PBF	1	7	2	8-SOIC	56M4522	2.40
● LTC2050HVCS8#PBF	1	12	2	8-SOIC	56M4542	3.01
● LTC1100CN8#PBF	1	18	3	8-DIP	55M9248	12.39
● LT1167AIS8#PBF	1	18	1.2	8-SOIC	57M2299	12.77
● LTC2053CMS8#PBF	1	11	0.2	8-MSOP	56M4714	6.41
● LTC2053CMS8-SYNC#PBF	1	11	0.2	8-MSOP	56M4711	6.79
● LTC2053HMS8#PBF	1	11	0.2	8-MSOP	56M4722	7.92
● LTC2053IMS8#PBF	1	11	0.2	8-NSOIC	56M4734	7.40
● LTC1051CSW#PBF	2	16.5	4	16-SOIC	55M8950	9.61
● LTC1151CN8#PBF	2	18	2.5	8-DIP	55M9402	11.67
● LTC2051HS8#PBF	2	12	2	8-SOIC	56M4598	4.52
● LTC2051HVIMS8#PBF	2	12	2	8-MSOP	56M4634	6.02
● LTC1151CSW#PBF	2	36	2.5	16-SOIC	55M9404	13.49
● LTC2051CDD#PBF	2	7	2	8-DFN	56M4578	4.77
● LTC2051HMS8#PBF	2	7	2	8-MSOP	56M4594	4.76
● LTC2051HVCS8#PBF	2	12	2	8-NSOIC	56M4614	5.28
● LTC2051HVHMS8#PBF	2	12	2	8-MSOP	56M4618	6.02
● LTC1053CSW#PBF	4	16.5	4	18-SOIC	55M8964	16.20
● LTC2052HVCS#PBF	4	6	2	14-SOIC	56M4678	9.84
● LTC1053CN#PBF	4	36	4	14-DIP	55M8962	13.58
● LTC2052CS#PBF	4	7	2	14-SOIC	56M4662	7.77
ZERO DRIFT, LOW NOISE						
● LTC1250CN8#PBF	1	18	10	8-DIP	55M9699	5.51

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INSTRUMENTAL AMPLIFIERS

RoHS Compliant Available

MICROCHIP

Mfg. Part No.	Supply Voltage Range	Gain (V/V)	Package	Stock No.	Price Each 1-25
● MCP6N11T-001E/MNY	1.8V to 5.5V	1	8-TDFN	75T9305	1.35
● MCP6N11-001E/SN	1.8V to 5.5V	1	8-SOIC	47T5277	1.35
● MCP6N11T-002E/MNY	1.8V to 5.5V	2	8-TDFN	75T9306	1.35
● MCP6N11-002E/SN	1.8V to 5.5V	2	8-SOIC	47T5278	1.35
● MCP6N11T-005E/MNY	1.8V to 5.5V	5	8-TDFN	75T9307	1.35
● MCP6N11-005E/SN	1.8V to 5.5V	5	8-SOIC	47T5279	1.35
● MCP6N11T-010E/MNY	1.8V to 5.5V	10	8-TDFN	75T9308	1.35
● MCP6N11-010E/SN	1.8V to 5.5V	10	8-SOIC	47T5280	1.35
● MCP6N11T-100E/MNY	1.8V to 5.5V	100	8-TDFN	75T9309	1.35
● MCP6N11-100E/SN	1.8V to 5.5V	100	8-SOIC	47T5281	1.35

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OPERATIONAL AMPLIFIERS

RoHS Compliant Available

MICROCHIP

Features:
- Operating Temperature: -40 to +125°C
- Surface Mountable Device

PRECISION

Mfg. Part No.	No. of Amps.	Bandwidth (MHZ)	Slew Rate (V/µs)	Supply Voltage (V)	Package	Stock No.	Price Each 1-25
● MCP6031-E/MS	1	0.01	0.004	1.8 - 5.5	8-MSOP	88K5634	0.72
● MCP6033-E/MS	1	0.01	0.004	1.8 - 5.5	8-MSOP	88K5645	0.74
● MCP6033-E/SN	1	0.01	0.004	1.8 - 5.5	8-SOIC	88K5647	0.74
● MCP6051T-E/MNY	1	0.385	0.15	1.8 - 6	8-DFN	07P9529	0.75
● MCP6051T-E/OT	1	0.385	0.15	1.8 - 6	5-SOT-23	23T2816	0.65
● MCP6071-E/SN	1	1.2	0.5	1.8 - 6	8-SOIC	07P9548	0.64
● MCP6061T-E/MNY	1	0.73	0.25	1.8 - 6	8-DFN	07P9539	0.71
● MCP6061T-E/OT	1	0.73	0.25	1.8 - 6	5-SOT-23	23T2817	0.62
● MCP6071T-E/MNY	1	1.2	0.5	1.8 - 6	8-DFN	07P9549	0.68
● MCP6071T-E/OT	1	1.2	0.5	1.8 - 6	5-SOT-23	23T2818	0.59
● MCP6032-E/MS	2	1.2	0.004	1.8 - 5.5	8-MSOP	88K5640	0.96

➤CONTINUED➤

OPERATIONAL AMPLIFIERS (CONT.)

Mfg. Part No.	No. of Amps.	Bandwidth (MHZ)	Slew Rate (V/µs)	Supply Voltage (V)	Package	Stock No.	Price Each 1-25
● MCP6072-E/SN	2	1.2	0.5	1.8 - 6	8-SOIC	07P9551	0.87
● MCP6072T-E/MNY	2	1.2	0.5	1.8 - 6	8-DFN	07P9552	0.92
● MCP6034-E/ST	4	0.01	0.004	1.8 - 5.5	14-TSSOP	88K5652	1.70
● MCP6054-E/SL	4	0.385	0.15	1.8 - 6	14-SOIC	07P9534	1.69
● MCP6064-E/SL	4	0.73	0.25	1.8 - 6	14-SOIC	07P9544	1.65
● MCP6074-E/SL	4	1.2	0.5	1.8 - 6	14-SOIC	07P9554	1.62
HIGH-SPEED							
● MCP651-E/SN	1	50	30	2.5 - 5.5	8-SOIC	77M3038	1.69
● MCP655-E/UN	2	50	30	2.5 - 5.5	10-MSOP	77M3045	2.21
GENERAL PURPOSE							
● MCP6001RT-E/OT	1	1	0.6	1.8 - 6	5-SOT-23	84R5181	0.29
● MCP6001T-E/LT	1	1	0.6	1.8 - 6	5-SC-70	84R5182	0.32
● MCP6001UT-E/OT	1	1	0.6	1.8 - 6	5-SOT-23	84R5183	0.29
● MCP6401T-E/LT	1	1	0.5	1.8 - 6	5-SC-70	73R3629	0.39
● MCP6L01RT-E/OT	1	1	0.6	1.8 - 6	5-SC-70	08R1810	0.25
● MCP6L01UT-E/OT	1	1	0.6	1.8 - 6	5-SOT-23	08R1813	0.25
● MCP6L1T-E/SN	1	2.8	2.3	2.7 - 6	8-SOIC	08R1818	0.40
● MCP6L71T-E/OT	1	2	0.9	2 - 6	5-SOT-23	08R1823	0.37
● MCP6L71T-E/SN	1	2	0.9	2 - 6	8-SOIC	08R1824	0.45
● MCP6L71RT-E/OT	1	2	0.9	2 - 6	5-SOT-23	08R1821	0.37
● MCP652-E/MF	2	50	30	2.5 - 5.5	8-DFN	77M3040	2.16
● MCP655-E/MF	2	50	30	2.5 - 5.5	10-DFN	77M3044	2.21
● MCP6L72T-E/SN	2	2	0.9	2 - 6	8-SOIC	08R1826	0.59
CMOS							
● MCP601RT-E/OT	1	2.8	2.3	2.7 - 6	5-SOT-23	84R5184	0.44
● MCP6021RT-E/OT	1	10	7	2.5 - 5.5	5-SOT-23	84R6269	0.99
● MCP6021T-E/OT	1	10	7	2.5 - 5.5	5-SOT-23	84R5185	0.99
● MCP601-E/P	1	2.8	2.3	2.7 - 6	8-DIP	88H9864	0.48
● MCP601-E/SN	1	2.8	2.3	2.7 - 6	8-SOIC	88H9865	0.48
● MCP603-E/P	1	2.8	2.3	2.7 - 6	8-DIP	88H9895	0.50
● MCP603-E/SN	1	2.8	2.3	2.7 - 6	8-SOIC	88H9896	0.50
● MCP603T-E/CH	1	2.8	2.3	2.7 - 6	6-SOT-23	88H9898	0.44
● MCP606-I/ST	1	0.155	0.08	2.5 - 6	8-TSSOP	96K3740	0.72
● MCP6402-E/SN	1	1	0.5	1.8 - 6	8-SOIC	79R3454	0.44
● MCP6402T-E/MNY	1	1	0.5	1.8 - 6	8-TDFN	84R6072	0.47
● MCP602-E/P	2	2.8	2.3	2.7 - 6	8-DIP	88H9870	0.63
● MCP602-E/SN	2	2.8	2.3	2.7 - 6	8-SOIC	88H9871	0.63
● MCP602-E/ST	2	2.8	2.3	2.7 - 6	8-TSSOP	88H9872	0.63
● MCP6404-E/SL	2	1	0.5	1.8 - 6	14-SOIC	79R3460	0.59
● MCP6404-E/ST	2	1	0.5	1.8 - 6	14-TSSOP	79R3461	0.59
● MCP604-E/P	4	2.8	2.3	2.7 - 6	14-DIP	88H9902	1.16
● MCP604-E/ST	4	2.8	2.3	2.7 - 6	14-TSSOP	88H9904	1.16
WIDEBAND							
● MCP6L91RT-E/OT	1	10	7	2.4 - 6	5-SOT-23	08R1829	0.48
● MCP6L91T-E/OT	1	10	7	2.4 - 6	5-SOT-23	08R1831	0.48
● MCP6L91T-E/SN	1	10	7	2.4 - 6	8-SOIC	08R1832	0.59
● MCP6L92T-E/SN	2	10	7	2.4 - 6	8-SOIC	08R1834	0.78
● MCP6L94T-E/SL	4	10	7	2.4 - 6	14-SOIC	08R1835	1.37
HIGH GAIN: 124 dB							
● MCP633-E/SN	1	24	10	2.5 - 5.5	8-SOIC	24R6836	0.80
● MCP632-E/SN	2	24	10	2.5 - 5.5	8-SOIC	24R6833	1.01
● MCP632-E/MF	2	24	10	2.5 - 5.5	8-DFN	24R6832	1.05
● MCP635-E/MF	2	24	10	2.5 - 5.5	10-DFN	24R6838	1.08
● MCP662-E/MF	2	60	32	2.5 - 5.5	8-DFN	24R6844	1.32
● MCP665-E/MF	2	60	32	2.5 - 5.5	10-DFN	24R6850	1.35
LOW POWER							
● MCP616-I/MS	1	0.19	0.08	2.3 - 5.5	8-MSOP	92C4239	0.78
● MCP618-I/MS	1	0.19	0.08	2.3 - 5.5	8-MSOP	92C4243	0.83
● MCP6441T-E/LT	1	0.9	0.003	1.4 - 6	5-SC-70	18T1888	0.68
● MCP6441T-E/OT	1	0.9	0.003	1.4 - 6	5-SOT-23	18T1889	0.62
● MCP6H01-E/SN	1	1.2	0.8	3.5 - 16	8-SOIC	65R5503	0.63
● MCP6002-E/MS	2	1	0.6	1.8 - 6	8-MSOP	88H9854	0.36
● MCP6002T-I/MS	2	1	0.6	1.8 - 6	8-MSOP	72C4273	0.33
● MCP6H02-E/SN	2	1.2	0.8	3.5 - 16	8-SOIC	65R5506	0.89
● MCP6H02T-E/MNY	2	1.2	0.8	3.5 - 16	8-TDFN	18T1887	0.89
● MCP617-I/MS	2	0.19	0.08	2.3 - 5.5	8-MSOP	92C4241	1.02
● MCP6004-E/ST	4	1	0.6	1.8 - 6	14-TSSOP	88H9861	0.48
● MCP6004-I/ST	4	1	0.6	1.8 - 6	14-TSSOP	72C4277	0.44
RAIL TO RAIL							
● MCP6021-E/P	1	10	7	2.5 - 5.5	8-DIP	88H9875	1.02
● MCP6021-E/SN	1	10	7	2.5 - 5.5	8-SOIC	88H9876	1.02
● MCP6021-E/ST	1	10	7	2.5 - 5.5	8-TSSOP	88H9877	1.02
● MCP6023-E/P	1	10	7	2.5 - 5.5	8-DIP	88H9885	1.07

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OPERATIONAL AMPLIFIERS (CONT.)

RAIL TO RAIL

Mfg. Part No.	No. of Amps.	Bandwidth (MHZ)	Slew Rate (V/µs)	Supply Voltage (V)	Package	Stock No.	Price Each 1-25
MCP6023-E/SN	1	10	7	2.5 - 5.5	8-SOIC	88H9886	1.07
MCP6023-E/ST	1	10	7	2.5 - 5.5	8-TSSOP	88H9887	1.07
MCP6141-E/SN	1	0.1	0.024	1.4 - 6	8-SOIC	56J7447	0.60
MCP6143T-E/CH	1	0.1	0.024	1.4 - 6	6-SOT-23	69K0146	0.60
MCP6231-E/MS	1	0.3	0.15	1.8 - 6	8-MSOP	88H9907	0.32
MCP6271-E/MS	1	2	0.9	2 - 6	8-MSOP	68H9371	0.50
MCP6273-E/MS	1	2	0.9	2 - 6	8-MSOP	68H9381	0.53
MCP6273-E/P	1	2	0.9	2 - 6	8-DIP	68H9382	0.53
MCP6273T-E/CH	1	2	0.9	2 - 6	6-SOT-23	71J5305	0.44
MCP6281-E/MS	1	5	2.5	2.2 - 6	8-MSOP	68H9391	0.60
MCP6283-E/MS	1	5	2.5	2.2 - 6	8-MSOP	68H9401	0.65
MCP6283-E/P	1	5	2.5	2.2 - 6	8-DIP	68H9402	0.63
MCP6283T-E/CH	1	5	2.5	2.2 - 6	6-SOT-23	71J5308	0.50
MCP6291-E/MS	1	10	7	2.4 - 6	8-MSOP	68H9411	0.68
MCP6041-E/MS	1	0.014	0.003	1.4 - 6	8-MSOP	56J7422	0.60
MCP6041-E/P	1	0.014	0.003	1.4 - 6	8-DIP	56J7423	0.60
MCP6041-E/SN	1	0.014	0.003	1.4 - 6	8-SOIC	56J7424	0.60
MCP6041T-E/OT	1	0.014	0.003	1.4 - 6	5-SOT-23	56J7426	0.56
MCP6401RT-E/OT	1	1	0.5	1.8 - 6	5-SOT-23	53R0114	0.35
MCP6401UT-E/OT	1	1	0.5	1.8 - 6	5-SOT-23	63R7785	0.35
MCP6043-E/MS	1	0.014	0.003	1.4 - 6	8-MSOP	56J7433	0.63
MCP6043-E/P	1	0.014	0.003	1.4 - 6	8-DIP	56J7434	0.63
MCP6043-E/SN	1	0.014	0.003	1.4 - 6	8-SOIC	56J7435	0.63
MCP6231RT-E/OT	1	0.3	0.15	1.8 - 6	5-SOT-23	84R5186	0.30
MCP6231T-E/OT	1	0.3	0.15	1.8 - 6	5-SOT-23	84R5187	0.30
MCP6231UT-E/LT	1	0.3	0.15	1.8 - 6	5-SC-70	84R5188	0.32
MCP6231UT-E/OT	1	0.3	0.15	1.8 - 6	5-SOT-23	84R5189	0.30
MCP6241-E/MS	1	0.55	0.3	1.8 - 5.5	8-MSOP	88H9916	0.30
MCP6241RT-E/OT	1	0.55	0.3	1.8 - 5.5	5-SOT-23	84R5190	0.29
MCP6241T-E/OT	1	0.55	0.3	1.8 - 5.5	5-SOT-23	84R5191	0.29
MCP6241UT-E/LT	1	0.55	0.3	1.8 - 5.5	5-SC-70	84R5192	0.30
MCP6241UT-E/OT	1	0.55	0.3	1.8 - 5.5	5-SOT-23	84R6270	0.29
MCP6271T-E/OT	1	2	0.9	2 - 6	5-SOT-23	84R5193	0.42
MCP6281T-E/OT	1	5	2.5	2.2 - 6	5-SOT-23	84R5194	0.48
MCP6042-E/MS	2	0.014	0.003	1.4 - 6	8-MSOP	56J7428	0.80
MCP6042-E/P	2	0.014	0.003	1.4 - 6	8-DIP	56J7429	0.80
MCP6042-E/SN	2	0.014	0.003	1.4 - 6	8-SOIC	56J7430	0.80
MCP6022-E/SN	2	10	7	2.5 - 5.5	8-SOIC	88H9881	1.31
MCP6022-E/ST	2	10	7	2.5 - 5.5	8-TSSOP	88H9882	1.31
MCP6142-E/MS	2	0.1	0.024	1.4 - 6	8-MSOP	56J7450	0.80
MCP6142-E/P	2	0.1	0.024	1.4 - 6	8-DIP	56J7451	0.80
MCP6142-E/SN	2	0.1	0.024	1.4 - 6	8-SOIC	56J7452	0.80
MCP6232-E/MS	2	0.3	0.15	1.8 - 6	8-MSOP	08J8771	0.39
MCP6242-E/MS	2	0.55	0.3	1.8 - 5.5	8-MSOP	08J8782	0.36
MCP6272-E/MS	2	2	0.9	2 - 6	8-MSOP	68H9376	0.68
MCP6282-E/MS	2	5	2.5	2.2 - 6	8-MSOP	68H9396	0.80
MCP6292-E/MS	2	10	7	2.4 - 6	8-MSOP	68H9416	0.87
MCP6024-E/SL	4	10	7	2.5 - 5.5	14-SOIC	88H9891	1.91
MCP6024-E/ST	4	10	7	2.5 - 5.5	14-TSSOP	88H9892	1.91
MCP6044-E/P	4	0.014	0.003	1.4 - 6	14-DIP	56J7440	1.41
MCP6044-E/SL	4	0.014	0.003	1.4 - 6	14-SOIC	56J7441	1.41
MCP6044-E/ST	4	0.014	0.003	1.4 - 6	14-TSSOP	56J7442	1.41
MCP6144-E/P	4	0.1	0.024	1.4 - 6	14-DIP	56J7460	1.41
MCP6144-E/ST	4	0.1	0.024	1.4 - 6	14-TSSOP	56J7462	1.41
MCP6284-E/ST	4	5	2.5	2.2 - 6	14-TSSOP	68H9408	1.40
MCP6294-E/ST	4	10	7	2.4 - 6	14-TSSOP	68H9428	1.53
MCP6234-E/ST	4	0.3	0.15	1.8 - 6	14-TSSOP	56K7040	0.62
MCP6244-E/ST	4	0.55	0.3	1.8 - 5.5	14-TSSOP	56K7042	0.57
MCP6274-E/ST	4	2	0.9	2 - 6	14-TSSOP	68H9388	1.22
MCP664-E/ST	4	60	32	2.5 - 5.5	14-TSSOP	55T3287	1.96

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
MCP651EV-VOS	MCP651, OP-AMP, INPUT OFFSET, EVALUATION BOARD	25R7951	30.00

(155338)

OPERATIONAL AMPLIFIERS

RoHS Compliant Available

MICROCHIP

- Rail-to-Rail Output Swing
- Unity Gain Stable
- Low Bias Current
- Temperature Range: -40°C to +85°C
- Available on Tape and Reel; *Go online or call*

Gain bandwidth product: 1MHz. Operating voltage: 1.8V to 5.5V. I_Q (typical) = 140µA. V_{OS} = 7mV.

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-25
MCP6001T-I/OT	Single	5-SOT-23	72C4269	0.24
MCP6001RT-I/OT	Single	5-SOT-23	89K2098	0.24
MCP6293T-E/CH	Single	6-SOT-23	89K2103	0.57
MCP6002-I/P	Dual	8-PDIP	96K3734	0.33
MCP6002-I/SN	Dual	8-SOIC	63K5672	0.33
MCP6L02T-E/SN	Dual	8-SOIC	06R3492	0.31
MCP6004-I/P	Quad	14-DIP	61K2951	0.44
MCP6L04T-E/SL	Quad	14-SOIC	06R3493	0.40
Gain bandwidth product: 2.8MHz. Operating voltage: 2.7V to 5.5V. I_Q (typical) = 230µA. V_{OS} = 2mV.				
MCP601-I/P	Single	8-PDIP	69K7608	0.44
MCP601-I/SN	Single	8-SOIC	61K2952	0.44
MCP601T-I/OT	Single	8-TSSOP	73K1003	0.39
MCP602-I/P	Dual	8-PDIP	12C1812	0.57
MCP602-I/SN	Dual	8-SOIC	12C1813	0.57
MCP604-I/P	Quad	14-PDIP	12C1818	1.04
Gain bandwidth product: 10MHz. Operating voltage: 2.5V to 5.5V. I_Q (typical) = 1mA. V_{OS} = 500µV.				
MCP6021-I/SN	Single	8-SOIC	96K3736	1.02
MCP6024-I/P	Quad	14-PDIP	73K1004	1.91
MCP6024-I/SL	Quad	14-SOIC	61K2953	1.91
Gain bandwidth product: 150kHz. Operating voltage: 2.7V to 5.5V. Operating current: 20µA (typical). V_{OS} = <200µA (typical).				
MCP607-I/SN	Dual	8-SOIC	74K5406	0.98

(64686)

CMOS OPERATIONAL AMPLIFIERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Applications:
- ADC interface
- Photodiode amplifiers
- Active filters and buffers
- Low noise signal processing
- Medical instrumentation
- Sensor interface applications

Mfg. Part No.	Slew Rate Typ. (V/µs)	Supply Current (mA)	Offset Voltage (mV)	Package	Stock No.	Price Each 1-9
LMC660AIM/NOPB	1.1	0.38	3	14-SOIC	41K2685	2.72
LMC6062AIM/NOPB	0.035	0.04	0.1	8-SOIC	41K2614	3.10
LMC6064IM/NOPB	0.035	0.08	0.1	14-NSOIC	41K2621	5.20
LMC660CMX/NOPB	1.1	0.38	6	14-SOIC	41K2689	2.02
LMC662AIM/NOPB	1.1	0.38	3	8-NSOIC	41K2691	1.88
LMC662AIMX/NOPB	1.1	0.38	3	8-SO	41K2692	1.60
LMC662AIN/NOPB	1.1	0.38	3	8-DIP	41K2693	1.81
LMC662CM/NOPB	1.1	0.38	6	8-SO	41K2694	1.67
LMC6084IM/NOPB	1.5	0.45	0.8	14-NSOIC	41K2637	6.61
LMC6484AIN/NOPB	1.3	0.5	3	14-DIP	41K2665	3.08
LMC6484IN/NOPB	1.3	0.5	3	14-DIP	41K2668	2.83
LMV831MGE/NOPB	2	0.24	1	5-SC-70	08P4295	1.41
LPC661IM/NOPB	0.11	0.055	6	8-SOIC	41K6513	2.12
LPC662AIM/NOPB	0.11	0.043	3	8-SOIC	41K6515	2.89
LMV793MF/NOPB	35	1.15	1.35	5-SOT-23	46M5459	1.31

(176052)

CURRENT SENSE AMPLIFIERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Applications:
- High-side current sense
- Vehicle current measurement
- Power management

Mfg. Part No.	Vcm (V)	Supply Voltage (V)	Supply Current (mA)	Package	Stock No.	Price Each 1-9
INA230AIRGTT	28	2.7 - 5.5	330	16-QFN	93T6798	3.22
LMP8645HVMKE/NOPB	76	2.7 - 12	3.1	6-TSOT-23	55R3749	2.94
LMP8645MKE/NOPB	42	2.7 - 12	0.61	6-TSOT-23	55R3752	2.66
LMP8602QMA/NOPB	60	3 - 5.5	1.5	8-SOIC	76R6955	3.37
LMP8640MKE-F/NOPB	42	2.7 - 12	2.3	6-TSOT	99R3321	2.66
LMP8640MKE-H/NOPB	42	2.7 - 12	2.3	6-TSOT	99R3322	1.72
LMP8640HVMKE-F/NOPB	76	2.7 - 12	2.3	6-TSOT	99R3317	2.94
LMP8640HVMKE-H/NOPB	76	2.7 - 12	2.3	6-TSOT	99R3319	2.94

(177449)

DIFFERENTIAL AMPLIFIERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Applications:

- Single-ended to differential converter
- High speed differential signaling
- IF/RF and baseband gain blocks
- SAW filter buffer/driver
- Oscilloscope Probes
- Automotive Safety Applications
- Video over twisted pari
- Differential line driver

Mfg. Part No.	Supply Voltage (V)	Bandwidth (GHz)	Slew Rate (V/µs)	Package	Stock No.	Price Each 1-9
● LMH6554LEE/NOPB	4.7 - 5.25	2.8	6200	14-LLP	55R3712	8.31
● THS4531AID	2.5 - 5.5	36	220	8-SOIC	55W7338	3.15
● THS4531IDGK	2.5 - 5.5	36	220	8-MSOP	92T2315	3.22

EVALUATION BOARD

Mfg. Part No.	Description	Stock No.	Price Each
THS4531ADGKEVM	THS4531 EVALUATION BOARD	55W7337	100.98

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GENERAL PURPOSE OPERATIONAL AMPLIFIERS

RoHS Compliant Available

TEXAS INSTRUMENTS

FEATURED CMOS INPUT OPERATIONAL AMPLIFIERS

Mfg. Part No.	Supply Voltage	TCVos Typ. (nV/°C)	Offset Voltage (uV)	Package	Stock No.	Price Each 1-9
● LMC6001AIN/NOPB	4.5V to 15.5V	2.5	0.35	8-DIP	41K2572	17.80
● LMC6062IN/NOPB	4.5V to 15.5V	1	0.35	8-DIP	41K2618	2.75
● LMV751M5/NOPB	2.7V to 5V	1	1	5-SOT-23	41K3179	1.92
● LMC6062IM/NOPB	4.5V to 15.5V	1	0.35	8-NSOIC	41K2616	2.87
● LMP7702MA/NOPB	2.7V to 12V	1	0.22	8-SOIC	55M4624	3.56
● LMC6061AIM/NOPB	4.5V to 15.5V	1	0.35	8-NSOIC	41K2610	1.95
● LMC6064IN/NOPB	4.5V to 15V	1	0.35	14-DIP	41K2623	4.99
● LMP7715MF/NOPB	1.8V to 5.5V	1	0.15	5-SOT-23	99K2277	2.04
● LMP7716MM/NOPB	1.8V to 5.5V	1.8	0.15	8-SOIC	99K2281	2.69
● LMP7701MF/NOPB	2.7V to 12V	1	0.2	5-SOT-23	69K2293	2.56
● LMP7702MM/NOPB	2.7V to 12V	1	0.22	8-SOIC	99K2273	2.96
● LMP7704MT/NOPB	2.7V to 12V	1	0.22	14-TSSOP	79K7710	4.75
● LMV772MM/NOPB	2.7V to 5.5V	0.35	1	8-MSOP	41K3193	1.74
● LMV796MF/NOPB	1.8V to 5.5V	1	1.35	5-SOT-23	99K2296	1.31
● LMV797MM/NOPB	1.8V to 5.5V	1.8	1.35	8-SOIC	99K2300	1.63
● LM6211MF/NOPB	5V to 24V	2	2.5	5-SOT-23	99K2539	2.80

GENERAL PURPOSE OPERATIONAL AMPLIFIERS

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● LF347BN/NOPB	Wide Bandwidth, Quad JFET Input Op Amps	14-DIP	41K2538	2.09
● TL082CP/NOPB	Wide Bandwidth, Quad JFET Input Op Amps	8-DIP	41K8447	1.43
● LM675T/NOPB	Wide BW and Low Input Offset Voltage Power Op Amp	5-TO-220	41K6255	5.41
● LM837M/NOPB	Low Noise Quad Op Amp	14-SOIC	41K6428	1.66
● LM13700M/NOPB	Dual Operational Transconductance Amp w/Linearizing Diodes & Buffers	16-NSOIC	41K3505	1.36
● LM13700N/NOPB	Dual Operational	16-MDIP	41K3507	2.00
● LM1815M/NOPB	Amp w/Linearizing	14-SOIC	41K3517	4.12
● LM301AN/NOPB	Operational Amplifier	8-DIP	41K4643	0.88
● LM318M/NOPB	Precision High Speed Operational Amplifier	8-NSOIC	41K4664	1.26
● LM321MF/NOPB	Low Power Single Op Amp	5-SOT-23	37K8530	0.71
● LM4250CN/NOPB	Programmable Operational Amplifier	8-MiniDIP	41K5503	1.15
● LM8261M5/NOPB	Rail to Rail Input and Output, High Output Current and Unlimited Cap Load Op Amp	5-SOT-23	41K6397	2.60
● LM8262MM/NOPB	Rail to Rail Input and Output, High Output Current and Unlimited Cap Load Op Amp	8-MSOP	41K6399	2.69
● LM8272MM/NOPB	Rail to Rail Input and Output, High Output Current and Unlimited Cap Load Op Amp	8-MSOP	41K6401	2.96
● LMH6624MF/NOPB	w/ Rail-to-Rail	5-SOT-23	41K2796	4.23
● LMV722MM/NOPB	10MHz, Low Noise, Low Voltage, and Low Power Op Amp	8-MSOP	41K3156	1.58
● LF347M/NOPB	Wide Bandwidth, Quad JFET Input Op Amps	14-NSOIC	41K2539	2.63
● LF347N/NOPB	Wide Bandwidth, QuadJFET Input Op Amps	14-DIP	41K2541	1.89
● LF353N/NOPB	Wide Bandwidth, Dual JFET Input Op Amps	8-DIP	41K2544	1.06
● LF356M/NOPB	JFET Input Op Amps	8-NSOIC	41K2545	1.03
● LF356N/NOPB	JFET Input Op Amps	8-DIP	41K2547	0.89
● LF411ACN/NOPB	Low Offset, Low Drift, JFET Input Op Amps	8-DIP	41K2552	5.18
● LF411CN/NOPB	Low Offset, Low Drift, JFET Input Op Amps	8-DIP	41K2553	1.26
● LF412ACN/NOPB	Low Offset, Low Drift, Dual JFET Input Op Amps	8-DIP	41K2554	4.26
● LF412CN/NOPB	Low Offset, Low Drift, Dual JFET Input Op Amps	8-DIP	41K2555	1.53
● LM1458N/NOPB	Dual Op Amps	8-DIP	41K3510	0.98
● LM318N/NOPB	Precision High Speed Op Amps	8-DIP	41K4666	1.08
● LM741CN/NOPB	Single Op Amps	8-DIP	41K6294	0.70

➤ CONTINUED ➤

GENERAL PURPOSE OPERATIONAL AMPLIFIERS (CONT.)

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● TL082CM/NOPB	Wide Bandwidth, Quad JFET Input Op Amps	8-NSOIC	41K8445	1.31
● LMV862MM/NOPB	30 MHz Low Power CMOS, EMI Hardened Op Amps		07P5346	2.45
● LMC6492BEM/NOPB	CMOS Rail-to-Rail Input and Output OP AMP	8-SOIC	41K2671	2.86
● LM7332MA/NOPB	Dual Rail-to-Rail Input/Output, Wide Voltage Range, High Output Power	8-NSOIC	08N3588	3.15
● LM7321MF/NOPB	Dual Rail-to-Rail Input/Output, High Output Current, Unlimited Capacitive Load	5-SOT-23	11N9285	2.21

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HIGH SPEED OPERATIONAL AMPLIFIERS

RoHS Compliant Available

TEXAS INSTRUMENTS

FEATURED HIGH SPEED OPERATIONAL AMPLIFIERS

Mfg. Part No.	Gain BW (MHz)	Slew Rate Typ. (V/µs)	Supply Voltage (V) Min.	Supply Voltage (V) Max.	Pkg.	Stock No.	Price Each 1-9
● LMH6647MF/NOPB	47	22	2.5	12	6-SOT-23	41K2832	1.69
● LMH6629SDE/NOPB	900	1600	2.7	5.5	8-LLP	84R3786	4.89
● LMH6640MF/NOPB	62	170	4.5	16	5-SOT-23	41K2808	3.03
● LMH6672MA/NOPB	90	135	3	12	8-NSOIC	41K2850	3.72
● LMH6682MA/NOPB	190	940	3	12	8-SOIC	41K2856	2.48
● LMH6683MA/NOPB	190	940	3	12	14-SOIC	41K2860	3.39
● LMH6628MA/NOPB	300	550	5	12	8-SOIC	41K2802	4.06
● LMH6609MF/NOPB	900	1400	6	12	5-SOT-23	41K2788	2.42
● LMH6646MM/NOPB	55	22	2.5	12	8-MSOP	41K2828	2.69
● LMH6642MA/NOPB	130	135	2.7	12.8	8-NSOIC	41K2810	1.96
● LMH6642MF/NOPB	130	135	2.7	12.8	5-SOT-23	41K2812	1.63
● LMH6643MA/NOPB	130	135	2.7	12.8	8-NSOIC	41K2814	2.21
● LMH6643MAX/NOPB	130	135	2.7	12.8	8-NSOIC	41K2815	1.84
● LMH6643MM/NOPB	130	135	2.7	12.8	8-MSOP	41K2816	1.84
● LMH6644MA/NOPB	130	135	2.7	12.8	14-NSOIC	41K2818	3.56
● LMH6644MT/NOPB	130	135	2.7	12.8	14-TSSOP	41K2820	3.56
● LMH6654MF/NOPB	260	200	4.5	12	5-SOT-23	41K2836	2.21
● LMH6655MM/NOPB	260	200	4.5	12	8-SOIC	41K2840	1.39
● LMH6658MA/NOPB	270	700	3	12	8-SOIC	41K2846	2.91
● LMH6611MKE/NOPB	345	460	2.7	11	6-SOT-23	84M8052	2.19
● LMH6720MF/NOPB	400	1800	10	12	6-SOT-23	41K2884	2.18
● LMH6722MA/NOPB	400	1800	10	12	14-SOIC	41K2886	4.03
● LMH6714MA/NOPB	400	1800	10	12	8-SOIC	41K2874	2.38
● LMH6715MA/NOPB	480	1300	10	12	8-SOIC	41K2878	2.84
● LMH6703MA/NOPB	1200	4200	12	8	8-SOIC	41K2868	3.70
● LMH6703MF/NOPB	1200	4200	12	8	6-SOT-23	65K5777	3.08
LMH6624MF	1500	400	5	12	5-SOT-23	26H2733	2.99
● LMH6624MF/NOPB	1500	400	5	12	5-SOT-23	41K2796	4.23
● LMH6702MA/NOPB	1700	3100	10	12	8-NSOIC	41K2864	3.96
● LMH6702MF/NOPB	1700	3100	10	12	5-SOT-23	41K2866	3.30

FEATURED VIDEO AMPLIFIERS

Mfg. Part No.	Gain BW (MHz)	Slew Rate Typ. (V/µs)	Supply Voltage (V) Min.	Supply Voltage (V) Max.	Pkg.	Stock No.	Price Each 1-9
● LMH6714MA/NOPB	400	1800	10	12	8-SOIC	41K2874	2.38
● LMH6739MQ/NOPB	750	3300	8	12	16-SSOP	41K2902	6.28
● LMH6683MA/NOPB	190	940	3	12	14-SOIC	41K2860	3.39

FEATURED HIGH SPEED, LOW NOISE OPERATIONAL AMPLIFIERS

Mfg. Part No.	Voltage Noise (nV/√Hz)	Slew Rate (V/us)	Gain BW (MHz)	Pkg.	Stock No.	Price Each 1-9
● LMH6628MA/NOPB	2	550	300	8-SOIC	41K2802	4.06

FEATURED HIGH SPEED, LOW NOISE OPERATIONAL AMPLIFIERS

Mfg. Part No.	Voltage Noise (nV/√Hz)	Slew Rate (V/us)	Gain BW (MHz)	Pkg.	Stock No.	Price Each 1-9
● LMH6624MA/NOPB	0.92	400	1500	8-SOIC	41K2794	5.06
● LMH6624MF/NOPB	0.92	400	1500	5-SOT-23	41K2796	4.23
● LMH6702MA/NOPB	1.83	3100	1700	8-NSOIC	41K2864	3.96
● LMH6702MF/NOPB	1.83	3100	1700	5-SOT-23	41K2866	3.30
● LMH6703MA/NOPB	2.3	4200	1200	8-SOIC	41K2868	3.70
● LMH6703MF/NOPB	2.3	4200	1200	6-SOT-23	65K5777	3.08

➤ CONTINUED ➤

HIGH SPEED OPERATIONAL AMPLIFIERS (CONT.)

FEATURED RAIL-to-RAIL OPERATIONAL AMPLIFIERS

Mfg. Part No.	Slew Rate	Supply Current (mA)	Gain BW (MHz)	Pkg.	Stock No.	Price Each 1-9
LM6181IM-8/NOPB	1400 V/µs	7.5	100	8-NSOIC	41K6223	3.34
LMC6462AIM/NOPB	0.015 V/µs	0.02	0.05	8-NSOIC	41K2644	3.03
LMC6462BIN/NOPB	0.015 V/µs	0.02	0.05	8-DIP	41K2649	2.77
LMC6464AIM/NOPB	0.015 V/µs	0.02	0.05	14-NSOIC	41K2650	5.85
LMC6464BIM/NOPB	0.015 V/µs	0.02	0.05	14-SOIC	41K2652	4.82
LMC6464BIN/NOPB	0.015 V/µs	0.02	0.05	14-DIP	41K2654	4.61
LMH6645MF/NOPB	22 V/µs	0.725	55	6-SOT-23	41K2824	1.83
LMH6646MA/NOPB	22 V/µs	0.725	55	8-NSOIC	41K2826	2.84
LMH6646MM/NOPB	22 V/µs	0.725	55	8-MSOP	41K2828	2.69

HIGH OUTPUT, 100mA

Mfg. Part No.	Slew Rate (Typ.) (V/µs)	Supply Voltage Max. (V)	Pkg/Pins	Stock No.	Price Each 1-9
LM6171BIN/NOPB	3600	36	8-DIP	41K6219	2.89

HIGH SPEED, 50MHz

LM6171AIM/NOPB	3600	36	8-SO	41K6215	4.03
LM6171BIM/NOPB	3600	36	8-NSOIC	41K6217	3.44
LM6172IM/NOPB	3000	36	8-SOIC	41K6220	4.54
LM6172IN/NOPB	3000	36	8-DIP	41K6222	3.82
LM6181IM-8/NOPB	1400	32	8-NSOIC	41K6223	3.34
LM6181IN/NOPB	1400	32	8-DIP	41K6227	2.80
LM7121IM/NOPB	1300	33	8-NSOIC	41K6268	2.89
LM7171AIM/NOPB	4100	36	8-NSOIC	41K6272	3.82
LM7171BIM/NOPB	4100	36	8-NSOIC	41K6275	3.01
LM7171BIN/NOPB	4100	36	8-DIP	41K6277	2.89
LM7372MR/NOPB	3000	32	8-PSOP	41K6288	5.39

(71012)

OPERATIONAL AMPLIFIERS WITH SHUT DOWN

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Gain BW (MHz)	Supply Volt. (V) Min.	Supply Volt. (V) Max.	Pkg.	Stock No.	Price Each 1-9
LP324MT/NOPB	0.1	3	32	14-TSSOP	41K7328	1.43
LMV341MG/NOPB	1	5	2.7	6-SC70	41K3096	0.92
LMC8101MM/NOPB	1	10	2.7	8-SOIC	41K2741	1.36
LMV710M5/NOPB	5	2.7	12	5-SOT-23	41K3135	1.14
LMV712MM/NOPB	5	5	2.7	10-MSOP	41K3141	1.50
LPV521MGE/NOPB	6.2	1.6	5.5	5-SC-70	51R2442	1.00
LMH6647MF/NOPB	47	2.5	12	6-SOT-23	41K2832	1.69
LMH6645MF/NOPB	55	2.5	12	6-SOT-23	41K2824	1.83
LMH6703MA/NOPB	1200	12	8	8-SOIC	41K2868	3.70
LMH6703MF/NOPB	1200	12	8	6-SOT-23	65K5777	3.08

(70375)

POWER OPERATIONAL AMPLIFIERS

RoHS Compliant Available

TEXAS INSTRUMENTS

FEATURED LOW POWER OPERATIONAL AMPLIFIERS

Mfg. Part No.	Supply Current (mA)	Supply Voltage Range (V) Min.	Supply Voltage Range (V) Max.	Package	Stock No.	Price Each 1-9
LM148J/PB	2.4	...	22	14-DIP	13B5466	9.98
LM324AM/NOPB	0.085	1.5	16	14-NSOIC	41K4684	1.18
LM392M/NOPB	1	1.5	16	8-NSOIC	41K5114	1.35
LM6172IMX	4.6	5.5	36	8-SOIC	07B6863	5.32
LMV358M/NOPB	0.14	2.7	5.5	8-NSOIC	41K3106	0.89
LMV358MM/NOPB	0.14	2.7	5.5	8-MSOP	41K3107	0.84
LMV341MG/NOPB	0.107	5	2.7	6-SC70	41K3096	0.92
LMV651MG/NOPB	0.11	2.7	5.5	5-SC-70	99K2287	1.17
LMV934MA/NOPB	0.116	1.8	5	14-NSOIC	41K3217	1.96
LMV301MG/NOPB	0.163	1.8	5	5-SC-70	41K3078	0.31
LMV822M/NOPB	0.25	2.5	5.5	8-NSOIC	41K3201	1.55
LMV822MM/NOPB	0.25	2.5	5.5	8-MSOP	41K3202	1.46
LMV822MX/NOPB	0.25	2.5	5.5	8-SOIC	41K3204	1.46
LMV824M/NOPB	0.25	2.5	5.5	14-NSOIC	41K3205	1.63
LMV824MTX/NOPB	0.25	2.5	5.5	14-TSSOP	41K3207	1.53
LMV821M5/NOPB	0.3	2.5	5.5	5-SOT-23	41K3197	1.20
LMV751M5/NOPB	0.6	2.7	5.5	5-SOT-23	41K3179	1.92
LMV772MM/NOPB	0.6	2.7	5	8-MSOP	41K3193	1.74
LMV774MT/NOPB	0.6	2.7	5	14-TSSOP	41K3195	2.94

➤CONTINUED➤

POWER OPERATIONAL AMPLIFIERS (CONT.)

Mfg. Part No.	Supply Current (mA)	Supply Voltage Range (V) Min.	Supply Voltage Range (V) Max.	Package	Stock No.	Price Each 1-9
LM6588MA/NOPB	0.8	5	16	14-SOIC	41K6251	3.36
LMV722MM/NOPB	0.9	2.7	5	8-MSOP	41K3156	1.58
LMV2011MF/NOPB	0.93	2.7	5	5-SOT-23	41K3064	2.45
LMV721M5/NOPB	1.03	2.7	5	5-SOT-23	41K3145	1.41
LMV712MM/NOPB	1.17	5	2.7	10-MSOP	41K3141	1.50
LP324N/NOPB	0.085	1.5	16	14-DIP	41K7331	1.19

FEATURED MICROPOWER OPERATIONAL AMPLIFIERS

Mfg. Part No.	Supply Current (mA)	Supply Voltage Range (V) Min.	Supply Voltage Range (V) Max.	Gain BW (MHz)	Package	Stock No.	Price Each 1-9
LMC660CM/NOPB	2.7	5	16	1.4	14-NSOIC	41K2688	2.42
LMC660CN/NOPB	2.7	5	16	1.4	14-DIP	41K2690	2.32
LMC662CN/NOPB	1.6	5	16	1.4	8-DIP	41K2696	1.60
LMC6041IN/NOPB	0.014	4.5	15.5	0.075	8-DIP	41K2597	1.66
LMC6061AIM/NOPB	0.03	4.5	15	0.1	8-NSOIC	41K2610	1.95
LMC6062IM/NOPB	0.057	4.5	15	0.1	8-NSOIC	41K2616	2.87
LMC6062IN/NOPB	0.057	4.5	15	0.1	8-DIP	41K2618	2.75
LMV641MGE/NOPB	0.158	2.7	12	10	5-SC70	60M5670	1.85
LMV651MG/NOPB	0.11	2.7	5.5	12	5-SC-70	99K2287	1.17

LOW POWER OPERATIONAL AMPLIFIERS

Mfg. Part No.	Number of Circuits	Slew Rate Typ. (V/µs)	Supply Voltage Max. (V)	I_B Max. (nA)	Package	Stock No.	Price Each 1-9
LM7301IM5/NOPB	1	1.25	30	250	5-SOT-23	41K6282	2.29
LMC6001AIN/NOPB	1	1.5	15	0.0020, 0.0040	8-DIP	41K2572	17.80
LMC6081AIM/NOPB	1	1.5	16	0.10, 0.0040	8-NSOIC	41K2624	2.94
LMC6081IM/NOPB	1	1.5	16	0.10, 0.0040	8-NSOIC	41K2626	2.71
LMC6081IN/NOPB	1	1.5	16	0.10	8-DIP	41K2628	2.60
LMC6081IN/NOPB	1	1.5	16	0.0040	8-DIP	41K2628	2.60
LM7121IM5/NOPB	1	1300	+/-15	12000	5-SOT-23	41K6270	2.78
LM7301IM5/NOPB	1	1.25	32	200	5-SOT-23	41K6282	2.29
LM7301IM5X/NOPB	1	1.25	32	200	5-SOT-23	41K6283	2.29
LMV321M5X/NOPB	1	1	5.5	11	5-SOT-23	41K3081	0.84
LMH6714MF/NOPB	1	1800	12.5	1000	5-SOT-23	41K2876	1.99
LMC6482AIM/NOPB	2	1.3	15	0.0040	8-NSOIC	41K2655	2.17
LMC6482AIM/NOPB	2	1.3	15	0.0040	8-NSOIC	41K2655	2.17
LMC6482AIMX/NOPB	2	1.3	15	0.0040	8-SO	41K2656	1.88
LMC6482AIN/NOPB	2	1.3	15	0.0040	8-DIP	41K2657	2.10
LMC6482AIN/NOPB	2	1.3	15	0.0040	8-DIP	41K2657	2.10
LMC6482IMM/NOPB	2	1.3	15	0.0040	8-MSOP	41K2659	1.66
LMC6482IMX/NOPB	2	1.3	15	0.0040	8-SO	41K2661	1.66
LMC6482IM/NOPB	2	1.3	15	0.0040	8-NSOIC	41K2658	1.76
LMC6482IN/NOPB	2	1.3	15	0.0040	8-DIP	41K2662	1.69
LMC6082AIM/NOPB	2	1.5	16	0.0040	8-NSOIC	41K2629	4.27
LMC6082AIN/NOPB	2	1.5	16	0.0040	8-DIP	41K2631	4.13
LMC6032IM/NOPB	2	1.1	15	0.20	8-NSOIC	41K2578	1.10
LMC6032IN/NOPB	2	1.1	15	0.20	8-DIP	41K2580	0.91
LF442ACN/NOPB	2	1	40	3, 20	8-DIP	41K2556	4.90
LF442CN/NOPB	2	1	40	3, 20	8-DIP	41K2557	1.37
LM2904M/NOPB	2	0.1	26	500	8-NSOIC	41K4455	0.97
LM2904N/NOPB	2	0.1	26	500	8-DIP	41K4457	0.92
LM358AM/NOPB	2	0.1	32	500, 200	8-NSOIC	41K4886	0.91
LM358AMX/NOPB	2	0.1	32	500	8-SO	41K4887	0.87
LM358AN/NOPB	2	0.1	32	500, 200	8-DIP	41K4888	0.98
LM358M/NOPB	2	0.1	32	500, 200	8-NSOIC	41K4889	1.00
LM358MX/NOPB	2	0.1	32	500	8-SO	41K4890	0.83
LM358N/NOPB	2	0.1	32	500, 200	8-DIP	41K4891	0.93
LM6132AIM/NOPB	2	14	24	300, 350	8-NSOIC	41K6184	3.96
LM6132BIM/NOPB	2	14	24	300	8-NSOIC	41K6186	3.56
LM6132BIN/NOPB	2	14	24	300, 350	8-DIP	41K6188	2.99
LM6142AIM/NOPB	2	25	24	15	8-SOIC	41K6198	5.99
LM6142BIM/NOPB	2	25	24	526	8-SOIC	41K6201	4.49
LF444ACN/NOPB	4	1	40	3	14-DIP	41K2558	2.91
LF444CM/NOPB	4	1	40	3	14-NSOIC	41K2559	1.99
LF444CN/NOPB	4	1	40	3	14-DIP	41K2561	1.69
LM2902M/NOPB	4	0.5	26	30	14-NSOIC	41K4443	1.24

➤CONTINUED➤

POWER OPERATIONAL AMPLIFIERS (CONT.)

Mfg. Part No.	Number of Circuits	Slew Rate Typ. (V/µs)	Supply Voltage Max. (V)	I_B Max. (nA)	Package	Stock No.	Price Each 1-9
● LM324AMX/NOPB	4	0.5	32	200	14-NSOIC	41K4685	0.98
● LM324AN/NOPB	4	0.5	32	500	14-DIP	41K4686	1.13
● LM324N/NOPB	4	0.5	32	500	14-DIP	41K4691	1.05
● LM324M/NOPB	4	0.5	32	200	14-NSOIC	41K4687	1.15
● LM324MT/NOPB	4	0.5	32	500	14-TSSOP	41K4688	1.68
● LM348M/NOPB	4	0.5	36	400	14-NSOIC	41K4820	1.27
● LM348N/NOPB	4	0.5	36	400	14-DIP	41K4822	1.06
● LM6134AIM/NOPB	4	14	24	300, 350	8-NSOIC	41K6189	5.44
● LM6134BIM/NOPB	4	14	24	300, 350	8-NSOIC	41K6191	4.71
● LM6134BIN/NOPB	4	14	24	300, 350	8-DIP	41K6193	4.29
● LM6144BIM/NOPB	4	25	24	526	14-NSOIC	41K6206	7.44
● LMC6034IM/NOPB	4	1.1	15	20	14-NSOIC	41K2581	1.74
● LMV324MX/NOPB	4	1	5.5	11	14-SOIC	41K3087	1.05
● LMV834MT/NOPB	4	2	5.5	0.0001	14-TSSOP	56P4148	2.94

(70374)

LOW VOLTAGE HIGH SPEED OPEARATIONAL AMPLIFIERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Supply Voltage (V)	Gain BW (MHz)	Slew Rate Typ. (V/µs)	Package	Stock No.	Price Each 1-9
● LMH6642MA/NOPB	2.7 - 12.8	130	135	8-NSOIC	41K2810	1.96
● LMH6642MF/NOPB	2.7 - 12	130	135	5-SOT-23	41K2812	1.63
● LMH6643MA/NOPB	2.7 - 13.5	130	135	8-NSOIC	41K2814	2.21
● LMH6643MAX/NOPB	2.7 - 12.8	130	135	8-NSOIC	41K2815	1.84
● LMH6643MM/NOPB	2.7 - 12.8	130	135	8-MSOP	41K2816	1.84
● LMH6644MA/NOPB	2.7 - 12.8	130	135	14-NSOIC	41K2818	3.56
● LMH6645MF/NOPB	2.5 - 12	55	22	6-SOT-23	41K2824	1.83
● LMH6646MA/NOPB	2.5 - 12	55	22	8-NSOIC	41K2826	2.84
● LMH6646MM/NOPB	2.5 - 12	55	22	8-MSOP	41K2828	2.69

(176067)

PRECISION OPERATIONAL AMPLIFIERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Gain BW (MHz)	Offset Voltage (mV)	TCVos Typ. (uV/°C)	Package	Stock No.	Price Each 1-9
● LMH6624MF/NOPB	1500	0.5	0.2	5-SOT-23	41K2796	4.23

FEATURED PRECISION SINGLE OPERATIONAL AMPLIFIERS

Mfg. Part No.	Offset Voltage (mV)	TCVos Typ. (uV/°C)	Slew Rate (dB)	Avol (dB)	Package	Stock No.	Price Each 1-9
● LMP2011MA/NOPB	0.025	0.015	4	130	8-SOIC	41K2904	2.94
● LMP2011MF/NOPB	0.025	0.015	4	130	5-SOT-23	41K2906	2.45
● LMP7701MF/NOPB	0.2	1	1.1	119	5-SOT-23	69K2293	2.56
● LMP7715MF/NOPB	0.15	1	9.5	110	5-SOT-23	99K2277	2.04
● LMP7731MF/NOPB	0.05	1	2.4	130	5-SOT-23	50M8797	2.86
● LMV841MG/NOPB	0.5	0.35	2.5	123	5-SC-70	32M0965	1.83
● OPA322AIDBVT	2	1.8	10	130	5-SOT-23	64T3766	1.73

FEATURED PRECISION DUAL OPERATIONAL AMPLIFIERS

● LMP2012MA/NOPB	0.036	0.015	4	130	8-SOIC	79K7706	3.58
● LMP2012MM/NOPB	0.036	0.015	4	130	8-SOIC	41K2908	2.99
● LMP7702MA/NOPB	0.22	1	1.1	119	8-SOIC	55M4624	3.56
● LMP7702MM/NOPB	0.22	1	1.1	119	8-SOIC	99K2273	2.96
● LMP7716MM/NOPB	0.15	1.8	9.5	110	8-SOIC	99K2281	2.69
● LMP7732MA/NOPB	0.05	1	2.4	130	8-SOIC	54M4627	4.01
● LMV772MM/NOPB	1	0.35	5	100	8-MSOP	41K3193	1.74

FEATURED PRECISION QUAD OPERATIONAL AMPLIFIERS

● LMP7704MT/NOPB	0.22	1	1.1	119	14-TSSOP	79K7710	4.75
● LMV774MT/NOPB	1	0.35	1.4	100	14-TSSOP	41K3195	2.94
● LMV751M5/NOPB	1	1	...	120	5-SOT-23	41K3179	1.92
● OPA4322AIPW	2	1.8	10	130	14-TSSOP	92T2263	3.58

PRECISION OPERATIONAL AMPLIFIERS

Mfg. Part No.	No. of Amps	Slew Rate (V/us)	Package	Stock No.	Price Each 1-9
● LMP2021MA/NOPB	1	2.6	8-SOIC	19P7825	2.87
● LMP2021MFE/NOPB	1	2.6	5-SOT-23	19P7826	2.75

➤CONTINUED➤

PRECISION OPERATIONAL AMPLIFIERS (CONT.)

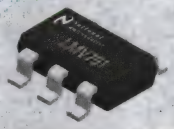
Mfg. Part No.	No. of Amps	Slew Rate (V/us)	Package	Stock No.	Price Each 1-9
● LMP2231AMF/NOPB	1	0.058	5-SOT-23	84M8072	2.56
● LMP7721MA/NOPB	1	12.76	8-SOIC	78M7733	10.56
● LMP7731MA/NOPB	1	2.4	8-SOIC	01P0821	3.01
● LMP8601MA/NOPB	1	0.7	8-SOIC	19P7829	2.94
● LMP8602MA/NOPB	1	0.7	8-SOIC	16R1307	2.94
● LMP8603MA/NOPB	1	0.7	8-SOIC	16R1308	2.94
● LME49990MA/NOPB	1	22	8-SOIC	71R5091	3.30
● LPV521MGE/NOPB	1	0.0024	5-SC-70	27R1776	1.54
● LMP7732MA/NOPB	2	2.4	8-SOIC	54M4627	4.01
● LM359M/NOPB	2	60	14-SOIC	41K4894	3.20
● LMP2022MA/NOPB	2	2.6	8-SOIC	19P7827	3.87
● LMP2022MME/NOPB	2	2.6	8-MSOP	19P7828	3.70
● LMP7704MA/NOPB	4	1.1	14-SOIC	11N9157	4.75
● LMV844QMA/NOPB	4	2.5	14-SOIC	27R1772	5.85

(100947)

LOW VOLTAGE OPERATIONAL AMPLIFIERS

RoHS Compliant Available

TEXAS INSTRUMENTS



FEATURED LOW VOLTAGE HIGH SPEED OPERATIONAL AMPLIFIERS

Mfg. Part No.	Supply Voltage (V) Min.	Supply Voltage (V) Max.	Gain BW (MHz)	Slew Rate Typ. (V/µs)	Package	Stock No.	Price Each 1-9
● LMH6683MA/NOPB	3	12	190	940	14-SOIC	41K2860	3.39

FEATURED LOW VOLTAGE LOW NOISE OPERATIONAL AMPLIFIERS

Mfg. Part No.	Voltage Noise (nV/√Hz)	Supply Current (mA)	Gain BW (MHz)	Package	Stock No.	Price Each 1-9
● LMV721M5/NOPB	8.5	1.03	10	5-SOT-23	41K3145	1.41
● LMV722MM/NOPB	8.5	0.9	10	8-MSOP	41K3156	1.58
● LMV751M5/NOPB	6.5	0.6	5	5-SOT-23	41K3179	1.92
● LMH6702MA/NOPB	1.83	12.5	1700	8-NSOIC	41K2864	3.96
● LMH6702MF/NOPB	1.83	12.5	1700	5-SOT-23	41K2866	3.30
● LMP7731MF/NOPB	2.9	2.2	22	5-SOT-23	50M8797	2.86
● LMP7732MA/NOPB	2.9	2.2	22	8-SOIC	54M4627	4.01
● LMP7715MF/NOPB	5.8	1.15	17	5-SOT-23	99K2277	2.04
● LMP7716MM/NOPB	5.8	1.3	17	8-SOIC	99K2281	2.69
● LMP7701MF/NOPB	9	0.715	2.5	5-SOT-23	69K2293	2.56
● LMP7702MA/NOPB	9	0.75	2.5	8-SOIC	55M4624	3.56
● LMP7702MM/NOPB	9	0.75	2.5	8-SOIC	99K2273	2.96
● LMP7704MT/NOPB	9	0.725	2.5	14-TSSOP	79K7710	4.75
● LMH6624MF/NOPB	0.92	12	1500	5-SOT-23	41K2796	4.23
● LMH6628MA/NOPB	2	9	300	8-SOIC	41K2802	4.06

FEATURED LOW VOLTAGE LOW POWER OPERATIONAL AMPLIFIERS

Mfg. Part No.	Supply Voltage (V) Min.	Supply Voltage (V) Max.	Supply Current (mA)	Gain BW (MHz)	Package	Stock No.	Price Each 1-999
● LMV301MG/NOPB	1.8	5	0.163	1	5-SC-70	41K3078	0.31
● LMV324M/NOPB	2.7	5.5	0.41	1	14-SOIC	41K3084	1.26
● LMV796MF/NOPB	1.8	5	1.3	17	5-SOT-23	99K2296	1.31
● LMV797MM/NOPB	1.8	5	1.3	17	8-SOIC	99K2300	1.63
● LMV934MA/NOPB	1.8	5	0.116	1.5	14-NSOIC	41K3217	1.96
● LM8262MM/NOPB	2.5	22	1.05	21	8-MSOP	41K6399	2.69
● LM8272MM/NOPB	2.5	24	0.9	13	8-MSOP	41K6401	2.96
● LM8261M5/NOPB	2.5	30	0.97	21	5-SOT-23	41K6397	2.60
● LMV821M5/NOPB	2.5	5.5	0.3	5.6	5-SOT-23	41K3197	1.20
● LMV822M/NOPB	2.5	5.5	0.25	5.6	8-NSOIC	41K3201	1.55
● LMV822MM/NOPB	2.5	5.5	0.25	5.6	8-MSOP	41K3202	1.46
● LMV822MX/NOPB	2.5	5.5	0.25	5.6	8-SOIC	41K3204	1.46
● LMV824M/NOPB	2.5	5.5	0.25	5.6	14-NSOIC	41K3205	1.63
● LMV824MTX/NOPB	2.5	5.5	0.25	5.6	14-TSSOP	41K3207	1.53
● LMV641MGE/NOPB	2.7	12	0.158	10	5-SC70	60M5670	1.85
● LMV841MG/NOPB	2.7	12	1.02	4.5	5-SC-70	32M0965	1.83
● LPV511MG/NOPB	2.7	12	0.00097	0.027	5-SC-70	79K7967	1.38
● LM6154BCM/NOPB *	2.7	24	1.4	75	14-NSOIC	41K6213	7.18
● LMV341MG/NOPB	5	2.7	0.107	1	6-SC70	41K3096	0.92
● LMV712MM/NOPB	5	2.7	1.17	5	10-MSOP	41K3141	1.50
● LMV721M5/NOPB	2.7	5	1.03	10	5-SOT-23	41K3145	1.41
● LMV722MM/NOPB	2.7	5	0.9	10	8-MSOP	41K3156	1.58

➤CONTINUED➤

LOW VOLTAGE OPERATIONAL AMPLIFIERS (CONT.)

Mfg. Part No.	Supply Voltage (V) Min.	Supply Voltage (V) Max.	Supply Current (mA)	Gain BW (MHz)	Package	Stock No.	Price Each 1-999
LMV772MM/NOPB	2.7	5	0.6	3.5	8-MSOP	41K3193	1.74
LMV774MT/NOPB	2.7	5	0.6	3.5	14-TSSOP	41K3195	2.94
LMV651MG/NOPB	2.7	5.5	0.11	12	5-SC-70	99K2287	1.17
LMV751M5/NOPB	2.7	5.5	0.6	5	5-SOT-23	41K3179	1.92

Mfg. Part No.	Number of Circuits	Slew Rate Typ. (V/µs)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-9
LM10CLN/NOPB	1	0.2	40, 7	8-DIP	41K3352	3.13
LM10CN/NOPB	1	0.2	40, 7	8-DIP	41K3353	2.91
LM10CWM/NOPB	1	0.2	40, 7	14-WSOIC	41K3354	2.97
LM6132AIM/NOPB	2	14	24	8-NSOIC	41K6184	3.96
LM6132BIM/NOPB	2	14	24	8-NSOIC	41K6186	3.56
LM6132BIN/NOPB	2	14	24	8-DIP	41K6188	2.99
LM6134AIM/NOPB	4	14	24	8-NSOIC	41K6189	5.44
LM6134BIM/NOPB	4	14	24	8-NSOIC	41K6191	4.71
LM6134BIN/NOPB	4	14	24	8-DIP	41K6193	4.29
LMV842MA/NOPB	4	2.5	12	8-SOIC	84M8080	3.13
LM6152ACM/NOPB	2	30	24	8-NSOIC	41K6209	5.25
LM6154BCM/NOPB *	4	30	24	14-NSOIC	41K6213	7.18

(71011)

ISOLATED AMPLIFIER FOR E-METERING

RoHS Compliant Available

TEXAS INSTRUMENTS

Features:
- Fixed Gain: 8 (0.5% Accuracy)
- Fully Specified Over the Extended Industrial Temperature Range

Applications:
- Energy Meters
- Green Energy
- Power Measurement Applications

AMC1100EVM

The **AMC1100** is a precision isolation amplifier with an output separated from the input circuitry by a silicon dioxide (SiO2) barrier that is highly resistant to magnetic interference. This barrier has been certified to provide galvanic isolation of up to 4250 VPEAK, according to UL1577 and IEC60747-5-2. Used in conjunction with isolated power supplies, this device prevents noise currents on a high common-mode voltage line from entering the local ground and interfering with or damaging sensitive circuitry.

Mfg. Part No.	Supply Voltage	No. of Amps	Power Consumption (mW)	Package	Stock No.	Price Each 1-9
AMC1100DUB	2.7V to 5.5V	1	82.5	8-SOP	94T9511	5.73

EVALUATION BOARD

Mfg. Part No.	Description	Stock No.	Price Each Each
AMC1100EVM	Isolated Amplifier Eval Board	94T9513	50.00

(207448)

RAIL-TO-RAIL OPERATIONAL AMPLIFIERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Supply Current (µA)	Gain BW (MHz)	Slew Rate Typ. (V/µs)	Package	Stock No.	Price Each 1-9
LMH6645MF/NOPB	725	55	22	6-SOT-23	41K2824	1.83
LMH6646MA/NOPB	725	55	22	8-NSOIC	41K2826	2.84
LMH6646MM/NOPB	725	55	22	8-MSOP	41K2828	2.69
LMH6647MF/NOPB	725	47	22	6-SOT-23	41K2832	1.69
LMC6484AIM/NOPB	500	1.5	1.3	14-NSOIC	41K2663	3.18
LMC6484IM/NOPB	500	1.5	1.3	14-NSOIC	41K2666	2.94
LMC6484IMX/NOPB	500	1.5	1.3	14-SO	41K2667	2.45
LMC6494AEM/NOPB	500	15	1.3	14-SO	41K2673	5.63
LMC7101AIM5/NOPB	500	1	1.1	5-SOT-23	41K2710	1.10
LMC7101AIM5X/NOPB	500	1	1.1	5-SOT-23	41K2711	1.10
LMC7101BIM5/NOPB	500	1	1.1	5-SOT-23	41K2712	0.86
LMC7101BIM5X/NOPB	500	1	1.1	5-SOT-23	41K2713	0.86
LMC6442AIM/NOPB	950	0.01	0.41	8-NSOIC	41K2639	2.70
LMV321M5/NOPB	130	1	1	5-SOT-23	41K3080	0.84
LMV321M7/NOPB	130	1	1	5-SC-70	41K3082	0.88
LMV358MMX/NOPB	105	1	1	8-SOIC	41K3108	0.84
LMV358MX/NOPB	105	1	1	8-SOIC	41K3109	0.84
LMC7111BIM5/NOPB	25	0.05	0.015	5-SOT-23	41K2714	1.17
LM7321MA/NOPB	950	20	18	8-SOIC	11N9283	2.65
LM7321MFE/NOPB	950	20	18	5-SOT-23	11N9286	2.54

➤ CONTINUED ➤

RAIL-TO-RAIL OPERATIONAL AMPLIFIERS (CONT.)

Mfg. Part No.	Supply Current (µA)	Gain BW (MHz)	Slew Rate Typ. (V/µs)	Package	Stock No.	Price Each 1-9
LM7322MA/NOPB	950	20	18	8-SOIC	01P0825	2.87
LM7322MME/NOPB	950	20	18	8-MSOP	01P0826	1.83
LM7341MFE/NOPB	700	4.6	1.9	5-SOT-23	01P0827	2.72
LMC6462BIM/NOPB	20	0.05	0.015	8-NSOIC	41K2647	2.89
LMV342MA/NOPB	100	1	1	8-SOIC	41K3098	1.44
LMV552MM/NOPB	37	3	1	8-MSOP	05W9886	1.23

(176045)

VARIABLE GAIN AND DIFFERENTIAL AMPLIFIERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Applications
- ADC Drivers
- Consumer Video
- Active Filters
- Pulse Delay Circuits

Specifications
- Unity Gain Bandwidth: Up to 600MHz
- Supply Current: Up to 4.5mA/channel
- Settling Time (to 0.01%): Up to 25ns

Mfg. Part No.	Gain BW (MHz)	Slew Rate Typ. (V/µs)	Supply Voltage (V) Min.	Supply Voltage (V) Max.	Package	Stock No.	Price Each 1-9
LMH6550MA/NOPB	400	3000	5	12	8-SOIC	41K2766	6.13
LMH6551MA/NOPB	370	2400	3	12	8-SOIC	41K2770	4.46
LMH6551MM/NOPB	370	2400	3	12	8-SOIC	41K2772	3.72
LMH6552MA/NOPB	1000	3800	4.5	12	8-SOIC	39M4946	10.37

VARIABLE GAIN AMPLFIERS

Mfg. Part No.	Bandwidth (MHz)	Supply Voltage Max. (V)	Offset Voltage Max. (mV)	Package	Stock No.	Price Each 1-9
LMH6505MA/NOPB	150	12	55	8-SOIC	79K7695	6.10
LMH6518SQE/NOPB	900	5.25	15	16-LLP	19P7822	12.28
LMP7312MA/NOPB	1	5.5	0.1	14-SOIC	76R6953	8.42

(101626)

AUDIO AMPLIFIERS

RoHS Compliant Available

NXP

Features:
- Requires very few external components
- High output power
- Fixed gain
- Good ripple rejection
- Mute/standby switch
- Thermally protected
- Reverse polarity safe
- No switch-on/switch-off plop
- Electrostatic discharge protection

Mfg. Part No.	Class	Supply Voltage	Output Power (mW)	Package	Stock No.	Price Each 1-9
TDA7052AT/N2,112	AB	4.5V to 18V	550	8-SOIC	70R9232	1.24
TDA7056AT/N2,512	AB	4.5V to 18V	3500	20-SOIC	70R9237	1.40
TDA8541T/N1,112	AB	2.2V to 18V	1200	8-SOIC	70R9267	1.77
TDA8542TS/N1,112	AB	2.2V to 18V	700	20-SSOP	70R9271	2.70
TDA8547TS/N1,112	AB	2.2V to 18V	700	20-SSOP	70R9275	3.03
TDA8551T/N1,112	AB	2.7V to 5.5V	1000	8-SOIC	70R9277	1.40

STEREO HEADPHONE DRIVERS

TDA1308T/N2,112	AB	3V to 7V	40	8-SOIC	70R9190	0.69

(195695)

SINGLE OPERATIONAL AMPLIFIERS

RoHS Compliant Available

ON Semiconductor

"I" in description denotes industrial temperature range (–40°C to +85°C); "C" denotes commercial temperature range (0°C to +70°C).

NON-COMPENSATED

Mfg. Part No.	I_{IB} Max. (µA)	TC_{VIO} Typ. (µV/°C)	I_{IO} Max. (nA)	Supply Volt. Max. (V)	Package	Stock No.	Price Each 1-9
NCS2001SN1T1G	0.00001	8	...	7	5-SOT-23	45J1978	1.08
LM201ADG	0.075	3	10	±22	8-SOIC	41K9832	0.65
MC33171DG	0.1	10	20	44	8-SOIC	42K0590	1.09
MC33201DG	0.2	2	0.05	13	8-SOIC	71J5522	1.41
LM301ADG	0.25	30	0.05	18	8-SOIC	45J0731	0.74
LM301ANG	0.25	6	50	±18	8-DIP	26K3624	1.05
MC33071ADG	0.5	10	50	44	8-SOIC	98H0669	1.13
MC34071DG	0.5	10	75	44	8-SOIC	45J1214	1.09

(4285)

DUAL OPERATIONAL AMPLIFIERS

RoHS Compliant Available

ON Semiconductor

"I" in description denotes industrial temperature range (–40°C to +85°C); "C" denotes commercial temperature range (0°C to +70°C).

Mfg. Part No.	I_{IB} Max. (µA)	TC_{VIO} Typ. (µV/°C)	I_{IO} Max. (nA)	Supp. Volt. Max. (V)	Package	Stock No.	Price Each 1-9
● LM2904DR2G	0.045	7	50	±13 +26	8-SOIC	84K8729	0.47
● TCA0372DP1G	0.1	20	50	±13 +36	8-DIP	88H5148	1.38
● TCA0372DP2G	0.1	20	50	±13 +36	16-DIP	98H0977	1.54
● TCA0372DWG	0.1	20	50	±13 +36	16-WSOIC	26K5198	1.13
● TCA0372DWR2G	0.1	20	50	±13 +36	16-SO	26K5199	1.24
● MC33172DG	0.1	10	20	22	8-SOIC	17H1572	1.01
● MC33172DR2G	0.1	10	20	44	8-SOIC	84K8759	0.96
● NCP4300ADG	0.002	7	2	35	8-SOIC	42K1888	0.90
● LM258DG	0.15	10	30	±18 +32	8-SOIC	71J4994	0.47
● LM258DR2G	0.15	10	30	±18 +32	8-SOIC	98H0559	0.11
● LM258NG	0.15	7	30	±18 +32	8-DIP	45J0718	0.55
● MC33202DG	0.2	2	50	13	8-SOIC	17H1575	1.09
● MC33202DMR2G	0.2	2	50	13	8-Micro	88H4725	0.90
● MC33202PG	0.2	2	50	13	8-DIP	71J5524	1.25
● MC33202VDG	0.2	2	50	13	14-SOIC	26K4016	1.34
● SE5532AD8G	0.2	5.0	...	±20	8-SOIC	42K2613	1.76
● LM358DG	0.25	7	50	±16 +32	8-SOIC	45J0748	0.43
● LM358NG	0.25	7.0	50	±18	8-DIP	67H6684	0.48
● LM2904DG	-0.25	7	50	±16 +32	8-SOIC	45J0728	0.45
● LM2904NG	-0.25	7	50	±16 +32	8-DIP	45J0729	0.44
● LM358DR2G	-0.25	7	50	±16 +32	8-SOIC	83H7264	0.60
● MC33072ADG	0.5	10	50	44	8-SOIC	98H0670	1.02
● MC33072APG	0.5	10	50	44	8-DIP	26K3998	1.20
● MC33072DG	0.5	10	75	44	8-SOIC	71J5514	0.95
● MC33072DR2G	0.5	10	50	44	8-SOIC	88H4723	1.04
● MC33072PG	0.5	10	75	44	8-DIP	98H0672	1.09
● MC33178DG	0.5	2.0	50	±18	8-SOIC	88H4724	1.08
● MC33178DR2G	0.5	2.0	50	±18	8-SOIC	45J1176	0.92
● MC34072ADG	0.5	10	50	44	8-SOIC	45J1215	1.14
● MC34072APG	0.5	10	50	44	8-DIP	45J1216	1.22
● MC34072DR2G	0.5	10	50	44	8-SOIC	88H4733	0.92
● MC34072PG	0.5	10	75	44	8-DIP	45J1217	1.11
● MC33272ADG	0.65	0.56	25	±18	8-SOIC	45J1186	1.75
● MC33272ADR2G	0.65	0.56	25	±18	8-SOIC	88H4728	1.64
● MC34072DG	0.7	10	300	44	8-SOIC	88H4732	1.02
● MC33078DG	0.75	2.0	150	±18	8-SOIC	71J5515	0.90
● MC33078PG	0.75	2	150	36	8-DIP	45J1162	1.39
● LM833NG	1	2.0	200	±18	8-DIP	26K3636	0.61
● MC33077DG	1	2	180	36	8-SOIC	98H0675	1.55

(4286)

QUAD OPERATIONAL AMPLIFIERS

RoHS Compliant Available

ON Semiconductor

"I" in description denotes industrial temperature range (–40°C to +85°C); "C" denotes commercial temperature range (0°C to +70°C).

Mfg. Part No.	I_{IB} Max. (µA)	TC_{VIO} Typ. (µV/°C)	I_{IO} Max. (nA)	Supp. Volt. Max. (V)	Package	Stock No.	Price Each 1-9
● LM324ADG	0.1	7	30	±16 +32	14-SOIC	26K3628	0.56
● LM224DG	0.15	7	30	+16 +32	14-SOIC	71J4990	0.47
● LM224NG	0.15	7	30	+16 +32	14-DIP	45J0710	0.61
● LM324DG	0.25	7	50	+16 ±32	14-SOIC	45J0744	0.48
● LM324DR2G	0.25	7	50	+16 ±32	14-SOIC	84K8734	0.46
● LM324NG	0.25	7	50	32	14-DIP	45J0745	0.62
● MC33204DG	0.2	2	50	±13	14-DIP	45J1178	1.57
● MC33204DR2G	0.2	2	50	±13	14-SOIC	84K8760	1.74

➤CONTINUED➤

QUAD OPERATIONAL AMPLIFIERS (CONT.)

Mfg. Part No.	I_{IB} Max. (µA)	TC_{VIO} Typ. (µV/°C)	I_{IO} Max. (nA)	Supp. Volt. Max. (V)	Package	Stock No.	Price Each 1-9
● MC33204DTBG	0.2	2	50	±13	14-SOIC	42K0597	1.78
● LM224DR2G	0.3	7	100	±32	14-SOIC	98H0552	0.49
● LM2902DG	0.5	7	50	±13 +26	14-SOIC	45J0722	0.47
● LM2902DR2G	0.5	7	50	±13 +26	14-SOIC	84K8727	0.49
● LM2902NG	0.5	7	50	±13 +26	14-DIP	45J0723	0.60
● MC3303DG	0.5	10	75	36	14-SOIC	26K3985	0.72
● MC33074ADG	0.5	10	50	44	14-SOIC	45J1159	1.46
● MC33074APG	0.5	10	50	44	14-DIP	42K0574	1.48
● MC33074DG	0.5	10	75	44	14-SOIC	45J1160	1.65
● MC33074PG	0.5	10	75	44	14-DIP	26K3999	1.55
● MC33179DG	0.5	2	50	±36	14-SOIC	98H0686	1.32
● MC33179DR2G	0.5	2	50	±36	14-SOIC	98H0687	1.08
● MC34074ADG	0.5	10	50	44	14-SOIC	45J1218	1.41
● MC34074APG	0.5	10	50	44	14-DIP	42K0653	1.50
● MC34074DG	0.5	10	75	44	14-SOIC	42K0654	1.51
● MC34074PG	0.5	10	75	44	14-DIP	45J1220	1.59
● MC33074ADR2G	0.7	10	300	±44	14-SOIC	98H0673	1.41
● MC33074DR2G	0.7	10	300	±44	14-SOIC	98H0674	1.33
● MC33079DG	0.75	2	150	±36	14-SOIC	98H0677	0.92
● MC33079PG	0.75	2	150	±36	14-DIP	98H0678	1.51
● MC33274ADR2G	0.8	3	80	±32	14-SOIC	98H0694	1.49

* T_A = -25°C to +85°C; † T_A = 40°C to +105°C

(9962)

AUDIO AMPLIFIERS

RoHS Compliant Available

Mfg. Part No.	No. of Circuits	Supply Voltage (V)	Gain Max. (dB)	Offset Voltage (mV)	Package	Stock No.	Price Each 1-9
● TDA2009A	1	28	36.5	...	11-Multiwatt	89K1041	2.67
● TDA2822D	1	15	41	80	8-SOIC	89K1048	1.14
● TDA7265	1	25	30	20	16-DIP	89K1053	5.98
● TEA2025B	1	15	53	...	16-DIP	89K1062	1.93
● TDA7293V	1	60	80	10	15-MULTIWATT	89K1055	8.47
● TDA7294V	1	50	80	10	15-MULTIWATT	89K1056	12.37

(83709)

GENERAL PURPOSE OPERATIONAL AMPLIFIERS

RoHS Compliant Available

Mfg. Part No.	No. of Amplifiers	Slew Rate (V/µs)	BW (MHz)	Supply Voltage (V)	Offset Voltage (mV)	Package	Stock No.	Price Each 1-9
● LM301AN	1	0.5	1000	44	7.5	8-DIP	89K1306	1.58
● UA741CD	1	0.5	1	44	5	8-SOIC	89K1782	0.55
● UA741CDT	1	0.5	1	44	5	8-SOIC	89K1783	0.63
● TL084CD	4	16	4	36	10	14-SOIC	89K1727	0.74
● TL084ID	4	16	4	36	10	14-SOIC	89K1729	0.71

(178861)

OPERATIONAL AMPLIFIERS

RoHS Compliant Available

Mfg. Part No.	No. of Amplifiers	Slew Rate (V/µs)	Bandwidth (MHZ)	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
LOW NOISE BIPOLAR OP-AMPS							
● MC33079D	4	7	15	36	14-SOIC	89K1425	0.90
● MC33079DT	4	7	15	36	14-SOIC	89K1426	0.66
LOW NOISE JFET OP-AMPS							
● TL072ACD	2	16	4	36	8-SOIC	89K1713	0.68
● TL072CDT	2	16	4	36	8-SOIC	89K1716	0.47
● TL074CD	4	13	3	36	14-SOIC	89K1719	0.80
LOW NOISE OP-AMPS							
● MC33078D	2	7	15	36	8-SOIC	89K1423	0.84
● MC33078DT	2	7	15	36	8-SOIC	89K1424	0.73

➤CONTINUED➤

OPERATIONAL AMPLIFIERS (CONT.)

Mfg. Part No.	No. of Amplifiers	Slew Rate (V/µs)	Bandwidth (MHZ)	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
LOW NOISE OP-AMPS							
TS522ID	2	7	15	36	8-SO	89K1751	1.42
LM833N	2	7	15	36	8-DIP	89K0718	0.62
LOW POWER JFET OP-AMPS							
TL062CD	2	3.5	1000	36	8-SOIC	89K1709	0.75
TL064CD	4	3.5	1000	36	14-SOIC	89K1710	0.57
LOW POWER OP-AMPS							
TS321ILT	1	0.4	0.8	30	5-SOT-23	89K1747	0.68
LM258D	2	0.6	1.1	32	8-SOIC	89K1298	0.44
LM2904DT	2	0.6	1.1	32	8-SO	89K0669	0.56
LM358DT	2	0.6	1.1	32	8-SO	89K0709	0.54
LM2904D	2	0.6	1.1	32	8-SO	89K1302	0.42
LM324AN	4	0.4	1.3	32	14-DIP	89K0690	0.51
LM324DT	4	0.4	1.3	32	14-SO	89K0691	0.77
LM2902D	4	0.4	1.3	32	14-SOIC	89K1300	0.53
LM2902DT	4	0.4	1.3	32	14-SOIC	89K1301	0.48
LM324AD	4	0.4	1.3	32	14-SOIC	89K1307	0.50
LOW POWER BIPOLAR OP-AMPS							
MC33172DT	2	2	2.1	44	8-SOIC	89K1428	0.79
MC3403D	4	0.5	1000	36	14-SOIC	89K1431	1.70
MC33174D	4	2	2.1	44	14-SOIC	89K1429	0.87
CMOS RAIL TO RAIL OP-AMP							
TS912AIDT	2	1.3	1.4	18	8-SOIC	89K1763	1.23
RAIL TO RAIL HIGH OUTPUT CURRENT OP-AMPS							
TS924AID	4	1.3	4	14	14-SOIC	89K1766	2.48
GENERAL PURPOSE BIPOLAR OP-AMPS							
UA741CD	1	0.5	1000	44	8-SOIC	89K1782	0.55
UA741CDT	1	0.5	1000	44	8-SOIC	89K1783	0.63
LM348N	4	0.5	1.3	...	14-DIP	89K0703	0.72
GENERAL PURPOSE JFET OP-AMPS							
TL082ACD	2	16	4	36	8-SOIC	89K1722	0.58
TL084CD	4	16	4	36	14-SOIC	89K1727	0.74
TL084CDT	4	16	4	36	14-SOIC	89K1728	0.46
TL084ID	4	16	4	36	14-SOIC	89K1729	0.71
TL084IDT	4	16	4	36	14-SOIC	89K1730	0.49
HIGH PERFORMANCE OP-AMPS							
MC1458D	2	0.8	1000	44	8-SOIC	89K1421	5.20
BIPOLAR OP-AMPS							
LM301AN	1	0.5	1	44	8-DIP	89K1306	1.58
WIDE BANDWIDTH JFET OP-AMPS							
LF351D	1	16	4	36	8-SOIC	89K1288	0.89
LF353D	2	16	4	36	8-SOIC	89K1289	0.40
LF347D	4	16	4000	36	14-SOIC	89K1287	1.07
LF347N	4	16	4	36	14-DIP	89K0633	0.92
WIDE BANDWIDTH BIPOLAR OP-AMPS							
MC4558CD	2	2.2	5.5	44	8-SOIC	89K1435	4.89
=1,2423282	=1,5113	=1,3833322	=1,474	=1,5119	=1,1118	=1	=1,3748205

(83800)

AUDIO AMPLIFIERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Description	Pkg.	Stock No.	Price Each 1-9
LINE DRIVERS / RECEIVERS				
DRV602PW	DIRECTPATH™, 2Vrms Line Driver with Adjustable Gain	14-TSSOP	45P6610	2.45
INA137PA	Audio Differential Line Receivers, +-6dB (G=1/2 or 2)	8-DIP	35C0496	2.89
HIGH SPEED AUDIO OPERATIONAL AMPLIFIERS				
LM833DR	Dual High-Speed Audio Operational Amplifier	8-SOIC	13T3757	1.02
LM833P	Dual High-Speed Audio Operational Amplifier	8-PDIP	13T3758	1.12
TAS5715PHPR	25-W Stereo I2S Audio Amplifier w/Speaker EQ, 2-Band DRC, & DC Protection	48-HTQFN	91R0765	5.37
ANALOG INPUT AUDIO SUBSYSTEM				
TPA2054D4YZKT	1.4 W/Channel Stereo Class-D Audio Subsystem with DirectPath™ Headphone Amplifier and 3 Inputs	25-DSBGA	08R6192	3.73
CLASS-AB SPEAKER AMPLIFIERS				
TPA1517NE	Stereo, Medium-Power (6W), Class-AB Audio Amplifier, 4Ω min Load	20-DIP	35K1279	3.06
TPA321D	350mW, Mono, w/ Differential Inputs	8-SOIC	76C9806	1.15

CONTINUED

AUDIO AMPLIFIERS (CONT.)

Mfg. Part No.	Description	Pkg.	Stock No.	Price Each 1-9
CLASS-AB SPEAKER AMPLIFIERS				
TPA3106D1VFPR	500W , Class-AB, 8Ω Load	32-HLQFP	65M5966	4.89
TPA4861DR	1-W BTL Output, Mono	8-SOIC	76C9815	1.87
TPA6012A4PWP	2-W Stereo Audio Power Amplifier with Advanced DC Volume Control	24-HTSSOP	53R1374	4.06
TPA6013A4PWP	3-W Stereo Audio Power Amplifier with Advanced DC Volume Control	24-HTSSOP	53R1375	4.26
TPA6017A2PWP	2-W with Four Selectable Gain Settings	20-HTSSOP	76C9824	2.34
TPA6021A4N	2-W with Advanced DC Volume Control	20-DIP	43K4150	3.06
TPA6203A1DGNR	1.25W Mono, Fully Differential	8-MSOP	81K4127	0.89
TPA6204A1DRB	Mono, Fully Differential	8-SON	10J9731	1.31
TPA6211A1DGN	3.1-W, Mono, Fully Differential	8-MSOP	82H5865	1.24
TPA6211A1DRBR	3.1-W, Mono, Fully Differential	8-SON	82H5868	1.03
TPA741D	700mW, Mono, Low-Voltage, with Differential Inputs	8-SOIC	76C9873	1.65
ANALOG INPUT CLASS-D SPEAKER AMPLIFIERS				
TAS5414ATDKDMQ1	Four-Channel Digital Power Amp	36-SSOP	52M6048	26.24
TAS5630DKD	Analog input 300W Stereo (600W total) class D amplifier with integrated feedback	44-HSSOP	14R8281	15.91
TPA2026D2YZHT	3.2-W/Ch Stereo SmartGainTM Class-D Audio Amplifier	16-DSBGA	74R3115	2.86
TPA2001D1PW	1-W, Filterless, Mono, Class-D	16-TSSOP	76C9788	2.71
TPA2005D1DGN	1.4-W Mono, Fully Differential, Filter-Free Class-D Audio Amplifier, 8Ω min Load	8-MSOP	73J8370	1.47
TPA2005D1DRBR	1-4W Mono, Fully Differential, Filter-Free Class-D Audio Amplifier, 4Ω min Load	8-QFN	36K7655	1.23
TPA2006D1DRBR	1.45-W Mono Class-D, 1.8V Shutdown	8-SON	18M3207	1.09
TPA2018D1YZFT	3-W Mono Class-D Audio Amplifier with SmartGain™ AGC/DRC	9-DSBGA	29R0267	2.86
TPA2025D1YZGT	2W Constant Output Class-D Audio Amplifier with Adaptive Boost (DC/DC) Converter	12-DSBGA	93T6800	2.59
TPA2028D1YZFT	3-W Mono Class-D Audio Amplifier with Fast Gain Ramp SmartGain™ AGC/DRC	9-DSBGA	64R8564	1.91
TPA2036D1YZFT	1-Channel;2.5W; Impedance: 4Ω; Supply Voltage: 2.5-5.5V	9-DSBGA	19P7477	0.75
TPA2037D1YFFT	Fixed Gain 3.2 W Mono Class-D with Integrated DAC Noise Filter	9-WCSP	51R5928	1.63
TPA3001D1PWPR	20W Mono, High-Power, Filter-Free Class-D Audio Amplifier, 4Ω min Load	24-HTSSOP	74K3973	6.04
TPA3008D2PHP	High Efficiency, Class-D	48-HTQFP	21J9176	8.80
TPA3101D2PHP	10W Stereo, Class-D, 8Ω min Load	48-HTQFP	80K3364	6.48
TPA3110D2PWP	15W Filter-Free Class D Stereo Amplifier with SpeakerGuard™	28-HTSSOP	24R8484	2.99
TPA3112D1PWP	25-W Filter-Free Mono Class-D Audio Amplifier with SpeakerGuard™	28-HTSSOP	32R7817	3.22
TPA3113D2PWP	6-W Stereo Class-D Audio Power Amplifier with SpeakerGuard™	28-TSSOP	26R5218	2.69
TPA3117D2RHBT	15W Filter-Free Stereo Class-D Amplifier	32-QFN	13T5936	3.87
TPA3123D2PWP	Single-Ended Output; 2-Channels; 25W; Impedance:4Ω	24-HTSSOP	53M3994	5.25
DIGITAL INPUT CLASS-D SPEAKER AMPLIFIERS				
TAS5707PHP	2-Channels; Impedance: 6Ω	48-HTQFP	33P9827	6.38
TAS5710PHP	20-W Stereo Closed-loop I2S Audio Amplifier with Speaker EQ and 2-Band DRC	48-HTQFP	47P0635	5.85
TAS5711PHP	20-W Stereo I2S Audio Amplifier with Speaker EQ, DRC, and 2.1 support	48-HTQFP	60R2429	6.59
TAS5717PHPR	Digital input stereo amplifier with integrated CAP free headphone amp	48-HTQFP	13T8922	3.94
TAS5727PHP	25-W Digital Audio Power Amplifier with EQ and 2-Band DRC	48-HTQFP	32T3258	5.25
TAS5731PHP	20-W stereo digital audio power amplifier with dsp and 2.1 mode	40-HTQFP	76T8032	5.95
HEADPHONE AMPLIFIERS				
TPA1517DWPR	6-W, with Mute/Standby Function	20-SOIC	76C9773	2.66
TPA6130A2RTJR	138mW Stereo; 2-Channels; 16ohm	20-QFN	34M0132	2.18
TPA6138A2PW	40-mW DirectPath™ Stereo Headphone Driver with Adjustable Gain	14-TSSOP	27T6830	1.10
TPA6139A2PW	25-mW DirectPath™ Stereo Headphone Amplifier	14-TSSOP	27T6833	1.18
TPA6141A2YFFT	25-mW Class-G DirectPath™ Stereo Headphone Amplifier	16-DSBGA	32R8552	2.45
MICROPHONE PREAMPLIFIERS				
INA163UA	Mono, Low Noise, Low Distortion, Wide Bandwidth	14-SOIC	80K5909	7.44
PGA2500IDB	Gain Range: 0dB, and 10dB to 65dB in 1dB steps	28-SSOP	36K7585	17.88
PWM-INPUT POWER STAGES (PurePath TM)				
TAS5112ADCA	50-W/Ch., High Performance	56-HTSSOP	73J8317	10.05
TAS5261DKD	Integrated Self-Protection Circuit, Supports PWM.	36-SSOP	18M3142	11.80

CONTINUED

AUDIO AMPLIFIERS (CONT.)

PWM-INPUT POWER STAGES (PurePath TM)

Mfg. Part No.	Description	Pkg.	Stock No.	Price Each 1-9
● TAS5342DDV	2-Channels; 100W; Impedance:4Ω	44-HTSSOP	60M1730	7.97
● TAS5508CPAGR	8-Channel Digital Audio PWM Processor	64-TQFP	91R2089	7.09
● TAS5611APHDR	125W Stereo / 250W Mono PurePath(TM) HD Analog-input Power Stage	64-HTQFP	91R2090	8.18

AUDIO VOLUME CONTROL

Mfg. Part No.	Gain and Attenuation(dB)	Supply (V)	Pkg.	Stock No.	Price Each 1-9
● PGA2311U	+31.5dB to -95.5dB with 0.5dB	+/-5	16-SOIC	80K6043	10.09
● PGA2320IDW	+31.5dB to -95.5dB with 0.5dB	+/-15	16-SOIC	28K3666	17.88

EVALUATION MODULES

Mfg. Part No.	Description	Stock No.	Price Each
● PGA2505EVM	Evaluation Module for the PGA2505 Digitally-Controlled Microphone Preamplifier	50R7823	101.00
● TAS5613PHD2EVM	TAS5611/13PHD2EVM PurePath™ Premier Pro customer Evaluation Module	63R7588	407.00
TAS5631DKD2EVM	Evaluation Module for the TAS5631DKD & TAS5518PAG	55R7157	407.00
TAS5717EVM	Evaluation Module for the TAS5717	24T4756	203.00
TAS5719EVM	Evaluation Module for the TAS5719	24T4757	203.00
TPA2028D1YZFEVM	Evaluation Module for the TPA2028D1 Mono Class-D Speaker Amplifier	65R4598	101.00
● TPA2037D1YFFEVM	Evaluation Module for the TPA2037D1 Mono Class-D Speaker Amplifier	62R9593	49.98
● TPA2039D1YFFEVM	Evaluation Module for the TPA2037D1 Mono Class-D Speaker Amplifier	62R9594	100.98
● TPA3100D2EVM	TPA3100D2 Evaluation Module	75K1614	152.01
● TPA3110D2EVM	TPA3110D2 Evaluation Module	50R8084	152.01
TPA3112D1EVM	Evaluation Module for the TPA3112D1 Mono Class-D Audio Amplifier	53R1373	152.01
TPA3117D2EVM	Evaluation Module for the TPA3117D2 Class-D Audio Power Amplifier	21T4321	152.01
● TPA3123D2EVM	TPA3123D2 Evaluation Module	55M5943	101.00
TPA6013A4PWPEVM	TPA6013A4PWP Evaluation Module	55R7551	101.00
TPA6140A2YFFEVM	Evaluation Module for the TPA6140A2 Stereo Class-G Headphone Amplifier	04R6576	49.98

(65781)

CURRENT SENSING AMPLIFIERS

RoHS Compliant Available

TEXAS INSTRUMENTS

INA282AIDR

Mfg. Part No.	Quiescent Current (uA)	Band-width Max. (kHz)	Gain (V/V)	Com. Mode Volt. Range (V)	Pkg.	Stock No.	Price Each 1-9
● INA138NA/250	25	800	100	2.7 to 36	5-SOT-23	80K5906	2.04
● INA139NA/250	60	440	100	2.7 to 36	5-SOT-23	39C3949	2.04
● INA168NA/250	25	800	100	2.7 to 60	5-SOT-23	35C1744	2.50
● INA170EA/250	75	400	100	2.7 to 60	8-MSOP	74C9833	2.99
● INA170EA/2K5	75	400	100	2.7 to 60	8-MSOP	74C9832	2.59
● INA193AIDBVT	250	500	20	-16 to 80	5-SOT-23	21J8780	2.59
● INA193AIDBVTG4	250	500	20	-16 to 80	5-SOT-23	37K0156	2.59
● INA194AIDBVT	700	300	50	-16 to 80	5-SOT-23	21J8782	2.59
● INA195AIDBVT	700	200	100	-16 to 80	5-SOT-23	21J8784	2.59
● INA196AIDBVT	700	500	20	-16 to 80	5-SOT-23	21J8786	2.59
● INA197AIDBVT	700	300	50	-16 to 80	5-SOT-23	21J8788	2.59
● INA198AIDBVT	700	200	100	-16 to 80	5-SOT-23	21J8790	2.59
● INA202AIDGKR	1800	200	100	-16 to 80	8-MSOP	22M0725	2.45
● INA209AIPW	1000	...	Prog.	0 to 26	16-TSSOP	48M0664	6.38
● INA209AIPWR	1000	...	Prog.	0 to 26	16-TSSOP	48M0665	5.97
● INA210AIDCKT	115	14	200	-0.3 to 26	6-SC-70	05N1039	2.04
● INA211AIDCKT	65	14	500	-0.3 to 26	6-SC-70	01P3283	2.04
● INA212AIDCKT	65	14	1000	-0.3 to 26	6-SC-70	01P3284	2.04
● INA213AIDCKT	115	14	50	-0.3 to 26	6-SC70	05N1040	2.04
● INA214AIDCKT	115	14	100	-0.3 to 26	6-SC70	05N1041	2.04
● INA216A4YFFT	13	2.5	200	1.8 to 5.5	4-DSBGA	24T4573	1.24
● INA219AIDCNR	700	...	Prog.	0 to 26	8-SOT-23	09P2546	2.18
● INA219BIDCNT	700	...	Prog.	0 to 26	8-SOT-23	12T2860	2.86
● INA220AIDGST	700	...	Prog.	0 to 26	10-MSOP	14R8334	2.75
● INA270AID	700	130	14	-16 to 80	8-SOIC	33M9103	2.78

➤ CONTINUED ➤

CURRENT SENSING AMPLIFIERS (CONT.)

Mfg. Part No.	Quiescent Current (uA)	Band-width Max. (kHz)	Gain (V/V)	Com. Mode Volt. Range (V)	Pkg.	Stock No.	Price Each 1-9
● INA271AID	900	130	20	-16 to 80	8-SOIC	33M9105	2.78
● INA282AIDR	600	10	50	-14 to 80	8-SOIC	91R0763	2.99

DEVELOPMENT TOOLS

Mfg. Part No.	Description	Stock No.	Price Each
INA220EVM	INA220 Evaluation Module	50R7695	152.01
● INA282-286EVM	INA282 Evaluation Module	91R2085	50.00
● INA210-214EVM	INA210-214 Evaluation Module	08P4366	50.00

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FULLY DIFFERENTIAL OPERATIONAL AMPLIFIERS

RoHS Compliant Available

TEXAS INSTRUMENTS

SINGLE CHANNEL

Mfg. Part No.	BW (MHz)	Supply Voltage Max. (V)	Slew Rate Typ. (V/us)	V_{IO} (25°C) Max. (mV)	Offset Drift Typ. (µV/°C)	Pkg.	Stock No.	Price Each
● THS4521ID	95	5.5	480	3.5	...	8-SOIC	45P2938	3.46
● THS4521IDGKT	95	5.5	490	3.5	...	8-MSOP	45P2939	3.32
● THS4524IDBT	95	5.5	490	2.5	2	38-TSSOP	05R5042	8.42
● THS4130ID	150	30	52	2	4.5	8 SOIC	76C6405	8.03
● THS4130IDGK	150	30	52	0.2	4.5	8-MSOP	01J0843	8.03
● THS4130IDGNR	150	15	52	2	4.5	8-MSOP	76C6407	7.18
● THS4131CD	150	30	52	2	4.5	8 SOIC	27C0009	7.71
● THS4131ID	150	30	52	2	4.5	8 SOIC	72C6289	7.93
● THS4131IDGK	150	30	52	0.2	4.5	8-MSOP	01J0847	7.93
● THS4131IDGN	150	30	52	0.2	4.5	8-HTSSOP	36C2608	8.35
● THS4140ID	160	30	450	1	7	8-SOIC	76C6420	9.69
● THS4504D	260	15	1800	1	10	8-SOIC	02E7132	5.44
● THS4502CD	370	15	2800	3	10	8-SOIC	76C6465	11.11
● THS4503CD	370	15	2800	3	10	8-SOIC	73C1674	11.11
● THS4503ID	370	15	2800	7	10	8-SOIC	76C6477	11.32
● THS4503IDGN	370	15	2800	4	10	8-MSOP	73C7816	11.32
● INA149AID	500	36	5	1.1	3	8-SOIC	76T6054	6.91
● THS770012IRGET	900	5.25	3300	...	...	24-QFN	21T4295	10.52
● THS4508RGTT	2000	5.5	6400	1	2.6	16-QFN	63K6471	11.70
● THS770006IRGET	2400	5.25	3200	...	...	24-QFN	91R0767	10.09
● THS4509RGTT	3000	5.5	6600	1	2.6	16-QFN	08K4860	10.07

DUAL CHANNEL

● TL062ACDR	1	36	3.5	7.5	10	8-SOIC	76C9079	0.80
● TL062CDR	1	36	3.5	20	10	8-SOIC	35C2173	0.64
● TL032AIP	1.1	15	2.9	4.5	10.8	8-DIP	76C9033	2.82

QUAD CHANNEL

● TL034ACN	1.1	15	2.9	4.5	12	14-PDIP	97B2294	6.02
● TL034ID	1.1	15	2.9	4.5	12	14-SOIC	76C9045	2.04

EVALUATION MODULES

Mfg. Part No.	Description	Stock No.	Price Each
● THS4521EVM	THS4521EVM Evaluation Module for the single, THS4521 in the D (8-lead SOIC) package	50P9387	100.98
THS770012EVM	THS770012 Differntial Amplifier Evaluation Module	21T4293	101.00
INA149EVM	EVAL MODULE, INA149, DIFF AMPLIFIER	74T3765	50.00

(64972)

GENERAL PURPOSE OPERATIONAL AMPLIFIERS - SINGLE CHANNEL

RoHS Compliant Available

TEXAS INSTRUMENTS

J-FET INPUT

Mfg. Part No.	BW (MHz)	Supply Voltage Max. (V)	Slew Rate Typ. (V/us)	V_{IO} (25°C) Max. (mV)	Offset Drift Typ. (µV/°C)	Pkg.	Stock No.	Price Each 1-9
● TL061CP	1	36	3.5	15	10	8-PDIP	60K6983	0.63
● LF411CD	3	36	13	2	10	8-SOIC	06F8939	1.64
● OPA171AIDRLT	3	36	1.5	1.8	0.3	5-SOT-53	27T6639	1.66
● TL081ACD	3	36	13	6	18	8-SOIC	76C9114	0.93
● TL081ACP	3	36	13	6	18	8-PDIP	68K1132	1.01
● TL081CD	3	36	13	6	18	8-SOIC	08F9312	0.57
● TL081CP	3	36	13	15	18	8-DIP	08F9317	0.53

LOW NOISE J-FET INPUT

● TL071ACP	3	36	13	6	18	8-DIP	60K6986	0.80
● TL071CD	3	36	13	6	18	8-SOIC	08F9262	0.57
● TL071CP	3	36	13	10	18	8-DIP	08F9265	0.62

➤ CONTINUED ➤

GENERAL PURPOSE OPERATIONAL AMPLIFIERS - SINGLE CHANNEL (CONT.)

Mfg. Part No.	BW (MHz)	Supply Voltage Max. (V)	Slew Rate Typ. (V/us)	V_{IO} (25°C) Max. (mV)	Offset Drift Typ. (µV/°C)	Pkg.	Stock No.	Price Each 1-9
FET INPUT								
OPA137NA/250	1	36	3.5	3	15	5-SOT-23	75C4604	1.91
OPA137N/250	1	36	3.5	3	15	5-SOT-23	80K6010	2.86
GENERAL PURPOSE								
LM2904D	0.7	26	0.3	7	7	8-SOP	06F9184	0.49
UA741CD	1	36	0.5	6	1	8-SOIC	67K2884	0.52
UA741CP	1	36	0.5	6	1	8-DIP	60K7043	0.56
RAIL-TO-RAIL OUTPUT								
LMV321IDBVT	1	5.5	1	7	5	5-SOT-23	61H5122	1.12
LMV321IDCKR	1	5.5	1	7	5	5-SOP	75C0690	0.68
LOW NOISE								
NE5534AP	10	30	13	4	...	8-DIP	60K6704	1.08
LOW NOISE, HIGH SPEED								
NE5534P	10	30	13	4	1	8-SOP	60K6705	0.97
LOW OFFSET VOLTAGE								
OP07CD	0.6	36	0.3	250	0.5	8-SOIC	67K2808	0.96
OP07CDR	0.6	18	0.3	0.25	0.5	8-SOIC	75C5226	0.80
OP07CP	0.6	36	0.3	250	0.5	8-DIP	60K6707	0.91
OP07DP	0.6	36	0.3	250	0.7	8-DIP	60K6708	1.16
PROGRAMMABLE LOW POWER								
TLC271ACD	1.7	16	3.6	10	1.8	8-SOIC	08F9076	1.03
TLC271ACP	1.7	16	3.6	8	1.8	8-DIP	36K3641	0.98
TLC271BCP	1.7	16	3.6	1.1	1.8	8-DIP	35K1198	1.09
LinCMOS™								
TLC251CP	1.7	16	3.6	10	1.8	8-DIP	35K4972	3.06
TLC271CD	1.7	16	3.6	8	1.8	8-SOP	08F9082	0.89
TLC271CP	1.7	16	3.6	8	1.8	8-DIP	35K1199	0.97
TLC271CDR	1.7	16	3.6	8	1.8	8-SOIC	35C2131	0.84
TLC271IP	1.7	16	3.6	8	1.8	8-DIP	35C2132	0.89
MICROAMPLIFIER SERIES								
OPA237NA/250	1.5	36	0.5	0.76	2	5-SOT-23	35C1874	1.63
OPA237UA	1.5	36	0.5	0.76	2	8-SOIC	04M4584	1.63

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GENERAL PURPOSE OPERATIONAL AMPLIFIERS - DUAL CHANNEL

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	BW (MHz)	Supply Voltage Max. (V)	Slew Rate Typ. (V/us)	V_{IO} (25°C) Max. (mV)	Offset Drift Typ. (µV/°C)	Pkg.	Stock No.	Price Each 1-9
J-FET INPUT								
TL062ACD	1	36	3.5	6	10	8-SOIC	08F9224	0.96
TL062ACP	1	36	3.5	15	10	8-PDIP	67K1273	0.88
TL062CD	1	36	3.5	15	10	8-SOIC	08F9229	0.77
TL062CP	1	36	3.5	15	10	8-DIP	60K6984	0.71
TL062IP	1	36	3.5	15	10	8-PDIP	08F9232	0.77
LF353D	3	36	13	10	10	8-SOIC	34K7181	0.69
LF412CD	3	36	13	3	10	8-SPOP	72K8844	1.60
TL082ACD	3	36	13	6	18	8-SOP	67K2877	0.96
TL082ACP	3	36	13	6	18	8-DIP	08F9330	0.88
TL082BCD	3	36	13	6	18	8-SOP	08F9335	1.31
TL082BCP	3	36	13	3	18	8-PDIP	67K1277	1.41
TL082CD	3	36	13	15	18	8-SOP	35K1261	0.77
TL082CP	3	36	13	15	18	8-DIP	60K6991	0.84
TL082ID	3	36	13	6	18	8-SOP	08F9350	0.84
TL082IP	3	36	13	6	18	8-DIP	60K6992	0.77
PRECISION J-FET INPUT								
TL052ACD	3	30	20.7	1.5	8	8-SOIC	76C9053	2.51
TL052ACP	3	30	20.7	0.8	6	8-DIP	67K1270	2.35
LOW NOISE J-FET INPUT								
TL072ACD	3	36	13	6	18	8-SOP	35K1256	0.93
TL072ACP	3	36	13	6	18	8-DIP	60K6987	1.01
TL072BCD	3	36	13	3	18	8-SOIC	08F9273	1.31
TL072CD	3	36	13	6	18	8-SOIC	08F9277	0.77
TL072CDR	3	36	13	10	18	8-SOP	36K7650	0.64
TL072CP	3	36	13	10	18	8-DIP	60K6988	0.84
TL072ID	3	36	13	6	18	8-SOP	76C9106	0.77
FET INPUT								
OPA2130UA	1	36	2	1	2	8-SOIC	35C1841	6.44
OPA2137P	1	36	3.5	2	15	8-DIP	74M8352	2.75

➤ CONTINUED ➤

GENERAL PURPOSE OPERATIONAL AMPLIFIERS - DUAL CHANNEL (CONT.)

Mfg. Part No.	BW (MHz)	Supply Voltage Max. (V)	Slew Rate Typ. (V/us)	V_{IO} (25°C) Max. (mV)	Offset Drift Typ. (µV/°C)	Pkg.	Stock No.	Price Each 1-9
GENERAL PURPOSE								
LM258D	0.7	32	0.3	5	7	8-SOIC	06F9136	0.48
LM358ADGKRG4	0.7	32	0.3	7	7	8-SOIC	70K2995	0.58
LM358AD	0.7	32	0.3	7	7	8-SOIC	75C0844	0.46
LM358DR	0.7	32	0.3	7	7	8-SOIC	34K7599	0.55
LM358D	0.7	32	0.3	7	7	8-SOP	67K2804	0.45
LM358P	0.7	32	0.3	7	7	8-DIP	60K6191	0.50
LM358PE3	0.7	32	0.3	9	7	8-PDIP	12T2862	0.50
MC1458P	1	30	0.5	6	1	8-DIP	60K6206	0.58
UA747CN	1	36	0.5	6	1	14-PDIP	60K7044	1.24
TLC272CP	1.7	16	3.6	10	1.8	8-DIP	36K3642	0.89
TLC272IP	1.7	16	3.6	1.1	1.8	8-DIP	08F9090	0.93
TLC272CDR	1.7	16	3.6	1.1	1.8	8-SOIC	35C2134	0.78
TLC272IDR	1.7	16	3.6	1.1	1.8	8-SOIC	35C2135	0.82
RC4558P	3	30	1.7	6	1	8-DIP	60K6767	0.43
RAIL-TO-RAIL OUTPUT								
LMV722IDR	10	5	5.25	3	0.6	8-SOIC	02M3640	1.16
RAIL-TO-RAIL OUTPUT, VERY LOW NOISE								
TL972ID	12	12	5	1	5	8-SOIC	52M6085	0.93
TL972IDR	12	12	5	1	5	8-SOIC	52M6086	0.88
PRECISION								
LT1013CP	1	44	0.4	0.3	2.5	8-DIP	60K6194	2.66
LT1013DD	1	44	0.4	0.3	2.5	8-SOP	35C1764	2.35
LT1014DN	1	44	0.4	0.8	5	14-DIP	60K6195	5.88
LT1013DP	1	44	0.4	0.8	5	8-PDIP	67K0378	2.20
OPA1644AID	11	18	20	1	...	14-SOIC	77R1720	5.61
PRECISION, LOW POWER								
TLC27M2CP	0.525	16	0.43	10	1.7	8-DIP	35K4974	0.98
TLC27M2ID	0.525	16	0.43	10	1.7	8-SOIC	35K1196	1.07
LOW NOISE								
NE5532AD	10	30	9	4	...	8-SOIC	75C4431	1.18
NE5532AP	10	30	9	4	1	8-DIP	08F2505	1.08
HIGH SPEED, LOW NOISE								
MC33078P	16	36	7	2	2	8-DIP	73J8261	0.88
NE5532D	10	30	9	4	...	8-SOIC	75C4434	0.93
LinCMOS™								
TLC272ACDR	1.7	16	3.6	10	1.8	8-SOP	35C2133	0.94
TLC272ACP	1.7	16	3.6	10	1.8	8-DIP	08F9085	0.95
TLC272AID	1.7	16	3.6	5	1.8	8-SOP	35K1200	1.03
TLC272BCD	1.7	16	3.6	2	1.8	8-SOP	67K1261	1.03
TLC272BCP	1.7	16	3.6	1.1	1.8	8-DIP	35K1201	1.16
TLC272BID	1.7	16	3.6	1.1	1.8	8-SOIC	76C7213	1.07
TLC272BIP	1.7	16	3.6	10	1.8	8-DIP	76C7215	1.03
MICROAMPLIFIER SERIES								
OPA2237EA/250	1.5	36	0.5	0.76	2	8-MSOP	35C1853	2.86
OPA2237UA	1.5	36	0.5	0.76	2	8-SOIC	80K6018	2.99
AUDIO								
RC4580ID	12	32	5	3	...	8-DIP	61H5379	1.05
LM833DGKR	16	18	7	0.15	2	8-MSOP	12T2863	1.02

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GENERAL PURPOSE OPERATIONAL AMPLIFIERS - QUAD CHANNEL

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	BW (MHz)	Supply Voltage Max. (V)	Slew Rate Typ. (V/us)	V_{IO} (25°C) Max. (mV)	Offset Drift Typ. (µV/°C)	Pkg.	Stock No.	Price Each 1-9
J-FET INPUT								
TL064ACD	1	36	3.5	6	10	14-SOIC	08F9237	1.05
TL064BCN	1	36	3.5	15	10	14-PDIP	66F2901	1.08
TL064CN	1	36	3.5	15	10	14-DIP	60K6985	0.68
TL064IN	1	36	3.5	15	10	14-DIP	08F9246	0.63
LF347BD	3	36	13	7	18	14-SOIC	75C0685	0.82
TL084ACN	3	36	13	6	18	14-DIP	08F9361	0.97
TL084BCD	3	36	13	6	18	14-SOIC	36K3653	1.35
TL084BCN	3	36	13	6	18	14-PDIP	60K6993	1.46
TL084CD	3	36	13	15	18	14-SOP	36K3654	0.68
TL084CN	3	36	13	15	18	14-DIP	08F9374	0.68
TL084ID	3	36	13	6	18	14-SOIC	08F9378	0.68
TL084IN	3	36	13	6	18	14-DIP	60K6994	0.92

➤ CONTINUED ➤

GENERAL PURPOSE OPERATIONAL AMPLIFIERS - QUAD CHANNEL (CONT.)

Mfg. Part No.	BW (MHz)	Supply Voltage Max. (V)	Slew Rate Typ. (V/us)	V_{IO} (25°C) Max. (mV)	Offset Drift Typ. (µV/°C)	Pkg.	Stock No.	Price Each 1-9
J-FET INPUT, PRECISION								
● TL054CN	2.7	30	17.8	1.5	23	8-SOP	99F8836	2.51
J-FET INPUT, LOW NOISE								
● TL074ACD	3	36	13	6	18	14-SOP	52F2748	1.01
● TL074ACN	3	36	13	6	18	14-PDIP	67K1275	0.93
● TL074BCN	3	36	13	6	18	14-DIP	60K6989	1.08
● TL074BCD	3	36	13	5	18	14-SOIC	35K1257	1.18
● TL074CD	3	36	13	10	18	14-SOP	35K1258	0.68
● TL074CN	3	36	13	10	18	14-DIP	60K6990	0.62
● TL074ID	3	36	13	6	18	14-DOP	35K1260	0.93
● TL074IN	3	36	13	6	18	14-DIP	67K1276	1.01
FET INPUT								
● OPA4130UA	1	36	2	1	2	14-SOIC	80K8080	8.71
● OPA4137UA	1	18	3.5	3.5	15	14-SOIC	75C4958	3.10
GENERAL PURPOSE								
● LM324N	0.7	32	...	7	1	14-PDIP	60K6190	0.58
● LM248N	1	36	0.5	7.5	...	14-PDIP	67K0313	0.62
● LM2902DR	1.2	26	0.5	7	...	14-SOIC	75C0767	0.43
● LM224D	1.2	32	0.5	5	7	14-SOIC	06F9100	0.50
● LM224N	1.2	32	0.5	5	1	14-DIP	06F9106	0.54
● LM324AN	1.2	32	0.5	3	7	14-DIP	43K5293	0.43
● LM324AD	1.2	32	0.5	3	7	14-SOIC	75C0822	0.48
● LM324D	1.2	32	0.5	7	1	14-SOIC	72K8847	0.46
● LM324DR	1.2	32	0.5	7	10	14-SOIC	75C0826	0.57
● LM324NE3	1.2	32	0.5	9	7	14-PDIP	12T2861	0.56
● TLC274CD	1.7	16	3.6	5	1.8	14-SOP	08F9094	1.17
● TLC274CN	1.7	16	3.6	5	1.8	14-DIP	35K1205	1.12
● LM2900N	2.5	32	20	7	7	14-DIP	60K6186	0.56
● RC4136N	3	30	1.7	6	1	14-PDIP	60K6766	1.54
RAIL-TO-RAIL OUTPUT								
● LMV324IPWR	1	5.5	1	7	5	14-TSSOP	75C0693	0.80
RAIL-TO-RAIL OUTPUT, VERY LOW NOISE								
● TL974ID	12	12	5	1	5	14-SOIC	14M2459	1.10
● TL974IDR	12	12	5	1	5	14-SOIC	14M2461	0.35
● TL974IN	12	12	5	1	5	14-PDIP	14M2463	1.01
LOW POWER								
● LP324N	0.1	32	0.05	4	10	14-DIP	31K7163	0.66
● MC3403N	1	30	0.6	8	10	14-DIP	60K6209	0.84
LOW POWER, LOW VOLTAGE								
● TLC27M4AIN	0.525	16	0.43	5	1.7	14-DIP	22C6329	1.24
● TLC27M4CN	0.525	16	0.43	10	1.7	14-DIP	35K4975	1.19
PRECISION								
● LT1014DIDW	1	44	0.4	0.3	2	14-DIP	16C7242	6.44
● LT1014DIN	1	44	0.4	0.3	5	14-DIP	21H0963	5.88
● TLC279IDR	1.7	36	3.6	0.9	1.1	14-DIP	35C2141	2.94
HIGH SPEED, LOW POWER, PRECISION								
TLE2024BMDW.	1.7	40	0.5	1.1	2	16-SOIC	76C7595	5.74
LinCMOS™								
● TLC274ACD	1.7	16	3.6	5	1.8	14-SOP	35C2136	1.27
● TLC274ACN	1.7	16	3.6	1.1	1.8	14-DIP	36K3643	1.22
● TLC274BCN	1.7	16	3.6	2	1.8	14-DIP	35K1203	1.36
● TLC274BIDR	1.7	16	3.6	1.1	1.8	14-SOIC	35C2137	1.18

(175988)

LOW INPUT BIAS CURRENT/ FET INPUT PRECISION OPERATIONAL AMPLIFIERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	GBW (MHz)	Slew Rate Typ. (V/us)	V_{IO} (25°C) Max. (mV)	Offset Drift Typ. (µV/°C)	Pkg.	Stock No.	Price Each 1-9
SINGLE CHANNEL							
● OPA349NA/250	0.065	0.02	10	15	5-SOT-23	75C4892	1.63
● OPA349SA/3K	0.065	0.02	10	15	5-SC-70	75C4895	1.50
● OPA347NA/250	0.35	0.17	6	3	5-SOT-23	35C1893	0.88
● OPA347PA	0.35	0.17	6	3	8-DIP	75C4881	0.88
● OPA347SA/3K	0.35	0.17	6	3	5-SC-70	75C4883	0.76
● OPA129U	1	2.5	2	5	8-SOIC	80K6004	6.80
● OPA344NA/250	1	0.8	1	3	5-SOT-23	75C4871	1.63
● OPA348AIDBVT	1	0.5	5	4	5-SOT-23	74K3907	0.78
● OPA705NA/3K	1	0.6	5	4	5-SOT-23	75C5213	1.50
● IVC102U	2	3	5	30	14-SOIC	03P0868	11.58

➤ CONTINUED ➤

LOW INPUT BIAS CURRENT/FET INPUT PRECISION OPERATIONAL AMPLIFIERS (CONT.)

Mfg. Part No.	GBW (MHz)	Slew Rate Typ. (V/us)	V_{IO} (25°C) Max. (mV)	Offset Drift Typ. (µV/°C)	Pkg.	Stock No.	Price Each 1-9
● OPA337NA/250	3	1.2	3	2	5-SOT-23	75C4849	0.80
● OPA345NA/250	3	2	1	3	5-SOT-23	75C4876	1.63
● OPA140AID	11	20	120	1	8-SOIC	13T8920	4.54
● OPA140AIDGKT	11	20	120	1	8-MSOP	13T8921	4.30
DUAL CHANNEL							
● OPA2347UA	0.35	0.17	6	3	8-SOIC	35C1870	1.40
● OPA2347EA/250	0.35	0.17	6	3	8-SOT-23	75C4719	1.34
● OPA2344UA	1	0.8	1	3	8-SOIC	75C4713	2.70
● OPA2348AID	1	0.5	5	4	8-SOIC	75C4722	1.24
● OPA2703UA	1	0.6	0.075	4	8-SOIC	75C4806	6.78
● OPA2705UA	1	0.6	5	4	8-SOIC	75C4816	2.10
● OPA2337EA/250	3	1.2	3	2	8-SOT-23	96K4525	1.24
● OPA2140AIDGKT	11	20	0.12	0.35	8-MSOP	01T0585	6.69
● OPA2320AIDGKT	20	10	150	1.5	8-MSOP	17T1604	3.46
QUAD CHANNEL							
● OPA4347EA/250	0.35	0.17	6	3	14-TSSOP	75C5003	1.94
● OPA4348AID	1	0.5	5	4	14-SOIC	75C5006	1.57
● OPA4705UA	1	0.6	5	4	14-SOIC	75C5048	3.59
● OPA4140AID	11	20	0.12	0.35	14-SOIC	25T0266	10.67

(175983)

LOW NOISE PRECISION OPERATIONAL AMPLIFIERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	GBW (MHz)	Slew Rate Typ. (V/us)	V_{IO} (25°C) Max. (mV)	Offset Drift Typ. (µV/°C)	Pkg.	Stock No.	Price Each 1-9
SINGLE CHANNEL							
● OPA121KU	2	2	3	3	8-SOIC	75C4581	11.42
● OPA131UA	4	10	0.075	2	8-SOIC	80K6007	3.10
● OPA141AID	10	20	1	10	8-SOIC	77R3942	2.86
● OPA209AID	18	6.4	150	1	8-SOIC	17T1600	3.15
● OPA378AIDBVT	0.9	0.4	0.05	0.1	5-SOT-23	14R7884	2.31
● OPA569AIDWP	1.2	1.2	2	1.3	20-SO	21H3992	9.99
● OPA569AIDWPR	1.2	1.2	2	1.3	20-SO	21H3993	8.29
● OPA827AID	22	28	0.15	1.5	8-SOIC	12P6261	9.56
● TLV2471IDBVR	2.8	1.4	2.2	0.4	5-SOT-23	06C0825	2.09
● OPA209AIDBVT	18	6.4	0.15	1	5-SOT-23	27T6641	3.03
DUAL CHANNEL							
● OPA2107AP	4.5	18	1	3	8-DIP	01M8387	15.82
● OPA2107AU	4.5	18	1	3	8-SOIC	35C1840	16.57
● OPA2131UJ/2K5	4	10	1	2	8-SOIC	75C4620	3.22
● OPA2131UA	4	10	1	2	8-SOIC	80K6012	5.01
● OPA2141AID	10	20	1	10	8-SOIC	77R3943	3.82
● OPA2131UJ	4	10	1	2	8-SOIC	80K6013	3.94
● OPA2211AIDRGT	45	27	0.15	0.35	8-SON	10R1439	11.24
● OPA2378AIDCNT	0.9	0.4	0.07	0.15	8-SOT-23	51R6140	3.10
● TLC2262ID	0.71	0.55	2.5	2	8-SOIC	01C2204	2.23
● TLC2262CD	0.71	0.55	2.5	2	8-SOIC	35K1180	2.23
● TLC2262CP	0.71	0.55	2.5	2	8-DIP	35K1181	2.10
● TLC2262AID	0.82	0.55	0.95	2	8-SOIC	08F9010	2.38
● TLC2202IP	1.9	2.7	1	0.5	8-DIP	74C6088	7.73
● TLC2272CP	2.18	3.6	2.5	2	8-DIP	35K1183	2.10
● TLC2272ID	2.18	3.6	2.5	2	8-SOIC	67K1256	2.23
● TLC2272CD	2.18	3.6	2.5	2	8-SOIC	68K1127	2.10
● TLC2272AID	2.18	3.6	0.95	2	8-SOIC	08F9015	2.38
● TLC2272AIP	2.18	3.6	0.95	2	8-DIP	08F9016	2.23
● TLC2272ACD	2.18	3.6	0.95	2	8-SOIC	35K1182	2.23
● TLC2272ACP	2.18	3.6	0.95	2	8-DIP	36K3639	2.10
● TLC2272AIDR	2.18	3.6	0.95	2	8-SOIC	99B1009	1.98
● TLV2472CD	2.8	1.4	2.2	0.4	8-SOIC	19C9002	2.86
● TLV2472IP	2.8	1.4	2.2	0.4	8-DIP	76C8290	2.86
QUAD CHANNEL							
● OPA4131NA	4	10	1	2	14-SOIC	80K6025	7.76
● OPA4131NJ	4	10	1	2	14-SOIC	80K6026	6.48
● OPA4131PA	4	10	1	2	14-DIP	80K6027	8.71
● OPA4141AIPW	10	20	3.5	2	14-TSSOP	27T6643	5.44
● OPA4330AIRGYT	0.35	0.16	0.05	0.02	14-QFN	32T2985	4.54
● OPA4141AID	10	20	1	10	14-SOIC	77R3944	5.44
● OPA4209AIPW	18	6.4	0.15	1	14-TSSOP	21T3846	7.44
● TLC2264CD	0.71	0.55	2.5	2	14-SOIC	36K7645	2.54

➤ CONTINUED ➤

LOW NOISE PRECISION OPERATIONAL AMPLIFIERS (CONT.)

QUAD CHANNEL

Mfg. Part No.	GBW (MHz)	Slew Rate Typ. (V/us)	V_{IO} (25°C) Max. (mV)	Offset Drift Typ. (µV/°C)	Pkg.	Stock No.	Price Each 1-9
TLC2264ID	0.71	0.55	2.5	2	14-SOIC	76C6892	2.70
TLC2264AID	0.82	0.55	0.95	2	14-SOIC	90B2688	2.82
TLC2274CDR	2.18	3.6	2.5	2	14-SOIC	35C2125	2.23
TLC2274CN	2.18	3.6	2.5	2	14-DIP	35K1186	2.54
TLC2274CD	2.18	3.6	2.5	2	14-SOIC	67K1258	2.54
TLC2274ACN	2.18	3.6	0.95	2	14-DIP	35K1184	2.40
TLC2274AIN	2.18	3.6	0.95	2	14-DIP	35K1185	2.51
TLC2274ACD	2.18	3.6	0.95	2	14-SOIC	67K1257	2.51
TLC2274AID	2.18	3.6	0.95	2	14-SOIC	72K9572	2.60
TLC2274ACDR	2.18	3.6	0.95	2	14-SOIC	76C6917	2.10
TLC2274ACPWR	2.18	3.6	0.95	2	14-TSSOP	76C6918	2.10
TLV2264IN	0.67	0.55	2.5	2	14-DIP	52F2741	3.36
TLV2264AID	0.67	0.55	0.95	2	14-SOIC	76C7897	3.73
TLV2474CD	2.8	1.4	2.2	0.4	14-SOIC	19C9004	3.36
TLV2474IDR	2.8	1.4	2.2	0.4	14-SOIC	76C8314	3.06

(175984)

LOW OFFSET VOLTAGE PRECISION OPERATIONAL AMPLIFIERS

RoHS Compliant Available

TEXAS INSTRUMENTS

SINGLE CHANNEL

Mfg. Part No.	GBW (MHz)	Slew Rate Typ. (V/us)	V_{IO} (25°C) Max. (mV)	Offset Drift Typ. (µV/°C)	Pkg.	Stock No.	Price Each 1-9
OPA27GP	8	1.9	0.1	0.4	8-DIP	74K3903	3.48
OPA27GU	8	1.9	0.1	0.4	8-SOIC	80K6023	3.59
OPA37GU	63	11.9	0.1	0.4	8-SOIC	35C1897	3.73
OPA37GP	63	11.9	0.1	0.4	8-DIP	74K3909	3.59
OPA124U	1.5	1.6	0.5	2	8-SOIC	80K6002	10.09
OPA124UA	1.5	1.6	0.5	4	8-SOIC	80K6003	11.79
OPA132UA	8	20	0.5	2	8-SOIC	35C1838	4.18
OPA132U	8	20	0.5	2	8-SOIC	80K6008	6.69
OPA177FP	0.6	0.3	0.025	0.1	8-DIP	04M4582	2.86
OPA177GP	0.6	0.3	0.025	0.1	8-DIP	04M4583	2.86
OPA177GS	0.6	0.3	0.025	0.1	8-SOIC	35C0218	2.97
OPA211AID	45	27	0.05	0.35	8-SOIC	58M1074	8.82
OPA211AIDR	45	27	0.05	0.35	8-SOIC	58M1075	7.33
OPA227U	8	2.3	0.075	0.1	8-SOIC	35C1861	6.65
OPA227PA	8	2.3	0.075	0.1	8-DIP	83K8705	3.84
OPA228UA	33	11	0.075	0.1	8-SOIC	35C1864	3.48
OPA228PA	33	11	0.075	0.1	8-DIP	41M3877	3.34
OPA277P	1	0.8	0.02	0.1	8-DIP	30C5715	6.01
OPA277U	1	0.8	0.02	0.1	8-SOIC	75C4824	6.13
OPA277UA	1	0.8	0.02	0.1	8-SOIC	75C4826	3.15
OPA277PA	1	0.8	0.02	0.1	8-DIP	80K6024	3.03
OPA333AID	0.35	0.16	0.01	0.02	8-SOIC	80K2657	2.75
OPA333AIDBVT	0.35	0.16	0.01	0.02	5-SOT-23	80K2659	2.99
OPA333AIDCKR	0.35	0.16	0.01	0.02	5-SC-70	80K2660	2.59
OPA333AIDCKT	0.35	0.16	0.01	0.02	5-SC-70	80K2661	2.99
OPA334AIDBVT	2	1.6	0.005	0.02	6-SOT-23	75C4832	3.06
OPA335AIDBVT	2	1.6	0.005	0.02	5-SOT-23	36K7582	3.06
OPA335AID	2	1.6	0.005	0.02	8-SOIC	75C4833	3.20
OPA336UA	0.1	0.03	0.125	1.5	8-SOIC	35C1888	2.04
OPA336N/250	0.1	0.03	0.125	1.5	5-SOT-23	74K3904	2.86
OPA336N/3K	0.1	0.03	0.125	1.5	5-SOT-23	75C4841	2.59
OPA336NA/250	0.1	0.03	0.125	1.5	5-SOT-23	75C4842	2.04
OPA340NA/250	5.5	6	0.5	2.5	5-SOT-23	35K4774	2.88
OPA350UA	38	22	0.5	4	8-SOIC	35C1894	3.31
OPA364AIDBVT	7	5	0.5	3	5-SOT-23	21H3986	2.10
OPA364IDBVT	7	5	0.5	3	5-SOT-23	21H3990	2.82
OPA365AIDBVR	50	25	0.2	1	5-SOT-23	03M9400	1.77
OPA365AIDBVT	50	25	0.2	1	5-SOT-23	03M9402	2.04
OPA365AID	50	25	0.2	1	8-SOIC	18M7500	2.18
OPA376AID	5.5	2	0.025	0.26	8-SOIC	50M8880	2.18
OPA376AIDBVT	5.5	2	0.025	0.26	5-SOT-23	50M8882	2.04
OPA376AIDCKT	5.5	2	0.025	0.26	5-SC-70	50M8884	2.04
OPA381AIDGKT	18	12	0.025	0.03	8-MSOP	43J9649	2.45
OPA627AP	16	55	0.25	1.2	8-DIP	04M6519	24.43
OPA627AU	16	55	0.25	1.2	8-SOIC	30C4516	25.28
OPA627BM	16	55	0.25	1.2	8-TO-99	31C2537	54.97
OPA627BP	16	55	0.25	1.2	8-DIP	35C1918	33.79

➤ CONTINUED ➤

LOW OFFSET VOLTAGE PRECISION OPERATIONAL AMPLIFIERS (CONT.)

Mfg. Part No.	GBW (MHz)	Slew Rate Typ. (V/us)	V_{IO} (25°C) Max. (mV)	Offset Drift Typ. (µV/°C)	Pkg.	Stock No.	Price Each 1-9
OPA627AM	16	55	0.25	1.2	8-TO-99	72K7290	52.45
OPA637SM	80	135	0.25	1.2	8-TO-99	75C5111	87.80
OPA637AU	80	135	0.25	1.2	8-SOIC	80K6031	25.28
OPA637AP	80	135	0.25	1.2	8-DIP	96K4529	24.43
OPA727AIDGKT	20	30	0.15	0.3	8-MSOP	43J9653	1.91
OPA735AID	1.6	1.5	0.005	0.01	8-SOIC	90H2263	4.01
TLC2201AID	1.9	2.7	0.2	0.5	8-SOIC	66F3396	5.72
TLC2201AMD	1.9	2.7	0.2	0.5	8-SOIC	05W5170	5.86
TLC2652ACP	1.9	3.1	0.001	0.003	8-DIP	35K1189	6.92
TLE2021CP	1.2	0.5	0.6	2	8-DIP	08F9159	1.59
DUAL CHANNEL							
OPA2111AM	2	2	0.5	0.5	8-TO-99	74C0428	39.00
OPA2111KP	2	2	0.5	0.5	8-DIP	96K4522	16.59
OPA2132P	8	20	0.5	2	8-DIP	47P7461	11.49
OPA2132UA	8	20	0.5	2	8-SOIC	35C1846	6.16
OPA2132PA	8	20	0.5	2	8-DIP	61M2752	6.59
OPA2132U	8	20	0.5	2	8-SOIC	80K6015	10.49
OPA2227UA	8	2.3	0.075	0.1	8-SOIC	35C1849	5.86
OPA2227U	8	2.3	0.075	0.1	8-SOIC	75C4637	10.45
OPA2227PA	8	2.3	0.075	0.1	8-DIP	80K6017	5.60
OPA2227P	8	2.3	0.075	0.1	8-DIP	80K8516	10.23
OPA2228PA	33	11	0.075	0.1	8-DIP	28M9260	5.60
OPA2228U	33	11	0.075	0.1	8-SOIC	35C1850	10.45
OPA2228P	33	11	0.075	0.1	8-DIP	75C4640	10.23
OPA2234UG4	0.35	0.2	0.1	0.5	8-SOIC	81K3683	6.43
OPA2234U	0.35	0.2	0.1	0.5	8-SOIC	96K4523	6.43
OPA2234UA	0.35	0.2	0.1	0.5	8-SOIC	96K4524	6.00
OPA2241UA	0.035	0.01	0.25	0.4	8-SOIC	10M9199	5.49
OPA2251UA	0.035	0.01	0.25	0.5	8-SOIC	01M8394	5.49
OPA2277P	1	0.8	0.025	0.1	8-DIP	01M3139	8.29
OPA2277U	1	0.8	0.025	0.1	8-SOIC	35C1863	8.39
OPA2277UA	1	0.8	0.025	0.1	8-SOIC	75C4660	4.65
OPA2277PA	1	0.8	0.025	0.1	8-DIP	80K6021	4.54
OPA2333AIDGKR	0.35	0.16	0.01	0.02	8-MSOP	31M0321	3.58
OPA2333AID	0.35	0.16	0.01	0.02	8-SOIC	80K2645	4.30
OPA2333AIDRBT	0.35	0.16	0.01	0.02	8-SON	80K2647	4.18
OPA2335AIDGKT	2	1.6	0.005	0.02	8-MSOP	74K3898	4.93
OPA2335AID	2	1.6	0.005	0.02	8-SOIC	75C4669	5.07
OPA2336EA/250	0.1	0.03	0.125	1.5	8-MSOP	75C4675	2.99
OPA2350UA	38	22	0.5	4	8-SOIC	35C1873	5.41
OPA2350EA/250	38	22	0.5	4	8-MSOP	74K3902	5.18
OPA2350PA	38	22	0.5	4	8-DIP	75C4730	5.18
OPA2340EA/250	5.5	6	0.5	2.5	8-MSOP	36K7580	4.01
OPA2340UA	5.5	6	0.5	2.5	8-SOIC	36K7581	4.12
OPA2340PA	5.5	6	0.5	2.5	8-DIP	62K3460	3.92
OPA2340UA/2K5	5.5	6	0.5	2.5	8-SOIC	75C4699	3.42
OPA2376AIDR	5.5	2	0.025	0.26	8-SOIC	54M7255	2.59
OPA2365AID	50	25	0.2	1	8-SOIC	18M7498	2.75
OPA2727AIDR	20	30	0.15	0.3	8-SOIC	33M9411	2.72
OPA2735AID	1.6	1.5	0.005	0.01	8-SOIC	01J0602	6.39
OPA2735AIDGKT	1.6	1.5	0.005	0.01	8-SOIC	01J0604	6.14
TLC2202ACD	1.9	2.7	0.5	0.5	14-SOIC	08F9007	8.68
TLC27L7CD	0.085	0.03	0.5	1.1	8-SOIC	35K1194	2.70
TLC277CP	1.7	3.6	0.5	1.8	8-DIP	35K4977	2.70
TLC277ID	1.7	3.6	0.5	1.8	8-SOIC	72K9576	2.82
TLC277IDR	1.7	3.6	0.5	1.8	8-SOIC	76C7242	2.38
TLC4502CD	4.7	2.5	0.1	1	8-SOIC	76C7404	5.86
TLE2022CD	1.7	0.5	0.6	2	8-SOIC	08F9160	2.38
TLE2022CP	1.7	0.5	0.6	2	8-DIP	08F9161	2.23
TLE2022CDR	1.7	0.5	0.6	2	8-SOIC	76C7586	1.98
TLE2022AID	1.7	0.5	0.4	2	8-SOIC	76C7583	3.06
QUAD CHANNEL							
OPA4227PA	8	2.3	0.2	0.3	14-DIP	74K3910	11.05
OPA4227UA	8	2.3	0.2	0.3	14-SOIC	80K7311	11.53
OPA4228UA	33	11	0.2	0.3	14-SOIC	20M1355	11.53
OPA4277PA	1	0.8	0.05	0.15	14-DIP	15M1931	9.35
OPA4277UA	1	0.8	0.05	0.15	14-SOIC	24C8771	9.77
OPA4277UA/2K5	1	0.8	0.05	0.15	14-SOIC	75C4978	8.18
OPA4350UA	38	22	0.5	4	14-SOIC	74K3912	11.75
OPA4350EA/250	38	22	0.5	4	16-SSOP	75C5011	11.35
OPA4340EA/250	5.5	6	0.5	2.5	16-SSOP	35C1906	6.70

➤ CONTINUED ➤

LOW OFFSET VOLTAGE PRECISION OPERATIONAL AMPLIFIERS (CONT.)

QUAD CHANNEL

Mfg. Part No.	GBW (MHz)	Slew Rate Typ. (V/us)	V_{IO} (25°C) Max. (mV)	Offset Drift Typ. (µV/°C)	Pkg.	Stock No.	Price Each 1-9
● OPA4376AIPWR	5.5	2	0.025	0.26	14-TSSOP	54M7257	3.34
● TLE2024CN	1.7	0.5	1.1	2	14-DIP	08F9162	3.94

(175985)

LOW POWER PRECISION OPERATIONAL AMPLIFIERS

RoHS Compliant Available

TEXAS INSTRUMENTS

SINGLE CHANNEL

Mfg. Part No.	GBW (MHz)	Slew Rate Typ. (V/us)	V_{IO} (25°C) Max. (mV)	Offset Drift Typ. (µV/°C)	Pkg.	Stock No.	Price Each 1-9
● OPA244NA/250	0.43	0.16	1.5	4	5-SOT-23	35C1876	1.79
● OPA244UA	0.43	0.16	1.5	4	8-SOIC	35C1877	1.79
● OPA330AID	0.35	0.16	0.008	0.02	8-SOIC	51R1163	2.54
● OPA330AIDBVT	0.35	0.16	0.008	0.02	5-SOT-23	51R1164	2.54
● OPA171AIDBVT	3	1.5	1.8	0.3	5-SOT-23	21T3841	1.41
● OPA171AID	3	1.5	1.8	0.3	8-SOIC	21T9623	1.47
● TLV2211CDBVR	0.056	0.025	3	1	5-SOT-23	76C7826	1.40
● TLV2211IDBVR	0.056	0.025	3	1	5-SOT-23	76C7828	1.47
● TLV2221CDBVR	0.48	0.18	3	1	5-SOT-23	76C7833	1.40
● TLV2231IDBVR	1.9	1.25	3	0.5	5-SOT-23	76C7839	1.47
● TLV2370IDBVR	2.4	2	4.5	2	6-SOT-23	76C7964	1.62
● TLV2370IP	2.4	2	4.5	2	8-DIP	76C7967	1.67
● TLV2371ID	2.4	2	4.5	2	8-SOIC	76C7968	1.62
● TLV2371IDBVR	2.4	2	4.5	2	5-SOT-23	76C7969	1.33
● TLV2371IDBVT	2.4	2	4.5	2	5-SOT-23	76C7970	1.62
● TLV2371IDR	2.4	2	4.5	2	8-SOIC	76C7971	1.33
● TLV2371IP	2.4	2	4.5	2	8-DIP	76C7972	1.53
● TLV2381IDBVT	0.16	0.06	4.5	1.1	5-SOT-23	76C7994	2.10
● TLV2401IP	0.0055	0.0025	1.2	3	8-DIP	76C8006	2.38
● TLV2451IDBVR	0.22	0.11	1.5	0.3	5-SOT-23	76C8113	1.79
● TLV271IDBVR	3	2.4	5	2	5-SOT-23	76C8471	0.90
● TLV271IDBVT	3	2.4	5	2	5-SOT-23	76C8472	1.02
DUAL CHANNEL							
● OPA2244EA/250	0.43	0.16	1.5	4	8-MSOP	35C1856	2.95
● OPA2330AID	0.35	0.16	0.008	0.02	8-SOIC	51R1161	3.20
● OPA2379AID	0.09	0.03	1.5	1.5	8-SOIC	71K9015	1.91
● TLC2252CD	0.2	0.12	1.5	0.5	8-SOIC	76C6846	2.10
● TLC2252AID	0.2	0.12	0.85	0.5	8-SOIC	76C6839	2.23
● TLC27L2CDR	0.085	0.03	10	1.1	8-SOIC	31C1366	0.84
● TLC27L2IDR	0.085	0.03	10	1.1	8-SOIC	35C2126	0.31
● TLC27L2CP	0.085	0.03	10	1.1	8-DIP	36K3640	1.00
● TLC27L2CD	0.085	0.03	10	1.1	8-SOIC	68K1128	0.89
● TLC27L2ACP	0.085	0.03	5	1.1	8-DIP	08F9050	1.13
● TLV2252AID	0.187	0.1	0.85	0.5	8-SOIC	76C7862	2.38
● TLV2372ID	2.4	2	4.5	2	8-SOIC	39C3934	2.10
● TLV2372IDGK	2.4	2	4.5	2	8-MSOP	76C7973	2.10
● TLV2372IDGKR	2.4	2	4.5	2	8-MSOP	76C7974	1.73
● TLV2372IDR	2.4	2	4.5	2	8-SOIC	76C7975	1.73
● TLV2372IP	2.4	2	4.5	2	8-DIP	76C7976	1.98
● TLV2382IDR	0.16	0.06	4.5	1.1	8-SOIC	76C7997	2.38
● TLV2402IDGK	0.0055	0.0025	1.2	3	8-MSOP	76C8012	3.34
● TLV2442CD	1.75	1.3	2	2	8-SOIC	90B4641	2.10
● TLV272IDGKR	3	2.4	5	2	8-MSOP	76C8484	1.06
● TLV272IDR	3	2.4	5	2	8-SOIC	76C8485	1.06
● TLV272IP	3	2.4	5	2	8-DIP	76C8486	1.22
● OPA2209AIDR	18	6.4	150	1	8-SOIC	91R0764	3.94
QUAD CHANNEL							
● OPA4330AID	0.35	0.16	50	0.02	14-SOIC	79R8275	4.65
● TLC27L4CN	0.085	0.03	10	1.1	14-DIP	35K1192	0.98
● TLC27L4IN	0.085	0.03	10	1.1	14-DIP	35K1193	1.03
● TLC27L4CD	0.085	0.03	10	1.1	14-SOIC	67K1259	1.03
● TLC27L4ID	0.085	0.03	10	1.1	14-SOIC	72K9574	1.07
● TLC27L4ACD	0.085	0.03	5	1.1	14-SOIC	35K1190	1.33
● TLC27L4ACN	0.085	0.03	5	1.1	14-DIP	35K1191	1.27
● TLV2374IN	2.4	2	4.5	2	14-DIP	35K1236	2.27
● TLV2374ID	2.4	2	4.5	2	14-SOIC	72K9578	2.38
● TLV2374IDR	2.4	2	4.5	2	14-SOIC	76C7983	1.98
● TLV2374IPWR	2.4	2	4.5	2	14-TSSOP	76C7986	1.98
● TLV2454CD	0.22	0.11	1.5	0.3	14-SOIC	19C8997	2.80
● TLV274CD	3	2.4	5	2	14-SOIC	76C8495	1.62
● TLV274CPWR	3	2.4	5	2	14-TSSOP	76C8498	1.36

➤ CONTINUED ➤

LOW POWER PRECISION OPERATIONAL AMPLIFIERS (CONT.)

QUAD CHANNEL

Mfg. Part No.	GBW (MHz)	Slew Rate Typ. (V/us)	V_{IO} (25°C) Max. (mV)	Offset Drift Typ. (µV/°C)	Pkg.	Stock No.	Price Each 1-9
● TLV274IDR	3	2.4	5	2	14-SOIC	76C8500	1.43
● TLV274IN	3	2.4	5	2	14-DIP	76C8501	1.63
● TLV274IPWR	3	2.4	5	2	14-TSSOP	76C8503	1.43
● TLV2764IPWR	0.5	0.2	3.5	9	14-TSSOP	76C8534	3.06

(175986)

HIGH OUTPUT CURRENT PRECISION OPERATIONAL AMPLIFIERS

RoHS Compliant Available

TEXAS INSTRUMENTS

SINGLE CHANNEL

Mfg. Part No.	GBW (MHz)	Slew Rate Typ. (V/us)	V_{IO} (25°C) Max. (mV)	Offset Drift Typ. (µV/°C)	Pkg.	Stock No.	Price Each 1-9
● OPA111AM	2	2	0.1	2	8-TO-99	75C4580	38.08
● OPA111BM	2	2	0.05	0.5	8-TO-99	78K8897	50.32
● OPA128JM	1	3	0.26	20	8-TO-99	75C4586	63.33
● OPA128LM	1	3	0.14	5	8-TO-99	78K8898	77.06
● OPA128SM	1	3	0.14	10	8-TO-99	88K1148	86.28
● OPA541AP	1.6	10	10	2	11-TO-220	72K9048	21.44
● OPA541SM	1.6	10	10	2	8-TO-3	75C5057	128.14
● OPA544T	1.4	8	5	10	5-TO-220	36K2005	17.02
● OPA544FKTTT	1.4	8	5	10	5-TO-263	87H2075	19.29
● OPA547T	1	6	5	25	7-TO-220	62K3461	10.77
● OPA547F/500	1	6	5	25	7-D2PAK	75C5060	10.77
● OPA547FKTWT	1	6	5	25	7-D2PAK	87H2076	12.17
● OPA548T-1	1	10	10	30	7-TO-220	35K4775	14.87
● OPA548T	1	10	10	30	7-TO-220	69K2680	14.87
● OPA548FKTWT	1	10	10	30	7-D2PAK	87H2077	16.80
● OPA549T	0.9	9	5	20	11-TO-220	74K3913	22.97
● OPA549S	0.9	9	5	20	11-TO-220	75C5065	22.97
● OPA551UA	3	15	3	7	8-SOIC	16M2463	5.01
● OPA551PA	3	15	3	7	8-DIP	75C5068	4.77
● OPA551FAKTWT	3	15	3	7	7-D2PAK	87H2078	6.38
● OPA552PA	12	24	3	7	8-DIP	28M9262	4.77
● OPA564AIDWP	17	20	20	10	20-SO	55R4575	7.01
● OPA567AIRHGT	1.2	1.2	2	1.3	12-QFN	63K6045	6.32
● TLE2061CP	1.8	3.4	3.1	6	8-DIP	35K1229	2.04
● TLV2771CDBVR	5.1	10.5	2.5	2	5-SOT-23	76C8553	1.94
● TLV2771IDBVR	5.1	10.5	2.5	2	5-SOT-23	76C8556	2.10
● TLV4110IDGNR	2.7	1.57	3.5	3	8-MSOP	76C8822	2.98
● TLV4110IP	2.7	1.57	3.5	3	8-DIP	76C8824	3.06
DUAL CHANNEL							
● TLE2062CP	1.8	3.4	5	6	8-DIP	36K3649	2.75
● TLE2062CD	1.8	3.4	5	6	8-SOIC	72K9577	2.87
● TLE2062CDR	1.8	3.4	5	6	8-SOIC	90B2859	2.72
● TLE2062ACD	1.8	3.4	4	6	8-SOIC	67K1267	3.94
● TLV2772ID	5.1	10.5	2.5	2	8-SOIC	76C8570	3.06
● TLV2772AID	5.1	10.5	1.6	2	8-SOIC	83F9311	3.20
QUAD CHANNEL							
● TLE2064CN	1.8	3.4	7	6	14-DIP	08F9172	4.42
● TLE2064ID	1.8	3.4	7	6	14-SOIC	67K1268	5.01
● TLE2064CD	1.8	3.4	7	6	14-SOIC	92F8608	4.65
● TLE2064ACD	1.8	3.4	6	6	14-SOIC	76C7627	6.44
● TLV2774CD	5.1	10.5	2.7	2	14-SOIC	20M5825	3.87
● TLV2774AIN	5.1	10.5	2.1	2	14-DIP	76C8595	4.93

DEVELOPMENT TOOLS

Mfg. Part No.	Description	Stock No.	Price Each
OPAMPEVM-SOT23	Universal Evaluation Module for Single/Dual OpAmps without Shutdown in MSOP/SOIC/SOT-23 Packages	75C4577	5.10

(139039)

EMBEDDED DESIGN TOOLS

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(196530)

HIGH SPEED OPERATIONAL AMPLIFIERS (GREATER THAN EQUAL TO 50MHz) - CURRENT FEEDBACK

RoHS Compliant Available

TEXAS INSTRUMENTS

SINGLE CHANNEL

Mfg. Part No.	BW (MHz)	Supply Voltage Max. (V)	Slew Rate Typ. (V/us)	V_{IO} (25°C) Max. (mV)	Pkg.	Stock No.	Price Each 1-9
OPA695ID	1700	5	4300	4	8-SOIC	90H2257	4.18
OPA695IDBVT	1700	12	4300	4	6-SOP	01J0613	4.01
THS3091DDA	235	30	7300	4	8-SO PowerPAD	86H2566	7.76
THS3001CD	420	15	6500	3	8 SOIC	93B3678	8.97
THS3091D	235	30	7300	4	8-SOIC	90H4519	7.33
THS3111ID	100	30	1300	8	8-SOIC	87H2778	4.13
THS3121IDGN	130	30	1700	8	8-SOIC	87H2795	6.31
THS3201DGN	1800	15	9800	4	8-SOIC	73H4614	6.18
DUAL CHANNEL							
THS3061D	300	30	7000	4.5	8-SOIC	83C7603	8.65
THS3062D	300	30	7000	4.5	8-SOIC	02H5491	10.99

(65274)

HIGH SPEED OPERATIONAL AMPLIFIERS (GREATER THAN EQUAL TO 50MHz) - DSL/ POWER LINE

RoHS Compliant Available

TEXAS INSTRUMENTS

SINGLE CHANNEL

Mfg. Part No.	BW (MHz)	Supply Voltage Max. (V)	Slew Rate Typ. (V/us)	V_{IO} (25°C) Max. (mV)	Pkg.	Stock No.	Price Each 1-9
DRV1100U	5	5.5	80	5	8-SOIC	74C9523	10.58
DRV1101U	10	5.5	100	3	8-SOIC	74C9525	11.01
DUAL CHANNEL							
OPA2613ID	125	12	70	1	8-SOIC	01J0594	4.80
OPA2670IRGVT	120	12.6	5000	6	16-VQFN	01T0593	3.87
OPA2673IRGVT	600	13	3000	7	16-QFN	14N8519	4.54
OPA2674ID	250	12	2000	1	8-SOIC	73H4297	3.77
OPA2674I-14D	250	12	2000	1	14-SOIC	73H4295	3.77
OPA2677IRGVT	220	12	1800	5.5	8-SOIC	80K2655	3.13
OPA2677U	220	12	1800	5.5	8-SOIC	34K8548	4.65
OPA2684ID	250	12	780	3.5	8-SOIC	75C4791	6.42
THS3092D	160	30	5700	0.9	8-SOIC	01J0819	3.15
THS3092DDA	160	30	5700	4	8-SO PowerPAD	01J0820	3.63
THS6032IDWP	100	16	1200	5	20-SOIC	76C6527	12.64
THS6062IDGN	100	30	100	6	8-SOIC	76C6570	9.33
QUAD CHANNEL							
THS6184PWP	50	16	400	25	20-TSSOP	37M0029	9.56

(175995)

HIGH SPEED OPERATIONAL AMPLIFIERS (GREATER THAN EQUAL TO 50MHz) - JFET/CMOS

RoHS Compliant Available

TEXAS INSTRUMENTS

SINGLE CHANNEL

Mfg. Part No.	BW (MHz)	Supply Voltage Max. (V)	Slew Rate Typ. (V/us)	V_{IO} (25°C) Max. (mV)	Pkg.	Stock No.	Price Each 1-9
OPA354AIDBVT	100	5.5	150	8	5-SOT-23	75C4906	2.18
OPA355NA/250	200	5.5	360	15	6-SOT-23	75C4907	2.18
OPA355NA/3K	200	5.5	360	15	6-SOT-23	75C4908	1.91
OPA355UA	200	5.5	360	2	8-SOIC	75C4909	2.31
OPA356AID	200	5.5	360	9	8-SOIC	75C4911	2.31
OPA356AIDBVT	200	5.5	360	9	5-SOT-23	75C4913	2.18
OPA656N/250	230	5.5	290	1.8	5-SOT-23	75C5133	7.40
OPA656NB/250	230	12	290	0.6	8-SOIC	28M9263	10.77
OPA656U	230	5.5	290	1.8	8-SOIC	75C5137	11.24
OPA656UB	230	5.5	290	0.6	8-SOIC	20M1356	11.24
OPA657N/250	1600	12	700	250	5-SOT-23	75C5141	11.78
OPA657NB/250	1600	12	700	250	5-SOT-23	75C5143	11.78
OPA657U	1600	12	700	0.6	8-SOIC	75C5145	12.28
OPA657UB	1600	12	700	0.6	8-SOIC	75C5147	12.28
OPA659IDRBT	350	6.5	2550	5	8-SON	46P3783	7.23
THS4601ID	180	30	100	4	8-SOIC	76C6484	26.85
THS4631D	210	30	1000	0.5	8-SOIC	73J8319	9.97
THS4631DGN	210	30	1000	0.5	8-HTSSOP	73J8322	10.39
DUAL CHANNEL							
OPA2354AIDGKT	100	5.5	150	8	8-MSOP	75C4737	3.10

➤ CONTINUED ➤

HIGH SPEED OPERATIONAL AMPLIFIERS (GREATER THAN EQUAL TO 50MHz) - JFET/CMOS (CONT.)

QUAD CHANNEL

Mfg. Part No.	BW (MHz)	Supply Voltage Max. (V)	Slew Rate Typ. (V/us)	V_{IO} (25°C) Max. (mV)	Pkg.	Stock No.	Price Each 1-9
OPA4354AIPWR	100	5.5	150	...	14-TSSOP	75C5020	3.82

(175996)

HIGH SPEED OPERATIONAL AMPLIFIERS (GREATER THAN EQUAL TO 50MHz) - RAIL TO RAIL

RoHS Compliant Available

TEXAS INSTRUMENTS

SINGLE CHANNEL

Mfg. Part No.	BW (MHz)	Supply Voltage Max. (V)	Slew Rate Typ. (V/us)	V_{IO} (25°C) Max. (mV)	Pkg.	Stock No.	Price Each 1-9
OPA830ID	110	11	600	0.5	8-SOIC	43J9656	1.71
OPA830IDBVT	110	11	600	0.5	5-SOT-23	43J9658	1.65
SN10501D	100	15	900	30	8-SOIC	61H5388	2.31
SN10501DGN	100	15	900	30	8-SOIC	90H3597	2.31
THS4281D	95	15	35	3.5	8-SOIC	10J9687	2.99
THS4281DBVT	95	15	35	3.5	5-SOT	10J9689	2.87
DUAL CHANNEL							
THS4222DGK	120	15	990	3	8-SOIC	01J0867	3.94
QUAD CHANNEL							
OPA4830IPW	100	11	560	6	14-TSSOP	30M1564	3.87

(175997)

HIGH SPEED OPERATIONAL AMPLIFIERS (GREATER THAN EQUAL TO 50MHz) - VOLTAGE FEEDBACK

RoHS Compliant Available

TEXAS INSTRUMENTS

SINGLE CHANNEL

Mfg. Part No.	BW (MHz)	Supply Voltage Max. (V)	Slew Rate Typ. (V/us)	V_{IO} (25°C) Max. (mV)	Pkg.	Stock No.	Price Each 1-9
OPA380AID	90	5.5	80	0.025	8-SOIC	01J0608	5.61
OPA380AIDGKT	90	5.5	80	0.025	8-SOIC	01J0610	5.37
OPA699ID	260	12	1400	5	8-SOIC	87H2082	6.06
OPA820ID	280	12	240	1	8-SOIC	21J8856	2.77
OPA820IDBVT	280	6	240	0.75	5-SOT-23	21J8858	3.02
OPA842ID	200	12	400	1.2	8-SOIC	21H3994	4.96
OPA843IDBVT	800	12	1000	1.2	5-SOT	21H4000	4.65
OPA847ID	3900	12	950	0.6	8-SOIC	04M6520	6.16
OPA847IDBVT	3900	12	950	0.5	6-SOT-23	73H4301	5.92
THS4001ID	270	30	400	8	8-SOIC	76C6271	5.92
THS4031CD	100	32	100	2	8 SOP	36K3631	5.20
THS4031ID	100	30	100	2	8-SOIC	76C6308	5.44
THS4061CD	180	30	400	8	8 SOP	19C8976	4.32
THS4271D	1400	15	1000	5	8 SOIC	02E7126	6.16
THS4304D	3000	5	830	4	8-SOIC	21J9122	6.14
DUAL CHANNEL							
OPA2380AIDGKT	90	5.5	80	0.025	8-MSOP	10J9510	6.16
OPA2690ID	300	12	1800	4.5	8-SOIC	75C4796	6.04
OPA2822U	240	5	170	1.2	8-SOIC	39C7278	4.25
THS4032ID	100	30	100	2	8-SOIC	76C6316	9.33
THS4062CD	180	30	400	8	8-SOIC	24C9842	6.61
OPA2836IRUNT	205	5.5	560	65	10-TQFN	24W9078	4.18
QUAD CHANNEL							
OPA4820ID	250	12.6	250	0.8	14-SOIC	71J7135	7.93

(175998)

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
OPA835IDBVEVM	OPERATIONAL AMPLIFIER EVAL. MODULE	45T9884	101.00

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(196535)

HIGH VOLTAGE PRECISION OPERATIONAL AMPLIFIERS

RoHS Compliant Available

TEXAS INSTRUMENTS

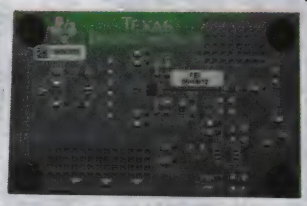
Mfg. Part No.	Ch.	GBW (MHz)	Slew Rate Typ. (V/us)	V_{IO} (25°C) Max. (mV)	Offset Drift Typ. (µV/°C)	Pkg.	Stock No.	Price Each 1-9
● OPA452TA	1	1.8	7.2	3	5	7-TO-220	75C5026	6.16
● OPA445ADDA	1	2	15	5	10	8-SOIC	18M7503	10.67
● OPA445AU	1	2	15	5	10	8-SOIC	75C5022	10.67
● OPA445BM	1	2	15	5	10	8-TO-99	78K8899	24.07
● OPA445AP	1	2	15	5	10	8-DIP	96K4527	11.60
● OPA454AIDDA	1	2.5	13	4	1.6	8-SOIC	73M3405	7.01
● OPA453TA	1	7.5	23	3	5	7-TO-220	75C5030	6.16

(175982)

INSTRUMENTATION DIFFERENCE AMPLIFIERS

RoHS Compliant Available

TEXAS INSTRUMENTS



INA827EVM

Mfg. Part No.	Small-Signal Bandwidth Typ. (MHz)	V_s Min. to V_s Max. (V)	CM-RR Min. (dB)	Quiescent Current ± Typ. (mA)	Pkg.	Stock No.	Price Each 1-9
● INA105KP	1	10 to 36	86	1.5	8-DIP	04M4538	9.52
● INA105KU	1	10 to 36	86	1.5	8-SOIC	35C0475	8.50
● INA106KP	5	10 to 36	86	1.5	8-PDIP	46M3170	10.77
● INA106U	5	10 to 36	86	1.5	8-SOIC	74C9754	11.24
● INA117KU	0.2	10 to 36	86	1.5	8-SOIC	17M6717	6.91
● INA117P	0.2	10 to 36	86	1.5	8-DIP	74K3811	6.61
● INA117KUG4	0.2	10 to 36	86	1.5	8-SOIC	80K2275	6.91
● INA117SM	0.03	10 to 36	86	1.5	8-TO-99	74C9766	75.67
● INA132U	0.3	2.7 to 36	76	0.16	8-SOIC	35C1734	4.18
● INA133U	1.5	5 to 36	76	0.95	8-SOIC	80K5903	4.18
● INA133UA	1.5	5 to 36	76	0.95	8-SOIC	74C9794	3.34
● INA143UA	0.15	4.5 to 36	80	0.95	8-SOIC	35C0497	3.10
● INA145UA	0.5	2.76 to 36	76	0.6	8-SOIC	35C0498	4.30
● INA146UA	0.5	2.76 to 36	76	0.6	8-SOIC	74K3815	4.89
● INA148UA	0.1	2.7 to 36	70	0.6	8-SOIC	74K3816	5.97
● INA154U	3.1	8 to 36	80	2.4	8-SOIC	35C1741	3.94
● INA159AIDGKT	1.5	1.8 to 5.5	80	1.5	8-MSOP	63K5527	4.42
● INA2133U	1.5	4.5 to 36	80	0.95	14-SOIC	74C9847	5.61
● INA101HP	0.3	10 to 40	106	6.7	14-DIP	74K3804	20.03
● INA103KP	6	18 to 50	100	9	16-DIP	74K3805	10.77
● INA103KU	6	18 to 50	100	9	16-SOIC	35C1712	11.24
● INA110KP	2.5	12 to 36	106	3	16-DIP	74K3807	15.07
● INA111AP	2	12 to 36	106	3.3	8-DIP	74K3808	11.73
● INA827AIDGK	0.6	2.7 to 36	126	0.2	8-MSOP	27W9371	3.22
● INA111BP	2	12 to 36	106	3.3	8-DIP	27C4351	15.77
● INA111BU	2	12 to 36	106	3.3	16-SOIC	35C1715	14.42
● INA114AP	1	4.5 to 36	106	2.2	8-DIP	74K3809	11.73
● INA114AU	1	4.5 to 36	106	2.2	16-SOIC	35C0481	10.86
● INA2133UA	1.5	4.5 to 36	80	0.95	14-SOIC	74C9849	4.30
● INA116UA	0.8	9 to 36	86	1	16-SOIC	35C1717	13.58
● INA118U	0.8	2.7 to 36	107	0.35	8-SOIC	04M6168	10.86
● INA118UB	0.8	2.7 to 36	107	0.35	8-SOIC	05M0439	15.82
● INA121PA	0.6	4.5 to 36	96	0.45	8-DIP	35C0485	6.12
● INA121U	0.6	4.5 to 36	96	0.45	8-SOIC	35C1723	8.61
● INA121UA	0.6	4.5 to 36	96	0.45	8-SOIC	35C0486	6.38
● INA122P	0.12	2.2 to 36	83	0.06	8-DIP	15M0948	7.59
● INA122PA	0.12	2.2 to 36	83	0.06	8-DIP	74K3813	5.99
● INA122UA	0.12	2.2 to 36	83	0.06	8-SOIC	35C0488	6.27
● INA125P	0.15	2.7 to 36	100	0.46	16-DIP	35C1726	6.08
● INA126P	0.2	2.7 to 36	83	0.175	8-DIP	74C9780	4.15
● INA126E/250	0.2	2.7 to 36	83	0.175	8-MSOP	74C9777	4.54
● INA126EA/250	0.2	2.7 to 36	83	0.175	8-MSOP	74C9779	3.59
● INA126U	0.2	2.7 to 36	83	0.175	8-SOIC	84K8003	4.40
● INA126UA	0.2	2.7 to 36	83	0.175	8-SOIC	80K5902	3.48
● INA128U	1.3	4.5 to 36	120	0.7	8-SOIC	35C1729	11.71

➤CONTINUED➤

INSTRUMENTATION DIFFERENCE AMPLIFIERS

(CONT.)

Mfg. Part No.	Small-Signal Bandwidth Typ. (MHz)	V_s Min. to V_s Max. (V)	CM-RR Min. (dB)	Quiescent Current ± Typ. (mA)	Pkg.	Stock No.	Price Each 1-9
● INA128UA	1.3	4.5 to 36	120	0.7	8-SOIC	35C1730	8.80
● INA129P	0.2	4.5 to 36	120	0.7	8-DIP	74C9786	9.18
● INA129U	1.3	4.5 to 36	120	0.7	8-SOIC	35C1732	9.55
● INA129UA	1.3	4.5 to 36	120	0.7	8-SOIC	35C1733	8.83
● INA131BP	0.07	4.5 to 36	110	2.2	8-DIP	74C9790	11.74
● INA141UA	0.2	4.5 to 36	117	0.75	8-SOIC	80K5908	10.23
● INA155UA	0.55	2.7 to 5.5	78	1.7	8-SOIC	35C0500	3.10
● INA155E/250	0.55	2.7 to 5.5	78	1.7	8-MSOP	74C9815	4.06
● INA156EA/250	0.55	2.7 to 5.5	72	1.7	8-MSOP	74C9822	3.34
● INA2128UA	1.3	4.5 to 36	120	0.7	16-SOIC	80K5912	12.35
● INA128P	1.3	4.5 to 36	120	0.7	8-DIP	74C9783	11.31
● INA2126P	0.2	1.35 to 18	90	0.175	16-DIP	74C9838	6.67
● INA2126PA	0.2	1.35 to 18	90	0.175	16-DIP	35C0501	5.18
● INA2128U	1.3	4.5 to 36	120	0.7	16-SOIC	28C7388	18.62
● INA2321EA/250	0.5	2.5 to 5.5	90	0.04	14-TSSOP	74C9861	4.77
● INA2332AIPWR	2	2.5 to 5.5	60	0.49	14-TSSOP	74C9866	2.59
● INA321E/250	0.5	2.5 to 5.5	90	0.04	8-MSOP	74C9869	4.06
● INA322EA/250	0.5	2.5 to 5.5	60	0.04	8-MSOP	74C9873	2.99
● INA326EA/2K5	0.001	2.7 to 5.5	100	2.4	8-MSOP	74C9874	4.30
● INA327EA/250	0.001	2.7 to 5.5	100	2.4	10-MSOP	74C9877	4.09
● INA330AIDGST	0.001	2.7 to 5.5	...	3.6	10-MSOP	02H5246	5.25
● INA332AIDGKT	0.5	2.5 to 5.5	60	0.415	8-MSOP	74C9883	1.63
● INA333AIDGKR	0.15	3 to 5.5	100	0.7	8-MSOP	01P0907	4.30
● INA826AIDGK	1	3 to 5.5	160	0.7	8-MSOP	64T3159	3.22

EVALUATION MODULES

Mfg. Part No.	Description	Stock No.	Price Each
● INA210-214EVM	INA210 Evaluation Module w/ User's Guide	08P4366	50.00
INA826EVM	INA826 Evaluation Module w/ User's Guide	64T3161	25.50
● INA827EVM	INA827 Evaluation Module	27W9373	50.00

(113077)

ISOLATION AMPLIFIERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Isolation Voltage: Cont. Peak DC (V)	Isolation Voltage: Pulse/ Test Peak (V)	Gain Non-Linearity ± Max. (%)	Small-Signal Bandwidth Typ. (kHz)	Package	Stock No.	Price Each 1-9
● ISO122JP	2121	2400	0.02	50	16-DIP	75C0481	21.01
● ISO122P	2121	2400	0.02	50	16-DIP	55M8194	25.52
● ISO124P	2121	2400	0.01	50	16-DIP	35C1752	17.88
● ISO124U	2121	2400	0.01	50	28-SOIC	10M8426	18.72

(113078)

PROGRAMABLE AND VARIABLE GAIN AMPLIFIERS

RoHS Compliant Available

TEXAS INSTRUMENTS

PROGRAMABLE GAIN AMPLIFIERS

Mfg. Part No.	Input Offset ± Max. (µV)	Input Offset Drift ± Max. (µV/°C)	Quiescent Current ± Typ. (mA)	Package	Stock No.	Price Each 1-9
● PGA103U	500	2	2.6	8-SOIC	80K6037	9.24
● PGA113AIDGST	100	1.2	1	10-MSOP	15N0065	2.75
● PGA116AIPWR	100	1.2	1	20-TSSOP	09P8515	4.42
● PGA117AIPWR	100	1.2	1	20-TSSOP	09P8516	4.42
● PGA202KP	1000+12000/G	12+120/G	6.5	14-DIP	80K6038	16.66
● PGA203KP	1000+12000/G	12+120/G	6.5	14-DIP	80K7312	16.66
● PGA204AP	50+100/G	0.25+5/G	5.2	16-DIP	75C5418	17.98
● PGA205AU	50+100/G	0.25+5/G	5.2	16-SOIC	80K6039	16.29
● PGA206PA	1500	2	12.4	16-DIP	75C5426	20.93
● PGA206UA	1500	2	12.4	16-SOIC	35C1960	20.22
● PGA207UA	1500	2	12.4	16-SOIC	75C5427	24.57
● PGA280AIPW	15	0.2	3	24-TSSOP	27R0200	7.44
● PGA870IRHDT	...	20	143	28-QFN	60R2418	10.62

EVALUATION MODULES

Mfg. Part No.	Description	Stock No.	Price Each
● PGA870EVM	Evaluation Module for the PGA870 High-Speed Fully Differential PGA	60R2417	305.00

(113079)

SPECIALTY AMPLIFIERS

RoHS Compliant Available

TEXAS INSTRUMENTS

PWM POWER DRIVERS

Mfg. Part No.	Supply Voltage (V)	Switching Freq. Max (KHz)	Output Current Max (A)	Pkg.	Stock No.	Price Each 1-9
DRV101FKTWT	9 - 60	24	2.3	7-PFM	87H0874	11.05
DRV101T	9 - 60	24	2.3	7-TO-220	34K3394	11.45
DRV102F/500	8 - 60	24	2.7	7-PFM	74C9517	9.82
DRV103H	8 - 32	100	3	8-HSOP	31C6363	5.51
DRV103U	8 - 32	100	3	8-SOIC	74C9520	4.92
DRV104PWP	8 - 32	100	1.2	14-HTSSOP	01J0534	5.97
DRV104PWPR	8 - 32	100	1.2	14-HTSSOP	87H0876	5.01
DRV591VFP	2.8 - 5.5	500	3	32-HLQFP	80K7302	23.58
DRV593VFPR	2.8 - 5.5	500	3	32-HLQFP	02E2694	13.37
DRV594VFP	2.8 - 5.5	500	3	32-HLQFP	03P0856	26.68
DRV8412DDW	0 - 52.5	500	6	44-HTSSOP	60R2412	9.88
DRV8801PWP	2 - 36	500	2.8	16-HTSSOP	24R9114	3.58
DRV8811PWP	8 - 38	50	2.5	28-HTSSOP	24R9116	5.25
DRV8821DCA	8 - 32	100	1.5	48-HTSSOP	50R7676	5.73
DRV8824PWP	8.2 - 45	50	1.6	28-HTSSOP	74R0560	4.65
DRV8830DGQR	2.75 - 6	100	1	10-MSOP	25T0265	2.31

FULLY DIFFERENTIAL MOTOR HAPTIC DRIVERS

Mfg. Part No.	Supply Voltage (V)	Startup Time (ms)	Output Voltage (V)	Pkg.	Stock No.	Price Each 1-9
DRV8601ZQVR	2.5 - 5.5	0.1	5.5	8-BGA	91R0762	1.47
DRV8662RGPT	3 - 5.5	1.5	200	20-QFN	53T5110	4.89

DEVELOPMENT TOOLS

Mnf. Part No.	Description	Stock No.	Price Each
DRV8412DDWEVM	DRV8412 Full Bridge PWM Motor Driver Evaluation Module	65R4597	152.01
DRV8412-C2-KIT	DRV8412 Full Bridge PWM Motor Driver Evaluation Kit	20T1527	199.40
DRV8824EVM	DRV8824 Stepper Motor Controller Evaluation Module	13T3124	152.01
DRV8812EVM	DRV8812 Bridge Motor Driver Evaluation Module	13T3123	152.01
DRV8601ZQVEVM	DRV8601 Haptics Driver Evaluation Module	21T1205	101.00

(64985)

WIDE BANDWIDTH PRECISION OPERATIONAL AMPLIFIERS

RoHS Compliant Available

TEXAS INSTRUMENTS

SINGLE CHANNEL

Mfg. Part No.	GBW (MHz)	Slew Rate Typ. (V/us)	V_{IO} (25°C) Max. (mV)	Offset Drift Typ. (µV/°C)	Pkg.	Stock No.	Price Each 1-9
OPA134PA	8	20	2	2	8-DIP	75C4599	2.94
OPA134UA	8	20	2	2	8-SOIC	80K6009	3.06
OPA1641AID	11	20	1	...	8-SOIC	60R2415	2.75
OPA300AID	150	80	5	2.5	8-SOIC	67H1445	2.45
OPA301AIDBVT	150	80	5	2.5	5-SOT-23	90H2246	2.45
OPA1644AIPW	11	20	3.5	...	14-TSSOP	27T6636	5.61
OPA343NA/250	5.5	6	8	3	5-SOT-23	75C4867	1.98
OPA353NA/250	44	22	8	5	5-SOT-23	35C1895	3.06
OPA377AIDBVT	5.5	2	1	0.32	5-SOT-23	12T2864	0.85
OPA602AP	6.5	35	1	3	8-DIP	01M8425	9.24
OPA602BP	6.5	35	1	3	8-DIP	96K4528	12.45
OPA604AP	20	25	5	8	8-DIP	88K1967	2.89
OPA606KP	12	30	3	10	8-DIP	04M4586	8.18
OPA725AID	20	30	3	4	8-SOIC	87H2084	2.99
TLC071AIP	10	16	1.4	1.2	8-DIP	76C6638	2.10
TLC081IP	10	16	1.9	1.2	8-DIP	76C6721	1.61
TLC081AIP	10	16	1.4	1.2	8-DIP	76C6713	2.10
TLE2071CP	9.4	35	4	3.2	8-DIP	08F9174	1.88
TLE2071ACP	9.4	35	2	3.2	8-DIP	76C7640	2.18
TLE2081CP	9.4	35	6	3.2	8-DIP	35K4980	1.89
TLE2141CP	5.8	45	1.4	1.7	8-DIP	35K1233	1.77
TLE2141AID	5.8	45	1	1.7	8-SOIC	76C7678	2.18
TLE2141ACP	5.8	45	1	1.7	8-DIP	94B5632	1.91
TLV2461IDBVR	6.4	1.6	2	2	5-SOT-23	74C0795	1.79

DUAL CHANNEL

OPA1612AID	40	27	0.1	...	8-SOIC	25R6133	7.01
OPA1642AID	11	20	1	...	8-SOIC	60R2416	4.01
OPA2134UA	8	20	2	2	8-SOIC	35C1847	4.23
OPA2134UAE4	8	20	2	2	8-SOIC	61K1329	4.23
OPA2134PA	8	20	2	2	8-DIP	74K3897	4.12
OPA2171AIDCUT	3	1.5	1.8	0.3	8-VSSOP	05W9872	1.91
OPA2170AID	1.2	0.4	1.8	0.3	8-MSOP	05W9871	2.04

➤ CONTINUED ➤

WIDE BANDWIDTH PRECISION OPERATIONAL AMPLIFIERS (CONT.)

DUAL CHANNEL

Mfg. Part No.	GBW (MHz)	Slew Rate Typ. (V/us)	V_{IO} (25°C) Max. (mV)	Offset Drift Typ. (µV/°C)	Pkg.	Stock No.	Price Each 1-9
OPA2343UA	5.5	6	8	3	8-SOIC	96K4526	3.04
OPA2353UA	44	22	8	5	8-SOIC	75C4734	5.46
OPA2364AIDR	7	5	0.9	3	8-SOIC	21H3965	2.82
OPA2364ID	7	5	0.9	3	8-SOIC	21H3966	4.12
OPA2374AIDCNT	6.5	5	5	3	8-SOT-23	90H2236	2.23
OPA2604AP	20	25	5	8	8-DIP	03M5333	5.23
OPA2604AU	20	25	5	8	8-SOIC	35C1878	5.49
OPA2725AIDGKT	20	30	5	4	8-MSOP	01J0599	4.65
OPA2725AID	20	30	5	4	8-SOIC	90H2238	4.89
OPA2743PA	7	10	7	8	8-DIP	75C4820	4.65
TLC072CD	10	16	1.9	1.2	8-SOIC	19C8984	2.38
TLC072ID	10	16	1.9	1.2	8-SOIC	76C6655	2.54
TLC072AIP	10	16	1.4	1.2	8-DIP	76C6650	2.54
TLE2072CDR	9.4	35	6	2.3	8-SOIC	35C2160	2.72
TLE2072CD	9.4	35	6	2.3	8-SOIC	35K1230	2.75
TLE2072CP	9.4	35	6	2.3	8-DIP	35K1231	2.99
TLE2072ACP	9.4	35	3.5	2.3	8-DIP	88F4180	3.20
TLE2082CD	9.4	35	6	2.3	8-SOIC	08F9180	2.70
TLE2082IDR	9.4	35	6	2.3	8-SOIC	35C2161	2.83
TLE2082ID	9.4	35	6	2.3	8-SOIC	76C7670	2.91
TLE2082ACP	9.4	35	4	2.3	8-DIP	26C1841	2.94
TLE2142CD	5.8	45	1.9	1.7	8-SOIC	35K4981	2.86
TLE2142CP	5.8	45	1.9	1.7	8-DIP	36K3651	2.75
TLE2142ACD	5.8	45	1.5	1.7	8-SOIC	76C7685	3.94
TLE2142AID	5.8	45	1.5	1.7	8-SOIC	76C7687	4.06
TLV2462AIDR	5.2	1.6	1.5	2	8-SOIC	76C8195	2.94
TLV2462CDR	6.4	1.6	2	2	8-SOIC	73C9479	2.38
TLV2462IDGKR	6.4	1.6	2	2	8-MSOP	76C8205	2.54

QUAD CHANNEL

OPA4132UA	8	20	2	2	14-SOIC	80K6028	11.58
OPA4134UA	8	20	2	2	14-SOIC	80K6029	5.66
OPA4353UA	44	22	8	5	14-SOIC	75C5016	7.13
OPA4343UA	5.5	6	8	3	14-SOIC	75C4991	5.18
OPA4364AIPWT	7	5	2.5	3	14-TSSOP	32H5902	4.26
OPA4743UA	7	10	7	8	14-SOIC	75C5052	7.44
TLC074CD	10	16	1.9	1.2	14-SOIC	19C8986	3.06
TLC084AID	10	16	1.4	1.2	14-SOIC	76C6764	3.34
TLE2074CN	9.4	35	5	10.1	14-DIP	36K3650	5.25
TLE2074IN	9.4	35	5	10.1	14-DIP	76C7658	5.73
TLE2084CN	9.4	35	7	10.1	14-DIP	35K1232	5.01
TLE2144CN	5.8	45	3.8	1.7	14-DIP	08F9188	4.77
TLE2144CDW	5.8	45	3.8	1.7	16-SOIC	76C7698	4.89
TLV2464CD	6.4	1.6	2	2	14-SOIC	76C8235	3.34

DEVELOPMENT TOOLS

Mnf. Part No.	Description	Stock No.	Price Each
DEM-OPA-SO-1A	Unpopulated PCB Compatible w/High Speed Wide Bandwidth Op Amps in 8-lead SOIC (D) Pkg	81K1828	5.10

(175987)

COMPARATORS

RoHS Compliant Available

ANALOG DEVICES

This extensive portfolio of high speed and low power comparators from Analog Devices expands its extensive breadth of product offerings to designers by offering them more complete signal chain solutions. The **AD790 series** is a fast, precise voltage comparator with a latching function that makes it suitable for applications requiring synchronous operation. The **AD8561/8564 series** comparator features a fast 7ns propagation delay, suitable for timing circuits and line receivers. The **AD8611 series** contains a latch function and complementary output, as well as a matched propagation delay that makes these comparators a good choice for clock recovery. The **CMP04 series** offers a low offset voltage, low output saturation voltage, high gain, and low power supply current suitable for precision applications requiring minimal power consumption. The **CMP401 series** provides independent input and output supplies and fast propagation that makes this comparator an excellent choice for interfacing to portable instrumentation.

SINGLE

Mfg. Part No.	Resp. Time (ns)	V_{os} Max (mV)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-9
AD790JNZ	45	0.25	5	8-PDIP	59K5948	8.20
AD790JRZ	45	0.25	5	8-SOIC	88H0079	8.20
AD8561ANZ	7	7	10	8-PDIP	59K6858	4.48
AD8561ARZ	7	8	10	8-SOIC	19M8919	4.37
AD8564ARZ	7	8	14	16-SOIC	19M8920	8.25
ADCMP572BCPZ-R2	0.15	2	5.4	16-LFCSP	12M7644	19.57
ADCMP573BCPZ-R2	0.15	2	5.4	16-LFCSP	12M7647	18.89
ADCMP601BKSZ-R2	3.5	2	5.5	6-SC-70	28M3535	5.70
ADCMP604BKSZ-R2	1.6	5	5.5	6-SC-70	28M3544	6.49

➤ CONTINUED ➤

ANALOG COMPARATORS

COMPARATORS (CONT.)

Mfg. Part No.	Resp. Time (ns)	V_{os} Max (mV)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-9
● AD8469WBRMZ	40	5	5.5	8-MSOP	86T6096	2.23
● ADCMP608BKSZ-R2	40	3	5.5	6-SC-70	28M3555	2.78
● ADCMP609BRMZ	40	3	5.5	8-MSOP	28M3556	2.45
● ADCMP553BRMZ	0.5	2	5.25	8-MSOP	59K0927	4.64
● AD96685BRZ	2.5	1	5	16-SOIC	59K7311	7.08
● AD8611ARZ	4	7	5	8-SOIC	59K6949	5.34
● AD8611ARMZ-R2	4	8	5	8-MSOP	19M8930	5.88
● ADCMP361YRJZ-REEL7	...	...	5.5	5-SOT-23	50M0765	1.74
● ADCMP602BRMZ	3.5	2	5.5	8-MSOP	28M3536	5.05
DUAL						
● ADCMP343YRJZ-REEL7	...	...	5.5	8-SOT-23	50M0764	2.53
● ADCMP567BCPZ	...	1	5.25	32-LFCSP	59K0936	8.34
● AD8612ARUZ	4	1	5	14-TSSOP	88H0301	8.06
● ADCMP562BRQZ	0.5	2	5.25	20-QSOP	12M7641	6.17
● AD96687BRZ	2.5	2	...	16-SOIC	59K7314	6.83
● ADCMP671-1YUJZ-RL7	500	...	5.5	6-TSOT	92T3179	3.76
QUAD						
● CMP04FSZ	...	1	36	14-SOIC	36K2854	10.04
● CMP401GSZ	23	4.5	5	16-SOIC	59K7619	7.77
● CMP402GSZ	65	3	3.9	16-SOIC	59K7622	7.54

(9679)

COMPARATORS

RoHS Compliant Available

FAIRCHILD

- Input Bias Current: 250nA Max.
- Input Offset Current: 50nA Max.
- Supply Voltage: +18/-36 Except Types LM311MX and LM311N, V_{CC}: ±36

Mfg. Part No.	Config.	Input Offset Voltage Max. (mV)	Response Time (ns)	Supply Current Typ. (mA)	Package	Stock No.	Price Each 1-9
● LM393AN	Dual	5	1400	0.6	8-DIP	58K1801	0.46
● LM393M	Dual	5	1400	0.6	8-SOIC	78K6008	0.41
● LM393N	Dual	5	1400	0.6	8-DIP	58K1802	0.47
● LM2903M	Dual	7	1500	0.6	8-SOIC	78K6001	0.46
● LM2903N	Dual	7	1500	0.6	8-DIP	38C7339	0.46
● LM319N	Dual	8	80	3.6	14-DIP	82C8155	0.56
● LM319MX	Dual	8	80	7.5	14-SOP	58R2530	0.44
● LM339AN	Quad	5	1400	2	14-DIP	58K8938	0.51
● LM339M	Quad	5	1400	2	14-SOP	34C1077	0.57
● LM339N	Quad	5	1400	2	14-DIP	58K8939	0.52
● LM2901M	Quad	7	1400	2	14-SOP	82C8132	0.60
● LM2901N	Quad	7	1400	2	14-DIP	58K8932	0.52

(74309)

COMPARATORS

RoHS Compliant Available

LINEAR TECHNOLOGY

Applications:

- Crystal Oscillator Circuits
- Current Sense for Switching Regulators
- High Speed Sampling Circuits
- High Speed Triggers
- Window Comparators
- Zero-Crossing Detectors

Linear Technology specializes in high speed comparators and micropower comparators. The high speed comparator products offer propagation delays as fast as 4ns. The micropower comparator product line offers supply currents as low as 300nA while still offering excellent precision and innovative features.

HIGH SPEED

Mfg. Part No.	Channels	Resp. Time (ns)	Is (mA)	Supply Voltage Max (V) Single	Supply Voltage Max (V) Dual	Package	Stock No.	Price Each 1-24
● LT1711CMS8#PBF	1	4.5	17	12	6	8-SO	57M5751	4.40
● LT1713CMS8#PBF	1	7	5	6	...	8-MSOP	57M5767	4.02
● LT1394CS8#PBF	1	7	6	...	5	8-SO	57M3861	5.15
● LT1016CN8#PBF	1	10	25	...	5	8-DIP	57M0853	5.55
● LT1016CS8#PBF	1	10	25	...	5	8-SO	57M0855	6.15
● LT1016IS8#PBF	1	10	25	4.5	...	8-SOIC	57M0861	9.99
● LT1116CS8#PBF	1	10	27	...	5	8-SO	57M1773	7.20
● LTC1540CS8#PBF	1	50000	0.0003	2	...	8-SOIC	56M1865	3.02
● LT1011AIS8#PBF	1	150	3.2	...	15	8-SO	57M0781	5.93
● LT1011ACN8#PBF	1	150	3.2	5	...	8-DIP	57M0779	5.53
● LT1011CN8#PBF	1	150	3.2	18	...	8-DIP	57M0785	2.64
● LT1011IS8#PBF	1	150	3.2	18	...	8-SOIC	57M0791	3.70
● LT1025CN8#PBF	1	...	0.08	4	...	PDIP	57M1017	5.15
● LTC1440IDD#PBF	1	...	0.0021	...	5.5	8-DFN	56M1191	3.71
● LT1715HMS#PBF	2	4	7.5	...	12	10-MSOP	19P0902	8.68
● LT1715CMS#PBF	2	4	1	12	...	10-MSOP	57M5783	6.94
● LT1720CMS8#PBF	2	4.5	4	6	2.7	8-MSOP	57M5823	6.56
● LT1720CS8#PBF	2	4.5	4	6	...	8-SO	57M5827	6.15

➤CONTINUED➤

COMPARATORS (CONT.)

Mfg. Part No.	Channels	Resp. Time (ns)	Is (mA)	Supply Voltage Max (V) Single	Supply Voltage Max (V) Dual	Package	Stock No.	Price Each 1-24
● LT1714CGN#PBF	2	7	5.5	12	...	16-SSOP	57M5775	6.77
● LT1017CS8#PBF	2	22000	0.04	40	...	8-SOIC	57M0871	4.42
● LTC1042CN8#PBF	2	80	1.2	...	18	8-DIP	55M8877	3.39
● LT319AN#PBF	2	80	8	...	15	14-DIP	57M8066	2.25
● LT6700IS6-3#TRMPBF	2	...	0.0071	...	18	6-TSOT-23	57M9727	3.64
● LTC1444IS#PBF	4	4000	0.0055	2	...	16-SOIC	56M1258	5.49
● LT1721CGN#PBF	4	4.5	4	6	...	16-SSOP	57M5843	9.40
MICROPOWER								
● LT1716IS5#PBF	1	3000	0.04	44	...	5-SOT-23	61M3351	2.62
● LT1716CS5#PBF	1	3000	0.04	44	...	5-SOT-23	78T3704	2.23
● LT1394IS8#PBF	1	7	6	5	5	SOIC	57M3865	5.78
● LT1719CS8#PBF	1	4.5	4.2	10.5	...	8-SOIC	57M5807	4.04
● LT1716HS5#PBF	1	3	40	44	2.7	5-TSOT-23	65T5908	2.62
● LTC1440CN8#PBF	1	8000	0.002	11	...	8-PDIP	56M1185	2.75
● LTC1440CS8#PBF	1	8000	0.002	11	...	8-SO	56M1187	2.75
● LT1011CS8#PBF	1	150	3.2	18	...	SOIC	57M0787	3.23
● LT6703CDC-3#PBF	1	18	6.5	18	1.4	3-DFN	78T4303	1.81
● LT6703HDC-3#PBF	1	18	17	18	1.4	3-DFN	78T4305	1.31
● LT6703IDC-3#PBF	1	18	15	18	1.4	3-DFN	78T4311	1.90
● LTC1540IDD#PBF	1	50	300	11	2	8-DFN	56M1869	4.69
● LTC1540CMS8#PBF	1	50000	0.0003	11	5.5	MSOP	56M1861	3.39
● LTC1540IS8#PBF	1	50000	0.0003	11	5.5	SOIC	56M1877	3.52
● LT1671CS8#PBF	1	60	0.45	5	5	SOIC	57M5607	3.53
● LT6700CS6-2#PBF	2	18	7.1	18	1.4	6-TSOT-23	78T4279	2.69
● LT6700CS6-1#PBF	2	18000	0.0071	18	...	6-SOT-23	61M3379	2.69
● LTC1442CS8#PBF	2	8	3.5	11	2	8-SOIC	56M1219	4.12
● LTC6702HTS8#PBF	2	0.5	25	5.5	1.7	8-TSOT-23	78T3487	2.66
● LTC1842CS8#PBF	2	4000	0.0035	11	5.5	SOIC	56M3890	2.88
● LT1017CN8#PBF	2	...	0.04	40	...	PDIP	57M0865	4.04
● LT1018CS8#PBF	2	...	0.13	1.1	...	SOIC	57M0887	4.23
● LTC1442IS8#PBF	2	8000	0.0035	11	5.5	SOIC	56M1225	4.86
● LT1017IS8#PBF	2	220000	0.03	40	...	8-SOIC	57M0877	5.34

(101594)

ANALOG COMPARATORS

RoHS Compliant Available

MICROCHIP

Applications:

- Laptop Computers
- Mobile Phones
- Metering Systems
- Hand-held Electronics
- RC Timers
- Alarm and Monitoring Circuits
- Windowed Comparators
- Multi-vibrators

Features:

- Low Switching Current
- Rail-to-Rail Input/Output

OPEN DRAIN

Mfg. Part No.	No. of Comparators	Supply Voltage (V)	Supply Current (µA)	Package	Stock No.	Price Each 1-25
● MCP6546T-I/LT	1	1.6 - 5.5	0.6	5-SC-70	03H5074	0.36
● MCP6546UT-I/LT	1	1.6 - 5.5	0.6	5-SC-70	17M0654	0.36
● MCP65R46T-1202E/CHY	1	1.8 - 5.5	2.5	6-SOT-23	23T2821	0.43
● MCP6546-E/MS	1	1.6 - 5.5	0.6	8-MSOP	71J5336	0.45
● MCP6546RT-E/OT	1	1.6 - 5.5	0.6	5-SOT-23	71J5339	0.36
● MCP6546T-E/OT	1	1.6 - 5.5	0.6	5-SOT-23	71J5342	0.36
● MCP6546UT-E/OT	1	1.6 - 5.5	0.6	5-SOT-23	71J5344	0.36
● MCP6548-E/MS	1	1.6 - 5.5	0.6	8-MSOP	71J5350	0.48
● MCP6548-E/P	1	1.6 - 5.5	0.6	8-DIP	71J5351	0.48
● MCP6548-E/SN	1	1.6 - 5.5	0.6	8-SOIC	71J5352	0.48
● MCP6547-E/MS	2	1.6 - 5.5	0.6	8-MSOP	71J5345	0.57
PUSH-PULL						
● MCP6541UT-I/LT	1	1.6 - 5.5	0.6	5-SC-70	17M0653	0.36
● MCP65R41T-1202E/CHY	1	1.8 - 5.5	2.5	6-SOT-23	23T2819	0.43
● MCP6541RT-E/OT	1	1.6 - 5.5	0.6	5-SOT-23	71J5315	0.36
● MCP6541-E/MS	1	1.6 - 5.5	0.6	8-MSOP	71J5312	0.45
● MCP6543-E/MS	1	1.6 - 5.5	0.6	8-MSOP	71J5326	0.48
● MCP6543-E/P	1	1.6 - 5.5	0.6	8-DIP	71J5327	0.48
● MCP6543-E/SN	1	1.6 - 5.5	0.6	8-SOIC	71J5328	0.48
● MCP6542-E/MS	2	1.6 - 5.5	0.6	8-MSOP	71J5321	0.57
● MCP6544-E/ST	4	1.6 - 5.5	0.6	14-TSSOP	71J5333	1.21

(194925)

HIGH-SPEED (45nsec) COMPARATORS

RoHS Compliant Available

MICROCHIP

Applications:
- Mobile phones
- Laptop computers
- Alarm and monitoring circuits
- Hand-held electronics

Features:
- Supply voltage: 1.8 to 5.5V
- Operating Temperature: -40 to 125°C

MCP6561T-E/OT

Mfg. Part No.	No. of Comparators	Output Type	Package	Stock No.	Price Each 1-25
MCP6561RT-E/OT	1	Push Pull	5-SOT-23	45P4723	0.51
MCP6561T-E/OT	1		5-SOT-23	45P4725	0.51
MCP6566RT-E/OT	1	Open Drain	5-SOT-23	45P4727	0.51
MCP6566T-E/LT	1		5-SC-70	45P4728	0.51
MCP6566T-E/OT	1		5-SOT-23	45P4729	0.51
MCP6562-E/MS	2	Push Pull	8-MSOP	54M4906	0.71
MCP6562-E/SN	2		8-SOIC	54M4907	0.71
MCP6567-E/MS	2	Open Drain	8-MSOP	54M4934	0.71
MCP6564-E/SL	4		14-SOIC	54M4921	1.44
MCP6564-E/ST	4	Push Pull	14-TSSOP	54M4922	1.44
MCP6569-E/ST	4	Open Drain	14-TSSOP	54M4950	1.44

(154781)

OPEN DRAIN COMPARATOR

RoHS Compliant Available

MICROCHIP

- Rail to Rail Input / Output
- Low Quiescent Current: 600nA/comparator
- Open-Drain Output: $V_{OUT} \leq 10V$
- Propagation Delay 4µs (typ.)
- Wide Supply Voltage Range: 1.8V to 5.5V
- Industrial Temperature: -40°C to +85°C

Applications include laptop computers, mobile phones, metering systems, hand-held electronics RC timers and windowed comparators.

Mfg. Part No.	Description	Package	Stock No.	Price Each
MCP6549-I/ST	Quad Open Drain Comparator	14-TSSOP	92C4276	1.21
MCP6541T-E/OT	Push-Pull Output Sub-Microamp Comparators	5-SOT-23	89K2104	0.36
MCP6541T-I/OT	Push-Pull Output Sub-Microamp Comparator	5-SOT-23	84R8379	0.36
MCP6541T-I/LT	Push-Pull Output Sub-Microamp Comparators	5-SC70	89K2105	0.36
MCP6541UT-E/OT	Push-Pull Output Sub-Microamp Comparator	5-SOT-23	71J5320	0.36

(78873)

ANALOG COMPARATORS

RoHS Compliant Available

TEXAS INSTRUMENTS

FEATURED HIGH SPEED COMPARATORS

Mfg. Part No.	Resp. Time (us)	Vos (mV)	Supply Voltage (V) Min.	Supply Voltage (V) Max.	Supply Current (mA)	Package	Stock No.	Price Each 1-9
LMV7239M5/NOPB	45	6	2.7	5	65	5-SOT-23	41K3163	1.85
LMV7239M7/NOPB	45	6	2.7	5	65	5-SC70	41K3165	1.85
LMH7220MK/NOPB	2.9	2.7	2.7	12	7.5	6-TSOT	13M1673	4.85

FEATURED LOW POWER COMPARATORS

Mfg. Part No.	Resp. Time (us)	Supply Voltage (V) Min.	Supply Voltage (V) Max.	Supply Current (mA)	Package	Stock No.	Price Each 1-9
LPV7215MG/NOPB	4.5	1.8	5	580	5-SC70	99K2571	1.43
LMV7219M5/NOPB	0.0013	2.7	5	1.1	SOT-23	41K3149	2.55
LMV7271MF/NOPB	880	1.8	5	9	5-SOT-23	41K3167	1.23
LMV7271MG/NOPB	880	1.8	5	9	5-SC70	41K3169	1.23
LMV7275MF/NOPB	880	1.8	5	9	5-SOT-23	41K3173	1.26
LMP7300MA/NOPB	4	2.7	12	12	8-SOIC	46M5449	2.84
LMP7300MME/NOPB	4	2.7	12	0.009	8-MSOP	14R4581	2.72
LMV761MA/NOPB	120	2.7	5	2.75	8-SOIC	41K3181	1.73
LMV762MA/NOPB	120	2.7	5	2.75	8-SOIC	41K3185	2.38
LMV762MM/NOPB	120	2.7	5	2.75	8-MSOP	41K3187	1.99
LM2901N/NOPB	1.3	2	36	800	14-DIP	41K4442	1.04
LMV7231SQE/NOPB	7	2.2	5.5	7	24-LLP	99R3325	3.89

ANALOG COMPARATORS

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
LM311N/NOPB	High-Performance Voltage Comparator	8-DIP	41K4648	0.92
LM2903M/NOPB	Low Power, Low Offset Voltage Dual Comparator	8-NSOIC	41K4450	0.94
LM2903N/NOPB	Low Power, Low Offset Voltage Dual Comparator	8-DIP	41K4452	1.04
LM319AM/NOPB	High-Speed, 2 Channel	14-NSOIC	41K4667	1.57
LM319M/NOPB	High-Speed, 2 Channel	14-NSOIC	41K4669	1.26
LM319N/NOPB	High-Speed, 2 Channel	14-DIP	41K4671	1.96
LM339AN/NOPB	Low-Power Low-Offset Voltage, 4 Channel	14-DIP	41K4751	1.04

CONTINUED

ANALOG COMPARATORS (CONT.)

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
LMV339MT/NOPB	Quad Low Voltage	14-TSSOP	41K3093	1.60
LMC6772AIM/NOPB	Micro-Power Rail-to-Rail Input CMOS with Open Drain Output, 2 Channel	8-NSOIC	41K2701	2.82
LMC6772BIN/NOPB	Micro-Power Rail-to-Rail Input CMOS with Open Drain Output, 2 Channel	8-MDIP	41K2707	2.63
LMC7211AIM5/NOPB	Tiny CMOS with Rail-to-Rail Input, 1 Channel	5-SOT-23	41K2718	1.66
LMC7211BIM5/NOPB	Tiny CMOS with Rail-to-Rail Input, 1 Channel	5-SOT-23	41K2722	1.28
LMC7215IM5/NOPB	Micro-Power, Rail-to-Rail CMOS Comparators w/ Open-Drain/Push-Pull Outputs	5-SOT-23	41K2726	1.56
LMC7221AIM/NOPB	Tiny CMOS Comparator w/ Rail-to-Rail Input and Open Drain Output	8-NSOIC	41K2728	1.70
LMC7221BIM5/NOPB	Tiny CMOS Comparator w/ Rail-to-Rail Input and Open Drain Output	5-SOT-23	41K2734	1.28
LMC7225IM5/NOPB	Rail-to-Rail CMOS w/ Open-Drain/Push-Pull Outputs	5-SOT-23	41K2736	1.56
LMV7239M7/NOPB	45 nsec, Ultra Low Power, Low Voltage, Rail-to-Rail Input Comparator with Open-Drain/ Push-Pull Output	5-SC70	41K3165	1.85
LMV331M7/NOPB	Low-Voltage, Tiny Pack, 1 Channel	5-SC70	41K3090	0.80
LM6511IM/NOPB	180ns 3V Comparator	8-SOIC	41K6245	3.17
LMP7300MA/NOPB	Micropower Precision Comparator and Precision Reference	8-SOIC	46M5449	2.84

(71118)

VOLTAGE COMPARATORS

RoHS Compliant Available

ST

GENERAL PURPOSE

Mfg. Part No.	Circuits	Offset Voltage (V)	Output Type	Response Time (µS)	Package	Stock No.	Price Each 1-9
LM211D	1	3	Open Emitter Collector	200	8-SOIC	89K0650	0.60
LM211DT	1	3	Open Emitter Collector	200	8-SOIC	89K0651	0.39
HIGH SPEED							
LM219D	2	4	Open Collector	80	14-SOIC	89K0654	1.71
LOW POWER							
TS391ILT	1	5	CMOS, DTL, ECL, TTL	1.3	5-SOT-23	89K1110	0.95
LM358AD	2	7	Open Emitter Collector	...	8-SOIC	89K0705	0.49
LM358ADT	2	7	Open Emitter Collector	...	8-SOIC	89K0706	0.48
LM358D	2	7	Open Collector	...	8-SOIC	89K0708	0.43
LM2903DT	2	7	CMOS, DTL, ECL, MOS, TTL	1.3	8-SOIC	89K0667	0.24
LM2903N	2	7	Open Collector	1.3	8-DIP	89K0668	0.60
LM293DT	2	5	CMOS, DTL, ECL, MOS, TTL	1.3	8-SOIC	89K0671	0.73
LM319DT	2	4	Open Emitter Collector	80	14-SOIC	89K0687	0.96
LM393DT	2	3	Open Collector	1.3	8-SO	89K0712	0.59
LM239ADT	4	2	CMOS, DTL, ECL, MOS, TTL	1.3	14-SOIC	89K0657	0.38
LM239AN	4	2	CMOS, DTL, ECL, MOS, TTL	1.3	14-DIP	89K0658	0.97
LM2901D	4	7	CMOS, DTL, ECL, MOS, TTL	1.3	14-SOIC	89K0662	0.82
LM2901DT	4	7	CMOS, DTL, ECL, MOS, TTL	1.3	14-SOIC	89K0663	0.58
LM339AD	4	2	CMOS, DTL, ECL, MOS, TTL	1.3	14-SOIC	89K0696	0.60
LM339ADT	4	2	CMOS, DTL, ECL, MOS, TTL	1.3	14-SOIC	89K0697	0.74
LM339DT	4	3	Open Collector	1.3	14-SOIC	89K0700	0.77
LM339PT	4	2	Open Emitter Collector	1.3	14-TSSOP	89K0702	0.27
MICROPOWER DUAL CMOS							
TS3702IDT	2	5	CMOS	1.5	8-SOIC	89K1109	1.10

(83706)

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(196545)

COMPARATORS

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TEXAS INSTRUMENTS

SINGLE

Mfg. Part No.	V_{CC}/V_{DD} Min.(V)	V_{CC}/V_{DD} Max.(V)	I_{OL} Min. (mA)	t_{RESP} Low-to-High (us)	Pins/ Pkg.	Stock No.	Price Each 1-9
● LM211D	3.5	30	...	0.165	8-SOP	67K2801	0.57
● LM211P	3.5	30	...	0.165	8-DIP	60K6183	0.53
● LM239N	2	36	6	0.3	14-DIP	60K6184	0.54
● LM306P	-6	12	100	0.028	8-DIP	60K6187	1.88
● LM306D	-3	12	100	0.028	SOIC	06F9233	2.04
● LM311D	4	30	8	0.115	8-SOP	06F9278	0.57
● LP311D	4	30	25	1.2	8-SOIC	06F9476	1.56
● LM311P	4	30	8	0.115	8-DIP	60K6188	0.62
● LM311PWR	4	30	8	0.115	8-TSSOP	75C0807	0.48
● LMV331IDBVR	2.7	5.5	...	0.2	5-SOT-23	75C0694	0.68
● TL331IDBVT	5	30	6	0.3	SOT-23	67H1747	0.98
● TL714CP	4.75	5.25	16	0.006	8-DIP	76C9325	4.90
● TLV3401IDBVR	2.7	16	...	...	SOT-23	76C8766	1.77
● TLV3501AID	2.2	5.5	...	0.0045	8-SOIC	28K5681	2.87
● TLV3501AIDBVT	2.7	5.5	50	0.0015	6-SOT-23	43K4126	2.75
● TLV3701IP	2.7	16	...	7	8-DIP	76C8796	1.70
● TLV3201AIDCKT	2.7	5.5	...	...	5-SC-70	05W9873	1.41
DUAL							
● LM293D	2	36	6	0.3	8-SOP	06F9201	0.48
● LM293DR	2	36	6	0.3	SOIC	75C0793	0.41
● LM293P	2	36	6	0.3	8-DIP	63K4279	0.46
● LM393AD	4	30	6	0.3	8-SOP	91F3640	0.46
● LM393P	4	30	6	0.3	8-DIP	06F9461	0.50
● TLC352CP	1.4	16	6	0.2	8-DIP	35K4978	1.45
● TLC352ID	1.4	16	6	0.2	8-SOIC	22C9312	1.57
● TLC3702CP	3	16	4	1.1	8-DIP	35K1208	1.13
● TLC3702IP	3	16	4	1.1	8-DIP	76C7342	1.23
● TLC3702IDR	3	16	4	1.1	8-SOIC	35C2144	1.08
● TLC372CD	3	16	6	0.2	8-SOP	67K1263	1.22
● TLC372CP	3	16	6	0.2	8-DIP	36K3644	1.16
● TLC372IP	3	16	6	1.1	8-SOP	35K4979	1.26
● TLC393CD	3	16	6	1.1	8-DIP	35C2147	1.14
● TLC393CDR	3	16	6	1.1	8-SOIC	76C7380	0.95
● TLV3011AIDBVT	1.8	5.5	...	...	6-SOT-23	90H4573	2.45
● TLV3402IDGKR	2.5	16	...	80	MSOP	76C8776	2.45
● TLV3492AID	1.8	5.5	...	6	8-SOIC	22H1273	2.38
● TLV3492AIDCNT	1.8	5.5	...	6	8-SOT-23	22H1275	2.23
● TLV3502AID	2.2	5.5	...	0.0045	8-SOIC	52K5913	4.30
● TLV3502AIDCNT	2.2	5.5	...	0.0045	8-SOT-23	43K4128	4.06
● TLV3702ID	2.7	16	...	7	8-SOIC	76C8801	2.59
● TLV3702IP	2.7	16	...	7	8-DIP	76C8805	2.59
● LM393AP	4	30	6	0.3	8-DIP	67K0319	0.52
● LM393D	2	30	6	0.3	8-SOIC	06F9455	0.45
● LM393DR	4	30	6	0.3	8-SOIC	35C1763	0.55
● LM393DGKR	4	30	6	0.3	8-MSOP	90H1913	0.55
● LMV393IDGKR	2.7	5.5	...	0.2	8-MSOP	21H0809	0.80
● TLC3702CD	3	16	4	1.1	8-SOIC	08F9114	1.18
● TLC3702ID	3	16	4	1.1	8-SOIC	52F2728	1.27
QUAD							
● LM139DR	2	30	4	0.3	SOIC	75C0710	1.60
● LM193DR	2	30	6	0.3	8-SOIC	75C0711	0.64
● LM2901N	2	30	6	0.3	14-DIP	06F9162	0.56
● LM3302N	2	28	6	0.3	14-DIP	06F9352	0.88
● LM339D	4	30	6	0.3	14-SOP	67K2803	0.46
● LM339ADR	2	30	6	0.3	14-SOIC	64M2729	0.41
● TLC339CPW	3	16	6	1	14-TSSOP	76C7288	1.57
● TLC339ID	3	16	6	1	14-SOIC	76C7290	1.73
● TLC3704IN	3	16	4	1.1	14-DIP	50B7916	1.66
● TLC374CN	3	16	6	0.2	14-DIP	35K1211	1.45
● TLC374ID	3	16	6	0.2	14-SOIC	35K1212	1.57
● LM339DR	2	30	6	0.3	14-SOIC	35C1760	0.57
● LM339N	2	30	6	0.3	14-DIP	06F9386	0.58
● LP2901D	3	30	...	8	14-SOIC	75C0882	0.78
● LP339N	5	30	6	1.3	14-DIP	60K6193	0.66
● LM2901DR	2	30	6	0.3	14-SOIC	34K7512	0.43

Operating Temperature Range: * = 0°C to +70°C, ** = -40°C to +85°C, *** = -55°C to +125°C, **** = -25°C to +85°C ‡ = Supplied on cut tape
(9971)

COMPARATORS

RoHS Compliant Available

ON Semiconductor

SINGLE

Mfg. Part No.	V_{CC} Max. (V)	Response Time (ns)	Package	Stock No.	Price Each 1-9
● LM211DG	36 or ±15	200	8-SOIC	41K9834	0.61
● LM311DG	36 or ±15	200	8-SOIC	98H0570	0.53
DUAL					
● LM2903DG	36 or ±18	1500	8-SOIC	71J4997	0.45
● LM2903DMR2G	36 or ±18	1500	8-Micro	04R7814	0.61
● LM2903VDR2G	36 or ±18	1500	8-SOIC	04R7815	0.57
● LM2903DR2G	36 or ±18	1500	8-SOIC	84K8728	0.44
● LM2903NG	36 or ±18	1500	8-DIP	45J0726	0.45
● LM2903VDG	36 or ±18	1500	8-SOIC	98H0564	0.59
● LM293DG	36 or ±18	1300	8-SOIC	26K3615	0.45
● LM293DR2G	36 or ±18	1300	8-SOIC	84K8730	0.46
● LM393DG	36 or ±18	1300	8-SOIC	88H4661	0.41
● LM393DR2G	36 or ±18	1300	8-SOIC	88H4662	0.60
● LM393NG	36 or ±18	1300	8-DIP	67H6685	0.49
● LM393DMR2G	36 or ±18	1300	8-Micro	04R7819	0.50
QUAD					
● LM239DG	36 or ±18	1300	14-SOIC	45J0711	0.50
● LM239DR2G	36 or ±18	1300	14-SOIC	98H0553	0.49
● LM239NG	36 or ±18	1300	14-DIP	45J0712	0.59
● LM2901DG	36 or ±18	1300	14-SOIC	26K3610	0.47
● LM2901DR2G	36 or ±18	1300	14-SOIC	84K8726	0.46
● LM2901DTBR2G	36 or ±18	1300	14-TSSOP	04R7812	0.51
● LM2901NG	36 or ±18	1300	14-DIP	45J0721	0.58
● LM339DG	36 or ±18	1300	14-SOIC	98H0575	0.47
● LM339NG	36 or ±18	1300	14-DIP	98H0576	0.61
● LM339DR2G	36 or ±18	1300	14-SOIC	17H1559	0.45
● LM339DTBR2G	36 or ±18	1300	14-TSSOP	04R7817	0.58

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(35874)

COMPANDORS

RoHS Compliant Available

ON Semiconductor

Mfg. Part No.	No. of Channels	Supply Current (mA)	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
● SA571DG	2	4.3	6 to 18	16-SOIC	42K2600	5.60
● SA575DTBG	2	4.2	3 to 7	20-TSSOP	70K4377	3.93

(147237)

VOLTAGE REFERENCES

RoHS Compliant Available

ANALOG DEVICES

SERIES MODE VOLTAGE REFERENCES

Mfg. Part No.	Ref. Volt. (V)	Ref. Volt. Tol. (± %)	Ref. Volt. Tol. (± mV)	Temp. Coef.	Package	Stock No.	Price Each 1-9
● ADR3412ARJZ-R7	1.2	0.1	...	8ppm/°C	6-SOT-23	12T2976	2.69
● AD589KH	1.25	1.2	...	50ppm/°C	2-TO-51	55M3851	15.46
● AD589JRZ	1.25	1.2	...	± 100ppm/°C	8-SOIC	59K4339	4.41
● AD589TH	1.25	1.2	...	50ppm/°C	2-TO-51	66F6736	16.92
● ADR420BRZ	2.048	0.05	1	3ppm/°C	8-SOIC	19M8735	10.49
● ADR420ARZ	2.048	0.05	3	10ppm/°C	8-NSOIC	19M0710	6.15
● ADR440BRZ	2.048	0.05	1	3ppm/°C	8-MSOP	19M0713	8.51
● REF191ESZ	2.048	0.1	2	5ppm/°C	8-SOIC	19M8994	5.57
● REF191GSZ	2.048	0.1	2	± 25ppm/°C	8-SOIC	19M8995	3.12
● ADR360AUJZ-R2	2.048	0.15	6	± 25ppm/°C	5-TSOT	63M0907	3.28
● ADR440ARMZ	2.048	0.15	3	10ppm/°C	8-MSOP	19M0711	6.35
● ADR430ARZ	2.048	0.0015	3	10ppm/°C	SOIC	12M8190	6.13
● ADR430ARMZ	2.048	0.0015	3	10ppm/°C	MSOP	59K2782	6.35
● ADR4525ARZ	2.5	0.02	...	± 4ppm/°C	8-SOIC	93T9993	6.22
● ADR4525BRZ	2.5	0.02	...	± 2ppm/°C	8-SOIC	93T9995	7.90
● ADR431BRZ	2.5	0.04	1	3ppm/°C	8-NSOIC	12M8194	9.44
● ADR421BRZ	2.5	0.04	1	3ppm/°C	8-SOIC	59K2766	10.13
● ADR441BRZ	2.5	0.04	1	3ppm/°C	8-SOIC	19M0716	8.72
● AD780BRZ	2.5	0.04	1	3ppm/°C	8-SOIC	59K5481	11.02
● AD780ANZ	2.5	0.04	5	7ppm/°C	8-DIP	59K5478	9.02
● AD780ARZ	2.5	0.04	5	7ppm/°C	8-SOIC	88H0027	9.02
● ADR421ARMZ	2.5	0.04	3	10ppm/°C	8-MSOP	59K2762	6.37
● ADR291ERZ	2.5	0.08	2	8ppm/°C	8-SOIC	19M8726	10.33
● ADR3525WARMZ-R7	2.5	0.1	2.5	± 2.5ppm/°C	8-MSOP	92T3201	2.88
● AD1582BRTZ-REEL7	2.5	0.08	2	50ppm/°C	3-SOT-23	19M8794	2.09
● AD1582ARTZ-REEL7	2.5	0.08	20	± 100ppm/°C	3-SOT-23	19M8793	1.55

➤ CONTINUED ➤

VOLTAGE REFERENCES (CONT.)

Mfg. Part No.	Ref. Volt. (V)	Ref. Volt. Tol. (± %)	Ref. Volt. Tol. (± mV)	Temp. Coef.	Package	Stock No.	Price Each 1-9
ADR03BKSZ-REEL7	2.5	0.1	...	± 9ppm/°C	5-SC70	59K2681	5.33
ADR03AKSZ-REEL7	2.5	0.002	5	± 25ppm/°C	SC70	59K2675	2.78
ADR03BRZ	2.5	0.1	2.5	3ppm/°C	8-SOIC	59K2682	6.05
REF192ESZ	2.5	0.1	...	5ppm/°C	8-SOIC	19M8996	5.57
REF192FSZ	2.5	0.1	...	10ppm/°C	8-SOIC	19M8997	4.51
REF192GPZ	2.5	0.1	...	± 25ppm/°C	8-DIP	19M1040	3.24
REF192GRUZ	2.5	0.1	...	± 25ppm/°C	8-TSSOP	19M8998	4.90
REF192GSZ	2.5	0.1	...	± 25ppm/°C	8-SOIC	19M1041	3.12
REF43GSZ	2.5	0.1	...	± 25ppm/°C	8-SOIC	59K9069	8.69
REF43GPZ	2.5	0.1	3	± 25ppm/°C	8-DIP	19M1043	9.00
ADR361AUJZ-REEL7	2.5	0.12	6	± 25ppm/°C	5-TSOT	19M0709	2.28
ADR441ARMZ	2.5	0.12	3	10ppm/°C	8-MSOP	19M0714	6.35
ADR441ARZ	2.5	0.12	3	10ppm/°C	8-SOIC	19M0715	5.82
ADR421ARZ	2.5	0.12	3	10ppm/°C	8-SOIC	59K2764	6.30
ADR391BUJZ-R2	2.5	0.16	4	± 9ppm/°C	5-TSOT-23	19M8730	4.74
REF03GPZ	2.5	0.2	0.2	10ppm/°C	8-DIP	13M2701	2.98
REF03GSZ	2.5	0.2	...	10ppm/°C	8-SOIC	59K9018	2.70
AD680ANZ	2.5	0.2	5	± 20ppm/°C	8-DIP	59K4520	7.36
ADR381ARTZ-REEL7	2.5	0.24	6	5ppm/°C	3-SOT-23	19M8727	1.89
ADR391AUJZ-R2	2.5	0.24	6	± 25ppm/°C	5-TSOT-23	19M8729	2.55
AD580UH	2.5	0.4	10	10ppm/°C	3-TO-52	66F6733	50.36
AD680JTZ	2.5	0.4	10	30ppm/°C	3-TO-92	19M0849	4.82
AD580JH	2.5	0.4	75	85ppm/°C	3-TO-52	63M5281	10.48
ADR3425ARJZ-R2	2.5	2.5	2.5	2.5ppm/°C	6-SOT-23	24W8480	4.06
ADR361AUJZ-R2	2.5	6	6	25ppm/°C	5-TSOT	24W8481	2.90
ADR443BRZ	3	0.04	1.2	3ppm/°C	8-SOIC	19M0719	8.51
REF193GSZ	3	0.1	...	± 25ppm/°C	8-SOIC	19M8999	3.20
ADR363AUJZ-R2	3	0.1	6	± 25ppm/°C	5-TSOT	63M2789	2.90
ADR443ARMZ	3	0.13	4	10ppm/°C	8-MSOP	19M0717	6.13
ADR3430ARJZ-R7	3	0.1	...	2.5ppm/°C	6-SOT-23	12T2977	2.59
ADR3530WARMZ-R7	3	0.1	3.3	± 2.5ppm/°C	8-MSOP	92T3202	2.88
ADR3533WBRMZ-R7	3.3	0.1	3	± 2.5ppm/°C	8-MSOP	92T3203	4.98
ADR3433ARJZ-R7	3.3	0.1	...	8ppm/°C	6-SOT-23	12T2978	2.59
REF196GSZ	3.3	0.1	...	± 25ppm/°C	8-SOIC	19M9002	3.24
ADR366AUJZ-R2	3.3	0.125	8	± 25ppm/°C	5-TSOT	63M2792	3.15
ADR444BRZ	4.096	0.04	1.6	3ppm/°C	8-SOIC	19M0722	8.82
ADR292GRZ	4.096	0.07	6	10ppm/°C	8-TSSOP	59K2716	4.49
ADR364AUJZ-R2	4.096	0.1	8	± 25ppm/°C	5-TSOT	63M2790	3.02
REF198ESZ	4.096	0.1	...	5ppm/°C	8-SOIC	19M9003	5.70
REF198FSZ	4.096	0.1	...	10ppm/°C	8-SOIC	19M9004	4.34
REF198GSZ	4.096	0.1	...	± 25ppm/°C	8-SOIC	19M9005	3.24
AD1584BRTZ-REEL7	4.096	0.1	4	50ppm/°C	3-SOT-23	19M8795	2.09
ADR392BUJZ-R2	4.096	0.12	5	± 9ppm/°C	5-TSOT-23	19M8732	4.93
ADR444ARZ	4.096	0.13	5	10ppm/°C	8-SOIC	19M0721	6.03
ADR392AUJZ-R2	4.096	0.15	6	± 25ppm/°C	5-TSOT-23	19M8731	2.65
ADR3440ARJZ-R7	4.096	0.1	...	2.5ppm/°C	6-SOT-23	12T2979	2.69
ADR3540WBRMZ-R7	4.096	0.1	4.096	± 2.5ppm/°C	8-MSOP	92T3204	4.79
ADR3550WARMZ-R7	5	0.1	5	± 2.5ppm/°C	8-MSOP	92T3205	2.88
ADR3450ARJZ-R7	5	0.1	...	2.5ppm/°C	6-SOT-23	12T2980	2.59
ADR4550BRZ	5	0.02	...	± 2ppm/°C	8-SOIC	93T9999	7.90
ADR445BRZ	5	0.04	2	3ppm/°C	8-SOIC	19M0725	8.51
AD586MNZ	5	0.04	2	2ppm/°C	8-DIP	59K4330	11.36
AD586BRZ	5	0.04	2.5	5ppm/°C	8-SOIC	19M8818	13.37
AD586LRZ	5	0.04	2.5	5ppm/°C	8-SOIC	19M8820	10.87
AD586KRZ	5	0.04	5	± 15ppm/°C	8-SOIC	19M8819	9.04
AD586KNZ	5	0.04	5	± 15ppm/°C	8-DIP	59K4322	8.31
AD586JRZ	5	0.04	20	± 25ppm/°C	8-SOIC	59K4320	7.10
AD586JNZ	5	0.04	20	± 25ppm/°C	8-DIP	59K4319	6.48
ADR435ARZ	5	0.04	6	10ppm/°C	8-NSOIC	59K2824	6.13
ADR02BRZ	5	0.06	3	3ppm/°C	8-SOIC	19M8724	6.05
ADR365AUJZ-R2	5	0.08	8	± 25ppm/°C	5-TSOT	63M2791	2.90
REF195FSZ	5	0.1	...	10ppm/°C	8-SOIC	19M9000	3.95
REF195GPZ	5	0.1	...	± 25ppm/°C	8-DIP	19M9001	2.96
ADR395BUJZ-R2	5	0.1	5	± 9ppm/°C	5-TSOT-23	19M8734	4.74
ADR02ARZ	5	0.1	5	10ppm/°C	8-SOIC	19M8723	2.81
ADR445ARMZ	5	0.12	6	10ppm/°C	8-MSOP	19M0723	6.13
ADR445ARZ	5	0.12	6	10ppm/°C	8-SOIC	19M0724	6.03
ADR395AUJZ-R2	5	0.12	6	± 25ppm/°C	5-TSOT-23	19M8733	2.55
REF02HSZ	5	0.15	25	± 25ppm/°C	8-SOIC	59K9016	4.76
REF02HPZ	5	0.17	25	± 25ppm/°C	8-DIP	59K9015	4.38
REF195ESZ	5	0.2	2	5ppm/°C	8-NSOIC	59K9045	5.20
REF195GSZ	5	0.2	2	± 25ppm/°C	8-SOIC	59K9052	3.12
REF02CPZ	5	0.45	50	65ppm/°C	8-DIP	59K9011	2.80

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VOLTAGE REFERENCES (CONT.)

Mfg. Part No.	Ref. Volt. (V)	Ref. Volt. Tol. (± %)	Ref. Volt. Tol. (± mV)	Temp. Coef.	Package	Stock No.	Price Each 1-9
REF02CSZ	5	0.45	50	65ppm/°C	8-SOIC	59K9012	2.77
AD688ARWZ	10	0.02	4	8ppm/°C	SOIC	57K1518	19.64
AD587KNZ	10	0.05	5	10ppm/°C	8-DIP	12M8694	6.86
AD587KRZ	10	0.05	5	10ppm/°C	8-SOIC	59K4334	7.76
AD587JRZ	10	0.05	10	± 20ppm/°C	8-SOIC	19M0842	6.86
AD587JNZ	10	0.05	10	± 20ppm/°C	8-DIP	59K4331	6.16
ADR01ARZ	10	0.1	10	10ppm/°C	8-SOIC	19M8722	2.81
REF01HPZ	10	0.17	50	± 25ppm/°C	8-DIP	59K9008	4.27
REF01CSZ	10	0.45	100	65ppm/°C	8-SOIC	59K9005	2.77
REF01CPZ	10	0.45	100	65ppm/°C	8-DIP	59K9004	2.80
SHUNT MODE VOLTAGE REFERENCES							
ADR510ARTZ-REEL7	1	0.35	3.5	70ppm/°C	3-SOT-23	19M8736	1.48
AD1580BRTZ-REEL7	1.2	0.1	1	50ppm/°C	3-SOT-23	19M8791	2.01
AD1580ARTZ-REEL7	1.2	0.1	10	± 100ppm/°C	3-SOT-23	19M8790	1.92
AD589KH	1.25	1.2	5	50ppm/°C	2-TO-51	55M3851	15.46
AD589TH	1.25	1.2	5	50ppm/°C	2-TO-51	66F6736	16.92
ADR5041ARTZ-R2	2.5	0.1	5	± 100ppm/°C	3-SOT-23	02P7393	1.52
SERIES / SHUNT MODE - MULTI/SELECT OUT VOLTAGE REFERENCES							
AD584JNZ	2.5	7.5	30	30ppm/°C	8-DIP	59K4314	7.34

(9993)

VOLTAGE REFERENCES

RoHS Compliant Available

EXAR

A New Direction in Mixed-Signal

The 3-terminal adjustable shunt voltage regulator provides a highly accurate bandgap reference.

Mfg. Part No.	Voltage Regulator Type	Ref. Volt. (V)	Temp. Coef.	Dimensions	Stock No.	Price Each 1-24
SPX2431AM-L	Shunt	2.5	30 ppm	3-SOT-23	23R9541	0.58

(157008)

VOLTAGE REFERENCES

RoHS Compliant Available

LINEAR TECHNOLOGY

Linear Technology offers a broad line of series and shunt precision voltage references. Many of Linear Technology's voltage references are designed to operate in either series or shunt mode. The following products offer excellent initial accuracy and low drift over time and temperature.

SERIES

Mfg. Part No.	Ref. Volt. (V)	Temp. Coef.	Pkg.	Stock No.	Price Each 1-24
LT1019CN8-2.5#PBF	2.5	± 20ppm/°C	8-DIP	57M0920	7.41
LT1236BILS8-5#PBF	5	5ppm/°C	8-LCC	27W9520	7.23
LT1460DCS8-10#PBF	10	20ppm	8-SOIC	57M4051	2.55
LT6654AHLS8-2.5#PBF	2.5	3ppm/°C	8-LCC	27W9589	7.23
LTC6652AHLS8-2.5#PBF	2.5	2ppm/°C	8-LCC	27W9511	9.57
LT1019ACS8-2.5#PBF	2.5	5 ppm	8-SOIC	57M0902	10.92
LT1019ACS8-5#PBF	5	5ppm/°C	8-SOIC	57M0906	10.92
LT6654AHS6-2.5#PBF	2.5	10ppm/°C	6-SOT-23	84R7871	5.79
LT1019CN8-5#PBF	5	± 20ppm/°C	8-DIP	57M0923	7.41
LT1019CS8-4.5#PBF	4.5	± 20ppm/°C	8-SOIC	57M0933	9.32
LT1021CCN8-10#PBF	10	± 20ppm/°C	8-DIP	57M0978	7.01
LT1034CS8-1.2#PBF	1.225	40ppm/°C	8-SOIC	57M1109	4.71
LT1236AIS8-5#PBF	5	5ppm/°C	8-SOIC	57M2880	10.32
LT1236BIS8-5#PBF	5	10ppm/°C	8-SOIC	57M2904	5.15
LT1236CCN8-10#PBF	10	± 15ppm/°C	8-DIP	57M2908	4.52
LT1236CCS8-5#PBF	5	± 15ppm/°C	8-SOIC	57M2916	4.02
LT1460ACS8-2.5#PBF	2.5	10ppm/°C	8-SOIC	57M4007	6.32
LT1236AIS8-5#PBF	5	5ppm/°C	8-SOIC	57M2880	10.32
LT1236BIS8-5#PBF	5	10ppm/°C	8-SOIC	57M2904	5.15
LT1236CCN8-10#PBF	10	± 15ppm/°C	8-DIP	57M2908	4.52
LT1236CCS8-5#PBF	5	± 15ppm/°C	8-SOIC	57M2916	4.02
LT1460ACS8-2.5#PBF	2.5	10ppm/°C	8-SOIC	57M4007	6.32
LT1460BIS8-5#PBF	5	10ppm/°C	8-SOIC	57M4029	9.09
LT1460DCS8-5#PBF	5	± 20ppm/°C	8-SOIC	57M4059	2.55
LT1460GIZ-5#PBF	5	± 25ppm/°C	3-SOIC	57M4113	3.24
LT1460BIS8-5#PBF	5	10ppm/°C	8-SOIC	57M4029	9.09
LT1460DCS8-5#PBF	5	± 20ppm/°C	8-SOIC	57M4059	2.55
LT1460GIZ-5#PBF	5	± 25ppm/°C	3-SOIC	57M4113	3.24
LT1019AIS8-2.5#PBF	2.5	10ppm/°C	8-SO	57M0910	11.52
LT1019CS8-2.5#PBF	2.5	± 20ppm/°C	8-DIP	57M0929	9.32
LT1019CS8-5#PBF	5	± 20ppm/°C	8-SOIC	57M0937	9.32
LT1019CS8-10#PBF	10	± 20ppm/°C	8-SOIC	57M0925	9.32

➤CONTINUED➤

VOLTAGE REFERENCES (CONT.)

Mfg. Part No.	Ref. Volt. (V)	Temp. Coef.	Pkg.	Stock No.	Price Each 1-24
● LT1021BCN8-7#PBF	7	5ppm/°C	8-NPDIP	57M0973	10.56
● LT1021CCN8-5#PBF	5	± 20ppm/°C	8-NPDIP	57M0980	7.01
● LT1021DCS8-5#PBF	5	3ppm/°C	8-SOIC	57M0997	6.44
● LT1021DCS8-10#PBF	10	± 20ppm/°C	8-SOIC	57M0993	6.44
● LT1027ECS8-5#PBF	5	3ppm/°C	8-SOIC	57M1049	4.66
● LT1236ACS8-10#PBF	10	5ppm/°C	8-SOIC	57M2866	6.41
● LT1236ACS8-5#PBF	5	5ppm/°C	8-SOIC	57M2870	7.76
● LT1236CCS8-10#PBF	10	± 15ppm/°C	8-NSOIC	57M2912	4.52
● LT1460CCMS8-2.5#PBF	2.5	± 15ppm/°C	8-MSOP	57M4037	6.48
● LT1460HCS3-2.5#PBF	2.5	10ppm/°C	3-SOT-23	78T3690	5.89
● LT1460JCS3-2.5#PBF	2.5	10ppm/°C	3-SOT-23	78T3693	4.85
● LT1460EIS8-5#PBF	5	± 20ppm/°C	8-NSOIC	57M4077	4.40
● LT1790ACS6-2.5#PBF	2.5	10ppm/°C	6-SOT-23	61M3363	6.28
● LT1790BCS6-2.5#PBF	2.5	± 25ppm/°C	6-SOT-23	61M3364	2.87
● LT1790BCS6-3#PBF	3	± 25ppm/°C	6-SOT-23	61M3365	2.87
● LT1790BCS6-2.048#PBF	2.048	12ppm/°C	6-TSOT-23	78T3731	2.87
● LT1790BCS6-4.096#PBF	4.096	12ppm/°C	6-TSOT-23	78T3733	2.87
● LM336Z-2.5#PBF	2.5	35ppm/°C	3-TO-92	55M8805	2.48
● LTC6652AHMS8-1.25#PBF	1.25	5ppm/°C	8-MSOP	75M4579	6.76
● LTC6652AHMS8-2.048#PBF	2.048	5ppm/°C	8-MSOP	75M4581	6.76
● LTC6652AHMS8-2.5#PBF	2.5	5ppm/°C	8-MSOP	75M4583	6.76
● LTC6652AHMS8-3.3#PBF	3.3	5ppm/°C	8-MSOP	75M4585	6.76
● LTC6652AHMS8-4.096#PBF	4.096	5ppm/°C	8-MSOP	75M4589	6.76
● LTC6652AHMS8-5#PBF	5	5ppm/°C	8-MSOP	75M4591	6.76
● LTC6652BHMS8-1.25#PBF	1.25	10ppm/°C	8-MSOP	75M4593	3.32
● LTC6652BHMS8-2.048#PBF	2.048	10ppm/°C	8-MSOP	75M4595	3.32
● LTC6652BHMS8-2.5#PBF	2.5	10ppm/°C	8-MSOP	75M4597	3.32
● LTC6652BHMS8-4.096#PBF	4.096	10ppm/°C	8-MSOP	75M4603	3.32
● LT6656BIS6-2.5#PBF	2.5	± 20ppm/°C	6-TSOT-23	67R4299	4.38
● LTC6655BHMS8-1.25#PBF	1.25	2ppm/°C	8-MSOP	67R4288	12.27
● LTC6655BHMS8-2.048#PBF	2.048	2ppm/°C	8-MSOP	67R4289	12.27
● LTC6655BHMS8-3#PBF	3	2ppm/°C	8-MSOP	67R4291	12.27
● LTC6655CHMS8-2.5#PBF	2.5	2.5ppm/°C	8-MSOP	72R5745	7.67
● LTC6655BHMS8-3.3#PBF	3.3	2ppm/°C	8-MSOP	67R4290	12.27
● LTC6655BHMS8-4.096#PBF	4.096	2ppm/°C	8-MSOP	67R4292	12.27
● LTC6655BHMS8-5#PBF	5	2ppm/°C	8-MSOP	67R4293	12.27
● LT6656ACS6-2.5#PBF	2.5	10ppm/°C	6-TSOT-23	67R4296	5.38
● LT6656AIS6-2.5#PBF	2.5	10ppm/°C	6-TSOT-23	67R4297	5.92
● LT6656BCS6-2.5#PBF	2.5	± 20ppm/°C	6-TSOT-23	67R4298	3.84
● LT6654AHS6-1.25#TRMPBF	1.25	3ppm/°C	6-TSOT-23	24T2760	6.45
● LT6654AHS6-2.048#TRMPBF	2.048	3ppm/°C	6-TSOT-23	24T2761	6.45
● LT6654AHS6-3.3#TRMPBF	3.3	3ppm/°C	6-TSOT-23	24T2762	6.45
● LT6654AHS6-3#TRMPBF	3	10ppm/°C	6-TSOT-23	24T2763	6.45
● LT6654AHS6-4.096#TRMPBF	4.096	3ppm/°C	6-TSOT-23	24T2764	6.45
● LT6654AHS6-5#TRMPBF	5	3ppm/°C	6-TSOT-23	24T2765	6.45
● LT6654BHS6-1.25#TRMPBF	1.25	± 10ppm/°C	6-TSOT-23	24T2766	3.83
● LT6654BHS6-2.048#TRMPBF	2.048	± 10ppm/°C	6-TSOT-23	24T2767	3.83
● LT6654BHS6-3.3#TRMPBF	3.3	± 10ppm/°C	6-TSOT-23	24T2768	3.83
● LT6654BHS6-4.096#TRMPBF	4.096	± 10ppm/°C	6-TSOT-23	24T2769	3.83
● LT6654BHS6-5#TRMPBF	5	± 10ppm/°C	6-TSOT-23	24T2770	3.83
● LT1027BCN8-5#PBF	5	1ppm/°C	8-DIP	57M1033	9.31
● LT1027CCN8-5#PBF	5	2ppm/°C	8-DIP	57M1035	8.46
● LT1019IS8-2.5#PBF	2.5	5ppm/°C	8-SOIC	57M0948	6.34
● LT1460ACS8-10#PBF	10	5ppm/°C	8-SOIC	57M4003	3.75
● LT1461CCS8-2.5#PBF	2.5	5ppm/°C	8-SOIC	57M4270	1.95
● LT6654AHS6-2.048#PBF	2.048	3ppm/°C	6-TSOT-23	78T4185	5.79
● LT6654AHS6-3#PBF	3	3ppm/°C	6-TSOT-23	78T4187	5.79
● LT6654AHS6-3.3#PBF	3.3	3ppm/°C	6-TSOT-23	78T4186	5.79
● LT6654BHS6-1.25#PBF	1.25	10ppm/°C	6-TSOT-23	78T4197	3.43
● LT6656ACS6-1.25#PBF	1.25	12ppm/°C	6-TSOT-23	78T4218	5.38
● LT6660HCDC-3.3#PBF	3.3	10ppm/°C	3-DFN	78T4265	2.76
SHUNT					
● LT1004CS8-1.2#PBF	1.2	± 20ppm/°C	8-SO	57M0690	3.21
● LT1004CS8-2.5#PBF	2.5	± 20ppm/°C	3-TO-92	57M0694	3.21
● LT1004IS8-1.2#PBF	1.23	20 ppm	8-SOIC	57M0706	6.21
● LT1034CS8-1.2#PBF	1.225	40ppm/°C	8-SOIC	57M1109	4.71
● LT1004CZ-1.2#PBF	1.235	± 20ppm/°C	3-TO-92	57M0698	2.62
● LT1004CZ-2.5#PBF	2.5	± 20ppm/°C	3-TO-92	57M0702	2.62
● LT1004IZ-2.5#PBF	2.5	± 20ppm/°C	3-TO-92	57M0718	5.53
● LT1009CZ#PBF	2.5	± 15ppm/°C	3-TO-92	57M0754	2.62
● LT1634BCS8-2.5#PBF	2.5	10ppm/°C	8-SOIC	57M5362	4.71
● LT1634BIS8-2.5#PBF	2.5	10ppm/°C	8-SOIC	57M5378	3.35
● LT1009IZ#PBF	2.5	35ppm/°C	3-TO-92	57M0762	2.75
● LT1009S8#PBF	2.5	± 15ppm/°C	8-SOIC	57M0766	3.52

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VOLTAGE REFERENCES (CONT.)

Mfg. Part No.	Ref. Volt. (V)	Temp. Coef.	Pkg.	Stock No.	Price Each 1-24
SHUNT					
● LT1029CZ#PBF	5	12ppm/°C	3-TO-92	57M1069	3.11
● LT1029ACZ#PBF	5	8ppm/°C	3-TO-92	57M1065	5.00
● LT1634BIS8-4.096#PBF	4.096	± 25ppm/°C	8-SOIC	57M5382	5.73
SERIES, SHUNT					
● LT1019ACN8-2.5#PBF	2.5	3ppm/°C	8-DIP	57M0897	12.61
● LT1019ACN8-5#PBF	5	3ppm/°C	8-DIP	57M0900	7.50
● LT1019AIS8-5#PBF	5	3ppm/°C	8-SOIC	57M0914	11.52
● LT1021BCN8-10#PBF	10	3ppm/°C	8-DIP	57M0969	10.56
● LT1021DIN8-5#PBF	5	5ppm/°C	8-DIP	57M1007	7.01
● LT1236AIS8-10#PBF	10	2ppm/°C	8-SOIC	57M2876	7.67
● LT1236BCS8-10#PBF	10	5ppm/°C	8-SOIC	57M2888	4.90
● LT1236BCS8-5#PBF	5	5ppm/°C	8-SOIC	57M2892	2.55

(101587)

HIGH-PRECISION VOLTAGE REFERENCES

RoHS Compliant Available

MICROCHIP

- 2.5V or 4.096V Output
- Initial Accuracy: ± 1% Max
- Temperature Coefficient: 50ppm/°C Max.
- Output Current: ± 2mA
- Industrial Temperature Range: -40°C to +85°C

Voltage references use a combination of advanced CMOS design and EEPROM trimming to provide an initial tolerance of 1% (max) and temperature stability of 50ppm/°C (max). Ideal for use in communication devices, data acquisition systems, instrumentation and process control, high-precision power supplies and battery-powered systems.

Mfg. Part No.	Output Voltage (V)	Package	Stock No.	Price Each 1-25
● MCP1525-I/TO	2.500	3-Pin TO-92	89C7117	0.77
● MCP1525T-I/TT	2.500	3-Pin SOT-23-TR	89C7118	0.77
● MCP1541-I/TO	4.096	3-Pin TO-92	96K3704	0.77
● MCP1541T-I/TT	4.096	3-Pin SOT-23-TR	96K3705	0.77

(72661)

VOLTAGE REFERENCES

RoHS Compliant Available

ON Semiconductor

MICROPOWER VOLTAGE REF DIODES

Operating temperature: 0°C to +70°C, except **type LM285-1.2**, which is -40°C to +80°C.

Mfg. Part No.	V_{REF} Typ. (V)	I_0 Min. (mA)	Package	Stock No.	Price Each 1-9
● LM285D-1.2G	1.235	0.01	8-SOIC	26K3607	0.81
● LM285Z-1.2G	1.235	0.01	TO-226AA	45J0720	0.76
● LM385BZ-1.2G	1.235	0.02	TO-226AA	71J5021	0.74
● LM285D-2.5G	2.5	0.02	8-SOIC	26K3608	0.76
● LM285Z-2.5G	2.5	0.02	TO-226AA	71J4996	0.79
● LM385BZ-2.5G	2.5	0.02	TO-226AA	26K3632	0.74
● LM385Z-1.2G	1.235	0.02	TO-226AA	71J5025	0.65
● LM385Z-2.5G	2.5	0.02	TO-92	26K3635	0.68

ADJUSTABLE SHUNT REGULATORS

Reference input voltage: adjustable 2.495 to 36V. Min.operating current: 0.5mA. Tolerance ±1% .

Mfg. Part No.	Operating Temp.	ΔV_{REF} Typ.*(mV)	Package	Stock No.	Price Each 1-9
● TL431ACDG	0°C to +70°C	2.495	8-SOP	45J2294	0.49
● TL431ACLPG	0°C to +70°C	2.495	TO-92	88H5149	0.44
● TL431ACPG	0°C to +70°C	2.495	8-PDIP	42K2685	0.99
● TL431AIDG	-40°C to +85°C	2.495	8-SOIC	45J2295	0.55
● TL431AILPRPG	-40°C to +85°C	2.495	3-TO-92	42K2688	0.45
● TL431CDG	0°C to +70°C	2.495	8-SOIC	42K2696	0.44
● TL431CLPG	0°C to +70°C	2.495	TO-92	98H0996	0.55
● TL431ILPG	-40°C to +85°C	2.495	TO-92	45J2304	0.51
● TL431ACDR2G	0°C to +70°C	2.495	8-SOIC	98H0988	0.52
● TL431ACLPRAG	0°C to +70°C	2.495	TO-92	98H0989	0.45
● TL431AIDR2G	-40°C to +85°C	2.495	8-SOIC	98H0990	0.56
● TL431AILPG	-40°C to +85°C	2.495	TO-92	42K2686	0.54
● TLV431ALPG	-40°C to +85°C	1.24	3-TO-92	45J2289	0.62
● TLV431ASNT1G	-40°C to +85°C	1.24	5-TSOP	83H7909	0.48

*Reference input voltage deviation over temperature range I_K: 10mA

(70337)

SHUNT VOLTAGE REFERENCES

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Output Current Max. (mA)	Ref. Voltage (V)	Oper. Current (µA)	Package	Stock No.	Price Each 1-9
LM285M/NOPB	20	1.24	10	8-SOIC	41K4417	1.23
LM329DZ/NOPB	15	6.9	600	3-TO-92	41K4692	0.99
LM385BM/NOPB	20	1.24	10	8-SOIC	41K5065	1.18
LM385BYZ/NOPB	20	1.24	10	3-TO-92	41K5082	1.73
LM431BCM3/NOPB	100	2.495	1000	3-SOT-23	41K5516	0.65
LM285BXZ/NOPB	20	...	10	3-TO-92	41K4405	2.56
LM285M-1.2/NOPB	20	...	10	8-SOIC-NARROW	41K4415	0.96
LM285M-2.5/NOPB	20	...	10	8-SOIC-NARROW	41K4416	0.98
LM285Z-2.5/NOPB	20	...	20	TO-92	41K4422	0.93
LM336BM-2.5/NOPB	10	2.5	400	8-SOIC-NARROW	41K4730	1.41
LM336BZ-2.5/NOPB	10	2.5	400	3-TO-92	41K4734	1.19
LM336M-2.5/NOPB	10	2.5	400	8-NSOIC	41K4736	0.91
LM336BZ-5.0/NOPB	10	5	600	3-TO-92	41K4735	1.19
LM336M-5.0/NOPB	10	5	600	8-NSOIC	41K4737	0.91
LM336Z-2.5/NOPB	10	5	10	TO-92	41K4740	0.78
LM336Z-5.0/NOPB	10	5	600	3-TO-92	41K4741	0.78
LM385BZ-1.2/NOPB	20	1.235	10	TO-92	41K5083	1.03
LM385Z-1.2/NOPB	20	1.235	10	TO-92	41K5096	0.72
LM385BYZ-1.2/NOPB	20	1.235	10	3-TO-92	41K5080	1.73
LM385M-1.2/NOPB	20	1.235	10	8-NSOIC	41K5086	0.89
LM385M3-1.2/NOPB	20	1.235	10	3-SOT-23	41K5092	1.09
LM385M3X-1.2/NOPB	20	1.235	10	SOT-23	41K5094	1.09
LM385BXZ-2.5/NOPB	20	2.5	10	3-TO-92	41K5074	2.04
LM385BZ-2.5/NOPB	20	2.5	10	3-TO-92	41K5084	1.03
LM385BM-2.5/NOPB	20	2.5	10	8-NSOIC	41K5064	1.16
LM385Z-2.5/NOPB	20	2.5	10	3-TO-92	41K5097	0.72
LM385M-2.5/NOPB	20	2.5	10	8-NSOIC	41K5087	0.89
LM385M3X-2.5/NOPB	20	2.5	10	SOT-23	41K5095	1.09
LM385Z/NOPB	20	2.5	10	3-TO-92	41K5098	0.87
LM4040AIM3-2.5/NOPB	15	2.5	60	3-SOT-23	41K5136	1.73
LM4040AIM3-4.1/NOPB	15	4.1	60	3-SOT-23	41K5138	1.73
LM4040AIM3-5.0/NOPB	15	5	60	3-SOT-23	41K5139	1.73
LM4040AIM3-10.0/NOPB	15	10	60	3-SOT-23	41K5134	1.73
LM4040AIZ-5.0/NOPB	15	5	60	3-TO-92	41K5153	1.73
LM4040BIM3-2.5/NOPB	15	2.5	60	3-SOT-23	41K5157	1.20
LM4040BIM3-4.1/NOPB	15	4.1	60	3-SOT-23	41K5159	1.20
LM4040BIM3-5.0/NOPB	15	5	60	3-SOT-23	41K5160	1.20
LM4040BIM3-10.0/NOPB	15	10	60	3-SOT-23	41K5155	1.20
LM4040CIM3-2.5/NOPB	15	2.5	60	3-SOT-23	41K5195	0.91
LM4040CIM3-4.1/NOPB	15	4.1	60	3-SOT-23	41K5197	0.91
LM4040CIM3-5.0/NOPB	15	5	60	3-SOT-23	41K5198	0.91
LM4040CIM3-10.0/NOPB	15	10	60	3-SOT-23	41K5193	0.31
LM4040CIZ-5.0/NOPB	15	5	60	3-TO-92	41K5222	0.91
LM4040DIM3-2.5/NOPB	15	2.5	15	3-SOT-23	29K6027	0.79
LM4040DIM3-4.1/NOPB	15	4.1	65	3-SOT-23	26K2435	0.79
LM4040DIM3-5.0/NOPB	15	5	15	3-SOT-23	41K5235	0.79
LM4040DIM3-10.0/NOPB	15	10	65	3-SOT-23	41K5232	0.79
LM4040EIM3-2.5/NOPB	15	2.5	65	3-SOT-23	41K5270	0.70
LM4041AIM3-1.2/NOPB	12	1.2	60	3-SOT-23	41K5284	1.67
LM4041BIM3-1.2/NOPB	12	1.2	60	3-SOT-23	41K5287	1.17
LM4041CIM3-1.2/NOPB	12	1.2	60	3-SOT-23	41K5297	0.82
LM4041CIM3-ADJ/NOPB	12	1.24 to 10	60	3-SOT-23	41K5296	0.82
LM4041DIM3-1.2/NOPB	12	1.2	60	3-SOT-23	41K5311	0.74
LM4041DIM3-ADJ/NOPB	12	1.24 to 10	65	3-SOT-23	41K5310	0.74
LM4041EIM3-1.2/NOPB	12	1.2	65	3-SOT-23	41K5322	0.74
LM4050AIM3-2.5/NOPB	15	2.5	60	3-SOT-23	41K5341	2.86
LM4050AIM3-4.1/NOPB	15	4.1	60	3-SOT-23	41K5342	2.86
LM4050BIM3-2.5/NOPB	15	2.5	60	3-SOT-23	41K5365	2.18
LM4050BIM3-4.1/NOPB	15	4.1	60	3-SOT-23	41K5366	2.18
LM4050BIM3-5.0/NOPB	15	5	60	3-SOT-23	41K5367	2.18
LM4050CIM3-2.5/NOPB	15	2.5	60	3-SOT-23	41K5388	1.91
LM4050CIM3-5.0/NOPB	15	5	60	3-SOT-23	41K5390	1.91
LM4051AIM3-1.2/NOPB	12	1.2	60	3-SOT-23	41K5403	2.99
LM431ACM/NOPB	15	2.5 - 36	1000	8-NSOIC	41K5504	0.75
LM431ACM3/NOPB	15	2.5 - 36	1000	3-SOT-23	41K5506	0.63
LMV431ACM5/NOPB	15	2.5 - 36	1000	SOT-23-5	41K3116	0.63
LM431AIM3/NOPB	15	2.5 - 36	1000	3-SOT-23	41K5511	0.68
LM431AIZ/NOPB	15	2.5 - 36	1000	3-TO-92	41K5513	0.67
LM431BIM3/NOPB	15	2.5 - 36	1000	3-SOT-23	41K5521	0.61
LM431CIM3/NOPB	15	2.5 - 36	1000	3-SOT-23	41K5531	0.96
LMV431AIM5/NOPB	15	1.2	100	3-SOT-23	41K3121	0.63
LMV431AIMF/NOPB	15	1.2	100	3-SOT-23	41K3119	0.70

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SHUNT VOLTAGE REFERENCES (CONT.)

Mfg. Part No.	Output Current Max. (mA)	Ref. Voltage (V)	Oper. Current (µA)	Package	Stock No.	Price Each 1-9
LMV431CM5/NOPB	15	1.2	100	3-SOT-23	41K3129	0.60
LM4431M3-2.5/NOPB	15	2.5	15	SOT-23	41K5536	0.91
LMV431AIZ/NOPB	...	1.24	3000	3-TO-92	41K3123	0.66
LM4040BIM7-2.5/NOPB	15	2.5	60	3-SOT-23	41K5170	1.20
LM4040DEM3-2.5/NOPB	15	2.5	60	3-SOT-23	41K5225	0.88
LM4040DEM3-5.0/NOPB	15	5	74	3-SOT-23	41K5227	0.88
LM4041CEM3-ADJ/NOPB	12	Adj.	60	5-SC-70	41K5292	0.95
LM4041DEM3-1.2/NOPB	12	1.2	60	5-SC-70	41K5307	0.96
LM4050AEM3-2.5/NOPB	15	2.5	60	3-SOT-23	41K5329	2.75
LM4050AEM3-5.0/NOPB	15	5	74	3-SOT-23	41K5331	2.75
LM4050CIM3-4.1/NOPB	15	4.1	68	3-SOT-23	41K5389	1.91
LM4051AIM3-ADJ/NOPB	12	Adj.	60	3-SOT-23	41K5402	1.42
LM4051BIM3-1.2/NOPB	12	1.225	60	3-SOT-23	41K5411	2.18
LM4051CIM3-ADJ/NOPB	12	Adj.	60	3-SOT-23	41K5418	1.91
LM4051CIM3-1.2/NOPB	12	1.225	60	3-SOT-23	41K5419	1.91
LM4030BMF-2.5/NOPB	30	2.5	120	5-SOT-23	11N9259	2.18

(72292)

MICROPOWER VOLTAGE REFERENCE DIODES

RoHS Compliant Available

TEXAS INSTRUMENTS

Features:

- Operating current of 20 µA to 20 mA
- Operating Temperature: 0°C to 70°C
- 0.6Ω dynamic impedance (A grade)
- Low temperature coefficient

Mfg. Part No.	Ref. Volt. (V)	Ref. Type	Ref. Volt. Tol. (±%)	Package	Stock No.	Price Each 1-9
LP3470IM5-3.08/NOPB	2.5	Shunt	0.8	5-SOT-23	41K7338	1.63

(167431)

PRECISION VIRTUAL GROUND

RoHS Compliant Available

TEXAS INSTRUMENTS

2.5V virtual ground for 5v/GND analog systems. High output-current capability sink or source 20mA typ. Micropower operation ...170µA typ. Excellent regulation characteristics: Output regulation; -40µV typ @ I_L = 0 to -10mA, +15µV typ @ I_L = 0 to +10mA, Input regulation = 1.5µV/V typ. Low-impedance output 0.0075Ω typ. **Mfg. Part No.TLE2425** is a 2.5V virtual ground for 5V/GND analog systems. **Mfg. Part No.TLE2426** is a ½ Vl virtual ground for analog systems.

Mfg. Part No.	Operating Temp.	Description	Pkg.	Stock No.	Price Each 1-9
TLE2425CD	0°C to 70°C	Precision Virtual Ground	8-SOIC	36K3652	2.10
TLE2425CDR	0°C to 70°C	Precision Virtual Ground	8-SOIC	35C2163	1.79
TLE2426CD	0°C to 70°C	Rail Splitter Precision Virtual Ground	8-SOIC	50B7917	1.94
TLE2426CDR	0°C to 70°C	Rail Splitter Precision Virtual Ground	8-SOIC	76C7712	1.63
TLE2426CLP	0°C to 70°C	Rail Splitter Precision Virtual Ground	8-SOT	88K1249	2.23
TLE2426ID	-40°C to +85°C	Rail Splitter Precision Virtual Ground	8-SOIC	35K1234	1.94
TLE2426ILP	-40°C to +85°C	Rail Splitter Precision Virtual Ground	92-TO	14M8241	2.23
TLE2426IP	-40°C to +85°C	Rail Splitter Precision Virtual Ground	8-PDIP	76C7718	1.94

(70563)

VOLTAGE REFERENCES

RoHS Compliant Available

TEXAS INSTRUMENTS

SERIES VOLTAGE REFERENCES

Mfg. Part No.	V_{REF} (V)	V_{REF} Tol. (+/- %)	Temp. Coeff.	Pkg.	Stock No.	Price Each 1-9
REF3312AIDBZT	1.25	0.15	8ppm/°C	3-SOP	58M1127	2.72
REF3012AIDBZT	1.25	0.2	± 35ppm/°C	3-SOP	75C7413	1.91
REF3212AIDBVT	1.25	0.2	4ppm/°C	6-SOT	43K4068	4.77
REF2912AIDBZT	1.25	2	35ppm/°C	3-SOP	72K9318	1.63
REF2912AIDBZR	1.25	0.0002	35ppm/°C	3-SOT-23	83C7447	1.50
REF3112AIDBZT	1.25	0.2	10ppm/°C	3-SOT-23	90H3369	2.75
REF3318AIDBZT	1.8	0.15	8ppm/°C	SOT-23	58M1133	2.72
REF3320AIDBZT	2.048	0.15	8ppm/°C	SOT-23	58M1141	2.72
REF5020ID	2.048	0.05	2.5ppm/°C	8-SOIC	50M8893	6.91
REF3020AIDBZT	2.049	0.2	± 35ppm/°C	3-SOP	75C7415	1.91
REF3120AIDBZT	2.048	0.2	10ppm/°C	3-SOT-23	90H3371	2.75
REF3325AIDBZT	2.5	0.000015	8ppm/°C	3-SOT-23	58M1149	2.72
REF5025AID	2.5	0.05	3ppm/°C	8-SOIC	50M8895	3.94
REF5025ID	2.5	0.05	2.5ppm/°C	8-SOIC	50M8897	6.91
REF3125AIDBZT	2.5	0.2	10ppm/°C	3-SOP	90H3373	2.75
REF3225AIDBVT	2.5	0.2	4ppm/°C	6-SOT	43K4072	3.17
REF2925AIDBZT	2.5	2	35ppm/°C	3-SOP	83C7452	1.63
REF3330AIDBZT	3	0.000015	8ppm/°C	3-SOT-23	58M1157	2.72

➤CONTINUED➤

VOLTAGE REFERENCES (CONT.)

Mfg. Part No.	V_{REF} (V)	V_{REF} Tol. (+/- %)	Temp. Coeff.	Pkg.	Stock No.	Price Each 1-9
REF5030ID	3	0.05	2.5ppm/°C	8-SOIC	50M8901	6.91
REF3333AIDBZT	3.3	0.15	8ppm/°C	SOT-23	58M1165	2.72
REF3033AIDBZT	3.3	0.2	± 35ppm/°C	3-SOP	75C7419	1.91
REF3033AIDBZR	3.3	0.002	± 20ppm/°C	3-SOT-23	75C7418	1.63
REF2933AIDBZT	3.3	2	35ppm/°C	3-SOP	83C7456	1.63
REF3030AIDBZT	3	0.2	± 35ppm/°C	3-SOP	90H3367	1.91
REF3130AIDBZT	3	0.2	10ppm/°C	3-SOP	90H3375	2.75
REF3233AIDBVT	3.3	0.2	4ppm/°C	6-SOT-23	43K4076	3.17
REF3133AIDBZT	3.3	0.2	10ppm/°C	3-SOT-23	90H3377	2.75
REF2930AIDBZT	3	2	35ppm/°C	3-SOP	83C7454	1.63
REF5040ID	4.096	0.05	2.5ppm/°C	8-SOIC	50M8905	6.91
REF2940AIDBZT	4.096	2	35ppm/°C	3-SOP	63K6131	1.63
REF5045AID	4.5	0.05	3ppm/°C	8-SOIC	50M8907	3.94
REF5045ID	4.5	0.05	2.5ppm/°C	8-SOIC	50M8909	6.91
REF5050AID	5	0.05	3ppm/°C	8-SOIC	50M8911	3.94
REF5050ID	5	0.05	2.5ppm/°C	8-SOIC	50M8913	6.91
REF02AU	5	0.2	4ppm/°C	8-SOIC	80K6133	4.65
REF102AU	10	0.05	10ppm/°C	8-SOIC	04M4600	5.23
REF102BP	10	0.05	5ppm/°C	8-PDIP	04M4601	7.76
REF102CP	10	0.05	2.5ppm/°C	8-PDIP	90H3364	10.31
REF5010AID	10	0.05	3ppm/°C	8-SOIC	45P2936	3.94
REF5010ID	10	0.05	2.5ppm/°C	8-SOIC	45P2937	6.91
SHUNT VOLTAGE REFERENCES						
LT1004CD-1-2	1.235	0.3	± 20ppm/°C	8-SOIC	75C0910	1.18
REF1004C-1.2	1.235	0.3	± 20ppm/°C	8-SOIC	75C7399	3.48
LM285LP-1-2	1.235	1	± 20ppm/°C	TO-92	75C0755	0.73
LM285DR-2-5	2.5	0.00015	± 20ppm/°C	8-SOIC	75C0754	0.62
LM285LP-2-5	2.5	0.00015	± 20ppm/°C	3-TO-92	75C0756	0.73
LM385BLP-2-5	2.5	0.00015	± 20ppm/°C	3-TO-92	06F9436	0.80
LM385BPWR-1-2	1.235	0.0001	± 20ppm/°C	8-TSSOP	75C0852	0.80
LM4040C20ILP	2.048	0.5	± 15ppm/°C	3-TO-92	33M9279	0.97
LM4040A20IDBZT	2.048	0.1	± 15ppm/°C	3-SOP	53K9321	3.22
LM4040A25IDCKR	2.5	0.1	± 15ppm/°C	5-SC-70	53K9325	2.80
LM4040B20IDBZR	2.048	0.2	± 15ppm/°C	3-SOT-23	53K9326	1.88
LM4040B30IDBZR	3	0.2	± 15ppm/°C	3-SOT-23	66K2445	1.88
LM4040C10IDBZR	10	0.5	± 15ppm/°C	3-SOT-23	84K2949	0.92
LM4040C10ILP	10	0.5	± 15ppm/°C	3-TO-92	14M2029	0.97
LM4040C25ILP	2.5	0.5	± 15ppm/°C	3-TO-92	88K5440	0.97
LM4040C30IDBZR	3	0.5	± 15ppm/°C	3-SOT-23	66K2451	0.92
LM4040C30QDBZR	3	0.5	± 15ppm/°C	3-SOT-23	66K2454	1.23
LM4040C41IDBZR	4.096	0.5	± 15ppm/°C	3-SOT-23	66K2456	0.92
LM4040C41IDCKR	4.096	0.5	± 15ppm/°C	5-SC-70	66K2458	0.88
LM4040C50IDBZR	5	0.5	± 15ppm/°C	3-SOT-23	43K3362	0.92
LM4040C50QDBZR	5	0.5	± 15ppm/°C	3-SOT-23	43K3365	1.23
LM4040D10ILP	10	1	± 15ppm/°C	3-TO-92	14M2031	0.87
LM4040D25ILP	2.5	1	± 15ppm/°C	3-TO-92	88K5442	0.87
LM4040D30IDCKR	3	1	± 15ppm/°C	5-SC-70	66K2461	0.80
LM4040D41IDBZR	4.096	1	± 15ppm/°C	3-SOT-23	66K2464	0.72
LM4040D50IDBZR	5	1	± 15ppm/°C	3-SOT-23	43K3367	0.72
LM4040D50QDBZR	5	1	± 15ppm/°C	3-SOT-23	43K3370	0.95
LM4040D82IDBZR	8:192	1	± 15ppm/°C	3-SOT-23	84K2958	0.72
LM4041A12IDBZR	1.24	0.1	± 15ppm/°C	3-SOT-23	58K5875	1.88
LM4041C12IDBZR	1.2	0.5	± 15ppm/°C	3-SOT-23	43K3372	0.92
LM4041C12ILP	1.225	0.5	± 15ppm/°C	3-TO-92	18M2429	0.97
LM4041C12QDBZT	1.225	0.5	± 15ppm/°C	3-SOT-23	43K3376	1.57
LM4041D12IDBZR	1.23	1	± 15ppm/°C	3-SOT-23	43K3377	0.72
LM4041D12IDCKR	1.225	1	± 15ppm/°C	5-SC-70	43K3379	0.80
LM4041D12ILP	1.225	1	± 15ppm/°C	3-TO-92	18M2431	0.87
LM336BLP-2-5	2.49	2	10ppm/°C	TO-92	06F9354	0.88
TL431ACDBVT	2.495	1	± 34ppm/°C	5-SOT-23	67H1756	0.86
TL431ACDBZR	2495	1	± 34ppm/°C	3-SOT-23	44J2369	0.48
TL431ACLPRE3	2495	1	± 34ppm/°C	3-TO-92	57K1272	0.48
TL431AILPR	2.495	0.01	± 34ppm/°C	3-TO-92	76C9260	0.43
TL431BQDBZR	2.495	0.5	± 34ppm/°C	3-SOT-23	44J2402	0.70
TL431CDBZR	2495	2	± 34ppm/°C	3-SOT-23	44J2408	0.44
TL431CPKG3	2495	2	± 34ppm/°C	3-SOT-89	66K4469	0.40
TL431IDBZR	2495	0.005	± 34ppm/°C	3-SOT23	44J2410	0.50
LM4040A25IDBZT	2.5	0.1	± 15ppm/°C	3-SOP	53K9324	3.22
LM4040B25IDBZT	2.5	0.2	± 15ppm/°C	3-SOP	53K9330	2.35
LT1009CDR	2.5	0.2	± 15ppm/°C	8-SOIC	75C0924	1.12
LT1004CD-2-5	2.5	0.8	± 20ppm/°C	8-SOIC	75C0911	1.18
LM4040C30ILP	3	0.5	± 15ppm/°C	3-TO-92	33M9281	0.97
LM4040A30IDBZT	3	0.1	± 15ppm/°C	3-SOP	66K2440	3.22
LM4040D30ILP	3	1	± 15ppm/°C	3-TO-92	33M9287	0.87

➤ CONTINUED ➤

VOLTAGE REFERENCES (CONT.)

Mfg. Part No.	V_{REF} (V)	V_{REF} Tol. (+/- %)	Temp. Coeff.	Pkg.	Stock No.	Price Each 1-9
SHUNT VOLTAGE REFERENCES						
LM4040C41ILP	4.096	0.5	± 100ppm/°C	3-TO-92	50M8848	0.97
LM4040C50ILP	5	0.5	± 15ppm/°C	3-TO-92	33M9283	0.97
LM4040D50ILP	5	1	± 15ppm/°C	3-TO-92	33M9289	0.87
LM4040A50IDBZT	5	0.1	± 15ppm/°C	3-SOP	58K5870	3.22
LM4040B50IDBZT	5	0.2	± 15ppm/°C	3-SOP	58K5873	2.35
LM4041CILP	1.233	0.5	± 15ppm/°C	3-TO-92	50M8856	0.97
SHUNT ADJUSTABLE VOLTAGE REFERENCES						
TL431ACD	2495	1	± 34ppm/°C	8-SOIC	67K2879	0.52
TL431ACP	2.495	1	-999	8-PDIP	52F2760	0.48
TL431AID	2495	1	-999	8-SOIC	08F9416	0.46
TL431AIDBZT	2.495	1	± 34ppm/°C	3-SOP	44J2372	0.86
TL431AILP	2.495	1	± 34ppm/°C	TO-92	14P7544	0.50
TL431CD	2495	2	-999	8-SOIC	35K1272	0.44
TL431CDBVR	2.495	2	± 34ppm/°C	5-SOT	76C9262	0.40
TL431CP	2495	2	± 34ppm/°C	8-PDIP	08F9434	0.44
TL431CPK	2.495	2	± 34ppm/°C	3-SIP	14P7546	0.40
TL431IPK	2.495	2	± 34ppm/°C	3-SIP	76C9269	0.45
TL1431QDRQ1	2.5	0.4	...	8-SOIC	28K5683	0.92
TLV431AIDBZR	1.24	1	39ppm/°C	3-SOT-23	21J9151	0.80
TLV431AILPME3	1.24	1	39ppm/°C	3-TO-92	70K5554	0.72
TLV431AILPRE3	1.24	1	39ppm/°C	3-TO-92	70K5555	0.72
TLV431CLP	1.24	1.5	39ppm/°C	3-TO-92	76C8863	0.63
TLVH431ACDBZR	1.24	1	...	3-SOT-23	31K7645	0.75
TLVH431AIDBVR	1.24	1	...	5-SOT-23	31K7648	0.68
TLVH431AIDBZR	1.24	1	...	3-SOT-23	31K7650	0.75
TLVH431AILP	1.24	1	...	3-TO-92	52K5902	0.82
TLVH431BIDBZR	1.24	0.5	...	3-SOT-23	37K4207	0.89
TLVH431ILPR	1.24	1.5	...	3-TO-92	52K5909	0.60

(68931)

VOLTAGE-TO-FREQUENCY CONVERTERS

RoHS Compliant Available

ANALOG DEVICES

SQUARE WAVE OUTPUT

Mfg. Part No.	Full-Scale Frequency (MHz)	Linearity Max.	FS Calibration Error Typ.	Input Voltage Max. (V)	Package	Stock No.	Price Each 1-9
AD654JNZ	0.5	0.4	10%	+14	8-PDIP	59K4465	8.84
AD7740KRMZ	1	1	...	2.5	8-SOIC	59K5406	2.59
AD7741BRZ	2.75	0.01	...	2.5	8-SOIC	59K5414	4.66
PULSE TRAIN OUTPUT							
AD650JNZ	1	0.02	5%	11	14-DIP	59K4459	18.74
AD7740YRMZ	1	0.012	...	2.5	8-MSOP	59K5409	2.82
AD650KNZ	1	0.1	5%	11	14-DIP	12M8702	21.08
ADVFC32KNZ	0.5	0.5	5%	+10	14-DIP	19M0775	12.10
ONE SHOT OUTPUT							
AD652KPZ	95	0.005	0.01%	36	20-PLCC	59K4464	23.12

(4338)

VOLTAGE-TO-FREQUENCY/ FREQUENCY-TO-VOLTAGE CONVERTERS

RoHS Compliant Available

MICROCHIP

- DC to 100kHz (F/V) or 1Hz to 100kHz (V/F)
- Low Power Dissipation: 27mW Typ.
- Single/Dual Supply Operation: +8V to +15V or ±4V to ±7.5V
- Gain Temperature Stability: ±25ppm/°C Typ.
- Programmable Scale Factor
- Package: 14-Pin PDIP; Freq.: 100kHz; Temp.: 0°C to +70°C

14-pin SOIC and 14-pin ceramic DIP packages are also available. Change Mfg. Part No. suffix to **COD** for -40°C to +85°C SOIC version, or to **EJD** for 0°C to +70°C ceramic DIP version.

Mfg. Part No.	V/F Non-Linearity (%FS)	F/VF Non-Linearity (%FS)	Gain Temp. Drift (max)	Stock No.	Price Each 1-25
TC9400CPD	0.05%	±0.05%	±40	96K4052	7.26

(70511)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

V-TO-F AND F-TO-V CONVERTER

RoHS Compliant Available

Burr-Brown Products from Texas Instruments

Type VFC32 provides output frequency accurately proportional to its input voltage. Digital open-collector frequency is compatible with all logic families. Its integrating input provides immunity and low nonlinearity. **Type VFC110AP** include higher frequency operation, an on-board precision 5V reference and a Disable function.

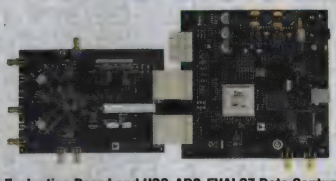
Mfg. Part No.	Description	Operational Frequency	Linearity	Package	Stock No.	Price Each 1-9
VFC32KP	V-to-F and F-to-V Converter	500KHz	±0.01%	14-DIP	80K6182	11.73
VFC32KU	V-to-F and F-to-V Converter	500KHz	±0.01%	14-SOIC	27C3318	10.86
VFC110AP	High Frequency V-to-F Converter	400MHz	±0.02%	14-DIP	80K6181	24.07
VFC320BP	V-to-F and F-to-V Converter	1MHz	±0.1%	14-DIP	77C3586	25.01

(63490)

8-BIT ANALOG TO DIGITAL CONVERTERS

RoHS Compliant Available

ANALOG DEVICES



AD9284 Evaluation Board and HSC-ADC-EVALCZ Data Capture Board

Mfg. Part No.	No. of Channels	Sample Rate (MSPS)	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
AD7278BRMZ	1	3	2.35 - 3.6	8-MSOP	59K4681	4.71
AD7819YNZ	1	0.2	2.7 - 5.5	16-DIP	59K5561	5.79
AD7821KRZ	1	1	4.75 - 5.25	20-SOIC	88H0035	17.75
AD7819YNZ	1	0.05	2.7 - 5.5	16-DIP	59K5561	5.79
AD9280ARSZ	1	32	2.7 - 5.5	28-SSOP	19M1009	5.35
AD7278BRMZ	1	3	2.35 - 3.6	8-MSOP	59K4681	4.71
AD7821KRZ	1	1	4.75 - 5.25	20-SOIC	88H0035	17.75
AD9484BCPZ-500	1	500	1.75 - 1.9	56-LFCSP	45T0254	56.37
AD7820KNZ	1	...	4.75 - 5.25	20-DIP	59K5568	15.13
AD7569JNZ	1	0.5	4.75 - 5.25	24-DIP	19M0873	17.40
AD9280ARSZ	1	32	2.7 - 5.5	28-SSOP	19M1009	5.35
AD7478ARTZ-500RL7	1	1	2.7 - 5.25	6-SOT-23	59K4922	2.75
AD7819YRZ	1	0.2	2.7 - 5.5	16-SOIC	59K5565	5.82
AD673JNZ	1	...	4.5 - 7	20-PDIP	12M8718	22.00
AD9288BSTZ-40	2	40	2.7 - 3.6	48-LQFP	82H3062	7.78
AD9284BCPZ-250	2	250	1.7 - 1.9	48-LFCSP	23T4194	42.48
AD9288BSTZ-40	2	40	2.7 - 3.6	48-LQFP	82H3062	7.78
AD7824KNZ	4	0.1	4.75 - 5.25	24-DIP	59K5592	19.37
AD7828BRZ	4	...	4.75 - 5.25	28-SOIC	59K5603	18.04
AD7828KNZ	8	...	4.75 - 5.25	28-DIP	59K5606	21.23
AD7908BRUZ	8	1	2.7 - 5.25	20-TSSOP	59K5952	4.71
AD7291BCPZ	8	0.0222	1.65 - 3.6	20-LFCSP	31T9307	9.03
AD7908BRUZ	8	1	2.7 - 5.25	20-TSSOP	59K5952	4.71

EVALUATION BOARDS

When evaluating the digital data from the **AD9284-250EBZ**, the **HSC-ADC-EVALCZ** must be used in conjunction with the **AD9284-250EBZ**.

Mfg. Part No.	Description	Stock No.	Price Each
AD9284-250EBZ	AD9284, ADC, SPI, EVALUATION BOARD	23T4193	326.25
HSC-ADC-EVALCZ	HIGH SPEED ADC, FIFO, SPI, USB PORT I/F, EVAL KIT	50M1169	652.74

(176070)

10-BIT ANALOG TO DIGITAL CONVERTERS

RoHS Compliant Available

ANALOG DEVICES

Mfg. Part No.	No. of Channels	Sample Rate (SPS)	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
AD573JNZ	1	...	4.5 - 16.5	20-DIP	12M8682	46.99
AD9215BRUZ-80	1	105	2.7- 3.3	28-TSSOP	59K7135	13.43
AD9215BRUZ-105	1	105	2.7- 3.3	28-TSSOP	59K7133	14.71
AD7813YNZ	1	0.4	2.7 - 5.5	16-DIP	59K5525	7.56
AD9203ARUZ	1	40	2.7 - 3.6	28-SSOP	82H3049	8.89
AD9200JRSZ	1	20	2.7 - 5.5	28-SSOP	59K7122	5.73
AD9218BSTZ-105	2	105	2.7 - 3.6	48-LQFP	59K7151	29.47
AD9608BCPZ-105	2	105	1.7 - 1.9	64-LFCSP	55T8964	19.59
AD9608BCPZ-125	2	125	1.7 - 1.9	64-LFCSP	55T8965	31.34
AD7993BRUZ-0	4	0.188	2.7 - 5.5	16-TSSOP	59K6101	4.81
AD7997BRUZ-0	8	0.079	2.7 - 5.5	20-TSSOP	20K7698	5.35

➤ CONTINUED ➤

10-BIT ANALOG TO DIGITAL CONVERTERS (CONT.)

Mfg. Part No.	No. of Channels	Sample Rate (SPS)	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
AD7298-1BCPZ	8	1	1.65 - 3.6	20-LFCSP	18T2145	5.77
AD7918BRUZ	8	1	2.7 - 5.25	20-TSSOP	59K5982	7.72

EVALUATION BOARD

Mfg. Part No.	Description	Stock No.	Price Each
AD9608-125EBZ	AD9608-125 EVAL. BOARD	55T8963	271.88

(176071)

12-BIT ANALOG TO DIGITAL CONVERTERS

RoHS Compliant Available

ANALOG DEVICES

Mfg. Part No.	No. of Channels	Sample Rate	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
AD7170BCPZ-REEL7	1	125SPS	2.7 - 5.5	10-LFCSP	63R1304	2.65
AD9220ARSZ	1	10MSPS	4.75 - 5.25	28-SOIC	59K7155	11.73
AD7466BRTZ-R2	1	200kSPS	1.6 - 3.6	6-SOT-23	12M8817	6.28
AD9230BCPZ-250	1	250MSPS	1.7 - 1.9	56-LFCSP	34M5088	89.76
AD9235BRUZ-20	1	20MSPS	2.7 - 3.6	28-TSSOP	59K7190	13.58
AD7920BKSZ-500RL7	1	250kSPS	2.35 - 5.25	6-SC-70	92T3227	5.97
AD7920AKSZ-500RL7	1	250kSPS	2.35 - 5.25	6-SC-70	92T3226	5.35
AD1674JNZ	1	100kSPS	-11.4 - 16.5	28-DIP	59K3408	26.62
AD574AJNZ	1	...	-11.4 - 16.5	28-DIP	59K4311	36.71
AD1674KNZ	1	100kSPS	4.5 - 16.5	28-DIP	19M8796	36.71
AD7879-1ACPZ-500R7	1	105kSPS	1.6 - 3.6	16-LFCSP	94T9075	4.43
AD9224ARSZ	1	40MSPS	4.75 - 5.25	28-SSOP	19M8939	21.22
AD7476ARTZ-500RL7	1	1MSPS	2.7 - 5.25	6-SOT-23	19M8841	9.34
AD9634BCPZ-170	1	170MSPS	1.7 - 1.9	32-LFCSP	58T8924	34.58
AD9634BCPZ-210	1	210MSPS	1.7 - 1.9	32-LFCSP	58T8925	49.70
AD9634BCPZ-250	1	250MSPS	1.7 - 1.9	32-LFCSP	58T8926	55.21
AD9235BRUZ-65	1	40MSPS	2.7 - 3.6	28-TSSOP	98J0137	21.14
AD9434BCPZ-370	1	370MSPS	1.75 - 1.9	56-LFCSP	45T0249	120.06
AD9434BCPZ-500	1	500MSPS	1.75 - 1.9	56-LFCSP	45T0250	170.25
AD7891ASZ-1	1	450kSPS	4.75 - 5.25	44-MQFP	59K5853	26.20
AD7276BRMZ	1	3MSPS	2.35 - 3.6	8-MSOP	59K4672	8.50
AD1674JRZ	1	100kSPS	-11.4 - 16.5	28-SOIC	59K3409	25.32
AD9225ARSZ	1	25MSPS	4.75 - 5.25	28-SSOP	59K7170	25.18
AD7572AJNZ10	1	...	4.75 - 5.25	24-DIP	19M0874	21.58
AD7896ANZ	1	100kSPS	2.7 - 5.5	8-DIP	19M0904	15.58
AD7578KNZ	1	...	4.75 - 5.25	24-DIP	59K5089	38.91
AD7876BNZ	1	100kSPS	-4.75 - 5.25	24-DIP	59K5810	44.56
AD674BKNZ	1	...	-11.4 - 16.5	28-DIP	59K4507	47.46
AD9238BSTZ-65	2	65MSPS	2.7 - 3.6	64-LQFP	59K7216	32.64
AD9628BCPZ-105	2	105MSPS	1.7 - 1.9	64-LFCSP	55T8969	46.83
AD9628BCPZ-125	2	125MSPS	1.7 - 1.9	64-LFCSP	55T8970	49.06
AD9613BCPZ-170	2	170MSPS	1.7 - 1.9	64-LFCSP	45T0259	60.29
AD9613BCPZ-210	2	210MSPS	1.7 - 1.9	64-LFCSP	45T0260	84.07
AD9613BCPZ-250	2	250MSPS	1.7 - 1.9	64-LFCSP	45T0261	98.01
AD7887BRZ	2	125kSPS	2.7 - 5.25	8-SOIC	59K5825	9.62
AD7887ARMZ	2	125kSPS	2.7 - 5.25	8-MSOP	88H0063	7.58
AD7924BRUZ	4	1MSPS	2.7 - 5.25	16-TSSOP	88H0082	10.28
AD7874ANZ	4	116kSPS	-4.75 - 5.25	28-DIP	59K5806	60.03
AD7864ASZ-1	4	500kSPS	4.75 - 5.25	44-MQFP	59K5750	23.96
AD7582KNZ	4	10kSPS	0 - 5	28-DIP	59K5098	46.53
AD9633BCPZ-80	4	80MSPS	1.7 - 1.9	48-LFCSP	72T3624	68.97
AD9633BCPZ-105	4	105MSPS	1.7 - 1.9	48-LFCSP	72T3622	87.56
AD9633BCPZ-125	4	125MSPS	1.7 - 1.9	48-LFCSP	72T3623	100.98
AD7874ARZ	4	116kSPS	-4.75 - 5.25	28-SOIC	88H0056	59.10
AD7890ANZ-10	8	117kSPS	4.75 - 5.25	24-DIP	59K5831	19.44
AD7888ARZ	8	125kSPS	2.7 - 5.25	16-SOIC	19M0903	9.40
AD7927BRUZ	8	200kSPS	2.7 - 5.25	20-TSSOP	19M8862	6.41
AD7998BRUZ-1	8	188kSPS	2.7 - 5.5	20-TSSOP	19M8865	8.89
AD7888ARUZ	8	125kSPS	2.7 - 5.25	16-TSSOP	19M8861	8.95
AD7928BRUZ	8	1MSPS	2.7 - 5.25	20-TSSOP	19M8863	11.14
AD9637BCPZ-40	8	40MSPS	1.7 - 1.9	64-LFCSP	67T0320	61.29
AD9637BCPZ-80	8	80MSPS	1.7 - 1.9	64-LFCSP	67T0321	86.27
AD7858LARZ	8	100kSPS	3 - 5.5	24-SOIC	59K5709	13.91
AD7298BCPZ	8	1MSPS	1.65 - 3.6	20-LFCSP	18T2147	8.82
AD7859ASZ	8	100kSPS	3 - 5.5	44-PQFP	88H0050	14.79
AD7998BRUZ-0	8	188kSPS	2.7 - 5.5	20-TSSOP	19M0909	8.32
AD7888BRZ	8	125kSPS	2.7 - 5.25	8-SOIC	59K5829	9.47
AD7891APZ-1	8	500kSPS	4.75 - 5.25	44-PLCC	59K5849	28.34

➤ CONTINUED ➤

12-BIT ANALOG TO DIGITAL CONVERTERS (CONT.)

Mfg. Part No.	No. of Channels	Sample Rate	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
● AD7490BCPZ	16	1MSPS	2.7 - 5.25	32-LFCSP	59K4930	11.94
● AD7490BRUZ	16	1MSPS	2.7 - 5.25	28-TSSOP	19M0870	11.52

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
● AD9272-65EBZ	AD9272 EVALUATION BOARD	34P3260	271.88
● EVAL-AD7991EBZ	AD7991 EVALUATION BOARD	78M0861	55.32
● EVAL-AD2S1210EDZ	AD2S1210 EVALUATION BOARD	71P7918	92.82
● HSC-ADC-EVALB-DCZ	FIFO DATA CAPTURE KIT	34M6400	543.95
● HSC-ADC-EVALCZ	AD9261 EVALUATION BOARD	50M1169	652.74
● EVAL-AD7266EDZ	AD7266 EVALUATION BOARD	45P6656	55.32
● EVAL-AD7887CBZ	AD7887 EVALUATION BOARD	74R6345	142.32
● AD9628-125EBZ	AD9628 EVALUATION BOARD	55T8968	271.88
● EVAL-AD7920CBZ	AD7920 EVALUATION BOARD	54M6896	55.32

(175963)

13-BIT ANALOG TO DIGITAL CONVERTERS

RoHS Compliant Available

ANALOG DEVICES

Mfg. Part No.	No. of Channels	Sample Rate (MSPS)	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
● AD7321BRUZ	2	500	5 - 16.5	14-TSSOP	19M0856	7.13
● AD7322BRUZ	2	1	2.5 - 16.5	14-TSSOP	19M0857	11.27
● AD7327BRUZ	8	500	5 - 16.5	20-TSSOP	19M0860	9.04
● AD7328BRUZ	8	1	2.5 - 16.5	20-TSSOP	19M8837	12.10

(177869)

14-BIT ANALOG TO DIGITAL CONVERTERS

RoHS Compliant Available

ANALOG DEVICES

Mfg. Part No.	No. of Channels	Sample Rate (MSPS)	Supply Voltage (V)	Package	Stock No.	Price Each 1-4
● AD9255BCPZ-80	1	80	1.7 - 3.5	48-LFCSP	33R2728	51.67
● AD9649BCPZ-20	1	20	1.7 - 1.9	32-LFCSP	51R0816	21.38
● AD9649BCPZ-40	1	40	1.7 - 1.9	32-LFCSP	51R0817	26.34
● AD9240ASZ	1		4.75 - 5.25	44-MQFP	59K7221	31.96
● AD9642BCPZ-170	1	170	1.7 - 1.9	32-LFCSP	55T8976	60.13
● AD9648BCPZ-125	1	125	1.7 - 1.9	64-LFCSP	55T8984	77.63
● AD7872JRZ	1	0.083	-4.75 - 5.25	16-SOIC	59K5789	50.22
● AD679JNZ	1	0.128	11.4 - 12.6	28-DIP	59K4518	63.75
● AD7894ARZ-10	1	0.2	4.75 - 5.25	8-SOIC	59K5898	15.39
● AD9245BCPZ-80	1		2.7 - 3.6	32-LFCSP	59K7235	50.60
● AD9244BSTZ-40	1	40	4.75 - 5.25	48-LQFP	59K7228	33.49
● AD9243ASZ	1	3	4.75 - 5.25	44-MQFP	59K7226	20.34
● AD7869JRZ	1	0.083	4.75 - 5.25	28-SOIC	59K5780	60.82
● AD9248BSTZ-20	2		2.7 - 3.6	64-LQFP	59K7240	33.02
● AD9251BCPZ-80	2		1.7 - 3.6	64-LFCSP	05R6597	58.73
● AD9645BCPZ-80	2	80	1.7 - 1.9	32-LFCSP	94T0070	47.56
● AD9645BCPZ-125	2	125	1.7 - 1.9	32-LFCSP	94T0069	78.77
● AD9643BCPZ-170	2	170	1.7 - 1.9	64-LFCSP	45T0268	106.84
● AD9643BCPZ-210	2	210	1.7 - 1.9	64-LFCSP	45T0269	146.02
● AD9643BCPZ-250	2	250	1.7 - 1.9	64-LFCSP	45T0270	179.28
● AD6649BCPZ	2	250	1.7 - 1.9	64-LFCSP	45T0228	117.66
● AD9644CCPZ-80	2	155	1.7 - 1.9	48-LFCSP	85R6464	58.73
● AD9644BCPZ-80	2	155	1.7 - 1.9	48-LFCSP	85R6462	63.10
● AD9644BCPZ-155	2	155	1.7 - 1.9	48-LFCSP	51T2002	93.96
● AD9253BCPZ-80	4	80	1.7 - 1.9	48-LFCSP	72T3617	92.71
● AD9253BCPZ-105	4	105	1.7 - 1.9	48-LFCSP	72T3615	135.51
● AD9253BCPZ-125	4	125	1.7 - 1.9	48-LFCSP	72T3616	154.95
● AD7856ANZ	8	0.285	4.75 - 5.25	24-DIP	59K5693	18.86
● AD9257BCPZ-40	8	65	1.7 - 1.9	64-LFCSP	67T0310	72.81
● AD9257BCPZ-65	8	65	1.7 - 1.9	64-LFCSP	67T0311	105.24

EVALUATION BOARDS

Mfg. Part No.	Supported Devices	Stock No.	Price Each
● AD9649-65EBZ	AD9649BCPZ-65	51R0814	217.50
● AD9649-80EBZ	AD9649BCPZ-80	51R0815	217.50
● AD9648-125EBZ	AD9648-125	55T8982	271.88
● AD9642-170EBZ	AD9642-170	55T8973	326.25
● AD9257-65EBZ	AD9257	67T0309	271.88
● AD9644-155KITZ	AD9644	82T3706	978.75
● AD9644-80KITZ	AD9644	85R6461	978.75

(175965)

16-BIT ANALOG TO DIGITAL CONVERTERS

RoHS Compliant Available

ANALOG DEVICES

Applications:
- Medical devices
- Communications

Mfg. Part No.	No. of Channels	Sample Rate (kSPS)	Supply Voltage (V)	Package	Stock No.	Price Each 1-4
● AD7671ASTZ	1	1000	4.75 to 5.25	48-LQFP	59K5178	46.97
● AD7621ASTZ	1	3000	2.37 to 2.63	48-LQFP	59K5111	46.38
● AD7622BSTZ	1	2000	2.37 to 2.63	48-LQFP	19M1192	39.51
● AD9446BSVZ-100	1	1000000	3.14 to 5.25	100-TQFP	12M9226	86.88
● AD7653ASTZ	1	1000	4.75 to 5.25	48-LQFP	59K5131	19.79
● AD7686CRMZ	1	500	4.5 to 5.5	10-MSOP	59K5250	24.01
● AD7980ARMZ	1	1000	2.375 to 2.625	10-MSOP	54M6760	20.56
● AD7980BRMZ	1	1000	2.375 to 2.625	10-MSOP	54M6762	27.44
● AD7665ASTZ	1	570	4.75 to 5.25	48-LQFP	96K2102	32.70
● AD7685BRMZ	1	250	2.3 to 5.5	10-MSOP	59K5237	15.15
● AD7683BRMZ	1	100	2.7 to 5.5	8-MSOP	19M0886	12.31
● AD7988-1BRMZ	1	100	2.375 to 2.625	10-MSOP	82T3697	15.09
● ADS1146IPW	1	2	2.7 to 5.5	16-TSSOP	77R1717	6.89
● AD7701ANZ	1	4	4.5 to 5.5	20-DIP	19M0889	27.26
● AD7988-5BRMZ	1	500	2.375 to 2.625	10-MSOP	82T3699	14.46
● AD7400AYRWZ	1	10000	4.5 to 5.5	16-SOIC	19P8286	6.92
● AD976ANZ	1		4.75 to 5.25	28-DIP	19M8945	36.84
● AD7715ARZ-5	1	0.5	4.75 to 5.25	16-WSOIC	19M8850	11.69
● AD7715ANZ-5	1	0.5	4.75 to 5.25	16-DIP	19M8849	11.62
● AD7683ARMZ	1	100	2.7 to 5.5	8-MSOP	19M8846	11.15
● AD7680BRMZ	1	100	2.5 to 4.096	8-MSOP	19M8845	11.35
● AD7663ASTZ	1	250	4.75 to 5.25	48-LQFP	19M8844	21.86
● AD7610BSTZ	1	250	4.75 to 5.25	48-LQFP	28M4046	22.99
● AD677JRZ	1		5 to 12	28-SOIC	59K4510	47.43
● AD677KNZ	1		5 to 12	16-DIP	59K4512	55.62
● AD7684BRMZ	1	100	2.7 to 5.5	8-MSOP	59K5229	12.31
● AD976ARZ	1	100	4.75 to 5.25	28-SOIC	59K7384	36.48
● AD976BRZ	1	100	4.75 to 5.25	28-SOIC	59K7389	46.95
● AD977ABRZ	1		4.75 to 5.25	20-SOIC	59K7416	51.52
● AD977ANZ	1	100	4.75 to 5.25	20-DIP	59K7418	36.84
● AD977ARZ	1		4.75 to 5.25	20-SOIC	59K7421	35.76
● AD9467BCPZ-200	1	200	1.7 to 1.9	72-LFCSP	14T0770	136.66
● AD7788ARMZ	1	...	2.7 to 5.25	10-MSOP	59K5448	5.23
● AD7687BRMZ	1		2.3 to 5.5	10-MSOP	59K5254	17.56
● AD7790BRMZ	1	...	2.5 to 5.25	10-MSOP	59K5456	6.74
● AD9467BCPZ-200	1	200000	1.7 to 1.9	72-LFCSP	14T0770	136.66
● AD9467BCPZ-250	1	250000	1.7 to 1.9	72-LFCSP	18T2170	159.48
● AD7705BRUZ	2	...	2.7 to 3.3	16-TSSOP	59K5279	9.67
● AD7705BRZ	2	...	2.7 to 3.3	16-SOIC	59K5282	9.44
● AD7705BNZ	2	0.5	4.75 to 5.25	16-DIP	19M0890	10.08
● AD7654ASTZ	2	500	4.75 to 5.25	48-LQFP	19M0878	28.10
● AD9269BCPZ-20	2	20000	1.7 to 1.9	64-LFCSP	67R2287	75.94
● AD9269BCPZ-40	2	40000	1.7 to 1.9	64-LFCSP	67R2288	87.96
● AD9269BCPZ-65	2	60000	1.7 to 1.9	64-LFCSP	67R2289	104.36
● ADS1147IPW	3	2	2.7 to 5.5	20-TSSOP	77R1718	8.80
● AD7706BNZ	3	0.5	4.75 to 5.25	16-DIP	19M0891	10.02
● AD7792BRUZ	3	0.47	2.7 to 5.25	16-TSSOP	19M0897	9.35
● AD7606BSTZ-4	4	200	4.75 to 5.25	64-LQFP	76R7616	18.60
● AD7656BSTZ	6	250	5 to 16.5	64-LQFP	19M0879	22.51
● AD7656YSTZ	6	250	5 to 16.5	64-LQFP	19M0880	23.84
● AD7795BRUZ	6	0.47	2.7 to 5.25	24-TSSOP	19M0900	10.13
● AD7606BSTZ-6	6	200	4.75 to 5.25	64-LQFP	76R7618	23.60
● ADS1148IPW	7	2	2.7 to 5.5	28-TSSOP	77R1719	10.07
● ADS1148IRHBT	7	2	2.7 to 5.25	32-QFN	05W9870	9.65
● AD7606BSTZ	8	200	4.75 to 5.25	64-LQFP	76R7614	27.70
● AD7699BCPZ	8	...	4.5 to 5.5	20-LFCSP	34P3196	15.30
● AD7708BRUZ	10		2.7 to 5.25	28-TSSOP	19M8847	9.11

The **AD9262** Series are dual, 16-bit analog-to-digital converter (ADC) based on a continuous time sigma-delta architecture that achieves -87 dB of dynamic range over a 10 MHz input bandwidth. The integrated features and characteristics unique to the continuous time sigma-delta architecture significantly simplify its use and minimize the need for external components

Mfg. Part No.	No. of Channels	Sample Rate (MSPS)	Supply Voltage (V)	Frqcy. (MHz)	Package	Stock No.	Price Each 1-4
● AD7626BCPZ	1	10	2.37 to 5.25	...	32-LFCSP	33R2709	55.08
● AD9262BCPZ	2	160	1.7 to 1.9	2.5	64-LFCSP	67R2275	46.98
● AD9262BCPZ-10	2	160	1.7 to 1.9	10	64-LFCSP	67R2276	72.72

EVALUATION BOARDS

Mfg. Part No.	Supported Devices	Stock No.	Price Each
● AD9262-10EBZ	AS9262 10MHz	67R2273	326.25
● AD9269-80EBZ	AD9269 80MSPS	67R2286	217.50

CONTINUED

16-BIT ANALOG TO DIGITAL CONVERTERS (CONT.)

Mfg. Part No.	Supported Devices	Stock No.	Price Each
EVAL-AD7656CBZ	AD7656 Family	30M0715	92.82
AD9467-200EBZ	AD9467-200	14T0768	326.25
AD9467-250EBZ	AD9467-250	18T2169	326.25
EVAL-AD7400AEDZ	AD7400A and AD7401A	07P9130	55.32
EVAL-AD7400EDZ	AD7400 and AD7401	07P9131	55.32

(172777)

18-BIT ANALOG TO DIGITAL CONVERTERS

RoHS Compliant Available

ANALOG DEVICES

Mfg. Part No.	No. of Channels	Sample Rate (MSPS)	Supply Voltage (V)	Package	Stock No.	Price Each 1-4
AD7641BSTZ	1	2	2.37 - 2.63	48-LQFP	19M1194	48.69
AD7674ASTZ	1		4.75 - 5.25	48-LQFP	59K5182	48.38
AD7982BRMZ	1	1	2.375 - 2.625	10-MSOP	34M5046	38.65
AD7608BSTZ	8		4.75 - 5.25	64-LQFP	47T4700	35.65

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
EVAL-AD7608EDZ	AD7608 18-BIT ADC Evaluation Kit	47T5003	140.63
EVAL-AD7609EDZ	AD7609 18-BIT ADC Evaluation Kit	58T9431	140.63

(177870)

20-BIT ANALOG TO DIGITAL CONVERTERS

RoHS Compliant Available

ANALOG DEVICES

Mfg. Part No.	No. of Channels	Sample Rate (SPS)	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
AD7781BRZ	1	16.7	2.7 - 5.25	14-SOIC	11R1020	9.53
AD7703ARZ	1	4000	-4.5 - 5.5	20-SOIC	59K5272	31.37

(175967)

24-BIT ANALOG TO DIGITAL CONVERTERS

RoHS Compliant Available

ANALOG DEVICES

Mfg. Part No.	No. of Channels	Sample Rate	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
AD7780BRZ	1	16.7 Hz	2.7 - 5.25	14-SOIC	11R1016	8.95
AD7760BSVZ	1	2.5 MHz	4.75 - 5.25	64-TQFP	59K5428	45.31
AD1871YRSZ	1		4.5 - 5.5	28-SSOP	12M8447	9.98
AD7195BCPZ	1	4.8 kHz	4.75 - 5.25	32-LFCSP	67R2255	14.33
AD7767BRUZ	1	128 kSPS	2.375 - 2.625	16-TSSOP	54M6754	16.09
AD7766BRUZ	1		2.375 - 2.625	16-TSSOP	54M6748	11.26
AD7767BRUZ-2	1		2.375 - 2.625	16-TSSOP	54M6758	16.47
AD7710ARZ	2	1.02 kSPS	5 - 10	24-SOIC	88H0024	33.31
AD7710ANZ	2	1.03 kSPS	4.75 - 5.25	24-DIP	59K5309	33.31
AD7730BNZ	2	1.2 kSPS	2.7 - 5.25	24-DIP	19M0893	18.53
AD7730BRZ	2		4.75 - 5.25	24-WSOIC	19M8851	17.99
AD7730BRUZ	2	1.2 kSPS	4.75 - 5.25	24-TSSOP	59K5374	17.99
AD7731BRZ	3		2.7 - 5.25	24-SOIC	59K5389	19.45
AD7793BRUZ	3	500 SPS	2.7 - 5.25	16-TSSOP	19M0898	10.12
AD7799BRUZ	3	500 SPS	2.7 - 5.25	16-TSSOP	19M0901	10.21
AD7731BNZ	3	6.4 kSPS	2.7 - 5.25	24-DIP	19M0894	18.42
AD7193BRUZ	4		3 - 5.25	28-TSSOP	26R2472	10.25
AD7734BRUZ	4	15.4 kSPS	4.75 - 5.25	28-TSSOP	19M8852	16.46
AD7714YRUZ	5	1 kSPS	3 - 5.25	24-TSSOP	19M8848	16.05
AD7714ARZ-5	5	1 kSPS	3 - 5.25	24-SOIC	59K5329	18.18
AD7714AN-5	5		4.75 - 5.25	24-DIP	66F5871	20.36
AD7190BRUZ	5		4.75 - 5.25	24-TSSOP	34P3182	11.59
AD7794BRUZ	6	500 SPS	2.7 - 5.25	24-TSSOP	19M0899	11.22
AD7739BRUZ	8		4.75 - 5.25	24-TSSOP	12M8932	15.37

EVALUATION BOARDS

Mfg. Part No.	Supported Devices	Stock No.	Price Each
EVAL-AD7195EBZ	AD7195	45T0397	55.32

(175968)

CAPACITANCE-TO-DIGITAL CONVERTERS

RoHS Compliant Available

ANALOG DEVICES

AD7150 series is ultra-low power for proximity sensing. **AD7746/AD7747 series** come with a temperature sensor.

Mfg. Part No.	Res. (Bits)	Input Chan.	Capacitance (pF) Input Base	Capacitance (pF) Range	Samp. Rate (SPS)	Pkg.	Stock No.	Price Each 1-9
AD7150BRMZ	12	2	10	±4	100	10-MSOP	64M7550	3.59
AD7156BCPZ-REEL7	12	2	...	...	100	10-LFCSP	34P3181	1.98
AD7747ARUZ	24	1	17	±8	45.5	16-TSSOP	34M5039	10.75
AD7147ACPZ-1500RL7	16	13	20	±8	111	24-LFCSP	61M4034	2.03
AD7147ACPZ-500RL7	16	13	20	±8	111	24-LFCSP	61M4035	3.36
AD7151BRMZ	12	1	10	±4	100	10-MSOP	64M7552	3.59

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
EVAL-AD7746EBZ	Evaluation Board for AD7746	34M6022	55.32
EVAL-AD7147-1EBZ	AD7147-1 CapTouch Controller Evauation Board	61M4200	166.04
EVAL-AD7152EBZ	AD7152 Capacitance Converter Evaluation Kit	11N9036	55.32
EVAL-AD7747EBZ	AD7747 Capacitance Converter Evaluation Board	34M6023	55.32

(138963)

ANALOG-TO-DIGITAL CONVERTERS

RoHS Compliant Available

intersil

INTEGRATING CONVERTERS WITH DISPLAY DRIVERS

Rollover and linearity error of less than one count. 40-pin plastic DIP package, commercial temperature range. Converters for 3½-digit LCD/LED 7-segment displays contain all necessary active devices. **ICL7136** is an improved version of **ICL7126**.

3½-DIGIT A/D CONVERTER FOR DIRECT DRIVE OF LCD/LED 7-SEGMENT DISPLAYS

Analog-to-digital converter provides a 3-digit, multiplexed BCD output.

Mfg. Part No.	Display	Conv. /Sec. Max.	Supply Voltage	Package	Stock No.	Price Each 1-24
ICL7106CPLZ	LCD Direct Drive	15	± 15V	40-DIP	61J6191	4.56
ICL7107CPLZ	LED Common Anode	15	+ 6V to –9V	40-DIP	61J6192	4.77
ICL7136CPLZ	LCD Direct Drive	4	± 15V	40-DIP	61J6197	7.24

5½-DIGIT LCD A/D CONVERTER

µP-COMPATIBLE INTEGRATING CONVERTERS

Monolithics. Up to 12-bit resolution and guaranteed accuracy of ±1 count or 1 LSB. Output may be directly accessed by two separate enables, except for **ICL7135CPI,** which has multiplexed BCD, count accuracy of ±1 in 20,000 and added functions for display applications and more sophisticated systems. Commercial temperature range.

Mfg. Part No.	Reso–lution	Conv./Sec. Max.	Supply Voltage	Package	Stock No.	Price Each 1-24
ICL7135CPIZ	4½-Digit	15	+6V to –9V	28-DIP	61J6196	5.45

(4237)

HIGH-SPEED ANALOG-TO-DIGITAL CONVERTERS

RoHS Compliant Available

intersil

Mfg. Part No.	Reso–lution (Bits)	Conversion Rate (MSPS)	Band-width (MHz)	Package	Stock No.	Price Each 1-24
HI3-574AJN-5Z	12	25	...	28-DIP	57K3840	59.59
HI3-574AKN-5Z	12	25	...	28-DIP	57K3841	50.91
HI7190IBZ	22	20	10	20-SOIC	57K3852	37.72

(4240)

12-BIT ANALOG TO DIGITAL CONVERTERS

RoHS Compliant Available

LINEAR TECHNOLOGY

PARALLEL

Mfg. Part No.	No. of. DACs	Supply Voltage (V)	DNL/INL (LSB)	Package	Stock No.	Price Each 1-24
LTC1403CMSE#PBF	1	2.7 - 3.6	0.2/0.5	10-MSOP	56M0717	8.06
LTC1410CSW#PBF	1	-4.75 - 5.25	1/1	28-SOIC	56M0821	17.26
LTC2221CUP#PBF	1	3.1 - 3.5	0.2/1	64-QFN	56M4932	46.92
LTC2221IUP#PBF	1	3.1 - 3.5	0.2/1	64-QFN	56M4936	63.85
LTC2222CUK#PBF	1	3.1 - 3.5	0.2/1	48-QFN	56M4944	45.05
LTC2224CUK#PBF	1	3.1 - 3.5	0.3/1	48-QFN	56M4964	46.92
LTC2242IUP-12#PBF	1	2.375 - 2.625	0.4/1	64-QFN	56M5122	105.02
LTC2242CUP-12#PBF	1	2.375 - 2.625	0.4/1	64-QFN	56M5114	87.52
LTC2252CUH#PBF	1	2.85 - 3.4	0.15/0.3	32-QFN	56M5182	37.08
LTC2262CUJ-12#PBF	1	1.7 - 1.9	0.1/0.3	40-QFN	11R6198	53.98
LTC2262IUJ-12#PBF	1	1.7 - 1.9	0.1/0.3	40-QFN	11R6200	64.77
LTC2291CUP#PBF	1	2.7 - 3.4	0.15/0.3	64-QFN	56M5302	15.18
LTC2293CUP#PBF	1	2.7 - 3.4	0.15/0.3	64-QFN	56M5318	29.95
LTC1420CGN#PBF	1	4.75 - 5.25	1/1	SSOP	56M0953	12.58

CONTINUED

12-BIT ANALOG TO DIGITAL CONVERTERS (CONT.)

Mfg. Part No.	No. of. DACs	Supply Voltage (V)	DNL/INL (LSB)	Package	Stock No.	Price Each 1-24
● LTC2290IUP#PBF	2	2.7 - 3.4	0.15/0.3	64-QFN	56M5298	16.60
● LTC2292CUP#PBF	2	2.7 - 3.4	0.15/0.3	64-QFN	56M5310	19.38
● LTC2293IUP#PBF	2	2.7 - 3.4	0.15/0.3	64-QFN	56M5322	35.93
● LTC1851CFW#PBF	8	4.75 - 5.25	1/1	48-TSSOP	56M3942	14.76
SERIAL, SPI						
● LTC2256CUJ-12#PBF	1	1.7 - 1.9	0.1/0.3	40-QFN	73P7251	20.31
● LTC2256IUJ-12#PBF	1	1.7 - 1.9	0.1/0.3	40-QFN	73P7237	19.52
● LTC2257CUJ-12#PBF	1	1.7 - 1.9	0.1/0.3	40-QFN	73P7252	16.99
● LTC2257IUJ-12#PBF	1	1.7 - 1.9	0.1/0.3	40-QFN	73P7240	20.38
● LTC2258CUJ-12#PBF	1	1.7 - 1.9	0.1/0.3	40-QFN	73P7242	24.12
● LTC2258IUJ-12#PBF	1	1.7 - 1.9	0.1/0.3	40-QFN	73P7244	28.94
● LTC2259CUJ-16#PBF	1	1.7 - 1.9	0.5/4	40-QFN	68R1363	53.98
● LTC1407CMSE#PBF	2	2.7 - 3.6	1/0.25	10-MSOP	56M0777	8.06
● LTC1407CMSE-1#PBF	2	2.7 - 3.6	1/0.25	10-MSOP	56M0774	8.06
● LTC2263CUJ-12#PBF	2	1.7 - 1.9	0.1/0.3	40-QFN	63R6758	20.36
● LTC2263IUJ-12#PBF	2	1.7 - 1.9	0.1/0.3	40-QFN	63R6762	24.43
● LTC2264CUJ-12#PBF	2	1.7 - 1.9	0.1/0.3	40-QFN	63R6766	25.48
● LTC2264IUJ-12#PBF	2	1.7 - 1.9	0.1/0.3	40-QFN	63R6770	25.51
● LTC2265CUJ-12#PBF	2	1.7 - 1.9	0.1/0.3	40-QFN	63R6774	31.02
● LTC2265IUJ-12#PBF	2	1.7 - 1.9	0.1/0.3	40-QFN	63R6778	29.78
● LTC2266CUJ-12#PBF	2	1.7 - 1.9	0.1/0.3	40-QFN	51R1486	32.86
● LTC2266IUJ-12#PBF	2	1.7 - 1.9	0.1/0.3	40-QFN	51R1488	45.29
● LTC2267CUJ-12#PBF	2	1.7 - 1.9	0.1/0.3	40-QFN	51R1490	44.95
● LTC2267IUJ-12#PBF	2	1.7 - 1.9	0.1/0.3	40-QFN	51R1492	41.25
● LTC2268IUJ-12#PBF	2	1.7 - 1.9	0.1/0.3	40-QFN	51R1496	50.04
● LTC2170CUKG-12#PBF	4	1.7 - 1.9	0.1/0.3	52-QFN	63R6734	36.61
● LTC2170IUKG-12#PBF	4	1.7 - 1.9	0.1/0.3	52-QFN	63R6738	40.26
● LTC2171CUKG-12#PBF	4	1.7 - 1.9	0.1/0.3	52-QFN	63R6742	31.89
● LTC2171IUKG-12#PBF	4	1.7 - 1.9	0.1/0.3	52-QFN	63R6746	42.04
● LTC2172CUKG-12#PBF	4	1.7 - 1.9	0.1/0.3	52-QFN	63R6750	48.86
● LTC2172IUKG-12#PBF	4	1.7 - 1.9	0.1/0.3	52-QFN	63R6754	49.78
● LTC2173CUKG-12#PBF	4	1.7 - 1.9	0.1/0.3	52-QFN	51R1474	68.36
● LTC2173IUKG-12#PBF	4	1.7 - 1.9	0.1/0.3	52-QFN	51R1476	75.20
● LTC2174CUKG-12#PBF	4	1.7 - 1.9	0.1/0.3	52-QFN	51R1478	90.22
● LTC2174IUKG-12#PBF	4	1.7 - 1.9	0.1/0.3	52-QFN	51R1480	99.24
● LTC2175CUKG-12#PBF	4	1.7 - 1.9	0.1/0.3	52-QFN	51R1482	105.83
● LTC2175IUKG-12#PBF	4	1.7 - 1.9	0.1/0.3	52-QFN	51R1484	116.41
● LTC1857CG#PBF	8	4.75 - 5.25	.../1	28-SSOP	56M3986	18.01
● LTC1863LCGN#PBF	8	2.7 - 3.6	1/1	16-SSOP	56M4082	7.68
● LTC1863CGN#PBF	8	4.75 - 5.25	1/1	16-SSOP	56M4074	7.66
● LTC1863LIGN#PBF	8	2.7 - 3.6	1/1	16-SSOP	56M4086	9.31
LVDS PARRALEL AND SPI						
● LTC2150CUJ-12#PBF	1	1.7 - 1.9	0.6/0.26	40-QFN	78T2573	32.30
● LTC2151CUJ-12#PBF	1	1.7 - 1.9	0.6/0.26	40-QFN	78T2581	50.30
● LTC2152CUJ-12#PBF	1	1.7 - 1.9	0.6/0.26	40-QFN	78T2589	60.35
● LTC2155CUP-12#PBF	2	1.7 - 1.9	0.16/0.26	64-QFN	78T2605	54.91
● LTC2155IUP-12#PBF	2	1.7 - 1.9	0.16/0.26	64-QFN	78T2607	63.14
● LTC2156CUP-12#PBF	2	1.7 - 1.9	0.16/0.26	64-QFN	78T2609	85.49
● LTC2156IUP-12#PBF	2	1.7 - 1.9	0.16/0.26	64-QFN	78T2611	98.31
● LTC2157CUP-12#PBF	2	1.7 - 1.9	0.16/0.26	64-QFN	78T2613	102.59

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
DC1437B-AA	LTM9003-AA, 12-BIT, PREDISTORTION RCVR, DEMO BOARD	27T5641	300.00
DC1437B-AB	LTM9003-AB, 12-BIT, PREDISTORTION RCVR, DEMO BOARD	27T5642	300.00

(175971)

14-BIT ANALOG TO DIGITAL CONVERTERS

PARALLEL

RoHS Compliant Available

LINEAR TECHNOLOGY

Mfg. Part No.	No. of. DACs	Supply Voltage (V)	DNL/INL (LSB)	Package	Stock No.	Price Each 1-24
● LTC2205CUK-14#PBF	1	3.135 - 3.465	0.3/0.7	48-QFN	56M4833	45.13
● LTC2205IUK-14#PBF	1	3.135 - 3.465	0.3/0.7	48-QFN	56M4841	48.63
● LTC2207CUK-14#PBF	1	3.135 - 3.465	0.1/0.4	48-QFN	56M4865	65.12
● LTC2207IUK-14#PBF	1	3.135 - 3.465	0.1/0.4	48-QFN	56M4873	78.15
● LTC2208CUP-14#PBF	1	3.135 - 3.465	0.2/1	64-QFN	56M4881	79.60
● LTC2245CUH#PBF	1	2.7 - 3.4	0.5/1	32-QFN	56M5126	17.19
● LTC2247CUH#PBF	1	2.7 - 3.4	0.5/1	32-QFN	56M5142	21.93
● LTC2248IUH#PBF	1	2.7 - 3.4	0.5/1	32-QFN	56M5154	42.17
● LTC2249CUH#PBF	1	2.7 - 3.4	0.5/1	32-QFN	56M5158	41.80
● LTC2249IUH#PBF	1	2.7 - 3.4	0.5/1	32-QFN	56M5162	41.50
● LTC2254IUH#PBF	1	2.85 - 3.4	0.5/1	32-QFN	56M5202	71.20

➤CONTINUED➤

14-BIT ANALOG TO DIGITAL CONVERTERS (CONT.)

Mfg. Part No.	No. of. DACs	Supply Voltage (V)	DNL/INL (LSB)	Package	Stock No.	Price Each 1-24
● LTC2262CUJ-14#PBF	1	1.7 - 1.9	0.3/1	40-QFN	11R6199	87.90
● LTC2284CUP#PBF	1	2.85 - 3.4	0.6/1.5	64-QFN	56M5246	88.99
● LTC2285IUP#PBF	1	2.85 - 3.4	0.6/1.5	64-QFN	56M5258	127.59
● LTC2295CUP#PBF	1	2.7 - 3.4	0.5/1.2	64-QFN	56M5334	28.43
● LTC2296CUP#PBF	1	2.7 - 3.4	0.5/1.2	64-QFN	56M5342	31.35
● LTC2297CUP#PBF	1	2.7 - 3.4	0.5/1.2	64-QFN	56M5350	39.75
● LTC2298CUP#PBF	1	2.7 - 3.4	0.5/1.2	64-QFN	56M5358	52.75
● LTC1414CGN#PBF	1	-6 - 6	...	28-SSOP	56M0849	27.41
● LTC2296IUP#PBF	2	2.7 - 3.4	0.5/1.2	64-QFN	56M5346	37.64
● LTC2297IUP#PBF	2	2.7 - 3.4	0.5/1.2	64-QFN	56M5354	42.93
SERIAL, SPI						
● LTC2256CUJ-14#PBF	1	1.7 - 1.9	0.3/1	40-QFN	73P7236	24.83
● LTC2256IUJ-14#PBF	1	1.7 - 1.9	0.3/1	40-QFN	73P7238	29.80
● LTC2257CUJ-14#PBF	1	1.7 - 1.9	0.3/1	40-QFN	73P7239	30.57
● LTC2257IUJ-14#PBF	1	1.7 - 1.9	0.3/1	40-QFN	73P7241	36.68
● LTC2258CUJ-14#PBF	1	1.7 - 1.9	0.3/1	40-QFN	73P7243	43.40
● LTC2258IUJ-14#PBF	1	1.7 - 1.9	0.3/1	40-QFN	73P7245	46.92
● LTC2259CUJ-16#PBF	1	1.7 - 1.9	0.5/4	40-QFN	68R1363	53.98
● LTC1403ACMSE#PBF	1	2.7 - 3.6	0.2/0.5	10-MSOP	56M0697	10.00
● LTC1417AIGN#PBF	1	-6 - 6	1/3	16-SSOP	56M0885	17.50
● LTC1417CGN#PBF	1	-6 - 6	1/3	16-SSOP	56M0889	9.00
● LTC2314HTS8-14#TRMPBF	1	2.7 - 5.25	0.4/1.5	8-TSOT-23	72W4003	30.13
● LTC2314HTS8-14#TRPBF	1	2.7 - 5.25	0.4/1.5	8-TSOT-23	72W4004	30.13
● LTC2314ITS8-14#TRMPBF	1	2.7 - 5.25	0.4/1.5	8-TSOT-23	72W4005	26.19
● LTC2314ITS8-14#TRPBF	1	2.7 - 5.25	0.4/1.5	8-TSOT-23	72W4006	26.19
● LTC2314CTS8-14#TRPBF	1	2.7 - 5.25	0.4/1.5	8-TSOT-23	72W4002	22.78
● LTC2314CTS8-14#TRMPBF	1	2.7 - 5.25	0.4/1.5	8-TSOT-23	72W4001	22.78
● LTC2263IUJ-14#PBF	2	1.7 - 1.9	0.3/1	40-QFN	63R6764	44.69
● LTC2263CUJ-14#PBF	2	1.7 - 1.9	0.3/1	40-QFN	63R6760	37.24
● LTC2264IUJ-14#PBF	2	1.7 - 1.9	0.3/1	40-QFN	63R6772	49.56
● LTC2264CUJ-14#PBF	2	1.7 - 1.9	0.3/1	40-QFN	63R6768	41.29
● LTC2265IUJ-14#PBF	2	1.7 - 1.9	0.3/1	40-QFN	63R6780	55.13
● LTC2265CUJ-14#PBF	2	1.7 - 1.9	0.3/1	40-QFN	63R6776	50.12
● LTC2266CUJ-14#PBF	2	1.7 - 1.9	0.3/1	40-QFN	51R1487	50.00
● LTC2266IUJ-14#PBF	2	1.7 - 1.9	0.3/1	40-QFN	51R1489	55.00
● LTC2267CUJ-14#PBF	2	1.7 - 1.9	0.3/1	40-QFN	51R1491	64.77
● LTC2268IUJ-14#PBF	2	1.7 - 1.9	0.3/1	40-QFN	51R1497	83.13
● LTC2170IUKG-14#PBF	4	1.7 - 1.9	0.3/1	52-QFN	63R6740	55.35
● LTC2170CUKG-14#PBF	4	1.7 - 1.9	0.3/1	52-QFN	63R6736	46.61
● LTC2171IUKG-14#PBF	4	1.7 - 1.9	0.3/1	52-QFN	63R6748	68.14
● LTC2171CUKG-14#PBF	4	1.7 - 1.9	0.3/1	52-QFN	63R6744	57.38
● LTC2172IUKG-14#PBF	4	1.7 - 1.9	0.3/1	52-QFN	63R6756	89.63
● LTC2172CUKG-14#PBF	4	1.7 - 1.9	0.3/1	52-QFN	63R6752	87.96
● LTC2173CUKG-14#PBF	4	1.7 - 1.9	0.3/1	52-QFN	51R1475	97.16
● LTC2173CUKG-14#PBF	4	1.7 - 1.9	0.3/1	52-QFN	51R1475	97.16
● LTC2173IUKG-14#PBF	4	1.7 - 1.9	0.3/1	52-QFN	51R1477	106.87
● LTC2174CUKG-14#PBF	4	1.7 - 1.9	0.3/1	52-QFN	51R1479	141.43
● LTC2174IUKG-14#PBF	4	1.7 - 1.9	0.3/1	52-QFN	51R1481	155.57
● LTC2175CUKG-14#PBF	4	1.7 - 1.9	0.3/1	52-QFN	51R1483	180.43
● LTC2175IUKG-14#PBF	4	1.7 - 1.9	0.3/1	52-QFN	51R1485	198.48
LVDS, SERIAL						
● LTC2158IUP-14#PBF	1	1.7 - 1.9	0.35/1.2	64-QFN	78T2623	259.54
● LTC2158CUP-14#PBF	1	1.7 - 1.9	0.35/1.2	64-QFN	78T2619	225.70

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
DC1298A-AA	LTM9002-AA, IF/BASEBAND RCVR, 14-BIT, DEMO BOARD	27T5638	300.00
DC1298A-LA	LTM9002-LA, IF/BASEBAND RCVR, 12-BIT, DEMO BOARD	27T5639	300.00
DC1513B-AA	LTM9004-AA, DIRECT CONVERSION RECEIVER, DEMO BOARD	27T5643	300.00
DC1513B-AB	LTM9004-AB, DIRECT CONVERSION RECEIVER, DEMO BOARD	27T5644	300.00
DC1513B-AC	LTM9004-AC, DIRECT CONVERSION RECEIVER, DEMO BOARD	27T5645	300.00
DC1513B-AD	LTM9004-AD, DIRECT CONVERSION RECEIVER, DEMO BOARD	27T5646	300.00

(175972)

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(197415)

16-BIT ANALOG TO DIGITAL CONVERTERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Applications:
- Communications
- Cellular Base Stations
- Software Defi ned Radios
- Portable Medical Imaging
- Multi-Channel Data Acquisition
- Nondestructive Testing

Mfg. Part No.	Supply Voltage (V)	Operating Temperature	Package	Stock No.	Price Each 1-24
PARALLEL					
LTC2202IUK#PBF	3.135 - 3.465	-40°C to +85°C	48-QFN	56M4812	43.41
LTC1608CG#PBF	4.75 - 5.25	0°C to +70°C	36-SSOP	56M2631	28.35
LTC1608ACG#PBF	4.75 - 5.25	0°C to +70°C	36-SSOP	56M2623	28.10
LTC2203IUK#PBF	3.135 - 3.465	-40°C to +85°C	48-QFN	56M4820	52.09
LTC2205IUK#PBF	3.135 - 3.465	-40°C to +85°C	48-QFN	56M4844	74.29
LTC2205CUK#PBF	3.135 - 3.465	0°C to +70°C	48-QFN	56M4836	62.70
LTC2207IUK#PBF	3.135 - 3.465	-40°C to +85°C	48-QFN	56M4876	98.40
LTC2207CUK#PBF	3.135 - 3.465	0°C to +70°C	48-QFN	56M4868	80.96
LTC2208CUP#PBF	3.135 - 3.465	0°C to +70°C	64-QFN	56M4884	94.06
LTC2209IUP#PBF	3.135 - 3.465	-40°C to +85°C	64-QFN	56M4900	125.89
SERIAL					
LTC2272CUJ#PBF	3.135 - 3.465	0°C to +70°C	40-QFN	44P3747	74.29
LTC2273CUJ#PBF	3.135 - 3.465	0°C to +70°C	40-QFN	31P7569	89.45
LTC2273IUJ#PBF	3.135 - 3.465	-40°C to +85°C	40-QFN	31P7570	99.43
LTC2274CUJ#PBF	3.135 - 3.465	0°C to +70°C	40-QFN	13P4658	104.87
LTC2274IUJ#PBF	3.135 - 3.465	-40°C to +85°C	40-QFN	13P4659	116.57
SERIAL, I2C					
LTC2461CDD#PBF	2.7 - 5.5	0°C to +70°C	12-DFN	24R3294	3.52
LTC2461CMS#PBF	2.7 - 5.5	0°C to +70°C	12-MSOP	24R3295	3.52
LTC2461IDD#PBF	2.7 - 5.5	-40°C to +85°C	12-DFN	24R3296	4.07
LTC2471CMS#PBF	2.7 - 5.5	0°C to +70°C	12-MSOP	13T3794	3.63
LTC2471CDD#PBF	2.7 - 5.5	0°C to +70°C	12-DFN	13T3792	3.63
LTC2461IMS#PBF	2.7 - 5.5	-40°C to +85°C	12-MSOP	24R3297	4.07
LTC2463CDD#PBF	2.7 - 5.5	0°C to +70°C	12-DFN	24R3298	2.36
LTC2463CMS#PBF	2.7 - 5.5	0°C to +70°C	12-MSOP	24R3299	3.52
LTC2463IDD#PBF	2.7 - 5.5	-40°C to +85°C	12-DFN	24R3300	2.71
LTC2463IMS#PBF	2.7 - 5.5	-40°C to +85°C	12-MSOP	24R3301	4.07
LTC2473IMS#PBF	2.7 - 5.5	-40°C to +85°C	12-MSOP	63R6795	4.18
LTC2473IDD#PBF	2.7 - 5.5	-40°C to +85°C	12-DFN	63R6793	4.18
LTC2473CMS#PBF	2.7 - 5.5	0°C to +70°C	12-MSOP	63R6791	2.43
LTC2473CDD#PBF	2.7 - 5.5	0°C to +70°C	12-DFN	63R6789	2.43
SERIAL, PARALLEL					
LTC2391CUK-16#TRPBF	1.71 - 5.25	0°C to +70°C	48-QFN	67R4274	11.33
LTC2391CUK-16#PBF	1.71 - 5.25	0°C to +70°C	48-QFN	67R4273	16.79
LTC2391CLX-16#PBF	1.71 - 5.25	0°C to +70°C	48-LQFP	67R4272	16.79
LTC2392CUK-16#PBF	1.71 - 5.25	0°C to +70°C	48-QFN	67R4276	27.91
LTC2392CLX-16#PBF	1.71 - 5.25	0°C to +70°C	48-LQFP	67R4275	27.91
LTC2393IUK-16#PBF	1.71 - 5.25	-40°C to +85°C	48-QFN	63R6787	40.67
LTC2393ILX-16#PBF	1.71 - 5.25	-40°C to +85°C	48-LQFP	63R6786	40.67
LTC2393HLX-16#PBF	1.71 - 5.25	-40°C to +125°C	48-LQFP	63R6785	43.95
LTC2393CUK-16#PBF	1.71 - 5.25	0°C to +70°C	48-QFN	63R6783	35.37
LTC2393CLX-16#PBF	1.71 - 5.25	0°C to +70°C	48-LQFP	63R6782	29.50
LTC2269CUK#PBF	1.7 - 1.9	0°C to +70°C	48-QFN	45W8465	46.27
LTC2269IUK#PBF	1.7 - 1.9	-40°C to +85°C	48-QFN	45W8467	55.52
LTC2180CUP#PBF	1.7 - 1.9	0°C to +70°C	64-QFN	59T5393	65.55
LTC2270IUP#PBF	1.7 - 1.9	-40°C to +85°C	64-QFN	44W6801	90.99
LTC2389ILX-16#PBF	4.75 - 5.25	-40°C to +85°C	48-LQFP	05W4608	53.76
LTC2389IUK-16#PBF	4.75 - 5.25	-40°C to +85°C	48-QFN	05W4609	49.80
LTC2270CUP#PBF	1.7 - 1.9	0°C to +70°C	64-QFN	44W6799	78.66
SERIAL, SPI					
LTC1609ISW#PBF	4.75 - 5.25	-40°C to +85°C	20-SO	56M2658	28.03
LTC1609CSW#PBF	4.75 - 5.25	0°C to +70°C	20-SO	56M2650	25.68
LTC1864LCMS8#PBF	2.7 - 3.6	0°C to +70°C	8-SOP	56M4138	12.13
LTC1864ACMS8#PBF	4.75 - 5.25	0°C to +70°C	8-SOP	56M4090	15.14
LTC2383CMS-16#PBF	2.375 - 2.625	0°C to +70°C	16-MSOP	13T3784	20.90
LTC2383CDE-16#PBF	2.375 - 2.625	0°C to +70°C	16-DFN	13T3782	17.43
LTC2382CMS-16#PBF	2.375 - 2.625	0°C to +70°C	16-MSOP	13T3774	18.17
LTC2382CDE-16#PBF	2.375 - 2.625	0°C to +70°C	16-DFN	13T3772	18.17
LTC2381CMS-16#PBF	2.375 - 2.625	0°C to +70°C	16-MSOP	13T3764	10.29
LTC2381CDE-16#PBF	2.375 - 2.625	0°C to +70°C	16-DFN	13T3762	15.39
LTC1864CS8#PBF	4.75 - 5.25	0°C to +70°C	8-SOIC	56M4110	12.51
LTC2472IMS#PBF	2.7 - 5.5	-40°C to +85°C	12-MSOP	52R9831	4.18
LTC2472IDD#PBF	2.7 - 5.5	-40°C to +85°C	12-DFN	52R9830	4.18
LTC2472CMS#PBF	2.7 - 5.5	0°C to +70°C	12-MSOP	52R9829	3.63
LTC2472CDD#PBF	2.7 - 5.5	0°C to +70°C	12-DFN	52R9828	3.63
LTC2470IMS#PBF	2.7 - 5.5	-40°C to +85°C	12-MSOP	52R9827	4.18
LTC2470IDD#PBF	2.7 - 5.5	-40°C to +85°C	12-DFN	52R9826	2.79
LTC2470CMS#PBF	2.7 - 5.5	0°C to +70°C	12-MSOP	52R9825	3.63

➤ CONTINUED ➤

16-BIT ANALOG TO DIGITAL CONVERTERS (CONT.)

Mfg. Part No.	Supply Voltage (V)	Operating Temperature	Package	Stock No.	Price Each 1-24
SERIAL, SPI					
LTC2470CDD#PBF	2.7 - 5.5	0°C to +70°C	12-DFN	52R9824	3.63
LTC2259CUJ-16#PBF	1.7 - 1.9	0°C to +70°C	40-QFN	68R1363	53.98
LTC1867CGN#PBF	4.75 - 5.25	0°C to +70°C	16-SSOP	56M4226	15.58
LTC1867LCGN#PBF	2.7 - 3.6	0°C to +70°C	16-SSOP	56M4242	15.60
LTC1867LIGN#PBF	2.7 - 3.6	-40°C to +85°C	16-SSOP	56M4246	18.75
LTC1867ACGN#PBF	4.75 - 5.25	0°C to +70°C	16-SSOP	56M4218	18.48
LTC1867LACGN#PBF	2.7 - 3.6	0°C to +70°C	16-SSOP	56M4234	18.49
LTC2364CDE-16#PBF	2.375 - 2.625	0°C to +70°C	16-DFN	82T3835	12.10
LTC2364IDE-16#PBF	2.375 - 2.625	-40°C to +85°C	16-DFN	82T3847	13.92
LTC2364IMS-16#PBF	2.375 - 2.625	-40°C to +85°C	16-MSOP	82T3851	13.92
LTC2367CMS-16#PBF	2.375 - 2.625	0°C to +70°C	16-MSOP	82T3859	23.29
LTC2367IMS-16#PBF	2.375 - 2.625	-40°C to +85°C	16-MSOP	82T3871	26.78
LTC2368CMS-16#PBF	2.375 - 2.625	0°C to +70°C	16-MSOP	82T3879	35.37
LTC2368IMS-16#PBF	2.375 - 2.625	-40°C to +85°C	16-MSOP	82T3891	33.93
LTC2370CMS-16#PBF	2.375 - 2.625	0°C to +70°C	16-MSOP	78T2663	35.00
LTC2370IMS-16#PBF	2.375 - 2.625	-40°C to +85°C	16-MSOP	78T2669	40.25

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each Each
DC1241B-AA	LTM9001-AA, IF/BASEBAND RECEIVER, LVDS, DEMO BOARD	27T5634	300.00
DC1241B-BA	LTM9001-BA, IF/BASEBAND RECEIVER, LVDS, DEMO BOARD	27T5635	300.00
DC1250A-AA	LTM9001-AA, IF/BASEBAND RECEIVER, CMOS, DEMO BOARD	27T5636	300.00
DC1250A-BA	LTM9001-BA, IF/BASEBAND RECEIVER, CMOS, DEMO BOARD	27T5637	300.00
DC1398A-GA	LTM9001-GA, 16BIT, RECEIVER SUBSYSTEM, DEMO BOARD	27T5640	300.00

(167487)

18-BIT ANALOG TO DIGITAL CONVERTERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Mfg. Part No.	Supply Voltage	Interface	DNL/INL		Stock No.	Price Each 1-99
LTC2369IMS-18#PBF	2.375V to 2.625V	Serial, SPI	0.1 / 0.5	16-MSOP	78T2659	49.20
LTC2369IDE-18#PBF	2.375V to 2.625V	Serial, SPI	0.1 / 0.5	16-DFN	78T2657	53.12
LTC2369CMS-18#PBF	2.375V to 2.625V	Serial, SPI	0.1 / 0.5	16-MSOP	78T2653	46.19
LTC2389IUK-18#PBF	4.75V to 5.25V	Parallel, Serial, SPI	0.3 / 1.25	48-LQFP	90T0592	60.13
LTC2389ILX-18#PBF	4.75V to 5.25V	Parallel, Serial, SPI	0.3 / 1.25	48-LQFP	90T0591	55.69

(203769)

DELTA-SIGMA A/D CONVERTERS WITH NO LATENCY

RoHS Compliant Available

LINEAR TECHNOLOGY

No latency Delta Sigma analog to digital converters (Sigma Delta ADCs) are easy to use and are great for nearly any precision measurement application. Available in resolutions from 16 to 24-bit, up to 16 multiplexed inputs and either I2C or SPI serial interface. Also includes an internal clock.

Mfg. Part No.	Ch.	Supply Voltage	Speed (sps)	Power (mW)	Package	Stock No.	Price Each 1-24
16-BIT, SERIAL I2C INTERFACE							
LTC2451IDDB#PBF	1	2.7V to 5.5V		1.2	8-DFN	14N8606	2.94
LTC2487CDE#PBF	4	2.7V to 5.5V	...	0.48	14-DFN	56M5734	4.84
16-BIT, SERIAL SPI INTERFACE							
LTC2452CDDB#TRMPBF	1	2.7V to 5.5V		2.4	8-DFN	14N8607	2.32
LTC2452IDDB#TRMPBF	1	2.7V to 5.5V		2.4	8-DFN	14N8608	3.33
LTC2470CDD#PBF	1	2.7V to 5.5V	250	...	12-DFN	52R9824	3.63
LTC2470CMS#PBF	1	2.7V to 5.5V	250	...	12-MSOP	52R9825	3.63
LTC2470IDD#PBF	1	2.7V to 5.5V	250	...	12-DFN	52R9826	2.79
LTC2470IMS#PBF	1	2.7V to 5.5V	250	...	12-MSOP	52R9827	4.18
LTC2472CDD#PBF	1	2.7V to 5.5V	250	...	12-DFN	52R9828	3.63
LTC2472CMS#PBF	1	2.7V to 5.5V	250	...	12-MSOP	52R9829	3.63
LTC2472IDD#PBF	1	2.7V to 5.5V	250	...	12-DFN	52R9830	4.18
LTC2472IMS#PBF	1	2.7V to 5.5V	250	...	12-MSOP	52R9831	4.18
LTC2482IDD#PBF	1	2.7V to 5.5V	...	0.48	10-DFN	56M5703	3.97
20-BIT, SERIAL SPI INTERFACE							
LTC2422IMS#PBF	2	2.7V to 5.5V	...	1	10-MSOP	56M5532	9.72
LTC2428CG#PBF	8	2.7V to 5.5V	100	1	28-SSOP	56M5544	10.08
24-BIT, SERIAL I2C INTERFACE							
LTC2420CS8#PBF	1	2.7V to 5.5V		1	8-SOIC	56M5512	8.33
LTC2440CGN#PBF	1	4.4V to 5.5V		40	16-SSOP	56M5608	11.16
LTC2480CMS#PBF	1	2.7V to 5.5V	6.8	0.48	10-DFN	56M5682	3.71

➤ CONTINUED ➤

DELTA-SIGMA A/D CONVERTERS WITH NO LATENCY (CONT.)

24-BIT, SERIAL I2C INTERFACE

Mfg. Part No.	Ch.	Supply Voltage	Speed (sps)	Power (mW)	Package	Stock No.	Price Each 1-24
● LTC2446CUHF#PBF	8	4.5V to 5.5V		40	38-QFN	56M5640	14.29
● LTC2449CUHF#PBF	16	4.5V to 5.5V		40	38-QFN	56M5664	14.29
24-BIT, SERIAL SPI INTERFACE							
● LTC2400CS8#PBF	1	2.7V to 5.5V	7.5	1	8-SOIC	56M5400	10.65
● LTC2400IS8#PBF	1	2.7V to 5.5V	7.5	1	8-SOIC	56M5404	12.24
● LTC2410CGN#PBF	1	2.7V to 5.5V	7.5	1	16-SSOP	56M5440	10.65
● LTC2415CGN#PBF	1	2.7V to 5.5V		1	16-SSOP	56M5496	10.65
● LTC2413IGN#PBF	1	2.7V to 5.5V	...	1	16-SSOP	56M5476	12.24
● LTC2440IGN#PBF	1	4.4V to 5.5V		40	16-SSOP	56M5612	12.72
● LTC2402CMS#PBF	2	2.7V to 5.5V	7.5	1	10-SOP	56M5416	10.89
● LTC2412CGN#PBF	2	2.7V to 5.5V	7.5	1	16-SSOP	56M5464	9.60
● LTC2418CGN#PBF	16	2.7V to 5.5V	7.5	1	28-SSOP	56M5504	13.56

(101572)

GENERAL PURPOSE A/D CONVERTERS

RoHS Compliant Available

LINEAR TECHNOLOGY

The general-purpose analog to digital converters are great for single input channel to multiplexed/simultaneous sampling applications. Available in a wide range from 8-bit to up to 16-bit resolutions they also feature excellent AC and DC performance at low power.

8-BIT

Mfg. Part No.	Ch.	Speed (ksps)	DNL +/- (LSB)	INL +/- (LSB)	Power (mW)	Package	Stock No.	Price Each 1-24
● LTC1099CN#PBF	1	400	1	0.5	55	20-DIP	55M9242	14.85
10-BIT								
● LTC1093CN#PBF	6	26	1	0.5	5	16-DIP	55M9170	17.63
12-BIT								
● LTC1286CS8#PBF	1	12.5	0.75	2	1.25	8-SOIC	56M0044	10.74
● LTC1286CN8#PBF	1	12.5	0.25	0.75	500	8-DIP	56M0042	9.98
● LTC2366CS6#PBF	1	3000	1	1	7.8	6-TSOT-23	14N8602	7.07
● LTC2366HS6#PBF	1	3000	1	1	7.8	6-TSOT-23	14N8603	13.36
● LTC2366IS6#PBF	1	3000	1	1	7.8	6-TSOT-23	14N8604	12.18
● LTC2366ITS8#PBF	1	3000	1	1	7.8	8-TSOT-23	14N8605	8.38
● LTC2302IDD#PBF	1		0.25	0.3	14	10-DFN	75M4393	3.60
● LTC2351CUH-12#PBF	1	1500	1	0.25	16.5	32-QFN	56M5377	12.21
● LTC1292CCN8#PBF	1		1	0.5	30	8-DIP	56M0139	22.65
● LTC1860CS8#PBF	1	250	1	1	4.25	8-SOIC	56M4014	4.76
● LTC1861LCMS#PBF	2	150	1	1	1.22	10-SOP	56M4058	5.65
● LTC2305CMS#PBF	2	14	...	...	500	12-MSOP	07P8283	4.49
● LTC2306IDD#PBF	2		0.25	0.3	14	10-DFN	75M4397	5.39
● LTC1291DCN8#PBF	2	54	1	0.5	30	8-DIP	56M0132	18.24
● LTC1298CN8#PBF	2	11.1	0.25	0.75	500	8-DIP	56M0232	9.98
● LTC1298CS8#PBF	2	11.1	0.75	2	1.8	8-SOIC	56M0234	10.74
● LTC1298IS8#PBF	2	11.1	0.75	2	1.7	8-SOIC	56M0240	13.40
● LTC1594CS#PBF	4	10.5	0.75	3	1.6	16-SOIC	56M2295	11.28
● LTC1594LIS#PBF	4	10.5	0.75	3	0.48	16-SOIC	56M2307	13.07
● LTC1293DCSW#PBF	6	46.5	1	0.5	30	16-WSOIC	56M0162	17.48
● LTC2308IUF#PBF	8	500	1	1	20	24-QFN	56M5375	7.30
● LTC2309IUF#PBF	8	14	1	1	11.5	24-QFN	88M1838	7.30
● LTC2309CUF#PBF	8		0.35	0.45	...	24-QFN	88M1836	6.08
● LTC2308CUF#PBF	8		0.25	0.3	17.5	24-QFN	56M5373	6.08
● LTC1290DCN#PBF	8	500	1	0.5	30	20-DIP	56M0111	13.34
● LTC1290CCSW#PBF	8	50	1	0.5	30	20-SOIC	56M0098	30.45
● LTC1290CISW#PBF	8	50	1	0.5	30	20-SOIC	56M0105	28.25
● LTC1294CCN#PBF	8	46.5	1	0.5	30	20-DIP	56M0172	22.65
● LTC1294DCN#PBF	8	46.5	1	0.5	30	20-DIP	56M0178	18.24
● LTC1296DCSW#PBF	8	46.5	1	0.75	500	20-SOIC	56M0213	10.85
14-BIT								
● LTC1418CG#PBF	1		1	1.25	15	28-SSOP	56M0909	17.74
● LTC1407AHMSE#PBF	1		...	0.5	14	10-SOP	44P3717	16.54
● LTC2355IMSE-14#PBF	1	3500	1	4	18	10-MSOP	56M5391	19.67
16-BIT								
● LTC1609ISW#PBF	1	200	3	3	65	20-SO	56M2658	28.03
● LTC1864LCMS8#PBF	1	150	2	6	1.22	8-SOP	56M4138	12.13
● LTC1864ACMS8#PBF	1		2	6	4.25	8-SOP	56M4090	15.14
● LTC1864CS8#PBF	1	250	2	6	4.25	8-SOIC	56M4110	12.51
● LTC1867CGN#PBF	8		1	2	6.5	16-SSOP	56M4226	15.58
● LTC1867LCGN#PBF	8		1	3	2.25	16-SSOP	56M4242	15.60
● LTC1867LIGN#PBF	8	175	1	3	2	16-SSOP	56M4246	18.75

(101573)

GENERAL PURPOSE SUCCESSIVE APPROXIMATION REGISTER (SAR) ANALOG TO DIGITAL CONVERTERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Linear Technology offers a wide range of general purpose successive approximation register (SAR) analog to digital converters with sample rates up to 5Msps. Resolutions offered range from as low as 8 bits up to our industry leading 18-bit ADCs, from single channel to multiplexed/simultaneous sampling ADCs with parallel, serial SPI or I2C interfaces. Linear Technology's portfolio of SAR ADC offers fully tested and guaranteed AC and DC specifications which result in improved production yield and performance in the end product. Our new 18-bit and 16-bit SAR ADCs offer excellent DC performance including outstanding INL and DNL and very low offset and gain error. Better than 100dB SNR is achieved at 18-bits, along with guaranteed SFDR and THD performance over the full temperature range.

8-BITS

Mfg. Part No.	No. of Channels	Speed (kSPS)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-24
● LTC1096CS8#PBF	1	33	9	8-SOIC	55M9194	5.51
● LTC1099CN#PBF	1	400	5	20-DIP	55M9242	14.85
● LTC1196-2ACS8#PBF	1	1000	6	8-SOIC	55M9595	6.05
● LTC1196-2BCS8#PBF	1	1000	6	8-SOIC	55M9599	4.80
● LTC1406CGN#PBF	1	20000	5.25	24-SSOP	56M0749	6.53
● LTC1098CS8#PBF	2	33	6	8-SOIC	55M9220	5.51
● LTC1098LCS8#PBF	2	33	4	8-SOIC	55M9230	6.02
● LTC1198-2BCS8#PBF	2	750	6	8-SOIC	55M9647	5.28
10-BITS						
● LTC1092CN8#PBF	1	38	10	8-DIP	55M9166	17.63
● LTC1197CMS8#PBF	1	500	9	8-SOP	55M9603	5.55
● LTC1197LCMS8#PBF	1	500	4	8-SOP	55M9619	5.55
● LTC1197LCS8#PBF	1	500	4	8-SOIC	55M9623	4.89
● LTC1199CS8#PBF	2	500	6	8-SOIC	55M9655	4.89
● LTC1199LCMS8#PBF	2	500	4	8-MSOP	55M9667	5.55
● LTC1199LCS8#PBF	2	500	4	8-SOIC	55M9671	4.89
● LTC1093CN#PBF	6	26	10	16-DIP	55M9170	17.63
● LTC1090CN#PBF	8	30	10	20-DIP	55M9154	19.01
● LTC1094CN#PBF	8	26	10	20-DIP	55M9178	17.63
● LTC1850CFW#PBF	8	1250	5.25	48-TSSOP	56M3934	12.22
● LTC1852CFW#PBF	8	400	5.5	48-TSSOP	56M3950	12.22
12-BITS						
● LTC1400CS8#PBF	1	400	5.25	8-SOIC	56M0670	5.90
● LTC1400IS8#PBF	1	400	5.25	8-SOIC	56M0674	6.55
● LTC1401CS8#PBF	1	200	3.6	8-SOIC	56M0678	3.70
● LTC1402CGN#PBF	1	2200	5.25	16-SSOP	28M8968	15.17
● LTC1403ACMSE-1#PBF	1	2800	3.6	10-MSOP	56M0694	10.00
● LTC1404CS8#PBF	1	600	5.25	8-SOIC	56M0733	6.20
● LTC1272-3CCN#PBF	1	250	5.25	24-DIP	55M9895	16.69
● LTC1272-8CCSW#PBF	1	250	5.25	24-SOIC	55M9921	16.36
● LTC1273BCN#PBF	1	300	5.25	24-DIP	55M9931	18.95
● LTC1274CSW#PBF	1	100	5.25	24-SOIC	55M9937	14.85
● LTC1275BCN#PBF	1	300	5.25	24-DIP	55M9951	17.75
● LTC1276BCN#PBF	1	300	5.25	24-DIP	55M9963	17.75
● LTC1277CSW#PBF	1	100	5.25	24-SOIC	55M9969	15.66
● LTC1278-4CN#PBF	1	400	5.25	24-DIP	55M9977	19.41
● LTC1278-5ISW#PBF	1	500	5.25	24-WSOIC	55M9993	23.71
● LTC1285CN8#PBF	1	7.5	6	8-DIP	56M0032	12.74
● LTC1286CN8#PBF	1	12.5	9	8-DIP	56M0042	9.98
● LTC1286CS8#PBF	1	12.5	9	8-SOIC	56M0044	10.74
● LTC1292CCN8#PBF	1	60	5.25	8-DIP	56M0139	22.65
● LTC1403CMSE#PBF	1	2800	3.6	10-MSOP	56M0717	8.06
● LTC1409CSW#PBF	1	800	5.25	28-SOIC	56M0805	17.26
● LTC1410CSW#PBF	1	1250	5.25	28-SOIC	56M0821	17.26
● LTC1415CSW#PBF	1	1250	5.25	28-SOIC	56M0861	17.26
● LTC1860CMS8#PBF	1	250	5.25	8-SOP	56M4010	4.91
● LTC1860CS8#PBF	1	250	5.25	8-SOIC	56M4014	4.76
● LTC1860LCMS8#PBF	1	150	3.6	8-SOP	56M4026	5.65
● LTC2302IDD#PBF	1	500	5.25	10-DFN	75M4393	3.60
● LTC2366CS6#PBF	1	3000	3.6	6-TSOT-23	69W6138	11.96
● LTC2366CS6#PBF	1	3000	3.6	6-TSOT-23	14N8602	7.07
● LTC2366HS6#PBF	1	3000	3.6	6-TSOT-23	14N8603	13.36
● LTC2366IS6#PBF	1	3000	3.6	6-TSOT-23	14N8604	12.18
● LTC2366ITS8#PBF	1	3000	3.6	8-TSOT-23	14N8605	8.38
● LTC1288CS8#PBF	2	6.6	6	8-SOIC	56M0060	8.35
● LTC1407ACMSE#PBF	2	3000	3.6	10-MSOP	56M0761	10.00
● LTC1407AIMSE#PBF	2	3000	3.6	10-MSOP	56M0769	16.10
● LTC2305IMS#PBF	2	14	5.25	12-MSOP	07P8289	5.39
● LTC1288CN8#PBF	2	6.6	6	8-DIP	56M0058	12.74
● LTC1291DCN8#PBF	2	54	5.25	8-DIP	56M0132	18.24
● LTC1298CN8#PBF	2	11.1	5.5	8-DIP	56M0232	9.98
● LTC1298CS8#PBF	2	11.1	5.5	8-SOIC	56M0234	10.74
● LTC1298IS8#PBF	2	11.1	5.5	8-SOIC	56M0240	13.40
● LTC1407CMSE#PBF	2	3000	3.6	10-MSOP	56M0777	8.06

➤CONTINUED➤

GENERAL PURPOSE SUCCESSIVE APPROXIMATION REGISTER (SAR) ANALOG TO DIGITAL CONVERTERS (CONT.)

12-BITS

Mfg. Part No.	No. of Channels	Speed (kSPS)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-24
LTC1407CMSE-1#PBF	2	3000	3.6	10-MSOP	56M0774	8.06
LTC1861CMS#PBF	2	250	5.25	10-SOP	56M4042	6.23
LTC1861CS8#PBF	2	250	5.25	8-SOIC	56M4046	5.85
LTC1861LCMS#PBF	2	150	3.6	10-SOP	56M4058	5.65
LTC2305CMS#PBF	2	14	5.25	12-MSOP	07P8283	4.49
LTC2306IDD#PBF	2	500	5.25	10-DFN	75M4397	5.39
LTC1594CS#PBF	4	16.8	3.6	16-SOIC	56M2295	11.28
LTC1594LCS#PBF	4	10.5	3.6	16-SOIC	56M2303	11.28
LTC1594LIS#PBF	4	10.5	3.6	16-SOIC	56M2307	13.07
LTC1408IUH-12#PBF	6	600	3.6	32-QFN	56M0795	9.93
LTC1293DCN#PBF	6	46.5	5.25	16-DIP	56M0160	18.24
LTC1293DCSW#PBF	6	46.5	5.25	16-WSOIC	56M0162	17.48
LTC2309HF#PBF	8	14	5.25	20-TSSOP	15N5194	9.09
LTC1290CCN#PBF	8	50	5	20-DIP	56M0096	25.36
LTC1290CCSW#PBF	8	50	5	20-SOIC	56M0098	30.45
LTC1290CISW#PBF	8	50	5	20-SOIC	56M0105	28.25
LTC1290DCN#PBF	8	500	5.25	20-DIP	56M0111	13.34
LTC1294CCN#PBF	8	46.5	5.25	20-DIP	56M0172	22.65
LTC1294DCN#PBF	8	46.5	5.25	20-DIP	56M0178	18.24
LTC1296BCN#PBF	8	46.5	5	20-DIP	56M0185	19.63
LTC1296DCN#PBF	8	46.5	5	20-DIP	56M0211	16.06
LTC1296DCSW#PBF	8	46.5	5	20-SOIC	56M0213	10.85
LTC1851CFW#PBF	8	1250	5.25	48-TSSOP	56M3942	14.76
LTC1853CFW#PBF	8	400	5.5	48-TSSOP	56M3958	14.76
LTC1857CG#PBF	8	100	5.25	28-SSOP	56M3986	18.01
LTC1863CGN#PBF	8	200	5.25	16-SSOP	56M4074	7.66
LTC1863LCGN#PBF	8	175	3.6	16-SSOP	56M4082	7.68
LTC1863LIGN#PBF	8	175	3.6	16-SSOP	56M4086	9.31
LTC2308CUF#PBF	8	500	5.25	24-QFN	56M5373	6.08
LTC2308IUF#PBF	8	500	5.25	24-QFN	56M5375	7.30
LTC2309CUF#PBF	8	14	5.25	24-QFN	88M1836	6.08
LTC2309IUF#PBF	8	14	5.25	24-QFN	88M1838	7.30
14-BITS						
LTC1403AIMSE#PBF	1	2800	3.6	10-MSOP	56M0709	16.10
LTC1417IGN#PBF	1	400	5.25	16-SSOP	56M0893	9.95
LTC1403ACMSE#PBF	1	2800	3.6	10-MSOP	56M0697	10.00
LTC1407AHMSE#PBF	1	3000	3.6	10-SOP	44P3717	16.54
LTC1414CGN#PBF	1	2200	6	28-SSOP	56M0849	27.41
LTC1417AIGN#PBF	1	400	6	16-SSOP	56M0885	17.50
LTC1417CGN#PBF	1	400	6	16-SSOP	56M0889	9.00
LTC1418ACN#PBF	1	200	5.25	28-DIP	56M0901	17.66
LTC1418CG#PBF	1	200	5.25	28-SSOP	56M0909	17.74
LTC1418CN#PBF	1	200	5.25	28-DIP	56M0913	17.22
LTC1407ACMSE-1#PBF	2	3000	3.6	10-MSOP	56M0758	14.01
LTC2351HUH-14#PBF	6	1500	3.6	32-QFN	44P3755	17.81
16-BITS						
LTC1605AISW#PBF	1	100	5.25	28-SOIC	56M2567	29.15
LTC1606ACG#PBF	1	250	5.25	28-SSOP	56M2591	43.91
LTC1609IG#PBF	1	200	5.25	28-SSOP	56M2654	19.35
LTC1605-1CN#PBF	1	100	5.25	28-DIP	56M2535	20.05
LTC1608ACG#PBF	1	500	5.25	36-SSOP	56M2623	28.10
LTC1608CG#PBF	1	500	5.25	36-SSOP	56M2631	28.35
LTC1609CSW#PBF	1	200	5.25	20-SO	56M2650	25.68
LTC1609ISW#PBF	1	200	5.25	20-SO	56M2658	28.03
LTC1864ACMS8#PBF	1	250	5.25	8-SOP	56M4090	15.14
LTC1864CMS8#PBF	1	250	5.25	8-SOP	56M4106	12.98
LTC1864CS8#PBF	1	250	5.25	8-SOIC	56M4110	12.51
LTC1864LACMS8#PBF	1	150	3.6	8-SOP	56M4122	13.97
LTC1864LCMS8#PBF	1	150	3.6	8-SOP	56M4138	12.13
LTC1865AHMS#PBF	2	250	5.25	10-MSOP	75M4382	18.12
LTC1865AIMS#PBF	2	250	5.25	10-MSOP	56M4162	16.02
LTC1865CS8#PBF	2	250	5.25	8-SOIC	56M4174	12.87
LTC1865LAIMS#PBF	2	150	3.6	10-MSOP	56M4194	16.02
LTC1605CSW#PBF	2	100	5.25	28-WSOIC	56M2577	29.25
LTC1865ACMS#PBF	2	250	5.25	10-SOP	56M4154	15.39
LTC1865CMS#PBF	2	250	5.25	10-MSOP	56M4170	13.41
LTC1865LACMS#PBF	2	150	3.6	10-SOP	56M4186	15.39
LTC1865LCMS#PBF	2	150	3.6	10-MSOP	56M4202	13.41
LTC1859CG#PBF	8	100	5.25	28-SSOP	56M4002	28.20
LTC1859IG#PBF	8	100	5.25	28-SSOP	56M4006	34.75
LTC1867AIGN#PBF	8	200	5.25	16-SSOP	56M4222	14.75

➤CONTINUED➤

GENERAL PURPOSE SUCCESSIVE APPROXIMATION REGISTER (SAR) ANALOG TO DIGITAL CONVERTERS (CONT.)

16-BITS

Mfg. Part No.	No. of Channels	Speed (kSPS)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-24
LTC1867IGN#PBF	8	200	5.25	16-SSOP	56M4230	18.75
LTC1867LAIGN#PBF	8	175	3.6	16-SSOP	56M4238	15.80
LTC1867ACGN#PBF	8	200	5.25	16-SSOP	56M4218	18.48
LTC1867CGN#PBF	8	200	5.25	16-SSOP	56M4226	15.58
LTC1867LACGN#PBF	8	175	3.6	16-SSOP	56M4234	18.49
LTC1867LCGN#PBF	8	175	3.6	16-SSOP	56M4242	15.60
LTC1867LIGN#PBF	8	175	3.6	16-SSOP	56M4246	18.75
20-BITS						
LTC2378CDE-20#PBF	1	1000	2.625	16-DFN	94W8387	45.50
LTC2378CMS-20#PBF	1	1000	2.625	16-MSOP	94W8389	45.50
LTC2378IDE-20#PBF	1	1000	2.625	16-DFN	94W8391	52.32
LTC2378IMS-20#PBF	1	1000	2.625	16-MSOP	94W8393	52.32

(209641)

HIGH SPEED ANALOG TO DIGITAL CONVERTERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Linear Technology's extensive high speed ADC portfolio offers families of pin-compatible, high performance multi-channel ADCs in resolutions of 10-bit, 12-bit, 14-bit and 16-bit sampling from 1Msps up to 310Msps. Whatever your data acquisition needs, Linear Technology offers single, dual, quad and octal ADCs, with flexible serial or parallel interfaces, and lowest power consumption without compromising AC performance. Many of these ADCs offer unique features for reducing digital feedback in situations where even good layout practice may fail.

8-BITS

Mfg. Part No.	No. of Channels	Speed (MSPS)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-24
LTC1406CGN#PBF	1	20	5.25	24-SSOP	56M0749	6.53
10-BITS						
LTC2230CUP#PBF	1	170	3.5	64-QFN	56M5011	43.97
LTC2230IUP#PBF	1	170	3.5	64-QFN	56M5013	52.71
LTC2231CUP#PBF	1	135	3.5	64-QFN	56M5015	33.44
LTC2231IUP#PBF	1	135	3.5	64-QFN	56M5019	40.13
LTC2233CUK#PBF	1	80	3.5	48-QFN	56M5031	13.80
LTC2234CUK#PBF	1	135	3.5	48-QFN	56M5039	33.44
LTC2236IUH#PBF	1	25	3.4	32-QFN	56M5051	8.45
LTC2238CUH#PBF	1	65	3.4	32-QFN	56M5062	10.19
LTC2238IUH#PBF	1	65	3.4	32-QFN	56M5066	12.22
LTC2239IUH#PBF	1	80	3.4	32-QFN	56M5074	16.50
LTC2250IUH#PBF	1	105	3.4	32-QFN	56M5170	18.11
LTC2251CUH#PBF	1	125	3.4	32-QFN	56M5174	17.14
LTC2280CUP#PBF	2	105	3.4	64-QFN	56M5214	18.14
LTC2280IUP#PBF	2	105	3.4	64-QFN	56M5218	21.76
LTC2281CUP#PBF	2	125	3.4	64-QFN	56M5222	29.01
LTC2281IUP#PBF	2	125	3.4	64-QFN	56M5226	34.82
LTC2286CUP#PBF	2	25	3.4	64-QFN	56M5262	10.56
LTC2286IUP#PBF	2	25	3.4	64-QFN	56M5266	12.68
LTC2287IUP#PBF	2	40	3.4	64-QFN	56M5274	17.36
LTC2288CUP#PBF	2	65	3.4	64-QFN	56M5278	15.30
LTC2288IUP#PBF	2	65	3.4	64-QFN	56M5282	18.33
LTC2289CUP#PBF	2	80	3.4	64-QFN	56M5286	16.60
LTC2289IUP#PBF	2	80	3.4	64-QFN	56M5290	19.83
LTC2237CUH#PBF	1	40	3.4	32-QFN	66K6367	9.67
11-BITS						
LTC2222CUK-11#PBF	1	105	3.5	48-QFN	56M4941	23.38
LTC2222IUK-11#PBF	1	105	3.5	48-QFN	56M4949	28.05
LTC2252CUH#PBF	1	105	3.4	32-QFN	56M5182	37.08
LTC2282CUP#PBF	1	105	3.4	64-QFN	56M5230	49.93
LTC2290CUP#PBF	1	10	3.4	64-QFN	56M5294	13.83
LTC2291CUP#PBF	1	25	3.4	64-QFN	56M5302	15.18
LTC2293CUP#PBF	1	65	3.4	64-QFN	56M5318	29.95
LTC2220CUP-1#PBF	1	185	3.5	64-QFN	56M4917	73.75
LTC2220CUP#PBF	1	170	3.5	64-QFN	56M4920	59.49
LTC2221CUP#PBF	1	135	3.5	64-QFN	56M4932	46.92
LTC2221IUP#PBF	1	135	3.5	64-QFN	56M4936	63.85
LTC2222CUK#PBF	1	105	3.5	48-QFN	56M4944	45.05
LTC2222IUK#PBF	1	105	3.5	48-QFN	56M4952	56.32
LTC2223CUK#PBF	1	80	3.5	48-QFN	56M4956	27.60
LTC2224CUK#PBF	1	135	3.5	48-QFN	56M4964	46.92
LTC2224IUK#PBF	1	135	3.5	48-QFN	56M4968	63.85
LTC2225CUH#PBF	1	10	3.4	32-QFN	56M4972	9.31
LTC2225IUH#PBF	1	10	3.4	32-QFN	56M4976	11.16
LTC2226CUH#PBF	1	25	3.4	32-QFN	56M4980	15.30

➤CONTINUED➤

ANALOG-TO-DIGITAL CONVERTERS

HIGH SPEED ANALOG TO DIGITAL CONVERTERS (CONT.)

11-BITS

Mfg. Part No.	No. of Channels	Speed (MSPS)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-24
● LTC2226IUH#PBF	1	25	3.4	32-TQFP	56M4984	18.33
● LTC2227CUH#PBF	1	40	3.4	32-QFN	56M4988	16.14
● LTC2227IUH#PBF	1	40	3.4	32-QFN	56M4992	19.36
● LTC2228CUH#PBF	1	65	3.4	32-QFN	56M4996	19.97
● LTC2228IUH#PBF	1	65	3.4	32-QFN	56M5000	23.96
● LTC2229IUH#PBF	1	80	3.4	32-QFN	56M5008	33.04
● LTC1420CGN#PBF	1	10	5.25	SSOP	56M0953	12.58
● LTC1405CGN#PBF	1	5	5.25	28-SSOP	56M0741	8.50
● LTC2252IUH#PBF	1	105	3.4	32-QFN	56M5186	44.49
● LTC2253CUH#PBF	1	125	3.4	32-QFN	56M5190	44.32
● LTC2253IUH#PBF	1	125	3.4	32-QFN	56M5194	47.75
● LTC2282IUP#PBF	2	105	3.4	64-QFN	56M5234	59.92
● LTC2283CUP#PBF	2	125	3.4	64-QFN	56M5238	58.93
● LTC2283IUP#PBF	2	125	3.4	64-QFN	56M5242	71.64
● LTC2290IUP#PBF	2	10	3.4	64-QFN	56M5298	16.60
● LTC2291IUP#PBF	2	25	3.4	64-QFN	56M5306	22.04
● LTC2292CUP#PBF	2	40	3.4	64-QFN	56M5310	19.38
● LTC2293IUP#PBF	2	65	3.4	64-QFN	56M5322	35.93

14-BITS

● LTC2229CUH#PBF	1	80	3.4	32-QFN	56M5004	27.60
● LTC2247CUH#PBF	1	40	3.4	32-QFN	56M5142	21.93
● LTC2249CUH#PBF	1	80	3.4	32-QFN	56M5158	41.80
● LTC2249IUH#PBF	1	80	3.4	32-QFN	56M5162	41.50
● LTC2254CUH#PBF	1	105	3.4	32-QFN	56M5198	59.34
● LTC2284CUP#PBF	1	105	3.4	64-QFN	56M5246	88.99
● LTC2285CUP#PBF	1	125	3.4	64-QFN	56M5254	106.36
● LTC2285IUP#PBF	1	125	3.4	64-QFN	56M5258	127.59
● LTC2295CUP#PBF	1	10	3.4	64-QFN	56M5334	28.43
● LTC2297CUP#PBF	1	40	3.4	64-QFN	56M5350	39.75
● LTC2298CUP#PBF	1	65	3.4	64-QFN	56M5358	52.75
● LTC2205CUK-14#PBF	1	65	3.465	48-QFN	56M4833	45.13
● LTC2205IUK-14#PBF	1	65	3.465	48-QFN	56M4841	48.63
● LTC2206IUK-14#PBF	1	80	3.465	48-QFN	56M4857	57.31
● LTC2207CUK-14#PBF	1	105	3.465	48-QFN	56M4865	65.12
● LTC2207IUK-14#PBF	1	105	3.465	48-QFN	56M4873	78.15
● LTC2208CUP-14#PBF	1	130	3.465	64-QFN	56M4881	79.60
● LTC2208IUP-14#PBF	1	130	3.465	64-QFN	56M4889	95.51
● LTC1746CFW#PBF	1	25	5.25	48-TSSOP	56M3650	14.80
● LTC2245IUH#PBF	1	10	3.4	32-QFN	56M5130	17.77
● LTC2246CUH#PBF	1	25	3.4	32-QFN	56M5134	20.07
● LTC2246IUH#PBF	1	25	3.4	32-QFN	56M5138	20.75
● LTC2247IUH#PBF	1	40	3.4	32-QFN	56M5146	31.77
● LTC2248CUH#PBF	1	65	3.4	32-QFN	56M5150	39.05
● LTC2248IUH#PBF	1	65	3.4	32-QFN	56M5154	42.17
● LTC2254IUH#PBF	1	105	3.4	32-QFN	56M5202	71.20
● LTC2255IUH#PBF	1	125	3.4	32-QFN	56M5210	85.10
● LTC2284IUP#PBF	2	105	3.4	64-QFN	56M5250	106.79
● LTC2295IUP#PBF	2	10	3.4	64-QFN	56M5338	34.11
● LTC2297IUP#PBF	2	40	3.4	64-QFN	56M5354	42.93
● LTC2298IUP#PBF	2	65	3.4	64-QFN	56M5362	63.25
● LTC2299CUP#PBF	2	80	3.4	64-QFN	56M5366	51.88
● LTC2299IUP#PBF	2	80	3.4	64-QFN	56M5370	67.77

16-BITS

● LTC2202CUK#PBF	1	10	3.465	48-QFN	56M4808	40.30
● LTC2269CUK#PBF	1	20	1.9	48-QFN	45W8465	46.27
● LTC2269IUK#PBF	1	20	1.9	48-QFN	45W8467	55.52
● LTC2203CUK#PBF	1	25	3.465	48-QFN	56M4816	43.41
● LTC2204CUK#PBF	1	40	3.465	48-QFN	56M4824	57.37
● LTC2205CUK#PBF	1	65	3.465	48-QFN	56M4836	62.70
● LTC2206CUK#PBF	1	80	3.465	48-QFN	56M4852	69.93
● LTC2207CUK#PBF	1	105	3.465	48-QFN	56M4868	80.96
● LTC2208CUP#PBF	1	130	3.465	64-QFN	56M4884	94.06
● LTC2202IUK#PBF	1	10	3.465	48-QFN	56M4812	43.41
● LTC2203IUK#PBF	1	25	3.465	48-QFN	56M4820	52.09
● LTC2204IUK#PBF	1	45	3.465	48-QFN	56M4828	60.78
● LTC2205IUK#PBF	1	65	3.465	48-QFN	56M4844	74.29
● LTC2206IUK#PBF	1	80	3.465	48-QFN	56M4860	83.94
● LTC2207IUK#PBF	1	105	3.465	48-QFN	56M4876	98.40
● LTC2208IUP#PBF	1	130	3.465	64-QFN	56M4892	112.87
● LTC2209CUP#PBF	1	160	3.465	64-QFN	56M4896	104.91
● LTC2209IUP#PBF	1	160	3.465	64-QFN	56M4900	125.89
● LTC2274CUJ#PBF	1	105	3.465	40-QFN	13P4658	104.87

➤CONTINUED➤

HIGH SPEED ANALOG TO DIGITAL CONVERTERS (CONT.)

16-BITS

Mfg. Part No.	No. of Channels	Speed (MSPS)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-24
● LTC2274IUJ#PBF	1	105	3.465	40-QFN	13P4659	116.57
● LTC2272CUJ#PBF	1	65	3.465	40-QFN	44P3747	74.29
● LTC2273CUJ#PBF	1	80	3.465	40-QFN	31P7569	89.45
● LTC2273IUJ#PBF	1	80	3.465	40-QFN	31P7570	99.43
● LTC2193CUKG#PBF	2	80	1.9	52-QFN	46T9109	113.61
● LTC2193CUKG#TRPBF	2	80	1.9	52-QFN	46T9110	132.23
● LTC2193IUKG#PBF	2	80	1.9	52-QFN	46T9111	136.31
● LTC2193IUKG#TRPBF	2	80	1.9	52-QFN	46T9112	161.22
● LTC2194CUKG#PBF	2	105	1.9	52-QFN	46T9113	135.46
● LTC2194CUKG#TRPBF	2	105	1.9	52-QFN	46T9114	160.21
● LTC2194IUKG#PBF	2	105	1.9	52-QFN	46T9115	162.55
● LTC2194IUKG#TRPBF	2	105	1.9	52-QFN	46T9116	192.25
● LTC2195CUKG#PBF	2	125	1.9	52-QFN	46T9117	157.31
● LTC2195CUKG#TRPBF	2	125	1.9	52-QFN	46T9118	186.04
● LTC2195IUKG#PBF	2	125	1.9	52-QFN	46T9119	188.76
● LTC2195IUKG#TRPBF	2	125	1.9	52-QFN	46T9120	223.23
● LTC2180CUP#PBF	2	25	1.9	64-QFN	59T5393	65.55
● LTC2270CUP#PBF	2	20	1.9	64-QFN	44W6799	78.66
● LTC2270IUP#PBF	2	20	1.9	64-QFN	44W6801	90.99
● LTC2271CUKG#PBF	2	20	1.9	52-QFN	48W6377	72.86
● LTC2271IUKG#PBF	2	20	1.9	52-QFN	48W6379	84.29

(209877)

LOW POWER DUAL ANALOG-TO-DIGITAL CONVERTERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Features:
- Serial LVDS Outputs: 1, 2 or 4 Bits per Channel
- 76.8dB SNR
- 90dB SFDR
- Shutdown and Nap Modes
- Serial SPI Port for Configuration

Applications:
- Communications
- Cellular Base Stations
- Software-Defined Radios
- Portable Medical Imaging
- Multi-Channel Data Acquisition
- Nondestructive Testing

Mfg. Part No.	Resolution (Bits)	DNL/INL (LSB)	Sample Rate (MSPS)	Package	Stock No.	Price Each 1-24
● LTC2193CUKG#PBF	16	0.5/2	80	52-QFN	46T9109	113.61
● LTC2194CUKG#PBF	16	0.5/2	105	52-QFN	46T9113	135.46
● LTC2195CUKG#PBF	16	0.5/2	125	52-QFN	46T9117	157.31

(196183)

NO LATENCY DELTA SIGMA ANALOG TO DIGITAL CONVERTERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Linear Technology's family of No Latency Delta Sigma analog to digital converters (Sigma Delta ADCs) is unrivaled in performance and ease of use. With guaranteed resolutions from 16-bit ADCs up to 24-bit ADCs, with up to 16 multiplexed inputs and either I2C or SPI serial interfaces, we offer a data converter for nearly any precision measurement application. Unique features like the Easy Drive current cancellation technique enables external RC networks and high impedance sensors to directly interface to the Easy Drive ADC family without external amplifiers. If an external amplifier is used, the ADC automatically calibrates both the offset and drift of this circuit and the Easy Drive sampling scheme enables a wide variety of amplifiers to be used.

Linear Technology's portfolio of Delta Sigma ADCs offers ultralow noise with speeds ranging from 6.8Hz up to 8kHz, with versions offering line frequency rejection of 50Hz, 60Hz or simultaneous 50Hz/60Hz. The flexibility to select devices with single-ended and/or differential inputs, ultra-tiny package sizes, internal temperature sensors, PGAs, integrate references and an internal oscillator not only makes finding the perfect ADC easy, but also reduces the number of external components required for space constrained applications.

16-BITS

Mfg. Part No.	No. of Channels	Speed (SPS)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-24
● LTC2481IDD#PBF	1	6.8	5.5	10-DFN	56M5695	4.48
● LTC2480HMS#PBF	1	7.5	5.5	10-MSOP	13T3802	3.65
● LTC2450IDC#PBF	1	30	5.5	6-DFN	78T2703	2.92
● LTC2450CDC#PBF	1	30	5.5	6-DFN	78T2702	2.44
● LTC2450IDC-1#PBF	1	60	5.5	6-DFN	69W6139	3.04
● LTC2451ITS8#PBF	1	60	5.5	8-TSOT-23	78T2706	2.94
● LTC2451CTS8#PBF	1	60	5.5	8-TSOT-23	78T2705	2.47
● LTC2450IDC-1#PBF	1	60	5.5	6-DFN	13N3586	2.51
● LTC2450CDC-1#PBF	1	60	5.5	6-DFN	78T2701	2.44
● LTC2480CDD#PBF	1	6.8	5.5	10-DFN	56M5679	3.71
● LTC2480CMS#PBF	1	6.8	5.5	10-DFN	56M5682	3.71
● LTC2481CDD#PBF	1	6.8	5.5	10-DFN	56M5691	3.71
● LTC2482CDD#PBF	1	6.8	5.5	10-DFN	56M5699	3.32
● LTC2483CDD#PBF	1	6.8	5.5	10-DFN	56M5707	3.32
● LTC2482IDD#PBF	1	6.8	5.5	10-DFN	56M5703	3.97
● LTC2433-1CMS#PBF	1	6.9	5.5	10-SOP	56M5568	2.60
● LTC2452CDDB#TRMPBF	1	60	5.5	8-DFN	14N8607	2.32

➤CONTINUED➤

NO LATENCY DELTA SIGMA ANALOG TO DIGITAL CONVERTERS (CONT.)

Mfg. Part No.	No. of Channels	Speed (SPS)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-24
LTC2452IDDB#TRMPBF	1	60	5.5	8-DFN	14N8608	3.33
LTC2451IDDB#PBF	1	60	5.5	8-DFN	14N8606	2.94
LTC2461CDD#PBF	1	60	5.5	12-DFN	24R3294	3.52
LTC2461CMS#PBF	1	60	5.5	12-MSOP	24R3295	3.52
LTC2461IDD#PBF	1	60	5.5	12-DFN	24R3296	4.07
LTC2461IMS#PBF	1	60	5.5	12-MSOP	24R3297	4.07
LTC2463CDD#PBF	1	60	5.5	12-DFN	24R3298	2.36
LTC2463CMS#PBF	1	60	5.5	12-MSOP	24R3299	3.52
LTC2463IDD#PBF	1	60	5.5	12-DFN	24R3300	2.71
LTC2463IMS#PBF	1	60	5.5	12-MSOP	24R3301	4.07
LTC2470CDD#PBF	1	250	5.5	12-DFN	52R9824	3.63
LTC2470CMS#PBF	1	250	5.5	12-MSOP	52R9825	3.63
LTC2470IDD#PBF	1	250	5.5	12-DFN	52R9826	2.79
LTC2470IMS#PBF	1	250	5.5	12-MSOP	52R9827	4.18
LTC2471CMS#PBF	1	1000	5.5	12-MSOP	13T3794	3.63
LTC2471CDD#PBF	1	1000	5.5	12-DFN	13T3792	3.63
LTC2472CDD#PBF	1	1000	5.5	12-DFN	52R9828	3.63
LTC2472CMS#PBF	1	1000	5.5	12-MSOP	52R9829	3.63
LTC2472IDD#PBF	1	1000	5.5	12-DFN	52R9830	4.18
LTC2472IMS#PBF	1	1000	5.5	12-MSOP	52R9831	4.18
LTC2473CDD#PBF	1	1000	5.5	12-DFN	63R6789	2.43
LTC2473CMS#PBF	1	1000	5.5	12-MSOP	63R6791	2.43
LTC2473IDD#PBF	1	1000	5.5	12-DFN	63R6793	4.18
LTC2473IMS#PBF	1	1000	5.5	12-MSOP	63R6795	4.18
LTC2436-1IGN#PBF	2	6.8	5.5	16-SSOP	56M5596	5.55
LTC2488IDE#PBF	4	7.5	5.5	14-DFN	56M5740	5.32
LTC2487CDE#PBF	4	15	5.5	14-DFN	56M5734	4.84
LTC2486IDE#PBF	4	15	5.5	14-DFN	56M5732	4.13
LTC2497CUHF#PBF	16	7.5	5.5	38-QFN	56M5771	5.46
LTC2439-1CGN#PBF	16	6.9	5.5	28-SSOP	56M5600	7.49
20-BITS						
LTC2420CS8#PBF	1	7.5	5.5	8-SOIC	56M5512	8.33
LTC2421CMS#PBF	1	7.5	5.5	10-SOP	56M5520	8.37
LTC2430CGN#PBF	1	7.5	5.5	16-SSOP	56M5552	7.15
LTC2431CMS#PBF	1	7.5	5.5	10-SOP	56M5560	7.43
LTC2435-1CGN#PBF	1	13.75	5.5	16-SSOP	56M5576	7.15
LTC2435CGN#PBF	1	15	5.5	16-SSOP	56M5584	7.15
LTC2422CMS#PBF	2	7.5	5.5	10-SOP	56M5528	8.79
LTC2422IMS#PBF	2	7.5	5.5	10-MSOP	56M5532	9.72
LTC2424CG#PBF	4	100	5.5	28-SSOP	56M5536	5.65
LTC2428CG#PBF	8	100	5.5	28-SSOP	56M5544	10.08
24-BITS						
LTC2484CDD#PBF	1	6.8	5.5	10-DFN	56M5715	4.93
LTC2485CDD#PBF	1	6.8	5.5	10-DFN	56M5723	4.93
LTC2411-1CMS#PBF	1	6.9	5.5	10-SOP	56M5448	10.65
LTC2413CGN#PBF	1	6.9	5.5	16-SSOP	56M5472	10.65
LTC2413IGN#PBF	1	6.9	5.5	16-SSOP	56M5476	12.24
LTC2400CS8#PBF	1	7.5	5.5	8-SOIC	56M5400	10.65
LTC2400IS8#PBF	1	7.5	5.5	8-SOIC	56M5404	12.24
LTC2401CMS#PBF	1	7.5	5.5	10-SOP	56M5408	10.34
LTC2410CGN#PBF	1	7.5	5.5	16-SSOP	56M5440	10.65
LTC2411CMS#PBF	1	7.5	5.5	10-SOP	56M5456	10.65
LTC2411IMS#PBF	1	7.5	5.5	10-SOP	56M5460	12.24
LTC2415-1CGN#PBF	1	13.75	5.5	16-SSOP	56M5488	10.65
LTC2415CGN#PBF	1	15	5.5	16-SSOP	56M5496	10.65
LTC2440CGN#PBF	1	3500	5.5	16-SSOP	56M5608	11.16
LTC2440IGN#PBF	1	3500	5.5	16-SSOP	56M5612	12.72
LTC2410IGN#PBF	1	7.5	5.5	16-SSOP	56M5444	12.24
LTC2402CMS#PBF	2	7.5	5.5	10-SOP	56M5416	10.89
LTC2412CGN#PBF	2	7.5	5.5	16-SSOP	56M5464	9.60
LTC2404CG#PBF	4	7.5	5.5	28-SSOP	56M5424	11.71
LTC2493IDE#PBF	4	7.5	5.5	14-DFN	56M5752	7.29
LTC2408CG#PBF	8	7.5	5.5	28-SSOP	56M5432	12.24
LTC2414CGN#PBF	8	7.5	5.5	28-SSOP	56M5480	12.24
LTC2414IGN#PBF	8	7.5	5.5	28-SSOP	56M5484	13.73
LTC2442CG#PBF	8	8000	5.5	36-SSOP	56M5616	14.98
LTC2446CUHF#PBF	8	8000	5.5	38-QFN	56M5640	14.29
LTC2447CUHF#PBF	8	8000	5.5	38-QFN	56M5648	14.29
LTC2444IUHF#PBF	8	8000	5.5	38-QFN	56M5628	9.15
LTC2444CUHF#PBF	8	8000	5.5	38-QFN	56M5624	7.95
LTC2446IUHF#PBF	8	8000	5.5	38-QFN	56M5644	16.55
LTC2418CGN#PBF	16	7.5	5.5	28-SSOP	56M5504	13.56
LTC2498CUHF#PBF	16	7.5	5.5	38-QFN	56M5779	7.08

➤ CONTINUED ➤

NO LATENCY DELTA SIGMA ANALOG TO DIGITAL CONVERTERS (CONT.)

24-BITS

Mfg. Part No.	No. of Channels	Speed (SPS)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-24
LTC2498IUHF#PBF	16	7.5	5.5	38-QFN	56M5783	6.05
LTC2449CUHF#PBF	16	8000	5.5	38-QFN	56M5664	14.29
LTC2418IGN#PBF	16	7.5	5.5	28-SSOP	56M5508	14.96
LTC2448IUHF#PBF	16	8000	5.5	38-QFN	56M5660	10.15

(209881)

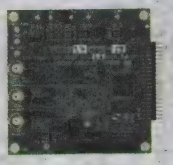
SAR ANALOG TO DIGITAL CONVERTERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Features:

- No Pipeline Delay, No Cycle Latency
- SPI- Compatible Serial I/O with Daisy-Chain Mode, Parallel I/O
- Digital Gain Compression Eliminates ADC Driver's Negative Rails (LTC2379 Family)



DC1813A-A

DC590B

Applications:

- Medical Imaging
- High Speed Data Acquisition
- Portable or Compact Instrumentation
- Industrial Process Control
- Low Power Battery-Operated Instrumentation
- ATE

18-BIT, FULLY DIFFERENTIAL

Mfg. Part No.	Sample Rate (kSPS)	SNR (dB)	Interface	Package	Stock No.	Price Each 1-24
LTC2379CMS-18#PBF	1600	101	Serial, SPI	16-MSOP	59T5449	46.19
LTC2378CMS-18#PBF	1000	102	Serial, SPI	16-MSOP	59T5439	41.95
LTC2377CMS-18#PBF	500	102	Serial, SPI	16-MSOP	59T5429	27.86
LTC2376CMS-18#PBF	250	102	Serial, SPI	16-MSOP	59T5419	25.12
18-BIT, PSEUDO-DIFFERENTIAL UNIPOLAR						
LTC2369CMS-18#PBF	1600	96.5	Serial, SPI	16-MSOP	78T2653	46.19
LTC2368CMS-18#PBF	1000	97	Serial, SPI	16-MSOP	82T3881	35.00
LTC2367CMS-18#PBF	500	97	Serial, SPI	16-MSOP	82T3861	27.86
LTC2364CMS-18#PBF	250	97	Serial, SPI	16-MSOP	82T3841	20.96
18-BIT, PSEUDO-DIFFERENTIAL UNIPOLAR, PSEUDO-DIFFERENTIAL BIPOLAR OR FULLY DIFFERENTIAL						
LTC2389CLX-18#PBF	2500	99.8	Parallel Serial, SPI	48-LQFP	94T1180	52.28
16-BIT, FULLY DIFFERENTIAL						
LTC2380CMS-16#PBF	2000	96.2	Serial, SPI	16-MSOP	59T5459	41.95
LTC2378CMS-16#PBF	1000	97	Serial, SPI	16-MSOP	78T2693	35.37
LTC2377CMS-16#PBF	500	97	Serial, SPI	16-MSOP	78T2683	23.29
LTC2376CMS-16#PBF	250	97	Serial, SPI	16-MSOP	78T2673	18.11
16-BIT, PSEUDO-DIFFERENTIAL UNIPOLAR						
LTC2370CMS-16#PBF	2000	94	Serial, SPI	16-MSOP	78T2663	35.00
LTC2368CMS-16#PBF	1000	94.7	Serial, SPI	16-MSOP	82T3879	35.37
LTC2367CMS-16#PBF	500	94.7	Serial, SPI	16-MSOP	82T3859	23.29
LTC2364CMS-16#PBF	250	94.7	Serial, SPI	16-MSOP	82T3839	18.11
16-BIT, PSEUDO-DIFFERENTIAL UNIPOLAR, PSEUDO-DIFFERENTIAL BIPOLAR OR FULLY DIFFERENTIAL						
LTC2389CLX-16#PBF	2500	96	Parallel Serial, SPI	48-LQFP	05W4604	46.75
LTC2389CUK-16#PBF	2500	96	Parallel Serial, SPI	48-QFN	05W4605	46.75
LTC2389ILX-16#PBF	2500	96	Parallel Serial, SPI	48-LQFP	05W4608	53.76
LTC2389IUK-16#PBF	2500	96	Parallel Serial, SPI	48-QFN	05W4609	49.80

Linear Technology's family of high performance 18- and 16-bit Successive Approximation Register (SAR) Analog to Digital Converters (ADCs) are supported with demonstration systems and evaluation software that demonstrates the correct layout and recommended device selection to achieve the highest performance design. The free, easy-to-use, and powerful QuikEval™ and PScope™ data acquisition and analysis software tools enable users to evaluate the performance of Linear Technology's ADCs, quickly and easily.

EVALUATION BOARDS

Mfg. Part No.	Associated IC	Required for Evaluation Board	Stock No.	Price Each
DC1783A-A	LTC2380-16	DC718 or DC590	06W4968	150.00
DC1783A-E	LTC2379-18	DC718 or DC590	06W4969	150.00
DC1783A-F	LTC2378-18	DC718 or DC590	06W4970	150.00
DC1783A-H	LTC2376-18	DC718 or DC590	06W4971	150.00
DC1813A-A	LTC2370-16	DC718 or DC590	06W4972	150.00
DC1813A-E	LTC2369-18	DC718 or DC590	06W4973	150.00
DC1813A-H	LTC2364-18	DC718 or DC590	06W4974	150.00
DC1826A-A	LTC2389-18	DC718	06W4975	150.00
DC1826A-E	LTC2389-16	DC718	06W4976	150.00

➤ CONTINUED ➤

ANALOG-TO-DIGITAL CONVERTERS

SAR ANALOG TO DIGITAL CONVERTERS (CONT.)

Use the **DC590B** QuikEval™ serial controller to evaluate the DC performance such as peak-to-peak noise and DC linearity. Use the **DC718C** PScope™ data acquisition controller to evaluate AC performance such as SNR, THD, SINAD and SFDR.

EVALUATION BOARD ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
DC718C	USB Data Acquisition Controller, for evaluating AC specifications	48T3022	300.00
DC590B	USB Serial Controller, for evaluating DC specifications	48T3021	50.00

(207455)

ANALOG-TO-DIGITAL CONVERTERS

RoHS Compliant Available

MICROCHIP

DISPLAY A/D CONVERTERS

The display ADCs feature 3½ to 4½ digit resolution with direct LCD or LED drives for display in digital meters, portable instrumentation, and analog measurement applications.

Mfg. Part No.	Display	Supply Voltage	Digit Resolution	Power (mW)	Package	Stock No.	Price Each 1-25
● TC7107ACLW	LED	5	3-1/2	10	44-PLCC	92C6458	10.96
● TC7107ACPL	LED	5	3-1/2	10	40-DIP	96K4041	4.88
● TC7107CPL	LED	5	3-1/2	10	40-DIP	69K7656	4.22
● TC7116CPL	LCD	9	3-1/2	10	40-DIP	96K4042	5.28
● TC7117CKW	LED	5	3-1/2	10	44-PQFP	96K4043	4.75
● TC7117CPL	LED	5	3-1/2	10	40-DIP	92C6505	4.75

BINARY A/D CONVERTERS - Features over and under rand detection

Mfg. Part No.	Supply Voltage	Power (mW)	Data Interface	Package	Stock No.	Price Each 1-25
● TC850CLW	5	20	Parallel	44-PLCC	96K4051	29.52
● TC850CPL	5	20	Parallel	40-DIP	59K0276	26.40

BCD OUTPUT A/D CONVERTERS

Mfg. Part No.	Supply Voltage	Digit Resolution	Data Interface	Package	Stock No.	Price Each 1-25
● TC14433EPG	5	3½	BCD	24-WDIP	85C0441	6.60

DUAL SLOPE A/D CONVERTERS

Mfg. Part No.	Supply Voltage	Data Interface	Package	Stock No.	Price Each 1-25
● TC7109CPL	5	Serial, Parallel	40-DIP	92C6482	7.26

(78701)

ANALOG-TO-DIGITAL CONVERTERS

RoHS Compliant Available

MICROCHIP

- 2.7V to 5.5V Supply
- No Missing Codes
- ±1 LSB DNL
- Serial Output with SPI Interface
- Standby Current: 0.5µA

Applications include data acquisition instrumentation and measurement, multichannel data loggers, industrial PCs, motor control, robotics, smart sensors, portable instrumentation, and home medical appliances.

10-BIT RESOLUTION, 200kHz SAMPLING RATE

Mfg. Part No.	Input Channels	Operating Current Typ. (µA)	Max. INL	Package	Stock No.	Price Each 1-25
● MCP3002-I/P	2	525	±1 LSB	8-PDIP	61K2948	1.79
● MCP3021A5T-E/OT	3	250	±1 LSB	5-SOT-23A	64T2461	1.07
● MCP3004-I/P	4	425	±1 LSB	14-PDIP	19C7195	2.08
● MCP3008-I/P	8	425	±1 LSB	16-PDIP	19C7200	2.19
● MCP3008-I/SL	8	425	±1 LSB	16-SOIC	19C7201	2.19
● MCP3008T-I/SL	8	425	±1 LSB	16-SOIC	19C7202	2.19
12-BIT RESOLUTION, 100kHz SAMPLING RATE						
● MCP3221A5T-I/OT	1	175	±2 LSB	5-SOT-23A	92C2410	1.44
● MCP3201-BI/SN	1	300	±1 LSB	8-SOIC	23C2828	2.66
● MCP3201-CI/P	1	300	±2 LSB	8-PDIP	19C7203	2.28
● MCP3201-CI/SN	1	300	±2 LSB	8-SOIC	73K1001	2.28
● MCP3202-CI/P	2	375	±2 LSB	8-PDIP	72K7287	2.53
● MCP3202-CI/SN	2	375	±2 LSB	8-SOIC	19C7207	2.53
● MCP3204-BI/SL	4	400	±1 LSB	14-SOIC	23C2838	3.94
● MCP3204-CI/P	4	320	±2 LSB	14-PDIP	19C7209	3.17
● MCP3208-BI/SL	8	400	±1 LSB	16-PDIP	23C2843	4.35
● MCP3208-CI/P	8	320	±2 LSB	16-PDIP	58K1815	3.48
● MCP3208-CI/SL	8	320	±2 LSB	16-SOIC	69K7605	3.48
13-BIT RESOLUTION, 100kHz SAMPLING RATE						
● MCP3301-CI/P	1	300	±2 LSB	8-PDIP	96K3722	2.27
● MCP3550-50-E/SN	1	120	±1 LSB	8-MSOP	69K0131	3.98
● MCP3551-E/SN	1	120	±1 LSB	8-SOIC	22K1369	3.98
● MCP3302-BI/SL	2	450	±1 LSB	14-SOIC	40C2513	3.91
● MCP3304-BI/SL	4	450	±1 LSB	16-SOIC	40C2523	4.32
● MCP3301-CI/P	4	300	±2 LSB	16-PDIP	96K3722	2.27

(64172)

DATA ACQUISITION DEVICES

RoHS Compliant Available

MICROCHIP

- Precision (Up to 17 Bits) A/D Converter
- 3-Pin Control Interface to Microprocessor
- Flexible: User Can Trade Off Conversion Speed for Resolution
- Single Supply Operation; Automatic Input Voltage Polarity Detection
- Low Power Dissipation: TC500A: 10mW, TC510: 18mW
- Wide Analog Input Range: ±4.2V
- Directly Accepts Bipolar and Differential Input Signals
- -5V Output PIN
- 4 Input, Differential Analog MUX
- Low Operating Current: 5mA Max.
- Wide Analog Input Range: ±4.2V Max.

The **TC500A/510** family are precision analog front ends that implement dual-slope A/D converters having a max. res. of 17 bits. Each device contains the integrator, zero-crossing comparator and processor interface logic. **Mfg. Part No. TC500A** (16-bit max. device) requires both positive and negative power supplies. **Mfg. Part No. TC510** adds on-board negative power supply converter for single supply operation.

PRECISION ANALOG FRONT ENDS

Mfg. Part No.	Temp. Range	Package	Stock No.	Price Each 1-25
● TC500ACOE	0°C to +70°C	16-Pin SOIC	96K4023	3.51
● TC500ACPE	0°C to +70°C	16-Pin Plastic DIP (Narrow)	33C1158	3.11
● TC500COE	0°C to +70°C	16-WSOIC	96K4024	3.11
● TC500CPE	0°C to +70°C	16-DIP	92C6182	2.27
● TC510COG	0°C to +70°C	24-Pin SOIC	33C1159	4.22

(70513)

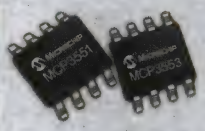
DELTA-SIGMA ANALOG TO DIGITAL CONVERTERS

RoHS Compliant Available

MICROCHIP

Applications:
- Weigh Scales
- Direct Temperature Measurement
- 6-digit DVMs
- Instrumentation
- Data Aquisition
- Strain Gauge Measure

Features:
- 22-bit Resolution
- Automatic Internal Offset
- Low Output Noise
- Ultra Low Converstion Current
  100 µA @ V_{DD} = 2.7V
  120 µA @ V_{DD} = 5.0V
- 2.7 to 5.5V Single Supply
- -40 to 125°C Extended Temperature Range



Mfg. Part No.	Sample Rate	Output noise (µVrms)	Internal Oscilator (kHz)	Package	Stock No.	Price Each 1-25
● MCP3553-E/SN	60SPS	6	122.88	8-SOIC	56K7004	3.98
● MCP3422A0-E/MS	3.75SPS	1.5	100-3400	8-MSOP	54M4862	2.90
● MCP3422A0-E/SN	3.75SPS	1.5	100-3400	8-SOIC	54M4863	2.87
● MCP3423-E/MF	3.75SPS	1.5	...	10-DFN	54M4867	3.11
● MCP3423-E/UN	3.75SPS	1.5	100-3400	10-MSOP	54M4868	3.11
● MCP3426A0-E/MS	15SPS	2.5	...	8-MSOP	52R9953	2.64
● MCP3427-E/MF	15SPS	2.5	100-3400	10-DFN	52R9958	2.83
● MCP3427-E/UN	15SPS	2.5	100-3400	10-MSOP	52R9959	2.83
● MCP3428-E/SL	15SPS	2.5	100-3400	14-SOIC	52R9962	3.56
● MCP3428-E/ST	15SPS	2.5	...	14-TSSOP	52R9963	3.63
● MCP3551-E/MS	13.75SPS	2.5	...	8-MSOP	22K1368	4.02
● MCP3553-E/MS	60SPS	2.5	...	8-MSOP	56K7003	4.02

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
MCP3423EV	18-BIT DELTA-SIGMA Analog-to-Digital Converter Evaluation Board	25R7935	15.00
MCP3422EV	18-BIT DELTA-SIGMA Analog-to-Digital Converter Evaluation Board	08R1796	15.00

(85672)

SIX CHANNEL ANALOG-TO-DIGITAL CONVERTERS

RoHS Compliant Available

MICROCHIP

The **MCP3903** is a six-channel Analog Front End (AFE) containing three pairs made out of two synchronous sampling Delta-Sigma Analog-to-Digital Converters (ADC) with PGA, a phase delay compensation block, internal voltage reference, and high-speed 10 MHz SPI compatible serial interface. The converters contain a proprietary dithering algorithm for reduced idle tones and improved THD.

The internal register map contains 24-bit wide ADC data words, a modulator output register as well as six 24-bit writable control registers to program gain, over-sampling ratio, phase, resolution, dithering, shut-down, reset and several communication features.

The communication is largely simplified with various Continuous Read modes that can be accessed by the Direct Memory Access (DMA) of an MCU and with separate Data Ready pins that can directly be connected to the Interrupt Request (IRQ) input of an MCU. The **MCP3903** is capable of interfacing to a large variety of voltage and current sensors including shunts, current transformers, Rogowski coils, and Hall-effect sensors.

Mfg. Part No.	Supply Voltage Range	Supply Current (µA)	Sampling Rate (kSPS)	Resolution (Bits)	Package	Stock No.	Price Each 1-25
● MCP3903-E/SS	2.7V to 3.6V	7.1	64	24	28-SSOP	79R3452	4.39

(202099)

GENERAL PURPOSE A/D CONVERTERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Features
- Single supply voltage: 2.7 to 5.25V
- 500ksps to 1Msps speed range
- SPI/QSPI/MICROWIRE/DSP compatible

Unique in the industry. Instead of selecting different ADCs for each application speed, these new ADCs offer guaranteed performance over a wide range of speeds.

Mfg. Part No.	Ch	Res (bits)	DNL+ (LSB)	INL+ (LSB)	Package	Stock No.	Price Each 1-9
ADC1173CIMTC/NOPB	1	8	0.85	1.3	24-TSSOP	41K1556	4.15
ADC121C027CIMK/NOPB	1	12	0.5	0.5	6-TSOT	78M7723	2.77
ADC128D818CIMT/NOPB	8	12	1	1	16-TSSOP	71R5089	5.58
ADC12EU050CIPLQ/NOPB	8	12	0.75	3	68-LLP	34P3006	88.10
LM12H458CIV/NOPB	8	13	0.75	1	28-PLCC	41K3492	23.31

(85663)

HIGH RESOLUTION ADCs FOR ENERGY EXPLORATION AND SEISMIC APPLICATIONS

RoHS Compliant Available

TEXAS INSTRUMENTS

The **ADS1281** is an extremely high-performance, single-chip analog-to-digital converter (ADC) designed for the demanding needs of energy exploration and seismic monitoring environments. The single-chip design promotes board area savings for improvements in high-density applications.

Mfg. Part No.	# of Chan.	Sample Rate (kSPS)	Input Type	Digital Supply Range	Pkg.	Stock No.	Price Each 1-9
ADS1281IPW	1	4	Differential	1.65V to 3.6V	24-TSSOP	64M7486	49.99

(192111)

POWERWISE ADCs

RoHS Compliant Available

TEXAS INSTRUMENTS

Features
- Internal Sample-and-Hold
- Choice of SDR or DDR output clocking
- Interleave Mode for 2x Sampling Rate
- Serial Interface for Extended Control
- Duty Cycle Corrected Sample Clock

Applications
- Direct RF Down Conversion
- Digital Oscilloscopes
- Satellite Set-top boxes
- Communications Systems
- Test Instrumentation

Mfg. Part No.	Resolution (Bits)	INL (LSB)	DNL (LSB)	Package	Stock No.	Price Each 1-9
ADC102S101CIMM/NOPB	10	0.7	0.6	8-MSOP	41K1535	4.06
ADC121S021CIMF/NOPB	12	0.45	0.45	6-SOT-23	69K1526	2.77
ADC124S101CIMM/NOPB	12	1.6	1.6	10-MSOP	41K1608	4.99
ADC128S102CIMT/NOPB	12	1.2	1.5	16-TSSOP	60K8368	6.65
ADC14C105CISQE/NOPB	14	1.8	0.5	32-LLP	60M5663	47.61
ADC141S626CIMM/NOPB	14	0.5	0.5	10-MSOP	84M7752	6.56
HIGH SPEED ADCs						
ADC08L060CIMT/NOPB	6	0.5	0.25	24-TTSOP	41K1417	8.42
LOW POWER ADCs						
ADC081S021CIMF/NOPB	8	0.45	0.45	6-SOT-23	69K1478	1.66
ADC082S021CIMM/NOPB	8	0.4	0.4	8-SOIC	41K1457	2.26
ADC084S021CIMM/NOPB	8	0.04	0.04	10-SOIC	41K1489	2.72
ADC088S022CIMT/NOPB	8	0.04	0.04	16-TTSOP	79K5518	4.13
ADC101S021CIMF/NOPB	10	0.14	0.16	6-SOT-23	69K1507	2.59
ADC104S021CIMM/NOPB	10	0.13	0.13	10-SOIC	41K1538	3.30
ADC122S021CIMM/NOPB	12	0.35	0.2	8-SOIC	41K1597	3.30
ADC124S021CIMM/NOPB	12	0.35	0.2	10-SOIC	41K1604	4.08
ADC128S022CIMT/NOPB	12	0.4	1	16-TTSOP	69K1533	6.89
ADC121C021CIMM/NOPB	12	1	1	8-MSOP	14R4579	2.77
ADC161S626CIMME/NOPB	16	2	2	10-MSOP	14R4580	10.62
ADC161S626CIMM/NOPB	16	0.8	0.8	10-MSOP	12P9269	10.62

(101605)

SENSOR AFE SYSTEM

RoHS Compliant Available

TEXAS INSTRUMENTS

Applications:
- Temperature and Pressure Transmitters
- Strain Gauge Interface
- Industrial Process Control

The Sensor AFE has features and functions specific to each sensor type, including signal conditioning, calibration, diagnostic support, and sensor drive when required. The integrated design tool allows designers to select sensors, generate a solution, configure the signal path, and set diagnostics for each sensor. Configuration data can be saved and downloaded to a Sensor AFE for immediate prototyping. The software can be used online through WEBENCH Sensor AFE Designer or offline with a standalone bench-top system that also supports prototype evaluation. The **LMP90100** is designed to work with temperature sensors (RTDs, thermocouples, thermistors) and bridge sensors (pressure, force, load) and the **LMP91000** is designed for chemical sensing applications.

Mfg. Part No.	Description	Supply Voltage	Package	Stock No.	Price Each 1-9
LMP90100MHE/NOPB	Multi-Channel, Low Power 24–Bit Sensor AFE	3 - 5.5	28-TSSOP	23T0749	9.77

➤CONTINUED➤

SENSOR AFE SYSTEM (CONT.)

DEVELOPMENT TOOLS

Mfg. Part No.	Description	Stock No.	Price Each
LMP90100EB/NOPB	LMP90100 24–Bit Sensor AFE Eval. Board	23T0748	100.98
SPIO-4/NOPB	Digital Interface Board for LMP91000SDEVAL	23T0752	151.98

(192335)

8 BIT ANALOG TO DIGITAL CONVERTERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Speed	DNL (±LSB)	INL (±LSB)	Package	Stock No.	Price Each 1-9
1-CHANNEL						
ADS7885SDBVT	3MSPS	0.4	0.4	6-SOT-23	94M6134	2.99
ADS7888SDBVT	1.25MSPS	0.3	0.3	6-SOT-23	43K9044	2.63
ADS931E	33MSPS	1	2.5	28-SSOP	74C7268	6.74
TLC549CP	40kSPS	0.5	0.5	8-DIP	35K1217	2.94
TLC5510INS	20MSPS	0.75	1	24-SOIC	76C7436	6.59
TLC5540IPW	40MSPS	1	1	24-TSSOP	76C7449	7.25
2-CHANNELS						
ADS7949SRTER	2MSPS	0.3	0.3	16-QFN	91R2076	1.13
8-CHANNELS						
ADS7830IPWT	70kSPS	0.5	0.5	16-TSSOP	90H0468	3.94

(9977)

10 BIT ANALOG TO DIGITAL CONVERTERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Speed	DNL (±LSB)	INL (±LSB)	Package	Stock No.	Price Each 1-9
1-CHANNEL						
ADS7884SDBVT	3MSPS	0.8	0.8	6-SOT-23	96M9615	4.42
ADS7887SDBVT	1.25MSPS	0.5	0.75	6-SOT-23	43K9040	4.12
TLC1550IDW	164kSPS	0.5	0.5	24-SOIC	76C6824	11.05
THS1041IPW	40MSPS	1	1.5	28-TSSOP	76C6178	21.17
ADS7948SRTER	2MSPS	0.5	0.5	16-QFN	91R2075	1.93
8-CHANNELS						
TLV1570CPW	1.25MSPS	1	1	20-TSSOP	25C3233	9.77
11-CHANNELS						
TLC1542IN	38kSPS	0.5	0.5	20-SOIC	90B1207	8.99
TLC1543CDW	38kSPS	1	1	20-SOP	90B1233	5.49
TLC1543CN	38kSPS	1	1	20-DIP	35K1175	5.25
TLC1543IDW	38kSPS	1	1	20-SOIC	08F8998	5.73

(167496)

12 BIT ANALOG TO DIGITAL CONVERTERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Speed	DNL (±LSB)	INL (±LSB)	Package	Stock No.	Price Each 1-9
1-CHANNEL						
ADS1000A0IDBVT	128SPS	1	0.1	6-SOT-23	18M1686	2.83
ADS1013IDGST	3.3kSPS	0.5	1	10-MSOP	35R0209	2.97
ADS4126IRGZT	160MSPS	0.5	2	48-QFN	91R2071	27.14
ADS4129IRGZT	250MSPS	0.5	2	48-QFN	21T9622	51.60
ADS41B29IRGZT	250MSPS	1	1.5	48-VQFN	24T4529	57.60
ADS5400IPZP	1GSPS	-1	4	100-HTQFP	70R1292	936.80
ADS5463IPFP	500MSPS	0.95	1.5	80-TQFP	21M9192	172.01
ADS6128IRGZT	210MSPS	0.2	1	48-QFN	39P9363	60.38
ADS7822EB/250	200kSPS	1	1	8-MSOP	74C7136	5.18
ADS7822P	200kSPS	2	2	8-DIP	17M6542	4.74
ADS7823E/250	50kSPS	1	2	8-MSOP	74C7146	7.01
ADS7835E/250	500kSPS	1	1	8-MSOP	74K3634	6.80
ADS7881IPFBT	4MSPS	1	1	48-TQFP	86H9619	15.82
ADS7883SBDBVT	3MSPS	0.5	0.6	6-SOT-23	02P6554	5.97
ADS7886SDBVT	1MSPS	1	1.25	6-SOT-23	66K0602	4.77
ADS801U	25MSPS	1	1.7	28-SOIC	35C1570	32.77
ADS807E	53MSPS	1	4	28-SSOP	74K3637	26.64
2-CHANNELS						
ADS4222IRGCT	65MSPS	1.5	3.5	64-VQFN	55T1206	26.96
ADS7947SRTER	2MSPS	1	1	16-QFN	91R2074	2.22
4-CHANNELS						
ADS1015IRUGT	3.3kSPS	0.5	1	10-QFN	33R2088	3.15
ADS1015IDGST	3.3kSPS	0.5	1	10-MSOP	35R0211	3.15
ADS1018IRUGT	3.3kSPS	0.5	0.5	10-X2QFN	61W8295	3.15
ADS7223SRHBT	1MSPS	0.5	0.5	32-QFN	25T0985	9.67

➤CONTINUED➤

12 BIT ANALOG TO DIGITAL CONVERTERS (CONT.)

4-CHANNELS

Mfg. Part No.	Speed	DNL (±LSB)	INL (±LSB)	Package	Stock No.	Price Each 1-9
● ADS7924IRTET	100kSPS	0.6	0.5	16-WQFN	77R3940	3.46
● ADS7841E	200kSPS	0.8	2	16-SSOP	35C1553	7.13
● ADS7841EB	200kSPS	1	1	16-SSOP	35C1554	8.33
● ADS7841P	200kSPS	1	1	16-DIP	14M9333	6.90
8-CHANNELS						
● ADS7828E/250	50kSPS	1	2	16-TSSOP	74C7158	8.18
● ADS7828EB/250	50kSPS	1	1	16-TSSOP	74C7160	9.67
● ADS7844E	200kSPS	0.8	2	20-QSOP	35C1557	7.44
● ADS7844N	200kSPS	0.8	2	20-SSOP	80K5559	7.44
● ADS7852Y/250	500kSPS	1	2	32-TQFP	35C1562	8.39
● ADS7951SBDBT	1MSPS	1	1	30-TSSOP	14N8506	8.29
● ADS8201IRGET	100kSPS	1	0.9	24-VQFN	52R7927	6.80
11-CHANNELS						
● TLC2543CDW	66kSPS	1	1	20-SOIC	36K7646	11.29
● TLC2543CDWR	66kSPS	1	1	20-SOIC	76C6987	10.58
● TLC2543IDW	66kSPS	1	1	20-SOIC	08F9046	11.93
● TLC2543IN	66kSPS	1	1	20-DIP	35K1188	11.42
● TLV2553IDW	200kSPS	1	1	20-SOIC	76C8376	8.71

EVALUATION MODULES

Mfg. Part No.	Description	Stock No.	Price Each
ADS1015EVM	ADS1015 ADC Evaluation Module	50R7473	50.00
ADS5400EVM	ADS5400 ADC Evaluation Module	50R8512	1528.99
● ADS8558EVM	ADS8558 ADC Evaluation Module	55R2425	101.00
ADS7924EVM	ADS7924 ADC Evaluation Module	83R9341	76.50

(167497)

14 BIT ANALOG TO DIGITAL CONVERTERS

RoHS Compliant Available

TEXAS INSTRUMENTS

1-CHANNEL

Mfg. Part No.	Speed	DNL (±LSB)	INL (±LSB)	Package	Stock No.	Price 1-4
● ADS4146IRGZT	160MSPS	0.5	2	48-QFN	91R2072	46.33
● ADS5547IRGZT	210MSPS	0.5	3.5	48-QFN	21M9195	117.94
● ADS41B49IRGZT	250MSPS	1	2.5	48-VQFN	24T4531	107.45
● ADS41B49IRGZ25	250MSPS	...	5	48-QFN	32T2536	121.94
● ADS5474IPFP	400MSPS	0.7	1	80-HTQFP	52M2894	239.82
2-CHANNELS						
● ADS7280IPW	1MSPS	1	1	16-TSSOP	13N4108	11.47
● ADS7945SRTET	2MSPS	1.5	1.5	16-WQFN	64T2839	9.67
● ADS7946SRTET	2MSPS	1.5	1.5	16-QFN	64T2841	9.35
4-CHANNELS						
● ADS7263SRHBT	1MSPS	1	2	32-QFN	25T0986	14.98
● ADS8331IBPW	500kSPS	2	2	24-TSSOP	27T6163	13.67
● ADS8331IPW	500kSPS	2	2	24-TSSOP	27T6165	11.80
8-CHANNELS						
● ADS7871IDB	48kSPS	0.5	2	28-SSOP	54H4367	11.24
● TLC3578IPW	200kSPS	1	1.5	24-TSSOP	72K7327	21.86
● ADS8332IBPW	500kSPS	2	2	24-TSSOP	27T6167	15.92
● ADS8332IPW	500kSPS	2	2	24-TSSOP	27T6169	14.04

EVALUATION MODULES

Mfg. Part No.	Description	Stock No.	Price Each
● ADS4146EVM	ADS4146 ADC Evaluation Module	24T4535	305.00
● ADS4149EVM	ADS4149 ADC Evaluation Module	52R7926	305.00
ADS62P49EVM	ADS62P49 ADC Evaluation Module	06R6177	305.00
ADS8557EVM	ADS8557 ADC Evaluation Module	55R2424	101.00

(167498)

16 BIT ANALOG TO DIGITAL CONVERTERS

RoHS Compliant Available

TEXAS INSTRUMENTS

1-CHANNEL

Mfg. Part No.	Speed	DNL (±LSB)	INL (±LSB)	Package	Stock No.	Price Each 1-9
● ADS1100A0IDBVT	128SPS	1	...	6-SOT-23	20H0708	5.49
● ADS1100A1IDBVT	128SPS	1	...	6-SOT-23	20H0710	5.49
● ADS1100A2IDBVT	128SPS	1	...	6-SOT-23	20H0712	5.49
● ADS1110A0IDBVT	240SPS	1	...	6-SOT-23	74K3626	6.40
● ADS1110A1IDBVT	240SPS	1	...	6-SOT-23	61H4890	6.40
● ADS1110A4IDBVT	240SPS	1	8	6-SOT23	61H4896	6.40
● ADS1110A5IDBVT	240SPS	1	8	6-SOT23	61H4898	6.40
● ADS1601IPFBT	1.25MSPS	0.25	0.75	48-TQFP	71J2995	16.85

➤CONTINUED➤

16 BIT ANALOG TO DIGITAL CONVERTERS (CONT.)

Mfg. Part No.	Speed	DNL (±LSB)	INL (±LSB)	Package	Stock No.	Price Each 1-9
● ADS7805P	100kSPS	1	4	28-DIP	35C1528	50.56
● ADS7805U	100kSPS	1	4	28-SOIC	80K5546	48.20
● ADS7807P	40kSPS	3	3	28-DIP	74C7075	55.36
● ADS7807U	40kSPS	3	3	28-SOIC	80K5548	52.88
● ADS7809U	100kSPS	3	3	20-SOIC	80K5549	48.20
● ADS7813PB	40kSPS	1	2	16-DIP	74C7097	44.15
● ADS8318IDGST	500kSPS	0.75	1	10-MSOP	12P6254	10.73
● ADS8319IBDGST	500kSPS	0.5	1	10-MSOP	46P3770	15.73
● ADS8320E/250	100kSPS	2	8	8-MSOP	35C1581	12.43
● ADS8321EB/250	100kSPS	2	8	8-MSOP	74K3638	12.55
● ADS8322Y/250	500kSPS	2	6	32-TQFP	74C7226	13.66
● ADS8325IBDGKT	100kSPS	2	4	8-VSSOP	80K5561	16.11
● ADS8326IDGKT	250kSPS	1	1.5	8-VSSOP	47M3598	10.77
● ADS8327IPW	500kSPS	1	2	16-TSSOP	99K1786	12.36
● ADS8332IBRGET	500kSPS	1.5	2	24-QFN	61R9354	11.26
● ADS8505IBDW	250kSPS	1	3	28-SOIC	63K4845	33.94
● ADS8507IBDW	40kSPS	1.5	1.5	28-SOIC	26M8851	34.02
● ADS8509IBDW	250kSPS	1	2	20-SOIC	43K2924	28.84
● ADS8509IDW	250kSPS	1	2	20-SOIC	43K2928	20.33
● AMC1204DW	78kSPS	...	9	16-SOIC	48T4093	8.82
2-CHANNELS						
● ADS1113IDGST	860SPS	1	1	10-MSOP	25R1237	5.35
● ADS1114IDGST	860SPS	1	1	10-MSOP	25R1239	5.89
● ADS1209SPW	40kSPS	1	8	24-TSSOP	67R4096	11.47
3-CHANNELS						
● ADS1112IDGST	240SPS	1	...	10-MSOP	73H4116	7.78
● ADS1112IDGSR	240SPS	1	...	10-VSSOP	73H4115	6.76
4-CHANNELS						
● ADS1118IDGST	860SPS	...	1	10-MSOP	57T9643	6.32
● ADS1115IDGST	860SPS	1	1	10-MSOP	25R1241	6.32
● ADS1115IRUGT	860SPS	1	1	10-QFN	25R1242	6.32
● ADS1194CPAG	8kSPS	1	16	64-TQFP	13T1868	17.60
● ADS8331IBRGET	500kSPS	1.5	2	24-VQFN	67R1110	13.67
● ADS8331IRGET	500kSPS	2	3	24-VQFN	67R1111	11.80
● ADS8343E	100kSPS	2	6	16-SSOP	74C7243	16.76
● ADS8363SRHBT	1MSPS	2	3	32-QFN	25T0987	19.48
6-CHANNELS						
● ADS1196CPAG	8kSPS	1	16	64-TQFP	13T1870	22.71
● ADS8364Y/250	250kSPS	1.5	8	64-TQFP	74C7260	33.34
8-CHANNELS						
● ADS1178IPAPT	52kSPS	1	...	64-HTQFP	72M6993	17.23
● ADS1198CPAG	8kSPS	...	...	64-TQFP	91R2069	27.82
● ADS8345NB	100kSPS	2	6	20-SSOP	74C7257	17.98
16-CHANNELS						
● ADS1158IRTCT	125kSPS	1	1	48-QFN	14N4058	12.83

EVALUATION MODULES

Mfg. Part No.	Description	Stock No.	PriceEach
ADS1115EVM-PDK	ADS1115 ADC Performance Demonstration Kit	50R7480	152.01
● ADS1146EVM	ADS1146 Evaluation Module	68R2136	76.50
● ADS1147EVM	ADS1147 ADC Evaluation Module	68R2138	76.50
ADS1147EVM-PDK	ADS1147 ADC Performance Demonstration Kit	68R2139	203.00
ADS1148EVM	ADS1148 ADC Evaluation Module	68R2140	76.50
● ADS1148EVM-PDK	ADS1148 ADC Performance Demonstration Kit	68R2141	203.00
ADS1198ECGFE-PDK	ADS1198 Front End Performance Demonstration Kit	20T9666	203.00
ADS5493EVM	ADS5493 ADC Evaluation Module	91R2073	305.00
● ADS8519EVM	ADS8519 ADC Evaluation Module	55R2422	50.00
ADS8556EVM	ADS8556 ADC Evaluation Module	55R2423	101.00
● ADS8331EVM	ADS8331 ADC Evaluation Module	91R0387	50.00
● ADS8332EVM	AMC1203 ADC Evaluation Module	91R0388	50.00
● AMC1204EVM	AMC1204 ADC Evaluation Module	45T7165	76.50
● ADS5263EVM	ADS5263 ADC Evaluation Module	48T4081	305.00
ADS1118EVM	ADS1118 ADC Evaluation Module	52T7491	50.00

(167501)

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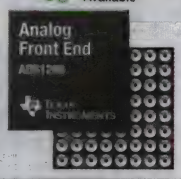
(212565)

24-BIT ANALOG TO DIGITAL CONVERTERS

RoHS Compliant Available

TEXAS INSTRUMENTS



Mfg. Part No.	Speed	DNL (±LSB)	INL (±LSB)	Package	Stock No.	Price Each 1-9
1-CHANNEL						
ADS1244IDGST	30SPS	1	2	10-MSOP	20H0724	9.43
ADS1246IPW	2kSPS	1	6	16-TSSOP	05R0318	8.80
ADS1231ID	80SPS	1	...	16-SOIC	27T6158	6.38
ADS1251U	20kSPS	1	...	8-SOIC	74C7002	12.64
ADS1252U	41kSPS	1	...	8-SOIC	80K5543	14.51
ADS1255IDBT	30kSPS	2	...	20-SSOP	74K3630	14.04
ADS1259BIPW	14.4kSPS	...	0.4ppm	20-TSSOP	69R4543	14.89
ADS1259IPW	14.4kSPS	...	0.4ppm	20-TSSOP	69R4544	12.64
ADS1271IBPW	105kSPS	1	...	16-TSSOP	03M6192	17.04
ADS1271IPW	105kSPS	1	...	16-TSSOP	73J8185	13.30
ADS1672IPAG	625kSPS	1	2	64-TQFP	01P0905	23.55
2-CHANNELS						
ADS1232IPW	800SPS	1	...	24-TSSOP	60K8812	9.99
ADS1292RIPBS	8 kSPS	...	...	32-TQFP	92T1985	10.82
3-CHANNELS						
ADS1247IPW	2kSPS	1	6	20-TSSOP	05R0319	11.35
4-CHANNELS						
ADS1294RIZXGT	32 kSPS	...	8	64-BGA	32T2529	22.88
ADS1234IPW	80SPS	1	...	28-TSSOP	60K8814	10.41
ADS1242IPWT	15SPS	1	...	16-TSSOP	74C6997	9.18
ADS1254E	20.8kSPS	1	...	20-SSOP	74C7008	15.07
ADS1274IPAPT	144kSPS	1	...	64-HTQFP	50M8809	27.48
ADS1294IPAG	32kSPS	1	8	64-TQFP	13T1872	23.73
ADS1294CZXGT	32kSPS	1	8	64-FBGA	17T1597	22.88
6-CHANNELS						
ADS1296CZXGT	32kSPS	1	8	64-FBGA	17T1598	33.09
ADS1296RIZXGT	32 kSPS	...	8	64-BGA	32T2531	33.09
ADS1296IPAG	32kSPS	1	8	64-TQFP	13T1874	33.94
7-CHANNELS						
ADS1248IPW	2kSPS	1	6	28-TSSOP	05R0320	11.12
8-CHANNELS						
ADS1216Y/250	780SPS	1	...	48-TQFP	74C6984	17.68
ADS1217IPFBT	780SPS	1	...	48-TQFP	74C6987	16.85
ADS1243IPWT	15SPS	1	...	20-TSSOP	74C6999	10.07
ADS1298CZXGT	32kSPS	1	1.5	64-NFBGA	77R3938	41.46
ADS1298CZXGT	32 kSPS	...	...	64-NFBGA	77R3938	41.46
ADS1256IDBT	30kSPS	1	...	28-SSOP	73H4119	15.73
ADS1278IPAPT	144kSPS	1	...	64-HTQFP	50M8811	43.42
MSC1210Y5PAGT	1kSPS	1	...	64-TQFP	75C3980	29.02
ADS1298RIZXGT	32kSPS	...	8	64-BGA	32T2533	41.46
16-CHANNELS						
ADS1258IRTCT	125kSPS	1	0.0003	48-QFN	63K4828	20.31

EVALUATION MODULES

Mfg. Part No.	Description	Stock No.	Price Each
ADS1231REF	ADS1231 ADC Evaluation Module	25T0264	50.00
ADS1259EVM-PDK	ADS1259 Performance Demonstration Kit	70R1290	203.00
ADS1271EVM	ADS1271 ADC Evaluation Module	73J8184	49.98
ADS1281EVM	ADS1281 ADC Evaluation Module	04R6574	50.00
ADS1298ECGFE-PDK	ADS1298 Performance Demonstration Kit	77R3939	203.00
EVAL-ADAU1966Z	ADAU1966 ADC Evaluation Board	67T0349	617.63

(167505)

ANALOG DATA ACQUISITION— A-TO-D CONVERTERS

RoHS Compliant Available

TEXAS INSTRUMENTS

GENERAL-PURPOSE/INDUSTRIAL A-TO-D CONVERTERS (5.0V)

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
ADC0803LCN/NOPB	8-Bit µP-Compatible	20-DIP	41K1423	5.24
ADC0804LCN/NOPB	8-Bit µP-Compatible	20-DIP	41K1428	3.62
ADC0804LCWM/NOPB	8-Bit µP-Compatible	20-WSOIC	41K1429	3.25
ADC0817CCN/NOPB	8-Bit µP-Compatible w/Multiplexer Options	8-DIP	41K1456	10.40

➤CONTINUED➤

ANALOG DATA ACQUISITION— A-TO-D CONVERTERS (CONT.)

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
ADC0831CCN/NOPB	8-Bit High-Speed Serial I/O with Multiplexer Options,Voltage Ref. and Track/Hold	8-DIP	41K1470	2.80
ADC0808CCN/NOPB	8-Bit Microprocessor-Compatible with 8-Channel Multiplexer	8-DIP	41K1435	5.94
ADC0808CCV/NOPB		28-PLCC	41K1436	6.75
ADC0809CCN/NOPB		8-DIP	41K1438	4.23
ADC0816CCN/NOPB		8-DIP	41K1454	14.61
ADC0820CCN/NOPB	8-Bit High-Speed µP-Compatible with Track/Hold Function	20-DIP	41K1465	4.32
ADC0820CCWM/NOPB	8-Bit High-Speed µP-Compatible with Track/Hold Function	20-WSOIC	41K1466	4.40
ADC0832CCN/NOPB	8-Bit Serial I/O with Multiplexer Option	8-DIP	41K1473	2.68
ADC0838CCN/NOPB	8-Bit Serial I/O with Multiplexer Option	20-MDIP	41K1484	3.00
ADC0844CCN/NOPB	8-Bit µP-Compatible w/Multiplexer Options	20-MDIP	41K1495	5.23
ADC0848CCN/NOPB	8-Bit Microprocessor-Compatible with Multiplexer Option	24-DIP	41K1499	5.37
ADC12048CIVF/NOPB	12-Bit Plus Sign 216 kHz 8 Channel Sampling Analog to Digital Converter	44-PQFP	41K1586	12.28
LM12458CIV/NOPB	12-Bit Plus Sign Data Acquisition System with Self-Calibration	44-PLCC	41K3497	24.16
ADC122S655CIMM/NOPB	Dual 12-Bit, 200 kSPS to 500 kSPS, Simultaneous Sampling	10-MSOP	84M7738	6.23
DAC0808LCN/NOPB	8-Bit D/A Converter	16-MDIP	41K1769	1.92
ADC081C021CIMK/NOPB	I2C-Compatible, 8-Bit ADC w/Alert Function	6-TSOT	84M7722	1.66
ADC101C027CIMK/NOPB	I2C-Compatible, 10-Bit ADC w/ Alert Function	6-TSOT	84M7728	2.72
ADC081C027CIMK/NOPB	I2C-Compatible, 8-Bit ADC with Alert Function	6-TSOT	84M7724	1.55
ADC0838CCWM/NOPB	8-Bit Serial I/O	20-SOIC	41K1485	3.70

SAMPLE AND HOLD

Mfg. Part No.	Title	Offset	Package	Stock No.	Price Each 1-9
LF398N/NOPB	Monolithic Sample and Hold Circuit	10mV, 3mV	8-DIP	41K2551	1.54
LF398AN/NOPB	Monolithic Sample and Hold Circuit	3mV	8-DIP	41K2548	2.88
LF298M/NOPB	Monolithic Sample-and-Hold Circuits	5 mV	14-SOIC	41K2536	3.56

VOLTAGE-TO-FREQUENCY CONVERTERS

Mfg. Part No.	Operating Temp. Min	Operating Temp. Max	Package	Stock No.	Price Each 1-9
LM231N/NOPB	-25	85	8-DIP	41K3557	5.77
LM331N/NOPB	0	70	8-DIP	41K4696	2.58
LM331AN/NOPB	0	70	8-DIP	41K4695	7.25

(70550)

RMS TO DC CONVERTERS

RoHS Compliant Available

ANALOG DEVICES

Mfg. Part No.	Bandwidth (kHz)	Supply Voltage (V)	Max. Error (%)	Operating Temp. (°C)	Package	Stock No.	Price Each 1-9
AD736JNZ	190	2.8	0.3	0 to 70	8-DIP	59K4741	9.60
AD636JHZ	130	16	1	0 to 70	10-TO-100	34M5026	20.28
AD637JRZ	200	3	0.25	0 to 70	16-WSOIC	87H9958	18.36
AD736ARZ	33	16.5	0.3	-40 to 85	8-SOIC	59K4732	9.35
AD637ARZ	200	3	0.25	-40 to 85	16-WSOIC	59K4441	33.07
AD536AJHZ	45	15	0.5	0 to 70	10-TO-100	13M6177	23.49
AD536AJDZ	45	15	0.5	0 to 70	14-CDIP	13M6176	36.02
AD536AKDZ	45	15	0.2	0 to 70	14-DIP	13M6178	57.06

(9875)

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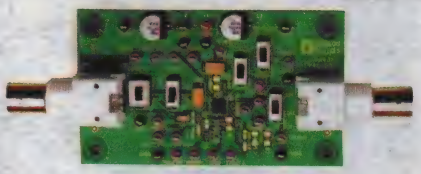
(212569)

RMS-TO-DC CONVERTER EVALUATION BOARD

RoHS Compliant Available

ANALOG DEVICES



AD8436-EVALZ

The **AD8436** evaluation board is fully assembled, tested and ready to use after the power and signal sources are connected. The **AD8436-EVALZ** offers many options, without sacrificing simplicity. The board is tested and shipped with a 10 µF averaging capacitor (CAVG), 3.3 µF low-pass filter capacitor (C8) and a 0.1 µF (COPT) capacitor to optimize crest factor performance. Please see AD8436 data sheet available on-line for complete details.

Mfg. Part No.	Description	Stock No.	Price Each
● AD8436-EVALZ	AD8436, RMS TO DC CONVERTER, EVALUATION BOARD	58T8913	119.48

(200569)

RMS-TO-DC CONVERTERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Features
- High Linearity
- Wide Input Bandwidth
- No-Hassle Simplicity
- Ultralow Shutdown Current
- Flexible Inputs
- Flexible Outputs
- Small Size

Applications
- True RMS Digital Multimeters and Panel Meters
- True RMS AC + DC Measurements

Linear Technology's simple, true RMS-to-DC converters use an innovative delta-sigma computational technique that features high linearity and accuracy suitable for a wide variety of AC measurement applications.

Mfg. Part No.	Bandwidth (kHz)	Supply Voltage (V)	Operating Temp. (°C)	Package	Stock No.	Price Each 1-24
● LTC1966CMS8#PBF	6	5	-40 to 85	8-MSOP	56M4388	5.76
● LTC1967CMS8#PBF	200	5.5	-40 to 85	8-MSOP	56M4396	6.84
● LTC1968CMS8#PBF	500	5.5	-40 to 85	8-MSOP	56M4404	7.92

(101592)

8-BIT DIGITAL-TO-ANALOG CONVERTERS

RoHS Compliant Available

ANALOG DEVICES

These digital-to-analog converters (DACs) enable new system architectures that deliver breakthrough combinations of performance and function. They have the ability to deliver a varied range of resolutions and update rates in a small footprint at the low cost requirements that today's systems demand. They provide superior value for high-volume applications in cost-sensitive markets.

Mfg. Part No.	# of DACs	DAC Update Rate (MSPS)	Settling Time (us)	Output Type	Package	Stock No.	Price Each 1-9
● AD7224KNZ	1	0.143	7	Voltage	18-PDIP	59K4564	9.94
● AD5301BRTZ-500RL7	1	0.167	8	Voltage	6-SOT-23	19M8814	3.72
● AD5300BRTZ-500RL7	1	0.25	6	Voltage	6-SOT-23	19M8813	3.38
● AD7801BRUZ	1	0.833	2	Voltage	20-TSSOP	19M8854	5.18
● AD7801BRZ	1	0.833	2	Voltage	20-SOIC	19M0902	5.00
● AD558JNZ	1	1.25	3	Voltage	16-PDIP	59K4249	15.19
● AD558KNZ	1	1.25	3	Voltage	16-PDIP	59K4251	20.42
● AD5601BKSZ-500RL7	1	1.7	6	Voltage	6-SC-70	19M0820	1.42
● AD5426YRMZ	1	2.47	0.05	Current	10-MSOP	59K4118	3.70
● AD7524JNZ	1	4	0.5	Current	16-PDIP	59K4969	8.34
● AD7524JRZ	1	4	0.25	Current	16-SOIC	59K4970	8.84
● DAC08CPZ	1	11.8	0.15	Current	16-PDIP	59K7898	2.52
● DAC08EPZ	1	11.8	0.085	Current	16-DIP	19M1021	3.19
● AD5424YRUZ	1	20.4	0.03	Voltage	20-TSSOP	59K4108	3.95
● AD9708ARZ	1	125	0.035	Current	28-SOIC	59K7319	7.21
● DAC08CSZ	1	...	0.15	Current	16-SOIC	19M1020	2.55
● AD7303BNZ	2	0.833	2	Voltage	8-PDIP	19M0854	6.04
● AD7303BRZ	2	0.833	2	Voltage	8-SOIC	19M8835	6.07
● AD7628KNZ	2	2.9	0.35	Current	20-DIP	59K5120	5.98
● AD7628KNZ	2	2.9	0.35	Current	20-DIP	59K5120	5.98
● AD7528JRZ	2	5.6	0.18	Current	20-SOIC	88H0002	12.06
● AD7528JNZ	2	5.6	0.4	Current	20-PDIP	59K4975	10.89
● AD9709ASTZ	2	125	0.035	Current	48-LQFP	59K7321	10.28
● AD5337ARMZ	2	...	6	Voltage	8-MSOP	59K3977	3.03
● AD7302BNZ	2	...	1.2	Voltage	20-DIP	19M0853	5.92
● AD7528KNZ	2	...	0.2	Voltage	20-DIP	59K4977	10.85
● AD7302BNZ	2	...	1.2	Voltage	20-DIP	19M0853	5.92
● AD7528KNZ	2	...	0.2	Voltage	20-DIP	59K4977	10.85
● AD7226KNZ	4	0.143	4	Voltage	20-PDIP	59K4578	22.99
● AD7226KRZ	4	0.143	4	Voltage	20-WSOIC	59K4581	23.13
● AD7225KNZ	4	0.2	5	Voltage	24-PDIP	59K4571	25.40
● DAC8426FSZ	4	0.333	5	Voltage	20-SOIC	59K7951	33.39

➤ CONTINUED ➤

8-BIT DIGITAL-TO-ANALOG CONVERTERS (CONT.)

Mfg. Part No.	# of DACs	DAC Update Rate (MSPS)	Settling Time (us)	Output Type	Package	Stock No.	Price Each 1-9
● AD7305BRZ	4	1	2	Voltage	20-SOIC	19M8836	9.35
● AD5305BRMZ	4	...	6	Voltage	10-MSOP	59K3874	7.01
● AD7226KPZ	4	...	4	Voltage	20-PLCC	59K4579	25.35
● AD7304BRZ	4	...	2	Voltage	16-SOIC	59K4702	8.36
● AD5308ARUZ	8	0.167	6	Voltage	16-TSSOP	59K3883	5.88
● AD7228ACNZ	8	0.2	5	Voltage	24-DIP	59K4586	32.47
● AD7228KNZ	8	0.2	7	Voltage	24-PDIP	19M1188	46.18

(9990)

10-BIT DIGITAL-TO-ANALOG CONVERTERS

RoHS Compliant Available

ANALOG DEVICES

These digital-to-analog converters (DACs) enable new system architectures that deliver breakthrough combinations of performance and function. They have the ability to deliver a varied range of resolutions and update rates in a small footprint at the low cost requirements that today's systems demand. They provide superior value for high-volume applications in cost-sensitive markets.

Mfg. Part No.	# of DACs	DAC Update Rate (MSPS)	Settling Time (µs)	Output Type	Dimensions	Stock No.	Price Each 1-9
● AD5310BRMZ	1	0.167	8	Voltage	8-uSOIC	19M0805	4.46
● AD5432YRMZ	1	2.47	55	Voltage	10-MSOP	59K4131	6.06
● AD5433YRUZ	1	20.4	35	Voltage	20-TSSOP	59K4135	5.75
● AD5611AKSZ-500RL7	1	1.7	6	Voltage	6-SC-70	59K4267	1.77
● AD5611ACPZ-RL7	1	1.7	6	Voltage	6-LFCSP	92T3212	1.70
● AD5611BKSZ-REEL7	1	1.7	6	Voltage	6-SC-70	92T3213	1.95
● AD7533JNZ	1	1.7	0.8	Current	16-PDIP	59K4979	8.16
● AD5336BRUZ	4	...	7	Voltage	28-TSSOP	59K3974	9.51
● AD9959BCPZ	4	500	...	Voltage	56-LFCSP	59K7563	60.01
● AD5318ARUZ	8	0.167	6	Voltage	16-TSSOP	59K3916	9.60*
● AD5318BRUZ	8	0.167	6	Voltage	16-TSSOP	87H9885	9.56
● AD5347BRUZ	8	0.143	9	Voltage	38-TSSOP	59K4010	9.88

(161811)

EVALUATION BOARD

The evaluation board software provides a graphical user interface for easy communication with the device along with many user-friendly features such as the "mouse-over effect." Many elements of the software can be clarified by placing your mouse over the element.

Mfg. Part No.	Description	Stock No.	Price Each
● AD9959/PCBZ	AD9959 EVALUATION BOARD	28M4215	435.00

12-BIT DIGITAL-TO-ANALOG CONVERTERS

RoHS Compliant Available

ANALOG DEVICES

These digital-to-analog converters (DACs) enable new system architectures that deliver breakthrough combinations of performance and function. They have the ability to deliver a varied range of resolutions and update rates in a small footprint at the low cost requirements that today's systems demand. They provide superior value for high-volume applications in cost-sensitive markets.

Mfg. Part No.	# of DACs	DAC Update Rate (MSPS)	Settling Time (µs)	Output Type	Dimensions	Stock No.	Price Each 1-9
● AD7390ARZ	1	0.017	60	Voltage	8-SOIC	59K4759	10.90
● AD5412AREZ	1	0.04	18	Voltage	24-TSSOP	24R9013	11.05
● DAC8512FPZ	1	0.0625	16	Voltage	8-PDIP	19M8959	11.09
● AD7233ANZ	1	0.1	10	Voltage	8-PDIP	59K4593	16.70
● AD7243ANZ	1	0.1	10	Voltage	16-PDIP	59K4606	14.93
● AD7243ARZ	1	0.1	10	Voltage	16-SOIC	59K4607	15.02
● AD5321BRMZ	1	0.125	10	Voltage	8-MSOP	19M0810	7.01
● AD5320BRTZ-500RL7	1	0.125	10	Voltage	8-SOT-23	96K2092	5.70
● AD667JNZ	1	0.5	4	Voltage	28-PDIP	59K4495	21.00
● AD767JNZ	1	0.5	4	Voltage	24-NPDIP	59K5175	21.81
● AD7945BNZ	1	1.7	0.6	Current	20-DIP	19M0907	9.67
● AD5621AKSZ-500RL7	1	1.7	10	Voltage	6-SC-70	19M0821	2.48
● AD5621ACPZ-RL7	1	1.7	10	Voltage	6-LFCSP	92T3214	2.58
● AD5621BKSZ-500RL7	1	1.7	6	Voltage	6-SC-70	64M7535	2.57
● AD5443YRMZ	1	2.47	0.16	Current	10-MSOP	19M8815	5.95
● DAC8043FPZ	1	4	0.25	Current	8-DIP	59K7920	14.44
● AD5445YRUZ	1	20.4	0.08	Current	20-TSSOP	59K4162	6.28
● AD9762ARUZ	1	125	0.035	Current	28-SOIC	59K7399	12.25
● AD9742ARUZ	1	210	11	Current	28-TSSOP	59K7343	11.94
● ADDAC80NZ-CBI-V	1	...	4	Current	24-DIP	12M7687	23.94
● DAC312HPZ	1	...	0.25	Current	20-DIP	14M1925	9.99
● AD7248AANZ	1	...	7	Voltage	20-DIP	59K4632	17.91
● AD7248JNZ	1	...	10	Voltage	24-PDIP	19M0852	17.38
● AD7541AJNZ	1	...	0.6	Current	18-PDIP	59K4999	13.47
● AD7541AKNZ	1	...	0.6	Current	18-DIP	59K5002	15.32

➤ CONTINUED ➤

12-BIT DIGITAL-TO-ANALOG CONVERTERS (CONT.)

Mfg. Part No.	# of DACs	DAC Update Rate (MSPS)	Settling Time (µs)	Output Type	Dimensions	Stock No.	Price Each 1-9
AD7542JNZ	1	...	2	Current	16-DIP	59K5006	25.05
AD7545AKNZ	1	...	1	Current	20-PDIP	59K5021	11.76
AD7548JNZ	1	...	1.5	Current	20-PDIP	19M8842	19.07
AD7548KNZ	1	...	1.5	Current	20-PDIP	59K5041	20.77
AD8522ARZ	2	0.0625	16	Voltage	14-NSOIC	59K6799	18.03
AD5025BRUZ	2	1.5	13	Voltage	14-TSSOP	34P3154	9.97
AD7249ANZ	2	0.125	7	Voltage	16-DIP	59K4641	18.42
AD7249ARZ	2	0.125	7	Voltage	16-SOIC	87H9980	18.52
AD7247AANZ	2	0.125	8	Voltage	24-DIP	59K4622	27.99
AD7247ABRZ	2	0.125	8	Voltage	24-SOIC	59K4626	31.90
AD7237JNZ	2	0.125	8	Voltage	24-PDIP	19M0851	28.55
AD5323BRUZ	2	0.125	8	Voltage	16-TSSOP	59K3936	11.09
AD7847ANZ	2	0.25	5	Voltage	24-PDIP	59K5660	26.99
AD5623RBRMZ-3	2	0.287	4.5	Voltage	10-MSOP	19M0822	5.71
AD5623RBRMZ-5	2	0.287	4.5	Voltage	10-MSOP	19M0823	5.91
AD7547JNZ	2	0.667	1.5	Current	24-DIP	59K5030	23.26
AD7537JNZ	2	0.667	1.5	Current	24-PDIP	19M0872	20.77
AD7537KNZ	2	0.667	1.5	Current	24-PDIP	59K4990	25.44
DAC8222FPZ	2	1	1	Current	24-DIP	12M9663	33.90
AD9765ASTZ	2	125	0.035	Current	48-LQFP	19M8946	19.17
AD5327BRUZ	4	0.125	10	Voltage	16-TSSOP	19M0812	14.57
AD5344BRUZ	4	0.125	10	Voltage	28-TSSOP	19M0818	16.55
DAC8420FPZ	4	0.125	8	Voltage	16-DIP	59K7948	43.78
AD7398BRUZ	4	0.167	6	Voltage	16-TSSOP	19M8838	18.40
AD7398BRZ	4	0.167	6	Voltage	16-WSOIC	19M0865	18.40
DAC8412FPCZ	4	0.167	10	Voltage	28-PLCC	19M8958	42.38
DAC8412FPZ	4	0.167	6	Voltage	28-DIP	59K7941	43.65
AD5582YRVZ	4	0.2	5	Voltage	48-TSSOP	35K4065	17.83
AD5624RBRMZ-5	4	0.287	4.5	Voltage	10-MSOP	19M0826	10.49
AD5737ACPZ	4	...	15	Current	64-LFCSP	58T8899	18.35
AD5735ACPZ	4	...	11	Voltage	64-LFCSP	58T8897	20.29
AD9106BCPZ	4	180	0.0312	Voltage	32-LFCSP	52W9437	26.12
AD5628BRUZ-2	8	0.095	6	Voltage	16-TSSOP	50M0809	15.76
AD5348BCPZ	8	0.125	10	Voltage	40-LFCSP	59K4014	16.96
AD5348BRUZ	8	0.125	10	Voltage	38-TSSOP	59K4018	17.28
AD5328ARUZ	8	0.167	6	Voltage	16-TSSOP	59K3952	13.95
AD5328BRUZ	8	0.167	10	Voltage	16-TSSOP	59K3954	17.00
AD5629RARUZ-1	8	166	6	Voltage	16-TSSOP	18T2131	15.21
AD5629RBRUZ-2	8	166	6	Voltage	16-TSSOP	18T2135	18.12

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
EVAL-AD5443-DBRDZ	AD5443 Evaluation Board	71P7921	55.32
AD9106-EBZ	AD9106 Evaluation Board	52W9436	538.32

(161812)

13-BIT DIGITAL-TO-ANALOG CONVERTERS

RoHS Compliant Available

ANALOG DEVICES

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Mfg. Part No.	# of DACs	DAC Update Rate (MSPS)	Settling Time (µs)	Output Type	Dimensions	Stock No.	Price Each 1-4
AD7839ASZ	8	0.033	30	Voltage	44-MQFP	59K5632	48.70

(161815)

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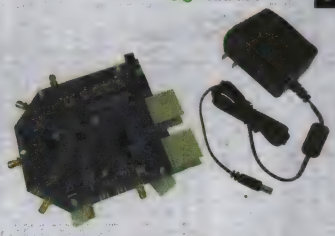
(196525)

14-BIT DIGITAL-TO-ANALOG CONVERTERS

RoHS Compliant Available

ANALOG DEVICES



AD9253-125EBZ

These digital-to-analog converters (DACs) enable new system architectures that deliver breakthrough combinations of performance and function. They have the ability to deliver a varied range of resolutions and update rates in a small footprint at the low cost requirements that today's systems demand. They provide superior value for high-volume applications in cost-sensitive markets.

Mfg. Part No.	# of DACs	DAC Update Rate (MSPS)	Settling Time (µs)	Output Type	Dimensions	Stock No.	Price Each 1-9
AD5641AKSZ-500RL7	1	1.7	10	Voltage	6-SC-70	19M0827	4.36
AD5641ACPZ-REEL7	1	1.7	10	Voltage	6-LFCSP	92T3215	4.36
AD5641BKSZ-REEL7	1	1.7	10	Voltage	6-SC-70	92T3216	5.20
AD9739ABBCZ	1	2.5	0.013	Current	16-CSPBGA	83R9373	66.19
AD5040BRJZ-500RL7	1	0.25	4	Voltage	8-SOT-23	72T0890	12.02
AD7538JNZ	1	0.667	1.5	Current	24-DIP	59K4995	19.20
AD9102BCPZ	1	180	0.0312	Voltage	32-LFCSP	55W5824	22.25
AD9736BBCZ	1	1200	...	Voltage	160-BGA	12M9241	55.39
AD9744ARUZ	1	210	0.011	Current	28-TSSOP	59K7349	14.23
AD9754ARUZ	1	125	35	Current	28-TSSOP	59K7365	14.46
AD9767ASTZ	2	125	0.035	Current	48-LQFP	59K7411	21.90
AD7244JRZ	2	0.25	4	Voltage	28-SOIC	59K4614	41.14
AD5045BRUZ	2	1.5	10.7	Voltage	14-TSSOP	34P3158	13.93
AD7836ASZ	4	0.0625	16	Voltage	44-MQFP	59K5626	42.28
AD7841ASZ	8	0.032	31	Voltage	44-MQFP	59K5638	49.26
AD7841BSZ	8	0.032	31	Voltage	44-MQFP	59K5640	53.55

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
AD9253-125EBZ	AD9253 EVAL. BOARD	72T3614	271.88

(161816)

16-BIT DIGITAL-TO-ANALOG CONVERTERS

RoHS Compliant Available

ANALOG DEVICES

These digital-to-analog converters (DACs) enable new system architectures that deliver breakthrough combinations of performance and function. They have the ability to deliver a varied range of resolutions and update rates in a small footprint at the low cost requirements that today's systems demand. They provide superior value for high-volume applications in cost-sensitive markets.

AD9122BCPZ

Mfg. Part No.	DAC Update Rate (MSPS)	Settling Time (µs)	Output Type	Dimensions	Stock No.	Price Each 1-9
AD420ANZ-32	0.0004	3000	Current	24-PDIP	59K3523	20.27
AD420ARZ-32	0.0004	3000	Current	24-SOIC	19M0785	19.69
AD421BNZ	0.000125	8000	Current	16-PDIP	59K3526	13.81
AD421BRZ	0.000125	8000	Current	16-WSOIC	59K3527	13.09
AD5060ARJZ-1500RL7	0.25	4	Voltage	8-SOT-23	72T0891	10.60
AD5060ARJZ-2500RL7	0.25	4	Voltage	8-SOT-23	72T0892	10.60
AD5060BRJZ-1500RL7	0.25	4	Voltage	8-SOT-23	72T0893	12.18
AD5060BRJZ-2500RL7	0.25	4	Voltage	8-SOT-23	72T0894	12.18
AD5060YRJZ-1500RL7	0.25	4	Voltage	8-SOT-23	72T0895	14.02
AD5061BRJZ-1500RL7	1.3	4	Voltage	8-SOT-23	72T0896	8.75
AD5061BRJZ-2500RL7	1.3	4	Voltage	8-SOT-23	72T0897	8.64
AD5061YRJZ-1500RL7	1.3	4	Voltage	8-SOT-23	72T0898	9.70
AD5062ARJZ-1500RL7	1.3	4	Voltage	8-SOT-23	72T0899	10.06
AD5062BRJZ-1500RL7	1.3	4	Voltage	8-SOT-23	72T0900	11.57
AD5062BRJZ-2500RL7	1.3	4	Voltage	8-SOT-23	72T0901	11.57
AD5063BRMZ	0.333	4	Voltage	10-MSOP	19M0786	11.21
AD5063BRMZ-1	0.333	4	Voltage	10-MSOP	52R8107	11.21
AD5421ACPZ-REEL7	...	50	Current	32-LFCSP	92T3206	10.92
AD5421BCPZ-REEL7	...	50	Current	32-LFCSP	92T3207	12.87
AD5421BREZ	...	50	Current	28-TSSOP	27T3838	11.05
AD5421CREZ	...	50	Current	28-TSSOP	39T6553	14.83
AD5541AACPZ-REEL7	1	1	Voltage	10-LFCSP	92T3208	12.38

➤ CONTINUED ➤

DIGITAL-TO-ANALOG CONVERTERS

16-BIT DIGITAL-TO-ANALOG CONVERTERS (CONT.)

Mfg. Part No.	DAC Update Rate (MSPS)	Settling Time (µs)	Output Type	Dimensions	Stock No.	Price Each 1-9
● AD5541AARMZ	1	1	Voltage	10-MSOP	83R9350	12.87
● AD5541ABCPZ-1-RL7	1	1	Voltage	8-LFCSP	92T3210	15.75
● AD5541ABCPZ-REEL7	1	1	Voltage	10-LFCSP	92T3209	15.75
● AD5541ABRMZ	1	1	Voltage	10-MSOP	83R9352	15.79
● AD5541ARZ	1.5	1	Voltage	8-SOIC	19M8816	17.72
● AD5541CRZ	1.5	1	Voltage	8-SOIC	59K4208	32.05
● AD5541JRZ	1.5	1	Voltage	8-SOIC	59K4209	17.73
● AD5542LRZ	1.5	1	Voltage	14-SOIC	12M8559	23.33
● AD5543BRZ	2.47	0.5	Current	8-SOIC	59K4216	14.07
● AD5546BRUZ	2	0.5	Voltage	28-TSSOP	59K4219	16.68
● AD5660ARJZ-1500RL7	0.125	8	Voltage	8-SOT-23	92T3217	7.50
● AD5660ARJZ-2500RL7	0.125	8	Voltage	8-SOT-23	92T3218	7.50
● AD5660ARJZ-3500RL7	0.125	8	Voltage	8-SOT-23	92T3219	7.68
● AD5660BRJZ-2500RL7	0.125	8	Voltage	8-SOT-23	92T3220	8.24
● AD5660BRJZ-3500RL7	0.125	8	Voltage	8-SOT-23	92T3221	8.24
● AD5660CRMZ-1	0.125	8	Voltage	8-MSOP	91R2582	9.04
● AD5660CRMZ-2	0.125	8	Voltage	8-MSOP	91R2584	9.37
● AD5660CRMZ-3	0.125	8	Voltage	8-MSOP	89M5010	9.37
● AD5662ARMZ-1	0.125	8	Voltage	8-MSOP	19M0832	6.10
● AD569JNZ	...	3	Voltage	28-PDIP	59K4309	48.17
● AD5760ACPZ	...	2.5	Voltage	24-LFCSP	76T1800	17.77
● AD5760BCPZ	...	2.5	Voltage	24-LFCSP	76T1802	21.51
● AD660ANZ	0.167	10	Voltage	24-DIP	12M8703	29.86
● AD669ANZ	0.167	6	Voltage	28-DIP	59K4499	29.86
● AD669BNZ	0.167	6	Voltage	28-DIP	59K4501	45.02
● AD768ARZ	30	35	Current	28-SOIC	96K2103	41.32
● AD7846KNZ	0.143	9	Voltage	28-PDIP	59K5658	47.48
● AD5065ARUZ	1.5	10.7	Voltage	14-TSSOP	24R9007	16.98
● AD5065BRUZ	1.5	10.7	Voltage	14-TSSOP	34P3160	17.12
● AD5545BRUZ	2	0.5	Current	16-TSSOP	28M3992	16.63
● AD5663RBRMZ-5	0.22	7	Voltage	10-MSOP	19M0837	9.92
● AD9122BCPZ	1230	0.02	Analog	72-LFCSP	33R2721	54.01
● AD9125BCPZ	1000	0.02	Current	72-LFCSP	51R0742	46.98
● AD9747BCPZ	250	...	Current	72-LFCSP	46M5305	27.99
● AD9779ABSVZ	1000	...	Current	100-TQFP	52M3014	49.79
● AD5064ARUZ-1	0.125	8	Voltage	16-TSSOP	05R6574	23.84
● AD5064BRUZ	0.125	8	Voltage	16-TSSOP	11P2915	27.41
● AD5064BRUZ-1	0.125	8	Voltage	16-TSSOP	71P7858	27.41
● AD5066BRUZ	...	12	Voltage	16-TSSOP	26R2460	23.85
● AD5544ARSZ	0.5	2	Voltage	28-SSOP	18M6080	30.49
● AD5755-1ACPZ	0.091	11	V or I	64-LFCSP	47T4695	28.65
● AD5755BCPZ-REEL7	0.091	11	V or I	64-LFCSP	92T3225	28.62
● AD5764CSUZ	1.26	10	Voltage	32-TQFP	19M1187	46.98
● AD5668ARUZ-3	0.095	6	Voltage	16-TSSOP	12M8670	18.50
● AD5669RARUZ-1	166	6	Voltage	16-TSSOP	18T2139	21.41
● AD5669RBRUZ-2	166	6	Voltage	16-TSSOP	18T2141	24.62

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
● EVAL-AD5660DKZ	AD5660 Evaluation Board	98M0873	92.82
● AD9125-M5375-EBZ	Evaluation Board Connected to ADL5375 Modulator	51R0741	538.32
● AD9125-M5372-EBZ	Evaluation Board Connected to ADL5372 Modulator	83R9367	538.32
● EVAL-AD5062EBZ	AD5062 Evaluation Board	63R9913	92.82
● EVAL-AD5063EBZ	AD5063 Evaluation Board	64T0013	92.82
● EVAL-AD5060EBZ	AD5060 Evaluation Board	63R9912	92.82
● EVAL-AD5064EBZ	AD5064 Evaluation Board	11P4298	92.82
● EVAL-AD5064-1EBZ	AD5064-1 Evaluation Board	34P4182	92.82
● EVAL-AD5541ASDZ	AD5541 Evaluation Board	39T6644	92.82
● EVAL-AD5755-1SDZ	AD5755-1 Evaluation Board	47T5000	149.07
● EVAL-AD5755SDZ	AD5755 Evaluation Board	55T9108	149.07
● EVAL-AD5421SDZ	AD5421 Evaluation Board	47T4997	55.32

(161817)

EMBEDDED DESIGN TOOLS

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(196530)

18-BIT DIGITAL-TO-ANALOG CONVERTERS

RoHS Compliant Available

ANALOG DEVICES

Applications:
- Medical instrumentation
- Test and measurement
- Industrial control
- Data acquisition systems
- Digital gain and offset adjustment

Mfg. Part No.	Interface	Supply Voltage (V)	Sample Rate (MSPS)	Package	Stock No.	Price Each 1-9
● AD5781ARUZ	3 Wire, Serial	2.7 - 5.5	1	20-TSSOP	83R9355	29.64
● AD5781BRUZ	3 Wire, Serial	9 - 33	1	20-TSSOP	83R9357	44.86
● AD5780BCPZ	Serial, SPI	2.7 - 5.5	...	24-LFCSP	76T1806	46.85
● AD5780ACPZ	Serial, SPI	2.7 - 5.5	...	24-LFCSP	76T1804	35.40

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
● EVAL-AD5781SDZ	AD5781, DAC, EVALUATION BOARD	91R2846	149.07
● EVAL-AD5780SDZ	AD5780, DAC, EVALUATION BOARD	76T2088	55.32

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8-BIT DIGITAL TO ANALOG CONVERTERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Applications:
- Mobile Communications
- Process Control and Industrial Automation
- Automotive

Mfg. Part No.	No. of. DACs	Supply Voltage (V)	DNL/INL (LSB)	Package	Stock No.	Price Each Each
● LTC2632HTS8-HZ8#PBF	2	4.5 - 5.5	0.5/0.05	8-TSOT-23	27T5652	2.79
● LTC2632HTS8-LZ8#PBF	2	2.7 - 5.5	0.5/0.05	8-TSOT-23	27T5661	2.79
● LTC2632HTS8-HMI8#TRPBF	2	4.5 - 5.5	0.5/0.05	8-TSOT-23	27T4161	3.56
● LTC2632HTS8-HZ8#TRPBF	2	4.5 - 5.5	0.5/0.05	8-TSOT-23	27T4167	3.56
● LTC2632HTS8-LMI8#TRPBF	2	2.7 - 5.5	0.5/0.05	8-TSOT-23	27T4173	3.56
● LTC2632HTS8-LX8#TRPBF	2	2.7 - 5.5	0.5/0.05	8-TSOT-23	27T4179	2.47
● LTC2632HTS8-LZ8#TRPBF	2	2.7 - 5.5	0.5/0.05	8-TSOT-23	27T4185	2.47
● LTC2635HMSE-HMI8#PBF	4	5.5 - 4.5	0.5/0.05	10-MSOP	52R9834	3.51
● LTC2635HMSE-HZ8#PBF	4	5.5 - 4.5	0.5/0.05	10-MSOP	52R9835	3.51
● LTC2635HMSE-LMO8#PBF	4	5.5 - 2.7	0.5/0.05	10-MSOP	52R9840	5.25
● LTC2635HMSE-LMX8#PBF	4	5.5 - 2.7	0.5/0.05	10-MSOP	52R9843	3.51
● LTC2635HMSE-LZ8#PBF	4	5.5 - 2.7	0.5/0.05	10-MSOP	52R9846	5.25
● LTC2635HUD-HMI8#PBF	4	5.5 - 4.5	0.5/0.05	16-QFN	52R9849	3.51
● LTC2635HUD-HZ8#PBF	4	5.5 - 4.5	0.5/0.05	16-QFN	52R9851	3.51
● LTC2635HUD-LMI8#PBF	4	5.5 - 2.7	0.5/0.05	16-QFN	52R9854	3.51
● LTC2635HUD-LMO8#PBF	4	5.5 - 2.7	0.5/0.05	16-QFN	52R9857	3.51
● LTC2635HUD-LMX8#PBF	4	5.5 - 2.7	0.5/0.05	16-QFN	52R9860	3.51
● LTC2635HUD-LZ8#PBF	4	5.5 - 2.7	0.5/0.05	16-QFN	52R9863	3.51
● LTC1665IGN#PBF	8	2.7 - 5.5	0.2/0.6	16-SSOP	56M3073	4.15

(176236)

10-BIT DIGITAL TO ANALOG CONVERTERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Applications:
- Mobile Communications
- Process Control and Industrial Automation
- Automotive

Mfg. Part No.	No. of. DACs	Supply Voltage (V)	DNL/INL (LSB)	Package	Stock No.	Price 1-99
● LTC2630HSC6-LZ10#PBF	1	2.7 - 5.5	0.5/0.2	6-SC-70	78T2748	2.15
● LTC2632HTS8-HZ10#PBF	2	4.5 - 5.5	0.5/0.2	8-TSOT-23	27T5650	3.34
● LTC2632HTS8-LZ10#PBF	2	2.7 - 5.5	0.5/0.2	8-TSOT-23	27T5659	3.34
● LTC2632HTS8-HMI10#TRPBF	2	4.5 - 5.5	0.5/0.2	8-TSOT-23	27T4157	4.27
● LTC2632HTS8-HZ10#TRPBF	2	4.5 - 5.5	0.5/0.2	8-TSOT-23	27T4163	3.09
● LTC2632HTS8-LMI10#TRPBF	2	2.7 - 5.5	0.5/0.2	8-TSOT-23	27T4169	4.27
● LTC2632HTS8-LZ10#TRPBF	2	2.7 - 5.5	0.5/0.2	8-TSOT-23	27T4181	4.27
● LTC2635HMSE-HMI10#PBF	4	5.5 - 4.5	0.5/0.2	10-MSOP	52R9832	7.94
● LTC2635HMSE-LMI10#PBF	4	5.5 - 2.7	0.5/0.2	10-MSOP	52R9836	5.31
● LTC2635HMSE-LMO10#PBF	4	5.5 - 2.7	0.5/0.2	10-MSOP	52R9838	7.94
● LTC2635HMSE-LMX10#PBF	4	5.5 - 2.7	0.5/0.2	10-MSOP	52R9841	5.31
● LTC2635HMSE-LZ10#PBF	4	5.5 - 2.7	0.5/0.2	10-MSOP	52R9844	7.94
● LTC2635HUD-HMI10#PBF	4	5.5 - 4.5	0.5/0.2	16-QFN	52R9847	5.31
● LTC2635HUD-HZ10#PBF	4	5.5 - 4.5	0.5/0.2	16-QFN	52R9850	5.31
● LTC2635HUD-LMI10#PBF	4	5.5 - 2.7	0.5/0.2	16-QFN	52R9852	5.31
● LTC2635HUD-LMO10#PBF	4	5.5 - 2.7	0.5/0.2	16-QFN	52R9855	5.31
● LTC2635HUD-LMX10#PBF	4	5.5 - 2.7	0.5/0.2	16-QFN	52R9858	7.94
● LTC2635HUD-LZ10#PBF	4	5.5 - 2.7	0.5/0.2	16-QFN	52R9861	5.31

(176235)

AUDIO AND VIDEO DIGITAL-TO-ANALOG CONVERTERS

RoHS Compliant Available

ANALOG DEVICES

These monolithic audio and video DACs have been designed for a wide range of applications such as high-end compact disc players, digital audio amplifiers, digital video systems, and video signal reconstruction.

AUDIO

The **AD1851** is a single 16-bit PCM audio DAC that provides a voltage output amplifier, DAC, serial-to-parallel register and voltage reference. The output amplifier achieves fast settling and high slew rates, providing a full ±3 V signal at load currents up to 8 mA. When used in current output mode, the **AD1851** provides a ±1 mA output signal.

Mfg. Part No.	DNR (dB)	SNR (dB)	THD+N at 1kHz (-dB)	Settling Time (us)	Supply Voltage Max (V)	Package	Stock No.	Price Each 1-9
AD1851RZ	96	110	90	1.5	5	16-SOIC	19M8797	11.76

VIDEO

The **ADV7123, ADV7125, and ADV7127** are high speed video DACs with complementary outputs, a standard parallel CMOS/TTL input interface and a high impedance, analog output current source all on a single monolithic chip. The **ADV7123 and ADV7125** consist of three DACs with update rates of 330 MSPS while the **ADV7127** is comprised of only a single DAC with an update rate of 240 MSPS. All DACs have a differential and integral nonlinearity of +/-1 LSB and a maximum supply voltage of 5V.

Mfg. Part No.	Resolution	Number of DACs	Clock Frequency (MHz)	Package	Stock No.	Price Each 1-9
ADV7125KSTZ50	8bit	3	50	48-LQFP	19M8776	8.87
ADV7125KSTZ140	8bit	3	140	48-LQFP	19M8775	11.64
ADV7127KRUZ50	10bit	1	50	24-TSSOP	87H9716	10.38
ADV7123KSTZ50	10bit	3	50	48-LQFP	19M8773	11.10
ADV7123KSTZ140	10bit	3	140	48-LQFP	19M8772	12.34
ADV7123JSTZ240	10bit	3	240	48-LQFP	19M8771	17.03

(34805)

NANO DIGITAL TO ANALOG CONVERTERS

RoHS Compliant Available

ANALOG DEVICES

Applications:
- Optical transceivers
- Base-station power amplifiers
- Process control (PLC I/O cards)
- Industrial automation
- Data acquisition systems

Features:
- User selectable gain of 1 or 2 (GAIN pin)
- Reset to zero scale or midscale (RSTSEL pin)
- 1.8 V logic compatibility
- 50 MHz SPI with readback or daisy-chain

The **AD5686R/AD5685R/AD5684R**, members of the nanoDAC+® family, are low power, buffered voltage output DACs. The devices include a 2.5 V, 2 ppm/°C internal reference (enabled by default) and a gain select pin giving a full-scale output of 2.5 V (gain = 1) or 5 V (gain = 2).

The **AD5686R/AD5685R/AD5684R** also incorporate a power-on reset circuit and a RSTSEL pin that ensures that the DAC outputs power up to zero scale or midscale and remains there until a valid write takes place. Each part contains a per-channel power-down feature that reduces the current consumption of the device to 4 µA at 3 V while in power-down mode.

Mfg. Part No.	Resolution (Bits)	Interface	Update Rate (MSPS)	Accuracy	Package	Stock No.	Price Each 1-9
AD5684RARUZ	12	Serial	25	±2 LSB INL	16-TSSOP	94T0022	10.88
AD5684RBRUZ	12	Serial	25	±1 LSB INL	16-TSSOP	94T0025	10.57
AD5685RARUZ	14	Serial	25	±1 LSB INL	16-TSSOP	94T0027	11.04
AD5685RBRUZ	14	Serial	25	±4 LSB INL	16-TSSOP	94T0030	12.68
AD5686RARUZ	16	Serial	25	±8 LSB INL	16-TSSOP	94T0033	15.43
AD5686RBRUZ	16	Serial	25	±2 LSB INL	16-TSSOP	94T0036	17.75

(208167)

12-BIT DIGITAL TO ANALOG CONVERTERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Applications:
- Mobile Communications
- Process Control and Industrial Automation
- Instrumentation
- Automatic Test Equipment
- Automotive

Mfg. Part No.	No. of. DACs	Supply Voltage (V)	DNL/INL (LSB)	Package	Stock No.	Price Each 1-24
LTC1451IS8#PBF	1	4.5 - 5.5	0.5/4	8-SOIC	56M1349	9.93
LTC2630AISC6-LZ12#PBF	1	2.7 - 5.5	1/0.5	6-SC-70	78T2726	3.14
LTC2632HTS8-HZ12#PBF	2	4.5 - 5.5	1/1	8-TSOT-23	27T5651	4.50
LTC2632HTS8-LMI12#PBF	2	2.7 - 5.5	1/1	8-TSOT-23	27T5654	5.83
LTC2632HTS8-LZ12#PBF	2	2.7 - 5.5	1/1	8-TSOT-23	27T5660	4.50
LTC2632HTS8-HMI12#TRPBF	2	4.5 - 5.5	1/1	8-TSOT-23	27T4159	5.76
LTC2632HTS8-HZ12#TRPBF	2	4.5 - 5.5	1/1	8-TSOT-23	27T4165	4.13
LTC2632HTS8-LZ12#TRPBF	2	2.7 - 5.5	1/1	8-TSOT-23	27T4183	5.76
LTC2635HMSE-HMI10#PBF	4	5.5 - 4.5	0.5/0.2	10-MSOP	52R9832	7.94
LTC2635HMSE-LMI10#PBF	4	5.5 - 2.7	0.5/0.2	10-MSOP	52R9836	5.31
LTC2635HMSE-LMO10#PBF	4	5.5 - 2.7	0.5/0.2	10-MSOP	52R9838	7.94
LTC2635HMSE-LMX10#PBF	4	5.5 - 2.7	0.5/0.2	10-MSOP	52R9841	5.31
LTC2635HMSE-LZ10#PBF	4	5.5 - 2.7	0.5/0.2	10-MSOP	52R9844	7.94

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12-BIT DIGITAL TO ANALOG CONVERTERS (CONT.)

Mfg. Part No.	No. of. DACs	Supply Voltage (V)	DNL/INL (LSB)	Package	Stock No.	Price Each 1-24
LTC2635HUD-HMI10#PBF	4	5.5 - 4.5	0.5/0.2	16-QFN	52R9847	5.31
LTC2635HUD-HZ10#PBF	4	5.5 - 4.5	0.5/0.2	16-QFN	52R9850	5.31
LTC2635HUD-LMI10#PBF	4	5.5 - 2.7	0.5/0.2	16-QFN	52R9852	5.31
LTC2635HUD-LMO10#PBF	4	5.5 - 2.7	0.5/0.2	16-QFN	52R9855	5.31
LTC2635HUD-LMX10#PBF	4	5.5 - 2.7	0.5/0.2	16-QFN	52R9858	7.94
LTC2635HUD-LZ10#PBF	4	5.5 - 2.7	0.5/0.2	16-QFN	52R9861	5.31
LTC2635HMSE-LMX12#PBF	4	2.7 - 5.5	1/2.5	10-MSOP	52R9842	11.13
LTC2635HMSE-LZ12#PBF	4	2.7 - 5.5	1/2.5	10-MSOP	52R9845	11.13
LTC2635HUD-HMI12#PBF	4	4.5 - 5.5	1/2.5	16-QFN	52R9848	7.43
LTC2635HUD-LMI12#PBF	4	2.7 - 5.5	1/2.5	16-QFN	52R9853	7.43
LTC2635HUD-LMO12#PBF	4	2.7 - 5.5	1/2.5	16-QFN	52R9856	11.13
LTC2635HUD-LMX12#PBF	4	2.7 - 5.5	1/2.5	16-QFN	52R9859	11.13
LTC2635HUD-LZ12#PBF	4	2.7 - 5.5	1/2.5	16-QFN	52R9862	11.13
LTC2655IUF-L12#PBF	4	2.7 - 5.5	0.1/0.5	20-QFN	84R4952	8.28
LTC2655IUF-H12#PBF	4	4.5 - 5.5	0.1/0.5	20-QFN	84R4950	8.28
LTC2655IGN-L12#PBF	4	2.7 - 5.5	0.1/0.5	16-SSOP	84R4948	8.28
LTC2655IGN-H12#PBF	4	4.5 - 5.5	0.1/0.5	16-SSOP	84R4946	12.39
LTC2654CGN-H12#PBF	4	4.5 - 5.5	0.1/0.5	16-SSOP	68R1383	10.26
LTC2654CGN-L12#PBF	4	2.7 - 5.5	0.1/0.5	16-SSOP	68R1385	10.26
LTC2654CUF-H12#PBF	4	4.5 - 5.5	0.1/0.5	20-QFN	68R1387	10.26
LTC2654CUF-L12#PBF	4	2.7 - 5.5	0.1/0.5	20-QFN	68R1389	10.26
LTC2657IFE-H12#PBF	8	4.5 - 5.5	0.1/0.5	20-TSSOP	51R1502	17.22
LTC2657IFE-L12#PBF	8	2.7 - 5.5	0.1/0.5	20-TSSOP	51R1503	17.22
LTC2657IUFD-H12#PBF	8	4.5 - 5.5	0.1/0.5	20-QFN	51R1504	14.37
LTC2657IUFD-L12#PBF	8	2.7 - 5.5	0.1/0.5	20-QFN	51R1505	17.22

(167486)

16-BIT DIGITAL TO ANALOG CONVERTERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Applications:
- Mobile Communications
- Process Control and Industrial Automation
- Instrumentation
- Automatic Test Equipment
- Automotive

Mfg. Part No.	No. of. DACs	Supply Voltage (V)	DNL/INL (LSB)	Package	Stock No.	Price Each 1-24
LTC1655IS8#PBF	1	4.5 - 5.5	0.5/8	8-SOIC	56M2913	18.97
LTC1595BCS8#PBF	1	4.5 - 5.5	1/1	8-SOIC	56M2325	23.48
LTC1595ACS8#PBF	1	4.5 - 5.5	1/1	8-SOIC	56M2313	39.25
LTC1595CCS8#PBF	1	4.5 - 5.5	1/1	8-SOIC	56M2337	20.16
LTC2752BCLX#PBF	2	2.7 - 5.5	1/2	48-QFP	84R4956	12.50
LTC2752ACLX#PBF	2	2.7 - 5.5	1/1	48-QFP	84R4954	14.21
LTC2752BCLX#PBF	2	2.7 - 5.5	1/2	48-QFP	84R4956	12.50
LTC2655BIGN-H16#PBF	4	5.5 - 4.5	0.3/2	16-SSOP	84R4930	20.19
LTC2654BCGN-H16#PBF	4	4.5 - 5.5	0.3/2	16-SSOP	68R1367	20.03
LTC2654BCGN-L16#PBF	4	2.7 - 5.5	0.3/2	16-SSOP	68R1369	20.03
LTC2654BCUF-H16#PBF	4	4.5 - 5.5	0.3/2	20-QFN	68R1371	20.03
LTC2654BCUF-L16#PBF	4	2.7 - 5.5	0.3/2	20-QFN	68R1373	20.03
LTC2655BIGN-L16#PBF	4	2.7 - 5.5	0.3/2	16-SSOP	84R4932	24.20
LTC2655BIUF-H16#PBF	4	4.5 - 5.5	0.3/2	20-QFN	84R4934	24.20
LTC2655BIUF-L16#PBF	4	2.7 - 5.5	0.3/2	20-QFN	84R4936	20.19
LTC2609CGN#PBF	4	2.7 - 5.5	1/16	16-SSOP	56M5891	19.01
LTC2657BIFE-L16#PBF	8	2.7 - 5.5	0.3/2	20-TSSOP	51R1499	35.35
LTC2656CCFE-L16#PBF	8	2.7 - 5.5	0.3/6	20-TSSOP	24T0444	24.40
LTC2657BIUFD-H16#PBF	8	4.5 - 5.5	0.3/2	20-QFN	51R1500	29.50
LTC2657BIUFD-L16#PBF	8	2.7 - 5.5	0.3/2	20-QFN	51R1501	35.35
LTC2600IGN#PBF	8	2.5 - 5.5	1/12	16-SSOP	56M5799	26.50

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(196535)

DIGITAL-TO-ANALOG CONVERTERS

PRECISION D/A CONVERTERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Mfg. Part No.	No. of DACs	Output Type	Settling Time (us)	Package	Stock No.	Price Each 1-24
10-BIT						
● LTC1669CMS8#PBF	1	Voltage	30	8-MSOP	56M3115	3.53
● LTC1661CN8#PBF	2	Voltage	30	8-DIP	56M3003	3.40
● LTC1661IMS8#PBF	2	Voltage	30	8-MSOP	56M3005	3.79
● LTC1661CMS8#PBF	2	Voltage	30	8-MSOP	56M2999	3.40
● LTC1664CGN#PBF	4	Voltage	19	16-SSOP	56M3055	6.27
● LTC1660CGN#PBF	8	Voltage	30	16-SSOP	56M2987	12.71
● LTC1660IGN#PBF	8	Voltage	30	16-SSOP	56M2993	14.25
12-BIT						
● LTC1257CS8#PBF	1	Voltage	6	8-SO	55M9719	8.93
● LTC1453CS8#PBF	1	Voltage	14	8-SO	56M1367	9.80
● LTC1659CS8#PBF	1	Voltage	14	8-SO	56M2977	8.37
● LTC2621CDD#PBF	1	Voltage	7	10-DFN	56M6023	4.03
● LTC8043ES8#PBF	1	Current	1	8-SO	57M0608	9.15
● LTC8043FS8#PBF	1	Current	1	8-SO	57M0614	8.79
● LTC2626CDD-1#PBF	1	Voltage	2.7	10-DFN	56M6072	4.23
● LTC1257CN8#PBF	1	Voltage	6	8-NPDIP	55M9717	8.46
● LTC1451CN8#PBF	1	Voltage	14	8-DIP	56M1341	8.68
● LTC1451CS8#PBF	1	Voltage	14	8-NSOIC	56M1343	9.17
● LTC1655CS8#PBF	1	Voltage	20	8-SOIC	56M2907	17.33
● LTC1448CN8#PBF	2	Voltage	14	8-DIP	56M1305	11.99
● LTC1590CS#PBF	2	Current	...	16-SOIC	56M2245	12.45
● LTC2622CMS8#PBF	2	Voltage	7	8-MSOP	56M6035	5.51
● LTC1446LCS8#PBF	2	Voltage	14	8-SOIC	56M1295	13.47
● LTC1448CS8#PBF	2	Voltage	14	8-SOIC	56M1307	12.17
● LTC1446CS8#PBF	2	Voltage	14	8-NSOIC	56M1283	12.17
● LTC2754IUKG-12#PBF	4	Current	2	52-QFN	24R3304	15.69
● LTC2620CGN#PBF	8	Voltage	...	16-SSOP	56M6011	15.68
● LTC2620CUFD#PBF	8	Voltage	10	20-DFN	44P3766	9.00
14-BIT						
● LTC1658CS8#PBF	1	Voltage	12	8-SOIC	56M2959	10.56
● LTC1591CG#PBF	1	Current	2	28-SSOP	56M2267	20.50
● LTC2612CMS8#PBF	2	Voltage	7	8-MSOP	56M5927	6.91
● LTC2755CUP-14#PBF	4	Current	2	64-QFN	95M6488	21.66
● LTC2755IUP-14#PBF	4	Current	2	64-QFN	95M6492	26.01
● LTC2610CUFD#PBF	8	Voltage	10	20-DFN	44P3762	18.77
● LTC2610CGN#PBF	8	Voltage	10	16-SSOP	56M5903	17.82
16-BIT						
● LTC1597-1ACG#PBF	1	Current	1	28-SSOP	56M2419	45.04
● LTC1597ACG#PBF	1	Current	1	28-SSOP	56M2443	45.04
● LTC1668CG#PBF	1	Current	0.02	28-SSOP	56M3095	23.74
● LTC1668IG#PBF	1	Current	0.02	28-SSOP	56M3099	25.76
● LTC1592ACG#PBF	1	Current	2	16-SSOP	56M2279	44.78
● LTC1650ACS#PBF	1	Voltage	4	16-SOIC	56M2875	26.17
● LTC2641CS8-16#PBF	1	Voltage	1	8-SOIC	12P7551	12.90
● LTC2641IS8-16#PBF	1	Voltage	1	8-SOIC	12P7553	15.46
● LTC2642CMS-16#PBF	1	Voltage	1	10-MSOP	56M6248	12.90
● LTC2602IMS8#PBF	2	Voltage	10	8-MSOP	56M5823	10.74
● LTC2602CMS8#PBF	2	Voltage	7	8-MSOP	56M5819	9.60
● LTC2604IGN-1#PBF	4	Voltage	10	16-SSOP	56M5833	17.60
● LTC2604IGN#PBF	4	Voltage	10	16-SSOP	56M5835	17.60
● LTC2755ACUP-16#PBF	4	Current	2	64-QFN	95M6478	33.75
● LTC2755AIUP-16#PBF	4	Current	2	64-QFN	95M6480	40.49
● LTC2755BIUP-16#PBF	4	Current	2	64-QFN	95M6484	32.51
● LTC2754AIUKG-16#PBF	4	Current	2	52-QFN	24R3302	40.49
● LTC2754BCUKG-16#PBF	4	Current	2	52-QFN	24R3303	25.50
● LTC2600CUFD#PBF	8	Voltage	10	20-DFN	44P3758	23.77
● LTC2600CGN#PBF	8	Voltage	10	16-SSOP	56M5795	22.58

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(196545)

DIGITAL-TO-ANALOG CONVERTERS

RoHS Compliant Available

MICROCHIP

Features

- 12-Bit resolution
- ±0.2LSB DNL (typ)
- ±2LSB INL (typ)
- Rail-to-rail output
- SPI™ interface with 20MHz clock support
- Simultaneous latching of the dual DACs w/LDAC
- Fast settling time of 4.5µs
- Selectable unity or 2x gain output
- 450 kHz multiplier mode
- External VREF input
- 2.7V to 5.5V single-supply operation
- Extended temperature range: -40°C to +125°C

Mfg. Part No.	Channels	Package	Stock No.	Price Each 1-25
● MCP4725A2T-E/CH	1	6-SOT-23	64T2462	0.96
● MCP4921-E/P	1	8-DIP	08J8743	1.97
● MCP4801-E/MS	1	8-MSOP	53R0065	1.13
● MCP4801-E/P	1	8-DIP	53R0066	1.13
● MCP4811-E/MS	1	8-MSOP	53R0076	1.62
● MCP4811-E/P	1	8-DIP	53R0077	1.62
● MCP4821-E/MS	1	8-MSOP	31K2968	2.30
● MCP4821-E/SN	1	8-SOIC	31K2970	2.41
● MCP4901-E/MS	1	8-MSOP	53R0089	0.96
● MCP4901-E/P	1	8-DIP	53R0090	0.96
● MCP4911-E/MS	1	14-MSOP	53R0101	1.38
● MCP4911-E/P	1	8-DIP	53R0102	1.38
● MCP4921-E/MS	1	8-MSOP	08J8742	1.97
● MCP4801-E/MC	1	8-DFN	53R0064	1.13
● MCP4811-E/MC	1	8-DFN	53R0075	1.62
● MCP4901-E/MC	1	8-DFN	53R0088	0.96
● MCP4911-E/MC	1	8-DFN	53R0100	1.38
● MCP4802-E/MS	2	8-MSOP	53R0071	1.48
● MCP4802-E/P	2	8-DIP	53R0072	1.48
● MCP4802-E/SN	2	8-SOIC	53R0073	1.48
● MCP4812-E/MS	2	8-MSOP	53R0082	2.11
● MCP4812-E/P	2	8-DIP	53R0083	2.11
● MCP4812-E/SN	2	8-SOIC	53R0084	2.11
● MCP4822-E/MS	2	8-MSOP	31K2973	3.00
● MCP4822-E/SN	2	8-SOIC	31K2975	3.00
● MCP4902-E/P	2	14-DIP	53R0095	1.29
● MCP4902-E/SL	2	14-SOIC	53R0096	1.29
● MCP4902-E/ST	2	14-TSSOP	53R0097	1.29
● MCP4912-E/P	2	14-DIP	53R0107	1.83
● MCP4912-E/SL	2	14-SOIC	53R0108	1.83
● MCP4912-E/ST	2	14-TSSOP	53R0109	1.83
● MCP4922-E/P	2	14-DIP	61K2950	2.62
● MCP4922-E/ST	2	14-TSSOP	08J8749	2.62
● MCP4728-E/UN	4	10-MSOP	08R1808	1.89

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DIGITAL-TO-ANALOG CONVERTERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	No. of DACs	Resolution (Bits)	Interface Type	Package	Stock No.	Price Each 1-9
● DAC0800LCM/NOPB	1	8	CMOS, Parallel, TTL	16-NSOIC	41K1761	1.61
● DAC0800LCN/NOPB	1	8	CMOS, Parallel, TTL	16-DIP	41K1763	1.63
● DAC081C081CIMK/NOPB	1	8	2 Wire, Serial	6-TSOT	84M7842	1.69
● DAC081C085CIMM/NOPB	1	8	2 Wire, Serial	8-MSOP	84M7846	1.69
● DAC101C081CIMK/NOPB	1	8	2 Wire, Serial	6-TSOT	84M7853	0.74
● DAC0808LCM/NOPB	1	8	CMOS, Parallel, TTL	16-NSOIC	41K1767	1.90
DAC0808LCN	1	8	CMOS, Parallel, TTL	16-MDIP	07B5074	2.23
● DAC0808LCN/NOPB	1	8	CMOS, Parallel, TTL	16-MDIP	41K1769	1.92
● DAC081S101CIMK/NOPB	1	8	Serial, SPI	6-TSOT	65K5278	1.69
● DAC0830LCN/NOPB	1	8	CMOS, Parallel, TTL	20-DIP	41K1770	6.27
● DAC0832LCN/NOPB	1	8	CMOS, Parallel, TTL	20-DIP	41K1771	3.53
● DAC0832LCWM/NOPB	1	8	CMOS, Parallel, TTL	20-WSOIC	41K1772	4.20
● DAC101S101CIMK/NOPB	1	10	3 Wire, Serial	6-TSOT	65K5280	1.69
● DAC101S101QCMK/NOPB	1	10	3 Wire, Serial	6-TSOT	19P7820	0.83
● DAC121C081CIMK/NOPB	1	12	I2C, Serial	6-TSOT	75M6026	1.31
● DAC121C085CIMM/NOPB	1	12	I2C, Serial	8-MiniSOIC	75M6027	2.75
● DAC121S101CIMK/NOPB	1	12	3 Wire, Serial	6-TSOT	65K5283	2.75
● DAC121S101QCMK/NOPB	1	12	3 Wire, Serial	6-TSOT	71R5090	2.96
● DAC121S101CIMM/NOPB	1	12	3 Wire, Serial	8-MiniSOIC	65K5285	2.75
● DAC161S055CISQ/NOPB	1	16	4 Wire, Serial	16-LLP	20T1906	6.27
● DAC161P997CISQ/NOPB	1	16	Serial	16-LLP	59T4807	4.18
● DAC082S085CIMM/NOPB	2	8	3 Wire, Serial	10-MSOP	12M9632	1.91
● DAC102S085CIMM/NOPB	2	10	3 Wire, Serial	10-MiniSOIC	12M9640	3.34
● DAC102S085CISD/NOPB	2	10	3 Wire, Serial	10-LLP	32M0879	1.59
● DAC122S085CIMM/NOPB	2	12	3 Wire, Serial	10-MiniSOIC	12M9648	4.30
● DAC084S085CIMM/NOPB	4	8	3 Wire, Serial	10-MSOP	12M9636	1.02

➤ CONTINUED ➤

DIGITAL-TO-ANALOG CONVERTERS (CONT.)

Mfg. Part No.	No. of DACs	Resolution (Bits)	Interface Type	Package	Stock No.	Price Each 1-9
DAC104S085CIMM/NOPB	4	10	3 Wire, Serial	10-MiniSOIC	12M9644	4.77
DAC124S085CIMM/NOPB	4	12	3 Wire, Serial	10-MiniSOIC	12M9652	6.38

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8 BIT DIGITAL-TO-ANALOG CONVERTERS

RoHS Compliant Available

TEXAS INSTRUMENTS

TI's portfolio of D to A Converters (DACs) includes high accuracy (+/- 1 LSB INL), two or four quadrant capable Multiplying D to A Converters (MDACs) provide high performance solutions. Choose your output buffer to meet your application needs, i.e., low offset, high voltage, high speed (fast slew rate).

Mfg. Part No.	Settling Time (µs)	Sample Rate	DNL Max. (±LSB)	INL Max. (±LSB)	Package	Stock No.	Price Each 1-9
SINGLE							
DAC5571IDBVT	8	188 kSPS	0.25	1	6-SOT	90H1170	2.86
TLC7524IN	0.1	10 MSPS	0.5	0.5	16-PDIP	08F9151	4.26
DUAL							
TLC7528CDW	0.1	10 MSPS	0.5	0.5	20-SOIC	08F9152	4.71
TLC7628CN	0.1	10 MSPS	0.5	0.5	20-PDIP	76C7515	5.52
TLV5626ID	0.8	278 kSPS	0.5	1	8-SOIC	76C8957	6.39
QUAD							
DAC5574IDGS	8	188 kSPS	0.25	0.5	10-VSSOP	90H1173	6.59
TLC5620CN	10	48 kSPS	0.9	1	14-PDIP	52F2731	4.99
TLC7226CDW	7	143 kSPS	1	1	20-SOIC	35K1223	6.19
TLC7226IDW	5	143 kSPS	1	1	20-SOIC	76C7490	6.58
TLC7226IN	5	143 kSPS	1	1	20-PDIP	76C7492	5.74
TLV5627IPW	2.5	107 kSPS	0.5	0.5	16-TSSOP	76C8964	6.30
OCTAL							
DAC5578SRGET	7	...	0.1	0.25	24-VQFN	91R2082	7.33
DAC5578SPWR	7	...	0.1	0.25	16-TSSOP	01T0028	6.38
TLV5628IDW	10	45 kSPS	0.9	1	16-SOIC	76C8967	6.78

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10 BIT DIGITAL-TO-ANALOG CONVERTERS

RoHS Compliant Available

TEXAS INSTRUMENTS

TI's portfolio of D to A Converters (DACs) includes high accuracy (+/- 1 LSB INL), two or four quadrant capable Multiplying D to A Converters (MDACs) provide high performance solutions. Choose your output buffer to meet your application needs, i.e., low offset, high voltage, high speed (fast slew rate).

Mfg. Part No.	Settling Time (µs)	Sample Rate	DNL Max. (±LSB)	INL Max. (±LSB)	Pkg.	Stock No.	Price Each 1-9
SINGLE							
DAC6571IDBVT	9		0.5	2	6-SOT-23	90H1177	3.94
TLC5615CD	12.5	75kSPS	0.5	1	8-SOIC	83F9158	6.14
TLV5606IDGK	3		1	1.5	8-VSSOP	76C8888	4.54
DUAL							
DAC2900Y/250	0.03		1	1	48-TQFP	74C9116	20.18
DAC5652IPFB	0.02		1	0.5	48-TQFP	28K3013	17.60
DAC3152IRGZT	10000	500MSPS	0.1	0.15	48-VQFN	83T1598	19.94
QUAD							
DAC6573IPW	9		0.5	2	16-TSSOP	90H1178	7.86
OCTAL							
DAC6578SRGET	7	...	0.2	0.5	24-VQFN	91R2084	9.56
DAC6578SPWR	7	...	0.2	0.5	16-TSSOP	01T0031	8.29

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12 BIT DIGITAL-TO-ANALOG CONVERTERS

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TEXAS INSTRUMENTS

TI's portfolio of D to A Converters (DACs) includes high accuracy (+/- 1 LSB INL), two or four quadrant capable Multiplying D to A Converters (MDACs) provide high performance solutions. Choose your output buffer to meet your application needs, i.e., low offset, high voltage, high speed (fast slew rate).

Mfg. Part No.	Settling Time (µs)	Sample Rate	DNL Max. (±LSB)	INL Max. (±LSB)	Pkg.	Stock No.	Price Each 1-9
SINGLE							
DAC7311IDCKR	6	225 kSPS	1	1	6-SC70	08P4365	2.59
DAC7512N/250	10	95 kSPS	1	8	6-SOT	74C9152	4.54
DAC7512E/250	10	95 kSPS	1	8	8-VSSOP	74C9151	4.65
DAC7513N/250	10	95 kSPS	1	8	8-SSOP	35C1624	5.07
DAC7513E/250	10	95 kSPS	1	8	8-VSSOP	74K3714	5.18
DAC7551IDRNT	5	500 kSPS	0.5	1	12-USON	60K9170	3.94

CONTINUED

12 BIT DIGITAL-TO-ANALOG CONVERTERS (CONT.)

Mfg. Part No.	Settling Time (µs)	Sample Rate	DNL Max. (±LSB)	INL Max. (±LSB)	Pkg.	Stock No.	Price Each 1-9
DAC7571IDBVT	10	50 kSPS	1	4	6-SOT	32H5598	4.30
DAC7571IDBVR	10	50 kSPS	1	4	6-SOT	32H5597	3.70
DAC7611P	10	132 kSPS	1	1	8-PDIP	14M8157	9.45
DAC7811IDGSR	0.2	5 MSPS	1	1	10-VSSOP	85K0568	6.09
DAC7821IPW	0.2	10 MSPS	1	1	20-TSSOP	80K1419	6.69
DAC8043U	1	284 kSPS	1	1	8-SOIC	17M6576	10.33
DAC811AH	4	250 kSPS	0.5	0.25	28-CDIP SB	72K7277	75.96
DAC811JP	4	250 kSPS	0.5	0.25	28-PDIP	14M8163	39.17
TLV5616CD	3	102 kSPS	1	4	8-SOIC	76C8904	9.50
TLV5616CP	3	102 kSPS	1	4	8-PDIP	76C8908	9.03
TLV5619IDW	1	1 MSPS	1	4	20-SOIC	76C8926	11.60
TLV5636IDGK	1	233 kSPS	1	4	8-VSSOP	76C8988	12.35
DUAL							
DAC7552IRGTR	5	1 MSPS	0.5	1	16-QFN	43K3290	5.61
DAC7553IRGTT	5	1 MSPS	0.5	1	16-QFN	60K9172	7.23
TLC5618AQD.	2.5	75kSPS	1	4	8-SOIC	76C7469	11.33
TLV5618AID	2.5	93 kSPS	1	4	8-SOIC	76C8918	13.69
TLV5618AIP	2.5	93 kSPS	1	4	8-PDIP	76C8920	13.18
TLV5638ID	1	233 kSPS	1	4	8-SOIC	76C8995	12.54
DAC3162IRGZT	10	500MSPS	0.4	0.5	48-VQFN	83T1599	23.99
QUAD							
DAC7554IDGS	5	1 MSPS	0.5	1	10-VSSOP	65J4377	10.86
DAC7565IAPW	8	225 kSPS	0.5	1	16-TSSOP	94M6804	8.92
DAC7573IPW	10	43 kSPS	1	8	16-TSSOP	87H0866	17.23
DAC7614U	10	89 kSPS	1	1	16-SOIC	96K4486	16.83
DAC7714U	10	89 kSPS	1	1	16-SOIC	35C1647	25.56
DAC7724U	10	100 kSPS	1	1	28-SOIC	16M2420	26.32
OCTAL							
DAC7578SRGET	7	...	0.25	1	24-VQFN	91R0760	11.89
DAC7678SRGET	7	...	0.25	1	24-VQFN	91R0761	12.92
DAC7558IRHBT	5	500 kSPS	0.5	1	32-QFN	33K5130	14.96
DAC7568ICPW	5	225 kSPS	0.25	0.3	16-TSSOP	08R4452	17.88
DAC7578SPWR	7	...	0.25	1	16-TSSOP	01T0034	11.69
DAC7678SPWR	7	...	0.25	1	16-TSSOP	01T0037	11.24
DAC7728SPAG	15	...	1	1	64-TQFP	53R2223	20.50

EVALUATION MODULES

Mfg. Part No.	Description	Stock No.	Price Each
DAC7311EVM	DAC7311 DAC Evaluation Module	55R2888	50.00
DAC7716EVM	DAC7716 DAC Evaluation Module	55R2890	50.00

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14 BIT DIGITAL-TO-ANALOG CONVERTERS

RoHS Compliant Available

TEXAS INSTRUMENTS

TI's portfolio of D to A Converters (DACs) includes high accuracy (+/- 1 LSB INL), two or four quadrant capable Multiplying D to A Converters (MDACs) provide high performance solutions. Choose your output buffer to meet your application needs, i.e., low offset, high voltage, high speed (fast slew rate).

Mfg. Part No.	Settling Time (µs)	Sample Rate	DNL Max. (±LSB)	INL Max. (±LSB)	Pkg.	Stock No.	Price Each 1-9
SINGLE							
DAC8311IDCKT	6	225 kSPS	2	1	6-SC70	09P8596	5.49
DAC8801IDGKT	0.5	2 MSPS	0.5	1	8-VSSOP	73J8224	11.26
DUAL							
DAC5672IPFB	0.02	275 MSPS	3	4	48-TQFP	65J4375	25.35
QUAD							
DAC8164IAPW	8	225 kSPS	1	2	16-TSSOP	89M0335	11.24
OCTAL							
DAC8218SRGZT	15	...	1	2	48-VQFN	60R2410	25.43
DAC8228SPAG	15	...	1	2	64-TQFP	53R2225	26.28
DAC8228SRTQT	15	...	1	2	56-QFN	53R2226	25.43

EVALUATION MODULES

Mfg. Part No.	Description	Stock No.	Price Each
DAC8311EVM	DAC8311 DAC Evaluation Module	55R2893	50.00
DAC8218EVM	DAC8218 DAC Evaluation Module	74R3113	76.50

(167490)

DIGITAL-TO-ANALOG CONVERTERS • DIGITAL POTENTIOMETERS

1

16 BIT DIGITAL-TO-ANALOG CONVERTERS

RoHS Compliant Available

TEXAS INSTRUMENTS

TI's portfolio of D to A Converters (DACs) includes high accuracy (+/- 1 LSB INL), two or four quadrant capable Multiplying D to A Converters (MDACs) provide high performance solutions. Choose your output buffer to meet your application needs, i.e., low offset, high voltage, high speed (fast slew rate).

SINGLE

Mfg. Part No.	Settling Time (µs)	Sample Rate	DNL Max. (±LSB)	INL Max. (±LSB)	Pkg.	Stock No.	Price Each 1-9
DAC5681ZIRGCT	0.0104	1GSPS	2	4	64-VQFN	32R8551	52.87
DAC712UB	10	100 kSPS	1	2	28-SOIC	10M5148	30.06
DAC712UK	10	100 kSPS	1	2	28-SOIC	67C3271	27.73
DAC714P	10	86 kSPS	1	1	16-PDIP	78K7952	36.38
DAC715PK	6	100 kSPS	1	2	28-PDIP	74C9139	48.92
DAC3283IRGZT	0.0104	800 MSPS	2	4	36-VQFN	74R0559	46.35
DAC716UB	10	86 kSPS	2	2	16-SOIC	74C9146	37.47
DAC7731E	3	172 kSPS	3	3	24-SSOP	74C9254	19.34
DAC8501E/250	10	93 kSPS	1	64	8-VSSOP	74K3715	8.53
DAC8531E/250	10	93 kSPS	1	64	8-VSSOP	72K8437	8.20
DAC8551IDGKT	10	200 kSPS	1	8	8-VSSOP	52K5717	7.13
DAC8571IDGK	10	43 kSPS	1	65	8-VSSOP	20H5068	7.54
DAC8581IPW	0.65	3 MSPS	0.5	64	16-TSSOP	53K9304	6.22
DAC8811IBDGKT	0.5	2 MSPS	1	1	8-VSSOP	73J8228	15.45
DAC8830IBD	1	1 MSPS	1	1	8-SOIC	36M3783	14.23
DAC8830ICD	1	1 MSPS	1	1	8-SOIC	34M2210	14.51
DAC8831ICD	1	2 MSPS	1	1	14-SOIC	33K5140	15.22
DAC8871SBPW	1	...	1	1	16-TSSOP	50M8837	22.48
DUAL							
DAC3482IRKDR	...	1.25 GSPS	2	4	88-WQFN	51T1816	48.79
DAC5682ZIRGCT	0.0104	1 GSPS	2	4	64-VQFN	65M0702	53.11
DAC5687IPZP	0.012	500 MSPS	3	6	100-HTQFP	31K6715	47.62
DAC8532IDGK	10	93 kSPS	1	65	8-VSSOP	74K3716	13.49
DAC8552IDGKT	10	200 kSPS	1	8	8-VSSOP	06M7244	8.20
QUAD							
DAC7664YCT	12	100 kSPS	3	3	64-LQFP	01J0531	50.93
DAC7744E	8	100 kSPS	1	2	48-SSOP	15M0230	50.75
DAC8534IPW	10	93 kSPS	1	64	16-TSSOP	02E2685	21.96
DAC8544IPFB	8	52 kSPS	1	65	48-TQFP	10J9172	24.16
DAC8555IPW	10	200 kSPS	1	12	16-TSSOP	71K2658	12.36
DAC8565IAPW	8	200 kSPS	1	8	16-TSSOP	65M0711	13.39
DAC8814IBDBT	0.5	2 MSPS	1	1	28-SSOP	58K5660	31.39
OCTAL							
DAC8568ICPW	5	225 kSPS	1	4	16-TSSOP	08R4454	26.28
DAC8718SRGZT	15	...	1	4	48-VQFN	60R2411	30.54
DAC8728SPAG	15	...	1	4	64-TQFP	53R2227	31.39
DAC8728SRTQT	15	...	1	4	56-QFN	53R2228	30.54

EVALUATION MODULES

Mfg. Part No.	Description	Stock No.	Price Each
DAC8411EVM	DAC8411 DAC Evaluation Module	55R2894	49.98
DAC8568EVM	DAC8568 DAC Evaluation Module	55R2897	50.00
DAC8734EVM	DAC8734 DAC Evaluation Module	55R2899	50.00
DAC9881EVM-PDK	DAC9881 Performance Demonstration Kit	52R3137	178.50
DAC7718EVM	DAC7718 DAC Evaluation Module	74R3112	76.50
DAC8718EVM	DAC8718 DAC Evaluation Module	74R3114	76.50
DAC8728EVM	DAC8728 Evaluation Module	72R5216	101.00

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18 BIT DIGITAL-TO-ANALOG CONVERTERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Features
- Relative Accuracy: ±2 LSB Max
- Low-Noise: 24nV/√Hz
- On-Chip Output Buffer Amplifier w/ Rail-to-Rail Operation
- DAC Loading Control
- Selectable Power-On Reset to Zero-Scale or Midscale
- Power-Down Mode
- Operating Temp. Range: -40°C to +105°C

Applications
- Automatic Test Equipment
- Precision Instrumentation
- Industrial Control
- Data Acquisition Systems

Mnf. Part No.	# of Chan.	Settling Time (µs)	DNL Max (±LSB)	INL Max (±LSB)	Interface	Pkg.	Stock No.	Price Each 1-9	Price Each 10-24
DAC9881SBRGET	1	5	1	2	Serial, SPI	24-VQFN	08P4020	43.01	38.97

DEVELOPMENT TOOLS

Mnf. Part No.	Description	Stock No.	Price Each
DAC9881EVM-PDK	DAC9881 Performance Demonstration Kit	52R3137	178.50

(163110)

20 BIT DIGITAL-TO-ANALOG CONVERTERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Features
- Low Power: 2.5mW
- Maximum Linearity Error: ±0.0015%
- On-Chip Calibration

Applications
- Process Control
- ATE Pin Electronics
- Closed-Loop Servo Control
- Smart Transmitters
- Portable Instruments

Mfg. Part No.	# of DACs	Settling Time (µs)	Sample Rate	DNL Max. (±LSB)	INL Max. (±LSB)	Pkg.	Stock No.	Price Each 1-9
DAC1220E	1	10000		1	1	16-SSOP	74K3713	16.35

(167493)

DIGITAL POTENTIOMETERS

RoHS Compliant Available

ANALOG DEVICES

Digitally controlled potentiometers. Differential linearity error (LSB @ TA = operating temperature). 2.7V to 16.5V Input Voltage

SINGLE

Mfg. Part No.	Resist (kΩ)	Control Interface	Temp. Coef. (ppm/°C)	Package	Stock No.	Price Each 1-9
AD8400ARZ1	1	Serial, SPI	± 500ppm/°C	8-SOIC	19M8905	2.80
AD5245BRJZ5-R2	5	I2C, Serial	± 45ppm/°C	8-SOT-23	19M8811	2.59
AD5259BRMZ5	5	I2C, Serial	± 300ppm/°C	10-MSOP	59K3813	2.51
AD5160BRJZ5-R2	5	Serial, SPI	± 35ppm/°C	8-SOT-23	19M8807	2.59
AD5200BRMZ10	10	3 Wire, Serial	± 500ppm/°C	10-µSOIC	59K3605	2.48
AD5220BNZ10	10	3 Wire, Serial	± 800ppm/°C	8-DIP	19M0790	2.69
AD5227BUJZ10-R2	10	3 Wire, Serial	± 35ppm/°C	8-TSOT	59K3669	1.78
AD5245BRJZ10-R2	10	I2C, Serial	± 30ppm/°C	8-SOT-23	19M8810	2.69
AD5258BRMZ10	10	I2C, Serial	± 300ppm/°C	10-MSOP	59K3803	1.69
AD5161BRMZ10	10	I2C, Serial	± 35ppm/°C	10-MSOP	59K3554	1.88
AD5171BRJZ10-R2	10	I2C, Serial	± 35ppm/°C	8-SOT-23	19M0788	2.75
AD5220BRZ10	10	Increment/ Decrement	± 800ppm/°C	8-SOIC	59K3652	2.51
AD5228BUJZ10-R2	10	Pushbutton	± 35ppm/°C	8-TSOT	19M0791	1.77
AD5231BRUZ10	10	Serial, SPI	± 600ppm/°C	16-TSSOP	59K3681	5.02
AD7376ARUZ10	10	Serial, SPI	± 35ppm/°C	14-TSSOP	89M5017	6.32
AD8400ARZ10	10	Serial, SPI	± 500ppm/°C	8-SOIC	59K6710	2.80
AD5290YRMZ10	10	Serial, SPI	± 35ppm/°C	10-MSOP	19M0798	4.83
AD7376ARWZ10	10	Serial, SPI	± 35ppm/°C	16-SOIC	12M8779	6.08
AD5160BRJZ10-RL7	10	Serial, SPI	± 35ppm/°C	8-SOT-23	59K3548	1.78
AD5201BRMZ10	10	SPI	500ppm/°C	10-MSOP	59K3609	1.30
AD5272BRMZ-20	20	I2C, Serial	± 5ppm/°C	10-MSOP	52R8114	4.31
AD5274BRMZ-20	20	I2C, Serial	± 5ppm/°C	10-MSOP	52R8116	2.48
AD5270BRMZ-20	20	Serial, SPI	± 5ppm/°C	10-MSOP	52R8110	4.31
AD5260BRUZ20	20	Serial, SPI	± 35ppm/°C	14-TSSOP	59K3818	4.41
AD5262BRUZ20	20	Serial, SPI	± 35ppm/°C	16-TSSOP	59K3824	4.83
AD5245BRJZ50-R2	50	I2C, Serial	± 35ppm/°C	8-SOT-23	82H2845	2.59
AD5231BRUZ50	50	Increment/ Decrement	± 600ppm/°C	16-TSSOP	59K3685	5.02
AD5160BRJZ50-RL7	50	Serial, SPI	± 35ppm/°C	8-SOT-23	59K3553	1.78
AD8400ARZ50	50	Serial, SPI	± 500ppm/°C	8-SOIC	59K6714	2.80
AD5290YRMZ50	50	Serial, SPI	± 35ppm/°C	10-MSOP	19M0800	5.02
AD5260BRUZ50	50	Serial, SPI	± 35ppm/°C	14-TSSOP	59K3821	4.59
AD5116BCPZ80-500R7	80	Pushbutton	± 35ppm/°C	8-LFCSP	92T1810	1.84
AD5220BNZ100	100	3 Wire, Serial	± 800ppm/°C	8-DIP	59K3646	2.59
AD5259BRMZ100	100	I2C, Serial	± 300ppm/°C	10-MSOP	52K4146	2.51
AD5245BRJZ100-R2	100	I2C, Serial	± 35ppm/°C	8-SOT-23	82H8715	2.59
AD5241BRZ100	100	I2C, Serial	± 30ppm/°C	14-SOIC	19M0794	2.59
AD5231BRUZ100	100	Increment/ Decrement	± 600ppm/°C	16-TSSOP	59K3683	4.83
AD5165BUJZ100-R2	100	Serial, SPI	± 35ppm/°C	8-SOT-23	19M0787	2.59
AD8400ARZ100	100	Serial, SPI	± 500ppm/°C	8-SOIC	59K6712	2.80
AD5290YRMZ100	100	Serial, SPI	± 35ppm/°C	10-MSOP	19M0799	5.02
AD5293BRUZ-100	100	Serial	± 35ppm/°C	14-TSSOP	52R8122	6.21
AD5262BRUZ200	200	Serial, SPI	± 35ppm/°C	16-TSSOP	59K3826	4.83
DUAL						
AD5252BRUZ1	1	I2C, Serial	± 300ppm/°C	14-TSSOP	59K3745	4.10
AD5242BRZ1M	1	I2C, Serial	± 30ppm/°C	16-SOIC	59K3697	3.24
AD8402ARZ1	1	Serial, SPI	± 500ppm/°C	14-SOIC	88H0234	4.19
AD5243BRMZ10	10	I2C, Serial	± 35ppm/°C	10-MSOP	59K3702	2.55
AD5242BRUZ10	10	I2C, Serial	± 30ppm/°C	16-TSSOP	87H9810	3.12
AD5252BRUZ10	10	I2C, Serial	± 650ppm/°C	14-TSSOP	19M0796	3.95
AD8402ARZ10	10	Serial, SPI	± 500ppm/°C	14-SOIC	19M8906	4.19
AD5162BRMZ100	100	SPI	± 35ppm/°C	10-MSOP	59K3562	2.55
AD5252BRUZ100	100	I2C, Serial	± 300ppm/°C	14-TSSOP	59K3749	3.95

➤ CONTINUED ➤

DIGITAL POTENTIOMETERS (CONT.)

QUAD

Mfg. Part No.	Resist (kΩ)	Control Interface	Temp. Coef. (ppm/°C)	Package	Stock No.	Price Each 1-9
AD5254BRUZ10	10	I2C, Serial	± 300ppm/°C	20-TSSOP	59K3781	5.71
AD5204BRZ10	10	Serial, SPI	± 700ppm/°C	24-WSOIC	19M0789	3.73
AD8403ARZ10	10	Serial, SPI	± 500ppm/°C	24-SOIC	88H0242	6.32
AD8403ARUZ10	10	Serial, SPI	± 500ppm/°C	24-TSSOP	19M8907	6.32
AD5203ARZ10	10	SPI	± 700ppm/°C	24-WSOIC	59K3617	3.43
AD5263BRUZ20	20	I2C, Serial	± 30ppm/°C	24-TSSOP	59K3831	6.57

(19239)

NON-VOLATILE DIGITAL POTENTIOMETERS

RoHS Compliant Available

ANALOG DEVICES

Applications:

- Mechanical potentiometer replacement
- Portable electronics level adjustment
- Audio volume control
- Low resolution DAC
- LCD panel brightness and contrast control
- Programmable voltage to current conversion
- Programmable filters, delays, time constants
- Feedback resistor programmable power supply
- Sensor calibration

SINGLE

Mfg. Part No.	Supply Voltage Range	Res. (kohm)	Interface	Package	Stock No.	Price Each 1-9
AD5112BCPZ5-500R7	2.3V to 5.5V	5	I2C	8-LFCSP	82T5473	1.89
AD5113BCPZ5-500R7	2.3V to 5.5V	5	Up/Down	8-LFCSP	82T5476	1.89
AD5116BCPZ5-500R7	2.3V to 5.5V	5	Pushbutton	8-LFCSP	82T5483	1.91
AD5116BCPZ10-500R7	2.3V to 5.5V	10	Pushbutton	8-LFCSP	82T5482	1.84
AD5110BCPZ10-500R7	2.3V to 5.5V	10	I2C	8-LFCSP	82T5468	2.20
AD5111BCPZ10-RL7	2.3V to 5.5V	10	Up/Down	8-LFCSP	82T5470	2.12
AD5112BCPZ10-500R7	2.3V to 5.5V	10	I2C	8-LFCSP	82T5472	1.89
AD5113BCPZ10-500R7	2.3V to 5.5V	10	Up/Down	8-LFCSP	82T5475	1.89
AD5114BCPZ10-500R7	2.3V to 5.5V	10	I2C	8-LFCSP	82T5478	1.67
AD5115BCPZ10-500R7	2.3V to 5.5V	10	Up/Down	8-LFCSP	82T5480	1.67
AD5115BCPZ80-500R7	2.3V to 5.5V	80	Up/Down	8-LFCSP	82T5481	1.67
AD5110BCPZ80-500R7	2.3V to 5.5V	80	I2C	8-LFCSP	82T5469	2.12
AD5111BCPZ80-RL7	2.3V to 5.5V	80	Up/Down	8-LFCSP	82T5471	2.12
AD5112BCPZ80-500R7	2.3V to 5.5V	80	I2C	8-LFCSP	82T5474	1.89
AD5113BCPZ80-500R7	2.3V to 5.5V	80	Up/Down	8-LFCSP	82T5477	1.89
AD5114BCPZ80-500R7	2.3V to 5.5V	80	I2C	8-LFCSP	82T5479	1.67
AD5121BCPZ100-RL7	1.8V to 5.5V	100	I2C, SPI	16-LFCSP	54W6619	1.95
AD5141BCPZ100-RL7	1.8V to 5.5V	100	I2C, SPI	16-LFCSP	54W6621	2.60
DUAL						
AD5122ABRUZ10	1.8V to 5.5V	10	I2C	16-TSSOP	52W9389	3.56
AD5122BRUZ10	1.8V to 5.5V	10	SPI	16-TSSOP	52W9393	3.56
AD5142ABRUZ10	1.8V to 5.5V	10	I2C	16-TSSOP	52W9405	4.05
AD5142BRUZ10	1.8V to 5.5V	10	SPI	16-TSSOP	52W9409	4.05
AD5122ABRUZ100	1.8V to 5.5V	100	I2C	16-TSSOP	52W9390	3.56
AD5122BRUZ100	1.8V to 5.5V	100	SPI	16-TSSOP	52W9394	3.56
AD5142ABRUZ100	1.8V to 5.5V	100	I2C	16-TSSOP	52W9406	4.21
AD5142BRUZ100	1.8V to 5.5V	100	SPI	16-TSSOP	52W9410	4.05
QUAD						
AD5123BCPZ10-RL7	1.8V to 5.5V	10	I2C	16-LFCSP	54W6620	6.18
AD5143BCPZ10-RL7	1.8V to 5.5V	10	I2C	16-LFCSP	54W6622	6.42
AD5144BRUZ10	1.8V to 5.5V	10	SPI	20-TSSOP	52W9417	6.41
AD5144ABRUZ10	1.8V to 5.5V	10	I2C	20-TSSOP	52W9413	6.41
AD5124BRUZ100	1.8V to 5.5V	100	SPI	20-TSSOP	52W9400	5.53
AD5144BRUZ100	1.8V to 5.5V	100	SPI	20-TSSOP	52W9418	6.64
AD5144ABRUZ100	1.8V to 5.5V	100	I2C	20-TSSOP	52W9414	6.41

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
EVAL-AD5110SDZ	AD5110 DIG POT EVAL BOARD	76T2077	55.32
EVAL-AD5111SDZ	AD5111 DIG POT EVAL BOARD	76T2078	55.32
EVAL-AD5116EBZ	AD5116 DIG POT EVAL BOARD	76T2079	55.32

(203711)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

DIGITALLY CONTROLLED POTENTIOMETERS

RoHS Compliant Available

intersil

Mfg. Part No.	Resistance (kOhm)	Voltage Rating (V)	Operating Temp. (°C)	Package	Stock No.	Price Each 1-24
X9C102PZ	1	5	0 to +70	8-DIP	79K8945	4.93
X9C103PZ	10	5	0 to +70	8-DIP	57K5539	4.83
X9511WSZT1	10	5.5	0 to +70	8-SOIC	79K9546	3.42
X9C104PIZ	100	5	-40 to +85	8-DIP	79K8959	5.60
FOUR POTS IN ONE PACKAGE						
X9241AWSIZ	10	5.5	-40 to +85	20-SOIC	79K9068	12.50
X9250US24Z	50	5.5	0 to +70	24-SOIC	06M0694	14.68

(83383)

DIGITAL POTENTIOMETERS AND EVALUATION KIT

RoHS Compliant Available

MICROCHIP

- Operating Temperature: -40°C to +85°C, < 1µA Standby Current
- Operating Voltage: 2.7V to 5.5V
- 256 Taps; SPI Interface; Max. INL: +1 LSB; Max. DNL: +1 LSB
- Applications include Audio Equipment (Volume and Tone Controls), Servo-Motor Control, Battery Charging and Control, Communications (Line Impedance Matching), Power Supplies, Instrumentation (Gain, Offset Adjusts), LCD Contrast Control and Programmable Filters

Mfg. Part No.	Per Package	Resistance (Ω)	Package	Stock No.	Price Each 1-25
MCP4018T-502E/LT	1	5K	6-SC-70	24R6828	0.51
MCP4024T-202E/OT	1	2.1k	5-SOT-23	84R6265	0.79
MCP4014T-202E/OT	1	50K	8-SOIC	56K7036	0.51
MCP41010-I/P	1	10K	8-PDIP	69K7607	1.34
MCP41010-I/SN	1	10K	8-SOIC	61K2949	1.34
MCP41050-I/P	1	50K	8-PDIP	59K0227	1.34
MCP41050-I/SN	1	50K	8-SOIC	24C6508	1.34
MCP41100-I/P	1	100K	8-PDIP	96K3725	1.34
MCP4011-103E/MS	1	10K	8-MSOP	56K7007	0.51
MCP4011-202E/MS	1	2.1K	8-MSOP	56K7009	0.51
MCP4011-202E/SN	1	2.1K	8-SOIC	56K7010	0.51
MCP4011-502E/MS	1	5K	8-MSOP	56K7011	0.51
MCP4011-503E/MS	1	50K	8-MSOP	56K7013	0.51
MCP4011-503E/SN	1	50K	8-SOIC	56K7014	0.51
MCP4012T-103E/CH	1	10K	6-SOT-23	84R6246	0.51
MCP4012T-502E/CH	1	5K	6-SOT-23	84R6247	0.51
MCP4012T-503E/CH	1	50K	6-SOT-23	84R6248	0.51
MCP4013T-103E/CH	1	10K	6-SOT-23	84R6249	0.51
MCP4013T-202E/CH	1	2.1K	6-SOT-23	84R6250	0.51
MCP4013T-502E/CH	1	5K	6-SOT-23	84R6251	0.51
MCP4013T-503E/CH	1	50K	6-SOT-23	84R6252	0.51
MCP4014T-103E/OT	1	10K	5-SOT-23	84R6253	0.51
MCP4014T-502E/OT	1	5K	5-SOT-23	84R6254	0.51
MCP4014T-503E/OT	1	50K	5-SOT-23	84R6255	0.51
MCP4017T-104E/LT	1	100K	6-SC-70	08R1798	0.51
MCP4018T-104E/LT	1	100K	6-SC-70	08R1802	0.51
MCP4018T-503E/LT	1	50K	6-SC-70	08R1803	0.51
MCP4019T-104E/LT	1	100K	5-SC-70	08R1805	0.51
MCP4019T-503E/LT	1	50K	5-SC-70	08R1807	0.51
MCP4021-103E/MS	1	10K	8-MSOP	71J5269	0.81
MCP4021-202E/MS	1	2.1K	8-MSOP	71J5271	0.81
MCP4021-202E/SN	1	2.1K	8-SOIC	71J5272	0.78
MCP4021-502E/MS	1	5K	8-MSOP	71J5273	0.81
MCP4021-503E/MS	1	50K	8-MSOP	71J5275	0.81
MCP4021-503E/SN	1	50K	8-SOIC	71J5276	0.78
MCP4022T-103E/CH	1	10K	6-SOT-23	84R6256	0.79
MCP4022T-202E/CH	1	2.1K	6-SOT-23	84R6257	0.79
MCP4022T-502E/CH	1	5K	6-SOT-23	84R6258	0.79
MCP4022T-503E/CH	1	50K	6-SOT-23	84R6259	0.79
MCP4023T-103E/CH	1	10K	6-SOT-23	84R6260	0.79
MCP4023T-202E/CH	1	2.1K	6-SOT-23	84R6261	0.79
MCP4023T-502E/CH	1	5K	6-SOT-23	84R6262	0.79
MCP4023T-503E/CH	1	50K	6-SOT-23	84R6263	0.79
MCP4024T-103E/OT	1	10K	5-SOT-23	84R6264	0.79
MCP4024T-202E/OT	1	2.1K	5-SOT-23	84R6265	0.79
MCP4024T-502E/OT	1	5K	5-SOT-23	84R6267	0.79
MCP4024T-503E/OT	1	50K	5-SOT-23	84R6268	0.79
MCP42010-I/P	2	10K	14-PDIP*	24C6511	2.00
MCP42010-I/SL	2	10K	14-SOIC*	88K1136	2.00
MCP42010-I/ST	2	10K	14-TSSOP*	68K5102	2.00
MCP42100-I/P	2	100K	14-PDIP*	59K0228	2.00

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DIGITAL POTENTIOMETERS AND EVALUATION KIT (CONT.)

Mfg. Part No.	Per Package	Resistance (Ω)	Package	Stock No.	Price Each 1-25
● MCP42100-I/SL	2	100K	14-SOIC*	96K3728	2.00
● MCP4361-103E/ST	4	10K	20-TSSOP	53R0040	1.88

*Feature hardware shutdown pin

DIGITAL POTENTIOMETER EVALUATION KIT

Mfg. Part No.	Description	Stock No.	Price Each
TSSOP20EV	Digital Potentiometer Eval Board	53R0381	9.99
● SOIC8EV	Eval Board, for 8-Pin, SOIC, MSOP, TSSOP, DIP	56K7379	10.00
MCP46XXDM-PTPLS	PICTAIL PLUS, MCP46XX, Digital Pot, Daughter Board	25R7949	20.00

(70510)

MCP413X/415X/423X/425X SERIES VOLATILE DIGITAL POTENTIOMETERS

RoHS Compliant Available

MICROCHIP

Features:
- Potentiometer or Rheostat configuration options
- Zero Scale to Full-Scale Wiper operation
- Supports Split Rail Applications

The **MCP413X, MCP413X, MCP423X** & **MCP425X** devices offer a wide range of product offerings using an SPI interface. This family of devices support 7-bit and 8-bit resistor networks, and Potentiometer and Rheostat pinouts.

MCP413X SERIES

Mfg. Part No.	End To End Resistance (kohm)	No. of Pots	Supply Voltage Range	Pkg.	Stock No.	Price Each 1-25
● MCP4131-103E/P	10	Single	1.8 - 5.5	8-DIP	77M2570	0.67
● MCP4131-103E/SN	10	Single	1.8 - 5.5	8-SOIC	77M2571	0.67
● MCP4131-104E/P	100	Single	1.8 - 5.5	8-DIP	77M2574	0.67
● MCP4131-104E/SN	100	Single	1.8 - 5.5	8-SOIC	77M2575	0.67
● MCP4131-502E/P	5	Single	1.8 - 5.5	8-DIP	77M2578	0.67
● MCP4131-502E/SN	5	Single	1.8 - 5.5	8-SOIC	77M2579	0.67
● MCP4131-503E/P	50	Single	1.8 - 5.5	8-DIP	77M2582	0.67
● MCP4131-503E/SN	50	Single	1.8 - 5.5	8-SOIC	77M2583	0.67
● MCP4132-103E/P	10	Single	1.8 - 5.5	8-DIP	77M2598	0.67
● MCP4132-103E/SN	10	Single	1.8 - 5.5	8-SOIC	77M2599	0.67
● MCP4132-104E/P	100	Single	1.8 - 5.5	8-DIP	77M2602	0.67
● MCP4132-502E/P	5	Single	1.8 - 5.5	8-DIP	77M2606	0.67
● MCP4132-502E/SN	5	Single	1.8 - 5.5	8-SOIC	77M2607	0.67
● MCP4132-503E/P	50	Single	1.8 - 5.5	8-DIP	77M2610	0.67
● MCP4132-104E/SN	100	Single	1.8 - 5.5	8-SOIC	77M2603	0.67
● MCP4132-503E/SN	50	Single	1.8 - 5.5	8-SOIC	77M2611	0.67
MCP415X SERIES						
● MCP4151-103E/P	10	Single	1.8 - 5.5	8-DIP	77M2682	0.90
● MCP4151-103E/SN	10	Single	1.8 - 5.5	8-SOIC	77M2683	0.90
● MCP4151-104E/P	100	Single	1.8 - 5.5	8-DIP	77M2686	0.90
● MCP4151-104E/SN	100	Single	1.8 - 5.5	8-SOIC	77M2687	0.90
● MCP4151-502E/P	5	Single	1.8 - 5.5	8-DIP	77M2690	0.90
● MCP4151-502E/SN	5	Single	1.8 - 5.5	8-SOIC	77M2691	0.90
● MCP4151-503E/P	50	Single	1.8 - 5.5	8-DIP	77M2694	0.90
● MCP4152-103E/P	10	Single	1.8 - 5.5	8-DIP	77M2710	0.90
● MCP4152-104E/SN	100	Single	1.8 - 5.5	8-SOIC	77M2715	0.90
● MCP4152-502E/P	5	Single	1.8 - 5.5	8-DIP	77M2718	0.90
● MCP4152-103E/SN	10	Single	1.8 - 5.5	8-SOIC	77M2711	0.90
● MCP4152-104E/P	100	Single	1.8 - 5.5	8-DIP	77M2714	0.90
● MCP4152-502E/SN	5	Single	1.8 - 5.5	8-SOIC	77M2719	0.90
● MCP4152-503E/P	50	Single	1.8 - 5.5	8-DIP	77M2722	0.90
● MCP4152-503E/SN	50	Single	1.8 - 5.5	8-SOIC	77M2723	0.90
MCP423X SERIES						
● MCP4231-104E/SL	100	Dual	1.8 - 5.5	14-SOIC	27M0079	0.90
● MCP4231-103E/P	10	Dual	1.8 - 5.5	14-DIP	27M0075	0.90
● MCP4231-103E/SL	10	Dual	1.8 - 5.5	14-SOIC	27M0076	0.90
● MCP4231-104E/P	100	Dual	1.8 - 5.5	14-DIP	27M0078	0.90
● MCP4231-502E/P	5	Dual	1.8 - 5.5	14-DIP	27M0081	0.90
● MCP4231-502E/SL	5	Dual	1.8 - 5.5	14-SOIC	27M0082	0.90
● MCP4231-503E/P	50	Dual	1.8 - 5.5	14-DIP	27M0084	0.90
● MCP4231-503E/SL	50	Dual	1.8 - 5.5	14-SOIC	27M0085	0.90
● MCP4232-104E/UN	100	Dual	1.8 - 5.5	10-MSOP	27M0100	0.90
● MCP4232-103E/UN	10	Dual	1.8 - 5.5	10-MSOP	27M0099	0.90
● MCP4232-502E/UN	5	Dual	1.8 - 5.5	10-MSOP	27M0101	0.90
● MCP4232-503E/UN	50	Dual	1.8 - 5.5	10-MSOP	27M0102	0.90
MCP425X SERIES						
● MCP4251-103E/SL	10	Single	1.8 - 5.5	14-SOIC	27M0148	0.93
● MCP4251-103E/P	10	Dual	1.8 - 5.5	14-DIP	27M0147	0.93
● MCP4251-104E/SL	100	Dual	1.8 - 5.5	14-SOIC	27M0151	0.93
● MCP4251-502E/P	5	Dual	1.8 - 5.5	14-DIP	27M0153	0.93
● MCP4251-502E/SL	5	Dual	1.8 - 5.5	14-SOIC	27M0154	0.93
● MCP4251-503E/SL	50	Dual	1.8 - 5.5	14-SOIC	27M0157	0.93

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MCP413X/415X/423X/425X SERIES VOLATILE DIGITAL POTENTIOMETERS (CONT.)

MCP425X SERIES

Mfg. Part No.	End To End Resistance (kohm)	No. of Pots	Supply Voltage Range	Pkg.	Stock No.	Price Each 1-25
● MCP4251-104E/P	100	Single	1.8 - 5.5	14-DIP	27M0150	0.93
● MCP4251-503E/P	50	Single	1.8 - 5.5	14-DIP	27M0156	0.93
● MCP4252-103E/UN	10	Dual	1.8 - 5.5	10-MSOP	27M0171	0.93
● MCP4252-104E/UN	100	Dual	1.8 - 5.5	10-MSOP	27M0172	0.93
● MCP4252-503E/UN	50	Dual	1.8 - 5.5	10-MSOP	27M0174	0.93
● MCP4252-502E/UN	5	Dual	1.8 - 5.5	10-MSOP	27M0173	0.93

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MCP414X/416X/424X/426X SERIES NON-VOLATILE DIGITAL POTENTIOMETERS

RoHS Compliant Available

MICROCHIP

Features:
- Single or Dual Resistor Network options
- Potentiometer or Rheostat configuration options
- Zero-Scale to Full-Scale Wiper operation

The **MCP41XX** and **MCP42XX** devices offer a wide range of product offerings using an SPI interface. This family of devices support 7-bit and 8-bit resistor networks, and Potentiometer and Rheostat pinouts.

MCP414X SERIES

Mfg. Part No.	End To End Resistance (kohm)	End To End Resistance (kohm)	Supply Voltage Range	Pkg.	Stock No.	Price Each 1-25
● MCP4141-103E/P	10	Single	2.7 - 5.5	8-DIP	77M2626	0.81
● MCP4141-103E/SN	10	Single	2.7 - 5.5	8-SOIC	77M2627	0.81
● MCP4141-104E/P	100	Single	2.7 - 5.5	8-DIP	77M2630	0.81
● MCP4141-104E/SN	100	Single	2.7 - 5.5	8-SOIC	77M2631	0.81
● MCP4141-502E/P	5	Single	2.7 - 5.5	8-DIP	77M2634	0.81
● MCP4141-502E/SN	5	Single	2.7 - 5.5	8-SOIC	77M2635	0.81
● MCP4141-503E/P	50	Single	2.7 - 5.5	8-DIP	77M2638	0.81
● MCP4141-503E/SN	50	Single	2.7 - 5.5	8-SOIC	77M2639	0.81
● MCP4142-502E/P	5	Single	2.7 - 5.5	8-DIP	77M2662	0.81
● MCP4142-103E/P	10	Single	2.7 - 5.5	8-DIP	77M2654	0.81
● MCP4142-503E/P	50	Single	2.7 - 5.5	8-DIP	77M2666	0.81
● MCP4142-103E/SN	10	Single	2.7 - 5.5	8-SOIC	77M2655	0.81
● MCP4142-104E/P	100	Single	2.7 - 5.5	8-DIP	77M2658	0.81
● MCP4142-104E/SN	100	Single	2.7 - 5.5	8-SOIC	77M2659	0.81
● MCP4142-502E/SN	5	Single	2.7 - 5.5	8-SOIC	77M2663	0.81
● MCP4142-503E/SN	50	Single	2.7 - 5.5	8-SOIC	77M2667	0.81
MCP416X SERIES						
● MCP4161-103E/P	10	Single	2.7 - 5.5	8-DIP	77M2738	0.96
● MCP4161-103E/SN	10	Single	2.7 - 5.5	8-SOIC	77M2739	0.96
● MCP4161-104E/P	100	Single	2.7 - 5.5	8-DIP	77M2742	0.96
● MCP4161-104E/SN	100	Single	2.7 - 5.5	8-SOIC	77M2743	0.96
● MCP4161-502E/P	5	Single	2.7 - 5.5	8-DIP	77M2746	0.96
● MCP4161-502E/SN	5	Single	2.7 - 5.5	8-SOIC	77M2747	0.96
● MCP4161-503E/P	50	Single	2.7 - 5.5	8-DIP	77M2750	0.96
● MCP4161-503E/SN	50	Single	2.7 - 5.5	8-SOIC	77M2751	0.96
● MCP4162-502E/P	5	Single	2.7 - 5.5	8-DIP	77M2774	0.96
● MCP4162-502E/SN	5	Single	2.7 - 5.5	8-SOIC	77M2775	0.96
● MCP4162-104E/SN	100	Single	2.7 - 5.5	8-SOIC	77M2771	0.96
● MCP4162-503E/SN	50	Single	2.7 - 5.5	8-SOIC	77M2779	0.96
● MCP4162-103E/P	10	Single	2.7 - 5.5	8-DIP	77M2766	0.96
● MCP4162-103E/SN	10	Single	2.7 - 5.5	8-SOIC	77M2767	0.96
● MCP4162-104E/P	100	Single	2.7 - 5.5	8-DIP	77M2770	0.96
● MCP4162-503E/P	50	Single	2.7 - 5.5	8-DIP	77M2778	0.96
MCP424X SERIES						
● MCP4241-502E/P	5	Dual	2.7 - 5.5	14-DIP	27M0117	1.06
● MCP4241-502E/SL	5	Dual	2.7 - 5.5	14-SOIC	27M0118	1.06
● MCP4241-503E/P	50	Dual	2.7 - 5.5	14-DIP	27M0120	1.06
● MCP4241-503E/SL	50	Dual	2.7 - 5.5	14-SOIC	27M0121	1.06
● MCP4241-104E/P	100	Dual	2.7 - 5.5	14-DIP	27M0114	1.06
● MCP4241-104E/SL	100	Dual	2.7 - 5.5	14-SOIC	27M0115	1.06
● MCP4242-103E/UN	10	Dual	2.7 - 5.5	10-MSOP	27M0135	1.06
● MCP4242-104E/UN	100	Dual	2.7 - 5.5	10-MSOP	27M0136	1.06
● MCP4242-502E/UN	5	Dual	2.7 - 5.5	10-MSOP	27M0137	1.06
● MCP4242-503E/UN	50	Dual	2.7 - 5.5	10-MSOP	27M0138	1.06
MCP426X SERIES						
● MCP4261-502E/P	5	Dual	2.7 - 5.5	14-DIP	27M0189	1.21
● MCP4261-502E/SL	5	Dual	2.7 - 5.5	14-SOIC	27M0190	1.21
● MCP4261-103E/P	10	Dual	2.7 - 5.5	14-DIP	27M0183	1.21
● MCP4261-103E/SL	10	Dual	2.7 - 5.5	14-SOIC	27M0184	1.21
● MCP4261-104E/P	100	Dual	2.7 - 5.5	14-DIP	27M0186	1.21
● MCP4261-104E/SL	100	Dual	2.7 - 5.5	14-SOIC	27M0187	1.21

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MCP414X/416X/424X/426X SERIES NON-VOLATILE DIGITAL POTENTIOMETERS (CONT.)

MCP426X SERIES

Mfg. Part No.	End To End Resistance (kohm)	End To End Resistance (kohm)	Supply Voltage Range	Pkg.	Stock No.	Price Each 1-25
MCP4261-503E/P	50	Dual	2.7 - 5.5	14-DIP	27M0192	1.21
MCP4261-503E/SL	50	Dual	2.7 - 5.5	14-SOIC	27M0193	1.21
MCP4262-103E/UN	10	Dual	2.7 - 5.5	10-MSOP	27M0207	1.21
MCP4262-104E/UN	100	Dual	2.7 - 5.5	10-MSOP	27M0208	1.21
MCP4262-503E/UN	50	Dual	2.7 - 5.5	10-MSOP	27M0210	1.21
MCP4262-502E/UN	5	Dual	2.7 - 5.5	10-MSOP	27M0209	1.21

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MCP434X/436X SERIES NON-VOLATILE DIGITAL POTENTIOMETERS

RoHS Compliant Available

MICROCHIP

Features:
- Single or Dual Resistor Network options
- Potentiometer or Rheostat configuration options
- Zero-Scale to Full-Scale Wiper operation

The **MCP444X** and **MCP446X** devices offer a wide range of product offerings using an SPI interface, This family of devices support 7-bit and 8-bit resistor networks, Non-Volatile memory configurations, and Potentiometer and Rheostat pinouts. WiperLock Technology allows application-specific calibration settings to be secured in the EEPROM.

MCP444X SERIES

Mfg. Part No.	End To End Resistance (kohm)	End To End Resistance (kohm)	Supply Voltage Range	Pkg.	Stock No.	Price Each 1-25
MCP4441-502E/ML	5	Quad	2.7 - 5.5	20-QFN	91R2852	1.40
MCP4441-502E/ST	5	Quad	2.7 - 5.5	20-TSSOP	91R2853	1.40
MCP4442-103E/ST	10	Quad	2.7 - 5.5	14-TSSOP	91R2864	1.35
MCP4441-103E/ML	10	Quad	2.7 - 5.5	20-QFN	91R2848	1.35
MCP4441-103E/ST	10	Quad	2.7 - 5.5	20-TSSOP	91R2849	1.40
MCP4441-503E/ML	50	Quad	2.7 - 5.5	20-QFN	91R2854	1.40
MCP4441-503E/ST	50	Quad	2.7 - 5.5	20-TSSOP	91R2855	1.40
MCP4442-503E/ST	50	Quad	2.7 - 5.5	14-TSSOP	91R2866	1.35
MCP4441-104E/ML	100	Quad	2.7 - 5.5	20-QFN	91R2850	1.40
MCP4441-104E/ST	100	Quad	2.7 - 5.5	20-TSSOP	91R2851	1.40
MCP4442-104E/ST	100	Quad	2.7 - 5.5	14-TSSOP	91R2865	1.35
MCP416X SERIES						
MCP4461-502E/ML	5	Quad	2.7 - 5.5	20-QFN	91R2875	1.88
MCP4462-103E/ST	10	Quad	2.7 - 5.5	14-TSSOP	91R2884	1.88
MCP4461-103E/ML	10	Quad	2.7 - 5.5	20-QFN	91R2871	1.88
MCP4461-103E/ST	10	Quad	2.7 - 5.5	20-TSSOP	91R2872	1.88
MCP4462-503E/ST	50	Quad	2.7 - 5.5	14-TSSOP	91R2886	1.88
MCP4461-104E/ML	100	Quad	2.7 - 5.5	20-QFN	91R2873	1.88
MCP4461-104E/ST	100	Quad	2.7 - 5.5	20-TSSOP	91R2874	1.88
MCP4462-104E/ST	100	Quad	2.7 - 5.5	14-TSSOP	91R2885	1.88

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MCP453X/455X/463X/465X SERIES VOLATILE DIGITAL POTENTIOMETERS

RoHS Compliant Available

MICROCHIP

Features:
- Single or Dual Resistor Network options
- Potentiometer or Rheostat configuration options

The **MCP453X**, **MCP455X**, **MCP463X** and **MCP465X** devices offer a wide range of product offerings using an I2C interface. This family of devices support 7-bit and 8-bit resistor networks, Volatile memory configurations, and Potentiometer and Rheostat pinouts.

MCP453X SERIES

Mfg. Part No.	End To End Resistance (kohm)	End To End Resistance (kohm)	Supply Voltage Range	Pkg.	Stock No.	Price Each 1-25
MCP4531-503E/MS	50	Single	1.8 - 5.5	8-MSOP	77M2843	0.67
MCP4531-104E/MS	100	Single	1.8 - 5.5	8-MSOP	77M2841	0.67
MCP4532-104E/MS	100	Single	1.8 - 5.5	8-MSOP	77M2853	0.67
MCP4532-502E/MS	5	Single	1.8 - 5.5	8-MSOP	77M2854	0.67
MCP4532-503E/MS	50	Single	1.8 - 5.5	8-MSOP	77M2855	0.67
MCP455X SERIES						
MCP4551-502E/MS	5	Single	1.8 - 5.5	8-MSOP	77M2890	0.90
MCP4551-503E/MS	50	Single	1.8 - 5.5	8-MSOP	77M2891	0.90
MCP4551-104E/MS	100	Single	1.8 - 5.5	8-MSOP	77M2889	0.90
MCP4552-502E/MS	5	Single	1.8 - 5.5	8-MSOP	77M2902	0.90
MCP4552-104E/MS	100	Single	1.8 - 5.5	8-MSOP	77M2901	0.90
MCP4552-503E/MS	50	Single	1.8 - 5.5	8-MSOP	77M2903	0.90
MCP463X SERIES						
MCP4631-502E/ST	5	Dual	1.8 - 5.5	14-TSSOP	77M2938	0.90
MCP4631-503E/ST	50	Dual	1.8 - 5.5	14-TSSOP	77M2939	0.90
MCP4631-104E/ST	100	Dual	1.8 - 5.5	14-TSSOP	77M2937	0.90

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MCP453X/455X/463X/465X SERIES VOLATILE DIGITAL POTENTIOMETERS (CONT.)

MCP463X SERIES

Mfg. Part No.	End To End Resistance (kohm)	End To End Resistance (kohm)	Supply Voltage Range	Pkg.	Stock No.	Price Each 1-25
MCP4632-502E/UN	5	Dual	1.8 - 5.5	10-MSOP	77M2950	0.90
MCP4632-503E/UN	50	Dual	1.8 - 5.5	10-MSOP	77M2951	0.90
MCP4632-104E/UN	100	Dual	1.8 - 5.5	10-MSOP	77M2949	0.90
MCP465X SERIES						
MCP4651-502E/ST	5	Dual	1.8 - 5.5	14-TSSOP	77M2986	0.93
MCP4651-503E/ST	50	Dual	1.8 - 5.5	14-TSSOP	77M2987	0.93
MCP4651-104E/ST	100	Dual	1.8 - 5.5	14-TSSOP	77M2985	0.93
MCP4652-502E/UN	5	Dual	1.8 - 5.5	10-MSOP	77M2998	0.93
MCP4652-503E/UN	50	Dual	1.8 - 5.5	10-MSOP	77M2999	0.93
MCP4652-104E/UN	100	Dual	1.8 - 5.5	10-MSOP	77M2997	0.93

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MCP454X/456X/464X/466X SERIES NON-VOLATILE DIGITAL POTENTIOMETERS

RoHS Compliant Available

MICROCHIP

Features:
- Single or Dual Resistor Network options
- Potentiometer or Rheostat configuration options
- Zero-Scale to Full-Scale Wiper operation

The **MCP45XX** and **MCP46XX** devices offer a wide range of product offerings using an I2C interface. This family of devices support 7-bit and 8-bit resistor networks, Non-Volatile memory configurations, and Potentiometer and Rheostat pinouts. WiperLock Technology allows application-specific calibration settings to be secured in the EEPROM.

MCP454X SERIES

Mfg. Part No.	End To End Resistance (kohm)	End To End Resistance (kohm)	Supply Voltage Range	Pkg.	Stock No.	Price Each 1-25
MCP4541-502E/MS	5	Single	2.7 - 5.5	8-MSOP	77M2866	0.81
MCP4541-503E/MS	50	Single	2.7 - 5.5	8-MSOP	77M2867	0.81
MCP4541-104E/MS	100	Single	2.7 - 5.5	8-MSOP	77M2865	0.81
MCP4542-502E/MS	5	Single	2.7 - 5.5	8-MSOP	77M2878	0.81
MCP4542-503E/MS	50	Single	2.7 - 5.5	8-MSOP	77M2879	0.81
MCP4542-104E/MS	100	Single	2.7 - 5.5	8-MSOP	77M2877	0.81
MCP456X SERIES						
MCP4561-502E/MS	5	Single	2.7 - 5.5	8-MSOP	77M2914	0.96
MCP4561-503E/MS	50	Single	2.7 - 5.5	8-MSOP	77M2915	0.96
MCP4561-104E/MS	100	Single	2.7 - 5.5	8-MSOP	77M2913	0.96
MCP4562-503E/MS	50	Single	2.7 - 5.5	8-MSOP	77M2927	0.96
MCP4562-502E/MS	5	Single	2.7 - 5.5	8-MSOP	77M2926	0.96
MCP4562-104E/MS	100	Single	2.7 - 5.5	8-MSOP	77M2925	0.96
MCP464X SERIES						
MCP4641-502E/ST	5	Dual	2.7 - 5.5	14-TSSOP	77M2962	1.06
MCP4641-104E/ST	100	Dual	2.7 - 5.5	14-TSSOP	77M2961	1.06
MCP4641-503E/ST	50	Dual	2.7 - 5.5	14-TSSOP	77M2963	1.06
MCP4642-104E/UN	100	Dual	2.7 - 5.5	10-MSOP	77M2973	1.06
MCP4642-502E/UN	5	Dual	2.7 - 5.5	10-MSOP	77M2974	1.06
MCP4642-503E/UN	50	Dual	2.7 - 5.5	10-MSOP	77M2975	1.06
MCP466X SERIES						
MCP4661-502E/ST	5	Dual	2.7 - 5.5	14-TSSOP	77M3010	1.26
MCP4661-503E/ST	50	Dual	2.7 - 5.5	14-TSSOP	77M3011	1.26
MCP4661-104E/ST	100	Dual	2.7 - 5.5	14-TSSOP	77M3009	1.26
MCP4662-502E/UN	5	Dual	2.7 - 5.5	10-MSOP	77M3022	1.26
MCP4662-503E/UN	50	Dual	2.7 - 5.5	10-MSOP	77M3023	1.26
MCP4662-104E/UN	100	Dual	2.7 - 5.5	8-MSOP	77M3021	1.26

(190031)

DIGITAL POTENTIOMETERS

RoHS Compliant Available

ON Semiconductor

Features:
- Temperature Range: -40°C to +85°C
- Linear Taper
- Single supply operation

VOLATILE; SINGLE CHANNEL

Mfg. Part No.	Res. (kohm)	Interface	Sup. Volt. (V)	Package	Stock No.	Price Each
CAT5110SDI-10-GT3	10	2 Wire, Serial	2.7 to 5.5	6-SC-70	08R5272	1.62
CAT5110SDI-50-GT3	50	2 Wire, Serial	2.7 to 5.5	6-SC-70	08R5273	1.62
CAT5110TBI-00-T3	100	2 Wire, Serial	2.7 to 5.5	6-SOT-23	08R5274	7.28
CAT5115ZI-50-T3	50	Serial	2.5 to 6	8-MSOP	08R5283	2.78
CAT5119TBI-00-GT3	100	2 Wire, Serial	2.7 to 5.5	6-SOT-23	08R5284	2.51
CAT5119TBI-50-GT3	50	2 Wire, Serial	2.7 to 5.5	6-SOT-23	08R5285	2.51
CAT5120TBI-10-GT3	10	2 Wire, Serial	2.7 to 5.5	6-SOT-23	08R5286	2.82
CAT5121TBI-10-GT3	10	2 Wire, Serial	2.7 to 5.5	6-SOT-23	08R5287	2.73

➤CONTINUED➤

DIGITAL POTENTIOMETERS (CONT.)

Mfg. Part No.	Res. (kohm)	Interface	Sup. Volt. (V)	Package	Stock No.	Price Each
● CAT5125TBI-10-GT3	10	2 Wire, Serial	2.7 to 5.5	6-SOT-23	08R5288	2.41
● CAT5110TBI-00GT3	100	2 Wire, Serial	2.7 to 5.5	6-SOT-23	34R3311	1.59
● CAT5110TBI-50GT3	50	2 Wire, Serial	2.7 to 5.5	6-SOT-23	34R3313	1.59
VOLATILE; QUAD CHANNEL						
● CAT5251YI-50	50	Serial, SPI	2.5 to 6	24-TSSOP	06R1256	8.22
NON-VOLATILE; SINGLE CHANNEL						
● CAT5113ZI-10	10	Increment-Decrement	2.5 to 6	8-MSOP	06R1110	3.51
● CAT5111ZI-10	10	Serial	2.5 to 6	8-MSOP	06R1034	3.36
● CAT5113LI-01-G	1	Serial	2.5 to 6	8-PDIP	06R1069	3.83
● CAT5113LI-10-G	10	Serial	2.5 to 6	8-PDIP	06R1071	3.83
● CAT5113VI-00-T3	100	Serial	2.5 to 6	8-SOIC	08R5278	19.66
● CAT5113VI-50	50	Serial	2.5 to 6	8-SOIC	06R1086	3.78
● CAT5113ZI-00	100	Serial	2.5 to 6	8-MSOP	06R1106	3.51
● CAT5114LI-10	10	Serial	2.5 to 6	8-PDIP	06R1116	2.40
● CAT5127ZI-10-GT3	10	Serial	2.5 to 5.5	8-MSOP	08R5289	2.70
● CAT5129TDI-10-GT3	10	Serial	2.5 to 5.5	6-TSOT-23	08R5290	2.67
● CAT5132ZI-00-GT3	100	I2C, Serial	2.7 to 5.5	10-MSOP	08R5291	3.78
● CAT5132ZI-10-G	10	I2C, Serial	2.7 to 5.5	10-MSOP	06R1233	3.28
NON-VOLATILE; QUAD CHANNEL						
● CAT5241WI-10	2.5	2 Wire, Serial	2.5 to 6	20-SOIC	06R1247	7.32

(148503)

ACTIVE ANALOG FILTERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Linear Technology's line of continuous time and switched capacitor filters provide simple, flexible frequency discrimination solutions. Their specially designed filters can accomodate any frequency response (lowpass, highpass or bandpass) and a wide range of frequencies.

LOWPASS FILTERS

Mfg. Part No.	Filter Order Max.	Filter Response	Cutoff Freq. (MHz)	Package	Stock No.	Price Each 1-24
● LT6600CS8-10#PBF	4th	Chebyshev	10	8-SOIC	57M9556	5.92
● LTC1563-2CGN#PBF	4th	Butterworth	256	16-SSOP	56M2159	4.12
● LTC1563-2IGN#PBF	4th	Butterworth	256	16-SSOP	56M2163	4.51
● LTC1563-3CGN#PBF	4th	Bessel	256	16-SSOP	56M2167	4.12
● LTC1062CSW#PBF	5th	...	20	16-SO	55M8992	6.25
● LTC1062CN8#PBF	5th	...	20	8-DIP	55M8990	6.11
● LTC1063CN8#PBF	5th	Butterworth	50	8-DIP	55M8996	11.04
● LTC1063CSW#PBF	5th	Butterworth	50	16-SOIC	55M8998	11.81
● LTC1564CG#PBF	8th	Elliptic	150	16-SSOP	56M2175	19.48
● LTC6603CUF#PBF	9th	Linear Phase	...	24-QFN	02P7627	16.02
● LTC6603IUF#PBF	9th	Linear Phase	...	24-QFN	02P7629	18.38
● LTC1569CS8-6#PBF	10th	Root Raised Cosine	64	8-SOIC	56M2199	11.57
● LTC1569IS8-7#PBF	10th	Bessel	300	8-SO	56M2211	13.58
UNIVERSAL ACTIVE						
● LTC6601IUF-2#PBF	2nd	Universal	27	20-QFN	05R7683	9.70
● LTC6601CUF-2#PBF	2nd	Universal	27	20-QFN	05R7681	8.42

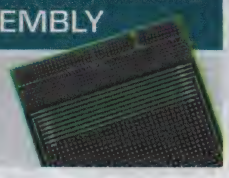
FILTER BUILDING BLOCKS

Mfg. Part No.	Filter Order Max.	Filter Type	Cutoff Freq. (kHz)	Package	Stock No.	Price Each 1-24
● LTC1068IG#PBF	2nd	Switched Capacitor	50	28-SSOP	55M9118	13.59
● LTC1060ACN#PBF	4th	Universal	20	20-DIP	55M8974	15.36
● LTC1060CSW#PBF	4th	Universal	20	20-SOW	55M8978	8.16
● LTC1067CS#PBF	4th	Switched Capacitor	20	16-SOIC	55M9076	6.92
● LTC1064CSW#PBF	8th	Lowpass	50	24-SOIC	55M9036	18.15
● LTC1064-2CN#PBF	8th	Lowpass	140	14-DIP	55M9010	20.03
● LTC1562CG-2#PBF	8th	Universal	150	20-SSOP	56M2142	19.60

(101593)

PCB FABRICATION & ASSEMBLY

Quality US-based manufacturers—as fast as 48-hour turnaround!



(197415)

DIGITALLY CONTROLLED ANTIALIASING FILTER

RoHS Compliant Available

LINEAR TECHNOLOGY

Applications:
- Antialias or Reconstruction Filtering
- DSP Systems
- Communications Systems
- Scientific Instruments
- High Resolutions (16 Bits to 20 Bits)
- Processing Signals Buried in Noise
- Audio Signal Processing
- Programmable Data Rates
- Automatic Gain Control (AGC)
- Single Part Replacing Multiple Filters

Features:
- No External Components
- 122dB Total System Dynamic Range
- Rail-to-Rail Input and Output Range
- Low Noise Mute Mode
- Low Power Shutdown Mode

The **LTC®1564** is a new type of continuous time filter for antialiasing, reconstruction and other band-limiting applications. No other analog components or filter expertise are needed to use it. There is one analog input pin and one analog output pin. The cutoff frequency (f_C) and gain are programmable while the shape of the lowpass response is fixed. A latching digital interface stores (f_C) and gain settings or it can be bypassed for control directly from the pins. The LTC1564 is a rail-to-rail high resolution 8th-order lowpass filter with two stopband notches, giving approximately 100dB attenuation at 2.5 times the passband cutoff frequency f_C (a de-facto standard for DSP front ends).

Mfg. Part No.	Supply Voltage (V)	Cutoff Frequency	Supply Current (mA)	Package	Stock No.	Price Each 1-99
● LTC1564IG#PBF	2.7 to 10.5	10kHz to 150kHz	22	16-SSOP	56M2179	11.67

(210113)

EMI/RFI FILTERS

RoHS Compliant Available

ON Semiconductor

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-2999
● STF202-22T1G	USB Filter with ESD Protection	6-TSOP	45J2271	0.68
● NUF2221W1T2G	USB Upstream Terminator with ESD Protection	88-SC	04R7861	0.60

(142259)

BUTTERWORTH SWITCH-CAPACITOR FILTER

RoHS Compliant Available

TEXAS INSTRUMENTS

- Low Clock-to-Cutoff-Frequency Ratio Error: ±0.8%
- Filter Cutoff Frequency Dependent Only on External-Clock Frequency Stability
- Minimum Filter Response Deviation Due to External Component Variations Over Time and Temperature
- Cutoff Frequency Range From 0.1Hz to 30kHz, $V_{CC}\pm = \pm 2.5$ V
- 5V to 12V Operation
- Self-Clocking or TTL-Compatible and CMOS-Compatible Clock Inputs
- Low Supply-Voltage Sensitivity
- Designed to be Interchangeable With National MF4-50

Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-24	25-49
● TLC04CD	Switch-Capacitor Filter	08F8983	2.86	2.57	2.23
● TLC04ID	Switch-Capacitor Filter	90B0867	3.34	2.98	2.69
● TLC14CD	Monolithic, Low Pass Filter	90B1126	3.20	2.57	2.34
● TLC14ID	Monolithic, Low Pass Filter	90B1140	2.80	2.25	2.05

(74642)

ANALOG MULTIPLIERS/DIVIDERS

RoHS Compliant Available

ANALOG DEVICES

These devices accept analog voltages and multiply, divide, square and/or square-root the signals over wide frequency range (DC to 500MHz). The 4-quadrant multipliers/dividers accept any combination of input signal polarity and provide output signals of appropriate polarity. Various signal processing functions can be implemented, including modulation and demodulation, fixed and variable remote gain adjustment, power measurement and mathematical operations in analog computing, curve computing and linearizing.

Mfg. Part No.	BW Max. (MHz)	Supply Voltage Max. ±(V)	FS Accuracy Max.	Package	Stock No.	Price Each 1-4
● AD538BDZ	0.4	18	1 %	18-DIP	46M5256	61.45
● AD835ARZ	1	5.5	1 %	8-SOIC	68H9066	18.22
● AD532KDZ	1	18	1 %	14-CDIP	13M6171	116.74
● AD532JDZ	1	18	2 %	14-CDIP	13M6170	68.85
● AD632AHZ	1	18	1 %	10-TO-100	34M5024	22.77
● AD633JNZ	1	18	2 %	8-PDIP	59K4439	9.00
● AD633JRZ	1	18	2 %	8-SOIC	87H9955	9.00
● AD734ANZ	10	16.5	0.4 %	14-PDIP	59K4727	23.38
● AD734BNZ	40	16.5	2 %	14-DIP	59K4728	39.79
● AD834ARZ	500	9	2 %	8-SOIC	59K6628	31.52

(9876)

ANALOG SWITCHES

RoHS Compliant Available

ANALOG DEVICES

ANALOG CMOS SWITCHES, SPST

Mfg. Part No.	Channels	$R_{DS}(ON)$ (Ω)	$I_D(ON)$, $I_S(ON)$ (nA)	Sup. Volt. Max. (V) Sngl.	Dual	Package	Stock No.	Price Each 1-9
ADG601BRTZ-REEL7	1	2	0.01	5.5	5.5	6-SOT-23	19M8662	2.51
ADG801BRMZ	1	0.35	0.01	5.5	5.5	8-MSOP	12M7846	2.72
ADG702BRMZ	1	3	0.01	5.5	...	8-MSOP	19M0681	1.81
ADG417BNZ	1	25	0.1	12	15	8-PDIP	59K1257	2.76
ADG801BRTZ-REEL7	1	0.4	30	5.5	...	SOT-23	59K1626	2.60
ADG741BKSZ-REEL7	1	2	0.01	5.5	...	5-SC70	49X0597	1.84
ADG1401BRMZ	1	1	0.2	16.5	...	8-MSOP	52R8027	3.90
ADG821BRMZ	2	0.5	0.01	5.5	...	8-MSOP	19M8674	2.58
ADG721BRMZ	2	4	0.01	5.5	...	8-MSOP	19M0688	1.97
ADG621BRMZ	2	4	0.01	5.5	5.5	10-uSOIC	59K1443	2.70
ADG1422BRMZ	2	2.1	2	12	15	10-MSOP	52R8038	4.38
ADG1423BRMZ	2	2.1	2	12	15	10-MSOP	52R8040	4.22
ADG1421BRMZ	2	2.1	0.2	16.5	...	8-MSOP	52R8036	4.22
ADG1611BRUZ	4	1	10	16	8	16-TSSOP	71P7807	4.56
ADG1211YRUZ	4	120	0.02	15	...	16-TSSOP	59K1155	5.17
ADG711BRUZ	4	2.5	0.01	5.5	...	16-TSSOP	19M8667	2.77
ADG442BRZ	4	40	0.08	12	15	16-SOIC	59K1317	2.49
ADG451BNZ	4	4	0.04	12	20	16-DIP	19M0675	6.05
ADG451BRZ	4	4	0.04	12	15	16-NSOIC	59K1329	5.59
ADG783BCPZ	4	4	0.2	5.5	...	20-LFCSP	12M7841	2.53
ADG451BRUZ	4	4	0.04	12	20	16-TSSOP	19M8656	5.80
ADG431BNZ	4	17	0.1	12	15	16-PDIP	59K1276	5.88
ADG411BRZ	4	25	0.1	12	15	16-NSOIC	19M8649	4.27
ADG201HSKRZ	4	30	0.1	15	15	16-SOIC	59K1177	9.88
ADG201AKNZ	4	60	0.5	15	15	16-PDIP	59K1167	3.65
ADG201AKRZ	4	60	0.5	15	15	16-NSOIC	19M8642	3.65
ADG5413BRUZ-REEL7	4	10	2	40	22	16-TSSOP	92T1804	6.04
ADG5413BCPZ-REEL7	4	10	2	40	22	16-LFCSP	92T1803	5.50
ADG5412BRUZ-REEL7	4	10	2	40	22	16-TSSOP	92T1802	6.04
ADG5413BRUZ	4	10	2	40	22	16-TSSOP	85R6322	5.87
ADG5412BRUZ	4	10	2	40	22	16-TSSOP	85R6320	5.80
AD7511DIKNZ	4	75	10	...	15	16-DIP	12M8826	17.19
ADG611YRUZ	4	85	0.01	5.5	5.5	16-TSSOP	59K1428	3.68
ADG211AKNZ	4	115	0.5	15	15	16-PDIP	59K1184	3.49
ADG1414BRUZ	8	9.5	0.1	16.5	...	24-TSSOP	52R8031	7.63
ADG715BRUZ	8	2.5	0.01	5.5	2.5	24-TSSOP	19M0686	4.82
ADG714BRUZ	8	4.5	0.01	5.5	2.5	24-TSSOP	59K1531	4.63
ANALOG SWITCHES, SPST - NC								
ADG701BRMZ	1	3	0.01	5.5	...	8-MSOP	19M0680	1.81
ADG417BRZ	1	25	0.1	12	15	8-NSOIC	19M8651	2.63
ADG722BRMZ	2	40	0.01	5.5	...	8-MSOP	19M0689	2.06
ADG412BNZ	4	100	10	12	15	16-PDIP	59K1249	4.87
ADG612YRUZ	4	85	0.1	5.5	5.5	16-TSSOP	59K1431	3.82
ADG613YRUZ	4	85	0.1	5.5	5.5	16-TSSOP	59K1434	3.68
ADG712BRZ	4	2.5	0.01	5.5	...	16-SOIC	19M0684	2.60
ADG712BRUZ	4	2.5	0.01	5.5	...	16-TSSOP	19M8668	2.70
ADG452BNZ	4	4	0.04	12	15	16-PDIP	12M7797	5.57
ADG452BRZ	4	4	0.04	12	20	16-NSOIC	19M8658	5.52
ADG452BRUZ	4	4	0.04	12	20	16-TSSOP	19M8657	5.80
ADG432BRZ	4	17	0.1	12	15	16-SOIC	59K1284	5.64
ADG412BRZ	4	25	0.1	12	15	16-SOIC	59K1252	4.43
ADG441BRZ	4	40	0.08	12	15	16-SOIC	19M8655	2.39
ADG201HSJNZ	4	30	0.1	15	15	16-DIP	59K1172	6.36
ADG202AKNZ	4	60	0.5	15	15	16-PDIP	59K1179	3.75
ADG202AKRZ	4	60	0.5	15	15	16-NSOIC	19M8643	3.87
ADG212AKNZ	4	115	0.5	15	15	16-PDIP	59K1189	3.36
ADG212AKRZ	4	115	0.5	15	15	16-NSOIC	19M8644	3.26
ANALOG SWITCHES, SPST - NO/NC								
ADG723BRMZ	2	4	0.01	5.5	...	8-MSOP	19M0690	1.98
ADG1222BRMZ	2	120	20	16.5	16.5	10-MSOP	34M4783	3.44
ADG1223BRMZ	2	120	20	16.5	16.5	10-MSOP	34M4785	3.31
ADG811YRUZ	4	0.5	0.2	3.6	...	16-TSSOP	59K1641	3.34
ADG713BRZ	4	2.5	0.01	5.5	...	16-SOIC	19M0685	2.50
ADG713BRUZ	4	2.5	0.01	5.5	...	16-TSSOP	19M8669	2.60
ADG453BRZ	4	4	0.04	12	15	16-NSOIC	59K1342	5.39
ADG453BRUZ	4	4	0.04	12	15	16-TSSOP	19M8659	5.59
ADG433BRZ	4	17	0.1	12	15	16-SOIC	59K1290	5.64
ADG413BRZ	4	25	0.1	12	15	16-NSOIC	19M8650	4.27
ANALOG SWITCHES, SPDT								
ADG819BRMZ	1	0.5	0.01	5.5	...	8-uSOIC	19M8673	2.86
ADG1419BRMZ	1	2.1	0.2	16.5	5	8-MSOP	52R8034	4.10
ADG849YKSZ-500RL7	1	0.5	0.01	5.5	...	6-SC70	19M8675	1.92

➤CONTINUED➤

ANALOG SWITCHES (CONT.)

ANALOG SWITCHES, SPDT

Mfg. Part No.	Channels	$R_{DS}(ON)$ (Ω)	$I_D(ON)$, $I_S(ON)$ (nA)	Sup. Volt. Max. (V) Sngl.	Dual	Package	Stock No.	Price Each 1-9
ADG719BRMZ	1	2.5	0.01	5.5	...	8-uSOIC	19M0687	1.98
ADG719BRTZ-REEL7	1	4	0.25	5.5	...	6-SOT-23	96K2067	1.81
ADG779BKSZ-REEL7	1	2.5	0.01	5.5	...	6-SC70	19M8672	1.86
ADG619BRMZ	1	4	0.01	5.5	5.5	8-MSOP	59K1437	2.70
ADG419BNZ	1	25	0.4	12	15	8-PDIP	59K1259	3.07
ADG419BRZ	1	25	0.4	12	15	8-SOIC	59K1263	2.97
ADG419BRMZ	1	25	0.4	12	15	8-uSOIC	19M8652	3.05
ADG619BRTZ-REEL7	1	4	0.01	5.5	5	SOT-23	59K1442	2.65
ADG918BRMZ	1	...	...	2.75	...	8-MSOP	19M8676	2.67
ADG5436BRUZ	2	10	2	40	22	16-TSSOP	85R6324	6.03
ADG1636BRUZ	2	1	12	16	8	16-TSSOP	71P7822	4.94
ADG884BRMZ	2	0.28	0.2	5.5	...	10-MSOP	19M0697	2.81
ADG736BRMZ	2	2.5	0.01	5.5	...	10-MSOP	19M0693	2.63
ADG787BRMZ	2	2.5	50	5.5	...	10-MSOP	19M0695	2.84
ADG436BNZ	2	12	0.05	12	15	16-PDIP	19M8653	6.53
ADG436BRZ	2	12	0.05	12	15	16-NSOIC	59K1293	5.84
AD7512DIJNZ	2	75	15	...	15	14-PDIP	59K4967	12.40
ADG636YRUZ	2	85	0.01	5.5	5.5	14-TSSOP	12M7822	4.08
ADG1236YRUZ	2	120	0.02	12	15	16-TSSOP	19M0662	5.05
ADG1633BRUZ	3	4.5	2	16	8	16-TSSOP	26R2420	7.54
ADG5233BRUZ	3	200	0.2	40	...	16-TSSOP	58T8827	5.59
ADG5433BRUZ	3	14	4	40	22	16-TSSOP	18T1964	5.79
ADG5433BRUZ-REEL7	3	14	2	40	22	16-TSSOP	92T1806	5.75
ADG5433BCPZ-REEL7	3	14	2	40	22	16-LFCSP	92T1805	5.62
ADG5434BRUZ	4	14	4	40	22	20-TSSOP	18T1966	7.40
ADG5234BRUZ	4	200	0.2	40	...	20-TSSOP	58T8829	7.14
ADG734BRUZ	4	2.5	0.01	5.5	2.5	20-TSSOP	59K1572	3.70
ADG333ABNZ	4	20	0.1	12	15	20-PDIP	59K1221	6.59
ADG333ABRSZ	4	20	0.1	12	15	20-SSOP	59K1222	6.48
ADG5434BRUZ-REEL7	4	14	30	40	22	20-TSSOP	92T1807	7.27
ADG1434YRUZ	4	40	0.05	12	15	20-TSSOP	28M3595	7.74
ADG1234YRUZ	4	120	0.02	12	15	20-TSSOP	19M0661	6.92
ADG1334BRSZ	4	130	10	12	15	20-SSOP	23M1193	4.19
ADG1634BRUZ	4	4.5	2	16	8	20-TSSOP	26R2422	9.95
ANALOG SWITCHES, DPDT								
ADG888YRUZ	2	0.4	0.2	5.5	...	16-TSSOP	19M0698	4.22

(9996)

VIDEO CROSSPOINT SWITCHES

RoHS Compliant Available

ANALOG DEVICES

16 x 5 BUFFERED VIDEO CROSSPOINT SWITCH MATRICES

Mfg. Part No.	Gain	Frequency (MHz)	Interface Type	Supply Voltage (V) Min.	Max.	Package	Stock No.	Price Each 1-9
AD8106ASTZ	1	260	Parallel	4.5	5.5	80-LQFP	19M0934	27.18
AD8110ASTZ	1	260	Parallel/ Serial	4.5	5.5	80-LQFP	59K6377	53.07
AD8107ASTZ	2	260	Parallel	4.5	5.5	80-LQFP	19M0935	27.18
AD8109ASTZ	2	325	Parallel/ Serial	4.5	5.5	80-LQFP	59K6370	32.58
AD8113JSTZ	2	60	Parallel/ Serial	4.5	5.5	100-LQFP	82H2981	43.76

8 x 8 BUFFERED VIDEO CROSSPOINT SWITCH ARRAYS

Mfg. Part No.	Gain	Frequency (MHz)	Interface Type	Supply Voltage (V) Min.	Max.	Package	Stock No.	Price Each 1-9
AD8108ASTZ	1	325	Serial, Parallel	4.5	5.5	80-LQFP	59K6369	33.55

16 x 16 BUFFERED VIDEO CROSSPOINT SWITCH ARRAYS

Mfg. Part No.	Number of Switches	Package	Stock No.	Price Each 1-9
AD75019JPZ	256	44-PLCC	59K4960	26.20

(89812)

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(212565)

ANALOG SWITCHES & MULTIPLEXERS

1

ANALOG CMOS MULTIPLEXERS

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ANALOG DEVICES

Mfg. Part No.	Configuration	R_{On} (ohms)	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
ADG1606BRUZ	16:1	7.5	16	28-TSSOP	52R8046	7.68
ADG1607BRUZ	8:1	7.5	16	28-TSSOP	52R8048	7.68
DS100MB201SQE/NOPB	2:1	50	2.625	54-LLP	47T6921	19.27
AD7501KNZ	8:1	300	15	16-PDIP	59K4959	15.66
ADG5404BRUZ	4:1	16	40	14-TSSOP	85R6318	6.10
ADG5408BRUZ	4:1	22	40	16-TSSOP	91R2561	5.66
ADG5209BRUZ	4:1	230	40	16-TSSOP	58T8825	5.66
ADG5204BRUZ	4:1	280	40	14-TSSOP	51T1955	5.88
ADG5409BRUZ	8:1	22	40	16-TSSOP	91R2563	5.87
AD7506JNZ	16:1	300	16	28-DIP	12M8823	22.53
AD7506KNZ	16:1	300	17	28-PDIP	59K4963	25.90
AD8170ANZ	2:1	...	6	8-DIP	19M0939	5.57
AD8174ARZ	4:1	...	6	14-SOIC	88H0184	7.76
AD8182ARZ	2:1	...	6	14-SOIC	59K6456	6.15
AD8184ARZ	4:1	...	6	14-NSOIC	19M8887	5.59
ADG1204YRUZ	4:1	120	12	14-TSSOP	19M8641	5.52
ADG1206YRUZ	16:1	120	16.5	28-TSSOP	28M3577	10.24
ADG1408YRUZ	8:1	4	16.5	16-TSSOP	28M3586	7.20
ADG1604BRUZ	4:1	1	16	14-TSSOP	71P7802	4.76
ADG3257BRQZ	2:1	2	5	16-QSOP	59K1211	1.85
ADG406BNZ	16:1	50	15	28-PDIP	59K1226	9.86
ADG406BPZ	16:1	...	12	28-PLCC	59K1227	10.21
ADG407BPZ	8:1	50	12	28-PLCC	19M8645	11.11
ADG408BNZ	8:1	40	12	16-PDIP	19M0674	6.20
ADG408BRUZ	8:1	40	12	16-TSSOP	19M8646	5.95
ADG408BRZ	8:1	40	12	16-NSOIC	19M8647	5.81
ADG409BNZ	4:1	40	15	16-PDIP	59K1236	6.13
ADG409BRUZ	4:1	40	44	16-TSSOP	59K1237	5.95
ADG409BRZ	4:1	40	12	16-NSOIC	19M8648	5.95
ADG426BRSZ	16:1	50	15	28-SSOP	59K1266	10.40
ADG438FBRZ	8:1	400	15	16-NSOIC	59K1296	8.34
ADG439FBRZ	4:1	400	15	16-NSOIC	19M8654	8.34
ADG506AKNZ	16:1	280	16.5	28-PDIP	59K1351	10.79
ADG506AKRZ	16:1	280	16.5	28-WSOIC	59K1353	10.85
ADG507AKNZ	8:1	280	16.5	28-PDIP	59K1355	11.03
ADG507AKRUZ	8:1	280	16.5	28-TSSOP	59K1357	14.21
ADG507AKRZ	8:1	280	16.5	28-WSOIC	59K1358	11.00
ADG508AKNZ	8:1	280	16.5	16-PDIP	59K1360	5.88
ADG508AKRZ	8:1	280	16.5	16-NSOIC	59K1361	5.71
ADG508FBNZ	8:1	300	15	16-PDIP	19M0676	8.02
ADG508FBRNZ	8:1	300	15	16-NSOIC	19M8660	7.93
ADG509AKNZ	4:1	280	16.5	16-PDIP	19M0677	5.65
ADG509FBRNZ	4:1	300	15	16-NSOIC	19M8661	7.74
ADG526AKNZ	16:1	280	16.5	28-PDIP	19M0678	11.80
ADG528AKNZ	8:1	280	16.5	18-DIP	19M0679	8.73
ADG529AKNZ	4:1	500	16.5	18-DIP	59K1400	8.84
ADG604YRUZ	4:1	85	5.5	14-TSSOP	19M8663	4.08
ADG608BRUZ	8:1	30	6.5	16-TSSOP	77M9913	4.98
ADG608BRZ	8:1	22	5	16-NSOIC	59K1419	4.98
ADG609BRUZ	4:1	22	5	16-TSSOP	19M8664	4.98
ADG658YRUZ	8:1	45	12	16-TSSOP	19M8665	4.46
ADG659YRUZ	4:1	45	12	16-TSSOP	19M8666	4.29
ADG704BRMZ	4:1	2.5	5.5	10-uSOIC	59K1493	2.74
ADG706BRUZ	16:1	2.5	5.5	28-TSSOP	19M0682	6.06
ADG708BRUZ	8:1	3	5.5	16-TSSOP	59K1501	3.37
ADG708CRUZ	8:1	3	5.5	16-TSSOP	59K1504	3.95
ADG709BRUZ	4:1	3	5.5	16-TSSOP	19M0683	3.29
ADG709CRUZ	4:1	3	5.5	16-TSSOP	59K1510	3.95
ADG725BSUZ	16:1	4	5.5	48-TQFP	12M7827	11.29
ADG726BSUZ	32:1	4	5.5	48-TQFP	59K1555	11.11
ADG728BRUZ	8:1	4.5	5.5	16-TSSOP	19M0691	4.19
ADG729BRUZ	4:1	2.5	5.5	16-TSSOP	19M0692	4.19
ADG731BSUZ	32:1	4	5.5	TQFP	59K1565	11.16
ADG732BSUZ	32:1	4	5.5	48-TQFP	19M8670	10.98
ADG738BRUZ	8:1	4.5	5	16-TSSOP	19M8671	4.19
ADG774ABRQZ	2:1	2.2	5.5	16-QSOP	59K1600	4.31
ADG774BRZ	2:1	2.2	5	16-SOIC	19M0694	4.19
ADG5208BRUZ	8:1	230	40	16-TSSOP	58T8823	5.87
ADG804YRMZ	4:1	0.5	3.6	10-MSOP	59K1638	2.64
ADG774BRQZ	2:1	2.2	5	16-QSOP	59K1603	4.14

(177917)

ANALOG SWITCHES

RoHS Compliant Available

FAIRCHILD

The Fairchild Switch FSAL200 is a rail-to-rail quad 2:1 high-speed CMOS TTL-compatible analog multiplexer/demultiplexer switch. The low On Resistance of the switch allows inputs to be connected to outputs without adding propagation delay or generating additional ground bounce noise

Mfg. Part No.	Number of Switches	Config.	R_{ON} (Ohm)	Supply Voltage Range (V)	Package	Stock No.	Price Each 1-9
FSA5157P6X	1	SPST	0.4	1.65-4.3	6-SC-70	86K1551	0.60
FSA1157P6X	1	SPST (NC)	0.75	1.65-5.5	6-SC70	09J6396	0.56
FSA4157AP6X	1	SPST (NO)	0.95	2.7-5.5	6-SC70	31K6859	0.70
FSA4157P6X	1	SPST (NO)	0.95	1.65-5.5	6-SC70	84H4796	0.71
FSA3157P6X	1	SPST (NO)	5	1.65-5.5	6-SC70	50H4349	0.54
FSA2467MPX	2	DPDT	0.4	1.65-4.6	16-MLP	64K1105	0.93

(83675)

ANALOG SWITCHES

RoHS Compliant Available

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QUAD SINGLE-POLE SINGLE-THROW (4 × SPST)

Mfg. Part No.	$R_{DS(ON)}$ Max. (Ω)	$I_{S(OFF)}$ Typ. (± nA)	T_{ON} Typ. (ns)	T_{OFF} Typ. (ns)	Package	Stock No.	Price Each 1-24
DG411DYZ	25	0.1	110	100	16-SOIC	11J8344	2.17
DG413DYZ	25	0.1	110	100	16-SOIC	61J5531	2.60
DG412DJZ	35	0.1	110	100	16-DIP	79K6183	2.77
DG412DYZ	35	0.1	110	100	16-SOIC	11J8346	2.54
DG442DJZ	50	0.01	150	110	16-DIP	61J5533	2.55
DG445DYZ	50	0.01	120	160	16-SOIC	61J5536	2.08
HI3-5043-5Z	50	0.8	370	280	16-DIP	61J6017	8.55
HI9P0201-5Z	55	2	185	220	16-SOIC	61J6056	8.55
HI3-0201-5Z	80	2	185	220	16-DIP	61J6008	4.85
DG441DYZ	85	0.01	250	120	16-SOIC	11J8348	2.55
DG441DJZ	85	0.01	150	90	16-DIP	61J5532	2.74

SINGLE-POLE DOUBLE-THROW (2 × SPDT)

Mfg. Part No.	$R_{DS(ON)}$ Max. (Ω)	$I_{S(OFF)}$ Typ. (± nA)	T_{ON} Typ. (ns)	T_{OFF} Typ. (ns)	Package	Stock No.	Price Each 1-24
DG403DYZ	45	0.01	100	60	16-SOIC	61J5522	1.98

(9880)

CMOS ANALOG MULTIPLEXERS

RoHS Compliant Available

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Mfg. Part No.	Description	$R_{DS(ON)}$ Max. (Ω)	T_{ON} Typ. (ns)	T_{OFF} Typ. (ns)	Package	Stock No.	Price Each 1-24
DG407DYZ	Single 8 x 1	50	150	70	28-SOIC	61J5527	8.23
DG408DJZ	Single 8 x 1	100	115	105	16-DIP	61J5528	3.16
DG408DYZ	Single 8 x 1	100	115	105	16-SOIC	11J8340	2.94
HI9P0508-5Z	Single 8 x 1	180	250	250	16-SOIC	61J6062	4.51
HI3-0508-5Z	Single 8 x 1	400	250	250	16-DIP	61J6013	4.99
HI3-0508A-5Z	Single 8 x 1*	1800	300	300	16-DIP	57K3839	6.24
DG406DYZ	Single 16 x 1	50	150	70	28-SOIC	61J5525	7.09
DG406DJZ	Single 16 x 1	50	150	70	28-DIP	61J5524	6.05
HI3-0506A-5Z	Dual 16 x 1*	1800	30	300	28-DIP	61J6011	16.02
DG409DJZ	Diff. 4 x 1	100	115	105	16-DIP	61J5529	2.97
DG409DYZ	Diff. 4 x 1	100	115	105	16-SOIC	11J8342	3.07
HI3-0509A-5Z	Diff. 4 x 1	1800	300	300	16-DIP	61J6014	7.79
HI3-0507A-5Z	Diff. 8 x 1*	1800	300	300	28-DIP	61J6012	28.31

* Features overvoltage protection.
(4243)

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(212569)

SWITCHES AND MULTIPLEXERS

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LINEAR TECHNOLOGY

Industry-standard analog switches and SPI and I2C serially controlled multiplexers for data conversion applications.

Mfg. Part No.	Ch.	Configuration	RDS(ON) (Ohm)	Package	Stock No.	Price Each 1-24
ANALOG SWITCHES w/ PARALLEL INTERFACE						
LTC203CS#PBF	4	SPST	65	16-SOIC	56M4510	5.02
ANALOG SWITCHES w/ SERIAL INTERFACE						
LTC1391CS#PBF	8	CMOS	45	16-SOIC	56M0630	4.66
MULTIPLEXERS w/SMBus INTERFACE						
LTC1380CS#PBF	8	Single Ended	35	16-SOIC	56M0518	6.26
LTC1393CS#PBF	4	Differential	70	16-SOIC	56M0658	6.26
ANALOG SWITCHES w/SMBus INTERFACE						
LTC1710CS8#PBF	2	Switch	0.4	8-SOIC	56M3434	5.87

(101575)

VIDEO MULTIPLEXERS

RoHS Compliant Available

LINEAR TECHNOLOGY

The **LT1205** is a dual buffered 4-input, 2-output multiplexer. These multiplexers act as SPDT video switches with 10ns transition times at toggle rates up to 30MHz. Both have a 25ns switch time and are manufactured using LTC's proprietary complementary bipolar process.

LT6555 and **LT6556** are high speed triple 2:1 video multiplexers that are ideal for driving very high resolution video signals. Separate power supply pins for each amplifier boost channel separation to 72dB, allowing them to excel in many high speed applications.

Mfg. Part No.	Number of Channels	Bandwidth Max (MHz)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-24
LT1205CS#PBF	2	150	15	16-SOIC	57M2664	5.54
LT6555CGN#PBF	3	650	6	24-SSOP	57M9488	5.53
LT6555IGN#PBF	3	650	6	24-SSOP	57M9496	6.33
LT1675CGN#PBF	3	250	12.6	16-SSOP	57M5659	6.68

(101590)

BUFFERS

RoHS Compliant Available

TEXAS INSTRUMENTS

FEATURED BUFFERS

Mfg. Part No.	Description	Datarate Max. (Gbps)	Package	Stock No.	Price Each 1-9
DS10BR150TSD/NOPB	Buffer	1	8-LLP	46M5346	2.72
DS25BR100TSD/NOPB	Buffer	3.125	8-LLP	46M5352	5.37
DS25BR110TSD/NOPB	Single LVDS Buffer	3.125	8-LLP	46M5354	5.13
DS25BR120TSD/NOPB	Single LVDS Buffer	3.125	8-LLP	46M5356	5.13
DS25BR150TSD/NOPB	Single LVDS Buffer	3.125	8-LLP	42M1578	4.87
DS25BR440TSQ/NOPB	Quad LVDS Buffer	3.125	40-LLP	95M8821	8.69
DS90LV804TSQ/NOPB	Quad LVDS Buffer	0.8	32-LLP	69K2127	5.01
DS90LV004TVS/NOPB	Quad LVDS Buffer	1.5	48-TQFP	65K5420	6.67
DS15BR400TVS/NOPB	Quad LVDS Buffer	...	48-TQFP	32M0908	9.05
FEATURED EQUALIZERS					
DS16EV5110SQ/NOPB	Settable HDMI/DVI EQ	2.25	48-LLP	54M4546	11.80
FEATURED 1:n REPEATERS					
DS10BR254TSQ/NOPB	1 to 4 Repeater	1.5	40-LLP	78M7724	9.16

FEATURED FIXED BUFFERS

Type	Av+1 BW (MHz)	Slew Rate (V/us)	Supply Range (V) Min.	Supply Range (V) Max.	Offset Voltage (mV)	Package	Stock No.	Price Each 1-9
LMH6321MR/NOPB	110	1800	5	30	15	8-PSOP	99K2264	5.99
LMH6321TS/NOPB	110	1800	5	30	15	7-TO-263	99K2268	5.99
LMH6559MA/NOPB	1750	4580	3	10	3	8-NSOIC	41K2774	2.94
LMH6559MF/NOPB	1750	4580	3	10	3	5-SOT-23	41K2776	2.45

(85030)

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(196525)

ANALOG SWITCHES / MULTIPLEXERS

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Features
- Low ON resistance
- Low ON resistance flatness
- Low switch leakag

Applications
- Automotive monitoring systems
- Audio/video source selection

ANALOG MULTIPLEXERS / DEMULTIPLEXERS

Mfg. Part No.	Description	Supply Voltage Range	Pkg.	Stock No.	Price Each 1-9
74HC4051D,652	8-channel analog multiplexer/ demultiplexer	2V to 10V	16-SOIC	71R2504	0.60
74HC4051D,653		2V to 10V	16-SOIC	78R6259	0.60
74HC4051N,652		2V to 10V	16-DIP	71R2508	1.24
74HC4051PW,112		2V to 10V	16-TSSOP	71R2509	0.60
74HC4051PW,118		2V to 10V	16-TSSOP	78R6260	0.48
74HCT4051D,112		4.5V to 5.5V	16-SOIC	71R1642	0.55
74HCT4051N,112		4.5V to 5.5V	16-DIP	71R1646	1.24
HEF4051BP,652		3V to 15V	16-DIP	70R5226	1.23
HEF4051BT,013		3V to 15V	16-SOIC	70R5227	0.62
HEF4051BT,653		3V to 15V	16-SOIC	78R7393	0.53
HEF4067BP,652	16-channel analog multiplexer/ demultiplexer	3V to 15V	24-DIP	70R5250	5.64
74HC4052D,652	Dual 4-channel analog multiplexer/ demultiplexer	2V to 10V	16-SOIC	71R2512	0.57
74HC4052D,653		2V to 10V	16-SOIC	78R7402	0.57
74HC4052N,652		2V to 10V	16-DIP	71R2516	1.24
HEF4052BP,652		3V to 15V	16-DIP	70R5233	1.23
HEF4052BT,652		3V to 15V	16-SOIC	70R5234	0.61
74HC4053D,653	Triple 2-channel analog multiplexer/demultiplexer	2V to 10V	16-SOIC	78R7403	0.60
74HC4053D,652		2V to 10V	16-SOIC	71R2520	0.60
74HC4053N,652		2V to 10V	16-DIP	71R2524	1.24
74HCT4053D,112		4.5V to 5.5V	16-SOIC	71R1656	0.59
74HCT4053N,112		4.5V to 5.5V	16-DIP	71R1660	1.43
ANALOG SWITCHES					
74HC1G66GW,125	Single SPST analog switch	2V to 10V	5-TSSOP	71R1962	0.46
74LVC1G66GW,125		1.65V to 5.5V	5-TSSOP	71R3117	0.46
HEF4053BP,652	Triple SPDT analog switch	3V to 15V	16-DIP	70R5236	1.23
HEF4053BT,652		3V to 15V	16-SOIC	70R5237	0.61
74HC4066BQ,115	Quad SPST analog switch	2V to 10V	14-QFN	71R2540	0.62
74HC4066D,652		2V to 10V	14-SOIC	71R2541	0.45
74HC4066N,652		2V to 10V	14-DIP	71R2545	1.08
74HCT4066D,112		4.5V to 5.5V	14-SOIC	71R1673	0.50
74HCT4066N,112		4.5V to 5.5V	14-DIP	71R1677	1.08
HEF4066BP,652		3V to 15V	14-DIP	70R5247	0.91
HEF4066BT,652		3V to 15V	14-SOIC	70R5248	0.55
HEF4016BP,652	Quad Bilateral Switch	4.5V to 15.5V	14-DIP	70R5154	0.91

(190428)

ANALOG SWITCHES AND MULTIPLEXERS

RoHS Compliant Available

ON Semiconductor

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
MC14051BDG	Analog Multiplexer/Demultiplexer	16-SOIC	45J1061	0.56
MC14051BDTR2G	Analog Multiplexer/Demultiplexer	16-TSSOP	42K0523	0.66
MC14052BDG	Analog Multiplexer/Demultiplexer	16-SOIC	71J5472	0.72
MC14053BDG	Analog Multiplexer/Demultiplexer	16-SOIC	45J1064	0.58
MC74HC4051ADG	Analog Multiplexer/Demultiplexer	16-SOIC	26K4231	0.58
MC74HC4051ADR2G	Analog Multiplexer/Demultiplexer	16-SOIC	84K8780	0.60
MC74HC4053ADG	Analog Multiplexer/Demultiplexer	16-SOIC	45J1329	0.64
MC74HC4053ADTG	Analog Multiplexer/Demultiplexer	16-TSSOP	42K0891	0.55
MC74HC4053ANG	Analog Multiplexer/Demultiplexer	16-PDIP	45J1330	0.80
MC14551BDG	Quad 2-Channel Analog Multiplexer/ Demultiplexer	16-SOIC	71J5501	1.61
MC74HC4066ADG	Quad Analog Switch/Multiplexer/ Demultiplexer	14-SOIC	45J1332	0.55
MC74HC4066ADR2G	Quad Analog Switch/Multiplexer/ Demultiplexer	14-SOIC	84K8781	0.56
MC74HC4066ADTR2G	Quad Analog Switch/Multiplexer/ Demultiplexer	14-TSSOP	42K0895	0.56
MC14016BDG	Quad Analog Switch/Quad Multiplexer	14-SOIC	71J5456	0.45
MC14066BDG	Quad Analog Switch/Quad Multiplexer	14-SOIC	45J1068	0.45
MC14066BDTR2G	Quad Analog Switch/Quad Multiplexer	14-TSSOP	42K0527	0.50

(70357)

ANALOG SWITCHES/ MULTIPLEXERS

RoHS Compliant Available

TEXAS INSTRUMENTS

CMOS ANALOG SWITCHES

Mfg. Part No.	Analog Switch Function	Num. of Ch.	Rds(on) (Ohms)	Pins/ Pkg.	Stock No.	Price Each 1-9
● TS12A4514P	SPST	1	0.015	8-DIP	10M0679	0.80
● TS5A3159DBVT	SPDT	1	1.1	6-SOT-23	44J2610	1.40
● TS5A3359DCUT	SP3T	1	1.1	8-VSSOP	52K5952	0.58
● TS5A4624DCKT	SPDT	1	1.1	6-SC-70	69K0701	0.98
● TS12A12511DRJR	SPDT	1	8	8-QFN	51R5930	1.73
● TS3A4741DGKR	SPST	2	1.1	8-MSOP	02M4336	0.92
● TS3A4742DCNR	SPST	2	1.1	8-SOT-23	71M0462	0.92
● TS5A21366DCUR	SPST	2	0.75	8-VSSOP	04R6571	1.38
● TS5A22364DGSR	SPDT	2	0.52	10-MSOP	85M0257	1.38
● TS5A22366YFCR	SPDT	2	0.8	12-DSBGA	91R2099	1.32
● TS5A23157DGST	SPDT	2	10	10-MSOP	01J1026	1.33
● TS5A23157RSER	SPDT	2	10	10-QFN	14M2543	0.92
● TS5A23159DGST	SPDT	2	1	10-MSOP	57K1341	0.55
● TS5A23166DCUR	SPST	2	0.9	8-VSSOP	28K5759	0.96
● TS3A44159PWR	SPDT	4	0.45	16-TSSOP	31M0463	1.14
● TS3A5018PW	SPDT	4	10	16-TSSOP	71J8329	1.01
● TS12A44514DR	SPST	4	6.5	14-SOIC	95M0176	1.63

TRANSMIT / RECEIVE SWITCH

● TX810IRHHT	...	8	67	36-VQFN	85R5907	12.36

MUX / DEMUX SWITCH

Mfg. Part No.	Ratio	Num. of Ch.	Rds(on) (Ohms)	Pins/ Pkg.	Stock No.	Price Each 1-9
● TS3USB221DRCR	1:2	1	6	10-SON	22M1857	1.08
● TS3DDR3812RUAR	1:2	12	12	42-WQFN	37T9626	4.54

HIGH SPEED CMOS ANALOG MULTIPLEXERS/DEMULTIPLEXERS

These devices are digitally controlled analog switches which utilize silicon gate CMOS technology to achieve operating speeds similar to LSTTL with the low power consumption of standard CMOS integrated circuits.

Supply Voltage Range: 2V to 6V; Operating Temp Range: -55 °C to +125°C

Mfg. Part No.	Num. of Ch.	Frequency (MHz)	Rds(on) (Ohms)	Pins/ Pkg.	Stock No.	Price Each 1-9
● TS5A3159ADBVR	1	100	0.9	6-SOT-23	61K1945	0.88
● TS5A3159ADCKR	1	100	0.9	6-SC70	61K1947	0.88
● TS5A3166DCKR	1	200	0.9	5-SC-70	08K5005	0.58
● TS5A3357DCUR	1	334	7	8-SC-70	44J2613	0.95
● TS5A4594DBVR	1	450	8	5-SOT-23	73J8415	0.43
● TS5A22362DGSR	2	...	0.94	10-MSOP	33R2198	1.38
● OPA3875IDBQ	3	424	...	16-QSOP	27M0446	6.48
● TX810IRHHT	8	0.14	...	36-VQFN	85R5907	12.36

CMOS ANALOG MULTIPLEXERS

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● MPC506AU	Single-Ended, 16-Channel Multiplexer	28-SOIC	72K8921	14.22
● MPC507AP	Double-Ended, 8-Channel Multiplexer	28-PDIP	75C3662	13.69
● MPC508AP	Single-Ended, 8-Channel Multiplexer	16-PDIP	96K4520	7.60
● MPC508AU	Single-Ended, 8-Channel Multiplexer	16-SOIC	74K3896	7.95
● MPY634KP	4-Quad Analog Multiplier	14-PDIP	80K5991	22.54
● CD4052BM96G3	Differential, 4-Channel Multiplexer	16-SOIC	32T2589	0.45
● CD4053BM96G3	Triple, 2-Channel Multiplexer	16-SOIC	32T2590	0.45
● CD4053BPWRG3	Triple, 2-Channel Multiplexer	16-TSSOP	32T2591	0.45

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ANALOG MULTIPLEXERS

RoHS Compliant Available

VISHAY

High-speed analog multiplexers with on-chip logic regulator. Tape-and-reel packaging also available; *go online or call.*

4-CHANNEL DIFFERENTIAL

Mfg. Part No.	$R_{DS(on)}$ Max. (Ω)	$I_{S(on)}$ Max. (nA)	Analog Range (V)	Transition Time (µs)	Power Consumption Max. (mW)	Package	Stock No.	Price Each 1-9
● DG409LDQ-T1-E3	30	0.3	-6 to 12	0.06	0.9	16-TSSOP	06J4746	1.94
● DG409DY-T1-E3	100	1	±15	0.25	0.9	16-SOIC	65K2469	2.01
● DG409DY-E3	100	1	±15	0.25	0.9	16-SOIC	49K9567	1.94
● DG409DJ-E3	100	1	±15	0.25	0.9	16-PDIP	49K9566	3.88

8-CHANNEL SINGLE-ENDED

● DG9408DN-T1- E4	3.9	2	-6 to 12	0.042	0.012	16-QFN	65K2482	2.99
● DG408DJ-E3	100	1	±15	0.2	0.9	16-PDIP	49K9561	3.66
● DG408DY-T1-E3	100	1	±15	0.2	0.9	16-SOIC	65K2468	2.14
● DG408DY-E3	100	1	±15	0.2	0.9	16-SOIC	49K9562	2.27

➤CONTINUED➤

ANALOG MULTIPLEXERS (CONT.)

16-CHANNEL SINGLE-ENDED

Mfg. Part No.	$R_{DS(on)}$ Max. (Ω)	$I_{S(on)}$ Max. (nA)	Analog Range (V)	Transition Time (µs)	Power Consumption Max. (mW)	Package	Stock No.	Price Each 1-9
● DG406DN-E3	100	1	±15	0.3	0.47	28-PLCC	65K2463	8.54

(56670)

DATA TRANSMISSION AND CONTROL CIRCUITS

RoHS Compliant Available

ANALOG DEVICES

RS-232

Mfg. Part No.	Drivers/ Receivers	Supply Voltage (V)	Data Rate (Kbps)	Package	Stock No.	Price Each 1-9
● ADM101EARMZ	2/2	5.5	460	10-MSOP	19M8678	2.74
● ADM202EANZ	2/2	5.5	230	16-DIP	19M0699	2.53
● ADM202EARNZ	2/2	5.5	230	16-SOIC	59K1967	2.53
● ADM202EARUZ	2/2	5.5	230	16-TSSOP	19M8684	2.53
● ADM202EARWZ	2/2	5.5	230	16-WSOIC	59K1973	2.63
● ADM202JNZ	2/2	5.5	120	16-DIP	19M0700	2.39
● ADM202JRNZ	2/2	5.5	120	16-SOIC	19M0701	2.39
● ADM213EARZ	5/4	5.5	230	28-WSOIC	19M0705	3.63
● ADM232AARNZ	2/2	5.5	200	16-SOIC	59K2026	2.54
● ADM232AARWZ	2/2	5.5	200	16-WSOIC	19M8685	2.58
● ADM232LJNZ	2/2	5.5	120	16-DIP	19M8686	2.78
● ADM232LJRZ	2/2	5.5	120	16-WSOIC	19M0706	2.78
● ADM233LJNZ	2/2	5.25	120	20-DIP	59K2037	5.71
● ADM238LJNZ	4/4	5.5	120	24-DIP	59K2045	3.49
● ADM242ARZ	2/2	5.5	200	18-WSOIC	19M8687	3.45
● ADM1385ARSZ	2/2	5.5	460	20-SSOP	59K1888	3.34
● ADM3202ANZ	1/1	5.5	460	16-DIP	19M8690	2.87
● ADM3202ARNZ	2/2	5.5	460	16-SOIC	59K2061	2.80
● ADM3202ARUZ	2/2	5.5	460	16-TSSOP	59K2064	2.80
● ADM3202ARWZ	1/1	5.5	460	16-WSOIC	19M8691	2.80
● ADM3222ARSZ	4/4	5.5	460	20-SSOP	59K2067	2.80
● ADM3222ARUZ	1/1	5.5	460	20-TSSOP	19M8692	2.80
● ADM3311EARUZ	1/1	3.6	460	28-TSSOP	19M8693	3.62
● ADM3310EARUZ	5/3	3.6	460	28-TSSOP	12M8001	3.53
● ADM211EARUZ	5/4	5.5	230	28-TSSOP	59K2003	3.63
● ADM3202ARNZ-REEL7	2/2	5.5	460	16-SOIC	59K2063	2.88

RS-422/RS-485

● ADM483EANZ	1/1	5.5	250	8-DIP	59K2111	3.20
● ADM1485ANZ	32/32	5.25	30	8-DIP	12M7915	5.51
● ADM1485ARZ	2/2	5.25	30	8-SOIC	19M1176	5.51
● ADM1485JRZ	2/2	5.25	30	8-SOIC	19M8683	4.10
● ADM2483BRWZ	1/1	5.5	500	16-WSOIC	19M8688	6.72
● ADM2486BRWZ	1/1	5.5	20	16-WSOIC	19M8689	9.77
● ADM3485ARZ	1/1	3.6	10	8-SOIC	19M1179	2.70
● ADM3491ARZ	1/1	3.6	10	14-SOIC	19M0708	2.77
● ADN4661BRZ	1/1	3.6	600	8-SOIC	51P3738	2.03
● ADN4662BRZ	1/1	3.6	400	8-SOIC	71P7827	1.95
● ADN4663BRZ	2/2	3.6	600	8-SOIC	51P3740	2.37
● ADN4664BRZ	2/2	3.6	400	8-SOIC	71P7829	2.28
● ADM485ANZ	1/1	5.25	5	8-SOIC	19M8695	4.38
● ADM485ARZ	1/1	5.25	5	8-SOIC	19M8696	4.27
● ADM485JNZ	1/1	5.25	5	8-DIP	96K2074	3.30
● ADM485JRZ	32/32	5.25	5	8-SOIC	59K2120	3.34
● ADM488ARZ	2/2	5.5	250	8-SOIC	19M8697	2.97
● ADM489ARZ	1/1	5.5	250	14-SOIC	19M8698	3.80
● ADM1486ARZ	1/1	5.25	30 Mbps	8-SOIC	59K1897	5.08
● ADM3076EARZ	1/1	3.6	16 Mbps	14-SOIC	28M3724	3.97

(88678)

EMBEDDED DESIGN TOOLS

IDEs, Compilers, Debuggers and programming tools for all your MCU/DSP/FPGA needs.

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(196530)

LVDS DRIVERS AND RECEIVERS

RoHS Compliant Available

ANALOG DEVICES

Mfg. Part No.	Type	Data Rate (MSPS)	Drivers/Receivers	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
ADN4661BRZ	LVDS	600	1/0	3.6	8-SOIC	51P3738	2.03
ADN4662BRZ	LVDS	400	1/0	3.6	8-SOIC	71P7827	1.95
ADN4663BRZ	LVDS	600	2/0	3.6	8-SOIC	51P3740	2.37
ADN4664BRZ	LVDS	400	2/2	3.6	8-SOIC	71P7829	2.28
ADN4665ARZ	LVDS	400	4/0	3.6	16-NSOIC	11R0922	2.85
ADN4690EBRZ	MLVDS	100	1/1	3.6	8-SOIC	86T6067	2.65
ADN4691EBRZ	MLVDS	200	1/1	3.6	8-SOIC	93T9958	2.87
ADN4692EBRZ	MLVDS	100	1/1	3.6	14-SOIC	86T6069	2.65
ADN4693EBRZ	MLVDS	200	1/1	3.6	14-SOIC	93T9960	2.98
ADN4694EBRZ	MLVDS	100	1/1	3.6	8-SOIC	93T9962	2.65
ADN4695EBRZ	MLVDS	100	1/1	3.6	14-SOIC	93T9964	2.65
ADN4696EBRZ	MLVDS	200	1/1	3.6	8-SOIC	82T3654	2.87
ADN4697EBRZ	MLVDS	200	1/1	3.6	14-SOIC	82T3656	2.98

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
EVAL-ADN469XEHDEBZ	ADN469X M-LVDS TX/RX Evaluation Kit	82T3804	70.32
EVAL-ADN469XEFDEBZ	ADN4697E Eval. Board	82T3803	70.32

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TRANSCEIVERS, DRIVERS

RoHS Compliant Available

ANALOG DEVICES

Mfg. Part No.	Type	Data Rate (Mbps)	Drivers/ Receivers	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
ADM213EARSZ	RS232	0.12	4/5	5.5	28-SSOP	59K2010	3.77
ADM232LARZ	RS232	0.2	2/2	5.5	16-SOIC	59K2032	2.67
ADM3101EACPZ-250R7	RS232	0.46	1/1	5.5	12-LFCSP	50M0780	2.48
ADM3101EARQZ	RS232	0.46	1/1	5.5	16-QSOP	84M7773	2.81
ADM3315EARUZ	RS232	0.46	3/3	3.6	24-TSSOP	59K2097	3.53
ADM3222ARWZ	RS232	0.46	2/2	5.5	18-SOIC	59K2073	2.80
ADM3232EARNZ	RS232	0.46	2/2	5.5	16-SOIC	28M3736	3.34
ADM3232EARUZ	RS232	0.46	2/2	5.5	16-TSSOP	28M3738	3.21
ADM213ARSZ	RS232	0.12	4/5	5.5	28-SSOP	59K2008	3.45
ADM4853ARZ	RS422 / RS485	10	1/1	5.25	8-SOIC	12M8025	2.06

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LVDS DRIVERS AND RECEIVERS

RoHS Compliant Available

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DRIVERS

Mfg. Part No.	Data Rate (Mbps)	Supply Voltage (V)	Supply Current (mA)	Operating Temperature Range	Package	Stock No.	Price Each
AS1152	500	3 to 3.6	4	-40°C to +85°C	16-TSSOP	59P3719	2.99
AS1154BSOU	800	3 to 3.6	2	-40°C to +85°C	8-SOIC	59P3724	2.06

RECEIVERS

AS1150	500	3 to 3.6	5	-40°C to +85°C	16-TSSOP	59P3715	2.99
AS1153	260	3 to 3.6	2.5	-40°C to +85°C	8-SOIC	59P3721	1.71

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LAN ICS

RoHS Compliant Available

CYPRESS PERFORM

CONTROL COMMUNICATIONS

Mfg. Part No.	Supply Voltage	Supply Current (mA)	Temp. Range	Package	Stock No.	Price Each 1-24
CY7C53120E2-10SXI	5	20	-40°C to +85°C	32-SOIC	19M7014	16.38
CY7C53120E4-40SXI	5	55	-40°C to +85°C	32-SOIC	19M7018	21.30
CY7C53150-20AXI	5	32	-40°C to +85°C	64-QFP	19M7020	13.32

MULTI-PROTOCOL PHYS

CYP15G0101DXB-BBXC	3.3	390	0°C to +70°C	100-PBGA	19M5717	47.96

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RS232 TRANSCEIVERS

RoHS Compliant Available

EXAR

A New Direction in Mixed-Signal

Mfg. Part No.	Description	Drvrs./ Rcvrs.	Package	Stock No.	Price Each
SP202ECN-L	High-Performance RS-232 Line Driver/Receiver	2/2	16-NSOIC	23R9983	1.33
SP202ECP-L		2/2	16-PDIP	23R9985	1.32
SP202EEN-L		2/2	16-NSOIC	23R9988	1.32
SP202EEP-L		2/2	16-PDIP	23R9990	1.40
SP202EET-L		2/2	16-WSOIC	23R9991	1.40
SP232ACN-L		2/2	16-NSOIC	24R0076	1.15
SP232ACP-L		2/2	16-PDIP	24R0078	1.22
SP232ACT-L		2/2	16-WSOIC	24R0079	1.24
SP232AEN-L		2/2	16-NSOIC	24R0081	1.20
SP232AEP-L		2/2	16-PDIP	24R0083	1.29
SP232AET-L		2/2	16-WSOIC	24R0084	1.29
SP232ECN-L		2/2	16-NSOIC	24R0086	1.15
SP232ECP-L		2/2	16-PDIP	24R0088	1.24
SP232ECT-L		2/2	16-WSOIC	24R0089	1.24
SP232EEN-L		2/2	16-NSOIC	24R0091	1.20
SP232EEP-L		2/2	16-PDIP	24R0093	1.20
SP232EET-L		2/2	16-WSOIC	24R0094	1.20
SP310EET-L		2/2	18-WSOIC	24R0207	3.09
SP312ECT-L		2/2	18-WSOIC	24R0213	3.29
SP208ECA-L	Low Power High ESD 5V RS232 Transceiver	4/4	24-SSOP	24R0024	3.45
SP208EEA-L		4/4	24-SSOP	24R0028	3.25
SP211ECA-L		4/5	28-SSOP	24R0048	2.70
SP211EEA-L		4/5	28-SSOP	24R0052	2.59
SP211EET-L		4/5	28-WSOIC	24R0054	2.59
SP213EHCA-L		4/5	28-SSOP	24R0070	2.40
SP233ACP-L	Enhanced RS-232 Line Drivers/Receivers	2/2	20-PDIP	24R0096	6.07
SP233ACT-L		2/2	20-WSOIC	24R0097	4.91
SP233AET-L		2/2	20-WSOIC	24R0100	4.63
SP385EEA-L		2/2	20-SSOP	24R0543	3.53
SP3203EEY-L	RS-232 Serial Transceiver w/Logic Selector	3/2	20-TSSOP	24R0231	3.95
SP3220ECY-L	3.0V to 5.5V RS-232 Driver/Receiver Pair	1/1	16-TSSOP	24R0244	2.32
SP3220EEA-L		1/1	16-SSOP	24R0246	2.40
SP3220EEY-L		1/1	16-TSSOP	24R0248	2.40
SP3222EBEY-L	True 3.0V to 5.5V RS-232 Transceivers	2/2	20-TSSOP	24R0268	2.40
SP3222ECA-L		2/2	20-SSOP	24R0270	2.51
SP3222ECY-L		2/2	20-TSSOP	24R0274	2.32
SP3222EEA-L		2/2	20-SSOP	24R0276	2.59
SP3222EEY-L		2/2	20-TSSOP	24R0280	2.51
SP3232EBCA-L		2/2	16-SSOP	24R0350	1.65
SP3232EBCN-L		2/2	16-NSOIC	24R0352	1.65
SP3232EBEN-L		2/2	16-NSOIC	24R0361	1.59
SP3232ECN-L		2/2	16-NSOIC	24R0370	1.65
SP3232ECP-L		2/2	16-PDIP	24R0372	1.65
SP3232ECY-L		2/2	16-TSSOP	24R0375	1.65
SP3232EEA-L		2/2	16-SSOP	24R0377	1.59
SP3232EEN-L		2/2	16-NSOIC	24R0379	1.59
SP3232EEY-L		2/2	16-TSSOP	24R0384	1.59
SP3232EUCN-L		2/2	16-NSOIC	24R0402	1.65
SP3223ECA-L	Intelligent 3.0V to 5.5V RS-232 Transceivers	2/2	20-SSOP	24R0302	2.32
SP3223ECY-L		2/2	20-TSSOP	24R0304	2.32
SP3223EEA-L		2/2	20-SSOP	24R0306	2.40
SP3224ECA-L		2/2	20-SSOP	24R0318	1.47
SP3224ECY-L		2/2	20-TSSOP	24R0320	1.47
SP3224EEY-L		2/2	20-TSSOP	24R0324	2.17
SP3238ECA-L		5/3	28-SSOP	24R0413	2.71
SP3238EEA-L		5/3	28-SSOP	24R0417	2.78
SP3243ECA-L		3/5	28-SSOP	24R0441	2.17
SP3243EHCA-L		3/5	28-SSOP	24R0453	2.32
SP3243EHCT-L		3/5	28-WSOIC	24R0455	2.67
SP3243EUCA-L		3/5	28-SSOP	24R0461	2.67
SP3243EUEA-L		3/5	28-SSOP	24R0469	2.95
SP3244ECY-L	Intelligent 3.3V to 5V	3/5	28-TSSOP	24R0479	2.81
SP3244EER1-L		3/5	32-QFN	24R0483	2.86
SP3244EEY-L		3/5	28-TSSOP	24R0485	2.86

(156281)

RS485 TRANSCEIVERS

RoHS Compliant Available

EXAR

A New Direction in Mixed-Signal

TEMPERATURE CHART

Code	Range	Code	Range	Code	Range
C	0°C to 70°C	E	-40°C to 85°C	A	-40°C to 125°C

Mfg. Part No.	Description	Temp. Code	Drvrs./ Rcvrs.	Package	Stock No.	Price Each
● SP1481ECN-L	Enhanced Low Power Half-Duplex RS-485 Transceivers	C	1/1	8-NSOIC	23R9961	1.72
● SP1481EEN-L		E	1/1	8-NSOIC	23R9963	1.77
● SP1485ECN-L		C	1/1	8-NSOIC	23R9965	1.90
● SP1490ECN-L	Full Duplex RS-485 Transceivers	C	1/1	8-NSOIC	23R9975	1.80
● SP3483EN-L	Low Power Slew Rate Limited Half-Duplex RS-485 Transceiver	E	1/1	8-NSOIC	24R0517	3.09
● SP3490CN-L	3.3V Low Power Full Duplex RS-485 Transceivers w/10Mbps Data Rate	C	1/1	8-NSOIC	24R0523	2.63
● SP481ECN-L	Enhanced Low Power Half-Duplex RS-485 Transceivers	C	1/1	8-NSOIC	24R0552	2.24
● SP481EEN-L		E	1/1	8-NSOIC	24R0555	2.32
● SP483CN-L	Low Power Half-Duplex RS-485 Transceivers	C	1/1	8-NSOIC	24R0558	1.98
● SP485CN-L		C	1/1	8-NSOIC	24R0570	1.27
● SP483ECP-L	Enhanced Low EMI Half-Duplex RS-485 Transceiver	C	1/1	8-PDIP	24R0563	2.13
● SP483EEN-L		E	1/1	8-NSOIC	24R0564	1.93
● SP485EN-L	Low Power Half-Duplex RS-485 Transceivers	E	1/1	8-NSOIC	24R0581	1.33
● SP485ECN-L	Enhanced Low Power Half-Duplex RS-485 Transceivers	C	1/1	8-NSOIC	24R0573	1.29
● SP485EEN-L		E	1/1	8-NSOIC	24R0576	1.33
● SP485EEP-L		E	1/1	8-PDIP	24R0578	1.24
● SP485RCN-L		C	1/1	8-NSOIC	24R0584	1.36
● SP485RCP-L		C	1/1	8-PDIP	24R0586	1.36
● SP485REN-L		E	1/1	8-NSOIC	24R0587	1.44
● SP490EEN-L	Full Duplex RS-485 Transceivers	E	1/1	8-NSOIC	24R0610	2.24
● SP490EN-L		E	1/1	8-NSOIC	24R0613	2.24
● SP491CN-L		C	1/1	14-NSOIC	24R0616	2.33
● SP491ECN-L		C	1/1	14-NSOIC	24R0619	2.17
● SP491EEN-L		E	1/1	14-NSOIC	24R0622	2.24
● SP491EEP-L		E	1/1	14-PDIP	24R0624	2.24
● SP491EN-L		E	1/1	14-NSOIC	24R0625	2.24

(156282)

T1/E1 LINE INTERFACE UNITS (LIUs)

RoHS Compliant Available

EXAR

A New Direction in Mixed-Signal

Mfg. Part No.	Ch.	Data Rate (Mbps)	Supply Voltage (VDC)	Operating Temperature	Package	Stock No.	Price Each 1-4
● XRT59L91ID-F	1	2.048	3.13-3.46	-40°C to +85°C	16-SOIC	24R1691	4.99
● XRT5683AID-F	1	8.844	4.75-5.25	-40°C to +85°C	18-SOIC	24R1672	7.43
● XRT82D20IW-F	1	2.048	3.135-5.25	-40°C to +85°C	28-SOJ	24R1894	13.43
● XRT83D10IW-F	1	2.048	4.75-5.25	-40°C to +85°C	28-SOJ	24R1902	20.63
● XRT5894IV-F	4	2.048	3.135-3.465	-40°C to +85°C	64-TQFP	24R1686	19.70
● XRT5997IV-F	7	2.048	3.13-3.46	-40°C to +85°C	100-LQFP	24R1696	38.17
● XRT83VSH28IB-F	8	2.048	3.13-3.46	-40°C to +85°C	225-PBGA	24R1945	22.47
● XRT83VSH38IB-F	8	2.048	3.13-3.46	-40°C to +85°C	225-PBGA	24R1954	26.44
● XRT83VSH314IB-F	14	2.048	3.13-3.46	-40°C to +85°C	304-PBGA	24R1948	48.65
● XRT83VSH316IB-F	16	2.048	3.13-3.46	-40°C to +85°C	316-TBGA	24R1951	52.85

(164433)

T3/E3 LINE INTERFACE UNITS (LIUs)

RoHS Compliant Available

EXAR

A New Direction in Mixed-Signal

Mfg. Part No.	Ch.	Data Rate (Mbps)	Supply Voltage (VDC)	Operating Temperature	Package	Stock No.	Price Each 1-4
● XRT7295ATIW-F	1	51.84	4.5-5.5	-40°C to +85°C	20-SOJ	24R1756	46.63
● XRT7296IW-F	1	51.84	4.75-5.25	-40°C to +85°C	28-SOJ	24R1761	10.80
● XRT73LC00AIV-F	1	51.84	3.135-3.465	-40°C to +85°C	44-TQFP	24R1768	37.11
● XRT75L00DIV-F	1	51.84	3.135-3.465	-40°C to +85°C	52-TQFP	24R1802	65.10
● XRT75L00IV-F	1	51.84	3.135-3.465	-40°C to +85°C	52-TQFP	24R1807	48.16
● XRT75R03DIV-F	1	51.84	3.135-3.465	-40°C to +85°C	128-LQFP	24R1844	89.62
● XRT75R03IV-F	1	51.84	3.135-3.465	-40°C to +85°C	128-LQFP	24R1849	77.95
● XRT75R12IB-F	1	51.84	3.135-3.465	-40°C to +85°C	420-TBGA	24R1863	212.20
● XRT75L02IV-F	2	51.84	3.135-3.465	-40°C to +85°C	100-TQFP	24R1814	91.49

➤CONTINUED➤

T3/E3 LINE INTERFACE UNITS (LIUs) (CONT.)

Mfg. Part No.	Ch.	Data Rate (Mbps)	Supply Voltage (VDC)	Operating Temperature	Package	Stock No.	Price Each 1-4
● XRT73LC03AIV-F	3	51.84	3.135-3.465	-40°C to +85°C	120-LQFP	24R1773	84.60
● XRT75L03DIV-F	3	51.84	3.135-3.465	-40°C to +85°C	128-LQFP	24R1818	119.60
● XRT75L03IV-F	3	51.84	3.135-3.465	-40°C to +85°C	128-LQFP	24R1823	88.48
● XRT75L04IV-F	4	51.84	3.135-3.465	-40°C to +85°C	176-LQFP	24R1833	111.43

(164434)

RS485/RS422 TRANSCEIVERS

RoHS Compliant Available

intersil

Mfg. Part No.	No. of Tx/Rx	Data Rate (Mbs)	Devices allowed on bus	Voltage Rating (V)	Package	Stock No.	Price Each 1-24
HALF DUPLEX							
● ISL8483EIBZ	1/1	0.25	32	5.5	8-SOIC	11J9067	1.47
● ISL8483IBZ	1/1	0.25	32	5.5	8-SOIC	80K5941	1.87
● ISL83485IBZ	1/1	10	32	3.6	8-SOIC	61J6746	1.67
● ISL4485EIBZ	1/1	20	32	5.5	8-SOIC	11J8891	2.70
● ISL43485IBZ	1/1	30	32	3.6	8-SOIC	57K3935	3.26
● ISL4486IBZ	1/1	40	50	5.5	8-SOIC	61J6368	3.26
● ISL3152EIBZ	1/1	0.115	256	5.5	8-SOIC	29M6942	1.89
● ISL3155EIBZ	1/1	1	256	5.5	8-SOIC	29M6950	1.98
● ISL3158EIBZ	1/1	20	256	5.5	8-SOIC	29M6958	1.83
FULL DUPLEX							
● ISL3150EIBZ	1/1	0.115	256	5.5	14-SOIC	29M6938	1.98
● ISL3153EIBZ	1/1	1	256	5.5	14-SOIC	29M6946	2.10
● ISL3156EIBZ	1/1	20	256	5.5	14-SOIC	29M6954	2.10

(80228)

HIGH-SPEED DIFFERENTIAL DRIVERS

RoHS Compliant Available

intersil

Mfg. Part No.	No. of Amps	Freq. (MHz)	Slew Rate (V/µs)	Supply Voltage (V)	I_{out} (A)	Pkg.	Stock No.	Price Each 1-24
● EL5170ISZ	1	200	1100	6.6	60	8-SOIC	57K3266	2.21
● EL5171ISZ	1	250	800	11	90	8-SOIC	57K3272	2.99
● EL5177IYZ	1	250	1000	11	50	10-MSOP	61J5616	3.10
● EL5173ISZ	1	440	1000	11	55	8-SOIC	57K3281	3.37
● EL5174ISZ	1	550	1000	11	60	8-SOIC	57K3287	3.19
● EL4543IUZ	3	350	1200	12	50	24-QSOP	61J5595	5.59
● EL5373IUZ	3	440	1000	11	55	24-QSOP	61J5653	6.22
● EL5374IUZ	3	550	850	11	60	28-QSOP	79K6432	6.88

(80135)

RS-232 TRANSMITTERS/ RECEIVERS

RoHS Compliant Available

intersil

Mfg. Part No.	RS-232 Drivers	RS-232 Receivers	Low-Power Shutdown/ TTL Tri-State	Package	Stock No.	Price Each 1-24
● ICL3221ECAZ	1	1	Yes/Yes	16-SSOP	11J8845	1.65
● ICL3221CVZ	1	1	No/Yes	16-TSSOP	11J8843	1.63
● ICL3221EIAZ	1	1	Yes/Yes	16-SSOP	11J8851	1.55
● ICL3221ECVZ	1	1	Yes/Yes	16-TSSOP	11J8849	1.79
● ICL3223CAZ	2	2	Yes/Yes	20-SSOP	11J8855	2.25
● ICL3232CVZ	2	2	No/No	16-TSSOP	11J8863	1.73
● ICL3232CBZ	2	2	No/No	16-SOIC	61J6136	1.84
● ICL3232EIV-16Z	2	2	Yes/No	16-TSSOP	11J8871	1.83
● HIN202CBNZ	2	2	No/No	16-SOIC	11J8712	1.33
● HIN202ECBNZ	2	2	Yes/No	16-SOIC	11J8717	1.33
● HIN202EIBNZ	2	2	Yes/No	16-SOIC	11J8719	1.35
● HIN232IBZ	2	2	No/No	16-SOIC	11J8730	1.20
● ICL232CBEZ	2	2	No/No	16-SOIC	79K6897	3.87
● HIN232CPZ	2	2	No/No	16-DIP	61J5919	1.32
● HIN232ACBNZ	2	2	No/No	16-SOIC	61J5915	1.32
● HIN211CAZ	4	5	No/Yes	28-SSOP	11J8723	2.65

(4355)

RS-232 TRANSMITTER/ RECEIVERS

RoHS Compliant Available

intersil

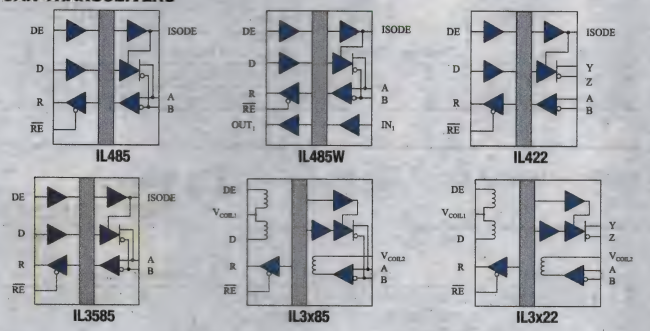
Mfg. Part No.	RS-232 Drivers	RS-232 Receivers	Low-Power Shutdown/TTL Tri-State	Package	Stock No.	Price Each 1-24
ICL3221ECAZ	1	1	Yes/Yes	16-SSOP	11J8845	1.65
ICL3221CVZ	1	1	No/Yes	16-TSSOP	11J8843	1.63
ICL3221EIAZ	1	1	Yes/Yes	16-SSOP	11J8851	1.55
ICL3221ECVZ	1	1	Yes/Yes	16-TSSOP	11J8849	1.79
ICL3223CAZ	2	2	Yes/Yes	20-SSOP	11J8855	2.25
ICL3232CVZ	2	2	No/No	16-TSSOP	11J8863	1.73
ICL3232CBZ	2	2	No/No	16-SOIC	61J6136	1.84
ICL3232EIV-16Z	2	2	Yes/No	16-TSSOP	11J8871	1.83

(66084)

IL4- and IL3- SERIES ISOLATED RS-422, RS-485, PROFIBUS, AND CAN TRANSCEIVERS

RoHS Compliant Available

NVE CORPORATION



Features:

- 3 V or 5 V Power Supply
- Low Quiescent Supply Current
- Digital and Passive Input Versions
- 25,000 Year Barrier Life
- 0.15″ and 0.3″-Wide 16-pin SOIC

NVE's award-winning **IL4-** and **IL3-Series** single-chip isolated transceivers dramatically reduce chip count and board area compared to traditional optocouplers. Unique 0.15″ SOIC packages for some parts reduce board area even more.

DIGITAL INPUT

Mfg. Part No.	Data Rate (Mbps)	Prop. Delay (nS)	Temperature Range Min. (°C)	Temperature Range Max. (°C)	Package	Stock No.	Price Each 1-9
IL41050TE	1	180	-55	125	16-SOIC	41T3892	5.68
IL422E	25	16	-40	85	16-SOIC	93K6264	14.94
IL485E	35	16	-40	85	16-SOIC	93K6265	14.94
IL485WE	35	16	-40	85	16-SOIC	93K6266	13.87
IL3522E	40	20	-40	85	16-SOIC	41T3891	8.43
IL3585E	40	20	-40	85	16-SOIC	93K6263	7.52
IL3685E	40	20	-40	85	16-SOIC	90T0849	6.89
PASSIVE INPUT							
IL3122-3E	5	50	-40	85	16-SOIC	41T3885	6.09
IL3122E	5	40	-40	85	16-SOIC	93K6260	5.69
IL3185-3E	5	50	-40	85	16-SOIC	41T3886	5.69
IL3185E	5	40	-40	85	16-SOIC	03M8150	5.69
IL3222-3E	5	50	-40	85	16-SOIC	41T3887	5.82
IL3222E	5	40	-40	85	16-SOIC	93K6261	5.82
IL3285-3E	5	50	-40	85	16-SOIC	41T3888	5.82
IL3285E	5	40	-40	85	16-SOIC	03M8151	5.82
IL3422E	20	40	-40	85	16-SOIC	03M8152	5.87
IL3485-3E	20	50	-40	85	16-SOIC	41T3890	5.87
IL3485E	20	40	-40	85	16-SOIC	93K6262	6.28
IL3422-3E	30	50	-40	85	16-SOIC	41T3889	6.28
IL3585-01	40		-40	85	16-SOIC	94T5282	99.99

(88869)

COMMUNICATION ICs

RoHS Compliant Available

NXP

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
P82B96TD	Dual Bi-Directional Bus Buffer	8-SOIC	11N8524	3.61
PCA9555PW	16-Bit I2C and SMBus I/O Port with Interrupt	24-TSSOP	11N8512	2.10
P82B715PN	I2C-Bus	8-DIP	24M6586	4.30

(118099)

LOAD RELAY DRIVERS

RoHS Compliant Available

ON Semiconductor

Mfg. Part No.	Description	Package	Tape Cut Stock No.	Tape Cut Price Each 1-9
AMIS39101PNPB4RG	Octal High Side Driver with Protection	28-SOP	03P0836	6.61
MDC3105LT1G	Single 5 V Inductive Load Driver	3-SOT-23	45J1474	0.62
UAA2016PG	Zero Voltage Switch Power Controller for Triacs	PDIP	45J2359	1.59

(4269)

LINE DRIVERS AND RECEIVERS

RoHS Compliant Available

ST

RS232 LINE DRIVERS

Mfg. Part No.	Supply Volt. Max. (V)	Channels	Package	Stock No.	Price Each 1-9
ST3232CTR	5.5	2	16-TSSOP	89K1001	1.46
ST3485EBDR	3.6	2	16-SO-8	89K1003	2.03
TRI-STATE DIFFERENTIAL LINE DRIVER					
ST26C31BDR	5.5	4	16-SOIC	89K0996	1.10

(83710)

ST7538 POWER LINE TRANCEIVER EVALUATION KIT

ST

The **EVALST7538DUAL** board integrates the ST7538 power line transceiver along with the power supply section, the signal coupling interface section, crystal oscillator and device protections. The coupling interface section has been realized for communication on CENELEC Band A used mainly for AMR applications, with the possibility of programmable switching between 72kHz and 86kHz communication channels. This half-duplex "dual channel" communication feature has been implemented through optimized receiving and transmitting filters on the board. EVALST7538DUAL board must be connected to a PC through the EVALCOMMBOARD general purpose board.

Mfg. Part No.	Description	Stock No.	Price Each Each
EVALST7538DUAL	Dual-channel Power Line Transceiver Evaluation Board based on ST7538	09R4579	157.50
EVALCOMMBOARD	Communication/ control board based on ST72F651AR6 microcontroller for power line communication and industrial products	09R4573	105.00

(191908)

DRIVERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Description	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
DS90LV011ATMF/NOPB	Single High Speed Differential Driver	3.3	SOT-23	41K2063	1.29
DS2003TM/NOPB	High Current/Voltage Darlington Driver	5	16-NSOIC	41K1822	0.95
DS3668N/NOPB	Quad Fault Protected	5	16-DIP	41K1886	3.34
LMD18400N/NOPB	Quad High Side Driver	28	20-DIP	41K2748	12.32
LP395Z/NOPB	Power Transistor	...	92-TO	41K7762	1.56
LM1949N/NOPB	Injector Driver Controller	5.5	8-DIP	41K3540	5.38
MM5452N/NOPB	Liquid Crystal Display Drivers	10	40-DIP	41K8278	6.55

(74772)

INTERFACE- DATA TRANSMISSION CIRCUITS - RS-232 SERIAL PORT DEVICES

RoHS Compliant Available

TEXAS INSTRUMENTS

DRIVERS/RECEIVERS

Mfg. Part No.	Description	Supply Voltage	Package	Stock No.	Price Each 1-9
DS14C232CN/NOPB	Low Power Dual Driver/Receiver	5.5	16-DIP	41K1797	3.36
DS14C232TM/NOPB	Low Power Dual Driver/Receiver	5.5	16-NSOIC	41K1798	4.04
DS14C89AM/NOPB	Quad CMOS Receiver	5.5	14-NSOIC	41K1811	1.80
DS14C89AN/NOPB	Quad CMOS Receiver	5.5	14-DIP	41K1813	2.46
DS14185WM/NOPB	EIA/TIA-232 3x5 Driver/Receiver	5.25	20-Pin SOIC	41K1814	1.93
DS14C232CM/NOPB	Dual Driver/Receiver	5.5	16-NSOIC	41K1795	3.36
DS14C335MSA/NOPB	3x5 Driver/Receiver	3.6	28-SSOP	41K1804	9.95

CONTINUED

INTERFACE- DATA TRANSMISSION CIRCUITS - RS-232 SERIAL PORT DEVICES (CONT.)

PERIPHERAL DRIVERS

Mfg. Part No.	Description	Output Voltage (V)	Package	Stock No.	Price Each 1-9
● DS2003CM/NOPB	High Current/Voltage Darlington Driver	50	16-SOIC	41K1819	0.95
● DS3658N/NOPB	Quad Fault Protected Peripheral Driver	70	16-DIP	41K1885	3.25

(70383)

INTERFACE DATA TRANSMISSION CIRCUITS RS-422/423/485 LINE DRIVERS AND RECEIVERS

RoHS Compliant Available

TEXAS INSTRUMENTS

5 V SUPPLY VOLTAGE

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● DS26C31TM/NOPB	CMOS Quad Tri-State Differential Line Driver	16-NSOIC	41K1827	1.90
● DS96174CN/NOPB	RS-485/RS-422 Quad Differential Line Drivers	16-DIP	41K2137	3.78
● DS26C31TN/NOPB	CMOS Quad Tri-State Differential Line Driver	16-DIP	41K1829	2.04
● DS26C32ATM/NOPB	CMOS Quad Differential Line Receiver	16-NSOIC	41K1830	2.06
● DS26LS31CM/NOPB	Quad High Speed Differential Line Driver	16-NSOIC	41K1833	1.62
● DS34C86TM/NOPB	Quad CMOS Diff. Line Receiver	16-NSOIC	41K1846	2.00
● DS34C87TM/NOPB	CMOS Quad Tri-State Differential Line Receiver	16-NSOIC	41K1849	1.70
● DS8921AM/NOPB	Differential Line Driver and Receiver Pair	8-NSOIC	41K1924	1.65
● DS8921N/NOPB	Differential Line Drivers and Receiver Pair	8-DIP	41K1930	1.68
● DS8922AM/NOPB	Tri-State RS-422 Dual Differential Line Drivers and Receiver Pair	16-NSOIC	41K1931	1.94
● DS89C21TM/NOPB	Diff. CMOS Line Driver & Receiver Pair	8-NSOIC	41K1922	1.92
● DS90LV019TM/NOPB	LVDS Driver/Receiver	8-SOIC	09K7537	2.84
● DS1487M/NOPB	Low Power RS-485/1/4 Unit Load Multipoint Transceiver	8-NSOIC	41K1816	2.52
● DS3695N/NOPB	Multipoint RS-485/ RS-422 Transceivers	8-DIP	41K1897	1.66
● DS3695AM/NOPB	Multipoint Transceiver	8-NSOIC	41K1893	1.70
● DS3695TN/NOPB	Multipoint Transceiver	8-DIP	41K1898	1.60
● DS36C278M/NOPB	Low Power Multi-point TIA/EIA-487 Transceiver	8-SO	41K1866	2.94
● DS36C278TM/NOPB	Low Power Multi-point TIA/EIA-487 Transceiver	8-SOIC	41K1868	2.77
● DS485TM/NOPB	Low Power RS-485/ RS-422 Multipoint Transceiver	8-NSOIC	41K1913	2.62
● DS75176BM/NOPB	Multipoint RS-485/ RS-422 Transceivers	8-NSOIC	41K1916	1.75
● DS75176BN/NOPB	Multipoint RS-485/ RS-422 Transceivers	8-DIP	41K1918	1.61
● DS75176BTM/NOPB	Multipoint RS-485/ RS-422 Transceivers	8-NSOIC	41K1919	1.58
● DS75176BTN/NOPB	Multipoint RS-485/ RS-422 Transceivers	8-DIP	41K1921	1.66
● DS96175CN/NOPB	Quad Diff. Line Receiver	8-DIP	41K2138	5.10
● DS96176CN/NOPB	Diff. Bus Repeater	8-DIP	41K2139	2.28
3.3 V SUPPLY VOLTAGE				
● DS26LV31TM/NOPB	3V Enhanced CMOS Quad Diff. Line Driver	16-NSOIC	41K1842	2.09
● DS26LV32ATM/NOPB	3V Enhanced CMOS Quad Differential Line Receiver	16-NSOIC	41K1844	2.09
● DS34LV86TM/NOPB	3V Enhanced CMOS Quad Differential Line Receiver	16-NSOIC	41K1852	2.71
● DS34LV87TM/NOPB	Enhanced CMOS Quad Diff. Line Driver	16-NSOIC	41K1854	3.08

(70382)

LVDS DRIVERS AND RECEIVERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No	Data Rate (GBPS)	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
● DS90CF386MTD/NOPB	2.83	3 - 3.6	56-TSSOP	41K1955	7.91
● DS90LV031ATM/NOPB	0.4	3 - 3.6	16-NSOIC	41K2084	2.87
● DS90LV032ATM/NOPB	0.4	3 - 3.6	16-NSOIC	41K2089	2.87
● DS90LV032ATMTC/NOPB	0.4	3 - 3.6	16-TSSOP	41K2090	2.87

(148660)

MULTIPOINT TRANSCEIVERS

RoHS Compliant Available

TEXAS INSTRUMENTS

The **DS36276M/NOPB** FAILSAFE Multipoint Transceiver is designed for use on bi-directional differential busses. It is compatible with existing TIA/EIA-485 transceivers, however, it offers an additional feature not supported by standard transceivers. The **DS485TM/NOPB** low-power transceiver for RS-485 and RS-422 communication. The device contains one driver and one receiver.

Mfg. Part No.	Channels	Max Data Rate (MBPS)	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
● DS485TM/NOPB	1	2.5	4.75 - 5.25	8-NSOIC	41K1913	2.62
● DS64BR401SQE/NOPB	8	6400	2.375 - 2.625	54-LLP	27R1771	17.11

(148656)

PHYTER ETHERNET ICs

RoHS Compliant Available

TEXAS INSTRUMENTS

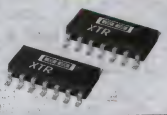
Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● DP83816AVNG/NOPB	10/100 Mb/s Integrated PCI Ethernet Media Access Controller and Physical Layer (MacPhyter-II)	144-LQFP	41K1777	9.90
● DP83848CVV/NOPB	PHYTER - Single 10/100 Ethernet Transceiver	48-LQFP	79K6187	5.13
● DP83848IVV/NOPB	PHYTER - Single 10/100 Ethernet Transceiver	48-LQFP	69K2089	5.25
● DP83848JSQ/NOPB	Ethernet Transceiver	40-LLP	32M0900	2.18
● DP83848KSQ/NOPB	Single Port 10/100 Ethernet Transceiver	40-LLP	32M0901	2.59
● DP83865DVH/NOPB	PHYTER V - 10/100/1000 Ethernet Transceiver	128-PQFP	41K1781	21.10
● DP83849CVS/NOPB	PHYTER DUAL Commercial Temperature Dual Port 10/100 Mb/s Ethernet Physical Layer Transceiver	80-TQFP	12M9707	7.06

(113068)

4-20mA TRANSMITTER/ RECEIVER ICs

RoHS Compliant Available

TEXAS INSTRUMENTS



TRANSMITTERS

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● XTR101AP	Precision Low Drift 4-20mA 2-Wire Transmitter	14-DIP	84K4518	18.72
● XTR105P	Current Transmitter w/Sensor Excitation and Linearization	14-DIP	77C3629	13.37
● XTR105PA	Current Transmitter w/Sensor Excitation and Linearization	14-DIP	80K6192	11.24
● XTR106PA	4-20mA Current Transmitter w/Bridge Excitation and Linearization	14-DIP	80K6193	9.77
● XTR106UA	4-20mA Current Transmitter w/Bridge Excitation and Linearization	14-SOIC	80K6194	10.20
● XTR110KP	Precision Voltage-To-Current Converter/Transmitter	16-DIP	79K0175	15.26
● XTR110KU	Precision Voltage-To-Current Converter/Transmitter	16-SOIC	77C3641	15.92
● XTR111AIDGQT	Precision Voltage-to-Current Converter/ Transmitter	10-MSOP	54M7931	2.04
● XTR111AIDRCT	Precision Voltage-to-Current Converter/ Transmitter	10-SON	22M2147	2.04
● XTR115U	4-20mA Current Transmitter	8-SOIC	77C3651	4.18
● XTR115UA	4-20mA Current Transmitter	8-SOIC	77C3653	3.58
● XTR116U	4-20mA Current Transmitter	8-SOIC	77C3655	4.18
● XTR117AIDRBT	4-20mA Current Transmitter	8-SON	80K3969	2.86
● XTR300AIRGWT	Industrial Analog Current/Voltage Output Driver	20-QFN	80K3971	5.25
RECEIVERS				
● RCV420JP	Precision 4-20mA Current Loop Receiver	16-DIP	60K6765	8.67
● RCV420KP	Precision 4-20mA Current Loop Receiver, Converts to a 0-5V Output	16-DIP	15M1939	12.32
ACTIVE FILTERS				
● UAF42AP	Universal Active Filter	14-DIP	04M4621	16.96

CONTINUED

4-20mA TRANSMITTER/RECEIVER ICs (CONT.)

SENSOR CONDITIONING

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
PGA308AIDGST	Single Supply, Auto-Zero Sensor Amplifier w/Programmable Gain & Offset	10-MSOP	02P6556	5.13
PGA309AIPWT	Voltage Output Programmable Sensor Conditioner	16-TSSOP	74K3916	7.23

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
PGA309EVM-USB	PGA309 Evaluation Module	72R6238	203.00

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INTERFACE TRANSCEIVERS, RECEIVERS AND DRIVERS

RoHS Compliant Available

TEXAS INSTRUMENTS

SCSI PARALLEL INTERFACE (SPI)

Mfg. Part No.	Description	Drvrs./ Rcvrs.	Pkg.	Stock No.	Price Each 1-9
SN65LBC170DB	Triple Differential Tranceivers	3/3	16-SSOP	75C7759	10.40
SCSI BUS TERMINATION					
UCC5672PWP	9-Line Multimode Terminator with SPI-3 Mode Change Delay	...	28-TSSOP	77C2758	6.39
OTHER LINE CIRCUITS					
AM26S10CN	Quadruple Bus Transceiver	4/4	16-DIP	06F1132	1.54
SN75119P	Differential Line Transceivers	1/1	8-PDIP	08F8058	5.74
SN75453BD	8-Bit Registered LVDM Transceiver	0/8	SOIC	67K2873	0.80
SN75468NSR	High-Voltage, High-Current Darlington Transistor Arrays	7/0	SOP	76C5399	1.87
SN75477D	Dual Peripheral Drivers	2/0	SOIC	08F8166	0.80
ULQ2003ATDRQ1	Automotive Catalog High-Voltage High-Current Darlington Transistor Array	7/0	16-SOIC	22H2029	0.20

(9974)

LVDS DRIVERS, RECEIVERS, AND TRANSCEIVERS

RoHS Compliant Available

TEXAS INSTRUMENTS

LVDS SERDES (<100 MHz)

Mfg. Part No.	Description	Drvrs./ Rcvrs.	Pkg.	Stock No.	Price Each 1-9
SN65LV1023ADB	10:1 LVDS Serdes Transmitter	1/0	28-SSOP	73H4426	8.40
LVDS PHYs (<800 Mbps)					
SN65LVDS048AD	Quad LVDS Receiver with Flow-Through Pinout	0/4	16-SOIC	75C7843	3.59
SN65LVDS049PW	Dual High-Speed Differential Driver & Receiver	1/1	16-TSSOP	82H5438	2.88
SN65LVDS104D	1:4 LVDS Clock Fanout Buffer	1/4	16-SOIC	34C4599	5.52
SN65LVDS104PW	1:4 LVDS Clock Fanout Buffer	1/4	16-TSSOP	75C7854	5.52
SN65LVDS179DGK	Single Full-Duplex LVDS Transceiver	1/1	8-MSOP	76C0737	3.67
SN65LVDS349PWR	Quad High Speed Differential Receiver	0/4	16-TSSOP	01T0658	9.56
SN65LVDS390D	Quad LVDS Receiver	0/4	16-SOIC	76C0790	3.59
SN65LVDS390PW	Quad LVDS Receiver	0/4	16-TSSOP	76C0792	3.59
SN65LVDT2DBVR	Single LVDS Receiver	0/1	5-SOT-23	76C0821	1.57
SN65LVDT2DBVT	Single LVDS Receiver	0 / 1	5-SOT-23	76C0822	1.60
SN65LVDT32BD	Quad LVDS Receiver with -2 to 4.4V Common-mode Range	2/2	16-SOIC	76C0824	9.03
M-LVDS PHYs (<500 Mbps)					
SN65MLVD082DGG	8-Channel Half-Duplex M-LVDS Transceiver	1/2	64-TSSOP	87H2584	7.65
SN65MLVD205AD	Full-Duplex M-LVDS Transceiver	1/2	14-SOIC	90H3613	3.76
SN65LVDM051D	Dual LVDS Transmitter/Receiver	0/2	16-SOIC	93B5108	4.46
SN75LVDM976DGG	9-Channel LVD-SCSI Transceiver	0/0	56-TSSOP	20M5787	23.05
FlatLink (LVDS FOR LCD)					
SN75LVDS83DGG	Transmitter	0/4	56-TSSOP	76C5294	5.80

(177444)

LVDS/M-LVDS/ECL/ CML INTERFACE ICs

RoHS Compliant Available

TEXAS INSTRUMENTS

LVDS PHYS

Mfg. Part No.	Trans-mitters/ Receivers	Signaling Rate (Mbps)	I_{CC} Max. (mA)	Supply Voltage (V)	Pkg.	Stock No.	Price Each 1-9
SN65LVDS047D	4/0	400	26	3.6	16-SOIC	75C7839	4.46
SN65LVDS047PW	4/0	400	26	3.6	16-TSSOP	75C7841	4.46
SN65LVDS1050PW	1/1	400	20	2.7	16-TSSOP	76C0722	4.90
SN65LVDS105D	1/1	400	35	3.6	16-SOIC	76C0718	5.52
SN65LVDS105PW	1/1	400	35	3.6	16-TSSOP	76C0720	5.52
SN65LVDS1D	1/0	630	8	3.6	8-SOIC	76C0714	1.64

CONTINUED

LVDS/M-LVDS/ECL/CML INTERFACE ICs (CONT.)

Mfg. Part No.	Trans-mitters/ Receivers	Signaling Rate (Mbps)	I_{CC} Max. (mA)	Supply Voltage (V)	Pkg.	Stock No.	Price Each 1-9
SN65LVDS1DBVR	1/0	630	8	3.6	SOT-23	76C0715	1.54
SN65LVDS1DBVT	1/0	630	8	3.6	5-SOP	76C0716	1.58
SN65LVDS2D	0/1	400	7	3.6	8-SOIC	76C0743	1.64
SN65LVDS2DBVR	0/1	400	7	3.6	5-SOT-23	76C0744	1.54
SN65LVDS2DBVT	0/1	400	7	3.6	5-SOT-23	76C0745	1.58
SN65LVDS31D	4/0	400	35	3.6	16-SOP	36K3545	3.59
SN65LVDS31PW	4/0	400	35	3.6	16-TSSOP	76C0755	3.59
SN65LVDS32D	0/4	400	18	3.6	16-SOP	68K1112	3.59
SN65LVDS32BDR	0/4	400	16	3.6	16-SOIC	76C0758	4.12
SN65LVDS32PW	0/4	100	18	3.6	16-TSSOP	76C0762	3.59
SN65LVDS389DBT	8/0	630	70	3.6	38-TSSOP	74K3950	5.66
SN65LVDS391D	4/0	630	26	3.6	16-SOIC	76C0794	3.59
SN65LVDS391PW	4/0	630	26	3.6	16-TSSOP	72K9422	3.59
SN65LVDS9637BD	0/2	400	8	3.6	8-SOIC	76C0806	3.84
SN65LVDS9638D	2/0	150	13	3.6	8-SOIC	93B5576	2.66
SN65LVDS9638DGK	2/0	150	13	3.6	MSOP	76C0813	2.66
SN65LVDS9638DGKR	2/0	150	13	3.6	MSOP	76C0814	2.24
SN65LVDS9638DGN	2/0	150	13	3.6	MSOP	76C0815	2.77
SN65LVDT33D	0/4	400	23	3.6	16-SOIC	76C0826	4.23
SN65LVDT348PW	0/4	560	16	3.6	16-TSSOP	76C0834	4.01
SN65LVDT386DGG	0/16	630	70	3.6	64-TSSOP	77K7808	11.00
SN65LVDT386DGGR	0/16	250	50	3.6	64-TSSOP	76C0841	10.70
SN65LVDT388ADBT	0/8	630	40	3.6	38-SM8	76C0842	6.25
SN65LVDT390D	0/4	630	18	3.6	16-SOIC	76C0846	4.01
SN65LVDT390PW	0/4	200	18	3.6	16-TSSOP	76C0848	4.01
SN75LVDT388ADBT	0/8	630	22	3.6	38-TSSOP	31C9559	6.25
M-LVDS PHYS							
SN65LVDM051PW	2/2	100	19	3.6	16-TSSOP	31C5437	4.46
SN65LVDM1676DGG	16/16	630	175	3.6	64-TSSOP	75C7818	14.04
SN65LVDM1677DGG	16/16	630	175	3.3	64-TSSOP	75C7820	13.56
SN65LVDM179D	1/1	500	15	3.6	8-SOIC	93B5060	3.59
SN65MLVD200AD	1/1	100	24	3.3	8-SOIC	90H3607	3.31
SN65MLVD201D	1/1	200	24	3.3	8-SOIC	22H0109	3.95
SN65MLVD204AD	1/1	100	24	3.6	8-SOIC	90H3611	3.76
PECL PHYS							
SN65ELT22DGK	2/2	1000	17.3	5.7	8-MSOP	45P8150	3.42
SN65EPT22D	1/1	4000	39	5.7	8-SOIC	45P8157	4.23
SN65LVELT22D	2/2	3500	23	3.6	8-SOIC	45P8166	3.42
SN65ELT23D	2/2	0.5	27	5.25	8-SOIC	14R9901	3.92
SN65LVELT23D	2/2	0.4	27	3.6	8-SOIC	14R9902	6.44
SN65LVDS33D	0/4	400	23	3.6	16-SOIC	76C0764	3.42
REPEATER/TRANSLATORS							
SN65LVCP418PAPT	8/8	4250	335	3.3	64-HTQFP	14R5421	20.60
SN65LVDS100D	1/1	2000	30	3.6	8-SOIC	02E6875	6.14
SN65LVDS100DGK	1/1	2000	30	3.6	8-MSOP	02E6876	6.14
DIFFERENTIAL RECEIVERS							
SN65EPT23D	2/2	600	15	3.8	8-SOIC	55R1353	4.23
FLATLINK TRANSMITTER							
SN75LVDS84ADGGR	1/0	197	35	3.6	48-TSSOP	76C5297	4.88

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RS-232 DRIVERS, RECEIVERS, AND TRANSCEIVERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Description	Drvrs./ Rcvrs.	Op. Temp. Range	Pkg.	Stock No.	Price Each 1-9
GD75232DBR	RS-232 Drivers And Receivers	3/5	0°C to +70°C	20-SSOP	96B8287	0.82
GD75232N	Multiple RS-232 Drivers and Receivers	4/4	0°C to +70°C	20-DIP	67K2800	0.98
MAX202CD	5-V Dual RS-232 Line Driver/Receiver	2/2	0°C to +70°C	16-SOIC	82H4684	1.26
MAX202CDW	5-V Dual RS-232 Line Driver/Receiver	2/2	0°C to +70°C	16-WSOIC	82H4686	1.26
MAX202ID	RS-232 Line Driver/ Receiver	2/2	-40°C to +85°C	16-SOIC	82H4690	1.26
MAX202IPW	5-V Dual RS-232 Line Driver/Receiver	2/2	-40°C to +85°C	16-TSSOP	82H4694	1.26
MAX213IDBR	Multichannel Line Driver/ Receiver w/ 15-kV ESD Protection	4/5	-40°C to +85°C	28-SSOP	71K6673	2.04
MAX232D	Dual EIA-232 Driver/ Receiver	2/2	0°C to +70°C	16-SOIC	35K4719	1.26

CONTINUED

RS-232 DRIVERS, RECEIVERS, AND TRANSCEIVERS (CONT.)

Mfg. Part No.	Description	Drvrs./ Rcvrs.	Op. Temp. Range	Pkg.	Stock No.	Price Each 1-9
● MAX232DR	Dual EIA-232 Driver/Receiver	2/2	0°C to +70°C	16-SOIC	75C0971	1.05
● MAX232DW	Dual EIA-232 Driver/Receiver	2/2	0°C to +70°C	16-WSOIC	34K7924	1.37
● MAX232ECN	Dual RS-232 Driver/ Receiver	2/2	0°C to +70°C	16-DIP	02M3654	1.46
● MAX232EIN	Dual RS-232 Driver/ Receiver	2/2	-40°C to +85°C	16-DIP	02M3668	1.46
● MAX232ID	Dual EIA-232 Driver/Receiver	2/2	-40°C to +85°C	16-SOIC	75C0974	1.26
● MAX232IDW	Dual EIA-232 Driver/Receiver	2/2	-40°C to +85°C	16-SOIC	75C0976	1.37
● MAX232IN	Dual EIA-232 Driver/Receiver	2/2	-40°C to +85°C	16-DIP	92B8965	1.16
● MAX232N	Driver/Receiver	2/2	0°C to +70°C	16-DIP	59K8220	1.16
● MAX3221CPW	3-V to 5.5-V Single-Channel RS-232 Line Driver/Receiver	1/1	0°C to +70°C	16-TSSOP	02H5279	2.20
● MAX3221CPWR	Multi RS-232 Line Driver/Receiver	1/1	0°C to +70°C	16-TSSOP	75C0980	1.73
● MAX3221EIPW	Single-Channel RS-232 Line Driver/ Receiver	1/1	-40°C to +85°C	16-TSSOP	61K0352	2.35
● MAX3221IPWR	Multi RS-232 Line Driver/Receiver	1/1	-40°C to +85°C	16-TSSOP	75C0982	2.04
● MAX3221MDBREP	SINGLE-CHANNEL RS-232 LINE DRIVER/RECEIVER	1/1	-55°C to +125°C	16-SSOP	45M8058	5.49
● MAX3221ECPW	Single-Channel Line Driver/Receiver	1/1	0°C to +70°C	16-TSSOP	61K0344	2.20
● MAX3221IPW	Single-Channel Line Driver/Receiver	1/1	-40°C to +85°C	16-TSSOP	02H5280	2.35
● MAX3222CDBR	3V to 5.5V Multichannel RS-232 Line Driver/ Receiver	2/2	0°C to +70°C	20-SSOP	67K2806	2.82
● MAX3222CDW	3V to 5.5V Multichannel RS-232 Line Driver/ Receiver	2/2	0°C to +70°C	20-SOIC	75C0984	2.80
● MAX3222CPWR	Multichannel Line Driver/Receiver	2/2	0°C to +70°C	20-TSSOP	75C0986	2.51
● MAX3222ECPWR	Multichannel Line Driver/Receiver	2/2	0°C to +70°C	20-TSSOP	71K6683	2.51
● MAX3222EIPW	3-V to 5.5-V Multichannel RS-232 Line Driver/ Receiver	2/2	-40°C to +85°C	20-TSSOP	71K6688	2.94
● MAX3223CDBR	3V - 5.5V Multichannel RS232 Dvr/Rvr	2/2	0°C to +70°C	20-SSOP	75C0991	2.51
● MAX3223CPWR	3V - 5.5V Multichannel RS232 Dvr/Rvr	2/2	0°C to +70°C	20-TSSOP	75C0994	2.20
● MAX3223EIDB	3V - 5.5V Multichannel RS232 Dvr/Rvr	2/2	-40°C to +85°C	20-SSOP	71K6696	2.98
● MAX3223IPWR	3-V to 5.5V Multichannel RS-232 Line	2/2	-40°C to +85°C	20-TSSOP	75C0998	2.51
● MAX3232CD	3V - 5.5V Multichannel RS232 Dvr/Rvr	2/2	0°C to +70°C	16-SOIC	75C0999	2.35
● MAX3232CDW	3-V to 5.5-V Multichannel RS-232 Line Driver/ Receiver	2/2	0°C to +70°C	16-SOIC	75C1002	2.35
● MAX3232CPW	3V-5.5V Multichannel RS-232 Line Tx/Rx	2/2	0°C to +70°C	16-TSSOP	34K7925	2.35
● MAX3232CPWR	3V-5.5V Multichannel RS-232 Line Tx/Rx	2/2	0°C to +70°C	16-TSSOP	75C1004	1.88
● MAX3232ECD	Multichannel RS-232 Line Driver/ Receiver w/ +/-15kV IEC ESD Protection	2/2	0°C to +70°C	16-SOIC	52K5768	2.35
● MAX3232ECDB	Multichannel RS-232 Line Driver/ Receiver w/ +/-15kV IEC ESD Protection	2/2	0°C to +70°C	16-SSOP	52K5769	2.35
● MAX3232ECPW	Multichannel RS-232 Line Driver/ Receiver	2/2	0°C to +70°C	16-TSSOP	52K5774	2.35

➤CONTINUED➤

RS-232 DRIVERS, RECEIVERS, AND TRANSCEIVERS (CONT.)

Mfg. Part No.	Description	Drvrs./ Rcvrs.	Op. Temp. Range	Pkg.	Stock No.	Price Each 1-9
● MAX3232EIPW	Multichannel RS-232 Line Driver/Receiver w/ +/-15kV IEC ESD Protection	2/2	-40°C to +85°C	16-TSSOP	52K5782	2.51
● MAX3232ID	3-V to 5.5-V Multichannel RS-232 Line Driver/Receiver	2/2	-40°C to +85°C	16-SOIC	75C1005	2.51
● MAX3232IDB	3-V to 5.5-V Multichannel RS-232 Line Driver/Receiver	2/2	-40°C to +85°C	16-SSOP	87H1318	2.51
● MAX3232IDW	3-V to 5.5-V Multichannel RS-232 Line Driver/Receiver	2/2	-40°C to +85°C	16-SOIC	75C1008	2.51
● MAX3232IPW	3-V to 5.5-V Multichannel RS-232 Line Driver/Receiver	2/2	-40°C to +85°C	16-TSSOP	35K4721	2.51
● MAX3232CDBR	3-V to 5.5-V Multichannel RS-232 Line Driver/Receiver	2/2	0°C to +70°C	16-SSOP	75C1000	2.20
● MAX3232EID	3-V to 5.5-V Multichannel RS-232 Line Driver/Receiver	2/2	-40°C to +85°C	16-SOIC	52K5776	2.51
● MAX3232EIDR	3-V to 5.5-V Multichannel RS-232 Line Driver/Receiver	2/2	-40°C to +85°C	16-SOIC	52K5779	2.20
● MAX3237ECPWR	3-V To 5.5-V Single Channel RS-232 1 Mbit/s Line Driver/ Receiver	5/3	0°C to +70°C	28-TSSOP	99K3246	2.66
● MAX3238IPW	Multichannel RS-232 Line Driver/Receiver	5/3	-40°C to +85°C	28-TSSOP	02H5288	2.80
● MAX3243CDBR	3-V to 5.5-V Multichannel RS-232 Line Driver/Receiver	3/5	0°C to +70°C	28-SSOP	75C1015	1.73
● MAX3243EIPW	3-V to 5.5-V Multichannel RS-232 Line Driver/Receiver	3/5	-40°C to +85°C	28-TSSOP	43K3431	2.35
● MAX3243IPWR	3-V to 5.5-V Multichannel RS-232 Line Driver/Receiver	3/5	-40°C to +85°C	28-TSSOP	75C1022	2.04
● MAX3243IDBR	3-V to 5.5-V Multichannel RS-232 Line Driver/Receiver w/ +/-15kV ESD (HBM) Protection	3/5	-40°C to +85°C	28-SSOP	75C1019	2.04
● MAX3243IPW	3-V to 5.5-V Multichannel RS-232 Line Driver/Receiver w/ +/-15kV ESD (HBM) Protection	3/5	-40°C to +85°C	28-TSSOP	21H1152	2.35
● MC1488N	Quadruple Line Driver	4/0	0°C to +70°C	14-DIP	60K6207	0.65
● MC1489AN	Quadruple Line Receiver*	-999/4	0°C to +70°C	14-DIP	07F4438	0.78
● MC1489N	Quadruple Line Receiver**	4/4	0°C to +70°C	14-DIP	60K6208	0.78
● SN65C3221PW	3-V To 5.5-V Multichannel RS-232 Line Driver/Receiver	1/1	-40°C to +85°C	16-TSSOP	02H5325	2.98
● SN75150D	Dual Line Driver	2/0	0°C to +70°C	8-SOIC	08F8074	1.40
● SN75150P	Dual Line Driver	2/0	0°C to +70°C	8-DIP	60K6922	1.54
● SN75154N	Quadruple Differential Line Receiver	4/4	0°C to +70°C	16-DIP	08F8079	1.54
● SN75155D	Line Driver and Receiver	1/1	0°C to +70°C	8-SOIC	35K0838	1.54
● SN75185DW	Multiple Driver/ Receiver	3/5	0°C to +70°C	20-SOIC	91F3641	0.97
● SN75188D	Quadruple Line Driver	4/0	0°C to +70°C	14-SOIC	08F8135	0.57
● SN75188N	Quadruple Line Driver	4/0	0°C to +70°C	14-DIP	60K6933	0.63
● SN75189AD	Low-Power Line Receiver	0/4	0°C to +70°C	14-SOIC	08F8137	0.69
● SN75189N	Line Receiver, 0.33V Typ. Hysteresis	0/4	0°C to +70°C	14-DIP	08F8140	0.63
● SN75C1406D	Low-Power Driver/ Receiver	3/3	0°C to +70°C	16-SOIC	08F8020	1.88
● SN75C1406DW	Triple Low-Power Drivers And Receivers	3/3	0°C to +70°C	16-SOIC	36K7624	1.88
● SN75C1406N	Triple Low-Power Drivers And Receivers	3/3	0°C to +70°C	16-DIP	60K6918	1.73
● SN75C185N	Low-Power Multiple Driver/Receiver	3/5	0°C to +70°C	20-DIP	08F8023	2.20
● SN75C188D	Low-Power Line Driver	4/0	0°C to +70°C	14-SOIC	72K9441	0.92
● SN75C188N	Low-Power Line Driver	4/0	0°C to +70°C	14-DIP	08F8025	0.84
● SN75C189N	Quad Low-Power Line Receiver	0/4	0°C to +70°C	14-DIP	67K1134	0.84
● SN75C3221EDB	RS-232 1 Mbit/s Line Driver/Receiver	1/1	0°C to +70°C	16-SSOP	66K4284	2.82
● SN75C3221EPW	RS-232 1 Mbit/s Line Driver/Receiver	1/1	0°C to +70°C	16-TSSOP	66K4286	2.82

➤CONTINUED➤

RS-232 DRIVERS, RECEIVERS, AND TRANSCEIVERS (CONT.)

Mfg. Part No.	Description	Drvrs./ Rcvrs.	Op. Temp. Range	Pkg.	Stock No.	Price Each 1-9
SN75LP1185DW	Low-Power Multiple RS-232 Drivers and Receivers	3/5	0°C to +70°C	20-SOIC	76C5244	3.36
TL145406N	Triple RS-232 Drivers/ Receivers	3/3	0°C to +70°C	16-DIP	66F4593	2.04
TRS202EID	RS-232 Line Driver/ Receiver	2/2	-40°C to +85°C	16-SOIC	71M0460	1.37
TRS3221ECPWR	3-V to 5.5-V Single-Channel RS-232 Line Driver/Receiver With +/-15-kV IEC ESD Protection	1/1	0°C to +70°C	16-TSSOP	41M6157	1.73
TRS3221EIDBR	3-V to 5.5-V Single-Channel RS-232 Line Driver/Receiver With +/-15-kV IEC ESD Protection	1/1	-40°C to +85°C	16-SSOP	41M6159	2.04
TRS3221EIPW	3-V to 5.5-V Single-Channel RS-232 Line Driver/Receiver With +/-15-kV IEC ESD Protection	1/1	-40°C to +85°C	16-TSSOP	41M6160	2.35
TRS3243EIPWR	3-V to 5.5-V Multichannel RS-232 Line Driver/Receiver With +/-15-kV IEC ESD Protection	1/1	-40°C to +85°C	28-TSSOP	41M6311	2.04
TRSF3232EID	3-V to 5.5-V Two-Channel RS-232 1-Mbit/s Line Driver/ Receiver	1/1	-40°C to +85°C	16-SOIC	41M6010	2.82
TRSF3232EIPW	3-V to 5.5-V Two-Channel RS-232 1-Mbit/s Line Driver/ Receiver	1/1	-40°C to +85°C	16-TSSOP	41M6018	2.82
TRSF3232EIPWR	3-V to 5.5-V Two-Channel RS-232 1-Mbit/s Line Driver/ Receiver	1/1	-40°C to +85°C	16-TSSOP	41M6019	2.35
UA9636ACD	Dual Line Driver	2/0	0°C to +70°C	8-SOIC	09F1536	0.93
UA9636ACP	Driver w/Adjustable Slew Rate	2/0	0°C to +70°C	8-DIP	60K7045	1.01

*1.8KΩ internal response control resistor. ** 8.4KΩ internal response control resistor.
(177445)

RS-422 DRIVERS AND RECEIVERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Description	Drvrs./ Rcvrs.	Pkg.	Stock No.	Price Each 1-9
AM26C31CD	Quad Differential Line Driver	4/0	16-SOIC	74C7297	1.35
AM26C31CN	Quad Differential Line Driver	4/0	16-DIP	60K0764	1.24
AM26C31ID	Quad Differential Line Driver	4/0	16-SOIC	34K0702	1.46
AM26C31IN	Quadruple Differential Line Driver	4/0	16-DIP	74C7303	1.35
AM26C31IPW	Quadruple Differential Line Driver	4/0	TSSOP	43J2168	1.35
AM26C32CDR	Quadruple Diffrential Line Receiver	0/4	SOIC	74C7307	1.12
AM26C32CN	Quadruple Differential Line Receiver	0/4	16-DIP	69K7579	1.24
AM26C32ID	Quad Differential Line Receiver	0/4	16-SOIC	67C2528	1.46
AM26C32IN	Quadruple Differential Line Receiver	0/4	16-DIP	74C7309	1.35
AM26LS31CD	Quad Differential Line Driver	4/0	16-SOIC	06F1107	1.05
AM26LS31CN	Quad Differential Line Driver	4/0	16-PDIP	60K0765	1.42
AM26LS32ACD	Quad Differential Line Receiver	0/4	16-SOIC	06F1118	1.05
AM26LS32ACN	Quad Differential Line Receiver	0/4	16-DIP	60K0766	0.97
AM26LS32AID	Quadruple Differential Line Receiver	0/4	16-SOIC	36K7132	1.26
AM26LV31CD	Low-Voltage High-Speed Quadruple Differential Line Drvr	4/0	16-SOIC	74C7317	1.26
AM26LV32CD	Low-Voltage High-Speed Quad Diff. Line Receiver	0/4	16-SOIC	34K0706	1.68
AM26LV32ID	Low-Voltage, High-Speed Quad Differential Line Receiver	0/4	16-SOIC	43K2931	1.73
MC3486D	Quadruple Differential Line Receiver w/ 3-State Outputs	0/4	16-SOIC	07F5164	1.18
MC3486N	Quad Diff. Line Receiver w/3-State Outputs	0/4	16-DIP	60K6210	1.08
MC3487N	Quad Differential Line Driver	4/0	16-DIP	07F5179	1.08
SN75ALS191P	Dual Differential Line Driver	2/0	PDIP	76C5108	2.35
SN75C1168PW	Dual Differential Drivers And Receivers	2/2	16-TSSOP	02H5485	2.04
SN75C1168N	Dual Differential Drivers And Receivers	2/2	16-DIP	99B3669	1.88
UA9637ACD	Dual High-Speed Differential Line Receiver	2/2	8-SOIC	09F1539	1.18
UA9637ACP	Dual High-Speed Differential Line Receiver	0/2	8-DIP	60K7046	1.08
UA9638CD	Dual High-Speed Differential Line Driver	2/0	8-SOIC	67K2885	0.72
UA9638CP	Dual High-Speed Differential Line Driver	2/0	8-DIP	60K7047	0.66

(177446)

RS-485 DRIVERS, RECEIVERS, AND TRANSCEIVERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Description	Drvrs./ Rcvrs.	Pkg.	Stock No.	Price Each 1-9
SN65176BD	Differential Bus Transceiver	1/1	8-SOIC	08F5891	0.96
SN65176BP	Differential Bus Transceiver	1/1	8-DIP	60K6785	0.88
SN65ALS180D	Differential Driver And Receiver Pair	1/1	14-SOIC	35K0740	3.36
SN65HVD05D	High-Output RS-485 Transceiver	1/1	8-SOIC	75C7726	4.60
SN65HVD37D	Full-Duplex RS-485 Driver and Receiver	1/1	14-SOIC	82T4169	4.65
SN65HVD06D	High-Output RS-485 Transceiver	1/1	8-SOIC	75C7729	4.34
SN65HVD07D	High-Output RS-485 Transceiver	1/1	8-SOIC	75C7732	4.34
SN65HVD08D	3.3/5-V RS-485 Transceiver	1/1	8-SOIC	17M9320	4.65
SN65HVD08P	3.3/5-V RS-485 Transceiver	1/1	8-DIP	22H0093	5.20
SN65HVD10D	3.3V Differential Transceiver	1/1	8-SOIC	72K9420	4.23
SN65HVD10QD	Differential Transceiver	1/1	8-SOIC	22H0094	6.58
SN65HVD1176D	RS-485 Transceiver	1/1	8-SOIC	82H5435	4.93
SN65HVD11D	3.3V Differential Transceiver	1/1	8-SOIC	72K9421	4.01
SN65HVD11QD	Differential Transceiver	1/1	8-SOIC	22H0096	6.36
SN65HVD12D	3.3V Differential Transceiver	1/1	8-SOIC	58K2335	4.01
SN65HVD12P	Differential Transceiver	1/1	8-DIP	75C7743	4.48
SN65HVD1780P	Fault-Protected RS-485 Transceiver	1/1	8-PDIP	15P0226	5.97
SN65HVD1781D	RS-485 Transceiver	1/1	8-SOIC	85M0100	5.37
SN65HVD1786D	70-V Fault-Protected RS-485 Transceiver	1/1	8-SOIC	94M9572	5.37
SN65HVD1791D	70-V Fault-Protected Transceiver	1/1	14-SOIC	08P3879	5.49
SN65HVD1792D	70-V Fault-Protected RS-485 Transceiver	1/1	14-SOIC	34P6326	5.49
SN65HVD1793D	70-V Fault-Protected RS-485 Transceiver	1/1	14-SOIC	34P6328	6.09
SN65HVD21P	RS-485 Transceiver	1/1	8-DIP	22H0103	4.54
SN65HVD23D	Extended Common-mode RS-485 Transceiver	1/1	8-SOIC	73H4404	5.25
SN65HVD24D	RS-485 Transceiver	1/1	8-SOIC	73H4411	5.25
SN65HVD3082ED	Low-Power RS-485 Transceiver	1/1	8-SOIC	61H5396	2.76
SN65HVD3082EDR	Low-Power RS-485 Transceiver	1/1	8-SOIC	61H5397	2.38
SN65HVD3085ED	RS-485 Transceiver	*1/1	8-SOIC	21J8891	3.04
SN65HVD3085EDGKR	Low-power Half-duplex RS-485 Transceiver	1/1	8-MSOP	21J8893	3.06
SN65HVD30D	3.3 V Full-Duplex RS 485 Drivers and Receivers	1/1	8-SOIC	84K3662	4.48
SN65HVD30DR	3.3 V Full-Duplex RS 485 Drivers and Receivers	1/1	8-SOIC	84K3663	3.76
SN65HVD31D	3.3 V Full-Duplex RS 485 Drivers and Receivers	1/1	8-SOIC	84K3664	4.23
SN65HVD32DR	3.3 V Full-Duplex RS 485 Drivers and Receivers	1/1	8-SOIC	84K3667	3.42
SN65HVD33D	3.3 V Full-Duplex RS 485 Drivers and Receivers	1/1	8-SOIC	61K1684	4.48
SN65HVD33DR	3.3 V Full-Duplex RS 485 Drivers and Receivers	1/1	14-SOIC	61K1685	3.76
SN65HVD34D	3.3 V Full-Duplex RS 485 Drivers and Receivers	1/1	14-SOIC	61K1686	5.41
SN65HVD34DR	3.3 V Full-Duplex RS 485 Drivers and Receivers	1/1	14-SOIC	61K1687	4.48
SN65HVD485ED	RS-485 Transceiver	1/1	8-SOIC	21J8899	2.38
SN65HVD485EDR	Half-Duplex RS-485 Transceiver	1/1	8-SOIC	21J8902	1.98
SN65HVD50D	High Output Full-Duplex RS 485 Drivers and Receivers	1/1	8-SOIC	84K3670	5.46
SN65HVD75D	3.3 V IEC ESD Protection	1/1	8-SOIC	94T1770	2.55
SN65LBC172A16DW	Quadruple RS-485 Differential Line Drivers	4/0	SOIC	74M8372	6.44
SN65LBC172AN	RS-485 Line Driver	4/0	16-DIP	75C7769	6.38
SN65LBC173AD	Quadruple RS-485 Differential Line Receivers	4/4	16-SOIC	75C7771	4.82
SN65LBC173D	Quadruple Low-Power Differential Line Receiver	0/4	16-SOIC	72C4070	3.70
SN65LBC175D	Quaddruple Low-Power Differential Receiver	0/4	16-SOIC	75C7784	3.53
SN65LBC176AD	Differential Bus Transceivers	1/1	8-SOIC	29C2991	3.25
SN65LBC176AP	Differential Bus Transceivers	1/1	8-DIP	75C7789	3.53
SN65LBC176QDRQ1	Differential Bus Transceiver	1/1	SOIC	90H3605	2.81
SN75LBC179AD	Low-Power Differential Line Driver and Receiver Pairs	1/1	8-SOIC	76C5208	3.00
SN65LBC179P	Differential Line Driver And Receiver Pair	1/1	8-DIP	75C7801	3.03
SN65LBC180AD	Differential Line Driver And Receiver Pair	1/1	14-SOIC	75C7804	4.34
SN65LBC180D	Differential Line Driver And Receiver Pair	1/1	14-SOIC	67C2792	3.36
SN65LBC180N	Differential Line Driver And Receiver Pair	1/1	14-DIP	75C7808	3.76
SN65LBC182D	Differential Bus Transceiver	1/1	8-SOIC	75C7809	3.14

➤CONTINUED➤

RS-485 DRIVERS, RECEIVERS, AND TRANSCEIVERS (CONT.)

Mfg. Part No.	Description	Drvrs./ Rcvrs.	Pkg.	Stock No.	Price Each 1-9
● SN65LBC184DR	Transient Voltage Suppression Differential Transceiver	1/1	8-SOIC	75C7812	3.30
● SN65LBC184P	Differential Line Driver	1/1	8-DIP	35K0741	4.30
● SN75157D	Dual Differential Line Receiver	0/2	8-SOIC	36K2052	2.94
● SN75172DW	Quadruple Differential Line Driver	4/0	SOIC	08F8098	2.80
● SN75172N	Differential Line Driver	4/0	16-DIP	60K6926	2.82
● SN75173D	Differential Line Receiver	0/4	16-SOIC	08F8102	2.80
● SN75173N	Differential Line Receiver	0/4	16-DIP	63K6423	2.82
● SN75174N	Differential Line Receiver	4/0	16-DIP	60K6927	2.80
● SN75175D	Differential Line Receiver	0/4	16-SOIC	36K3556	2.80
● SN75175N	Differential Line Receiver	0/4	16-DIP	60K6928	2.82
● SN75176BD	Differential Bus Transceiver	1/1	8-SOIC	08F8127	0.96
● SN75176BP	Differential Bus Transceiver	1/1	8-DIP	60K6929	0.88
● SN75ALS1177N	Dual Differential Driver And Receiver	2/2	PDIP	76C5084	6.05
● SN75ALS181N	Differential Driver And Receiver Pair	1/1	14-PDIP	76C5105	3.03
● SN75ALS172ADW	Differential Line Driver	4/0	20-SOIC	91F3645	4.90
● SN75ALS173N	Differential Line Driver	0/4	16-DIP	67K1128	4.48
● SN75ALS174ADW	Differential Line Receiver	4/0	20-SOIC	66F4589	3.64
● SN75ALS174AN	Differential Line Driver	4/0	16-DIP	91F3648	3.36
● SN75ALS176BD	Differential Bus Transceiver	1/1	8-SOIC	35K0833	2.66
● SN75ALS176BP	Differential Bus Transceiver	1/1	8-DIP	67K1130	2.51
● SN75ALS176P	Differential Bus Transceiver	1/1	8-DIP	60K6915	2.20
● SN75ALS180D	Differential Driver/Receiver Pair	1/1	14-SOIC	52F2693	3.08
● SN75ALS180N	Differential Driver/Receiver Pair	1/1	14-DIP	08F8013	3.08
● SN75HVD08DR	3.3/5-V RS-485 Transceiver	1/1	8-SOIC	32H6457	3.58
● SN75HVD08D	3.3/5-V RS-485 Transceiver	1/1	8-SOIC	32H6456	4.30
● SN75HVD10D	3.3V Differential Transceiver	1/1	8-SOIC	76C5167	4.23
● SN75HVD11D	3.3V Differential Transceiver	1/1	8-SOIC	76C5170	4.01
● SN75HVD1176D	RS-485 Transceiver	1/1	8-SOIC	82H5798	4.54
● SN75HVD12D	RS-485 Transceiver	1/1	8-SOIC	76C5173	4.01
● SN75HVD12DR	3.3V Differential Transceiver	1/1	8-SOIC	76C5174	3.31
● SN75LBC173AD	Quadruple RS-485 Differential Line Receivers	0/4	16-SOIC	76C5190	4.46
● SN75LBC173D	Quadruple Low-Power Differential Line Receiver	0/4	16-SOIC	76C5193	3.42
● SN75LBC174DW	Quad Low-Power Differential Line Driver	4/0	20-SOIC	76C5198	5.66
● SN75LBC175AD	Quadruple RS-485 Differential Line Receiver	0/4	16-SOIC	76C5200	4.18
● SN75LBC176D	Differential Bus Transceiver	1/1	8-SOIC	91F3643	2.66
● SN75LBC176P	Differential Bus Transceiver	1/1	8-DIP	91F9568	2.98
● SN75LBC180AD	Line Driver and Receiver Pairs	1/1	50-SOIC	76C5213	4.01
● SN75LBC180D	Low-Power Differential Line Driver And Receiver Pair	1/1	14-SOIC	67K1135	3.14
● SN75LBC180N	Line Driver and Receiver Pairs	1/1	14-DIP	92B8970	3.50
● SN75LBC182D	Half-duplex,15-kV ESD, 1/4 UL Transceiver	1/1	8-SOIC	76C5217	3.14
● SN75LBC184D	Differential Transceiver with TVS	1/1	8-SOIC	83F9186	3.58
● SN75LBC184P	Differential Transceiver with TVS	1/1	8-DIP	36K7625	4.01

EVALUATION BOARDS:

Mfg. Part No.	Description	Stock No.	Price Each
SN65HVD96EVM	SN65HVD96 Evaluation Module	79R8402	50.00
● SN65HVD22EVM	SN65HVD2x Series Evaluation Module	61H5394	49.98

(177447)

CERTIFIED EMC COMPLIANT RS-485 INTERFACE DESIGN TOOL

RoHS Compliant Available

ANALOG DEVICES

Features
- Robust EMC compliant RS-485 transceiver interface
- Tested to specific ESD, EFT, and surge levels

Applications
- Building Control & Automation
- Electronic Test & Measurement
- Field Instruments/ Smart Transmitters
- Heating, Ventilation & Air Conditioning
- Instrumentation
- Motor and Power Control
- Programmable Logic Controllers/ Distributed Control Systems
- Sensors and Sensor Interface

Mfg. Part No.	Descriptoin	Stock No.	Price Each Each
● EVAL-CN0313-SDPZ	CN0313 Eval Board	65W5606	87.50

(210293)

DUAL-CHANNEL ISOLATORS WITH INTEGRATED DC-TO-DC CONVERTERS

RoHS Compliant Available

ANALOG DEVICES

Features:
- 15 ns propagation delay
- Regulated 3.15 V to 5.25 V output
- Up to 150 mW output power
- Dual dc-to-100 Mbps (NRZ) signal isolation channels
- Soft start power supply

Applications:
- RS-232 transceivers
- Power supply start-up bias and gate drives
- Isolated sensor interfaces
- Industrial PLCs

Mfg. Part No.	Insulation Rating (kVrms)	# of Inputs Side1/Side2	Prop. Delay (nS)	Package	Stock No.	Price Each 1-9
● ADUM5210CRSZ	2.5	2/0	15	20-SSOP	47W0471	7.14
● ADUM5211CRSZ	2.5	1/1	15	20-SSOP	47W0472	7.40
● ADUM5212CRSZ	2.5	0/2	15	20-SSOP	47W0473	7.14
● ADUM6210CRSZ	3.75	2/0	15	20-SSOP	47W0475	10.35
● ADUM6211CRSZ	3.75	1/1	15	20-SSOP	47W0476	10.35
● ADUM6212CRSZ	3.75	0/2	15	20-SSOP	47W0477	10.35

(210240)

iCOUPLER® DIGITAL ISOLATORS

RoHS Compliant Available

ANALOG DEVICES

EVAL-ADUM4160EBZ

By avoiding the use of LEDs and photodiodes, iCoupler devices completely remove design difficulties commonly associated with optocouplers.
For the following table, Channel Configuration is defined by : # inputs on non-isolated side / # inputs isolated supply side.

Mfg. Part No.	Channel Configuration	Data Rate (Mbps)	Prop. Delay (nS)	Isolation Voltage (Vrms)	Package	Stock No.	Price Each 1-9
1 CHANNEL							
● ADM2490EBRWZ	1/0	16	...	5000	16-SOIC	41M1916	10.42
● ADUM1100ARZ	1/0	25	18	5000	8-SOIC	19M0749	3.48
● ADUM1100BRZ	1/0	100	18	5000	8-SOIC	19M8747	3.75
● ADUM1100URZ	1/0	100	18	2500	8-SOIC	59K3236	3.75
● ADUM3160BRWZ	1/0	12	60	2500	16-SOIC	85R6420	6.94
● ADUM5000ARWZ	1/0	...	...	2500	16-SOIC	19P8235	6.99
● ADUM5230ARWZ	1/0	...	100	2500	16-SOIC	98M0124	5.57
2 CHANNEL							
● ADM2491EBRWZ	2/0	16	...	...	16-SOIC	64M7466	10.90
● ADUM1200ARZ	2/0	1	100	2500	8-NSOIC	19M0750	2.77
● ADUM1200BRZ	2/0	10	50	2500	8-NSOIC	19M0751	2.94
● ADUM1200CRZ	2/0	25	45	2500	8-NSOIC	19M0752	3.14
● ADUM1210BRZ	2/0	10	50	2500	8-NSOIC	19M8749	3.04
● ADUM1251ARZ	2/0	1	150	2500	8-SOIC	28M3928	5.39
● ADUM1280CRZ	2/0	100	18	3000	8-SOIC	94T9432	3.49
● ADUM1285CRZ	2/0	100	18	3000	8-SOIC	94T9444	3.36
● ADUM2200BRIZ	2/0	10	50	5000	16-SOIC	63T8598	4.51
● ADUM2210TRIZ	2/0	10	50	5000	16-SOIC	63T8606	4.86
● ADUM3200CRZ	2/0	50	45	2500	8-SOIC	28M3942	3.93
● ADUM3201ARZ	2/0	1	3	2500	8-SOIC	28M3944	2.81
● ADUM3211BRZ	2/0	10	50	2500	8-SOIC	24R9001	2.97
● ADUM3211TRZ	2/0	10	50	2500	8-SOIC	24R9003	3.53
● ADUM4160BRWZ	2/0	12	...	5000	16-SOIC	24R8652	10.81
● ADUM5241ARZ	2/0	1	70	...	8-SOIC	34M4937	6.85
● ADUM7240CRZ	2/0	25	41	1000	8-SOIC	94T9468	2.99
● ADUM1201ARZ	1/1	1	150	2500	8-NSOIC	19M0753	2.70
● ADUM1201BRZ	1/1	10	50	2500	8-NSOIC	19M8748	3.06
● ADUM1201CRZ	1/1	25	45	2500	8-NSOIC	19M0754	3.26
● ADUM1281CRZ	1/1	100	18	3000	8-SOIC	94T9438	3.36
● ADUM1286CRZ	1/1	100	18	3000	8-SOIC	94T9450	3.36
● ADUM2201BRIZ	1/1	10	50	5000	16-SOIC	63T8602	4.51
● ADUM2201BRWZ	1/1	10	50	5000	16-SOIC	84M7792	4.51
● ADUM2211TRIZ	1/1	10	50	5000	16-SOIC	63T8610	4.86
● ADUM7241CRZ	1/1	25	41	1000	8-SOIC	94T9472	2.99
3 CHANNEL							
● ADUM1300ARWZ	3/0	1	100	2500	16-SOIC	19M8751	3.19
● ADUM1310ARWZ	3/0	10	100	2500	16-SOIC	34M4927	3.31
● ADUM1310BRWZ	3/0	10	5	2500	16-SOIC	19M8754	4.51
● ADUM1311ARWZ	3/0	10	100	2500	16-SOIC	34M4929	3.31
● ADUM1301ARWZ	2/1	1	100	2500	16-SOIC	19M0756	3.07
● ADUM1301BRWZ	2/1	10	50	2500	16-SOIC	19M0757	4.93

➤CONTINUED➤

iCOUPLER® DIGITAL ISOLATORS (CONT.)

3 CHANNEL

Mfg. Part No.	Channel Configuration	Data Rate (Mbps)	Prop. Delay (nS)	Isolation Voltage (Vrms)	Package	Stock No.	Price Each 1-9
ADUM1301CRWZ	2/1	90	32	2500	16-SOIC	19M8753	5.72
ADUM2251ARIZ	2/1	1	162	5000	16-SOIC	63T8614	6.35
4 CHANNEL							
ADUM1400ARWZ	4/0	1	100	2500	16-SOIC	19M8755	4.30
ADUM1400BRWZ	4/0	10	50	2500	16-SOIC	19M0758	5.42
ADUM1400CRWZ	4/0	90	32	2500	16-SOIC	19M8756	5.71
ADUM1412ARWZ	4/0	10	65	2500	16-SOIC	28M3934	4.39
ADUM2400CRIZ	4/0	90	32	5000	16-SOIC	63T8620	8.14
ADUM3440CRWZ	4/0	150	5	2500	16-SOIC	64M7527	5.73
ADUM3480ARSZ	4/0	25	65	3750	20-SSOP	43W5512	4.14
ADUM3480BRSZ	4/0	25	25	3750	20-SSOP	43W5514	5.17
ADUM4400CRIZ	4/0	90	32	5000	16-SOIC	63T8638	8.14
ADUM4400CRWZ	4/0	90	27	5000	16-SOIC	11R0963	8.43
ADUM7440ARQZ	4/0	1	50	1000	16-QSOP	52R8095	3.80
ADUM7440CRQZ	4/0	25	40	1000	16-QSOP	52R8097	5.32
ADUM1401ARWZ	3/1	1	100	2500	16-SOIC	19M8757	4.30
ADUM1401BRWZ	3/1	10	50	2500	16-SOIC	59K3278	5.61
ADUM1401CRWZ	3/1	90	32	2500	16-SOIC	19M8758	5.71
ADUM2401ARWZ	3/1	1	100	5000	16-SOIC	19M8765	6.94
ADUM2401BRWZ	3/1	10	50	5000	16-SOIC	19M8766	7.76
ADUM2401CRIZ	3/1	90	32	5000	16-SOIC	63T8626	8.43
ADUM2401CRWZ	3/1	90	32	5000	16-SOIC	19M8767	8.43
ADUM3481ARSZ	3/1	25	65	3750	20-SSOP	43W5516	4.14
ADUM3481BRSZ	3/1	25	25	3750	20-SSOP	43W5518	5.17
ADUM4401CRIZ	3/1	90	32	5000	16-SOIC	63T8644	8.14
ADUM6401CRWZ	3/1	25	45	5000	16-SOIC	11R0983	14.40
ADUM7441ARQZ	3/1	1	50	1000	16-QSOP	52R8099	3.85
ADUM1402ARWZ	2/2	1	100	2500	16-SOIC	19M0759	4.19
ADUM1402BRWZ	2/2	10	50	2500	16-SOIC	19M8759	5.61
ADUM1402CRWZ	2/2	90	32	2500	16-SOIC	19M8760	5.71
ADUM2250ARIZ	2/2	1	162	5000	16-SOIC	63T8612	6.87
ADUM2402ARWZ	2/2	1	100	5000	16-SOIC	19M8768	6.94
ADUM2402CRIZ	2/2	90	32	5000	16-SOIC	63T8632	8.14
ADUM3482ARSZ	2/2	25	65	3750	20-SSOP	43W5520	4.14
ADUM3482BRSZ	2/2	25	25	3750	20-SSOP	43W5522	5.17
ADUM4160BRIZ	2/2	1.5	60	5000	16-SOIC	47T4676	11.20
ADUM4402CRIZ	2/2	90	32	5000	16-SOIC	63T8650	8.14
ADUM5402ARWZ	2/2	1	60	2500	16-SOIC	11N8824	9.81
ADUM7442ARQZ	2/2	1	50	1000	16-QSOP	52R8103	3.70
5 CHANNEL							
ADUM1510BRWZ	5/0	10	30	2500	16-SOIC	07P8921	10.04

EVALUATION BOARDS:

Mfg. Part No.	Description	Stock No.	Price Each
EVAL-ADUM4160EBZ	ADUM4160 EVALUATION BOARD	10R6464	62.50

(88707)

ISOLATED CAN TRANSCEIVER W/INTEGRATED VOLTAGE, BUS-SIDE, LINEAR REGULATOR

RoHS Compliant Available

ANALOG DEVICES

Features:
- Short-circuit protection on bus pins
- Integrated bus miswire protection
- Unpowered nodes do not disturb the bus
- Complies with ISO 11898 standard

The **ADM3052** is an isolated controller area network (CAN) physical layer transceiver with a V+ integrated linear regulator. The device employs Analog Devices, Inc., iCoupler® technology to combine a 3-channel isolator, a CAN transceiver, and a linear regulator into a single package.

Mfg. Part No.	Supply Voltage	No. of Nodes On Bus	Data Rate (Mbps)	Package	Stock No.	Price Each 1-9
ADM3052BRWZ	3.3V to 5V	110	1	16-WSOIC	55T8903	8.20

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
EVAL-ADM3052EBZ	ADM3052 Eval. Board	55T9105	70.32

(203696)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

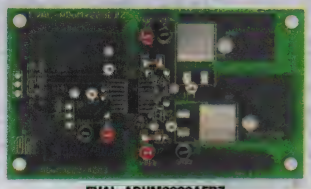
ISOLATED PRECISION HALF-BRIDGE DRIVERS

RoHS Compliant Available

ANALOG DEVICES

Features:
- High frequency operation: 1 MHz maximum
- CMOS input logic levels
- Default low output

Applications:
- Switching power supplies
- Isolated IGBT/MOSFET gate drives
- Industrial inverters



EVAL-ADUM3223AEBZ

The **ADuM3223/ADuM4223** are 4 A isolated, half-bridge gate drivers that employ the Analog Devices, Inc., iCoupler® technology to provide independent and isolated high-side and low-side outputs. The **ADuM3223/ADuM4223** isolators each provide two independent isolated channels. Combining high speed CMOS and monolithic transformer technology, these isolation components provide outstanding performance characteristics superior to the alternatives, such as the combination of pulse transformers and gate drivers.

Mfg. Part No.	Supply Voltage	Minimum Output Voltage (V)	Isolation Voltage	Package	Stock No.	Price Each 1-9
ADUM3223ARZ	3.3V to 5V	4.5 V	3000 Vrms	16-SOIC	94T9454	4.77
ADUM3223BRZ	3.3V to 5V	7.5 V	3000 Vrms	16-SOIC	94T9456	4.77
ADUM3223CRZ	3.3V to 5V	11.5 V	3000 Vrms	16-SOIC	94T9458	4.77
ADUM4223ARWZ	3.3V to 5V	4.5 V	5000 Vrms	16-SOIC	94T9460	5.49
ADUM4223BRWZ	3.3V to 5V	7.5 V	5000 Vrms	16-SOIC	94T9462	5.69
ADUM4223CRWZ	3.3V to 5V	11.5 V	5000 Vrms	16-SOIC	94T9464	5.69

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
EVAL-ADUM3223AEBZ	ADuM3223 Evaluation Board	94T9867	45.00

(208165)

ISOPOWER® & ICOUPLER® RS-422/RS-485 TRANSCEIVERS

RoHS Compliant Available

ANALOG DEVICES

Applications:
- Isolated RS-485/RS-422 interfaces
- Industrial field networks
- Multipoint data transmission systems

iCoupler® products with isoPower™ technology offer a new approach that greatly reduces size and cost without compromising on data rate and isolation rating. isoPower technology, a new family of devices integrates 50 mW of isolated power and two 10 Mbps data channels with 2.5 kV isolation, provides a total solution in one package.

Mfg. Part No.	Data Rate (MSPS)	Isolated Rating (kVrms)	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
ADM2582EBRWZ	16	2.5	3 - 5.5	20-SOIC	33R2686	12.46
ADM2587EBRWZ	0.5	2.5	3 - 5.5	20-SOIC	33R2688	10.53
ADUM6000ARIZ	180	5	3 - 5.5	16-SOIC	63T8652	8.76
ADUM6200CRIZ	180	5	3 - 5.5	16-SOIC	63T8656	10.89
ADUM6201CRIZ	180	5	3 - 5.5	16-SOIC	63T8660	11.28
ADUM6202CRIZ	180	5	3 - 5.5	16-SOIC	63T8662	10.89

(176239)

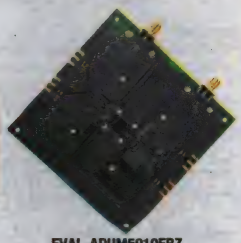
ISOPOWER: ICOUPLER TECHNOLOGY WITH ISOPOWER - INTEGRAGED, ISOLATED POWER

RoHS Compliant Available

ANALOG DEVICES

Features:
- High temperature operation: 105°C maximum
- Thermal overload protection
- Up to 500 mW output power

Applications:
- RS-422/RS-485 transceivers
- Industrial field networks
- Multipoint data transmission systems



EVAL-ADUM5010EBZ

Mfg. Part No.	Data Rate (MSPS)	Isolated Rating (kVrms)	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
ADM2582EBRWZ	16	2.5	3 - 5.5	20-SOIC	33R2686	12.46
ADM2587EBRWZ	0.5	2.5	3 - 5.5	20-SOIC	33R2688	10.53

The converters expand ADI's isolated power portfolio by providing designers with a compact, easy-to-implement, cost-effective approach to meeting both isolated power and data requirements. The combination of size and output power also addresses the growing space and power constraints engineers must consider when designing control systems, test and measurement equipment, power supplies, motor drives, and other industrial and instrumentation applications.

Mfg. Part No.	Isolated Output (V)	Isolated Rating (kVrms)	#of Inputs V_{DD} side/ V_{ISO} side	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
ADUM5000ARWZ	3 - 5.5	2.5	1/0	2.7 - 5.5	16-SOIC	19P8235	6.99
ADUM5010ARSZ	3.15 - 5.25	2.5	1/0	3 - 5.5	20-SSOP	47W0470	3.95
ADUM6010ARSZ	3.15 - 5.25	3.75	1/0	3 - 5.5	20-SSOP	47W0474	5.49

CONTINUED

ISOPOWER: ICOUPLER TECHNOLOGY WITH ISOPOWER - INTEGRAGED, ISOLATED POWER (CONT.)

Mfg. Part No.	Isolated Output (V)	Isolated Rating (kVrms)	#of Inputs V_{DD} side/ V_{ISO} side	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
● ADUM6400ARWZ	3.3 - 5	5	4/0	3 - 5.5	16-WSOIC	11R0977	12.13
● ADUM6401ARWZ	3.3 - 5	5	3/1	3 - 5.5	16-WSOIC	11R0981	11.84
● ADUM6402ARWZ	3.3 - 5	5	2/2	3 - 5.5	16-WSOIC	11R0985	11.84
● ADUM6403ARWZ	3.3 - 5	5	1/3	3 - 5.5	16-WSOIC	11R0989	11.84
● ADUM6404ARWZ	3.3 - 5	5	0/4	3 - 5.5	16-WSOIC	11R0993	11.84

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
● EVAL-ADUM5010EBZ	ADUM5010 Eval Board	47W2277	66.38

(143696)

HIGH STABILITY ISOLATED ERROR AMPLIFIER

NEW — RoHS Compliant Available — ANALOG DEVICES

Features:
- Compatible with Type II or Type III compensation networks
- Compatible with DOSA
- Safety and regulatory approvals (pending)
- UL recognition: 2500 V rms for 1 minute per UL 1577
- CSA Component Acceptance Notice #5A
- VDE certificate of conformity
- DIN V VDE V 0884-10 (VDE V 0884-10):2006-12
- VIORM = 560 V peak

Applications:
- Linear power supplies
- Inverters
- Uninterruptible Power Supply (UPS)
- DOSA-compatible modules
- Voltage monitors

The **ADuM3190** is an isolated error amplifier based on Analog Devices, Inc., iCoupler® technology. The **ADuM3190** is ideal for linear feedback power supplies. The primary side controllers of the **ADuM3190** enable improvements in transient response, power density, and stability as compared to commonly used optocoupler and shunt regulator solutions. Unlike optocoupler-based solutions, which have an uncertain current transfer ratio over lifetime and at high temperatures, the **ADuM3190** transfer function does not change over its lifetime and it is stable over a wide temperature range of -40°C to +125°C. Included in the **ADuM3190** is a wideband operational amplifier for a variety of commonly used power supply loop compensation techniques. The ADuM3190 is fast enough to allow a feedback loop to react to fast transient conditions and overcurrent conditions. Also included is a high accuracy 1.225 V reference to compare with the supply output setpoint.

Mfg. Part No.	Supply Voltage	Insulation Rating (kVrms)	Accuracy (%)	Package	Stock No.	Price Each 1-9
● ADUM3190ARQZ	3V to 20V	2.5	1	16-QSOP	69W7680	2.65

ADUM4190 SERIES

Mfg. Part No.	Supply Voltage	Typical Bandwidth (kHz)	Operating Temperature (°C)	Package	Stock No.	Price Each 1-9
● ADUM4190ARIZ	3V to 20V	200	-40 to 85	16-SOIC	04X3018	2.94
● ADUM4190SRIZ	3V to 20V	200	-40 to 125	16-SOIC	04X3022	3.21
● ADUM4190BRIZ	3V to 20V	400	-40 to 85	16-SOIC	04X3020	3.16
● ADUM4190TRIZ	3V to 20V	400	-40 to 125	16-SOIC	04X3024	3.41

EVALUATION BOARD

Mfg. Part No.	Description	Stock No.	Price Each
● EVAL-ADUM3190EBZ	ADUM3190 EVAL BOARD	94W8127	55.13

(210799)

LOW POWER HART MODEM

RoHS Compliant Available — ANALOG DEVICES

Features:
- HART-compliant fully integrated FSK modem
- Suitable for intrinsically safe applications
- Buffered HART output—extra drive capability
- UART interface

Applications:
- Field transmitters
- HART multiplexers
- PLC and DCS analog I/O modules
- HART network connectivity

Mfg. Part No.	Supply Voltage Range	Current Consumption (µA)	Package	Stock No.	Price Each 1-9
● AD5700BCPZ-R5	2V to 5.5V	179	24-LFCSP	92T3224	10.47
● AD5700-1BCPZ-R5	2V to 5.5V	464	24-LFCSP	92T3223	11.50
● AD5700-1ACPZ-RL7	2V to 5.5V	464	24-LFCSP	92T3222	9.57

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
● EVAL-AD5700-1EBZ	Low Power HART Modem Eval. Board	90T5006	56.24

(203970)

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element14.com

(196545)

SIGNAL & POWER ISOLATED CAN TRANSCEIVER W/ ISOLATED DC-DC CONVERTER

RoHS Compliant Available — ANALOG DEVICES

Features:
- Connect 110 or more nodes on the bus
- Slope Control for reduced EMI
- Thermal shutdown protection
- Complies with ISO 11898 standard

Applications:
- CAN data buses
- Industrial field networks

Mfg. Part No.	No. of Channels	Isolation Voltage (KVrms)	Supply Voltage	Package	Stock No.	Price Each 1-9
● ADM3053BRWZ	1	2.5	4.5V to 5.5V	20-SOIC	55T8905	10.79

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
● EVAL-ADM3053EBZ	ADM3053 Eval. Board	55T9106	70.32

(202124)

SIGNAL AND POWER ISOLATED RS-485 TRANSCEIVERS

RoHS Compliant Available — ANALOG DEVICES

Features:
- Connect up to 256 nodes on one bus
- Open- and short-circuit, fail-safe receiver inputs
- Thermal shutdown protection

Applications:
- Isolated RS-485/RS-422 interfaces
- Industrial field networks
- Multipoint data transmission systems

Mfg. Part No.	Supply Voltage	No. of Channels	Data Rate (kbps)	Package	Stock No.	Price Each 1-9
● ADM2687EBRIZ	3V to 5.5V	1	500	16-SOIC	58T8846	12.76
● ADM2682EBRIZ	3V to 5.5V	1	1600	16-SOIC	58T8844	14.86

EVALUATION BOARD

Mfg. Part No.	Description	Stock No.	Price Each
● EVAL-ADM2682EEBZ	Isolated Data Transceiver Eval. Board	58T9426	70.32
● EVAL-ADM2687EEBZ	Isolated Data Transceiver Eval. Board	58T9427	70.32

(197169)

FST BUS SWITCHES

RoHS Compliant Available — FAIRCHILD

Bus switches provide CMOS/TTL-compatible bus switching. The low ON resistance allows the bus switches to connect two buses directly, without adding propagation delay or generating additional ground bounce noise.

Mfg. Part No.	Description	Input	Pkg./Pins	Stock No.	Price Each 1-9
● FST16211MTD	24-Bit Bus Switch	24	TSSOP, 56	82C4508	1.40
● FST16233MTDX	16 to 32-Bit Multiplexer Switch	16	TSSOP, 56	38C7290	0.84
● FSTD16211MTDX	24-Bit Bus Switch w/ Level Shifting	24	TSSOP, 56	78K5964	2.07

(73667)

MICROPROCESSOR PERIPHERALS

RoHS Compliant Available — intersil

Mfg. Part No. 82C50A asynchronous communications element (ACE) support data rates from DC to 625k baud (0-10MHz clock). **Mfg. Part No. CP82C52** support data rates up to 1M baud asynchronously with 16x clock (16MHz clock frequency). **Mfg. Part No. CP82C55A** has 24 I/O pins. Individually programmable in 2 groups of 12 and used in 3 major modes of operation. Operating voltage: 5.0V. Operating temperature: 0°C to +70°C.

Mfg. Part No.	Operating Freq. (max)	Features	Package	Stock No.	Price Each 1-24
● CP82C55AZ	8MHz	Programmable I/O	40-DIP	79K6035	7.51
● CS82C55AZ	8MHz	Programmable I/O	44-PLCC	42K8144	10.30
● IP82C55AZ	8MHz	Programmable I/O	40-DIP	79K6939	19.70
● IS82C55AZ	8MHz	Programmable I/O	44-PLCC	42K3370	20.46

(18341)

DUAL ISOLATED RS232 µMODULE TRANSCEIVERS

RoHS Compliant Available — LINEAR TECHNOLOGY

Features:
- Isolated RS232 transceiver: 2.5 kV_{RMS}
- High common mode transient immunity: 30kV/µs
- No external components required

The **LTM2882** addresses a wide range of RS232 applications, including industrial communications and test/measurement equipment, where breaking ground loops or working with large common mode voltages is demanded. The ±10kV ESD-protected transceiver operates at up to 1Mbps and only consumes 30µA of shutdown current when disabled. The two drivers can be enabled and disabled in less than 2µs using the uncommitted auxiliary isolated digital channel and are protected from short-circuits to any voltage within the absolute maximum range of ±15V. Their receiver counterparts are protected from common mode voltages within the absolute maximum range of ±25V. The **LTM2882** meets RF and magnetic field immunity test requirements per European standard EN 550024. Users will appreciate how the self-powered **LTM2882** takes many precautions to guarantee safe and reliable communications in RS232 systems.

Mfg. Part No.	Supply Voltage (V)	Temperature Range	Package	Stock No.	Price Each 1-24
● LTM2882CV-3#PBF	3 - 3.6	0°C to +70°C	32-LGA	63R1668	14.88
● LTM2882CV-5#PBF	4.5 - 5.5	0°C to +70°C	32-LGA	63R1670	14.88
● LTM2882IV-3#PBF	3 - 3.6	-40°C to +85°C	32-LGA	63R1671	19.38

➤CONTINUED➤

DUAL ISOLATED RS232 µMODULE TRANSCEIVERS (CONT.)

Mfg. Part No.	Supply Voltage (V)	Temperature Range	Package	Stock No.	Price Each 1-24
LTM2882IV-5#PBF	4.5 - 5.5	-40°C to +85°C	32-LGA	63R1672	19.38
LTM2882CY-5#PBF	4.5 - 5.5	0°C to +70°C	32-LGA	67R4266	14.88
LTM2882IY-3#PBF	3 - 3.6	-40°C to +85°C	32-LGA	67R4267	19.38
LTM2882IY-5#PBF	4.5 - 5.5	-40°C to +85°C	32-LGA	67R4268	19.38
LTM2882CY-3#PBF	3 - 3.6	0°C to +70°C	32-LGA	67R4265	14.88

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
DC1554A-A	Isolated RS232 µModule Transceiver & Power Demo Board	77R3590	50.00
DC1554A-B		77R3591	50.00

(166575)

SPI/DIGITAL or I²C µMODULE ISOLATORS + POWER

RoHS Compliant Available

LINEAR TECHNOLOGY

Features:
- 6-Channel Logic Isolator: 2500V_{RMS}
- No External Components Required
- High Common Mode Transient Immunity: 30kV/µs
- Common Mode Working Voltage: 560V_{PEAK}
- Low Current Shutdown Mode (<10µA)

Applications:
- Isolated SPI or I²C Interfaces
- Industrial Systems
- Test and Measurement Equipment
- Breaking Ground Loops

The **LTM®2883** is a complete digital µModule® galvanic isolator. The **LTM2883's** internal inductive isolation barrier breaks ground loops by isolating the logic level interface for SPI, I²C or general purpose I/O. An onboard DC/DC converter provides power to the internal communications interface and to three adjustable isolated power supply outputs, nominally 5V, 12.5V and –12.5V. Each supply can be adjusted from its nominal value using a single external resistor. The **LTM2883's** 2500V_{RMS} isolation, onboard secondary power, digital communications interface and guaranteed uninterrupted communication through common mode transients greater than 30kV/µs, provides a simple, highly integrated µModule solution for isolated serial data communications.

INTER-IC (I2C) BUS LOGIC OPTION

Mfg. Part No.	Supply Voltage Range	Operating Temperature	Package	Stock No.	Price Each 1-24
LTM2883CY-3I#PBF	3V to 3.6V	0°C to +70°C	32-BGA	44W6837	19.59
LTM2883IY-3I#PBF	3V to 3.6V	-40°C to +85°C	32-BGA	44W6845	21.39
LTM2883CY-5I#PBF	4.5V to 5.5V	0°C to +70°C	32-BGA	44W6839	19.59
LTM2883IY-5I#PBF	4.5V to 5.5V	-40°C to +85°C	32-BGA	44W6847	21.39
SERIAL PERIPHERAL INTERFACE (SPI) BUS LOGIC OPTION					
LTM2883CY-3S#PBF	3V to 3.6V	0°C to +70°C	32-BGA	44W6838	19.59
LTM2883IY-3S#PBF	3V to 3.6V	-40°C to +85°C	32-BGA	44W6846	21.39
LTM2883CY-5S#PBF	4.5V to 5.5V	0°C to +70°C	32-BGA	44W6840	19.59
LTM2883IY-5S#PBF	4.5V to 5.5V	-40°C to +85°C	32-BGA	44W6848	21.39

(209300)

SMBUS/I2C ACCELERATOR

RoHS Compliant Available

LINEAR TECHNOLOGY

Applications:
- Notebook and Palmtop Computers
- Portable Instruments
- Battery Chargers
- Industrial Control Application
- TV/Video Products
- ACPI SMBus Interface

Features:
- Improves SMBus Rise Time Transition
- Ensures Data Integrity with Multiple Devices on the SMBus
- Improves Low State Noise Margin
- Auto Detect Low Power Standby Mode

The **LTC™1694** is a dual SMBus active pull-up designed to enhance data transmission speed and reliability under all specified SMBus loading conditions. The **LTC1694** is also compatible with the Philips I²C™ Bus. The **LTC1694** allows multiple device connections or a longer, more capacitive interconnect, without compromising slew rates or bus performance, by using two bilevel hysteretic current source pull-ups. During positive bus transitions, the **LTC1694** current sources provide 2.2mA to quickly slew the SMBus line. During negative transitions or steady DC levels, the current sources decrease to 275µA to improve negative slew rate and improve low state noise margins. An auto detect standby mode reduces supply current if both SCL and SDA are high.

The **LTC4311** is a dual I2C active pull-up designed to enhance data transmission speed and reliability for bus loading conditions well beyond the 400pF I2C specification limit. The **LTC4311** allows multiple device connections or a longer, more capacitive interconnect, without compromising slew rates or bus performance, by using two slew limited pull-up currents. During positive bus transitions, the **LTC4311** provides slew limited pull-up currents to quickly slew the I2C or SMBus lines to the bus pull-up voltage. During negative transitions or steady DC levels, the currents are disabled to improve negative slew rate, and improve low state noise margins. An auto detect standby mode reduces supply current if both SCL and SDA are high. When disabled, the **LTC4311** goes into low (<5µA) current shutdown.

Mfg. Part No.	Supply Voltage (V)	Supply Current (µA)	Package	Stock No.	Price Each 1-24
LTC1694CS5#PBF	2.7 to 6	60	5-TSOT-23	78T2508	2.84
LTC4311ISC6#PBF	1.6 to 5.5	200	6-SC-70	78T3333	4.07

(210178)

TRIPLE RS232 DRIVER/ RECEIVER w/SHUTDOWN

RoHS Compliant Available

LINEAR TECHNOLOGY

Features:
- 125kBd Operation with 3kohms/2500pF Load
- 250kBd Operation with 3kohms/1000pF Load
- Fully Protected Against Overload
- Outputs Can Be Driven ±30V Without Damage
- Three-State Outputs; Outputs Open When Off
- Bipolar Circuit - No Latchup
- No Supply Current in Shutdown
- 30kohms Input Impedance
- Meets All RS232 Specifications

Applications:
- RS232 Interface
- Terminals
- Modems

The **LT®1039A** is a triple RS232 driver/receiver that includes shutdown. Each receiver will accept up to ±30V input and can drive either TTL or CMOS logic. The RS232 drivers accept TTL logic inputs and output RS232 voltage levels. The outputs are fully protected against overload and can be shorted to ground or up to ±30V without damage to the drivers. Additionally, when the system is shut down or power is off, the outputs are in a high impedance state allowing data line sharing. On-chip ESD protection eliminates the need for external protection devices. A bias pin allows one receiver to be kept on while the rest of the part is shut down. A bias pin allows one receiver to be kept on while the rest of the part is shut down.

Mfg. Part No.	Supply Voltage (V)	Drivers/ Receivers	ESD (kV)	Package	Stock No.	Price Each 1-99
LT1039ACSW#PBF	5 to 15	3/3	15	18-SOIC	57M1158	3.90

(210174)

RS485/RS422 µMODULE TRANSCEIVERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Applications:
- Isolated RS485/RS422 interface
- Industrial networks
- Breaking RS485 ground loops

The RS485 standard (formally TIA-485) specifies differential data transmission over a terminated twisted pair at up to 10Mbps. The standard specifies electrical characteristics of a driver and receiver, and does not specify any data protocol or connectors. RS485 is popular for inexpensive local networks, multidrop communication links and long haul data transfer over distances of up to 4,000 feet. The use of a balanced line means RS485 has excellent noise rejection and is ideal for industrial and commercial applications. The RS422 standard is similar to the RS485 standard but does not permit multiple drivers on a bus. Similarly, the Profibus (Process Field Bus) protocol uses RS485's popular physical medium when deploying fieldbus solutions in factory and process automation environments.

Linear Technology offers a broad selection of industry standard, low power CMOS RS485 and RS422 interface transceivers featuring high data rates, high ESD protection, failsafe receivers, and high voltage versions for rugged environments. Our latest RS485/RS422 transceivers feature pin-controlled switchable 120ohm termination resistors that minimize physical user intervention when reconfiguring networks, and fully balanced receiver thresholds that help maintain good duty cycle symmetry at low signal levels.

Mfg. Part No.	Supply Voltage (V)	Temperature Range	Package	Stock No.	Price Each 1-24
LTM2881CV-3#PBF	3 - 3.6	0°C to +70°C	32-LGA	51R1522	14.88
LTM2881IV-3#PBF	3 - 3.6	-40°C to +85°C	32-LGA	51R1524	19.38
LTM2881CY-3#PBF	3 - 3.6	0°C to +70°C	32-LGA	67R4261	14.88
LTM2881IY-3#PBF	3 - 3.6	-40°C to +85°C	32-BGA	67R4263	19.38
LTC1689CS#PBF	3 - 5.25	0°C to +70°C	16-SOIC	56M3207	10.19
LTM2881CV-5#PBF	4.5 - 5.5	0°C to +70°C	32-LGA	51R1523	14.88
LTM2881IV-5#PBF	4.5 - 5.5	-40°C to +85°C	32-BGA	51R1525	19.38
LTM2881CY-5#PBF	4.5 - 5.5	0°C to +70°C	32-BGA	67R4262	14.88
LTM2881IY-5#PBF	4.5 - 5.5	-40°C to +85°C	32-BGA	67R4264	19.38
LTC1518CS#PBF	4.75 - 5.25	0°C to +70°C	16-SOIC	56M1761	10.21
LTC1685IS8#PBF	4.75 - 5.25	-40°C to +85°C	8-SOIC	56M3179	3.80
LTC2850CDD#PBF	3 - 3.6	0°C to +70°C	8-DFN	56M6374	2.07
LTC2850IDD#PBF	3 - 3.6	-40°C to +85°C	8-DFN	56M6380	2.48
LTC2855CDE#PBF	3 - 3.6	0°C to +70°C	12-DFN	56M6414	3.47
LTC2856IDD-2#PBF	4.5 - 5.5	-40°C to +85°C	8-DFN	56M6443	2.48
LTC2862IDD-1#PBF	3 - 5.5	-40°C to +85°C	8-DFN	78T2917	5.78

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
DC1503A-A	3V Isolated RS485/RS422 µModule Transceiver & Power Demo Board	77R3587	50.00
DC1503A-B	5V Isolated RS485/RS422 µModule Transceiver & Power Demo Board	77R3589	50.00
DC1746A-A	5V Isolated RS485/RS422 µModule Transceiver & Power Demo Board	25T5586	50.00
DC1746A-B	5V Isolated RS485/RS422 µModule Transceiver & Power Demo Board	25T5587	50.00
DC1747A-A	Dual Isolated RS232 µModule Transceiver Demo Board	25T5588	50.00
DC1747A-B		25T5589	50.00

(164491)

INTERFACE ICs

RoHS Compliant Available

LINEAR TECHNOLOGY

Drivers and receivers for traditional serial port applications such as RS232, RS485, V.35 and multi-protocol combinations. Key features are ruggedness, 10-15kV ESD protection and availability in industry-standard footprints. Industry standard single and dual drivers and receivers for RS232 and RS562 are available for power supplies from 1.8V to 5.5V with high ESD protection. Industry standard low power CMOS RS485 and RS422 transceivers also feature high ESD protection, failsafe, high speed and high voltage versions. Ideal for serial ports in networking and telecom applications, these multiprotocol transceivers support RS232, V.35, X.21 and a host of other legacy protocols. Linear Technology's CAN Transceiver provides fault protected communcations for industrial and automotive environments.

RS232/562 TRANSCIEVER ICS

Mfg. Part No.	# of DRVRs	# of RCVRs	Package	Stock No.	Price Each 1-24
● LT1080CSW#PBF	2	2	18-WSOIC	57M1440	6.50
● LT1081CN#PBF	2	2	16-DIP	57M1450	4.77
● LT1081CSW#PBF	2	2	16-SOIC	57M1452	6.03
● LT1130ACSW#PBF	5	5	28-SOIC	57M2130	7.65
● LT1133ACSW#PBF	3	5	24-SOIC	57M2156	7.65
● LT1134ACSW#PBF	4	4	24-WSOIC	57M2166	7.05
● LT1134ACN#PBF	4	4	24-DIP	57M2164	7.05
● LT1136ACNW#PBF	5	4	28-DIP	57M2182	4.83
● LT1181ACSW#PBF	2	2	16-WSOIC	57M2546	5.13
● LT1181ACN#PBF	2	2	16-DIP	57M2544	4.66
● LT1280ACN#PBF	2	2	18-SOIC	57M3125	5.04
● LT1280ACSW#PBF	2	2	18-SOIC	57M3127	5.51
● LT1281ACN#PBF	2	2	16-DIP	57M3137	5.04
● LT1781CN#PBF	...	2	16-DIP	57M6319	5.26
● LT1381CS#PBF	2	2	16-SOIC	57M3829	3.80
● LT1780CSW#PBF	2	2	18-SOIC	57M6309	3.65
● LT1781CS#PBF	2	2	16-SOIC	57M6321	5.61
● LT1781IS#PBF	2	2	16-SOIC	57M6331	7.05
● LTC1338CG#PBF	5	3	28-SSOP	56M0388	10.17
● LTC1348IG#PBF	3	5	28-SSOP	56M0466	6.75
● LTC1382CSW#PBF	2	2	18-SOIC	56M0532	6.53
● LTC1383CS#PBF	2	2	16-SOIC	56M0544	5.64
● LTC1384CSW#PBF	2	2	18-SOIC	56M0560	6.53
● LTC1385CG#PBF	2	2	20-SSOP	56M0574	7.32
● LTC1386CS#PBF	2	2	16-SO	56M0594	5.64
● LTC2801CDE#PBF	1	1	12-DFN	56M6287	3.22
● LTC2802CDE#PBF	1	1	12-DFN	56M6295	3.32
● LTC2803CDHC#PBF	2	2	16-DFN	56M6303	2.71
● LTC2803IDHC#PBF	2	2	16-DFN	56M6311	3.21
● LT1180AISW#PBF	2	2	18-SOIC	57M2540	6.63
RS485/422 TRANSCEIVER ICS					
● LT1785ACS8#PBF	1	1	8-SO	57M6405	5.00
● LT1785AIN8#PBF	1	1	8-DIP	57M6409	5.64
● LT1785AIS8#PBF	1	1	8-SO	57M6411	5.83
● LT1785CN8#PBF	1	1	8-DIP	57M6415	4.04
● LT1785CS8#PBF	1	1	8-SO	57M6417	4.13
● LT1785IN8#PBF	1	1	8-DIP	57M6421	4.66
● LT1785IS8#PBF	1	1	8-SO	57M6423	4.76
● LT1791CS#PBF	1	1	14-SO	57M6613	4.52
● LT1791AIS#PBF	1	1	14-SO	57M6607	6.40
● LT1796CN8#PBF	1	5	8-DIP	57M6703	3.02
● LT1796CS8#PBF	1	5	8-SOIC	57M6705	3.02
● LTC485CN8#PBF	1	1	8-DIP	56M9595	2.50
● LTC485CS8#PBF	1	1	8-SOIC	56M9597	3.15
● LTC485IN8#PBF	1	1	8-DIP	56M9601	3.61
● LTC485IS8#PBF	1	1	8-SOIC	56M9603	4.51
● LTC1480CS8#PBF	1	1	8-SOIC	56M1547	5.17
● LTC1480IS8#PBF	1	1	8-SO	56M1553	6.68
● LTC1482CS8#PBF	1	1	8-SOIC	56M1575	4.13
● LTC1484CS8#PBF	1	1	8-SO	56M1603	3.53
● LTC1487CN8#PBF	1	1	8-DIP	56M1625	2.76
● LTC1487CS8#PBF	1	1	8-SO	56M1627	3.39
● LTC1535CSW#PBF	1	1	28-SOIC	56M1821	11.14
● LTC1535ISW#PBF	1	1	28-SO	56M1825	12.74
● LTC1685CS8#PBF	1	1	8-SOIC	56M3175	5.61
● LTC1686CS8#PBF	1	1	8-SOIC	56M3183	8.46
● LTC1686IS8#PBF	1	1	8-SOIC	56M3187	9.70
● LTC2852IMS#PBF	1	1	10-MSOP	56M6406	3.71
● LTC2855CGN#PBF	1	1	16-SSOP	56M6416	3.47
● LTC2856CMS8-2#PBF	1	1	8-MSOP	56M6435	2.91
● LTC2857CMS8-1#PBF	1	1	8-MSOP	56M6463	3.12
● LTC2852CMS#PBF	1	1	10-MSOP	56M6400	3.12
● LTC491CN#PBF	1	1	14-DIP	56M9667	5.32
● LTC491CS#PBF	1	1	14-SO	56M9669	5.85
● LTC491IS#PBF	1	1	14-SO	56M9675	7.86
● LTC1485CS8#PBF	1	1	8-SO	56M1615	3.61

➤CONTINUED➤

INTERFACE ICs (CONT.)

RS485/422 TRANSCEIVER ICS

Mfg. Part No.	# of DRVRs	# of RCVRs	Package	Stock No.	Price Each 1-24
● LTC1485IS8#PBF	1	1	8-SO	56M1621	4.90
● LTC1690CS8#PBF	1	1	8-SOIC	56M3221	3.53
● LTC2850HMS8#PBF	1	1	8-MSOP	75M4425	3.94
● LTC2850IS8#PBF	1	1	8-SOIC	56M6384	3.47
● LTC2851IDD#PBF	1	1	8-DFN	56M6392	3.71
● LTC2851IS8#PBF	1	1	8-SOIC	56M6396	2.64
● LTC2852CS#PBF	1	1	14-SOIC	56M6402	3.12
● LTC2854CDD#PBF	1	1	10-DFN	56M6410	3.18
● LTC2854HDD#PBF	1	1	10-DFN	75M4441	4.23
● LTC2856HMS8-2#PBF	1	1	8-MSOP	75M4453	3.93
● LTC2857HMS8-2#PBF	1	1	8-MSOP	75M4462	4.23
● LTC2859CDD#PBF	1	1	10-DFN	56M6517	2.27
● LTC2859IDD#PBF	1	1	10-DFN	56M6521	3.85
● LTC488CN#PBF	1	4	16-DIP	56M9631	6.52
● LTC488CSW#PBF	1	4	16-SOIC	56M9633	7.48
● LTC489CSW#PBF	1	4	16-SOL	56M9645	8.16
● LTC486CSW#PBF	4	1	16-SOL	56M9609	8.16
● LTC487CSW#PBF	4	1	16-SOL	56M9621	8.16
MULTI-PROTOCOL ICS					
● LT1785ACN8#PBF	1	1	8-DIP	57M6403	4.90
● LT1791IS#PBF	1	1	14-SOIC	57M6619	5.15
● LTC1485CN8#PBF	1	1	8-DIP	56M1613	3.23
● LTC2850CS8#PBF	1	1	8-SOIC	56M6378	2.91
● LTC2801IDE#PBF	1	1	12-DFN	56M6291	3.81
● LTC2870CUFD#PBF	2	2	28-QFN	27T4188	10.69
● LTC1387CSW#PBF	2	2	20-SO	56M0606	8.54
● LTC1387IG#PBF	2	2	20-SSOP	56M0610	10.56
● LTC2872CUHF#PBF	4	4	38-QFN	93T2003	13.78
● LTC2872IUHF#PBF	4	4	38-QFN	93T2004	14.86
● LTC1334CG#PBF	4	4	28-SSOP	56M0346	13.12
● LTC1334CSW#PBF	4	4	28-DIP	56M0352	12.32
● LTC1334IG#PBF	4	4	28-SSOP	56M0356	15.05
● LTC1334ISW#PBF	4	4	28-SOIC	56M0362	14.35
CAN TRANSCEIVER ICS					
● LT1796IS8#PBF	1	1	8-SO	57M6711	3.51
DIFFERENTIAL BUS/LINE DRIVER ICs					
● LTC1688IS#PBF	4	0	16-SOIC	56M3203	11.66
● LTC1688CS#PBF	4	0	16-SOIC	56M3199	10.19
RS485 LINE RECEIVER ICs					
● LTC489ISW#PBF	0	4	16-SOIC	56M9651	10.56
RS232/RS423 LINE DRIVER ICS					
● LT1381IS#PBF	2	2		57M3833	4.51
● LT1781CSW#PBF	2	2	16-SOIC	57M6325	5.79
● LT1032ISW#PBF	4	4	16-SOIC	57M1086	5.53
MICROPOWER HEX DRIVERS/RECEIVERS IC					
● LTC1045CSW#PBF	8	...	20-SOIC	55M8906	8.27

(102088)

IL600-ISOLATOR EVALUATION BOARD

RoHS Compliant Available

NVE NVE CORPORATION

The IL600-Series Isolator evaluation board lets you try a variety of NVE's unique IL600-Series Isolators. The board has four isolators in four package types: IL613E (wide-body SOIC-16), IL614-3E (narrow-body SOIC-16), IL611-3E (SOIC-8), Open-drain IL610A-1E (MSOP-8)

Mfg. Part No.	Description	Stock No.	Price Each
IL600-01	Evaluation Board for IL600 Series Passive-Input Isolators	94T5283	49.99

(203754)

NEW PRODUCTS ADDED DAILY

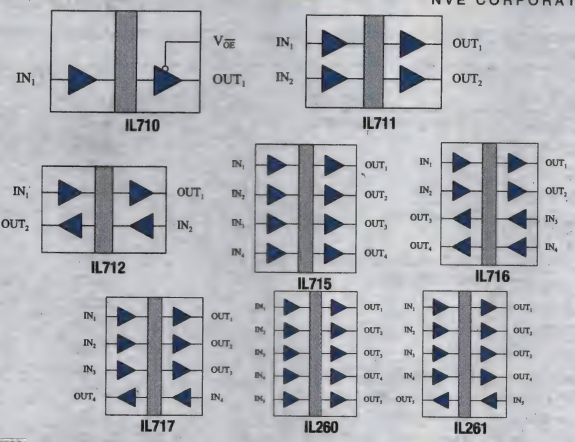
See the newest products, technologies and suppliers on our website.

(196560)

IL700/IL200 HIGH SPEED DIGITAL SIGNAL ISOLATORS

RoHS Compliant Available

NVE CORPORATION



Features:

- 1.5mA/output channel Quiescent Current
- Up to 150 Mbps (S-Series)
- PWD to 300 ps (S-Series)
- 100ps Typical Pulse Jitter
- 10ns Typical Propagation Delay
- Up to 125°C (T-Series)
- 25,000 Year Barrier Life
- Low EMC Footprint
- MSOP, SOIC, and PDIP Packages
- UL1577 & IEC 61010-2001 Approved

IL700 / IL200 series are the original high-speed optocouplers from NVE. Popular applications include serial interfaces, isolated Controller Area Network (CAN Bus), isolated Serial Peripheral Interface (SPI), isolated A/D converters, and isolated power interfaces. An evaluation board is available.

Mfg. Part No.	No. of Channels	Data Rate (Mbps)	Prop. Delay (nS)	Temperature Range Min. (°C)	Temperature Range Max. (°C)	Package	Stock No.	Price Each 1-9
IL710-1E	1	150	10	-40	100	8-MSOP	34R6504	5.04
IL710-2E	1	110	12	-40	100	8-DIP	93K6287	4.23
IL710T-1E	1	150	10	-40	125	8-MSOP	41T3903	4.91
IL710-3E	1	110	12	-40	100	8-SOIC	93K6288	4.23
IL710T-2E	1	100	12	-40	125	8-DIP	93K6289	4.57
IL710T-3E	1	100	12	-40	125	8-SOIC	93K6290	4.57
IL711-1E	2	150	10	-40	100	8-MSOP	10R5720	7.83
IL711T-1E	2	150	10	-40	125	8-MSOP	01P0253	7.41
IL712-1E	2	150	10	-40	100	8-MSOP	34R6507	7.83
IL712T-1E	2	150	10	-40	125	8-MSOP	41T3908	7.41
IL711-2E	2	110	12	-40	100	8-DIP	93K6291	7.83
IL711-3E	2	110	12	-40	100	8-NSOIC	93K6292	7.31
IL711T-2E	2	100	12	-40	125	8-DIP	93K6293	7.41
IL711T-3E	2	100	12	-40	125	8-NSOIC	93K6294	7.41
IL712-2E	2	110	12	-40	100	8-DIP	03M8153	7.99
IL712-3E	2	110	12	-40	100	8-NSOIC	03M8154	7.89
IL712T-2E	2	100	12	-40	125	8-DIP	03M8155	7.87
IL712T-3E	2	100	12	-40	125	8-NSOIC	03M8156	7.87
IL715-3E	4	110	12	-40	100	16-NSOIC	93K6295	9.79
IL715E	4	110	12	-40	100	16-SOIC	93K6296	9.09
IL715T-3E	4	100	12	-40	125	16-NSOIC	93K6297	9.75
IL715TE	4	100	12	-40	125	16-SOIC	93K6298	9.79
IL716-3E	4	110	12	-40	100	16-NSOIC	03M8157	9.09
IL716E	4	110	12	-40	100	16-SOIC	03M8158	9.50
IL716T-3E	4	110	12	-40	125	16-NSOIC	03M8159	9.75
IL716TE	4	110	12	-40	125	16-SOIC	03M8160	9.75
IL717-3E	4	110	12	-40	100	16-NSOIC	03M8161	9.92
IL717E	4	110	12	-40	100	16-SOIC	03M8162	9.05
IL717T-3E	4	110	12	-40	125	16-NSOIC	03M8163	10.43
IL717TE	4	110	12	-40	125	16-SOIC	03M8164	9.75
IL260-3E	5	110	12	-40	85	16-SOIC	93K6258	10.13
IL260E	5	110	12	-40	85	16-SOIC	93K6259	10.08
IL261-3E	5	110	12	-40	85	16-SOIC	03M8148	10.70
IL261E	5	110	12	-40	85	16-SOIC	03M8149	10.08

EVAL BOARD

Mfg. Part No.	Description	Stock No.	Price Each
IL700-01	Evaluation Board for IL700 Series Digital Signal Isolators	94T5284	49.99

(89375)

I2C BUS REPEATERS/ HUBS/EXTENDERS

RoHS Compliant Available

Mfg. Part No.	Supply Volt. Min.	Supply Volt. Max.	Description	Package	Stock No.	Price Each 1-9
PCF8574ATD	2.5	6	Remote 8-bit I/O expander	16-SOIC	11N8514	1.62
PCF8574PN	2.5	6	Remote 8-bit I/O expander	16-DIP	11N8515	3.00

(118098)

3G HD/SD SDI LOW POWER EXTENDED REACH ADAPTIVE CABLE EQUALIZER

RoHS Compliant Available

TEXAS INSTRUMENTS

Features:

- Output de-emphasis to compensate for FR4 board trace losses
- Optional SPI register access
- Internally terminated 100Ω LVDS outputs with programmable output common mode voltage and swing
- Programmable launch amplitude optimization
- Cable length indicator

Applications:

- SMPTE 424M, SMPTE 292M, SMPTE 344M, and SMPTE 259M serial digital interfaces
- Broadcast Video routers, switchers, and distribution amplifiers

Mfg. Part No.	Supply Voltage (V)	Power Consumption (mW)	Data Rate (Gbps)	Package	Stock No.	Price Each 1-9
LMH0394SQE/NOPB	2.375 - 2.5	115	2.97	16-LLP	31T9709	29.52

(196182)

ANALOG, MIXED SIGNAL, AND INTERFACE PRODUCTS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
DS15EA101SQE/NOPB	0.15 to 1.5 Gbps Adaptive Cable Equalizer	16-LLP	60M5665	10.45
DS90CP04TLQ/NOPB	1.5 Gbps 4x4 LVDS Crosspoint Switch	32-LLP	41K1977	10.64
LM2907M/NOPB	Monolithic Frequency to Voltage Converter	14-SOIC	41K4459	2.29
SCANSTA111MT/NOPB	Enhanced SCAN Bridge Multidrop Addressable IEEE 1149.1 (JTAG) Port	48-TSSOP	41K8402	10.33
SCANSTA112SM/NOPB	7-Port Multidrop IEEE 1149.1 (JTAG) Multiplexer	100-FBGA	41K8406	12.17
SCANSTA112VS/NOPB	7-Port Multidrop IEEE 1149.1 (JTAG) Multiplexer	100-TQFP	41K8408	12.17

(80419)

DISPLAY INTERFACES

RoHS Compliant Available

TEXAS INSTRUMENTS

PanelBus provides a universal interface to allow a glue-less connection to most commonly available graphics controllers. Advantages of this universal interface include selectable bus widths, adjustable signal levels, and differential and single-ended clocking. The adjustable 1.1-V to 1.8-V digital interface provides a low-EMI, high-speed bus that connects seamlessly with 12-bit or 24-bit interfaces. The DVI interface supports flat panel display resolutions up to UXGA at 165 MHz in 24-bit true color pixel format.

PANELBUS (DVI)

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
TFP401APZP	PanelBus DVI Receiver	100-HTQFP	74K3959	8.50
TFP410PAP	165MHz, HSYNC fix	64-HTQFP	74K3960	6.38
DVI/HDMI REPEATERS/SWITCHES				
TMDS261BPAG	2 to 1 HDMI switch	64-TQFP	51R4692	3.94
FLATLINK				
SN75LVDS83BDGG	FlatLink 10-135MHz Transmitter	56-TSSOP	11R7398	6.69
SN75LVDS83BZQLR	FlatLink 10-135MHz Transmitter	56-BGA	24R9966	5.95

(80476)

EMI/ESD SOLUTIONS

RoHS Compliant Available

TEXAS INSTRUMENTS

An Electrostatic Discharge strike is a constant threat to device reliability and functionality. Many low-voltage core chips or system ASICs only offer device-level human-body model (HBM) ESD protection, which doesn't address the risks of system-level ESD strikes. TI's stand-alone ESD solutions provide a space-saving and cost-effective solution to protect the system interconnects from external ESD strikes. The TPD product family of devices from TI provides IEC 61000-4-2 level ESD protection, with solutions for multiple external interfaces, including video, audio and serial data transfer. TI's family of devices meet requirements for low-power, small footprint applications making them ideal for multiple markets, including mobile computing, mobile handsets and consumer electronics. TI produces ESD devices with solutions that protect the majority of external connections to the outside world.

ESD-PROTECTION ARRAY FOR HIGH-SPEED DATA INTERFACES

Mfg. Part No.	No. of Ch.	Vbr (V)	IO Cap. (pF)	IO Leakage Current (nA)	Pkg.	Stock No.	Price Each 1-9
TPD2E001DRSR	2	11	1.5	1	6-QFN	54M7403	0.62
TPD2E009DBZR	2	9	0.7	10	3-SOT-23	14R9549	0.62
TPD2EUSB30ADRTR	2	4.5	0.7	10	3-SOT	27T6835	0.62
TPD3E001DRLR	3	11	1.5	1	5-SOP	41M5842	0.43
TPD4E001DRLR	4	11	1.5	1.5	6-SOT	34M0134	0.68
TPD4E004DRYR	4	6	1.6	1	6-SON	85M0177	0.63
TPD4S009DBVR	4	9	0.8	10	6-SOT-23	33R2191	1.00

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EMI/ESD SOLUTIONS (CONT.)

Mfg. Part No.	No. of Ch.	Vbr (V)	IO Cap. (pF)	IO Leakage Current (nA)	Pkg.	Stock No.	Price Each 1-9
● TPD6E001RSER	6	11	1.5	1	10-QFN	30M1828	0.58
● TPD8S009DSMR	8	9	0.05	10	15-SON	33R2192	1.69
ESD SOLUTION FOR SUPER-SPEED (6 GBPS) USB 3.0 INTERFACE							
● TPD4EUSB30DQAR	4	8	0.8	10	10-SON	13T5937	0.84
UNIVERSAL SERIAL BUS (USB) PORT TRANSIENT SUPPRESSORS							
● SN65220DBVR	2	7	35	1000	6-SOT-23	75C7863	0.91
● SN65220DBVT	2	7	35	1000	6-SOT-23	35K0746	1.04
● SN65240PWR	4	7	35	1000	8-TSSOP	75C7867	1.31
● SN75240PW	4	7	35	1000	8-TSSOP	74K3957	1.56
● SN75240PWR	4	7	35	1000	8-TSSOP	24C4633	1.31
EMI FILTERS FOR LCD DISPLAY APPLICATIONS							
● TPD6F002DSVR	6	6	34	20	12-SON	53R2230	0.84
● TPD6F003DQDR	6	6	19	10	12-SON	69R4547	0.84
● TPD8F003DQDR	8	6	17	10	16-SON	69R4548	0.88
EMI FILTERS FOR AUDIO SPEAKER/AVIF CONNECTOR							
● TPD2F702YFKR	2	+/-14	5000	100	5-DSBGA	68R2143	0.62

(93035)

EMI FILTER W/INTEGRATED VCC CLAMP FOR SIM CARD INTERFACE

RoHS Compliant Available

TEXAS INSTRUMENTS

Features:
- Bidirectional EMI/RFI Filtering and Line Termination with Integrated ESD Protection
- Low Noise C-R-C Filter Topology
- Integrated VCC Clamp Eliminates the Need for External ESD Protection

Applications:
- Mobile handsets
- PDAs
- Video Consoles
- Portable Computers

The **TPD3F303** is a 3-ch integrated EMI filter for SIM interface. This device integrates a VCC clamp to provide system level ESD protection at the VCC line. Termination resistor value of 47ohm is included on the CLK line, while a 100ohm termination is employed at the DATA and RST line. The **TPD3F303** is designed to suppress EMI/RFI noise in systems subjected to electromagnetic interferences.

Mfg. Part No.	No. of Channels	Ctotal (Typ) pF	Breakdown Voltage (V)	Package	Stock No.	Price Each 1-9
● TPD3F303DPVR	3	20	6	8-DPV	32T3294	0.95
● TPD3F303DQDR	3	20	6	8-DQD	32T3295	0.95

(195540)

PRECISION PHYTER - IEEE 1588 PRECISION TIME PROTOCOL TRANSCEIVER

RoHS Compliant Available

TEXAS INSTRUMENTS

Features:
- IEEE 1588 V1 and V2 Supported
- UDP/IPv4, UDP/IPv6, and Layer2 Ethernet Packets Supported
- IEEE 1588 Clock Synchronization
- Selectable Frequency Synchronized Low Jitter Clock Output
- Timestamp Resolution of 8 ns
- Allows Sub 10 ns Synchronization to Master Reference
- 12 IEEE 1588 GPIOs for Trigger or Capture
- Deterministic, Low Transmit and Receive Latency
- Dynamic Link Quality Monitoring
- TDR Based Cable Diagnostic and Cable Length Detection

Applications:
- Telecom
- FactoryAutomation
- Test and Measurement
- Video Synchronization
- Real Time Networking

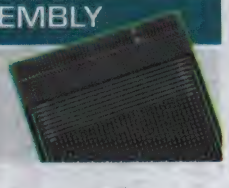
The **DP83630** Precision PHYTER device delivers the highest level of precision clock synchronization for real time industrial connectivity based on the IEEE 1588 standard. The **DP83630** has deterministic, low latency and allows choice of microcontroller with no hardware customization required. The integrated 1588 functionality allows system designers the flexibility and precision of a close to the wire timestamp

Mfg. Part No.	Supply Voltage	Data Rate (Mbps)	ESD (kV)	Package	Stock No.	Price Each 1-249
● DP83630SQE/NOPB	3V to 3.6V	100	8	48-LLP	31T9426	8.02

(210227)

PCB FABRICATION & ASSEMBLY

Quality US-based manufacturers—as fast as 48-hour turnaround!



(197415)

I2C INTERFACE ICs

RoHS Compliant Available

TEXAS INSTRUMENTS

Texas Instruments I2CTM products are engineered to assist you on the completion of any related Standard Linear or Interface project.

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● P82B96DR	Dual Bidirectional Bus Buffer	8-SOIC	88K6385	3.76
● P82B96DGKR		8-VSSOP	88K6384	3.76
● P82B96P		8-PDIP	88K6386	3.76
● P82B96PWR		8-TSSOP	88K6388	3.76
● P82B715D	I2C Bus Extender	8-SOIC	84M9793	4.51
● P82B715P		8-PDIP	84M9797	3.76
● PCA9306DCTR	Dual Bi-Directional I2C-Bus and SMBus Voltage Level-Translator	8-SSOP	65J6232	0.89
● PCA9306DCTT		8-SSOP	65J6233	1.64
● PCA9306DCUT		8-VSSOP	24K4705	1.64
● PCA9306YZTR		8-DSBGA	21T3851	0.89
● PCA9306DQER		8-X2SON	21T3850	0.89
● PCA9517D	Level-Translating I2C Bus Repeater	8-SOIC	71M0457	3.42
● TCA6416APWR	16-Bit I2C and SMBus I/O Expander	24-TSSOP	10R6151	2.11
● TCA6424ARGJR	24-Bit I2C and SMBus I/O Expander	32-QFN	01T0713	2.53
● TCA9554APWR	Remote 8-Bit I2C and SMBus I/O Expander	16-TSSOP	25T0268	1.87
● PCA9535DWR	REMOTE 16-BIT I2C AND SMBUS, LOW-POWER I/O EXPANDER WITH INTERRUPT OUTPUT & CONFIG. REGISTERS	24-SOIC	63K6052	2.29
● PCA9535PW		24-TSSOP	63K6053	3.81
● PCA9535PWR		24-TSSOP	63K6054	3.22
● PCA9535RGER		24-QFN	71K9094	2.29
● PCA9536DGKR	REMOTE 4-BIT I2C AND SMBUS I/O EXPANDER WITH CONFIGURATION REGISTERS	8-MSOP	88K5920	1.49
● PCA9536DR		8-SOIC	06M7563	1.49
● PCA9538DW	REMOTE 8-BIT I2C AND SMBUS LOW-POWER I/O EXPANDER WITH INTERRUPT OUTPUT, RESET, AND CONFIG. REGISTERS	16-SOIC	27M0461	1.88
● PCA9538PW		16-TSSOP	18M7521	1.88
● PCA9538PWR		16-SOIC	18M7522	0.67
● PCA9539DWR	REMOTE 16-BIT I2C AND SMBUS, LOW-POWER I/O EXPANDER WITH INTERRUPT OUTPUT, RESET & CONFIG. REGISTERS	24-SOIC	63K6060	2.13
● PCA9539PWR		24-TSSOP	63K6062	3.34
● PCA9539RGER		24-VQFN	71K9095	2.13
● PCA9543APW	Two-Channel I2C-Bus Switch With Interrupt Logic and Reset	TSSOP	58M1087	1.92
● PCA9544APWR	4-CHANNEL I2C AND SMBUS MULTIPLEXER WITH INTERRUPT LOGIC	TSSOP	66K4024	0.71
● PCA9545APW	4-CHANNEL I2C AND SMBUS MULTIPLEXER WITH INTERRUPT LOGIC AND RESET FUNCTIONS	20-TSSOP	66K4030	2.40
● PCA9546AD	4-Channel I2C And SMBus Multiplexer With Reset Functions	SOIC	06M7565	2.34
● PCA9546APW		16-TSSOP	67K8252	2.34
● PCA9546APWR		TSSOP	67K8253	0.82
● PCA9548ADB	8-Channel I2C Switch With Reset	24-SSOP	22M1598	2.97
● PCA9548ADW		24-SOIC	36M9292	2.97
● PCA9548APW		24-TSSOP	22M1601	2.97
● PCA9548APWR		24-TSSOP	22M1602	2.48
● PCA9554DB	REMOTE 8-BIT I2C AND SMBUS I/O EXPANDER WITH INTERRUPT OUTPUT AND CONFIGURATION REGISTERS	16-SSOP	06M7571	2.21
● PCA9555DW	REMOTE 16-BIT I2C AND SMBUS I/O EXPANDER WITH INTERRUPT OUTPUT AND CONFIGURATION REGISTERS	24-SOIC	63K6067	2.59
● PCA9555DWR		24-SOIC	63K6068	2.16
● PCA9555PW		24-TSSOP	63K6069	2.59
● PCA9555PWR		24-TSSOP	63K6070	3.45
● PCA9555RGER		24-VQFN	71K9096	2.16
● PCF8574ADW	REMOTE 8-BIT I/O EXPANDER FOR I2C-BUS	16-SOIC	75C5232	2.35
● PCF8574AN		16-DIP	75C5234	2.07
● PCF8574N		16-DIP	75C5238	2.07
● PCF8575CDW	REMOTE 16-BIT I2C AND SMBUS I/O EXPANDER WITH INTERRUPT OUTPUT	24-SOIC	28K3635	3.08
● PCF8575DW		24-SOIC	52K5809	3.08
● TCA4311D	HOT SWAPPABLE 2-WIRE BUFFERS	8-SOIC	45P8198	5.72
● TCA8418EYFPR	KEYPAD SCAN IC WITH INTEGRATED ESD PROTECTION	25-DSBGA	01T0714	2.45

(89698)

ISOLATORS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Channel Configuration	Data Rate (Mbps)	Pkg.	Stock No.	Price Each 1-9
● ISO721D	1/0	100	8-SOIC	74K5333	3.46
● ISO721MD	1/0	100	8-SOIC	74K5335	3.82
● ISO7221AD	1/1	1	8-SOIC	48M0672	2.86
● ISO7221ADR	1/1	1	SOIC	48M0673	2.31
● ISO7221CDR	1/1	25	SOIC	48M0675	2.86
● ISO7221BD	1/1	5	8-SOIC	94M7889	2.75
● ISO7521CDWR	1/1	1	16-SOIC	84R8220	2.86
● ISO7220ADR	2/0	1	8-SOIC	48M0667	2.31

CONTINUED

ISOLATORS (CONT.)

Mfg. Part No.	Channel Configuration	Data Rate (Mbps)	Pkg.	Stock No.	Price Each 1-9
ISO7220CD	2/0	25	8-SOIC	48M0668	3.10
ISO7220MDR	2/0	150	8-SOIC	48M0671	2.87
ISO7220BD	2/0	5	8-SOIC	94M7887	2.75
ISO7420FED	2/0	50	8-SOIC	24T4578	3.10
ISO7420MD	2/0	1	8-SOIC	60R2414	3.46
ISO7520CDWR	2/0	1	16-SOIC	84R8219	2.86
ISO7230ADW	3/0	1	16-SOIC	58M0373	4.29
ISO7242ADW	2/2	1	SOIC	73M3159	5.35
ISO7242CDW	2/2	25	SOIC	73M3161	5.25
ISO7242MDW	2/2	150	SOIC	73M3163	6.32
ISO7241ADW	3/1	1	SOIC	73M3153	5.35
ISO7241CDW	3/1	25	SOIC	73M3155	5.25
ISO7241MDW	3/1	150	SOIC	73M3157	6.32
ISO7240ADW	4/0	1	16-SOIC	58M0379	5.35
ISO7240CDW	4/0	25	16-SOIC	58M0381	5.25
ISO7240MDW	4/0	150	16-SOIC	58M0385	6.32
TRANSCEIVERS					
ISO1050DUBR	CAN	1	8-SOP	14R9899	4.54
ISO1176DW	RS-485	40	16-SOIC	13N4111	7.01
ISO1176TDW	RS-485	40	16-SOIC	24T4576	7.76
ISO15DW	RS-485	1	16-SOIC	13N4112	7.65
ISO3080DW	RS-485	0.2	16-SOIC	13N4113	6.69
ISO3082DW	RS-485	0.2	16-SOIC	13N4114	6.69
ISO3086DW	RS-485	20	16-SOIC	13N4115	7.65
ISO3088DW	RS-485	20	16-SOIC	13N4116	7.65
ISO35DW	RS-485	1	16-SOIC	13N4117	7.65

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
ISO722XEVM	Evaluation Module Bench	53R1372	50.00
ISO1050EVM	ISO1050 Evaluation Module	15R3942	50.00

(101635)

REDRIVER / EQUALIZER INTERFACE ICs

RoHS Compliant Available

TEXAS INSTRUMENTS

PCIe PROTOCOL

Mfg. Part No.	# of Chan.	Speed (Max) (Gbps)	ESD HBM (kV)	Supply Voltage	Pkg.	Stock No.	Price Each 1-9
SN65LVPE501RGET	2	5	3	3V to 3.6V	24-VQFN	78R5883	9.77
SN65LVPE504RUAR	4	5	6	3V to 3.6V	42-WQFN	12T2865	11.29
10GbE, 10GFC PROTOCOL							
TLK1102ERGET	2	11.3	2.5	2.95V to 3.6V	24-QFN	71P8445	20.93
SMBus (I2C) PROTOCOL							
DS100BR111SQE/NOPB	2	5	5	2.5V to 3.3V	24-LLP	89T3442	11.85

(191923)

(196527)

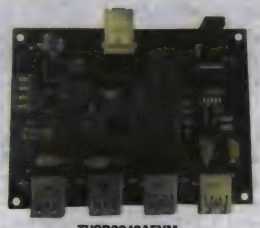
SECOND GENERATION FOUR PORT SUPERSPEED USB (USB 3.0) HUB

RoHS Compliant Available

TEXAS INSTRUMENTS

Features:
- Supports Operation as a USB 3.0 or USB 2.0 Compound Device
- Supports Per Port or Ganged Power Switching and Over-Current Notification Inputs
- Provides 128-Bit Universally Unique Identifier (UUID)
- Optionally Supports USB 2.0 Compliant Port Indicator LEDs
- Configurable SMBus Address to Support Multiple Devices on the Same SMBus Segment
- Supports On-Board and In-System EEPROM Programming Via the USB 2.0 Upstream Port
- Single Clock Input, 24-MHz Crystal or Oscillator

Applications:
- Computer Systems
- Docking Stations
- Monitors
- Set-top Boxes



TUSB8040AEVM

The **TUSB8040A** is a four-port USB 3.0 compliant hub and is available in a 100-pin QFN package. The device is designed for operation over the commercial temperature range of 0°C to 70°C. The **TUSB8040A** provides simultaneous SuperSpeed USB and high-speed or full-speed connections on the upstream port and provides SuperSpeed USB, high-speed, full-speed, or low-speed connections on the downstream ports. When the upstream port is connected to an electrical environment that only supports high-speed, full-speed or low-speed connections, SuperSpeed USB connectivity is disabled on the downstream ports. When the upstream port is connected to an electrical environment that only supports full-speed or low-speed connections, SuperSpeed USB and high-speed connectivity are disabled on the downstream ports. The **TUSB8040A** supports up to four downstream ports. It may be configured to report one to four downstream ports by pin selection or by an attached EEPROM or SMBus controller. The configuration options provide the ability to scale the device by application.

Mfg. Part No.	Supply Voltage	# of Ports	Package	Stock No.	Price Each 1-9
TUSB8040ARKMR	3V to 3.6V	4	100-WQFN	95T2674	7.44
TUSB8040ARKMT	3V to 3.6V	4	100-WQFN	95T2675	8.61

(206476)

SERIAL DIGITAL INTERFACE DEVICES

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Description	Data Rate (Mbps)	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
CLC007BM/NOPB	Serial Digital Cable Driver w/Dual Complementary Outputs	400	5	8-SOIC	64M6818	9.46
DS90UR241IVS/NOPB	5-43 MHz DC-Balanced 24-Bit LVDS Serializer and Deserializer	1032	3.3	48-TQFP	32M0918	10.18
LMH0002MA/NOPB	SMPTE 292M/259M Serial Digital Cable Driver	1485	3.3	8-SOIC	79K7683	8.92
LMH0002SQ/NOPB	SMPTE 292M/259M Serial Digital Cable Driver	1485	3.3	16-LLP	32M0942	7.44
LMH0024MA/NOPB	SMPTE 259M/344M Adaptive Cable Equalizer	540	3.3	16-SOIC	99K2250	17.86
LMH0044SQ/NOPB	SMPTE 292M / 259M Adaptive Cable Equalizer	1.485	3.465	16-LLP	13M1666	18.63
LMH0046MH/NOPB	HD/SD SDI Reclocker w/Dual Differential Outputs	1.485	3.465	20-TSSOP	32M0944	28.84
LMH0302SQE/NOPB	3Gbps HD/SD SDI Cable Driver	2.97	3.6	16-LLP	64M6884	10.14

(72291)

BUS INTERFACE TRANSCEIVER POWER ICs

RoHS Compliant Available

VISHAY.

Devices provide over-temperature protection. Package: SO-8.

Mfg. Part No.	Description	V_{BAT} (V) Min.	V_{BAT} (V) Max.	K Output	L Output	Chip Select	Fault Out	Stock No.	Price Each 1-9
SI9200EY	CAN Bus Driver and Receiver	...	...	No	No	No	No	34C4973	2.84
SI9241AEY	Single-Ended ISO 9141 Bus Transceiver	6	36	Yes	No	Yes	Yes	46C2221	2.25
SI9241AEY-T1-E3	Single-Ended ISO 9141 Bus Transceiver	6	36	Yes	No	Yes	Yes	06J8202	1.86
SI9243AEY	Single-Ended ISO 9141 Bus Transceiver	6	36	Yes	Yes	No	No	46C2223	2.15

(74763)

BUS EXPANDER ICS • CLOCK & TIMING MANAGEMENT ICS

I/O PORT EXPANDERS

RoHS Compliant Available

MICROCHIP

- I²C™and SMBus Compatible Interface
- Compatible With Most Microcontrollers
- Internal Power On Reset
- Operating Supply Voltage: 2.0V to 5.5V
- Temperature Range: -40°C to +85°C

The MCP23016 device provides 16-bit, general purpose, parallel I/O expansion for I²C™ bus applications. This device includes high-current drive capability, low supply current and individual I/O configuration. I/O expanders provide a simple solution when additional I/Os are needed for ACPI, power switches, sensors, push buttons, and LEDs.

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-25
● MCP23008-E/P	8-BIT I/O expander, I2C interface	18-DIP	08J8737	1.02
● MCP23008-E/SO	8-BIT I/O expander, I2C interface	18-SOIC	08J8738	1.02
● MCP23S08-E/SO	8-BIT I/O expander, SPI interface	18-SOIC	08J8733	1.07
● MCP23S08-E/SS	8-BIT I/O expander, SPI interface	20-SSOP	08J8734	1.15
● MCP23016-I/SO	16-bit I/O port expander	28-SOIC	03H5066	1.58
● MCP23016-I/SP	16-bit I/O port expander	28-DIP	03H5067	1.58
● MCP23017-E/ML	16-BIT I/O expander, I2C interface	28-QFN	31K2957	1.41
● MCP23017-E/SO	16-bit I/O expander, I2C interface	28-SOIC	31K2958	1.20
● MCP23017-E/SP	16-bit I/O expander, I2C interface	28-DIP	31K2959	1.20
● MCP23017-E/SS	16-bit I/O expander, I2C interface	28-SSOP	31K2960	1.26
● MCP23018-E/SP	16-Bit I/O Expander with Open-Drain Outputs	28-PDIP	98M1583	1.51
● MCP23S17-E/ML	16-BIT I/O expander, SPI interface	28-QFN	31K2949	1.51
● MCP23S17-E/SO	16-bit I/O expander, SPI interface	28-SOIC	31K2950	1.26
● MCP23S17-E/SP	16-bit I/O expander, SPI interface	28-DIP	31K2951	1.26
● MCP23S17-E/SS	16-bit I/O expander, SPI interface	28-SSOP	31K2952	1.32

(78875)

BUS EXPANDERS

RoHS Compliant Available

ON Semiconductor

These I²C/SMBus I/O port expanders provide additional I/Os for ACPI power switches, servers, sensors, fans, LEDs, and industrial control applications. They operate from 2.3V to 5.5V of supply voltage and 0Hz to 400kHz clock frequency.

LED BLINKERS

Mfg. Part No.	Output Current Min (mA)	Features	Pkg.	Stock No.	Price Each 1-9
● CAT9532WI-T1	25	LED Blink/PWM	24-SOIC	08R5462	3.20

SIMPLE I/O EXPANDERS

● CAT9555WI-T1	10	Interrupt Output and I/O Pullups	24-SOIC	08R5467	1.81

(147899)

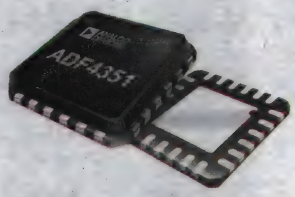
WIDEBAND SYNTHESIZER W/ INTEGRATED VCO

RoHS Compliant Available

ANALOG DEVICES

Features:
- Fractional-N synthesizer and integer-N synthesizer
- Low phase noise VCO
- Programmable output power level
- RF output mute function
- Analog and digital lock detect
- Switched bandwidth fast-lock mode
- Cycle slip reduction

Applications:
- Wireless infrastructure (W-CDMA, TD-SCDMA, WiMAX, GSM, PCS, DCS, DECT)
- Test equipment
- Wireless LANs, CATV equipment
- Clock generation



The **ADF4351** allows implementation of fractional-N or integer-N phase-locked loop (PLL) frequency synthesizers if used with an external loop filter and external reference frequency. The **ADF4351** has an integrated voltage controlled oscillator (VCO) with a fundamental output frequency ranging from 2200 MHz to 4400 MHz. In addition, divide-by-1/2/4/8/16/32 or 64 circuits allow the user to generate RF output frequencies as low as 35 MHz. For applications that require isolation, the RF output stage can be muted. The mute function is both pin- and software-controllable. An auxiliary RF output is also available, which can be powered down if not in use.

Mfg. Part No.	Supply Voltage (V)	Supply Current (mA)	Freq. Max (GHz)	Package	Stock No.	Price Each 1-9
● ADF4351BCPZ	3V to 3.6V	110	4.4	32-LFCSP	94T9408	13.43
● ADF4350BCPZ	3V to 3.6V	21	4.4	32-LFCSP	45P6411	11.35

(207799)

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(212565)

CLOCKS & BUFFERS

RoHS Compliant Available

CYPRESS PERFORM

CLOCK GENERATORS

Mfg. Part No.	No. of Outputs	Supply Voltage	Output Frequency (MHz)	Package	Stock No.	Price Each 1-24
● CY22381FXC	3	3.135V to 3.465V	200	8-SOIC	19M5871	5.75
● CY22150FZXC	6	3.135V to 3.465V	200	16-TSSOP	19M5858	2.75
● CY22392FXC	6	3.135V to 3.465V	200	16-TSSOP	19M5883	5.75
● CY22393FXC	6	3.135V to 3.465V	200	16-TSSOP	19M5891	6.27
● CY22393FXI	6	3.135V to 3.465V	166	16-TSSOP	19M5893	6.49
● CY2292FXC	6	3V to 3.6V, 4.5V to 5.5V	90	16-SOIC	19M5915	3.08
● CY2292FXI	6	3V to 3.6V, 4.5V to 5.5V	80	16-SOIC	19M5917	5.86

CLOCK BUFFERS

● CY2304NZZXC-1	4	3V to 3.6V	140	8-TSSOP	19M5952	4.73
● CY2304NZZXI-1	4	3V to 3.6V	140	8-TSSOP	19M5954	5.72
● CY2304SXC-1	4	3V to 3.6V	133.3	8-SOIC	19M5956	3.22
● CY2305SXC-1	5	3V to 3.6V	133.33	8-SOIC	19M2151	1.54
● CY2305SXC-1H	5	3V to 3.6V	133.33	8-SOIC	19M2152	1.59
● CY2305SXI-1	5	3V to 3.6V	133.33	8-SOIC	19M2155	2.75
● CY2305SXI-1H	5	3V to 3.6V	133.33	8-SOIC	19M2156	4.51
● CY23EP05SXC-1H	5	2.3V to 3.6V	220	8-SOIC	19M5922	5.39
● CY2308SXC-1	8	3V to 3.6V	133.3	16-SOIC	19M2177	4.65
● CY2308SXC-1H	8	3V to 3.6V	133.3	16-SOIC	19M2178	4.76
● CY2308SXC-2	8	3V to 3.6V	133.3	16-SOIC	19M2181	4.32
● CY2308ZXC-1H	8	3V to 3.6V	133.3	16-TSSOP	19M2203	8.43

(191927)

T/E TIMING ICs

RoHS Compliant Available

EXAR
A New Direction in Mixed-Signal

Mfg. Part No.	Description	Pkg.	Stock No.	Price 1-4
● XRT85L61IG-F	BITS (BUILDING INTEGRATED TIMING SUPPLY) CLOCK EXTRACTOR	28-TSSOP	24R1960	29.88

(177041)

TIMERS

RoHS Compliant Available

FAIRCHILD

- Supply Voltage: 4.5V Min., 16V Max.
- Control Voltage Min.: 9, 11@ V_{cc}: 15V, 5V Respectively
- Control Voltage Max.: 2.6, 4 @ V_{cc}: 15V, 5V Respectively
- Trigger Voltage Min.: 4.5, 5.6 @ V_{cc}: 15V, 5V Respectively
- Trigger Voltage Max.: 1.1, 2.2 @ V_{cc}: 15V, 5V Respectively

Mfg. Part No.	Config.	Threshold Voltage Min. @V_{cc} 15V	Threshold Voltage Min. @V_{cc} 5V	Threshold Voltage Typ. @V_{cc} 15V	Threshold Voltage Max. @V_{cc} 15V	Threshold Voltage Max. @V_{cc} 5V	Package	Stock No.	Price Each 1-9
● LM555CM	Single	...	10	...	3.3	3.3	8-SOP	78K6011	0.51
● LM555CN	Single	...	10	...	3.3	3.3	8-DIP	58K8943	0.46

(74485)

CLOCK DRIVERS

RoHS Compliant Available

intersil

Features:
- Industry Standard Driver Replacement and Improved Response Times
- Matched Rise and Fall Times
- Reduced Clock Skew
- Low Output Impedance and Input Capacitance
- High Noise Immunity
- Improved Clocking Rate
- Low Supply Current
- Wide Operating Voltage Range (+4.5V to +16V)

Applications:
- Clock/Line Drivers
- CCD Drivers
- Ultra-Sound Transducer Drivers
- Power MOSFET Drivers
- Switch Mode Power Supplies

The **EL7104C** is a matched driver IC that improves the operation of the industry-standard TC-4420/29 clock drivers. Very high speed driver delivers peak currents of 1A into highly capacitive loads. The **EL7202C/EL7222C** ICs are matched dual-drivers ICs that improve the operation of the industry standard DS0026 clock drivers. Very high speed drivers deliver peak currents of 2.0A into highly capacitive loads.

Mfg. Part No.	Desc.	Peak O/P Current (A)	Rise Time/ Fall Time Into 1000pF (ns)	Package	Stock No.	Price Each 1-24
● EL7104CSZ	Single Ch	4	10/15	8-SOIC	57K3539	5.42
● EL7202CSZ	Dual Ch	2	10/15	8-SOIC	57K3548	2.70
● EL7222CSZ	Dual Ch	2	10/15	8-SOIC	57K3551	2.87
● EL7232CSZ	Dual Ch	2	10/13	8-SOIC	57K3554	3.37
● EL7242CNZ	Dual Ch	2	20/20	8-DIP	79K6445	5.79
● EL7242CSZ	Dual Ch	2	20/20	8-SOIC	57K1477	3.60
● ICL7667CPAZ	Dual Ch	1	35/20	8-DIP	57K3897	4.61
● EL7252CSZ	Dual Ch	2	20/20	8-SOIC	57K3561	3.37

➤CONTINUED➤

CLOCK DRIVERS (CONT.)

Mfg. Part No.	Desc.	Peak O/P Current (A)	Rise Time/ Fall Time Into 1000pF (ns)	Package	Stock No.	Price Each 1-24
EL7212CSZ	2-Phase	2	10/13	8-SOIC	61J5668	2.87
EL7457CLZ	Non-Inv Quad	2	11/12	16-QFN	61J5673	5.55
EL7457CSZ	Non-Inv Quad	2	11/12	16-SOIC	61J5676	6.10
EL7457CUZ	Non-Inv Quad	2	11/12	16-QSOP	61J5679	5.55

(74863)

MICROPROCESSOR PERIPHERALS

RoHS Compliant Available

intersil

TIMERS

Mfg. Part No.	Supply Current Typ.	Description	Package	Stock No.	Price Each 1-24
ICM7555IPAZ	60µA	Single CMOS RC Timer	8-DIP	57K3903	0.95
ICM7555CBAZ	60µA	Single CMOS RC Timer	8-SOIC	57K3899	0.80
ICM7556IPDZ	120µA	Dual CMOS RC Timer	14-DIP	57K3904	1.58
ICM7555IBAZ	300µA	Single CMOS RC Timer	8-SOIC	57K3901	0.76

REAL-TIME CLOCKS

Time keeping and date stamping for personal computers, communications, robotics, auto, etc.

Mfg. Part No.	Standby Current	Desc.	Package	Stock No.	Price Each 1-24
CDP68HC68T1EZ	25µA	Clock, Real-Time, Serial w/RAM, Power Sense/Control, CMOS	16-PDIP	57K3029	7.27
CDP68HC68T1M2Z	12µA	Power Sense/Control, CMOS	16-SOIC	61J4819	7.36
ISL12024IBZ	...	Low power real-time clock with timing and crystal compensation, clock/calender.	8-SOIC	20M5181	4.85

LONG RANGE FIXED TIMER

Mfg. Part No.	Supply Voltage	Description	Package	Stock No.	Price Each 1-24
ICM7242IPAZ	2 to 16V	RC Oscillator + 8-Bit Counter	8-DIP	79K6933	3.76

(9957)

REAL-TIME CLOCKS

RoHS Compliant Available

intersil

Mfg. Part No.	Description	Interface Type	V_{RESET} (V)	Package	Stock No.	Price Each 1-24
ISL12026AIBZ	Real Time Clock/Calendar w/ I2C Bus™ and EEPROM	I2C	...	8-SOIC	34P4602	3.72
ISL12026AIVZ		I2C	...	8-TSSOP	34P4604	3.72
ISL12027IB27Z	Real Time Clock/Calendar w/EEPROM	I2C	2.63	8-SOIC	79K6950	4.85
ISL12027IV27Z		I2C	2.63	8-TSSOP	79K6960	4.85
ISL12027IB27AZ		I2C	2.92	8-SOIC	79K6948	4.85
ISL12027IV27AZ		I2C	2.92	8-TSSOP	79K6958	4.85
ISL12027IB30AZ		I2C	3.09	8-SOIC	79K6952	4.85
ISL12027IV30AZ		I2C	3.09	8-TSSOP	79K6962	4.85
ISL12027IBZ		I2C	4.38	8-SOIC	79K6946	4.85
ISL12027IVZ		I2C	4.38	8-TSSOP	79K6956	4.85
ISL12027IBAZ		I2C	4.64	8-SOIC	79K6944	4.85
ISL12027IVAZ		I2C	4.64	8-TSSOP	79K6954	4.85
ISL12028IB27AZ		I2C	2.92	14-SOIC	79K6968	4.85
ISL12028IB27Z		I2C	2.63	14-SOIC	79K6970	4.85
ISL12028IB30AZ		I2C	3.09	14-SOIC	79K6972	4.85
ISL12028IBAZ		I2C	4.64	14-SOIC	79K6964	4.85
ISL12028IBZ		I2C	4.38	14-SOIC	79K6966	4.85
ISL12028IV27AZ		I2C	2.92	14-TSSOP	79K6978	4.85
ISL12028IV27Z		I2C	2.63	14-TSSOP	79K6980	4.85
ISL12028IV30AZ		I2C	3.09	14-TSSOP	79K6982	4.85
ISL12028IVAZ		I2C	4.64	14-TSSOP	79K6974	4.85
ISL12028IVZ		I2C	4.38	14-TSSOP	79K6976	4.85
ISL12029IB27AZ		I2C	2.92	14-SOIC	79K6988	4.85
ISL12029IB27Z		I2C	2.63	14-SOIC	79K6990	4.85
ISL12029IB30AZ		I2C	3.09	14-SOIC	79K6992	4.85
ISL12029IBAZ		I2C	4.64	14-SOIC	79K6984	4.85
ISL12029IBZ		I2C	4.38	14-SOIC	79K6986	4.85
ISL12029IV27AZ		I2C	2.92	14-TSSOP	79K6998	4.85
ISL12029IV27Z		I2C	2.63	14-TSSOP	79K7000	4.85
ISL12029IV30AZ		I2C	3.09	14-TSSOP	79K7002	4.85
ISL12029IVAZ		I2C	4.64	14-TSSOP	79K6994	4.85
ISL12029IVZ		I2C	4.38	14-TSSOP	79K6996	4.85
ISL12020MIRZ	RTC w/Embedded Crystal, ±5ppm Accuracy	I2C	...	20-DFN	96M2894	7.02
ISL12008IB8Z	Low Power RTC w/ Battery ReSeal™ Function	I2C	...	8-SOIC	27P5360	3.21

CONTINUED

REAL-TIME CLOCKS (CONT.)

Mfg. Part No.	Description	Interface Type	V_{RESET} (V)	Package	Stock No.	Price Each 1-24
ISL12022IBZ	Low Power RTC w/Battery-Backed SRAM & Embedded Temp Compensation	I2C	...	8-SOIC	96M2896	5.02
ISL12023IVZ		I2C	...	14-TSSOP	96M2898	5.41
ISL12030IBZ	Low Power RTC w/ 50/60 Cycle AC Input, Alarms & Daylight Savings Correction	I2C	...	8-SOIC	78M1440	3.07
ISL12032IVZ	Low Power RTC w/ Battery Backed SRAM & 50/60 Cycle AC Input and Xtal Back-up	I2C	...	14-TSSOP	78M1442	3.79
ISL12082IB8Z	Low Power RTC with Battery ReSeal™, 2 IRQs, 1/100s Time, & Crystal Compensation	I2C	...	8-SOIC	12P8991	3.23
ISL12082IUZ		I2C	...	10-MSOP	12P8993	3.40

(155337)

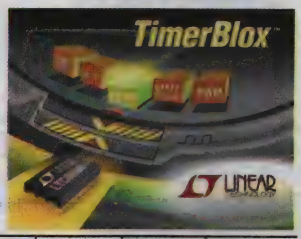
TimerBlox FAMILY OF TIMING BUILDING BLOCKS

RoHS Compliant Available

LINEAR TECHNOLOGY

Features:
- 500µs start-up time
- VCO bandwidth >300kHz at 1MHz
- CMOS logic output sources/sinks 20mA
- 50% duty cycle square wave output
- Output enable (selectable low or Hi-Z when disabled)

Applications:
- Low cost precision programmable oscillator
- Voltage-controlled oscillator
- High vibration, high acceleration environments
- Replacement for fixed crystal and ceramic oscillators
- Portable and battery-powered equipment



Mfg. Part No.	Supply Voltage (V)	Frequency Accuracy (%)	Package	Stock No.	Price Each 1-24
LTC6991CDCB#TRMPBF	2.25 - 5.5	0.8	6-DFN	24T2687	1.88
LTC6991CS6#TRMPBF	2.25 - 5.5	0.8	6-TSOT-23	24T2688	3.35
LTC6991IS6#PBF	2.25 - 5.5	0.8	6-TSOT-23	78T3560	3.41
LTC6990CDCB#PBF	2.25 - 5.5	2	6-DFN	84R7845	3.42
LTC6990CS6#PBF	2.25 - 5.5	2	6-SOT-23	84R7846	3.42
LTC6993CDCB-1#TRMPBF	2.25 - 5.5	2.3	6-DFN	24T2698	3.35
LTC6993CDCB-2#TRMPBF	2.25 - 5.5	2.3	6-DFN	24T2699	1.88
LTC6993CDCB-3#TRMPBF	2.25 - 5.5	2.3	6-DFN	24T2700	3.35
LTC6993CDCB-4#TRMPBF	2.25 - 5.5	2.3	6-DFN	24T2701	3.35
LTC6993CS6-1#TRMPBF	2.25 - 5.5	2.3	6-TSOT-23	24T2702	3.35
LTC6993CS6-2#TRMPBF	2.25 - 5.5	2.3	6-TSOT-23	24T2703	3.35
LTC6993CS6-3#TRMPBF	2.25 - 5.5	2.3	6-TSOT-23	24T2704	3.35
LTC6993CS6-4#TRMPBF	2.25 - 5.5	2.3	6-TSOT-23	24T2705	3.35
LTC6994CDCB-1#TRMPBF	2.25 - 5.5	2.3	6-DFN	24T2706	1.88
LTC6994CDCB-2#TRMPBF	2.25 - 5.5	2.3	6-DFN	24T2707	1.88
LTC6994CS6-1#TRMPBF	2.25 - 5.5	2.3	6-TSOT-23	24T2708	3.35
LTC6994CS6-2#TRMPBF	2.25 - 5.5	2.3	6-TSOT-23	24T2709	3.35
LTC6994CS6-2#PBF	2.25 - 5.5	2.3	6-TSOT-23	78T3638	2.99
LTC6992CDCB-1#TRMPBF	2.25 - 5.5	2.4	6-DFN	24T2689	3.84
LTC6992CDCB-2#TRMPBF	2.25 - 5.5	2.4	6-DFN	24T2690	2.16
LTC6992CDCB-3#TRMPBF	2.25 - 5.5	2.4	6-DFN	24T2691	2.16
LTC6992CDCB-4#TRMPBF	2.25 - 5.5	2.4	6-DFN	24T2693	2.16
LTC6992CS6-1#TRMPBF	2.25 - 5.5	2.4	6-TSOT-23	24T2694	3.84
LTC6992CS6-2#TRMPBF	2.25 - 5.5	2.4	6-TSOT-23	24T2695	3.84
LTC6992CS6-3#TRMPBF	2.25 - 5.5	2.4	6-TSOT-23	24T2696	2.16
LTC6992CS6-4#TRMPBF	2.25 - 5.5	2.4	6-TSOT-23	24T2697	2.16
LTC6992IS6-1#PBF	2.25 - 5.5	2.4	6-TSOT-23	78T3584	3.91

(190322)

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(212569)

LTC6905-XXX SERIES SILICON OSCILLATORS

RoHS Compliant Available

LINEAR TECHNOLOGY

Features:
- No External Components to Set Frequency
- Frequency Error ±0.5% Typical
- Fast Start-Up Time: 100µs Typical
- Includes Output Enable
- Includes Divide by 1, 2 or 4
- CMOS Output Drives 600 Ohm Load

Applications:
- Data Clocks for High Reliability Applications
- High Vibration, High Acceleration Environments
- Replacement for Fixed Crystal and Ceramic Oscillators

The **LTC6905-XXX** series of parts are precision, fixed frequency, silicon oscillators designed to minimize board space while maximizing accuracy and ease of use. Programmed at the factory to a fixed frequency, the **LTC6905-XXX** series of parts need no external trim components. An internal three-state divider allows for division of the master clock by 1, 2 or 4, providing 3 frequencies (for each device).

Mfg. Part No.	Number of Outputs	Program Method	Freq. Max. (MHz)	Package	Stock No.	Price Each 1-24
● LTC6905CS5#PBF	1	Resistor	170	5-SOT-23	78T3494	3.56
● LTC6905CS5-80#PBF	1	Resistor	80	5-SOT-23	78T3492	1.71

(210182)

ULTRALOW NOISE & SPURIOUS INTEGER-N SYNTHESIZER W/VCO

RoHS Compliant Available

LINEAR TECHNOLOGY

Features:
- Configurable Status Output
- SPI Compatible Serial Port Control
- PLLWizard™ Software Design Tool Support

Applications:
- Wireless Base Stations (LTE, WiMAX, W-CDMA, PCS)
- Broadband Wireless Access
- Military and Secure Radio
- Test and Measurement

The **LTC6946** is a high performance, low noise, phase-locked loop (PLL) with a fully integrated VCO, including a reference divider, phase-frequency detector (PFD) with phase-lock indicator, ultralow noise charge pump, integer feedback divider, and VCO output divider. The charge pump contains selectable high and low voltage clamps useful for VCO monitoring.
The integrated low noise VCO uses no external components. It is internally calibrated to the correct output frequency with no external system support.

Mfg. Part No.	Frequency Tuning	Spurious (dBc)	Package	Stock No.	Price Each 1-24
● LTC6946IUFD-1#PBF	373MHz to 3.74GHz	-103	28-QFN	78T3542	12.29
● LTC6946IUFD-2#PBF	513MHz to 4.91GHz	-103	28-QFN	78T3544	12.29
● LTC6946IUFD-3#PBF	640MHz to 5.79GHz	-103	28-QFN	78T3546	12.29

(201300)

PHASED LOCKED LOOP (PLL) ICs

RoHS Compliant Available

NXP

The **74HC/HCT4046A** are high-speed Si-gate CMOS devices and are pin compatible with the '4046' of the '4000B' series. They are specified in compliance with JEDEC standard no. 7A. They are phase-locked-loop circuits that comprise a linear voltage-controlled oscillator (VCO) and three different phase comparators (PC1, PC2 and PC3) with a common signal input amplifier and a common comparator input. The **HEF4046B** is a phase-locked loop circuit that consists of a linear Voltage Controlled Oscillator (VCO) and two different phase comparators with a common signal input amplifier and a common comparator input. A 7 V regulator (Zener) diode is provided for supply voltage regulation if necessary.

Mfg. Part No.	Type	Supply Voltage Range	Freq. Typ. (MHz)	Logic Level	Package	Stock No.	Price Each 1-9
● 74HC4046AD,652	VCO	2V to 6V	21	CMOS	16-SOIC	71R2484	0.61
● 74HC4046AN,652	VCO	2V to 6V	21	CMOS	16-DIP	71R2488	2.04
● 74HCT4046AD,112	VCO	4.5V to 5.5V	17	TTL	16-SOIC	71R1636	0.74
● 74HCT4046AN,112	VCO	4.5V to 5.5V	17	TTL	16-DIP	71R1640	2.04
● HEF4046BT,652	VCO	3V to 15V	2.7	CMOS	16-SOIC	70R5215	0.68
● HEF4046BP,652	VCO	3V to 15V	2.7	CMOS	16-DIP	70R5214	1.61

(194481)

REAL-TIME CLOCKS

RoHS Compliant Available

NXP

Mfg. Part No.	Time Format	RTC Features	Package	Stock No.	Price Each 1-9
● PCF8563TD	BCD	Year, month, day, weekday hours, minutes, and seconds	8-SOIC	11N8513	2.02
● PCF8583PN	12Hr / 24Hr	Clock/calender with 2048-bytes of RAM	8-DIP	11N8517	3.41
● PCF8563T/F4,118	HH:MM:SS	Year, month, day, weekday hours, minutes, and seconds	8-SOIC	78R6249	1.97
● PCF8583P/F5,112	HH:MM:SS:hh	240 × 8-bit low-voltage RAM	8-DIP	70R6904	3.40

(118097)

CLOCK DISTRIBUTION

RoHS Compliant Available

ON Semiconductor

DIFFERENTIAL FANOUT BUFFER

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● MC10EL11DG	5 V ECL 1:2 Differential Fanout Buffer	52-LQFP	98H0614	5.21
● MC100EL11DG	5 V ECL 1:2 Differential Fanout Buffer	8-SOIC	88H4701	4.90
● MC100EL13DWG	5V ECL Dual 1:3	20-SOIC	98H0631	14.15
● MC100EP11DG	3.3V / 5V ECL 1:2	8-SOIC	45J0937	7.50
● MC100EP11DR2G	3.3 V / 5 V ECL 1:2 Differential Fanout Buffer	8-SOIC	98H0636	7.68
● MC100EP11DTG	2.5V/3.3V enhanced differential 1:2 clock	8-TSSOP	45J0938	7.50
● MC100LVEL11DG	3.3 V ECL 1:2 Differential Fanout Buffer	8-NSOIC	71J5430	5.21
● MC100LVEL11DTG	3.3V ECL 1:2	8-TSSOP	26K3898	4.90
● MC100LVEP11DG	2.5 V / 3.3 V ECL 1:2 Differential Fanout Buffer	8-SOIC	26K3919	7.50
● MC100LVEP11DTG	2.5 V / 3.3 V ECL 1:2 Differential Fanout Buffer	28-PLCC	71J5441	7.50
● NB3L553DG	2.5 V / 3.3 V / 5.0 V 1:4 Clock Fanout Buffer	8-NSOIC	02M9803	2.14
● NB3N2304NZDTG	3.3 V Low Skew 1:4 Clock buffer	8-TSSOP	27M2498	2.02
● NB3N551DG	3.3 V 1:4 Clock Buffer	8-NSOIC	02M9807	1.86
● NB4N316MDTG	3.3 V AnyLevel™ Input to Open Collector CML Output Buffer/ Translator	8-TSSOP	04M5225	6.30
● NB6L11DTG	Multilevel Input to Differential LVNECL/ LVPECL 1:2 Clock or Data Fanout Buffer/ Translator	8-TSSOP	61K1178	12.38
● NB6L11SMNG	2.5 V 1:2 AnyLevel Input to LVDS Clock/ Data Fanout Buffer / Translator	16-QFN	02M9809	9.37
● NB6L14MNG	3 GHz Differential 1:4 Clock/Data Fanout Buffer	16-QFN	32M7325	11.99
● NB6N11SMNG	3.3 V 1:2 AnyLevel™ Input to LVDS Fanout Buffer / Translator	16-QFN	27M2512	8.75
● NB6N14SMNG	3.3 V 1:4 AnyLevel™ Input to LVDS Fanout Buffer / Translator	16-QFN	02M9811	10.70
● NB7L14MMNG	2.5 V / 3.3 V, 12 Gb/s Differential 1:4 Clock/ Data Fanout Buffer/Translator	52-LQFP	26K4800	43.64
CLOCK DISTRIBUTION CHIP				
● MC100EL14DWG	5V ECL 1:5	20-SOIC	88H4704	10.59
● MC100EL15DG	5V ECL 1:4	16-SOIC	42K0357	5.60
● MC100LVEL14DWG	3.3 V ECL 1:5 Clock Distribution Chip	32-LQFP	98H0640	10.00
● MC100LVEP111FAG	1:10 Clock Distribution Chip	32-QFN	98H0648	6.67
CLOCK DRIVER				
● MC100E111FNG	5V ECL 1:9	28-PLCC	45J0952	11.13
● MC100EP14DTG	3.3V/5V ECL/PECL/HSTL	20-TSSOP	71J5407	10.00
● MC100LVE111FNG	3.3 V ECL 1:9 Differential Clock Driver	8-TSSOP	71J5445	11.78
● MC100LVEP14DTG	2.5 V / 3.3 V 1:5 Differential ECL/PECL/ HSTL Clock Driver	28-PLCC	42K0489	10.00
● NB7L111MMNG	6.125 Gb/s 2:1:10 Differential Clock / Data Driver	52-QFN	42K1754	45.85
● NBSG11MNG	1:2 Differential Clock Driver with RSECL Outputs	16-QFN	45J1760	36.40

(4279)

CLOCK GENERATION

RoHS Compliant Available

ON Semiconductor

CRYSTAL-TO-HCSL CLOCK GENERATOR

Mfg. Part No.	Supply (V)	Frequency (GHz)	Package	Stock No.	Price Each 1-9
● NB3N5573DTG	3.63	200	16-TSSOP	57M9781	5.04

(102961)

PROGRAMMABLE PLL SYNTHESIZED CLOCK GENERATORS

RoHS Compliant Available

ON Semiconductor

Mfg. Part No.	VCC Typ (V)	tLOCK Max (ms)	tJitter Typ (ps)	tR & tF Min (ps)	tR & tF Max (ps)	Pkg.	Stock No.	Price Each 1-24
● NB3N3002DTG	3.3	1	2	175	700	16-TSSOP	57M9779	3.43
● NB3N502DG	3	1	15	1000	1000	8-SOIC	02M9805	3.77
● NB3N508SDTG	3.3	2	88dBc/Hz @1KHZ	380	500	16-TSSOP	27M2504	2.24
● NB4N441MNG	3.3	5	3.5	175	425	24-QFN	27M2510	10.00
● NB4N507ADG	3.3	1	10	50	70	16-SOIC	61K1174	3.81
● NBC12429AMNG	3.3	10	20	175	425	32-QFN	83K8596	13.68
● NBC12429FAG	3.3	10	20	175	425	32-LQFP	45J1755	10.00
● NBC12429FNG	3.3	10	20	175	425	28-PLCC	45J1757	10.00
● NBC12430FAG	3.3	10	20	175	425	32-LQFP	45J1758	10.00
● NBC12430FNG	3.3	10	20	175	425	28-PLCC	26K4720	10.00

CONTINUED

PROGRAMMABLE PLL SYNTHESIZED CLOCK GENERATORS (CONT.)

Mfg. Part No.	VCC Typ (V)	tLOCK Max (ms)	tJitter Typ (ps)	tR & tF Min (ps)	tR & tF Max (ps)	Pkg.	Stock No.	Price Each 1-24
NBC12439AMNG	3.3	10	20	175	425	32-QFN	83K8600	13.68
NBC12439FAG	3.3	10	20	175	425	32-LQFP	42K1678	10.00
NBC12439FNG	3.3	10	20	175	425	28-PLCC	26K4724	10.00

(116687)

SKEW MANAGERS - PROGRAMMABLE DELAY IC

RoHS Compliant Available

ON Semiconductor

Mfg. Part No.	$t_{d(prog)}$ Min (ns)	$t_{d(prog)}$ Max (ns)	$t_{d(step)}$ Typ (ps)	t_R & t_F Max (ps)	Pkg.	Stock No.	Price Each 1-9
MC100EP195BFAG	2.2	12	10	300	32-LQFP	57M9762	17.60
MC100EP195FAG	2.2	12.2	10	300	32-LQFP	26K3858	17.07
MC100EP196FAG	2.2	12.2	10	210	32-LQFP	88H4711	15.40
MC10EP195FAG	2.2	12.2	10	300	32-LQFP	26K3730	15.95

(116723)

TIMERS

RoHS Compliant Available

ON Semiconductor

- Direct Replacement for NE555 Timers
- Timing from Microseconds through Hours
- Operates in Both Astable and Monostable Modes
- Adjustable Duty Cycle
- High Current Output Can Source or Sink: 200mA
- Output Can Drive MTTL
- Temperature Stability: 0.005% per °C
- Normally ON or Normally OFF Output

Mfg. Part No.	Description	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
MC1455DG	Timing Circuit	4.5/16	8-SOIC	45J1128	0.59
MC14536BDWG	Programmable Timer	3/18	16-SOIC	26K3967	0.96
MC14541BCPG	Programmable Oscillator-Timer	3/18	14-PDIP	45J1124	0.71
MC14541BDG	Programmable Oscillator-Timer	3/18	14-SOIC	26K3971	0.47
MC14541BDR2G	Programmable Oscillator-Timer	3/18	14-SOIC	84K8755	0.48

(74513)

TIMERS

RoHS Compliant Available

INDUSTRY STANDARD

Mfg. Part No.	Freq (MHz)	V_{Supply} Max. (V)	I_{Supply} (mA)	Package	Stock No.	Price Each 1-9
NE556N	500	16	12	14-DIP	89K1489	0.58
NE556N	500	16	12	14-DIP	89K1489	0.58
SA556N	500	16	30	14-DIP	89K1502	1.14
LOW POWER						
HCF4541BEY	100	20	10	14-DIP	89K0597	0.83

(83732)

3G/HD/SD VIDEO CLOCK GENERATOR WITH AUDIO CLOCK

RoHS Compliant Available

TEXAS INSTRUMENTS

Applications:
- Triple rate (3G/HD/SD) SDI SerDes
- FPGA reference clock generation/cleaning
- Audio embed/de-embed
- Video cameras
- Frame synchronizers (Genlock, DARS)
- A-D/D-A conversion, editing, processing cards
- Keyers and logo inserters
- Format/standards converters
- Video displays and projectors
- A/V test and measurement equipment

Features:
- 3 x 2 Video clock crosspoint
- Flexible PLL bandwidth to optimize jitter performance and lock time
- Soft re-synchronization to new reference
- Digital holdover or free-run on loss of reference
- Status flags for loss of reference and loss of PLL lock

Mfg. Part No.	Supply Voltage (V)	Interface	Package	Stock No.	Price Each 1-9
LMH1983SQE/NOPB	3.135 - 3.465	I2C	40-LLP	99R3316	27.99

(194518)

PLLs

RoHS Compliant Available

TEXAS INSTRUMENTS

FEATURED FRACTIONAL-N SYNTHESIZERS WITH INTEGRATED VCO

Mfg. Part No.	Type	Frequency (GHz)	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
LMX2531LQ2080E/NOPB	Sigma-Delta	2.27	3.2	36-LLP	69K2348	11.85
LMX2531LQ1515E/NOPB	Sigma-Delta	2.79	3.2	36-LLP	11N9172	11.69
FEATURED FRACTIONAL-N PLLs						
LMX2485ESQ/NOPB	Sigma-Delta	3	3.6	24-LLP	79K7739	5.89

SINGLE

Mfg. Part No.	Description	V_{cc} (V)	I_{cc} (mA)	Package	Stock No.	Price Each 1-9
LMX2470SLEX/NOPB	1.2GHz/550MHz+	3.0	6.0	24-UCSP	41K3327	4.77
LMX2531LQE2820E/NOPB	High Performance Frequency Synthesizer System with Integrated VCO	3.0	44	36-LLP	27R1773	11.85
LMX2531LQE3010E/NOPB	High Performance Frequency Synthesizer System with Integrated VCO	3.0	44	36-LLP	27R1774	11.85

*Frequency synthesizer for RF personal communications; +Fractional N RF/Integer N IF frequency synthesizer

(70795)

PRECISION CLOCK DISTRIBUTORS

RoHS Compliant Available

TEXAS INSTRUMENTS

- No. of LVDS Outputs: 3
- No. of LVPECL Outputs: 5
- Operating Temperature: -40 °C to +85 °C

FEATURED PRECISION CLOCK CONDITIONER

Mfg. Part No.	Supply Voltage Max. (V)	Frequency Max (GHz)	RMS Jitter (fs)	Package	Stock No.	Price Each 1-9
LMK04000BISQE/NOPB	3.45	1.2	110	48-LLP	57R6018	21.95
LMK04001BISQE/NOPB	3.45	1.5	105	48-LLP	57R6021	21.95
LMK04010BISQE/NOPB	3.45	1.2	110	48-LLP	57R6026	21.95
LMK04033BISQE/NOPB	3.45	1.08	110	48-LLP	19P7824	21.95
FEATURED PRECISION CLOCK CONDITIONER WITH INTEGRATED VCO						
LMK03000CISQ/NOPB	3.45	1.24	400	48-LLP	39M4949	21.10
LMK03033CISQE/NOPB	3.45	200	500	48-LLP	08P4293	21.10
LMK03200ISQE/NOPB	3.45	0.2	800	48-LLP	25R3829	18.31
CLOCK GENERATOR						
CDCM9102RHBT	3.6	0.1	...	32-QFN	94T6062	5.85

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
LMK04000BEVAL	Evaluation Board for LMK04000	55R3724	321.00

(94472)

TIMERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Operating temperature: 0°C to +70°C except **type LMC555**, -40°C to +85°C.

SINGLE TIMERS

Mfg. Part No.	Features	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
LM555CN/NOPB	Astable and Monostable Modes	16	8-DIP	41K6148	1.11
LM555CM/NOPB	Astable and Monostable Modes	16	8-NSOIC	41K6144	1.20
LM555CMX/NOPB	Astable and Monostable Modes	18	8-SO	41K6147	1.00
LMC555CM/NOPB	CMOS, 3MHz Astable Freq. Capability	15	8-NSOIC	41K2562	1.25
LMC555CMX/NOPB	CMOS, 3MHz Astable Freq. Capability	15	8-SO	41K2565	1.04
LMC555CN/NOPB	CMOS, 3MHz Astable Freq. Capability	15	8-MDIP	41K2566	1.30
LMC555CMM/NOPB	Astable and Monostable Modes	15	8-MSOP	41K2563	1.21
DUAL TIMERS					
LM556CM/NOPB	Dual, Astable and Monostable Modes	16	14-SOIC	41K6149	1.70

TIMER CLOCK ICs

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
DP8573AV/NOPB	Real Time Clock	28-PLCC	41K1793	21.74
LM555CMM/NOPB	Timer Clock	8-MSOP	41K6145	0.96

(74774)

CLOCK CIRCUITS

RoHS Compliant Available

TEXAS INSTRUMENTS

CLOCK BUFFERS PLL

Mfg. Part No.	Description	Pkg.	Stock No.	Price Each 1-9	Price Each 10-24
● CDCLVD2102RGTT	Dual 1:2 Low Additive Jitter LVDS Buffer	16-QFN	79R9089	7.33	6.62
● CDCLVD1204RGTT	Low Jitter, 2-Input Selectable 1:4 Universal-to-LVDS Buffer	16-QFN	79R9087	7.01	6.33
● CDCLVC1110PW	Low Jitter, 1:10 LVCMOS Fan-out Clock Buffer	20-TSSOP	79R7916	6.44	5.74
● CDCLVC1106PW	Low Jitter, 1:6 LVCMOS Fan-out Clock Buffer	14-TSSOP	79R7912	4.30	3.83
● CDCLVC1104PW	Low Jitter, 1:4 LVCMOS Fan-out Clock Buffer	8-TSSOP	79R7910	3.46	3.08
● CDCLVC1102PW	Low Jitter, 1:2 LVCMOS Fan-out Clock Buffer	8-TSSOP	79R7906	2.99	2.70
● CDCLVC1112PW	Low Jitter, 1:1 LVCMOS Fan-out Clock Buffer	24-TSSOP	77R3941	6.69	6.04
● CDCVF2505PWR	3.3 V Phased-Lock Loop Clock Driver	8-TSSOP	74C7872	2.51	2.00
● CDCVF25081PW	3.3 V Phased-Lock Loop Clock Driver	16-TSSOP	74C7875	4.12	3.31
● CDCVF857DGG	2.5 V Phased-Lock Loop Clock Driver	48-TSSOP	90H0614	9.13	8.22
● TLC2932AIPW	0 Delay PLL Single Ended Phase-Locked Loop System	14-TSSOP	66K4356	4.68	3.76
● TLC2933AIPW	0 Delay PLL Single Ended High Performance Phase Locked Loop	14-TSSOP	66K4358	4.68	3.76

CLOCK BUFFERS (NON-PLL)

● CDC340DW	1-Line to 8-Line Clock Driver	20-SOIC	52F2637	11.60	10.47
● CDC3RL02YFPR	Dual-Channel Square/Sine-to-Square Wave Clock Buffer	8-DSBGA	53R1371	2.45	2.21
● CDC3S04YFFR	Quad Sine-Wave Clock Buffer with LDO	20-DSBGA	51R1160	4.30	3.83
● CDCLVD1204RGTT	2:4 Low Additive Jitter LVDS Buffer	16-QFN	79R9087	7.01	6.33
● CDCLVD1208RHDT	Low Jitter, 2-Input Selectable 1:8 Universal-to-LVDS Buffer	28-VQFN	91R2080	9.46	8.53
● CDCLVD2104RHDT	Low Jitter, Dual 1:4 Universal-to-LVDS Buffer	28-VQFN	91R2081	9.77	8.82
● CDCLVP110VF	Low Voltage, 1:10 LVPECL/HSTL with Selectable Input Clock Driver	32-LQFP	74C7861	14.52	13.20
● CDCLVP1102RGTT	Low Jitter 1:2 Universal-to-LVPECL Buffer	16-QFN	50R7241	6.16	5.56
● CDCLVP1204RGTT	Low Jitter, 2-Input Selectable 1:4 Universal-to-LVPECL Buffer	16-QFN	50R7242	7.82	7.06
● CDCLVP1208RHDT	Low Jitter, 2-Input Selectable 1:8 Universal-to-LVPECL Buffer	28-QFN	50R9643	10.77	9.78
● CDCLVP1216RGZT	Low Jitter, 2-Input Selectable 1:16 Universal-to-LVPECL Buffer	48-QFN	14R9547	18.35	16.67
● CDCLVP2102RGTT	Low Jitter, Dual 1:2 Universal-to-LVPECL Buffer	16-QFN	50R7243	8.08	7.29
● CDCLVP2104RHDT	Low Jitter, Dual 1:4 Universal-to-LVPECL Buffer	28-QFN	50R9644	10.77	9.78
● CDCVF2310PW	2.5 V to 3.3 V High Performance Clock Buffer	24-TSSOP	34K2395	5.85	5.21
● CDCVF2310PWR	2.5 V to 3.3 V High Performance Clock Buffer	24-TSSOP	74C7869	4.89	4.36

CLOCK GENERATORS

● CDCE913PW	Programmable 1-PLL VCXO Clock Synthesizer	14-TSSOP	58M0317	4.65	4.15
● CDCE925PW	Programmable 2-PLL VCXO Clock Synthesizer	16-TSSOP	53M3257	5.25	4.68
● CDCE937PW	Programmable 3-PLL VCXO Clock Synthesizer	20-TSSOP	61M5157	5.73	5.10
● CDCE949PW	Programmable 2-PLL VCXO Clock Synthesizer	24-TSSOP	50M8835	6.32	5.63
● CDCM61001RHBT	1:1 Ultra Low Jitter Crystal-In Clock Generator	32-QFN	71P5315	6.56	5.85
● CDCM61002RHBT	1:2 Ultra Low Jitter Crystal-In Clock Generator	32-QFN	71P5316	6.80	6.14
● CDCM61004RHBT	1:4 Ultra Low Jitter Crystal-In Clock Generator	32-QFN	71P5317	8.71	7.86
● CDCS502PW	Crystal Oscillator / Clock Generator with Optional SSC	8-TSSOP	45P6554	2.75	2.45

CLOCK SYNTHESIZERS/JITTER CLEANERS

● CDCE18005RGZT	250MHz; Input Type:LVPECL, LVDS, or LVCMOS; Supply Voltage Min:3V; Termination:SMD	48-QFN	34P2008	12.83	11.66
● CDCE62002RHBT	Four Output Clock Generator/Jitter Cleaner with Integrated Dual VCOs	32-QFN	15R0070	14.23	12.93
● CDCE62005RGZT	1.175GHz; Input Type:LVPECL,LVDS,LVCMOS; Supply Voltage Min:3.3V	48-QFN	34P2009	16.20	14.72
● CDCE72010RGCT	10 Outputs 3.3V, 1500MHz Low Jitter Clock Synchronizer and Jitter Cleaner	VQFN	14N4060	19.57	17.78

OFFICE AUTOMATION CLOCKS

● CDCE706PW	Programmable 3-PLL Clock Synthesizer, Multiplier, Divider	20-TSSOP	06M7222	9.24	8.34
● CDCE906PW	Programmable 3-PLL Clock Synthesizer, Multiplier, Divider	20-TSSOP	06M7226	6.32	5.63

➤CONTINUED➤

CLOCK CIRCUITS

(CONT.)

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
CDC3S04EVM	CDC3S04 EVALUATION BOARD	83R9451	152.01
● CDCLVD1204EVM	CDCLVD1204 EVALUATION BOARD	91R0390	152.01
CDCLVD2102EVM	CDCLVD2102 EVALUATION BOARD	91R0391	152.01
● CDCS502PERF-EVM	CDCS502 EVALUATION BOARD	91R0392	101.00
CDCE421AEVM	CDCE421A Evalution Module	11R8325	202.98
● CDCE72010EVM	CDCE72010-10 Evaluation Module; Wireless Base Station Clocks	15N0084	202.98
CDCLVD1213EVM	CDCLVD1213 Evaluation Module	12T2859	152.01
● CDCLVP1102EVM	CDCLVP1102 Evaluation Module	50R8766	151.98
● CDCLVP1208EVM	CDCLVP1208 Evaluation Module	51R1158	152.01
CDCLVP2102EVM	CDCLVP2102 Evaluation Module	50R8767	152.01
● CDCLVP2104EVM	CDCLVP2104 Evaluation Module	51R1159	152.01

(80415)

REAL-TIME CLOCKS

RoHS Compliant Available

TEXAS INSTRUMENTS

MULTIPLEXED

Mfg. Part No.	Description	RTC Bytes	Pkg.	Stock No.	Price Each 1-9
● BQ3287AMT-SB2	RTC Module With 114x8 NVSRAM	14	24-DIP	74C7695	15.71
● BQ3287MT-I	114 x 8 NVSRAM, Alarm Wake-Up	14	24-DIP	74C7698	15.71

PARALLEL

● BQ4802LYPW	Y2K Compliant with CPU Supervisor, External NVSRAM Control	16	28-TSSOP	74C7743	6.38
● BQ4845S-A4N	Parallel RTC with CPU Supervisor	16	28-SOIC	74C7755	6.65

(70335)

TIMER ICS

RoHS Compliant Available

TEXAS INSTRUMENTS

LinCMOS™ timer circuits are fully compatible with CMOS, TTL, and MOS logic and operate at frequencies up to 2MHz. High input impedance means smaller timing capacitors may be used. Sink: 100mA (typ.). Rail-to-rail CMOS output.

551 SERIES

Mfg. Part No.	Description	V_{DD} (V)	Operating Temperature	Pkg.	Stock No.	Price Each 1-9
● TLC551CD	Low Power CMOS Timer	1 to 15	0°C to +70°C	8-SOIC	76C7432	1.57
● TLC551CP	Low Power CMOS Timer	1 to 15	0°C to +70°C	8-DIP	08F9140	1.85

552 SERIES

● TLC552CN	Low Power CMOS Timer	1 to 18	0°C to +70°C	14-DIP	08F9141	2.88

555 SERIES

● NA555D	Precision Timer	5 to 15	-40°C to +105°C	8-SOIC	06M7349	0.45
● NA555P	Precision Timer	5 to 15	-40°C to +105°C	8-PDIP	06M7353	0.48
● TLC555CDG4	Low Power CMOS Timer	2 to 15	0°C to +70°C	8-SOIC	54K1012	0.89
● TLC555CP	Low Power CMOS Timer	2 to 15	0°C to +70°C	8-PDIP	36K2064	0.86
● TLC555ID	Low Power CMOS Timer	3 to 15	-40°C to +85°C	8-SOIC	08F9144	0.96
● TLC555IDR	Low Power CMOS Timer	3 to 15	-40°C to +85°C	8-SOIC	35C2154	0.82
● TLC555IP	Low Power CMOS Timer	3 to 15	-40°C to +85°C	8-PDIP	36K2065	0.93

556 SERIES

● NA556N	Dual Precision Timer	4.5 to 16	-40°C to +105°C	14-PDIP	06M7359	0.66
● TLC556CD	Dual LinCMOS™ Timer	2 to 18	0°C to +70°C	14-SOIC	08F9146	1.52
● TLC556ID	Dual LinCMOS™ Timer	2 to 18	-40°C to +85°C	14-SOIC	76C7456	1.65
● TLC556IN	Dual LinCMOS™ Timer	2 to 18	-40°C to +85°C	14-PDIP	76C7458	1.58

(70336)

LVDS DRIVERS AND RECEIVERS

RoHS Compliant Available

FAIRCHILD

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● FIN1001M5X	LVDS 1-bit High Speed Differential Driver	5-SOT-23	82C2736	0.97
● FIN1002M5X	LVDS 1-bit High Speed Differential Receiver	5-SOT-23	82C2738	0.97
● FIN1104MTC	LVDS 4-port High Speed Repeater	24-TSSOP	82C2772	3.72
● FIN1108MTD	LVDS 8-port High Speed Repeater	48-TSSOP	28H9763	5.67

(88511)

ANALOG INTERFACE - LVDS CIRCUITS

RoHS Compliant Available

TEXAS INSTRUMENTS

MULTI-POINT LVDS CIRCUITS

Mfg. Part No.	Description	Data Rate Max. (Gbps)	Package	Stock No.	Price Each 1-9
DS91C176TMA/NOPB	M-LVDS type 2 Transceiver	200	8-SOIC	99K2043	3.72
DS91D176TMA/NOPB	M-LVDS type 1 Transceiver	200	8-SOIC	99K2048	3.72
DS92001TMA/NOPB	B-LVDS Buffer	400	8-SOIC	41K2134	2.68
DS92LV010ATM/NOPB	B-LVDS Transceiver	155	8-NSOIC	41K2108	3.58
DS92LV090ATVEH/NOPB	9-bit B-LVDS Transceiver	100	64-TQFP	41K2112	11.49

LVDS CIRCUITS

Mfg. Part No.	Description	Function	Package	Stock No.	Price Each 1-9
DS10BR254TSQ/NOPB	1 to 4 Repeater	LVDS Repeater	40-LLP	78M7724	9.16
DS25BR150TSD/NOPB	Low Jitter, Low Power Operation	LVDS Buffer	8-LLP	42M1578	4.87
DS90C124IVS/NOPB	5-35MHz DC-Balanced 24-Bit LVDS Serializer and Deserializer	Serializer	48-TQFP	99K2025	9.86
DS90C241IVS/NOPB	5-35MHz DC-Balanced 24-Bit LVDS Serializer and Deserializer	Serializer	48-TQFP	99K2029	9.86
DS90LV047ATM/NOPB	3V LVDS Quad CMOS Differential Line Driver	Driver	SOIC	41K2093	3.13
DS90CR216MTD/NOPB	Rising Edge Data Strobe LVDS 21-Bit Channel and Link - 66MHz	Receiver	48-TSSOP	41K1991	7.65
DS90CR285MTD/NOPB	Rising Edge Data Strobe LVDS 28-Bit Channel and Link - 66MHz	Transmitter	56-TSSOP	41K2003	8.82
DS90CR288AMTD/NOPB	28-Bit Channel and Link - 85 MHz	Receiver	56-TSSOP	41K2011	10.71
DS90UR124IVS/NOPB	5-43 MHz DC-Balanced 24-Bit	Deserializer	64-TQFP	32M0916	10.18
DS90LV049HMT/NOPB	Dual High Temperature 3V	Receiver/Driver	16-TSSOP	69K2123	2.88
DS91M124TMA/NOPB	1 to 4 Repeater	LVDS Repeater	16-SOIC	40P2711	6.01
DS91M125TMA/NOPB	1 to 4 Repeater	LVDS Repeater	16-SOIC	40P2712	6.01

LVDS CROSSPOINT SWITCHES

Mfg. Part No.	Description	Function	Package	Stock No.	Price Each 1-999
DS25CP104ATSQ/NOPB	3.125 Gbps 4x4 LVDS Crosspoint Switch with Transmit Pre-Emphasis and Receive Equalization	Crosspoint Switch	40-LLP	12P9270	15.35

(70658)

SERIALIZER AND DESERIALIZER ICs

RoHS Compliant Available

TEXAS INSTRUMENTS

SINGLE CHANNEL 24-BIT SERIALIZER/DESERIALIZER WITH LVDS INTERFACE

Mfg. Part No.	Description	Data Rate Max. (Mbps)	Package	Stock No.	Price Each 1-9
DS90UR124QVS/NOPB	Deserializer	1032	64-TQFP	11N9010	10.18
DS90UR241QVS/NOPB	Serializer	1032	48-TQFP	11N9012	10.18

MULTI-CHANNEL 28-BIT SERIALIZER/DESERIALIZER

DS90CR288AMTD/NOPB	Receiver	595	56-TSSOP	41K2011	10.71

(113795)

ECLinPS LITE TRANSLATORS

RoHS Compliant Available

ON Semiconductor

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
MC10ELT20DG	TTL/Differential PECL Translator	8-SOIC	88H4693	4.20
MC100ELT20DG	TTL/Differential PECL Translator	8-SOIC	26K3803	4.52
MC100ELT20DTG	5V TTL to Diff. PECL Translator	8-TSSOP	26K3804	4.20
MC10ELT21DG	Differential PECL/TTL Translator	8-SOIC	98H0610	4.20
MC100ELT21DTG	5V Diff. PECL to TLL Translator	8-TSSOP	26K3805	4.20
MC100ELT21DG	Differential PECL/TTL Translator	8-SOIC	71J5392	4.52
MC10ELT22DG	Dual TTL/Diff. PECL Translator	8-SOIC	98H0611	4.20
MC100ELT22DG	Dual TTL/Diff. PECL Translator	8-SOIC	98H0628	4.20
MC100ELT23DG	Dual Diff. PECL/TTL Translator	8-SOIC	98H0629	4.52
MC100ELT23DTG	5V Dual Diff. PECL to TTL Trans.	8-TSSOP	26K3808	4.52
MC10ELT24DG	TTL/Differential ECL Translator	8-SOIC	88H4695	4.20
MC100ELT24DTG	5V TTL to Diff. ECL Translator	8-TSSOP	26K3811	4.52
MC10ELT25DTG	-5V Diff. ECL to TTL Translator	8-TSSOP	42K0043	4.52

CONTINUED

ECLinPS LITE TRANSLATORS (CONT.)

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
MC10ELT25DG	Differential ECL/TTL Translator	8-SOIC	88H4696	4.52
MC100ELT25DTG	-5V Diff. ECL to TTL Translator	8-TSSOP	26K3813	4.52
MC10ELT28DG	TTL to Diff. PECL/Diff. PECL to TTL Translator	8-SOIC	26K3714	6.25
MUR140G	-5V Diff. ECL to TTL Translator	DO-41AD	42K1604	0.41
MUR220G	TTL/Differential PECL Translator	8-SOIC	42K1618	0.50
MUR4100EG	5V Dual TTL to Diff. PECL Trans.	DO-201AD	42K1627	0.72

LOW-VOLTAGE

MC100LVELT22DG	Dual TTL/Diff. PECL Translator	8-SOIC	45J0984	4.52

(39170)

AUDIO ICS

RoHS Compliant Available

International IOR Rectifier

Applications:

- Home theater systems
- Mini component stereo systems
- Powered speaker systems
- General purpose audio power amplifiers

Mfg. Part No.	Offset Voltage (V)	I_0+/- (mA)	Package	Stock No.	Price Each 1-9
IRS2092PBF	15	1000/1200	16-PDIP	02P2146	6.04
IRS2092SPBF	15	1000/1200	16-SOIC	08N6382	4.72
IRS20124SPBF	200	1200/1000	14-SOIC	58K5831	6.11
IRS20957SPBF	100	1000/1200	16-SOIC	51P1630	3.57

(89405)

AUDIO AMPS, CONTROLS AND VIDEO CIRCUITS

RoHS Compliant Available

TEXAS INSTRUMENTS

AUDIO POWER AMPLIFIERS

Mfg. Part No.	Supply Voltage (V)	S/N Ratio (dB)	Package	Stock No.	Price Each 1-9
LM380N/NOPB	...	...	14-DIP	41K5037	1.55
LM384N/NOPB	26	...	14-DIP	41K5062	2.27
LM1875T/NOPB	60	...	5-TO-220	41K3523	3.08
LM1876TF/NOPB	22	...	15-TO-220	41K3525	6.78
LM386M-1/NOPB	12	...	8-NSOIC	41K5099	1.04
LM386MX-1/NOPB	12	...	8-NSOIC	41K5101	0.99
LM386N-1/NOPB	12	...	8-DIP	41K5102	0.99
LM386N-3/NOPB	12	...	8-DIP	41K5103	1.02
LM386N-4/NOPB	18	...	8-DIP	41K5104	1.02
LM3875TF/NOPB	84	95	11-TO-220	41K5106	6.83
LM3876T/NOPB	84	98	11-TO-220	41K5107	7.03
LM3886T/NOPB	84	92	11-TO-220	41K5109	6.60
LM3886TF/NOPB	84	92	11-TO-220	41K5110	6.60
LM4765T/NOPB	66	...	15-TO-220	41K5588	6.73
LM4766T/NOPB	30	100	15-TO-220	41K5589	6.47
LM4811MM/NOPB	5	106	8-MSOP	41K5617	1.14
LM4860M/NOPB	5	98	16-SO	41K5732	1.86
LM4861M/NOPB	5	98	8-SOIC	41K5734	2.11
LM4861MX/NOPB	5	98	8-SO	41K5735	1.76
LM4871M/NOPB	5	98	8-SOIC	41K5780	1.72
LM4871MM/NOPB	5.5	98	8-SO	41K5781	1.43
LM4871MX/NOPB	5.5	98	8-SO	41K5783	1.43
LM4880M/NOPB	5	...	16-NSOIC	41K5816	1.70
LME49860NA/NOPB	22	20	8-PDIP	53M0338	2.99
LME49860MA/NOPB	22	20	8-SOIC	48M4538	3.58
LME49710MA/NOPB	36	...	8-NSOIC	32M0934	2.35
LME49720MA/NOPB	36	...	8-SOIC	42M1579	3.15
LM833M/NOPB	36	...	8-NSOIC	41K6409	0.96
LM833N/NOPB	36	...	8-DIP	41K6413	0.97
LME49811TB/NOPB	200	...	15-TO-247	64M6879	5.97
LM48411TL/NOPB	5.5	...	16-SMD	64M7026	1.57
LME49870MA/NOPB	22	...	8-SOIC	64M6880	2.61
LM4562HA/NOPB	34	...	8-TO-99	32M1173	7.44
LM4562MA/NOPB	34	...	8-NSOIC	32M1175	3.15
LM4562NA/NOPB	17	...	8-MDIP	32M1177	2.99
LM4702BTA/NOPB	100	...	15-TO-220	32M1186	12.92
LM4889MA/NOPB	5.5	...	8-SOIC	41K5837	1.66
LM4890MM/NOPB	5.5	...	8-SOIC	41K5848	1.26
LM4702CTA/NOPB	75	...	15-TO-220	69K2549	13.58
LME49722MA/NOPB	18	...	8-SOIC	95M8822	3.72
LME49724MR/NOPB	2.5	...	8-SOIC	04R8948	3.15

CONTINUED

AUDIO AMPS, CONTROLS AND VIDEO CIRCUITS (CONT.)

AUDIO CONTROLS

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● LM1036N/NOPB	Dual DC-Operated Tone	20-DIP	41K3358	2.72

ANALOG VIDEO AMPLIFIER SYSTEMS

Mfg. Part No.	Supply Voltage (V)	Pixel Clock (MHz)	Package	Stock No.	Price Each 1-9
● LMH6715MA/NOPB	5	...	8-SOIC	41K2878	2.84

ANALOG FLAT PANEL DISPLAY LINKS

Mfg. Part No.	Supply Voltage (V)	Pixel Clock (MHz)	Package	Stock No.	Price Each 1-9
● DS90C385AMT/NOPB	3.6	18-87.5	56-TSSOP	41K2043	5.44
● DS90CF364AMTD/NOPB	3.6	65	48-TSSOP	41K1941	6.65
● DS90C363BMT/NOPB	3.6	20-65	48-TSSOP	41K2033	5.58

VIDEO IC

Mfg. Part No.	Package	Stock No.	Price Each 1-9
● DS90C385AMT/NOPB	56-TSSOP	41K2043	5.44
● LMH0034MA/NOPB	16-SOIC	99K2256	20.31

AUDIO CODEC

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● TP3070V-G/NOPB	Combo II Programmable PCM Codec/Filter	28-PLCC	41K8465	11.95
● LM4550BVH/NOPB	AC '97 Rev 2.1 Multi-Channel Audio Codec w/ Stereo Headphone Amp, Sample Rate Conv. & National 3D Sound	48-LQFP	69K2544	8.10

AUDIO BUFFER

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● LME49600TS/NOPB	High Performance, High Fidelity, High Current Audio Buffer	5-TO-263	84M8021	5.49

* Isolated; † SOIC Wide package; ‡ SOIC Narrow package
(71117)

AUDIO CLOCKS, CONVERTERS AND CODECs

RoHS Compliant Available

TEXAS INSTRUMENTS

AUDIO A/D CONVERTERS 24-BIT

Mfg. Part No.	# ADCs	Sampling Rate	Power Dissipation Max. (mW)	Package	Stock No.	Price Each 1-9
● PCM1803ADB	2		55	20-SSOP	40K8040	3.13
● PCM1804DB	2		225	28-SSOP	36K7583	6.27

AUDIO D/A CONVERTERS 16-BIT

Mfg. Part No.	# DACs	Sampling Rate (kSPS)	Power Dissipation Max. (mW)	Package	Stock No.	Price Each 1-249
● PCM2704DB	2	48	175	28-SSOP	73H4312	7.12
● PCM2705DB	2	192	175	28-SSOP	82H5166	7.12

AUDIO D/A CONVERTERS 24-BIT

● PCM1794ADB	1	768	205	28-SSOP	54K0199	16.14
● PCM1704U-K	2	96	175	20-SOP	75C5306	80.52
● PCM1741E	2	96	43	16-SSOP	75C5335	6.09
● PCM1789PW	2	192	154	24-TSSOP	19P7476	4.77
● DF1704E	2	192	100	28-SSOP	34K3368	35.26
● PCM1798DB	2	192	115	28-SSOP	90H2300	6.82
● PCM4104PFBT	4	192	200	48-TQFP	01J0620	10.71

AUDIO CODECS 13-BIT

Mfg. Part No.	ADC/ DACs	Sample Rate	Pwr Disp. Max. (mW)	Package	Stock No.	Price Each 1-9
● TLV320AIC1106PW	1 / 1		13.5	20-TSSOP	61H5491	7.25

AUDIO CODECS 15-BIT

● TLV320AIC1110PBS	1 / 1		12	32-TQFP	76C8707	7.63

AUDIO CODECS 16-BIT

● PCM2912PJT	2 / 1		425	32-TQFP	84M9692	10.49

AUDIO CODECS 24-BIT

● TLV320AIC23BPW	2 / 2		23	28-TSSOP	22H1265	8.97
● TLV320AIC23BIPW	2 / 2		11.2	28-TSSOP	32H6514	9.88
● TLV320AIC23BIPWR	2 / 2		11.2	28-TSSOP	32H6515	8.37
● TLV320AIC23BRHDR	2 / 2		11.2	28-QFN	61H5496	7.48
● TLV320AIC31IRHBT	2 / 2		11.2	32-QFN	70K5542	10.10
● TLV320AIC3107IRSBT	2 / 2		14	40-QFN	33P9829	4.31

CONTINUED

AUDIO CLOCKS, CONVERTERS AND CODECs (CONT.)

AUDIO CODECS 24-BIT

Mfg. Part No.	ADC/ DACs	Sample Rate	Pwr Disp. Max. (mW)	Package	Stock No.	Price Each 1-9
● TLV320AIC33IRGZR	2 / 2		14	48-QFN	81K4100	7.33
● PCM3168APAP	8 / 6		1160	64-HTQFP	33P9825	10.86

AUDIO CODECS 32-BIT

● TLV320AIC3204IRHBR	2 / 2		4.1	32-QFN	09P8706	5.37
● TLV320AIC3254IRHBR	2 / 2		4.1	32-QFN	12P6263	8.39
● PCM3070IRHBT	4 / 4	192 kSPS	136	32-QFN	32T2990	6.91
● TLV320AIC3256IRSBT	2 / 2	192	...	40-QFN	43W4736	10.41
● TLV320AIC3262IYZFT	2 / 2	192	...	81-WCSP	94T6068	10.67

EVALUATION MODULES

Mfg. Part No.	Description	Stock No.	Price Each
PCM4222EVM	PCM4222 Evaluation Module	41M3903	152.01
TLV320AIC3111EVM-K	TLV320AIC3111 Evaluation Module	50R8001	151.98
● TLV320AIC33EVM-PDK	TLV320AIC33 Evaluation Module (EVM) and USB motherboard	75K1591	151.98
TLV320AIC1106EVM-K	TLV320AIC1106 Complete Evaluation/Demonstration Kit	25T0269	203.00
TLV320AIC1110EVM-K	TLV320AIC1110 Complete Evaluation/Demonstration Kit	25T0271	203.00

(74637)

AUDIO CODECS

RoHS Compliant Available

wolfson microelectronics

12-BIT AUDIO CODECS

Mfg. Part No.	ADC/DACs	Update Rate (kHz)	Supply Voltage (V)	Package	Stock No.	Price Each 1-49
● WM8352GEB/V	2	48	1.71 to 3.6	129-BGA	52R3766	12.00

24-BIT AUDIO CODECS

● WM8510GEDS/RV	1	48	1.71 to 3.6	28-SSOP	52R3767	3.14
● WM8974CGEFL/RV	1	48	1.71 to 3.6	24-QFN	52R8746	3.59
● WM8940CGEFL/RV	1	48	1.71 to 3.6	24-QFN	52R3788	3.73
● WM8750CLSEFL/R	2	96	1.42 to 3.6	32-QFN	52R3777	4.18
● WM8731SEDS/RV	2	96	1.42 to 3.6	28-SSOP	52R8742	3.49

(164646)

AUDIO CONVERTERS AND CODECs

RoHS Compliant Available

wolfson microelectronics

AUDIO A/D CONVERTERS

Mfg. Part No.	#ADCs	Sampling Rate	Supply Voltage (V)	Package	Stock No.	Price Each
● WM8737CLGEFL/R	2		1.8 to 3.6	32-QFN	52R3774	3.13
● WM8782SEDS/RV	2		2.7 to 5.5	20-SSOP	52R3785	3.08

AUDIO D/A CONVERTERS

Mfg. Part No.	#DACs	Update Rate (kSPS)	Supply Voltage (V)	Package	Stock No.	Price Each 1-49
● WM8716SEDS/RV	2	192	2.97 - 5.5	28-SSOP	52R8741	5.37
● WM8740SEDS/RV	2	192	2.97 - 5.5	28-SSOP	52R8743	6.58
● WM8726CGED/RV	2	192	3 - 5.5	14-SOIC	52R3773	2.09
● WM8741GEDS/RV	2	192	3 - 5.5	28-SSOP	52R3775	19.79

(164485)

AUDIO SPEAKER DRIVERS

RoHS Compliant Available

wolfson microelectronics

Applications:
- Mobile phones
- Laptop computers and portable gaming devices
- Portable navigation & media devices

The **WM9001** is a powerful, high quality speaker driver which can operate in class D or AB mode, providing total flexibility to the system designer. Low leakage, high PSRR and pop/click suppression enable direct battery connection to the speaker supply. RF noise suppression techniques and differential design are used to suppress undesired noise. A single-ended input option has been included for complete system flexibility

Mfg. Part No.	Operating Temperature Range	Supply Voltage (V)	Load Impedance (Ohms)	Package	Stock No.	Price Each 1-49
● WM9001GEFL/R	-40°C to +85°C	2.7 to 3.6	8	16-QFN	52R3796	1.29

(164645)

VIDEO ICs

RoHS Compliant Available

ANALOG DEVICES

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
ADV212BBCZ-150	Video Codec	144-BGA	28M3952	47.54
ADDI7100BCPZ	12-Bit CCD Signal Processor	32-LFCSP	86T6055	11.19

The **ADV7179 series** is an integrated digital encoder that converts digital CCIR-601 4:2:2 8-bit component video data into a standard analog baseband television signal compatible with worldwide standards. The **ADV7311/7321 series** include six high-speed NSV video D/A converters with TTL compatible inputs. The **AD725 series** is a general purpose RGB to NTSC/PAL encoder that converts red, green, and blue color component signals into their corresponding luminance and chrominance signals in accordance with either NTSC or PAL standards.

ENCODERS

Mfg. Part No.	Resolution (Bits)	Number of DACs	Supply Voltage Max (V)	Package	Stock No.	Price Each 1-9
AD725ARZ	...	...	5.25	16-SOIC	19M8834	9.39
ADV7171KSUZ	10-Bit	4	5.25	44-TQFP	82H2833	10.58
ADV7179BCPZ	10-Bit	3	3.6	40-LFCSP	19M8777	13.43
ADV7393BCPZ	10-Bit	3	1.89	40-LFCSP	21M5538	10.76

The **ADV7180/7189 series** automatically detect and convert standard analog baseband television signals compatible with worldwide NTSC, PAL, and SECAM standards into 4:2:2 component video data compatible with the 8-bit ITU-R BT.656 interface standard (**ADV7180**) and the 20-/16-/10-/8-bit CCIR601/CCIR656 interface standard(**ADV7189**).

DECODERS

Mfg. Part No.	Resolution	Input Channels	Supply Voltage Max (V)	Package	Stock No.	Price Each 1-9
ADV7180BCPZ	10-Bit	6	1.89	40-LFCSP	19M0776	12.96
ADV7180BSTZ	10-Bit	6	1.89	64-LQFP	19M0777	14.94
ADV7188BSTZ	12-Bit	12	3.6	80-LQFP	59K3344	27.48
ADV7403KSTZ-140	12-Bit	12	3.6	100-LQFP	59K3367	40.47

EVALUATION BOARDS

Type	Description	Stock No.	Price Each
EVAL-ADV7181DEBZ	ADV7181 9-Bit Video Decoder Evaluation Kit	82T3805	562.50

(89801)

VIDEO FILTERS

RoHS Compliant Available

FAIRCHILD

VIDEO FILTERS

Type	Input/Output Format	Channels	Cutoff Freq. (MHz)	Package	Stock No.	Price Each 1-9
FMS6143CSX	Composite, RGB, YC, YUV	3	8	8-SOIC	31K6805	0.43
FMS6406CSX	Composite, YC	2	7.1	8-SOIC	31K6809	1.90
FMS6203MTC1406X	Composite, RGB, YC, YUV	3	8,15,30	14-TSSOP	86K1478	1.90
FMS6363CSX	Composite, RGB, YC, YUV	3	30	8-SOIC	43K6904	0.67

(83586)

DISPLAY DRIVERS

RoHS Compliant Available

intersil

Mfg. part no. ICM7211AM has Code B font (0-9, H, E, L, P, -, and blank). Comes in 40-pin plastic DIP. **Mfg. part no. ICML7218** features 3 decode formats and drive up to 64 independent LEDs. Includes 8 x 8 memory, multiplexed LED drivers, encoders, interface and control. Compatible with both hexadecimal and Code B fonts. Comes in 28-pin ceramic DIP. **Mfg. part no. ICM7243B** can be daisy-chained or cascaded. Has ASCII font. Comes in 40-pin DIP.

Mfg. Part No.	7-Segment Digits	Display Type	Interface*	Cycle Time (ns)	Stock No.	Price Each 1-24
ICM7211AMIPLZ	4	LCD Direct Drive	Random Access	200	79K6927	3.81
ICM7228CIPIZ	8	LED Common Anode Drive	Access	200	79K6932	6.86

* Mux BCD = BCD + digital select strobes; Random Access = data + address + WR

** 8 Alphanumeric characters + decimal point

(72293)

EMBEDDED DESIGN TOOLS

IDEs, Compilers, Debuggers and programming tools for all your MCU/DSP/FPGA needs.

newark.com/dev-tools-software

(196530)

VIDEO SYNC SEPARATORS

RoHS Compliant Available

intersil

Mfg. Part No.	Features	Composite Prop Delay (ns)	Supply Current (mA)	Package	Stock No.	Price Each 1-24
EL1883ISZ*	NTSC, PAL, SECAM, Horiz. Output	30	1.2	8-SOIC	61J5568	3.59
EL4511CUZ	HDTV/DTV, Tri and Bi-Level auto sync.	30	20	24-QSOP	11J8498	9.45
EL4581CSZ	NTSC, PAL, SECAM, 50% Slice, S-H, Filter	260	1.7	8-SOIC	11J8501	7.25
EL4583CSZ	NTSC, PAL, SECAM, Low Power	250	2.5	16-SOIC	57K3172	11.38

* Extended temperature version.

(80236)

32-SEGMENT CMOS LCD DRIVERS

RoHS Compliant Available

MICROCHIP

Features:

- Drives up to 32 LCD Segments of Arbitrary Configuration
- Voltage Range: +3V to +8.5V
- Low-Power Operation: 13µA Typical LCD OSC> 100Hz
- CMOS and TTL-Compatible Inputs
- Electrostatic Discharge Protection on All Pins
- Cascadable
- On-Chip Oscillator
- Requires Only 3 Control Lines

Driver latches the data to be displayed and relieves the microprocessor from the task of generating the required waveforms. The AC frequency of the LCD waveforms can either be supplied by the user or generated by attaching a capacitor to the LCD input, which controls the frequency of an internal oscillator. Applications include: industrial displays, consumer product displays, telecom product displays, and automotive dashboard displays.

Mfg. Part No.	Operating Temperature	Package	Stock No.	Price Each 1-25
AY0438-I/L	-40°C to +85°C	44-Lead PLCC	96K3651	4.96
AY0438-I/P	-40°C to +85°C	40-Pin PDIP	12C1751	3.50
AY0438/P	0°C to +70°C	40-Pin PDIP	23C2747	3.33

(68802)

TOUCH SCREEN CONTROLLERS

RoHS Compliant Available

MICROCHIP

Applications:

- Mobile communication devices
- Personal Digital Assistants (PDA)
- Global Positioning Systems (GPS)
- Touch Screen Monitors
- KIOSK
- Media Players
- Portable Instruments
- Point of Sale Terminals

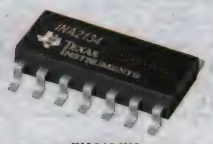
Mfg. Part No.	Supply Voltage (V)	Interface	Package	Stock No.	Price Each 1-25
AR1010-I/SO	3.3 - 5	UART	20-SOIC	24R5596	1.82
AR1010-I/SS	3.3 - 5	UART	20-SSOP	24R5597	1.67
AR1020-I/ML	3.3 - 5	I2C, SPI	20-QFN	24R5601	1.92
AR1020-I/SO	3.3 - 5	I2C, SPI	20-SOIC	24R5602	1.82
AR1020-I/SS	3.3 - 5	I2C, SPI	20-SSOP	24R5603	1.67

(178364)

AUDIO AND VIDEO ICs

RoHS Compliant Available

TEXAS INSTRUMENTS



INA2134UA

DIFFERENTIAL LINE RECEIVER

Mfg. Part No.	Description	Pkg	Stock No.	Price Each 1-9
INA134PA	With On-Chip High-Performance Amp & Precision Resistors, 0dB Gain	8-DIP	88K1115	2.89
INA137UA	on-chip precision resistors, low-distortion	8-SOIC	80K5905	3.10
INA134UA	Professional Line Receiver, G=1, ±4V ±18V Supply, 3.1MHz BW	8-SOIC	80K5904	3.10
INA137UA	Professional Line Receiver, G=1/2 or 2, ±4V ±18V Supply, 4.0MHz BW	8-SOIC	80K5905	3.10
INA2134UA	Dual, Professional Line Receiver, G=1, ±4V ±18V Supply, 3.1MHz BW	14-SOIC	35C1748	4.89

DIFFERENTIAL LINE DRIVER

DRV134PA	Professional Line Transmitter, ±4.5V to ±18V Supply, 1.2MHz BW	8-DIP	93K7535	5.35
DRV134UA	Professional Line Transmitter, ±4.5V to ±18V Supply, 1.2MHz BW	16-SOIC	80K5822	5.61
DRV135UA	Professional Line Transmitter, ±4.5V to ±18V Supply, 1.2MHz BW	8-SOIC	80K5823	5.61

DIGITAL AUDIO INTERFACE CONTROLLER

TAS1020BPFB	USB, MCU, DMA Controller, Codec Port Interface	48-TQFP	76C5956	9.55

CONTINUED

AUDIO AND VIDEO ICs (CONT.)

VIDEO DIGITAL TO ANALOG CONVERTERS

Mfg. Part No.	Description	Pkg	Stock No.	Price Each 1-9
● THS8200PFP	Support for all ATSC video formats (including 1080P) & PC graphics formats.	80-HTQFP	75K9017	8.30

DIGITAL AUDIO RECEIVER

● DIR9001PW	One-Chip Digital Audio Interface Receiver(DIR) Including Low-Jitter Clock-Recovery System	28-TSSOP	26M9173	5.16

DIGITAL AUDIO TRANSMITTER

● DIT4192IPW	192kHz, Hardware Mode Allows Operation without a Microcontroller	28-TSSOP	74C9511	5.73

DIGITAL AUDIO INTERFACE TRANSCEIVER

● DIX9211PTR	216kHz, Allows multiplexing of other audio receivers w/the analog and S/PDIF signals to a digital signal processor (DSP)	48-LQFP	01T0044	9.03

SAMPLE RATE CONVERTERS

● SRC4184IPAG	192kHz, Ultra Low Distortion, Wide Input-to-Output Sampling Ratio	64-TQFP	44J1804	14.04

STEREO HEADPHONE DRIVERS

● TPA6120A2DWP	HI-FI, Current Feedback Architecture, Short Circuit, and Thermal Protection	20-SOIC	01J0948	5.97

VIDEO DECODERS

● TVP5146M2PFP	10-Bit High Quality Single Chip Digital Video Decoder	80-TQFP	54K1946	8.80
● TVP5146PFP	10-Bit, Supports NTSC (J, M, 4.43), PAL (B, D, G, H, I, M, N, Nc, 60) & SECAM (B, D, G, K, K1, L) CVBS, S-video	80-HTQFP	82H5901	9.08

MULTI-CHANNEL LCD GAMMA CORRECTION BUFFERS

● BUF08630RGWT	Programmable Gamma-Voltage Generator, Adjustable Gain, ½ AVDD Topology	20-VQFN	13T1946	5.49

VIDEO AMPLIFIERS AND BUFFERS

● THS7364IPWR	6-Ch Video Amp w/ 3-SD & 3-Full-HD Filters & 6-dB Gain	20-TSSOP	91R0766	2.38
● THS7368IPW	6-Ch Video Amp w/ 3-SD & 3-SD/ED/HD/Full-HD Filters & 6-dB Gain	20-TSSOP	60R2431	3.06
● THS7373IPW	4-Channel Video Amplifier with 1-SD & 3-HD Sixth-Order Filters and 6-dB Gain	14-TSSOP	60R2432	2.23
● THS7374IPW	4-Ch SDTV (Component and Composite) Video Amplifier w/9.5MHz Filters & 6dB Gain	14-TSSOP	01P3285	2.20

VIDEO SWITCHES

● TS3DV20812RHHR	2-Gbps Differential Switch 8-Bits	36-VQFN	79R9093	1.88
● TS3V712ELRTGR	7-Channel, 1:2 Video Switch w/Integrated Level Shifters	32-WQFN	01T0904	4.18
● TS3V713ELRTGR	7-Channel, 1:2 Video Switch w/Integrated Level Shifters	32-WQFN	21T4351	3.34

FIXED GAIN

● BUF602ID	High Speed, Closed Loop Buffer	8-SOIC	67K7911	2.97
● BUF602IDBVT	High Speed, Closed Loop Buffer	5-SOT-23	67K7913	2.86
● BUF634T	250mA High-Speed Buffer	5-TO-220	04M8376	9.77
● BUF634U	250mA High-Speed Buffer	8-SOIC	27C6567	8.92
● BUF634P	250mA High-Speed Buffer	8-DIP	80K5714	8.56
● OPA3693IDBQ	Triple, Ultra-Wideband, Fixed Gain, Video Buffer with Disable	16-QSOP	27M0442	7.08
● OPA633KP	High Speed Buffer Amplifier	8-DIP	17M7509	11.70

DEVELOPMENT TOOLS

Mfg. Part No.	Description	Stock No.	Price Each
● THS7360EVM	THS7360 Evaluation Module	91R2091	152.01
BUF08630EVM	BUF08630 Evaluation Module	24T4557	152.01
● THS7364EVM	THS7364 Evaluation Module	91R0395	152.01

(65577)

TOUCH SCREEN CONTROLLERS

RoHS Compliant Available

TEXAS INSTRUMENTS

CONTROLLER ONLY

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● ADS7843E	4-Wire Touch-Screen Controller	16-SSOP	35C1556	5.32
● ADS7845E	5-Wire Touch-Screen Controller	16-SSOP	35C1560	10.73
● ADS7846E	4-Wire Touch-Screen Controller	16-SSOP	35C1561	5.85
● TSC2003IPWR	4-Wire Resistive Touch Screen Controller	16-TSSOP	22H1447	5.37
● TSC2005IYZLT	4-Wire Nano-Power Touch Screen Controller w/ SPI Serial Interface	28-DSBGA	27M1130	4.42
● TSC2007IPW	4-Wire Nano-Power Touch Screen Controller w/ I2C Serial Interface	16-TSSOP	37M0087	4.93
● TSC2014IYZGT	4-Wire Touch Screen Controller with I2C	12-DSBGA	01T0901	3.58

➤CONTINUED➤

TOUCH SCREEN CONTROLLERS (CONT.)

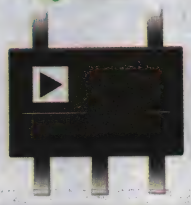
Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● TSC2020IRTVT	Analog Matrix Touch Screen Controller w/ I2C Serial Interface for 3×5 Array	32-QFN	37T9625	8.75
● TSC2046IRGVT	4-Wire Touch Screen Controller w/ low voltage digital I/O	16-QFN	34H2508	2.88
● TSC2046EIPW	4-Wire Touch Screen Controller w/ low voltage digital I/O	16-TSSOP	52M6177	2.63
● TSC2046IPWR	4-Wire Touch Screen Controller w/ low voltage digital I/O	16-TSSOP	34H2506	2.38

(72258)

LDO VOLTAGE REGULATORS

RoHS Compliant Available

ANALOG DEVICES



LDO FIXED POSITIVE

Mfg. Part No.	Output Voltage (V)	Output Current Max (A)	Dropout Voltage (mV)	Supply Voltage Max (V)	Package	Stock No.	Price Each 1-9
● ADP322ACPZ-135-R7	3.3	0.2	110	5.5	16-LFCSP	18T2037	1.51
● ADP322ACPZ-145-R7	3.3	0.2	110	5.5	16-LFCSP	23T4167	1.51
● ADP322ACPZ-155-R7	3.3	0.2	110	5.5	16-LFCSP	18T2038	1.51
● ADP1720ARMZ-5-R7	5	0.05	275	28	8-MSOP	41M1922	1.80
● ADP1720ARMZ-3.3-R7	3.3	0.05	275	28	8-MSOP	41M1921	1.73
● ADP1715ARMZ-1.8-R7	1.8	0.5	250	5.5	8-MSOP	28M3817	1.35
● ADP3339AKCZ-5-R7	5	1.5	230	6	3-SOT-223	12M8170	3.96
● ADP3339AKCZ-1.8-R7	1.8	1.5	230	6	3-SOT-223	61M4001	4.01
● ADP3367ARZ	5	0.3	300	16.5	8-SOIC	59K2629	4.44
● ADP3338AKCZ-1.8-R7	1.8	1	190	8	3-SOT-223	59K2616	2.85
● ADP3338AKCZ-2.5RL7	2.5	1	190	8	3-SOT-223	19M8719	2.78
● ADP3339AKCZ-2.5-R7	2.5	1.5	230	6	3-SOT-223	12M8166	4.01
● ADP1715ARMZ-3.0-R7	3	0.5	250	5.5	8-MSOP	28M3819	2.31
● ADP3301ARZ-3	3	0.1	100	12	8-SOIC	12M8143	2.45
● ADP150AUJZ-3.0-R7	3	0.3	105	5.5	5-TSOT	24W8479	0.98
● ADP3301ARZ-3.2	3.2	0.1	100	12	8-SOIC	12M8144	2.70
● ADP3301ARZ-3.3	3.3	0.1	100	12	8-SOIC	12M8145	2.45
● ADP150ACBZ-3.3-R7	3.3	0.15	105	5.5	4-WLCSP	60R3275	0.98
● ADP1715ARMZ-3.3-R7	3.3	0.5	250	5.5	8-MSOP	28M3820	1.35
● ADP122AUJZ-3.3-R7	3.3	0.3	85	5.5	5-TSOT	60R3274	1.12
● ADP150ACBZ-3.3-R7	3.3	0.3	105	5.5	4-WLCSP	60R3275	0.98
● ADP150AUJZ-3.3-R7	3.3	0.3	105	5.5	5-TSOT	60R3276	1.01
● ADP3330ARTZ3.3-RL7	3.3	0.2	140	12	6-SOT-23	12M8152	2.34
● ADP3303ARZ-3.3	3.3	0.2	180	12	8-SOIC	59K2583	2.83
● ADP3338AKCZ-3.3RL7	3.3	1	190	9	3-SOT-223	19M8720	2.78
● ADP3339AKCZ-3.3-R7	3.3	1.5	230	6	3-SOT-223	12M8168	3.96
● ADP3301ARZ-5	5	0.1	100	12	8-SOIC	59K2578	2.55
● ADP3303ARZ-5	5	0.2	150	12	8-SOIC	19M8716	2.83
● ADP3338AKCZ-5-R7	5	1	190	10	3-SOT-223	19M8721	2.89

LDO ADJUSTABLE POSITIVE

Mfg. Part No.	Adj. V_{OUT} (V) Min	Adj. V_{OUT} (V) Max	I_O Max (mA)	V_{DROP} (mV)	Supply Voltage Max (V)	Package	Stock No.	Price Each 1-9
● ADP1710AUJZ-R7	0.8	5	150	150	5.5	5-TSOT	63W5347	1.30
● ADP667ARZ	1.3	16	250	250	16.5	8-SOIC	59K2649	4.19
● ADP1715ARMZ-R7	0.75	5	0.5	250	5.5	8-MSOP	28M3805	2.40
● ADP7102ACPZ-R7	1.22	11.8	0.3	200	20	8-LFCSP	92T3197	3.38
● ADP7102ARDZ-R7	1.22	11.8	0.3	200	20	8-SOIC	82T5465	4.04
● ADP7104ARDZ-R7	1.22	11.75	0.5	350	20	8-SOIC	82T5466	4.77
● ADP3334ARZ	1.5	10	0.5	200	11	8-SOIC	19M8718	2.42
● ADP3331ARTZ-REEL7	1.5	11.75	0.14	200	16	6-SOT-23	19M8717	2.37
● ADP123AUJZ-R7	0.8	5	0.3	85	5.5	5-TSOT	12T2968	1.10
● ADP3336ARMZ-REEL7	1.5	10	500	200	12	8-MSOP	96K2076	2.66
● ADP323ACPZ-R7	0.5	5	0.2	110	5.5	16-LFCSP	18T2040	1.51
● ADP667ANZ	1.3	16	0.25	150	16.5	8-DIP	59K2648	4.39

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
● ADP130-2.5-EVALZ	ADP130 Evaluation Board	07P8897	75.00
● ADP1706-3.3-EVALZ	ADP1706 Evaluation Board	89M4994	75.90
● ADP1707-3.3-EVALZ	ADP1707 Evaluation Board	61M3970	75.90
● ADP1708-EVALZ	ADP1708 Evaluation Board	61M3971	75.90

➤CONTINUED➤

LDO VOLTAGE REGULATORS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
ADP1720-5-EVALZ	ADP1720 Evaluation Board	61M3975	75.90
ADP1741-EVALZ	ADP1741 Evaluation Board	71P7840	75.00
ADP123-EVALZ	ADP123 Adj. Output Evaluation Board	63R9743	75.00
ADP150CB-3.3-EVALZ	ADP150 Evaluation Board	58R3875	75.00
ADP1720-EVALZ	ADP1720 Evaluation Board	54M6714	75.90
ADP1740-1.5-EVALZ	ADP1740 Evaluation Board	90T1347	56.25

(89802)

LDO VOLTAGE REGULATORS

RoHS Compliant Available

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SINGLE OUTPUT

Mfg. Part No.	Dropout Voltage (mV)	Output Current (mA)	Output Voltage (V)	Supply Voltage (V)	Package	Stock No.	Price Each
AS13985H33-T	45	150	3.3	2.5 to 5.5	5-SOT-23	05R9405	0.58
AS13985H27-T	45	150	2.7	2.5 to 5.5	5-SOT-23	05R9401	0.58
AS13985H12-T	45	150	1.2	2.5 to 5.5	5-SOT-23	05R9399	0.58
AS1364BTDTAD	140	1000	5.3	2 to 5.5	8-TDFN	05R9398	1.16
AS1363BSTTAD	150	500	5.3	2 to 5.5	6-TSOT-23	05R9397	0.94
AS1362BTTT33	140	300	3.3	2 to 5.5	6-TSOT-23	05R9396	0.90
AS1361BTTT45	70	150	4.5	2 to 5.5	6-TSOT-23	05R9395	0.70
AS1360-50-T	400	250	5	2 to 20	3-SOT-23	05R9394	0.83
AS1360-33-T	400	250	3.3	2 to 20	3-SOT-23	05R9393	0.83
AS1360-30-T	400	250	3	2 to 20	3-SOT-23	05R9392	0.83
AS1360-25-T	400	250	2.5	2 to 20	3-SOT-23	05R9391	0.83
AS1360-18-T	400	250	1.8	2 to 20	3-SOT-23	05R9390	0.83
AS1359BTTT30	140	300	3	2 to 5.5	5-TSOT-23	05R9389	0.87
AS1356-33-T	60	150	3.3	2.5 to 5.5	5-SOT-23	05R9387	0.83
AS1353-33-T	60	150	3.3	2.5 to 5.5	5-SOT-23	05R9384	0.83
AS1353-26-T	60	150	2.6	2.5 to 5.5	5-SOT-23	05R9381	0.83
AS1353-18-T	60	150	1.8	2.5 to 5.5	5-SOT-23	05R9380	0.83
AS1353-15-T	60	150	1.5	2.5 to 5.5	5-SOT-23	05R9379	0.83
QUAD OUTPUT							
AS1352-7BC0-T	200	200	2.5	3 to 5.5	12-QFN	05R9378	1.81

(147224)

LOW NOISE LDO VOLTAGE REGULATORS

RoHS Compliant Available

EXAR

A New Direction in Mixed-Signal

Mfg. Part No.	Input Voltage Max (V)	Output Current Max (A)	Output Voltage Max (V)	Package	Stock No.	Price Each
SPX3819M5-L	16	500	Adjustable	5-SOT-23	23R9689	0.95
SPX3819M5-L-3-3	16	500	3.3	5-SOT-23	23R9702	0.95
SPX5205M5-L	16	150	Adjustable	5-SOT-23	23R9838	0.62
SPX5205M5-L-3-3	16	150	3.3	5-SOT-23	23R9851	0.62
SPX5205M5-L-5-0	16	150	5	5-SOT-23	23R9853	0.62

(157006)

SINGLE OUTPUT POSITIVE REGULATORS

RoHS Compliant Available

FAIRCHILD

Package type: 3-lead TO-220 except **type MC78L05ACD**, 8-lead SOIC.

Mfg. Part No.	Output Voltage Typ. (V)	Input Voltage Max. (V)	Output Current Typ. (A)	Voltage Drop Max. (V)	Stock No.	Price Each 1-9
KA7805AETU	5	35	1	2	09J6572	0.66
MC78L05ACD	5	30	0.1	1.7	78K6020	0.49
MC78L05ACP	5	30	0.1	1.7	72K8867	0.50
MC78L08ACP	8	30	0.1	...	72K8868	0.50

(74482)

SINGLE-OUTPUT LINEAR REGULATORS

RoHS Compliant Available

FAIRCHILD

Adjustable output voltage for **mfg. part no. LM317T** and **LM337T** (min./max.): 1.2/37. Adjustable output voltage for **mfg. part no. LM350T** (min./max.): 1.2/33.

Mfg. Part No.	Output Level	Output Voltage Typ. (V)	Input Voltage Max. (V)	Output Current Typ. (A)	Package	Stock No.	Price Each 1-9
LM78M05CT	Positive	5	35	0.5	3-TO-220	58K1803	0.67
LM78L05ACZ	Positive	5	30	0.1	3-TO-92	72K8848	0.49
LM78L12ACZ	Positive	12	35	0.1	3-TO-92	72K8849	0.54
LM317T	Positive	ADJ	40	1.5	3-TO-220	58K8936	0.74
LM337T	Positive	ADJ	40	1.5	3-TO-220	58K8937	0.79
LM350T	Positive	ADJ	35	3	3-TO-92	58K8940	1.02
LM7905CT	Negative	5	35	1	3-TO-92	58K8945	0.64
LM79L05ACZ	Negative	5	30	1	3-TO-92	72K8850	0.53
KA78L05AMTF	Positive	5	30	0.1	3-SOT-89	58R2527	0.37
LM7805ACT	Positive	5	35	1	3-TO-220	86K1590	0.76
LM7808CT	Positive	8.3	35	1	3-TO-220	86K1594	0.76

(70556)

LDO AND SHUNT REGULATORS

RoHS Compliant Available

LINEAR TECHNOLOGY

LT1761 and **LT1964** series are micropower, low noise, low dropout regulators. With an external 0.01µF bypass capacitor, **LT1761** output noise drops to 20µVRMS over a 10Hz to 100kHz bandwidth. Low 20µA quiescent current (0.1uA shutdown). **LT1964** series is capable of supplying 200mA of output current with a dropout voltage of 340mV. Low quiescent current (30µA operating and 3µA shutdown). Both series are ideal for battery-powered applications.

POSITIVE LDO MICROPOWER REGULATORS

Mfg. Part No.	Vdo (mV)	Output Current Max (mA)	Supply Voltage Max (V)	Package	Stock No.	Price Each 1-24
LT1761ES5-BYP#PBF	300	100	20	5-SOT-23	61M3352	2.16
LT1761ES5-SD#PBF	300	100	20	5-SOT-23	61M3353	2.16
LT1761ES5-1.2#PBF	300	100	20	5-SOT-23	61M3354	2.13
LT1761ES5-1.5#PBF	300	100	20	5-SOT-23	61M3355	1.10
LT1761ES5-1.8#PBF	300	100	20	5-SOT-23	61M3356	2.13
LT1761ES5-2.5#PBF	300	100	20	5-SOT-23	61M3357	2.13
LT1761MPS5-3.3#PBF	300	100	20	5-TSOT-23	79R3062	2.51
LT1761MPS5-5#PBF	300	100	20	5-TSOT-23	79R3064	4.16
LT1761ES5-3.3#PBF	300	100	20	5-SOT-23	61M3358	2.16
LT1761ES5-5#PBF	300	100	20	5-SOT-23	61M3359	2.16
NEGATIVE LDO MICROPOWER REGULATORS						
LT1964ES5-SD#TRMPBF	340	200	-20	5-SOT-23	59M8318	3.24
LT1964ES5-5#TRMPBF	340	200	-20	5-SOT-23	59M8319	3.24

VOLTAGE SHUNT REGULATORS

LT1431 series is an adjustable shunt voltage regulator with 100mA sink capability, 0.4% initial reference voltage tolerance and 0.3% typical temperature stability. On-chip divider resistors allow the **LT1431** to be configured as a 5V shunt regulator, with 1% initial voltage tolerance and requiring no additional external components.

Mfg. Part No.	Voltage Ref. (V)	Output Current (mA)	Supply Voltage Max (V)	Package	Stock No.	Price Each 1-24
LT1120CS8#PBF	2.5	125	36	8-SOIC	57M1865	5.49
LT1431CS8#PBF	2.5	100	36	8-SOIC	57M3971	3.53
LT1431CN8#PBF	2.5	100	36	8-PDIP	57M3969	2.43
LT1634ACS8-2.5#PBF	2.5	20	...	8-SOIC	57M5322	9.64
LT1634BCS8-1.25#PBF	1.25	20	...	8-SOIC	57M5358	4.71
LT1634BCS8-4.096#PBF	4.096	20	...	8-SOIC	57M5366	4.71

VOLTAGE REGULATORS

The **LT323A** is an improved version of the popular **LM323** 5 Volt, 3 Amp Regulator. These new devices offer maximum initial output voltage tolerance of 1% and maintain a maximum tolerance of 3% over worst case operating conditions. Line and load regulation are also improved by a factor of 2.

Mfg. Part No.	Voltage Ref. (V)	Output Current (mA)	Supply Voltage Max (V)	Package	Stock No.	Price Each 1-24
LT323AT#PBF	5	3	20	3-TO-220	57M8068	4.28

(102093)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

POSITIVE LOW DROPOUT LINEAR REGULATORS

RoHS Compliant Available

LINEAR TECHNOLOGY

Linear Technology manufactures a broad line of high performance low dropout linear regulators. These LDOs offer the very low dropout, fast transient response, excellent line and load regulation, and have a very wide input voltage range, anywhere from 0.9V to 80V. Output currents range from 100mA to 10A, with positive and multiple outputs.

Mfg. Part No.	Vdo (V)	Output Current (mA)	Output Voltage (V)	Package	Stock No.	Price Each 1-24
● LT1083CP#PBF	1.3	7500	3.3 to 12	3-TO-3	57M1484	14.79
● LT1084CP-5#PBF	1.3	5000	4.95 to 5.05	3-TO-3	57M1489	13.25
● LT1084CT#PBF	1.3	5000	3.3 to 12	3-TO-220	57M1498	8.01
● LT1084CT-5#PBF	1.3	5000	...	3-TO-220	57M1497	8.01
● LT1084IT#PBF	1.3	5000	1.25 to 28.5	3-TO-220	57M1500	10.26
● LT1084CP#PBF	1.3	5000	1.2 to 15	3-TO-3P	57M1490	13.25
● LT1085CM#PBF	1.3	3000	3.3 to 12	3-DD	57M1510	7.40
● LT1085CM-3.3#PBF	1.3	3000	3.3 V	3-DD	57M1503	7.40
● LT1085CT#PBF	1.3	3000	3.3 to 12	3-TO-220	57M1522	6.78
● LT1085CT-3.3#PBF	1.3	3000	3.3 V	3-TO-220	57M1517	6.78
● LT1965EQ#PBF	0.31	1100	1.2V to 19.5V	5-TO-263	57M7596	4.41
● LT1965IDD#PBF	0.31	1100	1.2V to 19.5V	8-DFN	57M7599	4.33
● LT3012BEDE#PBF	0.4	250	1.24V to 60V	12-DFN	57M7851	4.13
● LT3012EFE#PBF	0.4	250	1.24V to 60V	16-TSSOP	57M7863	4.43
● LT3014BEDD#PBF	0.35	20	1.22V to 60V	8-DFN	57M7887	2.14
● LT3014EDD#PBF	0.35	20	1.22V to 60V	8-DFN	57M7903	2.14
● LT3021EDH#PBF	0.155	500	200mV to 9.5V	16-DFN	57M7990	4.51
● LT3022EDHC#PBF	0.145	1000	200mV to 9.5V	16-DFN	83R7894	5.85
● LT3022EMSE#PBF	0.145	1000	200mV to 9.5V	16-MSOP	13T4226	6.15
● LT3032EDE#PBF	0.27	150	± 1.22V to ± 20V	14-DFN	52R9875	4.70
● LT3032IDE#PBF	0.27	150	± 1.22V to ± 20V	14-DFN	68R2219	5.40
● LT3050IMSE#PBF	0.34	100	600mV to 44.5V	12-MSOP	63R6833	3.75
● LT3080EMS8E-1#PBF	0.35	1100	Adjustable	8-MSOP	88M1941	3.90
● LT3082EDD#PBF	1.3	200	Adjustable	8-DFN	28R7638	3.00
● LT3082EST#PBF	1.3	200	Adjustable	3-SOT-223	28R7639	3.21
● LT3082IDD#PBF	1.3	200	Adjustable	8-DFN	72R5802	3.33
● LT1764EFE#PBF	0.34	3000	1.21V to 20V	16-TSSOP	57M6145	4.71
● LT1764ET#06PBF	0.34	3000	1.21V to 20V	5-TO-220	57M6181	4.21
● LT1963AET#06PBF	0.34	1500	1.21V to 20V	5-TO-220	57M7493	5.53
● LT1963AIS8#PBF	0.34	1500	1.21V to 20V	8-SOIC	15N5474	3.43
● LT1963EFE#PBF	0.34	1500	1.21V to 20V	16-TSSOP	57M7511	5.24
● LT1117IST#PBF	1.1	800	1.2V to 10V	3-SOT-223	57M1821	4.62
● LT1118CS8#PBF	1	800	1.213V to 1.237V	8-SOIC	57M1849	5.55
● LT1085IT#PBF	1.3	3000	Adjustable	3-TO-220	57M1532	9.07
● LT1086CM#PBF	1.3	1500	3.3 to 12	3-DD	57M1542	4.26
● LT1086CM-3.3#PBF	1.3	1500	3.3 V	3-DD	57M1535	4.26
● LT1086CT#PBF	1.3	1500	3.3 to 12	3-TO-220	57M1556	4.05
● LT1086CT-5#PBF	1.3	1500	1.25 to 23.5	3-TO-220	57M1555	4.05
● LT1086CT-3.3#PBF	1.3	1500	3.3 V	3-TO-220	57M1551	4.05
● LT1086IM#PBF	1.3	1500	3.3 to 12	3-DD	57M1562	4.90
● LT1086IM-3.3#PBF	1.3	1500	3.3 V	3-DD	57M1559	4.90
● LT1086IT#PBF	1.3	1500	3.3 to 12	3-TO-220	57M1572	4.63
● LT1117CST#PBF	1.2	800	2.85 to 5	3-SOT-223	57M1805	3.88
● LT1117CST-3.3#PBF	1.2	800	3.3 V	3-SOT-223	57M1798	3.88
● LT1117CST-5#PBF	1.1	800	5 V	3-SOT-223	57M1802	3.88
● LT1117IST-5#PBF	1.2	800	...	3-SOT-223	57M1818	4.62
● LT1118CST-2.5#PBF	1	800	2.5 V	3-SOT-223	57M1825	5.04
● LT1118CST-5#PBF	1	800	...	3-SOT-223	57M1833	5.04
● LT3032EDE-5#PBF	0.3	150	5	14-DFN	13T4238	4.70
● LT1121ACS8#PBF	0.42	150	3.3 to 5	8-SOIC	57M1883	3.88
● LT1121AIS8#PBF	0.42	150	3.75 to 30	8-SOIC	57M1903	4.61
● LT1121CN8-5#PBF	0.42	150	5	8-SOIC	57M1910	3.01
● LT1121CS8#PBF	0.42	150	3.75 to 30	8-SOIC	57M1928	3.23
● LT1121CS8-3.3#PBF	0.42	150	3.3 V	8-SOIC	57M1921	3.23
● LT1121CS8-5#PBF	0.42	150	5 V	8-SOIC	57M1925	3.23
● LT1121CST-3.3#PBF	0.42	150	3.3 V	3-SOT-223	57M1913	3.59
● LT1121CST-5#PBF	0.42	150	5 V	3-SOT-223	57M1916	3.59
● LT1121CZ-5#PBF	0.42	150	5 V	3-TO-92	57M1936	2.62
● LT1121IS8#PBF	0.42	150	3.3 to 5	8-SOIC	57M1970	3.90
● LT1121IS8-3.3#PBF	0.42	150	3.3 V	8-SOIC	57M1963	3.90
● LT1121IS8-5#PBF	0.42	150	5 V	8-SOIC	57M1967	3.90
● LT1121IST-3.3#PBF	0.42	150	3.3	3-SOT-223	57M1954	4.12
● LT1121IST-5#PBF	0.42	150	5 V	3-SOT-223	57M1958	4.12
● LT1129CQ#PBF	0.4	700	3.3 to 5	5-DD	57M2061	4.90

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POSITIVE LOW DROPOUT LINEAR REGULATORS (CONT.)

Mfg. Part No.	Vdo (V)	Output Current (mA)	Output Voltage (V)	Package	Stock No.	Price Each 1-24
● LT1129CQ-5#PBF	0.4	700	3.8 to 30	5-DD	57M2058	4.90
● LT1129CS8#PBF	0.4	700	3.3 to 5	8-SOIC	57M2081	4.80
● LT1129CS8-3.3#PBF	0.4	700	3.3	8-SOIC	57M2074	4.80
● LT1129CS8-5#PBF	0.4	700	5 V	8-SOIC	57M2078	4.80
● LT1129CST-3.3#PBF	0.4	700	3.3 V	3-SOT-223	57M2065	4.52
● LT1129CST-5#PBF	0.4	700	5 V	3-SOT-223	57M2069	4.52
● LT1129CT#PBF	0.4	700	3.8 to 30	5-TO-220	57M2089	4.28
● LT1129CT-5#PBF	0.4	700	5	5-TO-220	57M2088	4.28
● LT1129IQ#PBF	0.4	700	3.3 to 5	5-DD	57M2098	5.80
● LT1129IQ-5#PBF	0.4	700	5 V	5-DD	57M2095	5.80
● LT1129IS8#PBF	0.4	700	Adjustable	8-SOIC	57M2118	5.65
● LT1129IST-3.3#PBF	0.4	700	3.3 V	3-SOT-223	57M2102	5.00
● LT1129IST-5#PBF	0.4	700	5 V	3-SOT-223	57M2106	5.00
● LT1175CQ#PBF	0.5	500	Adjustable	5-DD	57M2448	6.37
● LT1175CS8#PBF	0.5	500	-20 to -4.3	8-SOIC	57M2460	5.82
● LT1175CS8-5#PBF	0.5	500	5	8-SOIC	57M2457	5.82
● LT1175CST-5#PBF	0.5	500	5 V	3-SOT-223	57M2452	5.27
● LT1175IS8#PBF	0.5	500	Adjustable	8-SOIC	57M2488	7.65
● LT1175IST-5#PBF	0.5	500	5 V	3-SOT-223	57M2480	5.74
● LT1185CQ#PBF	0.8	3000	-35 to -4.2	5-DD	57M2580	7.30
● LT3050EDDB-5#PBF	0.34	100	5	12-DFN	79R3066	3.39
● LT3050EDDB-3.3#PBF	0.34	100	3.3	12-DFN	79R3065	3.39
● LT3071MPUFD#PBF	0.085	5000	0.8V to 1.8V	28-QFN	79R1590	19.42
● LT3071EUFD#PBF	0.085	5000	0.8V to 1.8V	28-QFN	78R8451	8.98
● LT3050MPMSE-5#PBF	0.34	100	5	12-MSOP	78R8449	5.99
● LT3050MPMSE-3.3#PBF	0.34	100	3.3	12-MSOP	78R8447	8.96
● LT3050EMSE-5#PBF	0.34	100	5	12-MSOP	78R8437	3.31
● LT3050EMSE-3.3#PBF	0.34	100	3.3	12-MSOP	78R8435	2.22
● LT1461ACS8-2.5#PBF	2	100	2.5	8-SOIC	57M4190	10.81
● LT1461ACS8-4#PBF	2	100	4	8-SOIC	57M4202	10.81
● LT1461ACS8-5#PBF	2	100	5	8-SOIC	57M4206	10.81
● LT1461CCS8-5#PBF	1.5	100	5	8-SOIC	57M4286	3.00
● LT1461AIS8-5#PBF	2	100	5	8-SOIC	57M4226	11.56
● LT1461CCS8-4#PBF	2	100	4	8-SOIC	57M4282	3.00
● LT1461DHS8-2.5#PBF	2	100	2.5	8-SOIC	57M4310	3.00
● LT1461CIS8-5#PBF	2	100	2.5	8-SOIC	57M4306	3.27
● LT1461DHS8-3#PBF	0.4	100	3	8-SOIC	57M4318	3.00
● LT1461DHS8-5#PBF	0.4	100	5	8-SOIC	57M4326	3.00
● LT1521CS8#PBF	0.5	300	3.66 to 3.81	8-SOIC	57M4772	4.13
● LT1521CST-3.3#PBF	0.5	300	3.3 V	3-SOT-223	57M4749	2.36
● LT1521CST-5#PBF	0.5	300	5	SOT-223	57M4756	4.23
● LT1521CMS8#PBF	0.5	300	Adjustable	8-MSOP	57M4746	4.68
● LT1521CS8-3.3#PBF	0.5	300	5	8-SOIC	57M4762	4.13
● LT1521IS8-3.3#PBF	0.5	300	3.3	8-SOIC	57M4786	3.35
● LT1521IS8-5#PBF	0.5	300	5	8-SOIC	57M4791	5.02
● LT1528CQ#PBF	0.6	3000	3.3 to 14	5-DD	57M4798	7.38
● LT1529CQ-3.3#PBF	0.6	3000	3.3 to 14.15	5-DD	57M4805	7.57
● LT1529CQ-5#PBF	0.6	3000	3.3 to 14.15	5-DD	57M4809	7.57
● LT1529CQ#PBF	0.6	3000	3.3 to 14.15	5-DD	57M4812	7.57
● LT1529CT#PBF	0.6	3000	3.3 to 14.15	5-TO-220	57M4821	6.93
● LT1529IQ#PBF	0.6	3000	3.3 to 14.15	5-D2PAK	57M4832	8.59
● LT1585CM#PBF	1.1	4600	2.5 to 3.6	3-D2PAK	57M5126	8.09
● LT1585CM-3.3#PBF	1.2	5000	3.3 V	3-DD	57M5115	8.09
● LT1585CT-3.3#PBF	1.2	5000	3.3 V	3-TO-220	57M5133	7.40
● LT1587CM-3.3#PBF	1.2	3000	3.3 V	3-DD	57M5147	6.78
● LT1587CT-3.3#PBF	1.15	3000	3.3 V	3-TO-220	57M5165	3.92
● LT1086CT-12#PBF	1.3	1500	12	3-TO-220	57M1547	4.05
● LT1761IS5-SD#PBF	0.3	100	Adjustable	5-TSOT-23	24R8520	2.31
● LT1761IS5-BYP#PBF	0.3	100	Adjustable	5-TSOT-23	24R8519	2.31
● LT1761IS5-5#PBF	0.3	100	5	5-TSOT-23	24R8529	2.31
● LT1761IS5-3.3#PBF	0.3	100	3.3	5-TSOT-23	24R8528	2.31
● LT1761IS5-2.8#PBF	0.3	100	2.8	5-TSOT-23	24R8526	1.50
● LT1761IS5-2.5#PBF	0.3	100	2.5	5-TSOT-23	24R8525	2.31
● LT1761IS5-2.0#PBF	0.3	100	2	5-TSOT-23	24R8524	2.31
● LT1761IS5-1.8#PBF	0.3	100	1.8	5-TSOT-23	24R8523	2.31
● LT1761IS5-1.5#PBF	0.3	100	1.5	5-TSOT-23	24R8522	1.50
● LT1761IS5-1.2#PBF	0.3	100	1.2	5-TSOT-23	24R8521	2.31
● LT1762EMS8#PBF	0.3	150	1.22 to 20	8-MSOP	57M6011	2.44
● LT1762EMS8-2.5#PBF	0.3	150	2.5 V	8-MSOP	57M5996	2.44
● LT1762EMS8-3#PBF	0.3	150	3 V	8-MSOP	57M6004	2.44
● LT1762EMS8-3.3#PBF	0.3	150	3.3 V	8-MSOP	57M6001	2.44
● LT1762EMS8-5#PBF	0.3	150	5 V	8-MSOP	57M6008	2.44
● LT1763CDE#PBF	0.3	500	1.21 to 1.23	12-DFN	57M6039	4.13
● LT1763CDE-5#PBF	0.3	500	1.22 to 20	12-DFN	57M6036	4.13

➤CONTINUED➤

POSITIVE LOW DROPOUT LINEAR REGULATORS (CONT.)

Mfg. Part No.	Vdo (V)	Output Current (mA)	Output Voltage (V)	Package	Stock No.	Price Each 1-24
LT1763CS8#PBF	0.3	500	1.5 to 5	8-SOIC	57M6066	4.21
LT1763CS8-1.5#PBF	0.3	500	1.5 V	8-SOIC	57M6044	4.21
LT1763CS8-1.8#PBF	0.3	500	1.8 V	8-SOIC	57M6048	4.21
LT1763CS8-2.5#PBF	0.3	500	2.5 V	8-SOIC	57M6052	4.21
LT1763CS8-3.3#PBF	0.3	500	3.3 V	8-SOIC	57M6056	4.21
LT1763CS8-5#PBF	0.3	500	5 V	8-SOIC	57M6063	4.21
LT1763CDE-3.3#PBF	0.3	500	3.3	12-DFN	57M6029	4.13
LT1763CS8-3#PBF	0.3	500	3	8-SOIC	57M6059	4.21
LT1764AEFE#PBF	0.34	3000	Adjustable	16-TSSOP	57M6088	7.18
LT1764AEQ#PBF	0.34	3000	1.8 to 3.3	5-DD	57M6108	7.38
LT1764AEQ-1.5#PBF	0.34	3000	1.5 V	5-DD	57M6093	7.38
LT1764AEQ-1.8#PBF	0.34	3000	1.8 V	5-DD	57M6097	7.38
LT1764AEQ-2.5#PBF	0.34	3000	2.5 V	5-DD	57M6101	7.38
LT1764AEQ-3.3#PBF	0.34	3000	3.3 V	5-DD	57M6105	7.38
LT1764AET#PBF	0.34	3000	1.21 to 20	5-TO-220	57M6122	7.38
LT1764AET-2.5#PBF	0.34	3000	2.5 V	5-TO-220	57M6117	7.38
LT1764EQ#PBF	0.34	3000	1.21 to 20	5-DD	57M6165	7.38
LT1764EQ-2.5#PBF	0.34	3000	2.5 V	5-DD	57M6158	7.38
LT1764ET#PBF	0.34	3000	1.21 to 20	5-TO-220	57M6179	7.57
LT1790ACS6-1.25#TRMPBF	0.05	...	1.24 to 1.25	6-SOT-23	57M6488	6.52
LT1790AIS6-2.5#TRMPBF	0.05	...	2.49 to 2.5	6-SOT-23	57M6524	7.48
LT1962EMS8#PBF	0.27	300	1.21 to 20	8-MSOP	57M7404	3.53
LT1962EMS8-1.5#PBF	0.27	300	1.5	8-MSOP	57M7381	3.53
LT1962EMS8-1.8#PBF	0.27	300	1.8	8-MSOP	57M7385	3.53
LT1962EMS8-2.5#PBF	0.27	300	2.5	8-MSOP	57M7389	3.53
LT1962EMS8-3.3#PBF	0.27	300	3.3	8-MSOP	57M7394	3.53
LT1962EMS8-3#PBF	0.27	300	3	8-MSOP	57M7397	3.53
LT1962EMS8-5#PBF	0.27	300	5 V	8-MSOP	57M7401	3.53
LT1963AEQ#PBF	0.34	1500	1.21 to 20	5-DD	57M7443	5.53
LT1963AEQ-1.8#PBF	0.34	1500	1.8	5-D2PAK	57M7433	5.53
LT1963AEQ-2.5#PBF	0.34	1500	2.5 V	5-DD	57M7436	5.53
LT1963AEQ-3.3#PBF	0.34	1500	3.3 V	5-DD	57M7440	5.53
LT1963AES8#PBF	0.34	1500	1.21 to 20	8-SOIC	57M7479	4.51
LT1963AES8-3.3#PBF	0.34	1500	3.25 to 3.35	8-SOIC	57M7476	4.51
LT1963AEST-1.5#PBF	0.34	1500	1.5 V	3-SOT-223	57M7447	4.88
LT1963AEST-1.8#PBF	0.34	1500	1.8	5-TO-220	57M7451	4.88
LT1963AEST-2.5#PBF	0.34	1500	2.5 V	3-SOT-223	57M7455	4.88
LT1963AEST-3.3#PBF	0.34	1500	3.3 V	3-SOT-223	57M7459	4.88
LT1963AET#PBF	0.34	1500	1.21 to 20	5-TO-220	57M7492	5.53
LT1963AET-1.8#PBF	0.34	1500	1.8 V	5-TO-220	57M7486	5.53
LT1963AES8-1.5#PBF	0.34	1500	1.5	8-SOIC	57M7464	4.51
LT1963AES8-1.8#PBF	0.34	1500	1.8	8-SOIC	57M7468	4.51
LT1963AES8-2.5#PBF	0.34	1500	2.5	8-SOIC	57M7472	4.51
LT1963EQ#PBF	0.34	1500	Adjustable	5-DD	57M7531	5.53
LT1963EQ-2.5#PBF	0.34	1500	...	5-DD	57M7524	5.53
LT1963EST-1.8#PBF	0.34	1500	1.8 V	3-SOT-223	57M7539	4.88
LT1963EST-2.5#PBF	0.34	1500	2.5 V	3-SOT-223	57M7543	4.88
LT1963EST-3.3#PBF	0.34	1500	3.3 V	3-SOT-223	57M7547	4.88
LT1964ES5-BYP#TRMPBF	0.34	200	Adjustable	5-SOT-23	57M7582	3.24
LT1965EDD#PBF	0.29	1100	Adjustable	8-DFN	57M7592	3.77
LT1965EMS8E#PBF	0.29	1100	1.2 to 19.5	8-MSOP	57M7594	3.90
LT1965IMS8E#PBF	0.29	1100	1.2 to 19.5	8-MSOP	57M7601	4.48
LT3008EDC#PBF	0.3	20	44.7 to 0.6	6-DFN	46P4016	2.68
LT3008ETS8#PBF	0.3	20	0.6 to 44.7	8-TSOT-23	46P4017	2.68
LT3010EMS8E#PBF	0.3	50	1.275 to 60	8-MSOP	57M7843	3.15
LT3010EMS8E-5#PBF	0.3	50	5 V	8-MSOP	57M7840	3.15
LT3010HMS8E#PBF	0.3	50	1.275 to 60	8-MSOP	57M7848	4.13
LT3010HMS8E-5#PBF	0.3	50	5	8-MSOP	57M7846	4.13
LT3011EMSE#PBF	0.3	50	60	12-MSOP	07P8409	3.75
LT3012BEFE#PBF	0.4	250	1.24 to 60	16-TSSOP	57M7855	4.43
LT3012EDE#PBF	0.4	250	Adjustable	12-DFN	57M7859	4.13
LT3013EDE#PBF	0.4	250	1.24 to 60	12-DFN	57M7877	4.51
LT3020EMS8#PBF	0.15	100	0.2 to 9.5	8-MSOP	57M7946	3.01
LT3021EDH-1.2#PBF	0.155	500	1.2 V	16-DFN	57M7979	4.51
LT3021ES8#PBF	0.155	500	0.2 to 9.5	8-SOIC	57M8006	4.51
LT3021ES8-1.2#PBF	0.155	500	1.176 to 1.224	8-SOIC	57M7995	4.51
LT3023EDD#PBF	0.3	100	1.22 to 20	10-DFN	57M8010	3.40
LT3023EMSE#PBF	0.3	100	Adjustable	10-MSOP	57M8014	3.22
LT3024EFE#PBF	0.3	500	1.22 to 20	16-TSSOP	57M8022	4.93
LTC3025EDC#PBF	0.3	300	0.4 to 3.6	6-DFN	78T3135	2.75
LT3028EFE#PBF	0.3	500	1.8 to 20	16-TSSOP	57M8046	5.12
LT3080EDD#PBF	0.3	1100	0 to 30	8-DFN	75M4714	3.77
LT3080EMS8E#PBF	0.3	1100	0 to 30	8-MSOP	75M4716	3.90
LT3080ET#PBF	0.3	1100	1.2 to 36	5-TO-220	64M0567	4.41

➤ CONTINUED ➤

POSITIVE LOW DROPOUT LINEAR REGULATORS (CONT.)

Mfg. Part No.	Vdo (V)	Output Current (mA)	Output Voltage (V)	Package	Stock No.	Price Each 1-24
LT3080EST#PBF	0.3	1100	0 to 30	3-SOT-223	75M4718	3.63
LT3085EMS8E#PBF	0.275	500	0 to 35.7	8-MSOP	12P7608	3.91
LT3507EUHF#PBF	2	2400	0.8 to 32.4	38-QFN	95M8576	9.09
LTC1798CS8-3#PBF	0.1	10	3	8-SOIC	56M3815	2.55
LTC3026EDD#PBF	0.1	1500	0.4 to 2.6	10-DFN	56M7306	4.41
LTC3026EMSE#PBF	0.1	1500	0.4 to 2.6	10-MSOP	56M7310	4.41
LTC3035EDDB#PBF	0.045	300	0.4 to 3.6	8-DFN	96M1088	2.99
LT337AT#PBF	...	1500	-1.2 to -37	3-TO-220	57M8072	4.05
LT317AT#PBF	...	1500	1.238 to 1.26	3-TO-220	57M8062	4.05
LT1763IDE#PBF	...	500	1.25 to 1.19	12-DFN	51R1532	4.60
LT1763IDE-1.5#PBF	...	500	...	12-DFN	51R1526	4.60
LT1763IDE-1.8#PBF	0.3	500	...	12-DFN	51R1527	4.60
LT1763IDE-2.5#PBF	...	500	...	12-DFN	51R1528	4.60
LT1763IDE-3#PBF	...	500	...	12-DFN	51R1530	4.60
LT1763IDE-3.3#PBF	...	500	...	12-DFN	51R1529	4.60
LT1763IDE-5#PBF	...	500	...	12-DFN	51R1531	4.60
LT1963AMPQ#PBF	0.02	1500	1.192 to 1.228	5-DD-PAK	15N5477	14.44
LT3070EUFD#PBF	0.085	5000	0.792 to 1.818	28-QFN	51R1535	8.98
LT3009ESC8-1.2#PBF	0.28	20	1.212	8-SC-70	24R8530	2.13
LT3009ESC8-1.5#PBF	0.28	20	1.515	8-SC-70	24R8531	1.36
LT3080EQ#PBF	0.35	1100	0V to 36V	5-DDPAK	24R3350	4.41
LT3050EMSE#PBF	0.34	100	0.6V to 44.5V	12-MSOP	63R6829	3.31
LT1117IST-3.3#PBF	1.1	800	3.3 V	3-SOT-223	57M1814	4.62
LT1118CS8-2.5#PBF	1	800	2.5 V	8-SOIC	57M1838	5.55
LT1120CN8#PBF	0.4	125	5 V	8-DIP	57M1863	4.71
LT1121ACS8-5#PBF	0.42	150	5 V	8-SOIC	57M1880	3.88
LT1121AIS8-5#PBF	0.42	150	5 V	8-SOIC	57M1900	4.61
LT1129IQ-3.3#PBF	0.45	700	3.3 V	5-TO-263	57M2092	5.80
LT1129IS8-3.3#PBF	0.45	700	3.3 V	8-SOIC	57M2111	5.65
LT1175IQ-5#PBF	0.5	500	-5 V	5-TO-263	57M2473	8.26
LT1175IS8-5#PBF	0.5	500	-5 V	8-SOIC	57M2485	7.65
LT1461ACS8-3.3#PBF	1.5	100	3.3 V	8-SOIC	57M4195	9.20
LT1461BCS8-2.5#PBF	0.13	100	2.5 V	8-SOIC	57M4230	7.43
LT1461BCS8-4#PBF	1.5	100	4.096 V	8-SOIC	57M4242	7.43
LT1461BIS8-3.3#PBF	1.5	100	3.3 V	8-SOIC	57M4255	6.96
LT1461BIS8-4#PBF	1.5	100	4.096 V	8-SOIC	57M4262	8.18
LT1764EQ-1.5#PBF	0.34	3 A	1.5 V	5-TO-263	57M6150	7.38
LT1764EQ-1.8#PBF	0.34	3 A	1.8 V	5-TO-263	57M6154	7.38
LT1963AEFE-1.8#PBF	0.34	1.5 A	1.8 V	16-TSSOP	57M7413	3.57
LT1963AEQ-1.5#PBF	0.34	1.5 A	1.5 V	5-TO-263	57M7429	5.53
LT1963EQ-1.5#PBF	0.34	1.5 A	1.5 V	5-TO-263	57M7516	3.57
LT1963EQ-1.8#PBF	0.31	1.5 A	1.8 V	5-TO-263	57M7520	5.53
LT1965EDD-1.8#PBF	0.31	1.1 A	1.8 V	8-DFN	24R6654	3.77
LT1965EQ-3.3#PBF	0.31	1.1 A	3.3 V	5-TO-263	24R6673	3.14
LT1965IDD-1.8#PBF	0.31	1.1 A	1.8 V	8-DFN	24R6681	3.09
LT1965IDD-3.3#PBF	0.31	1.1 A	3.3 V	8-DFN	24R6685	4.33
LT3021ES8-1.5#PBF	0.155	500	1.5 V	8-SOIC	57M7999	4.51
LT1965EDD-2.5#PBF	0.31	1.1 A	2.5 V	8-DFN	24R6656	2.69
LT3027EDD#PBF	0.3	100	...	10-DFN	57M8026	3.54
LT3023IDD#PBF	0.3	100	...	10-DFN	75M4707	2.67
LT3080EDD-1#PBF	0.35	1.1 A	...	8-DFN	88M1939	3.77
LT1963ES8-1.5#PBF	0.34	1.5 A	1.5 V	8-SOIC	57M7552	2.60
LT1963ES8-1.8#PBF	0.34	1.5 A	1.8 V	8-SOIC	57M7556	2.60
LT1963ES8-2.5#PBF	0.34	1.5 A	2.5 V	8-SOIC	57M7560	2.60
LT1963ES8#PBF	0.34	1.5 A	...	8-SOIC	57M7567	4.51
LT3024EDE#PBF	0.34	500	...	12-DFN	57M8018	4.93
LT1963EST-1.5#PBF	0.34	1.5 A	1.5 V	3-SOT-223	57M7535	4.72

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GENERAL PURPOSE LOW DROPOUT REGULATORS

RoHS Compliant Available

LINEAR TECHNOLOGY

Applications:
- General purpose linear regulator
- Battery-powered systems
- Microprocessor core/logic supplies
- Post regulator for switching supplies
- Tracking/sequencing power supplies

Features:
- Current: 500mA per channel
- Reverse-battery and reverse output-to-input protection
- Low noise: 20 uVRMS (10Hz to 100kHz)

Mfg. Part No.	Output Voltage (V)	Dropout Voltage (mV)	Output Current (mA)	Package	Stock No.	Price Each 1-24
● LT3022EMSE-1.2#PBF	1.2	145	1000	16-MSOP	13T4220	6.15
● LT3060EDC-1.2#PBF	1.2	300	100	8-DFN	84R7847	2.69
● LT3060ETS8-1.2#PBF	1.2	300	100	8-TSOT	84R7853	1.73
● LT3060HTS8-1.2#PBF	1.2	300	100	8-TSOT	84R7859	2.39
● LT3014IDD#PBF	1.22 to 60	350	20	8-DFN	07P8426	3.30
● LT1763MPDE-1.5#PBF	1.5	300	500	12-DFN	78R8411	12.30
● LT3060ETS8-1.5#PBF	1.5	300	100	8-TSOT	84R7854	1.73
● LT3022EMSE-1.5#PBF	1.5	145	1000	16-MSOP	13T4222	6.15
● LT3060EDC-1.5#PBF	1.5	300	100	8-DFN	84R7848	2.69
● LT3060HTS8-1.5#PBF	1.5	300	100	8-TSOT	84R7860	2.39
● LT1763MPDE-1.8#PBF	1.8	300	500	12-DFN	78R8413	12.30
● LT3022EMSE-1.8#PBF	1.8	145	1000	16-MSOP	13T4224	6.15
● LT3060HTS8-1.8#PBF	1.8	300	100	8-TSOT	84R7861	2.39
● LT3060ETS8-1.8#PBF	1.8	300	100	8-TSOT	84R7855	2.69
● LT3060EDC-1.8#PBF	1.8	300	100	8-DFN	84R7849	2.69
● LT3060EDC-2.5#PBF	2.5	300	100	8-DFN	84R7850	2.69
● LT3060ETS8-2.5#PBF	2.5	300	100	8-TSOT	84R7856	2.69
● LT3060HTS8-2.5#PBF	2.5	300	100	8-TSOT	84R7862	2.39
● LT1763MPDE-2.5#PBF	2.5	300	500	12-DFN	78R8415	12.30
● LTC1844ES5-2.5#PBF	2.5	135	150	5-TSOT-23	78T2530	2.59
● LTC1844ES5-2.8#PBF	2.8	105	150	5-TSOT-23	78T2531	2.59
● LT1761ES5-2.8#PBF	2.8	300	100	5-TSOT-23	78T3708	2.13
● LT1763MPDE-3#PBF	3	300	500	12-DFN	78R8419	12.30
● LT3008ETS8-3.3#PBF	3.3	300	20	8-TSOT-23	78T3789	2.68
● LT1763MPDE-3.3#PBF	3.3	300	500	12-DFN	78R8417	12.30
● LT3060ETS8-3.3#PBF	3.3	300	100	8-TSOT	84R7857	2.69
● LT3060EDC-3.3#PBF	3.3	300	100	8-DFN	84R7851	2.69
● LT3060HTS8-3.3#PBF	3.3	300	100	8-TSOT	84R7863	3.66
● LT1175MPS8-5#PBF	5	500	500	8-SOIC	84R5019	18.59
● LT1175MPQ-5#PBF	5	500	500	5-D2-PAK	84R5015	16.44
● LT1763MPDE-5#PBF	5	300	500	12-DFN	78R8421	12.30
● LT3010MPMS8E-5#PBF	5	300	50	8-MSOP	78R8425	9.04
● LT3060EDC-5#PBF	5	300	100	8-DFN	84R7852	2.69
● LT3060ETS8-5#PBF	5	300	100	8-TSOT	84R7858	2.69
● LT1121IZ-5#PBF	5	420	150	3-TO-92	57M1978	1.92
● LT1521IST-5#PBF	5	500	300	3-SOT-223	57M4782	5.00
● LT1575CS8#PBF	5	...	1	8-SOIC	57M4932	4.76
● LT3008ETS8-5#PBF	5	300	20	8-TSOT-23	78T3790	2.68
● LT3060HTS8-5#PBF	5	300	100	8-TSOT	84R7864	3.66
● LT3009EDC#PBF	5	280	20	6-DFN	78T3816	2.01
● LT3020IDD#PBF	9.5	150	100	8-DFN	78R8429	3.28
● LT3029EDE#PBF	19.5	300	500	16-DFN	64R6814	6.15
● LT3029EMSE#PBF	19.5	300	500	16-MSOP	64R6816	6.15
● LT3029MPMSE#PBF	19.5	300	500	16-MSOP	64R6824	16.55
● LT3029IDE#PBF	19.5	300	500	16-DFN	64R6820	4.47
● LT1763MPDE#PBF	20	300	500	12-DFN	78R8423	12.30
● LT1763IS8#PBF	20	300	500	8-SOIC	19P9358	4.60
● LT3010MPMS8E#PBF	60	300	50	8-MSOP	78R8427	9.04
● LT1175MPQ#PBF	...	500	500	5-D2-PAK	84R5017	16.44
● LT1175MPS8#PBF	...	500	500	8-SOIC	84R5021	18.59
● LT1964ES5-SD#PBF	-5	340	200	5-SOT-23	78T3771	2.91
● LT3082ETS8#PBF	Adj.	1.3	200	8-SOT-23	78T3979	3.12
● LT3083EDF#PBF	Adj.	240	3000	12-DFN	27T4256	8.12

(176244)

LT3015 SERIES NEGATIVE LOW DROPOUT VOLTAGE REGULATORS

RoHS Compliant Available

LINEAR TECHNOLOGY

Features:
- Precision Current Limit with Foldback
- Precision Positive or Negative Shutdown Logic
- Fast Transient Response
- Controlled Quiescent Current in Dropout

Applications:
- Post-Regulator for Switching Supplies
- Negative Logic Supplies
- Low Noise Instrumentation
- Industrial Supplies

Mfg. Part No.	Supply Voltage Max (V)	Output Voltage (V)	Dropout Voltage (mV)	Package	Stock No.	Price Each 1-24
● LT3015EDD#PBF	-30	-1.22V to -29.5V	310	8-DFN	59T5794	5.71
● LT3015EMSE#PBF	-30	-1.22V to -29.5V	310	12-MSOP	59T5796	5.71
● LT3015EQ#PBF	-30	-1.22V to -29.5V	410	5-D2-PAK	59T5798	6.41

➤CONTINUED➤

LT3015 SERIES NEGATIVE LOW DROPOUT VOLTAGE REGULATORS (CONT.)

Mfg. Part No.	Supply Voltage Max (V)	Output Voltage (V)	Dropout Voltage (mV)	Package	Stock No.	Price Each 1-24
● LT3015ET#PBF	-30	-1.22V to -29.5V	410	5-TO-220	59T5800	6.41
● LT3015IDD#PBF	-30	-1.22V to -29.5V	310	8-DFN	58T3714	6.41
● LT3015MPQ#PBF	-30	-1.22V to -29.5V	410	5-D2-PAK	59T5811	17.32
● LT3015IMSE#PBF	-30	-1.22V to -29.5V	310	12-MSOP	59T5803	6.41
● LT3015IQ#PBF	-30	-1.22V to -29.5V	410	5-D2-PAK	59T5805	7.38
● LT3015IT#PBF	-30	-1.22V to -29.5V	410	5-D2-PAK	59T5807	4.93
● LT3015MPMSE#PBF	-30	-1.22V to -29.5V	310	12-MSOP	59T5809	15.42

(197681)

LT3081 SERIES LINEAR DROPOUT REGULATORS

NEW

RoHS Compliant Available

LINEAR TECHNOLOGY

Features:
- Extended Safe Operating Area
- Stable with or without Input/Output Capacitors
- Single Resistor Sets Output VoltageParallel Multiple Devices for Higher Current or Heat Spreading
- Programmable Current Limit
- Reverse-Battery and Reverse-Current Protection

Applications:
- All Surface Mount Power Supply
- Rugged Industrial Power Supply
- Post Regulator for Switching Supplies
- Low Output Voltage Supply
- Intrinsic Safety Applications

The **LT®3081** is a low dropout linear regulator designed for rugged industrial applications. Key features of the IC are the extended safe operating area (SOA), output current monitor, temperature monitor and programmable current limit. The **LT3081** can be paralleled for higher output current or heat spreading. The device withstands reverse input and reverse output-to-input voltages without reverse current flow. The output current monitor (IOUT/5000) and die junction temperature output (1µA/°C) provide system monitoring and debug capability. In addition, a single resistor programs current limit. Internal protection circuitry includes reverse-battery and reverse-current protection, current limiting and thermal limiting.

Mfg. Part No.	No. of Outputs	Input Voltage (V)	Output Current (A)	Package	Stock No.	Price Each 1-24
● LT3081EDF#PBF	1	36	1.5	12-DFN	94W8438	5.57
● LT3081EFE#PBF	1	36	1.5	16-TSSOP	94W8440	5.71
● LT3081ER#PBF	1	36	1.5	7-TO-263	94W8442	6.15
● LT3081ET7#PBF	1	36	1.5	7-TO-220	94W8444	6.15
● LT3081IDF#PBF	1	36	1.5	12-DFN	94W8448	6.39
● LT3081IFE#PBF	1	36	1.5	16-TSSOP	94W8450	6.57
● LT3081IR#PBF	1	36	1.5	7-TO-263	94W8452	7.06
● LT3081IT7#PBF	1	36	1.5	7-TO-220	94W8454	7.06

(210800)

NEGATIVE LOW DROPOUT LINEAR REGULATORS

RoHS Compliant Available

LINEAR TECHNOLOGY

Linear Technology manufactures a broad line of high performance low dropout linear regulators. These LDOs offer the very low dropout, fast transient response, excellent line and load regulation, and have a very wide input voltage range, anywhere from 0.9V to 80V. Output currents range from 100mA to 10A, with negative outputs.

Mfg. Part No.	Dropout Voltage (mV)	Output Current (A)	Output Voltage Max.	Output Voltage Min.	Package	Stock No.	Price Each 1-24
● LT1175IQ#PBF	500	0.5	-3.8	-19.3	5-TO-263	57M2476	8.26
● LT1185IQ#PBF	670	3	-2.4	-34	5-TO-263	51P4620	8.73
● LT1185IT#06PBF	670	3	-2.4	-34	5-TO-220	51P4622	8.73
● LT1185IT#PBF	670	3	-2.4	-34	5-TO-220	57M2588	9.07

(209453)

150 mA, 28V LDO REGULATORS With SHUTDOWN

RoHS Compliant Available

MICROCHIP

Features:
- 50 µA typical quiescent current
- 0.01 µA typical shutdown current
- Output voltage accuracy: ±2%
- Stable with Ceramic output capacitors
- Current limit protection with current foldback
- Shutdown pin
- High PSRR: 50 dB typical @ 1 kHz

Applications:
- Cordless phones, wireless communications
- PDAs, notebook & netbook computers
- Digital cameras
- Microcontroller power
- Car audio & navigation systems
- Home appliances

The **MCP1804** is a family of CMOS low dropout (LDO) voltage regulators that can deliver up to 150 mA of current while consuming only 50 µA of quiescent current.

Mfg. Part No.	Dropout Voltage (mV)	Supply Voltage (V)	Package	Stock No.	Price Each
● MCP1804T-A002I/OT	130	2 - 28	5-SOT-23	55R1042	0.67
● MCP1804T-C002I/OT	120	2 - 28	5-SOT-23	55R1043	0.67
● MCP1804T-1802I/OT	550	2 - 28	5-SOT-23	55R1044	0.67
● MCP1804T-2502I/OT	310	2 - 28	5-SOT-23	55R1045	0.67
● MCP1804T-3002I/OT	260	2 - 28	5-SOT-23	55R1046	0.67
● MCP1804T-3302I/OT	260	2 - 28	5-SOT-23	55R1047	0.67
● MCP1804T-5002I/OT	190	2 - 28	5-SOT-23	55R1048	0.67

(167494)

150mA CMOS LDO WITH SHUTDOWN

RoHS Compliant Available

MICROCHIP

Features

- Supply voltage: 2.7-6V
- Space-saving 5-Pin SC-70 and SOT-23 packages
- Extremely low operating current for longer battery life: 53µA (typ.)
- High output voltage accuracy: ±0.5% (typ.)
- Power-saving shutdown mode: 0.05µA (typ.)
- Overcurrent and overtemperature protection
- Pin-Compatible upgrade for bipolar regulators

Mfg. Part No.	Output Current Max. (mA)	Output Voltage Max. (V)	Package	Stock No.	Price Each 1-25
TC1014-3.3VCT713	50	3.3	5-SOT-23A	61K3534	0.33
TC1014-1.8VCT713	0.05	1.8	5-SOT-23	84R5241	0.33
TC1016-1.85VCTTR	80	1.85	5-SOT-23	84R8382	0.36
TC1016-3.3VCTTR	80	3.3	5-SOT-23	84R6273	0.36
TC1016-4.0VCTTR	80	4	5-SOT-23	84R8383	0.36
TC1016-4.0VLTTR	80	4	5-SC-70	84R8384	0.36

(83659)

LDO VOLTAGE REGULATORS

RoHS Compliant Available

MICROCHIP

Features:

- Very Low Dropout Voltage: 120mV typ. @ 100mA, 380mV typ. @ 200mA
- High Output Current: 250mA(V_{OUT}=5.0V)
- High Accuracy Output Voltage: ±0.5%
- Wide Output Voltage Range: 1.1-6.0V
- Low Power Consumption: 1.1µA typ.
- Low Temperature Drift: ±100ppm/°C typ.
- Excellent Line Regulation: 0.2%/V typ.
- Operating Temperature: -40°C to +85°C

OUTPUT VOLTAGE: 0.8 V

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-25
MCP1824T-ADJE/OT	300 mA, Low Voltage Low Quiescent Current LDO Regulator	5-SOT-23	40M0692	0.42
MCP1824T-3302E/OT	300 mA, Low Voltage Low Quiescent Current LDO Regulator	5-SOT-23	40M0704	0.42
MCP1725-0802E/MC	500 mA, Low Voltage Low Quiescent Current LDO Regulator	8-DFN	26M9906	0.51
MCP1725-0802E/SN		8-SOIC	17M0590	0.51
MCP1726-0802E/MF	1 A, Low Voltage Low Quiescent Current LDO Regulator	8-DFN	08J8700	0.68
MCP1726-0802E/SN		8-SOIC	08J8701	0.68

OUTPUT VOLTAGE: 1.2 V

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-25
MCP1801T-1202I/OT	150 mA, Low Voltage Low Quiescent Current LDO Regulator	5-SOT-23	54M4826	0.42
MCP1700-1202E/TO	200 mA, Low Voltage Low Quiescent Current LDO Regulator	3-TO-92	88H9800	0.37
MCP1700T-1202E/TT		3-SOT-23	88H9809	0.37
MCP1702-1202E/TO	250 mA, Low Voltage Low Quiescent Current LDO Regulator	3-TO-92	52R9888	0.48
MCP1702T-1202E/CB		3-SOT-23B	52R9892	0.48
MCP1703T-1202E/CB		3-SOT-23B	40M0625	0.54
MCP1703T-1202E/MB		3-SOT-89	40M0627	0.54
MCP1824ST-1202E/DB	300 mA, Low Voltage Low Quiescent Current LDO Regulator	3-SOT-223	08N7663	0.48
MCP1824T-1202E/OT	300 mA, Low Voltage, Low Quiescent Current LDO Regulator	5-SOT-23	08N7666	0.42
MCP1802T-1202I/OT		5-SOT-23	54M4834	0.53
MCP1725-1202E/MC	500 mA, Low Voltage Low Quiescent Current LDO Regulator	8-DFN	26M9907	0.51
MCP1725-1202E/SN		8-SOIC	17M0592	0.51
MCP1825-1202E/AT		5-TO-220	26M9927	0.82
MCP1825S-1202E/AB		3-TO-220	26M9948	0.82
MCP1825S-1202E/DB		3-SOT-223	26M9949	0.51
MCP1726-1202E/MF	1 A, Low Voltage Low Quiescent Current LDO Regulator	8-DFN	08J8702	0.68
MCP1726-1202E/SN		8-SOIC	08J8703	0.68
MCP1826-1202E/AT		5-TO-220	27M0003	0.98
MCP1826S-1202E/AB		3-TO-220	27M0024	0.98
MCP1826S-1202E/DB		3-SOT-223	27M0025	0.68
MCP1826T-1202E/DC		5-SOT-223	40M0733	0.68
MCP1727-1202E/MF	1.5 A, Low Voltage Low Quiescent Current LDO Regulator	8-DFN	74K5378	0.82
MCP1727-1202E/SN		8-SOIC	74K5379	0.82
MCP1827-1202E/AT		5-TO-220	88K5590	1.13
MCP1827-1202E/ET		5-D2-PAK	88K5591	1.13
MCP1827S-1202E/AB		3-TO-220	88K5602	1.13
MCP1827S-1202E/EB		3-D2-PAK	88K5603	1.13

OUTPUT VOLTAGE: 1.8 V

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-25
MCP1824ST-1802E/DB	300 mA, Low Voltage Low Quiescent Current LDO Regulator	3-SOT-223	95M9050	0.48
MCP1700T-1802E/TT	Low Quiescent Current LDO	3-SOT-23	84R5175	0.37
MCP1702T-1802E/CB	250 mA Low Quiescent Current LDO Regulator	3-SOT-23A	84R5177	0.48
MCP1703T-1802E/MB		3-SOT-89	40M0630	0.54
TC1264-1.8VAB	800 mA Low Quiescent Current LDO Regulator	3-SOT-223	92C5783	0.98
MCP1726-1802E/MF	1 A Low Quiescent Current LDO Regulator	8-DFN	08J8704	0.68

➤CONTINUED➤

LDO VOLTAGE REGULATORS (CONT.)

OUTPUT VOLTAGE: 1.8 V

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-25
MCP1727-1802E/SN	1.5A, Low Voltage Low Quiescent Current LDO Regulator	8-SOIC	74K5381	0.82
MCP1827-1802E/AT		5-TO-220	88K5592	1.13
MCP1827-1802E/ET		5-D2-PAK	88K5593	1.13
MCP1827S-1802E/AB		3-TO-220	88K5604	1.13
MCP1827S-1802E/EB		3-D2-PAK	88K5605	1.13
MCP1727-1802E/MF		8-DFN	74K5380	0.82

OUTPUT VOLTAGE: 2.5

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-25
MCP1801T-2502I/OT	150 mA, Low Voltage Low Quiescent Current LDO Regulator	5-SOT-23	54M4828	0.42
MCP1802T-2502I/OT	300 mA, Low Voltage Low Quiescent Current LDO Regulator	5-SOT-23	54M4836	0.53
MCP1700-2502E/TO	250 mA, Low Voltage Low Quiescent Current LDO Regulator	3-TO-92	88H9802	0.37
MCP1702-2502E/TO		3-TO-92	56K6982	0.48
MCP1703T-2502E/CB		3-SOT-23B	40M0631	0.54
MCP1703T-2502E/MB		3-SOT-89	40M0633	0.54
MCP1700T-2502E/TT	Low Quiescent Current LDO	3-SOT-23	88H9813	0.37
MCP1700T-5002E/TT	Low Quiescent Current LDO	3-SOT-23	88H9819	0.37
TC1262-2.5VAB	500mA Fixed Output CMOS LDO	3-TO-220	92C5746	0.82
TC1262-2.5VDB		3-SOT-223	69K0481	0.51
MCP1725-2502E/MC	500 mA, Low Voltage Low Quiescent Current LDO Regulator	8-DFN	26M9909	0.51
MCP1725-2502E/SN		8-SOIC	17M0596	0.51
MCP1825-2502E/AT		5-TO-220	26M9933	0.82
MCP1825S-2502E/AB		3-TO-220	26M9954	0.82
MCP1825S-2502E/DB		3-SOT-223	26M9955	0.51
TC1264-2.5VAB	800mA Fixed Output CMOS LDO	3-SOT-223	92C5786	0.98
MCP1726-2502E/MF	1 A, Low Voltage Low Quiescent Current LDO Regulator	8-DFN	08J8706	0.68
MCP1726-2502E/SN		8-SOIC	08J8707	0.68
MCP1826-2502E/AT		5-TO-220	27M0009	0.98
MCP1826S-2502E/AB		3-TO-220	27M0030	0.98
MCP1826S-2502E/DB		3-SOT-223	27M0031	0.68
MCP1727-2502E/MF	1.5 A, Low Voltage Low Quiescent Current LDO Regulator	8-DFN	74K5382	0.82
MCP1727-2502E/SN		8-SOIC	74K5383	0.82
MCP1827-2502E/AT		5-TO-220	88K5594	1.13
MCP1827-2502E/ET		5-D2-PAK	88K5595	1.13
MCP1827S-2502E/AB		3-TO-220	88K5606	1.13
MCP1827S-2502E/EB		3-D2-PAK	88K5607	1.13

OUTPUT VOLTAGE: 3 V

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-25
MCP1703T-3002E/CB	250 mA Low Quiescent Current LDO Regulator	3-SOT-23	40M0634	0.54
MCP1703T-3002E/MB		3-SOT-89	40M0636	0.54
MCP1700T-3002E/TT	Low Quiescent Current LDO	3-SOT-23	84R5176	0.37
MCP1702T-3002E/CB	250 mA Low Quiescent Current LDO Regulator	3-SOT-23A	84R5178	0.48
MCP1725-3002E/SN	500 mA Low Quiescent Current LDO Regulator	8-SOIC	17M0598	0.51
TC1262-3.0VAB	500mA Fixed Output CMOS LDO	3-TO-220	92C5752	0.82
TC1262-3.0VDB		3-SOT-223	53R0369	0.51
MCP1827-3002E/AT	1.5A, Low Voltage, Low Quiescent Current LDO Regulator	5-TO-220	17M0623	1.13
MCP1827-3002E/ET		5-D2-PAK	17M0624	1.13
MCP1827S-3002E/AB		3-TO-220	17M0625	1.13
MCP1827S-3002E/EB		3-D2-PAK	17M0626	1.13
MCP1727-3002E/MF		8-DFN	17M0619	0.82

OUTPUT VOLTAGE: 3.3 V

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-25
TC1185-3.3VCT713	150 mA LDO w/Shutdown and Vref Byass	5-SOT-23	92C5688	0.37
MCP1703T-3302E/CB	250 mA Low Quiescent Current LDO Regulator	3-SOT-23	40M0637	0.54
MCP1824ST-3302E/DB	300 mA, Low Voltage Low Quiescent Current LDO Regulator	3-SOT-223	05N1293	0.48
MCP1702T-3302E/CB	250 mA Low Quiescent Current LDO Regulator	3-SOT-23A	84R5179	0.48
MCP1703T-3302E/MB		3-SOT-89	40M0639	0.54
MCP1725-3302E/MC	500 mA Low Quiescent Current LDO Regulator	8-DFN	26M9911	0.51
TC1262-3.3VAB	500mA Fixed Output CMOS LDO	3-TO-220	92C5755	0.82
TC1262-3.3VDB		3-SOT-223	53R0370	0.51
TC1264-3.3VAB	800 mA Fixed Output CMOS LDO	3-TO-220	92C5792	0.98
MCP1726-3302E/MF	1 A Low Quiescent Current LDO Regulator	8-DFN	08J8708	0.68
MCP1827-3302E/AT	1.5A, Low Voltage, Low Quiescent Current LDO Regulator	5-TO-220	88K5596	1.13
MCP1827-3302E/ET		5-D2-PAK	88K5597	1.13
MCP1827S-3302E/AB		3-TO-220	88K5608	1.13
MCP1827S-3302E/EB		3-D2-PAK	88K5609	1.13
MCP1727-3302E/MF		8-DFN	74K5384	0.82

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LDO VOLTAGE REGULATORS (CONT.)

OUTPUT VOLTAGE: 3.3 V

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-25
● MCP1700T-3302E/TT	Low Quiescent Current LDO	3-SOT-23	88H9817	0.37
● MCP1700-3302E/TO		3-TO-92	88H9804	0.37
● MCP1700T-3302E/MB		3-SOT-89	88H9816	0.37

OUTPUT VOLTAGE: 5 V

● MCP1703T-5002E/CB	250 mA Low Quiescent Current LDO Regulator	3-SOT-23	40M0640	0.54
● MCP1702-5002E/TO		3-TO-92	56K6985	0.48
● MCP1702T-5002E/CB		3-SOT-23A	84R5180	0.48
● MCP1703T-5002E/MB		3-SOT-89	40M0642	0.54
● MCP1725-5002E/MC	500 mA Low Quiescent Current LDO Regulator	8-DFN	26M9912	0.51
● MCP1726-5002E/MF	1 A Low Quiescent Current LDO Regulator	8-DFN	08J8710	0.68
● MCP1827-5002E/AT	1.5A, Low Voltage Low Quiescent Current LDO Regulator	5-TO-220	88K5598	1.13
● MCP1827-5002E/ET		5-D2-PAK	88K5599	1.13
● MCP1827S-5002E/AB		3-TO-220	88K5610	1.13
● MCP1827S-5002E/EB		3-D2-PAK	88K5611	1.13
● MCP1727-5002E/MF		8-DFN	74K5386	0.82
● TC1262-5.0VAB	500 mA Fixed Output CMOS LDO	3-TO-220	92C5758	0.82
● MCP1755ST-5002E/DB	300 mA, 16V High-Performance LDO	3-SOT-223	31W8738	0.66
● MCP1755ST-5002E/DB	300 mA, 16V High-Performance LDO	3-SOT-223	88W3161	0.66
● MCP1725-ADJE/SN	500 mA, Low Voltage Low Quiescent Current LDO Regulator	8-SOIC	17M0588	0.51
● MCP1725-ADJE/MC		8-DFN	26M9905	0.51
● MCP1725-ADJE/MC	500 mA, Low Voltage Low Quiescent Current LDO Regulator	8-DFN	26M9905	0.51
● MCP1726-ADJE/SN	1A, Low Voltage Low Quiescent Current LDO Regulator	8-SOIC	22K1363	0.68
● MCP1727-ADJE/SN	1.5A, Low Voltage Low Quiescent Current LDO Regulator	8-SOIC	74K5375	0.82
● MCP1827-ADJE/AT		5-TO-220	88K5586	1.13
● MCP1827-ADJE/ET		5-D2-PAK	88K5587	1.13
● MCP1727-ADJE/MF		8-DFN	74K5374	0.82

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
SOT223-5EV-VREG	Voltage Regulator Evaluation Board	07P9763	35.00
TO263-5EV-VREG		14R9168	30.00
SOT89-3EV-VREG		25R8512	25.00
TO263-3EV-VREG		25R9520	25.00

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GENERAL PURPOSE LINEAR VOLTAGE REGULATORS

RoHS Compliant Available

ON Semiconductor

POSITIVE FIXED

Mfg. Part No.	V_{out} Typ. (V)	Output Current (A)	Dropout Voltage (V)	Package	Stock No.	Price Each 1-9
● LM2931AD-5.0G	5	0.1	0.6	8-SOIC	71J5000	0.70
● LM2931AT-5.0G	5	0.1	0.6	4-TO-220	26K3619	1.30
● LM2931AZ-5.0G	5	0.1	0.16	3-TO-92	71J5003	0.72
● LM2931DT-5.0G	5	0.1	0.16	3-DPAK	26K3621	0.69
● LM2931T-5.0G	5	0.1	0.6	3-TO-220	26K3623	1.07
● LM2931Z-5.0G	5	0.1	0.16	3-TO-92	71J5009	0.73
● LP2950ACZ-5.0RAG	5	0.1	0.35	3-TO-92	41K9897	0.97
● LP2950CDT-3.3RKG	3.3	0.1	0.35	3-DPAK	26K3639	0.87
● LP2950CDT-5.0G	5	0.1	0.35	3-DPAK	71J5028	0.85
● LP2950CZ-3.0G	3	0.1	0.35	3-TO-92	41K9899	0.89
● LP2950CZ-5.0G	5	0.1	0.35	3-TO-92	45J0754	0.95
● LP2951ACN-3.3G	3.317	0.1	0.35	8-DIP	70K3005	0.95
● MC33269D-3.3G	3.3	0.8	1	8-SOIC	45J1180	0.90
● MC33269DT-012G	12	0.8	1	3-DPAK	42K0605	0.90
● MC33269DT-3.3G	3.3	0.8	1	3-DPAK	98H0692	0.90
● MC33269DT-5.0G	5	0.8	1	3-DPAK	45J1183	0.95
● MC33269DTRK-5.0G	5	0.8	1	DPAK	98H0693	0.92
● MC33269ST-3.3T3G	3.3	0.8	1	3-SOT-223	71J5526	0.97
● MC33269T-3.3G	3.3	0.8	1	3-TO-220	71J5527	1.01
● MC33269T-5.0G	5	0.8	1	3-TO-220	45J1185	1.08
● MC33275DT-2.5G	2.5	0.3	0.26	3-DPAK	42K0615	0.95
● MC33275DT-3.0G	3	0.3	0.26	3-DPAK	26K4022	1.01
● MC33275DT-3.3G	3.3	0.3	0.26	DPAK	26K4024	0.95
● MC33275DT-5.0G	5	0.3	0.26	DPAK	42K0616	1.01
● MC33275ST-5.0T3G	5	0.3	0.26	4-SOT-223	45J1189	1.00
● MC33375ST-1.8T3G	1.8	0.3	0.26	4-SOT-223	26K4033	0.74
● MC33375ST-3.3T3G	3.3	0.3	0.26	5-SOT-223	45J1199	0.78
● MC33375ST-5.0T3G	5	0.3	0.26	6-SOT-223	45J1200	0.74

➤CONTINUED➤

GENERAL PURPOSE LINEAR VOLTAGE REGULATORS (CONT.)

Mfg. Part No.	V_{out} Typ. (V)	Output Current (A)	Dropout Voltage (V)	Package	Stock No.	Price Each 1-9
● MC33761SNT1-050G	5	0.08	0.16	5-SOT-23	83H7303	0.90
● MC7805ABTG	5	1	2	3-TO-220	71J5733	0.79
● MC7805ACD2TG	5	1	2	3-D2PAK	71J5734	0.93
● MC7805ACTG	5	1	2	3-TO-220	45J1442	0.63
● MC7805BDTG	5	1	2	4-DPAK-3	71J5736	0.73
● MC7805BDTRKG	5	1	2	3-D2PAK	83H7311	0.74
● MC7805BTG	5	1	2	3-TO-220	45J1443	0.75
● MC7805CD2TR4G	5	1	2	3-D2PAK	71J5742	0.77
● MC7805CTG	5	1	2	3-TO-220	88H4758	0.52
● MC7806ACTG	6	1	2	3-C77	42K1217	0.61
● MC7806CTG	6	1	2	3-TO-220	88H4759	0.52
● MC7808ACTG	8	1	2	3-TO-220	42K1220	0.62
● MC7808BDTRKG	8	1	2	4-DPAK-3	45J1444	0.73
● MC7808BTG	8	1	2	3-TO-220	45J1445	0.74
● MC7808CTG	8	1	2	3-TO-220	88H4760	0.52
● MC7809ACTG	9	1	2	3-TO-220	42K1223	0.62
● MC7809CTG	9	1	2	3-TO-220	88H4761	0.54
● MC7812ACTG	12	1	2	3-TO-220	45J1446	0.61
● MC7812BDTRKG	12	1	2	4-DPAK-3	45J1447	0.69
● MC7812BTG	12	1	2	3-TO-220	45J1448	0.75
● MC7812CD2TG	12	1	2	3-D2PAK	71J5752	0.84
● MC7812CD2TR4G	12	1	2	3-D2PAK	71J5753	0.81
● MC7812CTG	12	1	2	3-TO-220	88H4762	0.53
● MC7815ACTG	15	1	2	3-TO-220	98H0725	0.61
● MC7815BTG	15	1	2	3-TO-220	45J1450	0.61
● MC7815CD2TR4G	15	1	2	3-D2PAK	71J5759	0.85
● MC7815CTG	15	1	2	3-TO-220	45J1451	0.54
● MC7818BTG	18	1	2	3-TO-220	26K4403	0.61
● MC7818CTG	18	1	2	3-TO-220	45J1452	0.53
● MC7824ACTG	24	1	2	3-TO-220	45J1453	0.62
● MC7824BTG	24	1	2	3-TO-220	45J1454	0.56
● MC7824CTG	24	1	2	3-TO-220	45J1455	0.52
● MC78FC33HT1G	3.382	0.12	0.1	3-SOT-89	98H0717	0.97
● MC78FC50HT1G	5	0.12	0.1	3-SOT-89	71J5705	0.92
● MC78L05ABDG	5	0.1	1.7	8-SOIC	71J5712	0.56
● MC78L05ABDR2G	5	0.1	1.7	8-SOP	88H4745	0.57
● MC78L05ABPG	5	0.1	1.7	3-TO-92	45J1400	0.49
● MC78L05ABPRAG	5	0.1	1.7	3-TO-92	84K8787	0.45
● MC78L05ACDG	5	0.1	1.7	8-SOIC	88H4746	0.47
● MC78L05ACDR2G	5	0.1	1.7	8-SOP	88H4747	0.60
● MC78L05ACPG	5	0.1	1.7	3-TO-92	88H4748	0.52
● MC78L05ACPRAG	40	0.1	1.7	3-TO-92	88H4749	0.55
● MC78L05ACPRPG	30	0.1	1.7	3-TO-92	98H0719	0.51
● MC78L08ABDG	8	0.1	1.7	8-SOP	88H4750	0.56
● MC78L08ABPG	8	0.1	1.7	3-TO-92	42K1170	0.45
● MC78L08ACDG	8	0.1	1.7	8-SOP	45J1406	0.49
● MC78L08ACPG	8	0.1	1.7	3-TO-92	45J1408	0.53
● MC78L09ACDG	9	0.1	1.7	8-SOIC	71J5715	0.49
● MC78L09ACPG	9	0.1	1.7	3-TO-92	45J1412	0.54
● MC78L12ABDG	12	0.1	1.7	8-SOP	42K1176	0.54
● MC78L12ACDG	12	0.1	1.7	8-SOP	71J5719	0.49
● MC78L12ACDR2G	12	0.1	1.7	8-SOIC	84K8788	0.49
● MC78L12ACPG	12	0.1	1.7	3-TO-92	45J1414	0.56
● MC78L15ABPG	15	0.1	1.7	3-TO-92	42K1178	0.48
● MC78L15ACDR2G	15	0.1	1.7	8-SOIC	84K8789	0.46
● MC78L15ACPG	15	0.1	1.7	3-TO-92	31K8203	0.57
● MC78L18ACPG	18	0.1	1.7	3-TO-92	45J1421	0.52
● MC78L24ACPG	24	0.1	1.7	3-TO-92	45J1422	0.53
● MC78LC50HT1G	5	0.1	0.025	3-SOT-89	71J5711	0.76
● MC78LC50NTRG	5	0.1	0.03	5-SOT-23	26K4390	0.88
● MC78M05ABDTG	5	0.5	2	3-DPAK	83H7309	0.72
● MC78M05ACDTG	5	0.5	2	3-DPAK	42K1187	0.69
● MC78M05BDTG	5	0.5	2	3-DPAK	45J1424	0.73
● MC78M05BDTRKG	5	0.5	2	3-DPAK	45J1425	0.57
● MC78M05BTG	5	0.5	2	3-TO-220	71J5724	0.74
● MC78M05CDTG	5	0.5	2	3-DPAK	88H4751	0.54
● MC78M05CDTRKG	5	0.5	2	3-DPAK	67H6773	0.51
● MC78M05CTG	5	0.5	2	3-TO-220	88H4752	0.54
● MC78M06CDTG	6	0.5	2	3-DPAK	88H4753	0.50
● MC78M08BDTG	8	0.5	2	3-DPAK	26K4394	0.74
● MC78M08CDTG	8	0.5	2	3-DPAK	45J1428	0.53
● MC78M08CDTRKG	8	0.5	2	3-DPAK	83H7310	0.51
● MC78M08CTG	8	0.5	2	3-TO-220	45J1429	0.60
● MC78M09CTG	9	0.5	2	3-TO-220	45J1430	0.60

➤CONTINUED➤

GENERAL PURPOSE LINEAR VOLTAGE REGULATORS (CONT.)

Mfg. Part No.	V_{out} Typ. (V)	Output Current (A)	Dropout Voltage (V)	Package	Stock No.	Price Each 1-9
MC78M12BDTG	12	0.5	2	3-DPAK	45J1431	0.74
MC78M12CDTG	12	0.5	2	3-DPAK	45J1432	0.53
MC78M12CDTRKG	12	0.5	2	8 Lead	45J1433	0.51
MC78M12CTG	12	0.5	2	3-T0-220	45J1434	0.53
MC78M15BDTG	15	0.5	2	3-DPAK	71J5729	0.69
MC78M15BTG	15	0.5	2	3-T0-220	42K1208	0.69
MC78M15CTG	15	0.5	2	3-T0-220	98H0723	0.60
MC78M24CTG	24	0.5	2	3-T0-220	42K1213	0.60
MC78PC18NTRG	1.8	0.15	0.6	5-TSOP	88H4756	0.76
MC78PC33NTRG	3.3	0.15	0.2	5-TSOP	45J1438	0.80
MC78PC50NTRG	5	0.15	0.17	5-SOT-23	42K1216	0.76
NCP1117DT15G	1.5	1	1.2	3-DPAK	42K1810	0.49
NCP1117DT15RKG	1.5	1	1.2	3-DPAK	83H7619	0.50
NCP1117DT33G	3.3	1	1.2	3-DPAK	71J6562	0.51
NCP1117DT33RKG	3.3	1	1.2	3-DPAK	83H7620	0.53
NCP1117DT50G	5	1	1.2	3-DPAK	26K4839	0.51
NCP1117ST25T3G	2.5	1	1.07	3-SOT-223	88H4973	0.50
NCP1117ST33T3G	3.3	1	1.2	3-SOT-223	67H7013	0.53
NCP1117ST50T3G	5	1	1.07	3-SOT-223	71J6563	0.54
NCP1117STAT3G	18.8	1	1.2	3-SOT-223	88H4970	0.52
NCP500SN33T1G	3.383	0.15	0.15	5-TSOP	88H4995	0.69
NCP511SN33T1G	3.399	0.15	0.1	5-TSOP	17H1671	0.69
NCP5501DT50G	5	0.5	0.3	3-DPAK	02M9833	0.74
NCP551SN18T1G	1.8	0.15	0.13	5-TSOP	45J1925	0.69
NCP551SN33T1G	3.399	0.15	0.04	5-TSOP	83H7670	0.68
NCP551SN50T1G	5.1	0.15	0.04	5-TSOP	45J1930	0.20
NCV7805BTG	5	1	2	3-T0-220	42K2116	0.80
NEGATIVE FIXED						
MC7905ACTG	-5	1	1.3	3-T0-220	45J1466	0.61
MC7905CTG	-5	1	1.3	3-T0-220	98H0732	0.64
MC7906CTG	-6	1	1.3	3-T0-220	45J1468	0.64
MC7908CTG	-8	1	1.3	3-T0-220	88H4765	0.60
MC7912ACTG	-12	1	1.3	3-T0-220	71J5771	0.58
MC7912BTG	-12	1	1.3	3-T0-220	26K4429	0.58
MC7912CD2TG	-12	1	1.3	3-D2PAK	26K4430	0.79
MC7912CTG	-12	1	1.3	3-T0-220	45J1469	0.63
MC7915ACTG	-15	1	1.3	3-T0-220	71J5772	0.61
MC7915CTG	-15	1	1.3	3-T0-220	45J1471	0.65
MC7918CTG	-18	1	1.3	3-T0-220	45J1472	0.60
MC79L05ABDG	-5	0.1	1.7	8-SOIC	71J5761	0.45
MC79L05ABPG	-5	0.1	1.7	3-T0-92	26K4404	0.51
MC79L05ACDG	-5	0.1	1.7	8-SOIC	45J1457	0.49
MC79L05ACDR2G	-5	0.1	1.7	8-SOIC	84K8790	0.50
MC79L05ACPG	-5	0.1	1.7	3-T0-92	98H0727	0.56
MC79L12ABDG	-12	0.1	1.7	8-SOP	26K4407	0.46
MC79L12ABPG	-12	0.1	1.7	3-T0-92	42K1241	0.51
MC79L12ACDG	-12	0.1	1.7	8-SOIC	26K4410	0.49
MC79L12ACPG	-12	0.1	1.7	3-T0-92	98H0729	0.56
MC79L15ABPG	-15	0.1	1.7	3-T0-92	26K4414	0.53
MC79L15ACPG	-15	0.1	1.7	3-T0-92	42K1243	0.57
MC79M05BTG	-5	0.5	1.1	3-T0-220	26K4417	0.68
MC79M05CDTG	-5	0.5	1.1	DPAK	71J5765	0.58
MC79M05CTG	-5	0.5	1.1	3-T0-220	45J1461	0.60
MC79M08BDTG	-8	0.5	1.1	4-DPAK	42K1251	0.69
MC79M12CDTG	-12	0.5	1.1	DPAK	71J5766	0.58
MC79M12CTG	-12	0.5	1.1	3-T0-220	45J1463	0.60
MC79M15BTG	-15	0.5	1.1	3-T0-220	26K4425	0.69
MC79M15CDTG	-15	0.5	1.1	3-DPAK	88H4764	0.64
POSITIVE ADJUSTABLE						
CS8182YDFR8G	45	0.2	0.35	8-SOIC	71J3571	2.12
LM2931ACDG	29.5	0.1	0.16	8-SOIC	41K9871	0.66
LM2931CDR2G	29.5	0.1	0.16	8-SOIC	88H4655	0.63
LM2931CTG	29.5	0.1	0.16	5-T0-220	26K3620	1.03
LM317BD2TG	37	0.1	1.95	3-D2PAK	88H4656	1.01
LM317BD2TR4G	37	0.1	1.95	3-D2PAK	84K8731	1.09
LM317BTG	37	0.1	1.95	3-T0-220	45J0735	0.64
LM317D2TG	37	0.1	1.95	3-D2PAK	71J5011	0.92
LM317D2TR4G	37	0.1	1.95	3-D2PAK	71J5012	0.90
LM317LBDG	37	0.1	1.95	8-SOIC	88H4658	0.61
LM317LBZG	37	0.1	1.95	3-T0-92	45J0736	0.72
LM317LDG	37	0.1	1.95	8-SOP	45J0739	0.56
LM317LDR2G	37	0.1	1.95	8-SOIC	84K8732	0.53
LM317LZG	37	0.1	1.95	3-T0-92	45J0740	0.52
LM317MABTG	37	0.1	1.95	3-T0-220	26K3626	0.92

➤CONTINUED➤

GENERAL PURPOSE LINEAR VOLTAGE REGULATORS (CONT.)

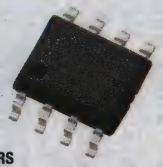
Mfg. Part No.	V_{out} Typ. (V)	Output Current (A)	Dropout Voltage (V)	Package	Stock No.	Price Each 1-9
POSITIVE ADJUSTABLE						
LM317MBDTG	37	0.1	1.95	4-DPAK	71J5014	0.95
LM317MBSTT3G	37	0.1	1.95	3-SOT-223	41K9881	0.97
LM317MDTG	37	0.1	1.95	4-DPAK	57J3838	0.76
LM317MDTRKG	37	0.1	1.95	4-DPAK	88H4660	0.65
LM317MSTT3G	37	0.1	1.95	3-SOT-223	26K3627	0.85
LM317MTG	37	0.1	1.95	3-T0-220	45J0743	0.69
LM317TG	37	0.1	1.95	3-T0-220	98H0572	0.63
LP2951ACDG	5.025	0.1	0.35	8-SOIC	26K3642	0.73
LP2951ACDR2G	5.025	0.1	0.35	8-SOIC	41J1709	0.75
LP2951ACNG	5.025	0.1	0.35	8-DIP	70K3006	0.88
LP2951CNG	5.05	0.1	0.35	8-DIP	26K3645	0.83
MC33269DG	10	0.8	1	8-SOIC	42K0603	0.96
MC33269DTG	10	0.8	1	3-DPAK	83H7300	0.96
MC33269TG	10	0.8	1	3-T0-220	71J5528	1.08
NCP1117DTAG	18.8	1	1.07	3-DPAK	45J1790	0.52
NCP1117DTARKG	18.8	1	1.07	3-DPAK	88H4967	0.50
NCP3334DADJG	10	0.86	0.34	8-SOIC	02M9826	1.01
NCP3334DADJR2G	10	0.86	0.34	8-SOIC	02M9827	0.37
NEGATIVE ADJUSTABLE						
LM337BTG	-37	1.5	2.5	3-T0-220AB	45J0746	0.98
LM337TG	-1.2	1.5	2.25	3-T0-220AB	45J0747	0.86

(74502)

LINEAR VOLTAGE REGULATORS - LOW DROPOUT

RoHS Compliant Available

ON Semiconductor



FIXED OUTPUT VOLTAGE REGULATORS

Mfg. Part No.	V_{IN} Max. (V)	I_{OUT} Max. (A)	V_{OUT} Max (V)	Drop-out Voltage (V)	Pkg.	Stock No.	Price Each 1-9
NCP699SN33T1G	6	0.24	3.399	0.32	5-TSOP	04R7849	0.57
NCP1117DT18RKG	20	0.8	1.845	1.07	3-DPAK	77M8941	0.53
NCP699SN18T1G	6	0.24	1.854	0.57	5-TSOP	04R7848	0.57
NCP1117ST18T3G	11.8	2.2	1.845	1.2	3-SOT-223	04R7838	0.50
MC79M15CTG	-30	0.5	-15.6	1.1	3-T0-220	98H0731	0.62
MC79M15CDTRKG	-30	0.5	-15.6	1.1	3-DPAK	04R7835	0.65
MC79M12CDTRKG	-30	0.5	-12.5	1.1	3-DPAK	04R7834	0.69
MC79M05CDTRKG	-25	0.5	-5.2	1.1	3-DPAK	04R7833	0.63
MC79M05BDTG	-25	0.5	-5.2	1.1	3-DPAK	71J5764	0.74
MC79L15ACDG	-30	0.1	-15.6	1.7	8-SOIC	26K4415	0.49
MC79L15ABDG	-30	0.1	-15.6	1.7	8-SOIC	26K4412	0.46
MC7924CTG	-38	1	-25	1.3	3-T0-220	45J1473	0.64
MC7915CD2TG	-30	1	-15.6	1.3	3-D2PAK	26K4434	0.84
MC7915BTG	-30	1	-15.6	1.3	3-T0-220	45J1470	0.61
MC7905CD2TG	-25	1	-5.2	1.3	3-D2PAK	71J5768	0.79
MC7905BTG	-25	1	-5.2	1.3	3-T0-220	45J1467	0.58
MC7905BD2TG	-25	1	-5.2	1.3	3-D2PAK	42K1256	0.92
MC7905ACD2TG	-25	1	-5.1	1.3	3-D2PAK	71J5767	0.98
MC7905.2CTG	-25	1	-5.4	1.3	3-T0-220	45J1465	0.93
MC78M15CDTG	30	0.35	15.6	2	4-DPAK	98H0722	0.53
MC78M12BTG	30	0.35	12.5	2	3-T0-220	42K1204	0.69
MC78M08BTG	25	0.35	8.3	2	3-T0-220	42K1198	0.69
MC78M06CTG	25	0.35	6.25	2	3-T0-220	45J1426	0.60
MC78M05ACDTRKG	25	0.35	5.1	2	4-DPAK	04R7830	0.71
MC78M05ABDTRKG	25	0.35	5.1	2	4-DPAK	04R7829	0.74
MC78L15ACDG	30	0.1	15.6	1.7	8-SOIC	71J5721	0.49
MC78L15ABDG	30	0.1	15.6	1.7	8-SOIC	42K1177	0.56
MC78L12ABPG	27	0.1	12.5	1.7	3-T0-92	71J5717	0.49
MC78L05ACPRMG	20	0.1	5.2	1.7	3-T0-92	45J1405	0.55
MC78L05ACPREG	20	0.1	5.2	1.7	3-T0-92	04R7828	0.51
MC7818ACTG	33	1	18.36	2	3-T0-220	42K1236	0.58
MC7815BDTG	30	0.5	15.6	2	4-DPAK	71J5756	0.71
MC7812CDTG	30	0.5	12.5	2	4-DPAK	42K1230	0.66
MC7812ACD2TG	30	1	12.25	2	3-D2PAK	42K1227	0.92
MC7809CD2TG	26	0.5	9.35	2	3-D2PAK	71J5748	0.83
MC7808ABD2TG	25	1	8.16	2	3-D2PAK	26K4398	0.89

➤CONTINUED➤

LINEAR VOLTAGE REGULATORS - LOW DROPOUT (CONT.)

Mfg. Part No.	V_{IN} Max. (V)	I_{OUT} Max. (A)	V_{OUT} Max (V)	Drop-out Voltage (V)	Pkg.	Stock No.	Price Each 1-9
● MC7805CDTRKG	25	1	5.2	2	4-DPAK	04R7831	0.67
● NCV8664ST50T3G	45	0.15	5.1	0.265	3-SOT-223	04R7850	1.79
● MC7805CDTG	25	0.5	5.2	2	4-DPAK	71J5739	0.66
● MC7805CD2TG	25	0.5	5.2	2	3-D2PAK	71J5741	0.76
● MC7805BD2TG	25	0.5	5.2	2	3-D2PAK	71J5737	0.92
● MC7805ABD2TG	25	1	5.1	2	3-D2PAK	71J5732	0.89
● MC33269DTRK-3.3G	20	0.8	3.33	1.1	4-DPAK	04R7826	0.92
● LP2951CD-3.3R2G	30	0.1	3.333	0.35	8-SOIC	04R7822	0.68
● LP2951CD-3.3G	30	0.1	3.333	0.35	8-SOIC	70K3008	0.77
● LP2950CZ-5.0RPG	30	0.1	5.05	0.35	3-TO-92	41K9903	0.92
● LP2950CZ-3.3RAG	30	0.1	3.333	0.35	3-TO-92	04R7821	0.92
● LP2950ACZ-5.0G	30	0.1	5.05	0.35	3-TO-92	41K9896	0.99

ADJUSTABLE OUTPUT VOLTAGE REGULATORS

Mfg. Part No.	V_{IN} Max. (V)	I_{out} Max. (A)	V_{OUT} Range (V)	V_{DO} (V)	Pkg.	Stock No.	Price Each 1-9
● LM317MABDTG	40	0.5	1.2 to 37	2.1	4-DPAK	26K3625	1.10
● LM317MBDTRKG	40	0.5	1.2 to 37	2.1	4-DPAK	04R7816	1.03
● LM317MBTG	40	0.5	1.2 to 37	2.1	3-TO-220	71J5015	0.79
● LM337BD2TG	40	1.5	-1.2 to -37	2.1	3-D2PAK	71J5016	1.51

(89363)

3 TERMINAL POSITIVE VOLTAGE REGULATORS

RoHS Compliant Available

FIXED

Mfg. Part No.	Output Voltage Max. (V)	Output Current Max. (A)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-9
● L78M05CV	5	0.5	35	3-TO-220	89K1366	0.63
● L78M12CV	12	0.5	35	3-TO-220	89K0772	0.75
● L7818CV	18	1	30	3-TO-220	89K1402	0.76
● L78S12CV	12	2	35	3-TO-220	89K0776	1.06
● L78S24CV	24	2	40	3-TO-220	89K0778	1.02

(83720)

3 TERMINAL NEGATIVE VOLTAGE REGULATORS

RoHS Compliant Available

FIXED

Mfg. Part No.	Output Voltage Max. (V)	Output Current Max. (A)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-9
● L7912ACV	-12	1.5	-35	3-TO-220	89K0792	0.70

ADJUSTABLE

Mfg. Part No.	Output Voltage Min. (V)	Output Voltage Max. (V)	Output Current Max. (A)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-9
● LM337SP	-1.2	-37	1.5	-40	3-TO-220	89K0694	1.30

(83721)

VOLTAGE REGULATORS

RoHS Compliant Available

POSITIVE VOLTAGE REGULATORS

Mfg. Part No.	Output Voltage Max. (V)	Output Current Max. (A)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-9
● L7809CV	9	1.5	35	3-TO-220	89K1390	0.62
● L7805CD2T-TR	5	1.5	35	3-D2PAK	89K1379	0.74
● L7805CP	5	1	30	3-TO-220FP	89K1380	1.16
● L7805ABD2T-TR	5	1	35	3-D2PAK	89K0779	0.78
● L7805ABV	5	1	35	3-TO-220	89K0780	0.94
● L7806CV	6	1	30	3-TO-220	89K1383	0.75
● L7812CP	12	1	30	3-TO-220FP	89K1393	1.07
● L7812CV	12	1	30	3-TO-220	89K1395	0.59
● L7824CV	24	1	40	3-TO-220	89K1406	0.70
● LM723CN	37	0.15	40	14-DIP	89K0715	0.94
● L4940V5	5	1.5	30	3-TO-220	89K0746	2.10
● L4941BV	5	1	30	3-TO-220	89K0747	1.54
● LD1085V	28	3	30	3-TO-220	89K0604	2.48

➤ CONTINUED ➤

VOLTAGE REGULATORS (CONT.)

Mfg. Part No.	Output Voltage Max. (V)	Output Current Max. (A)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-9
● LD1086V33	3.3	1.5	30	3-TO-220	89K0611	1.77
● LD1117V33	3.3	0.8	15	3-TO-220	89K0630	0.63

FIXED POSITIVE VOLTAGE REGULATOR

Mfg. Part No.	Output Voltage Nom. (V)	Output Current Max. (A)	Dropout Voltage Max. (V)	Package	Stock No.	Price Each 1-9
● L78S05CV	5	2	...	3-TO-220	89K0775	0.84
● L78S75CV	7.5	2	...	3-TO-220	89K1375	1.26
● PB137ACV	13.7	1.5	2	3-TO-220	89K1490	1.86
● L7805ACV	5	1	2	3-TO-220	89K0782	0.63
● L7812ABV	12	1	2	3-TO-220	89K0785	1.05
● L7812ACV	12	1	2	3-TO-220	89K0786	0.87
● L78M05CDT-TR	5	0.5	2	3-DPAK	89K1365	0.65
● L7805ABP	5	1	2	3-TO-220	89K1376	1.21
● L7805ACP	5	1	2	3-TO-220	89K1377	1.03
● L7805C-V	5	1	2	3-TO-220	89K1378	0.53
● L7806ACV	6	1	2	3-TO-220	89K1382	0.69
● L7812ACD2T-TR	12	1	2	3-D2PAK	89K1391	0.98
● L7812CD2T-TR	12	1	2	3-D2PAK	89K1392	0.78
● L7815ABV	15	1	2	3-TO-220	89K1396	0.94
● L7815CD2T-TR	15	1	2	3-D2PAK	89K1397	0.69
● L7815CP	15	1	2	3-TO-220	89K1398	1.14
● L7824ACV	24	1	2	3-TO-220	89K1403	0.75
● L78M05ABV	5	0.5	2	3-TO-220	89K0771	0.85
● L78M05ABDT-TR	5	0.5	2	3-DPAK	89K1363	0.64
● L78M05ACDT-TR	5	0.5	2	3-DPAK	89K1364	0.34
● L78M05CDT-TR	5	0.5	2	3-DPAK	89K1365	0.65
● L78M08CV	8	0.5	2	3-TO-220	89K1367	0.60
● L78M12ABDT-TR	12	0.5	2	3-DPAK	89K1368	0.72
● L78M12CDT-TR	12	0.5	2	3-DPAK	89K1370	0.46
● L78M15CDT-TR	15	0.5	2	3-DPAK	89K1372	0.77
● L78L05ABD13TR	5	0.1	1.7	8-SOIC	89K1336	0.56
● L78L05ABUTR	5	0.1	1.7	SOT-89	89K1337	0.54
● L78L05ABZ	5	0.1	1.7	3-TO-92	89K1338	0.53
● L78L05ACD13TR	5	0.1	1.7	8-SOIC	89K1339	0.54
● L78L05ACUTR	5	0.1	1.7	3-SOT-89	89K1341	0.54
● L78L05ACZ	5	0.1	1.7	3-TO-92	89K1342	0.61
● L78L06ABZ	6	0.1	1.7	3-TO-92	89K1345	0.60
● L78L08ABUTR	8	0.1	1.7	3-SOT-89	89K1348	0.38
● L78L08ACZ	8	0.1	1.7	3-TO-92	89K1350	0.54
● L78L08ACZTR	8	0.1	1.7	3-TO-92	89K1351	0.20
● L78L09ACUTR	9	0.1	1.7	3-SOT-89	89K1352	0.59
● L78L12ABZ	12	0.1	1.7	3-TO-92	89K1354	0.46
● L78L12ACUTR	12	0.1	1.7	3-SOT-89	89K1355	0.62
● L78L12ACZ	12	0.1	1.7	3-TO-92	89K1356	0.51
● L78L12ACZ-TR	12	0.1	1.7	3-TO-92	89K1357	0.61
● L78L15ACZ	15	0.1	1.7	3-TO-92	89K1358	0.58
● L78L33ACD13TR	3.3	0.1	1.7	8-SOIC	89K1360	0.48
● L78L33ACUTR	3.3	0.1	1.7	SOT-89	89K1361	0.70
● L78L33ACZ	3.3	0.1	1.7	3-TO-92	89K1362	0.52

FIXED NEGATIVE VOLTAGE REGULATOR

● L7905CV	-5	1.5	1.4	3-TO-220	89K0790	0.64
● L79L05ACZ	-5	0.1	-35	3-TO-92	89K0789	0.56
● L7912CV	-12	1.5	1.1	3-TO-220	89K0793	0.61
● L7905ACV	-5	1.5	1.4	3-TO-220	89K1414	0.65
● L7905CD2T-TR	-5	1.5	1.4	3-D2PAK	89K1415	1.00
● L7912CD2T-TR	-12	1.5	1.1	3-D2PAK	89K1417	0.96
● L7912CP	-12	1.5	1.1	3-TO-220	89K1418	1.07
● L7915ACV	-15	1.5	1.4	3-TO-220	89K1419	0.98
● L79L05ACUTR	-5	0.1	1.7	3-SOT-89	89K1409	0.62

(85908)

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(196560)

ADJUSTABLE POSITIVE VOLTAGE REGULATORS

RoHS Compliant Available

Mfg. Part No.	Output Voltage Min. (V)	Output Voltage Max. (V)	Output Current Max. (A)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-9
LM217T	1.2	37	1.5	40	3-TO-220	89K0653	1.10
LM317D2T-TR	1.2	37	1.5	40	3-D2PAK	89K0676	0.83
LM317LZ-TR	1.2	37	0.1	40	3-TO-92	89K0681	0.61
LM317MDT-TR	1.2	37	0.5	40	3-DPAK	89K0682	0.80
LM317T	1.2	37	1.5	40	3-TO-220	89K0685	0.78
LM317P	1.2	37	1.5	40	3-TO-220	89K0684	1.35
L200CV	2.85	36	2	40	5-Pentawatt	89K0722	4.90

(83722)

LDO POSITIVE VOLTAGE REGULATORS

RoHS Compliant Available

FIXED OUTPUT

Mfg. Part No.	Output Voltage (V)	Output Current Max. (A)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-9
LD1117AS18TR	1.8	0.8	15	3-SOT-223	89K0613	0.87
LD1117AS33TR	3.3	0.8	15	3-SOT-223	89K0614	1.00
LD1117DT12TR	1.2	1.3	15	DPAK	89K0616	0.55
LD1117DT18TR	1.8	0.8	15	3-DPAK	89K0617	0.63
LD1117DT25CTR	2.5	0.8	15	3-DPAK	89K0618	0.26
LD1117DT33CTR	3.3	0.8	15	3-DPAK	89K0619	0.55
LD1117DT33TR	3.3	0.8	15	3-DPAK	89K0620	0.52
LD1117DT50CTR	5	0.8	15	3-DPAK	89K0621	0.46
LD1117DT50TR	5	0.8	15	3-DPAK	89K0622	0.45
LD1117S12TR	1.2	0.8	15	3-SOT-223	89K0624	0.24
LD1117S25CTR	2.5	0.8	15	3-SOT-223	89K0625	0.62
LD1117S33CTR	3.3	1.3	15	SOT-223	89K0626	0.52
LD1117S33TR	3.3	1.3	15	3-SOT-223	89K0627	0.56
LD1117S50CTR	5	0.8	15	3-SOT-223	89K0628	0.60
LD1117S50TR	5	0.8	15	3-SOT-223	89K0629	0.54
LD1117V33C	3.3	0.8	15	3-TO-220	89K0631	0.75
KF33BDT-TR	3.3	1	20	3-DPAK	89K0599	1.31
KF50BDT-TR	5	1	20	3-DPAK	89K0600	0.76
LD1085D2T33R	3.3	1.5	30	3-D2PAK	89K0603	2.02
LD1085V50	5	1.5	30	3-TO-220	89K0606	1.74
LD1086DT33TR	3.3	1.5	30	3-DPAK	89K0607	0.56
LD1086D2M33TR	3.3	1.5	30	3-D2PAK/A	89K0608	2.01
LD1086D2T33TR	3.3	1.5	30	3-D2PAK	89K0609	0.59

ADJUSTABLE OUTPUT

Mfg. Part No.	Output Voltage Min. (V)	Output Voltage Max. (V)	Output Current Max. (A)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-9
LD1117DTTR	1.25	15	0.8	15	3-DPAK	89K0615	0.43
LD1117STR	1.25	15	1.3	15	3-SOT-223	89K0623	0.62

(83723)

VERY LOW DROPOUT POSTIVE VOLTAGE REGULATORS

RoHS Compliant Available

Mfg. Part No.	Dropout Voltage (mV)	Output Voltage (V)	Output Current Max. (A)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-9
LM2931AD50R	250	5	0.1	40	8-SO	89K1303	0.99
LM2931AZ50R	250	5	0.1	40	3-TO-92	89K1305	0.68
LE33CZ-TR	200	3.3	0.15	20	3-TO-92	89K1281	0.83
LE50ABZ	200	5	0.15	20	3-TO-92	89K1282	1.76
LF33CV	450	3.3	2	16	3-TO-220	89K1286	2.10
LD29150DT33R	400	3.3	1.5	30	3-DPAK	89K1273	1.59
LD29150DT50R	400	3.3	1.5	30	3-DPAK	89K1274	1.20
L4941BDT-TR	250	5	1.5	30	3-TO-220FP	89K1320	1.93
LF33CDT-TR	450	3.3	2	16	3-DPAK	89K1285	1.72

(83724)

ANALOG REGULATORS - LOW DROPOUT VOLTAGE

RoHS Compliant Available

TEXAS INSTRUMENTS

1.5-3A LOW DROPOUT

Mfg. Part No.	Input Voltage Max. (V)	Output Current (A)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
LM1084IS-3.3/NOPB	29	1.5	3.3	TO-220	41K3361	2.87
LM1084IS-ADJ/NOPB	29	1.5	1.25 to 27.5	TO-220	41K3359	2.87
LM1084IT-3.3/NOPB	29	5	3.3	TO-220	41K3369	2.72
LM1084IT-ADJ/NOPB	29	1.5	1.25 to 27.5	TO-220	41K3367	2.72
LM1085IS-3.3/NOPB	29	3	3.3	TO-263	41K3373	2.58
LM1085IS-5.0/NOPB	29	1.5	5	TO-220	41K3374	2.58
LM1085IS-ADJ/NOPB	29	1.5	1.25 to 27.5	TO-220	41K3371	2.58
LM1085IT-3.3/NOPB	29	1.5	3.3	TO-220	41K3381	2.02
LM1085IT-5.0/NOPB	29	1.5	5	TO-220	41K3382	2.02
LM1085IT-ADJ/NOPB	29	3	1.25 to 27.5	TO-220	41K3379	2.02
LM1086CS-3.3/NOPB	29	1.5	3.3	TO-263	41K3386	2.06
LM1086CS-ADJ/NOPB	29	1.5	1.25 to 27.5	TO-263	41K3383	2.06
LM1086CT-3.3/NOPB	29	1.5	3.3	TO-220	41K3395	1.72
LM1086CT-5.0/NOPB	29	1.5	5	TO-220	41K3396	1.72
LM1086CT-ADJ/NOPB	29	1.5	1.25 to 27.5	TO-220	41K3393	1.72
LM1086IS-3.3/NOPB	29	1.5	3.3	TO-220	41K3412	2.06
LM1086IS-5.0/NOPB	29	1.5	5	TO-220	41K3414	2.06
LM1086IS-ADJ/NOPB	29	1.5	1.25 to 27.5	TO-263	41K3409	2.06
LM1086IT-ADJ/NOPB	29	1.5	1.25 to 27.5	TO-220	41K3421	1.72

800mA LOW DROPOUT

Mfg. Part No.	Input Voltage Max. (V)	Output Current (A)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
LM1117DT-3.3/NOPB	15	0.8	3.3	TO-252	41K3430	1.65
LM1117DT-5.0/NOPB	15	0.8	5	TO-252	41K3431	1.65
LM1117DT-ADJ/NOPB	15	0.8	1.25 to 13.8	TO-252	41K3426	1.65
LM1117IMP-3.3/NOPB	15	0.8	3.3	4-SOT-223	41K3450	1.07
LM1117IMP-ADJ/NOPB	15	0.8	1.25 to 13.8	4-SOT-223	41K3449	1.07
LM1117MP-1.8/NOPB	15	0.8	1.8	4-SOT-223	41K3467	1.07
LM1117MP-2.5/NOPB	15	0.8	2.5	4-SOT-223	41K3468	1.07
LM1117MP-5.0/NOPB	15	0.8	5	4-SOT-223	41K3471	1.07
LM1117MPX-1.8	15	0.8	1.8	4-SOT-223	74C3931	1.29
LM1117MPX-3.3	15	0.8	3.3	4-SOT-223	13B5343	1.29
LM1117MPX-5.0	15	0.8	5	4-SOT-223	13B5344	1.29
LM1117T-3.3/NOPB	15	0.8	3.3	TO-220	41K3490	1.50
LM1117T-5.0/NOPB	15	800	5	3-TO-220	41K3491	1.50

100mA LOW DROPOUT

Mfg. Part No.	Input Voltage Max. (V)	Output Current (A)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
LM2931CM/NOPB	26	0.1	3 to 24	8-SOIC	41K4482	0.89

ULTRA-LOW QUIESCENT CURRENT

Mfg. Part No.	Input Voltage Max. (V)	Output Current (A)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
LM2936BM-3.3/NOPB	60	0.05	3.3	8-SOIC	41K4494	2.12
LM2936BM-5.0/NOPB	60	0.05	5	8-SOIC	41K4495	2.12
LM2936DT-5.0/NOPB	60	0.05	5	TO-252	41K4501	2.29
LM2936M-3.3/NOPB	60	0.05	3.3	8-SOIC	41K4514	2.12
LM2936MP-3.0/NOPB	60	0.05	3.0	4-SOT-223	41K4522	1.69
LM2936MP-3.3/NOPB	60	0.05	3.3	8-SOIC	41K4523	1.69
LM2936MP-5.0/NOPB	60	0.05	5	4-SOT-223	41K4524	1.69
LM2936MX-5.0/NOPB	60	0.05	5	8-SOIC	41K4530	1.77
LM2936Z-5.0/NOPB	60	0.05	5	TO-92	41K4533	2.10
LM2936Z-5.0/NOPB	60	0.05	5	TO-92	41K4533	2.10

500mA LOW DROPOUT

Mfg. Part No.	Input Voltage Max. (V)	Output Current (A)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
LM2937ES-12/NOPB	26	0.5	12	TO-263	41K4535	2.32
LM2937ET-12/NOPB	26	0.5	12	TO-220	41K4549	1.63
LM2937ET-5.0/NOPB	26	0.5	5	TO-220	41K4553	1.63
LM2937ET-5.0/NOPB	26	0.5	5	TO-220	41K4553	1.63
LM2937ET-8.0/NOPB	26	0.5	8	TO-220	41K4554	1.63
LM2937IMP-3.3/NOPB	26	500	3.3	4-SOT-223	28K1907	1.82
LM2937IMP-5.0/NOPB	26	500	5	4-SOT-223	27K6035	1.82
LM2937IMP-8.0/NOPB	26	0.5	8	4-SOT-223	41K4559	1.82
LM2937IMP-10/NOPB	26	0.5	10	4-SOT-223	41K4555	1.82
LM2937IMP-12/NOPB	26	0.5	12	4-SOT-223	41K4556	1.82

1A LOW DROPOUT

Mfg. Part No.	Input Voltage Max. (V)	Output Current (A)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
LM2940CS-12/NOPB	26	1	12	TO-263	41K4567	2.06
LM2940CS-15/NOPB	26	1	15	TO-263	41K4568	2.06
LM2940CSX-5.0/NOPB	26	1	15	TO-263	41K4573	1.72
LM2940T-8.0/NOPB	26	1	8	TO-220	41K4616	1.68
LM2940T-10.0/NOPB	26	1	10	TO-220	41K4613	1.68
LM2940CT-12/NOPB	26	1	12	TO-220	41K4575	1.65
LM2940CT-15/NOPB	26	1	15	TO-220	41K4576	1.65
LM2940IMP-10/NOPB	26	1	10	4-SOT-223	41K4579	2.17
LM2940IMP-12/NOPB	26	1	12	4-SOT-223	41K4580	2.17
LM2940S-10/NOPB	26	1	10	TO-263	41K4603	2.20
LM2940S-12/NOPB	26	1	12	TO-263	41K4604	2.20
LM2940S-8.0/NOPB	26	1	8	TO-263	41K4606	2.32

CONTINUED

ANALOG REGULATORS - LOW DROPOUT VOLTAGE (CONT.)

Mfg. Part No.	Input Voltage Max. (V)	Output Current (A)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
1A LOW DROPOUT						
● LM2940SX-5.0/NOPB	26	1	8	TO-263	41K4610	1.84
● LM2940T-5.0/NOPB	26	1	5	TO-220	41K4615	1.68
● LM2940T-8.0/NOPB	26	1	8	TO-220	41K4616	1.68
● LM2940T-10.0/NOPB	26	1	10	TO-220	41K4613	1.68
● LM2940T-12.0/NOPB	26	1	12	TO-220	41K4614	1.68
● LMS8117AMP-ADJ/NOPB	15	1	13.75	3-SOT-223	41K3018	1.15
1A LOW DROPOUT ADJUSTABLE						
● LM2941CS/NOPB	26	1	5 to 20	5-TO-263	41K4618	2.62
● LM2941CT/NOPB	26	1	5 to 20	5-TO-220	41K4620	1.72
● LM2941S/NOPB	26	1	5 to 20	5-TO-263	41K4623	2.12
● LM2941SX/NOPB	26	1	5 to 20	5-TO-263	41K4624	1.76
● LM2941T/NOPB	26	1	5 to 20	5-TO-220	41K4625	1.72
NEGATIVE LOW DROPOUT						
● LM2990S-5.0/NOPB	0.3	1.5	-5	TO-263	41K4630	3.68
● LM2990SX-5.0/NOPB	0.3	1.5	-5	TO-263	41K4633	3.06
● LM2990S-12/NOPB	0.3	1.5	-12	TO-263	41K4628	3.68
● LM2990S-15/NOPB	0.3	1.5	-15	TO-263	41K4629	3.68
● LM2990T-12/NOPB	0.3	1.5	-12	TO-220	41K4634	3.06
● LM2990T-15/NOPB	0.3	1.5	-15	TO-220	41K4635	3.06
1A LOW DROPOUT ADJUSTABLE						
● LM2991S/NOPB	0.3	1	-25 to 2	5-TO-263	41K4638	3.06
● LM2991SX/NOPB	0.3	1	-25 to 2	5-TO-263	41K4639	3.06
QUASI-LOW DROPOUT						
● LM3480IM3-3.3/NOPB	30	0.1	3.3	3-SOT-23	41K4825	0.92
LM3480IM3-5.0	30	0.1	5	3-SOT-23	83F3816	1.25
● LM3480IM3X-5.0/NOPB	30	0.1	5	3-SOT-23	41K4829	0.92
● LM3480IM3-12/NOPB	30	0.1	12	3-SOT-23	41K4823	0.92
● LM3480IM3-15/NOPB	30	0.1	15	3-SOT-23	41K4824	0.92
1A LOW DROPOUT						
● LM3940IMP-3.3/NOPB	7.5	1	3.3	4-SOT-223	41K5122	1.54
● LM3940IS-3.3/NOPB	7.5	1	3.3	TO-263	41K5124	2.18
● LM3940ISX-3.3/NOPB	7.5	1	3.3	TO-220	41K5125	1.81
● LM3940IT-3.3/NOPB	7.5	1	3.3	TO-220	41K5126	1.77
3-TERMINAL NEGATIVE						
● LM7905CT/NOPB	-25	1.5	–5	TO-220	41K6356	1.58
● LM7912CT/NOPB	-35	1.5	–12	TO-220	41K6357	1.52
● LM7915CT/NOPB	-35	1.5	–15	TO-220	41K6358	1.52
● LM79L05ACM/NOPB	-20	0.1	–5	8-SOIC	41K6342	0.92
● LM79L05ACZ/NOPB	-35	0.1	-15	TO-92	41K6346	0.76
3A LDO FAST RESPONSE						
● LMS1587CS-1.5/NOPB	13	3	1.5	TO-263	41K2946	3.00
1A LOW DROPOUT						
● LMS8117AMP-3.3/NOPB	15	1	3.3	4-SOT-223	41K3020	1.15
ADJUSTABLE MICROPOWER						
● LP2950ACZ-3.0/NOPB	30	0.1	3.0	TO-92	41K6534	0.88
● LP2950ACZ-3.3/NOPB	30	0.1	3.3	TO-92	41K6535	0.88
● LP2950CDT-5.0/NOPB	30	0.1	5.5	TO-252	41K6539	1.32
● LP2950CZ-3.0/NOPB	30	0.1	3.3	TO-92	41K6543	0.80
● LP2950CZ-3.3/NOPB	30	0.1	3.3	TO-92	41K6544	0.80
● LP2951ACMX/NOPB	30	0.1	3.3	8-SOIC	41K6556	0.94
● LP2951CM-3.3/NOPB	30	0.1	3.3	8-SOIC	41K6567	0.96
● LP2951CM-3.3/NOPB	30	0.1	3.3	8-SOIC	41K6567	0.96
● LP2951CMX/NOPB	30	0.1	1.24 to 29	8-SOIC	41K6576	0.80
5V MICROPOWER						
● LP2954AIS/NOPB	30	0.25	5	TO-263	41K6612	4.92
● LP2954IT/NOPB	30	0.25	5	TO-220	41K6619	2.68
● LP3981IMM-3.3/NOPB	6	0.3	3.3	8-SOIC	41K7899	0.69

(70388)

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(197415)

STANDARD LINEAR REGULATORS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Supply Voltage Max. (V)	Output Voltage Typ. (V)	Output Current (mA)	Package	Stock No.	Price Each 1-9
● LM317DCY	40	37	1.5	4-SOT-223	75C0809	0.96
● LM317KTTR	40	37	1.5	3-TO-263	26M9818	0.96
● LM317LID	38	32	100	8-SOIC	14M2018	0.50
● LM317LIPK	38	32	100	3-SOT-89	36M8089	0.74
● LM317LILP	38	32	100	3-TO-92	14M2022	0.50
● LM317MKVURG3	40	37	1.5	3-TO-252	80K2350	0.90
● LM317DCYR	40	37	1500	4-SOT-223	75C0810	0.80
● LM317MDCY	40	37	500	4-SOT-223	75C0818	0.93
● LM317MDCYRG3	40	37	500	4-SOT-223	31K7113	0.88
● LM337KCSE3	-40	-37	1500	3-TO-220	88K5437	0.88
● REG101NA-3.3/250	10	3.3	100	5-SOT-23	75C7430	2.80
● REG102NA-3.3/250	12	3.3	400	5-SOT-23	74K3923	3.34
● REG102NA-5/250	12	5	250	5-SOT-23	75C7476	3.34
● REG103GA-3.3	15	3.3	500	6-SOP	75C7511	6.65
● REG104FA-5KTTT	15	5	1	5-D2PAK	87H2557	7.95
● REG104GA-A	15	5.5	1	6-SOT-223	74C0365	6.65
● REG104GA-3.3	15	3.3	1	5-SOT-223	75C7546	6.65
● REG104GA-5	15	5	1	5-SOT-223	75C7549	6.65
● REG113EA-3.3/250	10	3.3	400	8-MSOP	75C7580	3.73
● REG113NA-3.3/250	10	3.3	400	5-SOT-23	75C7589	3.34
● REG1117-3.3	15	3.3	800	3-SOT-223	35C1963	2.82
● REG1117FAKTTT	15	13.5	1	3-D2PAK	87H2562	5.04
● TL317CD	35	32	100	8-SOIC	08F9401	0.93
● TL317CLP	35	32	100	3-TO-92	08F9402	0.93
● TL780-05CKTTR	25	5	1.5	3-TO-263	18M3191	0.93
● TL780-05KCS	25	5	1.5	3-TO-220	22H1306	0.88
● TL780-15KCS	30	15	1500	3-TO-220	22H1308	0.88
● TL783CKCSE3	150	125	700	3-TO-220	10M0615	2.04
● TL783CKTTR	150	125	700	3-TO-263	18M3193	2.51
● TLV1117-33CDCY	15	3.3	800	4-SOT-223	67K8520	0.79
● TLV1117-33IDCY	15	3.3	800	4-SOT-223	67K8522	0.79
● UA723CD	40	37	150	14-SOIC	35K1830	0.89
● UA723CN	40	37	150	14-DIP	09F1473	0.93
● UA7805CKCS	25	5	1.5	3-TO-220	75M5680	0.80
● UA7805CKTTR	25	5	1.5	3-TO-263	18M3303	0.96
● UA78L05ACD	20	5	100	8-SOIC	09F1481	0.63
● UA78L05ACDR	20	5	100	8-SOIC	77C1854	0.53
● UA78L05ACLPRE3	20	5	100	3-TO-92	52K5955	0.53
● UA78L05AID	20	5	100	8-SOIC	01J1032	0.61
● UA78L05CLP	20	5	100	3-TO-92	52M8832	0.46
● UA78L05CPK	20	5.5	100	3-SOT89	77C1862	0.53
● UA78L06ACPK	20	6.5	100	3-SOT89	77C1864	0.40
● UA78L06ACLP	20	6.2	100	3-TO-92	09F1486	0.48
● UA78L08ACLP	23	8	100	3-TO-226A	09F1489	0.46
● UA78L10ACD	25	10	100	8-SOIC	36K3714	0.46
● UA78L10ACPK	25	10	100	3-SOT-89	77C1878	0.53
● UA78M05CDCY	25	5	500	3-SOT-223	77C1885	0.64
● UA78M05CKVURG3	25	5.25	500	3-TO-252	80K3495	0.75
● UA78M05IDCY	25	5.25	500	4-SOT-223	44J2615	0.64
● UA78M05IKVURG3	25	5.25	500	3-TO-252	80K3496	0.75
● UA78M33CKCS	25	3.5	500	3-TO-220	14P7581	0.60
● UA78M33CDCY	25	3.3	500	3-SOT-223	03P0895	0.60
● UA78M33CKVURG3	25	3.5	500	3-TO-252	80K3502	0.70

DEVELOPMENT TOOLS

Mnf. Part No.	Description	Supported Device	Stock No.	Price Each
● TLV70018EVM-503	Evaluation Module	TLV70018	68R2142	20.40

(4334)

LOW DROPOUT VOLTAGE (LDO's) REGULATORS

RoHS Compliant Available

TEXAS INSTRUMENTS

FEATURED POSITIVE LOW DROPOUT (Vin MAX <25V)

Mfg. Part No.	Input Voltage Max. (V)	Output Current Max. (mA)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
● LP5900SD-1.8/NOPB	5.5	150	3.3	6-LLP	13M2041	0.70
● LP5900SD-3.0/NOPB	5.5	150	3.3	6-LLP	13M2051	0.70
● LP5900SD-3.3/NOPB	5.5	150	3.3	6-LLP	13M2053	0.70
● LP5900TL-1.8/NOPB	2.5	150	3.3	4-SMD	79K8013	0.80

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LOW DROPOUT VOLTAGE (LDO's) REGULATORS (CONT.)

Mfg. Part No.	Input Voltage Max. (V)	Output Current Max. (mA)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
LP5900TL-2.5/NOPB	2.5	150	3.3	4-SMD	79K8019	0.80
LP5900TL-3.0/NOPB	2.5	150	3.3	4-SMD	69K2661	0.80
LP5900TL-3.3/NOPB	2.5	150	3.3	4-SMD	69K2662	0.80
LP38690DT-3.3/NOPB	10	1	3.3 V	3-TO-252	41K7439	1.73
LP38690SD-3.3/NOPB	10	1	3.3 V	6-LLP	41K7448	1.63
LP38690SD-ADJ/NOPB	10	1	Adjustable	6-LLP	41K7445	1.60
LP38691DT-3.3/NOPB	10	500	3.3 V	3-TO-252	41K7457	1.63
LP38691SD-5.0/NOPB	10	500	5 V	6-LLP	41K7467	1.53
LP38691SD-ADJ/NOPB	10	500	Adjustable	6-LLP	41K7463	1.53
LP38692MP-3.3/NOPB	10	1	3.3 V	5-SOT-223	41K7476	1.63
LP38692MP-5.0/NOPB	10	1	5 V	5-SOT-223	41K7477	1.63
LP38692MP-ADJ/NOPB	10	1	Adjustable	5-SOT-223	41K7473	1.63
LP38692SD-ADJ/NOPB	10	1	Adjustable	6-LLP	41K7483	1.63
LP38693MP-3.3/NOPB	10	500	3.3 V	5-SOT-223	41K7496	1.53
LP38693MP-ADJ/NOPB	10	500	Adjustable	5-SOT-223	41K7493	1.53
LP38693SD-ADJ/NOPB	10	500	Adjustable	6-LLP	41K7503	1.53
LP3990MF-1.8/NOPB	6	150	1.8	5-SOT-23	69K2651	0.70
LP3990MF-3.3/NOPB	6	150	3.3	5-SOT-23	69K2655	0.70
LP5951MF-2.5/NOPB	5.5	150	2.5 V	5-SOT-23	13M2079	0.70
LP5951MF-3.0/NOPB	5.5	150	3 V	5-SOT-23	13M2083	0.70
LP38853S-ADJ/NOPB	5.5	3	Adjustable	7-TO-263	32M1324	4.73
LP38856S-1.2/NOPB	5.5	3	1.2	5-TO-263	13M1968	4.58
LP38859S-1.2/NOPB	5.5	3	1.2	5-TO-263	13M1980	4.58
LP38500SD-ADJ/NOPB	2.7	1.5	5.1	8-LLP	64M7059	1.74
LP38500TS-ADJ/NOPB	2.7	1.5	5.1	5-TO-263	64M7061	2.09
LP38502SD-ADJ/NOPB	2.7	1.5	5.1	8-LLP	64M7066	1.74

POSITIVE LOW DROPOUT (Vin MAX <25V)

Mfg. Part No.	Input Voltage Max. (V)	Output Current (mA)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
LP2966IMM-1833/NOPB	7	150	1.8	8-MSOP	41K6642	1.91
LP2982AIM5-5.0/NOPB	16	50	5	5-SOT-23	41K6826	0.91
LP3982IMM-3.0/NOPB	6	300	3	8-MSOP	41K7926	0.68
LP3984IMF-1.5/NOPB	6	150	1.5	5-SOT-23	41K7941	0.59
LP3988IMF-2.5/NOPB	6	150	2.5	5-SOT-23	41K8031	0.70
LP3988IMF-3.3/NOPB	6	150	3.3	5-SOT-23	41K8035	0.70
LP38511MR-ADJ/NOPB	5.5	800	5	8-PSOP	10R2193	1.96
LP38512MR-ADJ/NOPB	5.5	1500	5	8-PSOP	10R2194	2.45

NEGATIVE LOW DROP OUT

Mfg. Part No.	Input Voltage (V)	Output Current (A)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
LM2990S-12/NOPB	0.3	1.5	20	3-TO-263	41K4628	3.68
LM2990S-15/NOPB	0.3	1.5	-15	3-TO-263	41K4629	3.68
LM2990S-5.0/NOPB	0.3	1.5	-5	3-TO-263	41K4630	3.68
LM2990T-12/NOPB	0.3	1.5	-12	3-TO-220	41K4634	3.06
LM2990T-15/NOPB	0.3	1.5	-15	3-TO-220	41K4635	3.06
LM2991S/NOPB	-26	1	-3	3-TO-263	41K4638	3.06

LOW NOISE LOW DROPOUT

Mfg. Part No.	Input Voltage (V)	Output Current (mA)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
LP2983AIM5-1.2/NOPB	16	150	1.2	5-SOT-23	41K6866	1.38
LP2983IM5-1.2/NOPB	16	150	1.2	5-SOT-23	41K6872	1.38
LP2985AIM5-2.0/NOPB	16	150	2.5	5-SOT-23	41K6880	0.89
LP2985IM5-4.5/NOPB	16	150	4.5	5-SOT-23	41K6957	0.82
LP2985AIM5-4.5/NOPB	16	150	4.5	5-SOT-23	55K6862	0.89
LP2985AIM5-4.0/NOPB	16	150	4	5-SOT-23	41K6893	0.89
LP2985IM5-4.0/NOPB	16	150	4	5-SOT-23	41K6956	0.82
LP2989AIMM-3.3/NOPB	16	500	3.3	8-MSOP	41K7212	2.45
LP2989IM-5.0/NOPB	16	500	5	8-SOIC	41K7247	2.91
LP2989AIM-3.3/NOPB	16	500	3.3	8-SOIC	41K7206	2.94
LP2989AIMM-5.0/NOPB	16	500	5	8-MSOP	41K7213	2.45
LP2992IM5-2.5/NOPB	16	250	2.5	5-SOT-23	41K7299	1.17
LP2992IM5-1.5/NOPB	16	250	1.5	5-SOT-23	41K7297	1.17
LP2992AIM5-1.8/NOPB	16	250	1.8	5-SOT-23	41K7276	1.17
LP3878MR-ADJ/NOPB	16	800	5.5	8-PSOP	65K6513	2.61
LP3878SD-ADJ/NOPB	16	800	5.5	8-LLP	65K6515	2.21
LP3879MR-1.0/NOPB	6	800	1.2	8-PSOP	79K7982	2.29

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LOW DROPOUT VOLTAGE (LDO's) REGULATORS (CONT.)

POSITIVE LOW DROPOUT (Vin MAX <25V)

Mfg. Part No.	Input Voltage Max. (V)	Output Current (mA)	Output Voltage Max. (V)	Package	Stock No.	Price Each 1-9
LP2975AIMM-5.0/NOPB	24	5000	5	8-SOIC	41K6676	1.91
LP3966ES-3.3/NOPB	7	3000	3.3	5-TO-263	41K7870	4.73
LP3966ES-ADJ/NOPB	7	3000	5	5-TO-263	41K7867	4.73
LMS1587CS-1.5/NOPB	13	3	1.5	3-TO-263	41K2946	3.00
LMS1587CS-ADJ/NOPB	13	3	...	3-TO-263	41K2945	3.00
LP38502TSX-ADJ/NOPB	5.5	1500	5.1	5-TO-263	84M8162	1.74
LP3879MR-1.2/NOPB	6	800	1.2	8-PSOP	99K2577	2.29
LP3879SD-1.2/NOPB	6	800	1.2	8-LLP	99K2583	1.91
LP3962ES-3.3/NOPB	7.5	1500	3.3	5-TO-263	41K7795	3.56
LP3965EMP-1.8/NOPB	7.5	1500	1.8	5-SOT-223	41K7843	2.75
LP3965EMP-2.5/NOPB	7.5	1500	2.5	5-SOT-223	41K7844	2.75
LP3965EMP-3.3/NOPB	7.5	1500	3.3	5-SOT-223	41K7845	2.75
LP3965EMP-ADJ/NOPB	7.5	1500	5	5-SOT-223	41K7842	2.75
LP3965ES-ADJ/NOPB	7.5	1500	5	5-TO-263	41K7852	3.96
LP3985IM5-5.0/NOPB	6	150	5	5-SOT-23	41K7962	0.59
LMS8117AMP-3.3/NOPB	15	1	3.3	4-SOT-223	41K3020	1.15
LM3940IMP-3.3/NOPB	7.5	1000	3.3	4-SOT-223	41K5122	1.54
LM3940IS-3.3/NOPB	7.5	1000	3.3	3-TO-263	41K5124	2.18
LM3940IT-3.3/NOPB	7.5	1000	3.3	3-TO-220	41K5126	1.77
LP3964EMP-2.5/NOPB	7.5	800	2.5	5-SOT-223	41K7819	2.78
LP3964EMP-ADJ/NOPB	7.5	800	5	5-SOT-223	41K7817	2.78
LM1117DT-3.3/NOPB	15	800	3.3	3-TO-252	41K3430	1.65
LM1117DT-5.0/NOPB	15	800	5	3-TO-252	41K3431	1.65
LM1117DT-ADJ/NOPB	15	800	13.8	3-TO-252	41K3426	1.65
LM1117IMP-3.3/NOPB	15	800	3.3	4-SOT-223	41K3450	1.07
LM1117IMP-ADJ/NOPB	15	800	13.8	4-SOT-223	41K3449	1.07
LM1117MP-1.8/NOPB	15	800	1.8	4-SOT-223	41K3467	1.07
LM1117MP-2.5/NOPB	15	800	2.5	4-SOT-223	41K3468	1.07
LM1117MP-3.3/NOPB	40	800	3.3	4-SOT-223	41K3470	1.07
LM1117MP-5.0/NOPB	15	800	5	4-SOT-223	41K3471	1.07
LM1117T-3.3/NOPB	15	800	3.3	3-TO-220	41K3490	1.50
LM1117T-ADJ/NOPB	40	800	13.8	3-TO-220	41K3486	1.50
LP2989AILD-3.3/NOPB	16	500	3.3	8-LLP	41K7190	2.69
LP2989IM-3.3/NOPB	16	500	3.3	8-SO	41K7246	2.91
LP3981ILD-3.3/NOPB	6	300	3.3	6-LLP	41K7886	0.69
LP3981IMM-3.3/NOPB	6.5	300	3.3	8-MSOP	41K7899	0.69
LP3982ILD-ADJ/NOPB	6	300	6.5	8-LLP	41K7907	0.69
LP3982IMM-1.8/NOPB	6	300	1.8	8-SOIC	41K7922	0.68
LP3982IMM-3.3/NOPB	6	300	3.3	8-SOIC	41K7927	0.68
LP3982IMM-ADJ/NOPB	6	300	6	8-SOIC	41K7921	0.68
LP2992AIM5-1.5/NOPB	16	250	1.5	5-SOT-23	41K7275	1.17
LP2992AIM5-3.3/NOPB	16	250	3.3	5-SOT-23	41K7279	1.17
LP2992AIM5-5.0/NOPB	16	250	5	5-SOT-23	41K7280	1.17
LP2992IM5-1.8/NOPB	16	250	1.8	5-SOT-23	41K7298	1.17
LP2992IM5-3.3/NOPB	16	250	3.3	5-SOT-23	41K7301	1.17
LP2992IM5-5.0/NOPB	16	250	5	5-SOT-23	41K7302	1.17
LP2985AIM5-1.8/NOPB	16	150	1.8	5-SOT-23	41K6877	0.89
LP2985AIM5-2.5/NOPB	16	150	2.5	5-SOT-23	41K6881	0.89
LP2985AIM5-2.8/NOPB	16	150	2.8	5-SOT-23	41K6884	0.89
LP2985AIM5-3.0/NOPB	16	150	3	5-SOT-23	41K6886	0.89
LP2985AIM5-3.3/NOPB	16	150	3.3	5-SOT-23	41K6889	0.89
LP2985AIM5-5.0/NOPB	16	150	5	5-SOT-23	41K6896	0.89
LP2985IM5-1.8/NOPB	16	150	1.8	5-SOT-23	41K6940	0.79
LP2985IM5-3.3/NOPB	16	150	3.3	5-SOT-23	41K6952	0.82
LP2985IM5-3.6/NOPB	16	150	3.6	5-SOT-23	41K6954	0.82
LP2985IM5-5.0/NOPB	16	150	5	5-SOT-23	41K6960	0.82
LP3984IMF-1.8/NOPB	6	150	1.8	5-SOT-23	41K7942	0.59
LP3985IM5-2.5/NOPB	6	150	2.5	5-SOT-23	23K8220	0.59
LP3985IM5-3.0/NOPB	6	150	3	5-SOT-23	41K7958	0.59
LP3985IM5-3.3/NOPB	6	150	3.3	5-SOT-23	23K8224	0.59
LP2981AIM5-3.3/NOPB	16	100	3.3	5-SOT-23	41K6771	1.05
LP2981AIM5-5.0/NOPB	16	100	5	5-SOT-23	41K6776	1.05
LP2981IM5-3.3/NOPB	16	100	3.3	5-SOT-23	41K6797	1.02
LP2980AIM5-2.5/NOPB	16	50	2.5	5-SOT-23	41K6692	0.70
LP2980AIM5-3.0/NOPB	16	50	3	5-SOT-23	41K6697	0.70
LP2980AIM5-3.3/NOPB	18	50	3.3	5-SOT-23	41K6700	0.70
LP2980IM5-3.3/NOPB	18	50	3.3	5-SOT-23	41K6737	0.70
LP2980IM5-5.0/NOPB	18	50	5	5-SOT-23	41K6744	0.70
LP2980IM5-ADJ/NOPB	16	50	4.51	5-SOT-23	41K6726	0.70
LP2982AIM5-3.0/NOPB	16	50	3	5-SOT-23	41K6819	0.91
LP2982AIM5-3.3/NOPB	16	50	3.3	5-SOT-23	41K6820	0.91
LP2980AIM5-2.5/NOPB	16	50	2.5	5-SOT-23	41K6692	0.70

➤CONTINUED➤

LOW DROPOUT VOLTAGE (LDO's) REGULATORS (CONT.)

Mfg. Part No.	Input Voltage Max. (V)	Output Current (mA)	Output Voltage Max. (V)	Package	Stock No.	Price Each 1-9
● LP2980AIM5-3.0/NOPB	16	50	3	5-SOT-23	41K6697	0.70
● LP2980AIM5-3.3/NOPB	18	50	3.3	5-SOT-23	41K6700	0.70
● LP2980IM5-2.5/NOPB	16	50	2.5	5-SOT-23	41K6729	0.24
● LP2980IM5-3.0/NOPB	16	50	3	5-SOT-23	41K6734	0.70
● LP2980IM5-3.3/NOPB	18	50	3.3	5-SOT-23	41K6737	0.70
● LP2980IM5-5.0/NOPB	18	50	5	5-SOT-23	41K6744	0.70
● LP2980IM5-ADJ/NOPB	16	50	4.51	5-SOT-23	41K6726	0.70
● LM3411AM5-5.0/NOPB	20	15	5	5-SOT-23	41K4778	1.77
● LM3411M5-5.0/NOPB	20	15	5	5-SOT-23	41K4782	0.57

POSITIVE LOW DROPOUT (Vin MAX >25V)

Mfg. Part No.	Input Voltage Max. (V)	Output Current (mA)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
● LM1084IS-3.3/NOPB	29	1.5	3.3	3-TO-263	41K3361	2.87
● LM1084IS-ADJ/NOPB	29	1.5	27.5	3-TO-263	41K3359	2.87
● LM1084IT-3.3/NOPB	29	5	3.3	3-TO-220	41K3369	2.72
● LM1084IT-ADJ/NOPB	29	1.5	27.5	3-TO-220	41K3367	2.72
● LM1085IS-3.3/NOPB	29	3	3.3	3-TO-263	41K3373	2.58
● LM1085IS-5.0/NOPB	8	1.5	5.1	3-TO-263	41K3374	2.58
● LM1085IS-ADJ/NOPB	29	3000	...	3-TO-263	41K3371	2.58
● LM1085IT-3.3/NOPB	29	1.5	3.3	3-TO-220	41K3381	2.02
● LM1085IT-5.0/NOPB	29	1.5	5	3-TO-220	41K3382	2.02
● LM1085IT-ADJ/NOPB	29	3	12	3-TO-220	41K3379	2.02
● LM1086CS-3.3/NOPB	29	1.5	3.3	3-TO-263	41K3386	2.06
● LM1086CS-ADJ/NOPB	29	1.5	25	3-TO-263	41K3383	2.06
● LM1086CT-3.3/NOPB	29	1.5	3.3	3-TO-220	41K3395	1.72
● LM1086CT-5.0/NOPB	29	1.5	5	3-TO-220	41K3396	1.72
● LM1086CT-ADJ/NOPB	29	1.5	5	3-TO-220	41K3393	1.72
● LM1086IS-3.3/NOPB	29	1.5	3.3	3-TO-220	41K3412	2.06
● LM1086IS-5.0/NOPB	29	1.5	5	3-TO-220	41K3414	2.06
● LM1086IS-ADJ/NOPB	29	1.5	5	3-TO-263	41K3409	2.06
● LM1086IT-3.3/NOPB	27	1.5	3.3	3-TO-220	41K3424	1.72
● LM1086IT-ADJ/NOPB	29	1.5	27.5	3-TO-220	41K3421	1.72
● LM2937IMP-8.0/NOPB	26	500	8	4-SOT-223	41K4559	1.82
● LM2941CS/NOPB	26	1000	20	5-TO-263	41K4618	2.62
● LM2941CT/NOPB	45	1	20	5-TO-220	41K4620	1.72
● LM2941S/NOPB	26	1	20	5-TO-263	41K4623	2.12
● LM2941SX/NOPB	60	1	20	5-TO-263	41K4624	1.76
● LM2941T/NOPB	60	1000	20	5-TO-220	41K4625	1.72
● LM2940CS-12/NOPB	26	1000	12	3-TO-263	41K4567	2.06
● LM2940CS-15/NOPB	26	1000	15.75	3-TO-263	41K4568	2.06
● LM2940CS-5.0/NOPB	26	1000	5	3-TO-263	41K4569	2.06
● LM2940CS-9.0/NOPB	26	1	9	3-TO-263	41K4570	2.06
● LM2940CSX-5.0/NOPB	26	1	5	3-TO-263	41K4573	1.72
● LM2940CT-12/NOPB	26	1	12	3-TO-220	41K4575	1.65
● LM2940CT-15/NOPB	26	1	15.75	3-TO-220	41K4576	1.65
● LM2940CT-5.0/NOPB	26	1000	5	3-TO-220	41K4577	1.65
● LM2940IMP-10/NOPB	26	1	10	4-SOT-223	41K4579	2.17
● LM2940IMP-12/NOPB	26	1000	12	4-SOT-223	41K4580	2.17
● LM2940IMP-5.0/NOPB	26	1000	5	4-SOT-223	41K4582	2.17
● LM2940S-10/NOPB	26	1	10	3-TO-263	41K4603	2.20
● LM2940S-12/NOPB	26	1000	12	3-TO-263	41K4604	2.20
● LM2940S-5.0/NOPB	26	1000	5	3-TO-263	41K4605	2.20
● LM2940S-8.0/NOPB	26	1000	8	3-TO-263	41K4606	2.32
● LM2940S-9.0/NOPB	26	1	9	3-TO-263	41K4607	2.32
● LM2940SX-5.0/NOPB	26	1	5	3-TO-263	41K4610	1.84
● LM2940T-10.0/NOPB	26	1	10	3-TO-220	41K4613	1.68
● LM2940T-12.0/NOPB	26	1	12	3-TO-220	41K4614	1.68
● LM2940T-5.0/NOPB	26	1000	5	3-TO-220	41K4615	1.68
● LM2940T-8.0/NOPB	26	1	8	3-TO-220	41K4616	1.68
● LM2940T-9.0/NOPB	26	1	9	3-TO-220	41K4617	1.68
● LM2937ES-12/NOPB	26	500	12	3-TO-263	41K4535	2.32
● LM2937ES-15/NOPB	26	500	15	3-TO-263	41K4536	2.32
● LM2937ES-3.3/NOPB	26	500	3.3	3-TO-263	41K4538	2.32
● LM2937ES-5.0/NOPB	26	500	5	3-TO-263	41K4539	2.32
● LM2937ES-8.0/NOPB	26	500	8	3-TO-263	41K4540	1.93
● LM2937ET-10/NOPB	26	500	15	3-TO-220	41K4548	1.63
● LM2937ET-12/NOPB	26	500	12	3-TO-220	41K4549	1.63
● LM2937ET-15/NOPB	26	500	15	3-TO-220	41K4550	1.63
● LM2937ET-3.3/NOPB	26	500	3.3	3-TO-220	41K4552	1.63
● LM2937ET-5.0/NOPB	26	500	5	3-TO-220	41K4553	1.63
● LM2937IMP-10/NOPB	26	500	10	4-SOT-223	41K4555	1.82

➤CONTINUED➤

LOW DROPOUT VOLTAGE (LDO's) REGULATORS (CONT.)

Mfg. Part No.	Input Voltage Max. (V)	Output Current (mA)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
● LM2937IMP-12/NOPB	26	500	12	4-SOT-223	41K4556	1.82
● LM2937IMP-2.5/NOPB	26	500	2.5	4-SOT-223	41K4558	1.82
● LP2954AIM/NOPB	30	250	29	8-SOIC	41K6610	2.70
● LP2954AIS/NOPB	30	250	5	3-TO-263	41K6612	4.92
● LP2954IM/NOPB	30	250	29	8-SOIC	41K6615	1.63
● LP2954IT/NOPB	30	250	5	3-TO-220	41K6619	2.68
● LM330T-5.0/NOPB	26	150	5	3-TO-220	41K4693	1.23
● LM2930T-5.0/NOPB	26	150	5	3-SOT-220	41K4474	1.39
● LM9076BMA-5.0/NOPB	40	150	5	8-SOIC	41K6487	2.55
● LM9076S-5.0/NOPB	40	150	5	5-TO-263	41K6489	2.68
● LP2951ACM-3.0/NOPB	30	100	29	8-SOIC	41K6546	0.99
● LP2951ACM-3.3/NOPB	30	100	3.3	8-SOIC	41K6547	0.99
● LP2951ACMM-3.3/NOPB	30	100	29	8-SOIC	41K6549	0.88
● LP2951ACMM/NOPB	30	100	29	8-SOIC	41K6550	0.88
● LP2951ACMX/NOPB	30	100	29	8-SO	41K6556	0.94
● LP2951CM-3.3/NOPB	30	100	3.3	8-SOIC	41K6567	0.96
● LP2951CM/NOPB	30	100	29	8-NSOIC	26K2433	0.96
● LP2951CMM-3.3/NOPB	30	100	29	8-SOIC	41K6569	0.89
● LP2951CMX/NOPB	30	100	29	8-SO	41K6576	0.80
● LP2951CN/NOPB	30	100	29	8-DIP	41K6579	1.22
● LM2931AM-5.0/NOPB	26	100	5	8-SOIC	41K4476	1.00
● LM2931AS-5.0/NOPB	26	100	5	3-TO-263	41K4478	2.38
● LM2931AZ-5.0/NOPB	26	100	5	3-TO-92	41K4481	0.80
● LM2931CM/NOPB	26	100	24	8-SOIC	41K4482	0.89
● LM2931M-5.0/NOPB	26	100	5	8-SOIC	41K4487	1.00
● LM2931T-5.0/NOPB	26	100	5	3-TO-220	41K4491	1.29
● LP2950ACZ-3.0/NOPB	30	100	3	3-TO-92	41K6534	0.88
● LP2950ACZ-3.3/NOPB	30	100	3.3	3-TO-92	41K6535	0.88
● LP2950ACZ-5.0/NOPB	30	100	5	3-TO-92	41K6536	0.88
● LP2950CDT-3.3/NOPB	30	100	5	3-TO-252	41K6538	1.32
● LP2950CDT-5.0/NOPB	30	100	5.5	3-TO-252	41K6539	1.32
● LP2950CZ-3.0/NOPB	30	100	3	3-TO-92	41K6543	0.80
● LP2950CZ-3.3/NOPB	30	100	3.3	3-TO-92	41K6544	0.80
● LP2950CZ-5.0/NOPB	30	100	5	3-TO-92	41K6545	0.80
● LP2951ACN/NOPB	30	100	29	8-DIP	41K6559	1.22
● LM3480IM3-12/NOPB	30	100	12	3-SOT-23	41K4823	0.92
● LM3480IM3-15/NOPB	30	100	15	3-SOT-23	41K4824	0.92
● LM3480IM3-3.3/NOPB	30	100	3.3	3-SOT-23	41K4825	0.92
● LM3480IM3X-5.0/NOPB	30	100	5	3-SOT-23	41K4829	0.92
● LM2936BM-3.3/NOPB	60	50	3.3	8-SOIC	41K4494	2.12
● LM2936BM-5.0/NOPB	60	50	5	8-SOIC	41K4495	2.12
● LM2936DT-5.0/NOPB	60	50	5	3-TO-252	41K4501	2.29
● LM2936HVBMA-3.3/NOPB	60	50	3.3	8-SOIC	41K4506	2.29
● LM2936M-3.3/NOPB	60	50	3.3	8-SOIC	41K4514	2.12
● LM2936M-5.0/NOPB	60	50	5	8-SOIC	41K4515	2.12
● LM2936MP-3.0/NOPB	40	50	3	3-SOT-223	41K4522	1.69
● LM2936MP-3.3/NOPB	60	50	3.3	8-SOIC	41K4523	1.69
● LM2936MP-5.0/NOPB	60	50	5	4-SOT-223	41K4524	1.69
● LM2936MX-5.0/NOPB	40	50	5	8-SOIC	41K4530	1.77
● LM2936Z-5.0/NOPB	60	50	5	3-TO-92	41K4533	2.10

POSITIVE NPN STANDARD

Mfg. Part No.	Input Voltage Max. (V)	Output Current Max. (mA)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
● LM338T/NOPB	40	5000	37	3-TO-220	41K4748	2.03
● LM350AT/NOPB	35	3000	33	3-TO-220	41K4850	2.97
● LM350T/NOPB	35	3000	33	3-TO-220	41K4851	1.75
● LM3402HVMM/NOPB	75	500	67	8-SOIC	32M1047	2.31
● LM3402HVMR/NOPB	75	500	67	8-PSOP	50M8804	2.78
● LM3402MM/NOPB	42	500	37	8-MSOP	32M1049	2.18
● LM3402MR/NOPB	42	500	37	8-PSOP	50M8805	2.61
● LM3404HVMA/NOPB	75	1	67	8-SOIC	32M1054	2.94
● LM3404HVMR/NOPB	75	1	67	8-SOP	32M1058	2.94
● LM3404MA/NOPB	42	1000	37	8-SOIC	32M1062	2.78
● LM3404MR/NOPB	42	1	37	8-SOP	32M1066	2.78
● LM3405XMK/NOPB	15	1000	13.5	6-TSOT	32M1070	1.38
● LM3407MY/NOPB	30	350	27	8-MSOP	78M7735	1.69
● LM340AT-5.0/NOPB	35	1	5	3-TO-220	41K4762	1.72
● LM340LAZ-5.0/NOPB	35	100	5	3-TO-92	41K4765	0.95
● LM340MP-5.0/NOPB	35	1	5	4-SOT-223	41K4766	1.28
● LM340S-5.0/NOPB	35	1	5	3-TO-263	20J4450	1.78
● LM340SX-5.0/NOPB	35	1	5	3-TO-263	41K4770	1.66

➤CONTINUED➤

LOW DROPOUT VOLTAGE (LDO's) REGULATORS (CONT.)

Mfg. Part No.	Input Voltage Max. (V)	Output Current Max. (mA)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
LM340T-12/NOPB	35	1	12	3-TO-220	41K4771	1.66
LM340T-15/NOPB	35	1000	15	3-TO-220	41K4772	1.66
LM340T-5.0/NOPB	30	1	5	3-TO-220	41K4773	1.66
LM317AEMP/NOPB	40	500	37	4-SOT-223	41K4649	1.77
LM317AEMPX/NOPB	40	1.5	37	4-SOT-223	41K4650	1.77
LM317AT/NOPB	40	500	37	3-TO-220	41K4653	1.71
LM317EMP/NOPB	40	1500	37	4-SOT-223	20J4456	1.20
LM317HVT/NOPB	60	500	57	3-TO-220	41K4655	2.43
LM317LM/NOPB	40	100	37	8-NSOIC	41K4656	0.92
LM317LMX/NOPB	40	100	37	8-SOIC	41K4657	0.76
LM317LZ/NOPB	40	100	37	3-TO-92	41K4658	0.67
LM317MDT/NOPB	40	1.5	37	3-TO-252	41K4659	1.57
LM317S/NOPB	40	1500	37	3-TO-263	41K4661	1.67
LM317SX/NOPB	40	1.5	37	3-TO-263	41K4662	1.67
LM317T/NOPB	40	1500	37	3-TO-220	41K4663	1.71
LM78M05CDT/NOPB	35	500	5	3-TO-252	41K6334	1.56
LM78M05CT/NOPB	35	500	5.25	3-TO-220	41K6336	1.46
LM317AEMP/NOPB	40	500	37	4-SOT-223	41K4649	1.77
LM317AEMPX/NOPB	40	1.5	37	4-SOT-223	41K4650	1.77
LM317AT/NOPB	40	500	37	3-TO-220	41K4653	1.71
LM317EMP/NOPB	40	1500	37	4-SOT-223	20J4456	1.20
LM317HVT/NOPB	60	500	57	3-TO-220	41K4655	2.43
LM317LM/NOPB	40	100	37	8-NSOIC	41K4656	0.92
LM317LMX/NOPB	40	100	37	8-SOIC	41K4657	0.76
LM317LZ/NOPB	40	100	37	3-TO-92	41K4658	0.67
LM317MDT/NOPB	40	1.5	37	3-TO-252	41K4659	1.57
LM317S/NOPB	40	1500	37	3-TO-263	41K4661	1.67
LM317SX/NOPB	40	1.5	37	3-TO-263	41K4662	1.67
LM317T/NOPB	40	1500	37	3-TO-220	41K4663	1.71
LM3410XMF/NOPB	5.5	1000	24	5-SOT-23	75M6032	2.72
LM3410YMF/NOPB	5.5	1000	24	5-SOT-23	75M6034	2.72
LM3411AM5-5.0/NOPB	20	15	5	5-SOT-23	41K4778	1.77
LM3411M5-5.0/NOPB	20	15	5	5-SOT-23	41K4782	0.57
LM341T-5.0/NOPB	35	500	5	3-TO-220	41K4776	1.39
LM723CN/NOPB	40	150	37	14-DIP	41K6278	1.00
LM78L12ACM/NOPB	35	140	12	8-NSOIC	41K6326	0.78
LM78L12ACZ/NOPB	35	140	12.5	3-TO-92	41K6328	0.65
LM78L15ACZ/NOPB	35	140	15	3-TO-92	41K6331	0.68
LM78L05ACM/NOPB	35	140	5.2	8-SOIC	41K6321	0.78
LM78L05ACMX/NOPB	35	100	5	8-SOIC	41K6322	0.65
LM78L05ACZ/NOPB	35	140	5.2	3-TO-92	41K6323	0.65

NEGATIVE STANDARD LINEAR

Mfg. Part No.	Output Current (mA)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
LM337LM/NOPB	100	37	8-SOIC	41K4744	0.88
LM337LMX/NOPB	100	37	8-SOIC	41K4745	0.84
LM337LZ/NOPB	100	37	3-TO-92	41K4746	0.84
LM337T/NOPB	100	-37	3-TO-220	41K4747	1.70
LM7915CT/NOPB	1500	-15	3-TO-220	41K6358	1.52
LM7905CT/NOPB	0.5	5.25	3-TO-220	41K6356	1.58
LM79L05ACM/NOPB	100	-5	8-SOIC	41K6342	0.92
LM79L05ACZ/NOPB	100	-15	3-TO-92	41K6346	0.76
LM7912CT/NOPB	1500	-12	3-TO-220	41K6357	1.52

(70387)

FAST ULTRA-LOW DROPOUT LINEAR REGULATORS

RoHS Compliant Available

TEXAS INSTRUMENTS

Input voltage range: 2.5 to 7.0V.

Mfg. Part No.	Output Voltage (V)	Dropout Voltage (V)	Error Flag	Output Current Max. (mA)	Package	Stock No.	Price Each 1-9
LP3964EMP-ADJ/NOPB	1.215 - 5.0	0.24	No	800	SOT-223/5	41K7817	2.78
LP3962EMP-3.3/NOPB	3.3	0.38	Yes	1500	SOT-223/5	41K7787	2.80
LP3962ES-3.3/NOPB	3.3	0.38	Yes	1500	TO-263/5	41K7795	3.56
LP3965EMP-1.8/NOPB	1.8	0.38	No	1500	SOT-223/5	41K7843	2.75
LP3965EMP-2.5/NOPB	2.5	0.38	No	1500	SOT-223/5	41K7844	2.75
LP3965EMP-3.3/NOPB	3.3	0.38	No	1500	SOT-223/5	41K7845	2.75
LP3965EMP-ADJ/NOPB	1.215 - 5.0	0.38	No	1500	SOT-223/5	41K7842	2.75
LP3965ES-ADJ/NOPB	1.215 - 5.0	0.38	No	1500	TO-263/5	41K7852	3.96
LP3966ES-3.3/NOPB	3.3	0.8	No	3000	TO-263/5	41K7870	4.73
LP3966ES-ADJ/NOPB	1.215 - 5.0	0.8	No	3000	TO-263/5	41K7867	4.73

CONTINUED

FAST ULTRA-LOW DROPOUT LINEAR REGULATORS (CONT.)

Mfg. Part No.	Output Voltage (V)	Dropout Voltage (V)	Error Flag	Output Current Max. (mA)	Package	Stock No.	Price Each 1-9
LP3852EMP-2.5/NOPB	2.5	240	No	1.5	5-SOT-223	41K7366	4.30
LP3963ES-3.3/NOPB	3.3	0.39	Yes	3	5-TO-263	41K7807	4.25
LP3855EMP-2.5/NOPB	2.5	240	No	1.5	5-SOT-223	41K7399	4.30
LP3855EMP-3.3/NOPB	3.3	240	No	1.5	5-SOT-223	41K7400	4.30
LP3855EMP-ADJ/NOPB	5	240	No	1.5	5-SOT-223	41K7397	2.10
LP3856ES-3.3/NOPB	3.3	390	No	3	5-TO-263	41K7425	5.44
LP3871EMP-1.8/NOPB	1.8	240	No	800	5-SOT-223	41K7513	2.61
LP3961EMP-2.5/NOPB	2.5	240	No	800	5-SOT-223	41K7766	2.78
LP3871EMP-3.3/NOPB	3.3	240	No	800	5-SOT-223	41K7515	2.61
LP3962EMP-3.3/NOPB	3.3	380	No	1.5	5-SOT-223	41K7787	2.80
LP3873ES-1.8/NOPB	1.8	800	Yes	3	5-TO-263	41K7553	5.01
LP3874EMP-ADJ/NOPB	6.76	240	No	800	5-SOT-223	41K7565	2.61
LP3964EMP-2.5/NOPB	2.5	240	No	800	5-SOT-223	41K7819	2.78
LP3874EMP-3.3/NOPB	3.3	240	No	800	5-SOT-223	41K7568	2.61
LP3874ES-ADJ/NOPB	6.76	240	No	800	5-TO-263	41K7575	2.72
LP3875EMP-ADJ/NOPB	6.62	380	Yes	1.5	5-SOT-223	41K7590	2.75
LP3875EMP-1.8/NOPB	1.8	380	No	1.5	5-SOT-223	41K7591	2.75
LP3875EMP-3.3/NOPB	2.5	380	No	1.5	5-SOT-223	41K7593	2.75
LP3875ES-ADJ/NOPB	6.62	380	No	1.5	5-TO-263	41K7600	3.96
LP3875ES-3.3/NOPB	3.3	380	No	1.5	5-TO-263	41K7603	3.96
LP3876ES-ADJ/NOPB	6.2	800	No	3	5-TO-263	41K7615	5.01
LP3881ES-1.2/NOPB	1.8	75	No	800	5-TO-263	41K7636	5.58
LP3882ES-1.2/NOPB	1.8	110	No	1.5	5-TO-263	41K7651	5.58
LP38842MR-ADJ/NOPB	1.5	115	No	1.5	8-PSOP	41K7680	2.87
LP3891EMR-1.2/NOPB	1.2	100	No	800	8-PSOP	41K7700	3.58
LP3892ES-1.2/NOPB	1.2	140	No	1.5	5-TO-263	41K7721	4.15
LP3961EMP-1.8/NOPB	1.8	240	No	800	5-SOT-223	41K7765	2.78
LP3961EMP-3.3/NOPB	3.3	240	No	800	5-SOT-223	41K7767	2.78
LP3961EMP-5.0/NOPB	5	240	No	800	5-SOT-223	41K7768	2.78

(74776)

FIXED POSITIVE VOLTAGE ANALOG REGULATORS

RoHS Compliant Available

TEXAS INSTRUMENTS

3-TERMINAL POSITIVE REGULATORS

Mfg. Part No.	Max. Input Voltage (V)	Max. Output Current (mA)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
LM330T-5.0/NOPB	26	150	5	TO-220	41K4693	1.23
LM2930T-5.0/NOPB	26	150	5	3-SOT-220	41K4474	1.39
LM340LAZ-5.0/NOPB	35	100	5	TO-92	41K4765	0.95
LM340LAZ-5.0/NOPB	35	100	5	TO-92	41K4765	0.95
LM78L05ACM/NOPB	35	100	5	8-SOIC	41K6321	0.78
LM78L05ACZ/NOPB	35	100	5	TO-92	41K6323	0.65
LM78L12ACM/NOPB	35	100	12	8-SOIC	41K6326	0.78
LM78L12ACZ/NOPB	35	100	12	TO-92	41K6328	0.65
LM78L15ACZ/NOPB	35	100	15	TO-92	41K6331	0.68
LM78M05CT/NOPB	35	500	5	TO-220	41K6336	1.46
LM341T-5.0/NOPB	35	500	5	TO-220	41K4776	1.39
LM340AT-5.0/NOPB	35	1000	5	TO-220	41K4762	1.72
LM340MP-5.0/NOPB	35	1000	5	4-SOT-223	41K4766	1.28
LM340S-5.0/NOPB	35	1000	5	TO-263	20J4450	1.78
LM340T-12/NOPB	35	1000	12	TO-220	41K4771	1.66
LM340T-5.0/NOPB	35	1000	5	TO-220	41K4773	1.66

ULTRA-LOW QUIESCENT CURRENT 5V REGULATOR

LM2936M-5.0/NOPB	50	50	5	8-SOIC	41K4515	2.12
LM2936Z-5.0/NOPB	50	50	5	TO-92	41K4533	2.10

LOW DROPOUT REGULATORS

LM1117MP-3.3/NOPB	10, 20	800	3.3	4-SOT-223	41K3470	1.07
LM1117MP-ADJ	10, 20	800	1.8-5	4-SOT-223	13B5337	1.07
LM1117T-ADJ/NOPB	10, 20	800	1.8-5	TO-220	41K3486	1.50
LM2931AM-5.0/NOPB	26	100	5	8-SOIC	41K4476	1.00
LM2931AZ-5.0/NOPB	26	100	5	TO-92	41K4481	0.80
LM2931M-5.0/NOPB	26	100	5	8-SOIC	41K4487	1.00
LM2931T-5.0/NOPB	26	100	5	TO-220	41K4491	1.29
LM2937ES-5.0/NOPB	26	500	5	TO-263	41K4539	2.32
LM2937ES-12/NOPB	26	500	12	TO-263	41K4535	2.32
LM2937ET-5.0/NOPB	26	500	5	TO-220	41K4553	1.63
LM2937ET-8.0/NOPB	26	500	8	TO-220	41K4554	1.63
LM2937ET-10/NOPB	26	500	10	TO-220	41K4548	1.63
LM2937ET-12/NOPB	26	500	12	TO-220	41K4549	1.63
LM2937IMP-5.0/NOPB	26	500	5	4-SOT-223	27K6035	1.82
LM2937IMP-8.0/NOPB	26	500	8	4-SOT-223	41K4559	1.82

CONTINUED

FIXED POSITIVE VOLTAGE ANALOG REGULATORS (CONT.)

LOW DROPOUT REGULATORS

Mfg. Part No.	Max. Input Voltage (V)	Max. Output Current (mA)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
● LM2940IMP-5.0/NOPB	26	1000	5	4-SOT-223	41K4582	2.17
● LM2940S-5.0/NOPB	26	1000	5	TO-263	41K4605	2.20
● LM2940CS-12/NOPB	26	1000	12	TO-263	41K4567	2.06
● LM2940CS-15/NOPB	26	1000	15	TO-263	41K4568	2.06
● LM2940CS-5.0/NOPB	26	1000	5	TO-263	41K4569	2.06
● LM2940CT-12/NOPB	26	1000	12	TO-220	41K4575	1.65
● LM2940CT-15/NOPB	26	1000	15	TO-220	41K4576	1.65
● LM2940CT-5.0/NOPB	26	1000	5	TO-220	41K4577	1.65
● LP38692MP-ADJ/NOPB	10	1000	9	5-SOT-223	41K7473	1.63
VOLTAGE REGULATORS						
● LM2937IMP-2.5/NOPB	26	400	2.5	4-SOT-223	41K4558	1.82
● LM2937IMP-3.3/NOPB	26	400	3.3	4-SOT-223	28K1907	1.82
● LM2937ES-3.3/NOPB	26	500	3.3	TO-263	41K4538	2.32
● LM2937ET-3.3/NOPB	26	500	3.3	TO-220	41K4552	1.63
● LM3411M5-5.0/NOPB	20	15	5.0	5-SOT-23	41K4782	0.57
● LP3990MF-1.8/NOPB	6	150	1.8	5-SOT-23	69K2651	0.70
MICROPOWER VOLTAGE REGULATORS						
● LP2950ACZ-5.0/NOPB	30	100	5	TO-92	41K6536	0.88
● LP2950CZ-3.3/NOPB	30	100	3.3	TO-92	41K6544	0.80
● LP2950CZ-5.0/NOPB	30	100	5	TO-92	41K6545	0.80
MICROPOWER ULTRA-LOW-DROPOUT REGULATOR						
● LP2980AIM5-2.5/NOPB	16	50	2.5	5-SOT-23	41K6692	0.70
● LP2980AIM5-3.0/NOPB	16	50	3	5-SOT-23	41K6697	0.70
● LP2980IM5-ADJ/NOPB	16	50	3.3-4.51	5-SOT-23	41K6726	0.70
● LP2980AIM5-3.3/NOPB	18	50	3.3	5-SOT-23	41K6700	0.70
● LP2980IM5-3.3/NOPB	18	50	3.3	5-SOT-23	41K6737	0.70
● LP2981IM5-5.0/NOPB	16	100	9	5-SO	41K6802	1.02
● LP2982AIM5-3.0/NOPB	16	50	3	5-SOT-23	41K6819	0.91
● LP2982AIM5-3.3/NOPB	16	50	3.3	5-SOT-23	41K6820	0.91
● LP2981AIM5-3.0/NOPB	16	100	3	5-SOT-23	41K6768	1.05
● LP2981AIM5-3.3/NOPB	16	100	3.3	5-SOT-23	41K6771	1.05
● LP2981AIM5-5.0/NOPB	16	100	5	5-SOT-23	41K6776	1.05
● LP2981IM5-3.0/NOPB	16	100	3	5-SOT-23	41K6794	1.02
● LP2981IM5-3.3/NOPB	16	100	5	5-SOT-23	41K6797	1.02
● LP2981IM5-5.0/NOPB	16	100	5	5-SOT-23	41K6802	1.02
MICROPOWER LOW-NOISE ULTRA-LOW-DROPOUT REGULATOR						
● LP2985IM5-2.5/NOPB	16	150	2.5	5-SOT-23	41K6944	0.82
● LP2985IM5-2.8/NOPB	16	150	2.8	5-SOT-23	41K6947	0.82
● LP2985AIM5-3.0/NOPB	16	150	3	5-SOT-23	41K6886	0.89
● LP2985AIM5-5.0/NOPB	16	150	5	5-SOT-23	41K6896	0.89
● LP2985IM5-3.3/NOPB	16	150	3.3	5-SOT-23	41K6952	0.82
● LP2985IM5-3.6/NOPB	16	150	3.6	5-SOT-23	41K6954	0.82
● LP2985IM5-5.0/NOPB	16	150	5	5-SOT-23	41K6960	0.82
● LP3981ILD-3.3/NOPB	6	300	3.3	6-LLP	41K7886	0.69
● LP3981IMM-2.5/NOPB	6	300	2.5	8-MSOP	41K7893	0.69
● LP3982ILD-ADJ/NOPB	6	300	-0.3 - 6.5	8-LLP	41K7907	0.69
● LP3982IMM-2.5/NOPB	6	300	2.5	8-MSOP	41K7923	0.68
● LP3985IM5-2.8/NOPB	6	150	2.8	5-SOT-23	41K7955	0.59

(70560)

LDO LINEAR REGULATORS

RoHS Compliant Available

TEXAS INSTRUMENTS

SINGLE CHANNEL LDO

Mfg. Part No.	Supply Voltage Max. (V)	Output Voltage Typ. (V)	Output Current (mA)	Package	Stock No.	Price Each 1-9
● LP2951D	30	30	100	8-SOIC	48M0679	0.74
● LP2985-33DBVT	16	3.3	150	5-SOT-23	43J9347	1.05
● LP2985-50DBVT	16	5	150	5-SOT-23	14M2051	1.05
● LP2985A-50DBVT	16	5	150	5-SOT23	14M2067	1.19
● REG101NA-3/250	10	3	100	5-SOT-23	75C7432	2.80
● REG101NA-3.3/250	10	3.3	100	5-SOT-23	75C7430	2.80
● REG101NA-5/250	10	5	100	5-SOT-23	75C7434	2.80
● REG101NA-A/250	10	5.5	100	5-SOT23	75C7422	2.80
● REG102NA-3.3/250	12	3.3	400	5-SOT-23	74K3923	3.34
● REG102NA-5/250	12	5	250	5-SOT-23	75C7476	3.34
● REG102NA-A/250	12	5.5	250	5-SOT23	75C7464	3.34
● REG102UA-3.3	12	3.3	470	8-SOIC	75C7487	3.59
● REG103GA-3.3	15	3.3	500	6-SOP	75C7511	6.65
● REG103UA-A	15	5.5	950	8-SOIC	75C7516	6.43
● REG104FA-3.3KTTT	15	3.3	1	5-TO-263	87H2555	4.14

➤ CONTINUED ➤

LDO LINEAR REGULATORS (CONT.)

Mfg. Part No.	Supply Voltage Max. (V)	Output Voltage Typ. (V)	Output Current (mA)	Package	Stock No.	Price Each 1-9
● REG104FA-5KTTT	15	5	1	5-D2PAK	87H2557	7.95
● REG104FA-5/500	15	5	1000	5-TO-263	75C7539	6.90
● REG104FA-AKTTT	15	5.5	1	5-TO-263	87H2552	7.95
● REG104GA-3.3	15	3.3	1	5-SOT-223	75C7546	6.65
● REG104GA-5	15	5	1	5-SOT-223	75C7549	6.65
● REG104GA-A	15	5.5	1	6-SOT-223	74C0365	6.65
● REG113NA-3/250	10	3	400	5-SOT-23	75C7591	3.34
● REG113EA-3.3/250	10	3.3	400	8-MSOP	75C7580	3.73
● REG113NA-3.3/250	10	3.3	400	5-SOT-23	75C7589	3.34
● REG1117-3.3	15	3.3	800	3-SOT-223	35C1963	2.82
● REG1117A-1.8	15	1.8	1	4-SOP	44P2530	2.80
● REG1117FAKTTT	15	13.5	1	3-D2PAK	87H2562	5.04
● SN105125DBVR	5.25	1.2	150	5-SOT-23	67H1525	1.00
● TL1963A-18KTTR	20	1.8	1.5	5-TO-263	33R2187	2.99
● TL1963A-25KTTR	20	2.5	1.5	5-TO-263	33R2188	2.99
● TL1963A-33KTTR	20	3.3	1.5	5-TO-263	33R2189	2.99
● TL1963AKTTR	20	20	1.5	5-TO-263	33R2190	2.99
● TL5209DR	16	6.5	500	8-SOIC	20M5842	1.37
● TL750L05CLP	26	5	150	3-TO-92	14P7548	0.82
● TL750L10CD	26	10	150	8-SOIC	76C9331	0.82
● TL750L12CD	26	12	150	8-SOIC	76C9335	0.82
● TL750L12CLP	26	12	150	3-3-TO-92	76C9337	0.68
● TLV70018DCKT	5.5	1.8	0.2	5-SC70	50R4439	0.58
● TLV70018DDCT	5.5	1.8	0.2	5-SOT	50R4440	0.58
● TLV70025DDCT	5.5	4.8	0.2	5-SOT	60R2433	0.58
● TLV70028DCKT	5.5	2.8	0.2	5-SC70	50R4441	0.58
● TLV70028DDCT	5.5	2.8	0.2	5-SOT	50R4442	0.16
● TLV70030DCKT	5.5	3	0.2	5-SC70	50R4443	0.58
● TLV70030DDCT	5.5	3	0.2	5-SOT	50R4444	0.58
● TLV70033DCKT	5.5	3.3	0.2	5-SC70	50R4445	0.58
● TLV70033DDCT	5.5	3.3	0.2	5-SOT	50R4446	0.58
● TPS51100DGQ	5.25	5.25	3000	10-MSOP	10J9766	2.38
● TPS51100DGQR	5.25	3.6	3000	10-MSOP	10J9767	2.00
● TPS51200DRCT	3.5	3.5	3000	10-SON	01P3287	2.45
● TPS70451PWP	6	3.3	2000	24-HTSSOP	77C0776	5.95
● TPS71501DCKR	24	1.2	50	5-SC-70	36K7664	1.00
● TPS71518DCKR	24	1.8	50	5-SC70	61K1908	1.00
● TPS71525DCKR	24	2.5	50	5-SOT-23	77C0814	1.00
● TPS71530DCKR	24	3	50	5-SOT-23	34H2503	1.00
● TPS71533DCKR	24	3.3	50	5-SC-70	77C0815	1.00
● TPS71550DCKR	24	5	50	5-SC-70	34H2504	1.00
● TPS71550QDCKRQ1	24	5	50	5-SC70	73J8410	1.17
● TPS715A01DRBT	24	3.3	80	8-SON	73J8403	1.53
● TPS715A33DRBT	24	3.3	80	8-SON	73J8405	1.53
● TPS71701DCKT	6.5	6.2	150	5-SC-70	65M6356	1.27
● TPS71710DCKT	6.5	1	150	5-SC70	30M1852	1.27
● TPS71725DCKT	6.5	3.3	150	5-SC70	30M1858	1.27
● TPS71730DCKR	6.5	3	150	5-SC70	85K1728	1.11
● TPS71750DSET	6.5	5	0.15	6-SON	51R6146	1.27
● TPS7A4001DGNT	100	90	50	8-MSOP	40T5455	2.75
● TPS7201QP	10	9.75	250	8-DIP	52F3987	1.86
● TPS72101DBVT	5.5	2.5	150	5-SOT23	77C0819	1.45
● TPS72118DBVT	5.5	1.8	150	5-SOT-23	83C7647	1.45
● TPS72218DBVT	5.5	1.8	50	5-SOT-23	77C0831	1.45
● TPS72301DBVT	-10	-1.2	200	5-SOT-23	87H2931	2.99
● TPS72325DBVT	-3	-2.5	200	5-SOT23	87H2933	2.99
● TPS72501KTTR	6	5.5	1000	5-D2PAK	87H2934	2.75
● TPS72501DCQR	6	5.5	1000	6-SOT-223	77C0843	2.99
● TPS72525DCQ	6	2.5	1	6-SOT223	77C0854	3.22
● TPS72718DSET	5.5	1.8	400	6-SON	34R6357	1.69
● TPS72728DSET	5.5	2.8	400	6-SON	34R6358	1.69
● TPS73001DBVT	5.5	1	200	6-SOT223	71J8225	0.82
● TPS73018DBVT	5.5	1.8	200	5-SOT23	71J8227	0.82
● TPS7301QDR	10	9.75	500	8-SOIC	35C2221	2.77
● TPS73025DBVR	5.5	2.5	200	5-SOT23	71J8228	0.71
● TPS73030DBVT	5.5	3	200	5-SOT-23	71J8231	0.82
● TPS73033DBVR	5.5	3.3	200	5-SOT-23	71J8232	0.71
● TPS73033DBVT	5.5	3.3	200	5-SOT23	71J8233	0.82
● TPS73101DBVT	5.5	1	150	5-SOT23	87H2944	1.17
● TPS73118DBVT	5.5	1.8	150	5-SOT23	87H2948	1.17
● TPS73125DBVT	5.5	2.5	150	5-SOT23	87H2950	1.17
● TPS73130DBVT	5.5	3	150	5-SOT23	87H2952	1.17

➤ CONTINUED ➤

LDO LINEAR REGULATORS
(CONT.)

Mfg. Part No.	Supply Voltage Max. (V)	Output Voltage Typ. (V)	Output Current (mA)	Package	Stock No.	Price Each 1-9
TPS73133DBVT	5.5	3.3	500	5-SOT-23	87H2954	1.17
TPS73150DBVT	5.5	5	150	5-SOT-23	87H2956	1.17
TPS73201DBVR	5.5	5.5	250	5-SOT-23	87H2957	1.38
TPS73201DBVT	5.5	5.5	600	5-SOT-23	87H2958	1.69
TPS73201DCQR	5.5	5.5	250	6-SOT-223	01J0986	1.67
TPS73233DBVT	5.5	3.3	600	5-SOT-23	87H2968	1.01
TPS7333QD	10	3.3	500	8-SOIC	52F2803	3.30
TPS73430DRVT	6.5	3	250	6-SON	04R6653	1.17
TPS73533DRVT	6.5	3.3	500	6-SON	04R6654	1.54
TPS73601DBVT	5.5	5.5	400	5-SOT-23	87H2972	2.45
TPS73601DCQR	5.5	5.5	400	6-SOT-223	01J1003	2.31
TPS73601DRBT	5.5	1	400	8-SON	73J8412	2.59
TPS73601DBVR	5.5	5.5	400	5-SOT-23	87H2971	2.04
TPS73601DCQ	5.5	5.5	400	6-SOT-223	01J1002	2.86
TPS73618DBVT	5.5	1.8	400	5-SOT-23	87H2976	2.45
TPS73618DCQR	5.5	1.8	400	6-SOT-223	01J1007	0.97
TPS73625DBVT	5.5	2.5	400	5-SOT-23	86H3878	2.45
TPS73633DCQR	5.5	3.3	400	6-SOT-223	01J1013	2.31
TPS73633DBVT	5.5	3.2	400	5-SOT23	87H2981	2.45
TPS73701DRBR	5.5	5.5	1000	8-SON	50M9154	1.63
TPS73701DRBT	5.5	5	1	8-SON	50M9155	1.91
TPS73701DCQ	5.5	5.5	2200	6-SOT-223	75K1627	1.89
TPS73733DCQ	5.5	5	1	6-SOT-223	58M1296	1.89
TPS74201KTWT	5.5	3.6	1.5	7-PFM	28M7832	6.09
TPS74201RGWR	5.5	3.6	1.5	20-QFN	03M1115	4.77
TPS74301RGWT	5.5	3.6	1.5	20-QFN	03M1118	5.49
TPS74401KTWT	5.5	3.6	3	7-PFM	28M7836	7.23
TPS74401RGWT	5.5	3.6	3	20-QFN	03M1120	6.80
TPS74701DRCT	5.5	3.6	500	10-SON	72M4784	2.45
TPS74701DRCR	5.5	3.6	500	10-SON	72M4783	2.04
TPS74801DRCT	5.5	3.6	1.5	10-SON	30M1869	2.45
TPS74801DRCR	5.5	3.6	1500	10-SON	30M1868	2.18
TPS74901RGWT	5.5	3.6	3	20-QFN	48M0959	4.18
TPS75501KC	5.5	5	5	5-TO-220	77C0936	5.97
TPS75501KTTT	5.5	5	5	5-TO-263	95H4580	6.06
TPS75525KTTT	5.5	2.5	5000	5-PFM	87H2984	6.06
TPS75733KTTT	5.5	3.3	3000	5-PFM	87H2995	7.12
TPS75818KTTT	5.5	1.8	3000	5-TO-263	87H2998	6.09
TPS75833KTTT	5.5	3.3	3000	5-PFM	87H3000	6.09
TPS75901KTTT	5.5	5	7500	5-PFM	87H3001	4.86
TPS75933KTTT	5.5	3.3	7500	5-PFM	87H3005	6.38
TPS75933KC	5.5	3.3	7.5	5-TO-220	77C1007	6.21
TPS76030DBVR	16	3	50	5-TSSOP	35K1343	1.16
TPS76033DBVR	16	3.3	50	5-TSSOP	35K1344	1.16
TPS76050DBVR	16	5	50	5-TSSOP	35K5020	1.16
TPS76133DBVT	16	3.3	100	5-SOT-23	77C1021	1.36
TPS76150DBVR	16	5	100	5-SOT-23	77C1024	1.19
TPS76201DBVR	10	5.5	100	5-SOT-23	77C1026	1.14
TPS76201DBVT	10	5.5	100	5-SOT23	77C1027	1.31
TPS76301DBVR	10	6.5	150	5-SOT-23	77C1028	0.96
TPS76301DBVT	10	6.5	150	5-SOT-23	35K1346	0.96
TPS76318DBVR	10	1.8	150	5-SOT23	77C1030	0.96
TPS76318DBVT	10	1.8	150	5-SOT-23	96C8608	0.96
TPS76325DBVR	10	2.5	150	5-SOT23	77C1031	0.96
TPS76328DBVT	10	2.8	150	5-SOT-23	19C9072	0.96
TPS76333DBVT	10	3.3	150	5-SOT-23	96C8605	0.40
TPS76350DBVR	10	5	150	5-SOT23	77C1037	0.96
TPS76433DBVR	10	3.3	150	5-SOT-23	77C1043	0.98
TPS76618D	10	1.8	250	8-SOIC	19C9085	1.47
TPS76633D	10	3.3	250	8-SOIC	77C1060	1.47
TPS76650D	10	5	250	8-SOIC	77C1062	1.47
TPS76701QPWPR	10	1.8	1	5-SOT23	77C1072	2.77
TPS76718QPWP	10	1.8	1	5-SOT23	77C1079	3.30
TPS76725QD	10	2.5	1	8-SOIC	77C1081	3.30
TPS76733QD	10	3.3	1	8-SOIC	77C1097	3.30
TPS76733QPWP	10	3.3	1	20-TSSOP	74K3985	3.30
TPS76750QD	10	5	1	8-SOIC	77C1101	3.30
TPS76750QPWP	10	5	1	20-HTSSOP	77C1103	3.30
TPS76801QPWP	10	5.5	1	20-HTSSOP	77C1107	2.70
TPS76833QD	10	3.3	1	8-SOIC	77C1133	2.70
TPS76833QPWP	10	3.3	1	20-TSSOP	77C1135	2.70
TPS76850QD	10	5	1	8-SOIC	77C1137	2.70

➤CONTINUED➤

LDO LINEAR REGULATORS
(CONT.)

Mfg. Part No.	Supply Voltage Max. (V)	Output Voltage Typ. (V)	Output Current (mA)	Package	Stock No.	Price Each 1-9
TPS76901DBVR	10	5.5	100	5-SOT23	77C1141	0.89
TPS76912DBVR	10	1.2	100	5-SOT-23	77C1145	0.89
TPS76918DBVR	10	1.8	100	5-SOT-23	77C1150	0.89
TPS76925DBVR	10	2.5	100	5-SOT-23	77C1153	0.89
TPS76930DBVR	10	3	100	5-SOT-23	77C1161	0.89
TPS76933DBVR	10	3.3	100	5-SOT23	77C1164	0.84
TPS76933DBVT	10	3.3	100	5-SOT-23	77C1165	0.97
TPS76950DBVT	10	5	100	5-SOT-23	77C1169	1.02
TPS77001DBVR	10	5.5	50	5-SOT-23	12C8653	1.18
TPS77018DBVR	10	1.8	50	5-SOT-23	77C1176	1.18
TPS77018DBVT	10	1.8	50	5-SOT	77C1177	1.34
TPS77030DBVT	10	3	50	5-SOT23	77C1185	1.34
TPS77033DBVT	10	3.3	50	5-SOT-23	77C1187	1.34
TPS77133DGK	10	3.3	150	8-MSOP	72K9599	2.04
TPS77301DGK	10	5.5	250	8-VSSOP	77C1213	2.31
TPS77601D	10	5.5	50	8-SOIC	19C9100	2.38
TPS77625D	10	2.5	500	8-SOIC	19C9103	2.38
TPS77633D	10	3.3	500	8-SOIC	19C9105	2.38
TPS77633PWP	10	3.3	1900	20-TSSOP	77C1277	2.38
TPS77733PWP	10	3.3	750	20-HTSSOP	77C1292	3.13
TPS77801D	10	5.5	750	8-SOIC	19C9111	2.87
TPS77801PWP	10	5.5	750	20-HTSSOP	72K9600	2.87
TPS77833D	10	3.3	750	8-SOIC	77C1305	2.87
TPS78001DDCT	5.5	5.5	150	5-SOT-23	95M0132	1.22
TPS780270200DDCR	5.5	4.2	400	5-SOT	03P1645	1.06
TPS780230300DRVT	5.5	3	150	6-SON	73P4656	1.22
TPS78601DCQR	5.5	5.5	1.5	6-SOT223	02E7247	3.22
TPS78601KTTT	5.5	5.5	1.5	5-D2PAK	32H6574	3.96
TPS78618DCQ	5.5	1.8	1.5	6-SOT-223	02E7248	3.94
TPS78633KTTT	5.5	3.3	1.5	5-D2PAK	32H6585	3.96
TPS78833DBVR	5.5	3.3	150	5-SOT-23	77C1319	1.17
TPS79101DBVR	5.5	5.5	100	6-SOT-23	77C1342	1.23
TPS79118DBVR	5.5	1.8	100	5-SOT-23	77C1344	1.23
TPS79133DBVR	5.5	5.5	100	5-SOT23	77C1346	1.23
TPS79133DBVT	5.5	3.3	100	5-SOT-23	77C1347	1.41
TPS79201DBVR	5.5	5.5	100	5-SOT-23	77C1349	1.23
TPS79225DBVT	5.5	2.5	100	5-SOT23	77C1352	1.41
TPS79230DBVR	5.5	3	100	5-SOT-23	77C1355	1.23
TPS79301DBVR	5.5	5.5	200	6-SOT-23	77C1357	0.84
TPS79318DBVR	5.5	1.8	200	5-SOT23	77C1359	0.84
TPS79318DBVT	5.5	1.8	200	5-SOT-23	44J2543	0.96
TPS79325DBVR	5.5	2.5	200	5-SOT23	77C1360	0.84
TPS79328DBVR	5.5	2.85	200	5-SOT23	77C1361	0.84
TPS79330DBVR	5.5	3.3	200	5-SOT23	77C1364	0.84
TPS79333DBVR	5.5	3.3	200	5-SOT-23	77C1365	0.84
TPS793475DBVR	5.5	4.75	200	5-SOT23	77C1366	0.84
TPS79433DCQR	5.5	3.3	925	6-SOT-223	32H6602	1.77
TPS79501DCQR	5.5	5.5	500	6-SOT-223	02E7261	2.72
TPS79518DCQR	5.5	1.8	500	6-SOT-223	02E7265	2.72
TPS79533DCQ	5.5	3.3	500	6-SOT-223	72K9601	2.87
TPS79533DCQR	5.5	3.3	500	6-SOT223	02E7269	2.72
TPS79601DCQ	6	5.5	1	6-SOT-223	02E7270	3.13
TPS79601DCQR	5.5	5.5	1	6-SOT-223	02E7271	2.97
TPS79618DCQR	5.5	1.8	1	6-SOT-223	02E7273	1.24
TPS79625DCQ	5.5	2.5	1	6-SOT223	02E7274	3.13
TPS79633DCQR	5.5	3.3	1	6-SOT-223	02E7281	2.97
TPS79650DCQR	5.5	5	1	6-SOT-223	88K7083	2.97
TPS79718DCKR	5.5	1.8	50	5-SC-70	77C1372	1.04
TPS79718DCKT	5.5	1.8	0.05	5-SC-70	77C1373	1.20
TPS79925DDCT	6.5	2.5	0.2	5-SOT	08K4984	1.08
TPS79928DDCR	6.5	2.8	200	5-SOT-23	08K4985	0.94
TPS79730DCKR	5.5	3	50	5-SC-70	77C1374	1.04
TPS79733DCKT	5.5	3.3	50	5-SC70	77C1377	0.72
TPS79901DDCT	6.5	1	200	5-TSOT23	08K4978	1.08
TPS79912DDCT	6.5	1.2	200	5-TSOT23	46M1210	1.08
TPS79918DDCR	6.5	1.8	200	5-TSOT23	08K4981	0.94
TPS79930DDCT	6.5	3	200	5-TSOT23	08K4990	1.08
TPS79933DDCT	6.5	3.3	200	5-TSOT23	08K4992	1.08
TPS7A8001DRBT	6.5	6	1	8-SON	79R9092	3.30
TPS7A3001DGNT	-36	Adj.	200	8-MSOP-PowerPAD	86R9813	4.18
TPS7A4501KTTR	20	20	1.5	5-TO-263	33R2193	3.46
TPS7A4518KTTR	20	1.8	1.5	5-TO-263	33R2195	3.46

➤CONTINUED➤

LDO LINEAR REGULATORS (CONT.)

Mfg. Part No.	Supply Voltage Max. (V)	Output Voltage Typ. (V)	Output Current (mA)	Package	Stock No.	Price Each 1-9
● TPS7A4525KTTR	20	2.5	1.5	5-TO-263	33R2196	3.46
● TPS7A4901DGNT	36	Adj.	150	8-MSOP-PowerPAD	86R9814	3.10
● UC382TDKTTT-ADJ	7.5	6	3	5-PFM	87H4737	5.91
● UC385TDKTTT-ADJ	7.5	6	5	5-TO-263	87H4744	8.14
● UCC283T-5	9	5	3	3-TO-220	77C2145	7.03
● UCC383T-3	9	3.3	3	3-TO-220	77C2491	7.03
● UCC284DP-5	-16	-5	500	8-SOIC	77C2156	6.99
● UCC384DP-ADJ	-15	-15	500	8-SOIC	77C2504	5.82
DUAL CHANNEL LDO						
● TPS70102PWP	6	5.5	500	20-TSSOP	19C9066	4.30
● TPS70251PWP	6	3.3	500	20-HTSSOP	77C0755	5.37
● TPS70258PWP	6	3.3	500	20-HTSSOP	77C0757	5.37
● TPS70345PWP	6	3.3	2	24-HTSSOP	77C0761	5.95
● TPS70351PWP	6	3.366	1	24-HTSSOP	77C0766	5.95
● TPS70448PWP	6	3.3	2000	24-HTSSOP	77C0774	5.95
● TPS70751PWP	6	3.3	250	20-HTSSOP	77C0786	3.34
● TPS71202DRCT	5.5	5.5	250	10-SON	73J8391	2.59
● TPS71330DR	10	3.3	500	8-SOIC	77C0807	3.27
● TPS71500D	10	5	500	8-SOIC	67K1292	3.20
● TPS767D318PWP	13.5	1.8	1	28-HTSSOP	77C1065	5.85
LDO CONTROLLERS						
● UC3834N	40	1.5	200	16-DIP	72K7334	13.46
● UC3836N	20	2.5	250	8-DIP	77C3283	10.62

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
● TLV70028EVM-463	Evaluation Module for TLV70028 Low Dropout Regulator	60R3524	20.40
● TLV70033EVM-503	Evaluation Module for TLV70033 Low Dropout Regulator	60R3525	20.40
● TLV7101828EVM-595	Evaluation Module for TLV7101828 Dual Low Dropout Regulator	91R2092	20.40
● TPS73501EVM-276	Evaluation Module for TPS73501 Low Dropout Linear Regulator	50R8170	20.40
TPS7A30-49EVM-567	Evaluation Module for TPS7A3001 and TPS7A4901 Low Dropout Linear Regulator	86R8633	20.40

(65783)

DUAL LINEAR REGULATORS

RoHS Compliant Available

TEXAS INSTRUMENTS

MULTI-OUTPUT LINEAR DROPOUT REGULATORS

Mfg. Part No.	Input Volt. Max. (V)	Output Voltage (V)	Output Current (mA)	Package	Stock No.	Price Each 1-9
● LP2966IMM-1833/NOPB	7	1.8	150	8-MSOP	41K6642	1.91

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LINEAR ANALOG VOLTAGE REGULATORS

RoHS Compliant Available

TEXAS INSTRUMENTS

DDR TERMINATION REGULATORS

Mfg. Part No.	Input Volt. Min. (V)	Output Current (mA)	DDR Standards	Package	Stock No.	Price Each 1-9
● LP2995M/NOPB	2.2	1.5	DDR	8-NSOIC	41K7313	1.66
● LP2995MR/NOPB	2.2	1.5	DDR	8-PSOP	41K7314	1.66
● LP2995MX/NOPB	2.2	1.5	DDR	8-SO	41K7316	1.38
● LP2996LQ/NOPB	1.8	1.5	DDR, DDR-II	16-LLP	41K7317	1.69
● LP2996MRX/NOPB	1.8	1.5	DDR, DDR-II	8-PSOP	41K7321	1.69
● LP2997M/NOPB	1.8	500	DDR-II	8-SOIC	41K7323	1.63
● LP2998MR/NOPB	2.2	1.5	DDR, DDR-II	8-PSOP	84M8159	2.12
● LP2998MA/NOPB	1.8	1.5	DDR, DDR-II	8-SOIC	75M6036	2.12

3-TERMINAL POSITIVE

Mfg. Part No.	Input Voltage Max. (V)	Output Volt. (V)	Pkg.	Stock No.	Price Each 1-9
● LM317AEMP/NOPB	40	1.2 to 37	4-SOT-223	41K4649	1.77
● LM317AEMPX/NOPB	40	1.2 to 37	4-SOT-223	41K4650	1.77
● LM317AT/NOPB	40	1.2 to 37	3-TO-220	41K4653	1.71
● LM317EMP/NOPB	40, 37	1.2 to 37	4-SOT-223	20J4456	1.20
● LM317HVT/NOPB	60	1.2 to 37	3-TO-220	41K4655	2.43

➤CONTINUED➤

LINEAR ANALOG VOLTAGE REGULATORS (CONT.)

Mfg. Part No.	Input Voltage Max. (V)	Output Volt. (V)	Pkg.	Stock No.	Price Each 1-9
● LM317LM/NOPB	40	1.2 to 37	8-NSOIC	41K4656	0.92
● LM317LMX/NOPB	40	1.2 to 37	8-SOIC	41K4657	0.76
● LM317LZ/NOPB	40	1.2 to 37	3-TO-92	41K4658	0.67
● LM317MDT/NOPB	40	1.2 to 37	3-TO-252	41K4659	1.57
● LM317S/NOPB	40,37	1.2 to 37	3-TO-263	41K4661	1.67
● LM317SX/NOPB	40,37	1.2 to 37	3-TO-263	41K4662	1.67
● LM317T/NOPB	40,37	1.2 to 37	3-TO-220	41K4663	1.71
● LM338T/NOPB	40	1.2 to 37	3-TO-220	41K4748	2.03
● LM340SX-5.0/NOPB	35	12	3-TO-263	41K4770	1.66
● LM340T-15/NOPB	35	12	3-TO-220	41K4772	1.66
● LM350AT/NOPB	35	1.2 to 37	3-TO-220	41K4850	2.97
● LM350T/NOPB	35	1.2 to 37	3-TO-220	41K4851	1.75
● LM723CN/NOPB	40	2	14-DIP	41K6278	1.00
● LM78L05ACMX/NOPB	35	5	8-SOIC	41K6322	0.65
● LM78M05CDT/NOPB	35	5	3-TO-252	41K6334	1.56
3-TERMINAL NEGATIVE					
● LM337LM/NOPB	–50	–37 to –1.2	8-SOIC	41K4744	0.88
● LM337LMX/NOPB	–50	–37 to –1.2	8-SOIC	41K4745	0.84
● LM337LZ/NOPB	–50	–37 to –1.2	3-TO-92	41K4746	0.84
● LM337T/NOPB	–50	–37 to –1.2	3-TO-252	41K4747	1.70
LOW-DROPOUT REGULATORS					
● LM1117T-ADJ/NOPB	40	1.25 to 13.8	3-TO-220	41K3486	1.50
● LP2951ACM	30	5	8-NSOIC	17M0417	1.17
● LP2951ACMM/NOPB	30	5	8-SOIC	41K6550	0.88
● LP2951CM/NOPB	30	5	8-NSOIC	26K2433	0.96
● LP2951CN/NOPB	30	5	8-DIP	41K6579	1.22
DDR TERMINATION REGULATORS					
● LP2995M/NOPB	5	...	8-NSOIC	41K7313	1.66
● LP2995MX/NOPB	5	...	8-SO	41K7316	1.38
● LP2995MR/NOPB	5	...	8-PSOP	41K7314	1.66
● LP2996MRX/NOPB	5	1.39	8-PSOP	41K7321	1.69
● LP2998MA/NOPB	1.5	...	8-SOIC	75M6036	2.12

(70403)

LOW DROPOUT REGULATORS

RoHS Compliant Available

TEXAS INSTRUMENTS

SINGLE CHANNEL LDO

Mfg. Part No.	Supply Voltage Max. (V)	Output Voltage Typ. (V)	Output Current (mA)	Package	Stock No.	Price Each 1-9
● ADP2140ACPZ1528R7	5.5	1.5	600	10-LFCSP	12T2991	3.03
● ADP2140ACPZ3315R7	5.5	3.3	600	10-LFCSP	12T2993	3.03
● ADP2140ACPZ3312R7	5.5	3.3	600	10-LFCSP	12T2992	3.03
● ADP2140ACPZ1233R7	5.5	1.2	600	10-LFCSP	12T2990	3.03
● ADP162AUJZ-1.5-R7	5.5	1.5	150	5-TSOT	18T2023	1.08
● ADP130AUJZ-2.5-R7	3.6	2.5	350	5-TSOT	10R7025	0.95
● ADP1621ARMZ-R7	5.5	...	1000	10-MSOP	28M3770	2.09
● ADP162AUJZ-3.3-R7	5.5	3.3	150	5-TSOT	18T2028	1.08
● ADP162AUJZ-3.3-R7	5.5	3.3	150	5-TSOT	18T2028	1.08
● ADP162AUJZ-1.5-R7	5.5	1.5	150	5-TSOT	18T2023	1.08
● ADP121-AUJZ33R7	5.5	3.3	150	5-TSOT	10R7024	0.89
● ADP150AUJZ-3.3-R7	5.5	3.3	150	5-TSOT	60R3276	1.01

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
● TPS7A4001EVM-709	Evaluation Module for TPS7A4001 Low Dropout Linear Regulator	40T5456	20.40
● ADP2140CPZ-REDYKIT	Evaluation Module for ADP2140 Low Dropout Linear Regulator	31T9290	150.00
● ADP162UJZ-REDYKIT	Evaluation Module for ADP162 Low Dropout Linear Regulator	18T2030	56.25
● ADP160UJZ-REDYKIT	Evaluation Module for ADP160 Low Dropout Linear Regulator	18T2012	56.25
● ADP151UJZ-REDYKIT	Evaluation Module for ADP151UJZ Low Dropout Linear Regulator	85R6381	56.25
● ADP150UJZ-REDYKIT	Evaluation Module for ADP150UJZ Low Dropout Linear Regulator	67R2195	56.25
● ADP130UJZ-REDYKIT	Evaluation Module for ADP130UJZ Low Dropout Linear Regulator	67R2194	75.00
● ADP124RHZ-REDYKIT	Evaluation Module for ADP124RHZ Low Dropout Linear Regulator	70R1819	56.25
● ADP124CPZ-REDYKIT	Evaluation Module for ADP124CPZ Low Dropout Linear Regulator	51T1960	56.25

➤CONTINUED➤

LOW DROPOUT REGULATORS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
ADP122UJZ-REDYKIT	Evaluation Module for ADP122UJZ Low Dropout Linear Regulator	67R2193	56.25
ADP121UJZ-REDYKIT	Evaluation Module for ADP121UJZ Low Dropout Linear Regulator	24R8975	56.25

(197180)

SINGLE OUTPUT LOW-DROPOUT LINEAR REGULATOR

RoHS Compliant Available

TEXAS INSTRUMENTS

Features:
- CMOS Logic-Level-Compatible Enable Pin
- Built-In Current-Limit and Thermal Shutdown Protection

Applications:
- Microprocessors, Microcontrollers Powered by Industrial Busses with High Voltage Transients
- Industrial Automation
- Telecom Infrastrucure
- Automotive
- Power over Ethernet (PoE)
- LED Lighting
- Bias Power Supplies

Mfg. Part No.	Dropout Voltage (mV)	Supply Voltage (V)	Output Current (mA)	Package	Stock No.	Price Each 1-9
TPS7A4001DGNT	290	7 - 100	50	8-MSOP	40T5455	2.75
TPS7A1601DGNT	60	3 - 60	100	8-MSOP	83T1600	3.94

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
TPS7A1601EVM-046	TPS7A1601, LDO REGULATOR, EVALUATION MODULE	76T8161	20.40

(196590)

SWITCHING REGULATORS

RoHS Compliant Available

ANALOG DEVICES

The **ADP1111** is part of a family of step-up/step-down switching regulators that operates from an input voltage supply of 2 V to 12 V in step-up mode and up to 30 V in step-down mode. The **ADP1111** can be programmed to operate in step-up/step-down or inverting applications with only 3 external components.
The **ADP3050** is a current-mode monolithic buck (step-down) PWM switching regulator that contains a high current 1A switch and all control, logic and protection functions. It uses a unique compensation scheme which allows the use of any type of output capacitor (tantalum, ceramic, electrolytic, OS-CON).

INVERTING/STEP-UP/STEP-DOWN REGULATORS

Mfg. Part No.	Input Voltage Range (V)	Output Voltage (V)	Switching Frequency (kHz)	Package	Stock No.	Price Each 1-9
ADP1111ARZ	2 to 30	45	70	8-SOIC	59K2520	4.90
ADP1111ARZ-5	2 to 30	5	70	8-SOIC	59K2524	4.90
INVERTING/STEP-DOWN REGULATOR						
ADP2114ACPZ-R7	2.75 to 5.5	3.3	1380	32-LFCSP	33R2226	4.74
ADP2140ACPZ1233R7	2.3 to 5.5	1.2	3000	10-LFCSP	12T2990	3.03
ADP2140ACPZ1528R7	2.3 to 5.5	1.5	3000	10-LFCSP	12T2991	3.03
ADP2140ACPZ3312R7	2.3 to 5.5	3.3	3000	10-LFCSP	12T2992	3.03
ADP2140ACPZ3315R7	2.3 to 5.5	3.3	3000	10-LFCSP	12T2993	3.03
ADP2120ACPZ-R7	2.3 to 5.5	5.5	1200	10-LFCSP	12T2970	2.62
ADP2119ACPZ-R7	2.3 to 5.5	5.5	1200	10-LFCSP	12T2969	2.99
ADP3050ARZ	3.6 to 30	40	200	8-SOIC	59K2542	4.44
ADP2108AUJZ-3.3-R7	2.3 to 5.5	3.3	3500	5-TSOT	25R1927	1.74
ADP2384ACPZN-R7	4.5 to 20	...	1400	24-LFCSP	54W6613	4.56
ADP2442ACPZ-R7	4.5 to 36	...	1000	12-LFCSP	54W6615	4.80
INVERTING/STEP-UP REGULATOR						
ADP1613ARMZ-R7	2.5 to 5.5	20	1400	8-MSOP	25R1925	1.95
ADP1614ACPZ-1.3-R7	2.5 to 5.5	20	1300	10-LFCSP	46W0841	2.65

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
ADP1612-5-EVALZ	ADP1612 Step-Up Converter Evaluation Board	08R6627	75.00
ADP2119-EVALZ	ADP2119 Step-Down Converter Evaluation Board	83R9286	75.00
ADP2120-EVALZ	ADP2120 Step-Down Converter Evaluation Board	83R9294	75.00
ADP2108-1.2-EVALZ	ADP2108 Step-Down Converter Evaluation Board	34P3070	75.00

(105249)

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(212565)

SWITCHING REGULATORS WITH INTEGRATED FET SWITCHES

RoHS Compliant Available

ANALOG DEVICES

These switching regulators come in step up, step down, and inverting modes and are capable of generating a fixed or adjustable output voltage offering up to 2A of output current. Some of the features available are low battery detector, user adjustable current limit, a variety of switching frequencies, and a reduced number of external components.

STEP-DOWN (BUCK)

Mfg. Part No.	Supply Voltage Max (V)	Output Voltage Vout (V)	Package	Stock No.	Price Each 1-1499
ADP2105ACPZ-3.3-R7	5.5	3.3 V	16-LFCSP	28M3844	2.85
ADP2303ARDZ-5.0-R7	12	5	8-SOIC	12T2975	3.13
ADP2303ARDZ-R7	20	Adjustable	8-SOIC	12T2974	2.73
ADP2302ARDZ-3.3-R7	12	3.3	8-SOIC	12T2973	2.94
ADP2302ARDZ-R7	20	Adjustable	8-SOIC	12T2972	2.62
ADP2300AUJZ-R7	20	17	6-TSOT	12T2971	2.26

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
ADP2300-EVALZ	ADP2300, DC TO DC REGULATOR, STEP DOWN, EVAL BOARD	74R5915	75.00
ADP2302-EVALZ	ADP2302, DC TO DC REGULATOR, STEP DOWN, EVAL BOARD	83R9316	75.00
ADP2303-EVALZ	ADP2303, DC TO DC REGULATOR, STEP DOWN, EVAL BOARD	83R9320	75.00

(107841)

STEP-DOWN REGULATORS

RoHS Compliant Available

ANALOG DEVICES

Applications:
- Industrial and instrumentation
- DC-to-dc point of load applications
- Communications infrastructure
- Networking and servers

Features:
- Selectable PWM or PFM mode operation
- External compensation and soft start
- Startup into precharged output

Mfg. Part No.	Supply Voltage Max. (V)	Switching Frequency (MHz)	Output Current (A)	Package	Stock No.	Price Each 1-24
ADP2108ACBZ-1.82R7	3.6	3	0.6	5-WLCSP	11R0636	1.56
ADP2108AUJZ-3.3-R7	3.6	3.5	0.6	5-TSOT	25R1927	1.74
ADP2108AUJZ-1.2-R7	5.5	3	0.6	5-TSOT	92T3192	1.67
ADP2108ACBZ-1.2-R7	5.5	3	0.6	5-WLCSP	92T3191	1.67
ADP5023ACPZ-R7	5.5	3.5	0.8	24-LFCSP	65T4792	3.71
ADP5037ACPZ-R7	5.5	3.5	0.8	24-LFCSP	65T4793	3.94
ADP5034ACPZ-2-R7	5.5	3	1.2	24-LFCSP	92T3195	5.02
ADP2164ACPZ-R7	6.5	1.4	4	16-LFCSP	92T3193	4.19
ADP2370ACPZ-R7	15	1.2	0.8	8-LFCSP	94T9073	3.53
ADP2371ACPZ-R7	15	1.2	0.8	8-LFCSP	94T9074	3.53
ADP1876ACPZ-R7	20	0.6	0.15	32-LFCSP	82T5461	4.77
ADP2323ACPZ-R7	20	1.2	3	32-LFCSP	55T8619	5.27
ADP2325ACPZ-R7	20	1.2	5	32-LFCSP	92T3194	6.10
ADP2380AREZ-R7	20	1.4	4	16-TSSOP	66W1257	3.62
ADP2386ACPZN-R7	20	1.4	6	24-LFCSP	54W6614	5.14
ADP2441ACPZ-R7	36	1	1	12-LFCSP	46W0846	4.67

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
ADP2323-EVALZ	ADP2323 EVAL. BOARD	55T8413	75.00
ADP2108UJZ-REDYKIT	ADP2108 EVAL. BOARD	14R8705	150.00
ADP2164-EVALZ	ADP2164 EVAL. BOARD	86T6071	75.00
ADP5034-1-EVALZ	ADP5034-1 EVAL. BOARD	58T8879	61.25
ADP2380-EVALZ	ADP2380 EVAL. BOARD	64W2550	75.00

(197181)

ISOPOWER® AND ICOUPLER® DC/DC CONVERTERS

RoHS Compliant Available

ANALOG DEVICES

Applications:
- RS-232/RS-422/RS-485 transceivers
- Medical isolation
- AC/DC power supply startup bias and gate drives
- Isolated sensor interface

iCoupler® products with isoPower™ technology offer a new approach that greatly reduces size and cost without compromising on data rate and isolation rating. isoPower technology, a new family of devices integrates 50 mW of isolated power and two 10 Mbps data channels with 2.5 kV isolation, provides a total solution in one package.

Mfg. Part No.	No. of Inputs, V_{DD1} Side	Isolated Rating (kVrms)	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
ADUM6404ARWZ	...	5	3 - 5.5	16-WSOIC	11R0993	11.84
ADUM6403ARWZ	1	5	3 - 5.5	16-WSOIC	11R0989	11.84
ADUM6402ARWZ	2	5	3 - 5.5	16-WSOIC	11R0985	11.84
ADUM5000ARWZ	2	2.5	2.7 - 5.5	16-SOIC	19P8235	6.99
ADUM6401ARWZ	3	5	3 - 5.5	16-WSOIC	11R0981	11.84
ADUM6400ARWZ	4	5	3 - 5.5	16-WSOIC	11R0977	12.13

(176243)

SWITCHING REGULATORS & CONVERTERS

CHARGE PUMPS

RoHS Compliant Available

ANALOG DEVICES

Analog Devices, Inc's charge pump solutions are designed to improve power efficiencies in battery powered applications such as higher output current for backlight displays in mobile phones. Other applications include handheld instruments, portable computers, remote data acquisition, and op amp power supplies.

Mfg. Part No.	Output Voltage (V) Min	Output Voltage (V) Max	I_o Max (mA)	Supply Voltage (V) Min	Supply Voltage (V) Max	Switching Frequency Max (kHz)	Pkg.	Stock No.	Price Each 1-9
● ADM660ARZ	3	15	100	1.7	7.5	120	8-SOIC	19M8699	4.64
● ADM8660ANZ	-7	-1.5	100	7	15	120	8-DIP	19M1185	3.55
● ADM8828ARTZ-REEL7	1.5	-1.5	25	1.5	5.5	120	6-SOT-23	59K2458	1.24
● ADM8832ACPZ	-10.2	15.3	8	2.6	3.6	100	20-LFCSP	59K2462	4.71
● ADM8839ACPZ	-15	15	20	2.7	4.2	100	20-LFCSP	59K2465	4.62

(89732)

DC-DC CONVERTERS

RoHS Compliant Available

amu

BOOST (STEP-UP) DC-DC CONVERTER

Mfg. Part No.	Output Voltage (V)	Output Current (mA)	Supply Voltage (V)	Package	Stock No.	Price Each 1-24
● AS1323BTTT-27	2.781	100	0.75 to 2	5-TSOT-23	05R9363	1.14
● AS1326BBTDT	5	800	0.7 to 5	10-TDFN	05R9370	1.71
● AS1329ABTTT	5	315	0.65 to 5	6-SOT-23	05R9371	1.38
● AS1340ABTDT10	50	100	2.7 to 5.5	8-TDFN	05R9374	1.93
BUCK (STEP-DOWN) DC-DC CONVERTER						
● AS1325BSTT-33	3.33	300	1.5 to 3.5	6-SOT-23	05R9367	1.57
● AS1325BSTT-50	5.05	185	1.5 to 5	6-SOT-23	05R9368	1.57
● AS1341BTDT	20	600	4.5 to 20	8-TDFN	05R9375	2.70
● AS7620ABQFT500	32	500	3.6 to 32	12-MLPQ	05R9510	2.37
● AS7620BBQFT500	3.33	500	3.6 to 32	12-MLPQ	05R9511	2.20

(147227)

SWITCHING REGULATORS

RoHS Compliant Available

FAIRCHILD

Mfg. Part No.	Switching Frequency (kHz)	Supply Voltage Max. (V)	Output Current Max. (A)	Leads	Package	Stock No.	Price Each 1-9
● MC34063AD	100	40	1.5	8	SOP	78K6019	0.89
● LP2951CM	500	30	1.26	8	SOIC	78K6014	0.62
● LM317LMX	...	...	0.1	8	SOP	58R2529	0.47
● KA7805ERTF	...	35	1	3	TO-220	58R2528	0.66

(74481)

HIGH-EFFICIENCY STEP-DOWN DC-DC CONVERTER

RoHS Compliant Available

FAIRCHILD

Mfg. Part No.	Input Voltage (V)	Output Voltage (V)	Package	Stock No.	Price Each 1-9	Price Each 10-24
● FAN2001MPX	2.5 to 5.5	0.8 to V_{IN}	6-MLP	43K6812	1.50	1.44
● FAN5308MPX	2.5 to 5.5	0.8 to V_{IN}	6-MLP	58R2521	1.38	1.32

(90555)

SUPIRBUCK ™ 2ND GENERATION INTEGRATED VOLTAGE REGULATORS

RoHS Compliant Available

International IOR Rectifier

Applications:
- Server applications
- Storage applications
- Embedded telecom systems
- Distributed point of load power architectures
- Netcom applications
- Computing peripheral voltage regulators
- General DC-DC Converters

The **IR384XW** SupIRBuck™ is an easy-to-use, fully integrated and highly efficient DC/DC synchronous Buck regulator. The MOSFETs copackaged with the on-chip PWM controller make **IR384XW** a space-efficient solution, providing accurate power delivery for low output voltage applications.

Mfg. Part No.	Output Current (A)	Switch Freq. (MHz)	Output Voltage Range (V) Min.	Output Voltage Range (V) Max	Pkg.	Stock No.	Price Each 1-9
● IR3843WMTR1PBF	2	1.5	0.7	14.4	15-QFN	71R6217	3.63
● IR3842WMTRPBF	4	1.5	0.7	14.4	15-QFN	79R1551	4.13
● IR3841WMTR1PBF	8	1.5	0.7	14.4	15-QFN	71R6209	4.79

CONTINUED

SUPIRBUCK ™ 2ND GENERATION INTEGRATED VOLTAGE REGULATORS (CONT.)

Mfg. Part No.	Output Current (A)	Switch Freq. (MHz)	Output Voltage Range (V) Min.	Output Voltage Range (V) Max	Pkg.	Stock No.	Price Each 1-9
● IR3840WMTR1PBF	12	1.5	0.7	14.4	15-QFN	71R6207	6.11
● IR3840WMTRPBF	12	1.5	0.7	14.4	15-QFN	79R1549	6.11

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
● IRDC3840W	IRDC3840W Evaluation Board	79R1545	93.75
● IRDC3841W	IRDC3841W Evaluation Board	79R1546	93.75
● IRDC3842W	IRDC3842W Evaluation Board	79R1547	93.75
● IRDC3843W	IRDC3843W Evaluation Board	79R1548	93.75

(190033)

SUPIRBUCK ™ DC/DC REGULATOR ICs

RoHS Compliant Available

International IOR Rectifier

The **IR3800A SupIRBuck™** is an easy-to-use, fully integrated and highly efficient DC/DC regulator. The onboard switching controller and MOSFETs make the **IR3800A** a space-efficient solution, providing accurate power delivery for low output voltage applications.

Mfg. Part No.	Output Current (A)	Switch Freq. (kHz)	Output Voltage Range (V) Min.	Output Voltage Range (V) Max	Pkg.	Stock No.	Price Each 1-9
● IR3476MTR1PBF	12	750	0.5	12	17-QFN	25T5610	4.95
● IR3473MTR1PBF	6	750	500	12	17-QFN	25T5602	3.81
● IR3863MTR1PBF	6	750	0.5	12	17-QFN	25T5614	4.13
● IR3710MTRPBF	20	1000	0.5	12	16-MLPQ	73P5198	2.08

(142174)

SUPIRBUCK DC-DC VOLTAGE REGULATOR EVALUATION BOARDS

International IOR Rectifier

Features:
- Programmable Switching Frequency,
- Thermally Compensated Over-Current Protection,
- Soft Start, Pre-Bias Start Up, Enable Input, Power Good Output.

Constant On-Time Integrated Point of Load DC-DC Voltage Regulator Designed for Applications that Require High Light Load Efficiency

Mfg. Part No.	Description	Stock No.	Price Each
IRDC3863	IR3863 EVAL. BOARD	54T9240	30.00
IRDC3865	IR3865 EVAL. BOARD	54T9241	30.00

(200251)

DC-DC CONVERTERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Mfg. Part No.	Output Current (mA)	Primary Input Voltage (V)	Package	Stock No.	Price Each 1-24
● LT3957AEUHE#PBF	600	40	36-QFN	93T2040	6.30
● LT3957AIUHE#PBF	600	40	36-QFN	93T2041	7.26
BUCK BOOST					
● LTC3115EFE-1#PBF	2000	40	20-TSSOP	92T3081	11.87
● LTC3115EDHD-1#PBF	2000	40	16-DFN	93T2021	11.44
● LTC3115IDHD-1#PBF	2000	40	16-DFN	93T2022	12.59
● LTC3115IFE-1#PBF	2000	40	20-TSSOP	93T2023	13.06

(203710)

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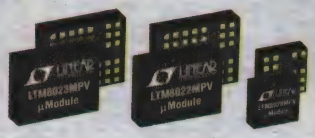
(212569)

DC-DC BUCK µMODULE® REGULATORS

RoHS Compliant Available

LINEAR TECHNOLOGY

Features:
- Clock Synchronization
- Output Current Sharing (Parallelable)
- Wide Temperature Range (-55°C to +125°C)
- Remote Output Voltage Sensing
- Positive to Negative Output (Inverting)



Linear Technology's recent technical achievements in the performance of switching regulators and innovative packaging methods have finally allowed a new generation of power converters which include all the circuit component such as the inductor, controller, and power switches to be encapsulated in such a tiny size that they resemble a surface mount IC. family of DC/DC step-down µModule® regulators support input voltages up to 60V and output currents up to 60A in parallel.

SINGLE OUTPUT

Mfg. Part No.	Input Voltage (V)	Output Voltage (V)	Output Current (A)	Package	Stock No.	Price Each 1-24
LTM8020EV#PBF	4 - 36	1.2 - 5	0.2	21-LGA	79M3638	9.32
LTM8020IV#PBF	4 - 36	1.2 - 5	0.2	21-LGA	01N6436	9.60
LTM8020MPV#PBF	4 - 36	1.2 - 5	0.2	21-LGA	19P9344	19.70
LTM8047EY#PBF	3.1 - 32	2.5 - 12	0.44	45-BGA	78T3672	14.53
LTM8047IY#PBF	3.1 - 32	2.5 - 12	0.44	45-BGA	78T3673	16.00
LTM8047MPY#PBF	3.1 - 32	2.5 - 12	0.44	45-BGA	78T3674	28.49
LTM8021EV#PBF	3 - 36	0.8 - 5	0.5	35-LGA	01P1603	11.01
LTM8021IV#PBF	3 - 36	0.8 - 5	0.5	35-LGA	15N3618	11.34
LTM8029IY#PBF	4.5 - 36	1.2 - 18	0.6	35-BGA	87T1008	14.12
LTM8031EV#PBF	3.6 - 36	0.8 - 10	1	71-LGA	68R7661	17.52
LTM8031IV#PBF	3.6 - 36	0.8 - 10	1	71-LGA	68R7662	17.99
LTM8022EV#PBF	3.6 - 36	0.8 - 10	1	50-LGA	79M3639	13.09
LTM8022IV#PBF	3.6 - 36	0.8 - 10	1	50-LGA	02P7639	13.47
LTM8031MPV#PBF	3.6 - 36	0.8 - 10	1	71-LGA	84R5011	36.59
LTM8023EV#PBF	3.6 - 36	0.8 - 10	2	50-LGA	75M4609	14.96
LTM8023IV#PBF	3.6 - 36	0.8 - 10	2	50-LGA	02P7640	15.42
LTM8023MPV#PBF	3.6 - 36	0.8 - 10	2	50-LGA	19P9346	26.50
LTM8032EV#PBF	3.6 - 36	0.8 - 10	2	71-LGA	56P4238	17.83
LTM8025IV#PBF	3.6 - 36	0.8 - 24	3	70-LGA	53R1244	17.35
LTM8033EV#PBF	3.6 - 36	0.8 - 24	3	76-LGA	84R5012	19.45
LTM8033IV#PBF	3.6 - 36	0.8 - 24	3	76-LGA	84R5013	21.24
LTM8025MPV#PBF	3.6 - 36	0.8 - 24	3	70-LGA	63R1639	27.79
LTM4604AEV#PBF	2.375 - 5.5	0.8 - 5	4	66-LGA	07P8345	16.52
LTM4604AIV#PBF	2.375 - 5.5	0.8 - 5	4	66-LGA	07P8346	18.16
LTM4604EV#PBF	2.375 - 5.5	0.8 - 5	4	66-LGA	57M0671	15.42
LTM4609EV#PBF	4.5 - 36	0.8 - 34	4	141-LGA	51P3126	36.97
LTM4609MPV#PBF	4.5 - 36	0.8 - 34	4	141-LGA	84R5008	57.37
LTM8027EV#PBF	4.5 - 60	2.5 - 24	4	113-LGA	52R9868	27.06
LTM8027IV#PBF	4.5 - 60	2.5 - 24	4	113-LGA	52R9869	29.76
LTM8027MPV#PBF	4.5 - 60	2.5 - 24	4	113-LGA	52R9870	55.33
LTM4605EV#PBF	4.5 - 20	0.8 - 16	5	141-LGA	95M6551	29.87
LTM4605IV#PBF	4.5 - 20	0.8 - 16	5	141-LGA	75M4607	32.85
LTM4607IV#PBF	4.5 - 36	0.8 - 24	5	141-LGA	79M3637	37.66
LTM4612EV#PBF	5 - 36	3.3 - 15	5	133-LGA	02P7636	32.61
LTM4612IV#PBF	5 - 36	3.3 - 15	5	133-LGA	02P7637	35.87
LTM8028EY#PBF	6 - 36	0.8 - 1.8	5	114-BGA	86W7070	23.28
LTM8028IY#PBF	6 - 36	0.8 - 1.8	5	114-BGA	86W7071	25.61
LTM8028MPY#PBF	6 - 36	0.8 - 1.8	5	114-BGA	86W7072	46.22
LTM8052AEV#PBF	6 - 36	1.2 - 24	5	81-LGA	24W5388	21.43
LTM8026EV#PBF	6 - 36	1.2 - 24	5	81-LGA	78T1492	20.48
LTM8026IV#PBF	6 - 36	1.2 - 24	5	81-LGA	78T1493	22.53
LTM8026MPV#PBF	6 - 36	1.2 - 24	5	81-LGA	24W5385	41.56
LTM4602EV#PBF	4.5 - 20	0.6 - 5	6	104-LGA	57M0661	20.02
LTM4602HVEV#PBF	4.5 - 28	0.6 - 5	6	104-LGA	57M0662	24.43
LTM4602HVIV#PBF	4.5 - 28	0.6 - 5	6	104-LGA	57M0663	26.88
LTM4602IV#PBF	4.5 - 20	0.6 - 5	6	104-LGA	57M0664	22.03
LTM4603EV#PBF	4.5 - 20	0.6 - 5	6	118-LGA	57M0666	22.62
LTM4603EV-1#PBF	4.5 - 20	0.6 - 5	6	118-LGA	57M0665	21.70
LTM4603HVEV#PBF	4.5 - 28	0.6 - 5	6	118-LGA	57M0667	27.59
LTM4603HVIV#PBF	4.5 - 28	0.6 - 5	6	118-LGA	57M0668	29.12
LTM4603IV#PBF	4.5 - 20	0.6 - 5	6	118-LGA	57M0670	24.87
LTM4603IV-1#PBF	4.5 - 20	0.6 - 5	6	118-LGA	57M0669	23.87
LTM4606EV#PBF	4.5 - 28	0.6 - 5	6	133-LGA	02P7633	27.06
LTM4606IV#PBF	4.5 - 28	0.6 - 5	6	133-LGA	02P7634	29.76
LTM4618EV#PBF	4.5 - 26.5	0.8 - 5	6	84-LGA	84R5009	18.53
LTM4618IV#PBF	4.5 - 26.5	0.8 - 5	6	84-LGA	84R5010	20.38
LTM4608AEV#PBF	2.7 - 5.5	0.6 - 5	8	68-LGA	07P8347	18.53
LTM4608AIV#PBF	2.7 - 5.5	0.6 - 5	8	68-LGA	07P8348	20.38
LTM4608IV#PBF	2.7 - 5.5	0.6 - 5	8	68-LGA	75M4608	20.81
LTM4608AMPV#PBF	2.7 - 5.5	0.6 - 5	8	68-LGA	07P8349	36.21
LTM4613EV#PBF	5 - 36	3.3 - 15	8	133-LGA	45T2341	39.71

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DC-DC BUCK µMODULE® REGULATORS (CONT.)

Mfg. Part No.	Input Voltage (V)	Output Voltage (V)	Output Current (A)	Package	Stock No.	Price Each 1-24
LTM4600EV#PBF	4.5 - 20	0.6 - 5	10	104-LGA	57M0650	24.63
LTM4600HVEV#PBF	4.5 - 28	0.6 - 5	10	104-LGA	57M0651	30.15
LTM4600HVIV#PBF	4.5 - 28	0.6 - 5	10	104-LGA	57M0652	33.17
LTM4600HVMPV#PBF	4.5 - 28	0.6 - 5	10	104-LGA	57M0653	56.93
LTM4600IV#PBF	4.5 - 20	0.6 - 5	10	104-LGA	57M0654	27.14
LTM4601AEV#PBF	4.5 - 28	0.6 - 5	12	133-LGA	88M1931	27.42
LTM4601AEV-1#PBF	4.5 - 20	0.6 - 5	12	133-LGA	88M1930	26.88
LTM4601AHVEV#PBF	4.5 - 28	0.6 - 5	12	133-LGA	88M1932	33.44
LTM4601AHVEY#PBF	4.5 - 28	0.6 - 5	12	133-BGA	78T3659	30.80
LTM4601AHVIV#PBF	4.5 - 28	0.6 - 5	12	133-LGA	88M1933	36.52
LTM4601AHVIY#PBF	4.5 - 28	0.6 - 5	12	133-BGA	78T3660	38.58
LTM4601AHVMPV#PBF	4.5 - 28	0.6 - 5	12	133-LGA	88M1934	65.50
LTM4601AHVMPY#PBF	4.5 - 28	0.6 - 5	12	133-BGA	78T3661	67.38
LTM4601AIV#PBF	4.5 - 20	0.6 - 5	12	133-LGA	88M1936	30.39
LTM4601AIV-1#PBF	4.5 - 20	0.6 - 5	12	133-LGA	88M1935	29.36
LTM4601EV#PBF	4.5 - 20	0.6 - 5	12	118-LGA	57M0656	27.65
LTM4601EV-1#PBF	4.5 - 20	0.6 - 5	12	118-LGA	57M0655	26.72
LTM4601HVEV#PBF	4.5 - 28	0.6 - 5	12	118-LGA	57M0657	33.76
LTM4601HVIV#PBF	4.5 - 28	0.6 - 5	12	118-LGA	57M0658	37.14
LTM4601IV#PBF	4.5 - 20	0.6 - 5	12	118-LGA	57M0660	30.41
LTM4601IV-1#PBF	4.5 - 20	0.6 - 5	12	118-LGA	57M0659	29.40
LTM4611EV#PBF	1.5 - 5.5	0.8 - 5	15	104-LGA	76R0904	31.65
LTM4611IV#PBF	1.5 - 5.5	0.8 - 5	15	104-LGA	76R0905	34.83
LTM4627EV#PBF	4.5 - 20	0.6 - 5	15	133-LGA	99R2730	29.28
LTM4627EY#PBF	4.5 - 20	0.6 - 5	15	133-BGA	78T3663	31.39
LTM4627IV#PBF	4.5 - 20	0.6 - 5	15	133-LGA	99R2731	32.19
LTM4627IY#PBF	4.5 - 20	0.6 - 5	15	133-BGA	78T3664	34.52
LTM4627MPY#PBF	4.5 - 20	0.6 - 5	15	133-BGA	78T3665	54.16
LTM4637EV#PBF	4.5 - 20	0.6 - 5.5	20	133-LGA	94W8422	36.24
LTM4637IV#PBF	4.5 - 20	0.6 - 5.5	20	133-LGA	94W8423	39.56
DUAL OUTPUT						
LTM8048EY#PBF	3.1 - 32	1.2 - 13	0.44	45-BGA	78T3675	15.42
LTM8048IY#PBF	3.1 - 32	1.2 - 13	0.44	45-BGA	78T3676	18.71
LTM8048MPY#PBF	3.1 - 32	1.2 - 13	0.44	45-BGA	78T3677	29.15
LTM4614EV#PBF	2.375 - 5.5	0.8 - 5	4	144-LGA	56P4237	25.41
LTM4619EV#PBF	4.5 - 26.5	0.8 - 5	4	144-LGA	68R7658	27.46
LTM4619IV#PBF	4.5 - 26.5	0.8 - 5	4	144-LGA	68R7659	30.22
LTM4616EV#PBF	2.7 - 5.5	0.6 - 5	8	144-LGA	01N6434	31.65
LTM4616IV#PBF	2.7 - 5.5	0.6 - 5	8	144-LGA	01N6435	34.83
LTM4628EV#PBF	4.5 - 26.5	0.6 - 5.5	8	144-LGA	20T5704	32.62
LTM4628IV#PBF	4.5 - 26.5	0.6 - 5.5	8	144-LGA	18T1284	35.89
LTM4616EY#PBF	2.7 - 5.5	0.6 - 5	8	144-BGA	05W4636	33.54
LTM4616IY#PBF	2.7 - 5.5	0.6 - 5	8	144-BGA	05W4637	36.89
LTM4616MPV#PBF	2.7 - 5.5	0.6 - 5	8	144-LGA	05W4638	56.95
LTM4620EV#PBF	4.5 - 16	0.6 - 2.5	13	144-LGA	27W9514	48.81

(202174)

DC-DC BUCK-BOOST µMODULE® REGULATORS

RoHS Compliant Available

LINEAR TECHNOLOGY

Features:
- Clock Synchronization
- Output Current Sharing (Parallelable)
- Wide Temperature Range (-55°C to +125°C)

LTM4607EV#PBF

Linear Technology's family of DC/DC buck-boost µModule® regulators deliver an output voltage above, below or equal to the input voltage

Mfg. Part No.	Input Voltage (V)	Output Voltage (V)	Output Current (A)	Package	Stock No.	Price Each 1-24
LTM4609EV#PBF	4.5 - 36	0.8- 34	4	141-LGA	51P3126	36.97
LTM4609MPV#PBF	4.5 - 36	0.8- 34	4	141-LGA	84R5008	57.37
LTM4605EV#PBF	4.5 - 20	0.8- 16	5	141-LGA	95M6551	29.87
LTM4605IV#PBF	4.5 - 20	0.8- 16	5	141-LGA	75M4607	32.85
LTM4607EV#PBF	4.5 - 36	0.8- 24	5	141-LGA	79M3636	34.23
LTM4607IV#PBF	4.5 - 36	0.8- 24	5	141-LGA	79M3637	37.66

(202176)

SWITCHING REGULATORS & CONVERTERS

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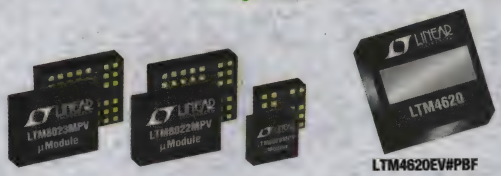
µMODULE REGULATORS

RoHS Compliant Available

LINEAR TECHNOLOGY



LTM4620EV#PBF

Linear Technology's recent technical achievements in the performance of switching regulators and innovative packaging methods have finally allowed a new generation of point-of-load DC/DC regulators, including all the circuit components such as the inductor and power MOSFETs, to be shrunk and encapsulated in such a tiny size that they resemble a surface mount IC. These high-end point-of-load µModule regulators are complete solutions containing the DC/DC controller, MOSFETs, inductor, input and output bypass capacitors and compensation circuitry in only 2.25cm. Supported by Linear Technology's rigorous testing and high reliability processes, the µModule family simplifies the design and layout of your next power supply. A broader selection of Linear Technology's µModule Regulator may be found online or call.

µMODULE BUCK-BOOST REGULATORS

Mfg. Part No.	Input Voltage Min. (V)	Output Voltage (V)	Output Current (A)	Package	Stock No.	Price Each 1-24
● LTM4605EV#PBF	4.5 - 20	16	12	141-LGA	95M6551	29.87
● LTM4605IV#PBF	4.5 - 20	16	12	141-LGA	75M4607	32.85
● LTM4607IV#PBF	4.5 - 36	24	10	141-LGA	79M3637	37.66
● LTM4609EV#PBF	4.5 - 36	34	4	141-LGA	51P3126	36.97
µMODULE BUCK REGULATORS						
● LTM4620IV#PBF	4.5 - 16	2.5	13	144-LGA	27W9515	53.67
● LTM4601EV#PBF	4.5 - 20	5	12	118-LGA	57M0656	27.65
● LTM4601AEV-1#PBF	4.5 - 20	5	14	133-LGA	88M1930	26.88
● LTM4601AEV#PBF	4.5 - 28	5	14	133-LGA	88M1931	27.42
● LTM4602EV#PBF	4.5 - 20	5	6	104-LGA	57M0661	20.02
● LTM4603IV#PBF	4.5 - 20	5	8	118-LGA	57M0670	24.87
● LTM4604EV#PBF	2.375 - 5.5	5	4	66-LGA	57M0671	15.42
● LTM4604AEV#PBF	2.375 - 5.5	5	4	66-LGA	07P8345	16.52
● LTM4604AIV#PBF	2.375 - 5.5	5	4	66-LGA	07P8346	18.16
● LTM4606EV#PBF	4.5 - 28	5	8	133-LGA	02P7633	27.06
● LTM4606IV#PBF	4.5 - 28	5	8	133-LGA	02P7634	29.76
● LTM4608AEV#PBF	2.7 - 5.5	5	8	68-LGA	07P8347	18.53
● LTM4608AIV#PBF	2.7 - 5.5	5	8	68-LGA	07P8348	20.38
● LTM4608EV#PBF	2.7 - 5.5	5	8	68-LGA	01N6433	18.92
● LTM4612EV#PBF	5 - 36	15	7	133-LGA	02P7636	32.61
● LTM4612IV#PBF	5 - 36	15	7	133-LGA	02P7637	35.87
● LTM4616IV#PBF	2.7 - 5.5	5	8	144-LGA	01N6435	34.83
● LTM4616EV#PBF	2.7 - 5.5	5	8	144-LGA	01N6434	31.65
● LTM4620EV#PBF	4.5 - 16	2.5	13	144-LGA	27W9514	48.81
● LTM8020EV#PBF	4 - 36	5	200	21-LGA	79M3638	9.32
● LTM8020IV#PBF	4 - 36	5	200	21-LGA	01N6436	9.60
● LTM8021EV#PBF	3 - 36	5	0.5	35-LGA	01P1603	11.01
● LTM8021IV#PBF	3 - 36	5	0.5	35-LGA	15N3618	11.34
● LTM8022IV#PBF	3.6 - 36	10	1	50-LGA	02P7639	13.47
● LTM8023IV#PBF	3.6 - 36	10	2	50-LGA	02P7640	15.42
● LTM8023MPV#PBF	3.6 - 36	10	2	50-LGA	19P9346	26.50
● LTM8032EV#PBF	3.6 - 36	10	2	71-LGA	56P4238	17.83
● LTM4601AHVEY#PBF	4.5 - 28	5	12	133-BGA	78T3659	30.80
● LTM4601AHVIY#PBF	4.5 - 28	5	12	133-BGA	78T3660	38.58
● LTM4601AHVMPY#PBF	4.5 - 28	5	12	133-BGA	78T3661	67.38
● LTM4627EY#PBF	4.5 - 20	5	15	133-BGA	78T3663	31.39
● LTM4627IY#PBF	4.5 - 20	5	15	133-BGA	78T3664	34.52
● LTM4627MPY#PBF	4.5 - 20	5	15	133-BGA	78T3665	54.16
ISOLATED FLYBACK						
● LTM8047EY#PBF	3.1 - 32	12	0.44	45-BGA	78T3672	14.53
● LTM8047IY#PBF	3.1 - 32	12	0.44	45-BGA	78T3673	16.00
● LTM8047MPY#PBF	3.1 - 32	12	0.44	45-BGA	78T3674	28.49
● LTM8048EY#PBF	3.1 - 32	13	0.44	45-BGA	78T3675	15.42
● LTM8048IY#PBF	3.1 - 32	13	0.44	45-BGA	78T3676	18.71
● LTM8048MPY#PBF	3.1 - 32	13	0.44	45-BGA	78T3677	29.15
µMODULE CONVERTER						
● LTM8029IY#PBF	4.5 - 36	18	0.6	35-BGA	87T1008	14.12

(167523)

CHARGE PUMPS

RoHS Compliant Available

LINEAR TECHNOLOGY

Linear Technology's family of charge pumps offers the widest selection of simple and compact inductorless DC/DC converter designs. These converters can be used to step-up, step-down or invert an input voltage. By eliminating the inductor, these switched capacitor converters provided small solution footprint and a simpler design. Furthermore, by incorporating Spread Spectrum technology on-chip, both input and output noise are significantly reduced.

Mfg. Part No.	Input Voltage Range (V)	Output Voltage (V)	Output Current Max (mA)	Package	Stock No.	Price Each 1-24
● LT1026CN8#PBF	4 to 10	18.5	15	8-PDIP	57M1023	4.12
● LT1026CS8#PBF	4 to 10	18.5	15	8-SOIC	57M1025	4.51
● LTC1044CS8#PBF	1.5 to 9	-9	20	8-SOIC	55M8900	4.52
● LTC1261LIMS8#PBF	2.7 to 5.5	-1.23	20	8-MSOP	45W8457	4.70
● LTC1261LIS8#PBF	2.7 to 5.5	-1.23	20	8-SOIC	45W8463	4.13
● LTC1262CS8#PBF	5 to 6	12.6	30	8-SOIC	55M9815	4.72
● LTC1144CS8#PBF	2 to 18	-18	50	8-SOIC	55M9284	4.94
● LTC1144IS8#PBF	2 to 18	-18	50	8-SOIC	55M9290	5.73
● LTC1682CS8-5#PBF	2.7 to 4.4	6	50	8-SO	56M3144	2.00
● LTC1263CS8#PBF	5 to 6	12.6	60	8-SOIC	55M9823	7.18
● LTC1682IS8-5#PBF	2.7 to 4.4	5	90	8-SOIC	56M3168	4.13
● LT1054CN8#PBF	3.5 to 15	Adj.	100	8-PDIP	57M1182	5.32
● LT1054CS8#PBF	3.5 to 15	Adj.	100	8-SOIC	57M1188	6.15
● LT1054ISW#PBF	3.5 to 15	Adj.	100	16-SOIC	57M1194	9.32
● LTC660CS8#PBF	1.5 to 6	11	100	8-SOIC	57M0133	5.53
● LTC1503CMS8-1.8#PBF	2.4 to 6.5	1.8	100	8-MSOP	56M1643	4.10
● LTC3260HMSE#PBF	4.5 to 32	Adj.	100	16-MSOP	45W8469	9.07
● LTC3260MPMSE#PBF	4.5 to 32	Adj.	100	16-MSOP	45W8471	19.63
● LTC3261HMSE#PBF	4.5 to 32	-4.5	100	12-MSOP	45W8473	7.77

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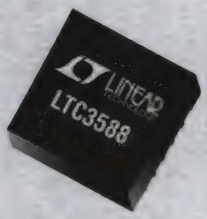
ENERGY HARVESTING DEMO BOARDS AND ICs

RoHS Compliant Available

LINEAR TECHNOLOGY



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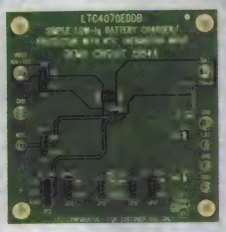


DC1584A

Linear Technology manufactures a wide range of ultra-low power products targeted for Energy harvesting applications. Power management products that convert energy from Vibration (Piezo), PhotoVoltaic (Solar) and Thermal (TEC, TEG, Thermopiles, Thermocouples) sources provide high efficiency conversion to regulated voltages or to charge batteries and super capacitor storage elements. Boost converters that operate from as little as 20mV or Battery chargers with Maximum Power Point capability expand the possibilities for a wide variety of industrial automation and control, wireless sensor, transportation, automotive and building management applications.

Mfg. Part No.	Description	Pkg.	Stock No.	Price Each 1-24
● LT3652EMSE#PBF	Power Tracking 2A Battery Charger for Solar Power	12-MSOP	64R8539	6.52
● LTC4070EDDB#PBF	Li-Ion/Polymer Shunt Battery Charger System	8-DFN	67R4286	2.94
● LTC3526LBEDC-2#PBF	Synchronous Step-Up DC/DC Converter; 550mA 1MHz	6-DFN	51R1506	2.64
● LTC3534EGN#PBF	Synchronous Buck-Boost DC/DC Converter; 7V, 500mA	16-SSOP	56P2477	4.50
● LTC3588EDD-1#PBF	Piezoelectric Energy Harvesting Power Supply	10-DFN	63R1665	6.30
● LTC3109EUF#PBF	Auto-Polarity, Ultralow Voltage Step-Up Converter & Power Manager	20-QFN	84R6674	5.64
● LTC3109EGN#PBF		20-SSOP	84R6672	5.64

DEVELOPMENT TOOLS

Mfg. Part No.	Description	Stock No.	Price Each
DC1053A-H	Demo Board for LTC3526L 550mA 1MHz Synchronous Step-Up DC/DC Converters in 2mm x 2mm DFN	76R6976	75.00
DC1227A	Demo Board for LTC3534 7V, 500mA Synchronous Buck-Boost DC/DC Converter	76R6977	100.00
DC1568A	Demo Board for LTC3652 Power Tracking 2A Battery Charger for Solar Power	76R6979	150.00
DC1584A	Demo Board for LTC4070 Li-Ion/Polymer Shunt Battery Charger System	76R6980	100.00

(179649)

FLYBACK CONTROLLERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Mfg. Part No.	Output Current Max (A)	Input Voltage Range (V)	Switch Freq. Max	Package	Stock No.	Price Each 1-24
LT1737CGN#PBF	0.1	4.5 to 20	250kHz	16-SSOP	57M5915	6.28
LT1737IGN#PBF	0.1	4.5 to 20	250kHz	16-SSOP	57M5923	7.32
LT1961EMS8E#PBF	1.5	3 to 25	1.5MHz	8-MSOP	57M7374	3.39
LT3573EMSE#PBF	1.25	3 to 40	1MHz	16-MSOP	19P1048	5.90
LT3798EMSE#PBF	1	10 to 38	150	16-MSOP	87T1021	4.81
LT1425CS#PBF	0.2	2.8 to 20	300	16-SOIC	57M3961	5.89
LT3748HMS#PBF	1.9	5 to 100	...	16-MSOP	13T4243	7.90
LT1725CGN#PBF	5	-999 to 22	250kHz	16-SSOP	57M5899	3.55

(168153)

SWITCHED-CAPACITOR VOLTAGE CONVERTER W/REGULATOR

RoHS Compliant Available

LINEAR TECHNOLOGY

Applications:
- Voltage Inverter
- Voltage Regulator
- Negative Voltage Doubler
- Positive Voltage Doubler

Features:
- External Shutdown
- External Oscillator Synchronization
- Can Be Paralleled

The **LT®1054** is a monolithic, bipolar, switched-capacitor voltage converter and regulator. The **LT1054** provides higher output current than previously available converters with significantly lower voltage losses. An adaptive switch driver scheme optimizes efficiency over a wide range of output currents. The **LT1054** also provides regulation, a feature not previously available in switched-capacitor voltage converters. By adding an external resistive divider a regulated output can be obtained. This output will be regulated against changes in both input voltage and output current.

Mfg. Part No.	Input Voltage (V)	Output Current (mA)	Operating Temperature	Package	Stock No.	Price Each 1-24
LT1054LCS8#PBF	7	125	0°C to +100°C	8-SOIC	57M1202	4.28
LT1054ISW#PBF	15	100	-40°C to +100°C	16-SOIC	57M1194	9.32

(209454)

ISOLATED FLYBACK CONVERTERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Feature:
- Boundary mode operation
- BIAS Pin for internal bias supply and power NPN driver
- Programmable power switch current limit
- Programmable soft-start

Applications:
- Industrial, Automotive and Medical Isolated Power Supplies

Mfg. Part No.	Supply Voltage (V)	Output Voltage (V)	Output Current (mA)	Package	Stock No.	Price 1-24
LT3574EMS#PBF	3 - 30	5	650	16-MSOP	63R6859	5.90
LT1424IS8-5#PBF	3 - 20	5	400	8-SOIC	57M3953	4.85
LT3575EFE#PBF	3 - 40	60	3500	16-TSSOP	84R5095	6.36
LT3511EMS#PBF	4.5 - 100	150	240	16-MSOP	24T2754	6.30
LT3748EMS#PBF	5 - 100	...	1900	16-MSOP	84R5099	6.67

(176247)

ISOLATED CONVERTERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Features:
- Internal Galvanic Isolation 100% Production Tested at Rated Voltage
- Wide Input Voltage Range
- Wide Adjustable Output Voltage Range
- Operating Junction Temperature up to +125°C
- Low Output Voltage Ripple (select part numbers)

Linear Technology's family of DC/DC Isolated µModule Converters include an internal galvanic transformer providing a complete Isolated DC/DC power solution with a few capacitors and resistors in a small surface mount BGA package.

SINGLE OUTPUT

Mfg. Part No.	Input Voltage (V)	Output Voltage (V)	Isolated Voltage (VDC)	Package	Stock No.	Price Each 1-24
LTM8047EY#PBF	3.1 to 32	2.5 to 12	725	45-BGA	78T3672	14.53
LTM8047IY#PBF	3.1 to 32	2.5 to 12	725	45-BGA	78T3673	16.00
LTM8047MPY#PBF	3.1 to 32	2.5 to 12	725	45-BGA	78T3674	28.49
DUAL OUTPUT						
LTM8048EY#PBF	3.1 to 32	1.2 to 12	725	45-BGA	78T3675	15.42
LTM8048IY#PBF	3.1 to 32	1.2 to 12	725	45-BGA	78T3676	18.71
LTM8048MPY#PBF	3.1 to 32	1.2 to 12	725	45-BGA	78T3677	29.15

(202217)

SWITCHING REGULATORS

RoHS Compliant Available

LINEAR TECHNOLOGY

Linear Technology manufactures a broad line of high performance switching regulator ICs with both synchronous and non-synchronous internal switches. These switching voltage regulators offer typical input voltage capability from 2.25V up to 60V, switching frequencies up to 4MHz and high efficiency operation up to 96%. Also with Burst Mode operation, quiescent currents in the tens of micro-amps level can be attained. This combination of features allows very small, low profile circuit implementations with minimum external components. Topologies include buck (step-down) switching regulators, boost (step-up) switching regulators, buck-boost switching regulator, inverting switching regulators, and flyback and isolated topology switching regulators. Other features include adjustable or synchronizable switching frequency, small size, low external component count and more.

INVERTING

Mfg. Part No.	Input Voltage Range (V)	Output Voltage (V)	Switch Current Max (A)	Package	Stock No.	Price Each 1-24
LTC1144IN8#PBF	2 to 18	-18	0.05	8-DIP	55M9288	5.69
STEP-DOWN (BUCK)						
LTC3642EDD#PBF	4.5 to 45	45	0.115	8-DFN	31P7582	5.67
LTC3642EDD-3.3#PBF	4.5 to 45	3.31	0.115	8-DFN	31P7578	5.67
LTC3642EDD-5#PBF	4.5 to 45	5.015	0.115	8-DFN	31P7580	5.67
LTC3642EMS8E#PBF	4.5 to 45	45	0.115	8-MSOP	31P7588	5.67
LTC3642EMS8E-3.3#PBF	4.5 to 45	3.31	0.115	8-MSOP	31P7584	5.67
LTC3642EMS8E-5#PBF	4.5 to 45	5.015	0.115	8-MSOP	31P7586	5.67
LTC3405AES6#TRMPBF	2.5 to 6	5.5	0.3	6-TSOT-23	59M8271	3.87
LTC1474IS8-3.3#PBF	3 to 18	3.3	0.4	8-SOIC	56M1498	8.28
LTC1877EMS8#PBF	2.65 to 11	10	0.6	8-MSOP	56M4296	6.28
LTC3419IDD#PBF	2.5 to 5.5	5.5	0.6	8-DFN	73P5034	4.55
LTC3419IMS#PBF	2.5 to 5.5	5.5	0.6	10-MSOP	73P5035	4.55
LTC3406ES5#TRMPBF	2.5 to 6	5.5	0.6	5-TSOT-23	59M8272	4.59
LTC1707CS8#PBF	2.9 to 8.5	8.5	0.7	8-SOIC	56M3398	4.47
LT3695EMSE-3.3#PBF	3.6 to 36	3.3	2	16-MSOP	51R1544	6.96
LT3695EMSE-5#PBF	3.6 to 36	5	2	16-MSOP	51R1545	6.96
LT3695HMSE-3.3#PBF	3.6 to 36	3.3	2	16-MSOP	51R1546	8.26
LT3695HMSE-5#PBF	3.6 to 36	5	2	16-MSOP	51R1547	8.26
LTC3606BEDD#PBF	2.5 to 5.5	5	2.4	8-DFN	51R1508	4.49
LTC3619BEDD#PBF	2.5 to 5.5	5	2.4	10-DFN	51R1509	4.81
LTC3619EDD#PBF	2.5 to 5.5	5	2.4	10-DFN	51R1510	4.81
LTC3619EMSE#PBF	2.5 to 5.5	5	2.4	10-MSOP	51R1511	4.81
LT3663EMS8E#PBF	7.5 to 36	5	2.5	8-MSOP	51R1540	5.57
LT3663EMS8E-3.3#PBF	7.5 to 36	3.3	2.5	8-MSOP	51R1538	5.57
LT3663EMS8E-5#PBF	7.5 to 36	5	2.5	8-MSOP	51R1539	5.57
LT3663HMS8E#PBF	7.5 to 36	5	2.5	8-MSOP	51R1543	7.08
LT3663HMS8E-3.3#PBF	7.5 to 36	3.3	2.5	8-MSOP	51R1541	7.08
LT3663HMS8E-5#PBF	7.5 to 36	5	2.5	8-MSOP	51R1542	4.73
LTC1474CS8-3.3#PBF	3 to 18	3.3	0.75	8-SOIC	56M1486	6.94
LTC3535EDD#PBF	0.68 to 6	5.25	0.75	12-DFN	46P4009	6.30
LTC1627CS8#PBF	2.65 to 8.5	8.5	0.8	8-SOIC	56M2710	4.49
LTC3545EUD-1#PBF	2.25 to 5.5	5.5	0.8	16-QFN	75M4525	6.25
LTC3545EUD#PBF	2.25 to 5.5	5.5	0.8	16-QFN	75M4527	6.25
LTC3448EMS8E#PBF	2.5 to 5.5	5.2	1	8-MSOP	56M7831	4.13
LTC3407IDD-2#PBF	2.5 to 5.5	5	1.2	10-DFN	56M7624	4.84
LTC3407IMSE-2#PBF	2.5 to 5.5	5	1.2	10-MSOP	56M7626	6.79
LTC3546EUFD#PBF	2.25 to 5.5	5	2	28-QFN	46P4010	8.01
LTC3565EDD#PBF	2.5 to 5.5	5.5	2.1	10-DFN	46P4011	4.28
LTC3565EMSE#PBF	2.5 to 5.5	5.5	2.1	10-MSOP	46P4012	4.28
LTC3417AEDHC-2#PBF	2.25 to 5.5	5	2.5	16-DFN	95M6494	6.27
LTC3417AEFE-2#PBF	2.25 to 5.5	5	2.5	20-TSSOP	95M6496	4.47
LTC3417AIDHC-2#PBF	2.25 to 5.5	5	2.5	16-DFN	95M6498	7.20
LTC3417AIFE-2#PBF	2.25 to 5.5	5	2.5	20-TSSOP	95M6500	7.64
LTC3569EFE#PBF	2.5 to 5.5	5.5	2.5	16-TSSOP	46P4013	6.85
LTC3569EUD#PBF	2.5 to 5.5	5.5	2.5	20-QFN	46P4014	6.62
LT3972EDD#PBF	3.6 to 33	30	5.4	10-DFN	12P6571	9.09
LTC3605EUF#PBF	4 to 15	15	6	24-QFN	51P3117	9.09
LTC3415EUHF#PBF	2.5 to 5.5	5.5	7	38-QFN	56M7718	13.77
LTC3416EFE#PBF	2.25 to 5.5	5.5	8	20-TSSOP	56M7722	9.80
LTC3610EWP#PBF	4 to 28	24	12	64-QFN	56M8026	17.10
LTC3608EWKG#PBF	4 to 18	18	16	52-QFN	24R3315	16.04
LTC1775CS#PBF	4 to 36	36	20	16-SOIC	56M3782	9.41
LTC3716EG#PBF	4 to 36	36	20	36-SSOP	56M8129	9.11
LTC3850EUF#PBF	4 to 24	6	25	28-QFN	56M8611	4.91
LTC3851IGN#PBF	4 to 38	5.5	25	16-SSOP	12P6567	4.16
LTC3719EG#PBF	4 to 36	36	40	36-SSOP	56M8145	9.11
STEP-UP (BOOST)						
LTC3459ES6#TRPBF	1.5 to 5.5	10	0.075	6-TSOT-23	56M7869	4.50
LTC3526LBEDC-2#PBF	0.5 to 5	5.25	0.2	6-DFN	51R1506	2.64
LTC1044CN8#PBF	1.5 to 9	18	0.02	8-DIP	55M8898	3.33
LTC3862EFE#PBF	4 to 36	60	0.05	24-TSSOP	07P8312	7.29
LTC3862EFE-1#PBF	8.5 to 36	60	0.05	24-TSSOP	12P7567	7.29
LT8410EDC#TRMPBF	2.5 to 16	40	0.25	8-DFN	19P1078	2.63
LT8410EDC-1#TRMPBF	2.5 to 16	40	0.25	8-DFN	19P1077	4.31

CONTINUED

SWITCHING REGULATORS (CONT.)

Mfg. Part No.	Input Voltage Range (V)	Output Voltage (V)	Switch Current Max (A)	Package	Stock No.	Price Each 1-24
STEP-UP (BOOST)						
● LT1945EMS#PBF	1.2 to 15	34	0.4	10-MSOP	57M7266	4.31
● LTC3526EDC#PBF	1 to 6	5.25	0.5	6-DFN	61M3334	3.63
● LTC3528EDDB-2#PBF	0.5 to 5.5	5.25	1	8-DFN	51R1507	4.27
● LTC3127EDD#PBF	1.8 to 5.5	5.25	1	10-DFN	67R4281	6.30
● LTC3127EMSE#PBF	1.8 to 5.5	5.25	1	12-MSOP	67R4282	6.41
● LTC3401EMS#PBF	0.5 to 5	6	1.6	10-MSOP	56M7495	5.64
● LTC3423EMS#PBF	0.5 to 5	6	1.6	10-MSOP	56M7765	5.64
● LTC3458EDE#PBF	1.5 to 6	7.5	1.6	12-DFN	56M7859	6.62
● LTC3539EDCB#TRMPBF	0.7 to 5	5.25	2.6	8-DFN	14N8610	6.05
● LTC3539EDCB-2#TRMPBF	0.7 to 5	5.25	2.6	8-DFN	14N8609	6.05
● LTC3424EMS#PBF	0.5 to 5	6	2.8	10-MSOP	56M7769	7.32
● LTC3425EUH#PBF	0.5 to 4.5	6	7	32-QFN	56M7773	8.81
● LTC3813EG#PBF	6.35 to 14	100	25	28-SSOP	56M8502	5.36
● LT3758EDD#PBF	5.5 to 100	100	25	10-DFN	24R3357	5.02
STEP-DOWN / STEP-UP (BUCK / BOOST)						
● LTC3440EMS#PBF	2.5 to 5.5	6	1	10-MSOP	73K4393	5.97
● LT3439EFE#PBF	2.8 to 20	35	1.65	16-TSSOP	57M8156	7.01
● LTC3442EDE#PBF	2.4 to 5.5	5.25	2	12-DFN	56M7808	8.09
● LTC3530EMS#PBF	1.8 to 5.5	5.25	2	10-MSOP	56M7929	4.24
● LTC3443EDE#PBF	2.4 to 5.5	5.25	3.2	12-DFN	56M7812	4.23
● LTC3703IGN#PBF	9.3 to 15	93	20	16-SSOP	56M8069	7.29
STEP-DOWN / INVERTING (BUCK / INVERTING)						
● LTC1174CS8-3.3#PBF	4 to 13.5	13.5	0.6	8-SOIC	55M9548	7.45
FLYBACK						
● LT8301MPS5#TRMPBF	2.7 to 42	5	1.375	5-TSOT-23	49X0216	20.12
● LT8301ES5#TRMPBF	2.7 to 42	5	1.375	5-TSOT-23	49X0213	6.67
● LT8301IS5#TRMPBF	2.7 to 42	5	1.375	5-TSOT-23	49X0215	7.55
● LT8301HS5#TRMPBF	2.7 to 42	5	1.375	5-TSOT-23	49X0214	8.10
● LT1425CS#PBF	2.8 to 20	35	2	16-SOIC	57M3961	5.89
● LT1425IS#PBF	3 to 20	35	2	16-SOIC	57M3965	7.40
● LT8302ES8E#PBF	2.8 to 42	5	4.5	8-SOIC	18X4334	7.41
● LT8302IS8E#PBF	2.8 to 42	5	4.5	8-SOIC	18X4338	7.99
● LT8302HS8E#PBF	2.8 to 42	5	4.5	8-SOIC	18X4336	8.50
STEP-UP / SEPIC / FLYBACK (BOOST / SEPIC / FLYBACK)						
● LT3581EMSE#PBF	2.5 to 22	42	4.3	16-MSOP	71R4698	5.46
● LT3581HDE#PBF	2.5 to 22	42	4.3	14-DFN	19X8093	6.36
● LTC1871EMS-7#PBF	6 to 36	36	20	10-MSOP	56M4253	5.54
STEP-UP / SEPIC / INVERTING / FLYBACK (BOOST / SEPIC / INVERTING / FLYBACK)						
● LTC1871EMS#PBF	2.5 to 36	12	20	10-MSOP	56M4256	5.54
PUSH PULL						
● LT3439EFE#PBF	2.8 to 20	35	1.65	16-TSSOP	57M8156	7.01

*Constant Off-Time
(101571)

SEPIC SWITCHING REGULATORS

RoHS Compliant Available

LINEAR TECHNOLOGY

Mfg. Part No.	Switch Current Max (A)	Input Voltage Range (V)	Switch Freq. Max	Package	Stock No.	Price Each 1-24
● LT1304CS8#PBF	1.2	1.5 to 8	300kHz	8-SOIC	57M3209	4.75
● LT1375CS8-5#PBF	2	5 to 25	500Hz	8-SOIC	57M3748	7.32
● LT1071CT#PBF	2.5	3 to 40	40kHz	5-TO-220	57M1254	8.93
● LT1071CT#06PBF	2.5	3 to 40	47kHz	5-TO-220	46P5714	8.70
● LT1171CT#06PBF	2.5	3 to 40	100kHz	5-TO-220	46P5715	5.75
● LT1171IQ#PBF	2.5	3 to 40	100kHz	5-DD	57M2385	10.58
● LT3477IUF#PBF	3	2.3 to 25	3.5MHz	20-QFN	57M8322	5.40
● LT1935ES5#PBF	2	2.1 to 16	1.2MHz	5-TSOT-23	78T3767	5.09
● LT1070CT#PBF	5	3 to 40	0.04MHz	5-TO-220	57M1242	10.85
● LT1070HVCT#PBF	5	3 to 60	47kHz	5-TO-220	57M1245	14.12
● LT1070HVCT#06PBF	5	3 to 60	47kHz	5-TO-220	15N5465	13.82
● LT1170CT#PBF	5	3 to 60	100kHz	5-TO-220	57M2349	10.85
● LT1170CT#06PBF	5	3 to 40	100kHz	5-TO-220	95M6554	10.74
● LT1170CQ#PBF	5	3 to 60	100kHz	5-D2PAK	57M2345	11.62
● LT1170HVCQ#PBF	5	3 to 60	100kHz	5-D2PAK	57M2351	14.69
● LT1170HVCT#06PBF	5	3 to 60	100kHz	5-TO-220	31P7606	14.12
● LT3724IFE#PBF	5	4 to 60	200kHz	16-TSSOP	57M8585	8.10
● LT1171CT#PBF	5.5	3 to 40	100kHz	5-TO-220	57M2370	8.93
● LT1370CR#PBF	6	2.7 to 30	...	7-DD	57M3541	12.16
● LT1370HVCR#PBF	6	2.7 to 42	0.5MHz	7-D2PAK	57M3547	13.78
● LT1374CR#PBF	6	5 to 25	500Hz	7-DD	57M3667	10.25
● LT1374CS8#PBF	6	5 to 25	500Hz	8-SOIC	57M3683	9.64

➤CONTINUED➤

SEPIC SWITCHING REGULATORS (CONT.)

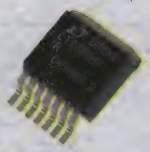
Mfg. Part No.	Switch Current Max (A)	Input Voltage Range (V)	Switch Freq. Max	Package	Stock No.	Price Each 1-24
● LT1374CFE#PBF	6	5 to 25	500Hz	16-TSSOP	57M3651	5.38
● LT1374IR-5#PBF	6	5 to 25	500Hz	7-DD	57M3722	11.79
● LT1268CT#PBF	7.5	3 to 30	150Hz	5-TO-220	57M3102	11.70
● LTC3872ETS8#PBF	10	2.75 to 9.8	750kHz	8-TSOT-23	78T3270	2.57
● LT3757EDD#PBF	25	2.9 to 40	1MHz	10-DFN	24R6741	4.40

(168156)

STEP DOWN BUCK SWITCHING REGULATORS

RoHS Compliant Available

LINEAR TECHNOLOGY



Linear Technology manufactures a broad line of high performance step-down buck switching regulator ICs and buck switching controller ICs with both synchronous and non-synchronous switches. These switching voltage regulators offer typical input voltage capability from less than 2V up to 100V+, switching frequencies up to 4MHz and high efficiency operation up to 96%. Also with Burst Mode operation, quiescent currents in the tens of micro-amps level can be attained. This combination of features allows very small, low profile buck switching regulator circuit implementations with minimum external components. Other features of these step down switch mode voltage regulators include micropower operation (Burst Mode), high efficiency, adjustable or synchronizable switching frequency, small package size and more.

Mfg. Part No.	Input Voltage (V)	Output Voltage (V)	Output Current Max (A)	Package	Stock No.	Price Each 1-24
● LTC3388EDD-1#PBF	2.7 to 20	2.5	0.05	10-DFN	84R6680	6.30
● LTC3388EDD-3#PBF	2.7 to 20	5	0.05	10-DFN	84R6682	6.30
● LTC3388EMSE-1#PBF	2.7 to 20	2.5	0.05	10-MSOP	84R6684	6.30
● LTC3388EMSE-3#PBF	2.7 to 20	5	0.05	10-MSOP	84R6686	6.30
● LT1339CN#PBF	9 to 60	5	0.065	20-PDIP	57M3367	9.16
● LTC3639HMSE#PBF	4 to 150	150	0.1	16-MSOP	86W7558	9.14
● LTC3639IMSE#PBF	4 to 150	150	0.1	16-MSOP	86W7560	8.59
● LTC3639EMSE#PBF	4 to 150	150	0.1	16-MSOP	86W7556	7.80
● LTC3639MPMSE#PBF	4 to 150	150	0.1	16-MSOP	86W7562	18.56
● LTC3631EDD#PBF	4.5 to 45	45	0.1	8-DFN	24R8669	6.30
● LT3470ETS8#PBF	4 to 40	16	0.2	8-TSOT-23	78T4005	5.33
● LTC3860EUH#PBF	3 to 5.5	5	0.24	32-QFN	67R4285	5.49
● LTC3729EUH#PBF	4 to 36	5	0.24	32-QFN	56M8263	8.66
● LTC3549EDCB#PBF	1.6 to 5.5	5.5	0.25	6-DFN	78T3212	2.98
● LTC3103EMSE#PBF	2.5 to 15	13.8	0.3	10-MSOP	78T3143	5.25
● LTC3544BEUD#PBF	2.25 to 5.5	5.5	0.3	16-QFN	56M7986	5.94
● LTC3544BEUD#PBF	2.25 to 5.5	5.5	0.3	16-QFN	56M7986	5.94
● LTC3544EUD#PBF	2.25 to 5.5	5.5	0.3	16-QFN	56M7988	5.94
● LT3970EDDB-3.3#PBF	4.2 to 40	3.3	0.35	10-DFN	67R4294	5.13
● LT3970EMS-3.3#PBF	4.2 to 40	3.3	0.35	10-MSOP	67R4295	5.13
● LT3990EMSE-3.3#PBF	4 to 60	3.3	0.35	16-MSOP	24W8537	5.57
● LT3990EMSE-5#PBF	4 to 60	5	0.35	16-MSOP	24W8539	5.57
● LT3990HMSE#PBF	4 to 60	25	0.35	16-MSOP	24W8545	6.71
● LT3990HMSE-3.3#PBF	4 to 60	3.3	0.35	16-MSOP	24W8541	6.71
● LT3990HMSE-5#PBF	4 to 60	5	0.35	16-MSOP	24W8543	6.71
● LT3990IMSE-3.3#PBF	4 to 60	3.3	0.35	16-MSOP	24W8547	6.18
● LT3990IMSE-5#PBF	4 to 60	5	0.35	16-MSOP	24W8549	6.18
● LT3990EDD#PBF	4.2 to 62	25	0.35	10-DFN	13T8597	5.46
● LT1615IS5#PBF	1.2 to 15	34	0.35	5-SOT-23	78T3702	4.18
● LT1933IS6#PBF	3.6 to 36	31.6	0.4	6-TSOT-23	61M3374	4.60
● LTC1174HVCS8-5#PBF	4 to 18.5	5	0.4	8-SOIC	55M9570	8.33
● LTC1174CS8#PBF	4 to 18.5	9	0.4	8-SOIC	55M9555	7.45
● LTC1174CS8-5#PBF	4 to 18.5	5	0.4	8-SOIC	55M9552	7.45
● LTC3522EUD#PBF	2.4 to 5.5	5.25	0.4	16-QFN	56M7880	3.57
● LTC3542EDC#PBF	2.5 to 5.5	5.5	0.5	6-DFN	78T3203	3.31
● LT3437EDD#PBF	3.3 to 60	72	0.5	10-DFN	57M8138	4.51
● LT3437IDD#PBF	3.3 to 60	72	0.5	10-DFN	57M8148	3.86
● LT3437IFE#PBF	3.3 to 60	72	0.5	16-TSSOP	57M8152	5.51
● LT3502AIDC#PBF	3 to 40	36	0.5	8-DFN	61W8360	5.37
● LTC1627IS8#PBF	2.65 to 8.5	8.5	0.5	8-SOIC	56M2714	6.67
● LT1676IS8#PBF	7.4 to 60	51	0.55	8-SOIC	57M5679	6.30
● LT1777CS#PBF	7 to 48	40.8	0.55	16-SOIC	57M6299	5.38
● LT1777IS#PBF	7 to 48	40.8	0.55	16-SOIC	57M6303	6.30
● LTC3447EDD#PBF	2.5 to 5.5	2.05	0.6	10-DFN	56M7823	2.79
● LTM8045EY#PBF	2.8 to 18	15	0.7	40-BGA	64W5995	12.27
● LTM8045IY#PBF	2.8 to 18	15	0.7	40-BGA	64W5996	14.90
● LTM8045MPY#PBF	2.8 to 18	15	0.7	40-BGA	64W5997	22.73
● LT1776CS8#PBF	7.4 to 40	34	0.7	8-SOIC	57M6291	5.28

➤CONTINUED➤

STEP DOWN BUCK SWITCHING REGULATORS (CONT.)

Mfg. Part No.	Input Voltage (V)	Output Voltage (V)	Output Current Max (A)	Package	Stock No.	Price Each 1-24
LT1776IS8#PBF	7.4 to 40	34	0.7	8-SOIC	57M6296	6.05
LT3433IFE#PBF	4 to 60	20	0.7	16-TSSOP	57M8114	7.55
LT3688EFE#PBF	3.8 to 36	28.8	0.8	24-TSSOP	24W8521	8.01
LT3688HFE#PBF	3.8 to 36	28.8	0.8	24-TSSOP	24W8523	9.46
LT3688IFE#PBF	3.8 to 36	28.8	0.8	24-TSSOP	24W8525	8.91
LT3688IUF#PBF	3.8 to 36	28.8	0.8	24-QFN	24W8527	8.58
LT3433EFE#PBF	-0.3 to 60	60	0.9	16-TSSOP	57M8110	6.54
LT3437EFE#PBF	3.3 to 80	1.25	0.9	16-TSSOP	57M8142	4.64
LT3509EDE#PBF	3.7 to 36	32.4	0.9	14-DFN	44P2425	6.30
LT3509EMSE#PBF	3.7 to 36	32.4	0.9	16-MSOP	44P2426	6.52
LT1110CS8#PBF	1 to 30	36	1	8-SOIC	57M1702	6.41
LTC3374IFE#PBF	2.25 to 5.5	5.5	1	38-TSSOP	94W8403	12.11
LTC3374IUHF#PBF	2.25 to 5.5	5.5	1	38-QFN	94W8401	11.97
LTC3374EFE#PBF	2.25 to 5.5	5.5	1	38-TSSOP	94W8395	10.63
LTC3374HFE#PBF	2.25 to 5.5	5.5	1	38-TSSOP	94W8399	12.75
LTC3374EUHF#PBF	2.25 to 5.5	5.5	1	38-QFN	94W8397	9.95
LTC3374IUHF#PBF	2.25 to 5.5	5.5	1	38-QFN	94W8405	11.44
LTC3561EDD#PBF	2.625 to 5.5	5	1	8-DFN	58M0801	3.57
LTC3446EDE#PBF	2.7 to 5.5	5.5	1	14-DFN	58M0749	3.93
LT3493EDCB#PBF	3.6 to 40	31.32	1	6-DFN	61M3376	5.55
LT3493IDCB#PBF	3.6 to 40	31.32	1	6-DFN	06R5448	6.63
LT3988EMSE#PBF	4.1 to 60	55.2	1	16-MSOP	93T2042	7.80
LT3988HMSE#PBF	4.1 to 60	55.2	1	16-MSOP	93T2043	9.51
LT3988IMSE#PBF	4.1 to 60	55.2	1	16-MSOP	93T2044	8.98
LT3682EDD#PBF	3.6 to 36	20	1	12-DFN	46P5740	6.30
LT3682IDD#PBF	3.6 to 36	20	1	12-DFN	46P5742	6.52
LT1176CN8-5#PBF	7.3 to 35	29.75	1.2	8-PDIP	57M2497	5.64
LT1767EMS8#PBF	3 to 25	20	1.2	8-MSOP	57M6259	6.02
LT1767EMS8E#PBF	3 to 25	20	1.2	8-MSOP	57M6278	6.11
LT1767EMS8E-1.8#PBF	5.5 to 60	1.8	1.2	8-MSOP	57M6263	6.11
LT1767EMS8E-3.3#PBF	3 to 25	3.3	1.2	8-MSOP	57M6271	6.11
LT1767EMS8E-5#PBF	3 to 25	5	1.2	8-MSOP	57M6275	6.11
LT3505EDD#PBF	3.6 to 36	31.32	1.2	8-DFN	57M8466	4.83
LT3686AEDD#PBF	3.6 to 37	3.3	1.2	10-DFN	13T8490	5.35
LT3686AEMSE#PBF	3.6 to 37	3.3	1.2	12-MSOP	13T8492	5.57
LT3686HDD#PBF	3.6 to 37	3.3	1.2	10-DFN	78R8986	6.48
LT3971EDD#PBF	4.5 to 38	30	1.2	10-DFN	53R1596	5.88
LT3971EMSE#PBF	4.5 to 38	30	1.2	10-MSOP	53R1597	5.88
LT3971EMSE16#PBF	4.3 to 38	30	1.2	16-MSOP	24W8533	6.09
LT3971EMSE-3.3#PBF	4.3 to 38	3.3	1.2	10-MSOP	24T2756	5.88
LT3971EMSE-5#PBF	4.3 to 38	5	1.2	10-MSOP	24T2757	5.88
LT3971IMSE16#PBF	4.3 to 38	30	1.2	16-MSOP	24W8535	6.71
LT3991EDD#PBF	4.3 to 55	30	1.2	10-DFN	53R1598	6.30
LT3991EMSE#PBF	4.3 to 55	30	1.2	10-MSOP	53R1599	6.30
LT3991EMSE-3.3#PBF	4.3 to 38	3.3	1.2	10-MSOP	24T2758	6.30
LT3991EMSE-5#PBF	4.3 to 38	5	1.2	10-MSOP	24T2759	6.30
LT3686IDD#PBF	3.6 to 37	34.04	1.2	10-DFN	13T8502	3.97
LT1976BIFE#PBF	3.3 to 60	54	1.24	16-TSSOP	57M7623	6.00
LT1977IFE#PBF	3.3 to 60	54	1.24	16-TSSOP	57M7643	5.47
LTC3564EDCB#PBF	2.5 to 5.5	5.5	1.25	6-DFN	78T3219	4.27
LT3971AIMSE#PBF	4.3 to 38	5	1.3	10-MSOP	87T9243	7.17
LT3640EFE#PBF	4 to 35	31.5	1.3	28-TSSOP	78R8970	7.80
LT3508EUF#PBF	3.7 to 36	32.4	1.4	24-QFN	58M1032	6.74
LT3508IUF#PBF	3.7 to 36	32.4	1.4	24-QFN	58M1036	8.09
LT1375IS8#PBF	5 to 25	21.5	1.5	8-SOIC	57M3771	7.79
LT1956EFE#PBF	5.5 to 60	45	1.5	16-TSSOP	57M7330	7.55
LTC3417AEFE#PBF	2.25 to 5.5	5	1.5	20-TSSOP	56M7729	7.34
LT3506EFE#PBF	3.6 to 25	22.5	1.6	16-TSSOP	57M8500	4.36
LT3506AEFE#PBF	3.6 to 25	22.5	1.6	16-TSSOP	57M8486	6.11
LT1176CSW-5#PBF	7.3 to 35	5	1.7	20-SOL	57M2501	8.18
LTC3568EDD#PBF	2.5 to 5.5	5	1.8	10-DFN	56M8024	5.94
LTC3546IUFD#PBF	2.25 to 5.5	5	2	28-QFN	56P3086	9.44
LT3481EDD#PBF	3.6 to 36	20	2	10-DFN	57M8350	6.54
LT3481IDD#PBF	3.6 to 36	20	2	10-DFN	57M8358	7.82
LT1076CT#PBF	5 to 45	-35	2	5-TO-220	57M1342	6.79
LT1076CT-5#PBF	7.3 to 45	64	2	5-TO-220	57M1340	6.79
LT1076HVCT#PBF	5 to 64	50	2	5-TO-220	57M1358	11.62
LT1766IFE#PBF	5.5 to 60	54	2	16-TSSOP	57M6231	8.96
LT1766IGN#PBF	5.5 to 60	15	2	16-SSOP	57M6239	9.11
LT1767EMS8-5#PBF	3 to 25	5	2	8-MSOP	57M6256	6.02
LT1912EDD#PBF	3 to 36	20	2	10-DFN	75M4658	5.94
LT1912EMSE#PBF	3 to 36	20	2	10-MSOP	75M4660	6.11
LT1956IGN#PBF	5.5 to 60	45	2	16-SSOP	57M7354	9.11
LT3500EMSE#PBF	3 to 36	34.92	2	16-MSOP	12P8627	7.17

➤ CONTINUED ➤

STEP DOWN BUCK SWITCHING REGULATORS (CONT.)

Mfg. Part No.	Input Voltage (V)	Output Voltage (V)	Output Current Max (A)	Package	Stock No.	Price Each 1-24
LTC3546EFE#PBF	2.25 to 5.5	5	2	28-TSSOP	53R1595	8.35
LT1507CS8-3.3#PBF	4 to 15	3.3	1.2	8-SOIC	57M4633	7.40
LT3684EDD#PBF	3.6 to 36	20	2	10-DFN	57M8552	4.21
LT3480HMSE#PBF	3.3 to 36	20	2	10-MSOP	82T4672	6.44
LT3504EUFD#PBF	3.2 to 40	40	2.1	28-QFN	27W9523	7.48
LT3504IUFD#PBF	3.2 to 40	40	2.1	28-QFN	27W9525	8.24
LT1938EDD#PBF	3.6 to 25	20	2.2	10-DFN	75M4667	5.51
LT3505IMS8E#PBF	3.6 to 36	31.32	2.2	8-MSOP	57M8478	6.16
LT1976IFE#PBF	3.3 to 60	54	2.4	16-TSSOP	57M7635	9.26
LT3975EMSE#PBF	4 to 42	41.16	2.5	16-MSOP	24W5394	6.62
LT3975HMSE#PBF	4 to 42	41.16	2.5	16-MSOP	24W5396	7.82
LT3975IMSE#PBF	4 to 42	41.16	2.5	16-MSOP	24W5398	7.29
LTC3604EMSE#PBF	3.6 to 15	13.5	2.5	16-MSOP	63R7770	6.96
LTC3604EUD#PBF	3.6 to 15	13.5	2.5	16-QFN	63R7772	6.96
LTC3626EUDC#PBF	3.6 to 20	6	2.5	20-QFN	24W8516	7.38
LTC3626IUDC#PBF	3.6 to 20	6	2.5	20-QFN	24W8518	8.49
LT1076CQ#PBF	7.3 to 45	35	2.6	5-DD	57M1327	7.76
LT1076CR#PBF	7.3 to 45	50	2.6	7-D2PAK	57M1335	8.44
LT1076HVCR#PBF	7.3 to 45	50	2.6	7-D2PAK	57M1352	14.54
LT1076IR#PBF	7.3 to 45	50	2.6	7-D2PAK	57M1376	9.97
LT3508EFE#PBF	3.7 to 36	32.4	2.6	16-TSSOP	58M1030	7.01
LT3694EFE#PBF	4 to 36	16	2.6	20-TSSOP	13T8526	8.56
LT3694EFE-1#PBF	4 to 36	16	2.6	20-TSSOP	13T8524	5.71
LT3694EUFD#PBF	4 to 36	16	2.6	28-QFN	13T8530	5.50
LT3694EUFD-1#PBF	4 to 36	16	2.6	28-QFN	13T8528	5.50
LT1765EFE-5#PBF	3 to 25	5	3	16-TSSOP	57M6196	9.72
LT1765ES8#PBF	3 to 25	20	3	8-SOIC	57M6203	9.76
LTC3612EFE#PBF	2.25 to 5.5	5.5	3	20-TSSOP	13T8364	6.96
LTC3633IUFD#PBF	3.6 to 15	13.5	3	28-QFN	13T8401	10.09
LTC3612IFE#PBF	2.25 to 5.5	5.5	3	20-TSSOP	13T8368	5.46
LTC3615EFE-1#PBF	2.25 to 5.5	5.5	3	24-TSSOP	84R6706	5.86
LTC3615EUF-1#PBF	2.25 to 5.5	5.5	3	24-QFN	84R6708	8.45
LT3434IFE#PBF	3.3 to 60	54	3	16-TSSOP	57M8122	12.16
LTC3633EFE#PBF	3.6 to 15	14.7	3	28-TSSOP	67R4283	9.40
LTC3633EUFD#PBF	3.6 to 15	14.7	3	28-QFN	67R4284	9.09
LTC3633AEUFD#PBF	3.6 to 20	6	3	28-QFN	46W1186	9.09
LT3995EMSE#PBF	4.3 to 60	58.2	3	16-MSOP	95W3394	7.59
LT3995HMSE#PBF	4.3 to 60	58.2	3	16-MSOP	95W3396	8.89
LT3995IMSE#PBF	4.3 to 60	58.2	3	16-MSOP	95W3398	8.36
LT1766EFE-5#PBF	5.5 to 60	68	3	16-TSSOP	57M6208	7.55
LT1766EGN-5#PBF	5.5 to 60	68	3	16-SSOP	57M6216	7.41
LT1956EGN#PBF	5.5 to 60	68	3	16-SSOP	57M7338	7.41
LT1956EGN-5#PBF	5.5 to 60	68	3	16-SSOP	57M7335	7.41
LT3430EFE#PBF	5.5 to 60	54	3	16-TSSOP	57M8092	9.96
LT3430IFE#PBF	5.5 to 60	54	3	16-TSSOP	57M8098	11.44
LT3431EFE#PBF	5.5 to 60	48	3	16-TSSOP	57M8102	9.96
LT1913EDD#PBF	3.6 to 25	25	3.5	10-DFN	75M4662	7.80
LT1913IDD#PBF	3.6 to 25	25	3.5	10-DFN	75M4664	9.37
LT3480EDD#PBF	3.6 to 60	20	3.5	10-DFN	57M8341	6.95
LT3480EMSE#PBF	3.6 to 60	20	3.5	10-MSOP	57M8343	7.15
LT3501IFE#PBF	3.3 to 25	22.5	3.5	20-TSSOP	58M1027	8.45
LT3692EUH#PBF	3 to 36	34.2	3.5	32-QFN	24T2755	9.09
LT3693EDD#PBF	3.6 to 36	30	3.5	10-DFN	57M8568	5.50
LT1959IS8#PBF	4 to 15	12.9	3.6	8-SOIC	57M7370	11.03
LT3684EMSE#PBF	3.6 to 36	20	3.6	10-MSOP	57M8554	6.14
LT1959CR#PBF	4 to 15	12.9	4.5	7-D2PAK	57M7358	10.25
LT3685EMSE#PBF	3.6 to 60	20	3.7	10-MSOP	57M8562	6.31
LT3481EMSE#PBF	3.5 to 34	30.6	3.8	10-MSOP	57M8354	6.54
LT3681EDE#PBF	3.6 to 36	20	3.8	14-DFN	57M8550	7.34
LT1765EFE-3.3#PBF	3 to 25	3.3	4	16-TSSOP	57M6192	9.72
LTC3614EUDD#PBF	2.25 to 5.5	5.5	4	24-QFN	71R4678	7.38
LT1506CS8-3.3#PBF	4 to 15	3.3	4.5	8-SOIC	57M4597	5.00
LT1374IS8#PBF	5 to 25	21.5	4.5	8-SOIC	57M3735	5.75
LT1374HVIR#PBF	5 to 32	27.52	4.5	7-TO-263	57M3707	12.92
LTC3809EDD#PBF	2.75 to 9.8	9.8	5	10-DFN	56M8481	3.57
LT3976EUDD#PBF	4.3 to 40	39.2	5	24-QFN	65W5614	5.36
LTC1771IS8#PBF	2.8 to 18	18	5	8-SOIC	56M3750	3.25
LT3976IUDD#PBF	4.3 to 40	39.2	5	24-QFN	65W5616	5.90
LT1074CT#PBF	5 to 45	35	5	5-TO-220	57M1301	10.19
LTC1772BES6#PBF	2.5 to 9.8	9.8	5	6-TSOT-23	78T2521	4.08
LT1074HVCT#PBF	5 to 64	50	5	5-TO-220	57M1306	15.33
LT3431IFE#PBF	5.5 to 60	48	5	16-TSSOP	57M8106	11.44
LT3976EMSE#PBF	4.3 to 40	40	5	16-MSOP	44W6857	8.01
LT3976HMSE#PBF	4.3 to 40	40	5	16-MSOP	44W6859	9.37

➤ CONTINUED ➤

SWITCHING REGULATORS & CONVERTERS

STEP DOWN BUCK SWITCHING REGULATORS (CONT.)

Mfg. Part No.	Input Voltage (V)	Output Voltage (V)	Output Current Max (A)	Package	Stock No.	Price Each 1-24
● LT3976IMSE#PBF	4.3 to 40	40	5	16-MSOP	44W6861	8.84
● LT3693EMSE#PBF	3.6 to 36	30	5.4	10-MSOP	57M8570	7.91
● LT3693IDD#PBF	3.6 to 36	30	5.4	10-DFN	57M8572	9.31
● LTC3615IUF#PBF	2.25 to 5.5	5.5	6	24-QFN	13T8378	6.64
● LTC3630EDHC#PBF	4 to 65	65	0.5	16-DFN	05W5146	6.77
● LT1765EFE#PBF	3 to 25	20	6	16-TSSOP	57M6199	9.72
● LT3680EDD#PBF	3.6 to 36	30	6	10-DFN	57M8542	8.35
● LT3680EMSE#PBF	3.6 to 36	30	6	10-MSOP	57M8544	8.55
● LT3680IDD#PBF	3.6 to 36	30	6	10-DFN	57M8546	9.97
● LT3680IMSE#PBF	3.6 to 36	30	6	10-MSOP	57M8548	10.20
● LT1506CR#PBF	4 to 15	31	4.5	7-TO-263	57M4592	5.50
● LT1506IS8#PBF	4 to 15	12.9	4.5	8-SOIC	57M4624	5.75
● LT1074CT7#PBF	7.3 to 45	64	6.5	7-TO-220	57M1303	11.84
● LT1074HVCT7#PBF	7.3 to 65	50	6.5	7-TO-220	57M1310	16.80
● LT1074IT#PBF	7.3 to 45	35	6.5	5-TO-220	57M1318	13.78
● LT1074IT7#PBF	7.3 to 45	35	6.5	7-TO-220	57M1321	14.69
● LT3434EFE#PBF	3.3 to 60	54	6.5	16-TSSOP	57M8118	10.57
● LT3435EFE#PBF	3.3 to 60	54	6.5	16-TSSOP	57M8126	10.57
● LT1959CS8#PBF	4 to 15	12.9	8.5	8-SOIC	57M7362	9.62
● LT3845EN#PBF	4 to 20	12	10	16-DIP	63R6867	7.13
● LT3845MPFE#PBF	4 to 20	12	10	16-TSSOP	63R6869	15.22
● LTC1625IGN#PBF	3.7 to 36	36	10	16-SSOP	56M2702	7.02
● LTC3859EFE#PBF	4.5 to 38	60	25	38-TSSOP	70R5698	10.95
● LTC3859EUHF#PBF	4.5 to 38	60	25	38-QFN	70R5700	10.58
● LTC3728LXCUH#PBF	4 to 36	5.5	25	32-QFN	56M8253	6.16
● LTC3865EFE#PBF	4.5 to 38	5	25	38-TSSOP	63R6807	6.11
● LTC3865EUH#PBF	4.5 to 38	5	25	32-QFN	63R6811	5.67
● LTC3864MPDE#PBF	3.5 to 60	60	25	12-DFN	48W6409	9.40
● LTC3864MPMSE#PBF	3.5 to 60	60	25	12-MSOP	48W6411	14.07
● LTC3865EUH-1#PBF	4.5 to 38	5	25	32-QFN	63R6809	5.67
● LTC3850EUFD#PBF	4 to 24	6	25	28-QFN	75M4531	3.43
● LTC3850IUF#PBF	4 to 30	6	25	28-QFN	75M4535	3.64
● LTC3866EFE#PBF	4.5 to 38	3.5	30	24-TSSOP	82T3903	6.38
● LTC3866IFE#PBF	4.5 to 38	3.5	30	24-TSSOP	82T3907	4.96
● LTC3621IDCB#TRMPBF	2.7 to 17	17	1	6-DFN	44X1593	6.79
● LTC3624EDD#PBF	2.7 to 17	17	2	8-DFN	38X5872	6.30
● LTC3624EDD-2#PBF	2.7 to 17	17	2	8-DFN	38X5870	6.30
● LTC3624IDD#PBF	2.7 to 17	17	2	8-DFN	38X5876	6.96
● LTC3624IDD-2#PBF	2.7 to 17	17	2	8-DFN	38X5874	6.96
● LTC3631EDD#PBF	4.5 to 45	45	0.1	8-DFN	24R8669	6.30
● LTC1771EMS8#PBF	2.8 to 18	18	5	8-MSOP	56M3742	5.76
● LTC1771ES8#PBF	2.8 to 18	18	5	8-SOIC	56M3746	5.54
● LTC3103EMSE#PBF	2.5 to 15	13.8	0.3	10-MSOP	78T3143	5.25
● LTC3388EDD-1#PBF	2.7 to 20	2.5	0.05	10-DFN	84R6680	6.30
● LTC3388EMSE-1#PBF	2.7 to 20	2.5	0.05	10-MSOP	84R6684	6.30
● LTC3404EMS8#PBF	2.65 to 5.5	7.3	0.6	8-MSOP	56M7507	5.91
● LTC3412AEFE#PBF	2.625 to 5.5	5	3	16-TSSOP	58M0737	6.91
● LTC3412AEUF#PBF	2.625 to 5.5	5	3	16-QFN	58M0741	6.91
● LTC3414EFE#PBF	2.3 to 6	5.5	4	20-TSSOP	56M7708	9.00
● LTC3447EDD#PBF	2.5 to 5.5	2.05	0.6	10-DFN	56M7823	2.79
● LTC3542EDC#PBF	2.5 to 5.5	5.5	0.5	6-DFN	78T3203	3.31
● LTC3870EUFD#PBF	4.5 to 60	14	25	28-QFN	41X7996	5.02
● LTC3870EUFD#TRPBF	4.5 to 60	14	25	28-QFN	41X7997	2.95
● LTC3870IUFD#PBF	4.5 to 60	14	25	28-QFN	41X7998	5.41
● LTM4630EY#PBF	4.5 to 15	1.8	25	144-BGA	41X8001	58.67
● LTM4630IY#PBF	4.5 to 15	1.8	36	144-BGA	41X8002	64.36
● LT3988HMSE#PBF	4.1 to 60	55.2	1	16-MSOP	93T2043	9.51
● LT3988IMSE#PBF	4.1 to 60	55.2	1	16-MSOP	93T2044	8.98
● LTM4620AEY#PBF	4.5 to 16	5.3	13	144-BGA	18X0189	52.88
● LTM4620EV#PBF	4.5 to 16	2.5	13	144-LGA	27W9514	48.81
● LTM4630EY#PBF	4.5 to 15	1.8	36	144-BGA	41X8001	58.67
● LTM4630IY#PBF	4.5 to 15	1.8	36	144-BGA	41X8002	64.36
● LTC3850EGN#PBF	4 to 24	6	25	28-SSOP	56M8609	3.43
● LTC3838EUHF-1#PBF	4.5 to 38	5.5	25	38-QFN	71W8468	6.80
● LTC3838EUHF-2#PBF	4.5 to 38	5.5	25	38-QFN	64W5962	6.80
● LTC3868EUFD-1#PBF	4 to 24	14	25	28-QFN	24R3321	3.87
● LTC3865EUH#PBF	4.5 to 38	5	25	32-QFN	63R6811	5.67
● LTC3865EUH-1#PBF	4.5 to 38	5	25	32-QFN	63R6809	5.67
● LTC3858EUFD-1#PBF	4 to 38	24	25	28-QFN	24R3319	6.56
● LTC3857EUH#PBF	4 to 38	24	25	32-QFN	24R3317	9.81
● LTC3858EUFD-1#PBF	4 to 38	24	25	28-QFN	24R3319	6.56
● LTC3875EUJ#PBF	4.5 to 38	5	30	40-QFN	33X0983	7.41
● LTC3875IUJ#PBF	4.5 to 38	5	30	40-QFN	33X0985	7.80
● LTC3890EGN-3#PBF	4 to 60	24	25	28-SSOP	64W5982	6.80

CONTINUED

STEP DOWN BUCK SWITCHING REGULATORS (CONT.)

Mfg. Part No.	Input Voltage (V)	Output Voltage (V)	Output Current Max (A)	Package	Stock No.	Price Each 1-24
● LTC3890EUH#PBF	4 to 60	24	25	32-QFN	67R4260	10.44
● LTC3890HGN-3#PBF	4 to 60	24	25	28-SSOP	64W5984	12.36
● LTC3890IGN-3#PBF	4 to 60	24	25	28-SSOP	64W5986	7.82
● LTC3890MPGN-3#PBF	4 to 60	24	25	28-SSOP	64W5988	22.57
● LTC3868EUFD-1#PBF	4 to 24	14	25	28-QFN	24R3321	3.87
● LTC3708EUH#PBF	4.5 to 36	36	25	32-QFN	56M8105	9.71
● LTC3774EUHE#PBF	4.5 to 38	3.5	25	36-DFN	18X0177	6.30
● LTC3774IUHE#PBF	4.5 to 38	3.5	25	36-DFN	18X0179	7.17
● LTC3775EMSE#PBF	4.5 to 38	30.4	25	16-MSOP	59T5626	3.82
● LTC3727EG#PBF	4 to 36	14	25	28-SSOP	56M8201	6.93
● LTM4619EV#PBF	4.5 to 26.5	5	4	144-LGA	68R7658	27.46
● LTM4619IV#PBF	4.5 to 26.5	5	4	144-LGA	68R7659	30.22
● LTM4628EV#PBF	4.5 to 26.5	5.5	8	144-LGA	20T5704	32.62
● LTM4628IV#PBF	4.5 to 26.5	5.5	8	144-LGA	18T1284	35.89

(168157)

STEP UP BOOST SWITCHING REGULATOR

RoHS Compliant Available

LINEAR TECHNOLOGY

LTC3105EDD#PBF

Mfg. Part No.	Switch Current Max (A)	Voltage Range (V)	Switch Freq. Max	Package	Stock No.	Price Each 1-24
● LTC1754ES6-5#PBF	0.05	2.7 to 5.5	700kHz	6-SOT-23	78T2520	3.09
● LTC3200ES6-5#PBF	0.1	2.7 to 4.5	2MHz	6-SOT-23	78T3157	3.37
● LTC3204BEDC-5#PBF	0.15	2.7 to 5.5	1.2MHz	6-DFN	78T3159	3.32
● LTC3525ESC6-5#PBF	0.175	0.85 to 4.5	...	6-SC-70	78T3194	3.69
● LT3494EDDB#PBF	0.18	2.3 to 16	...	8-DFN	78T4017	3.01
● LT3571EUD#PBF	0.35	2.7 to 20	2MHz	16-QFN	51P3124	5.25
● LT3482EUD#PBF	0.36	2.5 to 16	2MHz	16-QFN	57M8365	6.95
● LTC3105EDD#PBF	0.4	0.225 to 5	...	10-DFN	27T5809	5.78
● LTC3105EMS#PBF	0.4	0.225 to 5	...	12-MSOP	27T5811	5.78
● LT3482IUD#PBF	0.42	2.5 to 16	750kHz	16-QFN	57M8367	8.33
● LT3571IUD#PBF	0.47	2.7 to 20	2MHz	16-QFN	51P4632	3.89
● LTC3532EDD#PBF	0.5	2.4 to 5.5	...	10-DFN	56M7953	4.71
● LTC3203EDD-1#PBF	0.5	2.7 to 5.5	1MHz	10-DFN	56M7347	2.86
● LT1610CS8#PBF	0.6	1 to 8	1.7MHz	8-SOIC	57M5176	3.59
● LT1302CS8-5#PBF	0.6	2.2 to 8	400kHz	8-SOIC	57M3172	4.25
● LT3460ES5#PBF	0.6	2.5 to 16	1.3MHz	5-TSOT-23	78T3987	3.31
● LT3461AES6#PBF	0.6	2.5 to 16	3MHz	6-TSOT-23	78T3988	3.52
● LT3461ES6#PBF	0.6	4 to 16	1.3MHz	6-TSOT-23	78T3989	3.52
● LTC3400ES6#PBF	0.85	0.5 to 5	1.2MHz	6-SOT-23	78T3172	4.19
● LTC3429ES6#PBF	0.85	0.5 to 4.4	500kHz	6-TSOT-23	78T3192	4.09
● LT1073CS8#PBF	1	1 to 30	23kHz	8-SOIC	57M1297	4.25
● LT1082IQ#PBF	1	3 to 75	75kHz	5-DD	57M1473	11.84
● LT1082IT#PBF	1	3 to 75	60Hz	5-TO-220	57M1477	11.16
● LT1082CN8#PBF	1	3 to 75	60Hz	8-DIP	57M1462	8.10
● LT1305CS8#PBF	1	1.8 to 10	300kHz	8-SOIC	58M0968	6.43
● LT3467ES6#PBF	1.1	2.4 to 16	1.3MHz	6-TSOT-23	78T3998	3.69
● LT1109CS8-12#PBF	1.2	3 to 20	150kHz	8-SOIC	57M1675	2.92
● LT3473EDD#PBF	1.2	2.2 to 16	1.2MHz	8-DFN	57M8282	3.92
● LT1072CN8#PBF	1.25	3 to 40	40kHz	8-PDIP	57M1264	4.71
● LT1072CS8#PBF	1.25	3 to 40	40Hz	8-SOIC	57M1270	5.82
● LT1072CT#PBF	1.25	3 to 60	47kHz	5-TO-220	57M1274	5.87
● LT1172CN8#PBF	1.25	3 to 40	100kHz	8-PDIP	57M2391	4.71
● LT1172CS8#PBF	1.25	3 to 40	100kHz	8-SOIC	57M2401	5.82
● LT1172CQ#PBF	1.25	3 to 40	115kHz	5-DD	57M2393	6.89
● LT1172CT#PBF	1.25	3 to 40	115kHz	5-TO-220	57M2405	5.87
● LT1172CT#06PBF	1.25	3 to 40	115kHz	5-TO-220	46P5717	3.75
● LT1172HVCQ#PBF	1.25	3 to 60	115kHz	5-DD	57M2407	6.52
● LT1172HVCT#PBF	1.25	3 to 60	100Hz	5-TO-220	57M2411	7.67
● LT1172IN8#PBF	1.25	3 to 40	100kHz	8-PDIP	57M2416	6.63
● LT1172IS8#PBF	1.25	3 to 40	115kHz	8-SOIC	57M2418	7.65
● LT1376CS8#PBF	1.5	5 to 25	500kHz	8-SOIC	57M3787	6.53
● LT1376HVCS8#PBF	1.5	5 to 30	500kHz	8-SOIC	57M3795	7.20
● LT1376HVIS8#PBF	1.5	5 to 30	500kHz	8-SOIC	57M3803	8.65
● LT1376IS8-5#PBF	1.5	5 to 25	500kHz	8-SOIC	57M3816	8.19

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STEP UP BOOST SWITCHING REGULATOR (CONT.)

Mfg. Part No.	Switch Current Max (A)	Voltage Range (V)	Switch Freq. Max	Package	Stock No.	Price Each 1-24
LTC3422EDD#PBF	1.5	0.5 to 4.5	3MHz	10-DFN	56M7761	4.21
LT1373CS8#PBF	2	2.7 to 30	250Hz	8-SOIC	57M3629	7.32
LT1310EMSE#PBF	2.1	2.75 to 18	4.5MHz	10-MSOP	57M3269	5.71
LT1308CS8#PBF	2.5	1 to 10	600kHz	8-SOIC	57M3261	6.94
LT1308BCS8#PBF	3	1 to 10	600Hz	8-SOIC	57M3253	6.58
LT1308BIS8#PBF	3	1 to 10	600kHz	8-SOIC	57M3257	7.52
LT1371HVCR#PBF	3.8	2.7 to 30	580kHz	7-DD	57M3575	10.53
LTC3122EDE#PBF	4.5	0.5 to 5.5	1.15MHz	12-DFN	27W9451	4.98
LTC3122EMSE#PBF	4.5	0.5 to 5.5	1.15MHz	12-MSOP	27W9453	4.98
LTC3122IDE#PBF	4.5	0.5 to 5.5	1.15MHz	12-DFN	27W9455	5.85
LTC3122IMSE#PBF	4.5	0.5 to 5.5	1.15MHz	12-MSOP	27W9457	3.90
LTC3788EGN-1#PBF	25	4.5 to 38	850kHz	28-SSOP	63R6799	7.55
LTC3788EUH#PBF	25	4.5 to 38	850kHz	32-QFN	63R6801	7.55
LT1950IGN#PBF	...	3 to 25	...	SSOP	57M7306	6.63

(168158)

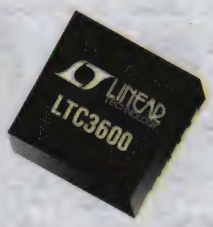
SYNCHRONOUS RAIL-TO-RAIL SINGLE RESISTOR STEP-DOWN REGULATORS

RoHS Compliant Available

LINEAR TECHNOLOGY

Features:
- Integrated Power N-Channel MOSFETs (200mΩ Top and 100mΩ Bottom)
- Current Mode Operation for Excellent Line and Load
- Transient Response
- <1µA Supply Current in Shutdown

Applications:
- Point-of-Load Power Supplies
- Portable Instruments
- Distributed Power Systems
- Battery-Powered Equipment
- Voltage Tracking Supplies



The **LTC3600** is a high efficiency, monolithic synchronous buck regulator whose output is programmed with just one external resistor. The accurate internally generated 50µA current source on the ISET pin allows the use of a single external resistor to program an output voltage that ranges from 0V to 0.5V below VIN. The VOUT voltage feeds directly back to the error amplifier in unity gain fashion and equals the ISET voltage.

Mfg. Part No.	No. of Outputs	Input Voltage (V)	Output Current (A)	Package	Stock No.	Price Each 1-24
LTC3600IDD#PBF	1	4 to 15	1.5	12-DFN	78T3226	6.89
LTC3600IMSE#PBF	1	4 to 15	1.5	12-MSOP	78T3228	6.89

(201303)

INVERTING SWITCHING REGULATORS

RoHS Compliant Available

LINEAR TECHNOLOGY

Linear Technology's line of DC/DC invertering switching regulators is specifically designed to invert input voltages to negative outputs. They offer input voltage ranges from 1V to 64V with switch currents from as little as 100mA up to 10A. Notable features include integrated Schottky diodes, fixed frequency operation, programmable current limit and low noise operation.

Mfg. Part No.	Input Voltage Range (V)	Output Voltage (V)	Switch Current Max (A)	Package	Stock No.	Price Each 1-24
LT3483AEDC#TRMPBF	2.5 to 16	-38	0.15	8-DFN	24T2735	5.10
LT1107CS8-12#PBF	2 to 30	12	0.15	8-SOIC	57M1619	5.17
LT3463EDD#PBF	2.4 to 15	40	0.25	10-DFN	57M8188	3.92
LT3463AEDD#PBF	2.2 to 15	40	0.25	10-DFN	57M8184	2.79
LT3472EDD#PBF	2.2 to 16	34	0.4	10-DFN	57M8274	2.31
LT1107CS8#PBF	2 to 36	-30	1	8-SOIC	57M1624	2.80
LT1107IS8#PBF	2 to 36	5	1	8-SOIC	57M1628	5.40
LT1111CN8#PBF	2 to 12	7.2	1	8-DIP	57M1710	4.61
LT1111CS8#PBF	2 to 36	-30	1	8-SOIC	57M1720	5.32
LT1111IS8#PBF	2 to 12	7.2	1	8-SOIC	57M1724	6.92
LT1111CS8-5#PBF	2 to 36	5	1	8-SOIC	57M1717	5.32
LT1614CS8#PBF	1.25 to 6	30	500	8-SOIC	57M5204	5.00
LT1108CS8#PBF	2 to 30	50	1.5	8-SOIC	57M1646	3.42
LT1108CS8-5#PBF	2 to 30	5	1.5	8-SOIC	57M1643	5.17
LT1372CS8#PBF	2.7 to 30	30	1.5	8-SOIC	57M3607	7.32
LT1372HVCS8#PBF	2.7 to 42	42	2	8-SOIC	57M3613	7.40
LT1372IS8#PBF	2.7 to 30	35	2	8-SOIC	57M3623	8.75
LT1377IS8#PBF	2.7 to 30	35	2	8-SOIC	57M3827	9.51
LT1076CQ-5#PBF	3.5 to 45	64	1.6	5-TO-263	57M1324	7.76
LT1076CT#06PBF	3.5 to 45	50	2	5-TO-220	57M1344	6.79
LT1076HVIR#PBF	3.5 to 64	50	2	5-TO-263	57M1364	10.95
LT1076IT#06PBF	3.5 to 45	50	2	5-TO-220	57M1384	5.92
LT1076IT#PBF	3.5 to 45	50	2	5-TO-220	57M1382	9.09
LT3479EFE#PBF	2.5 to 24	40	3	16-TSSOP	57M8338	6.05
LT8582EDKD#PBF	2.5 to 22	42	3	24-DFN	82T4676	8.01
LT8582IDKD#PBF	2.5 to 22	42	3	24-DFN	82T4678	8.84

CONTINUED

INVERTING SWITCHING REGULATORS (CONT.)

Mfg. Part No.	Input Voltage Range (V)	Output Voltage (V)	Switch Current Max (A)	Package	Stock No.	Price Each 1-24
LT3479EDE#PBF	2.3 to 24	42	3	14-DFN	57M8334	6.05
LT3958EUHE#PBF	5 to 80	84	3.3	36-QFN	78R8466	6.52
LT1074HVCT#06PBF	3.5 to 64	75	5	5-TO-220	57M1308	15.33
LT1074HVIT#PBF	3.5 to 64	75	5	5-TO-220	57M1314	16.51
LT1074HVIT7#PBF	3.5 to 64	75	5	7-TO-220	57M1316	17.36
LT1074IT#06PBF	3.5 to 45	64	5	5-TO-220	75M4622	13.78
LT3957EUHE#PBF	3 to 40	40	5	36-QFN	78R8462	6.30
LT3959EUHE#PBF	1.6 to 40	40	6	36-QFN	24W8529	6.52
LT3959IUHE#PBF	1.6 to 40	40	6	36-QFN	24W8531	7.52
LT3844EFE#PBF	4 to 20	36	10	16-TSSOP	57M8629	6.43
LTC3863EDE#PBF	3.5 to 60	150	25	12-DFN	94W8407	4.40
LTC3863MPDE#PBF	3.5 to 60	150	25	12-DFN	94W8418	14.07
LTC3863MPMSE#PBF	3.5 to 60	150	25	12-MSOP	94W8420	14.07
LTC3863EMSE#PBF	3.5 to 60	150	25	12-MSOP	94W8409	4.40
LTC3863HDE#PBF	3.5 to 60	150	25	12-DFN	94W8411	5.85
LTC3863IDE#PBF	3.5 to 60	150	25	12-DFN	94W8415	5.21
LTC3863HMSE#PBF	3.5 to 60	150	25	12-MSOP	94W8413	5.85
LTC3863IMSE#PBF	3.5 to 60	150	25	12-MSOP	94W8416	5.21

(168154)

LCD/CCD/OLED Bias SWITCHING REGULATORS

RoHS Compliant Available

LINEAR TECHNOLOGY

Linear Technology manufactures a broad line of high performance switching regulators specifically for generating bias voltages in CCFL and LCD applications. These boost regulators offer typical input voltage capability from 0.9V to 30V, output voltages as high as 60V, switching frequencies up to 3MHz, switch current up to 1.5A, and multiple output capability. This combination of features allows very small circuit implementations and optimizes battery run time in battery operated handheld devices.

Mfg. Part No.	Input Voltage Range (V)	Output Voltage (V)	Switch Current Max (A)	Package	Stock No.	Price Each 1-24
LT1300CS8#PBF	1.8 to 10	5	0.22	8-SOIC	57M3151	5.00
LT1944EMS#PBF	1.2 to 15	34	0.35	10-MSOP	57M7262	4.37
LT1945EMS#PBF	1.2 to 15	34	0.4	10-MSOP	57M7266	4.31
LT3580EDD#PBF	2.5 to 32	12	0.55	8-DFN	57M8515	4.02
LT3580IDD#PBF	2.5 to 32	12	0.55	8-DFN	57M8519	4.83
LT3580IMS8E#PBF	2.5 to 32	12	0.55	8-MSOP	57M8521	5.05
LT3580MPMS8E#PBF	2.5 to 32	12	0.55	8-MSOP	13T8454	17.76
LT1316IS8#PBF	1.5 to 12	30	0.75	8-SOIC	57M3285	5.51
LT1942EUF#PBF	2.6 to 16	1.2	0.75	24-QFN	57M7250	5.51
LT1184FCS#PBF	3 to 30	1.244	1	16-SOIC	57M2572	5.25
LT3487EDD#PBF	2.3 to 16	28	1.09	10-DFN	57M8414	4.61
LT1182CS#PBF	3 to 30	1.244	1.25	16-SOIC	57M2556	6.25
LT1307BCMS8#PBF	1 to 12	28	1.25	8-MSOP	57M3217	4.80
LT1307BCS8#PBF	1 to 12	30	1.25	8-SOIC	57M3221	2.75
LT3471EDD#PBF	2.4 to 16	-40	1.3	10-DFN	57M8270	5.67
LT1317BIS8#PBF	1.5 to 12	30	1.35	8-SOIC	57M3297	3.30
LT1949EMS8#PBF	1.7 to 12	30	1.5	8-MSOP	57M7290	4.51
LT1946AEMS8E#PBF	2.5 to 16	36	2.1	8-MSOP	57M7270	3.54
LT1946EMS8#PBF	2.5 to 16	36	2.1	8-MSOP	57M7274	3.54
LT3580EMS8E#PBF	2.5 to 32	42	2.5	8-MSOP	57M8517	4.23
LT3581EDE#PBF	2.5 to 22	42	3.3	14-DFN	71R4696	5.25
LT3581EMSE#PBF	2.5 to 22	42	3.3	16-MSOP	71R4698	5.46
LT3436EFE#PBF	3 to 25	25	6	16-TSSOP	57M8134	5.51

(168155)

(196526)

2-QUADRANT CVCC STEP-DOWN µMODULE REGULATORS

RoHS Compliant Available

LINEAR TECHNOLOGY

Applications:
- Constant-Frequency Voltage Regulation Even at No Load
- Peltier Driver
- Battery Tester
- Battery/Supercap Charging and Cell Balancing
- Motor Drive Power Regulator
- High Power LED Drive

Features:
- Complete Step-Down Switch Mode Power Supply
- CVCC: Constant-Voltage Constant-Current
- 2-Quadrant: Sources and Sinks Output Current
- Adjustable Output Current
- Forced Continuous Operation
- Programmable Soft-Start

The **LTM8052** is a 36V input constant frequency step-down µModule® regulator with an adjustable output current limit up to 5A. The adjustable current limit helps system designers set the maximum power delivered to a load, minimizing the output rating of the upstream AC/DC or DC/DC power supply. Additionally, the **LTM8052** is capable of sourcing or sinking current while regulating an adjustable output voltage. For simple noise filtering, the LTM8052 operates at a constant frequency throughout the entire output current range.

Mfg. Part No.	Input Voltage	Output Voltage	Selectable Switching Frequency	Package	Stock No.	Price Each 1-24
● LTM8052AEV#PBF	6V to 36V	1.2V to 24V	100kHz to 1MHz	81-LGA	**24W5388**	21.43
● LTM8052AIV#PBF	6V to 36V	1.2V to 24V	100kHz to 1MHz	81-LGA	**24W5389**	23.59

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
DC1866A	LTM8052 Eval Board	**08W0109**	65.00

(208471)

MCP1640 SYNCHRONOUS BOOST REGULATORS

RoHS Compliant Available

MICROCHIP

Features:
- Switching frequency: 500 kHz
- Operating temperature: -40°C to 85°C
- Adjustable output voltage range: 2.0V to 5.5V

Mfg. Part No.	PWM/ PFM	PWM	True Dis	Bypass
● MCP1640-I/MC	X	...	X	...
● MCP1640B-I/MC	...	X	X	...
● MCP1640C-I/MC	X	...	...	X
● MCP1640D-I/MC	...	X	...	X

Mfg. Part No.	Supply Voltage (V)	Output Current (mA)	Package	Stock No.	Price Each 1-25
● MCP1640B-I/MC	0.65 to 5.5	350	8-DFN	**24R6819**	0.61
● MCP1640C-I/MC	0.65 to 5.5	350	8-DFN	**24R6822**	0.61
● MCP1640D-I/MC	0.65 to 5.5	350	8-DFN	**24R6825**	0.61
● MCP1640-I/MC	0.65 to 5.5	350	8-DFN	**52R9885**	0.61
● MCP1640CT-I/CHY	0.65 to 5.5	350	6-SOT-23	**73R3626**	0.57
● MCP1640T-I/CHY	0.65 to 5.5	350	6-SOT-23	**73R3628**	0.57
● MCP1640BT-I/CHY	0.65 to 5.5	350	6-SOT-23	**73R3625**	0.57
● MCP1640DT-I/CHY	0.65 to 5.5	350	6-SOT-23	**73R3627**	0.57

(173701)

CHARGE PUMP DC-DC CONVERTERS

RoHS Compliant Available

MICROCHIP

- Voltage Doubler or Voltage Inverter
- High Efficiency
- Only 2 Non-Critical External Capacitors Required for Operation

Operating temperature: 0°C to +70°C, suffix EOA denotes denotes -40°C to +85°C.

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-25
● TC7660COA	V_{IN} 1.5-10V, Max I_{IN} 180µA, Active I_{OUT} (typ.): 20mA, 98% Power Efficiency	8-SOIC	**61K3539**	0.79
● TC7660CPA		8-PDIP	**61K3540**	0.79
● TC7660SCOA	Oscillator Boost from 10kHz to 45kHz, V_{IN} 1.5-12V, Max. I_{IN} 160µA, Active I_{OUT} (typ): 20mA, 98% Power Efficiency, ESD Protection	8-SOIC	**96K4048**	0.90
● TC7660SCPA			**92C6604**	0.90
● TC7662ACPA	V_{IN} 3-18V, Max. I_{IN}: 200µA, Active I_{OUT} (typ.): 40mA, Low Output Impedance 40Ω (typ.), No External Diodes Required	8-PDIP	**33C1188**	2.64
● TC7662BCOA	V_{IN} 1.5-15V, Max. I_{IN}: 180µA, Active I_{OUT} (typ.): 20mA.	8-SOIC	**33C1189**	1.90
● TC7662BEOA	Oscillator Boost from 10kHz to 35kHz, 95% Power Efficiency, Extended Temp.	8-SOIC	**75K1581**	2.22
● TC7662BCPA		8-DIP	**75K1580**	1.90

LOW NOISE, POSITIVE-REGULATED CHARGE PUMP

The **MCP1252/3** are inductorless, positive-regulated charge pump DC/DC converters with shutdown mode for further power reduction. The **MCP1252/3** offer thermal and short-circuit protection in a space saving package. Low opertationg current 80 µA typical.

Mfg. Part No.	Description	Supply Voltage	Switching Freq.	Package	Stock No.	Price Each 1-25
● MCP1252-33X50I/MS	V_{IN} 5.5, Max. I_{OUT}	5.5	650 kHz	8-MSOP	**59K0222**	1.37
● MCP1253-33X50I/MS	V_{IN} 5.5, Max. I_{OUT}	5.5	1 MHz	8-MSOP	**03H5060**	1.37

(70516)

SYNCHRONOUS BUCK REGULATOR

RoHS Compliant Available

MICROCHIP

Applications:
- Cellular telephones
- Portable computers
- Organizers / PDAs
- USB powered devices
- Digital cameras
- Portable equipment

Mfg. Part No. **MCP1603** is a high efficiency fully integrated 500 mA 2.0 MHz synchronous buck regulator ideally suited for Li-Ion/NiMH Battery powered application powered. At heavy loads, Mfg. Part No. **MCP1603** operates in the 2.0 MHz fixed frequency PWM mode which provides a low noise, low output ripple, small-size solution. When the load is reduced to light levels, Mfg. Part No. **MCP1603** automatically changes operation to a PFM mode to minimize quiescent current draw from the battery. No intervention is necessary for a smooth transition from one mode to another. These two modes of operation allow Mfg. Part No. **MCP1603** to achieve the highest efficiency over the entire operating current range.

Mfg. Part No.	Output Voltage Typ. (V)	Package	Stock No.	Price Each 1-25
● MCP1603T-120I/OS	1.2	5-TSOT	**84R5173**	0.98
● MCP1603T-180I/OS	1.8	5-TSOT	**22K1328**	0.98
● MCP1603T-250I/OS	2.5	5-TSOT	**84R5174**	0.98
● MCP1603T-330I/OS	3.3	5-TSOT	**22K1332**	0.98
● MCP1603T-ADJI/OS	Adj.	5-TSOT	**22K1320**	0.98

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
MCP1603RD-TNY	MCP1603, BUCK REGULATOR, TINY, REF DESIGN BOARD	**07P9499**	40.00

(101236)

THREE TERMINAL VOLTAGE REGULATORS

RoHS Compliant Available

•M•C•C•

Micro Commercial Components

Features
- Internal short-circuit current limiting
- Internal thermal overload protection
- No external components required

POSITIVE

Mfg. Part No.	Max Input Voltage (V)	Output Voltage (V)	Max Output Current (mA)	Package	Stock No.	Price Each 1-9
● MC7805CT-BP	30	5	1	T0-220	**69R5614**	0.62
POSITIVE LOW CURRENT						
● MC78L05BP-AP	30	5	100	T0-92	**69R5606**	0.59
● MC78L06BP-AP	30	6	100	T0-92	**69R5608**	0.59
NEGATIVE LOW CURRENT						
● MC79L06BP-AP	30	6	100	T0-92	**69R5620**	0.59
● MC79L08BP-AP	30	8	100	T0-92	**69R5622**	0.59

(197657)

HIGH VOLTAGE, LOW POWER REGULATORS

RoHS Compliant Available

NVE CORPORATION

Features:
- Reverse Battery Protection
- Excellent Immunity to Transients and ESD
- High Temperature Operation
- Small, Low Profile Surface Mount Package

Applications:
- Industrial Sensors and Controls
- Automotive Sensors and Controls

DC-Series voltage regulators are designed for harsh, noisy environments where immunity to large voltage transients and high input voltages are required. These regulators protect sensitive electronic components while providing a stable regulated supply. They are rated for high temperature operation, up to 170°C. The low-profile small footprint package features an exposed die-attach pad for direct heat sinking to the circuit board.

Mfg. Part No.	Input Voltage (V)	Output Voltage (V)	Output Current Max. (mA)	Package	Stock No.	Price Each 1-9
● DC001-10E	36	3.3	20	6-TDFN	**72W1077**	1.58
● DC002-10E	36	5	20	6-TDFN	**72W1079**	1.58

(209461)

AC-DC CONTROLLERS

RoHS Compliant Available

ON Semiconductor

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● MC33060ADG	Multi-Topology PWM Voltage-Mode Controller	14-SOIC	**71J5511**	1.29
● MC33262DG	Power Factor Controller in Critical Conduction Mode	8-SOIC	**88H4727**	1.06
● MC33262PG	Power Factor Controller in Critical Conduction Mode	8-DIP	**98H0691**	1.07
● MC33364DG	Variable-Frequency Critical-Mode Voltage-Mode Flyback Controller	16-SOIC	**42K0624**	1.82
● MC33368DG	Power Factor Controller in Critical Conduction Mode	16-SOIC	**42K0627**	2.55
● NCP1200D100R2G	Flyback PWM Current-Mode Controller	8-SOIC	**88H4976**	1.11
● NCP1200P100G	PWM Current-Mode Controller for Low-Power Univ. Off-Line Supplies, Switching Freq. = 100kHz	8-DIP	**88H4977**	1.18

➤CONTINUED➤

AC-DC CONTROLLERS (CONT.)

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
NCP1200P40G	PWM Current-Mode Controller for Low-Power Univ. Off-Line Supplies, Switching Freq. = 40kHz	8-DIP	88H4978	1.18
NCP1200P60G	PWM Current-Mode Controller for Low-Power Univ. Off-Line Supplies, Switching Freq. = 60kHz	8-DIP	88H4979	1.25
NCP1203D60R2G	Flyback PWM Current-Mode Controller	8-SOIC	45J1797	1.11
NCP1203D100R2G	PWM Current-Mode Controller for Univ. Off-Line Supplies Featuring Standby and Short Circuit Protection, Switching Freq. = 60kHz	8-SOIC	98H0874	1.11
NCP1217D100R2G	Enhanced PWM Current-Mode Controller for High-Power Universal Off-Line Supplies	8-SOIC	71J6570	1.26
	Secondary Side Synchronous Flyback Controller			
UC2842BD1R2G	High performance Current Mode controller	8-SOIC	67H7336	0.66
UC2842BDG	Current Mode PWM Control Circuit	14-SOIC	70K5973	0.64
UC2843BNG	Current Mode PWM Control Circuit	8-PDIP	45J2366	0.72
UC3842BNG	High Performance Current Mode Controller, Oscillator Frequency Guaranteed at 250kHz	8-DIP	88H5155	0.74
UC3843BDG	Current Mode PWM Control Circuit	14-SOIC	70K6019	0.60
UC3843BD1G	Current Mode PWM Control Circuit	8-SOIC	45J2379	0.71
UC3843BVD1G	Current Mode PWM Control Circuit	8-SOIC	71J8473	0.86
UC3843BVDG	Current Mode PWM Control Circuit	14-SOIC	70K6020	0.86
UC3844BD1G	Current Mode PWM Control Circuit	3-TO-225AA	45J2384	0.60
UC3844BDG	Current Mode PWM Control Circuit	14-SOIC	70K6021	0.64
UC3844BNG	High Performance Current Mode Controller Trimmed Oscillator for Precise Frequency Control	8-DIP	45J2386	0.75
UC3844BVD1R2G	Current Mode PWM Control Circuit	8-SOIC	42K2721	0.80
UC3845BDG	Current Mode PWM Control Circuit	14-SOIC	42K2722	0.64
UC3845BNG	Current Mode PWM Control Circuit	8-DIP	88H5157	0.70
UC3845BVD1G	Current Mode PWM Control Circuit	8-SOIC	42K2725	0.86
NCP1351ADR2G	Current Mode PWM Control Circuit	8-SOIC	01P0407	1.16
UC3843BVD1R2G	Current Mode PWM Control Circuit	8-SOIC	01P0463	0.75
NCP1230D100R2G	Current Mode PWM Control Circuit	8-SOIC	77M8942	1.23
NCP1200D60R2G	Current Mode PWM Control Circuit	8-SOIC	38X6198	1.11

* Not recommended for new designs
(74566)

CONSTANT CURRENT SWITCHING REGULATOR

RoHS Compliant Available — ON Semiconductor

Mfg. Part No.	Supply Voltage Max. (V)	Iout Max. (A)	Vout Max. (V)	Switching Regulator Type	Pkg.	Stock No.	Price Each 1-2499
NCP3065DR2G	40	1.5	250	Step Down/Step Up (Buck/Boost)	8-SOIC	57M9798	0.62
NCP3065MNTXG	40	1.5	250	Step Down/Step Up (Buck/Boost)	8-DFN	57M9799	1.70

(102958)

DC/DC CONVERTERS

RoHS Compliant Available — ON Semiconductor

Features:
- Soft start, slew rate control
- Thermal overload shutdown protection
- Constant high frequency (2MHz) operation
- Shutdown current less than 1µA

Mfg. Part No.	Output Voltage (V)	Output Current (mA)	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
CAT3200TDI-GT3	6	100	4.5	6-TSOT-23	08R5251	1.62

(148506)

DC-DC CONVERTERS

RoHS Compliant Available — ON Semiconductor

BUCK (STEP DOWN)

Mfg. Part No.	Supply Voltage Max. (V)	Output Current Max. (A)	Switching Frequency (kHz)	Package	Stock No.	Price Each 1-9
CS51411EDR8G	40	1.5	260	8-SOIC	26K3572	2.35
CS51413EDR8G	40	1.5	520	8-SOIC	45J0653	2.44
CS51414EDR8G	40	1.5	520	8-SOIC	26K3573	2.44
LV5068V-MPB-H	40	0.5	2200	16-SSOP	45W3316	3.13
LV5068V-TLM-H	40	0.5	2200	16-SSOP	46W0870	3.56
LM2575T-3.3G	40	1	52	5-TO-220	41K9850	2.30
LM2575T-5G	40	1	52	3-TO-220	26K3600	2.45
LM2575T-ADJG	40	1	52	3-TO-220	26K3599	2.42
LM2576T-ADJG	40	3	52	3-TO-220	26K3602	2.18

CONTINUED

DC-DC CONVERTERS (CONT.)

Mfg. Part No.	Supply Voltage Max. (V)	Output Current Max. (A)	Switching Frequency (kHz)	Package	Stock No.	Price Each 1-9
MC33167TG	40	5	72	5-TO-220	45J1171	4.29
MC34167TG	40	5	72	5-TO-220	71J5543	4.18
NCP1529ASNT1G	5.5	1	1700	5-TSOP	75M5084	0.90
CS51414GD8G	40	1.5	520	8-SOIC	26K3576	2.21
NCP1529MUTBG	5.5	1	1700	6-UDFN	95M6817	0.99
NCP1532MUAATXG	5.5	1.6	2250	10-DFN	95M6818	0.68
BOOST (STEP UP)						
NCP1400ASN33T1G	5.5	0.1	180	5-SOT-23	42K1839	0.88
NCP1400ASN50T1G	5.5	0.1	180	5-SOT-23	98H0880	0.82
NCP1402SN33T1G	5.5	0.2	200	5-SOT-23	45J1846	0.86
NCP1402SN50T1G	5.5	0.2	200	5-SOT-23	98H0882	0.86
BUCK/BOOST (STEP DOWN/STEP UP)						
MC33166TG	40	3	72	5-TO-220	45J1170	4.04
MC34163DWG	40	3.4	50	16-WSOIC	26K4047	3.36
MC34163PG	40	3.4	50	16-DIP	71J5539	3.36
MC34166TG	40	3	72	5-TO-220	42K0666	2.73
BUCK/BOOST/INVERTING (STEP DOWN/STEP UP/INVERTING)						
MC33063ADG	40	3	100	8-SOIC	88H4720	0.74
MC33063ADR2G	40	3	100	8-SOIC	88H4721	0.80
MC33063AP1G	40	3	100	8-DIP	45J1156	0.98
MC34063ADG	40	3	100	8-SOIC	45J1208	0.69
MC34063AP1G	40	3	100	8-DIP	67H6703	0.78
NCP1595AMNR2G	5.5	1.5	1000	6-DFN	38X6199	1.01

(84223)

SWITCHING REGULATORS

RoHS Compliant Available — ON Semiconductor

Features:
- Adjustable 200-2200 kHz Operation allows optimization of efficiency and size
- 0.8 ±1.5% FB reference voltage for good system level accuracy across temperature
- External soft-start
- Enable/Disable Capability provides ability to turn off each channel into a low power state
- Hiccup overload protection
- Low shutdown power (Iq < 100 uA)
- Applications:
  LCD-TV logic board
  Set top box (STB)
  xDSL and cable modem

ON Semiconductor Introduces it's New Family of PWM Buck Regulators Featuring Unique Auto-Tracking and Sequencing Capabilities.

The dual 2.0 A NCP3120 and NCP3122 and dual 3.0 A NCP3121 and NCP3123 from ON Semiconductor are a pin equivalent family of dual output buck regulators. The converters reduce input capacitance requirements by switching 180 degrees out-of-phase at a frequency of 200 kHz up to 2.2 MHz. Switching frequency is adjustable by an external resistor. A unique built-in auto-tracking and sequencing feature allows exact timing and control over both outputs and several devices can be daisy chained together to control multiple outputs. Programmable options include sequential, ratio-metric and tracking. Input voltage for +5 V to +12 V designs and output voltages down to 0.8 V. Protection features include cycle-by-cycle current limit and under voltage lockout (UVLO).

Mfg. Part No.	Supply Voltage Max. (V)	Current (A)	Pkg.	Stock No.	Price Each 1-9
NCP1072P065G	8.6	0.25	7-DIP	45W8737	1.30
CS51413GD8G	40	1.5	8-SOIC	41K9679	2.21
LM2574N-5G	40	0.5	8-DIP	70K2987	1.76
LM2575TV-ADJG	40	1	5-TO-220	98H0554	2.29
LM2576D2T-ADJG	40	3	5-D2PAK	41K9853	2.26
LM2576TV-ADJG	40	3	5-TO-220	98H0558	2.36
MC34167TVG	40	5	5-TO-220	98H0703	3.31

EVALUATION BOARD

Mfg. Part No.	Description	Stock No.	Price Each Each
NCP1072DIPGEVB	NCP072 Eval. Board	87W7345	53.34

(116668)

STEP-DOWN REGULATORS

RoHS Compliant Available — SEMTECH

Features:
- Input Voltage: 2.9V to 5.5V
- Temperature range: -40 to +85°C
- Over-temperature protection

Mfg. Part No.	Output Current	Output Voltage Max (V)	Package	Stock No.	Price Each 1-24
SC202AMLTRT	500 mA	3.3	13-MLPQ	58T4493	2.08
SC286ULTRT	4 A	3.3	28-MLPQ	58T4495	5.26
SC186ULTRT	4 A	3.3	16-MLPQ	58T4491	2.50

(203964)

SWITCHING REGULATORS & CONVERTERS

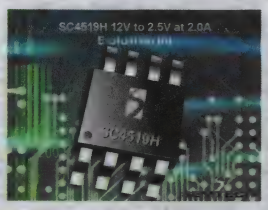
STEP-DOWN SWITCHING REGULATORS

RoHS Compliant Available

SEMTECH

Features
- Integrated 1.5 Amp Switch
- 1.25MHz Frequency of Operation
- Synchronizable to Higher Frequency up to 2MHz
- 6µA Low Shutdown Current
- Current Mode Controller

Applications
- XDSL Modems
- CPE Equipment
- DC-DC Point of Load Applications
- Portable Equipment



SWITCHING REGULATORS

Mfg. Part No.	Output Voltage Max. (V)	Output Current Max. (A)	Switching Frequency Max. (kHz)	Package	Tape Cut Stock No.	Tape Cut Price Each 1-24
● SC4517AIMS18TRT	1.8	1.5	1600	8-MSOP	36K7116	1.87
● SC4517AIMS50TRT	5	1.5	1600	8-MSOP	36K7122	1.87
● SC4519HSETRT	-999	3	1200	8-SOIC	18M7662	3.07
● SC4521SETRT	-999	3	600	8-SOIC	18M7669	2.63
● SC4525DSETRT	28	3	350	8-SOIC	29T5739	1.43
● SC4525CSETRT	28	3	2000	8-SOIC	29T5737	1.56
● SC4524DSETRT	30	2	2000	8-SOIC	29T5735	1.32
● SC4524CSETRT	30	2	2000	8-SOIC	29T5733	1.54
● SC4525DSETRT	28	3	350	8-SOIC	29T5740	0.75
● SC185QULTRT	3.3	4	1725	12-MLPQ	25T0876	1.31
● SC185QULTRT	3.3	4	1725	12-MLPQ	25T0876	1.31
● SC185QULTRT	3.3	4	1725	12-MLPQ	25T0875	2.50
● SC185LULTRT	2.5	4	1725	12-MLPQ	25T0874	1.31
● SC185LULTRT	2.5	4	1725	12-MLPQ	25T0873	2.50
● SC185JULTRT	1.8	4	1725	12-MLPQ	25T0872	1.31
● SC185JULTRT	1.8	4	1725	12-MLPQ	25T0871	2.50
● SC185HULTRT	1.5	4	1725	12-MLPQ	25T0870	1.31
● SC185HULTRT	1.5	4	1725	12-MLPQ	25T0869	2.50
● SC185EULTRT	1.2	4	1725	12-MLPQ	25T0868	1.31
● SC185EULTRT	1.2	4	1725	12-MLPQ	25T0867	2.50
● SC185BULTRT	1	4	1725	12-MLPQ	25T0866	1.31
● SC185BULTRT	1	4	1725	12-MLPQ	25T0865	2.50
● SC197ULTRT	3.3	0.5	3500	18-MLPQ	44T9996	2.42
● SC4525CSETRT	28	3	2000	8-SOIC	29T5738	0.82
● SC4524DSETRT	30	2	2000	8-SOIC	29T5736	0.69
● SC4524CSETRT	30	2	2000	8-SOIC	29T5734	0.81

EVALUATION BOARDS

Mfg. Part No.	For Use With	Configuration	Stock No.	Price Each 1-99
● SC4517EVB-1	SC4517A Switching Regulator	$12V_{IN}$ / $3.3V_{OUT}$ / $1A_{OUT}$	18M7651	35.71
● SC4517EVB-2	SC4517A Switching Regulator	$12V_{IN}$ / $5V_{OUT}$ / $0.5A_{OUT}$	18M7652	35.72
● SC4519HEVB-1	SC4519H Switching Regulator	$12V_{IN}$ / $5V_{OUT}$ / $2.5A_{OUT}$	18M7657	35.71
● SC4519HEVB-2	SC4519H Switching Regulator	$12V_{IN}$ / $1.8V_{OUT}$ / $2A_{OUT}$	18M7658	35.71
● SC4519HEVB-3	SC4519H Switching Regulator	$12V_{IN}$ / $1.2V_{OUT}$ / $2A_{OUT}$	18M7659	35.71
● SC4519HEVB-4	SC4519H Switching Regulator	$12V_{IN}$ / $2.5V_{OUT}$ / $2A_{OUT}$	18M7660	35.71
● SC4519HEVB-5	SC4519H Switching Regulator	$12V_{IN}$ / $3.3V_{OUT}$ / $2A_{OUT}$	18M7661	35.71
● SC4521EVB-1	SC4521 Switching Regulator	$18V_{IN}$ / $12V_{OUT}$ / $0.7A_{OUT}$	18M7665	35.71
● SC4521EVB-2	SC4521 Switching Regulator	$5V_{IN}$ / $1V_{OUT}$ / $2A_{OUT}$	18M7666	35.71
● SC4521EVB-3	SC4521 Switching Regulator	13V-$21V_{IN}$ / $3.3V_{OUT}$ / $1A_{OUT}$	18M7667	35.71
● SC4521EVB-4	SC4521 Switching Regulator	$12V_{IN}$ / $3.3V_{OUT}$ / $1A_{OUT}$	18M7668	35.71

(85008)

80mA CHARGE PUMP VOLTAGE CONVERTER

RoHS Compliant Available

SEMTECH

Features
- Short Circuit and Over-Temperature Protection
- 140µA Typical Input Current @ No Load
- Shutdown Current <1µA
- Operating Temperature Range: -40°C to 85°C

Applications
- Cellular Phones
- Handheld Devices
- LCD Displays

Mfg. Part No.	Output Current Max. (mA)	Input Voltage Max. (V)	Package	Stock No.	Tape Cut Price Each 1-24
● SC632AULTRT	275	5.5	8-MLPQ	58T4498	1.12
● SC630AULTRT	400	5.5	8-MLPQ	58T4496	1.12

(89646)

ECOSPEED SYNCHRONOUS SWITCHING REGULATORS

RoHS Compliant Available

SEMTECH

Applications:
- Networking Equipment, Embedded Systems
- Medical Equipment, Office Automation
- Instrumentation, Portable Systems
- Consumer Devices (DTV, Set-top Box, etc)
- 5V POL Converters

Features:
- High Output Accuracy
- Small Ceramic Capacitors
- Power Good Pin (Open-Drain)
- Internal Soft start
- Smart Power Save

Mfg. Part No.	Supply Voltage Max. (V)	Output Voltage Max (V)	Output Current (A)	Package	Stock No.	Price Each 1-24
● SC171MLTRT	5.5	5.225	1	10-MLPD	29T6040	1.80
● SC172MLTRT	5.5	5.225	2	10-MLPD	29T6042	1.90
● SC173AMLTRT	5.5	5.225	3	10-MLPD	31T1640	2.19

(194891)

SWITCHING REGULATOR

RoHS Compliant Available

ST

Mfg. Part No.	DC Input Voltage (V) Min.	DC Input Voltage (V) Max.	Output Current (A) Max.	Regulated Output Voltage (V) Min.	Regulated Output Voltage (V) Max.	Switch. Freq. (kHz) Max.	Package	Stock No.	Price Each 1-9
● L296	9	50	4.0	5.1	40	200	15-MULTIWATT	89K0735	7.11
● L4962/A	9	50	1.5	5.1	40	150	16-DIP	89K0748	3.46
● MC34063ACN	3	50	1.5	-999	-999	100	8-DIP	89K1433	0.40
● MC34063ECN	3	50	1.5	-999	-999	100	8-DIP	89K1434	0.75
● L4972A	12	50	2.0	5.1	40	200	20-DIP	89K1326	5.15
● L4974A	12	50	3.5	5.1	40	200	20-DIP	89K1327	11.60
● L4975A	12	50	5.0	5.1	40	500	15-Multiwatt	89K1328	27.44
● L4970A	12	50	10	5.1	40	500	15-Multiwatt	89K1324	20.36

(83931)

3A STEP-DOWN SWITCHING REGULATOR DEMONSTRATION BOARDS

RoHS Compliant Available

ST

Features:
- 3A DC output current
- 2.9V to 18V input voltage
- Output voltage adjustable from 0.6V to 16V
- 250 kHz switching frequency, programmable up to 1 MHz
- Internal soft-start and inhibit
- Low dropout operation: 100% duty cycle
- Zero-load current operation
- Overcurrent and thermal protection
- VFQFPN8 3 mm x 3 mm package or HSOP8 for the L5987A

The EVAL5987/A demonstration board provides the design engineer with a fully functional stepdown switching regulator with an output current of up to 3 A. The board integrates STMicroelectronics' L5987/A step-down switching regulator, together with all the external components required for a typical application. The rated voltage of the input capacitor and the Schottky diode rectifier repetitive peak reverse voltage are both 25 V, making the board capable of covering the entire 2.9 V - 18 V input voltage range of the L5987/A device. The board features an external resistor divider (R1 and R2) designed for an output voltage of 1.8 V. The output voltage can be set to a level from 0.6 V up to the input voltage. The compensation network on the demonstration board allows the use of MLCC as output filter to keep the loop stable. The inductor saturation current and forward current of the Schottky diode are within the current limit values. The switching frequency on the demonstration board is set to 500 kHz by means of the R5 resistor connected to pin Fsw.

Mfg. Part No.	Description	Stock No.	Price Each
EVAL5987	Step-Down Regulator Eval. Board; Supported Families:L5987; Features:Internal Soft-Start & Inhibit, Zero-Load Current Operation, Over-Current & Thermal Protection	09R4600	13.13
● EVAL5987A	Step-Down Regulator Eval. Board; Supported Families:L5987A; Features:Internal Soft-Start & Inhibit, Zero-Load Current Operation, Over-Current & Thermal Protection	09R4601	16.80

(191891)

STEP-DOWN DC-TO-DC CONVERTERS

RoHS Compliant Available

ST

Type	DC Input Min (V)	DC Input Max (V)	Output Voltage Max (V)	Output Current (mA)	Eff. (typ) (%)	Stock No.	Price Each 1-9
● L5972D013TR	4.4	36	35	2	90	89K0526	3.39
● L5973D013TR	4.4	36	35	2.5	90	89K0527	4.77
● L6902D	8	36	35	1	85	89K0528	5.11

(83913)

VERTICAL INTELLIGENT POWER ENHANCED REGULATOR (VIPer)

RoHS Compliant Available

ST's **VIPer series** includes a PWM controller, a power MOSFET, an integrated high voltage current source and built-in protection. VIPer devices are used to build AC/DC converter in Buck or Buck-Boost or Fly-back topologies reducing the number of components by a half against a discrete approach. The VIPer family represents the easiest solution to comply with the "Blue Angel" and " Energy Star" Eco Norms, with extremely low total power consumption from the mains when the system is in stand-by mode. Can be used in video systems, power supplies and much more.

Mfg. Part No.	Max. Supply Voltage (Vdd)	Drain Source Withstand Voltage (Vdss)	Max. Output Current (A)	On State Drain To Source Resistance (Ohm)	Switching Freq. (kHz)	Stock No.	Price Each 1-9
VIPER50A-E	15	700	1.5	5.7	200	89K1787	6.20
VIPER100A-E	15	700	3	2.8	200	89K1786	7.22
VIPER100-E	15	620	3	2.5	200	89K1785	5.90

(83934)

BUCK-BOOST DC/DC CONVERTERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Supply Voltage Max. (V)	Output Voltage (V)	Output Current (A)	Package	Stock No.	Price Each 1-9
TPS63000DRCR	5.5	5.5	1.8	10-SON	85K1709	2.99
TPS63000DRCT	5.5	5.5	1.2	10-SON	22M1823	3.44
TPS63001DRCR	5.5	3.3	1.2	10-SON	85K1711	2.99
TPS63001DRCT	5.5	3.3	1.2	10-SON	22M1824	3.44
TPS63002DRCR	5.5	5	1.8	10-SON	85K1713	2.99
TPS63002DRCT	5.5	5	1.2	10-SON	22M1825	3.44
TPS63010YFFT	5.5	5.5	1.2	20-DSBGA	14N8521	3.70
TPS63020DSJT	5.5	5.5	4	14-VSON	72R7076	5.23
TPS63030DSKT	5.5	5.5	1	10-SON	19P7478	2.97
TPS63031DSKT	5.5	3.3	1	10-SON	19P7479	2.97

EVALUATION MODULES

Mfg. Part No.	Description	Stock No.	Price Each
TPS63000EVM-148	Evaluation Module for the TPS63000 device family	84K3833	49.98
TPS63020EVM-487	Evaluation Module for the TPS63020 device family	74R6638	50.00

(4332)

ANALOG BOOST SIMPLE SWITCHER VOLTAGE REGULATOR

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Max. I_{OUT} (A)	Max. V_{IN} (V)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
LM2577T-12/NOPB	3	40	12	5-TO-220	41K3717	6.32

(175883)

DC/DC CONTROLLERS (EXTERNAL SWITCH)

RoHS Compliant Available

TEXAS INSTRUMENTS

TI analog DC/DC Controllers (External Switch) Power Management products are a subset of analog Non-Isolated Switching DC/DC Regulators solutions.

Mfg. Part No.	Supply Voltage Max. (V)	Output Voltage Max. (V)	Output Current Max. (A)	Package	Stock No.	Price Each 1-9
TPS40055PWP	40	35	20	16-HTSSOP	95H4567	4.44
TPS40055PWPR	40	35	20	16-HTSSOP	95H4568	3.70
TPS40056PWP	40	35	20	16-HTSSOP	88K7068	4.61
TPS40057PWP	40	35	20	16-HTSSOP	95H4569	4.44
TPS40170RGYT	60	8	20	20-VQFN	40T4046	5.78
TPS40190DRCR	15	12.75	20	10-SON	54K1659	2.45
TPS40190DRCT	15	12.75	20	10-SON	54K1660	2.83
TPS40200D	52	16	3	8-SOIC	80K3399	2.38
TPS40200DRG4	52	46.8	3	8-SOIC	59M7211	2.00
TPS40210DGQ	52	260	6	10-MSOP	95M0046	2.61
TPS40210DRCT	52	260	6	10-SON	94T6070	2.50
TPS40422RHAT	20	5.6	60	40-VQFN	88T7692	7.10
TPS5130PT	28	5.5	...	48-LQFP	83C7639	7.03
TPS51116RGET	28	3	25	24-QFN	33K7619	2.87
TPS51163DRCT	13.2	35	...	10-SON	10R6152	3.28
TPS51216RUKT	28	1.8	2	20-WQFN	43W4737	2.75
TPS51218DSCT	28	2.6	20	10-SON	10R2208	3.58
TPS51513RHBT	28	1.05	25	32-QFN	34R2717	3.58
TPS51621RHAT	28	1.5	...	40-QFN	51R6144	4.54

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DC/DC CONTROLLERS (EXTERNAL SWITCH) (CONT.)

Mfg. Part No.	Supply Voltage Max. (V)	Output Voltage Max. (V)	Output Current Max. (A)	Package	Stock No.	Price Each 1-9
TPS59621RHAT	28	1.5	...	40-VQFN	78R4085	5.01
TPS62122DRVT	15	5.5	75	6-SON	91R2095	2.04
TPS62205DBVT	6	2.5	300	5-SOT-23	35K1333	1.23
TPS64203DBVT	6.5	6.5	3	6-SOT-23	82H5889	1.77

EVALUATION MODULES

Mfg. Part No.	Description	Stock No.	Price Each
TPS51218EVM-496	Evaluation Module for the TPS51218 Step Down Converter	63R9633	50.00
TPS40170EVM-578	Evaluation Module for the TPS40170 Step Down Converter	40T5428	50.00
TPS51513EVM-549	Evaluation Module for the TPS51513 Single Phase Synchronous Buck Controller for General IC Vcore Applications	64R8565	50.00

(167462)

SYNCHRONOUS SIMPLE SWITCHER® BUCK REGULATORS

RoHS Compliant Available

TEXAS INSTRUMENTS

Type	Supply Voltage (V)	Output Current (A)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
LM2267X SERIES						
LM22670MRE-5.0/NOPB	42	3	5	8-PSOP	08P5273	5.08
LM22670MRE-ADJ/NOPB	42	3	Adjustable	8-PSOP	08P5272	5.08
LM22670TJE-5.0/NOPB	42	3	5	7-TO-263	08P5275	5.08
LM22670TJE-ADJ/NOPB	42	3	Adjustable	7-TO-263	08P5274	5.08
LM22671MR-ADJ/NOPB	42	0.5	Adjustable	8-PSOP	34P4764	3.72
LM22671MRE-ADJ/NOPB	42	0.5	Adjustable	8-PSOP	08P5276	3.58
LM22672MRE-5.0/NOPB	42	1	5.1	8-PSOP	19P7830	2.92
LM22672MRE-ADJ/NOPB	42	1	Adjustable	8-PSOP	08P5278	4.39
LM22673MRE-5.0/NOPB	42	3	5	8-PSOP	08P5280	5.08
LM22673MRE-ADJ/NOPB	42	3	Adjustable	8-PSOP	08P5279	5.08
LM22673TJE-5.0/NOPB	42	3	5	7-TO-263	08P5282	5.08
LM22674MRE-5.0/NOPB	42	0.5	5	8-PSOP	08P5284	3.44
LM22674MRE-ADJ/NOPB	42	0.5	Adjustable	8-PSOP	08P5283	3.44
LM22675MRE-5.0/NOPB	42	1	5	8-PSOP	08P5286	4.25
LM22675MRE-ADJ/NOPB	42	1	Adjustable	8-PSOP	08P5285	4.25
LM22676MRE-5.0/NOPB	42	3	5	8-PSOP	08P5288	4.94
LM22676MRE-ADJ/NOPB	42	3	Adjustable	8-PSOP	08P5287	4.94
LM22676TJE-5.0/NOPB	42	3	5	7-TO-263	08P5290	4.94
LM22676TJE-ADJ/NOPB	42	3	Adjustable	7-TO-263	08P5289	4.94
LM22677TJE-5.0/NOPB	42	5	5	7-TO-263	08P5292	6.12
LM22677TJE-ADJ/NOPB	42	5	Adjustable	7-TO-263	08P5291	6.12
LM22678TJE-5.0/NOPB	42	5	5	7-TO-263	08P5294	5.99
LM22678TJE-ADJ/NOPB	42	5	Adjustable	7-TO-263	08P5293	5.99
LM22679TJE-5.0/NOPB	42	5	5	7-TO-263	08P5296	6.59
LM22679TJE-ADJ/NOPB	42	5	Adjustable	7-TO-263	08P5295	6.59
LM2557X SERIES						
LM25574MT/NOPB	42	0.5	40	16-TSSOP	32M0988	3.87
LM25575MH/NOPB	42	1.5	40	16-TSSOP EXP PAD	32M0992	4.58
LM25576MH/NOPB	42	3	40	20-TSSOP EXP PAD	32M0997	5.73
LM258X SERIES						
LM2585S-ADJ/NOPB	40	3	60	5-TO-263	41K3722	7.65
LM2585T-ADJ/NOPB	40	3	60	5-TO-220	41K3730	6.38
LM2586S-ADJ	40	3	60	5-TO-263	07B6069	10.85
LM2587S-ADJ/NOPB	40	5	60	5-TO-263	41K3746	10.07
LM2587T-ADJ/NOPB	40	5	60	5-TO-220	41K3754	8.39
LM2588SX-ADJ/NOPB	40	5	60	7-TO-263	41K3762	9.03
LM267X SERIES						
LM2670S-ADJ/NOPB	40	3	37	3-TO-263	41K4030	5.30
LM2670T-ADJ/NOPB	40	3	37	7-TO-220	41K4046	4.42
LM2671M-3.3/NOPB	40	0.5	3.3	8-NSOIC	41K4060	3.72
LM2671M-5.0/NOPB	40	0.5	5	8-NSOIC	41K4061	3.72
LM2671MX-5.0/NOPB	40	0.5	5	8-SO	41K4065	3.10
LM2672M-5.0/NOPB	40	1	5	8-SO	41K4081	4.73
LM2672M-ADJ/NOPB	40	1	37	8-SOIC	41K4078	4.73
LM2672MX-5.0/NOPB	40	1	5	8-SO	41K4085	3.94
LM2672MX-ADJ/NOPB	40	1	37	8-SO	41K4082	3.94
LM2673S-5.0/NOPB	40	3	5	7-TO-263	41K4093	5.30
LM2673S-ADJ/NOPB	40	3	37	7-TO-263	41K4090	5.30
LM2673SD-5.0/NOPB	40	3	5	14-LLP	41K4097	5.08
LM2674M-12/NOPB	40	0.5	12	8-SOIC	41K4119	3.44
LM2674M-3.3/NOPB	40	0.5	3.3	8-NSOIC	41K4120	3.44

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SYNCHRONOUS SIMPLE SWITCHER® BUCK REGULATORS (CONT.)

LM267X SERIES

Type	Supply Voltage (V)	Output Current (A)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
● LM2674M-ADJ/NOPB	40	0.5	37	8-SOIC	41K4118	3.44
● LM2674MX-5.0/NOPB	40	0.5	5	8-SO	41K4125	2.87
● LM2674N-5.0/NOPB	40	0.5	5	8-DIP	41K4129	2.87
● LM2675M-12/NOPB	40	1	12	8-SOIC	41K4139	4.58
● LM2675M-3.3/NOPB	40	1	3.3	8-SO	41K4140	4.58
● LM2675M-5.0/NOPB	40	1	5	8-NSOIC	41K4141	4.58
● LM2675M-ADJ/NOPB	40	1	37	8-SOIC	41K4138	4.58
● LM2675MX-5.0/NOPB	40	1	5	8-SO	41K4145	3.82
● LM2675MX-ADJ/NOPB	40	1	37	8-SO	41K4142	3.82
● LM2675N-5.0/NOPB	40	1	5	8-DIP	41K4149	3.82
● LM2675N-ADJ/NOPB	40	1	37	8-DIP	41K4146	3.82
● LM2676S-12/NOPB	40	3	12	7-TO-263	41K4151	5.16
● LM2676S-5.0/NOPB	40	3	5	7-TO-263	41K4153	5.16
● LM2676S-ADJ/NOPB	40	3	37	7-TO-263	41K4150	5.16
● LM2676SD-5.0/NOPB	40	3	5	14-LLP	41K4157	4.94
● LM2676SD-ADJ/NOPB	40	3	37	14-LLP	41K4154	4.94
● LM2676SX-3.3/NOPB	40	3	3.3	7-TO-263	41K4164	4.30
● LM2676SX-5.0/NOPB	40	3	5	7-TO-263	41K4165	4.30
● LM2676SX-ADJ/NOPB	40	3	37	7-TO-263	41K4162	2.56
● LM2676T-12/NOPB	40	3	12	7-TO-220	41K4167	4.30
● LM2676T-ADJ/NOPB	40	3	37	7-TO-220	41K4166	4.30
● LM2677S-3.3/NOPB	40	5	3.3	7-TO-263	41K4172	6.44
● LM2677SD-ADJ/NOPB	40	5	37	14-LLP	41K4174	6.18
● LM2677T-ADJ/NOPB	40	5	37	7-TO-220	41K4186	5.37
● LM2678S-3.3/NOPB	40	5	3.3	7-TO-263	41K4191	6.30
● LM2678S-5.0/NOPB	40	5	5	7-TO-263	41K4192	6.30
● LM2678S-ADJ/NOPB	40	5	37	7-TO-263	28K1912	6.30
● LM2678SD-ADJ/NOPB	40	5	37	14-LLP	41K4193	6.04
● LM2678T-12/NOPB	40	5	12	7-TO-220	41K4206	5.25
● LM2678T-5.0/NOPB	40	5	5	7-TO-220	41K4208	5.25
● LM2678T-ADJ/NOPB	40	5	37	7-TO-220	41K4205	5.25
● LM2679S-ADJ/NOPB	40	5	37	7-TO-263	41K4209	6.44
● LM2679T-ADJ/NOPB	40	5	37	7-TO-220	41K4225	5.37
LM285X SERIES						
● LM2852XMXA-3.3/NOPB	5.5	2	3.3	14-TSSOP	65K5973	4.30
● LM2852YMXA-1.2/NOPB	5.5	2	1.2	14-TSSOP	41K4426	4.30
● LM2853MH-1.2/NOPB	5.5	3	1.2	14-TSSOP EX PAD	32M1024	5.01
● LM2853MH-3.3/NOPB	5.5	3	3.3	14-TSSOP EX PAD	32M1029	5.01
LM257X/LM259X SERIES						
● LM2574HVM-5.0/NOPB	60	0.5	5	14-WSOIC	41K3589	4.15
● LM2574HVN-12/NOPB	60	0.5	12	8-DIP	41K3596	4.65
● LM2574HVN-5.0/NOPB	60	0.5	5	8-DIP	41K3599	4.65
● LM2574M-3.3/NOPB	40	0.5	3.3	14-WSOIC	41K3603	2.52
● LM2574M-5.0/NOPB	40	0.5	5	14-WSOIC	41K3604	2.52
● LM2574M-ADJ/NOPB	40	0.5	37	14-SOIC	41K3600	2.52
● LM2574N-12/NOPB	40	0.5	12	8-DIP	41K3611	2.02
● LM2574N-5.0/NOPB	40	0.5	5	8-DIP	41K3614	2.02
● LM2574N-ADJ/NOPB	40	0.5	Adjustable	8-DIP	41K3610	2.02
● LM2575HVS-5.0/NOPB	60	1	5	5-TO-263	41K3631	5.16
LM2575HVS-ADJ	60	1	Adjustable	5-TO-263	07B5964	6.30
● LM2575HVT-5.0/NOPB	60	1	5	5-TO-220	41K3641	5.01
● LM2575HVT-ADJ/NOPB	60	1	Adjustable	5-TO-220	41K3637	5.01
● LM2575M-5.0/NOPB	40	1	5	14-WSOIC	41K3646	2.83
● LM2575N-5.0/NOPB	40	1	5	16-MDIP	41K3655	2.92
● LM2575S-5.0/NOPB	40	1	5	5-TO-263	41K3660	2.92
● LM2575S-ADJ/NOPB	40	1	Adjustable	5-TO-263	41K3656	2.92
● LM2575T-12/NOPB	40	1	12	5-TO-220	41K3667	2.48
● LM2575T-5.0/NOPB	40	1	5	5-TO-220	41K3670	2.48
● LM2575T-ADJ/NOPB	40	1	Adjustable	5-TO-220	41K3666	2.48
● LM2576HVS-5.0/NOPB	60	3	5	5-TO-263	41K3675	6.59
● LM2576HVS-ADJ/NOPB	60	3	Adjustable	5-TO-263	41K3671	6.59
● LM2576HVT-12/NOPB	60	3	12	5-TO-220	41K3682	5.49
● LM2576HVT-5.0/NOPB	60	3	5	5-TO-220	41K3685	5.49
● LM2576HVT-ADJ/NOPB	60	3	Adjustable	5-TO-220	41K3681	5.49
● LM2576S-3.3/NOPB	40	3	3.3	5-TO-263	41K3689	3.39
● LM2576S-5.0/NOPB	40	3	5	5-TO-263	41K3690	3.39
● LM2576S-ADJ/NOPB	63	3	Adjustable	5-TO-263	41K3686	3.39
● LM2576T-12/NOPB	40	3	12	5-TO-220	41K3697	2.83
● LM2576T-3.3/NOPB	40	3	3.3	5-TO-220	41K3699	2.83
● LM2576T-5.0/NOPB	40	3	5.2	5-TO-220	41K3700	2.83
● LM2576T-ADJ/NOPB	40	3	Adjustable	5-TO-220	41K3696	2.83
● LM2577S-ADJ/NOPB	40	3	Adjustable	5-TO-263	41K3710	6.76

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SYNCHRONOUS SIMPLE SWITCHER® BUCK REGULATORS (CONT.)

LM257X/LM259X SERIES

Type	Supply Voltage (V)	Output Current (A)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
● LM2577T-ADJ/NOPB	40	3	Adjustable	5-TO-220	41K3716	6.32
● LM2578AM/NOPB	40	0.75	Adjustable	8-SOIC	41K3719	4.09
● LM2591HVS-5.0/NOPB	60	1	5	5-TO-263	41K3782	5.73
● LM2591HVS-ADJ/NOPB	60	1	Adjustable	5-TO-263	41K3780	5.73
● LM2592HVS-5.0/NOPB	60	2	5	5-TO-263	41K3791	6.12
● LM2592HVT-5.0/NOPB	60	2	5	5-TO-220	41K3797	5.73
● LM2592HVT-ADJ/NOPB	60	2	Adjustable	5-TO-220	41K3795	5.73
● LM2593HVS-5.0/NOPB	60	2	5	7-TO-263	41K3800	6.50
● LM2593HVS-ADJ/NOPB	60	2	Adjustable	7-TO-263	41K3798	6.50
● LM2594HVM-12/NOPB	60	0.5	12	8-NSOIC	41K3808	5.30
● LM2594HVM-3.3/NOPB	60	0.5	3.3	8-NSOIC	41K3809	5.30
● LM2594HVM-5.0/NOPB	60	0.5	5	8-NSOIC	41K3810	5.30
● LM2594M-3.3/NOPB	40	0.5	3.3	8-NSOIC	41K3821	3.44
LM2594M-5.0	40	0.5	5	8-NSOIC	07B6108	4.71
● LM2595S-5.0/NOPB	40	1	5	5-TO-263	41K3833	4.58
● LM2595S-ADJ/NOPB	40	1	Adjustable	5-TO-263	41K3830	4.58
● LM2595T-12/NOPB	40	1	12	5-TO-220	41K3839	3.82
● LM2595T-5.0/NOPB	40	1	5	5-TO-220	41K3841	3.82
● LM2595T-ADJ/NOPB	40	1	Adjustable	5-TO-220	41K3838	3.82
● LM2596S-12/NOPB	40	3	12	5-TO-263	41K3843	5.16
● LM2596S-3.3/NOPB	40	3	3.3	5-TO-263	23K0827	5.16
● LM2596S-5.0/NOPB	40	3	5	5-TO-263	41K3844	5.16
● LM2596S-ADJ/NOPB	40	3	Adjustable	3-TO-263	41K3842	5.16
● LM2596SX-5.0/NOPB	40	3	5	5-TO-263	41K3848	4.30
● LM2596SX-ADJ/NOPB	40	3	Adjustable	5-TO-263	41K3845	4.30
● LM2596T-5.0/NOPB	40	3	5	5-TO-220	41K3851	4.30
● LM2596T-ADJ	40	3	Adjustable	5-TO-220	07B6137	4.30
LM310X SERIES						
● LM3100MH/NOPB	36	1.5	7	20-TSSOP	79K7816	5.30
● LM3102MH/NOPB	42	2.5	7	20-TSSOP	54M4671	6.16
LM501X SERIES						
● LM5017SD/NOPB	100	0.6	90	8-LLP	89T3444	3.75
LM557X SERIES						
● LM5574MT/NOPB	75	0.5	70	16-TSSOP	32M1267	4.44
● LM5575MH/NOPB	75	1.5	70	16-TSSOP EXP PAD	32M1271	5.87
● LM5576MH/NOPB	75	3	70	20-TSSOP EXP PAD	32M1276	6.63
3A 550 kHz SYNCHRONOUS SIMPLE SWITCHER® BUCK REGULATOR						
● LM2853MH-1.2/NOPB	5.5	3	1.2	14-TSSOP EX PAD	32M1024	5.01
● LM2853MH-3.3/NOPB	5.5	3	3.3	14-TSSOP EX PAD	32M1029	5.01

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
● LM5007EVAL/NOPB	Evaluation Board for LM5007	55R4080	25.50
LM5575EVAL	Evaluation Board for LM5575	22M1043	49.98
LM5574EVAL	Evaluation Board for LM5574	22M1042	49.98
LM25575EVAL	Evaluation Board for LM25575	22M0912	49.98
LM25574EVAL	Evaluation Board for LM25574	22M0911	49.98
LM22670EVAL	Evaluation Board for LM22670	12P9047	24.10

(90496)

INVERTING DC/DC CONVERTERS

RoHS Compliant Available

TEXAS INSTRUMENTS

TI analog Inverting Regulators Power Management products are a subset of analog Non-Isolated Switching DC/DC Regulators solutions.

Mfg. Part No.	Supply Voltage Max. (V)	Output Voltage (V)	Output Current (A)	Package	Stock No.	Price Each 1-9
● MC33063ADR	40	40	1.5	8-SOIC	04K3496	0.62
● TL497ACN	12	35	500	14-DIP	68K1133	2.04
● TL7660CP	10	18.6	20	8-DIP	14M2447	1.54
● TPS63700DRCT	5.5	-2	360	10-SON	61K1899	2.83
● TPS6735IDR	6.2	-5	0.27	8-SOIC	77C0738	3.58

EVALUATION MODULES

Mfg. Part No.	Description	Stock No.	Price Each
● TPS63700EVM-139	Evaluation Module for the TPS63700 Inverting DC/DC Converter	63K6558	49.98

(167463)

ANALOG BUCK SIMPLE SWITCHER VOLTAGE REGULATORS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Max. I_{OUT} (A)	Max. V_{IN} (V)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
LM2574M-ADJ/NOPB	0.5	40	37	14-SOIC	41K3600	2.52
LM2575T-15/NOPB	1	60	3.3	5-TO-220	41K3668	2.48
LM2592HVS-ADJ/NOPB	2	60	1.2 to 57	5-TO-263	41K3789	6.12
LM2594HVM-3.3/NOPB	0.5	60	3.3	8-NSOIC	41K3809	5.30
LM2594HVM-12/NOPB	0.5	60	12	8-NSOIC	41K3808	5.30
LM2594M-3.3/NOPB	0.5	40	3.3	8-NSOIC	41K3821	3.44
LMZ13610TZ/NOPB	10	36	6	11-TO-PMOD	47T7393	23.99
LMZ23608TZ/NOPB	8	36	6	11-TO-PMOD	47T7406	23.48
LMZ13608TZ/NOPB	8	36	6	11-TO-PMOD	47T7391	21.78
LMZ23610TZ/NOPB	10	36	6	11-TO-PMOD	47T7408	25.69
LM2594M-ADJ/NOPB	0.5	40	37	8-NSOIC	41K3819	3.44
LM2594N-5.0/NOPB	0.5	40	5	8-DIP	41K3829	2.87
LM2670S-5.0/NOPB	3	40	5	7-TO-263	41K4033	5.30
LM2671M-5.0/NOPB	0.5	40	5	8-NSOIC	41K4061	3.72
LM2671MX-5.0/NOPB	0.5	40	5	8-SO	41K4065	3.10
LM2674M-3.3/NOPB	0.5	40	3.3	8-NSOIC	41K4120	3.44
LM2674MX-5.0/NOPB	0.5	40	5	8-SO	41K4125	2.87
LM22676TJ-ADJ/NOPB	3	42	1.285	7-TO-263	75T9682	4.30
LMZ12003EXTTZE/NOPB	3	20	6	7-TO-PMOD	99R3327	24.67
LM2676T-5.0/NOPB	3	40	5	7-TO-220	41K4169	4.30
LM2677S-ADJ/NOPB	5	40	37	7-TO-263	41K4170	6.44
LM5574MT/NOPB	0.5	75	70	16-TSSOP	32M1267	4.44
LM25574MT/NOPB	0.5	42	40	16-TSSOP	32M0988	3.87
LM3671MF-ADJ/NOPB	0.6	5.5	3.3	5-SOT-23	41K4936	0.92
LM5007MM/NOPB	5	75	73	8-MSOP	41K6024	3.10
LM5007SD/NOPB	0.5	75	73	8-LLP	41K6026	3.10
LM2575HVS-3.3/NOPB	1	60	3.3	5-TO-263	41K3630	5.16
LM2595S-3.3/NOPB	1	40	3.3	5-TO-263	41K3832	4.58
LM2595S-5.0/NOPB	1	40	5	5-TO-263	41K3833	4.58
LM2595S-ADJ/NOPB	1	40	37	5-TO-263	41K3830	4.58
LM2595T-5.0/NOPB	1	40	5	5-TO-220	41K3841	3.82
LM2595T-ADJ/NOPB	1	40	37	5-TO-220	41K3838	3.82
LM2672M-5.0/NOPB	1	40	5	8-SO	41K4081	4.73
LM2672MX-5.0/NOPB	1	40	5	8-SO	41K4085	3.94
LM2672MX-ADJ/NOPB	1	40	37	8-SO	41K4082	3.94
LM2675M-3.3/NOPB	1	40	3.3	8-SO	41K4140	4.58
LM2675M-5.0/NOPB	1	40	5	8-NSOIC	41K4141	4.58
LM2675MX-5.0/NOPB	1	40	5	8-SO	41K4145	3.82
LM2675MX-ADJ/NOPB	1	40	37	8-SO	41K4142	3.82
LM2734XMK/NOPB	1	20	18	6-TSOT	41K4307	2.87
LM2734YMK/NOPB	1	20	18	6-TSOT	41K4309	2.59
LM5010ASD/NOPB	1	75	70	10-LLP	69K2590	3.51
LM5010MH/NOPB	1	75	70	14-TSSOP	41K6032	4.11
LM5010SD/NOPB	1	75	70	10-LLP	41K6034	3.41
LM5010AMH/NOPB	1	75	70	14-TSSOP	69K2586	4.20
LMR10510XMFE/NOPB	1	5.5	0.8	5-SOT-23	76T4993	1.06
LMR10510YMFE/NOPB	1	5.5	0.8	5-SOT-23	76T4994	1.06
LMR10510YSDE/NOPB	1	5.5	0.8	6-LLP	76T4995	1.06
LMR24210TL/NOPB	1	42	0.8	28-µSMD	76T5005	4.13
LM2651MTC-3.3/NOPB	1.5	14	3.3	16-TSSOP	41K4001	4.01
LM2651MTC-ADJ/NOPB	1.5	14	13	16-TSSOP	41K3998	4.01
LM25575MH/NOPB	1.5	42	40	16-TSSOP EXP PAD	32M0992	4.58
LM5575MH/NOPB	1.5	75	70	16-TSSOP EXP PAD	32M1271	5.87
LMR10515XMFE/NOPB	1.5	5.5	1	5-SOT-23	76T4996	1.24
LMR10515XSDE/NOPB	1.5	5.5	1	6-LLP	76T4997	1.24
LMR10515YMFE/NOPB	1.5	5.5	1	5-SOT-23	76T4998	1.24
LMR10515YSDE/NOPB	1.5	5.5	1	6-LLP	76T4999	1.24
LM2592HVS-5.0/NOPB	2	60	5	5-TO-263	41K3791	6.12
LM2592HVT-5.0/NOPB	2	60	5	5-TO-220	41K3797	5.73
LM2592HVT-ADJ/NOPB	2	60	57	5-TO-220	41K3795	5.73
LM2593HVS-5.0/NOPB	2	60	5	7-TO-263	41K3800	6.50
LM2593HVS-ADJ/NOPB	2	60	57	7-TO-263	41K3798	6.50
LMR10520XSDE/NOPB	2	5.5	1	6-LLP	76T5000	1.34
LM22680MRE-ADJ/NOPB	2	42	37	8-PSOP	46P3249	4.68
LMR24220TL/NOPB	2	42	0.8	28-µSMD	76T5006	5.49
LM27342MY/NOPB	2	20	18	10-SOIC	46P3254	2.87
LM2596S-3.3/NOPB	3	40	3.3	5-TO-263	23K0827	5.16
LM2596S-5.0/NOPB	3	40	5	5-TO-263	41K3844	5.16
LM2596SX-5.0/NOPB	3	40	5	5-TO-263	41K3848	4.30
LM2596S-ADJ/NOPB	3	40	37	3-TO-263	41K3842	5.16

➤CONTINUED➤

ANALOG BUCK SIMPLE SWITCHER VOLTAGE REGULATORS (CONT.)

Mfg. Part No.	Max. I_{OUT} (A)	Max. V_{IN} (V)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
LM2596SX-ADJ/NOPB	3	40	37	5-TO-263	41K3845	4.30
LM2596T-5.0/NOPB	3	40	5	5-TO-220	41K3851	4.30
LM2596T-ADJ	3	40	37	5-TO-220	07B6137	4.30
LM2596S-12/NOPB	3	40	12	5-TO-263	41K3843	5.16
LM2576S-3.3/NOPB	3	40	3.3	5-TO-263	41K3689	3.39
LM2673S-5.0/NOPB	3	40	37	7-TO-263	41K4093	5.30
LM2676SD-ADJ/NOPB	3	40	37	14-LLP	41K4154	4.94
LM2676SX-3.3/NOPB	3	40	3.3	7-TO-263	41K4164	4.30
LM2676SX-5.0/NOPB	3	40	5	7-TO-263	41K4165	4.30
LM2676SX-ADJ/NOPB	3	40	37	7-TO-263	41K4162	2.56
LM2676T-12/NOPB	3	40	12	7-TO-220	41K4167	4.30
LM2670S-ADJ/NOPB	3	40	37	3-TO-263	41K4030	5.30
LM25576MH/NOPB	3	42	40	20-TSSOP EXP PAD	32M0997	5.73
LM2576HVS-5.0/NOPB	3	60	5	5-TO-263	41K3675	6.59
LM2576HVS-ADJ/NOPB	3	60	57	5-TO-263	41K3671	6.59
LM2576S-ADJ/NOPB	3	63	37	5-TO-263	41K3686	3.39
LM5576MH/NOPB	3	75	70	20-TSSOP EXP PAD	32M1276	6.63
LM20144QMHE/NOPB	4	5.5	0.8	16-TSSOP	79T9683	5.08
LMZ10505EXTTZE/NOPB	5	5.5	5	7-TO-PMOD	99R3326	26.54
LM2678S-3.3/NOPB	5	40	3.3	7-TO-263	41K4191	6.30
LM2678T-12/NOPB	5	40	12	7-TO-220	41K4206	5.25
LM20145QMHE/NOPB	5	5.5	0.8	16-TSSOP	79T9684	5.23
LM25088MH-1/NOPB	10	13	40	16-TSSOP	46P3250	3.58
LM5008MM/NOPB	0.35	95	75	8-MSOP	41K6028	2.75
LM27402SQ/NOPB	30	20	18.6	16-LLP	84R3787	2.99
LMR14203XMKE/NOPB	0.3		0.8	6-SOT-23	76T5003	2.83
LMR14206XMKE/NOPB	0.6		0.8	6-SOT-23	76T5004	2.72

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
LM20145EVAL	LM20145 Evaluation Board	64M6952	49.98
LM20143EVAL	LM20143 Evaluation Board	64M6946	49.98
LM20134EVAL	LM20134 Evaluation Board	64M6943	49.98
LM20133EVAL	LM20133 Evaluation Board	64M6940	49.98

(174955)

STEP-DOWN DC/DC CONVERTERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Supply Voltage Max. (V)	Output Voltage (V)	Output Current (A)	Package	Stock No.	Price Each 1-9
MC33063ADR	40	40	0.75	8-SOIC	04K3496	0.62
MC34063AP	40	40	0.75	8-DIP	04K3500	0.62
TL2575-05IKTTR	40		1	5-DDPAK	27M1030	2.35
TL2575-05IKV	40		1	5-TO-220	27M1031	2.51
TPS62651YFFT	5.5	1.4375	0.8	9-BGA	32T3308	2.72
TL2575-12IKTTR	40	12	1	5-DDPAK	28M7789	2.35
TL2575-33IKTTR	40		1	5-DDPAK	27M1032	2.35
TL2575HV-05IKTTR	60	5	1	5-DDPAK	27M1038	3.22
TL2575HV-05IN	60	5	1	16-PDIP	27M1040	3.56
TL2575HV-12IKTTR	60		1	5-DDPAK	28M7793	3.22
TL2575HV-33IKTTR	60	3.3	1	5-DDPAK	27M1046	3.22
TL2575HV-ADJIKTTR	60	57	1	5-DDPAK	27M1034	3.22
TL2575HV-ADJIKV	60	57	1	5-TO-220	27M1035	3.22
TPS54260DGQ	60	58	2.5	10-MSOP	71R4305	5.32
TPS62730DRYT		2.1	100	6-SON	52T8814	2.04
TPS40304DRCT	20	6.5	25	10-SON	55R1362	2.99
TPS51315RGFT	14	5.5	10	40-QFN	10R6962	7.70
TPS5410D	36	31	1	8-SOIC	18M3221	4.65
TPS54061DRBT	60	0.8-58	0.2	8-VSON	95T1085	2.87
TPS54120RGYT	17	6	1	24-VQFN	93T6801	4.89
TPS54140ADGQ	42	39	1.5	10-MSOP	95T1087	3.61
TPS54140ADRCT	42	39	1.5	10-VSON	95T1090	3.46
TPS54160ADGQ	60	58	1.5	10-MSOP	95T1091	4.54
TPS54160ADRCT	60	58	1.5	10-VSON	95T1094	4.34
TPS54225PWP	18	5.5	2	14-HTSSOP	55R7588	2.38
TPS54226PWP	18	5.5	2	14-HTSSOP	55R7589	2.45
TPS54260DRCT	60	58	2.5	10-SON	94T6071	5.23
TPS54425PWP	18	5.5	4	14-HTSSOP	86R9937	2.72
TPS54426PWP	18	5.5	4	14-HTSSOP	86R9938	2.77
TPS82672SIPT	4.8	1.5	0.6	8-µSIP	91T4740	3.15

➤CONTINUED➤

STEP-DOWN DC/DC CONVERTERS (CONT.)

Mfg. Part No.	Supply Voltage Max. (V)	Output Voltage (V)	Output Current (A)	Package	Stock No.	Price Each 1-9
● TPS54310PWP	3	3.3	3	20-HTSSOP	77C0489	6.30
● TPS54310PWPR	3	3.3	3	20-HTSSOP	77C0490	5.25
● TPS54312PWP	6	1.2	3	20-HTSSOP	72K9592	6.30
● TPS54313PWP	6	1.5	3	20-HTSSOP	77C0495	6.30
● TPS54313PWP	6	1.5	3	20-HTSSOP	77C0495	6.30
● TPS54315PWP	6	2.5	3	20-HTSSOP	72K9593	6.30
● TPS54316PWP	6	3.3	3	20-SOIC	74K3979	6.30
● TPS54316PWP	6	3.3	3	20-SOIC	74K3979	6.30
● TPS54317RHFT	6	3.3	3	24-QFN	72K0972	6.04
● TPS54317RHFT	6	3.3	3	24-QFN	72K0972	6.04
● TPS54320RHLT	17	15	3	14-QFN	01T0826	4.39
● TPS54350PWP	20	12	3	16-TSSOP	87H2891	5.37
● TPS54356PWP	20	3.3	3	16-HTSSOP	10J9777	5.37
● TPS54360DDA	60	0.8-58	3.5	8-SOIC	45W9490	6.01
● TPS54380PWPR	4.5	6	3	20-HTSSOP	35K5017	5.37
● TPS54383PWP	28	25.2	3	14-HTSSOP	62M0723	6.12
● TPS54240DGQ	42	39	2.5	10-MSOP	74R6616	4.27
● TPS5450DDA	36	31	5	8-HSOP	37M0059	6.44
● TPS5450DDARG4	36	31	5	8-HSOP	59M7214	5.37
● TPS54525PWP	18	5.5	5.5	16-HTSSOP	06W3573	3.15
● TPS54526PWP	18	5.5	5.5	16-HTSSOP	06W3576	3.20
● TPS54526RSAT	18	5.5	5.5	16-QFN	46W1391	3.18
● TPS54550PWP	20	12	6	16-HTSSOP	88K7073	6.80
● TPS54610PWP	6	4.5	6	28-HTSSOP	77C0506	7.91
● TPS54612PWP	6	1.2	6	20-SOIC	72K9595	7.91
● TPS54614PWP	6	1.8	6	28-HTSSOP	77C0515	7.91
● TPS53311RGTT	6	5.04	3	16-QFN	79R9091	5.97
● TPS54616PWP	6	3.3	6	28-HTSSOP	77C0519	7.91
● TPS54616PWPR	6	3.3	6	28-HTSSOP	72K9597	6.59
● TPS54672PWPR	6	4.5	6	28-TSSOP	77C0522	6.80
● TPS54719RTET	6	4.5	7	16-WQFN	06W3581	6.63
● TPS54810PWP	6	3.3	8	28-HTSSOP	74K3980	9.35
● TPS54910PWP	4	2.5	9	28-HTSSOP	77C0527	8.29
● TPS56121DQPT	14	12	15	22-PQFN	39T2511	8.56
● TPS56221DQPT	14	12	25	22-PQFN	39T2512	9.16
● TPS62000DGSR	5.5	5.5	0.6	10-MSOP	77C0694	2.99
● TPS62000DGS	5.5	5.5	0.6	MSOP	35K1327	3.13
● TPS62003DGSR	5.5	1.2	0.6	10-MSOP	77C0701	2.99
● TPS62007DGS	5.5	3.3	600	10-VSSOP	35K1329	3.13
● TPS62040DGQR	6	6	1.2	10-MSOP	73H4658	2.99
● TPS62040DRCR	6	6	1.2	10-SON	87H2901	2.99
● TPS62046DGQR	6	3.3	1.2	10-MSOP	73H4666	2.99
● TPS62050DGSR	10	6	0.8	10-MSOP	35K1330	2.86
● TPS62050DGS	10	6	800	10-VSSOP	36K3663	3.01
● TPS62056DGS	10	3.3	800	10-VSSOP	35K5019	3.01
● TPS62065DSGT	6	6	2	8-WSON	70R1295	2.83
● TPS62067DSGT	6	6	2	8-WSON	70R1296	2.91
● TPS62110MRSAREP	17	16	1.5	16-QFN	66M7866	9.03
● TPS62110RSAT	17	16	1.5	16-QFN	52K2744	3.58
● TPS62111MRSAREP	17	3.3	1.5	16-QFN	66M7867	10.62
● TPS62111RSAT	17	16	1.5	16-QFN	54K1739	3.58
● TPS62112RSAT	17	16	1.5	16-QFN	54K1741	3.58
● TPS62113RSAT	17	16	1.5	16-QFN	71P5323	3.58
● TPS62160DGKT	17	6	1	8-MSOP	93T6802	2.66
● TPS62175DQCT	28	6	0.5	10-WSON	48W7461	2.35
● TPS62177DQCT	28	3.3	0.5	10-WSON	48W7462	2.35
● TPS62200DBVR	6	6	0.3	5-SOT-23	77C0722	1.68
● TPS62201DBVT	6	1.5	0.3	5-SOT-23	77C0725	1.23
● TPS62202DBVR	6	1.8	0.3	5-SOT-23	77C0726	1.68
● TPS62202DBVT	6	1.8	0.3	5-SOT-23	77C0727	1.23
● TPS62203DBVT	6	3.3	0.3	5-SOT-23	36K7662	1.92
● TPS62205DBVT	6	2.5	0.3	5-SOT-23	35K1333	1.23
● TPS62207DBVT	6	1.2	0.3	5-SOT-23	21J9236	1.92
● TPS62222DDCT	6	1.8	0.4	5-SOT-23	87H2911	2.24
● TPS62224DDCT	6	6	0.4	5-SOT-23	87H2913	2.24
● TPS62227DDCT	6	1.2	0.4	5-SOT-23	81K4166	2.24
● TPS62230DRYT	6	2.5	0.5	6-SON	07R8107	1.63
● TPS62231DRYT	6	1.8	0.5	6-SON	07R8108	1.63
● TPS62240DRVTG4	6	6	0.3	6-SON 2x2 -6	59M7215	1.57
● TPS62250DRVT	6	6	0.7	6-SON	19P8154	2.50
● TPS62260DDCT	6	6	0.6	5-TSOT-23	50M9128	2.04
● TPS62260DRVT	6	6	0.6	6-SON	08P4470	2.04
● TPS62290DRVT	6	6	1	2 x 2 - SON	50M9136	2.50

➤CONTINUED➤

STEP-DOWN DC/DC CONVERTERS (CONT.)

Mfg. Part No.	Supply Voltage Max. (V)	Output Voltage (V)	Output Current (A)	Package	Stock No.	Price Each 1-9
● TPS62300DRCR	6	5.4	0.5	10-SON	21J9237	2.86
● TPS62410DRCT	6	6	0.8	10-SON	34M0195	2.75
● TPS62420DRCT	6	6	1	10-SON	10M0642	2.75
● TPS62510DRCR	3.8	3.8	1.5	10-SON	99K4417	2.72
● TPS62622YFFT	5.5	1.5	0.6	6-DSBGA	24R8486	2.04
● TPS62060DSGT	6	1.8	1.6	8-WSON	71R4306	2.66
● UCC25230DRMT	100	48	0.2	8-VSON	83T1760	3.70
● TPS54560DDA		58.8	5	8-HSOIC	74W0855	6.59

EVALUATION TOOLS

Mfg. Part No.	Description	Stock No.	Price Each
TPS51315EVM	Evaluation Module for the TPS51315 step down buck controller	12R3083	25.50
● TPS62113EVM-465	Evaluation Module for the TPS62113 step-down converter	50R8131	50.00
● TPS62230EVM-370	Evaluation Module for the TPS62230, TPS62231 or TPS62232 ICs	11R8327	49.98
● TPS62260LED-338	Evaluation Module for the TPS62240 & TPS62290 buck converters	99M6407	19.38
TPS62065-67EVM-347	Evaluation Module for the TPS62065 step-down converter	72R6653	50.00
TPS62110EVM-101	Evaluation Module for the TPS62110 step-down converter	09R6671	49.98
TPS62120EVM-640	Evaluation Module for the TPS62120 step-down converter	13T5953	50.00
● TPS56221EVM-579	Evaluation Module for the TPS56221 step-down converter	40T5444	50.00
TPS56121EVM-601	Evaluation Module for the TPS56121 step-down converter	40T5442	50.00
TPS62730EVM-726	Evaluation Module for the TPS62730DRYT step-down converter	48T4698	50.00
● UCC25230EVM-754	Evaluation Module for the UCC25230 step-down converter	74T5671	101.00

(167464)

DC-TO-DC CONVERTER

RoHS Compliant Available

TEXAS INSTRUMENTS

MICROPOWER STEP-UP DC/DC CONVERTERS

Mfg. Part No.	Switch Output Current Max (A)	Voltage Output Adjustable (V)	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
● LM2703MF-ADJ/NOPB	0.35	Up to 21	2.2 to 7	5-SOT23	41K4253	2.00
● LM2704MF-ADJ/NOPB	0.55	Up to 20	2.2 to 7	5-SOT23	41K4255	1.95
● LM2524DN/NOPB	0.2	4.8 to 5.2	5 to 40	16-MDIP	41K3584	1.63
STEP DOWN (BUCK) DC TO DC CONVERTER						
● LM25005MH/NOPB	2.5	1.23 to 40	7 to 42	20-TSSOP	79K7769	4.01
● LM5006MM/NOPB	0.65	2.5 to 75	6 to 75	10-MSOP	45T6655	3.34
● LM25007MM/NOPB	0.5	2.5 to 37	9 to 42	8-SOIC	79K7773	2.86
● LM2574HVM-12/NOPB	0.5	12 (Fixed)	4 to 60	14-SOIC	41K3586	4.15
● LM2574M-12/NOPB	0.5	12 (Fixed)	4 to 40	14-SOIC	41K3601	2.52
● LM2575HVS-12/NOPB	1	12 (Fixed)	4 to 60	5-TO-263	41K3628	5.16
● LM2575HVT-12/NOPB	1	12 (Fixed)	4 to 60	5-TO-220	41K3638	5.01
● LM2575HVT-15/NOPB	1	15 (Fixed)	4 to 60	5-TO-220	41K3639	5.01
● LM2575S-3.3/NOPB	1	3.3 (Fixed)	4 to 40	5-TO-263	41K3659	2.92
● LM2577N-ADJ/NOPB	3	up to 12.6	3.5 to 40	16-MDIP	41K3707	6.32
● LM2717MT-ADJ/NOPB	3.6	1.265 to 18	4 to 20	24-TSSOP	79K7803	6.80
● LM2734ZMK/NOPB	1	0.8 to 18	3 to 20	6-LLP	41K4311	3.22
● LM26420XMH/NOPB	2	0.8 to 4.5	3 to 5.5	20-TSSOP	14R4583	5.87
● LM26420YMH/NOPB	2	0.8 to 4.5	3 to 5.5	20-TSSOP	14R4584	5.87
● LM2841XMK-ADJL/NOPB	0.3	34 (Fixed)	4.5 to 42	6-TSOT	10R2189	2.99
● LM2841YMK-ADJL/NOPB	0.3	34 (Fixed)	4.5 to 42	6-TSOT	10R2190	2.75
● LM2842XMK-ADJL/NOPB	0.6	34 (Fixed)	4.5 to 42	6-TSOT	10R2191	2.99
● LM2842YMK-ADJL/NOPB	0.6	34 (Fixed)	4.5 to 42	6-TSOT	10R2192	3.10
● LM2736XMK/NOPB	0.75	1.25 to 16	3 to 18	6-TSOT	41K4315	1.02
● LM2736YMK/NOPB	0.75	1.25 to 16	3 to 18	6-TSOT	41K4317	2.31
● LM2825N-5.0/NOPB	2.4	1.23 to 15	4.75 to 40	24-DIP	41K4398	32.15
● LM2830XMF/NOPB	1	0.6 to 4.5	3 to 5.5	5-SOT-23	13M1721	2.45
● LM2831XMF/NOPB	2.5	0.6 to 4.5	3 to 5.5	5-SOT-23	13M1734	2.69
● LM2831YMF/NOPB	2.5	0.6 to 4.5	3 to 5.5	5-SOT-23	13M1742	2.69
● LM2832XMY/NOPB	2	0.6 to 4.5	3 to 5.5	8-SOIC	13M1758	2.75
● LM2832YMY/NOPB	2	0.6 to 4.5	3 to 5.5	8-SOIC	13M1767	2.75
● LM2738YMY/NOPB	1.5	800 to 18	3 to 20	8-MSOP	08N3585	2.87
● LM5118MH/NOPB	...	1.3 to 70	4.75 to 14	20-TSSOP	08N3587	6.08
INVERTING DC-TO-DC CONVERTER						
● LM2687MM/NOPB	10	-5.2 to -1.5	2.7 to 5.5	8-SOIC	41K4241	1.56

➤CONTINUED➤

DC-TO-DC CONVERTER (CONT.)

DC TO DC EVALUATION KITS

Mfg. Part No.	Description	Stock No.	Price Each
LM2831XMF EVAL	Evaluation Board for LM2831	13M1733	49.98

(74775)

STEP-UP DC/DC CONVERTERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Supply Voltage Max. (V)	Output Voltage (V)	Output Current (mA)	Package	Stock No.	Price Each 1-9
TPS55340RTET	32	3 - 38	5000	16-WQFN	24W9080	5.08
TPS61016DGS	0.8	3.3	200	10-MSOP	77C0668	3.58
TPS61025DRCR	6.5	5.5	1.5	10-SON	87H2896	2.18
TPS61027DRCR	6.5	5.5	1.5	10-SON	87H2897	2.18
TPS61028DRCR	6.5	5.5	800	10-SON	40K9771	2.04
TPS61030PWPR	5.5	5.5	1000	16-TSSOP	32H6564	2.99
TPS61030RSAR	5.5	5.5	1000	16-QFN	90H4859	2.99
TPS61032RSAR	5.5	5	1000	16-QFN	90H4861	2.99
TPS61070DDCR	5.5	5.5	600	6-SOT	64M3125	1.38
TPS61071DDCR	5.5	5.5	600	6-SOT-23	21J9232	1.38
TPS61081DRCT	6	27	1.3	10-SON	30M1833	3.44
TPS61086DRCT	6	18.5	2000	10-SON	26R5220	2.94
TPS61093DSKT	6	17	1000	10-SON	35R2720	3.30
TPS61097-33DBVT	5.5	3.4	100	5-SOT-23	14R9550	2.45
TPS61170DRVT	18	38	1200	6-SON	65M6342	3.30
TPS61175PWP	18	38	3000	14-HTSSOP	40P3874	4.58
TPS61200DRCT	5.5	5.5	1.2	10-SON	37M0066	2.75
TPS61201DRCT	5.5	3.3	300	10-SON	37M0068	2.75
TPS61202DRCT	5.5	5	600	10-SON	37M0070	2.75
TPS61251DSGT	6	6.5	1500	8-WSON	01T0839	2.35
TPS61252DSGT	6	6.5	1500	8-WSON	01T0841	2.35
TPS61253YFFT	4.85	5	1500	9-DSBGA	95T1100	2.50
TPS61258YFFT	4.35	4.5	1500	9-DSBGA	95T1102	2.50
MCP1256-E/MF	3.6	3.3	100	10-DFN	88K5510	1.46
MCP1256-E/UN	3.6	3.3	100	10-MSOP	88K5511	1.46
MCP1257-E/MF	3.6	3.3	100	10-DFN	88K5516	1.46
MCP1257-E/UN	3.6	3.3	100	10-MSOP	88K5517	1.46
MCP1258-E/MF	3.6	3.3	100	10-DFN	88K5520	1.46
MCP1258-E/UN	3.6	3.3	100	10-MSOP	88K5521	1.46
MCP1259-E/MF	3.6	3.3	100	10-DFN	88K5524	1.46
MCP1259-E/UN	3.6	3.3	100	10-MSOP	88K5525	1.46

EVALUATION MODULES

Mfg. Part No.	Description	Stock No.	Price Each
TPS61020EVM-025	Evaluation Module for the TPS61020 inductive step-up converter	90H4857	49.98
TPS61086EVM-526	Evaluation Module for the TPS61086 step-up DC/DC converter	50R4449	49.98
TPS61093EVM-519	Evaluation Module for the TPS61093 step-up DC/DC converter	55R7607	49.98
TPS61175EVM-588	Evaluation Module for the TPS61175 high voltage boost converter	63R9634	50.00
TPS61200EVM-179	Evaluation Module for the TPS61200 synchronous boost converter	41M5888	50.00
TPS61240EVM-360	Evaluation Module for the TPS61240 step-up DC/DC converter	25R0115	49.98

(167465)

SIMPLE SWITCHER POWER MODULES

RoHS Compliant Available

TEXAS INSTRUMENTS

Key Features:
- Integrated shielded inductor
- Flexible startup sequencing using external soft-start,tracking, and precision enable
- Protection against in-rush currents and faults such as input UVLO and output short-circuit
- Single exposed pad and standard pinout for easy mounting and manufacturing

Applications:
- Point-of-load conversions from 3.3V and 5V rails
- Space constrained applications
- Extreme temperatures/no air flow environments
- Noise sensitive applications (i.e. transceiver, medical)

Mfg. Part No.	Supply Voltage (V)	Output Voltage (V)	Output Current (A)	Package	Stock No.	Price Each 1-9
LMZ10503EXTTZ/NOPB	2.95 to 5.5	5	3	7-TO-PMOD	20T5505	22.97
LMZ10503TZE-ADJ/NOPB	2.95 to 5.5		3	7-TO-PMOD	74R8004	9.56
LMZ10504TZ-ADJ/NOPB	2.95 to 5.5		4	7-TO-PMOD	51R2432	10.52
LMZ10504TZX-ADJ/NOPB	2.95 to 5.5	5	4	7-TO-PMOD	51R2434	9.14
LMZ12001TZE-ADJ/NOPB	4.5 to 20	6	1	7-TO-PMOD	74R8007	10.84
LMZ12002TZE-ADJ/NOPB	4.5 to 20		2	7-TO-PMOD	74R8010	10.90
LMZ12003TZ-ADJ/NOPB	4.5 to 20		3	7-TO-PMOD	51R2435	11.09

CONTINUED

SIMPLE SWITCHER POWER MODULES (CONT.)

Mfg. Part No.	Supply Voltage (V)	Output Voltage (V)	Output Current (A)	Package	Stock No.	Price Each 1-9
LMZ12003TZX-ADJ/NOPB	4.5 to 20	6	3	7-TO-PMOD	51R2437	10.94
LMZ14202TZE-ADJ/NOPB	6 to 42	6	2	7-TO-PMOD	74R8013	15.17
LMZ14203TZ-ADJ/NOPB	6 to 42		3	7-TO-PMOD	51R2438	18.31
LMZ14203TZX-ADJ/NOPB	6 to 42	6	3	7-TO-PMOD	51R2440	15.92
LMZ12001TZ-ADJ/NOPB	4.5 to 20		1	7-TO-PMOD	74R8006	10.39
LMZ10503TZ-ADJ/NOPB	2.95 to 5.5	5	3	7-TO-PMOD	74R8003	9.16

(165108)

SWIFT™ POINT-OF-LOAD DC/DC CONVERTERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Supply Voltage Max. (V)	Output Voltage (V)	Output Current (A)	Package	Stock No.	Price Each 1-9
TPS54010PWP	4	2.5	14	28-TSSOP	21J9222	10.84
TPS54040DGQ	42	39	0.5	MSOP	73P9595	3.30
TPS54060DGQ	60	58	0.5	10-MSOP	71P5340	4.15
TPS54160DGQ	60	58	1.5	10-MSOP	18P9328	5.01
TPS5420D	36	31	2	8-SOIC	85K1692	4.89
TPS5420DRG4	36	31	2	8-SOIC	59M7212	4.06
TPS5420MDREP	35	31	2	8-SOIC	78M6639	6.16
TPS54218RTET	6	4.5	2	16-QFN	32R8553	3.84
TPS54232D	28	25	2	8-SOIC	45P2940	1.80
TPS54283PWP	28	25.2	2	14-HTSSOP	62M0712	6.44
TPS5430DDA	36	31	3	8-HSOP	75K1619	5.37
TPS5430DDARG4	36	31	3	8-HSOP	59M7213	4.42
TPS54318RTET	6	4.5	3	16-QFN	33R2478	5.23
TPS54325PWP	18	5.5	3	14-HTSSOP	11R8099	2.78
TPS54331D	28	25	3	8-SOIC	03P1641	1.96
TPS54332DDA	28	25	3.5	8-SO	50P9395	2.38
TPS54319RTET	6	4.5	3	16-WQFN	78R4084	2.50
TPS54394PWP	18	7	3	16-HTSSOP	27W9735	3.27
TPS54395PWP	18	7	3	16-HTSSOP	27W9737	3.27
TPS54494PWP	18	7	4	16-HTSSOP	27W9739	3.30
TPS54495PWP	18	7	4	16-HTSSOP	27W9741	3.30
TPS54418RTET	6	4.5	4	16-QFN	10R6871	6.44
TPS54617RUVT	6	3.3	6	34-QFN	40P2821	7.59
TPS54620RGYT	17	15	6	14-QFN	10R6963	6.16

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
TPS54040EVM-456	Evaluation Module for the TPS54040 DC/DC converter	08R2499	25.50
TPS54140EVM-429	Evaluation Module for the TPS54140 DC/DC converter	08R2500	25.50
TPS54160EVM-230	Evaluation Module for the TPS54160 DC/DC converter	34P6508	25.50
TPS5420EVM-175	Evaluation Module for the TPS5420 SWIFT DC/DC converter	88K7071	10.20
TPS54232EVM-415	Evaluation Module for the TPS54232 regulator	56P3013	25.50
TPS54318EVM-512	Evaluation Module for the TPS54318 SWIFT Converter	50R4448	25.50
TPS54331EVM-232	Evaluation Module for the TPS54331 DC/DC converter	03P5203	10.20
TPS54332EVM-416	Evaluation Module for the TPS54332 DC/DC converter	04R7445	25.50
TPS5450EVM-254	Evaluation Module for the TPS5450 regulator	46M1123	10.20
TPS54620EVM-374	Evaluation Module for the TPS54620 SWIFT Converter	11R6295	25.50
TPS54060EVM-590	Evaluation Module for the TPS54060 SWIFT Converter	77R3946	25.50
TPS54240EVM-605	Evaluation Module for the TPS54240 SWIFT Converter	77R3947	25.50
TPS54319EVM-626	Evaluation Module for the TPS54319 SWIFT Converter	78R4083	25.50

(167488)

PowerWise® SYNCHRONOUS REGULATORS

RoHS Compliant Available

TEXAS INSTRUMENTS

Features
- External soft-start
- Tracking
- Precision enable
- Power good
- Pre-biased start-up
- Enhanced system reliability
- High accuracy current limit
- Over-voltage protection, under voltage lockout, and over-current protection

Texas Instruments' new family of full-featured PowerWise synchronous buck regulators provides high efficiency DC-DC step-down power conversion for point-of-load applications. The family offers a full range of features and options enabling the designer to fully customize their power solution to meet system needs.

ADJUSTABLE FREQUENCY SYNCHRONOUS BUCK REGULATORS

Mfg. Part No.	Input Volt. Max. (V)	Output Volt. Min. (V)	Output Current (A)	Freq. (MHz)	Package	Stock No.	Price Each 1-9
LM26001MXA/NOPB	38	1.25	1.5	1	16-TSSOP	99K2336	5.01
LM25119PSQE/NOPB	42	...	0.1	1000	32-LLP	99R3329	6.35
LM5009MM/NOPB	95	2.5	0.15	0.6	8-SOIC	79K7931	2.99

CONTINUED

PowerWise® SYNCHRONOUS REGULATORS (CONT.)

Mfg. Part No.	Input Volt. Max. (V)	Output Volt. Min. (V)	Output Current (A)	Freq. (MHz)	Package	Stock No.	Price Each 1-9
● LM5009SDC/NOPB	95	2.5	0.15	0.6	8-LLP	13M1894	2.99
● LM3000SQ/NOPB	18.5	0.6	...	0.155	32-LLP	16R1311	6.56
● LM5119PSQE/NOPB	65	...	0.1	1000	32-LLP	99R3332	7.95
● LM3754SQ/NOPB	18	0.6	50	3.6	32-LLP	55R4035	6.56
● LM3753SQ/NOPB	18	0.6	50	3.6	32-LLP	64R5687	6.88
● LM5085QMYE/NOPB	75	1.25	...	1	8-MSOP	51R2441	2.70
● LM21215AMHE-1/NOPB	5.5	0.6	15	1.5	20-TSSOP-EXP	47T7417	8.67
● LM3670MF-1.8/NOPB	5.5	0.7	0.35	1	5-SOT-23	41K4933	0.92
● LM3670MF-3.3/NOPB	5.5	0.7	0.35	1	5-SOT-23	65K6211	0.92
● LM3671MF-1.2/NOPB	5.5	1.1	0.6	2	5-SOT-23	41K4937	0.92
● LM3671MF-1.8/NOPB	5.5	1.1	0.6	2	5-SOT-23	41K4942	0.92
● LM3671MF-3.3/NOPB	5.5	1.1	0.6	2	5-SOT-23	79K7839	0.92
● LM3674MF-ADJ/NOPB	5.5	1	0.6	2	5-SOT-23	79K7863	0.98
BOOST DC/DC REGULATORS							
● LM5022MM/NOPB	60	1.25	0.1	2	10-uSOIC	32M1225	2.45
BUCK DC/DC REGULATORS							
● LM21215MH/NOPB	5.5	5.5	0.1	2	20-TSSOP	31T9854	9.05
● LM21212MH-2/NOPB	5.5	5.5	0.1	1.5	20-TSSOP	31T9849	8.42
● LM21212MH-1/NOPB	5.5	5.5	0.1	1.5	20-TSSOP	31T9848	8.42

(103014)

SWITCHING REGULATORS INTEGRATED POWER SOLUTIONS

RoHS Compliant Available

TEXAS INSTRUMENTS

The **TPS8267x** devices are series of high-frequency, synchronous, step-down dc-dc converters optimized for battery-powered portable applications. Intended for low-power applications, these devices support up to 350-mA load current, and allow the use of low-cost chip inductors and capacitors. The devices support applications powered by lithium-ion (Li-Ion) batteries with extended voltage ranges. The **TPS84620RUQ** is an easy-to-use integrated power solution that combines a 6-A DC/DC converter with power MOSFETs, an inductor, and passives into a low profile, BQFN package. This total power solution allows as few as 3 external components and eliminates the loop compensation and magnetics part selection process. The TPS84620 offers the flexibility and the feature-set of a discrete point-of-load design and is ideal for powering performance DSPs and FPGAs.

STEP-DOWN CONVERTERS

Mfg. Part No.	Input Voltage (V)	Output Voltage (V)	Output Current (A)	Pkg.	Stock No.	Price 1-9
● TPS82670SIPT	2.3-4.8	1.86	0.6	8-µSIP	05W9880	3.15
TPS82671SIPT	2.3-4.8	1.8	0.6	8-µSIP	12T9638	3.15
● TPS826711SIPR	2.3-4.8	1.8	0.6	8-SIP	46W1393	2.75
● TPS82672SIPR	2.3-4.8	1.5	0.6	8-SIP	88T7693	2.75
● TPS82673SIPT	2.3-4.8	1.26	0.6	8-µSIP	05W9881	3.15
TPS82675SIPT	2.3-4.8	1.2	0.6	8-µSIP	12T9640	3.15
TPS84410RKGT	2.95-6	3.6	4	39-QFN	71T5492	9.29
LMZ35003RKGT	7-50	2.5 to 15	2.5	41-QFN	47W2296	17.11
STEP-UP CONVERTERS						
● TPS81256SIPT	2.5-5.5	5	0.55	9-SIP	06W3591	4.39
STEP-DOWN AND STEP-UP CONVERTERS						
LMZ34002RKGT	4.5-40	-3 to -17	2	41-QFN	47W2297	14.53

DEVELOPMENT TOOLS

Mfg. Part No.	Description	Stock No.	Price Each
TPS82671EVM-646	Evaluation Module for TPS82671	12T9637	20.40
TPS82675EVM-646	Evaluation Module for TPS82675	12T9639	20.40
● TPS84620EVM-692	Evaluation Module for TPS84620	12T9641	50.00
TPS84410EVM-001	Evaluation Module for TPS84410	64T4268	50.00

(190895)

CHARGE PUMP VOLTAGE CONVERTERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Input Voltage Max. (V)	Output Current Max. (mA)	Package	Stock No.	Price Each 1-9
● LM828M5/NOPB	5.5	25	3-SOT-23	41K6403	0.94
● LM2660M/NOPB	5.5	100	8-NSOIC	41K4014	1.63
● LM2662M/NOPB	5.5	200	8-NSOIC	41K4022	2.45
● LM2663M/NOPB	5.5	200	8-NSOIC	41K4024	2.45
● LM2664M6/NOPB	5.8	40	6-SOT-23	41K4026	0.94
● LM2665M6/NOPB	5.8	40	6-SOT-23	41K4028	0.94
● LMC7660IM/NOPB	10	45	8-NSOIC	41K2738	1.18
● LMC7660IN/NOPB	10	...	8-DIP	41K2740	0.99
● MAX660M/NOPB	550	100	8-SOIC	41K8194	1.67

(80667)

CHARGE PUMPS

RoHS Compliant Available

TEXAS INSTRUMENTS

The **TPS6040 series** is a family of devices that generate an unregulated negative output voltage from an input voltage ranging from 1.6 V to 5.5 V. The devices are typically supplied by a preregulated supply rail of 5 V or 3.3 V. Due to its wide input voltage range, two or three NiCd, NiMH, or alkaline battery cells, as well as one Li-Ion cell can also power them.

INVERTING CHARGE PUMP REGULATORS

Mfg. Part No.	Quiescent Current (µA)	I_{out} (A)	Switching Freq. Max. (kHz)	Package	Stock No.	Price Each 1-9
● TPS60400DBVT	125	0.06	350	5-SOP	39C6049	1.27
● TPS60402DBVT	120	0.06	70*	5-SOP	77C0630	1.27
● TPS60403DBVT	425	0.06	300*	5-SOP	77C0632	1.27
STEP-DOWN CHARGE PUMP REGULATORS						
● TPS60500DGSR	425	0.25	1200	10-MSOP	77C0634	1.69

EVALUATION MODULES

Mfg. Part No.	Description	Stock No.	Price Each
TPS60151EVM-359	Evaluation Module for TPS60151	55R7604	49.98

*Fixed Frequency

(80408)

SYNCHRONOUS CURRENT-MODE BUCK CONTROLLER

RoHS Compliant Available

ANALOG DEVICES

Features:
- Supports all N-channel MOSFET power stages
- No current-sense resistor required
- Resistor-programmable current-sense gain
- Thermal overload protection
- Short-circuit protection
- Precision enable input
- Integrated bootstrap diode for high-side drive

Applications:
- Telecom and networking systems
- Mid to high end servers
- Set-top boxes
- DSP core power supplies

Mfg. Part No.	Input Voltage Range	Frequency (kHz)	Package	Stock No.	Price Each 1-9
● ADP1872ARMZ-0.3-R7	2.75V to 20V	300	10-MSOP	92T3189	2.60
● ADP1872ARMZ-0.6-R7	2.75V to 20V	600	10-MSOP	92T3190	2.60

(203727)

SWITCHING CONTROLLERS

RoHS Compliant Available

EXAR

A New Direction in Mixed-Signal

BUCK CONTROLLERS

Mfg. Part No.	Input Voltage Max. (V)	Output Voltage Max. (V)	Freq. (kHz)	Dimensions	Stock No.	Price Each 1-24
● SP6126EK1-L	29	24	600	6-TSOT	24R0673	1.99
● XRP7714ILB-F	25	5.1	1500	40-TQFN	73R0502	9.03
● XRP7713ILB-F	25	5.1	1500	32-TQFN	73R0499	7.20
● XRP7740ILB-F	...	5.1	1500	40-TQFN	65R6429	12.98
● XRP7704ILB-F	20	5.1	1500	40-TQFN	65R6426	11.16
● XRP7708ILB-F	20	5.1	1500	40-TQFN	73R0496	11.80

DEVELOPMENT TOOLS

Mfg. Part No.	Description	Stock No.	Price Each
XRP7704EVB-XCM	XRP7704 Step Down Controller Evaluation Board	65R6424	100.00
XRP7704EVB-XPM	XRP7704 Step Down Controller Evaluation Board	65R6425	150.00
XRP7708EVB	XRP7708 Step Down Controller Evaluation Board	73R0495	62.50
XRP7714EVB	XRP7714 Step Down Controller Evaluation Board	73R0501	225.00
XRP7740EVB	XRP7740 Step Down Controller Evaluation Board	65R6428	62.50

(156747)

STEP DOWN DC/DC CONTROLLERS

RoHS Compliant Available

LINEAR TECHNOLOGY

NON SYNCHRONOUS STEP DOWN (BUCK)

Mfg. Part No.	Type	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-24
● LTC1625CGN#PBF	Step Down (Buck)	36	16-SSOP	56M2694	9.78
● LTC1625CS#PBF	Step Down (Buck)	36	16-SSOP	56M2698	9.22
● LTC1625IS#PBF	Step Down (Buck)	36	16-SOIC	56M2706	11.12
● LTC1628CG#PBF	Step Down (Buck)	36	28-SSOP	56M2726	9.12
● LTC1629CG#PBF	Dual Synchronous Step-Down Current Mode Switching Regulator Controller	36	28-SSOP	56M2753	12.16
● LTC1703CG#PBF	Step Down (Buck)	7	28-SSOP	56M3350	11.18
● LTC1735CGN#PBF	Step Down (Buck)	36	16-NSSOP	56M3560	7.06
● LTC3851AEGN#PBF	Buck DC/DC Converter	38	16-SSOP	13T3928	3.62
● LTC3851AEMSE#PBF	Buck DC/DC Converter	38	16-MSOP	13T3932	3.62
● LTC3891EFE#PBF	Buck DC/DC Converter	60	20-TSSOP	13T3958	7.80

CONTINUED

STEP DOWN DC/DC CONTROLLERS (CONT.)

Mfg. Part No.	Type	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-24
LTC3891EUDC#PBF	Buck DC/DC Converter	60	20-QFN	13T3960	7.41
LTC1735CS#PBF	Step Down (Buck)	36	16-NSOIC	56M3568	6.79
LTC1753CG#PBF	Step Down (Buck)	6	20-SSOP	56M3702	6.67
LTC1771EMS8#PBF	Step Down (Buck)	18	8-MSOP	56M3742	5.76
LTC1773EMS#PBF	Step Down (Buck)	8.5	10-MSOP	56M3774	5.52
LTC1775CS#PBF	Current Mode Synchronous Step-Down Switching Regulator Controller	36	16-SOIC	56M3782	9.41
LTC1778EGN#PBF	Step Down (Buck)	36	16-NSSOP	56M3798	5.91
LTC1778EGN-1#PBF	Step Down (Buck)	36	16-NSSOP	56M3795	5.91
LTC1874EGN#PBF	Dual Current Mode Step-Down DC/DC Controller	9.8	16-SSOP	56M4284	6.91
LTC1929CG#PBF	Dual Synchronous Step-Down Current Mode Switching Regulator Controller	36	28-SSOP	56M4364	9.00
LTC3610EWP#PBF	Step Down (Buck)	28	64-QFN	56M8026	17.10
LTC3701EGN#PBF	Dual Step-Down DC/DC Controller	10	16-SSOP	56M8037	7.12
LTC3708EUH#PBF	Buck Controller	36	32-QFN	56M8105	9.71
LTC3714EG#PBF	Step Down (Buck)	36	28-WSSOP	56M8125	3.61
LTC3727EG#PBF	Step Down (Buck)	36	28-SSOP	56M8201	6.93
LTC3728EG#PBF	Dual Step-Down Switching Regulator Controller	36	28-SSOP	56M8217	10.46
LT3800EFE#PBF	Step Down (Buck)	20	16-TSSOP	57M8609	6.41
LT3800IFE#PBF	Buck Switching	20	16-TSSOP	57M8613	8.10
LTC3728LCUH#PBF	Step Down (Buck)	28	32-QFN	56M8229	9.19
LTC3778EF#PBF	Step-Down Controller	36	20-TSSOP	56M8391	7.30
LTC3728LEUH#PBF	Step Down (Buck)	28	32-QFN	56M8245	6.88
LTC3731IUH#PBF	Step Down (Buck)	36	QFN	56M8291	9.91
LTC3878EGN#PBF	Step Down (Buck)	38	16-SSOP	56P4234	3.62
LTC3879EMSE#PBF	Step Down (Buck)	38	16-MSOP	56P4235	3.75
LTC3879EUD#PBF	Step Down (Buck)	38	16-QFN	56P4236	3.75
LTC3835IFE#PBF	Step Down Controller	10	TSSOP	01N6416	8.36
LTC3835IUFD#PBF	Step Down Controller	10	QFN	01N6418	8.36
LTC3883EUH#PBF	Single Phase with Digital Power System Management	24	32-QFN	44W6813	10.30
SYNCHRONOUS					
LTC3731CG#PBF	Synchronous Buck Switching Regulator Controller	36	36-SSOP	56M8275	8.67
LTC3731CUH#PBF	Synchronous Buck Switching Regulator Controller	36	32-QFN	56M8279	9.19
LT3740EDHC#PBF	Synchronous Step-Down Controller	22	16-DFN	57M8588	2.96
LTC3770EG#PBF	Step-Down Synchronous Controller	32	28-SSOP	56M8358	7.19
LT3845AEFE#PBF	Buck DC/DC Converter	60	16-TSSOP	13T4245	7.13
LT3845IFE#PBF	Buck DC/DC Converter	60	16-TSSOP	57M8638	8.40
LTC3851EMSE-1#PBF	Synchronous Buck Switching	38	16-MSOP	31P7602	2.44
LTC3851EMSE#PBF	Synchronous Buck Switching	38	16-MSOP	44P3980	3.62
LTC3857EUH#PBF	Synchronous Buck DC/DC Converter	38	32-QFN	24R3317	9.81
LTC3858EGN-1#PBF	Synchronous Buck DC/DC Converter	38	28-SSOP	24R3318	9.56
LTC3858EUFD-1#PBF	Synchronous Buck DC/DC Converter	38	28-QFN	24R3319	6.56
LTC3868EGN-1#PBF	Synchronous Buck DC/DC Converter	24	28-SSOP	24R3320	5.53
LTC3868EUFD-1#PBF	Synchronous Buck DC/DC Converter	24	28-QFN	24R3321	3.87
LTC3775EUD#PBF	Synchronous Buck DC/DC Converter	38	16-QFN	51R1512	3.82
LTC3855EFE#PBF	Synchronous Buck DC/DC Converter	38	38-TSSOP	51R1513	7.27
LTC3855EUJ#PBF	Synchronous Buck DC/DC Converter	38	40-QFN	51R1514	6.80
LTC3880EUJ-1#PBF	Dual Output Polyphase	24	40-QFN	59T5656	11.44
LTC3880EUJ#PBF	Dual Output Polyphase	24	40-QFN	59T5658	11.44
LTC3861EUHE#PBF	Dual Output Polyphase	24	36-QFN	82T3899	4.11

(175973)

EMBEDDED DESIGN TOOLS

IDEs, Compilers, Debuggers and programming tools for all your MCU/DSP/FPGA needs.

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(196530)

STEP UP DC/DC CONTROLLERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Mfg. Part No.	Type	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-24
STEP UP					
LT1619ES8#PBF	Step Up (Boost)	18	8-NSOIC	57M5256	4.37
LTC3862EGN#PBF	Boost Switching	36	24-SSOP	15N5417	7.04
LTC3872ETS8#TRMPBF	Boost	9.8	8-TSOT-23	56M8617	4.32
LTC3805EDD-5#PBF	Boost Switching	75	10-DFN	79M3553	2.71
LTC3805EMSE-5#PBF	Boost Switching, Step Up (Boost)	75	10-MSOP	79M3555	2.71
LTC3805HMSE#PBF	Boost, Flyback	8.8	10-MSOP	51P3120	2.51
LTC3787EGN#PBF	PolyPhase Synchronous Boost Controller	38	28-SSOP	13T3901	7.55
LTC3787EUFD#PBF		38	28-QFN	13T3903	7.55
LTC3786EMSE#PBF	Synchronous Boost Controller	38	16-MSOP	13T3893	5.47
LTC3786EUD#PBF	Synchronous Boost Controller	38	16-QFN	13T3895	5.47
LT3782EFE#PBF	Boost DC/DC Converter	40	28-SSOP	57M8603	9.42
LT3782AEFE#PBF	Boost DC/DC Converter	40	28-TSSOP	44P4033	9.68
LT3782AEUFD#PBF	Boost DC/DC Converter	40	28-QFN	44P4035	9.44
SYNCHRONOUS/FLYBACK					
LTC3703EG#PBF	Synchronous Switching Regulator Controller	15	28-SSOP	56M8045	7.03
LTC3736EGN#PBF	Dual Synchronous Controller	9.8	24-SSOP	56M8331	7.68
LTC3773EG#PBF	Synchronous DC/DC Controller	36	36-SSOP	56M8378	7.91
LTC3802EGN#PBF	Dual Synchronous DC/DC Controller	6	28-SSOP	56M8429	9.71
LTC3803HS6#PBF	Flyback Switching	75	6-TSOT-23	51P3118	3.37
LTC3805HMSE-5#PBF	Flyback	75	10-MSOP	51P3119	3.77
LTC3809EMSE#PBF	Synchronous DC/DC Controller	9.8	10-MSOP	56M8489	3.57
LT3825EFE#PBF	Isolated Synchronous Flyback Controller	75	16-TSSOP	57M8621	6.36
LTC3704EMS#PBF	...	36	10-MSOP	56M8073	3.78
LTC3723EGN-1#PBF	Synchronous Push-Pull PWM Controller	9.5	16-SSOP	56M8169	9.43
LT3724EFE#PBF	High Voltage Current Mode Switching Regulator Controller	60	16-TSSOP	57M8581	6.41
LTC3737EGN#PBF	Dual DC/DC Controller	9.8	24-SSOP	56M8347	7.43
LTC3831EGN#PBF	Synchronous Switching Regulator Controller	8	16-SSOP	56M8576	6.07
LTC3901EGN#PBF	Secondary Side Synchronous Driver	11	16-SSOP	56M8632	5.26
LTC1696ES6#PBF	Monitor	27	6-SOT-23	66M7843	3.65
STEP UP / STEP DOWN					
LTC3780EUH#PBF	Step Down/Step Up (Buck/Boost)	36	32-QFN	56M8399	9.52
LTC3780IG#PBF	Step Down/Step Up (Buck/Boost)	36	24-SSOP	56M8403	11.07
LTC3780IUH#PBF	Synch Buck-Boost Controller	36	QFN	56M8407	11.07

(112547)

PUSHBUTTON ON/OFF CONTROLLERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Features:

- Automatic Turn-On Via Voltage Monitor Input
- Wide Input Supply Range: 1.5V to 36V
- ±25kV ESD HBM on PB Input
- ±36V Wide Input Voltage for PB Input
- Low Leakage EN Output Allows DC/DC Converter Control (LTC2955-1)
- High Voltage EN Output Drives External P-Channel MOSFET (LTC2955-2)
- Simple Interface Allows Graceful µP Shutdown
- Adjustable Turn-Off Timer
- Operating Temperature Range: LTC2955C = 0°C to 70°C LTC2955I = –40°C to 85°C

Mfg. Part No.	Supply Current (µA)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-24
LTC2955CDDB-1#TRMPBF	1.2	36	10-DFN	93T2005	4.83
LTC2955CDDB-2#TRMPBF	1.2	36	10-DFN	93T2006	2.88
LTC2955CTS8-1#TRMPBF	1.2	36	8-TSOT-23	93T2007	4.83
LTC2955CTS8-2#TRMPBF	1.2	36	8-TSOT-23	93T2008	4.83
LTC2955IDDB-1#TRMPBF	1.2	36	10-DFN	93T2009	5.80
LTC2955IDDB-2#TRMPBF	1.2	36	10-DFN	93T2010	5.80
LTC2955ITS8-1#TRMPBF	1.2	36	8-TSOT-23	93T2011	5.80
LTC2955ITS8-2#TRMPBF	1.2	36	8-TSOT-23	93T2012	5.80
LTC2950CDDB-1#TRMPBF	6	26	8-DFN	12P6548	4.20
LTC2950CDDB-2#TRMPBF	6	26	8-DFN	12P6550	2.59
LTC2950CTS8-1#TRMPBF	6	26	8-TSOT-23	12P6551	4.20
LTC2950CTS8-1#TRPBF	6	33	8-TSOT-23	56M7180	4.09
LTC2950CTS8-2#PBF	6	26.4	8-TSOT-23	78T3108	3.75
LTC2950CTS8-2#TRMPBF	6	26	8-TSOT-23	12P6552	4.20
LTC2950IDDB-1#TRMPBF	6	26	8-DFN	12P6553	4.88
LTC2950IDDB-2#TRMPBF	6	26	8-DFN	12P6554	4.88
LTC2950ITS8-1#PBF	6	26.4	8-TSOT-23	78T3111	4.35
LTC2950ITS8-1#TRMPBF	6	26	8-TSOT-23	12P6555	4.88
LTC2950ITS8-2#PBF	6	26.4	8-TSOT-23	78T3112	4.35
LTC2950ITS8-2#TRMPBF	6	26	8-TSOT-23	12P6556	4.88

➤ CONTINUED ➤

PUSHBUTTON ON/OFF CONTROLLERS (CONT.)

Mfg. Part No.	Supply Current (µA)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-24
● LTC2951CDDB-1#TRMPBF	6	26	8-DFN	12P6557	4.20
● LTC2951CDDB-2#TRMPBF	6	26	8-DFN	12P6558	4.20
● LTC2951CTS8-1#PBF	6	26.4	8-TSOT	78T3115	3.75
● LTC2951CTS8-1#TRMPBF	6	26	8-TSOT-23	12P6559	4.20
● LTC2951CTS8-2#TRMPBF	6	26	8-TSOT-23	12P6560	4.20
● LTC2951IDDB-1#TRMPBF	6	26	8-DFN	12P6561	4.88
● LTC2951IDDB-2#TRMPBF	6	26	8-DFN	12P6562	4.88
● LTC2951ITS8-1#TRMPBF	6	26	8-TSOT-23	12P6563	4.88
● LTC2951ITS8-2#TRMPBF	6	26	8-TSOT-23	12P6564	4.88
● LTC2954CTS8-1#PBF	6	26.4	8-TSOT-23	78T3123	3.75
● LTC2954ITS8-1#PBF	6	26.4	8-TSOT-23	78T3127	4.35
● LTC2954ITS8-2#PBF	6	26.4	8-TSOT-23	78T3128	4.35
● LTC2953CDD-1#PBF	14	27	12-DFN	58M0728	3.29
● LTC2952CF#PBF	25	28	20-TSSOP	56M7234	4.21
● LTC2952IUF#PBF	25	28	20-QFN	56M7246	7.08

(203725)

SWITCHING CONTROLLERS

RoHS Compliant Available

ON Semiconductor

Features:
- Internal Thermal Shutdown
- X2 Capacitor in EMI Filter Discharging Feature
- Frequency Modulation for Softened EMI Signature
- Adjustable Overpower Protection Dependant on the Bulk Voltage
- Latch-off Input Combined with the Overpower Protection Sensing Input

Applications:
- AC-DC Adapters for Notebooks, LCD, and Printers
- Offline Battery Chargers
- Consumer Electronic Power Supplies
- Auxiliary/Housekeeping Power Supplies
- Offline Adapters for Notebooks

Mfg. Part No.	Topology	Supply Voltage Max. (V)	Drive Cap. (mA)	Package	Stock No.	Price Each 1-2499
● NCP1244AD065R2G	Flyback	28	500/800	8-SOIC	60W1668	0.48
● NCP1255AD65R2G	Flyback	35	300/500	8-SOIC	72W3918	0.90

(209469)

PWM CONTROLLERS

RoHS Compliant Available

CURRENT MODE PWM CONTROLLER

Mfg. Part No.	UVLO Threshold (V)	DC Input Voltage (V) Min.	DC Input Voltage (V) Max.	Output Current (A) Max.	Switching Frequency (kHz) Max.	Package	Stock No.	Price Each 1-9
● UC3842BN	8.4	12	25	1	250	8-DIP	89K1262	1.35
● UC3844BN	16	12	25	1	250	8-DIP	89K1264	1.05

VOLTAGE MODE PWM CONTROLLER

Mfg. Part No.	DC Input Voltage (V) Min.	DC Input Voltage (V) Max.	Output Current (A) Max.	Switching Frequency (kHz) Max.	Package	Stock No.	Price Each 1-9
● SG3524P	8	40	0.1	300	16-SOIC	89K1505	1.65
● SG3525AN	8	35	0.5	400	16-DIP	89K1506	1.45
● SG3524N	8	40	0.1	300	16-DIP	89K1504	1.86

(83933)

SWITCHING CONTROLLERS

RoHS Compliant Available

Texas Instruments

SWITCHING REGULATOR PWM CONTROLLERS

Mfg. Part No.	Input Volt. Max. (V)	Gate Drive	Topology	Package	Stock No.	Price Each 1-9
● LM5026MT/NOPB	15	3	Forward Active Clamp	16-TSSOP	69K2595	3.15
● LM5033MM/NOPB	15	1.5	Push-Pull, Half-Bridge Full-Bridge, IBC	10-MiniSOIC	65K6383	2.31
● LM5027AMH/NOPB	90	...	Forward Active Clamp	20-TSSOP	76R6959	3.41
● LM5046MH/NOPB	100	2	Phase Shifted Full-Bridge	28-eTSSOP	45T6656	6.44
● LM5035CSQ/NOPB	105	...	Half-Bridge, Push-Pull and Full-Bridge	24-LLP	76R6961	4.06
● LM5116MH/NOPB	15	...	Buck	20-TSSOP	32M1263	6.16
● LM25037MT/NOPB	14	...	Dual-Mode	16-TSSOP	02P9788	3.56

➤CONTINUED➤

SWITCHING CONTROLLERS (CONT.)

STEP-UP (BOOST) SWITCHING CONTROLLERS

Mfg. Part No.	Input Volt. Max. (V)	Output Volt. Min. (V)	Topology	Package	Stock No.	Price Each 1-9
● LM3578AM/NOPB	40	...	Buck, Boost, Flyback, Invert	8-NSOIC	41K4883	2.51
● LM5022MM/NOPB	60	1.25	Boost, Sepic	10-uSOIC	32M1225	2.45

NON-SYNCHRONOUS BUCK CONTROLLERS

Mfg. Part No.	Input Volt. Max. (V)	Output Volt. Min. (V)	PWM Mode	Package	Stock No.	Price Each 1-9
● LM3485MM/NOPB	35	...	Hysteretic	8-MSOP	41K4830	1.60
● LM3485MMX/NOPB	35	...	Hysteretic	8-MSOP	41K4831	1.60
● LM3488MM/NOPB	40	1.26	Current	8-MSOP	41K4832	2.18
● LM3489MM/NOPB	35	...	Hysteretic	8-MSOP	99K2420	1.66

SIMPLE SWITCHER SYNCHRONOUS BUCK CONTROLLERS

● LM3150MHE/NOPB	42	0.6	...	14-TSSOP	12P9273	4.25
● LM3153MHE-3.3/NOPB	42	3.3	...	14-TSSOP	12P9276	4.25

STEP-DOWN (BUCK) SWITCHING CONTROLLERS

Mfg. Part No.	Input Volt. Max. (V)	Output Volt. Min. (V)	Topology	Package	Stock No.	Price Each 1-999
● LM5642MH/NOPB	36	1.3	Current	28-TSSOP	50M8806	5.01
● LM25085MME/NOPB	42	1.25	Voltage	8-MSOP	40P2713	2.19
● LM25085MYE/NOPB	42	1.25	Voltage	8-MSOP-EP	40P2714	2.19
● LM3481MM/NOPB	48	1.275	Boost, Flyback, SEPIC	10-SOIC	84M8119	2.18
● LM5085MME/NOPB	75	1.25	Voltage	8-MSOP	40P2717	2.66
● LM5088MH-1/NOPB	13	1.205	Emulated Current Mode	16-TSSOP	56P4155	4.20

SYNCHRONOUS BUCK CONTROLLERS

● LM5116MH/NOPB	15	1.215	Buck	20-TSSOP	32M1263	6.16
● LM25116MH/NOPB	15	1.215	Buck	20-TSSOP	42M1580	4.87
● LM2642MTC/NOPB	30	1.238	Buck	28-TSSOP	41K3986	4.25

STEP-UP/DOWN (BOOST/BUCK) INDUCTIVE REGULATORS

Mfg. Part No.	Input Volt. Max. (V)	Output Volt. Min. (V)	Output Current (mA)	Package	Stock No.	Price Each 1-9
● LM5001MA/NOPB	75	...	1000	8-SOIC	32M1216	4.44
● LM5002MA/NOPB	75	...	500	8-SOIC	32M1220	4.15

BOOST AND/OR BUCK-BOOST CONTROLLERS

Mfg. Part No.	Input Volt. Max (V)	Output Volt. Max (V)	Topology	Package	Stock No.	Price Each 1-9
● LM3477AMM/NOPB	35	1.265	Buck	8-MSOP	41K4814	2.31
● LM3478MM/NOPB	40	1.26	Boost	8-MSOP	41K4818	2.18
● LM5020MM-1/NOPB	15	1.225	Boost	10-MSOP	41K6036	2.18

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
LM2587EVAL	LM2587 Evaluation Board	82H4004	49.98
LM3485EVAL	LM3485 Evaluation Board	74C4154	25.50
● LM5020EVAL	LM5020 Evaluation Board	10J9382	60.20

(113787)

BATTERY MANAGEMENT ICs

RoHS Compliant Available

Analog Devices

The ADM690 family of supervisory circuits offers complete single chip solutions for power supply monitoring and battery control functions in microprocessor systems. These functions include µP reset, backup battery switchover, watchdog timer, CMOS RAM write protection, and power failure warning.

The ADP2291 is a constant-current/constant-voltage linear charger for a single cell lithium ion battery, requiring just a few components to provide a simple and safe charging system that operates from a wide 4.5 V to 12 V input voltage range. It features an internally controlled, multistep charging cycle that improves battery life.

BATTERY BACKUP IC

Mfg. Part No.	Manual Reset	Package	Stock No.	Price Each 1-9
● ADM691ANZ	Yes	16-PDIP	59K2233	3.73
● ADM691ARZ	Yes	16-SOIC	19M8702	3.24
● ADM691ARZ-REEL	Yes	16-SOIC	96K2075	3.33

BATTERY CHARGER IC

Mfg. Part No.	Function	Package	Stock No.	Price Each 1-9
● ADP2291ARMZ-R7	Charge Controller	8-MSOP	59K2530	2.83
● ADP5065ACBZ-1-R7	Charge Controller	20-WLCSP	82T5464	4.04

(105248)

FLASH MEMORY PROGRAMMING SUPPLY

RoHS Compliant Available

LINEAR TECHNOLOGY

Features:
- No Inductors
- Guaranteed 30mA Output
- Low Power: I_{CC} = 500mA
- I_{CC} in Shutdown: 0.5mA

Applications:
- 12V Flash Memory Programming Supplies
- Compact 12V Op Amp Supplies
- Battery-Powered Systems

The **LTC®1262** is a regulated 12V, 30mA output DC/DC converter. It is designed to provide the 12V ±5% output necessary to program byte-wide flash memories. The output will provide up to 30mA from input voltages as low as 4.75V without using any inductors. Only four external capacitors are required to complete an extremely small surface mountable circuit. The TTL compatible shutdown pin can be directly connected to a microprocessor and reduces the supply current to less than 0.5mA. The **LTC1262** offers improved shutdown current performance and requires fewer external components than competing solutions.

Mfg. Part No.	Supply Voltage (V)	Supply Current (mA)	Output Voltage (V)	Package	Stock No.	Price Each 1-99
LTC1262IS8#PBF	4.75 to 5.5	0.5	12	8-SOIC	55M9819	3.20

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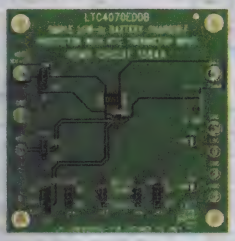
BATTERY MANAGEMENT ICs

RoHS Compliant Available

LINEAR TECHNOLOGY



LTC4060 accomodates single, 2-, 3- or 4-series cell batteries. **LTC4011** accomodates from 1 to 16 cells. No firmware or microcontroller required.

LINEAR CHARGER

Mfg. Part No.	Battery Chemistry	Package	Stock No.	Price Each 1-24
LTC1733EMSE#PBF	Li-Ion	10-MSOP	58M0697	3.63
LTC4001EUF-1#PBF	Li-Ion	16-QFN	56M8636	4.43
LTC4077EDD#PBF	Li-Ion	10-DFN	58M0938	2.67
LTC1732EMS-8.4#PBF	Li-Ion, NiCd, NiMH	10-MSOP	58M0693	2.52
LTC4150CMS#PBF	Li-Ion, NiCd, NiMH	10-MSOP	56M8728	3.00
LTC3559EUD#PBF	Li-Ion, Li-Pol	16-QFN	56M8018	4.31
LTC3566EUF#PBF	Li-Ion, Li-Pol	24-QFN	95M6504	8.16
LTC3576EUFE#PBF	Li-Ion, Li-Pol	38-QFN	12P6566	10.26
LTC3576EUFE-1#PBF	Li-Ion, Li-Pol	38-QFN	12P6565	10.26
LT3650EDD-4.1#PBF	Li-Ion, Li-Pol	12-DFN	08R2338	5.99
LT3650EDD-4.2#PBF	Li-Ion, Li-Pol	12-DFN	08R2339	5.99
LT3650EDD-8.4#PBF	Li-Ion, Li-Pol	12-DFN	08R2340	5.99
LT3652HVEMSE#PBF	Li-Ion, Li-Pol	12-MSOP	78R8980	7.27
LT3652HVEMSE#PBF	Li-Ion, Li-Pol	12-MSOP	78R8980	7.27
LTC4071EMS8E#PBF	Li-Ion, Li-Pol	8-MSOP	13T8411	4.91
LTC4075EDD#PBF	Li-Ion, Li-Pol	10-DFN	58M0928	3.78
LTC4075HVXEDD#PBF	Li-Ion, Li-Pol	11-DFN	58M0931	4.02
LTC4060EFE#PBF	NiCd, NiMH	16-TSSOP	56M8672	7.41

SMBUS/I2C/SPI CONTROLLED BATTERY CHARGER

LTC4110EUHF#PBF	Lead Acid, Li-Ion, NiCd, NiMH	38-QFN	95M8574	19.77
LTC4099EUDC#PBF	Li-Ion, Li-Pol	20-UTQFN	51R1515	4.76

SWITCHING CHARGER

LTC1760CFW#PBF	Dual Smart Battery	48-TSSOP	58M0705	15.99
LT1512CN8#PBF	Li-Ion	8-DIP	57M4702	6.78
LT1512CS8#PBF	Li-Ion	8-SOIC	57M4704	7.04
LTC3455EUF#PBF	Li-Ion	24-QFN	56M7851	7.91
LTC4090EDJC#PBF	Li-Ion	22-DFN	56M8725	6.54
LT1510CS#PBF	Li-Ion, NiCd, NiMH	16-SOIC	57M4678	7.90
LT1510CS8#PBF	Li-Ion, NiCd, NiMH	8-SOIC	57M4682	3.70
LT1513-2CT7#PBF	Lead Acid, Li-Ion, NiCd, NiMH	7-7-TO-220	57M4722	9.06
LT1513CR#PBF	Lead Acid, Li-Ion, NiCd, NiMH	7-TO-252	57M4730	9.64
LTC4008EGN#PBF	Li-Ion, Li-Pol, NiCd, NiMH	20-SSOP	56M8662	7.43
LTC4009CUF#PBF	Li-Ion, Li-Pol, NiCd, NiMH	20-QFN	15N5429	6.30
LTC4100EG#PBF	Li-Ion, Li-Pol, NiCd, NiMH	24-SSOP	58M0960	10.89
LT3650EDD-8.2#PBF	Li-Ion, Li Polymer	12-DFN	51P3125	5.99
LTC3677EUFF-3#PBF	Li-Ion, Li-Pol	44-QFN	70R5696	6.96
LTC4001EUF#PBF	Li-Ion, Li-Pol	16-QFN	56M8638	3.14
LTC4002ES8-4.2#PBF	Li-Ion, Li-Pol	8-SOIC	73K4388	3.52
LTC4002ES8-8.4#PBF	Li-Ion, Li-Pol	8-SOIC	58M0818	3.52
LTC4007EGN#PBF	Li-Ion, Li-Pol	24-SSOP	56M8654	7.68
LTC4009IUF#PBF	Li-Ion, Li-Pol	20-QFN	71R4686	7.27
LTC4012IUF#PBF	Li-Ion, Li-Pol	20-QFN	71R4694	8.12
LTC4012IUF-3#PBF	Li-Ion, Li-Pol	20-QFN	71R4692	8.12
LTC4054LES5-4.2#TRPBF	Li-Ion, Li-Pol	5-TSOT-23	58M0860	3.50
LTC4070EDDB#PBF	Li-Ion, Li-Pol	8-DFN	67R4286	2.94

CONTINUED

BATTERY MANAGEMENT ICs (CONT.)

SWITCHING CHARGER

Mfg. Part No.	Battery Chemistry	Package	Stock No.	Price Each 1-24
LTC4070EMS8E#PBF	Li-Ion, Li-Pol	8-MSOP	67R4287	4.70
LTC4099EUDC#PBF	Li-Ion, Li-Pol	20-UTQFN	51R1515	4.76
LTC4011CFE#PBF	NiCd, NiMH	20-TSSOP	58M0830	10.01
LT3652IDD#PBF	LiFePO4, Li-Ion, Li-Pol	12-DFN	13T8472	7.18
LTC4006EGN-2#PBF	Li-Ion	16-SSOP	56M8642	7.17

DUAL INPUT POWER CHARGER

LTC4156EUFD#PBF	Lithium Iron Phosphate	28-QFN	87T9233	4.22
LTC4156IUFD#PBF	Lithium Iron Phosphate	28-QFN	87T9235	4.64

MONITOR AND CONTROL ICs

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-24
LTC1153IS8#PBF	Auto-Reset Electronic Circuit Breaker	8-SOIC	55M9428	5.17
LTC2924CGN#PBF	Quad Power Supply Sequencer	16-SSOP	56M7098	5.28
LTC2970IUFD#PBF	Power Supply Monitor & Margining Controller	24-QFN	56M7294	9.63
LTC6801IG#PBF	Overvoltage Battery Monitor	36-SSOP	68R2491	9.54
LTC6802IG-1#PBF	Overvoltage Battery Monitor	44-SSOP	56P3097	17.04
LTC6802IG-2#PBF	Overvoltage Battery Monitor	44-SSOP	72P2172	17.04

OVERVOLTAGE PROTECTION REGULATOR ICs

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-24
LT4356CMS-1#PBF	Overvoltage Protection Regulator and Inrush Limiter	10-MSOP	57M8717	3.99
LT4356HMS-1#PBF	Overvoltage Protection Regulator and Inrush Limiter	10-MSOP	57M8723	5.19
LT4356IMS-1#PBF	Overvoltage Protection Regulator and Inrush Limiter	10-MSOP	57M8729	4.76

CAPACITOR CHARGER

Mfg. Part No.	Switch Current (A)	Input Voltage Range (V) Min.	Input Voltage Range (V) Max.	Package	Stock No.	Price Each 1-24
LT3751EUFD#PBF	10	4.75	24	20-QFN	31P7617	7.76
LT3751EFE#PBF	0.15	4.75	24	20-TSSOP	05R7693	8.17

FUEL GAUGES

Mfg. Part No.	Battery Chemistry	Package	Stock No.	Price Each 1-24
LTC2942IDCB-1#PBF	Li-Ion	6-DFN	84R7842	4.84
LTC2942CDCB-1#PBF	Li-Ion	6-DFN	84R7841	4.05
LTC2941CDCB-1#PBF	Li-Ion	6-DFN	84R7840	3.61

DUAL INPUT POWER CHARGERS

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-99
LTC4156EUFD#PBF	3.5A LiFePO4 Battery Charger with I2C Control and USB OTG	28-QFN	87T9233	4.22
LTC4156IUFD#PBF	3.5A LiFePO4 Battery Charger with I2C Control and USB OTG	28-QFN	87T9235	4.64

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µMODULE BATTERY CHARGERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Features:
- Programmable Charge Current: Up to 2A
- Dynamic Charge Rate Programming/Soft-Start Pin
- Programmable Input Current Limit
- Optional Reverse Input Protection
- NTC Resistor Temperature Monitor
- 0.5% Float Voltage Accuracy
- Bad-Battery Detection with Auto-Reset

Applications:
- Industrial Handheld Instruments
- 12V to 24V Automotive and Heavy Equipment
- Professional Video/Camera Chargers

The battery chargers are complete solutions containing the DC/DC controller, MOSFETs, inductor, input and output bypass capacitors and compensation circuitry in only 2.25cm.

Mfg. Part No.	Max. No. of Cells	Battery Type	Battery Charge Voltage (V)	Package	Stock No.	Price Each 1-24
LTM8061EV-4.1#PBF	1	Li-Ion, Li-Pol	4.1	77-LGA	21T2054	15.59
LTM8061EV-4.2#PBF	1	Li-Ion, Li-Pol	4.2	77-LGA	21T2055	12.64
LTM8061IV-4.1#PBF	1	Li-Ion, Li-Pol	4.1	77-LGA	21T2058	17.16
LTM8061IV-4.2#PBF	1	Li-Ion, Li-Pol	4.2	77-LGA	21T2059	13.91
LTM8061EV-8.2#PBF	2	Li-Ion, Li-Pol	8.2	77-LGA	21T2056	12.64
LTM8061EV-8.4#PBF	2	Li-Ion, Li-Pol	8.4	77-LGA	21T2057	15.59
LTM8061IV-8.2#PBF	2	Li-Ion, Li-Pol	8.2	77-LGA	21T2060	17.16
LTM8061IV-8.4#PBF	2	Li-Ion, Li-Pol	8.4	77-LGA	21T2061	13.91
LTM8062EV#PBF	5	Li-Ion, Li-Pol	14.4	77-LGA	21T2062	17.35
LTM8062IV#PBF	5	Li-Ion, Li-Pol	14.4	77-LGA	21T2063	17.64

(195453)

POWER MANAGEMENT ICS

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ENERGY HARVESTING POWER MANAGEMENT

RoHS Compliant Available

LINEAR TECHNOLOGY

Applications:
- Remote sensors and radio power
- Surplus heat energy harvesting
- HVAC systems
- Industrial wireless sensing
- Automatic metering
- Building automation
- Predictive maintenance

Features:
- Operates from inputs of 20mV
- Power good indicator
- Uses compact Step-Up transformers

Mfg. Part No.	Input Voltage (V)	Output Current (mA)	Output Voltage (V)	Package	Stock No.	Price Each 1-24
● LTC3108EDE#PBF	0.02 - 0.5	4.5	5	12-DFN	67R4277	6.30
● LTC3108EGN#PBF	0.02 - 0.5	300	5	16-SSOP	67R4278	6.30
● LTC3108IDE#PBF	0.02 - 0.5	300	5	12-DFN	67R4279	7.38
● LTC3108IGN#PBF	0.02 - 0.5	300	5	16-SSOP	67R4280	7.38

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PIEZOELECTRIC ENERGY HARVESTING POWER SUPPLY

RoHS Compliant Available

LINEAR TECHNOLOGY

Features:
- Integrated low-loss full-wave bridge rectifier
- Up to 100 mA of output current
- High efficiency integrated hysteretic buck DC/DC
- Selectable output voltages: 1.8V, 2.5V, 3.3V & 3.6V

The **LTC3588-1** integrates a low-loss full-wave bridge rectifier with a high efficiency buck converter to form a complete energy harvesting solution optimized for high output impedance energy sources such as piezoelectric transducers. An ultralow quiescent current undervoltage lockout (UVLO) mode with a wide hysteresis window allows charge to accumulate on an input capacitor until the buck converter can efficiently transfer a portion of the stored charge to the output. In regulation, the **LTC3588-1** enters a sleep state in which both input and output quiescent currents are minimal. The buck converter turns on and off as needed to maintain regulation.

Mfg. Part No.	No. of Outputs	Input Voltage (V)	Temperature Range	Package	Stock No.	Price Each 1-24
● LTC3588EDD-1#PBF	1	20	-40°C to +85°C	10-DFN	63R1665	6.30
● LTC3588EMSE-1#PBF	1	20	-40°C to +85°C	10-MSOP	63R1666	6.30
● LTC3588IMSE-1#PBF	1	20	-40°C to +125°C	10-MSOP	63R1667	4.96
● LT3652EMSE#PBF	1	32	-40°C to +125°C	12-MSOP	64R8539	6.52
● LTC3588EMSE-2#PBF	1	20	-40°C to +125°C	10-MSOP	84R6698	6.30
● LTC3588EDD-2#PBF	1	20	-40°C to +125°C	10-DFN	84R6696	4.22

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Li-ION, Li-POLYMER CHARGE MANAGEMENT

RoHS Compliant Available

MICROCHIP

Mfg. Part No.	Cell Volt. (V)	Max Volt. Reg. (V)	Charge Status Output	Package	Stock No.	Price Each
● MCP73811T-420I/OT	4.2	± 1	Tri-State Output	5-SOT-23	27M0231	0.51
● MCP73812T-420I/OT	4.2	± 1	Open-Drain Output	5-SOT-23	27M0232	0.54
● MCP73831T-2ACI/OT	4.2	± 0.75	Tri-State Output	5-SOT-23	56K7045	0.56
● MCP73832T-2ACI/OT	4.2	± 0.75	Open-Drain Output	5-SOT-23	88K5656	0.56
● MCP73837-FCI/MF	...	± 0.5	Open-Drain Output	10-DFN	40M0755	1.12
● MCP73837-FCI/UN	...	± 0.5	Open-Drain Output	MSOP	77M3068	1.12
● MCP73837-FJI/MF	...	± 0.5	Open-Drain Output	10-DFN	77M3069	1.12
● MCP73837-NVI/MF	...	± 0.5	Open-Drain Output	10-DFN	77M3071	1.12
● MCP73838-FCI/MF	...	± 0.5	Open-Drain Output	10-DFN	40M0759	1.12
● MCP73838-FJI/MF	...	± 0.5	Open-Drain Output	10-DFN	77M3077	1.12
● MCP73838-NVI/MF	...	± 0.5	Open-Drain Output	10-DFN	77M3079	1.12
● MCP73838T-FCI/MF	...	± 0.5	Open-Drain Output	10-DFN	95M9052	1.12
● MCP73871-2AAI/ML	...	± 0.75	Open-Drain Output	20-QFN	54M4955	1.79
● MCP73871-2CAI/ML	...	± 0.75	Open-Drain Output	20-QFN	54M4956	1.79
● MCP73871-2CCI/ML	...	± 0.75	Open-Drain Output	20-QFN	54M4957	1.79
● MCP73833-AMI/UN	4.2	± 0.75	Open-Drain Output	10-MSOP	88K5664	0.85

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TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

BATTERY MANAGEMENT

RoHS Compliant Available

MICROCHIP

Applications:
- Low-Cost Li-Ion/Li-Poly Battery Chargers
- MP3 players
- Digital still camera
- Portable media players
- Handheld devices
- Bluetooth headsets
- USB chargers

Mfg. Part No.	Supply Voltage (V)	No. of Cells	Vreg (V)	Package	Stock No.	Price Each 1-25
● MCP73113-06SI/MF	4 - 16	1	4.2	10-DFN	11R7579	1.12
● MCP73831T-2ATI/OT	3.75 - 6	1	4.2	5-SOT-23	84R5196	0.56
● MCP73832T-2ATI/OT	3.75 - 6	1	4.2	5-SOT-23	84R5197	0.56
● MCP73832T-2DCI/OT	3.75 - 6	1	4.2	5-SOT-23	84R5198	0.56
● MCP73831T-2DCI/OT	3.75 - 6	1	4.2	5-SOT-23	84R6271	0.56
● MCP73833-FCI/UN	3.75 - 6	1	4.2	10-MSOP	88K5666	0.85
● MCP73838-FCI/UN	3.75 - 6	...	4.2	10-MSOP	77M3076	1.12

(178369)

BATTERY MANAGEMENT ICs

RoHS Compliant Available

TEXAS INSTRUMENTS

BATTERY CHARGE MANAGEMENT

Mfg. Part No.	Battery Type	Primary Charge Termination Method	Pkg.	Stock No.	Price Each 1-9
● BQ2000PW	Li-Ion, NiCd, NiMH	Minimum Current, PVD	8-TSSOP	74C7501	4.18
● BQ24616RGET	Li-Ion, Li-Pol	Minimum Current	24-VQFN	84R4651	6.80
● BQ29440DRBT	Li-Ion, Li-Pol	Minimum Current	8-SON	78R4077	1.63
● BQ24650RVAT	Li-Ion, Li-Pol	Minimum Current	16-QFN	83R9416	5.49
● BQ2004HSN	NiCd, NiMH	(-)dV, dT/dt, PVD	16-SOIC	74K3704	6.42
● BQ2004SN	NiCd, NiMH	(-)dV, dT/dt, PVD	16-SOIC	74K3705	6.42
● BQ2002ESN	NiCd, NiMH	(-)dV, PVD	8-SOIC	74C7516	2.89
● BQ2002PN	NiCd, NiMH	(-)dV, PVD	8-PDIP	24C2184	2.43
● BQ2002SN	NiCd, NiMH	(-)dV, PVD	8-SOIC	74C7524	2.89
● BQ2002TPN	NiCd, NiMH	dT/dt	8-PDIP	74C7526	2.43
● BQ2031SN-A5	Lead Acid	(-)d2V, Maximum Voltage, Minimum Current	16-SOIC	36K7136	7.42
● BQ2057TS	Li-Ion, Li-Pol	Minimum Current	8-TSSOP	74C7594	2.10
● BQ2057WSN	Li-Ion, Li-Pol	Minimum Current	8-SOIC	74C7600	2.98
● BQ2057CSN	Li-Ion, Li-Pol	Minimum Current	8-SOIC	74C7587	2.54
● BQ24005PWP	Li-Ion, Li-Pol	Minimum Current	20-HTSSOP	74C7641	4.77
● BQ24030RHLR	Li-Ion, Li-Pol	Minimum Current	20-QFN	24K4387	4.30
● BQ24032ARHLR	Li-Ion, Li-Pol	Minimum Current	20-QFN	43K9063	4.30
● BQ24050DSQT	Li-Ion	Programmable	10-SON	29R0265	1.06
● BQ24616RGET	Li-Ion, Li-Pol	Minimum Current	24-VQFN	84R4651	6.80
● BQ24070RHLR	Li-Ion	Minimum Current	20-QFN	85K0180	2.87
● BQ24070RHLT	Li-Ion, Li-Pol	Minimum Current	20-QFN	85K0181	3.34
● BQ24072RGTT	Li-Ion	Minimum Current	16-QFN	12P6258	2.75
● BQ24086DRCR	Li-Ion	C/10 w/ Enable pin	10-SON	73M9219	2.45
● BQ24103ARHLR	Li-Ion	Minimum Current	20-QFN	61M5047	4.77
● BQ24123RHLT	Li-Ion, Li-Pol	Minimum Current	20-QFN	84K0851	3.65
● BQ24125RHLT	Li-Ion, Li-Pol	Minimum Current	20-QFN	71M0456	7.33
● BQ24150AYFFT	Li-Ion, Li-Pol	Minimum Current	20-DSBGA	10R2207	2.86
● BQ24610RGET	Li-Ion, Li-Pol	Constant Current, Constant Voltage	24-QFN	60R2408	6.80
● BQ24707RGRT	Li-Ion	Host Controlled	20-QFN	91R2077	7.12
● BQ24725RGRT	Li-Ion	Host Controlled	20-QFN	91R2078	6.44
● BQ24726RGRT	Li-Ion	Host Controlled	20-QFN	91R2079	8.63
● UC2906DW	Lead Acid	Maximum Voltage, Minimum Current	16-SOIC	74K4004	7.01
● UC2906N	Lead Acid	Maximum Voltage, Minimum Current	16-DIP	74K4005	6.56
● UC3906DW	Lead Acid	Maximum Voltage, Minimum Current	16-SOIC	74K4023	7.01

BATTERY FUEL GAUGES

Mfg. Part No.	Battery Type	Comm. Interface	Battery Capacity Min (mAh)	Battery Capacity Max (mAh)	Pkg.	Stock No.	Price 1-9
● BQ20Z75DBTR-V160	Li-Ion, Li-Pol	SMBus	800	15000	38-TSSOP	15N0082	10.63
● BQ2014HSN	NiCd, NiMH	HDQ	500	6000	16-SOIC	74C7556	10.73
● BQ2040SN-C408	NiCd, NiMH	SMBus	800	10000	16-SOIC	74K3706	10.22
● BQ2060A-E619DBQ	Li-Ion, NiCd, NiMH	HDQ , SMBus	800	10000	28-SSOP	74C7604	7.65
● BQ27000DRKR	...	HDQ	300	6000	10-SON	43J2513	3.22
● BQ27200DRKR	...	I2C	300	10000	10-SON	64J9753	3.22
● BQ27510DRZT	Li-Ion	I2C	...	...	12-SON	14N8518	5.02
● BQ27541DRZT	Li-Ion	HDQ, I2C	800	6000	12-SON	46P3780	5.02
● BQ27541DRZT-V200	Li-Ion	HDQ, I2C	800	6000	12-SON	67R1112	3.44

➤ CONTINUED ➤

BATTERY MANAGEMENT ICs (CONT.)

LITHIUM ION PROTECTION

Mfg. Part No.	No. of Cells Protected	Shutdown Current (uA)	Overvoltage Threshold (V)	Pkg.	Stock No.	Price Each 1-9
BQ29330DBT	2, 3, 4	1	...	30-TSSOP	58K5583	2.59
BQ29440DRBT	2, 3, 4	3	4.35	8-SON	78R4077	1.63
BQ77PL900DLR	5, 6, 7, 8, 9, 10	1.2	4.5	48-SSOP	15N0083	3.35

EVALUATION TOOLS

Mfg. Part No.	Description	Stock No.	Price Each
BQ20Z45EVM-001	SBS 1.1 Impedance Track Technology Enabled Battery Mgmt Solution Kit (full kitted box) for the BQ20Z45/BQ29412 Battery Mgmt System	10R1437	50.00
BQ20Z90EVM-001	Complete Evaluation System for the BQ20Z90/BQ29330/BQ29410 Li-Ion Smart Battery Chipset	02M9364	100.98
BQ24050EVM	BQ24050 Evaluation Module	55R2436	100.98
BQ24100EVM	BQ24100 Evaluation Module	43J2506	50.00
BQ24103EVM	BQ24103 Evaluation Module	43J2507	50.00
BQ24352EVM	BQ24352 Evaluation Module	24R9063	50.00
BQ24703EVM	BQ24703 Evaluation Module	73H4156	49.98
BQ24747EVM	BQ24747 Evaluation Module	55R2439	100.63
BQ27441EVM-G1A	BQ27441 Evaluation Module	38X4659	100.98
BQ27441EVM-G1B	BQ27441 Evaluation Module	38X4660	100.98
BQ27501EVM	BQ27501 Evaluation Module	50R7525	100.98
BQ27505EVM	BQ27505 Evaluation Module	24R9065	100.98
BQ24150AEVM	BQ24150 Evaluation Module	79R7880	101.00
EV2200	PC Interface Board	74C9630	50.00

(70654)

USB CHARGING PORT POWER SWITCH & CONTROLLER

RoHS Compliant Available

TEXAS INSTRUMENTS

Features:
- D+/D– CDP/DCP Modes per USB Battery Charging Specification 1.2
- D+/D– Shorted Mode per Chinese Telecommunication Industry Standard YD/T 1591-2009
- D+/D– Divider Modes 2.0V/2.7V and 2.7/2.0V Compliant with 1A and 2A Apple Mobile Digital Devices
- Automatic Selection of D+/D– Mode for an Attached Device
- Supports Sleep-Mode Charging and Mouse/Keyboard (Low-Speed Only) Wake Up
- Load Detection for Both Power Supply Control in S4/S5 Charging and Port Power Management in all Charge Modes
- Compatible with USB 2.0 and 3.0 Power Switch Requirements

Applications:
- USB Ports (Host and Hubs)
- Notebook Desktop PCs
- Universal Wall Charging Adapters

The **TPS2543** is a USB charging port controller and power switch with an integrated USB 2.0 high-speed data line (D+/D–) switch. The **TPS2543** can be configured to automatically select the D+/D– mode needed to charge an attached device. The **TPS2543** provides load detection via the STATUS pin that allows for both power supply control in S4/S5 charging and the ability to manage port power in a multi-port application. Additionally, system wake up (from S3) with a mouse/keyboard (low speed only) is fully supported in the **TPS2343**. The **TPS2543** 73-mΩ power-distribution switch is intended for applications where heavy capacitive loads and short-circuits are likely to be encountered. Two programmable current thresholds provide flexibility for setting current limits and load detect thresholds.

Mfg. Part No.	Supply Voltage	Current Limit (A)	Package	Stock No.	Price Each 1-9
TPS2543RTET	4.5V to 5.5V	2.7	16-WQFN	94T6069	2.41

EVALUATION BOARD

Mfg. Part No.	Description	Stock No.	Price Each
TPS2543EVM-064	TPS2543 EVAL BOARD	87T3986	25.50

(210213)

BATTERY FUEL GUAGE EVALUATION MODULE INTERFACE BOARD

RoHS Compliant Available

TEXAS INSTRUMENTS

Features:
- USB-based interface board for evaluation of battery fuel gauge circuits developed with fuel gauge ICs using the HDQ and SMBus communication protocol
- Provides interface between intelligent battery circuit and a Windows-based PC
- Connects to the USB port of a PC
- Allows for on screen display and programming of gas gauge register functions when used with the appropriate PC software

The **EV2300** is a USB-based interface board for a PC that can be used to evaluate battery fuel gauge circuits designed with Texas Instruments' ICs. It has connections on it for a USB cable and also accepts inputs from a battery fuel gauge circuit's communication port (SMBus or HDQ).

Mfg. Part No.	For Use With	Interface	Stock No.	Price Each
EV2300	Texas Instrument's Battery Fuel Gauge Circuits	USB	66H9717	100.98

(100955)

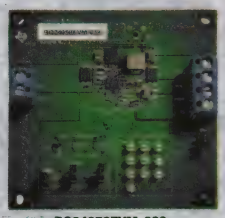
SYNCHRONOUS SWITCH-MODE BATTERY CHARGER CONTROLLER FOR SOLAR POWER

RoHS Compliant Available

TEXAS INSTRUMENTS

Features:
- Resistor Programmable Float Voltage
- Charge Status Outputs for LED or Host Processor
- Charge Enable on MPPSET Pin
- Programmable MPPT Setting

Applications:
- Solar Powered Applications
- Remote Monitoring Stations
- Portable Handheld Instruments
- 12V to 24V Automotive Systems
- Current-Limited Power Source



BQ24650EVM-639

The **BQ24650** is a highly integrated switch-mode battery charge controller. It provides input voltage regulation, which reduces charge current when input voltage falls below a programmed level. When the input is powered by a solar panel, the input regulation loop lowers the charge current so that the solar panel can provide maximum power output.

Mfg. Part No.	Supply Voltage (V)	Charge Current (A)	Package	Stock No.	Price Each 1-9
BQ24650RVAT	5 - 28	10	16-QFN	83R9416	5.49

EVALUATION BOARD

Mfg. Part No.	Associated IC	Stock No.	Price Each
BQ24650EVM-639	BQ24650 BATTERY CHARGER	99R9907	101.00

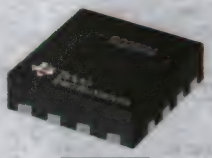
(196696)

ULTRA LOW POWER BOOST CONVERTER W/BATTERY MANAGEMENT FOR ENERGY HARVESTER APPLICATIONS

RoHS Compliant Available

TEXAS INSTRUMENTS

Applications:
- Energy Harvesting
- Solar Charger
- Thermal Electric Generator (TEG) Harvesting
- Wireless Sensor Networks (WSN)
- Industrial Monitoring
- Environmental Monitoring
- Bridge / Structural Health Monitoring (SHM)
- Smart Building Controls
- Portable and Wearable Health Devices
- Entertainment System Remote Controls



BQ25504RGTT

The **bq25504** is the first of a new family of intelligent integrated energy harvesting Nano-Power management solutions that are well suited for meeting the special needs of ultra low power applications. The product is specifically designed to efficiently acquire and manage the microwatts (µW) to milliwatts (mW) of power generated from a variety of DC sources like photovoltaic (solar) or thermal electric generators. The **bq25504** is the first device of its kind to implement a highly efficient boost converter/charger targeted toward products and systems, such as wireless sensor networks (WSN) which have stringent power and operational demands. The design of the **bq25504** starts with a DCDC boost converter/charger that requires only microwatts of power to begin operating.

Mfg. Part No.	Input Voltage (V)	Input Power (W)	Package	Stock No.	Price Each 1-9
BQ25504RGTT	0.13 to 3	0.3	16-QFN	76T8906	5.85

EVALUATION BOARD

Mfg. Part No.	Description	Stock No.	Price Each
BQ25504EVM-674	BQ25504, BOOST CONVERTER, EVALUATION MODULE	68T8956	100.98

(201316)

ENERGY MEASUREMENT ICs

RoHS Compliant Available

ANALOG DEVICES

The **ADE7116/ADE7156/ADE7166/ADE7169/ADE7566/ADE75691** integrate Analog Devices, Inc., energy (ADE) metering IC analog front end and fixed function DSP solution with an enhanced 8052 MCU core, an RTC, an LCD driver, and all the peripherals to make an electronic energy meter with an LCD display in a single part.

Mfg. Part No.	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
ADE7758ARWZ	...	24-SOIC	59K0994	10.95
ADE7878ACPZ	3.6	40-LFCSP	67R2177	12.45
ADE7880ACPZ	3.63	40-LFCSP	67T0271	15.30
ADE7569ASTZF16	3.7	64-LQFP	61M3938	6.48
ADE7169ASTZF16	3.7	64-LQFP	71M1604	6.48
AD71056ARZ	5.25	16-SOIC	28M4032	2.98
ADE7763ARSZ	5.25	20-SSOP	59K1002	4.10
ADE7753ARSZ	5.25	20-SSOP	59K0984	4.54
ADE7757ARNZ	5.25	16-SOIC	59K0992	2.75

CONTINUED

ENERGY MEASUREMENT ICs (CONT.)

EVALUATION BOARD

Mfg. Part No.	Description	Stock No.	Price Each
● EVAL-ADE7878EBZ	ADE7878 Energy Metering Evaluation Board	67R3070	438.75

(109347)

HOT SWAP CONTROLLERS

RoHS Compliant Available

ANALOG DEVICES

Hot Swap products perform all the housekeeping functions necessary to hot swap plug-in boards. These parts also integrate with industry-leading converter and amplifier cores for power monitoring and control with patented circuitry delivering unmatched ±3% monitoring accuracy. Hot swap controllers play a key role in keeping central office switching stations and server banks operating at peak efficiency. These devices safely and accurately monitor the power usage in a typical server rack system which enables operators to remotely monitor each rack individually thus saving energy and minimizing system downtimes.

Mfg. Part No.	Input Voltage Range	Hot Swap Options	Package	Stock No.	Price Each 1-9
● ADM1170-1AUJZ-RL7	1.6V to 16.5V	Automatic Retry	8-TSOT	92T3185	5.37
● ADM1170-2AUJZ-RL7	1.6V to 16.5V	Latched Off	8-TSOT	92T3186	5.37
● ADM1178-1ARMZ-R7	3.15V to 16.5V	Automatic Retry	10-MSOP	92T3187	6.00
● ADM1178-2ARMZ-R7	3.15V to 16.5V	Latched Off	10-MSOP	92T3188	6.22

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
● EVAL-ADM1170EBZ	ADM117 Eval. Board	61M4185	142.32
● EVAL-ADM1178EBZ	ADM1178 Eval. Board	28M4379	142.32

(203713)

HOT SWAP CONTROLLERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Applications:

- -48V or +48V Telecom and Networking
- Power Over Ethernet (PoE)
- ATCA
- PCI
- CompactPCI
- Low Voltage Supply Sequencing

Linear Technologies controllers limit in-rush current, provide current limiting during normal operation and offer other supervisory features.

Mfg. Part No.	# of Poles	Type	Voltage Range (V)	Package	Stock No.	Price Each 1-24
● LTC4210-1CS6#TRMPBF	1	Positive	2.7 to 16.5	6-TSOT-23	59M8274	3.84
● LTC4210-1IS6#TRMPBF	1	Positive	2.7 to 16.5	6-TSOT-23	59M8275	4.48
● LTC4211CMS#PBF	1	Positive	2.5 to 16.5	10-MSOP	56M8768	5.28
● LTC4211IMS#PBF	1	Positive	2.5 to 16.5	MSOP	56M8780	6.05
● LTC4211IMS8#PBF	1	Positive	2.5 to 16.5	8-MSOP	56M8784	4.90
● LTC4217CDHC#PBF	1	Positive	2.9 to 26.5	16-DFN	07P8322	7.17
● LTC4217IDHC-12#PBF	1	Positive	2.9 to 26.5	16-DFN	07P8328	8.24
● LTC4217IDHC#PBF	1	Positive	2.9 to 26.5	16-DFN	07P8330	8.24
● LTC4218IDHC-12#PBF	1	Negative	2.9 to 26.5	DFN	79M3603	4.35
● LT1641-1IS8#PBF	1	Positive	9 to 80	8-SOIC	57M5584	5.64
● LTC4365CTS8#TRMPBF	1	UV, OV & Reverse	2.5 to 34	8-TSOT-23	24T2682	3.67
● LTC4219CDHC-12#PBF	1	Positive	0 to 5	16-DFN	84R4984	7.17
● LTC4219CDHC-5#PBF	1	Positive	0 to 5	16-DFN	84R4986	4.79
● LTC4308CDD#PBF	1	Positive	2.3 to 5.5	DFN	56M9407	4.31
● LTC4308CMS8#PBF	1	Positive	2.3 to 5.5	MSOP	56M9411	4.31
● LTC4308IDD#PBF	1	Positive	2.3 to 5.5	DFN	56M9415	5.19
● LTC4350CGN#PBF	1	Positive	3.3 to 12	16-SSOP	56M9435	8.84
● LT1640LIS8#PBF	1	Negative	10 to 80	SOIC	57M5576	4.52
● LT1641-2CS8#PBF	1	Positive	9 to 80	8-SO	57M5588	5.13
● LT4250LCS8#PBF	1	Negative	-80 to -20	8-SO	57M8664	4.90
● LTC4251BCS6#TRMPBF	1	Negative	-15 Min (floating)	6-SOT-23	82T5031	4.58
● LTC4251BCS6#TRMPBF	1	Negative	-15 Min (floating)	6-SOT-23	82T3915	2.36
● LTC4251BCS6-1#TRMPBF	1	Negative	-15 Min (floating)	6-SOT-23	82T5029	2.36
● LTC4251BCS6-1#TRMPBF	1	Negative	-15 Min	6-SOT-23	82T3911	2.36
● LTC4251BCS6-2#TRMPBF	1	Negative	-15 Min (floating)	6-SOT-23	82T5030	4.58
● LTC4251BCS6-2#TRMPBF	1	Negative	-15 Min (floating)	6-SOT-23	82T3913	2.36
● LTC4252BCMS-1#PBF	1	Negative	-15 Min (floating)	10-MSOP	82T3923	5.00
● LTC4252BCMS-2#PBF	1	Negative	-15 Min (floating)	10-MSOP	82T3925	5.00
● LTC4252BCMS8-1#PBF	1	Negative	-15 Min (floating)	8-MSOP	82T3927	2.55
● LTC4252BCMS8-2#PBF	1	Negative	-15 Min (floating)	8-MSOP	82T3929	2.55
● LTC4252CIMS-1#PBF	1	Negative	-15 Min (floating)	10-MSOP	82T3943	6.20

➤CONTINUED➤

HOT SWAP CONTROLLERS (CONT.)

Mfg. Part No.	# of Poles	Type	Voltage Range (V)	Package	Stock No.	Price Each 1-24
● LTC4252CIMS-2#PBF	1	Negative	-15 Min (floating)	10-MSOP	82T3945	6.20
● LT4256-2CS8#PBF	...	Positive	10.8 to 80	8-SOIC	57M8690	3.53
● LTC4219IDHC-12#PBF	1	Positive	2.9 to 15 (12V presets)	16-DFN	84R4988	8.59
● LTC4219IDHC-5#PBF	1	Positive	2.9 to 15 (5V presets)	16-DFN	84R4990	8.59
● LTC4253BCGN#PBF	1	Negative	-15 Min (floating)	16-SSOP	82T3947	3.60
● LTC4253BIGN#PBF	1	Negative	-15 Min (floating)	16-SSOP	82T3949	7.38
● LTC4210-1IS6#PBF	1	Positive	2.7 to 16.5	6-TSOT-23	78T3308	4.00
● LTC4210-2IS6#PBF	1	Positive	2.7 to 16.5	6-TSOT-23	78T3309	2.75
● LTC4217IFE#PBF	1	Positive	2.9 to 26.5	20-TSSOP	07P8334	5.50
● LTC4218IGN#PBF	1	Positive	2.9 to 26.5	16-SSOP	79M3605	6.52
● LTC4360ISC8-1#PBF	1	Positive	2.5 to 5.5	8-SC-70	78T3371	2.82
● LTC4361IDC-1#PBF	1	Positive	2.5 to 5.5	8-DFN	78T3377	2.20
● LTC4361IDC-2#PBF	1	Positive	2.5 to 5.5	8-DFN	78T3378	3.37
● LTC4365CDDB#PBF	1	Positive	2.5 to 34	8-DFN	78T3383	3.28
● LTC4365HDDB#PBF	1	Positive	2.5 to 34	8-DFN	78T3385	3.95
● LTC4365IDDB#PBF	1	Positive	2.5 to 34	8-DFN	78T3387	2.36
● LTC4366CTS8-2#PBF	1	Positive	4.5 to 12.5	8-TSOT-23	78T3398	5.74
● LTC4226IMS-1#PBF	2	Positive/ Negative	4.5 to 44	16-MSOP	48W6421	5.09
● LTC4226IMS-2#PBF	2	Positive/ Negative	4.5 to 44	16-MSOP	48W6423	5.09
● LTC4226IUD-1#PBF	2	Positive/ Negative	4.5 to 44	16-QFN	48W6425	5.09
● LTC4226IUD-2#PBF	2	Positive/ Negative	4.5 to 44	16-QFN	48W6427	5.09
● LT1641-1CS8#PBF	2	Positive	9 to 80	8-SO	57M5580	5.13
● LT4220CGN#PBF	2	Positive	2.7 to 16.5	16-SSOP	57M8642	7.01
● LTC1645IS#PBF	2	Positive	1.2 to 12	14-SO	56M2825	7.88
● LTC1645CS#PBF	2	Positive	1.2 to 12	14-SO	56M2817	3.95
● LTC1646CGN#PBF	2	CompactPCI	2.7 to 7	16-SSOP	56M2833	4.65
● LTC1643ALCGN#PBF	4	PCI-Bus	4.75 to 5.25	16-SSOP	56M2801	5.00
● LTC4280CUFD#PBF	...	Positive	2.9 to 15	24-QFN	13T3974	8.38
● LT4356CS-1#PBF	...	Positive	4 to 80	16-SO	44P4041	2.83
● LT4356IS-1#PBF	...	Positive	4 to 80	16-SO	44P4045	5.07
● LTC4215CUFD-3#PBF	...	Positive	2.9 to 15	24-QFN	24R3322	8.38
● LTC4215CUFD-2#PBF	...	Positive	2.9 to 15	24-QFN	24R6622	5.78
● LT4356CDE-2#PBF	...	Positive	4 to 80	12-DFN	51P3111	3.99
● LT4356CS-2#PBF	...	Positive	4 to 80	16-SO	51P3112	4.23
● LT4356IDE-2#PBF	...	Positive	4 to 80	12-DFN	51P3113	4.76
● LT4356IS-2#PBF	...	Positive	4 to 80	16-SO	51P3114	5.09
● LT4363CDE-2#PBF	...	Positive	4 to 80	12-DFN	78T4088	5.30
● LT4363CMS-2#PBF	...	Positive	4 to 80	12-MSOP	78T4092	3.54

(101602)

HOT SWAP CONTROLLERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Controller Type	Input Voltage Range	Fault Control	Package	Stock No.	Price Each 1-9
● LM5069MM-2/NOPB	Positive Voltage	9 V to 80 V	Auto Restart	10-MSOP	13M1902	3.51
● LM25061PMME-2/NOPB	Positive Voltage	2.9 V to 17 V	Active High	10-MSOP	25R3831	3.30
● LM25069PMME-2/NOPB	Positive Voltage	2.9 V to 17 V	Active High	10-MSOP	25R3833	2.94

(113794)

HOT SWAP AND POWER DISTRIBUTION

RoHS Compliant Available

TEXAS INSTRUMENTS

HOT SWAP POWER MANAGEMENT

Mfg. Part No.	Channels	Supply Voltage (V)	Switch Resistance, R(on) (mohms)	Pkg.	Stock No.	Price Each 1-9
● TPS2391DGK	1	-80	...	8-MSOP	77C0197	2.87
● TPS2400DBVT	1	6.8	...	5-SOT-23	21J9194	2.45
● TPS2410PW	1	16.5	...	14-TSSOP	31M0444	4.30
● TPS2412PW	1	16.5	...	8-TSSOP	31M0448	3.46
● TPS24701DGK	1	18	...	8-MSOP	46T8889	3.22
● TPS2490DGS	1	80	...	10-MSOP	90H4844	4.06
● TPS2492PW	1	80	...	14-TSSOP	86R1112	3.84
● TPS2493PW	1	80	...	14-TSSOP	86R1113	3.84
● LM25056PSQE/NOPB	1	17	...	24-LLP	89T3443	4.13

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HOT SWAP AND POWER DISTRIBUTION (CONT.)

Mfg. Part No.	Channels	Supply Voltage (V)	Switch Resistance, R(on) (mohms)	Pkg.	Stock No.	Price Each 1-9
TPS24700DGK	1	18	...	8-MSOP	46T8888	3.22
TPS24701DGK	1	18	...	8-MSOP	46T8889	3.22
TPS2459RHBT	2	15	290	32-QFN	71P8449	7.44
PCMCIA AND USB						
TPS2031D	1	5.5	0.033	8-SOIC	96B3633	2.94
TPS2041BD	1	6	0.07	8-SOIC	01J0950	1.88
TPS2041BDGN	1	6	0.07	8-MSOP	90H4831	2.20
TPS2041D	1	5.5	0.08	8-SOIC	76C9970	4.32
TPS2041BDBVR	1	5.5	70	5-SOT-23	20M5863	1.57
TPS2042BDR	1	5.5	70	8-SOIC	10J9736	2.10
TPS2044BDR	1	5.5	70	16-SOIC	90H4834	2.88
TPS2045AD	1	6	0.08	8-SOIC	76C9982	2.23
TPS2049D	1	6	0.4	8-SOIC	18M7782	1.73
TPS2051BD	1	6	0.07	8-SOIC	10J9737	1.79
TPS2051BDBVR	1	5.5	70	5-SOT-23	20M5870	1.67
TPS2051BDGNR	1	5.5	70	8-MSOP	44J2495	1.79
TPS2052BDR	1	5.5	70	8-SOIC	44J2499	2.04
TPS2061D	1	6	0.07	8-SOIC	65J6887	2.20
TPS2061DGNR	1	5.5	70	8-MSOP	21J9184	2.04
TPS2540RTET	1	5.5	75	16-WQFN	13T5945	2.25
TPS2541RTET	1	5.5	75	16-WQFN	13T5947	2.25
TPS2500DRCT	1	5.25	0.05	10-SON	29R0268	3.34
TPS2550DBVT	1	6.5	...	6-SOT-23	85M0208	3.08
TPS2551DBVT	1	6.5	0.085	6-SOT-23	85M0214	3.08
TPS2551DRVT	1	6.5	0.1	6-SON	85M0217	3.08
TPS2556DRBT	1	6.5	0.022	8-SON	51R6142	2.86
TPS2557DRBT	1	6.5	0.022	8-SON	51R6143	2.86
TPS2042D	2	5.5	0.08	8-SOIC	35K1308	5.21
TPS2042BD	2	6	0.07	8-SOIC	10J9733	2.54
TPS2042BDGN	2	5.5	0.07	8-MSOP	10J9734	2.82
TPS2052BD	2	6	0.07	8-SOIC	44J2496	2.51
TPS2052BDGN	2	6	0.07	8-MSOP	44J2497	2.82
TPS2062D	2	6	0.07	8-SOIC	90H4835	2.82
TPS2062DGN	2	5.5	0.07	8-MSOP	44J2500	2.80
TPS2148IDGN	2	6	0.34	8-MSOP	77C0096	2.99
TPS2221PWP	1	5	97	HTSSOP	02E7202	5.25
TPS2044AD	4	5.5	0.08	16-SOIC	88K2010	4.76
TPS2044BD	4	5.5	0.07	16-SOIC	90H4833	3.06
TPS2151IPWP	4	6	0.04	14-HTSSOP	77C0102	4.06
HOT-SWAP SWITCHES (EXTERNAL FET)						
TPS2456RHHT	2	15	...	36-VQFN	74R0566	5.84
TPS2480PW	1	20	...	20-TSSOP	84R0662	5.73
POWER MUXES AND CURRENT LIMITED SWITCHES						
TPS2101DBVR	1	4	1300	5-SOT-23	77C0070	1.77
TPS2111APWR	1	5.5	0.084	8-TSSOP	01J0957	2.04
TPS2111PW	1	5.5	0.084	8-TSSOP	22H1359	2.45
TPS22941DCKR	1	5.5	0.4	5-SC70	34R2714	1.11
TPS22943DCKR	1	5.5	0.4	5-SC-70	51R1165	1.11
TPS22944DCKR	1	5.5	0.4	5-SC70	34R2715	1.11
TPS22946YZPR	1	5.5	0.3	6-DSBGA	34R2716	1.69
TPS22949ADRGR	1	5.5	0.6	8-SON	51R1166	1.91
TPS2552DBVT	1	6.5	85	6-SOT-23	40P3866	2.82
TPS2552DBVT-1	1	6.5	85	6-SOT-23	40P3867	2.82
TPS2552DRVT-1	1	6.5	100	6-SON	40P3869	1.81
TPS2553DBVT	1	6.5	85	6-SOT-23	40P3870	2.82
TPS2553DBVT-1	1	6.5	85	6-SOT-23	40P3871	2.82
TPS2553DRVT	1	6.5	100	6-SON	40P3872	2.82
TPS2553DRVT-1	1	6.5	100	6-SON	40P3873	2.82
TPS2080D	2	5.5	0.08	8-SOIC	77C0040	2.18
TPS2082D	2	6	0.08	8-SOIC	77C0045	2.18
TPS2110PW	2	6	0.12	8-TSSOP	22H1357	2.45
TPS2113PW	2	6	0.084	8-TSSOP	22H1363	2.45
TPS2115PW	2	6	0.084	8-TSSOP	22H1367	2.45
NON CURRENT LIMITED SWITCHES						
TPS22901YFPR	1	3.6	0.13	4-DSBGA	71P5335	0.77
TPS22924CYZPT	1	3.6	0.014	6-DSBGA	55R1361	0.99
TPS22932BYFPT	1	3.6	55	6-DSBGA	51R6141	0.96

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HOT SWAP AND POWER DISTRIBUTION (CONT.)

POWER OVER ETHERNET/LAN SOLUTIONS

Mfg. Part No.	Channels	Supply Voltage (V)	Switch Resistance, R(on) (mohms)	Pkg.	Stock No.	Price Each 1-9
TPS23753PW	1	57	1200	14-TSSOP	15N0086	3.22
TPS23754PWP	1	57	...	20-HTSSOP	06R6421	3.58
TPS23851DCE	4	34	...	36-SSOP	91R2093	11.69

EVALUATION TOOLS

Mfg. Part No.	Description	Stock No.	Price Each
TPS22922BEVM	Load Switch Evaluation Module for the TPS22921, TPS22922, or TPS22922B load switches	04R6577	29.58
TPS22932BEVM	TPS22932B Load Switch Evaluation Module	63R7589	29.60
TPS23753AEVM-001	Evaluation Module for TPS2375A	25R0090	49.98
TPS23754EVM-383	Evaluation Module for TPS23754 Operates from 48V	08R2497	49.98
TPS23754EVM-420	Evaluation Module for TPS23754 Operates from 24V & 48V	08R2498	49.98
TPS23756EVM	Evaluation Module for TPS23756	50R8105	49.98
TPS23757EVM	Evaluation Module for TPS23757	50R4447	49.98
TPS2500EVM-337	Evaluation Module for TPS2500	50R8108	50.00
TPS24701EVM-002	Evaluation Module for TPS24701	40T5425	50.00
TPS24700EVM-001	Evaluation Module for TPS24700	40T5424	50.00

(91477)

DIGITAL POWER FACTOR CORRECTION CONTROLLER W/ACCURATE AC POWER METERING

RoHS Compliant Available

ANALOG DEVICES

Features:
- Flexible digital power factor correction (PFC) controller
- True rms ac power metering
- Enhanced dynamic response
- Inrush current control
- Extensive fault protection for high reliability systems
- Programming via easy-to-use graphical user interface (GUI)

Applications:
- AC/DC power supplies for applications
- Computing server and storage
- Network and communication infrastructure
- Industrial and medical

Mfg. Part No.	Supply Voltage Range	Frequency (MHz)	Supply Current (mA)	Package	Stock No.	Price Each 1-9
ADP1048ARQZ-R7	3V to 3.6V	400	17	24-QSOP	82T5460	8.10

(203719)

HIGH EFFICIENCY THERMOELECTRIC COOLER CONTROLLER

RoHS Compliant Available

LINEAR TECHNOLOGY

Features:
- High Efficiency, Low Noise Topology
- Adjustable Output Slew Rate Reduces EMI
- Full-Bridge Controller for Bidirectional Current Control
- Adjustable Pulse-by-Pulse Bidirectional TEC Current Limit
- Open/Shorted Thermistor Indication
- TEC Voltage Clamping
- TEC Current, Voltage and Heat/Cool Status Outputs
- Adjustable/Synchronizable Oscillator Frequency
- Reduces Filter Component Size and System Noise

Applications:
- Laser-Based Fiber Optic Links
- Medical Instruments
- CPU Temperature Regulators

The **LTC®1923** is a pulse width modulator intended for thermoelectric cooler (TEC) or heater applications requiring either unidirectional or bidirectional drive circuits. All of the necessary control circuitry and two sets of complementary output drivers are integrated into the **LTC1923** to drive a full bridge, providing an efficient means of bidirectional current flow to the TEC. An accurate temperature control loop to stabilize the temperature of a laser diode system is easily achieved with the addition of just a few external components.

Mfg. Part No.	Input Voltage	Supply Current (mA)	Function	Package	Stock No.	Price Each 1-99
LTC1923EUH#PBF	2.7 to 5.5	3	Thermoelectric Cooler Full Bridge Controller	32-QFN	56M4352	28.07

(210171)

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element14.com

(196545)

COMPBO8 PFC & HALF-BRIDGE BALLAST IC

RoHS Compliant Available

International IOR Rectifier

Features:
- PFC, ballast control and half-bridge driver in one IC
- Critical-conduction mode boost-type PFC
- Internal VBUS sensing and regulation
- Internal PFC loop compensation
- Programmable PFC over-current
- Ignition voltage regulation (current or voltage control)
- Half-bridge non-ZVS protection
- Half-bridge over-current protection using low-side MOSFET Rds(on)
- Programmable preheat time
- Programmable preheat frequency
- Programmable ignition ramp time
- Programmable run frequency
- Voltage-controlled oscillator (VCO) analog input
- Latched EOL window comparator on VCC
- Internal EOL fault timer
- Fixed dead-time (1.7µsec typ.)
- DC bus under-voltage reset
- Lamp insert auto-restart
- Micro-power start-up current
- Under-voltage lock-out mode

Mfg. Part No.	Output Source Current Min. (mA)	Output Sink Current Min. (mA)	Supply Voltage Range	Package	Stock No.	Price Each 1-9
● IRS2580DSTRPBF	180	260	11 to 18	8-SOIC	54T9277	3.44

(203763)

POWER FACTOR CORRECTION ICs AND POWER SUPPLY SUPPORT

RoHS Compliant Available

Texas Instruments

Features
- Industry standard architecture
- Deliver PF>0.993
- New BiCMOS generation reduces complexity
- Optimized PFC/PWM "combo" controllers
- Superior applications support

From 50 W to 5 kW, TI PFC controllers deliver EN61000-3-2 compliance.

LOADSHARE CONTROLLERS

Mfg. Part No.	Threshold On (V)	Supply Voltage Max (V)	Startup Current (mA)	Package	Stock No.	Price Each 1-9
● UCC39002D	...	14.25	2500	8-SOIC	77C2548	2.75
POWER FACTOR CORRECTION ICs						
● UC2855BDW	10.5	35	0.15	20-SOIC	77C3032	14.98
● UCC28063D	12.6	21	0.15	16-SOIC	64T4303	2.99
● UC3854BN	10.5	20	0.25	16-DIP	77C3372	4.34
● UC3854NG4	10.5	35	1.5	16-PDIP	71J8481	3.84
● UCC28019AD	10.5	20	0.1	8-SOIC	10R0816	2.45
● UCC38503DW	10.5	15	0.15	20-SOIC	77C2520	6.06
● UCC28051D	16	18	0.075	8-SOIC	73H4674	2.18
● UC2854ADW	16	20	0.25	16-WSOIC	77C3017	4.42
● UC2854BDW	16	20	0.25	16-SOIC	77C3022	4.42
● UC2854DW	16	35	1.5	16-SOIC	77C3027	3.99
● UC2854N	16	35	1.5	16-DIP	77C3029	4.39
● UCC2817D	16	17	0.15	16-SOIC	77C2128	3.58
● UC3854ADW	16	20	0.25	16-SOIC	77C3367	3.94

EVALUATION TOOLS

Mfg. Part No.	Description	Stock No.	Price Each
UCC28019AEVM	Evaluation Module for UCC28019A CCM PFC Controller	10R1441	100.98
UCC28063EVM-723	Evaluation Module for UCC28063 CCM PFC Controller	64T4305	152.01

(106510)

LOGIC CONTROLLED HIGH-SIDE LOAD SWITCH

RoHS Compliant Available

Analog Devices

Applications:
- Mobile phones
- Digital cameras and audio devices
- Portable and battery-powered equipment

The **ADP198** is a high-side load switch that provides power domain isolation, thereby helping to keep subsystems isolated and powered independently and enabling reduced power consumption. The **ADP198** contains a low on-resistance P-channel MOSFET that supports a continuous load current. The **ADP199** is a high-side load switch that provides power domain isolation, thereby helping to keep subsystems isolated and powered independently, and enabling reduced power consumption. The **ADP199** contains a low on-resistance, N-channel MOSFET to minimize power loss, and supports a continuous load current.

Mfg. Part No.	Input Voltage Range	Load Current (A)	Package	Stock No.	Price Each 1-9
● ADP198ACBZ-R7	1.65V to 6.5V	1	4-WLCSP	82T5462	1.11
● ADP199ACBZ-R7	0.9V to 3.6V	0.5	4-WLCSP	82T5463	1.01

(203721)

HIGH SIDE OR-ING FET CONTROLLER

RoHS Compliant Available

Texas Instruments

Features:
- +100 Volt transient capability
- Charge pump gate driver for external N-Channel MOSFET
- Fast 50ns response to current reversal
- 2A peak gate turn-off current
- Minimum VDS clamp for faster turn-off

Applications:
- Active OR-ing of Redundant (N+1) Power Supplies

The **LM5050-1** High Side OR-ing FET Controller operates in conjunction with an external MOSFET as an ideal diode rectifier when connected in series with a power source. This ORing controller allows MOSFETs to replace diode rectifiers in power distribution networks thus reducing both power loss and voltage drops.

Mfg. Part No.	Input Voltage Range (V)	Topology	Package	Stock No.	Price Each 1-9
● LM5050MK-1/NOPB	5V to 75V	NMOSFET Controller	6-TSOT	47T7502	2.37

(196463)

QUAD HIGH SIDE SMART POWER SOLID STATE RELAY EVALUATION BOARD

RoHS Compliant Available

ST

Features:
- Shorted load protections
- Over-temperature protection
- Protection against loss of ground
- Current limitation
- Undervoltage shut-down
- Open drain diagnostic outputs
- 3.3V CMOS/TTL compatible inputs
- Fast demagnetization of inductive loads

The purpose of this design is to demonstrate the features of the VNI4140K quad high side smart power solid state relay. The application offers robustness and complies with EMC industrial standards. It implements short-circuit/overload protection and thermal management as well, achieving best-in-class MTBF values. The reference design is suitable for use in programmable logic controllers (PLCs) as well as to drive generic loads which require up to 0.7A of nominal current (the typical current limitation is 0.7 - 1.7A). Thanks to the very low RDS(on) (only 80mΩ at 25°C per channel) the device allows very low power consumption during operation and for this reason making it an ideal solution for IP65 / IP67 requirements. The device is compliant with IEC 61131-2 (Programmable Controllers International Standard).

Mfg. Part No.	Description	Stock No.	Price Each
● STEVAL-IFP006V1	Quad high side smart power solid state relay evaluation board using the VNI4140K	09R5858	74.82

(191907)

12-PORT POE/POE+/LTPOE++ PSE CONTROLLERS

RoHS Compliant Available

Linear Technology

Features:
- 12 Independent PSE Channels
- Compliant with IEEE 802.3at Type 1 and 2
- Supports 2-Pair and 4-Pair Output Power
- 1MHz I2C Compatible Serial Control Interface

Applications:
- PoE PSE Switches/Routers
- PoE PSE Midspans

The **LTC4270/LTC4271** chipset is a 12-port power sourcing equipment (PSE) controller designed for use in IEEE 802.3at Type 1 and Type 2 (high power) compliant Power over Ethernet (PoE) systems.
Advanced power management features include per-port 12-bit current monitoring ADCs, DAC-programmable current limit, and versatile fast shut-down of preselected ports. Advanced power management host software is available under a no-cost license. PD discovery uses a proprietary dual-mode 4-point detection mechanism ensuring excellent immunity from false PD detection.

Mfg. Part No.	PoE Type	Max Power (W)	IEEE-Compliant Detection	Package	Stock No.	Price Each 1-99
● LTC4270AIUKG#PBF	1, 2 LTPoE++	90	4-Point	52-QFN	59T5708	14.71
● LTC4270BIUKG#PBF	1, 2 LTPoE++	25.5	4-Point	52-QFN	59T5710	12.86
● LTC4270CIUKG#PBF	1, 2 LTPoE++	13	4-Point	52-QFN	59T5712	19.24
● LTC4271IUF#PBF	1, 2 LTPoE++	...	4-Point	24-QFN	59T5714	6.41

(201305)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

POWER-OVER-ETHERNET (PoE) INTERFACE CONTROLLERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Features:
- Complete Power Interface Port for IEEE 802®.3af Powered Device (PD)
- Onboard 100V, UVLO Switch
- Constant-Frequency 300kHz Operation
- Precision Dual Level Inrush Current Limit
- Integrated Current Mode Switching Regulator
- Onboard 25k Signature Resistor with Disable
- Programmable Classification Current (Class 0-4)
- Thermal Overload Protection
- Power Good Signal
- Integrated Error Amplifier and Voltage Reference

Applications:
- IP Phone Power Management
- Wireless Access Points
- Security Cameras

The LTC®4267-3 combines an IEEE 802.3af compliant Powered Device (PD) interface with a 300kHz current mode switching regulator, providing a complete power solution for PD applications.

Mfg. Part No.	No. of Channels	Oper. Temp. Range	Package	Stock No.	Price Each 1-24
LTC4257CS8#PBF	1	0°C to +70°C	SOIC	56M9072	3.25
LTC4267IDHC-3#PBF	1	-40°C to +85°C	16-DFN	56M9206	5.28
LTC4267IGN-3#PBF	1	-40°C to +85°C	16-SSOP	56M9216	5.04
LTC4265CDE#PBF	1	0°C to +70°C	12-DFN	44P2420	3.86
LTC4265IDE#PBF	1	-40°C to +85°C	12-DFN	44P2421	4.60
LTC4268CDKD-1#PBF	1	0°C to +70°C	32-DFN	56M9223	4.83
LTC4268IDKD-1#PBF	1	-40°C to +85°C	32-DFN	56M9227	5.80
LTC4269CDKD-1#PBF	1	0°C to +70°C	32-DFN	24R3327	5.13
LTC4269CDKD-2#PBF	1	0°C to +70°C	32-DFN	24R3328	5.57
LTC4269IDKD-1#PBF	1	-40°C to +85°C	32-DFN	24R3329	6.16
LTC4269IDKD-2#PBF	1	-40°C to +85°C	32-DFN	24R3330	6.67
LTC4278CDKD#PBF	1	0°C to +70°C	32-DFN	24R3331	5.57
LTC4278IDKD#PBF	1	-40°C to +85°C	32-DFN	24R3332	6.67
LTC4263CS#PBF	1	0°C to +70°C	14-SOIC	56M9170	5.94
LTC4263IDE#PBF	1	-40°C to +85°C	14-DFN	56M9176	5.05
LTC4264CDE#PBF	1	0°C to +70°C	12-DFN	56M9183	2.57
LTC4267CDHC#PBF	1	0°C to +70°C	16-DFN	56M9192	2.92
LTC4267IGN#PBF	1	-40°C to +85°C	16-SSOP	56M9219	5.04
LTC4267IGN-1#PBF	1	-40°C to +85°C	16-SSOP	56M9213	3.33
LTC4266CGW#PBF	4	0°C to +70°C	36-SSOP	24R3323	10.69
LTC4266CUHF#PBF	4	0°C to +70°C	38-QFN	24R3324	10.69
LTC4266IGW#PBF	4	-40°C to +85°C	36-SSOP	24R3325	11.76
LTC4266IUHF#PBF	4	-40°C to +85°C	38-QFN	24R3326	11.76
LTC4274AIUHF-1#PBF	...	-40°C to +85°C	38-QFN	59T5716	11.55
LTC4274AIUHF-4#PBF	...	-40°C to +85°C	38-QFN	59T5722	7.71
LTC4274CUHF#PBF	...	0°C to +70°C	38-QFN	51R1516	9.61
LTC4274IUHF#PBF	...	-40°C to +85°C	38-QFN	51R1517	10.58

(138953)

POWER LOAD SWITCHES

RoHS Compliant Available

International IOR Rectifier

Features:
- Over current shutdown
- Over temperature shutdown
- Current sensing
- Active clamp
- Low quiescent current
- ESD protection

Mfg. Part No.	No. of Outputs	Load Switch Type	Current Limit (A)	Package	Stock No.	Price Each 1-9
AUIPS7142GTR	1	High Side	25	16-WSOIC	54T8871	5.05
AUIPS7125RTRL	1	High Side	60	5-TO-252	54T8868	3.44
AUIPS2041LTR	1	Low Side	5.5	4-SOT-223	54T8865	1.72
AUIPS2031R	1	Low Side	15	3-TO-252	54T8860	2.16
AUIPS1052GTR	1	Low Side	2.8	8-SOIC	54T8859	2.60
AUIPS1011RTRL	1	Low Side	85	3-TO-252	54T8827	3.49
AUIPS1011S	1	Low Side	85	3-TO-263	54T8829	3.89
AUIPS1021	1	Low Side	45	3-TO-220AB	54T8832	3.02
AUIPS1021RTRL	1	Low Side	45	3-TO-252	54T8835	2.22
AUIPS1021STRL	1	Low Side	45	3-TO-263	54T8838	3.02
AUIPS1031	1	Low Side	18	3-TO-220AB	54T8840	2.73
AUIPS1031R	1	Low Side	18	3-TO-252	54T8841	2.08
AUIPS1031RTR	1	Low Side	18	3-TO-252	54T8842	1.64
AUIPS1031S	1	Low Side	18	3-TO-263	54T8845	2.49
AUIPS1041LTR	1	Low Side	4.5	4-SOT-223	54T8849	1.67
AUIPS1041RTRL	1	Low Side	4.5	3-TO-252	54T8852	1.64
AUIPS1042GTR	1	Low Side	4.5	8-SOIC	54T8855	2.63
AUIPS1051LTR	1	Low Side	2.8	4-SOT-223	54T8857	1.52

(203762)

USB POWER CONTROL SWITCHES

RoHS Compliant Available

EXAR — A New Direction in Mixed-Signal

Mfg. Part No.	No. of Channels	Supply Voltage Range (V)	Current Limit Min (A)	Enable Input Polarity	Package	Stock No.	Price Each
SP2525A-1EN-L	1	3 - 5.5	0.6	Active-High	8-NSOIC	24R0110	1.03
SP2526A-1EN-L	2	3 - 6	0.6	Active-High	8-NSOIC	24R0114	1.28
SP2526A-2EN-L	2	3 - 6	0.6	Active-Low	8-NSOIC	24R0116	1.37

(157007)

USB POWER MANAGEMENT ICS

RoHS Compliant Available

LINEAR TECHNOLOGY

Applications:
- Media players
- GPS
- PDAs
- Smart phones
- Portable Li-Ion/Polymer based electronic devices

Mfg. Part No.	Supply Voltage (V)	Battery Chemistry	Charge Current (A)	Package	Stock No.	Price Each 1-24
LTC3553EUD#PBF	4.35 - 5.5	Li-Ion/Polymer	0.5	20-DFN	84R4958	4.75
LTC3554EUD#PBF	2.7 - 5.5	Li-Ion/Polymer	0.4	20-QFN	84R4960	5.02
LTC4098EUDC-3.6#PBF	4.35 - 5.5	Li-Ion/Polymer	1.5	20-QFN	84R6714	3.79
LTC4098EUDC#PBF	4.35 - 5.5	Li-Ion/Polymer	1.5	20-QFN	84R6716	5.35
LTC4160EUDC#PBF	4.35 - 5.5	Li-Ion/Polymer	1.2	20-QFN	13T8418	6.09
LTC4160EUDC-1#PBF	4.35 - 5.5	Li-Ion/Polymer	1.2	20-QFN	13T8416	6.02
LTC4085EDE#PBF	4.35 - 5.5	Li-Ion	1.2 A	14-DFN	75M4541	2.36

(190317)

PERIPHERAL POWER AND DISPLAY DRIVER ICs

RoHS Compliant Available

Allegro MicroSystems, Inc.

SOURCE DRIVERS

Mfg. Part No.	Output mA	Output V	Drivers	Serial Input	Latched Drivers	Package	Stock No.	Price Each 1-9
UDN2987LWTR-6-T◆	–350	35	8	...	...	DIP	87K5093	3.91
A2982SLWTR-T◆	–350	50	8	...	...	SOIC	31K6646	2.75

◆ Diode clamp

SOURCE/SINK (BRIDGE) DRIVERS

Mfg. Part No.	Output mA	Output V	Drivers	Package	Stock No.	Price Each 1-9
A3972SB-T	±1500	50	4	DIP	59J2487	8.34

(4456)

INTEGRATED LOAD SWITCHES

RoHS Compliant Available

FAIRCHILD

P-channel integrated load switches are designed for configuration as a load switch. Particularly suited for power management in portable battery-powered electronic equipment.

Mfg. Part No.	V_{IN} Max. (V)	V_{GS} Max. (V)	I_L (V_{DROP} = 0.2V) @ V_{IN} = 5V (A)	R_{ON} Max. @ V_{IN} = 4.5V (Ω)	Package	Stock No.	Price Each 1-9
FDC6331L	8	8	2.8	0.055	SuperSOT-6	58K1427	0.72
FDC6329L	8	8	2.8	0.07	SuperSOT-6	58K1425	0.68
FDG6323L	8	8	1	0.2	SuperSOT-6	38C7129	0.41
FDC6323L	8	8	...	0.55	SC70-6	58K1421	0.68
FDC6330L	20	20	1.6	0.125	SuperSOT-6	58K8823	0.77
FDC6326L	20	20	1	0.2	SuperSOT-6	58K1423	0.77
FDG6324L	20	20	0.67	0.3	SuperSOT-6	58K1455	0.61
FDC6324L	20	8	0.36	0.75	SC70-6	58K8822	0.65

(74301)

POWER IC's - H-BRIDGES AND CONFIGURABLE SWITCHES (TOTEM-POLE OUTPUT DEVICES)

RoHS Compliant Available

freescale

The H-Bridge devices control up to 6A DC-motors with internal switching FETs, and 10A DC-motors using H-Bridge pre-driver w/ext. switching FETs. Output switching up to 20kHz. Output short circuit, current limit, and thermal shutdown. Operating temperature: -40°C to +125°C.

Mfg. Part No.	Outputs	R_{DS} (mΩ) of Each Output	Curr. Limit. Stdby Max.	Curr. Limit. (A)	Control	Package	Stock No.	Price Each 1-9
MPC17C724EP	2	1000	...	...	Parallel	16-QFN	53J3340	0.94
MC33926PNB	2	225	20 mA	6.2	Parallel	32-PQFN	40P5023	3.44

➤CONTINUED➤

POWER IC's - H-BRIDGES AND CONFIGURABLE SWITCHES (TOTEM-POLE OUTPUT DEVICES) (CONT.)

Mfg. Part No.	Outputs	R_{DS} (mΩ) of Each Output	Curr. Limit. Stdby Max.	Curr. Limit. (A)	Control	Package	Stock No.	Price Each 1-9
● MC33931VW	2	235	20 mA	6.5	Parallel	44-HSOP	56P3106	7.53
● MPC17510EJ	2	450	...	1.2	...	24-WTSSOP	09J5467	3.10

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
● KIT33887EKEVBE	MC33887 Evaluation Kit	14R8799	71.70
● KIT33937AEKEVBE	MC33937 Evaluation Kit	53R3751	201.25
● KIT33926PNBEVBE	MC33926 Evaluation Board	74P0310	80.50

(74919)

POWER DISTRIBUTION CONTROLLERS

RoHS Compliant Available — intersil

HOT SWAP CONTROLLERS

Mfg. Part No.	Supply Voltage (V)	Description	Package	Stock No.	Price Each 1-24
● ISL6115CBZA	12	IntelliTrip™ Current Regulation, PGOOD Always Enabled	8-SOIC	61J6426	4.81

HOT PLUG CONTROLLERS

● HIP1020CKZ-T	12 or 5	Single, Double or Triple-Output, Adj.	5-SOT-23	61J5944	2.65
● ISL6140CBZ*	12 or 5	Turn-On Ramp, Int. Charge Pump	8-SOIC	11J8915	4.74
● ISL6150CBZ*	12 or 5	Negative Voltage Hot Plug Controller	8-SOIC	97H9786	4.74

*RoHS compliant.
(74859)

CONFIGURABLE HIGH POWER POWER MANAGEMENT IC

RoHS Compliant Available — LINEAR TECHNOLOGY

Features:
- Pushbutton ON/OFF/RESET
- Independent 1A Boost and 1A Buck-Boost DC/DCs
- I2C Read Back of DC/DC, LED Driver, Fault Status

Applications:
- High Power (5W to 10W) Single Cell Li-Ion/Polymer Applications
- Portable Industrial Applications, Handy Terminals, Portable Instruments
- Multioutput Low Voltage Power Supplies

The **LTC3675EUFF#PBF** is a digitally programmable high efficiency multioutput power supply plus dual string LED driver IC optimized for high power single cell Li-Ion/Polymer applications. The DC/DCs consist of four synchronous buck converters, one synchronous boost DC/DC, and one buck-boost DC/DC all powered from a 2.7V to 5.5V input. The 40V LED driver can regulate up to 25mA of current through two LED strings with up to 10 LEDs each. The LED driver may also be configured as a general purpose high voltage boost converter.

Mfg. Part No.	No. of Channels	Supply Voltage (V)	Package	Stock No.	Price Each 1-24
● LTC3675EUFF#PBF	7	2.7 to 5.5	44-QFN	13T3891	10.79

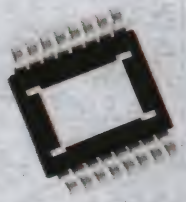
(195452)

DUAL 4A IDEAL DIODES W/ADJUSTABLE CURRENT LIMIT

RoHS Compliant Available — LINEAR TECHNOLOGY

Features:
- Low Reverse Leakage Current (1μA Max)
- 15mV Forward Drop in Regulation
- Smooth Switchover in Diode ORing
- Load Current Monitor
- Precision Enable Thresholds to Set Switchover
- Soft-Start to Limit Inrush Current on Start-Up
- Status Pins to Indicate Forward Diode Conduction
- Current and Thermal Limit with Warning

Applications:
- High Current PowerPath™ Switch
- Battery and Wall Adapter Diode ORing
- Backup Battery Diode ORing
- Logic Controlled High Current Power Switch
- Supercapacitor ORing
- Multiple Battery Sharing



The **LTC4415** contains two monolithic PowerPath ideal diodes, each capable of supplying up to 4A with typical forward conduction resistance of 50mΩ. The diode voltage drops are regulated to 15mV during forward conduction at low currents, extending the power supply operating range and ensuring no oscillations during supply switchover.

Mfg. Part No.	Voltage Range (V)	Typical Current Capability (A)	Package	Stock No.	Price Each 1-24
● LTC4415EMSE#PBF	1.7 to 5.5	4	16-MSOP	78T3428	6.30

(201292)

EIGHT-OUTPUT REGULATOR ICS

RoHS Compliant Available — LINEAR TECHNOLOGY

Applications:
- Handheld instruments and scanners
- Portable industrial devices
- Automotive infotainment
- Medical devices
- High end consumer devices
- Multirail systems
- Supports Freescale i.MX, Marvell PXA and Other Application Processors

Features:
- Pushbutton ON/OFF control with system reset
- Flexible pin-strap sequencing operation
- I2C and independent enable control pins

Mfg. Part No.	Supply Voltage (V)	Output Voltage (V)	Operating Temperature	Package	Stock No.	Price Each 1-24
● LTC3589EUJ#PBF	2.7 - 5.5	5	-40°C to +125°C	40-QFN	84R4962	9.95
● LTC3589HUJ#PBF	2.7 - 5.5	5	-40°C to +150°C	40-QFN	84R4964	12.18

(190318)

HIGH VOLTAGE SURGE STOPPERS

RoHS Compliant Available — LINEAR TECHNOLOGY

Features:
- Rugged Floating Topology
- Adjustable Output Clamp Voltage
- Controls N-Channel MOSFET
- Adjustable Protection Timer
- Internal 9 Second Cool-Down Timer

Applications:
- Industrial, Automotive and Avionic Surge Protection
- High Voltage DC Distribution

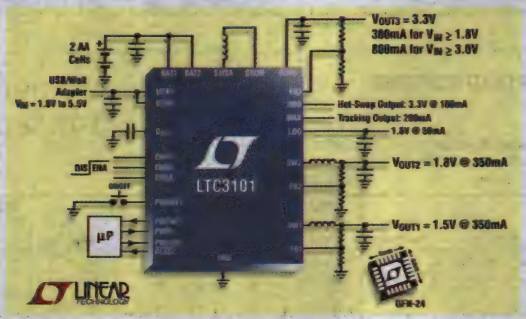
The **LTC4366** surge stopper protects loads from high voltage transients. By controlling the gate of an external N-channel MOSFET, the **LTC4366** regulates the output during an overvoltage transient. The load may remain operational while the overvoltage is dropped across the MOSFET. Placing a resistor in the return line isolates the **LTC4366** and allows it to float up with the supply; therefore, the upper limit on the output voltage depends only on the availability of high valued resistors and MOSFET ratings.

Mfg. Part No.	Input Voltage	Overvoltage Threshold Accuracy (%)	After Fault Attempt	Package	Stock No.	Price Each 1-99
● LTC4366IDDB-1#PBF	4.5V to 12V	3	Latch Off	8-DFN	78T3410	4.36
● LTC4366IDDB-2#PBF	4.5V to 12V	3	Auto-retry	8-DFN	78T3413	6.59
● LTC4366ITS8-1#PBF	4.5V to 12.5V	3	Latch Off	8-SOT-23	78T3416	4.36
● LTC4366ITS8-2#PBF	4.5V to 12V	3	Auto-retry	8-SOT-23	78T3419	6.59
● LT4363IDE-2#PBF	4.5V to 12V	12	Auto-retry	12-DFN	78T4100	6.09

(201307)

POWER CONTROLLERS

RoHS Compliant Available — LINEAR TECHNOLOGY



Linear Technology controllers are configurable in step-up, step-down, inverter, flyback, forward, SEPIC and buck-boost topologies. Furthermore, these controllers can feature wide input voltage ranges, multiple output capability, PolyPhase operation, and output tracking. They also come in voltage-mode and current-mode topologies, offer easy synchronization to external clocks and have comprehensive protection features.

PFC ONTROLLER IC

Mfg. Part No.	Features	Supply Voltage Range (V)	Package	Stock No.	Price Each 1-24
● LT1248CS#PBF	Power Factor Correction	11.5 to 25	16-SOIC	57M3016	7.41
● LT1248IS#PBF	For universal off-line power systems	11.5 to 25	16-SOIC	57M3022	8.61
● LT1249CN8#PBF	High Power Factor Over Wide Load Range	11.5 to 25	8-DIP	57M3026	6.27

CAPACITOR CHARGER CONTROLLER ICs

● LT3750EMS#PBF	Capacitor Charger Controller	3 to 24	10-MSOP	57M8591	7.01

PWM CONTROLLER ICs

● LT1243IN8#PBF	High Speed Current Mode PWM	12 to 25	8-DIP	57M2972	4.42
● LT1244CN8#PBF	High Speed Current Mode PWM	12 to 25	8-DIP	57M2978	3.53
● LTC3723EGN-1#PBF	Synchronous Push-Pull PWM Controller	6.5 to 9.5	16-SSOP	56M8169	9.43
● LT3761HMSE#PBF		4.5 to 60	16-MSOP	44W6853	5.50

➤ CONTINUED ➤

POWER CONTROLLERS (CONT.)

PWM CONTROLLER ICs

Mfg. Part No.	Features	Supply Voltage Range (V)	Package	Stock No.	Price Each 1-24
LT1242CS8#PBF	High Speed Current Mode PWM	8.5 to 25	8-SOIC	57M2956	2.58
LT3761IMSE#PBF	Boost, Buck, Flyback, Sepic	4.5 to 60	16-MSOP	44W6855	5.07
PowerPath CONTROLLER ICs					
LTC4352CDD#PBF	Low Voltage Ideal Diode Controller with Monitoring	9 to 6	12-DFN	02P7606	5.35
LTC4352CMS#PBF	Low Voltage Ideal Diode Controller with Monitoring	9 to 6	12-MSOP	02P7608	5.35
LTC4352IDD#PBF	Low Voltage Ideal Diode Controller with Monitoring	9 to 6	12-DFN	02P7610	6.20
LTC4352IMS#PBF	Low Voltage Ideal Diode Controller with Monitoring	9 to 6	12-MSOP	02P7612	6.20
LTC4357CMS8#PBF	Positive High Voltage Ideal Diode Controller	9 to 80	8-MSOP	56M9468	3.40
LTC4357MPMS8#PBF	Ideal Diode Controller	9 to 80	8-MSOP	84R4993	10.90
LTC4357IMS8#PBF	Positive High Voltage Ideal Diode Controller	9 to 80	8-MSOP	56M9472	4.08
LTC4357HDCB#PBF	Ideal Diode Controller	9 to 80	6-DFN	24R8518	5.13
LTC4357HMS8#PBF	Ideal Diode Controller	9 to 80	8-MSOP	24R3334	5.02
LTC4355CMS#PBF	PowerPath Control	9 to 80	16-MSOP	71P8107	5.31
LTC4355IMS#PBF	PowerPath Control	9 to 80	16-MSOP	71P8109	6.41
LTC4355IS#PBF	PowerPath Control	9 to 80	SOIC	56M9464	5.99
LTC4417CUF#PBF	PowerPath Control	9 to 36	24-QFN	53W0554	6.52
LTC4412ES6#PBF	PowerPath Control	-14 to 28	6-TSOT-23	61M3335	3.17
LTC4414EMS8#PBF	36V, Low Loss PowerPath Controller for Large PFETs	3 to 36	8-MSOP	56M9533	3.71
POWER SUPPLY TRACKER ICs					
LTC2926CGN#PBF	MOSFET-Controlled Power Supply Tracker	2.9 to 5.5	20-SSOP	56M7122	5.00
PMIC					
LTC3101EUF#PBF	Multi-Output DC/DC Converter & PowerPath Controller	1.8 to 5.5	24-QFN	44P3976	8.45
OVERVOLTAGE PROTECTION					
LTC4362CDCB-1#PBF	Overvoltage/ Overcurrent Protector	2.5 to 5.5	8-DFN	84R7843	3.50
LTC4362CDCB-2#PBF	Overvoltage/ Overcurrent Protector	2.5 to 5.5	8-DFN	84R7844	3.50

(102092)

QUAD DIGITAL POWER SUPPLY MANAGER

RoHS Compliant Available

LINEAR TECHNOLOGY

Applications:
- Computers
- Network Servers

The **LTC2974** is a quad, digital power-supply monitor, supervisor, sequencer, and margin controller. Supervisory functions include over and under threshold limits for current, voltage and temperature on four output channels as well as OV/UV threshold limits for a single input channel.

Mfg. Part No.	External Input Cap. (pF)	External Output Cap. (pF)	Input Voltage Range	PWM Input Frequency (kHz)	Pkg.	Stock No.	Price Each 1-24
LTC2974IUP#PBF	10	10	3V to 15V	110	64-QFN	82T3897	17.43

(203720)

FAN MANAGERS

RoHS Compliant Available

MICROCHIP

FAN MANAGERS REQUIRING EXTERNAL TEMP SENSORS

Temperature range: 0°C - +85°C. Vcc range: +3.0V to +5.5V. Max. supply current: 1000µA. These devices use an external temperature sensor. Accuracy of the total solution is a function of the accuracy of the external sensor. -40°C to +85°C temperature range option available; *go online or call.*

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-25
TC642VOA	FanSense™ Fan Monitor, Min. Fan Speed Control	SOIC-8	69K7655	1.48

PREDICTIVE FAN MANAGERS

The TC670 is an integrated fan speed sensor that predicts and/or detects fan failure, preventing thermal damage to systems with cooling fans.

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-25
TC670ECHTR*	Predictive Fan Failure Detector	SOT-23A-6-TR	92C2504	1.32

(70509)

POWER MANAGEMENT IC'S

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Max. Input Voltage (V)	Max. Output Current (A)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
LM2673S-ADJ/NOPB	40	3	37	7-TO-263	41K4090	5.30
LM2674M-12/NOPB	40	0.5	12	8-SOIC	41K4119	3.44
LM2675M-12/NOPB	40	1	12	8-SOIC	41K4139	4.58
LM5001MA/NOPB	75	...	75	8-SOIC	32M1216	4.44
LM26484SQE/NOPB	5.5	2	3.5	24-LLP	56P4149	2.19

SEQUENCERS

Mfg. Part No.	Supply Voltage (V)	Timer Settings (ms)	Operating Temperature Range	Package	Stock No.	Price Each
LM3880MF-1AA/NOPB	2.7 - 5.5	10	-40 to 125°C	6-SOT-23	32M1095	1.38

(65028)

SPACE-EFFICIENT BOOST AND SEPIC DC-DC REGULATORS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Output Voltage Max. (V)	Frequency	Package	Stock No.	Price Each
LM2735XMF/NOPB	24	520 kHz	5-SOT-23	50M8798	2.75
LM2735XSD/NOPB	24	520 kHz	6-LLP	50M8800	2.75
LM2735YMF/NOPB	24	1.6 MHz	5-SOT-23	50M8801	2.75

(102105)

CONSTANT CURRENT SOURCE REGULATOR

RoHS Compliant Available

NXP

Features:
- One chip integrated constant current source
- Output current setting by use of an external resistor
- Very small package
- Reduces component count and board space

Mfg. Part No.	Supply Voltage (V)	Power Dissipation (mW)	Package	Tape Cut Stock No.	Tape Cut Price Each 1-9
PSSI2021SAY,115	75	335	SOT-353	75R4854	0.62

(197687)

FUSION DIGITAL POWER™ CONTROL SOLUTIONS

RoHS Compliant Available

TEXAS INSTRUMENTS

DIGITAL POINT OF LOAD SYSTEM CONTROLLERS

Mfg. Part No.	Supply Voltage Max. (V)	# of Outputs	# of Phases	Fs (Max) (kHz)	PWM Res. (ps)	Package	Stock No.	Price Each 1-9
UCD9240PFC	3.6	4	6, 8	2000	250	80-TQFP	03P1646	12.83
DIGITAL CONTROL COMPATIBLE SYNCHRONOUS BUCK GATE DRIVER								
UCD7242RSJT	18	2	...	2000	...	32-QFN	63R9635	6.48

EVALUATION MODULES

Mfg. Part No.	Description	Stock No.	Price Each
USB-TO-GPIO	USB Interface Adapter Evaluation Module	20M5965	49.98

(101675)

POWER MANAGEMENT MULTI-CHANNEL IC (PMIC) SOLUTIONS

RoHS Compliant Available

TEXAS INSTRUMENTS

PMIC SOLUTIONS WITH AND WITHOUT BATTERY CHARGER

Mfg. Part No.	Vin Max (V)	No. of Step-Down DC/DC Converter	No. of LDO	Pkg.	Stock No.	Price Each 1-9
TPS65023RSBT	6	3	3	40-QFN	22M1827	7.20
TPS650243RHBT	6	3	3	32-QFN	78M8411	6.35
TPS650250RHBT	6	3	3	32-QFN	45P2941	6.04
TPS65051RSMT	6	2	4	32-QFN	30M1842	4.80
TPS650532RGET	6	2	3	24-VQFN	33R2479	4.54
TPS65070RSLT	6.3	3	2	48-QFN	25R2326	8.80
TPS65073RSLT	6.3	3	2	48-QFN	25R2327	8.80
TPS75003RHLR	6.5	2	1	20-QFN	24K6137	4.54

(74645)

PWM POWER SUPPLY CONTROLLERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Supply Voltage Min./ Max. (V)	Output Current (mA)	V_{ref} Tol. (%)	Pkg.	Stock No.	Price Each 1-9
100kHz						
● UCC35702N	10/13	1200	2	14-DIP	77C2260	8.46
● UCC28610P	9/20	3600	...	8-PDIP	35R6297	1.66
250kHz						
● UC2843AD8	12/25	1000	1	8-SOIC	77C2962	1.79
300kHz						
● TL494CD	7/40	200	5	16-SOIC	67K2881	0.68
● TL494CN	7/40	200	5	16-DIP	60K6995	0.73
● TL494ID	7/40	200	5	16-SOIC	52F2762	0.68
● TL494IN	7/40	200	5	16-DIP	67K1282	0.73
● TL594CD	7/40	200	1	16-SOIC	76C9312	0.97
● TL594CN	7/40	200	1	16-DIP	65K1078	0.89
● TL598CN	7/40	200	1	16-DIP	50B7918	1.73
● TL598CD	7/40	200	1	16-SOIC	76C9319	1.88
350kHz						
● UCC25600D	11.5/18	...	4	8-SOIC	34P6588	2.31
450kHz						
● UC2524ADW	8/40	100	1	16-SOIC	77C2782	2.23
● UC2525AN	4.5/35	500	1	16-DIP	77C2790	2.49
● UC2842AD8	12/25	1000	1	8-SOIC	74K4001	1.79
● UC2842AN	12/25	1000	1	8-DIP	77C2950	1.85
● UC2842N	12/25	1000	1	8-DIP	77C2957	1.85
● UC2843AN	...	1000	1	8-DIP	77C2964	1.85
● UC2843D	12/25	1000	1	14-SOIC	78K9927	1.79
● UC2843D8	12/25	1000	1	8-SOIC	78K9928	1.79
● UC2843N	12/25	1000	1	8-DIP	74K4002	1.85
● UC2844AN	12/25	1000	1	8-PDIP	77C2975	1.85
● UC2845AD8	12/25	1000	1	8-SOIC	35K1832	1.79
● UC2845AN	12/25	1000	1	8-DIP	77C2986	1.85
● UC2845N	12/25	1000	1	8-DIP	77C2990	1.85
● UC2846DW	8/40	500	2	16-SOIC	77C2991	4.77
● UC2846N	8/40	500	1	16-DIP	74K4003	5.27
● UC3524ADW	8/40	100	1	16-SOIC	77C3116	2.23
● UC3524AN	8/40	200	1	16-DIP	68K1137	2.49
● UC3525AN	4.5/35	200	1	16-DIP	74K4006	2.49
● UC3525ADW	4.5/35	500	1	16-SOIC	77C3124	2.23
● UC3526ADW	7/35	200	1	18-SOIC	77C3132	3.34
● UC3526N	8/35	100	1	18-PDIP	77C3139	3.73
● UC3842AD8	12/25	1000	1	8-SOIC	74K4011	1.60
● UC3842AN	10/30	1000	1	8-DIP	74K4012	1.61
● UC3842D8	12/25	1000	1	8-SOIC	77C3298	1.60
● UC3842N	10/30	1000	1	8-DIP	74K4013	1.61
● UC3843AD	12/25	1000	1	14-SOIC	78K9929	1.60
● UC3843AN	12/25	1000	1	8-DIP	80K6179	1.61
● UC3843N	12/25	1000	1	8-DIP	74K4014	1.61
● UC3844AD8	12/25	1000	1	8-SOIC	77C3313	1.60
● UC3844AN	12/25	1000	1	8-DIP	74K4015	1.61
● UC3844N	12/25	1000	1	8-DIP	62K3475	1.61
● UC3845AD8	12/25	200	1	8-SOIC	74K4016	1.60
● UC3845AN	12/25	1000	1	8-DIP	74K4017	1.61
● UC3845D	12/25	1000	1	8-DIP	77C3328	1.60
● UC3845D8	12/25	1000	1	8-SOIC	80K6180	1.60
● UC3845N	12/25	1000	1	8-DIP	35K5056	1.61
● UC3846DW	8/40	500	1	16-SOIC	74K4018	4.54
● UC3846N	8/40	500	1	16-DIP	74K4019	5.08
● UC3851N	...	400	1	18-DIP	77C3360	22.03
500kHz						
● DRV8332DKD	0/52.5	8000	...	36-HSSOP	78R4079	10.58
● TL3842BD-8	12/25	200	1	8-SOIC	14M2396	1.26
● TL3842P	12/25	200	1	8-DIP	76C9241	1.01
● TL3843BD-8	12/25	200	1	8-SOIC	14M2406	1.26
● TL3843P	12/25	200	1	8-DIP	76C9246	1.01
● TL3844P	12/25	200	1	8-DIP	76C9251	1.10
● TL3845BD-8	12/25	200	1	8-SOIC	14M2426	1.26
● TL3845P	12/25	200	1	8-DIP	76C9256	1.10
1000kHz						
● UC28025DW	9/30	500	2	16-SOIC	61H5613	4.40
● UC2823ADW	12/20	2000	1	16-SOIC	74K3998	15.43
● UC2825ADW	12/20	500	2	16-WSOIC	74K3999	7.33
● UC2825AN	12/20	500	2	16-DIP	24C6758	8.16

➤ CONTINUED ➤

PWM POWER SUPPLY CONTROLLERS (CONT.)

Mfg. Part No.	Supply Voltage Min./ Max. (V)	Output Current (mA)	V_{ref} Tol. (%)	Pkg.	Stock No.	Price Each 1-9
1000kHz						
● UC2825DW	10/30	1500	1	16-SOIC	77C2911	5.32
● UC2825N	10/30	1500	1	16-DIP	74K4000	5.88
● UC2856DW	8/40	500	2	16-SOIC	77C3035	5.27
● UCC2897APW	8.5/16	2000	...	20-TSSOP	45P8386	3.46
● UC3823AN	12/20	500	2	16-DIP	77C3234	15.99
● UC3823DW	10/30	500	2	16-SOIC	97B1232	5.07
● UC3823N	10/30	500	2	16-DIP	77C3242	5.69
● UC3824N	10/30	500	2	16-DIP	70C5715	19.47
● UC3825ADW	12/20	2000	1	16-SOIC	77C3247	7.03
● UC3825AN	12/20	1000	1	16-DIP	68K1140	7.88
● UC3825DW	10/30	1500	1	16-SOIC	74K4010	5.07
● UC3825N	10/30	1500	1	16-DIP	68K1141	5.69
● UC3856DW	...	500	2	16-SOIC	77C3383	5.08
● UC3856N	...	500	2	16-PDIP	26C0132	5.68
● UC3875N	11/20	2000	1	20-DIP	67K1300	12.21
● UC3875DWP	11/20	2000	1	28-SOIC	77C3434	10.86
● UCC2800N	/10	1000	5	8-PDIP	77C2017	3.68
● UCC2801D	/10	1000	1.5	8-SOIC	74K3992	3.34
● UCC2804D	0/10	1000	1.5	8-SOIC	77C2034	3.34
● UCC2804N	0/10	1000	1.5	PDIP	29C2466	3.68
● UCC2805D	3.6/10	1000	1.5	SOIC	77C2044	3.34
● UCC2806DW	8/14.5	200	1	16-SOIC	77C2049	10.67
● UCC2808D-1	/10	20	1	8-SOIC	77C2076	2.99
● UCC28084D	4.1/10	20	1	8-SOIC	02E7315	3.34
● UCC2813D-1	...	1000	1.5	8-SOIC	77C2101	2.99
● UCC2813D-3	...	1000	1.5	8-SOIC	97B4419	2.99
● UCC2813D-4	...	1000	1.5	8-SOIC	77C2103	2.99
● UCC2813D-5	...	1000	1.5	8-SOIC	77C2104	2.99
● UCC28600D	0/21	800	...	8-SOIC	99K4471	1.47
● UCC2892D	8.5/16	2000	1	16-SOIC	87H4698	3.22
● UCC2894D	8.5/16	2000	1	16-SOIC	87H4704	3.22
● UCC2894PW	8.5/16	2000	1	16-TSSOP	87H4706	3.22
● UCC2895DW	10/16.5	100	1.2	20-SOIC	74K3993	7.84
● UCC28C43D	7.6/18	200	2	8-SOIC	77C2000	2.23
● UCC28C44D	12/18	1000	2	8-SOIC	77C2005	2.23
● UCC28C45D	12/18	1000	2	8-SOIC	77C2010	2.23
● UCC3802D	/10	1000	1.5	8-DIP	77C2374	3.22
● UCC3804D	/10	1000	1.5	8-DIP	77C2383	3.22
● UCC3806N	8/14.5	200	1	16-DIP	77C2395	11.66
● UCC3808D-2	10/10	1000	1	8-SOIC	77C2420	2.87
● UCC3813N-1	/10	1000	...	8-PDIP	77C2459	3.20
● UCC3813PW-2	...	1000	1.5	8-TSSOP	77C2466	2.87
● UCC3895DW	10/16.5	100	1.2	20-SOIC	74K3995	7.52
● UCC3895N	10/16.5	100	1.2	20-DIP	77C2543	8.46
● UCC38C40DGK	12/18	1000	2	8-MSOP	77C2337	2.31
2000kHz						
● UCD9246RGCT	3/3.6	...	...	64-VQFN	62R9598	11.05

EVALUATION MODULES

Mfg. Part No.	Description	Stock No.	Price Each
● UCC2897AEVM	UCC2897A Evaluation Module	55R7748	101.00

(84934)

WIDE-OUTPUT ADJUST POWER MODULES

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	V_{in} Max. (V)	Output Min. (V)	Output Max. (V)	Output Max. (A)	Pkg.	Stock No.	Price Each 1-9	Price Each 10-24
● PTH03000WAH	3.6	0.9	2.5	6	5-DIP	80K6125	12.92	11.74
● PTH05000WAH	5.5	0.9	3.6	6	5-DIP	80K6126	12.92	11.74
● PTH05050WAH	5.5	0.8	3.6	6	6-DIP	83K8771	14.21	12.91
PTH05050WAS	5.5	0.8	3.6	6	6-DIP	90H3323	14.21	12.91
● PTH05060WAH	5.5	0.8	3.6	10	10-DIP	80K6127	20.18	18.34
● PTH12050WAH	13.2	1.2	5.5	6	6-DIP	02M9990	14.21	12.91
PTH12050WAS	13.2	1.2	5.5	6	6-DIP	90H3329	14.21	12.91

(84979)

SMPS CONTROLLERS

RoHS Compliant Available

FAIRCHILD

Features:
- Low start up current
- Maximum duty clamp
- UVLO with Hysteresis
- Output current of 1 A at maximum

The **UC3842AN**, **UC3842N** & **UC3843N** are designed for Off - Line and DC-to-DC converter applications with minimum external components. These integrated circuits feature a trimmed oscillator for precise duty cycle control, a temperature compensated reference, high gain error amplifier, current sensing comparator, and a high current totempole output ideally suited for driving a power MOSFET.

Mfg. Part No.	Supply Voltage (V)	Frequency (kHz)	Package	Stock No.	Price Each 1-9
FSDM0565REWDTU	20	66	TO-220F	07P9256	2.27
KA5M0365RTU	30	100	TO-220F	82C6533	2.09

(147149)

LIGHTING BALLAST CONTROLLERS

RoHS Compliant Available

International IOR Rectifier

Mfg. Part No.	Output Current (mA) Source	Output Current (mA) Sink	Supply Voltage (V)	Output Voltage (V) Min.	Output Voltage (V) Max.	Package	Stock No.	Price Each 1-9
IR21531DPBF	null	null	16.8	10	20	8-PDIP	73K8366	3.22
IR2156PBF	250	400	20	10	25	14-DIP	19K8437	3.40
IR21531SPBF	200	400	16.8	10	20	8-SOIC	19K8436	2.58
IRS2153DPBF	180	260	16.8	10	20	8-DIP	88K5081	1.89
IRS2158DPBF	180	260	20	...	100	16-PDIP	51P1621	3.29
IR2520DSPBF	140	230	15.4	...	...	8-PDIP	63J7918	3.22

(177883)

CONTROL ICS

RoHS Compliant Available

International IOR Rectifier

IRS20124xxx

IRS2153xxx

IRS2453xxx

Features
- Improved Input Filter
- Lower Pulse Distortion
- Reliable Spike Noise Rejection
- Short Pulse Rejection
- Improved Temperature Stability
- Improved Clamping Structure Provides Additional Spike Protection
- Allows Higher PWM Control
- Higher Signal to Noise Rejection at Input and Improved Logic Threshold Values
- Improved DC Operation Under Negative Vs Conditions
- Improved Matching Time
- Increased Blanking Time to Increase Overcurrent Detection Reliability
- Increased Blanking Time Reduces the Need for External Noise Filters at the ITRIP Pin

Applications
- Automotive
- Lighting
- Audio
- Air Conditioner & Refrigerator Compressors
- Vacuum Cleaners
- Washing Machines
- Dish Washers
- Ventilation Fans
- Circulating Pumps
- Industrial Drives

A new series of next-generation 500V and 600V half-bridge and high- and low-side high-voltage integrated circuits (HVIC) address a wide range of applications including motor control, lighting, switch-mode power supplies, audio, and flat-panel displays. They are offered with single or dual inputs, under-voltage lockout protection, fixed or programmable deadtime for half-bridge drivers, and drive currents up to 2A.

Mfg. Part No.	Offset Voltage (V)	Source Output Current Max. (mA)	Sink Output Current (mA)	Pkg.	Delay Matching max (ns)	Tape Cut Stock No.	Tape Cut Price Each
AUDIO							
IRS2011SPBF	200	...	...	8-SOIC	20	58K5829	2.52
LIGHTING							
IRS2153DPBF	600	180	260	8-DIP	...	88K5081	1.89
MOTION CONTROL, APPLIANCES							
IRS21844PBF	600	1400	1800	14-DIP	90 / 40	11M1885	3.56

(89407)

ENHANCED, HIGH-EFFICIENCY POWER FACTOR CONTROLLERS

RoHS Compliant Available

ON Semiconductor

NEW

Features:
- Near-Unity Power Factor
- Critical Conduction Mode (CrM)
- Current Controlled Frequency Fold-back (CCFF): Low Frequency Operation is Forced at Low Current Levels
- On-time Modulation to Maintain a Proper Current Shaping in CCFF Mode
- Skip Mode Near the Line Zero Crossing
- Fast Line / Load Transient Compensation (Dynamic Response Enhancer)
- Valley Turn on

Applications:
- PC, TV, Adapters Power Supplies
- LED Drivers and Light Ballasts (including dimmable versions)
- All Off-Line Applications Requiring Power Factor Correction

The **NCP1611** is designed to drive PFC boost stages based on an innovative Current Controlled Frequency Fold-back (CCFF) method. In this mode, the circuit classically operates in Critical conduction Mode (CrM) when the inductor current exceeds a programmable value. When the current is below this preset level, the **NCP1611** linearly decays the frequency down to about 20 kHz when the current is null. CCFF maximizes the efficiency at both nominal and light load. In particular, the stand-by losses are reduced to a minimum.

Mfg. Part No.	Supply Voltage (V)	Topology	Drive Cap. (mA)	Package	Stock No.	Price Each 1-9
NCP1611ADR2G	9.5 - 35	Step-Up	500 / 800	8-SOIC	76T6314	0.51
NCP1612ADR2G	9.5 - 35	Step-Up	500 / 800	10-SOIC	73W9126	1.52

EVALUATION BOARD

Mfg. Part No.	Description	Stock No.	Price Each
NCP1611GEVB	NCP1611 Eval. Board	87W7346	200.00
NCP1612GEVB	NCP1612 Eval. Board	87W7347	200.00

(210801)

BIPOLAR STEPPER MOTOR DRIVERS

RoHS Compliant Available

Allegro MicroSystems, Inc.

Features
- Output Capability of 8-35 V and ±1.5 A (2 A Peak)
- 3.3V and 5V Logic Compatible (3.0V to 5.5V)
- Low R_{on} DMOS Outputs
- Synchronous Rectification Reduces Power Dissipation - Typically a 20% Power Savings
- Automatic Slow, Fast and Mixed Decay
- Less Than 10 mA Sleep Mode Current

Operate bipolar stepper motors in full, half (**Mfg. Part No. A3982**).

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-7999
A3950SLPTR-T	DMOS Full-Bridge Motor Driver	16-TSSOP	65K5224	1.68
A3979SLPTR-T	Microstepping DMOS Driver w Translator	28-TSSOP	31K6660	3.61
A3982SLBTR-T	DMOS Dual Full-Bridge Stepper Motor Driver w/ Translator	24-SOIC	59P3277	5.19
A3986SLDTR-T	DMOS Dual Full-Bridge MOSFET Driver w/ Translator	38-TSSOP	87K3387	2.25

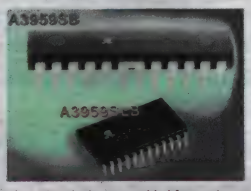
(84707)

DMOS FULL-BRIDGE PWM MOTOR DRIVER

RoHS Compliant Available

Allegro MicroSystems, Inc.

Features
- High Output Rating
- Low rDS(on) Outputs
- Mixed, Fast, and Slow Current-Decay Modes
- Synchronous Rectification for Low Power Dissipation
- Internal UVLO and Thermal-Shutdown Circuitry
- Crossover-Current Protection
- Internal Oscillator for Digital PWM Timing
- Operating Temp: -20°C to 85°C



The **A3959** is designed for PWM current control of DC motors. Input terminals are provided for use in controlling the speed and direction of a DC motor with externally applied PWM-control signals. Special power-up sequencing is not required.

Mfg. Part No.	Supply Voltage Max (V)	Output Current Max (A)	R_{DS} (on) Typ. (Ω)	Package	Stock No.	Price Each 1-9
A3959SLPTR-T	5.5	3	270	28-TSSOP	59P3271	6.35

(90043)

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(197415)

FULL-BRIDGE PWM MOTOR DRIVER

RoHS Compliant Available

Allegro MicroSystems, Inc.

The **A4970** motor driver drives both windings of a bipolar stepper motor or bidirectionally controls two DC motors. Both bridges are capable of sustaining 45 V and include internal pulse-width modulation (PWM) control of the output current to 750 mA.

The**A4973** is capable of continuous output currents to ±1.5 A and operating voltages to 50 V. Internal fixed off-time PWM current-control circuitry can be used to regulate the maximum load current to a desired value. The peak load current limit is set by the user's selection of an input reference voltage and external sensing resistor. The fixed off-time pulse duration is set by a user- selected external RC timing network. Internal circuit protection includes thermal shutdown with hysteresis, transient-suppression diodes, and crossover current protection. Special power-up sequencing is not required.

The **A4975** is designed to drive one winding of a bipolar stepper motor in a microstepping mode. The outputs are rated for continuous output currents to ±1.5 A and operating voltages to 50 V. Internal pulse width modulated (PWM) current control combined with an internal three-bit nonlinear digitalto- analog converter allows the motor current to be controlled in full-, half-, quarter-, or eighth-step (microstepping) modes. Nonlinear increments minimize the number of control lines necessary for microstepping. Microstepping provides increased step resolution, and reduces torque variations and resonance problems at low speed.

Mfg. Part No.	Supply Voltage Range (V)	Output Current Max (A)	Package	Stock No.	Price Each 1-9
● A4970GLBTR-T	7.45V to 45V	750	24-WSOIC	87T7240	5.27
● A4970SLBTR-T	7.45V to 45V	750	24-WSOIC	87T7241	4.98
● A4973SB-T	3V to 5.5V	1.5	16-DIP	87T7242	4.14
● A4973SLBTR-T	3V to 5.5V	1.5	16-WSOIC	87T7243	4.19
● A4975SB-T	4.5V to 5.5V	1.5	16-DIP	87T7244	3.77
● A4975SLBTR-T	4.5V to 5.5V	1.5	16-WSOIC	87T7245	4.01

(201311)

AUTOMOTIVE DMOS MICROSTEPPING DRIVER WITH TRANSLATOR

RoHS Compliant Available

Allegro MicroSystems, Inc.

Features
- Low R_{DS}(ON) outputs
- Automatic current decay mode detection/selection
- 3.0 V to 5.5 V logic supply voltage range
- Mixed, fast, and slow current decay modes
- Synchronous rectification for low power dissipation
- Internal OVLO and thermal shutdown circuitry
- Crossover current protection

Applications
- Automotive stepper motors
- Engine management
- Headlamp positioning

Mfg. Part No.	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-9
● A4983SETTR-T	5.5	QFN	39M6763	4.50

* Tape on Reel version: 4000

(82343)

DUAL FULL BRIDGE LOW VOLTAGE MOTOR DRIVER

RoHS Compliant Available

Allegro MicroSystems, Inc.

- Low $R_{DS(on)}$ outputs
- Full- and half-stepping capability
- Small package
- Forward, reverse, and brake modes for dc motors
- Sleep mode with zero current drain
- PWM control up to 250 kHz
- Crossover-current protection
- Thermal shutdown (TSD)

The **A3901** is a dual full-bridge motor driver, designed for low voltage portable applications involving bipolar stepper or brush DC motors. Outputs have been optimized for low voltage drop, with currents up to ±400 mA (±800 mA with outputs paralleled) and operating voltage range of 2.5 to 5.5 V. The four inputs (IN1 to IN4) can control a bipolar stepper motor in full- or half-step mode, or dc motors in forward, reverse, or brake mode. The inputs can be PWMed for current or speed control at frequencies up to 250 kHz. Internal protection circuitry includes thermal shut down (TSD) and crossover (shoot-through) protection. The **A3901** is supplied in a 3 x 3 x 0.75 mm nominal, 10-lead DFN/MLP package, with exposed thermal pad (package "EJ"). Small footprint package, lead (Pb) free, with 100% matte tin-lead frame plating.

Mfg. Part No.	Supply Voltage Min (V)	Supply Voltage Max (V)	Output Current Max (mA)	$R_{DS(on)}$ Typ. (Ω)	Package	Stock No.	Price Each 1-9
● A3901SEJTR-T	2.5	5.5	400	1.2	10-DFN/MLP	87K3379	1.37

(90321)

STEPPER MOTOR DRIVERS

RoHS Compliant Available

Allegro MicroSystems, Inc.

Package: 15-lead SIP.

Type	Output Ratings mA	Output Ratings V	Drivers	Serial Input	Stock No.	Price Each 1-9
● SLA7024M	1000	46	4	Stepper Motor Controller/Driver	95B3004	8.61
● SLA7026M	3000	46	4	Stepper Motor Controller/Driver	95B3005	12.55
● SLA7042M	1200	46	4	Microstepping Controller/Driver	95B3006	17.60

(50932)

MOTION CONTROL

RoHS Compliant Available

ANALOG DEVICES

Analog DSP AC motor control ICs are single-chip DSP-based controllers suitable for high-performance control of AC induction motors, permanent magnet synchronous motors, and brushless DC motors. DSP processor and a high-performance ADC system address speed and accuracy requirements. Other on-chip peripherals include a flexible encoder interface, a 16-bit PWM generator, power-on reset, and programmable digital I/O, allowing OEMs to implement a complete motor control drive system on one integrated IC. Features a 16-bit main PWM, with a bus frequency of 20kHz. Evaluation kits are recommended for intial program development. They contain hardware (controller, evaluation/processor board, and connector board), software (assembler, linker, and debugger), documentation, and serial cable for connection to a personal computer.

PROGRAMMABLE SINUSOIDAL OSCILLATORS

Mfg. Part No.	Bus Freq. (kHz)	Accuracy (arc min)	Package	Stock No.	Price Each 1-9
● AD2S99APZ	20	5	20-PLCC	59K3497	15.96

RESOLVER-TO-DIGITAL CONVERTERS

Mfg. Part No.	Res. (Bits)	Accuracy (arc min)	Track Rate +/- (rps)	Interface	Package	Stock No.	Price Each 1-4
AD2S80AJD	10/12/14/16	± 8	1040	Parallel	40-CDIP	05F6700	139.46
● AD2S90APZ	12	10.6	500	Serial	20-PLCC	19M8798	49.22

(65088)

H-BRIDGE MOTOR DRIVER

RoHS Compliant Available

freescale

Features:
- TL/CMOS Compatible Inputs
- PWM Frequencies up to 10kHz
- Active Current Limiting via Internal Constant OFF-Time PWM (with Temperature-Dependent Threshold Reduction)
- Output Short-circuit Protection
- Under-voltage Shutdown
- Fault Status Reporting

Applications:
- DC-motor acme lead screw actuators
- Servo gear actuators
- Bi-directional thrust solenoids
- Fractional horsepower DC-motor control
- Medical/Healthcare - Powered Patient Beds

The **MC33886** is a monolithic power IC comprising control logic, charge pump, gate drive, and low R DS(on)MOSFET output H-Bridge circuitry into a small surface mount package. It is designed to drive inductive loads with rms currents to 5.2 A in both directions. In addition,the current drive can be pulse width modulated (PWM)at frequencies to 10 kHz. Undervoltage, overtemperature, and overcurrent conditions are detected and reported via a status flag output. Output control is via two independent inputs (forward, reverse, free- wheeling low, and freewheeling high are possible active output states). Two disable inputs are provided, one Low =True and one High =True, either of which will place the outputs into a high impedance OFF state.

Mfg. Part No.	Supply Voltage	Output Current (A)	R_{DS}(ON) (mohms)	Package	Stock No.	Price Each 1-9
● MC33886PVW	5V to 28V	5	120	20-HSOP	38T2590	6.74

(210231)

CONSTANT-CURRENT CONTROL VOICE COIL MOTOR DRIVER

RoHS Compliant Available

ON Semiconductor

Features:
- Built-in current detection resistor
- Built-in thermal protection circuit
- Constant current control enabled by 10bit DAC
- Less External Component
- Constant current driver for voice coil motors

End Products:
- Portable & Wireless
- Smartphone
- Tablet
- Camera for mobile phone
- Pocket movie Camera

Benefits:
- Easy control
- Wide power supply application
- Current limit protection
- Small mounting space
- Voltage drop protection
- Thermal protection
- Improving the converging stability of the AF-VCM
- Simple Design
- Low consumption

Applications:
- Portable & Wireless

The **LV8498CT** is a constant current driver IC for voice coil motors that supports I2C control integrating a digital/analog converter (DAC). It uses an ultraminiature WLP package and includes a current detection resistor for constant current control, which makes the IC ideal for miniaturization of camera modules intended for use in camera-equipped mobile phones. The output transistor has a low on-resistance of 1 Ω and the resistance of the built-in current detection resistor is 1 Ω, which minimizes the voltage loss and helps withstand voltage drop in VCC. The function is incorporated, which, by changing the current in a stepped pattern while taking time at rise and fall of the output current, provides the current a slope, improving the converging stability of the voice coil motor (current slope function).

Mfg. Part No.	V_M Min. (V)	V_M Max. (V)	I_O Max. (A)	Package	Stock No.	Price Each 1-9
● LV8498CT-TE-L-H	2.2	5	0.15	6-WLP	46W0882	1.05

(210206)

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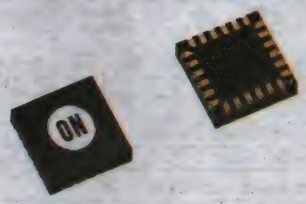
(212565)

DC MOTOR CONTROL DRIVERS

RoHS Compliant Available

ON Semiconductor

Applications:
- Stepper Motors
- Industrial
- Portable & Wireless
- Power Supply



LV8411GR-TE-L-E

STEPPER MOTORS

Mfg. Part No.	Supply Voltage	Output Current (mA)	Control Type	Package	Stock No.	Price Each 1-9
LV8044LP-TLM-E	2.7V to 5.5V	400	Serial	40-VQFN	46W0871	3.74
LV8044LP-TLM-H	2.7V to 5.5V	400	Serial	40-VQFN	46W0872	4.10
LB1838M-TRM-E	2.5V to 9V	400	Parallel	14-SOIC	46W0862	2.19
LB1909MC-BH	2.5V to 16V	800	Parallel	10-SOIC	46W0863	1.72
LV8712T-MPB-H	2.7V to 5.5V	800	Clock	24-TSSOP	45W3516	3.74
LV8712T-TLM-H	2.7V to 5.5V	800	Clock	24-TSSOP	46W0888	2.92
LV8713T-MPB-H	2.7V to 5.5V	800	Clock	24-TSSOP	45W3517	4.54
LV8713T-TLM-H	2.7V to 5.5V	800	Clock	24-TSSOP	46W0889	4.38
LV8746V-TLM-E	9V to 35V	1000	Clock/Parallel	44-SSOP	46W0897	6.89
LB1973JA-AH	1.8V to 7.5V	1000	Parallel	16-SSOP	46W0868	2.66
LV8548MC-AH	4V to 16V	1000	Parallel	10-SOIC	46W0883	1.50
LV8549MC-AH	4V to 16V	1000	Parallel	10-SOIC	46W0885	1.52
LV8771VH-TLM-H	9V to 32V	1500	Parallel	28-HSOP	46W0901	3.07
STEPPER / BRUSH DC						
LV8411GR-TE-L-E	2.5V to 5.5V	400	Parallel	24-QFN	46W0878	4.83
LV8413GP-E	2.5V to 5.5V	400	Parallel	16-QFN	45W3510	2.48
LV8413GP-H	2.5V to 5.5V	400	Parallel	16-QFN	45W3511	2.48
LB1836M-TLM-E	2.5V to 9V	800	Parallel	14-SOIC	46W0861	2.81
LB1848MC-BH	2.5V to 7.5V	800	Parallel	10-SOIC	46W1316	1.44
LB1948MC-AH	2.5V to 16V	800	Parallel	10-SOIC	46W0866	2.19
LV8080LP-E	2.5V to 6V	400	Parallel	16-QFN	45W3472	3.26
LV8080LP-TE-L-E	2.5V to 6V	200	Parallel	16-QFN	46W0874	3.34
LV8402GP-H	2.8V to 5.5V	1.4	Parallel	24-QFN	45W3503	3.31
LV8402GP-TE-L-H	2.8V to 5.5V	1.4	Parallel	24-QFN	46W0877	3.39
LV8413GP-TE-L-E	2.5V to 5.5V	400	Parallel	16-QFN	46W0879	2.54
LV8413GP-TE-L-H	2.5V to 5.5V	400	Parallel	16-QFN	46W0880	2.54
LV8711T-MPB-H	2.7V to 5.5V	800	PWN	24-TSSOP	45W3513	2.48
LV8711T-TLM-H	4V to 16V	800	PWN	24-TSSOP	46W0887	2.54
LV8731V-TLM-H	9V to 32V	2	Clock/Parallel	44-SSOP	46W0890	2.89
LV8732V-TLM-H	9V to 32V	2	Clock/Parallel	44-SSOP	46W0891	6.82
LV8734V-TLM-H	9V to 32V	1.5	Clock/Parallel	44-SSOP	46W0892	2.70
LV8735V-TLM-H	9V to 32V	1	Clock/Parallel	44-SSOP	46W0893	4.27
LV8736V-TLM-H	9V to 32V	1	Clock/Parallel	44-SSOP	46W0894	2.38
LV8740V-TLM-E	9V to 35V	2.5	Clock/Parallel	44-SSOP	46W0895	7.60
LV8741V-TLM-E	2.7V to 5.5V	1.5	Clock/Parallel	44-SSOP	46W0896	3.66
BRUSHLESS DC						
LV8136V-TLM-H	9.5V to 16.5V	10	DC	30-SSOP	46W0875	5.51
LB11696V-TLM-E	4.5V to 18V	25	DC	30-SSOP	46W0859	3.16
LB11868V-TLM-H	4V to 16V	30	DC	20-SSOP	46W0860	2.52
LV8860V-MPB-H	6V to 34V	700	PWM	16-SSOP	45W3553	2.76
LV8860V-TLM-H	6V to 34V	700	PWM	16-SSOP	46W0905	2.82
LV8804FV-TLM-H	6V to 15V	1200	DC	20-SSOP	46W0902	2.95
LV8804FV-TRM-H	6V to 15V	1200	DC	20-SSOP	46W0903	2.95
LV8805SV-TLM-H	6V to 16V	1200	PWM	20-SSOP	46W0904	2.99
LB11685AV-TLM-H	4.5V to 18V	1200	DC	24-SSOP	46W0858	2.22
BRUSH DC						
LV8075LP-E	2.5V to 5.5V	500	Parallel	16-QFN	45W3471	2.32
LV8075LP-TE-L-E	2.5V to 5.5V	500	Parallel	16-QFN	46W0873	2.37
LV8417CS-TE-L-H	2.7V to 5.5V	1000	Parallel	9-WLP	46W0881	2.03
LV8762T-MPB-H	9V to 32V	1000	Parallel	24-TSSOP	45W3539	2.17
LV8762T-TLM-H	9V to 32V	1000	Parallel	24-TSSOP	46W0900	2.22
LV8400V-MPB-E	2.7V to 5.5V	1200	Parallel	16-SSOP	45W3501	3.26
LV8400V-TLM-E	2.7V to 5.5V	1200	Parallel	16-SSOP	46W0876	3.34
LV8760T-TLM-E	3V to 5.5V	3000	Parallel	20-TSSOP	46W0898	3.07
LV8761V-TLM-E	3V to 5.5V	3000	Parallel	36-SSOP	46W0899	4.65

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
LV8044LPGEVB	EVAL BOARD FOR LV8044LP	45W6120	62.50
LV8411GREVB	EVAL BOARD FOR LV8411GR	45W6126	43.75
LV8805SVGEVB	EVAL BOARD FOR LV8805SV	45W6150	62.50

(208474)

MOTOR CONTROLLERS

RoHS Compliant Available

ON Semiconductor

Mfg. Part No.	Supply Voltage (V)	Input Offset Voltage Max. (mV)	Input Offset Current Max. (nA)	Package	Tape Cut Stock No.	Price Each 1-9
AMIS30624C6244RG	40	...	...	20-SOIC	03P0834	10.58
MC33033DWG	30	10	500	SOIC-20	26K3987	4.50
MC33035DWG	40	10	500	24-SOIC	26K3990	4.74
MC33039DG	9	...	...	8-SOIC	45J1154	1.78

(74510)

L6235 DMOS DRIVER

RoHS Compliant Available

Mfg. Part No.	Description	Stock No.	Price Each Each
EVAL6235N	L6235 DMOS Driver for Three-Phase Brushless DC Motor Evaluation Board	09R4611	26.25

(191902)

MOTOR DRIVERS

RoHS Compliant Available

Mfg. Part No.	I_0 Max.	V_S Max. (V)	Package	Stock No.	Price Each 1-9
L6506	25 mA	7	18-DIP	89K0769	6.16
L6506D	25 mA	7	20-SOIC	89K0770	5.73
L297D	50 mA	7	20-SO	89K0738	10.36
L6201	1 A	48	20-SOIC	89K0750	12.58
L6205N	2.8	52	20-DIP	89K0754	8.19
L272D	1 A	28	16-NSOIC	89K0723	2.91
L293E	1 A	36	20-DIP	89K0732	5.02
TDE1767DP	1.3 A	55	8-DIP	89K1060	7.44
L298HN	4 A	7	15-MULTIWATT	89K0740	5.61
L298N	4 A	7	15-MULTIWATT	32M1527	4.40
L6208PD	2.8 A	52	36-SOIC	89K0759	20.22

(83704)

DUAL BRIDGE MOTOR DRIVER IC'S

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Supply Voltage Range (V)	Output Voltage (V)	Output Current (A)	Package	Stock No.	Price Each 1-9
DRV8834PWP	2.5 to 11	500 mV	1.5	24-HTSSOP	92T2050	3.34
DRV8835DSSR	2 to 7	11	1.5	12-WSON	94T6065	1.91
DRV8836DSSR	2 to 7	...	1.5	12-WSON	94T6066	1.91

(210140)

MOTOR CONTROLLERS

RoHS Compliant Available

TEXAS INSTRUMENTS

TWO CHANNEL MOTOR CONTROL BRIDGES

Mfg. Part No.	Input Volt. Max. (V)	Output Current (A)	Features	Package	Stock No.	Price Each 1-9
DRV8818PWP	35	1.75	1.9A Bipolar Stepper Motor Driver with On-Chip 1/8 Microstepping Indexer (Step/Dir Ctrl)	28-HTSSOP	92T2047	6.44
LMD18200T/NOPB	55	3	Low-Loss Internal Current Sense Circuitry, Shorted Load Protection	11-TO-220	41K2745	15.17
LMD18201T/NOPB	55	3	Thermal Warning Flag at 145°C	11-TO-220	41K2746	14.42
LMD18245T/NOPB	55	3	Low-Loss Internal Current Sense Circuitry, 4-Bit Digital Motor Current Control	15-TO-220	41K2747	17.13
DRV8805PWP	60	2	Unipolar Stepper Motor Driver w/On-Chip Indexer	16-HTSSOP	87T0343	4.30

CONTINUED

MOTOR CONTROLLERS (CONT.)

SPECIAL FUNCTION MOTOR CONTROL ICs

Mfg. Part No.	Freq. Max. (MHz)	Features	Output Data	Package	Stock No.	Price Each 1-9
● LM628N-6/NOPB	6	Digital PID Filter, 32-Bit Velocity, Position, Accl. Registers	8-Bit or 12-Bit DAC	28-DIP	41K6232	37.47
● LM628N-8/NOPB	8	Digital PID Filter, 32-Bit Velocity, Position, Accl. Registers	8-Bit or 12-Bit DAC	28-MDIP	41K6233	50.72
● LM629M-6/NOPB	6	Digital PID Filter, 32-Bit Velocity, Position, Accl. Registers	8-Bit Sign Magn. PWM to Drive H-Bridge	24-SOIC	41K6234	34.02
● LM629N-8/NOPB	8	Digital PID Filter, 32-Bit Velocity, Position, Accl. Registers	8-Bit Sign Magn. PWM to Drive H-Bridge	28-MDIP	41K6238	50.72

(114913)

MOTOR CONTROL

RoHS Compliant Available

VISHAY.

Mfg. Part No.	Supply Voltage (V)	Output Drive Capacity	Features	Package	Stock No.	Price Each 1-9
● SI9979CS-E3	20-40	Drives 6 N-Ch. MOSFETs	PWM 60 and 120 Hall Sensor Commutation, DC Operation	48-SQFP	51K7028	7.97
● SI9979DS-E3	20-40	Drives 6 N-Ch. MOSFETs	PWM 60 and 120 Hall Sensor Commutation, DC Operation	SQFP, 48	22M8985	7.70
● SI9986DY-T1-E3	3.8-13.2	1.0A	PWM, Saturated	8-SOIC	06J8287	3.10
● SI9988DQ-T1-E3	3.8-13.2	0.6A	PWM, Saturated	TSSOP, 8	22M8989	3.49

C in Mfg. Part No. denotes commercial temperature range (0°C to +70°C); **D** in Mfg. Part No. denotes industrial temperature range (-40°C to +85°C). Tape and reel packaging available; *go online or call.*
(74764)

DRIVERS

RoHS Compliant Available

International IOR Rectifier

SINGLE DRIVERS—HIGH SIDE - 600V OFFSET

Mfg. Part No.	Output Current (mA) Source	Output Current (mA) Sink	V_{CC} Max.	Output Voltage (V) Min.	Output Voltage (V) Max.	Package	Stock No.	Price Each 1-9
● IR21271SPBF	200	420	20	9	20	8-SOIC	63J7873	3.50
● IR2127PBF	200	420	20	10	20	8-DIP	19K8425	3.68
● IR2127SPBF	200	420	20	10	20	8-SOIC	63J7871	2.81
● IR2117PBF	200	420	20	10	20	8-DIP	19K8419	3.32
● IR2117SPBF	200	420	20	10	20	8-SOIC	63J7868	2.99
● IR2118PBF	200	420	20	10	20	8-DIP	19K8420	3.08
● IR2118SPBF	200	420	20	10	20	8-SOIC	19K8421	3.34
● IRS2117PBF	200	420	20	10	20	8-PDIP	21M6598	4.74
● IRS21844PBF	1400	1800	20	10	20	14-DIP	11M1885	3.56
● IRS21851SPBF	4000	4000	20	10	20	8-SOIC	21M6606	1.98
● IR2175PBF	...	10	20	0	0	8-DIP	19K8443	7.28
● IR2175SPBF	...	10	20	0	0	8-SOIC	33K5207	7.42
SINGLE DRIVERS—LOW SIDE - 5V OFFSET								
● IR2121PBF	1000	2000	18	12	18	8-DIP	63J7870	7.26
SINGLE DRIVERS—LOW SIDE								
● IR4426PBF	1500	1500	20	6	20	8-DIP	19K8460	2.72
● IR4426SPBF	1500	1500	20	6	20	8-SOIC	19K8461	3.04
● IR4427PBF	1500	1500	20	6	20	8-DIP	19K8462	1.92
● IR4427SPBF	1500	1500	20	6	20	8-SOIC	19K8463	2.32
● IR4428PBF	1500	1500	20	6	20	8-DIP	19K8464	3.08
SINGLE DRIVER—FULL BRIDGE - 600V OFFSET								
● IRS24531DSPBF	190	440	16.6	10	20	14-SOIC	51P1617	2.80
3-PHASE DRIVERS—3 HIGH AND 3 LOW								
● IR2131SPBF	200	420	20	10	20	28-SOIC	19K8427	15.20
3-PHASE DRIVERS—3 PHASE INVERTER DRIVE								
● IR2130JPBF	200	420	20	10	20	44-PLCC	63J7875	14.80
● IR2130SPBF	200	420	20	10	20	28-SOIC	58K5837	14.20
● IR2132SPBF	200	420	20	10	20	28-SOIC	63J7876	14.25
● IR2133JPBF	200	420	20	10	20	44-PLCC	19K8429	12.80

CONTINUED

DRIVERS (CONT.)

3-PHASE DRIVERS—3 PHASE INVERTER DRIVE

Mfg. Part No.	Output Current (mA) Source	Output Current (mA) Sink	V_{CC} Max.	Output Voltage (V) Min.	Output Voltage (V) Max.	Package	Stock No.	Price Each 1-9
● IR2136PBF	120	250	20	10	20	28-DIP	33K5193	7.63
● IR2136SPBF	120	250	20	10	20	28-SOIC	63J7880	8.06
3-PHASE DRIVERS—3 PHASE INVERTER DRIVE								
● IR2233JPBF	200	420	20	10	20	44-PLCC	19K8454	19.85

DUAL DRIVERS—HALF BRIDGE - 200V OFFSET

Mfg. Part No.	Output Current (mA) Source	Output Current (mA) Sink	V_{CC} Max.	Output Voltage (V) Min.	Output Voltage (V) Max	Package	Stock No.	Price Each 1-9
● IRS2003PBF	130	270	20	10	20	8-PDIP	21M6590	2.27
● IRS2003SPBF	130	270	20	10	20	8-SOIC	21M6591	1.53
● IRS2004PBF	130	270	20	10	20	8-PDIP	21M6594	1.79
● IRS2004SPBF	130	270	20	10	20	8-SOIC	21M6595	1.54
DUAL DRIVERS—HALF BRIDGE - 600V OFFSET								
● IRS2304SPBF	60	130	20	10	20	8-SOIC	21M6618	1.43
● IR2302SPBF	120	250	20	10	20	8-SOIC	63J7912	3.50
● IR2308SPBF	120	250	20	10	20	8-SOIC	63J7914	3.69
● IR21094SPBF	120	250	20	10	20	14-SOIC	63J7857	3.73
● IR2104PBF	130	210	20	10	20	8-DIP	63J7843	2.84
● IR2104SPBF	130	210	20	10	20	8-SOIC	63J7844	1.78
● IR2111PBF	200	420	20	10	20	8-DIP	19K8415	3.55
● IR2111SPBF	200	420	20	10	20	8-SOIC	63J7862	3.73
● IR21531SPBF	200	400	16.8	10	20	8-SOIC	19K8436	2.58
● IR2153SPBF	250	400	20	10	20	8-SOIC	63J7895	1.78
DUAL DRIVERS—LOW AND HIGH SIDE - 200V OFFSET								
● IRS2001SPBF	130	270	20	10	20	8-SOIC	21M6577	1.56
● IR2010PBF	3000	3000	20	10	20	14-DIP	19K8402	5.33
● IR2010SPBF	3000	3000	20	10	20	16-SOIC	19K8403	4.19
DUAL DRIVERS—LOW AND HIGH SIDE - 500V OFFSET								
● IR2110PBF	2000	2000	20	10	20	14-DIP	63J7859	4.93
● IR2110SPBF	2000	2000	20	10	20	16-SOIC	63J7860	3.74
DUAL DRIVERS—LOW AND HIGH SIDE - 600V OFFSET								
● IR2101PBF	100	210	20	10	20	8-DIP	63J7837	2.84
● IR2101SPBF	100	210	20	10	20	8-SOIC	63J7838	1.67
● IR2102SPBF	100	210	20	10	20	8-SOIC	19K8406	3.57
● IR2106PBF	120	250	20	10	20	8-DIP	63J7848	2.64
● IR2108PBF	120	250	20	10	20	8-DIP	19K8409	3.87
● IR2108SPBF	120	250	20	10	20	8-SOIC	63J7853	3.87
● IR21084SPBF	120	250	20	10	20	14-SOIC	19K8411	4.03
● IR2112PBF	200	420	20	10	20	14-DIP	19K8417	3.92
● IR2112SPBF	200	420	20	10	20	16-SOIC	63J7864	3.13
● IR2181PBF	1700	1700	20	10	20	8-DIP	19K8444	3.96
● IR2181SPBF	1700	1700	20	10	20	8-SOIC	19K8445	3.70
● IR2183PBF	1700	1700	20	10	20	8-DIP	19K8447	4.36
● IR2183SPBF	1700	1700	20	10	20	8-SOIC	19K8448	4.44
● IR2184PBF	1700	1700	20	10	20	8-DIP	19K8450	4.16
● IR2184SPBF	1700	1700	20	10	20	8-SOIC	63J7906	3.39
● IR21844PBF	1700	1700	20	10	20	14-DIP	19K8451	4.20
● IR21844SPBF	1700	1700	20	10	20	14-SOIC	63J7908	4.43
● IR2113PBF	2000	2000	20	10	20	14-DIP	19K8418	5.29
● IR2113SPBF	2000	2000	20	10	20	16-SOIC	63J7866	5.36
● IRS2186PBF	4000	4000	20	10	20	8-PDIP	21M6609	4.95
● IRS2186SPBF	4000	4000	20	10	20	8-SOIC	21M6610	3.78
● IRS21864PBF	4000	4000	20	10	20	14-PDIP	21M6613	3.91
● IRS21864SPBF	4000	4000	20	10	20	14-SOIC	21M6614	3.36
DUAL DRIVERS—LOW AND HIGH SIDE - 1200V OFFSET								
● IR2213PBF	1700	2000	20	10	20	14-DIP	19K8452	9.64
● IR2213SPBF	1700	2000	20	10	20	16-SOIC	19K8453	9.44

BALLAST CONTROL - 600V OFFSET

Mfg. Part No.	Output Current (mA) Source	Output Current (mA) Sink	Supply Voltage (V)	Package	Stock No.	Price Each 1-9	Price Each 10-99
● IRS2158DPBF	180	260	10 to 20	16-PDIP	51P1621	3.29	2.17

(74679)

GENERAL PURPOSE HIGH VOLTAGE GATE DRIVER ICS

RoHS Compliant Available

International IOR Rectifier

Mfg. Part No.	Output Current (mA) Source	Output Current (mA) Sink	VCC Max. (V)	Output Voltage (V) Min.	Output Voltage (V) Max	Package	Stock No.	Price Each 1-9
IR2010PBF	3000	3000	20	10	20	14-DIP	19K8402	5.33
IR2010SPBF	3000	3000	20	10	20	16-SOIC	19K8403	4.19
IR2011PBF	1000	1000	20	10	20	8-DIP	41K2518	4.08
IR2011SPBF	1000	1000	20	10	20	8-SOIC	37J1454	3.80
IR2101PBF	100	210	20	10	20	8-DIP	63J7837	2.84
IR2101SPBF	100	210	20	10	20	8-SOIC	63J7838	1.67
IR2102SPBF	100	210	20	10	20	8-SOIC	19K8406	3.57
IR2103SPBF	130	270	20	10	20	8-SOIC	63J7841	3.01
IR2104PBF	130	210	20	10	20	8-DIP	63J7843	2.84
IR2104SPBF	130	210	20	10	20	8-SOIC	63J7844	1.78
IR2130SPBF	200	420	20	10	20	28-SOIC	58K5837	14.20
IR2131SPBF	200	420	20	10	20	28-SOIC	19K8427	15.20
IR2132SPBF	200	420	20	10	20	28-SOIC	63J7876	14.25
IR2133JPBF	200	420	20	10	20	44-PLCC	19K8429	12.80
IR2136PBF	120	250	20	10	20	28-DIP	33K5193	7.63
IR2136SPBF	120	250	20	10	20	28-SOIC	63J7880	8.06
IR2181PBF	1700	1700	20	10	20	8-DIP	19K8444	3.96
IR2181SPBF	1700	1700	20	10	20	8-SOIC	19K8445	3.70
IR2183PBF	1700	1700	20	10	20	8-DIP	19K8447	4.36
IR2183SPBF	1700	1700	20	10	20	8-SOIC	19K8448	4.44
IR21844PBF	1700	1700	20	10	20	14-DIP	19K8451	4.20
IR21844SPBF	1700	1700	20	10	20	14-SOIC	63J7908	4.43
IR2184PBF	1700	1700	20	10	20	8-DIP	19K8450	4.16
IR2184SPBF	1700	1700	20	10	20	8-SOIC	63J7906	3.39
IR2213PBF	1700	2000	20	10	20	14-DIP	19K8452	9.64
IR2213SPBF	1700	2000	20	10	20	16-SOIC	19K8453	9.44
IR2233JPBF	200	420	20	10	20	44-PLCC	19K8454	19.85
IR2301PBF	120	250	20	10	20	8-DIP	19K8456	3.63
IR2301SPBF	120	250	20	10	20	8-SOIC	63J7910	3.50
IR2302SPBF	120	250	20	10	20	8-SOIC	63J7912	3.50
IR2304PBF	120	250	20	10	20	8-DIP	19K8457	3.18
IR2308SPBF	120	250	20	10	20	8-SOIC	63J7914	3.69
IR4426PBF	1500	1500	20	6	20	8-DIP	19K8460	2.72
IR4426SPBF	1500	1500	20	6	20	8-SOIC	19K8461	3.04
IR4427PBF	1500	1500	20	6	20	8-DIP	19K8462	1.92
IR4427SPBF	1500	1500	20	6	20	8-SOIC	19K8463	2.32
IR4428PBF	1500	1500	20	6	20	8-DIP	19K8464	3.08
IRS2001SPBF	130	270	20	10	20	8-SOIC	21M6577	1.56
IRS2003PBF	130	270	20	10	20	8-PDIP	21M6590	2.27
IRS2003SPBF	130	270	20	10	20	8-SOIC	21M6591	1.53
IRS2004PBF	130	270	20	10	20	8-PDIP	21M6594	1.79
IRS2004SPBF	130	270	20	10	20	8-SOIC	21M6595	1.54
IRS2011SPBF	1000	1000	20	10	20	8-SOIC	58K5829	2.52
IRS21844PBF	1400	1800	20	10	20	14-DIP	11M1885	3.56
IRS21864PBF	4000	4000	20	10	20	14-PDIP	21M6613	3.91
IRS21864SPBF	4000	4000	20	10	20	14-SOIC	21M6614	3.36
IRS2186PBF	4000	4000	20	10	20	8-PDIP	21M6609	4.95
IRS2186SPBF	4000	4000	20	10	20	8-SOIC	21M6610	3.78
IRS2186STRPBF	4000	4000	20	10	20	8-SOIC	21M6611	3.03
IRS2304SPBF	60	130	20	10	20	8-SOIC	21M6618	1.43
IRS2308PBF	97	250	20	10	20	8-DIP	11M1886	3.67
IRS2336DJPBF	...	350	20	10	20	44-PLCC	78M1424	10.51
IRS2336DSPBF	...	350	20	10	20	28-WSOIC	78M1426	7.58
IRS2336SPBF	...	350	20	10	20	28-WSOIC	02P2151	7.35

(177880)

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(212569)

IR2011(S) & (PbF) SERIES HIGH AND LOW SIDE DRIVERS

RoHS Compliant Available

International IOR Rectifier

Features
- Floating channel designed for bootstrap operation
- Tolerant to negative transient voltage, dV/dt immune
- Independent low and high side channels
- Undervoltage lockout for both channels
- 3.3V and 5V input logic compatible
- CMOS Schmitt-triggered inputs with pull-down
- Matched propagation delay for both channels

Applications
- Audio Class D amplifiers
- High power DC-DC SMPS converters
- Other high frequency applications

Specifications
- V_{OFFSET}: 200V max.
- I_O: ±1.0A /1.0A typ.
- V_{OUT}: 10 - 20V
- t_{on}/t_{off}: 80 & 60ns typ.
- Delay Matching: 20ns max.

Mfg. Part No.	Package	Tape Cut Stock No.	Price Each 1-9
IR2011PBF	8-DIP	41K2518	4.08

(82436)

MOSFET DRIVERS

RoHS Compliant Available

International IOR Rectifier

Mfg. Part No.	Offset Voltage (V)	Supply Voltage Max. (V)	Source Output Current Max. (mA)	Sink Output Current (mA)	Package	Tape Cut Stock No.	Price Each 1-9
IR2106PBF	600	20	120	250	8-DIP	63J7848	2.64
IR2108SPBF	600	20	120	250	8-SOIC	63J7853	3.87
IR21094SPBF	600	20	120	250	14-SOIC	63J7857	3.73
IR2110PBF	500	20	2000	2000	14-DIP	63J7859	4.93
IR2110SPBF	500	20	2000	2000	16-SOIC	63J7860	3.74
IR2111SPBF	600	20	200	420	8-SOIC	63J7862	3.73
IR2112SPBF	600	20	200	420	16-SOIC	63J7864	3.13
IR2113SPBF	600	20	2000	2000	16-SOIC	63J7866	5.36
IR2117SPBF	600	20	200	420	8-SOIC	63J7868	2.99
IR2121PBF	5	18	1000	2000	8-DIP	63J7870	7.26
IRS4427PBF	25	20	...	...	8-DIP	54T9278	2.70
IRS25091SPBF	600	20	250	300	8-SOIC	54T9274	2.21
IRS2509SPBF	600	20	250	300	8-SOIC	54T9272	1.93
IRS2334STRPBF	600	20	250	300	20-SOIC	54T9271	7.05
IRS2334MTRPBF	600	20	250	300	28-MLPQ	54T9269	6.95
IRS21867STRPBF	600	20	4000	4000	8-SOIC	54T9267	2.20
IR2183STRPBF	600	20	1400	1800	8-SOIC	61T4479	4.13
IR2181STRPBF	600	20	1400	1800	8-SOIC	61T4478	3.70
IR2130STRPBF	600	20	4	2.1	28-SOIC	61T4477	14.06
IR2112STRPBF	600	20	...	...	16-SOIC	61T4476	2.64
IR2127SPBF	600	20	200	420	8-SOIC	63J7871	2.81
IR21271SPBF	600	20	200	420	8-SOIC	63J7873	3.50
IR2130JPBF	600	20	200	420	44-PLCC	63J7875	14.80
IR2108PBF	600	20	120	250	8-DIP	19K8409	3.87
IR21084SPBF	600	20	120	250	14-SOIC	19K8411	4.03
IR2111PBF	600	20	200	420	8-DIP	19K8415	3.55
IR2112PBF	600	20	200	420	14-DIP	19K8417	3.92
IR2113PBF	600	20	2000	2000	14-DIP	19K8418	5.29
IR2117PBF	600	20	200	420	8-DIP	19K8419	3.32
IR2118PBF	600	20	200	420	8-DIP	19K8420	3.08
IR2118SPBF	600	20	200	420	8-SOIC	19K8421	3.34
IR2125PBF	500	18	1000	2000	8-DIP	19K8423	7.26
IR2127PBF	600	20	200	420	8-DIP	19K8425	3.68

(89400)

DRIVERS

RoHS Compliant Available

intersil

FULL-BRIDGE DRIVERS

Mfg. Part No.	Peak Output Current (A)	Supply Current Max. (No Load) (mA)	Supply Voltage Bias (V)	Supply Voltage Bus (V)	Package	Stock No.	Price Each 1-24
HIP4082IBZ	1.25	6.6	8.5 to 15	1 to 80	16-SOIC	61J5960	4.51
HIP4082IPZ	1.25	6.6	8.5 to 15	1 to 80	16-DIP	61J5962	4.71
HIP4080AIBZ	2.5	18.5	9.5 to 16	1 to 80	20-SOIC	97H9763	5.98
HIP4080AIPZ	2.5	18.5	9.5 to 16	1 to 80	20-DIP	61J5959	5.83
HIP4081AIBZ	2.5	16.5	9.5 to 16	1 to 80	20-SOIC	57K3816	6.05
HIP4081AIPZ	2.5	16.5	9.5 to 16	1 to 80	20-DIP	57K3817	6.13
HIP4086ABZ	0.5	10	7 to 15	1 to 80	24-SOIC	20J4468	7.00
HALF-BRIDGE DRIVERS							
HIP2100IBZ	2.0	100	1MHz	9 to 14	8-SOIC	83H6613	3.98
HIP2101IBZ	2.0	100	1MHz	9 to 14	8-SOIC	97H9762	3.98

CONTINUED

DRIVERS (CONT.)

THREE-PHASE DRIVERS

Mfg. Part No.	Peak Output Current (A)	Supply Current Max. (No Load) (mA)	Supply Voltage Bias (V)	Supply Voltage Bus (V)	Package	Stock No.	Price Each 1-24
● HIP4086APZ	0.5	10	7 to 15	1 to 80	24-DIP	61J5967	7.13

LED DRIVERS

Mfg. Part No.	Number of Digits	Cycle Time	Interface	Package	Stock No.	Price Each 1-24	Price Each 25+
● ICM7228AIBIZ	8	500 ns	BIT PAR, DIGIT SER.	28-SOIC	61J6223	9.74	4.87
● ICM7228BIPIZ	8	500 ns	BIT PAR, DIGIT SER.	28-DIP	79K6930	3.36	2.69

(74861)

PIN DRIVERS

RoHS Compliant Available

intersil

Mfg. Part No.	V_{in} (max.) (V)	R_{dson} (Ohms)	t_R/t_F (ns)	I_{pk} (A)	Package	Stock No.	Price Each 1-24
● EL7154CSZ	15	1.5	20/20	4	8-SOIC	57K3542	6.91
● EL7155CSZ	5	2	14.5/15	3.5	8-SOIC	57K3545	7.18
● EL7156CNZ	5	2	14.5/15	3.5	8-DIP	79K6444	6.88
● EL7156CSZ	5	2	14.5/15	3.5	8-SOIC	61J5662	7.18
● EL7158ISZ	18	0.5	8/8	12	8-SOIC	61J5665	8.31

(80156)

MOSFET DRIVER ICs

RoHS Compliant Available

LINEAR TECHNOLOGY

Linear Technology's growing portfolio MOSFET drivers provides a simple and effective solution to drive single, dual, triple or quad N-Channel or P-Channel FETs. Key features include wide input range of operation, extended temperature range of operation, powerful gate drive and short circuit protection.

MOSFET DRIVERS

Mfg. Part No.	Type	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-24
● LT1910ES8#PBF	Single, High Side	48	8-SO	57M7136	4.14
● LT1910IS8#PBF	Single, High Side	48	8-SO	24R3347	4.53
● LTC1154CS8#PBF	Single, High Side	18	8-SOIC	55M9434	3.80
● LTC1477CS8#PBF	Single, High Side	5.5	SOIC	56M1537	6.23
● LTC4440EMS8E#PBF	Single, High Side	60	8-MSOP	56M9553	3.53
● LTC4444EMS8E#PBF	Single, High Side	13.5	8-MSOP	75M4547	3.40
● LTC4444MPMS8E#PBF	Single, High Side	13.5	8-MSOP	78R8370	6.16
● LTC1155CN8#PBF	Dual, High Side	18	PDIP	55M9440	5.82
● LTC1155CS8#PBF	Dual, High Side	18	8-SO	55M9442	6.21
● LTC1693-2IS8#PBF	Dual P-Channel MOSFET Driver	13.2	8-SOIC	56M3243	4.10
● LTC1693-1CS8#PBF	Dual, High Side	13.2	8-SOIC	56M3231	3.59
● LTC1693-1IS8#PBF	Dual, High Side	13.2	SOIC	56M3235	4.10
● LT1161CSW#PBF	Quad, High Side	48	20-SO	57M2265	6.99
● LT1161ISW#PBF	Quad, High Side	48	20-SO	57M2271	7.86
● LT1158CSW#PBF	Single, Bridge driver	30	16-SOIC	57M2241	7.05
● LT1158ISW#PBF	Single, Bridge driver	30	16-SOL	57M2247	8.26
● LTC1163CS8#PBF	Triple High Side Driver	6	8-SOIC	55M9501	3.50
● LT1166CS8#PBF	High Side, Low Side	...	8-SOIC	57M2287	3.25

(102095)

MOSFET DRIVERS

RoHS Compliant Available

MICROCHIP

- Operating Temperature: (C)0°C to +70°C, (E)-40°C to +85°C, (M)-55°C to +125°C.

Suitable MOSFETs available, go online or call.

SINGLE - INVERTING INPUT

Mfg. Part No.	I_0 Peak (A)	Output Resist. (Rh/Rl) (Max. Ω @ 25°C)	Max. Supply Volt. (V)	Rise Time (ns)	Fall Time (ns)	Pkg.	Stock No.	Price Each 1-25
● TC429CPA	6	2.5/2.5	18	70	70	8-DIP	54K2856	1.56
● TC4421CAT	9	1.4 (typ)/ 1.7	18	120	120	5-TO-220	54K2857	3.48
● TC4421CPA	9	1.4 (typ)/ 1.7	18	120	120	8-DIP	54K2858	2.77
● TC4421EPA	9	1.4 (typ)/ 1.7	18	120	120	8-DIP	92C6068	2.90
● TC4429CPA	6	2.8/2.5	18	60	60	8-DIP	59K0275	1.43
● TC4429CAT	6	2.8/2.5	18	60	60	5-TO-220	92C6126	2.77
● MCP1415T-E/OT	1.5	7.5/5.5	18	20	20	5-SOT-23	02P6619	0.62
● TC1410EOA	0.5	22/16	16	40	40	8-SOIC	92C5892	1.14
● TC1411EOA	1	11/8	16	40	40	8-SOIC	92C5904	1.16
● TC1412EOA	2	6/4	16	31	31	8-SOIC	92C5916	1.40

➤CONTINUED➤

MOSFET DRIVERS (CONT.)

Mfg. Part No.	I_0 Peak (A)	Output Resist. (Rh/Rl) (Max. Ω @ 25°C)	Max. Supply Volt. (V)	Rise Time (ns)	Fall Time (ns)	Pkg.	Stock No.	Price Each 1-25
● TC4626EOE	1.5	15/10	15	55	50	16-SOIC	92C6166	4.59
● TC1413EOA	3	4/2.7	16	33	33	8-SOIC	92C5928	1.48
SINGLE - NON-INVERTING INPUT								
● TC1410NEOA	0.5	22/16	16	40	25	8-SOIC	92C5898	1.14
● MCP1416T-E/OT	1.5	7.5/5.5	18	20	20	5-SOT-23	02P6620	0.62
● TC1411NEOA	1	25/15	16	40	40	8-SOIC	92C5910	1.16
● MCP14700-E/SN	2	2.5/2.5	5.5	10	10	8-SOIC	52R9882	1.63
● MCP14700-E/MF	2	2.5/2.5	5.5	10	10	8-DFN	52R9881	1.86
● TC1412NEOA	2	6/4	16	31	31	8-SOIC	92C5922	1.40
● TC1413NEOA	3	4/2.7	16	33	33	8-SOIC	92C5934	1.48
● TC4420COA	6	2.8/2.5	18	60	60	8-SOIC	33C1142	1.40
● TC4420CPA	6	2.8/2.5	18	60	60	8-DIP	61K3536	1.43
● TC4420EOA	6	2.8/2.5	18	60	60	8-SOIC	61K3537	1.43
● TC4420EPA	6	2.8/2.5	18	60	60	8-DIP	96K4015	1.45
● TC4421AVOA	10	1.5/1.1	18	45	40	8-SOIC	22K2729	1.83
● TC4422AVOA	10	1.5/1.1	18	45	40	8-SOIC	22K2735	1.83
● TC4422AVPA	10	1.5/1.1	18	45	40	8-DIP	22K2737	1.88
● TC4422CAT	9	1.4 (typ)/ 1.7	18	120	120	5-TO-220	69K7651	3.48
● TC4422EPA	9	1.4 (typ)/ 1.7	18	120	120	8-DIP	72K7326	2.90
● TC4431VPA	1.5	10/10	30	40	50	PDIP	98M4408	2.85
● TC4432VPA	1.5	10/10	30	40	50	PDIP	98M4411	2.85
● TC4451VOA	12	1.5/1.5	18	60	60	8-SOIC	56K7432	2.08
● TC4451VPA	12	1.5/1.5	18	60	60	8-DIP	56K7434	2.13
● TC4452VOA	12	1.5/1.5	18	60	60	8-SOIC	56K7438	2.08
● TC4452VPA	12	1.5/1.5	18	60	60	8-DIP	56K7440	2.13
● TC4627EOE	1.5	15/10	15	55	50	16-SOIC	92C6173	4.59
DUAL - INVERTING INPUT								
● TC1427VPA	1.2	18/12	16	12	12	8-DIP	40M1967	1.32
● TC426COA	1.5	15/10	18	60	60	8-SOIC	31C2449	1.11
● TC4431EOA	1.5	7/10	36	40	50	8-SOIC	92C6138	2.69
● TC426CPA	1.5	15/10	18	60	60	8-DIP	65K1076	1.14
● TC426EPA	1.5	15/10	18	60	60	8-DIP	31C1703	1.14
● TC4426AEOA	1.5	7/12	18	40	40	8-SOIC	92C6094	1.03
● TC1426CPA	1.2	18/18	16	60	40	8-DIP	33C1133	1.03
● TC4423CPA	3	5/5	18	60	60	8-DIP	33C1145	2.27
● TC4423AVOA	4.5	3/3.5	18	21	21	8-SOIC	56K7416	1.65
● TC4426ACOA	1.5	9/9	18	40	40	8-SOIC	96K4017	0.84
● TC4426ACPA	1.5	9/9	18	40	40	8-DIP	92C6093	1.14
● TC4426COA	1.5	9/9	18	40	40	8-SOIC	69K7652	1.08
● TC4426CPA	1.5	10/10	18	40	40	8-DIP	96K4018	1.14
● TC4426EOA	1.5	10/10	18	40	40	8-SOIC	92C6099	1.11
● TC4426EPA	1.5	10/10	18	40	40	8-DIP	92C6101	1.14
DUAL - NON-INVERTING INPUT								
● TC427CPA	1.5	15/10	18	60	60	8-DIP	33C1139	1.14
● TC1427COA	1.2	18/18	16	60	40	8-SOIC	33C1134	1.03
● TC1427CPA	1.2	18/18	16	60	40	8-DIP	54K2855	1.03
● TC4404EOA	1.5	10/7	18	30	30	8-SOIC	92C6052	2.69
● TC4405EOA	1.5	10/7	18	30	30	8-SOIC	92C6059	2.69
● TC4424CPA	3	5/5	18	60	60	8-DIP	96K4016	2.27
● TC4424EPA	3	5/5	18	60	60	8-DIP	92C6082	2.43
● TC4424AVOE	3	3/3.5	18	12	12	16-SOIC	63R7902	2.77
● TC4427ACOA	1.5	9/9	18	40	40	8-SOIC	92C6103	0.84
● TC4427AEOA	1.5	9/9	18	40	40	8-SOIC	96K4020	1.03
● TC4427COA	1.5	10/10	18	40	40	8-SOIC	61K3538	1.08
● TC4427CPA	1.5	10/10	18	40	40	8-DIP	33C1150	1.11
● TC4427EOA	1.5	10/10	18	40	40	8-SOIC	92C6111	1.11
● TC4427EPA	1.5	10/10	18	40	40	8-DIP	96K4021	1.14
● TC4427MJA	1.5	10/10	18	40	40	8-CDIP	96K4022	10.88
DUAL - COMPLEMENTARY								
● TC428CPA	1.5	15/10	18	60	60	8-DIP	96K4014	1.14
● TC1428COA	1.2	18/18	16	60	40	8-SOIC	96K4012	1.03
● TC1428CPA	1.2	18/18	16	60	40	8-DIP	61K3535	1.03
● TC4428COA	1.5	10/10	18	40	40	8-SOIC	69K7653	1.08
● TC4428CPA	1.5	10/10	18	40	40	8-PDIP	73K1380	1.11
● TC4428EOA	1.5	10/10	18	40	40	8-SOIC	75K1578	1.11
● TC4428AEOA	1.5	10/10	18	40	40	8-SOIC	92C6118	1.03
● TC4425AVOA	4.5	3/3.5	18	21	21	8-SOIC	56K7426	1.65
QUAD - AND INPUT								
● TC4468COE	6	15/15	18	50	50	16-WSOIC	92C6153	2.61
● TC4468CPD	6	15/15	18	50	50	14-DIP	54K2859	2.56

➤CONTINUED➤

MOSFET DRIVERS (CONT.)

QUAD - AND/INVERTING INPUT

Mfg. Part No.	I_O Peak (A)	Output Resist. (Rh/Rl) (Max. Ω @ 25°C)	Max. Supply Volt. (V)	Rise Time (ns)	Fall Time (ns)	Pkg.	Stock No.	Price Each 1-25
TC4469COE	6	15/15	18	50	50	16-WSOIC	92C6158	2.61
TC4469CPD	6	15/15	18	50	50	14-DIP	92C6160	2.56
QUAD - INVERTING INPUT								
TC4467EOE	1.2	10/15	18	50	50	16-SOIC	56J8343	4.65
TC4469EOE	1.2	10/15	18	50	50	16-SOIC	56J8345	3.83
QUAD - NON-INVERTING INPUT								
TC4468EOE	1.2	10/15	18	25	25	16-SOIC	56J8344	3.83

(70542)

MOSFET AND IGBT MODULES

RoHS Compliant Available

ON Semiconductor

Features

- 4.0A peak drive current
- Rise and fall times under 15ns
- Propagation delay from inputs to outputs are under 20ns
- Adaptive nonoverlap time optimized for large power MOSFETs
- Floating top driver accommodates applications up to 25V
- Undervoltage lockout
- Thermal shutdown protection
- Less than 1.0mA quiescent current — enabled
- 25μA quiescent current — disabled
- Internal TG to DRN pulldown resistor

Mfg. Part No.	V_{CC} Max. (V)	No. of Drivers	t_{PROP} Max (ns)	Package	Stock No.	Price Each 1-9
MC33151DG	18	2	100	8-SOIC	71J5516	1.71
MC33151PG	18	2	100	8-DIP	45J1165	1.71
MC33152PG	18	2	120	8-DIP	45J1167	1.47
MC34151PG	18	2	100	8-DIP	71J5536	1.59
MC34152DG	18	2	120	8-SOIC	45J1221	1.42
MC34152PG	18	2	120	8-DIP	71J5537	1.52

(84333)

IGBT GATE DRIVERS

RoHS Compliant Available

POWEREX

Features:

- Single in-line Package
- 2500VRMS Isolation
- Optically Isolated Input Interface
- Wide Output Voltage Swing (+15/-10V)

Applications:

- Inverter
- AC Servo
- UPS
- Welding
- Power Supply

Opto-isolated hybrid integrated circuits designed to drive Powerex brand IGBT modules.

Mfg. Part No.	Short Circuit Protection	Soft Shut-down	Output Current	Usable Range	Optimum Range	Stock No.	Price Each 1-9
M57161L-01	Vge RTC Operation	Yes†	+/-5A	600 V & 1200V F Series		85C1379	39.87
M57959L	V_{CE} Desaturation	Yes	+/-2A	600V,400A 1.2kV,200A	600V,100A 1.2kV,50A	73K1973	18.96
M57962CL-01	V_{CE} Desaturation	Yes	+/-5A	600V,800A 1.2kV,400A		16C1469	17.85
M57962L	V_{CE} Desaturation	Yes	+/-5A	600V,600A 1.2kV,600A	600V,400A 1kV,200A	73K1974	23.07
VLA500-01	V_{CE} Desaturation	Yes†	+/-12A	600V,800A 1.2kV,1400A	600V,800A 1.2kV,1400A	18J0603	45.79
VLA502-01	V_{CE} Desaturation	Yes	+/-12A	600 V & 1200V NFH Series		43J1091	53.15
VLA503-01	V_{CE} Desaturation	Yes	+/-5A	600V,600A 1.2kV,600A	600V,400A 1kV,200A	23K7451	14.38
VLA504-01	V_{CE} Desaturation	Yes	+/-2A	600V,400A 1.2kV,200A	600V,100A 1.2kV,50A	23K7452	12.71

†Adjustable
(50787)

MOSFET DRIVERS

RoHS Compliant Available

TEXAS INSTRUMENTS

Operating temperature: -40° to +125°C. All are dual high speed. *Suitable MOSFETs are available, go online or call.*

Mfg. Part No.	Description	Output Current (A)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-9
SN75374D	MOSFET Driver	0.5	28	16-SOIC	76C5386	3.08
UC3705T	MOSFET Driver	1.5	40	8-SOIC	77C3180	7.44
UC3706N	MOSFET Driver	1.5	40	16-PDIP	77C3183	6.78
UC3709N	MOSFET Driver	1.5	40	8-DIP	77C3196	7.37
TPS2812P	MOSFET Driver	2	14	8-DIP	77C0202	2.49
TPS2814P	MOSFET Driver	2	14	8-DIP	35K1314	2.28

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MOSFET DRIVERS (CONT.)

Mfg. Part No.	Description	Output Current (A)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-9
TPS2818DBVR	MOSFET Driver	2	14	5-SOT-23	77C0214	0.84
TPS2819DBVR	MOSFET Driver	2	14	5-SOT-23	77C0215	1.98
TPS2828DBVR	MOSFET Driver	2	14	5-SOT-23	77C0216	1.79
TPS2829DBVR	MOSFET Driver	2	14	5-SOT-23	77C0218	1.79
UC3708DW	Non-Inverting MOSFET Driver	3	35	16-SOIC	77C3190	8.25
UCC24610D	GREEN Rectifier Controller	3	5.5	8-SOIC	99R2201	2.45
UCC24610DRBT	GREEN Rectifier Controller	3	5.5	8-QFN	99R2202	2.45
UCC27200D	MOSFET Driver	3	17	8-SOIC	27M1154	4.26
UCC27201D	MOSFET Driver	3	17	8-SOIC	27M1160	4.26
UCC27201DDA	MOSFET Driver	3	17	8-SOIC	27M1161	4.26
UC3710T	High Current FET Driver	4	18	5-TO-220	36K2077	7.25
UCC27324D	MOSFET Driver	4	15	8-SOIC	77C1967	2.40
UCC27324P	MOSFET Driver	4	15	8-DIP	77C1971	2.30
UCC27325DGN	MOSFET Driver	4	15	8-MSOP	77C1973	2.40
UCC27423D	MOSFET Driver	4	15	8-SOIC	87H4666	2.40
UCC27423P	MOSFET Driver	4	15	8-DIP	87H4670	2.30
UCC27424D	MOSFET Driver	4	15	8-SOIC	87H4671	2.40
UCC27424DGN	MOSFET Driver	4	15	8-HTSSOP	87H4672	2.40
UCC27424P	MOSFET Driver	4	15	8-DIP	87H4675	2.30
UCC27517DBVT	MOSFET Low-Side Gate Driver	4	18	5-SOT-23	93T6803	1.68
UCC37323D	MOSFET Driver	4	15	8-SOIC	77C2312	2.40
UCC37324D	MOSFET Driver	4	15	8-SOIC	77C2317	2.40
UCC37324DGN	MOSFET Driver	4	15	8-MSOP	77C2318	2.40
UCC37324P	MOSFET Driver	4	15	8-DIP	77C2321	2.30
UC3710N	FET Driver	6	18	8-DIP	97B4120	8.29
TPS28225D	MOSFET Driver	6	8	8-SOIC	99K4396	2.23
LM5114BMF/NOPB	MOSFET Low-Side Gate Driver	7.6	12.6	6-SOT-23	89T3445	1.63
UCC27511DBVT	MOSFET Low-Side Gate Driver	8	18	6-SOT-23	94T6072	1.68
UCC37321P	MOSFET Driver	9	15	8-DIP	02E7328	3.20
UCC37322D	MOSFET Driver	9	15	8-SOIC	02E7329	2.87
UCC37322P	MOSFET Driver	9	15	8-DIP	02E7333	3.20
UCC27321D	MOSFET Driver	9	15	8-SOIC	92C3476	3.10
UCC27321DGN	MOSFET Driver	9	15	8-MSOP	02E7294	3.34
UCC27322D	MOSFET Driver	9	15	8-SOIC	02E7298	3.10
UCC27322DGN	MOSFET Driver	9	15	8-MSOP	02E7299	3.34
UCC27322P	MOSFET Driver	9	15	8-DIP	02E7302	3.44

(70333)

FEATURED MOSFET DRIVERS

Mfg. Part No.	Input Voltage Max. (V)	Peak Current (A)	Prop. Delay (nS)	Package	Stock No.	Price Each 1-9
LM5100AM/NOPB	14	3	25	8-SOIC	41K6088	3.56
LM5101AM/NOPB	14	3	25	8-SOIC	41K6096	3.56
LM5100CMY/NOPB	100	1	25	8-SOIC	14R4591	2.61
LM5101ASD/NOPB	14	3	25	10-LLP	41K6098	2.96
LM5111-1M/NOPB	...	5	25	8-SOIC	41K6134	1.89
LM5112MY/NOPB	...	7	25	8-MiniSOIC	32M1256	1.38
LM5112SD/NOPB	...	7	25	6-LLP	41K6140	1.38

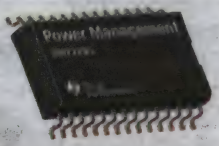
PHOTOVOLTAIC FULL BRIDGE DRIVER

RoHS Compliant Available

TEXAS INSTRUMENTS

Features:

- Renewable Energy Grade
- Independent High and Low driver logic inputs
- Bootstrap supply voltage range up to 115V DC
- Two current sense amplifiers with externally
- Programmable gain and buffered outputs
- Programmable over voltage protection
- Supply rail under-voltage lockouts with power good indicator



The **SM72295** is designed to drive 4 discrete N type MOSFET's in a full bridge configuration. Current sensing is provided by 2 transconductance amplifiers with externally programmable gain and filtering to remove ripple current to provide average current information to the control circuit. The current sense amplifiers have buffered outputs available to provide a low impedance interface to an A/D converter if needed. An externally programmable input over voltage comparator is also included to shutdown all outputs. Under voltage lockout with a PGOOD indicator prevents the drivers from operating if VCC is too low.

Mfg. Part No.	Supply Voltage (V)	Peak Output Current (A)	Propagation Delay (ns)	Package	Stock No.	Price Each 1-9
SM72295MAE/NOPB	8 to 14	3	22	28-SOIC	47T9152	5.23

(201314)

LED DRIVER ICS

3-BIT CONSTANT CURRENT LED DRIVER

RoHS Compliant Available

Allegro MicroSystems, Inc.

Features

- 5 V to 17 V operation
- 3×7-bit Dot Correction current settings
- 31-bit shift register
- 3×10-bit PWM luminance settings
- Buffered output control pins
- Up to 5 MHz serial / PWM clock frequency
- Thermal Shutdown / UVLO
- Operating temperature: -40°C to 85°C

The **A6280** controls LED luminance with a pulse width modulation (PWM) scheme that gives the application the capability of displaying a billion colors. It is designed to minimize the number of components needed to drive LEDs with large pixel spacing.

Mfg. Part No.	Output Voltage (V) Min	Output Voltage (V) Max	Output Current (mA) Min	Output Current (mA) Max	Switching Freq. Max. (MHz)	Package	Stock No.	Price Each 1-9
● A6281EESTR-T	1	3	10	150	6	QFN	61M4139	2.00
● A6260SLJTR-T	-0.3	40	333	367	...	SOIC	97M3959	1.77

(90040)

LIGHTING AND DISPLAY DRIVERS MODULE

RoHS Compliant Available

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7-SEGMENT NUMERIC DISPLAY

Mfg. Part No.	Number of Outputs	LED Current per Output (mA)	Supply Voltage (V)	Package	Stock No.	Price Each 1-24
● AS1106WL	64	5	2.7 to 5.5	24-SOIC	59P3690	7.08
● AS1107WL	64	5	2.7 to 5.5	24-SOIC	59P3693	7.58
● AS1108WL	32	10	2.7 to 5.5	20-SOIC	59P3696	4.91
GENERAL PURPOSE LED DRIVERS						
● AS1101-T	2	80	2.2 to 3.6	6-SC-70	05R9351	0.69
● AS1102-T	3	40	2.2 to 3.6	6-SC-70	05R9352	0.69
● AS1103-T	4	40	2.2 to 3.6	6-SC-70	05R9353	0.84
● AS1104	4	40	2.2 to 3.6	8-MSOP	59P3682	1.18
● AS1109BQFT	8	100	3 to 5.5	16-QFN	05R9354	1.57
● AS1109BSOU	8	100	3 to 5.5	16-SOIC	59P3701	1.88
● AS1110BQFT	16	100	3 to 5.5	20-QFN	05R9355	2.36
● AS1110BSSU	16	100	3 to 5.5	24-SSOP	59P3707	2.83
● AS1112BQFT	16	80	3 to 5.5	32-TQFN	05R9356	2.49
● AS1113BSSU	16	50	3 to 5.5	24-SSOP	59P3712	2.06

(147272)

LED DRIVERS

RoHS Compliant Available

infineon

Applications:

- Architectural & general lighting
- Medical & dental lighting
- Train and aircraft lighting
- Strobe lighting

FOR 0.5W LEDS

Mfg. Part No.	Supply Voltage (V)	Output Current (mA)	PWM	Package	Stock No.	Price Each 1-9
● BCR320U	1.4 - 27	250	ext. digital transistor requred	6-SC-74	68R0436	0.73
● BCR420U	1.4 - 40	150	ext. digital transistor required	6-SC-74	68R0443	0.72
● BCR421U	1.4 - 40	150	Digital PWM input pin	6-SC-74	68R0444	0.70
FOR LOW POWER LEDS						
● BCR401W	1.2 - 18	10	ext. digital transistor required	4-SOT-343	68R0439	0.51
● BCR401U	1.4 - 40	10	ext. digital transistor required	6-SC-74	68R0438	0.44
● BCR402U	1.4 - 40	20	ext. digital transistor required	6-SC-74	68R0440	0.46
● BCR405U	1.4 - 40	50	ext. digital transistor required	6-SC-74	68R0442	0.46

(168165)

LED DRIVER ICs

RoHS Compliant Available

LINEAR TECHNOLOGY

Linear Technology offers a very broad line of LED drivers for automotive, display backlighting, handheld and general lighting applications.

STEP UP (BOOST)

Mfg. Part No.	Max. # of LEDs	Supply Volt. Max. (V)	Package	Stock No.	Price Each 1-24
● LT1932ES6#PBF	8	10	6-SOT-23	61M3372	3.80
● LT3465ES6#TRMPBF	6	16	6-TSOT-23	59M8322	3.35
● LT3465AES6#PBF	6	30	6-TSOT-23	78T3991	3.00
● LT3465ES6#PBF	6	30	6-TSOT-23	78T3992	3.00
● LT3466EDD-1#PBF	10	24	10-DFN	57M8205	3.92
● LT3486EDHC#PBF	16	24	16-DFN	57M8402	5.03

➤CONTINUED➤

LED DRIVER ICs (CONT.)

Mfg. Part No.	Max. # of LEDs	Supply Volt. Max. (V)	Package	Stock No.	Price Each 1-24
● LT3491EDC#PBF	6	12	6-DFN	52R2636	1.79
● LTC3490EDD#PBF	2	3.2	8-DFN	56M7871	4.23
● LTC3490ES8#PBF	2	3.2	8-SOIC	56M7875	4.23
● LT3486EFE#PBF	2 x 10	24	16-TSSOP	57M8406	3.71
● LT3593EDC#TRMPBF	10	5.5	6-PDFN	14N8614	2.00
● LT3593ES6#TRMPBF	10	5.5	6-TSOT-23	14N8615	2.00
● LT3598EUF#PBF	6 x 10	30	24-DFN	12P6570	6.30
● LT3598IUF#PBF	6 x 10	30	24-QFN	12P7617	7.26
● LT3760EFE#PBF	...	40	28-TSSOP	63R6863	9.09
● LT3486IFE#PBF	16	...	16-TSSOP	57M8410	6.28
● LT3466EDD#PBF	20	39.5	10-DFN	57M8208	4.43
STEP DOWN (BUCK)					
● LT3474EFE#PBF	1	36	16-TSSOP	57M8286	5.94
● LT3595EUHH#PBF	16 x 10	45	56-QFN	57M8540	9.93
● LT3743IFE#PBF	10	36	28-TSSOP	72R5830	12.45
● LT3743IUFD#PBF	10	36	28-QFN	72R5832	12.08
● LT3475EFE#PBF	2	36	20-TSSOP	57M8296	7.01
● LT3596EUHG#PBF	3 x 10	60	52-QFN	78R8458	7.80
● LT3592EDDB#PBF	10	36	10-DFN	08P3453	3.60
● LT3592EMSE#PBF	10	36	10-MSOP	08P3454	3.75
● LT3743EFE#PBF	...	36	28-TSSOP	52R9876	10.58
● LT3743EUFD#PBF	...	36	28-QFN	52R9877	10.26
● LT3590ESC8#PBF	10	55	8-SC-70	78T4028	2.00
STEP UP (BOOST)/STEP DOWN (BUCK)					
● LT3476EUHF#PBF	4	16	38-QFN	57M8306	9.50
● LT3477EFE#PBF	12	25	20-TSSOP	57M8310	6.64
● LT3477EUF#PBF	4	25	20-QFN	57M8314	6.31
● LT3478IFE-1#PBF	6	36	16-TSSOP	57M8329	8.69
● LT3496EFE#PBF	3 x 10	30	28-TSSOP	07P8432	7.45
● LT3496IFE#PBF	3 x 10	30	28-TSSOP	07P8434	8.72
● LT3496IUFD#PBF	3 x 10	30	28-QFN	57M8442	8.45
● LT3519EMS#PBF	10	30	16-MSOP	72R5822	5.35
● LT3756EMSE-1#PBF	25+	100	16-MSOP	07P8444	6.41
● LT3756EUD#PBF	25+	100	16-QFN	07P8450	4.14
● LT3756EUD-1#PBF	25+	100	16-QFN	07P8448	6.20
● LT3517HUF#PBF	10	30	16-QFN	70R5708	7.47
● LT3956EUHE#PBF	20+	80	36-QFN	78R8988	7.48
● LT3496HUFD#PBF	3 x 10	30	28-QFN	78R8456	6.36
● LTC3783EDHD#PBF	25+	36	16-DFN	56M8411	5.90
● LTC3783EFE#PBF	25+	36	16-TSSOP	56M8415	5.90
● LT3496EUFD#PBF	...	30	28-QFN	57M8440	7.01
● LT3755EMSE#PBF	25+	40	16-QFN	07P8438	6.09
● LT3755EMSE-1#PBF	25+	40	16-QFN	07P8436	6.09
● LT3755EUD#PBF	25+	40	16-QFN	01N6449	5.88
● LT3755EUD-1#PBF	25+	40	16-QFN	01N6447	5.88
● LT3756EMSE#PBF	25+	100	16-MSOP	07P8446	6.41
● LTM8040EV#PBF	4	36	66-LGA	71P2245	13.50
● LT3519EMS-1#PBF	...	30	16-MSOP	51R1536	5.35
● LT3519EMS-2#PBF	...	30	16-MSOP	51R1537	5.35
● LT3492EFE#PBF	...	30	28-TSSOP	63R6849	8.24
● LT3755EMSE-2#PBF	...	40	16-MSOP	24R3354	6.09
● LT3755EUD-2#PBF	...	40	16-QFN	24R3355	5.88
● LT3756EMSE-2#PBF	...	24	16-MSOP	24R3356	6.41
● LT3492EUFD#PBF	...	30	28-QFN	63R6851	5.29
● LT3755IUD#PBF	...	75	16-QFN	01N6453	4.50
CHARGE PUMP					
● LTC3202EDD#PBF	8	4.5	10-DFN	56M7330	2.93
● LTC3214EDD#PBF	1	4.5	10-DFN	56M7417	2.36
● LTC3215EDD#PBF	1	4.4	10-DFN	56M7421	3.53
● LTC3216EDE#PBF	1	4.4	12-DFN	56M7425	2.38
● LTC3219EUD#PBF	9	5.5	20-QFN	56M7434	2.57
● LTC3230EUD#PBF	5	5.5	20-QFN	56M7448	3.12
● LTC3200EMS8#PBF	6	4.5	8-MSOP	56M7318	3.39
FLYBACK					
● LT3799EMSE#PBF	...	18	16-MSOP	28T0559	4.81
● LT3799IMSE#PBF	...	18	16-MSOP	28T0560	5.49
● LT3599EFE#PBF	4 Strings	30	28-FE	46P4018	7.17
● LTC3220EPF#PBF	18	6	28-UTQFN	75M4517	5.02
● LTC3220EPF-1#PBF	18	6	28-UTQFN	75M4515	5.02

➤CONTINUED➤

LED DRIVER ICs (CONT.)

SYNCHRONOUS

Mfg. Part No.	Max. # of LEDs	Supply Volt. Max. (V)	Package	Stock No.	Price Each 1-24
LT3791EFE#PBF	100W+	60	38-TSSOP	93T2028	10.16
LT3791HFE#PBF	100W+	60	38-TSSOP	93T2029	7.86
LT3791IFE#PBF	100W+	60	38-TSSOP	93T2030	7.50

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µMODULE LED DRIVERS

RoHS Compliant Available

LINEAR TECHNOLOGY

Features:
- Open LED Protection
- Up to 2MHz Adjustable Switching Frequency
- 3000:1 LED Dimming Range
- Well suited for use with µModule Battery Chargers

Members of the µModule® LED driver family are preconfigured to deliver up to 1A through an LED string in a buck, boost or buck-boost topology. These products deliver a wide dimming range with excellent current regulation accuracy in a compact solution

Mfg. Part No.	Input Voltage (V)	Output Voltage (V)	Output Current (A)	Package	Stock No.	Price Each 1-24
LTM8040EV#PBF	4 to 36	2.5 to 13	1	66-LGA	71P2245	13.50
LTM8040IV#PBF	4 to 36	2.5 to 13	1	66-LGA	71P8121	14.87
LTM8042EV#PBF	3 to 30	2 to 32	1	56-LGA	99R2733	15.43
LTM8042EV-1#PBF	3 to 30	2 to 32	0.35	56-LGA	99R2732	15.43
LTM8042IV#PBF	3 to 30	2 to 32	1	56-LGA	99R2735	16.51
LTM8042IV-1#PBF	3 to 30	2 to 32	0.35	56-LGA	99R2734	13.39

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
DC1511A-A	LTM8042 EVAL. BOARD	24T2727	65.00
DC1511A-B	LTM8042-1 EVAL. BOARD	24T2728	65.00

(164488)

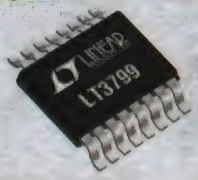
OFFLINE ISOLATED FLYBACK LED CONTROLLER WITH PFC

RoHS Compliant Available

LINEAR TECHNOLOGY

Features:
- Isolated PFC LED Driver with Minimum Number of External Components
- TRIAC Dimmable
- Low Harmonic Content
- No Opto-Coupler Required
- Open LED and Shorted LED Protection

Applications:
- Offline 4W to 100W+ LED Applications
- High DC VIN LED Applications



The **LT3799** has a unique current sensing scheme that delivers a well regulated current to the secondary side without using an opto-coupler. This not only reduces cost but also improves reliability. Its single stage PFC regulator design requires minimal external components.

Mfg. Part No.	Operating Temperature	Package	Stock No.	Price Each 1-24
LT3799EMSE#PBF	-40°C to +125°C	16-MSOP	28T0559	4.81
LT3799IMSE#PBF	-40°C to +125°C	16-MSOP	28T0560	5.49

(194489)

LED DRIVERS

RoHS Compliant Available

ON Semiconductor

NCL30082FLYGEVB

Mfg. Part No.	Supply Voltage Max. (V)	Output Current Max. (A)	Package	Stock No.	Price Each 1-9
NUD4001DR2G	30	0.5	8-NSOIC	70K4034	1.05
NUD4011DR2G	200	0.07	8-SOIC	04R7859	1.05
NCL30082ADMR2G	20	3	8-SMD	72W3916	1.12
NCL30083ADMR2G	20	3	8-SMD	72W3917	1.12

CONTINUED

LED DRIVERS (CONT.)

EVALUATION BOARD

Mfg. Part No.	Description	Stock No.	Price Each Each
NCL30082FLYGEVB	NCL30082 Evaluation Board	09X1745	84.53

(136342)

CONSTANT CURRENT REGULATORS & LED DRIVERS

RoHS Compliant Available

ON Semiconductor

Features:
- Wide operating voltage range
- Immediate turn-on
- Voltage surge suppressing - protecting LEDs
- AEC-Q101 Qualified
- SBT (Self-Biased Transistor) technology
- Negative temperature coefficient

Applications:
- Automotive lightings
- Switch contact wetting
- LED drive
- Contact wetting

The linear constant current regulator (CCR) is a simple, economical and robust device designed to provide a cost-effective solution for regulating current in LEDs. The CCR is based on patent-pending Self-Biased Transistor (SBT) technology and regulates current over a wide voltage range. It is designed with a negative temperature coefficient to protect LEDs from thermal runaway at extreme voltages and currents

SINGLE OUTPUT

Mfg. Part No.	Input Voltage (V)	Output Current (mA)	Package	Stock No.	Price Each 1-9
NSI45020AT1G	45	20	2-SOD-123	15R4677	0.59
NSI45025AT1G	45	25	2-SOD-123	15R4679	0.59
NSI45030AT1G	45	30	2-SOD-123	15R4683	0.59
NSI50010YT1G	50	10	2-SOD-123	60R6439	0.54

DUAL OUTPUT

NSI45025AZT1G	45	25	4-SOT-223	15R4680	0.65
NSI45030AZT1G	45	30	4-SOT-223	15R4684	0.69

The **CCRKIT** is a sample kit which contains the following: NSI45030T1G, NSI45025T1G, NSI45020T1G, **NSI45030AT1G**, **NSI45025AT1G**, **NSI45020AT1G**, NSI45030ZT1G, NSI45025ZT1G, **NSI45030AZT1G**, **NSI45025AZT1G**, **NSI50010YT1G**, NSI50020DZT1G, NSI50035DZT1G, NSI50060DDT1G & NSI50090DDT1G

Mfg. Part No.	Description	Stock No.	Price Each 1-9
CCRKIT	Constant Current Regulator Sample kit w/CD-ROM	60R6438	22.00

(165052)

LED DISPLAY DRIVERS

RoHS Compliant Available

ON Semiconductor

Mfg. Part No.	Supply Voltage (V)	Temperature Range	Package	Stock No.	Price Each
CAT310W-T1	5.5	-40°C to +125°C	20-SOIC	08R5250	2.13
CAT3626HV4-GT2	5.5	-40°C to +85°C	16-TQFN	34R3310	1.72
CAT3647HV3-GT2	5.5	-40°C to +85°C	16-TQFN	08R5255	1.37
CAT4008W-T2	5.5	-40°C to +85°C	16-SOIC	08R5258	1.59
CAT4016VSR-T2	5.5	-40°C to +85°C	24-QSOP	08R5261	1.84
CAT4016VS-T2	5.5	-40°C to +85°C	24-QSOP	08R5260	1.84
CAT4016W-T1	5.5	-40°C to +85°C	24-SOIC	08R5262	1.96
CAT4016Y-T2	5.5	-40°C to +85°C	24-TSSOP	08R5263	1.84
CAT4101TV-T75	5.5	-40°C to +85°C	5-TO-263	08R5264	3.05
CAT4139TD-GT3	5.5	-40°C to +85°C	5-TSOT-23	08R5267	1.29
CAT4201TD-GT3	36	-40°C to +125°C	5-TSOT-23	08R5268	1.86
CAT4237TD-GT3	5.5	-40°C to +85°C	5-TSOT-23	08R5269	1.44
CAT4238TD-GT3	5.5	-40°C to +85°C	5-TSOT-23	08R5270	1.39
CAT4240TD-GT3	5.5	-40°C to +85°C	5-TSOT-23	08R5271	1.62

(148505)

DC-DC STEP DOWN REGULATORS

RoHS Compliant Available

Panasonic

1-CHANNEL

Mfg. Part No.	Input Voltage (V)	Output Voltage (V)	Output Current (A)	Switching Frequency (MHz)	Package	Stock No.	Price Each 1-24
AN33013UA-VB	25	1.2 to 9	1.5	2	24-SSOP	56W3668	3.04
AN33014UA-VB	25	1.2 to 9	1.5	1	24-SSOP	56W3669	3.97
AN33016UA-VB	39	1.2 to 9	1.5	2	24-SSOP	56W3670	4.20

2-CHANNEL

AN33012UA-VB	25	1.2 to 9	...	2	24-SSOP	56W3667	3.04

(209001)

LED DRIVER ICS

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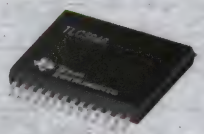
LIGHTING AND DISPLAY SOLUTIONS

RoHS Compliant Available

TEXAS INSTRUMENTS

Features:
- Over-Temperature Protection
- I2C-Compatible



TLC5946PWP

LED DRIVERS

Mfg. Part No.	Number of Channels	Output Current (mA)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
● TL4242DRJR	1	5	41	8-SON	94M9959	1.08
● TLC5920DL	1	30	17	48-SSOP	76C7480	3.30
● TLC5928PWPR	1	35	17	24-HTSSOP	03P1638	1.69
● TLC5921DAPR	1	80	17	32-HTSSOP	76C7483	3.13
● TLC5945PWP	1	90	18	28-TSSOP	41M5430	2.87
● TLC59116IPWR	1	100	17	28-TSSOP	85M0144	2.99
● TLC5916IN	1	120	17	16-PDIP	60M1749	1.65
● TLC5940PWP	1	120	17	28-HTSSOP	08K4866	3.58
● TLC5941PWP	3	80	18	28-HTSSOP	58K6744	2.84
● TLC5946PWP	16	40	17	28-TSSOP	96M4787	2.72
● TLC5925IDBQR	16	45	20	24-SSOP	46P3784	1.57
● TLC5925IPWR	16	45	20	24-TSSOP	46P3785	1.57
● TLC5925IDWR	16	45	17	24-SOIC	10R6961	1.57
● TLC5929DBQ	16	65	10	24-SOP	46T8884	2.86
● TLC5927IDBQR	16	120	17	24-SSOP	33R2185	2.04
● TLC5947DAP	24	30	30	32-TSSOP	03P5011	5.58
● TLC5952DAP	24	35	15	32-TSSOP	24R9993	3.87
WHITE LED DRIVERS						
● TCA6507PW	1	20	6.5	14-TSSOP	54M7301	2.34
● TPS61045DRBR	1	20	28	8-SON	32H6571	1.71
● TPS92210D	1	...	...	8-SOIC	69R0458	1.96
● TPS61043DRBR	1	30	16.9	8-SON	90H4862	1.58
● TPS61150ADRCT	1	45	27	10-SON	22M1822	1.83
● TPS61041DBVR	1	50	28	6-SON	36K7661	1.58
● TPS61040DBVR	1	90	28	6-SOT-23	35K1326	1.58
● TPS61160ADRVT	1	...	38	6-SON	05R5228	1.46
● TPS61160DRVT	1	...	38	6-SON	65M6336	1.46
● TPS61161ADRVT	1	...	38	6-SON	10R0471	1.49
● TPS61161DRVT	1	...	38	6-SON	65M6338	1.49
● TPS92070PW	1	...	7.2	16-TSSOP	64T4269	1.96
● TPS92020D	2	20	11	8-SOIC	99R2200	0.89
LCD/OLED DISPLAY BIAS SOLUTIONS						
● TPS65131RGET	2	800	15	24-QFN	44J2536	6.09
● PCF8576DT/2,118	4	10	7.5	56-TSSOP	78R7397	1.97

PHOTO-FLASH CAPACITOR CHARGERS

Mfg. Part No.	Supply Voltage (V)	Battery Input Voltage Range (V)	Stock No.	Price Each 1-9
● TPS65563ARGTR	5.5	1.4 - 12	08P4022	2.03

LED LIGHTING POWER CONTROLLER

The **UCC28810 and UCC28811** are general lighting power controllers for low to medium power lumens applications requiring power factor correction and EMC compliance. It is designed for controlling a flyback, buck or boost converter operating in critical conduction mode. It features a transconductance voltage amplifier for feedback error processing, a simple current reference generator for generating a current command proportional to the input voltage, a current-sense (PWM) comparator, PWM logic and a totem-pole driver for driving an external FET.

Mfg. Part No.	UVLO Turn-On Threshold (V)	Amplifier Source Current (µA)	Stock No.	Price Each 1-9
● UCC28810D	15.8	1300	34P6595	1.18

LED DRIVER EVALUATION KIT

These evaluation modules are designed to help the user evaluate and test the various operating modes of the existing LED drivers.

Mfg. Part No.	Description	Stock No.	Price Each
TL4242EVM-543	Evaluation Module for the TL4242 Adjustable LED Driver	55R7476	50.00
TPS61165EVM-283	Evaluation Module for the TPS61165 High Brightnes White LED Driver	72M4772	49.98
● TPS62260LED-338	Evaluation Module for the TPS62240 buck converter for lower current LED applications and the TPS62290 for higher current LED applications	99M6407	19.38
TPS75105DSKEVM-529	Evaluation Module for the TPS75105 low dropout, two-bank LED Driver	55R7659	49.98
UCC28810EVM-003	Evaluation Module for the UCC28810 110-W Multiple String LED Driver	51R5931	101.00
TPS92010EVM-592	Evaluation Module for the TPS92010 110-VAC TRIAC Dimmable Light Bulb Replacement	78R4087	101.00

➤CONTINUED➤

LIGHTING AND DISPLAY SOLUTIONS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
UCC28810EVM-002	Constant Current Supply with PFC for 100-W LED Lighting Applications	25R0175	101.00
UCC28810EVM-003	110-W Multiple String LED Driver with Universal Line Input & PFC Evaluation Module	51R5931	101.00

(92272)

LED DRIVERS

RoHS Compliant Available

TEXAS INSTRUMENTS

FEATURED LED DRIVERS

Mfg. Part No.	Input Voltage (V) Min.	Input Voltage (V) Max.	Output Voltage (V)	LED Current Max. (mA)	Package	Stock No.	Price Each 1-9
● LM3404HVMA/NOPB	6	75	67	1000	8-SOIC	32M1054	2.94
● LM2759SD/NOPB	2.7	5.5	5.1	1000	12-LLP	55R3859	1.91
● LM27964SQ-C/NOPB	2.7	5.5	...	180	24-LLP	04R9160	3.10
● LM3410XQMF/NOPB	2.7	5.5	24	2800	5-SOT-23	55R3975	2.99
● LM3410XSDE/NOPB	2.7	5.5	24	2800	6-LLP	11N9218	2.75
● LM3431AQMH/NOPB	5	37	40	200	28-TSSOP	55R3994	4.01
● LM3431QMH/NOPB	5	37	40	200	28-TSSOP	55R3996	3.72
● LM3530UME-40/NOPB	2.7	5.5	40	29.5	12-MicroSMD	55R4012	1.66
● LM3554TME/NOPB	2.7	5.5	...	1200	16-MicroSMD	55R4019	1.62
● LP3950SL/NOPB	3	7.2	5.3	300	32-CSP	41K7763	4.06
● LP8501TME/NOPB	2.7	5.5	...	225	25-MicroSMD	04R9391	2.35
● LM3414HVSD/NOPB	4.5	65	65	1	8-LLP	99R3330	2.18
● LM3402HVMM/NOPB	6	75	67	500	8-SOIC	32M1047	2.31
● LM3402HVMR/NOPB	6	75	67	500	8-PSOP	50M8804	2.78
● LM3402MM/NOPB	6	42	37	500	8-MSOP	32M1049	2.18
● LM3402MR/NOPB	6	42	37	500	8-PSOP	50M8805	2.61
● LM3404HVMR/NOPB	6	75	67	1000	8-SOP	32M1058	2.94
● LM3404MA/NOPB	6	42	37	1000	8-SOIC	32M1062	2.78
● LM3404MR/NOPB	6	42	37	1000	8-SOP	32M1066	2.78
● LM3405XMK/NOPB	3	15	13.5	1000	6-TSOT	32M1070	1.38
● LM3407MY/NOPB	4.5	30	27	350	8-MSOP	78M7735	1.69
● LM3409HVMY/NOPB	6	75	...	5000	10-MSOP	14R4585	2.04
● LM3409MY/NOPB	6	75	...	5000	10-MSOP	14R4586	1.91
● LM3450MT/NOPB	8.5	20	11.5	200	16-TSSOP	20T5582	2.87
● LM3410XMF/NOPB	2.7	5.5	24	1000	5-SOT-23	75M6032	2.72
● LM3410YMF/NOPB	2.7	5.5	24	1000	5-SOT-23	75M6034	2.72
● LM3421Q0MH/NOPB	4.5	75	75	1000	16-TSSOP	65R7033	3.99
● LM3421Q1MH/NOPB	4.5	75	75	1000	16-TSSOP	65R7034	3.70
● LM3423Q0MH/NOPB	4.5	75	75	1000	20-TSSOP	65R7035	4.18
● LM3423Q1MH/NOPB	4.5	75	75	1000	20-TSSOP	65R7036	3.72
● LM3424MH/NOPB	3.5	75	...	1000	20-TSSOP	27R1775	3.72
● LM3464MH/NOPB	12	80	80	1000	28-TSSOP	99R3331	5.73

LED DRIVERS

Mfg. Part No.	Output Current (mA)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-9
● LM3421MH/NOPB	...	75	TSSOP	01P0823	3.30
● LM3423MH/NOPB	...	75	TSSOP	01P0824	3.58
● LM3432MH/NOPB	240	40	28-TSSOP	64M6994	3.44
● LM3445MM/NOPB	1000	277	10-MSOP	56P4152	1.63
● LP5524TM-5/NOPB	100	5.5	9-BGA	54M4758	1.88
FLASH LED DRIVERS					
● LM2754SQ/NOPB	800	5.5	24-LLP	13M1713	2.04
● LM2758TL/NOPB	700	5.5	12-BGA	84M8090	1.73
● LM3551SD/NOPB	1000	5.5	14-LLP	65K6204	1.91
● LM3552SD/NOPB	1000	5.5	14-LLP	65K6206	0.80
● LM3553SD/NOPB	1200	5.5	12-LLP	84M8124	1.77
HIGH BRIGHTNESS LED DRIVERS					
● LM3401MM/NOPB	...	35	8-MSOP	54M4678	1.63
● LM3405AXMK/NOPB	1000	22	6-TSOT	64M6991	1.53
● LM3434SQ/NOPB	30000	30	24-LLP	76R6958	4.54
● LM3409QMY/NOPB	1000	42	10-SOIC	76R6957	2.38
● LM3409QHVMY/NOPB	1000	75	10-SOIC	76R6956	2.48
● LM3405AXMY/NOPB	1000	22	8-MSOP	19P7831	0.57
● LM3429MH/NOPB	1000	75	14-TSSOP	16R1312	2.87
● LM3406HVMH/NOPB	1500	75	14-TSSOP	08P3934	2.87
● LM3406MH/NOPB	1500	42	14-TSSOP	08P3935	2.72
● LM3433SQ/NOPB	3000	5.8	24-LLP	64M6996	2.10
INDUCTIVE-BOOST BACKLIGHT LED DRIVERS					
● LM3430SD/NOPB	...	14	12-LLP	32M1075	2.04
● LM3432MH/NOPB	240	40	28-TSSOP	64M6994	3.44
● LM3432SQ/NOPB	40	40	24-LLP	39M4953	2.87

➤CONTINUED➤

LED DRIVERS (CONT.)

INDUCTIVE-BOOST BACKLIGHT LED DRIVERS

Mfg. Part No.	Output Current (mA)	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-9
LM3500TL-16/NOPB	70	7	8-BGA	41K4852	2.75
LM3500TL-21/NOPB	70	7	8-BGA	41K4853	2.75
LM3501TL-16/NOPB	70	7	8-BGA	41K4856	2.75
LM3501TL-21/NOPB	70	7	8-BGA	32M1083	2.75
LM3502ITL-16/NOPB	...	5.5	10-MicroSMD	69K2456	3.01
LM3502ITL-25/NOPB	...	5.5	10-MicroSMD	69K2458	3.01
LM3502ITL-35/NOPB	...	5.5	10-MicroSMD	69K2460	3.01
LM3502ITL-44/NOPB	...	5.5	10-MicroSMD	69K2462	3.01
LM3502SQ-16/NOPB	...	5.5	10-MicroSMD	69K2472	1.25
LM3502SQ-44/NOPB	...	5.5	10-MicroSMD	69K2478	1.25
LM3503ITL-16/NOPB	20	5.5	16-LLP	69K2488	2.89
LM3503ITL-25/NOPB	20	5.5	16-LLP	69K2490	2.89
LM3503ITL-35/NOPB	20	5.5	16-LLP	69K2492	2.89
LM3503ITL-44/NOPB	20	5.5	16-LLP	69K2494	2.89
LM3503SQ-35/NOPB	20	5.5	16-LLP	55K6778	1.19
LM3509SDE/NOPB	...	6	10-LLP	11N9229	2.97
LM3519MK-20/NOPB	...	5.5	6-SOT23	79K7826	2.00
LM3557SD-2/NOPB	...	5.5	8-LLP	41K4879	1.86

LIGHTING MANAGEMENT UNITS

LM4970SD/NOPB	...	5.5	10-LLP	41K6000	2.07
LP3943ISQ/NOPB	...	5.5	24-QFN	41K7750	2.28
LP3952RL/NOPB	300	5.5	36-BGA	54M4742	1.83
LP39542RL/NOPB	...	5.5	36-BGA	64M7081	3.65
LP3958TL/NOPB	96	5.5	25-BGA	99K2590	4.13
LP5520TL/NOPB	180	5.5	25-BGA	54M4750	4.54
LP5521TM/NOPB	75	5.5	20-BGA	54M4752	1.41
LP5521YQ/NOPB	75	5.5	20-BGA	54M4754	0.69
LP5522TM/NOPB	20	5.5	6-BGA	54M4756	1.41
LP5524TM-5/NOPB	100	5.5	9-BGA	54M4758	1.88
LP5526TL/NOPB	201	5.5	25-BGA	99K2594	3.47
LP55271TL/NOPB	430	5.5	30-BGA	32M1373	2.19
LP55281RL/NOPB	400	5.5	36-BGA	84M8168	2.83
LP55281TL/NOPB	400	5.5	36-BGA	54M4760	2.83

SWITCHED-CAPACITOR BOOST BACKLIGHT LED DRIVERS

LM2750SD-5.0/NOPB	120	5.6	10-LLP	69K2411	2.04
LM2751SD-A/NOPB	...	5.5	10-LLP	41K4337	2.00
LM2751SD-B/NOPB	...	5.5	10-LLP	41K4338	2.00
LM2755TM/NOPB	90	5.5	18-BGA	64M6971	0.96
LM2756TM/NOPB	180	5.5	20-BGA	54M4666	3.84
LM27951SD/NOPB	120	5.5	12-BGA	69K2419	1.69
LM27952SD/NOPB	120	5.5	14-LLP	41K4379	1.63
LM27966SQ/NOPB	180	5.5	24-LLP	13M1717	2.86

DEVELOPMENT TOOLS

Mfg. Part No.	Description	Stock No.	Price Each
LM3404MREVAL	Step-Down Switching Regulator Evalution Board to Drive LEDs	54M4682	49.98
LM3552SDEV	SPAN ERROR	22M0955	151.98
LM3503ITL-25EV	Dual-Display Constant Current LED Driver Evaluation Board	22M0954	100.98
LM3409EVAL/NOPB	LED Driver Demo Board	55R3970	76.50
LM3409HVEVAL/NOPB	LED Buck Controller Eval. Board	55R3971	80.58
LM3500TL-16EV	White LED Driver Evaluation Board	10J9339	80.58
LM3501TL-16EV		10J9340	80.58
LM3424BKBSTEVAL/NOPB	LED Driver Buck-Boost Eval. Board	55R3983	151.98
LM3429BKBSTEVAL/NOPB	LED Driver Buck-Boost Eval. Board	55R3989	100.98
LM3429BSTEVAL/NOPB	LED Driver Boost Eval. Board	55R3990	100.98
LM3445-120VSMEV/NOPB	LED Driver Eval. Board	55R4001	80.58
LM2796TLEV	LED Driver Dual Display Eval. Board	41J6841	80.58
LM3404EVAL/NOPB	LED Driver Buck-Boost Eval. Board	55R3965	49.98
LM3407EVAL/NOPB	LED Driver Buck-Boost Eval. Board	77R5213	49.98
LP3944ISQEV	LED Driver Eval. Board	65J5390	151.98

(102107)

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(196525)

BATTERY BACKUP SUPERVISORY CIRCUITS

RoHS Compliant Available

ANALOG DEVICES

Applications:
- Microprocessor systems
- Computers
- Controllers
- Intelligent instruments
- Automotive systems

Mfg. Part No.	Reset Threshold Typ. (V)	Reset Pulse Width (ms)	Supply Voltage (V) Min	Supply Voltage (V) Max	Package	Stock No.	Price Each 1-9
ADM690ANZ	4.65	50	1	5.5	8-DIP	19M8700	2.64
ADM690AARNZ	4.65	50	1	5.5	8-SOIC	59K2223	3.88
ADM691ANZ	4.65	50	0	5.5	16-PDIP	59K2233	3.73
ADM691ARZ	4.65	50	0	5.5	16-SOIC	19M8702	3.24
ADM694ANZ	2.25	200	4.75	5.5	8-PDIP	59K2246	2.58
ADM695ANZ	4.65	200	4.75	5.5	16-DIP	59K2247	2.68
ADM698ANZ	4.55	200	3	5.5	8-PDIP	59K2256	2.53
ADM705ANZ	4.55	50	1	5.5	8-PDIP	12M8056	2.48
ADM709LARZ	4.65	200	1.2	5.5	8-SOIC	59K2297	1.87

(167434)

MULTI-VOLTAGE SUPERVISORY ICS

RoHS Compliant Available

ANALOG DEVICES

Applications:
- Intelligent instruments
- Portable instruments

Mfg. Part No.	Reset Threshold Typ. (V)	Reset Pulse Width (ms)	Supply Voltage (V) Min	Supply Voltage (V) Max	Package	Stock No.	Price Each 1-9
ADM6710BARJZ-REEL7	4.63	200	1.2	5.5	6-SOT-23	84M7777	3.56
ADM8691ARNZ	1.3	50	4.75	5.5	SOIC	59K2435	6.55
ADM13307-5ARZ	2.93	200	2	5.5	8-SOIC	84M7771	2.92

(167435)

SUPERVISORY CIRCUITS

RoHS Compliant Available

ANALOG DEVICES

The **ADM1232 series** is a microprocessor monitoring circuit that monitors microprocessor supply voltage, microprocessor lock-up, and external interrupts. It also contains a watchdog timer and a debounced manual reset input. The **ADM690/691 series** are supervisory circuits for power supply monitoring and battery control functions in microprocessor systems. Functions include uP reset, backup battery switchover, watchdog timer, CMOS RAM write protection, and power failure warning. The **ADM705/706/708 series** are microprocessor supervisory circuits suitable for monitoring the 5V power supply/battery and can also monitor microprocessor activity. They also contain a debounced active low manual reset input, a threshold detector for power-fail warning, and power-on reset output during power-up, power-down and brownout conditions. The **ADM705/706 series** include an independent watchdog timeout. The **ADM706P series** contains an active high reset output. The **ADM706S/T series** contain an active low reset output. The **ADM708T series** includes an active high reset output in addition to the active low output. The **ADM809 series** supervisory circuits monitor the power supply voltage in microprocessor systems. They provide an active low reset output during power-up, power-down and brownout conditions. The **ADM811 series** are voltage monitoring devices suitable for use in most voltage monitoring applications. It is designed to monitor six different voltages and includes a debounced manual reset input as well as an active low reset output.

SIMPLE RESET/POWER ON RESET

Mfg. Part No.	Reset Threshold Typ. (V)	Reset Pulse Width (ms)	Supply Voltage (V) Min	Supply Voltage (V) Max	Package	Stock No.	Price Each 1-9
ADM809LARTZ-REEL7	4.63	240	1.2	5.5	3-SOT-23	19M8708	1.82
ADM809SARTZ-REEL7	2.93	240	1.2	5.5	3-SOT-23	19M8709	1.76
ADM809TARTZ-REEL7	3.08	240	1.2	5.5	3-SOT-23	19M8710	1.82
ADM811LARTZ-REEL7	4.63	140	1.2	5.5	4-SOT-143	19M8711	1.45
ADM811SARTZ-REEL7	2.93	140	1.2	5.5	4-SOT-143	19M8712	1.49
ADM1232ANZ	4.62	610	4.5	5.5	8-PDIP	59K1882	2.29
ADM13307-33ARZ	4.55	200	2	5.5	8-SOIC	61M3959	2.92

WATCHDOG TIMERS

ADM699ANZ	4.65	200	3	5.5	8-PDIP	59K2259	2.58
ADM705ARZ	4.65	200	1	5.5	8-SOIC	19M8703	2.48
ADM706ARZ	4.4	200	1	5.5	8-SOIC	19M8704	2.48
ADM706SARZ	4.4	200	1	5.5	8-SOIC	19M8705	2.58
ADM706TARZ	4.4	200	1	5.5	8-SOIC	19M8706	2.58
ADM2914-1ARQZ	1	8.5	2.3	6.9	16-QSOP	14R8672	6.10
ADM2914-2ARQZ	1	8.5	2.3	6.9	16-QSOP	14R8674	6.10
ADM13307-18ARZ	2.93	200	2	5.5	8-SOIC	61M3957	2.92

ACTIVE HIGH RESET

ADM707ARZ	4.65	200	1	5.5	8-SOIC	59K2281	2.58
ADM708ARZ	4.4	200	1	5.5	8-SOIC	59K2284	2.32
ADM708SARZ	4.4	200	1	5.5	8-SOIC	59K2290	2.32

BATTERY BACKUP CIRCUITS

ADM690ANZ	4.65	50	1	5.5	8-DIP	19M8700	2.64
ADM690AARNZ	4.65	50	1	5.5	8-SOIC	59K2223	3.88
ADM691ANZ	4.65	50	0	5.5	16-PDIP	59K2233	3.73
ADM691ARZ	4.65	50	0	5.5	16-SOIC	19M8702	3.24
ADM694ANZ	2.25	200	4.75	5.5	8-PDIP	59K2246	2.58

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SUPERVISORY CIRCUITS (CONT.)

BATTERY BACKUP CIRCUITS

Mfg. Part No.	Reset Threshold Typ. (V)	Reset Pulse Width (ms)	Supply Voltage (V) Min	Supply Voltage (V) Max	Package	Stock No.	Price Each 1-9
● ADM695ANZ	4.65	200	4.75	5.5	16-DIP	59K2247	2.68
● ADM698ANZ	4.55	200	3	5.5	8-PDIP	59K2256	2.53
● ADM705ANZ	4.55	50	1	5.5	8-PDIP	12M8056	2.48
● ADM709LARZ	4.65	200	1.2	5.5	8-SOIC	59K2297	1.87
MULTI-VOLTAGE SUPERVISORY ICs							
● ADM6710BARJZ-REEL7	4.63	200	1.2	5.5	6-SOT-23	84M7777	3.56
● ADM8691ARNZ	1.3	50	4.75	5.5	SOIC	59K2435	6.55
● ADM13307-5ARZ	2.93	200	2	5.5	8-SOIC	84M7771	2.92

(69611)

SUPERVISORY CIRCUITS WITH SIMPLE RESET/POWER ON RESET

RoHS Compliant Available

ANALOG DEVICES

Applications:
- Microprocessor systems
- Computers
- Controllers
- Intelligent instruments

Mfg. Part No.	Reset Threshold Typ. (V)	Reset Pulse Width (ms)	Supply Voltage (V) Min	Supply Voltage (V) Max	Package	Stock No.	Price Each 1-9
● ADM809LARTZ-REEL7	4.63	240	1.2	1.2	3-SOT-23	19M8708	1.82
● ADM809SARTZ-REEL7	2.93	240	1.2	1.2	3-SOT-23	19M8709	1.76
● ADM809TARTZ-REEL7	3.08	240	1.2	1.2	3-SOT-23	19M8710	1.82
● ADM811LARTZ-REEL7	4.63	140	1.2	1.2	4-SOT-143	19M8711	1.45
● ADM811SARTZ-REEL7	2.93	140	1.2	1.2	4-SOT-143	19M8712	1.49
● ADM1232ANZ	4.62	610	4.5	4.5	8-PDIP	59K1882	2.29
● ADM13307-33ARZ	4.55	200	2	2	8-SOIC	61M3959	2.92

(167348)

SUPERVISORY CIRCUITS WITH WATCHDOG TIMERS

RoHS Compliant Available

ANALOG DEVICES

Applications:
- Microprocessor systems
- Computers
- Controllers
- Intelligent instruments
- Portable instruments

Mfg. Part No.	Reset Threshold Typ. (V)	Reset Pulse Width (ms)	Supply Voltage (V) Min	Supply Voltage (V) Max	Package	Stock No.	Price Each 1-9
● ADM699ANZ	4.65	200	3	5.5	8-PDIP	59K2259	2.58
● ADM705ARZ	4.65	200	1	5.5	8-SOIC	19M8703	2.48
● ADM706ARZ	4.4	200	1	5.5	8-SOIC	19M8704	2.48
● ADM706SARZ	4.4	200	1	5.5	8-SOIC	19M8705	2.58
● ADM706TARZ	4.4	200	1	5.5	8-SOIC	19M8706	2.58
● ADM2914-1ARQZ	1	8.5	2.3	6	16-QSOP	14R8672	6.10
● ADM2914-2ARQZ	1	8.5	2.3	6	16-QSOP	14R8674	6.10
● ADM13307-18ARZ	2.93	200	2	5.5	8-SOIC	61M3957	2.92

(167349)

CMOS POWER SUPPLY SUPERVISORY CIRCUITS

RoHS Compliant Available

intersil

VOLTAGE CONVERTERS

Positive to negative; needs only two capacitors. Acts as voltage doubler. Voltage range for **ICL7660**: 1.5 to 12V; **ICL7662**: 4.5 to 20V.

Mfg. Part No.	Temperature Range	Package	Stock No.	Price Each 1-24
● ICL7660ACBAZA	Commercial	8-SOIC	61J6199	1.95
● ICL7660ACPAZ	Commercial	8-DIP	79K6924	1.95
● ICL7660CBAZ	Commercial	8-SOIC	61J6203	1.92
● ICL7660CPAZ	Commercial	8-DIP	57K3889	1.97
● ICL7660SCBAZ	Commercial	8-SOIC	11J8885	1.95
● ICL7660SCPAZ	Commercial	8-DIP	57K3890	1.95
● ICL7660SIBAZ	Industrial	8-SOIC	97H9770	1.92
● ICL7660SIPAZ	Industrial	8-DIP	57K3891	1.95

AUTOMATIC BATTERY BACK-UP SWITCHES (8-PIN)

Automatically connects output to greater volt supply.

Mfg. Part No.	Temperature Range	Package	Stock No.	Price Each 1-24
● ICL7673CPAZ	Commercial	8-DIP	57K3898	2.28
● DG442DYZ	Industrial	16-SOIC	57K3050	2.54

➤CONTINUED➤

CMOS POWER SUPPLY SUPERVISORY CIRCUITS (CONT.)

Mfg. Part No.	Temperature Range	Package	Stock No.	Price Each 1-24
Two low-power, individually-programmable detectors; one CMOS chip. Voltage range: 1.6 to 16V. 20mA sink, 10µA max. quiescent current.				
● ICL7665SACPAZ	Commercial	8-PDIP	79K6925	3.50
● ICL7665SCPAZ	Commercial	8-DIP	57K3894	3.03

POWER SUPPLY/CONTROL CIRCUITS

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-24
● ICL7663SCPAZ	High-efficiency CMOS programmable µpower voltage regulator accepts 1.6 to 16V puts.	8-DIP	57K3893	2.86

(9954)

SUPERVISORY CIRCUITS

RoHS Compliant Available

LINEAR TECHNOLOGY

Applications:
- Computers
- Network Servers

Supervisory circuits ranging from 0.5V on up with integration up to six supply monitors in tiny packages. Many feature a user-selectable threshold feature.

Mfg. Part No.	Reset Type	Threshold Voltage (V)	Package	Stock No.	Price Each 1-24
● LTC1232CS8#PBF	Active Low	4.62	8-SOIC	55M9685	3.83
● LTC1326IS8-2.5#PBF	Active Low/High	0.4	8-SOIC	56M0313	5.93
● LTC1726EMS8-2.5#PBF	Active Low Open Drain	2.337	8-MSOP	56M3442	3.88
● LTC1726ES8-2.5#PBF	Active Low Open Drain	3.135	8-SOIC	56M3450	3.63
● LTC1728ES5-2.5#TRMPBF	Active Low	1	5-SOT-23	59M8267	3.20
● LTC1728ES5-3.3#TRMPBF	Active Low	1	5-SOT-23	59M8268	3.20
● LTC1985ES5-1.8#TRMPBF	Active Low	0.4	5-SOT-23	56M4429	3.20
● LTC2900-1CMS#PBF	Active Low Open Drain	4.75	10-MSOP	56M6545	2.30
● LTC2900-2CMS#PBF	Active Low Open Drain	4.75	10-MSOP	56M6561	3.66
● LTC2902-1CGN#PBF	Active Low Open Drain	4.75	16-SSOP	56M6604	3.30
● LTC2900-1IMS#PBF	Active Low Open Drain	0.4	10-MSOP	56M6553	4.23
● LTC2901-1CGN#PBF	Active Low Open Drain	0.4	16-SSOP	56M6572	4.67
● LTC2901-3CGN#PBF	Active Low Open Drain	4.75	16-SSOP	56M6588	4.67
● LTC2908CTS8-B1#TRMPBF	Active Low	0.5	8-TSOT-23	59M8270	5.81
● LTC2910CGN#PBF	Active-High, Active-Low	0.5	16-SSOP	56M6824	6.43
● LTC2911CTS8-5#TRMPBF	Active-Low	0.5	8-TSOT-23	24T2733	3.74
● LTC2911CTS8-4#TRMPBF	Active-Low	1.122	8-TSOT-23	24T2732	2.17
● LTC2911CTS8-3#TRMPBF	Active-Low	1.683	8-TSOT-23	24T2731	2.17
● LTC2911CTS8-2#TRMPBF	Active-Low	2.338	8-TSOT-23	24T2730	2.17
● LTC2911CTS8-1#TRMPBF	Active-Low	4.675	8-TSOT-23	24T2729	3.74
● LTC2932CF#PBF	Active-Low	4.75	20-TSSOP	79M3537	5.77
● LTC2935CDC-3#PBF	Active-Low	2.44	8-DFN	24R8509	2.71
● LTC2935CDC-4#PBF	Active-Low	2.44	8-DFN	24R8510	2.71
● LTC2935CTS8-3#PBF	Active-Low	2.44	8-SOT-23	24R8511	1.74
● LTC2935CTS8-4#PBF	Active-Low	2.44	8-SOT-23	24R8512	2.74
● LTC2935IDC-3#PBF	Active-Low	2.44	8-DFN	24R8513	3.12
● LTC2935IDC-4#PBF	Active-Low	2.44	8-DFN	24R8514	3.12
● LTC2935ITS8-3#PBF	Active-Low	2.44	8-SOT-23	24R8515	3.12
● LTC2935ITS8-4#PBF	Active-Low	2.44	8-SOT-23	24R8516	2.00
● LTC690CS8#PBF	Active Low	4.65	8-SOIC	57M0147	6.94
● LTC691CSW#PBF	Active Low	4.75	16-SOIC	57M0319	8.14
● LTC1326CMS8-2.5#PBF	Active High/Low	0.4	8-MSOP	56M0289	4.66
● LTC1326CS8#PBF	Active High/Low	4.725	8-SOIC	56M0300	4.42
● LTC1326CS8-2.5#PBF	Active High/Low	2.985	8-SOIC	56M0297	4.42
● LTC2905HTS8#PBF	Open Drain	4.75	8-TSOT-23	55R1038	2.46
● LTC1726IS8-5#PBF	Active-Low, Open-Drain	4.675	8-SOIC	56M3462	4.13
● LTC2901-1IGN#PBF	Active-Low, Open-Drain	0.4	16-SSOP	56M6576	3.40
● LTC2960IDC-1#PBF	Active Low	400	8-DFN	93T2013	2.81
● LTC2960IDC-2#PBF	Active Low	400	8-DFN	93T2014	2.81
● LTC2960IDC-3#PBF	Active Low	400	8-DFN	93T2015	4.26
● LTC2960IDC-4#PBF	Active Low	400	8-DFN	93T2016	4.26
● LTC2960ITS8-1#PBF	Active Low	400	8-TSOT-23	93T2017	4.26
● LTC2960ITS8-2#PBF	Active Low	400	8-TSOT-23	93T2018	2.81
● LTC2960ITS8-3#PBF	Active Low	400	8-TSOT-23	93T2019	2.81
● LTC2960ITS8-4#PBF	Active Low	400	8-TSOT-23	93T2020	2.81

(101585)

MICROPOWER VOLTAGE DETECTORS

RoHS Compliant Available

MICROCHIP

Features:
- Resets Microcontroller in a power loss event
- Operating Temperature Range: -40°C to +125°C
- Supply Voltage Range: 1V to 5.5V

Mfg. Part No.	Threshold Voltage (V)	# of Supervisors/ Monitors	Supply Current (µA)	Package	Stock No.	Price Each 1-25
ACTIVE-LOW / OPEN DRAIN						
MCP131-270E/TO	2.63	1	1	3-TO-92	43J9493	0.50
MCP131T-270E/TT	2.63	1	1	3-SOT-23	43J9501	0.50
MCP111T-240E/LB	2.32	1	1	3-SC-70	56J7325	0.45
MCP111T-270E/TT	2.63	1	1	3-SOT-23	56J7328	0.45
MCP111T-290E/LB	2.9	1	1	3-SC-70	84R5162	0.45
MCP111T-290E/TT	2.9	1	1.75	3-SOT-23B	84R5163	0.45
MCP111-300E/TO	2.93	1	1	3-TO-92	56J7321	0.45
MCP111T-300E/LB	2.93	1	1	3-SC-70	56J7331	0.45
MCP111-315E/TO	3.08	1	1	3-TO-92	56J7322	0.45
MCP111T-315E/LB	3.08	1	1	3-SC-70	56J7333	0.45
MCP121-315E/TO	3.08	1	1	3-TO-92	43J9476	0.50
MCP121T-315E/TT	3.08	1	1	3-SOT-23	43J9486	0.50
MCP131-315E/TO	3.08	1	1	3-TO-92	43J9495	0.50
MCP131T-315E/TT	3.08	1	1	3-SOT-23	43J9505	0.50
MCP111T-450E/LB	4.38	1	1	3-SC-70	84R5164	0.45
MCP111T-450E/TT	4.38	1	1.75	3-SOT-23B	84R5165	0.45
MCP120T-460I/TT	4.475	1	45	3-SOT-23	23C2795	0.45
MCP130-460DI/TO	4.475	1	45	3-TO-92	96K3700	0.45
MCP111-475E/TO	4.63	1	1	3-TO-92	56J7324	0.45
MCP111T-475E/LB	4.63	1	1	3-SC-70	56J7337	0.45
MCP111T-475E/TT	4.63	1	1	3-SOT-23	37J1622	0.45
MCP121-475E/TO	4.63	1	1	3-TO-92	43J9478	0.50
MCP131-475E/TO	4.63	1	1	3-TO-92	43J9497	0.50
MCP131T-475E/TT	4.63	1	1	3-SOT-23	43J9509	0.50
MCP130T-485I/TT	4.725	1	45	3-SOT-23	23C2819	0.45
ACTIVE-LOW / PUSH-PULL						
TCM809ZVNB713	2.32	1	12	3-SOT-23B	68H9553	0.34
MCP112T-240E/LB	2.32	1	1	3-SC-70	56J7346	0.45
MCP112T-240E/TT	2.32	1	1	3-SOT-23	56J7347	0.45
MCP102-270E/TO	2.63	1	1	3-TO-92	43J9433	0.50
MCP102T-270E/TT	2.63	1	1	3-SOT-23	43J9441	0.50
MCP112T-270E/LB	2.63	1	1	3-SC-70	56J7348	0.45
TCM809RVNB713	2.63	1	12	3-SOT-23B	92C5465	0.34
MCP112T-290E/LB	2.9	1	1	3-SC-70	84R5166	0.45
MCP112T-290E/TT	2.9	1	1.75	3-SOT-23B	84R5167	0.45
MCP112T-300E/LB	2.93	1	1	3-SC-70	56J7352	0.45
MCP112T-300E/TT	2.93	1	1	3-SOT-23	56J7353	0.45
TCM809SVLB713	2.93	1	12	3-SC-70	92C5466	0.34
MCP102T-315E/TT	3.08	1	1	3-SOT-23	43J9445	0.50
MCP112-315E/TO	3.08	1	1	3-TO-92	56J7343	0.45
MCP112T-315E/LB	3.08	1	1	3-SC-70	56J7354	0.45
MCP112T-315E/TT	3.08	1	1	3-SOT-23	56J7355	0.45
TCM809TVLB713	3.08	1	12	3-SC-70	92C5468	0.34
MCP112-450E/TO	4.38	1	1.75	3-TO-92	56J7344	0.45
MCP112T-450E/LB	4.38	1	1	3-SC-70	84R5168	0.45
MCP112T-450E/TT	4.38	1	1.75	3-SOT-23B	84R5169	0.45
TCM809MVLB713	4.38	1	12	3-SC-70	92C5462	0.34
TCM809MVNB713	4.38	1	12	3-SOT-23B	92C5463	0.34
MCP100T-460I/TT	4.475	1	45	3-SOT-23	23C2763	0.34
MCP102T-475E/TT	4.63	1	1	3-SOT-23	43J9449	0.50
MCP112T-475E/LB	4.63	1	1	3-SC-70	56J7358	0.45
MCP112T-475E/TT	4.63	1	1	3-SOT-23	56J7359	0.45
TCM809LVNB713	4.63	1	12	3-SOT-23B	92C5460	0.34
MCP100-485DI/TO	4.725	1	45	3-TO-92	23C2761	0.34
MCP100T-485I/TT	4.725	1	45	3-SOT-23	23C2764	0.34
ACTIVE-HIGH / PUSH-PULL						
TCM810ZVLB713	2.32	1	12	3-SC-70	72C4335	0.34
TCM810ZVNB713	2.32	1	12	3-SOT-23B	56J8232	0.34
TCM810RVLB713	2.63	1	12	3-SC-70	72C4333	0.34
TCM810RVNB713	2.63	1	12	3-SOT-23B	92C5475	0.34
TCM810SVLB713	2.93	1	12	3-SC-70	72C4334	0.34
TCM810SVNB713	2.93	1	12	3-SOT-23B	92C5476	0.34
TCM810TVLB713	3.08	1	12	3-SC-70	92C5478	0.34
TCM810TVNB713	3.08	1	12	3-SOT-23B	92C5479	0.34
TCM810JVNB713	4	1	12	3-SOT-23B	56J8231	0.34
TCM810MVLB713	4.38	1	12	3-SC-70	92C5473	0.34
TCM810MVNB713	4.38	1	12	3-SOT-23B	92C5474	0.34
MCP101T-460I/TT	4.475	1	45	3-SOT-23	23C2774	0.34

➤ CONTINUED ➤

MICROPOWER VOLTAGE DETECTORS (CONT.)

Mfg. Part No.	Threshold Voltage (V)	# of Supervisors/ Monitors	Supply Current (µA)	Package	Stock No.	Price Each 1-25
ACTIVE-HIGH / PUSH-PULL						
TCM810LVLB713	4.63	1	12	3-SC-70	92C5470	0.34
TCM810LVNB713	4.63	1	12	3-SC-70	92C5471	0.34
MCP101T-485I/TT	4.725	1	45	3-SOT-23	23C2775	0.34

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MICROPOWER VOLTAGE SUPERVISORS

RoHS Compliant Available

MICROCHIP

Features
- Ultra low supply current: 1.75µA
- Active-Low RST pin
- 120ms typical reset delay timer
- Available in SOT23-3, TO-92 and SC70 packages
- Lead Free Packaging

Mfg. Part No.	Threshold Voltage (V)	Package	Tape Cut Stock No.	Tape Cut Price Each 1-25
PUSH PULL OUTPUT				
MCP102-195I/TO	1.9	3-TO-92	43J9431	0.50
MCP102-240E/TO	2.32	3-TO-92	43J9432	0.50
MCP102T-240E/TT	2.32	3-SOT-23	43J9439	0.50
MCP102T-300E/TT	2.93	3-SOT-23	43J9443	0.50
MCP102-300E/TO	2.93	3-TO-92	43J9434	0.50
TCM809JVLB713	4	3-SC-70	92C5458	0.34
MCP101-450DI/TO	4.375	3-TO-92	19C7136	0.34
MCP102-450E/TO	4.38	3-TO-92	43J9436	0.50
MCP102T-450E/TT	4.38	3-SOT-23	43J9447	0.50
OPEN DRAIN OUTPUT				
MCP121-195I/TO	1.9	3-TO-92	43J9472	0.50
MCP131-195I/TO	1.9	3-TO-92	43J9491	0.50
MCP131T-195I/TT	1.9	3-SOT-23B	88H9756	0.50
MCP121-240E/TO	2.32	3-TO-92	43J9473	0.50
MCP121T-240E/TT	2.32	3-SOT-23	43J9480	0.50
MCP131-240E/TO	2.32	3-TO-92	43J9492	0.50
MCP131T-240E/TT	2.32	3-SOT-23	43J9499	0.50
MCP121T-270E/TT	2.63	3-SOT-23	43J9482	0.50
MCP121-270E/TO	2.63	3-TO-92	43J9474	0.50
MCP121-300E/TO	2.93	3-TO-92	43J9475	0.50
MCP121T-300E/TT	2.93	3-SOT-23B	84R5170	0.50
MCP131-300E/TO	2.93	3-TO-92	43J9494	0.50
MCP131T-300E/TT	2.93	3-SOT-23B	84R5172	0.50
MCP131T-450E/TT	4.38	3-SOT-23	43J9507	0.50
MCP121T-450E/TT	4.38	3-SOT-23B	84R5171	0.50
MCP131-450E/TO	4.38	3-TO-92	43J9496	0.50

(83626)

MICROPROCESSOR RESET CIRCUITS

RoHS Compliant Available

TEXAS INSTRUMENTS

Applications:
- Low battery detection
- Microprocessor reset controller
- Power fail indicator
- Battery backup detection

Mfg. Part No.	Reset Threshold Voltage (V)	Output Current Max. (mA)	Max. Supply Voltage (V)	Package	Stock No.	Price Each 1-9
LM8365BALMF27/NOPB	2.7	1	6	5-SOT-23	41K6424	0.80
LM3704XCMM-308/NOPB	3.08	...	6	9-SMD	41K4957	0.86
LP3470IM5-2.63/NOPB	2.63	...	6	5-SOT-23	41K7335	1.63
LP3470IM5-3.08/NOPB	3.08	10	5	5-SOT-23	41K7338	1.63

(167430)

SUPERVISORY ICS

RoHS Compliant Available

TEXAS INSTRUMENTS

Applications:
- Microprocessor systems
- Computers
- Controllers
- Intelligent instruments
- Portable/Battery-Powered equipment

Mfg. Part No.	Supervised Voltage (V)	Reset Timeout (ms)	Iq (µA)	Package	Stock No.	Price Each 1-9
LM3724IM5-3.08/NOPB	3.08	190	6	5-SOT-23	41K5031	2.04

(167350)

VOLTAGE REFERENCES

RoHS Compliant Available

TEXAS INSTRUMENTS

Applications:
- Instrumentation and test equipment
- Industrial process control
- Data acquisition systems
- Medical equipment

Mfg. Part No.	Ref. Volt. (V)	Output Current (mA)	Long Term Stability (ppm/1000hr)	Package	Stock No.	Price Each 1-9
● LM4120AIM5-1.8/NOPB	1.8	5	100	5-SOT-23	41K5424	2.04
● LM4120AIM5-2.0/NOPB	2.048	5	100	5-SOT-23	41K5425	2.04
● LM4120AIM5-2.5/NOPB	2.5	5	100	SOT-23	41K5426	0.86
● LM4120AIM5-3.0/NOPB	3	5	100	SOT-23	41K5427	2.04
● LM4120AIM5-3.3/NOPB	3.3	5	100	SOT-23	41K5428	2.04
● LM4120AIM5-4.1/NOPB	4.096	5	100	SOT-23	41K5429	2.04
● LM4120IM5-2.5/NOPB	2.5	5	100	SOT-23	41K5440	1.91
● LM4120IM5-3.0/NOPB	3	5	100	5-SOT-23	41K5441	1.91
● LM4120IM5-5.0/NOPB	5	5	100	5-SOT-23	41K5443	1.91
● LM4128AMF-2.5/NOPB	2.5	20	50	5-SOT-23	32M1108	2.45
● LM4128BMF-2.5/NOPB	2.5	20	50	5-SOT-23	32M1119	1.91
● LM4132AMF-2.5/NOPB	2.5	20	50	5-SOT-23	99K2466	3.10
● LM4132AMF-3.0/NOPB	3	20	50	5-SOT-23	13M1820	3.10
● LM4132AMF-3.3/NOPB	3.3	20	50	5-SOT-23	13M1822	3.10
● LM4132AMF-4.1/NOPB	4.1	20	50	5-SOT-23	13M1823	3.10
● LM4132BMF-2.5/NOPB	2.5	20	50	5-SOT-23	99K2467	2.72
● LM4132BMF-4.1/NOPB	4.096	20	50	5-SOT-23	32M1158	2.72
● LM4140ACM-1.0/NOPB	1.024	8	60	8-SOIC	41K5471	4.30
● LM4140ACM-1.2/NOPB	1.25	8	60	8-SOIC	41K5472	4.30
● LM4140ACM-2.5/NOPB	2.5	8	60	8-SOIC	41K5474	5.16
● LM4140BCM-1.0/NOPB	1.024	8	60	8-SOIC	41K5481	4.44
● LM4140BCM-2.5/NOPB	2.5	8	60	8-SOIC	41K5484	4.44
● LM4140BCM-4.1/NOPB	4.096	8	60	8-SOIC	41K5485	4.44
● LM4140CCM-1.0/NOPB	1.024	8	60	8-SOIC	41K5491	3.87
● LM4140CCM-1.2/NOPB	1.25	8	60	8-SOIC	41K5492	3.87
● LM4140CCM-2.5/NOPB	2.5	8	60	8-SOIC	41K5494	3.87
● LM4140CCM-4.1/NOPB	4.096	8	60	8-SOIC	41K5495	3.87

(70402)

CPU SUPERVISORS

RoHS Compliant Available

ON Semiconductor

Features:
- Temperature Range: -40°C to +85°C
- Serial, I2C Interface
- Low power CMOS technology

Mfg. Part No.	Threshold Voltage (V)	Supply Voltage (V)	Package/Case	Stock No.	Price Each
● CAT1025WI-30	3	2.7 to 5.5	8-SOIC	06R0168	1.82
● CAT1161WI-28-GT3	2.85	2.7 to 6	8-SOIC	08R5243	1.77
● CAT1162WI-45	4.5	2.7 to 6	8-SOIC	06R0326	1.57
● CAT1163WI-30-T3	3	2.7 to 6	8-SOIC	08R5247	2.22
● CAT1232LPV-GT3	4.62	1 to 5.5	8-SOIC	08R5248	1.43
● CAT1832V-G	2.88	1 to 5.5	8-SOIC	06R0457	1.23
● CAT706TVI-GT3	3.08	1.2 to 5.5	8-SOIC	08R5293	1.78
● CAT803TTBI-T3	3.08	1.2 to 5.5	3-SOT-23	08R5295	0.62
● CAT809SSDI-T3	2.93	1.2 to 5.5	3-SC-70	08R5296	0.72
● CAT809STBI-T3	2.93	1.2 to 5.5	3-SOT-23	08R5297	0.56
● CAT809TSDI-T3	3.08	1.2 to 5.5	3-SC-70	08R5298	0.65
● CAT809TTBI-T3	3.08	1.2 to 5.5	3-SOT-23	08R5299	0.46
● CAT810LTBI-T3	4.63	1.2 to 5.5	3-SOT-23	08R5300	0.81
● CAT811LTBI-T3	4.63	1.2 to 5.5	4-SOT-143	08R5301	0.57
● CAT811STBI-GT3	2.93	1.2 to 5.5	4-SOT-143	08R5302	0.57
● CAT811STBI-T3	2.93	1.2 to 5.5	4-SOT-143	08R5303	0.54
● CAT811TTBI-T3	3.08	1.2 to 5.5	4-SOT-143	08R5304	0.57
● CAT812LTBI-GT3	4.63	1.2 to 5.5	4-SOT-143	08R5305	0.54
● CAT812STBI-T3	2.93	1.2 to 5.5	4-SOT-143	08R5306	0.56
● CAT823TTDI-GT3	3.08	1.2 to 5.5	5-TSOT-23	08R5307	0.93

(148501)

UNIVERSAL VOLTAGE MONITORS

RoHS Compliant Available

ON Semiconductor

- Unique Mode Select Input Allows Channel Programming
- Over, Under and Window Voltage Detection
- Positive and Negative Voltage Detection
- Fully Functional at 2.0V for Positive Voltage Sensing, 4.0V for Negative Voltage Sensing
- Pinned Out 2.54V Reference with Current Limit Protection
- Low Standby Current
- Open Collector Outputs for Enhanced Device Flexibility

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● MMBZ20VALT1G	Universal Voltage Monitor	3-SOT-23	98H0763	0.25

(74518)

VOLTAGE SUPERVISORY CIRCUITS

RoHS Compliant Available

ON Semiconductor

Mfg. Part No.	Reset Threshold Voltage (V)	Operating Temperature Range	Package	Stock No.	Price Each 1-9
● MAX708RESA-TG	2.63	-40°C to +85°C	8-SOIC	41K9962	0.88
● MAX708SESA-TG	2.93	-40°C to +85°C	8-SOIC	26K3663	0.81
● MAX708TCUA-TG	3.08	-40°C to +85°C	8-Micro	71J5240	0.88
● MAX708TESA-TG	3.08	-40°C to +85°C	8-SOIC	26K3664	0.88
● MAX809RTRG	2.63	-40°C to +105°C	3-SOT-23	45J0768	0.56
● MAX809STRG	2.93	-40°C to +105°C	3-SOT-23	98H0579	0.45
● MAX809TTRG	3.08	-40°C to +105°C	3-SOT-23	45J0769	0.53
● MAX810MTRG	4.38	-40°C to +105°C	3-SOT-23	71J5243	0.53
● MAX810RTRG	2.63	-40°C to +105°C	3-SOT-23	41K9966	0.65
● MAX810TTRG	3.08	-40°C to +105°C	3-SOT-23	41K9967	0.65
● MC33064D-5G	4.59	-40°C to +85°C	8-SOIC	26K3992	0.76
● MC33064D-5R2G	4.59	-40°C to +85°C	8-SOIC	98H0668	0.76
● MC33064D-5R2G	4.59	-40°C to +85°C	8-SOIC	98H0668	0.76
● MC33064P-5G	4.59	-40°C to +85°C	3-TO-92	45J1158	0.69
● MC33064P-5RPG	4.59	-40°C to +85°C	3-TO-92	26K3995	0.78
● MC33161DG	1.27	-40°C to +105°C	8-SOIC	98H0679	1.16
● MC33164P-5G	4.27	-40°C to +125°C	3-TO-92	98H0683	0.78
● MC34064D-5R2G	4.59	0°C to +70°C	8-SOIC	45J1210	0.71
● MC34064P-5G	4.59	0°C to +70°C	3-TO-92	45J1211	0.73
● MC34064P-5RAG	4.59	0°C to +70°C	3-TO-92	45J1212	0.71
● MC34161DG	1.27	0°C to +70°C	8-SOIC	98H0701	1.22
● MC34164D-5G	4.27	0°C to +70°C	8-SOIC	26K4049	0.81
● MC34164P-3G	2.65	0°C to +70°C	3-TO-92	71J5542	0.81
● MC34164P-5G	4.27	0°C to +70°C	3-TO-92	45J1224	0.79
● NCP301HSN45T1G	4.5	-40°C to +125°C	5-TSOP	26K4912	0.59
● NCP301LSN18T1G	1.8	-40°C to +125°C	5-SOT-23	45J1875	0.53
● NCP301LSN20T1G	2	-40°C to +125°C	5-TSOT-23	45J1876	0.53
● NCP301LSN27T1G	2.7	-40°C to +125°C	5-TSOT-23	98H0889	0.53
● NCP301LSN30T1G	3	-40°C to +125°C	5-TSOT-23	83H7652	0.53
● NCP301LSN45T1G	4.5	-40°C to +125°C	5-TSOP	98H0891	0.53
● NCP301LSN47T1G	4.7	-40°C to +125°C	5-TSOT-23	45J1877	0.63
● NCP302LSN30T1G	3	-40°C to +85°C	5-TSOP	88H4986	0.55
● NCP302LSN45T1G	4.5	-40°C to +85°C	5-TSOP	45J1882	0.53
● NCP303LSN09T1G	0.9	-40°C to +85°C	5-TSOT-23	45J1883	0.56
● NCP303LSN20T1G	2	-40°C to +85°C	3-TO-225AA	83H7654	0.53
● NCP303LSN30T1G	3	-40°C to +85°C	5-TSOP	83H7656	0.56
● NCP303LSN45T1G	4.5	-40°C to +85°C	5-TSOP	71J6598	0.53
● NCP303LSN47T1G	4.7	-40°C to +85°C	5-TSOT-23	26K4935	0.59
● NCP305LSQ27T1G	2.7	-40°C to +85°C	4-SC-82AB	83H7659	0.59
● NCP361SNT1G	...	-40°C to +85°C	5-TSOP	01P0135	0.77
● NCP803SN293T1G	2.93	-40°C to +105°C	3-SOT-23	26K4983	0.65
● NCP803SN308T1G	3.08	-40°C to +105°C	3-SOT-23	45J1977	0.66
● NCV33064D-5R2G	4.59	-40°C to +125°C	8-SOIC	26K5008	1.26

(39383)

SUPPLY VOLTAGE SUPERVISORS & RESET IC'S

RoHS Compliant Available

The TL7700A series are monolithic supply voltage supervisor IC's specifically designed for use as reset controllers in microcomputer and microprocessor systems.

Mfg. Part No.	V_{Supply} Max. (V)	Supply Current (µA)	Threshold Detection Voltage (Vcc)	Package	Stock No.	Price Each 1-9
● TL7705ACD1/A	18	3300	4.55	8-SOIC	89K1737	1.28

RESET IC'S

ST's expanding family of single voltage, Industry Standard Reset Circuits are available in 3-SOT23 and 4-SOT143 packages, providing Power-on Reset and Low-Voltage Detect.

Mfg. Part No.	Push Pull Activity Reset	Manual Reset	Threshold Detection Voltage (Vcc)	Package	Stock No.	Price Each 1-9
● STM809LWX6F	Active Low	No	2.63-4.63	3-SOT-23	89K1554	0.50
● STM809SWX6F	Active Low	No	2.63-4.63	3-SOT-23	89K1556	0.50
● STM809TWX6F	Active Low	No	2.63-4.63	3-SOT-23	89K1557	0.52
● STM811LW16F	Active Low	Yes	2.63-4.63	4-SOT-143	89K1558	0.83
● STM811RW16F	Active Low	Yes	2.63-4.63	4-SOT-144	89K1559	0.70
● STM811SW16F	Active Low	Yes	2.63-4.63	4-SOT-145	89K1560	0.74
● STM811TW16F	Active Low	Yes	2.63-4.63	4-SOT-146	89K1561	0.70
● STM812LW16F	Active High	Yes	2.63-4.63	4-SOT-147	89K1562	0.82

(83765)

SINGLE VOLTAGE SUPERVISOR CIRCUITS

RoHS Compliant Available

TEXAS INSTRUMENTS

STANDARD

Mfg. Part No.	Threshold Voltage (V)	Supply Range (V)	Reset Thresh. Accur. (%)	Package	Stock No.	Price Each 1-9
TL7705ACD	4.55	3.5 to 18	1.1	8-SOIC	08F9504	0.72
TL7705ACP	4.55	3.5 to 18	1.1	8-PDIP	60K6997	0.78
TL7705AID	4.55	3.5 to 18	1.1	8-SOIC	76C9353	0.72
TL7705AIDR	4.55	3.5 to 18	1.1	SOIC	76C9354	0.60
TL7712ACP	10.8	3.5 to 18	1.9	8-PDIP	68K5974	1.08
TL7715ACP	13.5	3.5 to 18	2.2	8-PDIP	67K1284	1.62
TLC7701ID	1.1	2 to 6	5.5	8-SOIC	74K3964	2.00
TLC7703ID	2.63	2 to 6	2.7	8-SOIC	74K3965	2.83
TLC7705ID	4.55	2 to 6	1.8	8-SOIC	35K1226	2.00
TLC7733IPW	2.93	2 to 6	2.4	8-TSSOP	76C7550	2.83
TLC7733IPWR	2.93	2 to 6	2.4	TSSOP	76C7551	2.38
TLC7733QPWR	3	2 to 6	2.4	8-TSSOP	76C7555	2.52
TPS3103E12DBVR	1.142	0.4 to 3.3	0.75	6-SOT-23	77C0250	2.45
TPS3103K33DBVR	2.941	0.4 to 3.3	0.75	6-SOT	77C0256	2.45
TPS3103K33DBVT	2.941	0.4 to 3.3	0.75	6-SOT	77C0257	2.86
TPS3125L30DBVR	2.64	0.85 to 3.3	2.7	5-SOT-23	77C0282	2.38
TPS3126E12DBVT	1.14	0.85 to 3.3	3.5	5-SOT	77C0284	2.45
TPS3619-33DGK	2.93	1.65 to 5.5	2	8-VSSOP	77C0359	2.83
TPS3801E18DCKR	1.71	1.6 to 4	2.3	5-SC70	77C0384	1.23
TPS3801K33DCKR	2.93	2 to 6	2	5-SOT	77C0387	1.23
TPS3801T50DCKR	4.00	2 to 6	2.3	5-SC70	77C0389	1.23
TPS3802K33DCKR	2.93	1.6 to 4	2	5-SOT	77C0390	1.23
TPS3803-01DCKR	1.226	1.3 to 6	1.5	5-SOT	77C0392	0.88
TPS3820-33DBVT	2.93	1.1 to 5.5	2.4	5-SOT	77C0414	1.73
TPS3823-30DBVR	2.63	1.1 to 5.5	2.3	5-SOT-23	96B3644	1.72
TPS3823-50DBVT	4.55	1.1 to 5.5	2	5-SOT	77C0420	1.76
TPS3824-30DBVR	2.63	1.1 to 5.5	2.3	5-SOT-23	96B3648	1.72
TPS3824-33DBVR	2.93	1.1 to 5.5	2.4	5-SOT-23	96B3649	1.72
TPS3824-50DBVR	4.55	1.1 to 5.5	2	SOT-23	96B3650	1.72
TPS3825-33DBVR	2.93	1.1 to 5.5	2.4	5-SOT	77C0425	1.62
TPS3825-33DBVT	2.93	1.1 to 5.5	2.4	5-SOT	77C0426	1.73
UCC2946D	1.235	2.1 to 5.5	2	8-SOIC	77C2227	3.96
AUTOMOTIVE						
TPS3808G01DBVR	0.405	1.7 to 6.5	1	6-SOT	21J9196	1.85
TPS3808G09DBVR	5	1.7 to 6.5	0.5	6-SOT-23	21J9198	1.85
TPS3808G09DBVT	0.84	1.7 to 6.5	0.5	6-SOT	21J9199	2.13
TPS3808G12DBVR	5	1.7 to 6.5	0.5	6-SOT-23	21J9200	1.85
TPS3808G12DBVT	1.12	1.7 to 6.5	0.5	6-SOT	21J9201	2.13
TPS3808G18DBVR	5	1.7 to 6.5	0.5	6-SOT-23	21J9204	1.85
TPS3808G18DBVT	5	1.7 to 6.5	0.5	6-SOT-23	21J9205	2.13
TPS3808G25DBVR	2.33	1.7 to 6.5	0.5	SOT-23	21J9206	1.85
TPS3808G25DBVT	5	1.7 to 6.5	0.5	6-SOT-23	21J9207	2.13
TPS3808G30DBVR	5	1.7 to 6.5	0.5	6-SOT-23	21J9208	1.85
TPS3836K33DBVT	2.93	1.6 to 6	2.6	5-SOT	77C0440	2.72
TPS3838K33DBVT	2.93	1.6 to 6	2.6	5-SOT	35K5016	2.72
TPS3808G33DBVR	3.07	1.7 to 6.5	0.5	6-SOT	21J9210	1.85
TPS3808G33DBVT	3.07	1.7 to 6.5	0.5	6-SOT	21J9211	2.13
TPS3808G50DBVR	4.65	1.7 to 6.5	0.5	6-SOT	21J9212	1.85
TPS3809I50DBVR	4.55	2 to 6	2.2	3-SOT	31C7122	0.79
TPS3809I50DBVT	4.55	2 to 6	2.2	3-SOT	19C9046	0.30
TPS3809J25DBVR	2.25	2 to 6	2.2	3-SOT	77C0399	0.79
TPS3809K33DBVR	2.93	2 to 6	2	3-SOT	77C0401	0.79
TPS3809K33QDBVRQ1	2.93	2 to 6	2	SOT-23	22H1375	0.93
TPS3809L30DBVR	2.64	2 to 6	2.3	3-SOT	77C0403	0.79
TPS3836E18DBVT	1.71	1.6 to 6	2.4	5-SOT	77C0434	2.72
HIGH RELIABILITY						
TPS3803-01MDCKREP	1.226	1.3 to 6	1.5	5-SC-70	46M1095	1.77
MILITARY						
TL7702ACD	2.53	3.5 to 18	2	8-SOIC	08F9502	0.72
TL7702ACP	2.53	3.5 to 18	2	8-PDIP	60K6996	0.78
TL7702AID	2.53	3.5 to 18	2	8-SOIC	52F2763	0.72
TL7702BID	2.53	3.6 to 18	2	8-SOIC	67K2882	0.72
TL7757CPK	4.55	1 to 7	2.6	3-SOT-89	73C4729	0.72

(9972)

MULTIPLE CIRCUIT VOLTAGE SUPERVISORS

RoHS Compliant Available

TEXAS INSTRUMENTS

DUAL VOLTAGE SUPERVISORS

Mfg. Part No.	Threshold Voltage (V)	Supply Range (V)	Reset Thresh. Accur. (%)	Package	Stock No.	Price Each 1-9
TPS3106K33DBVR	2.941	0.4 to 3.3	0.75	SOT-23	77C0262	2.45
TPS3106K33DBVT	2.941	0.4 to 3.3	0.75	6-SOT	77C0263	2.86
TPS3305-18DGN	2.93	2.7 to 6	2.7	8-HTSSOP	72C4111	2.87
TPS3306-18DGK	2.93	2.7 to 6	2.7	8-MSOP	77C0309	2.99
TPS3705-33D	2.93	2 to 6	1.9	8-SOIC	19C9040	2.17
TPS3805H33DCKR	3.05	1.3 to 6	1.5	5-SC70	77C0394	1.15
TRI VOLTAGE SUPERVISORS						
TPS3307-18D	2.93	2 to 6	2.7	8-SOIC	35K5015	3.10
TPS3307-18DGNR	1.68	2 to 6	2.7	8-MSOP	77C0324	2.99
TPS3307-33DGN	4.55	2 to 6	2.7	8-HTSSOP	77C0331	3.10
TPS3307-33DGNR	4.67	2 to 6	2.7	8-MSOP	77C0332	2.99
QUAD VOLTAGE SUPERVISORS						
TPS386000RGPT	0.4	1.8 to 6.5	1	20-QFN	33R2476	2.99
UC2903DW	2.5	8 to 40	3	18-SOIC	25C1482	6.25
12-CHANNEL VOLTAGE SUPERVISORS						
UCD90120RGCT	...	3 to 3.6	2.4	64-VQFN	27R0202	12.81

DEVELOPMENT TOOLS

Mnf. Part No.	Description	Supported Devices	Stock No.	Price Each
TPS386000EVM	TPS386000 Evaluation Module	TPS386000	50R8514	49.81
TPS386040EVM	TPS386040 Evaluation Module	TPS386040	50R8515	49.98

(165095)

MIXERS

RoHS Compliant Available

ANALOG DEVICES

The **AD607** is a low power receiver IF subsystem - It consists of a mixer, IF amplifiers, I and Q demodulators, a phase-locked quadrature oscillator, AGC detector, and a biasing system with external power-down.
The **AD8343** is a high-performance broadband high IP3 active mixer, with very low intermodulation distortion and an integrated LO driver.

Mfg. Part No.	Frequency (MHz)	Supply Current (mA)	Supply Voltage (V) Min.	Supply Voltage (V) Max.	Package	Stock No.	Price Each 1-9
AD831APZ	400	100	4.5	5.5	20-PLCC	59K6569	13.82
AD608ARZ	500	7.3	3	5.5	16-SOIC	59K4385	5.93
AD8343ARUZ	500	50	4.5	5.5	14-TSSOP	19M8898	8.49
AD9874ABST	300	26.5	2.7	3.6	48-LQFP	53H7167	26.34
AD8342ACPZ-REEL7	286	98	4.75	5.25	16-LFCSP	04P2161	9.11

(89805)

RFICs

RoHS Compliant Available

ANALOG DEVICES

ANALOG DEVICES
SHORT RANGE RF TRANSCEIVER

RF/IF - MODULATORS

Mfg. Part No.	Supply Voltage Range (V)	RF Freq. (MHz)	Supply Current (mA)	Package	Stock No.	Price Each 1-9
AD630ARZ	5 to 16.5	DC to 2	5	20-WSOIC	19M8827	20.80
AD630KNZ	5 to 16.5	DC to 2	5	20-PDIP	59K4437	30.80
AD8345AREZ	2.7 to 5.5	250 to 1	65	16-TSSOP	19M8899	9.39
AD8346ARUZ	2.7 to 5.5	800 to 2.5	45	16-TSSOP	19M8900	10.19
RF/IF - DEMODULATORS						
AD8347ARUZ	2.7 to 5.5	800 to 2.7	64	28-TSSOP	59K6648	10.94
AD8348ARUZ	2.7 to 5.5	50 to 1	58	28-TSSOP	19M0952	9.37
DDS MODULATORS						
AD5933YRSZ	5.5	DC to 0.1	17	16-SSOP	06M5088	24.89
AD9832BRUZ	5.5	DC to 25	15	16-TSSOP	19M1013	9.69
AD9833BRMZ	5.5	DC to 25	5.5	10-MSOP	19M1014	9.07
AD9834BRUZ	5.5	DC to 75	8.7	20-TSSOP	19M1015	9.92
AD9850BRSZ	5.25	DC to 125	96	28-SSOP	88H0344	21.78
AD9851BRSZ	5.25	DC to 180	130	28-SSOP	19M8949	24.45
AD9852ASVZ	3.465	DC to 300	815	80-TQFP	46M5307	37.80
AD9859YSVZ	1.89	DC to 400	20	48-TQFP	59K7492	19.77
AD9913BCPZ	1.8	DC to 100	46.5	32-LFCSP	71M1885	17.00
ADF7020BCPZ	3.6	DC to 862	2	48-LFCSP	59K1141	5.47

CONTINUED

RFICs (CONT.)

RF MIXERS

Mfg. Part No.	Supply Voltage Range (V)	RF Freq. (MHz)	Supply Current (mA)	Package	Stock No.	Price Each 1-9
ADRF6601ACPZ-R7	5.25	750 to 1160	97	40-LFCSP	92T3198	19.59
ADRF6602ACPZ-R7	5.25	1550 to 2150	97	40-LFCSP	82T5467	19.59
ADRF6603ACPZ-R7	5.25	2100 to 2600	97	40-LFCSP	92T3199	19.59
RF AMPLIFIERS						
ADL5565ACPZ-R7	5.2	2100 to 2600	97	16-LFCSP	67T0280	4.69
RF TRANSCEIVERS						
ADF7023BCPZ	3.6	431 to 928	...	32-LFCSP	91R2559	6.01
RF DETECTORS						
ADL5511ACPZ-R7	5.25	DC to 6000	21.5	16-LFCSP	67W3133	14.87

(88712)

RF DRIVER AMPLIFIER

RoHS Compliant Available

ANALOG DEVICES

Features:
- Gain of 14.6 dB at 2140 MHz
- OIP3 of 43.1 dBm at 2140 MHz
- P1dB of 29.1 dBm at 2140 MHz
- Noise figure of 3.8 dB

Applications:
- Wireless infrastructure
- Automated test equipment
- ISM/AMR applications

Mfg. Part No.	Supply Voltage	Supply Current (mA)	Frequency Range	Package	Stock No.	Price Each 1-9
ADL5324ARKZ-R7	3.15V to 5.25V	140	400MHz to 4GHz	3-SOT-89	94T2512	7.54

(207469)

MIXER ICs

RoHS Compliant Available

LINEAR TECHNOLOGY

A broad selection of high linearity upconverting and downconverting active mixers designed to meet the performance of wireless basestations and cable infrastructure equipment.

Mfg. Part No.	Type	Freq. Max.	Package	Stock No.	Price Each 1-24
LT5522EUF#PBF	Downconverting	2.7 GHz	16-QFN	57M8796	10.41
LTC5542IUH#PBF	Downconverting	2.7 GHz	20-QFN	68R1401	16.02
LT5560EDD#PBF	Downconverting	4 GHz	8-DFN	57M8837	3.15
LTC5544IUF#PBF	Downconverting	6 GHz	16-QFN	93T2024	12.10
LTC5540IUH#PBF	Downconverting	1.3 GHz	20-QFN	70R5706	13.89
LT5578IUH#PBF	Upconverting	950 MHz	24-QFN	24R3358	10.88

(101588)

MODULATORS/ DEMODULATORS

RoHS Compliant Available

ON Semiconductor

- Excellent Carrier Suppression: -65dB Typ. @ 0.5MHz, -50dB Typ. @ 10MHz
- Adjustable Gain and Signal Handling
- Balanced Inputs and Outputs
- High Common Mode Rejection: -85dB Typ.

Mfg. Part No.	Supply Voltage (V)	Bias Current Max. (mA)	Input Offset Current Max. (mA)	Package	Stock No.	Price Each 1-9
MC1496DG	10	10	7	14-SOIC	26K3982	0.92
MC1496DR2G	10	10	7	14-SOIC	45J1148	0.95

(74514)

EMBEDDED DESIGN TOOLS

IDEs, Compilers, Debuggers and programming tools for all your MCU/DSP/FPGA needs.

newark.com/dev-tools-software

(196530)

QUADRATURE MODULATOR IC's

RoHS Compliant Available

TEXAS INSTRUMENTS

Features:
- Very Low Noise Floor: –163 dBm/Hz · CDMA: IS95, UMTS, CDMA2000, TD-SCDMA
- OPI3 of 23 dBm · TDMA: GSM, IS-136, EDGE/UWC-136
- P1dB of 9 dBm · Wireless Local Loop
- Wireless MAN Wideband Transceivers · Unadjusted Carrier Feedthrough of –40 dBm
- Unadjusted Side-Band Suppression of –40 dBc
- Single Supply: 4.5 V–5.5 V Operation
- Silicon Germanium Technology

The **TRF370x** series consists of very low-noise direct quadrature modulators, capable of converting complex modulated signals from baseband or IF directly up to RF. The TRF370x is ideal for high-performance direct RF modulation from 400 MHz up to 4 GHz. The modulators are implemented as a double-balanced mixer. The RF output block consists of a differential to single-ended converter and an RF amplifier capable of driving a single-ended 50-W load without any need of external components. The **TRF371109** is a highly linear direct-conversion quadrature receiver. The TRF371109 integrates balanced I and Q mixers, LO buffers, and phase splitters to convert an RF signal directly to i and Q baseband. The on-chip programmable gain amplifiers allow adjustment of the output signal level without the need for external variable gain (attenuator) devices.

Mfg. Part No.	Frequency Min. to Max.	Package	Stock No.	Price Each 1-9
TRF370315IRGET	0.4-GHz to 4-GHz	24-QFN	14M2528	10.67
TRF370333IRGET	0.4-GHz to 4-GHz	24-QFN	18M7792	10.67
TRF370417IRGET	0.05-GHz to 6-GHz	24-VQFN	78R4088	19.46
DIRECT DOWNCONVERSION RECEIVER				
TRF371109IRGZT	0.3-GHz to 1.7-GHz	48-VQFN	24T4839	21.52

DEVELOPMENT TOOLS

Mfg. Part No.	Description	Stock No.	Price Each
TRF372017EVM	TRF372017 Quadrature Modulator Evaluation Module	13T5974	305.00
TRF371109EVM	TRF371109 Downconversion Receiver Evaluation Module	24T4837	305.00

(89675)

RF DEMODULATORS

RoHS Compliant Available

ANALOG DEVICES

Applications:
- QAM/QPSK RF/IF demodulators
- Cellular W-CDMA/CDMA/CDMA2000
- Microwave point-to-(multi)point radios
- Broadband wireless and WiMAX

Mfg. Part No.	Frequency (MHz)	Supply Voltage Range	Supply Current (mA)	Package	Stock No.	Price Each 1-4
ADRF6806ACPZ-R7	50 to 525	4.75V to 5.25V	86	40-LFCSP	92T3200	19.76

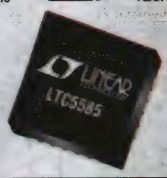
(203718)

WIDEBAND IQ DEMODULATOR

RoHS Compliant Available

LINEAR TECHNOLOGY

Features
- Single-Ended RF with On-Chip Transformer
- Shutdown Mode



Applications:
- LTE/W-CDMA/TD-SCDMA Base Station Receivers
- Wideband DPD Receivers
- Point-To-Point Broadband Radios
- High Linearity Direct Conversion I/Q Receivers
- Image Rejection Receivers

Mfg. Part No.	Frequency Range	IIP3 (dB)	Noise Figure (dB)	Package	Stock No.	Price Each 1-24
LTC5585IUF#PBF	700MHz to 3GHz	28.7	12.7	24-QFN	82T3951	12.78
LTC5584IUF#PBF	30MHz to 1.4GHz	33	9.9	24-QFN	94T1322	12.08

(201299)

RMS DETECTORS

RoHS Compliant Available

ANALOG DEVICES

The **AD8361 series TruPwr™ Detector** is a mean-responding power detector for use in high frequency receiver and transmitter signal chains. It is intended for true power measurement of simple and complex waveforms. The output is a linear-responding DC voltage. The **AD8362 series** is a true rms-responding power detector. It is intended for use in a variety of high frequency communication systems and in instrumentation requiring an accurate response to signal power. The output is linear in decibels. Both series are particularly useful for measuring high crest-factor (high peak-to-rms ratio) signals such as CDMA and W-CDMA. Operating temperature range: -40°C to 85°C.

Mfg. Part No.	Supply Voltage (V) Min	Supply Voltage (V) Max	Supply Current (mA)	Freq. Max (MHz)	Dyn. Range (dB)	Accuracy (±)	Package	Stock No.	Price Each 1-9
AD8361ARMZ	2.7	5.5	1.1	2.5	30	0.25 dB	8-MSOP	19M8902	8.40
AD8362ARUZ	4.5	5.5	20	3.8	60	0.5 dB	16-TSSOP	19M8903	12.64
ADL5505ACBZ-P7	2.5	3.3	1.8	6000	35	0.25 dB	4-WLCSP	79R5522	6.05

(89810)

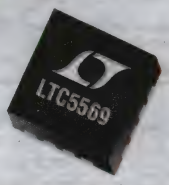
ACTIVE DOWNCONVERTING MIXER WITH WIDEBAND IF

RoHS Compliant Available

LINEAR TECHNOLOGY

Features:
- 1.9dB Conversion Gain
- LO Input 50Ω Matched when Shutdown
- Very Small Solution Size
- –40°C to 105°C Operation (TC)

Applications:
- Wireless Infrastructure Receivers
- DPD Observation Receivers
- CATV Infrastructure



The **LTC®5567** is optimized for RF downconverting mixer applications that require wide IF bandwidth. The part is also a pin-compatible upgrade to the **LT5557** active mixer, offering higher linearity and 1dB compression, wider bandwidth, and lower output spurious levels. Integrated RF and LO transformers and LO buffer amplifiers allow a very compact solution.
The **LTC®5569** dual active downconverting mixer is optimized for diversity and MIMO receiver applications that require low power and small size. Each mixer includes an independent LO buffer amplifier, active mixer core, and bias circuit with enable pin. The symmetry of the IC assures that a phase and amplitude coherent LO is applied to each mixer.

Mfg. Part No.	Frequency	Supply Voltage	Package	Stock No.	Price Each 1-24
LTC5567IUF#PBF	300MHz to 4GHz	3V to 3.6V	16-QFN	94T1320	13.89
LTC5569IUF#PBF	300MHz to 4GHz	3V to 3.6V	16-QFN	59T5730	12.14

(207792)

HIGH LINEARITY DIFFERENTIAL RF/IF AMPLIFIER/ADC DRIVER

RoHS Compliant Available

LINEAR TECHNOLOGY

Applications:
- Differential ADC Driver
- Differential IF Amplifier
- OFDM Signal Chain Amplifier
- 50Ω Balanced IF Amplifier
- 75Ω CATV Amplifier
- 700 MHz to 800MHz LTE Amplifier

Features:
- Insensitive to V_{CC} Variation
- 100Ω Differential Gain-Block Operation
- Input/Output Internally Matched to 100Ω Diff

Mfg. Part No.	High OIP3 BW (MHz)	Gain Range	OIP3 (dBm)	Package	Stock No.	Price Each 1-24
LTC6430AIUF-15#PBF	20 to 1600	15.2dB	50	24-QFN	64W5990	13.67
LTC6430BIUF-15#PBF	20 to 1600	15.2dB	47	24-QFN	64W5992	7.92
LTC6400CUD-14#PBF	DC to 300	14dB	46.5	16-QFN	95M6520	6.43
LTC6401CUD-20#PBF	DC to 300	20dB	41	16-QFN	57M0114	5.94
LTC6403IUD-1#PBF	DC to 10	0 to 40dB	8.9	16-QFN	95M6536	4.47
LTC6405CUD#PBF	DC to 30	0 to 26dB	35.5	16-QFN	15N3551	6.96
LTC6405IUD#PBF	DC to 30	0 to 26dB	35.5	16-QFN	15N3555	5.48
LTC6404CUD-1#PBF	DC to 20	0 to 6dB	50 (10MHz)	16-QFN	75M4559	6.93
LTC6362CMS8#PBF	...	Resistor Set	...	8-MSOP	93T2025	3.26
LTC6362HDD#PBF	...	Resistor Set	...	8-DFN	24W5365	4.08
LTC6362HMS8#PBF	...	Resistor Set	...	8-MSOP	93T2026	4.08
LTC6362IMS8#PBF	...	Resistor Set	...	8-MSOP	93T2027	3.61
LT1994CDD#PBF	DC to 2	0 to >20dB	...	8-DFN	57M7735	3.32
LTC6406CUD#PBF	DC to 40	0 to 26dB	36.5	16-QFN	57M0126	6.93
LT1994CMS8#PBF	DC to 2	0 to >20dB	...	8-MSOP	57M7739	3.32
LT1994IDD#PBF	DC to 2	0 to >20dB	...	8-DFN	57M7743	3.83
LTC6409CUDB#PBF	DC to >400	0 to 52dB	48	10-QFN	78T3480	9.78
LTC6409CUDB#TRMPBF	DC to >400	0 to 52dB	48	10-QFN	24T2686	10.80
LTC6410IUD-6#PBF	DC to 150	6dB	32	16-QFN	75M4577	6.70
LTC6420CUDC-20#PBF	DC to 200	20dB	44	20-QFN	12P6568	11.04
LTC6421IUDC-20#PBF	DC to 200	20dB	39	20-QFN	95M6548	7.92

DEMO BOARDS

Mfg. Part No.	Description	Stock No.	Price Each 1-24
DC1774A-A	LTC6430-15 100MHz to 400MHz DEMO BOARD	85W2739	77.20
DC1774A-B	LTC6430-15 400MHz to 1GHz DEMO BOARD	85W2740	77.20

(210173)

RF POWER DETECTOR ICS

RoHS Compliant Available

LINEAR TECHNOLOGY

Linear Technology's high frequency products listed below include building blocks for wireless and cable infrastructure and RF power control for handsets.

RF SCHOTTKY PEAK DETECTORS WITH BUFFERED OUTPUT

Mfg. Part No.	Power Range	Input Frequency Range	Package	Stock No.	Price Each 1-24
LTC5505-1ES5#PBF	–28 dBm to 18 dBm	300 MHz to 3 GHz	5-SOT-23	61M3336	2.57
LTC5507ES6#PBF	–34 dBm to 14 dBm	100 kHz to 1 GHz	6-SOT-23	61M3338	3.21
LTC5508ESC6#PBF	-32 dBm to 12 dBm	300 MHz to 7 GHz	6-SC70	61M3339	3.08
LTC5509ESC6#PBF	-30 dBm to 6 dBm	300 MHz to 3 GHz	6-SC70	61M3340	2.91

PRECISION RF POWER DETECTORS

LTC5583IUF#PBF	-59 dBm to 4 dBm	40 MHz to 6 GHz	24-QFN	13T4038	20.31
LTC5582IDD#PBF	-57 dBm to 2 dBm	40 MHz to 10 GHz	10-DFN	78R8373	13.16
LTC5530ES6#PBF	-32 dBm to 10 dBm	300 MHz to 7 GHz	6-TSOT-23	61M3341	1.91

➤CONTINUED➤

RF POWER DETECTOR ICS (CONT.)

PRECISION RF POWER DETECTORS

Mfg. Part No.	Power Range	Input Frequency Range	Package	Stock No.	Price Each 1-24
LTC5532ES6#PBF	-32 dBm to 10 dBm	300 MHz to 7 GHz	6-TSOT-23	61M3343	3.24
LTC5535ES6#PBF	-32 dBm to 10 dBm	600 MHz to 7 GHz	6-TSOT-23	61M3344	3.35
LTC5536ES6#PBF	-26 dBm to 12 dBm	600 MHz to 7 GHz	6-TSOT-23	61M3345	4.72

MONOLITHIC RF LOG DETECTOR

LT5534ESC6#PBF	-58 dBm to 2 dBm	50 MHz to 3 GHz	6-SC70	61M3377	10.28
LT5538IDD#PBF	-75 dBm to 10 dBm	40 MHz to 3.8 GHz	8-DFN	01N6455	9.56
LT5537EDDB#PBF	-76 dBm to 14 dBm	10 MHz to 1 GHz	8-DFN	78T4144	6.22

(102096)

PLLs / FREQUENCY SYNTHESIZERS

RoHS Compliant Available

ANALOG DEVICES

These synthesizers are designed for use in a variety of communication applications featuring best in class performance, phase noise and integration.

ANALOG DEVICES SYNTHESIZER

PLLs / FREQUENCY SYNTHESIZERS

The **ADF41xx family** of frequency synthesizers can be used to implement local oscillators in the up-conversion and down-conversion sections of wireless receivers and transmitters. The **ADF4153** uses fractional-N PLL technology to achieve a 10 dB improvement in phase noise compared to devices based on integer-N technology. It is pin-compatible with the ADF4110/1/2/3 products. The **ADF4252** Fractional-N Synthesizer when combined with a VCO and loop filter forms a complete phased locked loop (PLL). This solution creates state-of-the-art LO's (local oscillator) for the upconversion and downconversion of RF signals in Wireless applications. The **ADF4360** family are fully integrated integer-N synthesizer and voltage-controlled oscillator (VCO), control of all the on-chip registers is through a simple 3-wire interface. The **ADF5001** divide by four prescaler is a low noise, low power, fixed RF divider block that can be used to divide down frequencies to a lower frequency suitable for input into a the PLL.

Mfg. Part No.	Supply (V)	Frequency (GHz)	Package	Stock No.	Price Each 1-9
ADF4007BCPZ	3.3	7.5	20-LFCSP	12M7712	5.39
ADF4106BCPZ	3.3	6	20-LFCSP	59K1019	5.59
ADF4106BRUZ	3.3	6	16-TSSOP	59K1022	5.52
ADF4113BRUZ	5.5	4	16-TSSOP	59K1034	5.71
ADF4118BRUZ	5.5	3	TSSOP	59K1043	4.52
ADF4150BCPZ	3.6	4.4	24-LFCSP	58T8821	5.59
ADF4150HVBCPZ	3.6	3	32-LFCSP	82T3642	5.95
ADF4151BCPZ	3.6	3.5	32-LFCSP	72T3493	5.79
ADF4153BCPZ	3.3	4	20-LFCSP	59K1046	5.71
ADF4153BRUZ	3.3	4	16-TSSOP	59K1049	5.92
ADF4156BCPZ	3.3	6	20-LFCSP	28M3571	6.26
ADF4156BRUZ	3.3	6	16-TSSOP	28M3574	6.26
ADF4360-0BCPZ	3.6	2.727	24-LFCSP	59K1097	7.03
ADF4360-1BCPZ	3.6	2.45	24-LFCSP	59K1100	6.79
ADF4360-3BCPZ	3.6	1.95	24-LFCSP	59K1108	6.79
ADF4360-4BCPZ	3.6	1.7	24-CSP	59K1111	7.03

PRESCALER

ADF5001BCPZ	3.6	18	16-LFCSP	58R3862	16.20

DIRECT DIGITAL SYNTHESIZERS (DDS)

The **AD9852** can be configured to serve as a synthesized LO agile clock generator and FSK/BPSK modulator. The **AD9858** coupled with an internal high-speed, high performance D/A converter forms a digitally-programmable, complete high-frequency synthesizer capable of generating a frequency-agile analog output sinewave at up to 400+ MHz. It is designed to provide fast frequency hopping and fine tuning resolution (32-bit frequency tuning word).

Mfg. Part No.	Freq.out (MHz)	I/O	Supply (V)	Bits	Package	Stock No.	Price Each 1-9
AD9834CRUZ	75	Serial	5.5	10bit	20-TSSOP	28M4203	11.15
AD9852ASTZ	100	Parallel, Serial	3.465	10bit	80-LQFP	59K7485	27.69
AD9858BSVZ	100	Parallel, Serial	3.165	10bit	100-TQFP	59K7489	69.19
AD9901KPZ	200	CMOS, TTL	7	...	20-PLCC	59K7524	7.50
AD9910BSVZ	1000	Parallel, Serial	1.89		100-TQFP	50M0843	55.33
AD9952YSVZ	400	Serial	1.89		48-TQFP	59K7547	27.29
AD9958BCPZ	500	Serial	1.89	10bit	56-LFCSP	59K7560	35.84

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
EVAL-ADF4150HVEB1Z	ADF4150HV PLL Synthesizer Evaluation Kit	82T3798	140.00

(68708)

WIDE DYNAMIC RANGE, HIGH SPEED, DIGITALLY CONTROLLED VGA

RoHS Compliant Available

ANALOG DEVICES

Applications:
- Differential ADC drivers
- High IF sampling receivers
- High output power IF amplification
- Instrumentation

Features:
- Wide input dynamic range
- Low power mode option
- Power-down control

Mfg. Part No.	No. of Channels	Description	Bandwidth (MHz)	Package	Stock No.	Price Each 1-9
● ADL5201ACPZ-R7	1	4.5V to 5.5V	700	24-LFCSP	82T5456	10.22
● ADL5202ACPZ-R7	2	4.5V to 5.5V	700	40-LFCSP	82T5457	13.01

(202165)

RF DIFFERENTIAL AMPLIFIERS

RoHS Compliant Available

ANALOG DEVICES

Applications:
- Differential ADC drivers
- Single-ended-to-differential conversion
- RF/IF gain blocks
- SAW filter interfacing

The **ADL5565** is a high performance differential amplifier optimized for RF and IF applications. The amplifier offers low noise of 1.5 nV/√Hz and excellent distortion performance over a wide frequency range making it an ideal driver for high speed 8-bit to 16-bit analog-to-digital converters (ADCs).

Mfg. Part No.	Supply Voltage	-3 dB BandWidth (MHz)	Supply Current (mA)	Package	Stock No.	Price Each 1-9
● ADL5565ACPZ-R7	2.8V to 5.2V	6 MHz	70	16-LFCSP	72T0887	8.58

(198296)

RF/IF AMPLIFIERS

RoHS Compliant Available

ANALOG DEVICES

Mfg. Part No.	-3 dB BW (MHz)	Gain Range (dB) Min	Gain Range (dB) Max	No. of Amps	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-9
● ADL5531ACPZ-R7	500	19.2	20.9	1	5.25	8-LFCSP	64M7465	3.91
● ADL5605ACPZ-R7	1000	...	23	1	5	16-LFCSP	59T9889	15.35
● ADL5535ARKZ-R7	1000	...	14.9	1	5.5	3-SOT-89	79R5523	4.59
● ADL5536ARKZ-R7	1000	...	18.1	1	5.5	3-SOT-89	79R5524	4.53
● ADL5320ARKZ-R7	2700	11.5	13.4	1	5.5	3-SOT-89	79R5520	5.81
● ADL5606ACPZ-R7	2700	...	24.7	1	5.25	16-LFCSP	59T9890	15.35
● ADL5601ARKZ-R7	4000	12.1	16.5	1	5.5	3-SOT-89	51R4597	4.41
● ADL5240ACPZ-R7	4000	17.6	22	1	5.25	32-LFCSP	59T9887	8.16
● ADL5243ACPZ-R7	4000	17.6	22	2	5.25	32-LFCSP	59T9888	11.47
● ADL5602ARKZ-R7	4000	...	18.5	1	5.5	3-SOT-89	79R5525	4.41
● ADL5541ACPZ-R7	6000	14.7	15.5	1	5.5	8-LFCSP	61M3948	3.91
● ADL5542ACPZ-R7	6000	11.2	20.8	1	5.5	8-LFCSP	61M3949	4.06
MIXER EQUIPED WITH IF AMPLIFIER & WIDEBAND LO AMPLIFIER								
● ADL5811ACPZ-R7	2800	...	7.5	1	5	32-LFCSP	59T9891	15.90

EVALUATION BOARD

Mfg. Part No.	Description	Stock No.	Price Each
● AD8432-EVALZ	AD8432, NOISE AMPLIFIER, EVALUATION BOARD	52R8165	135.94

(133594)

SiGe:C LOW NOISE AMPLIFIER W/BYPASS SWITCH

RoHS Compliant Available

freescale

Features:
- Standby Mode to Turn Off Device Completely
- Bias stabilized for device and temperature variations

The **MBC13720** is a high IP3, low nosie amplifier designed for 400 MHz to 2.4 GHz multi-standard wireless applications. The input and output match is external to allow maximum design flexibility. The LNA has two selectable gain settings as well as standby mode. The LNA will operate from a 2.5 to 3.0 V supply.

Mfg. Part No.	Frequency (MHz)	Supply Voltage	Package	Stock No.	Price Each 1-9
● MBC13720NT1	400MHz to 2.4GHz	2.3V to 3V	6-SOT-23	62K4801	0.89

(195541)

RFID SYSTEMS

RoHS Compliant Available

TEXAS INSTRUMENTS

RFID technology raises asset tracking to a new level. With TI-RFid tags, smart labels, and RFID readers end users enjoy faster, seamless transactions that are more secure than currently used systems.

Mfg. Part No.	Description	Stock No.	Price 1-4
READERS AND READER MODULES			
RI-RFM-007B-30	Series 2000 High Performance RFM	78M5085	325.00
RI-STU-251B-30	Series 2000 Reader S251B	89M2659	750.00
● RI-R6C-001A-03	HF Reader System Series 6000 S6700 Multi-Protocol Transceiver	89M2658	13.97
PACKAGED HF TRANSPONDERS			
● RF-HDT-DVBB-N2	Hi-Freq Overmolded Transponder w/ HF-I Plus Die	24R9934	2.31
● TRF7960RHBR	Multi-Standard Fully Integrated 13.56-MHz RFID AFE & Data Framing Reader System	82R7761	5.95
● RF-HDT-DVBE-N2	Hi-Freq Overmolded Transponder w/ HF-I Standard die	24R9935	2.04
RI-TH1-CB1A-00	13.56-MHz Vicinity Card Transponder	30M1669	4.90
Tag-it™ HF-I PLUS INLAYS			
● RI-I11-112A-03	HF-I Plus Transponder Inlays Square	30M1645	0.98
LF TRANSPONDERS			
● RI-TRP-DR2B-30	32mm Glass Transponder Multipage	09R5109	11.50
● RI-TRP-WFOB-30	Keyring Transponder R/W	84R4033	6.75
LF ANTENNAS			
RI-ACC-ATI2-00	Series 2000 Antenna Tuning Indicator	30M1617	187.50
LF TRANSPONDER DEVELOPMENT TOOL			
RI-K3A-001A-00	Series 2000 Low Frequency Micro RFID Evaluation Kit	30M1659	425.39

(176935)

PRESCALERS

RoHS Compliant Available

ON Semiconductor

- Supply Voltage: 5.5V Max.
- Low Power—Typically <4mA at V_{CC} = 5V

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● MC12026ADG	1.1GHz Dual Module Prescaler	8-SOIC	45J1002	5.64
● MC12080DG	1.1GHz Prescaler	8-SOIC	45J1004	5.64
● MC12093DG	Divide Ratio of 2, 4, 8 1.1GHz Low Power Prescaler w/ Stand-By Mode	8-SOIC	45J1005	5.32

(74512)

RF RECEIVERS

RoHS Compliant Available

ANALOG DEVICES

Applications:
- Communications
- Diversity radio and smart antenna (MIMO) systems
- Multimode digital receivers (3G)
- I/Q demodulation systems
- General-purpose software radios

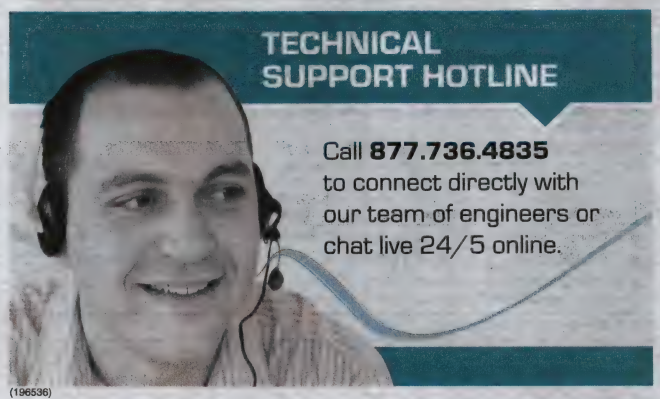
The **AD6657A** is an 11-bit, 200 MSPS, quad channel intermediate frequency (IF) receiver specifically designed to support multiple antenna systems in telecommunication applications where high dynamic range performance, low power, and small size are desired.

Mfg. Part No.	Supply Voltage	-3 dB BandWidth (MHz)	Supply Current (mA)	Package	Stock No.	Price Each 1-4
● AD6657ABBCZ	1.7V to 1.9V	65	466	144-BGA	67T0291	148.17

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
● AD6657AEBZ	AD6657A RF Evaluation Kit	67T0292	326.25
● AD6657EBZ	AD6657 RF Evaluation Kit	51R0734	217.50

(198298)



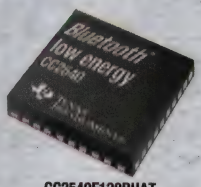
(196536)

2.4GHZ BLUETOOTH LOW ENERGY SYSTEM-ON-CHIP SOLUTION

RoHS Compliant Available

TEXAS INSTRUMENTS

Applications:
- 2.4-GHz Bluetooth low energy Systems
- Mobile Phone Accessories
- Sports and Leisure Equipment
- Consumer Electronics
- Human Interface Devices (Keyboard, Mouse, Remote Control)
- USB Dongles
- Health Care and Medical



CC2540F128RHAT

The **CC2540** is a cost-effective, low-power, true system-on-chip (SoC) for Bluetooth low energy applications. It enables robust BLE master or slave nodes to be built with very low total bill-of-material costs. The **CC2540** combines an excellent RF transceiver with an industry-standard enhanced 8051 MCU, in-system programmable flash memory, 8-KB RAM, and many other powerful supporting features and peripherals. The **CC2540** is suitable for systems where very low power consumption is required. Very low-power sleep modes are available. Short transition times between operating modes further enable low power consumption.

Type	Supply Voltage	Data Rate (kbps)	Frequency (Ghz)	Package	Stock No.	Price Each 1-9
CC2540F128RHAT	2V to 3.6V	1000	2.402GHz to 2.480GHz	40-VQFN	12T2857	6.30

(195543)

INTEGRATED WIRELESS POWER SUPPLY RECEIVER, Qi (WIRELESS POWER CONSORTIUM) COMPLIANT

RoHS Compliant Available

TEXAS INSTRUMENTS

Features:
- Dynamic Rectifier Control for Improved Load Transient Response
- Dynamic Efficiency Scaling for Optimized Performance Over any Range of Output Power
- Adaptive Communication Limit for Robust Communication During High Levels of Load Current Noise
- Thermal Shutdown
- Multifunction NTC and Control Pin for Temperature Monitoring, Done Charging and Fault Host Control
- Stand-alone Digital Controller

Applications:
- WPC Compliant Receivers
- Cell Phones, Smart Phones
- Headsets
- Digital Cameras
- Portable Media Players
- Hand-held Devices

The **bq5101x** is an advanced, integrated, receiver IC for wireless power transfer in portable applications. The device provides the AC/DC power conversion while integrating the digital control required to comply with the Qi v1.0 communication protocol. Together with the **bq500210** transmitter controller, the **bq5101x** enables a complete contact-less power transfer system for a wireless power supply solution. By using near-field inductive power transfer, the receiver coil embedded in the portable device receives the power transmitted by the transmitter coil via mutually coupled inductors. The AC signal from the receiver coil is then rectified and regulated to be used as a power supply for down-system electronics. Global feedback is established from the secondary to the transmitter in order to stabilize the power transfer process via back-scatter modulation. This feedback is established by using the Qi v1.0 communication protocol supporting up to 5 W applications.

Mfg. Part No.	Supply Voltage	Output Current (A)	Output Power (W)	Package	Stock No.	Price Each 1-9
BQ51013ARHLT	4V to 10V	1.5	5	20-QFN	28W3512	4.54

EVALUATION MODULE

Mfg. Part No.	Description	Stock No.	Price Each
BQ51013AEVM-765	Wireless Power Reciever Eval Module	06W2159	203.00

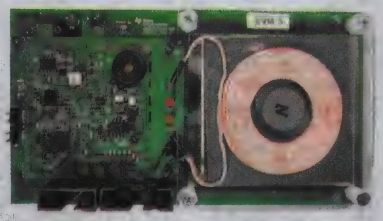
(207798)

Qi COMPLIANT WIRELESS POWER TRANSMITTER MANAGER

RoHS Compliant Available

TEXAS INSTRUMENTS

Features:
- Intelligent Control of the Power Transfer between Base Station and Mobile Device
- Conforms to the Wireless Power Consortium (WPC) Wireless Power Transfer 1.0.2 Specification
- Digital Demodulation Significantly Simplifies Solution Over bq500110
- Improved Parasitic Metal Object Detection (PMOD) Promotes Safety During Wireless Power Transfer
- Enhanced Charge Status Indicator



Applications:
- Mobile and Smart Phones
- MP3 Players
- Global Positioning Devices
- Digital Cameras
- Hermetically Sealed Devices, Tools, and Appliances
- Furniture Built-In Wireless Chargers
- Toy Power Supplies and Chargers

The **bq500210** is a second generation Wireless Power dedicated digital controller that integrates the logic functions required to control Wireless Power Transfer in a single channel WPC compliant contactless charging base station. The **bq500210** is an intelligent device that periodically pings the surrounding environment for available devices to be powered, monitors all communication from the device being wirelessly powered, and adjusts power applied to the transmitter coil per feedback received from the powered device. The **bq500210** also manages the fault conditions associated with the power transfer and controls the operating modes status indicator. The **bq500210** supports improved Parasitic Metal Object Detection (PMOD). The controller in real time analyzes the efficiency of the established power transfer using Rectified Power Packets and protects itself and the power receiver from excessive power loss and heat associated with parasitic metal objects placed in the power transfer path.

CONTINUED

Qi COMPLIANT WIRELESS POWER TRANSMITTER MANAGER (CONT.)

Mfg. Part No.	No. of Channels	Transmitter Input Voltage (V)	Transmitter Power Class (W)	Package	Stock No.	Price Each 1-9
BQ500210RGZT	1	19	5	48-VQFN	28W3511	6.97

EVALUATION MODULE

Mfg. Part No.	Description	Stock No.	Price Each
BQ500210EVM-689	Wireless Power Transmitter Eval Board	52T7582	203.00

(207797)

PROC CAPSENSE 2.4GHz RF TRANCIEVER'S

RoHS Compliant Available

CYPRESS PERFORM

Mfg. Part No.	Supply Voltage Range (V)	Data Rate (Mbps)	Package	Price Each 1-24
CYRF89435-68LTXC	1.8 to 3.6	1	68-QFN	5.35
CYRF89435-40LTXC	1.9 to 3.6	1	40-QFN	4.29
CYRF89535-68LTXC	1.9 to 3.6	1	68-QFN	5.55
CYRF89135-68LTXC	2.7 to 3.6	1	68-QFN	4.56
CYRF89235-40LTXC	3.15 to 3.45	1	40-QFN	3.63

(210300)

STELLARIS® & CC2560 BLUETOOTH® PLATFORM

TEXAS INSTRUMENTS

Features:
- Bluetooth 2.1 + Enhanced Data Rate (EDR) with best-in-class Bluetooth RF performance
- Complete, validated, certified, productionreadymodule offered by Panasonic: CC2560-PAN1325, CC2560-PAN1315
- Stellaris LM3S9000 series pre-integrated with Bluetooth software stack and Panasonic modules
- Full-featured evaluation boards for hardware and software prototyping

What's Included:
- Bluetooth software stack
- Serial Port Profile
- Advanced Audio Distribution Profile
- Audio/Video Remote Control Profile

Mfg. Part No.	Description	Stock No.	Price Each
DK-EM2-2560B	Stellaris Bluetooth Eval. Module	45T8620	199.40

(196374)

VALUE LINE TRANSCEIVER

RoHS Compliant Available

TEXAS INSTRUMENTS

RF PERFORMANCE:
- Programmable output power up to +12dBm
- Receive sensitivity down to -116 dBm at 0.6 kbps
- Programmable Data Rate from 0.6 to 600 kbps

Digital Features:
- Flexible Support for Packet Oriented Systems
- On-chip Support for Sync Word Insertion, Flexible Packet Length, and Automatic CRC Calculation

Low-Power Features:
- 200 nA Sleep Mode Current Consumption
- Fast Startup Time; 240 µs From Sleep to RX Mode or TX mode
- 4-byte RX and TX FIFO

Mfg. Part No.	Device Type	Supply Voltage	Standby Current (mA)	Package	Stock No.	Price Each
CC110LRTKT	Transceiver	1.8V to 3.6V	200	20-VQFN	57T9706	4.68

EVALUATION BOARD

Mfg. Part No.	Description	Stock No.	Price Each
CC11XLEMK-433	CC11XL, RF TXRX, ANTENNA, 433MHZ, EVAL MODULE KIT	57T9704	101.00

(197178)

LOGIC LEVEL TRANSLATORS

RoHS Compliant Available

ANALOG DEVICES

ADG3123 series is a noninverting CMOS to high voltage level translator capable of operating at high supply voltages up to +35V, while maintaining ultralow power consumption. **ADG3304 and ADG3308 series** are low voltage logic level translators that can be used in multivoltage digital system applications such as data transfer between a low voltage DSP controller and a higher voltage device. Supply Voltage Max: 5.5V Operating temperature range: -40°C to 85°C

UNIDIRECTIONAL TRANSLATION

Mfg. Part No.	Data Rate (Mbps)	Prop. Delay Max (ns)	Supply Voltage Min. (V)	No. of Chan.	Package	Stock No.	Price Each 1-9
ADG3123BRUZ	0.1	125	2.3	8	20-TSSOP	19M0670	6.03
BIDIRECTIONAL TRANSLATION							
ADG3300BRUZ	50	10	1.15	8	20-TSSOP	19M0671	4.19
ADG3304BRUZ	60	35	1.15	4	14-TSSOP	19M0672	2.68
ADG3308BRUZ	60	35	1.15	8	20-TSSOP	19M0673	4.51

(89786)

74ACT SERIES FACT ™ (ACT) CMOS LOGIC

RoHS Compliant Available

FAIRCHILD

FACT™ (Fairchild Advanced CMOS Technology) logic attains superior speeds while retaining the ultra-low power consumption of CMOS. It offers system designers superior line driving characteristics as well as excellent ESD and latch-up immunity. FACT™ ACT series offers standard logic functions with CMOS-compatible inputs and TTL- and MOS-compatible outputs.

Mfg. Part No.	Description	Inputs	Pkg.	Stock No.	Price Each 1-9
● 74ACT08SC	Quad 2-Input And Gate	8	14-SOIC	78K6176	0.56
● 74ACT32SC	Octal 2-Input OR Gate	8	14-SOIC	78K6186	0.50
● 74ACT00SC	Quad 2-Input Nand Gate	8	14-SOIC	34C8037	0.51
● 74ACT04SC	Hex Inverter	6	14-SOIC	78K6175	0.56
● 74ACT04MTC	Hex Inverter	6	14-TSSOP	58K3209	0.44
● 74ACT14SC	Hex Inverter w/ Schmitt Trigger	6	14-SOIC	78K6179	0.52
● 74ACT14MTCX	Hex Inverter w/ Schmitt Trigger	6	14-TSSOP	55R1158	0.42
● 74ACT138SC	3-to-8 Line Decoder/Demultiplexer	3	16-SOIC	78K6178	0.67
● 74ACT139SCX	Dual 1-of-4 Decoder/Demultiplexer	2	16-SOIC	55R1157	0.44
● 74ACT244SC	Octal Bus Driver w/ 3-State Outputs	8	20-SOIC	78K6183	0.68
● 74ACT541SC	Octal Buffer/Line Driver w/ 3-STATE Outputs	8	20-SOIC	78K6191	0.64
● 74ACT245SCX	Octal Bus Transceiver	8	20-SOIC	55R1159	0.65
● 74ACT245SC	Octal Bus Transceiver	8	20-SOIC	78K6184	0.70

(70553)

74ACXX SERIES FACT ™ (AC) CMOS LOGIC

RoHS Compliant Available

FAIRCHILD

FACT (Fairchild Advanced CMOS Technology) logic attains superior speeds while retaining the ultra-low power consumption of CMOS. It offers system designers superior line-driving characteristics and excellent ESD, latchup immunity. FACT AC series offers standard logic functions with CMOS-compatible inputs and TTL-and MOS-compatible outputs. Supply voltage (V_{CC}) range: 2V to 6V.

Mfg. Part No.	Description	Inputs	Pkg.	Stock No.	Price Each 1-9
● 74AC00MTC	Quad 2-Input NAND Gate	8	14-TSSOP	58K9670	0.40
● 74AC00SC	Quad 2-Input NAND Gate	8	14-SOIC	78K6195	0.57
● 74AC00SCX	Quad 2-Input NAND Gate	2	14-SOIC	38C7783	0.56
● 74AC08MTC	Quad 2-Input AND Gate	8	14-TSSOP	58K3222	0.47
● 74AC08SC	Quad 2-Input AND Gate	8	14-SOIC	82K8899	0.50
● 74AC32MTC	Quad 2-Input OR Gate	8	14-TSSOP	83C4275	0.47
● 74AC32SC	Quad 2-Input OR Gate	8	14-SOIC	78K6228	0.50
● 74AC86SC	Quad 2-Input Exclusive OR Gate	8	14-SOIC	78K6245	0.57
● 74AC86SCX	Quad 2-input Exclusive-OR Gate	2	14-SOIC	18C9488	0.47
● 74AC04MTC	Hex Inverter	6	14-TSSOP	58K3221	0.41
● 74AC04SC	Hex Inverter	6	14-SOIC	05M2995	0.47
● 74AC04SCX	Hex Inverter	6	14-SOIC	78K6197	0.55
● 74AC14MTC	Hex Inverter w/Schmitt Trigger	6	14-TSSOP	58K3229	0.50
● 74AC14SC	Hex Inverter w/Schmitt Trigger	6	14-SOIC	05M2996	0.55
● 74AC138MTC	3-to-8 Line Decoder/Demultiplexer	3	16-TSSOP	58K3227	0.59
● 74AC138SC	3-to-8 Line Decoder/Demultiplexer	3	16-SOIC	83C4174	0.44
● 74AC139SC	Dual 1-to-4 Decoder/Demultiplexer	4	16-SOIC	78K6203	0.68
● 74AC240SC	Octal Inverting Bus Driver w/3-State	4	20-WSOIC	78K6215	0.72
● 74AC244MTC	Octal Bus Driver w/3-State	8	20-TSSOP	78K6218	0.60
● 74AC244SC	Octal Bus Driver w/3-State	8	20-SOIC	78K6219	0.67
● 74AC540MTC	Octal Buffer/Line Driver	8	20-TSSOP	78K6237	0.48
● 74AC541MTC	Octal Buffer/Line Driver	8	20-TSSOP	80K6367	0.61
● 74AC541SC	Octal Buffer/Line Driver	8	20-SOIC	78K6239	0.68
● 74AC245MTC	Octal Bus Transceiver	8	20-TSSOP	78K6220	0.59
● 74AC245SC	Octal Bus Transceiver	8	20-SOIC	78K6221	0.70

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74HC SERIES ADVANCED SILICON GATE CMOS LOGIC

RoHS Compliant Available

FAIRCHILD

Mnf. Part No.	Description	# of Inputs	Pkg.	Stock No.	Price Each 1-9
● MM74HC08M	Quad 2-Input AND Gate	8	14-SOIC	78K6057	0.54
● MM74HC00M	Quad 2-Input NAND Gate	8	14-SOIC	78K6056	0.54
● MM74HC00MX	Quad 2-Input NAND Gate	8	14-SOIC	38C7496	0.41
● MM74HC132M	Quad 2-Input NAND Schmitt Trigger	8	14-SOIC	78K6061	0.53

➤ CONTINUED ➤

74HC SERIES ADVANCED SILICON GATE CMOS LOGIC (CONT.)

Mnf. Part No.	Description	# of Inputs	Pkg.	Stock No.	Price Each 1-9
● MM74HC132MTCX	Quad 2-Input NAND Schmitt Trigger	8	14-TSSOP	55R1146	0.45
● MM74HC32M	Quad 2-Input OR Gate	8	14-SOIC	34C7987	0.50
● MM74HC02M	Quad 2-Input NOR Gate	8	14-SOIC	84K2981	0.39
● MM74HC86M	Quad 2-Input Exclusive OR Gate	8	14-SOIC	74C0531	0.47
● MM74HC04M	Hex Inverter	6	14-SOIC	88K1145	0.60
● MM74HC04MTC	Hex Inverter	6	14-TSSOP	58K1939	0.51
● MM74HC04MX	Hex Inverter	6	14-SOIC	38C7499	0.55
● MM74HC14M	Hex Inverting Schmitt Trigger	6	14-SOIC	78K6063	0.56
● MM74HC14MTCX	Hex Inverting Schmitt Trigger	6	14-TSSOP	58K1944	0.63
● MM74HC14MX	Hex Inverting Schmitt Trigger	6	14-SOIC	38C7505	0.71
● MM74HC125M	3-STATE Quad Buffer	4	14-SOIC	78K6059	0.58
● MM74HC125MTC	3-STATE Quad Buffer	4	14-TSSOP	58K1940	0.53
● MM74HC126M	3-STATE Quad Buffer	4	14-SOIC	78K6060	0.47
● MM74HC240WM	Inverting Octal 3-STATE Buffer	8	20-SOIC	34C7983	0.66
● MM74HC244WM	Octal 3-STATE Buffer	8	20-SOIC	78K6070	0.69
● MM74HC540WMX	Inverting Octal 3-STATE Buffer	8	20-SOIC	55R1147	0.58
● MM74HC541WM	Octal 3-STATE Buffer	8	20-SOIC	78K6081	0.69
● MM74HC74AM	Dual D-Type Flip-Flop with Preset and Clear	2	14-SOIC	78K6086	0.60
● MM74HC74AMTC	Dual D-Type Flip-Flop with Preset and Clear	2	14-TSSOP	58K1954	0.46
● MM74HC273WM	Octal D-Type Flip-Flop with Clear	8	20-SOIC	34C7986	0.48
● MM74HC374WM	3-STATE Octal D-Type Flip-Flop	8	20-SOIC	78K6073	0.65
● MM74HC574WM	3-STATE Octal D-Type Edge-Triggered Flip-Flop	8	20-SOIC	78K6083	0.66
● MM74HC373WM	3-STATE Octal D-Type Latch	8	20-SOIC	78K6072	0.55
● MM74HC573MTC	3-STATE Octal D-Type Latch	8	20-TSSOP	82C9246	0.46
● MM74HCT573MTCX	3-STATE Octal D-Type Latch	8	20-TSSOP	55R1145	0.46
● MM74HC573WM	3-STATE Octal D-Type Latch	8	20-SOIC	78K6082	0.70
● MM74HC138M	3 to 8 Line Decoder	3	16-SOIC	34C7980	0.50
● MM74HC164M	8-Bit Serial-in/Parallel-out Shift Register	8	14-SOIC	78K6067	0.52
● MM74HC595M	8-Bit Shift Registers with Output Latches	8	16-SOIC	83K8586	0.48
● MM74HC245AWM	Octal 3-STATE Transceiver	8	20-SOIC	34C7985	0.94

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74HCT SERIES ADVANCED SILICON GATE CMOS LOGIC

RoHS Compliant Available

FAIRCHILD

Mnf. Part No.	Description	# of Inputs	Pkg.	Stock No.	Price Each 1-9
● MM74HCT08M	Quad 2-Input AND Gate	8	14-SOIC	78K6042	0.43
● MM74HCT00M	Quad 2 Input NAND Gate	8	14-SOIC	78K6040	0.58
● MM74HCT32M	Quad 2-Input OR Gate	8	14-SOIC	78K6049	0.44
● MM74HCT04M	Hex Inverter	6	14-SOIC	78K6041	0.47
● MM74HCT05M	Hex Inverter (Open Drain)	6	14-SOIC	34C1259	0.49
● MM74HCT14M	Hex Inverting Schmitt Trigger	6	14-SOIC	78K6043	0.37
● MM74HCT14MX	Hex Inverting Schmitt Trigger	6	14-SOIC	38C7490	0.45
● MM74HCT244WM	Octal 3-STATE Buffer	8	20-SOIC	78K6046	0.78
● MM74HCT541WM	Octal 3-STATE Buffer	8	20-SOIC	78K6052	0.51
● MM74HCT74M	Dual D Flip-Flop with Preset and Clear	2	14-SOIC	78K6054	0.47
● MM74HCT574WM	3-STATE Octal D-Type Flip-Flop	8	20-SOIC	34C7972	0.63
● MM74HCT373WM	3-STATE Octal D-Type Latch	8	20-SOIC	78K6050	0.75
● MM74HCT573WM	Octal D-Type Latch	8	20-SOIC	78K6053	0.58
● MM74HCT138M	3-to-8 Line Decoder	3	16-SOIC	82C9026	0.59
● MM74HCT245MTCX	Octal 3-STATE Transceiver	8	20-TSSOP	34C1266	0.63
● MM74HCT245WM	Octal 3-STATE Transceiver	8	20-SOIC	78K6047	0.59

(168151)

74LCX SERIES CROSSVOLT ™ LCX LOW VOLTAGE LOGIC

RoHS Compliant Available

FAIRCHILD

3.3V and 2.5V optimized logic comprised of gates, octals and 16-bit devices. Feature maximum propagation delays of 6.5ns for octals, sub-5ns for 16-bit functions, low CMOS power, input and output over-voltage tolerance, and balanced high drive. Supply voltage (VCC): 2V min., 3.6V max.

Mfg. Part No.	Description	Inputs	Pkg./Pins	Stock No.	Price Each 1-9
● 74LCX00MTC	Quad 2-Input NAND Gate	8	14-TSSOP	78K6272	0.44
● 74LCX00MTCX	Low Voltage Quad 2-Input NAND Gate	8	14-TSSOP	38C7817	0.41

➤ CONTINUED ➤

74LCX SERIES CROSSVOLT ™ LCX LOW VOLTAGE LOGIC (CONT.)

Mfg. Part No.	Description	Inputs	Pkg./Pins	Stock No.	Price Each 1-9
74LCX02MTC	Quad 2-Input NOR Gate	8	14-TSSOP	78K6274	0.55
74LCX08MTCX	Quad 2-Input AND Gate	8	14-TSSOP	78K6284	0.42
74LCX32MTC	Quad 2-Input OR Gate	8	14-TSSOP	85K9077	0.46
74LCX04MTC	Hex Inverter	6	14-TSSOP	78K6276	0.55
74LCX04MTCX	Low Voltage Hex Inverter	6	14-TSSOP	38C7821	0.30
74LCX14MTCX	Low Voltage Hex Inverter	6	14-TSSOP	88K1470	1.18
74LCX06M	Hex Inverter w/Open Drain Output	6	14-SOIC	78K6278	0.47
74LCX14M	Hex Inverter w/Schmitt Trigger	6	14-SOIC	78K6290	0.49
74LCX07M	Hex Buffer w/Open Drain Output	6	14-SOIC	78K6279	0.47
74LCX07MTC	Hex Buffer w/Open Drain Output	6	14-TSSOP	78K6280	0.46
74LCX07MTCX	Hex Buffer w/Open Drain Output	6	14-TSSOP	78K6281	1.03
74LCX74M	Dual D-Type Flip-Flop	2	14-SOIC	34C2220	0.47
74LCX74MTC	Dual D-Type Flip-Flop	2	14-TSSOP	78K6313	0.52
74LCX574MTCX	Octal D-Type Flip-Flop	8	20-TSSOP	38C7875	0.49
74LCX574WM	Octal D-Type Flip-Flop	8	20-SOIC	78K6312	0.64
74LCX573MTC	Octal D-Type Latch	8	20-TSSOP	34C8118	0.68
74LCX373MTC	Octal D-Type Latch	8	20-TSSOP	78K6306	0.49
74LCX16374MTD	16-Bit D-Type Flip-Flop w/3-State	16	48-TSSOP	78K6296	0.91
74LCX16373MTD	16-Bit D-Type Latch	16	48-TSSOP	34C8106	0.73
74LCX125M	Quad Buffer	8	14-SOIC	78K6286	0.57
74LCX125MTC	Quad Buffer	8	14-TSSOP	78K6287	0.55
74LCX125MTCX	Quad Buffer	8	14-TSSOP	38C7835	0.29
74LCX138M	3-8 Line Decoder/Demultiplexer	3	16-SOIC	78K6288	0.49
74LCX138MTCX	3-to-8 Line Decoder/Demultiplexer	3	16-TSSOP	78K6289	0.39
74LCX257MTC	Quad 2-Input Multiplexer	8	16-TSSOP	78K6303	0.42
74LCX157MTC	Low Voltage Quad 2-Input Multiplexer w/ 5V Tolerant Inputs	8	16-TSSOP	83C5028	0.42
74LCX244MTC	Low Voltage Buffer/Line Driver with 5V Tolerant Inputs and Outputs	8	20-TSSOP	78K6299	0.58
74LCX244MTCX	Low Voltage Buffer/Line Driver with 5V Tolerant Inputs and Outputs	8	20-TSSOP	78K6300	0.54
74LCX244WM	Low Voltage Buffer/Line Driver with 5V Tolerant Inputs and Outputs	8	20-SOIC	34C2216	0.56
74LCX126MTC	Low Voltage Quad Buffer with 5V tolerant Inputs and Outputs	4	14-TSSOP	34C2202	0.38
74LCX541MTC	Octal Buffer/Line Driver	8	20-TSSOP	80K9326	0.61
74LCX541WM	Octal Buffer/Line Driver	8	20-SOIC	78K6310	0.64
74LCX16244MTD	16-Bit Buffer/Line Driver	16	48-TSSOP	78K6292	1.04
74LCX16244MTDX	16-Bit Buffer/Line Driver	16	48-TSSOP	55R1162	0.78
74LCX245MTC	Octal Bus Transceiver	8	20-TSSOP	78K6301	0.65
74LCX245WM	Octal Bus Transceiver	8	20-SOIC	78K6302	0.62
74LCX245MTCX	Low Voltage Bidirectional Transceiver	8	20-TSSOP	38C7860	0.49

(70641)

74VHC SERIES -- VHC CMOS LOGIC

RoHS Compliant Available

FAIRCHILD

VHC logic is an enhanced version of the industry's most popular CMOS family — high-speed CMOS (HC/HCT). VHC is the logical upgrade from HC and is ideal where the full drive of CMOS FACT is not needed. VHC logic offers all the advantages of HCMOS with the addition of higher drive and lower propagation delays (e.g., faster) with no noise penalty. **74VHC series** offers standard logic functions with CMOS-compatible inputs and TTL- and MOS-compatible outputs. Minimum supply voltage: 2V. Maximum supply voltage: 5.5V.

Mfg. Part No.	Description	Inputs	Pkg./Pins	Stock No.	Price Each 1-9
74VHC08M	Quad 2-Input AND Gate	8	14-SOIC	34C2262	0.50
74VHC00M	Quad 2-Input NAND Gate	8	14-SOIC	78K6360	0.45
74VHC132MTCX	Quad 2-Input NAND Schmitt Trigger	8	14-TSSOP	78K6368	0.25
74VHC32M	Quad 2-Input OR Gate	8	14-SOIC	34C8144	0.46
74VHC32MTCX	Quad 2-Input OR Gate	8	14-TSSOP	78K6379	0.46
74VHC02M	Quad 2-Input NOR Gate	8	14-SOIC	78K6362	0.49
74VHC04M	Hex Inverter	6	14-SOIC	78K6363	0.47
74VHC04MTCX	Hex Inverter	6	14-TSSOP	78K6364	0.58
74VHC14MX	Hex Inverter w/Schmitt Trigger	6	14-SOIC	55R1164	0.52
74VHC14MTC	Hex Inverter w/Schmitt Trigger	6	14-TSSOP	78K6372	0.43
74VHC14MTCX	Hex Inverter w/Schmitt Trigger	6	14-TSSOP	78K6373	0.94
74VHC74M	Dual D-Type Flip-Flop w/ Preset and Clear	4	14-SOIC	78K6389	0.47
74VHC74MTC	Dual D-Type Flip-Flop w/ Preset and Clear	4	14-TSSOP	83C5673	0.42
74VHC574MTC	Octal D-Type Flip-Flop	8	20-TSSOP	78K6386	0.50
74VHC573M	Octal D-Type Latch w/ 3-STATE Outputs	8	20-SOIC	83C5664	0.55
74VHC573MTC	Octal D-Type Latch w/ 3-STATE Outputs	8	20-TSSOP	83C5665	0.44
74VHC244MX	Octal Bus Driver w/3-State	8	20-SOIC	38C8049	0.50

➤ CONTINUED ➤

74VHC SERIES -- VHC CMOS LOGIC (CONT.)

Mfg. Part No.	Description	Inputs	Pkg./Pins	Stock No.	Price Each 1-9
74VHC244MTCX	Octal Bus Driver w/3-State	8	20-TSSOP	78K6376	0.49
74VHC125M	Quad Buffer w/ 3-STATE Outputs	8	14-SOIC	83C5570	0.58
74VHC541M	Octal Buffer/ Line Driver	8	20-SOIC	78K6384	0.54
74VHC541MTC	Octal Buffer/ Line Driver	8	20-TSSOP	85K9078	0.54
74VHC161MX	4-Bit Binary Counter with Asynchronous Clear	4	16-SOIC	38C8040	0.59
74VHC393M	Dual 4-Bit Binary Counter	4	14-SOIC	78K6380	0.53
74VHC393MTC	Dual 4-Bit Binary Counter	4	14-TSSOP	83C5639	0.49
74VHC4040MTC	12-Stage Binary Counter	2	16-TSSOP	83C5642	0.64
74VHC4040M	12-Stage Binary Counter	2	16-SOIC	34C2269	0.87
74VHC123AM	Dual Retriggerable Monostable Multivibrator	4	16-SOIC	78K6366	0.54
74VHC221AMX	Dual Non-Retriggerable Monostable Multivibrator	4	16-SOIC	78K6375	0.61
74VHC153MX	Dual 4-Input Multiplexer	8	16-SOIC	38C8038	0.59
74VHC138M	3-to-8 Decoder/Demultiplexer	6	16-SOIC	83C5576	0.58
74VHC138MTCX	3-to-8 Line Decoder/Demultiplexer	3	16-TSSOP	78K6369	0.34
74VHC139MTC	Dual 2-to-4 Decoder/Demultiplexer	2	16-TSSOP	83C5580	0.52
74VHC164MTCX	8-Bit Serial-In, Parallel-Out Shift Register	2	14-TSSOP	55R1165	0.31
74VHC595M	8-Bit Shift Register w/Latches	1	16-SOIC	78K6388	0.46
74VHC595MTCX	8-Bit Shift Register w/Latches	1	16-TSSOP	19C0154	0.57
74VHC245M	Octal Bidirectional Transceiver w/ 3-STATE Outputs	2	20-SOIC	83C5619	0.56

(70643)

TINYLOGIC® HIGH SPEED CMOS LOGIC

RoHS Compliant Available

FAIRCHILD

Tiny Logic offers single-gate functions in very small packages. **Mfg. part numbers with suffix X are supplied on cut tape.**

NC7S TINYLOGIC™ HS SERIES
Tiny High Speed (HS) series performance similar to HC/VHC. CMOS-compatible inputs. Supply voltage: 2V-6V.

Mfg. Part No.	Description	Inputs	Pkg.	Stock No.	Price Each 1-9
NC7S08M5X	Single 2-Input AND Gate	2	5-SOT-23	58K1991	0.44
NC7S08P5X	Single 2-Input AND Gate	2	5-SC-70	58K1992	0.35
NC7S00M5	2-Input NAND Gate	2	5-SOT-23	67K0816	0.48
NC7S00P5	2-Input NAND Gate	2	5-SC-70	83C0034	0.41
NC7S32M5	2-Input OR Gate	2	5-SOT-23	67K0821	0.40
NC7S32M5X	2-Input OR Gate	2	5-SOT-23	58K1994	0.44
NC7S32P5X	2-Input OR Gate	2	5-SC-70	38C7613	0.22
NC7S86M5	Single 2-Input Exclusive OR Gate	2	5-SOT-23	34C1580	0.49
NC7S02M5	2-Input NOR Gate	2	5-SOT-23	67K0817	0.42
NC7S04M5X	Single Inverter Open Drain Ouput	1	5-SOT-23	38C7606	0.42
NC7S04P5X	Single Inverter Open Drain Ouput	1	5-SC-70	38C7607	0.37
NC7S14M5	Single Inverter w/Schmitt Trigger	1	5-SOT-23	67K0819	0.61
NC7S14M5X	Single Inverter w/Schmitt Trigger	1	5-SOT-23	58K1993	0.43
NC7S14P5X	Single Inverter w/Schmitt Trigger	1	5-SC-70	38C7611	0.33
NC7SU04M5X	Unbuffered Inverter	1	5-SOT-23	38C7563	0.45

NC7ST SERIES
Tiny High Speed (HST) series offers performance similar to HC/VHC and is available with TTL-compatible inputs.

NC7ST04M5X	Single Inverter	1	5-SOT-23	38C7556	0.46
NC7ST04P5X	Single Inverter	1	5-SC-70	38C7557	0.23
NC7ST08M5X	Single 2-Input AND Gate	2	5-SOT-23	58K1969	0.48
NC7ST08P5	Single 2-Input AND Gate	2	5-SC-70	67K0812	0.43
NC7ST32M5	Single 2-Input OR Gate	2	5-SOT-23	82C9963	0.43

NC7NZ, NC7SZ, NC7WZ SERIES
Tiny Ultra High Speed (UHS) series has faster speeds and higher drive than HS series. 5V-tolerant inputs. Supply voltage: 1.8V-5.5V.

NC7NZ14K8X	Triple Inverter w/Schmitt Trigger Input	3	8-US8	58K1967	0.49
NC7SZ08M5	Single 2-Input AND Gate	2	5-SOT-23	34C1561	0.40
NC7SZ08M5X	Single 2-Input AND Gate	2	5-SOT-23	58K1975	0.46
NC7SZ08P5	Single 2-Input AND Gate	2	5-SC-70	34C1562	0.69
NC7SZ11P6X	3-Input AND Gate	3	6-SC-70	58K9467	0.43
NC7SZ00M5	Single 2-Input NAND Gate	2	5-SOT-23	34C1555	0.48
NC7SZ00M5X	Single 2-Input NAND Gate	2	5-SOT-23	58K1972	0.46
NC7SZ00P5X	Single 2-Input NAND Gate	2	5-SC-70	38C7570	0.36
NC7SZ38M5X	2-Input NAND Gate Open Drain Output	2	5-SOT-23	55R1154	0.49
NC7SZ32M5	Single 2-Input OR Gate	2	5-SOT-23	34C1570	0.50

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TINYLOGIC® HIGH SPEED CMOS LOGIC (CONT.)

NC7NZ, NC7SZ, NC7WZ SERIES

Mfg. Part No.	Description	Inputs	Pkg.	Stock No.	Price Each 1-9
● NC7SZ32M5X	Single 2-Input OR Gate	2	5-SOT-23	58K1983	0.46
● NC7SZ32P5	Single 2-Input OR Gate	2	5-SC-70	34C1571	0.44
● NC7SZ32P5X	Single 2-Input OR Gate	2	5-SC-70	38C7590	0.33
● NC7SZ332P6X	3-Input OR Gate	3	6-SC-70	58K1984	0.54
● NC7SZ02M5	Single 2-Input NOR Gate	2	5-SOT-23	82C9996	0.54
● NC7SZ02P5	Single 2-Input NOR Gate	2	5-SC-70	34C1557	0.55
● NC7SZ27P6X	3-Input NOR Gate	3	6-SC-70	83C0014	0.50
● NC7SZ86M5	Single 2-Input Exclusive OR Gate	2	5-SOT-23	83C0031	0.43
● NC7SZ86P5X	Single 2-Input Exclusive OR Gate	2	5-SC-70	58K1990	0.37
● NC7SZ04M5	Single Inverter	1	5-SOT-23	34C1558	0.65
● NC7SZ04M5X	Single Inverter	1	5-SOT-23	58K1973	0.46
● NC7SZ04P5	Single Inverter	1	5-SC-70	34C1559	0.51
● NC7SZ04P5X	Single Inverter	1	5-SC-70	38C7574	0.36
● NC7SZ05M5	Single Inverter Open Drain Ouput	1	5-SOT-23	34C1560	0.61
● NC7SZ05P5X	Single Inverter Open Drain Ouput	1	5-SC-70	58K1974	0.35
● NC7SZ14M5	Single Inverter w/Schmitt Trigger	1	5-SOT-23	67K0813	0.66
● NC7SZ14P5	Single Inverter w/Schmitt Trigger	1	5-SC-70	67K0814	0.64
● NC7SZ57P6X	Universal Configurable 2-Input Logic Gates	3	6-SC-70	38C7596	0.42
● NC7SZ58P6X	Universal Configurable 2-Input Logic Gates	3	6-SC-70	58K1987	0.45
● NC7SZ125M5	Single Buffer w/3-State	1	5-SOT-23	34C1563	0.65
● NC7SZ125P5	Single Buffer w/3-State	1	5-SC-70	34C1564	0.16
● NC7SZ125P5X	Single Buffer w/3-State	1	5-SC-70	38C7580	0.36
● NC7SZ125L6X	Single Buffer w/3-State	1	6-uPak	55R1153	0.42
● NC7SZ126M5	Single Buffer w/3-State	1	5-SOT-23	58K1977	0.51
● NC7SZ126M5X	Single Buffer w/3-State	1	5-SOT-23	58K1978	0.45
● NC7SZ126P5	Single Buffer w/3-State	1	5-SC-70	34C1566	0.57
● NC7SZ126P5X	Single Buffer w/3-State	1	5-SC-70	58K1979	0.37
● NC7SZ175P6	Single D-Type Flip Flop w/Asynchronous	1	6-SC-70	34C1569	0.66
● NC7SZ175P6X	Single D-Type Flip Flop w/Asynchronous	1	6-SC-70	58K1981	0.49
● NC7SZ74K8X	D-Type Flip-Flop with Preset and Clear	1	8-US8	58K9468	0.50
● NC7SZ373P6X	Single D-Type Latch w/3-State	1	6-SC-70	58K1985	0.35
● NC7SZ19P6X	Single 2-1 Demultiplexer	2	6-SC-70	58K1982	0.50
● NC7SZ157P6X	2-Input Non-Inverting Multiplexer	2	6-SC-70	38C7585	0.42
● NC7WZ08K8X	2-Input Dual AND Gate	4	8-US8	58K2000	0.51
● NC7WZ00K8X	2-Input Dual NAND Gate	4	8-US8	58K1997	0.53
● NC7WZ132K8X	2-Input Dual NAND Gate w/Schmitt Trigger	4	8-US8	38C7622	0.48
● NC7WZ32K8X	2-Input Dual OR Gate	4	8-US8	58K2004	0.45
● NC7WZ02K8X	2-Input Dual NOR Gate	4	8-US8	58K1998	0.56
● NC7WZ86K8X	2-Input Dual Exclusive OR Gate	4	8-US8	58K2005	0.53
● NC7WZ04P6	Dual Inverter	2	6-SC-70	34C1585	0.61
● NC7WZ04P6X	Dual Inverter	2	6-SC-70	58K1999	0.45
● NC7WZ14P6	Dual Inverter w/Schmitt Trigger	2	6-SC-70	34C1588	0.40
● NC7WZ14P6X	Dual Inverter w/Schmitt Trigger	2	6-SC-70	58K2001	0.42
● NC7WZU04P6X	Dual Unbuffered Inverter	2	8-SC-70	58K1996	0.48
● NC7WZ07P6	Dual Buffer w/Open Drain Outputs	2	6-SC-70	83C0052	0.48
● NC7WZ07P6X	Dual Buffer w/Open Drain Outputs	2	6-SC-70	58K9469	0.42
● NC7WZ16P6	Dual Buffer	2	6-SC-70	34C1589	0.48
● NC7WZ17P6	Dual Buffer w/Schmitt Trigger	2	6-SC-70	34C1590	0.63
● NC7WZ17P6X	Dual Buffer w/Schmitt Trigger	2	6-SC-70	38C7625	0.44
● NC7WZ125K8X	Dual Non-Inverting Buffer w/3-State	2	8-US8	34C1586	0.53
● NC7WZ126K8X	Dual Non-Inverting Buffer w/3-State	2	8-US8	34C1587	0.57
● NC7WZ240K8X	Dual Inverting Buffer w/ 3-STATE Outputs	2	8-US8	34C1591	0.57
● NC7WZ241K8X	Dual Non-Inverting Buffer w/3-State	2	8-US8	58K2003	0.56

NC7SV, NC7WV SERIES

Tiny Ultra-Low Power (ULP-A) series is ideal for applications that require extreme high speed, high drive, and low power. Supply Voltage: 0.9V to 3.6V.

● NC7SV08P5X	2-Input AND Gate	2	5-SC-70	55R1150	0.40
● NC7SV32P5X	2-Input OR Gate	2	5-SC-70	29H0708	0.46
● NC7SV86P5X	2-Input Exclusive-OR Gate	2	5-SC-70	29H0713	0.34

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TINYLOGIC® HIGH SPEED CMOS LOGIC (CONT.)

NC7SV, NC7WV SERIES

Mfg. Part No.	Description	Inputs	Pkg.	Stock No.	Price Each 1-9
● NC7SV57P6X	Universal Configurable 2-Input Logic Gates	2	6-SC-70	29H0711	0.42
● NC7SV04P5X	Single Inverter	1	5-SC70	29H0701	0.40
● NC7SV14P5X	Single Inverter with Schmitt Trigger Input	1	5-SC-70	26H5474	0.40
● NC7SV17P5X	Single Buffer with Schmitt Trigger Input	1	5-SC-70	29H0707	0.50
● NC7SV125P5X	Single Buffer with 3-STATE Output	2	5-SC-70	82C9989	0.56
● NC7SV126P5X	Single Buffer with 3-STATE Output	2	5-SC-70	55R1151	0.45
● NC7SV74K8X	D-Type Flip-Flop with Preset and Clear	4	8-US8	84H0094	0.56
● NC7SV157P6X	2-Input Non-Inverting Multiplexer	2	6-SC-70	29H0705	0.53
● NC7WV04P6X	Dual Inverter	2	6-SC-70	09J6783	0.10
● NC7WV16P6X	Dual Buffer	2	6-SC-70	55R1156	0.61
● NC7WV07P6X	Dual Buffer w/Open Drain Output	2	6-SC-70	09J6785	0.47
● NC7WV17P6X	Dual Buffer w/ Schmitt Trigger Input	2	6-SC-70	84H6513	0.63

NC7SP, NC7WP SERIES

Tiny Ultra Low Power (ULP) series are ideal for applications where battery life is critical. Supply Voltage: 0.9V to 3.6V.

● NC7SP08P5X	2-Input AND Gate	2	5-SC-70	82C9971	0.50
● NC7SP00P5X	2-Input NAND Gate	2	5-SC-70	29H0685	0.32
● NC7SP04P5X	Single Inverter	1	5-SC-70	81C9517	0.43
● NC7SP14P5X	Single Inverter w/ Schmitt Trigger Input	1	5-SC-70	29H0690	0.40
● NC7SPU04P5X	Unbuffered Inverter	1	5-SC-70	29H0684	0.38
● NC7SP17P5X	Single Buffer with Schmitt Trigger Input	1	5-SC-70	22H9999	0.56
● NC7SP125P5X	Single Buffer with 3-STATE Output	1	5-SC-70	55R1148	0.45
● NC7SP126P5X	Single Buffer with 3-STATE Output	1	5-SC-70	55R1149	0.48
● NC7SP74K8X	D-Type Flip-Flop with Preset and Clear	1	8-US8	82H9304	0.56
● NC7SP157P6X	2-Input Non-Inverting Multiplexer	2	6-SC-70	29H0691	0.61
● NC7WP14P6X	Single Inverter w/ Schmitt Trigger Inputs	1	6-SC-70	84H0092	0.53

NC7SB, NC7SZ and NC7WB SWITCHES

Tiny logic switch series provides high speed CMOS analog and TTL-compatible bus switching.

● NC7SB3157P6X	SPDT Analog Switch or 2:1 Multiplexer/ Demultiplexer Bus Switch	2	6-SC-70	58K9465	0.48
● NC7SBU3157P6X	SPDT Analog Switch with -2V Undershoot Protection	2	6-SC-70	82C9968	0.38
● NC7SB3257P6X	2:1 Multiplexer/Demultiplexer Bus Switch	2	6-SC-70	58K9466	0.64
● NC7SZ66M5X	Single SPST Normally Open Bus Switch	1	5-SOT-23	58K1988	0.21
● NC7SZ66P5X	Single SPST Normally Open Bus Switch	1	6-SC-70	58K1989	0.46
● NC7WB66K8X	Dual SPST Normally Open Analog Switch or 2-Bit Bus Switch	2	8-US8	34C1584	0.38

(70549)

AHC AND AHCT FAMILY STANDARD LOGIC ICs

RoHS Compliant Available

The **AHC** devices have CMOS input switching levels and supply voltage range 2V to 5.5V. The **AHCT** devices have TTL input switching levels and supply voltage range 4.5V to 5.5V.

AHC FAMILY

GATES

Mfg. Part No.	Description	No. of Inputs per Circuit	No. of Circuits	Package	Stock No.	Price Each 1-9
● 74AHC1G08GW,125	AND	2	1	5-TSSOP	78R7398	0.34
● 74AHCT1G08GW,125	AND	2	1	5-TSSOP	71R0149	0.41
● 74AHC1G02GW,125	NOR	2	1	5-TSSOP	71R0340	0.38

INVERTERS

● 74AHC1G14GW,125	Inverter Schmitt Trigger	1	1	5-TSSOP	78R7399	0.34

FLIP FLOPS

Mfg. Part No.	Description	Trigger Type	No. of Circuits	Package	Stock No.	Price 1-9
● 74AHCT1G79GW,125	D-Type Flip Flop	Positive Edge	1	5-TSSOP	71R0167	0.41

(190416)

ALVC AND LVC FAMILY STANDARD LOGIC ICs

RoHS Compliant Available

The **ALVC and LVC** family devices are high-performance, low-power, low-voltage, Si-gate CMOS devices, superior to most advanced CMOS compatible TTL families. Inputs on the LVC family can be driven from either 3.3V or 5V devices. This feature allows the use of these devices as translators in a mixed 3.3 and 5 V environment.

LVC FAMILY GATES

Mfg. Part No.	Description	No. of Circuits	No. of Inputs per Circuit	Package	Stock No.	Price Each 1-9
74LVC1G08GW,125	AND	1	2	5-TSSOP	78R7405	0.41
74LVC1G32GW,125	OR	1	2	5-TSSOP	78R7406	0.41
74LVC32AD,112	OR	4	2	14-SOIC	71R3503	0.52
74LVC1G00GW,125	NAND	1	2	5-TSSOP	71R2979	0.41
74LVC00AD,112	NAND	4	2	14-SOIC	71R2930	0.52
74LVC132AD,112	NAND Schmitt Trigger	4	2	14-SOIC	71R3187	0.61
74LVC1G02GW,125	NOR	1	2	5-TSSOP	71R2985	0.41
74LVC86AD,112	XOR	4	2	14-SOIC	71R3642	0.42
INVERTERS						
74LVC1G04GW,125	Inverter	1	1	5-TSSOP	71R2991	0.41
74LVC1G14GW,125	Inverter Schmitt Trigger	1	1	5-TSSOP	78R6265	0.41
74LVC14APW,118	Inverter Schmitt Trigger	6	1	14-TSSOP	78R7408	0.55
74LVC1GU04GW,125	Inverter, Unbuffered	1	1	5-TSSOP	71R2971	0.41
74LVCU04AD,112	Inverter, Unbuffered	6	1	14-SOIC	71R2920	0.52

BUFFERS / LINE DRIVERS

Mfg. Part No.	Description	No. of Circuits	Package	Stock No.	Price Each 1-9
74LVC1G07GW,125	Buffer, Non Inverting	1	5-TSSOP	78R7404	0.41
74LVC1G125GW,125	Buffer / Line Driver, Non Inverting	1	5-TSSOP	71R3028	0.41
74LVC1G126GW,125	Buffer / Line Driver, Non Inverting	1	5-TSSOP	71R3034	0.41
74LVC125APW,118	Buffer / Line Driver, Non Inverting	4	14-TSSOP	78R7407	0.47
74LVC125APW,112	Buffer / Line Driver, Non Inverting	4	14-TSSOP	71R3170	0.44
74LVC126AD,112	Buffer / Line Driver, Non Inverting	4	14-SOIC	71R3173	0.50
74LVC244APW,112	Buffer / Line Driver, Non Inverting	8	20-TSSOP	71R3433	0.53
74LVC244APW,118	Buffer / Line Driver, Non Inverting	8	20-TSSOP	78R6266	0.53
74LVCH162244ADGG,1	16-Bit Buffer/Line Driver, Non Inverting, 3-State, w/ Bus Hold & 30 Ω Term. Res.	1	48-TSSOP	71R2803	0.87
TRANSCEIVERS					
74LVC4245APW,112	Transceiver, Translating	8	24-TSSOP	71R3549	0.99

(190414)

HC AND HCT FAMILY STANDARD LOGIC ICs

RoHS Compliant Available

HC and **HCT** family devices are high-speed Si-gate CMOS devices and are pin compatible with low power Schottky TTL (LSTTL). The **HC** family devices have a supply voltage range of 2V to 6V. The **HCT** devices have a supply voltage range of 4.5V to 5.5V. Both families are specified in compliance with JEDEC standard no. 7A.

HC FAMILY GATES

Mfg. Part No.	Description	No. of Circuits	No. of Inputs/ Circuit	Package	Stock No.	Price Each 1-9
74HC1G08GW,125	AND	1	2	5-TSSOP	71R1947	0.41
74HC21D,652	AND	2	4	14-SOIC	71R2212	0.48
74HC21N,652	AND	2	4	14-DIP	71R2216	1.02
74HC11D,652	AND	3	3	14-SOIC	71R1986	0.55
74HC11N,652	AND	3	3	14-DIP	71R1990	1.02
74HC08D,652	AND	4	2	14-SOIC	71R1927	0.52
74HC08D,653	AND	4	2	14-SOIC	78R6254	0.52
74HC08N,652	AND	4	2	14-DIP	71R1931	0.92
74HC1G32GW,125	OR	1	2	5-TSSOP	71R1959	0.41
74HC32D,652	OR	4	2	14-SOIC	71R2356	0.52
74HC32D,653	OR	4	2	14-SOIC	78R6258	0.52
74HC32N,652	OR	4	2	14-DIP	71R2360	0.92
74HC1G00GW,125	NAND	1	2	5-TSSOP	71R1938	0.41
74HC30PW,112	NAND	1	8	14-TSSOP	71R2353	0.44
74HC30D,652	NAND	1	8	14-SOIC	71R2348	0.48
74HC30N,652	NAND	1	8	14-DIP	71R2352	1.02
74HC20N,652	NAND	2	4	14-DIP	71R2209	1.02
74HC10D,652	NAND	3	3	14-SOIC	71R1967	0.55
74HC10N,652	NAND	3	3	14-DIP	71R1971	1.02
74HC00BQ,115	NAND	4	2	14-QFN	71R1896	0.46
74HC00D,652	NAND	4	2	14-SOIC	71R1897	0.55
74HC00D,653	NAND	4	2	14-SOIC	78R6252	0.55
74HC00N,652	NAND	4	2	14-DIP	71R1901	0.92
74HC03D,652	NAND	4	2	14-SOIC	71R1911	0.72
74HC132N,652	NAND Schmitt Trigger	4	2	14-DIP	71R2026	0.93
74HC132D,652	NAND Schmitt Trigger	4	2	14-SOIC	71R2022	0.42

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HC AND HCT FAMILY STANDARD LOGIC ICs (CONT.)

Mfg. Part No.	Description	No. of Circuits	No. of Inputs/ Circuit	Package	Stock No.	Price Each 1-9
74HC1G02GW,125	NOR	1	2	5-TSSOP	71R1941	0.41
74HC27D,652	NOR	3	3	14-SOIC	71R2303	0.57
74HC02D,652	NOR	4	2	14-SOIC	71R1904	0.52
74HC02N,652	NOR	4	2	14-DIP	71R1908	0.92
74HC1G86GW,125	XOR	1	2	5-TSSOP	71R1965	0.46
74HC86N,652	XOR	4	2	14-DIP	71R2789	0.97
74HC86D,652	XOR	4	2	14-SOIC	71R2785	0.55
INVERTERS						
74HC1GU04GW,125	Inverter	1	1	5-TSSOP	71R1935	0.46
74HC1G04GW,125	Inverter	1	1	5-TSSOP	71R1944	0.41
74HC04D,652	Inverter	6	1	14-SOIC	71R1919	0.52
74HC04D,653	Inverter	6	1	14-SOIC	78R6253	0.52
74HC04N,652	Inverter	6	1	14-DIP	71R1923	0.92
74HCU04D,652	Inverter	6	1	14-SOIC	71R1889	0.64
74HC1G14GW,125	Inverter Schmitt Trigger	1	1	5-TSSOP	71R1956	0.41
74HC14D,652	Inverter Schmitt Trigger	6	1	14-SOIC	71R2050	0.52
74HC14D,653	Inverter Schmitt Trigger	6	1	14-SOIC	78R6255	0.52
74HC14N,652	Inverter Schmitt Trigger	6	1	14-DIP	71R2054	0.92
74HC14PW,112	Inverter Schmitt Trigger	6	1	14-TSSOP	71R2055	0.61
74HC14PW,118	Inverter Schmitt Trigger	6	1	14-TSSOP	78R6256	0.61

COUNTERS

Mfg. Part No.	Description	No. of Circuits	No. of Bits	Package	Stock No.	Price Each 1-9
74HC161N,652	Presettable Binary, Synchronous	1	4	16-DIP	71R2105	1.67
74HC191D,652	Presettable Binary, Synchronous, Up / Down	1	4	16-SOIC	71R2158	0.70
74HC191N,652	Presettable Binary, Synchronous, Up / Down	1	4	16-DIP	71R2162	1.58
74HC40103D,652	Binary, Synchronous, Down	1	8	16-SOIC	71R2431	0.95
74HC40103N,652	Binary, Synchronous, Down	1	8	16-DIP	71R2435	2.04
74HC93N,112	Binary Ripple	1	4	14-DIP	71R2802	2.04
74HC4024D,652	Binary Ripple	1	7	14-SOIC	71R2470	0.76
74HC4024N,652	Binary Ripple	1	7	14-DIP	71R2474	1.58
74HC4040D,652	Binary Ripple	1	12	16-SOIC	71R2477	0.65
74HC4040N,652	Binary Ripple	1	12	16-DIP	71R2481	1.67
74HC4060D,652	Binary Ripple Counter with Oscillator	1	14	16-SOIC	71R2533	0.51
74HC4060N,652	Binary Ripple Counter with Oscillator	1	14	16-DIP	71R2537	1.67
74HC4520D,112	Binary, Synchronous	2	4	16-SOIC	71R2603	0.62
74HC4520N,652	Binary, Synchronous	2	4	16-DIP	71R2607	1.70
74HC393D,652	Binary Ripple	2	4	14-SOIC	71R2417	0.55
74HC393N,652	Binary Ripple	2	4	14-DIP	71R2421	1.30
74HC4017D,652	Decade, Johnson	1	...	16-SOIC	71R2456	0.66
74HC4017N,652	Decade, Johnson	1	...	16-DIP	71R2460	1.70
74HC390D,652	Decade Ripple	2	...	16-SOIC	71R2409	0.62
74HC390N,652	Decade Ripple	2	...	16-DIP	71R2413	1.30

BUFFERS / LINE DRIVERS

Mfg. Part No.	Description	No. of Circuits	Package	Stock No.	Price Each 1-9
74HC1G125GW,125	Buffer/Line Driver, Non Inverting	1	5-TSSOP	71R1950	0.46
74HC1G126GW,125	Buffer/Line Driver, Non Inverting	1	5-TSSOP	71R1953	0.46
74HC125D,652	Buffer/Line Driver, Non Inverting, Active LOW Enable	4	14-SOIC	71R2008	0.61
74HC125N,652		4	14-DIP	71R2012	1.05
74HC126D,652	Buffer/Line Driver, Non Inverting, Active HIGH Enable	4	14-SOIC	71R2015	0.46
74HC365N,652	Buffer/Line Driver, Non Inverting, Active HIGH Enable	6	16-DIP	71R2367	1.67
74HC240D,652	Buffer/Line Driver, Inverting	8	20-SOIC	71R2236	0.56
74HC240N,652		8	20-DIP	71R2240	1.21
74HC244D,652	Buffer/Line Driver, Non Inverting	8	20-SOIC	71R2256	0.56
74HC244N,652		8	20-DIP	71R2260	1.09
74HC540D,652	Buffer/Line Driver, Inverting	8	20-SOIC	71R2627	0.76
74HC540N,652		8	20-DIP	71R2631	1.57
74HC541D,652	Buffer/Line Driver, Non Inverting	8	20-SOIC	71R2632	0.69
74HC541N,652		8	20-DIP	71R2636	1.09

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HC AND HCT FAMILY STANDARD LOGIC ICs (CONT.)

LATCHES

Mfg. Part No.	Description	No. of Circuits	Package	Stock No.	Price Each 1-9
74HC373N,652	D-Type Transparent Latch	8	20-DIP	71R2392	1.09
74HC373D,652		8	20-SOIC	71R2388	0.69
74HC573D,652	D-Type Transparent Latch	8	20-SOIC	71R2649	0.68
74HC573D,653		8	20-SOIC	78R6261	0.56
74HC573N,652		8	20-DIP	71R2653	1.09
74HC75D,652	Bistable Transparent Latch	4	16-SOIC	71R2758	0.67
74HC75PW,112		4	16-TSSOP	71R2763	0.67
74HC259D,652	8-Bit Addressable Latch	1	16-SOIC	71R2295	0.62

TRANSCEIVERS

Mfg. Part No.	Description	No. of Circuits	Package	Stock No.	Price Each 1-9
74HC245D,652	Transceiver, Non Inverting	8	20-SOIC	71R2264	0.61
74HC245N,652	Transceiver, Non Inverting	8	20-DIP	71R2268	1.09

MULTIVIBRATORS

Mfg. Part No.	Description	No. of Circuits	Package	Stock No.	Price Each 1-9
74HC4538D,652	Retriggerable Monostable, Precision	2	16-SOIC	71R2610	0.56
74HC4538N,652		2	16-DIP	71R2614	1.61
74HC123D,652	Retriggerable Monostable w/ reset	2	16-SOIC	71R2001	0.55
74HC123N,652		2	16-DIP	71R2005	1.05
74HC221D,652	Non-Retriggerable Monostable w/ reset	2	16-SOIC	71R2217	0.65
74HC221N,652		2	16-DIP	71R2221	2.38

TRANSLATORS/LEVEL SHIFTERS

Mfg. Part No.	Description	No. of Circuits	Package	Stock No.	Price Each 1-9
74HC4049N,652	High-To-Low Level Shifter, Inverting	6	16-DIP	71R2495	2.55
74HC4050D,652	High-To-Low Level Shifter	6	16-SOIC	71R2496	0.53
74HC4050N,652	High-To-Low Level Shifter	6	16-DIP	71R2500	1.40

DECODERS / DEMULTIPLEXERS

Mfg. Part No.	Description	Config.	Package	Stock No.	Price Each 1-9
74HC138D,652	Decoder / Demultiplexer, Inverting	3-to-8	16-SOIC	71R2035	0.66
74HC138N,652	Decoder / Demultiplexer, Inverting	3-to-8	16-DIP	71R2039	0.97
74HC139D,652	Decoder / Demultiplexer, Dual	2-to-4	16-SOIC	71R2042	0.48
74HC139N,652	Decoder / Demultiplexer, Dual	2-to-4	16-DIP	71R2046	0.97
74HC237D,652	Decoder / Demultiplexer w/ Address Latches	3-to-8	16-SOIC	71R2222	0.64
74HC238N,652	Decoder / Demultiplexer	3-to-8	16-DIP	71R2232	1.49
74HC42D,652	BCD to Decimal Decoder	1-of-10	16-SOIC	71R2568	0.64
74HC42N,652	BCD to Decimal Decoder	1-of-10	16-DIP	71R2570	1.70

MULTIPLEXERS

Mfg. Part No.	Description	Config.	Package	Stock No.	Price Each 1-9
74HC151D,652	Multiplexer	8-to-1	16-SOIC	71R2062	0.70
74HC151N,652			16-DIP	71R2066	1.21
74HC153D,652	Multiplexer, Dual	4-to-1	16-SOIC	71R2069	0.62
74HC153N,652			16-DIP	71R2073	1.21
74HC157N,652	Multiplexer, Quad	2-to-1	16-DIP	71R2088	1.21

FLIP FLOPS

Mfg. Part No.	Type	No. of Circuits	Features	Package	Stock No.	Price Each 1-9
74HC74D,652	D-Type	2	set & reset, pos. edge-trig.	14-SOIC	71R2748	0.55
74HC74D,653				14-SOIC	78R6264	0.55
74HC74N,652				14-DIP	71R2752	1.00
74HC574D,652	D-Type	4	pos. edge-trig.	20-SOIC	71R2656	0.69
74HC574N,652				20-DIP	71R2660	1.09
74HC374D,652	D-Type	8	pos. edge-trig.	20-SOIC	71R2395	0.69
74HC374N,652				20-DIP	71R2399	1.09
74HC273D,652	D-Type	8	reset, pos. edge-trig.	20-SOIC	71R2311	0.56
74HC273N,652				20-DIP	71R2315	1.09
74HC377D,652	D-Type	8	data enable, pos. edge-trig.	20-SOIC	71R2402	0.62
74HC377N,652				20-DIP	71R2406	1.40

SHIFT REGISTERS

Mfg. Part No.	Description	No. of Bits	Input/ Output	Package	Stock No.	Price Each 1-9
74HC164D,652	Shift Register	8	SIPO	14-SOIC	71R2115	0.48
74HC164N,652		8		14-DIP	71R2119	1.40
74HC165D,652	Shift Register	8	PISO	16-SOIC	71R2123	0.57
74HC165D,653		8		16-SOIC	78R6257	0.57
74HC165N,652		8		16-DIP	71R2127	1.40
74HC595D,112	Shift Register	8	SIPO or SISO	16-SOIC	71R2679	0.49
74HC595D,118		8		16-SOIC	78R6262	0.49
74HC595N,112		8		16-DIP	71R2683	1.19
74HC595PW,112		8		16-TSSOP	71R2684	0.61
74HC595PW,118		8		16-TSSOP	78R6263	0.61

➤ CONTINUED ➤

HC AND HCT FAMILY STANDARD LOGIC ICs (CONT.)

SHIFT REGISTERS

Mfg. Part No.	Type	No. of Circuits	Features	Package	Stock No.	Price Each 1-9
74HC4094D,652	Shift Store Register	8	SIPO	16-SOIC	71R2561	0.48
74HC4094N,652		8		16-DIP	71R2565	1.40

COMPARATORS

Mfg. Part No.	Comparator Type	No. of Bits	Word Type	Package	Stock No.	Price Each 1-9
74HC85N,652	Magnitude	4	Binary or BCD	16-DIP	71R2782	1.16
74HC688D,652	Magnitude	8	Binary or BCD	20-SOIC	71R2717	0.71

HCT FAMILY GATES

Mfg. Part No.	Description	No. of Circuits	No. of Inputs/ Circuit	Package	Stock No.	Price Each 1-9
74HCT1G08GW,125	AND	1	2	5-TSSOP	71R1179	0.54
74HCT10N,652	NAND	3	3	14-DIP	71R1203	1.02
74HCT10D,652	NAND	3	3	14-SOIC	71R1199	0.55
74HCT10PW,112	NAND	3	3	14-TSSOP	71R1204	0.56
74HCT08N,652	AND	4	2	14-DIP	71R1166	0.92
74HCT08D,652	AND	4	2	14-SOIC	71R1162	0.63
74HCT1G32GW,125	OR	1	2	5-TSSOP	71R1191	0.49
74HCT32D,652	OR	4	2	14-SOIC	71R1533	0.57
74HCT32N,652	OR	4	2	14-DIP	71R1537	0.92
74HCT1G02GW,125	NOR	1	2	5-TSSOP	71R1173	0.54
74HCT27N,652	NOR	3	3	14-DIP	71R1491	0.92
74HCT27PW,112	NOR	3	3	14-TSSOP	71R1492	0.61
74HCT02N,652	NOR	4	2	14-DIP	71R1143	0.92
74HCT02D,652	NOR	4	2	14-SOIC	71R1139	0.55
74HCT30D,652	NAND	1	8	14-SOIC	71R1525	0.48
74HCT30N,652	NAND	1	8	14-DIP	71R1529	1.02
74HCT30PW,112	NAND	1	8	14-TSSOP	71R1530	0.55
74HCT20N,652	NAND	2	4	14-DIP	71R1415	1.02
74HCT00D,652	NAND	4	2	14-SOIC	71R1132	0.55
74HCT00N,652	NAND	4	2	14-DIP	71R1136	0.92
74HCT132N,652	NAND Schmitt Trigger	4	2	14-DIP	71R1255	0.93
74HCT132D,652	NAND Schmitt Trigger	4	2	14-SOIC	71R1251	0.48
74HCT1G86GW,125	XOR	1	2	5-TSSOP	71R1197	0.61
74HCT86N,652	XOR	4	2	14-DIP	71R1872	0.97
74HCT86D,652	XOR	4	2	14-SOIC	71R1868	0.55

INVERTERS

Mfg. Part No.	Description	No. of Circuits	No. of Inputs/ Circuit	Package	Stock No.	Price Each 1-9
74HCT1G04GW,125	Inverter	1	1	5-TSSOP	71R1176	0.54
74HCT1G14GW,125	Inverter Schmitt Trigger	1	1	5-TSSOP	71R1188	0.41
74HCT04N,652	Inverter	6	1	14-DIP	71R1158	0.92
74HCT04D,652	Inverter	6	1	14-SOIC	71R1154	0.55
74HCT14D,652	Inverter Schmitt Trigger	6	1	14-SOIC	71R1274	0.55
74HCT14N,652	Inverter Schmitt Trigger	6	1	14-DIP	71R1278	0.92

COUNTERS

Mfg. Part No.	Description	No. of Circuits	No. of Bits	Package	Stock No.	Price Each 1-9
74HCT161D,652	Presettable, Binary, Synchronous	1	2	16-SOIC	71R1318	0.70
74HCT161N,652	Presettable, Binary, Synchronous	1	2	16-DIP	71R1322	1.67
74HCT193D,652	Presettable, Binary, Up / Down	1	2	16-SOIC	71R1375	0.92
74HCT193N,652	Presettable, Binary, Up / Down	1	2	16-DIP	71R1379	1.58
74HCT393D,652	Binary Ripple	2	4	14-SOIC	71R1595	0.57
74HCT393N,652	Binary Ripple	2	4	14-DIP	71R1599	1.30
74HCT4040N,652	Binary Ripple	1	12	16-DIP	71R1633	1.67
74HCT4060D,652	Binary Ripple	1	14	16-SOIC	71R1667	0.99
74HCT4060N,652	Binary Ripple	1	14	16-DIP	71R1671	1.67

SHIFT REGISTERS

Mfg. Part No.	Description	No. of Bits	Input/ Output	Package	Stock No.	Price Each 1-9
74HCT164N,652	Shift Register	8	Serial In, Parallel Out	14-DIP	71R1337	1.40
74HCT165D,652	Shift Register	8	Parallel In, Serial Out	16-SOIC	71R1341	0.70
74HCT165N,652		8		16-DIP	71R1345	1.40
74HCT166D,652	Shift Register	8	Parallel In, Serial Out	16-SOIC	71R1348	0.70
74HCT166N,652		8		16-DIP	71R1352	1.49

➤ CONTINUED ➤

HC AND HCT FAMILY STANDARD LOGIC ICs (CONT.)

Mfg. Part No.	Description	No. of Bits	Input/ Output	Package	Stock No.	Price Each 1-9
74HCT595D,118	Shift Register	8	Serial In, Parallel or Serial Out	16-SOIC	78R7401	0.95
74HCT4094D,112	Shift Store Register	8	Serial In, Parallel Out	16-SOIC	71R1695	0.55
74HCT4094N,112		8		16-DIP	71R1699	1.40

COMPARATORS

Mfg. Part No.	Description	No. of Bits	Word Type	Package	Stock No.	Price Each 1-9
74HCT85D,652	Magnitude Comparator	4	Binary or BCD	16-SOIC	71R1863	0.68
74HCT85N,652				16-DIP	71R1867	1.28
74HCT688D,652	Magnitude Comparator	8	Binary or BCD	20-SOIC	71R1827	0.63
74HCT688N,652				20-DIP	71R1831	1.70

FLIP FLOPS

Mfg. Part No.	Description	No. of Circuits	Features	Package	Stock No.	Price Each 1-9
74HCT374N,652	D-Type Flip Flop	8	pos. edge-trig.	20-DIP	71R1579	1.09
74HCT374D,652	D-Type Flip Flop	8	pos. edge-trig.	20-SOIC	71R1575	0.56
74HCT574N,652	D-Type Flip Flop	8	pos. edge-trig.	20-DIP	71R1786	1.09
74HCT574D,652	D-Type Flip Flop	8	pos. edge-trig.	20-SOIC	71R1782	0.69
74HCT273N,652	D-Type Flip Flop	8	reset, pos. edge-trig.	20-DIP	71R1499	1.09
74HCT74N,652	D-Type Flip Flop	8	set & reset, pos. edge-trig.	14-DIP	71R1848	1.00
74HCT74D,652	D-Type Flip Flop	8	set & reset, pos. edge-trig.	14-SOIC	71R1844	0.52
74HCT107N,652	JK-Type Flip Flop	2	reset, neg. edge-trig.	14-DIP	71R1208	1.15
74HCT109N,652	JK-Type Flip Flop	2	set & reset, pos. edge-trig.	16-DIP	71R1213	1.15
74HCT109D,652	JK-Type Flip Flop	2	set & reset, pos. edge-trig.	16-SOIC	71R1209	0.48
74HCT109PW,112	JK-Type Flip Flop	2	set & reset, pos. edge-trig.	16-TSSOP	71R1214	0.75
74HCT112N,652	JK-Type Flip Flop	2	set & reset, neg. edge-trig.	16-DIP	71R1227	1.40
74HCT112D,652	JK-Type Flip Flop	2	set & reset, neg. edge-trig.	14-SOIC	71R1223	0.70

BUFFERS / LINE DRIVERS

Mfg. Part No.	Description	No. of Circuits	Package	Stock No.	Price Each 1-9
74HCT1G125GW,125	Buffer/Line Driver, Non Inverting	1	5-TSSOP	71R1182	0.46
74HCT125D,652	Buffer/Line Driver, Non Inverting	4	14-SOIC	71R1237	0.42
74HCT125N,652		4	14-DIP	71R1241	1.05
74HCT241D,652	Buffer/Line Driver, Non Inverting	4	20-SOIC	71R1437	0.76
74HCT241N,652		4	20-DIP	71R1441	1.33
74HCT241PW,112		4	20-TSSOP	71R1442	0.54
74HCT367D,652	Buffer/Line Driver, Non Inverting	6	16-SOIC	71R1553	0.64
74HCT367N,652		6	16-DIP	71R1557	1.67
74HCT244D,652	Buffer/Line Driver, Non Inverting	8	20-SOIC	71R1445	0.61
74HCT244D,653		8	20-SOIC	78R7400	0.61
74HCT244N,652		8	20-DIP	71R1449	1.09
74HCT240N,652	Buffer/Line Driver, Inverting	8	20-DIP	71R1434	1.21
74HCT540D,652	Buffer/Line Driver, Inverting	8	20-SOIC	71R1754	0.73
74HCT540N,652		8	20-DIP	71R1758	1.42
74HCT541D,652	Buffer/Line Driver, Non Inverting	8	20-SOIC	71R1759	0.69
74HCT541N,652		8	20-DIP	71R1763	1.09

TRANSCEIVERS

Mfg. Part No.	Description	No. of Circuits	Package	Stock No.	Price Each 1-9
74HCT245D,652	Transceiver, Non Inverting	8	20-SOIC	71R1453	0.61
74HCT245N,652		8	20-DIP	71R1457	1.09
74HCT640N,652	Transceiver, Inverting	8	20-DIP	71R1813	2.55

MULTIPLEXERS

Mfg. Part No.	Description	No. of Circuits	Package	Stock No.	Price Each 1-9
74HCT151D	Multiplexer	1	16-SOIC	99K0550	0.52

MULTIVIBRATORS

Mfg. Part No.	Description	No. of Circuits	Package	Stock No.	Price Each 1-9
74HCT4538D,112	Retriggerable Monostable, Precision	2	16-SOIC	71R1744	0.71
74HCT4538N,112		2	16-DIP	71R1748	1.61
74HCT123D,652	Retriggerable Monostable w/ Reset	2	16-SOIC	71R1230	0.55
74HCT123N,652		2	16-DIP	71R1234	1.05
74HCT221D,112	Non-Retriggerable Monostable w/ Reset	2	16-SOIC	71R1416	0.87
74HCT221N,112		2	16-DIP	71R1420	2.38

LATCHES

Mfg. Part No.	Description	No. of Circuits	Package	Stock No.	Price Each 1-9
74HCT373N,652	D-Type Transparent Latch; 3-State	8	20-DIP	71R1572	1.09
74HCT573D,652	D-Type Transparent Latch	8	20-SOIC	71R1775	0.46
74HCT573N,652	D-Type Transparent Latch	8	20-DIP	71R1779	1.09

➤CONTINUED➤

HC AND HCT FAMILY STANDARD LOGIC ICs (CONT.)

DECODERS / DEMULTIPLEXERS

Mfg. Part No.	Description	No. of Circuits	Package	Stock No.	Price Each 1-9
74HCT138D,652	Decoder / Demultiplexer, Inverting	3-to-8	16-SOIC	71R1259	0.46
74HCT138N,652	Decoder / Demultiplexer, Inverting	3-to-8	16-DIP	71R1263	0.97
74HCT139D,652	Decoder / Demultiplexer, Dual	2-to-4	16-SOIC	71R1266	0.48
74HCT139N,652	Decoder / Demultiplexer, Dual	2-to-4	16-DIP	71R1270	0.97
74HCT238D,652	Decoder / Demultiplexer	3-to-8	16-SOIC	71R1422	0.72
74HCT238N,652	Decoder / Demultiplexer	3-to-8	16-DIP	71R1426	1.49
74HCT154N,652	Decoder / Demultiplexer	4-to-16	24-DIP	71R1303	2.55
74HCT4511N,652	Latch / Decoder / Driver	BCD-to-7seg	16-DIP	71R1728	1.87

MULTIPLEXERS

Mfg. Part No.	Description	No. of Circuits	Package	Stock No.	Price Each 1-9
74HCT151D,652	Multiplexer	8-to-1	16-SOIC	71R1284	0.52
74HCT151N,652			16-DIP	71R1288	1.21
74HCT151PW,112			16-TSSOP	71R1289	0.52
74HCT153D,652	Multiplexer, Dual	4-to-1	16-SOIC	71R1291	0.57
74HCT153N,652			16-DIP	71R1295	1.21
74HCT153PW,112			16-TSSOP	71R1296	0.74
74HCT157D,652	Multiplexer, Quad	2-to-1	16-SOIC	71R1306	0.46
74HCT157N,652			16-DIP	71R1310	1.21
74HCT257D,652	Multiplexer, Quad, 3-State	2-to-1	16-SOIC	71R1472	0.46
74HCT257N,652			16-DIP	71R1476	1.40

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HEF FAMILY STANDARD LOGIC ICs

RoHS Compliant Available

HEF family devices have fully buffered outputs for highest noise immunity and pattern insensitivity to output impedance variations. They operate over a recommended V_{DD} power supply range of 3V to 15V referenced to V_{SS} (usually ground). Unused inputs must be connected to V_{DD}, V_{SS}, or another input. These devices are suitable for use over both the industrial (-40°C to +85°C) and automotive (-40°C to +125°C) temperature ranges.

GATES

Mfg. Part No.	Description	No. of Circuits	No. of Inputs per Circuit	Package	Stock No.	Price Each 1-9
HEF4082BP,652	AND	2	4	14-DIP	70R5283	0.91
HEF4073BP,652	AND	3	3	14-DIP	70R5271	0.91
HEF4081BP,652	AND	4	2	14-DIP	70R5280	0.91
HEF4081BT,652	AND	4	2	14-SOIC	70R5281	0.55
HEF4072BP,652	OR	2	4	14-DIP	70R5268	1.40
HEF4075BP,652	OR	3	3	14-DIP	70R5274	0.91
HEF4071BP,652	OR	4	2	14-DIP	70R5265	1.00
HEF4071BT,652	OR	4	2	14-SOIC	70R5266	0.50
HEF4068BP,652	NAND	1	8	14-DIP	70R5253	1.63
HEF4023BP,652	NAND	3	3	14-DIP	70R5175	1.00
HEF4011BP,652	NAND	4	2	14-DIP	70R5137	0.91
HEF4011BT,652	NAND	4	2	14-SOIC	70R5138	0.43
HEF4011UBP,652	NAND Gate, Unbuffered	4	2	14-DIP	70R5140	0.86
HEF4093BP,652	NAND Schmitt Trigger	4	2	14-DIP	70R5286	1.03
HEF4093BT,652	NAND Schmitt Trigger	4	2	14-SOIC	70R5287	0.48
HEF4093BT,653	NAND Schmitt Trigger	4	2	14-SOIC	78R7394	0.48
HEF4002BP,652	NOR	2	4	14-DIP	70R5123	1.40
HEF4002BT,652	NOR	2	4	14-SOIC	70R5124	0.59
HEF4025BP,652	NOR	3	3	14-DIP	70R5187	1.00
HEF4001BT,652	NOR	4	2	14-SOIC	70R5121	0.45
HEF4001BP,652	NOR	4	2	14-DIP	70R5120	1.00
HEF4001BT,652	NOR	4	2	14-SOIC	70R5121	0.45
HEF4030BP,652	XOR	4	2	14-DIP	70R5196	1.21
HEF4030BT,652	XOR	4	2	14-SOIC	70R5197	0.48
HEF4070BP,652	XOR	4	2	14-DIP	70R5262	1.00
HEF4070BT,652	XOR	4	2	14-SOIC	70R5263	0.55
HEF4077BP,652	XNOR Gate	4	2	14-DIP	70R5277	1.00

INVERTERS

Mfg. Part No.	Description	No. of Circuits	No. of Inputs per Circuit	Package	Stock No.	Price Each 1-9
HEF4069UBP,652	Inverter	6	1	14-DIP	70R5256	1.00
HEF4069UBT,013	Inverter	6	1	14-SOIC	70R5257	0.56
HEF40106BP,652	Inverter Schmitt Trigger	6	1	14-DIP	70R5132	1.03
HEF40106BT,652	Inverter Schmitt Trigger	6	1	14-SOIC	70R5133	0.51

BUFFERS / LINE DRIVERS

Mfg. Part No.	Description	No. of Circuits	Package	Stock No.	Price Each 1-9
HEF4049BP,652	Buffer, Inverting	6	16-DIP	70R5220	1.08
HEF4049BT,652	Buffer, Inverting	6	16-SOIC	70R5221	0.50
HEF4050BT,652	Buffer, Non-Inverting	6	16-SOIC	70R5224	0.48

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HEF FAMILY STANDARD LOGIC ICs (CONT.)

Mfg. Part No.	Description	No. of Circuits	Package	Stock No.	Price Each 1-9
● HEF4050BP,652	Buffer, Non-Inverting	6	16-DIP	70R5223	1.08
● HEF40244BP,652	Buffer, Non-Inverting	8	20-DIP	70R5184	3.59
MULTIVIBRATORS					
● HEF4528BP,652	Monostable	2	16-DIP	70R5323	1.58
● HEF4528BT,652	Monostable	2	16-SOIC	70R5324	0.71
● HEF4538BP,652	Monostable, Precision	2	16-DIP	70R5326	1.58
● HEF4538BT,652	Monostable, Precision	2	16-SOIC	70R5327	0.56
● HEF4047BP,652	Monostable / Astable	2	14-DIP	70R5217	1.40
● HEF4047BT,652	Monostable / Astable	2	14-SOIC	70R5218	0.59
TRANSLATORS/LEVEL SHIFTERS					
● HEF4104BP,652	Low-to-High Voltage Translator	4	16-DIP	70R5293	2.89

COUNTERS

Mfg. Part No.	Description	No. of Bits/Stages	Package	Stock No.	Price Each 1-9
● HEF4020BP,652	Binary Counter	4	16-DIP	70R5169	1.40
● HEF4516BP,652	Binary Up / Down	4	16-DIP	70R5305	2.13
● HEF4520BP,652	Binary Counter, Dual	4	16-DIP	70R5314	1.23
● HEF4520BT,652	Binary Counter, Dual	4	16-SOIC	70R5315	0.59
● HEF4526BP,652	Programmable Binary, Down	4	16-DIP	70R5320	1.79
● HEF4024BP,652	Binary Counter	7	14-DIP	70R5178	1.23
● HEF4040BP,652	Binary Ripple Counter	12	16-DIP	70R5205	1.23
● HEF4040BT,652	Binary Ripple Counter	12	16-SOIC	70R5206	0.53
● HEF4060BP,652	Ripple-Carry Binary Counter / Divider	14	16-DIP	70R5244	1.47
● HEF4060BT,652	Ripple-Carry Binary Counter / Divider	14	16-SOIC	70R5245	0.59
● HEF4518BP,652	BCD Counter, Dual	4	16-DIP	70R5311	1.23
● HEF4017BP,652	Johnson Decade Counter	5	16-DIP	70R5157	1.28
● HEF4017BT,652	Johnson Decade Counter	5	16-SOIC	70R5158	0.68
● HEF4059BP,652	Prog. Divide-By-N Counter	...	24-DIP	70R5241	8.22
DIVIDERS					
● HEF4521BP,652	Frequency Divider / Ocsillator	24	16-DIP	70R5317	2.21
● HEF4521BT,652	Frequency Divider / Ocsillator	24	16-SOIC	70R5318	0.82

DECODERS / DEMULTIPLEXERS

Mfg. Part No.	Description	Config.	Package	Stock No.	Price Each 1-9
● HEF4555BP,652	Decoder / Demux, Dual	1-of-4	16-DIP	70R5337	1.73
● HEF4514BP,652	Decoder / Demux w/ Input Latches	1-of-16	24-DIP	70R5299	2.13
● HEF4514BT,652	Decoder / Demux w/ Input Latches	1-of-16	24-SOIC	70R5300	0.96
● HEF4028BP,652	BCD to Decimal Decoder	1-of-10	16-DIP	70R5193	1.29
● HEF4511BP,652	BCD to 7-Seg. Latch/Decoder/ Driver w/ Lamp Test Input	...	16-DIP	70R5296	1.54
● HEF4511BT,652	BCD to 7-Seg. Latch/Decoder/ Driver w/ Lamp Test Input	...	16-SOIC	70R5297	0.60
● HEF4543BP,652	BCD to 7-Seg. Latch/Decoder/ Driver w/ Phase Input	...	16-DIP	70R5334	1.83

FLIP FLOPS

Mfg. Part No.	Description	No. of Circuits	Features	Package	Stock No.	Price Each 1-9
● HEF4013BP,652	D Flip Flop	2	Pos. Edge-triggered	14-DIP	70R5143	1.00
● HEF4013BT,652	D Flip Flop	2	Pos. Edge-triggered	14-SOIC	70R5144	0.45
● HEF4027BP,652	JK Flip Flop	2	Edge-triggered	16-DIP	70R5190	1.03
● HEF4027BT,652	JK Flip Flop	2	Edge-triggered	16-SOIC	70R5191	0.48
LATCHES						
● HEF4043BP,652	R/S Latch	4	Active High Set & Reset	16-DIP	70R5208	1.19
● HEF4044BP,652	R/S Latch	4	Active Low Set & Reset	16-DIP	70R5211	1.19

SHIFT REGISTERS

Mfg. Part No.	Description	No. of Bits	Input/ Output	Package	Stock No.	Price Each 1-9
● HEF4094BP,652	Shift Store Register	8	Serial to Parallel	16-DIP	70R5289	1.29
● HEF4094BT,652	Shift Store Register	8	Serial to Parallel	16-SOIC	70R5290	0.50
● HEF4015BP,652	Static Shift Register, Dual	4	Serial to Parallel	16-DIP	70R5151	1.42
● HEF4021BP,652	Static Shift Register	8	Parallel to Serial	16-DIP	70R5172	1.29
COMPARATORS						
● HEF4585BP,652	Magnitude	4	Binary or BCD	16-DIP	70R5343	2.04

➤ CONTINUED ➤

HEF FAMILY STANDARD LOGIC ICs (CONT.)

TIMERS

Mfg. Part No.	Description	No. of Circuits	Features	Package	Stock No.	Price Each 1-9
● HEF4541BP,652	Programmable Timer	16	36	14-DIP	70R5329	1.47
● HEF4541BT,512	Programmable Timer	16	36	14-SOIC	70R5330	0.76

(190415)

AC AND ACT FAMILY STANDARD LOGIC ICs

RoHS Compliant Available

ON Semiconductor

The **AC logic family** from ON Semiconductor provides 24 mA of drive current and operates with Vcc of 3.0 to 5.5 V. The **ACT logic family** from ON Semiconductor provides 24 mA of drive current and operates with Vcc of 3.0 to 5.5 V. The ACT logic family has TTL-compatible inputs.

GATES - AC FAMILY

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● MC74AC08DG	Quad 2-Input AND Gate	14-SOIC	26K4111	0.56
● MC74AC00DR2G	Quad 2-Input NAND Gate	14-SOIC	84K8768	0.58
INVERTERS - AC FAMILY				
● MC74AC04DG	SPAN ERROR	14-SOIC	26K4108	0.56
● MC74AC14DG	Hex Inverter Schmitt Trigger	14-SOIC	71J5568	0.60
BUFFER/LINE DRIVERS - AC FAMILY				
● MC74AC244NG	Octal Buffer/Line Driver, 3 State	20-PDIP	26K4130	1.53
● MC74AC541DWG	Octal Buffer/Line Driver, 3 State	20-SOIC	26K4158	0.74
● MC74AC541NG		20-PDIP	26K4162	1.45
● MC74AC573DWG	Octal Buffer/Line Driver, 3-State	20-SOIC	42K0814	0.76
FLIP-FLOPS - AC FAMILY				
● MC74AC74NG	Dual D Flip-Flop w/ Preset and Clear	14-PDIP	45J1265	0.78
LATCHES - AC FAMILY				
● MC74AC373NG	Octal Transparent Latch, 3-State	20-PDIP	26K4146	1.45
DECODER/DEMULTIPLEXERS - AC FAMILY				
● MC74AC138DG		16-WSOIC	26K4118	0.54
COUNTERS - AC FAMILY				
● MC74AC4040DG	12-Stage Binary Ripple Counter	16-SOIC	26K4154	1.61

GATES - ACT FAMILY

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● MC74ACT08DG	Quad 2-Input AND Gate	14-SOIC	71J5547	0.56
● MC74ACT00DG	Quad 2-Input NAND Gate	14-SOIC	42K0673	0.56
● MC74ACT132DG	Quad 2-Input NAND Schmitt Trigger	14-SOIC	42K0691	0.56
● MC74ACT20NG	Dual 4-Input NAND Gate	14-PDIP	26K4072	0.71
● MC74ACT32DG	Quad 2-Input OR Gate	14-SOIC	71J5554	0.56
● MC74ACT32NG		14-PDIP	42K0728	0.78
● MC74ACT02DG	Quad 2-Input NOR Gate	14-SOIC	45J1231	0.56
● MC74ACT02NG		14-PDIP	45J1233	0.71
INVERTERS - ACT FAMILY				
● MC74ACT04DG	SPAN ERROR	14-SOIC	45J1234	0.60
● MC74ACT04DR2G		14-SOIC	84K8764	0.58
● MC74ACT05DG	Hex Inverter with Open-Drain Outputs	14-SOIC	42K0680	0.56
● MC74ACT14DG	Hex Inverter Schmitt Trigger	14-SOIC	42K0699	0.60
BUFFERS - ACT FAMILY				
● MC74ACT244DWG	Octal Buffer/Line Driver, 3-State	20-SOIC	42K0713	0.76
● MC74ACT244NG		20-PDIP	26K4078	1.45
FLIP-FLOPS - ACT FAMILY				
● MC74ACT74NG	Dual D-Type Positive Edge Trigger Flip-Flop	14-PDIP	26K4106	0.78
TRANSCEIVERS - ACT FAMILY				
● MC74ACT245DWG	Octal Bidirectional Transceiver, 3-State Inputs/Outputs	20-SOIC	98H0705	0.76

(74506)

HC FAMILY STANDARD LOGIC ICs

RoHS Compliant Available

ON Semiconductor

The **HC logic family** from ON Semiconductor operates with Vcc of 2 to 6 V, and provides ESD protection exceeding three industry standards (HBM, MM, CDM).

GATES

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● MC74HC08ADG	Quad 2-Input AND Gate	14-SOIC	45J1285	0.49
● MC74HC08ADR2G	Quad 2-Input AND Gate	14-SOIC	84K8773	0.54
● MC74HC1G08DTT1G	Single 2 Input AND Gate	5-TSOP	10N9697	0.45
● MC74HC00ADG	Quad 2-Input NAND Gate	14-SOIC	71J5589	0.52
● MC74HC00ADR2G	Quad 2-Input NAND Gate	14-SOIC	45J1278	0.51
● MC74HC03ADG	Quad 2-Input NAND Open Drain Outputs	14-SOIC	26K4195	0.49

➤ CONTINUED ➤

HC FAMILY STANDARD LOGIC ICs (CONT.)

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
MC74HC03ANG	Quad 2-Input NAND Open Drain Outputs	14-PDIP	45J1283	0.70
MC74HC132ADG	Quad 2-Input NAND Schmitt-Trigger Inputs	14-SOIC	45J1294	0.44
MC74HC132ADR2G	Quad 2-Input NAND Schmitt-Trigger Inputs	14-SOIC	84K8775	0.43
MC74HC32ADG	Quad OR Gate	14-SOIC	26K4221	0.49
MC74HC32ADR2G	Quad OR Gate	14-SOIC	84K8779	0.51
MC74HC1G32DTT1G	Single 2 Input OR Gate	5-SOT-23	83H7307	0.41
MC74HC02ADG	Quad 2-Input NOR Gate	14-SOIC	45J1280	0.52
MC74HC02ADR2G	Quad 2-Input NOR Gate	14-SOIC	84K8772	0.51
MC74HC1G02DTT1G	Single 2 Input NOR Gate	5-TSOP	45J1289	0.41
MC74HC86ADR2G	Quad 2-Input Exclusive OR Gate	14-SOIC	84K8785	0.51
INVERTERS				
MC74HC04ADG	Hex Inverter	14-SOIC	42K0843	0.49
MC74HC04ADR2G	Hex Inverter	14-SOIC	45J1284	0.51
MC74HC14ADG	Hex Schmitt-Trigger Inverter	14-SOIC	71J5595	0.49
MC74HC14ADR2G	Hex Schmitt-Trigger Inverter	14-SOIC	45J1301	0.51
MC74HC14ADTR2G	Hex Schmitt-Trigger Inverter	14-TSSOP	42K0856	0.51
MC74HC1G14DTT1G	Single Inverter, Schmitt Input	5-TSOP	71J5593	0.41
MC74HCU04ADR2G	Hex Unbuffered Inverter	14-SOIC	84K8771	0.51
MC74HC1GU04DFT1G	Single Unbuffered Inverter	5-SC-70	67H6706	0.36
BUFFERS				
MC74HC125ADG	Quad Noninverting Buffer, 3 State	14-SOIC	45J1290	0.41
MC74HC125ADR2G	Quad Noninverting Buffer, 3 State	14-SOIC	84K8774	0.43
MC74HC125ANG	Quad Noninverting Buffer, 3 State	14-PDIP	45J1292	0.71
MC74HC126ANG	Quad Noninverting Buffer, 3 State	14-PDIP	45J1293	0.66
BUFFER/LINE DRIVER/LINE RECEIVERS				
MC74HC244ADWG	Octal 3-State Non-Inverting Buffer/Line Driver/Line Receiver	20-SOIC	42K0866	0.63
MC74HC244ADWR2G	Octal 3-State Non-Inverting Buffer/Line Driver/Line Receiver	20-SOIC	45J1313	0.64
MC74HC540ADWG	Octal 3-State Inverting Buffer/Line Driver/ Line Receiver	20-SOIC	26K4246	0.63
MC74HC540ANG	Octal 3-State Inverting Buffer/Line Driver/ Line Receiver	20-PDIP	26K4250	1.26
MC74HC541ADWG	Octal 3-State Noninverting Buffer/Line Driver/Line Receiver	20-SOIC	42K0904	0.63
MC74HC541ADWR2G	Octal 3-State Noninverting Buffer/Line Driver/Line Receiver	20-SOIC	84K8782	0.64
MC74HC541ANG	Octal 3-State Noninverting Buffer/Line Driver/Line Receiver	20-PDIP	45J1340	1.38
FLIP-FLOPS				
MC74HC74ADG	Dual D-Type Flip-Flop with Set and Reset	14-SOIC	26K4258	0.49
MC74HC74ADR2G	Dual D-Type Flip-Flop with Set and Reset	14-SOIC	84K8784	0.51
MC74HC174ANG	Hex D-Type Flip-Flop with Clock	16-PDIP	45J1311	0.70
MC74HC273ADWG	Octal D Flip-Flop w/ Common Clock & Reset	20-SOIC	42K0869	0.67
MC74HC374ADWG	Octal 3-State Non-Inverting D Flip-Flop	20-SOIC	26K4225	0.63
MC74HC574ADWG	Octal 3-State Non-Inverting D Flip-Flop	20-SOIC	42K0908	0.63
LATCHES				
MC74HC373ADWG	Octal 3-State Non-Inverting Transparent Latch	20-SOIC	26K4222	0.63
MC74HC573ADWG	Octal 3-State Non-Inverting Transparent Latch	20-SOIC	45J1341	0.67
REGISTERS				
MC74HC164ADG	8-Bit Serial-Input/Parallel-Output Shift Register	14-SOIC	71J5599	0.44
MC74HC165ADR2G	8-Bit Serial or Parallel-Input/Serial Output Shift Register	16-SOIC	84K8778	0.43
MC74HC589ADR2G	8-Bit Serial or Parallel-Input/Serial-Output Shift Register w/ 3-State Output	16-SOIC	10N9698	0.48
MC74HC595ADG	8-Bit Serial-Input/Serial or Parallel-Output Shift Register w/ Latched 3-State Outputs	16-SOIC	45J1347	0.49
MC74HC595ADR2G	8-Bit Serial-Input/Serial or Parallel-Output Shift Register w/ Latched 3-State Outputs	16-SOIC	84K8783	0.54
MC74HC595ADTG	8-Bit Serial-Input/Serial or Parallel-Output Shift Register w/ Latched 3-State Outputs	16-TSSOP	42K0909	0.52
MC74HC595ADTR2G	8-Bit Serial-Input/Serial or Parallel-Output Shift Register w/ Latched 3-State Outputs	16-TSSOP	42K0910	0.50
COUNTERS				
MC74HC390ADG	Dual 4-Stage Binary Ripple Counter w/ Divide-by-2 & Divide-by-5 Sections	16-SOIC	71J5612	0.66
MC74HC390ANG	Dual 4-Stage Binary Ripple Counter w/ Divide-by-2 & Divide-by-5 Sections	16-PDIP	71J5614	0.72
DECODERS / MULTIPLEXERS / DEMULTIPLEXERS				
MC74HC138ADG	1-of-8 Decoder/Demultiplexer	16-WSOIC	42K0852	0.41
MC74HC138ADR2G	1-of-8 Decoder/Demultiplexer	16-WSOIC	84K8776	0.43
MC74HC139ADG	Dual 1-of-4 Decoder/Demultiplexer	16-WSOIC	42K0853	0.41
MC74HC157ADG	Data Selector/Multiplexer 2-Input Q	16-WSOIC	26K4206	0.41
MC74HC157ADR2G	Data Selector/Multiplexer 2-Input Q	16-WSOIC	84K8777	0.43

➤ CONTINUED ➤

HC FAMILY STANDARD LOGIC ICs (CONT.)

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
DECODERS / MULTIPLEXERS / DEMULTIPLEXERS				
MC74HC4051ADG	Analog Multiplexer/Demultiplexer, 184 FETs	16-SOIC	26K4231	0.58
MC74HC4051ADR2G	Analog Multiplexer/Demultiplexer, 184 FETs	16-SOIC	84K8780	0.60
MC74HC4053ADG	Analog Multiplexer/Demultiplexer, 156 FETs	16-SOIC	45J1329	0.64
MC74HC4053ADTG	Analog Multiplexer/Demultiplexer, 156 FETs	16-TSSOP	42K0891	0.55
MC74HC4053ANG	Analog Multiplexer/Demultiplexer, 156 FETs	16-PDIP	45J1330	0.80
MC74HC4066ADG	Quad Analog Switch/Multiplexer/ Demultiplexer	14-SOIC	45J1332	0.55
MC74HC4066ADR2G	Quad Analog Switch/Multiplexer/ Demultiplexer	14-SOIC	84K8781	0.56
TRANSCEIVERS				
MC74HC245ADWG	Octal 3-State Non-Inverting Bus/ Transceiver	20-SOIC	45J1314	0.63
MULTIVIBRATORS				
MC74HC4538ADG	Dual Precision Monostable Multivibrator (Retriggerable, Resettable)	16-SOIC	45J1336	0.67

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HCT FAMILY STANDARD LOGIC GATES

RoHS Compliant Available

ON Semiconductor

The **HCT logic family** from ON Semiconductor operates with Vcc of 2 to 6 V, and provides ESD protection exceeding three industry standards (HBM, MM, CDM). The HCT logic family has TTL-compatible inputs.

Mfg. Part No.	Description	Pkg.	Stock No.	Price Each 1-9
INVERTERS				
MC74HCT04ADG	Hex Inverter, LSTTL Compliant Input	14-SOIC	71J5579	0.49
MC74HCT04ANG		14-PDIP	45J1266	0.70
MC74HCT14ADG		14-SOIC	45J1267	0.47
BUFFER / LINE DRIVER / LINE RECEIVERS				
MC74HCT244ADWG	Octal Buffer/Line Driver/Line Receiver, 3-State, Non-Inverting, TTL Level	20-SOIC	45J1270	0.63
MC74HCT244ANG		20-PDIP	42K0826	1.35
MC74HCT541ADWG	Octal Buffer/Line Driver/Line Receiver, 3-State, Non-Inverting, TTL Level	20-SOIC	42K0835	0.67
FLIP-FLOPS				
MC74HCT74ADG	Dual D-Type Flip-Flop w/ Set & Reset	14-SOIC	42K0838	0.47
MC74HCT574ADWG	Octal D-Type 3-State Noninverting Flip-Flop	20-SOIC	26K4188	0.63
MC74HCT574ANG		20-PDIP	26K4189	1.26
LATCHES				
MC74HCT373ANG		20-PDIP	71J5583	1.26
MULTIPLEXERS / DECODERS / DEMULTIPLEXERS				
MC74HCT138ANG	1-of-8 Decoder/Demultiplexer, LSTTL Compatible Inputs	16-PDIP	71J5580	0.67

(74568)

HIGH-SPEED CMOS

RoHS Compliant Available

ON Semiconductor

NL FAMILY
1-CIRCUIT DEVICES

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
NL17SZU04DFT2G	Unbuffered Inverter	5-SC-88A	98H0938	0.36
NL17SZ14DFT2G	Single Inverter, Schmitt Trigger	5-SC-70	88H5066	0.36
NL17SZ125DFT2G	Non Inverting Buffer, 3-State Low Enable	5-SC-70	83H7736	0.39
NL17SZ17DFT2G	Buffer, Schmitt	5-SC-70	45J2062	0.39
NL17SZ74USG	D Flip-Flop	8-US	83H7737	0.61
2-CIRCUIT DEVICES				
NL27WZ00USG	2 Input NAND Gate	8-US	83H7738	0.50
NL27WZ04DFT2G	Inverter	6-SC-70	45J2064	0.56
NL27WZ04DTT1G		6-TSOP	26K5079	0.57
NL27WZ06DFT2G	Inverter, Open Drain Outputs	6-SC-88	45P5150	0.56
NL27WZ14DFT2G	Inverter, Schmitt-Trigger	6-SC-70	45J2066	0.61
NL27WZ14DTT1G		6-TSOP	71J6968	0.57
NL27WZ16DFT2G	Buffer	6-SC-70	88H5068	0.56
NL27WZ16DTT1G		6-TSOP	71J6969	0.61
NL27WZ07DFT2G	Buffer, Open Drain Outputs	6-SC-70	45J2065	0.61
NL27WZ07DTT1G		6-TSOP	88H5067	0.57
NL27WZ17DFT2G	Buffer, Schmitt	6-SC-70	04R7800	0.56
NL27WZ125USG	Buffer, 3-State Outputs Low Enable	8-US	83H7742	0.53
NL27WZ126USG	Buffer, 3-State Outputs High Enable	8-US	83H7743	0.50

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HIGH-SPEED CMOS (CONT.)

3-CIRCUIT DEVICES

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● NL37WZ14USG	Inverter, Schmitt-Trigger	8-US	83H7749	0.47
● NL37WZ16USG	Buffer	8-US	83H7750	0.47
● NL37WZ17USG	Buffer, Non Inverting, Schmitt	8-US	83H7751	0.47
● NL37WZ07USG	Buffer, Open Drain Outputs	8-US	83H7748	0.14

(74508)

METAL GATE CMOS

RoHS Compliant Available

ON Semiconductor

The Metal Gate logic family from ON Semiconductor has a Vcc range of 3 to 18 V, operating temperature range of -55 to +125 C, and latch-up immunity >500 mA.

GATES

Mfg. Part No.	Description	Pkg.	Stock No.	Price Each 1-9
● MC14081BDG	Quad 2-Input AND Gate	14-SOIC	45J1086	0.60
● MC14011BDR2G	Quad 2-Input NAND Gate	14-SOIC	45J1015	0.54
● MC14011UBCPG	Quad 2-Input NAND Gate Unbuffered	14-PDIP	45J1016	0.68
● MC14011UBDG	Quad 2-Input NAND Gate Unbuffered	14-SOIC	42K0501	0.56
● MC14093BDG	Quad 2-Input Schmitt Trigger NAND	14-SOIC	71J5481	0.47
● MC14071BDG	Quad 2-Input OR Gate	14-SOIC	26K3944	0.60
● MC14070BCPG	Quad 2-Input Exclusive OR Gate	14-PDIP	45J1075	0.74
● MC14070BDG	Quad 2-Input Exclusive OR Gate	14-SOIC	71J5474	0.56
● MC14001BDG	Quad 2-Input NOR Gate	14-SOIC	26K3924	0.52
● MC14001UBCPG	Quad 2-Input NOR Gate Unbuffered	14-PDIP	45J1009	0.73
● MC14025BDG	Triple 3-Input NOR Gate	14-SOIC	26K3933	0.56
● MC14025BDG	Triple 3-Input NOR Gate	14-SOIC	26K3933	0.56
● MC14077BDG	Quad 2-Input Exclusive NOR Gate	14-SOIC	26K3945	0.60
INVERTERS				
● MC14049BDG	Hex Inverter/Buffer	16-SOIC	71J5469	0.51
● MC14049UBDG	Hex Inverter/Buffer	16-SOIC	71J5471	0.49
● MC14049UBDR2G	Hex Inverter/Buffer	16-SOIC	84K8744	0.50
● MC14050BDG	Noninverting Hex Buffer	16-SOIC	26K3938	0.48
● MC14050BDR2G	Noninverting Hex Buffer	16-SOIC	84K8745	0.49
● MC14069UBDG	Hex Inverter	14-SOIC	45J1073	0.56
● MC14069UBDR2G	Hex Inverter	14-SOIC	84K8748	0.54
● MC14106BDG	Hex Schmitt Trigger Inverter	14-SOIC	71J5483	0.45
● MC14584BDG	Hex Schmitt Trigger Inverter	14-SOIC	45J1140	0.56
● MC14584BDR2G	Hex Schmitt Trigger Inverter	14-SOIC	84K8756	0.54
● MC14007UBDG	Dual Comparator Pair Plus Inverter	14-SOIC	26K3925	0.52
● MC14050BDG	Noninverting Hex Buffer	16-SOIC	26K3938	0.48
● MC14050BDR2G	Noninverting Hex Buffer	16-SOIC	84K8745	0.49
● MC14069UBDG	Hex Inverter	14-SOIC	45J1073	0.56
● MC14069UBDR2G	Hex Inverter	14-SOIC	84K8748	0.54
● MC14106BDG	Hex Schmitt Trigger Inverter	14-SOIC	71J5483	0.45
● MC14584BDG	Hex Schmitt Trigger Inverter	14-SOIC	45J1140	0.56
● MC14584BDR2G	Hex Schmitt Trigger Inverter	14-SOIC	84K8756	0.54
● MC14007UBDG	Dual Comparator Pair Plus Inverter	14-SOIC	26K3925	0.52
FLIP-FLOPS				
● MC14013BDG	Dual D-Type Flip-Flop	14-SOIC	45J1018	0.56
● MC14174BCPG	Hex D Flip-Flop	16-PDIP	45J1097	0.72
● MC14175BCPG	Quad D Flip-Flop	16-PDIP	45J1098	0.88
● MC14027BDG	Dual J-K Flip-Flop	16-WSOIC	71J5463	0.45
LATCHES				
● MC14042BCPG	Quad Transparent Latch	16-PDIP	45J1047	0.88
● MC14099BCPG	8-Bit Addressable Latch	16-PDIP	45J1093	1.09
● MC14099BDWG	8-Bit Addressable Latch	16-SOIC	26K3949	0.84
REGISTERS				
● MC14021BCPG	8-Bit Static Shift Register	16-PDIP	45J1029	0.86
● MC14021BDG	8-Bit Static Shift Register	16-SOIC	45J1030	0.56
● MC14094BDG	8-Bit Shift/Store Register, 3-State	16-SOIC	45J1092	0.50
● MC14517BDWG	Dual 64-Bit Static Shift Register	16-SOIC	26K3955	1.61
● MC14557BDWG	1 To 64 Bit Variable Length Shift Register	16-SOIC	26K3975	1.07
● MC14543BDG	BCD-to-7 Segment Latch/Decoder/Driver	16-SOIC	71J5499	0.56
COMPARATORS				
● MC14017BDG	Decade Counter/Divider	16-SOIC	42K0508	0.61
● MC14018BDG	Presettable Divide-by-N Counter	16-SOIC	71J5459	0.67
● MC14020BDG	14-Bit Binary Counter	16-SOIC	26K3930	0.61
● MC14022BCPG	Octal Counter	16-PDIP	45J1032	1.20
● MC14040BDG	12-Stage Ripple-Carry	16-SOIC	45J1046	0.56

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METAL GATE CMOS (CONT.)

BINARY COUNTERS/DIVIDERS

Mfg. Part No.	Description	Pkg.	Stock No.	Price Each 1-9
● MC14040BDR2G	12-Stage Ripple-Carry	16-SOIC	26K3935	0.57
● MC14060BDG	14-Stage Binary Counter/Oscillator	16-SOIC	71J5473	0.59
● MC14520BCPG	Dual Binary Up Counter	16-PDIP	45J1111	1.10
FREQUENCY DIVIDERS				
● MC14521BDG	24-Stage Frequency Divider	16-SOIC	45J1113	0.83
DECODERS / ENCODERS / MULTIPLEXERS / DEMULTIPLEXERS				
● MC14028BDG	BCD-To-Decimal	16-SOIC	71J5465	0.56
● MC14051BDTR2G	Analog Multiplexer/Demultiplexer SP8T solid state switch	16-TSSOP	42K0523	0.66
● MC14532BCPG	8-Bit Priority Encoder (Active High Outputs)	16-PDIP	45J1118	0.92
● MC14556BCPG	Dual Binary to 1-of-4 Decoder/Demultiplexer (Active Low Outputs)	16-PDIP	45J1133	0.95
MULTIVIBRATORS				
● MC14538BCPG	Dual Precision Monostable Multivibrator Retriggerable/Resettable	16-PDIP	45J1120	1.02
● MC14538BDG	Dual Precision Monostable Multivibrator Retriggerable/Resettable	16-SOIC	45J1121	0.77
● MC14538BDR2G	Dual Precision Monostable Multivibrator Retriggerable/Resettable	16-SOIC	10N9441	0.79
● MC14538BDWG	Dual Precision Monostable Multivibrator Retriggerable/Resettable	16-SOIC	26K3968	0.79
TRANSLATORS				
● MC14504BDG	TTL or CMOS-to-CMOS	16-SOIC	71J5489	1.29
HEX LEVEL SHIFTER				
● MC14504BDR2G	TTL or CMOS-to-CMOS	16-SOIC	84K8754	1.25

(74507)

VHC AND VHCT FAMILY STANDARD LOGIC ICs

RoHS Compliant Available

ON Semiconductor

- Over 60% Faster than HCMOS (Close to FACT)
- Very Low Noise (0.3 V_{OLP} Typ.)
- Inputs Tolerate Voltages from 0V to 7V (At Any Specified Voltage)
- Low Static I_{CC}
- 8mA Sink/Source Current @ V_{CC} = 4.5V (4mA @ V_{CC} = 3.0V)

VHC series CMOS logic is designed for operation from V_{CC} = 2V-5.5V. **VHCT series** CMOS logic is designed for operation from V_{CC} = 4.5V-5.5V. Feature 5V-tolerant inputs to aid 3V-5V mixed system designs, when operating at supply voltages less than 5V. Low power, low switching noise, and fast switching speeds make this series perfect for low-power, low-cost portable applications. Latch-up immunity: >±300mA.

SINGLE GATES

Mfg. Part No.	Description	Pkg.	Stock No.	Price Each 1-9
● MC74VHC1G08DFT1G	2 Input AND	5-SOT-353	67H6751	0.36
● MC74VHC1G08DTT1G		5-SOT-23	71J5688	0.41
● M74VHC1GT08DFT1G	2 Input AND, TTL Level	5-SOT-353	61K1032	0.39
● M74VHC1GT08DTT1G		5-TSOP	61K1034	0.41
● MC74VHC1G09DTT1G	2-Input AND, Open Drain	5-TSOP	71J5689	0.45
● M74VHC1G132DTT1G	2-Input NAND, Schmitt Trigger	5-SOT-23	61K1063	0.41
● M74VHC1G135DTT1G	2-Input NAND, Schmitt Trigger, Open Drain	5-TSOP	61K1066	0.44
● MC74VHC1G32DTT1G	2 Input OR	5-TSOP	83H7308	0.45
● MC74VHC1G02DTT1G	2 Input NOR	5-TSOP	71J5685	0.41
● MC74VHC1G03DFT1G	2 Input NOR, Open Drain	5-SOT-353	67H6745	0.36
● MC74VHC1G86DTT1G	2-Input Exclusive OR	5-TSOP	71J5695	0.41
MULTIPLE CHANNEL GATES				
● MC74VHCT08ADR2G	Quad 2-Input AND Gate	14-SOIC	26K4323	0.43
INVERTERS				
● MC74VHC1G04DFT1G	Inverter	5-SC-88A	09H2337	0.40
● MC74VHC1G04DTT1G		5-SOT-23	45J1387	0.45
● M74VHC1GT04DFT1G	Inverter, TTL Level	5-SC-88A	61K1029	0.39
● MC74VHC1G05DFT1G	Inverter, Open Drain	5-SC-88A	67H6747	0.36
● MC74VHC1G05DTT1G		5-TSOP	71J5687	0.45
● MC74VHC1G14DFT1G	Inverter, Schmitt Input	5-SC-88A	67H6763	0.39
● MC74VHC1G14DTT1G		5-TSOP	45J1389	0.45
● M74VHC1GT14DFT1G	Inverter, Schmitt Input, TTL Level	5-SC-88A	61K1037	0.36
● MC74VHC14DTG	Hex Inverter, Schmitt Trigger	14-TSSOP	42K1131	0.46
BUFFERS				
● MC74VHC1G50DFT1G	Single Non Inverting Buffer	5-SC-70	67H6767	0.36
● MC74VHC1G07DFT1G	Single Non Inverting Buffer, Open Drain	5-SC-70	67H6749	0.36
● M74VHC1GT50DFT1G	Single Non Inverting Buffer, TTL Level	5-SC-70	61K1043	0.39
● M74VHC1GT50DTT1G		5-SOT-23	61K1045	0.41
● M74VHC1G125DFT1G	Single Non Inverting Buffer, 3-State, TTL Level	5-SC-70	61K1055	0.36
● M74VHC1G125DFT2G		5-SC-70	61K1056	0.36
● M74VHC1G125DTT1G		5-SOT-23	61K1057	0.41

➤CONTINUED➤

VHC AND VHCT FAMILY STANDARD LOGIC ICs (CONT.)

BUFFERS

Mfg. Part No.	Description	Pkg.	Stock No.	Price Each 1-9
M74VHC1GT125DF1G	Single Non Inverting Buffer, 3-State, TTL Level	5-SC-70	83H7591	0.36
M74VHC1GT125DT1G		5-SOT-23	61K1035	0.44
M74VHC1G126DFT1G	Single Non Inverting Buffer, 3-State	5-SC-70	61K1058	0.36
M74VHC1GT126DF1G	Single Non Inverting Buffer, TTL Level	5-SC-70	83H7593	0.39
M74VHC1GT126DT1G		5-SOT-23	61K1036	0.41

BUFFERS

MC74VHCT125ADR2G	Quad Bus Buffer, 3–State Control Inputs	14-SOIC	26K4324	0.46
MC74VHCT541ADWG	Octal Buffer/Line Driver/Line Receiver, 3-State, Noninverting, TTL Level	20-SOIC	26K4345	0.67

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4000 CMOS LOGIC

RoHS Compliant Available

BUFFERS AND DRIVERS

Mfg. Part No.	Description	Pkg.	Stock No.	Price Each 1-9
M74HC125RM13TR	Quad Bus Buffer (3-State)	14-SOP	89K0856	0.44
M74HC4050RM13TR	Hex Buffer/Converter	16-SOP	89K0905	0.52
74LCX244TTR	Octal Bus Buffer (3-State) with 5V Tolerant I/O	20-TSSOP	89K1182	0.87

COUNTERS/MULTIPLIERS/DIVDERS

HCF4017BEY	Decade Counter with 10 Decoded Outputs	16-DIP	89K0558	1.83
HCF4040BEY	12-Stage Binary/Ripple Counter	16-DIP	89K0567	1.46
M74HC163B1R	Synchronous Binary Counter With Sync. Clear	16-DIP	89K0869	1.02
M74HC4040B1R	12-Stage Binary Counter	16-DIP	89K0902	0.79

DECODERS/ENCODERS/MULTIPLIERS

HCF4052BEY	Dual 4-Channel Analog Mux/DeMux	16-DIP	89K0574	0.59
M74HC238RM13TR	3 to 8 Line Decoder	16-SOIC	89K0878	0.67

FLIP-FLOPS

M74HC74RM13TR	Dual D-Type Flip-Flop With Preset & Clear	16-SOIC	89K0936	0.55

GATES AND INVERTERS

M74HC04B1R	Hex Inverter	14-DIP	89K0846	0.66
M74HC32B1R	Quad 2-Input OR Gate	14-DIP	89K0889	0.59
HCF4030BEY	Quad Exclusive-OR Gate	14-DIP	89K0566	1.07

LATCHES

M74HC4094B1R	8 Bit SIPO Shift Register Latch (3-State)	16-DIP	89K0916	0.85
M74HC573RM13TR	Octal D-Type Latch (3-State)	20-SOIC	89K0925	1.08

MULTIPLEXERS

M74HC4052RM13TR	Dual 4-Channel Analog Multiplexer/ Demultiplexer	16-SOIC	89K0908	0.67

SWITCHES

HCF4016BEY	Quad Bilateral Switch	14-DIP	89K0557	0.75
M74HC4066RM13TR	Quad Bilateral Switch	14-SOIC	89K0913	0.29
STG3157CTR	SPDT Low Voltage Switch w/ Break Before Make	6-SOT-323	89K0951	0.50

TRANCEIVERS

M74HC245B1R	Octal Bus Transceiver (3-State)	20-DIP	89K0881	0.58
74LCX245MTR	Octal Bus Transceiver (3-State) with 5V Tolerant Input & Output	20-SOIC	89K1183	0.73

(83713)

74HC HIGH SPEED CMOS LOGIC

RoHS Compliant Available

Mfg. Part No.	Description	Package	Stock No.	Price Each 10-24
M74HC08RM13TR	Quad 2-input AND gate	14-SOP	89K0851	0.45
M74HC125B1R	Quad bus buffer (3-state)	16-DIP	89K0855	0.59
M74HC365B1R	Hex bus buffer with 3-state outputs (non inverting)	16-DIP	89K0890	1.19
M74HC4060B1R	14 stage binary counters/oscillator	16-DIP	89K0911	0.57
M74HC148B1R	8 to 3 line priority encoder	16-DIP	89K0864	0.63
M74HC174B1R	Hex D-type flip flop with clear	16-DIP	89K0872	0.68
M74HCU04B1R	Hex inverter (single state)	14-DIP	89K0841	0.65
M74HCT14B1R	Hex schmitt inverter	14-DIP	89K0833	0.53
M74HC257B1R	Quad 2-channel multiplexer (3-state)	16-DIP	89K0883	0.99
M74HC4538B1R	Dual Retriggerable Monostable Mulivibrator	16-DIP	89K0919	0.90
M74HC03B1R	Quad 2-input open drain NAND gate	16-DIP	89K0845	0.64

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74HC HIGH SPEED CMOS LOGIC (CONT.)

Mfg. Part No.	Description	Package	Stock No.	Price Each 10-24
M74HC27B1R	Triple 3-input NOR gate	16-DIP	89K0885	0.54
M74HC02B1R	Quad 2-input NOR gate	16-DIP	89K0844	0.51

(83741)

CD4000 LOGIC SERIES

RoHS Compliant Available

TEXAS INSTRUMENTS

DECODERS/ENCODERS/MULTIPLEXERS

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
CD4514BE	4-Bit Latch/Line Decoder	24-DIP	60K5142	2.38

GATES AND INVERTERS

CD4071BE	Quad 2-In OR Gate	14-DIP	60K5129	0.53
CD4071BM	Quad 2-In OR Gate	14-SOIC	16F4838	0.52

TIMERS/COUNTERS

CD4018BE	CMOS Presettable Divide-By-N Counter	16-DIP	60K5100	0.61

BUFFERS AND DRIVERS

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
CD4009UBE	Hex Inverter Buffer	16-DIP	60K5090	0.57
CD4041UBE	Quad Buffer	14-DIP	67K0080	1.33
CD4049UBE	Hex Inverting Buffer	16-DIP	60K5117	0.57
CD4050BE	Hex Buffer	16-DIP	60K5118	0.57
CD4503BE	Tri-State Hex Buffer	16-DIP	67K0085	0.61
CD40106BE	Hex Schmitt Trigger	14-DIP	60K5093	0.53

BUS SWITCHES

CD4016BE	Quad Bilateral Switch	14-DIP	60K5098	0.53
CD4066BE	Quad Bilateral Switch	14-DIP	60K5124	0.53
CD4066BM	Quad Bilateral Switch	14-SOP	67K2793	0.52

COUNTERS/MULTIPLIERS/DIVIDERS

CD40103BE	8-State 8-Bit Down Counter	16-DIP	60K5092	1.39
CD4017BE	Decade Counter/Divider	16-DIP	60K5099	0.57
CD40192BE	Up/Down BCD Counter	16-DIP	65K3116	0.61
CD40193BE	UP/Down Binary Counter	16-DIP	60K5102	0.61
CD4020BE	14-Stage Binary Counter	16-DIP	60K5103	0.57
CD4024BE	7-Stage Binary Counter	14-DIP	60K5106	0.53
CD4026BE	Counter/Divider w/7-Segment Output	16-DIP	64K3092	0.57
CD4029BE	Preset Up/Down Binary Counter	16-DIP	60K5110	0.57
CD4033BE	CMOS Decade Counter/Divider	16-DIP	69K1771	1.39
CD4040BE	12-Stage Binary Counter	16-DIP	60K5112	0.57
CD4059AE	Divide-By-N-Counter	24-DIP	67K0082	3.92
CD4060BE	14-Stage Binary Counter	16-DIP	60K5122	0.57
CD4510BE	BCD Up/Down Counter	16-DIP	60K5140	0.61
CD4516BE	Binary Up/Down Counter	16-DIP	60K5143	0.61
CD4518BE	Dual BCD Up Counter	16-DIP	60K5144	0.61
CD4520BE	Dual Binary Up Counter	16-DIP	06F2678	0.61

DECODERS/ENCODERS/MULTIPLEXERS

CD4028BE	BCD-To-Decimal Decoder	16-DIP	60K5109	0.57
CD4056BE	LCD Display Driver	16-DIP	67K0081	0.61
CD4511BE	BCD 7-Segment Latch/Decoder/Driver	16-DIP	60K5141	0.61
CD4512BE	8-Channel Data Selector	16-DIP	06F2667	0.61
CD4514BE	4-Bit Latch/Line Decoder	24-DIP	60K5142	2.38
CD4532BE	8-Bit Priority Encoder	16-DIP	67K0087	0.61
CD4543BE	BCD-7 Segment Decoder/Driver	16-DIP	67K0090	0.57

FLIP-FLOP

CD4013BE	Dual D Flip-Flop	14-DIP	60K5096	0.53
CD40174BE	Hex D-Type Flip-Flop	16-DIP	68K1098	0.61
CD40175BE	Quad D-Type Flip-Flop	16-DIP	06F2415	0.61
CD4027BE	Dual JK M/S Flip-Flop	16-DIP	60K5108	0.57

GATES AND INVERTERS

CD4001BE	Quad 2-In NOR Gate	14-DIP	80K5726	0.53
CD4001BM	CMOS Quad 2-Input NOR Gate	14-SOIC	16F4852	0.52
CD4002BE	Dual 4-In NOR Gate	14-DIP	60K5089	0.53
CD4007UBE	CMOS Dual Complementary Pair Plus Inverter	14-DIP	74C7958	0.53
CD40107BE	Dual 2-In NAND Gate	8-DIP	06F2366	0.58
CD4011BE	Quad 2-In NAND Gate	14-DIP	60K5095	0.53
CD4011UBE	CMOS Quad 2-Input NAND Gate	14-DIP	67K0078	0.53
CD4012BE	Dual 4-In NAND Gate	14-DIP	06F2389	0.53
CD4019BE	Quad AND/OR Select Gate	16-DIP	60K5101	0.57
CD4023BE	Triple 3-In NAND Gate	14-DIP	60K5105	0.53
CD4025BE	Triple 3-In NOR Gate	14-DIP	60K5107	0.53
CD4030BE	Quad Exclusive OR Gate	14-DIP	60K5111	0.53
CD4048BE	Expandable 8-Input Gate	16-DIP	60K5116	0.61

➤CONTINUED➤

CD4000 LOGIC SERIES (CONT.)

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
GATES AND INVERTERS				
● CD4068BE	8-Input AND/NAND Gate	14-DIP	60K5126	0.53
● CD4069UBE	Hex Inverter	14-DIP	60K5127	0.53
● CD4069UBM	Hex Inverter	14-SOP	76K1022	0.52
● CD4070BE	Quad Exclusive-OR Gate	14-DIP	60K5128	0.53
● CD4072BE	Dual 4-Input Buffed Gate	14-DIP	60K5130	0.53
● CD4073BE	Triple 3-In AND Gate	14-DIP	06F2590	0.53
● CD4075BE	Triple 3-In OR Gate	14-DIP	60K5131	0.53
● CD4077BE	Quad Exclusive-NOR Gate	14-DIP	60K5132	0.53
● CD4078BE	8-In NOR/OR Gate	14-DIP	60K5133	0.53
● CD4081BE	Quad 2-In AND Gate	14-DIP	60K5134	0.53
● CD4081BM	CMOS Quad 2-Input AND Gate	14-SOIC	16F4839	0.52
● CD4082BE	Dual 4-In AND Gate	14-DIP	60K5135	0.53
● CD4093BE	Quad 2-Input NAND Trigger	14-DIP	60K5137	0.53
LATCHES				
● CD4042BE	Quad D Latch	16-DIP	60K5113	0.61
● CD4043BE	Quad NOR R/S Latch	16-DIP	06F2481	0.61
● CD4044BE	Quad NAND R/S Latch	16-DIP	60K5114	0.61
● CD4044BD	Quad NAND R/S Latch w/ 3-State Outputs	16-SOIC	20H4786	0.58
● CD4508BE	CMOS Dual 4-Bit Latch	24-DIP	67K0086	2.54
● CD4514BM	CMOS 4-Bit, 4-16 Line Decoder w/ Output 'High' on Select	24-SOIC	05B5603	0.99
MULTIVIBRATORS				
● CD40257BE	CMOS Quad Data Selector/Multiplexer	16-DIP	74C8025	1.47
● CD4047BE	Monostable Multivibrator	14-DIP	60K5115	0.57
● CD4098BE	Dual Mono Multivibrator	16-DIP	60K5138	0.61
● CD4556BE	CMOS Dual Binary to 1-of-4 Decoder/Demultiplexer	16-DIP	68K1102	0.61
PHASE LOCKED LOOPS				
● CD4046BE	Micropower Phase Locked Loop	16-DIP	06F2487	0.61
REGISTERS				
● CD4015BE	Dual 4-Stage Shift Register	16-DIP	60K5097	0.61
● CD4021BE	8-Stage Shift Register	16-DIP	60K5104	0.57
● CD4076BE	4-Bit D-Type Register	16-DIP	68K1099	0.57
● CD4094BE	8-Bit Shift Register w/Latch	16-DIP	06F2627	0.57
TIMERS/COUNTERS				
● CD4018BE	CMOS Presettable Divide-By-N Counter	16-DIP	60K5100	0.61
● CD4522BE	CMOS Programmable BCD Counter	16-DIP	68K1100	0.64
● CD4536BE	Programmable Timer	16-DIP	67K0088	0.61
● CD4541BE	Programmable Timer	14-DIP	67K0089	0.53
VOLTAGE LEVEL SHIFTERS				
● CD40109BE	Quad Lo-Hi Voltage Shifter	16-DIP	60K5094	0.57
● CD4504BE	Hex Voltage Shifter	16-DIP	60K5139	0.61
ANALOG MULTIPLEXERS/DEMULTIPLEXERS				
● CD4051BE	Single 8-Channel w/Logic-Level Conversion	16-DIP	60K5119	0.57
● CD4052BE	Differential 4-Channel w/Logic-Level Conversion	16-DIP	60K5120	0.57
● CD4053BE	Triple 2-Channel w/Logic-Level Conversion	16-DIP	60K5121	0.57
● CD4067BE	Single 16-Channel	24-DIP	60K5125	2.50

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74ABT SERIES ADVANCED BiCMOS BUS INTERFACE PRODUCTS

RoHS Compliant Available

TEXAS INSTRUMENTS

Uses latest 0.8μ BiCMOS process for high drive up to 64mA and propagation delays below 5ns range, while maintaining very low power consumption. Well suited to live-insertion applications with an I_{off} specification of 0.1A.

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● SN74ABT125N	Quad Bus Buffer Gates w/ 3-State Outputs	14-PDIP	08F5896	0.88
● SN74ABT126D	Quad Bus Buffer Gates w/ 3-State Outputs	14-SOIC	66F4439	0.96
● SN74ABT16244ADL	16-Bit Buffer/Driver	48-SSOP	67K0982	1.73
● SN74ABT16245ADGGR	16-Bit Bus Transceiver 3-State	48-TSSOP	76C0931	1.40
● SN74ABT16245ADL	16-Bit Bus Transceiver 3-State	48-SSOP	84K0225	1.73
● SN74ABT16373ADL	16-Bit D-Transp. Latch w/ 3-State Outputs	48-SSOP	72K9424	1.88
● SN74ABT244ADW	Octal Buffers/Drivers w/ 3-State Outputs	20-SOIC	52F3998	0.91
● SN74ABT244AN	Octal Buffers/Drivers w/ 3-State Outputs	20-DIP	67K0983	0.88
● SN74ABT540DW	Octal Buffers/Drivers w/ 3-State Outputs	20-SOIC	36K7611	1.05
● SN74ABT541BDW	Octal Buffers/Drivers w/ 3-State Outputs	20-SOIC	85F222	1.07
● SN74ABT245BDW	Octal Bus Transceivers w/ 3-State Outputs	20-SOIC	01F920	0.94
● SN74ABT245BN	Octal Bus Transceivers w/ 3-State Outputs	20-DIP	67K0984	0.80
● SN74ABT273DW	Octal Buffers/Drivers w/ 3-State Outputs	20-SOIC	67K2810	0.91
● SN74ABT574ADW	Octal Buffers/Drivers w/ 3-State Outputs	20-SOIC	35K0747	0.91

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74AC SERIES ADVANCED CMOS LOGIC

RoHS Compliant Available

TEXAS INSTRUMENTS

AC/ACT series devices are manufactured in 1μ CMOS with more than 70 functions available, including gates, flip-flops, drivers, counters, and transceivers. Includes standard end-pin products and center-pin V_{CC} and ground configuration products with output edge control (OEC™) circuitry. AC devices offer CMOS-compatible inputs and ACT devices offer TTL-compatible inputs.

Mfg. Part No.	Description	Pkg.	Stock No.	Price Each 1-9
● CD74AC00E	Quad 2-Input NAND Gate	14-DIP	06F2779	0.68
● CD74AC02M	Qauadruple 2-Input Positive-NOR Gates	14-SOIC	66F5366	0.73
● CD74AC04E	Hex Inverters	14-DIP	06F2782	0.68
● CD74AC14M	Hex Schmitt Trigger Inverter	14-SOIC	66F5372	0.73
● CD74AC138M	3-Line to 8-Line Inverting Decoders/Demultiplexers	16-SOIC	34K2406	0.73
● SN74AC00D	Quad 2-In NAND Gate	14-SOIC	35K0756	0.62
● SN74AC04D	Hex Inverter	14-SOIC	35K0757	0.62
● SN74AC04N	Hex Inverter	14-DIP	52F2307	0.57
● SN74AC08DR	Quad 2-Input Positive-AND Gate	14-SOIC	35K0758	0.48
● SN74AC08N	Quad 2-Input Positive-AND Gate	14-DIP	67K0998	0.52
● SN74AC14D	Hex Schmitt Trigger Inverter	14-SOIC	35K0759	0.56
● SN74AC14N	Hex Schmitt Trigger Inverter	14-DIP	60K6787	0.52
● SN74AC32D	Quad 2-Input Positive-OR Gate	14-SOIC	36K3546	0.62
● SN74AC32N	Quad 2-Input Positive-OR Gate	14-DIP	67K1001	0.57
● SN74AC74D	Dual D-Type Flip-Flop	14-SOIC	52F2310	0.62
● SN74AC74PW	Dual D-Type Flip-Flop	14-TSSOP	02H5347	0.62
● SN74AC244DW	Octal Buffer/Driver, 3-State	20-SOIC	36K7612	1.08
● SN74AC244N	Octal Buffer/Driver, 3-State	20-DIP	67K0999	0.93
● SN74AC245DW	Octal Bus Transceiver, 3-State	20-SOIC	66F4601	1.08
● SN74AC374DW	Octal D-Type Flip-Flop	20-SOIC	35K0762	0.96
● SN74AC573DW	Octal D-Type Transparent Latch, 3-State	20-SOIC	36K7613	0.98
● SN74AC573N	Octal D-Type Transparent Latch, 3-State	20-DIP	67K1006	0.96
● SN74AC574N	Octal D-Type Flip/Flop, 3-State	20-DIP	83F8886	0.96

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74ACT SERIES ADVANCED CMOS LOGIC

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● CD74ACT08M	Quad 2-Input AND Gates	14-SOIC	06F2732	0.73
● SN74ACT08D	Quad 2-Input Positive-AND Gate	14-SOIC	52F2386	0.68
● SN74ACT08N	Quad 2-Input Positive-AND Gate	14-DIP	67K0989	0.63
● CD74ACT32E	Quad 2-Input OR Gates	14-DIP	68K1103	0.68
● CD74ACT32M	Quad 2-Input OR Gates	14-SOIC	67K2795	0.73
● SN74ACT32D	Quad 2-Input Positive-OR Gate	14-SOIC	52F2392	0.62
● SN74ACT32N	Quad 2-Input Positive-OR Gate	14-DIP	67K0991	0.57
● SN74ACT00D	Quad 2-Input Positive-NAND Gate	14-SOIC	52F2384	0.57
● SN74ACT00N	Quad 2-Input Positive-NAND Gate	14-PDIP	67K0987	0.57
● SN74ACT86D	Quad 2-Input Exclusive-OR Gate	14-SOIC	52F2394	0.62
● SN74ACT86N	Quad 2-Input Exclusive-OR Gate	14-DIP	67K0997	0.57
● SN74ACT04D	Hex Inverter	14-SOIC	52F2462	0.56
● CD74ACT05E	Hex Inverters w/ Open-Drain Outputs	14-DIP	67K0092	0.68
● CD74ACT05M	Hex Inverters w/ Open-Drain Outputs	14-SOIC	34K2402	0.73
● SN74ACT14D	Hex Schmitt Trigger Inverter	14-SOIC	35C2000	0.56
● SN74ACT14N	Hex Schmitt Trigger Inverter	14-DIP	60K6786	0.52
● 74ACT11244DW	Octal Buffers/Drivers w/ 3-State Outputs	24-SOIC	52F2810	3.64
● SN74ACT244DW	Octal Buffer/Driver	20-SOIC	66F4581	0.98
● CD74ACT541E	Octal Buffer/Line Driver	20-DIP	67K0097	0.96
● 74ACT16244DGGR	16-Bit Buffers/Line Drivers w/ 3-State Output	48-TSSOP	22C4953	1.88
● CD74ACT138E	3-Line to 8-Line Inverting Decoders/Demux	16-DIP	67K0093	0.72
● CD74ACT138M	3-to-8 Line Decorder/Demultiplexer	16-SOP	34K2403	0.78
● CD74ACT245E	Octal Non-Inverting Bus Transceiver w/ 3-State	20-DIP	06F2752	1.01
● CD74ACT273E	Octal D-Type Flip-Flops w/ Reset	20-DIP	67K0096	0.96
● CD74ACT273M	Octal D Flip-Flop w/ Reset	16-SOP	34K2405	0.91
● CD74ACT573E	Octal Non-Inverting Transparent Latch, 3-State	20-DIP	67K0098	0.96

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74ACT SERIES ADVANCED CMOS LOGIC (CONT.)

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
CD74ACT74M	Dual Positive-Edge-Triggered D-Type Flip Flops w/ Set and Reset	14-SOIC	06F2776	0.62
SN74ACT573DW	Octal D-Type Transparent Latch, 3-State	20-SOIC	35K0754	0.98
SN74ACT573N	Octal D-Type Transparent Latch, 3-State	20-DIP	67K0995	0.96
SN74ACT74D	Dual D-Type Flip/Flop	14-SOIC	35C2010	0.62
SN74ACT74N	Dual D-Type Flip/Flop	14-DIP	83F8876	0.57
SN74ACT240N	Octal Transceiver	20-DIP	66F4580	0.68
SN74ACT244N	Octal Transceiver	20-DIP	73K2445	0.96
SN74ACT244PWR	Octal Buffer/Driver	20-TSSOP	35C2003	0.88
SN74ACT245N	Octal Bus Transceiver, 3-State	20-DIP	67K0990	0.96
74ACT16373DL	16-Bit D-Type Transparent Latches w/ 3-State	48-SSOP	72K9989	2.38

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74ALVC SERIES ADVANCED LOW-VOLTAGE CMOS

RoHS Compliant Available

TEXAS INSTRUMENTS

Feature typical propagation delays of less than 2ns, current drive of 24mA, and static power consumption of 40µA for bus-interface functions.

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
SN74ALVC04D	Hex Inverter	14-SOIC	34C5964	0.52
SN74ALVC08D	Quad 2-Input Positive AND Gate	14-SOIC	35K0787	0.52
SN74ALVC125D	Quad Bus Buffer Gates w/ 3-State	14-SOIC	36K7616	0.63
SN74ALVC164245DGGR	16-Bit 3.3-5V Level Shifting Transceiver, 3-State	48-TSSOP	35C2035	2.20
SN74ALVC164245DL	16-Bit 3.3-5V Level Shifting Transceiver, 3-State	48-SSOP	62K3464	2.69
SN74ALVC244PW	Octal Buffer/Driver w/ 3-State	20-TSSOP	36K3549	0.72
SN74ALVCH16245DGGR	16-Bit Bus Transceiver w/ 3-State	48-TSSOP	90B6625	1.73
SN74ALVCH32973KR	16-Bit Bus Transceiver and Transparent D-Latch w/8 Buffers	96-LFBGA	61H5405	4.20
SN74ALVCH162373GR	16-Bit Transparent D-Type Latch	48-TSSOP	44J1446	1.57

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74AUP SERIES CMOS LOGIC

RoHS Compliant Available

TEXAS INSTRUMENTS

AUP series is TI's premier solution to the industry's low power needs in battery-powered portable applications. This family ensures a very low static and dynamic power consumption across the entire VCC range of 0.8 V to 3.6 V, resulting in an increased battery life. This product also maintains excellent signal integrity.

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
GATES/INVERTERS				
SN74AUP3G04DCUR	Triple Inverter Gate	8-US8	60R2424	0.64
SN74AUP1G08DCKR	Single 2-Input Positive-AND Gate	5-SC-70	01J0745	0.57
SN74AUP2G08YZPR	Dual 2-Input Positive-AND Gate	8-DSBGA	85M0106	0.64
SN74AUP1G00DBVR	Single 2-Input Positive-NAND Gate	5-SOT-23	44J1449	0.57
SN74AUP1G00DSFR	Single 2-Input Positive-NAND Gate	6-SON	63R6147	0.12
SN74AUP1G02DSFR	Single 2-Input Positive-NOR Gate	6-SON	63R6148	0.12
FLIP-FLOPS				
SN74AUP1G74DQER	Single Positive-Edge-Triggered D-Type Flip-Flop w/ Clear & Preset	8-QFN	60R2419	0.60
SN74AUP2G79DCUR	Dual Positive-Edge-Triggered D-Type Flip-Flop	8-US8	60R2422	0.64
SN74AUP2G80DCUR	Single Postitive-Edge-Triggered D-Type Flip-Flop	8-US8	60R2423	0.64
SN74AUP1G80DSFR	Single Postitive-Edge-Triggered D-Type Flip-Flop	6-SON	63R6150	0.12
BUFFERS				
SN74AUP1G07DSFR	Single Buffer/Driver with Open-Drain Outputs	6-SON	63R6149	0.12
SN74AUP2G240DCUR	Dual Buffer/Driver With 3-State Outputs	8-US8	60R2420	0.64
SN74AUP2G241DCUR	Dual Buffer/Driver With 3-State Outputs	8-US8	60R2421	0.64
SN74AUP2G241DQER	Dual Buffer/Driver With 3-State Outputs	8-UQFN	63R6151	0.19
SN74AUP3G06DCUR	Triple Inverter Buffer/Driver With Open-Drain Outputs	8-US8	60R2425	0.64
SN74AUP3G07DCUR	Triple Inverter Buffer/Driver With Open-Drain Outputs	8-US8	60R2426	0.64
SN74AUP3G17DCUR	Triple Schmitt-Trigger Buffer	8-US8	60R2427	0.64
SN74AUP3G17DQER	Triple Schmitt-Trigger Buffer	8-UQFN	63R6152	0.19
SN74AUP3G34DCUR	Triple Buffer Gate	8-US8	60R2428	0.64

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74AUP SERIES CMOS LOGIC (CONT.)

VOLTAGE-LEVEL TRANSLATORS

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
SN74AUP1T57DBVR	Single-Supply Voltage-Level Translator	6-SOT-23	65J6730	0.63
SN74AUP1T97DCKR	Single-Supply Voltage-Level Translator	6-SC-70	71J7798	0.16

(105280)

74AVC SERIES CMOS LOGIC

RoHS Compliant Available

TEXAS INSTRUMENTS

With the patented Dynamic Output Control (DOC™) circuitry, **AVC Series** has the shortest propagation delay time (t_{pd}) at 3.3V, 2.5V, and 1.8V supply voltages (Vcc). This enables the fastest performance while also providing the lowest noise and mixed-voltage mode system support.

Mfg. Part No.	Description	I_{OH} (mA)	I_{OL} (mA)	Package	Stock No.	Price Each 1-9
SN74AVCA164245GR	16-Bit Dual-Supply Bus Transceiver w/ Configurable Voltage Translation and 3-State Output	-12	12	48-TSSOP	83C7525	4.20
SN74AVCB164245VR	16-Bit Dual-Supply Bus Transceiver w/ Configurable Translation and 3-State Output	-12	12	48-TVSOP	83C7533	3.92
SN74AVC1T45DBVT	Single-Bit Dual-Supply Bus Transceiver	-12	12	6-SOT-23	21J8968	1.02
SN74AVC1T45DCKT	Single-Bit Dual-Supply Bus Transceiver	.12	12	6-SC-70	21J8970	1.02
SN74AVC2T45DCTR	Dual-Bit Dual-Supply Bus Transceiver	-12	12	8-SSOP	21J8975	0.76
SN74AVC8T245PWR	8-Bit Dual-Supply Bus Transceiver	-12	12	24-TSSOP	10J9627	1.69
SN74AVCB164245GR	16-Bit Dual-Supply Bus Transceiver	-12	12	48-TSSOP	83C7531	5.10
SN74AVC16T245ZQLR	16-Bit Dual-Supply Bus Transceiver	-12	12	56-BGA MICRO-STAR JUNIOR	21J8974	3.82
SN74AVC2T45DCTR	Dual-Bit Dual-Supply Bus Transceiver	-12	12	8-SSOP	21J8975	0.76
SN74AVC2T45DCTT	Dual-Bit Dual-Supply Bus Transceiver	-12	12	8-SSOP	21J8976	1.19
SN74AVC2T45DCUR	Dual-Bit Dual-Supply Bus Transceiver	-12	12	8-VSSOP	21J8977	0.76
SN74AVC4T245PWR	4-Bit Dual-Supply Bus Transceiver	-12	12	16-TSSOP	33K5891	1.05
SN74AVC8T245PW	4-Bit Dual-Supply Bus Transceiver	-12	12	24-TSSOP	10J9626	1.77
SN74AVC16T245DGGR	16-Bit Dual-Supply Bus Transceiver	-12	12	48-TSSOP	21J8971	3.58
SN74AVCH1T45DBVR	Octal Bus Transceiver	-12	12	20-QFN	44J1471	0.88
SN74AVCH1T45DCKR	Single-Bit Dual-Supply Bus Transceiver	-12	12	6-SC-70	44J1473	0.88
SN74AVC4T774PW	4-Bit Dual-Supply Bus Transceiver w/ Configurable Voltage Translation and 3-State Outputs	-12	12	16-TSSOP	85M0107	1.35

(82417)

74CB3T SERIES CMOS LOGIC

RoHS Compliant Available

TEXAS INSTRUMENTS

The new **CB3T** family provides high-performance, low-power replacements for standard bus-interface devices when signal buffering (current drive) is not required. The CB3T 2.5-V/3.3-V bidirectional voltage-translator bus-switch family fully supports mixed-mode signal operation on all data ports, and is ideally suited for mixed 2.5-V, 3.3-V and 5.0-V system environments.

Mfg. Part No.	Description	Prop. Delay (nS)	Pkg.	Stock No.	Price Each 1-9
SN74CBTD3861PWR	10-Bit FET Bus Switch	350	24-TSSOP	76C2902	0.64
SN74CBTLV1G125DCKR	Low-Voltage Single FET Bus Switch	0.15	5-SC-70	31C8888	0.96
SN74CB3Q16211DGGR	24-Bit FET Bus Switch	0.25	56-TSSOP	21J8982	2.51
SN74CB3Q16244DGGR	16-Bit FET Bus Switch	0.3	48-TSSOP	10J9633	2.98
SN74CB3Q32245ZKER	32-Bit FET Bus Switch	0.3	LFBGA	73J8301	4.76
SN74CB3T1G125DCKR	Single FET Low-Voltage Bus Switch w/ 5-V Tolerant Level Shifter	250	5-SOP	67K2825	1.02
SN74CB3T16210DGGR	20-Bit FET Bus Switch	0.25	48-TSSOP	21J8994	3.08
SN74CB3T16211DGGR	24-Bit FET Bus Switch	0.25	56-TSSOP	90H3648	2.98
SN74CB3T3245PW	8-Bit FET Low-Voltage Bus Switch w/ 5-V Tolerant Level Shifter	0.25	20-TSSOP	90H3656	2.20
SN74CB3T3257PWR	4-Bit 1-of-2 FET Mux/Demux	0.25	16-TSSOP	90H3660	1.73

(82416)

74CBT SERIES CROSSBAR TECHNOLOGY

RoHS Compliant Available

TEXAS INSTRUMENTS

Enables a bus-interface device to function as a very fast bus switch, isolating buses when the switch is open and causing very little propagation delay when the switch is closed. Also can be used as a 5V to 3.3V translator, allowing both types of devices to be used in the same system.

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● SN74CBT1G125DBVR	16-Bit 1-of-2 Multiplexer/Demultiplexer	56-TSSOP	67K2824	0.46
● SN74CBT34X245DBBR	32-Bit FET Bus Switch	80-TVSOP	76C3126	3.08
● SN74CBTD3384DW	10-Bit FET Bus Switch	24-SOIC	76C2896	0.94
● SN74CBTD3384PWR	10-Bit FET Bus Switch	24-TSSOP	05C4120	0.72
● SN74CBTLV3245ARGYR	Low voltage octal FET bus switch	20-QFN	32H6313	1.33

(70391)

74HC SERIES HIGH-SPEED CMOS LOGIC

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● SN74HC00N	Quad 2-Input Positive-NAND Gate	14-PDIP	60K6816	0.53
● SN74HC00D	Quad 2-Input Positive-NAND Gate	14-SOIC	08F6419	0.46
● SN74HC00PW	Quad 2-Input Positive-NAND Gate	14-SOIC	02H5406	0.46
● SN74HC02N	Quad 2-Input NOR Gate	14-PDIP	60K6817	0.53
● SN74HC02D	Quad 2-Input NOR Gate	14-SOIC	08F6421	0.46
● SN74HC02DR	Quad 2-Input Positive-NOR Gate	14-SOIC	36K7617	0.57
● SN74HC03N	Quad 2-Input NAND w/ Open Drain	14-PDIP	08F6423	0.58
● SN74HC04N	Hex Inverter	14-PDIP	08F6425	0.53
● SN74HC04D	Hex Inverter	14-SOIC	72K9430	0.46
● SN74HCT04D	Hex Inverter	14-SOIC	52F5557	0.46
● SN74HC05N	Hex Inverter, Open Collector Outputs	14-PDIP	60K6818	0.58
● SN74HC05D	Hex Inverter, Open Collector Outputs	14-SOIC	08F6426	0.46
● SN74HC08N	Quad 2-Input Postive-AND Gate	14-PDIP	60K6819	0.53
● SN74HC08D	Quad 2-Input Postive-AND Gate	14-SOIC	36K3552	0.46
● SN74HC10D	Triple 3-Input Positive-NAND Gate	14-SOIC	72K9431	0.46
● SN74HC10N	Triple 3-Input NAND Gate	14-PDIP	60K6820	0.53
● SN74HC11N	Triple 3-Input AND Gate	14-PDIP	60K6822	0.58
● SN74HC11D	Triple 3-Input AND Gate	14-SOIC	35K0801	0.46
● SN74HC14N	Hex Schmitt-Trigger Inverter	14-PDIP	60K6826	0.53
● SN74HC14D	Hex Schmitt-Trigger Inverter	14-SOIC	08F6449	0.46
● SN74HC14NSR	Hex Schmitt-Trigger Inverters	14-SOIC	76C3452	0.42
● SN74HC14PW	Hex Schmitt-Trigger Inverters	14-SOIC	02H5414	0.46
● SN74HC20N	Dual 4-Input NAND Gate	14-PDIP	08F6475	0.58
● SN74HC20D	Dual 4-Input Positive-NAND Gates	14-SOIC	70C4339	0.46
● SN74HC21D	Dual 4-Input Positive-AND Gates	14-SOIC	76C3493	0.46
● SN74HC27N	Triple 3-Input Positive-NOR Gates	14-PDIP	60K6835	0.51
● SN74HC32N	Quad 2-Input OR Gate	14-PDIP	60K6836	0.53
● SN74HC32D	Quad 2-Input OR Gate	14-SOIC	08F6501	0.46
● SN74HC74N	Dual D-Type Flip-Flop	14-PDIP	08F6569	0.53
● SN74HC74D	Dual D-Mfg. Part No. Flip-Flop	14-SOIC	08F6568	0.46
● SN74HC86N	Quad 2-Input Excl. OR Gate	14-PDIP	60K6846	0.43
● SN74HC86D	Quad 2-Input Excl. OR Gate	14-SOIC	52F2611	0.58
● SN74HC109N	Dual J-K Flip-Flop	16-PDIP	60K6821	0.53
● SN74HC109D	Dual J-K Flip-Flop	16-SOIC	52F5567	0.57
● SN74HC112N	Dual J-K Negative Edge Flip-Flop	16-PDIP	08F6436	0.53
● SN74HC125N	Quad Bus Buffer, 3-State	14-PDIP	60K6823	0.46
● SN74HC125D	Quad Bus Buffer, 3-State	14-SOIC	52F5552	0.58
● SN74HC132D	Quad NAND Gate	14-PDIP	35K0802	0.58
● SN74HC132DR	Quad NAND Gate	14-SOIC	35K0803	0.48
● SN74HC138N	3-to-8 Decoder/Demultiplexer	16-PDIP	60K6824	0.46
● SN74HC138D	3-to-8 Decoder/Demultiplexer	16-SOIC	67K2840	0.58
● SN74HC138PWR	Decoder / Demultiplexer	16-TSSOP	76C3445	0.48
● SN74HC139N	Dual 2-to-4 Decoder/Demux	16-PDIP	60K6825	0.46
● SN74HC139D	Dual 2-to-4 Decoder/Demux	16-SOIC	52F2357	0.58
● SN74HC148N	8-Line To 3-Line Priority Encoders	16-PDIP	67K1083	0.46
● SN74HC148D	8-Line To 3-Line Priority Encoders	16-SOIC	35K0804	0.58
● SN74HC151N	8-to-1 Data Selector Mux	16-PDIP	60K6827	0.58
● SN74HC151D	8-to-1 Data Selector Mux	16-SOIC	67K2842	0.63
● SN74HC153N	Dual 4-to-1 Data Selector/Mux	16-PDIP	67K1084	0.53
● SN74HC153D	Dual 4-to-1 Data Selector/Mux	16-SOIC	67K2843	0.57
● SN74HC157N	Quad 2-to-1 Selector/Multiplexer	16-PDIP	60K6828	0.53
● SN74HC157D	Quad 2-to-1 Selector/Multiplexer	16-SOIC	52F2341	0.57
● SN74HC161N	4-Bit Synchronous Binary Counter	16-PDIP	67K1085	0.46
● SN74HC161D	4-Bit Synchronous Binary Counter	16-SOIC	08F6458	0.58
● SN74HC163N	4-Bit Synchronous Binary Counter	16-PDIP	08F6461	0.46
● SN74HC164N	8-Bit Parallel-Out Serial Shift Reg.	14-PDIP	69K3680	0.46
● SN74HC164D	8-Bit Parallel-Out Serial Shift Reg.	14-SOIC	36K3553	0.58
● SN74HC165N	8-Bit Parallel-Load Shift Reg.	16-PDIP	60K6829	0.53

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74HC SERIES HIGH-SPEED CMOS LOGIC (CONT.)

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● SN74HC165D	8-Bit Parallel-Load Shift Reg.	16-SOIC	35K4891	0.57
● SN74HC165PWR	Shift Register	16-TSSOP	76C3479	0.48
● SN74HC166N	8-Bit Parallel-Load Shift Reg.	16-PDIP	68K1117	0.53
● SN74HC174N	Hex D-Type Flip-Flop	16-PDIP	08F6467	0.53
● SN74HC174D	Hex D-Mfg. Part No. Flip-Flop	16-SOIC	08F6466	0.57
● SN74HC175N	Quad D-Type Flip-Flop	16-PDIP	60K6830	0.53
● SN74HC175D	Quad D-Mfg. Part No. Flip-Flop	16-SOIC	52F2344	0.57
● SN74HC191N	4-Bit Synch. Up/Down Binary Counter	16-PDIP	67K1086	0.63
● SN74HC193N	4-Bit Synch. Up/Down Binary Counter	16-PDIP	62K3465	0.58
● SN74HC240N	Octal Buffer/Line Driver, 3-State	20-PDIP	68K1118	0.56
● SN74HC240DW	Octal Buffer/Line Driver, 3-State	20-SOIC	72K9432	0.66
● SN74HC244N	Octal Buffer/Line Driver, 3-State	20-PDIP	60K6831	0.56
● SN74HC244DW	Octal Buffer/Line Driver, 3-State	20-SOIC	08F6485	0.66
● SN74HC244PWR	Buffer / Driver	20-TSSOP	76C3502	0.51
● SN74HC245N	Octal Bus Transceiver, 3-State	20-PDIP	60K6832	0.56
● SN74HC245DW	Octal Bus Transceiver, 3-State	20-SOIC	67K2845	0.66
● SN74HC251N	1-of-8 Data Selector/Mux, 3-State	16-PDIP	08F6490	0.63
● SN74HC251D	1-of-8 Data Selector/Mux, 3-State	16-SOIC	08F6489	0.69
● SN74HC257N	Quad 2-to1 Data Selector/Mux, 3-State	16-PDIP	60K6833	0.61
● SN74HC257D	Quad 2-to1 Data Selector/Mux, 3-State	16-SOIC	52F2347	0.66
● SN74HC259N	8-Bit Address Latch	16-PDIP	60K6834	0.63
● SN74HC259D	8-Bit Address Latch	16-SOIC	08F6493	0.69
● SN74HC273N	Octal D-Type Flip-Flop	20-PDIP	08F6498	0.56
● SN74HC273DW	Octal D-Type Flip-Flop	20-SOIC	36K3554	0.66
● SN74HC365D	Buffer	16-SOIC	76C3535	0.68
● SN74HC367N	Buffer	16-DIP	08F6507	0.62
● SN74HC373N	Octal D-Type Transp. Latch, 3-State	20-PDIP	59K9085	0.56
● SN74HC373DW	Octal D-Mfg. Part No. Transp. Latch, 3-State	20-SOIC	08F6509	0.66
● SN74HC374N	Octal D-Type Flip-Flop, 3-State	20-PDIP	60K6837	0.56
● SN74HC374DW	Octal D-Mfg. Part No. Flip-Flop, 3-State	20-SOIC	08F6511	0.66
● SN74HC393N	Dual 4-Bit Binary Counter	14-PDIP	60K6838	0.53
● SN74HC393D	Dual 4-Bit Binary Counter	14-SOIC	35K0811	0.57
● SN74HC540N	Octal Buffer/Line Driver, 3-State	20-PDIP	60K6840	0.68
● SN74HC541N	Octal Buffer/Line Driver, 3-State	20-PDIP	60K6841	0.68
● SN74HC541DW	Octal Buffer/Line Driver, 3-State	20-SOIC	08F6536	0.68
● SN74HC573AN	Octal D-Type Transp. Latch, 3-State	20-PDIP	60K6842	0.60
● SN74HC573ADW	Octal D-Mfg. Part No. Transp. Latch, 3-State	20-SOIC	67K2848	0.70
● SN74HC574N	Octal D-Type Flip-Flop, 3-State	20-PDIP	60K6843	0.56
● SN74HC574DW	Octal D-Mfg. Part No. Flip-Flop, 3-State	20-SOIC	52F2607	0.66
● SN74HC590AN	8-Bit Binary Counters w/ 3-State Output Registers	16-PDIP	60K6844	0.66
● SN74HC590AD	8-Bit Binary Counters w/ 3-State Output Registers	16-SOIC	33C9807	0.72
● SN74HC594DW	Shift Register	16-SOIC	08F6543	0.84
● SN74HC594N	8-Bit Shift Register	16-PDIP	67K1088	0.71
● SN74HC595N	8-Bit Shift Register	16-PDIP	60K6845	0.63
● SN74HC595D	8-Bit Shift Register	16-SOIC	67K2849	0.69
● SN74HC595DR	8-Bit Shift Register	16-SOIC	67K2850	0.58
● SN74HC645N	Octal Bus Transceiver, 3-State	20-PDIP	73K4039	1.54
● SN74HC688DW	8-Bit Identity Comparator	20-SOIC	73C8560	1.14
● SN74HC4020N	14-Bit Asynchronous Binary Counter	16-PDIP	08F6523	0.71
● SN74HC4020D	14-Bit Asynchronous Binary Counter	16-SOIC	52F5558	0.65
● SN74HC4040N	Asynchronous Binary Counter	16-PDIP	60K6839	0.71
● SN74HC4066D	Quad Bi-Lateral Analog Switch	14-SOIC	72K9433	0.57
● SN74HC7001D	Quad Positive-AND Gate	14-SOIC	08F6560	2.04
● SN74HCT139D	Decoder / Demultiplexer	16-SOIC	76C3344	0.58
● CD74HC00E	Quad 2-Input NAND Gate	14-PDIP	06F3016	0.71
● CD74HC00M	Quad 2-Input NAND Gate	14-SOIC	74C8257	0.69
● CD74HC04E	Hex Inverter, High Speed CMOS	14-PDIP	60K5154	0.71
● CD74HC04M	Hex Inverter, High Speed CMOS	14-SOIC	06F3024	0.69
● CD74HC08E	Quad 2-Input AND Gate	14-PDIP	60K5155	0.63
● CD74HC08M	Quad 2-Input AND Gate	14-SOIC	06F3027	0.69
● CD74HC14M	Hex Schmitt-Triggered Inverters	14-SOIC	66F5182	0.69
● CD74HC30E	8-Input NAND Gate	14-PDIP	67K0143	0.45
● CD74HC30M	8-Input NAND Gate	14-SOIC	34K2413	0.56
● CD74HC32M	Quad 2-Input OR Gate, High Speed	14-SOIC	34K2414	0.69
● CD74HC73E	Dual Negative-Edge-Triggered J-K Flip-Flops w/ Reset	14-PDIP	06F3166	0.73
● CD74HC85E	Mag Comparator, High Speed 4-Bit	16-PDIP	67K0161	1.23
● CD74HC125E	Quad Buffer, Three-State	14-PDIP	67K0136	0.71
● CD74HC125M	Quad Buffer, Three-State	14-SOIC	66F5176	0.77
● CD74HC138E	3-to-8 Line Decoder Demux Inverting and Non-Inverting	16-PDIP	60K5156	0.71
● CD74HC138M	3-to-8 Line Decoder Demux Inverting and Non-Inverting	16-SOIC	06F3040	0.64

➤CONTINUED➤

74HC SERIES HIGH-SPEED CMOS LOGIC (CONT.)

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
CD74HC147E	10- to 4-Line Priority Encoder	16-PDIP	06F3044	0.68
CD74HC154EN	4-to-16 Line Decoder/Demultiplexer	24-PDIP	60K5157	2.26
CD74HC154M	4-to-16 Line Decoder/Demultiplexer	24-SOIC	66F5185	0.82
CD74HC221E	Dual Monostable Multivibrator w/ RESET	16-PDIP	60K5158	0.73
CD74HC221M	Dual Monostable Multivibrator w/ RESET	16-SOIC	74C8279	0.80
CD74HC237E	3-to-8 Line Decoder Demutiplexer w/ Address Latches	16-PDIP	60K5159	0.71
CD74HC245M	Non-Inverting Octal-Bus Transceivers w/ 3-State Outputs	20-SOIC	36K3121	0.92
CD74HC393E	Dual 4-Stage Binary Counters	14-PDIP	06F3103	0.90
CD74HC393M	Dual 4-Stage Binary Counters	14-SOIC	06F3105	0.76
CD74HC423E	Dual Retriggerable	16-PDIP	67K0151	0.84
CD74HC573M	3-State Octal Transparent Latch	20-SOIC	34K2418	0.96
CD74HC4046AE	Phase Locked Loop w/VCO	16-PDIP	67K0148	0.66
CD74HC4046AM	Phase Locked Loop w/VCO	16-SOIC	34K2415	0.72
CD74HC4049M	Hex Buffers, Inverting and Non-Inverting	16-SOIC	66F5525	0.57
CD74HC4050M	Hex Non-Inverting Buffers	16-SOIC	66F5526	0.57
CD74HC4052M	Analog Multiplexers/Demultiplexers	16-SOIC	34K2416	0.69
CD74HC4053E	Analog Multiplexers/Demultiplexers	16-PDIP	67K0150	0.62
CD74HC4053M	Analog Multiplexers/Demultiplexers	16-SOIC	34K2417	0.57
CD74HC4051M	Analog Mux/Demux	16-SOIC	72K7849	0.69
CD74HC4060M	14-Stage Binary Counter w/ Oscillator	16-SOIC	06F3128	0.69
CD74HC4538M	Dual Retriggerable Multivibrator	16-SOIC	66F5423	0.87
CD74HCT161E	Presettable Counter	16-DIP	67K0113	0.63
CD74HCT30E	NAND	14-DIP	67K0122	0.45
CD74HC4049E	Inverter	16-DIP	06F3117	0.53
CD74HC4075M	Triple 3-Input OR Gate	14-SOIC	66F5511	0.62

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74LV-A SERIES CMOS LOGIC

RoHS Compliant Available

TEXAS INSTRUMENTS

LV-A (Low-Voltage CMOS Technology) family offers better flexibility in your 3.3V or 5V system. The new LV-A devices have improved operating characteristics and new features such as 5-V tolerance, faster performance, and partial power down making it a superior migration path from LV, HC, and VHC.

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
SN74LV04AD	Hex Inverter	14-SOIC	76C4641	0.48
SN74LV08AD	Quad 2-Input AND Gate	14-SOIC	67K2864	0.48
SN74LV125AD	Quad Bus Buffer with 3-State Output	14-SOIC	76C4689	0.56
SN74LV165APWRG3	Parallel-Load 8-Bit Shift Registers	16-TSSOP	32T3212	0.49
SN74LV595ADRG3	8-Bit Shift Registers	16-SOIC	32T3213	0.96
SN74LV595APWRG3	8-Bit Shift Registers	16-TSSOP	32T3214	0.92
SN74LV07AD	Hex Buffers/Drivers w/ Open-Drain Outputs	14-SOIC	76C4659	0.53
SN74LV14AD	Hex Schmitt-Trigger Inverter	14-SOIC	76C4718	0.48
SN74LV244APWR	Octal Buffers/Drivers w/ 3-State Outputs	20-TSSOP	76C4802	0.46

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74LVC SERIES LOW-VOLTAGE CMOS

RoHS Compliant Available

TEXAS INSTRUMENTS

Designed for 3V power supplies, feature 0.8µ CMOS process technology, 24mA current.

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
SN74LVC08AD	Quad 2-Input AND Gate	14-SOIC	45C6937	0.52
SN74LVC08APW	Quadruple 2-Input Positive-AND Gate	14-TSSOP	72K7322	0.52
SN74LVC08APWR	Quad 2-Input AND Gate	14-TSSOP	22C8629	0.43
SN74LVC2G08DCTR	Dual 2-Input Positive AND Gate	8-SSOP	68K1120	0.58
SN74LVC2G08DCUR	Dual 2-Input Positive AND Gate	8-VSSOP	67K2861	0.68
SN74LVC1G11DBVR	Single 3-Input Positive-AND Gate	6-SOT-23	87H2655	0.40
SN74LVC00AD	Quad 2-Input NAND Gate	14-SOIC	45C6936	0.52
SN74LVC00APW	Quad 2-Input NAND Gate	14-TSSOP	22H0370	0.52
SN74LVC1G00DCKT	2-Input NAND Gate	5-SC-70	32H6332	0.80
SN74LVC1G00DBVT	Single 2-Input Positive-NAND Gate	5-SOP	67K2860	0.80
SN74LVC1G00DBVR	Single 2-Input Positive-NAND Gate	5-SOT-23	76C4061	0.50
SN74LVC2G00DCTR	Dual 2-Input Positive-NAND Gate	8-SSOP	76C4187	0.58

CONTINUED

74LVC SERIES LOW-VOLTAGE CMOS (CONT.)

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
SN74LVC2G00DCUR	Dual 2-Input Positive-NAND Gate	8-VSSOP	76C4188	0.68
SN74LVC1G32DBVR	Single 2-Input Positive-OR Gate	5-SOT-23	76C4093	0.40
SN74LVC1G32DBVT	Single 2-Input Positive-OR Gate	5-SOP	32H6366	0.84
SN74LVC32AD	OR Gate 2-Input	14-SOIC	35K0819	0.52
SN74LVC32APWR	Quad 2-Input OR Gate	14-TSSOP	35K0820	0.43
SN74LVC1G332DCKR	Single 3-Input Positive-OR Gate	6-SC70	87H2664	0.40
SN74LVC2G32DCUR	Dual 2-Input Positive-OR Gate	8-VSSOP	76C4212	0.68
SN74LVC1G02DBVR	Single 2-Input Positive-NOR Gate	5-SOT-23	76C4065	0.50
SN74LVC1G86DBVR	Single 2-Input Exclusive-OR Gate	5-SOT-23	76C4107	0.40
SN74LVC1GU04DBVR	Single Inverter	5-SOT-23	76C4059	0.40
SN74LVC1G04DCKR	Single Inverter	5-SOP	76C4070	0.50
SN74LVC1G04DCKT	Single Inverter	5-SOP	22H0375	0.80
SN74LVC04AD	Hex Inverter	14-SOIC	76C4042	0.52
SN74LVC04APWR	Hex Inverter	14-SOIC	01C4540	0.43
SN74LVC2G04DBVT	Dual Inverter	6-SOT-23	32H6389	0.95
SN74LVC3G04DCUR	Triple inverter gate	8-VSSOP	76C4262	0.72
SN74LVC3G14DCUR	Triple inverter w/ Schmitt trigger	8-VSSOP	67K2862	0.72
SN74LVC2G14DBVR	Dual Schmitt-Trigger Inverter	6-SOT-23	76C4203	0.58
SN74LVC2G14DCKR	Dual Schmitt-Trigger Inverter	6-SC-70	76C4204	0.58
SN74LVC14AD	Hex Schmitt-Trigger Inverter	14-SOIC	45C6938	0.52
SN74LVC14APWR	Hex Schmitt-Trigger Inverter	14-TSSOP	76C4143	0.43
SN74LVC1G14DBVR	Schmitt Trigger Inverter	5-SOT-23	76C4085	0.50
SN74LVC1G14DCKR	Single Schmitt Trigger Inverter	5-SOP	76C4086	0.50
SN74LVC06AD	Hex Inverter Buffer/ Driver with OD	14-SOIC	67K2859	0.53
SN74LVC1G06DBVR	Single Inverter Buffer/Driver w/ Open-Drain Output	5-SOT-23	76C4073	0.50
SN74LVC3G06DCTR	Triple Inverter Buffer/Driver, Open-Drain	8-SSOP	68K1121	0.63
SN74LVC3G06DCUR	Triple Inverter Buffer/Driver, Open-Drain	8-VSSOP	76C4264	0.72
SN74LVC07AD	Hex Buffer/Driver	14-SOIC	76C4050	0.53
SN74LVC1G07DBVR	Single Buffer/Driver w/ Open-Drain Output	5-SOP	39C2931	0.50
SN74LVC1G07DBVT	Single Buffer/Driver w/ Open-Drain Output	5-SOP	32H6344	0.80
SN74LVC1G07DCKR	Single Buffer/Driver w/ Open-Drain Output	5-SC-70	76C4075	0.50
SN74LVC1G07DCKT	Buffer/Driver with OD	5-SC-70	22H0378	0.80
SN74LVC2G07DBVR	Dual Buffer/Driver w/ OD	6-SOT-23	76C4195	0.58
SN74LVC2G07DCKR	Dual Buffer/Driver w/ OD	6-SC-70	76C4196	0.58
SN74LVC2G07DCKT	Dual Buffer/Driver w/ Open-Drain Output	6-SOP	32H6391	0.95
SN74LVC1G17DCKT	Schmitt-Trigger Buffer	5-SC-70	22H0382	0.80
SN74LVC2G17DBVR	Dual Schmitt-Trigger Buffer	6-SOP	76C4207	0.58
SN74LVC2G17DCKR	Dual Schmitt-Trigger Buffer	6-SC-70	76C4208	0.58
SN74LVC2G17DCKT	Dual Schmitt-Trigger Buffer	6-SOP	32H6405	0.95
SN74LVC125AD	Quad Bus Buffer Gate	14-SOIC	94B6303	0.56
SN74LVC125APWR	Quad Bus Buffer Gate	14-TSSOP	35K0816	0.46
SN74LVC1G125DBVR	Bus Buffer Gate 3-State	5-SOT-23	74C1414	0.40
SN74LVC1G125DBVT	Single Bus Buffer Gate w/ 3-State Outputs	5-SOP	32H6348	0.84
SN74LVC1G125DCKR	Single Bus Buffer Gate w/ 3-State Outputs	5-SOP	76C4082	0.40
SN74LVC1G125DCKT	Single Bus Buffer Gate w/ 3-State Outputs	5-SOP	22H0380	0.84
SN74LVC2G125DCUR	Dual Bus Buffer Gate w/ 3-State Outputs	8-VSSOP	76C4200	0.68
SN74LVC1G126DCKR	Single Bus Buffer Gate w/ 3-State Outputs	5-SC-70	76C4084	0.40
SN74LVC1G126DBVT	Buffer Gate w/ 3-State Outputs	5-SOT-23	32H6351	0.84
SN74LVC1G34DBVT	Single Buffer Gate	5-SOT-23	01J0788	0.84
SN74LVC3G34DCUR	Triple Buffer Gate	8-VSSOP	76C4270	0.72
SN74LVC1G240DBVR	Single Buffer/Driver w/ 3-State Outputs	5-SOT-23	76C4091	0.40
SN74LVC244ADW	Octal Buffer/Driver w/ 3-State Outputs	20-SOIC	76C4240	0.62
SN74LVC244AN	Octal Buffer/Driver w/ 3-State Outputs	20-DIP	67K1104	0.60
SN74LVC244APW	Octal Buffer/Driver w/ 3-State Outputs	20-TSSOP	02H5433	0.57
SN74LVC244APWR	Octal Buffer/Driver	20-TSSOP	10C2401	0.48
SN74LVC162244ADGGR	16-Bit Buffer/Driver w/ 3-State Outputs	48-TSSOP	76C4150	2.04
SN74LVC16244ADGGR	16-Bit Buffer/Driver	48-TSSOP	35K0818	1.33
SN74LVC1G175DBVT	Single D-Type Flip-Flop	6-SOT-23	10J9652	0.84

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74LVC SERIES LOW-VOLTAGE CMOS (CONT.)

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
SN74LVC74AD	Dual D-Type Flip-Flop	14-SOIC	36K7623	0.56
SN74LVC74APW	Dual D-Type Flip-Flop w/ Clear And Preset	14-TSSOP	32H6430	0.56
SN74LVC1G80DBVR	Single Positive-Edge-Triggered D-Type Flip-Flop	5-SOT-23	76C4105	0.40
SN74LVC1G80DCKR	Single Positive-Edge-Triggered D-Type Flip-Flop	5-SC-70	76C4106	0.40
SN74LVC16373ADGVR	16-Bit Transparent D-Type Latch, 3-State	48-TVSOP	76C4167	1.33
SN74LVC573ADW	Octal Transparent D-Type Latches, 3-State	20-SOIC	35K0822	0.62
SN74LVC573APW	Octal Transparent D-Type Latches 3-State	20-TSSOP	02H5440	0.57
SN74LVC1G57DBVR	Configurable Multiple Function Gate	6-SOP	22H0384	0.40
SN74LVC1G57DCKR	Configurable Multiple Function Gate	6-SOP	22H0385	0.40
SN74LVC1G58DCKR	Configurable Multiple Function Gate	6-SOP	22H0389	0.40
SN74LVC1G97DBVR	Configurable Multiple Function Gate	6-SOP	32H6375	0.40
SN74LVC1G97DCKR	Configurable Multiple Function Gate	6-SOP	32H6376	0.40
SN74LVC1G123DCUT	Monostable Multivibrator	8-VSSOP	10J9646	0.97
SN74LVC138APW	3-Line to 8-Line Decoder/Demultiplexer	16-TSSOP	22H0400	0.56
SN74LVC157AD	Quad 2-1 Data Selector/Multiplexer	16-SOIC	35C2062	0.69
SN74LVC1T45DCKR	Single-Bit Dual-Supply Bus Transceiver	6-SC-70	01J0797	0.63
SN74LVC1T45DBVT	Single-Bit Dual Bus Transceiver 3-State	5-SOT-23	01J0796	0.98
SN74LVC1T45YZPR	Single Bus Transceiver	6-WCSP	10J9664	0.63
SN74LVC245ADW	Octal Bus Transceiver w/ 3-State Outputs	20-SOIC	76C4247	0.62
SN74LVC245APW	Octal Bus Transceiver w/ 3-State Outputs	20-TSSOP	02H5434	0.57
SN74LVC2G06DBVR	Dual Inverter Buffer/Driver w/ Open-Drain Output	6-SOT-23	76C4193	0.58
SN74LVC2G125DCTR	Dual Bus Buffer Gate w/ 3-State Output	8-SSOP	76C4199	0.58
SN74LVC2G34DBVR	Dual Buffer Gate	6-SOT-23	76C4213	0.58
SN74LVC2G74DCUT	Single Positive-Edge-Triggered D-Type FF w/ Clear and Preset	8-VSSOP	32H6416	0.95
SN74LVC2T45DCTT	Dual-Bit Dual Transceiver, 3-State	8-SM	69K0399	1.16
SN74LVC2T45DCUT	Dual Bus Transceiver	8-US8	01J0800	1.16
SN74LVC2T45YZPR	Dual Bus Transceiver	8-WCSP	10J9673	0.72
SN74LVC3G17DCTR	Triple Logic Buffer	8-SSOP	90H3713	0.63
SN74LVC541ADW	Octal Buffer/Driver, 3-State	20-SOIC	36K2049	0.63
SN74LVC4245ADBR	Octal Bus Transceiver, 3-State	24-SSOP	76C4289	1.16
SN74LVC4245ADWR	Octal Bus Transceiver, 3.3 to 5V w/ 3SO	24-SOIC	35K0821	1.16
SN74LVC4245APW	Octal Bus Transceiver, 3.3 to 5V w/ 3SO	24-TSSOP	35K4892	1.26
SN74LVC4245APWR	Octal Bus Transceiver, 3.3 to 5V w/ 3SO	24-TSSOP	92B8894	1.05
SN74LVC8T245PWR	8-Bit Dual-Supply Bus Transceiver	24-TSSOP	58K6538	1.23
SN74LVCC3245ADW	Octal Bus Transceiver	24-SOIC	67K2858	1.47
SN74LVCC3245APW	Octal Bus Transceiver, Adj. Voltage 3-State	24-TSSOP	02H5425	1.47
SN74LVC16245ADGGR	16-Bit Transceiver	48-TSSOP	36K7622	1.47
SN74LVC16245ADL	Bus Transceiver 3-State	48-SSOP	72K9437	1.73
SN74LVC16T245DGGR	Dual Bus Transceiver	48-TSSOP	58K6530	2.35
SN74LVC1G3157DBVR	Single-Pole, Double-Throw Analog Switch	6-SOP	32H6364	0.40
SN74LVC1G3157DCKR	Single-Pole, Double-Throw Analog Switch	6-SOP	32H6365	0.40
SN74LVC1G66DBVT	Analog Switch	5-SOT-23	32H6369	0.84

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(196545)

74LVT/LVTH SERIES LOW-VOLTAGE BiCMOS

RoHS Compliant Available

TEXAS INSTRUMENTS

5V-tolerant 3.3V devices use latest 0.72µ BiCMOS technology. Operate at LVTTL or TTL signal levels in point-to-point or distributed load backplanes applications. Maximum propagation delays of 3.5ns at 3.3V for buffers. Provide up to 64mA of drive at $3.3V_{VCC}$, consuming less than 330µW of standby power.

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
SN74LVTH125D	Quad Bus Buffer 3-State	14-SOIC	76C4370	0.68
SN74LVT244BDW	3.3V Octal Buffer/Driver	20-SOIC	26C2813	1.05
SN74LVTH244ADW	Octal Buffer/Driver 3-State	20-SOIC	76C4471	1.01
SN74LVTH244APWR	Octal Buffer/Driver 3-State	20-TSSOP	22C6039	0.88
SN74LVTH245ADW	Octal Bus Transceiver 3-State	20-SOIC	90B1738	1.01
SN74LVTH574DW	3.3-V ABT Octal Edge-Triggered D-Type FF, 3-State	20-SOIC	76C4524	1.01
SN74LVTH16244ADGGR	3.3V ABT 16-Bit Buffers/Drivers 3-State	48-TSSOP	26C2859	1.54
SN74LVTH16245ADGGR	3.3V 16-Bit Bus Transceiver	48-TSSOP	76C4411	1.40
SN74LVTH16245ADL	Bus Transceiver 3-State	48-SSOP	72K9439	1.73
SN74LVTH162244DGGR	16-Bit Buffer/Driver	48-TSSOP	35K0824	1.70
SN74LVTH162245DL	Bus Transceiver 3-State	48-SSOP	76C4392	1.73

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74VMEH SERIES CMOS LOGIC

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
SN74VMEH22501ADGGR	8-Bit Universal Bus Transceiver	48-TSSOP	71J7804	5.49

(105281)

HCT SERIES HIGH-SPEED CMOS TTL LOGIC

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Description	Pkg.	Stock No.	Price Each 1-9
CD74HCT00E	Quad 2-Input NAND Gate	14-DIP	60K5146	0.71
CD74HCT393M	Dual 4-stage binary counter	14-SOIC	36K3120	0.63
CD74HCT03E	Quad 2-Input NAND Gates w/ Open Drain	14-DIP	67K0106	0.51
CD74HCT04E	Hex Inverter CMOS	14-DIP	60K5147	0.71
CD74HCT08M	Quad 2-input AND Gate	14-SOIC	06F2879	0.69
CD74HCT10E	Triple 3-Input NAND Gate	14-DIP	67K0107	0.71
CD74HCT11E	Triple 3-input AND Gate	14-PDIP	67K0109	0.55
CD74HCT14E	Hex Schmitt-Trigger Inverter	14-DIP	06F2895	0.71
CD74HCT14M	Hex Schmitt-Trigger Inverter	14-SOIC	67K2797	0.69
CD74HCT32E	Quad 2-Input OR Gate	14-DIP	60K5152	0.71
CD74HCT74E	Dual D-Type Flip-Flop w/ Reset & Clear	14-DIP	67K0131	0.63
CD74HCT86E	Quad 2-Input Exclusive OR Gate	14-DIP	67K0132	0.71
CD74HCT86M	Quad 2-input EXCLUSIVE-OR Gate	14-SOIC	06F3013	0.77
CD74HCT123E	Dual Retriggerable Multivibrator	16-DIP	67K0111	0.71
CD74HCT123M	Dual Retriggerable Multivibrator	16-SOIC	66F5456	0.69
CD74HCT138E	3-8 Ln. Decoder/Demultiplexer, Inverter	16-DIP	06F2891	0.71
CD74HCT157E	Quad 2-input Multiplexer	16-DIP	06F2900	0.71
CD74HCT164E	Shift Register 8-Bit	14-DIP	67K0114	0.71
CD74HCT174E	Hex D Flip-Flop w/Clear	16-DIP	06F2911	0.63
CD74HCT174M	High Speed Logic Hex D-Type Flip-Flop w/ Reset	16-SOIC	66F5432	0.57
CD74HCT175E	Quad D Flip-Flop w/Reset	16-DIP	60K5150	0.63
CD74HCT221E	"Dual Monostable Multivibrator w/ RESET"	16-DIP	68K9995	0.80
CD74HCT251E	8-input Multiplexer, 3-State	16-DIP	67K0119	0.66
CD74HCT273E	Octal D Type Flip-Flop	20-DIP	67K0121	0.84
CD74HCT273M	Octal D Type Flip-Flop	20-SOIC	66F5474	0.92
CD74HCT541M	High Speed Octal Non-Inverting Buffers/Line Driver, 3-State	20-SOIC	05B6071	0.92
SN74HCT00D	Quad 2-Input Positive-NAND Gate	14-SOIC	72K9428	0.46
SN74HCT00N	Quad 2-Input Positive-NAND Gate	14-DIP	08F6379	0.53
SN74HCT02D	Quad 2-Input NOR Gate	14-SOIC	52F2350	0.46
SN74HCT02N	Quad 2-Input NOR Gate	14-DIP	67K1077	0.53
SN74HCT04D	Hex Inverter	14-SOIC	52F5557	0.46
SN74HCT04N	Hex Inverter	14-DIP	60K6804	0.53
SN74HCT08D	Quad 2 Input AND Gate	14-SOIC	67K2833	0.46
SN74HCT08N	Quad 2 Input AND Gate	14-DIP	60K6805	0.53
SN74HCT14D	Hex Schmitt-Trigger Inverter	14-SOIC	76C3349	0.46
SN74HCT14DR	Hex Schmitt-Trigger Inverter	14-SOIC	67K2834	0.57
SN74HCT14N	Hex Schmitt-Trigger Inverter	14-DIP	76C3352	0.53
SN74HCT32D	Quad 2-Input Positive-OR Gate	14-SOIC	36K2046	0.46
SN74HCT32N	Quad 2-Input Positive-OR Gate	14-DIP	60K6811	0.53
SN74HCT74D	Dual Flip-Flop w/Clear/Preset	14-SOIC	35K0798	0.46

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HCT SERIES HIGH-SPEED CMOS TTL LOGIC (CONT.)

Mfg. Part No.	Description	Pkg.	Stock No.	Price Each 1-9
SN74HCT74N	Dual Flip-Flop w/Clear/Preset	14-DIP	67K1081	0.53
SN74HCT125D	Quad Bus Buffer Gate	14-SOIC	78K6132	0.58
SN74HCT138D	3-to-8 Decoder/Demultiplexer	16-SOIC	52F2352	0.58
SN74HCT138N	3-to-8 Decoder/Demultiplexer	16-DIP	60K6806	0.43
SN74HCT139N	Dual 2-to-4 Decoder/Demultiplexer	16-PDIP	67K1078	0.43
SN74HCT157D	Quad 2-1 Line Data Selectors/Multiplexers	16-SOIC	92B9600	0.57
SN74HCT240DW	Octal Buffer/Line Driver, 3-State	20-SOIC	08F6385	0.66
SN74HCT240N	Octal Buffer/Line Driver, 3-State	20-DIP	60K6807	0.63
SN74HCT244DW	Octal Buffer/Line Driver, 3-State	20-SOIC	08F6389	0.66
SN74HCT244N	Octal Buffer/Line Driver, 3-State	20-DIP	60K6808	0.63
SN74HCT245DW	Octal Bus Transceiver	20-SOIC	35K0796	0.66
SN74HCT245N	Octal Bus Transceiver	20-DIP	60K6809	0.63
SN74HCT273DW	Octal D-Type Flip-Flop w/Clear	20-SOIC	67K2837	0.66
SN74HCT273DWR	Octal D-Type Flip-Flop w/Clear	20-SOIC	35K0797	0.56
SN74HCT273N	Octal D-Type Flip-Flop w/Clear	20-DIP	60K6810	0.63
SN74HCT373DW	Octal Transparent Latch	20-SOIC	08F6396	0.66
SN74HCT373N	Octal Transparent Latch	20-DIP	67K1079	0.63
SN74HCT374DW	Octal D-Type Flip-Flop, 3-State	20-SOIC	08F6398	0.66
SN74HCT374N	Octal D-Type Flip-Flop, 3-State	20-DIP	60K6812	0.56
SN74HCT540DW	Octal Buffers And Line Drivers, 3-State	20-SOIC	76C3385	0.68
SN74HCT541DW	Octal Buffer/Line Driver, 3-State	20-SOIC	52F2353	0.68
SN74HCT541N	Octal Buffer/Line Driver, 3-State	20-DIP	60K6814	0.68
SN74HCT573DW	Octal D-Type Transp. Latch, 3-State	20-SOIC	36K3551	0.66
SN74HCT573N	Octal D-Type Transp. Latch, 3-State	20-DIP	60K6815	0.56
SN74HCT574DW	Octal D-Type Flip-Flop, 3-State	20-SOIC	72K9429	0.66
SN74HCT574N	Octal D-Type Flip-Flop, 3-State	20-DIP	08F6407	0.56

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SN74 LOGIC FAMILIES

RoHS Compliant Available

TEXAS INSTRUMENTS

74LS (LOW-POWER SCHOTTKY)

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
SN74LS00N	Quad 2-Input Positive-NAND Gate	14-DIP	60K6847	0.68
SN74LS02N	Quad 2-Input Positive-NOR Gate	14-DIP	60K6848	0.68
SN74LS03N	Quad 2-Input NAND	14-DIP	60K6849	1.01
SN74LS04N	Hex Inverter	14-DIP	60K6850	0.74
SN74LS05D	Hex Inverter w/Open Collector Outputs	14-SOIC	67K2852	1.01
SN74LS05N	Hex Inverter w/Open Collector Outputs	14-DIP	08F6630	0.93
SN74LS06D	Hex Inverter Buffer/Driver	14-SOIC	36K7619	1.01
SN74LS06NSR	Hex Inverter Buffer/Driver	14-SOP	76C3651	0.93
SN74LS07N	Hex Buffer/Driver	14-DIP	60K6851	1.01
SN74LS08D	Quad 2-Input Positive-AND Gate	14-SOIC	08F6633	0.74
SN74LS09D	Quad 2-input Pos. AND gate w/ open collect. outputs	14-SOIC	35K0812	1.10
SN74LS09N	Quad 2-input Pos. AND gate w/ open collect. outputs	14-DIP	60K6853	1.01
SN74LS10N	Triple 3-Input Positive-NAND Gate	14-DIP	60K6854	0.82
SN74LS11N	Triple 3-Input Positive-AND Gate	14-DIP	08F6673	0.82
SN74LS14D	Hex Schmitt-Trigger Inverter	14-SOIC	76K1060	0.74
SN74LS14N	Hex Schmitt-Trigger Inverter	14-DIP	08F6782	0.68
SN74LS20N	Dual 4-Input NAND Gate	14-DIP	60K6870	1.01
SN74LS251N	8-Line To 1-Line Data Selectors/Multiplexer w/ 3-State Outputs	16-DIP	08F7074	0.93
SN74LS27N	Triple 3-Input Positive-NOR Gate	14-DIP	59K0267	1.13
SN74LS30N	8-Input NAND Gate	14-DIP	60K6879	1.01
SN74LS32N	Quad 2-Input Positive-OR Gate	14-DIP	08F7225	0.63
SN74LS33N	Quad 2-input NOR buffers w/ open collect. outputs	14-DIP	60K6880	1.57
SN74LS38N	Quad 2-Input NAND Buffer	14-DIP	60K6884	0.93
SN74LS42N	4-Line BCD To 10-Line Decimal Decoder	16-DIP	60K6886	2.35
SN74LS74AD	Dual D-Type Flip-Flop	14-SOIC	36K2048	0.68
SN74LS74AN	Dual D-Type Flip-Flop	14-DIP	60K6892	0.63
SN74LS86AN	Quad 2-Input Exclusive-OR Gate	14-DIP	60K6895	0.63
SN74LS92N	Divide-by-12 Decade Counter	14-DIP	60K6897	2.80
SN74LS93N	4-Bit Binary Counter	14-DIP	60K6898	2.51
SN74LS109AD	Dual J-K-Bar Flip-Flop	16-SOIC	67K2853	1.65
SN74LS112AN	Dual J-K Edge Trigger Flip-Flop	16-DIP	60K6855	0.82
SN74LS122N	Re-Trigger Mono Multivibrator	14-DIP	60K6856	1.26
SN74LS123D	Dual Mono Multivibrator	16-SOIC	08F6711	0.94
SN74LS123N	Dual Mono Multivibrator	16-DIP	60K6857	0.87
SN74LS125AD	Quad Bus Buffer	14-SOIC	08F6719	0.94
SN74LS125AN	Quad Bus Buffer	14-DIP	08F6722	0.87
SN74LS126AN	Quad Buffer, 3-State	14-DIP	60K6858	0.87

CONTINUED

SN74 LOGIC FAMILIES (CONT.)

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
SN74LS132N	Quad 2-Input NAND Trigger	14-DIP	60K6859	0.92
SN74LS138D	3-to-8 Decoder/Demultiplexer	16-SOIC	67K2854	0.94
SN74LS138N	3-to-8 Decoder/Demultiplexer	16-DIP	60K6860	0.87
SN74LS139AN	Dual 2-to-4 Decoder/Demultiplexer	16-DIP	08F6771	0.87
SN74LS145N	BCD-to-Decimal Decoder	16-DIP	60K6861	1.13
SN74LS148N	8-to-3 Priority Encoder	16-DIP	60K6862	1.68
SN74LS151N	1-of-8 Data Selector/Multiplexer	16-DIP	08F6812	0.93
SN74LS153N	Dual 4-to-1 Selector/Multiplexer	16-DIP	60K6863	0.93
SN74LS156N	Dual 2-4 Line Decoder/Demux w/ Open-Collect. Out	16-DIP	60K6865	0.93
SN74LS157N	Quad 1-of-2 Data Selector/Multiplexer	16-DIP	60K6866	0.82
SN74LS161AN	4-Bit Synchronous Binary Counter	16-DIP	08F6861	0.92
SN74LS163AN	Synchronous 4-Bit Binary Counters	16-DIP	60K6867	0.82
SN74LS164D	Dual 4-to-1 Selector/Multiplexer	16-SOIC	08F6877	0.89
SN74LS164N	Dual 4-to-1 Selector/Multiplexer	16-DIP	08F6881	0.82
SN74LS165AN	Serial-out Shift Registers	16-DIP	60K6868	0.82
SN74LS174N	Hex D-Type Flip-Flop	16-DIP	63K6343	0.97
SN74LS175N	Quad D-Type Flip-Flop	16-DIP	08F6926	0.96
SN74LS191N	Synchronous 4-Bit Up/Down Counter	16-DIP	60K6869	1.13
SN74LS193N	4-Bit Up/Down Counter	16-DIP	08F6957	1.13
SN74LS221D	Dual Mono Multivibrator	16-SOIC	08F7002	1.43
SN74LS221N	Dual Mono Multivibrator	16-DIP	08F7006	1.31
SN74LS240DW	Dual 4-Bit Octal Buffer/Line Driver	16-SOIC	67K2855	0.97
SN74LS240N	Dual 4-Bit Octal Buffer/Line Driver	16-DIP	60K6871	0.89
SN74LS241N	Octal Buffers And Line Drivers w/ 3-State Outputs	20-DIP	08F7025	0.89
SN74LS244DW	Octal Buffer/Line Driver, 3-State	20-SOIC	08F7041	1.01
SN74LS244N	Octal Buffer/Line Driver, 3-State	20-DIP	60K6872	0.93
SN74LS245DW	Octal Bus Transceiver, 3-State	20-SOIC	08F7050	1.01
SN74LS245N	Octal Bus Transceiver, 3-State	20-DIP	60K6873	0.93
SN74LS257BN	Quad 2-to-1 Data Selector/Mux, 3-State	16-DIP	60K6874	0.93
SN74LS273DW	Octal D-Type Flip-Flops w/ Clear	20-SOIC	08F7145	0.97
SN74LS273N	Octal D-Type Flip-Flop	20-DIP	60K6876	0.89
SN74LS279AN	Quad NOT-S/NOT-R Latch	16-DIP	60K6877	1.35
SN74LS365AN	Hex Bus Drivers w/ 3-State Outputs	16-DIP	60K6881	1.73
SN74LS367AN	Hex Bus Driver, 3-State	16-DIP	60K6882	1.22
SN74LS368AN	6-Bit Buffer/Line-Driver	16-DIP	08F7293	1.47
SN74LS373DW	Octal D-Type Transparent Latch, 3-State	20-SOIC	08F7306	1.00
SN74LS373N	Octal D-Type Transparent Latch, 3-State	20-DIP	59K9086	0.96
SN74LS374N	Octal D-Type Flip-Flop, 3-State	20-DIP	60K6883	0.96
SN74LS377N	Octal D-Type Flip-Flop	20-PDIP	59K9087	1.55
SN74LS390N	Dual 4-Bit Decade Counter	16-DIP	60K6885	1.57
SN74LS393N	Dual 4-Bit Binary Counter	14-DIP	08F7375	1.26
SN74LS540N	Octal Buffer/Line Driver	20-DIP	08F7446	1.68
SN74LS541DW	Octal Buffer/Line Driver, 3-State	20-SOIC	67K2857	1.38
SN74LS541N	Octal Buffer/Line Driver, 3-State	20-DIP	08F7453	1.26
SN74LS590N	Binary Counter w/Ouput-Regulator	16-DIP	60K6888	11.00
SN74LS640N	Octal Bus Transceiver	20-DIP	59K9088	2.04
SN74LS645-1N	Octal Bus Transceiver, 3-State	20-DIP	62K3467	2.20
SN74LS645N	Octal Bus Transceiver, 3-State	20-DIP	60K6890	2.20
SN74LS682N	Octal Binary or BCD Magnitude Comparator	20-DIP	58K2338	2.51
SN74LS688N	8-Bit Identity Comparator	20-DIP	08F7554	2.66

74ALS (ADVANCED LOW-POWER SCHOTTKY)

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
SN74ALS00AD	Quad 2-Input Positive-NAND Gate	14-SOIC	08F5927	0.91
SN74ALS00AN	Quad 2-Input Positive-NAND Gate	14-DIP	67K1024	0.96
SN74ALS04BD	Hex Inverter	14-SOIC	08F5932	0.94
SN74ALS04BN	Hex Inverter	14-DIP	60K6788	0.87
SN74ALS05AN	Hex Inverter w/Open Collector Outputs	14-DIP	67K1025	0.96
SN74ALS08D	Quad 2-Input Positive-AND Gate	14-SOIC	08F5935	0.94
SN74ALS08N	Quad 2-Input Positive-AND Gate	14-DIP	60K6789	0.87
SN74ALS10AN	Triple 3-Input Positive-NAND Gate	14-DIP	67K1026	0.93
SN74ALS32D	Quad 2-Input Positive-OR Gate	14-SOIC	08F6036	0.91
SN74ALS32N	Quad 2-Input Positive-OR Gate	14-DIP	60K6791	0.96
SN74ALS74AD	Dual D-Type Flip-Flop	14-SOIC	67K2819	1.01
SN74ALS74AN	Dual D-Type Flip-Flop	14-DIP	60K6798	0.93
SN74ALS86N	Quad 2-Input Exclusive-OR Gate	14-DIP	67K1046	0.63
SN74ALS112AN	Dual J-K Edge Trigger Flip-Flop	16-DIP	08F5952	1.43
SN74ALS138AD	3-Line to 8-Line Decoder/Demultiplexer	16-SOIC	92F8084	1.10
SN74ALS138AN	3-to-8 Decoder/Demultiplexer	16-DIP	69K0251	1.01
SN74ALS139N	Dual 2-to-4 Decoder/Demultiplexer	16-DIP	67K1030	1.09
SN74ALS157AN	Quad 1-of-2 Data Selector/Multiplexer	16-DIP	67K1033	1.26
SN74ALS175N	Quad D-Type Flip-Flop	16-DIP	08F5982	1.09

CONTINUED

SN74 LOGIC FAMILIES (CONT.)

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
SN74ALS240AN	Dual 4-Bit Octal Buffer/Line Driver	16-DIP	67K1037	1.31
SN74ALS244CN	Octal Buffer/Line Driver, 3-State	20-SOIC	67K1039	1.22
SN74ALS245ADW	Octal Bus Transceiver, 3-State	20-SOIC	08F6012	1.33
SN74ALS245AN	Octal Bus Transceiver, 3-State	20-DIP	60K6790	1.22
SN74ALS273DW	Octal D-Type Flip-Flop	20-SOIC	35K0783	1.52
SN74ALS273N	Octal D-Type Flip-Flop	20-DIP	08F6025	1.39
SN74ALS373AN	Octal D-Type Transparent Latch, 3-State	20-DIP	08F6043	1.18
SN74ALS374AN	Octal D-Type Flip-Flop, 3-State	20-DIP	67K1043	1.18
SN74ALS521N	8-Bit Identity Comparator	20-DIP	60K6794	2.04
SN74ALS541DW	Octal Buffer/Line Driver, 3-State	20-SOIC	08F6065	1.88
SN74ALS541N	Octal Buffer/Line Driver, 3-State	20-DIP	60K6795	1.73
SN74ALS573CDW	Octal D-Type Transp. Latch, 3-State	20-SOIC	08F6074	1.29
SN74ALS573CN	Octal D-Type Transp. Latch, 3-State	20-DIP	60K6796	1.18
SN74ALS574BDW	Octal D-Type Flip-Flop	20-SOIC	52F2560	1.41
SN74ALS574BN	Octal D-Type Flip-Flop	20-DIP	08F6077	1.30
SN74ALS645A-1N	Octal Bus Transceiver, 3-State	20-DIP	08F6096	2.35
SN74ALS645AN	Octal Bus Transceiver, 3-State	20-DIP	60K6797	2.35
SN74ALS653NT	Octal Bus Transceiver/Register, 3-State	24-DIP	59K9084	18.37
SN74ALS688N	8-Bit Identity Comparator	20-DIP	08F6109	6.58
SN74ALS867ANT	Synchronous Up/Down Binary Counter	24-DIP	67K1047	13.29
SN74ALS869NT	Synchronous Up/Down Binary Counter	24-DIP	65K1075	12.43
SN74ALS1035D	Hex Non-Inverter Buffer Octal	14-SOIC	35K0780	2.51

74F (FAST)

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
SN74F00D	Quad 2-Input Positive-NAND Gate	14-SOIC	08F6288	0.63
SN74F00N	Quad 2-Input Positive-NAND Gate	14-DIP	67K1065	0.69
SN74F02N	Quad 2-Input Positive-NOR Gate	14-DIP	08F6290	0.69
SN74F245DW	Octal Bus Transceiver, 3-State	20-SOIC	67K2830	1.00
SN74F08D	Quad 2-Input Positive-AND Gate	14-SOIC	67K2827	0.63
SN74F08N	Quad 2-Input Positive-AND Gate	14-DIP	60K6800	0.69
SN74F10N	Triple 3-Input Positive-NAND Gate	14-DIP	08F6297	0.69
SN74F32D	Quad 2-Input Positive-OR Gate	14-SOIC	67K2831	0.63
SN74F32N	Quad 2-Input Positive-OR Gate	14-DIP	60K6803	0.69
SN74F38D	Quad 2-Input NAND Buffer	14-SOIC	35K0794	0.57
SN74F74D	Dual D-Type Flip-Flop	14-SOIC	67K2832	0.63
SN74F74DR	Dual Positive-Edge-Triggered D-Type FF w/ Clear And Preset	14-SOIC	76C3264	0.63
SN74F74N	Dual D-Type Flip-Flop	14-DIP	67K7345	0.69
SN74F109N	Dual J-K-Bar Flip-Flop	16-DIP	08F6298	0.92
SN74F112N	Dual J-K Edge Trigger Flip-Flop	16-DIP	08F6300	0.80
SN74F125D	Quad Bus Buffer	14-SOIC	52F2367	0.69
SN74F125N	Quad Bus Buffer	14-DIP	67K1067	0.63
SN74F138N	3-to-8 Decoder/Demultiplexer	16-DIP	60K6801	0.63
SN74F157AN	Quad 1-of-2 Data Selector/Multiplexer	16-DIP	67K1068	0.63
SN74F161AN	4-Bit Synchronous Binary Counter	16-DIP	08F6312	0.72
SN74F244DW	Octal Buffer/Line Driver, 3-State	20-SOIC	67K2829	1.00
SN74F245N	Octal Bus Transceiver, 3-State	20-DIP	60K6802	0.96
SN74LS247N	BCD-to-Seven-Segment Decoder/Driver	16-PDIP	72K9436	1.88
SN74F374DW	Octal D-Type Edge-Triggered FF w/ 3-State Output	20-SOIC	36K3550	1.00
SN74F374N	Octal D-Type Flip-Flop, 3-State	20-DIP	08F6351	0.96
SN74F521N	8-Bit Identity Comparator	20-DIP	67K1075	0.80
SN74F543NT	Octal Registered Transceiver With 3-State Output	24-DIP	67K7344	1.88

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SN74AHC/AHCT SERIES ADVANCED CMOS LOGIC

RoHS Compliant Available

TEXAS INSTRUMENTS

AHC series features same low noise of HCMOS without the overshoot and undershoot typical of higher drive devices usually needed to achieve **AHC** speeds with half the static power consumption of HCMOS. With typical propagation delays of 5.2ns for octals, **AHC** provides 3 times the speed of HCMOS. Output current: ±8mA at 5V, ±4mA at 3.3V. With input diode to V_{CC} removed, **AHC** is specified for both 5V and 3.3V operation.

74AHCT SERIES

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
SN74AHCT00D	Quad 2-Input Positive-NAND Gate	14-SOIC	76C1450	0.46
SN74AHCT02N	Quad 2-Input Positive-NOR Gate	14-DIP	67K1009	0.53
SN74AHCT04D	Hex Inverter	14-SOIC	76C1464	0.46
SN74AHCT14D	Hex Schmitt Trigger Inverter	14-DIP	99B3539	0.46
SN74AHCT14N	Hex Schmitt Trigger Inverter	14-DIP	83F8894	0.53
SN74AHCT125D	Quad Bus Buffer Gate	14-SOIC	76C1498	0.58
SN74AHCT126N	Hex Inverter	14-DIP	69K3679	0.43
SN74AHCT138D	3-Line to 8-Line Decoder / Demultiplexer	16-SOIC	76C1517	0.58

CONTINUED

SN74AHC/AHCT SERIES ADVANCED CMOS LOGIC (CONT.)

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
SN74AHCT244DW	Octal Buffers/Drivers w/ 3-State Outputs	20-SOIC	35K0766	0.66
SN74AHCT541PWR	Octal Buffer/Driver	20-DIP	23C2341	0.69
SN74AHCT573DW	Octal Transparent Latch	20-SOIC	75K1484	0.66
SN74AHCT1G08DCKR	Single 2-Input AND Gate	5-SC-70	67K2813	0.50
SN74AHCT1G08DBVT	Single 2-Input Positive-AND Gate	5-SOT-23	22H0193	0.80
SN74AHCT1G14DBVR	Single Schmitt Trigger Inverter	5-SOT-23	67K2814	0.09
SN74AHCT1G32DBVT	Single 2-Input Positive-OR Gate	5-SOP	22H0201	0.84
SN74AHCT1G125DBVT	Single Bus Buffer Gate w/ 3-State Output	5-SOT-23	22H0195	0.80
SN74AHCT1G125DCKT	Single Bus Buffer Gate w/ 3-State Output	5-SOP	22H0196	0.80

74AHC SERIES

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
SN74AHC00N	Quad 2-Input Positive-NAND Gate	14-DIP	91F3629	0.53
SN74AHC02N	Quad 2-Input Positive-NOR Gate	14-DIP	67K1014	0.53
SN74AHC08N	Quad 2-Input Positive-AND Gate	14-DIP	67K1015	0.53
SN74AHC1G02DBVR	Single 2-Input Positive-NOR Gate	5-SOT-23	76C1727	0.50
SN74AHC14D	Hex Schmitt Trigger Inverter	14-SOIC	35K0769	0.46
SN74AHC14N	Hex Schmitt Trigger Inverter	14-DIP	83F8905	0.53
SN74AHC32D	Quad 2-Input Positive-OR Gate	14-SOIC	76C1848	0.46
SN74AHC74D	Dual D-Type Flip-Flop	14-SOIC	35K0777	0.46
SN74AHC125D	Quad Bus Buffer Gate, 3-State	14-SOIC	76C1740	0.58
SN74AHC125N	Quad Bus Buffer Gate, 3-State	14-DIP	67K1016	0.43
SN74AHC125PW	Quad Bus Buffer Gate, 3-State	14-TSSOP	35K0768	0.58
SN74AHC244DW	Octal Buffer/Driver	20-SOIC	35K0771	0.66
SN74AHC244PW	Octal Buffers/Drivers	20-TSSOP	22H0250	0.60
SN74AHC245DW	Octal Bus Transceivers w/ 3-State Outputs	20-SOIC	35K0772	0.66
SN74AHC541PWR	Octal Buffer/Line Driver, 3-State	20-DIP	35C2022	0.63
SN74AHC1G02DBVT	Single 2-Input Positive-NOR Gate	5-SOP	22H0229	0.80
SN74AHC1G04DBVR	Single Inverter	5-SOT-23	76C1729	0.50
SN74AHC1G04DCKR	Single Inverter	5-SC-70	67K2818	0.50
SN74AHC1G08DBVR	Single 2-Input and Gate	5-SOT-23	76C1730	0.50
SN74AHC1G08DCKR	Single 2-Input Positive-AND Gate	5-SOP	19C1781	0.50
SN74AHC1G14DBVR	Single Schmitt-Trigger Inverter	5-SOT-23	76C1733	0.50
SN74AHC1G14DCKT	Single Schmitt-Trigger Inverter Gate	5-SOP	62K3463	0.80
SN74AHC1G86DBVR	Single 2-Input Exclusive-Or Gate	5-SOT-23	10C2398	0.40
SN74AHC1G125DBVT	Single Bus Buffer Gate w/ 3-State Output	5-SOP	22H0235	0.80

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LOGIC - VOLTAGE-LEVEL TRANSLATORS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Features	No. of Bits	Supply Voltage (V)	Pkg.	Stock No.	Price Each 1-9
TXB0104ZXUR	Auto Direction Sensing and +/-15-kV ESD Protect	4bit	3.6	12-BGA	18M3269	1.64
TXB0106PWR	Auto Direction Sensing and +/-15-kV ESD Protect	6bit	3.6	16-TSSOP	46P3786	1.91
TXB0108PWR	Auto Direction Sensing and +/-15-kV ESD Protect	8bit	5.5	20-TSSOP	27M1151	2.18
TXS0102DCUR	VCC Isolation	2bit	3.6	8-VSSOP	30M1878	1.01
TXS0102DCUT	VCC Isolation	2bit	3.6	8-SO	30M1879	1.47
TXS0206-29YFPR	Bidirectional for Open Drain Applications	6bit	3.6	20-DSBGA	60R2440	1.88
TXS02326MRGER	Auto Direction Sensing and +/-15-kV ESD Protect	6bit	3.3	24-VQFN	13T5981	3.46
TXS02326RGER	Auto Direction Sensing and +/-15-kV ESD Protect	6bit	3.3	24-VQFN	13T5982	3.46
SN65LVDT100D	Accepts LVDS, PECL, or CML Input Signals	...	3.6	8-SOIC	02E6889	6.72

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POWER LOGIC CIRCUITS

RoHS Compliant Available

TEXAS INSTRUMENTS

POWER LOGIC CIRCUITS

Mfg. Part No.	Description	Low $R_{DS(on)}$ (Ω)	Output (V)	Continuous Current	Pkg.	Stock No.	Price Each 1-9
TPIC6B259N	8-Bit Addressable Latch	5	50	150mA	20-DIP	55M8243	2.54
TPIC6259N	8-Bit Addressable Latch	1.3	45	250mA	20-PDIP	88K2008	4.06
TPIC6273N	Octal D-Mfg. Part No. Latch	1.3	45	250mA	20-PDIP	88K2009	4.06
TPIC6B273N	Octal D-Mfg. Part No. Latch	5	50	50mA	20-PDIP	83F9190	2.54
TPIC2810DG4	8-Bit LED Driver	5	40	100mA	16-SOIC	02M4281	2.70
TPIC6595N	8-Bit Shift Register	1.3	45	250mA	20-PDIP	52M8830	3.73
TPIC6B595DWG4	8-Bit Shift Register	5	50	50mA	20-SOIC	80K3370	1.60
TPIC6B595N	8-Bit Shift Register	5	50	50mA	20-PDIP	15M1973	1.76
TPIC6A595NE	8-Bit Shift Register	1	50	350mA	20-PDIP	88K2007	3.95
TPIC6A596DW	8-Bit Shift Register	1	50	350mA	24-SOIC	90R9912	3.95
TPIC6B595DW	8-Bit Shift Register	5	50	150mA	20-SOIC	52F2783	1.60
TPIC6C595D	8-Bit Shift Register	7	33	100mA	16-SOIC	96B3624	1.40
TPIC6C595N	8-Bit Shift Register	7	33	100mA	16-PDIP	35K1281	1.23
TPIC6C596N	8-Bit Shift Register	7	33	100mA	16-DIP	76C9914	1.46

(9914)

BUFFERS AND ACCELERATORS

RoHS Compliant Available

LINEAR TECHNOLOGY

Bus buffers, multiplexers, accelerators and isolators address a wide variety of issues that commonly arise when many nodes are added to a bus. A bus buffer is commonly used in high availability (Hot Swap) environments to provide level translation or level shifting capabilities for 1V, 1.2V, 1.5V, 1.8V, 2.5V, 3.3V and 5V buses, and break down bus capacitances into smaller compliant pieces. Stand alone or built-in rise time accelerators help speed up signal rise times to help devices meet I2C requirements. Aside from increasing fan-in or fan-out, our software-programmable and pin-selectable multiplexers help resolve address limitations.

FAST 150MA POWER BUFFER

Mfg. Part No.	Supply Voltage (V)	Package	Stock No.	Price Each 1-24
LT1010CDD#PBF	22	8-DFN	57M0770	4.80
SMBUS/I²C ACCELERATOR				
LTC1694CS5#TRMPBF	6	5-TSOT-23	56M3264	3.01
HOT SWAP 2-WIRE BUS BUFFERS				
LTC4300-1CMS8#PBF	5.5	8-MSOP	56M9231	3.52
LTC4300-1IMS8#PBF	5.5	8-MSOP	56M9235	4.01
LTC4300A-1CMS8#PBF	5.5	8-MSOP	56M9247	3.52
LTC4300A-2IMS8#PBF	5.5	8-MSOP	56M9259	4.01
LTC4300A-2CMS8#PBF	5.5	8-MSOP	56M9255	3.52
LOW OFFSET LEVEL SHIFTING HOT SWAP 2-WIRE BUS BUFFER W/ STUCK BUS RECOVERY				
LTC4303CMS8#PBF	5.5	8-MSOP	56M9331	4.23
LTC4307CMS8#PBF	5.5	8-MSOP	56M9396	4.31
LTC4309IDE#PBF	5.5	12-DFN	56M9427	5.41
2-WIRE BUS BUFFERS W/ HIGH NOISE MARGIN				
LTC4313CDD-1#PBF	5.5	8-DFN	78T3334	3.43
LTC4313CDD-2#PBF	5.5	8-DFN	78T3336	3.43
LTC4313CDD-3#PBF	5.5	8-DFN	78T3338	3.43
LTC4313CMS8-1#PBF	5.5	8-MSOP	78T3340	5.13
LTC4313CMS8-2#PBF	5.5	8-MSOP	78T3342	3.43
LTC4313CMS8-3#PBF	5.5	8-MSOP	78T3344	5.13
LTC4313IDD-1#PBF	5.5	8-DFN	78T3346	5.90
LTC4313IDD-2#PBF	5.5	8-DFN	78T3348	3.94
LTC4313IDD-3#PBF	5.5	8-DFN	78T3350	3.94
LTC4313IMS8-1#PBF	5.5	8-MSOP	78T3352	5.90
LTC4313IMS8-2#PBF	5.5	8-MSOP	78T3354	5.90
LTC4313IMS8-3#PBF	5.5	8-MSOP	78T3356	5.90
LTC4315CDE#PBF	5.5	12-DFN	78T3358	5.35
LTC4315CMS#PBF	5.5	12-MSOP	78T3360	5.35
LTC4315IDE#PBF	5.5	12-DFN	78T3362	6.15
LTC4315IMS#PBF	5.5	12-MSOP	78T3364	6.15

(101604)

10H/100H FAMILY ECL BASED LOGIC ICs

RoHS Compliant Available

ON Semiconductor

The **10H family** is a functional/pinout duplication of the standard MECL 10K family part, with 100% improvement in counting frequency and no increase in power-supply current. The **100H family** is compatible with 100K levels.

GATES

Mfg. Part No.	Description	Pkg.	Stock No.	Price Each 1-24
MC10H104FNG	Quad 2-Input AND Gate	20-PLCC	26K3767	4.47
MC10H104PG	Quad 2-Input AND Gate	16-PDIP	45J0864	3.79
MC10H103FNG	Quad 2-Input OR Gate	20-PLCC	42K0199	4.47
MC10H103PG	Quad 2-Input OR Gate	16-PDIP	45J0863	3.79

CONTINUED

10H/100H FAMILY ECL BASED LOGIC ICs (CONT.)

Mfg. Part No.	Description	Pkg.	Stock No.	Price Each 1-24
MC10H102PG	Quad 2-Input NOR Gate	16-PDIP	45J0862	4.49
MC10H101PG	Quad OR/NOR Gate	16-PDIP	45J0861	4.18
MC10H105PG	Triple 2-3-2-Input OR/NOR Gate	16-PDIP	45J0866	4.18
MC10H107FNG	Triple 2-Input XOR/XNOR Gate	20-PLCC	26K3771	4.47
MC10H107PG	Triple 2-Input XOR/XNOR Gate	16-PDIP	45J0868	4.18
FLIP FLOPS				
MC10H131PG	Dual Type D Master-Slave Flip-Flop	16-PDIP	45J0879	7.37
COUNTERS				
MC10H136PG	Universal Hexidecimal Counter	16-PDIP	45J0882	26.12
DRIVERS / RECEIVERS				
MC10H123FNG	Triple 4-3-3-Input Bus Driver	20-PLCC	26K3780	5.77
MC10H116DG	Triple Line Receiver	16-SOIC	26K3776	5.44
MC10H116FNG	Triple Line Receiver	20-PLCC	45J0871	4.93
MC10H116PG	Triple Line Receiver	16-PDIP	45J0872	4.49
MC10H115PG	Quad Line Receiver	16-PDIP	45J0870	4.18
TRANSLATORS				
MC10H350FNG	PECL to TTL Translator	20-PLCC	45J0898	15.00
MC10H350PG	PECL to TTL Translator	16-PDIP	45J0899	22.22
MC10H351FNG	TTL/NMOS to ECL Translator	20-PLCC	45J0900	15.00
MC10H351FNR2G	TTL/NMOS to ECL Translator	20-PLCC	10N9433	16.50
MC10H351PG	TTL/NMOS to ECL Translator	20-PDIP	42K0312	22.22
MC10H124FNG	Quad TTL to ECL Translator	20-PLCC	45J0874	8.14
MC10H124PG	Quad TTL to ECL Translator	16-PDIP	98H0625	6.98
MC10H125PG	Quad ECL to TTL Translator	16-PDIP	45J0876	7.47
MC10H600FNG	9-Bit TTL/ECL Translator	28-PLCC	71J5384	11.20
MC10H601FNG	9-Bit ECL/TTL Translator	28-PLCC	26K3798	11.20

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EL FAMILY ECL BASED LOGIC ICs

RoHS Compliant Available

ON Semiconductor

The **10EL/100EL families** are 5V Differential Logic (ECL) devices. With propagation delays and output transition times significantly faster than the 10E/100E families, they are ideally suited for those applications which require the ultimate in AC performance. The 100 Series contains temperature compensation.

GATES

Mfg. Part No.	Description	Pkg.	Stock No.	Price Each 1-9
MC10EL04DG	2-Input AND/NAND	8-NSOIC	98H0612	6.30
MC100EL04DG	2-Input AND/NAND	8-NSOIC	98H0630	6.75
MC100EL05DG	2-Input Differential AND/NAND	8-NSOIC	42K0347	6.30
MC10EL01DG	4-Input OR/NOR	8-SOIC	45J0833	6.30
MC100EL01DG	4-Input OR/NOR	8-NSOIC	42K0342	6.30
FLIP FLOPS				
MC10EL31DG	D-Type Flip-Flop with Set and Reset	8-NSOIC	98H0615	6.30
MC100EL31DG	D-Type Flip-Flop with Set and Reset	8-NSOIC	88H4707	6.75
MULTIPLEXERS				
MC10EL58DG	2:1 Multiplexer	8-SOIC	98H0620	7.50
MC10EL57DG	4:1 Differential Multiplexer	16-SOIC	45J0840	8.13
MC100EL57DG	4:1 Differential Multiplexer	16-SOIC	45J0919	8.70
RECEIVERS				
MC10EL16DG	Differential Receiver	8-SOIC	71J5370	6.30
MC10EL16DR2G	Differential Receiver	8-SOIC	83H7289	6.46
MC100EL16DG	Differential Receiver	8-SOIC	88H4705	6.30
DIVIDERS				
MC10EL32DG	5V Divide-by-2 Divider	8-SOIC	98H0616	6.75
MC100EL32DG	5V Divide-by-2 Divider	8-SOIC	26K3825	6.30
MC10EL33DG	5V Divide-by-4 Divider	8-SOIC	98H0617	6.30
MC100EL33DG	5V Divide-by-4 Divider	8-SOIC	98H0633	6.30
TRANSLATORS				
MC100ELT20DG	TTL to Differential PECL Translator	8-SOIC	26K3803	4.52
MC10ELT20DG	TTL to Differential PECL Translator	8-SOIC	88H4693	4.20
MC100ELT20DTG	TTL to Differential PECL Translator	8-TSSOP	26K3804	4.20
MC10ELT22DG	Dual TTL to Differential PECL Translator	8-SOIC	98H0611	4.20
MC100ELT22DG	Dual TTL to Differential PECL Translator	8-SOIC	98H0628	4.20
MC100ELT21DG	Differential PECL To TTL Translator	8-SOIC	71J5392	4.52
MC100ELT21DTG	Differential PECL To TTL Translator	8-TSSOP	26K3805	4.20
MC100ELT23DG	Dual Differential PECL to TTL Translator	8-SOIC	98H0629	4.52
MC100ELT23DTG	Dual Differential PECL to TTL Translator	8-TSSOP	26K3808	4.52
MC10ELT24DG	TTL to Differential ECL Translator	8-SOIC	88H4695	4.20
MC100ELT24DG	TTL to Differential ECL Translator	8-SOIC	26K3810	4.52
MC100ELT24DTG	TTL to Differential ECL Translator	8-TSSOP	26K3811	4.52
MC10ELT25DTG	Differential -5V ECL To TTL Translator	8-TSSOP	42K0043	4.52
MC100ELT25DG	Differential -5V ECL To TTL Translator	8-SOIC	26K3812	4.52

CONTINUED

EL FAMILY ECL BASED LOGIC ICs (CONT.)

TRANSLATORS

Mfg. Part No.	Description	Pkg.	Stock No.	Price Each 1-9
● MC100ELT25DTG	Differential -5V ECL To TTL Translator	8-TSSOP	26K3813	4.52
● MC10ELT28DG	TTL to Differential PECL & Differential PECL to TTL Translator	8-SOIC	26K3714	6.25
● MC100EL91DWG	Triple LVPECL/PECL Input to -5V ECL Output Translator	20-SOIC	26K3834	10.00

(4259)

EP FAMILY ECL BASED LOGIC ICs

RoHS Compliant Available

ON Semiconductor

The **EP family** ICs are 3.3V / 5V Differential Logic (ECL) devices. With AC performance much faster than the LVEL devices, the EP family is ideal for applications requiring the fastest AC performance available. The 100 Series contains temperature compensation.

GATES

Mfg. Part No.	Description	Pkg.	Stock No.	Price Each 1-9
● MC100EP05DG	2-Input Differential AND/NAND	8-NSOIC	71J5404	8.13
● MC100EP05DTG	2-Input Differential AND/NAND	8-TSSOP	71J5405	8.13
● MC100EP01DTG	4-Input OR/NOR	8-TSSOP	26K3839	8.13
● MC100EP08DTG	Differential 2-Input XOR/XNOR	8-TSSOP	61K0831	8.13
FLIP FLOPS				
● MC10EP31DG	D Flip-Flop with Set and Reset	8-NSOIC	45J0849	8.75
● MC100EP131FAG	D Flip Flop with Set, Reset, and Differential Clock	32-LQFP	26K3843	19.80
● MC100EP51DTG	D Flip Flop with Reset and Differential Clock	8-TSSOP	71J5411	6.69
● MC100EP52DTG	Differential Data and Clock D Flip-Flop	8-TSSOP	26K3869	7.50
● MC100EP29DTG	Dual Differential Data and Clock D Flip-Flop With Set and Reset	20-TSSOP	42K0420	18.84
REGISTERS				
● MC100EP142FAG	9-Bit Shift Register	32-LQFP	26K3846	25.30
● MC100EP451FAG	6-Bit Differential Register with Master Reset	32-LQFP	45J0946	25.30
RECEIVER/DRIVERS				
● MC10EP16DG	Differential Receiver/Driver	8-SOIC	45J0847	6.75
● MC100EP16DG	Differential Receiver/Driver	8-SOIC	26K3847	6.75
● MC10EP16DTG	Differential Receiver/Driver	8-TSSOP	26K3728	6.75
● MC100EP16DTG	Differential Receiver/Driver	8-TSSOP	71J5410	6.75
● MC100EP16DTR2G	Differential Receiver/Driver	8-TSSOP	45J0940	6.92
MULTIPLEXERS				
● MC100EP58DG	2:1 Multiplexer	8-SOIC	45J0947	7.50
● MC100EP58DTG	2:1 Multiplexer	8-TSSOP	45J0949	7.50
● MC100EP56DTG	Dual Differential 2:1 Multiplexer	20-TSSOP	42K0438	11.25
● MC100EP57DTG	4:1 Differential Multiplexer	20-TSSOP	71J5412	11.13
DIVIDERS				
● MC10EP32DTG	Divide-by-2 Divider	8-TSSOP	26K3732	7.50
● MC100EP32DTG	Divide-by-2 Divider	8-TSSOP	45J0943	7.50
● MC100EP33DTG	Divide-by-4 Divider	8-TSSOP	45J0945	7.50
SERIAL/PARALLEL CONVERTERS				
● MC100EP445FAG	8-Bit Serial/Parallel Converter	32-LQFP	26K3865	25.30
● MC100EP446FAG	8-Bit Differential Parallel/Serial Converter	32-LQFP	26K3867	25.30
TRANSLATORS				
● MC100EPT20DG	TTL/CMOS to Differential PECL Translator	8-SOIC	45J0921	9.90
● MC100EPT20DTG	TTL/CMOS to Differential PECL Translator	8-TSSOP	45J0922	9.25

(9904)

LOW VOLTAGE ECL BASED LOGIC ICs

RoHS Compliant Available

ON Semiconductor

The **LVEL family** is functionally equivalent to the EL family Differential Logic (ECL) devices, operating from a 3.3V supply. With output transition times and propagation delays comparable to the EL family, LVEL devices are ideally suited for interfacing with high frequency sources at 3.3 V supplies. The **LVEP family** is functionally equivalent to the EL, EP and LVEL devices, operating from 2.5 & 3.3V supplies. With output transition times significantly faster than the EL and LVEL devices, the LVEP devices are ideally suited for interfacing with high frequency and low voltage (2.5V) sources.

FLIP FLOPS

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● MC100LVEL51DG	Differential Clock D Flip-Flop	8-NSOIC	26K3911	6.25
● MC100LVEL29DWG	Dual Differential Data and Clock D-Type Flip-Flop with Set and Reset	20-SOIC	98H0645	11.91
RECEIVERS / DRIVERS				
● MC100LVEL16DG	Differential Receiver	8-SOIC	98H0642	6.30
● MC100LVEL16DTG	Differential Receiver	8-TSSOP	26K3900	6.30
● MC100LVEP16DTG	Differential Receiver/Driver	8-TSSOP	71J5443	7.50
MULTIPLEXERS				
● MC100LVEL56DWG	Dual Differential 2:1 Multiplexer	20-SOIC	26K3912	8.70

➤ CONTINUED ➤

LOW VOLTAGE ECL BASED LOGIC ICs (CONT.)

TRANSLATORS

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
● MC100LVELT22DG	Dual LVTTL/LVCMOS to Differential LVPECL Translator	8-SOIC	45J0984	4.52
● MC100LVELT22DTG	Dual LVTTL/LVCMOS to Differential LVPECL Translator	8-TSSOP	45J0986	4.20
● MC100EPT22DG	Dual LVTTL/LVCMOS to Differential LVPECL Translator	8-SOIC	45J0924	9.25
● MC100EPT22DTG	Dual LVTTL/LVCMOS to Differential LVPECL Translator	8-TSSOP	45J0926	9.90
● MC100EPT25DG	Differential LVECL/ECL to LVTTL Translator	8-SOIC	45J0933	9.38
● MC100EPT25DTG	Differential LVECL/ECL to LVTTL Translator	8-TSSOP	45J0934	9.38
● MC100LVELT23DG	Dual Differential LVPECL to LVTTL Translator	8-SOIC	71J5428	4.52
● MC100LVELT23DTG	Dual Differential LVPECL to LVTTL Translator	8-TSSOP	42K0472	4.20
● MC100EPT26DG	1:2 Fanout Differential LVPECL to LVTTL Translator	8-SOIC	42K0377	9.38
● MC100EPT26DTG	1:2 Fanout Differential LVPECL to LVTTL Translator	8-TSSOP	26K3838	9.38
● MC100LVEL90DWG	Triple ECL Input to LVPECL Output Translator	20-SOIC	26K3916	10.00
● MC100LVEL92DWG	Triple PECL Input to LVPECL Output Translator	20-SOIC	71J5440	10.00
● MC100EP90DTG	Triple ECL Input to LVPECL/PECL Output Translator	8-TSSOP	42K0443	17.60
● MC100LVEL91DWG	Triple LVPECL / PECL Input to -3.3 V ECL Output Translator	20-SOIC	26K3918	10.00

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ANALOG ACCELEROMETERS

RoHS Compliant Available

ANALOG DEVICES

SINGLE AXIS

Mfg. Part No.	Acceleration Range	Supply Voltage	Package	Stock No.	Price Each 1-9
● ADXL103CE	±1.7g, ±18g	3V to 6V	8-CLCC	19M8780	23.78
ADXL203CE	±1.7g, ±5g, ±18g	3V to 6V	8-LLC	30M0177	28.96
● ADXL001-70BEZ	±70g, ±250g, ±500g	3.135V to 6V	8-LCC	14N5804	31.11
DUAL AXIS					
● ADXL206HDZ	±5g	4.75V to 5.25V	8-SBDIP	47T4682	704.00
TRI AXIS					
● ADXL335BCPZ	±3g	1.8V to 3.6V	16-LFCSP	45P6448	6.33
● ADXL326BCPZ	±16g	1.8V to 3.6V	16-LFCSP	05R6564	6.18
● ADXL337BCPZ-RL7	±3g	1.8V to 3.6V	16-LFCSP	23T4178	2.07
● ADXL337BCPZ-RL7	±3g	1.8V to 3.6V	16-LFCSP	94T2513	4.21
● ADXL325BCPZ	±5g	1.8V to 3.6V	16-LFCSP	05R6561	6.12
● ADXL327BCPZ	±2g	1.8V to 3.6V	16-LFCSP	05R6567	6.18

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
ADXL203EB	ADXL203 EVALUATION BOARD	59K3370	32.97
● EVAL-ADXL326Z	ADXL326 EVALUATION BOARD	05R7177	37.50
● EVAL-ADXL325Z	ADXL325 EVALUATION BOARD	05R7176	37.50
● EVAL-ADXL327Z	ADXL327 EVALUATION BOARD	05R7178	37.50

(203496)

DIGITAL ACCELEROMETERS

RoHS Compliant Available

ANALOG DEVICES

DUAL AXIS EVAL-ADXL362Z-MLP ADXL345BCCZ

Mfg. Part No.	Acceleration Range	Supply Voltage	Package	Stock No.	Price Each 1-4
● ADIS16003CCCZ	1.7g	3V to 5.25V	12-LGA	19M1174	33.39
● ADIS16006CCCZ	5g	3V to 5.25V	12-LGA	12M7870	39.41
TRI AXIS iMEMS					
● ADXL362BCCZ-RL7	±2g, ±4g, ±8g	1.6V to 3.6V	16-LGA	47W0478	9.34
● ADXL345BCCZ	±2g, ±4g, ±8g, ±16g	2V to 3.6V	14-LGA	04R8114	7.30
● ADXL346ACCZ-RL7	±2g, ±4g, ±8g, ±16g	1.7V to 2.75V	16-LGA	78T6295	7.33
● ADXL343BCCZ	±2g, ±4g, ±8g, ±16g	2V to 3.6V	14-LGA	90T1358	2.94

➤ CONTINUED ➤

DIGITAL ACCELEROMETERS (CONT.)

EVALUATION BOARDS

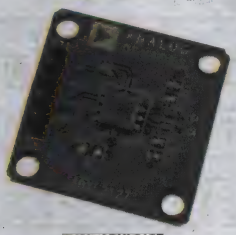
Mfg. Part No.	Description	Stock No.	Price Each
EVAL-ADXL345Z	Accelerometer Eval. board	05R7179	37.50
EVAL-ADXL345Z-M	ADXL345, digital accel, 3 axis, mother board	05R7180	311.25
EVAL-ADXL345Z-S	Accelerometer Eval. board	05R7181	186.25
EVAL-ADXL345Z-DB	ADXL345, Inertial Sensor, Data Logger, Dev. Board	52R8314	64.17
EVAL-ADXL346Z	ADXL346, Accelerometer, 3 Axis, Eval. board	74R6342	37.50
ADIS16003/PCBZ	Dual Axis Accelerometer Eval. board	28M3649	107.67
ADIS16006/PCBZ	ADIS16006, Accelerometer, 2 Axis, SPI, Eval. board	28M3650	107.67
EVAL-ADXL362Z-MLP	Tri-axis accelerometer Eval. board	47W2279	270.79
EVAL-ADXL343Z	Tri-axis accelerometer breakout board	90T4998	37.50
EVAL-ADXL343Z-DB	Tri-axis accelerometer Eval. board	90T4999	64.17

(203497)

PWM ACCELEROMETERS

RoHS Compliant Available

ANALOG DEVICES



EVAL-ADXL212Z

Mfg. Part No.	Range (°/s)	Supply Voltage	Package	Stock No.	Price Each 1-9
ADXL213AE	±1.2g	3V to 6V	8-CLCC	28M9819	26.33
ADXL212AEZ	±2g	3V to 5.25V	8-LCC	51T1992	28.96

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
ADXL213EB	ADXL213 EVALUATION BOARD	59K3372	32.97
EVAL-ADXL212Z	ADXL212 EVALUATION BOARD	39T6632	32.97

(203503)

iMEMS® INCLINOMETERS

RoHS Compliant Available

ANALOG DEVICES

SINGLE AXIS

Mfg. Part No.	Acceleration Range	Supply Voltage	Package	Stock No.	Price Each 1-4
ADIS16203CCCZ	±1.7g; ±180°	3V to 3.6V	16-LGA	28M3656	46.64
DUAL AXIS					
ADIS16209CCCZ	±1.7g; ±180°	3V to 3.6V	16-LGA	71M1609	62.18
ADIS16201CCCZ	±1.7g; ±90°	3V to 3.6V	16-LGA	19M1175	44.44
TRI AXIS					
ADIS16210CMLZ	±1.7g; ±180°	3V to 3.6V	MODULE	47T4615	155.35

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
ADIS16209/PCBZ	ADIS16209 EVALUATION BOARD	77M9918	107.67
ADIS16201/PCBZ	ADIS16201 EVALUATION BOARD	28M3654	107.67
ADIS16210/PCBZ	ADIS16210 EVALUATION BOARD	47T4614	228.38
ADIS16203/PCBZ	ADIS16203 EVALUATION BOARD	28M3655	107.67

(203498)

IMPACT SENSORS

RoHS Compliant Available

ANALOG DEVICES

Mfg. Part No.	Range (°/s)	Supply Voltage	Package	Stock No.	Price Each 1-4
ADIS16240ABCZ	±19g	2.4V to 3.6V	112-PBGA	08R6618	47.85

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
ADIS16240/PCBZ	ADIS16240 Evaluation Board	08R6617	107.67

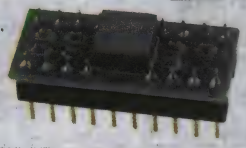
(203504)

MEMS GYROSCOPES (ALL SINGLE AXIS)

RoHS Compliant Available

ANALOG DEVICES

ADXRS649BBGZ



EVAL-ADXRS642Z

ANALOG OUTPUT

Mfg. Part No.	Range (°/s)	Supply Voltage	Package	Stock No.	Price Each 1-4
ADXRS624BBGZ	50	4.75V to 5.25V	32-BGA	85R6427	45.77
ADXRS623BBGZ	150	4.75V to 5.25V	32-BGA	85R6425	45.77
ADXRS652BBGZ	250	4.75V to 5.25V	32-BGA	70R1837	36.16
ADXRS642BBGZ	250	4.75V to 5.25V	32-CBGA	47T4688	65.28
ADXRS620BBGZ	300	4.75V to 5.25V	32-BGA	91R2569	47.46
ADXRS649BBGZ	20000+	4.75V to 5.25V	32-BGA	39T6551	92.36
DIGITAL OUTPUT					
ADXRS450BEYZ	300	3.15V to 5.25V	14-LCC	31T9300	64.68
ADXRS453BEYZ	300	3.15V to 5.25V	14-LCC	31T9301	90.05

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
EVAL-ADXRS622Z	ADXRS622 EVALUATION BOARD	05R7182	62.50
EVAL-ADXRS642Z	ADXRS642 EVALUATION BOARD	47T4995	76.13
EVAL-ADXRS646Z	ADXRS646 EVALUATION BOARD	73T0165	119.63

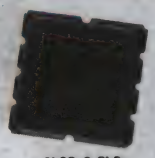
(203500)

iMEMS® TECHNOLOGY ACCELEROMETERS AND GYROSCOPES

RoHS Compliant Available

ANALOG DEVICES

ADXL345BCCZ



8-CLCC, 8-CLC

iMEMS® inertial sensing components are part of Analog Device, Inc's growing family of Motion Signal Processing™ solutions. They are more reliable, power efficient, user friendly, compact, cost-effective, and offer more robust performance under severe conditions. All iMEMS® devices are equipped with a temperature sensor output and a precision voltage reference output. The **ADXL series accelerometers** are commonly used in a variety of cost-sensitive, low power, motion- and tilt-sensing applications including mobile devies, gaming systems, disk drive protection, image stabilization, and sports and health devices. The **ADXRS series gyroscopes** are commonly used in a variety of applications including automotive safety, navigation, image stabilization, inertial measurement units, and platform stabilization.

LOW G ACCELEROMETERS

Mfg. Part No.	# of Axes	Accel.	Sensitivity	Supply Voltage Range (V)	Package	Stock No.	Price Each 1-9
ADXL103CE	1	±1.7g	1 V/g	3V to 6V	8-CLCC	19M8780	23.78
ADXL213AE	2	±1.2g	30%/g	3V to 6V	8-CLCC	28M9819	26.33
ADXL203CE	2	±18g	1000mV/g	3V to 6V	8-LLC	30M0177	28.96
ADXL327BCPZ	3	±2g	420 mV/g	1.8V to 3.6V	16-LFCSP	05R6567	6.18
ADXL335BCPZ	3	±3g	300 mV/g	1.8V to 3.6V	16-LFCSP	45P6448	6.33
ADXL325BCPZ	3	±5g	174 mV/g	1.8V to 3.6V	16-LFCSP	05R6561	6.12
ADXL326BCPZ	3	±16g	57 mV/g	1.8V to 3.6V	16-LFCSP	05R6564	6.18
ADXL346ACCZ-RL7	3	±16g	256 LSB/g	1.7V to 2.75V	16-LGA	78T6295	7.33
ADXL345BCCZ	3	±16g	256 LSB/g	2V to 3.6V	14-LGA	04R8114	7.30
HIGH G ACCELEROMETERS							
ADXL206HDZ	2	±5g	312 mV/g	4.75V to 5.25V	8-SBDIP	47T4682	704.00
AD22279-A-R2	1	±37g	55 mV/g	4.75V to 5.25V	8-CLCC	19M8800	11.45
AD22284-A-R2	2	±37g	55 mV/g	4.5V to 5.5V	8-CLCC	19M8805	16.44
AD22280-R2	1	±55g	38 mV/g	4.5V to 5.5V	8-CLCC	19M8801	11.70
AD22285-R2	2	±55g	38 mV/g	4.75V to 5.25V	8-CLCC	19M8806	16.23
AD22282-A-R2	1	±120g	18 mV/g	4.5V to 5.5V	8-CLCC	19M8803	14.01
AD22283-B-R2	1	±250g	8 mV/g	4.75V to 5.25V	8-CLCC	19M8804	13.70
HIGH TEMP ACCELEROMETERS							
ADXL375BCCZ	3	±250g	20.5 LSB/g	2V to 3.6V	14-LGA	06X4785	11.03

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
ADXL203EB	±1.7g Dual-Axis iMEMS Accelerometer Eval. Board	59K3370	32.97
ADXL213EB	±1.2g Dual Axis Accelerometer Eval. Board	59K3372	32.97
EVAL-ADXL330Z	3-Axis ±3g iMEMS Accelerometer Evaluation Board	28M4392	65.98
EVAL-ADXL346Z	3-Axis, ±2 g/±4 g/±8 g/±16 g Accelerometer Eval. Board	74R6342	37.50
EVAL-ADXRS646Z	±300°/sec, High Stability & Low Noise Gyro Eval. Board	73T0165	119.63

(89822)

ANALOG OUTPUT ACCELERATION SENSOR DEVELOPMENT TOOL

RoHS Compliant Available

freescale

Freescale's analog power-select acceleration sensors are designed to detect on one, two or three axes, allowing your end application the freedom of movement detection it needs. In addition, for multifunctional applications, these devices allow you to select between 1.5g to 12g levels of acceleration. Freescale accelerometers have a fast response time, low current consumption, low voltage operation and a standby mode all in a small profile package to detect orientation, shake, tap, double tap, fall, tilt, motion, positioning, shock or vibration.

Mfg. Part No.	Description	Supported Devices	Stock No.	Price Each
● KIT3376MMA7361LC	Evaluation Kit	MMA7361LC	76R8878	35.00

(189573)

MICROPOWER THERMOCOUPLE COLD JUNCTION COMPENSATOR

RoHS Compliant Available

LINEAR TECHNOLOGY

Applications:
- Thermocouple Cold Junction Compensator
- Centigrade Thermometer
- Temperature Compensation Network

The **LT™1025** is a micropower thermocouple cold junction compensator for use with type E, J, K, R, S, and T thermocouples. It utilizes wafer level and post-package trimming to achieve 0.5°C initial accuracy. Special curvature correction circuitry is used to match the "bow"' found in all thermocouples so that accurate cold junction compensation is maintained over a wider temperature range.

Mfg. Part No.	Supply Voltage	Supply Current (µA)	Temperature Error at 10mV/°C Output (°C)	Package	Stock No.	Price Each 1-24
● LT1025ACN8#PBF	4V to 36V	80	0.3	8-DIP	57M1015	9.22
● LT1025CS8#PBF	4V to 36V	80	0.5	8-SOIC	57M1019	5.94

(210181)

iSENSOR MEMS ACCELEROMETER SUBSYSTEMS

NEW

RoHS Compliant Available

ANALOG DEVICES

ADIS16227/PCBZ

iSensor MEMS accelerometer subsystems that reliably and accurately detect and measure acceleration, tilt, shock and vibration in performance-driven applications. ADI's MEMS accelerometer portfolio leads the industry in power, noise, bandwidth, and temperature specifications, and offers a range of MEMS sensor and signal conditioning integration on chip.

Mfg. Part No.	Supply Voltage	Sensitivity Accuracy (%)	-3dB Bandwidth (kHz)	Package	Stock No.	Price Each 1-4
● ADIS16209CCCZ	3V to 3.6V	0.4	50	16-LGA	71M1609	62.18
● ADIS16201CCCZ	3V to 3.6V	1	2.25	16-LGA	19M1175	44.44
● ADIS16227CMLZ	3.15V to 3.6V	5	9	ML-14-2	18T1977	280.49
● ADIS16006CCCZ	3V to 5.25V	6	2.25	12-LGA	12M7870	39.41
● ADIS16228CMLZ	3V to 3.6V	6	5	ML-15-1	55T8900	244.30
● ADIS16228CMLZ	3V to 3.6V	6	5	ML-15-1	55T8900	244.30
● ADIS16003CCCZ	3V to 5.25V	7	2.25	12-LGA	19M1174	33.39
● ADIS16240ABCZ	2.4V to 3.6V	...	1.6	112-PBGA	08R6618	47.85
● ADIS16203CCCZ	3V to 3.6V	...	2.25	16-LGA	28M3656	46.64

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
● ADIS16203/PCBZ	ADIS16203 EVAL BOARD	28M3655	107.67
● ADIS16210/PCBZ	ADIS16210 EVAL BOARD	47T4614	228.38
● ADIS16227/PCBZ	ADIS16227 EVAL BOARD	18T1976	391.50
● ADIS16228/PCBZ	ADIS16228 EVAL BOARD	55T8899	353.44

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iSENSOR MEMS GYROSCOPE SUBSYSTEMS (ALL SINGLE AXIS)

RoHS Compliant Available

ANALOG DEVICES

Mfg. Part No.	Range (°/s)	Supply Voltage	Package	Stock No.	Price Each 1-4
● ADIS16060BCCZ	80	4.75V to 5.25V	16-LGA	71M1607	57.84
● ADIS16080ACCZ	80	4.75V to 5.25V	16-LGA	28M3651	60.70
● ADIS16265BCCZ	320	4.75V to 5.25V	20-LGA	51R0654	89.19
● ADIS16135BMLZ	350	4.85V to 5.15V	24-ML	79R2307	746.07
● ADIS16136AMLZ	480	4.75V to 5.25V	ML-24-3	82T3646	976.28
● ADIS16133BMLZ	1200	4.85V to 5.15V	ML-24-3	18T1973	805.79

➤CONTINUED➤

iSENSOR MEMS GYROSCOPE SUBSYSTEMS (ALL SINGLE AXIS) (CONT.)

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
● ADIS16060/PCBZ	ADIS16060 Evaluation Board	71M1606	107.67
● ADIS16080/PCBZ	ADIS16080 Evaluation Board	30M0446	107.67
● ADIS16265/PCBZ	ADIS16265 Evaluation Board	51R0653	107.67

(203501)

iSENSOR MEMS INERTIAL MEASUREMENT UNITS (IMUs)

RoHS Compliant Available

ANALOG DEVICES

4 DEGREES OF FREEDOM

Mfg. Part No.	Gyro (°/s)	Accel (g)	Supply Voltage	Package	Stock No.	Price Each 1-4
● ADIS16305AMLZ	300	3	4.75V to 5.25V	ML-24-4	85R6328	156.93
6 DEGREES OF FREEDOM						
● ADIS16362BMLZ	300	1.7	4.75V to 5.25V	24-Module	33R2682	501.85
● ADIS16364BMLZ	300	5	4.75V to 5.25V	ML-24-2	51P3724	501.85
● ADIS16365BMLZ	300	18	4.75V to 5.25V	24-Module	02P7455	538.30
● ADIS16334BMLZ	300	5	4.75V to 5.25V	ML-20-1	31T9263	501.85
● ADIS16367BMLZ	1200	18	4.75V to 5.25V	ML-24-2	67R2187	578.09
9 DEGREES OF FREEDOM						
● ADIS16405BMLZ	300	18	4.75V to 5.25V	24 Ld Module	51P3726	598.07
10 DEGREES OF FREEDOM						
● ADIS16407BMLZ	300	18	4.75V to 5.25V	ML-24-2	47T4617	636.89
● ADIS16488AMLZ	450	18	3V to 3.6V	ML-24-6	82T3648	1751.20
● ADIS16448AMLZ	1200	18	3.15V to 3.45V	ML-20-2	27W3688	671.67

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
● ADIS16305/PCBZ	ADIS16305 Evaluation Board	85R6327	239.25
● ADIS16334/PCBZ	ADIS16334 Evaluation Board	31T9262	663.38
● ADIS16448/PCBZ	ADIS16448 Evaluation Board	27W3687	890.67

(203502)

PWM OUTPUT ACCELEROMETER

RoHS Compliant Available

ANALOG DEVICES

Applications:
- Automotive tilt alarms
- Vehicle dynamic control (VDC)/electronic stability program (ESP) systems
- Electronic chassis control
- Electronic braking
- Data projectors
- Navigation
- Platform stabilization/leveling
- Alarms and motion detectors
- High accuracy, 2-axis tilt sensing

Features:
- High sensitivity accuracy
- Pulse width modulated digital outputs
- Bandwidth adjustment with a single capacitor
- Single-supply operation
- 3500 g shock survival

Mfg. Part No.	No. of Axes	Supply Voltage	Acceleration Range	Package	Stock No.	Price Each 1-9
● ADXL212AEZ	2	3V to 5.25V	± 2g	8-LCC	51T1992	28.96

EVALUATION BOARD

Mfg. Part No.	Description	Stock No.	Price Each
● EVAL-ADXL212Z	ADXL212, ACCEL, 2 AXIS, PWM OUTPUT, EVAL BOARD	39T6632	32.97

(197168)

VIBRATION SENSORS

RoHS Compliant Available

ANALOG DEVICES

ADIS16223CMLZ

Mfg. Part No.	Range (°/s)	Supply Voltage	Package	Stock No.	Price Each 1-4
● ADIS16228CMLZ	±18g	3V to 3.6V	ML-15-1	55T8900	244.30
● ADIS16223CMLZ	±70g	3.15V to 3.6V	14-ML	79R2309	233.54
● ADIS16227CMLZ	±70g	3.15V to 3.6V	ML-14-2	18T1977	280.49

➤CONTINUED➤

VIBRATION SENSORS (CONT.)

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
ADIS16228/PCBZ	ADIS16228 EVAL BOARD	55T8899	353.44
ADIS16223/PCBZ	ADIS16223 EVAL BOARD	79R2308	337.13
ADIS16227/PCBZ	ADIS16227 EVAL BOARD	18T1976	391.50

(203505)

ADXRS64x FAMILY iMEMS® GYROSCOPES

RoHS Compliant Available

ANALOG DEVICES

The **ADXRS64x family** of low noise, vibration rejecting yaw rate gyroscopes are drop-in performance upgrades to existing designs using the ADXRS62x family. These devices are high-performance, low-power iMEMS® gyroscopes with analog output specifically for angular rate (rotational) sensing in harsh environments. They incorporate ADI's advanced, differential quad-sensor technology, which rejects the influence of linear acceleration and vibration to enable these new MEMS gyros to offer exceptionally accurate and reliable rate sensing even where severe shock and vibration are present.

GYROSCOPES

Mfg. Part No.	Range (± °/s)	Sensitivity	Supply Voltage	Pkg./ Case	Stock No.	Price Each 1-4	Price Each 5-9
ADXRS642BBGZ	250	7 mV/°/s	4.75V to 5.25V	32-CBGA	47T4688	65.28	63.51

The **EVAL-ADXRS64x** evaluation boards allow quick evaluation of the performance of the ADXRS64x yaw rate gyroscopes. No additional external components are required for operation. The boards have a 20-lead, dual in-line (0.3 inch width × 0.1 inch pin spacing) interface that allows easy prototyping of products.

EVALUATION TOOLS

Mfg. Part No.	For use with	Stock No.	Price Each
EVAL-ADXRS642Z	ADXRS642	47T4995	76.13

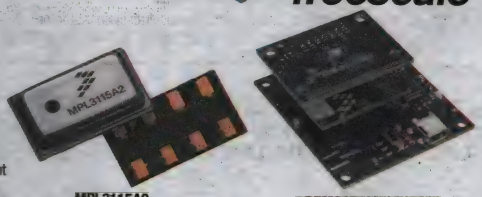
(69823)

I2C PRECISION ALTIMETER

RoHS Compliant Available

freescale

Applications:
- High Accuracy Altimetry
- Smartphones/Tablets
- Personal Electronics Altimetry
- GPS Dead Reckoning
- GPS Enhancement for Emergency Services
- Map Assist, Navigation
- Weather Station Equipment



MPL3115A2 DEMOSTBMPL3115A2

Features:
- Programmable Events
- Autonomous Data Acquisition
- Resolution down to 1 ft. / 30 cm
- 32 Sample FIFO
- Ability to log data up to 12 days using the FIFO
- 1 second to 9 hour data acquisition rate

Mfg. Part No.	Supply Voltage (V)	Supply Current (µA)	Package	Stock No.	Price Each 1-9
MPL3115A2	1.95V to 3.6V	40	8-LGA	48T4344	2.88

EVALUATION BOARD

Mfg. Part No.	Description	Stock No.	Price Each
DEMOSTBMPL3115A2	Precision Altimeter Eval Board	75T6605	99.00

(207470)

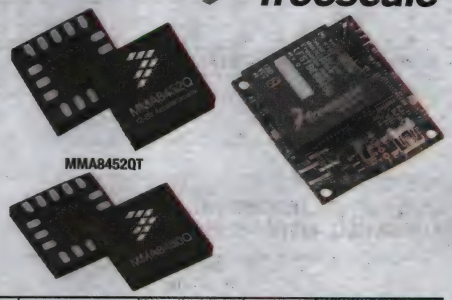
XTRINSIC LOW G, 3-AXIS DIGITAL ACCELEROMETERS

RoHS Compliant Available

freescale

Features:
- I2C digital output interface
- Programmable 2 interrupt pins
- 32 sample FIFO
- Self-Test

Applications:
- Mobile phones
- Gaming controllers
- Sport Monitoring
- Medical instrumentation
- Pointing devices
- Industrial instruments
- Personal navigation
- Romote controls



MMA8452QT

Mfg. Part No.	Output	Accel. Range	Sensitivity	Package	Stock No.	Price Each 1-9
MMA8450QR1	8-BIT/12-BIT	± 2g, ± 4g, ± 8g	4.296 mg/digit	16-QFN	65R1277	2.93
MMA8450QT	8-BIT/12-BIT	± 2g, ± 4g, ± 8g	4.296 mg/digit	16-QFN	65R1278	2.93
MMA8451QR1	14-BIT/8-BIT	± 2g, ± 4g, ± 8g	4096 Counts/g	16-QFN	84R7350	1.68
MMA8451QT	14-BIT/8-BIT	± 2g, ± 4g, ± 8g	4096 Counts/g	16-QFN	84R7351	1.68
MMA8452QR1	12-BIT/8-BIT	± 2g, ± 4g, ± 8g	512 Counts/g	16-QFN	84R7352	1.32
MMA8452QT	12-BIT/8-BIT	± 2g, ± 4g, ± 8g	1024 Counts/g	16-QFN	84R7353	1.32
MMA8453QR1	10-BIT/8-BIT	± 2g, ± 4g, ± 8g	256 Counts/g	16-QFN	84R7354	1.32

CONTINUED

XTRINSIC LOW G, 3-AXIS DIGITAL ACCELEROMETERS (CONT.)

Mfg. Part No.	Output	Accel. Range	Sensitivity	Package	Stock No.	Price Each 1-9
MMA8453QT	10-BIT/8-BIT	± 2g, ± 4g, ± 8g	256 Counts/g	16-QFN	84R7355	1.32
FXLS8471QR1	14-BIT	± 2g, ± 4g, ± 8g	0.976 mg/LSB	16-QFN	12X9000	1.70
MMA8491QR1	14-BIT	± 8	1 mg/LSB	12-QFN	47W8613	1.52

DEVELOPMENT TOOLS

Mfg. Part No.	Description	Stock No.	Price Each
LFSTBEB8450	MMA8450 Accelerometer Development Board	64R6755	75.00
RD3924MMA8450Q	MMA8450 Accelerometer Development Kit	64R7495	99.00
RDMMA845X	MMA845x Family Accelerometer Development Kit	87R1180	99.00
LFSTBUSB	Sensor Toolbox Accelerometer USB Interface board	26R2808	50.00
LFSTBBAT9	Sensor Toolbox Accelerometer 9V Battery Board	26R2804	35.00

(167115)

XTRINSIC 3-AXIS, DIGITAL MAGNETOMETER

RoHS Compliant Available

freescale

NEW

Features:
- Full-scale range ±1000 µT
- Sensitivity of 0.10 µT
- Noise down to 0.25 µT rms
- Output Data Rates (ODR) up to 80 Hz
- 400 kHz Fast Mode compatible I2C interface
- Low-power, single-shot measurement mode

Applications:
- Electronic Compass (e-compass)
- Location-Based Services

Freescale's **FXMS3110** is a small, low-power, digital 3-axis magnetometer qualified for the industrial market. The device can be used in conjunction with a 3-axis accelerometer to realize an orientation independent electronic compass that can provide accurate heading information. It features a standard I2C serial interface output and smart embedded functions. The **FXMS3110** is capable of measuring magnetic fields with an output data rate (ODR) up to 80 Hz; these output data rates correspond to sample intervals from 12.5 ms to several seconds.

Mfg. Part No.	Sensing Axis	Supply Voltage Range	Operating Temperature (°C)	Package	Stock No.	Price Each 1-9
FXMS3110CDR1	X, Y, Z	1.95V to 3.6V	-40 to 85	10-DFN	30W9471	2.25

(212423)

ACCELERATION SENSORS

RoHS Compliant Available

freescale

MMA series silicon capacitive, micromachined accelerometers feature signal conditioning and 4-pole low pass compensation. Zero-g offset full scale span and filter cut-off are factory set and require no external devices. A full system self-test capability verifies system functionality.

LOW G VERSIONS

Mfg. Part No.	Sensing Axis	Accel. Range	Zero g Output (Typ) (V)	Package	Stock No.	Price Each 1-9
MMA7455LR1	XYZ Axis	± 2g, ± 4g, ± 8g	1.65	14-LGA	69M3899	3.27
MMA7455LT	XYZ Axis	± 2g, ± 4g, ± 8g	1.65	14-LGA	69M3901	3.27

(65776)

3-AXIS ORIENTATION/ MOTION DETECTION SENSOR

RoHS Compliant Available

freescale

Features:
- Digital Output (I^2C)
- Configurable Samples per Second from 1 to 120 samples a second

Applications:
- Laptop PC: Anti-theft
- Gaming: Motion detection, auto-wake/sleep for low power consumption
- Digital still camera

Mfg. Part No.	Acceleration Range ±(g)	Supply Voltage (V)	Sensitivity ± (%)	Package	Stock No.	Price Each 1-9
MMA7660FCR1	1.5	2.4 - 3.6	8	10-DFN	74P0442	1.21

DEMONSTRATION/EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
KIT3803MMA7660FC	Accelerometer DIP Board	08R2490	35.00
RD3803MMA7660FC	Communication Board	08R2491	119.00
LFSTBEB7660	Sensor Toolbox Accelerometer Development Board	26R2807	75.00

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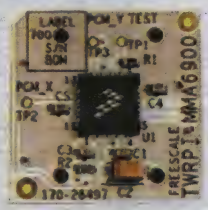
TOWER SYSTEM SENSOR PERIPHERAL MODULES

RoHS Compliant Available

freescale

Applications
- Automotive
- Industrial



The **TWRPI-MMA6900** is a Tower System plug-in board that contains the Xtrinsic MMA6900Q inertial sensor. The board is designed to interface to the Freescale Tower System, a modular development platform which aids in rapid prototyping and tool reuse.

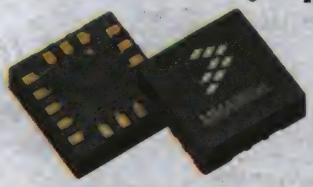
Mfg. Part No.	Acceleration Range	# of Bits Output	Stock No.	Price Each
● TWRPI-MMA6900	± 3.5g, ± 5g	11	45T2784	20.00

(197032)

INTELLIGENT MOTION-SENSING PLATFORM

RoHS Compliant Available

freescale



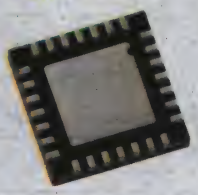
Mfg. Part No.	Sensitivity (mg/LSB)	Accel. Range	Supply Voltage Range	Package	Stock No.	Price Each 1-9
● FXLC95000CLR1	0.244	± 2g, ± 4g, ± 8g	1.71V to 1.89V	24-LGA	12X8999	3.57

(203499)

MOTION SENSORS - MEMS

RoHS Compliant Available

ST



Based on our advanced proprietary technologies, **ST's MEMS** address the most innovative features required on the market, ranging from mobile and consumer applications to the innovative needs of the healthcare and automotive markets. Housed in ultra-compact packages, MEMS achieve a high level of motion-control detection, embedding the most useful smart functions and minimizing the power consumption.

ACCELEROMETERS

ST's state-of-the-art analog and digital **accelerometers** feature up to ±24g full scale, high resolution, smart embedded functionalities and advanced power-saving features. A set of smart SPI/I²C programmable embedded functions, such as low-power mode, auto wake-up function, free-fall and 6D-orientation detection are integrated into the LIS331DLx family.

Mfg. Part No.	Sensing Axes	Sensing Range typ.	Output Type	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
● LIS331AL	X, Y, Z	± 2g	Analog	3V to 3.6V	16-LGA	56P7987	3.78
LIS331DL.	X, Y, Z	± 2g, ± 8g	Digital	2.16V to 3.6V	16-LGA	56P7989	3.27
● LIS331DLM	X, Y, Z	± 2g, ± 4g, ± 8g	Digital	2.16V to 3.6V	16-LGA	09R4848	3.67
● LIS331HH	X, Y, Z	± 6g, ± 12g, ± 24g	Digital	2.16V to 3.6V	16-LGA	55R3682	5.61
LIS332AR	X, Y, Z	± 2g	Analog	2.16V to 3.6V	16-LGA	71R6451	5.56
● LIS332AX	X, Y, Z	± 2g	Analog	2.16V to 3.6V	16-LGA	71R6453	4.48
● LIS33DE	X, Y, Z	± 2g, ± 8g	Digital	2.16V to 3.6V	16-LGA	56P7985	5.38
● LIS344AL	X, Y, Z	± 3.5g	Analog	2.7V to 3.3V	16-LGA	56P7991	5.38
LIS352AX	X, Y, Z	± 2g	Analog	2.16V to 3.6V	14-LGA	25R7786	2.90
● LIS35DE	X, Y, Z	± 2g, ± 8g	Digital	2.16V to 3.6V	14-LGA	56P7995	5.38

GYROSCOPES

ST's portfolio of single-, dual- and tri-axis **gyroscopes** covers a wide full-scale range (from 30 to 6000 dps) in small LGA packages. The innovatively designed sensors can provide different combinations of analog and digital outputs. The embedded power-down mode together with the innovative sleep mode guarantee a fast turn-on time for efficient power cycling. ST's new gyroscopes feature excellent stability over a wide temperature range and time, with a resolution lower than 0.08 dps/°C for zero-rate level. This avoids the use of further temperature compensation in the same application.

Mfg. Part No.	Sensing Axes	Angular Rate Full Scale (± dps)	Output Type	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
● LPR410AL	Pitch, Roll	100	Analog	2.7V to 3.6V	28-LGA	55R4147	7.06
● LPR450AL	Pitch, Roll	500	Analog	2.7V to 3.6V	28-LGA	55R4153	6.41
● LPR4150AL	Pitch, Roll	1500	Analog	2.7V to 3.6V	28-LGA	55R4149	6.36
● LPY430AL	Pitch, Yaw	300	Analog	2.7V to 3.6V	28-LGA	55R4220	6.91
● LPY450AL	Pitch, Yaw	500	Analog	2.7V to 3.6V	28-LGA	55R4222	6.46
● LPY4150AL	Pitch, Yaw	1500	Analog	2.7V to 3.6V	28-LGA	55R4218	11.38
● LY330ALH	Yaw	300	Analog	2.7V to 3.6V	10-LGA	55R4290	4.08

➤ CONTINUED ➤

MOTION SENSORS - MEMS (CONT.)

Mfg. Part No.	Sensing Axes	Angular Rate Full Scale (± dps)	Output Type	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
● LY3100ALH	Yaw	1000	Analog	2.7V to 3.6V	10-LGA	55R4286	4.39
● LY3200ALH	Yaw	2000	Analog	2.7V to 3.6V	10-LGA	55R4288	4.08

FUNCTIONAL SENSORS

STMicroelectronics offers a complete range of **multi-function sensors** optimized for specific applications. The **FC30 sensor** performs smart 3D orientation and click detection. The device automatically recognizes screen rotation (portrait/landscape) and 6 different orientations of an handheld device with respect to the gravity field. When a single or double mechanical tap is detected, the FC30 provides an interrupt signal, enabling a mouse button-like function for intuitive man-machine user interfaces.

Mfg. Part No.	Function	Output Type	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
FC30.	Orientation Detection	Digital	2.16V to 3.6V	16-LGA	56P7492	3.78

DEVELOPMENT TOOLS

Mfg. Part No.	Description	Stock No.	Price Each
STEVAL-MKI004V1	LIS3LV02DQ EVALUATION BOARD	09R5947	52.92
STEVAL-MKI024V1	LIS331DL DEMO BOARD	09R5950	91.69

(88946)

MEMS DEMONSTRATION KITS

ST

Mfg. Part No.	Description	Stock No.	Price Each
STEVAL-MKI022V1	MEMS 3-axis ±2g /±4g /±8g smart digital output evaluation board based on nano accelerometer LIS331DLH	09R5948	74.34
STEVAL-MKI032V1	Interconnection board for connecting STM32xxx and MEMS demonstration boards	25R9397	69.57
STEVAL-MKI041V1	MEMS analog output demonstration board for the LY550ALH, ±500°/s and ±2000°/s, dual-axis pitch and yaw gyroscope	71R6990	99.75

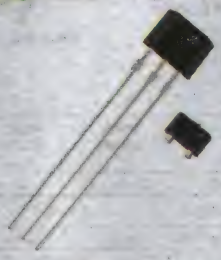
(191903)

A1120, A1220 AND A1221 HALL EFFECT SWITCHES AND LATCHES

RoHS Compliant Available

Allegro MicroSystems, Inc.

The **A1120**, **A1220** and **A1221** Hall-effect, unipolar switch is an extremely temperature-stable and stress-resistant sensor, especially suited for operation over extended temperature ranges to 150°C. Superior high-temperature performance is made possible through dynamic offset cancellation, which reduces the residual offset voltage normally caused by device overmolding, temperature dependencies, and thermal stress.



A1120 Series

CHOPPER STABILIZED PRECISION SWITCH

Mfg. Part No.	Switch Points Over Temp. (°C) Operate Max.	Switch Points Over Temp. (°C) Release Min.	Package	Stock No.	Price Each 1-9
● A1120LUA-T	50	5	3-SIP	57P7560	1.65
● A1126LLHLX-T	55	5	3-SOT-23W	89T7950	1.31
CHOPPER STABILIZED PRECISION LATCH					
● A1220LUA-T	40	-40	3-SIP	57P7564	1.63
● A1221LUA-T	90	-90	3-SIP	57P7567	1.57
● A1221LLHLX-T	90	-90	3-SOT-23W	89T7951	1.50

(146394)

A132X SERIES RATIOMETRIC LINEAR HALL-EFFECT SENSOR

RoHS Compliant Available

Allegro MicroSystems, Inc.

Mfg. Part No.	Output Sensitivity (mV/G)	Package	Stock No.	Price Each 1-9
● A1326LUA-T	2.5	3-SIP	89T7957	2.09
● A1326LLHLX-T	2.5	3-SOT-23W	89T7956	2.05
● A1325LLHLX-T	3.125	3-SOT-23W	89T7954	1.99
● A1325LUA-T	3.125	3-SIP	89T7955	2.09
● A1324LLHLX-T	5	3-SOT-23W	89T7953	2.02
● A1324LUA-T	5	3-SIP	48T3969	2.03

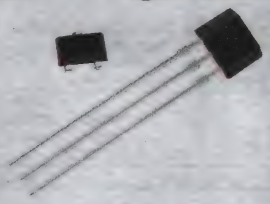
(79594)

HALL-EFFECT LATCH / BIPOLAR SWITCH

RoHS Compliant Available

Allegro MicroSystems, Inc.

The **A1250** Hall-effect sensor IC is a temperature stable, stress-resistant bipolar switch. This device is the most sensitive Hall-effect device in the bipolar switch family and is intended for ring-magnet sensing. Superior high-temperature performance is made possible through a patented dynamic offset cancellation that utilizes chopper-stabilization. This method reduces the offset voltage normally caused by device overmolding, temperature dependencies, and thermal stress.



Mfg. Part No.	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
A1250LUA-T	3V to 24V	3-SIP	80T4287	1.62
A1250LLHLT-T	3V to 24V	3-SOT-23W	80T4285	0.56

(201310)

HALL-EFFECT SWITCHES & SENSORS

RoHS Compliant Available

Allegro MicroSystems, Inc.

UNIPOLAR HALL-EFFECT SWITCHES

The unipolar Hall-effect switch is characterized by the magnetic operating threshold (Bop). If the Hall cell is exposed to a magnetic field from the south pole greater than the operate threshold, the output transistor is switched on; by dropping below the threshold (Brp), the transistor is switched off.

Mfg. Part No. containing **suffix LU** and Mfg. Part No. beginning **UGQ** are extended temperature range. Additional package types available; *go online or call.*

Mfg. Part No.	Switch Points Over Temp. (°C) Operate Max.	Release Min.	Description	Package	Stock No.	Price Each 1-9
A1101EUA-T	+175	+10	Continuous-Time Unipolar	3-SIP	31K6569	1.83
A1101ELHLT-T	+175	+10	Continuous-Time Unipolar	SOT-23W	30K5851	1.78
A1101LLHLT-T	+175	+10	Continuous-Time Unipolar	SOT-23W	31K6570	2.02
A1101LUA-T	+175	+10	Continuous-Time Unipolar	3-SIP	31K6571	2.05
A1102EUA-T	+245	+60	Continuous-Time Unipolar	3-SIP	31K6572	1.72
A1102ELHLT-T	+245	+60	Continuous-Time Unipolar	SOT-23W	30K5853	1.72
A1102LLHLT-T	+245	+60	Continuous-Time Unipolar	SOT-23W	31K6573	2.02
A1102LUA-T	+245	+60	Continuous-Time Unipolar	3-SIP	31K6574	2.02
A1104EUA-T	+450	+25	Continuous-Time Unipolar	3-SIP	31K6578	1.49
A1104LUA-T	+450	+25	Continuous-Time Unipolar	3-SIP	31K6580	1.68
A1106LUA-T	+430	+160	Continuous-Time Unipolar	3-SIP	31K6583	1.83

OMNIPOLAR HALL-EFFECT SWITCHES

Omnipolar Hall-effect switches switch on with the presence of either a north or south magnetic field that has sufficient strength. Output will be off in the absence of a magnetic field.

Mfg. Part No.	Switch Points Over Temp. (°C) Operate Max.	Release Min.	Description	Package	Stock No.	Price Each 1-9
A3212ELHLT-T	+55	+10	Micro Power Ultra-Sensitive Hall-Effect Switch	SOT-23W	73K6530	1.10
A3214ELHLT-T	+70	+10	Micro Power Ultra-Sensitive Hall-Effect Switch	3-SOT	87K3366	1.41

BIPOLAR HALL-EFFECT LATCHES

Latches will not switch on removal of magnetic field.

Mfg. Part No.	Switch Points Over Temp. (°C) Operate Max.	Release Min.	Description	Package	Stock No.	Price Each 1-9
A1203EUA-T	+95	-95	Continuous-Time Bipolar	3-SIP	31K6607	1.56

The direction-detection Hall-effect sensors are a special function integrated device capable of sensing the direction of rotation of a ring magnet.

LINEAR HALL-EFFECT SENSORS

The linear Hall-effect sensors voltage output accurately tracks the changes in magnetic flux density.

Mfg. Part No.	Output Typ.	Description	Package	Stock No.	Price Each 1-9
A1302ELHLT-T	1.3 mV/G	Ratiometric Linear	SOT-23W	31K6638	1.53
A1391SEHLT-T	1.25 mV/G	Linear Sensor	6-MLP	65K5155	1.88
A1392SEHLT-T	2.5 mV/G	Linear Sensor	6-MLP	65K5156	1.77

(10017)

NEW PRODUCTS ADDED DAILY

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(196560)

GEAR-TOOTH HALL EFFECT SPEED SENSORS

RoHS Compliant Available

Allegro MicroSystems, Inc.

Features:

- Integrated, series resistor on VCC pin for improved transient immunity
- Self-calibrating for tight timing accuracy
- First-tooth detection
- Immunity to air gap variation and system offsets
- Large air gap capability
- Optimized magnetic circuit

Mfg. Part No.	Supply Voltage (V)	Output Type	Min. Speed (Hz)	Package	Stock No.	Price Each
ATS617LSGTN-T	4.5 to 24	3-wire	10	4-SIP	04R7133	5.80
ATS682LSHTN-T	4 to 24	2-wire	...	4-SIP	04R7134	5.39

(147119)

ACS709 SERIES CURRENT SENSORS

RoHS Compliant Available

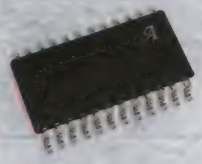
Allegro MicroSystems, Inc.

Features:

- 3 to 5.5 V single supply voltage
- 2100 VRMS isolation voltage between primary current path and sensor IC electronics
- 120 kHz bandwidth through proprietary amplifier and filter design techniques
- Ratiometric output from supply voltage
- 1.1 mohm primary conductor resistance for low power loss

Applications:

- Motor control and protection
- Load management and overcurrent detection
- Power conversion and battery monitoring / UPS systems



Mfg. Part No.	Linear Sensing Current (A)	Sensivity (mV/A)	Package	Stock No.	Price Each
ACS709LLFTR-20BB-T	37.5	56	24-QSOP	58R3722	3.74
ACS709LLFTR-35BB-T	75	28	24-QSOP	58R3721	3.67

(165051)

ACS710 ISOLATION CURRENT SENSORS

RoHS Compliant Available

Allegro MicroSystems, Inc.

Applications::

- Motor control and protection
- Load management and overcurrent detection
- Power conversion and battery monitoring / UPS systems

The **ACS710** current sensor IC provides economical and precise means for current sensing applications in industrial, commercial, and communications systems. The device is offered in a small footprint surface mount package that allows easy implementation in customer applications. The **ACS710** consists of a precision linear Hall sensor integrated circuit with a copper conduction path located near the surface of the silicon die. Applied current flows through the copper conduction path, and the analog output voltage from the Hall sensor linearly tracks the magnetic field generated by the applied current. The accuracy of the **ACS710** is maximized with this patented packaging configuration because the Hall element is situated in extremely close proximity to the current to be measured.

Mfg. Part No.	I_P (A)	Sensitivity (Typ @ VCC = 5 V) (mV/A)	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
ACS710KLATR-12CB-T	±12.5	56	3 - 5.5	16-SOIC	34R2577	4.54
ACS710KLATR-25CB-T	±25	28	3 - 5.5	16-SOIC	34R2578	4.40

(176943)

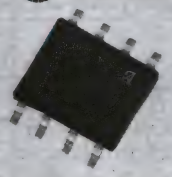
ACS71X FULLY INTEGRATED, HALL EFFECT-BASED LINEAR CURRENT SENSORS

RoHS Compliant Available

Allegro MicroSystems, Inc.

Features

- Low-noise analog signal path
- Device bandwidth is set via the new FILTER pin
- 5 µs output rise time in response to step input current
- 50 kHz bandwidth
- Total output error 1.5% at TA = 25°C, and 4% at –40°C to 85°C
- Small footprint, low-profile SOIC8 package
- 1.2 mΩ internal conductor resistance
- 2.1 kVRMS minimum isolation voltage from pins 1-4 to pins 5-8
- 5.0 V, single supply operation
- Output voltage proportional to AC or DC currents
- Factory-trimmed for accuracy
- Extremely stable output offset voltage
- Nearly zero magnetic hysteresis
- Ratiometric output from supply voltage



The Allegro® **ACS712** and **ACS713** provide economical and precise solutions for AC (ACS712) or DC (ACS712 and ACS713) current sensing in industrial, automotive, commercial, and communications systems. The device package allows for easy implementation by the customer. Typical applications include motor control, load detection and management, switched-mode power supplies, and overcurrent fault protection.

Mfg. Part No.	Optimized Range I_P (A)	Sensitivity (mA/V)	Stock No.	Price Each 1-9
ACS712ELCTR-05B-T	±5	185	27M3644	4.04
ACS712ELCTR-20A-T	±20	100	31M3133	4.04
ACS712ELCTR-30A-T	±30	66	30M9922	4.04

CONTINUED

ACS71X FULLY INTEGRATED, HALL EFFECT-BASED LINEAR CURRENT SENSORS (CONT.)

Mfg. Part No.	Optimized Range I_P (A)	Sensitivity (mA/V)	Stock No.	Price Each 1-9
ACS713ELCTR-20A-T	0 to 20	185	30M9923	4.04
ACS713ELCTR-30A-T	0 to 30	133	30M9924	4.04

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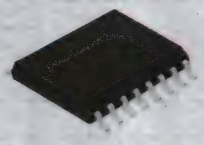
ACS716 VOLTAGE ISOLATION CURRENT SENSORS

RoHS Compliant Available

Allegro MicroSystems, Inc.



Features:
- Industry-leading noise performance with greatly improved bandwidth
- Small footprint package suitable for space-constrained applications
- 1 mΩ primary conductor resistance for low power loss
- High isolation voltage, suitable for line-powered applications
- User-adjustable Overcurrent Fault level
- Overcurrent Fault signal typically responds to an overcurrent condition in < 2 µs
- Filter pin capacitor improves resolution in low bandwidth applications

ACS716 current sensor provides economical and precise means for current sensing applications in industrial, commercial, and communications systems. The device is offered in a small footprint surface mount package that allows easy implementation in customer applications. The **ACS716** consists of a precision linear Hall sensor integrated circuit with a copper conduction path located near the surface of the silicon die. Applied current flows through the copper conduction path, and the analog output voltage from the Hall sensor linearly tracks the magnetic field generated by the applied current. The accuracy of the **ACS716** is maximized with this patented packaging configuration because the Hall element is situated in extremely close proximity to the current to be measured.

Mfg. Part No.	Supply Voltage (V)	Package	Stock No.	Price Each 1-9
ACS716KLATR-6BB-T	3V to 3.6V	16-SOIC	87T7239	4.54
ACS716KLATR-12CB-T	3V to 3.6V	16-SOIC	80T0023	4.60
ACS716KLATR-25CB-T	3V to 3.6V	16-SOIC	80T0024	4.54

(201308)

ACS755SCB-XXX CURRENT SENSORS

RoHS Compliant Available

Allegro MicroSystems, Inc.

Features
- Monolithic Hall IC for high reliability
- Single +5 V supply
- 3 kVRMS isolation voltage between terminals 4-5
- Ultra-low power loss: 100 µΩ internal conductor resistance
- Ratiometric output from supply voltage
- Extremely stable output offset voltage
- Output proportional to ac and dc currents

Applications
- Automotive systems
- Industrial systems
- Power conversion
- Battery monitors

Mfg. Part No.	Primary Sensing Current (A)	Bandwidth (kHz)	Package	Stock No.	Price Each 1-9
ACS756KCA-050B-PFF-T	50	18	5-PFF	97M3899	6.86
ACS756SCA-050B-PFF-T	50	27	5-PFF	97M3900	7.16
ACS756SCA-100B-PFF-T	100	27	5-PFF	97M3901	7.16

(85675)

ACS758 CURRENT SENSORS

RoHS Compliant Available

Allegro MicroSystems, Inc.

Features:
- Monolithic Hall IC for high reliability
- 3.0 to 5.5 V, single supply operation
- Industry-leading noise performance through proprietary amplifier and filter design techniques
- Ultra-low power loss: 100 µΩ internal conductor resistance
- Output voltage proportional to AC or DC currents
- Total output error improvement through gain and offset trim over temperature
- 120 kHz typical bandwidth

ISOLATION VOLTAGE: 3000 VRMS

Mfg. Part No.	Measurement Range (A)	Temperature Range	Package	Stock No.	Price Each
ACS758ECB-200B-PFF-T	±50 to 200	-40°C to +85°C	5-PFF	04R7127	7.47
ACS758ECB-200B-PSS-T	±50 to 200	-40°C to +85°C	5-PSS	04R7128	7.56
ACS758KCB-150B-PFF-T	±50 to 200	-40°C to +125°C	5-PFF	04R7129	7.66
ACS758KCB-150B-PSS-T	±50 to 200	-40°C to +125°C	5-PSS	04R7130	7.14
ACS758LCB-050B-PFF-T	±50 to 200	-40°C to +150°C	5-PFF	04R7131	7.56
ACS758LCB-100B-PFF-T	±50 to 200	-40°C to +150°C	5-PFF	04R7132	7.56

(147120)

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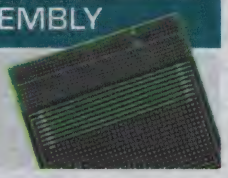


(197415)

LINEAR MAGNETIC FIELD TRANSDUCER ICs

RoHS Compliant Available

ANALOG DEVICES

Features:
- Adjustable Offset to Unipolar or Bipolar Operation
- Low Offset Drift over Temperature Range
- Gain Adjustable over Wide Range
- Low Gain Drift over Temperature Range
- Adjustable First Order Temperature Compensation
- Ratiometric to Vcc

Mfg. Part No.	Type	Output Current (mA @ 25°C)	Supply Voltage Range (V)	Temp. Range (°C)	Package	Stock No.	Price Each 1-9
AD22151YRZ	Linear	1	4.5 to 6	-40°C to +150°C	8-SOIC	59K3512	6.28

(142248)

MAGNETIC ENCODERS

RoHS Compliant Available

ams

Mfg. Part No.	Resolution	Operating Temperature Range	Supply Voltage (V)	Package	Stock No.	Price Each
ROTARY						
AS5030ATSU	8bit	-40°C to +125°C	4.5 to 5.5	16-TSSOP	59P4055	5.09
AS5035	8bit	-40°C to +125°C	3.3 to 5	16-SSOP	59P4056	6.47
AS5040ASSU	10bit	-40°C to +125°C	3 to 3.6	16-SSOP	59P4059	9.76
AS5043ASSU	10bit	-40°C to +125°C	3 to 3.6	16-SSOP	59P4061	9.36
AS5045ASSU		-40°C to +125°C	3 to 3.6	16-SSOP	59P4063	11.04
AS5046ASSU		-40°C to +125°C	3 to 3.6	16-SSOP	59P4065	10.32
LINEAR						
AS5304AATSU	25 µm	-40°C to +125°C	4.5 to 5.5	20-TSSOP	59P4074	8.47
AS5304BATSU	25 µm	-40°C to +125°C	4.5 to 5.5	20-TSSOP	59P4076	8.47
AS5306AATSU	15 µm	-40°C to +125°C	4.5 to 5.5	20-TSSOP	59P4078	8.47
AS5306BATSU	15 µm	-40°C to +125°C	4.5 to 5.5	20-TSSOP	59P4080	8.47

(147310)

PRESSURE SENSORS

RoHS Compliant Available

freescale

UNCOMPENSATED PRESSURE SENSORS

This series of silicon piezoresistive pressure sensors provide a very accurate and linear voltage output — directly proportional to the applied pressure. These standard, low-cost, uncompensated sensors permit manufacturers to design and add their own external temperature compensation and signal conditioning networks.

Mfg. Part No.	Pressure Rating Max. (psi)	Pressure Rating Max. (kPa)	Sup. Volt. Typ. (V)	Sensitivity (mV/kPa)	Package	Stock No.	Price Each 1-9
MPX10GP	1.45	10	3	3.5	344B - Single Port	48F6765	8.70
MPX10DP	1.45	10	3	3.5	344C - Dual Port	07F9772	8.16

COMPENSATED PRESSURE SENSORS

These silicon piezoresisitive pressure sensors provide a very accurate and linear voltage output - directly proportional to the applied pressure.

MPX2010GP	1.45	10	10	2.5	344B - Single Port	07F9817	12.21
MPX2010GSX	1.45	10	10	2.5	344F - Axial Port	07F9819	12.21
MPX2050GP	7.25	50	10	0.8	344B - Single Port	48F6767	12.21
MPXM2010GS	1.45	10	10	2.5	1320A - Ported	25C4134	7.53
MPXM2102GS	14.5	100	10	0.4	1320A - Ported	25C4138	7.83
MPXM2202GS	20	200	10	0.2	1320A - Ported	26C1093	7.53
MPX2010DP	1.45	10	10	2.5	344C - Dual Port	07F9816	10.01
MPX2100DP	14.5	100	10	0.4	344C - Dual Port	07F9853	12.21
MPX2200DP	29	200	10	0.2	344C - Dual Port	07F9871	12.21
MPXV2010DP	1.45	10	10	2.5	1351 - Dual Port	75C3888	10.01
MPXV2053DP	7.25	50	10	0.8	1351 - Dual Port	75C3890	10.89
MPXM2053GS	7.25	50	10	0.8	1320A - Axial Port	25C4136	6.90
MPXM2102AS	14.5	100	10	0.4	1320A - Axial Port	26C1089	7.83
MPXM2202AS	20	200	10	0.2	1320A - Axial Port	26C1091	7.83
MPX2102ASX	14.5	100	10	0.4	344F - Axial Port	75C3927	12.21
MPX2100AP	14.5	100	10	0.4	344B - Single Port	07F9849	12.21
MPX2200AP	29	200	10	0.2	344B - Single Port	07F9867	12.21
MPX2200GP	29	200	10	0.2	344B - Single Port	48F6770	12.21
MPX2100A	14.5	100	10	0.4	344 - Basic Element	48F6768	12.21

COMPENSATED MEDICAL GRADE PRESSURE SENSORS

Motorola has developed a low-cost, high-volume, miniature pressure sensor package which is ideal as a sub-module component or a disposable unit. The unique concept of the Chip Pak allows great flexibility in system design while providing an economic solution for the designer.

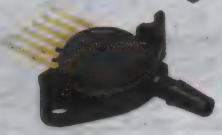
Mfg. Part No.	Pressure Rating Max. (psi)	Pressure Rating Max. (mmHg)	Sup. Volt. Typ. (V)	Sensitivity (mV/kPa)	Package	Stock No.	Price Each 1-9
MPX2300DT1	5.8	300	6	...	423A - Basic Element	66F7152	4.97
MPXC2011DT1	1.45	75	3	2.5	423A - Basic Element	20C2917	8.73

(19531)

INTEGRATED PRESSURE SENSORS

RoHS Compliant Available

freescale



This series offers a variety of integrated pressure sensors for a wide range of applications.

Mfg. Part No.	Pressure Rating Max. (psi)	Pressure Rating Max. (kPa)	Supply Volt. Typ. (VDC)	Package	Stock No.	Price Each 1-9
MPX3H6115A6U	16.7	115	3	1317 - Basic Element	73J1408	11.11
MPX4115A	16.7	115	5.1	867 - Basic Element	07F9894	16.10
MPX4115AP	16.7	115	5.1	867B - Single Port	07F9895	16.10
MPX4250A	36.3	250	5.1	867 - Basic Element	07F9898	14.01
MPX4250AP	36.3	250	5.1	867B - Single Port	07F9899	14.01
MPX4250DP	36.3	250	5.1	...	48F4497	16.10
MPX5010DP	1.45	10	5	867C - Dual Port	07F9909	12.84
MPX5010GP	1.45	10	5	867B - Single Ported	07F9910	16.10
MPX5050D	7.25	50	5	867 - Basic Element	07F9916	16.10
MPX5050DP	7.25	50	5	867C - Dual Port	07F9917	16.10
MPX5050GP	7.25	50	5	867B - Single Port	07F9918	16.10
MPX5100AP	14.5	100	5	867B - Single Port	07F9928	16.10
MPX5100DP	14.5	100	5	867C - Dual Port	07F9931	16.10
MPX5100GP	14.5	100	5	867B - Single Port	07F9932	16.10
MPX5500DP	72.5	500	5	867C - Dual Port	66F7154	10.10
MPX5700A	101.5	700	5	867 - Basic Element	40C2287	16.81
MPX5700AP	101.5	700	5	867B - Single Port	22C9037	16.10
MPX5700ASX	101.5	700	5	867F - Axial Port	73J1404	16.10
MPX5700D	101.5	700	5	867 - Basic Element	66F7111	16.10
MPX5700DP	101.5	700	5	867C - Dual Port	66F7112	13.99
MPX5700GP	101.5	700	5	867E - Single Port	66F7113	16.10
MPX5999D	150	1000	5	867 - Basic Element	66F7119	12.84
MPXA4115A6U	16.7	115	5.1	482 - Basic Element	95B4473	14.58
MPXA4115AC6U	16.7	115	5.1	482A - Axial Port	48F6597	15.11
MPXA4250A6U	36.3	250	5.1	482 - Basic Element	75C3863	14.58
MPXA4250AC6U	36.3	250	5.1	482A - Axial Port	75C3861	15.11
MPXA6115AC6U	16.7	115	5	482A - Axial Port	75C3865	12.57
MPXAZ6115AP	16.7	115	5	1369 - Side Port	53J3389	14.48
MPXH6115A6U	16.7	115	5	1317 - Basic Element	75C3872	9.67
MPXH6115AC6U	16.7	115	5	1317A - Axial Port	75C3870	10.25
MPXH6115A6T1	16.7	115	5	1317	75C3871	9.67
MPXH6115AC6T1	16.7	115	5	1317A	75C3869	10.25
MPXH6250A6U	36	250	5.1	1317 - Basic Element	86H4728	9.87
MPXH6300A6U	42	304	5.1	1317 - Basic Element	75C3874	9.87
MPXH6300AC6U	42	304	5.1	1317A - Axial Port	21H2254	9.99
MPXH6300AC6T1	42	304	5.1	1317A	21H2253	5.55
MPXH6400AC6U	28	400	5	1317A - Axial Port	62K5491	9.99
MPXH6400AC6T1	28	400	5	1317A	02J8440	9.99
MPXHZ6115A6U	16.7	115	5	1317 - Basic Element	86H4724	10.03
MPXHZ6115AC6U	16.7	115	5	1317A - Axial Port	86H4722	10.44
MPXV4006DP	0.87	6	5	1351 - Dual Port	75C3896	13.95
MPXV4006GC7U	0.87	6	5	482C - Axial Port	75C3898	14.17
MPXV5004DP	.57	3.92	5	1351 - Dual Port	75C3903	13.29
MPXV5004GC6U	.57	3.92	5	482A - Axial Port	96B1082	13.47
MPXV5004GC7U	.57	3.92	5	482C - Axial Port	75C3905	13.47
MPXV5004GVP	.57	3.92	5	1368 - Single Port	75C3907	13.29
MPXV5010DP	1.45	10	5	1351 - Dual Port	75C3911	13.95
MPXV5010GC6U	1.45	10	5	482A - Axial Port	95B4476	14.17
MPXV5010GC7U	1.45	10	5	482C - Axial Port	75C3913	12.30
MPXV5010GP	1.45	10	5	1369 - Single Port	75C3914	13.95
MPXV5050DP	7.25	50	5	1351 - Dual Port	75C3917	13.95
MPXV5050GP	7.25	50	5	1369 - Side Port	75C3918	13.95
MPXV5100DP	16.7	100	5	1351 - Dual Port	58K8438	13.95
MPXV5100GC6U	16.7	100	5	482A - Axial Port	03J5400	14.48
MPXV5100GC7U	14.5	100	5	342A - Axial Port	03J5401	14.48
MPXV6115VC6U	2.2	0	5	482A - Axial Port	75C3920	14.48
MPXV7002DP	0.3	2	5	1351 - Dual Port	70K3587	13.29
MPXV7002DPT1	0.3	2	5	1351	70K3588	13.29
MP3V5010DP	1.45	10	5.25	...	14R8944	10.62
MP3V5004DP	2.3	16	3	1351-01	09P4190	10.62

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
KITMPXV5004DPEVB	Sensor Toolbox Pressure Sensor Development board	26R2785	49.00
KITPRESSURE1EVB	Sensor Toolbox Pressure Sensor Interface Board	26R2786	79.00

(74906)

ADXL335 3-AXIS ACCELEROMETER EVALUATION BOARD

RoHS Compliant Available

ANALOG DEVICES

The **EVAL-ADXL335Z** is a simple evaluation board that allows quick evaluation of the performance of the ADXL335 three-axis accelerometer. The EVAL-ADXL335Z has a 6-pin, 0.1 inch spaced header for access to all power and signal lines that the user can attach to a prototyping board (breadboard) or wire using a standard plug. Four holes are provided for mechanical attachment of the EVAL-ADXL335Z to the application.

Mfg. Part No.	Description	Stock No.	Price Each
EVAL-ADXL335Z	ADXL335 Development Tool	45P6651	37.50

(177451)

HIGH ACCURACY DIGITAL TEMPERATURE SENSORS

RoHS Compliant Available

ANALOG DEVICES

Applications:
- RTD and thermistor replacement
- Thermocouple cold junction compensation
- Medical equipment
- Industrial control and test
- Food transportation and storage
- Environmental monitoring and HVAC
- Laser diode temperature control

Features:
- Programmable interrupts
- Easy implementation

The **ADT7320** & **ADT7420** are high accuracy digital temperature sensors offering breakthrough performance over a wide industrial range. It contains an internal band gap reference, a temperature sensor, and a 16-bit ADC to monitor and digitize the temperature to 0.0078°C resolution. The ADC resolution, by default, is set to 13 bits (0.0625°C). The ADC resolution is a user programmable mode that can be changed through the serial interface.

Mfg. Part No.	Output Interface	Accu. (°C)	Temp. Range (°C)	Supply Voltage Range (V)	Package	Stock No.	Price Each 1-9
ADT7320UCPZ-R2	I2C	±0.25	-40 to +150	2.7 to 5.5	16-LFCSP	66W1258	7.67
ADT7420UCPZ-R2	SPI	±0.25	-40 to +150	2.7 to 5.5	16-LFCSP	66W1259	7.67

EVALUATION BOARD

The evaluation kit allows the user to evaluate the performance of the **ADT7320** and **ADT7420** temperature sensors using a PC. The kit consists of two boards; a main board connected to the PC through the USB port and an external board. The external board is attached to the main board using wires that can withstand high temperatures, and can be used for remote temperature measurements in oil baths or ovens where the temperature exceeds the specifications of the USB cable. The evaluation software allows the user to select either the main board or the external board, as well as the desired temperature sensor device.

Mfg. Part No.	Description	Stock No.	Price Each
EVAL-ADT7X20EBZ	ADT7320/ADT7420 DIGITAL TEMP SENSOR EVAL BOARD	66W8747	55.32

(209467)

TEMPERATURE SENSORS

RoHS Compliant Available

ANALOG DEVICES

CURRENT OUTPUT TEMPERATURE SENSORS

Mfg. Part No.	Accuracy @ 25°C (°C)	Linearity	Temperature Range (°C)	Package	Stock No.	Price Each 1-9
AD592CNZ	± 0.5	± 0.05°C	-25 to +105	3-TO-92	59K4348	17.56
AD592ANZ	± 0.5	± 0.15 °C	-25 to +105	3-TO-92	59K4346	5.55
AD590MF	± 0.5	± 0.3°C	-55 to +150	2-Flatpack	05F7082	79.92
AD590MH	± 0.5	± 0.3°C	-55 to +150	3-TO-52	05F7083	54.54
AD590JH	± 0.5	± 0.3°C	-55 to +150	3-TO-52	05F7077	9.92
AD590KH	± 0.5	± 0.3°C	-55 to +150	3-TO-52	05F7079	12.83
AD592BNZ	± 0.5	± 0.1°C	-25 to +105	3-TO-92	59K4347	13.19
AD590LF	± 1	± 0.4°C	-55 to +150	2-Flatpack	05F7080	48.81
AD590KF	± 2.5	± 0.8°C	-55 to +150	2-Flatpack	05F7078	20.27
AD590JF	± 5	± 1.5°C	-55 to +150	2-Flatpack	05F7076	18.54

VOLTAGE OUTPUT TEMPERATURE SENSORS

Mfg. Part No.	Output Scale Factor (mV/°K)	Accu. @ 25°C (°C)	Temperature Range (°C)	Package	Stock No.	Price Each 1-9
TMP01FPZ	5	...	-55 to +125	8-DIP	59K9131	6.37
TMP05BRTZ-REEL7	...	± 0.5	-40 to +150	5-SOT-23	59K9158	2.67
TMP35GT9Z	...	±2	-10 to +125	3-TO-92	13M3231	1.49
TMP36FSZ	10	± 2	-40 to +125	8-SOIC	59K9193	1.84
TMP37FT9Z	20	± 2	0 to +100	3-TO-92	13M3232	1.59
AD22100ARZ	22.5	± 2	-50 to +150	8-SOIC	19M8799	6.55
AD22100ATZ	22.5	± 2	-50 to +150	3-TO-92	59K3506	6.02
AD22100KRZ	22.5	± 2	-50 to +150	8-SOIC	87H9743	4.17
AD22100KTZ	22.5	± 2	-50 to +150	3-TO-92	59K3507	3.99
AD8494CRMZ	...	± 1	-40 to +125	8-MSOP	91R2591	7.47
AD8495ARMZ	...	± 3	-40 to +125	8-MSOP	85R6446	5.04
AD22100SRZ	22.5	± 2	-50 to +150	8-SOIC	87H9745	7.58
AD22100STZ	22.5	± 2	-50 to +150	3-TO-92	59K3508	6.64
AD22103KTZ	28	± 2.5	0 to +100	3-TO-92	59K3511	3.76
TMP36GT9Z	10	± 3	-40 to +125	3-TO-92	19M9015	1.48
TMP36GSZ	10	± 3	-40 to +125	8-SOIC	19M9014	1.51

CONTINUED

TEMPERATURE SENSORS (CONT.)

DIGITAL OUTPUT TEMPERATURE SENSORS

Mfg. Part No.	Accu. (°C)	Temp. Range (°C)	Package	Stock No.	Price Each 1-9
● AD7314ARMZ	± 2	-35 to +85	8-MSOP	19M0855	2.23
● ADT7410TRZ	± 0.5	-55 to +150	8-SOIC	08R6646	3.60
● AD7414ARTZ-0500RL7	± 3	-40 to +125	6-SOT-23	19M8839	2.79
● AD7414ARTZ-1500RL7	± 3	-40 to +125	6-SOT-23	12M8805	2.62
● AD7415ARTZ-0500RL7	± 3	-40 to +125	5-SOT-23	19M8840	2.79
● ADT7301ARTZ-500RL7	± 3	-40 to +150	6-SOT-23	59K3053	3.25
● AD7416ARZ	± 3	-40 to +85	8-SOIC	19M0868	2.45
● AD7416ARMZ	± 1	-40 to +125	8-MSOP	59K4786	2.45
● AD7417ARZ	± 3	-55 to +125	16-SOIC	19M1189	6.74
● AD7814ARMZ	± 2	-55 to +125	8-MSOP	19M8855	2.87
● AD7814ARTZ-500RL7	± 3.5	-55 to +125	6-SOT-23	19M8857	2.68
● ADT7411ARQZ	± 5	-40 to +120	16-QSOP	19M8742	5.44
● ADT75ARMZ	±1	-55 to +125	8-MSOP	30M9930	2.04
● ADT75ARZ	± 2	-55 to +125	8-SOIC	19M0733	1.92
● TMP03FSZ	±1.5	-55 to +150	8-TSSOP	59K9132	7.32
● TMP04FSZ	± 3	-40 to +100	8-SOIC	19M9011	7.37
● TMP04FT9Z	± 3	-40 to +100	3-TO-92	13M3228	7.22
● TMP05AKSZ-500RL7	± 0.5	-40 to +150	5-SC-70	19M9012	2.07
● TMP05BKSZ-500RL7	±0.5	-40 to +150	5-SC-70	59K9153	2.87
● TMP05BRTZ-500RL7	± 0.5	-40 to +150	5-SOT-23	19M9013	2.91

THERMOCOUPLERS AND TEMPERATURE SWITCHES

Mfg. Part No.	Accuracy (°C)	Temperature Range (°C)	Package	Stock No.	Price Each 1-9
● AD597ARZ	1	-40 to +125	8-SOIC	19M8821	6.95
● AD22105ARZ	2.0	-40 to +150	8-SOIC	19M0784	3.47
● ADN8830ACPZ	0.01	-40 to +85	32-LFCSP	28M3767	10.70
● TMP01ESZ	0.5	-55 to +150	8-SOIC	13M3224	10.44

THERMOCOUPLE AMPLIFIER ICs

Mfg. Part No.	Accuracy (°C)	Temperature Range (°C)	Package	Stock No.	Price Each 1-9
● AD595CDZ	1	0 to +55	14-TO-116	18M6081	58.11
● AD8497ARMZ	1	-40 to +125	8-MSOP	85R6450	4.91
● AD8496ARMZ	1	-40 to +125	8-MSOP	91R2593	4.98

(4360)

TEMPERATURE SENSORS

RoHS Compliant Available

LINEAR TECHNOLOGY

Applications:
- Network Servers
- Core, I/O Voltage Monitors
- Desktop and Notebook Computers
- Environmental Monitoring

Features:
- Converts Remote Sensor or Internal Diode
- Temperature to Analog Voltage
- Built-In Series Resistance Cancellation

The **LTC®2995** is a high accuracy temperature sensor and dual supply monitor. It converts the temperature of an external diode sensor and/or its own die temperature to an analog output voltage while rejecting errors due to noise and series resistance. Two supply voltages and the measured temperature are compared against upper and lower limits set with resistive dividers. If a threshold is exceeded, the device communicates an alert by pulling low the correspondent open drain logic output.

Mfg. Part No.	No. of Channels	Temp. Sense Accuracy (%)	Output Type	Package	Stock No.	Price Each 1-24
● LTC2995IUD#PBF	1	1	Analog	20-QFN	94T1241	6.02

(208435)

TEMPERATURE SENSORS

RoHS Compliant Available

MICROCHIP

LOGIC OUTPUT TEMPERATURE SENSORS
- User-Programmable Hysteresis and Temperature Set Point
- Easily Programmed With 2 External Resistors
- Control Output, High=True
- ±1°C Accuracy (Typ.)
- 400µA Max. Supply Current

Mfg. Part No.	Description	Temp. Range	Package	Stock No.	Price Each 1-25
● TC622CPA	Single Trip Point Temperature Sensor	-40°C to +125°C	8-DIP	33C1173	1.04
● TC620CVOA	5V Dual Trip Point Temp. Sensor	-40 to +125°C	8-SOIC	92C6313	1.49
● MCP9701AT-E/LT	Low-Power Linear Active Thermistor	-40°C to +125°C	5-SC-70	88K5692	0.31

SERIAL OUTPUT TEMPERATURE SENSORS
- ±0.5°C typical accuracy
- Standby mode for power savings
- 400µA Max. Supply Current
- Temperature Resolution: 0.5°C for **type MCP9803**, 0.25°C for **type TC72** and 0.0625°C for **type TC77**

➤ CONTINUED ➤

TEMPERATURE SENSORS (CONT.)

Mfg. Part No.	Description	Supply Voltage Max. (V)	Package	Stock No.	Price Each 1-25
● TC72-5.0MUA	Serial Output, 4-wire SPI	5	8-MSOP	69K7657	0.92
● TC74A0-3.3VCTTR†	Digital Temp. Sensor	5.5	5-SOT-23	84R6274	0.87
● MCP9803-M/SNG	Serial Output, 2-Wire I²C/SMBus Compatible	5.5	8-SOIC	43J9525	1.20

- 8-Bit Digital Temperature Outputs
- 200 µA Supply Current
- Range: -40°C to +125°C
- ±2°C Accuracy from +25°C to +85°C
- ±3°C Accuracy from 0°C to +125°C
- Temperature Resoultion: 1°C

Mfg. Part No.	Description	Address	Package	Stock No.	Price Each 1-25
● TC74A0-5.0VAT	SMBus/I²C Compatible Interface with Digital Thermal Sensor	1001 000	5-TO-220	92C6554	1.37
● TC74A4-3.3VCTTR	SMBus/I²C Compatible Interface with Digital Thermal Sensor	1001 100	5-SOT-23	89K2108	0.87
● TC74A5-5.0VAT	SMBus/I²C Compatible Interface with Digital Thermal Sensor	1001 101	5-TO-220	69K7658	1.37

- Programmable Hysteresis and Trip Points with Power-Up Defaults
- Standard 2-Wire Interface
- Shutdown Mode for Low Power Standby (<1µA)
- Range: -55°C to +125°C
- ±0.5°C Accuracy (Typ.)
- Temperature Resolution: 0.5°C
- 1mA Max. Supply Current

Mfg. Part No.	Description	Type	Package	Stock No.	Price Each 1-25
● TCN75-3.3MUA	SMBus/I² Compatible Interface, Thermal Monitor with Interrupt Output	3.3V	8-MSOP	33C1105	1.26
● TCN75-3.3MOA		3.3V	8-MSOP	80K6157	1.21
● TCN75-5.0MOA		5V	8-SOIC	33C1106	1.21

VOLTAGE OUTPUT TEMPERATURE SENSORS
- High Precision
- Range: -40°C to +125°C
- ±0.5°C Accuracy (Typ.)
- 35µA Supply Current Typical, 60µA Max.

Mfg. Part No.	Vcc Range (V)	Description	Package	Stock No.	Price Each 1-25
● TC1046VNBTR†	+2.7 to +4.4	Temp.-to-Voltage Converter (6.25mV/°C)	3-SOT-23B	89C8092	0.59
● TC1047AVNBTR†	+2.5 to +5.5	Temp.-to-Voltage Converter (10mV/°C)	3-SOT-23B	89C8093	0.62
● TC1047VNBTR†	+2.7 to +4.4	Temp.-to-Voltage Converter (10mV/°C)	3-SOT-23B	89C8094	0.59
● MCP9700T-E/LT†	+2.3 to +5.5	Low-Power Linear Active Thermistor IC	5-SC-70	08J8798	0.25
● MCP9700AT-E/LT†	+2.3 to +5.5	Low-Power Linear Active Thermistor IC	5-SC-70	84R6272	0.31
● MCP9700T-E/TT†	+2.3 to +5.5	Low-Power Linear Active Thermistor IC	3-SOT-23	84R5200	0.25
● MCP9701A-E/TO	+3.1 to +5.5	Low-Power Linear Active Thermistor IC	3-TO-92	17M0680	0.31
● MCP9701-E/TO	+3.1 to +5.5	Low-Power Linear Active Thermistor IC	3-TO-92	17M0679	0.25
● MCP9701AT-E/LT†	+3.1 to +5.5	Low-Power Linear Active Thermistor IC	5-SC-70	88K5692	0.31
● MCP9701AT-E/LT†	+3.1 to +5.5	Low-Power Linear Active Thermistor IC	5-SC-70	88K5692	0.31
● MCP9701AT-E/TT†	+3.1 to +5.5	Low-Power Linear Active Thermistor IC	3-SOT-23	84R5201	0.31

†Supplied on cut tape

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
MCP9800DM-TS1	Temperature Sensor Demo Board	07P9561	35.00
MCP9700DM-PCTL	Temperature-to-Voltage Converter PICTAIL Demo Board	56K7058	10.00
● MCP9800DM-DL	Temperature Data Logger Demo Board	69K0148	35.00
TMPSNSRD-TCPL1	Thermocouple Reference Design	63R7907	35.00

(70540)

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(212565)

DIGITAL TEMPERATURE SENSORS

RoHS Compliant Available

NXP

Features
- I²C-bus interface to 400 kHz with up to 8 devices on the same bus
- Temperature range from -55°C to +125°C
- ADC offers a temperature resolution of 0.125°C
- Pin-for-pin replacement for industry standard LM75/LM75A
- Stand-alone operation as thermostat at power-up
- Programmable temperature threshold and hysteresis set points

Applications
- System thermal management
- Personal computers
- Electronics equipment
- Industrial controllers

Mfg. Part No.	Description	Accuracy	ADC Res. (Bits)	Supply Voltage	Package	Stock No.	Price 1-9
LM75ADP,118	Digital temperature sensor & thermal watchdog	± 3°C	11	2.8V to 5.5V	8-TSSOP	78R6248	0.66
LM75BD,112	Digital temperature sensor & thermal watchdog	± 3°C	11	2.8V to 5.5V	8-SOIC	70R5572	0.62
LM75BDP,118	Digital temperature sensor & thermal watchdog	± 3°C	11	2.8V to 5.5V	8-TSSOP	70R5574	0.62
LM75BGD,125	Digital temperature sensor & thermal watchdog	± 3°C	11	2.8V to 5.5V	8-XSON	70R5575	0.62
SE95DP,118	Digital temperature sensor & thermal watchdog	± 2°C	13	2.8V to 5.5V	8-TSSOP	70R9085	1.16

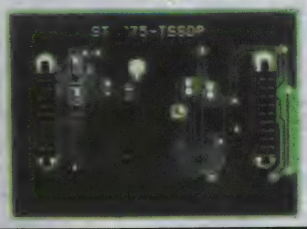
(189574)

TEMPERATURE SENSORS

RoHS Compliant Available

ST

The LM335 is a precision temperature sensor which can be easily calibrated. It operates as a 2-terminal Zener and the breakdown voltage is directly proportional to the absolute temperature 10 mV/K



Mfg. Part No.	Package	Temperature Range (°C)	Stock No.	Price Each 1-9
LM335AZ	3-TO-92	-40 to 100	89K1311	1.63
LM335Z	3-TO-92	-40 to 100	89K1312	1.10
LM234DT	8-SO	-25 to 100	89K1294	1.77
LM235Z	3-TO-92	-40 to 125	89K1296	1.56

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
STEVAL-IFS003V1	ST72F651 EVALUATION BOARD	09R5864	154.98
STEVAL-IFS012V10	STCN75 DAUGHTER BOARD	09R5871	22.80
STEVAL-IFS012V11	STCN75 DAUGHTER BOARD	09R5872	30.40
STEVAL-IFS012V12	STTS424E02 DAUGHTER BOARD	09R5873	27.98
STEVAL-IFS012V2	STTS75 DAUGHTER BOARD	09R5874	30.40
STEVAL-IFS012V4	STLM20 DAUGHTER BOARD	09R5875	30.40
STEVAL-IFS012V6	STDS75 DAUGHTER BOARD	09R5876	30.40
STEVAL-IFS012V7	STDS75 DAUGHTER BOARD	09R5877	30.40
STEVAL-IFS012V8	STLM75 DAUGHTER BOARD	09R5878	30.40
STEVAL-IFS012V9	STLM75 DAUGHTER BOARD	25R9384	30.40

(83735)

STS21 TEMPERATURE SENSORS

RoHS Compliant Available

SENSIRION THE SENSOR COMPANY

Features
- Fully calibrated
- Digital output, I2C interface
- Low power consumption
- Excellent long term stability
- DFN type package ¡V reflow solderable

Mfg. Part No.	Accuracy	ADC Res. (Bits)	Supply Voltage	Package	Stock No.	Price Each
STS21	± 0.2°C	14	2.1V to 3.6V	DFN	78T0593	3.00

(208473)

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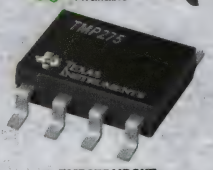
(212569)

TEMPERATURE SENSORS AND TEMPERATURE CONTROL ICs

RoHS Compliant Available

TEXAS INSTRUMENTS

Applications:
- LCD/DLP/LCOS projectors
- Servers
- Central office telecom equipment
- Desktop and notebook computers
- Storage area networks



TMP275AIDGKT

TEMPERATURE SENSORS

Mfg. Part No.	Accuracy Over Temp. Range Max. (°C)	Temp. Resolution (Bits)	I_q Typ. (µA)	Pkg.	Stock No.	Price Each 1-9
TMP275AID	0.5	12	50	8-SOIC	27M1051	2.75
TMP275AIDGKT	0.5	12	50	30-TSSOP	03M1088	2.99
TMP431DDGKT	1	12	35	8-MSOP	40T5419	1.62
TMP431CDGKT	1	12	35	8-MSOP	40T5417	1.62
TMP513AID	1	12	1000	16-SOIC	79R8526	4.54
TMP103AYFFT	1	8	1	4-DSBGA	32T3276	1.38
TMP112AIDRLT	1	12	110	6-SOT-563	14R8030	2.50
TMP401AIDGKT	1	12	250	8-MSOP	14M2473	2.72
TMP411ADGKT	1	12	400	8-MSOP	27M1054	1.62
TMP421AIDCNT	1	12	400	8-SOT-23	52M6094	1.77
TMP432ADGST	1	12	35	10-MSOP	55R1359	1.73
TMP441AIDCNT	1	12	35	8-SOT-23	05R0304	1.77
TMP175AIDR	1.5	12	50	8-SOIC	01J0913	2.04
TMP102AIDRLT	2	12	10	6-SOT-563	53M3987	1.88
TMP106YZCR	2	12	50	6-DSBGA	70K5598	2.18
TMP121AIDBVT	2	12	35	6-SOT-23	74K3968	2.86
TMP123AIDBVT	2	12	35	6-SOT-23	87H2854	2.86
TMP75AIDGKT	2	12	50	8-MSOP	58K6859	1.53
TMP75AID	2	12	50	8-SOIC	01J0914	1.59
TMP100NA/250	3	12	45	6-SOP	76C9437	2.45
TMP100NA/3K	3	12	45	6-SOT-23	76C9438	2.04
TMP100MDBVREP	3	12	45	6-SOT-23	46M1069	5.25
TMP101NA/250	3	12	45	6-SOP	76C9439	2.59

TEMPERATURE SWITCHES

Mfg. Part No.	Accuracy Over Temp. Range Max. (°C)	Trip Point	Output Type	Pkg.	Stock No.	Price Each 1-9
TMP300AIDCKT	2	Programmable	Open Drain	6-SC70	58M1274	8.40

TEMP MONITORING AND FAN CONTROL

Mfg. Part No.	Description	Pkg.	Stock No.	Price Each 1-9
AMC6821SDBQ	Intelligent Temp. Monitor and PWM Fan Controller	16-QSOP	52M3024	2.87

POWER+ CONTROL

Mfg. Part No.	Description	Output Current (mA)	Max Supply Voltage (V)	Pkg.	Stock No.	Price Each 1-9
TPIC2603DW.	Low-Side Driver	350	5.5	24-SOIC	76C9890	6.58

DEVELOPMENT TOOLS

Mfg. Part No.	Description	Supported Devices	Stock No.	Price Each
TMP513EVM	Evaluation Module	TMP512, TMP513	84R0636	152.01

(74641)

TEMPERATURE SENSORS

RoHS Compliant Available

TEXAS INSTRUMENTS

Mfg. Part No.	Description	Operating Temperature	Package	Stock No.	Price Each 1-9
LM35AH	Precision Centigrade Temperature Sensors	-55 to 150°C	3-TO-46	83F3871	23.60
LM45CIM3X	Precision Centigrade Temperature Sensors	-40 to 125°C	3-SOT-23	07B6764	1.29
LM96080CIMT/NOPB	System Hardware Monitor w/2-Wire Serial Interface	-40°C to +125°C	24-TSSOP	55R4141	6.30
LM94021QBIMG/NOPB	Multi-Gain Analog Temperature Sensor	-50°C to +150°C	5-SC-70	71R5094	1.50

CONTINUED

TEMPERATURE SENSORS (CONT.)

Mfg. Part No.	Description	Operating Temperature	Package	Stock No.	Price Each 1-9
● LM71QCIMF/NOPB	Multi-Gain Analog Temperature Sensor	-40°C to +150°C	5-SOT-23	71R5093	2.34
● LM71QCIMF/NOPB	SPI/MICROWIRE 13-Bit Plus Sign Temperature Sensor	-40°C to +150°C	5-SOT-23	71R5093	2.34
● LM56BIMM/NOPB	Dual Output Low Power Thermostat	-40 to 125°C	8-SOIC	41K6153	2.59
● LM61BIM3/NOPB	PrecisionTemperature Sensor	-25 to 85°C	3-SOT-23	41K6172	1.30
● LM62BIM3/NOPB	Precision Temperature Sensor	0 to 90°C	3-SOT-23	41K6228	1.10
● LM70CIMM-3/NOPB	SPI/MICROWIRE 10-Bit plus Sign Digital Temperature Sensor	-55 to 150°C	8-SOIC	41K6260	2.03
● LM70CIMM-5/NOPB	SPI/MICROWIRE 10-Bit plus Sign Digital Temperature Sensor	-55 to 150°C	8-SOIC	41K6261	2.03
● LM19CIZ/NOPB	10µA Temp. Sensor	-55 to 130°C	3-TO-92	41K3539	0.85
● LM20BIM7/NOPB	2.4V, 10µA, SC70, Micro SMD Sensor	-55 to 130°C	5-SC70	41K3550	1.13
● LM20CIM7/NOPB	2.4V, 10µA, SC70, Micro SMD Sensor	-55 to 130°C	SC-70	41K3552	0.97
● LM234Z-3/NOPB	2-Terminal Adjustable, ±3°C Accuracy,	-25 to 100°C	3-TO-92	41K3558	2.66
● LM234Z-6/NOPB	2-Terminal Adjustable, ±3°C Accuracy,	-25 to 100°C	3-TO-92	41K3559	1.28
● LM334M/NOPB	3-Terminal Adjustable Current Source	0 to 70°C	8-SOIC	41K4697	0.92
● LM334Z/NOPB		0 to 70°C	3-TO-92	41K4701	0.88
● LM335AZ/NOPB	Precision Temp. Sensor	-40 to 100°C	3-TO-92	41K4704	1.68
● LM335M/NOPB		-55 to 150°C	8-SOIC	41K4705	1.24
● LM335Z/NOPB		-55 to 150°C	3-TO-92	41K4707	1.08
● LM34DM/NOPB	Precision Fahrenheit Temp. Sensor	-50 to 300°F	8-SOIC	41K4757	2.96
● LM34DZ/NOPB	Precision Temp. Sensor	-50 to 300°F	3-TO-92	41K4759	2.55
● LM34CAZ/NOPB		-50 to 300°F	3-TO-92	41K4755	8.55
● LM34CZ/NOPB		-50 to 300°F	3-TO-92	41K4756	6.63
● LM35CAZ/NOPB	Precision Centigrade Temp. Sensor	-40 to 110°C	3-TO-92	41K4844	5.60
● LM35CZ/NOPB		-40 to 110°C	3-TO-92	41K4845	4.76
● LM35DM/NOPB		-55 to 150°C	8-SOIC	41K4846	1.83
● LM35DT/NOPB		-55 to 150°C	3-TO-220	41K4848	2.35
● LM35DZ/NOPB		-55 to 150°C	3-TO-92	41K4849	1.58
● LM45BIM3/NOPB	Single-Supply °C Temp. Sensor	-20 to 100°C	3-SOT-23	33K4200	1.63
● LM45CIM3/NOPB		-20 to 100°C	3-SOT-23	41K5539	0.93
● LM50BIM3/NOPB		-40 to 125°C	3-SOT-23	41K6016	1.58
● LM50CIM3/NOPB		-40 to 125°C	3-SOT-23	37K8526	0.97
● LM50CIM3X/NOPB		-40 to 125°C	SOT-23	41K6018	0.97
● LM56CIM/NOPB	Dual Output Low Power Thermostat	-40 to 125°C	8-SOP	41K6156	2.16
● LM60BIM3/NOPB	2.7V Temp. Sensor	-25 to 125°C	3-SOT-23	41K6166	1.23
● LM60BIZ/NOPB	2.7V Temp. Sensor	-25 to 85°C	3-TO-92	41K6168	1.16
● LM60CIM3/NOPB	2.7V Temp. Sensor	-40 to 125°C	3-SOT-23	41K6169	0.92
● LM60CIZ/NOPB	2.7V Temp. Sensor	-30 to 100°C	3-TO-92	41K6171	0.88
● LM61BIZ/NOPB	2.7V Temp. Sensor	-30 to 100°C	3-TO-92	41K6174	1.17
● LM74CIM-5/NOPB	SPI/MicroWire Digital Temp. Sensor	-55 to 150°C	8-SOIC	41K6291	2.06
● LM75BIMM-3/NOPB	Digital Temp. Sensor and Thermal Watchdog with Two-Wire Interface	-55 to 125°C	8-MSOP	41K6297	1.87
● LM80CIMT-3/NOPB	Digital Temp. Sensor and Thermal WATCHDOG with Two-Wire Interface	-20 to 85°C	24-TSSOP	41K6359	7.78
● LM83CIMQA/NOPB	3 Diode Input ACPI Compatible Digital Temperature Sensor w/Two-Wire Interface	-40 to 125°C	16-SSOP	41K6405	6.64
● LM86CIMM/NOPB	±0.75°C Accurate Remote Diode and Local Digital Temp. Sensor with Two-Wire Interface	-40 to 125°C	8-MSOP	41K6439	1.89
● LM87CIMT/NOPB	Serial Interface System Hardware Monitor w/ Remote Diode Temp. Sensing	-40 to 125°C	24-TSSOP	41K6442	6.38

➤CONTINUED➤

TEMPERATURE SENSORS (CONT.)

Mfg. Part No.	Description	Operating Temperature	Package	Stock No.	Price Each 1-9
● LM92CIM/NOPB	±0.33°C Accurate, 12-Bit + Sign Temperature Sensor and Thermal Window Comparator with Two-Wire Interface	-55 to 150°C	8-SOIC	41K6491	4.61
● LM94022BIMG/NOPB	1.5V, SC70 Multi-Gain Temp. Sensor with Class -AB Output	-55 to 150°C	SC-70	65K6466	1.08
● LM94023BITME/NOPB	1.5V, Dual-Gain Analog Temp. Sensor with Class AB Output	-50 to 150°C	4-BGA	08P4296	1.24
● LM94021BIMG/NOPB	Multi-Gain Analog Temp. Sensor	-50 to 150°C	5-SC-70	41K6494	1.08
● LM95071CIMF/NOPB	SPI/MICROWIRE 13-Bit Plus Sign Temp. Sensor	-40 to 150°C	5-SOT-23	41K6498	1.83
● LM73CIMK-0/NOPB	2.7V, SOT-23, 11-to-14 Bit Digital Temp. Sensor w/2-Wire Interface	-40 to 150°C	6-TSOT	69K2606	2.04
● LM26CIM5-RPA/NOPB	±3°C Accurate, Factory Preset Thermostat	-55 to 125°C	5-SOT-23	41K3901	1.32
● LM56CIMM/NOPB	Dual Output Low Power Thermostat	-40 to 125°C	8-SOIC	41K6157	1.96
● LM74CIM-3/NOPB	Digital Temp. Sensor SPI/MicroWire	-55 to 150°C	8-MSOP	41K6290	2.06
● LM95235DIMM/NOPB	Precision Remote Diode Temperature Sensor with SMBus Interface and TruTherm™ Technology	-40 to 125°C	8-SOIC	13M1935	1.32
● LM95234CISD/NOPB	Quad Remote Diode and Local Temp. Sensor w/SMBus Interface & TruTherm™ Technology	-40 to 140°C	14-LLP	32M1293	2.80
● LM99CIMM/NOPB	±1°C Accurate, High Temp., Remote Diode Temp. Sensor w/Two-Wire Interface	0 to 125°C	8-SOIC	41K6508	2.95
● LM77CIM-3/NOPB	Digital Temp. Sensor and Thermal Window Comparator with Two-Wire Interface	-55 to 125°C	8-SOP	41K6313	2.86
● LM75AIM/NOPB	Digital Temp. Sensor and Thermal Watchdog w/Two-Wire Interface	-55 to 125°C	8-SOIC	34P4881	1.66

(72257)

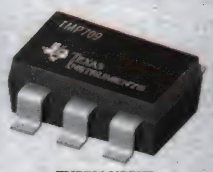
RESISTOR PROGRAMMABLE TEMPERATURE SWITCH

RoHS Compliant Available

TEXAS INSTRUMENTS

Features:
- Temperature Threshold Set By 1% External Resistor
- Low Quiescent Current: 40µA Typical
- Open-Drain, Active-Low Output Stage
- Pin-Selectable 2°C or 10°C Hysteresis

Applications:
- Computers (Laptops and Desktops)
- Servers
- Industrial and Medical Equipment
- Storage Area Networks
- Automotive



TMP709AIDBVT

The **TMP709** is a fully-integrated, resistor- programmable temperature switch with a temperature threshold that is set by just one external resistor within its entire operating range. The TMP709 provides an open-drain, active-low output.

Mfg. Part No.	Supply Voltage (V)	Temperature Accuracy	Supply Current (µA)	Package	Stock No.	Price Each 1-9
● TMP709AIDBVT	2.7V to 5.5V	± 0.5°C	40	5-SOT-23	93T6799	1.15
● TMP708AIDBVT	2.7V to 5.5V	± 0.5°C	40	5-SOT-23	82T4199	1.15

EVALUATION BOARD

Mfg. Part No.	Description	Stock No.	Price Each
TMP709EVM	TMP709 Evaluation Board	82T4203	50.00

(202670)

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(196525)

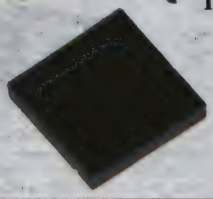
INFRARED THERMOPILE SENSORS

RoHS Compliant Available

TEXAS INSTRUMENTS

Features:
- SMBus Compatible Interface
- Pin-Programable Interface Addressing

Applications:
- Notebook Case Temperature
- Comfort Index Measurement
- Motor Case Temperature
- Server Farm Power Management



Mfg. Part No.	Supply Voltage	Temperature Resolution (Bits)	Supply Current (µA)	Package	Stock No.	Price Each 1-9
TMP006AIYZFT	2.2V to 5.5V	14	240	8-DSBGA	48T2174	4.18

EVALUATION BOARD

Mfg. Part No.	Description	Stock No.	Price Each
TMP006EVM	TMP006 EVALUATION MODULE	48T4654	50.00

(197030)

TOUCH CONTROLLER ICS

RoHS Compliant Available

Atmel

Features:
- Long Range Proximity Sensing
- Cutting-edge interfaces
- Exacting precision
- Design flexibility
- Low power consumption
- Robust operation

Touch controller devices enhance the user experience by implementing nonmechanical buttons, sliders, and wheels with excellent precision and reliability. They also deliver superb low-power characteristics, a critical requirement for today's battery-powered handheld and mobile devices.

Mfg. Part No.	# of Touch Channels	Supply Voltage Range	Oper. Temp. Range	Pkg.	Stock No.	Price Each 1-9
SINGLE BUTTON						
AT42QT1010-TSHR	1	1.8V to 5.5V	-40°C to +85°C	6-SOT-23	68T4653	0.83
AT42QT1011-TSHR	1	1.8V to 5.5V	-40°C to +85°C	6-SOT-23	68T4655	0.76
AT42QT1012-TSHR	1	1.8V to 5.5V	-40°C to +85°C	6-SOT-23	68T4657	0.76
TEN OR LESS BUTTONS						
AT42QT1040-MMH	4	1.8V to 5.5V	-40°C to +85°C	20-QFN	68T4658	1.64
AT42QT1060-MMU	6	1.8V to 5.5V	-40°C to +85°C	28-QFN	68T4659	2.97
AT42QT1070-SSU	7	1.8V to 5.5V	-40°C to +85°C	14-SOIC	68T4661	1.23
MORE THAN TEN BUTTONS						
AT42QT1110-AU	11	3V to 5.5V	-40°C to +85°C	32-TQFP	68T4662	1.56
AT42QT1110-AZ	11	3V to 5.5V	-40°C to +85°C	32-TQFP	72T3089	2.83
AT42QT1110-MZ	11	3V to 5.5V	-40°C to +85°C	32-QFN	72T3090	2.83
AT42QT1111-AU	11	1.8V to 5.5V	-40°C to +85°C	32-TQFP	68T4666	2.25
AT42QT1111-MU	11	1.8V to 5.5V	-40°C to +85°C	32-QFN	68T4667	2.25
QT60168-ASG	16	3V to 5.5V	-40°C to +105°C	32-TQFP	71T5345	7.07
QT60168C-ASG	16	3V to 5.5V	-40°C to +105°C	32-TQFP	71T5346	10.05
QT60240-ATG	24	1.8V to 5.5V	-40°C to +85°C	32-QFN	71T5347	4.69
QT60248-ASG	24	3V to 5.5V	-40°C to +105°C	32-TQFP	71T5349	12.65
QT60248C-ASG	24	3V to 5.5V	-40°C to +105°C	32-TQFP	71T5350	12.65
QT60160-ATG	32	1.8V to 5.5V	-40°C to +85°C	32-QFN	71T5343	4.26
QT60160-ISG	32	1.8V to 5.5V	-40°C to +85°C	32-QFN	71T5344	3.00
QT60326-ASG	32	4.8V to 5.3V	-40°C to +105°C	44-TQFP	71T5351	11.12
QT60486-ASG	48	4.8V to 5.3V	-40°C to +105°C	44-TQFP	71T5352	13.34
SLIDERS AND WHEELS						
AT42QT2160-MMU	16	1.8V to 5.5V	-40°C to +85°C	28-QFN	68T4672	2.76

(197947)

STM8S TOUCH SENSING EVALUATION KIT

RoHS Compliant Available

Features:
- Touch-sensing interface
- LCD display
- Configurable operation
- RC acquisition principle
- Supports up to 24 capacitive sensing touchkeys
- Supports up to 2 capacitive sensing wheels
- Up to 8-bit resolution wheel/slider using 8 channels
- Autocalibration, debounce filtering
- Environment control system (ECS)
- Detection exclusion system
- Free C source code library

The STM8S touch sensing evaluation kit enables designers, who are familiar with standard STM8S microcontrollers, to create higher-end look-and-feel user interfaces by replacing conventional electromechanical switches with touch sensing controls. Designers can thus combine touch sensing functions with traditional MCU features such as communication, LED control, beeper, LCD control, and so on. The kit contains an STM8/128-EVAL board, and an STM8S touch sensing evaluation daughterboard (STM8Sxxx-TS1) which provides an evaluation platform for the resistor-capacitor acquisition principle. The touch sensing library is a complete, free source-code solution to transform any 8-bit STM8 microcontroller into a capacitive touchkey controller.

Mfg. Part No.	Description	Stock No.	Price Each Each
STM8/128-EV/TS	STM8S evaluation board with Touch Sensing solution evaluation	55R6963	178.75

(191905)

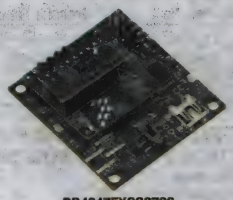
6-AXIS XTRINSIC SENSOR w/INTEGRATED LINEAR ACCELEROMETER & MAGNETOMETER

RoHS Compliant Available

freescale

Features:
- Highly integrated
- Wide dynamic range ±1200 µT
- Embedded vector magnitude detection
- Embedded autonomous hard iron calibration
- Low-power consumption

Applications:
- eCompass in mobile devices
- User interface (menu scrolling by orientation change, tap detection for button replacement)
- Orientation detection (portrait/landscape: up/down, left/right, back/front position identification)
- Augmented Reality (AR), gaming, and real-time activity analysis (pedometry, freefall and drop detection for hard disk drives and other devices)
- Power management for mobile devices using inertial and magnetic event detection
- Shock and vibration monitoring (mechatronic compensation, shipping and warranty usage logging)



RD4247FXOS8700

FXOS8700CQ is a small, low-power 6-axis linear accelerometer and magnetometer combined into a single package. The device features a selectable digital I2C or SPI serial interface with 14-bit accelerometer and 16-bit magnetometer resolution along with smart-embedded functions.

Mfg. Part No.	Sensing Axis	Supply Voltage	Package	Stock No.	Price Each 1-9
FXOS8700CQR1	XYZ	1.95V to 3.6V	16-QFN	47W8598	2.43

EVALUATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
RD4247FXOS8700	6-AXIS ACCERATION SENSOR EVAL BOARD	45W3813	99.00

(208434)

S-TOUCH CAPACITIVE TOUCHKEY CONTROLLER ICs

Features
- Up to 24 highly-sensitive channels
- Automatic channel calibration
- Auto-tuning without external components
- 8 independent PWMs to control up to 16 LEDs
- Ultra-low-power consumption: 50 µA
- 400 kHz I²C interface

S-Touch capacitive touchkey controllers are based on an impedance-change detection engine with an all digital, ultra-low-power capacitance measurement architecture. The high sensitivity of the devices ensures excellent performance, even with a relatively small sensor pad size (0.30 cm²) under a few millimeters of plastic/glass overlay. Touch capacitive touch-key controllers are suitable for a wide range of touchkey sensing applications, such as keypads, rotators or buttons.

Mfg. Part No.	# of Chan.	Supply Voltage Range	Pkg.	Stock No.	Price Each 1-9
STMPE321QTR	3	1.65V to 1.95V	12-QFN	23T0679	1.82
STMPE821QTR	8	2.7V to 3.6V	16-QFN	23T0680	2.41
STMPE1208SQTR	12	3V to 5.5V	40-QFN	23T0678	3.53

(192320)

SIGNAL CONDITIONERS

RoHS Compliant Available

ANALOG DEVICES

THERMOCOUPLE SIGNAL CONDITIONERS
- DIGITAL OUTPUT : 1 OPEN COLLECTOR
- Voltage Output @ +25°C : 0.25 V
- Operating Temperature : 25°C to 100°C

Mfg. Part No.	Accuracy @ +25°C	Voltage Supply (V)	I_Q (µA)	Package	Stock No.	Price Each 1-9
AD594ADZ	± 3	5 to 15	300	14-TO-116	13M6185	30.79
AD595ADZ	± 3	5 to 15	300	14-DIP	13M6186	38.85

STRAIN GAGE SIGNAL CONDITIONERS
- CMMR@ 60Hz(dB) 100 Av=1000
- OUTPUT OFFSET : +/- 0.2 (mV)
- Gain Error : +/-3.0
- Linearity Max (%) : 0.005
- Operating Voltage : 12V to 18V
- Operating Temperature : -40°C to 85°C

Mfg. Part No.	Iq (mA)	Supply Voltage (V)	Supply Current (mA)	BW $A_V = 1$ (Hz)	Gain (V/V) Typ	Output Current (mA)	Package	Stock No.	Price 1-4
1B31AN	10	15	10	1	2 to 5000	100	28-DIP	05F9179	203.92

4-to-20mA TRANSMITTER SIGNAL CONDITIONERS

Mfg. Part No.	Supply Voltage (V)	Supply Current (mA)	Accuracy Max. (%)	Package	Stock No.	Price Each 1-9
AD694ARZ	4.5 to 36	2	± 0.002	16-SOIC	59K4525	11.28
AD694JNZ	4.5 to 36	2	± 0.30	16-PDIP	59K4530	12.25

LVDT SIGNAL CONDITIONERS
- Gain Error +/- 1(%), Gain Drift +/- 100 (ppm) for Mfg. Part Nos AD598JR, AD698APZ and +/- 50 (ppm) for Mfg. Part No. AD598AD
- Excitation Output Voltage : 2.1 to 24 Vrms
- Supply Voltage : 13 to 36 V

CONTINUED

SIGNAL CONDITIONERS (CONT.)

Mfg. Part No.	Transfer Function	Operating Temp. (°C)	Package	Stock No.	Price Each 1-4
● AD598JRZ	VOUT = [(VA –VB)/(VA +VB)]*500mA*R2	0 to 70	20-WSOIC	59K4352	38.50
● AD698APZ	Vout = (Va-Vb)*500uA*R	-40 to 85	28-PLCC	12M8720	31.03

(19245)

SIGNAL CONDITIONING IC FOR OPTICAL PROXIMITY SENSORS

RoHS Compliant Available

AVAGO TECHNOLOGIES

Applications
- PDA and mobile phones
- Portable and Handheld devices
- Personal Computers/Notebooks
- Amusement/Games/Vending Machines
- Industrial Automation
- Contactless Switches
- Sanitary Automation

APDS-9700 is a single chip solution that consists of a LED driver circuit, sunlight cancellation and built-in LED stuck high protection circuit integrated into a single chip. The APDS-9700 device has artificial light immunity and is also operational under the sun. Design flexibility is optimized as APDS-9700 can be paired up with an integrated proximity sensor or discrete pair solution.

Mfg. Part No.	Description	Pkg.	Stock No.	Price Each 1-9
● APDS-9700-020	Signal Conditioning IC	8-QFN	77M9971	3.55

(190222)

LOW POWER, CAPACITIVE BUTTON TOUCH & PROXIMITY CONTROLLERS

RoHS Compliant Available

SEMTECH

Features:
- Proximity Sensing up to several centimetres
- Complete 8 Sensors Capacitive Touch-Button Solution
- Support of buzzer for audible feedback
- Programmable Scanning Period from 15ms to several seconds
- No External Components per Sensor Input
- Internal Clock Requires No External Components
- Differential Sensor Sampling for Reduced EMI

Applications:
- LCD TVs, Monitors
- White Goods
- Notebook/Netbook/Portable/Handheld computers
- Consumer Products, Instrumentation, Automotive
- Mechanical Button Replacement

The **SX8661** & **SX8661** are ultra low power, fully integrated 8-channel solutions for capacitive touch-button and proximity detection applications. Unlike many capacitive touch solutions, the **SX8661** & **SX8661** features dedicated capacitive sense inputs (that requires no external components) in addition to 8 general purpose I/O ports (GPIO).

Mfg. Part No.	Supply Voltage	Interface Type	Package	Stock No.	Price Each 1-24
● SX8660I06AULTRT	2.7V to 3.6V	I2C	28-MLPQ	44T9308	2.29
● SX8661I07AULTRT	2.7V to 3.6V	I2C	28-MLPQ	44T9309	3.44

(196157)

MICRO-POWER CHEMICAL SENSOR AFE

RoHS Compliant Available

TEXAS INSTRUMENTS

Features:
- Single configurable solutions for potentiostat applications
- Programmable cell bias
- Programmable TIA gain
- Integrated temperature sensor for external temp monitoring/correction
- -40 to 85°C temperature range

Gas Sensors/Applications:
- Carbon Monoxide
- Methane
- Hydrogen Sulphide
- Sulphur Dioxide
- Ammonia
- Ozone

Mfg. Part No.	Supply Voltage	Supply Current (mA)	Package	Stock No.	Price Each 1-9
● LMP91000SDE/NOPB	2.7 - 5.25	10	14-QFN	23T0750	6.61

EVALUATION BOARDS:

Mfg. Part No.	Description	Stock No.	Price Each
● SPIO-4/NOPB	Digital Interface Board for LMP90100EB	23T0752	151.98

(192336)

EMBEDDED DESIGN TOOLS

IDEs, Compilers, Debuggers and programming tools for all your MCU/DSP/FPGA needs.

newark.com/dev-tools-software

(196531)

COMPACT PRECISION INERTIAL SENSORS

RoHS Compliant Available

ANALOG DEVICES

ADIS16445AMLZ

Features:
- SPI-compatible serial interface
- Embedded temperature sensor

Applications:
- Platform stabilization and control
- Navigation
- Robotics

The **ADIS16445** iSensor® device is a complete inertial system that includes a triaxial gyroscope and a triaxial accelerometer. Each sensor in the **ADIS16445** combines industry-leading iMEMS® technology with signal conditioning that optimizes dynamic performance. The factory calibration characterizes each sensor for sensitivity, bias, alignment, and linear accel-eration (gyroscope bias). As a result, each sensor has its own dynamic compensation formulas that provide accurate sensor measurements. The **ADIS16445** provides a simple, cost-effective method for integrating accurate, multiaxis inertial sensing into industrial systems, especially when compared with the complexity and investment associated with discrete designs. All necessary motion testing and calibration are part of the production process at the factory, greatly reducing system integration time. Tight orthogonal alignment simplifies inertial frame alignment in navigation systems. The SPI and register structures provide a simple interface for data collection and configuration control.

The **ADIS16448** iSensor® device is a complete inertial system that includes a triaxial gyroscope, a triaxial accelerometer, a triaxial magnetometer, and pressure sensors. Each sensor in the **ADIS16448** combines industry-leading iMEMS® technology with signal conditioning that optimizes dynamic performance. The factory calibration characterizes each sensor for sensitivity, bias, alignment, and linear acceleration (gyroscope bias). As a result, each sensor has its own dynamic compensation formulas that provide accurate sensor measurements. The **ADIS16448** provides a simple, cost-effective method for integrating accurate, multiaxis inertial sensing into industrial systems, especially when compared with the complexity and investment associated with discrete designs.

Mfg. Part No.	No. of Degrees	Supply Voltage	Gyro Range (°/s)	Package	Stock No.	Price Each 1-4
● ADIS16445AMLZ	6	3.15V to 3.45V	± 250	ML-20-3	47W4400	578.02
● ADIS16448AMLZ	10	3.15V to 3.45V	± 1000	ML-20-2	27W3688	671.67

The **ADIS16445/PCBZ** is a "breakout board," which provides (1) **ADIS16445AMLZ**, (1) flexible cable and (1) interface PCB to simplify the process of developing a prototype connection with an existing embedded processor system. It is required for connecting the ADIS16445AMLZ directly to the EVAL-ADIS evaluation system as well.

Mfg. Part No.	Description	Stock No.	Price Each
● ADIS16445/PCBZ	ADIS16445 BREAKOUT BOARD	47W4399	774.30

(209455)

NANOPOWER DIGITAL SWITCHES

RoHS Compliant Available

NVE CORPORATION

Features:
- Precise Detection of Low Magnetic Fields
- Digital Switch Output
- Continuously Operating or Duty-Cycled Versions
- They feature the extremely small 1.1mm X 1.1mm X 0.4mm ULLGA package

ADL-Series sensors are Giant Magnetoresistive (GMR) Digital Switches designed to run at low voltages and extremely low currents. The devices are manufactured with NVE's patented spintronic GMR technology for unmatched miniaturization, sensitivity, precision, and low power.

Mfg. Part No.	Magnetic Operate Point Max. (Oe)	Quiescent Current (µA)	Supply Voltage	Package	Stock No.	Price Each 1-9
● ADL021-14E	25	0.350	2.4V to 3.6V	4-ULLGA	72W1059	2.89
● ADL024-14E	34	0.350	2.4V to 3.6V	4-ULLGA	72W1061	3.11
● ADL921-14E	25	120	2.4V to 3.6V	4-ULLGA	72W1063	2.89
● ADL924-14E	34	120	2.4V to 3.6V	4-ULLGA	72W1065	2.89

NVE's AFL-Series Sensors are digital switches designed to run at very low voltages and currents. The parts can operate from a single battery. The output is configured as a switch to detect magnetic fields, switching on at a specified magnetic field, and off when the field is removed. Current-sinking or current-sourcing output configurations are available.

Mfg. Part No.	Magnetic Operate Point Max. (Oe)	Quiescent Current (µA)	Supply Voltage	Package	Stock No.	Price Each 1-9
● AFL000-10E	13	55	0.9V to 1.3V	6-TDFN	72W1070	8.35

(209480)

AA SERIES ANALOG SENSORS

RoHS Compliant Available

NVE CORPORATION

Features:
- Excellent Sensitivity to Applied Magnetic Fields
- Wheatstone Bridge Analog Output
- Wide Linear Range of Operation
- Near-Zero Voltage Operation
- DC to >1MHz Frequency Response

Applications:
- General Motion, Speed, and Position Sensing
- Low Power, Low Voltage Applications
- Low Field Sensing for Magnetic Media Detection
- Current Sensing

AA-Series sensors use NVE's patented spintronic materials to provide a directionally-sensitive output. These sensors are sensitive in one direction in the plane of the IC, with a cosine-scaled fall-off in sensitivity as the sensor is rotated away from the sensitive direction. These devices provide omnipolar output, that is the same output for magnetic fields in the positive or negative direction along the axis of sensitivity. All sensors use a temperature compensating Wheatstone bridge configuration. The AAH-Series GMR sensors are manufactured with a high sensitivity GMR material, making them ideally suited for any low magnetic field application. They are also extremely temperature tolerant, to 150°C operating temperatures. The AAL-Series GMR sensors are manufactured with a low hysteresis GMR material, for use in magnetometer applications where minimum hysteresis is important. They are also extremely temperature tolerant, to 150°C operating temperatures.

Mfg. Part No.	Saturation Field (Oe)	Linear Max. (Oe)	Sensitivity Max. (mV/V-Oe)	Resistance (Ohms)	Package	Stock No.	Price Each 1-9
● AAH002-02E	6	3	18	2K	8-SOIC	72W1044	13.94
● AAL002-02E	15	10.5	4.2	5.5K	8-SOIC	72W1045	13.03

➤ CONTINUED ➤

AA SERIES ANALOG SENSORS (CONT.)

Mfg. Part No.	Saturation Field (Oe)	Linear Max. (Oe)	Sensitivity Max. (mV/V-Oe)	Resistance (Ohms)	Package	Stock No.	Price Each 1-9
AA002-02E	15	10.5	4.2	5K	8-SOIC	72W1050	10.83
AA003-02E	20	14	3.2	5K	8-SOIC	72W1051	7.45
AA004-02E	50	35	1.3	5K	8-SOIC	72W1052	7.75
AA005-02E	100	70	0.65	5K	8-SOIC	72W1053	7.75

The NVE GMR Engineering Evaluation Kit (**AG001-01E**) was created as an aid to the technical user of GMR sensors to facilitate laboratory experimentation and development. The kit consists of an assortment of NVE sensors, printed circuit boards and permanent magnets sufficient to demonstrate sensor functionality in the laboratory.

EVALUATION KIT

Mfg. Part No.	Description	Stock No.	Price Each
AG001-01E	AA SERIES ANALOG SENSOR EVAL. KIT	72W1072	60.00

(209476)

DIGITAL MAGNETOMETER

RoHS Compliant Available

freescale

Applications:
- Electronic Compass (eCompass)
- Location-Based Services

Features:
- Full-scale range ±1000 µT
- Sensitivity of 0.10 µT
- Noise down to 0.25 µT rms
- One-shot triggered measurement mode to conserve power

RD4247MAG3110

LFSTBEB3110 MAG3110FCR1

The device can be used in conjunction with a 3-axis accelerometer to realize an orientation independent electronic compass that can provide accurate heading information. It features a standard I2C serial interface output and smart embedded functions.

Mfg. Part No.	Description	Supply Current (µA)	Package	Stock No.	Price Each 1-9
MAG3110FCR1	1.62V to 3.6V	900	10-DFN	07W3591	1.08

EVALUATION BOARD

Mfg. Part No.	Description	Stock No.	Price Each
LFSTBEB3110	MAGNETIC SENSOR EVAL. BOARD	45T2339	75.00
RD4247MAG3110	SENSOR TOOLBOX FOR LFSTBUSB USB-INTERFACE BOARD	45T2535	99.00

(207475)

CAPSENSE® CAPACITIVE TOUCH CONTROLLERS

NEW

RoHS Compliant Available

CYPRESS PERFORM

- Ultra low power
- Robust Water Tolerance
- SmartSense Auto-Tuning
- Signal-to-Noise Ratio (SNR) of > 100:1

Mfg. Part No.	Supply Voltage Range (V)	Interface	Package	Stock No.	Price Each 1-24
CY8CMBR3002-SX1I	1.71 - 5.5	I2C	8-SOIC	42X9631	0.77
CY8CMBR3102-SX1I	1.71 - 5.5	I2C	8-SOIC	42X9632	1.10
CY8CMBR3110-SX2I	1.71 - 5.5	I2C	16-SOIC	42X9633	1.65
CY8CMR3106S-LQXI	1.71 - 5.5	I2C	24-QFN	42X9634	1.65
CY8CMR3116-LQXI	1.71 - 5.5	I2C	24-QFN	42X9636	2.09
CY8CMR3108-LQXI	1.71 - 5.5	I2C	16-QFN	42X9635	1.98

(212214)

CAPACITANCE-DIGITAL-CONVERTER IC FOR ELECTROSTATIC CAPACITIVE TOUCH SENSORS

RoHS Compliant Available

ON Semiconductor

Features:
- Detection system: Differential capacitance detection (Mutual capacitance type)
- Input capacitance resolution: Can detect capacitance changes in the femto Farad order
- External components for measurement: Not required
- Detection operations: Switch
- Interface: I²C compatible bus or SPI selectable.

Applications:
- White goods
- Black goods
- PC peripherals

End Products:
- Washing machine
- Refrigerator
- Cooking appliances
- TV
- OA
- Printer

LC717A00ARGEVB

Mfg. Part No.	Supply Voltage	Input Current (µA)	Package	Stock No.	Price Each 1-9
LC717A00AR-NH	2.6V to 5.5V	320	28-QFN	46W0869	3.86

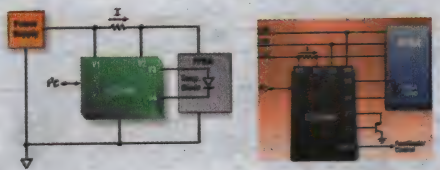
(208439)

LTC2990/LTC2991: QUAD/OCTAL I²C TEMPERATURE, VOLTAGE & CURRENT MONITORS

RoHS Compliant Available

LINEAR TECHNOLOGY

Measures:
- External Temperature
- Internal Temperature
- Single-Ended Voltage
- Differential Voltage
- Rail-to-Rail Current
- Internal VCC



LTC2990CMS#PBF LTC2991CMS#PBF

The **LTC®2990/LTC2991** are temperature, voltage and current monitors for 3V to 5.5V systems that integrate a 14-bit ADC, 10ppm/°C reference and I2C interface to provide sub-millivolt voltage resolution and 1% current measurement, as well as ±1°C accuracy internally and up to ±0.7°C accuracy remotely when making temperature measurements. The **LTC2990/LTC2991** use up to eight single-ended inputs to conveniently measure any combination of parameters simultaneously.

Mfg. Part No.	Supply Voltage	Ext. Temp Accuracy (typ)	Int. Temp Accuracy (typ)	Package	Stock No.	Price Each 1-24
LTC2990CMS#PBF	2.9V to 5.5V	±0.5°C at –40°C to 85°C	±1°C at 0°C to 85°C	10-MSOP	13T3887	4.81
LTC2991CMS#PBF	2.9V to 5.5V	±0.7°C at –40°C to 85°C	±1°C at 25°C	16-MSOP	59T5575	9.61

(208437)

SECONDARY-SIDE OPTOCOUPLER DRIVER

RoHS Compliant Available

LINEAR TECHNOLOGY

Features:
- Overshoot Control Function Prevents Output Overshoot on Start-Up and Short-Circuit Recovery
- High Bandwidth Error Amplifi er Permits Simple Loop
- Frequency Compensation
- Ground-Referenced Opto-Coupler Drive
- 10mA Opto-Coupler Drive with Current Limiting

Applications:
- 48V Input Isolated DC/DC Converters
- Isolated Telecommunication Power Systems
- Distributed Power Step-Down Converters
- Offline Isolated Power Supplies
- Industrial Control Systems
- Automotive and Heavy Equipment

The LT®4430 drives the opto-coupler that crosses the galvanic barrier in an isolated power supply. The IC contains a precision-trimmed reference, a high bandwidth error amplifier, an inverting gain of 6 stage to drive the optocoupler and unique overshoot control circuitry.

Mfg. Part No.	Supply Voltage	Output Current (A)	Package	Stock No.	Price Each
LT4430ES6#PBF	3V to 20V	2.3	6-TSOT-23	78T4110	3.71

(210118)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196538)

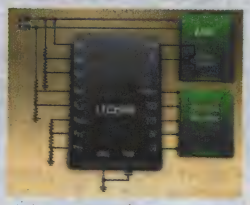
LTC2995/LTC2996/LTC2997: FAST, SMALL & SIMPLE V_{PTAT} MONITORING

RoHS Compliant Available

LINEAR TECHNOLOGY

Features:
- Int Temp Measurement
- Ext Temp Measurement
- Series Resistance Cancellation
- V_{PTAT} Output
- 1.8V Reference Output

LTC2997CDCB#PBF



LTC2995IUD#PBF

The **LTC®2995/LTC2997/LTC2997** are analog temperature monitors for low voltage systems that provide a 3.5ms-updated voltage proportional to absolute temperature (VPTAT) so that systems can quickly react with subdegree accuracy when making internal or external temperature measurements. The full-featured **LTC2995** provides equally impressive high voltage monitoring capabilities for two rails, as well as temperature and voltage alerts, for a truly comprehensive thermal monitoring solution. No code is required to configure these tiny devices.

Mfg. Part No.	Supply Voltage	Ext. Temp Accuracy (typ)	Int. Temp Accuracy (typ)	Package	Stock No.	Price Each 1-24
● LTC2995IUD#PBF	2.25V to 5.5V	±0.25°C at –40°C to 125°C	±0.5°C at 25°C	20-QFN	94T1241	6.02
● LTC2996CDD#PBF	2.25V to 5.5V		±0.25°C at –40°C to 125°C	10-DFN	27W9437	4.18
● LTC2997CDCB#PBF	2.5V to 5.5V	±0.25°C at –40°C to 125°C	±0.25°C at –40°C to 100°C	6-DFN	78T3129	2.07

EVALUATION BOARD

Mfg. Part No.	Description	Stock No.	Price Each
DC1767A	LTC2997 Demo Board	08W0077	25.00

(208438)

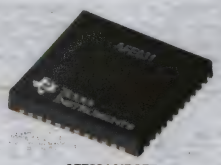
POWERLINE COMMUNICATIONS ANALOG FRONT-END

RoHS Compliant Available

TEXAS INSTRUMENTS

Features:
- Supports FSK, S-FSK, and OFDM
- Supports PRIME, G3, IEC 61334
- Receive Sensitivity: 20 µVRMS, Typical
- Programmable Tx and Rx Gain Control
- Four-Wire Serial Peripheral Interface
- Two Integrated Zero Crossing Detectors
- Two-Wire Transceiver Buffer

Applications:
- eMetering
- Lighting
- Solar
- Pilot Wire



AFE031AIRGZT

The **AFE031AIRGZT** is a low-cost, integrated, powerline communications (PLC) analog front-end (AFE) device that is capable of capacitive- or transformer-coupled connections to the powerline while under the control of a DSP or microcontroller.

Mfg. Part No.	Supply Voltage	Quiescent Current (mA)	Slew Rate (V/µs)	Package	Stock No.	Price Each 1-9
● AFE031AIRGZT	7V to 26V	60.3	19	48-VQFN	91T4739	6.16

(202132)

QUAD CHANNEL TIME MEASUREMENT UNIT

RoHS Compliant Available

TEXAS INSTRUMENTS

Applications:
- Automatic Test Equipment
- Benchtop Time-Measurement Equipment
- Radar and Sonar
- Medical Imaging
- Mass Spectroscopy
- Nuclear/Particle Physics

Features:
- High-Speed LVDS-Compatible Serial-Result Bus per Channel
- Programmable Serial-Result Bus Length
- Temperature Sensor

The **THS788** is a four-channel timing measurement unit (TMU) that incorporates a time-to-digital converter (TDC) architecture for fast and accurate measurements. The TMU is able to provide 8 ps of single-shot accuracy. The TDC has 13 ps resolution (LSB), which is derived from an external master clock of 200 MHz. It uses fast LVDS-compatible interfaces for all of its event inputs and serial result outputs, which allows for fast and reliable data transfer. Each channel can process time stamps at a maximum speed of 200 MSPS

Mfg. Part No.	Supply Voltage	Package	Stock No.	Price Each 1-4
● THS788PFD	3.135V to 3.465V	100-TQFP	48T4624	147.96

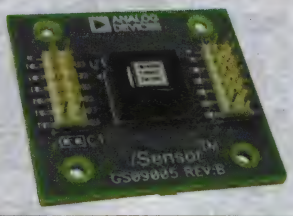
(196588)

INSENSOR™ INCLINOMETER/ ACCELEROMETER EVALUATION BOARD

RoHS Compliant Available

ANALOG DEVICES

The **ADIS1620x/PCB** are simple evaluation boards that provide convenient access to the ADIS1620x family of products, using a standard 2 mm, 2 × 6, connector interface. These connectors can be accessed using a variety of cable options, including standard 1 mm ribbon cables. The ADIS1620x/PCB is designed to be evaluated in an existing digital platform (such as MCU, DSP, FPGA, PLD) or as part of the ADISEVAL system. Four mounting holes (sized for 2-56 or 2 mm screws) have been provided to secure the board during evaluation.



Mfg. Part No.	Description	Stock No.	Price Each
● ADIS16209/PCBZ	ADIS16209, INCLINOMETER, ACCEL, 2 AXIS, EVAL BOARD	77M9918	107.67

(200568)

ADM1062 SUPER SEQUENCER EVALUATION KIT

RoHS Compliant Available

ANALOG DEVICES

Kit Contents:
- EVAL-ADM1062-69CASZ Evaluation Board
- SOCKET-ADM106xTQZ IC Socket
- 8-way, 150 mm Micromatch ribbon cable
- Patch cables

Additional Equipment Needed:
- USB-to-I²C dongle USB-SMBUS-CABLEZ
- 9 V to 14.4 V power supply

Mfg. Part No.	Description	Stock No.	Price Each
● EVAL-ADM1062TQEBZ	ADM1062 Evaluation Board Kit	34M5969	284.63

(203974)

APPLICATION SPECIFIC REFERENCE DESIGN BOARDS

RoHS Compliant Available

ANALOG DEVICES

The **EVAL-CN0196-EB1Z** is an H-bridge composed of high power switching MOSFETs that are controlled by low voltage logic signals. The circuit provides a convenient interface between logic signals and the high power bridge. The bridge uses low cost N-channel power MOSFETs for both the high and low sides of the H-bridge. The circuit also provides galvanic isolation between the control side and power side. This circuit can be used in motor control, power conversion with embedded control interface, lighting, audio amplifiers, and uninterruptable power supplies (UPS).

The **EVAL-CN0216-SDPZ** shows the actual test setup. For testing purposes, a 6-wire Tedea-Huntleigh 505H-0002-F070 load cell is used. Current flowing through a PCB trace produces an IR voltage drop, and with longer traces, this voltage drop can be several millivolts or more, introducing a considerable error. A 1 inch long, 0.005 inch wide trace of 1 oz copper has a resistance of approximately 100 mΩ at room temperature. With a load current of 10 mA, this can introduce a 1 mV error.

Mfg. Part No.	Description	Stock No.	Price Each
● EVAL-CN0196-EB1Z	H-Bridge Driver Circuit Using Isolated Half-Bridge Drivers	73T0173	65.25
● EVAL-CN0216-SDPZ	Precision Weigh Scale Design Using the AD7791 24-Bit Sigma-Delta ADC w/External ADA4528-1 Zero-Drift Amplifiers	73T0175	65.25

(200559)

SYSTEM DEMONSTRATION PLATFORM-SERIAL (SDP-S) CONTROLLER BOARD

RoHS Compliant Available

ANALOG DEVICES

Features:
- USB-to-serial engine
- Peripherals exposed
- SPI
- TWI/I2C
- GPIO
- USB 2.0 PC connectivity
- PC software stack and base firmware provided

The SDP-S is based on a USB to Serial Engine providing connectivity to the PC through a USB 2.0 hight speed port. Controller boards allow for the configuration and capture of data on daughter boards from the PC via USB. The SDP-S has a 120 pin connector which exposes serial interface peripherals to attached SDP compatible daughter boards. The SDP-S has configurable SPI, I2C and GPIOs communication lines. The PC side software application controlling the attached daughter board is provided with each of the daughter product evaluation boards or Circuits from the Lab™ reference circuits.

The SDP-S provides a subset of the capabilities of the SDP-B. The connector pin out used for the SDP-S is the same as the SDP-B but with the unsupported peripherals pins unavailable on the connector. The power and grounding pins are also identical.

EVAL-SDP-CS1Z

Mfg. Part No.	Description	Stock No.	Price Each
● EVAL-SDP-CS1Z	SDP-S EVAL. MODLULE	67T0235	53.29

(200243)

iMEMS ADXL345 INERTIAL SENSOR EVALUATION SYSTEM

RoHS Compliant Available

ANALOG DEVICES

The iMEMS® **ADXL345** inertial sensor evaluation system is an easy-to-use evaluation tool targeting bench or desktop characterization of Analog Devices, Inc., inertial sensor products. The system consists of the inertial sensor evaluation board (ISEB), or main board, and a satellite board for any Analog Devices inertial sensor product. The ISEB connects directly to a PC via its USB, where the USB connection provides both power and communications to the board. The ISEB then connects to the satellite board through a ribbon cable. This cable allows the satellite to be easily manipulated for testing or for being separately placed into an environmental chamber for temperature or humidity testing. Separating the boards mitigates corruption of data due to the temperature and humidity effects of other components.

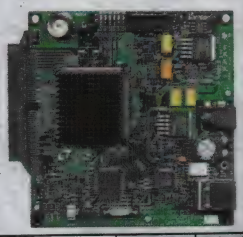
Mfg. Part No.	Description	Stock No.	Price Each
EVAL-ADXL345Z	ADXL345 Eval. System	05R7179	37.50

(200562)

HIGH SPEED USB DATA COLLECTION BOARD

LINEAR TECHNOLOGY

Demonstration circuit **DC890B** along with QuickEval-II™ software provides a USB based Windows PC hosted digital data acquisition system supporting CMOS/LVDS output ADCs up to 250Msps. The **DC890B** must be powered from an external 6±0.5VDC power supply when operating in LVDS mode. When operating in CMOS mode, the external power supply is optional. The Linear Technology supplied QuickEval- II evaluation software automatically detects the **DC890B** and can also detect many of the standard ADC demonstration circuits boards. The **DC890B** will not enable LVDS mode unless an external 6.0VDC power source is available. The QuickEval-II system provides for fast and easy performance evaluation of high speed ADCs.



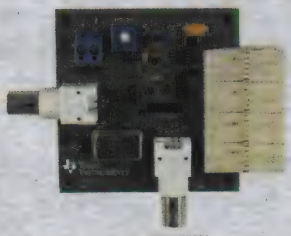
Mfg. Part No.	Description	Stock No.	Price Each
DC890B	250MBPS, CMOS / LVDS, USB DATA COLLECTION BOARD	14R9626	462.00

(200572)

ADC121S101EVAL EVALUATION MODULE

TEXAS INSTRUMENTS

This evaluation board allows you to evaluate product performance in one of two ways. This evaluation board can be operated either in standalone mode with a logic analyzer, or with a personal computer and WaveVision4 hardware and software.



ADC121S101EVAL

Mfg. Part No.	Description	Stock No.	Price Each
ADC121S101EVAL	12-BIT ADC EVAL BOARD	41J4073	151.98

(207490)

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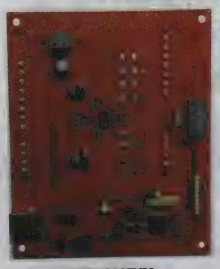
element14.com

(196547)

DRV8818 INTEGRATED MICRO-STEPPING MOTOR DRIVER EVALUATION MODULE

TEXAS INSTRUMENTS

The **DRV8818** evaluation module (EVM) demonstrates the capabilities and performance of the **DRV8818** integrated micro-stepping motor driver from Texas Instruments. This EVM comes with an on-board MSP430 microprocessor which has been pre-programmed for standalone operation. The regulated voltage for the **MSP430** is provided by **TPS77701** single-channel LDO. This EVM operates on power supply voltages from 8 V to 35 V.



DRV8818EVM

Mfg. Part No.	Description	Stock No.	Price Each
DRV8818EVM	Micro-Stepper Motor Evaluation Module	87T0345	101.00

(207488)

SEMICONDUCTOR REPLACEMENT KITS

RoHS Compliant Available

NTE® ELECTRONICS, INC.

- Convenient Selection of Most Popular Devices
- Perfect for Prototyping
- Perfect for Fast Fixing
- Ideal for the Work Bench
- Housed in a 30-Drawer Cabinet
- All Devices Are Sold Separately
- NTE Semiconductor Technical Guide and Cross Reference Included

Mfg. Part No. NTEKCOM1 transistor/diode kit has 30 of the most popular transistors, diodes, rectifiers, and MOSFETs that replace 33,187 devices. Contains 138 pieces total.

Mfg. Part No.	Stock No.	Price 1-9
NTEKCOM1	40C2545	321.83

Mfg. Part No. NTEKCOM2 transistor/diode kit has the next 30 most popular transistors, diodes, rectifiers, and MOSFETs that replace 14,571 devices. Contains 122 pieces total.

NTEKCOM2	40C2546	342.13

NTEKCOM1 KIT CONTENTS

Mfg. Part No.	Description	Package	Qty.	Stock No.	Price Each 1-49
NTE109	Diode, Ge, General Purpose 100 PRV	DO-7	5	21M5148	5.56
NTE116	Diode, Si, 600 PRV, 1.0A	DO-41	10	29C4420	0.92
NTE123AP	Transistor, NPN, Si, Audio Amp, Switch	TO-92	5	06M7367	1.57
NTE125	Diode, Si, 1000 PRV, 2.5A	DO-41	10	06M7368	1.01
NTE156	Rectifier, Si, 1000 PRV, 3A	DO-15	5	06M7373	1.70
NTE159	Transistor, PNP, Si, Low Noise Audio Amp	3-TO-92	10	06M7374	2.01
NTE261	Transistor, NPN, Si, Darlington Power Amp, 80V, 8A,	3-TO-220	5	06M7404	3.02
NTE262	Transistor, PNP, Si, Darlington Power Amp, 80V, 8A,	TO-220	5	06M7405	2.76
NTE263	Transistor, NPN, Si, Darlington Power Amp, 80V, 10A, hFE = 1000	3-TO-220	5	51M8909	3.18
NTE264	Transistor, PNP, Si, Darlington Power Amp, 80V, 10A,	3-TO-220	5	29C5289	3.52
NTE331	Transistor, NPN, Si, Audio Power Amp, Switch	3-TO-220	5	29C4562	4.17
NTE332	Transistor, PNP, Si, Audio Power Amp, Switch	3-TO-220	5	06M7413	4.13
NTE377	Transistor, NPN, Si, TV Power Supply, Driver, Switch	3-TO-220	5	29C5296	2.88
NTE378	Transistor, PNP, Si, TV Power Supply, Driver, Switch	3-TO-220	5	21M5162	3.84
NTE379	Transistor, NPN, Si, Power Amp, High Voltage Switch	3-TO-220	5	06M7414	9.26
NTE392	Transistor, NPN, Si, Power Amp, High Speed Switch	3-TO-218	2	29C5304	5.69
NTE519	Diode, Si, Ultra Fast Switch, 100 PRV	DO-35	5	06M7433	1.41
NTE558	Rectifier, Si, General Purpose, High Voltage, Fast Recovery	DO-41	5	06M7461	2.20

CONTINUED

SEMICONDUCTOR REPLACEMENT KITS (CONT.)

Mfg. Part No.	Description	Package	Qty.	Stock No.	Price Each 1-49
● NTE2302	Transistor, NPN, Si, High Voltage Hor. Output w/Damper Diode	3-T0-3P	5	06M7385	9.25
● NTE2324	Transistor, NPN, Si, High Speed Switch	3-T0-3PML	2	06M7387	11.02
● NTE2331	Transistor, NPN, Si, Color TV Horizontal Deflection w/Damper Diode, tf = 0.1µs Typ.	T0-3PML	5	06M7388	11.21
● NTE2377	MOSFET–N–Ch, Enhancement Mode, High Speed Switch	3-T0-3P	2	06M7395	18.11
● NTE2385	MOSFET–N–Ch, Enhancement Mode, High Speed Switch	T0-220	2	29C4491	8.14
● NTE2389	MOSFET–N–Ch, Enhancement Mode, High Speed Switch	T0-220	2	42M2411	8.52
● NTE2393	MOSFET–N–Ch, Enhancement Mode, High Speed Switch	3-T0-3P	2	06M7397	10.45
● NTE2395	MOSFET–N–Ch, Enhancement Mode, High Speed Switch	T0-220	2	06M7399	5.94

NTEKCOM2 KIT CONTENTS

Mfg. Part No.	Description	Qty.	Package	Stock No.	Price Each 1-99
● NTE129	Transistor, PNP, Si, Audio Output, Video, Driver	3	3-T0-39	06M7369	2.78
● NTE135A	Zener Diode, 5.6V, 1W	6	D0-41	21M5150	0.78
● NTE137A	Zener Diode, 6.2V, 1W	6	D0-41	06M7371	0.78
● NTE145A	Zener Diode, 15V, 1W	6	D0-41	06M7372	0.64
● NTE152	Transistor, NPN, Si, Audio Power Amp, Medium Speed Switch	5	T0-220	29C4445	2.82
● NTE289A	Transistor, NPN, Si, Audio Power Amp, PD = 0.6W	5	T0-92	42M2414	1.81
● NTE290A	Transistor, PNP, Si, Audio Power Amp, PD = 0.6W	5	T0-92	29C4527	1.88
● NTE385	Transistor, NPN, Si, Audio Power Amp, Switch	5	T0-3	06M7415	11.25
● NTE393	Transistor, PNP, Si, Power Amp and High Speed Switch	5	3-T0-218	21M5164	7.34
● NTE396	Transistor, NPN, Si, Power Amp and High Speed Switch	5	3-T0-39	29C5305	3.74
● NTE399	Transistor, NPN, Si, High Voltage Amp, Video	5	3-T0-92	06M7416	4.07
● NTE577	Rectifier, Si, General Purpose, Switch,Fast Recovery, 1000 PRV, 5A, 70ns	5	D0-27	06M7467	4.83
● NTE588	Diode, Si, Switch, Ultra Fast, 200 PRV, 3A, 35ns	5	D0-27	29C4743	2.04
● NTE2310	Transistor, NPN, Si, High Voltage/High Speed Switch, tf = 0.8µs	3	3-T0-218	29C5280	9.66
● NTE2311	Transistor, NPN, Si, High Voltage/High Speed Switch, tf = 0.13µs	3	3-T0-218	29C5281	19.91
● NTE2353	Transistor, NPN, Si, Color TV Horizontal Deflection w/Damper Diode, tf = 0.1µs	3	T0-3PML	06M7392	11.56
● NTE2394	MOSFET–N–Ch, Enhancement Mode, High Speed Switch	3	3-T0-3P	06M7398	14.68
● NTE2397	MOSFET–N–Ch, Enhancement Mode, High Speed Switch	3	T0-220	29C4498	6.57
● NTE2398	MOSFET–N–Ch, Enhancement Mode, High Speed Switch	3	T0-220	29C4499	7.59
● NTE5127A	Zener Diode, 12V, 5W	4	D0-29	10M6197	2.52
● NTE5304	Rectifier, Si, Bridge, 400 PRV, 1.5A	2	T0-5	15M1924	2.04
● NTE5322	Rectifier, Si, Bridge, 200 PRV, 25A	2	...	06M7446	6.88

➤ CONTINUED ➤

SEMICONDUCTOR REPLACEMENT KITS (CONT.)

Mfg. Part No.	Description	Qty.	Package	Stock No.	Price Each 1-99
● NTE5344	Rectifier, Si, Bridge, 1000 PRV, 40A	2	...	06M7454	18.34
● NTE5804	Rectifier, 400 PRV, 3A	3	D0-27	06M7470	1.39

(74715)

POWEREX DEVELOPMENT KITS

POWEREX

Implement fast prototyping and proof of concept for new designs. Kits include unpopulated PCB with gate driver and/or DC to DC converter plus application notes.

IGBT

Mfg. Part No.	Description	For Use With	Output Current	Stock No.	Price Each 1-9
BG2B-F	Universal Dual IGBT Module Gate Driver Board	Dual IGBT Modules: -CM75/100/150/200/300/400DU-12H/F -CM50/75/100/150/200/300DU-24H/F	5A	32H5412	90.45
BG2B-5015	Dual IGBT Gate Development Kit	Dual IGBT Modules to 400A	5A	30M3403	103.97
BG2B-1515	Universal IGBT Gate Drive Prototype Board	NF and A series IGBT modules	5A	30M3401	100.61
BG2B-3015	Universal IGBT Gate Drive Prototype Board	NF and A series IGBT modules	5A	30M3402	103.97
BG2C-3015	Universal IGBT Gate Drive Prototype Board	NFH Series and CM***DUS-12F high frequency IGBT modules	5A	88K1004	88.55
BG2C-5015	Universal IGBT Gate Drive Prototype Board	NFH Series and CM***DUS-12F high frequency IGBT modules	5A	84K7768	111.85
BG2A-NF	NF/A IGBT Development Kit	NF and A series IGBT modules	12A	43J1201	197.42
BG2A-NFH	Universal IGBT Gate Drive Prototype Board	NFH-Series IGBT modules	12A	43J1202	194.27

IPM

Mfg. Part No.	Description	For Use With	Output Current	Stock No.	Price Each 1-9
BP7A-LB	IPM Development Kit	L-Series IPMs rated 200-300A/600V and 100-150A / 1200V	24	23K2952	155.62
BP6A-L	IPM Development Kit	L-Series IPMs rated 450-600A/600V and 200-450A/1200V	24	23K2951	223.55
BP7B-LB	IPM Interface Circuit Reference Design	L-Series six and seven pack IPMs: 50A-300A 600V and 25A-150A 1200V.	...	48M6858	177.29
BP7B-LS	IPM Interface Circuit Reference Design	L-Series six and seven pack IPMs: 50A-300A 600V and 25A-150A 1200V.	...	48M6859	168.64

(84684)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196561)

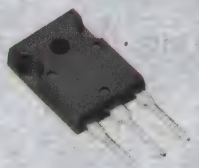
SILICON CARBIDE (SiC) POWER MOSFETS

RoHS Compliant Available

CREE

Features
- N-Channel Enhancement Mode
- Industry Leading $R_{DS(on)}$
- High Speed Switching
- Low Capacitances
- Easy to Parallel
- Simple to Drive

Applications
- Solar Inverters
- High Voltage DC/DC Converters
- Motor Drives



Benefits
- Higher System Efficiency
- Reduced Cooling Requirements
- Avalanche Ruggedness
- Increased System Switching Frequency

Mfg. Part No.	V_{DS} (kV)	I_D (max) (A)	$R_{DS(on)}$ (Ω)	Test Voltage (V)	Pkg.	Stock No.	Price 1-49
CMF10120D	1.2	24	0.16	20	3-TO-247	46T8852	17.91
C2M0080120D	1.2	31.6	0.08	20	3-TO-247	67W3046	17.91
CMF20120D	1.2	33	0.08	20	3-TO-247	25T0989	35.45
C2M0160120D	1.2	17.7	0.16	20	3-TO-247	08X3830	8.89
C2M0025120D	1.2	90	0.025	20	3-TO-247	47X3210	69.63
C2M1000170D	1.7	4.9	0.95	20	3-TO-247	08X1011	5.61

(192344)

SILICON CARBIDE SIX PACK (3-PHASE) MOSFET MODULE

RoHS Compliant Available

CREE

Features:
- Turn-Off Switching Energy=0.6 mJ
- Ultra Low Loss
- Zero Reverse Recovery Current
- Zero Turn-off Tail Current
- High-Frequency Operation
- Positive Temperature Coefficient on VF and VDS(on)
- Cu Baseplate, AlN DBC

Applications:
- Solar Inverters
- UPS and SMPS
- Induction Heating
- Regen Drives
- 3-Phase PFC
- Motor Drives

Cree's six-pack module can reduce power losses by 75 percent, which leads to an immediate 70 percent reduction in the size of the heat sink or a 50 percent increase in power density. When compared to state-of-the-art silicon modules, the SiC 1.2 kV, 50 A modules deliver performance equivalent to silicon modules rated at 150 A.

Mfg. Part No.	V_{DS} (kV)	I_D (max) (A)	$R_{DS(on)}$ (Ω)	Test Voltage (V)	Stock No.	Price Each
CCS050M12CM2	1.2	87	0.025	20	87W6316	431.07

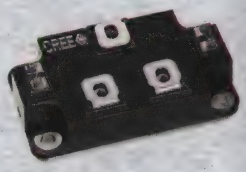
(209962)

SILICON CARBIDE HALF-BRIDGE MOSFET MODULE

RoHS Compliant Available

CREE

Features:
- Ultra Low Loss
- High Ruggedness
- High-Frequency Operation
- Zero Reverse Recovery Current from Diode
- Zero Turn-off Tail Current from MOSFET
- Positive Temperature Coefficient on VF and VDS(on)



Specifications:
- Transistor Polarity: Dual N Channel
- Operating temperature: -55°C to +125°C
- Weight: 200g

Mfg. Part No.	V_{DS} (kV)	I_D (max) (A)	$R_{DS(on)}$ (Ω)	Test Voltage (V)	$V_{GS(th)}$ (V)	Stock No.	Price Each
CAS100H12AM1	1.2	100	24	20	3.1	47W3950	455.17
CAS300M12BM2	1.2	404	0.005	20	2.3	55X2370	558.75

(210081)

DEV KIT HQ™

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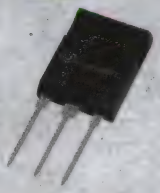
(196525)

SILICON CARBIDE SUPER JUNCTION TRANSISTORS

RoHS Compliant Available

GeneSiC SEMICONDUCTOR



Mfg. Part No.	Continuous Drain Current Id (mA)	Power Diss. (mW)	Pkg.	Stock No.	Price Each 1-24
GA04JT17-247	...	91	TO-247AB	46W2772	35.85
GA08JT17-247	...	16	TO-247AB	46W2773	67.63
GA16JT17-247	...	31	TO-247AB	46W2774	88.44
GA03JT12-247	3	91	TO-247AB	88W4916	8.93
GA05JT12-247	5	57	TO-247AB	08X5865	10.98
GA05JT12-263	5	58	TO-263	08X5866	10.98
GA06JT12-247	6	146	TO-247AB	88W4917	14.64
GA10JT12-247	10	91	TO-247AB	08X5867	17.96
GA10JT12-263	10	94	TO-263	08X5868	17.96
GA10SICP12-247	10	91	TO-247AB	08X5869	41.84
GA20JT12-247	20	5	TO-247AB	08X5872	38.44
GA20JT12-263	20	157	TO-263	08X5873	38.44
GA50JT12-247	50	308	TO-247AB	08X5876	84.33

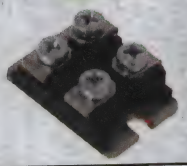
(209637)

SILICON CARBIDE TRANSISTOR/ SCHOTTKY DIODE CO-PACK

RoHS Compliant Available

GeneSiC SEMICONDUCTOR

NEW



Mfg. Part No.	Continuous Drain Current Id (mA)	Power Diss. (mW)	Pkg.	Stock No.	Price Each 1-24
GA20SICP12-263	20	157	TO-263	08X5874	61.78
GA50SICP12-227	50	67	SOT-227	08X5878	94.38
GA100SICP12-227	100	133	TO-227	08X5871	188.76

(211439)

NORMALLY-OFF SILICON CARBIDE TRANSISTORS

NEW

RoHS Compliant Available

GeneSiC SEMICONDUCTOR

Mfg. Part No.	Power Diss. (mW)	Continuous Drain Current Id (A)	Drain Source Voltage Vds (V)	Pkg.	Stock No.	Price Each
2N7635-GA	7	4	650	3-TO-257	46W5839	213.84
2N7636-GA	7	4	650	3-TO-276	46W5840	208.56
2N7637-GA	8	7	650	3-TO-257	46W5841	245.52
2N7638-GA	11	8	650	3-TO-276	46W5842	242.77
2N7639-GA	22	15	650	3-TO-257	46W5843	279.84
2N7640-GA	27	16	650	3-TO-276	46W5844	274.56

(211440)

POWER TRENCH MOSFETS N AND DUAL N CHANNEL

RoHS Compliant Available

FAIRCHILD

Applications include power management, load switch and battery protection.

N-CHANNEL

Mfg. Part No.	V_{DS} (V)	I_D (A)	$R_{DS(on)}$ Max. (mΩ)	P_D (W)	Pkg.	Tape Cut Stock No.	Tape Cut Price Each 1-9
FDG6335N	20	0.7	300	0.3	SC-70	58K1457	0.61
FDV305N	20	0.9	220	0.35	SOT-23	82C2601	0.61
FDN335N	20	1.7	70†	0.5	SuperSOT	58K1462	0.45
FDN327N	20	2	70	0.5	SuperSOT	82C2523	0.48
FDN339AN	20	3	35†	0.5	SuperSOT	34C0138	0.61

CONTINUED

POWER TRENCH MOSFETS N AND DUAL N CHANNEL (CONT.)

Mfg. Part No.	V_{DS} (V)	I_D (A)	$R_{DS(ON)}$ Max. (mΩ)	P_D (W)	Pkg.	Tape Cut Stock No.	Price Each 1-9
● FDC6401N	20	3	70	0.96	SuperSOT	82C2449	0.53
● FDS6892A	20	7.5	18	2	SOIC	82C2569	0.73
● FDS6911	20	8	13	12	SOIC	67P3488	1.22
● NDS8425	20	7.4	22†	2.5	SOIC	34C1620	1.06
● FDS6898AZ	20	9.4	14	2	SOIC	82C2574	1.30
● FDS6570A	20	15	7.5†	2.5	SOIC	78K5936	1.45
● FDG315N	30	2	120*	0.75	SC-70	58K1445	0.50
● FDN359AN	30	2.7	46*	0.5	SuperSOT	38C7142	0.74
● FDT457N	30	5	60	3	SOT-223	38C7189	0.70
● FDS6910	30	7.5	13	1.6	SOIC	97J6790	1.22
● FDS6982AS	30	8.6	13.5	2	SOIC	64K0982	0.94
● FDMC7692S	30	12.5	7.8	2.3	MLP	94T2668	0.68
● FDP8870	30	35	4.1	160	TO-220AB	60J0601	1.43
● FDD6670A	30	66	8*	70	TO-252	58K1437	1.34
● FDS4470	40	12.5	9†	2.5	SOIC	78K5930	1.69
● FDN5630	60	1.7	100†	0.5	SuperSOT	58K8845	0.58
● FDC5612	60	4.3	55*	1.6	SuperSOT	58K1414	0.94
● FDS5680	60	8	20*	2.5	SOIC	38C7160	1.73
● FDS5670	60	10	14*	2.5	SOIC	78K5934	1.76
● FDD5612	60	18	55	42	TO-252	34C0119	0.96
● FDD10AN06A0	60	50	10.5	135	TO-252AA	58K8830	1.79
● FDB13AN06A0	60	62	13.5	115	TO-263AB	50H4190	1.54
● FDB035AN06A0	60	80	3.2	310	TO-263AB	26H3004	4.27
● FDB070AN06A0	60	80	7	175	TO-263AB	60J0576	1.80
● FDB045AN08A0	75	80	4.5	310	TO-263AB	28H9655	3.53
● FDH038AN08A1	75	80	3.8	450	TO-247	84H4564	5.71
● FDC3512	80	3	77	1.6	SuperSOT	82C2440	0.75
● FDS3572	80	9	16	2.5	SOIC	09J6252	1.65
● FDC3601N	100	1	500	0.96	SuperSOT	82C2441	0.59
● FDC3612	100	2.6	125	1.6	SuperSOT	34C0106	0.71
● FDS3992	100	4.5	123	2.5	SOIC	28H9712	1.69
● FDD3682	100	32	36	95	TO-252AA	28H9670	1.15
● FDB3652	100	41	16	150	TO-263AB	28H9662	1.74
● FDP3632	100	80	9	310	TO-220AB	28H9699	2.96
● FDH3632	100	80	9	310	TO-247	60J0597	4.99
● FDB3632	100	80	9	310	TO-263AB	28H9661	3.22
● FDP036N10A	100	214	3.2	333	TO-220AB	92R5577	4.46
● FDC2512	150	1.4	425	1.6	SuperSOT	82C2438	0.81
● FDS2582	150	4.5	66	2.5	SOIC	28H9709	1.71
● FDD120AN15A0	150	14	120	65	TO-252AA	28H9668	0.96
● FDB2552	150	16	36	150	TO-263AB	28H9659	1.73
● FDD2572	150	29	54	135	TO-252AA	26H2761	1.65
● FDB2532	150	79	16	310	TO-263AB	28H9658	3.06

DUAL N-CHANNEL

Mfg. Part No.	V_{DS} (V) Q1	V_{DS} (V) Q2	I_D (A) Q1	I_D (A) Q2	$R_{DS(ON)}$ Max. @ V_{GS} = 10V (mΩ) Q1	$R_{DS(ON)}$ Max. @ V_{GS} = 10V (mΩ) Q2	P_D (W)	Pkg.	Tape Cut Stock No.	Price Each 1-9
● FDC6305N	20	20	2.7	2.7	0.08	0.08	0.96	SuperSOT	58K1417	0.51
● FDC6561AN	30	30	2.5	2.5	0.095	0.095	1.6	SuperSOT	58K8828	0.67
● FDS6912	30	30	6	6	0.028	0.028	2	SOIC	67K0212	1.22
● FDML7610S	30	30	30	28	7.5	4.2	2.2	MLP	58T5422	1.25
● FDMS7602S	30	30	30	30	7.5	5	2.5	Power 56	58T5427	2.31

* R_{DS} @ V_{GS} = 10V; † R_{DS} @ V_{GS} = 4.5V
(164090)

POWER TRENCH MOSFETS P-CHANNEL, DUAL P, AND COMPLEMENTARY

RoHS Compliant Available

FAIRCHILD

Applications include power management, load switch and battery protection.

P-CHANNEL

Mfg. Part No.	V_{DS} (V)	I_D (A)	$R_{DS(ON)}$ Max. (Ω)	Rds(on) Test Voltage (V)	P_D (W)	Package	Tape Cut Stock No.	Price Each 1-9
● FDG6316P	-12	0.7	270	-4.5	0.3	6-SC-70	58K1452	0.50
● FDC606P	-12	-6	26	-4.5	1.6	SuperSOT-6	82C2442	0.63
● FDC604P	-20	-5.5	33	-4.5	1.6	SuperSOT-6	34C0109	0.41
● FDC5614P	-20	-3	105	-10	1.6	SuperSOT-6	34C0107	0.63
● FDG312P	-20	1.2	180	-4.5	0.75	SC70-6	58K1442	0.44
● FDN304P	-20	2.4	52	-4.5	0.5	SuperSOT-3	58K8839	0.63
● FDT434P	-20	6	50	-4.5	3	3-SOT-223	38C7187	0.70
● FDS4465	-20	13.5	8.5	-4.5	2.5	8-SOIC	34C0164	1.23
● FDS6375	-20	8	24	-4.5	2.5	8-SOIC	78K5935	0.77

➤CONTINUED➤

POWER TRENCH MOSFETS P-CHANNEL, DUAL P, AND COMPLEMENTARY (CONT.)

Mfg. Part No.	V_{DS} (V)	I_D (A)	$R_{DS(ON)}$ Max. (Ω)	Rds(on) Test Voltage (V)	P_D (W)	Package	Tape Cut Stock No.	Price Each 1-9
● FDS6576	-20	11	14	-4.5	2.5	8-SOIC	34C0170	0.97
● FDS9431A	-20	-3.5	130	-4.5	2.5	8-SOIC	38C7184	0.76
● FDZ197PZ	-20	-3.8	46	-4.5	1.9	6-WL-CSP	79R1473	0.74
● FDN352AP	-30	-1.3	180	-10	0.5	3-SuperSOT	64K0974	0.42
● FDS4435A	-30	9	17	-10	2.5	8-SOIC	78K5929	0.88
● FDD6685	-30	40	20	-10	52	TO-252	60J0586	1.05
● SI4435DY	-30	8.8	20	-10	2.5	TO-252	38C8609	1.00
● FDS6679	-30	13	9	-10	2.5	8-SOIC	78K5942	1.66
● FDS6681Z	-30	-20	4.6	-10	2.5	8-SOIC	86K1388	1.86
● FDS9435A	-30	5.3	50	-10	2.5	8-SOIC	38C7185	0.66
● FDN5618P	-60	1.2	170	-10	0.5	SuperSOT-3	58K8844	0.53
● FDD5614P	-60	-15	100	-10	6	TO-252	82C2455	0.69
DUAL P-CHANNEL								
● FDC6318P	-12	2.5	90	-4.5	0.96	SuperSOT-6	82C2445	0.67
● FDS9933A	-20	3.8	75	-4.5	2	8-SOIC	38C7186	0.93
● FDC6312P	-20	2.3	115	-4.5	0.96	SuperSOT-6	58K8820	0.57
● FDMA6023PZT	-20	-3.6	60	-4.5	1.4	6-MicroFET (2x2)	73R3647	0.63
● FDS4935A	-30	7	23	-10	1.6	8-SOIC	28H9721	1.07
● NDS9948	-60	2.3	250	-10	2	8-SOIC	34C1632	1.02
COMPLEMENTARY								
● FDG6332C	20	0.7	300	4.5	0.3	SC70-6	82C2485	0.53
● FDS9934C	20	6.5	30	4.5	2	8-SOIC	60J0609	0.93
● FDS4559	60	4.5	55	10	2	8-SOIC	34C0166	0.92

(164091)

LOGIC LEVEL MOSFETs

RoHS Compliant Available

FAIRCHILD

Applications include DC-to-DC converters, motor drivers and load switches.

N-CHANNEL

Mfg. Part No.	V_{DS} (V)	I_D (A)	$R_{DS(ON)}$ Max. @ V_{GS} = 10V (Ω)	P_D (W)	Package	Tape Cut Stock No.	Price Each 1-9
● FDS6612A	30	8.4	0.022	2.5	SOIC-8	78K5938	0.77
● FDS6630A	30	6.5	0.038	2.5	SOIC-8	78K5939	0.62
● FDS6670A	30	13	0.008	2.5	SOIC-8	78K5940	1.35
● FDS6680A	30	13	0.0095	2.5	SOIC-8	78K5944	0.98
● FDS6690A	30	11	0.0125	2.5	SOIC-8	58K8855	0.87
● FDP7030BL*	30	60	0.009	60	SOIC-8	38C7149	1.20
DUAL N-CHANNEL							
● FDS6990A	30	7.5	0.018	2	SOIC-8	38C7180	1.12
● FDS6912A	30	6	0.028	2	SOIC-8	38C7175	0.79
● FDS6930B	30	5.5	0.038	2	SOIC-8	67P3489	0.81
● FDS6961A	30	3.5	0.09	2	SOIC-8	72K8459	0.70
● FDC658P	30	3.5	0.09	2	SOIC-8	58K8829	0.64
● FDC5614P	30	3.5	0.09	2	SOIC-8	34C0107	0.63
P-CHANNEL							
● FDC658P	-30	4	0.05	1.6	SuperSOT-6	58K8829	0.64
● FDC5614P	-60	3	0.105	1.6	SuperSOT-6	34C0107	0.63
DUAL P-CHANNEL							
● FDC6506P	-30	1.8	0.17	0.96	SuperSOT-6	58K8826	0.69

* = Sold as EA
(74304)

SINGLE QFETS

RoHS Compliant Available

FAIRCHILD

These devices are well suited for low-voltage applications such as high-efficiency switching DC-to-DC converters and DC motor control.

N-CHANNEL

Mfg. Part No.	V_{DS} (V)	$R_{DS(on)}$ Max. @ V_{GS} = 10V	I_D (A)	P_D (W)	Pkg.	Stock No.	Price Each 1-9
● FQP50N06L	60	0.021	52	121	TO-220	38C7278	1.67
● FQP50N06	60	0.022	50	120	TO-220	58K1528	1.61
● FQP44N10	100	0.039	43.5	146	TO-220	58K1527	1.46
● FQA28N15	150	0.09	33	227	TO-3P	58K8866	1.83
● FQP46N15	150	33	45.6	210	TO-220	34C0497	2.07
● FQP34N20	200	0.075	34	210	TO-3P	58K1525	1.75
● FQA62N25C	250	0.035	62	298	TO-3P	60J0786	4.90
● FQP27N25	250	0.11	25.5	180	TO-220	58K8869	2.04
● FQA30N40	400	0.14	30	290	TO-3P	58K1514	5.34
● FQP17N40	400	0.27	16	170	TO-220	58K1521	2.24

➤CONTINUED➤

SINGLE QFETS (CONT.)

Mfg. Part No.	V_{DS} (V)	$R_{DS(on)}$ Max. @ V_{GS} = 10V	I_D (A)	P_D (W)	Pkg.	Stock No.	Price Each 1-9
FQP5N60C	600	2.5	4.5	100	TO-220	84H4779	1.14
FQP9N90C	900	1.4	8	205	TO-220	60J0874	2.68
P-CHANNEL							
FQA36P15	-150	0.09	-36	294	TO-3P	45J3232	3.06
FQP17P10	-100	0.14	-16.5	100	TO-220	58K1523	1.20
FQB27P06TM*	-60	0.07	-27	120	D2-PAK	58K1517	1.33
FQB47P06TM_AM002*	-60	0.026	-47	160	D2-PAK	84H4746	2.13
FQP17P06	-60	0.12	-17	79	TO-220	58K1522	1.00
FQP47P06	-60	0.026	47	160	TO-220	34C0498	2.39

* = Tape Cut
(74307)

ULTRAFET POWER MOSFETS

RoHS Compliant Available

FAIRCHILD

Single N-channel configuration with 3 leads. Applications include switching regulators, switching converters, motor drivers, relay drivers, and drivers for high-power bipolar switching transistors.

Mfg. Part No.	Polarity	V_{DS} (V)	I_D (A)	$R_{DS(on)}$ Max. @ 10V (Ω)	P_D (W)	Stock No.	Price Each 1-9
TO-220							
HUF75321P3	N Channel	55	35	0.034	93	58K1601	0.83
HUF75339P3	N Channel	55	75	0.012	200	58K1606	1.64
HUF75345P3	N Channel	55	75	0.007	325	83F5505	2.51
HUF75542P3	N Channel	80	75	0.014	230	58K1609	2.04
HUF75545P3	N Channel	80	75	0.01	270	58K1610	2.46
FDP3682	N Channel	100	32	0.036	95	28H9701	1.28
HUF75645P3	N Channel	100	75	0.014	310	58K1614	3.08
FDP2532	N Channel	150	33	0.016	310	58K8846	3.24
TO-247							
HUF75345G3	N Channel	55	75	0.007	325	83F5504	3.16
HUF75652G3	N Channel	100	75	0.008	515	58K1615	6.98
HUF75639G3	N Channel	100	56	0.025	200	58K1611	2.28
FDH44N50	N Channel	500	44	0.12	625	58K1460	9.71
TO-252 (DPAK) AND TO-251 (1PAK)							
RFD14N05LSM	N Channel	50	14	100	48	58K2119	0.85
HUF75329D3ST	N Channel	55	20	22	128	81R3933	1.18

(70777)

UniFET™ MOSFETs

RoHS Compliant Available

FAIRCHILD

These N-Channel enhancement mode power field effect transistors are produced using Fairchild's proprietary, planar stripe, DMOS technology. This advanced technology has been especially tailored to minimize on-state resistance, provide superior switching performance, and withstand high energy pulse in the avalanche and commutation mode. These devices are well suited for high efficient switching mode power supplies and active power factor correction.

N CHANNEL

Mfg. Part No.	V_{DS} (V)	I_D (A)	$R_{ds(on)}$ @ 10V (ohm)	P_D (W)	Pkg.	Stock No.	Price Each 1-9
FDA38N30	300	38	0.07	312	3-TO-3	92R5517	3.85
FDPF5N50NZF	500	4.2	1.57	30	3-TO-220F	92R5572	1.47
FDPF8N50NZU.	500	6.5	1	40	3-TO-220F	92R5576	1.71
FDPF8N50NZ.	500	8	0.77	40.3	3-TO-220F	92R5574	1.35
FDPF8N60ZUT	600	6.5	1.15	34.5	3-TO-220F	64R3044	1.68
FDPF12N60NZ	600	12	0.53	39	3-TO-220F	92R5570	2.28

(194791)

ENHANCEMENT MODE FETs

RoHS Compliant Available

FAIRCHILD

Applications include notebook computer power management, switching regulators, switching converters, motor drivers and relay drivers.

SINGLE N-CHANNEL

Mfg. Part No.	V_{DS} (V)	I_D (A)	$R_{ds(on)}$ (Ω)	$R_{ds(on)}$ Test Voltage, (V)	P_D (W)	Pkg.	Tape Cut Stock No.	Tape Cut Price Each 1-9
NDS331N	20	1.3	210	2.7	0.5	SuperSOT	58K2016	0.54
FDV303N	25	0.68	450	4.5	0.35	SOT-23	58K8857	0.40
NDS351AN	30	1.2	250	10	0.5	SuperSOT	58K9481	0.57
NDS355AN	30	1.7	125	10	0.5	SuperSOT	58K2018	0.46
FDN357N	30	1.9	90	4.5	0.5	SuperSOT	58K8842	0.58
FDN337N	30	2.2	65	4.5	0.5	SuperSOT	58K1464	0.48
FDT439N	30	6.3	72	4.5	3	SOT-223	38C7188	0.85

CONTINUED

ENHANCEMENT MODE FETs (CONT.)

Mfg. Part No.	V_{DS} (V)	I_D (A)	$R_{ds(on)}$ (Ω)	$R_{ds(on)}$ Test Voltage, (V)	P_D (W)	Pkg.	Tape Cut Stock No.	Tape Cut Price Each 1-9
BSS138	50	0.22	3.5	10	0.36	SOT-23	58K8769	0.22
2N7002	60	0.115	7.5	10	0.2	SOT-23	58K9651	0.24
2N7002DW	60	0.115	7.5	5	0.2	SOT-363	05R0387	0.54
2N7002MTF	60	0.2	7.5	10	0.2	SOT-23	34C2015	0.33
2N7000_D26Z	60	0.2	5	10	0.4	TO-92	78K6147	0.41
2N7000*	60	0.2	5	10	0.4	TO-92	58K9650	0.39
NDS7002A	60	0.28	2	10	0.3	SOT-23	58K9482	0.44
MMBF170	60	0.5	5	10	0.3	SOT-23	58K9427	0.45
BS170	60	0.5	5	10	0.83	TO-92	58K8772	0.42
NDT014L	60	2.8	160	10	3	SOT-223	34C1635	0.49
NDT3055	60	4	100	10	3	SOT-223	58K2021	0.70
NDT3055L	60	4	100	10	3	SOT-223	72K9001	0.70
MTD3055VL	60	12	0.18	5	48	TO-252	63K5835	1.29
NDB6060L	60	48	0.025	5	100	TO-263AB	58K9470	2.09
RFP50N06*	60	50	0.022	10	131	TO-220AB	58K9518	1.57
RFP70N06*	60	70	0.014	10	150	TO-220AB	58K2128	1.81
NDP7060*	60	75	13	10	150	TO-220	34C1614	3.41
BSS123	100	0.17	6	10	0.36	SOT-23	58K8768	0.25
RFP12N10L*	100	12	200	5	60	TO-220AB	58K9511	0.93
IRF530A*	100	14	110	100	55	TO-220	58K1735	1.08
SINGLE P-CHANNEL								
NDS332P	-20	-1	300	-4.5	0.5	SuperSOT	58K9478	0.55
FDN336P	-20	-1.2	270	-4.5	0.5	SuperSOT	58K1463	0.45
FDN338P	-20	-1.6	130	-4.5	0.5	SuperSOT	58K8840	0.59
FDN340P	-20	-2	110	-4.5	0.5	SuperSOT	58K8841	0.46
FDN342P	-20	-2	130	-4.5	0.5	SuperSOT	58K1465	0.45
FDC634P	-20	-3.5	80	-4.5	1.6	SuperSOT	58K8824	0.43
NDB6020P	-20	-24	0.05	-4.5	60	TO-263AB	58K2006	1.40
NDP6020P*	-20	-24	50	-4.5	60	TO-220	58K9475	1.75
FDV304P	-25	-0.46	1.1	-4.5	0.35	SOT-23	58K1480	0.40
NDS352AP	-30	-0.9	500	-10	0.5	SuperSOT	58K2017	0.62
NDS356AP	-30	-1.1	300	-10	0.5	SuperSOT	58K2019	0.55
FDN358P	-30	-1.5	200	-10	0.5	SuperSOT	58K8843	0.43
FDN360P	-30	-2	80	-10	0.5	SuperSOT	58K1466	0.59
NDT452AP	-30	-5	65	-10	3	SOT-223	58K2023	1.04
FDS9435A	-30	-5.3	50	-10	2.5	SOIC	38C7185	0.66
NDT454P	-30	-5.9	50	-10	3	SOT-223	58K9484	1.57
NDT456P	-30	-7.5	30	-10	3	SOT-223	58K9485	1.82
BSS84	-50	-0.13	1.2	-5	0.36	SOT-23	58K8770	0.23
NDS0610	-60	-0.12	10	-10	0.36	SOT-23	58K2015	0.51
NDS0605	-60	-0.18	5	-10	0.36	SOT-23	58K9477	0.52
NDT2955	-60	-2.5	300	-10	3	SOT-223	58K9483	0.65
NDS9407	-60	-3	150	-10	2.5	SOIC	78K6109	1.00
DUAL N-CHANNEL								
FDC6561AN	30	6.3	95	10	1.6	SuperSOT	58K8828	0.67
NDC7002N	50	0.51	2	10	0.9	SuperSOT	58K9474	0.55
NDS9945	60	3.5	100	10	1.6	SOIC	03H3057	1.22
DUAL P-CHANNEL								
NDC7003P	-60	-0.34	5	-10	0.96	SuperSOT	58K2009	0.69

COMPLEMENTARY

Mfg. Part No.	Channel	V_{DS} (V)	$R_{DS(on)}$ Max. @ V_{GS} = 10V	$R_{DS(on)}$ Max. @ V_{GS} = 4.5V	I_D (A)	P_D (W)	Package	Tape Cut Stock No.	Tape Cut Price Each 1-9
FDS8928A	N	30	...	0.03	5.5	2	SOIC-8	38C7181	1.26
	P	-20	...	0.055	4				
FDS8958A	N	30	0.028	0.04	7	2	SOIC-8	34C0185	0.85
	P	-30	0.052	0.08	5				
NDS9952A	N	30	0.08	...	3.7	2	SOIC-8	38C7632	1.01
	P	-30	0.13	...	2.9				
NDC7001C	N	60	2	4	0.51	0.96	SuperSOT-6	58K9473	0.67
	P	-60	5	7.5	0.34				

*= Sold as EA
(74305)

EMBEDDED DESIGN TOOLS

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(196530)

SupreMOS® MOSFET TRANSISTORS

RoHS Compliant Available

FAIRCHILD

The **SupreMOS** MOSFET, Fairchild's next generation of high voltage super- junction MOSFETs, employs a deep trench filling process that differentiates it from preceding multi-epi based technologies. By utilizing this advanced technology and precise process control, SupreMOS provides world class Rsp, superior switching performance and ruggedness. This SupreMOS MOSFET fits the industry's AC-DC SMPS requirements for PFC, server/telecom power, FPD TV power, ATX power, and industrial power applications.

Mfg. Part No.	Drain Source Voltage (V)	Continuous Drain Current (A)	On Resistance, $R_{DS(ON)}$ (ohm)	$R_{DS(ON)}$ Test Voltage (V)	Package	Stock No.	Price Each 1-9
● FCA16N60N	600	16	170	10	3-TO-3PN	64R2975	5.32
● FCP16N60N	600	16	170	10	3-TO-220	64R2987	4.29
● FCA22N60N	600	22	140	10	3-TO-3PN	64R2976	6.08
● FCPF22N60NT	600	22	140	10	3-TO-220F	64R2983	6.98
● FCP22N60N	600	22	140	10	3-TO-220	64R2988	5.52

(177573)

N-CHANNEL POWER MOSFET TRANSISTORS

RoHS Compliant Available

International IOR Rectifier

* Sold as EA

SINGLE N-CHANNEL

Mfg. Part No.	V_{DS} (V)	I_D	Rds(on) @V_{GS} =10V (Ohms)	Pkg.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● IRFH6200TRPBF	20	100A	0.0012	PQFN	84R9703	2.21
● IRF6710S2TRPBF	25	12mA	0.0045	DirectFET S1	25R3339	2.36
● IRF8707GPBF*	30	11mA	0.119	SOIC	25R3344	1.02
● IRF8714GPBF*	30	14mA	0.087	SOIC	25R3345	1.07
● IRFH7921TRPBF	30	15mA	0.0071	PQFN	25R3332	1.49
● IRFH7932TRPBF	30	24A	0.033	PQFN	25R3333	1.77
● IRF3709STRLPBF	30	90A	0.009	TO-263	73R1189	2.65
● IRLB8748PBF*	30	92A	0.48	TO-220	10R3515	1.36
● IRLB3813PBF*	30	260A	0.195	TO-220	25R3352	2.57
● IRFH7440TRPBF	40	85A	0.0018	PQFN	47W3262	1.85
● IRFH7446TRPBF	40	85A	0.0025	PQFN	47W3264	1.51
● IRFR7440PBF*	40	90A	0.0019	TO-252	47W3266	1.95
● IRFR7440TRPBF	40	90A	0.0019	TO-252	47W3267	1.95
● IRFU7440PBF*	40	90A	0.0019	TO-251	47W3276	1.95
● IRFS7440PBF*	40	120A	0.002	TO-263	47W3274	2.06
● IRFS7440TRLPBF	40	120A	0.002	TO-263	47W3275	2.06
● IRFSL7440PBF*	40	120A	0.002	TO-262	47W3269	2.06
● IRLR3114ZTRPBF	40	130A	0.0049	TO-252	25R3355	2.30
● IRFS7437-7PPBF*	40	195A	0.0011	TO-263	47W3270	3.14
● IRFS7437PBF*	40	195A	0.0014	TO-263	47W3271	2.37
● IRFS7437TRL7PP	40	195A	0.0011	TO-263	47W3273	3.14
● IRFS7437TRLPBF	40	195A	0.0014	TO-263	47W3272	2.43
● IRFSL7437PBF*	40	195A	0.0014	TO-262	47W3268	2.37
● IRLR2705TRLPBF	55	28A	0.04	TO-252	73R1199	1.27
● IRL3705NSTRLPBF	55	89A	0.01	TO-263	73R1201	3.03
● IRFR3806TRPBF	60	43mA	0.126	TO-252	25R3337	1.40
● IRLML2060TRPBF	60	1.2A	0.48	SOT-23	65R4984	0.42
● IRFB3006GPBF*	60	270A	0.021	TO-220	25R3330	4.78
● IRFR3607TRPBF	75	56A	0.00734	TO-252	25R3336	1.92
● IRF8010STRLPBF	100	80A	0.012	TO-263	73R1196	3.31
● IRF7465TRPBF	150	1.9A	0.28	SOIC	73R1195	1.16
● IRF7820PBF*	200	3.7A	0.0625	SOIC	47W3277	1.79
● IRF7820TRPBF	200	3.7A	0.0625	SOIC	47W3278	1.89
● IRFP4137PBF*	300	38A	0.056	TO-247AC	48W4838	6.32
● IRFB4137PBF*	300	38A	0.056	TO-220	48W4837	5.99
● IRFP4868PBF*	300	70A	0.0255	TO-247AC	48W4839	9.79
DUAL N-CHANNEL						
● IRF7380TRPBF	80	3.6A	0.061	SOIC	73R1193	1.36

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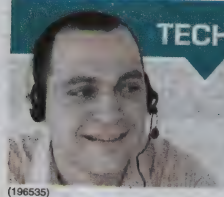

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Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

P-CHANNEL POWER MOSFET TRANSISTORS

RoHS Compliant Available

International IOR Rectifier

Mfg. Part No.	V_{DS} (V)	Rds(on) (Ohm)	V_{GS} @ Rds(on) (V)	Pkg.	Stock No.	Price Each 1-9
● IRLML6302TRPBF*	-20	0.6	-4.5	SOT-23	63J7614	0.53
● IRF7425TRPBF*	-20	0.0082	-4.5	SOIC	73R1194	1.82
● IRF9383MTRPBF*	-30	0.0023	-10	DirectFET MX	48W2107	2.62
● IRF5210PBF	-100	0.06	-10	TO-220AB	63J7311	3.07
● IRFI9540GPBF	-100	0.2	-10	TO-220FP	63J6786	4.20
● IRF9520PBF	-100	0.6	-10	TO-220	63J7428	2.00
● IRF9540NSPBF	-100	0.117	-10	TO-263	73K3366	2.51
● IRFP9140NPBF	-100	0.117	-10	TO-247AC	63J6897	2.36
● IRFR5410PBF	-100	0.205	-10	TO-252	63J6991	1.52
● IRFR9120NPBF	-100	0.48	-10	TO-252	63J7008	1.48
● IRF9530NPBF	-100	0.2	-10	TO-220AB	63J7429	2.13
● IRF9540NPBF	-100	0.117	-10	TO-220AB	63J7431	2.12
● IRFP9140PBF	-100	0.2	-10	TO-247	19K8174	4.83
● IRF9520NSPBF	-100	0.48	-10	TO-263	41K2385	2.18
● IRF9530NSPBF	-100	0.2	-10	TO-263	41K2387	2.39
● IRF5210SPBF	-100	0.06	-10	TO-263	73K8260	3.50
● IRF5210LPBF	-100	0.06	-10	TO-262	73K8259	3.56
● IRF5210STRLPBF	-100	0.06	-10	TO-263	40M7918	3.44
● IRFR5410TRPBF*	-100	0.205	-10	TO-252	40M7904	1.59
● IRFR9120NTRPBF*	-100	0.48	-10	TO-252	40M7907	1.56
● IRF6216TRPBF*	-150	0.24	-10	SOIC	73R1190	1.65
● IRF6217TRPBF*	-150	2.4	-10	SOIC	73R1191	1.04
● IRFR6215PBF	-150	0.295	-10	TO-252	63J6997	1.74
● IRF6215PBF	-150	0.29	-10	TO-220AB	63J7332	1.90
● IRF6215SPBF	-150	0.29	-10	TO-263	41K2319	2.02
● IRF6215LPBF	-150	0.29	-10	TO-262	41K2318	2.47
● IRF6216PBF	-150	0.24	-10	SOIC	58K5767	1.65
● IRFR6215TRPBF*	-150	0.295	-10	TO-252	40M7906	1.81
● IRF6218PBF	-150	0.15	-10	TO-220AB	31K2167	3.52
● IRFD9210PBF	-200	3	-10	HVMDIP	19K8167	1.69
● IRFR9214PBF	-250	3	-10	TO-252	63J7015	1.55

*Tape Cut
(176933)

HI-REL STANDARD POWER MOSFET DISCRETES

International IOR Rectifier

Features:

- Repetitive Avalanche
- Dynamic dv/dt Rating
- Hermetically Sealed
- Simple Drive Requirements
- Ease of Paralleling

Hexfet thru-hole transistors provide capabilities in the design and development of radiation hardened discrete semiconductors, hybrids, custom-designed assemblies and DC-DC converters.

N-CHANNEL

Mfg. Part No.	B_{VDSS} (V)	$R_{DS(on)}$ (Ω)	I_D @ 25°C (A)	I_D @ 100°C (A)	Power Dissipation (W)	Package	Stock No.	Price Each 1-24
2N6764	100	0.055	38	24	150	TO-204AE	94B8152	17.32
IRF150	100	0.055	38	24	150	TO-204AE	77C5971	16.61
IRF140	100	0.077	28	20	125	TO-204AE	06F8130	13.34
2N6756	100	0.18	14	9	75	TO-204AA	97B9021	14.90
2N6796	100	0.18	8	5	25	TO-205AF	74C0970	8.87
IRF130	100	0.18	14	9	75	TO-204AA	06F8119	12.57
IRFF130	100	0.18	8	5	25	TO-205AF	77C5961	9.65
2N6788	100	0.3	6	3.5	20	TO-205AF	09F6543	9.47
IRFF120	100	0.3	6	3.5	20	TO-205AF	77C5960	9.28
2N6782	100	0.6	3.5	2.25	15	TO-205AF	09F6539	8.47
IRFF110	100	0.6	3.5	2.25	15	TO-205AF	77C5959	8.47
2N6766	200	0.085	30	19	150	TO-204AE	94B3742	15.75
IRF250	200	0.085	30	19	150	TO-204AE	06F8163	13.91
IRF240	200	0.18	18	11	125	TO-204AE	06F8154	13.92
2N6798	200	0.4	5.5	3.5	25	TO-205AF	74C0971	9.78
IRF230	200	0.4	9	6	75	TO-204AA	06F8146	14.49
IRFF230	200	0.4	5.5	3.5	25	TO-205AF	97B8386	10.17
IRFF220	200	0.8	3.5	2.25	20	TO-205AF	97B8385	10.05
IRF350	400	0.3	14	9	150	TO-204AE	06F8194	14.11
IRF340	400	0.55	10	6	125	TO-204AA	77C5972	15.07
IRFF330	400	1	3	2	25	TO-205AF	77C5963	10.36
IRFF320	400	1.8	2	1.25	20	TO-205AF	97B8387	11.73
IRFF310	400	3.6	1.25	0.8	15	TO-205AF	77C5962	10.24
IRF450	500	0.4	12	7.75	150	TO-204AA	06F8228	13.92
IRF440	500	0.85	8	5	125	TO-204AA	06F8219	15.54
2N6802	500	1.5	2.5	1.5	25	TO-205AF	74C0973	11.73

➤ CONTINUED ➤

HI-REL STANDARD POWER MOSFET DISCRETES (CONT.)

Mfg. Part No.	B_{VDSS} (V)	$R_{DS(on)}$ (Ω)	I_D @ 25°C (A)	I_D @ 100°C (A)	Power Dissipation (W)	Package	Stock No.	Price Each 1-24
IRF430	500	1.5	4.5	3	75	TO-204AA	06F8210	17.21
IRFF430	500	1.5	2.5	1.5	25	TO-205AF	06F7905	11.36
P-CHANNEL								
IRF9140	-100	0.2	-18	-11	125	TO-204AA	74C0930	16.03
2N6849	-100	0.3	-6.5	-4.1	25	TO-205AF	74C0976	8.50
IRF9130	-100	0.3	-11	-7	75	TO-204AA	06F8453	13.33
IRFF9130	-100	0.3	-6.5	-4.1	25	TO-205AF	77C5966	8.47
IRFF9120	-100	0.6	-4	-2.6	20	TO-205AF	77C5965	9.39
IRF9240	-200	0.5	-11	-7	125	TO-204AA	06F8462	14.76
IRFF9230	-200	0.8	-4	-2.4	25	TO-205AF	77C5967	9.68
IRF9230	-200	0.8	-6.5	-4	75	TO-204AA	77C5973	14.08

(74683)

AUTOMOTIVE MOSFETS

RoHS Compliant Available

International IOR Rectifier

Specifically designed for Automotive applications, these HEXFET® Power MOSFETs utilize the latest processing techniques to achieve extremely low on-resistance per silicon area. Additional features of this design are a 175°C junction operating temperature, fast switching speed and improved repetitive avalanche rating.

Mfg. Part No.	$V_{(BR)DSS}$ (V)	I_D @ 25°C (A)	$R_{DS(on)}$ @ 10V (mΩ)	P_D (W)	Pkg.	Stock No.	Price Each 1-9
IRFR3504ZPBF	40	77	9	90	D-PAK	31K1990	1.86
IRF4104PBF	40	120	5.5	140	TO-220AB	63J7299	3.12
IRLZ44ZPBF	55	51	13.5	80	TO-220AB	63J7716	2.18
IRF3205ZPBF	55	110	6.5	170	3-TO-220AB	37J1434	2.60
IRFZ44VZPBF	60	57	12	92	TO-220AB	37J1427	2.20
IRFL024ZPBF	60	115	9	270	TO-220AB	63J6797	1.27
IRF540ZPBF	100	36	26.5	92	3-TO-220AB	37J1436	2.08

(82440)

AUTOMOTIVE GRADE DirectFET™ DIRECTFET POWER MOSFETs

RoHS Compliant Available

International IOR Rectifier

Features:
- Advanced Process Technology
- Optomized for Automotive applications
- Low Parasitic Parameters
- Dual Sided Cooling
- 175 C Operating Temp.
- Repetitive Avalanche capablility for robustness and reliablitiy
- Halogen Free

Mfg. Part No.	V_{DS} (V)	I_D (A)	Rds(on) (Ω) @ VGS=10V	$V_{gs(th)}$ Typ (V)	Power (W)	Pkg.	Tape Cut Stock No.	Tape Cut Price Each 1-9
AUIRF7665S2TR1	100	14.4	51	4	2.4	DirectFET SB	80R8030	1.81

(190993)

AUTOMOTIVE MOSFETs

RoHS Compliant Available

VISHAY.

N CHANNEL

Mnf. Part No.	V_{DS} (V)	I_D (A)	$R_{DS(on)}$ (Ω)	P_D (W)	Package	Stock No.	Price Each 1-9
SQJ456EP-T1-GE3	100	32	0.021	83	PowerPAK SO	37T8250	2.66
P CHANNEL							
SQ2361EES-T1-GE3	-60	-2.5	0.115	2	SOT-23	91T5917	0.59

(202654)

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(196545)

N CHANNEL AUTOMOTIVE TRENCH MOSFETs

RoHS Compliant Available

NXP

Features
- AEC Q101 compliant
- Suitable for standard, intermediate, & logic level gate drive sources
- Suitable for thermally demanding environments

Applications
- 12V, 24V and 42V Automotive systems
- General purpose & Ultra high performance power switching
- Motors, lamps and solenoids
- Electric and electro-hydraulic power steering
- Start-Stop micro-hybrid applications
- Transmission control

NXP's **Automotive N-channel enhancement mode Field-Effect Transistors (FETs)** in plastic packages use TrenchMOS technology. These products have been designed and qualified to the appropriate AEC standard for use in automotive critical applications.

STANDARD LEVEL

Mfg. Part No.	Drain Source Voltage (V)	Cont. Drain Current (A)	On-State Resistance $R_{DS(ON)}$ (mohm)	$R_{DS(ON)}$ Test Voltage (V)	Package	Stock No.	Price Each 1-9
BUK7Y13-40B,115	40	58	11	10	SOT-669	79R1847	0.99
BUK78150-55A,115	55	5.5	128	10	SOT-223	79R1850	0.57
BUK7880-55,135	55	7.5	68	10	SOT-223	79R1851	0.81
BUK7608-55A,118	55	75	6.8	10	SOT-404	79R1848	2.36
BUK764R0-55B,118	55	75	3.4	10	SOT-404	79R1849	3.00
BUK7575-100A,127	100	23	64	10	TO-220AB	70R3456	1.22
LOGIC LEVEL							
BUK9Y11-30B,115	30	59	8.1	10	SOT-669	79R1852	1.20
BUK952R8-30B,127	30	75	0.002	10	TO-220AB	70R3571	3.01
BUK9Y14-40B,115	40	56	9	10	SOT-669	79R1853	1.20
BUK98150-55A,135	55	5.5	116	10	SOT-223	75R4724	0.56
BUK9880-55A,115	55	7	62	10	SOT-223	79R1865	0.78
BUK9840-55,115	55	10.7	30	5	SOT-223	79R1864	1.02
BUK9832-55A,115	55	12	25	10	SOT-223	79R1863	0.97
BUK9277-55A,118	55	18	59	10	SOT-428	75R4723	0.78
BUK9575-55A,127	55	20	58	10	TO-220AB	70R3583	1.02
BUK9Y40-55B,115	55	26	32	10	SOT-669	79R1856	1.01
BUK9535-55A,127	55	34	24	10	TO-220AB	70R3579	1.05
BUK9624-55A,118	55	46	19	10	SOT-404	79R1861	1.39
BUK9608-55B,118	55	75	6.2	10	SOT-404	79R1859	2.03
BUK9Y30-75B,115	75	34	23	10	SOT-669	79R1855	1.24
BUK9226-75A,118	75	45	20.9	10	SOT-428	79R1858	1.32
BUK98180-100A,115	100	4.6	147	10	SOT-223	79R1862	0.79
BUK9875-100A,115	100	7	62	10	SOT-223	75R4725	0.95
BUK96180-100A,118	100	11	152	10	SOT-404	79R1860	0.97
BUK9Y53-100B,115	100	23	41	10	SOT-669	79R1857	1.24
BUK9240-100A,118	100	33	33	10	SOT-428	75R4722	1.32

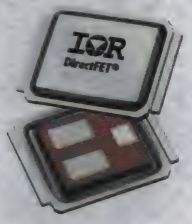
(194375)

DIRECTFET™ POWER PACKAGE

RoHS Compliant Available

International IOR Rectifier

Features:
- 3°C/W Junction to Case Thermal Resistance ($R_{th(J-C)}$) Enables Highly Effective Top-Side Cooling
- Less Than 1°C/W $R_{th(junction-pcb)}$ in Same Footprint as SO-8
- Over 90% Lower Die-Free Package Resistance (DFPR) than SO-8
- 0.7mm Profile Compared to 1.75mm for SO-8
- Direct Chip Attach with No Wire Bonding or Lead-Frame
- Lower Package Inductance for Higher Frequencies
- Compatible with High Volume Manufacturing Equipment and Processes
- Bromide- and Lead-Free
- Increases Current Density by a Factor of Two
- Cuts MOSFET Part Count by 60%
- Reduces PCB Space by 50%
- Up to 50°C Lower Operating Temperature Increases Reliability
- Lower Total System Cost



Applications:
- High-End Notebooks
- V_{RM} Modules for Servers
- Workstations and Mainframes
- Advanced Telecom and Datacom Systems

N-CHANNEL

Mfg. Part No.	V_{BRDSS} (V)	I_D @ +70°C (A)	$R_{DS(on)}$ @10V (Ohms)	Q_G (nC)	P_D (W)	Package	Tape Cut Stock No.	Tape Cut Price Each 1-9
IRF6711STR1PBF	25	19	3	34	2.2	DirectFET SQ	80R8043	2.36
IRF6715MTR1PBF	25	34	1.3	34	2.8	DirectFET MX	80R8047	3.04
IRF6717MTRPBF	25	38	0.95	46	96	DirectFET MX	73P5186	3.32
IRF6720S2TR1PBF	30	11	6	34	1.7	DirectFET S1	80R8051	2.36
IRF6722STR1PBF	30	13	4.7	34	2.3	DirectFET MP	80R8054	2.15
IRF6721STR1PBF	30	14	51	34	2.2	DirectFET SQ	80R8052	1.97
IRF6724MTR1PBF	30	27	1.9	34	2.8	DirectFET MX	80R8058	3.60
IRF6616TRPBF	40	15	5	29	89	DirectFET MX	28M4607	3.22
IRF6613TR1PBF	40	18	3.4	42	89	DirectFET MT	40M7925	4.29
IRF6648TR1PBF	60	69	7	36	89	DirectFET MN	39M3565	4.26

➤CONTINUED➤

DIRECTFET™ POWER PACKAGE (CONT.)

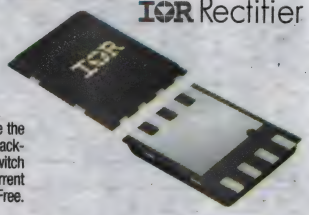
Mfg. Part No.	V_{BRDSS} (V)	I_D @ +70°C (A)	$R_{DS(on)}$ @10V (Ohms)	Q_G (nC)	P_D (W)	Package	Tape Cut Stock No.	Tape Cut Price Each 1-9
● IRF6665TR1PBF	100	3.4	62	8.7	42	DirectFET SH	41M6928	3.18
● IRF6645TR1PBF	100	4.5	35	14	42	DirectFET SJ	41M6925	3.04
● IRF6643TRPBF	150	6.2	29	34	2.8	DirectFET MZ	80R8033	4.16
● IRF6785MTR1PBF	200	19	85	34	2.8	DirectFET MZ	80R8063	3.27

(74684)

HEXFET POWER MOSFETs IN PQFN PACKAGE

RoHS Compliant Available

International IOR Rectifier



Features:
- Low RDS(ON)
- Very Low Gate Charge
- Low Junction to PCB Thermal Resistance

These MOSFETs feature IR's latest silicon technology and are the company's first devices available in an 8-pin 5x6mm PQFN package. **IRFH5250** and **IRFH53xx** devices are designed for DC switch applications and DC motor drive applications requiring high current carrying capability and high efficiency. **IRFH** Series is Halogen Free.

N-CHANNEL

Mfg. Part No.	V_{DS} (V)	I_D (A)	Rds(on) (Ω) @ VGS=10V	$V_{gs(th)}$ Typ (V)	Power (W)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● IRLHM620TRPBF	20	26	2*	0.8	2.7	05T6579	1.78
● IRFH4201TRPBF	25	49	700	1.6	3.5	19X2752	2.68
● IRFH4210DTRPBF	25	44	850	1.6	3.5	19X2753	2.62
● IRFH4210TRPBF	25	45	850	1.6	3.6	19X2754	2.37
● IRFH4213DTRPBF	25	40	0.0011	1.6	3.6	19X2755	2.10
● IRFH4213TRPBF	25	41	0.0011	1.6	3.6	19X2756	1.91
● IRFH4234TRPBF	25	22	0.0035	1.6	3.5	19X2757	1.48
● IRFHM4226TRPBF	25	28	0.0017	1.6	2.7	19X2750	1.74
● IRFHM4234TRPBF	25	20	0.0035	1.6	2.8	19X2751	1.31
● IRFH8337TRPBF	30	12	10.3	1.8	3.2	40T7437	1.40
● IRFH8337TR2PBF	30	12	10.3	1.8	3.2	40T7439	1.33
● IRFHM831TRPBF	30	14	6.6	1.8	2.5	05T6575	1.27
● IRFH8334TRPBF	30	14	7.2	1.8	3.2	40T7433	1.46
● IRFH8334TR2PBF	30	14	7.2	1.8	3.2	40T7435	1.46
● IRFH8330TR2PBF	30	17	5.3	1.8	3.3	40T7431	1.18
● IRFHM830DTRPBF	30	20	3.4	1.8	2.8	05T6567	1.71
● IRLHM630TRPBF	30	21	2.8*	0.8	2.7	05T6583	2.31
● IRFHM830TRPBF	30	21	3	1.8	2.7	05T6571	1.49
● IRFHM830TR2PBF	30	21	3	1.8	2.7	05T6573	1.49
● IRFH8325TR2PBF	30	21	4.1	1.8	3.6	40T7427	1.29
● IRFH8324TRPBF	30	23	3.3	1.8	3.6	40T7421	1.45
● IRFH8324TR2PBF	30	23	3.3	1.8	3.6	40T7423	1.45
● IRFH8318TRPBF	30	27	3.1	1.8	3.6	40T7417	1.67
● IRFH8318TR2PBF	30	27	3.1	1.8	3.6	40T7419	1.58
● IRFH5306TR2PBF	30	44	8.1	1.8	3.6	53R1731	1.32
● IRLH5034TRPBF	40	100	2	1	3.6	74R1506	2.56
● IRFH5006TRPBF	60	100	3.5	2	3.6	74R1470	2.66
● IRFH5006TR2PBF	60	100	3.5	2	3.6	74R1472	2.66
● IRFH5406TRPBF	60	40	11.4	2	3.6	74R1502	1.83
● IRFH5106TRPBF	60	100	0.0047	2	3.6	74R1482	2.12
● IRFH5206TRPBF	60	89	5.6	2	3.6	74R1490	2.30
● IRFH5206TR2PBF	60	89	5.6	2	3.6	74R1492	2.30
● IRLH5036TRPBF	60	100	3.7	1	3.6	74R1510	4.23
● IRFH5007TRPBF	75	100	5.1	2	3.6	74R1474	2.56
● IRFH5010TRPBF	100	100	7.5	2	3.6	74R1478	2.88
● IRFH5215TRPBF	150	5	45.5	5	3.6	25T5515	2.36
● IRFH5220TRPBF	200	3.8	80	5	3.6	25T5519	2.41
● IRFH5220TR2PBF	200	3.8	80	5	3.6	25T5521	2.29
P CHANNEL							
● IRFHM9331TRPBF	-30	-11	10	-1.8	2.8	79R7545	1.12
DUAL N CHANNEL							
● IRFH4251DTRPBF	25	188	600	1.6	63	19X2758	4.04
● IRFH4253DTRPBF	25	145	900	1.6	50	19X2759	2.83

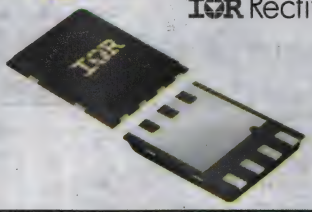
* Rds(on) Test Voltage, Vgs = 4.5V

(167495)

HALOGEN FREE HEXFET® POWER MOSFETs IN PQFN PACKAGE

RoHS Compliant Available

International IOR Rectifier



Features and Benefits
- Low Charge and Low Rg resulting in Lower Switching Losses
- Low Thermal Resistance to PCB gives Increased Power Density
- Increased Reliability
- Multi-Vendor Compatibility
- Easier Manufacturing
- Environmentally Friendlier

Mfg. Part No.	$V_{(BR)DSS}$ (V)	I_D (A)	$R_{DS(ON)}$ @ 10V (Ω)	Power Diss. (W)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● IRFH5250DTRPBF	25	100	1.4	3.6	65R4964	2.41
● IRFH5250TRPBF	25	100	1.15	3.6	50R8545	2.21
● IRFH3702TRPBF	30	16	5.7	2.8	08R4841	1.17
● IRFH5304TRPBF	30	79	4.5	3.6	65R4976	1.42
● IRFH5302DTRPBF	30	100	2.5	3.6	65R4972	2.08
● IRLH5030TRPBF	100	100	9.9	3.6	65R4980	2.52
● IRFH5015TRPBF	150	56	31	3.6	65R4956	2.76

(175894)

N-CHANNEL HEXFET® POWER MOSFETs:12 TO 30V

RoHS Compliant Available

International IOR Rectifier

* = Tape Cut

Mfg. Part No.	V_{DS} (V)	I_{DS} (A)	$R_{DS(ON)}$ (mΩ)	On Res Test V	Power Diss. (W)	Pkg.	Stock No.	Price Each 1-9
● IRF7476PBF	12	15	8	4.5	2.5	8-SOIC	31K2258	1.63
● IRLMS1902TRPBF*	20	3.2	100	4.5	1.7	Micro6	19K8374	0.70
● IRLML6246TRPBF*	20	4.1	46	4.5	1.3	3-SOT-23	84R9707	0.25
● IRLML6244TRPBF*	20	6.3	21	4.5	1.3	3-SOT-23	84R9705	0.28
● IRLMS2002TRPBF*	20	6.5	30	4.5	2	Micro6	19K8375	0.96
● IRF7401PBF	20	8.7	22	4.5	2.5	8-SOIC	19K8271	1.35
● IRLHS6242TRPBF*	20	10	9.4	4.5	1.98	6-PQFN	25T5526	0.77
● IRF7456PBF	20	16	6.5	10	2.5	8-SOIC	19K8291	1.86
● IRF6201PBF	20	27	1.9	4.5	2.5	8-SOIC	81R2596	1.69
● IRF3704ZPBF	20	67	7.9	10	57	3-T0-220AB	19K8204	2.21
● IRLH6224TRPBF*	20	80	2.3	4.5	3.6	PQFN	90T1094	2.09
● IRLH6224TR2PBF*	20	80	2.3	4.5	3.6	PQFN	90T1096	2.09
● IRFR3711ZPBF	20	93	5.7	10	79	3-DPAK	19K8180	1.35
● IRLR6225TRPBF*	20	100	3.2	4.5	63	3-DPAK	25T5505	1.47
● IRFML8244TRPBF	25	5.8	20	10	1.25	3-SOT-23	25T5496	0.43
● IRFHS8242TRPBF*	25	9.9	10	10	2.1	6-PQFN	25T5484	0.66
● IRFHS8242TR2PBF*	25	9.9	10	10	2.1	6-PQFN	25T5486	0.67
● IRFH4201TRPBF	25	49	700	10	3.5		19X2752	2.68
● IRLML2030TRPBF*	30	2.7	100	10	1.3	3-SOT-23	52R2615	0.48
● IRLMS1503TRPBF*	30	3.2	100	10	1.7	Micro6	19K8373	0.64
● IRLML6346TRPBF*	30	3.4	46	4.5	1.3	3-SOT-23	25T5502	0.46
● IRLL2703PBF	30	3.9	45	10	2.1	3-SOT-223	63J7605	1.13
● IRLL3303PBF	30	4.6	31	10	2.1	3-SOT-223	63J7607	1.67
● IRLL3303TRPBF*	30	4.6	31	10	2.1	3-SOT-223	40M7984	1.76
● IRLML6344TRPBF*	30	5	22	4.5	1.3	3-SOT-23	25T5500	0.48
● IRLML0030TRPBF	30	5.3	27	10	1.3	3-SOT-23	52R2613	0.52
● IRF9410PBF	30	7	30	10	2.5	8-SOIC	19K8340	1.27
● IRF7201TRPBF*	30	7	50	20	2.5	8-SOIC	40M7938	1.27
● IRFTS8342TRPBF*	30	8.2	15	10	2	TSOP	90T1092	0.59
● IRF7807APBF	30	8.3	25	4.5	2.5	8-SOIC	19K8316	1.46
● IRLTS6342TRPBF*	30	8.3	14	4.5	2	TSOP	90T1103	0.72
● IRF7403PBF	30	8.5	22	10	2.5	8-SOIC	19K8274	1.22
● IRF7403TRPBF*	30	8.5	35	20	2.5	8-SOIC	40M7951	1.22
● IRLHS6342TRPBF*	30	8.7	12	4.5	2.1	6-PQFN	25T5527	0.77
● IRFHS8342TRPBF*	30	8.8	13	10	2.1	6-PQFN	25T5488	0.60
● IRFHS8342TR2PBF*	30	8.8	13	10	2.1	6-PQFN	25T5490	0.60
● SI4410DYPBF	30	10	13.5	10	2.5	8-SOIC	19K8481	1.65
● SI4410DYTRPBF*	30	10	20	20	2.5	8-SOIC	40M8017	1.65
● IRF7807ZPBF	30	11	13.8	10	2.5	8-SOIC	19K8323	1.29
● IRF7807ZTRPBF*	30	11	11	10	2.5	8-SOIC	40M7970	1.29
● SI4420DYPBF	30	12.5	9	10	2.5	8-SOIC	19K8482	1.81
● IRF7413ZTRPBF*	30	13	8	10	2.5	8-SOIC	40M7954	1.19
● IRF7413ZPBF	30	13	10	10	2.5	8-SOIC	19K8279	1.19
● IRF7413PBF	30	13	11	10	2.5	8-SOIC	19K8278	1.30
● IRF7809AVPBF	30	13.3	9	4.5	2.5	8-SOIC	19K8324	1.86
● IRF7821TRPBF*	30	13.6	7	10	2.5	8-SOIC	40M7974	1.36

CONTINUED

N-CHANNEL HEXFET® POWER MOSFETs:12 TO 30V (CONT.)

Mfg. Part No.	V_{DS} (V)	I_{DS} (A)	$R_{DS(ON)}$ (mΩ)	On Res Test V	Power Diss. (W)	Pkg.	Stock No.	Price Each 1-9
IRF7821PBF	30	13.6	9.1	10	2.5	8-SOIC	31K2287	1.36
IRF7463PBF	30	14	8	10	2.5	8-SOIC	19K8295	1.99
IRF8721TRPBF*	30	14	8.5	20	...	8-SOIC	58M7428	1.06
IRF7811AVPBF	30	14	14	4.5	3.5	8-SOIC	19K8326	1.33
IRF7455PBF	30	15	7.5	10	2.5	8-SOIC	19K8289	1.79
IRF8113PBF	30	17.2	5.6	10	2.5	8-SOIC	19K8334	1.49
IRF8736TRPBF*	30	18	4.8	20	...	8-SOIC	58M7430	1.44
IRF7832PBF	30	20	4	10	2.5	8-SOIC	19K8331	2.22
IRF7862TRPBF*	30	21	3.7	20	...	8-SOIC	58M7422	1.65
IRF7831TRPBF*	30	21	3.1	10	2.5	8-SOIC	40M7976	2.07
IRF8788PBF	30	24	2.8	10	2.5	8-SOIC	27P5289	2.13
IRL2703PBF	30	24	40	10	45	3-TO-220AB	63J7741	2.26
IRFR3303PBF	30	33	31	10	57	3-DPAK	63J6945	1.40
IRLR3103TRPBF*	30	55	19	10	107	3-DPAK	40M7987	1.65
IRLR3103PBF	30	55	19	10	69	3-DPAK	63J7638	1.74
IRFR3707ZPBF	30	56	9.5	10	50	3-DPAK	19K8177	1.15
IRFR3707ZTRPBF*	30	56	7.5	10	50	3-DPAK	40M7901	1.21
IRFR3708PBF	30	61	12.5	10	87	3-DPAK	63J6968	1.83
IRF3708PBF	30	62	12	10	87	3-TO-220AB	63J7272	2.22
IRL3103PBF	30	64	12	10	83	3-TO-220AB	63J7752	2.52
IRL3103SPBF	30	64	12	10	110	3-D2-PAK	63J7753	2.37
IRLR7821PBF	30	65	10	10	75	3-DPAK	19K8387	1.34
IRLR7821TRPBF*	30	65	7.5	10	75	3-DPAK	40M7990	1.34
IRLR8726PBF	30	86	4	10	75	3-DPAK	10R3532	1.18
IRFR3709ZPBF	30	86	6.5	10	79	3-DPAK	31K1997	2.05
IRL2203NPBF	30	116	7	10	130	3-TO-220AB	63J7734	2.39
IRL2203NSPBF	30	116	7	10	170	3-D2-PAK	63J7735	2.83
IRL3803PBF	30	140	6	10	150	3-TO-220AB	63J7795	3.46
IRL7833PBF	30	150	3.8	10	140	3-TO-220AB	19K8397	2.55
IRLR7843PBF	30	161	3.3	10	140	3-DPAK	19K8389	2.04
IRLR7843TRPBF*	30	161	2.6	10	140	3-DPAK	40M7992	1.96
IRF3703PBF	30	210	2.8	10	230	3-TO-220AB	63J7254	5.80
IRL3713PBF	30	260	3	10	200	3-TO-220AB	63J7772	4.34
IRL3713SPBF	30	260	3	10	200	3-D2-PAK	63J7773	4.14
IRL3713STRLPBF*	30	260	3	10	330	TO-263	59T9243	4.14

(175902)

N-CHANNEL HEXFET POWER MOSFETs: 40 TO 80V

RoHS Compliant Available

International IOR Rectifier

* = Sold as EA

Mfg. Part No.	$V_{(BR)DSS}$ (V)	I_D (A) @ 25°C	$R_{DS(ON)}$ (mΩ)	PD (W)	Pkg.	Tape Cut Stock No.	Price Each 1-9
IRLML0040TRPBF*	40	3.6	56	1.3	3-SOT-23	79R5630	0.57
IRF7469PBF*	40	9	17	2.5	8-SOIC	19K8301	1.33
IRF7469TRPBF	40	9	21	2.5	8-SOIC	40M7960	1.33
IRF7468PBF*	40	9.4	15.5	2.5	8-SOIC	19K8300	1.33
IRF7470PBF*	40	10	13	2.5	8-SOIC	19K8302	1.69
IRF7470TRPBF	40	10	13	2.5	8-SOIC	40M7961	1.69
IRF6613TR1PBF	40	18	3.4	89	DirectFET MT	40M7925	4.29
IRF7842TRPBF	40	18	5.9	2.5	8-SOIC	40M7977	2.22
IRFR4104PBF*	40	42	5.5	140	3-DPAK	19K8182	2.34
IRLH7134TRPBF	40	50	3.3	104	PQFN	90T1098	2.81
IRLR3114ZPBF*	40	130	49	140	3-DPAK	58M7441	2.18
IRL1404PBF*	40	160	4	200	3-TO-220AB	19K8393	3.95
IRF1404LPBF*	40	162	4	200	3-TO-262	63J7186	4.35
IRF1404ZPBF*	40	190	3.7	220	3-TO-220AB	63J7191	3.53
IRLB3034PBF*	40	195	1.4	375	3-TO-220AB	10R3511	4.35
IRF1404PBF*	40	202	4	200	3-TO-220AB	63J7187	3.66
IRF2804SPBF*	40	270	2	300	3-D2-PAK	73K8240	5.63
IRF2804PBF*	40	270	2.3	330	3-TO-220AB	63J7214	5.90
IRF2804S-7PPBF*	40	320	1.6	330	7-D2PAK	73K8239	6.57
IRLP3034PBF*	40	327	1.4	347	3-TO-247AC	10R3525	6.60
IRFS3004PBF*	40	340	1.4	380	3-D2-PAK	08R4846	4.67
IRLS3034PBF*	40	343	1.4	375	3-D2-PAK	73P5193	5.63
IRFP4004PBF*	40	350	1.7	380	3-TO-247AC	19P2516	7.75
IRLS3034-7PPBF	40	380	1	380	3-D2-PAK	73P5191	7.45
IRFS3004-7PPBF*	40	400	900	380	3-D2-PAK	08R4845	5.50
IRFD010PBF*	50	1.7	160	1	4-DIP	19K8149	0.98
IRFD020PBF*	50	2.4	100	1	4-HD-1	19K8151	1.36
IRFZ20PBF*	50	15	100	40	3-TO-220AB	19K8195	1.50

➤ CONTINUED ➤

N-CHANNEL HEXFET POWER MOSFETs: 40 TO 80V (CONT.)

Mfg. Part No.	$V_{(BR)DSS}$ (V)	I_D (A) @ 25°C	$R_{DS(ON)}$ (mΩ)	PD (W)	Pkg.	Tape Cut Stock No.	Price Each 1-9
IRFZ30PBF*	50	30	50	75	3-TO-220AB	19K8197	1.73
IRFZ40PBF*	50	35	28	150	3-TO-220AB	19K8198	2.30
IRFL014NTRPBF	55	1.9	160	2.1	3-SOT-223	40M7891	0.93
IRFL014NPBF*	55	1.9	160	2.1	3-SOT-223	63J6792	0.93
IRLL014NTRPBF	55	2	140	2.1	3-SOT-223	39M3590	0.96
IRLL014NPBF*	55	2	140	2.1	3-SOT-223	63J7597	0.91
IRFL024NPBF*	55	2.8	75	2.1	3-SOT-223	63J6796	1.52
IRLL024NPBF*	55	3.1	65	2.1	3-SOT-223	63J7601	1.10
IRFL4105TRPBF	55	3.7	45	2.1	3-SOT-223	40M7892	1.45
IRFL4105PBF*	55	3.7	45	2.1	3-SOT-223	63J6803	1.39
IRLL2705TRPBF	55	3.8	40	2.1	3-SOT-223	19K8372	1.20
IRLL2705PBF*	55	3.8	40	2.1	3-SOT-223	63J7606	1.18
IRLL024NTRPBF	55	4.4	65	2.1	3-SOT-223	40M7983	1.04
IRLL024ZPBF*	55	5	60	2.8	3-SOT-223	58K5816	1.20
IRFIZ24NPBF*	55	14	70	26	TO-220FP	63J6746	1.53
IRLR024NTRLPBF	55	17	65	45	3-DPAK	40M7985	1.40
IRLR024NPBF*	55	17	65	38	3-DPAK	63J7619	1.40
IRLU024NPBF*	55	17	65	38	3-IPAK	63J7671	1.29
IRFZ24NPBF*	55	17	70	45	3-TO-220AB	63J7110	1.66
IRFR024NTRLPBF	55	17	75	45	3-DPAK	40M7894	1.31
IRFR024NPBF*	55	17	75	38	3-DPAK	63J6904	1.38
IRFU024NPBF*	55	17	75	38	3-IPAK	63J7043	1.44
IRLZ24NPBF*	55	18	60	45	3-TO-220AB	63J7702	1.56
IRLZ24NSPBF*	55	18	60	45	3-D2-PAK	63J7703	2.17
IRFIZ34NPBF*	55	21	40	31	TO-220FP	63J6749	1.64
IRFR4105PBF*	55	27	45	48	3-DPAK	63J6977	1.31
IRLR2705PBF*	55	28	40	46	3-DPAK	63J7629	1.27
IRFZ34NPBF*	55	29	40	56	3-TO-220AB	63J7120	1.79
IRFZ34NSPBF*	55	29	40	68	3-D2-PAK	63J7121	2.20
IRLR3915PBF*	55	30	14	120	3-DPAK	63J7659	1.82
IRLIZ44NPBF*	55	30	22	38	TO-220FP	63J7582	1.74
IRFR4105ZPBF*	55	30	24.5	48	3-DPAK	19K8183	1.50
IRLZ34NSTRLPBF	55	30	35	68	3-D2-PAK	40M7994	2.16
IRLZ34NPBF*	55	30	35	56	3-TO-220AB	63J7705	1.82
IRFIZ44NPBF*	55	31	24	38	TO-220FP	63J6753	1.91
IRFIZ48NPBF*	55	36	16	42	TO-220FP	63J6756	2.06
IRLR2905PBF*	55	42	27	69	3-DPAK	63J7632	1.91
IRLR2905TRPBF	55	42	27	110	3-DPAK	40M7986	1.91
IRFR1205TRPBF	55	44	27	107	3-DPAK	40M7895	1.66
IRFR1205PBF*	55	44	27	69	3-DPAK	63J6919	1.57
IRLZ44NSTRLPBF	55	47	22	110	3-D2-PAK	40M7996	2.08
IRLZ44NPBF*	55	47	22	83	3-TO-220AB	63J7709	2.27
IRLZ44NSPBF*	55	47	22	110	3-D2-PAK	63J7710	2.08
IRFZ44NSTRLPBF	55	49	17.5	110	3-D2-PAK	39M3555	1.96
IRFZ44NLPBF*	55	49	17.5	110	3-TO-262	63J7130	2.25
IRFZ44NPBF*	55	49	17.5	83	3-TO-220AB	63J7131	2.31
IRFZ44NSPBF*	55	49	17.5	94	3-D2-PAK	63J7132	1.96
IRLI3705NPBF*	55	52	10	47	TO-220FP	63J7587	2.45
IRFZ46NSTRLPBF	55	53	16.5	120	3-D2-PAK	39M3556	2.03
IRFP044NPBF*	55	53	20	100	3-TO-247AC	63J6833	2.17
IRFR2405PBF*	55	56	16	110	3-DPAK	63J6935	1.82
IRFI3205PBF*	55	64	8	48	TO-220FP	63J6760	2.32
IRFZ48NSTRLPBF	55	64	14	140	3-D2-PAK	39M3557	2.22
IRFZ48NPBF*	55	64	14	94	3-TO-220AB	63J7152	2.03
IRFZ48NSPBF*	55	64	14	140	3-D2-PAK	63J7153	2.34
IRFR3505PBF*	55	71	13	140	3-DPAK	63J6957	2.26
IRF2805PBF*	55	75	4.7	330	3-TO-220AB	63J7218	3.71
IRF1405ZPBF*	55	75	4.9	230	3-TO-220AB	63J7197	3.55
IRF3205ZPBF*	55	75	6.5	170	3-TO-220AB	37J1434	2.60
IRF1010ZPBF*	55	75	7.5	140	3-TO-220AB	63J7176	2.52
IRF1010ZSPBF*	55	75	7.5	140	3-D2-PAK	63J7177	2.50
IRFP054NPBF*	55	81	120	130	3-TO-247AC	63J6838	3.10
IRF1010NPBF*	55	85	11	130	3-TO-220AB	63J7171	2.40
IRF1010NSPBF*	55	85	11	3.8	3-D2-PAK	63J7172	2.60
IRL3705NPBF*	55	89	10	130	3-TO-220AB	63J7766	2.84
IRL2505STRLPBF	55	104	8	200	3-D2-PAK	40M7997	3.41
IRL2505PBF*	55	104	8	200	3-TO-220AB	63J7739	3.55
IRL2505SPBF*	55	104	8	200	3-D2-PAK	63J7740	3.55
IRFP064NPBF*	55	110	8	150	3-TO-247AC	63J6841	3.39
IRF3205PBF*	55	110	8	150	3-TO-220AB	63J7236	2.77
IRF3205SPBF*	55	110	8	200	3-D2-PAK	63J7237	3.13
IRF1405PBF*	55	169	5.3	200	3-TO-220AB	63J7195	3.76
IRF1405SPBF*	55	131	5.3	200	3-D2-PAK	63J7196	3.84

➤ CONTINUED ➤

N-CHANNEL HEXFET POWER MOSFETs: 40 TO 80V (CONT.)

Mfg. Part No.	$V_{(BR)DSS}$ (V)	I_D (A) @ 25°C	$R_{DS(ON)}$ (mΩ)	PD (W)	Pkg.	Tape Cut Stock No.	Price Each 1-9
● IRFD014PBF*	60	1.7	200	1.3	4-HD-1	19K8150	1.05
● IRLD014PBF*	60	1.7	200	1.3	4-HD-1	19K8366	1.10
● IRLD024PBF*	60	2.5	100	1.3	4-HD-1	19K8367	1.56
● IRLML0060TRPBF	60	2.7	92	1.25	3-SOT-23	60R6446	0.56
● IRFL014PBF*	60	2.7	200	2	4-SOT-223	63J6794	1.27
● IRF7478PBF*	60	4.2	26	2.5	8-SOIC	19K8306	1.33
● IRFR014PBF*	60	7.7	200	25	3-DPAK	63J6901	1.20
● IRLIZ14GPBF*	60	8	200	25	TO-220FP	63J7577	1.53
● IRFU024PBF*	60	14	100	2.5	3-IPAK	19K8188	1.46
● IRLZ24PBF*	60	17	100	60	3-TO-220AB	19K8392	1.30
● IRLZ34PBF*	60	30	50	88	3-TO-220AB	63J7707	1.81
● IRF7749L2TRPBF	60	33	1.1	3.3	DirectFET L8	57R4055	6.15
● IRF7749L2TR1PBF	60	33	1.1	3.3	DirectFET L8	57R4057	6.22
● IRFZ44EPBF*	60	48	23	110	3-TO-220AB	63J7128	2.00
● IRFZ44ESPBF*	60	48	23	110	3-D2-PAK	63J7129	2.48
● IRFZ44RPBF*	60	50	28	150	3-TO-220AB	63J7136	2.19
● IRLZ44PBF*	60	50	28	150	3-TO-220AB	63J7713	2.54
● IRFZ44VPBF*	60	55	16.5	115	3-TO-220AB	63J7138	2.33
● IRFZ44VZSPBF*	60	57	12	92	3-D2-PAK	63J7140	2.02
● IRFP064PBF*	60	70	9	300	3-TO-247AC	63J6842	6.63
● IRFP048RPBF*	60	70	18	190	3-TO-247AC	63J6837	4.47
● IRFZ48VPBF*	60	72	12	150	3-TO-220AB	63J7159	2.15
● IRF1010EZPBF*	60	75	8.5	140	3-TO-220AB	63J7168	2.41
● IRF1010EPBF*	60	84	12	170	3-TO-220AB	63J7165	2.64
● IRLU3636PBF*	60	99	5.4	143	3-IPAK	71P8092	2.23
● IRLR3636PBF*	60	99	6.8	143	3-DPAK	71P8091	2.01
● IRFB3306GPBF*	60	160	4.2	230	3-TO-220AB	71P8061	3.46
● IRLB3036PBF*	60	195	1.9	380	3-TO-220AB	10R3512	4.47
● IRFB3006PBF*	60	270	2.1	375	4-TO-220AB	27P5254	4.55
● IRFS3006-7PPBF*	60	293	1.5	375	3-D2-PAK	27P5260	6.71
● IRFR2407PBF*	75	42	26	110	3-DPAK	63J6936	1.86
● IRF2807ZPBF*	75	75	9.4	170	3-TO-220AB	63J7225	2.76
● IRFH7107TRPBF	75	75	8.5	104	PQFN	90T1082	2.86
● IRFH7107TR2PBF	75	75	8.5	104	PQFN	90T1084	2.86
● IRF2807STRLPBF	75	82	13	200	3-D2-PAK	39M3558	3.14
● IRF2807PBF*	75	82	13	200	3-TO-220AB	63J7221	3.02
● IRF2807SPBF*	75	82	13	200	3-D2-PAK	63J7222	3.14
● IRF3808SPBF*	75	106	7	200	3-D2-PAK	19K8207	3.98
● IRF1407PBF*	75	130	7.8	330	3-TO-220AB	63J7199	3.69
● IRF1607PBF*	75	142	7.5	380	3-TO-220AB	63J7207	4.95
● IRFP2907PBF*	75	209	4.5	330	3-TO-247AC	63J6867	7.92
● IRFB3077GPBF*	75	210	3.3	370	3-TO-220AB	71P8058	5.55
● IRFS3107-7PPBF*	75	260	2.1	370	3-D2-PAK	27P5262	6.86
● IRFP4368PBF*	75	350	1.85	520	3-TO-247AC	06P9595	8.97
● IRF7493PBF*	80	9.3	15	2.5	8-SOIC	19K8311	2.23
● IRFR3518PBF*	80	30	29	110	3-DPAK	63J6961	1.75
● IRLR2908PBF*	80	30	28	120	3-DPAK	63J7635	2.00

(175898)

N-CHANNEL HEXFET® POWER MOSFETs: 100 TO 200V

RoHS Compliant Available

International IOR Rectifier

Mfg. Part No.	$V_{(BR)DSS}$ (V)	I_D (A) @ 25°C	$R_{DS(ON)}$ (mΩ)	$R_{DS(ON)}$ Test Voltage	Power Diss. (W)	Pkg.	Stock No.	Price Each 1-9
● IRFD123PBF	100	1.3	270	10	1.3	4-HD-1	31K1939	1.54
● IRLML0100TRPBF	100	1.6	220	10	1.3	3-SOT-23	60R6448	0.71
● IRF7452TRPBF	100	4.5	60	10	2.5	8-SOIC	40M7957	1.83
● IRF7490PBF	100	5.4	39	10	2.5	8-SOIC	19K8308	1.73
● IRF510PBF	100	5.6	540	10	43	3-TO-220AB	63J7301	1.15
● IRF510SPBF	100	5.6	540	10	43	3-D2-PAK	63J7302	1.12
● IRF540NSTRRPBF	100	6.5	44	10	3.8	3-D2-PAK	19K8212	2.14
● IRF7473PBF	100	6.9	26	10	2.5	8-SOIC	19K8304	2.04
● IRFR120ZPBF	100	8.7	190	10	35	3-DPAK	31K1966	1.27
● IRFR120NPBF	100	9.4	210	10	39	3-DPAK	63J6913	1.41
● IRFU120NPBF	100	9.4	210	10	39	3-IPAK	63J7047	1.54
● IRF520NPBF	100	9.7	200	10	48	3-TO-220AB	19K8210	1.68
● IRLR120NTRPBF	100	10	185	10	39	3-DPAK	39M3592	1.30
● IRLR120NPBF	100	10	185	10	39	3-DPAK	63J7623	1.25
● IRLU120NPBF	100	10	185	10	39	3-IPAK	63J7673	1.44
● IRL520NPBF	100	10	180	10	48	3-TO-220AB	63J7801	1.66
● IRL520NSPBF	100	10	180	10	3.8	3-D2-PAK	63J7802	2.14

➤CONTINUED➤

N-CHANNEL HEXFET® POWER MOSFETs: 100 TO 200V (CONT.)

Mfg. Part No.	$V_{(BR)DSS}$ (V)	I_D (A) @ 25°C	$R_{DS(ON)}$ (mΩ)	$R_{DS(ON)}$ Test Voltage	Power Diss. (W)	Pkg.	Stock No.	Price Each 1-9
● IRLI530NPBF	100	12	100	10	33	TO-220FP	63J7591	1.94
● IRFR3910PBF	100	16	115	10	52	3-DPAK	63J6973	1.43
● IRFR3910TRLPBF	100	16	0.115	10	79	3-DPAK	19T8773	1.38
● IRFR3910TRPBF	100	16	115	10	52	3-DPAK	39M3554	1.38
● IRFU3910PBF	100	16	115	10	52	3-IPAK	63J7086	1.22
● IRF530NSPBF	100	17	90	10	3.8	3-D2-PAK	63J7313	2.24
● IRF530NSTRLPBF	100	17	90	10	3.8	3-D2-PAK	39M3561	2.24
● IRF530NSTRRPBF	100	17	90	10	3.8	3-D2-PAK	39M3562	2.36
● IRF530NPBF	100	17	90	10	79	3-TO-220AB	63J7312	1.85
● IRL530NSPBF	100	17	100	10	3.8	3-D2-PAK	63J7806	2.24
● IRL530NPBF	100	17	100	10	79	3-TO-220AB	63J7805	1.91
● IRL530NSTRLPBF	100	17	100	10	79	3-D2-PAK	40M8002	2.24
● IRLR3410PBF	100	17	105	10	52	3-DPAK	63J7646	1.27
● IRFI540NPBF	100	20	52	10	42	TO-220FP	63J6765	2.36
● IRLI540NPBF	100	23	44	10	42	TO-220FP	63J7593	2.20
● IRFI1310NPBF	100	24	36	10	45	TO-220FP	63J6759	2.10
● IRL540SPBF	100	28	77	5	3.7	3-D2-PAK	19K8395	2.45
● IRFR3410PBF	100	31	39	10	110	3-DPAK	63J6948	1.63
● IRFP140NPBF	100	33	52	10	94	3-TO-247AC	63J6844	2.26
● IRF540NSTRLPBF	100	33	44	10	130	3-D2-PAK	40M7920	2.25
● IRF540NLPBF	100	33	44	10	140	3-TO-262	63J7318	2.45
● IRF540NPBF	100	33	44	10	130	3-TO-220AB	63J7319	1.90
● IRF540NSPBF	100	33	44	10	3.8	3-D2-PAK	63J7320	2.14
● IRF540ZSPBF	100	36	26.5	10	92	3-D2-PAK	63J7324	2.43
● IRF540ZPBF	100	36	26.5	10	92	3-TO-220AB	37J1436	2.08
● IRL540NPBF	100	36	44	10	140	3-TO-220AB	63J7809	2.13
● IRL540NSPBF	100	36	44	10	3.8	3-D2-PAK	63J7810	2.46
● IRFR3710ZPBF	100	42	18	10	140	3-DPAK	19K8178	2.37
● IRF1310NPBF	100	42	36	10	160	3-TO-220AB	19K8200	2.44
● IRF1310NSPBF	100	42	36	10	3.8	3-D2-PAK	63J7183	2.62
● IRFP150NPBF	100	42	36	10	140	3-TO-247AC	63J6848	2.78
● IRL2910SPBF	100	55	26	10	3.8	3-D2-PAK	63J7745	3.43
● IRL2910PBF	100	55	26	10	200	3-TO-220AB	63J7744	3.18
● IRF3710PBF	100	57	23	10	200	3-TO-220AB	63J7283	2.76
● IRF3710SPBF	100	57	23	10	3.8	3-D2-PAK	63J7284	3.02
● IRFP3710PBF	100	57	25	10	180	3-TO-247AC	63J6881	2.85
● IRF3710STRRPBF	100	57	23	10	3.8	3-D2-PAK	39M3560	3.02
● IRF3710ZPBF	100	59	18	10	160	3-TO-220AB	19K8205	2.57
● IRF3710ZSPBF	100	59	18	10	160	3-D2-PAK	19K8206	2.98
● IRFB59N10DPBF	100	59	25	10	200	3-TO-220AB	63J6722	3.45
● IRFP4710PBF	100	72	14	10	190	3-TO-247AC	63J6895	3.85
● IRFI4110GPBF	100	72	3.7	10	61	3-TO-220AB	27T2739	6.03
● IRFB4710PBF	100	75	14	10	200	3-TO-220AB	63J6720	3.76
● IRF8010PBF	100	80	15	10	260	3-TO-220AB	63J7399	3.08
● IRF8010SPBF	100	80	15	10	260	3-D2-PAK	63J7400	3.31
● IRFB4410ZPBF	100	96	8	10	230	3-TO-220AB	58M7351	2.95
● IRFS4410ZPBF	100	97	7.2	10	230	3-D2PAK	46M4993	4.07
● IRFB4410ZGPBF	100	97	9	10	230	3-TO-220AB	71P8065	3.10
● IRFB4310ZPBF	100	140	7	20	250	3-TO-220AB	58M7350	4.40
● IRFS4310PBF	100	140	7	10	300	3-D2-PAK	80K9837	6.47
● IRFPS3810PBF	100	170	9	10	441	3-Super-247	63J6828	11.42
● IRLB4030PBF	100	180	3.4	10	370	3-TO-220AB	08R4847	4.65
● IRFS4010PBF	100	180	3.9	20	375	3-D2-PAK	18P9424	5.61
● IRFB4110GPBF	100	180	4.5	10	370	3-TO-220AB	71P8063	5.98
● IRFB4110PBF	100	180	4.5	10	370	3-TO-220AB	73K8209	5.70
● IRFS4010-7PPBF	100	190	3.3	20	380	3-D2-PAK	27P5264	6.46
● IRFP4468PBF	100	290	2.6	10	520	3-TO-247AC	19P2517	8.97
● IRF7815PBF	150	5.1	34	10	2.5	8-SOIC	57R4071	1.93
● IRFR13N15DPBF	150	14	180	10	86	3-DPAK	63J6920	1.58
● IRFB4019PBF	150	17	80	10	80	3-TO-220AB	19M4160	1.89
● IRFR18N15DPBF	150	18	125	10	110	3-DPAK	63J6923	1.73
● IRFB23N15DPBF	150	23	90	10	3.8	3-TO-220AB	63J6712	2.88
● IRFR24N15DPBF	150	24	95	10	140	3-DPAK	63J6934	1.90
● IRFB33N15DPBF	150	33	56	10	3.8	3-TO-220AB	63J6715	3.65
● IRFR4615PBF	150	33	34	10	144	3-DPAK	10R3439	1.94
● IRFSL5615PBF	150	33	34.5	10	144	3-TO-262	10R3445	2.03
● IRFIB41N15DPBF	150	41	45	10	200	TO-220FP	63J6736	3.09
● IRFS41N15DPBF	150	41	45	10	200	3-D2-PAK	63J7038	3.96
● IRFP3415PBF	150	43	42	10	200	3-TO-247AC	63J6873	3.26
● IRF3415PBF	150	43	42	10	200	3-TO-220AB	63J7246	3.49
● IRF3415SPBF	150	43	42	10	3.8	3-D2-PAK	63J7247	3.84
● IRFB52N15DPBF	150	60	32	10	320	3-TO-220AB	63J6721	4.35
● IRFB61N15DPBF	150	60	32	10	330	3-TO-220AB	63J6723	5.70
● IRFB4321GPBF	150	83	15	10	330	3-TO-220AB	71P8064	4.39

➤CONTINUED➤

N-CHANNEL HEXFET® POWER MOSFETs: 100 TO 200V (CONT.)

Mfg. Part No.	$V_{(BR)DSS}$ (V)	I_D (A) @ 25°C	$R_{DS(ON)}$ (mΩ)	$R_{DS(ON)}$ Test Voltage	Power Diss. (W)	Pkg.	Stock No.	Price Each 1-9
IRFS4115PBF	150	99	10.3	20	375	3-D2-PAK	46P7876	4.53
IRFB4115PBF	150	104	9.3	20	380	3-TO-220AB	46P7869	4.52
IRFB4115GPBF	150	104	9.3	10	380	3-TO-220AB	10R3426	4.75
IRFP4568PBF	150	171	5.9	30	517	3-TO-247AC	09P9088	9.13
IRF7450PBF	200	2.5	170	10	3	8-SOIC	19K8285	2.10
IRFU210PBF	200	2.6	1.5	10	25	3-IPAK	63J7056	1.04
IRFR220NTRPBF	200	5	600	10	43	3-DPAK	40M7896	1.14
IRFR220NPBF	200	5	600	10	43	3-DPAK	63J6927	1.14
IRL620PBF	200	5.2	800	5	50	3-TO-220AB	63J7814	1.51
IRF620PBF	200	5.2	800	10	50	3-TO-220AB	63J7330	0.94
IRL630PBF	200	9	400	5	74	3-TO-220AB	63J7816	1.97
IRF630NSTRLPBF	200	9.3	300	10	82	3-D2-PAK	19K8217	1.92
IRF630NPBF	200	9.3	300	10	82	3-TO-220AB	63J7338	1.93
IRF630NSPBF	200	9.3	300	10	82	3-D2-PAK	63J7339	2.30
IRFR9N20DPBF	200	9.4	380	10	86	3-DPAK	63J6999	1.54
IRFI640GPBF	200	9.8	180	10	40	TO-220FP	63J6771	3.17
IRFR13N20DPBF	200	13	235	10	110	3-DPAK	63J6921	1.53
IRL640PBF	200	17	180	5	125	3-TO-220AB	63J7818	2.09
IRL640SPBF	200	17	180	5	125	3-SMD-220	63J7819	2.60
IRFS4020PBF	200	18	85	10	100	3-D2-PAK	26R2730	2.15
IRF640NSTRLPBF	200	18	150	10	150	3-D2-PAK	39M3563	2.45
IRF640NLPBF	200	18	150	10	150	3-TO-262	63J7350	2.26
IRF640NSPBF	200	18	150	10	150	3-D2-PAK	63J7352	2.55
IRF640PBF	200	18	180	10	125	3-TO-220	63J7355	2.36
IRFP240PBF	200	20	180	10	150	3-TO-247AC	63J6857	4.29
IRFS4620PBF	200	24	63.7	10	144	3-D2-PAK	10R3466	2.07
IRFS5620PBF	200	24	63.7	10	144	3-D2-PAK	10R3470	1.99
IRFB23N20DPBF	200	24	100	10	170	3-TO-220AB	63J6713	3.96
IRFS23N20DPBF	200	24	100	10	170	3-D2-PAK	63J7034	3.17
IRFP250NPBF	200	30	75	10	214	3-TO-247AC	63J6859	2.88
IRFP250PBF	200	30	85	10	190	3-TO-247AC	63J6860	4.90
IRFS31N20DPBF	200	31	82	10	200	3-D2-PAK	19K8185	3.46
IRFB31N20DPBF	200	31	82	10	200	3-TO-220AB	57J2554	4.22
IRFB38N20DPBF	200	44	54	10	320	3-TO-220AB	63J6716	4.86
IRFS38N20DPBF	200	44	54	10	320	3-D2-PAK	63J7036	3.88
IRFP260NPBF	200	50	40	10	300	3-TO-247AC	63J6864	4.61
IRFB260NPBF	200	56	40	10	380	3-TO-220AB	63J6714	4.66
IRFS4127PBF	200	72	18.6	20	375	3-D2-PAK	46P7877	5.42
IRFB4127PBF	200	76	17	20	375	3-TO-220AB	27P5255	4.87
IRFP90N20DPBF	200	94	23	10	580	3-TO-247AC	63J6896	6.84
IRFBA90N20DPBF	200	98	23	10	650	3-Super-220	63J6677	12.01
IRFP4668PBF	200	130	2.6	30	520	3-TO-247AC	19P2518	9.65
IRFD210PBF	200	600	1.5	10	1.3	4-HD-1	19K8155	1.05
IRFD220PBF	200	800	800	10	1.3	4-HD-1	19K8156	1.07

(175899)

N-CHANNEL HEXFET® POWER MOSFETs: 250 TO 1000V

RoHS Compliant Available

International IOR Rectifier

* = Tape Cut; many types stocked as tape on reel, *go online or call.*

Mfg. Part No.	$V_{(BR)DSS}$ (V)	I_D (A)@ 25°C	$R_{DS(ON)}$ (mΩ) @ 10V	Power Diss. (W)	Pkg.	Stock No.	Price Each 1-9
IRFP4229PBF	250	44	38	310	3-TO-247AC	19M4171	4.92
IRFB4229PBF	250	46	38	330	3-TO-220AB	18M1487	5.16
IRFP4768PBF	250	93	14.5	520	3-TO-247AC	08R4843	10.94
IRFR310PBF	400	1.7	3.6	25	3-DPAK	63J6941	1.10
IRFR310TRPBF	400	1.7	3.6	25	3-DPAK	63J6942	1.10
IRFR812PBF*	500	3.6	1.85	78	TO-252	90T1086	1.03
IRFR812TRPBF*	500	3.6	1.85	78	TO-252	90T1087	1.03
IRFR825PBF	500	6	1.05	119	TO-252	90T1089	1.30
IRFR825TRPBF*	500	6	1.05	119	TO-252	90T1090	1.24
IRFBC40APBF	600	6.2	1.2	96	3-TO-220AB	63J6687	1.96
IRFBC40ASPBF	600	6.2	1.2	125	3-D2-PAK	63J6688	4.90
IRFBG30PBF	1000	3.1	5	125	3-TO-220AB	63J6702	2.31

(148880)

P-CHANNEL HEXFET POWER MOSFETs

RoHS Compliant Available

International IOR Rectifier

* = Tape Cut

Mfg. Part No.	$V_{(BR)DSS}$ (V)	I_D (A) @ 25°C	$R_{DS(ON)}$ (Ω)	V_{GS} @ Rds(on) (V)	Power Dissipation (W)	Pkg.	Stock No.	Price Each 10-99
IRLML6401TRPBF*	-12	-4.3	50	-4.5	1.3	3-SOT-23	63J7615	0.61
IRF7410PBF	-12	-16	7	-4.5	2.5	8-SOIC	73K8287	2.04
IRF7410TRPBF*	-12	-16	7	-4.5	2.5	8-SOIC	59T9241	2.15
IRLML6302TRPBF*	-20	-0.78	600	-4.5	0.54	3-SOT-23	63J7614	0.53
IRLMS6702TRPBF*	-20	-2.3	200	-4.5	1.7	Micro6	19K8377	0.72
IRF7104TRPBF*	-20	-2.3	400	-4.5	2	8-SOIC	40M7937	1.26
IRLML2246TRPBF*	-20	-2.6	0.09	-4.5	1.3	3-SOT-23	40T7450	0.48
IRLML6402TRPBF*	-20	-3.7	65	-4.5	1.3	3-SOT-23	63J7616	0.54
IRLML2244TRPBF*	-20	-4.3	0.042	-4.5	1.3	3-SOT-23	40T7448	0.62
IRF7204TRPBF*	-20	-5.3	100	-4.5	2.5	8-SOIC	40M7939	1.38
IRF7404PBF	-20	-6.7	40	-4.5	2.5	8-SOIC	19K8275	1.43
IRLTS2242TRPBF	-20	-6.9	0.026	-4.5	2	TSOP	90T1102	0.54
IRLHS2242TRPBF	-20	-7.2	25	-4.5	2.1	6-PQFN	40T7444	0.81
IRLHS2242TR2PBF	-20	-7.2	25	-4.5	2.1	6-PQFN	40T7446	0.90
IRF7425TRPBF*	-20	-15	8.2	-4.5	2.5	8-SOIC	73R1194	1.82
IRF7425PBF	-20	-15	8.2	-4.5	2.5	8-SOIC	88K3056	1.82
IRLML5103PBF*	-30	-0.61	600	-10	540	3-SOT-23	38K2987	0.30
IRLML5103TRPBF*	-30	-0.76	600	-10	540	3-SOT-23	63J7612	0.47
IRLML9303TRPBF*	-30	-2.3	165	-10	1.25	3-SOT-23	79R5634	0.49
IRLMS5703TRPBF*	-30	-2.3	200	-10	1.7	Micro6	19K8376	0.67
IRF7406TRPBF*	-30	-2.8	70	-4.5	2.5	8-SOIC	40M7952	1.21
IRLML5203PBF*	-30	-3	98	-10	1.25	3-SOT-23	97K2353	0.31
IRLML5203TRPBF*	-30	-3	98	-10	1.25	3-SOT-23	63J7613	0.54
IRLML9301TRPBF*	-30	-3.6	64	-10	1.3	3-SOT-23	79R5632	0.53
IRF7205PBF	-30	-4.6	70	-10	2.5	8-SOIC	19K8227	1.11
IRF7205TRPBF*	-30	-4.6	130	-4.5	2.5	8-SOIC	40M7940	1.11
IRF9335PBF	-30	-5.4	48	-10	2.5	8-SOIC	79R7560	1.11
IRF7406PBF	-30	-5.8	45	-10	2.5	8-SOIC	19K8277	1.21
IRFTS9342TRPBF*	-30	-5.8	0.032	-10	2	TSOP	90T1093	0.62
IRFHS9301TRPBF*	-30	-6	30	-10	2.1	6-PQFN	25T5492	0.91
IRFHS9301TR2PBF*	-30	-6	30	-10	2.1	6-PQFN	25T5493	1.03
IRF7726TRPBF*	-30	-7	26	-10	1.79	Micro8	39M3585	1.25
SI4435DYPBF	-30	-8	20	-10	2.5	8-SOIC	19K8483	1.58
IRF9362PBF	-30	-8	17	-10	2	8-SOIC	79R7563	1.22
IRF9362TRPBF	-30	-8	17	-10	2	8-SOIC	79R7564	1.27
SI4435DYTRPBF*	-30	-8	35	4.5	2.5	8-SOIC	39M3596	1.67
IRF9333TRPBF*	-30	-9.2	15.6	-10	2.5	8-SOIC	79R7558	1.08
IRF9333PBF	-30	-9.2	15.6	-10	2.5	8-SOIC	79R7557	1.24
IRF7416PBF	-30	-10	20	-10	2.5	8-SOIC	31K2231	1.47
IRF7416TRPBF*	30	-10	20	-10	2.5	8-SOIC	39M3570	1.47
IRF7424PBF	-30	-11	13.5	-10	2.5	8-SOIC	19K8283	1.63
IRF7424TRPBF*	-30	-11	22	-4.5	2.5	8-SOIC	39M3571	1.63
IRF9328PBF	-30	-12	10	-10	2.5	8-SOIC	79R7554	1.20
IRF9328TRPBF	-30	-12	10	-10	2.5	8-SOIC	79R7555	1.20
IRF9321PBF	-30	-15	5.9	-10	2.5	8-SOIC	79R7551	1.87
IRF9317TRPBF*	-30	-16	5.4	-10	2.5	8-SOIC	79R7549	1.07
IRF9317PBF	-30	-16	5.4	-10	2.5	8-SOIC	79R7548	1.30
IRF9310PBF	-30	-20	3.9	-10	2.5	8-SOIC	67R9377	2.07
IRF9310TRPBF*	-30	-20	3.9	-10	2.5	8-SOIC	79R7547	2.07
IRF5803TRPBF*	-40	-3.4	112	-10	2	6-TSOP	73K8264	0.71
IRF7241PBF	-40	-6.2	41	-10	2.5	8-SOIC	19K8231	1.34
IRF7241TRPBF*	-40	-6.2	70	-4.5	2.5	8-SOIC	40M7942	1.39
IRF7240PBF	-40	-10.5	15	-10	2.5	8-SOIC	58K5775	1.96
IRF7240TRPBF*	-40	-10.5	15	-10	2.5	8-SOIC	58K5776	1.88
IRFD9010PBF	-50	-1.1	350	-10	1	4-HD-1	19K8161	1.30
IRFR9020PBF	-50	-9.9	280	-10	42	3-DPAK	19K8184	1.91
IRF9Z30PBF	-50	-18	93	-10	74	3-TO-220AB	19K8338	2.90
IRFR9024NTRPBF*	-55	-11	175	-10	38	3-DPAK	63J7004	1.47
IRFR9024NPBF	-55	-11	175	-10	38	3-DPAK	63J7002	1.47
IRFU9024NPBF	-55	-11	175	-10	38	3-IPAK	63J7099	1.33
IRF9Z24NSPBF	-55	-12	175	-10	45	3-D2-PAK	41K2377	2.20
IRF9Z24NPBF	-55	-12	175	-10	45	3-TO-220AB	63J7422	1.68
IRLIB9343PBF	-55	-14	105	-10	33	TO-220FP	19K8370	1.51
IRF9Z34NPBF	-55	-17	100	-10	56	3-TO-220AB	63J7424	1.80
IRFR5505TRPBF*	-55	-18	110	-10	57	3-DPAK	40M7905	1.46
IRFR5505PBF	-55	-18	110	-10	57	3-DPAK	63J6993	1.48
IRFU5505PBF	-55	-18	110	-10	57	3-IPAK	63J7094	1.15
IRF9Z34NLPBF	-55	-19	100	-10	68	3-TO-262	19K8339	2.27
IRF9Z34NSPBF	-55	19	100	-10	68	3-D2-PAK	41K2380	2.16
IRF9Z34NSTRLPBF*	-55	-19	100	-10	68	3-D2-PAK	40M7979	2.16
IRFR5305PBF	-55	-28	65	-10	89	3-DPAK	63J6989	1.54

➤CONTINUED➤

P-CHANNEL HEXFET POWER MOSFETs (CONT.)

Mfg. Part No.	$V_{(BR)DSS}$ (V)	I_D (A) @ 25°C	$R_{DS(ON)}$ (Ω)	V_{GS} @ Rds(on) (V)	Power Dissipation (W)	Pkg.	Stock No.	Price Each 10-99
● IRFU5305PBF	-55	-28	65	-10	89	3-IPAK	63J7093	1.64
● IRF5305LPBF	-55	-31	60	-10	3.8	3-TO-262	41K2310	2.15
● IRFR5305TRPBF*	-55	-31	65	-10	110	3-DPAK	63J6990	1.61
● IRFR5305TRLPBF*	-55	-31	65	-10	110	3-DPAK	40M7903	1.61
● IRF5305STRLPBF*	-55	-31	60	-10	110	3-D2-PAK	40M7919	2.04
● IRF5305SPBF	-55	-31	60	-10	110	3-D2-PAK	31K2160	2.04
● IRF5305PBF	-55	-31	60	-10	110	3-TO-220AB	63J7317	2.21
● IRF4905PBF	-55	-64	20	-10	150	3-TO-220AB	63J7300	3.37
● IRF4905STRLPBF*	-55	-74	20	-10	200	3-D2-PAK	40M7917	3.68
● IRF4905LPBF	-55	-74	20	-10	200	3-TO-262	58K5759	3.47
● IRF4905SPBF	-55	-74	20	-10	170	3-D2-PAK	58K5760	3.72
● IRF6215STRLPBF*	-150	-13	290	-10	110	3-D2-PAK	40M7921	2.02
● IRFD9210PBF	-200	-400	3	-10	1.3	4-HD-1	19K8167	1.69

(175895)

DUAL COMPLEMENTARY HEXFET® POWER MOSFETs

RoHS Compliant Available

International IOR Rectifier

A modified SO-8 package, with a customized lead frame for enhanced thermal characteristics and multiple-die capability, allows multiple devices to be used in an application with much less board space. The package is ideal in a variety of power applications and designed for vapor phase, infrared, or wave soldering techniques.

Mfg. Part No.	$V_{BR DSS}$ (V)	$R_{DS(ON)}$ (mΩ) @ 4.5V N Ch.	$R_{DS(ON)}$ (mΩ) @ 4.5V P Ch.	I_D (A) @ 25°C N Ch.	I_D (A) @ 25°C P Ch.	QG Typ. (nC) N Ch.	QG Typ. (nC) P Ch.	Pkg.	Stock No.	Price Each 1-9
● IRF7307PBF	20	70	140	4.3	-3.6	13.3	14.7	8-SOIC	19K8238	1.33
● IRF7307TRPBF*	20	70	140	5.2	-4.3	20	22	8-SOIC	40M7944	1.33
● IRF7507TRPBF*	20	140	270	2.4	-1.7	5.3	5.4	Micro8	39M3576	0.95
● IRF7105PBF	25	160	400	3.5	-2.3	9.4	10	8-SOIC	19K8223	1.35
● IRF7389PBF	30	46	98	7.3	-5.3	22	23	8-SOIC	19K8270	1.49
● IRF7389TRPBF*	30	46	98	7.3	-5.3	22	23	8-SOIC	40M7950	1.41
● IRF7319PBF	30	46	98	6.5	-4.9	22	23	8-SOIC	19K8249	1.51
● IRF7319TRPBF*	30	46	98	6.5	-4.9	22	23	8-SOIC	40M7945	1.43
● IRF7309PBF	30	80	160	4.9	-3.6	16.7	16.7	8-SOIC	19K8239	1.20
● IRF7309TRPBF*	30	80	160	4.9	-3.6	16.7	16.7	8-SOIC	19K8240	1.20
● IRF7343PBF	55	65	170	4.7	-3.4	24	26	8-SOIC	19K8264	1.78
● IRF7343TRPBF*	55	65	170	4.7	-3.4	24	26	8-SOIC	19K8265	1.71
		100	-100	2.1	-1.5	19	21			

* = Tape Cut
(175901)

HEXFET POWER MOSFET ARRAYS

RoHS Compliant Available

International IOR Rectifier

* = Tape Cut

DUAL N-CHANNEL

Mfg. Part No.	$V_{BR DSS}$ (V)	I_D (A) @ 25°C	$R_{DS(ON)}$ @ 25°C (Ω)	@ V_{GS} (V)	PD (W)	Pkg.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● IRF7501TRPBF*	20	2.4	0.135	2.7	1.25	Micro8	39M3572	1.14
● IRLHS6276TRPBF*	20	4.5	0.045	4.5	1.5	6-PQFN	25T5498	0.93
● IRF7301PBF	20	5.2	0.05	4.5	2	8-SOIC	19K8232	1.31
● IRF7301TRPBF*	20	5.2	0.05	4.5	2	8-SOIC	39M3566	1.31
● IRF7311PBF	20	6.6	0.029	10	2	8-SOIC	19K8241	1.39
● IRF7311TRPBF*	20	6.6	0.029	10	2	8-SOIC	39M3568	1.39
● IRF7530TRPBF*	20	5.4	0.03	4.5	1.3	Micro8	39M3577	1.26
● IRF7503TRPBF*	30	2.4	0.135	4.5	1.25	Micro8	39M3573	1.09
● IRLHS6376TRPBF*	30	3.4	0.063	4.5	1.5	6-PQFN	25T5531	0.69
● IRF9956PBF	30	3.5	0.1	10	2	8-SOIC	19K8342	1.29
● IRF7303PBF	30	4.9	0.08	4.5	2	8-SOIC	19K8233	1.20
● IRF7303TRPBF*	30	4.9	0.08	4.5	2	8-SOIC	39M3567	1.27
● IRF7313TRPBF*	30	6.5	0.029	10	2	8-SOIC	19K8243	1.38
● IRF7313PBF	30	6.5	0.029	10	2	8-SOIC	19K8242	1.38
● IRF7103PBF	30	6.5	0.029	10	2	8-SOIC	19K8219	1.17
● IRF8313PBF	30	8.1	0.0155	10	2	8-SOIC	10R3491	1.10
● IRL6372PBF	30	8.1	0.014	10	2	8-SOIC	40T7452	1.27
● IRL6372TRPBF*	30	8.1	0.014	10	2	8-SOIC	40T7453	1.27
● IRL6342TRPBF*	30	9.9	0.0146	4.5	2.5	8-SOIC	25T5536	0.81
● IRF7103TRPBF*	50	3	0.13	10	2	8-SOIC	19K8221	1.17
● IRF7341PBF	55	4.7	0.043	10	2	8-SOIC	19K8259	1.32
● IRF7341TRPBF*	55	4.7	0.05	10	2	8-SOIC	19K8261	1.30
● IRF7380PBF	80	3.6	0.073	10	2	8-SOIC	19K8269	1.36

➤CONTINUED➤

HEXFET POWER MOSFET ARRAYS (CONT.)

DUAL P-CHANNEL

Mfg. Part No.	$V_{BR DSS}$ (V)	I_D (A) @ 25°C	$R_{DS(ON)}$ @ 25°C (Ω)	@ V_{GS} (V)	PD (W)	Pkg.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● IRF7329PBF	-12	-9.2	0.017	-4.5	2	8-SOIC	19K8257	1.57
● IRF7304PBF	-20	-4.3	0.09	-4.5	2	8-SOIC	19K8235	1.18
● IRF7314TRPBF*	-20	-5.3	0.058	-4.5	2	8-SOIC	39M3569	1.16
● IRF7324PBF	-20	-9	0.018	-10	2	8-SOIC	19K8253	2.17
● IRFHS9351TRPBF*	-30	-2.3	135	-10	1.4	6-PQFN	25T5494	1.04
● IRFHS9351TR2PBF*	-30	-2.3	135	-10	1.4	6-PQFN	25T5495	1.16
● IRF7306PBF	-30	-3.6	0.1	-4.5	2	8-SOIC	19K8237	1.27
● IRF7316PBF	-30	-4.9	0.058	-10	2	8-SOIC	19K8245	1.39
● IRF7328TRPBF*	-30	-8	0.021	-10	2	8-SOIC	40M7947	2.62
● IRF7328PBF	-30	-8	0.021	-10	2	8-SOIC	19K8256	2.52
● IRF9358TRPBF*	-30	-9.2	0.0163	-10	2	8-SOIC	25T5524	1.51
● IRF7506TRPBF*	-30	-1.7	0.27	-10	1.25	Micro8	39M3575	1.12
● IRF7306TRPBF*	-30	-3.6	100	-4.5	2	8-SOIC	40M7943	1.27
● IRF7306TRPBF*	-30	-3.6	100	-4.5	2	8-SOIC	40M7943	1.27
● IRF7342PBF	-55	-3.4	0.105	-10	2	8-SOIC	19K8262	1.56
● IRF7342TRPBF*	-55	-3.4	0.105	-10	2	8-SOIC	19K8263	1.48

(175900)

TRENCH MOSFET ARRAYS

RoHS Compliant Available

NXP

Features
- Low on-state resistance
- Low figure of merit
- Wide package range
- Suitable for a wide range of applications

DUAL N CHANNEL STANDARD LEVEL MOSFETs

Mfg. Part No.	Drain Source Voltage (V)	Continuous Drain Current (mA)	On Res. $R_{DS(ON)}$ (mohm)	$R_{DS(ON)}$ Test Voltage (V)	Pkg.	Stock No.	Price Each 1-9	Price Each 10-24
● PHKD6N02LT,518	20	10.9A	16	5	SOIC	79R1988	0.91	0.81
DUAL N CHANNEL ULTRA LOW LEVEL MOSFETs								
COMPLEMENTARY N & P CHANNEL LOGIC LEVEL MOSFETs								
● PHC2300,118	300	340	6000	10	SOIC	79R1982	0.76	0.67
COMPLEMENTARY N & P CHANNEL INTERMEDIATE LEVEL MOSFETs								
● PHC21025,118	30	3.5A	80	10	SOIC	79R1981	0.85	0.75

(194480)

NexFET™ POWER MOSFETs

RoHS Compliant Available

Texas Instruments

Features:
- Optimized for 5V Gate Drive
- Ultralow Qg and Qgd
- Low Thermal Resistance
- Avalanche Rated

Applications:
- Point-of-Load Synchronous Buck in Networking, Telecom and Computing Systems
- Optimized for Synchronous FET Applications

N CHANNEL

Mfg. Part No.	VDS (V)	I_D (A)	VTH (V)	$R_{DS(on)}$ (Ω) @ Vgs=4.5	Pkg.	Stock No.	Price Each 1-9
● CSD16301Q2	25	5	1.2	23 mΩ	6-SON	35R6294	0.64
CSD16340Q3.	25	60	0.85	4.3 mΩ	8-SON	60R3529	1.36
● CSD16322Q5	25	97	1.1	4.6 mΩ	8-SON	26R3342	1.25
● CSD16556Q5B	25	100	1.4	0.0009	8-SON	63W5303	2.72
CSD17313Q2	30	5	1.3	26 mΩ	6-SON	72R3842	0.64
● CSD87351Q5D	30	32	2.1	7.4 mΩ	8-SON	41T1990	2.37
CSD17309Q3.	30	60	1.2	4.9 mΩ	8-SON	79R1554	1.36
CSD17507Q5A.	30	65	1.6	11.8 mΩ	8-SON	91R0782	1.05
CSD17303Q5.	30	100	1.1	2 mΩ	8-SON	72R3841	2.04
● CSD17311Q5	30	100	1.2	1.8 mΩ	8-SON	79R7924	0.86
● CSD17312Q5	30	100	1.1	1.4 mΩ	8-SON	79R7925	2.59
CSD17505Q5A.	30	100	1.3	2.9 mΩ	8-SON	24T5454	1.72
● CSD17559Q5	30	100	1.4	950 µohm	8-SON	63W5306	2.68
CSD17551Q3A.	30	48	1.6	0.0078	8-SON	45W5786	0.67
● CSD17552Q5A	30	60	1.5	0.0051	8-SON	63W5305	1.01
● CSD17313Q2Q1	30	5	1.3	0.024	6-SON	63W5304	0.63
● CSD17552Q5A	30	60	1.5	0.0051	8-SON	63W5305	1.01
● CSD17313Q2Q1	30	5	1.3	0.024	6-SON	63W5304	0.63
● CSD17559Q5	30	100	1.4	950 µohm	8-SON	63W5306	2.68
● CSD17559Q5	30	100	1.4	950 µohm	8-SON	63W5306	2.68
CSD17551Q3A.	30	48	1.6	0.0078	8-SON	45W5786	0.67
● CSD17552Q5A	30	60	1.5	0.0051	8-SON	63W5305	1.01
● CSD17313Q2Q1	30	5	1.3	0.024	6-SON	63W5304	0.63
CSD17551Q3A.	30	48	1.6	0.0078	8-SON	45W5786	0.67
● CSD18502Q5B	40	100	1.8	0.0018	8-SON	63W5307	2.75
● CSD18504KCS	40	100	1.9	0.0055	3-TO-220	55W6153	1.58

➤CONTINUED➤

NexFET™ POWER MOSFETs (CONT.)

Mfg. Part No.	VDS (V)	I_D (A)	VTH (V)	$R_{DS(on)}$ (Ω) @ Vgs=4.5	Pkg.	Stock No.	Price Each 1-9
CSD18502Q5B	40	100	1.8	0.0018	8-SON	63W5307	2.75
CSD18504KCS	40	100	1.9	0.0055	3-TO-220	55W6153	1.58
CSD18504KCS	40	100	1.9	0.0055	3-TO-220	55W6153	1.58
CSD18502Q5B	40	100	1.8	0.0018	8-SON	63W5307	2.75
CSD18532Q5B	60	100	1.8	0.0025	8-SON	63W5308	2.75
CSD18534Q5A	60	50	1.9	0.0078	8-SON	63W5309	1.53
CSD18532KCS	60	100	1.8	0.0033	3-TO-220	45W5787	2.64
CSD18533Q5A.	60	100	1.9	0.0047	8-SON	45W5788	1.98
CSD18532Q5B	60	100	1.8	0.0025	8-SON	63W5308	2.75
CSD18534Q5A	60	50	1.9	0.0078	8-SON	63W5309	1.53
CSD18534KCS	60	100	1.9	0.0076	3-TO-220	45W5789	1.58
CSD18532KCS	60	100	1.8	0.0033	3-TO-220	45W5787	2.64
CSD18533Q5A.	60	100	1.9	0.0047	8-SON	45W5788	1.98
CSD18534KCS	60	100	1.9	0.0076	3-TO-220	45W5789	1.58
CSD18532KCS	60	100	1.8	0.0033	3-TO-220	45W5787	2.64
CSD18533Q5A.	60	100	1.9	0.0047	8-SON	45W5788	1.98
CSD18534KCS	60	100	1.9	0.0076	3-TO-220	45W5789	1.58
CSD18532Q5B	60	100	1.8	0.0025	8-SON	63W5308	2.75
CSD18534Q5A	60	50	1.9	0.0078	8-SON	63W5309	1.53
CSD19503KCS	80	100	2.8	0.0076	3-TO-220	29X0646	2.45
CSD19505KCS	80	150	2.6	0.0026	3-TO-220	38X4673	3.94
CSD19501KCS	80	100	2.6	0.0055	3-TO-220	38X4672	2.72
CSD19533Q5A	100	100	2.8	0.0078	8-SON	41X5176	2.02
CSD19531KCS	100	100	2.7	0.0064	3-TO-220	11X3114	2.67
CSD19531Q5A	100	100	2.7	0.0053	8-SON	41X5174	2.45
CSD19532Q5B	100	100	2.6	0.004	8-SON	41X5175	2.84
CSD19533KCS	100	100	2.8	0.0087	3-TO-220	29X0648	2.23
CSD19535KCS	100	150	2.7	0.0031	3-TO-220	38X4674	3.94
CSD19536KCS	100	150	2.5	0.0023	3-TO-220	38X4675	5.49
DUAL N CHANNEL							
CSD86311W1723	25	4.5	1	29 mΩ	12-DSBGA	34T4873	1.31
CSD86360Q5D.	25	1	...	3.7 mΩ	8-SON	45W5790	2.95
CSD88537NDT	60	15	3	0.0125 mΩ		62X6326	1.66
CSD88539NDT	60	15	3	0.023 mΩ		62X6327	1.38
POWER BLOCK MOSFET PAIR - N CHANNEL							
CSD86330Q3D	25	65	1.4	8.8 mΩ	8-SON	27T6310	2.04
DUAL P CHANNEL							
CSD75211W1723	-20	-4.5	-0.7	46 mΩ	12-DSBGA	79R7927	1.49

DEVELOPMENT TOOLS

Mfg. Part No.	Description	Stock No.	Price Each
CSD86330EVM-717	Evaluation Module for CSD86330Q3D	32T2290	50.00

(164649)

HIGH SPEED N CHANNEL MOSFETS

NEW — RoHS Compliant Available — MICROCHIP

Features:
- Low Drain-to-Source On Resistance (RDS(ON))
- Low Total Gate Charge (QG) and Gate-to-Drain Charge (QGD)
- Low Series Gate Resistance (RG)
- Capable of Short Dead-Time Operation

Applications:
- Point-of-Load DC-DC Converters
- High Efficiency Power Management in Servers, Networking, and Automotive Applications

Mfg. Part No.	Continuous Drain Current Id (A)	Drain Source Voltage Vds (V)	On Resistance Rds(on) @ 10V (Ohm)	Package	Stock No.	Price Each 1-25
MCP87130T-U/LC	42	25	0.0173	DFN	90W1540	0.39
MCP87090T-U/LC	48	25	0.01	DFN	90W1538	0.47
MCP87130T-U/MF	54	25	0.0173	DFN	90W1541	0.40
MCP87055T-U/LC	60	25	0.0057	DFN	90W1537	0.54
MCP87090T-U/MF	64	25	0.01	DFN	90W1539	0.50
MCP87018T-U/MF	100	25	0.0018	DFN	90W1534	1.44
MCP87022T-U/MF	100	25	0.0022	DFN	90W1535	1.32
MCP87050T-U/MF	100	25	0.005	DFN	90W1536	0.62

(212363)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

N CHANNEL POWER MOSFETs

RoHS Compliant Available — ON Semiconductor

N CHANNEL - CUT TAPE

Mfg. Part No.	$V_{(BR)DSS\ Min}$ (V)	I_D Max (A)	rDS(on) Max (Ω)	P_D Max (W)	Package	Tape Cut Stock No.	Price Each 1-9
NTR4501NT1G	20	3.2	80	1.25	3-SOT-23	06R3476	0.62
NTGS3446T1G	20	5.1	45	2	6-TSOP	04M7521	0.52
NTD20N03L27T4G	20	20	27	74	4-DPAK	10N9715	1.03
NTGS4141NT1G	30	7	25	2	6-TSOP	10N9576	0.52
NTLJS4114NT1G	30	7.8	35	3.3	6-WDFN	10N9582	0.65
NTMFS4897NFT1G	30	171	1.3	125	SO-8FL	73R4092	1.75
NTMFS4833NT1G	30	191	2	125	8-DFN5	09R9666	1.45
NTF3055-100T1G	60	3	100	2.1	4-SOT-223	10N9573	0.77
NTF3055L108T1G	60	3	120	2.1	4-SOT-223	10P1660	0.75
NTD3055-150T4G	60	9	150	28.8	4-DPAK	10N9571	0.75
NTD3055L170T4G	60	9	170	28.5	4-DPAK	09R9641	0.66
NID6002NT4G	60	11	210	2.5	4-DPAK	09R9604	1.68
NTD3055-094T4G	60	12	94	48	4-DPAK	71J7043	0.74
NTD18N06LT4G	60	18	65	55	4-DPAK	09R9639	1.03
NTD20N06LT4G	60	20	48	60	4-DPAK	10N9716	1.00
NTD20N06T4G	60	20	46	60	4-DPAK	09R9640	0.96
NTD24N06LT4G	60	24	45	62.5	4-DPAK	10N9717	0.99
NTB45N06T4G	60	45	26	125	3-D2-PAK	10N9712	1.66
NTB35N15T4G	150	37	50	178	3-D2-PAK	45J2088	3.72
NDTL03N150CG	1.5	2.5	8	140		11X3629	3.78
NDUL03N150CG	1.5	2.5	8	50		11X3630	4.53

N CHANNEL - BULK PACKAGING

Mfg. Part No.	$V_{(BR)DSS\ Min}$ (V)	I_D Max (mA)	rDS(on) Max (Ω)	P_D Max (W)	Package	Stock No.	Price Each 1-9
NTD40N03R-1G	25	45	12.6	50	3-DPAK	83H7808	0.60
NTD5802NT4G	40	101	4.4	93.75	4-DPAK	13P5605	1.21
NTD3055L104-1G	60	12	104	48	3-DPAK	45J2116	0.72
NTD3055-094-1G	60	12	94	48	3-IPAK	71J7041	0.69
NTD3055L104G	60	12	104	48	4-DPAK	45J2117	0.72
NTB6411ANG	100	72	12.7	188	3-D2-PAK	52R8704	2.67
NTB6412ANG	100	58	16.8	167	3-D2-PAK	63R4573	2.32
NTB6413ANG	100	42	25.6	136	3-D2-PAK	63R4575	2.17
NTD6416ANLT4G	100	19	68	71	4-DPAK	52R8719	1.06
NTMFS5832NLT1G	40	20	0.0031	3.1	DFN	52T8335	0.90
NTP6411ANG	100	72	12.7	188	3-TO-220	63R4588	2.21
NTP6412ANG	100	58	16.8	167	3-TO-220	63R4589	1.76
NTP6413ANG	100	42	25.6	136	3-TO-220	63R4590	2.23
NDD05N50ZT4G	500	4.7	1.25	83	4-DPAK	63R4558	0.96
NDF05N50ZG	500	5	1.25	28	3-TO-220	71R6685	1.00
NDF08N50ZG	500	7.5	0.85	31	3-TO-220	71R6686	1.20

(116722)

P CHANNEL POWER MOSFETs

RoHS Compliant Available — ON Semiconductor

Mfg. Part No.	$V_{(BR)DSS\ Min}$ (V)	I_D Max (A)	rDS(on) Max (Ω)	P_D Max (W)	Package	Stock No.	Price Each 1-9
NTGS3443T1G	-20	2	65	2	6-TSOP	83H7823	0.46
NTGS3441T1G	-20	2.35	90	1	6-TSOP	83H7822	0.44
NTJS4151PT1G	20	4.2	60	1	6-SC-88	09R9658	0.46
NTHS5441T1G	-20	5.3	60	2.5	ChipFET	88H5108	0.67
NTMD6P02R2G	20	7.8	33	2	8-SOIC	09R9661	1.04
NTMD3P03R2G	30	-3.05	85	2	8-SOIC	09R9660	1.00
NTGS3455T1G	-30	3.5	100	2	6-TSOP	83H7824	0.59
NTF5P03T3G	30	-5.2	100	3.13	3-SOT-223	06R3475	0.78
MTB50P03HDLT4G	30	50	25	125	3-D2-PAK	09R9557	3.74
MTP50P03HDLG	30	50	25	125	TO-220	98H0856	4.27
BSS84LT1G	50	0.13	10	225	SOT-23	98H0511	0.41
MTD5P06VT4G	60	5	450	40	D-PAK	54K4911	0.86
NTB5605PT4G	60	18.5	140	88	3-D2-PAK	09R9633	1.29
MTB30P06VT4G	60	30	80	125	3-D2-PAK	09R9556	2.28
MTP2P50EG	500	2	6	75	TO-220AB	98H0854	3.21

(148741)

POWER MOSFETS

N CHANNEL SMALL SIGNAL MOSFETS

RoHS Compliant Available — ON Semiconductor

Mfg. Part No.	$V_{(BR)DSS\,Min}$ (V)	I_D Max (mA)	rDS(on) Max (mΩ)	P_D Max (W)	Package	Stock No.	Price Each 1-9
NTA4001NT1G	20	238	1.5	300	3-SC-75	06R3472	0.33
NTUD3170NZT5G	20	280	1.5	200	6-SOT-963	13P5617	0.54
NTK3043NT1G	20	285	3.4	440	3-SOT-723	09R9659	0.42
MMBF2201NT1G	20	300	1	150	3-SC-70	01P0394	0.56
MMBF0201NLT1G	20	300	1	225	SOT-23	88H4779	0.60
NTZD3154NT1G	20	540	550	280	SOT-563	45J2181	0.59
MGSF1N02LT1G	20	750	90	400	3-SOT-23	83H7317	0.50
NTK3134NT1G	20	890	350	550	3-SOT-723	27M2735	0.55
NTA4153NT1G	20	915	230	300	3-SC-75	10N9565	0.54
NTE4153NT1G	20	915	230	300	SC-89	45J2132	0.47
NTJS4405NT1G	25	1.2A	350	630	SC-88	45J2161	0.49
NTA7002NT1G	30	154	7	300	3-SC-75	10N9709	0.47
NTJD4001NT1G	30	250	1.5	272	SC-88	83H7833	0.50
NTS4001NT1G	30	270	1.5	330	3-SC-70	83H7842	0.44
NTR4003NT1G	30	560	1.5	830	3-SOT-23	10N9588	0.32
NTR4003NT3G	30	560	1.5	830	3-SOT-23	09R9671	0.31
NTR4503NT1G	30	2.5A	140	730	3-SOT-23	10N9590	0.59
BSS138LT1G	50	200	3.5	225	3-SOT-23	83H6430	0.29
BSS138LT3G	50	200	5.6	225	3-SOT-23	09R9392	0.29
2N7002LT1G	60	115	7.5	300	3-SOT-23	83H7920	0.19
2N7002LT3G	60	115	7.5	300	3-SOT-23	09R9864	0.17
VN2222LLG	60	150	10	400	T0-92	45J2394	0.47
2N7000G	60	200	5	350	3-T0-92	88H5170	0.58
2N7000RLRAG	60	200	5	350	3-T0-92	88H5171	0.59
MMFT960T1G	60	300	1.7	800	SOT-223	09R9471	0.71
2N7002ET1G	60	310	2.5	420	SOT-23	09R9861	0.16
2N7002WT1G	60	340	1.6	330	SC-70	09R9865	0.23
2N7002KT1G	60	380	1.6	420	SOT-23	09R9863	0.24
MMBF170LT1G	60	500	5	225	SOT-23	88H4781	0.35
BS170RLRAG	60	500	5	350	T0-92	71J3430	0.56
BS170G	60	500	5	350	T0-92	88H4576	0.57
BS107ARL1G	200	250	6	350	3-T0-92	45J0626	0.61

(148733)

P CHANNEL SMALL SIGNAL MOSFETS

RoHS Compliant Available — ON Semiconductor

SINGLE P CHANNEL

Mfg. Part No.	$V_{(BR)DSS\,Min}$ (V)	I_D Max (A)	rDS(on) Max (mΩ)	P_D Max (W)	Package	Tape Cut Stock No.	Tape Cut Price Each 1-9
NTJD1155LT1G	8	1.3	175	400	6-SOT-363	10N9720	0.50
NTS2101PT1G	8	1.4	100	290	3-SC-70	10N9726	0.44
NTR2101PT1G	-8	-3.7	52	960	SOT-23	45J2174	0.61
NTR0202PLT1G	20	0.4	800	225	3-SOT-23	10N9585	0.52
NTA4151PT1G	20	0.76	360	301	3-SC-75	10N9708	0.47
NTE4151PT1G	20	0.76	360	313	3-SC-89	10N9572	0.50
NTK3139PT1G	20	0.78	480	550	3-SOT-723	27M2737	0.52
NTJD4152PT1G	20	0.88	215	272	SC-88	45J2156	0.48
NTR1P02T1G	20	-1	180	400	3-SOT-23	10N9587	0.49
NTS4101PT1G	20	1.37	120	329	3-SC-70	10N9727	0.60
NTGS3443T1G	20	2	65	2	6-TSOP	83H7823	0.46
NTGS3441T1G	20	2.35	90	1	6-TSOP	83H7822	0.44
NTR4101PT1G	20	-3.2	70	730	3-SOT-23	10P1661	0.48
NTMS5P02R2G	20	5.4	33	7.05	8-NSOIC	61K1300	0.74
MMSF3P02HDR2G	20	5.6	60	2.5	8-SOIC	17M8995	1.43
NTMS10P02R2G	20	10	14	2.5	8-SOIC	10N9725	1.68
NTS4173PT1G	30	-1.3	90	290	3-SC-70	08R4029	0.46
NTR4502PT1G	30	-1.95	200	1.25	3-SOT-23	10N9589	0.61
NTGS3455T1G	30	3.5	100	2	6-TSOP	83H7824	0.59
NTR4171PT1G	30	-3.5	50	480	3-SOT-23	08R4026	0.45
NTGS4111PT1G	30	4.7	60	1.25	6-TSOP	10N9575	0.52
NTD25P03LT4G	30	25	72	75	3-DPAK	06R3474	1.07
BSS84LT1G	50	0.13	10	225	SOT-23	98H0511	0.41
NTF2955T1G	60	2.6	170	1	3-SOT-223	10N9718	0.89
NTD2955T4G	60	12	180	55	3-DPAK	10N9570	0.69
NTD20P06LT4G	60	15.5	150	65	3-DPAK	06R3473	1.04
NTB25P06T4G	60	27.5	82	120	3-D2-PAK	10N9566	1.77

(148742)

DUAL CHANNEL MOSFET ARRAYS

RoHS Compliant Available — ON Semiconductor

N CHANNEL

Mfg. Part No.	$V_{(BR)DSS\,Min}$ (V)	I_D Max (A)	rDS(on) Max (mΩ)	P_D Max (W)	Package	Stock No.	Price Each 1-9
NTJD4401NT1G	20	630	375	270	SC-88	83H7837	0.46
NTMD4N03R2G	30	4	60	2	8-SOIC	10N9583	0.68
MMDF1N05ER2G	50	2	300	2	8-SOIC	83K8580	1.63
DUAL N CHANNEL W/ SCHOTTKY							
NTLLD4901NFTWG	30	8.3	0.0174	1.88	8-WDFN	45W3759	0.50

P CHANNEL

Mfg. Part No.	$V_{(BR)DSS\,Min}$ (V)	I_D Max (A)	rDS(on) Max (mΩ)	P_D Max (W)	Package	Stock No.	Price Each 1-9
NTJD4152PT1G	-20	0.88	215	272	SC-88	45J2156	0.48
NTHD3100CT1G	20	3.9	80	3.1	ChipFET	10N9578	0.68

N AND P CHANNEL

Mfg. Part No.	$V_{(BR)DSS\,Min}$ (V)	I_D Max (A)	rDS(on) Max (mΩ)	P_D Max (W)	Package	Stock No.	Price Each 1-9
NTUD3169CZT5G	20	280	1.5	200	6-SOT-963	13P5616	0.56
NTZD3155CT1G	20	540	400	250	6-SOT-563	10N9592	0.65
NTJD4105CT1G	20	775	220	550	6-SOT-363	10N9722	0.44
NTHC5513T1G	20	3.9	80	2.1	ChipFET	09R9651	0.67
NTHD3102CT1G	20	5.5	45	2.1	ChipFET	09R9653	0.68

(161780)

TMOS POWER MOSFETs

RoHS Compliant Available — ON Semiconductor

Mfg. Part No.	$V_{(BR)DSS}$ Min. (V)	I_D Max. (A)	$R_{DS(on)}$ Max. (mΩ)	P_D Max. (W)	Polarity	Package	Stock No.	Price Each 1-9	Price Each 10-99
MGSF1N02LT1G	20	0.75	90	400	N Channel	3-SOT-23	83H7317	0.50	0.37
NTMD6N02R2G	20	6.5	35	2	N Channel	8-SOIC	70K4028	0.78	0.61
MGSF1N03LT1G	30	2.1	100	730	N Channel	3-SOT-23	96K4519	0.51	0.38
MTD6N15T4G	150	6	300	50	N Channel	4-DPAK	45J1710	1.29	1.03

(74511)

POWER MOSFETs

RoHS Compliant Available — Panasonic

Features
- Designed for Li-Ion battery protection circuits
- Low On Resistance
- Built-in gate protection

N CHANNEL

Mfg. Part No.	V_{DS} (V)	I_D (A)	R_{DS} @ V (Ω)	P_D (mW)	Pkg.	Stock No.	Price Each 1-24
FK6K02010L	20	4.5	0.013 @ 4.5V	0.7	WSMini6-F1-B	56W4023	0.57
FK3303010L	30	100 mA	2 @ 4V	0.1	SOT-723	56W4020	0.28
FK3306010L	60	100 mA	6 @ 4V	0.1	SOT-723	56W4021	0.30
FK3906010L	60	100 mA	6 @ 4V	0.125	SOT-490	56W4022	0.29

P CHANNEL

Mfg. Part No.	V_{DS} (V)	I_D (A)	R_{DS} @ V (Ω)	P_D (mW)	Pkg.	Stock No.	Price Each 1-24
MTM761100LBF	-12	-4	0.03 @ -4V	0.7	WSMini6-F1-B	93R5573	0.34
MTM761110LBF	-12	-4	0.026 @ -4.5V	0.7	WSMini6-F1-B	56W4024	0.35
FJ6K01010L	-12	-4	0.026 @ -4.5V	0.7	WSMini6-F1-B	56W4019	0.31
MTM761230LBF	-20	-3	0.036 @ -4V	0.7	WSMini6-F1-B	56W4025	0.32
FJ3303010L	-30	-100 mA	4 @ -4V	0.1	SOT-723	56W4018	0.28

DUAL N CHANNEL

Mfg. Part No.	V_{DS} (V)	I_D (A)	R_{DS} @ V (Ω)	P_D (W)	Pkg.	Stock No.	Price Each 1-2999
FC6943010R	30	100	2 @ 4V	0.125	SOT-666	53W8098	0.07
FC6943010R	30	100	2 @ 4V	0.125	SOT-666	56W4015	0.34
FC6946010R	60	100	6 @ 4V	0.125	SOT-666	56W4016	0.34

N AND P CHANNEL

Mfg. Part No.	V_{DS} (V) N	V_{DS} (V) P	I_D (A) N	I_D (A) P	R_{DS} (Ω) N	R_{DS} (Ω) P	P_D (W)	Pkg.	Stock No.	Price Each 1-24
FG6943010R	30	-30	100	100	2.5	4	0.125	SOT-666	56W4017	0.37

(202102)

MOSFETS

RoHS Compliant Available

ROHM SEMICONDUCTOR

Mfg. Part No.	V_{DS} (V)	I_D (A)	R_{DS} @ V (Ω)	P_D (mW)	Package	Stock No.	Price Each 1-9
2SK3065T100	60	2	0.25 @ 4	500	SOT-89	84R7791	0.81
2SK3018T106	30	10	8 @ 4	200	SOT-323	40P3488	0.25
2SK3019TL	30	100	13 @ 4	150	EMT	74M6353	0.25
2SK3065T100	60	2	0.25 @ 4	500	SOT-89	84R7791	0.81
2SK3541T2L	30	100	0.005 @ 4	150	VMT	40P3489	0.30
QS5K2TR	30	2	154 @ 4.5	1.25 W	TSMT	74M4143	0.52
QS6K1TR	30	1	364 @ 4.5	900	TSMT	74M4156	0.70
RJU003N03T106	30	300	1.1 @ 4.5	200	UMT	40P3170	0.22
RK7002T116	60	500	7.5 @ 10	225	SOT-23	80P7489	0.25
RSR015P03TL	-30	1.5	235 @ -10	1 W	TSMT	40P3195	0.55
RSR025N03TL	30	2.5	70 @ 10	1 W	TSMT	40P3196	0.64
RTR020N05TL	45	2	250 @ 4.5	1 W	TSMT	74M4289	0.92
RTR040N03TL	30	4	66 @ 4.5	1 W	TSMT	74M4291	0.49
RTU002P02T106	-20	0.25	1 @ -4.5	200	SOT-323	84R7508	0.36
RUE003N02TL	20	300	700 @ 4	150	EMT	84R7509	0.28
RJP020N06T100	60	2	165 @ 4.5	500	SOT-89	84R7502	0.91
RSS090N03FU6TB	30	9	11 @ 10	2	SOP	74M4271	1.37
RTM002P02T2L	-20	-200	1 @ -4.5	150	VMT	28W2067	0.59
RTR030P02TL	20	3.2	125 @ -4.5	1	TSMT	74M4290	0.61
RUF025N02TL	20	2.5	0.039 @ 4.5	800	TUMT	28W2068	0.69
RZF030P01TL	-12	-3	0.028 @ -4.5	800	TUMT	28W2070	0.75
RZQ050P01TR	-12	-5	0.019 @ -4.5	1.25	TSMT	28W2071	0.92
RZR040P01TL	-12	-4	0.022 @ -4.5	1	TSMT	28W2073	0.82

(207804)

MOSFET ARRAYS

RoHS Compliant Available

ROHM SEMICONDUCTOR

8-SOP

DUAL N CHANNEL

Mfg. Part No.	V_{DS} (V)	I_D (A)	R_{DS} @ V (Ω)	P_D (mW)	Package	Stock No.	Price Each 1-9
UM6K1NTN	30	10	8 @ 4	150	UMT	40P3427	0.35
N and P Channel							
SP8M3FU6TB	30	5	0.051 @ 10	2 W	SOIC	74M4619	1.31
QS6M3TR	20	1.5	0.238 @ 4.5	900	TSMT	74M4157	0.54

(207812)

ENHANCEMENT MODE POWER MOSFETs

RoHS Compliant Available

SOLID·STATE

N CHANNEL

Mfg. Part No.	V_{DS} (V)	I_D (mA)	$R_{DS(on)}$ (Ω)	R_{DS} Test Voltage (V)	P_D (mW)	Pkg.	Stock No.	Price Each 1-9
2N6660	60	1.1	2.7	10	6.25	TO-205AF	14R8415	5.54
2N6661	90	900	3	10	6.25	TO-205AF	14R8416	5.54

(199458)

DUAL GATE MOSFET

SOLID·STATE

Mfg. Part No.	Polarity	Package	Stock No.	Price Each 1-9
3N201	N Channel	TO-72	79T5562	13.88

(207646)

STD SERIES N-CHANNEL MOSFETs

RoHS Compliant Available

Mfg. Part No.	V_{DS}(V)	I_D (A)	RDS(on) (Ω)	Rds(on) Test Volt. (V)	$V_{GS(Th)}$ Typ (V)	P_D (W)	Pkg.	Stock No.	Price Each 1-9
STD35NF06T4	60	35	24	10	3	55	TO-252	89K1549	1.89
STD12NF06LT4	60	12	80	10	2	30	TO-252	89K1544	1.33
STD10NF10T4	100	13	130	10	3	50	TO-252	89K1542	1.30
STD5NM50T4	500	7.5	800	10	4	100	TO-252	89K1550	2.56

(166395)

STP SERIES N-CHANNEL MOSFETs

RoHS Compliant Available

Mfg. Part No.	V_{DS}(V)	I_D (A)	RDS(on) @ 10V (Ω)	$V_{GS(Th)}$ Typ (V)	P_D (W)	Case	Stock No.	Price Each 1-9
STP80NF03L-04	30V	80	4	1.7	300	TO-220	89K1631	3.89
STP100NF04	40V	120	4.6	4	300	TO-220	89K1607	3.32
STP80NF55-06	55V	80	6.5	3	300	TO-220	89K1634	3.13
STP85NF55	55V	80	8	3	300	TO-220	89K1637	2.92
STP80NF06	60V	80	6.5	3	300	TO-220	89K1632	3.39
STP16NF06	60V	16	80	4	45	TO-220	89K1615	0.92
STP16NF06L	60V	16	70	2.5	45	TO-220	89K1616	1.04
STP45NF06	60V	38	28	3	80	TO-220	89K1624	1.50
STP36NF06	60V	30	40	4	70	TO-220	89K1621	1.29
STP55NF06	60V	50	15	3	30	TO-220	89K1625	2.29
STP55NF06L	60V	55	16	1.7	95	TO-220	89K1626	1.58
STP75NF75	75V	80	9.5	3	300	TO-220	89K1628	2.68
STP24NF10	100V	26	55	3	85	TO-220	89K1618	1.76
STP35NF10	100V	40	35	3	115	TO-220	89K1620	1.74
STP40NF10	100V	50	24	3	150	TO-220	89K1623	2.12
STP80NF10	100V	80	12	3	300	TO-220	89K1633	3.59
STP120NF10	100V	110	10.5	4	312	TO-220	89K1612	3.42
STP5NK50Z	500V	4.4	1.22	3.75	70	TO-220	73J5890	1.40
STP9NK50Z	500V	7.2	720	3.75	110	TO-220	73J5894	2.11
STP12NM50	550V	12	350	4	160	TO-220	89K1609	5.68
STP20NM50	550V	20	250	4	192	TO-220	89K1617	7.07
STP11NM60	650V	11	450	4	160	TO-220	89K1608	4.96
STP4NK80Z	800V	3	3	3.75	80	TO-220	89K1622	2.13
STP10NK80ZFP	800V	9	0.78	3.75	40	TO-220FP	26M3664	4.11
STP3NK90Z	900V	3	4.1	3.75	90	TO-220	89K1619	1.58
STP9NK90Z	900V	8	1.3	3.75	160	TO-220	89K1638	3.20

(83793)

STW SERIES N-CHANNEL MOSFETs

RoHS Compliant Available

Mfg. Part No.	V_{DS} (V)	I_D (A)	RDS(on) (@ 10V) (Ω)	Rds(on) Test Volt. V_{GS} (V)	P_D (W)	Case	Stock No.	Price Each 1-9
STW14NK50Z	500V	14	340	10	150	TO-247	89K1671	4.08
STW20NK50Z	500V	17	230	10	190	TO-247	89K1672	3.79
STW20NM50FD	500V	20	250	10	214	TO-247	89K1674	6.64
STW26NM50	500V	30	120	10	313	TO-247	89K1675	10.68
STW45NM50	550V	45	100	10	417	TO-247	89K1678	15.08
STW10NK60Z	600V	10	650	10	156	TO-247	73J5896	2.85
STW13NK60Z	600V	13	480	10	150	TO-247	89K1670	5.01
STW45NM60	650V	45	110	10	417	TO-247	89K1680	12.26
STW9NK90Z	900V	8	1.3	10	160	TO-247	89K1681	3.49
STW11NK100Z	1kV	8.3	1.38	10	230	TO-247	89K1668	6.47
STW13NK100Z	1kV	13	700	10	350	TO-247	89K1669	11.66

(166394)

D SERIES HIGH VOLTAGE POWER MOSFETS

NEW

RoHS Compliant Available

VISHAY.

The 400V, 500V, and 600V devices feature on-resistance down to 0.17Ω, 0.13Ω, and 0.34Ω, respectively. The ultra-low on-resistance values translate into extremely low conduction and switching losses to save energy in high-power, high-performance switch mode applications, including server and telecom power systems, welding, plasma cutting, battery chargers, ballast light, high-intensity discharge (HID) lighting, semiconductor capital equipment, and induction heating.

Mfg. Part No.	Continuous Drain Current Id (A)	Drain Source Voltage Vds (V)	On Resistance Rds(on) @ 10V (Ohm)	Package	Stock No.	Price Each 1-9
● SIHD3N50D-E3	3	500	2.6	TO-252	08X3788	0.77
● SIHD3N50D-E3	3	500	2.6	TO-252	08X3788	0.77
● SIHD3N50D-GE3	3	500	2.6	TO-252	08X3789	0.77
● SIHU3N50D-E3	3	500	2.6	TO-251	08X3794	0.75
● SIHU3N50D-GE3	3	500	2.6	TO-251	08X3795	0.75
● SIHF6N40D-E3	6	400	0.85	TO-220FP	99W9472	1.45
● SIHP6N40D-E3	6	400	0.85	TO-220AB	99W9511	1.34
● SIHP6N40D-GE3	6	400	0.85	TO-220AB	99W9512	1.33
● SIHF10N40D-E3	10	400	0.5	TO-220FP	99W9461	1.77
● SIHP10N40D-E3	10	400	0.5	TO-220AB	99W9492	1.66
● SIHP10N40D-GE3	10	400	0.5	TO-220AB	99W9493	1.67
● SIHG14N50D-E3	14	500	0.32	TO-247AC	99W9474	3.39
● SIHG14N50D-GE3	14	500	0.32	TO-247AC	99W9475	3.39
● SIHP14N50D-E3	14	500	0.32	TO-220AB	99W9496	2.73
● SIHP14N50D-GE3	14	500	0.32	TO-220AB	99W9497	2.73
● SIHG17N60D-E3	17	600	0.275	TO-247AC	99W9476	4.07
● SIHG17N60D-GE3	17	600	0.275	TO-247AC	99W9477	4.07
● SIHP17N60D-E3	17	600	0.275	TO-220AB	08X3792	3.42
● SIHP17N60D-GE3	17	600	0.275	TO-220AB	99W9500	3.42
● SIHF18N50D-E3	18	500	0.23	TO-220FP	99W9465	2.70
● SIHG460B-GE3	20	500	0.2	TO-247AC	99W9487	4.10
● SIHG22N50D-E3	22	500	0.185	TO-247AC	99W9478	0.77
● SIHG22N50D-GE3	22	500	0.185	TO-247AC	99W9479	5.01
● SIHG25N40D-E3	25	400	0.14	TO-247AC	99W9482	3.82
● SIHG25N40D-GE3	25	400	0.14	TO-247AC	99W9483	3.82
● SIHP25N40D-E3	25	400	0.14	TO-220AB	99W9506	3.16
● SIHP25N40D-GE3	25	400	0.14	TO-220AB	99W9507	3.16
● SIHG32N50D-E3	30	500	0.125	TO-247AC	99W9485	5.44
● SIHG32N50D-GE3	30	500	0.125	TO-247AC	99W9486	5.44
● SIHS36N50D-E3	36	500	0.105	Super-247	99W9516	8.03
● SIHD5N50D-E3	5.3	500	1.2	TO-252	08X3790	1.04
● SIHD5N50D-GE3	5.3	500	1.2	TO-252	08X3791	1.04
● SIHF5N50D-E3	5.3	500	1.2	TO-220FP	99W9471	1.45
● SIHP5N50D-E3	5.3	500	1.2	TO-220AB	99W9509	1.13
● SIHP5N50D-GE3	5.3	500	1.2	TO-220AB	99W9510	1.13
● SIHF8N50D-E3	8.7	500	0.7	TO-220FP	99W9473	1.76
● SIHP8N50D-E3	8.7	500	0.7	TO-220AB	99W9514	1.44
● SIHP8N50D-GE3	8.7	500	0.7	TO-220AB	08X3793	1.44

(212311)

N-CHANNEL TRENCHFET MOSFET's

RoHS Compliant Available

VISHAY.

SINGLE N-CHANNEL

Mfg. Part No.	V_{DS} (V)	I_D (A) Package Limit	R_{DS} (On) @ V_{GS} = 10 V (Ω)	Pkg.	Stock No.	Price Each 1-9
● SIA406DJ-T1-GE3	12	4.5	19.8	6-PowerPAK SC70	35R6183	0.29
● SI3460DV-T1-GE3	20	6.8	27	6-TSOP	35R6211	1.36
● SI5404BDC-T1-GE3	20	7.5	39	8-1206	26R1905	0.87
● SIB422EDK-T1-GE3	20	9	30	6-PowerPAK SC75	35R6186	0.32
● SI5406DC-T1-GE3	12	9.5	20	8-1206	26R1906	1.04
● SI7366DP-T1-GE3	20	20	9	8-SOIC	26R1918	3.99
● SI4408DY-T1-GE3	20	21	4.5	8-SOIC	26R1871	3.46
● SI7448DP-T1-GE3	20	22	6.5	8-PowerPAK SO	26R1924	2.74
● SI4186DY-T1-GE3	20	35.8	2.6	8-SOIC	35R6234	0.93
● SI2304DDS-T1-GE3	30	3.6	60	3-TO-236	35R6205	0.21
● SI3434DV-T1-GE3	30	4.6	34	6-TSOP	26R1865	0.75
● SI5458DU-T1-GE3	30	6	41	8-PowerPAK ChipFET	35R6242	0.44
● SI5402BDC-T1-GE3	30	6.1	42	8-1206	26R1904	0.87
● SI3410DV-T1-GE3	30	8	19.5	6-TSOP	35R6208	0.52
● SI9410BDY-T1-GE3	30	8.1	24	8-SOIC	26R1948	0.89
● SI4410BDY-T1-GE3	30	10	20	8-SOIC	26R1872	0.97
● SI4890DY-T1-GE3	30	11	20	8-SOIC	26R1891	2.74
● SI4894BDY-T1-GE3	30	12	16	8-SOIC	26R1892	1.10
● SI4712DY-T1-GE3	30	14.6	13	8-SOIC	35R6240	0.93

CONTINUED

N-CHANNEL TRENCHFET MOSFET's (CONT.)

Mfg. Part No.	V_{DS} (V)	I_D (A) Package Limit	R_{DS} (On) @ V_{GS} = 10 V (Ω)	Pkg.	Stock No.	Price Each 1-9
● SI7386DP-T1-GE3	30	19	9.5	8-SOIC	26R1919	2.78
● SIR172DP-T1-GE3	30	20	8.9	8-SOIC PowerPAK	35R6195	0.55
● SI4156DY-T1-GE3	30	24	6	8-SOIC	35R6233	0.72
● SIR428DP-T1-GE3	30	30	7.5	8-SOIC PowerPAK	35R6199	1.19
● SIJ400DP-T1-GE3	30	32	4	8-SOIC PowerPAK	35R6191	1.44
● SI7772DP-T1-GE3	30	35.6	13	8-SOIC PowerPAK	35R6247	0.93
● SI4456DY-T1-GE3	40	3.3	4.5	8-SOIC	26R1878	4.17
● SIJ800DP-T1-GE3	40	20	9.5	8-SOIC PowerPAK	35R6192	0.90
● SIR426DP-T1-GE3	40	30	10.5	8-SOIC PowerPAK	35R6198	0.91
● SIS434DN-T1-GE3	40	35	7.6	8-PowerPAK 1212	35R6202	1.03
● SIE812DF-T1-GE3	40	60	3.4	10-PolarPAK	26R1858	5.75
● SI7308DN-T1-GE3	60	6	72	8-1212	26R1916	1.58
● SI7120DN-T1-GE3	60	10	28	8-1212	26R1909	2.87
● SI7478DP-T1-GE3	60	20	8.8	8-PowerPAK SO	26R1929	3.99
● SI7812DN-T1-GE3	75	16	46	8-1212	26R1935	2.86
● SI7148DP-T1-GE3	75	28	11	8-PowerPAK SO	26R1912	3.03
● SIR432DP-T1-GE3	100	28.4	30.6	8-SOIC PowerPAK	35R6200	1.56
● SIR846DP-T1-GE3	100	60	7.8	8-SOIC PowerPAK	35R6201	2.34
● SI3440DV-T1-GE3	150	1.5	400	6-TSOP	26R1866	1.72
● SI7818DN-T1-GE3	150	3.4	142	8-1212	26R1936	2.09
● SI7898DP-T1-GE3	150	3	95	8-SOIC	26R1940	1.53
● SI4488DY-T1-GE3	150	5	50	8-SOIC	26R1883	2.08
● SI4462DY-T1-GE3	200	1.5	480	8-SOIC	35R6237	1.01
● SI7820DN-T1-GE3	200	2.6	250	8-1212	26R1937	2.64
● SI7434DP-T1-GE3	250	3.8	162	8-SOIC	26R1922	4.36

(90606)

P-CHANNEL TRENCHFET MOSFETs

RoHS Compliant Available

VISHAY.

Mfg. Part No.	V_{DS} (V)	I_D (A)	$R_{DS(ON)}$* (Ω)	Pkg.	Tape Cut Stock No.	Price Each 1-9
● SI3499DV-T1-GE3	-8	-7	23	6-TSOP	35R6214	0.96
● SI4465ADY-T1-GE3	-8	13.7	16	8-SOIC	26R1880	2.56
● SI3447BDV-T1-GE3	-12	-4.5	40	6-TSOP	26R1868	0.54
● SIA431DJ-T1-GE3	-20	-12	25	6-PowerPAK SC70	35R6184	0.54
● SI2367DS-T1-GE3	-20	-3.8	66	3-TO-236	35R6206	0.35
● SI3407DV-T1-GE3	-20	-8	24	6-TSOP	35R6207	0.42
● SI3441BDV-T1-GE3	-20	-2.45	90	6-TSOP	35R6209	0.42
● SI3469DV-T1-GE3	-20	-6.7	30	6-TSOP	35R6212	0.87
● SI4421DY-T1-GE3	-20	-14	13.5	8-SOIC	26R1874	3.71
● SI4463BDY-T1-GE3	-20	13.7	20	8-SOIC	26R1879	2.23
● SI4477DY-T1-GE3	-20	-26.6	6.2	8-SOIC	35R6238	1.61
● SI5459DU-T1-GE3	-20	-8	52	8-PowerPAK ChipFET	35R6243	0.60
● SI7485DP-T1-GE3	-20	-20	13	8-PowerPAK SO	26R1930	4.68
● SI7635DP-T1-GE3	-20	-40	4.9	8-SOIC PowerPAK	35R6246	1.38
● SI8461DB-T2-E1	-20	-3.7	100	4-MICROFOOT	35R6249	0.54
● SI9424BDY-T1-GE3	-20	-7.1	25	8-SOIC	26R1949	1.55
● SI2343DS-T1-GE3	-30	-4	53	3-SOT-23	26R1862	0.69
● SI4413ADY-T1-GE3	-30	-15	7.5	8-SOIC	26R1873	3.09
● SI4425BDY-T1-GE3	-30	-11.4	19	8-SOIC	26R1875	2.27
● SI4427BDY-T1-GE3	-30	-12.6	19.5	8-SOIC	26R1876	2.04
● SI4483EDY-T1-GE3	-30	-14	14	8-SOIC	26R1882	3.11
● SI7409ADN-T1-GE3	-30	-11	31	8-1212	26R1920	2.34
● SI7421DN-T1-GE3	-30	-9.8	43	8-1212	26R1921	1.95
● SI7491DP-T1-GE3	-30	18	13	8-PowerPAK SO	26R1932	4.68
● SI7617DN-T1-GE3	-30	-35	12.3	8-PowerPAK 1212	35R6245	0.98
● SI7463DP-T1-GE3	-40	-18.6	14	8-PowerPAK SO	26R1925	3.99
● SUD50P04-13L-GE3	-40	-60	10.5	3-TO-252	26R1954	2.79
● SI7309DN-T1-GE3	-60	-8	146	8-1212	26R1917	1.48
● SI7465DP-T1-GE3	-60	-5	80	8-SOIC	26R1926	1.88
● TP0610K-T1-GE3	-60	-185	6	3-SOT-23	26R1957	0.33
● SI2337DS-T1-GE3	-80	-2.2	303	3-SOT-23	26R1861	1.24
● SI7469DP-T1-GE3	-80	-28	29	8-PowerPAK SO	26R1927	3.94
● SI7489DP-T1-GE3	-100	-28	47	8-PowerPAK SO	26R1931	3.50
● SI2325DS-T1-GE3	-150	-690	1.3	3-SOT-23	26R1859	1.16
● SI7439DP-T1-GE3	-150	-5.2	95	8-PowerPAK SO	26R1923	5.57

CONTINUED

P-CHANNEL TRENCHFET MOSFETs (CONT.)

Mfg. Part No.	V_{DS} (V)	I_D (A)	$R_{DS(ON)}$* (Ω)	Pkg.	Tape Cut Stock No.	Price Each 1-9
SI2327DS-T1-GE3	-200	-490	2.45	3-SOT-23	26R1860	1.33
SI7119DN-T1-GE3	-200	-3.8	1.1	8-1212	26R1908	1.43

*V_{GS} = 10V
(177048)

ENHANCEMENT-MODE MOSFETs

RoHS Compliant Available

VISHAY.

*** = Sold individually.** Tape and reel packaging also available; *go online or call.*

N-CHANNEL TO-236 (SOT-23)

Mfg. Part No.	$V_{(BR)DSS}$ Min. (V)	$r_{DS(on)}$ Max. (Ω)	I_D Max. (A)	P_D Max. (W)	Tape Cut Stock No.	Price Each 1-9
2N7002-E3*	60	7.5	115	200	06J8891	0.35
2N7002-T1-E3	60	7.5	115	200	06J8892	0.41
N-CHANNEL SC-89 (3-LEAD)						
SI1032X-T1-E3	20	9	200	340	06J7514	0.31
N-CHANNEL SC-89 (6-LEAD)						
SI1034X-T1-E3	20	9	200	250	06J7516	0.35

(70267)

SINGLE N-CHANNEL MOSFETs 8V to 25V

RoHS Compliant Available

VISHAY.

SINGLE N CHANNEL

Mfg. Part No.	V_{DS} (V)	I_D	R_{DS} (On) @ V_GS=10V (Ω)	Pd	Pkg.	Tape Cut Stock No.	Price Each 1-9
SI1050X-T1-GE3	8	1.34A	0.12	236mW	SC-89	16P3688	0.50
SIA414DJ-T1-GE3	8	12A	0.041	3.5W	SC-70	16P3612	1.25
SI5406CDC-T1-GE3	12	6A	0.027	2.3W	1206	16P3767	0.84
SI4866BDY-T1-GE3	12	21.5A	0.0042	4.45W	SOIC	69W7204	1.18
SI4838BDY-T1-GE3	12	34A	0.0021	5.7W	SOIC	05W6948	1.27
SI7102DN-T1-GE3	12	35A	0.0031	52W	PowerPAK 1212	05W6953	1.63
SI1032R-T1-GE3	20	200mA	10	250mW	SC-75A	16P3681	0.45
SI1034X-T1-GE3	20	200mA	10	250mW	SC-89	16P3683	0.29
SI1012R-T1-GE3	20	600mA	0.41	150mW	SOT-416	69W7168	0.28
SI1012X-T1-GE3	20	600mA	0.7	250mW	SC-89	16P3669	0.42
TN0200K-T1-E3	20	730mA	0.4	350mW	SOT-23	72J6434	0.28
SI2302CDS-T1-E3	20	2.6A	0.045	710mW	SOT-23	69W7186	0.28
SI8800EDB-T2-E1	20	2.8A	0.066	900mW	MICRO FOOT	69W7244	0.30
SI2302CDS-T1-GE3	20	2.9A	0.075	710mW	TO-236	16P3702	0.44
SI2314EDS-T1-GE3	20	3.77A	0.027	750mW	SOT-23	84R8027	0.61
SI2314EDS-T1-E3	20	4.9A	0.033	750mW	TO-236	06J7576	0.61
SI2312BDS-T1-GE3	20	5A	0.047	750mW	TO-236	16P3709	0.61
SI5404BDC-T1-E3	20	5.4A	0.022	1.3W	ChipFET	69W7207	0.92
SI3446ADV-T1-GE3	20	5.8A	0.031	2W	TSOP	84R8036	0.44
SI5486DU-T1-GE3	20	12A	0.012	31W	PowerPAK	69W7210	0.84
SIA430DJ-T1-GE3	20	12A	0.0185	3.5W	SC-70	16P3618	1.41
SIS410DN-T1-GE3	20	35A	0.004	52W	PowerPAK 1212	05W6932	0.75
SI7868ADP-T1-E3	20	40A	0.0018	83W	PowerPAK SO	01P0441	2.27
SIE808DF-T1-E3	20	60A	0.0013	125W	PolarPAK	69W7161	4.12
SIE810DF-T1-E3	20	60A	0.0011	125W	PolarPAK	69W7162	3.58
SIR440DP-T1-GE3	20	60A	0.0012	104W	PowerPAK SO	69W7164	1.88
SUP85N02-03-E3*	20	85A	0.003	250W	TO-220AB	06J8570	8.50
SI4116DY-T1-GE3	25	18A	0.0115	2.5W	SOIC	16P3725	1.49
SI4472DY-T1-GE3	20	7.7A	0.047	3.1W	SOIC	26R1881	4.87
SIR438DP-T1-GE3	25	60A	0.00145	83W	PowerPAK SO	05W6930	1.82
SINGLE CHANNEL WITH SCHOTTKY DIODE							
SI3812DV-T1-GE3	20	2.4A	0.125	760mW	TSOP	35R6222	0.67

*Bulk packaging
(166456)

SINGLE N-CHANNEL MOSFETs 30V to 60V

RoHS Compliant Available

VISHAY.

Mfg. Part No.	V_{DS} (V)	I_D	R_{DS} (On) @ V_GS=10V (Ω)	Pd	Pkg.	Tape Cut Stock No.	Price Each 1-9
SI1070X-T1-GE3	30	1.2A	0.14	236mW	SC-89	16P3696	0.50
SI2304BDS-T1-GE3	30	3.2A	0.105	750mW	TO-236	16P3704	0.65
SI2300DS-T1-GE3	30	3.6A	0.055	1.7W	SOT-23	69W7184	0.28
SI2306BDS-T1-GE3	30	4A	0.065	750mW	TO-236	16P3706	0.62
SI2316BDS-T1-GE3	30	4.5A	0.08	1.25W	TO-236	16P3710	0.73
SIA408DJ-T1-GE3	30	4.5A	0.053	3.4W	SC-70	16P3609	1.21
SI4346DY-T1-GE3	30	5.9A	0.019	1.31W	SOIC	84R8044	0.78
SI4800BDY-T1-GE3	30	9A	0.03	1.3W	SOIC	16P3753	1.16
SI4420BDY-T1-E3	30	9.5A	0.007	1.4W	SOIC	69W7199	1.65
SI4128DY-T1-GE3	30	10.9A	0.02	5W	SOIC	05W6939	0.47
SI7112DN-T1-GE3	30	11.3A	0.006	1.5W	PowerPAK 1212	69W7220	1.93
SI4178DY-T1-GE3	30	12A	0.017	5W	SOIC	05W6942	0.47
SI4430BDY-T1-E3	30	14A	0.0037	1.6W	SOIC	69W7262	2.14
SI4686DY-T1-E3	30	18.2A	0.0078	5.2W	SOIC	69W7202	1.30
SI4686DY-T1-GE3	30	18.2A	0.014	3W	SOIC	26R1888	2.09
SI4162DY-T1-GE3	30	19.3A	0.0065	5W	SOIC	05W6941	0.70
SIRA14DP-T1-GE3	30	20A	0.00425	31.5W	PowerPAK SO	68W7087	0.51
SIRA12DP-T1-GE3	30	25A	0.0032	31W	PowerPAK SO	68W7085	0.81
SI4160DY-T1-GE3	30	25.4A	0.004	5.7W	SOIC	05W6940	1.04
SI4842BDY-T1-E3	30	28A	0.0034	6.25W	SOIC	05W6951	2.31
SIRA10DP-T1-GE3	30	30A	0.0028	40W	PowerPAK SO	68W7083	0.87
SISA10DN-T1-GE3	30	30A	0.0028	39W	PowerPAK 1212	68W7089	0.87
SI4164DY-T1-GE3	30	30A	0.0026	6W	SOIC	69W7195	1.29
SIS322DNT-T1-GE3	30	38.3A	0.006	19.8W	PowerPAK 1212	68W7091	0.47
SIRA06DP-T1-GE3	30	40A	0.00205	62.5W	PowerPAK SO	68W7081	0.98
SIS476DN-T1-GE3	30	40A	0.00205	52W	PowerPAK 1212	68W7093	0.98
SIR466DP-T1-GE3	30	40A	0.0029	54W	SOIC	69W7165	0.98
SIR468DP-T1-GE3	30	40A	0.0047	50W	PowerPAK SO	69W7166	1.10
SUP70N03-09BP-E3*	30	70A	0.007	93W	TO-220AB	06J8552	2.39
SI2318DS-T1-GE3	40	3A	0.036	750mW	SOT-23	84R8029	0.36
SI4446DY-T1-GE3	40	3.9A	0.033	1.1W	SOIC	84R8051	0.55
SIS412DN-T1-GE3	40	12A	0.02	15.6W	PowerPAK 1212	05W6933	0.44
SI5410DU-T1-GE3	40	12A	0.015	31W	ChipFET	69W7208	0.89
SI4840BDY-T1-E3	40	19A	0.0074	6W	SOIC	05W6949	1.27
SI4840BDY-T1-GE3	40	19A	0.0074	6W	SOIC	05W6950	1.35
SI7288DP-T1-GE3*	40	20A	0.0156	15.6W	PowerPAK SO	63R8227	0.74
SIR836DP-T1-GE3	40	21A	0.015	15.6W	PowerPAK SO	05W6931	0.61
SI4154DY-T1-GE3	40	36A	0.0027	7.8W	SOIC	69W7194	1.10
SIR418DP-T1-GE3	40	40A	0.005	5W	PowerPAK SO	35R6197	1.17
SIR422DP-T1-GE3	40	40A	0.0054	34.7W	PowerPAK SO	05W6929	1.05
SI7848BDP-T1-GE3	40	47A	0.012	4.2W	SOIC	16P3873	4.63
SIR414DP-T1-GE3	40	50A	0.0023	83W	PowerPAK SO	05W6928	1.61
SI7790DP-T1-GE3	40	50A	0.0036	69W	PowerPAK SO	69W7233	2.86
SIE832DF-T1-E3	40	50A	0.0046	104W	PolarPAK	69W7163	3.29
SUD50N04-8M8P-GE3	40	50A	0.0105	3.1W	TO-252	16P3890	2.23
SI7884BDP-T1-E3	40	58A	0.0062	46W	PowerPAK SO	05W6955	3.03
SI7884BDP-T1-GE3	40	58A	0.009	4.6W	SOIC	16P3877	5.17
SIR640DP-T1-GE3	40	60A	0.0014	104W	PowerPAK SO	83T3532	1.88
SIR470DP-T1-GE3	40	60A	0.0019	104W	PowerPAK SO	69W7167	2.62
SI1330EDL-T1-E3	60	240mA	1	280mW	SOT-323	69W7174	0.31
SI1022R-T1-GE3	60	330mA	1.25	250mW	SC-75A	16P3674	0.51
SI1026X-T1-GE3	60	305mA	1.4	250mW	SC-89	16P3678	0.26
SI2308BDS-T1-E3	60	2.3A	0.13	1.66W	SOT-23	69W7187	0.31
SI2308BDS-T1-GE3	60	2.3A	0.192	1.09W	TO-236	16P3708	0.50
IRFL014TRPBF	60	2.7A	0.2	3.1W	SOT-223	69W7151	1.27
SI3458BDV-T1-GE3	60	3.2A	0.082	2W	TSOP	84R8039	0.58
SI4850EY-T1-GE3	60	6A	0.018	1.7W	SOIC	84R8062	1.39
SUD23N06-31-GE3	60	9.1A	0.045	5.7W	TO-252	16P3889	1.40
IRFZ14PBF*	60	10A	0.2	43W	TO-220AB	63J7108	1.17
SI5476DU-T1-GE3	60	12A	0.028	31W	PowerPAK	69W7209	0.93
SI7460DP-T1-GE3	60	18A	0.012	5.4W	PowerPAK SO	64R4909	2.02
SUD23N06-31L-E3*	60	23A	0.025	100W	TO-252	06J8438	1.16
SI7138DP-T1-GE3	60	30A	0.0078	5.4W	PowerPAK SO	26R1911	3.29
SUM50N06-16L-E3	60	50A	0.13	3.7W	TO-263	69W7249	2.25
SI7164DP-T1-GE3	60	60A	0.00625	6.25W	PowerPAK SO	64R4908	2.88
SIR662DP-T1-GE3	60	60A	0.0022	104W	PowerPAK SO	83T3534	1.99
SUM110N06-3M9H-E3	60	110A	0.00325	375W	TO-263	69W7247	6.10

*Bulk Packaging
(168148)

SINGLE N-CHANNEL MOSFETs 75V to 600V

RoHS Compliant Available

VISHAY.

* = Sold as EA

Mfg. Part No.	V_{DS} (V)	I_D (mA)	R_{DS} (On) @ V_GS=10V (Ω)	Pd (W)	Pkg.	Tape Cut Stock No.	Tape Cut Price Each 1-2499
● SI7174DP-T1-GE3	75	60A	0.007	6.25W	SOIC	16P3829	4.59
● SI4110DY-T1-GE3	80	17.3A	0.0108	7.8W	SOIC	69W7193	1.59
● SI7852ADP-T1-GE3	80	30A	0.021	5W	SOIC	16P3875	3.25
● SUD40N08-16-E3*	80	40A	0.013	136W	TO-252	06J8449	3.53
● SIR880DP-T1-GE3	80	60A	0.0085	6.25W	PowerPAK SO	79R5405	2.66
● SI3430DV-T1-GE3	100	2.4A	0.17	2W	TSOP	26R1863	0.90
● SI7322DN-T1-GE3	100	18A	0.048	52W	PowerPAK 1212	69W7225	1.29
● SUM60N10-17-E3	100	60A	0.013	150W	TO-263	69W7250	3.95
● SI7178DP-T1-GE3	100	60A	0.014	6.25W	PowerPAK SO	16P3830	5.28
● SUM90N10-8M2P-E3*	100	90A	0.0067	300W	TO-263	75M5656	4.47
SIA446DJ-T1-GE3*	150	7.7A	0.145	19W	PowerPAK SC70	38X4910	0.69
● SI4848DY-T1-GE3	150	2.7A	0.068	1.5W	SOIC	84R8061	1.27
● SI4488DY-T1-E3	150	3.5A	0.041	3.1W	SOIC	69W7200	2.21
● SI7430DP-T1-GE3	150	26A	0.047	5.2W	SOIC	16P3846	3.62
● SI7450DP-T1-GE3	200	3.2A	0.065	1.9W	PowerPAK SO	84R8076	2.08
● TN2404K-T1-GE3	240	200mA	4	360mW	SOT-23	79R5407	0.71
● SI7802DN-T1-GE3	250	1.24A	0.36	1.5W	PowerPAK 1212	69W7234	1.65
● SUM18N25-165-E3	250	18A	0.13	150W	TO-263	69W7248	3.03
● IRFR320TRPBF	400	3.1A	1.8	42W	TO-252	69W7153	1.42
● IRF740PBF*	400	10A	0.55	125W	TO-220	63J7391	2.19
● IRFP460APBF*	500	20A	0.27	280W	TO-247	63J6888	6.62
● IRFP460PBF*	500	20A	0.27	280W	TO-247	63J6893	7.30
● IRFP460LCPBF*	500	20A	0.27	280W	TO-247	63J6891	10.36
● SIHP18N50C-E3*	560	18A	0.225	223W	TO-220	35R0016	2.64
● SIHG20N50C-E3*	560	20A	0.225	292W	TO-247	35R0015	3.13
● SIHD7N60E-GE3	575	7A	0.5	78W	TO-252	68W7039	1.87
● SIHF7N60E-E3	575	7A	0.5	31W	TO-220	68W7045	2.23
● SIHP7N60E-GE3	600	7A	0.5	78W	TO-220AB	68W7071	1.95
● SIHU7N60E-GE3	600	7A	0.5	78W	TO-251	68W7073	1.92
● SIHB12N60E-GE3	600	12A	0.32	147W	TO-263	68W7031	1.93
● SIHF12N60E-E3	600	12A	0.32	33W	TO-220FP	68W7041	2.62
● SIHP12N60E-GE3	600	12A	0.32	147W	TO-220AB	68W7059	2.51
● SIHB15N60E-GE3	600	15A	0.23	180W	TO-263	68W7033	3.23
● SIHF15N60E-E3	600	15A	0.23	34W	TO-220	68W7043	3.20
● SIHP15N60E-GE3	600	15A	0.23	180W	TO-220AB	68W7061	3.06
● SIHG22N60E-GE3*	600	21A	0.15	227W	TO-247AC	68W7047	4.61
● SIHP22N60E-GE3*	600	21A	0.15	227W	TO-220AB	68W7063	4.18
● SIHB22N60S-E3*	600	22A	0.16	250W	TO-263	74R0202	3.82
● SIHF22N60S-E3*	600	22A	0.16	250W	TO-220FP	74R0207	3.97
● SIHG30N60E-GE3*	600	29A	0.104	250W	TO-247AC	68W7051	6.63
● SIHP30N60E-GE3	600	29A	0.104	250W	TO-220AB	68W7067	6.20
● SIHW30N60E-GE3	600	29A	0.104	250W	TO-247AD	68W7075	6.63
● SIHB33N60E-GE3	600	33A	0.083	278W	TO-263	68W7037	6.40
● SIHG33N60E-GE3	600	33A	0.083	278W	TO-247AC	68W7053	6.92
● SIHP33N60E-GE3*	600	33A	0.083	278W	TO-220AB	68W7069	6.34
● SIHW33N60E-GE3	600	33A	0.083	278W	TO-247AD	68W7077	6.92
● SIHG47N60E-GE3	600	47A	0.053	357W	TO-247AC	68W7055	10.57
● SIHW47N60E-GE3	600	47A	0.053	357W	TO-247AD	68W7079	10.57
● SIHG47N60S-E3*	600	47A	0.057	417W	TO-247AC	65T1646	10.17
● SIHG73N60E-GE3*	600	73A	0.032	520W	TO-247AC	68W7057	15.56
● SIHB24N65E-GE3	650	24A	0.12	250W	TO-263	68W7035	6.14
● SIHG24N65E-GE3	650	24A	0.12	250W	TO-247AC	68W7049	6.34
● SIHP24N65E-GE3	650	24A	0.12	250W	TO-220AB	68W7065	5.91

(195717)

SINGLE P-CHANNEL MOSFETs -8V to-20V

RoHS Compliant Available

VISHAY.

*** = Sold individually.** Tape and reel packaging also available; *go online or call.*
Mfg. part nos. with suffix **E3** are packaged RoHS compliant versions. Those with **GE3** suffix are RoHS compliant and Halogen-free.

SINGLE P CHANNEL

Mfg. Part No.	V_{DS} (V)	Drain Current I_D	Rds(on) Ω	Power	Pkg.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● SI2305DS-T1-GE3	-8	-3.5A	0.044	1.25W	SOT-23	84R8023	1.08
● SI2305DS-T1-E3	-8	-3.5A	0.052	1.25W	TO-236	06J7569	1.08
● SI2305ADS-T1-GE3	-8	-4.1A	0.088	960mW	TO-236	16P3705	0.64
● SI3445DV-T1-E3	-8	-5.6A	0.042	2W	TSOP	06J7603	1.62
● SIA417DJ-T1-GE3	-8	-12A	0.095	3.5W	SC-70	16P3614	0.98

➤CONTINUED➤

SINGLE P-CHANNEL MOSFETs -8V to-20V (CONT.)

Mfg. Part No.	V_{DS} (V)	Drain Current I_D	Rds(on) Ω	Power	Pkg.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● SIA427DJ-T1-GE3	-8	-12A	0.037	19W	PowerPAK SC70	69W7155	0.45
● SI1417EDH-T1-E3	-12	-2.7A	0.133	1W	SOT-363	69W7177	0.47
● SI2315BDS-T1-E3	-12	-3A	0.05	750mW	TO-236	06J7577	0.65
● SI2315BDS-T1-GE3	-12	-3A	0.04	750mW	SOT-23	84R8028	0.62
● SI1401EDH-T1-GE3	-12	-4A	0.072	2.8W	SOT-363	69W7175	0.35
● SI2333DS-T1-E3	-12	-4.1A	0.032	1.25W	TO-236	06J7587	0.96
● SI2333DS-T1-GE3	-12	-4.1A	0.025	750mW	SOT-23	84R8032	0.90
● SI3447BDV-T1-E3	-12	-4.5A	0.06	1.1W	TSOP	69W7190	0.58
● SI6433BDQ-T1-GE3	-12	-4.8A	0.07	1.05W	TSSOP	16P3802	1.07
● SI8415DB-T1-E1	-12	-5.3A	0.05	1.47W	MICRO FOOT	69W7241	1.08
● SI3473DV-T1-E3	-12	-5.9A	0.023	2W	TSOP	06J7618	1.10
● SI5475DDC-T1-GE3	-12	-6A	0.052	2.3W	1206	16P3778	0.88
● SI2333CDS-T1-E3	-12	-7.1A	0.0285	2.5W	SOT-23	88T7691	0.62
● SI6423DQ-T1-GE3	-12	-8.2A	0.0112	1.05W	TSSOP	69W7214	1.73
● SI1023X-T1-GE3	-20	-350mA	2.7	250mW	SC-89	16P3675	0.44
● SI1013R-T1-GE3	-20	-350mA	1.8	150mW	SOT-416	69W7169	0.35
● TP0101K-T1-E3	-20	-580mA	0.42	350mW	TO-236	35K3507	0.46
● SI2301BDS-T1-GE3	-20	-2.2A	0.08	700mW	SOT-23	84R8020	0.40
● SI2301BDS-T1-E3	-20	-2.2A	0.1	900mW	TO-236	06J7561	0.44
● SI3441BDV-T1-E3	-20	-2.45A	0.09	1.25W	TSOP	06J7599	0.42
● SI5855DC-T1-E3	-20	-2.7A	0.095	1.1W	ChipFET	06J8043	0.83
● SI1469DH-T1-E3	-20	-2.7A	0.126	2.78W	SOT-363	69W7178	0.54
● SI1413EDH-T1-E3	-20	-2.9A	0.115	1W	SC-70	06J7536	0.54
● SI2301CDS-T1-E3	-20	-3.1A	0.11	1.6W	SOT-23	69W7185	0.35
● SI2301CDS-T1-GE3	-20	-3.1A	0.142	860mW	TO-236	16P3701	0.38
● SI3443BDV-T1-E3	-20	-3.6A	0.048	1.1W	TSOP	05W6938	0.62
● SI8467DB-T2-E1	-20	-3.7A	0.102	1.8W	MICRO FOOT	69W7242	0.54
● SI9933CDY-T1-GE3	-20	-4A	0.075	3.1W	SOIC	69W7246	0.65
● SI2377EDS-T1-GE3	-20	-4.4A	0.05	1.8W	SOT-23	05W6937	0.35
● SI9433BDY-T1-GE3	-20	-4.5A	0.05	1.3W	SOIC	69W7245	1.15
● SI2323DS-T1-E3	-20	-4.7A	0.039	1.25W	TO-236	06J7584	0.94
● SI4963BDY-T1-E3	-20	-4.9A	0.04	1.1W	SOIC	69W7205	2.67
● SI3433CDV-T1-GE3	-20	-5.2A	0.031	1.6W	TSOP	84R8034	0.33
● SI2323CDS-T1-GE3	-20	-6A	0.032	2.5W	SOT-23	05W6935	0.73
● SI5441BDC-T1-GE3	-20	-6.1A	0.08	2.5W	1206	16P3774	1.21
● SI6463BDQ-T1-GE3	-20	-6.2A	0.011	1.05W	TSSOP	69W7215	1.30
● SI3493BDV-T1-E3	-20	-8A	0.0347	2.97W	TSOP	69W7191	0.76
● SI7413DN-T1-E3	-20	-8.4A	0.023	1.5W	PowerPAK 1212	69W7226	1.37
● SIB433EDK-T1-GE3	-20	-9A	0.085	13W	PowerPAK	69W7159	0.44
● SIA443DJ-T1-GE3	-20	-9A	0.088	3.3W	SC-70	16P3620	1.02
● SI7107DN-T1-E3	-20	-9.8A	0.0167	1.5W	PowerPAK 1212	69W7219	2.05
● SIA433EDJ-T1-GE3	-20	-12A	0.018	3.5W	PowerPAK SC70	79R5403	0.69
● SIA411DJ-T1-GE3	-20	-12A	0.15	3.5W	SC-70	16P3610	1.07
● SIA415DJ-T1-GE3	-20	-12A	0.051	3.5W	SC-70	16P3613	1.21
● SI4423DY-T1-E3	-20	-14A	0.0075	1.5W	SOIC	06J7705	3.09
● SI8499DB-T2-E1	-20	-16A	0.06	13W	MICRO FOOT	69W7243	0.54
● SI7141DP-T1-GE3	-20	-60A	0.0024	104W	PowerPAK SO	69W7222	2.70
● SI1067X-T1-GE3	-20	1.06A	0.15	236mW	SC-89	16P3694	0.59
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● SI3805DV-T1-GE3	-20	-3.3	0.084	1.1	TSOP	35R6221	0.44

(52179)

SINGLE P-CHANNEL MOSFETs -30V to-200V

RoHS Compliant Available

VISHAY.

Mfg. Part No.	V_{DS} (V)	Drain Current I_D	Rds(on) Ω	Power	Pkg.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● SI7157DP-T1-GE3	-20	-60A	0.00125	104W	PowerPAK SO	29X6571	1.60
● SI8851EDB-T2-E1	-20	-16.7A	0.006	3.1W	MICRO FOOT	29X6572	0.57
● TP0202K-T1-E3	-30	-385mA	1.4	350mW	TO-236	35K3508	0.53
● SI1071X-T1-GE3	-30	-960mA	0.195	236mW	SC-89	69W7173	0.36
● SI2303BDS-T1-GE3	-30	-1.49A	0.2	700mW	SOT-23	84R8022	0.40
● SI2303BDS-T1-E3	-30	-1.64A	0.2	900mW	TO-236	06J7566	0.42
● SI2303CDS-T1-GE3	-30	-2.7A	0.33	1W	TO-236	16P3703	0.42
● SI2307CDS-T1-GE3	-30	-2.7A	0.138	1.1W	TO-236	16P3707	0.44
● SI1471DH-T1-E3	-30	-2.7A	0.14	2.78W	SOT-363	69W7179	0.54
● SI2307BDS-T1-E3	-30	-3.2A	0.13	1.25W	SOT-23	64R4907	0.69
● SI3457BDV-T1-E3	-30	-3.7A	0.1	2W	TSOP	06J7612	0.65
● SI9435BDY-T1-GE3	-30	-4.1A	0.033	1.3W	SOIC	84R8082	0.97
● SI4431BDY-T1-GE3	-30	-5.7A	0.023	1.5W	SOIC	84R8048	1.15

➤CONTINUED➤

SINGLE P-CHANNEL MOSFETs -30V to-200V (CONT.)

Mfg. Part No.	V_{DS} (V)	Drain Current I_D	Rds(on) Ω	Power	Pkg.	Tape Cut Stock No.	Tape Cut Price Each 1-9
SI2343CDS-T1-GE3	-30	-5.9A	0.037	2.5W	SOT-23	05W6936	0.52
SI4485DY-T1-GE3	-30	-6A	0.035	5W	SOIC	05W6944	0.58
SI6415DQ-T1-GE3	-30	-6.5A	0.22	1.5W	TSSOP	69W7213	1.83
SI4431BDY-T1-E3	-30	-7.5A	0.05	2.5W	SOIC	06J7725	1.23
SI8487DB-T1-E1	-30	-7.7A	0.025	2.7W	MICRO FOOT	94T2852	0.54
SI4925DDY-T1-GE3	-30	-8A	0.024	5W	SOIC	05W6952	1.16
SI4435DDY-T1-GE3	-30	-8.1A	0.0195	2.5W	SOIC	84R8049	0.68
SI4835DDY-T1-GE3	-30	-8.7A	0.014	2.5W	SOIC	84R8059	1.15
SI7491DP-T1-E3	-30	-11A	0.0105	1.8W	SOIC	69W7229	3.63
SI4425BDY-T1-E3	-30	-11.4A	0.019	2.5W	SOIC	06J7707	2.41
SIA421DJ-T1-GE3	-30	-12A	0.056	3.5W	SC-70	16P3616	1.43
SI7459DP-T1-E3	-30	-13A	0.0056	1.9W	PowerPAK SO	69W7227	4.02
SI8497DB-T2-E1	-30	-13A	0.043	13W	MICRO FOOT	94T2854	0.46
SUD45P03-10-E3	-30	-15A	0.01	4W	TO-252	06J8452	3.47
SI4425DDY-T1-GE3	-30	-19.7A	0.0081	5.7W	SOIC	05W6943	0.76
SI7625DN-T1-GE3	-30	-35A	0.0088	52W	PowerPAK 1212	69W7232	1.24
SI7139DP-T1-GE3	-30	-40A	0.0074	48W	PowerPAK SO	69W7221	1.71
SI3421DV-T1-GE3	-30	-8A	0.016	4.2W	TSOP	29X6569	0.41
SI7121ADN-T1-GE3	-30	-18A	0.0125	27.8W	PowerPAK 1212	38X4916	0.57
SI2319DS-T1-GE3	-40	-2.3A	0.065	750mW	SOT-23	84R8030	0.62
SI2319CDS-T1-GE3	-40	-4.4A	0.064	2.5W	SOT-23	05W6934	0.48
SI4401BDY-T1-E3	-40	-8.7A	0.021	1.85W	SOIC	57J5666	2.06
SI4401BDY-T1-GE3	-40	-8.7A	0.0165	1.5W	SOIC	69W7197	2.06
SI4401DY-T1-E3	-40	-10.5A	0.0155	1.5W	SOIC	06J7673	3.06
SI4401DDY-T1-GE3	-40	-16.1A	0.018	6.3W	SOIC	69W7198	0.84
SI7611DN-T1-GE3	-40	-18A	0.027	3.7W	PowerPAK 1212	69W7231	1.74
SUD50P04-15-E3	-40	-50A	0.023	100W	TO-252	06J8478	3.62
SUD50P04-13L-E3	-40	-50A	0.0075	136W	TO-252	57J5870	2.62
SUD50P04-09L-E3	-40	-50	0.0075	136	TO-252	06J8477	2.75
SUD50P04-08-GE3	-40	-50	0.0067	73.5	TO-252	86R4268	1.65
TP0610K-T1-E3	-60	-185mA	6	350mW	TO-236	35K3509	0.34
SI1021R-T1-GE3	-60	-190mA	8	250mW	SOT-416	69W7170	0.39
SI2309CDS-T1-GE3	-60	-1.6A	0.36	1.7W	SOT-23	69W7188	0.39
IRFL9014TRPBF	-60	-1.8A	0.5	3.1W	SOT-223	69W7152	2.16
SI9407BDY-T1-GE3	-60	-4.7A	0.15	2.4W	SOIC	16P3885	1.66
SI7415DN-T1-GE3	-60	-5.7A	0.11	1.5W	PowerPAK 1212	16P3845	2.18
SI7461DP-T1-GE3	-60	-8.6A	0.015	1.9W	PowerPAK SO	69W7228	2.59
SI7461DP-T1-E3	-60	-12.6A	0.19	1.2W	SOIC	02J5264	2.69
SUD19P06-60-GE3	-60	-19A	0.077	2.3W	TO-252	16P3888	1.70
SI1025X-T1-GE3	-60	-190	8	250	SC-89	69W7171	0.42
SUD50P06-15-GE3	-60	-50A	0.02	2.5W	TO-252	16P3891	3.65
IRFR9110TRPBF	-100	-3.1A	1.2	25W	TO-252	69W7154	1.49
SI7113DN-T1-GE3	-100	-13.2A	0.119	52W	PowerPAK 1212	69W7263	1.84
SUD50P10-43L-E3	-100	-38	0.036	136	TO-252	79K3483	3.09
SI1411DH-T1-E3	-150	-420mA	2.14	1W	SOT-363	69W7176	0.72
SI7115DN-T1-GE3	-150	-8.9A	0.235	52W	PowerPAK 1212	05W6954	2.37
SI2327DS-T1-E3	-200	-380mA	1.96	750mW	SOT-23	69W7189	1.11

Mfg. Part No.	V_{DS} (V)	Drain Current I_D	Rds(on) Ω	Power	Pkg.	Bulk Packaging Stock No.	Bulk Packaging Price Each 1-9
SUP75P03-07-E3	-30	-75	0.01	187	TO-220AB	06J8566	4.81
SUP75P05-08-E3	-55	-75	0.008	250	TO-220AB	06J8568	7.97
SUP90P06-09L-E3	-60	-90	0.0074	250	TO-220AB	57J5883	7.60

(164003)

DUAL N-CHANNEL MOSFETs

RoHS Compliant Available

VISHAY.

N-CHANNEL

Mfg. Part No.	V_{DS} (V)	Drain Current, Id (A)	R_{DS} (On) (Ω)	Power, Pd (W)	Pkg.	Tape Cut Stock No.	Tape Cut Price Each 1-9
SIA910EDJ-T1-GE3	12	4.5	0.023	7.8W	PowerPAK SC70	05W6927	0.74
SI7940DP-T1-GE3	12	11.8	0.014	1.4W	SOIC	69W7236	2.57
SIB912DK-T1-GE3	20	1.5	0.18	3.1W	PowerPAK	69W7160	0.42
SI6926ADQ-T1-GE3	20	4.1	0.024	830mW	TSSOP	69W7217	1.25
SI5908DC-T1-E3	20	4.4	0.032	1.1W	ChipFET	69W7211	1.29
SI6968BEDQ-T1-E3	20	5.2	0.0165	1W	TSSOP	06J8126	0.99
SI6968BEDQ-T1-GE3	20	5.2	0.165	1W	TSSOP	69W7218	0.67
SI7904BDN-T1-GE3	20	6	0.045	2.5W	PowerPAK 1212	26R1941	1.46
SI9926BDY-T1-GE3	20	6.2	0.02	1.14W	SOIC	26R1950	1.80

➤CONTINUED➤

DUAL N-CHANNEL MOSFETs (CONT.)

Mfg. Part No.	V_{DS} (V)	Drain Current, Id (A)	R_{DS} (On) (Ω)	Power, Pd (W)	Pkg.	Tape Cut Stock No.	Tape Cut Price Each 1-9
SI4204DY-T1-GE3	20	19.8	0.0038	3.25W	SOIC	69W7196	2.46
SIA936EDJ-T1-GE3	20	4.5		7.8W	PowerPAK SC70	47X1986	0.35
SIZ340DT-T1-GE3	30	40		31W	PowerPAIR	29X6567	1.14
SI7214DN-T1-E3	30	4.6	0.0333	1.3W	PowerPAK 1212	69W7223	1.82
SI4816BDY-T1-GE3	30	5.8	0.0155	1.25W	SOIC	26R1889	2.14
SI7214DN-T1-GE3	30	5.9	0.047	1.3W	PowerPAK 1212	26R1913	2.05
SI9936BDY-T1-GE3	30	6	0.052	2W	SOIC	26R1952	1.88
SI4210DY-T1-GE3	30	6.5	0.0355	1.78W	SOIC	35R6235	0.75
SI4936BDY-T1-GE3	30	6.9	0.051	2W	SOIC	26R1899	1.63
SI4922BDY-T1-GE3	30	8	0.024	2W	SOIC	26R1898	2.05
SIZ300DT-T1-GE3	30	11	0.02	16.7W	PowerPAIR	91T5908	1.39
SI4944DY-T1-GE3	30	12.2	0.016	1.3W	SOIC	26R1901	4.06
SIZ900DT-T1-GE3	30	24	0.0059	48W	PowerPAIR	91T5914	2.54
SI7272DP-T1-GE3	30	25	0.0076	22W	PowerPAK SO	69W7224	1.44
SIZ916DT-T1-GE3	30	40	0.0053	100W	PowerPAIR	68W7095	1.62
SIZ910DT-T1-GE3	30	40	0.0048	48W	PowerPAIR	91T5915	2.74
SI7994DP-T1-GE3	30	60	0.0046	3.5W	SOIC	69W7239	4.91
SI7222DN-T1-GE3	40	5	0.047	2.5W	PowerPAK 1212	26R1915	2.44
SI4910DY-T1-GE3	40	6	0.032	2W	SOIC	26R1895	1.54
SI7216DN-T1-GE3	40	6.5	0.039	2.5W	PowerPAK 1212	26R1914	2.05
SI4904DY-T1-GE3	40	8	0.019	2W	SOIC	26R1894	2.65
SI7958DP-T1-GE3	40	11.3	0.02	1.4W	SOIC	26R1946	3.68
SI7938DP-T1-GE3	40	60	0.0058	3.5W	PowerPAK SO	35R6248	2.14
SI7964DP-T1-E3	60	6.1	0.019	1.4W	PowerPAK SO	69W7238	3.25
SI7960DP-T1-GE3	60	9.7	0.025	1.4W	SOIC	26R1947	3.82
DUAL N-CHANNEL WITH SCHOTTKY DIODE							
SI4830CDY-T1-GE3	30	7.1	0.156	2.9W	SOIC	69W7203	1.60
SIZ790DT-T1-GE3	30	16	0.0075	27W	PowerPAIR	91T5912	1.73

(177047)

DUAL P-CHANNEL MOSFETs

RoHS Compliant Available

VISHAY.

Mfg. Part No.	V_{DS} (V)	R_{DS} (On) (Ω)	Drain Current, Id	Power, Pd	Pkg.	Tape Cut Stock No.	Tape Cut Price Each 1-9
SIA975DJ-T1-GE3	-12	0.07	-4.5A	7.8W	PowerPAK SC70	69W7158	0.82
SI1967DH-T1-GE3	-20	0.64	-1.3A	1.25W	SOT-363	69W7182	0.46
SI5935CDC-T1-GE3	-20	0.13	-4A	3.1W	ChipFET	69W7212	0.46
SIA917DJ-T1-GE3	-20	0.185	-4.5A	1.9W	SC-70	16P3633	0.96
SI7913DN-T1-GE3	-20	0.066	-7.4A	1.3W	PowerPAK 1212	26R1942	2.30
SI4943BDY-T1-GE3	-20	0.019	-8.4A	1.1W	SOIC	26R1900	3.06
SI4913DY-T1-GE3	-20	0.024	-9.4A	1.1W	SOIC	26R1896	4.11
SIA923AEDJ-T1-GE3	-20	0.044	-4.5A	7.8W	PowerPAK SC70	38X4914	0.51
SI3993DV-T1-GE3	-30	0.133	-2.2A	830mW	TSOP	35R6232	0.92
SI4953ADY-T1-GE3	-30	0.053	-4.9A	1.1W	SOIC	26R1902	1.70
SI4925BDY-T1-E3	-30	0.025	-7.1A	1.1W	SOIC	06J7973	2.67
SI7923DN-T1-GE3	-30	0.075	-6.4A	1.3W	PowerPAK 1212	26R1943	2.33
SI7945DP-T1-GE3	-30	0.031	-10.9A	1.4W	PowerPAK SO	26R1944	3.38
SI7997DP-T1-GE3	-30	0.0063	-60A	46W	PowerPAK SO	69W7240	2.69
SI7905DN-T1-GE3	-40	0.065	-6A	2.5W	PowerPAK 1212	69W7235	2.20
SI7949DP-T1-GE3	-60	0.08	-5A	1.5W	SOIC	26R1945	2.19

(164004)

DUAL N/P CHANNEL MOSFETs

RoHS Compliant Available

VISHAY.

DUAL N/P CHANNEL

Mfg. Part No.	V_{DS} (V)	$R_{DS(On)}$ @ V_G=10V (Ω)	Id	Pd	Pkg.	Tape Cut Stock No.	Tape Cut Price Each 1-24
SI6562CDQ-T1-GE3	6.7	0.18	20A	1.6W	TSSOP	26T3807	1.04
SIA511DJ-T1-GE3	12	0.033	4.5A	6.5W	PowerPAK SC70	69W7156	1.24
SIA517DJ-T1-GE3	12	0.024	4.5A	6.5W	PowerPAK SC70	05W6926	0.65
SI7540DP-T1-GE3	12	0.014	7.6A	1.4W	PowerPAK SO	69W7230	3.11
SI7540DP-T1-E3	12	0.017	11.8A	3.5W	SOIC	06J8161	3.01
SIA537EDJ-T1-GE3	12	0.023	4.5A	7.8W	PowerPAK SC70	38X4912	0.42
SI1035X-T1-GE3	20	5	180mA	250mW	SC-89	69W7172	0.42
SI1551DL-T1-E3	20	1.9	300mA	270mW	SC-70	06J7542	0.47
SI1016X-T1-GE3	20	0.41	485mA	250mW	SC-89	16P3672	0.45

➤CONTINUED➤

DUAL N/P CHANNEL MOSFETs (CONT.)

Mfg. Part No.	V_{DS} (V)	$R_{DS(on)}$ @ V_G=10V (Ω)	Id	Pd	Pkg.	Tape Cut Stock No.	Price Each 1-24
● SI1553DL-T1-E3	20	0.32	660mA	300mW	SOT-363	69W7181	0.54
● SI1563DH-T1-E3	20	0.49	1.13A	740mW	SC-70	06J7546	0.61
● SI3585DV-T1-GE3	20	0.1	1.8A	750mW	TSOP	35R6217	0.70
● SI3861BDV-T1-E3	20	0.145	2.3A	830mW	TSOP	22M8849	0.83
● SI3586DV-T1-GE3	20	0.047	2.5A	830mW	TSOP	35R6218	1.16
● SI3588DV-T1-GE3	20	0.064	2.5A	830mW	TSOP	35R6219	1.62
● SI3588DV-T1-E3	20	0.08	3A	830mW	TSOP	06J7625	1.70
● SI5513DC-T1-E3	20	0.075	4.2A	1.1W	1206	06J8040	1.49
● SI5515DC-T1-E3	20	0.032	4.4A	1.1W	1206	06J8041	1.44
● SIA519EDJ-T1-GE3	20	0.053	4.5A	7.8W	PowerPAK SC70	69W7157	0.55
● SI4500BDY-T1-GE3	20	0.022	7A	1.3W	SOIC	26R1884	1.58
● SI4562DY-T1-E3	20	0.019	7.1A	2W	SOIC	06J7807	5.28
● SI4511DY-T1-GE3	20	0.0145	9.6A	1.1W	SOIC	26R1886	2.09
● SI3585DV-T1-E3	20	0.2	19A	1.15W	TSOP	06J7624	0.98
● SI1539DL-T1-GE3	30	0.41	540mA	270mW	SOT-363	69W7180	0.44
● SI1539DL-T1-E3	30	0.48	630mA	270mW	SC-70	06J7541	0.49
● SI3590DV-T1-GE3	30	0.062	2A	830mW	TSOP	35R6220	0.93
● SI5504DC-T1-E3	30	0.29	2.1A	2.1W	1206	06J8039	2.87
● SI3552DV-T1-GE3	30	0.085	2.5A	1.15W	TSOP	35R6216	0.79
● SI6544BDQ-T1-GE3	30	0.025	3.7A	830mW	TSSOP	69W7216	1.67
● SI4532ADY-T1-GE3	30	0.044	3.7A	1.13W	SOIC	84R8058	1.62
● SI7501DN-T1-GE3	30	0.028	5.4A	1.6W	PowerPAK 1212	26R1933	1.46
● SI4532CDY-T1-GE3	30	0.038	6A	2.78W	SOIC	05W6945	0.75
● SI4501ADY-T1-GE3	30	0.042	6.3A	1.3W	SOIC	26R1885	1.86
● SI3552DV-T1-E3	30	0.36	51A	1.15W	TSOP	06J7623	0.79
● SI4599DY-T1-GE3	40	0.0295	6.8A	3W	SOIC	69W7201	0.65
● SI4563DY-T1-GE3	40	0.016	8A	2W	SOIC	26R1887	2.74
● SI4564DY-T1-GE3	40	0.0145	10A	3.1W	SOIC	05W6946	1.86
● SI1029X-T1-GE3	60	1.4	305mA	250mW	SC-89	16P3679	0.51

(164005)

DIGITAL FETs

RoHS Compliant Available

FAIRCHILD

Replacements for digital bipolar transistors. Suitable for 5V and 3V logic signals. >6kV ESD protected. No additional bias resistors required.

N-CHANNEL

Mfg. Part No.	V_{DS} (V)	I_D (A)	$R_{DS(ON)}$ @ 2.7V (Ω)	$V_{GS(th)}$ (V)	P_D (mW)	Pkg.	Stock No.	Price Each 1-9
● FDV301N	25	0.22	5	1.5	350	SOT-23	58K8856	0.24
● FDV303N	25	0.68	0.6	1.5	350	SOT-23	58K8857	0.40
● FDG313N	25	0.95	0.6	1.5	750	SC-70	58K1443	0.56
DUAL N-CHANNEL								
● FDC6301N	25	0.22	5	1.5	900	SuperSOT	58K8818	0.54
● FDG6301N	25	0.22	5	1.5	300	SC-70	58K8834	0.48
● FDG6303N	25	0.5	0.6	1.5	300	SC-70	58K1450	0.45
● FDC6303N	25	0.68	0.6	1.5	900	SuperSOT	58K8819	0.57
P-CHANNEL								
● FDV304P	-25	0.46	1.5	1.5	350	SOT-23	58K1480	0.40
● FDV302P	-25	0.12	13	1.5	350	SOT-23	58K1479	0.37
DUAL P-CHANNEL								
● FDC6302P	-25	-0.12	13	-1.5	900	SuperSOT	58K1415	0.49
● FDG6304P	-25	-0.41	1.5	-1.5	300	SC-70	58K1451	0.41
● FDC6304P	-25	-0.46	1.5	-1.5	900	SuperSOT	58K1416	0.27

COMPLEMENTARY (N & P CHANNEL)

Mfg. Part No.	Channel	V_{DS} (V)	I_D (A)	$R_{DS(ON)}$ @ 2.7V (Ω)	$V_{GS(th)}$ (V)	P_D (mW)	Pkg.	Stock No.	Price Each 1-9
● FDC6327C	N	20	2.7	0.12*	1.5	960	SuperSOT	58K1424	0.52
	P	-20	-1.9	0.25*	-1.5				
● FDG6320C	N	25	0.22	5	1.5	300	SC-70	58K1453	0.49
	P	-25	-0.14	13	-1.5				
● FDG6322C	N	25	0.22	5	1.5	300	SC-70	58K1454	0.57
	P	-25	-0.41	1.5	-1.5				
● FDC6320C	N	25	0.22	5	1.5	900	SuperSOT	58K8821	0.67
	P	-25	-0.12	13	-1.5				
● FDG6321C	N	25	0.5	0.6	1.5	300	SC-70	38C7127	0.46
	P	-25	-0.41	1.5	-1.5				
● FDC6321C	N	25	0.68	0.45**	1.5	900	SuperSOT	58K1419	0.50
	P	-25	-0.46	1.1**	-1.5				

➤CONTINUED➤

DIGITAL FETs (CONT.)

Mfg. Part No.	Channel	V_{DS} (V)	I_D (A)	$R_{DS(ON)}$ @ 2.7V (Ω)	$V_{GS(th)}$ (V)	P_D (mW)	Pkg.	Stock No.	Price Each 1-9
● FDC6333C	N	30	2.5	0.15**	3	960	SuperSOT	58K1428	0.48
	P	-30	-2	0.22**	-3				

* $R_{DS(ON)}$ @ 2.5V; ** $R_{DS(ON)}$ @ 4.5V

(163998)

SMALL SIGNAL JFETs

RoHS Compliant Available

FAIRCHILD

Applications:

- Amplifier and Switching Transistors
- VHF/UHF Amplifiers
- Analog or Digital Switching Applications
- RF Amplifier and Mixer Applications

N-CHANNEL

Mfg. Part No.	BV_{DSS} (V)	P_D (mW)	V_{GS} (off) Max. (V)	I_{DSS} Min. (mA)	I_{DSS} @ V_{DS} (V)	Pkg.	Stock No.	Price Each 1-9
● J105	25	625	-10	500	15	TO-92	58K1752	0.72
● J107	25	625	-4.5	100	15	TO-92	58K1754	0.69
● J109	25	625	-6	40	15	TO-92	58K1756	0.58
● MMBF5459	25	350	-8	4	15	SOT-23	58K1874	0.33
● MMBF4391	30	350	-10	50	20	SOT-23	38C7412	0.54
● MMBF4393	30	350	-3	5	20	SOT-23	58K9428	0.54
● J112	35	625	-5	2	15	TO-92	58K8918	0.48
● MMBFJ111	35	350	-10	20	15	SOT-23	58K1865	0.42
● MMBFJ112	35	350	-5	5	15	SOT-23	58K9423	0.40
● MMBFJ113	35	350	-3	2	15	SOT-23	58K9424	0.52
● J113	40	625	-3	2	20	TO-92	58K1757	0.55
● MMBF4117	40	225	-1.8	0.03	10	SOT-23	38C7410	0.54
● MMBFJ201	40	350	-1.5	0.2	20	SOT-23	58K9426	0.57
P-CHANNEL								
● MMBFJ177	30	225	2.5	1.5	15	SOT-23	58K9425	0.44
● MMBF5462	40	225	9	4	15	SOT-23	58K1875	0.57

(65987)

JUNCTION FIELD EFFECT TRANSISTORS (JFETs)

RoHS Compliant Available

ON Semiconductor

N-CHANNEL, SOT-23 (TO-236-AB) PACKAGE

Mfg. Part No.	$R_{DS(on)}$ Max. (Ω)	I_{DSS} Max. (mA)	$V_{(BR)GSS}$ Min. (V)	C_{rss} Max. (pF)	Tape Cut Stock No.	Tape Cut Price 1-9
● MMBF4391LT1G	30	150	30	3.5	45J1523	0.44
● MMBF4392LT1G	60	150	30	3.5	71J5987	0.44
● MMBF4393LT1G	100	30	30	3.5	45J1524	0.44
● MMBFJ309LT1G	...	30	25	2.5	45J1519	0.65
● MMBFU310LT1G	...	60	25	2.5	45J1521	0.44
P-CHANNEL, SOT-23 (TO-236-AB) PACKAGE						
● MMBFJ177LT1G	300	5.5	...	...	45J1518	0.65
N-CHANNEL, TO-92 PACKAGE						
● J310G	...	10	25	2.5	26K3593	0.57
P-CHANNEL, TO-92 PACKAGE						
● MC100LVEP34DTG	...	16	40	2	42K0494	15.40

(9902)

JUNCTION FIELD EFFECT TRANSISTORS (JFETs)

RoHS Compliant Available

ON Semiconductor

N-CHANNEL, SOT-23 (TO-236-AB) PACKAGE

Mfg. Part No.	$R_{DS(on)}$ Max. (Ω)	IDSS Min. (uA)	I_{DSS} Max. (uA)	$V_{(BR)GSS}$ Min. (V)	Ciss Max. (pF)	C_{rss} Max. (pF)	Tape Cut Stock No.	Tape Cut Price 1-9
● MMBF4391LT1G	30	50000	150000	30	14	3.5	45J1523	0.44
● MMBF4392LT1G	60	25000	75000	30	14	3.5	71J5987	0.44
● MMBF4393LT1G	100	5000	30000	30	14	3.5	45J1524	0.44
● MMBFJ309LT1G	...	12000	30000	25	5	2.5	45J1519	0.65
● MMBFJ310LT1G	...	24000	60000	25	5	2.5	45J1520	0.62
● MMBFU310LT1G	...	24000	60000	25	5	2.5	45J1521	0.44
P-CHANNEL, SOT-23 (TO-236-AB) PACKAGE								
● MMBFJ177LT1G	300	1500	20000	30	11	5.5	45J1518	0.65
N-CHANNEL, TO-92 PACKAGE								
● J112G	...	5000	...	35	28	5	26K3591	0.57
● J310G	...	24000	60000	25	5	5.5	26K3593	0.57

(148756)

JUNCTION FIELD EFFECT TRANSISTORS (JFETs)

SOLID·STATE

N-CHANNEL

Mfg. Part No.	Drain-Source Voltage (V)	Drain Current (mA)	Gate-Source Cutoff (Max) (V)	Power Diss. (mW)	Pkg.	Stock No.	Price Each 1-9
2N4856A	-40	50mA	-10	300	TO-18	67R1084	6.38
2N4857A	-40	20mA to 100mA	-6	300	TO-18	67R1086	6.38
2N4858A	-40	8mA to 80mA	4	300	TO-18	67R1088	6.38
2N4859A	-30	50mA	-10	300	TO-18	67R1090	6.03
2N4860A	-30	20mA to 100mA	-6	300	TO-18	67R1092	6.38

(195460)

N-CHANNEL JFET AMPLIFIERS

RoHS Compliant Available

VISHAY.

Sold individually. Tape and reel packaging also available; *go online or call.*

TO-236 (SOT-23)

Mfg. Part No.	Breakdown Voltage Min. (V)	I_{DSS} (mA) Min.	I_{DSS} (mA) Max.	$V_{GS(off)}$ (V) Min.	$V_{GS(off)}$ (V) Max.	$R_{DS(on)}$ Typ. (Ω)	Stock No.	Price Each 1-24
U310-E3	-25	24	60	-2.5	-6	35	06J8679	14.14
SST4416-E3	-30	5	15	...	-6	150	06J8355	0.57

TO-226AA (TO-92)

Mfg. Part No.	Breakdown Voltage Min. (V)	I_{DSS} (mA) Min.	I_{DSS} (mA) Max.	$V_{GS(off)}$ (V) Min.	$V_{GS(off)}$ (V) Max.	$R_{DS(on)}$ Typ. (Ω)	Stock No.	Price Each 1-24
J212-E3	-25	15	40	-4	-6	70	51K2093	0.51
SST5484-E3	-25	1	5	-0.3	-3	300	06J8383	0.45

TO-206AA (TO-18), TO-206AC (TO-52), TO-206AF (TO-72)

Mfg. Part No.	Breakdown Voltage Min. (V)	I_{DSS} (mA) Min.	I_{DSS} (mA) Max.	$V_{GS(off)}$ (V) Min.	$V_{GS(off)}$ (V) Max.	$R_{DS(on)}$ (Ω) Typ.	Stock No.	Price Each 1-24
2N4416A-E3	-35	5	15	-2.5	-6	150	06J8869	4.30
2N4338-E3	-50	0.2	0.6	-0.3	-1	...	06J8861	5.10
2N4339-E3	-50	0.5	1.5	-0.6	-1.8	...	06J8862	4.73

(70152)

SMALL SIGNAL NPN TRANSISTORS

RoHS Compliant Available

FAIRCHILD.

Mfg. Part No.	V_{CEO} Max (V)	ICM (mA)	P_D (mW)	hFE Max	Package	Stock No.	Price 1-9
BSV52	12	200	225	120	3-SOT-23	58K8771	0.20
MMBT2369A	15	200	225	120	3-SOT-23	18C7402	0.23
FZT649	25	3A	2W	300	4-SOT-223	58K1544	0.39
2N3904TF	40	200	625	100	3-TO-92	05R0381	0.20
2N3904BU	40	200	625	100	3-TO-92	83C3116	0.20
PZT3904	40	200	1W	300	4-SOT-223	58K9496	0.53
PN2222ATF	40	1	625	300	3-TO-92	58K2048	0.23
2N4401TFR	40	600	625	100	3-TO-92	05R0384	0.23
BSR14	40	800	350	300	3-SOT-323	18C5927	0.21
MMBT2222A	40	1A	350	300	3-SOT-23	18C7400	0.19
PN2222ABU	40	1A	625	300	TO-92	58K2047	0.21
PN2222ATA	40	1A	625	300	TO-92	83C0221	0.21
BC547BTA	45	100	500	450	3-3-TO-92	82C0428	0.21
BC547CTA	45	100	500	800	3-3-TO-92	82C0436	0.22
BC546BTA	65	100	500	450	3-3-TO-92	82C0406	0.22
MMBTA06	80	500	350	100	3-SOT-323	38C7416	0.31
MPSA06	80	500	625	100	TO-92	58K9460	0.46
PZTA06	80	500	1W	100	4-SOT-223	58K2055	0.50
BD681S	100	4A	40W	750	3-TO-126	33C9970	0.72
MMBT5551	160	600	350	250	3-SOT-323	18C7423	0.22
MMBTA42	300	500	350	40	3-SOT-23	58K1877	0.33
2N6517BU	350	500	625	30	3-TO-92	58K2826	0.22

(65571)

SMALL SIGNAL PNP TRANSISTORS

RoHS Compliant Available

FAIRCHILD.

Mfg. Part No.	V_{CEO} Max (V)	ICM (mA)	P_D (W)	hFE Max	Transistor Case	Stock No.	Price Each 1-9
MMBT3640	12	200	0.225	120	SOT-23	58K9430	0.65
FZT749	25	3A	2	300	SOT-223	58K1545	0.41
2N3906TF	-40	-200	0.625	100	TO-92	05R0382	0.23
2N3906TFR	-40	-200	0.625	100	TO-92	05R0383	0.21
MMBT4403	40	600	0.35	300	SOT-23	35C0528	0.21
MMBT2907	40	800	0.35	300	SOT-323	38C7430	0.21
BC32725TA	-45	-800	0.625	400	3-TO-92	82C0340	0.23
MMBT2907A	60	800	0.35	300	SOT-23	58K1885	0.22
PZT2907A	60	800	1	300	SOT-223	58K9495	0.56
BCP52	60	1.2A	1.5	250	SOT-223	58K8748	0.46
MMBTA56	-80	500	0.35	100	SOT-23	58K1878	0.25
PZTA56	80	500	1	100	SOT-223	58K9493	0.41
BCP53	-80	-1.2A	1.5	250	SOT-223	58K0080	0.52
MMBT5401	-150	600	0.35	240	SOT-323	38C7441	0.23
PZTA92	300	100	1	40	SOT-223	58K9494	0.47
MMBTA92	-300	-500	0.35	40	SOT-323	18C7389	0.39

(165068)

MULTI-CHIP TRANSISTORS

RoHS Compliant Available

FAIRCHILD.

Mfg. Part No.	V_{CEO} Max. (V)	I_{CM} (A)	h_{FE} Min.	Polarity	Package	Stock No.	Price Each 1-9
FFB3904	40	200	100	NPN	SuperSOT-6 Dual	58K1487	0.49
MMPQ3904	40	200	100	NPN	SOIC-16 Quad	78K6028	1.81
FFB3906	40	200	100	PNP	SC70-6 Dual	58K1488	0.53
MMPQ3906	40	200	100	PNP	SOIC-16 Quad	78K6029	1.72
FMB2222A	40	500	100	NPN	SuperSOT-6 Dual	58K1500	0.52
FFB2907A	60	600	100	PNP	SuperSOT-6 Dual	58K8863	0.33
MMPQ2907A	60	600	100	PNP	SOIC-16 Quad	78K6027	1.66
FMB2227A	40	500	100	NPN & PNP	SuperSOT-6 Dual	58K1501	0.56

(74479)

SMALL SIGNAL TRANSISTORS

RoHS Compliant Available

NTE® ELECTRONICS, INC.

Mfg. Part No.	Description	V_{CE} (V)	I_C (A)	Pkg.	Stock No.	Price Each 1-99
NTE85	T-NPN, Silicon, General-Purpose Amplifier	30	0.5	TO-92	06M7509	1.23
NTE123A	T-NPN, Silicon, Audio Amplifier, Switch (Compl. to NTE 159M)	40	0.8	TO-18	06M7366	1.89
NTE123AP	T-NPN, Silicon, Audio Amplifier, Switch (Compl. to NTE 159)	40	0.6	TO-92	06M7367	1.57
NTE128	T-NPN, Silicon, Audio Output, Video, Driver (Compl. to NTE 129)	80	1	TO-39	29C4431	2.36
NTE159	T-PNP, Silicon, Audio Amplifier Switch (Compl. to NTE 123AP)	80	1	TO-92	06M7374	2.01
NTE458	JFET, N-Channel, General Purpose Low Noise Amplifier	50	0.2	TO-92	29C4607	8.07
NTE312	JFET, N-Channel, VHF Amplifier, Mix	30	0.05-0.15	TO-92	29C5294	2.12
NTE123	T-NPN, Silicon, Audio Amplifier Switch	40	0.8	TO-39	29C4424	2.12
NTE289A	T-NPN, Silicon, Audio Power Amplifier and Switch (Compl. to NTE290A)	80	0.5	TO-92	42M2414	1.81
NTE184	T-NPN, Silicon, Audio Power Amplifier (Compl. to NTE185)	80	4	TO-126	29C5268	2.89
NTE36	T-NPN, Silicon, Audio Power Amplifier, High-Current Swich (Compl. to NTE37)	140	12	TO-3P	21M5161	5.89
NTE152	T-NPN, Silicon, Audio General Purpose Amplifier (Compl. to NTE153)	90	4	TO-220	29C4445	2.82
NTE199	T-NPN, Silicon, Low-Noise Hi-Gain PreAmplifier	50	0.1	TO-92	06M7379	1.38
NTE373	T-NPN, Silicon, Audio Amplifier and Driver (Compl. to NTE374)	160	1.5	TO-126	29C4565	2.34
NTE382	T-NPN, Silicon, Audio Frequency Driver (Compl. to NTE383)	100	1	R245	29C4568	2.63
NTE291	T-NPN, Silicon, General Purpose Amplifier (Compl. to NTE292)	120	4	TO-220	29C4528	3.97
NTE290A	T-PNP, Silicon, Audio Amplifier and Switch (Compl. to NTE289A)	80	0.5	TO-92	29C4527	1.88
NTE129	T-PNP, Silicon, Audio Output Driver (Compl. to NTE128)	80	1	TO-39	06M7369	2.78

➤CONTINUED➤

SMALL SIGNAL TRANSISTORS (CONT.)

Mfg. Part No.	Description	V_{CE} (V)	I_C (A)	Pkg.	Stock No.	Price Each 1-99
NTE129P	T-PNP, Silicon, General Purpose Amplifier Switch, Plastic NTE129 (Compl. to NTE128P)	80	1	TO-237	29C4433	2.06
● NTE6401	UJT-Unijunction Transistor	30	0.5	TO18	01N3958	10.21
● NTE2353	T-NPN, Silicon, Color TV Horizontal Deflection Output w/ Internal Damper Diode	800	10	TO-3PML	06M7392	11.56
● NTE2331	T-NPN, Silicon, Color TV Horizontal Deflection w/ Internal Damper Diode	800	6	TO-3PML	06M7388	11.21
● NTE265	T-NPN, Silicon, Darlington Power Amplifier	50	0.5	TO-202	29C4516	8.15
● NTE2406	T-NPN, Silicon, General Purpose Amp, Surface Mount (Compl. to NTE2407)	40	0.6	SOT-23	31C3606	2.51
● NTE2408	T-NPN, Silicon, General Purpose Amp, Surface Mount (Compl. to NTE2409)	65	0.1	SOT-23	09H1660	2.31
NTE2407	T-NPN, Silicon, General Purpose Amp, Surface Mount (Compl. to NTE2406)	60	0.6	SOT-23	31C3607	2.59

(70302)

AUDIO BIPOLAR TRANSISTORS

RoHS Compliant Available

ON Semiconductor

NPN

Mfg. Part No.	C-E Voltage (V)	Collector Current (A)	DC Current Gain Min (hfe)	Pd (W)	Pkg.	Stock No.	Price Each 1-9
● MJD44H11G	80	8	60	20	4-DPAK	45J1493	0.72
● D44H11G	80	10	20	50	3-TO-220	26K3585	1.03
● MJD243G	100	4	40	12.5	4-DPAK	42K1274	0.76
● MJD243T4G	100	4	40	12.5	4-DPAK	09R9436	0.82
● MJE243G	100	4	40	15	3-TO-225	45J1502	0.69
● MJF6388G	100	10	3000	40	3-TO-220	26K4480	1.77
● MJE15028G	120	8	40	50	3-TO-220	26K4449	1.13
● MJ15015G	120	15	20	180	2-TO-3	61K0964	3.02
● MJ15001G	140	15	25	200	2-TO-3	26K4511	4.49
● MJ15003G	140	20	25	250	2-TO-3	26K4513	4.41
● MJE15030G	150	8	40	50	3-TO-220	26K4450	1.70
● MJF15030G	150	8	40	36	3-TO-220	26K4476	1.68
● MJ15022G	200	16	15	250	2-TO-3	26K4518	5.88
● MJW3281AG	230	15	12	200	3-TO-247	26K4503	3.57
● MJW21194G	250	2	20	200	3-TO-247	26K4500	4.52
● MJE15032G	250	8	50	50	3-TO-220	45J1497	1.70
● NJW0281G	250	15	75	150	3-TO-3P	95M6875	2.80
● NJW21194G	250	15	20	200	3-TO-3P	89M5485	2.95
● MJ21196G	250	16	8	250	2-TO-3	26K4525	4.41
● MJL21196G	250	16	8	200	3-TO-264	26K4493	4.76
● MJ15024G	250	16	15	250	2-TO-3	26K4520	6.11
● MJ21194G	250	16	25	250	2-TO-3	26K4523	6.22
● MJL21194G	250	16	25	200	3-TO-264	26K4491	5.23
● MJL3281AG	260	15	75	200	3-TO-264	42K1305	3.78
● MJE15034G	350	8	100	50	3-TO-220	26K4452	1.46
● NJL4281DG	350	15	10	230	3-TO-264	70K9258	6.16
● MJL4281AG	350	30	80	230	3-TO-264	26K4494	6.61
● MJW18020G	450	30	14	250	3-TO-247	42K1308	7.40

PNP

● MJD45H11G	80	8	60	20	4-DPAK	45J1494	0.74
● D45H11G	80	10	40	50	3-TO-220	26K3587	1.03
● MJE253G	100	4	40	1.5	3-TO-225	45J1503	0.72
● MJE15029G	120	8	40	50	3-TO-220	71J5861	1.67
● MJ15016G	120	15	20	180	2-TO-3	42K1316	3.13
● MJ15004G	-140	-20	25	250	2-TO-3	26K4514	4.50
● MJE15031G	150	8	40	50	3-TO-220	26K4451	1.70
● MJF15031G	150	8	40	36	3-TO-220	26K4477	1.68
● MJ15023G	200	16	15	250	2-TO-3	26K4519	6.11
● MJW1302AG	230	15	12	200	3-TO-247	26K4496	3.39
● MJE15033G	-250	-8	10	50	3-TO-220	45J1498	1.67
● NJW0302G	250	15	75	150	3-TO-3P	95M6876	2.26
● MJ21195G	250	16	8	250	2-TO-3	26K4524	4.47
● MJL21195G	250	16	8	200	3-TO-264	26K4492	4.76
● MJ15025G	250	16	15	250	2-TO-3	26K4521	6.22
● MJ21193G	250	16	25	250	2-TO-3	26K4522	6.11
● MJL21193G	250	16	25	200	3-TO-264	26K4490	5.23
● MJW21195G	-250	-16	80	200	3-TO-247	26K4501	4.20
● MJW21193G	250	30	20	200	3-TO-247	26K4499	4.52
● MJL1302AG	260	15	75	200	3-TO-264	26K4489	3.78

(116699)

MPSxxx SERIES GENERAL PURPOSE TRANSISTORS

RoHS Compliant Available

ON Semiconductor

GENERAL PURPOSE — NPN

Mfg. Part No.	$V_{(br)CEO}$ Min. (V)	I_C (mA)	h_{FE} Min.	Pkg.	Tape Cut Stock No.	Price Each 1-9
● MPS5172RLRMG	25	100	100	3-TO-92	61K1000	0.39
● MPS4124RLRAG	25	200	120	3-TO-92	84K8812	0.44
● MPS2222G	30	600	100	3-TO-92	45J1667	0.39
● MPSW01G	30	1A	50	3-TO-92	42K1472	0.45
● MPS2222AG	40	600	100	3-TO-92	71J6115	0.42
● MPS2222ARLG	40	600	100	3-TO-92	45J1664	0.42
● MPS2222ARLRAG	40	600	100	3-TO-92	45J1665	0.44
● MPSW01AG	40	1A	50	3-TO-92	42K1471	0.45
● MPS650G	40	2A	40	3-TO-92	83K8799	0.39
● MPSA05G	60	500	100	3-TO-92	42K1441	0.42
● MPSA05RLRAG	60	500	100	3-TO-92	84K8804	0.44
● MPS651G	60	2A	40	3-TO-92	45J1676	0.46
● MPSA06RLRMG	80	500	100	3-TO-92	71J6097	0.39
● MPS8099G	80	500	100	3-TO-92	42K1516	0.49
● MPSA06G	80	500	100	3-TO-92	45J1642	0.38
● MPSA06RLRAG	80	500	100	3-TO-92	45J1643	0.39
● MPS8099RLRAG	80	500	150	TO-92	84K8816	0.48
● MPSW06G	80	500	60	3-TO-92	26K4637	0.54
● MPSA42RLRMG	300	50	40	3-TO-92	26K4623	0.46
● MPSA42RLRPG	300	50	40	3-TO-92	10N9532	0.46
● MPSA42G	300	500	25	3-TO-92	45J1648	0.44
● MPSA42RLRAG	300	500	40	3-TO-92	84K8808	0.46
● MPSW42G	300	500	40	3-TO-92	42K1475	0.45
● MPSW42RLRAG	300	500	40	3-TO-92	84K8811	0.54

GENERAL PURPOSE — PNP

● MPS6726G	-30	-1A	50	3-TO-92	45J1683	0.54
● MPS4250G	40	50	250	TO-92	71J6122	0.38
● MPSW51AG	40	1A	50	3-TO-92	26K4640	0.45
● MPSA55G	-60	-500	100	3-TO-92	26K4627	0.42
● MPS2907AG	-60	-600	100	3-TO-92	45J1669	0.46
● MPS2907ARLRAG	60	600	100	3-TO-92	45J1670	0.47
● MPS751G	60	-2A	40	3-TO-92	70K9591	0.51
● MPS751RLRAG	60	2A	40	3-TO-92	84K8815	0.58
● MPSA56G	80	500	100	3-TO-92	45J1654	0.42
● MPSA56RLRAG	-80	-500	100	3-TO-92	45J1655	0.43
● MPSA56RLRMG	80	500	100	3-TO-92	45J1656	0.44
● MPSW92RLRAG	300	-500	25	3-TO-92	10N9537	0.54
● MPSA92G	-300	-500	25	3-TO-92	45J1658	0.47
● MPSA92RLRAG	300	500	25	3-TO-92	45J1659	0.47

(175952)

BCxxx SERIES GENERAL PURPOSE TRANSISTORS

RoHS Compliant Available

ON Semiconductor

GENERAL PURPOSE — NPN

Mfg. Part No.	$V_{(br)CEO}$ Min. (V)	I_C (mA)	h_{FE} Min.	h_{FE} Max.	Pkg.	Tape Cut Stock No.	Price Each 1-9
● BCP68T1G	20	1A	85	375	SOT-223	26K3373	0.45
● BC548CG	30	100	420	800	TO-92	26K3436	0.36
● BC848BLT1G	30	100	200	200	SOT-23	88H4571	0.15
● BC848CLT1G	30	100	420	100	SOT-23	88H4572	0.15
● BC849BLT1G	30	100	200	450	SOT-23	26K3472	0.15
● BC237BG	45	100	200	150	TO-92	26K3383	0.33
● BC847CWT1G	45	100	420	520	SC-70	09R9380	0.17
● BC547BG	45	100	200	150	TO-92	26K3430	0.39
● BC547CG	45	100	420	150	TO-92	26K3432	0.40
● BC547CZL1G	45	100	420	800	TO-92	26K3433	0.40
● BC550CG	45	100	420	800	TO-92	26K3438	0.40
● BC850CLT1G	45	100	110	800	SOT-23	84K8724	0.15
● BC847ALT1G	45	100	110	100	SOT-23	45J0589	0.15
● BC847AWT1G	45	100	110	220	SC-70	45J0590	0.17
● BC847BLT1G	45	100	200	450	SOT-23	88H4566	0.15
● BC847CLT1G	45	100	420	100	SOT-23	88H4569	0.15
● BC817-16LT1G	45	500	100	100	SOT-23	98H0503	0.16
● BC817-25LT1G	45	500	160	100	TO-236	88H4562	0.14
● BC337G	45	800	100	630	TO-92	26K3404	0.44
● BC546BG	65	100	200	450	TO-92	26K3426	0.40
● BC846ALT1G	65	100	110	100	SOT-23	88H4564	0.15
● BC846BLT1G	65	100	200	450	SOT-23	88H4565	0.16

➤ CONTINUED ➤

BCxxx SERIES GENERAL PURPOSE TRANSISTORS (CONT.)

Mfg. Part No.	$V_{(br)CEO}$ Min. (V)	I_C (mA)	h_{FE} Min.	h_{FE} Max.	Pkg.	Tape Cut Stock No.	Price Each 1-9
BC846BWT1G	65	100	200	100	SC-70	45J0588	0.17
BCP56-10T1G	80	1A	63	...	SOT-223	26K3371	0.43
BCP56T1G	80	1A	40	250	SOT-223	88H4561	0.48
GENERAL PURPOSE — PNP							
BCP69T1G	20	1A	85	375	SOT-223	45J0568	0.59
BC858BLT1G	30	100	220	100	SOT-23	84K8725	0.15
BC858CLT1G	30	100	420	100	SOT-23	45J0609	0.15
BC557CG	-45	-100	420	800	TO-92	26K3444	0.39
BC560CG	45	-100	380	800	TO-92	26K3448	0.40
BC857BLT1G	45	100	220	100	SOT-23	88H4574	0.15
BC857CLT1G	45	100	420	100	SOT-23	45J0606	0.16
BC807-25LT1G	-45	500	40	400	SOT-23	87K6744	0.16
BCX17LT1G	45	500	100	...	SOT-23	45J0573	0.23
BC327-25RL1G	-45	-800	160	630	TO-92	71J3394	0.40
BC856ALT1G	65	100	125	100	SOT-23	45J0600	0.16
BC856BLT1G	65	100	220	100	SOT-23	88H4573	0.15
BCP53T1G	-80	1.5A	40	250	SOT-223	88H4560	0.50
GENERAL PURPOSE - DUAL NPN							
BC847BDW1T1G	45	100	200	250	SOT-363	06R3467	0.25
BC847CDW1T1G	45	100	420	250	SOT-363	09R9378	0.32
BC846BDW1T1G	65	100	200	250	SOT-363	09R9375	0.25
GENERAL PURPOSE - DUAL PNP							
BC857BDW1T1G	45	100	220	100	SOT-363	26K3475	0.25

(175946)

BDxxx, BFxxx, BSxxx, BUxxx, Dxxx SERIES GENERAL PURPOSE TRANSISTORS

RoHS Compliant Available — ON Semiconductor

GENERAL PURPOSE — NPN

Mfg. Part No.	V(br)CEO Min. (V)	h_{FE} Min.	h_{FE} Max.	Pkg.	Tape Cut Stock No.	Price Each 1-9
BD135G	45	40	250	3-TO-225	26K3491	0.64
BD137G	60	40	250	3-TO-225	26K3492	0.64
BD139G	80	40	...	3-TO-225	45J0613	0.64
BD809G	80	30	...	3-TO-220	26K3526	0.99
BF720T1G	300	50	60	4-SOT-223	45J0620	0.50
BUH100G	400	...	23	3-TO-220	26K3543	1.71
BUL45D2G	400	22	...	3-TO-220	26K3550	1.22
BUV21G	200	20	60	2-TO-3	26K3552	11.63
BUV22G	250	20	8	2-TO-3	26K3553	11.84
BUX85G	450	30	4	3-TO-220	41K9631	0.89
D44H8G	60	...	...	3-TO-220	71J3833	0.99
D44VH10G	80	20	...	3-TO-220	26K3586	1.03
GENERAL PURPOSE — PNP						
BD136G	45	40	250	3-TO-225	88H4575	0.64
BD140G	80	40	...	3-TO-225	26K3494	0.64
BD788G	60	40	250	3-TO-225	71J3403	0.69
BF721T1G	300	...	60	4-SOT-223	45J0621	0.50
D45C12G	80	40	120	3-TO-220	71J3834	1.34
D45H11G	80	40	...	3-TO-220	26K3587	1.03
D45H8G	60	...	...	3-TO-220	45J0695	0.99
D45VH10G	80	20	...	3-TO-220	26K3588	1.05

(175955)

MMBTxxxx SERIES GENERAL PURPOSE TRANSISTORS

RoHS Compliant Available — ON Semiconductor

GENERAL PURPOSE — NPN

Mfg. Part No.	$V_{(br)CEO}$ Min. (V)	I_C (mA)	h_{FE} Min.	h_{FE} Max.	Pkg.	Tape Cut Stock No.	Price Each 1-9
MMBT2369LT1G	15	200	20	120	SOT-23	45J1532	0.22
MMBTH10LT1G	25	4	60	60	SOT-23	98H0745	0.27
MMBT5089LT1G	25	50	400	1200	3-SOT-23	98H0755	0.23
MMBT4124LT1G	25	200	120	300	3-SOT-23	84K8797	0.20
MMBT5088LT1G	30	50	300	50	3-SOT-23	98H0754	0.23
MMBT2222LT1G	30	600	...	250	3-SOT-23	45J1530	0.15
MMBT3904LT1G	40	200		300	3-SOT-23	83H7337	0.11
MMBT3904LT3G	40	200	100	300	3-SOT-23	98H0751	0.13
MMBT3904TT1G	40	200	100	300	3-SC-75	88H4787	0.16

CONTINUED

MMBTxxxx SERIES GENERAL PURPOSE TRANSISTORS (CONT.)

Mfg. Part No.	$V_{(br)CEO}$ Min. (V)	I_C (mA)	h_{FE} Min.	h_{FE} Max.	Pkg.	Tape Cut Stock No.	Price Each 1-9
MMBT3904WT1G	40	200	100	300	3-SC-70	88H4788	0.17
MMBT2222ALT1G	40	600	100	300	3-SOT-23	84K8795	0.14
MMBT2222ALT3G	40	600	100	300	3-SOT-23	10N9478	0.13
MMBT2222ATT1G	40	600	100	300	3-SC-75	10N9479	0.16
MMBT2222AWT1G	40	600	100	300	3-SC-70	98H0748	0.17
MMBT4401LT1G	40	600	100	250	3-SOT-23	88H4790	0.14
MMBT6429LT1G	45	200	500	100	3-SOT-23	45J1536	0.26
MMBT6428LT1G	50	200	250	100	3-SOT-23	45J1535	0.26
MMBT2484LT1G	60	100	250	800	3-SOT-23	45J1533	0.25
MMBTA05LT1G	60	500	100	100	3-SOT-23	45J1527	0.23
MMBTA06LT3G	80	500	100	100	3-SOT-23	06R3470	0.23
MMBT8099LT1G	80	500	100	150	3-SOT-23	84K8799	0.28
MMBTA06LT1G	80	500	100	100	3-SOT-23	98H0741	0.20
MMBTA06WT1G	80	500	100	...	3-SC-70	10N9476	0.22
MMBT5550LT1G	140	600	60	250	3-SOT-23	88H4795	0.23
MMBT5551LT1G	160	60	80	...	3-SOT-23	88H4796	0.23
MMBTA42LT1G	300	50	40	50	3-SOT-23	88H4783	0.22
MMBT6517LT1G	350	100	30	40	3-SOT-23	45J1537	0.54
GENERAL PURPOSE — PNP							
MMBT4126LT1G	25	200	120	250	3-SOT-23	84K8798	0.20
MMBT3906LT1G	-40	200	100	250	3-SOT-23	48K7500	0.11
MMBT3906WT1G	40	200	100	250	3-SC-70	88H4789	0.17
MMBT4403LT1G	40	600	100	200	3-SOT-23	88H4792	0.13
MMBT5087LT1G	50	-50	250	40	3-SOT-23	98H0753	0.22
MMBTA55LT1G	60	500	100	50	3-SOT-23	71J5990	0.22
MMBT2907AWT1G	-60	-600	300	200	SOT-323	84K8796	0.17
MMBT2907ALT1G	-60	600	50	300	3-SOT-23	88H4785	0.14
MMBTA56LT1G	80	-500	100	50	3-SOT-23	88H4784	0.23
MMBT5401LT1G	150	-500	60	100	3-SOT-23	88H4794	0.23
MMBTA92LT1G	300	500	25	50	3-SOT-23	98H0744	0.24
MMBT6520LT1G	-350	500	30	40	3-SOT-23	79K4603	0.45
MMBT6520LT1G	-350	500	200	40	3-SOT-23	45J1538	0.07
GENERAL PURPOSE — DUAL NPN							
MBT3904DW1T1G	40	200	100	300	6-SC-88	88H4687	0.23
MBT2222ADW1T1G	40	600	100	300	6-SOT-363	42K0022	0.28

(175953)

NPxxxx, NZxxxx, PNxxxx AND PZxxxx SERIES GENERAL PURPOSE TRANSISTORS

RoHS Compliant Available — ON Semiconductor

GENERAL PURPOSE — NPN

Mfg. Part No.	V(br)CEO Min. (V)	h_{FE} Min.	h_{FE} Max.	Pkg.	Tape Cut Stock No.	Price Each 1-9
NJT4031NT1G	40	200	215	4-SOT-223	57M9869	0.47
NSS40301MZ4T1G	40	200	200	4-SOT-223	57M9899	0.54
NST3904DXV6T1G	40	100	300	6-SOT-563	10N9564	0.48
PZT3904T1G	40	100	300	4-SOT-223	10N9599	0.51
P2N2222AG	40	100	300	3-TO-92	42K2503	0.45
PN2222ARLRAG	40	100	300	3-TO-92	45J2211	0.43
PZT2222AT1G	40	100	300	4-SOT-223	45J2214	0.51
PZT651T1G	60	...	75	4-SOT-223	45J2216	0.59
PZTA42T1G	300	...	50	4-SOT-223	45J2213	0.54
GENERAL PURPOSE — PNP						
NJT4030PT1G	-40	200	400	4-SOT-223	29M7491	0.61
PZT2907AT1G	60	100	200	4-SOT-223	45J2215	0.51
PZT751T1G	60	...	75	4-SOT-223	45J2217	0.55

(175948)

MJxxxx, NJDxxxx SERIES GENERAL PURPOSE NPN TRANSISTORS

RoHS Compliant Available — ON Semiconductor

Mfg. Part No.	$V_{(br)CEO}$ (V)	I_C (A)	h_{FE} Min.	h_{FE} Max.	Pkg.	Tape Cut Stock No.	Price Each 1-9
MJD200G	25	5	45	65	D-PAK	45J1484	0.63
MJE180G	40	3	50	50	TO-225	42K1290	0.61
NJD2873T4G	50	2	120	360	3-D2PAK	54T9969	0.63
MJD3055T4G	60	10	20	20	4-DPAK	98H0734	0.79
MJE3055TG	60	10	20	2	3-TO-220	45J1504	1.01

CONTINUED

MJxxxx, NJDxxxx SERIES GENERAL PURPOSE NPN TRANSISTORS (CONT.)

Mfg. Part No.	$V_{(br)CEO}$ (V)	I_C (A)	h_{FE} Min.	h_{FE} Max.	Pkg.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● MJE182G	80	3	50	50	TO-225	26K4458	0.64
● MJD44H11RLG	80	8	60	...	4-DPAK	42K1284	0.73
● MJB44H11G	80	10	60	...	D2-PAK	42K1267	1.35
● MJF44H11G	80	10	...	...	TO-220	42K1301	1.75
● MJ14002G	80	60	15	...	TO-204	26K4509	14.56
● MJ802G	90	30	25	2	TO-204	26K4528	4.10
● MJD31CG	100	3	10	3	D-PAK	98H0735	0.52
● MJD31C1G	100	3	10	50	3-IPAK	42K1277	0.50
● MJD31CRLG	100	3	10	50	3-DPAK	71J5848	0.57
● MJD31CT4G	100	3	10	50	3-D2PAK	54T9964	0.54
● MJF31CG	100	3	10	50	TO-220FP	26K4479	1.32
● MJB41CG	100	30	15	75	D2-PAK	26K4436	1.21
● MJD47G	250	1	30	10	4-DPAK	42K1286	0.71
● MJF47G	250	1	30	10	3-TO-220	42K1303	1.46
● MJD340G	300	0.5	30	240	D-PAK	98H0736	0.62
● MJE340G	300	0.5	30	240	TO-225	98H0739	0.66
● NJD35N04G	350	4	2	2000	3-DPAK	02M9866	0.85
● MJE13007G	400	8	5	4	3-TO-220	71J5860	0.92
● MJE18004G	450	5	14	...	3-TO-220	26K4456	1.05
● MJF18004G	450	5	14	...	3-TO-220	26K4478	1.57
● MJE18008G	450	8	14	34	3-TO-220AB	45J1499	1.56

(175947)

MJxxxx SERIES GENERAL PURPOSE PNP TRANSISTORS

RoHS Compliant Available

ON Semiconductor

Mfg. Part No.	$V_{(br)CEO}$ Min. (V)	I_C (A)	h_{FE}Min.	h_{FE}Max.	Pkg.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● MJD210G	25	5	45	3	4-DPAK	42K1272	0.62
● MJD210T4G	25	-5	45	180	4-DPAK	10N9472	0.64
● MJE210G	25	5	45	65	3-TO-225	45J1501	0.65
● MJE170G	40	-3	50	50	3-TO-225	42K1289	0.61
● MJE371G	40	4	40	...	3-TO-225	26K4462	0.75
● MJE171G	60	3	50	50	3-TO-225	26K4454	0.61
● MJD2955G	60	10	20	2	4-DPAK	45J1488	0.74
● MJE2955TG	60	10	20	2	3-TO-220	98H0738	1.02
● MJ2955G	60	15	20	2.5	2-TO-3	26K4526	3.25
● MJE172G	80	-3	50	50	3-TO-225	26K4455	0.65
● MJB45H11G	80	-10	60	...	3-DPAK	98H0733	1.35
● MJF45H11G	80	-10	...	...	3-TO-220	42K1302	1.77
● MJD32CG	100	3	10	3	4-DPAK	42K1278	0.55
● MJD32CT4G	100	3	10	3	4-DPAK	45J1490	0.59
● MJD253-1G	100	-4	40	180	3-IPAK	26K4441	0.76
● MJD42CT4G	100	6	15	3	4-DPAK	71J5855	0.67
● MJ4502G	100	30	25	100	2-TO-3	26K4527	4.53
● MJF15031G	150	-8	40	30	3-TO-220	26K4477	1.68
● MJE15033G	-250	-8	10	70	3-TO-220	45J1498	1.67
● MJD350T4G	300	0.5	30	240	4-DPAK	71J5852	0.60
● MJE350G	300	0.5	30	240	3-TO-225	45J1505	0.69
● MJE5730G	300	-1	30	10	3-TO-220	26K4466	1.34
● MJE5850G	300	-8	...	...	3-TO-220	42K1298	3.16
● MJD5731T4G	350	1	30	10	4-DPAK	42K1288	0.75
● MJE5731G	-350	-1	30	10	3-TO-220	42K1296	1.27
● MJE5731AG	375	1	30	10	3-TO-220	26K4467	1.34
● MJE5852G	400	8	15	...	3-TO-220	26K4469	3.16
GENERAL PURPOSE - COMPLEMENTARY							
● MBT3906DW1T1G	40	0.2	100	250	6-SOT-363	88H4689	0.26
● MBT3946DW1T1G	40	0.2	100	300	6-SOT-363	83H7283	0.25

(175954)

PCB FABRICATION & ASSEMBLY

Quality US-based manufacturers—as fast as 48-hour turnaround!

(197415)

TO-18 GENERAL PURPOSE TRANSISTORS

RoHS Compliant Available

multicomp

Sold in multiples of 5.

TO-18

Mfg. Part No.	V_{CEO} (V)	I_C (A)	V_{CBO} (V)	hFE Max.	F_T (MHz)	Stock No.	Price Each 1-249
● BC107A	45	100	50	110	150	14M4488	0.80
● BC108	25	200	30	110	150	13M4851	0.79
● BC108B	25	200	30	200	150	14M4489	0.80
● BC108C	25	200	30	420	150	96K6824	0.80
● BC177	45	200	50	120	200	96K6829	0.80

(116561)

POWER BJTs

RoHS Compliant Available

FAIRCHILD

DARLINGTON

V_{CBO}: 100V. V_{CEO}: 100V. Package: TO-220.

Mfg. Part No.	Configuration	I_C (A)	P_C (W)	h_{FE} Min.	h_{FE} @ I_C (A)	V_{CE} (sat) Max. (V)	Stock No.	Price Each 1-9
● TIP102	NPN	8	80	1000	3	2	58K2411	1.00
● TIP105	PNP	8	80	1000	3	2	58K9556	0.67
● TIP107	PNP	8	80	1000	3	2	18C8692	0.81
● TIP110	NPN	2	50	1000	1	2.5	58K9557	0.69
● TIP112	NPN	2	50	1000	1	2.5	58K2413	0.70
● TIP120	NPN	5	65	1000	0.5	2	58K9558	0.70
● TIP121	NPN	5	65	1000	0.5	2	38C8651	0.72
● TIP122	NPN	5	65	1000	0.5	2	60K7825	0.70
● TIP127	PNP	5	65	1000	0.5	2	64K1711	0.72
● TIP142T	NPN	10	80	1000	5	2	58K9560	1.55
● TIP147T	PNP	10	80	1000	5	2	58K2422	1.15
● BDW94C	PNP	12	80	750	5	2	58K0107	0.87
GENERAL-PURPOSE Silicon transistors. Package: TO-220.								
● TIP29C	NPN	1	30	15	1	0.7	58K9561	0.60
● TIP30C	PNP	1	30	15	1	0.7	58K2424	0.63
● TIP31C	NPN	3	40	10	3	1.2	38C8658	0.58
● TIP32C	PNP	3	40	10	3	1.2	58K2428	0.63
● TIP49	NPN	1	40	30	0.3	1	58K2433	0.51
● TIP42C	PNP	6	65	15	3	1.5	58K2431	0.72
● TIP127TU	PNP	5	5	1000	0.5	2	58K2420	0.52
● BDW93C	NPN	12	80	750	5	2	58K0106	0.79
FAST SWITCHING								
● FJB3307DTM	NPN	8	80	8	2	3	23T2036	0.80

* Not recommended for new designs

(70558)

POWER TRANSISTORS

RoHS Compliant Available

NTE ELECTRONICS, INC.

POWER AMPLIFIERS

Mfg. Part No.	Application	V_{CB} (V)	I_C (A)	Pkg.	Stock No.	Price Each 1-24
● NTE30	Power Amp, Switch (Compl. to NTE29)	80	50	TO-3	31C3796	20.10
● NTE130	Power Amp, Switch (Compl. to NTE219)	100	15	TO-3	21M5149	4.89
● NTE219	Power Amp, Switch (Compl. to NTE130)	100	15	TO-3	29C8652	7.90
● NTE261	Darlington Power Amp (Compl. to NTE262)	100	5	TO-220	06M7404	3.02
● NTE262	Darlington Power Amp (Compl. to NTE261)	100	5	TO-220	06M7405	2.76
● NTE263	Darlington Power Amp (Compl. to NTE264)	100	10	TO-220	51M8909	3.18
● NTE264	Darlington Power Amp (Compl. to NTE263)	100	10	TO-220	29C5289	3.52
● NTE2343	Darlington Audio Amp, Driver (Compl. to NTE2344)	100	12	TO-220	29C4482	2.31

BIPOLAR TRANSISTORS

Mfg. Part No.	Application	V_{CB} (V)	I_C (A)	Pkg.	Stock No.	Price Each 1-49
● NTE236	RF Silicon NPN Transistor	60	6	TO-220AB	31C3573	9.73
● NTE238	Horizontal Deflection	1500	8	TO-3	06M7396	17.65
● NTE324	Silicon Complementary	120	1	TO-39	06M7412	5.02
● NTE2333	Silicon NPN Power Transistor	450	6	TO-220	06M7389	4.44
● NTE181	High-Power Audio Amp (Compl. to NTE180)	100	30	TO-3	21M5153	9.45

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POWER TRANSISTORS (CONT.)

Mfg. Part No.	Application	V_{CB} (V)	I_C (A)	Pkg.	Stock No.	Price Each 1-49
NTE185	Audio Power Amp (Compl. to NTE184)	80	4	TO-126	42M2405	3.07
NTE2319	High-Voltage High-Speed Power Switch	850	15	TO-3	29C4477	12.54
NTE2302	Horizontal Output	1500	5	TO-3P	06M7385	9.25
NTE251	Darlington Power Amp, HFE = 2500 (Compl. to NTE252)	100	20	TO-3	06M7403	9.70
NTE287	High-Voltage General-Purpose Amp (Compl. to NTE288)	300	0.5	TO-92	06M7407	1.15
NTE331	Audio Power Amp, Switch (Compl. to NTE332)	100	15	TO-220	29C4562	4.17
NTE37	Audio Power Amp, High-Current Switch (Compl. to NTE36)	160	12	TO-3P	42M2418	5.76
NTE377	Power Amp, Driver, Switch (Compl. to NTE378)	80	10	TO-220	29C5296	2.88
NTE378	Power Amp, Driver, Switch (Compl. to NTE377)	80	10	TO-220	21M5162	3.84
NTE379	Power Amp, High-Voltage Switch	750	12	TO-220	06M7414	9.26
NTE394	Power Amp, High Voltage Switch	400	3	TO-218	21M5165	7.01
NTE399	High-Voltage Amp, Video (Compl. to NTE2366)	300	0.1	TO-92	06M7416	4.07
NTE53	High-Voltage High-Speed Switch	850	15	TO-53	06M7439	13.80
NTE99	Darlington w/Base-Emitter Speed-up Diode	400	50	TO-3	06M7520	33.41

POWER MOSFETS

Mfg. Part No.	Application	V_{CB} (V)	I_C (A)	Pkg.	Stock No.	Price Each 1-49
NTE2385	Power, High-Speed	500	8	TO-220	29C4491	8.14
NTE2395	Power, High-Speed	60	4	TO-220	06M7399	5.94

OPTOISOLATORS

Mfg. Part No.	Application	V_{ISO} (V)	I_C (A)	Pkg.	Stock No.	Price Each 1-99
NTE3041	Transistor Output	7500	0.6	6-DIP	21M5157	2.58
NTE3040	Transistor Output	1.5	0.1	6-DIP	29C4540	2.55
NTE3042	Transistor Output	1.5	...	6-DIP	29C4542	2.04
NTE3045	Transistor Output	7.5	0.05	6-DIP	21M5158	2.95
NTE3047	Triac Driver Output	7.5	*	6-DIP	42M2416	3.55
NTE3048	Triac Driver Output	7.5	*	6-DIP	42M2417	4.64
NTE3084	Photo Darlington Output	7.5	0.05	6-DIP	29C4550	2.86
NTE3086	Transistor Output	7.5	0.002	8-DIP	06M7409	5.99
NTE3090	Schmitt Trigger Output	7.5	0.05	6-DIP	29C4553	4.57
NTE3097	Zero Crossing Triac Driver	7.5	*	6-DIP	31C3872	6.37
NTE3220	Transistor Output	5	0.05	8-DIP	31C3923	2.12
NTE3221	Transistor Output	5	0.05	16-DIP	31C3924	4.10

*Holding current: 0.1mA
(70303)

"INDUSTRY STANDARD" TRANSISTORS

RoHS Compliant Available

NTE ELECTRONICS, INC.

Mfr. Part No.	Output	Application	V_{CB} (V)	I_C (A)	Pkg.	Stock No.	Price Each 1-99
2N3054	NPN	High Voltage, Medium Power Switch	500	2	TO-66	10M4199	2.55
2N6259	NPN	General Purpose High Power Audio	400	16	TO-3	10M4200	5.66
MJ10001	NPN	High-Voltage Darlington Power Amp	500	20	TO-3	33C5054	6.43
MJ10012	NPN	High-Voltage Darlington Power Amp	600	10	TO-3	06M7347	5.09
MJ10023	NPN	High-Voltage Darlington Power Amp	400	40	TO-3	33C5062	14.78
TIP34C	PNP	Power Amp, Switch	100	10	TO-218	10M0568	2.37

(79002)

MEDIUM POWER BIPOLAR TRANSISTORS

RoHS Compliant Available

NXP

NPN

Mfg. Part No.	$V_{(BR)CEO}$ (V)	DC Collector Current (A)	Transition Frequency Typ. (MHz)	Power Dissipation (mW)	Package	Stock No.	Price Each 1-9
BC868,115	20	1	170	500	3-SOT-89	75R0762	0.53
BC868-25,115	20	1	170	500	3-SOT-89	79R4977	0.53
BCP68,115	20	1	170	625	4-SOT-223	79R4959	0.46
BCP68-25,115	20	1	170	625	4-SOT-223	79R4958	0.46
BCP54,115	45	1	180	640	3-SOT-223	75R0680	0.57
BCP54-10,135	45	1	180	640	3-SOT-89	79R4954	0.57
BCP54-16,115	45	1	180	640	3-SOT-223	75R0679	0.57
BCX54,115	45	1	180	500	3-SOT-89	75R0703	0.52
BCX54-10,115	45	1	180	500	3-SOT-89	75R0700	0.52
BCX54-16,115	45	1	180	500	3-SOT-89	75R0701	0.52

➤CONTINUED➤

MEDIUM POWER BIPOLAR TRANSISTORS (CONT.)

Mfg. Part No.	$V_{(BR)CEO}$ (V)	DC Collector Current (A)	Transition Frequency Typ. (MHz)	Power Dissipation (mW)	Package	Stock No.	Price Each 1-9
BCX54-16,135	45	1	180	500	3-SOT-89	75R0702	0.52
BCP55,115	60	1	180	640	4-SOT-223	79R4957	0.52
BCP55-10,115	60	1	180	640	4-SOT-223	79R4955	0.52
BCP55-16,115	60	1	180	640	4-SOT-223	79R4956	0.52
BCX55,115	60	1	180	500	3-SOT-89	79R4972	0.61
BCX55-10,115	60	1	180	500	3-SOT-89	79R4971	0.61
BCX55-16,115	60	1	180	500	3-SOT-89	75R0704	0.61
BSP41,115	60	1	100	1300	4-SOT-223	79R4986	0.73
BCP56,115	80	1	180	640	3-SOT-223	75R0683	0.52
BCP56-10,115	80	1	180	640	3-SOT-223	75R0681	0.52
BCP56-16,115	80	1	180	640	3-SOT-223	75R0682	0.52
BCX56,115	80	1	180	500	3-SOT-89	75R0707	0.61
BCX56-10,115	80	1	180	500	3-SOT-89	75R0705	0.61
BCX56-16,115	80	1	180	1.5	3-SOT-89	75R0706	0.61
BSP43,115	80	1	100	1300	4-SOT-223	79R4987	0.63
BSR43,115	80	1	100	1350	3-SOT-89	75R0772	0.72
PNP							
BC869,115	-20	-1	140	500	3-SOT-89	75R0763	0.46
BC869-25,115	-20	-1	140	500	3-SOT-89	79R4978	0.54
BCP69-25,115	-20	-1	140	625	3-SOT-223	79R4960	0.46
BCP69,115	-20	-1	140	625	3-SOT-223	75R0685	0.47
BCP69-16,115	-20	-1	140	625	3-SOT-223	75R0684	0.46
BCP51,115	-45	-1	145	650	3-SOT-223	75R0674	0.52
BCP51-10,135	-45	-1	145	500	4-SOT-223	79R4953	0.57
BCP51-16,115	-45	-1	145	650	3-SOT-223	75R0673	0.52
BCX51,115	-45	-1	145	500	3-SOT-89	75R0696	0.52
BCX51-10,115	-45	-1	145	500	3-SOT-89	75R0694	0.52
BCX51-16,115	-45	-1	145	500	3-SOT-89	75R0695	0.52
BCX52-10,115	-60	-1	145	500	3-SOT-89	79R4969	0.61
BCX52-16,115	-60	-1	145	500	3-SOT-89	79R4970	0.52
BCP52-16,115	-60	-1	145	650	3-SOT-223	75R0675	0.52
BSP31,115	-60	-1	100	1300	4-SOT-223	79R4984	0.87
BSR30,115	-60	-1	100	1350	3-SOT-89	75R0770	0.68
BCP53-10,115	-80	-1	145	650	3-SOT-223	75R0676	0.52
BCP53-16,115	-80	-1	145	650	3-SOT-223	75R0677	0.52
BCX53,115	-80	-1	145	500	3-SOT-89	75R0699	0.52
BCX53-10,115	-80	-1	145	500	3-SOT-89	75R0697	0.52
BCX53-16,115	-80	-1	145	500	3-SOT-89	75R0698	0.52
BSP33,115	-80	-1	100	1300	4-SOT-223	79R4985	0.73
BSR33,115	-80	-1	100	1350	3-SOT-89	75R0771	0.69

(190436)

BIPOLAR POWER TRANSISTORS IN TO-218 PACKAGE

RoHS Compliant Available

ON Semiconductor

Mfg. Part No.	I_C Max. (A)	$V_{CEO(sus)}$ Min. (V)	h_{FE} Min.	P_D* (W)	Stock No.	Price Each 1-9
TIP140G	10	60	500	125	26K5206	2.07
TIP33CG	10	100	**	80	26K5217	1.88
TIP142G	10	100	500	125	26K5208	2.05
TIP3055G	15	60	5	80	26K5212	1.82
MJH11020G	15	200	400	150	26K4484	4.22
MJH11022G	15	250	400	150	26K4486	4.22
MJH6284G	20	100	750	125	26K4487	4.32
TIP35CG	25	100	15	125	26K5218	2.82
PNP TYPE						
TIP32CG	3	100	**	80	45J2285	0.57
TIP147G	10	100	500	125	26K5211	2.07
TIP2955G	15	60	5	80	42K2666	1.86
MJH11017G	15	150	400	150	42K1304	4.15
MJH11019G	15	200	400	150	26K4483	4.43
MJH11021G	15	250	400	150	26K4485	4.43
MJH6287G	20	100	750	125	26K4488	4.58
TIP36CG	25	100	15	125	26K5219	2.94

* @ 25°C; ** h_{FE} min. = 20 (TIP33C), 10 (TIP32C)
(9660)

POWER BIPOLAR TRANSISTORS

BIPOLAR POWER TRANSISTORS IN TO-225AA PACKAGE

RoHS Compliant Available — ON Semiconductor

NPN

Mfg. Part No.	$V_{CEO(sus)}$ (V)	I_C (A)	f_t (MHz)	P_D (W)	Stock No.	Price Each 1-9
● MJE200G	25	5	65	1.5	45J1500	0.61
● BD135G	45	1.5	...	12.5	26K3491	0.64
● MJE181G	60	3	50	12.5	26K4457	0.61
● 2N5191G	60	4	2	40	42K3136	0.77
● MJE800G	60	4	1	40	45J1506	0.74
● 2N5192G	80	4	2	40	72J1869	0.80
● MJE803G	80	4	1	40	26K4473	0.75
● 2N4923G	80	1	3	30	26K5285	0.67
● MJE340G	300	0.5	...	20.8	98H0739	0.66
● MJE3439G	350	0.3	15	15	42K1295	0.69
● 2N5657G	350	0.5	10	20	26K5297	0.71

PNP

● MJE210G	25	5	65	15	45J1501	0.65
● 2N6034G	40	4	...	40	42K3159	0.77
● MJE371G	40	4	...	40	26K4462	0.75
● BD136G	45	1.5	...	12.5	88H4575	0.64
● MJE171G	60	3	50	12.5	26K4454	0.61
● MJE700G	60	4	1	40	26K4470	0.74
● 2N5194G	60	4	2	40	26K5291	0.77
● 2N4920G	80	1	3	30	45J2486	0.63
● 2N5195G	80	4	2	40	26K5292	0.81
● MJE702G	80	4	1	40	42K1300	0.75
● MJE271G	100	2	6	15	26K4460	0.69
● MJE350G	300	0.5	...	20.8	45J1505	0.69

(4250)

BIPOLAR POWER TRANSISTORS IN METAL TO-204AA PACKAGE

RoHS Compliant Available — ON Semiconductor

NPN

Mfg. Part No.	$V_{CEO(sus)}$ Min. (V)	I_C Max. (A)	P_D @ 25°C (W)	f_T (MHz)	Stock No.	Price Each 1-9
● 2N3771G	40	30	150	200	26K5275	4.17
● 2N3055G	60	15	115	2.5	98H1011	2.49
● 2N3055AG	60	15	115	6	42K3127	3.02
● 2N3772G	60	20	150	200	26K5276	4.62
● 2N5886G	80	25	200	4	26K5302	4.17
● 2N5038G	90	20	140	...	26K5286	10.27
● 2N6284G	100	20	160	...	26K5315	5.02
● 2N5302G	100	30	200	2	26K5293	4.17
● MJ802G	100	30	200	2	26K4528	4.10
● MJ11016G	120	30	200	...	26K4505	4.92
● 2N3442G	140	10	117	80	26K5274	2.85
● 2N3773G	140	16	150	...	45J2472	4.17
● MJ11022G	250	15	175	...	42K1311	8.07

PNP

● MJ2955G	60	15	115	2.5	26K4526	3.25
● 2N5884G	80	25	200	4	26K5301	4.47
● 2N6052G	100	12	150	...	26K5309	4.57
● 2N6287G	100	20	160	...	26K5316	4.57
● MJ15016G	120	15	180	18	42K1316	3.13
● MJ11015G	120	30	200	...	26K4504	4.57
● MJ15004G	140	20	250	2	26K4514	4.50
● MJ11021G	250	15	175	...	42K1310	8.17
● MJ15023G	200	16	250	4	26K4519	6.11
● MJ15025G	250	16	250	4	26K4521	6.22
● MJ21193G	250	16	250	4	26K4522	6.11

(4251)

BIPOLAR POWER TRANSISTORS IN TO-220 PACKAGE

RoHS Compliant Available — ON Semiconductor

NPN

Mfg. Part No.	$V_{CEO(sus)}$ Min. (V)	I_C Max. (A)	f_T Min. (MHz)	P_D* (W)	Stock No.	Price Each 1-9
● TIP110G	60	2	25	50	45J2275	0.73
● TIP120G	60	5	4	65	45J2278	0.65
● TIP100G	60	8	4	80	42K2655	0.93
● MJE3055TG	60	10	...	75	45J1504	1.01
● 2N6292G	70	7	4	40	26K5318	0.93
● TIP111G	80	2	25	50	45J2276	0.77

➤ CONTINUED ➤

BIPOLAR POWER TRANSISTORS IN TO-220 PACKAGE (CONT.)

Mfg. Part No.	$V_{CEO(sus)}$ Min. (V)	I_C Max. (A)	f_T Min. (MHz)	P_D* (W)	Stock No.	Price Each 1-9
● TIP31BG	80	3	3	40	26K5213	0.63
● TIP121G	80	5	4	65	42K2660	0.65
● TIP101G	80	8	4	80	42K2656	0.93
● 2N6388G	80	10	20	65	42K3177	1.01
● D44VH10G	80	15	50 Typ.	83	26K3586	1.03
● TIP29CG	100	1	3	30	45J2282	0.69
● TIP112G	100	2	25	50	26K5203	0.63
● TIP31CG	100	3	3	40	45J2283	0.64
● TIP122G	100	5	4	75	45J2279	0.66
● TIP41CG	100	6	3	65	45J2286	0.71
● BDX53CG	100	8	...	...	26K3488	0.97
● TIP102G	100	8	4	80	26K5200	0.94
● BDX33CG	100	10	3	70	26K3484	0.92
● BDW42G	100	15	4	85	26K3481	0.96
● TIP47G	250	1	10	40	71J7949	0.75
● MJE13007G	350	8	...	80	71J5860	0.92
● TIP50G	400	1	10	40	45J2288	0.78
● BUL45D2G	400	5	13	75	26K3550	1.22
● BUX85G	450	2	4	50	41K9631	0.89

PNP

● MJE2955TG	60	10	...	75	98H0738	1.02
● 2N6107G	70	7	4	40	26K5313	0.97
● TIP32BG	80	3	3	40	26K5215	0.60
● D45C12G	80	4	40 Typ.	30	71J3834	1.34
● TIP125G	60	5	4	65	45J2280	0.77
● TIP126G	80	5	4	65	26K5204	0.81
● TIP106G	80	8	4	80	42K2657	0.92
● D45H11G	80	10	50 Typ.	50	26K3587	1.03
● D45VH10G	80	15	50 Typ.	83	26K3588	1.05
● TIP30CG	100	1	3	30	42K2669	0.60
● TIP117G	100	2	25	50	45J2277	0.77
● TIP127G	100	5	4	75	45J2281	0.80
● TIP42CG	100	6	3	65	45J2287	0.73
● BDX54CG	100	8	...	...	26K3490	0.99
● TIP107G	100	8	4	80	26K5202	0.85
● BDW47G	100	15	4	85	45J0612	1.10
● MJE15031G	150	8	30	50	26K4451	1.70
● MJF15031G	150	8	30	36	26K4477	1.68
● MJE15033G	250	8	30	50	45J1498	1.67
● MJE5852G	350	8	...	80	26K4469	3.16
● MJE5731AG	400	1	10	40	26K4467	1.34

* @ 25°C

(9859)

PNP BIPOLAR TRANSISTORS

RoHS Compliant Available — ON Semiconductor

Mfg. Part No.	V_{CEO} Max. (V)	I_C (A)	P_d (mW)	f_T (MHz)	Pkg.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● MMBT3906LT3G	40	-200	225	250	SOT-23	09R9450	0.13
● MMBT4403LT3G	40	-600	225	200	SOT-23	09R9453	0.13
● NJT4030PT3G	40	-3	2	100	SOT-223	09R9605	0.61
● NJT4030PT1G	-40	-3	2	160	SOT-223	29M7491	0.61
● MMBT2907ALT3G	60	-600	225	200	SOT-23	09R9448	0.14
● MMBTA56LT3G	80	-500	225	50	SOT-23	09R9447	0.22
● MJD45H11RLG	80	-8	20	90	TO-252	71J5857	0.69
● D45H11G	80	10	50	40	TO-220	26K3587	1.03
● BSS63LT1G	100	-100	225	50	SOT-23	09R9393	0.26
● MJD253-1G	100	-4	12.5	40	TO-251	26K4441	0.76
● MJE15029G	120	8	50	30	TO-220	71J5861	1.67
● MJ15016G	120	15	180	18	TO-3	42K1316	3.13
● MJ15004G	-140	-20	250	2	TO-3	26K4514	4.50
● MJF15031G	150	-8	36	30	TO-220	26K4477	1.68
● MJE15031G	150	8	50	30	TO-220	26K4451	1.70
● MJ15023G	200	16	250	4	TO-3	26K4519	6.11
● MJW1302AG	230	-15	200	30	TO-247	26K4496	3.39
● MJL21195G	250	-16	200	4	TO-264	26K4492	4.76
● MJ21195G	250	-16	250	4	TO-3	26K4524	4.47
● MJE15033G	-250	-8	50	30	TO-220	45J1498	1.67
● MJ15025G	250	16	250	4	TO-3	26K4521	6.22
● MJ21193G	250	16	250	4	TO-3	26K4522	6.11

➤ CONTINUED ➤

PNP BIPOLAR TRANSISTORS (CONT.)

Mfg. Part No.	V_{ceo} Max. (V)	I_C (A)	P_d (mW)	f_T (MHz)	Pkg.	Tape Cut Stock No.	Price Each 1-9
MJE15035G	-350	-4	50	30	TO-220	26K4453	1.46
MJL4302AG	350	-15	230	35	TO-264	26K4495	6.49

(164676)

SILICON BIPOLAR JUNCTION TRANSISTORS

RoHS Compliant Available

Panasonic

Mfg. Part No.	Vbr(ceo) (V)	I_D (mA)	P_D (mW)	Package	Stock No.	Price Each 1-24
NPN						
DRC2114Y0L	50	100	200	SOT-23	56W4005	0.11
DRC2123J0L	50	100	200	SOT-23	56W4006	0.11
DRC3114E0L	50	100	100	SOT-723	56W4007	0.15
DRC3123E0L	50	100	100	SOT-723	56W4008	0.15
DRC3124T0L	50	100	100	SOT-723	56W4009	0.14
DRC5114E0L	50	100	150	SC-85	56W4010	0.10
DSC200100L	50	100	200	SOT-23	56W4012	0.08
DSC300100L	50	100	100	SOT-723	56W4013	0.11
DSC5C01R0L	100	20	150	SC-85	56W4014	0.32
PNP						
DRA5124E0L	-50	-100	150	SC-85	56W4004	0.10
DSA300100L	-50	-100	100	SOT-723	56W4011	0.11

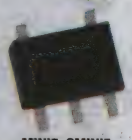
(208996)

SILICON BIPOLAR JUNCTION TRANSISTOR ARRAYS

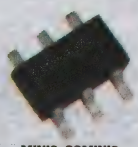
RoHS Compliant Available

Panasonic

SOT-23



MINI5, SMINI5



MINI6, SSMINI6

Mfg. Part No.	Vbr(ceo) (V)	I_D (mA)	P_D (mW)	Package	Stock No.	Price Each 1-24
DUAL NPN						
DRC2114Y0L	50	100	200	SOT-23	56W4005	0.11
DMC201010R	50	100	300	MINI5-G3-B	56W3995	0.16
DMC204020R	50	500	300	MINI6-G4-B	56W3996	0.29
DMC206010R	50	100	300	MINI6-G4-B	56W3997	0.16
DMC261010R	50	100	300	MINI5-G3-B	56W3998	0.17
DMC5610M0R	50	100	150	SMINI5-F3-B	56W3999	0.15
DMC561010R	50	100	150	SMINI5-F3-B	56W4000	0.20
DMC566040R	50	100	150	SSMINI6-F3-B	56W4001	0.20
DUAL PNP						
DMA204010R	-50	-100	300	MINI6-G4-B	56W3991	0.16
DMA561010R	-50	-100	150	SMINI5-F3-B	56W3992	0.20
DMA566010R	-50	-100	150	SSMINI6-F3-B	56W3993	0.20
DMA9640M0R	-50	-100	125	SSMINI6-F3-B	56W3994	0.36
NPN / PNP						
DMG204010R	50	100	300	MINI6-G4-B	56W4002	0.16
DMG563010R	50	100	150	SMINI5-F3-B	56W4003	0.20

(208998)

NPN TRANSISTORS

RoHS Compliant Available

ROHM SEMICONDUCTOR

Mfg. Part No.	$V_{(BR)CEO}$ (V)	I_D (mA)	DC Current Gain Max (hfe)	P_D (mW)	Package	Stock No.	Price Each 1-9
2SC2412KT146Q	50	150	120	200	SC-59	84R7772	0.12
2SC2412KT146R	50	150	120	200	SOT-346	84R7773	0.12
2SC4097T106R	32	500	120	200	SC-70	84R7778	0.24
2SC5658T2LQ	50	150	120	150	VMT	84R7783	0.14
2SD1782KT146R	80	500	120	200	SC-59	40P3469	0.35
2SD1898T100Q	80	500	82	500	SOT-89	40P3473	0.59
2SD2212T100	50	1 A	1000	500	SOT-89	40P3480	0.76
2SD2391T100Q	60	1 A	120	500	SOT-89	40P3482	0.79

➤CONTINUED➤

NPN TRANSISTORS (CONT.)

Mfg. Part No.	$V_{(BR)CEO}$ (V)	I_D (mA)	DC Current Gain Max (hfe)	P_D (mW)	Package	Stock No.	Price Each 1-9
DTC114EKAT146	50	100	30	200	SC-59	40P2941	0.14
DTC114YKAT146	50	100	68	200	SC-59	40P2952	0.15
DTC114YUAT106	50	100	68	200	SOT-323	40P2953	0.17
DTC143EKAT146	50	100	30	200	SC-59	40P2973	0.13
DTC144EETL	50	100	68	150	EMT	74M0740	0.17
DTC144EKAT146	50	100	68	200	SC-59	40P2988	0.15
MMSTA28T146	80	100	10000	200	SC-59	40P3110	0.38
SST2222AT116	40	150	100	200	SOT-23	40P3350	0.17
SST4401T116	40	600	100	200	SOT-23	40P3351	0.28
UMX1NTN	50	150	120	150	SOT-363	40P3417	0.26
UMX3NTR	50	150	120	150	SOT-363	40P3419	0.19
2SC2411KT146Q	32	500	120	200	SC-59	28W2112	0.28
2SC2412KT146S	50	150	120	200	SC-59	28W2113	0.13
2SC4081T106Q	50	150	120	200	SOT-323	84R7776	0.12
2SC4081T106R	50	150	120	200	SOT-323	84R7777	0.11
2SC4102T106R	120	50	180	200	SOT-323	84R7779	0.28
2SC4617TLS	50	50	120	150	SOT-416	40P3455	0.35
2SC5053T100Q	50	500	120	500	SOT-89	40P3457	0.60
2SC5053T100R	50	1 A	120	500	SOT-89	28W2115	0.61
2SC5585TL	12	500	270	150	SOT-416	28W2116	0.41
2SC5876T106Q	60	500	120	200	SOT-323	28W2117	0.59
2SC5876T106R	60	500	180	200	SOT-323	28W2118	0.55
2SD1733TLQ	80	1 A	120	1	SOT-428	28W2119	1.03
2SD1733TLR	80	1 A	180	1	SOT-428	28W2120	1.17
2SD1782KT146Q	80	500	120	200	SC-59	40P3468	0.35
2SD1898T100R	80	500	82	500	SOT-89	40P3474	0.59
2SD1949T106R	50	500	120	200	SOT-323	84R7786	0.36
2SD1980TL	100	1 A	1000	1	SOT-428	40P3476	1.25
2SD2351T106V	50	150	820	200	SOT-323	28W2121	0.35
2SD2351T106W	50	50	820	200	SOT-323	40P3481	0.35
2SD2657KT146	30	1 A	270	200	SOT-346	40P3483	0.42
2SD2662T100	30	1.5 A	270	500	SOT-89	28W2122	0.62
DTC114YMT2L	50	100	-999	150	SC-1055	28W1277	0.26
DTC123EMT2L	50	100	20	150	SC-1055	28W1278	0.26
MMSTA06T146	80	100	100	200	SC-59	40P3109	0.38
SSTA28T116	80	100	10000	200	SOT-23	40P3349	0.45

(207809)

PNP TRANSISTORS

RoHS Compliant Available

ROHM SEMICONDUCTOR

Mfg. Part No.	$V_{(BR)CEO}$ (V)	I_D (A)	DC Current Gain Max (hfe)	P_D (mW)	Package	Stock No.	Price Each 1-9
2SB1386T100R	20	4	82	500	SOT-89	40P3448	0.57
2SB1424T100Q	20	2	120	500	SOT-89	40P3449	0.58
2SB1188T100Q	32	-2	82	500	SOT-89	84R7765	0.61
2SB1188T100R	32	-2	82	500	SOT-89	84R7766	0.61
2SA1576AT106Q	50	-150	120	200	SC-70	84R7758	0.17
DTA114YKAT146	50	100	68	200	SC-59	40P2903	0.15
DTA124EKAT146	50	100	56	200	SC-59	40P2916	0.15
DTA143EETL	50	-100	30	150	SOT-416	84R7148	0.12
2SA1774TLR	50	-150	120	150	SC-75A	84R7762	0.13
DTA123JUAT106	50	100	80	200	SOT-323	40P2912	0.17
2SB1580T100	100	-2	1000	2	SOT-89	40P3451	1.05

(207805)

BIPOLAR NPN POWER TRANSISTORS

RoHS Compliant Available

ST

Mfg. Part No.	V_{CEO} (V)	I_C (A)	P_d	Case	Stock No.	Price Each 1-9
TIP29A	60	1	30	TO-220	89K1081	0.75
TIP31A	60	3	40	TO-220	89K1086	0.66
D44H8	60	10	50	TO-220	89K0518	1.21
2N3055	60	15	115	TO-3	89K1156	2.00
TIP3055	70	15	90	TO-247	89K1085	1.89
BD139	80	1.5	1.25	TO-126	89K0465	0.66

➤CONTINUED➤

BIPOLAR NPN POWER TRANSISTORS (CONT.)

Mfg. Part No.	V_{CEO} (V)	I_C (A)	P_d	Case	Stock No.	Price Each 1-9
● BD237	80	2	25	TO-126	89K0467	1.15
● MJE172	80	3	12.5	SOT-32	89K0808	0.80
● MJE182	80	3	12.5	SOT-32	89K0809	0.66
● MJD44H11T4	80	10	20	TO-252	89K0806	0.55
● D44H11	80	10	50	TO-220	89K0517	0.99
● TIP29C	100	1	30	TO-220	89K1082	0.62
● MJD31CT4	100	3	15	TO-252	89K0804	0.67
● TIP31C	100	3	40	TO-220	89K1087	0.66
● BD243C	100	6	65	TO-220	89K0469	1.30
● TIP41C	100	6	65	TO-220	89K1093	0.94
● TIP102	100	8	80	TO-220	89K1065	0.83
● TIP33C	100	10	80	SOT-93	89K1089	2.16
● TIP142	100	10	125	TO-247	89K1078	2.22
● TIP35C	100	25	125	TO-247	89K1091	2.42
● TIP47	250	1	40	TO-220	89K1096	1.68
● MJD47T4	250	1	15	TO-252	89K0807	0.83
● MJE340	300	0.5	20.8	SOT-32	89K0813	0.67
● TIP50	400	1	40	TO-220	89K1097	1.08
● BUL216	800	4	90	TO-220	89K0476	2.23

(164259)

BIPOLAR PNP POWER TRANSISTORS

RoHS Compliant Available

PNP

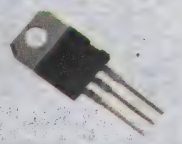
Mfg. Part No.	V_{CEO} (V)	I_C (A)	Power Diss, P_d (W)	Saturation Voltage V_{CE} (sat) (V)	Saturation Voltage @I_B (mA)	Package	Stock No.	Price Each 1-9
● TIP42A	60	6	2	6	600	TO-220	89K1094	1.38
● TIP105	-60	8	80	2	6	TO-220	89K1066	0.88
● D45H11	-80	-10	50	0.5	50	TO-220	89K0519	1.49
● TIP117	-100	2	50	2.5	8	TO-220	89K1071	1.00
● MJD32CT4	100	3	15	1.2	375	TO-252	89K0805	0.63
● TIP42C	-100	6	65	6	600	TO-220	89K1095	0.87
● TIP107	-100	8	80	2	6	TO-220	89K1067	1.02
● TIP147	-100	-10	125	2	10	TO-247	89K1080	2.16
● TIP36C	100	25	125	1.8	1500	TO-247	89K1092	2.40
● MJE350	-300	0.5	20.8	...	...	SOT-32	89K0814	0.62
DUAL PNP								
● MJE2955T	60	10	75	1.1	400	TO-220	89K0811	0.83
● MJ2955	-60	-15	115	...	...	TO-3	89K0818	2.23

(164258)

TRANSISTORS

RoHS Compliant Available

multicomp



UNIJUNCTION TRANSISTORS
NPN

Mfg. Part No.	V_{CEO} (V)	I_C (mA)	Package	Stock No.	Price Each 1-249
● BC109	25	200	TO-18	80K0906	0.79
● BC109B	25	200	TO-18	14M4490	0.79
● BC109C	25	200	TO-18	14M4491	0.81
● 2N3704	30	800	TO-92	08N7700	0.16
● BC140-16	40	1000	TO-39	96K6825	0.99
● BC237B	45	100	TO-92	08N7616	0.10
● BC547B	45	100	TO-92	08N8056	0.09
● BC337	45	500	TO-92	08N8055	0.11
● BC337.25	45	800	TO-92	08N6215	0.12
● BC635	45	1000	TO-92	08N8059	0.19
● BC182B	50	100	TO-92	08N8054	0.12
● MJ15024	250	16	TO-3	26M1599	9.33
● BUX80	400	10	TO-3	25M7947	3.80
PNP					
● 2N3906	40	200	TO-92	08N8112	0.10
● BC327.25	45	800	TO-92	08N6214	0.12
● BD136	45	1000	TO-126	08N7621	0.26

➤CONTINUED➤

TRANSISTORS (CONT.)

PNP

Mfg. Part No.	V_{CEO} (V)	I_C (mA)	Package	Stock No.	Price Each 1-249
● BC161-16	60	1000	TO-39	96K6828	0.99
● BC640	-80	1000	TO-92	08N8060	0.19
● 2N6609	140	16A	TO-3	26M6251	3.89
● MJ15004	140	20A	TO-3	26M1597	4.13

DARLINGTION TRANSISTORS
NPN

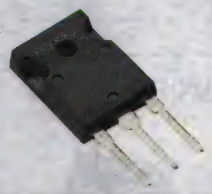
Mfg. Part No.	Vceo (V)	Ic (A)	Package	Stock No.	Price Each 1-49
● MJ11016	120	30	TO-3	26M1593	7.34
● MJ11032	120	50	TO-3	26M1594	12.15
● TIP150	300	7	TO-220	95M4475	2.97
● TIP152	400	7	TO-220	01N8616	3.08
PNP					
● TIP136	80	8	TO-220	14M6494	1.60
● 2N6051	80	12	TO-3	26M6243	3.18
● MJ11015	120	30	TO-3	26M1592	6.82
● MJ11033	120	50	TO-3	26M1595	11.79

(116849)

10A TO 16A POWER TRANSISTORS

RoHS Compliant Available

multicomp



Mfg. Part No.	Polarity	V_{CEO} (V)	$I_{C(av)}$ (A)	hFE Min.	P_D (W)	Pkg.	Stock No.	Price Each 1-99
● TIP140	NPN	60	10	1000	125	TO-247	13M3113	2.97
● TIP141	NPN	80	10	1000	125	TO-247	26M4140	3.02
● TIP162	NPN	380	10	200	125	TO-247	26M4145	4.03
● TIP146	PNP	-80	-10	1000	125	TO-247	26M4143	3.09
● BDV67B	NPN	100	16	1000	125	TO-247	14M4499	4.37
● BDV66B	PNP	100	16	1000	125	TO-247	14M4497	3.78

(116650)

BIPOLAR TRANSISTORS

RoHS Compliant Available

SOLID·STATE

Mfg. part no. 2N3866 RF and microwave low-power silicon transistor is designed for VHF and UHF equipment. Ideal for applications including amplifiers, pre-drivers, drivers and output stages. Also suitable for oscillator and frequency-multiplier functions.

Mfg. part no. MJ2955 is designed for use in general-purpose amplifier and switching applications. **Mfg. part nos. MJ15022** and **MJ15025** are complement to each other and are designed for high-power audio, disk head positioners and other linear applications.

RF AND MICROWAVE DISCRETE LOW-POWER BIPOLAR TRANSISTOR

Mfg. Part No.	V_{CEO} (V)	I_C (A)	P_D (W)	hFE (Min.)	f_T (MHz)	Polarity Config.	Package	Stock No.	Price Each 1-9
● 2N3866	30	400	5	10	800	NPN	3-TO-39	10P5415	4.78
● 2N3500	150	0.3	5	15	...	NPN	3-TO-39	67R1069	1.97
● 2N3773	140	16	150	15	...	NPN	2-TO-3	67R1070	4.64
COMPLEMENTARY SILICON POWER BIPOLAR TRANSISTORS									
● MJ2955	-60	15	115	5	2.5	PNP	TO-3	10P1538	1.94
● MJ15022	200	16	250	5	4	NPN	TO-3	10P1534	5.07
● MJ15025	--250	16	250	5	4	PNP	TO-3	10P1537	7.13

(148807)

HIGH VOLTAGE POWER TRANSISTORS

RoHS Compliant Available

NPN

Mfg. Part No.	V_{CEO} (V)	I_C (A)	P_D (W)	Pkg.	Stock No.	Price Each 1-9
● BUV48A	450	15	125	SOT-93	89K0478	4.21

(83915)

2NXXXX SERIES GENERAL PURPOSE TRANSISTORS

RoHS Compliant Available

ON Semiconductor

GENERAL PURPOSE — NPN

Mfg. Part No.	$V_{(br)CEO}$ Min. (V)	I_C (mA)	h_{FE} Min.	Pkg.	Tape Cut Stock No.	Price Each 1-9
2N5089G	25	50	400	T0-92	45J2492	0.38
2N4124G	25	200	120	T0-92	26K5280	0.40
2N6288G	30	7	30	3-T0-220	26K5317	0.89
2N5088G	30	50	300	T0-92	42K3133	0.40
2N4401G	40	600		T0-92	45J2480	0.58
2N4401RLRAG	40	600	100	T0-92	45J2481	0.59
2N4921G	40	3	30	T0-225	26K5283	0.66
2N5190G	40	4	30	T0-225	42K3135	0.81
2N3771G	40	30	15	T0-204	26K5275	4.17
2N4922G	60	3	30	T0-225	26K5284	0.67
2N5191G	60	4	25	T0-225	42K3136	0.77
2N6487G	60	15	20	3-T0-220	26K5324	0.99
2N3055AG	60	15	10	T0-204	42K3127	3.02
2N3055G	60	15	20	T0-204	98H1011	2.49
2N3772G	60	20	15	T0-204	26K5276	4.62
2N5302G	60	30	15	T0-204	26K5293	4.17
2N5885G	60	50	20	T0-204	59J7374	4.10
2N6292G	70	7	30	3-T0-220	26K5318	0.93
2N4923G	80	3	30	T0-225	26K5285	0.67
2N5192G	80	4	20	T0-225	72J1869	0.80
2N6488G	80	15	20	3-T0-220	72J1873	0.99
2N5886G	80	25	20	T0-204	26K5302	4.17
2N5686G	80	50	15	T0-204	26K5299	14.56
2N5038G	90	20	20	T0-204	26K5286	10.27
2N6338G	100	25	30	T0-204	26K5319	13.73
2N3442G	140	10	20	T0-204	26K5274	2.85
2N3773G	140	16	15	T0-204	45J2472	4.17
2N5550G	140	600	60	T0-92	42K3146	0.42
2N6341G	150	25	30	T0-204	42K3171	13.56
2N5551G	160	600	80	T0-92	45J2499	0.40
2N5551RLRAG	160	600	80	T0-92	84K8842	0.44
2N5655G	250	500	30	T0-225	42K3156	0.75
2N5657G	350	500	30	T0-225	26K5297	0.71
GENERAL PURPOSE — PNP						
2N4918G	40	-3	30	T0-225	26K5281	0.63
2N6109G	50	-7	30	3-T0-220	26K5314	0.97
2N5087G	50	-50	250	T0-92	45J2491	0.40
2SA1774G	50	100	120	SOT-416	45J2513	0.16
2N4919G	60	-3	30	T0-225	26K5282	0.67
2N5194G	60	4	25	T0-225	26K5291	0.77
2N6490G	60	-15	20	3-T0-220	42K3184	1.08
2N5883G	60	-25	20	T0-204	26K5300	4.09
2N6107G	70	7	30	3-T0-220	26K5313	0.97
2N4920G	80	3	30	T0-225	45J2486	0.63
2N5684G	-80	-50	15	T0-204	26K5298	9.53
2N6491G	-80	-15	20	3-T0-220	72J1874	0.97
2N5884G	80	25	20	T0-204	26K5301	4.47
2N5401G	150	500	60	T0-92	45J2495	0.42
2N5401RLRAG	150	500	60	T0-92	84K8841	0.41
2N6520RLRAG	350	500	30	T0-92	45J2510	0.55

(175945)

DARLINGTON TRANSISTORS—NPN

RoHS Compliant Available

ON Semiconductor

Mfg. Part No.	$V_{(br)CEO}$ Min. (V)	I_C (A)	VCE (sat) Max (V)	h_{FE} Min.	Pkg.	Tape Cut Stock No.	Price Each 1-9
MMBTA13LT1G	30	0.3	1.5	10000	3-SOT-23	98H0743	0.22
MMBTA14LT1G	30	0.3	1.5	20000	3-SOT-23	45J1528	0.22
MPSA13G	30	0.5	1.5	10000	T0-92	26K4618	0.43
MPSA13RLRAG	30	0.5	1.5	10000	T0-92	84K8805	0.44
MPSA14G	30	0.5	1.5	20000	T0-92	26K4621	0.42
MPSA14RLRAG	30	0.5	1.5	20000	T0-92	45J1646	0.42
BC517G	30	1	1	30000	3-T0-92	26K3424	0.49
2N6427G	40	0.5	1.5	20000	3-T0-92	42K3183	0.45
MMBT6427LT1G	40	0.5	1.5	20000	SOT-323	73J7777	0.26
MPSW45AG	50	1	1.5	25000	T0-92	26K4638	0.54
MPSA27G	60	0.5	1.5	10000	T0-92	45J1647	0.41

➤ CONTINUED ➤

DARLINGTON TRANSISTORS—NPN (CONT.)

Mfg. Part No.	$V_{(br)CEO}$ Min. (V)	I_C (A)	VCE (sat) Max (V)	h_{FE} Min.	Pkg.	Tape Cut Stock No.	Price Each 1-9
MPSA27RLRAG	60	0.5	1.5	10000	T0-92	84K8807	0.42
TIP110G	60	2	2.5	500	3-T0-220	45J2275	0.73
2N6038G	60	4	2	750	T0-225	42K3162	0.77
MJE800G	60	4	2.5	750	T0-225	45J1506	0.74
TIP120G	60	5	2	1000	3-T0-220	45J2278	0.65
TIP100G	60	8	2	1000	3-T0-220	42K2655	0.93
2N6043G	60	8	2	1000	3-T0-220	42K3166	0.84
TIP140G	60	10	2	500	T0-218	26K5206	2.07
2N6387G	60	10	2	1000	3-T0-220	42K3176	0.89
MJ11012G	60	30	3	1000	T0-204	42K1309	4.92
MJ11028G	60	50	2.5	1000	T0-204	42K1312	10.14
BSP52T3G	80	1		2000	SOT-223	09R9391	0.57
TIP111G	80	2	2.5	500	3-T0-220	45J2276	0.77
2N6039G	80	4	2	750	T0-225	42K3163	0.80
MJE802G	80	4	2.5	750	T0-225	26K4472	0.71
MJE803G	80	4	2.8	750	T0-225	26K4473	0.75
BD679AG	80	4	2.8	750	T0-225	45J0616	0.74
TIP121G	80	5	2	1000	3-T0-220	42K2660	0.65
TIP101G	80	8	2	1000	3-T0-220	42K2656	0.93
MJD44E3T4G	80	10	1.5	1000	D-PAK	42K1283	0.69
2N6388G	80	10	2	1000	3-T0-220	42K3177	1.01
MPSA29G	100	0.5	1.5	10000	T0-92	42K1452	0.41
MJD112-1G	100	2	2	1000	DPAK-3	26K4439	0.68
MJD112G	100	2	2	1000	4-DPAK	42K1268	0.71
MJD112T4G	100	2	2	1000	3-DPAK	10N9468	0.69
MJE270G	100	2	2	1500	3-T0-225	26K4459	0.69
TIP112G	100	2	2.5	500	3-T0-220	26K5203	0.63
TIP117G	100	2	2.5	500	3-T0-220	45J2277	0.77
BD681G	100	4	2.5	750	T0-225	26K3524	0.75
MJF122G	100	5	2	1000	T0-220	26K4474	1.03
TIP122G	100	5	2	1000	3-T0-220	45J2279	0.66
2N6045G	100	8	2	1000	3-T0-220	26K5308	0.84
BDX53CG	100	8	2	750	3-T0-220	26K3488	0.97
TIP102G	100	8	2	1000	3-T0-220	26K5200	0.94
MJD122T4G	100	8	4	1000	3-DPAK	10N9469	0.67
TIP142G	100	10	2	500	T0-218	26K5208	2.05
BDX33CG	100	10	2.5	750	3-T0-220	26K3484	0.92
BDW42G	100	15	2	1000	3-T0-220	26K3481	0.96
2N6284G	100	20	2	750	T0-204	26K5315	5.02
MJH6284G	100	20	2	750	T0-218	26K4487	4.32
MJ11016G	120	30	3	1000	T0-204	26K4505	4.92
MJ11032G	120	50	2.5	1000	T0-204	26K4507	10.02
MJH11020G	200	15	2.5	400	T0-218	26K4484	4.22
MJH11022G	250	15	2.5	400	3-T0-247	26K4486	4.22
MJ11022G	250	15	2	400	T0-204	42K1311	8.07
MJE5742G	400	8	2	200	3-T0-220	26K4468	1.65

(175950)

DARLINGTON TRANSISTORS

RoHS Compliant Available

SOLID·STATE

Switchmode series silicon power darlington transistors with base-emitter speed-up diode are designed for high voltage, high speed, power switching in inductive circuits where fall time is critical. Suited for line operated switch-mode applications such as switching regulators, inverters, and solenoid and relay drivers.

SWITCHMODE SERIES SILICON POWER DARLINGTON TRANSISTORS

Mfg. Part No.	V_{CEO} (V)	I_C (A)	P_D (W)	hFE (Min.)	Polarity Config.	Package	Stock No.	Price Each 1-9
MJ10007	400	10	150	40	NPN	T0-3	10P1512	8.48
MJ10025	850	20	250	50	NPN	T0-3	10P1521	13.07
MJ10023	400	40	250	60	NPN	T0-3	10P1519	10.37
MJ10015	400	50	250	25	NPN	T0-3	10P1516	10.89
MJ10016	500	50	250	25	NPN	T0-3	10P1517	11.16

COMPLEMENTARY SILICON POWER DARLINGTON TRANSISTORS

Designed for use as output devices in complementary general-purpose amplifier and low-speed switching applications. Monolithic construction with built-in base-emitter shunt resistor.

MJ11012	60	30	200	1000	NPN	T0-3	10P1523	9.73
2N6044	80	8	75	100	NPN	T0-220	10P5470	1.20

(148798)

DARLINGTON TRANSISTORS—PNP

RoHS Compliant Available

ON Semiconductor

Mfg. Part No.	$V_{CE(sat)}$ Max (V)	$V_{(br)CEO}$ Min. (V)	h_{FE} Min.	h_{FE} Max.	Pkg.	Tape Cut Stock No.	Price Each 1-9
● MMBTA63LT1G	1.5	30	10000	...	3-SOT-23	84K8794	0.22
● MMBTA64LT1G	1.5	30	20000	...	3-SOT-23	71J5992	0.23
● 2N6034G	2	40	750	750	3-TO-225	42K3159	0.77
● 2N6035G	2	60	750	15	3-TO-225	42K3160	0.77
● 2N6036G	2	80	750	15	3-TO-225	42K3161	0.81
● 2N6040G	2	60	1000	20	3-TO-220	42K3164	0.89
● 2N6042G	2	100	1000	20	3-TO-220	42K3165	0.89
● 2N6052G	2	100	750	18	2-TO-3	26K5309	4.57
● 2N6286G	2	80	750	18	2-TO-3	42K3170	4.57
● 2N6287G	2	100	750	18	2-TO-3	26K5316	4.57
● 2N6667G	2	60	1000	20	3-TO-220	26K5330	0.96
● BDV64BG	2	-100	1000	...	3-TO-247	26K3479	2.07
● BDW47G	2	100	1000	...	3-TO-220	45J0612	1.10
● TIP125G	2	60	1000	...	3-TO-220	45J2280	0.77
● TIP126G	2	80	1000	...	3-TO-220	26K5204	0.81
● TIP127G	2	100	1000	...	3-TO-220	45J2281	0.80
● TIP147G	2	100	500	...	3-TO-247	26K5211	2.07
● BDX54CG	2	100	750	...	3-TO-220	26K3490	0.99
● MJ11021G	2	250	400	15	2-TO-3	42K1310	8.17
● MJD117G	2	100	1000	12	4-DPAK	45J1480	0.75
● MJD127G	2	100	1000	12	4-DPAK	45J1482	0.65
● MJE271G	2	100	1500	...	3-TO-225	26K4460	0.69
● MJF127G	2	100	1000	...	3-TO-220	26K4475	1.05
● MJH6287G	2	100	750	18	4-SOT-93	26K4488	4.58
● TIP106G	2	80	1000	20	3-TO-220	42K2657	0.92
● TIP107G	2	100	1000	20	3-TO-220	26K5202	0.85
● MJH11017G	2.5	150	400	15000	4-SOT-93	42K1304	4.15
● BD682G	2.5	100	750	...	3-TO-225	45J0617	0.71
● BDX34BG	2.5	80	750	...	3-TO-220	26K3485	0.99
● MJ11033G	2.5	120	1000	18000	2-TO-3	26K4508	10.68
● MJE702G	2.5	80	750	...	3-TO-225	42K1300	0.75
● MJE700G	2.5	60	750	...	3-TO-225	26K4470	0.74
● MJH11021G	2.5	250	400	15	3-TO-247	26K4485	4.43
● BD680AG	2.8	80	750	...	3-TO-225	26K3522	0.71
● MJE703G	2.8	80	750	...	3-TO-225	26K4471	0.75
● MJ11015G	3	120	1000	...	2-TO-3	26K4504	4.57
● MJH11019G	4	-200	400	15	4-SOT-93	26K4483	4.43

(116805)

POWER BIPOLAR TRANSISTORS

RoHS Compliant Available

SOLID-STATE

NPN

Mfg. Part No.	V_{CEO} (V)	I_C (A)	hFE	Package	Stock No.	Price Each 1-9
2N5240	300	5	80	2-TO-3	67R1100	4.77

(195457)

DARLINGTON TRANSISTORS

RoHS Compliant Available

NPN

Mfg. Part No.	V_{CEO} (V)	I_C (A)	h_{FE} Min.	h_{FE} @I_C (A)	Package	Stock No.	Price Each 1-9
● BD677A	60	4	750	2	SOT-32	89K0470	1.33
● 2N6036	80	4	100	4	SOT-32	89K1167	0.96
● TIP120	60	5	1000	3	TO-220	89K1072	0.70
● TIP112	100	2	1000	1	TO-220	89K1069	0.89
● TIP122	100	5	1000	3	TO-220	89K1073	0.94
● MJD122T4	100	5	1000	4	TO-252	89K0801	0.87
● TIP132	100	8	1000	4	TO-220	89K1077	1.20
● BDW93C	100	12	750	5	TO-220	89K0464	1.45
● BU941ZPFI	350	15	300	5	ISOWATT-218	89K0489	5.36
● BU941ZT	350	15	300	5	TO-218	89K0490	4.08
● BU931P	400	15	300	5	SOT-93	89K0486	1.86
● BU931T	400	15	300	5	TO-220	89K0487	4.11
● BUL38D	450	5	10	10	TO-220	89K0477	1.36
● BUF420AW	450	30	...	...	TO-247	89K0474	9.46

➤ CONTINUED ➤

DARLINGTON TRANSISTORS (CONT.)

PNP

Mfg. Part No.	V_{CEO} (V)	I_C (A)	h_{FE} Min.	h_{FE} @I_C (A)	Package	Stock No.	Price Each 1-9
● TIP115	-60	-2	1000	3	TO-220	89K1070	0.75
● TIP125	-60	5	1000	3	TO-220	89K1074	0.88
● TIP127	-100	-5	1000	1	TO-220	89K1076	0.82
● MJD127T4	100	5	1000	4	TO-252	89K0802	1.09

(83785)

NPN DARLINGTON POWER MODULES

RoHS Compliant Available

Mfg. Part No.	$V_{CE(br)}$ (V)	I_C (A)	h_{FE}	Package	Stock No.	Price Each 1-9
● ESM6045DV	450	84	120	ISOTOP	89K0543	88.41

(83764)

MATCHED MONOLITHIC QUAD TRANSISTOR

RoHS Compliant Available

ANALOG DEVICES

Features:
- Low offset voltage: 400 µV maximum
- High current gain: 300 minimum
- Excellent current gain match: 4% maximum
- Low voltage noise density at 100 Hz, 1 mA 3 nV/√Hz maximum
- Excellent log conformance Bulk resistance (rBE) = 0.6 Ω maximum
- Guaranteed matching for all transistors

Mfg. Part No.	Polarity	V(br)ceo (V)	$I_{DC\ Collector}$ (mA)	Transition Freq. Typ (MHz)	Pkg.	Stock No.	Price Each 1-9
● MAT14ARZ	NPN	40	30	300	SOIC	20T0424	11.24

(207644)

HIGH-CURRENT NPN DARLINGTON ARRAYS

RoHS Compliant Available

ON Semiconductor

Features:
- High Breakdown Voltage
- Internal Suppression Diodes
- Applications: Driving Lamps, Relays and Printer Hammers
- 7 Circuits per Package

B suffix in type number indicates operating temperature: -40°C to +85°C; all others: -20°C to +85°C.

Mfg. Part No.	$V_{(BR)CEO}$ Min. (V)	$V_{CE(SAT)}$ Max. (V)	h_{FE} Min.	I_C Max. (A)	Pkg.	Tape Cut Stock No.	Price Each 1-9
● MC1413DG	50	1.6	1000	0.5	16-SOIC	98H0657	0.64
● MC1413BDG	50	1.6	1000	0.5	16-SOIC	42K0545	0.69
● MC1413BDR2G	50	...	1000	0.5	16-SOIC	84K8752	0.71
● MC1413DR2G	50	...	1000	0.5	16-SOIC	84K8753	0.62
● MC1413BPG	50	1.6	1000	0.5	16-PDIP	45J1095	0.71
● MC1413PG	50	1.6	1000	0.5	16-PDIP	88H4717	0.64

(74466)

BIPOLAR TRANSISTOR ARRAYS

RoHS Compliant Available

SOLID-STATE

DUAL NPN

Mfg. Part No.	$V_{(BR)CEO}$ (V)	I_C (mA)	f_T Typ. (MHz)	Package	Stock No.	Price Each 1-9
2N4044	60	10	...	TO-78	67R1080	19.31
2N2920	60	30	...	TO-71	67R1060	16.29
2N2920A	60	30	...	TO-71	67R1061	15.39
● 2N3810	60	50	100	TO-78	67R1076	19.31
● 2N3811	60	50	100	TO-78	67R1078	19.31

(195459)

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(212565)

TRANSISTOR ARRAYS

RoHS Compliant Available

ROHM SEMICONDUCTOR

DUAL NPN

Mfg. Part No.	I_D (A)	$V_{(BR)CEO}$ (V)	DC Current Gain Max (hfe)	P_D (mW)	Package	Stock No.	Price Each 1-9
UMD12NTR	100	50	68	150	SOT-363	40P3400	0.30
UMG9NTR	100	50	30	150	SOT-353	40P3405	0.30
UMH3NTN	100	50	250	150	SOT-363	40P3409	0.30
UMH6NTR	100	50	68	150	SOT-363	40P3411	0.30
UMX1NTN	150	50	120	150	SOT-363	40P3417	0.26
UMX3NTR	150	50	120	150	SOT-363	40P3419	0.19
EMZ1T2R	150	50	120	150	EMT	40P3028	0.35
UMY1NTR	150	50	120	150	SOT-353	40P3421	0.22
UMZ1NTR	150	50	120	150	SOT-363	40P3422	0.22
2SC2411KT146Q	500	32	120	200	SOT-346	28W2112	0.28
DUAL PNP							
EMD9T2R	100	50	68	150	EMT	40P3022	0.35
UMD12NTR	100	50	68	150	SOT-363	40P3400	0.30
UMB2NTN	100	50	68	150	SOT-363	40P3398	0.30
EMZ1T2R	150	50	120	150	EMT	40P3028	0.35
IMT1AT110	150	50	120	300	SOT-457	40P3090	0.30
UMF28NTR	150	50	180	150	SC-88	74M5096	0.44
UMT1NTN	150	50	120	150	SC-88	74M5106	0.25
UMY1NTR	150	50	120	150	SOT-353	40P3421	0.22
UMZ1NTR	150	50	120	150	SOT-363	40P3422	0.22
NPN / PNP							
IMZ1AT108	150	50	120	300	SOT-457	40P3099	0.34

(207811)

DARLINGTON TRANSISTOR ARRAYS

RoHS Compliant Available

ST

*= Tape Cut

Mfg. Part No.	I_{Out} Max. (mA)	V_{Out} Max. (V)	Number of Transistors	Package	Stock No.	Price Each 1-9
ULN2003A	500	50	7	16-DIP	89K1130	0.54
ULN2003D1013TR*	500	50	7	16-SOIC	89K1131	0.46
ULN2004D1013TR*	500	50	7	16-SOIC	89K1133	0.35
ULQ2003A	500	50	7	16-DIP	89K1145	0.67
ULN2801A	500	50	8	18-DIP	89K1141	1.91
ULN2802A	500	50	8	18-DIP	89K1142	1.72
ULN2803A	500	50	8	18-DIP	89K1143	1.35
ULN2804A	500	50	8	18-DIP	89K1144	1.87
ULN2064B	1.5 A	50	4	16-DIP	89K1134	3.59
ULN2068B	1.5 A	50	4	16-DIP	89K1137	3.75
ULN2065B	1.5 A	80	4	16-DIP	89K1135	3.41
ULN2067B	1.5 A	80	4	16-DIP	89K1136	4.73
ULN2069B	1.5 A	80	4	16-DIP	89K1138	3.17
ULN2074B	1.5 A	50	4	16-DIP	89K1139	3.19
ULN2075B	1.5 A	80	4	16-DIP	89K1140	4.65

(83767)

DARLINGTON TRANSISTOR ARRAYS

RoHS Compliant Available

TEXAS INSTRUMENTS

HIGH-SPEED, HIGH-CURRENT

Mfg. Part No.	Drivers Per Pkg.	Output Voltage Max. (V)	Delay Time Typ. (ns)	Input Compatibility	Package	Stock No.	Price Each 1-9
ULN2003AD	7	50	250	CMOS, TTL	16-SOIC	09F1868	0.69
ULN2003AN	7	50	250	CMOS, TTL	16-DIP	60K7049	0.66
ULN2003AIN	7	50	250	CMOS, TTL	16-DIP	01J1041	0.60
ULN2004ADR	7	50	250	CMOS	16-SOIC	67K2886	0.58
ULN2004AN	7	50	250	CMOS	16-DIP	60K7050	0.66
ULN2003AID	7	50	...	CMOS	16-SOIC	82H5910	0.63
ULN2803ADW	8	50	130	CMOS, TTL	18-SOIC	69K0711	1.14

(74644)

GaAs AND SILICON RF TRANSISTORS

RoHS Compliant Available

AVAGO TECHNOLOGIES

Micro X

Plastic 86 SMD

Mfg. Part No. **ATF-34143** and **ATF-35143** are high dynamic range, low-noise, pseudomorphic HEMT. Applications include: cellular and PCS base stations, LEO systems, MMDS, and other systems requiring super-low noise figure with good intercept in the 450MHz to 10GHz frequency range. Mfg. Part No. with suffix **BLK** and **BLKG** are sold in bulk, **TR1** and **TR1G** are packaged in tape on reel. Bulk items are sold by the piece where as tape on reel versions are sold in full reel quantities only. All Avago parts are RoHS compliant. *go online or call*

SINGLE VOLTAGE E-pHEMTs (FETs)

Mfg. Part No.	Freq. Range (GHz)	V_{DS} (Volts)	I_{DS} (mA)	N_F (dB)	Package	Stock No.	Price Each 1-9
ATF-54143-BLKG	450 - 6	3	60	0.5	4-SOT-343	63J8887	4.53
ATF-58143-BLKG	450 - 6	3	30	0.5	4-SC-70	63J8890	3.15
ATF-551M4-BLK	450 - 10	2.7	10	0.5	MiniPak	54K2746	1.88
LOW NOISE pHEMTs							
ATF-33143-BLKG	450 - 6	5.5	305	0.5	SOT-343	63J8872	4.40
ATF-34143-BLKG	450 - 6	4	60	0.5	4-SOT-343	63J8875	3.76
ATF-35143-BLKG	450 - 6	2	15	0.4	SOT-343	63J8878	1.84
ATF-38143-BLKG	450 - 6	4.5	145	0.4	SOT-343	63J8884	1.50
ATF-34143-BLKG	450 - 6	4	60	0.5	4-SOT-343	63J8875	3.76
HIGH FREQUENCY pHEMTs (FETs)							
ATF-36163-BLKG	1.5 - 18	3	40	1.2	SOT-363	63J8881	1.46

LOW NOISE SILICON BIPOLAR TRANSISTORS

Mfg. Part No.	V_{CE} (Volts)	Freq. (GHz)	N_F (dB)	Package	Stock No.	Price Each 1-9
AT-31033-BLKG	2.7	900	0.9	SOT-23	63J8831	0.64
AT-41511-BLKG	5	900	1	SOT-143	63J8853	0.70
AT-41533-BLKG	5	900	1	SOT-23	63J8859	0.70
AT-30533-BLKG	2.7	900	1.1	SOT-23	63J8825	0.64

(9855)

RF POWER FETs

RoHS Compliant Available

freescale

RF LDMOS POWER TRANSISTORS - MOBILE

Mfg. Part No.	Freq. Range (MHz)	Output Power (W)	V_{DSS} Max. (VDC)	V_{GS} Max. (VDC)	Pkg.	Stock No.	Price Each 1-9
MRF1511NT1	135 to 175	8	40	20	PLD-1.5	16N1972	7.56
MRF1550NT1	135 to 175	50	40	20	TO-272	43K5599	29.96
MRF1513NT1	400 to 520	3	40	20	PLD-1.5	16N1973	6.54
MRF1518NT1	400 to 520	8	40	20	PLD-1.5	34R2430	7.49
MRF1535NT1	400 to 520	35	40	20	TO-272	22M7859	20.65
MRF1517NT1	430 to 520	8	25	20	PLD-1.5	16N1974	7.02
RF LDMOS POWER TRANSISTORS - TV BROADCAST							
MW6S004NT1	1 to 2000	4	68	12	PLD-1.5	34R2431	9.98
MW6S010NR1	450 to 1500	10	68	12	TO-270	34R2432	17.30
MW6S010GNR1	450 to 1500	10	68	12	TO-270-2 GULL	81K3650	17.30
MRFE6S9045NR1	880 to 960	45	66	12	TO-270	34R2428	27.49
RF INDUSTRIAL, SCIENTIFIC, & MEDICAL POWER TRANSISTORS - HF/VHF							
MRFE6VP6300HR5	1.8 to 600	300	125	10	NI-780	13T4413	116.66
MRFE6VP5600HR5	1.8 to 600	600	130	10	NI-1230	24T5453	136.20
MRFE6VP61K25HR5	1.8 to 600	1250	125	10	NI-1230	19T6330	209.96

(74913)

RF POWER LDMOS TRANSISTORS

RoHS Compliant Available

freescale

Features:
- Unmatched Input and Output Allowing Wide Frequency Range Utilization
- Integrated ESD Protection
- Integrated Stability Enhancements
- Exceptional Thermal Performance
- High Linearity for: TETRA, SSB, LTE
- Cost-effective Over-molded Plastic Packaging

Applications:
- Output Stage VHF Band Mobile Radio
- Output Stage UHF Band Mobile Radio

Mfg. Part No.	Frequency Band	Power Dissipation (W)	Supply Voltage (V)	Package	Stock No.	Price Each Each
AFT05MS031NR1	136MHz to 520 MHz	31	13.6	TO-270	28W3504	7.58
AFT09MS031NR1	136MHz to 520 MHz	31	13.6	TO-270	28W3505	8.32
MRFE6VP100HR5	1.8MHz to 2GHz	100	50	NI-780	28W3506	108.42
MRFE6VS25NR1	1.8MHz to 2GHz	25	50	TO-270	28W3507	33.77

(207791)

BROADCAST / ISM RF POWER TRANSISTORS

RoHS Compliant Available

NXP

Features
- Designed for broadband operation
- Easy power control
- Good thermal stability
- High power gain
- Withstands full load mismatch

Applications
- TV, VHF and HF transmitters
- Military communications
- PMR
- ISM

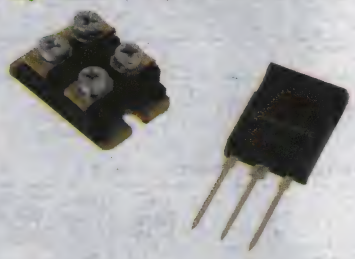
Mfg. Part No.	Drain Source Voltage (V)	Operating Frquency Range	Power Dissipation (mW)	Package	Stock No.	Price 1-9
VDMOS						
● BLF242,112	28	175MHz to 230MHz	16	4-SOT-123A	70R2760	61.54
LDMOS						
● BLF645,112	32	HF to 1400MHz	100	4-SOT-540A	70R2867	144.70
● BLF871,112	40	10MHz to 1GHz	24	2-SOT-467C	70R2880	128.71
● BLF878,112	40	470MHz to 860MHz	75	4-SOT-979A	70R2882	217.95
● BLF571,112	50	10MHz to 500MHz	20	2-SOT-467C	70R2782	80.44
● BLF573,112	50	10MHz to 500MHz	300	2-SOT-502A	81R1954	115.84
● BLF574,112	50	10MHz to 500MHz	400	4-SOT-539A	70R2784	193.73
● BLF578,112	50	10MHz to 500MHz	1.2	4-SOT-539A	70R2785	308.88
● BLF881,112	50	10MHz to 1GHz	33	2-SOT-467C	70R2883	97.19
● BLF6G27-45,112	65	2.5GHz to 2.7GHz	45	3-SOT-608A	70R2843	85.00
● BLF6H10L-160,112	104	729MHz to 960MHz	160	3-SOT-467C	45W7148	91.93

(194459)

IGBT SILICON CARBIDE (SiC) DIODE COPACKS

RoHS Compliant Available

GeneSiC SEMICONDUCTOR



Features
- MOS input control
- Positive temperature coefficient for easy paralleling
- High short-circuit current capability
- Temperature independent switching behavior of SiC rectifier
- Zero reverse recovery current (diode)
- Low switching losses
- Higher efficiency

Applications
- Solar Inverters
- Aerospace Actuators
- AC servo and robot devices
- AC and DC motor control
- Server power supplies

Mfg. Part No.	I_{CM} (A)	V_{CES} (V)	Pkg.	Stock No.	Price Each Each
● GA035XCP12-247	35	1.2	3-TO-247	20T5181	25.03
● GA35XCP12-247	35	3	3-TO-247	08X5875	40.58
● GB100XCP12-227	100	1.2	3-SOT-227	46W2775	190.08
GA100SCPL12-227E	100	1.9	3-SOT-227	08X5870	188.76

(192367)

IRG4 SERIES IGBTs

RoHS Compliant Available

International IOR Rectifier

Package size depictions where available; *go online or call.*

Mfg. Part No.	$V_{CE(ON)}$ (V)	DC Collector Current (A)	Package	Stock No.	Price Each 1-9
● IRG4IBC10UDPBF	600	6.8	TO-220	63J7497	3.10
● IRG4RC10UTRPBF	600	8.5	D-PAK	95W2958	1.88
● IRG4BC10UDPBF	600	8.5	TO-220AB	63J7472	2.84
● IRG4BC10KPBF	600	9	TO-220AB	63J7469	2.09
● IRG4IBC20KDPBF	600	11.5	TO-220	63J7499	3.50
● IRG4IBC20UDPBF	600	11.4	TO-220	63J7500	3.54
● IRG4IBC20WPBF	600	11.8	TO-220	63J7501	2.88
● IRG4BC20UDPBF	600	13	TO-220AB	63J7481	3.62
● IRG4BC20UD-SPBF	600	13	D2-PAK	19K8350	3.49
● IRG4BC20UPBF	600	13	TO-220AB	63J7482	2.54
● IRG4BC20WPBF	600	13	TO-220AB	63J7483	2.48
● IRG4BC20W-SPBF	600	13	D2-PAK	19K8351	2.54
● IRG4BC15UDPBF	600	14	TO-220AB	63J7474	2.88
● IRG4RC10SDPBF	600	14	TO-252AA	63J7565	2.77
● IRG4IBC20FDPBF	600	14.3	TO-220	63J7498	3.64
● IRG4BC20FDPBF	600	16	TO-220AB	63J7475	3.34
● IRG4BC20FPBF	600	16	TO-220AB	63J7476	2.51
● IRG4BC20KDPBF	600	16	TO-220AB	63J7477	3.57

CONTINUED

IRG4 SERIES IGBTs (CONT.)

Mfg. Part No.	$V_{CE(ON)}$ (V)	DC Collector Current (A)	Package	Stock No.	Price Each 1-9
● IRG4BC20KD-SPBF	600	16	D2-PAK	19K8346	3.44
● IRG4IBC30KDPBF	600	17	TO-220	63J7503	4.50
● IRG4IBC30UDPBF	600	17	TO-220	63J7505	4.55
● IRG4IBC30WPBF	600	17	TO-220	63J7506	3.36
● IRG4BC20SPBF	600	19	TO-220AB	19K8349	2.76
● IRG4RC20FPBF	600	22	D-PAK	63J7570	3.11
● IRG4BC30UDPBF	600	23	TO-220AB	63J7490	4.44
● IRG4BC30UPBF	600	23	TO-220AB	63J7491	3.12
● IRG4BC30U-SPBF	600	23	D2-PAK	19K8358	3.75
● IRG4BC30WPBF	600	23	TO-220AB	63J7492	3.15
● IRG4BC30W-SPBF	600	23	D2-PAK	19K8359	3.57
● IRG4PC30UDPBF	600	23	TO-247AC	63J7512	5.82
● IRG4PC30UPBF	600	23	TO-247AC	63J7513	4.09
● IRG4PC30WPBF	600	23	TO-247AC	63J7514	4.76
● IRG4IBC30SPBF	600	23.5	TO-220	63J7504	3.75
● IRG4PC30KDPBF	600	28	TO-247AC	63J7509	5.60
● IRG4BC30KDPBF	600	28	TO-220AB	63J7487	4.29
● IRG4BC30KD-SPBF	600	28	D2-PAK	19K8356	4.18
● IRG4BC30FDPBF	600	31	TO-220AB	63J7484	4.28
● IRG4BC30FPBF	600	31	TO-220AB	19K8354	3.15
● IRG4PC30FDPBF	600	31	TO-247AC	63J7507	6.12
● IRG4PC30FPBF	600	31	TO-247AC	63J7508	4.68
● IRG4BC30SPBF	600	34	TO-220AB	63J7489	3.08
● IRG4BC40UPBF	600	40	TO-220AB	63J7495	4.01
● IRG4PC40UD-EPBF	600	40	TO-247AC	63J7520	8.18
● IRG4PC40UDPBF	600	40	TO-247AC	63J7521	7.76
● IRG4PC40UPBF	600	40	TO-247AC	63J7522	5.83
● IRG4PC40WPBF	600	40	TO-247AC	63J7523	5.98
● IRG4BC40KPBF	600	42	TO-220AB	63J7494	3.81
● IRG4BC40FPBF	600	49	TO-220AB	63J7493	3.79
● IRG4PC40FDPBF	600	49	TO-247AC	63J7515	6.76
● IRG4PC40FPBF	600	49	TO-247AC	63J7516	5.84
● IRG4PC50KDPBF	600	52	TO-247AC	63J7526	8.99
● IRG4PC50KPBF	600	52	TO-247AC	63J7527	7.26
● IRG4PC50UDPBF	600	55	TO-247AC	19K8364	5.86
● IRG4PC50UPBF	600	55	TO-247AC	63J7530	6.89
● IRG4PC50WPBF	600	55	TO-247AC	63J7531	8.11
● IRG4PC40SPBF	600	60	TO-247AC	63J7519	5.69
● IRG4PC50FDPBF	600	70	TO-247AC	19K8363	8.84
● IRG4PC50FPBF	600	70	TO-247AC	63J7524	7.00
● IRG4PC50SPBF	600	70	TO-247AC	63J7528	7.30
● IRG4PSC71UDPBF	600	85	Super-247	63J7557	16.10
● IRG4PSC71KPBF	600	85	Super-247	63J7556	13.10
● IRG4PF50WDPBF	900	51	TO-247AC	63J7537	9.72
● IRG4PH20KDPBF	1200	11	TO-247AC	63J7539	5.48
● IRG4PH20KPBF	1200	11	TO-247AC	63J7540	4.23
● IRG4BH20K-LPBF	1200	11	3-TO-262	19K8361	2.92
● IRG4BH20K-SPBF	1200	11	D2-PAK	19K8362	3.51
● IRG4PH30KDPBF	1200	20	TO-247AC	63J7541	5.86
● IRG4PH30KPBF	1200	20	TO-247AC	63J7542	4.43
● IRG4PH40KDPBF	1200	30	TO-247AC	63J7544	8.07
● IRG4PH40KPBF	1200	30	TO-247AC	63J7545	6.52
● IRG4PH40UDPBF	1200	41	TO-247AC	63J7547	7.78
● IRG4PH40UPBF	1200	41	TO-247AC	63J7550	5.75
● IRG4PH50KDPBF	1200	45	TO-247AC	63J7551	11.32
● IRG4PH50KPBF	1200	45	TO-247AB	19K8365	7.33
● IRG4PH50UDPBF	1200	45	TO-247AC	63J7553	12.03
● IRG4PH50UPBF	1200	45	TO-247AC	63J7554	7.70
● IRG4PH50S-EPBF	1200	57	3-TO-247	71P8083	9.32
● IRG4PH50SPBF	1200	57	TO-247AC	63J7552	7.94
● IRG4PSH71KDPBF	1200	78	Super-247	63J7559	22.47
● IRG4PSH71KPBF	1200	78	Super-247	63J7560	14.90

(166563)

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(212569)

IRGP SERIES IGBTs

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Package size depictions where available; *go online or call.*

Mfg. Part No.	V_{CES} (V)	$V_{CE(ON)}$ (V)	I_C (A)	Transistor Case	Stock No.	Price Each 1-9
IRGP35B60PDPBF	600	600	60	TO-247AC	63J7461	8.33
IRGP50B60PD1PBF	600	600	75	TO-247AC	63J7462	10.00
IRGP20B120UD-EP	1200	1200	40	TO-247AD	63J7456	11.85
IRGP30B120KD-EP	1200	1200	60	TO-247AD	63J7458	11.05
IRGPS40B120UDP	1200	1200	80	Super-247	63J7452	16.00
IRGPS60B120KDP	1200	1200	105	Super-247	63J7454	19.57
IRGP4640D-EPBF	1600	600	65	TO-247AD	69W9260	6.33
IRGP4640DPBF	1600	600	65	TO-247AC	69W9261	5.68
IRGP4650D-EPBF	1600	600	76	TO-247AD	69W9262	7.44
IRGP4650DPBF	1600	600	76	TO-247AC	69W9263	7.87
IRGP4660D-EPBF	1600	600	100	TO-247AD	69W9264	8.37
IRGP4660DPBF	1600	600	100	TO-247AC	69W9265	7.94

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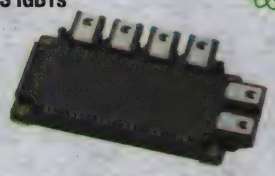
1.2kV NX 6.1 SERIES IGBTs

NEW

RoHS Compliant Available

POWEREX



Package A

Package B

Package C

Connection and size:
- A: 7-in-1 (136.9mm x 77.1mm)
- B: Dual (152mm x 62mm)
- C: 6-in-1 (121.7mm x 62mm)

Applications:
- Motor drives
- Wind & PV inverters
- UPS
- Power supplies
- Medical equipment

These IGBTs greatly simplify the design of medium power inverters for various industrial applications. Features such as an industry standard low profile package, best in class thermal impedance, and very low loss **6.1 Generation CSTBT™** Silicon facilitate a very efficient, economical, robust inverter design. The **NX-Series** lineup has been expanded to include a 600 amp, 1200 volt dual module to suit a higher power range of applications. New design effort is minimized, as they employ the same standard packaging and features previously introduced for the 5th and 6th Generation **NX-Series**.

Mfg. Part No.	I_C (A)	V_{CES} (kV)	Package	Stock No.	Price Each 1-9
CM100RX-24S1	100	1.8	A	35X3117	132.83
CM100TX-24S1	100	1.8	C	35X3118	125.31
CM150RX-24S1	150	1.8	A	35X3119	178.25
CM150TX-24S1	150	1.8	C	35X3120	167.14
CM225DX-24S1	225	1.9	B	35X3121	96.89
CM300DX-24S1	300	1.8	B	35X3122	125.46
CM450DX-24S1	450	1.8	B	99W3050	173.73
CM600DX-24S1	600	2	B	35X3123	257.14

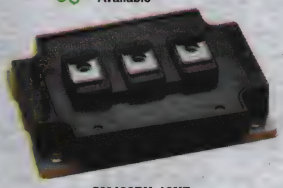
(212263)

NF SERIES CSTBT IGBT MODULES

RoHS Compliant Available

POWEREX

Features
- High performance industrial applications ~10-15 kHz
- 3rd Gen. (H-Series) Compatible
- Industry leading performance
- Highest reliability
- New Mega-Dual Package



CM400DY-12NF

Mfg. Part No.	Connection	V_{CE} (V)	I_C (A)	$V_{CE(SAT)}$ @ 25°C (V) Typ.	Max.	Stock No.	Price Each 1-9
CM200DY-12NF	Dual	600	200	1.7	2.2	73K1935	125.95
CM400DY-12NF	Dual	600	400	1.7	2.2	73K1938	204.73
CM1400DU-24NF	Dual	1200	1400	1.8	2.5	73K1932	1111.86

(84659)

NFH SERIES IGBT'S FOR HIGH FREQUENCY APPLICATIONS

RoHS Compliant Available

POWEREX

Features:
- Designed for use in High Frequency Applications (30-60kHz)
- 30kHz for hard switching applications
- 60kHz for soft switching applications
- 5th Generation CSTBT Chip Technology
- Low Esw (off)
- Trade-off $V_{CE(SAT)}$ for increased switching speed where low $ESW_{(off)}$
- 3 package sizes: 94m x 48mm, 108mm x 62mm; 110mm x 80mm

Mfg. Part No.	Style	V_{CES} (V)	I_C (A)	$V_{CES(SAT)}$ @ 25°C (V) Typ.	Max.	Stock No.	Price Each 1-9
CM200DU-12NFH	Dual	600	200	2	2.7	86H8424	132.00
CM100DU-24NFH	Dual	1200	100	5	6.5	18K8708	99.97
CM150DU-24NFH	Dual	1200	150	5	6.5	19K9207	130.67
CM400DU-24NFH	Dual	1200	400	5	6.5	83H4444	309.16
CM600DU-24NFH	Dual	1200	600	5	6.5	57J1799	395.09

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NX-SERIES IGBT MODULES

RoHS Compliant Available

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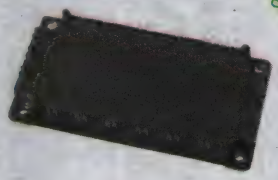
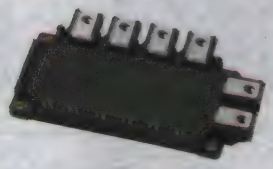


Package A

Package B

Powerex **NX-Series** Converter-Inverter-Brake (CIBs) and 1200V IGBT Modules use the 6th Generation Carrier Stored Trench-Gate Bipolar Transistor (CSTBT) chip. Improvements over previous generations include lower profile, lower losses, lower thermal impedance, and flow through connections (Bus on one side, output on other side, and control in the middle). **VLA536-01R** Dual Gate Drive board for **NX-Series** is also available.



Package C

Mfg. Part No.	Connection	I_C (A)	V_{CES} (kV)	Package	Stock No.	Price Each 1-9
CM150EXS-24S	Chopper	150	1.2	B	62W4735	107.84
CM200EXS-34S	Chopper	200	1.7	B	62W4737	152.34
CM200EXS-24S	Chopper	200	1.2	B	62W4736	112.98
CM300EXS-24S	Chopper	300	1.2	B	62W4738	130.14
CM200DX-24S	Dual	200	1.2	-	73R7445	136.93
CM300DX-24S	Dual	300	1.2	-	73R7446	160.40
CM450DX-24S	Dual	450	1.2	-	73R7447	228.61
CM150TX-24S	Six	150	1.2	A	73R7444	238.75
CM75RX-24S	Seven	75	1.2	C	73R7448	157.69
CM100RX-24S	Seven	100	1.2	C	73R7442	171.69
CM150RX-24S	Seven	150	1.2	C	73R7443	206.45

(116614)

S-SERIES IGBT MODULES

POWEREX

Applications:
- AC Motor Control
- Motion/Servo Control
- UPS
- Welding Power Supplies
- Laser Power Supplies

Features:
- Collector Emitter Voltage V(br)ceo=1.2 kV

Mfg. Part No.	I_C (A)	V_{CES} (V)	Power Dissipation (kW)	Stock No.	Price Each 1-9
CM300DY-24S	300	1.85	2.27	53W7687	171.21
CM450DY-24S	450	1.7	3.33	73T7844	275.16
CM600DY-24S	600	1.85	4.05	53W7688	305.73
CM800DY-24S	800	1.7	5.355	48W1954	457.85

(209624)

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(196525)

SUPER MINIDIP AND DIP INTELLIGENT POWER MODULES

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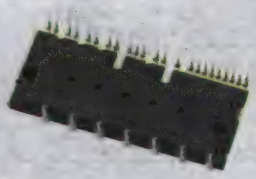
Super Mini



Large

DIP-IPMs are intelligent power modules that integrate power devices, drivers, and protection circuitry. For **DIP IPMs** design time is reduced by the use of application-specific HVICs and value-added features such as linear temperature feedback. Overall efficiency and reliability are increased by the use of full gate CSTBT technology and low thermal impedance. **Super MiniDIP IPMs** have an ultra compact dual-in-line transfer-mold package for use in driving small three phase motors.

Mfg. Part No.	Collector-Emitter Voltage	I_C/I_{CP} (A)	Package	Stock No.	Price Each 1-9
PS219B2-AS*	600	5/10	Super Mini	79T6389	17.68
PS219B3-AS*	600	10/20	Super Mini	79T6390	19.56
PS219B4-AS*	600	15/30	Super Mini	79T6391	21.63
● PS21A79*	600	50/100	Large	10N9759	78.65
● PS21A7A*	600	75/150	Large	10N9758	114.38
● PSM03S93E5-A*		75/150	Large	35X3255	14.22
● PSM05S93E5-A*		75/150	Large	35X3256	17.60
● PSS10S92F6-AG*		75/150	Large	35X3258	19.98
● PSS15S92F6-AG*		75/150	Large	35X3259	22.58
● PSS20S71F6*		75/150	Large	35X3260	31.38
● PSS20S92F6-AG*		75/150	Large	35X3261	25.81
● PSS30S71F6*		75/150	Large	35X3262	41.04
● PSS30S92F6-AG*		75/150	Large	35X3263	34.42
● PSS35S92F6-AG*		75/150	Large	35X3264	40.16
● PSS50S71F6*		75/150	Large	35X3265	49.07

(70786)

V1 SERIES IGBT MODULES

RoHS Compliant Available

POWEREX

Features
- Inverter power loss reduced by 20%
- Small package size helps miniaturized motor control systems
- Enhanced protection function

Applications
- Inverters
- Servo Systems

The **V1 Series** features low power loss and a compact package for inverters with volumes of 37kW or greater and servo systems with volumes of 15kW or greater. The series has an improved collector-emitter saturation voltage of 1.85V. The module size for all ratings is 120 x 70 mm.

Mfg. Part No.	Collector-Emitter Voltage (V)	Collector Current (mA)	Stock No.	Price Each 1-9
● PM400DV1A060	600	400	79R2143	210.62
● PM600DV1A060	600	600	79R2148	323.98
● PM300DV1A120	1200	300	79R2142	294.01

(190001)

PV SERIES INTELLIGENT POWER MODULES

RoHS Compliant Available

POWEREX

Features:
- Smaller Package helps miniatuiize PV Inverters
- Three types of circuit connection and two types of rating current

Mfg. Part No.	Config.	V_{CES} (V)	I_C (A)	Package	Stock No.	Price Each 1-9
● PM50B4L1C060	H-Bridges	600	50	90 x 50mm Module	79R2145	168.37
● PM75B5L1C060	H-Bridge + Chopper	600	75	90 x 50mm Module	79R2150	206.94
● PM50B6L1C060	H-Bridge + 2 Chopper	600	50	90 x 50mm Module	79R2147	186.63

(192103)

TRENCH IGBT MODULES

RoHS Compliant Available

SEMIKRON innovation+service

Mfg. Part No.	V(br)ceo (mV)	Vces (kV)	I_C (A)	Package	Stock No.	Price Each 1-24
● SKM400GM12T4	800	1.2	618	SEMITRANS 3	77R2588	349.41
● SKIM609GAL12E4	800	1.2	748	SKiM 93	77R2507	1865.36
● SKIM609GAR12E4	800	1.2	748	SKiM 93	77R2508	1864.45
● SKM200GM12T4	800	1.2	314	SEMITRANS 3	77R2564	211.45
● SKM150MLI066 T	900	600 V	200	SEMITRANS 5	77R2554	312.27
● SKM200GARL066 T	900	600 V	280	D61	77R2558	229.12
● SKM200MLI066 T	900	600 V	280	D60	77R2565	425.54
● SKM300GARL066T	900	600 V	400	D61	77R2568	270.75
● SKM300MLI066T	900	600 V	400	SEMITRANS 5	77R2575	549.94

CONTINUED

TRENCH IGBT MODULES (CONT.)

Mfg. Part No.	V(br)ceo (mV)	Vces (kV)	I_C (A)	Package	Stock No.	Price Each 1-24
● SKM100GB12V	940	1.2	155	SKiM 93	77R2546	192.34
● SKM150GAL12V	940	1.2	225	SKiM 93	77R2548	168.18
● SKM150GB12V	940	1.2	225	SEMITRANS 2	77R2551	253.70
● SKM200GB12V	900	1.2	304	SEMITRANS 3	77R2562	220.71
● SKM300GA12V	940	1.2	443	SEMITRANS 3	77R2571	196.70
● SKM300GB12V	940	1.2	443	SEMITRANS 3	77R2573	285.82
● SKM400GAL12V	940	1.2	598	SEMITRANS 3	77R2578	267.65
● SKM400GA12V	940	1.2	598	SEMITRANS 4	77R2584	183.90
● SKM600GA12V	940	1.2	890	SEMITRANS 4	77R2591	294.10
● SKM75GB12V	940	1.2	121	SEMITRANS 2	77R2592	94.36
● SKIM429GD17E4HD	1.1 V	1.7	595	SKiM 93	77R2504	2057.38

(194461)

GENERAL-PURPOSE, SINGLE-CONFIGURATION RECTIFIERS

RoHS Compliant Available

FAIRCHILD

1A GENERAL-PURPOSE RECTIFIERS

Mfg. Part No.	V_{RRM} (V)	V_{FFM} (V)	I_{FSM} (A)	I_{RM} (µA)	Pkg.	Stock No.	Price Each 1-9
● 1N4001	50	1.1	30	5	DO-41	18C8911	0.19
● 1N4003	200	1.1	30	5	DO-41	35C0674	0.19
● 1N4004	400	1.1	30	5	DO-41	18C8917	0.19
● 1N4005	600	1.1	30	5	DO-41	18C8919	0.19
● 1N4006	800	1.1	30	5	DO-41	18C8921	0.19
● 1N4007	1000	1.1	30	5	DO-41	18C8923	0.15
● GF1A	50	1	30	5	SMA	58K1564	0.51
● GF1B	100	1	30	5	SMA	58K1565	0.51
● GF1D	200	1	30	5	SMA	58K8896	0.51
● GF1G	400	1	30	5	SMA	58K1566	0.53
● GF1J	600	1	30	5	SMA	58K1567	0.51
● GF1M	1000	1.2	30	5	SMA	58K8897	0.52
● S1A	50	1.1	40	1	SMA	58K9551	0.26
● S1B	100	1.1	40	1	SMA	18C8663	0.26
● S1D	200	1.1	40	1	SMA	58K2387	0.16
● S1G	400	1.1	40	1	SMA	58K2388	0.25
● S1J	600	1.1	40	1	SMA	58K2389	0.26
● S1M	1000	1.1	40	1	SMA	58K2390	0.25
1.5A GENERAL-PURPOSE RECTIFIERS							
● 1N5393	200	1.4	50	5	DO-15	58K2654	0.23
● 1N5397	600	1.4	50	5	DO-15	58K2655	0.21
● S2A	50	1.15	50	1	SMB	58K2391	0.50
● S2J	600	1.15	50	1	SMB	58K2394	0.53
● S2M	1000	1.15	50	1	SMB	58K9553	0.58
3A GENERAL-PURPOSE RECTIFIERS							
● 1N5401	100	1.2	200	5	DO-201-AD	58K9605	0.51
● 1N5402	200	1.2	200	5	DO-201-AD	18C9029	0.51
● 1N5404	400	1.2	200	5	DO-201-AD	58K9607	0.50
● 1N5406	600	1.2	200	5	DO-201-AD	58K2656	0.51
● 1N5408	1000	1.2	200	5	DO-201-AD	58K9608	0.50
● S3A	50	1.2	100	5	SMC	58K2395	0.44
● S3G	100	1.2	100	5	SMC	58K2397	0.44
● S3D	200	1.2	100	5	SMC	58K9554	0.37
● S3K	800	1.2	100	5	SMC	18C8683	0.44
● S3M	1000	1.2	100	5	SMC	58K2398	0.60

(66392)

GENERAL-PURPOSE DIODES AND RECTIFIERS

RoHS Compliant Available

NTE® ELECTRONICS, INC.

Mfg. Part No.	Peak Reverse Voltage (V)	Forward Current Max. (A)	Pkg.	Stock No.	Price Each 1-99
● NTE585	40	1	DO-41	29C4736	1.68
● NTE5870	50	12	DO-4	29C4740	10.06
● 1N4001	50	1	DO-41	10M8464	0.11
● 1N647	50	1	DO-213AB	93R4468	5.12
● NTE5800	50	3	DO-27	47M2259	0.59
● NTE5980	50	40	DO-5	06M7478	6.14
● NTE109	80	0.06	DO-7	21M5148	5.56
● 1N914B	100	0.15	DO-35	21M5199	0.11
● 1N914	100	0.15	DO-35	10M6416	0.07

CONTINUED

GENERAL-PURPOSE DIODES AND RECTIFIERS (CONT.)

Mfg. Part No.	Peak Reverse Voltage (V)	Forward Current Max. (A)	Pkg.	Stock No.	Price Each 1-99
NTE519	100	0.15	DO-35	06M7433	1.41
1N4148	75	0.3	DO-35	10M2940	0.08
NTE177	200	0.25	DO-35	29C4460	1.38
NTE587	200	1	DO-41	06M7474	1.11
1N4003	200	1	DO-41	33C7676	0.12
NTE588	150	3	DO-127	29C4743	2.04
NTE574	400	1	DO-41	21M5177	0.73
1N4004	400	1	DO-41	10M2938	0.12
NTE5804	400	3	DO-27	06M7470	1.39
NTE576	400	5	DO-27	29C4722	2.24
NTE116	600	1	DO-41	29C4420	0.92
NTE552	600	1	DO-41	06M7457	1.81
NTE5806	600	3	DO-27	06M7471	1.69
NTE6064	600	70	DO-5	29C4760	18.37
NTE6248	600	16	TO-220	06M7492	3.91
NTE6156	600	150	DO-8	06M7489	37.62
NTE6157*	600	150	DO-8	06M7490	39.12
NTE569	600	3	DO-41	31C4958	1.38
NTE572	1	6	...	31C4975	1.32
1N4007	1	1	DO-41	10M2939	0.13
NTE125	1	1	DO-41	06M7368	1.01
NTE156	1	2	DO-15	06M7373	1.70
NTE577	1	5	DO-27	06M7467	4.83
NTE5817	1	6	DO-27	29C4735	4.13
NTE5910	1	16	DO-4	21M5179	15.06
NTE506	1.5	0.5	...	29C4632	2.31
NTE558	1.5	1	DO-41	06M7461	2.20

*Anode-to-Case polarity
(70306)

AXIAL LEAD, STANDARD RECOVERY, SILICON INDUSTRIAL RECTIFIERS

RoHS Compliant Available

NTE ELECTRONICS, INC.

Mfg. Part No.	V_{RR}	Amps	Package	Stock No.	Price Each 1-99
NTE5801	100	3	DO-201	06M7468	0.90
NTE5809	1000	3	DO-201	29C4730	2.96
NTE5812	100	6	DO-201	29C4732	1.83
NTE5814	400	6	DO-201	06M7472	2.13
NTE5815	600	6	DO-201	06M7473	3.22
NTE517	15000	550 mA	DO-201	31C4466	7.42

(70305)

STANDARD RECOVERY RECTIFIERS - AXIAL LEADED PACKAGES

RoHS Compliant Available

VISHAY.

Sold individually. Other quantities available; *go online or call.*

PLASTIC DO-201AD

Mfg. Part No.	V_{rrm} (V)	V_F (V)	If(AV) (A)	I_{fsm} (A)	Stock No.	Price Each 1-9
1N5406-E3/54	600	1.2	3	200	78K2537	0.22
GI510-E3/54	1 kV	1.1	3	100	76K5510	0.28

P600

Mfg. Part No.	V_{rrm} (V)	V_F (V)	If(AV) (A)	I_{fsm}(A)	Stock No.	Price Each 1-9
GI750-E3/54	50	900	6	400	76K5515	0.56
GI751-E3	100	900	6	400	76K5520	1.10
P600D-E3/73	200	900	6	400	77K0223	0.56

DO-204AL

Mfg. Part No.	V_{rrm} (V)	V_F (V)	If(AV) (A)	I_{fsm}(A)	Stock No.	Price Each 1-9
1N4001GP-E3/73	50	1.1	1	30	78K2061	0.15
1N4001-E3/73	50	1.1	1	30	78K2046	0.05
1N4001-E3/53	50	1.1	1	30	78K2043	0.13
1N4001-E3/53	50	1.1	1	30	78K2043	0.13
1N4001-E3/73	50	1.1	1	30	78K2046	0.05
1N4002-E3/73	100	1.1	1	30	78K2074	0.05
1N4002-E3/73	100	1.1	1	30	78K2074	0.05

CONTINUED

STANDARD RECOVERY RECTIFIERS - AXIAL LEADED PACKAGES (CONT.)

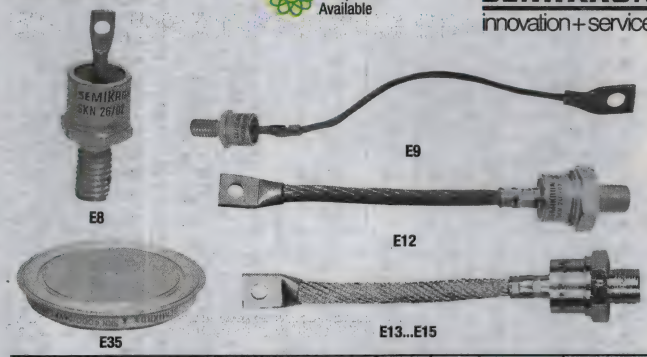
Mfg. Part No.	V_{rrm} (V)	V_F (V)	If(AV) (A)	I_{fsm}(A)	Stock No.	Price Each 1-9
1N4004-E3/73	400	1.1	1	30	78K2127	0.05
GP10G-E3/54	400	1.1	1	30	76K5917	0.15
1N4004-E3/73	400	1.1	1	30	78K2127	0.05
1N4005GP-E3/54	600	1.1	1	30	78K2179	0.15
1N4007E-E3/53	1000	1.1	1	30	78K2232	0.16
1N4007-E3/53	1000	1.1	1	30	78K2219	0.12
1N4007-E3/73	1000	1.1	1	30	78K2222	0.05
GP10Y-E3/54	1600	1.3	1	25	76K5979	0.20
GP02-20-E3/54	2000	3.0	250	15	76K5855	0.18

(74815)

RECTIFIER DIODES

RoHS Compliant Available

SEMIKRON innovation+service



Mfg. Part No.	V_{RRM} V_{RSM} (V)	I_{FRMS} (A)	I_{FMS} 10 ms at 25° (A)	I^2t 10 ms at 25° (A^2s)	Case	Stock No.	Price Each 1-2
SKN71/16	1600	150	1150	6600	E11	88K1223	9.44

(80381)

SOFT RECOVERY SILICON RECTIFIERS

RoHS Compliant Available

SOLID-STATE

SPECIFICATIONS

- Reverse polarity is designated by "R" in mfg. part number.

Mfg. Part No.	IF(AV) (A)	VF (V)	IFSM (A)	VRRM (V)	No. of Pins	Package	Stock No.	Price Each 1-9
1N3289A	150	1.1	2.5	200	2	DO-8	10P4732	27.81
1N3294A	150	1.1	2.5	800	2	DO-8	10P4752	28.41
1N3295A	150	1.1	2.5	1.2	2	DO-8	10P4756	28.11
1N3296A	150	1.1	2.5	1.2	2	DO-8	10P4760	29.33
1N3741	275	1.3	5	800	2	DO-9	10P5090	39.53
1N3741R	275	1.3	5	800	2	DO-9	10P5091	41.05
1N4056	275	1.3	5	1	2	DO-9	10P5198	41.94
1N4056R	275	1.3	5	1	2	DO-9	10P5199	41.05

(148797)

STANDARD RECOVERY SILICON RECTIFIERS

RoHS Compliant Available

SOLID-STATE

SPECIFICATIONS

- Reverse polarity is designated by "R" in mfg. part number.

Mfg. Part No.	IF(AV) (A)	VF (V)	IFSM (A)	VRRM (V)	No. of Pins	Package	Stock No.	Price Each 1-9
1N645-1	400	950	5	225	2	DO-35	10P5300	2.93
1N5806	2.5	875	35	150	2	DO-204AP	10P5282	2.87
1N5550	3	1	100	200	2	Axial Leaded	10P5274	2.27
1N5811	6	875	125	150	2	G4	10P5287	3.57
MR750	6	900	400	50	2	Axial Leaded	10P1625	1.82
MR754	6	900	400	400	2	Axial Leaded	10P1628	1.82
MR756	6	900	400	600	2	Axial Leaded	10P1629	1.82
12F10	12	1.2	250	100	2	DO-4	07R9214	3.14
1N1199A	12	1.2	250	50	2	DO-4	10P3980	4.00
1N1199RA	12	1.2	250	50	2	DO-4	10P3983	3.76
1N1200A	12	1.2	250	100	2	DO-4	10P3986	3.76
1N1201A	12	1.2	250	150	2	DO-4	10P3992	4.00
1N1202A	12	1.2	250	200	2	DO-4	10P3998	3.94
1N1202RA	12	1.2	250	200	2	DO-4	10P4001	3.76

CONTINUED

STANDARD RECOVERY SILICON RECTIFIERS (CONT.)

Mfg. Part No.	IF(AV) (A)	VF (V)	IFSM (A)	VRRM (V)	No. of Pins	Package	Stock No.	Price Each 1-9
● 1N1203A	12	1.2	250	300	2	DO-4	10P4004	4.00
● 1N1204A	12	1.2	250	400	2	DO-4	10P4010	4.00
● 1N1204RA	12	1.2	250	400	2	DO-4	10P4013	3.76
● 1N1205A	12	1.2	250	500	2	DO-4	10P4016	4.00
● 16FR60	16	1.2	300	600	2	DO-4	07R9237	3.56
● 16F120	16	1.2	300	1.2	2	DO-4	07R9242	3.57
● 16FR120	16	1.2	300	1.2	2	DO-4	07R9231	3.51
● 25F40	25	1.2	400	400	2	DO-4	07R9506	4.27
● 1N1183A	40	1.19	800	50	2	DO-5	10P3916	4.98
● 1N1184A	40	1.19	800	100	2	DO-5	10P3920	4.98
● 1N1184RA	40	1.19	800	100	2	DO-5	10P3922	4.98
● 1N249C	40	1.19	800	100	2	DO-5	10P4353	5.05
● 1N1185A	40	1.19	800	150	2	DO-5	10P3924	5.05
● 1N1186A	40	1.19	800	200	2	DO-5	10P3928	4.98
● 1N1186RA	40	1.19	800	200	2	DO-5	10P3930	5.05
● 1N1188A	40	1.19	800	400	2	DO-5	10P3936	5.11
● 1N1188RA	40	1.19	800	400	2	DO-5	10P3938	4.98
● 1N2158	40	1.19	800	400	2	DO-5	10P4263	5.11
● 1N1189A	40	1.19	800	500	2	DO-5	10P3940	5.05
● 1N1189RA	40	1.19	800	500	2	DO-5	10P3942	4.75
● 1N1190A	40	1.19	800	600	2	DO-5	10P3944	5.05
● 1N1190RA	40	1.19	800	600	2	DO-203AB	10P3946	5.05
● 1N2160	40	1.19	800	600	2	DO-5	14C3872	5.05
● 40HF40	40	1.3	500	400	2	DO-5	07R9657	4.98
● 40HFR40	40	1.3	500	400	2	DO-5	07R9646	5.05
● 40HF60	40	1.3	500	600	2	DO-5	07R9659	5.05
● 40HF80	40	1.3	-999	800	2	DO-5	14R8420	5.05
● 40HF100	40	1.3	500	1	2	DO-5	07R9651	4.98
● 40HFR100	40	1.3	500	1	2	DO-5	07R9640	5.05
● 40HF160	40	1.3	500	1.6	2	DO-5	07R9654	6.13
● 40HFR160	40	1.3	500	1.6	2	DO-5	07R9643	6.13
● 1N2130A	70	1.25	1.05	150	2	DO-5	10P4220	7.23
● 70HFR10	70	1.3	-999	100	2	DO-5	14R8421	6.74
● 70HF40	70	1.3	1	400	2	DO-5	08R0232	6.98
● 70HFR40	70	1.3	1	400	2	DO-5	08R0221	7.05
● 70HF60	70	1.3	1	600	2	DO-5	08R0233	7.05
● 70HFR60	70	1.3	1	600	2	DO-5	08R0222	7.05
● 70HF80	70	1.3	1	800	2	DO-5	08R0234	7.22
● 70HF100	70	1.3	-999	1	2	DO-5	14R8423	6.74
● 70HFR120	70	1.3	-999	1.2	2	DO-5	14R8422	7.14
● 70HFR160	70	1.3	1	1.6	2	DO-5	08R0218	6.74
● 85HFR20	85	1.3	1.5	200	2	DO-5	08R0330	7.56
● 85HF60	85	1.3	1.5	600	2	DO-5	08R0343	7.66
● 85HF100	85	1.3	1.5	1	2	DO-5	08R0337	7.23
● 85HF120	85	1.3	1.5	1.2	2	DO-5	08R0338	7.75
● 85HFR120	85	1.3	1.5	1.2	2	DO-5	08R0327	7.23
● 85HF160	85	1.3	1.5	1.6	2	DO-5	08R0340	7.56
● 1N1398	100	1.2	1.6	150	2	DO-8	10P4087	26.78

(165063)

HIGH CURRENT DENSITY STANDARD AVALANCHE SMD RECTIFIERS

RoHS Compliant Available

VISHAY.

Features:
- eSMP® Series
- Case: TO-277A (SMPC)
- Very low profile - typical height of 1.1 mm
- Ideal for automated placement
- Glass passivated chip junction
- Controlled avalanche characteristics
- Low leakage current
- High forward surge capability

Mfg. Part No.	V_{RRM} (V)	$I_{F(AV)}$ (A)	V_F (V)	I_{FSM} (A)	Tape Cut Stock No.	Price Each 1-9	Price Each 10-49
● AS4PD-M3/86A	200	4	1.1	100	91T5881	0.55	0.51
● AS4PG-M3/86A	400	4	1.1	100	91T5882	0.55	0.51
● AS4PJ-M3/86A	600	4	1.1	100	91T5883	0.55	0.51
● AS4PK-M3/86A	800	4	1.1	100	91T5884	0.57	0.53

(202675)

STANDARD RECOVERY RECTIFIERS - SURFACE MOUNT PACKAGES

RoHS Compliant Available

VISHAY.

Sold individually. Other quantities available; *go online or call.*

SURFACE MOUNT DO-213AA MELF PLASTIC PACKAGE

Mfg. Part No.	Current (A)	Voltage (V)	Stock No.	Price Each 1-2999
● EGL41G-E3/96	1	400	76K4536	0.20

SURFACE MOUNT DO-214AB (SMC) PACKAGE

Mfg. Part No.	Current (A)	Voltage (V)	Stock No.	Price Each 1-9
● S3B-E3/57T	3	100	69W6312	0.24
● S3D-E3/57T	3	200	65K2751	0.23
● S3J-E3/57T	3	600	65K2753	0.23

SURFACE MOUNT DO-213AA MELF PLASTIC PACKAGE

Mfg. Part No.	$I_{F(AV)}$ Max (A)	V_{RRM} Max (V)	V_F V)	I_{fsm} A)	Stock No.	Price Each 1-9
● EGL41G-E3/96	1	400	1.25	30	76K4536	0.20
● S3B-E3/57T	3	100	1.15	100	69W6312	0.24
DO-213AB						
● GL41A-E3/96	1	50	1.1	30	76K5652	0.21
● EGL41B-E3/96	1	100	1	30	05W6833	0.20
● GL41G-E3/96	1	400	1.1	30	76K5667	0.21
● GL41J-E3/96	1	600	1.1	30	76K5672	0.21

SURFACE MOUNT STANDARD AVALANCHE SINTERGLASS DO-214AC (SMA) PACKAGE

Mfg. Part No.	$I_{F(AV)}$ Max (A)	V_{RRM} Max (V)	V_F V)	I_{fsm} A)	Stock No.	Price Each 1-9
● S1B-E3/61T	1	100	1.1	40	77K8172	0.13
● S1D-E3/61T	1	200	1.1	40	05R5909	0.07
● S1G-E3/61T	1	400	1.1	40	05R5910	0.08
● S1J-E3/61T	1	600	1.1	40	77K8190	0.08
● S1M-E3/61T	1	1	1.1	30	05R5911	0.08
SURFACE MOUNT DO-214AA (SMB) PACKAGE						
● S2A-E3/52T	1.5	50	1.15	50	05R5913	0.12
● S2B-E3/52T	1.5	100	1.15	50	05R5914	0.12
● S2D-E3/52T	1.5	200	1.15	50	77K8251	0.12
● S2J-E3/52T	1.5	600	1.15	50	05R5915	0.13
● S2M-E3/52T	1.5	1	1.15	50	05R5916	0.13
SURFACE MOUNT DO-214AB (SMC) PACKAGE						
● S3A-E3/57T	3	50	1.15	100	65K2749	0.23
● S3D-E3/57T	3	200	1.15	100	65K2751	0.23
● S3G-E3/57T	3	400	1.15	100	65K2752	0.22
● S3J-E3/57T	3	600	1.15	100	65K2753	0.23
● S3M-E3/57T	3	1	1.15	100	65K2755	0.24

(165131)

STANDARD SMD RECTIFIERS WITH ESD CAPABILITY

RoHS Compliant Available

VISHAY.

Features:
- Very low profile - typical height of 0.95 mm
- Ideal for automated placement
- Oxide planar chip junction
- Low forward voltage drop, low leakage current
- ESD capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C
- AEC-Q101 qualified

Specifications:
- $I_{F(AV)}$: 3A
- V_{RRM}: 100V to 600V
- V_F at I_F = 3A: 0.86V
- I_{FSM}: 40A
- Operating temperature: -55°C to +175°C

SE20AFB THRU SE20AFJ

Mfg. Part No.	V_{RRM} (Max) (V)	$I_{F(AV)}$ (mA)	I_{FSM} (Max) (mA)	$V_{F(Max)}$ (V)	Package	Stock No.	Price Each 1-9
● SE20AFD-M3/6A	200	2	35	1.1	DO-221AC	66W6221	0.21
● SE20AFG-M3/6A	400	2	35	1.1	DO-221AC	66W6226	0.21
● SE20AFJ-M3/6A	600	2	35	1.1	DO-221AC	66W6231	0.21
SE30AFB THRU SE30AFJ							
● SE30AFBHM3/6A	100	3	40	1.1	DO-221AC	88W3687	0.27
● SE30AFD-M3/6B	200	3	40	1.1	DO-221AC	66W6241	0.24
● SE30AFDHM3/6A	200	3	40	1.1	DO-221AC	88W3688	0.27
● SE30AFG-M3/6B	400	3	40	1.1	DO-221AC	66W6246	0.24
● SE30AFGHM3/6A	400	3	40	1.1	DO-221AC	88W3689	0.27
● SE30AFJ-M3/6B	600	3	40	1.1	DO-221AC	66W6251	0.24
● SE30AFJHM3/6A	600	3	40	1.1	DO-221AC	88W3690	0.27

(210084)

HEXFRED™ DIODES

RoHS Compliant Available

VISHAY. Former International Rectifier Products

HEXFRED™ modules also available; *go online or call.*

600V DISCRETES

Mfg. Part No.	V_{RRM} (V)	I_{FAV}	@TC	V_{FM}	Pkg.	Stock No.	Price Each 1-9
VS-HFA25PB60PBF	600	25	100	1.7	TO-247 (2 LEAD)	63J6655	3.43
VS-HFA15TB60PBF	600	15	100	1.7	TO-220AC	19K8135	2.97
VS-HFA04TB60PBF	600	4	106	1.8	TO-220AC	63J6639	0.88
VS-HFA08TB60PBF	600	8	90	1.7	TO-220AC	19K8133	2.10
VS-HFA15PB60PBF	600	15	100	1.7	TO-247 (2 LEAD)	19K8134	3.18
VS-HFA25TB60PBF	600	25	100	1.7	TO-220AC	63J6656	4.84
1200V DISCRETES							
VS-HFA30PB120PBF	1200	30	84	3	TO-247 (2 LEAD)	19K8138	16.29
VS-HFA06TB120PBF	1200	6	100	3	TO-220AC	63J6640	1.50
VS-HFA16TB120SPBF	1200	16	98	3	D2-Pak (HEXFRED)	63J6654	11.76
COMMON CATHODES							
VS-HFA30PA60CPBF	600	30	100	1.7	TO-247AC	19K8137	7.35
VS-HFA50PA60CPBF	600	50	100	1.7	TO-247AC	19K8139	10.00

(70767)

STANDARD AND FAST RECOVERY RECTIFIERS

RoHS Compliant Available

ON Semiconductor

STANDARD RECOVERY

Mfg. Part No.	I_{RRM} (mA)	V_F Max (V)	V_{RRM} (V)	$I_{F(AV)}$ (mA)	Package	Stock No.	Price Each 1-9
MRA4003T3G	30	1.18	300	1	DO-214AC	45J1686	0.34
MRA4004T3G	30	1.18	400	1	DO-214AC	45J1687	0.33
MRA4005T3G	30	1.1	600	1	DO-214AC	71J6183	0.33
MRA4006T3G	30	1.1	800	1	DO-214AC	45J1689	0.33
MRA4007T3G	30	1.18	1	1	DO-214AC	20J4309	0.34
1N4002RLG	30	1.1	100	1	Axial Leaded	84K8825	0.20
1N4003RLG	30	1.1	200	1	Axial Leaded	84K8826	0.20
1N4004RLG	30	1.1	400	1	Axial Leaded	84K8827	0.21
1N4005G	30	1.1	600	1	DO-201AD	42K2825	0.21
1N4005RLG	30	1.1	600	1	Axial Leaded	84K8828	0.20
1N4006RLG	30	1.1	800	1	Axial Leaded	84K8829	0.19
MRS1504T3G	50	1.04	400	1.5	DO-214AA	83K8591	0.48
1N5400RLG	200	1	50	3	Axial Leaded	84K8834	0.45
1N5402RLG	200	1	200	3	Axial Leaded	84K8835	0.45
1N5404RLG	200	1	400	3	Axial Leaded	84K8836	0.48
1N5408RLG	200	1	1	3	Axial Leaded	84K8837	0.45
FAST RECOVERY							
1N4934RLG	30	1.2	100	1	Axial Leaded	84K8830	0.25
1N4934RLG	30	1.2	100	1	Axial Leaded	84K8830	0.25
1N4935RLG	30	1.2	200	1	Axial Leaded	84K8831	0.25
1N4937RLG	30	1.2	600	1	Axial Leaded	84K8833	0.25
MR854RLG	100	1.25	400	3	Axial Leaded	84K8817	0.47
MR856RLG	100	1.25	600	3	Axial Leaded	84K8818	0.49

(66177)

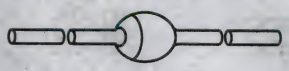
AXIAL LEAD RECTIFIERS

RoHS Compliant Available

VISHAY.

Features:

- Glass Passivated
- Hermetically Sealed Glass Envelope
- Sinterglass Axial
- Low Reverse Current



STANDARD RECOVERY

Mfg. Part No.	I_{FAV} (A)	V_R, V_{RRM}, V_{RWM} (V)	V_F 25°C @ I_F (V, A)	I_R High Temp. @ T_J, T_{STG} (µA)	t_{rr} @ Max. (ns)	Pkg.	Stock No.	Price Each 1-9
BYW52-TR	2	200	1 @ 1	10	...	SOD-57	18M1781	0.47
BYW54-TR	2	600	1 @ 1	10	...	SOD-57	47M1743	0.51
BYW56-TR	2	1000	1 @ 1	10	...	SOD-57	47M1744	0.58
1N5059-TR	2	200	1 @ 1	100	...	SOD-57	33C2820	0.46
1N5061-TR	2	600	1 @ 1	100	...	SOD-57	33C3957	0.40
1N5062-TR	2	800	1 @ 1	100	...	SOD-57	33C2826	0.50
FAST RECOVERY								
BY269TR	0.8	1600	1.25 @ 0.4	15	400	SOD-57	32C9490	0.67
BY448-TR	2	1500	1.6 @ 3	140	...	SOD-57	32C9492	0.57
BYT52M-TR	1.4	1000	1.3 @ 1	150	200	SOD-57	32C9308	0.64
BYT54M-TR	1.25	1000	1.5 @ 1	150	100	SOD-57	32C9334	0.64
BYV38-TR	2	1000	1.1 @ 1	150	300	SOD-57	32C9408	0.58
BYW36-TR	2	600	1.1 @ 1	150	200	SOD-57	32C9434	0.62

➤CONTINUED➤

AXIAL LEAD RECTIFIERS (CONT.)

FAST RECOVERY

Mfg. Part No.	I_{FAV} (A)	V_R, V_{RRM}, V_{RWM} (V)	V_F 25°C @ I_F (V, A)	I_R High Temp. @ T_J, T_{STG} (µA)	t_{rr} @ Max. (ns)	Pkg.	Stock No.	Price Each 1-9
BYT78-TR	3	1000	1.2 @ 3	150	250	SOD-64	47M1741	1.02
BYW178-TR	3	800	1.9 @ 3	20	60	SOD-64	18M1777	0.99
BYW86-TR	3	1000	1 @ 3	10	...	SOD-64	32C9464	1.02
SUPERFAST RECOVERY								
SF5408-TR	3	1000	1.7 @ 3	50	75	SOD-64	33C1044	1.01
ULTRAFAST RECOVERY								
BYV27-050-TR	2	50	1.07 @ 3	150	25	SOD-57	96K4325	0.59
BYV27-200-TR	2	200	1.07 @ 3	150	25	SOD-57	32C9392	0.69
BYV26B-TR	1	400	2.5 @ 1	100	30	SOD-57	32C9378	0.53
BYV26C-TR	1	600	2.5 @ 1	100	30	SOD-57	32C9380	0.58
BYV26D-TR	1	800	2.5 @ 1	100	75	SOD-57	47M1742	0.57
BYV26E-TR	1	1000	2.5 @ 1	100	75	SOD-57	32C9384	0.46
BYT56M-TR	3	1000	1.4 @ 3	150	100	SOD-64	32C9348	1.02
BYV28-150-TR	3.5	150	1.1 @ 5	150	30	SOD-64	32C9400	1.11
BYV98-200-TR	4	200	1.1 @ 5	200	35	SOD-64	18M1776	0.99

(70539)

FAST RECOVERY RECTIFIERS

RoHS Compliant Available

FAIRCHILD™

Single configuration DO-41 package and axial leads. Length: 5.2mm. Diameter: 2.7mm.

Mfg. Part No.	V_{RRM} Max. (V)	$I_{F(AV)}$ (A)	V_{FM} Max. (V)	I_{FSM} (A)	I_{RM} (µA)	Stock No.	Price Each 1-9
1N4934	100	1	1.2	30	5	18C8974	0.22
1N4935	200	1	1.2	30	5	18C8976	0.21
1N4936	400	1	1.2	30	5	18C8978	0.21
1N4937	600	1	1.2	30	5	18C8980	0.22
Single configuration SMA package. Length: 4.6mm. Width: 2.9mm.							
RGF1M	1000	1	1.3	30	5	58K2131	0.57

(66070)

FAST RECOVERY - SILICON RECTIFIER DIODES

RoHS Compliant Available

VISHAY. Former International Rectifier Products

Package size depictions where available; *go online or call.*

Mfg. Part No.	$I_{F(AV)}$ (A)	Oper. Temp. (°C)	I_{FSM} (A)	V_{FM} (V)	T_{RR} (nS)	Pkg.	Stock No.	Price Each 1-24
VS-1N3880	6	150	75	1.4	300	DO-203AA	07B3537	4.44
VS-1N3890	12	150	150	1.4	300	DO-203AA	07B3545	4.08
HI-POWER FAST RECOVERY, 200V								
VS-1N3891	12	150	150	1.4	300	DO-203AA	07B3547	4.85
HI-POWER FAST RECOVERY, 400V								
VS-1N3893	12	150	150	1.4	300	DO-203AA	07B3551	5.31
HI-POWER FAST RECOVERY, 600V								
VS-20ETF06PBF	20	150	260	1.3	160	TO-220AC	30K6012	2.78
VS-20ETF06FPPBF	20	150	300	1.67	160	TO-220 FP	30K6011	2.06
VS-20ETF06SPBF	20	150	260	1.3	160	D2-PAK	58K7813	2.83
VS-40EPF06PBF	40	150	420	1.25	160	TO-247AC	30K6041	4.28
VS-40HFL60S02	40	125	420	1.95	200	DO-203AB	09F6974	9.53
VS-70HFL60S02	70	125	730	1.85	200	DO-203AB	09F7319	11.80
VS-85HFL60S02	85	125	1.15	1.75	200	DO-203AB	07B4513	14.93
HI-POWER FAST RECOVERY, 800V								
VS-70HFL80S05	70	125	730	1.85	500	DO-203AB	07B4415	12.46
HI-POWER FAST RECOVERY, 1000V								
VS-16FL100S05	16	150	190	1.4	500	DO-203AA	07B3802	7.45
VS-40HFL100S05	40	125	420	1.95	500	DO-203AB	09F6973	13.31
VS-85HFL100S05	85	125	1.15	1.75	500	DO-203AB	07B4508	16.41
HI-POWER FAST RECOVERY, 1200V								
VS-40EPF12PBF	40	150	475	1.25	410	2-TO-247AC	30K6042	4.75
VS-60EPF12PBF	60	150	830	1.4	480	2-TO-247AC	30K6067	6.21

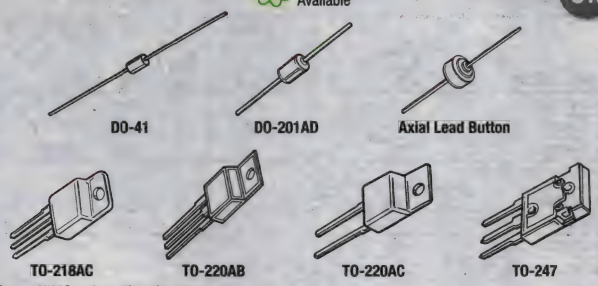
(70772)

FAST RECOVERY RECTIFIERS

THRU-HOLE RECTIFIERS

RoHS Compliant Available

ON Semiconductor



T_J Max. = 175°C, unless otherwise noted.

RoHS COMPLIANT — ULTRA-FAST RECTIFIERS

Mfg. Part No.	V_{RRM} (V)	I_n @ T_A (A)	I_n @ T_A (°C)	V_F Max. @ I_F T_C=25°C (V)	I_{FSM} (A)	Pkg.	Stock No.	Price Each 1-9
● MUR120G	200	1	130	0.875 @ 1A	35	DO-41	36K4293	0.58
● MUR160G	600	1	120	1.25 @ 1A	35	DO-41	42K1608	0.59
● MUR180EG	800	1	95	1.5 @ 1A	35	DO-41	42K1611	0.58
● MUR480EG	800	4	35	1.75 @ 3A	70	DO-201AD	42K1640	0.67
● MUR420G	200	4	80	0.875 @ 3A	125	DO-201AD	42K1631	0.53
● MUR460G	600	4	40	1.25 @ 3A	70	DO-201AD	42K1638	0.59
● MUR4100EG	1000	4	35	1.75 @ 3A	70	DO-201AD	42K1627	0.72
● MUR620CTG	200	6	130	0.975 @ 3A	75	TO-220AB	71J6215	0.68
● MUR820G	200	8	150	0.975 @ 8A	100	TO-220AC	45J1748	0.98
● MUR840G	400	8	150	1.3 @ 8A	100	TO-220AC	26K4712	1.05
● MUR860G	600	8	150	1.50 @ 8A	100	TO-220AC	45J1749	1.00
● MUR880EG	800	8	175	1.80 @ 8A	100	TO-220AC	71J6216	1.19
● MUR8100EG	1000	8	150	1.80 @ 8A	100	TO-220AC	88H4948	1.24
● MURH860CTG	600	8	120	2.8 @ 4A	100	TO-220AB	45J1736	1.66
● MUR1520G	200	15	150	1.05 @ 15A	200	TO-220AC	98H0862	1.20
● MUR1540G	400	15	150	1.25 @ 15A	150	TO-220AC	45J1742	1.47
● MUR1560G	600	15	145	1.50 @ 15A	150	TO-220AC	98H0863	1.47
● MUR1620CTG	200	16	150	0.975 @ 8A	100	TO-220AB	45J1743	0.97
● MUR1640CTG	400	16	150	1.3 @ 8A	100	TO-220AB	45J1744	1.52
● MURF1620CTG*	200	16	150	0.975 @ 8A	100	TO-220AB	26K4699	1.71
● MUR3060WTG	600	30	145	1.25 @ 15A	150	TO-247	26K4706	4.92
RoHS COMPLIANT — FAST RECOVERY & GENERAL-PURPOSE RECTIFIERS								
● 1N4001G	50	1	75	...	30	DO-41	42K2813	0.21
● 1N4002G	100	1	75	...	30	DO-41	42K2816	0.21
● 1N4003G	200	1	75	...	30	DO-41	42K2819	0.20
● 1N4004G	400	1	75	1.10 @ 1A	30	DO-41	42K2822	0.20
● 1N4006G	800	1	75	...	30	DO-41	42K2828	0.21
● 1N4007G	1000	1	75	1.10 @ 1A	30	DO-41	42K2831	0.21
● 1N4007RLG	1000	1	75	1.10 @ 1A	30	DO-41	83K4250	0.21
● 1N4933G**	50	1	75	1.20 @ 3.14A	30	DO-41	42K2833	0.24
● 1N4935G**	200	1	75	1.20 @ 3.14A	30	DO-41	42K2837	0.25
● 1N4934G**	100	1	75	1.2V @ 3.14A	30	DO-41	42K2835	0.24
● 1N4936G**	400	1	75	...	30	DO-41	42K2839	0.24
● 1N4937G**	600	1	75	1.20 @ 3.14A	30	DO-41	42K2841	0.25
● 1N5400G**	50	3	105	...	200	DO-201AD	42K2929	0.47
● 1N5401G**	100	3	105	...	200	DO-201AD	42K2931	0.46
● 1N5401RLG**	100	3	105	...	200	DO-201AD	42K2932	0.45
● 1N5402G**	200	3	105	...	200	DO-201AD	42K2933	0.46
● 1N5404G**	400	3	105	1.20 @ 9.4A	200	DO-201AD	42K2935	0.47
● 1N5406G**	600	3	105	1.20 @ 9.4A	200	DO-201AD	42K2937	0.47
● 1N5408G**	1000	4	35	1.75 @ 3A	70	DO-201AD	42K2941	0.47
● MR852G**	200	3	80	1.25 @ 3A	100	DO-201AD	42K1533	0.47
● MR854G**	400	3	80	1.25 @ 3A	100	DO-201AD	42K1535	0.47
● MR856G**	600	3	80	1.25 @ 3A	100	DO-201AD	42K1538	0.47

*T_J Max. = 125°C; ** T_J Max. = 150°C

(4244)

FAST-RECOVERY SINGLE DIODE MODULES

POWEREX

T_{RR}=0.8 µs

Mfg. Part No.	V_{RRM} (V)	I_{RRM} (mA)	$I_{T(AV)}$ (A)	V_{RMS} (V)	Stock No.	Price Each 1-9
CS240610	600	20	100	2500	06F3328	39.87
CS240650	600	10	50	2500	06F3329	32.73
CS241020	1000	40	200	2500	16F9158	126.05
CS241210	1200	20	100	2500	06F3330	41.33
CS241250	1200	10	50	2500	06F3331	35.48

(4393)

DIODES & FAST RECOVERY DIODES

RoHS Compliant Available

multicomp

Standard Recovery

Mfg. Part No.	V_{RRM} (V)	I_O (A)	V_F (V)	I_{FSM} (A)	Package	Stock No.	Price Each 1-249
● 1N4001.	50	1	1	30	DO-41	98K4995	0.05
● LL4001G	50	1	1.1	30	MELF	38K3501	0.18
● RS1A	50	1	1.3	30	DO-214	95M4413	0.16
● S1A	50	1	1.1	30	DO-214	14J9392	0.11
● 1N4002.	100	1	1	30	DO-41	93K6404	0.05
● LL4002G	100	1	1.1	30	MELF	38K3502	0.19
● 1N5401	100	3	1.2	200	DO-201	98K5009	0.17
● 1N4003.	200	1	1.1	30	DO-41	98K4998	0.05
● BA157	400	1	1.3	30	DO-41	25M7656	0.06
● S1G	400	1	1.1	30	DO-214	14J9393	0.12
● P600G	400	6	1	400	P600	97K8219	0.44
● 1N4005.	600	1	1	30	DO-41	26M5571	0.05
● 1N4006.	800	1	1.1	30	DO-41	98K5003	0.05
● P600K	800	6	1	400	P600	97K8220	0.46
● 1N4007.	1000	1	1	30	DO-41	98K5005	0.05
● BA159	1000	1	1.3	30	DO-41	25M7657	0.06
● LL4007G	1000	1	1.1	30	MELF	38K3503	0.21
Fast Recovery							
● RS1B	100	1	1.3	30	DO-214	14M6345	0.16
● 1F4	400	1	1.3	150	R1	98K4930	0.08
● BY299	800	2	1.3	250	DO-201AD	25M7979	0.13
● RS3K	800	3	1.3	100	DO-214	14M6350	0.44
● FR107	1000	1	1.3	30	DO-41	70K7871	0.06
● PS1010R	1000	1	1.3	500	DO-41	97K7836	0.09
● FR307	1000	3	1.3	150	DO-201	97K0219	0.25
● PS3010R	1000	3	1.3	200	DO-201AD	97K7838	0.32

(116843)

FAST RECOVERY RECTIFIERS

VISHAY.

DO-204AL AXIAL LEADED PACKAGE

For use in high frequency rectifier circuits. 1A operation at T_A = 75°C with no thermal runaway.

Mfg. Part No.	Current (A)	Voltage (V)	tRR (ns)	Tape Cut Stock No.	Price Each 1-9
● RGL41J-E3/96	1	600	250	77K0337	0.21
DO-41 AXIAL LEADED PACKAGE					
● RGP10GE-E3/54	1	400	150	77K0473	0.17
● RGP10M-E3/73	1	1	500	77K0524	0.16
● RGP02-20EHE3/73	500	2	300	09N2384	0.28
● RGP30M-E3/54	3	1	500	05W6904	0.74
DO-213AB SURFACE MOUNT PACKAGE					
● RGL41G-E3/96	1	400	150	77K0332	0.21
DO-213AA SURFACE MOUNT PACKAGE					
● RGL34J-E3/98	500	600	250	05W6903	0.27
DO-214BA SURFACE MOUNT PACKAGE					
● RGF1J-E3/67A	1	600	150	05W6902	0.33
● RGF1D-E3/67A	1	200	150	05W6901	0.33

(148773)

FAST RECOVERY DIODES, ROHM

RoHS Compliant Available

ROHM SEMICONDUCTOR

Features:
- Small Mold Type. (PMDU)
- Ultra Low V_f
- Ultra High Switching Speeds
- Low Switching Loss

Mfg. Part No.	V_{RRM} (V)	I_{FAVG} (A)	V_{FM} (V)	I_{fsm} Max (A)	Pkg.	Stock No.	Price Each 1-9
● RF071M2STR	200	700	850	15	SOD-123	40P3166	0.56

(208457)

EMBEDDED DESIGN TOOLS

IDEs, Compilers, Debuggers and programming tools for all your MCU/DSP/FPGA needs.

newark.com/dev-tools-software

(196530)

AVALANCHE SMD RECTIFIERS

RoHS Compliant Available

VISHAY

Features:
- Low profile packages
- Ideal for automated placement
- Glass passivated junction

Part numbers containing HE3 are AEC-Q101 qualified.

Mfg. Part No.	V_{RRM} (V)	$I_{F(AV)}$ (A)	V_F (V)	I_{FSM} (A)	Pkg.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-49
STANDARD RECOVERY								
BYG10D-E3/TR	200	1.5	1.15	30	DO-214AC	76K2896	0.19	0.17
BYG10DHE3/TR	200	1.5	1.15	30	DO-214AC	75R6871	0.28	0.26
BYG10G-E3/TR	400	1.5	1.15	30	DO-214AC	76K2898	0.19	0.17
BYG10GHE3/TR	400	1.5	1.15	30	DO-214AC	75R6873	0.28	0.26
BYG10J-E3/TR	600	1.5	1.15	30	DO-214AC	76K2900	0.19	0.17
BYG10JHE3/TR	600	1.5	1.15	30	DO-214AC	75R6875	0.28	0.26
BYG10KHE3/TR3	800	1.5	1.15	30	DO-214AC	75R6877	0.28	0.26
BYG10M-E3/TR	1kV	1.5	1.15	30	DO-214AC	76K2906	0.19	0.17
BYG10MHE3/TR	1kV	1.5	1.15	30	DO-214AC	75R6879	0.28	0.26
BYG10Y-E3/TR	1.6kV	1.5	1.15	30	DO-214AC	69W6194	0.35	0.32
FAST RECOVERY								
AR1PD-M3/84A	200	1	1.25	30	DO-220AA	94T2663	0.24	0.22
AR1PG-M3/84A	400	1	1.25	30	DO-220AA	94T2664	0.24	0.22
AR1PJ-M3/84A	600	1	1.25	30	DO-220AA	94T2665	0.24	0.22
BYG21M-E3/TR	1kV	1.5	1.6	30	DO-214AC	76K2919	0.22	0.21
BYG21MHE3/TR	1kV	1.5	1.6	30	DO-214AC	75R6887	0.29	0.27
HIGH FREQUENCY FAST RECOVERY								
BYG24D-E3/TR	200	1.5	1.25	30	DO-214AC	92T5071	0.35	0.33
BYG24DHE3/TR	200	1.5	1.25	30	DO-214AC	75R6897	0.35	0.33
BYG24JHE3/TR	600	1.5	1.25	30	DO-214AC	75R6900	0.35	0.33
ULTRAFAST RECOVERY								
BYG20D-E3/TR	200	1.5	1.4	30	DO-214AC	76K2910	0.23	0.22
BYG20GHE3/TR	400	1.5	1.4	30	DO-214AC	75R6882	0.28	0.26
BYG20J-E3/TR	600	1.5	1.4	30	DO-214AC	76K2915	0.19	0.18
BYG20J-E3/TR	600	1.5	1.4	30	DO-214AC	96K7233	0.58	0.50
BYG20JHE3/TR	600	1.5	1.4	30	DO-214AC	75R6884	0.28	0.26
ULTRAFAST RECOVERY - eSMP® SERIES								
AU2PK-M3/86A	800	2	2.5	30	TO-277A	91T5885	0.60	0.55
AU3PK-M3/86A	800	3	2.5	45	TO-277A	91T5886	0.78	0.72
HIGH FREQUENCY ULTRAFAST RECOVERY								
BYG22AHE3/TR	50	2	1.1	35	DO-214AC	75R6889	0.41	0.38
BYG22B-E3/TR	100	2	1.1	35	DO-214AC	76K2923	0.33	0.31
BYG22BHE3/TR	100	2	1.1	35	DO-214AC	75R6891	0.41	0.38
BYG22D-E3/TR	200	2	1.1	35	DO-214AC	05R5579	0.33	0.31
BYG22DHE3/TR	200	2	1.1	35	DO-214AC	75R6893	0.41	0.38
HIGH VOLTAGE ULTRAFAST RECOVERY								
BYG23M-E3/TR	1kV	1.5	1.7	30	DO-214AC	76K2927	0.21	0.19
BYG23T-E3/TR	1.3kV	1	1.9	18	DO-214AC	93T1201	0.29	0.27

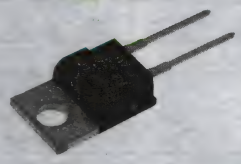
(202517)

HYPERFAST DIODES

RoHS Compliant Available

FAIRCHILD

- ½ the Recovery Time of Ultrafast Diodes
- Soft Recovery Characteristics - $t_{(rr)}$ < 100 ns
- Silicon Nitride Passivated Ion-Implanted Epitaxial Planar Construction



Mfg. Part No.	V_{RRM} (V)	$I_{F(AV)}$ (A)	V_{FM} (V)	Package	Stock No.	Price Each 1-9
RHRP1560	600	15	2.1	TO-220	58K9520	1.73
RHRP3060	600	30	2.1	TO-220AC	58K2133	2.56
RHRP8120	1.2	8	3.2	TO-220AC	58K9522	1.44
RHRP15120	1.2	15	3.2	TO-220AC	58K9519	1.81
RHRP30120	1.2	30	3	TO-220AC	58K9521	2.60

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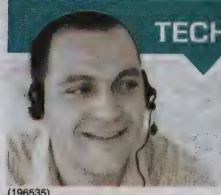


TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

ULTRAFAST RECOVERY RECTIFIERS

RoHS Compliant Available

FAIRCHILD

SINGLE CONFIGURATION

Mfg. Part No.	V_{RRM} (V)	I_{FAVG} (A)	V_{FMM} (V)	I_{FSM} (A)	I_{RM} (µA)	Package	Stock No.	Price Each 1-9
RURP8100	1000	8	1.8	100	100	TO-220 AC	58K2154	1.44
UF4002	100	1	1	30	10	DO-41	18C8803	0.43
UF4005	600	1	1.7	30	10	DO-41	38C8676	0.45
UF4007	1000	1	1.7	30	10	DO-41	38C8678	0.44
ES1A	50	1	0.92	30	5	SMA	58K1379	0.50
ES1B	100	1	0.92	30	5	SMA	58K1380	0.47
ES1D	200	1	9.2	30	5	SMA	58K1381	0.42
EGF1D	200	1	1	30	10	SMA	58K8808	0.48
ES2B	100	2	0.95	50	10	SMB	58K1382	0.44
ES2D	200	2	9.5	50	10	SMB	58K1384	0.52
ES3A	50	3	0.95	100	10	SMC	58K1385	0.39
ES3B	100	3	0.95	100	10	SMC	58K1386	0.61
ES3D	200	3	9.5	100	10	SMC	58K8809	0.57
RURP1560	600	15	1.5	...	100	TO-220	58K2152	1.45
RURP860	600	8	1.5	...	100	TO-220	58K9524	1.10
RURP3060	600	30	1.5	...	250	TO-220	58K2153	2.42
RURG3060	600	30	1.5	...	250	TO-247	34C1883	2.83
COMMON CATHODE CONFIGURATION								
RURG3020CC	200	30	1	...	250	TO-247	58K2149	5.18

(70331)

MURx SERIES ULTRAFAST RECTIFIERS

RoHS Compliant Available

multicomp

Mfg. Part No.	$If_{(AV)}$ (A)	V_F (V)	Package	Stock No.	Price Each 1-9
MUR620CT	6	0.95	TO-220AB	17T4227	1.18
MUR820	8	0.975	TO-220AC	17T4228	1.48
MUR840	8	1.3	TO-220AC	17T4229	1.67
MUR860	8	1.7	TO-220AC	17T4230	2.16
MUR1520	15	0.975	TO-220AC	17T4220	2.95
MUR3060WT	15	0.975	TO-247	17T4226	9.81
MUR1540	15	1.3	TO-220AC	17T4221	3.14
MUR1560	15	1.5	TO-220AC	17T4222	3.44
MURF1620CT	16	0.975	TO-220AB	17T4218	3.65
MUR1640CT	16	1.3	TO-220AB	17T4223	3.63
MUR1660CT	16	1.5	TO-220AB	17T4224	3.93
MURF1660CT	16	1.5	TO-220AB	17T4219	3.93
MUR3020WT	30	0.975	TO-3P	17T4225	6.38

(195490)

UF SERIES ULTRAFAST RECTIFIERS

RoHS Compliant Available

multicomp

Features:
- 1.0 ampere operation at TA = 55°C with no thermal runaway.
- Glass passivated chip junction.
- Low cost, fast efficient plastic rectifiers.
- Ultrafast recovery time for high efficiency.
- Low forward voltage.
- Low leakage current.
- High surge current capability.

Mfg. Part No.	V_F (V)	$If_{(AV)}$ (A)	Package	Tape Cut Stock No.	Tape Cut 1-24
UF4001	1	1	DO-41	13T8738	0.05
UF4002	1	1	DO-41	13T8740	0.05
UF4003	1	1	DO-41	13T8742	0.05
UF2001	1	2	DO-15	13T8706	0.07
UF2002	1	2	DO-15	13T8708	0.06
UF2003	1	2	DO-15	13T8710	0.07
UF2004	1	2	DO-15	13T8712	0.07
UF3001	1	3	DO-27	13T8722	0.17
UF3002	1	3	DO-27	13T8724	0.17
UF3003	1	3	DO-27	13T8726	0.17
UF2005	1.3	2	DO-15	13T8714	0.07
UF3004	1.3	3	DO-27	13T8728	0.17
UF3005	1.3	3	DO-27	13T8730	0.17
UF4004	1	1	DO-41	13T8744	0.05
UF4005	1.3	1	DO-41	13T8746	0.05
UF4006	1.7	1	DO-41	13T8748	0.05
UF4007	1.7	1	DO-41	13T8750	0.05
UF4008	1.7	1	DO-41	13T8752	0.05
UF2006	1.7	2	DO-15	13T8716	0.06
UF2007	1.7	2	DO-15	13T8718	0.07
UF2008	1.7	2	DO-15	13T8720	0.07

➤CONTINUED➤

UF SERIES ULTRAFAST RECTIFIERS (CONT.)

Mfg. Part No.	V_F (V)	$If_{(AV)}$ (A)	Package	Tape Cut Stock No.	Tape Cut 1-24
● UF3006	1.7	3	DO-27	13T8732	0.17
● UF3007	1.7	3	DO-27	13T8734	0.18
● UF3008	1.7	3	DO-27	13T8736	0.18

(196196)

ULTRAFAST RECTIFIERS

RoHS Compliant Available

VISHAY.

DO-204AL

Mfg. Part No.	V_{RRM}	I_F	I_{FSM}	V_F	trr	Stock No.	Price Each 1-9
● UF4001-E3/54	50	1	30	1	50	77K9804	0.20
● UF4002-E3/54	100	1	30	1	50	77K9812	0.13
● UF4003-E3/54	200	1	30	1	50	77K9826	0.20
DO-214AA							
● ES2B-E3/52T	100	2	50	900	20	76K4819	0.26
DO-214AC							
● ES1A-E3/61T	50	1	30	920	15	76K4783	0.14
● ES1D-E3/61T	200	1	30	920	15	76K4800	0.13
● US1M-E3/5AT	1	1	30	1.7	75	12M3636	0.18

DO-201AD

Mfg. Part No.	V_{RRM} (V)	I_F (A)	I_{FSM} (A)	V_F (V)	t_{rr} (ns)	Stock No.	Price Each 1-9
● UF5402-E3/54	200	3	150	1	50	05R5927	0.43
● UF5404-E3/54	400	3	150	1	50	05R5928	0.43
● MUR440-E3/54	400	4	150	1.28	50	76K7780	0.60
● UF5406-E3/54	600	3	150	1.7	75	05R5929	0.34
● UF5408-E3/54	1000	3	150	1.7	75	05R5930	0.35
DO-214AA							
● ES2D-E3/52T	200	3	100	900 mV	20	76K4826	0.26
DO-214AB							
● ES3D-E3/57T	200	3	100	900 mV	20	76K4866	0.33
● ES3G-E3/57T	400	3	100	1.1	35	76K4882	0.35
TO-220AC							
● FES8JT-E3/45	600	8	125	1.5	50	65K3905	0.80
● FES8GT-E3/45	400	8	125	1.3	50	76K5113	0.77
TO-247AD							
● FEP30DP-E3/45	200	30	300	950 mV	35	65K2501	1.89
TO-263AB							
● UHB20FCT-E3/4W	300	20	180	1.2	150	12M3602	1.36
JEDEC DO-214AB							
● ES3B-E3/57T	100	3	100	900 mV	20	08R3780	0.33

(74816)

ULTRAFAST RECTIFIER DIODES

RoHS Compliant Available

VISHAY.

Former International Rectifier Products

Features
- Ultrafast Recovery Time
- Low Forward Voltage Drop
- Low Leakage Current

Mfg. Part No.	I_{FAV} (A)	V_{RRM} (V)	V_{FM} (V)	t_{RR} (nS)	I_{FSM} (60Hz)	Pkg.	Stock No.	Price Each 1-9
● VS-4EWH02FNTR-M3	4	200	0.95	27	80	TO-252	94T2857	0.42
● VS-8EWH02FNTR-M3	8	200	0.97	27	140	TO-252	94T2859	0.51
● VS-MUR820PBF	8	200	0.975	25	100	TO-220AC	63J7983	0.92
● VS-MURB820PBF	8	200	0.975	25	100	D2-PAK	63J7978	0.93
● VS-8CWH02FNTR-M3	8	200	1.1	27	80	TO-252	94T2858	0.57
● VS-8ETH06PBF	8	600	2.1	30	120	TO-220AC	63J8098	1.13
VS-8E2TX06-E	8	600	3.2	23	77	TO-220AC	53T4642	1.93
● VS-10CWH02FNTR-M3	10	200	1.15	27	80	TO-252	94T2856	0.57
● VS-MURB1020CTPBF	10	200	0.99	25	50	D2-PAK	63J7973	1.13
● VS-MURB1520PBF	15	200	1.05	35	200	D2-PAK	63J7974	1.42
● VS-MUR1520PBF	15	200	1.05	35	200	TO-220AC	63J7980	1.28
● VS-15ETH03PBF	15	300	1.25	40	140	TO-220AC	63J8005	1.21
● VS-15ETH06PBF	15	600	2.1	35	200	TO-220AC	19K8498	1.33
● VS-15S2TH06FP	15	600	2.4	28	115	TO-220FP	86R8945	3.00
● VS-MUR1620CTPBF	16	200	0.975	25	100	TO-220AB	63J7981	1.26
● VS-MURB1620CTPBF	16	200	0.975	25	100	D2-PAK	63J7975	1.44
● FESB16GT-E3/81	16	400	1.3	50	...	TO-263AB	05W6834	1.28
● VS-MUR2020CTPBF	20	200	0.85	25	100	TO-220AB	63J7982	1.33
● VS-MURB2020CTPBF	20	200	0.85	25	100	D2-PAK	63J7977	1.51

➤ CONTINUED ➤

ULTRAFAST RECTIFIER DIODES (CONT.)

Mfg. Part No.	I_{FAV} (A)	V_{RRM} (V)	V_{FM} (V)	t_{RR} (nS)	I_{FSM} (60Hz)	Pkg.	Stock No.	Price Each 1-9
● VS-MUR3020WTPBF	30	200	1.05	35	200	TO-247AC	19K8480	2.77
● VS-30CPU04PBF	30	400	1.25	60	200	TO-247AC	63J8040	1.93
● VS-30EPH03PBF	30	300	1.25	55	300	TO-247	19K8517	1.78
● VS-60APU02PBF	60	200	1.08	35	800	TO-247AC	19K8529	3.88
● VS-60APU04PBF	60	400	1.25	50	600	TO-247AC	19K8530	4.39
● VS-60EPU02PBF	60	200	1.08	35	800	TO-247	19K8532	3.86
● VS-60EPU04PBF	60	400	1.25	50	600	TO-247	19K8533	3.98
● VS-80EBU02	80	200	1.13	35	800	PowerTab	30C0743	3.94
● VS-80EBU04	80	400	1.3	50	800	PowerTab	30C0744	4.07
● VS-UFB200FA40P	200	400	1.2	60	1.3	SOT-227	19M4672	33.38

(70773)

DIODE MODULES

UL

RoHS Compliant Available

crydom™

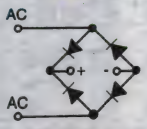


Fig. 1 Single-Phase Full Wave Bridge

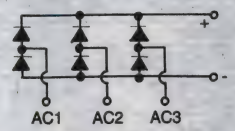


Fig. 2 Three-Phase Bridge

Diode modules feature rectifier circuits rated 60 and 100 amps, both single and three phase circuits. Dimensions: 2.28ΦL x 1.76ΦW x 1.16ΦH. UL listed.

Mfg. Part No.	Fig.	I_O (A)	I_{TSM} (A)	V_{DRM}/V_{RRM} (PIV)	Stock No.	Price Each 1-9
● M5060SB400	1	60	1000	400	18M2633	47.97
● M5060SB600	1	60	1000	600	18M2634	47.97
● M5060SB1200	1	60	1000	1200	18M2632	56.44
● M5060TB600	2	60	1000	600	18M2636	62.73
● M5060TB1400	2	60	1000	1400	18M2635	77.49
● M5060THC600	...	60	1000	600	52F9145	50.20
● M50100SB600	1	100	2000	600	18M2624	77.37
● M50100SB1200	1	100	2000	1200	18M2623	91.03
● M50100TB600	2	100	2000	600	18M2626	91.86
● M50100TB1200	2	100	2000	1200	18M2625	109.16

(4396)

DIODE MODULES

UL

RoHS Compliant Available

crydom™

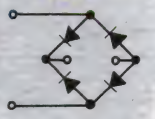


Fig. 1

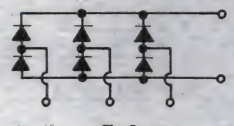


Fig. 2

Several different rectifier circuits contained in the traditional hybrid package. 35 Amps/single phase; 50 Amps/3-phase bridges, with 600 or 1200 volt PIV ratings. For **type T48** modules, I_{TSM} = 400A, and I^2T = 650A^2S. For **type B48** modules, I_{TSM} = 600A, and I^2T = 1500A^2S. Optional isolation barriers available. UL listed.

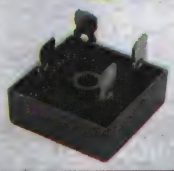
Mfg. Part No.	Fig.	I_O (A)	V_{DRM}/V_{RRM} (PIV)	V_{RMS} (VAC)	Stock No.	Price Each 1-9	10-49	50-99
● T483C	1	35	600	240	18M3289	39.46	37.40	35.79
● T485C	2	50	600	240	18M3291	51.04	48.37	46.29
● B483F-2	1	35	1200	480	18M1938	38.94	37.07	35.44
● B485C-2	2	50	600	240	18M1939	43.64	41.55	39.72
● B485F-2	2	50	1200	480	18M1940	44.98	42.82	40.94

(4397)

FULL-WAVE, SINGLE-PHASE, SILICON BRIDGE RECTIFIERS

RoHS Compliant Available

NTE® ELECTRONICS, INC.



Mfg. Part No.	Volts	Amps	Stock No.	Price Each 1-99
● NTE5304	400	1.5	15M1924	2.04
● NTE5310	600	4	06M7440	4.82
● NTE5315	420	8	06M7443	6.01
● NTE5322	200	25	06M7446	6.88

➤ CONTINUED ➤

FULL-WAVE, SINGLE-PHASE, SILICON BRIDGE RECTIFIERS (CONT.)

Mfg. Part No.	Volts	Amps	Stock No.	Price Each 1-99
NTE5324	400	25	06M7447	7.85
NTE5326	600	25	06M7448	8.06
NTE5327	800	25	10M5497	8.48
NTE5332	600	1	06M7451	1.97
NTE5340	200	40	06M7452	12.94
NTE5342	600	40	06M7453	15.93
NTE5344	1000	40	06M7454	18.34

(70308)

THREE-PHASE BRIDGE DIODE MODULES

RoHS Compliant Available

POWEREX

Mfg. Part No.	I_{DC} @ T_C (Amps)	(°C)	V_{RRM} (Volts)	I_{FSM} (Amps)	V_{ISOL} (Vrms)	Stock No.	Price Each 1-9
ME500810	100	102	800	1000	2500	84K0222	82.57
ME501610	100	102	1600	1000	2500	73K1959	129.03

(4391)

POW-R-BLOK™ DIODE & SCR MODULES

RoHS Compliant Available

POWEREX

Features

- Electrically Isolated Heatsinking
- Compression bonded construction
- Low Thermal Impedance for Improved Current Capability

Powerex **Dual Diode Modules** are designed for use in applications requiring rectification and isolated packaging. The Powerex **Dual SCR/Diode Modules** are designed for use in applications requiring phase control and isolated packaging. The **Dual SCR Modules** are designed for use in applications requiring phase control and isolated packaging. The modules are all isolated for easy mounting with other components on a common heatsink.

Mfg. Part No.	V_{RRM} (kV)	$I_{F(AV)}$ (A)	V_{FM} (V)	Stock No.	Price Each 1-9
DUAL DIODE ISOLATED MODULE					
CD410899C	0.8	100	1.55	58T5685	37.21
CD610816C	0.8	160	1.56	58T5704	59.39
CD411099C	1	100	1.55	58T5686	36.96
CD611016C	1	160	1.56	58T5705	57.25
CD411299C	1.2	100	1.55	58T5687	39.32
CD611216C	1.2	160	1.56	58T5706	57.55
CD411499C	1.4	100	1.55	58T5688	38.75
CD611416C	1.4	160	1.56	58T5707	57.77
CD411699C	1.6	100	1.55	58T5689	39.88
CD411699D	1.6	100	1.35	58T5690	33.86
CD611616C	1.6	160	1.56	58T5708	60.26
CD411899C	1.8	100	1.55	58T5691	39.74
CD611816C	1.8	160	1.56	58T5709	63.41
DUAL SCR / DIODE ISOLATED MODULE					
CD420890C	0.8	90	1.9	58T5692	37.62
CD421090C	1	90	1.9	58T5693	37.72
CD421290C	1.2	90	1.9	58T5694	38.85
CD421490C	1.4	90	1.9	58T5695	39.59
CD421690C	1.6	90	1.9	58T5696	41.50
CD421890C	1.8	90	1.9	58T5697	41.46
DUAL SCR ISOLATED MODULE					
CD430890C	0.8	90	1.9	58T5698	40.53
CD630815C	0.8	150	1.6	58T5710	59.20
CD431090C	1	90	1.9	58T5699	40.74
CD631015C	1	150	1.6	58T5711	59.56
CD431290C	1.2	90	1.9	58T5700	40.98
CD631215C	1.2	150	1.6	58T5712	62.85
CD431490C	1.4	90	1.9	58T5701	41.42
CD631415C	1.4	150	1.6	58T5713	63.30
CD431690C	1.6	90	1.9	58T5702	42.88
CD631615C	1.6	150	1.6	58T5714	62.65
CD431890C	1.8	90	1.9	58T5703	41.52
CD631815C	1.8	150	1.6	58T5715	65.63

(202139)

POW-R-BLOCK MODULE LEAD KITS

RoHS Compliant Available

POWEREX

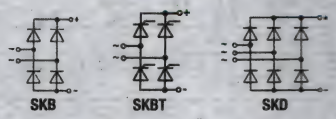
Mfg. Part No.	Desc.	Stock No.	Price Each 1-9
LEAD KIT #MR	CD42-CD47 Series: 1 RED & 1 YELLOW LEAD	72R7146	5.81
LEAD KIT #NK	CD63-ND43-LD43-PD43-PA43 Series	07J1260	11.57
LEAD KIT #MQ	CD43 Series: 2 RED & 2 YELLOW LEADS	51J9403	7.01
LEAD KIT #NM	CD62-ND42-LD42-LS43-PD47 Series	67W3108	11.03
LEAD KIT #NL	CD62-ND42-LD42-LS43-PD47 Series	78H4432	11.03

(209630)

SEMIPONT® POWER BRIDGE RECTIFIERS

RoHS Compliant Available

SEMIKRON innovation+service



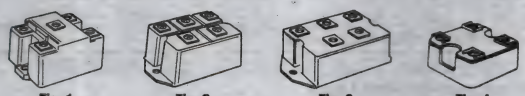


Fig. 1 Fig. 2 Fig. 3 Fig. 4

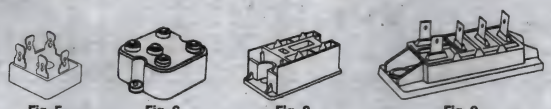


Fig. 5 Fig. 6 Fig. 8 Fig. 9

Non-controllable power bridge rectifiers. **Series SKB** and **series SKBT** are single-phase bridge rectifiers. **Series SKD** are three-phase bridge rectifiers. Additional voltage values available; *go online or call*.

Mfg. Part No.	Fig.	V_{RRM} (V)	I_D @ T_C (A)	(°C)	I_{FSM}* (A)	I^2t* (A^2s)	Stock No.	Price Each 1-2
SKD 100/12	1	1200	110	85	1150	6600	83F5078	146.00
SKD 160/12	3	1200	160	100	1800	16,200	88K1980	150.28
SKD 51/16	9	1600	50	125	775	3000	88K1168	313.42
SKD 60/16	1	1600	85	92	1000	5000	63K6160	146.42
SKD 62/16	2	1600	60	110	500	1250	88K1984	74.31
SKD 82/16	2	1600	80	110	750	2800	64K2275	97.11
SKD 100/16	1	1600	110	85	1150	6600	63K6154	162.30
SKD 110/16	3	1600	151	85	1200	7200	20H0345	176.13
SKD 160/16	3	1600	160	100	1800	16,200	20M1581	151.28

* @ 25°C, 10ms

(28583)

SCHOTTKY MODULES

RoHS Compliant Available

VISHAY.

Former International Rectifier Products

Package size depictions where available; *go online or call*.

Mfg. Part No.	V_{RRM} (V)	$I_{F(AV)}$ (A)	@ T_C (°C)	V_{FM} (V)	EAS (mJ)	I_{AR} (A)	Pkg.	Stock No.	Price Each 1-9
VS-401CNQ045PBF	45	400	138	0.67	270	40	TO-244AB	88K8234	56.48
VS-303CNQ100PBF	100	300	126	0.91	15	1	TO-244AB	88K8115	69.04
VS-403CNQ100PBF	100	400	105	0.83	15	1	TO-244AB	88K8235	56.63

(79372)

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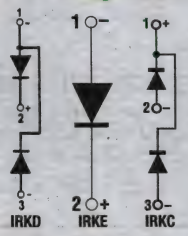
(196546)

DIODE POWER MODULES

RoHS Compliant Available

VISHAY.

Former International Rectifier Products



Package size depictions where available; *go online or call.*

STANDARD RECOVERY, CENTER TAP COMMON CATHODE, 250A-320A

Mfg. Part No.	V_{RRM} (V)	$I_{F(av)}$ Comp. (A)	@ T_C (°C)	V_{FM} @ 25°C (V)	I_{FM} Comp. (A)	Pkg.	Stock No.	Price Each 1-9
STANDARD RECOVERY, SINGLE CIRCUIT, 40A								
● VS-T40HF10	100	40	85	1.3	π x I fav	T-Module	07B3466	26.01
STANDARD RECOVERY, SINGLE CIRCUIT, 70A								
● VS-T70HF10	100	70	85	1.35	π x I fav	T-Module	07B3491	29.77
● VS-T70HF40	400	70	85	1.35	π x I fav	T-Module	07B3497	30.03
STANDARD RECOVERY, SINGLE CIRCUIT, 110A								
● VS-T110HF100	1000	110	85	1.35	π x I fav	T-Module	07B3448	37.05

HI-POWER FAST RECOVERY, SINGLE DIODE

Mfg. Part No.	V_{RRM} (V)	$I_{F(AV)}$ (A)	@ T_C (°C)	V_{FM} (V)	Package	Stock No.	Price Each 1-4
● VS-T70HFL60S02	600	70	70	1.73	T-Module	07B3488	32.79
● VS-T70HFL100S05	1000	70	70	1.73	T-Module	07B3483	32.48

(70770)

SINGLE-PHASE BRIDGE RECTIFIERS

RoHS Compliant Available

FAIRCHILD.

I_0= 1.5A= DC max. @ T_a= 50°C. I_{FSM}= 30A. Operating temperature: -55°C to 150°C (glass-passivated) max. @ T_a= 50°C.

0.5A -2.0A (MAX. @ T_a: 50°C), GLASS PASSIVATED

Mfg. Part No.	V_{RRM} (V)	I_{FAVG} (A)	V_{FM} (V)	Pkg.	Stock No.	Price Each 1-9
● DF005M	50	1.5	1.1	DIP	64K0900	0.49
● DF01M	100	1.5	1.1	DIP	58K8798	0.48
● DF01S	100	1.5	1.1	SDIP	84K0208	0.59
● DF02M	200	1.5	1.1	DIP	58K8799	0.48
● MB4S	400	0.5	1	SOIC	58K1813	0.55
● DF04M	400	1.5	1.1	DIP	58K0183	0.49
● DF04M	400	1	1.1	DIP	65W8568	0.53
● DF04S	400	1.5	1.1	SDIP	18C6124	0.49
● MB6S	600	0.5	1	SOIC	58K1814	0.45
● DF06M	600	1.5	1.1	DIP	35C0451	0.49
● DF06S	600	1.5	1.1	SDIP	35C0452	0.51
● DF06S-T	600	1	1.1	SMD	65W8570	0.50
● DF08M	800	1.5	1.1	DIP	58K8800	0.53
● DF10M	1000	1.5	1.1	DIP	58K0184	0.53
● DF10S	1000	1.5	1.1	SDIP	80K5820	0.54
25A-35A (MAX. @ T_a: 50°C), GLASS-PASSIVATED						
● GBPC25005	50	25	1.1	GBPC	58K8878	3.01
● GBPC35005	50	35	1.1	GBPC	58K1557	2.70
● GBPC2502	200	25	1.1	GBPC	58K8879	3.01
● GBPC3502	200	35	1.1	GBPC	58K8886	3.07
● GBPC2504	400	25	1.1	GBPC	58K8880	3.01
● GBPC3504	400	35	1.1	GBPC	58K8888	3.18
● GBPC2506	600	25	1.1	GBPC	58K8882	3.05
● GBPC3506	600	35	1.1	GBPC	58K8890	3.18
● GBPC2510	1000	25	1.1	GBPC	18C6677	3.21
● GBPC3510	1000	35	1.1	GBPC	18C6691	3.18
4A-35A (MAX. @ T_a: 50°C)						
● GBU8A	50	8	1	GBU	58K1563	1.38
● GBPC12005	50	12	1.1	GBPC	18C6637	2.86
● GBU6B	100	6	1	GBU	18C6701	1.13
● GBPC3501	100	35	1.1	GBPC	58K8884	3.18
● GBU4D	200	4	1	GBU	58K1559	1.06
● GBU6D	200	6	1	GBU	18C6702	1.10
● GBU8D	200	8	1	GBU	58K8892	1.45
● KBL04-E4/51	400	4	1.1	KBL	76K6344	1.10
● GBU8G	400	8	1	GBU	58K8893	1.57
● GBPC1204	400	12	1.1	GBPC	58K1547	2.81
● GBPC3504W	400	35	1.1	GBPCW	58K8889	2.97

➤CONTINUED➤

SINGLE-PHASE BRIDGE RECTIFIERS (CONT.)

4A-35A (MAX. @ T_a: 50°C)

Mfg. Part No.	V_{RRM} (V)	I_{FAVG} (A)	V_{FM} (V)	Pkg.	Stock No.	Price Each 1-9
● GBU6J	600	6	1	GBU	62K3420	1.17
● GBU8J	600	8	1	GBU	58K8894	1.65
● GBPC1206	600	12	1.1	GBPC	18C6645	2.81
● GBPC1506	600	15	1.1	GBPC	65K1030	3.00
● GBU8K	800	8	1	GBU	58K8895	1.62
● GBPC1208W	800	12	1.1	GBPCW	58K1549	2.38
● GBPC1508W	800	15	1.1	GBPCW	58K8877	2.98

* Mini glass-passivated

(66071)

SINGLE-PHASE BRIDGE RECTIFIERS, FORWARD VOLTAGE = 1V

RoHS Compliant Available

VISHAY.

Features:
- Glass Passivated
- High surge current capability
- High case dielectric strength 1500 VRMS

Application:
- AC-to-DC bridge full wave rectification
- Home appliances
- Office equipment
- Industrial automation applications

If(AV)= 3A

Mfg. Part No.	Vrrm (V)	If(AV) (A)	Pkg.	Stock No.	Price Each 1-9
● GBPC102-E4/51	200	3	Module	65K2516	1.12
● GBPC104-E4/51	400	3	Module	65K2517	1.11
● GBPC106-E4/51	600	3	Module	65K2518	1.12
If(AV)= 6A					
● GBPC602-E4/51	200	6	Module	76K5303	2.07
● GBPC606-E4/51	600	6	Module	65K2582	2.04

(164008)

GBPC SERIES BRIDGE RECTIFIERS

RoHS Compliant Available

multicomp

Features:
- Surge overload -300--450 amperes peak
- Low forward voltage drop
- Mounting position :Any
- Electrically isolated base-2000 Vlots
- Solderable 0.25" FASTON terminals
- Materials used carries U/L recognition
- GBPC Package

Mfg. Part No.	Vrrm Max (V)	If(AV) (A)	V_F Max (V)	No. of Phases	Stock No.	Price Each 1-24
● GBPC25005	50	25	1.1	Single	90R8636	2.73
● GBPC35005	50	35	1.1	Single	90R8643	3.10
● GBPC2501	100	25	1.1	Single	90R8637	2.76
● GBPC3501	100	35	1.1	Single	90R8644	3.10
● GBPC2502	200	25	1.1	Single	90R8638	2.80
● GBPC3502	200	35	1.1	Single	90R8645	3.06
● GBPC5002	200	50	1.2	Single	24M2287	4.41
● GBPC1504	400	15	1.1	Single	01P3496	3.56
● GBPC2504	400	25	1.1	Single	90R8639	2.80
● GBPC3504	400	35	1.1	Single	90R8646	3.14
● GBPC5004	400	50	1.1	Single	51T1788	4.00
● GBPC2506	600	25	1.1	Single	90R8640	2.73
● GBPC3506	600	35	1.1	Single	90R8647	3.06
● GBPC5006	600	50	1.2	Single	51T1789	3.83
● GBPC2508	800	25	1.1	Single	90R8641	2.76
● GBPC3508	800	35	1.1	Single	90R8648	3.10
● GBPC5008	800	50	1.1	Single	01P3517	6.77
● GBPC2510	1000	25	1.1	Single	90R8642	2.73
● GBPC3510	1000	35	1.1	Single	90R8649	3.06
● GBPC5010	1000	50	1.1	Single	01P3518	7.04

(195461)

NEW PRODUCTS ADDED DAILY

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(196560)

WOB PACKAGE SILCON PASSIVATED BRIDGE RECTIFIERS

RoHS Compliant Available

multicomp

Features
- Silicon Passivated
- Surge overload rating: 2W: -60 amperes peak W0: -50 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction
- Package: WOB

2W0/2W0M SERIES

Mfg. Part No.	V_{RRM} (V)	$I_{F(AV)}$ (A)	V_F (V)	Stock No.	Price Each 1-24
2W005	50	2	1.1	55T8859	0.27
2W01	100	2	1.1	55T8860	0.27
2W02	200	2	1.1	55T8861	0.27
2W04	400	2	1.1	55T8862	0.29
2W06	600	2	1.1	55T8863	0.27
2W08	800	2	1.1	55T8864	0.29
2W10	1000	2	1.1	55T8865	0.28

W0/W0M SERIES

W005	50	1.5	1.1	55T8852	0.26
W01M	100	1.5	1	63W5271	0.20
W01	100	1.5	1.1	55T8853	0.26
W02M	200	1.5	1	63W5272	0.17
W02	200	1.5	1.1	55T8854	0.26
W04M	400	1.5	1	63W5273	0.17
W04	400	1.5	1.1	55T8855	0.26
W06M	600	1.5	1	63W5274	0.20
W06	600	1.5	1.1	55T8856	0.26
W08M	800	1.5	1	63W5275	0.17
W08	800	1.5	1.1	55T8857	0.25
W08M	800	1.5	1	63W5275	0.17
W10M	1000	1.5	1	63W5276	0.20
W10	1000	1.5	1	55T8858	0.25

(203489)

SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIERS

RoHS Compliant Available

multicomp

Features
- Mini SMD Package Glass Passivated
- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction
- Forward Current = 0.8A

ABS SERIES

Mfg. Part No.	V_{RRM} (V)	$I_{F(AV)}$ (A)	V_F (V)	Tape Cut Stock No.	Tape Cut Price Each 1-24
ABS05	50	1	1.1	14T1567	0.22
ABS1	100	1	1.1	14T1569	0.22
ABS2	200	1	1.1	14T1573	0.22
ABS4	400	800	1.1	14T1575	0.22
ABS6	600	1	1.1	14T1577	0.22
ABS8	800	800	1.1	14T1579	0.22
ABS10	1000	1	1.1	14T1571	0.22

MBM SERIES

Mfg. Part No.	V_{RRM} (V)	$I_{F(AV)}$ (mA)	V_F (V)	Tape Cut Stock No.	Tape Cut Price Each 1-24
MB05S	50	800	1.1	14T2165	0.23
MB1S	100	800	1.1	14T2167	0.23
MB2S	200	800	1.1	14T2171	0.23
MB4S	400	800	1.1	14T2173	0.23
MB6S	600	800	1.1	14T2175	0.23
MB8S	800	800	1.1	14T2177	0.22
MB10S	1000	800	1.1	14T2169	0.23

(203532)

GSIB SERIES BRIDGE RECTIFIERS

RoHS Compliant Available

multicomp

Features:
- Rating to 1,000V PRV.
- Ideal for printed circuit board.
- Low forward voltage drop, high current capability.
- GSIB Package

Mfg. Part No.	Vrrm Max (V)	If(AV) (A)	V_F Max (V)	No. of Phases	Stock No.	Price Each 1-24
GSIB15005	50	15	1.1	Single	14T3259	1.28
GSIB1501	100	15	1.1	Single	14T3260	1.28
GSIB1502	200	15	1.1	Single	14T3261	1.28
GSIB1504	400	15	1.1	Single	14T3262	1.28
GSIB1506	600	15	1.1	Single	14T3263	1.28

CONTINUED

GSIB SERIES BRIDGE RECTIFIERS (CONT.)

Mfg. Part No.	Vrrm Max (V)	If(AV) (A)	V_F Max (V)	No. of Phases	Stock No.	Price Each 1-24
GSIB1508	800	15	1.1	Single	14T3264	1.36
GSIB1510	1000	15	1.1	Single	14T3265	1.28

(203534)

VSIB SERIES BRIDGE RECTIFIERS

RoHS Compliant Available

multicomp

Features
- Rating to 1000V PRV
- Ideal for printed circuit board
- Low forward voltage drop,high current capability

Mfg. Part No.	Vrrm Max (V)	If(AV) (A)	V_F Max (V)	No. of Phases	Stock No.	Price Each 1-24
VSIB405	50	4	1.1	Single	15T4374	0.83
VSIB605	50	6	1.1	Single	15T4381	0.93
VSIB410	100	4	1.1	Single	15T4375	0.88
VSIB610	100	6	1.1	Single	15T4382	0.93
VSIB420	200	4	1.1	Single	15T4376	0.88
VSIB620	200	6	1.1	Single	15T4383	0.93
VSIB440	400	4	1.1	Single	15T4377	0.88
VSIB640	400	6	1.1	Single	15T4384	0.93
VSIB460	600	4	1.1	Single	15T4378	0.83
VSIB660	600	6	1.1	Single	15T4385	0.93
VSIB480	800	4	1.1	Single	15T4379	0.83
VSIB680	800	6	1.1	Single	15T4386	0.93
VSIB500	1000	6	1.1	Single	15T4380	0.88
VSIB700	1000	8	1.1	Single	15T4387	0.93

(203535)

SINGLE-PHASE BRIDGE RECTIFIERS, FORWARD VOLTAGE = 1.1V

RoHS Compliant Available

VISHAY.

If(AV)= 12A

Mfg. Part No.	V_{rrm} (V)	Current (A)	Package	Stock No.	Price Each 1-9
GBPC1210-E4	1 kV	12	Module	65K2533	3.99

If(AV)= 25A

GBPC2501-E4	100	25	Module	65K2552	3.99
GBPC2502-E4/51	200	25	Module	76K5256	4.18
GBPC2502-E4/51	200	25	Module	76K5256	4.18
GBPC2506-E4/51	600	25	Module	76K5264	4.29

If(AV)= 35A

GBPC3501-E4	100	35	Module	65K2566	4.82
GBPC3504-E4/51	400	35	Module	76K5288	4.88
GBPC3506-E4/51	600	35	Module	76K5292	4.88
GBPC3508-E4	800	35	Module	65K2574	4.76
GBPC3510-E4/51	1 kV	35	Module	76K5300	4.71
GBPC3510W-E4	1 kV	35	Module	65K2577	4.57
GBPC3510W-E4/51	1.2 kV	35	GBPC-W	76K5302	4.63

(148806)

DIODE BRIDGES

RoHS Compliant Available

VISHAY.

Package: Bridge. **Suffix M** in type number = thru-hole; **suffix S** = surface mount; **suffix R** = pin code of - ⏥ +. Package size depictions where available; *go online or call.*

SINGLE IN-LINE, 2A

Mfg. Part No.	Circuit	V_{RRM} (V)	$I_{F(AV)}$ (A)	@ T_C (°C)	V_{FM} (V)	E_{AS} (mJ)	I_{AR} (A)	Stock No.	Price Each 1-24
VS-2KBP02	D-44	200	2	50	1	2	60	09F5269	0.94
VS-2KBB20R	D-37	200	2	45	1	3	50	09F5254	1.04
VS-2KBP04	D-44	400	2	50	1	2	60	09F5271	0.99
VS-2KBB40R	D-37	400	2	45	1	3	50	09F5256	1.48
VS-2KBP06	D-44	600	2	50	1	2	60	09F5273	0.82
VS-2KBB60	D-37	600	2	45	1	3	50	09F5259	0.87
VS-2KBP08	D-44	800	2	50	1	2	60	09F5276	0.84
VS-2KBB80	D-37	800	2	45	1	3	50	09F5261	0.93
VS-2KBP10	D-44	1000	2	50	1	2	60	09F5278	0.87
VS-2KBB100	D-37	1000	2	45	1	3	50	09F5251	1.03

SQUARE, 1.5A

VS-1KAB10E	D-38	100	1.5	45	1	1	50	09F2650	1.36
VS-1KAB20E	D-38	200	1.5	45	1	1	50	09F2653	1.16
VS-1KAB40E	D-38	400	1.5	45	1	1	50	09F2655	1.54
VS-1KAB100E	D-38	1000	1.5	45	1	1	50	09F2651	1.21

CONTINUED

DIODE BRIDGES (CONT.)

SQUARE, 3A-10A

Mfg. Part No.	Circuit	V_{RRM} (V)	$I_{F(AV)}$ (A)	@ T_C (°C)	V_{FM} (V)	E_{AS} (mJ)	I_{AR} (A)	Stock No.	Price Each 1-24
VS-KBPC6005PBF	D-72	50	6	50	1	3	100	19M4412	2.75
VS-KBPC801PBF	D-72	100	8	50	1	3	125	19M4420	3.25
VS-KBPC601PBF	D-72	100	6	50	1	3	100	19M4413	2.92
VS-KBPC802PBF	D-72	200	8	50	1	3	125	19M4421	3.28
VS-KBPC602PBF	D-72	200	6	50	1	3	100	19M4414	2.84
VS-KBPC804PBF	D-72	400	8	50	1	3	125	19M4422	3.40
VS-KBPC606PBF	D-72	600	6	50	1	3	100	19M4416	3.08
VS-KBPC806PBF	D-72	600	8	50	1	3	125	19M4423	3.59
VS-KBPC608PBF	D-72	800	6	50	1	3	100	19M4417	2.67
VS-KBPC808PBF	D-72	800	8	50	1	3	125	19M4424	3.12
VS-KBPC610PBF	D-72	1000	6	50	1	3	100	19M4418	3.05
VS-KBPC810PBF	D-72	1000	8	50	1	3	125	19M4425	3.16
SQUARE, 25A									
VS-26MB05A	D-34A	50	25	65	1.1	40	335	97B9043	5.25
VS-26MB10A	D-34A	100	25	65	1.1	40	335	83F5587	6.97
VS-GBPC2502A	GBPC-A	200	25	60	1.1	...	335	18C4361	5.20
VS-GBPC2502W	GBPC-W	200	25	60	1.1	...	335	18C4362	5.16
VS-26MB20A	D-34A	200	25	65	1.1	40	335	48F1222	6.38
VS-26MB40A	D-34A	400	25	65	1.1	40	335	48F1223	6.67
VS-GBPC2504A	GBPC-A	400	25	60	1.1	...	335	18C4363	5.01
VS-GBPC2504W	GBPC-W	400	25	60	1.1	...	335	18C4364	5.09
VS-GBPC2506A	GBPC-A	600	25	60	1.1	...	335	18C4365	5.38
VS-26MB60A	D-34A	600	25	65	1.1	40	335	83F5589	6.94
VS-GBPC2506W	GBPC-W	600	25	60	1.1	...	335	18C4366	5.16
VS-GBPC2508A	GBPC-A	800	25	60	1.1	...	335	18C4367	5.42
VS-26MB80A	D-34A	800	25	65	1.1	40	335	83F5588	8.04
VS-GBPC2508W	GBPC-W	800	25	60	1.1	...	335	18C4368	5.27
VS-26MB100A	D-34A	1000	25	65	1.1	40	335	48F1224	9.06
VS-GBPC2510W	GBPC-W	1000	25	60	1.1	...	400	29C9650	5.42
VS-GBPC2510A	GBPC-A	1000	25	60	1.1	...	335	29C9649	5.53
VS-26MB120A	D-34A	1200	25	65	1.1	40	335	48F1225	8.22
VS-26MB140A	D-34A	1400	25	65	1.1	40	335	48F1226	12.21
VS-26MB160A	D-34A	1600	25	65	1.1	40	335	48F1227	10.86
SQUARE, 35A									
VS-36MB05A	D-34A	50	35	60	1.2	55	400	83F5590	5.56
VS-36MB10A	D-34A	100	35	60	1.2	55	400	48F1228	6.53
VS-36MB20A	D-34A	200	35	60	1.2	55	400	48F1229	6.21
VS-GBPC3502A	GBPC-A	200	35	55	1.1	...	400	18C4369	5.70
VS-GBPC3502W	GBPC-W	200	35	55	1.1	...	400	18C4370	5.23
VS-GBPC3504A	GBPC-A	400	35	55	1.1	...	400	18C4371	5.43
VS-36MB40A	D-34A	400	35	60	1.2	55	400	48F1230	7.04
VS-GBPC3504W	GBPC-W	400	35	55	1.1	...	400	18C4372	5.58
VS-GBPC3506W	GBPC-W	600	35	55	1.1	...	400	18C4374	5.69
VS-GBPC3506A	GBPC-A	600	35	55	1.1	...	400	18C4373	5.73
VS-36MB60A	D-34A	600	35	60	1.2	55	400	48F1231	7.19
VS-GBPC3508W	GBPC-W	800	35	55	1.1	...	400	18C4376	5.81
VS-GBPC3508A	GBPC-A	800	35	55	1.1	...	400	18C4375	5.70
VS-36MB80A	D-34A	800	35	60	1.2	55	400	39C5372	7.37
VS-GBPC3510A	GBPC-A	1000	35	55	1.1	...	400	29C9653	6.51
VS-36MB100A	D-34A	1000	35	60	1.2	55	400	48F1233	7.95
VS-GBPC3510W	GBPC-W	1000	35	55	1.1	...	475	29C9654	6.04
VS-GBPC3512W	GBPC-W	1200	35	55	1.1	...	475	29C9656	5.86
VS-36MB120A	D-34A	1200	35	60	1.2	55	400	48F1234	8.34
VS-GBPC3512A	GBPC-A	1200	35	55	1.1	...	475	29C9655	5.75
VS-36MB140A	GBPC-A	1400	35	60	1.2	55	400	48F1235	13.20
VS-36MB160A	D-34A	1600	35	60	1.2	55	400	48F1236	14.56

(70774)

3-PHASE BRIDGES

RoHS Compliant Available

VISHAY.

Mfg. Part No.	$I_{F(AV)}$ Comp. (A)	V_{RRM} (V)	I_0 @ T_C	I_{FSM} (50Hz)	$R_{\Theta(JC)}$ (K/W)	Pkg.	Stock No.	Price Each 1-24
VS-26MT20	25	200	70	300	1.42	D-63	07B3992	16.42
VS-26MT60	25	600	70	300	1.42	D-63	07B3993	14.27
VS-26MT120	25	1200	70	300	1.42	D-63	07B3989	30.01
VS-26MT160	25	1600	70	300	1.42	D-63	07B3991	21.38
VS-36MT20	35	200	60	400	1.16	D-63	09F6872	16.62
VS-36MT40	35	400	60	400	1.16	D-63	09F6873	16.50
VS-36MT60	35	600	60	400	1.16	D-63	09F6874	16.87
VS-36MT80	35	800	60	400	1.16	D-63	09F6875	15.99

➤ CONTINUED ➤

3-PHASE BRIDGES (CONT.)

Mfg. Part No.	$I_{F(AV)}$ Comp. (A)	V_{RRM} (V)	I_0 @ T_C	I_{FSM} (50Hz)	$R_{\Theta(JC)}$ (K/W)	Pkg.	Stock No.	Price Each 1-24
VS-36MT100	35	1000	60	400	1.16	D-63	09F6870	18.27
VS-90MT160KPBF	90	1600	90	650	0.21	INT-A-Pak	89K0090	96.51
VS-160MT80KPBF	160	800	85	1200	0.121	INT-A-Pak	88K7919	121.51

(75173)

KBPC SERIES BRIDGE RECTIFIERS

RoHS Compliant Available

SOLID·STATE

- Single phase
- V_F (Max.): 1.2A per bridge element
- High efficiency
- 300A or 400A surge capability
- Through-hole mountable

KBPC series bridge rectifiers feature an electrically isolated metal case for maximum heat dissipation. All models have solderable Faston® terminals except **mfg. part no. KBPC3510W** which has wire leads.

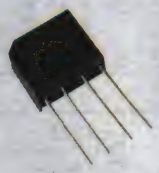
Mfg. Part No.	$I_{F(AV)}$ (Max.) (A)	V_{RRM} (Max.) (V)	V_{RMS} (Max.) (V)	I_{FSM} (A)	Stock No.	Price Each 1-9
KBPC2504	25	400	280	300	10P1409	3.39
KBPC3510W	35	1000	700	400	10P1430	3.34
HIGH CURRENT						
KBPC5002	50	200	140	400	10P1433	4.05
KBPC5010	50	1000	700	400	10P1437	3.99

(148786)

BRIDGE RECTIFIERS

RoHS Compliant Available

multicomp



Mfg. Part No.	V_{RRM} (V)	I_{fs} Max (A)	Input Voltage RMS (V)	Stock No.	Price Each 1-249
2KBP02M..	50	60	35	98K6205	0.66
CM1502	200	300	140	96K7970	2.93
CM1504	400	300	280	87K0834	2.96
CM1506	600	300	420	96K7971	3.02
CM2508	800	300	500	96K7981	3.17
CM3502	200	400	140	96K7988	3.19
CM40010	1	500	800	96K7992	4.74
CM4006	600	500	420	96K7994	4.45
DI106	600	30	420	96K8607	0.52
DI1510	1	50	700	96K8608	0.72
DI152	200	50	140	96K8609	0.51
GBU402	100	150	420	92K0217	0.84
GBU406	800	150	560	92K0221	0.94

(116845)

KBP SERIES BRIDGE RECTIFIERS

RoHS Compliant Available

multicomp

Features:

- Surge overload rating -60 amperes peak
- Ideal for printed circuit board
- Plastic material has UL flammability classification 94V-0
- Mounting Position : Any
- KBP Package

Mfg. Part No.	Vrrm Max (V)	If(AV) (A)	V_F Max (V)	No. of Phases	Stock No.	Price Each 1-24
KBP2005G	50	2	1.1	Single	90R8776	0.37
KBP201G	100	2	1.1	Single	90R8777	0.37
KBP202G	200	2	1.1	Single	90R8778	0.37
KBP204G	400	2	1.1	Single	90R8779	0.37
KBP206G	600	2	1.1	Single	90R8780	0.37
KBP208G	800	2	1.1	Single	90R8781	0.37
KBP210G	1000	2	1.1	Single	90R8782	0.37

(195443)

HIGH–CURRENT SILICON BRIDGE RECTIFIERS

RoHS Compliant Available

multicomp

Mfg. Part No.	Peak Reverse Voltage (V)	I_0 (A)	Package	Stock No.	Price Each 1-24
MCCM2500-RH	50	25	CM-25	10M6167	3.01
MCCM2501-RH	100	25	CM-25	10M6168	3.33
MCCM2502-RH	200	25	CM-25	10M6170	3.55
MCCM2504-RH	400	25	CM-25	10M6171	3.39
MCCM2506-RH	600	25	CM-25	10M9622	3.59
MCCM25010-RH	1000	25	CM-25	10M6169	3.81
MCCM3504-RH	400	35	CM-25	10M6176	3.84
MCCM3506-RH	600	35	CM-25	10M6177	3.89
MCCM3508-RH	800	35	CM-25	10M6178	3.86
MCCM35010-RH	1000	35	CM-25	10M6174	4.08
MCCM5000-RH	50	50	CM-25	10M6179	5.04
MCCM5002-RH	200	50	CM-25	10M6181	5.47
MCCM5006-RH	600	50	CM-25	10M6182	5.94
MCCM50010-RH	1000	50	CM-25	10M6180	6.32

(59391)

DFxxx MINIATURE BRIDGE RECITIFIERS

RoHS Compliant Available

VISHAY.

Features:
- High Temperature Soldering Guaranteed: 260°C/10 Seconds at 5 Lbs. (2.3 kg) Tension
- Plastic Package Rated UL 94V-0
- UL Listed Under Recognized Component Index, File No. E54214

High surge overload rating of 50A peak. Case: Molded plastic body over passivated junctions. Terminals: Matte tin plated leads, solderable per J-STD-002 and JESD22-B102.

Mfg. Part No.	V_{RRM} Max. (V)	$I_{F(AV)}$ (mA)	V_F (V)	Pkg.	Stock No.	Price Each 1-9
DF005M-E3/45	50	1	1.1	DIP	65K2441	0.49
DF005S-E3/45	50	1	1.1	SMD	76K4272	0.52
DF01M-E3/45	100	1	1.1	DIP	65K2443	0.52
DF01S-E3/45	100	1	1.1	SMD	76K4278	0.55
DF02M-E3/45	200	1	1.1	DIP	65K2445	0.52
DF02S-E3/45	200	1	1.1	SMD	76K4289	0.54
DF04M-E3/45	400	1	1.1	DIP	65K2447	0.49
DF04S-E3/45	400	1	1.1	SMD	76K4295	0.55
DF06S-E3/45	600	1	1.1	SMD	76K4301	0.54
DF08S-E3/77	800	1	1.1	SMD	76K4309	0.55
DF06SA-E3/45	600	1	1.1	SMD	76K4304	0.45
DF08SA-E3/77	800	1	1.1	SMD	05W6832	0.45
DF10S-E3/45	1kV	1	1.1	SMD	76K4314	0.55
DF10S-E3/77	1kV	1	1.1	SMD	05R5591	0.52
DF10SA-E3/77	1kV	1	1.1	SMD	05R5592	0.48
DF10M-E3/45	1kV	1	1.1	DIP	65K2453	0.52
DF10S-E3/45	1kV	1	1.1	SMD	76K4314	0.55
DF10S-E3/77	1kV	1	1.1	SMD	05R5591	0.52
DF10SA-E3/77	1kV	1	1.1	SMD	05R5592	0.48
DF10M-E3/45	1kV	1	1.1	DIP	65K2453	0.52

(165121)

ENHANCED isoCink+™ BRIDGE RECIFIERS

RoHS Compliant Available

VISHAY.

FEATURES
- Enhanced high-current density single in-line package
- Superior thermal conductivity
- Case Style PB

SPECIFICATIONS
- Non-repetitive peak forward surge current = 350 A
- Rating for fusing (t < 8.3 ms) = 508 A^2s
- Operating junction & storage temp range = -55°C to +150°C
- Typical junction capacitance per diode = 105 pF

Mnf. Part No.	V_{RRM} (V)	I_0 (A)	V_F (V)	Stock No.	Price Each 1-9
PB3006-E3/45	600	30	1.1	79R2483	3.01
PB3506-E3/45	600	35	1.1	24R7052	2.74
PB4006-E3/45	600	40	1.1	24R7053	2.94
PB5006-E3/45	600	45	1.1	24R7054	3.37
PB3008-E3/45	800	30	1.1	79R2484	2.83
PB3508-E3/45	800	35	1.1	79R2486	2.74
PB4008-E3/45	800	40	1.1	79R2488	2.94
PB5008-E3/45	800	45	1.1	79R2490	3.37
PB3010-E3/45	1kV	30	1.1	79R2485	2.83
PB3510-E3/45	1kV	35	1.1	79R2487	2.74

➤CONTINUED➤

ENHANCED isoCink+™ BRIDGE RECIFIERS (CONT.)

Mnf. Part No.	V_{RRM} (V)	I_0 (A)	V_F (V)	Stock No.	Price Each 1-9
PB4010-E3/45	1kV	40	1.1	79R2489	3.09
PB5010-E3/45	1kV	45	1.1	79R2491	3.53

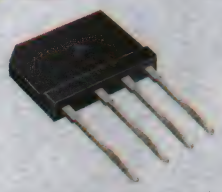
(202672)

SINGLE-PHASE IN-LINE BRIDGE RECTIFIERS

RoHS Compliant Available

VISHAY.

Features:
- Case Style GSIB-5S
- Thin single in-line package
- Oxide planar chip junction
- Low forward voltage drop
- High surge current capability
- High case dielectric strength of 2500 V_{RMS}



Mnf. Part No.	V_{RRM} (V)	I_0 (A)	V_F (V)	Stock No.	Price Each 1-9
LVB1560-M3/45	600	15	900	53T1104	5.12
LVB2560-M3/45	600	25	920	53T1105	4.41

(202674)

SILICON CARBIDE SCHOTTKY DIODES

RoHS Compliant Available

CREE

Features:
- Extremely fast switching
- Temperature-independent switching behavior
- Positive temperature coefficient on forward voltage
- High-frequency operation

Applications:
- Power factor correction
- Solar inverters
- Industrial motor drivers
- Output rectification

Cree's family of **ZERO RECOVERY®** rectifiers has essentially no reverse recovery at 600 V and 1200 V breakdown and is targeted for applications where low switching loss is required. These devices provide increased efficiency, reduced size and higher frequency in a variety of applications.

Mfg. Part No.	V_{RRM} (V)	$I_{F(AV)}$ (A)	V_F Max. (V)	Package	Stock No.	Price Each 1-9
C2D SERIES						
C2D05120A	1200	5	3	TO-220	73P9866	8.45
C2D10120A	1200	10	3	TO-220	73P9867	17.46
C2D10120D	1200	10	3	TO-247	73P9868	16.26
C2D20120D	1200	20	3	TO-247	73P9869	36.88
C3D SERIES						
C3D1P7060Q	600	1.7	1.7	QFN	07W3639	0.70
C3D02060A	600	2	1.7	TO-220	09R4508	1.02
C3D02060E	600	2	1.7	TO-252	09R4509	1.04
C3D04060A	600	4	1.7	TO-220	09R4512	1.94
C3D04060E	600	4	1.7	TO-252	09R4513	1.94
C3D04065A	650	4	1.8	TO-220	99R2670	2.06
C3D06060A	600	6	1.8	TO-220	09R4514	3.12
C3D06060G	600	6	1.8	TO-263	09R4515	2,90
C3D06065A	650	6	1.8	TO-220	99R2671	3.10
C3D06060F	600	6	1.8	TO-220-F2	07W3638	3.12
C3D08060A	600	8	1.8	TO-220	09R4516	4.15
C3D08060G	600	8	1.8	TO-263	09R4517	3.86
C3D08065I	650	8	1.8	TO-220	19X9757	4.30
C3D02065E	650	8	1.8	TO-252	55X2372	1.02
C3D10060A	600	10	1.8	TO-220	09R4518	5.20
C3D08065A	650	8	1.8	TO-220	25T5385	4.14
C3D10060G	600	10	1.8	TO-263	09R4519	5.09
C3D10065A	650	10	1.8	TO-220	99R2672	5.16
C3D10065I	650	10	1.8	TO-220	63W4928	5.38
C3D03065E	650	11.5	1.8	TO-252	55X2373	1.54
C3D04065E	650	15.5	1.8	TO-252	55X2374	2.04
C3D16060D	600	16	1.8	TO-247	07W3640	7.72
C3D20060D	600	28	1.8	TO-247	09R4520	10.41
C3D16065D	650	46	1.8	TO-247	55X2375	8.12
C3D20065D	650	59	1.8	TO-247	55X2376	10.16
CSD SERIES						
CSD01060A	600	1	1.8	TO-220	99R2656	1.02
CSD01060E	600	1	1.8	TO-252	05R9803	1.02

➤CONTINUED➤

SILICON CARBIDE SCHOTTKY DIODES (CONT.)

C4D SERIES

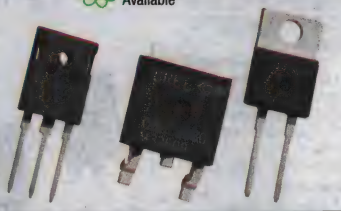
Mfg. Part No.	V_{RRM} (V)	$I_{F(AV)}$ (A)	V_F Max. (V)	Package	Stock No.	Price Each 1-9
● C4D02120A	1200	5.9	1.8	TO-220	48T7470	2.43
● C4D02120E	1200	5.9	1.8	TO-252	48T7471	2.40
● C4D05120A	1200	8.2	1.8	TO-220	48T7472	5.94
● C4D05120E	1200	8.2	1.8	TO-252	48T7473	5.62
● C4D10120A	1200	10	1.8	TO-220	48T7475	11.26
● C4D10120D	1200	18	1.8	TO-247	48T7476	11.26
● C4D10120E	1200	18	1.8	TO-252	48T7477	11.26
● C4D15120A	1200	15	1.8	TO-220	48T7478	16.88
● C4D20120A	1200	20	3	TO-220	46T9723	22.50
● C4D20120D	1200	32	1.8	TO-247	48T7479	22.50
● C4D08120E	1200	7.5	1.8	TO-252	58T6843	8.44
● C4D08120A	1200	11.3	3	TO-220	48T7474	8.44
● C4D30120D	1200	43	3	TO-247	48T7480	33.76
● C4D40120D	1200	40	3	TO-247	46T9724	47.16
CVFD-LOW FORWARD VOLTAGE SERIES						
● CVFD20065A	650	57	1.45	TO-220	55X2371	10.36

(146377)

Z-REC® SILICON-CARBIDE SCHOTTKY DIODES

NEW RoHS Compliant Available CREE

Features:
- Zero Reverse Recovery Current
- Zero Forward Recovery Voltage
- High-Frequency Operation
- Temperature-Independent Switching Behavior
- Extremely Fast Switching
- Positive Temperature Coefficient on VF



Mfg. Part No.	$I_{F(AV)}$ (A)	V_{RRM} (V)	V_F Max. (V)	Package	Stock No.	Price Each 1-9
● C3D08065I	8	650	1.8	TO-220	19X9757	4.30
● C3D02065E	8	650	1.8	TO-252	55X2372	1.02
● C3D03065E	11.5	650	1.8	TO-252	55X2373	1.54
● C3D04065E	15.5	650	1.8	TO-252	55X2374	2.04
● C3D16065D	46	650	1.8	TO-247	55X2375	8.12
● C3D20065D	59	650	1.8	TO-247	55X2376	10.16
LOW FORWARD VOLTAGE						
● CVFD20065A	57	650	1.45	TO-220	55X2371	10.36

(212384)

SILICON CARBIDE (SiC) POWER SCHOTTKY DIODES

RoHS Compliant Available GeneSiC SEMICONDUCTOR

Features
- 175 °C maximum operating temperature
- Superior surge current capability
- Positive temperature coefficient of V_F
- Fast switching speeds
- Superior figure of merit Q_C/I_F

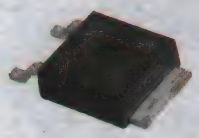
Mfg. Part No.	V_{RRM} (kV)	$I_{F(AV)}$ (A)	V_F (V)	Pkg.	Stock No.	Price Each 1-24
● GB01SLT06-214	650 V	1	1.5	DO-214AA	08X5908	2.91
● GAP3SLT33-214	3.3	350 mA	1.7	DO-214AA	08X5864	18.19
● GB01SLT12-214	1.2	1	1.6	DO-214AA	08X5909	3.30
● GB02SLT12-214	1.2	2	1.45	DO-214AA	08X5911	4.10

(202152)

SILICON CARBIDE (SiC) POWER SCHOTTKY DIODES

RoHS Compliant Available GeneSiC SEMICONDUCTOR

Features
- 1200 V Schottky rectifier
- 175 °C maximum operating temperature
- Temperature independent switching behavior
- Superior surge current capability
- Positive temperature coefficient of VF
- Extremely fast switching speeds
- Superior figure of merit QC/IF



Applications
- Power Factor Correction (PFC)
- Switched-Mode Power Supply (SMPS)
- Solar Inverters
- Wind Turbine Inverters
- Motor Drives
- Induction Heating
- Uninterruptible Power Supply (UPS)
- High Voltage Multipliers

➤CONTINUED➤

SILICON CARBIDE (SiC) POWER SCHOTTKY DIODES (CONT.)

Mfg. Part No.	V_{RRM} (kv)	$I_{F(AV)}$ (A)	V_F	Pkg.	Stock No.	Price Each 1-24
● GB01SLT06-214	650 V	1	1.5	DO-214AA	08X5908	2.91
GB01SLT12-252	1.2	1	2	TO-252	06W2379	2.70
● GB02SLT12-252	1.2	2	2	TO-252	06W2380	3.11
● GB05SLT12-252	1.2	5	2	TO-252	06W2385	7.35
● GB10SLT12-252	1.2	10	2	TO-252	06W2386	14.04
● GB01SLT12-214	1.2	1	1.6	DO-214AA	08X5909	3.30
● GB02SLT12-214	1.2	2	1.45	DO-214AA	08X5911	4.10
● GAP3SLT33-214	3.3	350 mA	1.7	DO-214AA	08X5864	18.19

(208324)

SCHOTTKY DIODES

RoHS Compliant Available AVAGO TECHNOLOGIES

Mfg. Part No.	V_F (mV)	Configuration	Package	Stock No.	Price Each 1-9
GENERAL PURPOSE - C_t: 1.0pF R_d:12.0Ω					
● HSMS-2820-BLKG	340	Single	SOT-23	63J9546	0.77
● HMPS-2822-BLK	340	Series	MiniPak	27C3040	1.20
● HSMS-2822-BLKG	340	Series	SOT-23	63J9549	1.03
● HSMS-2823-BLKG	340	Common Anode	SOT-23	63J9552	1.03
● HSMS-2824-BLKG	340	Common Cathode	SOT-23	63J9555	1.03
● HMPS-2825-BLK	340	Unconnected Pair	MiniPak	27C3043	1.20
● HSMS-2828-BLKG	340	Bridge Quad	SOT-143	63J9561	1.88
● HSMS-282K-BLKG	340	High Isolation Unconnected Pair	SOT-363	63J9531	1.11
HIGH CURRENT CLIPPING/CLAMPING - C_t:6.7 pF. R_d:65Ω					
● HSMS-270C-BLKG	550	Series	SOT-323	63J9438	0.72
LOWEST FLICKER NOISE - C_t:1.2 pF. R_d:15Ω					
● HSMS-2810-BLKG	400	Single	SOT-23	63J9504	1.06
● HSMS-2812-BLKG	400	Series	SOT-23	63J9507	1.46
● HSMS-281C-BLKG	400	Series	SOT-323	63J9490	1.54
● HSMS-2813-BLKG	400	Common Anode	SOT-23	63J9510	1.46
● HSMS-2814-BLKG	400	Common Cathode	SOT-23	63J9513	1.46
● HSMS-2815-BLKG	400	Unconnected Pair	SOT-143	63J9516	1.46
HIGH VBR - C_t:2.0 pF. R_d: 35.0Ω					
● HSMS-2800-BLKG	410	Single	SOT-23	63J9472	0.72
● HSMS-280B-BLKG	410	Single	SOT-323	63J9447	0.82
● HSMS-280C-BLKG	410	Series	3-SOT-23	63J9450	1.03
● HSMS-2804-BLKG	410	Common Cathode	3-SOT-23	63J9481	1.06
● HSMS-2805-BLKG	410	Unconnected Pair	SOT-143	08J1362	1.06
● HSMS-2808-BLKG	410	Bridge Quad	SOT-143	63J9484	1.95
HIGH FREQUENCY - up to 14 GHz - C_t:0.3 pF. R_d:14.0Ω					
● HSMS-2860-BLKG	350	Single	SOT-23	63J9607	1.11
● HSMS-2862-BLKG	350	Series Pair	SOT-23	63J9610	1.50
● HSMS-286C-BLKG	350	Series Pair	SOT-323	63J9589	1.63
ZERO BIAS DETECTOR DIODES - C_t:0.3 pF. R_d:14.0Ω					
● HSMS-2850-BLKG	150	Single	SOT-323	63J9577	1.07
● HSMS-2852-BLKG	150	Series Pair	SOT-23	63J9580	1.88
● HSMS-285C-BLKG	250	Series Pair	3-SOT-323	63J9570	1.97
X-BAND MIXER DIODES - C_t:0.26 pF. R_d:14.0Ω					
● HSMS-8202-BLKG	250	Series	SOT-23	63J9625	1.95
BEAM LEAD SCHOTTKY DIODES					
● HSCH-5340	375	Low Barrier	Beam Leaded	69K0016	24.64

(17533)

SCHOTTKY DIODES

RoHS Compliant Available FAIRCHILD

Mfg. Part No.	V_{RRM} (V)	I_{FAV} (A)	V_{FM} (V)	I_{RM} @ V_R (uA)	Pkg.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● BAR43	30	0.2	0.8	100	SOT-23	78K5851	0.23
● BAR43S	30	0.2	0.8	100	SOT-23	18C5746	0.27
● BAT54	30	0.2	0.8	2	SOT-23	35C0397	0.16
● BAT54A	30	0.2	0.8	2	SOT-23	38C6973	0.21

➤CONTINUED➤

SCHOTTKY DIODES (CONT.)

SPAN ERROR	SPAN ERROR	SPAN ERROR	SPAN ERROR	SPAN ERROR	SPAN ERROR	Tape Cut	
						SPAN ERROR	Price Each
BAT54C	30	0.2	0.8	2	SOT-23	35C0398	0.21
BAT54S	30	0.2	0.8	2	SOT-23	35C0399	0.22

(70515)

SILICON FAST RECOVERY DIODES

RoHS Compliant Available

GeneSiC SEMICONDUCTOR

Features:
- High Surge Capability

Mfg. Part No.	V_{RRM} (V)	I_{FAVG} (A)	V_{FM} (V)	I_{fsm} Max (A)	Pkg.	Stock No.	Price Each 1-24
MUR2510	100	25	1	500	DO-4	19T9830	10.30
MUR2510R	100	25	1	500	DO-4	19T9831	10.30
MUR5010	100	50	1	600	DO-5	19T9860	12.08
MUR5010R	100	50	1	600	DO-5	19T9861	12.08
MUR30020CT	200	100	1.3	1.5 kA	Module	19T9842	95.04
MUR30020CTR	200	100	1.3	1.5 kA	Module	19T9843	76.04
MUR7020	200	70	1	1 kA	DO-5	19T9872	12.93
MUR7020R	200	70	1	1 kA	DO-5	19T9873	12.08
FR30G02	400	30	1.4	300	DO-5	19T9047	8.43
FR30GR02	400	30	1.4	300	DO-5	19T9046	8.43
FR40G02	400	40	1.4	500	DO-5	19T9064	9.02
FR40GR02	400	40	1.4	500	DO-5	19T9062	8.43
FR70G02	400	70	1.5	870	DO-5	19T9108	8.43
FR70GR02	400	70	1.5	870	DO-5	19T9106	8.43
FR85G02	400	85	1.4	1.369 kA	DO-5	19T9128	11.34
FR85GR02	400	85	1.4	1.369 kA	DO-5	19T9126	11.34
MURT40040	400	200	1.35	3.3 kA	Module	19T9804	125.28
MURT40040R	400	200	1.35	3.3 kA	Module	19T9805	100.23
MUR10060CT	600	50	1.7	400	Module	19T9816	62.21
MUR10060CTR	600	50	1.7	400	Module	19T9817	62.21
FR85J02	600	85	1.4	1.369 kA	DO-5	19T9132	11.34
FR85JR02	600	85	1.4	1.369 kA	DO-5	19T9130	11.34
MURF10060	600	50	1.7	400	TO-244AB	19T9734	76.04
MURF10060R	600	50	1.7	400	TO-244AB	19T9735	76.04
MURT40060	600	200	1.7	3.3 kA	Module	19T9806	100.23
MURT40060R	600	200	1.7	3.3 kA	Module	19T9807	100.23

(192350)

SILICON FAST RECOVERY DIODES

RoHS Compliant Available

GeneSiC SEMICONDUCTOR

Features:
- High Surge Capability

Mfg. Part No.	V_{RRM} (V)	I_{FAVG} (A)	V_{FM} (V)	I_{fsm} Max (A)	Pkg.	Stock No.	Price Each 1-24
S70B	100	70	1.1	1.25	DO-5	20T0005	8.84
S70BR	100	70	1.1	1.25	DO-5	20T0006	9.52
S85B	100	85	1.1	1.8	DO-5	20T0023	10.19
S85BR	100	85	1.1	1.8	DO-5	20T0024	9.52
S150J	600	150	1.2	3.14	DO-8	19T9904	34.03
S150JR	600	150	1.2	3.14	DO-8	19T9905	34.03
S85J	600	85	1.1	1.8	DO-5	20T0029	8.86
S85JR	600	85	1.1	1.8	DO-5	20T0030	9.52
S150K	800	150	1.2	3.14	DO-8	19T9906	34.03
S150KR	800	150	1.2	3.14	DO-8	19T9907	34.03
1N3673A	1 kV	12	1.1	240	DO-4	20T0116	7.05
1N3768	1 kV	35	1.2	475	DO-5	20T0124	8.19
S150M	1 kV	150	1.2	3.14	DO-8	19T9908	32.10
S150MR	1 kV	150	1.2	3.14	DO-8	19T9909	32.10
S70M	1 kV	70	1.1	1.25	DO-5	20T0015	9.52
S70MR	1 kV	70	1.1	1.25	DO-5	20T0016	9.52
S85M	1 kV	85	1.1	1.8	DO-5	20T0033	9.52
S85MR	1 kV	85	1.1	1.8	DO-5	20T0034	9.52
S150Q	1.2 kV	150	1.2	3.14	DO-8	19T9910	32.10
S150QR	1.2 kV	150	1.2	3.14	DO-8	19T9911	34.03
S300Y	...	300	1.2	6.85	DO-9	19T9950	40.88
S300YR	...	300	1.2	6.85	DO-9	19T9951	40.88
S40Q	1.2 kV	40	1.1	595	DO-5	19T9978	9.52
S40QR	1.2 kV	40	1.1	595	DO-5	19T9979	8.15
S70Q	1.2 kV	70	1.1	1.25	DO-5	20T0017	9.52
S70QR	1.2 kV	70	1.1	1.25	DO-5	20T0018	9.52
S85Q	1.2 kV	85	1.1	1.8	DO-5	20T0035	8.43
S85QR	1.2 kV	85	1.1	1.8	DO-5	20T0036	8.43

CONTINUED

SILICON FAST RECOVERY DIODES (CONT.)

Mfg. Part No.	V_{RRM} (V)	I_{FAVG} (A)	V_{FM} (V)	I_{fsm} Max (A)	Pkg.	Stock No.	Price Each 1-24
S85V	1.4 kV	85	1.1	1.8	DO-5	20T0037	9.52
S85VR	1.4 kV	85	1.1	1.8	DO-5	20T0038	9.52
S70V	1.4 kV	70	1.1	1.25	DO-5	20T0019	9.52
S70VR	1.4 kV	70	1.1	1.25	DO-5	20T0020	9.52
S40Y	1.6 kV	40	1.1	595	DO-5	19T9982	9.52
S40YR	1.6 kV	40	1.1	595	DO-5	19T9983	9.52

(192374)

SILICON POWER SCHOTTKY DIODES

RoHS Compliant Available

GeneSiC SEMICONDUCTOR

Features:
- High Surge Capability

Mfg. Part No.	V_{RRM} (V)	V_{FM} (mV)	I_{FAVG} (A)	I_{FSM} Max (A)	Pkg.	Stock No.	Price Each 1-24
FST8320M	20	650	80	800	D61-3M	19T9148	13.67
FST8320SM	20	650	80	800	D61-3SM	19T9149	13.67
MBR12020CT	20	650	60	800	Module	19T9588	62.06
MBR12020CTR	20	650	60	800	Module	19T9589	62.06
MBRH12020	20	650	120	2 kA	D-67	19T9460	30.82
MBRH12020R	20	650	120	2 kA	D-67	19T9461	30.82
MBR12030CT	30	650	60	800	Module	19T9590	62.06
MBR12030CTR	30	650	60	800	Module	19T9591	62.06
MBR12035CT	35	650	60	800	Module	19T9592	62.06
MBR30035CT	35	650	150	2.5 kA	Module	19T9624	70.62
MBR30035CTR	35	650	150	2.5 kA	Module	19T9625	70.62
MBR40035CT	35	650	200	3 kA	Module	19T9640	65.67
MBR40035CTR	35	650	200	3 kA	Module	19T9641	65.67
MBRF40035	35	650	200	3 kA	TO-244AB	20T1536	84.24
MBRF40035R	35	650	200	3 kA	TO-244AB	20T1537	84.24
FST16035	35	750	160	1.2 kA	TO-249AB	19T9141	63.01
MBRT40035	35	750	200	3 kA	Module	19T9544	95.04
MBRT40035R	35	750	200	3 kA	Module	19T9545	95.04
MBRH12040	40	650	120	2 kA	D-67	19T9466	30.82
MBRH12040R	40	650	120	2 kA	D-67	19T9467	32.67
MBRH20045	45	650	200	3 kA	D-67	19T9484	34.24
MBRH20045R	45	650	200	3 kA	D-67	19T9485	36.29
MBR40045CTS	45	1200	400	...	SOT-227B	53W3419	65.88
MBRT20060	60	800	100	1.5 kA	Module	19T9518	72.76
MBRT20060R	60	800	100	1.5 kA	Module	19T9519	72.76
MBRT30060	60	800	150	2.5 kA	Module	19T9534	82.08
MBRT30060R	60	800	150	2.5 kA	Module	19T9535	82.08
MBRT40060	60	800	200	3 kA	Module	19T9550	76.04
MBRT40060R	60	800	200	3 kA	Module	19T9551	76.04
MBR400100CT	100	840	200	3 kA	Module	19T9634	65.67
MBR400100CTR	100	840	200	3 kA	Module	19T9635	65.67
MBRT400100	100	880	200	3 kA	Module	19T9538	87.92
MBRT400100R	100	880	200	3 kA	Module	19T9539	76.04
MBR200100CTS	100	950	200	...	SOT-227B	53W3418	57.24
GB50SLT12-247	1.2kV	1800	0.05	350	TO-247AC	66W0703	87.78
GB07SHT12-247	1.2 kV	1800	7	40	TO-247AC	20T5187	11.48
GB05SLT12-220	1200	2900	5	...	TO-220AC	20T1534	8.30
GB10SLT12-220	1200	2500	10	...	TO-220AC	20T1535	13.00
GB01SLT12-220	1200	7700	1	...	TO-220AC	20T1533	3.30
GB02SLT12-220	1.2 kV	2900	2	...	TO-220AC	19T9167	3.11
GB20SLT12-247	1.2 kV	2400	20	...	TO-247AC	19T9195	27.82
GAP3SLT33-220FP	3.3kV	...	300	...	TO-220FP	88W4915	28.89

(192394)

SCHOTTKY BARRIER RECTIFIERS

RoHS Compliant Available

FAIRCHILD

SINGLE CONFIGURATION

Mfg. Part No.	V_{RRM} (V)	$I_{F(AV)}$ (A)	V_{FM} (V)	Package	Tape Cut	
					Stock No.	Price Each
MBRS320	20	20	0.5	SMC	58K8946	0.56
SS32	20	20	0.5	SMC	58K2384	0.61
1N5817	20	1	0.45	DO-41	38C7700	0.49
SS12	20	1	0.5	SMA	58K2380	0.51
1N5818	30	1	0.55	DO-41	38C7701	0.52
SS23	30	2	0.5	SMB	60J1798	0.48
MBRS130L	30	30	0.395	SMB	58K1805	0.47
1N5821	30	30	0.5	DO-201AD	58K2659	0.51

CONTINUED

SCHOTTKY BARRIER RECTIFIERS (CONT.)

Mfg. Part No.	V_{RRM} (V)	$I_{F(AV)}$ (A)	V_{FM} (V)	Package	Tape Cut Stock No.	Tape Cut Price Each
● MBR735	35	35	0.84	TO-220AC	58K8950	0.86
● MBR0540	40	0.5	0.51	SOD-123	83K1808	0.40
● 1N5819	40	1	0.6	DO-41	18C9038	0.52
● SB140	40	1	0.5	DO-41	18C8221	0.54
● SS14	40	1	0.5	SMA	58K9550	0.49
● MBRS140	40	40	0.6	SMB	58K1806	0.45
● SB340	40	40	0.5	DO-201AD	58K2174	0.51
● MBRS340	40	40	0.525	SMC	58K1807	0.64
● SB540	40	40	0.55	DO-201AD	58K9533	0.56
● MBR745	45	7.5	0.84	TO-220AC	38C7372	1.11
● SS16	60	1	0.7	SMA	38C8641	0.56
● SS26	60	2	0.7	SMB	75M2474	0.57
● SB360	60	60	0.74	DO-201AD	58K9532	0.54
● SS36	60	60	0.75	SMC	58K2386	0.66
● SB560	60	60	0.67	DO-201AD	58K9534	0.56
● SB160	60	1	0.7	DO-41	18C8223	0.58
● S310	100	100	0.85	SMC	58K2399	0.77
● SB5100	100	100	0.85	DO-201AD	58K2175	0.82
● S100	100	1	0.85	SMA	58K9552	0.44
DUAL COMMON CATHODE CONFIGURATION						
● MBR3045PT	45	30	0.76	TO-247	38C7369	1.98

(74308)

SSxx SERIES SCHOTTKY DIODES

RoHS Compliant Available

multicomp

Features:

- For surface mounted application.
- Easy pick and place.
- Metal to silicon rectifier, majority carrier conduction.
- Low power loss, high efficiency.
- High current capability, low VF.
- High surge current capability.
- Plastic material.
- Epitaxial construction.
- High temperature soldering: 260°C/10 seconds at terminals.

Mfg. Part No.	$I_{F(AV)}$ (A)	V_{rrm} (V)	V_F (mV)	I_{FSM} (A)	Package	Stock No.	Price Each 1-24
● SS12	1	20	550	40	DO-214AC	90R9167	0.09
● SS12B	1	20	450	40	DO-213AA	90R9169	0.19
● SS13B	1	30	550	40	DO-213AA	90R9171	0.19
● SS14	1	40	500	40	DO-214AC	90R9173	0.09
● SS14B	1	40	600	40	DO-213AA	90R9175	0.19
● SS16	1	60	700	40	DO-214AC	90R9177	0.10
● SS110	1	100	800	30	DO-214AC	98K1091	0.28
● SS110B	1	100	850	40	DO-213AA	90R9165	0.21
● SS24	2	40	550	60	DO-214AA	90R9181	0.26
● SS26	2	60	700	60	DO-213AA	90R9183	0.26
● SS210	2	100	850	60	DO-213AA	90R9179	0.29
● SS32	3	20	550	80	DO-214AB	90R9187	0.36
● SS33	3	30	550	80	DO-214AB	90R9189	0.34
● SS34	3	40	500	100	DO-214AB	90R9191	0.35
● SS34A	3	40	550	80	DO-214AC	90R9193	0.19
● SS36	3	60	700	80	DO-214AB	90R9195	0.36
● SS310	3	100	850	100	DO-214AB	90R9185	0.44
● SS54	5	40	550	150	DO-214AB	90R9197	0.48

(195447)

LOW VF SCHOTTKY RECTIFIERS

RoHS Compliant Available

ON Semiconductor

Mfr. Part No.	V_{RRM} Min. (V)	$I_{F(AV)}$ Max. (A)	V_F Max. (V)	I_{FSM} Max. (A)	Pkg.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● MBRM110LT1G	10	1	365	50	DO-216AA	26K3688	0.49
● MBRB2515LT4G	15	25	450	150	TO-263	26K3676	2.31
● MBRM120LT1G	20	1	450	50	DO-216AA	88H4674	0.45
● MBRM120LT3G	20	1	450	50	DO-216AA	48K7497	0.46
● MBRA130LT3G	30	1	470	25	DO-214AC	83H7265	0.61
● MBRM130LT1G	30	1	520	50	POWERMITE	98H0593	0.45
● MBRM130LT3G	30	1	380	50	DO-216AA	98H0594	0.46
● MBRS130LT3G	30	2	445	40	DO-214AA	67H6689	0.49
● MBRS230LT3G	30	2	490	40	DO-214AA	10N9421	0.59
● MBRB3030CTLG	30	30	510	300	TO-263	26K3679	2.97
● MBRD835LG	35	8	510	75	TO-252	98H0591	0.77
● MBRD835LT4G	35	8	510	75	TO-252	88H4672	0.75
● MBRB2535CTLT4G	35	25	550	150	TO-263	45J0778	2.31
● MBRS2040LT3G	40	2	430	70	DO-214AA	88H4677	0.52

➤CONTINUED➤

LOW VF SCHOTTKY RECTIFIERS (CONT.)

Mfr. Part No.	V_{RRM} Min. (V)	$I_{F(AV)}$ Max. (A)	V_F Max. (V)	I_{FSM} Max. (A)	Pkg.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● MBRS240LT3G	40	2	430	25	DO-214AA	83H7274	0.55
● MBRS260T3G	60	2	630	40	DO-214AA	98H0597	0.56
● MBRS360BT3G	60	4	630	125	DO-214AA	55T0909	0.50

(148588)

LOW FORWARD VOLTAGE TRENCH-BASED SCHOTTKY RECTIFIERS

RoHS Compliant Available

ON Semiconductor

Features

- Fine Lithography Trench-based Schottky Technology for Very Low Forward Voltage and Low Leakage
- Fast Switching with Exceptional Temperature Stability
- Low Power Loss and Lower Operating Temperature
- Higher Efficiency for Achieving Regulatory Compliance
- Low Thermal Resistance
- High Surge Capability

Mnf. Part No.	V_F (mV)	V_{RRM} (V)	I_F (A)	I_{FSM} (A)	Pkg.	Stock No.	Price Each 1-9
COMMON ANODE							
● NTSB30100S-1G	950	100	30	250	TO-262	24T3497	1.38
COMMON CATHODE							
● NTSB20U100CT-1G	790	100	10	150	TO-262	76T6759	1.04
● NTST20U100CTG	790	100	10	150	TO-220AB	76T6761	1.60
● NTSB20100CT-1G	830	100	10	150	TO-262	65T1512	0.92
● NTST20100CTG	830	100	10	150	TO-220AB	65T1514	0.95
● NTSB30U100CT-1G	800	100	15	160	TO-262	76T6760	1.34
● NTST30U100CTG	800	100	15	160	TO-220AB	65T1515	1.25
● NTSB30100CT-1G	850	100	15	160	TO-262	65T1513	1.15
● NTST30100CTG	850	100	15	160	TO-220AB	65T1516	1.03

(200538)

H SERIES SCHOTTKY RECTIFIERS

RoHS Compliant Available

ON Semiconductor

H SERIES

Mfg. Part No.	VRRM Min. (V)	VF Max. (V)	IRM Max. (uA)	IO(rec) Max. (A)	IFSM Max. (A)	Pkg.	Bulk Packaging Stock No.	Bulk Packaging Price Each 1-9
● MBRF20H150CTG	20	680	50	20	180	TO-220FP	75M4783	1.15
● MBR30H60CTG	60	710	300	30	260	TO-220	27M2471	1.73
● MBRB30H60CT-1G	60	780	300	30	260	TO-262	20M3917	1.42
● MBR30H100CTG	100	800	4.5	30	250	TO-220	61K0799	1.07
● MBR60H100CTG	100	980	10	60	350	TO-220	61K0803	1.87
● MBRF30H100CTG	100	800	4.5	30	250	TO-220FP	01P0130	1.21
● MBR20H150CTG	150	720	50	20	180	TO-220	75M4785	1.13
● MBR30H150CTG	150	730	60	30	200	TO-220	75M4786	1.42
● MBRF10H150CTG	150	690	45	10	150	TO-220FP	75M4782	0.89

(148587)

SCHOTTKY RECTIFIER AXIAL LEADED

RoHS Compliant Available

ON Semiconductor

DO-41 PACKAGE

Mfg. Part No.	VRRM Min. (V)	VF Max. (V)	IRM Max. (uA)	IO(rec) Max. (A)	IFSM Max. (A)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● 1N5817G	20	450	1000	1	25	42K2943	0.50
● 1N5818G	30	550	1000	1	25	42K2945	0.54
● 1N5819G	40	900	1000	1	25	42K2947	0.54
● MBR160G	60	750	500	1	25	42K0009	0.41
● MBR1100G	100	790	500	1	50	41K9995	0.54
DO-201AD PACKAGE							
● 1N5820G	20	475	2000	3	80	42K2948	0.47
● 1N5821G	30	500	2000	3	80	42K2950	0.47
● 1N5822G	40	950	2000	3	80	42K2952	0.47
● MBR340G	40	600	600	3	80	42K0014	0.58
● 80SQ045NG	45	550	1000	8	140	42K3225	0.88
● MBR150G	50	750	500	1	25	42K0007	0.42
● MBR360G	60	740	600	3	80	42K0017	0.58
● MBR3100G	100	790	600	3	150	42K0012	0.76

(148586)

SCHOTTKY DIODES

RoHS Compliant Available

ON Semiconductor

* = SOLD AS EA

Mfg. Part No.	V_{RRM} Min. (V)	V_F Max. (mV)	I_{FSM} Max. (A)	Package	Tape Cut Stock No.	Price Each 1-9
BAS SERIES						
BAS40-04LT1G	40	380	0.2	3-SOT-23	88H4547	0.35
BAS40-06LT1G	40	380	0.2	3-SOT-23	84K8722	0.35
BAS40LT1G	40	380	0.2	3-SOT-23	88H4548	0.35
BAS70-04LT1G	70	410	...	3-SOT-23	45J0556	0.35
BAS70LT1G	70	410	...	3-SOT-23	45J0557	0.33
BAT SERIES						
BAT54ALT1G	30	320	0.6	3-SOT-23	45J0558	0.21
BAT54CLT1G	30	...	0.6	3-SOT-23	06R3466	0.20
BAT54CTT1G	30	320	0.6	3-SC-75	10N9691	0.33
BAT54CWT1G	30	320	0.6	3-SC-75	10N9692	0.29
BAT54HT1G	30	800	0.6	2-SOD-323	83H6419	0.24
BAT54LT1G	30	320	0.6	3-SOT-23	88H4553	0.21
BAT54SLT1G	30	320	0.6	3-SOT-23	83H6420	0.21
BAT54SWT1G	30	320	0.6	3-SC-70	83H6421	0.28
BAT54T1G	30	320	0.6	2-SOD-123	88H4554	0.39
BAT54WT1G	30	320	0.6	3-SC-70	98H0499	0.26
BAT54XV2T1G	30	520	0.6	2-SOD-523	46M4868	0.35
MBD SERIES						
MBD301G*	30	600	...	2-TO-92	26K3669	0.54
MBD54DWT1G	30	320	...	6-SOT-363	26K3670	0.52
MBR SERIES						
MBR150RLG	50	750	25	DO-41	10N9426	0.41
MBR160RLG	60	750	25	DO-41	10N9427	0.41
MMBD SERIES						
MMBD101LT1G	7	600	...	3-SOT-23	88H4769	0.32
MMBD352LT1G	7	600	...	3-SOT-23	45J1510	0.45
MMBD353LT1G	7	600	0.6	3-SOT-23	45J1513	0.45
MMBD301LT1G	30	450	...	3-SOT-23	88H4772	0.33
MMBD452LT1G	30	600	0.6	3-SOT-23	26K4532	0.45
MMBD701LT1G	70	500	...	3-SOT-23	88H4777	0.36
MMBD770T1G	70	1 V	0.2	3-SC-70	26K4534	0.25
MMDL SERIES						
MMDL301T1G	30	450	...	2-SOD-323	98H0800	0.30
MMDL770T1G	70	1 V	...	2-SOD-323	26K4556	0.30
MMS SERIES						
MMSD701T1G	70	500	...	2-SOD-123	10N9702	0.43
NSR SERIES						
NSR1020MW2T1G	20	440	5	2-SOD-323	10N9707	0.49
NSR0320MW2T1G	23	270	5	2-SOD-323	10N9706	0.50
NSR0320XV6T1G	23	270	...	6-SOT-563	42K2368	0.59
NSR0140P2T5G	30	350	0.5	2-SOD-923	10N9704	0.59
NSR0230P2T5G	30	325	1	2-SOD-923	10N9705	0.56
NSR0340HT1G	40	590	1	2-SOD-323	85W2840	0.27
NSR0240V2T1G	40	700	2	2-SOD-523	85W2839	0.42
RB SERIES						
RB520S30T1G	30	600	...	2-SOD-523	10N9730	0.22
RB521S30T1G	30	500	1	2-SOD-523	10N9731	0.22
RB751S40T1G	30	370	0.5	2-SOD-523	10N9732	0.24
RB751V40T1G	30	370	...	2-SOD-323	83H7851	0.31
1N SERIES						
1N5817RLG	20	750	25	Case-59	93K1999	0.50

(148821)

SCHOTTKY BARRIER DIODES, ROHM

RoHS Compliant Available

ROHM SEMICONDUCTOR

Features:
- Small Mold Type. (UMD2)
- Low V_f
- high Reliability

Mfg. Part No.	V_{RRM} (V)	I_{FAVG} (A)	V_{FM} (V)	I_{fsm} Max (A)	Pkg.	Stock No.	Price Each 1-9
RB551V-30TE-17	30	500	470	2	SOD-323	40P3160	0.50

(208455)

POWER SCHOTTKY RECTIFIERS

RoHS Compliant Available

ST

Mfg. Part No.	V_{RRM} (V)	I_F (A)	V_F (mV)	Package	Stock No.	Price Each 1-9
1N5817	20	1	450	DO-41	89K1807	0.69
STPS0520Z	20	500	320	SOD-123	89K1571	0.48
STPS10L25D	25	10	460	2-TO-220AC	89K1577	1.90
1N5818	30	1	500	DO-41	89K1808	0.65
BAR43AFILM	30	100	330	3L-SOT23	89K1201	0.12
BAR43CFILM	30	100	330	3L-SOT23	89K1202	0.15
STPS130A	30	1	460	DO-214AC	89K1580	0.83
STPS1L30U	30	1	0.3	SMB	89K1575	0.56
STPS2L30A	30	2	0.375	SMA	89K1589	0.80
STPS0560Z	40	500	400	SOD-123	89K1573	0.77
1N5819	40	1	550	DO-41	89K1809	0.70
1N5822	40	3	950	DO-201AD	89K1812	0.47
STPS140A	40	1	350	2-DO-214AC	89K1581	0.39
STPS140U	40	1	350	DO-214AA	89K1582	0.36
STPS2L40U	40	2	340	DO-214AA	89K1590	0.49
STPS0540Z	40	2	500	SOD-123	89K1572	0.52
STPS340S	40	3	570	SMC	89K1600	0.36
STPS1545D	45	15	570	2-TO-220AC	89K1585	1.08
STPS16045TV	45	160	950	4-ISOTOP	57P1639	25.29
STPS3045CT	45	30	570	3-TO-220AB	89K1598	1.30
STPS745D	45	7.5	570	2-TO-220AC	89K1604	1.02
STPS6045CW	45	60	840	3-TO-247	57P1802	7.78
STPS1L60A	60	1	560	DO-214AC	89K1576	0.80
STPS2L60	60	2	550	DO-41	89K1591	0.76
STPS2L60A	60	2	550	DO-214AC	89K1592	0.61
STPS3L60S	60	3	650	DO-214AB	89K1596	0.35
STPS20H100CT	100	20	710	3-TO-220AB	89K1593	2.10
STPS8H100D	100	8	710	2-TO-220AC	89K1605	2.00
STPS1H100A	100	1	620	D-PAK	89K1574	0.74
STPS2H100A	100	2	650	DO-214AC	89K1588	0.50
STPS40H100CW	100	20	610	TO-247	89K1602	3.61
STPS1150	150	1	820	2-DO-41	57P1607	0.46
STPS2150	150	2	820	2-DO-15	84M6312	0.46
STPS2150A	150	2	670	DO-214AC	89K1595	0.61
STPS3150RL	150	3	660	DO-201AD	89K1599	0.53

(83695)

TRENCH MOS BARRIER SCHOTTKY RECTIIERS

RoHS Compliant Available

VISHAY

Features:
- Trench MOS Schottky technology
- Low forward voltage drop, low power losses
- High efficiency operation

Specifications:
- $I_{F(AV)}$: 2 x 5A
- V_F at I_F = 5A: 0.65V
- $T_{J\ max}$: 175°C

Mfg. Part No.	$V_{RRM\ (Max)}$ (V)	$I_{F(AV)}$ (mA)	$I_{FSM\ (Max)}$ (mA)	$V_{F(Max)}$ (V)	Package	Stock No.	Price Each 1-9
DUAL HIGH-VOLTAGE TRENCH MOS BARRIER SCHOTTKY							
V60D45C-M3/I	45	60	320	640	TO-263AC	38X6011	3.99
V30D45C-M3/I	45	30	200	570	TO-263AC	38X5991	3.12
V30DL50C-M3/I	50	30	300	570	TO-263AC	38X5987	1.48
V10D60C-M3/I	60	10	100	700	TO-263AC	38X5979	1.52
V30D60CL-M3/I	60	30	200	610	TO-263AC	38X5995	2.99
V30D60C-M3/I	60	30	170	700	TO-263AC	38X5993	2.15
V10D100C-M3/I	100	10	100	750	TO-263AC	38X5975	1.52
V40D100C-M3/I	100	40	250	750	TO-263AC	38X6003	3.74
V60D100C-M3/I	100	60	320	810	TO-263AC	38X6007	3.99
V60D120C-M3/I	120	60	320	960	TO-263AC	38X6009	3.99
V40D120C-M3/I	120	40	250	890	TO-263AC	38X6005	3.74
V40DM120C-M3/I	120	40	250	890	TO-263AC	38X6001	3.24
V10D120C-M3/I	120	10	100	940	TO-263AC	38X5977	1.52
V20DM120C-M3/I	120	20	120	930	TO-263AC	38X5981	1.98
V30DM120C-M3/I	120	30	150	970	TO-263AC	38X5989	2.28
VB10170C-E3/4W	170	10	80	1.03	TO-263AB	46W3188	1.52
V40170C-M3/4W	170	40	200	1.2	TO-220AB	66W6261	2.99
V60170G-M3/4W	170	60	210	1.02	TO-220AB	46W3192	3.40
V60170PW-M3/4W	170	60	260	930	TO-3PW	46W3193	4.88
V80170PW-M3/4W	170	80	280	910	TO-3PW	66W6264	6.03
SURFACE MOUNT ESD CAPABILITY							
SE20AFG-M3/6A	400	2	35	1.1	DO-221AC	66W6226	0.21
SE30AFG-M3/6B	400	3	40	1.1	DO-221AC	66W6246	0.24
SE20AFJ-M3/6A	600	2	35	1.1	DO-221AC	66W6231	0.21
SE30AFJ-M3/6B	600	3	40	1.1	DO-221AC	66W6251	0.24

➤ CONTINUED ➤

TRENCH MOS BARRIER SCHOTTKY RECTIIERS (CONT.)

SURFACE MOUNT TRENCH MOS BARRIER SCHOTTKY

Mfg. Part No.	V_{RRM} (Max) (V)	$I_{F(AV)}$ (mA)	I_{FSM} (Max) (mA)	$V_{F(Max)}$ (V)	Package	Stock No.	Price Each 1-9
● VSSAF3L45-M3/6A	45	3	80	540	D0-221AC	66W6257	0.51
● V3PAL45HM3/I	45	3	80	540	D0-221BC	38X5983	0.35
● V4PAL45HM3/I	45	4	80	570	D0-221BC	38X5997	0.40
● V8PAL45HM3/I	45	8	120	570	D0-221BC	38X6013	0.73
● V8PAL50-M3/I	50	8	120	570	D0-221BC	38X6015	0.69
● V8PAN50-M3/I	50	8	120	560	D0-221BC	38X6017	0.68
● V4PAN50-M3/I	50	4	80	590	D0-221BC	38X5999	0.38
● V3PAN50-M3/I	50	3	80	540	D0-221BC	38X5985	0.34

(208207)

MBR SERIES SCHOTTKY RECTIFIERS

RoHS Compliant Available

ON Semiconductor

BULK PACKAGING

Mfg. Part No.	Vrrm (V)	If(AV) (A)	VF (V)	Ifsm (mA)	Package	Stock No.	Price Each 1-9
● MBR2515LG	15	25	380	150	T0-220AC	71J5256	2.82
● MBR735G	35	7.5	840	150	T0-220AC	98H0606	0.83
● MBR1035G	35	10	840	150	T0-220AC	45J0797	0.92
● MBR1635G	35	16	630	150	T0-220	26K3690	1.09
● MBR2535CTG	35	30	0.72	150	T0-220	98H0604	1.42
● MBR745G	45	7.5	840	150	T0-220AC	45J0808	0.79
● MBR1045G	45	10	840	150	T0-220AC	45J0798	0.96
● MBR1545CTG	45	15	0.84	150	T0-220	88H4682	0.95
● MBR1645G	45	16	630	150	T0-220	45J0800	1.14
● MBR2545CTG	45	30	0.82	150	T0-220	98H0605	1.20
● MBR3045WTG	45	30	720	200	T0-247	71J5258	4.08
● MBR6045WTG	45	60	750	500	T0-247	71J5260	4.96
● MBR1060G	60	10	800	150	T0-220AC	98H0600	1.04
● MBR10100G	100	10	800	150	T0-220AC	45J0796	1.09
● MBR20200CTG	200	20	1	150	T0-220	88H4685	1.78
● MBR40250G	250	40	970	150	T0-220AC	42K0020	2.12
● MBR40250TG	250	40	970	150	T0-220AB	42K0021	1.98

TAPE CUT

Mfg. Part No.	Vrrm (V)	If(AV) (A)	VF (V)	Ifsm (mA)	Package	Tape Cut Stock No.	Tape Cut Price Each 1-9
● MBR0520LT1G	20	0.5	385	5.5	SOD-123	48K7498	0.34
● MBR120VLSFT1G	20	1	340	45	SOD-123FL	10N9424	0.59
● MBR0530T1G	30	0.5	430	5.5	SOD-123	48K7499	0.34
● MBR0530T3G	30	0.5	430	5.5	SOD-123	41K9993	0.38
● MBR130LSFT1G	30	1	380	40	SOD-123FL	10N9425	0.57
● MBR130T1G	30	1	450	5.5	SOD-123	84K8740	0.51
● MBR130T3G	30	1	450	5.5	SOD-123	42K0004	0.49
● MBR0540T1G	40	0.5	610	5.5	SOD-123	83H7281	0.38
● MBR0540T3G	40	0.5	620	5.5	SOD-123	98H0599	0.40
● MBR140SFT1G	40	1	880	30	SOD-123FL	42K0005	0.51

(116797)

MBRx SERIES SCHOTTKY DIODES

RoHS Compliant Available

multicomp

Features:

- Low forward voltage
- Low switching noise
- High current capacity
- Guarantee reverse avalanche
- Guard-ring for stress protection
- Low power loss and high efficiency
- 175°C operating junction temp
- Low stored charge majority carrier conduction

Mfg. Part No.	V_{rrm} (V)	$I_{F(AV)}$ (A)	V_F (mV)	Package	Stock No.	Price Each 1-9
● MBR840	40	8	550	T0-220AC	17T4216	0.89
● MBR1040	40	10	550	T0-220AC	17T4201	1.03
● MBR1540	40	15	550	T0-220AC	17T4204	1.28
● MBR1640CT	40	16	550	T0-220AB	17T4207	1.03
● MBR2040CTL	40	20	550	T0-220AB	17T4211	1.18
● MBR3040CT	40	30	550	T0-220AB	17T4214	1.97
● MBR845	45	8	550	T0-220AC	17T4217	0.99
● MBR1045	45	10	840	T0-220AC	17T4202	1.08
● MBR1545	45	15	840	T0-220AB	17T4205	1.38
● MBR1645CT	45	16	550	T0-220AB	17T4208	1.08
● MBR2045CT	45	20	840	T0-220	17T4212	1.38
● MBRF3045CT	45	30	550	T0-220AB	17T4199	2.16

CONTINUED

MBRx SERIES SCHOTTKY DIODES (CONT.)

Mfg. Part No.	V_{rrm} (V)	$I_{F(AV)}$ (A)	V_F (mV)	Package	Stock No.	Price Each 1-9
● MBR3045CT	45	30	820	T0-220AB	17T4215	2.16
● MBR1060	60	10	950	T0-220AC	17T4203	1.18
● MBR2060CT	60	20	950	T0-220	17T4213	1.38
● MBR10100	100	10	850	T0-220AC	17T4200	1.34
● MBR16100CT	100	16	850	T0-220AB	17T4206	1.67
● MBR20100CT	100	20	850	T0-220AB	17T4197	1.55
● MBRF20100C	100	20	850	ITO-220AB	17T4209	1.48
● MBR20200CT	200	20	950	T0-220AB	17T4198	2.06
● MBRF20200C	200	20	1.23V	T0-220	17T4210	2.06

(195488)

MBRx SERIES SCHOTTKY RECTIFIERS

RoHS Compliant Available

VISHAY

Features:

- Plastic Package Flammability Rated UL 94V-0
- Metal Silicon Junction, Majority Carrier Conduction
- Low Power Loss, High-Efficiency
- Guardring For Overvoltage Protection
- For Use in Low Voltage, High-Frequency Inverters, Free Wheeling, and Polarity Protection Applications
- High-Temperature Soldering Guaranteed: 250°C/10 Seconds, 0.25″ (6.35mm) From Case

SINGLE ITO-220AC

Mfg. Part No.	$I_{F(AV)}$ (A)	V_{RWM} (V)	I_{FSM} (A)	V_F (mV)	Stock No.	Price Each 1-9
● MBRF10H100-E3/45	10	100	250	880	65K1730	1.28
● MBRF1635-E3/45	16	35	150	630	65K1740	1.19
● MBRF1645-E3/45	16	45	150	630	65K1741	1.27

DUAL COMMON CATHODE ITO-220AB

● MBRF10H100CT-E3/45	10	100	150	850	65K1731	1.38
● MBRF2045CT-E3/45	20	45	150	840	65K1746	1.35
● MBRF20H100CT-E3/45	20	100	250	880	65K1742	1.85
● MBRF2545CT-E3/45	30	45	150	820	65K1751	1.67

TO-220AB

● MBRF2090CT-E3/45	20	90	150	800	65K1749	1.98

TO-247AD

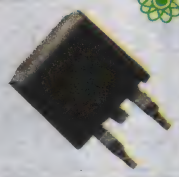
● MBR3060PT-E3/45	30	60	200	750	65K1773	2.46
● MBR4045PT-E3/45	40	45	400	800	65K1775	1.61
● MBR4060PT-E3/45	40	60	400	720	65K1777	1.75

(70372)

SCHOTTKY DIODES—DISCRETE

RoHS Compliant Available

VISHAY



15V

Mfg. Part No.	$I_{F(AV)}$ (A)	V_{FM} (mV)	Package	Stock No.	Price Each 1-9
● VS-10BQ015TRPBF	1	340	SMB	63J7991	0.27
● VS-10BQ015PBF	1	340	SMB	63J7990	0.28
● VS-20L15TPBF	20	250	T0-220AC	63J8026	2.22
● VS-STPS20L15DPBF	20	410	T0-220AC	19K8485	1.22
● VS-40L15CTSPBF	40	410	D2-PAK	63J8073	2.59

20V

● VS-MBRA120TRPBF	1	450	SMA	61J7181	0.18
● VS-1N5817	1	450	D0-204AL	03H7374	0.12
● VS-MBRS320TRPBF	3	450	SMC	19K8471	0.70
● VS-47CTQ020SPBF	40	450	D2-PAK	63J8076	4.55
● VS-80CPQ020PBF	80	460	T0-247AC	19K8542	3.49

30V

● VS-1N5818	1	550	D0-204AL	30C0436	0.13
● VS-MBRS130LTRPBF	1	300	SMB	19K8467	0.31
● VS-STPS1L30UPBF	1	300	SMB	19K8484	0.32
● VS-MBRS130TRPBF	1	420	SMB	19K8468	0.26
● VS-10BQ030PBF	1	420	SMB	19K8486	0.28
● VS-11DQ03	1.1	550	D0-204AL	09F5060	0.33
● VS-20BQ030PBF	2	470	SMB	63J8015	0.31
● VS-30WQ03FNPBF	3.5	450	D-PAK	63J8062	0.71
● VS-50WQ03FNPBF	5.5	460	D-PAK	73K9900	0.84
● VS-6CWQ03FNPBF	7	450	D-PAK	73K9956	0.95

CONTINUED

SCHOTTKY DIODES—DISCRETE (CONT.)

30V

Mfg. Part No.	$I_{F(AV)}$ (A)	V_{FM} (mV)	Package	Stock No.	Price Each 1-9
VS-12CWQ03FNPBF	12	470	D-PAK	73K9762	0.96
VS-32CTQ030SPBF	30	490	D2-PAK	31K5876	3.76
VS-32CTQ030PBF	30	490	TO-220AB	63J8065	2.62
VS-42CTQ030PBF	40	480	TO-220AB	19K8527	3.62
VS-42CTQ030SPBF	40	480	D2-PAK	63J8074	3.40
VS-72CPQ030PBF	70	510	TO-247AC	19K8537	4.17

35V

VS-MBRB735PBF	7.5	840	D2-PAK	63J7949	0.81

40V

VS-MBRA140TRPBF	1	490	SMA	63J7934	0.19
VS-10BQ040PBF	1	530	SMB	63J7992	0.24
VS-10BQ040TRPBF	1	530	SMB	63J7993	0.24
VS-MBRS140TRPBF	1	530	SMB	19K8469	0.20
VS-10MQ040NPBF	1.5	540	SMA	63J7998	0.68
VS-21DQ04	2	550	DO-204AL	30C0517	0.35
VS-15MQ040NPBF	2.1	420	SMA	19K8499	1.15
VS-15MQ040NTRPBF	2.1	420	SMA	19K8500	1.15
VS-MBRS340TRPBF	3	430	SMC	73J7305	0.44
VS-30BQ040PBF	3	510	SMC	63J8034	0.55
VS-MBRD340PBF	3	600	D-PAK	73K8838	0.53
VS-31DQ04	3.3	550	C-16	98F8275	0.62
VS-6CWQ04FNPBF	7	530	D-PAK	73K9960	0.79

45V

Mfg. Part No.	$I_{F(AV)}$ (A)	V_{FM} (V)	Package	Stock No.	Price Each 1-9
VS-6TQ045PBF	6	570	TO-220AC	63J8087	3.25
VS-MBR745PBF	7.5	840	TO-220AC	63J7971	0.74
VS-MBRB745PBF	7.5	840	D2-PAK	63J7952	1.41
VS-10TQ045PBF	10	570	TO-220AC	19K8493	1.61
VS-STPS1045BPBF	10	570	D-PAK	73K9494	1.31
VS-10WQ045FNPBF	10	630	D-PAK	73K9748	2.40
VS-MBR1045PBF	10	840	TO-220AC	63J7955	0.75
VS-MBRB1045PBF	10	840	D2-PAK	41K8199	2.16
VS-12CTQ045PBF	12	570	TO-220AB	63J8002	2.01
VS-12TQ045SPBF	15	560	D2-PAK	41K8500	2.35
VS-MBRB1545CTPBF	15	840	D2-PAK	63J7936	1.31
VS-MBR1645PBF	16	630	TO-220AC	63J7958	1.34
VS-MBRB1645PBF	16	630	D2-PAK	63J7939	1.83
VS-18TQ045PBF	18	600	TO-220AC	19K8503	2.96
VS-20TQ045SPBF	20	570	D2-PAK	63J8028	3.72
VS-20TQ045PBF	20	570	TO-220AC	63J8027	2.88
VS-20CTQ045PBF	20	640	TO-220AB	63J8024	2.09
VS-20CTQ045SPBF	20	640	D2-PAK	58K7812	2.28
VS-25CTQ045SPBF	30	560	D2-PAK	63J8032	3.01
VS-30CTQ045SPBF	30	620	D2-PAK	63J8051	2.09
VS-30CTQ045PBF	30	620	TO-220AB	63J8050	2.95
VS-MBRB3045CTPBF	30	760	D2-PAK	63J7946	2.89
VS-MBR3045WTPBF	30	760	TO-247AC	19K8476	1.50
VS-40CPQ045PBF	40	490	TO-247AC	19K8519	5.42
VS-40CTQ045PBF	40	530	TO-220AB	19K8523	2.76
VS-40CTQ045SPBF	40	530	D2-PAK	63J8068	2.63
VS-MBRB4045CTPBF	40	780	D2-PAK	63J7948	2.56
VS-MBR6045WTPBF	60	690	TO-247AC	19K8479	2.25

50V

VS-MBRD650CTPBF	6	900	D-PAK	73K8842	0.59

60V

VS-10BQ060PBF	1	570	SMB	63J7994	0.26
VS-10BQ060TRPBF	1	570	SMB	63J7995	0.27
VS-10MQ060NPBF	1.5	710	SMA	19K8488	0.58
VS-10MQ060NTRPBF	1.5	630	SMA	19K8489	0.58
VS-21DQ06	2	600	DO-204AL	30C0519	0.26
VS-30BQ060PBF	3	580	SMC	63J8036	0.53
VS-MBRS360TRPBF	3	610	SMC	19K8472	0.67
VS-31DQ06	3.3	580	C-16	48F1219	0.94
VS-30WQ06FNPBF	3.5	610	D-PAK	73K9872	0.93
VS-50WQ06FNPBF	5.5	570	D-PAK	73K9907	0.88
VS-MBRD660CTPBF	6	900	D-PAK	73K8846	0.62
VS-6CWQ06FNPBF	7	610	D-PAK	73K9964	0.73
VS-12CWQ06FNPBF	12	610	D-PAK	73K9770	1.01
VS-15TQ060PBF	15	620	TO-220AC	63J8013	2.82
VS-15TQ060SPBF	15	620	D2-PAK	41K8523	4.02
VS-30CPQ060PBF	30	600	TO-247AC	19K8510	3.35

➤CONTINUED➤

SCHOTTKY DIODES—DISCRETE (CONT.)

60V

Mfg. Part No.	$I_{F(AV)}$ (A)	V_{FM} (V)	Package	Stock No.	Price Each 1-9
VS-30CTQ060SPBF	30	620	D2-PAK	63J8052	4.73
VS-40CPQ060PBF	40	530	TO-247AC	19K8521	2.77
VS-48CTQ060PBF	40	750	TO-220AB	63J8078	2.61

80V

VS-8TQ080SPBF	8	720	D2-PAK	63J8109	2.46
VS-16CTQ080SPBF	16	720	D2-PAK	41K8536	1.87
VS-MBRB2080CTPBF	20	950	D2-PAK	63J7944	3.98

90V

VS-11DQ09	1.1	850	DO-204AL	09F5064	0.49

100V

VS-MBRS1100TRPBF	1	620	SMB	63J7953	0.21
VS-10BQ100PBF	1	780	SMB	63J7996	0.32
VS-10BQ100TRPBF	1	780	SMB	63J7997	0.64
VS-10MQ100NPBF	1.5	780	SMA	19K8490	0.61
VS-10MQ100NTRPBF	1.5	780	SMA	63J8000	0.60
VS-31DQ10	3.3	850	C-16	48F1220	0.86
VS-30WQ10FNPBF	3.5	810	D-PAK	73K9875	0.87
VS-50WQ10FNPBF	5.5	770	D-PAK	73K9911	1.09
VS-6CWQ10FNPBF	7	810	D-PAK	73K9967	0.77
VS-12CWQ10FNPBF	12	800	D-PAK	73K9774	0.93
VS-16CTQ100PBF	16	720	TO-220AB	19K8501	1.80
VS-16CTQ100SPBF	16	720	D2-PAK	41K8545	3.26
VS-MBR20100CT-1PBF	20	850	TO-262	63J7960	1.56
VS-MBRB20100CTPBF	20	950	D2-PAK	41K8207	1.54
VS-30CPQ100PBF	30	860	TO-247AC	19K8513	2.74
VS-30CTQ100SPBF	30	860	D2-PAK	63J8057	1.61
VS-40CPQ100PBF	40	770	TO-247AC	19K8522	4.61
VS-43CTQ100PBF	40	810	TO-220AB	19K8528	3.08
VS-43CTQ100SPBF	40	810	D2-PAK	41K8666	4.10
VS-63CTQ100PBF	60	820	TO-220AB	63J8093	4.15

150V

VS-10CTQ150PBF	10	930	TO-220AB	19K8487	1.78
VS-20CTQ150PBF	20	830	TO-220AB	63J8025	1.67
VS-40CTQ150PBF	40	930	TO-220AB	63J8071	2.28

(70274)

HIGH VOLTAGE TRENCH MOS SCHOTTKY RECTIFIER

RoHS Compliant Available

VISHAY.

Mfg. Part No.	I_{FAVG} (A)	I_{fsm} Max (A)	V_{FM} (V)	Package	Stock No.	Price Each 1-9
SA2M-E3/61T	2	55	1.1	DO-214AC	05W6911	0.13
SA2D-E3/61T	2	55	1.1	DO-214AC	05W6910	0.12
V30100S-E3/4W	30	250	910	TO-220AB	24R8062	1.46
VB30100S-E3/8W	30	250	910	TO-263AB	05W7009	1.48
VB20100S-E3/8W	20	250	900	TO-263AB	05W7008	1.35

(210047)

HIGH VOLTAGE TRENCH MOS SCHOTTKY RECTIFIER

RoHS Compliant Available

VISHAY.

COMMON CATHODE

Mfg. Part No.	I_{FAVG} (A)	I_{fsm} Max (A)	V_{FM} (V)	Package	Stock No.	Price Each 1-9
V60120C-E3/4W	60	300	950	TO-220AB	24R8067	2.29
V60100C-E3/4W	60	320	790	TO-220AB	24R8066	2.37

COMMON ANODE

V8P10-M3/86A	8	150	680	TO-277A	05W7019	0.64
V12P10-M3/86A	12	200	700	TO-277A	05W7018	0.80
V10P10-M3/86A	10	180	680	TO-277A	05W7017	0.77
V30100S-E3/4W	30	250	910	TO-220AB	24R8062	1.46
V10P10HM3/86A	10	180	680	TO-277A	14R9664	0.75

(210075)

TBU VOLTAGE CONTROL DEVICES

RoHS Compliant Available

BOURNS®

Features:
- Extremely high speed performance
- Blocks high voltages and currents
- Simple, superior circuit protection
- Minimal PCB area

Mfg. Part No.	V_{Clamp} (V)	Output Current (mA)	Peak Surge Current (A)	Response Time (µs)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● P40-G240-WH	40	480	240	0.2	09R9929	1.34
● C650-180-WH	650	360	180	1	09R9925	2.06
● P850-G120-WH	850	200	200	1	09R9934	1.69
● C850-260-WH	850	520	260	1	09R9928	1.91

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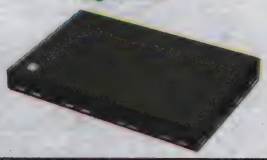
TBU™ HIGH SPEED PROTECTORS

RoHS Compliant Available

BOURNS®



PL SERIES

Mfg. Part No.	Operating Voltage (V)	Gate Trigger Current Max, Igt (mA)	Voltage Rating (Vrms)	Package	Tape Cut Stock No.	Tape Cut Price Each 1-9
● TBU-PL050-100-WH	-20	200	300	DFN	78R6337	1.28
● TBU-PL060-100-WH	-20	200	350	DFN	78R6341	1.44
● TBU-PL060-200-WH	-20	400	350	DFN	78R6343	1.44
● TBU-PL085-100-WH	-20	200	425	DFN	78R6345	1.69

CA SERIES

Mfg. Part No.	Operating Voltage (V)	Gate Trigger Current Max, Igt (mA)	Voltage Rating (Vrms)	Package	Tape Cut Stock No.	Tape Cut Price Each 1-9
● TBU-CA025-100-WH	250	100	100	DFN	83R7160	1.75
● TBU-CA025-300-WH	250	300	100	DFN	83R7162	1.75
● TBU-CA025-500-WH	250	500	100	DFN	83R7164	1.89
● TBU-CA040-100-WH	400	100	200	DFN	83R7166	1.75
● TBU-CA040-300-WH	400	300	200	DFN	83R7168	1.75
● TBU-CA040-500-WH	400	500	200	DFN	83R7170	1.75
● TBU-CA050-300-WH	500	300	250	DFN	83R7174	1.75
● TBU-CA050-500-WH	500	500	250	DFN	83R7176	1.75
● TBU-CA065-100-WH	650	100	300	DFN	83R7178	1.75
● TBU-CA065-300-WH	650	300	300	DFN	83R7180	1.75
● TBU-CA065-500-WH	650	500	300	DFN	83R7182	1.75
● TBU-CA085-100-WH	850	100	425	DFN	83R7184	1.75
● TBU-CA085-300-WH	850	300	425	DFN	83R7186	1.75
● TBU-CA085-500-WH	850	500	425	DFN	83R7188	1.75

CX SERIES

● TBU-CX025-VTC-WH	250	750	100	DFN	86R9344	2.07
● TBU-CX040-VTC-WH	400	750	200	DFN	86R9346	2.07
● TBU-CX065-VTC-WH	650	750	300	DFN	86R9351	2.07

DT SERIES

● TBU-DT065-100-WH	650	200	300	DFN	22T0320	1.91
● TBU-DT065-200-WH	650	400	300	DFN	22T0322	1.91
● TBU-DT065-300-WH	650	600	300	DFN	22T0324	1.91
● TBU-DT085-100-WH	850	200	850	DFN	22T0326	1.91
● TBU-DT085-300-WH	850	600	850	DFN	22T0330	1.91

(189992)

PCB FABRICATION & ASSEMBLY

Quality US-based manufacturers—as fast as 48-hour turnaround!

(197415)

SILICON CARBIDE THYRISTORS

GeneSiC™ SEMICONDUCTOR

Featrues:
- 6500 V Asymmetric SiC NPNP Thyristor
- 150 °C operating temperature
- Robust compact fully soldered package
- SOT-227 (ISOTOP) base plate form factor
- Fast turn on characteristics
- Lowest in class $Q_{rr}/I_{T(AVM)}$

Applications:
- Grid Tied Solar Inverters
- Wind Power Inverters
- HVDC Power Conversion
- Utility Scale Power Conversion
- Trigger Circuits/Ignition Circuits

Mfg. Part No.	It_{Av} (A)	Q_{rr} (µC)	Holding Current Max (mA)	I_{gt} Max (mA)	Pkg.	Stock No.	Price Each
● GA040TH65	40	1.8	780	30	SOT-227	06W2373	1584.00
● GA060TH65	60	2.95	...	100	SOT-227	06W2374	1848.00
● GA080TH65	80	4.2	...	100	SOT-227	06W2375	2376.00

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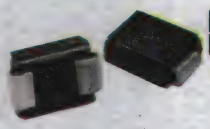
SIDACTOR DEVICES



Littelfuse® Expertise Applied | Answers Delivered

Specifications
- Package: DO-214AA
- On-state Voltage: 4V
- On-state Forward Voltage: 0V
- Leakage Current: 5µA
- Switching Current: 800mA

Littelfuse DO-214AA SIDACtor solid state protection devices protect telecommunications equipment such as modems, line cards, fax machines, and other CPE. SIDACtor devices are used to enable equipment to meet various regulatory requirements including GR 1089, ITU K.20, K.21 and K.45, IEC 60950, UL 60950, and TIA/EIA-IS-968 (formerly known as FCC Part 68).

Suffix	I_{PP} 2 x 10µs (A)	I_{PP} 8 x 20µs (A)	I_{PP} 10 x 160µs (A)	I_{PP} 10 x 560µs (A)	I_{PP} 10 x 1000µs (A)	I_{TSM} 60Hz (A)	di/dt A/µs
A	150	150	90	50	45	20	500
B	250	250	150	100	80	30	500
C	500	400	200	150	100	50	500
D	1000	800	400	300	200	50	1000

Mfg. Part No.	V_{DRM} (V)	V_S (V)	I_H (mA)	C_O Max. (pF)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● P0300SALRP	25	40	50	140	26K6868	1.25
● P0640SCLRP	58	77	150	155	71J0893	1.52
● P0720SCLRP	65	88	150	150	71J0917	1.42
● P1500SCLRP	140	180	150	95	71J1033	1.52
● P2600SALRP	220	300	150	35	71J1177	1.21
● P3100SBLRP	275	350	150	45	71J1224	1.36
● P4500SCMCLRP	400	530	150	65	66W7654	1.67
● P4500SCLRP	400	...	...	65	66W7653	1.52

(82336)

SCR THYRISTORS - LESS THAN 20A IT(RMS)

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

Features:
- Electrically-isolated package
- High voltage capability — 200V to 1000V
- High surge capability — up to 950A
- Glass-passivated chip
- Tape on reel versions available

The Teccor line of thyristor SCR semiconductors are half-wave, unidirectional, gate-controlled rectifiers which complement Teccor's line of sensitive SCRs. Teccor offers devices with ratings of 1A to 70A and 200V to 1000V, with gate sensitivities from 10mA to 50mA. If gate currents in the 12µA to 500µA ranges are required, see "Sensitive SCRs" section of this catalog. Three packages are offered in electrically isolated construction where the case or tab is internally isolated to allow the use of low-cost assembly and convenient packaging techniques.

The Teccor line of SCRs features glass-passivated junctions to help ensure long-term reliability and parameter stability. Teccor's glass offers a rugged, reliable barrier against junction contamination. Variations of devices covered in this data sheet are available for custom design applications. Consult for more information.

Mfg. Part No.	I_T (A) $I_{T(RMS)}$ MAX	V_{DRM} (V) MIN	I_{GT} (mA) MAX	I_H Max (A)	I_{TSM} @ 50Hz (A)	No. of Pins	Pkg.	Stock No.	Price Each 1-9
● S401E	1	400	10	30	25	3	TO-92	60K6978	0.84
● S4006L	6	400	15	30	83	3	TO-220	12J3201	1.38
● S6006L	6	600	15	30	83	3	TO-220	12J3326	1.48
● S8006L	6	800	15	30	83	3	TO-220	12J3381	1.59
● S4006RTP	6	400	15	30	83	3	TO-220	64W7467	1.40
● S4008L	8	400	15	30	83	3	TO-220	12J3213	1.63
● S6008L	8	600	15	30	83	3	TO-220	12J3338	1.72
● S8008L	8	800	15	30	83	3	TO-220	12J3384	1.76
● S4008R	8	400	15	30	83	3	TO-220	12J3216	1.47
● S6008R	8	600	15	30	83	3	TO-220	12J3341	1.52
● S4010L	10	400	15	30	83	3	TO-220	12J3227	1.82
● S6010L	10	600	15	30	83	3	TO-220	12J3352	1.92
● S6010R	10	600	15	30	83	3	TO-220	12J3355	1.65
● S4012R	12	400	20	40	100	3	TO-220	12J3235	1.62
● S4015L	15	400	30	40	188	3	TO-220	12J3237	1.94

➤CONTINUED➤

SCR THYRISTORS - LESS THAN 20A IT(RMS) (CONT.)

Mfg. Part No.	I_T (A) $I_{T(RMS)}$ MAX	V_{DRM} (V) MIN	I_{GT} (mA) MAX	I_H Max (A)	I_{TSM} @ 50Hz (A)	No. of Pins	Pkg.	Stock No.	Price Each 1-9
S6015L	15	600	30	40	188	3	TO-220	12J3362	2.08
S8015L	15	800	30	40	188	3	TO-220	12J3394	2.10

(82334)

SIDACTOR LCAS PROTECTION THYRISTORS

RoHS Compliant Available

Littelfuse — Expertise Applied | Answers Delivered

Features:
- Low voltage overshoot
- Low on-state voltage
- Does not degrade surge capability after multiple surge events within limit.
- Fails short circuit when surged in excess of ratings
- LCAS specific tip and ring thresholds

These SIDACtor® devices are designed to protect LCAS (Line Circuit Access Switch) devices from damaging overvoltage transients.
It provides a specialized asymmetrical overvoltage protection solution that enables equipment to comply with various global regulatory standards.

Mfg. Part No.	V_{DRM} (V)	IPP (A)	Package	Tape Cut Stock No.	Price Each 1-9
A0709SCLRP	65	500	DO-214AA	66W7645	1.75
A0710SCLRP	65	500	DO-214AA	66W7646	1.75

(209882)

Q2L SERIES SIDACtor PROTECTION THYRISTORS

RoHS Compliant Available

Littelfuse — Expertise Applied | Answers Delivered

Features:
- Low Profile
- Small Footprint
- Low capacitance
- Low voltage overshoot
- Low on-state voltage
- Does not degrade with use
- Fails short circuit when surged in excess of ratings

Q2L Series 3.3x3.3 QFN are low capacitance SIDACtor® devices designed to protect high density broadband equipment from damaging overvoltage transients.

Mfg. Part No.	V_{DRM} (V)	IPP (A)	Package	Tape Cut Stock No.	Price Each 1-9
P4500Q22CLRP	400	500	QFN	66W7652	1.74

(209927)

SCR THYRISTORS - 20A IT(RMS) AND HIGHER

RoHS Compliant Available

Littelfuse — Expertise Applied | Answers Delivered

Features:
- Electrically-isolated package
- High voltage capability — 400V to 1000V
- High surge capability — up to 950A
- Glass-passivated chip
- * = Tape Cut, Tape on reel versions available

The Teccor line of thyristor SCR semiconductors are half-wave, unidirectional, gate-controlled rectifiers which complement Teccor's line of sensitive SCRs. Teccor offers devices with ratings of 1A to 70A and 200V to 1000V, with gate sensitivities from 10mA to 50mA. If gate currents in the 12µA to 500µA ranges are required, see "Sensitive SCRs" section of this catalog. Three packages are offered in electrically isolated construction where the case or tab is internally isolated to allow the use of low-cost assembly and convenient packaging techniques.
The Teccor line of SCRs features glass-passivated junctions to help ensure long-term reliability and parameter stability. Teccor's glass offers a rugged, reliable barrier against junction contamination. Variations of devices covered in this data sheet are available for custom design applications. Consult for more information.

Mfg. Part No.	IT(rms) (A)	V_{DRM} (V)	I_{GT} Max. (mA)	I_H Max (A)	I_{TSM} @ 50Hz (A)	Pkg.	Stock No.	Price Each 1-9
S6020L	20	600	30	40	255	TO-220	12J3365	2.37
S8020L	20	800	30	40	255	TO-220	12J3397	2.52
S6025L	25	600	35	50	300	TO-220	12J3366	2.77
S4025L	25	400	35	50	350	TO-220	12J3241	2.58
S8025L	25	800	35	50	300	TO-220	12J3398	2.90
S8025LTP	25	800	35	50	300	TO-220	64W7475	2.85
S8025R	25	800	35	50	300	TO-220	12J3400	2.51
SK025R	25	1000	35	50	300	TO-220	12J3003	2.65
S4040R	40	400	40	60	520	TO-220	12J3247	3.41
S8040R	40	800	40	60	430	TO-220	12J3404	3.88
SK040R	40	1000	40	60	430	TO-220	12J3006	4.10
S6055R	55	600	40	60	550	TO-220	12J3375	4.05
S8055R	55	800	40	60	550	TO-220	12J3407	4.06
SK055R	55	1000	40	60	550	TO-220	12J3009	4.28
S4065JTP	65	400	50	80	800	TO-218X	72R7043	8.40
S4065KTP	65	400	50	80	800	TO-218AC	72R7044	7.84

(165122)

SCRs AND TRIACs

RoHS Compliant Available

NTE ELECTRONICS, INC.

SCRs

Mfg. Part No.	V_{RM}	I_{RM}	Package	Stock No.	Price Each 1-99
NTE5404	200	0.8	TO-92	21M5170	1.58
NTE5455	200	4.0	TO-202	29C4688	1.21
NTE5554	400	25	TO-220	31C4835	6.79
NTE5556	600	25	TO-220	47M2258	8.55
NTE5568	600	80	TO-65	30C8994	44.77
NTE5569	1200	80	TO-65	06M7459	75.17
TRIACs					
NTE56010	800	15	3-TO-220	42M2422	7.27
NTE56026	600	40	TO-48	29C4705	29.81
NTE5608	400	8	TO-220	29C4707	3.59
NTE5679	600	40	TO-3	06M7465	32.05

*Fullpack; +Isol.
(70307)

THYRISTOR POWERBLOCK MODULES

RoHS Compliant Available

NTE ELECTRONICS, INC.

Features
- Industry standard package and circuits
- Power control building blocks
- Max. required gate current to trigger: 150mA
- Max. required gate voltage to trigger: 3.0V

Mfg. Part No.	IT_{AV} (A)	VRRM (V)	V_F (V)	I_{TSM} (A)	Stock No.	Price 1-24
NTE5710	55	1.4	1.4	1500	31C4971	94.46
NTE5720	90	1.4	1.4	1950	31C4976	135.60

(79294)

SILICON CONTROLLED RECTIFIERS (SCRs)

RoHS Compliant Available

ON Semiconductor

Designed for temperature, light and speed control applications as well as half-wave AC control applications including relay and lamp drivers, small motor controls, gate drivers for larger thyristors, and sensing and detection circuits.

Mfg. Part No.	$I_{T(RMS)}$ Max. (A)	I_{TSM} Max. (A)	V_{DRM} Min. (V)	I_{GT} Max. (mA)2	Package	Stock No.	Price Each 1-9
C106BG*	4	20	200	0.2	TO-225AA	41K9729	0.69
C106DG*	4	20	400	0.2	TO-225AA	26K3582	0.69
C106D1G*	4	20	400	0.2	TO-225AA	98H0549	0.69
C106MG*	4	20	600	0.2	TO-225AA	45J0658	0.69
MCR106-6G*	4	25	400	0.2	TO-225AA	45J0818	0.67
MCR106-8G*	4	25	600	0.2	TO-225AA	26K3696	0.68
2N5060G*	0.8	10	30	0.2	TO-92	26K5287	0.58
2N5061G*	0.8	10	100	0.2	TO-92	45J2487	0.55
2N5062G*	0.8	10	100	0.2	TO-92	26K5289	0.55
MCR100-3G	0.8	10	100	0.2	TO-92	26K3692	0.48
MCR100-6G*	0.8	10	400	0.2	TO-92	45J0815	0.48
MCR100-8G*	0.8	10	600	0.2	TO-92	26K3695	0.48
MCR100-8RLG*	0.8	10	600	0.2	TO-92	45J0817	0.53
2N5064G	0.8	10	200	0.2	TO-92	26K5290	0.59
MCR72-6G	8	100	400	0.2	TO-220	83H7285	1.35
MCR72-6TG	8	100	400	0.2	TO-220	83H7286	1.30
MCR22-6G*	1.5	15	400	0.2	TO-92	26K3702	0.41
MCR22-6RLRPG*	1.5	15	400	0.2	TO-92	45J0823	0.41
C122F1G	8	90	50	25	TO-220	26K3584	1.30
MCR72-3G	8	100	100	0.2	TO-220	71J5366	1.37
MCR310-10G	10	100	800	0.2	TO-220	42K0033	1.35
MCR69-3G	25	300	100	30	TO-220	45J0826	1.55
MCR218-4G	8	80	200	25	TO-220AB	26K3700	1.30
MCR8SDG	8	80	400	0.2	TO-220AB	26K3711	1.00
MCR218-6G	8	80	400	25	TO-220AB	26K3701	1.30
MCR8NG	8	80	800	15	TO-220AB	26K3710	1.10
2N6394G	12	100	50	30	TO-220AB	45J2505	1.37
2N6395G	12	100	100	30	TO-220AB	26K5320	1.37
2N6397G	12	100	400	30	TO-220AB	26K5321	1.30
2N6397TG	12	100	400	30	TO-220AB	42K3178	1.30
MCR12MG	12	100	600	20	TO-220AB	26K3697	0.95
2N6399G	12	100	800	30	TO-220AB	72J1871	1.35
2N6400G	12	160	50	30	TO-220AB	42K3179	1.50
2N6401G	12	160	100	30	TO-220AB	72J1872	1.58
2N6402G	12	160	200	30	TO-220AB	42K3180	1.50
2N6403G	12	160	400	30	TO-220AB	26K5322	1.59
2N6404G	12	160	600	30	TO-220AB	42K3181	1.50
2N6405G	12	160	800	30	TO-220AB	42K3182	1.56
2N6504G	25	300	50	40	TO-220AB	45J2508	1.58

CONTINUED

SILICON CONTROLLED RECTIFIERS (SCRs) (CONT.)

Mfg. Part No.	$I_{T(RMS)}$ Max. (A)	I_{TSM} Max. (A)	V_{DRM} Min. (V)	I_{GT} Max. (mA)2	Package	Stock No.	Price Each 1-9
● 2N6505G	25	300	100	40	TO-220AB	26K5326	1.58
● 2N6507G	25	300	400	40	TO-220AB	26K5327	1.58
● 2N6508G	25	300	600	40	TO-220AB	45J2509	1.56
● 2N6509G	25	300	800	40	TO-220AB	42K3186	1.56
● 2N6509TG	25	300	800	40	TO-220AB	42K3187	1.56
● MCR12DG	12	100	400	20	TO-220AB	45J0820	1.00
● MCR08MT1G	0.8	8	200	0.2	SOT-223	88H4690	0.56
● MCR08BT1G	0.8	10	200	0.2	SOT-223	45J0814	0.54
● MCR8DCMT4G	8	80	600	15	DPAK	11J1347	0.94
● MCR12NG	12	100	800	20	TO-220AB	26K3698	1.05
● MCR25NG	25	300	800	30	TO-220AB	26K3705	1.71
● MCR12DCMT4G	12	100	600	0.2	DPAK	45J0819	1.06
● MCR12DSMT4G	12	100	600	0.2	DPAK	45J0821	1.02
● MCR12DSNT4G	12	100	800	0.2	DPAK	42K0027	1.05
● MCR25DG	25	300	400	30	TO-220AB	42K0032	1.62
● MCR16NG	12	150	400	20	TO-220AB	26K3699	1.25
● MCR68-2G	12	100	50	30	TO-220	71J5364	1.30
● MCR12LMG		100	600	8	TO-220AB	71J5363	1.55
● MCR72-8G*	8	100	600	0.2	TO-220AB	71J5367	1.30
● MCR69-2G	25	300	50	30	TO-220	45J0825	1.63

* Sensitive gate
(9959)

SEMIPACK® THYRISTOR/ DIODE MODULES

RoHS Compliant Available

SEMIKRON innovation+service

Fig. 1

Fig. 2

Fig. 3

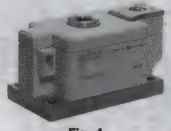
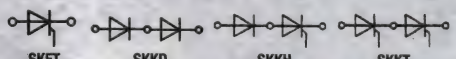


Fig. 4

Fig. 5



SKET SKKD SKKH SKKT

SKET series single thyristor; **SKKD series** two diodes; **SKKH series**, thyristor (cathode side) + diode; **SKKT series**, two thyristors. dv/dt grade: 500V/µs (mfg. part no. suffix **D**); 1000V/µs (mfg. part no. suffix **E**). Applications: DC motor and temperature control, light dimming, and rectifiers for AC/AC converters and transistorized AC motor controllers.

Mfg. Part No.	V_{RRM} (V)	I_{FRMS} (A)	I_{FAV} sin 180° (A)	I_{FSM} @ 25°C (A)	T_{vj} Max. (°C)	Fig.	Stock No.	Price Each 1-2
● SKKD 26/16	1600	60	31	550	125	1	91H1671	60.99
● SKKD 46/16	1600	90	45	700	125	1	64K2276	64.44
● SKKD81/16	1600	140	80	2000	125	1	88K1986	74.27
● SKKD 100/16	1600	175	100	2500	125	1	63K6161	89.30
● SKKD 162/16	1600	310	195	6000	135	2	63K6163	134.44
● SKKT 42/16E	1600	75	40	1000	125	1	88K1988	52.21
● SKKT 57/16 E	1600	95	55	1500	125	1	88K1989	49.57
● SKKT 92/16E	1600	150	95	2000	125	1	83F4930	53.30
● SKKT 106/16E	1600	180	106	2250	130	1	83F4932	57.16
● SKKT 132/16E	1600	220	130	4700	125	2	67K0921	95.86
● SKKT162/16E	1600	250	160	400	125	2	01H8025	96.68
● SKKT 250/16E	1600	420	250	9000	130	3	63K6168	248.73
● SKKH 57/16 E	1600	95	55	1500	125	1	63K6166	50.96
● SKKH 92/16E	1600	150	95	2000	125	1	88K1987	94.70
● SKKH 106/16E	1600	180	106	2250	130	1	63K6164	64.33
● SKKH 162/16 E	1600	250	160	5400	125	2	64K2277	106.23
● SKKH 250/16 E	1600	420	250	9000	130	3	63K6165	355.64
● SKMD 40F04	400	110	37	1.1	125	1	63K6178	239.39

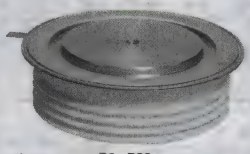
(28580)

HERMETIC SEALED THYRISTORS

RoHS Compliant Available

SEMIKRON innovation+service

B2...B3



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Mfg. Part No.	V_{RRM} (V)	I_{TAV} @ T sin 180° (A)	(°C)	I_{TSM} (A)	R_{thjc} sin 180° °C/W	Package	Stock No.	Price Each 1-2
● SKT 50/16 E	1600	50	85	1050	0,60	B3	88K1236	23.92
● SKT551/16E	1600	550	85	9000	0,047	B11	88K1239	153.86
● SKT760/16E	1600	760	80	15000	0,040	B10	88K1996	471.59

(80401)

50RIA SERIES SCR THYRISTORS

RoHS Compliant Available

SOLID·STATE

SPECIFICATIONS

- $I_{T(RMS)}$: 80A
- $I_{T(AV)}$: 50A
- I_{TSM}: 1200A (50Hz)
- I_{GT}: 100mA
- V_{GT}: 2.5V
- Operating temperature: -40° to 125°C
- Standard TO-208AC (TO-65) package

50RIA series of medium power thyristors is ideal for general-purpose phase control applications in converters, lighting circuits, battery chargers, regulated power supplies, and temperature and speed control circuits.

Mfg. Part No.	V_{RRM} or V_{DRM} (Max.) (V)*	V_{RMS} (Max.) (V)**	Stock No.	Price Each 1-9
● 50RIA20	200	300	07R9709	16.78
● 50RIA40	400	500	07R9710	17.00
● 50RIA60	600	700	07R9711	16.57
● 50RIA80	800	900	07R9712	17.00
● 50RIA120	1.2	1300	07R9706	17.00

*T_c= -40° to 125°C; **T_j= -25° to 125°C
(148784)

2N6 / 2N2 SERIES SCR THYRISTORS

RoHS Compliant Available

SOLID·STATE

2N6 series of reverse blocking triode thyristors are designed primarily for half-wave AC control applications such as motor controls, heating controls, and power supplies; or wherever half-wave silicon gate-controlled, solid-state devices are needed. Feature glass passivated junctions and center gate fire for greater parameter uniformity and stability. **2N2 series** for use in low power switching and control applications. Feature two ranges of gate sensitivity and high external gate-cathode shunting resistance.

Mfg. Part No.	V_{RRM} or V_{DRM} (Max.) (V)*	$I_{T(AV)}$ (A)	$V_{RS}M$ (Max.) (V)*	$I_{D(AV)}$ or $I_{R(AV)}$ (Max.) (mA)**	Pkg.	Stock No.	Price Each 1-9
● 2N681	25	16	35	6.5	TO-48	10P5497	12.32
● 2N682	50	16	75	6.5	TO-48	10P5499	12.32
● 2N683	100	16	150	6.5	TO-48	10P5501	12.17
● 2N684	150	16	225	6.5	TO-48	10P5503	11.64
● 2N685	200	16	300	6	TO-48	10P5505	12.32
● 2N2326	200	...	300	0.1	TO-5	10P5374	8.56
● 2N686	250	16	350	5.5	TO-48	10P5507	11.64
● 2N687	300	16	400	5	TO-48	10P5509	12.32
● 2N2328	300	...	400	0.1	TO-5	10P5378	8.56
● 2N688	400	16	500	4	TO-48	10P5511	12.32
● 2N689	500	16	600	3	TO-48	10P5513	12.32
● 2N690	600	16	720	2.5	TO-48	10P5515	12.32
● 2N692	800	16	960	2.0	TO-48	10P5519	12.32

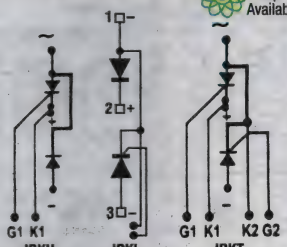
*T_c=125°C; **Rated V_{DRM} or V_{RRM} gate open, T_j=125°C
(148785)

ENGINEERS START HERE
Research. Design. Prototype.
newark.com/design-resources
(212565)

PHASE CONTROL SCR THYRISTORS

RoHS Compliant Available

VISHAY.



***SafeIR™** series phase-control SCRs are designed to increase safety margins. Input function allows for final product design to meet demanding environmental standards. **RIA** in type number indicates medium power thyristors.

Mfg. Part No.	V_{DRM} (V)	ITSM 50Hz (A)	V_{gt} (V)	I_{gt} (mA)	@ I_{TM} Comp. (V)	dv/dt (V/µs)	Pkg.	Stock No.	Price Each 1-9
DISCRETE: 6.5A - 10A									
VS-10TTS08SPBF	800	190	1	15	6.5	150	D2-PAK	74K2905	1.10
VS-10RIA120	1200	190	2	60	32	300	TO-208AA	09F5023	19.17
DISCRETE: 16A-20A									
VS-2N682	50	145	2	40	...	250	TO-208AA	08H0840	9.93
VS-16RIA60	600	285	2	60	50	300	TO-208AA	09F5232	12.99
VS-16RIA100	1000	285	2	60	50	300	TO-208AA	09F5228	18.24
VS-16RIA120	1200	285	2	60	50	300	TO-208AA	09F5229	21.86
VS-25TTS12PBF	1200	350	2	45	16	500	TO-220	30K6022	1.82
VS-25TTS12FPPBF	1200	350	2	45	16	500	TO-220 FULLPAK	30K6021	3.35
VS-30TPS16PBF	1600	300	2	45	20	500	TO-247AC	30K6028	2.59
DISCRETE: 22A-25A									
VS-22RIA60	600	335	2	60	70	300	TO-208AA	09F6655	16.12
VS-2N5206	1000	285	2	40	...	250	TO-208AA	09F5958	20.09
VS-2N5207	1200	285	2	40	...	250	TO-208AA	09F5960	22.30
VS-22RIA120	1200	335	2	60	70	300	TO-208AA	09F6652	20.27
VS-25RIA80	800	350	2	60	79	300	TO-208AA	09F6664	17.63
VS-25RIA120	1200	350	2	60	79	300	TO-208AA	09F6660	19.96
DISCRETE: 35A									
VS-40TPS12APBF	1200	600	2.5	150	110	500	TO-247AC	30K6045	4.70
DISCRETE: 50A									
VS-50RIA10	100	1200	2.5	100	157	500	TO-208AC	09F7085	14.31
VS-50RIA20	200	1200	2.5	100	157	500	TO-208AC	09F7088	15.03
VS-50RIA60	600	1200	2.5	100	157	500	TO-208AC	09F7090	15.93
VS-50RIA80	800	1200	2.5	100	157	500	TO-208AC	09F7091	20.09
VS-50RIA100	1000	1200	2.5	100	157	500	TO-208AC	09F7086	21.66
VS-50RIA120	1200	1200	2.5	100	157	1000	TO-208AC	09F7087	25.57

(70789)

BS08D SERIES TRIAC TRIGGERS

UL

RoHS Compliant Available

POWEREX

TRIAC triggers are ideal for use in light dimmers, temperature/humidity controls and timers. **Type BS08D-T112 sold in ammo packs of 2500.** UL listed.

Mfg. Part No.	I_T (mA)	P_T (mW)	I_G (mA)	Package	Stock No.	Price Each 1-9
BS08D-T112	175	450	5	TO-92	18K8777	0.83

(59382)

PHASE-CONTROL SCRs

RoHS Compliant Available

POWEREX

TO-93 T70 T-72 T9G

Wide variety of values available with 2N, C or T Prefix. Go online or call.

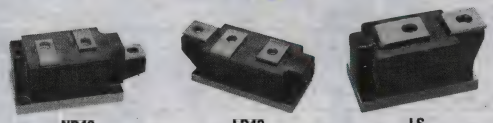
Mfg. Part No.	$I_{T(AV)}$ (A)	V_{rrm}	Package	Stock No.	Price Each 1-9
C150PB	70	1200	TO-94	48F7232	85.30
C180PB	150	1200	TO-93	48F7235	87.43
C430PB	650	1200	TO-200AB	73K1950	111.23
T9G0121203DH	1200	1200	T9G	48F7259	167.69

(5181)

ISOLATED CONVERTER MODULES

RoHS Compliant Available

POWEREX



ND43 LD43 LS

To complement IGBT and other applications.

DUAL SCR MODULES

Mfg. Part No.	$I_{T(AV)}$ @ T_C (A)	V_{RRM} (V)	Package	Stock No.	Price Each 1-9
CD431690B	90	1600	CD4 B-Package	08J5945	44.42
CD631615B	150	1600	CD6 B-Package	08J5957	72.37
ND431825	250	1800	ND43	73K1976	167.97

DUAL DIODE MODULES

Mfg. Part No.	$I_{T(AV)}$ @ T_C (A)	V_{RRM} (V)	Package	Stock No.	Price Each 1-9
CD611616B	160	1600	CD6 B-Package	08J5949	82.67

SINGLE DIODE AND SCR MODULES

Mfg. Part No.	$I_{T(AV)}$ @ T_C (A)	V_{RRM} (V)	Package	Stock No.	Price Each 1-9
LS431650	500	1600	LS	73K1955	157.84
LS411860	600	1800	LS	31C0336	166.19

HARDWARE KITS

Mfg. Part No.	For Use With	Description	Stock No.	Price Each 1-9
HARDWARE KIT #49	LS Style SCR and Diode Modules	Two M10 x 1.5 screws 20 mm in length and two 10mm lock washers	53W6602	3.91
HARDWARE KIT #50	LD Style SCR and Diode Modules	Three M10 x 1.5 screws 20 mm in length and three 10mm lock washers.	53W6603	5.19
HARDWARE KIT #87	ND Style SCR and Diode Modules	Three M8 x 1.25 screws 16 mm in length with captive lock washer and flat washer	53W6604	2.61

(4394)

Qxxx ALTERNISTOR TRIACS

RoHS Compliant Available

Littelfuse

Expertise Applied | Answers Delivered

Features:

- High surge current capability
- Glass-passivated junctions
- 2500 VAC isolation for L, J, and K Packages
- High commutating dv/dt
- High static dv/dt
- Operating temperature range (TJ) is -40°C to +125°C.
- Storage temperature range (TS) is -40°C to +125°C.
- Lead solder temperature is a maximum of 230°C for 10 sec. maximum ≥1/16" (1.59) from case.

Mfg. Part No.	V_{DRM} Min (V)	I_H (A)	V_{GT} Max (V)	Peak Gate Power (W)	Pkg.	Stock No.	Price Each 1-9
Q4008LH4	400	35	1.3	500	3-TO-220	12J0413	1.93
Q4010LH5	400	50	1.3	500	3-TO-220	12J0426	2.03
Q4012LH5	400	50	1.3	500	3-TO-220	12J0437	2.24
Q4016LH6	400	70	1.3	500	3-TO-220	12J0447	2.51
Q4025R6	400	100	1.3	500	3-TO-220	12J0460	3.03
Q6006LH4	600	35	1.3	500	3-TO-220	12J0484	2.21
Q6008LH4	600	35	1.3	500	3-TO-220	12J0497	2.13
Q6016LH4	600	50	1.3	500	3-TO-220	12J0530	3.12
Q6016LH6	600	70	1.3	500	3-TO-220	12J0531	2.94
Q6025L6	600	100	1.3	500	3-TO-220	12J0540	3.90
Q6025R6	600	100	1.3	500	3-TO-220	12J0545	3.51
Q6030LH5	600	75	2	500	3-TO-220	12J0546	4.16
Q6008LH1LED	600	6	1.3	...	3-TO-220AB	94W9266	1.44
Q6012LH1LED	600	8	1.3	...	3-TO-220AB	94W9270	1.69
Q6012LTH1LED	600	8	...	...	3-TO-220AB	94W9272	1.92
Q6008LTH1LED	600	6	1.3	...	3-TO-220AB	94W9268	1.85
Q8010L5	800	50	1.3	500	3-TO-220	56J8647	2.97
Q8015L5	800	70	2	500	3-TO-220	56J8652	3.13
Q8016LH6	800	70	1.3	500	3-TO-220	12J0592	3.09
Q8016RH6	800	70	1.3	500	3-TO-220	12J0598	2.96
Q8025L6	800	100	1.3	500	3-TO-220	12J0601	4.65

(165134)

BTAxxx TRIACS

RoHS Compliant Available

*= Sold as Ea

Mfg. Part No.	V_{drm} (V)	I_{gt} (mA)	V_{gt} (V)	I_{trm} (A)	Pkg.	Tape Cut Stock No.	Price Each 1-9
● BTA204S-600D,118	600	5	1.5	25	SOT-428	79R1842	0.68
● BTA316-600ET,127*	600	10	1.5	140	TO-220AB	99R2414	1.15
● BTA316-800ET,127*	600	10	1.5	140	TO-220AB	99R2415	1.18
● BTA140-600,127*	600	70	1.5	109	TO-220AB	70R2981	1.54
● BTA204S-800E,118	800	10	1.5	25	SOT-428	79R1843	0.70
● BTA204W-800E,135	800	10	1.5	10	SOT-223	79R1844	0.64
● BTA208S-800E,118	800	10	1.5	65	SOT-428	79R1845	0.99
● BTA140-800,127*	800	70	1.5	109	TO-220AB	70R2982	1.54

(194760)

TRIACs

RoHS Compliant Available

ON Semiconductor

STANDARD

Mfg. Part No.	$I_{T(RMS)}$ (A)	V_{DRM} (V)	I_{TSM} (A)	I_{GT} (mA)	Package	Stock No.	Price Each 1-9
● MAC97A4G	0.6	200	8	7	TO-92	26K3659	0.53
● MAC97A6G	0.6	400	8	7	TO-92	26K3660	0.56
● MAC97A6RLRPG	0.6	400	8	7	TO-92	41K9944	0.53
● MAC97A8G	0.6	600	8	7	TO-92	71J5238	0.42
● MAC97A8RLRPG	0.6	600	8	7	TO-92	10N9409	0.41
● MAC08BT1G	0.8	200	8	10	SOT-223	10N9407	0.54
● MAC08MT1G	0.8	600	8	10	SOT-223	64R8500	0.57
● MAC4DCNT4G	4	800	40	35	TO-252	26K3652	0.75
● MAC4DHMT4G	4	600	40	10	TO-252	41K9936	0.75
● T2500DG	6	400	60	60	TO-220AB	42K2705	1.71
● MAC228A4G	8	200	80	10	TO-220AB	41K9928	1.32
● MAC228A6G	8	400	80	10	TO-220AB	45J0762	1.39
● T2800DG	8	400	100	60	TO-220AB	42K2706	1.71
● MAC8DG	8	400	80	35	TO-220AB	41K9941	1.27
● MAC9DG	8	400	80	50	TO-220AB	26K3656	1.07
● MAC228A8G	8	600	80	10	TO-220AB	45J0763	1.37
● MAC8MG	8	600	80	35	TO-220AB	26K3654	1.34
● MAC8NG	8	800	80	35	TO-220AB	45J0764	1.17
● MAC228A10G	8	800	80	10	TO-220AB	41K9927	1.39
● MAC210A8G	10	600	100	75	TO-220AB	41K9924	1.67
● MAC12DG	12	400	100	35	TO-220AB	41K9906	1.07
● MAC12MG	12	600	100	35	TO-220AB	45J0761	1.07
● MAC212A8G	12	600	100	75	TO-220AB	41K9926	1.61
● 2N6344G	12	600	100	50	TO-220AB	42K3173	1.77
● 2N6344AG	12	600	100	50	TO-220AB	42K3172	1.80
● 2N6348AG	12	600	100	75	TO-220AB	42K3174	1.70
● 2N6349AG	12	800	100	75	TO-220AB	42K3175	1.77
● MAC212A10G	12	800	100	75	TO-220AB	41K9925	1.61
● MAC15A6G	15	400	150	75	TO-220AB	41K9911	1.85
● MAC15-8G	15	600	150	50	TO-220AB	41K9910	1.71
● MAC15A8G	15	600	150	75	TO-220AB	41K9912	1.81
● MAC15MG	15	600	150	35	TO-220AB	41K9913	1.28
● MAC15A10G	15	800	150	75	TO-220AB	71J5233	1.81
● MAC16MG	16	600	150	50	TO-220AB	71J5234	1.30
● MAC16HCNG	16	800	150	50	TO-220AB	41K9922	1.42
● MAC16NG	16	800	150	50	TO-220AB	26K3651	1.42
SENSITIVE GATE							
● T2322BG	2.5	200	25	10	TO-225AA	42K2704	0.92
● 2N6071AG	4	200	30	5	TO-225	26K5310	0.74
● 2N6071BG	4	200	30	3	TO-225	45J2502	0.69
● 2N6073AG	4	400	30	5	TO-225	26K5311	0.74
● 2N6073BG	4	400	30	3	TO-225	45J2503	0.93
● 2N6075AG	4	600	30	5	TO-225	45J2504	0.72
● 2N6075BG	4	600	30	3	TO-225	26K5312	0.69
● MAC4DSM-1G	4	600	40	10	TO-252	41K9939	0.73
● MAC4DSMT4G	4	600	40	10	TO-252	10N9408	0.71
● MAC12SNG	12	800	90	5	TO-220AB	71J5232	1.30
THREE QUADRANT							
● BTB12-600BW3G	12	600	120	50	TO-220AB	75M3832	1.07
● BTB12-600CW3G	12	600	120	35	TO-220AB	75M3833	1.01
● BTB16-600CW3G	16	600	170	35	TO-220AB	75M3837	1.24

➤ CONTINUED ➤

TRIACs (CONT.)

THREE QUADRANT INTERNALLY ISOLATED

Mfg. Part No.	$I_{T(RMS)}$ (A)	V_{DRM} (V)	I_{TSM} (A)	I_{GT} (mA)	Package	Stock No.	Price Each 1-9
● BTA08-800CW3LFG	8	800	90	35	TO-220AB	52T7589	1.58
● BTA16-600SW3G	16	600	170	10	TO-220AB	52T7590	1.68
● BTA16-800SW3G	16	800	170	10	TO-220AB	52T7591	1.68

(116793)

UNILATERAL AND BILATERAL SWITCHES

RoHS Compliant Available

SOLID·STATE

Mfg. Part No.	Switch Type	$I_{T(RMS)}$ (A)	Switching Voltage Max (V)	Package	Stock No.	Price Each 1-9
● 2N4990	Unilateral	175	9	TO-92	67R1095	3.51
● 2N4991	Bilateral	200	9	TO-92	67R1096	3.51
● 2N4992	Bilateral	200	10	TO-92	67R1097	3.57

(195469)

SCR TRIACS

RoHS Compliant Available

1A RMS ON-STATE CURRENT

Mfg. Part No.	$I_{T(RMS)}$ (A)	V_{RRM} (V)	I_{GT} (mA)	I_{TSM} (A)	Package	Stock No.	Price Each 1-9
● Z0103MA 1AA2	1	600	3	8	3-TO-92	89K1793	0.57
4A RMS ON-STATE CURRENT							
● T410-600T	4	600	10	30	3-TO-220	89K1778	1.18
● T405-600T	4	600	5	30	3-TO-220	89K1777	1.07
● T435-600B-TR	4	600	35	30	DPAK	89K1779	1.15
6A RMS ON-STATE CURRENT							
● T435-600B-TR	6	600	35	30	DPAK	89K1779	1.15
8A RMS ON-STATE CURRENT							
● T835-600G-TR	8	600	35	80	D2PAK	89K1781	1.42
● BTA08-400BRG	8	400	100	80	3-TO-220AB	56P5848	1.62
● BTA08-600BWRG	8	600	50	80	3-TO-220AB	89K1223	1.66
● BTA08-600CRG	8	600	25	80	3-TO-220AB	89K1224	1.58
● BTB08-600BWRG	8	600	50	80	3-TO-220AB	89K1248	1.78
● T835-600B-TR	8	600	35	80	D-PAK	89K1780	1.43
● T835-600G-TR	8	600	35	80	D2PAK	89K1781	1.42
10A RMS ON-STATE CURRENT							
● BTA10-600BRG	10	600	50	100	3-TO-220AB	89K1228	1.82
12A-RMS ON-STATE CURRENT							
● BTB12-600BWRG	12	600	50	120	3-TO-220AB	89K1249	1.58
16A RMS ON-STATE CURRENT							
● BTA16-600BRG	16	600	50	160	3-TO-220AB	89K1232	1.72
● BTA16-600CWRG	16	600	35	160	3-TO-220AB	89K1234	1.70
● BTA16-800BRG	16	800	100	160	3-TO-220AB	56P5881	2.41
● BTB16-600BRG	16	600	50	160	3-TO-220AB	89K1250	2.29
● BTB16-600BWRG	16	600	50	160	3-TO-220AB	89K1251	1.89
20A-25A RMS ON-STATE CURRENT							
● BTB24-600BRG	25	600	50	200	3-TO-220AB	89K1252	2.19
● BTA24-600BWRG	25	600	50	250	3-TO-220AB	56P5884	3.45
● BTA25-600B	25	600	100	250	3-RD-91	56P5889	8.51
● BTB24-600BWRG	25	600	50	250	3-TO-220AB	89K1253	2.16
● BTB24-800BRG	25	800	50	250	3-TO-220AB	89K1254	2.77
● BTA26-600BRG	25	600	35	250	3-TOP3	89K1241	6.02
40A RMS ON-STATE CURRENT							
● BTA40-600B	40	600	50	400	3-RD-91	89K1242	9.21
● BTA40-700B	40	700	100	400	3-RD-91	56P5900	10.59
● BTA40-800B	40	800	100	800	3-RD-91	56P5901	10.80
● BTA41-600BRG	40	600	50	400	3-TOP3 Ins.	89K1245	5.91
● BTA41-800BRG	40	800	50	300	3-TOP3	89K1246	6.26
50A RMS ON-STATE CURRENT							
● BTW69-1200RG	50	1200	80	580	3-TOP3	56P5958	11.05

(83827)

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(212569)

SIDACS

RoHS Compliant Available

ON Semiconductor

Mfg. Part No.	VDRM Min (V)	VGT Max (V)	IT(RMS) Max (A)	Package	Stock No.	Price Each 1-9
2N5060G	30	0.8	800	TO-92	26K5287	0.58
2N5061G	60	0.8	800	TO-92	45J2487	0.55
2N5061RLRAG	60	0.8	800	3-TO-92	10N9685	0.55
2N5062G	100	0.8	800	TO-92	26K5289	0.55
2N5064G	200	0.8	800	TO-92	26K5290	0.59
2N5064RLRAG	200	0.8	800	3-TO-92	10N9687	0.57
2N6394G	50	1.5	12	TO-220AB	45J2505	1.37
2N6399G	800	1.5	12	TO-220AB	72J1871	1.35
2N6400G	...	1.5	16	TO-220AB	42K3179	1.50
2N6401G	...	1.5	16	TO-220AB	72J1872	1.58
2N6403G	400	1.5	16	TO-220AB	26K5322	1.59
2N6404G	...	1.5	16	TO-220AB	42K3181	1.50
2N6405G	...	1.5	16	TO-220AB	42K3182	1.56
2N6504G	...	1.5	25	TO-220AB	45J2508	1.58
2N6505G	100	...	25	TO-220AB	26K5326	1.58
2N6507G	...	1.5	25	TO-220AB	26K5327	1.58
2N6508G	600	1.5	25	TO-220AB	45J2509	1.56
2N6509G	...	1.5	25	TO-220AB	42K3186	1.56
C106BG	...	0.8	4	C77	41K9729	0.69
C106D1G	...	0.8	4	TO-225AA	98H0549	0.69
C106DG	...	0.8	4	C77	26K3582	0.69
C106MG	...	0.8	4	C77	45J0658	0.69
MCR08BT1G	...	0.8	800	3-SOT-223	45J0814	0.54
MCR100-4G	...	0.8	800	3-TO-92	42K0024	0.48
MCR100-6G	...	0.8	800	TO-92	45J0815	0.48
MCR100-8G	...	0.8	800	TO-92	26K3695	0.48
MCR100-8RLG	600	0.8	800	TO-92 (TO-226)	45J0817	0.53
MCR106-6G	...	1	4	C77	45J0818	0.67
MCR106-8G	...	1	4	C77	26K3696	0.68
MCR12DG	400	1	12	3-TO-220AB	45J0820	1.00
MCR12DSMT4G	600	1	12	3-DPAK	45J0821	1.02
MCR12LMG	600	0.8	12	3-TO-220AB	71J5363	1.55
MCR12MG	600	1	12	TO-220AB	26K3697	0.95
MCR12NG	800	1	12	TO-220AB	26K3698	1.05
MCR16NG	800	1	16	3-TO-220AB	26K3699	1.25
MCR218-2G	...	1.5	8	3-TO-220AB	42K0030	1.30
MCR218-4G	...	1.5	8	TO-220AB	26K3700	1.30
MCR218-6G	...	1.5	8	TO-220AB	26K3701	1.30
MCR22-6G	...	0.8	1.5	TO-92	26K3702	0.41
MCR22-8G	...	0.8	1.5	TO-92	26K3703	0.48
MCR25DG	400	1	25	TO-220AB	42K0032	1.62
MCR310-10G	...	1.5	10	TO-220	42K0033	1.35
MCR68-2G	...	1.5	12	TO-220	71J5364	1.30
MCR69-2G	...	1.5	25	TO-220	45J0825	1.63
MCR69-3G	...	1.5	25	TO-220	45J0826	1.55
MCR703AT4G	100	0.8	4	DPAK-369C	26K3706	0.85
MCR72-3G	...	1.5	8	TO-220	71J5366	1.37
MCR72-6G	...	1.5	8	TO-220	83H7285	1.35
MCR72-8G	...	1.5	8	TO-220AB	71J5367	1.30
MCR8DCMT4G	...	1	8	D-PAK	11J1347	0.94
MCR8NG	800	1	8	TO-220AB	26K3710	1.10
MCR8SDG	400	1	8	TO-220AB	26K3711	1.00
MCR8SNG	800	1	8	3-TO-220AB	26K3713	1.10

(116794)

SMALL SIGNAL DIODES

RoHS Compliant Available

FAIRCHILD

GENERAL PURPOSE

Mfg. Part No.	V_{RRM} (V)	I_{FAVG} (mA)	V_{FM} (V)	Pkg.	Stock No.	Price Each 1-9
1N916	100	200	1	DO-35	58K9620	0.11
1N916B	100	200	1	DO-35	58K2661	0.07
1N485B	200	500	1	DO-35	58K9580	0.18
FDH400	200	500	1	DO-35	58K1459	0.15
1N486B	250	500	1	DO-35	58K9581	0.17
BAV21	250	500	1	DO-35	18C5756	0.20

CONTINUED

SMALL SIGNAL DIODES (CONT.)

HIGH CONDUCTANCE, FAST

Mfg. Part No.	V_{RRM} (V)	I_{FAVG} (mA)	V_{FM} (V)	Pkg.	Stock No.	Price Each 1-9
1N4148	100	300	1	DO-35	58K9570	0.11
1N4149	100	300	1	DO-35	58K9571	0.11
1N4448	100	300	1	DO-35	58K9575	0.11
1N914	100	300	1	DO-35	58K9617	0.11
1N3595	150	200	1	DO-35	58K9569	0.18
1N914B	150	300	1	DO-35	58K9619	0.11

HIGH CONDUCTANCE, ULTRAFAST

1N4454	75	400	1	DO-35	58K9576	0.11

HIGH CONDUCTANCE, LOW LEAKAGE

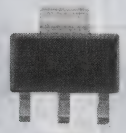
1N456A	30	500	1	DO-35	38C7675	0.18
1N457	70	500	1	DO-35	58K2650	0.18
1N457A	70	500	1	DO-35	58K9577	0.18
1N458A	150	500	1	DO-35	58K9578	0.17
FDH300A	150	500	1	DO-35	60K7821	0.22
FDH333	150	500	1.05	DO-35	58K8837	0.21
1N459A	200	500	1	DO-35	58K9579	0.17
1N459	200	500	1	DO-35	18C8941	0.18

(148572)

SMALL SIGNAL DIODES

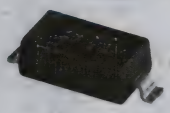
RoHS Compliant Available

FAIRCHILD



SOT-23

LL-34



SOD-123

DO-35

GENERAL PURPOSE

Mfg. Part No.	V_{RRM} (V)	I_{FAVG} (mA)	V_{FM} (V)	Pkg.	Tape Cut Stock No.	Tape Cut Price Each 1-9
BAS21	250	600	1	SOT-23	18C5749	0.21
FDLL914A	100	200	1	LL-34	78K5925	0.10
BAV23S	250	400	1	SOT-23	78K5854	0.24

HIGH CONDUCTANCE, FAST

1N914BTR	100	200	1	DO-35	05R0380	0.08
1N3595TR	125	200	1	DO-35	18C8910	0.17
1N4148TR	100	200	1	DO-35	05R0353	0.07
1N4448TR	100	200	1	DO-35	05R0354	0.10
FDLL4148	100	300	1	LL-34	18C6408	0.11
FDLL914	100	300	1	LL-34	38C7135	0.12
MMSD4148	100	600	1	SOD-123	58K1902	0.28
MMSD914	100	600	1	SOD-123	38C7463	0.28

HIGH CONDUCTANCE, ULTRAFAST

BAS16	85	600	1	SOT-23	18C5747	0.19
MMBD1201	100	600	1	SOT-23	38C7385	0.21
MMBD4148	100	600	1	SOT-23	58K9418	0.21
MMBD4448	100	600	1	SOT-23	58K1863	0.21
MMBD914	100	600	1	SOT-23	58K1864	0.18
MMBD1205	100	600	1	SOT-23	35C0520	0.22
MMBD4148CA	100	600	1	SOT-23	58K9419	0.27
BAV70	70	600	1	SOT-23	18C5758	0.22
BAV74	50	600	1	SOT-23	78K5855	0.17
MMBD1204	100	600	1	SOT-23	38C7387	0.22
MMBD4148CC	100	600	1	SOT-23	58K9420	0.24
BAV99	70	600	1	SOT-23	78K5856	0.24
MMBD1203	100	600	1	SOT-23	38C7386	0.24
MMBD1503A	200	600	1	SOT-23	58K9417	0.27
MMBD4148SE	100	600	1	SOT-23	58K9421	0.23
MMBD7000	100	600	1	SOT-23	58K9422	0.22

HIGH CONDUCTANCE, LOW LEAKAGE

1N457ATR	70	200	1	DO-35	05R0356	0.17
MMBD1501A	200	600	1.1	SOT-23	58K9416	0.22
MMBD1505A	200	600	1.1	SOT-23	58K1861	0.25
MMBD1504A	200	600	1.1	SOT-23	58K1860	0.27
FLLD261	200	600	1.4	SOT-23	58K1499	0.30

(66571)

SMALL SIGNAL SWITCHING DIODES

RoHS Compliant Available

ON Semiconductor

SWITCHING DIODES

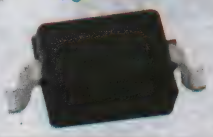
Mfg. Part No.	V_{RRM} Min. (V)	V_F Max. (V)	$I_{F(AV)}$ (mA)	t_{rr} (ns)	Diode Case Style	Stock No.	Price Each 1-9
● BAS116LT1G	75	1.1	200	3	SOT-23	98H0497	0.31
● BAS16HT1G	75	1	200	6	SOD-323	98H4541	0.21
● BAS16LT1G	75	1	200	6	SOT-23	88H4542	0.15
● BAS16TT1G	75	1.25	200	6	SOT-416	45J0553	0.17
● BAS16WT1G	75	1	200	6	SC-70	98H0498	0.16
● BAS20HT1G	200	1	200	50	SOD-323	26K3364	0.25
● BAS20LT1G	200	1	200	50	SOT-23	88H4544	0.14
● BAS21HT1G	250	1	200	50	SOD-323	88H4545	0.26
● BAS21LT1G	250	1	200	50	SOT-23	88H4546	0.14
● BAV70WT1G	70	1	200	6	SOT-323	45J0563	0.17
● BAV74LT1G	50	1	200	4	SOT-23	45J0564	0.16
● MMBD354LT1G	7	0.6	10	-888	TO-236	85W2814	0.36
● MMBD6050LT1G	70	1.1	200	4	SOT-23	88H4774	0.20
● MMBD914LT1G	100	1	200	4	SOT-23	88H4778	0.15
● MMDL914T1G	100	1	200	4	SOD-323	88H4861	0.20
● MMSD103T1G	250	1.25	200	50	SOD-123	26K4562	0.24
● MMSD4148T1G	100	1	200	4	SOD-123	45J1568	0.20
● MMSD4148T3G	100	1	200	4	SOD-123	10N9495	0.23
● MMSD914T1G	100	1	200	4	SOD-123	88H4865	0.25
● NSD914XV2T1G	100	1	200	4	SOD-523	42K2366	0.37
● 1SS400T1G	100	1.2	100	4	SOD-523	10N9739	0.23

(116721)

SMALL SIGNAL SCHOTTKY DIODES

RoHS Compliant Available

ON Semiconductor



Mfg. Part No.	V_{RRM} Max (V)	C_J Max. (pF)	I_{RM} Max. (µA)	Stock No.	Price Each 1-9
● NSR0320XV6T1G	23	35	50	42K2368	0.59
● BAT54ALT1G	30	0.4	10	45J0558	0.21
● MBD301G	30	1.5	0.2	26K3669	0.54
● RB751V40T1G	30	2.5	0.5	83H7851	0.31
● BAT54SWT1G	30	10	2	83H6421	0.28
● BAT54WT1G	30	10	2	98H0499	0.26
● BAT54T1G	30	10	2	88H4554	0.39
● BAT54HT1G	30	10	2	83H6419	0.24
● BAT54XV2T1G	30	10	2	46M4868	0.35
● BAT54LT1G	30	10	2	88H4553	0.21
● BAT54SLT1G	30	10	2	83H6420	0.21
● BAS40-04LT1G	40	0.5	5	88H4547	0.35
● BAS40LT1G	40	0.5	5	88H4548	0.35
● BAS40-06LT1G	40	5	1	84K8722	0.35
● BAS70LT1G	70	0.75	2	45J0557	0.33
● BAS70-04LT1G	70	0.75	2	45J0556	0.35
● BAS21AHT1G	250	...	...	85W2783	0.26
PIN SWITCHING					
● MMBV3401LT1G	35	1	0.1	45J1542	0.53

(4254)

SMALL SIGNAL SWITCHING DIODES, DUAL SERIES

RoHS Compliant Available

ON Semiconductor

Mfg. Part No.	V_{RRM} Min. (V)	V_F Max. (V)	$I_{F(AV)}$ mA)	t_{rr} ns)	Pkg.	Stock No.	Price Each 1-9
● BAS21SLT1G	250	1	225	50	SOT-23	45J0555	0.22
● BAV199LT1G	70	1	715	3	SOT-23	98H0500	0.32
● BAV70LT1G	70	1	200	6	SOT-23	88H4555	0.13
● BAV99LT1G	70	1.25	715	6	SOT-23	48K7496	0.13
● BAV99RWT1G	70	1	715	6	SC-70	45J0565	0.17
● BAV99WT1G	70	1	715	6	SC-70	83H6423	0.18
● BAW56LT1G	70	1	200	6	SOT-23	88H4559	0.13
● MMBD2836LT1G	75	1.2	100	4	SOT-23	84K8791	0.20
● MMBD2837LT1G	35	1	150	4	SOT-23	84K8792	0.19
● MMBD2838LT1G	75	1	150	4	SOT-23	88H4771	0.19

➤CONTINUED➤

SMALL SIGNAL SWITCHING DIODES, DUAL SERIES (CONT.)

Mfg. Part No.	V_{RRM} Min. (V)	V_F Max. (V)	$I_{F(AV)}$ mA)	t_{rr} ns)	Pkg.	Stock No.	Price Each 1-9
● MMBD6100LT1G	70	1.1	200	4	SOT-23	45J1515	0.18
● MMBD7000LT1G	100	1.1	200	4	SOT-23	88H4776	0.15

(165060)

SMALL SIGNAL SWITCHING DIODES

RoHS Compliant Available

Panasonic

ULTRAFAST RECOVERY

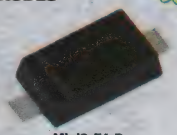
Mfg. Part No.	V_{RRM} (V)	V_F (V)	$I_{F(AV)}$ (mA)	t_{rr} (ns)	Pkg.	Stock No.	Price Each 1-24
● DA2J10400L	80	1.1	200	10	SOD-323F	56W3674	0.18
● DA3J101F0L	80	1.2	65	3	SC-85	56W3680	0.24
● DA3X101F0L	80	1.2	65	3	SOT-23	56W3689	0.19
● DA3S101F0L	80	1.2	65	3	SOT-490	56W3685	0.30
● DA4X101F0R	80	1.2	75	3	SOT-143	56W3695	0.25
● DA4X101K0R	80	1.2	75	3	SOT-143	56W3696	0.44
● DA4J101K0R	80	1.2	75	3	SMINI4-F3-B	56W4026	0.21
● DA2J10100L	80	1.2	100	3	SOD-323F	56W3673	0.18
● DA2S10100L	80	1.2	100	3	SOD-523	56W3676	0.18
● DA2710100L	80	1.2	100	3	SOD-723	56W3678	0.23
● DA3J101A0L	80	1.2	100	3	SC-85	56W3679	0.19
● DA3J101K0L	80	1.2	100	3	SC-85	56W3681	0.19
● DA6X101K0R	80	1.2	100	3	SOT-457	56W4027	0.24
● DA3S101A0L	80	1.2	100	3	SOT-490	56W3684	0.18
● DA3S101K0L	80	1.2	100	3	SOT-490	56W3686	0.18
● DA3X101A0L	80	1.2	100	3	SOT-23	56W3688	0.15
● DA3X101K0L	80	1.2	100	3	SOT-23	56W3690	0.15
● DA4X106U0R	80	1.2	100	10	SOT-143	56W3697	0.37
● DA3J103E0L	80	1.2	150	10	SC-85	56W3682	0.23
● DA3X103E0L	80	1.2	150	10	SOT-23	56W3691	0.22
● DA6X103T0R	80	1.2	100	10	SOT-457	56W4028	0.21
● DA3S103E0L	80	1.2	150	10	SOT-490	56W3687	0.24
● DA37103E0L	80	1.2	150	10	SOT-723	56W3694	0.31
FAST RECOVERY							
● DA22F2100L	200	0.98	1	35	SOD-123	56W3677	0.42
● DA3J107K0L	300	1.2	100	60	SC-85	56W3683	0.24
● DA3X107K0L	300	1.2	100	60	SOT-23	56W3692	0.25
● DA2JF8100L	800	2.5	200	45	SOD-323F	56W3672	0.31
STANDARD RECOVERY							
● DA2J10800L	300	1.2	200	...	SOD-323F	56W3675	0.26
● DA3X108K0L	300	1.2	200	...	SOT-23	56W3693	0.22
● DA2JF2300L	300	1.25	300	400	SOD-323F	56W3671	0.31

(208999)

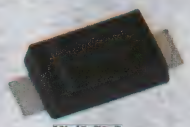
SMALL SIGNAL SCHOTTKY DIODES

RoHS Compliant Available

Panasonic



Mini2-F4-B



Mini2-F3-B

ULTRAFAST RECOVERY

Mfg. Part No.	V_{RRM} Min. (V)	V_F Max. (V)	$I_{F(AV)}$ mA)	t_{rr} ns)	Pkg.	Stock No.	Price Each 1-24
● DB2S20500L	15	390	200	2.2	SOD-523	56W3709	0.29
● DB2X20600L	20	450	1000	6	SOD-123	56W3718	0.29
● DB2J20900L	20	500	500	2.4	SOD-323F	56W3700	0.28
● DB3X209K0L	20	500	500	2.4	SOT-23	56W3744	0.31
● DB2J20100L	20	550	500	4.3	SOD-323F	56W3698	0.30
● DB3J201K0L	20	550	500	4.3	SC-85	56W3728	0.19
● DB2J20800L	25	420	500	4.3	SOD-323F	56W3699	0.35
● DB3J208K0L	25	450	700	4.3	SC-85	56W3729	0.22
● DB2730800L	30	290	100	1.3	SOD-723	56W3724	0.29
● DB4J314K0R	30	400	20	1	SMINI4-F3-B	56W3761	0.32
● DB4X314K0R	30	400	20	1	SOT-23	56W3765	0.25
● DB2230600L	30	450	2000	13	SOD-123	56W3721	0.39
● DB2232000L	30	460	1500	16	SOD-123	56W3722	0.78
● DB2J31000L	30	470	200	1.6	SOD-323F	56W3701	0.26
● DB2S31000L	30	470	200	1.6	SOD-523	56W3712	0.26
● DB2730900L	30	580	100	1.3	SOD-723	56W3725	0.29
● DB2731600L	30	550	100	0.8	SOD-723	56W3727	0.27

➤CONTINUED➤

SMALL SIGNAL SCHOTTKY DIODES (CONT.)

Mfg. Part No.	V_{RRM} Min. (V)	V_F Max. (V)	$I_{F(AV)}$(mA)	t_{rr}(ns)	Pkg.	Stock No.	Price Each 1-24
DB2J31300L	30	550	200	1.5	SOD-323F	56W3702	0.24
DB2J31600L	30	550	100	0.8	SOD-323F	56W3704	0.19
DB2J31700L	30	520	1000	7.8	SOD-323F	56W3705	0.33
DB2S30800L	30	420	100	1.3	SOD-523	56W3710	0.23
DB2S30900L	30	580	100	1.3	SOD-523	56W3711	0.21
DB2S31100L	30	560	200	2.2	SOD-523	56W3713	0.29
DB2S31600L	30	550	100	0.8	SOD-523	56W3715	0.19
DB2W31900L	30	490	3000	23	SOD-123F	56W3716	0.28
DB3J316F0L	30	550	70	0.8	SC-85	56W3734	0.29
DB3J316J0L	30	550	70	0.8	SC-85	56W3735	0.20
DB3J316K0L	30	550	100	0.8	SC-85	56W3736	0.17
DB3J316N0L	30	550	70	0.8	SC-85	56W3737	0.36
DB3X313F0L	30	550	130	1.5	SOT-23	56W3745	0.25
DB3X313K0L	30	550	200	1.5	SOT-23	56W3746	0.26
DB3X313N0L	30	550	130	1.5	SOT-23	56W3747	0.27
DB3X316F0L	30	550	70	0.8	SOT-23	56W3752	0.34
DB3X316J0L	30	550	70	0.8	SOT-23	56W3753	0.32
DB3X316K0L	30	550	100	0.8	SOT-23	56W3754	0.24
DB3X316N0L	30	550	70	0.8	SOT-23	56W3755	0.32
DB3X317K0L	30	520	1000	7.8	SOT-23	56W3756	0.37
DB4X313F0R	30	550	130	1.5	SOT-23	56W3763	0.41
DB4X313K0R	30	550	130	1.5	SOT-23	56W3764	0.31
DB4J310K0R	30	470	150	1.6	SMINI4-F3-B	56W3760	0.30
DB3J314F0L	30	1000	20	1	SC-85	56W3730	0.33
DB3J314J0L	30	1000	20	1	SC-85	56W3731	0.29
DB3J315E0L	30	1000	20	1	SC-85	56W3733	0.29
DB3S314F0L	30	1000	20	1	SOT-490	56W3739	0.26
DB3S314J0L	30	1000	20	1	SOT-490	56W3740	0.31
DB3S314K0L	30	1000	30	1	SOT-490	56W3741	0.26
DB3S315E0L	30	1000	20	1	SOT-490	56W3742	0.26
DB3X314F0L	30	1000	20	1	SOT-23	56W3748	0.34
DB3X314J0L	30	1000	20	1	SOT-23	56W3749	0.32
DB3X315E0L	30	1000	20	1	SOT-23	56W3751	0.34
DB3X314K0L	30	1000	30	1	SOT-23	56W3750	0.26
DB3J314K0L	30	1000	30	1	SC-85	56W3732	0.19
DB2731400L	30	1000	30	1	SOD-723	56W3726	0.25
DB2J31400L	30	1000	30	1	SOD-323F	56W3703	0.21
DB2S31400L	30	1000	30	1	SOD-523	56W3714	0.19
DB6J314K0R	30	1000	30	1	SOT-363	56W4029	0.41
DB6X314K0R	30	1000	30	1	SOT-457	56W4030	0.68
DB2X41500L	40	550	3000	25	SOD-123	56W3720	0.45
DB3J407K0L	40	550	500	5	SC-85	56W3738	0.35
DB3S406F0L	40	600	75	0.9	SOT-490	56W3743	0.28
DB4J406K0R	40	600	75	0.9	SMini4-F3-B	56W3762	0.34
DB3X407K0L	40	550	500	3.6	SOT-23	56W3757	0.38
DB2J40700L	40	550	500	3.6	SOD-323F	56W3706	0.33
DB2J41100L	40	580	1000	6.8	SOD-323F	56W3707	0.33
DB4X501K0R	50	550	150	1.6	SOT-143	56W3766	0.33
DB3X501K0L	50	550	200	1.6	SOT-23	56W3758	0.33
DB2J50100L	50	550	200	1.6	SOD-323F	56W3708	0.28
DB2W60400L	60	660	2000	12	SOD-123F	56W3717	0.65
DB3X603K0L	60	650	500	4.5	SOT-23	56W3759	0.34
FAST RECOVERY							
DB2441600L	40	450	3000	30	SOD-128	56W3723	0.93
DB2X41400L	40	490	2000	30	SOD-123	56W3719	0.45

(209000)

DEV KIT HQ™

Newest technology, Development Kits & Evaluation Boards from the best suppliers.

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(196526)

SURFACE MOUNT RF PIN DIODES

RoHS Compliant Available

AVAGO TECHNOLOGIES

Mfg. Part No. HSMP-386x and **HMMP-386x series** general puropose PIN diodes are designed for attenuator applications where current consumption is the most important design consideration.

Mfg. Part No. HSMP-389x and **HMMP-389x series** RF Pin switch diodes are optimized for switching applications where low resistance at low current combined with low capacitance are required.

Mfg. Part Nos. with suffix **BLK** and **BLKG** are sold in bulk, **TR1** and **TR1G** are packaged in tape on reel. Bulk items are sold by the piece where as tape on reel versions are sold in full reel quantities only. All Avago parts (except Glass Diodes) are RoHS compliant. *go online or call*

GENERAL PURPOSE PIN DIODE

Mfg. Part No.	V_{BR} (V)	R_S (Ω)	Package	Stock No.	Price Each 1-9
HSMP-3864-BLKG	50	1.5	SOT-23	63J9371	1.03
HSMP-3810-BLKG	100	3	SOT-23	63J9311	0.97
HSMP-3812-BLKG	100	3	SOT-23	63J9314	1.37
HSMP-3814-BLKG	100	3	SOT-23	63J9320	1.37
HSMP-3816-BLKG	100	3	SOT-25	74K5305	1.80
HSMP-381C-BLKG	100	3	SOT-323	63J9302	1.46
HSMP-381E-BLKG	100	3	SOT-323	63J9305	1.46
HSMP-3894-BLKG	100	2.5	SOT-23	63J9413	1.03
HSMP-4810-BLKG	100	3	SOT-23	63J9421	1.20
HSMP-481B-BLKG	100	3	SOT-323	63J9419	1.28
HSMP-4890-BLKG	100	2.5	SOT-23	63J9432	1.03

(74686)

MM3Z TO MM5Z SERIES VOLTAGE REGULATOR ZENER DIODES

RoHS Compliant Available

ON Semiconductor

MM3ZxxxT1 SERIES

Mfg. Part No.	Zener Voltage (V)	Power Dissipation (mW)	Package	Tape Cut Stock No.	Price Each 1-9
MM3Z2V4T1G	2.4	200	2-SOD-323	67H6867	0.16
MM3Z2V7T1G	2.7	200	2-SOD-323	71J6041	0.16
MM3Z3V6T1G	3.6	200	2-SOD-323	01P0395	0.16
MM3Z3V9T1G	3.9	200	2-SOD-323	67H6874	0.16
MM3Z4V7T1G	4.7	200	2-SOD-323	67H6877	0.16
MM3Z5V1T1G	5.1	200	2-SOD-323	67H6879	0.16
MM3Z5V6T1G	5.6	200	2-SOD-323	83H7525	0.16
MM3Z6V2T1G	6.2	200	2-SOD-323	83H7526	0.16
MM3Z10VT1G	10	200	2-SOD-323	67H6860	0.16
MM3Z12VT1G	12	200	2-SOD-323	67H6862	0.16
MM3Z13VT1G	13	200	2-SOD-323	67H6863	0.16
MM3Z15VT1G	15	200	2-SOD-323	67H6864	0.16
MM3Z18VT1G	18	200	2-SOD-323	85W2825	0.16
MM3Z24VT1G	24	200	2-SOD-323	10N9522	0.16
MM3Z27VT1G	27	200	2-SOD-323	85W2827	0.17
MM3ZxxxST1 SERIES (TIGHT TOLERANCE)					
MM3Z4V7ST1G	4.7	200	2-SOD-323	10N9523	0.16
MM3Z5V1ST1G	5.1	200	2-SOD-323	10N9524	0.16
MM3Z6V8ST1G	6.8	200	2-SOD-323	10N9526	0.16
MM3Z10VST1G	10	200	2-SOD-323	10N9519	0.16
MM3Z12VST1G	12	200	2-SOD-323	10N9520	0.16
MM5ZxxxT1 SERIES					
MM5Z5V1T1G	5.1	200	2-SOD-523	10N9530	0.26
MM5ZxxxST1 SERIES (TIGHT TOLERANCE)					
MM5Z5V1ST1G	5.1	200	2-SOD-523	10N9529	0.29

(175887)

MMBZ SERIES VOLTAGE REGULATOR ZENER DIODES

RoHS Compliant Available

ON Semiconductor

MMBZxxxALT1 SERIES

Mfg. Part No.	Zener Voltage (V)	Power Dissipation (mW)	Package	Tape Cut Stock No.	Price Each 1-9
MMBZ5V6ALT1G	5.6	225	3-SOT-23	98H0768	0.25
MMBZ6V2ALT1G	6.2	225	3-SOT-23	98H0798	0.26
MMBZ6V8ALT1G	6.8	225	3-SOT-23	98H0799	0.26
MMBZ9V1ALT1G	9.1	225	3-SOT-23	10N9494	0.26
MMBZ15VALT1G	15	225	3-SOT-23	98H0759	0.26

➤CONTINUED➤

MMBZ SERIES VOLTAGE REGULATOR ZENER DIODES (CONT.)

Mfg. Part No.	Zener Voltage (V)	Power Dissipation (mW)	Package	Tape Cut Stock No.	Tape Cut Price Each 1-9
● MMBZ18VALT1G	18	225	3-SOT-23	10N9482	0.26
● MMBZ20VALT1G	20	225	3-SOT-23	98H0763	0.25
● MMBZ27VALT1G	27	225	3-SOT-23	10N9483	0.25
MMBZxxxCLT1/DLT1 SERIES					
● MMBZ15VDLT1G	15	225	3-SOT-23	98H0760	0.26
● MMBZ27VCLT1G	27	225	3-SOT-23	98H0766	0.25
MMBZ52xxBLT SERIES					
● MMBZ5221BLT1G	2.4	225	3-SOT-23	45J1546	0.17
● MMBZ5222BLT1G	2.5	225	3-SOT-23	10N9484	0.16
● MMBZ5223BLT1G	2.7	225	3-SOT-23	10N9485	0.16
● MMBZ5226BLT1G	3.3	225	3-SOT-23	45J1549	0.17
● MMBZ5229BLT1G	4.3	225	3-SOT-23	98H0774	0.16
● MMBZ5230BLT1G	4.7	225	3-SOT-23	88H4806	0.17
● MMBZ5231BLT1G	5.1	225	3-SOT-23	88H4809	0.16
● MMBZ5232BLT1G	5.6	225	3-SOT-23	98H0775	0.16
● MMBZ5233BLT1G	6	225	3-SOT-23	88H4814	0.16
● MMBZ5234BLT1G	6.2	225	3-SOT-23	88H4816	0.16
● MMBZ5235BLT1G	6.8	225	3-SOT-23	88H4819	0.16
● MMBZ5236BLT1G	7.5	225	3-SOT-23	45J1553	0.16
● MMBZ5237BLT1G	8.2	225	3-SOT-23	45J1554	0.16
● MMBZ5239BLT1G	9.1	225	3-SOT-23	45J1556	0.16
● MMBZ5240BLT1G	10	225	3-SOT-23	98H0776	0.16
● MMBZ5241BLT1G	11	225	3-SOT-23	88H4829	0.16
● MMBZ5242BLT1G	12	225	3-SOT-23	88H4830	0.16
● MMBZ5243BLT1G	13	225	3-SOT-23	55T0910	0.16
● MMBZ5244BLT1G	14	225	3-SOT-23	98H0779	0.16
● MMBZ5245BLT1G	15	225	3-SOT-23	98H0780	0.16
● MMBZ5246BLT1G	16	225	3-SOT-23	83H7355	0.16
● MMBZ5247BLT1G	17	225	3-SOT-23	88H4841	0.16
● MMBZ5248BLT1G	18	225	3-SOT-23	98H0782	0.16
● MMBZ5249BLT1G	19	225	3-SOT-23	10N9489	0.16
● MMBZ5250BLT1G	20	225	3-SOT-23	83H7358	0.16
● MMBZ5251BLT1G	22	225	3-SOT-23	98H0784	0.16
● MMBZ5252BLT1G	24	225	3-SOT-23	85W2818	0.17
● MMBZ5255BLT1G	28	225	3-SOT-23	10N9491	0.16
● MMBZ5257BLT1G	33	225	3-SOT-23	41J1718	0.16
● MMBZ5261BLT1G	47	225	3-SOT-23	10N9493	0.16

(175888)

MMBZ SERIES SMALL SIGNAL ZENER DIODES

RoHS Compliant Available

VISHAY.

Sold individually. Tape-and-reel packaging also available; *go online or call.*

Power Dissipation: 225mW

Mfg. Part No.	V_{Zener} Typ (V)	Package	Tape Cut Stock No.	Tape Cut Price Each 1-9
● MMBZ5225B-V-GS08	3	SOT-23	69R4709	0.09
● MMBZ5226B-V-GS08	3.3	SOT-23	69R4710	0.09
● MMBZ5227B-V-GS08	3.6	SOT-23	69R4711	0.09
● MMBZ5228B-V-GS08	3.9	SOT-23	69R4712	0.09
● MMBZ5229B-V-GS08	4.3	SOT-23	69R4713	0.09
● MMBZ5230B-V-GS08	4.7	SOT-23	69R4714	0.09
● MMBZ5231B-V-GS08	5.1	SOT-23	69R4715	0.09
● MMBZ5232B-V-GS08	5.6	SOT-23	69R4716	0.09
● MMBZ5233B-V-GS08	6	SOT-23	69R4717	0.09
● MMBZ5234B-V-GS08	6.2	SOT-23	69R4718	0.09
● MMBZ5235B-V-GS08	6.8	SOT-23	69R4719	0.09
● MMBZ5236B-V-GS08	7.5	SOT-23	69R4720	0.09
● MMBZ5237B-V-GS08	8.2	SOT-23	69R4721	0.09
● MMBZ5238B-V-GS08	8.7	SOT-23	69R4722	0.09
● MMBZ5239B-V-GS08	9.1	SOT-23	69R4723	0.09
● MMBZ5240B-V-GS08	10	SOT-23	69R4724	0.09
● MMBZ5241B-V-GS08	11	SOT-23	69R4725	0.09
● MMBZ5242B-V-GS08	12	SOT-23	69R4726	0.09
● MMBZ5243B-V-GS08	13	SOT-23	69R4727	0.09
● MMBZ5244B-V-GS08	14	SOT-23	69R4728	0.09
● MMBZ5245B-V-GS08	15	SOT-23	69R4729	0.09
● MMBZ5246B-V-GS08	16	SOT-23	69R4730	0.09
● MMBZ5247B-V-GS08	17	SOT-23	69R4731	0.09
● MMBZ5248B-V-GS08	18	SOT-23	69R4732	0.09
● MMBZ5249B-V-GS08	19	SOT-23	69R4733	0.09
● MMBZ5250B-V-GS08	20	SOT-23	69R4734	0.09

CONTINUED

MMBZ SERIES SMALL SIGNAL ZENER DIODES (CONT.)

Mfg. Part No.	V_{Zener} Typ (V)	Package	Tape Cut Stock No.	Tape Cut Price Each 1-9
● MMBZ5251B-V-GS08	22	SOT-23	69R4735	0.09
● MMBZ5252B-V-GS08	24	SOT-23	69R4736	0.09
● MMBZ5253B-V-GS08	25	SOT-23	69R4737	0.09
● MMBZ5254B-V-GS08	27	SOT-23	69R4738	0.09
● MMBZ5255B-V-GS08	28	SOT-23	69R4739	0.09
● MMBZ5256B-V-GS08	30	SOT-23	69R4740	0.09
● MMBZ5257B-V-GS08	33	SOT-23	69R4741	0.09
● MMBZ5258B-V-GS08	36	SOT-23	69R4742	0.09
● MMBZ5259B-V-GS08	39	SOT-23	69R4743	0.09
● MMBZ5260B-V-GS08	43	SOT-23	69R4744	0.09
● MMBZ5261B-V-GS08	47	SOT-23	69R4745	0.09
● MMBZ5262B-V-GS08	51	SOT-23	69R4746	0.09
● MMBZ5263B-V-GS08	56	SOT-23	69R4747	0.09
● MMBZ5264B-V-GS08	60	SOT-23	69R4748	0.09
● MMBZ5265B-V-GS08	62	SOT-23	69R4749	0.09
● MMBZ5266B-V-GS08	68	SOT-23	69R4750	0.09
● MMBZ5267B-V-GS08	75	SOT-23	69R4751	0.09
Power Dissipation: 350mW				
● MMBZ4617-V-GS08	2.4	SOT-23	69R4661	0.09
● MMBZ4681-V-GS08	2.4	SOT-23	69R4672	0.09
● MMBZ4682-V-GS08	2.7	SOT-23	69R4673	0.09
● MMBZ4618-V-GS08	2.7	SOT-23	69R4662	0.09
● MMBZ4683-V-GS08	3	SOT-23	69R4674	0.09
● MMBZ4619-V-GS08	3	SOT-23	69R4663	0.09
● MMBZ4620-V-GS08	3.3	SOT-23	69R4664	0.09
● MMBZ4684-V-GS08	3.3	SOT-23	69R4675	0.09
● MMBZ4685-V-GS08	3.6	SOT-23	69R4676	0.09
● MMBZ4621-V-GS08	3.6	SOT-23	69R4665	0.09
● MMBZ4622-V-GS08	3.9	SOT-23	69R4666	0.09
● MMBZ4686-V-GS08	3.9	SOT-23	69R4677	0.09
● MMBZ4623-V-GS08	4.3	SOT-23	69R4667	0.10
● MMBZ4687-V-GS08	4.3	SOT-23	69R4678	0.09
● MMBZ4688-V-GS08	4.7	SOT-23	69R4679	0.09
● MMBZ4624-V-GS08	4.7	SOT-23	69R4668	0.09
● MMBZ4626-V-GS08	5.6	SOT-23	69R4670	0.09
● MMBZ4690-V-GS08	5.6	SOT-23	69R4681	0.09
● MMBZ4627-V-GS08	6.2	SOT-23	69R4671	0.09
● MMBZ4691-V-GS08	6.2	SOT-23	69R4682	0.09
● MMBZ4692-V-GS08	6.8	SOT-23	69R4683	0.09
● MMBZ4693-V-GS08	7.5	SOT-23	69R4684	0.09
● MMBZ4694-V-GS08	8.2	SOT-23	69R4685	0.09
● MMBZ4695-V-GS08	8.7	SOT-23	69R4686	0.09
● MMBZ4696-V-GS08	9.1	SOT-23	69R4687	0.09
● MMBZ4698-V-GS08	11	SOT-23	69R4689	0.09
● MMBZ4699-V-GS08	12	SOT-23	69R4690	0.09
● MMBZ4700-V-GS08	13	SOT-23	69R4691	0.09
● MMBZ4701-V-GS08	14	SOT-23	69R4692	0.09
● MMBZ4703-V-GS08	16	SOT-23	69R4694	0.09
● MMBZ4704-V-GS08	17	SOT-23	69R4695	0.09
● MMBZ4705-V-GS08	18	SOT-23	69R4696	0.09
● MMBZ4707-V-GS08	20	SOT-23	69R4698	0.09
● MMBZ4708-V-GS08	22	SOT-23	69R4699	0.09
● MMBZ4709-V-GS08	24	SOT-23	69R4700	0.09
● MMBZ4710-V-GS08	25	SOT-23	69R4701	0.09
● MMBZ4711-V-GS08	27	SOT-23	69R4702	0.09
● MMBZ4712-V-GS08	28	SOT-23	69R4703	0.09
● MMBZ4713-V-GS08	30	SOT-23	69R4704	0.09
● MMBZ4714-V-GS08	33	SOT-23	69R4705	0.09
● MMBZ4715-V-GS08	36	SOT-23	69R4706	0.09
● MMBZ4716-V-GS08	39	SOT-23	69R4707	0.09
● MMBZ4717-V-GS08	43	SOT-23	69R4708	0.09

(177558)

EMBEDDED DESIGN TOOLS

IDEs, Compilers, Debuggers and programming tools for all your MCU/DSP/FPGA needs.

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(196530)

1N7xxx ZENER DIODES

RoHS Compliant Available

multicomp

Features:
- High reliability.
- Very sharp reverse characteristic
- Zener voltage 3.3V to 12V
- Vz-tolerance ±5%

Mfg. Part No.	Zener Voltage (V)	Power Dissipation (mW)	Package	Tape Cut Stock No.	Tape Cut 1-9
1N746A	3.3	500	DO-35	13T8935	0.10
1N747A	3.6	500	DO-35	13T8937	0.09
1N748A	3.9	500	DO-35	13T8939	0.09
1N749A	4.3	500	DO-35	13T8941	0.09
1N750A	4.7	500	DO-35	13T8943	0.10
1N751A	5.1	500	DO-35	13T8945	0.10
1N752A	5.6	500	DO-35	13T8947	0.10
1N753A	6.2	500	DO-35	13T8949	0.10
1N754A	6.8	500	DO-35	13T8951	0.09
1N755A	7.5	500	DO-35	13T8953	0.09
1N756A	8.2	500	DO-35	13T8955	0.09
1N757A	9.1	500	DO-35	13T8957	0.09
1N758A	10	500	DO-35	13T8959	0.10
1N759A	12	500	DO-35	13T8961	0.09

(194895)

ZENER DIODES - 5% TOLERANCE

RoHS Compliant Available

FAIRCHILD

1N5200 SERIES
DO-35 package. Length: 4.5mm. Diameter: 2.0 mm. Working voltage tolerance: ±5%.

Mfg. Part No.	Zener Voltage (V)	P_D (W)	Z_Z Max. (Ω)	Tape Cut Stock No.	Tape Cut Price Each 1-9
1N5230BTR	4.7	0.5	19	05R0367	0.10
1N5231BTR	5.1	0.5	17	05R0368	0.12
1N5232BTR	5.6	0.5	11	05R0369	0.12
1N5235BTR	6.8	0.5	5	05R0370	0.10
1N5236BTR	7.5	0.5	6	05R0371	0.11
1N5239BTR	9.1	0.5	10	05R0372	0.10
1N5240BTR	10	0.5	17	05R0373	0.13
1N5242BTR	12	0.5	30	05R0374	0.13

1N4700 SERIES
DO-41 package. Length: 4.8mm. Diameter: 2.6 mm. Working voltage tolerance: ±5%.

1N4732ATR	4.7	1	8	05R0357	0.24
1N4733ATR	5.1	1	7	05R0358	0.24
1N4734ATR	5.6	1	5	05R0359	0.24
1N4737ATR	7.5	1	4	05R0360	0.25
1N4738ATR	8.2	1	4.5	05R0361	0.24
1N4740ATR	10	1	7	05R0362	0.25
1N4742ATR	12	1	9	05R0363	0.25
1N4747ATR	20	1	22	05R0364	0.24
1N4748ATR	22	1	23	05R0365	0.25
1N4752ATR	33	1	45	05R0366	0.24

BZX84C SERIES
SOT-23 package. Supplied on 8mm tape. Dimensions: height: 1.12mm; width: 3.05mm; depth: 2.3mm. Working voltage tolerance: ±5%.

Mfg. Part No.	Zener Voltage (V)	P_D (W)	Z_Z Max. (Ω)	Tape Cut Stock No.	Tape Cut Price Each 1-9
BZX84C3V6	3.6	0.35	85	38C6997	0.20
BZX84C4V7	4.7	0.35	60	58K0144	0.19
BZX84C5V1	5.1	0.35	35	58K0145	0.19
BZX84C5V6	5.6	0.35	25	58K8784	0.20
BZX84C6V2	6.2	0.35	10	18C6015	0.20
BZX84C6V8	6.8	0.35	8	58K8785	0.23
BZX84C7V5	7.5	0.35	7	58K0146	0.22
BZX84C8V2	8.2	0.35	7	18C6018	0.24
BZX84C9V1	9.1	0.35	10	18C6019	0.24
BZX84C10	10	0.35	15	58K0135	0.22
BZX84C12	12	0.35	20	58K0136	0.22
BZX84C13	13	0.35	26	58K0137	0.22
BZX84C15	15	0.35	30	58K8783	0.22
BZX84C16	16	0.35	40	18C6000	0.24
BZX84C18	18	0.35	50	58K0138	0.23
BZX84C30	30	0.35	80	18C6009	0.17

MMBZ5200B SERIES
SOT-23 package. Supplied on 8mm tape. Working voltage tolerance: ±5%.

CONTINUED

ZENER DIODES - 5% TOLERANCE (CONT.)

Mfg. Part No.	Zener Voltage (V)	Device Marking	Tape Cut Stock No.	Tape Cut Price Each 1-9
MMBZ5231B	5.1	8F	18C7438	0.23
MMBZ5232B	5.6	8G	38C7446	0.17
MMBZ5242B	12	8S	58K1899	0.23

(65975)

BZX84C SERIES VOLTAGE REGULATOR ZENER DIODES

RoHS Compliant Available

ON Semiconductor

BZX84C SERIES (STANDARD TOLERANCE)

Mfg. Part No.	Zener Voltage (V)	Power Dissipation (mW)	Package	Tape Cut Stock No.	Tape Cut Price Each 1-9
BZX84C2V4LT1G	2.4	225	3-SOT-23	45J0634	0.17
BZX84C2V7LT1G	2.7	225	3-SOT-23	45J0635	0.16
BZX84C3V0LT1G	3	225	3-SOT-23	83H6466	0.16
BZX84C3V3LT1G	3.3	225	3-SOT-23	88H4586	0.17
BZX84C3V6LT1G	3.6	225	3-SOT-23	45J0638	0.16
BZX84C3V9LT1G	3.9	225	3-SOT-23	98H0523	0.16
BZX84C4V3LT1G	4.3	225	3-SOT-23	45J0641	0.16
BZX84C4V7LT1G	4.7	225	3-SOT-23	83H6472	0.16
BZX84C5V1LT1G	5.1	225	3-SOT-23	88H4589	0.16
BZX84C5V6LT1G	5.6	225	3-SOT-23	83H6477	0.17
BZX84C6V2LT1G	6.2	225	3-SOT-23	83H6480	0.16
BZX84C6V8LT1G	6.8	225	3-SOT-23	98H0534	0.16
BZX84C7V5LT1G	7.5	225	3-SOT-23	83H6485	0.16
BZX84C8V2LT1G	8.2	225	3-SOT-23	88H4590	0.16
BZX84C9V1LT1G	9.1	225	3-SOT-23	88H4591	0.16
BZX84C10LT1G	10	225	3-SOT-23	88H4581	0.16
BZX84C12LT1G	12	225	3-SOT-23	83H6453	0.17
BZX84C13LT1G	13	225	3-SOT-23	88H4582	0.16
BZX84C15LT1G	15	225	3-SOT-23	83H6456	0.16
BZX84C16LT1G	16	225	3-SOT-23	88H4583	0.16
BZX84C18LT1G	18	225	3-SOT-23	88H4584	0.16
BZX84C20LT1G	20	225	3-SOT-23	45J0636	0.16
BZX84C24LT1G	24	225	3-SOT-23	10N9397	0.16
BZX84C30LT1G	30	225	3-SOT-23	83H6469	0.17
BZX84C33LT1G	33	225	3-SOT-23	45J0639	0.16
BZX84C36LT1G	36	225	3-SOT-23	88H4587	0.16
BZX84C43LT1G	43	225	3-SOT-23	10N9398	0.16
BZX84C51LT1G	51	225	3-SOT-23	10N9399	0.16
BZX84C75LT1G	75	225	3-SOT-23	98H0540	0.16

BZX84B SERIES (TIGHT TOLERANCE)

BZX84B5V1LT1G	5.1	225	3-SOT-23	10N9393	0.23
BZX84B5V6LT1G	5.6	225	3-SOT-23	10N9394	0.23
BZX84B6V2LT1G	6.2	225	3-SOT-23	45J0631	0.23

(175897)

BZX SERIES ZENER DIODES

RoHS Compliant Available

FAIRCHILD

* = Tape Cut

DO-35

Mfg. Part No.	Zener Voltage (V)	Total Power Dissipation (mW)	Stock No.	Price Each 1-9
BZX79C3V3	3.3	500	58K0131	0.14
BZX79C3V6	3.6	500	18C5982	0.13
BZX79C3V9	3.9	500	58K8781	0.11
BZX79C4V3	4.3	500	58K0132	0.11
BZX79C4V7	4.7	500	18C5987	0.14
BZX79C5V1	5.1	500	58K8782	0.14
BZX79C5V6	5.6	500	18C5989	0.14
BZX79C6V2	6.2	500	18C5990	0.14
BZX79C6V8	6.8	500	58K0133	0.14
BZX79C8V2	8.2	500	58K0134	0.11
BZX79C9V1	9.1	500	18C5994	0.14
BZX79C10	10	500	58K8778	0.13
BZX79C11	11	500	38C6994	0.14
BZX79C12	12	500	58K8779	0.14
BZX79C15	15	500	18C5974	0.14
BZX79C20	20	500	58K0129	0.11
BZX79C24	24	500	18C5979	0.13
BZX79C33	33	500	18C5985	0.14

CONTINUED

BZX SERIES ZENER DIODES (CONT.)

SOT-23*

Mfg. Part No.	Zener Voltage (V)	Total Power Dissipation (mW)	Stock No.	Price Each 1-9
● BZX84C3V3	3.3	350	58K0141	0.20
● BZX84C4V3	4.3	350	58K0143	0.20
● BZX84C11	11	350	18C5996	0.22
● BZX84C20	20	350	58K0139	0.22
● BZX84C27	27	350	58K0140	0.16
DO-41				
● BZX85C3V3	3.3	1 W	18C6031	0.24
● BZX85C3V6	3.6	1 W	18C6032	0.24
● BZX85C3V9	3.9	1 W	18C6033	0.24
● BZX85C4V3	4.3	1 W	18C6036	0.24
● BZX85C4V7	4.7	1 W	18C6037	0.24
● BZX85C5V1	5.1	1 W	18C6038	0.24
● BZX85C5V6	5.6	1 W	18C6039	0.24
● BZX85C8V2	8.2	1 W	18C6043	0.24
● BZX85C9V1	9.1	1 W	18C6044	0.24
● BZX85C10	10	1 W	18C6020	0.24
● BZX85C11	11	1 W	18C6021	0.24
● BZX85C12	12	1 W	18C6022	0.24
● BZX85C13	13	1 W	18C6023	0.24
● BZX85C15	15	1 W	18C6024	0.24
● BZX85C16	16	1 W	18C6025	0.17
● BZX85C18	18	1 W	18C6026	0.24
● BZX85C20	20	1 W	18C6027	0.17
● BZX85C22	22	1 W	18C6028	0.18
● BZX85C24	24	1 W	18C6029	0.24

(165066)

MMSZ SERIES ZENER DIODES

RoHS Compliant Available

FAIRCHILD

Mfg. Part No.	Zener Voltage (V)	Total Power Dissipation (mW)	Package	Stock No.	Price Each 1-9
● MMSZ4684	3.3	500	SOD-123	58K1903	0.23
● MMSZ5226B	3.3	500	SOD-123	38C7464	0.23
● MMSZ5227B	3.6	500	SOD-123	18C7493	0.19
● MMSZ4686	3.9	500	SOD-123	18C7485	0.16
● MMSZ5228B	3.9	500	SOD-123	58K1907	0.24
● MMSZ4688	4.94	500	SOD-123	58K1904	0.17
● MMSZ5230B	4.7	500	SOD-123	58K1908	0.18
● MMSZ5231B	5.1	500	SOD-123	58K1909	0.23
● MMSZ5232B	5.6	500	SOD-123	58K1910	0.22
● MMSZ5234B	6.2	500	SOD-123	58K1911	0.23
● MMSZ4692	6.8	500	SOD-123	18C7487	0.19
● MMSZ5237B	8.2	500	SOD-123	18C7503	0.19
● MMSZ5239B	9.1	500	SOD-123	58K1912	0.19
● MMSZ4697	10	500	SOD-123	58K1905	0.24
● MMSZ5240B	10	500	SOD-123	58K1913	0.27
● MMSZ5242B	12	500	SOD-123	58K1914	0.27
● MMSZ5244B	14	500	SOD-123	18C7510	0.27
● MMSZ4702	15	500	SOD-123	18C7489	0.20
● MMSZ5253B	25	500	SOD-123	18C7519	0.19
● MMSZ5256B	30	500	SOD-123	58K1919	0.19

(148570)

MMSZ SERIES VOLTAGE REGULATOR ZENER DIODES

RoHS Compliant Available

ON Semiconductor

MMSZ52xxBT SERIES

Mfg. Part No.	Zener Voltage (V)	Power Dissipation (W)	Package	Tape Cut Stock No.	Price Each 1-9
● MMSZ5221BT1G	2.4	500	2-SOD-123	83H7409	0.25
● MMSZ5222BT1G	2.5	500	2-SOD-123	26K4591	0.26
● MMSZ5225BT1G	3	500	2-SOD-123	83H7414	0.26
● MMSZ5226BT1G	3.3	500	2-SOD-123	45J1591	0.26
● MMSZ5227BT1G	3.6	500	2-SOD-123	45J1592	0.26
● MMSZ5228BT1G	3.9	500	2-SOD-123	10N9511	0.26
● MMSZ5229BT1G	4.3	500	2-SOD-123	71J6030	0.25
● MMSZ5230BT1G	4.7	500	2-SOD-123	83H7423	0.25
● MMSZ5231BT1G	5.1	500	2-SOD-123	83H7426	0.26
● MMSZ5232BT1G	5.6	500	2-SOD-123	88H4904	0.25

CONTINUED

MMSZ SERIES VOLTAGE REGULATOR ZENER DIODES (CONT.)

Mfg. Part No.	Zener Voltage (V)	Power Dissipation (W)	Package	Tape Cut Stock No.	Price Each 1-9
● MMSZ5233BT1G	6	500	2-SOD-123	55T0911	0.26
● MMSZ5234BT1G	6.2	500	2-SOD-123	45J1596	0.26
● MMSZ5235BT1G	6.8	500	2-SOD-123	83H7434	0.25
● MMSZ5236BT1G	7.5	500	2-SOD-123	83H7437	0.26
● MMSZ5238BT1G	8.7	0.5	2-SOD-123	26M8279	0.26
● MMSZ5239BT1G	9.1	500	2-SOD-123	88H4905	0.25
● MMSZ5240BT1G	10	500	2-SOD-123	98H0830	0.25
● MMSZ5242BT1G	12	500	2-SOD-123	83H7448	0.26
● MMSZ5243BT1G	13	500	2-SOD-123	45J1600	0.26
● MMSZ5244BT1G	14	500	2-SOD-123	45J1601	0.25
● MMSZ5245BT1G	15	500	2-SOD-123	83H7454	0.26
● MMSZ5246BT1G	16	500	2-SOD-123	83H7457	0.25
● MMSZ5247BT1G	17	500	2-SOD-123	45J1602	0.25
● MMSZ5248BT1G	18	500	2-SOD-123	83H7461	0.25
● MMSZ5250BT1G	20	500	2-SOD-123	83H7465	0.25
● MMSZ5251BT1G	22	0.5	2-SOD-123	10P1563	0.25
● MMSZ5252BT1G	24	500	2-SOD-123	83H7468	0.25
● MMSZ5254BT1G	27	500	2-SOD-123	83H7472	0.25
● MMSZ5255BT1G	28	500	2-SOD-123	83H7474	0.25
● MMSZ5256BT1G	30	500	2-SOD-123	83H7477	0.25
● MMSZ5257BT1G	33	500	2-SOD-123	83H7480	0.25
● MMSZ5258BT1G	36	500	2-SOD-123	83H7483	0.25
● MMSZ5259BT1G	39	500	2-SOD-123	83H7486	0.25
● MMSZ5260BT1G	43	500	2-SOD-123	83H7488	0.26
● MMSZ5261BT1G	47	500	2-SOD-123	83H7490	0.25
● MMSZ5262BT1G	51	500	2-SOD-123	10N9513	0.25
● MMSZ5263BT1G	56	500	2-SOD-123	10N9514	0.25
● MMSZ5264BT1G	60	500	2-SOD-123	10N9515	0.25
● MMSZ5266BT1G	68	500	2-SOD-123	45J1606	0.25
● MMSZ5270BT1G	91	500	2-SOD-123	45J1609	0.26
MMSZ4xxxT SERIES (LOW CURRENT)					
● MMSZ4678T1G	1.8	500	2-SOD-123	88H4871	0.25
● MMSZ4679T1G	2	500	2-SOD-123	71J6025	0.25
● MMSZ4680T1G	2.2	500	2-SOD-123	45J1575	0.26
● MMSZ4681T1G	2.4	500	2-SOD-123	45J1576	0.25
● MMSZ4683T1G	3	500	2-SOD-123	83H7395	0.25
● MMSZ4684T1G	3.3	500	2-SOD-123	45J1578	0.26
● MMSZ4685T1G	3.6	500	2-SOD-123	45J1579	0.25
● MMSZ4686T1G	3.9	500	2-SOD-123	10N9498	0.25
● MMSZ4687T1G	4.3	500	2-SOD-123	45J1580	0.25
● MMSZ4688T1G	4.7	500	2-SOD-123	83H7396	0.25
● MMSZ4689T1G	5.1	500	2-SOD-123	83H7397	0.25
● MMSZ4690T1G	5.6	500	2-SOD-123	83H7398	0.25
● MMSZ4691T1G	6.2	500	2-SOD-123	83H7399	0.25
● MMSZ4696T1G	9.1	500	2-SOD-123	45J1584	0.25
● MMSZ4697T1G	10	500	2-SOD-123	71J6026	0.26
● MMSZ4698T1G	11	500	2-SOD-123	10N9500	0.25
● MMSZ4699T1G	12	500	2-SOD-123	45J1585	0.25
● MMSZ4700T1G	13	500	2-SOD-123	10N9501	0.25
● MMSZ4701T1G	14	500	2-SOD-123	10N9502	0.25
● MMSZ4702T1G	15	500	2-SOD-123	71J6027	0.26
● MMSZ4703T1G	16	500	2-SOD-123	71J6028	0.25
● MMSZ4705T1G	18	500	2-SOD-123	10N9504	0.25
● MMSZ4711T1G	27	500	2-SOD-123	10N9506	0.25
MMSZxxxT SERIES					
● MMSZ2V7T1G	2.7	500	2-SOD-123	26K4567	0.25
● MMSZ3V0T1G	3	500	2-SOD-123	45J1571	0.25
● MMSZ3V3T1G	3.3	500	2-SOD-123	71J6023	0.25
● MMSZ3V9T1G	3.9	500	2-SOD-123	45J1572	0.25
● MMSZ4V7T1G	4.7	500	2-SOD-123	71J6024	0.25
● MMSZ5V6T1G	5.6	500	2-SOD-123	45J1588	0.25
● MMSZ6V2T1G	6.2	500	2-SOD-123	88H4906	0.25
● MMSZ7V5T1G	7.5	500	2-SOD-123	71J6036	0.26
● MMSZ8V2T1G	8.2	500	2-SOD-123	98H0831	0.26
● MMSZ9V1T1G	9.1	500	2-SOD-123	71J6037	0.25
● MMSZ11T1G	11	500	2-SOD-123	88H4866	0.26
● MMSZ12T1G	12	500	2-SOD-123	88H4867	0.25
● MMSZ15T1G	15	500	2-SOD-123	88H4868	0.25
● MMSZ18T1G	18	500	2-SOD-123	71J6019	0.25
● MMSZ20T1G	20	500	2-SOD-123	88H4869	0.25
● MMSZ27T1G	27	500	2-SOD-123	71J6022	0.25
● MMSZ43T1G	43	500	2-SOD-123	45J1574	0.25

(175869)

500mW ZENER DIODES

RoHS Compliant Available

multicomp

Features:
- High Reliability
- Very Sharp Reverse Characteristic
- Low Reverse Current Level
- V_Z Tolerance ±5%

Mfg. Part No.	Zener Voltage (V)	Package	Tape Cut Stock No.	Price Each 1-9
1N5221B	2.4	DO-35	90R9449	0.08
1N5226B	3.3	DO-35	90R9450	0.08
1N5227B	3.6	DO-35	90R9451	0.08
1N5228B	3.9	DO-35	90R9452	0.08
1N5229B	4.3	DO-35	90R9453	0.09
1N5230B	4.7	DO-35	90R9454	0.08
1N5231B	5.1	DO-35	90R9455	0.08
1N5232B	5.6	DO-35	90R9456	0.09
1N5233B	6.0	DO-35	90R9457	0.08
1N5234B	6.2	DO-35	90R9458	0.09
1N5235B	6.8	DO-35	90R9459	0.08
1N5236B	7.5	DO-35	90R9460	0.08
1N5237B	8.2	DO-35	90R9461	0.08
1N5238B	8.7	DO-35	90R9462	0.08
1N5239B	9.1	DO-35	90R9463	0.08
1N5240B	10	DO-35	90R9464	0.08
1N5241B	11	DO-35	90R9465	0.08
1N5242B	12	DO-35	90R9466	0.08
1N5243B	13	DO-35	90R9467	0.08
1N5244B	14	DO-35	90R9468	0.09
1N5245B	15	DO-35	90R9469	0.08
1N5246B	16	DO-35	90R9470	0.08
1N5247B	17	DO-35	90R9471	0.08
1N5248B	18	DO-35	90R9472	0.08
1N5250B	20	DO-35	90R9473	0.08

(196581)

AXIAL LEAD SMALL SIGNAL ZENER DIODES

RoHS Compliant Available

VISHAY.

Sold individually. Tape-and-reel packaging also available; *go online or call.*

PULSE CURRENT, DO-35 PACKAGE
Power dissipation: 500mW.

Mfg. Part No.	Zener Voltage Range V_Z @ I_{ZT} Min. (V)	Max. (V)	Test Current I_{ZT} (mA)	Reverse I_R @ T_{amb}=25°C (µA)	Leakage I_R @ T_{amb}=150°C (µA)	Stock No.	Price Each 1-9
BZX55C10-TR	9.4	10.6	40	200	<2	20H4313	0.08
BZX55C11-TR	10.4	11.6	36	100	<2	20H4315	0.08
BZX55C36-TR	34	38	11	50	<2	20H4351	0.08
1N5232C-TR	5.6	...	20	...	5	05W7038	0.09
BZX55C11-TAP	10.4	11.6	5	<0.1	<2	20H4169	0.08
BZX55C12-TAP	11.4	12.7	5	<0.1	<2	20H4171	0.08
BZX55C16-TAP	15.3	17.1	5	<0.1	<2	18M1859	0.08
BZX55C24-TAP	22.8	25.6	5	<0.1	<2	20H4189	0.08
BZX55C75-TAP	70	79	2.5	<0.1	<10	20H4235	0.08

THERMAL EQUILIBRIUM, DO-35 PACKAGE
Power dissipation: 500mW.

Mfg. Part No.	Nominal Zener Voltage V_Z @ I_{ZT} (V)	Test Current I_{ZT} (mA)	Maximum Zener Impedance @ I_{ZT} Z_{ZT} (Ω)	Maximum Reverse Leakage I_R (µA)	V_R (V)	Stock No.	Price Each 1-9
1N5221B-TR	2.4	20	30	100	1	33C2828	0.12
1N5222B-TR	2.5	20	30	100	1	18M3522	0.12
1N5223B-TR	2.7	20	30	75	1	18M3523	0.11
1N5225B-TAP	3	20	29	50	1	18M3525	0.10
1N5226B-TR	3.3	20	28	25	1	18M3527	0.10
1N5227B-TAP	3.6	20	24	15	1	18M3528	0.10
1N5228B-TR	3.9	20	23	10	1	18M3530	0.10
1N5229B-TR	4.3	20	22	5	1	18M3531	0.10
1N5230B-TR	4.7	20	19	5	2	18M3533	0.10
1N5232C-TR	5.6	20	11	5	3	05W7038	0.09
1N5233B-TAP	6	20	7	5	3.5	18M3536	0.07
1N5234B-TR	6.2	20	7	5	4	18M3537	0.07
1N5235B-TR	6.8	20	5	3	5	18M3539	0.07
1N5236B-TAP	7.5	20	6	3	6	18M3540	0.07
1N5237B-TR	8.2	20	8	3	6.5	18M3542	0.07
1N5239B-TR	9.1	20	10	3	7	18M3545	0.07
1N5240B-TR	10	20	17	3	8	18M3546	0.07
1N5240C-TAP	10	20	17	3	8	22H4436	0.10

CONTINUED

AXIAL LEAD SMALL SIGNAL ZENER DIODES (CONT.)

Mfg. Part No.	Nominal Zener Voltage V_Z @ I_{ZT} (V)	Test Current I_{ZT} (mA)	Maximum Zener Impedance @ I_{ZT} Z_{ZT} (Ω)	Maximum Reverse Leakage I_R (µA)	V_R (V)	Stock No.	Price Each 1-9
1N5241B-TR	11	20	22	2	8.4	18M3548	0.07
1N5243B-TAP	13	9.5	13	0.5	9.9	18M3550	0.07
1N5244B-TAP	14	9	15	0.1	10	18M3551	0.07
1N5245B-TR	15	8.5	16	0.1	11	18M3552	0.07
1N5246B-TAP	16	7.8	17	0.1	12	18M3553	0.07
1N5246B-TR	16	7.8	16	0.1	12	33C2870	0.07
1N5247B-TAP	17	7.4	19	0.1	13	18M3554	0.07
1N5248B-TR	18	7	21	0.1	14	18M3557	0.07
1N5250B-TR	20	6.2	25	0.1	15	18M3560	0.07
1N5251B-TAP	22	5.6	29	0.1	17	18M3561	0.07
1N5252B-TR	24	5.2	33	0.1	18	33C2881	0.07
1N5254B-TR	27	4.6	41	0.1	21	18M3564	0.07
1N5255B-TAP	28	4.5	44	0.1	21	18M3565	0.07
1N5256B-TAP	30	4.2	49	0.1	23	18M3566	0.07
1N5257B-TR	33	3.8	58	0.1	25	18M3568	0.07
1N5258B-TAP	36	3.4	70	0.1	27	18M3569	0.07
1N5260B-TAP	43	3	93	0.1	33	18M3571	0.07
1N5261B-TAP	47	2.7	105	0.1	36	18M3572	0.07
1N5262B-TR	51	2.5	125	0.1	39	18M3574	0.07
1N5255B-TAP	56	2.2	150	0.1	43	18M3565	0.07
1N5266B-TR	68	1.8	230	0.1	52	22H4504	0.07
1N5267B-TR	75	1.7	270	0.1	56	33C2909	0.07

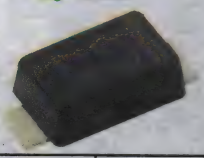
(172772)

BZD SERIES 0.8W ZENER DIODES

RoHS Compliant Available

VISHAY.

Features
- Silicon Planar Power Zener Diodes
- Low profile surface-mount package
- Zener and surge current specification
- Low leakage current
- High temperature soldering:260 °C/10 sec. at terminals
- Package: JEDEC DO-219AB (SMF®) Plastic Case



Mfg. Part No.	VZ @ IZ (V) Min	Max	IZT (mA)	Leakage Current I_R (µA)	@ VR (V)	Stock No.	Price Each 1-9
BZD27C3V6P-E3-08	3.4	3.8	100	100	1	18M8546	0.44
BZD27C3V9P-E3-08	4	4.6	100	25	1	20H3612	0.42
BZD27C4V3P-E3-08	4.4	5	100	10	1	20H3622	0.42
BZD27C4V7P-E3-08	4.8	5.4	100	5	1	20H3624	0.44
BZD27C5V1P-E3-08	5.2	6	100	10	2	18M8549	0.43
BZD27C5V6P-E3-08	5.8	6.6	100	5	2	20H3632	0.41
BZD27C6V2P-E3-08	6.4	7.2	100	10	3	20H3638	0.43
BZD27C6V8P-E3-08	7	7.9	100	50	3	20H3640	0.43
BZD27C7V5P-E3-08	7.7	8.7	100	10	3	20H3646	0.41
BZD27C8V2P-E3-08	8.5	9.6	50	10	5	18M8550	0.41
BZD27C10P-E3-08	10.4	11.6	50	4	8.2	32C1400	0.43
BZD27C15P-E3-08	15.3	17.1	25	1	12	32C1402	0.43
BZD27C16P-E3-08	16.8	19.1	25	1	13	20H3592	0.41
BZD27C18P-E3-08	18.8	21.2	25	1	15	20H3596	0.41
BZD27C22P-E3-08	22.8	25.6	25	1	18	20H3604	0.41
BZD27C27P-E3-08	28	32	25	1	22	20H3608	0.43
BZD27C36P-E3-08	37	41	10	1	30	20H3618	0.44
BZD27C62P-E3-08	64	72	10	1	51	20H3642	0.44
BZD27C75P-E3-08	77	87	10	1	62	32C1409	0.46
BZD27C82P-E3-08	85	96	5	1	68	20H3652	0.45
BZD27C100P-E3-08	104	116	5	1	82	18M8544	0.47
BZD27C130P-E3-08	138	156	5	1	110	20H3586	0.45
BZD27C150P-E3-08	153	171	5	1	120	20H3590	0.45
BZD27C180P-E3-08	188	212	5	1	150	20H3598	0.45

(60618)

1Nxxx SERIES ZENER DIODES

RoHS Compliant Available

FAIRCHILD

DO-41

Mfg. Part No.	Zener Voltage (V)	P_D (W)	Stock No.	Price Each 1-9
1N4728A	3.3	1	18C8944	0.24
1N4729A	3.6	1	18C8945	0.25
1N4730A	3.9	1	18C8946	0.25
1N4731A	4.3	1	18C8947	0.24
1N4732A	4.7	1	38C7679	0.24
1N4733A	5.1	1	38C7680	0.25
1N4734A	5.6	1	18C8950	0.25
1N4735A	6.2	1	18C8951	0.24
1N4736A	6.8	1	18C8952	0.24
1N4737A	7.5	1	18C8953	0.24
1N4738A	8.2	1	18C8954	0.24
1N4739A	9.1	1	38C7681	0.24
1N4740A	10	1	18C8956	0.25
1N4741A	11	1	18C8957	0.25
1N4742A	12	1	38C7682	0.25
1N4743A	13	1	18C8959	0.24
1N4744A	15	1	38C7683	0.25
1N4745A	16	1	18C8961	0.24
1N4746A	18	1	18C8962	0.25
1N4747A	20	1	18C8963	0.24
1N4748A	22	1	18C8964	0.24
1N4749A	24	1	18C8965	0.24
1N4750A	27	1	18C8966	0.24
1N4751A	30	1	18C8967	0.24
1N4752A	33	1	38C7684	0.24
DO-35				
1N5221B	2.4	500 mW	58K9583	0.14
1N5223B	2.7	500 mW	58K9584	0.14
1N5226B	3.3	500 mW	58K9585	0.14
1N5227B	3.6	500 mW	38C7686	0.14
1N5228B	3.9	500 mW	18C8987	0.14
1N5229B	4.3	500 mW	18C8988	0.13
1N5230B	4.7	500 mW	58K9586	0.14
1N5231B	5.1	500 mW	58K9587	0.13
1N5232B	5.6	500 mW	38C7688	0.13
1N5233B	6	500 mW	18C8992	0.14
1N5234B	6.2	500 mW	38C7689	0.14
1N5235B	6.8	500 mW	58K9588	0.14
1N5236B	7.5	500 mW	58K9589	0.13
1N5237B	8.2	500 mW	38C7691	0.13
1N5238B	8.7	500 mW	18C8997	0.13
1N5239B	9.1	500 mW	58K9590	0.13
1N5242BTR	12	500 mW	05R0374	0.13
1N5244B	14	500 mW	58K9593	0.14
1N5246B	16	500 mW	58K9595	0.14
1N5247B	17	500 mW	58K9596	0.14
1N5253B	25	500 mW	18C9012	0.14
1N5255B	28	500 mW	18C9014	0.14

(165067)

1W ZENER DIODES

RoHS Compliant Available

multicomp

Features:
- High Reliability
- Lower Profile Package
- Excellent Clamping Capability
- Glass Passivated Junction
- V_Z Tolerance ±5%

Mfg. Part No.	Zener Voltage (V)	Package	Tape Cut Stock No.	Tape Cut Price Each 1-9
1N4728A	3.3	DO-41	90R9416	0.14
1N4729A	3.6	DO-41	90R9417	0.14
1N4730A	3.9	DO-41	90R9418	0.14
1N4732A	4.7	DO-41	90R9419	0.14
1N4733A	5.1	DO-41	90R9420	0.14
1N4734A	5.6	DO-41	90R9421	0.14
1N4735A	6.2	DO-41	90R9422	0.14
1N4736A	6.8	DO-41	90R9423	0.14
1N4737A	7.5	DO-41	90R9424	0.13
1N4738A	8.2	DO-41	90R9425	0.14
1N4739A	9.1	DO-41	90R9426	0.14
1N4740A	10	DO-41	90R9427	0.14
1N4741A	11	DO-41	90R9428	0.13

➤ CONTINUED ➤

1W ZENER DIODES (CONT.)

Mfg. Part No.	Zener Voltage (V)	Package	Tape Cut Stock No.	Tape Cut Price Each 1-9
1N4742A	12	DO-41	90R9429	0.14
1N4743A	13	DO-41	90R9430	0.13
1N4744A	15	DO-41	90R9431	0.14
1N4745A	16	DO-41	90R9432	0.13
1N4746A	18	DO-41	90R9433	0.14
1N4747A	20	DO-41	90R9434	0.13
1N4748A	22	DO-41	90R9435	0.13
1N4749A	24	DO-41	90R9436	0.13
1N4750A	27	DO-41	90R9437	0.13
1N4751A	30	DO-41	90R9438	0.13
1N4752A	33	DO-41	90R9439	0.13
1N4753A	36	DO-41	90R9440	0.13
1N4754A	39	DO-41	90R9441	0.13
1N4755A	43	DO-41	90R9442	0.16
1N4756A	47	DO-41	90R9443	0.16
1N4757A	51	DO-41	90R9444	0.16
1N4758A	56	DO-41	90R9445	0.16
1N4759A	62	DO-41	90R9446	0.17
1N4760A	68	DO-41	90R9447	0.16
1N4761A	75	DO-41	90R9448	0.17

(196580)

1N47 SERIES ZENER DIODES

RoHS Compliant Available

VISHAY

Features:
- Silicon Planar Power Zener Diodes
- For use in stabilizing and clipping circuits with high power rating
- Standard Zener voltage tolerance is ± 5 %

Mfg. Part No.	VZ Nom. (V)	I_ZT (mA)	V_R (V)	I_{ZM} Max. (mA)	Stock No.	Price Each 1-9
1N4728A-TR	3.3	76	1	303	18M3501	0.14
1N4729A-TR	3.6	69	1	276	22H4315	0.14
1N4730A-TR	3.9	64	1	234	22H4316	0.14
1N4731A-TR	4.3	58	1	233	18M3502	0.14
1N4732A-TR	4.7	53	1	213	18M3503	0.14
1N4733A-TR	5.1	49	1	196	33C2776	0.14
1N4733A-TAP	5.1	49	1	196	95B4973	0.14
1N4734A-TAP	5.6	45	2	178	18M3504	0.14
1N4734A-TR	5.6	45	2	178	33C2777	0.14
1N4735A-TAP	6.2	41	3	161	95B4975	0.14
1N4735A-TR	6.2	41	3	161	33C2778	0.14
1N4736A-TR	6.8	37	4	147	18M3505	0.14
1N4737A-TR	7.5	34	5	133	33C2782	0.14
1N4738A-TR	8.2	31	6	110	22H4333	0.14
1N4739A-TR	9.1	28	7	110	33C2786	0.14
1N4740A-TAP	10	25	7.6	100	18M3506	0.14
1N4740A-TR	10	25	7.6	100	18M3507	0.14
1N4741A-TR	11	23	8.4	91	18M3509	0.14
1N4742A-TAP	12	21	9.1	83	95B4978	0.14
1N4742A-TR	12	21	9.1	83	33C2789	0.14
1N4743A-TR	13	19	9.9	69	22H4343	0.14
1N4744A-TAP	15	17	11.4	67	95B4979	0.14
1N4744A-TR	15	17	11.4	67	33C2792	0.14
1N4745A-TAP	16	15.5	12.2	63	18M3510	0.14
1N4745A-TR	16	15.5	12.2	63	18M3511	0.14
1N4746A-TAP	18	14	13.7	56	18M3512	0.14
1N4746A-TR	18	14	13.7	56	33C2794	0.14
1N4747A	20	12.5	15.2	50	18M3513	0.05
1N4747A-TR	20	12.5	15.2	50	18M3514	0.14
1N4749A-TR	24	10.5	18.2	42	33C2799	0.14
1N4751A-TR	30	8.5	22.8	33	18M3515	0.14
1N4752A-TR	33	7.5	25.1	27	22H4362	0.14
1N4753A-TAP	36	7	27.4	28	18M3516	0.14
1N4753A-TR	36	7	27.4	28	18M3517	0.14
1N4754A-TAP	39	6.5	29.7	26	95B4984	0.14
1N4754A-TR	39	6.5	29.7	26	18M3518	0.14
1N4755A-TAP	43	6	32.7	23	95B4985	0.03
1N4755A-TR	43	6	32.7	23	18M3519	0.14
1N4756A-TAP	47	5.5	35.8	21	95B4986	0.14
1N4756A-TR	47	5.5	35.8	21	33C2809	0.14
1N4759A-TR	62	4	70	14	33C2815	0.14
1N4760A-TAP	68	3.7	51.7	15	18M3520	0.14
1N4760A-TR	68	3.7	51.7	15	18M3521	0.14

(166292)

BZX85C SERIES ZENER DIODES

RoHS Compliant Available

VISHAY

Features:

- Sharp edge in reverse characteristics
- Low reverse current
- Low noise
- Very high stability
- Available with tighter tolerances

Mfg. Part No.	VZ Nom. (V)	I_ZT for V_{ZT} and $R_{Z,IT}$ (mA)	(V)	(Ω)	Stock No.	Price Each 1-9
BZX85C2V7-TAP	2.7	80	2.5 to 2.9	<20	33C0597	0.16
BZX85C5V1-TAP	5.1	45	4.8 to 5.4	<10	18M1930	0.16
BZX85C5V6-TAP	5.6	45	5.2 to 6	<7	18M1931	0.16
BZX85C6V2-TAP	6.2	35	5.8 to 6.6	<4	18M1934	0.17
BZX85C9V1-TAP	9.1	25	8.5 to 9.6	<5	18M1937	0.16
BZX85C10-TAP	10	25	9.4 to 10.6	<7	18M1921	0.16
BZX85C12-TAP	12	20	11.4 to 12.7	<9	20H4625	0.17
BZX85C13-TAP	13	20	12.4 to 14.1	<10	20H4629	0.17
BZX85C15-TAP	15	15	13.8 to 15.6	<15	18M1922	0.16
BZX85C16-TAP	16	15	15.3 to 17.1	<15	20H4637	0.17
BZX85C18-TAP	18	15	16.8 to 19.1	<20	20H4641	0.17
BZX85C22-TAP	22	10	20.8 to 23.3	<25	18M1923	0.16
BZX85C24-TAP	24	10	22.8 to 25.6	<25	18M1924	0.16
BZX85C27-TAP	27	8	25.1 to 28.9	<30	20H4653	0.16
BZX85C30-TAP	30	8	28 to 32	<30	20H4659	0.16
BZX85C33-TAP	33	8	31 to 35	<35	20H4661	0.16
BZX85C39-TAP	39	6	37 to 41	<50	18M1929	0.16
BZX85C43-TAP	43	6	40 to 46	<50	20H4671	0.16
BZX85C47-TAP	47	4	44 to 50	<90	20H4673	0.16
BZX85C51-TAP	51	4	48 to 54	<115	18M1932	0.17
BZX85C56-TAP	56	4	52 to 60	<120	18M1933	0.16
BZX85C62-TAP	62	4	58 to 66	<125	20H4687	0.17
BZX85C75-TAP	75	4	70 to 80	<3	20H4693	0.17

A in **mfg. part no** indicates 5% tolerance; other types: 10% tolerance.

SILICON PLANAR POWER DIODES, DO-213AB PACKAGE

- Power Dissipation: 1000mW
- Thermal Equilibrium
- Zener Voltage Tolerance: ±5%
- For Use in Stabilizing and Clipping Circuits with Higher Power Rating

Mfg. Part No.	V_Z Nom. (V)	I_{ZT} (mA)	DC Reverse Leakage Current Max. I_R (mA)	V_R (V)	Stock No.	Price Each Each
ZM4732A-GS08	4.7	53	10	1	22H3923	0.25
ZM4733A-GS08	5.1	49	10	1	22H3925	0.25
ZM4736A-GS08	6.8	37	10	4	22H3931	0.25
ZM4742A-GS08	12	21	5	9.1	22H3943	0.25
ZM4744A-GS08	15	17	5	11.4	22H3947	0.25
ZM4746A-GS08	18	14	5	13.7	18M3369	0.25

(52692)

1SMA59xxB SERIES VOLTAGE REGULATOR ZENER DIODES

RoHS Compliant Available

ON Semiconductor

1SMA59xxB SERIES

Mfg. Part No.	Power Dissipation (W)	Zener Voltage (V)	Package	Tape Cut Stock No.	Price Each 1-9
1SMA5913BT3G	1.5	3.3	SMA	26K5252	0.48
1SMA5914BT3G	1.5	3.6	SMA	26K5253	0.48
1SMA5915BT3G	1.5	3.9	SMA	45J2416	0.48
1SMA5916BT3G	1.5	4.3	SMA	71J9193	0.47
1SMA5917BT3G	1.5	4.7	SMA	26K5254	0.47
1SMA5918BT3G	1.5	5.1	SMA	71J9194	0.47
1SMA5919BT3G	1.5	5.6	SMA	71J9195	0.48
1SMA5920BT3G	1.5	6.2	SMA	45J2417	0.45
1SMA5922BT3G	1.5	7.5	SMA	71J9196	0.48
1SMA5923BT3G	1.5	8.2	SMA	71J9197	0.48
1SMA5924BT3G	1.5	9.1	SMA	45J2418	0.45
1SMA5925BT3G	1.5	10	SMA	71J9198	0.45
1SMA5927BT3G	1.5	12	SMA	45J2419	0.47
1SMA5928BT3G	1.5	13	SMA	26K5256	0.45
1SMA5929BT3G	1.5	15	SMA	45J2420	0.48
1SMA5930BT3G	1.5	16	SMA	26K5257	0.45
1SMA5933BT3G	1.5	22	SMA	10N9736	0.48
1SMA5934BT3G	1.5	24	SMA	45J2421	0.45
1SMA5935BT3G	1.5	27	SMA	71J9199	0.48
1SMA5936BT3G	1.5	30	SMA	71J9200	0.45
1SMA5937BT3G	1.5	33	SMA	71J9201	0.45
1SMA5938BT3G	1.5	36	SMA	26K5260	0.47
1SMA5939BT3G	1.5	39	SMA	83K8786	0.45

➤CONTINUED➤

1SMA59xxB SERIES VOLTAGE REGULATOR ZENER DIODES (CONT.)

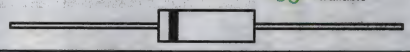
Mfg. Part No.	Power Dissipation (W)	Zener Voltage (V)	Package	Tape Cut Stock No.	Price Each 1-9
1SMA5943BT3G	1.5	56	SMA	45J2423	0.48
1SMA5945BT3G	1.5	68	SMA	26K5261	0.45

(9952)

GENERAL-PURPOSE ZENER DIODES

RoHS Compliant Available

NTE ELECTRONICS, INC.



Mfg. Part No.	Zener Voltage (V)	Power Dissipation (W)	Package	Stock No.	Price Each 1-99
NTE5002A	2.7	500 mW	DO-35	31C4321	1.08
NTE5004A	3	500 mW	DO-35	31C4323	1.08
NTE5069A	4.7	1	DO-41	21M5168	2.20
NTE135A	5.1	1	DO-41	21M5150	0.78
NTE137A	6.2	1	DO-41	06M7371	0.78
NTE5120A	6.8	5	DO-41	06M7431	2.42
NTE5072A	8.2	1	DO-41	31C4393	2.32
NTE5186A	10	10	DO-4	31C4486	17.07
NTE5256A	14	50	DO-4	06M7438	29.62
NTE140A	10	1	DO-41	29C4440	0.77
NTE142A	12	1	DO-41	30C0290	0.77
NTE5127A	12	5	DO-29	10M6197	2.52
NTE145A	15	1	DO-41	06M7372	0.64
NTE5077A	18	1	DO-41	29C4635	2.29
NTE5133A	18	5	DO-41	29C4644	2.52
NTE5137A	24	5	DO-41	31C4439	2.52
NTE5143A	36	5	DO-41	47M2257	2.55
NTE5086A	39	1	DO-41	31C4402	2.32
NTE5100A	150	1	DO-41	42M2419	1.94
NTE5105A	200	1	DO-41	06M7429	1.94
INDUSTRY STANDARD					
1N5225B	3	500 mW	DO-35	21M5198	0.17
1N5361B	27	5	DO-41	10M2941	0.89

(70304)

DZ SERIES SMALL SIGNAL ZENER DIODES

RoHS Compliant Available

Panasonic

Mini2-F3-B

POWER DISSIPATION: 120mW

Mfg. Part No.	Zener Voltage (V_Z)	Package	Stock No.	Price Each 1-24
DZ2705100L	5.1	SOD-723	56W3878	0.24
DZ2705600L	5.6	SOD-723	56W3879	0.24
DZ2706200L	6.2	SOD-723	56W3880	0.24
DZ2706800L	6.8	SOD-723	56W3881	0.25
DZ2707500L	7.5	SOD-723	56W3882	0.16
DZ2708200L	8.2	SOD-723	56W3883	0.16
DZ2709100L	9.1	SOD-723	56W3884	0.24
DZ2710000L	10	SOD-723	56W3885	0.25
DZ2711000L	11	SOD-723	56W3886	0.17
DZ2712000L	12	SOD-723	56W3887	0.24
DZ2716000L	16	SOD-723	56W3888	0.16
DZ2718000L	18	SOD-723	56W3889	0.24
DZ2720000L	20	SOD-723	56W3890	0.16
DZ2724000L	24	SOD-723	56W3891	0.16
DZ2730000L	30	SOD-723	56W3892	0.25
POWER DISSIPATION: 150mW				
DZ2S030M0L	3	SOD-523	56W3796	0.20
DZ2S033M0L	3.3	SOD-523	56W3797	0.20
DZ2S036M0L	3.6	SOD-523	56W3798	0.20
DZ2S039M0L	3.9	SOD-523	56W3799	0.18
DZ2S047M0L	4.7	SOD-523	56W3800	0.18
DZ2S051M0L	5.1	SOD-523	56W3801	0.20
DZ2S056M0L	5.6	SOD-523	56W3802	0.20
DZ2S062M0L	6.2	SOD-523	56W3803	0.18
DZ2S068C0L	6.8	SOD-523	56W3804	0.29

➤CONTINUED➤

DZ SERIES SMALL SIGNAL ZENER DIODES (CONT.)

POWER DISSIPATION: 150mW

Mfg. Part No.	Zener Voltage (V_Z)	Package	Stock No.	Price Each 1-24
● DZ2S068M0L	6.8	SOD-523	56W3805	0.18
● DZ37062D0L	6.2	SOT-723	56W3900	0.07
● DZ3S062D0L	6.2	SOT-490	56W3893	0.16
● DZ3S068D0L	6.8	SOT-490	56W3894	0.29
● DZ37082D0L	8.2	SOT-723	56W3901	0.21
● DZ3S082D0L	8.2	SOT-490	56W3895	0.16
● DZ2S091M0L	9.1	SOD-523	56W3806	0.18
● DZ2S100M0L	10	SOD-523	56W3807	0.18
● DZ3S100D0L	10	SOT-490	56W3896	0.16
● DZ37100D0L	10	SOT-723	56W3902	0.07
● DZ2S110M0L	11	SOD-523	56W3808	0.20
● DZ37120D0L	12	SOT-723	56W3903	0.28
● DZ3S120D0L	12	SOT-490	56W3897	0.29
● DZ2S120M0L	12	SOD-523	56W3809	0.20
● DZ2S130M0L	13	SOD-523	56W3810	0.18
● DZ2S150M0L	15	SOD-523	56W3811	0.20
● DZ2S160M0L	16	SOD-523	56W3812	0.20
● DZ2S180C0L	18	SOD-523	56W3813	0.29
● DZ2S180M0L	18	SOD-523	56W3814	0.14
● DZ2S200M0L	20	SOD-523	56W3815	0.15
● DZ2S220M0L	22	SOD-523	56W3816	0.18
● DZ2S300M0L	30	SOD-523	56W3817	0.18
● DZ2S330M0L	33	SOD-523	56W3818	0.14
POWER DISSIPATION: 200mW				
● DZ2J027M0L	2.7	SOD-323F	56W3767	0.16
● DZ2J030M0L	3	SOD-323F	56W3768	0.16
● DZ2J033M0L	3.3	SOD-323F	56W3769	0.18
● DZ2J036M0L	3.6	SOD-323F	56W3770	0.18
● DZ2J039M0L	3.9	SOD-323F	56W3771	0.18
● DZ2J043M0L	4.3	SOD-323F	56W3772	0.18
● DZ2J04700L	4.7	SOD-323F	56W4714	0.35
● DZ2J047M0L	4.7	SOD-323F	56W3773	0.16
● DZ2J05100L	5.1	SOD-323F	56W4715	0.35
● DZ2J051M0L	5.1	SOD-323F	56W3774	0.18
● DZ2J056M0L	5.6	SOD-323F	56W3775	0.16
● DZ2J062M0L	6.2	SOD-323F	56W3776	0.18
● DZ3X062D0L	6.2	SOT-23	56W3898	0.23
● DZ3X068D0L	6.8	SOT-23	56W3899	0.23
● DZ2J068M0L	6.8	SOD-323F	56W3777	0.16
● DZ2J075M0L	7.5	SOD-323F	56W3778	0.18
● DZ2J082M0L	8.2	SOD-323F	56W3779	0.16
● DZ2J091M0L	9.1	SOD-323F	56W3780	0.18
● DZ2J100M0L	10	SOD-323F	56W3781	0.18
● DZ2J110M0L	11	SOD-323F	56W3782	0.18
● DZ2J120M0L	12	SOD-323F	56W3783	0.18
● DZ2J130M0L	13	SOD-323F	56W3784	0.16
● DZ2J140M0L	14	SOD-323F	56W3785	0.18
● DZ2J150M0L	15	SOD-323F	56W3786	0.16
● DZ2J160M0L	16	SOD-323F	56W3787	0.18
● DZ2J180M0L	18	SOD-323F	56W3788	0.18
● DZ2J200M0L	20	SOD-323F	56W3789	0.16
● DZ2J220M0L	22	SOD-323F	56W3790	0.16
● DZ2J240M0L	24	SOD-323F	56W3791	0.16
● DZ2J27000L	27	SOD-323F	56W4716	0.35
● DZ2J270M0L	27	SOD-323F	56W3792	0.16
● DZ2J300M0L	30	SOD-323F	56W3793	0.18
● DZ2J330M0L	33	SOD-323F	56W3794	0.16
● DZ2J360M0L	36	SOD-323F	56W3795	0.14
POWER DISSIPATION: 1W				
● DZ2W02400L	2.4	SOD-123F	56W3819	0.31
● DZ2W02700L	2.7	SOD-123F	56W3820	0.31
● DZ2W03000L	3	SOD-123F	56W3821	0.31
● DZ2W03300L	3.3	SOD-123F	56W3822	0.29
● DZ2W03600L	3.6	SOD-123F	56W3823	0.29
● DZ2W03900L	3.9	SOD-123F	56W3824	0.31
● DZ2W04300L	4.3	SOD-123F	56W3825	0.31
● DZ2W04700L	4.7	SOD-123F	56W3826	0.31
● DZ2W05100L	5.1	SOD-123F	56W3827	0.31
● DZ2W05600L	5.6	SOD-123F	56W3828	0.29
● DZ2W06200L	6.2	SOD-123F	56W3829	0.29
● DZ2W06800L	6.8	SOD-123F	56W3830	0.31
● DZ2W07500L	7.5	SOD-123F	56W3831	0.31
● DZ2W08200L	8.2	SOD-123F	56W3832	0.29

➤ CONTINUED ➤

DZ SERIES SMALL SIGNAL ZENER DIODES (CONT.)

POWER DISSIPATION: 1W

Mfg. Part No.	Zener Voltage (V_Z)	Package	Stock No.	Price Each 1-24
● DZ2W09100L	9.1	SOD-123F	56W3833	0.31
● DZ2W10000L	10	SOD-123F	56W3834	0.29
● DZ2W11000L	11	SOD-123F	56W3835	0.29
● DZ2W12000L	12	SOD-123F	56W3836	0.31
● DZ2W13000L	13	SOD-123F	56W3837	0.29
● DZ2W15000L	15	SOD-123F	56W3838	0.29
● DZ2W16000L	16	SOD-123F	56W3839	0.31
● DZ2W18000L	18	SOD-123F	56W3840	0.29
● DZ2W20000L	20	SOD-123F	56W3841	0.31
● DZ2W22000L	22	SOD-123F	56W3842	0.69
● DZ2W24000L	24	SOD-123F	56W3843	0.31
● DZ2W27000L	27	SOD-123F	56W3844	0.29
● DZ2W30000L	30	SOD-123F	56W3845	0.29
● DZ2W33000L	33	SOD-123F	56W3846	0.29
● DZ2W36000L	36	SOD-123F	56W3847	0.31
● DZ2W39000L	39	SOD-123F	56W3848	0.31
● DZ2W43000L	43	SOD-123F	56W3849	0.29
● DZ2W47000L	47	SOD-123F	56W3850	0.29
● DZ2W51000L	51	SOD-123F	56W3851	0.29
POWER DISSIPATION: 2W				
● DZ2404700L	4.7	SOD-128	56W3852	0.38
● DZ2405100L	5.1	SOD-128	56W3853	0.41
● DZ2405600L	5.6	SOD-128	56W3854	0.38
● DZ2406200L	6.2	SOD-128	56W3855	0.38
● DZ2406800L	6.8	SOD-128	56W3856	0.38
● DZ2407500L	7.5	SOD-128	56W3857	0.38
● DZ2408200L	8.2	SOD-128	56W3858	0.38
● DZ2409100L	9.1	SOD-128	56W3859	0.41
● DZ2410000L	10	SOD-128	56W3860	0.41
● DZ2411000L	11	SOD-128	56W3861	0.38
● DZ2412000L	12	SOD-128	56W3862	0.41
● DZ2413000L	13	SOD-128	56W3863	0.38
● DZ2415000L	15	SOD-128	56W3864	0.41
● DZ2416000L	16	SOD-128	56W3865	0.41
● DZ2418000L	18	SOD-128	56W3866	0.41
● DZ2420000L	20	SOD-128	56W3867	0.41
● DZ2422000L	22	SOD-128	56W3868	0.41
● DZ2424000L	24	SOD-128	56W3869	0.41
● DZ2427000L	27	SOD-128	56W3870	0.38
● DZ2430000L	30	SOD-128	56W3871	0.41
● DZ2433000L	33	SOD-128	56W3872	0.38
● DZ2436000L	36	SOD-128	56W3873	0.41
● DZ2439000L	39	SOD-128	56W3874	0.38
● DZ2443000L	43	SOD-128	56W3875	0.38
● DZ2447000L	47	SOD-128	56W3876	0.38
● DZ2451000L	51	SOD-128	56W3877	0.38

(209002)

ZENER DIODES

RoHS Compliant Available

ROHM SEMICONDUCTOR

Mfg. Part No.	Power Dissipation PD (mW)	Zener Voltage Vz Typ (V)	Package Case	Stock No.	Price Each 1-9
● EDZTE615.6B	150	5.6	SOD-523	40P3015	0.30
● PTZTE259.1B	1000	9.1	SOD-106	40P3142	0.52
● UDZSTE-173.0B	200	3	SOD-323	05R8304	0.19
● VDZT2R5.1B	100	5.1	VMD2	84R7733	0.21

(207808)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

3W SURFACE MOUNT ZENER DIODES - 3SMAJ SERIES

RoHS Compliant Available

•M•C•C•

Micro Commercial Components

Feature
- 3.3V thru 56 Volt Voltage Range
- Case style: DO-214AC
- Low Inductance , Low Profile Mounting
- Glass Passivated Junction
- High specified maximum current (IZM) when adequately heat sinking

Mfg. Part No.	Zener Voltage (V)	Tape Cut Stock No.	Price Each 1-9
3SMAJ5922B-TP	7.5	51T5075	0.51
3SMAJ5923B-TP	8.2	51T5076	0.50
3SMAJ5924B-TP	9.1	51T5077	0.47
3SMAJ5926B-TP	11	51T5078	0.47
3SMAJ5927B-TP	12	51T5079	0.50
3SMAJ5928B-TP	13	51T5080	0.51
3SMAJ5930B-TP	16	51T5081	0.50
3SMAJ5931B-TP	18	51T5082	0.47
3SMAJ5936B-TP	30	51T5083	0.47
3SMAJ5937B-TP	33	51T5084	0.51
3SMAJ5938B-TP	36	51T5085	0.47

(197158)

1SMB59xxB SERIES 3W VOLTAGE REGULATOR ZENER DIODES

RoHS Compliant Available

ON Semiconductor

1SMB59xxB SERIES

Mfg. Part No.	Zener Voltage V_Z (V) Min.	Nom.	Max.	@ I_{ZT} mA	Package	Tape Cut Stock No.	Price Each 1-9
1SMB5913BT3G	3.13	3.3	3.47	113.6	DO-213AA	88H5165	0.61
1SMB5914BT3G	3.42	3.6	3.78	104.2	DO-213AA	71J9212	0.59
1SMB5915BT3G	3.7	3.9	4.1	96.1	DO-213AA	71J9213	0.62
1SMB5916BT3G	4.08	4.3	4.52	87.2	DO-213AA	71J9214	0.61
1SMB5917BT3G	4.46	4.7	4.94	79.8	DO-213AA	71J9215	0.61
1SMB5918BT3G	4.84	5.1	5.36	73.5	DO-213AA	45J2448	0.62
1SMB5919BT3G	5.32	5.6	5.88	66.9	DO-213AA	45J2449	0.62
1SMB5920BT3G	5.89	6.2	6.51	60.5	DO-213AA	45J2450	0.62
1SMB5921BT3G	6.46	6.8	7.14	55.1	DO-213AA	88H5166	0.61
1SMB5922BT3G	7.12	7.5	7.88	50	DO-214AA	71J9216	0.61
1SMB5923BT3G	7.79	8.2	8.61	45.7	DO-213AA	45J2451	0.62
1SMB5924BT3G	8.64	9.1	9.56	41.2	DO-213AA	71J9217	0.62
1SMB5925BT3G	9.5	10	10.5	37.5	DO-213AA	71J9218	0.59
1SMB5926BT3G	10.45	11	11.55	34.1	DO-213AA	42K3095	0.62
1SMB5927BT3G	11.4	12	12.6	31.2	DO-213AA	45J2452	0.61
1SMB5928BT3G	12.35	13	13.65	28.8	DO-213AA	42K3096	0.62
1SMB5929BT3G	14.25	15	15.75	25	DO-213AA	45J2453	0.59
1SMB5930BT3G	15.2	16	16.8	23.4	DO-213AA	10N9738	0.62
1SMB5932BT3G	19	20	21	18.7	DO-213AA	42K3097	0.59
1SMB5933BT3G	20.9	22	23.1	17	DO-213AA	42K3098	0.59
1SMB5934BT3G	22.8	24	25.2	15.6	DO-213AA	45J2456	0.59
1SMB5935BT3G	25.65	27	28.35	13.9	DO-213AA	45J2457	0.59
1SMB5936BT3G	28.5	30	31.5	12.5	DO-213AA	45J2458	0.59
1SMB5937BT3G	31.35	33	34.65	11.4	DO-213AA	42K3099	0.59
1SMB5939BT3G	37.05	39	40.95	9.6	DO-213AA	10N9664	0.59
1SMB5940BT3G	40.85	43	45.15	8.7	DO-213AA	10N9665	0.59
1SMB5941BT3G	44.65	47	49.35	8	DO-213AA	42K3100	0.62
1SMB5942BT3G	48.45	51	53.55	7.3	DO-213AA	71J9221	0.59
1SMB5943BT3G	53.2	56	58.8	6.7	DO-213AA	10N9666	0.59
1SMB5944BT3G	58.9	62	65.1	6	DO-213AA	71J9222	0.62
1SMB5945BT3G	64.6	68	71.4	5.5	DO-213AA	10N9667	0.62
1SMB5946BT3G	71.25	75	78.75	5	DO-213AA	10N9668	0.62
1SMB5948BT3G	86.45	91	95.55	4.1	DO-213AA	71J9225	0.59
1SMB5949BT3G	95	100	105	3.7	DO-213AA	71J9226	0.59
1SMB5953BT3G	142.5	150	157.5	2.5	DO-213AA	45J2461	0.62
1SMB5955BT3G	171	180	189	2.1	DO-213AA	10N9670	0.62
1SMB5956BT3G	190	200	210	1.9	DO-213AA	83H7918	0.61

(175886)

BZG SERIES 3W SINGLE ZENER DIODES

RoHS Compliant Available

VISHAY.

- Glass-Passivated Junction
- High Reliability
- Power Dissipation: 3W
- DO-214AC Package
- Fit Onto 5mm SMD Footpads
- Wave and Reflow Solderable
- For Voltage Stabilization Applications

Sold individually. Tape and reel packaging also available; *go online or call.*

BZG03C - SERIES

Mfg. Part No.	V_Z Min. (V)	Typ. (V)	Max. (V)	$R_{Z,I}$ and T_{KVZ} @ I_Z Typ. (Ω)	Typ. %/K	mA	Stock No.	Price Each 1-9
BZG03C10-TR	9.4	10	10.6	2	0.05	50	32C9497	0.50
BZG03C15-TR	13.8	15	15.6	5	0.05	50	32C9513	0.46
BZG03C16-TR	15.3	16	17.1	6	0.06	25	32C9517	0.46
BZG03C18-TR	16.8	18	19.1	6	0.06	25	32C9521	0.53
BZG03C27-TR	25.1	27	28.9	7	0.06	25	32C9537	0.50
BZG03C33-TR	31	33	35	8	0.06	25	32C9543	0.46
BZG03C43-TR	40	43	46	24	0.07	10	32C9549	0.50
BZG03C100-TR	94	100	106	60	0.09	5	32C9499	0.53
BZG03C120-TR	114	120	127	80	0.09	5	18M8552	0.50
BZG03C160-TR	158	160	171	150	0.09	5	32C9519	0.44
BZG03C180-TR	168	180	191	180	0.09	5	32C9523	0.44
BZG03C200-TR	188	200	212	200	0.09	5	32C9527	0.50
BZG03C220-TR	208	220	233	350	0.09	2	32C9531	0.53
BZG03C240-TR	228	240	256	400	0.09	2	32C9535	0.50
BZG03C270-TR	251	270	289	450	0.09	2	32C9539	0.44

BZG05C - SERIES

Mfg. Part No.	V_Z Nom. (V)	I_{ZT} (mA)	For V_{ZT} (V)	R_{ZJT} (Ω)	I_R (μA)	@ V_R (V)	Stock No.	Price Each 1-9
BZG05C3V3TR	3.3	80	3.1 to 3.5	<20	<40	1	32C9663	0.37
BZG05C4V7TR	4.7	45	4.4 to 5.0	<13	<3	1	32C9679	0.37
BZG05C5V1TR	5.1	45	4.8 to 5.4	<10	<1	1.5	32C9685	0.37
BZG05C5V6TR	5.6	45	5.2 to 6.0	<7	<1	2	32C9687	0.37
BZG05C16TR	16	15	15.3 to 17.1	<15	<0.5	12	32C9649	0.37

(74813)

1N5xxxBG ZENER DIODES

RoHS Compliant Available

ON Semiconductor

All Parts Sold EA

POWER MAX.: 3W; Surmetic™ 30 AXIAL CASE 59

Mfg. Part No.	Zener Voltage (V)	P_D (W)	Stock No.	Price Each 1-9
1N5927BG	12	3	42K2969	0.43
1N5953BG	150	3	42K2994	0.43
1N5956BG	200	3	42K2998	0.39
1N5919BG	5.6	3	42K2959	0.45
1N5920BG	6.2	3	42K2961	0.78
1N5921BG	6.8	3	42K2963	0.48
POWER MAX.: Surmetic™ 40 AXIAL CASE 017AA				
1N5347BG	10	5	42K2870	0.56
1N5378BG	100	5	42K2916	0.55
1N5348BG	11	5	42K2872	0.56
1N5380BG	120	5	42K2918	0.56
1N5350BG	13	5	42K2876	0.55
1N5383BG	150	5	42K2922	0.56
1N5354BG	17	5	42K2883	0.53
1N5355BG	18	5	61K2023	0.55
1N5386BG	180	5	42K2926	0.53
1N5357BG	20	5	42K2888	0.55
1N5388BG	200	5	70K6988	0.55
1N5359BG	24	5	42K2892	0.56
1N5333BG	3.3	5	42K2843	0.55
1N5364BG	33	5	42K2902	0.55
1N5365BG	36	5	42K2904	0.55
1N5366BG	39	5	42K2906	0.55
1N5367BG	43	5	42K2908	0.55
1N5338BG	5.1	5	42K2853	0.56
1N5339BG	5.6	5	42K2855	0.56
1N5342BG	6.8	5	42K2861	0.55
1N5373BG	68	5	61K2029	0.56
1N5343BG	7.5	5	42K2863	0.56
1N5374BG	75	5	61K2031	0.56
1N5375BG	82	5	61K2032	0.55

(165056)

xxxRLG ZENER DIODES

RoHS Compliant Available

ON Semiconductor

Parts With RLG Suffix Are Sold Tape & Reel

POWER MAX.: Surmetic™ 30 Axial Lead

Mfg. Part No.	Zener Voltage (V)	P_D (W)	Stock No.	Price Each 1-9
1N5925BRLG	10	3	10N9644	0.44
1N5929BRLG	15	3	42K2972	0.46
1N5931BRLG	18	3	10N9645	0.41
1N5932BRLG	20	3	42K2976	0.52
1N5934BRLG	24	3	42K2978	0.44
1N5942BRLG	51	3	42K2989	0.43
1N5955BRLG	180	3	10N9646	0.44
1N5956BRLG	200	3	06R3481	0.43
POWER MAX.: Surmetic™ 40 Axial Lead				
1N5333BRLG	3.3	5	10N9619	0.56
1N5335BRLG	3.9	5	10N9620	0.56
1N5337BRLG	4.7	5	10N9621	0.57
1N5338BRLG	5.1	5	10N9622	0.54
1N5341BRLG	6.2	5	42K2860	0.57
1N5342BRLG	6.8	5	10N9623	0.57
1N5343BRLG	7.5	5	10N9624	0.57
1N5344BRLG	8.2	5	42K2866	0.57
1N5345BRLG	8.7	5	10N9625	0.57
1N5346BRLG	9.1	5	10N9626	0.57
1N5347BRLG	10	5	42K2871	0.57
1N5349BRLG	12	5	04M7524	0.56
1N5350BRLG	13	5	10N9627	0.54
1N5351BRLG	14	5	10N9628	0.56
1N5352BRLG	15	5	10N9735	0.56
1N5353BRLG	16	5	10N9629	0.56
1N5355BRLG	18	5	42K2885	0.56
1N5357BRLG	20	5	10N9630	0.56
1N5358BRLG	22	5	10N9631	0.52
1N5359BRLG	24	5	42K2893	0.57
1N5361BRLG	27	5	10N9633	0.54
1N5362BRLG	28	5	10N9634	0.54
1N5363BRLG	30	5	10N9635	0.52
1N5364BRLG	33	5	06M5747	0.57
1N5365BRLG	36	5	10N9636	0.52
1N5368BRLG	47	5	10N9637	0.52
1N5369BRLG	51	5	10N9638	0.54
1N5371BRLG	60	5	09R9760	0.52
1N5378BRLG	100	5	10N9639	0.57
1N5383BRLG	150	5	10N9640	0.52
1N5386BRLG	180	5	10N9641	0.56
1N5388BRLG	200	5	10N9642	0.57

(74501)

5W ZENER DIODES

RoHS Compliant Available

multicomp

Features:
- High Reliability
- Very Sharp Reverse Characteristic
- Low Reverse Current Level
- V_Z Tolerance ±5%

Mfg. Part No.	Zener Voltage (V)	Package	Tape Cut Stock No.	Tape Cut Price Each 1-9
1N5340B	6	DO-201AE	90R9478	0.81
1N5348B	11	DO-201AE	90R9493	1.36
1N5354B	17	DO-201AE	90R9504	0.74

(196578)

10 WATT ZENER DIODES

RoHS Compliant Available

SOLID·STATE INC

Standard tolerance of +/-5% on the nominal zener voltage is designated by **B suffix** in the mfg. part number. Reverse polarity with cathode-to-case is designated by **R suffix** in mfg. part number.

DO-4

Mfg. Part No.	Zener Voltage (V)	I_{ZT} (mA)	Package	Stock No.	Price Each 1-9
1N2970B	6.8	370	DO-4	10P4371	7.66
1N2971B	7.5	335	DO-4	10P4377	7.56
1N2972B	8.2	305	DO-4	10P4383	7.23
1N2974B	10	250	DO-4	10P4394	7.56

CONTINUED

10 WATT ZENER DIODES (CONT.)

Mfg. Part No.	Zener Voltage (V)	I_{ZT} (mA)	Package	Stock No.	Price Each 1-9
1N2976B	12	210	DO-4	10P4406	7.56
1N2976RB	12	210	DO-4	10P4409	7.65
1N2977B	13	190	DO-4	10P4412	7.65
1N2978B	14	180	DO-4	10P4418	7.65
1N2979B	15	170	DO-4	10P4424	7.76
1N2979RB	15	170	DO-4	10P4427	7.23
1N2980B	16	155	DO-4	10P4430	7.65
1N2980RB	16	155	DO-4	10P4433	7.65
1N2982RB	18	140	DO-4	10P4444	7.65
1N2984B	20	125	DO-4	10P4453	7.65
1N2985B	22	115	DO-4	10P4459	7.65
1N2986B	24	115	DO-4	10P4465	7.56
1N2988B	27	95	DO-4	10P4477	7.65
1N2989B	30	85	DO-4	10P4483	7.56
1N2997B	51	50	DO-4	10P4530	7.65
1N3000B	62	62	DO-4	10P4548	7.65
1N3002B	75	75	DO-4	10P4560	7.23
1N3004B	91	28	DO-4	10P4571	7.65
1N3008B	120	20	DO-4	10P4595	7.56
1N3009B	130	19	DO-4	10P4601	7.23
1N3011B	150	17	DO-4	10P4613	7.65
1N3015B	200	12	DO-4	10P4637	7.65
1N3015RB	200	12	DO-4	10P4640	7.23

(136127)

50 WATT ZENER DIODES

RoHS Compliant Available

SOLID·STATE INC

Standard tolerance of +/-5% on the nominal zener voltage is designated by **B suffix** in the mfg. part number; **A suffix** denotes +/-10% standard voltage tolerance. Standard polarity is anode-to-case. Reverse polarity with cathode-to-case is designated by **R suffix** in mfg. part number.

DO-5

Mfg. Part No.	Zener Voltage (V)	I_{ZT} (mA)	Package	Stock No.	Price Each 1-9
1N3309B	10	1.2	DO-5	10P4792	12.68
1N3311B	12	1	DO-5	10P4804	13.00
1N3312B	13	960	DO-5	10P4810	12.84
1N3314B	15	830	DO-5	10P4821	12.68
1N3314RB	15	830	DO-5	10P4824	12.13
1N3315B	16	780	DO-5	10P4827	12.84
1N3315RB	16	780	DO-5	10P4830	12.84
1N3317B	17	740	DO-5	10P4839	12.84
1N3319B	20	630	DO-5	10P4851	12.68
1N3321B	24	520	DO-5	10P4863	12.68
1N3324B	30	420	DO-5	10P4881	12.84
1N3325B	33	380	DO-5	10P4887	13.00
1N3325RB	33	380	DO-5	10P4890	12.13
1N3327B	39	320	DO-5	10P4899	12.68
1N3327RB	39	320	DO-5	10P4902	12.13
1N3328B	43	290	DO-5	10P4905	12.84
1N3335B	62	200	DO-5	10P4946	12.84
1N3336B	68	180	DO-5	10P4952	12.84
1N3340B	100	120	DO-5	10P4975	12.68
1N3343B	120	100	DO-5	10P4993	12.13
1N3346B	150	85	DO-5	10P5011	12.84
1N3349B	180	68	DO-5	10P5029	12.84
1N3350RB	200	65	DO-5	10P5037	12.84

(163813)

SMAJ SERIES 400W UNI-DIRECTIONAL/BIDIRECTIONAL TVS DIODES

RoHS Compliant Available

BOURNS®

UNIDIRECTIONAL

Mfg. Part No.	V_{BR} Range	V_{RWM} (V)	Tape Cut Stock No.	Tape Cut Price Each 1-9
SMAJ5.0A	6.4V to 7V	5	67R1573	0.56
SMAJ7.0A	7.78V to 8.6V	7	67R1589	0.52
SMAJ11A	12.2V to 13.2V	11	67R1521	0.52
SMAJ12A	13.3V to 14.7V	12	67R1525	0.52
SMAJ15A	16.7V to 18.5V	15	67R1535	0.52

CONTINUED

SMAJ SERIES 400W UNI-DIRECTIONAL/BIDIRECTIONAL TVS DIODES (CONT.)

Mfg. Part No.	V_{BR} Range	V_{RWM} (V)	Tape Cut Stock No.	Price Each 1-9
SMAJ16A	17.8V to 19.7V	16	67R1539	0.56
SMAJ17A	18.9V to 20.9V	17	67R1543	0.52
SMAJ18A	20V to 22.1V	18	67R1547	0.52
SMAJ24A	26.7V to 29.5V	24	67R1553	0.52
SMAJ26A	28.9V to 31.9V	26	67R1555	0.56
SMAJ28A	31.1V to 34.4V	28	67R1557	0.52
SMAJ30A	33.3V to 36.8V	30	67R1559	0.56
SMAJ33A	36.7V to 40.6V	33	67R1561	0.52
SMAJ36A	40V to 44.2V	36	67R1563	0.56
SMAJ48A	53.3V to 58.9V	48	67R1571	0.52
SMAJ54A	60V to 66.3V	54	67R1577	0.52
SMAJ58A	64.4V to 71.2V	58	67R1579	0.52
SMAJ60A	66.7V to 73.7V	60	67R1585	0.52
SMAJ120A	133V to 147V	120	67R1527	0.52

BIDIRECTIONAL

Mfg. Part No.	V_{BR} Range	V_{RWM} (V)	Tape Cut Stock No.	Price Each 1-9
SMAJ5.0CA	6.4V to 7V	5	67R1574	0.43
SMAJ6.5CA	7.22V to 7.98V	6.5	67R1584	0.46
SMAJ10CA	11.1V to 12.3V	10	67R1518	0.43
SMAJ12CA	13.3V to 14.7V	12	67R1526	0.43
SMAJ13CA	14.4V to 15.9V	13	67R1530	0.43
SMAJ15CA	16.7V to 18.5V	15	67R1536	0.46
SMAJ18CA	20V to 22.1V	18	67R1548	0.43
SMAJ20CA	22.2V to 24.5V	20	67R1550	0.43
SMAJ24CA	26.7V to 29.5V	24	67R1554	0.43
SMAJ30CA	33.3V to 36.8V	30	67R1560	0.43
SMAJ33CA	36.7V to 40.6V	33	67R1562	0.43
SMAJ36CA	40V to 44.2V	36	67R1564	0.43
SMAJ51CA	56.7V to 62.7V	51	67R1576	0.43
SMAJ60CA	66.7V to 73.7V	60	67R1586	0.46

(172424)

SMAJ SERIES 400W UNI-DIRECTIONAL TVS DIODES

RoHS Compliant Available

Littelfuse — Expertise Applied | Answers Delivered

Features:
- 400W Peak Pulse Power Dissipation
- 2 pin (SMA) Low Profile Case
- Built-in Strain Relief
- Fast Response Time
- Excellent clamping capability
- Low incremental surge resistance

Mfg. Part No.	V_{RRM} (V)	VBR @ IT (V) Min./Max.	(mA)	IR @ VR (µA)	VC @ IPP (V)	IPP (A)	Pkg.	Tape Cut Stock No.	1-9
SMAJ5.0A	5	/ 7	10	800	9.2	43.5	DO-214AC	71J2029	0.33
SMAJ6.0A	6	/ 7.37	10	800	10.3	38.8	DO-214AC	71J2045	0.35
SMAJ6.5A	6.5	/ 7.98	10	500	11.2	35.7	DO-214AC	06R1897	0.35
SMAJ7.0A	7	/ 8.6	10	200	12	33.3	DO-214AC	71J2061	0.33
SMAJ7.5A	7.5	/ 9.21	1	100	12.9	31	DO-214AC	06R1903	0.33
SMAJ9.0A	9	/ 11.1	1	10	15.4	26	DO-214AC	06R1909	0.33
SMAJ10A	10	11.10 / 12.30	1	5	17	23.5	DO-214AC	31T1589	0.33
SMAJ12A	12	/ 14.7	1	1	19.9	20.1	DO-214AC	71J1937	0.33
SMAJ13A	13	/ 15.9	1	1	21.5	18.6	DO-214AC	71J1945	0.33
SMAJ14A	14	/ 17.2	1	1	23.2	17.2	DO-214AC	64T2593	0.33
SMAJ15A	15	/ 18.5	1	1	24.4	16.4	DO-214AC	06R1847	0.35
SMAJ16A	16	/ 19.7	1	1	26	15.4	DO-214AC	71J1965	0.33
SMAJ18A	18	/ 22.1	1	1	29.2	13.7	DO-214AC	06R1855	0.33
SMAJ20A	20	/ 24.5	1	1	32.4	12.3	DO-214AC	06R1857	0.35
SMAJ22A	22	/ 26.9	1	1	35.5	11.3	DO-214AC	06R1861	0.33
SMAJ24A	24	/ 29.5	1	1	38.9	10.3	DO-214AC	06R1865	0.33
SMAJ26A	26	/ 31.9	1	1	42.1	9.5	DO-214AC	71J1997	0.35
SMAJ28A	28	/ 34.4	1	1	45.4	8.8	DO-214AC	71J2001	0.35
SMAJ30A	30	/ 36.8	1	1	48.4	8.3	DO-214AC	71J2005	0.33
SMAJ36A	36	/ 44.2	1	1	58.1	6.9	DO-214AC	06R1877	0.33
SMAJ40A	40	/ 49.1	1	1	64.5	6.2	DO-214AC	71J2017	0.35
SMAJ45A	45	/ 55.3	1	1	72.7	5.5	DO-214AC	06R1883	0.35
SMAJ48A	48	/ 58.9	1	1	77.4	5.2	DO-214AC	71J2025	0.33
SMAJ51A	51	/ 62.7	1	1	82.4	4.9	DO-214AC	06R1889	0.33
SMAJ54A	54	/ 66.3	1	1	87.1	4.6	DO-214AC	06R1891	0.35
SMAJ58A	58	/ 71.2	1	1	93.6	4.3	DO-214AC	71J2041	0.35

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SMAJ SERIES 400W UNI-DIRECTIONAL TVS DIODES (CONT.)

Mfg. Part No.	V_{RRM} (V)	VBR @ IT (V) Min./Max.	(mA)	IR @ VR (µA)	VC @ IPP (V)	IPP (A)	Pkg.	Tape Cut Stock No.	1-9
SMAJ60A	60	/ 73.7	1	1	96.8	4.1	DO-214AC	71J2053	0.33
SMAJ75A	75	/ 92.1	1	1	121	3.3	DO-214AC	06R1905	0.33
SMAJ100A	100	/ 123	1	1	162	2.5	DO-214AC	06R1839	0.33
SMAJ150A	150	/ 185	1	1	243	1.6	DO-214AC	06R1849	0.33
SMAJ200A	200	/ 247	1	1	324	1.2	DO-214AC	26K7392	0.33
SMAJ250A	250	/ 309	1	1	405	1	DO-214AC	64T2594	0.61
SMAJ440A	440	/ 543	1	1	713	600	DO-214AC	72R7030	0.49

(83023)

SMAJ SERIES 400W BI-DIRECTIONAL TVS DIODES

RoHS Compliant Available

Littelfuse — Expertise Applied | Answers Delivered

Features:
- 400W Peak Pulse Power Dissipation
- 2 pin (SMA) Low Profile Case
- Built-in Strain Relief
- Fast Response Time
- Excellent clamping capability
- Low incremental surge resistance

Mfg. Part No.	V_{RRM} (V)	VBR @ IT (V) Min./Max.	(mA)	I_R @ VR Max. (µA)	V_{Clamp} Max. @ IPP (V)	IPP Max. (A)	Pkg.	Tape Cut Stock No.	1-9
SMAJ5.0CA	5	/ 7	10	800	9.2	43.5	DO-214AC	71J2031	0.36
SMAJ6.0CA	6	/ 7.37	10	800	10.3	38.8	DO-214AC	71J2047	0.36
SMAJ6.5CA	6.5	/ 7.98	10	500	11.2	35.7	DO-214AC	71J2051	0.36
SMAJ7.0CA	7	/ 8.6	10	200	12	33.3	DO-214AC	06R1902	0.36
SMAJ7.5CA	7.5	/ 9.21	1	100	12.9	31	DO-214AC	71J2067	0.36
SMAJ9.0CA	9	/ 11.1	1	10	15.4	26	DO-214AC	06R1910	0.36
SMAJ10CA	10	/ 12.3	1	5	17	23.5	DO-214AC	72R7028	0.36
SMAJ12CA	12	/ 14.7	1	1	19.9	20.1	DO-214AC	71J1939	0.36
SMAJ13CA	13	/ 15.9	1	1	21.5	18.6	DO-214AC	71J1947	0.36
SMAJ15CA	15	/ 18.5	1	1	24.4	16.4	DO-214AC	71J1959	0.36
SMAJ16CA	16	/ 19.7	1	1	26	15.4	DO-214AC	06R1852	0.38
SMAJ17CA	17	/ 20.9	1	1	27.6	14.5	DO-214AC	06R1854	0.36
SMAJ18CA	18	/ 22.1	1	1	29.2	13.7	DO-214AC	06R1856	0.38
SMAJ20CA	20	/ 24.5	1	1	32.4	12.3	DO-214AC	71J1987	0.36
SMAJ22CA	22	/ 26.9	1	1	35.5	11.3	DO-214AC	71J1991	0.36
SMAJ24CA	24	/ 29.5	1	1	38.9	10.3	DO-214AC	71J1995	0.36
SMAJ26CA	26	/ 31.9	1	1	42.1	9.5	DO-214AC	71J1999	0.38
SMAJ28CA	28	/ 34.4	1	1	45.4	8.8	DO-214AC	71J2003	0.36
SMAJ30CA	30	/ 36.8	1	1	48.4	8.3	DO-214AC	71J2007	0.36
SMAJ33CA	33	/ 40.6	1	1	53.3	7.5	DO-214AC	71J2011	0.36
SMAJ36CA	36	/ 44.2	1	1	58.1	6.9	DO-214AC	71J2015	0.36
SMAJ48CA	48	/ 58.9	1	1	77.4	5.2	DO-214AC	71J2027	0.36
SMAJ51CA	51	/ 62.7	1	1	82.4	4.9	DO-214AC	71J2035	0.36
SMAJ58CA	58	/ 71.2	1	1	93.6	4.3	DO-214AC	71J2043	0.35
SMAJ60CA	60	/ 73.7	1	1	96.8	4.1	DO-214AC	71J2055	0.35
SMAJ150CA	150	/ 185	1	1	243	1.6	DO-214AC	06R1850	0.35
SMAJ170CA	170	/ 209	1	1	275	1.5	DO-214AC	85R4930	0.35
SMAJ250CA	250	/ 309	1	1	405	1	DO-214AC	64T2595	0.53
SMAJ300CA	300	/ 371	1	1	486	800	DO-214AC	06R1874	0.56
SMAJ400CA	400	/ 494	1	1	648	600	DO-214AC	06R1882	0.53
SMAJ440CA	440	/ 543	1	1	713	600	DO-214AA	29R0820	0.70

(165110)

SMAJ SERIES TRANSIENT VOLTAGE SUPPRESSORS

RoHS Compliant Available

·M·C·C· Micro Commercial Components

Features
- For Surface Mount Applications
- High Temp Soldering: 260°C for 10 Seconds At Terminals
- UL Recognized File # E331408
- Epoxy meets UL 94 V-0 flammability rating
- Polarity: indicated by cathode band except bi-directional types

UNI-DIRECTIONAL

Mfg. Part No.	V_{RRM} (V)	VBR @ IT (V) Min./Max.	(mA)	IR @ VR (µA)	VC @ IPP (V)	IPP (A)	Pkg.	Tape Cut Stock No.	1-9
SMAJ6.5A-TP	6.5	/ 8.6	10	500	11.2	35.7	DO-214AC	51T4987	0.68
SMAJ24A-TP	24	/ 29.5	1	5	38.9	10.3	DO-214AC	51T4965	0.68
SMAJ26A-TP	26	/ 31.9	1	5	42.1	9.5	DO-214AC	51T4967	0.68
SMAJ36A-TP	36	/ 44.2	1	5	58.1	6.9	DO-214AC	51T4972	0.68
SMAJ43A-TP	43	/ 52.8	1	5	69.4	5.7	DO-214AC	51T4974	0.68

CONTINUED

SMAJ SERIES TRANSIENT VOLTAGE SUPPRESSORS (CONT.)

Mfg. Part No.	V_{RRM} (V)	VBR @ IT (V) Min./Max.	(mA)	IR @ VR (µA)	VC @ IPP (V)	IPP (A)	Pkg.	Tape Cut Stock No.	1-9
● SMAJ58A-TP	58	/ 71.2	1	50	93.6	4.3	DO-214AC	51T4984	0.68
● SMAJ150A-TP	150	/ 185	1	5	243	1.6	DO-214AC	51T4961	0.68
BI-DIRECTIONAL									
● SMAJ5.0CA-TP	5	/ 7	10	800	9.2	43.5	DO-214AC	51T4983	0.68
● SMAJ6.0CA-TP	6	/ 7.37	10	800	10.3	38.8	DO-214AC	51T4986	0.68
● SMAJ6.5CA-TP	6.5	/ 7.98	10	500	11.2	35.7	DO-214AC	51T4988	0.68
● SMAJ7.5CA-TP	7.5	/ 9.21	1	100	12.9	31	DO-214AC	51T4989	0.68
● SMAJ20CA-TP	20	/ 24.5	1	5	32.4	12.3	DO-214AC	51T4964	0.73
● SMAJ24CA-TP	24	/ 29.5	1	5	38.9	10.3	DO-214AC	51T4966	0.68
● SMAJ26CA-TP	26	/ 31.9	1	5	42.1	9.5	DO-214AC	51T4968	0.68
● SMAJ28CA-TP	28	/ 34.4	1	5	45.4	8.8	DO-214AC	51T4969	0.68
● SMAJ30CA-TP	30	/ 36.8	1	5	48.4	8.3	DO-214AC	51T4970	0.73
● SMAJ33CA-TP	33	/ 40.6	1	5	53.3	7.5	DO-214AC	51T4971	0.68
● SMAJ36CA-TP	36	/ 44.2	1	5	58.1	6.9	DO-214AC	51T4973	0.68
● SMAJ43CA-TP	43	/ 52.8	1	5	69.4	5.7	DO-214AC	51T4975	0.68
● SMAJ45CA-TP	45	/ 55.3	1	5	72.7	5.5	DO-214AC	51T4976	0.68
● SMAJ48CA-TP	48	/ 58.9	1	5	77.4	5.2	DO-214AC	51T4982	0.68
● SMAJ90CA-TP	90	/ 111	1	5	146	2.7	DO-214AC	51T4990	0.68
● SMAJ150CA-TP	150	/ 185	1	5	243	1.6	DO-214AC	51T4962	0.68
● SMAJ160CA-TP	160	/ 197	1	5	259	1.5	DO-214AC	51T4963	0.68

(197039)

1SMx 400W TRANSIENT VOLTAGE SUPPRESSORS

RoHS Compliant Available

ON Semiconductor

Features:
- All Parts supplied in exclusive, cost-effective, highly reliable surface mount package
- Response time typically < 1ns
- Low Leakage < 5 A Above 10V

400W 1SMA SERIES

Mfg. Part No.	Config.	V_{Br} Range	V_{Clamp} Max. (V)	V_{RWM} (V)	Stock No.	Price Each 1-9
● 1SMA5.0AT3G		6.4V to 7V	9.2	5	98H1010	0.47
● 1SMA12AT3G		13.3V to 14.7V	19.9	12	10N9649	0.45
● 1SMA12CAT3G		13.3V to 14.7V	19.9	12	10N9650	0.62
● 1SMA15AT3G		16.7V to 18.5V	24.4	15	10N9651	0.45
● 1SMA15CAT3G		16.7V to 18.5V	24.4	15	98H1003	0.62
● 1SMA33AT3G		36.7V to 40.6V	53.3	33	26K5247	0.47
● 1SMA33CAT3G		36.7V to 40.6V	53.3	33	10N9652	0.62
● 1SMA36AT3G		40V to 44.2V	58.1	36	10N9653	0.47
600W 1SBC SERIES						
● 1SMB5.0AT3G		6.4V to 7V	9.2	5	45J2445	0.45
● 1SMB6.0AT3G		6.67V to 7.37V	10.3	6	45J2462	0.39
● 1SMB9.0AT3G		10V to 11.1V	15.4	9	10N9678	0.39
● 1SMB10AT3G		11.1V to 12.3V	17	10	26K5262	0.39
● 1SMB10CAT3G		11.1V to 12.3V	17	10	45J2427	0.56
● 1SMB120AT3G		133V to 147V	193	120	42K3082	0.51
● 1SMB12AT3G		13.3V to 14.7V	19.9	12	45J2429	0.43
● 1SMB12CAT3G		13.3V to 14.7V	19.9	12	45J2430	0.53
● 1SMB15AT3G		16.7V to 18.5V	24.4	15	45J2432	0.45
● 1SMB15CAT3G		16.7V to 18.5V	24.4	15	45J2433	0.56
● 1SMB16AT3G		17.8V to 19.7V	26	16	88H5163	0.45
● 1SMB18AT3G		20V to 22.1V	29.2	18	45J2434	0.43
● 1SMB18CAT3G		20V to 22.1V	29.2	18	42K3086	0.56
● 1SMB22AT3G		24.4V to 26.9V	35.5	22	42K3087	0.39
● 1SMB24AT3G		26.7V to 29.5V	38.9	24	45J2436	0.45
● 1SMB24CAT3G		26.7V to 29.5V	38.9	24	10N9737	0.56
● 1SMB26AT3G		28.9V to 31.9V	42.1	26	26K5264	0.39
● 1SMB28AT3G		31.1V to 34.4V	45.4	28	45J2437	0.44
● 1SMB28CAT3G		31.1V to 34.4V	45.4	28	10N9659	0.57
● 1SMB30AT3G		33.3V to 36.8V	48.4	30	45J2438	0.44
● 1SMB33AT3G		36.7V to 40.6V	53.3	33	45J2440	0.45
● 1SMB36AT3G		40V to 44.2V	58.1	36	45J2442	0.39
● 1SMB36CAT3G		40V to 44.2V	58.1	36	26K5266	0.56
● 1SMB43AT3G		47.8V to 52.8V	69.4	43	10N9662	0.39
● 1SMB48AT3G		53.3V to 58.9V	77.4	48	42K3092	0.39
● 1SMB58AT3G		64.4V to 71.2V	93.6	58	45J2447	0.43
● 1SMB170AT3G		189V to 209V	275	170	71J9207	0.51
● 1SMB85AT3G		94.4V to 104V	137	85	10N9677	0.59
1.5 kW 1SMC SERIES						
● 1SMC5.0AT3G		6.4V to 7V	9.2	5	45J2468	0.72
● 1SMC12AT3G		13.3V to 14.7V	19.9	12	10N9679	0.69
● 1SMC15AT3G		16.7V to 18.5V	24.4	15	10N9680	0.69
● 1SMC18AT3G		20V to 22.1V	29.2	18	10N9681	0.69

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1SMx 400W TRANSIENT VOLTAGE SUPPRESSORS (CONT.)

1.5 kW 1SMC SERIES

Mfg. Part No.	Config.	V_{Br} Range	V_{Clamp} Max. (V)	V_{RWM} (V)	Stock No.	Price Each 1-9
● 1SMC24AT3G		26.7V to 29.5V	38.9	24	71J9237	0.72
● 1SMC26AT3G		28.9V to 31.9V	42.1	26	26K5270	0.69
● 1SMC28AT3G		31.1V to 34.4V	45.4	28	42K3116	0.72
● 1SMC33AT3G		36.7V to 40.6V	53.3	33	88H5167	0.73
● 1SMC36AT3G		40V to 44.2V	58.1	36	42K3118	0.73
● 1SMC54AT3G		60V to 66.3V	87.1	54	42K3119	0.69
● 1SMC58AT3G		64.4V to 71.2V	93.6	58	10N9682	0.69

(169710)

SA Series 500W TRANSIENT VOLTAGE SUPPRESSION DIODES

RoHS Compliant Available

Littelfuse®
Expertise Applied | Answers Delivered

Features:
- 500W Peak Pulse Power Dissipation
- DO-204AC (DO-15) Package
- Fast Response Time
- Excellent clamping capability
- Low incremental surge resistance

UNIDIRECTIONAL

Mfg. Part No.	Reverse Stand-Off Voltage V_R (V)	Breakdown Voltage V_{BR} @ I_T (V) Min./Max.	(mA)	Max. Reverse Leakage I_R @ V_R (µA)	Max. Clamping Voltage V_C @ I_{PP} (V)	Max. Peak Pulse Current I_{PP} (A)	Tape Cut Stock No.	Price Each 1-9
● SA5.0A	5	/ 7	10	600	9.2	55.4	48F5884	0.52
● SA6.0A	6	/ 7.37	10	600	10.3	49.5	48F5885	0.49
● SA12A	12	/ 14.7	1	1	19.9	25.6	06R1829	0.52
BIDIRECTIONAL								
● SA6.0CA	6	/ 7.37	10	600	10.3	49.5	17H2087	0.54
● SA12CA	12	/ 14.7	1	1	19.9	25.6	17H1984	0.57
● SA16CA	16	/ 19.7	1	1	26	19.6	93C9650	0.54

(147858)

PESD SERIES OVERVOLTAGE PROTECTION DEVICES

RoHS Compliant Available

TE connectivity
Authorized Distributor

Features:
- Low leakage current
- Low clamping voltage
- Fast response time (<1ns)
- Capable of withstanding numerous ESD strikes
- Compatible with standard reflow installation procedures
- Thick film technology
- Bi-directional protection

Mfg. Part No.	Diode Configuration	V_{Clamp} Max (V)	Package	Tape Cut Stock No.	Price Each 1-9
● PESD0402-140		40	2-SOD-923	83R8047	0.22
● PESD1206Q-240		45	1206	83R8048	0.50
● PESD0603-240		45	0603	01P1092	0.16

(189989)

P6KE SERIES 600W TRANSIENT VOLTAGE SUPPRESSION DIODES

RoHS Compliant Available

FAIRCHILD

600W peak pulse performance at 1.0ms. DO-15 package; dimensions: 7.62mm length, 3.56mm diameter. Devices with **suffix A** in type number are unidirectional; **suffix CA** are bidirectional. I(test): 1mA.

UNIDIRECTIONAL

Mfg. Part No.	V_{rm} Stand-off Voltage (V)	V_{br} Breakdown Voltage Min. (V)	Max. (V)	Clamping Voltage V(cl) Max. (V)	Max. Peak Pulse Current (A)	Max. Reverse Leakage Current (µA)	Tape Cut Stock No.	Price Each 1-9
● P6KE15A	12.8	14.3	15.8	21.2	28.0	5	58K2072	0.56
● P6KE18A	15.3	17.1	18.9	25.2	24.0	5	58K2080	0.56
● P6KE20A	17.1	19.0	21.0	27.7	22.0	5	58K2083	0.49
● P6KE30A	25.6	28.5	31.5	41.4	14.5	5	58K2094	0.58
● P6KE33A	28.2	31.4	34.7	45.7	13.2	5	58K2097	0.56
● P6KE36A	30.8	34.2	37.8	49.9	12.0	5	58K2101	0.56
● P6KE68A	58.1	64.6	71.4	92.0	6.5	5	58K2110	0.49
● P6KE200A	171.0	190.0	210.0	274.0	2.2	5	58K2085	0.55
● P6KE220A	185.0	209.0	231.0	328.0	1.9	5	58K2088	0.49
● P6KE250A	214.0	237.0	263.0	344.0	1.8	5	58K2090	0.56
● P6KE350A	300.0	332.0	368.0	482.0	1.3	5	58K2099	0.52

➤CONTINUED➤

P6KE SERIES 600W TRANSIENT VOLTAGE SUPPRESSION DIODES

(CONT.)

Mfg. Part No.	V_{rm} Stand-off Voltage (V)	V_{br} Breakdown Voltage Min. (V)	V_{br} Breakdown Voltage Max. (V)	Clamping Voltage V(cl) Max. (V)	Max. Peak Pulse Current (A)	Max. Reverse Leakage Current (µA)	Tape Cut Stock No.	Tape Cut Price Each 1-9
P6KE400A	342.0	380.0	420.0	548.0	1.1	5	58K9502	0.43
P6KE440A	376.0	418.0	462.0	602.0	1.0	5	58K2103	0.51
BIDIRECTIONAL								
P6KE10CA	8.55	9.5	10.5	14.5	41.0	10	58K2059	0.53
P6KE12CA	10.2	11.4	12.6	16.7	36.0	5	18C7968	0.42
P6KE18CA	15.3	17.1	18.9	25.2	24.0	5	58K9499	0.49
P6KE22CA	18.8	20.9	23.1	30.6	20.0	5	58K2087	0.52
P6KE39CA	33.3	37.1	41.0	53.9	11.2	5	58K9501	0.42
P6KE43CA	36.8	40.9	45.2	59.3	10.1	5	18C8018	0.51
P6KE47CA	40.2	44.7	49.4	64.8	9.3	5	58K2104	0.59
P6KE51CA	43.6	48.5	53.6	70.1	8.6	5	58K2106	0.52
P6KE68CA	58.1	64.6	71.4	92.0	6.5	5	58K9507	0.59
P6KE180CA	154.0	171.0	189.0	246.0	2.4	5	58K2082	0.56
P6KE200CA	171.0	190.0	210.0	274.0	2.2	5	58K2086	0.51
P6KE300CA	256.0	285.0	315.0	414.0	1.5	5	58K2096	0.49
P6KE350CA	300.0	332.0	368.0	482.0	1.3	5	58K2100	0.67
P6KE400CA	342.0	380.0	420.0	548.0	1.1	5	58K9503	0.73

(66478)

P6KE SERIES 600W TRANSIENT VOLTAGE SUPPRESSION DIODES

RoHS Compliant Available

Littelfuse

Expertise Applied | Answers Delivered

Features:
- 600W Peak Pulse Power Dissipation
- 2 pin DO-204AC (DO-15) Package
- Fast Response Time
- Excellent clamping capability
- Low incremental surge resistance

UNIDIRECTIONAL

Mfg. Part No.	Reverse Stand-Off Voltage (V)	Breakdown Voltage V_{BR} @ I_T (V) Min./Max.	Breakdown Voltage V_{BR} @ I_T (V) (mA)	Max. Reverse Leakage I_R @ V_R (µA)	Max. Clamping Voltage V_C @ I_{PP} (V)	Max. Peak Pulse Current I_{PP} (A)	Tape Cut Stock No.	Tape Cut Price Each 1-9
P6KE6.8A	5.8	/ 7.14	10	1000	10.5	58.1	72K7307	0.63
P6KE9.1A	7.78	/ 9.55	1	5	13.4	45.5	64T2592	0.60
P6KE12A	10.2	/ 12.6	1	5	16.7	36.5	06R1765	0.60
P6KE13A	11.1	/ 13.7	1	1	18.2	33.5	06R1767	0.60
P6KE15A	12.8	/ 15.8	1	1	21.2	28.8	06R1769	0.60
P6KE16A	13.6	/ 16.8	1	1	22.5	27.1	06R1770	0.60
P6KE18A	15.3	/ 18.9	1	1	25.2	24.2	74K3918	0.63
P6KE20A	17.1	/ 21	1	1	27.7	22	06R1773	0.64
P6KE30A	25.6	/ 31.5	1	1	41.4	14.7	06R1777	0.64
P6KE33A	28.2	/ 34.7	1	1	45.7	13.3	17H1871	0.60
P6KE43A	36.8	/ 45.2	1	1	59.3	10.3	06R1781	0.60
P6KE47A	40.2	/ 49.4	1	1	64.8	9.4	06R1785	0.60
P6KE51A	43.6	/ 53.6	1	1	70.1	8.7	06R1787	0.60
P6KE75A	64.1	71.3 / 78.8	1	1	103	5.9	85R4925	0.63
P6KE100A	85.5	/ 105	1	1	137	4.5	17H1793	0.60
P6KE200A	171	/ 210	1	1	274	2.2	17H1843	0.64
BIDIRECTIONAL								
P6KE6.8CA	5.8	/ 7.14	10	1000	10.5	58.1	48F5862	0.49
P6KE7.5CA	6.4	/ 7.88	10	500	11.3	54	06R1791	0.50
P6KE10CA	8.55	/ 10.5	1	10	14.5	42.1	72R7022	0.47
P6KE12CA	10.2	/ 12.6	1	5	16.7	36.5	48F5866	0.50
P6KE13CA	11.1	/ 13.7	1	1	18.2	33.5	06R1768	0.47
P6KE16CA	13.6	/ 16.8	1	1	22.5	27.1	17H1824	0.49
P6KE18CA	15.3	/ 18.9	1	1	25.2	24.2	48F5870	0.47
P6KE20CA	17.1	/ 21	1	1	27.7	22	48F5871	0.47
P6KE30CA	25.6	/ 31.5	1	1	41.4	14.7	17H1865	0.47
P6KE33CA	28.2	/ 34.7	1	1	45.7	13.3	17H1873	0.49
P6KE43CA	36.8	/ 45.2	1	1	59.3	10.3	17H1891	0.47
P6KE47CA	40.2	/ 49.4	1	1	64.8	9.4	06R1786	0.47
P6KE51CA	43.6	/ 53.6	1	1	70.1	8.7	48F5878	0.49
P6KE62CA	53	/ 65.1	1	1	85	7.2	64T2591	0.47
P6KE100CA	85.5	/ 105	1	1	137	4.5	06R1764	0.47

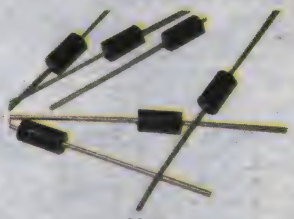
(147857)

P6KE SERIES BIDIRECTIONAL 600W TRANSIENT VOLTAGE SUPPRESSORS

RoHS Compliant Available

multicomp

Features
- Glass passivated chip junction in DO-15 Package
- 600W peak pulse capability at 10×1000µs
- Fast response time
- Excellent clamping capability



DO-15

Ammopack available online.

Mfg. Part No.	V_{RWM} (V)	V_{BR} Range	I_{PPM} (A)	V_{clamp} (V)	Tape Cut Stock No.	Tape Cut Price Each 1-24
P6KE6.8CA	5.8	6.45V to 7.14V	57	10.5	91R0581	0.20
P6KE10CA	8.55	9.5V to 10.5V	41	14.5	91R0521	0.19
P6KE12CA	10.2	11.4V to 12.6V	36	16.7	91R0525	0.20
P6KE15CA	12.8	14.3V to 15.8V	28	21.2	91R0533	0.19
P6KE18CA	15.3	17.1V to 18.9V	24	25.2	91R0537	0.19
P6KE24CA	20.5	22.8V to 25.2V	18	33.2	91R0545	0.19
P6KE30CA	25.6	28.5V to 31.5V	14.4	41.4	91R0549	0.20
P6KE33CA	28.2	31.4V to 34.7V	13.2	45.7	91R0553	0.19
P6KE36CA	30.8	34.2V to 37.8V	12	49.9	91R0557	0.19
P6KE39CA	33.3	37.1V to 41V	11.2	53.9	91R0561	0.20
P6KE43CA	36.8	40.9V to 45.2V	10.1	59.3	91R0565	0.20
P6KE47CA	40.2	44.7V to 49.4V	9.3	64.8	91R0569	0.19
P6KE56CA	47.8	53.2V to 58.8V	7.8	77	91R0577	0.20
P6KE62CA	53	58.9V to 65.1V	7.1	85	91R0585	0.19
P6KE68CA	58.1	64.6V to 71.4V	6.5	92	91R0589	0.19
P6KE130CA	111	124V to 137V	3.3	179	91R0529	0.21
P6KE200CA	171	190V to 210V	2.2	274	91R0541	0.21

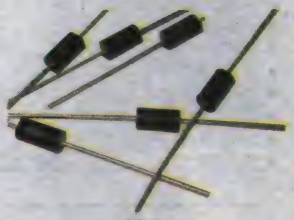
(195427)

P6KE SERIES UNIDIRECTIONAL 600W TRANSIENT VOLTAGE SUPPRESSION DIODES

RoHS Compliant Available

multicomp

Features
- Glass passivated chip junction in DO-15 Package
- 600W peak pulse capability at 10×1000µs
- Fast response time
- Excellent clamping capability



DO-15

Ammopack available online.

Mfg. Part No.	V_{RWM} (V)	V_{BR} Range	I_{PPM} (A)	V_{clamp} (V)	Tape Cut Stock No.	Tape Cut 1-24
P6KE6.8A	5.8	6.45V to 7.14V	57	10.5	91R0579	0.20
P6KE10A	8.55	9.5V to 10.5V	41	14.5	91R0519	0.19
P6KE12A	10.2	11.4V to 12.6V	36	16.7	91R0523	0.20
P6KE15A	12.8	14.3V to 15.8V	28	21.2	91R0531	0.20
P6KE18A	15.3	17.1V to 18.9V	24	25.2	91R0535	0.20
P6KE24A	20.5	22.8V to 25.2V	18	33.2	91R0543	0.20
P6KE30A	25.6	28.5V to 31.5V	14.4	41.4	91R0547	0.20
P6KE33A	28.2	31.4V to 34.7V	13.2	45.7	91R0551	0.19
P6KE36A	30.8	34.2V to 37.8V	12	49.9	91R0555	0.20
P6KE39A	33.3	37.1V to 41V	11.2	53.9	91R0559	0.19
P6KE43A	36.8	40.9V to 45.2V	10.1	59.3	91R0563	0.19
P6KE47A	40.2	44.7V to 49.4V	9.3	64.8	91R0567	0.19
P6KE51A	43.6	48.5V to 53.6V	8.6	70.1	91R0571	0.20
P6KE56A	47.8	53.2V to 58.8V	7.8	77	91R0575	0.19
P6KE62A	53	58.9V to 65.1V	7.1	85	91R0583	0.19
P6KE68A	58.1	64.6V to 71.4V	6.5	92	91R0587	0.20
P6KE130A	111	124V to 137V	3.3	179	91R0527	0.21
P6KE200A	171	190V to 210V	2.2	274	91R0539	0.22

(164253)

P6KE SERIES 600W TRANSIENT VOLTAGE SUPPRESSION DIODES

RoHS Compliant Available

ON Semiconductor

Features:
- All Parts are Axial Leaded
- Response time typically < 1ns
- Low Leakage < 5 A above 10 V

Mfg. Part No.	Config.	V_{Br} Range	V_{Clamp} Max. (V)	V_{RWM} (V)	Stock No.	Price Each 1-9
● P6KE6.8AG		6.45V to 7.14V	10.5	5.8	42K2536	0.49
● P6KE10AG		9.5V to 10.5V	14.5	8.55	42K2506	0.49
● P6KE150AG		143V to 158V	207	128	42K2516	0.62
● P6KE15AG		14.3V to 15.8V	21.2	12.8	42K2515	0.49
● P6KE18AG		17.1V to 18.9V	25.2	15.3	42K2519	0.49
● P6KE18ARLG		17.1V to 18.9V	25.2	15.3	09R9682	0.50
● P6KE24AG		22.8V to 25.2V	33.2	20.5	42K2526	0.49
● P6KE33AG		31.4V to 34.7V	45.7	28.2	42K2529	0.49
● P6KE39AG		37.1V to 41V	53.9	33.3	42K2531	0.51
● P6KE43AG		40.9V to 45.2V	59.3	36.8	42K2532	0.51
● P6KE47AG		44.7V to 49.4V	64.8	40.2	42K2533	0.49
● P6KE51AG		48.5V to 53.6V	70.1	43.6	42K2534	0.49
● P6KE200AG		190V to 210V	274	171	42K2523	0.45

(169503)

P6KE SERIES 600W TRANSIENT VOLTAGE SUPPRESSION DIODES

RoHS Compliant Available

VISHAY

* = Sold as EA

Mfg. Part No.	Break-Down Voltage (V)	V_{RWM}(V)	I_{PPM}(A)	V_C(V)	No. of Pins	Package	Tape Cut Stock No.	Tape Cut Price Each 1-9
● P6KE6.8A-E3/54	6.45	5.8	57.1	10.5	2	DO-204AC	05R5654	0.25
● P6KE8.2A-E3/54	7.79	7.02	49.6	12.1	2	DO-204AC	05R5662	0.26
● P6KE10A-E3/54	9.5	8.55	41.4	14.5	2	DO-204AC	05R5620	0.25
● P6KE15A-E3/54	14.3	12.8	28.3	21.2	2	DO-204AC	76K9171	0.25
● P6KE16A-E3/54	15.2	13.6	26.7	22.5	2	DO-204AC	05R5627	0.25
● P6KE18A-E3/54	17.1	15.3	23.8	25.2	2	DO-204AC	76K9289	0.25
● P6KE20A-E3/54	19	17	21.7	27.7	2	DO-204AC	05R5630	0.26
● P6KE27A-E3/54	25.7	23.1	16	37.5	2	DO-204AC	05R5638	0.25
● P6KE30A-E3/54	28.5	25.6	14.5	41.4	2	DO-204AC	05R5640	0.26
● P6KE33A-E3/54	31.4	28.2	13.1	45.7	2	DO-204AC	05R5642	0.25
● P6KE36A-E3/54	34.2	30.8	12	49.9	2	DO-204AC	05R5644	0.25
● P6KE39A-E3/54	37.1	33.3	11.1	53.9	2	DO-204AC	05R5646	0.25
● P6KE51A-E3/54	48.5	43.6	8.6	70.1	2	DO-204AC	05R5651	0.26
● P6KE150A-E3/54	143	128	2.9	207	2	DO-204AC	05R5626	0.25
● P6KE200A-E3/54	190	171	2.2	274	2	DO-204AC	05R5632	0.25

(166303)

P6SMB SERIES 600W TRANSIENT VOLTAGE SUPPRESSORS

RoHS Compliant Available

Littelfuse

Expertise Applied | Answers Delivered

Features:
- 600W Peak Pulse Power Dissipation
- DO-214AA (SMB) Low Profile Case
- Built-in Strain Relief
- Fast Response Time
- Excellent clamping capability
- Low incremental surge resistance

UNIDIRECTIONAL

Mfg. Part No.	Reverse Stand-Off Voltage V_R (V)	Breakdown Voltage V_{BR} @ I_T (V) Min./Max.	Breakdown Voltage V_{BR} @ I_T (V) (mA)	Max. Reverse Leakage I_R @ V_R (µA)	Max. Clamping Voltage V_C @ I_{PP} (V)	Max. Peak Pulse Current I_{PP} (A)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● P6SMB6.8A	5.8	/ 7.14	10	1000	10.5	58.1	06R1827	0.49
● P6SMB10A	8.55	/ 10.5	1	5	14.5	42.1	64T2542	0.46
● P6SMB18A	15.3	/ 18.9	1	1	25.5	24.2	01P7347	0.46
● P6SMB24A	20.5	/ 25.2	1	1	33.2	18.4	72R7023	0.46
● P6SMB30A	25.6	/ 31.5	1	1	41.4	14.7	01P7383	0.48
● P6SMB250A	214	/ 263	1	1	344	1.8	31T1584	0.68
● P6SMB350A	300	332 / 368	1	1	482	1.3	85R4926	0.64
● P6SMB400A	342	/ 420	1	1	548	1.1	06R1823	0.64
● P6SMB550A	495	/ 577.5	1	1	760	800	64T2547	0.64
BIDIRECTIONAL								
● P6SMB6.8CA	5.8	/ 7.14	10	1000	10.5	58.1	06R1828	0.54
● P6SMB10CA	8.55	/ 10.5	1	5	14.5	42.1	64T2543	0.51
● P6SMB18CA	15.3	/ 18.9	1	1	25.5	24.2	01P7349	0.53
● P6SMB30CA	25.6	/ 31.5	1	1	41.4	14.7	01P7385	0.51
● P6SMB33CA	28.2	/ 34.7	1	1	45.7	13.3	31T1585	0.54

➤CONTINUED➤

P6SMB SERIES 600W TRANSIENT VOLTAGE SUPPRESSORS (CONT.)

BIDIRECTIONAL

Mfg. Part No.	Reverse Stand-Off Voltage V_R (V)	Breakdown Voltage V_{BR} @ I_T (V) Min./Max.	Breakdown Voltage V_{BR} @ I_T (V) (mA)	Max. Reverse Leakage I_R @ V_R (µA)	Max. Clamping Voltage V_C @ I_{PP} (V)	Max. Peak Pulse Current I_{PP} (A)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● P6SMB36CA	30.8	/ 37.8	1	1	49.9	12.2	31T1586	0.51
● P6SMB47CA	40.2	/ 49.4	1	1	64.8	9.4	06R1826	0.51
● P6SMB68CA	58.1	/ 71.4	1	1	6.6	6.6	72R7026	0.54
● P6SMB300CA	256	/ 315	1	1	414	1.5	64T2544	0.63
● P6SMB350CA	300	/ 368	1	1	482	1.3	64T2545	0.63
● P6SMB400CA	342	/ 420	1	1	548	1.1	01P7409	0.63
● P6SMB440CA	376	/ 462	1	1	602	1	85R4928	0.66
● P6SMB480CA	408	/ 504	1	1	658	900	64T2546	0.63
● P6SMB550CA	495	/ 577.5	1	1	760	0.8	72R7025	0.63

(147859)

P6SMB SERIES 600W TRANSIENT VOLTAGE SUPPRESSORS

RoHS Compliant Available

ON Semiconductor

Features:
- All Parts come in SMB (403A) Package
- Response time typically < 1ns
- Low Leakage < 5 A Above 10 V

UNIDIRECTIONAL

Mfg. Part No.	V_{Br} Range	V_{Clamp} Max. (V)	V_{RWM} (V)	Stock No.	Price Each 1-9
● P6SMB6.8AT3G	6.45V to 7.14V	10.5	5.8	45J2235	0.45
● P6SMB13AT3G	12.4V to 13.7V	18.2	11.1	71J7341	0.45
● P6SMB15AT3G	14.3V to 15.8V	21.2	12.8	45J2221	0.12
● P6SMB16AT3G	15.2V to 16.8V	22.5	13.6	45J2223	0.43
● P6SMB27AT3G	25.7V to 28.4V	37.5	23.1	71J7343	0.43
● P6SMB30AT3G	28.5V to 31.5V	41.4	25.6	71J7344	0.43
● P6SMB33AT3G	31.4V to 34.7V	45.7	28.2	45J2228	0.45
● P6SMB36AT3G	34.2V to 37.8V	49.9	30.8	45J2229	0.47
● P6SMB39AT3G	37.1V to 41V	53.9	33.3	45J2231	0.47
● P6SMB62AT3G	58.9V to 65.1V	85	53	26K5166	0.43
● P6SMB75AT3G	71.3V to 78.8V	103	64.1	71J7345	0.45
● P6SMB91AT3G	86.5V to 95.5V	125	77.8	26K5174	0.59
● P6SMB150AT3G	143V to 158V	207	128	10N9600	0.54
● P6SMB200AT3G	190V to 210V	274	171	45J2226	0.59
BIDIRECTIONAL					
● P6SMB15CAT3G	14.3V to 15.8V	21.2	12.8	71J7342	0.59
● P6SMB18CAT3G	17.1V to 18.9V	25.2	15.3	42K2549	0.59
● P6SMB20CAT3G	19V to 21V	27.7	17.1	10N9601	0.56
● P6SMB33CAT3G	31.4V to 34.7V	45.7	28.2	42K2552	0.56

(168477)

SMBJ SERIES 600W UNIDIRECTIONAL TRANSIENT VOLTAGE SUPPRESSION DIODES

RoHS Compliant Available

BOURNS

UNIDIRECTIONAL

Mfg. Part No.	V_{Br} Range	V_{RWM} (V)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● SMBJ5.0A	6.4V to 7.25V	5	67R1665	0.52
● SMBJ6.0A	6.67V to 7.67V	6	67R1673	0.52
● SMBJ12A	13.3V to 15.3V	12	67R1617	0.56
● SMBJ13A	14.4V to 16.5V	13	67R1621	0.52
● SMBJ15A	16.7V to 19.2V	15	67R1627	0.52
● SMBJ18A	20V to 23.3V	18	67R1639	0.52
● SMBJ24A	26.7V to 30.7V	24	67R1645	0.56
● SMBJ28A	31.1V to 35.8V	28	67R1649	0.52
● SMBJ30A	33.3V to 38.3V	30	67R1651	0.52
● SMBJ33A	36.7V to 42.2V	33	67R1653	0.52
● SMBJ36A	40V to 46V	36	67R1655	0.52

BIDIRECTIONAL

Mfg. Part No.	V_{Br} Range	V_{RWM} (V)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● SMBJ5.0CA	6.4V to 7.25V	5	67R1666	0.46
● SMBJ6.0CA	6.67V to 7.67V	6	67R1675	0.43
● SMBJ6.5CA	7.22V to 8.3V	6.5	67R1677	0.43

➤CONTINUED➤

SMBJ SERIES 600W UNIDIRECTIONAL TRANSIENT VOLTAGE SUPPRESSION DIODES (CONT.)

Mfg. Part No.	V_{Br} Range	V_{RWM} (V)	Tape Cut Stock No.	Price Each 1-9
SMBJ7.0CA	7.78V to 8.95V	7	67R1683	0.43
SMBJ7.5CA	8.33V to 9.58V	7.5	67R1685	0.43
SMBJ8.5CA	9.44V to 10.8V	8.5	67R1695	0.43
SMBJ10CA	11.1V to 12.8V	10	67R1610	0.46
SMBJ12CA	13.3V to 14.7V	12	67R1618	0.46
SMBJ13CA	14.4V to 16.5V	13	67R1622	0.45
SMBJ15CA	16.7V to 19.2V	15	67R1628	0.46
SMBJ16CA	17.8V to 20.5V	16	67R1632	0.43
SMBJ18CA	20V to 23.3V	18	67R1640	0.43
SMBJ20CA	22.2V to 25.5V	20	67R1642	0.43
SMBJ24CA	26.7V to 30.7V	24	67R1646	0.43
SMBJ26CA	28.9V to 32.2V	26	67R1648	0.43
SMBJ28CA	31.1V to 35.8V	28	67R1650	0.46
SMBJ30CA	33.3V to 38.3V	30	67R1652	0.45
SMBJ33CA	36.7V to 42.2V	33	67R1654	0.43
SMBJ36CA	40V to 46V	36	67R1656	0.43
SMBJ43CA	47.8V to 52.8V	43	67R1660	0.43
SMBJ51CA	56.7V to 65.2V	51	67R1668	0.46
SMBJ170CA	189V to 218V	170	67R1638	0.43

(172456)

SMBJ SERIES TRANSIENT VOLTAGE SUPPRESSORS

RoHS Compliant Available

FAIRCHILD

Features:
- Glass passivated junction
- 600W Peak Pulse Power capability on10/1000 µs waveform
- Excellent clamping capability
- Low incremental surge resistance
- Fast response time; typically less than 1.0 ps from 0 volts to BV for unidirectional and 5.0 ns for bidirectional
- Typical IR less than 1.0 µA above 10V

UNIDIRECTIONAL

Mfg. Part No.	Breakdown Voltage (V)	Clamping Voltage Max, Vc (V)	Pkg.	Tape Cut Stock No.	Price Each 1-9
SMBJ5V0A	7	9.2	DO-214AA	67P3550	0.46
SMBJ15A	16.7	24.4	DO-214	58K9535	0.56
SMBJ24A	26.7	38.9	DO-214AA	18C8405	0.57
SMBJ30A	36.8	48.4	DO-214AA	58K9538	0.57
SMBJ70A	77.8	12	DO-214AA	67K0925	0.33
BIDIRECTIONAL					
SMBJ100CA	111	162	DO-214AA	18C8372	0.47

(176209)

SMBJ SERIES 600W UNIDIRECTIONAL TRANSIENT VOLTAGE SUPPRESSION DIODES

RoHS Compliant Available

ST

SMBJ SERIES

Mfg. Part No.	V_{RWM} (V)	V_{BR} (V)	VC (V)	P_d (W)	Pkg.	Stock No.	Price Each 1-9
SMBJ15A-TR	15		25.1	6	DO-214-AB	89K1514	0.55

(83698)

SMBJ SERIES 600W UNIDIRECTIONAL TRANSIENT VOLTAGE SUPPRESSION DIODES

RoHS Compliant Available

VISHAY

Features:
- Low profile package
- Ideal for automated placement
- Glass passivated chip junction
- Available in uni-directional and bi-directional
- 600 W peak pulse power capability with a 10/1000 µs waveform, repetitive rate (duty cycle): 0.01 %
- Excellent clamping capability
- Very fast response time
- Low incremental surge resistance

SMBJ

Mfg. Part No.	V_{BR} Min. (V)	I_T (mA)	V_{WM} (V)	I_{PPM} (A)	V_C @ I_{PPM} (V)	No. of Pins	Diode Case Style	Tape Cut Stock No.	Price Each 1-9
SMBG5.0CA-E3/52	6.4	1	5	65.2	9.2	2	DO-215AA	05W6961	0.54
SMBG7.5A-E3/52	8.33	1	7.5	46.5	12.9	2	DO-215AA	05W6962	0.39
SMBG33A-E3/52	36.7	1	33	11.3	53.3	2	DO-215AA	05W6960	0.39
SMBJ5.0A-E3/52	6.40	10	5	65.2	9.2	2	DO-214AA	89M6099	0.24
SMBJ5.0-E3/52	6.40	10	5	62.5	9.6	2	DO-214AA	77K4852	0.26
SMBJ8.0A-E3/52	8.89	1	8	44.1	13.6	2	DO-214AA	77K5114	0.23
SMBJ13A-E3/52	14.4	1	13	27.9	21.5	2	DO-214AA	77K4367	0.23

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SMBJ SERIES 600W UNIDIRECTIONAL TRANSIENT VOLTAGE SUPPRESSION DIODES (CONT.)

Mfg. Part No.	V_{BR} Min. (V)	I_T (mA)	V_{WM} (V)	I_{PPM} (A)	V_C @ I_{PPM} (V)	No. of Pins	Diode Case Style	Tape Cut Stock No.	Price Each 1-9
SMBJ15A-E3/52	16.7	1	15	24.6	24.4	2	DO-214AA	77K4426	0.23
SMBJ24A-E3/52	26.7	1	24	15.4	38.9	2	DO-214AA	05R5779	0.24
SMBJ30A-E3/52	33.3	10	30	12.4	48.4	2	DO-214AA	77K4698	0.24
SMBJ30A-E3/52	33.3	1	30	12.4	48.4	2	DO-214AA	77K4698	0.24
SMBJ48A-E3/52	53.3	1	48	7.8	77.4	2	DO-214AA	77K4833	0.23
SMBJ54A-E3/52	66.3	1	54	6.9	87.1	2	DO-214AA	69W6199	0.23

(166396)

MOSORB® SERIES 1500W UNIDIRECTIONAL TRANSIENT VOLTAGE SUPPRESSORS

RoHS Compliant Available

ON Semiconductor

Features:
- All Parts come in exclusive, cost-effective, highly reliable axial leaded package
- Response time typically < 1ns
- Low Leakage < 5 A Above 10V

Mfg. Part No.	V_{Br} (V)	V_{Br} Range	V_{Clamp} Max. (V)	V_{RWM} (V)	Stock No.	Price Each 1-9
1N5908G	6.2	...	8.5	5	42K2954	0.73
1N5908RL4G	6.2	...	8.5	5	42K2955	0.75
1N6373G	6.3	...	9.4	5	42K3059	0.72
1N6267AG	6.8	6.45V to 7.14V	10.5	5.8	42K3000	0.72
1N6274AG	13	12.4V to 13.7V	18.2	11.1	42K3008	0.74
1N6376G	14.1	...	21.2	12	42K3063	0.73
1N6275AG	15	14.3V to 15.8V	21.2	12.8	42K3010	0.66
1N6276AG	16	15.2V to 16.8V	22.5	13.6	42K3012	0.70
1N6377G	17.6	...	25	15	42K3065	0.72
1N6277AG	18	17.1V to 18.9V	25.2	15.3	42K3014	0.68
1N6278AG	20	19V to 21V	27.7	17.1	42K3016	0.74
1N6279AG	22	20.9V to 23.1V	30.6	18.8	42K3018	0.74
1N6281AG	27	25.7V to 28.4V	37.5	23.1	42K3021	0.70
1N6282AG	30	28.5V to 31.5V	41.4	25.6	42K3023	0.66
1N6283AG	33	31.4V to 34.7V	45.7	28.2	42K3025	0.73
1N6284AG	36	34.2V to 37.8V	49.9	30.8	42K3027	0.66
1N6285AG	39	37.1V to 41V	53.9	33.3	42K3029	0.72
1N6380G	42.4	...	65.2	36	42K3069	0.73
1N6286AG	43	40.9V to 45.2V	59.3	36.8	42K3031	0.74
1N6287AG	47	44.7V to 49.4V	64.8	40.2	42K3033	0.74
1N6288AG	51	48.5V to 53.6V	70.1	43.6	42K3035	0.70
1N6290AG	62	58.9V to 65.1V	85	53	42K3038	0.66
1N6291AG	68	64.6V to 71.4V	92	58.1	42K3040	0.74
1N6292AG	75	71.3V to 78.8V	103	64.1	42K3042	0.70

(169726)

1.5SMC 1500W TRANSIENT VOLTAGE SUPPRESSORS

RoHS Compliant Available

ON Semiconductor

Features:
- All parts supplied in SMC (Case 403) Package
- Response time typically < 1ns
- Low leakage: < 5µA above 10V
- All Parts are Unidirectional

Mfg. Part No.	V_{Br} Range	V_{Clamp} Max. (V)	V_{RWM} (V)	Stock No.	Price Each 1-9
1.5SMC6.8AT3G	6.45V to 7.14V	10.5	5.8	42K2808	0.72
1.5SMC15AT3G	14.3V to 15.8V	21.2	12.8	88H5158	0.69
1.5SMC18AT3G	17.1V to 18.9V	25.2	15.3	42K2801	0.72
1.5SMC20AT3G	19V to 21V	27.7	17.1	02M6929	0.69
1.5SMC24AT3G	22.8V to 25.2V	33.2	20.5	45J2396	0.73
1.5SMC27AT3G	25.7V to 28.4V	37.5	23.1	42K2802	0.69
1.5SMC30AT3G	28.5V to 31.5V	41.4	25.6	45J2397	0.72
1.5SMC33AT3G	31.4V to 34.7V	45.7	28.2	88H5159	0.72
1.5SMC36AT3G	34.2V to 37.8V	49.9	30.8	42K2803	0.73
1.5SMC39AT3G	37.1V to 41V	53.9	33.3	42K2804	0.72
1.5SMC43AT3G	40.9V to 45.2V	59.3	36.8	42K2805	0.69
1.5SMC47AT3G	44.7V to 49.4V	64.8	40.2	10N9734	0.73
1.5SMC68AT3G	64.6V to 71.4V	92	58.1	26K5237	0.69
1.5SMC75AT3G	71.3V to 78.8V	103	64.1	10N9618	0.69
1.5SMC91AT3G	86.5V to 95.5V	125	77.8	45J2398	0.69

(74516)

1.5SMC SERIES TRANSIENT VOLTAGE SUPPRESSION DIODES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

Features:
- Halogen-Free
- Low profile, surface mount DO214AB package
- 1500W Peak Pulse capability at 10×1000µs waveform, repetition rate (duty cycles):0.01%
- Fast Response Time typically less than 1.0ps from 0 Volts to BV min
- Excellent clamping capability
- Low incremental Surge resistance
- Plastic Package has Underwriters Laboratory Flammability classification 94V-0
- Matte Tin Lead-free Plated

Applications:
- The **1.5SMC** Series is designed specifically to protect sensitive electronic equipment from voltage transients induced by lightning and other transient voltage events.
- Ideal for the protection of I/O interfaces, V_{CC} bus and other vulnerable circuits used in telecom, computer, industrial and consumer electronic applications.

Mfg. Part No.	Reverse Stand-Off Voltage V_R (V)	Breakdown Voltage V_{BR} @ I_T	Max. Clamping Voltage V_C @ I_{PP} (V)	Max. Peak Pulse Current I_{PP} (A)	Tape Cut Stock No.	Tape Cut 1-9
● 1.5SMC6.8A	5.8	6.45V to 7.14V	10.5	144.8	85R4938	0.71
● 1.5SMC27A	23.1	25.7V to 28.4V	37.5	40.5	85R4935	0.71
● 1.5SMC33A	28.2	31.4V to 34.7V	45.7	33.3	31T1609	0.74
● 1.5SMC39A	33.3	37.1V to 41V	53.9	28.2	85R4936	0.71
● 1.5SMC480A	408	456V to 504V	658	2.3	85R4937	1.00
BIDIRECTIONAL						
● 1.5SMC6.8CA	5.8	6.45V to 7.14V	10.5	40.5	85R4939	0.77
● 1.5SMC39CA	33.3	37.1V to 41V	53.9	28.2	64T2600	0.73
● 1.5SMC440A	376	418V to 462V	602	2.5	64T2601	1.05

(190882)

1.5KE SERIES 1500W TRANSIENT VOLTAGE SUPPRESSION DIODES

RoHS Compliant Available

FAIRCHILD

Features:
- Glass-Passivated Junction
- Excellent Clamping Capability
- Low Incremental Surge Resistance
- Fast Response Time

BIDIRECTIONAL

Mfg. Part No.	V_{RWM} (V)	Vbr Min. (V)	Vbr Max. (V)	V_{Clamp} Max. (V)	I_{PPM} Max. (A)	I_R Max. (µA)	Pkg.	Stock No.	Price Each 1-9
● 1V5KE6V8CA	5.8	6.45	71.4	92	143	5	DO-201AE	67K1372	0.85
● 1V5KE10CA	8.55	9.5	10.5	14.5	103	10	DO-201AE	18C8824	1.28
● 1V5KE12CA	10.2	11.4	12.6	16.7	90	5	DO-201AE	67K1332	0.74
● 1V5KE15CA	12.8	14.3	15.8	21.2	71	5	DO-201AE	67K1338	0.50
● 1V5KE16CA	13.6	15.2	16.8	22.5	67	5	DO-201AE	80K9320	0.65
● 1V5KE18CA	15.3	17.1	18.9	26.2	59.5	5	DO-201AE	67K1343	0.48
● 1V5KE20CA	17.1	19	21	27.7	54.2	5	DO-201AE	67K1344	0.64
● 1V5KE24CA	20.5	22.8	25.2	33.2	45.2	5	DO-201AE	67K1349	0.61
● 1V5KE27CA	23.1	25.7	28.4	37.5	40	5	DO-201AE	67K1353	0.65
● 1V5KE33CA	28.2	31.4	34.7	45.7	33	5	DO-201AE	67K1357	0.65
● 1V5KE36CA	30.8	34.2	37.8	49.9	30.1	5	DO-201AE	18C8875	0.48
● 1V5KE39CA	33.3	37.1	41	53.9	28	5	DO-201AE	67K1361	0.64
● 1V5KE47CA	40.2	44.7	49.4	64.8	23.2	5	DO-201AE	67K1367	0.64
● 1V5KE51CA	43.6	48.5	53.6	70.1	21.4	5	DO-201AE	18C8887	0.65
● 1V5KE56CA	47.8	53.2	58.8	77	19.5	5	DO-201AE	67K1370	0.48
● 1V5KE62CA	53	58.9	65.1	85	17.7	5	DO-201AE	67K1374	0.61
● 1V5KE68CA	58.1	64.6	7.14	10.5	16.3	5	DO-201AE	67K1376	0.51
● 1V5KE75CA	64.1	71.3	78.8	104	14.6	5	DO-201AE	67K1377	0.48
● 1V5KE110CA	94	106	116	152	9.9	5	DO-201AE	67K1330	0.54
● 1V5KE130CA	111	124	137	179	8.4	5	DO-201AE	67K1336	0.48
● 1V5KE150CA	128	143	158	207	7.2	5	DO-201AE	18C8841	0.65
● 1V5KE200CA	171	190	210	274	5.5	5	DO-201AE	67K1345	0.64
● 1V5KE220CA	185	209	231	328	4.6	5	DO-201AE	67K1347	0.68
● 1V5KE250CA	214	237	263	344	4.5	5	DO-201AE	67K1351	0.54
● 1V5KE350CA	300	333	368	482	3.2	5	DO-201AE	67K1358	0.92
● 1V5KE400CA	342	380	420	548	2.8	5	DO-201AE	67K1363	0.93
● 1V5KE440CA	376	418	462	602	2.6	5	DO-201AE	67K1365	0.71
UNIDIRECTIONAL									
● 1V5KE12A	10.2	11.4	12.6	16.7	90	5	DO-201AE	67K1331	0.53
● 1V5KE15A	12.8	14.3	15.8	21.2	71	5	DO-201AE	67K1337	0.51
● 1V5KE18A	15.3	17.1	18.9	26.2	59.5	5	DO-201AE	67K1342	0.51
● 1V5KE20A	17.1	19	21	27.7	54.2	5	DO-201AE	18C8852	0.64
● 1V5KE22A	18.8	20.9	23.1	30.6	49	5	DO-201AE	67K1346	0.51
● 1V5KE27A	23.1	25.7	28.4	37.5	40	5	DO-201AE	67K1352	0.51
● 1V5KE30A	25.6	28.5	31.5	41.4	36.2	5	DO-201AE	67K1354	0.51
● 1V5KE33A	28.2	31.4	34.7	45.7	33	5	DO-201AE	73K6079	0.67

➤CONTINUED➤

1.5KE SERIES 1500W TRANSIENT VOLTAGE SUPPRESSION DIODES (CONT.)

UNIDIRECTIONAL

Mfg. Part No.	V_{RWM} (V)	Vbr Min. (V)	Vbr Max. (V)	V_{Clamp} Max. (V)	I_{PPM} Max. (A)	I_R Max. (µA)	Pkg.	Stock No.	Price Each 1-9
● 1V5KE36A	30.8	34.2	37.8	49.9	30.1	5	DO-201AE	67K1359	0.53
● 1V5KE39A	33.3	37.1	41	53.9	28	5	DO-201AE	67K1360	0.64
● 1V5KE47A	40.2	44.7	49.4	64.8	23.2	5	DO-201AE	67K1366	0.67
● 1V5KE62A	53	58.9	65.1	85	17.7	5	DO-201AE	67K1373	0.51
● 1V5KE68A	58.1	64.6	71.4	92	16.3	5	DO-201AE	67K1375	0.53
● 1V5KE75A	64.1	71.3	78.8	104	14.6	5	DO-201AE	18C8898	0.51
● 1V5KE91A	77.8	86.5	95.5	125	12	5	DO-201AE	67K1379	0.51
● 1V5KE130A	111	124	137	179	8.4	5	DO-201AE	67K1335	0.53
● 1V5KE150A	128	143	158	207	7.2	5	DO-201AE	67K1339	0.51
● 1V5KE160A	136	152	168	219	6.8	5	DO-201AE	18C8844	0.51
● 1V5KE200A	171	190	210	274	5.5	5	DO-201AE	18C8854	0.67
● 1V5KE250A	214	237	263	344	4.5	5	DO-201AE	67K1350	0.51
● 1V5KE350A	300	333	368	482	3.2	5	DO-201AE	74K4025	0.51
● 1V5KE400A	342	380	420	548	2.8	5	DO-201AE	67K1362	0.65
● 1V5KE440A	376	418	462	602	2.6	5	DO-201AE	67K2887	0.51

(65984)

1.5KE SERIES 1500W BIDIRECTIONAL TVS DIODES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

Mfg. Part No.	V_{Clamp} (V)	P_D (W)	V_{RWM} (V)	Package	Tape Cut Stock No.	Tape Cut Price Each 1-9
● 1.5KE6.8CA	10.5	6.5	5.8	DO-201	48F5833	0.75
● 1.5KE7.5CA	11.3	6.5	6.4	DO-201	48F5834	0.75
● 1.5KE10CA	14.5	6.5	8.55	DO-201	17H2565	0.72
● 1.5KE12CA	16.7	6.5	10.2	DO-201	29R0836	0.72
● 1.5KE15CA	21.2	6.5	12.8	DO-201	48F5839	0.75
● 1.5KE18CA	25.2	6.5	15.3	DO-201	48F5841	0.76
● 1.5KE24CA	33.2	6.5	20.5	DO-201	48F5843	0.72
● 1.5KE33CA	45.7	6.5	28.2	DO-201	17H2641	0.75
● 1.5KE36CA	49.9	6.5	30.8	DO-201	17H2649	0.72
● 1.5KE39CA	53.9	6.5	33.3	DO-201	17H2653	0.75
● 1.5KE43CA	59.3	6.5	36.8	DO-201	17H2660	0.72
● 1.5KE47CA	64.8	6.5	40.2	DO-201	17H2667	0.72
● 1.5KE51CA	70.1	6.5	43.6	DO-201	17H2671	0.75
● 1.5KE82CA	113	6.5	70.1	DO-201	17H2695	0.76
● 1.5KE150CA	207	6.5	128	DO-201	48F5852	1.01
● 1.5KE180CA	246	6.5	154	DO-201	48F5855	1.07
● 1.5KE250CA	344	6.5	214	DO-201	48F5858	1.07
● 1.5KE300CA	414	6.5	256	DO-201	48F5859	1.01
● 1.5KE350CA	482	6.5	300	DO-201	17H2645	1.05
● 1.5KE400CA	548	6.5	342	DO-201	72K7354	1.05
● 1.5KE440CA	602	6.5	376	DO-201	17H2663	1.01

(165118)

1.5KE SERIES 1500W UNIDIRECTIONAL TVS DIODES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

Features:
- 1500W Peak Pulse Power Dissipation
- DO-201 Package
- Fast Response Time
- Excellent clamping capability
- Low incremental surge resistance

Mfg. Part No.	V_{Clamp} (V)	P_D (W)	V_{RWM} (V)	Package	Tape Cut Stock No.	Tape Cut Price Each 1-9
● 1.5KE6.8A	10.5	6.5	5.8	DO-201	48F5832	0.69
● 1.5KE6.8A	10.5	6.5	5.8	DO-201	48F5832	0.69
● 1.5KE7.5A	11.3	6.5	6.4	DO-201	06R2106	0.65
● 1.5KE10A	14.5	6.5	8.55	DO-201	06R2049	0.69
● 1.5KE15A	21.2	6.5	12.8	DO-201	72K7352	0.68
● 1.5KE20A	27.7	6.5	17.1	DO-201	17H2611	0.65
● 1.5KE24A	33.2	6.5	20.5	DO-201	06R2066	0.65
● 1.5KE30A	41.4	6.5	25.6	DO-201	06R2071	0.68
● 1.5KE36A	49.9	6.5	30.8	DO-201	17H2647	0.68
● 1.5KE39A	53.9	6.5	33.3	DO-201	17H2651	0.69
● 1.5KE43A	59.3	6.5	36.8	DO-201	17H2658	0.65

➤CONTINUED➤

1.5KE SERIES 1500W UNIDIRECTIONAL TVS DIODES (CONT.)

Mfg. Part No.	V_{Clamp} (V)	P_D (W)	V_{RWM} (V)	Package	Tape Cut Stock No.	Tape Cut Price Each 1-9
1.5KE100A	137	6.5	85.5	DO-201	17H2567	0.65
1.5KE300A	414	6.5	256	DO-201	17H2637	0.79

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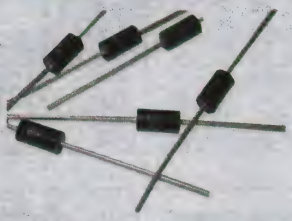
1.5KE BIDIRECTIONAL 1500W TRANSIENT VOLTAGE SUPPRESSORS

RoHS Compliant Available

multicomp



Features
- Glass passivated chip junction in DO-201 Package
- 1500W peak pulse capability at 10×1000µs waveform
- Fast response time
- Excellent clamping capability

Ammopack available online.

Mfg. Part No.	V_{RWM} (V)	V_{BR} Range	I_{PPM} (A)	V_{clamp} (V)	Tape Cut Stock No.	Tape Cut Price Each 1-24
1.5KE6.8CA	5.8	6.45V to 7.14V	143	10.5	91R0674	0.42
1.5KE7.5CA	6.4	7.13V to 7.88V	132	11.3	91R0686	0.43
1.5KE8.2CA	7.02	7.79V to 8.61V	124	12.1	91R0694	0.43
1.5KE10CA	8.55	9.5V to 10.5V	103	14.5	91R0598	0.42
1.5KE11CA	9.4	10.5V to 11.6V	96	15.6	98K4695	0.73
1.5KE12CA	10.2	11.4V to 12.6V	90	16.7	91R0606	0.40
1.5KE13CA	11.1	12.4V to 13.7V	82	18.2	91R0610	0.43
1.5KE15CA	12.8	14.3V to 15.8V	71	21.2	91R0614	0.42
1.5KE16CA	13.6	15.2V to 16.8V	67	22.5	91R0618	0.40
1.5KE18CA	15.3	17.1V to 18.9V	59.5	25.2	91R0622	0.43
1.5KE20CA	17.1	19V to 21V	54	27.7	91R0626	0.43
1.5KE22CA	18.8	20.9V to 23.1V	49	30.6	91R0630	0.42
1.5KE24CA	20.5	22.8V to 25.2V	45	33.2	91R0634	0.40
1.5KE27CA	23.1	25.7V to 28.4V	40	37.5	91R0638	0.43
1.5KE30CA	25.6	28.5V to 31.5V	36	41.4	91R0642	0.40
1.5KE33CA	28.2	31.4V to 34.7V	33	45.7	91R0646	0.43
1.5KE36CA	30.8	34.2V to 37.8V	30	49.9	91R0650	0.40
1.5KE39CA	33.3	37.1V to 41V	28	53.9	91R0654	0.43
1.5KE43CA	36.8	40.9V to 45.2V	25.3	59.3	91R0658	0.43
1.5KE47CA	40.2	44.7V to 49.4V	23.2	64.8	91R0662	0.43
1.5KE51CA	43.6	48.5V to 53.6V	21.4	70.1	91R0666	0.43
1.5KE56CA	47.8	53.2V to 58.8V	19.5	77	91R0670	0.43
1.5KE62CA	53	58.9V to 65.1V	17.7	85	91R0678	0.43
1.5KE68CA	58.1	64.6V to 71.4V	16.3	92	91R0682	0.43
1.5KE75CA	64.7	71.3V to 78.8V	14.6	103	91R0690	0.40
1.5KE91CA	77.8	86.5V to 95.5V	12	125	91R0698	0.40
1.5KE100CA	85.5	95V to 105V	11	137	91R0602	0.43

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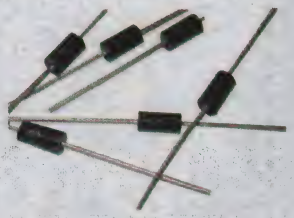
1.5KE SERIES UNIDIRECTIONAL 1500W TRANSIENT VOLTAGE SUPPRESSORS

RoHS Compliant Available

multicomp



Features
- Glass passivated chip junction in DO-201 Package
- 1500W peak pulse capability at 10×1000µs waveform
- Fast response time
- Excellent clamping capability

Ammopack available online.

Mfg. Part No.	V_{RWM} (V)	V_{BR} Range	I_{PPM} (A)	V_{clamp} (V)	Tape Cut Stock No.	Tape Cut Price Each 1-24
1.5KE6.8A	5.8	6.45V to 7.14V	143	10.5	91R0672	0.43
1.5KE7.5A	6.4	7.13V to 7.88V	132	11.3	91R0684	0.40
1.5KE8.2A	7.02	7.79V to 8.61V	124	12.1	91R0692	0.40
1.5KE10A	8.55	9.5V to 10.5V	103	14.5	91R0596	0.40
1.5KE12A	10.2	11.4V to 12.6V	90	16.7	91R0604	0.43
1.5KE13A	11.1	12.4V to 13.7V	82	18.2	91R0608	0.40
1.5KE15A	12.8	14.3V to 15.8V	71	21.2	91R0612	0.40

CONTINUED

1.5KE SERIES UNIDIRECTIONAL 1500W TRANSIENT VOLTAGE SUPPRESSORS (CONT.)

Mfg. Part No.	V_{RWM} (V)	V_{BR} Range	I_{PPM} (A)	V_{clamp} (V)	Tape Cut Stock No.	Tape Cut Price Each 1-24
1.5KE16A	13.6	15.2V to 16.8V	67	22.5	91R0616	0.40
1.5KE18A	15.3	17.1V to 18.9V	59.5	25.2	91R0620	0.40
1.5KE20A	17.1	19V to 21V	54	27.7	91R0624	0.40
1.5KE22A	18.8	20.9V to 23.1V	49	30.6	91R0628	0.40
1.5KE24A	20.5	22.8V to 25.2V	45	33.2	91R0632	0.40
1.5KE27A	23.1	25.7V to 28.4V	40	37.5	91R0636	0.40
1.5KE30A	25.6	28.5V to 31.5V	36	41.4	91R0640	0.40
1.5KE33A	28.2	31.4V to 34.7V	33	45.7	91R0644	0.43
1.5KE36A	30.8	34.2V to 37.8V	30	49.9	91R0648	0.43
1.5KE39A	33.3	37.1V to 41V	28	53.9	91R0652	0.40
1.5KE43A	36.8	40.9V to 45.2V	25.3	59.3	91R0656	0.43
1.5KE47A	40.2	44.7V to 49.4V	23.2	64.8	91R0660	0.40
1.5KE51A	43.6	48.5V to 53.6V	21.4	70.1	91R0664	0.43
1.5KE56A	47.8	53.2V to 58.8V	19.5	77	91R0668	0.43
1.5KE62A	53	58.9V to 65.1V	17.7	85	91R0676	0.40
1.5KE68A	58.1	64.6V to 71.4V	16.3	92	91R0680	0.42
1.5KE75A	64.7	71.3V to 78.8V	14.6	103	91R0688	0.43
1.5KE91A	77.8	86.5V to 95.5V	12	125	91R0696	0.43
1.5KE100A	85.5	95V to 105V	11	137	91R0600	0.40

(194921)

1.5KE 1500W TRANSZORB TRANSIENT VOLTAGE SUPPRESSORS

RoHS Compliant Available

VISHAY.

Features:
- Glass Passivated Junction
- 1500W Peak Pulse Power Capability on 10/1000µs Waveform, Repetition Rate (Duty Cycle) 0.05%
- 1.5KE Case Outline
- Excellent Clamping Capability
- Low Incremental Surge Resistance
- Very Fast Response Time
- $V_{(BR)}$ Unidirectional: 6.8 to 540V
- $V_{(BR)}$ Bidirectional: 6.8 to 440V
- UL Recognized Under Safety Standard 497B: Isolated Loop Circuit Protection

Case: Molded plastic body over passivated junction. Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026. High-temperature soldering guaranteed: 265°C/10 seconds, 0.375″ (9.5mm) lead length, 5 lbs. (2.3 kg) tension. **Suffix A** in **type number** denotes unidirectional device; **C** or **CA** denotes bidirectional. Polarity: For unidirectional types the color band denotes the cathode, which is positive with respect to the anode under normal TVS operation. Mounting position: Any. Flammability: Epoxy is rated UL 94V-0. **Sold individually.** Other quantities available; *go online or call.*

1.5KE SERIES, 1500W SURGE

Mfg. Part No.	Type	Breakdown Voltage V_{BR} (V)	Standoff Voltage V_{WM} (V)	Tape Cut Stock No.	Tape Cut Price Each 1-9
1.5KE6.8CA-E3/54	Bidirectional	6.45V to 7.14V	5.8	05R5966	0.48
1.5KE9.1CA-E3/54	Bidirectional	8.65V to 9.55V	7.78	05R5973	0.48
1.5KE10CA-E3/54	Bidirectional	9.5V to 10.5V	8.55	08R3813	0.48
1.5KE13CA-E3/54	Bidirectional	12.4V to 13.7V	11.1	05R5938	0.45
1.5KE12CA-E3/54	Bidirectional	11.4V to 12.6V	10.2	08R3817	0.48
1.5KE15CA-E3/54	Bidirectional	14.3V to 15.8V	12.8	08R3820	0.48
1.5KE18CA-E3/54	Bidirectional	17.1V to 18.9V	15.3	05R5942	0.48
1.5KE20CA-E3/54	Bidirectional	19V to 21V	17.1	08R3828	0.47
1.5KE33CA-E3/54	Bidirectional	31.4V to 34.7V	28.2	05R5952	0.47
1.5KE30CA-E3/54	Bidirectional	28.5V to 31.5V	25.6	08R3832	0.45
1.5KE36CA-E3/54	Bidirectional	34.2V to 37.8V	30.8	08R3836	0.45
1.5KE39CA-E3/54	Bidirectional	37.1V to 41V	33.3	08R3837	0.45
1.5KE62CA-E3/54	Bidirectional	58.9V to 65.1V	53	05R5967	0.47
1.5KE51CA-E3/54	Bidirectional	48.5V to 53.6V	43.6	08R3839	0.45
1.5KE120CA-E3/54	Bidirectional	114V to 126V	102	05R5937	0.48
1.5KE130CA-E3/54	Bidirectional	124V to 137V	111	05R5940	0.48
1.5KE150CA-E3/54	Bidirectional	143V to 158V	128	08R3822	0.48
1.5KE180CA-E3/54	Bidirectional	171V to 189V	154	69W6212	0.48
1.5KE200CA-E3/54	Bidirectional	190V to 210V	171	05R5945	0.48
1.5KE220CA-E3/54	Bidirectional	209V to 231V	185	05R5947	0.47
1.5KE300CA-E3/54	Bidirectional	285V to 315V	256	08R3834	0.86

(167156)

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(196545)

SMCJ 1500W BIDIRECTIONAL SURFACE MOUNT TRANSIANT VOLTAGE SUPPRESSORS

RoHS Compliant Available

BOURNS®

Features:

- Peak Pulse Power Dissipation: **SMCJ** 1500W
- D0-214AB Package
- No. of pins: 2

SMCJ SERIES

Mfg. Part No.	V_{Br} Range	V_{RWM} (V)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● SMCJ12CA	13.3V to 15.3V	12	67R1711	0.67
● SMCJ13CA	14.4V to 16.5V	13	67R1716	0.67
● SMCJ150CA	167V to 185V	150	67R1724	0.67
● SMCJ24CA	26.7V to 30.7V	24	67R1740	0.67
● SMCJ26CA	28.9V to 32.2V	26	67R1742	0.67
● SMCJ30CA	33.3V to 38.3V	30	67R1746	0.67
● SMCJ33CA	36.7V to 42.2V	33	67R1748	0.67
● SMCJ36CA	40V to 46V	36	67R1750	0.73
● SMCJ48CA	53.3V to 61.3V	48	67R1758	0.67
● SMCJ5.0CA	6.4V to 7.23V	5	67R1760	0.67
● SMCJ51CA	56.7V to 65.2V	51	67R1762	0.71
● SMCJ58CA	64.4V to 74.6V	58	67R1766	0.67
● SMCJ6.0CA	6.67V to 7.67V	6	67R1768	0.67
● SMCJ64CA	71.1V to 81.8V	64	67R1774	0.67
● SMCJ85CA	94.4V to 108.2V	85	67R1790	0.67
● SMCJ90CA	100V to 115.5V	90	67R1794	0.67

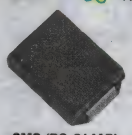
(176208)

SMCJ 1500W SURFACE MOUNT TRANSIANT VOLTAGE SUPPRESSORS

RoHS Compliant Available

FAIRCHILD

- Glass-Passivated Junction
- Excellent Clamping Capability
- Low Incremental Surge Resistance
- Fast Response Time
- 2 pin D0-214AB SMD Package



SMC (D0-214AB)

BIDIRECTIONAL

Mfg. Part No.	V_{rwm} (V)	Vbr Min. (V)	V_{Clamp} Max. (V)	I_{ppm} Max. (A)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● SMCJ10CA	10	11.1	17	88.2	58K2247	0.63
● SMCJ12CA	12	13.3	19.9	75.3	58K2253	0.46
● SMCJ13CA	13	14.4	21.5	69.8	58K2256	0.64
● SMCJ14CA	14	15.6	23.2	64.7	58K2258	0.52
● SMCJ15CA	15	16.7	24.4	61.5	58K2260	0.49
● SMCJ18CA	18	20	29.2	51.4	58K2266	0.46
● SMCJ20CA	20	22.2	32.4	46.3	18C8501	0.46
● SMCJ24CA	24	26.7	38.9	38.6	18C8505	0.46
● SMCJ26CA	26	28.9	42.1	35.6	58K9546	0.49
● SMCJ28CA	28	31.1	45.4	33	58K2270	0.58
● SMCJ30CA	30	33.3	48.4	31	58K2272	0.61
● SMCJ33CA	33	36.7	53.3	28.1	18C8513	0.60
● SMCJ40CA	40	44.4	64.5	23.3	58K2275	0.60
● SMCJ43CA	43	47.8	69.4	21.6	18C8519	0.46
● SMCJ45CA	45	50	72.7	20.6	58K9549	0.52
● SMCJ48CA	48	53.3	77.4	19.4	58K2276	0.61
● SMCJ54CA	54	60	87.1	17.2	58K2278	0.46
● SMCJ60CA	60	66.7	96.8	15.5	58K2279	0.58
● SMCJ70CA	70	77.8	113	13.3	18C8545	0.58
● SMCJ75CA	75	83.3	121	12.4	58K2281	0.60
● SMCJ85CA	85	94.4	137	10.9	18C8553	0.46
● SMCJ90CA	90	100	146	10.3	58K2286	0.59
● SMCJ110CA	110	122	177	8.5	58K2251	0.61
● SMCJ120CA	120	133	193	7.8	58K2254	0.58
● SMCJ170CA	170	189	275	5.5	58K9545	0.76
UNIDIRECTIONAL						
● SMCJ7V5A	7.5	8.33	12.9	...	18C8542	0.47
● SMCJ11A	11	12.2	18.2	82.4	58K2249	0.39
● SMCJ12A	12	13.3	19.9	75.3	58K2252	0.51
● SMCJ13A	13	14.4	21.5	69.8	58K2255	0.52
● SMCJ14A	14	15.6	23.2	64.7	58K9544	0.50
● SMCJ17A	17	18.9	27.6	54.3	58K2263	0.52
● SMCJ15A	15	16.7	24.4	61.5	58K2259	0.52
● SMCJ16A	16	17.8	26	57.7	58K2262	0.40
● SMCJ18A	18	20	29.2	51.4	58K2265	0.52
● SMCJ24A	24	26.7	38.9	38.6	58K2268	0.40
● SMCJ28A	28	31.1	45.4	33	58K2269	0.52

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SMCJ 1500W SURFACE MOUNT TRANSIANT VOLTAGE SUPPRESSORS (CONT.)

UNIDIRECTIONAL

Mfg. Part No.	V_{rwm} (V)	Vbr Min. (V)	V_{Clamp} Max. (V)	I_{ppm} Max. (A)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● SMCJ30A	30	33.3	48.4	31	58K2271	0.52
● SMCJ33A	33	36.7	53.3	28.1	58K2273	0.52
● SMCJ36A	36	40	58.1	25.8	58K9547	0.52
● SMCJ40A	40	44.4	64.5	23.3	58K9548	0.52
● SMCJ43A	43	47.8	69.4	...	18C8518	0.41
● SMCJ51A	51	56.7	82.4	...	18C8526	0.39
● SMCJ58A	58	64.4	93.6	...	18C8530	0.52
● SMCJ60A	60	66.7	96.8	...	67K0926	0.50
● SMCJ64A	64	71.1	103	...	18C8538	0.51
● SMCJ78A	78	86.7	126	11.9	58K2282	0.50
● SMCJ90A	90	100	146	10.3	58K2285	0.50

(165062)

SMCJ & SMDJ 1500W UNIDIRECTIONAL TRANSIENT VOLTAGE SUPPRESSION DIODES

RoHS Compliant Available

Littelfuse®

Expertise Applied | Answers Delivered

Features:

- Peak Pulse Power Dissipation: **SMCJ** 1500W **SMDJ** 3000W
- D0-214AB (SMC) Low Profile Case
- Built-in Strain Relief
- Fast Response Time
- Excellent clamping capability
- Low incremental surge resistance

SMCJ

Mfg. Part No.	V_{RRM} (V)	Breakdown Voltage VBR @ IT (V) Min./Max.	(mA)	P_D (W)	V_C (V)	Max. Peak Pulse Current IPP (A)	Pkg.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● SMCJ5.0A	5	7 /	10	6.5	9.2	163	D0-214AB	71J2209	0.57
● SMCJ6.0A	6	7.37 /	10	6.5	10.3	145.7	D0-214AB	06R2018	0.57
● SMCJ6.5A	6.5	7.98 /	10	6.5	11.2	134	D0-214AB	06R2020	0.57
● SMCJ12A	12	14.7 /	1	6.5	19.9	75.4	D0-214AB	71J2117	0.57
● SMCJ13A	13	15.9 /	1	6.5	21.5	69.8	D0-214AB	71J2125	0.60
● SMCJ14A	14	17.2 /	1	6.5	23.2	64.7	D0-214AB	71J2133	0.57
● SMCJ15A	15	18.5 /	1	6.5	24.4	61.5	D0-214AB	71J2137	0.60
● SMCJ16A	16	19.7 /	1	6.5	26	57.7	D0-214AB	06R1968	0.60
● SMCJ17A	17	20.9 /	1	6.5	27.6	54.4	D0-214AB	06R1970	0.57
● SMCJ18A	18	22.1 /	1	6.5	29.2	51.4	D0-214AB	71J2161	0.57
● SMCJ20A	20	24.5 /	1	6.5	32.4	46.3	D0-214AB	71J2165	0.60
● SMCJ22A	22	26.9 /	1	6.5	35.5	42.3	D0-214AB	06R1978	0.57
● SMCJ24A	24	29.5 /	1	6.5	38.9	38.6	D0-214AB	71J2173	0.57
● SMCJ26A	26	31.9 /	1	6.5	42.1	35.7	D0-214AB	71J2177	0.57
● SMCJ28A	28	34.4 /	1	6.5	45.4	33.1	D0-214AB	71J2181	0.57
● SMCJ30A	30	36.8 /	1	6.5	48.4	31	D0-214AB	71J2185	0.59
● SMCJ33A	33	40.6 /	1	6.5	53.3	28.2	D0-214AB	71J2189	0.57
● SMCJ36A	36	44.2 /	1	6.5	58.1	25.9	D0-214AB	71J2193	0.57
● SMCJ40A	40	49.1 /	1	6.5	64.5	23.3	D0-214AB	71J2197	0.57
● SMCJ45A	45	55.3 /	1	6.5	72.7	20.6	D0-214AB	06R2006	0.59
● SMCJ48A	48	58.9 /	1	6.5	77.4	19.4	D0-214AB	71J2205	0.60
● SMCJ51A	51	62.7 /	1	6.5	82.4	18.2	D0-214AB	71J2213	0.57
● SMCJ54A	54	66.3 /	1	6.5	87.1	17.3	D0-214AB	71J2217	0.57
● SMCJ60A	60	73.7 /	1	6.5	96.8	15.5	D0-214AB	06R2022	0.57
● SMCJ64A	64	78.6 /	1	6.5	103	14.6	D0-214AB	71J2237	0.57
● SMCJ75A	75	92.1 /	1	6.5	121	12.4	D0-214AB	71J2253	0.59
● SMCJ85A	85	104 /	1	6.5	137	11	D0-214AB	06R2032	0.57
● SMCJ90A	90	111 /	1	6.5	146	10.3	D0-214AB	06R2034	0.57
● SMCJ180A	180	222 /	1	1.5	292	5.1	D0-214AB	64T2599	0.71
● SMCJ220A	220	272 /	1	6.5	356	4.2	D0-214AB	06R1980	1.00
● SMCJ250A	250	309 /	1	6.5	405	3.7	D0-214AB	06R1984	1.00
● SMCJ350A	350	432 /	1	6.5	567	2.6	D0-214AB	26K7469	1.00
● SMCJ440A	440	543 /	1	6.5	713	2.1	D0-214AB	06R2004	1.05
SMDJ									
● SMDJ5.0A	5	7 /	1	3	9.2	326.1	D0-214AB	64T2554	1.01
● SMDJ10A	10	12.3 /	1	3	17	176.5	D0-214AB	64T2550	1.01
● SMDJ12A	12	14.7 /	1	6.5	19.9	150.8	D0-214AB	72R7035	1.01
● SMDJ28A	28	34.4 /	1	6.5	45.4	66.1	D0-214AB	72R7038	1.01
● SMDJ30A	30	36.8 /	1	6.5	48.4	62	D0-214AB	06R2036	1.01
● SMDJ33A	33	40.6 /	1	6.5	53.3	56.3	D0-214AB	29R0825	1.06
● SMDJ36A	36	44.2 /	1	6.5	58.1	51.6	D0-214AB	06R2038	1.01
● SMDJ48A	48	58.9 /	1	3	77.4	38.8	D0-214AB	64T2553	1.18
● SMDJ54A	54	66.3 /	1	3	87.1	34.4	D0-214AB	64T2556	1.18

(147851)

SMCJ & SMDJ 1500W BIDIRECTIONAL TRANSIENT VOLTAGE SUPPRESSION DIODES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

Features:
- Peak Pulse Power Dissipation: 3000W
- DO-214AB
- Built-in Strain Relief
- Fast Response Time
- Excellent clamping capability
- Low incremental surge resistance

Mfg. Part No.	V_{RRM} (V)	Breakdown Voltage VBR @ IT (V) Min./Max.	(mA)	P_D (W)	V_C (V)	Max. Peak Pulse Current IPP (A)	Pkg.	Tape Cut Stock No.	Price Each 1-9
SMCJ									
SMCJ5.0CA	5	7 /	10	6.5	9.2	163	DO-214AB	71J2211	0.59
SMCJ6.5CA	6.5	7.98 /	10	6.5	11.2	134	DO-214AB	06R2021	0.59
SMCJ7.0CA	7	8.6 /	10	6.5	12	125	DO-214AB	71J2243	0.59
SMCJ10CA	10	12.3 /	1	6.5	17	88.3	DO-214AB	71J2103	0.62
SMCJ12CA	12	14.7 /	1	6.5	19.9	75.4	DO-214AB	71J2119	0.59
SMCJ15CA	15	18.5 /	1	6.5	24.4	61.5	DO-214AB	71J2139	0.61
SMCJ16CA	16	19.7 /	1	6.5	26	57.7	DO-214AB	06R1969	0.59
SMCJ17CA	17	20.9 /	1	6.5	27.6	54.4	DO-214AB	06R1971	0.59
SMCJ18CA	18	22.1 /	1	6.5	29.2	51.4	DO-214AB	71J2163	0.59
SMCJ24CA	24	29.5 /	1	6.5	38.9	38.6	DO-214AB	71J2175	0.59
SMCJ28CA	28	34.4 /	1	6.5	45.4	33.1	DO-214AB	71J2183	0.62
SMCJ30CA	30	36.8 /	1	6.5	48.4	31	DO-214AB	71J2187	0.59
SMCJ33CA	33	40.6 /	1	6.5	53.3	28.2	DO-214AB	71J2191	0.61
SMCJ36CA	36	44.2 /	1	6.5	58.1	25.9	DO-214AB	71J2195	0.61
SMCJ40CA	40	49.1 /	1	6.5	64.5	23.3	DO-214AB	71J2199	0.61
SMCJ43CA	43	52.8 /	1	1.5	69.4	21.7	DO-214AB	64T2549	0.59
SMCJ48CA	48	58.9 /	1	6.5	77.4	19.4	DO-214AB	06R2009	0.59
SMCJ51CA	51	62.7 /	1	6.5	82.4	18.2	DO-214AB	71J2215	0.59
SMCJ54CA	54	66.3 /	1	6.5	87.1	17.3	DO-214AB	71J2219	0.61
SMCJ58CA	58	71.2 /	1	6.5	93.6	16.1	DO-214AB	71J2223	0.59
SMCJ60CA	60	73.7 /	1	6.5	96.8	15.5	DO-214AB	71J2235	0.59
SMCJ78CA	78	95.8 /	1	1.5	126	11.9	DO-214AB	31T1597	0.62
SMCJ75CA	75	92.1 /	1	6.5	121	12.4	DO-214AB	71J2255	0.61
SMCJ100CA	100	123 /	1	6.5	162	9.3	DO-214AB	71J2107	0.61
SMCJ200CA	200	247 /	1	6.5	324	4.6	DO-214AB	26K7455	1.04
SMCJ300CA	300	371 /	1	6.5	486	3.1	DO-214AB	26K7467	0.95
SMCJ400CA	400	494 /	1	6.5	648	2.3	DO-214AB	26K7475	0.95
SMCJ440CA	440	543 /	1	6.5	713	2.1	DO-214AB	26K7479	0.95
SMDJ									
SMDJ12CA	12	14.7 /	1	6.5	19.9	150.8	DO-214AB	72R7036	1.15
SMDJ28CA	28	34.4 /	1	3	45.4	66.1	DO-214AB	64T2551	1.36
SMDJ30CA	30	36.8 /	1	6.5	48.4	62	DO-214AB	06R2037	1.36
SMDJ33CA	33	40.6 /	1	3	53.3	56.3	DO-214AB	64T2552	1.29
SMDJ36CA	36	44.2 /	1	6.5	58.1	51.6	DO-214AB	06R2039	1.29
SMDJ51CA	51	62.7 /	1	3	82.4	36.4	DO-214AB	64T2555	1.87
SMDJ60CA	60	73.7 /	1	3	96.8	31	DO-214AB	64T2557	1.87
SMDJ64CA	64	78.6 /	1	3	103	29.1	DO-214AB	64T2558	1.87
SMDJ70CA	70	86 /	1	6.5	113	26.5	DO-214AB	72R7040	1.97
SMDJ75CA	75	92.1 /	1	6.5	121	24.8	DO-214AB	72R7041	1.87

(165129)

SlimSMA™ TRANSZORB® 600W TRANSIENT VOLTAGE SUPPRESSORS

RoHS Compliant Available

VISHAY.

Features:
- Very low profile - typical height of 0.95 mm
- Ideal for automated placement
- Uni-directional only
- Excellent clamping capability

Specifications:
- Case: DO-221AC (SlimSMA)
- Terminals: Matte tin plated leads
- Polarity: Color band denotes cathode end
- Peak pulse power: 600 W (19/1000 µs), 4 kW (9/20 µs)

Mnf. Part No.	V_{BR} Range	V_C Max. (V)	I_{PPM} @ 8/20 µs (A)	Tape Cut Stock No.	Price Each 1-9
SMA6F5.0A-M3/6A	6.4V to 7.07V	13.4	298	93T1137	0.32
SMA6F6.0A-M3/6A	6.7V to 7.41V	13.7	290	93T1140	0.30
SMA6F6.5A-M3/6A	7.2V to 7.96V	14.5	276	93T1143	0.30
SMA6F7.5A-M3/6A	8.33V to 9.21V	17	235	93T1146	0.30
SMA6F8.0A-M3/6A	8.89V to 9.83V	18.2	220	93T1149	0.30
SMA6F8.5A-M3/6A	9.4V to 10.4V	18.7	205	93T1152	0.30
SMA6F10A-M3/6A	11.1V to 12.3V	19.6	184	93T1108	0.30
SMA6F11A-M3/6A	12.2V to 13.5V	21.5	172	93T1111	0.30
SMA6F12A-M3/6A	13.3V to 14.7V	23.5	157	93T1114	0.30
SMA6F13A-M3/6A	14.4V to 15.9V	23.9	147	93T1119	0.30
SMA6F15A-M3/6A	16.7V to 18.5V	27.7	123	93T1122	0.32
SMA6F16A-M3/6A	17.8V to 19.7V	29.5	119	93T1125	0.30
SMA6F17A-M3/6A	18.9V to 20.9V	31.4	111	93T1128	0.30

CONTINUED

SlimSMA™ TRANSZORB® 600W TRANSIENT VOLTAGE SUPPRESSORS (CONT.)

Mnf. Part No.	V_{BR} Range	V_C Max. (V)	I_{PPM} @ 8/20 µs (A)	Tape Cut Stock No.	Price Each 1-9
SMA6F18A-M3/6A	20V to 22.1V	33.2	102	93T1131	0.30
SMA6F20A-M3/6A	22.2V to 24.5V	36.8	93	93T1134	0.30

(202255)

5KP SERIES 5000W BIDIRECTIONAL TRANSIENT VOLTAGE SUPPRESSION DIODES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

Features:
- 5000W Peak Pulse Power Dissipation
- 2 pin P600 Package
- Fast Response Time
- Excellent clamping capability
- Low incremental surge resistance

Mfg. Part No.	V_{RRM} (V)	Breakdown Voltage, VBR @ IT (V) Min./Max.	(mA)	P_D (W)	V_C (V)	Max. Peak Pulse Current IPP (A)	Diode Case Style	Tape Cut Stock No.	Price Each 1-9
5KP5.0CA	5	7 /	50	8	9.2	554.3	P600	18H3488	3.24
5KP6.0CA	6	7.37 /	50	8	10.3	495.1	P600	18H3504	3.24
5KP10CA	10	12.3 /	5	8	17	300	P600	06R2126	3.24
5KP15CA	15	18.5 /	5	8	24.4	209	P600	18H3422	3.07
5KP16CA	16	19.7 /	5	8	26	196.2	P600	18H3427	3.07
5KP24CA	24	29.5 /	5	8	38.9	131.1	P600	18H3449	3.07
5KP30CA	30	36.8 /	5	8	48.4	105.4	P600	18H3461	3.20
5KP33CA	33	40.6 /	5	8	53.3	95.7	P600	18H3465	3.07
5KP36CA	36	44.2 /	5	8	58.1	87.8	P600	18H3469	3.20
5KP40CA	40	49.1 /	5	8	64.5	79.1	P600	06R2182	3.20
5KP43CA	43	52.8 /	5	8	69.4	73.5	P600	27C4546	3.20
5KP45CA	45	55.3 /	5	8	72.7	70.2	P600	06R2186	3.07
5KP48CA	48	58.9 /	5	8	77.4	65.9	P600	18H3484	3.07
5KP51CA	51	62.7 /	5	8	82.4	61.9	P600	06R2192	4.45
5KP54CA	54	66.3 /	5	8	87.1	58.6	P600	06R2194	4.45
5KP64CA	64	78.6 /	5	8	103	49.5	P600	06R2204	4.45
5KP70CA	70	86 /	5	8	113	45.1	P600	18H3527	4.45
5KP75CA	75	92.1 /	5	8	121	42.1	P600	06R2211	4.45
5KP120CA	120	147 /	5	8	193	26.4	P600	06R2136	4.45
5KP130CA	130	159 /	5	8	209	24.4	P600	26K8840	4.64
5KP160CA	160	197 /	5	8	259	19.7	P600	06R2150	4.45
5KP170CA	170	209 /	5	8	275	18.5	P600	06R2154	4.45
5KP190CA	190	233 /	5	8	310	16.5	P600	06R2160	4.45
5KP200CA	200	246 /	5	8	329.2	15.5	P600	06R2164	4.45
5KP210CA	210	258 /	5	8	349.5	14.6	P600	06R2166	4.45
5KP220CA	220	244 / 270	5	8	371.1		P600	31T1613	4.68

(165124)

AUTOMOTIVE AND HIGH RELIABILITY TVS DIODES-600W

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

NEW

Features:
- Hi reliability application and automotive grade AEC-Q101 qualified
- SMA low profile package: less than 1.1 mm
- Same power as standard SMB devices (600 W)
- Footprint compatibility with standard SMA and SMB products (easy to lay out)
- Typical failure mode is short from over-specified voltage or current
- Whisker test is conducted based on JEDEC JESD201A per its table 4a and 4c
- IEC-61000-4-2 ESD 15kV(Air), 8kV (Contact)
- ESD protection of data lines in accordance with IEC 61000-4-2 (IEC801-2)
- EFT protection of data lines in accordance with IEC 61000-4-4 (IEC801-4)
- Low inductance, excellent clamping capability
- Fast response time: typically less than 1.0ns from 0 Volts to VBR min
- Built-in strain relief
- Glass passivated junction
- Typical IR less than 1µA above 12V
- High temperature soldering: 260°C/40 seconds at terminals
- Typical maximum temperature coefficient ΔVBR = 0.1% x VBR@25°C x ΔT
- Matte tin lead–free plated
- Halogen free and RoHS compliant

Mfg. Part No.	V_{RRM} (V)	VBR (V)	V_{Clamp} Max. @ IPP (V)	IPP Max. (A)	Pkg.	Tape Cut Stock No.	Price Each 1-9
TPSMA6L10A	10	11.1V to 12.3V	17	35.3	DO-221AC	66W7854	0.47
TPSMA6L11A	11	12.2V to 13.5V	18.2	33	DO-221AC	66W7855	0.47
TPSMA6L12A	12	13.3V to 14.7V	19.9	30.2	DO-221AC	66W7856	0.47
TPSMA6L13A	13	14.4V to 15.9V	21.5	28	DO-221AC	66W7857	0.47
TPSMA6L14A	14	15.6V to 17.2V	23.2	25.9	DO-221AC	66W7858	0.47
TPSMA6L15A	15	16.7V to 18.5V	24.4	24.6	DO-221AC	66W7859	0.47
TPSMA6L16A	16	17.8V to 19.7V	26	23.1	DO-221AC	66W7860	0.47

CONTINUED

TRANSIENT VOLTAGE SUPPRESSION DIODES

AUTOMOTIVE AND HIGH RELIABILITY TVS DIODES-600W (CONT.)

Mfg. Part No.	V_{RRM} (V)	VBR (V)	V_{Clamp} Max. @ IPP (V)	IPP Max. (A)	Pkg.	Tape Cut Stock No.	Tape Cut 1-9
● TPSMA6L17A	17	18.9V to 20.9V	27.6	21.8	D0-221AC	66W7861	0.47
● TPSMA6L18A	18	20V to 22.1V	29.2	20.6	D0-221AC	66W7862	0.47
● TPSMA6L20A	20	22.2V to 24.5V	32.4	18.6	D0-221AC	66W7863	0.47
● TPSMA6L22A	22	24.4V to 26.9V	35.5	16.9	D0-221AC	66W7864	0.47
● TPSMA6L24A	24	26.7V to 29.5V	38.9	15.5	D0-221AC	66W7865	0.47
● TPSMA6L26A	26	28.9V to 31.9V	42.1	14.3	D0-221AC	66W7866	0.47
● TPSMA6L28A	28	31.1V to 34.4V	45.4	13.3	D0-221AC	66W7867	0.47
● TPSMA6L30A	30	33.3V to 36.8V	48.4	12.4	D0-221AC	66W7868	0.47
● TPSMA6L33A	33	36.7V to 40.6V	53.3	11.3	D0-221AC	66W7869	0.47
● TPSMA6L36A	36	40V to 44.2V	58.1	10.4	D0-221AC	66W7870	0.47
● TPSMA6L40A	40	44.4V to 49.1V	64.5	9.3	D0-221AC	66W7871	0.47
● TPSMA6L43A	43	47.8V to 52.8V	69.4	8.7	D0-221AC	66W7872	0.47
● TPSMA6L45A	45	50V to 55.3V	72.7	8.3	D0-221AC	66W7873	0.47
● TPSMA6L48A	48	53.3V to 58.9V	77.4	7.8	D0-221AC	66W7874	0.47
● TPSMA6L5.0A	5	6.4V to 7V	9.2	65.3	D0-221AC	66W7875	0.47
● TPSMA6L51A	51	56.7V to 62.7V	82.4	7.3	D0-221AC	66W7876	0.47
● TPSMA6L54A	54	60V to 66.3V	87.1	6.9	D0-221AC	66W7877	0.47
● TPSMA6L58A	58	64.4V to 71.2V	93.6	6.5	D0-221AC	66W7878	0.47
● TPSMA6L6.0A	6	6.67V to 7.37V	10.3	58.3	D0-221AC	66W7879	0.47
● TPSMA6L6.5A	6.5	7.22V to 7.98V	11.2	53.6	D0-221AC	66W7880	0.47
● TPSMA6L60A	60	66.7V to 73.7V	96.8	6.2	D0-221AC	66W7881	0.47
● TPSMA6L64A	64	71.1V to 78.6V	103	5.9	D0-221AC	66W7882	0.47
● TPSMA6L7.0A	7	7.78V to 8.6V	12	50	D0-221AC	66W7883	0.47
● TPSMA6L7.5A	7.5	8.33V to 9.21V	12.9	46.6	D0-221AC	66W7884	0.47
● TPSMA6L70A	70	77.8V to 86V	113	5.3	D0-221AC	66W7885	0.47
● TPSMA6L75A	75	83.3V to 92.1V	121	5	D0-221AC	66W7886	0.47
● TPSMA6L78A	78	86.7V to 95.8V	126	4.8	D0-221AC	66W7887	0.47
● TPSMA6L8.0A	8	8.89V to 9.83V	13.6	44.2	D0-221AC	66W7888	0.47
● TPSMA6L8.5A	8.5	9.44V to 10.4V	14.4	41.7	D0-221AC	66W7889	0.47
● TPSMA6L85A	85	94.4V to 104V	137	4.4	D0-221AC	66W7890	0.47
● TPSMA6L9.0A	9	10V to 11.1V	15.4	39	D0-221AC	66W7891	0.47

(211471)

PTVS15-xxxC-TH SERIES HIGH CURRENT TVS DIODES

RoHS Compliant Available

BOURNS®

Features:
- 15 kA, 8/20µs surge capability
- Low clamping voltage under surge
- Bidirectional TVS

Mfg. Part No.	Breakdown Voltage (V)	Clamping Voltage (V)	Peak Pulse Current (kA)	Stock No.	Price Each 1-9
● PTVS15-058C-TH	64-70	110	15	53W9780	40.00
● PTVS15-076C-TH	85-95	150	15	53W9782	41.00

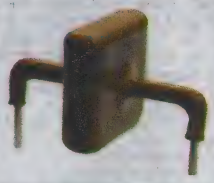
(209508)

PTVS SERIES HIGH CURRENT TVS DIODES

RoHS Compliant Available

BOURNS®

The PTVS range of high current bidirectional TVS diodes is designed for use in AC line protection and high power DC bus clamping applications. These devices offer bidirectional port protection from 58 volts to 470 volts.



Mnf. Part No.	I_{PPM} (kA)	V_{WM} (V)	$V_{(BR)}$ Range	V_C (V)	Stock No.	Price Each 1-9
● PTVS3-380C	3	380	401V to 443V	570	76T0577	53.00
● PTVS3-430C	3	430	440V to 490V	620	76T0578	50.00
● PTVS3-058C-TH	3	58	64V to 70V	100	49X1086	25.03
● PTVS3-076C-TH	3	76	85V to 95V	130	49X1087	27.31
● PTVS3-058C-TH	3	58	64 to 70	100	49X1086	25.03
● PTVS3-076C-TH	3	76	85 to 95	130	49X1087	27.31
● PTVS6-380C	6	380	401V to 443V	540	76T0579	90.00
● PTVS6-430C	6	430	440V to 490V	600	76T0580	90.00
● PTVS6-058C-TH	6	58	64 to 70	110	28X5102	18.44
● PTVS6-076C-TH	6	76	85 to 95	140	28X5103	20.91
● PTVS10-058C	10	58	64V to 70V	130	76T0571	43.04
● PTVS10-076C	10	76	85V to 95V	160	76T0572	44.27

➤CONTINUED➤

PTVS SERIES HIGH CURRENT TVS DIODES (CONT.)

Mnf. Part No.	I_{PPM} (kA)	V_{WM} (V)	$V_{(BR)}$ Range	V_C (V)	Stock No.	Price Each 1-9
● PTVS10-170C	10	170	190V to 210V	300	76T0573	94.05
● PTVS10-320C	10	320	336V to 368V	500	76T0574	145.60
● PTVS10-380C	10	380	401V to 443V	570	76T0575	145.60
● PTVS10-470C	10	470	490V to 530V	680	76T0576	152.15
● PTVS10-058C-TH	10	58	64 to 70	110	28X8244	21.81
● PTVS10-076C-TH	10	76	85 to 95	140	28X8245	26.34
● PTVS15-058C-SH	15	58	64 to 70	110	19X9936	24.80
● PTVS15-076C-SH	15	76	85 to 95	150	19X9937	30.00
● PTVS10-058C-SH	10	58	64 to 70	110	61X9276	25.68
● PTVS10-076C-SH	10	76	85 to 95	140	61X9277	31.03

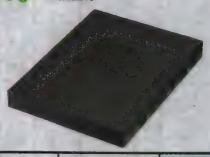
(200540)

TCS-DL SERIES DUAL TRANSIENT CURRENT SUPPRESSORS

RoHS Compliant Available

BOURNS®

Features:
- High-speed performance
- Superior overcurrent protection
- Bidirectional
- Low resistance
- Excellent channel to channel resistance matching
- Small SMT package



Mfg. Part No.	Impulse Voltage Rating	Trigger Current Range (mA)	Series Resist. Range (ohm)	Stock No.	Price Each 1-9
● TCS-DL004-250-WH		250 -500	1.6 - 3	43W4303	0.80
● TCS-DL004-500-WH		500 - 1000	1 - 1.8	43W4305	1.15
● TCS-DL004-750-WH		750 - 1500	0.7 - 1.3	43W4307	1.50

(208470)

SILICON PROTECTION ARRAYS

RoHS Compliant Available

Littelfuse®

Expertise Applied | Answers Delivered

Features
- Designed to Provide Over-Voltage Protection
- Meets HBM ESD Interface Standards
- High Peak Current Capability
- Fast Switching
- Low Input Leakages
- Low Input Capacitance
- Operating Temperature: -40°C to 105°C

Applications
- Microprocessor/Logic Input Protection
- Data Bus Protection
- Analog Device Input Protection
- Voltage Clamp

The SP720, SP721 and SP723 are arrays of SCR/Diode bipolar structures for ESD and over-voltage protection of sensitive input circuits. Every input has two protection SCR/Diode device structures.

Mfg. Part No.	Channels	Package	Stock No.	Price Each 1-9
● SP724AHTG	4	6-SOT-23	08N5580	1.83
● SP721ABG	6	8-SOIC	92K8997	2.61
● SP721ABTG	6	8-SOIC	06R2040	2.70
● SP721APP	6	8-DIP	92K8999	2.61
● SP723ABG	6	8-SOIC	80K9824	3.09
● SP723APP	6	8-DIP	92K9001	3.05
● SP720ABG	14	16-SOIC	92K8994	3.41
● SP720ABTG	14	16-SOIC	92K8995	3.53
● SP720APP	14	16-DIP	92K8996	3.35

(78747)

NEW PRODUCTS ADDED DAILY

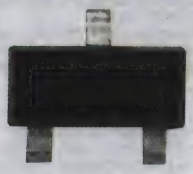
See the newest products, technologies and suppliers on our website.

(196562)

TVS DIODE ARRAYS

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered



Features:
- TVS Avalanche Diode Arrays
- Ultra small packages
- Fast Response Time
- Low Input Capacitance: 30pF Typ.
- Input Protection for Applications Up to 5VDC
- Operating Temperature Range: -40°C to +85°C
- Package Power Dissipation:
  0.2W for SC70
  0.225W for SOT23-3, SOT23-5, SOT23-6, SOT143
  0.5W for TSSOP, MSOP

Applications:
- Mobile phone handsets
- Personal Digital Assistants (PDA)
- Portable handheld equipment (Laptop, Palmtop computers)
- Computer port, keyboard (USB1.1)
- Digital still cameras
- Digital video cameras
- MP3 players

SP03 Series

Mfg. Part No.	Channels	V_{RWM} (V)	I_{PP} (A)	V_C (V)	Package	Tape Cut Stock No.	Price 1-9
SP03-3.3BTG	2	3.3	150	18	8-SOIC	06R2504	2.31
SP03-6BTG	2	6	150	20	8-SOIC	08P5362	2.11
SP1001 SERIES							
SP1001-04JTG	4	5.5	2	13	SC-70	31T1603	0.57
SP1001-04XTG	4	5.5	2	13	5-SOT-553	08P5364	0.59
SP1001-05XTG	5	5.5	2	11	6-SC70	01P7746	0.64
SP1001-02JTG	2	5.5	2	13	3-SC70	08P5363	0.58
SP1001-05JTG	5	5.5	2	13	6-SC70	08P5365	0.62
SP1002 SERIES							
SP1002-01JTG	1	6	2	11.2	3-SC70	08P5366	0.47
SP1003 SERIES							
SP1003-01DTG	1	5	7	12.5	2-SOD-723	08P5367	0.87
SP1003-01ETG	1	5	7	12	SOD-882	76T4916	0.47
SP1005 SERIES							
SP1005-01WTG	1	6	10	15.6	0201	81R3955	0.47
SP1005-01ETG	...	...	...	15.6	2-SOD-882	65W7518	0.32
SP1007 SERIES							
SP1007-01WTG	1	6	2	12.2	0201	81R3956	0.47
SP1007-01ETG	...	...	...	13.1	2-SOD-882	64W7445	0.08
SP1007-01ETG	...	...	...	13.1	2-SOD-882	65W7519	0.31
SP1011 SERIES							
SP1011-04UTG	4	6	2	10.2	6-uDFN	72R4427	0.64
SP3001 SERIES							
SP3001-04JTG	4	6	2.5	10.6	6-SC70	08P5368	0.79
SP3002 SERIES							
SP3002-04JTG	4	6	4.5	13	6-SC-70	72R4429	0.78
SP3002-04UTG	4	6	4.5	13	6-uDFN	72R4430	0.79
SP3003 SERIES							
SP3003-02XTG	2	6	2.5	11.8	5-SOT-553	08P5369	1.04
SP3003-08ATG	8	6	2.5	15	10-MSOP	76T4918	1.17
SP3003 SERIES							
SP3003-04XTG	4	6	2.5	11.8	6-SOT-563	08P5370	0.77
SP3004 SERIES							
SP3004-04XTG	4	6	4	10	6-SOT-563	15R3970	0.77
SP3004-04XTG	4	6	4	10	6-SOT-563	15R3971	0.25
SP3006-02XTG	...	...	...	15	6-SOT-563	06X3248	0.99
SP3011 SERIES							
SP3011-06UTG	6	6	2	10.2	6-uDFN	41T5393	1.08
SP3012 SERIES							
SP3012-04UTG	4	5	4	7	10-UDFN	76T4920	0.83
SP3050 SERIES							
SP3051-04HTG	...	6	20	17	6-SOT-23	88W3903	1.05
SP4020 SERIES							
SP4020-01FTG	...	...	...	21.8	2-SOD-323	05X0400	0.78
SP4020-01FTG-C	...	...	...	21.8	2-SOD-323	05X0402	0.78
SP4021-01FTG-C	...	...	...	19.6	2-SOD-323	05X0406	0.78
SP4021-01FTG	...	...	...	19.6	2-SOD-323	05X0404	0.74
SP4040 SERIES							
SP4040-02BTG	2	3.3	75	20	8-SOIC	76T4922	1.85
SRDA SERIES							
SRDA05-4BTG	...	...	...	21	8-SOIC	96W6681	1.01
SRDA3.3-4BTG	...	3.3	35	...	8-SOIC	95W5627	1.05
SRDA3.3-4BTG	...	3.3	35	...	8-SOIC	95W5628	0.41
SR70 SERIES							
SR70-02CTG	...	70	40	...	4-SOT-143	64W7448	0.38
SR70-02CTG	...	70	40	...	4-SOT-143	67W2333	1.07

➤CONTINUED➤

TVS DIODE ARRAYS (CONT.)

SM SERIES

Mfg. Part No.	Channels	V_{RWM} (V)	I_{PP} (A)	V_C (V)	Package	Tape Cut Stock No.	Price 1-9
SM05-02HTG	2	5	24	52	3-SOT-23	52X5698	0.50
SM12-02HTG	2	12	17	52	3-SOT-23	52X5700	0.50
SM15-02HTG	2	15	12	52	3-SOT-23	52X5702	0.50
SM24-02HTG	2	24	7	52	3-SOT-23	52X5704	0.50
SM36-02HTG	2	36	5	52	3-SOT-23	52X5706	0.50

(147853)

EMI FILTER ARRAYS

NEW

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

Features:
- EMI Filtering of frequencies from 800MHz to 3GHz
- Greater than -30dB Attenuation Typ @ 1GHz
- ESD, IEC6100-4-2 ±30kV contact, ±30kV air
- Small, low profile UDFN Package (Typ 0.5mm height)

Mfg. Part No.	# of Channels	Reverse Stand-Off Voltage Vrwm (V)	I_{Leak} (µA)	Clamping Voltage V_C (V)	Package	Tape Cut Stock No.	Price Each 1-9
SP6001-04UTG-1	4	6	1	...	8-uDFN	73R4150	0.80
SP6002-04UTG-1	4	6	1	7.8	8-uDFN	73R4152	0.80
SP6002-06UTG-1	6	6	1	7.8	12-uDFN	73R4153	1.01

(211444)

ESD PROTECTECTION DIODES

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

NEW

UDFN

SPLV2.8-4 SERIES

Mfg. Part No.	Clamping Voltage V_C (V)	Operating Voltage (V)	Package	Tape Cut Stock No.	Price Each 1-9
SLVU2.8-4BTG	15	2.8	SOIC	53W3283	2.16
SLVU2.8HTG	15	2.8	SOT-23	53W3284	1.08
SP05 SERIES					
SP0524PUTG	7	5	UDFN	53W3288	1.00
SP0504SHTG	13	6	SOT-23	53W3286	0.76
SP0502BAHTG	12	...	SOT-23	92K8957	0.78
SP0503BAHTG	12	5.5	SOT-143	92K8959	0.79
SP0504BAHTG	12	...	SOT-23	92K8961	1.07
SP0504BAJTG	12	...	SC-70	92K8962	0.99
SP0505BAHTG	12	...	SOT-23	92K8963	0.98
SP0505BAJTG	12	...	SC-70	92K8964	1.12
SP0506BAATG	12	...	MSOP	92K8965	1.54
SP25 SERIES					
SP2502LBTG	30	3.3	SOIC	53W3290	2.27
SP2504NUTG	11.5	2.5	UDFN	53W3292	1.83
SP3010 SERIES					
SP3010-04UTG	12.3	6	UDFN	72R4431	1.04
SP3010-04UTG	12.3	6	UDFN	72R4432	0.37
SP3304 SERIES					
SP3304NUTG	11.5	3.3	UDFN	53W3294	1.79
SPLV2.8 SERIES					
SPLV2.8HTG	15	2.8	SOT-23	74R9334	1.08
SP3003 SERIES RAIL CLAMP ARRAYS					
SP3003-02JTG	15	...	SC-70	31T1604	1.08
SR05 SERIES					
SR05-02CTG	18	5	SOT-143	04X5215	0.75
SRV05 SERIES					
SRV05-4HTG	15	6	SOT-23	53W3296	0.95

(211438)

TRANSIENT VOLTAGE SUPPRESSION DIODES

1

ESD PROTECTION DIODES

RoHS Compliant Available

ON Semiconductor

ESD PROTECTION ARRAY

Mfg. Part No.	Config.	C_t (pF)	V_{BR} Max (V)	V_{RWM} Max (V)	I_R Max (uA)	Package	Tape Cut Stock No.	Price Each 1-9
● CM1241-04D4	Unidirectional	1.5	6.8	3.3	1	8-WDFN	99R2534	0.31
● DF3A6.8FUT1G	Unidirectional	...	6.8	5	0.5	3-SC-70	10N9400	0.44
● DF6A6.8FUT1G	Unidirectional	...	7.2	5	1	6-SC-88	88H4596	0.54
● ESDR0524SMUTAG	Unidirectional	0.4	6	5	1	UDFN	52T7797	0.23
● ESD1014MUTAG	Bidirectional	3	...	...	5	UDFN	52T7798	1.31
● ESD7004MUTAG	Unidirectional	0.3	5.5	5	1	UDFN	52T7799	0.52
● MMQA5V6T1G	Unidirectional	...	5.88	...	2	6-SC-74	98H0804	0.49
● MMQA18VT1G	Unidirectional	...	18.9	...	0.075	6-SC-74	45J1564	0.49
● MMQA33VT1G	Unidirectional	...	34.7	...	0.075	SC-74	42K1365	0.47
● MSQA6V1W5T2G	Unidirectional	90	7.2	...	1	5-SOT-353	83H7542	0.45
● NSQA6V8AW5T2G	Unidirectional	15	7.1	...	1	5-SOT-353	10N9703	0.42
● NUP1301ML3T1G	Bidirectional	3	...	...	2.5	3-SOT-23	10N9593	0.52
● NUP2105LT1G	Bidirectional	30	32	22	0.1	3-SOT-23	06R3477	0.58
● NUP2301MW6T1G	Bidirectional	3	...	...	2.5	6-SOT-363	10N9594	0.45
● NUP4301MR6T1G	Bidirectional	3	70	...	2.5	6-TSOP	06R3479	0.53
● NZQA5V6AXV5T1G	Unidirectional	...	5.9	3	1	5-SOT-553	10N9728	0.50
● SMDA05CDR2G	Bidirectional	350	6	5	20	SOIC	52T8573	1.93
● SMF05CT1G	Unidirectional	130	7.2	5	5	6-SOT-363	10M5715	0.62
● SMF5.0AT1G	Unidirectional	15	6.7	5	400	2-SOD-123FL	10N9608	0.47
● SMF33AT1G	Unidirectional		38.7	33	1	2-SOD-123FL	10N9607	0.47
● SMS05T1G	Unidirectional	400	7.2	5	20	6-SC-74	10N9733	0.50
● SMS12CT1G	Unidirectional	150	15	12	1	6-TSOP	10N9609	0.50
ESD PROTECTION DEVICE								
● CM1242-07CP	Bidirectional	7	4.6	5	0.5	2-WLCSP	52T7663	0.35
ESD PROTECTION DIODE								
● ESD9X5.0ST5G	Unidirectional	65	6.8	5	1	SOD-923	02M9631	0.23
LOW CAPACITANCE VOLTAGE SUPPRESSOR								
● NUP4201MR6T1G	Unidirectional	3	6	5	5	6-TSOP	06R3478	0.71
● SD05T1G	Unidirectional	350	6.75	5	10	2-SOD-323	10N9602	0.52
● SD12CT1G	Bidirectional	...	15.75	12	1	2-SOD-323	10N9603	0.43
● SD12T1G	Unidirectional	150	15.75	12	1	2-SOD-323	10N9604	0.52
LOW CAPACITANCE VOLTAGE SUPPRESSOR								
● SL05T1G	Unidirectional	5	9	5	20	3-SOT-23	10N9605	0.49
● SL15T1G	Unidirectional	5	18.5	15	1	3-SOT-23	10N9606	0.46
DUAL COMMON ANODE ESD PROTECTION DIODES								
● NZL5V6AXV3T1G	Unidirectional	...	...	3	5	3-SC-89	10N9595	0.52
● NZL6V8AXV3T1G	Unidirectional	...	7.14	4.5	1	3-SC-89	10N9596	0.52
● SM05T1G	Unidirectional	225	6.8	5	10	3-SOT-23	10N9611	0.54
● SM12T1G	Unidirectional	95	14.5	12	1	3-SOT-23	10N9612	0.52
● UESD5.0DT5G	Unidirectional	...	6.2	5	0.1	3-SOT-723	42K2728	0.47

(116758)

SINGLE LINE BI-DIRECTIONAL ESD-PROTECTION DIODES

RoHS Compliant Available

VISHAY.

Mfg. Part No.	Reverse Stand-Off Voltage (V)	Breakdown Voltage	Clamping Voltage Max (V)	Package	Stock No.	Price Each 1-9
● VESD01-02V-G-08	1	1.5V	9	SOD-523	69W6209	0.22
● VESD03A1B-HD1-GS08	3.3	5V to 6.6V	9	LLP1006-2L	69R7266	0.22
● VESD05A1B-02V-G-08	5	6V to 7.5V	12	SOD-523	69W6211	0.27
● VBUS051BD-HD1-GS08	5	6.9V to 8.7V	16	LLP1006-2L	69R7260	0.22
● VESD05A1B-HD1-GS08	5	6V to 7.5V	11	LLP1006-2L	69R7268	0.22
● VESD05A1A-HD1-GS08	5	6V to 7.5V	12	LLP1006-2L	69R7267	0.22
● VESD05-02V-G-08	5	1.5V	20	SOD-523	69W6210	0.22
● VCUT0505B-HD1-GS08	5		16	LLP1006-2L	69R7262	0.23
● VCUT0714A-HD1-GS08	14		30	LLP1006-2L	69R7263	0.24

(177536)

SILICON ESD PROTECTION DEVICES

TE connectivity

Authorized Distributor

Applications

- Consumer, mobile and portable electronics
- Tablet PC and external storage with high speed interfaces
- Ultra-high speed data lines
- USB 3.0/2.0, HDMI 1.3/1.4, DisplayPort interface, Thunderbolt interface (Light Peak), V-by-One HS, and LVDS interface
- Applications requiring high ESD performance in small packages

Features

- Industry-leading lowest capacitance; provides lowest insertion loss for high speed data signals
- Provides ESD protection up to 20kV contact and air discharge per IEC61000-4-2
- Small size ESD protection diodes for high speed data signals (0402- and 0201- size devices)
- Helps protect electronic circuits against damage from Electrostatic Discharge (ESD), lightning and cable discharge events
- Assist equipment to pass IEC61000-4-2, level 4 testing: 20kV Contact & Air

1-CHANNEL BIDIRECTIONAL

Mnf. Part No.	V_{BR} (V)	Input Cap. Typ. (pF)	V_{CL} (V)	I_{PP} (A)	Pkg.	Stock No.	Price Each 1-9
● SESD0201X1BN-0010-098	9.8	0.1	10	2	0201	82T4918	0.37
● SESD0402X1BN-0010-098	9.8	0.1	10	2	0402	82T4921	0.46
1-CHANNEL UNIDIRECTIONAL							
● SESD0201X1UN-0020-090	9	0.2	9.2	2	0201	82T4919	0.32
● SESD0402X1UN-0020-090	9	0.2	9.2	2	0402	82T4922	0.36
2-CHANNEL UNIDIRECTIONAL							
● SESD0402Q2UG-0020-090	9	0.2	9.2	2	0402	82T4920	0.60
4-CHANNEL UNIDIRECTIONAL							
● SESD0802Q4UG-0020-090	9	0.2	9.2	2	0802	82T4923	0.78
● SESD1004Q4UG-0020-090	9	0.2	9.2	2	2510	82T4924	0.70
6-CHANNEL UNIDIRECTIONAL							
● SESD1103Q6UG-0020-090	9	0.2	9.2	2	1103	82T4925	1.09

(200537)

LINE SIDE PROTECTION; T1/E1, T3/E3 PROTECTION

RoHS Compliant Available

SEMTECH

LC Series are ideal for telecommunications applications with long-haul (outer building) connections. Low capacitance, low clamping and operating voltage, and high surge capability. Metallic (line-to-line) protection for one tip and ring line pair. ESD protection in excess of 25kV and lightning protection to 1500W (tp = 10/1000µs). Meets the transient immunity requiremets of Telcordia (Bellcore) 1089, FCC Part 68, IEC 61000-4-5, and ITU K17-K20.

LC SERIES

Mfg. Part No.	V_{RWM} (Max.) (V)	I_{PP} (A)	P_{PK} (W)	I_R (Max.) (µA)	Package	Tape Cut Stock No.	Price Each 1-24
● LC04-6.TBT	6	200	1000	15	16-SOIC	37K7840	7.05

LCDA SERIES

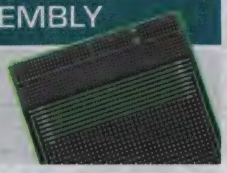
LCDA series surface-mount TVS arrays are designed for use in applications where multiple lines of protection are needed. Features TVS diode in series with a compensating diode for low capacitance. These devices will protect two bidirectional lines. They provide ESD protection in excess of 25kV and lightning protection to 300W (tp = 8/20µs). They may be used to meet the requirements of IEC 61000-4-2 & -4.

Mfg. Part No.	V_{RWM} (Max.) (V)	I_{PP} (A)	P_{PK} (W)	I_R (Max.) (µA)	Package	Tape Cut Stock No.	Price Each 1-24
● LCDA12.TBT	15	5	500	1	8-SOIC	37K7822	3.87
● LCDA12C-1.TCT	12	5	500	5	4-SOT-143	37K7823	2.06
● LCDA15C-1.TCT	15	5	500	5	4-SOT-143	37K7828	2.90

(82983)

PCB FABRICATION & ASSEMBLY

Quality US-based manufacturers—as fast as 48-hour turnaround!



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LOW CAPACITANCE TRANSIENT VOLTAGE PROTECTION

RoHS Compliant Available

SEMTECH

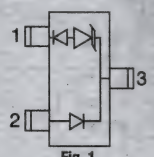


Fig. 1

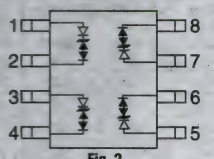


Fig. 2

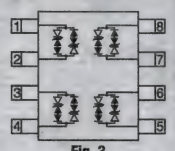


Fig. 3

Fig. 4

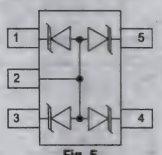


Fig. 5

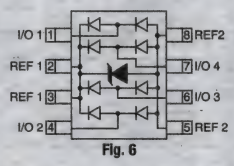


Fig. 6

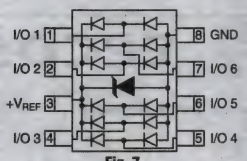


Fig. 7

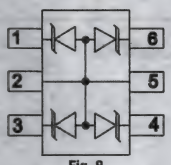


Fig. 8

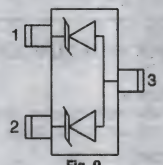
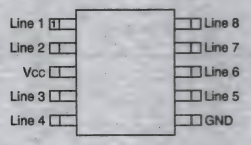


Fig. 9



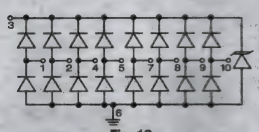


Fig. 12

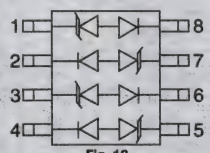


Fig. 13

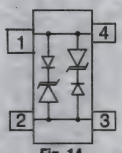


Fig. 14

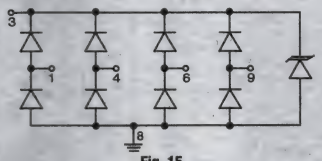


Fig. 15

Mfg. Part No.	Figure	V_{RWM} Max. (V)	C_J (pF)	I_{PP} (A)	Package	Tape Cut Stock No.	Price Each 1-2999
P_{PK} = 40W							
SMF3.3.TCT	5	3.3	30	5	5-SC-70	56J9072	1.05
P_{PK} = 150W							
SR3.3.TCT	4	3.3	10	10	4-SOT-143	37K8476	2.17
RCLAMP0504P.TCT	...	5	3	6	6-SLP1616P6	63K4380	0.84
RCLAMP0504N.TCT	...	5	3	...	6-SLP2020P6	79R2292	1.18
RCLAMP0524P.TCT	...	5	0.3	5	8-SLP2510P8	20M0618	0.93
P_{PK} = 200W							
SR2.8.TCT	4	2.8	10	14	4-SOT-143	37K8475	2.03
SMS3.3.TCT	8	3.3	40	12	6-SOT-23	37K8461	0.97
SMS3.3.TCT	8	3.3	40	12	6-SOT-23	37K8461	0.97
P_{PK} = 300W							
SL05.TCT	9	5	5	17	3-SOT-23	19K6128	0.74
SL05.TCT	9	5	5	17	3-SOT-23	19K6128	0.74
RCLAMP0504M.TBT	15	5	5	12	10-MSOP	56J9021	1.33
RCLAMP0508M.TBT	12	5	5	12	10-MSOP	56J9022	2.66
RCLAMP0514M.TBT	12	5	3	...	10-MSOP	79R2293	1.49
LCDA12.TBT	13	12	5	12	8-SOIC	37K7822	3.87
LCDA12.TBT	13	12	5	12	8-SOIC	37K7822	3.87
P_{PK} = 400W							
SLVU2.8.TCT	1	2.8	10	24	3-SOT-23	37K8424	1.49
SLVU2.8.TCT	1	2.8	10	24	3-SOT-23	37K8424	1.49
SLVU2.8-4.TBT	2	2.8	8	24	8-SOIC	37K8425	3.73
P_{PK} = 450W							
RCLAMP2504N.TCT	...	2.5	3.8	25	10-DFN	79R2294	2.07
RCLAMP3304N.TCT	...	3.3	3.8	25	10-DFN	79R2295	1.66

CONTINUED

LOW CAPACITANCE TRANSIENT VOLTAGE PROTECTION (CONT.)

Mfg. Part No.	Figure	V_{RWM} Max. (V)	C_J (pF)	I_{PP} (A)	Package	Tape Cut Stock No.	Price Each 1-2999
P_{PK} = 500W							
SRDA3.3-4.TBT	6	3.3	15	25	8-SOIC	37K8471	2.83
SRDA3.3-4.TBT	6	3.3	15	25	8-SOIC	37K8471	2.83
SRDA3.3-6.TBT	7	3.3	15	25	8-SOIC	37K8472	3.19
SR05.TCT	...	5	10	25	4-SOT-143	30K7323	2.00
SRDA05-6.T*	7	5	15	25	8-SOIC	70K7839*	2.82
LCDA12C-1.TCT	14	12	15	20	4-SOT-143	37K7823	2.06
LCDA12C-1.TCT	14	12	15	20	4-SOT-143	37K7823	2.06
LCDA15C-1.TCT	14	15	15	20	4-SOT-143	37K7828	2.90
P_{PK} = 600W							
SLVU2.8-8.TBT	3	2.8	8	30	8-SOIC	37K8426	4.89

* Sold as EA
(83746)

HIGH CAPACITANCE TRANSIENT VOLTAGE PROTECTION

RoHS Compliant Available

SEMTECH

REEL PACKAGED VERSIONS

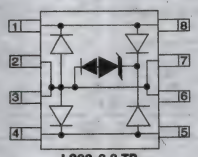
Mfg. Part No.	V_{RWM} Max. (V)	C_J (pF)	P_{PK} (W)	I_{PP} (A)	I_R Max. (µA)	Package	Tape Cut Stock No.	Price Each 1-24
SD05.TCT	5	350	350	24	10	2-SOD-323	58K9950	0.50
SD12.TCT	12	150	350	24	1	2-SOD-323	58K9951	0.62
SM05.TCT	5	400	300	17	20	3-SOT-23	37K8462	0.42
SM12.TCT	12	150	300	12	1	3-SOT-23	37K8463	0.43
SM15.TCT	15	100	300	10	1	3-SOT-23	37K8464	0.41
SM712.TCT	12	45	400	17	20	3-SOT-23	56J9077	1.60
SMDA05.TBT	5	400	300	17	20	8-SOIC	37K8430	2.45
SMDA12.TBT	12	150	300	12	1	8-SOIC	37K8437	2.45
SMF05.TCT	5	175	200	12	10	5-SC-70	58K9959	0.50
SMS05.TCT	5	400	350	24	20	6-SOT-23	37K8453	1.26
SMDA05C.TBT	5	350	300	17	20	8-SOIC	37K8432	4.11
SMDA15C.TBT	15	75	300	10	1	8-SOIC	37K8443	4.11
SMDA24C.TBT	24	50	300	5	1	8-SOIC	58K9957	4.06
BULK PACKAGED VERSIONS								
SMDA05.T	5	400	300	17	20	8-SOIC	70K7819	2.60
SMDA12.T	12	150	300	12	1	8-SOIC	70K7826	2.60
SMDA05C.T	5	350	300	17	20	8-SOIC	70K7818	4.06
SMDA12C.T	12	120	300	12	1	8-SOIC	70K7825	4.20
SMDA15C.T	15	75	300	10	1	8-SOIC	70K7829	4.11

(83747)

HIGH POWER TRANSIENT VOLTAGE PROTECTION

RoHS Compliant Available

SEMTECH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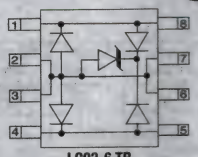
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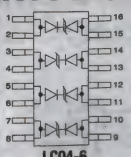
LC04-6

Mfg. Part No.	V_{RWM} Max. (V)	V_{BR} Min. (V)	C_J (pF)	P_{PK} (kW)	I_{PP} (A)	I_R Max. (µA)	Package	Tape Cut Stock No.	Price Each 1-24
LC03-3.3.TBT	3.3		12	1.8	100	1	8-SOIC	63J8408	3.81
LC03-6.TBT	6		12	2	100	25	8-SOIC	37K7836	3.30
LC04-6.TBT	6		15	1	200	15	16-SOIC	37K7840*	7.05

(83692)

TRANSIENT SUPPRESSOR DIODE ARRAYS

RoHS Compliant Available

SEMTECH

The µClamp™ series of TVS arrays are designed to protect sensitive electronics from damage or latch-up due to ESD.

Mfg. Part No.	No. of Lines	VRWM (V)	V_C (V)	I_R (µA)	P_{PM} (mW)	Cap. (pF)	Pkg.	Tape Cut Stock No.	Price Each 1-24
UCLAMP3301D.TCT	1	3.3	9.5	0.5	100	50	2-SOD-323	37K8493	0.58
UCLAMP3301H.TCT	1	3.3	8	0.05	40	25	2-SOD-523	64J3830	0.47
UCLAMP0511P.TCT	5	5	11	0.025	170	75	2-SLP1006P2	22M4266	0.52

(148772)

FBMOV SERIES METAL OXIDE VARISTORS

RoHS Compliant Available

Littelfuse®

Expertise Applied | Answers Delivered

The Littelfuse **FBMOV Series** thermally protected and Non Fragmenting varistor represents a new development in circuit protection. It consists of a 40kA varistor building block (MOV) with an integral thermally activated element designed to open in the event of overheating due to abnormal over-voltage, limited current conditions.

Mfg. Part No.	Varistor Voltage (V)	Max. Continuous Voltage (V) RMS	Max. Continuous Voltage (V) DC	Max. Peak Current (8/20 µs) (kA)	Max. Clamping Voltage (V)	Stock No.	Price 1-9
● FBMOV115M	180	115	150	40	295	48T7449	86.80
● FBMOV130M	205	130	170	40	335	48T7450	86.80
● FBMOV140M	220	140	180	40	355	48T7451	86.80
● FBMOV150M	240	150	200	40	390	48T7452	86.80
● FBMOV175M	270	175	225	40	450	48T7453	86.80
● FBMOV230M	360	230	300	40	585	48T7454	108.50
● FBMOV250M	390	250	320	40	640	48T7455	108.50
● FBMOV275M	430	275	350	40	700	48T7456	108.50
● FBMOV300M	470	300	385	40	765	48T7457	108.50
● FBMOV320M	510	320	420	40	825	48T7458	108.50
● FBMOV385M	620	385	505	40	1010	48T7459	130.20
● FBMOV420M	680	420	560	40	1100	48T7460	130.20
● FBMOV440M	715	440	585	40	1160	48T7461	130.20
● FBMOV460M	750	460	615	40	1220	48T7462	130.20
● FBMOV510M	820	510	670	40	1335	48T7463	141.05
● FBMOV550M	910	550	745	40	1475	48T7464	141.05
● FBMOV625M	1000	625	825	40	1625	48T7465	141.05
● FBMOV750M	1200	750	970	40	1950	48T7466	141.05

(202136)

TransGuard® TRANSIENT VOLTAGE SUPPRESSORS

RoHS Compliant Available

AVX

A KYOCERA GROUP COMPANY

Axial Lead

Surface Mount

Axial Lead Features:
- Monolithic Multilayer Construction
- Conformal Coating
- Copper-Clad Steel, Solder-Coated Leads
- 25.4mm Minimum Lead Length
- 0.51 ±0.05mm Lead Diameter

Surface Mount Features:
- Monolithic Multilayer Construction
- Nickel/Tin (Ni/Sn) Alloy-Coated Terminations
- EIA Industry Standard Sizes

Specifications:
- Operating Temperature: -55°C to +125°C

AXIAL LEADED

Mfg. Part No.	Working Voltage AC/DC (V)	Break-down Voltage (V)	Clamp-ing Voltage (V)	Typ. Cap. (pF)	Stock No.	Price Each 1-9
● VA100026D580DL	18/26	34.5	60	650	04M4625	1.14
SURFACE MOUNT—EIA SIZE 0402						
● VC040205X150WP	4/5.6	8.5	18	175	75M3009	0.88
● VC040214X300WP	10/14	18.5	30	100	16R1253	0.88
SURFACE MOUNT—EIA SIZE 0603						
● VC060303A100DP	2.3/3.3	5	12	1450	36K3718	0.94
● VC060305A150DP	4/5.6	8.5	18	750	35K5061	0.94
● VC060305A150RP	4/5.6	8.5	18	750	75M3012	0.91
● VC060314A300	10/14	18.5	32	350	95B8966	0.94
● VC060330A650DP	21/30	41	67	125	75M3016	0.94
SURFACE MOUNT—EIA SIZE 0805						
● VC080505A150DP	4/5.6	8.5	18	1100	36K2082	0.97
● VC080505A150RP	4/5.6	8.5	18	1100	75M3020	0.94
● VC080512A250DP	8.5/12	16	27	525	75M3022	0.97
● VC080514A300DP	10/14	18.5	32	325	35K2038	0.97
● VC080518A400DP	13/18	25.5	42	225	75M3024	0.97
● VC080526A580DP	18/26	34.5	60	120	75M3026	0.97
● VC080526C580DP	18/26	34.5	60	250	75M3027	1.02
SURFACE MOUNT—EIA SIZE 1206						
● VC120603D100DP	2.3/3.3	5	12	4700	75M3029	1.13
● VC12LC18A500DP	14/18	...	50	200	16R1254	0.83
● VC120605D150DP	4/5.6	8.5	18	3000	36K3719	1.13

➤ CONTINUED ➤

TransGuard® TRANSIENT VOLTAGE SUPPRESSORS (CONT.)

SURFACE MOUNT—EIA SIZE 1206

Mfg. Part No.	Working Voltage AC/DC (V)	Break-down Voltage (V)	Clamp-ing Voltage (V)	Typ. Cap. (pF)	Stock No.	Price Each 1-9
● VC120614D300DP	10/14	18.5	32	1050	36K3720	1.13
● VC120618D400DP	13/18	25.5	42	900	35K5062	1.13
● VC120626D580DP	18/26	34.5	60	500	35K2040	1.13
● VC120630D650DP	21/30	41	67	400	75M3033	1.13
● VC120630D650RP	21/30	41	67	400	75M3034	1.20
● VC120648D101DP	34/48	62	100	225	75M3035	1.13
SURFACE MOUNT—EIA SIZE 1210						
● VC121026H560DP	18/26	34.5	60	2150	75M3038	1.64
● VC121030H620DP	21/30	41	67	1850	75M3039	1.64
● VC121060J121DP	42/60	76	120	400	75M3041	1.69
● VC121085S151DP	60/85	100	150	275	81R3961	1.33

(50470)

SIOV METAL OXIDE VARISTORS

RoHS Compliant Available

EPCOS

Features
- Wide operating voltage range
- High surge current ratings
- No derating up to 85 °C ambient temperature
- PSpice models

StandarD SERIES

Mfg. Part No.	V_{RMS} (V)	V_{DC} (V)	V_C (V)	Peak Energy (J)	Stock No.	Price Each 1-9
● B72207S110K101	11	14	36	0.8	05J9282	0.46
● B72210S110K101	11	14	36	1.7	05J9346	0.68
● B72214S110K101	11	14	36	3.2	05J9438	0.48
● B72220S110K101	11	14	36	10	05J9523	1.02
● B72207S140K101	14	18	43	0.9	88H0767	0.46
● B72214S140K101	14	18	43	4	05J9447	0.48
● B72220S140K101	14	18	43	12	05J9526	1.02
● B72220S170K101	17	22	53	14	05J9530	1.02
● B72207S200K101	20	26	65	1.3	05J9304	0.46
● B72214S200K101	20	26	65	6	05J9459	0.48
● B72205S250K101	25	31	77	0.7	92H2388	0.51
● B72207S250K101	25	31	77	1.6	05J9310	0.46
● B72210S250K101	25	31	77	3.7	05J9372	0.73
● B72214S250K101	25	31	77	7	05J9465	0.48
● B72220S250K101	25	31	77	22	96H7002	1.02
● B72207S300K101	30	38	93	2	05J9318	0.49
● B72210S300K101	30	38	93	4.4	05J9379	0.73
● B72214S300K101	30	38	93	9	86H8115	0.50
● B72207S350K101	35	45	110	2.5	05J9323	0.46
● B72210S350K101	35	45	110	5.4	05J9387	0.68
● B72214S350K101	35	45	110	10	05J9476	0.50
● B72220S350K101	35	45	110	33	05J9537	1.02
● B72207S400K101	40	56	135	3	05J9327	0.46
● B72214S400K101	40	56	135	13	05J9479	0.51
● B72220S400K101	40	56	135	37	05J9539	1.02
● B72205S500K101	50	65	135	1.8	05J9270	0.51
● B72207S500K101	50	65	135	4.2	05J9334	0.46
● B72210S500K101	50	65	135	8.4	05J9397	0.68
● B72214S500K101	50	65	135	15	92H6450	0.51
● B72220S500K101	50	65	135	27	88H3530	1.08
● B72207S600K101	60	85	165	4.8	05J9337	0.46
● B72210S600K101	60	85	165	10	61H4242	0.68
● B72214S600K101	60	85	165	17	05J9488	0.51
● B72220S600K101	60	85	165	33	05J9542	1.02
● B72214S750K101	75	100	200	20	05J9492	0.48
● B72220S750K101	75	100	200	40	85H0285	1.08
● B72210S950K101	95	125	250	15	05J9408	0.68
● B72207S131K101	130	170	340	9.5	89H8968	0.49
● B72210S131K101	130	170	340	19	85H1022	0.68
● B72214S131K101	130	170	340	45	97H7695	0.50
● B72220S131K101	130	170	340	74	05J9525	1.10
● B72207S141K101	140	180	360	10	05J9292	0.48
● B72214S141K101	140	180	360	36	05J9450	0.48
● B72220S141K101	140	180	360	78	05J9527	1.02
● B72207S151K101	150	200	395	11	05J9295	0.49
● B72214S151K101	150	200	395	40	84H9862	0.51
● B72214S171K101	175	225	455	46	84H1174	0.51
● B72214S171K101	175	225	455	46	84H1174	0.51
● B72220S171K101	175	225	100	98	85C4602	1.02
● B72205S251K101	250	320	650	8.2	05J9249	0.51

➤ CONTINUED ➤

SIOV METAL OXIDE VARISTORS (CONT.)

Mfg. Part No.	V_{RMS} (V)	V_{DC} (V)	V_C (V)	Peak Energy (J)	Stock No.	Price Each 1-9
B72207S251K101	250	320	650	19	05J9313	0.46
B72214S251K101	250	320	650	65	92H2768	0.51
B72220S251K101	250	320	650	140	05J9533	1.02
B72207S271K101	275	350	710	21	90H9676	0.46
B72210S271K101	275	350	710	43	84H9899	0.68
B72205S301K101	300	385	775	9.6	05J9258	0.54
B72207S301K101	300	385	775	23	84H0754	0.46
B72210S301K101	300	385	775	47	05J9382	0.68
B72214S301K101	300	385	775	76	96H7826	0.51
B72220S301K101	300	385	775	173	05J9535	1.08
B72210S321K101	320	420	840	50	05J9385	0.73
B72214S321K101	320	420	840	84	85C5164	0.50
B72220S321K101	320	420	840	184	05J9536	1.10
B72210S381K101	385	505	1.025	40	05J9390	0.68
B72214S381K101	385	505	1.025	80	65H7406	0.48
B72214S421K101	420	560	1.12	90	05J9482	0.79
B72220S421K101	420	560	1.12	175	05J9540	1.29
B72220S461K101	460	615	1.24	195	61H4247	1.21
B72220S511K101	510	670	1.355	190	88H4260	1.78
B72214S551K101	550	745	1.5	120	05J9487	1.02
B72220S551K101	550	745	1.5	210	84H9864	1.62
B72214S621K101	625	825	1.65	130	05J9491	1.02
B72220S621K101	625	825	1.65	230	05J9543	1.62
B72210S681K101	680	895	1.815	72	05J9404	0.96
B72220S681K101	680	895	1.815	250	05J9544	1.78
HighE StandarD SERIES						
B72240L151K100	150	200	395	360	05J9592	13.36
B72240L271K100	275	350	710	550	05J9598	13.36
HighE Block SERIES						
B72232B131K1	130	170	340	210	05J9570	17.62
B72240B131K1	130	170	340	310	05J9581	27.81
B72232B151K1	150	200	395	240	92H2078	18.86
B72232B251K1	250	320	650	330	05J9572	18.61
B72232B271K1	275	350	710	360	05J9573	18.86
B72232B381K1	385	505	505	550	05J9575	17.62
B72232B461K1	460	615	615	660	05J9578	19.74
B72240B551K1	550	745	745	960	05J9587	34.00
AdvanceD SERIES						
B72210S2141K101	140	180	360	22	05J9414	0.44
B72220S2141K101	140	180	360	110	05J9547	1.16
B72205S2151K101	150	200	395	4.9	66K1531	0.61
B72207S2151K101	150	200	395	11	66K1602	0.54
B72210S2151K101	150	200	395	30	05J9415	0.47
B72214S2151K101	150	200	395	60	05J9501	0.60
B72220S2151K101	150	200	395	120	05J9548	1.16
B72210S2171K101	175	225	455	28	05J9416	0.44
B72214S2171K101	175	225	455	46	05J9502	0.57
B72220S2171K101	175	225	455	135	05J9549	1.16
B72207S2251K101	250	320	650	25	66K1608	0.54
B72210S2251K101	250	320	650	50	05J9419	0.47
B72214S2251K101	250	320	650	100	05J9505	0.61
B72220S2251K101	250	320	650	195	05J9552	1.16
B72210S2271K101	275	350	710	27.5	05J9420	0.47
B72214S2271K101	275	350	710	110	05J9506	0.61
B72220S2271K101	275	350	710	215	88H4190	1.08
B72205S2301K101	300	385	775	15	66K1538	0.61
B72207S2301K101	300	385	775	23	66K1610	0.50
B72210S2301K101	300	385	775	60	05J9421	0.44
B72214S2301K101	300	385	775	125	05J9507	0.61
B72220S2301K101	300	385	775	250	05J9553	1.08
B72207S2321K101	320	420	840	32	66K1614	0.50
B72220S2321K101	320	420	840	184	05J9554	1.15
B72220S2381K101	385	505	1.025	150	05J9555	1.16
B72210S2421K101	420	560	1.12	45	05J9424	0.62
AdvanceD-MP SERIES						
B72210P2271K101	275	350	710	60	34R3237	0.52
B72210P2301K101	300	385	775	65	34R3238	0.52
B72214P2301K101	300	385	775	140	34R3245	0.69
B72214P2321K101	320	420	840	150	34R3246	0.69
Automotive SERIES						
B72530V1140S262	14	16	40	1.6	64R5779	0.69
B72540V1140S262	14	16	40	12	64R5780	3.88
B72214S1140K102	14	16	43	4	05J9498	1.06

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SIOV METAL OXIDE VARISTORS (CONT.)

Automotive SERIES

Mfg. Part No.	V_{RMS} (V)	V_{DC} (V)	V_C (V)	Peak Energy (J)	Stock No.	Price Each 1-9
B72220S1140K102	14	16	43	12	05J9545	2.54
B72220S1250K102	25	31	77	22	43J3713	2.73
B72220S1300K102	30	38	93	26	43J3714	2.54

(148743)

MOV-14 AND MOV-20 SERIES METAL OXIDE VARISTORS

RoHS Compliant Available

BOURNS®

The MOV -14 and MOV-20 Series of 14mm and 20 mm disc radial leaded varistor devices protect against overvoltage transients such as lightning, power contact and power induction. The metal oxide varistors offer a choice of varistor voltages from 18V to 1800V and V_{rms} voltages from 11V to 1100V. The devices have a high current handling, high energy absorption capability and fast response times to protect against transient faults up to rated limits.

MOV-14 SERIES

Mfg. Part No.	Varistor Voltage (V)	Max. Continuous Voltage (V) RMS	Max. Continuous Voltage (V) DC	Max. Peak Current (8/20 µs) (kA)	Max. Clamping Voltage (V)	Stock No.	Price Each 1-9
MOV-14D470K	47	30	38	1	93	77T2727	0.19
MOV-14D680K	68	40	56	1	135	77T2730	0.19
MOV-14D181K	180	115	150	4.5	300	77T2731	0.20
MOV-14D201K	200	130	170	4.5	340	77T2732	0.22
MOV-14D241K	240	150	200	4.5	390	77T2733	0.22
MOV-14D271K	270	175	225	4.5	455	77T2734	0.24
MOV-14D361K	360	230	300	4.5	595	77T2735	0.24
MOV-14D391K	390	250	320	4.5	650	77T2736	0.18
MOV-14D431K	430	275	350	4.5	710	77T2726	0.18
MOV-14D471K	470	300	385	4.5	775	77T2728	0.17
MOV-14D511K	510	320	415	4.5	845	77T2729	0.18
MOV-14D621K	620	385	505	4.5	1025	76T0303	0.28
MOV-14D681K	680	420	560	4.5	1120	76T0306	0.30
MOV-14D821K	820	510	670	4.5	1355	76T0313	0.43
MOV-14D911K	910	550	745	4.5	1500	76T0315	0.43
MOV-20 SERIES							
MOV-20D220K	22	14	18	2	43	76T0332	0.59
MOV-20D470K	47	30	38	2	93	76T0356	0.59
MOV-20D680K	68	40	56	2	135	76T0368	0.63
MOV-20D181K	180	115	150	6.5	300	76T0327	0.48
MOV-20D201K	200	130	170	6.5	340	76T0330	0.52
MOV-20D241K	240	150	200	6.5	395	76T0336	0.52
MOV-20D271K	270	175	225	6.5	455	76T0340	0.52
MOV-20D361K	360	230	300	6.5	595	76T0348	0.48
MOV-20D391K	390	250	320	6.5	650	76T0352	0.63
MOV-20D431K	430	275	350	6.5	710	76T0354	0.59
MOV-20D471K	470	300	385	6.5	775	76T0358	0.63
MOV-20D511K	510	320	415	6.5	845	76T0360	0.59
MOV-20D621K	620	385	505	6.5	1025	76T0366	0.70
MOV-20D681K	680	420	560	6.5	1120	76T0370	0.75
MOV-20D821K	820	510	670	6.5	1355	76T0378	0.98
MOV-20D911K	910	550	745	6.5	1500	76T0380	0.98

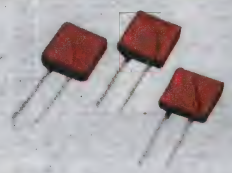
(202127)

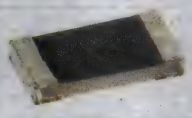
PGBx SERIES PULSEGUARD ESD SUPPRESSORS

RoHS Compliant Available

Littelfuse®

Expertise Applied | Answers Delivered





PulseGuard® ESD Suppressors help protect sensitive electronic equipment against electrostatic discharge (ESD). They use polymer composite materials to suppress fast rising ESD transients (as specified in IEC 61000-4-2), while adding virtually no capacitance to the circuit. They supplement the on-chip protection of integrated circuitry and are best suited for low-voltage, high-speed applications where low capacitance is important to ensure minimal interference of data signal integrity. The new and ultra-small surface mount **PGB2** 0402 series offers a RoHS Compliant, Halogen Free, and 100% Lead Free circuit protection alternative.

PGB1

Mfg. Part No.	V_{DC} Max. (V)	C_d (pF)	Vc (V)	Package	Tape Cut Stock No.	Tape Cut Price Each 1-9
PGB1010402KR	12	0.04	250	0402	29R0813	0.68
PGB102ST23WR	24	0.12	150	3-SOT-23	29R0814	0.86

(143207)

ML SERIES MULTILAYER SURFACE MOUNT TRANSIENT VOLTAGE SURGE SUPPRESSORS

RoHS Compliant Available

Littelfuse — Expertise Applied | Answers Delivered

The **ML series** is designed to suppress a variety of transient events, including those specified by the IEC and other standards used for Electromagnetic Compliance (EMC). Ideal for protecting integrated circuits and other components at the circuit board level. Operating temperature: -55°C to +125°C.

	Max. Ratings (+125°C)			Specs. (+25°C)			Price Each
Mfg. Part No.	I_{TM} (8/20µs) (A)	$V_{M(DC)}$/ $V_{M(AC)}$ (V)	V_C Max. (V)	Nom. Volt. @ 1mADC Min./Max $V_{N(DC)}$ (V)	Typical Cap. (pF) @f=1MHz	Stock No.	1-9
● V5.5MLA020164NR	1	5.5/4	1	8/14	64	85R4825	0.54
● V30MLA0805LNH	30	30/25	30	...	90	29R0832	0.75
● V5.5MLA0805LNH	40	5.5/4	40	7.1/9.3	990	05B9310	0.71
● V12MLA0805LNH	40	12/9	40	14/18.5	410	85R4775	0.67
● V5.5MLA1206NH	150	5.5/4	150	7.1/9.3	5180	75C8323	1.19
● V5.5MLA0805NH	120	5.5/4	120	...	1840	29R0834	0.71
● V120MLA1210NH	125	/107	125	135/165	80	29R0826	1.38
● V26MLA1206NH	150	26/20	150	29.5/38.5	600	75C8209	1.13
● V68MLA1206NH	180	68/50	180	76/90	100	05B9384	1.13

(4239)

MLE SERIES MULTILAYER SURFACE MOUNT TRANSIENT VOLTAGE SURGE SUPPRESSORS

RoHS Compliant Available

Littelfuse — Expertise Applied | Answers Delivered

The **MLE series** is designed to suppress ESD events, including those specified in IEC 61000-4-2 or other standards used for Electromagnetic Compliance testing. The MLE Series is typically applied to protect integrated circuits and other components at the circuit board level operating at 18VDC, or less. Operating temperature: -55°C to +125°C.

		Performance Specifications (+25°C)					Tape Cut	
Mfg. Part No.	Max. Cont. Working Volt. 125°C VM(DC),V)	Typ. Cap. @ 1MHz (pF)	Min./Max. Nom. Volt. @ 1mA $V_{NOM(DC)}$ (V)	Max. Clamp Volt. (8/20µs) V_C (V)	Max. ESD Clamp Volt. (V) 18kV Contact	15kV Air	Stock No.	Price Each 1-9
● V18MLE0805H	18	500	22/28	50	70	75	34C9040	0.72
● V18MLE1206H	18	1700	22/28	50	65	65	34C9042	1.13

(147908)

TMOV® VARISTOR SERIES

RoHS Compliant Available

Littelfuse — Expertise Applied | Answers Delivered

Features:
- High peak surge current rating up to 10kA
- Wave solderable
- Standard lead form and spacing option
- Low leakage
- Designed to facilitate compliance to UL1449 2 nd edition for TVSS products
- UL 1449 3rd Edition for SPD is pending

Applications:
- TVSS Products
- AC Panel Protection Modules
- AC Power Line Supplies
- Surge Protected Strip Connectors
- AC Power Meters

20mm DISC

	Maximum Rating (85°C)						
	Continuous		Transient				Price Each
Mfg. Part No.	$V_{M(AC)RMS}$ (V)	Suppressed Voltage (V)	W_{TM} (2ms) (J)	I_{TM} (8/20µs) 1 x Pulse (A)	2 x Pulse (A)	Stock No.	1-9
● TMOV20RP115E	115	300	52	10000	6500	01P8139	2.32
● TMOV20RP130E	130	400	100	10000	6500	01P8146	2.20
● TMOV20RP150E	150	400	120	10000	6500	01P8156	2.20
● TMOV20RP275E	275	700	190	10000	6500	01P8185	2.20
● TMOV20RP300E	300	900	250	10000	6500	01P8193	2.33

(148578)

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(212565)

iTMOV® VARISTOR SERIES

RoHS Compliant Available

Littelfuse — Expertise Applied | Answers Delivered

Features:
- High peak surge current rating up to 10kA
- Wave solderable
- Standard lead form and spacing option
- Low leakage
- Designed to facilitate compliance to UL1449 2nd edition for TVSS products
- UL 1449 3rd Edition for SPD is pending

Applications:
- TVSS Products
- AC Panel Protection Modules
- AC Power Line Supplies
- Surge Protected Strip Connectors
- AC Power Meters

The iTMOV® (M suffix) varistor differs from the TMOV® (E suffix) varistor by the inclusion of a third lead for the purpose of indicating that the MOV has been disconnected from the circuit. This lead facilitates connection to monitoring circuitry.

20mm DISC

	Maximum Rating (85°C)						
	Continuous		Transient				Price Each
Mfg. Part No.	$V_{M(AC)RMS}$ (V)	Suppressed Voltage (V)	W_{TM} (2ms) (J)	I_{TM} (8/20µs) 1 x Pulse (A)	2 x Pulse (A)	Stock No.	1-9
● TMOV20RP130M	130	400	100	10000	6500	01P8149	2.43
● TMOV20RP250M	250	700	170	10000	6500	01P8183	2.34
● TMOV20RP275M	275	700	190	10000	6500	01P8190	2.34
● TMOV20RP320M	320	900	372	10000	6500	01P8201	2.46

(148581)

25S SERIES UltraMOV™ VARISTORS

RoHS Compliant Available

Littelfuse — Expertise Applied | Answers Delivered

Features:
- High peak surge current rating (I_{TM}) 22kA
- Single ⁹⁄₁₀ µs pulse
- 40kA rating when 2 devices parallel matched within +/- 5%
- Characterized for maximum standby current

UltraMOV™ 25S Varistor Series is offered in 25x25mm square form in a radial lead package with straight leads. It can protect against lightning striking interference and abnormal power source from incoming power lines. The series has very fast response time and phenolic coated option available. It is designed for SPD, UPS, TVSS, AC power taps, etc.

Mfg. Part No.	V_{AC},V)	V_{DC},V)	Clamping Voltage Max, V_C (V)	Peak Energy (10/1000uS) (J)	Stock No.	Price Each 1-9
● V25S115P	115	150	295	230	64R7676	2.59
● V25S140P	140	180	355	285	64R7678	2.59
● V25S150P	150	200	390	300	51R1792	2.56
● V25S175P	175	225	450	315	64R7679	2.59
● V25S230P	230	300	585	400	64R7680	2.65
● V25S250P	250	320	640	435	64R7681	2.65
● V25S275P	275	350	700	470	64R7682	2.80
● V25S320P	320	420	825	540	64R7684	2.65
● V25S385P	385	505	1.01	630	64R7685	2.65
● V25S440P	440	585	1.16	675	64R7687	3.00
● V25S460P	460	615	1.22	690	64R7688	3.00
● V25S510P	510	670	1.335	700	64R7689	3.33
● V25S550P	550	745	1.475	765	64R7690	3.16
● V25S625P	625	825	1.625	800	51R1847	4.21
● V25S750P	750	970	1.95	890	64R7691	4.44

(177406)

SMOV25S SERIES VARISTORS

RoHS Compliant Available

Littelfuse — Expertise Applied | Answers Delivered

Features:
- Maximum single surge capability 20kA, ⁹⁄₁₀ waveshape
- Nominal Discharge Current: 10kA
- Intermediate current rating: 50A/150A
- Recognized to UL 1449 3rd ed.
- Integrated microswitch for indication circuitry/design

	Maximum Rating (75°C)		Specifications (25°C)		
Mfg. Part No.	Voltage Rating VAC (V)	Voltage Rating VDC (V)	Maximum Clamping Voltage 8/20is (V)	Stock No.	Price Each 1-9
● SMOV25S111MP	115	150	295	47W3086	11.60
● SMOV25S131MP	130	170	335	47W3087	11.60
● SMOV25S151MP	150	200	390	47W3088	11.60
● SMOV25S181MP	175	225	450	47W3089	11.60
● SMOV25S251MP	250	320	640	47W3090	13.05
● SMOV25S421MP	420	560	1.1	47W3091	13.00

➤ CONTINUED ➤

SMOV25S SERIES VARISTORS (CONT.)

Mfg. Part No.	Maximum Rating (75°C) Voltage Rating VAC (V)	Maximum Rating (75°C) Voltage Rating VDC (V)	Specifications (25°C) Maximum Clamping Voltage 8/20is (V)	Stock No.	Price Each 1-9
SMOV25S461MP	460	615	1.22	47W3092	13.00
SMOV25S511MP	510	670	1.335	47W3093	13.00
SMOV25S551MP	550	745	1.475	47W3094	13.00
SMOV25S621MP	620	800	1.625	64W7429	13.00
SMOV25S621NP	620	800	1.625	64W7430	13.00
SMOV25S751MP	750	970	1.95	47W3095	13.00

(209639)

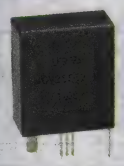
SMOV34S SERIES VARISTORS

RoHS Compliant Available

Littelfuse

Expertise Applied | Answers Delivered

Features:
- Maximum single surge capability 40kA, 8/20 waveshape
- Nominal Discharge Current: 20kA
- Intermediate current rating: 50A/150A
- Recognized to UL 1449 3rd ed.
- Integrated microswitch for indication circuitry/design



Mfg. Part No.	Maximum Rating (75°C) Voltage Rating VAC (V)	Maximum Rating (75°C) Voltage Rating VDC (V)	Specifications (25°C) Maximum Clamping Voltage 8/20is (V)	Stock No.	Price Each 1-9
SMOV34S111MP	115	150	305	47W3096	23.40
SMOV34S131MP	130	175	345	47W3097	23.40
SMOV34S151MP	150	200	405	47W3098	23.40
SMOV34S181MP	180	240	488	47W3099	23.40
SMOV34S251MP	250	320	650	47W3100	21.70
SMOV34S421MP	420	560	1.13	47W3101	23.87
SMOV34S461MP	460	610	1.188	47W3102	23.87
SMOV34S511MP	510	675	1.35	47W3103	23.87
SMOV34S551MP	550	700	1.415	47W3104	23.87
SMOV34S621MP	620	800	1.589	64W7431	23.87
SMOV34S621NP	620	800	1.589	64W7432	13.00
SMOV34S751MP	750	970	2	47W3105	23.87

(209642)

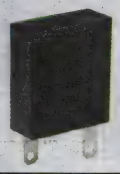
TCMOV34S SERIES VARISTORS

RoHS Compliant Available

Littelfuse

Expertise Applied | Answers Delivered

Features:
- Maximum single surge capability 50kA, 8/20 waveshape
- Nominal Discharge Current: 20kA
- Intermediate current rating: 50A/150A
- Recognized to UL 1449 3rd ed.
- Integrated microswitch for indication circuitry/design



Mfg. Part No.	Maximum Rating (75°C) Voltage Rating VAC (V)	Maximum Rating (75°C) Voltage Rating VDC (V)	Specifications (25°C) Maximum Clamping Voltage 8/20is (V)	Stock No.	Price Each 1-9
TCMOV34S111MP	115	150	305	47W3106	23.87
TCMOV34S111TP	115	150	305	64W7482	23.87
TCMOV34S131MP	130	170	345	47W3107	23.87
TCMOV34S131TP	130	170	345	64W7483	23.87
TCMOV34S151MP	150	200	405	47W3108	23.87
TCMOV34S151TP	150	200	405	64W7484	23.87
TCMOV34S151TPX3221	150	200	405	64W7485	23.87
TCMOV34S181MP	180	240	488	47W3109	23.87
TCMOV34S181TP	180	240	488	64W7486	23.87
TCMOV34S181TPX3221	180	240	488	64W7487	23.87
TCMOV34S201MP	200	265	540	47W3110	23.87
TCMOV34S201TP	200	265	540	64W7488	23.87
TCMOV34S251MP	250	320	650	47W3111	26.04
TCMOV34S251TP	250	320	650	64W7489	26.04
TCMOV34S271MP	275	350	730	47W3112	26.04
TCMOV34S271TP	275	350	730	64W7490	26.04
TCMOV34S301MP	300	385	780	47W3113	26.04

CONTINUED

TCMOV34S SERIES VARISTORS (CONT.)

Mfg. Part No.	Maximum Rating (75°C) Voltage Rating VAC (V)	Maximum Rating (75°C) Voltage Rating VDC (V)	Specifications (25°C) Maximum Clamping Voltage 8/20is (V)	Stock No.	Price Each 1-9
TCMOV34S301TP	300	385	780	64W7491	26.04
TCMOV34S321MP	320	420	830	47W3114	26.04
TCMOV34S321TP	320	420	830	64W7492	26.04
TCMOV34S321TPX3221	320	420	830	64W7493	26.04
TCMOV34S421MP	420	560	1.13	47W3115	28.21
TCMOV34S421TP	420	560	1.13	64W7494	28.21
TCMOV34S421TPX3221	420	560	1.13	64W7495	28.21
TCMOV34S461TP	460	610	1.188	64W7496	28.21
TCMOV34S511TP	510	675	1.35	64W7497	28.21
TCMOV34S551TP	510	675	1.35	64W7498	28.21
TCMOV34S551TPX3221	510	675	1.35	64W7499	28.21
TCMOV34S551MP	550	700	1.415	47W3116	28.21

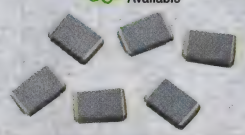
(209643)

CH SERIES SURFACE MOUNT MOVs

RoHS Compliant Available

Littelfuse

Expertise Applied | Answers Delivered



CH series transient surge suppressors are small, metal-oxide varistors (MOVs) manufactured in leadless chip form. They are intended for use in a variety of applications from low voltage DC to off-line board-level protection. These devices, which have significantly lower profiles than traditional radial-lead varistors, permit designers to reduce the size and weight and increase the reliability of their equipment designs.

T Suffix = 1,000 piece reel

Mfg. Part No.	Maximum Ratings (125°C) Continous V_{RMS} $V_{M(AC)}$ (V)	Maximum Ratings (125°C) Continous V_{DC} $V_{M(DC)}$ (V)	Maximum Ratings (125°C) Transient Energy (10/1000µs) W_{TM} (J)	Specifications (25°C) Voltage @ 1 mA DC Test Current Min (V)	Specifications (25°C) Clamp. Voltage @ Test Current (8/20µs) Max. V_C (V)	Stock No.	Price Each 1-9
V27CH8T	17	22	1	23	57	10R5065	1.38
V56CH8T	35	45	1.4	50	107	10R5069	1.31
V68CH8T	40	56	1.5	61	127	10R5070	1.31
V220CH8T	140	180	5	198	360	10R5063	1.31

(78748)

ULTRAMOV™ VARISTORS

RoHS Compliant Available

Littelfuse

Expertise Applied | Answers Delivered

Features:
- Maximum Peak Overvoltage: 130% of $V_{M(AC)}$, 5 Min. at 25°C; 125% of $V_{M(AC)}$, 5 Minutes at 125°C
- Hi-Pot Encapsulation Isolation Voltage Capability: 2500V per MIL-STD-202, Method 301
- Operating Temperature Range: -55°C to +85°C

Mfg. Part No.	Maximum Rating @ 85V°C $V_{M(AC)}$ (V)	VC Max. 8x20µs Max. (V)	VC Max. 8x20µs I_{PK} (A)	Stock No.	Price Each 1-9
V05E11P	11	36	500	64W7750	0.62
V05E14P	14	43	500	64W7751	0.62
V05E17P	17	53	500	64W7752	0.62
V07E130P	130	340	10	58K7147	0.59
V07E140P	140	360	10	58K7148	0.56
V07E150P	150	395	10	58K7149	0.56
V07E175P	175	455	10	58K7150	0.56
V07E11P	11	36	1	64W7753	0.45
V07E14P	14	43	1	64W7754	0.45
V07E17P	17	53	1	64W7755	0.45
V07P140P	140	360	1.75	64W7757	0.58
V07E230P	230	595	10	58K7151	0.59
V07E230PL3T5	230	595	1.75	66W7660	0.49
V07E250P	250	650	10	58K7152	0.56
V07E275P	275	710	10	58K7153	0.59
V07E300P	300	775	10	58K7154	0.56
V07E385P	385	1025	10	58K7156	0.37
V10E11P	11	36	2	64W7758	0.56
V10E14P	14	43	2	64W7759	0.56

CONTINUED

ULTRAMOV™ VARISTORS (CONT.)

Mfg. Part No.	Maximum Rating @ 85V°C $V_{M(AC)}$ (V)	VC Max. 8x20µs Max. (V)	VC Max. 8x20µs I_{PK} (A)	Stock No.	Price Each 1-9
● V10E130P	130	340	25	58K7162	0.57
● V10E140P	140	360	25	58K7163	0.57
● V10E150P	150	395	25	58K7164	0.57
● V10E175P	175	455	25	58K7165	0.57
● V10E250P	250	650	25	58K7166	0.60
● V10E460P	460	1240	25	58K7172	0.54
● V10E510P	510	1355	25	58K7173	0.54
● V14E11P	11	36	4	64W7760	0.73
● V14E14P	14	43	4	64W7761	0.73
● V14E130P	130	340	50	58K7240	0.57
● V14E150P	150	395	50	58K7242	0.54
● V14E230P	230	595	50	58K7244	0.54
● V14E250P	250	650	50	58K7245	0.54
● V14E275P	275	710	50	58K7246	0.57
● V14E300P	300	775	50	58K7247	0.54
● V14E385P	385	1025	50	58K7249	0.57
● V14E510P	510	1355	50	58K7253	0.69
● V14E175PL1T	175	455	6	66W7661	0.65
● V14P385P	385	1.025	6	64W7763	0.97
● V14P460P	460	1.24	6	64W7764	1.07
● V14P625P	625	1.65	10	64W7765	1.11
● V20E11P	11	36	8	64W7766	0.90
● V20E14P	14	43	8	64W7767	0.90
● V20E130P	130	340	100	58K7355	0.84
● V20E140P	140	360	100	58K7356	0.80
● V20E150P	150	395	10	58K7357	0.80
● V20E230P	230	595	100	58K7359	0.85
● V20E250P	250	650	100	58K7360	0.80
● V20E275P	275	710	100	57K0704	0.87
● V20E275PL1B1	275	710	10	64W7768	0.84
● V20E300P	300	775	100	58K7361	0.88
● V20E320P	320	840	100	58K7362	0.87
● V20E385P	385	1025	100	58K7363	0.85
● V20E420P	420	1120	100	58K7364	0.85
● V20E460P	460	1240	100	58K7366	0.97
● V20E510P	510	1355	100	58K7367	1.09
● V20E550P	550	1500	100	58K7368	1.14
● V20P550PL1T7	550	1.5	10	66W7662	1.31
● V20E625P	625	1650	100	58K7369	1.34
● V24ZA20P	14	43	2	64W7771	0.80
● V275LS20CP	275	710	6.5	45W5108	0.86

(72730)

ZA SERIES VARISTORS

RoHS Compliant Available

Littelfuse®

Expertise Applied | Answers Delivered

ZA series transient voltage surge suppressors are radial lead varistors (MOVs) designed for use in the protection of low- and medium-voltage circuits and systems. Applications include motor control, telecommunications, automotive systems, solenoid, and power supply circuits to protect PC board components and maintain data integrity.

Mfg. Part No.	Disc Dia. (mm)	Maximum Ratings @ +85°C Continuous V_{RMS} AC/DC (V)	Transient Energy 10/1000µs (J)	Transient Peak Current 8/20µs (A)	Stock No.	Price Each 1-9
● V8ZA05P	5	4/	100	50	58K7675	0.48
● V8ZA1P	7	4/5.5	0.4	100	58K7676	0.46
● V8ZA2P	10	4/5.5	0.8	250	58K7677	0.57
● V12ZA05P	5	6/8	0.14	50	58K7191	0.48
● V12ZA1P	7	6/	600	100	58K7192	0.57
● V12ZA2P	10	6/8	1.2	250	58K7193	0.57
● V18ZA05P	5	10/14	0.17	100	58K7326	0.61
● V18ZA1P	7	10/14	0.8	250	58K7327	0.60
● V18ZA2P	10	10/14	1.5	500	58K7328	0.57
● V18ZA3P	14	10/14	3.5	1000	58K7329	0.57
● V18ZA40P	20	10/14	80.0*	2000	58K7330	0.80
● V22ZA05P	5	14/	200	100	58K7371	0.59
● V22ZA1P	7	14/18	0.9	250	58K7372	0.56
● V22ZA2P	10	14/18	2.0	500	58K7373	0.60

➤CONTINUED➤

ZA SERIES VARISTORS (CONT.)

Mfg. Part No.	Disc Dia. (mm)	Maximum Ratings @ +85°C Continuous V_{RMS} AC/DC (V)	Transient Energy 10/1000µs (J)	Transient Peak Current 8/20µs (A)	Stock No.	Price Each 1-9
● V22ZA3P	14	14/18	4.0	1000	58K7374	0.68
● V24ZA50P	20	14/18†	100.0*	2000	58K7406	0.84
● V27ZA1P	7	17/	1	250	58K7429	0.59
● V27ZA2P	10	17/22	2.5	500	58K7430	0.57
● V27ZA4P	14	17/22	5.0	1000	58K7431	0.54
● V27ZA60P	20	17/22	120.0*	2000	58K7432	0.84
● V33ZA05P	5	20/26	0.3	100	58K7510	0.56
● V33ZA1P	7	20/26	1.2	250	58K7511	0.59
● V33ZA2P	10	20/26	3.0	500	58K7512	0.57
● V33ZA5P	14	20/26	6.0	1000	58K7513	0.57
● V33ZA70P	20	21/27	150.0*	2000	58K7514	0.85
● V36ZA80P	20	23/31	160.0*	2000	58K7530	0.84
● V39ZA05P	5	25/31	0.3	100	58K7540	0.59
● V39ZA1P	7	25/31	1.2	250	58K7541	0.60
● V39ZA3P	10	25/31	3.0	500	58K7543	0.60
● V39ZA6P	14	25/31	6.0	1000	58K7544	0.56
● V39ZA20P	20	25/31	20.0	2000	58K7542	0.85
● V47ZA05P	5	30/38	0.4	100	58K7574	0.59
● V47ZA1P	7	30/38	1.8	250	58K7575	0.59
● V47ZA3P	10	30/38	4.5	500	58K7577	0.60
● V47ZA7P	14	30/38	8.8	1000	58K7578	0.56
● V47ZA20P	20	30/38	23.0	2000	58K7576	0.84
● V56ZA05P	5	35/45	0.5	100	58K7617	0.56
● V56ZA2P	7	35/45	2.3	250	58K7618	0.59
● V56ZA3P	10	35/	5.5	500	58K7620	0.54
● V56ZA8P	14	35/45	10.0	1000	58K7621	0.57
● V56ZA20P	20	35/45	30.0	2000	58K7619	0.80
● V68ZA2P	7	40/56	3.0	250	58K7654	0.56
● V68ZA3P	10	40/56	6.5	500	58K7656	0.54
● V68ZA10P	14	40/56	13.0	1000	58K7653	0.56
● V68ZA20P	20	40/56	33.0	2000	58K7655	0.84
● V82ZA05P	5	50/68	2.0	400	58K7685	0.39
● V82ZA2P	7	50/68	4.0	1200	58K7687	0.57
● V82ZA12P	14	50/68	15.0	4500	58K7686	0.68
● V100ZA3P	7	60/81	5.0	1200	58K7178	0.56
● V100ZA4P	10	60/81	10.0	2500	58K7179	0.57
● V100ZA15P	14	60/81	20.0	4500	58K7177	0.56
● V120ZA1P	7	75/120	6.0	1200	58K7201	0.56
● V120ZA6P	14	75/120	22.0	4500	58K7204	0.57
● V150ZA05P	5	92/127	4.0	400	58K7299	0.59
● V150ZA1P	7	95/127	8.0	1200	58K7300	0.59
● V150ZA8P	14	95/127	20.0	4500	58K7303	0.56
● V180ZA1P	7	115/153	10.0	1200	58K7343	0.60
● V180ZA5P	10	115/153	18.0	2500	58K7346	0.57
● V180ZA10P	14	115/153	35.0	4500	58K7344	0.56
● V220ZA05P	5	140/180	6.0	400	58K7389	0.55
● V270ZA05P	5	175/225	7.5	400	58K7443	0.55
● V330ZA05P	5	210/275	9.0	400	58K7527	0.58
● V390ZA05P	5	250/330	10.0	400	58K7555	0.55
● V430ZA05P	5	275/369	11.0	400	58K7568	0.58

*Energy rating for pulse duration of 30ms minimum to ½ of peak current (auto load dump) †Also rated to withstand 24V for 5 minutes

(9960)

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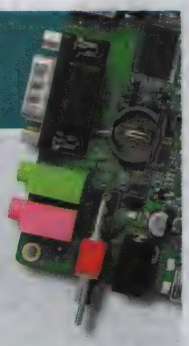

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(196526)

HA SERIES MOV VARISTORS

RoHS Compliant Available

Littelfuse®

Expertise Applied | Answers Delivered

HA series transient surge suppressors are designed to provide secondary surge protection in outdoor and service entrance environments (distribution panels) of buildings and also in industrial applications for motor controls and power supplies in oil-drilling, mining and transportation fields. 32mm and 40mm disc packages. Operating ambient temperature range: -55°C to +85°C. Additional values available, *go online or call.*

	Maximum Ratings @ +85°C				Specifications @ +25°C			
	Continuous		Transient					Price Each
Mfg. Part No.	V_{RMS} $V_{M(AC)}$ (V)	V_{DC} $V_{M(DC)}$ (V)	Energy (2ms) W_{TM} (V)	Peak Current (8/20µs) I_{TM} (A)	Varistor Voltage @ 1mA Nom. (V)	Max. Clamping Voltage @ 200A V_C (V)	Stock No.	1-9
V131HA40	130	175	270	40	200	345	09F1997	19.04
V151HA40	150	200	300	40000	240	405	09F2039	18.35
V251HA40	250	330	370	40000	390	630	09F2126	19.27
V271HA40	275	369	400	40	430	690	09F2153	18.35
V421HA40	420	560	600	40	680	1.1	09F2254	19.47
V511HA40	510	675	700	40	820	1.295	09F2314	23.33
V571HA40	575	730	770	40000	910	1.49	05B9368	23.05

(4329)

MA SERIES METAL OXIDE VARISTORS

RoHS Compliant Available

Littelfuse®

Expertise Applied | Answers Delivered

MA series transient surge suppressors are axial-lead metal-oxide varistors (MOVs) for use in a wide variety of board level industrial and commercial equipment. MOVs protect components and signal/data lines from low energy transients. 3mm diameter disc size. Operating temperature: -55°C to +85°C.

	Max. Ratings @ +75°C		Specifications @ 25°C					
	Continuous		Varistor Voltage at 1mA DC Test Current			V_C Max. @ 2A (8/20µs)		Price Each
Mfg. Part No.	$V_{M(AC)}$ (V)	$V_{M(DC)}$ (V)	Min. (V)	$V_{N(DC)}$ (V)	Max. (V)	V_C (V)	Stock No.	1-9
V18MA1B	10		15	18	21	44	72K7336	0.77
V33MA1A	18		26	33	40	73	72K7342	0.77
V33MA1B	20		29.5	33	36.5	67	72K7343	0.73
V39MA2B	25		35	39	43	79	72K7345	0.77
V47MA2A	27		37	47	57	99	72K7348	0.76
V56MA2A	32		44	56	68	117	72K7349	0.73
V56MA2B	35		50	56	62	108	72K7350	0.77
V68MA3B	40		61	68	75	127	71P8301	0.77
V220MA2A	132		187	220	253	380	72K7339	0.76
V220MA4B	138		198	220	242	360	72K7340	0.73
V430MA7B	264		387	430	473	700	72K7347	0.73

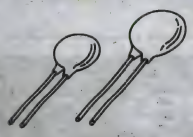
(4231)

C-III SERIES MOV VARISTORS

RoHS Compliant Available

Littelfuse®

Expertise Applied | Answers Delivered



C-III series metal-oxide varistors are specifically designed for high surge energy absorption ratings. Intended for use in AC line Transient Voltage Surge Suppressor (TVSS) product environment and other similar applications requiring high transient energy and peak current capability in a compact package. Operating temperature: -55°C to +85°C.

		Specifications @ +25°C					
		Varistor Voltage @ 1mA DC Test Current		Max. Clamping Voltage (8/20µs)			Price Each
Mfg. Part No.	Disc Dia. mm	V_N Min. (V)	V_N Max. (V)	V_C (V)	I_P (A)	Stock No.	1-9
V130LA10CP	14	184	228	340	50	58K7215	0.90
V130LA20CP	20	184	228	340	100	58K7219	1.10
V140LA10CP	14	198	242	360	50	58K7260	0.92
V140LA20CP	20	198	242	360	100	58K7263	1.09
V150LA10CP	14	212	268	395	50	58K7273	0.86
V150LA20CP	20	212	268	395	100	58K7277	1.04
V175LA20CP	20	247	303	455	50	58K7315	1.09

➤ CONTINUED ➤

C-III SERIES MOV VARISTORS (CONT.)

		Specifications @ +25°C					
		Varistor Voltage @ 1mA DC Test Current		Max. Clamping Voltage (8/20µs)			Price Each
Mfg. Part No.	Disc Dia. mm	V_N Min. (V)	V_N Max. (V)	V_C (V)	I_P (A)	Stock No.	1-9
V230LA20CP	14	324	396	595	50	58K7394	0.91
V230LA40CP	20	324	396	595	100	58K7397	1.08
V250LA20CP	14	354	429	650	50	58K7413	0.86
V250LA40CP	20	354	429	650	100	58K7416	1.08
V275LA20CP	14	389	473	710	50	58K7447	0.91
V275LA40CP	20	389	473	710	100	58K7450	1.10
V300LA40CP	20	420	517	775	100	58K7479	1.38

(9958)

LA SERIES METAL OXIDE VARISTORS

RoHS Compliant Available

Littelfuse®

Expertise Applied | Answers Delivered

The **LA series** of transient voltage surge suppressors are radial-lead varistors (MOVs) designed to be operated continuously across AC power lines. Operating temperature: -55°C to +85°C. UL recognized.

STRAIGHT LEADS

		Max. Ratings @ +85°C	Specifications @ +25°C			
					Tape Cut	
Mfg. Part No.	Disc Dia. (mm)	Cont. RMS AC/DC (V)	Varistor Voltage Min./Max. @ 1mA (V)	V_C Max. (8 x 20µs) (V)	Stock No.	1-9
V130LA1P	7	130/175	184/255	390	58K7213	0.59
V130LA2P	7	130/175	184/228	340	58K7216	0.59
V130LA5P	10	130/175	184/228	340	58K7220	0.61
V130LA10AP	14	130/175	184/228	340	58K7214	0.55
V130LA20AP	20	130/175	184/228	340	58K7217	0.82
V130LA20BP	20	130/175	184/220	325	58K7218	0.84
V140LA2P	7	140/	198/242	360	58K7261	0.59
V140LA5P	10	140/180	198/242	360	58K7264	0.60
V140LA10AP	14	140/180	198/242	360	58K7259	0.56
V140LA20AP	20	140/180	198/242	340	58K7262	0.84
V150LA1P	7	150/200	212/284	430	58K7271	0.56
V150LA2P	7	150/	212/268	395	58K7274	0.60
V150LA5P	10	150/	212/268	395	58K7278	0.60
V150LA10AP	14	150/200	212/268	395	58K7272	0.57
V150LA20AP	20	150/200	212/268	395	58K7275	0.84
V150LA20BP	20	150/200	212/243	360	58K7276	0.85
V175LA2P	7	175/	247/303	455	58K7313	0.56
V175LA10AP	14	175/225	247/303	455	05M1809	0.57
V175LA20AP	20	175/225	247/303	455	58K7314	0.84
V230LA4P	7	230/300	324/396	595	58K7395	0.56
V230LA20AP	14	230/300	324/396	595	58K7393	0.56
V230LA40AP	20	230/300	324/396	595	58K7396	0.84
V250LA2P	7	250/330	354/473	730	58K7411	0.59
V250LA4P	7	250/	354/429	650	58K7414	0.56
V250LA10P	10	250/330	354/429	650	58K7410	0.60
V250LA20AP	14	250/330	354/429	650	58K7412	0.56
V250LA40AP	20	250/330	354/429	650	56K4975	0.84
V250LA40BP	20	250/330	354/413	620	58K7415	0.85
V275LA2P	7	275/369	389/515	775	58K7446	0.56
V275LA4P	7	275/369	389/473	710	54K4103	0.60
V275LA10P	10	275/369	389/473	710	58K7445	0.60
V275LA20AP	14	275/369	389/473	710	57K2415	0.56
V275LA40AP	20	275/369	389/473	710	58K7448	0.84
V275LA40BP	20	275/369	389/453	680	58K7449	0.84
V300LA2P	7	300/	420/565	870	58K7474	0.59
V300LA4P	7	300/	420/517	775	58K7477	0.59
V300LA10P	10	300/405	420/517	775	58K7473	0.57
V300LA20AP	14	300/405	420/517	775	58K7475	0.54
V300LA40AP	20	300/405	420/517	775	58K7478	0.85
V320LA20AP	14	320/420	462/565	850	58K7491	0.56
V320LA40BP	20	320/420	462/540	810	58K7493	0.80
V385LA7P	7	385/505	558/682	1025	58K7537	0.46
V385LA20AP	14	385/505	558/682	1025	58K7535	0.57
V385LA40BP	20	385/505	558/682	1025	58K7536	0.94
V420LA10P	10	420/560	610/748	1120	58K7557	0.57
V420LA20AP	14	420/560	610/748	1120	58K7558	0.56
V420LA40BP	20	420/560	610/720	1060	58K7559	0.94

➤ CONTINUED ➤

LA SERIES METAL OXIDE VARISTORS (CONT.)

Mfg. Part No.	Disc Dia. (mm)	Max. Ratings @ +85°C Cont. RMS AC/DC (V)	Specifications @ +25°C Varistor Voltage Min./Max. @ 1mA (V)	V_C Max. (8 x 20µs) (V)	Tape Cut Stock No.	Tape Cut 1-9
● V480LA40AP	14	480/640	670/825	1240	58K7597	0.72
● V480LA80BP	20	480/640	670/790	1160	58K7599	1.10
● V510LA40AP	14	510/675	735/910	1350	58K7607	1.10
● V510LA80BP	20	510/675	735/860	1280	58K7608	1.37
● V575LA10P	10	575/730	805/1000	1500	58K7630	0.55
● V575LA40AP	14	575/730	805/1000	1500	58K7631	1.10
● V575LA80BP	20	575/730	805/960	1410	58K7632	1.79
● V625LA40AP	14	625/825	900/1100	1650	58K7641	1.71
● V625LA80BP	20	625/825	900/1100	1650	58K7642	2.40
● V660LA10P	10	660/	940/1250	1.65	58K7643	0.99
● V660LA50AP	14	660/850	940/1210	1820	58K7646	1.69
● V660LA100BP	20	660/850	940/1100	1650	58K7644	2.58
● V1000LA80AP	14	1000/1200	1425/1800	2700	58K7189	2.74
● V1000LA160BP	20	1000/1200	1425/1600	2420	58K7188	3.15

(9888)

BA/BB AND DA/DB SERIES BASE MOUNT VARISTORS

RoHS Compliant Available

Littelfuse®

Expertise Applied | Answers Delivered

BA/BB Series

DA/DB Series

Mfg. Part No.	Max. Ratings (85°C) Continuous V_{RMS} (V)	Transient Energy 2ms (J)	Transient Peak Surge Current 8/20µs (A)	Clamp Volt. Max. @ 200A, 8/20µs V_C (V)	Cap. Typ f =1MHz C (pF)	Stock No.	Price Each 1-9
BA/BB SERIES							
● V131BA60	130	450	50,000	340	20,000	51R5892	90.22
● V421BA60	420	1500	70	1060	6000	25R6234	139.76
● V481BA60	480	1600	70	1160	5500	25R6235	136.89
● V751BA60	750	2600	70,000	1880	3500	09F2366	172.58
● V881BA60	880	3200	70	2340	2700	25R6239	168.28
● V112BB60	1100	3800	70	2940	2200	09F1963	210.94
● V172BB60	1.7	6000	70,000	4.3	1500	25R6229	216.32
● V242BB60	2400	10,000	70,000	6200	1000	09F2103	257.13
● V282BB60	2800	10,000	70,000	7400	800	25R6232	290.09
DA/DB SERIES							
● V151DB40	150	300	30,000	405	8000	09F2037	43.15
● V251DA40	250	370	30,000	650	5000	09F2123	43.15
● V251DB40	250	370	40,000	650	5000	74R2846	43.15
● V271DB40	275	400	30,000	730	4500	09F2151	42.84
● V321DA40	320	460	30,000	830	3800	09F2189	43.78
● V321DB40	320	460	30,000	830	3800	09F2190	43.57
● V481DA40	480	650	40,000	1240	2700	09F2289	57.41
● V481DB40	480	650	40,000	1.24	2700	74R2848	57.41
● V511DA40	510	700	40,000	1.35	2500	74R2849	57.41
● V511DB40	510	700	40,000	1.35	2500	74R2850	57.41
● V571DA40	575	770	40,000	1.48	2200	74R2851	58.24
● V571DB40	575	770	40,000	1.48	2200	74R2852	57.96
● V661DA40	660	900	40,000	1720	2000	09F2350	57.41
● V661DB40	660	900	40,000	1720	2000	09F2351	57.41
● V751DA40	750	1050	40,000	2	1800	74R8960	57.96
● V751DB40	750	1050	40,000	2000	1800	09F2371	56.99

(4232)

ERZ TYPE SMD SERIES VF "ZNR" TRANSIENT/SURGE ABSORBERS

RoHS Compliant Available

Panasonic

Features:
- Large withstanding surge current capability in compact sizes
- Designed for flow/reflow soldering
- Excellent response against high steep surge voltage
- Low clamping voltage

Applications:
- Protection of communication modules such as modem, xDSL, terminal adapter
- Protection of consumer, industrial and automobile equipment
- Absorption of switching surge from relays

Mfg. Part No.	Varistor Voltage (V)	Voltage Rating ACrms (V)	Voltage Rating DC (V)	V_C (V)	Peak Surge Current @ 8/20uS (A)	Stock No.	Price Each 1-9
● ERZ-VF2M220	22	14	18	43	125	14T3036	1.79
● ERZ-VF2M270	27	17	22	53	125	14T3039	1.93
● ERZ-VF2M390	39	25	31	77	125	14T3044	1.93
● ERZ-VF2M470	47	30	38	93	125	14T3047	1.79
● ERZ-VF2M680	68	40	56	135	125	14T3050	1.93
● ERZ-VF2M820	82	50	65	135	600	14T3051	1.93
● ERZ-VF2M101	100	60	85	165	600	14T3032	1.79
● ERZ-VF2M121	120	75	100	200	600	14T3033	1.93
● ERZ-VF2M151	150	95	125	250	600	14T3034	1.79
● ERZ-VF2M201	200	130	170	340	600	14T3035	1.79
● ERZ-VF2M221	220	140	180	360	600	14T3037	1.79
● ERZ-VF2M241	240	150	200	395	600	14T3038	1.79
● ERZ-VF2M331	330	210	270	545	300	14T3042	2.32
● ERZ-VF2M361	360	230	300	595	300	14T3043	1.79
● ERZ-VF2M431	430	275	350	710	300	14T3046	2.32
● ERZ-VF2M471	470	300	385	775	300	14T3048	2.32

(209436)

ZNRV SERIES TYPE D TRANSIENT/SURGE ABSORBERS

RoHS Compliant Available

Panasonic

Features:
- Large withstanding surge current capability in compact sizes
- Large "Energy Handling Capability" absorbing transient overvoltages in compact sizes
- Wide range of varistor voltages
- Straight leads
- Operating temperature range: –40°C to 85°C

Applications:
- Transistor, diode, IC, thyristor or triac semiconductor protection
- Surge protection in consumer electronic equipment
- Surge protection in communication, measuring or controller electronics
- Surge protection in electronic home appliances, gas or petroleum appliances

Mfg. Part No.	Element Size	Varistor Voltage (V)*	AC_{rms} (V)	Voltage Rating Max. (VDC)	Clamping Voltage at 8/20µs	Stock No.	Price Each 1-9
● ERZ-V05D180	Disc 5mm	18	11	14	40	54W2576	0.45
● ERZ-V07D221	Disc 7mm	220	140	180	360	54W2579	0.50
● ERZ-E14A511	Disc 16.5mm	410	320	410	845	52W1625	1.15
● ERZ-E14A621	Disc 17.5mm	505	385	505	7500	52W1627	1.52
● ERZ-V10D511	Disc 10mm	510	320	410	845	55T6158	0.67
● ERZ-V14D511	Disc 14mm	510	320	410	845	55T6165	0.79
● ERZ-V20D511	Disc 20mm	510	320	410	845	52W2154	2.12
● ERZ-V20D621	Disc 20mm	620	385	505	1025	55T6172	3.53

*Measuring current of varistor voltage: 1mA, except for **mfg part no. ERZ-V05D180** 0.1mA

(208931)

(196531)

CADSOFT EAGLE PCB DESIGN AND PROTOTYPING SOFTWARE

EAGLE Features

- **EAGLE Professional:**
  Drawing Area: 4x4m (150x150 inch)
  Layers: Up to 16 signal layers
  Schematic: Up to 999 sheets
- **EAGLE Standard:**
  Drawing Area: 160 x 100 mm (about 6.3 x 3.9 inches)
  Layers: Up to 4 signal layers
  Schematic: Up to 99 sheets
- **EAGLE Light:**
  Drawing Area: 100 x 80 mm (about 3.9 x 3.2 inches)
  Layers: Up to 2 signal layers
  Schematic: 1 sheet

EAGLE System Requirements

- Windows®
  Windows 2000®, XP®, Vista® or 7
- Linux
  Intel PC based Linux
  Kernel version 2.6
  X11 in at least 8bpp mode
- Mac®
  Mac OS X 10.5 on PPC or Intel
- 70 MByte free disc space
- Minimum of 1024 x 768 display graphics resolution
- Preferably a 3button mouse

EAGLE (Easily Applicable Graphical Layout Editor) is a low-cost, easy to use, powerful PC-board design tool with advanced features like online Forward- and Back-Annotation; UNDO/REDO function for ANY editing command, script files for batch command execution, copper pouring, and an interactive Follow-me Router. Important delivery note: The ordered EAGLE installation file needs to be downloaded. There will be no manuals or CDs sent. Up to 50, multi-seat departmental licenses are also available for commercial and educational installations, for information; *go online or call.*

EAGLE PROFESSIONAL CONFIGURATIONS

Mfg. Part No.	Functional Modules Included	Users	Stock No.	Price Each
S-1CP-USCAN	Schematic Only	1	24R2476	625.00
L-1CP-USCAN	Layout Only	1	24R2467	625.00
LR-1CP-USCAN	Layout, Router	1	24R2469	1145.00
LS-1CP-USCAN	Layout, Schematic	1	24R2471	1145.00
LSR-1CP-1YR-USCAN	Layout, Schematic, Router - 1YR Term	1	14T0312	625.00
LSR-1CP-USCAN	Layout, Schematic, Router	1	24R2474	1640.00
S-3CP-USCAN	Schematic Only	3	70R0125	939.00
L-3CP-USCAN	Layout Only	3	69R9588	939.00
LR-3CP-USCAN	Layout, Router	3	69R9598	1719.00
LS-3CP-USCAN	Layout, Schematic	3	69R9609	1719.00
LSR-3CP-USCAN	Layout, Schematic, Router	3	69R9619	2460.00
S-5CP-USCAN	Schematic Only	5	70R0129	1406.00
L-5CP-USCAN	Layout Only	5	69R9592	1406.00
LR-5CP-USCAN	Layout, Router	5	69R9602	2576.00
LS-5CP-USCAN	Layout, Schematic	5	69R9613	2576.00
LSR-5CP-USCAN	Layout, Schematic, Router	5	69R9623	3690.00
S-10CP-USCAN	Schematic Only	10	70R0123	1875.00
L-10CP-USCAN	Layout Only	10	69R9586	1875.00
LR-10CP-USCAN	Layout, Router	10	69R9596	3435.00
LS-10CP-USCAN	Layout, Schematic	10	69R9607	3435.00
LSR-10CP-USCAN	Layout, Schematic, Router	10	69R9617	4920.00
S-30CP-USCAN	Schematic Only	30	70R0127	3750.00
L-30CP-USCAN	Layout Only	30	69R9590	3750.00
LR-30CP-USCAN	Layout, Router	30	69R9600	6870.00
LS-30CP-USCAN	Layout, Schematic	30	69R9611	6870.00
LSR-30CP-USCAN	Layout, Schematic, Router	30	69R9621	9840.00
EAGLE STANDARD CONFIGURATIONS				
S-1CS-USCAN	Schematic Only	1	24R2477	315.00
L-1CS-USCAN	Layout Only	1	24R2468	315.00
LR-1CS-USCAN	Layout, Router	1	24R2470	575.00
LS-1CS-USCAN	Layout, Schematic	1	24R2472	575.00
LSR-1CS-1YR-USCAN	Layout, Schematic, Router - 1YR Term	1	14T0313	315.00
LSR-1CS-USCAN	Layout, Schematic, Router	1	24R2475	820.00
S-3CS-USCAN	Schematic Only	3	70R0126	475.00
L-3CS-USCAN	Layout Only	3	69R9589	475.00
LR-3CS-USCAN	Layout, Router	3	69R9599	865.00
LS-3CS-USCAN	Layout, Schematic	3	69R9610	865.00
LSR-3CS-USCAN	Layout, Schematic, Router	3	69R9620	1230.00
S-5CS-USCAN	Schematic Only	5	70R0130	710.00
L-5CS-USCAN	Layout Only	5	69R9593	710.00
LR-5CS-USCAN	Layout, Router	5	69R9603	1295.00
LS-5CS-USCAN	Layout, Schematic	5	69R9614	1295.00
LSR-5CS-USCAN	Layout, Schematic, Router	5	69R9624	1845.00
S-10CS-USCAN	Schematic Only	10	70R0124	945.00
L-10CS-USCAN	Layout Only	10	69R9587	945.00
LR-10CS-USCAN	Layout, Router	10	69R9597	1725.00
LS-10CS-USCAN	Layout, Schematic	10	69R9608	1725.00
LSR-10CS-USCAN	Layout, Schematic, Router	10	69R9618	2460.00
S-30CS-USCAN	Schematic Only	30	70R0128	1890.00
L-30CS-USCAN	Layout Only	30	69R9591	1890.00
LR-30CS-USCAN	Layout, Router	30	69R9601	3450.00
LS-30CS-USCAN	Layout, Schematic	30	69R9612	3450.00
LSR-30CS-USCAN	Layout, Schematic, Router	30	69R9622	4920.00
EAGLE EDUCATIONAL STANDARD EDITIONS				
LSR-1ES	Complete Standard Ed. for Education	1	25T0983	410.00
LSR-10ES	Complete Standard Ed. for Education	10	72T0831	1230.00
LSR-30ES	Complete Standard Ed. for Education	30	72T0833	2460.00

➤ CONTINUED ➤

CADSOFT EAGLE PCB DESIGN AND PROTOTYPING SOFTWARE (CONT.)

EAGLE EDUCATIONAL PROFESSIONAL EDITIONS

Mfg. Part No.	Functional Modules Included	Users	Stock No.	Price Each
LSR-1EP	Complete Pro Edition for Education	1	92R5136	820.00
LSR-3EP	Complete Pro Edition for Education	3	27T9108	1230.00
LSR-5EP	Complete Pro Edition for Education	5	27T9109	1845.00
LSR-10EP	Complete Pro Edition for Education	10	72T0830	2460.00
LSR-30EP	Complete Pro Edition for Education	30	72T0832	4920.00
EAGLE LIGHT EDITION				
LSR-1CL-USCAN	Layout, Schematic, Router	1	24R2473	69.00

(163116)

ULTRA LIBRARIAN PCB COMPONENT LIBRARY BUILDER

Ultra Librarian Lite Features:

- Creates CAD footprints of over 300 families of components automatically
- Load, Save and print libraries of footprints
- Base design standards on industry standards or create your own design standards
- Create whole new families of footprints with our integrated template system

Ultra Librarian Premium Editions Features:

- SILVER
  All features of the SE edition
  Ability to access data from online sources
  Ability to import some data from existing CAD/CAE libraries
- GOLD
  All features of the SILVER edition
  ASCII import and manipulation abilities
  Database access of components and footprints
  Template verification and GUI editor and batch downloads of datasheets
  Allows authoring of BXL files for distribution

Ultra Librarian SE Features:

- All features of the Lite edition
- Create matching component symbols in an automated fashion
- Verify the design rules for a component are met before using the component
- Cross probing of pins between footprints and symbols

Ultra Librarian CAD / CAE library creation software is a low cost automated method to create complex footprints and symbols with ease. Create component representations that are exacting and consistent even when built by several different people. Export results to one of many supported CAD tools. Support multiple CAD tools with one entry tool! Preserve your design licenses for design tasks.

ULTRA LIBRARIAN LITE

Mfg. Part No.	Integration with	Stock No.	Price Each
ULLITE-EAGLE	CadSoft EAGLE	12T9789	199.00
ULLITE-ACCEL/PCAD	ACCEL(Altium) PCAD	12T9786	890.00
ULLITE-ALTIUM	Altium Designer	12T9788	890.00
ULLITE-ALLEGRO	Cadence Allegro	12T9787	890.00
ULLITE-ORCAD	Cadence Orcad	12T9793	890.00
ULLITE-MENTORBS	Mentor BoardStation	12T9792	890.00
ULLITE-MENTOR EXP	Mentor Expedition	12T9790	890.00
ULLITE-MENTOR PADS	Mentor Pads	12T9791	890.00
ULLITE-ZUKEN CADSTAR	Zuken Cadstar	12T9794	890.00
ULTRA LIBRARIAN SE			
ULSE-EAGLE	CadSoft Eagle	12T9799	595.00
ULSE-ACCEL/PCAD	ACCEL(Altium) PCAD	12T9796	1995.00
ULSE-ALTIUM	Altium Designer	12T9798	1995.00
ULSE -ALLEGRO-CONCEPT	Cadence Allegro/Concept	12T9795	1995.00
ULSE-ALLEGRO-ORCAD	Cadence Allegro/Orcad	12T9797	1995.00
ULSE-ORCAD	Cadence Orcad	12T9804	1995.00
ULSE-MENTORBS	Mentor BdStation/DesignArchitec	12T9803	1995.00
ULSE-MENTOR EXP DC	Mentor Expedition Design Capture	12T9800	1995.00
ULSE-MENTOR PADS	Mentor Pads	12T9802	1995.00
ULSE-MENTOR EXP DXD	Mentor Expedition View draw DXDes	12T9801	1995.00
ULSE-ZUKEN CADSTAR	Zuken Cadstar	12T9805	1995.00

ULTRA LIBRARIAN PREMIUM EDITIONS

Mfg. Part No.	Description	Stock No.	Price Each
ULSILVER	Ultra Librarian Silver	12T9806	4995.00
ULSILVER-ALTIUM	Ultra Librarian Silver for Altium	79T9389	4995.00
ULGOLD	Ultra Librarian Gold	12T9785	9995.00

(190897)

DEV KIT HQ™
Newest technology, Development Kits & Evaluation Boards from the best suppliers.
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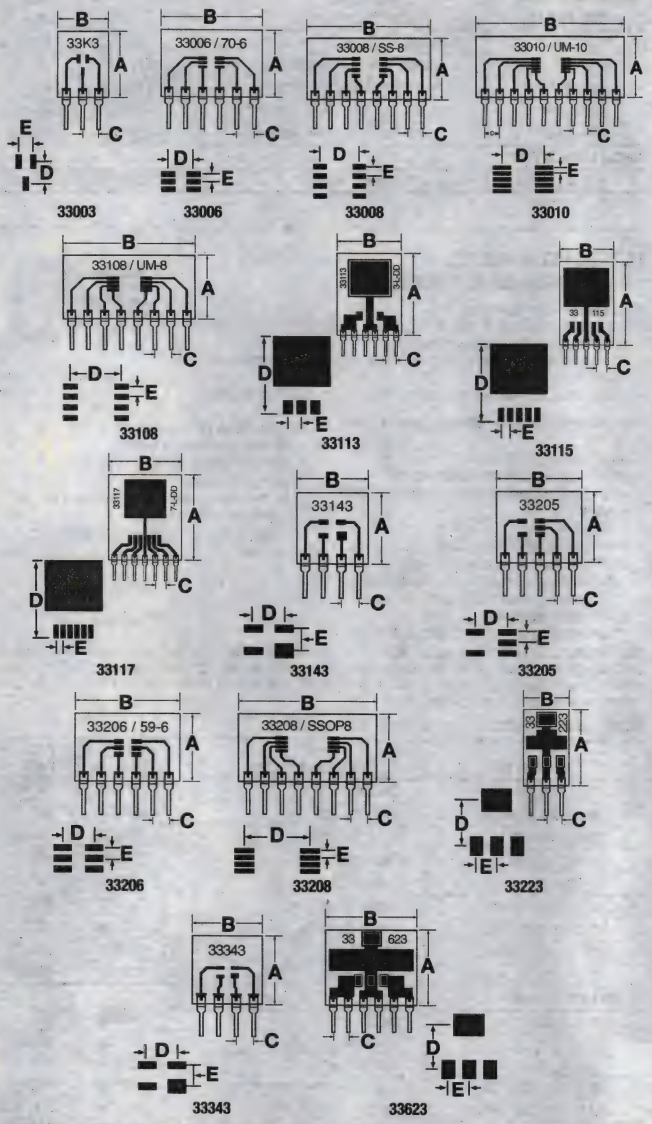
(196525)

33000 SERIES APPLICATION-SPECIFIC SURFACE MOUNT ADAPTERS

RoHS Compliant Available

CAPITAL ADVANCED TECHNOLOGIES INC.™



33000 series adapters for several popular discrete devices and small pin count ICs. These adapters provide direct pin out of device leads to SIP pins on 0.100″ centers.

Mfg. Part No.	Dim. A Inch(mm)	Dim. B Inch(mm)	Dim. C Inch(mm)	Dim. D Inch(mm)	Dim. E Inch(mm)
● 33003	.400(10.16)	.300(7.62)	1.00(2.54)	.080(2.03)	.0512(1.30)
● 33006	.400(10.16)	.600(15.24)	1.00(2.54)	.090(2.28)	.0256(.650)
● 33008	.400(10.16)	.800(20.32)	1.00(2.54)	.180(4.57)	.0375(.9530)
● 33010	.400(10.16)	1.0(25.4)	1.00(2.54)	.200(5.08)	.0197(.500)
● 33106	0.6(15.24)	0.35(8.89)	0.1(2.54)	0.055(1.4)	0.014(0.35)
● 33108	.400(10.16)	.800(20.32)	1.00(2.54)	.200(5.08)	.0256(.650)
● 33110	1(25.4)	0.4(10.16)	0.1(2.54)	0.09(2.3)	0.016(0.4)
● 33113	.800(20.32)	.600(15.24)	1.00(2.54)	.625(15.87)	.100(2.54)
● 33115	.800(20.32)	.500(12.7)	1.00(2.54)	.625(15.87)	.067(1.70)
● 33117	.800(20.32)	.700(17.78)	1.00(2.54)	.625(15.87)	.067(1.70)
● 33143	.400(10.16)	.400(10.16)	1.00(2.54)	.100(2.54)	.078(1.99)
● 33205	.400(10.16)	.500(12.7)	1.00(2.54)	.110(2.79)	.0375(.9530)
● 33206	.400(10.16)	.600(15.24)	1.00(2.54)	.110(2.79)	.0375(.9530)
● 33208	.400(10.16)	.800(20.32)	1.00(2.54)	.300(7.62)	.025(.650)
● 33213	1.125(28.57)	.850(21.59)	1.00(2.54)	.625(15.87)	1.00(2.54)
● 33223	.500(12.7)	.300(7.62)	1.00(2.54)	.275(6.98)	.090(2.28)
● 33305	0.5(12.7)	0.35(8.89)	0.1(2.54)	0.071(1.8)	0.014(0.35)
● 33306	0.6(15.24)	0.35(8.89)	0.1(2.54)	0.055(1.4)	0.016(0.4)
● 33308	0.8(20.32)	0.35(8.89)	0.1(2.54)	0.059(1.5)	0.014(0.35)
● 33310	1(25.4)	0.4(10.16)	0.1(2.54)	0.073(1.85)	0.02(0.5)
● 33343	.400(10.16)	.400(10.16)	1.00(2.54)	.080(2.03)	.051(1.3)
● 33405	0.5(12.7)	0.35(8.89)	0.1(2.54)	0.086(2.2)	0.02(0.5)
● 33406	0.6(15.24)	0.35(8.89)	0.1(2.54)	0.077(1.95)	0.02(0.5)
● 33408	0.8(20.32)	0.35(8.89)	0.1(2.54)	0.067(1.7)	0.016(0.4)
● 33410	1(25.4)	0.4(10.16)	0.1(2.54)	0.065(1.65)	0.02(0.5)
● 33505	0.5(12.7)	0.4(10.16)	0.1(2.54)	0.106(2.7)	0.025(0.65)

➤CONTINUED➤

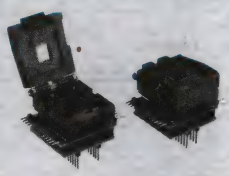
33000 SERIES APPLICATION-SPECIFIC SURFACE MOUNT ADAPTERS (CONT.)

Mfg. Part No.	Dim. A Inch(mm)	Dim. B Inch(mm)	Dim. C Inch(mm)	Dim. D Inch(mm)	Dim. E Inch(mm)
● 33508	0.8(20.32)	0.35(8.89)	0.1(2.54)	0.09(2.3)	0.02(0.5)
● 33518	0.8(20.32)	0.4(10.16)	0.1(2.54)	0.083(2.1)	0.02(0.5)
● 33608	0.8(20.32)	0.4(10.16)	0.1(2.54)	0.11(2.8)	0.025(0.65)
● 33623	.500(12.7)	.600(15.24)	1.00(2.54)	.275(6.98)	.090(2.28)
● 33708	0.8(20.32)	0.55(13.97)	0.1(2.54)	0.311(7.9)	0.06(1.53)

Mfg. Part No.	Accepts These Devices	Pins	Stock No.	Price 1-9
● 33003	SC-70-3, SOT-323, NEC Pkg.-30	3	10M5364	1.05
● 33006	SX-70-6, SOT-363	6	10M5365	2.15
● 33008	SUPERSOT-8 (Fairchild)	8	48F4863	2.95
● 33010	MICROMAX-10 (Maxim)	10	10M5366	3.40
● 33106	SOT-963, ULLGA6, SSSMini6-F1, CST6, FS6	6	17X9606	1.78
● 33108	MSOP-8, TSSOP-8, MICROMAX-8, MICRO-8, MINI SO-8	8	10M5367	3.01
● 33110	LFCSP, UMLP, UQFN10, WQFN10, RSW (PUQFN-N10)	10	17X9607	2.78
● 33113	TO-263-AB, 3-LEAD D Pkg.*	6	48F4867	2.42
● 33115	5-LEAD DD Pkg.	5	48F4868	2.02
● 33117	7-LEAD DD Pkg.	7	48F4869	2.74
● 33143	SOT-143	4	48F4870	1.30
● 33205	SOT-23-5, SC-59-5, BURR-BROWN PKG-331, TINYLOGIC (Fairchild), MICROGATE (TI)	5	10M5368	1.93
● 33206	SOT-23-6, SOT 23-L, SC-59-6, TSSOP-6, SUPERSOT-6 (Fairchild), MICRO-6 (LR)	6	10M5369	2.15
● 33208	SSOP-8	8	10M5370	2.38
● 33223	SOT-223	3	48F4875	1.34
● 33305	SOT-953	5	17X9608	1.64
● 33306	ULLGA6, WDFN6, 6L2MM	6	17X9609	1.82
● 33308	ULLGA8, UDFN8, DQM (R-PX2SON-N8)	8	17X9610	2.42
● 33310	10LD,MICROPAK, PQFP-N10, PQFP-N10	10	17X9611	2.78
● 33343	SOT-343	4	48F4876	1.30
● 33405	SOT-553 SOT-665	5	17X9612	1.64
● 33406	SC-75-6, SC-89, SOT-66, SOT-563, SOT-666	6	17X9613	1.82
● 33408	ULLGA8, UDFN8, DQM (R-PX2SON-N8)	8	17X9614	2.42
● 33410	TSLP9-1, PSON, UDFN, WLCSP10	10	17X9615	2.75
● 33505	SC-70-5, SC-88A, SOT-323-5, SOT-353	5	17X9616	1.64
● 33508	SC-8, SC-70-8, US8	8	17X9617	2.42
● 33518	8-MICROPAK, UQFN, PQFP, ULLGA8	8	17X9618	2.42
● 33608	SOT-23-8, SOT-28, TSOT-23-8	8	17X9619	2.42
● 33623	SOT-223*	6	48F4877	1.96
● 33708	8 LEAD 1.53 mm PITCH DEVICES	8	17X9620	2.62

*2 output pins per device are provided for higher current applications
(42471)

PROGRAMMING ADAPTERS



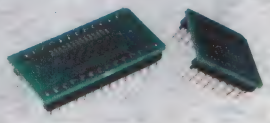
Emulation Technology, Inc.

Allows use of any programmer designed for a DIP socket to program SOIC, SSOP and PLCC. All are wired 1 to 1. Can be used for production ATE testing. Test points are provided for each signal in most adapters. Sturdy base contact pins. Additional pin counts and package styles available; *go online or call.*

Mfg. Part No.	No. of Pins	Pkg. Style	Body Width (mm)	Lead Pitch (mm)	Stock No.	Price Each
AS-08-08-01S-3	8	SOIC	3.8	0.635	18C0716	75.27
AS-28-28-02SS-6ENP-GANG	28	SSOP	5.3	0.65	18C0717	98.00
AS-28-28-03S-6-GANG	28	SOIC	7.5	1.27	18C0718	95.50

(61973)

PROTOTYPING ADAPTERS



Emulation Technology, Inc.

Ideal for project development, these SSOP and TSSOP prototyping adapters come in various pin counts. Other configurations are available; *go online or call.*

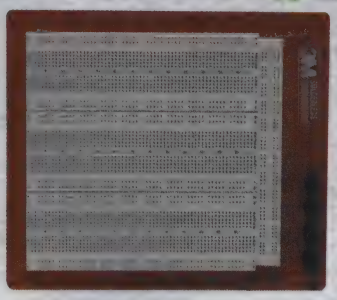
Mfg. Part No.	Description	Lead Pitch (mm)	Body Width (mm)	Stock No.	Price Each
AB-028-SS01S-A-M	20-28 Pin SSOP	0.635	3.8 to 7.6	19C5683	34.83
AB-020-ST03S-A-M	8-20 Pin TSSOP	0.65	4.4 to 8	19C5687	27.65
AB-020-ST35S-A-M	8-20 Pin TSSOP	0.50	3 to 9.90	19C5690	25.84

(65284)

300 SERIES SOLDERLESS BREADBOARDS

RoHS Compliant Available

3M



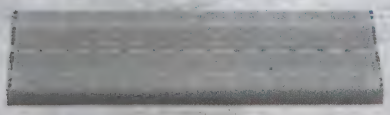
For easy, solderless plug-in circuit building. Terminal positions contain electrically connected tie-points spaced on a continuous 0.100″ matrix to accept any component with 0.100″ lead spacing. Five-way binding posts provide interface for connections from power supplies, signal generators or other equipment. Steel base has baked enamel finish. Rubber feet reduce sliding during bench work. Jumper wires included.

Mfg. Part No.	L x W (in.)	Tie Points	Binding Posts	Stock No.	Price Each 1-4
● 922306	4 x 5.4	610	2	92F1460	51.74
● 922309	4 x 7	840	3	92F1461	60.02
● 922318	6.25 x 7.75	1824	3	92F1462	102.02
922327	9.25 x 8	2712	4	92F1463	162.85
922336	9.25 x 10.25	3648	4	92F1464	161.69
922354	9.75 x 14.69	5424	4	92F1466	248.28

(3807)

MINI-BREADBOARDS

3M



Mfg. Part No. 923252 combines 0.1 x 0.1″ solderless tie point matrix with eight 25-tie-point distribution buses each for power, ground, signal lines. 6.5L x 2.25″W. **Mfg. Part No. 923253** combines solderless tie point matrix with four 35-tie-point distribution buses each for power, ground, signal lines. 4.9L x 2.25″W.

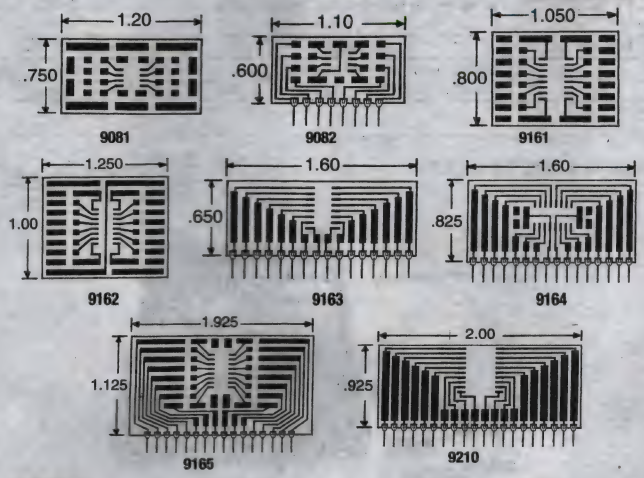
Mfg. Part No.	Stock No.	Price Each 1-4	Price Each 5-9
923252	65F120	59.02	53.85
923253	81F1388	33.12	30.22

(3791)

9000 SERIES SURFBOARDS - SMT BREADBOARDS FOR ICs

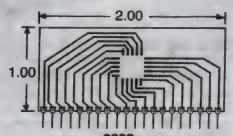
RoHS Compliant Available

CAPITAL ADVANCED TECHNOLOGIES INC.™



Applications:
- Prototype Circuits
- On-Board Bypass Capacitors
- Plug-In Test Circuits
- Adapting SMD to Thru-Hole

Specifications:
- 0.1″ (2.54mm) Pin Spacing
- Material: 0.31″ (±0.005″) Thick FR4 Glass Epoxy or Equivalent
- Circuits: 1 Oz. Copper with Solder-Coated Pads
- SIP (Single In-Line) Pins
- Compatible with Standard and Solderless Breadboards and Sockets



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9000 SERIES SURFBOARDS - SMT BREADBOARDS FOR ICs (CONT.)

Surfboards are large foil pad areas that may be modified to create additional part mounting zone or expert layout options. They are designed for SOIC and PLCC packages, providing standard IC footprints, as well as direct pin-out of IC to SIP pins, depending on the module chosen. All **9000 series** surfboards feature pins on 0.100″ centers, except **mfg. part nos. 9081**, **9161**, and **9162**.

Mfg. Part No.	Pins	Capacity	Stock No.	Price 1-9
8-PIN SOIC				
● 9081	8	1 to 8-pin SOIC	52F1439	1.66
● 9082	8	1 to 8-pin SOIC	52F1440	4.27
16-PIN SOIC				
● 9161	16	1 to 16-pin SOIC	10M5394	2.13
● 9162	16	1 to 16-pin SOIC	52F1442	2.25
● 9163	16	1 to 16-pin SOIC	52F1443	6.54
● 9164	16	1 to 16-pin SOIC	52F1444	5.69
● 9165	16	1 to 16-pin SOIC	52F1445	7.21
20-PIN, 0.3″ (7.62) WIDE				
● 9210	20	1 to 20-pin (w) SOIC	10M5395	7.83
20-PIN PLCC				
● 9302	20	1 to 20-pin PLCC	52F1448	6.49

Mfg. part no. MK-9000 master kit includes 5 each of **mfg. part nos. 9081, 9082, 9161**, and **9162** and 2 each of **mfg. part nos. 9163, 9164, 9165, 9210, 9301**, and **9302**.

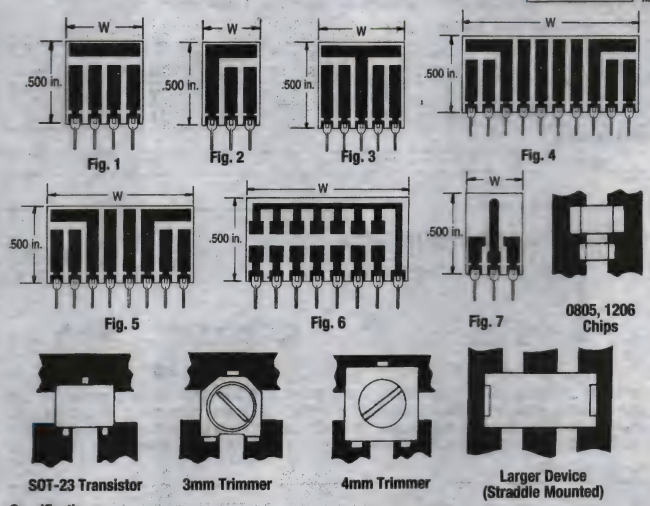
Mfg. Part No.	Description	Stock No.	Price Each
● MK-9000	Master Kit	52F1449	99.00

(3814)

6000 SERIES SURFBOARDS- SMT BREAD BREADBOARDS

RoHS Compliant Available

CAPITAL ADVANCED TECHNOLOGIES INC.™



Specifications:
- 0.1″ (2.54mm) Pin Spacing
- 0.5″ (12.7mm) Board Height
- Material: 0.31″ (±0.005″) Thick FR4 Glass Epoxy or Equivalent
- Circuits: 1 Oz. Copper with Solder-Coated Pads
- SIP (Single In-Line) Pins
- Compatible with Standard and Solderless Breadboards and Sockets

Applications:
- Amplifier Circuits
- Component and Transistor Arrays
- Switching Circuits
- Control Circuits
- Specialized Networks
- Interface Circuits

Surfboards are large foil pad areas which may be modified to create additional part mounting zone or extend layout options. Surfboards also feature built-in custom SIP (single in-line pin) circuits that are suitable for prototyping and short-run production circuits. **Figs. 1-7** show the basic pattern for each **6000 series** model. The pattern is repeated in models with higher pin count (see table below).

6000 SERIES FOR DISCRETE COMPONENTS

Mfg. Part No.	Fig.	Pins	Width (W)	Stock No.	Price 1-9
● 6004	1	4	0.400″	10M5390	1.81
● 6006	1	6	0.600″	52F1416	2.16
● 6007	1	7	0.700″	52F1417	1.99
● 6008	1	8	0.800″	52F1418	2.47
● 6010	1	10	1.00″	52F1419	2.69
● 6012	1	12	1.20″	52F1420	3.86
● 6103	2	3	0.300″	10M5391	1.29
● 6106	2	6	0.600″	52F1422	1.79
● 6109	2	9	0.900″	52F1423	2.29
● 6112	2	12	1.20″	52F1424	3.19
● 6115	2	15	1.50″	52F1425	3.69
● 6405	3	5	0.500″	10M5392	1.69
● 6410	3	10	1.00″	52F1430	2.69
● 6510	4	10	1.00″	52F1432	2.69

CONTINUED

6000 SERIES SURFBOARDS-SMT BREAD BREADBOARDS (CONT.)

Mfg. Part No.	Fig.	Pins	Width (W)	Stock No.	Price 1-9
● 6808	5	8	0.800″	52F1434	2.19
● 6816	5	16	1.60″	52F1435	3.59
SURFBOARDS FOR 1206 AND MINI-MELF PACKAGES					
● 6908	6	8	0.800″	10M5393	2.66
● 6916	6	16	1.60″	52F1437	3.59
SURFBOARDS FOR SOT-89 PACKAGES					
● 6306	7	16	1.60″	52F1427	1.79

(11226)

TRANSPARENT PROTOTYPING BOARDS

Global® Specialties

GS-830T

Transparent Proto-Boards® and breadboards are economically-priced and designed specifically for training by featuring a transparent back that allows students and designers to clearly view circuit connections. Other features include ABS plastic sockets and phosphor-bronze contacts. Transparent ABS solderless breadboarding sockets connect easily by way of melded key tabs to other economy line breadboarding sockets, or bus strips. Most economy line sockets come with colored numbers, allowing for convenient and easy viewing of circuit connections.

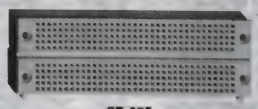
PROTOTYPING BOARD w/ BINDING POSTS

Mfg. Part No.	Strip Length	Strip Width	Tie Points	Term. Clips	IC Qty.	Binding Posts	Stock No.	Price Each
PB-60	6.5″	6″	1680	...	16	4	33C5877	51.00
PB-101T	8.45″	3.94″	1260	...	14	2	74R1723	19.50
BREADBOARDS								
GS-830T	6.5″	2.125″	830	168	7	...	74R1722	9.00

(68407)

QUICK TEST SOCKET BREADBOARDS

Global® Specialties



QT-35S

QT-35B

Quick Test breadboards feature a patented tab/keyway feature allow unlimited expansion of boards. Vinyl back prevents shorting. Accept all components with leads up to 0.033″. Conductive spring clips inside the board grabs component leads and connecting wire securely. Parts plug-in/pull out without soldering or damage. Molded-in mounting holes permit front mounting to backplate or other surfaces. 22AWG wire preferred.

QT - BREADBOARDS

Mfg. Part No.	Cent./ Mount Dim.	Strip Length	Strip Width	Tie Points	Term. Clips	IC Qty.	Stock No.	Price Each
QT-47S	1.0″ (25)	5.3″ (135)	1.32″ (34)	470	94	6	17C6979	8.00
QT - BUS STRIPS								
QT-59B	6.2″ (157)	6.5″ (165)	0.36″ (9)	100	20	...	17C6980	6.00

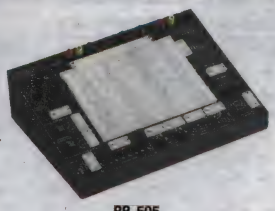
(63485)

PROTO-BOARD® DESIGN WORKSTATION SERIES

RoHS Compliant Available

Global® Specialties

PB-503C



PB-505

Features:

- Removable Breadboards for Multi-User Capabilities
- Unconditional Manufacturer's Lifetime Guarantee on All Breadboarding Sockets
- 3-Year Warranty on All Parts and Labor
- New High and Low Buffered Logic Indicators
- 8-Channel Logic Monitor
- New 8-Selectable Logic Indicators
- 2 Digital Pulsers
- Auto-Experimentation Speaker

PB-503C is a portable design workstation that comes with a rugged carrying case. Removable breadboard area. Function generator with continuously variable sine, square and triangle waveforms and TTl pulses. Triple output power supply offers fixed 5VDC supply plus 2 variable outputs: ±1.3 to ±15VDC. **PB-503** is a bench design for internal lab use.

➤CONTINUED➤

PROTO-BOARD® DESIGN WORKSTATION SERIES (CONT.)

PB-505 is a deluxe circuit design trainer for advanced/higher level analog, digital, and microprocessor circuit designs. Features a larger breadboard area, advanced function generator, built-in logic probe and BCD to-7 segment decoder display, plus special AC output. Additional breadboard socket plates are available; *go online or call.*

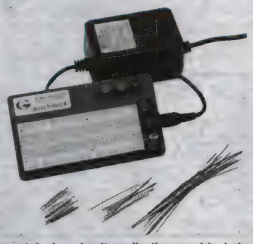
ANALOG AND DIGITAL CIRCUIT WORKSTATIONS

Mfg. Part No.	Description	Stock No.	Price Each
PB-503	Proto-Board® Workstation	17C6973	395.00
PB-503C	Proto-Board® Portable Workstation	17C6974	482.00
PB-505	Proto-Board® Deluxe Workstation	33C5876	584.40
PB-507	Proto-Board® Advanced Workstation	54X1823	1075.00
ANALOG AND DIGITAL CIRCUIT WORKSTATIONS w/ COURSEWARE			
PB-503LAB	PB-503 trainer w/ courseware and guides	74R1724	695.00
● PB-503CLAB,	PB-503C trainer w/ courseware and guides	97W8940	739.80
PB-505LAB	PB-505 trainer w/ courseware and guides	74R1725	800.00

(63487)

PROTOTYPING BREADBOARD LAB STATION

Global® Specialties



Pro-S Lab Station is ideal for prototyping circuit applications and includes solderless breadboard; DC power pack power supply, rated +5VDC @ 1A, +12VDC @ 250m, -12VDC @250mA; a power connector to connect power supply to breadboard; jumper wires, and 25 precut pieces of color-coded, 22AWG, insulated solid hook-up wire.

Mfg. Part No.	Description	Stock No.	Price Each
PRO-S LAB STATION	Lab Prototyping System w/ Power Supply	18C5694	93.00

(63483)

POWERED BREADBOARD SYSTEMS

Global® Specialties

- Binding Posts 450 Terminals
- 2250 Tie Points
- Handle 24-Pin ICs
- Preferred Wire Size: 22 AWG

Powered breadboards are ideal for various prototyping circuit applications. Initial contact resistance is less that 0.5 milliohm; after multiple use this reduces to less than 0.4 milliohm. **Mfg. Part No. PB-203A** features 3 separate power supplies; 5VDC @ 1A set, +5.5 - 18VDC @ 0.5A adjustable, and -5.5 - 18VDC @ 0.5A adjustable. Voltages adjust easily with a screwdriver. **Mfg. Part No. PB-204** features 3 separate power spplies: 5VDC @ 1A, +12VDC @ 0.25A, and -12VDC @ 0.25A.

Mfg. Part No.	Power Supplies	Stock No.	Price Each
PB-203A	5VDC @ 1A Set, +5.5-18VDC, -5.5-18VDC	17C6971	186.00
PB-204	5DVC @1A, +12VDC @ 0.25A, -12VDC @0.25A	17C6972	162.00

(63480)

DIGITAL LOGIC TRAINERS

Global® Specialties

Digital logic trainers are designed with gates and I/Os pre-mounted and each with convenient wire connection points. Both logic trainers eliminate the need to wire discrete ICs on breadboards. All components and I/Os are pre-mounted, de-coupled and de-bounced, so the trainers are ready for immediate classroom use. Included on each is a 270 tie-point solderless breadboard for wiring additional custom logic gates. Most importantly, each trainer comes with an appropriate 60 page training manual featuring overviews of digital logic theory and corresponding detailed hands on experiments (11 labs and 70 experiments). The training manuals are cost effective stand-alone training documents or an excellent supplement and experiment guide to most digital logic textbooks. These two trainers are packaged in a sturdy molded case and come complete with AC/DC Power Adapter and specially-designed, machined pin soldered pre-cut premium #22 gauge insulated stranded hook-up wires.

➤CONTINUED➤

DIGITAL LOGIC TRAINERS (CONT.)

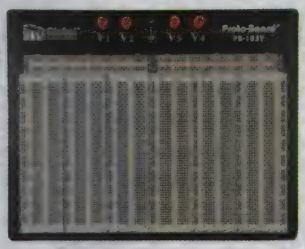
Mfg. Part No.	Description	Stock No.	Price Each
DL-010	Combinational Logic Trainer w/ courseware	74R1709	435.00
DL-020	Sequential Logic Trainer w/ courseware	74R1710	486.00

(177800)

Proto-Boards® SOLDERLESS PROTOTYPE SYSTEMS

RoHS Compliant Available

Global® Specialties



PB-105T

Proto-Boards® solderless prototyping systems feature QT sockets and bus strips mounted on rugged back panels with binding posts for the use of an external power source. These assembled breadboards can be used for various prototyping circuit applications. The preferred wire size for all types is 22 AWG.

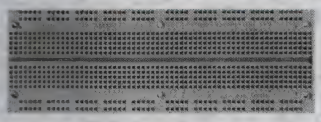
PROTO-BOARDS

Mfg. Part No.	Binding Posts	IC Cap.	Tie Pts.	Terminals	Width	Stock No.	Price Each
PB-10	3	8	840	...	4″	17C6961	23.00
PB-103	4	24	2250	450	6″	17C6965	50.00
PB-104	4	32	3060	612	8″	17C6967	75.00
● PB-105T	5	48	4880	912	11.4″	86W0203	100.00
PROTO-BOARD KITS							
PB-83E	3	8	840	...	4″	10R0133	17.00
PB-70E	3	12	1260	...	5″	10R0132	32.00

(63482)

EXPERIMENTOR SOLDERLESS BREADBOARDS

Global® Specialties



Experimenter Boards feature vinyl backs that prevent shorting and can be combined together for unlimited expansion. Accept all components with wire leads up to 0.033″. Molded-in mounting holes permit front mounting to backplate or other surfaces. The preferred wire size is 22AWG.

BREADBOARDS

Mfg. Part No.	Strip Length	Strip Width	Tie Points	Term. Clips	Cent./ Mount Dim.	IC Qty.	Stock No.	Price Each
UBS-100	6.5″ (165mm)	2.2″ (56mm)	840	168	0.3″ (8mm)	8 (14-Pin)	17C6982	13.00
EXP 300-E	6.5″ (165mm)	1.75″ (45mm)	550	110	...	5	54X1822	7.00
EXP-355	3.6″ (91mm)	3″ (76mm)	470	118	0.4″ (10mm)	5 (14-Pin)	92T9586	7.00
GS-351	4″ (101.6mm)	1.4″ (35.56mm)	350	70	...	4	74R1716	3.75
GS-400	3.3″ (83.82mm)	1.4″ (35.56mm)	400	80	...	3	74R1718	5.50
GS-470	5.25″ (133.35mm)	1.4″ (35.56mm)	470	94	...	5	74R1719	5.00
GS-590	6.5″ (165mm)	1.4″ (35.56mm)	590	118	...	7	74R1720	6.50
GS-630	6.5″ (165mm)	1.4″ (35.56mm)	630	20	...	7	74R1721	5.50
GS-830	6.5″ (165mm)	2.1″ (53mm)	830	168	...	7	15R8319	8.00
BUS STRIPS								
GS-060	4″ (101.6mm)	0.4″ (10.16mm)	60	12	...	...	74R1711	2.50
GS-080	5.25″ (133.35mm)	0.4″ (10.16mm)	80	16	...	...	74R1712	3.00
GS-100	6.5″ (165mm)	0.4″ (10.16mm)	100	20	...	...	74R1714	3.25

(63484)

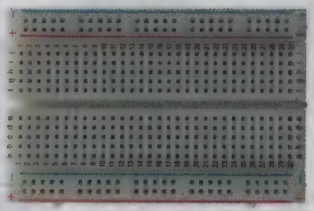
SOLDERLESS BREADBOARDS

NEW

multicomp

MCBB400 SPECIFICATIONS:
- 2 Distribution strips, Tie-point 100
- 1 Terminal Strip, Tie-point 300
- ABS plastic material
- Completely reusable
- Coloured coordinates for easy component placement
- Phosphor bronze nickel plated spring clips
- Accepts a variety of wire sizes (29-20 AWG)
- Dimensions:83.5x54.5x8.5mm

MCBB830 SPECIFICATIONS:
- 2 Distribution strips, Tie-point 200
- 1 Terminal Strip,Tie-point 630
- ABS plastic material
- Completely reusable
- Coloured coordinates for easy component placement
- Phosphor bronze nickel plated spring clips
- Accepts a variety of wire sizes (29-20 AWG)
- Dimensions:165x56x8.5mm



Mfg. Part No.	Description	Stock No.	Price Each 1-99
MCBB400	Solderless Breadboard 400 tie point	99W1759	3.36
MCBB830	Solderless Breadboard 830 tie point	99W1760	5.04

(210810)

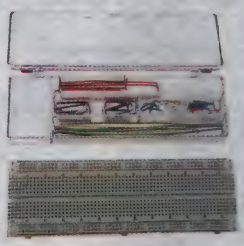
SOLDERLESS BREADBOARDS

Twin Industries Electronic Hardware Prototyping Tools

Features
- Labeled Row and Columns
- High Quality ABS Material
- Phosphor/Bronze Spring Clips
- Holes spaced on 0.1″ centers
- Wire kits included with select part numbers

Applications
- General Prototyping
- Electronic Projects
- Educational Programs

Solderless breadboards are a great way to rapidly prototype electronic designs or prove a concept. Ideal for engineering departments, technical schools, and hobbyists



TW-E41-1020 TW-E40-1020

BREADBOARDS

Mfg. Part No.	Tie-points	Board Size (in)	Wire Kit	Stock No.	Price Each 1-9
TW-E40-510	460	2.14″ x 6.5″	...	56T0249	7.63
TW-E40-1020	830	2.14″ x 3.3″	...	56T0250	9.54
BREADBOARDS W/ WIRE KIT					
TW-E41-1020	830	2.14″ x 6.5″	70pcs	56T0251	14.68
TW-E41-102B	830	2.14″ x 6.5″	70pcs	56T0278	21.92
TW-E41-1060	2390	5.7″ x 6.9″	140pcs	56T0280	42.47

JUMPER WIRES

Mfg. Part No.	Description	Length	Stock No.	Price Each 1-9
TW-E012-000	Standard 140 pcs Set	Various	54T9598	8.45
TW-MP-10	Machine Pin Ends - 10pcs Set	10cm	54T9599	8.36
TW-MP-20	Machine Pin Ends - 10pcs Set	20cm	54T9600	8.76
TW-MP-5	Machine Pin Ends - 10pcs Set	5cm	54T9601	7.97

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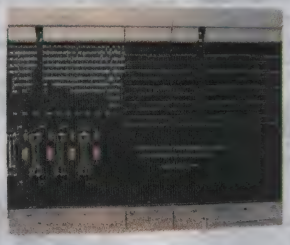
EXTENDER CARDS

Twin Industries Electronic Hardware Prototyping Tools

Applications
- Embedded Systems
- New Product Development
- Test/Measurement
- Military
- Industrial



2000-6U-EXTM-LF

Extender Cards allow for test and measurement of industry standard designs by extending cards under test away from system boards and outside of the chassis to facilitate signal monitoring and debugging. Additional benefits include the protection of system slots from excess wear and tear during the removal and insertion of test cards.

COMPACTPCI EXTENDERS

Mfg. Part No.	Rack Height	Board Size (in)	Stock No.	Price Each 1-9
2000-6U-EXTM-LF	6U	6.3″ x 9.2″	54T9634	424.65
2000-EXTM-LF	3U	6.3″ x 3.9″	54T9631	323.64

➤ CONTINUED ➤

EXTENDER CARDS (CONT.)

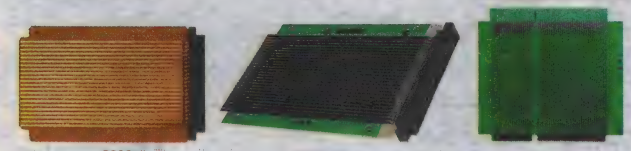
VME / VME64X / VPX EXTENDERS

Mfg. Part No.	Rack Height	Board Size (in)	Stock No.	Price Each 1-9
8196-6U-EXT-LF	6U	9.625″ x 9.2″	54T9842	212.92
8196-EXT-LF	3U	6.3″ x 3.9″	54T9841	103.67
PCI EXTENDERS				
7564-UEXTM-LF	...	4.2″ x 6.9″	54T9811	154.85
7586-EXT-LF	...	5.1″ x 3.9″	15M8122	81.63
PCMCIA EXTENDERS				
3300-EXTM-LF	...	2.12″ x 6.35″	54T9636	132.66

(200250)

3690 SERIES VECTORBORD® GENERAL PURPOSE EXTENDER CARDS

VECTOR ELECTRONICS & TECHNOLOGY, INC



3690 3960-16 3690-26

Gold-plated connector mounted on top of extender. Epoxy glass composite except (+) FR4 epoxy. **Mfg. Part No. 3690-26-1** has a multilayer design for high performance applications and 12 50V decoupling capacitors.

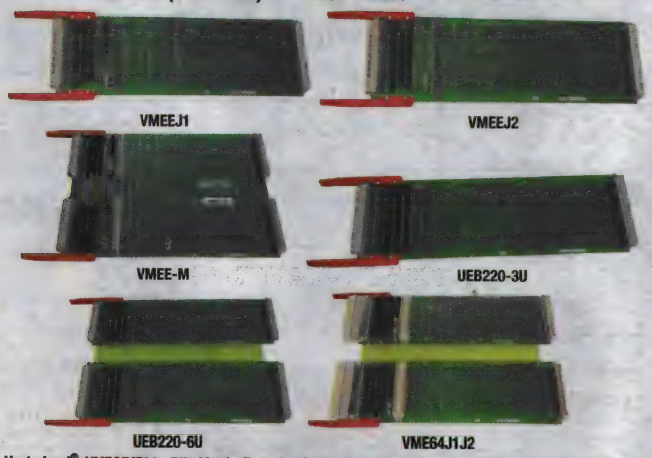
Mfg. Part No.	Fits Rack Series / Circuit Board / Bus Type	Contacts	Spacing (in.)	Stock No.	Price Each 1-9
3690	13 Series Subracks 3662, 3662-5, 3662-9, 3677-2, 3682-2, 3682-4, 4112-4, 4112-5, 838WE	44	0.156	34F1240	48.64
3690-6	13, 14 Series Subracks, 3662-2, 3682, 4112 RCA Cosmac Bus	44	0.156	34F1242	57.57
3690-16	0.125″ Centre 28 Position	56	0.125	34F1243	53.51

(3802)

VECTORBORD® METRIC EXTENDER CARDS (DIN41612)

RoHS Compliant Available

VECTOR ELECTRONICS & TECHNOLOGY, INC



VMEEJ1 VMEEJ2 VMEE-M UEB220-3U UEB220-6U VME64J1J2

Vectorbord® VME/VME64x DIN Metric Extender Cards (Test Adapters) are ASNI/VITA 1.1-1997 specification compatible for 160mm or 220mm rack depths and 4HP wide installation. These test adapters/extenders feature six-layer construction, controlled impedance design and signal trace shielding. Boards are populated with either 96-pin ('standard' VME) or 160-pin (VME64x) DIM connectors. Boards length 11.750" (298mm) and can be combined to make 6U (J1/J2) or matched with **DIN UEB series** Universal Uncommitted extenders available in a wide range of sizes and feature 4-layer construction, trace shielding and controlled impedance and jumpers for signal line interupt for each of 96-pins.

VME BUS EXTENDER CARDS - 96 PIN

Mfg. Part No.	Contacts	Length x Height	Panel Height	Stock No.	Price Each 1-9
VMEEJ1	96	11.75 x 3.94″ (298 x 100)	3U	46F347	318.63
VMEEJ2	96	11.75 x 3.94″ (298 x 100)	3U	46F2759	304.91
VMEE-M	96	11.75 x 9.188″ (298 x 233)	6U	98F7209	460.72
VME64x BUS EXTENDER CARDS - 160 PIN					
VME64J1J2	160+160	11.75 x 9.188″ (298 x 233)	6U	77T1252	1195.29
UNCOMMITED BUS EXTENDER CARDS - 96 PIN					
UEB220-3U	96	11.75 x 3.94″ (298 x 100)	3U	91B7297	330.23
UEB220-6U	96+96	11.75 x 9.188″ (298 x 233)	6U	88F3725	553.92

(77999)

PCMCIA RIGID AND FLEXIBLE EXTENDERS

VECTOR ELECTRONICS & TECHNOLOGY, INC

3690-36

Multilayer RIGID and FLEXIBLE extenders for Type II or Type III 68-pin PCMCIA slots have excellent signal propagation. When used with CF or CFII adapter, can be used with digital cameras, modems, handhelds or I/O cards. Flexible versions are a full 12.00"L. **3690-36** has standard 68-pin push/pull receptacle end. Flexible versions made of high Tg (260 degreesC) Kapton polyimide that is completely flexible and will 'mold' 180 degrees with a .05″ radius. Custom lengths available.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
3690-36	FLEX PCMCIA Extender with Fixed Slot	86H3247	194.26

(3888)

350-PIECE JUMPER WIRE KIT

RoHS Compliant Available

3M

Kit contains 25 each of 14 wire lengths, *which can also be ordered separately below.* PVC insulated 22 AWG solid tinned copper.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 923351-I	350-pc. jumper wire kit	65F2290	73.11

Mfg. Part No.	Insulation	Length	Pkg. of	Stock No.	Price Each 1-4
● 923345-01-C	None	0.1″ (2.54)	200	70C5570	22.65
● 923345-02-C	Red	0.2″ (5.08)	200	19M8560	22.65
● 923345-03-C	Orange	0.3″ (7.62)	200	19M8561	22.65
● 923345-04-C	Yellow	0.4″ (10.16)	200	19M8562	22.65
● 923345-05-C	Green	0.5″ (12.70)	200	19M8563	22.95
● 923345-06-C	Blue	0.6″ (15.24)	150	87F4059	20.99
● 923345-07-C	Violet	0.7″ (17.78)	150	19M8564	20.99
● 923345-08-C	Gray	0.8″ (20.32)	150	19M8565	20.99
● 923345-10-C	White	0.9″ (22.86)	150	19M8566	21.40
● 923345-10-C	Brown	1.0″ (25.40)	100	19M8566	21.40
● 923345-20-C	Red	2.0″ (50.80)	100	19M8567	20.00
● 923345-30-C	Orange	3.0″ (76.20)	75	87F4051	19.81
● 923345-40-C	Yellow	4.0″ (101.60)	75	87F4052	19.81
● 923345-50-C	Green	5.0″ (127.00)	75	19M8568	19.81

(3792)

JUMPER WIRE KITS

Global® Specialties

Kit comes in a plastic case containing precut/prestripped/pre-formed 22AWG insulated solid hook-up wire. 14 color-coded lengths from 0.1-5.0".

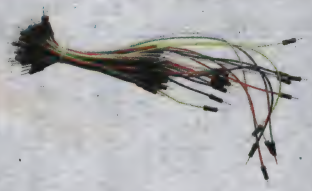
Mfg. Part No.	Pieces per Length	Pieces Total	Stock No.	Price Each
WK-1	25	350	17C6983	22.00
WK-2	10	140	10R0134	6.00
WK-3	5	70	10R0135	3.27

(63479)

JUMPER WIRE ASSORTMENT W/TIPS

NEW

multicomp



SPECIFICATIONS:
- 65 pcs of 22 AWG jumper wire
- Line of different colors can be re-used

KIT CONTENTS:
- 45 piece of 100mm jumper wire
- 10 piece of 150mm jumper wire
- 5 piece of 200mm jumper wire
- 5 piece of 250mm jumper wire

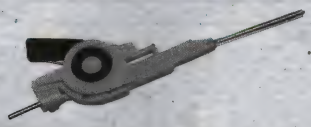
Mfg. Part No.	Description	Stock No.	Price Each 1-49
MCBBJ65	Jumper Wire Kit	99W1758	3.74

(211212)

MICROGRIPPER™— 1.25mm TO 0.2mm LEAD PITCH

RoHS Compliant Available

Emulation Technology, Inc.



Use with SMT packages down to 0.2mm to 0.3mm lead pitch. Thin clip body width allows unlimited lead grippers to be mounted side by side for simultaneous testing. 2 gripper ranges. Bandwidth: 3db >100MHz. Rating: 500WVDC. Material: body, ABS; tips, nickel-plated steel wire or stainless steel. **Sold in packages of 10, except Mfg. Part Nos. FOP-1, FOP-3 are sold as Each.**

Mfg. Part No.	Description	Used With Type	Stock No.	Price Each
FP-2CL-10	Long Gripper with Cords	...	18C0807	323.57
FP-2S-10	Long Gripper with Cords	FOP-1	18C0808	384.24

(65281)

LOW-PROFILE MICROGRIPPER™— 1.25mm TO 0.3mm LEAD PITCH

RoHS Compliant Available

Emulation Technology, Inc.

Featuring low-profile grippers. **Mfg. Part Nos. FP-7C** and **FP-7CL** conductor resistance is 2mΩ max. and **FP-LA1C** resistance is 40mΩ max. Includes flexible stand wires. Body height: 7mm. ABS plastic body. Rating: 500WVDC. **Sold in packages of 10.**

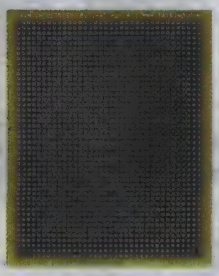
Mfg. Part No.	Description	Stock No.	Price Each
FP-7C-10	Short Gripper without Cord	18C0809	299.97
FP-7CL-10	Long Gripper without Cord	18C0810	340.42
FP-LA1C-10	Long Gripper with Cord	18C0801	148.30

(65282)

PROTOTYPING BOARDS

Twin Industries
Electronic Hardware Prototyping Tools

Applications
- Hardware Development
- Test/Measurement
- Research
- General Prototyping



8000-45

7100-45

General purpose prototyping boards provide a versatile solution for electronic hardware development projects. All boards are made with high quality FR4 material with a 0.062″ thinkness.

NON-PLATED BOARDS WITH HOLES

Mfg. Part No.	Hole Spacing (in)	Hole Dia. (in)	Board Size (in)	Stock No.	Price Each 1-9
7100-062-4565	0.1″	0.062″	4.5″ x 6.5″	54T9639	8.55
7100-062-4585	0.1″	0.062″	4.5″ x 8.5″	54T9640	12.98
7100-1010	0.1″	0.042″	10.0″ x 10.0″	54T9641	25.64
7100-1020	0.1″	0.042″	10.0″ x 20.0″	56T3404	51.45
7100-410	0.1″	0.042″	4.0″ x 10.0″	54T9642	9.71

CONTINUED

PROTOTYPING BOARDS (CONT.)

Mfg. Part No.	Hole Spacing (in)	Hole Dia. (in)	Board Size (in)	Stock No.	Price Each 1-9
7100-45	0.1″	0.042″	4.0″ x 5.0″	54T9643	5.15
7100-4565	0.1″	0.042″	4.5″ x 6.5″	54T9644	8.67
PLATED THROUGH HOLES - DUAL POWER/GROUND PLANE					
8200-410	0.1″	0.037″	4.0″ x 10.0″	54T9845	25.46
8200-45	0.1″	0.037″	4.0″ x 5.0″	54T9846	12.72
PLATED THROUGH HOLES - NO POWER/NO GROUND PLANES					
8000-1010	0.1″	0.037″	10.0″ x 10.0″	54T9816	66.69
8000-1020	0.1″	0.037″	10.0″ x 20.0″	54T9818	131.86
8000-2MM-3U	2mm	0.032″	100mm x 160mm	54T9819	25.98
8000-410	0.1″	0.037″	4.0″ x 10.0″	54T9820	25.46
8000-45	0.1″	0.037″	4.0″ x 5.0″	54T9822	12.72
8000-4565	0.1″	0.037″	4.5″ x 6.5″	54T9824	22.71
PLATED THROUGH HOLES - SINGLE POWER/GROUND PLANE					
8100-1010	0.1″	0.037″	10.0″ x 10.0″	54T9836	63.64
8100-410	0.1″	0.037″	4.0″ x 10.0″	54T9837	25.46
8100-45	0.1″	0.037″	4.0″ x 5.0″	54T9838	12.72
7050-100	0.1″ +0.05″	0.037″ +0.028″	8.0″ x 8.0″	97B2652	62.57
GENERAL PROTOTYPING PCBS WITH EDGE CONNECTOR					
4010-4565	0.1″	0.037″	4.5″ x 6.5″	54T9637	48.54
7036-50	0.05″	0.028″	3.0″ x 4.5″	54T9638	32.02

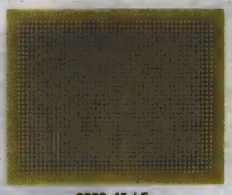
(200244)

LEAD-FREE PROTOTYPING BOARDS

Twin Industries
Electronic Hardware Prototyping Tools

Features
- Hi Temp Laminate
- Gold Plating

Applications
- Lead-Free Prototyping
- Lead-Free Process Development
- Higher Temperature Applications



8000-45-LF

Lead-free prototyping boards are great for developing new products or transitioning existing leaded designs. These high quality PCBs are made with high temperature laminates to support higher processing temperature for lead free manufacturing requirements and all offer gold-plating over copper.

GOLD PLATED THROUGH HOLES (PTH) ONLY

Mfg. Part No.	Hole Spacing (in)	Hole Dia. (in)	Board Size (in)	Stock No.	Price 1-9
8000-4565-LF	0.1″	0.037″	4.5″ x 6.5″	54T9825	23.84
8000-410-LF	0.1″	0.037″	4.0″ x 10.0″	54T9821	28.32
8000-45-LF	0.1″	0.037″	4.0″ x 5.0″	54T9823	13.36
8000-1010-LF	0.1″	0.037″	10.0″ x 10.0″	54T9817	70.83
GOLD-PLATED THROUGH HOLES (PTH) - SINGLE POWER/GROUND PLANE					
8100-45-LF	0.1″	0.037″	4.0″ x 5.0″	54T9839	14.30
GOLD-PLATED THROUGH HOLES (PTH) - DUAL POWER/GROUND PLANE					
8200-45-LF	0.1″	0.037″	4.0″ x 5.0″	54T9847	14.30

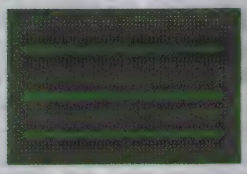
(200245)

SMD / SMT FOOTPRINT PCBS W/ BREAKOUT FUNCTION

Twin Industries
Electronic Hardware Prototyping Tools

Features
- SMT patterns for popular components
- Additional General Prototyping Area
- All Pads have dedicated plated hole for test points
- Lead-free versions available

Applications
- IC Evaluation
- SMT Connector Break-out



8100-SMT8-LF

SMT / SMD adapter boards allow for easy prototyping and evaluation of fine-pitch SMD components and connectors. All pads breakout to dedicated plated holes and boards are made from 0.062″ thick FR4 material.

STANDARD LAMINATE - STANDARD SOLIDER PLATING

Mfg. Part No.	Eitch Pattern	Pitch	Board Size (in)	Stock No.	Price Each 1-9
8100-SMT10	TSSOP	0.5mm	4.0″ x 6.0″	54T9826	38.64
8100-SMT4	SOIC Med, Wide	50mils (1.27mm)	4.0″ x 6.0″	54T9831	32.02
8100-SMT7	QFP 100, 128, 144, 208, 240	20mils (.5mm)	4.2″ x 4.2″	54T9833	38.64
8100-SMT8	SOIC Med, Metric, Tiny	50mils + 25mils	4.0″ x 6.0″	54T9834	38.64
LEAD VERSION WITH HIGH-TEMP LAMINATE AND GOLD PLATING					
8100-SMT10-LF	TSSOP	0.5mm	4.0″ x 6.0″	54T9827	43.01
8100-SMT8-LF	SOIC Med, Metric, Tiny	50mils + 25mils	4.0″ x 6.0″	54T9835	43.01

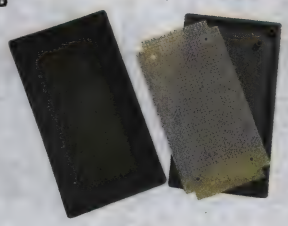
(200246)

ENCLOSURES WITH CUSTOM-FITTED PCB

Twin Industries
Electronic Hardware Prototyping Tools

Features
- ABS Project Boxes
- Includes Custom-Fit Prototyping Board
- Boards made from FR4 0.062″ Thick

Applications
- General Prototyping
- Electronic Projects
- Educational Programs



B20-8000

Project boxes includes a custom fitted PCBs which can shorten prototyping time by eliminating the need to select a box and modifying board shapes. One part number includes both box and board with different combinations available.

ENCLOSURES W/ PCB

Mfg. Part No.	Box Dimensions	Board Type	Stock No.	Price Each 1-9
B10-7100	4.5″ x 2.3″ x 1.7″	Non-plated	54T9152	12.36
B10-8000	4.5″ x 2.3″ x 1.7″	Plated Holes	54T9153	13.93
B20-7100	5.3″ x 2.9″ x 1.9″	Non-plated	54T9154	15.65
B20-8000	5.3″ x 2.9″ x 1.9″	Plated Holes	54T9155	18.50
B30-7100	6.3″ x 3.7″ x 2.4″	Non-plated	54T9156	19.77
B30-8000	6.3″ x 3.7″ x 2.4″	Plated Holes	54T9157	21.37
ENCLOSURES W/ PCB AND REMOVABLE END PANELS				
B40-8000	7.7″ x 4.3″ x 2.9″	Plated Holes	54T9158	25.83
B45-8000	7.7″ x 4.3″ x 1.4″	Plated Holes	54T9159	22.80

(200249)

BUS SPECIFIC PROTOTYPING BOARDS

Twin Industries
Electronic Hardware Prototyping Tools

Applications
- New Product Development
- Test/ Measurement

8198-200

Bus specific prototyping boards offer the size and form factor to conveniently prototype designs used with specific industry standard busses.

COMPACTPCI BUS

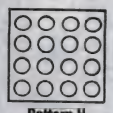
Mfg. Part No.	Etch Pattern	Board Size (in)	Stock No.	Price Each 1-9
2000-200	6U CompactPCI	6.3″ x 9.2″	55T0787	157.41
2000-50	3U CompactPCI	6.3″ x 3.9″	54T9633	79.63
2000-80	6U, 80mm CompactPCI	3.2″ x 9.2″	55T0788	102.13
PCI BUS				
7586-5100	32 bit PCI	3.9″ x 12.2″	54T9815	74.05
VME / VME64X				
8198-200	6U VME64/x	6.3″ x 9.2″	54T9843	158.29

(200247)

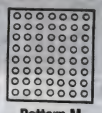
VECTORBORD® GENERAL-PURPOSE PROTOTYPING BOARDS

RoHS Compliant Available

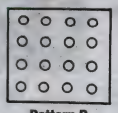
VECTOR ELECTRONICS & TECHNOLOGY, INC



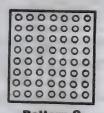
Pattern H



Pattern M



Pattern P



Pattern Q

Vectorbord general purpose pre-punched insulating punchboard is available in standard grid patterns shown below for assembling circuit components. Standard thickness is 1/16″ (0.062″) except as noted. FR-4 and CEM-1 laminate materials have a maximum electrical temperature of 130°C; FR-2 phenolic is 110°C and GPY P96 HiTemp material is 260°C. Vectorbord listed below is UNCLAD or COPPER CLAD only, no pads or plated holes. For unpunched panels see pattern X at bottom of listing.

FR4 EPOXY GLASS

Mfg. Part No.	Pattern	Hole Size (mm)	Hole Centers (mm)	W x L	Stock No.	Price Each 1-9
● 59P44-032	P	1.067	2.54	4.5 x 6 x 0.032″ TH	38F1385	12.35
● 64P44WE	P	1.067	2.54	4.5 x 6.5″	34F1223	9.05
● 84P44WE	P	1.067	2.54	4.5 x 8.5″	34F1224	13.81
● 169P44WE	P	1.067	2.54	4.5 x 17″	34F1226	23.32
● 169P59-032	P	1.067	2.54	6 x 17 x 0.032″ TH	38F1053	23.60
● 169P59-047	P	1.067	2.54	6 x 17 x 0.047″ TH	38F1386	24.55

➤CONTINUED➤

VECTORBORD® GENERAL-PURPOSE PROTOTYPING BOARDS (CONT.)

Mfg. Part No.	Pattern	Hole Size (mm)	Hole Centers (mm)	W x L	Stock No.	Price Each 1-9
● 169P79WE	P	1.067	2.54	8 x 17″	34F1227	35.81
● 169P84WE	P	1.067	2.54	8.5 x 17″	34F1228	33.32
● 169P99WE	P	1.067	2.54	10 x 17″	97H6167	48.30
● 85H48WE	H	1.57	2.54	4.8 x 8.51″	38F408	18.38
● 170H48WE	H	1.57	2.54	4.8 x 17″	38F1070	33.94
● 85H85WE	H	1.57	2.54	8.51 x 8.51″	38F1336	30.62
● 170H85WE	H	1.57	2.54	8.51 x 17″	38F1383	52.52
● 126M76-032	M	0.635	1.27	4 x 6.5 x 0.032″ TH	97F7956	27.41
● 336M76-032	M	0.635	1.27	4 x 17 x 0.032″ TH	87F661	25.16
● 47Q78WE	Q	0.635	2	3.94 x 6.30″	91C4700	15.23
FR4 WITH ONE SIDE COPPER CLAD						
● 336M76-032C1	M	0.635	1.27	4 x 17 x 0.032″ TH	97F7957	23.51
● 169P44WEC1	P	1.067	2.54	4.5 x 17″	34F1225	24.55
● 169P84WEC1	P	1.067	2.54	8.5 x 17″	34F1229	43.86
CEM-1EPOXY GLASS COMPOSITE WITH TWO SIDE COPPER CLAD						
● 169P44WEC2	P	1.067	2.54	4.5 x 17″	38F1379	24.15
CEM-1 EPOXY GLASS COMPOSITE						
● 64P44	P	1.067	2.54	4.5 x 6.5″	38F1376	9.58
● 169P44	P	1.067	2.54	4.5 x 17″	38F1377	16.41
● 169P79	P	1.067	2.54	8 x 17″	77B5242	37.63
● 169P84	P	1.067	2.54	8.5 x 17″	38F409	33.63
● 169P99	P	1.067	2.54	10 x 17″	89F659	49.70
CEM-1 EPOXY GLASS COMPOSITE WITH ONE SIDE COPPER CLAD						
● 169P44C1	P	1.067	2.54	4.5 x 17″	38F1378	28.93
FR2 PHENOLIC						
● 64P44XXXP	P	1.067	2.54	4.5 x 6.5″	38F410	8.90
● 169P44XXXP	P	1.067	2.54	4.5 x 17″	38F411	17.90
● 169P59XXXP	P	1.067	2.54	6 x 17″	77B5241	18.06

UNPUNCHED PANELS

Mfg. Part No.	Pattern	W x L	Stock No.	Price Each 1-9
● 12X12WE	FR4 Epoxy Glass	12 x 12″	26H0627	16.68
● 12X12WEC1	FR4 Epoxy Glass, Unplated copper 1 side	12 x 12″	26H0628	17.25
● 12X12C2	CEM-1 Epoxy Glass Comp, Unplated Copper 2 Sides	12 x 12″	91C3981	20.95
● 12X12C1	CEM-1 Epoxy. Glass Comp, Unplated Copper 1 Side	12 x 12″	68K0902	16.68

ACCESSORIES AND TOOLS FOR COPPER CLAD BOARDS

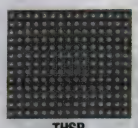
Mfg. Part No.	Description	Stock No.	Price Each 1-9
● P138A	Pad Cutter Tool w/Handle-Hole Size 0.04″ (1.02) for "P" Pattern Hole	81F4742	78.14
● P138C	Pad Cutter Tool, Shank Only-Hole Size 0.04″ (1.02) for "P" Pattern Hole	81F4743	83.76

(3851)

CIRCBORD™ PRINTED CIRCUIT PROTOTYPING BOARDS

VECTOR ELECTRONICS & TECHNOLOGY, INC

PPH



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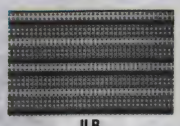


ILB

SMDPTH

SPPH

PPHC

OGP

- All Bus and Circuit Patterns are Solder Coated
- FR-4 Epoxy Glass and CEM-1 Epoxy Glass Composite Material with UL 94V-0 Flame Rating
- Boards Can Be Cut to Smaller Units

Pattern	Description
ILB	Interleaved Bus
OGP	Overall Ground Plane, No Pads
OGPWP	Overall Ground Plane, Surrounds Pads
PPH	.080″ Pads-Per-Hole Not Plated-Thru
PTPPH	.080″ Plated-Thru Pads-Per-Hole
PTHPGP	.080″ Plated-Thru-Pads-Per-Hole w/ Peripheral Ground Plane
PTHOGP	.080″ Plated-Thru-Pads-Per-Hole w/Overall Ground Plane
PTHC	Plated-Thru Holes on Lengthwise Tracks, Both Sides
PPHC	Non-Plated-Thru Holes on Lengthwise Tracks, One Side
SMDPTH	V & G Planes, Plated-Thru-Holes and SMD Cap Positions
SPPH	.085″ Square Pads-Per Hole and Peripheral Ground Plane

➤CONTINUED➤

CIRCBORD™ PRINTED CIRCUIT PROTOTYPING BOARDS (CONT.)

Pattern	Description
SPTH THSP	.085″ Square Plated-Thru Pads-Per-Hole w/Peripheral Ground Three-Hole Pads

These 0.062″ (1.57) thick printed circuit boards feature 0.042″ (1.07) diameter holes on 0.100″ (2.54) grid. Accepts **Mfg. Part No. R32** wire wrap socket pins, *ordered separately.*

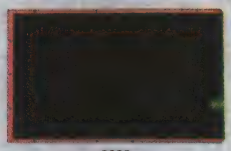
Mfg. Part No.	Material	Circuit Pattern: Solder Side	Circuit Pattern: Component Side	W x L	16-Pin DIP Cap.	Stock No.	Price Each 1-9
8002	CEM-1	ILB	None	4.50 x 6.50	36	38F1250	27.14
8004	CEM-1	OGP	None	4.50 x 6.50	50	44F3800	28.24
8007	CEM-1	OGP	PPH	4.50 x 6.50	60	46F1193	29.91
8022	FR-4	PPHC	None	3.00 x 3.50	0	66H7462	6.43
8029	FR-4	PPHC	PPH	2.00 x 3.00	0	24K7312	6.99
8019	FR-4	PTHC	PTHC	3.94 x 6.30	0	01H8755	23.36
106P70-4	FR-4	PTHOGP	PTHOGP	7.00 x 10.60	175	97F7953	134.85
8010	FR-4	PTPPH	PTPPH	4.00 x 13.00	124	94F9384	47.16
8006	FR-4	PTPPH	PTPPH	5.00 x 13.25	154	44F3801	51.82
8012	FR-4	PTPPH	PTPPH	9.20 x 11.00	283	94F9386	68.62
8013	FR-4	PTPPH	PTPPH	10.60 x 18.00	165	91B0472	114.06
8015	FR4 Epoxy Glass	PTPPH	PTPPH	4.00 x 6.00	72	94C4169	12.87
8015-1	FR-4	PPH	None	4.00 x 4.00	72	01H8753	7.79
8016	FR-4	PTPPH	None	6.00 x 9.00	165	01H8754	21.74
8016-1	FR-4	PTPPH	None	6.00 x 6.00	140	94C4031	11.82
106P106-1	FR-4	PTPPH	PTPPH	10.60 x 10.60	275	81F5768	66.04
8008	FR-4	SMDPTH	SMDPTH	4.50 x 6.50	70	94F9382	36.88
8003	CEM-1	SPPH	None	4.50 x 6.50	60	44F3799	27.89
45P80-1	CEM-1	SPPH	SPPH	4.50 x 8.08	80	81F5767	29.08
45P80-2	CEM-1	SPTH	SPTH	4.50 x 8.08	80	69H6774	28.26
8001	CEM-1	THSP	None	4.50 x 6.50	20	38F1249	25.67
8023	FR-4	THSP	THSP	4.50 x 6.50	20	24K7311	23.34
3677-6	CEM-1	THSP	None	4.50 x 8.08	21	87F660	24.60
0.25″ (1.07) DIAMETER HOLES ON 0.050″ GRID							
8021	FR-4	PTPPH	PTPPH	3.94 x 6.30	0	66H7461	36.46

(3858)

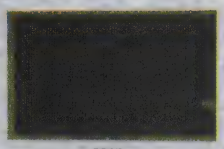
1MM & 2MM PITCH EUROCARD GRID DEVELOPMENT BOARDS

RoHS Compliant Available

VECTOR ELECTRONICS & TECHNOLOGY, INC

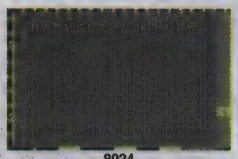


8020

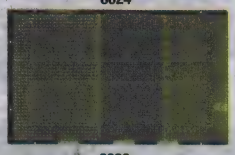


8017

8018



8024



8028

1MM (Hard Metric):
- "S" pattern for ALL METRIC component lead spacing
- 3U X 160mm (3.94″ X 6.3″)Eurocard size
- Mfg. Part No. 8020J1 has 2mm HM press-fit female J1 connector installed
- Isolated copper pads only, No solder plating

Mfg. Part No.	Description	Size (mm x mm)	Stock No.	Price Each 1-9
● 8020	Pad-Per-Hole, Plated Thru, No Solder	100 x 160	01H8756	36.88

2MM (Hard Metric):
- "Q" pattern for 2mm component lead spacing
- 3U X 160mm (3.94″ X 6.3″)Eurocard size
- Mfg. Part No. 8018 combines 0.100″ and 2mm grid('Q' & 'P' patterns)
- "J1" suffix has 2mm hard metric female connector installed
- Isolated copper pads with solder plating
- Peripheral ground planes
- Legends to identify hole locations on all metric boards
- All constructed of 1/16″ (0.062) FR-4, UL 94V-0

Mfg. Part No.	Description	Size (mm)	Stock No.	Price Each 1-9
8017	Pad-Per-Hole, Plated Thru, Solder Plating	100 x 160	92C2684	18.92
8018	Pad-Per-Hole, 2mm & 0.100″ Grid Combo	100 x 160	73C1943	22.00

➤CONTINUED➤

1MM & 2MM PITCH EUROCARD GRID DEVELOPMENT BOARDS (CONT.)

Mfg. Part No.	Description	Size (mm)	Stock No.	Price Each 1-9
8024	2mm x 2mm grid dev. Board with 3-hole solder pads	100 x 160	20J3132	22.03
8028	Pad-Per-Hole Combo with 0.100″, 0.050″ and 2 mm grid	100 x 160	16J0508	22.03

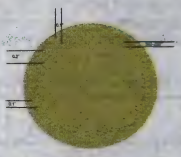
(73439)

ALTERNATE 0.1″ GRID FOR TRANSISTOR MOUNTING WITH 44 GOLD-PLATED CONTACTS

RoHS Compliant Available

VECTOR ELECTRONICS & TECHNOLOGY, INC

838WE



85G42WE Hole pattern

- 0.063″ (1.60mm) Diameter Holes on Alternate Intersections of 0.1″ (2.54mm) Grid.

Mfg. part no. 838WE has edge card contacts only for Vector **R644 series** edge connectors; FR-4 epoxy glass construction. 44 Gold-tin alloy plated edge contacts, 22 per side on 0.156″ centers. Board size: 4.5″ x 6.5″.

Mfg. Part No.	Contacts: No.	Contacts: Spacing	Mating Connector: Solder Eye	Mating Connector: Wrap Tail	Mating Extender	Stock No.	Price Each 1-9
● 838WE	22/22	0.156″	R644	R644-3	3690	38F1080	23.51

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 85G42WE	VECTORBORD® G Pattern Board (No Contacts, 8.5″ x 17″, FR-4)	38F1051	45.34

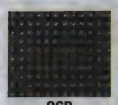
(3855)

PLUGBORD™ PROTOTYPING BOARDS, 0.063″ THICK FOR EDGE CONNECTORS

RoHS Compliant Available

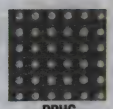
VECTOR ELECTRONICS & TECHNOLOGY, INC

ILB

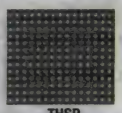


OGP

PTPPH & PTHPGP

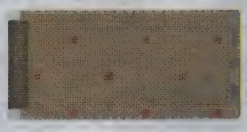


PPHC



THSP

3662-9



3719-4

3662

- Designed for VectorPak® EIA RS310 Subracks (Series CCK or CCA 13,14)
- All Bus and Circuit Patterns are Solder Coated
- Gold-plated Edge Contact "Fingers" for R600-series Edge Connectors on Both Sides
- FR-4 Epoxy Glass and CEM-1 Epoxy Glass Composite Material with UL 94V-0 Flame Rating
- Vector Plugbords™ Listed Here All Have .042" Dia. Holes

Circuit Pattern	Description
ILB	Interleaved Bus
OGP	Overall Ground Plane, No Pads
PTPPH	Pad-Per-Hole, Holes Plated-Thru
PTHPGP	Pad-Per-Hole, Holes Plated-Thru- w/ Peripheral Ground Plane
PPHC	Lengthwise Tracks Only
THSP	Three-Hole Pads

Mfg. Part No.	Circuit Pattern: Solder Side	Circuit Pattern: Component Side	W x L	Stock No.	Price Each 1-9
30 CONTACTS, R630 SOLDER CONNECTOR*					
3797-2	THSP	None	2.73″ x 4.5″	38F1100	22.67
44 CONTACTS, R644 SOLDER CONNECTOR, R64-3 WIRE-WRAP CONNECTOR*					
● 3662-5	None	None	4.5″ x 4.5″	38F1134	25.16
● 3662	None	None	4.5″ x 6.5″	38F1366	27.69
3662-9	PTHPGP	PTHPGP	4.5″ x 6.5″	81F4779	44.90
3677	THSP	None	4.5″ x 9.6″	38F1367	36.79
3677-2	THSP	None	4.5″ x 6.5″	38F1368	30.45
3795-1	THSP	None	2.73 x 4.5″	38F1099	25.16
4112-4	ZZ	OGP	4.5″ x 6.5″	38F1138	33.13
4112-5	ZZ	OGP	4.5″ x 4.5″	38F1137	30.03
72 CONTACTS, R636-2 SOLDER CONNECTOR, R636-1 WIRE-WRAP CONNECTOR*					
● 3719-1	None	None	4.5″ x 6.5″	38F1103	31.77
● 3719-4	None	None	4.5″ x 9.6″	38F1104	37.39
3719-6	PTHPGP	PTHPGP	4.5″ x 6.5″	81F4780	47.18

*Order connectors separately in our Interconnect section

(78909)

4617 SERIES CIRCUIT BOARDS FOR IBM® AT, PC AND XT COMPUTERS

VECTOR ELECTRONICS & TECHNOLOGY, INC

4617

4613 and 4617 series boards plug into any IBM® AT slot with dual connectors; have pads to mount dual row 0.1″ (2.54) spaced header. All boards listed below are 0.063″ (1.60) thick epoxy glass per MIL-P-13949 type GF. Feature marked edge identification, with gold-plated contacts on 0.1″ (2.54) centers. Power and ground buses terminate to connectors, and pads on board and bracket accept DB9-, 15-, 25- or 37-pin I/O connector. Holes are 0.042″ (1.07) diameter on 0.1″ (2.54) grid. Use solder or wire-wrap press-in terminals. Universal mounting bracket, card guide, layout planing sheets included. **4613 and 4617 Series** *uses* **Mfg. Part Nos. 3690-26 or 3690-26-1** *extender card, ordered separately on page 384.*

BOARDS WITH 3-HOLE SOLDER PADS/BUSES

Mfg. Part No.	Fits IBM® Model	16-Pin DIP Capacity	Stock No.	Price Each 1-9
4617	AT, ISA	39	**46F2448**	79.78

PERIPHERAL BUSES

These boards feature voltage and ground bus lines that trace a path around the board perimeter. Boards are filled on a 0.1″ (2.54) grid. Bus surfaces are solder-coated for convenience.

Mfg. Part No.	Fits IBM® Model	16-Pin DIP Capacity	Stock No.	Price Each 1-9
4613-1	PC, XT	93	**81F4777**	53.18
4617-1	AT, ISA	108	**46F2449**	59.97

PAD-PER-HOLE

These boards with plated-thru holes feature pads on a 0.1″ (2.54) grid which allow unlimited component placement. Full size. They accept any width DIP device, and have power and ground buses on each around the edges.

Mfg. Part No.	Fits IBM® Model	16-Pin DIP Capacity	Stock No.	Price Each 1-9
4613-3	PC, XT	154	**44F2202**	61.16
4617-3†	AT, ISA	96	**46F2450**	81.23

†Only *uses* **type 3690-26**

VOLTAGE/GROUND PLANES

These boards are for higher frequency construction, features solid voltage and ground planes on opposite sides. Boards are filled with 0.55″ (1.40) diameter holes spaced 0.1″ x 0.1″ (2.54 x 2.54), with etched clearance areas surrounding them. Connections from device leads to voltage or ground made by direct soldering or placing eyelet in hole, and soldering flange to tinned circuit plane. Component leads soldered into eyelets are connected to circuit side on which eyelet flange is soldered.

Mfg. Part No.	Fits IBM® Model	Holds 16-Pin DIPs	Stock No.	Price Each 1-9
4617-4	AT, ISA	140	**87F1076**	81.23
4617-5	AT	140	**27B9463**	106.92

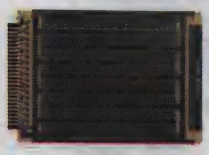
ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
HD36B	4617 Series IBM Braket and Hardware Kit	**87F1072**	27.66

(3849)

STD BUS AND S-100 CIRCUIT BOARDS

VECTOR ELECTRONICS & TECHNOLOGY, INC



4610

4610-2

4610-3

4610 series has 0.42″ (1.07MM) diameter precision drilled holes on 0.1″(2.54MM) grid, 0.062″ thick 94-V0 material. STD-Bus standard: 5V bus terminates to pins 1 and 2, ground terminated to pins 3 and 4. S100 per IEEE 696. All accept 3690-16 extender cards,R600-series edge connectors and R32 Socket Pins, ordered separately. *Order card racks separately; go online or call.*

Pattern	Description
PTPPH	.080″ Plated-Thru Pads-Per-Hole
THSP	Three-Hole Pads
ILB	Interleaved Bus
SPPH	.085″ Square Pads-Per Hole and Peripheral Ground Plane

W x L: 4.5″ x 6.5″

Mfg. Part No.	Material	Bus	Circuit Pattern: Solder Side	Circuit Pattern: Component Side	No. of Contacts	Centers	Stock No.	Price Each 1-9
4610	CEM-1	STD	None	THSP	56	2.5	**10F8207**	34.11
4610-2	CEM-1	STD	ILB	None	56	2.5	**10F8208**	45.20
4610-3	FR-4	STD	PTPPH	PTPPH	25	2.5	**81F4774**	47.72

(6663)

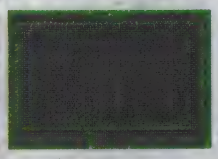
CIRCBORD™ EUROCARD PROTOTYPING BOARDS, 0.062″ THICK FOR DIN 41612 96-PIN CONNECTORS, VME

RoHS Compliant Available

VECTOR ELECTRONICS & TECHNOLOGY, INC

4614

4614-3



4615

- All Bus and Circuit Patterns are Solder Coated
- FR-4 Epoxy Glass and CEM-1 Epoxy Glass Composite Material with UL 94V-0 Flame Rating
- Boards Can Be Cut to Smaller Units
- Available in DIN sizes **3U** (3.94″), **6U** (9.19″) and **9U** (14.44″)

E160-6U-1

Signal pattern Eurocards have a bus connector, I/O, and signal pattern area. Bus connector area accepts 96-pin DIN wire-wrap connectors that allow direct connection to power and ground busses by wiring or using specially designed eyelets (T123/500 Eyelets for .055″ hole boards will simulate .042″ plated hole). I/O area provided for mounting D-sub and flat ribbon cable connectors. Eurocards may be used as 96-pin VME or Multibus II. 0.1″ x 0.1″ grid hole pattern allows non-restrictive placement of components. Boards are .062″ thick (1.57mm). Holes on .100″ (2.54mm) Grid. Accepts **mfg. part no. R32** wire-wrap socket pins and **mfg. part no. T123/500** Eyelets *ordered separately.*

Pattern	Description
ILB	Interveaved Bus
OGP	Overall Ground Plane,No Pads
OGPWP	Overall Ground Plane, Surrounds Pads
PB	Peripheral Busses Only, No Pads
PPH	Pads-Per-Hole, Holes Not Plated-Thru
PTPPH	Pads-Per-Hole, Holes Plated-Thru
PTHPGP	Pad-Per-Hole, Holes Plated-Thru- w/ Peripheral Ground Plane
PTHOGP	Pad-Per-Hole, Holes Plated-Thru- w/ Overall Ground Plane
PTHC	Plated-Thru Holes on Lengthwise Tracks, Both Sides
PPHC	Lengthwise Tracks Only
SMDPTH	V & G Planes, Plated-Thru-Holes and SMD Cap Positions
SPPH	Square Pad-Per-Hole and Peripheral Ground Plane
SPTH	Square Pad-Per-Hole, Holes Plated-Thru w/ Peripheral Ground
THSP	Three-Hole Pads

Mfg. Part No.	Hole Diam.	Circuit Pattern: Solder Side	Circuit Pattern: Component Side	W x L	16-DIP Capacity	Stock No.	Price Each 1-9
4614	0.042″	EUROCARD	THSP	3.94″ x 6.3″	20	**46F365**	35.08
4614-3	0.042″	EUROCARD	PTHPGP	3.94″ x 6.3″	30	**46F367**	34.68
4614-4	0.055″	EUROCARD	PTHPGP	3.94″ x 6.3″	20	**97H9197**	28.17
4615	0.042″	EUROCARD	THSP	9.19″ x 6.3″	50	**46F368**	38.58
E160-3U-1	0.042″	EUROCARD	PTHPGP	3.94″ x 6.3″	35	**46F2751**	24.44
E160-6U-1	0.042″	EUROCARD	PTHPGP	9.19″ x 8.66″	100	**46F2740**	39.89

ACCESSORIES

Standard Type 1 and Type 5 front panels constructed of 0.100″ thick brushed 6061-T6 aluminum.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● HA9/4	Rotator Ejector w/ Hardware - Set of 4	**77B5478**	11.10
● FP08-3U	DIN/VME 3UX8HP Front Panel & Type 5 Fixed Handle, 5.12″ x 1.588″	**94F9364**	27.56
● FP04-6U	DIN/VME 6UX4HP Front Panel & Type 5 Fixed Handle, 10.31″ x 0.794″	**94F9334**	27.01
● FPE04-6U	DIN/VME 6UX4HP Front Panel & Type 1 Ejector Handle, 10.31″ x 0.794″	**91B8129**	25.65

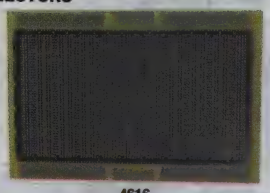
(3852)

(196531)

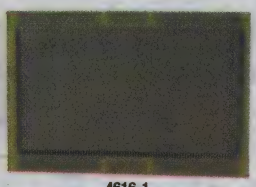
CIRCBORD™ EUROCARD PROTOTYPING BOARDS, 0.063″ THICK FOR 160-PIN DIN CONNECTORS

RoHS Compliant Available

VECTOR ELECTRONICS & TECHNOLOGY, INC



4616



4616-1

90100016

- All Bus and Circuit Patterns are Solder Coated
- FR-4 Epoxy Glass and CEM-1 Epoxy Glass Composite Material with UL 94V-0 Flame Rating
- BASED ON VME64x STANDARD
- Available in DIN size 6U X 160mm (9.19" x 6.3")

PTHPGP	Pad-Per-Hole, Holes Plated-Thru- w/ Peripheral Ground Plane
THSP	Three-Hole Pads

Signal pattern Eurocards have a bus connector, I/O, and signal pattern area. Bus connector area accepts 160-pin DIN connectors. 0.1″ X 0.1″ grid hole pattern allows non-restrictive placement of components. Boards are .062″ thick (1.57mm). Holes on .100″ (2.54mm) Grid. Accepts type R32 wire-wrap socket pins.

Mfg. Part No.	Hole Diam. (mm)	Circuit Pattern		Dimensions (H x W)	DIP Capacity	Stock No.	Price Each
		Solder Side	Component Side				1-9
4616	1.067	THSP	THSP	9.19 x 6.3″	50	68K1377	39.02
4616-1	1.067	PTHPGP	PTHPGP	9.19 x 6.3″	100	68K1378	33.10

ACCESSORIES

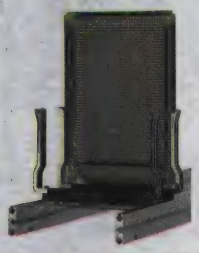
Mfg. Part No.	Description	Stock No.	Price Each 1-4
90100016	Type V EJECTOR/INJECTOR Handles, top/bottom, for EMC front panels	70C4087	34.32

(85837)

FREE-STANDING CONNECTOR MOUNTED CARD GUIDE

RoHS Compliant Available

VECTOR ELECTRONICS & TECHNOLOGY, INC



BR27D with Vector 3662-9 Plugbord with R644 Edge Connector and TS169 "T"-Strut

Secure connection and rugged support of 0.062″ thick free-standing circuit boards for applications where space is at a premium. Several styles available for Vector R600 edge connectors. Mounting hardware included. **Sold in packages of 2**

Mfg. Part No.	Fits Connector/Circuit Board	Stock No.	Price Each 1-4
BR27D	R644, R644-1, 3662, 3677, 3682	81F4766	10.60
BR27-1	Connectors R636-1and R636-2	81F4767	11.78

(7122)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

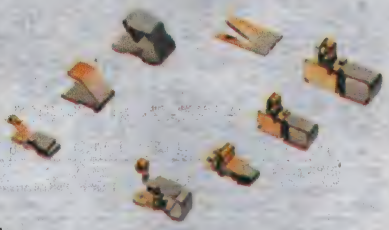
(196535)

SPRING FINGERS

RoHS Compliant Available

TE connectivity

Authorized Distributor



Applications
- Mobile devices
- Home entertainment
- Digital cameras/camcorders
- GPS
- Handheld entertainment devices
- Industrial equipment
- Personal computing

Features
- Common footprint across the Scalable family from 1.8mm-3.4mm
- Used for grounding between device and PCB to prevent EMI noise and static
- Spring locks into place to help prevent overstretching
- Anti-overstress feature helps prevent contact damage
- Provides shielding from vibration from motors, antennas, speakers and microphones
- Used as a connection for stacking applications between primary and secondary PCBs
- Available in effective heights of 0.3mm - 6.5mm
- Requires limited space on a PCB so it can be designed in at the last minute
- Accommodates soldering and pick-and-place using standard equipment

Spring fingers (also known as shield fingers, grounding springs or universal ground contacts) are used in almost every small printed circuit board application. A spring finger is a single contact, surface mountable, internal connector. It provides and electrical connection and grounding from EMI noise and static between a PCB and other electronic components, such as a secondary PCB, shield cam, antenna, or speaker.

SCALABLE PRELOADED SPRING FINGERS

Mfg. Part No.	Uncompressed Height (mm)	Application Use Range (mm)	Stock No.	Price Each 1-9	Price Each 10-24
1551572-5	1.80	0.95 - 1.45	78T6427	0.28	0.27
1551573-5	2.15	1.30 - 2.00	78T6428	0.28	0.27
1551574-5	2.60	1.70 - 2.40	78T6429	0.27	0.25
1551575-5	3.00	2.10 - 2.80	78T6430	0.31	0.29
PRE-LOADED SPRING FINGERS					
1551631-5	1.24	0.65 - 1.10	92T5091	0.11	0.11
1565158-1	1.50	0.95 - 1.30	92T5092	0.33	0.32
1565322-1	1.60	1.10 - 1.40	92T5093	0.12	0.12
1746854-1	2.40	1.40 - 2.20	92T5095	0.43	0.41
STANDARD LOW PROFILE SPRING FINGERS					
1674954-1	2.00	1.20 - 1.60	92T5094	0.31	0.29
1447009-8	3.50	2.10 - 2.80	92T5090	0.33	0.32

(202138)

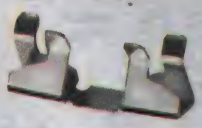
MINI RFI SHIELD CLIPS FOR EMI/RFI SHIELDS

RoHS Compliant Available

HARWIN

BoardWare

MICRO, MIDI and MAXI



MINI

3.5MM HIGH RFI GROUNDING/RFI CONTACTS

2.5MM HIGH RFI GROUNDING/RFI CONTACTS

'S' SHAPED GROUNDING / RFI CONTACTS

CORNER

- SMT EMI/RFI shield clips and fingers offer a fast solution for assembling RFI shields to PCBs.
- Saves PCB real estate.
- Compatible with automated assembly
- Eliminates the need for through holes and post reflow operations.
- Base material: Shield clips: Beryllium copper; Shield fingers: Copper alloy
- XXXX-46R Tin Finish, XXXX-42R Tin + Gold Finish

Shield clips allow multiple fitting–removal–refitting cycles of shielding cans. Mini version uses 40% less space than Midi and Maxi versions. Substantial improvement in time and simplicity of assembly tuning and re-work. Contact resistance as low as 20mΩ Shield fingers are for use on surface mount PCBs, in contact with metal shields or frames and are suitable for both wiping and sliding actions.

RFI SHIELD CLIPS - TIN - TAPE & REEL, SOLD INDIVIDUALLY

Mfg. Part No.	Description	Length (mm)	Width (mm)	Height (mm)	Stock No.	Price Each 1-9
S1411-46R	Maxi Clip	8.80	2.60	3.50	75R5333	0.72
S1711-46R	Midi Clip	8.80	2.20	3.50	48K7263	0.72
S1721-46R	Mini Clip	5.08	0.90	2.23	48K7267	0.44
S0971-46R	Mini Clip	5.80	1.00	2.00	17X8044	0.26

CONTINUED

PROTOTYPING BOARD ACCESSORIES

1

MINI RFI SHIELD CLIPS FOR EMI/RFI SHIELDS (CONT.)

Mfg. Part No.	Description	Length (mm)	Width (mm)	Height (mm)	Stock No.	Price Each 1-9
● S0991-46R	Micro Clip	6.50	0.80	1.28	17X8046	0.20
● S1001-46R	Micro Clip	4.50	0.70	0.80	17X8047	0.26
● S0981-46R	Corner Clip	4.70	0.80	1.30	17X8045	0.28
RFI SHIELD FINGERS						
These RFI Shield Fingers can be assembled to PCBs and used as grounding or shielding contacts, in contact with metal frames or shields. Suitable for both wiping and sliding action, the individual clips are ideal for automated placement.						
● S1741-46R	2.5mm High Clip	5.40	2.50	2.50	67W2331	0.60
● S1761-42R	3.5mm High Clip	4.50	2.50	3.50	75R5337	0.93
● S1791-42R	4.0mm High Clip	7.00	2.50	4.00	75R5338	0.58
GROUNDING / RFI CONTACTS						
These RFI Shield Fingers can be assembled to PCBs and used as grounding or shielding contacts, in contact with metal frames or shields. Suitable for both wiping and sliding action, the individual clips are ideal for automated placement.						
● S7041-42R	4.0mm High Clip	7.00	2.50	4.00	92T7716	0.57
● S7051-42R	4.0mm High Clip	7.00	2.50	4.00	92T7717	0.46
● S7061-42R	4.0mm High Clip	7.00	2.50	4.00	92T7718	0.49
● S7071-46R	4.0mm High Clip	7.00	2.50	4.00	92T7719	0.42
● S7081-42R	4.0mm High Clip	7.00	2.50	4.00	92T7720	0.42
● S7091-42R	4.0mm High Clip	7.00	2.50	4.00	92T7721	0.44
● S7101-42R	4.0mm High Clip	7.00	2.50	4.00	92T7722	0.57
● S7111-42R	4.0mm High Clip	7.00	2.50	4.00	92T7723	0.54
● S7121-42R	4.0mm High Clip	7.00	2.50	4.00	92T7724	0.38
GROUNDING / RFI CONTACTS						
'S' shaped contact for multi directional contact points. Spring loaded contacts maintain a positive force and stable electrical contact. Small PCB footprint.						
● S9001-46R	4.85mm High Clip	2.85	2.85	4.85	67W2332	0.62

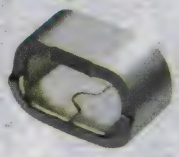
(78803)

SURFACE MOUNT TEST CLIP

RoHS Compliant Available

HARWIN

EZ BoardWare



- Base Material: Brass
- Finish: Tin Lead

SMT jumper points for test and system analysis. Tape & reel for automatic placement available, *go online or call.*

Mfg. Part No.	Length (mm)	Width (mm)	Height (mm)	Stock No.	Price Each 1-9
● S1751-46R	3.25	1.65	2.00	75R5336	0.54

(78832)

SURFACE MOUNT JUMPER LINKS

RoHS Compliant Available

HARWIN

EZ BoardWare

- Designed to link PCB tracks where through hole links are not possible
- Typical applications include use on aluminium backplanes in power applications
- High current
- Small footprint
- Base Material: S1621: Copper Alloy; S1731: Copper Alloy
- Finish: Tin

S1621

S1731

SMT jumper points for test and system analysis allow for linking between tracks and bridging over other tracks. SMT Jumper Links can simplify board layout and may eliminate unnecessary through holes and even a PCB layer

SURFACE MOUNT JUMPER LINKS - TIN - TAPE & REEL, SOLD INDIVIDUALLY

Mfg. Part No.	Length (mm)	Width (mm)	Height (mm)	Stock No.	Price Each 1-9
● S1621-46R	12.30	2.30	1.80	75R5334	0.43
● S1731-46R	6.86	2.54	2.54	75R5335	0.46

(78827)

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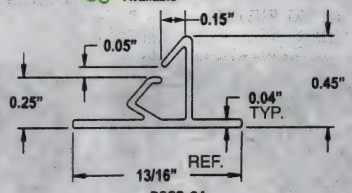
(196545)

PC BOARD MOUNTING STRIPS

RoHS Compliant Available

pro-POWER

Horizontal mount for PC boards of any length or width. One-piece PVC construction. Color: black. **Sold in packages of ten 2' lengths.**



PGCS-24

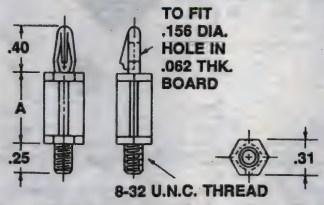
Mfg. Part No.	Base Width	Stock No.	Price Per Package 1-4	Price Per Package 5-9
● PGCS-24	0.813" (20.65)	81N1700	82.30	68.27

(9218)

STUDDED PC BOARD SUPPORTS

RoHS Compliant Available

multicomp



Studded supports for screw fastening. Reusable 1-piece PC board support with a #8-32 thread for speedy installation. Material: nylon. Color: natural. Require no tools. *Order* **Mfg. Part No. NH-0832-007-SN** *mounting nut separately online or call.* **Sold in packages of 100.**

Mfg. Part No.	Dimension A	Stock No.	Price Each 1-4	Price Each 5-9
● TPCS-4	0.25" (6.35)	81N1671	40.11	33.92
● TPCS-8	0.50" (12.70)	81N1673	40.23	34.01
● TPCS-10	0.62" (15.88)	81N1674	43.25	36.55
● 2624	0.75" (19.05)	92N4839	48.30	40.83
● 2625	0.87" (22.23)	92N4840	50.95	43.07
● 2626	1.00" (25.40)	92N4841	55.60	47.00

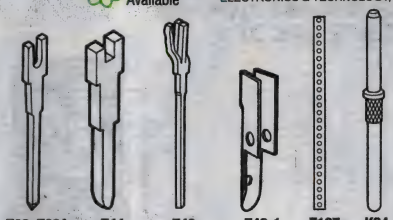
(9429)

CIRCUIT BOARD ACCESSORIES

RoHS Compliant Available

VECTOR ELECTRONICS & TECHNOLOGY, INC

- Wiring Terminals for Wire Wrap, Solder, Socket Pin or Hybrid Connection Methods
- All Wire Wrap Pins Use Standard 0.025" Square Posts
- Wire Wrap Socket Pins Accept Up to 24AWG or 0.022" Diameter Wire
- Versatile Pins for Hybrid Wire Wrap and Solder or Crimped Connections
- Pins Allow Discrete Component Mounting on Two Sides of Vectorbord®
- Phosphor Bronze; Tin Plated, Unless Otherwise Stated



T68, T68A T44 T49 T42-1 T107 K24

Terminals and pins sold in packages of 100 and 1000.

INBOARD SOLDER POINT PINS

Description	Length (in.)	Package of 100 Mfg. Part No.	Package of 100 Stock No.	Package of 100 Price Each	Package of 1000 Mfg. Part No.	Package of 1000 Stock No.	Package of 1000 Price Each 1-9
Gold Plated Pins For 0.042" Dia. Hole	0.65	...	...	...	● K24A/M	38F1087	123.66
Pins For 0.042" Dia. Hole	0.65	...	...	...	● K24C/M	38F401	75.55
Pins For 0.042" Dia. Hole	0.55	...	...	...	● K30C/M	77B5524	66.83
Pins For 0.042" Dia. Hole	0.375	...	...	...	● K31C/M	77B5526	49.08
PUSH-IN WIRE WRAP TERMINALS AND J-PINS							
Terminals For 0.042" Dia. Hole	0.17	● T42-1/C	38F1363	11.90	● T42-1/M	38F1328	66.31

➤CONTINUED➤

CIRCUIT BOARD ACCESSORIES (CONT.)

WIRE WRAP POST WITH BIFFURCATED SOLDER TERMINAL

Desc-ription	Length (in.)	Package of 100 Mfg. Part No.	Package of 100 Stock No.	Package of 100 Price Each	Package of 1000 Mfg. Part No.	Package of 1000 Stock No.	Package of 1000 Price Each 1-9
WW Post w/ Solder Terminal	0.69	● T44/C	38F1364	13.05	● T44/M	38F1329	62.52
Gold WW Post w/ Solder Terminal	0.69	● T44-1/C	34F1219	16.21	...	...	...
WW Post w/ Solder Terminal	0.8	● T68/C	34F1215	11.06	● T68/M	34F1216	66.76
Gold WW Post w/ Solder Terminal	0.63	...	...	...	● T68A/M	34F1218	120.43
WIRE WRAP POST WITH TRIFURCATED SOLDER TERMINAL							
WW Post w/ Solder Terminal	0.73	● T49/C	38F1330	16.60	● T49/M	38F1331	144.98

ADDITIONAL PCB ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● T107/C	Bus Strips w/ 0.042" Holes on 0.1" Center, Pkg. of 100	50F2551	109.54
● T107/10	Bus Strips w/ 0.042" Holes on 0.1" Center, Pkg. of 10	90H9856	11.55

INSERTION TOOLS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● A13-1	Hand Insertion Tool for Series T44, T68	34F1212	39.02
● P149A	Hand Insertion Tool for Series T42	38F1339	45.35
● P156	Hand Insertion Tool for Series T49	38F1340	106.90
● P133A	Hand Insertion Tool for Series K24, K30, K31, K36, T46	38F1342	99.81
● P91A	Hand Insertion Tool for Series T28	38F1338	114.68
● D7-2	Die Set for K24, K26, K30, K31, T46-2, T46-5 Series	38F407	101.86

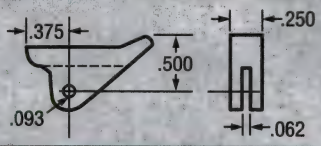
(8949)

ROTATION-TYPE EJECTOR HANDLES

RoHS Compliant Available

VECTOR ELECTRONICS & TECHNOLOGY, INC

- Card Ejector, Corner Mounting
- Supports Up to 40 Lbs. Extraction Force
- White Nylon
- Hardware Included



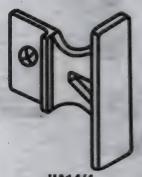
Mfg. Part No.	Quantity per Pkg.	Stock No.	Price Each 1-9
● HA9/4	4	77B5478	11.10
● HA9/C	100	89F660	123.57

(74259)

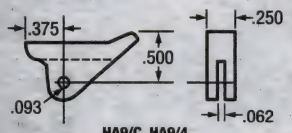
CARD RACK ACCESSORIES (EIA)

RoHS Compliant Available

VECTOR ELECTRONICS & TECHNOLOGY, INC



HA14/4



HA9/C, HA9/4

EIA RACK ACCESSORIES

Mfg. Part No.	Description	Qty	Stock No.	Price Each 1-9
● SC4-27/25	4-40 x 1/4"L Screw .200"Dia. Head	25	77B5666	6.48
● NT4-7PA	4-40 Nut with .180" Sq Head for T-STRUT	25	89F661	7.76
● HA9/4	Front Mounted Rotation-Type Card Ejector Handle	4	77B5478	11.10
● HA9/C	Front Mounted Rotation-Type Card Ejector Handle	100	89F660	123.57
● BR16A	Bracket Kit Includes Right/Left Brackets and Hardware	1	92B3147	14.88
● TS169	T-Strut Aluminum Mounting Rail, 1"(W) x 16.850"(L)	1	81F9332	9.65
● TS169-6/90	T-Strut Aluminum Mounting Rail w/Depressions for Snap-In Guides	1	92F7653	20.20

(78004)

CHIP QUIK® SMD REMOVAL KIT AND ACCESSORIES

RoHS Compliant Available

ET Emulation Technology, Inc.

Vacuum Pen

Alloy

Mfg. Part No. CQ123E Chip Quik® SMD removal kit is designed to assist engineers in removing surface mount devices without expensive rework equipment. Removes QFPs, PLCCs, SOICs, and other SMD chip components. Prevents damage to PC boards. Complete removal in 4 easy steps. Includes low-residue flux and desolder/alloy. **Mfg. Part No. CQ291E** no-clean flux syringe, and **Mfg. Part No. P/N-100** vacuum pen with 3 different tip sizes make removing soldered down ICs safe and easy; *order separately below.*

Mfg. Part No.	Description	Stock No.	Price Each 1-4
CQ123E	SMD Removal Kit	18C0786	33.70
CQ08E	4' Alloy, 6.5" Lengths	18C0785	75.56
CQ291E	No-Clean Flux Syringe, 10cc	18C0788	32.75
● P/N-100	Vacuum Pen with 3 Tips	18C0821	135.64

(65283)

PLCC, DIP AND SOIC TEST CLIPS

3M

Fig. 1

Fig. 2

ALLOY DIP TEST CLIPS—FIG. 1

Nail-Head Leads Stock No.	Nail-Head Leads Mfg. Part No.	Headless Leads Stock No.	Headless Leads Mfg. Part No.	Pins	Row to Row Dim.	Price Each 1-9
65F126	923695	65F2301	923690-08	8	0.3"	22.14
65F127	923698	65F2302	923690-14	14	0.3"	23.07
65F128	923700	65F2303	923690-16	16	0.3"	23.25
65F131	923704	65F2306	923690-20	20	0.3"	33.24
...	...	95F7324	923689-24	24	0.3"	43.31
65F133	923714	65F2308	923690-24	24	0.6"	40.86
65F136	923722	65F2311	923690-40	40	0.6"	57.07
GOLD-PLATED DIP TEST CLIPS—FIG. 2						
46F2122	923743-14	46F2125	923743-14	14	0.3"	26.18

SOIC TEST CLIPS—FIG. 2

Small outline integrated circuit (SOIC) test clips are designed for smaller components and higher densities. Industry standard 0.025" (0.635) square contact pins on 0.050" (12.7) centers. Centers are staggered to allow easy attachment of female socket connectors or wire wrapping and help prevent shorting of adjacent probes. Stacking of SOIC's as close as 0.050" (12.7) end-to-end. Available in alloy or gold plating.

ALLOY 764 SOIC TEST CLIPS

Mfg. Part No.	Description	Stock No.	Price 1-9
923660-16	16-Pin Wide Grip 0.440"W (11.18)	46F2108	24.67
923660-20	20-Pin Wide Grip 0.540"W (13.72)	46F2114	28.60
923660-24	24-Pin Wide Grip 0.640"W (16.26)	46F2115	30.68
GOLD-PLATED SOIC TEST CLIPS			
923665-16	16-Pin Wide Grip 0.440"W (11.18)	46F2117	30.26
923665-28	28-Pin Wide Grip 0.720"W (18.29)	46F2121	37.05

(3805)

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(196560)

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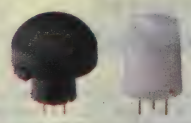

(((PaPIRs)))

- 1µA low current consumption
- Simplified circuitry with fully integrated sensor design
- Lead-free pyroelectric elements
- Low curvature lens for product designs
- Robust design prevents false detection

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- Inductors
- Sensors
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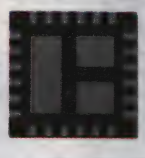
New! **NN30 Series**
Synchronous DC/DC Step-Down Regulator

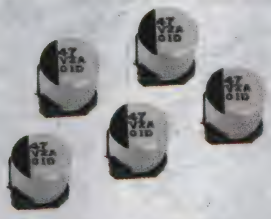


Panasonic's New NN30 Series integrates power MOSFETs that employ a hysteretic control system. This provides a high-speed response that minimizes output voltage fluctuations in the presence of load current spikes. Panasonic's NN30 Series has a user adjustable output voltage and a maximum current of 10A.

Circuit Protection!
ERZ-E Series ZNRs (MOV)
Zinc-oxide Non-linear Resistor

Outstanding performance now one diameter size smaller! Panasonic introduces the New ERZ-E Series Radial Lead Disc ZNR Transient / Surge Absorbers (MOV). The ERZ-E Series offers a finer, more uniform grain structure which facilitates enhanced performance while allowing for size reduction. Available in 5mm, 7mm, 8mm, 11mm and 14mm sizes!

Hybrid Capacitors!
EEH-ZA & EEH-ZC Series



Panasonic's New Hybrid design Surface Mount Aluminum Electrolytic Capacitors introduce a new technology that combines the benefits of both electrolytic and polymer products producing a capacitor with low ESR, low leakage current, high ripple current and smaller case sizes.

Passive Components

CAPACITORS

AC Capacitors 500-503
Aluminum Electrolytic Capacitors 456-499
Capacitor Kits 434
Capacitors 431
Ceramic Capacitors 398-433
Film Capacitors 503-519
Hardware 499-500
Mica Capacitors 519-520
RF Capacitors 433
Tantalum Capacitors 434-455
Ultra High Capacitance 456
Variable Capacitors 520-521

RESISTORS, THERMISTORS & POTENTIOMETERS

Carbon Film Resistors 597-599
Current Sense Resistors – Axial Terminal 561-562
Current Sense Resistors – SMD 556-560
Current Sense Resistors – Thick Film 561
Dials 649-650
Encoders 653
Foil Precision Resistors 528
High Voltage Resistors – Axial Terminal 562-565
High Voltage Resistors – Radial 565
High Voltage Resistors – SMD 556
Inrush Limiters 621
Metal Film Resistors 599-616
Multi-Turn Trimmers 627-636
NTC Thermistors 622-624
Potentiometers 637-649
Resistor Arrays 620
Resistor Kits 618
Resistor Networks 618-620
RF Resistors 528
Rheostats 650-652
Single Turn Trimmers 624-627
Surge Resistors – Axial Terminal 566-568
Surge Resistors – Radial Terminal 565
Thick Film Resistors – Heat Sinkable 570-573
Thick Film Resistors – SMD 529-551
Thin Film Resistors – SMD 522-527
Trimmer Adjustment Tools 637
Wirewound Resistors – Axial Terminal 579-590
Wirewound Resistors – Chassis Mount 574-579
Wirewound Resistors – High Power 590-597
Wirewound Resistors – SMD 554-555

INDUCTORS, COILS, FILTERS & FERRITES

Chokes – Axial Terminal 686-688
Chokes – Radial Terminal 684-686
Ferrite Bead Inductors – Axial 690
Ferrite Bead Inductors – SMD 688-690
Ferrite Cable Cores/Sleeves 690-692
Inductor/Ferrite Kits 693
Inductors – Axial Terminal 681-682
Inductors – Radial Terminal 682-684
Inductors – SMD 654-661
PCB Mount Antennas 695
PCB Mount Filters 693-695
Power Inductors – SMD 662-677
Power Inductors – Toroidal 677-681
Shielding Fabrics/Gaskets 692

CRYSTALS, OSCILLATORS & RESONATORS

Crystals – Ceramic SMD 699-701
Crystals – Microprocessor Radial Terminal 703
Crystals – Microprocessor SMD 701-703
Crystals – Plastic SMD 701
Crystals – Radial Terminal 704-705
Crystals – SMD 696-698
Crystals – Tuning Fork SMD 699
Crystals – Ceramic SMD 699
Oscillators – Clock Radial 712
Oscillators – Clock SMD 710-712
Oscillators – Programmable 712-713
Oscillators – SMD 705-709
Resonators – Radial Terminal 713
Resonators – SMD 713

ONBOARD AUDIBLES, MICROPHONES & SPEAKERS

Audible Signals 714-717
Microphones & Speakers 714

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FULL REEL PASSIVES — CAPACITORS & RESISTORS

MANUFACTURER	TECHNOLOGY	RANGES
AVX	Tantalum Capacitors	Standard and Low ESR Tantalum Capacitors in case sizes A–E
	Ceramic Capacitors	Standard MLCCs and Hi-CV products in case sizes 0201–1210
BOURNS®	Chip SMD Resistors, Potentiometers, Fuses	CR, CRF, CRM and CRT Series, SMD Trimmer Potentiometers, SMD and PTC Resettable Fuses
EPCOS	Film Capacitors	NEW A range of best selling boxed Film Capacitors
FAIRCHILD.	Diodes, Rectifiers, Transistors and Optocouplers	A larger range of top selling parts on Full Reels
KEMET	Tantalum Capacitors	NEW Standard SMD Tantalum Capacitors available in case sizes A–D
	Ceramic Capacitors	Standard MLCCs products in case sizes 0201–1210 available
multicomp	Ceramic Capacitors	Standard MLCCs products in case sizes 0201–1210
	Thick Film Capacitors	Thick Film Resistors Full range (E96) of 0201, 0402, 0603, 0805, 1206 at competitive prices
	Diodes and Rectifiers	A larger range of top selling parts on Full Reels
NXP	Diodes, Rectifiers and Transistors	A larger range of top selling parts on Full Reels
ON Semiconductor®	Diodes, Rectifiers and Transistors	A larger range of top selling parts on Full Reels
Panasonic	Thick Film Resistors	NEW Thick Film Resistors Full range (E96) of 0201, 0402, 0603, 0805, 1206
	Electrolytic Capacitors	FC, FK, ZA and ZC Series of E-caps
ST.	Diodes, Rectifiers and Transistors	A larger range of top selling parts on Full Reels
VISHAY.	Thick Film Resistors	NEW Thick Film Resistors Full range (E96) of 0201, 0402, 0603, 0805, 1206
	Diodes, Rectifiers and Transistors	A larger range of top selling parts on Full Reels

FULL REEL PASSIVES & SEMIs

	ARRAYS RESISTORS	ALUMINUM CAPACITORS	CARBON RESISTORS	CERAMIC CAPACITORS	CHIP SMD RESISTORS	CURRENT SENSING RESISTORS	FILM CAPACITORS	METAL FILM RESISTORS	MICA CAPACITORS	NETWORK RESISTORS	POTENTIOMETERS/ TRIMMERS	POLYMER CAPACITORS	TANTALUM CAPACITORS	THERMISTORS	SUPERCAPS/ ULTRACAPS	VARIABLE CAPACITORS	VARIABLE RESISTORS	WIREWOUND RESISTORS
AVX	•	•		•			•					•	•		•	•		
BOURNS	•				•	•		•		•	•						•	
CADDOCK HIGH PERFORMANCE FILM RESISTORS					•			•										
CLAROSTAT											•						•	•
CDE CORNELL DUBILIER		•		•			•		•			•	•		•			
EPCOS		•		•			•							•				
ETI SYSTEMS											•						•	
GE							•											
genteq							•											
ICL ILLINOIS CAPACITOR, INC.		•		•			•					•			•			
Johanson											•					•		
KEMET		•		•			•					•	•					
measurement SPECIALTIES														•				
multicomp		•	•	•	•		•	•			•		•					•
nichicon		•										•	•					
OHMITE			•		•	•		•			•						•	•
Panasonic		•			•		•			•		•			•			
Rubycon		•																
TAIYO YUDEN				•											•			
TE connectivity Authorized Distributor			•		•			•			•							•
TT electronics					•	•		•		•	•						•	•
UNITED CHEMI-CON		•		•				•				•						
VISHAY		•		•	•	•	•				•		•	•	•		•	•

FULL REEL PASSIVES — MAGNETICS

	MAGNETICS				TIMING DEVICES & FREQUENCY CONTROL			AUDIO & SIGNAL COMPONENTS	
	COILS & CHOKES	FERRITE BEADS	FILTERS	INDUCTORS	CRYSTALS	OSCILLATORS	RESONATORS	AUDIBLE SIGNALS	MICROPHONES & SPEAKERS
ABRACON CORPORATION					•	•	•		
BOURNS®	•		•	•					
CITIZEN					•	•			
COILTRONICS®				•					
Fair-Rite Products Corp.		•							
FOX					•	•			
MALLORY Sonalert® Products								•	
multicomp	•	•		•	•			•	•
OHMITE	•								
Panasonic	•	•		•					
TAIYO YUDEN			•	•					
EPCOS		•	•	•					
TE Authorized Distributor			•	•					
TT electronics				•					
TXC					•	•			
VISHAY				•	•	•			
WÜRTH ELEKTRONIK		•	•	•					

CERAMIC CAPACITORS

MULTILAYER CERAMIC CAPACITORS - 0.5pF TO 82,000pF

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Features
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- Suitable for High Density PC Board Applications
- Full Reel Quantities Available. Go online or call.

2

0201 CASE SIZE, VOLTAGE: 10V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 0201ZD103KAT2A	10 000	± 10%	X5R	23K8180	0.18	0.14
● 0201ZC103KAT2A	10 000	± 10%	X7R	10R5904	0.24	0.22
0201 CASE SIZE, VOLTAGE: 16V						
● 0201YC101KAT2A	100	± 10%	X7R	23K8175	0.25	0.22
● 0201YC271KAT2A	270	± 10%	X7R	96M1103	0.25	0.22
● 0201YC471KAT2A	470	± 10%	X7R	96M1104	0.25	0.22
0201 CASE SIZE, VOLTAGE: 25V						
● 02013A1R0CAT2A	1	± 0.25pF	C0G / NP0	10R5906	0.25	0.22
● 02013A4R7CAT2A	4.7	± 0.25pF	C0G / NP0	23K8192	0.25	0.22
● 02013A100JAT2A	10	± 5%	C0G / NP0	23K8184	0.28	0.24
● 02013A220JAT2A	22	± 5%	C0G / NP0	10R5907	0.28	0.24
0402 CASE SIZE, VOLTAGE: 10V						
● 0402ZC103KAT2A	10 000	± 10%	X7R	94W2829	0.20	0.14
● 0402ZC273KAT2A	27 000	± 10%	X7R	10R5910	0.32	0.28
● 0402ZC333KAT2A	33 000	± 10%	X7R	96M1116	0.41	0.36
● 0402ZC393KAT2A	39 000	± 10%	X7R	07J1956	0.41	0.36
0402 CASE SIZE, VOLTAGE: 16V						
● 0402YC101KAT2A	100	± 10%	X7R	94W2827	0.29	0.24
● 0402YC102JAT2A	1000	± 5%	X7R	94W2828	0.37	0.31
● 0402YC103JAT2A	10 000	± 5%	X7R	96M1108	0.24	0.22
● 0402YC103MAT2A	10 000	± 20%	X7R	96M1109	0.27	0.23
● 0402YC153KAT2A	15 000	± 10%	X7R	10R5908	0.26	0.23
● 0402YC183KAT2A	18 000	± 10%	X7R	96M1110	0.26	0.23
● 0402YC223JAT2A	22 000	± 5%	X7R	96M1111	0.37	0.31
● 0402YC223KAT2A	22 000	± 10%	X7R	96M1112	0.17	0.16
0402 CASE SIZE, VOLTAGE: 25V						
● 04023A100JAT2A	10	± 5%	C0G / NP0	94W2831	0.29	0.24
● 04023A220JAT2A	22	± 5%	C0G / NP0	94W2833	0.29	0.24
● 04023A330JAT2A	33	± 5%	C0G / NP0	94W2834	0.29	0.24
● 04023A101KAT2A	100	± 10%	C0G / NP0	94W2832	0.29	0.24
● 04023C101KAT2A	100	± 10%	X7R	94W2835	0.29	0.24
● 04023C102KAT2A	1000	± 10%	X7R	94W2836	0.29	0.24
● 04023C222KAT2A	2200	± 10%	X7R	94W2837	0.29	0.24
● 04023C103KAT2A	10 000	± 10%	X7R	96M1118	0.20	0.18
0402 CASE SIZE, VOLTAGE: 50V						
● 04025A0R5CAT2A	0.5	± 0.25pF	C0G / NP0	96M1121	0.29	0.24
● 04025A1R0CAT2A	1	± 0.25pF	C0G / NP0	96M1123	0.29	0.24
● 04025A1R5CAT2A	1.5	± 0.25pF	C0G / NP0	96M1125	0.29	0.24
● 04025A2R2CAT2A	2.2	± 0.25pF	C0G / NP0	96M1139	0.29	0.24
● 04025A2R7CAT2A	2.7	± 0.25pF	C0G / NP0	96M1140	0.29	0.24
● 04025A4R7CAT2A	4.7	± 0.25pF	C0G / NP0	96M1152	0.29	0.24
● 04025A4R7JAT2A	4.7	± 5%	C0G / NP0	94W2842	0.32	0.27
● 04025A5R6CAT2A	5.6	± 0.25pF	C0G / NP0	96M1154	0.29	0.24
● 04025A6R8CAT2A	6.8	± 0.25pF	C0G / NP0	96M1156	0.29	0.24
● 04025A8R2CAT2A	8.2	± 0.25pF	C0G / NP0	96M1158	0.29	0.24
● 04025A100CAT2A	10	± 0.25pF	C0G / NP0	96M1127	0.29	0.24
● 04025A100FAT2A	10	± 1%	C0G / NP0	94W2838	0.53	0.49
● 04025A100JAT2A	10	± 5%	C0G / NP0	96M1128	0.11	0.10
● 04025A100KAT2A	10	± 10%	C0G / NP0	94W2839	0.29	0.24
● 04025A120JAT2A	12	± 5%	C0G / NP0	96M1132	0.11	0.10
● 04025A150JAT2A	15	± 5%	C0G / NP0	96M1134	0.11	0.10
● 04025A180JAT2A	18	± 5%	C0G / NP0	96M1137	0.11	0.10
● 04025A200JAT2A	20	± 5%	C0G / NP0	96M1141	0.22	0.20
● 04025A220FAT2A	22	± 1%	C0G / NP0	94W2840	0.50	0.46
● 04025A220JAT2A	22	± 5%	C0G / NP0	96M1143	0.16	0.15
● 04025A220KAT2A	22	± 10%	C0G / NP0	96M1144	0.29	0.24
● 04025A270FAT2A	27	± 1%	C0G / NP0	94W2841	0.28	0.24
● 04025A270JAT2A	27	± 5%	C0G / NP0	96M1146	0.11	0.10
● 04025A330JAT2A	33	± 5%	C0G / NP0	96M1150	0.11	0.10
● 04025A390JAT2A	39	± 5%	C0G / NP0	96M1151	0.29	0.24
● 04025A470JAT2A	47	± 5%	C0G / NP0	96M1153	0.11	0.10
● 04025A560JAT2A	56	± 5%	C0G / NP0	96M1155	0.11	0.10
● 04025A680JAT2A	68	± 5%	C0G / NP0	96M1157	0.11	0.10

➤CONTINUED➤

MULTILAYER CERAMIC CAPACITORS - 0.5pF TO 82,000pF (CONT.)

0402 CASE SIZE, VOLTAGE: 50V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 04025A101FAT2A	100	± 1%	C0G / NP0	96M1129	0.50	0.46
● 04025A101JAT2A	100	± 5%	C0G / NP0	96M1130	0.03	0.02
● 04025A101KAT2A	100	± 10%	C0G / NP0	96M1131	0.11	0.10
● 04025C101KAT2A	100	± 10%	X7R	94W2843	0.29	0.24
● 04025C121KAT2A	120	± 10%	X7R	94W2845	0.29	0.24
● 04025A151JAT2A	150	± 5%	C0G / NP0	96M1135	0.22	0.20
● 04025A151KAT2A	150	± 10%	C0G / NP0	96M1136	0.32	0.28
● 04025C151KAT2A	150	± 10%	X7R	94W2846	0.29	0.24
● 04025A221JAT2A	220	± 5%	C0G / NP0	96M1145	0.29	0.24
● 04025C821KAT2A	820	± 10%	X7R	95W2723	0.05	0.05
● 04025C103KAT2A	1000	± 10%	X7R	94W2844	0.29	0.24
● 04025G103ZAT2A	1000	+80%, -20%	Y5V	94W2847	0.32	0.28
● 04025C272KAT2A	2700	± 10%	X7R	95W2721	0.05	0.05
● 04025C102MAT2A	1000	± 20%	X7R	10R5924	0.27	0.23
0603 CASE SIZE, VOLTAGE: 16V						
● 0603YC101KAT2A	100	± 10%	X7R	94W2848	0.27	0.18
● 0603YC102KAT2A	1000	± 10%	X7R	94W2849	0.27	0.18
● 0603YC222KAT2A	2200	± 10%	X7R	94W2851	0.27	0.18
● 0603YC103JAT2A	10 000	± 5%	X7R	94W2850	0.39	0.25
● 0603YC223KAT2A	22 000	± 10%	X7R	94W2852	0.37	0.24
● 0603YC333KAT2A	33 000	± 10%	X7R	94W2853	0.37	0.24
● 0603YC473KAT2A	47 000	± 10%	X7R	94W2854	0.27	0.17
● 0603YC563KAT2A	56 000	± 10%	X7R	96M1179	0.44	0.29
● 0603YC683KAT2A	68 000	± 10%	X7R	96M1180	0.52	0.33
● 0603YC823KAT2A	82 000	± 10%	X7R	96M1181	0.52	0.33
0603 CASE SIZE, VOLTAGE: 25V						
● 06033A220JAT2A	22	± 5%	C0G / NP0	94W2864	0.27	0.18
● 06033A101JAT2A	100	± 5%	C0G / NP0	94W2861	0.27	0.18
● 06033A101KAT2A	100	± 10%	C0G / NP0	94W2862	0.26	0.17
● 06033C101KAT2A	100	± 10%	X7R	94W2866	0.27	0.18
● 06033A471JAT2A	470	± 5%	C0G / NP0	94W2865	0.30	0.20
● 06033A102FAT2A	1000	± 1%	C0G / NP0	94W2863	0.61	0.58
● 06033C102KAT2A	1000	± 10%	X7R	94W2867	0.25	0.21
● 06033C473JAT2A	47 000	± 5%	X7R	96M1264	0.28	0.19
● 06033C473KAT2A	47 000	± 10%	X7R	96K4761	0.27	0.17
● 06033D104KAT2A	100 000	± 10%	X5R	94W2868	0.52	0.33
0603 CASE SIZE, VOLTAGE: 50V						
● 06035A0R5CAT2A	0.5	± 0.25pF	C0G / NP0	94W2869	0.29	0.19
● 06035A1R0CAT2A	1	± 0.25pF	C0G / NP0	94W2870	0.29	0.19
● 06035A1R2CAT2A	1.2	± 0.25pF	C0G / NP0	17C6472	0.29	0.19
● 06035A1R5CAT2A	1.5	± 0.25pF	C0G / NP0	09J2468	0.29	0.19
● 06035A1R8CAT2A	1.8	± 0.25pF	C0G / NP0	94W2871	0.17	0.12
● 06035A2R2CAT2A	2.2	± 0.25pF	C0G / NP0	94W2875	0.17	0.12
● 06035A2R7CAT2A	2.7	± 0.25pF	C0G / NP0	17C6484	0.29	0.19
● 06035A3R9CAT2A	3.9	± 0.25pF	C0G / NP0	94W2878	0.29	0.19
● 06035A5R6CAT2A	5.6	± 0.25pF	C0G / NP0	94W2882	0.29	0.19
● 06035A6R8CAT2A	6.8	± 0.25pF	C0G / NP0	94W2884	0.29	0.19
● 06035A8R2CAT2A	8.2	± 0.25pF	C0G / NP0	94W2885	0.29	0.19
● 06035A100DAT2A	10	± 0.5pF	C0G / NP0	94W2872	0.17	0.12
● 06035A100JAT2A	10	± 5%	C0G / NP0	17C6435	0.10	0.07
● 06035A100KAT2A	10	± 10%	C0G / NP0	94W2873	0.26	0.17
● 06035C100KAT2A	10	± 10%	X7R	94W2886	0.26	0.17
● 06035A120JAT2A	12	± 5%	C0G / NP0	17C6467	0.10	0.07
● 06035A150JAT2A	15	± 5%	C0G / NP0	17C6475	0.10	0.07
● 06035A180JAT2A	18	± 5%	C0G / NP0	17C6481	0.10	0.07
● 06035A220FAT2A	22	± 1%	C0G / NP0	94W2876	0.44	0.39
● 06035A220JAT2A	22	± 5%	C0G / NP0	19C6320	0.10	0.07
● 06035C220JAT2A	22	± 5%	X7R	94W2894	0.27	0.18
● 06035A220KAT2A	22	± 10%	C0G / NP0	94W2877	0.26	0.17
● 06035A330KAT2A	33	± 10%	C0G / NP0	94W2879	0.26	0.17
● 06035A330JAT2A	33	± 5%	C0G / NP0	35K5089	0.10	0.07
● 06035A390JAT2A	39	± 5%	C0G / NP0	22C1031	0.10	0.07
● 06035A470FAT2A	47	± 1%	C0G / NP0	94W2880	0.41	0.37
● 06035A470KAT2A	47	± 10%	C0G / NP0	94W2881	0.26	0.17
● 06035A500JAT2A	50	± 5%	C0G / NP0	94W2883	0.27	0.18
● 06035A101JAT2A	100	± 5%	C0G / NP0	96K4763	0.12	0.08
● 06035C101JAT2A	100	± 5%	X7R	94W2887	0.39	0.25
● 06035C101KAT2A	100	± 10%	X7R	94W2888	0.27	0.18
● 06035A101KAT2A	100	± 10%	C0G / NP0	96M1268	0.17	0.12
● 06035A151FAT2A	150	± 1%	C0G / NP0	94W2874	0.41	0.37
● 06035A181JAT2A	180	± 5%	C0G / NP0	96M1273	0.13	0.09
● 06035C181KAT2A	180	± 10%	X7R	94W2892	0.27	0.18

➤CONTINUED➤

MULTILAYER CERAMIC CAPACITORS - 0.5pF TO 82,000pF (CONT.)

0603 CASE SIZE, VOLTAGE: 50V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
06035A221FAT2A	220	± 1%	C0G / NP0	96M1274	0.57	0.51
06035A271JAT2A	270	± 5%	C0G / NP0	96M1275	0.17	0.11
06035C271KAT2A	270	± 10%	X7R	94W2895	0.27	0.18
06035A331JAT2A	330	± 5%	C0G / NP0	96M1276	0.17	0.11
06035C331KAT2A	330	± 10%	X7R	94W2897	0.27	0.18
06035A471FAT2A	470	± 1%	C0G / NP0	96M1278	0.94	0.79
06035A471JAT2A	470	± 5%	C0G / NP0	96M1279	0.17	0.11
06035A471J4T2A	470	± 5%	C0G / NP0	10R5935	0.40	0.26
06035A471KAT2A	470	± 10%	C0G / NP0	96M1280	0.39	0.25
06035A561JAT2A	560	± 5%	C0G / NP0	96M1281	0.17	0.11
06035C561KAT2A	560	± 10%	X7R	94W2901	0.27	0.18
06035A681JAT2A	680	± 5%	C0G / NP0	96M1282	0.17	0.11
06035C681KAT2A	680	± 10%	X7R	94W2903	0.27	0.18
06035C821KAT2A	820	± 10%	X7R	94W2906	0.27	0.18
06035A102FAT2A	1000	± 1%	C0G / NP0	96M1269	0.94	0.79
06035A102JAT2A	1000	± 5%	C0G / NP0	96M1270	0.17	0.11
06035C102JAT2A	1000	± 5%	X7R	96M1283	0.10	0.07
06035A102KAT2A	1000	± 10%	C0G / NP0	96M1271	0.46	0.30
06035C102KAT2A	1000	± 10%	X7R	09J2480	0.11	0.04
06035C102KAT4A	1000	± 10%	X7R	94W2889	0.46	0.39
06035C182KAT2A	1800	± 10%	X7R	94W2893	0.27	0.18
06035C272KAT2A	2700	± 10%	X7R	94W2896	0.27	0.18
06035C332JAT2A	3300	± 5%	X7R	94W2898	0.39	0.25
06035C392KAT2A	3900	± 10%	X7R	94W2899	0.17	0.12
06035C472JAT2A	4700	± 5%	X7R	94W2900	0.29	0.24
06035C562KAT2A	5600	± 10%	X7R	94W2902	0.27	0.18
06035C682JAT2A	6800	± 5%	X7R	94W2904	0.39	0.25
06035C682KAT2A	6800	± 10%	X7R	94W2905	0.27	0.18
06035C822KAT2A	8200	± 10%	X7R	94W2907	0.27	0.18
06035C103JAT2A	10 000	± 5%	X7R	96M1284	0.12	0.09
06035C103K4T2A	10 000	± 10%	X7R	94W2890	0.42	0.27
06035G103ZAT2A	10 000	+80%, -20%	Y5V	96M1292	0.17	0.12
06035C123KAT2A	12 000	± 10%	X7R	94W2891	0.37	0.24
06035C153JAT2A	15 000	± 5%	X7R	96M1286	0.29	0.20
06035C153KAT2A	15 000	± 10%	X7R	96M1287	0.12	0.08
06035C223JAT2A	22 000	± 5%	X7R	96M1288	0.50	0.32
06035C223KAT2A	22 000	± 10%	X7R	96K4764	0.11	0.08
06035C333JAT2A	33 000	± 5%	X7R	96M1290	0.28	0.19
06035C333KAT2A	33 000	± 10%	X7R	96M1291	0.12	0.09
06035C473KAT2A	47 000	± 10%	X7R	10R5941	0.29	0.20

0603 CASE SIZE, VOLTAGE: 100V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
06031A0R5CAT2A	0.5	± 0.25pF	C0G / NP0	96M1191	0.29	0.19
06031A1R0BAT2A	1	± 0.1pF	C0G / NP0	96M1192	0.61	0.58
06031A1R2CAT2A	1.2	± 0.25pF	C0G / NP0	96M1194	0.29	0.19
06031A1R5CAT2A	1.5	± 0.25pF	C0G / NP0	96M1195	0.29	0.19
06031A3R0CAT2A	3	± 0.25pF	C0G / NP0	96M1217	0.29	0.19
06031A4R7CAT2A	4.7	± 0.25pF	C0G / NP0	96M1225	0.29	0.19
06031A5R6CAT2A	5.6	± 0.25pF	C0G / NP0	96M1229	0.29	0.19
06031A8R2CAT2A	8.2	± 0.25pF	C0G / NP0	96M1232	0.29	0.19
06031A100JAT2A	10	± 5%	C0G / NP0	96K4754	0.15	0.10
06031A150JAT2A	15	± 5%	C0G / NP0	96M1203	0.15	0.10
06031A220FAT2A	22	± 1%	C0G / NP0	96M1210	0.57	0.51
06031A220JAT2A	22	± 5%	C0G / NP0	96K4756	0.15	0.10
06031A220KAT2A	22	± 10%	C0G / NP0	96M1212	0.17	0.12
06031A330FAT2A	33	± 1%	C0G / NP0	96M1220	0.57	0.51
06031A330JAT2A	33	± 5%	C0G / NP0	96M1221	0.15	0.10
06031A470FAT2A	47	± 1%	C0G / NP0	96M1226	0.57	0.51
06031A470JAT2A	47	± 5%	C0G / NP0	96M1227	0.15	0.10
06031A560JAT2A	56	± 5%	C0G / NP0	96M1230	0.27	0.18
06031A680JAT2A	68	± 5%	C0G / NP0	96M1231	0.15	0.10
06031A101FAT2A	100	± 1%	C0G / NP0	96M1198	0.57	0.51
06031A101JAT2A	100	± 5%	C0G / NP0	96K4755	0.15	0.10
06031A101JA12A	100	± 5%	C0G / NP0	55J2904	3.31	2.77
06031A101KAT2A	100	± 10%	C0G / NP0	96M1199	0.17	0.12
06031C101KAT2A	100	± 10%	X7R	94W2858	0.27	0.18
06031A151JAT2A	150	± 5%	C0G / NP0	96M1205	0.30	0.20
06031A221JAT2A	220	± 5%	C0G / NP0	96M1213	0.17	0.12
06031C221KAT2A	220	± 10%	X7R	96M1244	0.27	0.18
06031A331JAT2A	330	± 5%	C0G / NP0	96M1222	0.28	0.23
06031C331KAT2A	330	± 10%	X7R	96M1247	0.13	0.09
06031C391KAT2A	390	± 10%	X7R	96M1250	0.27	0.18
06031C471JAT2A	470	± 5%	X7R	96M1252	0.29	0.20

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MULTILAYER CERAMIC CAPACITORS - 0.5pF TO 82,000pF (CONT.)

0603 CASE SIZE, VOLTAGE: 100V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
06031C471KAT2A	470	± 10%	X7R	96M1253	0.13	0.09
06031C561KAT2A	560	± 10%	X7R	96M1255	0.27	0.18
06031C102JAT2A	1000	± 5%	X7R	96M1234	0.16	0.11
06031C102KAT2A	1000	± 10%	X7R	96K4757	0.11	0.08
06031C102MAT2A	1000	± 20%	X7R	96M1235	0.26	0.17
06031C122KAT2A	1200	± 10%	X7R	96M1238	0.27	0.18
06031C152JAT2A	1500	± 5%	X7R	96M1240	0.29	0.20
06031C152KAT2A	1500	± 10%	X7R	96M1241	0.27	0.18
06031C182KAT2A	1800	± 10%	X7R	96M1242	0.27	0.18
06031C222KAT2A	2200	± 10%	X7R	96K4759	0.13	0.09
06031C272KAT2A	2700	± 10%	X7R	96M1246	0.17	0.12
06031C332JAT2A	3300	± 5%	X7R	96M1248	0.39	0.25
06031C332KAT2A	3300	± 10%	X7R	96M1249	0.17	0.12
06031C472JAT2A	4700	± 5%	X7R	96M1254	0.29	0.20
06031C562JAT2A	5600	± 5%	X7R	96M1256	0.39	0.25
06031C822KAT2A	8200	± 10%	X7R	96M1261	0.27	0.18
06031C103JAT2A	10 000	± 5%	X7R	96M1236	0.19	0.13
06031C103KAT2A	10 000	± 10%	X7R	96K4758	0.12	0.08
06031C123KAT2A	12 000	± 10%	X7R	96M1239	0.37	0.24
06035C223KAT2A	22 000	± 10%	X7R	96K4764	0.11	0.08

0603 CASE SIZE, VOLTAGE: 200V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
06032C221KAT2A	220	± 10%	X7R	94W2859	0.46	0.41
06032C471KAT2A	470	± 10%	X7R	94W2860	0.65	0.58
06032C102KAT2A	1000	± 10%	X7R	96M1262	0.24	0.16

0805 CASE SIZE, VOLTAGE: 16V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
0805YC103KAT2A	10 000	± 10%	X7R	34C6801	0.15	0.10
0805YC473KAT2A	47 000	± 10%	X7R	94W2910	0.36	0.23

0805 CASE SIZE, VOLTAGE: 25V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
08053A102KAT2A	1000	± 10%	C0G / NP0	94W2915	0.50	0.32
08053A222JAT2A	2200	± 5%	C0G / NP0	96M1378	0.33	0.21
08053A272JAT2A	2700	± 5%	C0G / NP0	96M1379	0.33	0.21
08053A472JAT2A	4700	± 5%	C0G / NP0	96M1380	0.62	0.55

0805 CASE SIZE, VOLTAGE: 50V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
08055A1R0CAT2A	1	± 0.25pF	C0G / NP0	94W2921	0.18	0.12
08055A1R8CAT2A	1.8	± 0.25pF	C0G / NP0	94W2922	0.32	0.21
08055A2R7CAT2A	2.7	± 0.25pF	C0G / NP0	94W2928	0.32	0.21
08055A3R9CAT2A	3.9	± 0.25pF	C0G / NP0	94W2931	0.32	0.21
08055A4R7CAT2A	4.7	± 0.25pF	C0G / NP0	94W2932	0.32	0.21
08055A5R6CAT2A	5.6	± 0.25pF	C0G / NP0	94W2933	0.32	0.21
08055A8R2CAT2A	8.2	± 0.25pF	C0G / NP0	94W2936	0.32	0.21
08055A100KAT2A	10	± 10%	C0G / NP0	94W2923	0.18	0.13
08055A200JAT2A	20	± 5%	C0G / NP0	94W2929	0.30	0.20
08055A220KAT2A	22	± 10%	C0G / NP0	94W2930	0.18	0.13
08055A560JAT2A	56	± 5%	C0G / NP0	94W2934	0.18	0.13
08055A101FAT2A	100	± 1%	C0G / NP0	94W2924	0.59	0.53
08055A101KAT2A	100	± 10%	C0G / NP0	94W2925	0.18	0.13
08055C101KAT2A	100	± 10%	X7R	94W2937	0.30	0.20
08055A121JAT2A	120	± 5%	C0G / NP0	94W2926	0.18	0.13
08055A181JAT2A	180	± 5%	C0G / NP0	94W2927	0.31	0.20
08055C221KAT2A	220	± 10%	X7R	94W2942	0.30	0.20
08055A271JAT2A	270	± 5%	C0G / NP0	96M1398	0.28	0.23
08055A331JAT2A	330	± 5%	C0G / NP0	96M1400	0.28	0.23
08055C331KAT2A	330	± 10%	X7R	94W2945	0.30	0.20
08055A471JAT2A	470	± 5%	C0G / NP0	96K4777	0.28	0.23
08055A471FAT2A	470	± 1%	C0G / NP0	96M1402	0.43	0.39
08055A471KAT2A	470	± 10%	C0G / NP0	96M1403	0.32	0.21
08055C471KAT2A	470	± 10%	X7R	94W2946	0.18	0.12
08055A561JAT2A	560	± 5%	C0G / NP0	96M1404	0.35	0.22
08055A681JAT2A	680	± 5%	C0G / NP0	96M1405	0.35	0.22
08055A681FAT2A	680	± 1%	C0G / NP0	94W2935	0.59	0.53
08055C681KAT2A	680	± 10%	X7R	94W2947	0.30	0.20
08055A821JAT2A	820	± 5%	C0G / NP0	96M1406	0.24	0.16
08055A102JAT2A	1000	± 5%	C0G / NP0	96K4776	0.25	0.21
08055C102KAT2A	1000	± 10%	X7R	19C6331	0.14	0.10
08055A102FAT2A	1000	± 1%	C0G / NP0	96M1392	0.63	0.59
08055A102GAT2A	1000	± 2%	C0G / NP0	96M1393	0.62	0.55
08055C102JAT2A	1000	± 5%	X7R	96M1407	0.26	0.22
08055A122JAT2A	1200	± 5%	C0G / NP0	96M1395	0.39	0.35
08055A152JAT2A	1500	± 5%	C0G / NP0	96M1396	0.33	0.27
08055C152KAT2A	1500	± 10%	X7R	94W2939	0.30	0.20
08055C182KAT2A	1800	± 10%	X7R	94W2941	0.30	0.20
08055C272KAT2A	2700	± 10%	X7R	94W2943	0.30	0.20

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MULTILAYER CERAMIC CAPACITORS - 0.5pF TO 82,000pF (CONT.)

0805 CASE SIZE, VOLTAGE: 50V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 08055C822KAT2A	8200	± 10%	X7R	94W2948	0.30	0.20
● 08055C222KAT2A	2200	± 10%	X7R	19C6333	0.19	0.13
● 08055A222JAT2A	2200	± 5%	C0G / NP0	32H4914	0.29	0.19
● 08055A272JAT2A	2700	± 5%	C0G / NP0	96M1399	0.42	0.38
● 08055C472JAT2A	4700	± 5%	X7R	96M1414	0.30	0.25
● 08055C472KAT2A	4700	± 10%	X7R	35K2133	0.28	0.19
● 08055C682KAT2A	6800	± 10%	X7R	96M1418	0.18	0.12
● 08055C103JAT2A	10 000	± 5%	X7R	96M1408	0.27	0.22
● 08055C103KAT2A	10 000	± 10%	X7R	19C6332	0.13	0.09
● 08055C103MAT2A	10 000	± 20%	X7R	96M1409	0.18	0.12
● 08055G103ZAT2A	10 000	+80%, -20%	Y5V	94W2950	0.37	0.24
● 08055C123KAT2A	12 000	± 10%	X7R	94W2938	0.35	0.22
● 08055C153KAT2A	15 000	± 10%	X7R	94W2940	0.29	0.24
● 08055C273KAT2A	27 000	± 10%	X7R	94W2944	0.27	0.17
● 08055C333JAT2A	33 000	± 5%	X7R	96M1411	0.34	0.29
● 08055C333KAT2A	33 000	± 10%	X7R	96M1412	0.29	0.20
● 08055C393KAT2A	39 000	± 10%	X7R	96M1413	0.35	0.22
● 08055C473KAT2A	47 000	± 10%	X7R	96K4780	0.18	0.12
● 08055C473JAT2A	47 000	± 5%	X7R	96M1415	0.32	0.27
● 08055C563KAT2A	56 000	± 10%	X7R	96M1416	0.35	0.22
● 08055C823KAT2A	82 000	± 10%	X7R	96M1420	0.35	0.22
● 08055E104MAT2A	100 000	± 20%	Z5U	94W2949	0.30	0.19
● 08055C104K4T2A	100 000	± 10%	X7R	55J7455	0.52	0.33
● 08055C104K4T2A	100 000	± 10%	X7R	95W2729	0.07	0.07

0805 CASE SIZE, VOLTAGE: 100V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 08051A0R5CAT2A	0.5	± 0.25pF	C0G / NP0	96M1312	0.32	0.21
● 08051A1R0CAT2A	1	± 0.25pF	C0G / NP0	96M1313	0.32	0.21
● 08051A1R5CAT2A	1.5	± 0.25pF	C0G / NP0	96M1314	0.32	0.21
● 08051A2R2CAT2A	2.2	± 0.25pF	C0G / NP0	96M1327	0.32	0.21
● 08051A2R7CAT2A	2.7	± 0.25pF	C0G / NP0	96M1328	0.32	0.21
● 08051A3R3CAT2A	3.3	± 0.25pF	C0G / NP0	96M1334	0.32	0.21
● 08051A4R7CAT2A	4.7	± 0.25pF	C0G / NP0	96M1341	0.32	0.21
● 08051A5R6CAT2A	5.6	± 0.25pF	C0G / NP0	96M1344	0.32	0.21
● 08051A6R8CAT2A	6.8	± 0.25pF	C0G / NP0	96M1346	0.18	0.12
● 08051A6R8DAT2A	6.8	± 0.5pF	C0G / NP0	96M1347	0.29	0.19
● 08051A8R2CAT2A	8.2	± 0.25pF	C0G / NP0	96M1350	0.32	0.21
● 08051A100CAT2A	10	± 0.25pF	C0G / NP0	96M1315	0.46	0.30
● 08051A100JAT2A	10	± 5%	C0G / NP0	96K4767	0.25	0.21
● 08051A100KAT2A	10	± 10%	C0G / NP0	96M1316	0.18	0.13
● 08051A120JAT2A	12	± 5%	C0G / NP0	96M1320	0.18	0.13
● 08051A150JAT2A	15	± 5%	C0G / NP0	96M1322	0.25	0.21
● 08051A180JAT2A	18	± 5%	C0G / NP0	96M1325	0.25	0.21
● 08051A200JAT2A	20	± 5%	C0G / NP0	96M1329	0.30	0.20
● 08051A220JAT2A	22	± 5%	C0G / NP0	96K4769	0.25	0.21
● 08051A220KAT2A	22	± 10%	C0G / NP0	96M1330	0.18	0.13
● 08051A270JAT2A	27	± 5%	C0G / NP0	96M1332	0.18	0.13
● 08051A300JAT2A	30	± 5%	C0G / NP0	96M1336	0.30	0.20
● 08051A330JAT2A	33	± 5%	C0G / NP0	96K4771	0.25	0.21
● 08051A330KAT2A	33	± 10%	C0G / NP0	96M1337	0.18	0.13
● 08051A390JAT2A	39	± 5%	C0G / NP0	96M1339	0.18	0.13
● 08051A470JAT2A	47	± 5%	C0G / NP0	96K4772	0.25	0.21
● 08051A470KAT2A	47	± 10%	C0G / NP0	96M1342	0.18	0.13
● 08051A560JAT2A	56	± 5%	C0G / NP0	96M1345	0.18	0.13
● 08051A680JAT2A	68	± 5%	C0G / NP0	96M1348	0.18	0.13
● 08051A820JAT2A	82	± 5%	C0G / NP0	96M1351	0.18	0.13
● 08051A101FAT2A	100	± 1%	C0G / NP0	96M1317	0.67	0.60
● 08051A101JAT2A	100	± 5%	C0G / NP0	96K4768	0.25	0.21
● 08051A101KAT2A	100	± 10%	C0G / NP0	96M1318	0.18	0.13
● 08051A121JAT2A	120	± 5%	C0G / NP0	96M1321	0.18	0.13
● 08051A151JAT2A	150	± 5%	C0G / NP0	96M1323	0.28	0.23
● 08051A151KAT2A	150	± 10%	C0G / NP0	96M1324	0.18	0.13
● 08051A181JAT2A	180	± 5%	C0G / NP0	96M1326	0.31	0.20
● 08051A221JAT2A	220	± 5%	C0G / NP0	96K4770	0.28	0.23
● 08051C221KAT2A	220	± 10%	X7R	94W2912	0.30	0.20
● 08051A271JAT2A	270	± 5%	C0G / NP0	96M1333	0.31	0.20
● 08051A331JAT2A	330	± 5%	C0G / NP0	96M1338	0.28	0.23
● 08051C331KAT2A	330	± 10%	X7R	94W2913	0.30	0.20
● 08051A391JAT2A	390	± 5%	C0G / NP0	96M1340	0.31	0.20
● 08051A471JAT2A	470	± 5%	C0G / NP0	96M1343	0.24	0.16
● 08051A681JAT2A	680	± 5%	C0G / NP0	96M1349	0.24	0.16
● 08051C681KAT2A	680	± 10%	X7R	94W2914	0.30	0.20
● 08051A102JAT2A	1000	± 5%	C0G / NP0	96M1319	0.24	0.16

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MULTILAYER CERAMIC CAPACITORS - 0.5pF TO 82,000pF (CONT.)

0805 CASE SIZE, VOLTAGE: 100V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 08051A102J4T2A	1000	± 5%	C0G / NP0	10R5963	0.39	0.25
● 08051C152KAT2A	1500	± 10%	X7R	96M1356	0.25	0.21
● 08051C182KAT2A	1800	± 10%	X7R	96M1358	0.18	0.12
● 08051C222JAT2A	2200	± 5%	X7R	96M1359	0.21	0.14
● 08051C222KAT2A	2200	± 10%	X7R	96M1360	0.25	0.21
● 08051C272KAT2A	2700	± 10%	X7R	96M1361	0.30	0.20
● 08051C332JAT2A	3300	± 5%	X7R	96M1363	0.42	0.27
● 08051C332KAT2A	3300	± 10%	X7R	96M1364	0.25	0.21
● 08051C472KAT2A	4700	± 10%	X7R	96M1365	0.25	0.21
● 08051C822KAT2A	8200	± 10%	X7R	96M1368	0.30	0.20
● 08051C103JAT2A	10 000	± 5%	X7R	96M1352	0.29	0.24
● 08051C103KAT2A	10 000	± 10%	X7R	96M1353	0.18	0.12
● 08051C123KAT2A	12 000	± 10%	X7R	96M1355	0.35	0.22
● 08051C153KAT2A	15 000	± 10%	X7R	96M1357	0.35	0.22
● 08051C223KAT2A	22 000	± 10%	X7R	96K4773	0.25	0.21
● 08051C273KAT2A	27 000	± 10%	X7R	96M1362	0.35	0.22
● 08051C473KAT2A	47 000	± 10%	X7R	96M1366	0.22	0.15

0805 CASE SIZE, VOLTAGE: 200V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 08052A101JAT2A	100	± 5%	C0G / NP0	96M1369	0.48	0.31
● 08052A221JAT2A	220	± 5%	C0G / NP0	10R5967	0.52	0.33
● 08052A331JAT2A	330	± 5%	C0G / NP0	10R5968	0.52	0.33
● 08052C331KAT2A	330	± 10%	X7R	96M1374	0.50	0.32
● 08052A471JAT2A	470	± 5%	C0G / NP0	10R5969	0.52	0.33
● 08052C471JAT2A	470	± 5%	X7R	96M1375	0.43	0.39
● 08052C471KAT2A	470	± 10%	X7R	96M1376	0.50	0.32
● 08052C681KAT2A	680	± 10%	X7R	96M1377	0.50	0.32
● 08052C102KAT2A	1000	± 10%	X7R	96K4774	0.27	0.18
● 08052C102JAT2A	1000	± 5%	X7R	96M1370	0.43	0.39
● 08052C222KAT2A	2200	± 10%	X7R	96M1372	0.50	0.32
● 08052C472KAT2A	4700	± 10%	X7R	10R5971	0.50	0.32
● 08052C103KAT2A	10 000	± 10%	X7R	96M1371	0.27	0.18
● 08052C223KAT2A	22 000	± 10%	X7R	96M1373	0.16	0.11

0805 CASE SIZE, VOLTAGE: 100V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 08051A100JAT2A	10	± 5%	C0G / NP0	96K4767	0.25	0.21
● 08051A220JAT2A	22	± 5%	C0G / NP0	96K4769	0.25	0.21
● 08051A330JAT2A	33	± 5%	C0G / NP0	96K4771	0.25	0.21
● 08051A470JAT2A	47	± 5%	C0G / NP0	96K4772	0.25	0.21
● 08051A101JAT2A	100	± 5%	C0G / NP0	96K4768	0.25	0.21
● 08051A221JAT2A	220	± 5%	C0G / NP0	96K4770	0.28	0.23
● 08051C223KAT2A	22 000	± 10%	X7R	96K4773	0.25	0.21

1206 CASE SIZE, VOLTAGE: 16V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 1206YC103KAT2A	10 000	± 10%	X7R	34C6812	0.37	0.24

1206 CASE SIZE, VOLTAGE: 25V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 12063C103KAT2A	10 000	± 10%	X7R	34C6817	0.32	0.21
● 12063A103JAT2A	10 000	± 5%	C0G / NP0	96M1494	0.61	0.58

1206 CASE SIZE, VOLTAGE: 50V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 12065A150JAT2A	15	± 5%	C0G / NP0	94W2955	0.48	0.31
● 12065A180JAT2A	18	± 5%	C0G / NP0	94W2957	0.48	0.31
● 12065A680JAT2A	68	± 5%	C0G / NP0	94W2959	0.48	0.31
● 12065A820JAT2A	82	± 5%	C0G / NP0	94W2961	0.48	0.31
● 12065A121JAT2A	120	± 5%	C0G / NP0	94W2954	0.45	0.40
● 12065A151JAT2A	150	± 5%	C0G / NP0	94W2956	0.45	0.40
● 12065A391JAT2A	390	± 5%	C0G / NP0	94W2958	0.44	0.29
● 12065A681JAT2A	680	± 5%	C0G / NP0	94W2960	0.45	0.40
● 12065A102FAT2A	1000	± 1%	C0G / NP0	94W2953	0.64	0.60
● 12065A102JAT2A	1000	± 5%	C0G / NP0	96M1500	0.37	0.31
● 12065A152JAT2A	1500	± 5%	C0G / NP0	96M1502	0.44	0.39
● 12065A222FAT2A	2200	± 1%	C0G / NP0	96M1503	0.93	0.78
● 12065A222JAT2A	2200	± 5%	C0G / NP0	96M1504	0.43	0.28
● 12065A272JAT2A	2700	± 5%	C0G / NP0	96M1505	0.51	0.46
● 12065A332JAT2A	3300	± 5%	C0G / NP0	96M1506	0.42	0.38
● 12065A472JAT2A	4700	± 5%	C0G / NP0	96M1507	0.51	0.46
● 12065C563KAT2A	56 000	± 10%	X7R	94W2962	0.46	0.30

1206 CASE SIZE, VOLTAGE: 100V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 12061A100JAT2A	10	± 5%	C0G / NP0	96M1435	0.28	0.24
● 12061A220JAT2A	22	± 5%	C0G / NP0	96K4783	0.28	0.24
● 12061A270JAT2A	27	± 5%	C0G / NP0	96M1449	0.44	0.29
● 12061A330JAT2A	33	± 5%	C0G / NP0	96M1450	0.28	0.24
● 12061A390JAT2A	39	± 5%	C0G / NP0	96M1454	0.44	0.29
● 12061A470JAT2A	47	± 5%	C0G / NP0	96M1456	0.28	0.24
● 12061A680JAT2A	68	± 5%	C0G / NP0	96M1461	0.44	0.29
● 12061A820JAT2A	82	± 5%	C0G / NP0	96M1463	0.44	0.29

➤ CONTINUED ➤

MULTILAYER CERAMIC CAPACITORS - 0.5pF TO 82,000pF (CONT.)

1206 CASE SIZE, VOLTAGE: 100V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
12061A101JAT2A	100	± 5%	COG / NPO	96K4782	0.28	0.24
12061A101KAT2A	100	± 10%	COG / NPO	96M1436	0.44	0.29
12061A121JAT2A	120	± 5%	COG / NPO	96M1439	0.44	0.29
12061A151JAT2A	150	± 5%	COG / NPO	96M1441	0.44	0.29
12061A181JAT2A	180	± 5%	COG / NPO	96M1444	0.44	0.29
12061A221JAT2A	220	± 5%	COG / NPO	96M1446	0.26	0.17
12061A331JAT2A	330	± 5%	COG / NPO	96M1451	0.26	0.17
12061A391JAT2A	390	± 5%	COG / NPO	96M1455	0.44	0.29
12061A471JAT2A	470	± 5%	COG / NPO	96M1457	0.26	0.17
12061A471KAT2A	470	± 10%	COG / NPO	96M1458	0.53	0.34
12061A681JAT2A	680	± 5%	COG / NPO	96M1462	0.41	0.37
12061A102FAT2A	1000	± 1%	COG / NPO	96M1437	0.79	0.66
12061A102JAT2A	1000	± 5%	COG / NPO	96M1438	0.35	0.22
12061C102KAT2A	1000	± 10%	X7R	96K4784	0.16	0.11
12061A152JAT2A	1500	± 5%	COG / NPO	96M1442	0.44	0.39
12061A222JAT2A	2200	± 5%	COG / NPO	96M1448	0.44	0.29
12061C222JAT2A	2200	± 5%	X7R	96M1470	0.44	0.29
12061C472KAT2A	4700	± 10%	X7R	96M1479	0.28	0.24
12061C682JAT2A	6800	± 5%	X7R	96M1481	0.40	0.26
12061C103JAT2A	10 000	± 5%	X7R	96M1464	0.40	0.26
12061C103K4T2A	10 000	± 10%	X7R	95W2732	0.06	0.06
12061C103KAT2A	10 000	± 10%	X7R	34C6815	0.16	0.11
12061C153KAT2A	15 000	± 10%	X7R	96M1469	0.43	0.28
12061C223JAT2A	22 000	± 5%	X7R	96M1472	0.40	0.26
12061C223KAT2A	22 000	± 10%	X7R	96M1473	0.36	0.23
12061C333JAT2A	33 000	± 5%	X7R	96M1475	0.40	0.26
12061C333KAT2A	33 000	± 10%	X7R	96M1476	0.36	0.23
12061C393KAT2A	39 000	± 10%	X7R	96M1478	0.43	0.28
12061C473KAT2A	47 000	± 10%	X7R	96K4786	0.33	0.27
12061C683KAT2A	68 000	± 10%	X7R	96M1483	0.35	0.29

1206 CASE SIZE, VOLTAGE: 200V

12062A101JAT2A	100	± 5%	COG / NPO	96M1484	0.54	0.35
12062A221JAT2A	220	± 5%	COG / NPO	96M1486	0.39	0.35
12062A102JAT2A	1000	± 5%	COG / NPO	96M1485	0.41	0.36
12062C102KAT2A	1000	± 10%	X7R	96M1487	0.37	0.31
12062C222KAT2A	2200	± 10%	X7R	96M1489	0.27	0.18
12062C103KAT2A	10 000	± 10%	X7R	96M1488	0.27	0.18
12062C223KAT2A	22 000	± 10%	X7R	96M1490	0.30	0.20
12062C333KAT2A	33 000	± 10%	X7R	96M1491	0.40	0.36
12062C473KAT2A	47 000	± 10%	X7R	96M1492	0.32	0.21
12062C683KAT2A	68 000	± 10%	X7R	96M1493	0.79	0.66

1206 CASE SIZE, VOLTAGE: 500V

12067A470JAT2A	47	± 5%	COG / NPO	10R6020	0.81	0.77
12067A101JAT2A	100	± 5%	COG / NPO	96M1518	0.38	0.34
12067A331JAT2A	330	± 5%	COG / NPO	10R6019	0.41	0.37
12067A471JAT2A	470	± 5%	COG / NPO	10R6021	0.40	0.36
12067C102KAT2A	1000	± 10%	X7R	96M1519	0.26	0.17
12067C472KAT2A	4700	± 10%	X7R	96M1521	0.26	0.17
12067C103KAT2A	10 000	± 10%	X7R	96M1520	0.26	0.17

1210 CASE SIZE, VOLTAGE: 50V

12105A222JAT2A	2200	± 5%	COG / NPO	10R6037	0.62	0.55

1210 CASE SIZE, VOLTAGE: 100V

12101C103KAT2A	22 000	± 10%	X7R	94W2966	0.48	0.43
12101C473KAT2A	22 000	± 10%	X7R	94W2967	0.48	0.43

1210 CASE SIZE, VOLTAGE: 200V

12101A102JAT2A	1000	± 5%	COG / NPO	94W2965	0.43	0.39
12102C103KAT2A	10 000	± 10%	X7R	96M1531	0.58	0.55
12102C223KAT2A	22 000	± 10%	X7R	96M1533	0.58	0.55

1210 CASE SIZE, VOLTAGE: 500V

12107C102KAT2A	1000	± 10%	X7R	10R6039	0.95	0.90
12107C103KAT2A	10 000	± 10%	X7R	96M1551	0.56	0.36

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MULTILAYER CERAMIC CAPACITORS - 100,000pF AND ABOVE

SMD

RoHS Compliant Available

AVX A KYOCERA GROUP COMPANY

0201 CASE SIZE, VOLTAGE: 6.3V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
02016D104KAT2A	100 000	± 10%	X5R	85K9474	0.22	0.17

0402 CASE SIZE, VOLTAGE: 6.3V

04026D224KAT2A	220 000	± 10%	X5R	10R5926	0.20	0.19
04026D105KAT2A	1 000 000	± 10%	X5R	84K8386	0.24	0.22

0402 CASE SIZE, VOLTAGE: 10V

0402ZD104KAT2A	100 000	± 10%	X5R	96M1117	0.10	0.10
0402ZD224KAT2A	220 000	± 10%	X5R	94W2830	0.55	0.51
0402ZG224ZAT2A	220 000	+80%, -20%	Y5V	77M8949	0.50	0.46
0402ZD105KAT2A	1 000 000	± 10%	X5R	06M4041	0.38	0.33

0603 CASE SIZE, VOLTAGE: 4V

06034D106MAT2A	10 000 000	± 20%	X5R	10R5934	1.05	0.88

0603 CASE SIZE, VOLTAGE: 6.3V

06036D105KAT2A	1 000 000	± 10%	X5R	84K8390	0.17	0.12
06036D225KAT2A	2 200 000	± 10%	X5R	84K8391	0.21	0.14
06036D225MAT2A	2 200 000	± 20%	X5R	96M1294	0.75	0.70
06036D475KAT2A	4 700 000	± 10%	X5R	96M1295	0.21	0.14
06036D475MAT2A	4 700 000	± 20%	X5R	96M1296	0.75	0.70

0603 CASE SIZE, VOLTAGE: 10V

0603ZC104KAT2A	100 000	± 10%	X7R	94W2856	0.52	0.33
0603ZC154KAT2A	150 000	± 10%	X7R	96M1190	0.25	0.21
0603ZC224KAT2A	220 000	± 10%	X7R	96K4753	0.19	0.13
0603ZD105KAT2A	1 000 000	± 10%	X5R	84K8388	0.12	0.09
0603ZC105KAT2A	1 000 000	± 10%	X7R	94W2857	1.54	1.29
0603ZG105ZAT2A	1 000 000	+80%, -20%	Y5V	84K8389	0.68	0.64

0603 CASE SIZE, VOLTAGE: 16V

0603YC104JAT2A	100 000	± 5%	X7R	96M1175	0.12	0.09
0603YC104KAT2A	100 000	± 10%	X7R	96M1176	0.10	0.03
0603YC104K4T2A	100 000	± 10%	X7R	55J2625	0.43	0.28
0603YC104MAT2A	100 000	± 20%	X7R	96M1177	0.38	0.31
0603YG104ZAT2A	100 000	+80%, -20%	Y5V	94W2855	0.17	0.12
0603YD224KAT2A	220 000	± 10%	X5R	96M1182	0.25	0.21
0603YD334KAT2A	330 000	± 10%	X5R	96M1185	0.24	0.16
0603YD474KAT2A	470 000	± 10%	X5R	96M1186	0.21	0.14
0603YD105KAT2A	1 000 000	± 10%	X5R	96K4752	0.13	0.09
0603YC105KAT2A	1 000 000	± 10%	X7R	96M1178	0.27	0.18
0603YD225KAT2A	2 200 000	± 10%	X5R	96M1183	0.85	0.80
0603YD225MAT2A	2 200 000	± 20%	X5R	96M1184	0.82	0.77

0603 CASE SIZE, VOLTAGE: 25V

06033C104KAT2A	100 000	± 10%	X7R	96M1263	0.11	0.04
06033G104ZAT2A	100 000	+80%, -20%	Y5V	96K4762	0.17	0.12
06033D224KAT2A	220 000	± 10%	X5R	96M1266	0.31	0.26
06033D105KAT2A	1 000 000	± 10%	X5R	96M1265	0.32	0.27

0603 CASE SIZE, VOLTAGE: 50V

06035D104KAT2A	100 000	± 10%	X5R	94W2908	0.51	0.45
06035C104K4T2A	100 000	± 10%	X7R	10R5933	0.53	0.47
06035C104KAT2A	100 000	± 10%	X7R	54K2412	0.12	0.08
06035G104ZAT2A	100 000	+80%, -20%	Y5V	96M1293	0.37	0.24
06035A100FAT2A	1 000 000	± 1%	COG / NPO	43T7237	0.57	0.51

0805 CASE SIZE, VOLTAGE: 6.3V

08056D475KAT2A	4 700 000	± 10%	X5R	84K8400	0.18	0.12
08056D106MAT2A	10 000 000	± 20%	X5R	84K8399	1.67	1.40
08056D226MAT2A	22 000 000	± 20%	X5R	96M1423	1.88	1.57

0805 CASE SIZE, VOLTAGE: 10V

0805ZC684KAT2A	680 000	± 10%	X7R	96M1310	0.81	0.77
0805ZD105KAT2A	1 000 000	± 10%	X5R	94W2911	0.81	0.77
0805ZC105MAT2A	1 000 000	± 20%	X7R	96M1309	0.81	0.77
0805ZD335KAT2A	3 300 000	± 10%	X5R	84K8395	0.51	0.33
0805ZD475KAT2A	4 700 000	± 10%	X5R	84K8396	0.34	0.28
0805ZG475ZAT2A	4 700 000	+80%, -20%	Y5V	84K8397	0.81	0.77
0805ZD106KAT2A	10 000 000	± 10%	X5R	96M1311	0.27	0.18

0805 CASE SIZE, VOLTAGE: 16V

0805YC104KAT2A	100 000	± 10%	X7R	94W2909	0.30	0.19
0805YC224JAT2A	220 000	± 5%	X7R	96M1299	0.71	0.63
0805YC224KAT2A	220 000	± 10%	X7R	96M1300	0.30	0.25
0805YC334KAT2A	330 000	± 10%	X7R	96M1301	0.27	0.18
0805YC474KAT2A	470 000	± 10%	X7R	96K4765	0.27	0.18
0805YC474JAT2A	470 000	± 5%	X7R	96M1302	0.57	0.54
0805YC105KAT2A	1 000 000	± 10%	X7R	96M1298	0.21	0.14
0805YD105KAT2A	1 000 000	± 10%	X5R	96M1303	1.54	1.29

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MULTILAYER CERAMIC CAPACITORS - 100,000pF AND ABOVE (CONT.)

0805 CASE SIZE, VOLTAGE: 16V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 0805YG105ZAT2A	1 000 000	+80%, -20%	Y5V	96M1307	0.41	0.37
● 0805YD225KAT2A	2 200 000	± 10%	X5R	84K8392	1.54	1.29
● 0805YG225ZAT2A	2 200 000	+80%, -20%	Y5V	84K8393	0.68	0.64
● 0805YD475KAT2A	4 700 000	± 10%	X5R	96M1306	0.27	0.18
● 0805YD106KAT2A	10 000 000	± 10%	X5R	96M1304	0.30	0.20
● 0805YD106MAT2A	10 000 000	± 20%	X5R	96M1305	1.46	1.22

0805 CASE SIZE, VOLTAGE: 25V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 08053E104ZAT2A	100 000	+80%, -20%	Z5U	34C6803	0.35	0.29
● 08053C104JAT2A	100 000	± 5%	X7R	94W2916	0.32	0.21
● 08053C104KAT2A	100 000	± 10%	X7R	96M1381	0.13	0.09
● 08053C104MAT2A	100 000	± 20%	X7R	94W2917	0.30	0.19
● 08053G104ZAT2A	100 000	+80%, -20%	Y5V	96M1388	0.18	0.12
● 08053C154KAT2A	150 000	± 10%	X7R	96M1383	0.42	0.27
● 08053C224KAT2A	220 000	± 10%	X7R	96K4775	0.28	0.19
● 08053C224JAT2A	220 000	± 5%	X7R	65H4259	0.15	0.10
● 08053C224MAT2A	220 000	± 20%	X7R	96M1384	0.36	0.23
● 08053G334ZAT2A	330 000	+80%, -20%	Y5V	96M1390	0.49	0.31
● 08053D474KAT2A	470 000	± 10%	X5R	96M1386	0.76	0.67
● 08053G474ZAT2A	470 000	+80%, -20%	Y5V	96M1391	0.65	0.58
● 08053D684KAT2A	680 000	± 10%	X5R	96M1387	0.76	0.67
● 08053C105JAT2A	1 000 000	± 5%	X7R	94W2918	1.67	1.40
● 08053C105K4T2A	1 000 000	± 10%	X7R	94W2919	1.59	1.33
● 08053C105KAT2A	1 000 000	± 10%	X7R	96M1382	0.33	0.27
● 08053D105KAT2A	1 000 000	± 10%	X5R	96M1385	0.39	0.32
● 08053G105ZAT2A	1 000 000	+80%, -20%	Y5V	96M1389	0.41	0.37
● 08053D225KAT2A	2 200 000	± 10%	X5R	94W2920	1.31	1.09
● 08053C225KAT2A	2 200 000	± 10%	X7R	10R5975	0.37	0.24

0805 CASE SIZE, VOLTAGE: 50V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 08055G104ZAT2T	100 000	+80%, -20%	Y5V	34C6808	0.37	0.24
● 08055E104ZAT2A	100 000	+80%, -20%	Z5U	34C6807	0.31	0.25
● 08055C104MAT2A	100 000	± 20%	X7R	96K4779	0.30	0.19
● 08055G104ZAT2A	100 000	+80%, -20%	Y5V	96M1421	0.31	0.25
● 08055C224KAT2A	220 000	± 10%	X7R	96M1410	0.18	0.12
● 08055G224ZAT2A	220 000	+80%, -20%	Y5V	96M1422	0.44	0.39
● 08055C334KAT2A	330 000	± 10%	X7R	10R5978	0.39	0.32
● 08055C474KAT2A	470 000	± 10%	X7R	10R5979	0.26	0.17

0805 CASE SIZE, VOLTAGE: 100V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 08051C104KAT2A	100 000	± 10%	X7R	96M1354	0.33	0.27

1206 CASE SIZE, VOLTAGE: 6.3V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 12066D106KAT2A	10 000 000	± 10%	X5R	84K8407	0.38	0.25
● 12066D106KAT2X	10 000 000	± 10%	X5R	96M1516	0.97	0.81
● 12066D226KAT2A	22 000 000	± 10%	X5R	84K8408	0.49	0.31
● 12066D226MAT2A	22 000 000	± 20%	X5R	84K8409	1.18	0.99
● 12066D476MAT2A	47 000 000	± 20%	X5R	96M1517	1.96	1.64

1206 CASE SIZE, VOLTAGE: 10V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 1206ZC104KAT2A	100 000	± 10%	X7R	34C6814	0.47	0.31
● 1206ZC225KAT2A	2 200 000	± 10%	X7R	96M1434	0.49	0.31
● 1206ZD475KAT2A	4 700 000	± 10%	X5R	84K8404	1.57	1.31
● 1206ZD106KAT2A	10 000 000	± 10%	X5R	84K8403	0.37	0.24
● 1206ZG106ZAT2A	10 000 000	+80%, -20%	Y5V	84K8405	1.57	1.31

1206 CASE SIZE, VOLTAGE: 16V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 1206YC104KAT2A	100 000	± 10%	X7R	34C6813	0.42	0.27
● 1206YC684KAT2A	680 000	± 10%	X7R	20J6315	0.67	0.63
● 1206YC105KAT2A	1 000 000	± 10%	X7R	96K4781	0.35	0.29
● 1206YC105JAT2A	1 000 000	± 5%	X7R	96M1426	0.75	0.70
● 1206YC105MAT2A	1 000 000	± 20%	X7R	96M1427	0.55	0.52
● 1206YD225KAT2A	2 200 000	± 10%	X5R	96M1432	1.13	0.95
● 1206YD106KAT2A	10 000 000	± 10%	X5R	84K8401	0.37	0.24
● 1206YC106KAT2A	10 000 000	± 10%	X7R	10R6005	0.49	0.31
● 1206YC106MAT2A	10 000 000	± 20%	X7R	96M1428	1.57	1.31
● 1206YD106MAT2A	10 000 000	± 20%	X5R	96M1430	1.25	1.05

1206 CASE SIZE, VOLTAGE: 25V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 12063C104MAT2A	100 000	± 20%	X7R	34C6819	0.36	0.23
● 12063E104MAT2A	100 000	± 20%	Z5U	34C6821	0.40	0.26
● 12063C474KAT2A	470 000	± 10%	X7R	96M1495	0.37	0.31
● 12063C105KAT2A	1 000 000	± 10%	X7R	96K4787	0.30	0.21
● 12063G105ZAT2A	1 000 000	+80%, -20%	Y5V	94W2952	0.64	0.57
● 12063C225KAT2A	2 200 000	± 10%	X7R	99K5605	0.38	0.34
● 12063D225KAT2A	2 200 000	± 10%	X5R	96M1497	0.89	0.75
● 12063G225ZAT2A	2 200 000	+80%, -20%	Y5V	96M1499	0.96	0.91
● 12063D475KAT2A	4 700 000	± 10%	X5R	84K8406	0.50	0.32

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MULTILAYER CERAMIC CAPACITORS - 100,000pF AND ABOVE (CONT.)

1206 CASE SIZE, VOLTAGE: 25V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 12063D475MAT2A	4 700 000	± 20%	X5R	96M1498	0.80	0.67
● 12063D106MAT2A	10 000 000	± 20%	X5R	94W2951	1.57	1.31

1206 CASE SIZE, VOLTAGE: 50V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 12065C104JAT2A	100 000	± 5%	X7R	96M1508	0.30	0.25
● 12065C104KAT2A	100 000	± 10%	X7R	34C6824	0.34	0.23
● 12065C104MAT2A	100 000	± 20%	X7R	96K4788	0.43	0.28
● 12065G104ZAT2A	100 000	+80%, -20%	Y5V	10R6016	0.31	0.20
● 12065E104MAT2A	100 000	± 20%	Z5U	34C6825	0.36	0.23
● 12065C154KAT2A	150 000	± 10%	X7R	96M1509	0.53	0.47
● 12065C224KAT2A	220 000	± 10%	X7R	96K4789	0.18	0.12
● 12065C224JAT2A	220 000	± 5%	X7R	96M1510	0.26	0.17
● 12065C224MAT2A	220 000	± 20%	X7R	96M1511	0.41	0.37
● 12065C334KAT2A	330 000	± 10%	X7R	96M1512	0.37	0.31
● 12065C334MAT2A	330 000	± 20%	X7R	96M1513	0.54	0.48
● 12065C474KAT2A	470 000	± 10%	X7R	96M1514	0.37	0.31
● 12065C105KAT2A	1 000 000	± 10%	X7R	10R6014	0.43	0.28
● 12065D475KAT2A	4 700 000	± 10%	X5R	94W2963	1.05	0.88

1206 CASE SIZE, VOLTAGE: 100V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 12061C104JAT2A	100 000	± 5%	X7R	96M1466	0.38	0.34
● 12061C104K4T2A	100 000	± 10%	X7R	55J8846	0.38	0.34
● 12061C104KAT2A	100 000	± 10%	X7R	96K4785	0.16	0.11
● 12061C104MAT2A	100 000	± 20%	X7R	96M1467	0.50	0.32
● 12061C334KAT2A	330 000	± 10%	X7R	96M1477	1.10	0.92

1210 CASE SIZE, VOLTAGE: 6V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 12106D226KAT2A	22 000 000	± 10%	X5R	84K8418	0.70	0.67
● 12106D476MAT2A	47 000 000	± 20%	X5R	84K8420	3.67	3.12
● 12106D476KAT2A	47 000 000	± 10%	X5R	05M6454	0.96	0.80
● 12106D107KAT2A	100 000 000	± 10%	X5R	96M1549	3.67	3.12
● 12106D107MAT2A	100 000 000	± 20%	X5R	96M1550	3.67	3.12

1210 CASE SIZE, VOLTAGE: 10V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 1210ZC106KAT2A	10 000 000	± 10%	X7R	84K8413	2.21	1.84
● 1210ZD226KAT2A	22 000 000	± 10%	X5R	84K8415	0.88	0.83
● 1210ZC226KAT2A	22 000 000	± 10%	X7R	94W2964	0.84	0.70
● 1210ZG226ZAT2A	22 000 000	+80%, -20%	Y5V	84K8416	2.91	2.44

1210 CASE SIZE, VOLTAGE: 16V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 1210YC475KAT2A	4 700 000	± 10%	X7R	84K8410	0.56	0.54
● 1210YD106KAT2A	10 000 000	± 10%	X5R	10R6031	0.60	0.53
● 1210YG106ZAT2A	10 000 000	+80%, -20%	Y5V	84K8412	1.60	1.34
● 1210YD226KAT2A	22 000 000	± 10%	X5R	84K8411	0.77	0.74
● 1210YC226MAT2A	22 000 000	± 20%	X7R	96M1523	1.91	1.63

1210 CASE SIZE, VOLTAGE: 25V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 12103C105KAT2A	1 000 000	± 10%	X7R	96M1534	0.53	0.47
● 12103C225KAT2A	2 200 000	± 10%	X7R	96M1535	0.62	0.55
● 12103D475KAT2A	4 700 000	± 10%	X5R	84K8417	0.67	0.64
● 12103D106KAT2A	10 000 000	± 10%	X5R	10R6036	0.66	0.63
● 12103G106ZAT2A	10 000 000	+80%, -20%	Y5V	96M1537	2.34	1.95
● 12103D226MAT2A	22 000 000	± 20%	X5R	96M1536	1.97	1.64

1210 CASE SIZE, VOLTAGE: 50V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 12105C154KAT2A	150 000	± 10%	X7R	96M1539	0.59	0.53
● 12105C224KAT2A	220 000	± 10%	X7R	96M1540	0.30	0.20
● 12105C334KAT2A	330 000	± 10%	X7R	96M1543	0.54	0.35
● 12105C474JAT2A	470 000	± 5%	X7R	96M1545	0.63	0.59
● 12105C474KAT2A	470 000	± 10%	X7R	96M1546	0.54	0.35
● 12105C474MAT2A	470 000	± 20%	X7R	96M1547	0.57	0.54
● 12105C105KAT2A	1 000 000	± 10%	X7R	96M1538	0.53	0.47
● 12105C225KAT2A	2 200 000	± 10%	X7R	96M1542	0.60	0.53
● 12105C475KAT2A	4 700 000	± 10%	X7R	96M1548	0.77	0.74

1210 CASE SIZE, VOLTAGE: 100V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 12101C104KAT2A	100 000	± 10%	X7R	96M1525	0.30	0.20
● 12101C104MAT2A	100 000	± 20%	X7R	96M1526	0.43	0.39
● 12101C224KAT2A	220 000	± 10%	X7R	96M1528	0.33	0.21
● 12101C474KAT2A	470 000	± 10%	X7R	96M1529	0.54	0.48
● 12101C684KAT2A	680 000	± 10%	X7R	96M1530	2.09	1.75
● 12101C105KAT2A	1 000 000	± 10%	X7R	96M1527	0.58	0.51
● 12101C105MAT2A	1 000 000	± 20%	X7R	64K0192	0.65	0.63

1210 CASE SIZE, VOLTAGE: 200V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 12102C104KAT2A	100 000	± 10%	X7R	96M1532	0.40	0.26

1812 CASE SIZE, VOLTAGE: 10V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 1812ZD226KAT2A	22 000 000	± 10%	X5R	96M1564	2.35	1.97

1812 CASE SIZE, VOLTAGE: 25V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● 18123D106KAT2A	10 000 000	± 10%	X5R	84K8421	3.79	3.19

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MULTILAYER CERAMIC CAPACITORS - 100,000pF AND ABOVE (CONT.)

1812 CASE SIZE, VOLTAGE: 50V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
18125C334KAT2A	330 000	± 10%	X7R	96M1573	0.85	0.71
18125C474KAT2A	470 000	± 10%	X7R	96M1574	0.89	0.74
18125C684KAT2A	680 000	± 10%	X7R	96M1575	1.08	0.90
18125C105KAT2A	1 000 000	± 10%	X7R	96K4791	1.15	0.96
18125C225KAT2A	2 200 000	± 10%	X7R	96M1572	2.45	2.06
1812 CASE SIZE, VOLTAGE: 100V						
18121C104KAT2A	100 000	± 10%	X7R	94W2968	0.99	0.82
18121C224KAT2A	220 000	± 10%	X7R	96M1566	0.84	0.81
18121C474KAT2A	470 000	± 10%	X7R	96M1568	0.89	0.74
18121C105KAT2A	1 000 000	± 10%	X7R	96M1565	2.18	1.86
18121C225KAT2A	2 200 000	± 10%	X7R	96M1567	2.30	1.95
1812 CASE SIZE, VOLTAGE: 200V						
18122C104KAT2A	100 000	± 10%	X7R	96M1569	1.23	1.03
1825 CASE SIZE, VOLTAGE: 50V						
18255C474KAT2A	470 000	± 10%	X7R	96M1578	2.43	2.03
2220 CASE SIZE, VOLTAGE: 50V						
22205C105KAT1A	1 000 000	± 10%	X7R	10R6109	2.98	2.54

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MULTILAYER CERAMIC CAPACITORS - 0.5pF TO 82,000pF

SMD — RoHS Compliant Available — The Capacitance Company KEMET CHARGED.

KEMET multilayer ceramic chip capacitors are produced in plants designed specifically for chip capacitor manufacture. The process features a high degree of mechanization, as well as precise conditions. Manufacturing is supplemented by extensive technology, engineering and quality assurance programs. Standard end terminations use a nickel barrier layer and a tin overplate to provide excellent solderability for the customer.

C0402 SERIES, VOLTAGE: 16V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-49
C0402C103J4RACTU	10 000	± 5%	X7R	08H0374	0.24	0.21
C0402C103K4RACTU	10 000	± 10%	X7R	84H0795	0.11	0.03
C0402 SERIES, VOLTAGE: 25V						
C0402C101J3GACTU	100	± 5%	C0G / NP0	03C3038	0.11	0.03
C0402C102K3RACTU	1000	± 10%	X7R	96C8660	0.11	0.03
C0402C182J3GACTU	1800	± 5%	C0G / NP0	74R1765	0.40	0.34
C0402C222J3GACTU	2200	± 5%	C0G / NP0	94M5623	0.42	0.36
C0402C103J3RACTU	10 000	± 5%	X7R	78H4779	0.11	0.04
C0402 SERIES, VOLTAGE: 50V						
C0402C109C5GACTU	1	± 0.25pF	C0G / NP0	74R1763	0.10	0.07
C0402C189C5GACTU	1.8	± 0.25pF	C0G / NP0	78H4920	0.10	0.07
C0402C229C5GACTU	2.2	± 0.25pF	C0G / NP0	74R1766	0.10	0.07
C0402C339C5GACTU	3.3	± 0.25pF	C0G / NP0	74C1098	0.11	0.07
C0402C479C5GACTU	4.7	± 0.25pF	C0G / NP0	74R1768	0.10	0.07
C0402C689C5GACTU	6.8	± 0.25pF	C0G / NP0	03C3061	0.11	0.08
C0402C100J5GACTU	10	± 5%	C0G / NP0	03C3037	0.13	0.02
C0402C120J5GACTU	12	± 5%	C0G / NP0	03C3041	0.12	0.05
C0402C150J5GACTU	15	± 5%	C0G / NP0	03C3043	0.11	0.03
C0402C220J5GACTU	22	± 5%	C0G / NP0	03C3047	0.09	0.03
C0402C270J5GACTU	27	± 5%	C0G / NP0	01J3306	0.08	0.02
C0402C330J5GACTU	33	± 5%	C0G / NP0	03C3051	0.08	0.02
C0402C390J5GACTU	39	± 5%	C0G / NP0	03C3053	0.11	0.03
C0402C470J5GACTU	47	± 5%	C0G / NP0	03C3054	0.08	0.02
C0402C560J5GACTU	56	± 5%	C0G / NP0	03C3056	0.10	0.03
C0402C680J5GACTU	56	± 5%	C0G / NP0	03C3059	0.08	0.05
C0402C101J5GACTU	100	± 5%	C0G / NP0	70K9075	0.13	0.02
C0402C221K5RACTU	220	± 10%	X7R	78H4958	0.10	0.03
C0402C221J5GACTU	220	± 5%	C0G / NP0	88K0214	0.03	0.03
C0402C331K5RACTU	330	± 10%	X7R	78H5049	0.03	0.02
C0402C471J5GACTU	470	± 5%	C0G / NP0	94M5625	0.05	0.05
C0402C471K5RACTU	470	± 10%	X7R	88C9981	0.10	0.02
C0402C561K5RACTU	560	± 10%	X7R	01J3307	0.04	0.03
C0402C821J5GACTU	820	± 5%	C0G / NP0	78R4003	0.38	0.33
C0402C102F5GAC7867	1000	± 1%	C0G / NP0	33R1773	1.11	0.79
C0402C102J5GACTU	1000	± 5%	C0G / NP0	94M5622	0.12	0.08
C0402C102K5RACTU	1000	± 10%	X7R	74C3082	0.09	0.02
C0402C122J5GACTU	1200	± 5%	C0G / NP0	74R1764	0.40	0.34
C0402C152K5RACTU	1500	± 10%	X7R	03C3044	0.08	0.03
C0402C472K5RACTU	4700	± 10%	X7R	70K9082	0.10	0.03
C0402C103K5RACTU	10 000	± 10%	X7R	70K9076	0.11	0.03

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MULTILAYER CERAMIC CAPACITORS - 0.5pF TO 82,000pF (CONT.)

C0402 SERIES, VOLTAGE: 100V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-49
C0402C101J1GACTU	100	± 5%	C0G / NP0	74R1762	0.37	0.32
C0402C102J1GACTU	1000	± 5%	C0G / NP0	94M5621	0.43	0.37
C0603 SERIES, VOLTAGE: 16V						
C0603C103K4RACTU	10 000	± 10%	X7R	90C0378	0.03	0.02
C0603C223K4RACTU	22 000	± 10%	X7R	64K2853	0.10	0.06
C0603 SERIES, VOLTAGE: 25V						
C0603C102J3GACTU	1000	± 5%	C0G / NP0	14N2172	0.13	0.09
C0603C103K3RACTU	10 000	± 10%	X7R	31C7459	0.10	0.03
C0603C473K3RACTU	47 000	± 10%	X7R	14N2176	0.05	0.04
C0603 SERIES, VOLTAGE: 50V						
C0603C229C5GACTU	2.2	± 0.25pF	C0G / NP0	74R1782	0.30	0.26
C0603C339C5GACTU	3.3	± 0.25pF	C0G / NP0	74R1789	0.30	0.26
C0603C100J5GACTU	10	± 5%	C0G / NP0	64K2831	0.13	0.03
C0603C150J5GACTU	15	± 5%	C0G / NP0	70K9092	0.09	0.04
C0603C180J5GACTU	18	± 5%	C0G / NP0	64K2845	0.06	0.03
C0603C220J5GACTU	22	± 5%	C0G / NP0	64K2846	0.11	0.02
C0603C330J5GACTU	33	± 5%	C0G / NP0	64K2857	0.05	0.02
C0603C470J5GACTU	47	± 5%	C0G / NP0	64K2863	0.06	0.03
C0603C470K5GACTU	47	± 10%	C0G / NP0	64K2864	0.26	0.18
C0603C820J5GACTU	82	± 5%	C0G / NP0	70K9098	0.09	0.04
C0603C121J5GACTU	120	± 5%	C0G / NP0	64K2841	0.09	0.04
C0603C151J5GACTU	150	± 5%	C0G / NP0	64K2842	0.08	0.04
C0603C181J5GACTU	180	± 5%	C0G / NP0	01J3311	0.06	0.04
C0603C221J5GACTU	220	± 5%	C0G / NP0	64K2847	0.06	0.03
C0603C221K5RACTU	220	± 10%	X7R	64K2849	0.09	0.04
C0603C271J5GACTU	270	± 5%	C0G / NP0	64K2856	0.07	0.04
C0603C391J5GACTU	390	± 5%	C0G / NP0	64K2862	0.11	0.08
C0603C471J5GACTU	470	± 5%	C0G / NP0	14N2175	0.06	0.04
C0603C561K5RACTU	560	± 10%	X7R	64K2867	0.23	0.20
C0603C102J5GACTU	1000	± 5%	C0G / NP0	02J8136	0.08	0.06
C0603C102J5RACTU	1000	± 5%	X7R	42J9795	0.10	0.04
C0603C122J5GACTU	1200	± 5%	C0G / NP0	74R1772	0.36	0.31
C0603C152K5RACTU	1500	± 10%	X7R	64K2843	0.06	0.03
C0603C182J5GACTU	1800	± 5%	C0G / NP0	74R1778	0.36	0.31
C0603C222K5RACTU	2200	± 10%	X7R	64K2852	0.09	0.03
C0603C222J5GACTU	2200	± 5%	C0G / NP0	94M5626	0.27	0.24
C0603C272J5GACTU	2700	± 5%	C0G / NP0	74R1785	0.28	0.24
C0603C332K5RACTU	3300	± 10%	X7R	64K2859	0.07	0.03
C0603C472J5GACTU	4700	± 5%	C0G / NP0	94M5627	0.28	0.25
C0603C472J5RACTU	4700	± 5%	X7R	52K5445	0.10	0.04
C0603C472K5RACTU	4700	± 10%	X7R	64K2865	0.09	0.03
C0603C562J5GACTU	5600	± 5%	C0G / NP0	74R1794	0.30	0.26
C0603C682K5RACTU	6800	± 10%	X7R	70K9097	0.07	0.03
C0603C822K5RACTU	8200	± 10%	X7R	72J6002	0.23	0.20
C0603C103J5RACTU	10 000	± 5%	X7R	84C9668	0.10	0.04
C0603C103M5RACTU	10 000	± 20%	X7R	64K2835	0.09	0.03
C0603 SERIES, VOLTAGE: 100V						
C0603C100J1GACTU	10	± 5%	C0G / NP0	70K9085	0.10	0.06
C0603C120J1GACTU	12	± 5%	C0G / NP0	74R1771	0.10	0.07
C0603C150J1GACTU	15	± 5%	C0G / NP0	74R1773	0.10	0.07
C0603C180J1GACTU	18	± 5%	C0G / NP0	74R1776	0.10	0.07
C0603C220J1GACTU	22	± 5%	C0G / NP0	74R1779	0.11	0.05
C0603C270J1GACTU	27	± 5%	C0G / NP0	74R1783	0.10	0.07
C0603C330J1GACTU	33	± 5%	C0G / NP0	74R1786	0.07	0.05
C0603C470J1GACTU	47	± 5%	C0G / NP0	74R1791	0.10	0.05
C0603C680J1GACTU	68	± 5%	C0G / NP0	74R1795	0.11	0.06
C0603C101J1GACTU	100	± 5%	C0G / NP0	70K9086	0.11	0.05
C0603C151J1GACTU	180	± 5%	C0G / NP0	74R1775	0.22	0.19
C0603C221J1GACTU	220	± 5%	C0G / NP0	74R1781	0.06	0.05
C0603C271J1GACTU	270	± 5%	C0G / NP0	74R1784	0.25	0.22
C0603C331J1GACTU	330	± 5%	C0G / NP0	74R1788	0.09	0.08
C0603C561J1GACTU	560	± 5%	C0G / NP0	78R4008	0.28	0.24
C0603C681J1GACTU	680	± 5%	C0G / NP0	78R4010	0.28	0.24
C0603C102J1GACTU	1000	± 5%	C0G / NP0	74R1770	0.31	0.27
C0603C472J1GACTU	4700	± 5%	C0G / NP0	78R4006	0.31	0.27
C0603 SERIES, VOLTAGE: 200V						
C0603C100J2GACTU	10	± 5%	C0G / NP0	74R1769	0.24	0.21
C0603C220J2GACTU	22	± 5%	C0G / NP0	74R1780	0.24	0.21
C0603C330J2GACTU	33	± 5%	C0G / NP0	74R1787	0.24	0.21
C0603C470J2GACTU	47	± 5%	C0G / NP0	74R1792	0.24	0.21

➤ CONTINUED ➤

MULTILAYER CERAMIC CAPACITORS - 0.5pF TO 82,000pF (CONT.)

C0805 SERIES, VOLTAGE: 25V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-49
● C0805C222J3GACTU	2200	± 5%	C0G / NP0	14N2180	0.38	0.27
● C0805C473J3GACTU	47 000	± 5%	C0G / NP0	94M5640	0.66	0.55
C0805 SERIES, VOLTAGE: 50V						
● C0805C229C5GACTU	2.2	± 0.25pF	C0G / NP0	74R1802	0.29	0.25
● C0805C339C5GACTU	3.3	± 0.25pF	C0G / NP0	74R1805	0.30	0.26
● C0805C479D5GACTU	4.7	± 0.5pF	C0G / NP0	79H0795	0.24	0.17
● C0805C479C5GACTU	4.7	± 0.25pF	C0G / NP0	74R1809	0.29	0.25
● C0805C689C5GACTU	6.8	± 0.25pF	C0G / NP0	74R1811	0.37	0.32
● C0805C100J5GACTU	10	± 5%	C0G / NP0	64K2873	0.05	0.04
● C0805C120J5GACTU	12	± 5%	C0G / NP0	64K2898	0.10	0.05
● C0805C220J5GACTU	22	± 5%	C0G / NP0	70K9277	0.12	0.04
● C0805C270J5GACTU	27	± 5%	C0G / NP0	64K2920	0.07	0.04
● C0805C330J5GACTU	33	± 5%	C0G / NP0	64K2926	0.05	0.04
● C0805C470J5GACTU	47	± 5%	C0G / NP0	64K2936	0.05	0.04
● C0805C560J5GACTU	56	± 5%	C0G / NP0	64K2941	0.11	0.06
● C0805C680J5GACTU	68	± 5%	C0G / NP0	64K2945	0.10	0.05
● C0805C820J5GACTU	82	± 5%	C0G / NP0	64K2949	0.11	0.08
● C0805C101J5GACTU	100	± 5%	C0G / NP0	70K9275	0.12	0.04
● C0805C101K5GACTU	100	± 10%	C0G / NP0	64K2875	0.11	0.06
● C0805C121J5GACTU	120	± 5%	C0G / NP0	64K2899	0.10	0.07
● C0805C221K5RACTU	220	± 10%	X7R	64K2916	0.27	0.24
● C0805C271J5GACTU	270	± 5%	C0G / NP0	64K2921	0.11	0.08
● C0805C331J5GACTU	330	± 5%	C0G / NP0	64K2928	0.09	0.06
● C0805C331K5RACTU	330	± 10%	X7R	64K2929	0.10	0.07
● C0805C391J5GACTU	390	± 5%	C0G / NP0	64K2933	0.23	0.20
● C0805C471J5GACTU	470	± 5%	C0G / NP0	64K2937	0.07	0.05
● C0805C471K5RACTU	470	± 10%	X7R	81C9814	0.07	0.05
● C0805C561J5GACTU	560	± 5%	C0G / NP0	33K3949	0.11	0.08
● C0805C681J5GACTU	680	± 5%	C0G / NP0	64K2946	0.10	0.07
● C0805C681K5RACTU	680	± 10%	X7R	64K2947	0.22	0.19
● C0805C102F5GACTU	1000	± 1%	C0G / NP0	64K2876	1.31	1.09
● C0805C102K5GACTU	1000	± 10%	C0G / NP0	14N2179	0.14	0.10
● C0805C102K5RACTU	1000	± 10%	X7R	64K2881	0.08	0.03
● C0805C152K5RACTU	1500	± 10%	X7R	64K2905	0.11	0.08
● C0805C152J5GACTU	1500	± 5%	C0G / NP0	74R1798	0.18	0.12
● C0805C222J5GACTU	2200	± 5%	C0G / NP0	74R1801	0.08	0.06
● C0805C332K5RACTU	3300	± 10%	X7R	64K2930	0.09	0.05
● C0805C332J5GACTU	3300	± 5%	C0G / NP0	74R1804	0.43	0.31
● C0805C392K5RACTU	3900	± 10%	X7R	64K2935	0.12	0.06
● C0805C472K5RACTU	4700	± 10%	X7R	64K2938	0.10	0.04
● C0805C562K5RACTU	5600	± 10%	X7R	64K2943	0.14	0.09
● C0805C682K5RACTU	6800	± 10%	X7R	64K2948	0.09	0.07
● C0805C103J5GACTU	10 000	± 5%	C0G / NP0	94M5637	0.56	0.40
● C0805C103Z5UACTU	10 000	+80%, -20%	Z5U	64K2887	0.10	0.07
● C0805C183K5RACTU	18 000	± 10%	X7R	64K2911	0.24	0.21
● C0805C223J5GACTU	22 000	± 5%	C0G / NP0	94M5638	0.64	0.46
● C0805C273K5RACTU	27 000	± 10%	X7R	64K2924	0.11	0.08
● C0805C333K5RACTU	33 000	± 10%	X7R	64K2931	0.08	0.06
C0805 SERIES, VOLTAGE: 100V						
● C0805C100J1GACTU	10	± 5%	C0G / NP0	64K2872	0.08	0.05
● C0805C150J1GACTU	15	± 5%	C0G / NP0	74R1797	0.08	0.06
● C0805C330J1GACTU	33	± 5%	C0G / NP0	74R1803	0.09	0.06
● C0805C470J1GACTU	47	± 5%	C0G / NP0	74R1806	0.08	0.05
● C0805C680J1GACTU	68	± 5%	C0G / NP0	74R1810	0.29	0.20
● C0805C101K1GACTU	100	± 10%	C0G / NP0	14N2178	0.29	0.20
● C0805C221J1GACTU	220	± 5%	C0G / NP0	64K2914	0.06	0.05
● C0805C331J1GACTU	330	± 5%	C0G / NP0	64K2927	0.11	0.07
● C0805C102J1GACTU	1000	± 5%	C0G / NP0	64K2877	0.15	0.10
● C0805C102K1RACTU	1000	± 10%	X7R	64K2880	0.06	0.04
● C0805C103K1RACTU	10 000	± 10%	X7R	99B3817	0.10	0.04
C0805 SERIES, VOLTAGE: 200V						
● C0805C220J2GACTU	22	± 5%	C0G / NP0	74R1799	0.23	0.20
● C0805C470J2GACTU	47	± 5%	C0G / NP0	74R1807	0.23	0.20
● C0805C101J2GACTU	100	± 5%	C0G / NP0	70K9130	0.07	0.06
● C0805C221J2GACTU	220	± 5%	C0G / NP0	74R1800	0.28	0.24
C1206 SERIES, VOLTAGE: 25V						
● C1206C103J3GACTU	10 000	± 5%	C0G / NP0	70K9162	0.27	0.23
● C1206C155K3NACTU	1 500 000	± 10%	X8L	78R4012	1.13	0.94
C1206 SERIES, VOLTAGE: 50V						
● C1206C279C5GACTU	2.7	± 0.25pF	C0G / NP0	70K9317	0.42	0.30
● C1206C689D5GACTU	6.8	± 0.5pF	C0G / NP0	70K9341	0.31	0.27
● C1206C100J5GACTM	10	± 5%	C0G / NP0	79H2661	0.16	0.11

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MULTILAYER CERAMIC CAPACITORS - 0.5pF TO 82,000pF (CONT.)

C1206 SERIES, VOLTAGE: 50V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-49
● C1206C120J5GACTU	12	± 5%	C0G / NP0	70K9286	0.21	0.14
● C1206C150J5GACTU	15	± 5%	C0G / NP0	70K9292	0.17	0.12
● C1206C180J5GACTU	18	± 5%	C0G / NP0	70K9299	0.21	0.14
● C1206C220J5GACTU	22	± 5%	C0G / NP0	70K9304	0.13	0.09
● C1206C270J5GACTU	27	± 5%	C0G / NP0	70K9313	0.18	0.13
● C1206C330J5GACTU	33	± 5%	C0G / NP0	70K9318	0.13	0.09
● C1206C390J5GACTU	39	± 5%	C0G / NP0	70K9326	0.32	0.28
● C1206C560J5GACTU	56	± 5%	C0G / NP0	70K9331	0.33	0.28
● C1206C680J5GACTU	68	± 5%	C0G / NP0	70K9336	0.31	0.27
● C1206C820J5GACTU	82	± 5%	C0G / NP0	70K9343	0.31	0.27
● C1206C101K5GACTU	100	± 10%	C0G / NP0	94W4770	0.13	0.09
● C1206C121J5GACTU	120	± 5%	C0G / NP0	70K9287	0.33	0.28
● C1206C221K5GACTU	220	± 10%	C0G / NP0	70K9305	0.32	0.28
● C1206C681J5GACTU	680	± 5%	C0G / NP0	74R1816	0.12	0.10
● C1206C102K5GACTU	1000	± 10%	C0G / NP0	70K9280	0.26	0.23
● C1206C102K5RACTU	1000	± 10%	X7R	14N2182	0.09	0.06
● C1206C122K5RACTU	1200	± 10%	X7R	70K9288	0.28	0.19
● C1206C152K5RACTU	1500	± 10%	X7R	70K9295	0.25	0.22
● C1206C182K5RACTU	1800	± 10%	X7R	70K9300	0.25	0.22
● C1206C332K5RACTU	3300	± 10%	X7R	70K9319	0.09	0.08
● C1206C392K5RACTU	3900	± 10%	X7R	70K9328	0.25	0.22
● C1206C682K5RACTU	6800	± 10%	X7R	70K9337	0.25	0.22
● C1206C103K5RACTU	10 000	± 10%	X7R	01J3315	0.18	0.06
● C1206C103J5GACTU	10 000	± 5%	C0G / NP0	74R1814	1.12	0.93
● C1206C223J5GACTU	22 000	± 5%	C0G / NP0	94M5670	1.30	1.09
● C1206C333K5RACTU	33 000	± 10%	X7R	70K9320	0.16	0.11
● C1206C683J5RACTU	68 000	± 5%	X7R	70K9338	0.30	0.26
C1206 SERIES, VOLTAGE: 100V						
● C1206C100J1GACTU	10	± 5%	C0G / NP0	74R1812	0.10	0.09
● C1206C220J1GACTU	22	± 5%	C0G / NP0	74R1815	0.19	0.13
● C1206C101J1GACTU	100	± 5%	C0G / NP0	70K9278	0.16	0.11
● C1206C102J1GACTU	1000	± 5%	C0G / NP0	70K9279	0.17	0.15
● C1206C103K1RACTU	10 000	± 10%	X7R	85C1991	0.11	0.08
● C1206C103M1RACTU	10 000	± 20%	X7R	14N2183	0.16	0.11
● C1206C103J1GACTU	10 000	± 5%	C0G / NP0	74R1813	1.18	0.99
● C1206C823K1RACTU	82 000	± 10%	X7R	70K9345	0.37	0.26
C1206 SERIES, VOLTAGE: 200V						
● C1206C100J2GACTU	10	± 5%	C0G / NP0	70K9152	0.34	0.24
● C1206C101J2GACTU	100	± 5%	C0G / NP0	77C6075	0.34	0.24
● C1206C102K2RACTU	1000	± 10%	X7R	70K9161	0.26	0.23
C1210 SERIES, VOLTAGE: 50V						
● C1210C472J5GACTU	4700	± 5%	C0G / NP0	19C6077	0.85	0.71
● C1210C103F5GACTU	10 000	± 1%	C0G / NP0	94W4771	4.97	4.42
● C1210C103J5GACTU	10 000	± 5%	C0G / NP0	64K2953	1.40	1.15
C1812 SERIES, VOLTAGE: 50V						
● C1812C103J5GACTU	10 000	± 5%	C0G / NP0	70K9205	1.11	0.91

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MULTILAYER CERAMIC CAPACITORS - 100,000 pF AND ABOVE

SMD

RoHS Compliant Available

The Capacitance Company KEMET CHARGED.

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-49
C0402 SERIES, VOLTAGE: 4V						
C0402C335M7PACTU	3 300 000	± 20%	X5R	14N2170	0.37	0.32
C0402 SERIES, VOLTAGE: 6.3V						
C0402C104K9RACTU	100 000	± 10%	X7R	77R3548	0.10	0.06
C0402C224K9PACTU	220 000	± 10%	X5R	14N2169	0.06	0.05
C0402C105K9PACTU	1 000 000	± 10%	X5R	70K9079	0.06	0.04
C0402 SERIES, VOLTAGE: 10V						
C0402C104K8PACTU	100 000	± 10%	X5R	78H4791	0.13	0.02
C0402C104M8PACTU	100 000	± 20%	X5R	14N2168	0.10	0.03
C0402C104K8RACTU	100 000	± 10%	X7R	14N2167	0.12	0.03
C0402 SERIES, VOLTAGE: 16V						
C0402C104Z4VACTU	100 000	+80%, -20%	Y5V	70K9078	0.10	0.03
C0402C104Z4VACTU	100 000	+80%, -20%	Y5V	70K9078	0.10	0.03
C0603 SERIES, VOLTAGE: 6.3V						
C0603C105Z9VACTU	1 000 000	+80%, -20%	Y5V	70K9091	0.16	0.11
C0603C335M9PACTU	3 300 000	± 20%	X5R	14N2174	0.30	0.26
C0603C475K9PACTU	4 700 000	± 10%	X5R	70K9096	0.09	0.06
C0603 SERIES, VOLTAGE: 10V						
C0603C104K8RACTU	100 000	± 10%	X7R	62H0320	0.10	0.03
C0603C564K8PACTU	560 000	± 10%	X5R	77R3561	0.21	0.18
C0603C105K8PACTU	1 000 000	± 10%	X5R	70K9090	0.05	0.04
C0603C225K8PACTU	2 200 000	± 10%	X5R	70K9095	0.07	0.05
C0603C475K8PACTU	4 700 000	± 10%	X5R	14N2177	0.27	0.12
C0603 SERIES, VOLTAGE: 16V						
C0603C104J4RACTU	100 000	± 5%	X7R	64K2836	0.14	0.10
C0603C104M4RACTU	100 000	± 20%	X7R	64K2839	0.10	0.03
C0603C104Z4VACTU	100 000	+80%, -20%	Y5V	64K2840	0.10	0.03
C0603C224K4RACTU	220 000	± 10%	X7R	14N2173	0.36	0.31
C0603C105K4PACTU	1 000 000	± 10%	X5R	70K9089	0.08	0.05
C0603 SERIES, VOLTAGE: 25V						
C0603C223K3RACTU	22 000	± 10%	X7R	77R3556	0.09	0.04
C0603C104J3RACTU	100 000	± 5%	X7R	01J3308	0.37	0.16
C0603C104K3RACTU	100 000	± 10%	X7R	64K2837	0.11	0.02
C0603C104M3VACTU	100 000	± 20%	Y5V	64K2838	0.10	0.07
C0603C224Z3VACTU	220 000	+80%, -20%	Y5V	64K2854	0.25	0.21
C0603 SERIES, VOLTAGE: 50V						
C0603C681J5GACTU	680	± 5%	C0G / NP0	77R3562	0.09	0.06
C0603 SERIES, VOLTAGE: 100V						
C0603C103K1RACTU	10 000	± 10%	X7R	77R3550	0.03	0.03
C0603C393K1RACTU	39 000	± 10%	X7R	77R3558	0.25	0.22
C0805 SERIES, VOLTAGE: 6.3V						
C0805C226M9PACTU	22 000 000	± 20%	X5R	70K9142	1.11	0.91
C0805 SERIES, VOLTAGE: 16V						
C0805C474K4RACTU	470 000	± 10%	X7R	14N2181	0.11	0.08
C0805C105K4RACTU	1 000 000	± 10%	X7R	77C5351	0.13	0.06
C0805C105M4RACTU	1 000 000	± 20%	X7R	42H5473	0.21	0.14
C0805C155Z4VACTU	1 500 000	+80%, -20%	Y5V	64K2907	0.38	0.27
C0805C225K8RACTU	2 200 000	± 10%	X7R	77R3564	0.25	0.21
C0805C475K4PACTU	4 700 000	± 10%	X5R	70K9143	0.16	0.12
C0805 SERIES, VOLTAGE: 25V						
C0805C474K3RACTU	470 000	± 10%	X7R	64K2940	0.15	0.13
C0805C105K3PACTU	1 000 000	± 10%	X5R	70K9136	0.10	0.07
C0805C105Z3VACTU	1 000 000	+80%, -20%	Y5V	64K2896	0.37	0.26
C0805 SERIES, VOLTAGE: 50V						
C0805C222K5RACTU	2200	± 10%	X7R	19C6019	0.10	0.04
C0805C683K5RACTU	68 000	± 10%	X7R	77R3566	0.07	0.05
C0805C104J5RACTU	100 000	± 5%	X7R	64K2889	0.17	0.06
C0805C104K5RACTU	100 000	± 10%	X7R	19C6015	0.12	0.03
C0805C104Z5UACTU	100 000	+80%, -20%	Z5U	64K2892	0.13	0.09
C0805C104Z5VACTU	100 000	+80%, -20%	Y5V	64K2893	0.10	0.07
C0805C224K5RACTU	220 000	± 10%	X7R	70K9140	0.12	0.06
C0805C474K5RACTU	470 000	± 10%	X7R	93K6002	0.12	0.09
C0805 SERIES, VOLTAGE: 100V						
C0805C104K1RACTU	100 000	± 10%	X7R	70K9135	0.32	0.16
C1206 SERIES, VOLTAGE: 6.3V						
C1206C226K9PACTU	22 000 000	± 10%	X5R	70K9176	0.25	0.21
C1206C476M9PACTU	47 000 000	± 20%	X5R	70K9179	1.80	1.48

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MULTILAYER CERAMIC CAPACITORS - 100,000 pF AND ABOVE (CONT.)

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-49
C1206 SERIES, VOLTAGE: 10V						
C1206C106Z8VACTU	10 000 000	+80%, -20%	Y5V	70K9285	0.28	0.19
C1206C106K8PACTU	10 000 000	± 10%	X5R	70K9171	0.21	0.15
C1206C226M8PACTU	22 000 000	± 20%	X5R	94M5671	0.71	0.59
C1206C476M8PACTU	47 000 000	± 20%	X5R	94M5674	1.26	1.03
C1206 SERIES, VOLTAGE: 16V						
C1206C225K4PACTU	2 200 000	± 10%	X5R	70K9310	0.38	0.33
C1206C335K4PACTU	3 300 000	± 10%	X5R	70K9323	0.43	0.31
C1206C475K4PACTU	4 700 000	± 10%	X5R	24C9332	0.52	0.37
C1206C475K4RACTU	4 700 000	± 10%	X7R	70K9178	1.22	1.02
C1206C475Z4VACTU	4 700 000	+80%, -20%	Y5V	70K9329	0.26	0.23
C1206 SERIES, VOLTAGE: 25V						
C1206C104J3GACTU	100 000	± 5%	C0G / NP0	94M5668	1.44	1.18
C1206C224K3RACTU	220 000	± 10%	X7R	70K9308	0.19	0.13
C1206C334K3RACTU	330 000	± 10%	X7R	70K9321	0.17	0.15
C1206C105K3PACTU	1 000 000	± 10%	X5R	70K9168	0.79	0.66
C1206C105K3RACTU	1 000 000	± 10%	X7R	03M7475	0.21	0.09
C1206C105M3VACTU	1 000 000	± 20%	Y5V	79H2765	0.37	0.26
C1206C105Z3VACTU	1 000 000	+80%, -20%	Y5V	70K9284	0.19	0.13
C1206C225K3PACTU	2 200 000	± 10%	X5R	70K9174	0.53	0.38
C1206C475K3PACTU	4 700 000	± 10%	X5R	70K9177	0.27	0.20
C1206 SERIES, VOLTAGE: 50V						
C1206C104J5RACTU	100 000	± 5%	X7R	70K9281	0.30	0.10
C1206C104K5RACTU	100 000	± 10%	X7R	70K9167	0.12	0.05
C1206C104M5UACTU	100 000	± 20%	Z5U	70K9282	0.15	0.10
C1206C104Z5UACTU	100 000	+80%, -20%	Z5U	70K9283	0.14	0.10
C1206C224K5RACTU	220 000	± 10%	X7R	70K9309	0.12	0.09
C1206C334K5RACTU	330 000	± 10%	X7R	15R3385	0.27	0.19
C1206C105K5RACTU	1 000 000	± 10%	X7R	93K6006	0.21	0.21
C1206 SERIES, VOLTAGE: 100V						
C1206C104K1RACTU	100 000	± 10%	X7R	85C2205	0.22	0.10
C1210 SERIES, VOLTAGE: 6.3V						
C1210C476M9PACTU	47 000 000	± 20%	X5R	70K9196	1.47	1.23
C1210 SERIES, VOLTAGE: 10V						
C1210C106M8PACTU	10 000 000	± 20%	X5R	14N2188	0.57	0.47
C1210C226K8RACTU	22 000 000	± 10%	X7R	14N2190	0.96	0.80
C1210C226M8RACTU	22 000 000	± 20%	X7R	14N2191	0.96	0.80
C1210 SERIES, VOLTAGE: 16V						
C1210C106K4PACTU	10 000 000	± 10%	X5R	14N2185	0.34	0.29
C1210C106M4PACTU	10 000 000	± 20%	X5R	14N2186	0.57	0.47
C1210C226K4PACTU	22 000 000	± 10%	X5R	70K9193	0.59	0.48
C1210 SERIES, VOLTAGE: 25V						
C1210C225K3RACTU	2 200 000	± 10%	X7R	70K9192	0.41	0.34
C1210C475K3RACTU	4 700 000	± 10%	X7R	93K6013	1.04	0.87
C1210 SERIES, VOLTAGE: 35V						
C1210C106M6PACTU	10 000 000	± 20%	X5R	14N2187	0.83	0.69
C1210 SERIES, VOLTAGE: 50V						
C1210C104K5RACTU	100 000	± 10%	X7R	01J3318	0.27	0.23
C1210C224K5RACTU	220 000	± 10%	X7R	64K2957	0.20	0.17
C1210C105K5PACTU	1 000 000	± 10%	X5R	70K9186	1.07	0.90
C1210C105K5RACTU	1 000 000	± 10%	X7R	70K9187	0.54	0.29
C1210C335K5RACTU	3 300 000	± 10%	X7R	88K0231	0.69	0.58
C1210 SERIES, VOLTAGE: 100V						
C1210C104J1GACTU	100 000	± 5%	C0G / NP0	94M5700	3.93	3.49
C1210C225K1RACTU	2 200 000	± 10%	X7R	14N2189	0.60	0.50
C1210 SERIES, VOLTAGE: 200V						
C1210C104K2RACTU	100 000	± 10%	X7R	70K9184	0.51	0.36
C1812 SERIES, VOLTAGE: 50V						
C1812C105K5RACTU	1 000 000	± 10%	X7R	19C6081	1.18	0.98
C1812 SERIES, VOLTAGE: 100V						
C1812C104K1RACTU	100 000	± 10%	X7R	70K9208	0.96	0.80
C1812 SERIES, VOLTAGE: 200V						
C1812C104K2RACTU	100 000	± 10%	X7R	70K9209	1.16	0.97
C1825 SERIES, VOLTAGE: 50V						
C1825C105K5RACTU	1 000 000	± 10%	X7R	70K9218	2.26	1.87
C1825C225K5RACTU	2 200 000	± 10%	X7R	70K9219	3.84	3.18
C2220 SERIES, VOLTAGE: 50V						
C2220C105K5RACTU	1 000 000	± 10%	X7R	70K9221	1.62	1.33
C2220C225K5RACTU	2 200 000	± 10%	X7R	70K9222	4.01	3.32

(175942)

CERAMIC CAPACITORS

KPS SERIES SMD STACKED MULTILAYER CERAMIC CAPACITORS

RoHS Compliant Available

The Capacitance Company KEMET CHARGED.

Features
- Higher capacitance in the same footprint
- Potential board space savings
- Advanced protection against thermal and mechanical stress
- Provides up to 10mm of board flex capability
- Reduces audible, microphonic noise
- Extremely low ESR and ESL
- Non-polar device

Applications
- Industrial, Automotive, Military, Telecom
- Smoothing circuits
- DC-to-DC converters
- Power supplies (input/output filters)
- Noise Reduction (piezoelectric / mechanical)

Specifications
- Dielectric: X7R
- Operating Temp. Range: -55°C to +125°C
- Temperature Coefficient: ±15%

SINGLE CHIP STACK
VOLTAGE: 25 VDC

Mfg. Part No.	Cap. (µF)	Cap. Tol.	Case Size	Tape Cut Stock No.	Tape Cut Price Each 1-9
● C2220C106K3R1CTU	10	± 10%	2220 [5650 Metric]	79R5753	5.01
VOLTAGE: 50 VDC					
● C2220C335K5R1CTU	3.3	± 10%	2220 [5650 Metric]	79R5768	4.75
● C1210C475K5R1CTU	4.7	± 10%	1210 [3225 Metric]	79R5722	2.60
● C2220C106K5R1CTU	10	± 10%	2220 [5650 Metric]	79R5755	4.85
VOLTAGE: 100 VDC					
● C1210C105K1R1CTU	1	± 10%	1210 [3225 Metric]	79R5718	2.45
● C1210C225K1R1CTU	2.2	± 10%	1210 [3225 Metric]	79R5720	3.61
● C2220C335K1R1CTU	3.3	± 10%	2220 [5650 Metric]	79R5766	4.83
DOUBLE CHIP STACK VOLTAGE: 10 VDC					
● C1210C476M8R2CTU	47	± 20%	1210 [3225 Metric]	79R5726	3.78
VOLTAGE: 16 VDC					
● C1812C226M4R2CTU	22	± 20%	1812 [4532 Metric]	79R5736	3.61
● C2220C336M4R2CTU	33	± 20%	2220 [5650 Metric]	79R5770	4.58
VOLTAGE: 25 VDC					
● C1812C106M3R2CTU	10	± 20%	1812 [4532 Metric]	79R5734	3.64
● C2220C476M3R2CTU	47	± 20%	2220 [5650 Metric]	79R5772	4.86
VOLTAGE: 50 VDC					
● C1812C335M5R2CTU	3.3	± 20%	1812 [4532 Metric]	79R5738	3.64
● C2220C106M5R2CTU	10	± 20%	2220 [5650 Metric]	79R5757	4.64
● C2220C226M5R2CTU	22	± 20%	2220 [5650 Metric]	79R5764	4.88
VOLTAGE: 100 VDC					
● C2220C225M1R2CTU	2.2	± 20%	2220 [5650 Metric]	79R5762	3.46
● C1210C475M1R2CTU	4.7	± 20%	1210 [3225 Metric]	79R5724	3.58
VOLTAGE: 250 VDC					
● C1812C474MAR2CTU	0.47	± 20%	1812 [4532 Metric]	79R5743	3.68
● C2220C105MAR2CTU	1	± 20%	2220 [5650 Metric]	79R5751	4.64
● C2220C225MAR2CTU	2.2	± 20%	2220 [5650 Metric]	79R5760	4.68

(190430)

MONOLITHIC SURFACE MOUNT CERAMIC CHIP CAPACITORS

RoHS Compliant Available

VISHAY.

Features:
- Vitramon's Proprietary "Wet Build-Up Process"
- Excellent Adhesion Between Dielectric Layers of The Capacitor

Minimum quantities apply. Other ratings, voltages, and case sizes available; *go online or call.*

0603 CASE SIZE, VOLTAGE: 50 VDC

Mfg. Part No.	Cap. (pF)	Tol.	Temp Coeff.	Tape Cut Stock No.	Tape Cut Price Each 1-4999
● VJ0603A470JXAAC00	47	± 5%	C0G / NP0	46C5025	0.10
0805 CASE SIZE, VOLTAGE: 50 VDC					
● VJ0805A820JXAMT	82	± 5%	C0G / NP0	47C1779	0.07
● VJ0805A331JXAMT	330	± 5%	C0G / NP0	47C0156	0.12
● VJ0805A561JXAMT	560	± 5%	C0G / NP0	47C1163	0.12
0805 CASE SIZE, VOLTAGE: 100 VDC					
● VJ0805A151JXBMT	150	± 5%	C0G / NP0	46C8348	0.13
● VJ0805A821JXBMT	820	± 5%	C0G / NP0	47C1907	0.18
● VJ0805A122JXBMT	1200	± 5%	C0G / NP0	46C8108	0.24
● VJ0805A152JXBMT	1500	± 5%	C0G / NP0	46C8460	0.26
1206 CASE SIZE, VOLTAGE: 25 VDC					
● VJ1206Y474KXXMT	470 000	± 10%	X7R	48C6124	0.38
1206 CASE SIZE, VOLTAGE: 50 VDC					
● VJ1206A101JXAMT	100	± 5%	C0G / NP0	47C6901	0.13
● VJ1206A221JXAMT	220	± 5%	C0G / NP0	16F9738	0.15
● VJ1206A471JXAMT	470	± 5%	C0G / NP0	48C0583	0.12
● VJ1206A821JXAMT	820	± 5%	C0G / NP0	48C1927	0.18

➤ CONTINUED ➤

MONOLITHIC SURFACE MOUNT CERAMIC CHIP CAPACITORS (CONT.)

1206 CASE SIZE, VOLTAGE: 50 VDC

Mfg. Part No.	Cap. (pF)	Tol.	Temp Coeff.	Tape Cut Stock No.	Tape Cut Price Each 1-4999
● VJ1206A332JXAMT	3300	± 5%	C0G / NP0	47C9863	0.36
● VJ1206Y332KXAMT	3300	± 10%	X7R	48C5214	0.12
● VJ1206A472JXAMT	4700	± 5%	C0G / NP0	48C0695	0.36
● VJ1206Y333KXAMT	33 000	± 10%	X7R	48C5350	0.15
● VJ1206Y224KXAMT	220 000	± 10%	X7R	29C5109	0.30
1206 CASE SIZE, VOLTAGE: 100 VDC					
● VJ1206A270JXBMT	27	± 5%	C0G / NP0	47C8911	0.12
● VJ1206A820JXBMT	82	± 5%	C0G / NP0	48C1807	0.13
● VJ1206A101JXBMT	100	± 5%	C0G / NP0	47C6909	0.13
● VJ1206A221JXBMT	220	± 5%	C0G / NP0	47C8663	0.14
● VJ1206A471JXBMT	470	± 5%	C0G / NP0	48C0591	0.13
● VJ1206A222JXBMT	2200	± 5%	C0G / NP0	47C8783	0.28
● VJ1206Y223KXBMT	22 000	± 10%	X7R	48C4641	0.15
● VJ1206Y104KXBAT	100 000	± 10%	X7R	48C3239	0.24
1206 CASE SIZE, VOLTAGE: 200 VDC					
● VJ1206A101KXCMT	100	± 10%	C0G / NP0	06H5178	0.15
1206 CASE SIZE, VOLTAGE: 500 VDC					
● VJ1206A221KXEMT	220	± 10%	C0G / NP0	47C8711	0.32
● VJ1206A821KXEMT	820	± 10%	C0G / NP0	06H5180	0.32
1210 CASE SIZE, VOLTAGE: 25 VDC					
● VJ1210Y474KXXAT	470 000	± 10%	X7R	49C0132	0.47
1210 CASE SIZE, VOLTAGE: 50 VDC					
● VJ1210Y104KXAAT	100 000	± 10%	X7R	48C9016	0.29
● VJ1210Y474KXAAT	470 000	± 10%	X7R	49C0125	0.64
1210 CASE SIZE, VOLTAGE: 100 VDC					
● VJ1210Y104KXBAT	100 000	± 10%	X7R	48C9020	0.27
● VJ1210Y224KXBAT	220 000	± 10%	X7R	48C9592	0.42
● VJ1210Y334KXBAT	330 000	± 10%	X7R	48C9868	0.53
1210 CASE SIZE, VOLTAGE: 200 VDC					
● VJ1210Y104KXCAT	100 000	± 10%	X7R	48C9024	0.36
1210 CASE SIZE, VOLTAGE: 500 VDC					
● VJ1210Y223KXEAT	22 000	± 10%	X7R	48C9536	0.59
1812 CASE SIZE, VOLTAGE: 25 VDC					
● VJ1812Y105KXXAT	1 000 000	± 10%	X7R	49C2784	1.19
1812 CASE SIZE, VOLTAGE: 50 VDC					
● VJ1812Y474KXAAT	470 000	± 10%	X7R	49C3245	0.83
● VJ1812Y105KXAAT	1 000 000	± 10%	X7R	49C2782	1.46
1812 CASE SIZE, VOLTAGE: 100 VDC					
● VJ1812Y104KXBAT	100 000	± 10%	X7R	49C2760	0.57
● VJ1812Y334JXBAT	330 000	± 5%	X7R	49C3116	0.91
● VJ1812Y474KXBAT	470 000	± 10%	X7R	49C3247	1.14
1812 CASE SIZE, VOLTAGE: 200 VDC					
● VJ1812Y224KXCAT	220 000	± 10%	X7R	49C3000	1.02
1812 CASE SIZE, VOLTAGE: 500 VDC					
● VJ1812Y473KXEAT	47 000	± 10%	X7R	49C3225	1.00
● VJ1812Y104KXEAT	100 000	± 10%	X7R	49C2764	1.13
1812 CASE SIZE, VOLTAGE: 1000 VDC					
● VJ1812Y103KXGAT	10 000	± 10%	X7R	49C2740	1.21
1825 CASE SIZE, VOLTAGE: 100 VDC					
● VJ1825Y105KXBAT	1 000 000	± 10%	X7R	49C3475	2.69
1825 CASE SIZE, VOLTAGE: 500 VDC					
● VJ1825Y104KXEAT	100 000	± 10%	X7R	49C3453	1.79
3640 CASE SIZE, VOLTAGE: 500 VDC					
● VJ3640Y684KXEAT	680 000	± 10%	X7R	06H2765	10.19

(7217)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

HEAVY DUTY HIGH VOLTAGE CAPACITORS

RoHS Compliant Available

VISHAY.

Applications:
- High Voltage Power Supplies, CRTs, Lasers.
- Smallest Size Available.

Performance Characteristics:
- Operating Temperature Range: -30°C to +85°C
- Storage Temperature Range: -40°C to +100°C
- Temperature Coefficient: Y5U
- Tolerance: +80% - 20%
- Dielectric Strength: 150% of rated voltage, charging current limited to 50mA.
- Insulation Resistance: 200,000 megohms or 1000ΩF minimum at 25°C.

DK GENERAL PURPOSE TYPE, EIA CLASS III
10 TO 40KV MOLDED EPOXY CASE

Mnf. Part No.	Voltage (VDC)	Cap. (pF)	D x L (mm)	Stock No.	Price Each 1-9
715C20DKT50	20000	500	22.4 x 25.4	66K9540	38.06

(108733)

MIDDLE & HIGH VOLTAGE SMD MULTILAYER CERAMIC CAPACITORS

RoHS Compliant Available

TDK

Features
- Mid Voltage: The unique design structure for mid voltage enables a compact size with high voltage withstanding
- High Voltage: No polarity
  Suits 100Base-T LAN cards, LAN board, and HUB
  Complies with ISO8802-3 for LAN applications

Applications
- Mid Voltage: Snubber circuits for switching power supply, ringer circuits for telephone and modem, or other general high voltage circuits
- High Voltage: Input signal filtering circuit of modem and LAN interface, and general high voltage circuits
  Inverter circuits with a liquid crystal backlight, LAN products, and general high voltage circuits

Specifications
- Operating Temperature Range:
  C0G, X7R, X7S: -55°C to +125°C
  X8R: 55°C to +150°C
- Mid Voltage: 100 VDC to 630 VDC
- High Voltage: 1 kVDC to 3 kVDC

Mfg. Part No.	Cap.	Cap. Tol.	Diel. Char.	Temp. Coeff.	Tape Cut Stock No.	Tape Cut Price Each 1-9
VOLTAGE: 100 VDC, CASE SIZE 1608						
C1608C0G2A101J080AA	100pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R8315	0.10
C1608C0G2A102J080AA	1000pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R8316	0.13
C1608X7R2A102K080AA	1000pF	± 10%	X7R	± 15%	90R8318	0.10
C1608X7R2A332K080AA	3300pF	± 10%	X7R	± 15%	91R0076	0.10
C1608X7R2A103K080AA	0.01µF	± 10%	X7R	± 15%	90R8319	0.11
C1608X7R2A103M080AA	0.01µF	± 20%	X7R	± 15%	90R8320	0.11
C1608X7R2A223K080AA	0.022µF	± 10%	X7R	± 15%	90R8321	0.11
C1608X7S2A104K080AB	0.1µF	± 10%	X7S	± 22%	90R8322	0.21
VOLTAGE: 100 VDC, CASE SIZE 2012						
C2012C0G2A102J060AA	1000pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R8323	0.15
C2012X7R2A102K085AA	1000pF	± 10%	X7R	± 15%	90R8325	0.12
C2012X7R2A102M085AA	1000pF	± 20%	X7R	± 15%	91R0085	0.12
C2012X7R2A222K085AA	2200pF	± 10%	X7R	± 15%	90R8329	0.12
C2012C0G2A472J125AA	4700pF	± 5%	C0G / NP0	0 ± 30ppm/°C	91R0080	0.25
C2012X7R2A472K085AA	4700pF	± 10%	X7R	± 15%	91R0086	0.12
C2012X7R2A103K085AA	0.01µF	± 10%	X7R	± 15%	90R8326	0.12
C2012X7R2A223K125AA	0.022µF	± 10%	X7R	± 15%	90R8330	0.10
C2012X7R2A473K125AA	0.047µF	± 10%	X7R	± 15%	90R8331	0.18
C2012X7R2A104K125AA	0.1µF	± 10%	X7R	± 15%	90R8327	0.18
C2012X7R2A104M125AA	0.1µF	± 20%	X7R	± 15%	90R8328	0.18
C2012X7S2A105K125AB	1µF	± 10%	X7S	± 22%	90R8332	0.31
VOLTAGE: 100 VDC, CASE SIZE 3216						
C3216C0G2A472J085AA	4700pF	± 5%	C0G / NP0	0 ± 30ppm/°C	91R0091	0.34
C3216C0G2A103J115AA	0.01µF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R8333	0.30
C3216X7R2A104K160AA	0.1µF	± 10%	X7R	± 15%	90R8340	0.26
C3216X7R2A154K160AA	0.15µF	± 10%	X7R	± 15%	91R0104	0.29
C3216X7R2A224K115AA	0.22µF	± 10%	X7R	± 15%	90R8343	0.27
C3216X7R2A474K160AA	0.47µF	± 10%	X7R	± 15%	90R8344	0.34
C3216X7R2A105K160AA	1µF	± 10%	X7R	± 15%	90R8341	0.32
C3216X7R2A105M160AA	1µF	± 20%	X7R	± 15%	90R8342	0.32
C3216X7S2A225K160AB	2.2µF	± 10%	X7S	± 22%	90R8347	0.56
VOLTAGE: 100 VDC, CASE SIZE 3225						
C3225X7R2A474K200AA	0.47µF	± 10%	X7R	± 15%	90R8353	0.50
C3225X7R2A105K200AA	1µF	± 10%	X7R	± 15%	90R8348	0.63
C3225X7R2A105M200AA	1µF	± 20%	X7R	± 15%	90R8349	0.60
C3225X7R2A225K230AB	2.2µF	± 10%	X7R	± 15%	90R8351	0.69
C3225X7R2A225M230AB	2.2µF	± 20%	X7R	± 15%	90R8352	0.69
C3225X7S2A335K200AB	3.3µF	± 10%	X7S	± 22%	90R8356	0.62
VOLTAGE: 100 VDC, CASE SIZE 4532						
C4532X7R2A105K230KA	1µF	± 10%	X7R	± 15%	90R8357	0.72
C4532X7R2A105M230KA	1µF	± 20%	X7R	± 15%	90R8358	0.74

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MIDDLE & HIGH VOLTAGE SMD MULTILAYER CERAMIC CAPACITORS (CONT.)

Mfg. Part No.	Cap.	Cap. Tol.	Diel. Char.	Temp. Coeff.	Tape Cut Stock No.	Tape Cut Price Each 1-9
VOLTAGE: 100 VDC, CASE SIZE 4532						
C4532X7R2A225M230KA	2.2µF	± 20%	X7R	± 15%	90R8359	0.82
C4532X7S2A475M230KB	4.7µF	± 20%	X7S	± 22%	90R8361	1.44
VOLTAGE: 100 VDC, CASE SIZE 5750						
C5750X7R2A475K230KA	4.7µF	± 10%	X7R	± 15%	90R8362	2.46
C5750X7R2A475M230KA	4.7µF	± 20%	X7R	± 15%	90R8363	2.05
C5750X7S2A106M230KB	10µF	± 20%	X7S	± 22%	90R8365	2.46
VOLTAGE: 250 VDC, CASE SIZE 1608						
C1608C0G2E101J080AA	100pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R8317	0.12
C1608C0G2E151J080AA	150pF	± 5%	C0G / NP0	0 ± 30ppm/°C	91R0069	0.12
C1608C0G2E561J080AA	560pF	± 5%	C0G / NP0	0 ± 30ppm/°C	91R0070	0.14
VOLTAGE: 250 VDC, CASE SIZE 2012						
C2012C0G2E821J060AA	820pF	± 5%	C0G / NP0	0 ± 30ppm/°C	91R0083	0.18
C2012C0G2E102J085AA	1000pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R8324	0.18
C2012X7R2E102K085AA	1000pF	± 10%	X7R	± 15%	91R0087	0.10
C2012C0G2E152J085AA	1500pF	± 5%	C0G / NP0	0 ± 30ppm/°C	91R0081	0.20
C2012C0G2E222J125AA	2200pF	± 5%	C0G / NP0	0 ± 30ppm/°C	91R0082	0.23
C2012X7R2E472K085AA	4700pF	± 10%	X7R	± 15%	91R0089	0.21
C2012X7R2E103K125AA	0.01µF	± 10%	X7R	± 15%	91R0088	0.16
VOLTAGE: 250 VDC, CASE SIZE 3216						
C3216C0G2E332J085AA	3300pF	± 5%	C0G / NP0	0 ± 30ppm/°C	91R0092	0.28
C3216C0G2E472J115AA	4700pF	± 5%	C0G / NP0	0 ± 30ppm/°C	91R0093	0.34
C3216C0G2E682J160AA	6800pF	± 5%	C0G / NP0	0 ± 30ppm/°C	91R0094	0.30
C3216X7R2E104K160AA	0.1µF	± 10%	X7R	± 15%	90R8345	0.33
VOLTAGE: 250 VDC, CASE SIZE 3225						
C3225X7R2E104K200AA	0.1µF	± 10%	X7R	± 15%	90R8354	0.33
C3225X7R2E224K200AA	0.22µF	± 10%	X7R	± 15%	90R8355	0.37
VOLTAGE: 250 VDC, CASE SIZE 5750						
C5750X7R2E105M230KA	1µF	± 20%	X7R	± 15%	90R8364	1.03
VOLTAGE: 630 VDC, CASE SIZE 3216						
C3216C0G2J101J060AA	100pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R8334	0.23
C3216C0G2J151J060AA	150pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R8336	0.23
C3216C0G2J221J060AA	220pF	± 5%	C0G / NP0	0 ± 30ppm/°C	91R0095	0.23
C3216C0G2J331J060AA	330pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R8337	0.25
C3216C0G2J391J060AA	390pF	± 5%	C0G / NP0	0 ± 30ppm/°C	91R0097	0.29
C3216C0G2J471J085AA	470pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R8339	0.28
C3216C0G2J102J085AA	1000pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R8335	0.28
C3216X7R2J102K115AA	1000pF	± 10%	X7R	± 15%	91R0105	0.26
C3216C0G2J222J115AA	2200pF	± 5%	C0G / NP0	0 ± 30ppm/°C	91R0096	0.34
C3216X7R2J222K115AA	2200pF	± 10%	X7R	± 15%	91R0106	0.26
C3216C0G2J332J160AA	3300pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R8338	0.26
C3216X7R2J103K115AA	0.01µF	± 10%	X7R	± 15%	90R8346	0.26
C3216X7R2J333K160AA	0.033µF	± 10%	X7R	± 15%	91R0107	0.35
VOLTAGE: 630 VDC, CASE SIZE 4532						
C4532X7R2J104K230KA	0.1µF	± 10%	X7R	± 15%	90R8360	0.55
VOLTAGE: 2 kVDC, CASE SIZE 4520						
VOLTAGE: 2 kVDC, CASE SIZE 4532						
C4532X7R3D222K130KA	2200pF	± 10%	X7R	± 15%	90R8409	0.81
VOLTAGE: 3 kVDC, CASE SIZE 4520						
C4520C0G3F220K110KA	22pF	± 10%	C0G / NP0	0 ± 30ppm/°C	91R0111	0.58

(190043)

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(196546)

CERAMIC CAPACITORS

GENERAL PURPOSE SMD MULTILAYER CERAMIC CAPACITORS

RoHS Compliant Available

TDK

Features
- Monolithic structure ensures superior mechanical strength and reliability
- Extremely dependable performance, exhibiting virtually no degradation
- Low stray capacitance
- Low residual inductance assures superior frequency characteristics
- Long service life
- Low ESR and excellent frequency characteristics

Specifications
- Operating Temperature Range:
  C0G, X7R, X7S: -55°C to +125°C
  X5R: -55°C to +85°C
  Y5V: -30°C to +85°C
  X6S: -55°C to +105°C

Applications
- Power supply designs that require high levels of reliability
- High frequency and high density type power supplies

VOLTAGE: 4 VDC, CASE SIZE 0510 (EIA 0204)

Mfg. Part No.	Cap.	Cap. Tol.	Diel. Char.	Temp. Coeff.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● C0510X6S0G105M030AC	1µF	± 20%	X6S	...	45W5253	0.56
VOLTAGE: 6.3 VDC, CASE SIZE 0510 (EIA 0204)						
● C0510X5R0J105M030AC	1µF	± 20%	X5R	...	45W5252	0.64
VOLTAGE: 4 VDC, CASE SIZE 0603 (EIA 0201)						
● C0603X6S0G104M030BC	0.1µF	± 20%	X6S	± 22%	91R0014	0.10
VOLTAGE: 4 VDC, CASE SIZE 1005 (EIA 0402)						
● C1005X5R0G225M050BB	2.2µF	± 20%	X5R	± 15%	91R0040	0.14
● C1005X6S0G225M050BC	2.2µF	± 20%	X6S	± 22%	91R0047	0.26
VOLTAGE: 6.3 VDC, CASE SIZE 0603 (EIA 0201)						
● C0603X5R0J103M	0.01µF	± 20%	X5R	± 15%	90R9992	0.10
● C0603X5R0J153K030BA	0.015µF	± 10%	X5R	± 15%	90R9994	0.10
● C0603X5R0J223K030BC	0.022µF	± 10%	X5R	± 15%	90R9995	0.10
● C0603X5R0J223M030BC	0.022µF	± 20%	X5R	± 15%	90R9996	0.10
● C0603X5R0J333K030BC	0.033µF	± 10%	X5R	± 15%	90R9997	0.10
● C0603X5R0J473K030BC	0.047µF	± 10%	X5R	± 15%	90R9998	0.10
● C0603X5R0J473M030BC	0.047µF	± 20%	X5R	± 15%	90R9999	0.10
● C0603X5R0J104K030BC	0.1µF	± 10%	X5R	± 15%	90R7553	0.10
● C0603X5R0J104M030BC	0.1µF	± 20%	X5R	± 15%	90R9993	0.10
VOLTAGE: 6.3 VDC, CASE SIZE 1005 (EIA 0402)						
● C1005X5R0J224K050BB	0.22µF	± 10%	X5R	± 15%	90R7582	0.10
● C1005X5R0J474K050BB	0.47µF	± 10%	X5R	± 15%	90R7584	0.11
● C1005X5R0J105K050BB	1µF	± 10%	X5R	± 15%	90R7580	0.11
● C1005X5R0J105M050BB	1µF	± 20%	X5R	± 15%	90R7581	0.11
● C1005X6S0J105K050BC	1µF	± 10%	X6S	± 22%	91R0048	0.11
● C1005X6S0J105M050BC	1µF	± 20%	X6S	± 22%	91R0049	0.11
● C1005Y5V0J105Z	1µF	+80%, -20%	Y5V	+22%, -82%	91R0059	0.11
● C1005X5R0J225M050BC	2.2µF	± 20%	X5R	± 15%	90R7583	0.26
VOLTAGE: 6.3 VDC, CASE SIZE 1608 (EIA 0603)						
● C1608X5R0J155K080AB	1.5µF	± 10%	X5R	± 15%	90R7667	0.24
● C1608X5R0J225M080AB	2.2µF	± 20%	X5R	± 15%	90R7669	0.16
● C1608X5R0J335K080AB	3.3µF	± 10%	X5R	± 15%	90R7670	0.24
● C1608X5R0J106M080AB	10µF	± 20%	X5R	± 15%	90R7666	0.31
VOLTAGE: 6.3 VDC, CASE SIZE 2012 (EIA 0805)						
● C2012X5R0J475K125AA	4.7µF	± 10%	X5R	± 15%	90R7742	0.21
● C2012X5R0J475M125AA	4.7µF	± 20%	X5R	± 15%	91R0084	0.21
VOLTAGE: 6.3 VDC, CASE SIZE 3216 (EIA 1206)						
● C3216X5R0J226M160AA	22µF	± 20%	X5R	± 15%	90R7775	0.31
● C3216X5R0J336M130AC	33µF	± 20%	X5R	± 15%	90R7776	0.51
● C3216X5R0J476M160AC	47µF	± 20%	X5R	± 15%	90R7777	0.51
VOLTAGE: 6.3 VDC, CASE SIZE 3225 (EIA 1210)						
● C3225X5R0J336M250AA	33µF	± 20%	X5R	± 15%	91R0108	0.74
● C3225X5R0J476M250AA	47µF	± 20%	X5R	± 15%	90R7818	0.62
● C3225X5R0J107M250AC	100µF	± 20%	X5R	± 15%	90R7817	1.01
VOLTAGE: 6.3 VDC, CASE SIZE 4532 (EIA 1812)						
● C4532X5R0J107M280KA	100µF	± 20%	X5R	± 15%	90R7846	2.16
VOLTAGE: 6.3 VDC, CASE SIZE 5750 (EIA 2220)						
● C5750X5R0J107M280KA	100µF	± 20%	X5R	± 15%	90R7864	2.46
VOLTAGE: 10 VDC, CASE SIZE 0603 (EIA 0201)						
● C0603X5R1A103K030BA	0.01µF	± 10%	X5R	± 15%	91R0001	0.10
VOLTAGE: 10 VDC, CASE SIZE 1005 (EIA 0402)						
● C1005X5R1A104K050BA	0.1µF	± 10%	X5R	± 15%	90R7585	0.10
● C1005X5R1A104M050BA	0.1µF	± 20%	X5R	± 15%	91R0041	0.10
● C1005X7R1A104K050BB	0.1µF	± 10%	X7R	± 15%	90R7596	0.10
● C1005X7R1A104M	0.1µF	± 20%	X7R	± 15%	91R0050	0.10
● C1005X5R1A224K050BC	0.22µF	± 10%	X5R	± 15%	91R0042	0.10
● C1005X5R1A474K050BB	0.47µF	± 10%	X5R	± 15%	90R7588	0.12

➤ CONTINUED ➤

GENERAL PURPOSE SMD MULTILAYER CERAMIC CAPACITORS (CONT.)

VOLTAGE: 10 VDC, CASE SIZE 1005 (EIA 0402)

Mfg. Part No.	Cap.	Cap. Tol.	Diel. Char.	Temp. Coeff.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● C1005X5R1A105K050BB	1µF	± 10%	X5R	± 15%	90R7586	0.10
● C1005X5R1A105M050BB	1µF	± 20%	X5R	± 15%	90R7587	0.10
VOLTAGE: 10 VDC, CASE SIZE 1608 (EIA 0603)						
● C1608X5R1A474K080AA	0.47µF	± 10%	X5R	± 15%	90R7674	0.11
● C1608X5R1A684K080AC	0.68µF	± 10%	X5R	± 15%	91R0072	0.12
● C1608X7R1A105K080AC	1µF	± 10%	X7R	± 15%	90R7681	0.12
VOLTAGE: 10 VDC, CASE SIZE 2012 (EIA 0805)						
● C2012X5R1A225K085AC	2.2µF	± 10%	X5R	± 15%	90R7743	0.21
● C2012X5R1A475K085AC	4.7µF	± 10%	X5R	± 15%	90R7744	0.26
● C2012X7R1A475M125AC	4.7µF	± 20%	X7R	± 15%	90R7747	0.23
● C3225X5R1A476M250AC	47µF	± 20%	X5R	± 15%	04X3304	0.91
VOLTAGE: 10 VDC, CASE SIZE 3216 (EIA 1206)						
● C3216X5R1A106K160AB	10µF	± 10%	X5R	± 15%	90R7778	0.29
● C3216X5R1A106M160AB	10µF	± 20%	X5R	± 15%	90R7779	0.27
● C3216X7R1A106K160AC	10µF	± 10%	X7R	± 15%	90R7785	0.31
● C3216X7R1A106M160AC	10µF	± 20%	X7R	± 15%	90R7786	0.29
VOLTAGE: 10 VDC, CASE SIZE 3225 (EIA 1210)						
● C3225X5R1A226M230AA	22µF	± 20%	X5R	± 15%	90R7819	0.69
VOLTAGE: 10 VDC, CASE SIZE 4532 (EIA 1812)						
● C4532X5R1A336M230KA	33µF	± 20%	X5R	± 15%	90R7847	1.23
● C4532X5R1A476M280KA	47µF	± 20%	X5R	± 15%	90R7848	1.73
VOLTAGE: 10 VDC, CASE SIZE 5750 (EIA 2220)						
● C5750X5R1A686M230KA	68µF	± 20%	X5R	± 15%	90R7865	3.08
VOLTAGE: 16 VDC, CASE SIZE 0603 (EIA 0201)						
● C0603X5R1C472K030BA	4700pF	± 10%	X5R	± 15%	91R0002	0.10
VOLTAGE: 16 VDC, CASE SIZE 1005 (EIA 0402)						
● C1005X7R1C103K050BA	0.01µF	± 10%	X7R	± 15%	90R7597	0.10
● C1005X7R1C153K	0.015µF	± 10%	X7R	± 15%	91R0052	0.10
● C1005X7R1C473K050BC	0.047µF	± 10%	X7R	± 15%	90R7602	0.10
● C1005X5R1C104K050BA	0.1µF	± 10%	X5R	± 15%	90R7589	0.10
● C1005X5R1C104M050BA	0.1µF	± 20%	X5R	± 15%	91R0043	0.10
● C1005X7R1C104K050BC	0.1µF	± 10%	X7R	± 15%	90R7598	0.10
● C1005X5R1C224K050BB	0.22µF	± 10%	X5R	± 15%	90R7592	0.12
● C1005X5R1C334K050BB	0.33µF	± 10%	X5R	± 15%	90R7593	0.11
● C1005X5R1C474K050BB	0.47µF	± 10%	X5R	± 15%	90R7594	0.11
● C1005X5R1C474M050BC	0.47µF	± 20%	X5R	± 15%	91R0044	0.12
● C1005X5R1C105K050BC	1µF	± 10%	X5R	± 15%	90R7590	0.11
● C1005X5R1C105M050BC	1µF	± 20%	X5R	± 15%	90R7591	0.11
VOLTAGE: 16 VDC, CASE SIZE 1608 (EIA 0603)						
● C1608X7R1C224K080AC	0.22µF	± 10%	X7R	± 15%	90R7688	0.10
● C1608X5R1C474K080AA	0.47µF	± 10%	X5R	± 15%	90R7676	0.10
● C1608X7R1C474K080AC	0.47µF	± 10%	X7R	± 15%	90R7692	0.12
● C1608X7R1C684K080AC	0.68µF	± 10%	X7R	± 15%	90R7693	0.16
● C1608X5R1C105K080AA	1µF	± 10%	X5R	± 15%	90R7675	0.11
● C1608X7R1C105K080AC	1µF	± 10%	X7R	± 15%	90R7686	0.12
● C1608X7R1C105M080AC	1µF	± 20%	X7R	± 15%	91R0074	0.12
VOLTAGE: 16 VDC, CASE SIZE 2012 (EIA 0805)						
● C2012X7R1C105K125AA	1µF	± 10%	X7R	± 15%	90R7748	0.14
● C2012X7R1C225K125AB	2.2µF	± 10%	X7R	± 15%	90R7749	0.21
VOLTAGE: 16 VDC, CASE SIZE 3216 (EIA 1206)						
● C3216X7R1C475K160AB	4.7µF	± 10%	X7R	± 15%	90R7791	0.28
● C3216X7R1C475M160AB	4.7µF	± 20%	X7R	± 15%	90R7792	0.27
● C3216X7R1C685K160AC	6.8µF	± 10%	X7R	± 15%	90R7793	0.28
● C3216X5R1C106K160AA	10µF	± 10%	X5R	± 15%	90R7781	0.31
● C3216X5R1C106M160AA	10µF	± 20%	X5R	± 15%	90R7782	0.29
● C3216X7R1C106K160AC	10µF	± 10%	X7R	± 15%	90R7788	0.35
● C3216X7R1C106M160AC	10µF	± 20%	X7R	± 15%	90R7789	0.33
● C3216Y5V1C226Z	22µF	+80%, -20%	Y5V	+22%, -82%	90R7812	0.34
VOLTAGE: 16 VDC, CASE SIZE 3225 (EIA 1210)						
● C3225X5R1C106K200AA	10µF	± 10%	X5R	± 15%	90R7820	0.45
● C3225X5R1C106M200AA	10µF	± 20%	X5R	± 15%	90R7821	0.45
● C3225X7R1C106K200AB	10µF	± 10%	X7R	± 15%	90R7826	0.45
● C3225X7R1C106M200AB	10µF	± 20%	X7R	± 15%	90R7827	0.45
● C3225X5R1C226K250AA	22µF	± 10%	X5R	± 15%	90R7822	0.75
● C3225X5R1C226M250AA	22µF	± 20%	X5R	± 15%	90R7823	0.75
● C3225X7R1C226K250AC	22µF	± 10%	X7R	± 15%	90R7828	0.84
● C3225X7R1C226M250AC	22µF	± 20%	X7R	± 15%	90R7829	0.84
VOLTAGE: 16 VDC, CASE SIZE 4532 (EIA 1812)						
● C4532X5R1C226M230KA	22µF	± 20%	X5R	± 15%	91R0112	1.11
● C4532X7R1C226M230KB	22µF	± 20%	X7R	± 15%	90R7851	1.11

➤ CONTINUED ➤

GENERAL PURPOSE SMD MULTILAYER CERAMIC CAPACITORS (CONT.)

VOLTAGE: 16 VDC, CASE SIZE 4532 (EIA 1812)

Mfg. Part No.	Cap.	Cap. Tol.	Diel. Char.	Temp. Coeff.	Tape Cut Stock No.	Tape Cut Price Each 1-9
C4532X5R1C336M250KA	33µF	± 20%	X5R	± 15%	90R7849	1.23
C4532X7R1C336M250KC	33µF	± 20%	X7R	± 15%	90R7852	1.36
VOLTAGE: 16 VDC, CASE SIZE 5750 (EIA 2220)						
C5750X5R1C476M230KA	47µF	± 20%	X5R	± 15%	90R7866	2.46
C5750X7R1C476M230KB	47µF	± 20%	X7R	± 15%	90R7868	2.46
VOLTAGE: 25 VDC, CASE SIZE 0603 (EIA 0201)						
C0603C0G1E0R5C030BA	0.5pF	± 0.25pF	C0G / NP0	0 ± 30ppm/°C	90R9938	0.10
C0603C0G1E010C030BA	1pF	± 0.25pF	C0G / NP0	0 ± 30ppm/°C	90R9939	0.10
C0603C0G1E1R5C030BA	1.5pF	± 0.25pF	C0G / NP0	0 ± 30ppm/°C	90R9943	0.10
C0603C0G1E020B	2pF	± 0.1pF	C0G / NP0	0 ± 30ppm/°C	90R9940	0.10
C0603C0G1E2R2B	2.2pF	± 0.1pF	C0G / NP0	0 ± 30ppm/°C	90R9950	0.10
C0603C0G1E2R4B	2.4pF	± 0.1pF	C0G / NP0	0 ± 30ppm/°C	90R9951	0.11
C0603C0G1E030C030BA	3pF	± 0.25pF	C0G / NP0	0 ± 30ppm/°C	90R9941	0.10
C0603C0G1E3R9B	3.9pF	± 0.1pF	C0G / NP0	0 ± 30ppm/°C	90R9954	0.10
C0603C0G1E4R3B	4.3pF	± 0.1pF	C0G / NP0	0 ± 30ppm/°C	90R9957	0.11
C0603C0G1E5R6D	5.6pF	± 0.5pF	C0G / NP0	0 ± 30ppm/°C	90R9960	0.10
C0603C0G1E6R8D030BA	6.8pF	± 0.5pF	C0G / NP0	0 ± 30ppm/°C	90R9963	0.10
C0603C0G1E7R5C	7.5pF	± 0.25pF	C0G / NP0	0 ± 30ppm/°C	90R9964	0.10
C0603C0G1E7R5D	7.5pF	± 0.5pF	C0G / NP0	0 ± 30ppm/°C	90R9965	0.10
C0603C0G1E080C	8pF	± 0.25pF	C0G / NP0	0 ± 30ppm/°C	90R9942	0.10
C0603C0G1E8R2C	8.2pF	± 0.25pF	C0G / NP0	0 ± 30ppm/°C	90R9966	0.10
C0603C0G1E9R1D	9.1pF	± 0.5pF	C0G / NP0	0 ± 30ppm/°C	90R9967	0.10
C0603C0G1E100C	10pF	± 0.25pF	C0G / NP0	0 ± 30ppm/°C	90R9945	0.10
C0603C0G1E100D030BA	10pF	± 0.5pF	C0G / NP0	0 ± 30ppm/°C	90R9946	0.10
C0603C0G1E120J030BA	12pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R9948	0.10
C0603C0G1E180J030BA	18pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R9949	0.10
C0603C0G1E220J030BA	22pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R9952	0.10
C0603C0G1E240J	24pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R9953	0.10
C0603C0G1E330J030BA	33pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R9955	0.10
C0603C0G1E390J030BA	39pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R9956	0.10
C0603C0G1E470J030BA	47pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R9958	0.10
C0603C0G1E510J	51pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R9961	0.10
C0603C0G1E560J030BA	56pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R9962	0.10
C0603X5R1E221M030BA	220pF	± 20%	X5R	± 15%	91R0005	0.11
C0603X5R1E471K030BA	470pF	± 10%	X5R	± 15%	91R0007	0.11
C0603X5R1E681K030BA	680pF	± 10%	X5R	± 15%	91R0008	0.11
C0603X5R1E681M030BA	680pF	± 20%	X5R	± 15%	91R0009	0.11
C0603X5R1E102K030BA	1000pF	± 10%	X5R	± 15%	91R0003	0.11
C0603X5R1E152K030BA	1500pF	± 10%	X5R	± 15%	91R0004	0.11
C0603X5R1E332K030BA	3300pF	± 10%	X5R	± 15%	91R0006	0.11
VOLTAGE: 25 VDC, CASE SIZE 1005 (EIA 0402)						
C1005C0G1E102J050BA	1000pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7554	0.14
C1005X7R1E102K050BA	1000pF	± 10%	X7R	± 15%	90R7603	0.10
C1005X7R1E103K050BB	0.01µF	± 10%	X7R	± 15%	90R7604	0.10
C1005X7R1E223K050BB	0.022µF	± 10%	X7R	± 15%	90R7605	0.10
C1005X7R1E473K050BC	0.047µF	± 10%	X7R	± 15%	90R7607	0.10
C1005X5R1E683K050BC	0.068µF	± 10%	X5R	± 15%	91R0046	0.11
C1005X5R1E104K050BC	0.1µF	± 10%	X5R	± 15%	90R7595	0.11
C1005X5R1E104M050BC	0.1µF	± 20%	X5R	± 15%	91R0045	0.11
VOLTAGE: 25 VDC, CASE SIZE 1608 (EIA 0603)						
C1608C0G1E392J080AA	3900pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7618	0.24
C1608C0G1E472J080AA	4700pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7619	0.24
C1608C0G1E562J080AA	5600pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7620	0.29
C1608C0G1E682J080AA	6800pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7621	0.29
C1608C0G1E822J080AA	8200pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7622	0.33
C1608C0G1E103J080AA	0.01µF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7617	0.33
C1608X7R1E103K080AA	0.01µF	± 10%	X7R	± 15%	90R7695	0.10
C1608X7R1E104K080AA	0.1µF	± 10%	X7R	± 15%	90R7696	0.10
C1608X5R1E224K080AA	0.22µF	± 10%	X5R	± 15%	90R7678	0.12
C1608X7R1E224K080AC	0.22µF	± 10%	X7R	± 15%	90R7701	0.12
C1608X5R1E334K080AC	0.33µF	± 10%	X5R	± 15%	90R7679	0.11
C1608X5R1E474K080AC	0.47µF	± 10%	X5R	± 15%	90R7680	0.15
C1608X5R1E105K080AC	1µF	± 10%	X5R	± 15%	90R7677	0.14
VOLTAGE: 25 VDC, CASE SIZE 2012 (EIA 0805)						
C2012C0G1E103J060AA	0.01µF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7737	0.35
C2012C0G1E223J125AA	0.022µF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7738	0.35
C2012C0G1E333J125AA	0.033µF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7739	0.26
C2012X7R1E474K125AA	0.47µF	± 10%	X7R	± 15%	90R7754	0.21
C2012X7R1E105K125AB	1µF	± 10%	X7R	± 15%	90R7752	0.16
C2012X5R1E475K125AB	4.7µF	± 10%	X5R	± 15%	90R7745	0.29

➤CONTINUED➤

GENERAL PURPOSE SMD MULTILAYER CERAMIC CAPACITORS (CONT.)

VOLTAGE: 25 VDC, CASE SIZE 3216 (EIA 1206)

Mfg. Part No.	Cap.	Cap. Tol.	Diel. Char.	Temp. Coeff.	Tape Cut Stock No.	Tape Cut Price Each 1-9
C3216X7R1E105K085AA	1µF	± 10%	X7R	± 15%	90R7794	0.21
C3216X7R1E105M085AA	1µF	± 20%	X7R	± 15%	90R7795	0.21
C3216X7R1E155K160AA	1.5µF	± 10%	X7R	± 15%	91R0101	0.31
C3216X5R1E225K160AA	2.2µF	± 10%	X5R	± 15%	90R7783	0.25
C3216X7R1E225K160AA	2.2µF	± 10%	X7R	± 15%	90R7797	0.25
C3216X7R1E335K160AC	3.3µF	± 10%	X7R	± 15%	90R7799	0.33
C3216X7R1E475K160AC	4.7µF	± 10%	X7R	± 15%	90R7801	0.34
C3216X7R1E475M160AC	4.7µF	± 20%	X7R	± 15%	90R7802	0.34
VOLTAGE: 25 VDC, CASE SIZE 3225 (EIA 1210)						
C3225X5R1E106K250AA	10µF	± 10%	X5R	± 15%	90R7824	0.56
C3225X5R1E106M250AA	10µF	± 20%	X5R	± 15%	90R7825	0.56
C3225X7R1E106K250AC	10µF	± 10%	X7R	± 15%	90R7830	0.65
C3225X7R1E106M250AC	10µF	± 20%	X7R	± 15%	90R7831	0.65
VOLTAGE: 25 VDC, CASE SIZE 4532 (EIA 1812)						
C4532X5R1E106M250KA	10µF	± 20%	X5R	± 15%	91R0113	0.93
C4532X7R1E106K250KA	10µF	± 10%	X7R	± 15%	90R7853	1.02
C4532X7R1E106M250KA	10µF	± 20%	X7R	± 15%	90R7854	0.93
C4532X5R1E226M250KA	22µF	± 20%	X5R	± 15%	90R7850	1.23
C4532X7R1E226M250KC	22µF	± 20%	X7R	± 15%	90R7855	1.23
C4532X7R1E156M280KB	15µF	± 20%	X7R	± 15%	04X3307	1.11
VOLTAGE: 25 VDC, CASE SIZE 5750 (EIA 2220)						
C5750X7R1E226M250KA	22µF	± 20%	X7R	± 15%	90R7870	2.46
VOLTAGE: 50 VDC, CASE SIZE 0603 (EIA 0201)						
C0603C0G1H010B	1pF	± 0.1pF	C0G / NP0	0 ± 30ppm/°C	90R9969	0.10
C0603C0G1H1R5C030BA	1.5pF	± 0.25pF	C0G / NP0	0 ± 30ppm/°C	90R9972	0.10
C0603C0G1H2R2C030BA	2.2pF	± 0.25pF	C0G / NP0	0 ± 30ppm/°C	90R9980	0.10
C0603C0G1H030C030BA	3pF	± 0.25pF	C0G / NP0	0 ± 30ppm/°C	90R9970	0.10
C0603C0G1H3R9C	3.9pF	± 0.25pF	C0G / NP0	0 ± 30ppm/°C	90R9984	0.10
C0603C0G1H6R8D030BA	6.8pF	± 0.5pF	C0G / NP0	0 ± 30ppm/°C	90R9990	0.10
C0603C0G1H090C	9pF	± 0.25pF	C0G / NP0	0 ± 30ppm/°C	90R9971	0.10
C0603C0G1H100D030BA	10pF	± 0.5pF	C0G / NP0	0 ± 30ppm/°C	90R9974	0.10
C0603C0G1H110J	11pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R9976	0.10
C0603C0G1H120J030BA	12pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R9977	0.10
C0603C0G1H150J030BA	15pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R9978	0.10
C0603C0G1H180J030BA	18pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R9979	0.10
C0603C0G1H220J030BA	22pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R9982	0.10
C0603C0G1H270J030BA	27pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R9983	0.10
C0603C0G1H330J030BA	33pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R9985	0.10
C0603C0G1H390J030BA	39pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R9986	0.10
C0603C0G1H510J	51pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R9989	0.10
C0603C0G1H101J030BA	100pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R9975	0.10
C0603X5R1H101K	100pF	± 10%	X5R	± 15%	91R0010	0.11
C0603X5R1H151M	150pF	± 20%	X5R	± 15%	91R0011	0.11
C0603X5R1H471K	470pF	± 10%	X5R	± 15%	91R0012	0.11
C0603X5R1H471M	470pF	± 20%	X5R	± 15%	91R0013	0.11
VOLTAGE: 50 VDC, CASE SIZE 1005 (EIA 0402)						
C1005C0G1H010B050BA	1pF	± 0.1pF	C0G / NP0	0 ± 30ppm/°C	90R7555	0.10
C1005C0G1H010C050BA	1pF	± 0.25pF	C0G / NP0	0 ± 30ppm/°C	90R7556	0.10
C1005C0G1H1R5B050BA	1.5pF	± 0.1pF	C0G / NP0	0 ± 30ppm/°C	90R7557	0.10
C1005C0G1H1R5C050BA	1.5pF	± 0.25pF	C0G / NP0	0 ± 30ppm/°C	91R0022	0.10
C1005C0G1H020B050BA	2pF	± 0.1pF	C0G / NP0	0 ± 30ppm/°C	91R0015	0.10
C1005C0G1H030B050BA	3pF	± 0.1pF	C0G / NP0	0 ± 30ppm/°C	91R0017	0.10
C1005C0G1H040B050BA	4pF	± 0.1pF	C0G / NP0	0 ± 30ppm/°C	91R0018	0.10
C1005C0G1H040C050BA	4pF	± 0.25pF	C0G / NP0	0 ± 30ppm/°C	91R0019	0.10
C1005C0G1H6R8C	6.8pF	± 0.25pF	C0G / NP0	0 ± 30ppm/°C	91R0034	0.10
C1005C0G1H070D050BA	7pF	± 0.5pF	C0G / NP0	0 ± 30ppm/°C	91R0020	0.10
C1005C0G1H080D050BA	8pF	± 0.5pF	C0G / NP0	0 ± 30ppm/°C	91R0021	0.10
C1005C0G1H100C050BA	10pF	± 0.25pF	C0G / NP0	0 ± 30ppm/°C	91R0025	0.10
C1005C0G1H100D050BA	10pF	± 0.5pF	C0G / NP0	0 ± 30ppm/°C	90R7558	0.10
C1005C0G1H120J050BA	12pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7560	0.10
C1005C0G1H150J050BA	15pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7563	0.10
C1005C0G1H430J	43pF	± 5%	C0G / NP0	0 ± 30ppm/°C	91R0032	0.10
C1005C0G1H680J050BA	68pF	± 5%	C0G / NP0	0 ± 30ppm/°C	91R0035	0.10
C1005C0G1H750J	75pF	± 5%	C0G / NP0	0 ± 30ppm/°C	91R0036	0.10
C1005C0G1H820J050BA	82pF	± 5%	C0G / NP0	0 ± 30ppm/°C	91R0038	0.10
C1005C0G1H101J050BA	100pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7559	0.10
C1005C0G1H121J050BA	120pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7561	0.10
C1005C0G1H151J050BA	150pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7564	0.10
C1005C0G1H181J050BA	180pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7567	0.10
C1005X7R1H221K050BA	220pF	± 10%	X7R	± 15%	90R7609	0.10
C1005C0G1H271J050BA	270pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7572	0.10

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GENERAL PURPOSE SMD MULTILAYER CERAMIC CAPACITORS (CONT.)

VOLTAGE: 50 VDC, CASE SIZE 1005 (EIA 0402)

Mfg. Part No.	Cap.	Cap. Tol.	Diel. Char.	Temp. Coeff.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● C1005X7R1H331K050BA	330pF	± 10%	X7R	± 15%	90R7611	0.10
● C1005X7R1H471K050BA	470pF	± 10%	X7R	± 15%	90R7613	0.10
● C1005X7R1H471M050BA	470pF	± 20%	X7R	± 15%	91R0056	0.10
● C1005X7R1H681K050BA	680pF	± 10%	X7R	± 15%	90R7614	0.10
● C1005X7R1H152K050BA	1500pF	± 10%	X7R	± 15%	91R0055	0.10
● C1005X7R1H222K050BA	2200pF	± 10%	X7R	± 15%	90R7610	0.10
● C1005X7R1H332K050BA	3300pF	± 10%	X7R	± 15%	90R7612	0.10
● C1005X7R1H472M050BA	4700pF	± 20%	X7R	± 15%	91R0057	0.10
● C1005C0G1H0R5B050BA	0.5pF	± 0.1pF	C0G / NP0	0 ± 30ppm/°C	04X3199	0.11
● C1005C0G1H060D050BA	6pF	± 0.5pF	C0G / NP0	0 ± 30ppm/°C	04X3200	0.10
● C1005C0G1H102J050BA	1000pF	± 5%	C0G / NP0	0 ± 30ppm/°C	04X3201	0.14
● C1005C0G1H270J050BA	27pF	± 5%	C0G / NP0	0 ± 30ppm/°C	04X3202	0.10
● C1005C0G1H560J050BA	56pF	± 5%	C0G / NP0	0 ± 30ppm/°C	04X3207	0.10
● C1005C0G1H470F050BA	47pF	± 1%	C0G / NP0	0 ± 30ppm/°C	04X3205	0.44
● C1005C0G1H390J050BA	39pF	± 5%	C0G / NP0	0 ± 30ppm/°C	72W1726	0.01
● C1005C0G1H471J050BA	470pF	± 5%	C0G / NP0	0 ± 30ppm/°C	72W1730	0.01
● C1005C0G1H330F050BA	33pF	± 1%	C0G / NP0	0 ± 30ppm/°C	04X3203	0.44
● C1005C0G1H330F050BA	33pF	± 1%	C0G / NP0	0 ± 30ppm/°C	51T2572	0.09
● C1005C0G1H270J050BA	27pF	± 5%	C0G / NP0	0 ± 30ppm/°C	72W1721	0.01
● C1005C0G1H390J050BA	39pF	± 5%	C0G / NP0	0 ± 30ppm/°C	04X3204	0.10
● C1005C0G1H471J050BA	470pF	± 5%	C0G / NP0	0 ± 30ppm/°C	04X3206	0.10
VOLTAGE: 50 VDC, CASE SIZE 1608 (EIA 0603)						
● C1608C0G1H010C080AA	1pF	± 0.25pF	C0G / NP0	0 ± 30ppm/°C	90R7624	0.10
● C1608C0G1H030C080AA	3pF	± 0.25pF	C0G / NP0	0 ± 30ppm/°C	91R0063	0.10
● C1608C0G1H040C080AA	4pF	± 0.25pF	C0G / NP0	0 ± 30ppm/°C	91R0064	0.10
● C1608C0G1H060C080AA	6pF	± 0.25pF	C0G / NP0	0 ± 30ppm/°C	91R0066	0.10
● C1608C0G1H100C080AA	10pF	± 0.25pF	C0G / NP0	0 ± 30ppm/°C	90R7629	0.11
● C1608C0G1H100D080AA	10pF	± 0.5pF	C0G / NP0	0 ± 30ppm/°C	90R7630	0.10
● C1608C0G1H120J080AA	12pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7633	0.10
● C1608C0G1H150J080AA	15pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7635	0.10
● C1608C0G1H180J080AA	18pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7639	0.10
● C1608C0G1H220J080AA	22pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7643	0.10
● C1608C0G1H330J080AA	33pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7650	0.10
● C1608C0G1H470J080AA	47pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7656	0.10
● C1608C0G1H680J080AA	68pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7661	0.10
● C1608C0G1H101J080AA	100pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7631	0.03
● C1608C0G1H121J080AA	120pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7634	0.10
● C1608C0G1H151J080AA	150pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7636	0.10
● C1608C0G1H221J080AA	220pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7644	0.05
● C1608C0G1H331J080AA	330pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7651	0.11
● C1608C0G1H471J080AA	470pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7657	0.10
● C1608C0G1H681J080AA	680pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7662	0.12
● C1608C0G1H102J080AA	1000pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7632	0.12
● C1608C0G1H152J080AA	1500pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7637	0.10
● C1608C0G1H182J080AA	1800pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7641	0.18
● C1608C0G1H222J080AA	2200pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7645	0.18
● C1608C0G1H272J080AA	2700pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7648	0.21
● C1608C0G1H332J080AA	3300pF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7652	0.21
● C1608X7R1H223K080AA	0.022µF	± 10%	X7R	± 15%	90R7713	0.11
● C1608X7R1H223M080AA	0.022µF	± 20%	X7R	± 15%	91R0075	0.11
● C1608X7R1H473K080AA	0.047µF	± 10%	X7R	± 15%	90R7721	0.11
● C1608X7R1H104K080AA	0.1µF	± 10%	X7R	± 15%	90R7708	0.10
● C1608X7R1H104M080AA	0.1µF	± 20%	X7R	± 15%	90R7709	0.10
● C1608C0G1H560J080AA	56pF	± 5%	C0G / NP0	0 ± 30ppm/°C	72W1777	0.01
● C1608C0G1H050C080AA	5pF	± 0.25pF	C0G / NP0	0 ± 30ppm/°C	72W1758	0.01
● C1608C0G1H080D080AA	8pF	± 0.5pF	C0G / NP0	0 ± 30ppm/°C	72W1760	0.01
● C1608C0G1H020C080AA	2pF	± 0.25pF	C0G / NP0	0 ± 30ppm/°C	04X3237	0.10
VOLTAGE: 50 VDC, CASE SIZE 2012 (EIA 0805)						
● C2012C0G1H152J060AA	1500pF	± 5%	C0G / NP0	0 ± 30ppm/°C	91R0079	0.15
● C2012X7R1H224K125AA	0.22µF	± 10%	X7R	± 15%	90R7757	0.14
● C2012X7R1H334K125AA	0.33µF	± 10%	X7R	± 15%	90R7758	0.18
● C2012Y5V1H225Z	2.2µF	+80%, -20%	Y5V	+22%, -82%	90R7771	0.18
● C2012C0G1H222J085AA	2200pF	± 5%	C0G / NP0	0 ± 30ppm/°C	72W1825	0.02
● C2012C0G1H222J085AA	2200pF	± 5%	C0G / NP0	0 ± 30ppm/°C	04X3266	0.11
VOLTAGE: 50 VDC, CASE SIZE 3216 (EIA 1206)						
● C3216X7R1H224K115AA	0.22µF	± 10%	X7R	± 15%	90R7806	0.21
● C3216X7R1H334K160AA	0.33µF	± 10%	X7R	± 15%	90R7807	0.23
● C3216X7R1H474K160AA	0.47µF	± 10%	X7R	± 15%	90R7808	0.23
● C3216X7R1H684K160AA	0.68µF	± 10%	X7R	± 15%	91R0103	0.29
● C3216X5R1H105K160AA	1µF	± 10%	X5R	± 15%	90R7784	0.23

➤ CONTINUED ➤

GENERAL PURPOSE SMD MULTILAYER CERAMIC CAPACITORS (CONT.)

VOLTAGE: 50 VDC, CASE SIZE 3216 (EIA 1206)

Mfg. Part No.	Cap.	Cap. Tol.	Diel. Char.	Temp. Coeff.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● C3216X7R1H105K160AB	1µF	± 10%	X7R	± 15%	90R7804	0.23
● C3216X7R1H105M160AB	1µF	± 20%	X7R	± 15%	90R7805	0.23
VOLTAGE: 50 VDC, CASE SIZE 3225 (EIA 1210)						
● C3225C0G1H104J250AA	0.1µF	± 5%	C0G / NP0	0 ± 30ppm/°C	90R7816	1.23
● C3225X7R1H155K200AA	1.5µF	± 10%	X7R	± 15%	91R0109	0.47
● C3225X7R1H225K250AB	2.2µF	± 10%	X7R	± 15%	90R7834	0.56
● C3225X7R1H335K250AB	3.3µF	± 10%	X7R	± 15%	90R7835	0.84
● C3225X7R1H335M250AB	3.3µF	± 20%	X7R	± 15%	90R7836	0.84
● C3225X7S1H106K250AB	10µF	± 10%	X7S	± 22%	90R7837	0.91
● C3225X7S1H106M250AB	10µF	± 20%	X7S	± 22%	90R7838	0.82
VOLTAGE: 50 VDC, CASE SIZE 4532 (EIA 1812)						
● C4532X7R1H335M200KA	3.3µF	± 20%	X7R	± 15%	90R7856	0.87
● C4532X7R1H475K200KB	4.7µF	± 10%	X7R	± 15%	90R7857	1.02
● C4532X7R1H475M/2.00	4.7µF	± 20%	X7R	± 15%	90R7858	0.93
● C4532X7R1H685K250KB	6.8µF	± 10%	X7R	± 15%	90R7859	1.22
● C4532X7R1H685M250KB	6.8µF	± 20%	X7R	± 15%	90R7860	1.11
VOLTAGE: 50 VDC, CASE SIZE 5750 (EIA 2220)						
● C5750X5R1H106M230KA	10µF	± 20%	X5R	± 15%	90R7867	1.85
● C5750X7R1H106K230KB	10µF	± 10%	X7R	± 15%	90R7871	1.87
● C5750X7R1H106M230KB	10µF	± 20%	X7R	± 15%	90R7872	1.85
● C5750X5R1H106K230KA	10µF	± 10%	X5R	± 15%	04X3309	1.87
VOLTAGE: 100 VDC, CASE SIZE 3225 (EIA 1210)						
● C3225X7S2A475K200AB	4.7µF	± 10%	X7S	± 22%	04X3305	1.23
● C3225X7S2A475K200AB	4.7µF	± 10%	X7S	± 22%	12T1971	0.48
VOLTAGE: 100 VDC, CASE SIZE 4532 (EIA 1812)						
● C4532X7R2A225K230KA	2.2µF	± 10%	X7R	± 15%	04X3308	0.82

(190045)

CKG SERIES GENERAL PURPOSE METAL CAP MULTILAYER CERAMIC CHIP CAPACITORS

RoHS Compliant Available

TDK

Features
- A unique structure that ensures high reliability
- Metal caps absorbs stress caused by heat and mechanical shock
- Low ESR and ESL

Applications
- Power sources using aluminum substrates
- Devices with strict low or high temperature ambient conditions
- Replacement of electrolytic capacitors
- Communications infrastructures or on-board units

Specifications
- Dimensions: 6.5 x 5.5 mm
- Operating temperature: -55°C to +125°C

VOLTAGE: 50 VDC

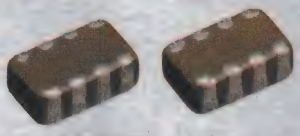
Mfg. Part No.	Cap. (µF)	Cap. Tol.	Diel. Char.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● CKG57NX7R1H106M500JH	10	± 20%	X7R	48T2903	6.15
VOLTAGE: 100 VDC					
● CKG57NX7R2A475M500JH	4.7	± 20%	X7R	48T2904	6.15

(202497)

CKC SERIES 4-ELEMENT MULTILAYER CERAMIC CHIP CAPACITOR ARRAYS

RoHS Compliant Available

TDK



Features
- Four capacitors fitted in a single package
- Contributes to reduced mounting area and cost
- Effective for EMC control around connectors

Applications
- Interfaces of various devices
- High-frequency noise bypass circuits
- Circuits that require identical capacitance

Specifications
- Dimensions: 3.2 x 1.6 mm
- No. of elements: 4
- Operating temperature: -55°C to +125°C

VOLTAGE: 16 VDC, CASE SIZE 1206

Mfg. Part No.	Cap. (pF)	Cap. Tol.	Diel. Char.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● CKCA43X7R1C104M085AA	100000	± 20%	X7R	48T2900	0.36
VOLTAGE: 50 VDC, CASE SIZE 1206					
● CKCA43C0G1H330K100AA	33	± 10%	C0G / NP0	48T2899	0.29
● CKCA43C0G1H101K085AA	100	± 10%	C0G / NP0	48T2898	0.29

➤ CONTINUED ➤

CKC SERIES 4-ELEMENT MULTILAYER CERAMIC CHIP CAPACITOR ARRAYS (CONT.)

VOLTAGE: 50 VDC, CASE SIZE 1206

Mfg. Part No.	Cap. (pF)	Cap. Tol.	Diel. Char.	Tape Cut Stock No.	Tape Cut Price Each 1-9
CKCA43X7R1H102M085AA	1000	± 20%	X7R	48T2901	0.30
CKCA43X7R1H103M100AA	10000	± 20%	X7R	48T2902	0.30

(202496)

GENERAL PURPOSE SMD MULTILAYER CERAMIC CAPACITORS

RoHS Compliant Available

multicomp

Features:
- High voltage in a given case size
- High stability and reliability

Specifications:
- Dielectric characteristic: C0G/NP0
- Operating temperature: -55°C to +125°C

0603 CASE SIZE, VOLTAGE: 200VDC

Mfg. Part No.	Cap. (pF)	Tol.	Tape Cut Stock No.	Tape Cut Price Each 1-99
MC0603N1R0C201CT	1	± 0.25pF	21T9787	0.03
MC0603N1R5C201CT	1.5	± 0.25pF	21T9789	0.03
MC0603N2R2C201CT	2.2	± 0.25pF	21T9799	0.03
MC0603N3R3C201CT	3.3	± 0.25pF	21T9805	0.03
MC0603N4R7C201CT	4.7	± 0.25pF	21T9809	0.03
MC0603N6R8C201CT	6.8	± 0.25pF	21T9813	0.06
MC0603N100J201CT	10	± 5%	21T9791	0.03
MC0603N150J201CT	15	± 5%	21T9795	0.03
MC0603N220J201CT	22	± 5%	21T9801	0.03
MC0603N330J201CT	33	± 5%	21T9807	0.03
MC0603N470J201CT	47	± 5%	21T9811	0.03
MC0603N680J201CT	68	± 5%	21T9815	0.03
MC0603N101J201CT	100	± 5%	21T9793	0.03
MC0603N151J201CT	150	± 5%	21T9797	0.03
MC0603N221J201CT	220	± 5%	21T9803	0.03
0805 CASE SIZE, VOLTAGE: 200VDC				
MC0805N1R0C201CT	1	± 0.25pF	21T9826	0.04
MC0805N1R5C201CT	1.5	± 0.25pF	21T9830	0.04
MC0805N2R2C201CT	2.2	± 0.25pF	21T9845	0.04
MC0805N3R3C201CT	3.3	± 0.25pF	21T9854	0.04
MC0805N4R7C201CT	4.7	± 0.25pF	21T9863	0.04
MC0805N6R8C201CT	6.8	± 0.25pF	21T9869	0.17
MC0805N100J201CT	10	± 5%	21T9834	0.04
0805 CASE SIZE, VOLTAGE: 500VDC				
MC0805N1R0C501CT	1	± 0.25pF	21T9828	0.06
MC0805N1R5C501CT	1.5	± 0.25pF	21T9832	0.06
MC0805N2R2C501CT	2.2	± 0.25pF	21T9847	0.06
MC0805N3R3C501CT	3.3	± 0.25pF	21T9856	0.06
MC0805N4R7C501CT	4.7	± 0.25pF	21T9865	0.06
MC0805N6R8C501CT	6.8	± 0.25pF	21T9871	0.04
MC0805N100J501CT	10	± 5%	21T9837	0.06
MC0805N150J501CT	15	± 5%	21T9841	0.06
MC0805N220J501CT	22	± 5%	21T9850	0.06
MC0805N330J501CT	33	± 5%	21T9858	0.06
MC0805N470J501CT	47	± 5%	21T9867	0.06
MC0805N680J501CT	68	± 5%	21T9873	0.06
MC0805N101J501CT	100	± 5%	21T9839	0.06
MC0805N151J501CT	150	± 5%	21T9843	0.08
MC0805N221J501CT	220	± 5%	21T9852	0.04
MC0805N331J501CT	330	± 5%	21T9860	0.04
1206 CASE SIZE, VOLTAGE: 200VDC				
MC1206N1R5C201CT	1.5	± 0.25pF	21T9967	0.09
MC1206N2R2C201CT	2.2	± 0.25pF	22T0009	0.09
MC1206N3R3C201CT	3.3	± 0.25pF	22T0034	0.09
MC1206N4R7C201CT	4.7	± 0.25pF	22T0056	0.09
MC1206N6R8C201CT	6.8	± 0.25pF	22T0075	0.08
MC1206N100J201CT	10	± 5%	21T9975	0.09
MC1206N150J201CT	15	± 5%	21T9990	0.09
MC1206N220J201CT	22	± 5%	22T0017	0.09
MC1206N330J201CT	33	± 5%	22T0042	0.09
MC1206N470J201CT	47	± 5%	22T0064	0.09

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GENERAL PURPOSE SMD MULTILAYER CERAMIC CAPACITORS (CONT.)

1206 CASE SIZE, VOLTAGE: 200VDC

Mfg. Part No.	Cap. (pF)	Tol.	Tape Cut Stock No.	Tape Cut Price Each 1-99
MC1206N680J201CT	68	± 5%	22T0083	0.04
MC1206N101J201CT	100	± 5%	21T9983	0.04
MC1206N151J201CT	150	± 5%	21T9998	0.04
MC1206N221J201CT	220	± 5%	22T0025	0.04
MC1206N331J201CT	330	± 5%	22T0050	0.04
MC1206N152J201CT	1500	± 5%	22T0005	0.07
MC1206N222J201CT	2200	± 5%	22T0030	0.08
1206 CASE SIZE, VOLTAGE: 630VDC				
MC1206N1R5C631CT	1.5	± 0.25pF	21T9971	0.04
MC1206N2R2C631CT	2.2	± 0.25pF	22T0013	0.04
MC1206N3R3C631CT	3.3	± 0.25pF	22T0038	0.04
MC1206N4R7C631CT	4.7	± 0.25pF	22T0060	0.04
MC1206N6R8C631CT	6.8	± 0.25pF	22T0079	0.09
MC1206N100J631CT	10	± 5%	21T9979	0.04
MC1206N150J631CT	15	± 5%	21T9994	0.04
MC1206N220J631CT	22	± 5%	22T0021	0.04
MC1206N330J631CT	33	± 5%	22T0046	0.04
MC1206N470J631CT	47	± 5%	22T0068	0.04
MC1206N680J631CT	68	± 5%	22T0087	0.04
MC1206N151J631CT	150	± 5%	22T0003	0.04
MC1206N331J631CT	330	± 5%	22T0052	0.05
1206 CASE SIZE, VOLTAGE: 1000VDC				
MC1206N1R5C102CT	1.5	± 0.25pF	21T9965	0.13
MC1206N2R2C102CT	2.2	± 0.25pF	22T0007	0.13
MC1206N3R3C102CT	3.3	± 0.25pF	22T0032	0.13
MC1206N4R7C102CT	4.7	± 0.25pF	22T0054	0.14
MC1206N6R8C102CT	6.8	± 0.25pF	22T0073	0.29
MC1206N100J102CT	10	± 5%	21T9973	0.14
MC1206N150J102CT	15	± 5%	21T9988	0.13
MC1206N220J102CT	22	± 5%	22T0015	0.13
MC1206N330J102CT	33	± 5%	22T0040	0.06
MC1206N470J102CT	47	± 5%	22T0062	0.13
MC1206N680J102CT	68	± 5%	22T0081	0.07
MC1206N101J102CT	100	± 5%	21T9981	0.07
MC1206N151J102CT	150	± 5%	21T9996	0.07
MC1206N221J102CT	220	± 5%	22T0023	0.07
MC1206N331J102CT	330	± 5%	22T0048	0.27
MC1206N471J102CT	470	± 5%	22T0070	0.28
1206 CASE SIZE, VOLTAGE: 2000VDC				
MC1206N1R5C202CT	1.5	± 0.25pF	21T9969	0.14
MC1206N2R2C202CT	2.2	± 0.25pF	22T0011	0.14
MC1206N3R3C202CT	3.3	± 0.25pF	22T0036	0.13
MC1206N4R7C202CT	4.7	± 0.25pF	22T0058	0.14
MC1206N6R8C202CT	6.8	± 0.25pF	22T0077	0.29
MC1206N100J202CT	10	± 5%	21T9977	0.13
MC1206N150J202CT	15	± 5%	21T9992	0.13
MC1206N220J202CT	22	± 5%	22T0019	0.13
MC1206N330J202CT	33	± 5%	22T0044	0.06
MC1206N470J202CT	47	± 5%	22T0066	0.13
MC1206N680J202CT	68	± 5%	22T0085	0.07
MC1206N101J202CT	100	± 5%	21T9985	0.08
MC1206N151J202CT	150	± 5%	22T0001	0.08
MC1206N221J202CT	220	± 5%	22T0027	0.08
1210 CASE SIZE, VOLTAGE: 1000VDC				
MC1210N100J102CT	10	± 5%	22T0162	0.34
MC1210N150J102CT	15	± 5%	22T0170	0.34
MC1210N220J102CT	22	± 5%	22T0178	0.34
MC1210N330J102CT	33	± 5%	22T0186	0.34
MC1210N470J102CT	47	± 5%	22T0192	0.34
MC1210N680J102CT	68	± 5%	22T0198	0.35
MC1210N101J102CT	100	± 5%	22T0166	0.35
MC1210N151J102CT	150	± 5%	22T0174	0.40
MC1210N221J102CT	220	± 5%	22T0182	0.40
MC1210N331J102CT	330	± 5%	22T0190	0.44
MC1210N471J102CT	470	± 5%	22T0196	0.48
MC1210N100J202CT	10	± 5%	22T0164	0.35
MC1210N150J202CT	15	± 5%	22T0172	0.35
MC1210N220J202CT	22	± 5%	22T0180	0.35
MC1210N330J202CT	33	± 5%	22T0188	0.35
MC1210N470J202CT	47	± 5%	22T0194	0.35
MC1210N680J202CT	68	± 5%	22T0200	0.35
MC1210N101J202CT	100	± 5%	22T0168	0.35

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GENERAL PURPOSE SMD MULTILAYER CERAMIC CAPACITORS (CONT.)

1210 CASE SIZE, VOLTAGE: 1000VDC

Mfg. Part No.	Cap. (pF)	Tol.	Tape Cut Stock No.	Tape Cut Price Each 1-99
● MC1210N151J202CT	150	± 5%	22T0176	0.40
● MC1210N221J202CT	220	± 5%	22T0184	0.40
1812 CASE SIZE, VOLTAGE: 1000VDC				
● MC1812N150J102CT	15	± 5%	22T0263	0.44
● MC1812N220J102CT	22	± 5%	22T0274	0.44
● MC1812N330J102CT	33	± 5%	22T0282	0.44
● MC1812N470J102CT	47	± 5%	22T0290	0.44
● MC1812N680J102CT	68	± 5%	22T0298	0.44
● MC1812N101J102CT	100	± 5%	22T0257	0.44
● MC1812N151J102CT	150	± 5%	22T0268	0.44
● MC1812N221J102CT	220	± 5%	22T0278	0.44
● MC1812N331J102CT	330	± 5%	22T0286	0.59
● MC1812N471J102CT	470	± 5%	22T0294	0.61
● MC1812N681J102CT	680	± 5%	22T0303	0.65
● MC1812N102J102CT	1000	± 5%	22T0261	0.64
● MC1812N152J102CT	1500	± 5%	22T0272	0.69
1812 CASE SIZE, VOLTAGE: 3000VDC				
● MC1812N100J302CT	10	± 5%	22T0255	0.51
● MC1812N150J302CT	15	± 5%	22T0265	0.51
● MC1812N220J302CT	22	± 5%	22T0276	0.51
● MC1812N330J302CT	33	± 5%	22T0284	0.51
● MC1812N470J302CT	47	± 5%	22T0292	0.54
● MC1812N680J302CT	68	± 5%	22T0300	0.54
● MC1812N101J302CT	100	± 5%	22T0259	0.54
● MC1812N151J302CT	150	± 5%	22T0270	0.52
● MC1812N221J302CT	220	± 5%	22T0280	0.56
● MC1812N331J302CT	330	± 5%	22T0288	0.78
● MC1812N471J302CT	470	± 5%	22T0296	0.88

(192100)

GENERAL PURPOSE SMD MULTILAYER CERAMIC CAPACITORS

RoHS Compliant Available

multicomp

Features:
- High voltage in a given case size
- High stability and reliability

Specifications:
- Dielectric characteristic: X7R
- Operating temperature: -55°C to +125°C

0805 CASE SIZE, VOLTAGE: 200VDC

Mfg. Part No.	Cap. (pF)	Tol.	Tape Cut Stock No.	Tape Cut Price Each 1-99
● MC0805B101K201CT	100	± 10%	21T9817	0.03
● MC0805B151K201CT	150	± 10%	21T9820	0.03
● MC0805B153K201CT	15000	± 10%	21T9822	0.05
● MC0805B223K201CT	22000	± 10%	21T9824	0.05
1206 CASE SIZE, VOLTAGE: 200VDC				
● MC1206B151K201CT	150	± 10%	21T9889	0.06
● MC1206B221K201CT	220	± 10%	21T9905	0.06
● MC1206B331K201CT	330	± 10%	21T9919	0.06
● MC1206B471K201CT	470	± 10%	21T9937	0.06
● MC1206B681K201CT	680	± 10%	21T9951	0.06
● MC1206B102K201CT	1000	± 10%	21T9877	0.06
● MC1206B152K201CT	1500	± 10%	21T9897	0.06
● MC1206B222K201CT	2200	± 10%	21T9913	0.06
● MC1206B332K201CT	3300	± 10%	21T9927	0.06
● MC1206B472K201CT	4700	± 10%	21T9945	0.06
● MC1206B682K201CT	6800	± 10%	21T9959	0.04
● MC1206B103K201CT	10000	± 10%	21T9883	0.06
● MC1206B333K201CT	33000	± 10%	21T9931	0.04
● MC1206B473K201CT	47000	± 10%	21T9947	0.04
● MC1206B683K201CT	68000	± 10%	21T9963	0.04
● MC1206B104K201CT	100000	± 10%	21T9885	0.09
1206 CASE SIZE, VOLTAGE: 630VDC				
● MC1206B151K631CT	150	± 10%	21T9893	0.16
● MC1206B221K631CT	220	± 10%	21T9909	0.16
● MC1206B331K631CT	330	± 10%	21T9923	0.16
● MC1206B471K631CT	470	± 10%	21T9941	0.16

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GENERAL PURPOSE SMD MULTILAYER CERAMIC CAPACITORS (CONT.)

1206 CASE SIZE, VOLTAGE: 630VDC

Mfg. Part No.	Cap. (pF)	Tol.	Tape Cut Stock No.	Tape Cut Price Each 1-99
● MC1206B681K631CT	680	± 10%	21T9955	0.16
● MC1206B152K631CT	1500	± 10%	21T9899	0.19
● MC1206B332K631CT	3300	± 10%	21T9929	0.19
● MC1206B682K631CT	6800	± 10%	21T9961	0.04
● MC1206B153K631CT	15000	± 10%	21T9901	0.04
● MC1206B223K631CT	22000	± 10%	21T9915	0.04
● MC1206B333K631CT	33000	± 10%	21T9933	0.14
1206 CASE SIZE, VOLTAGE: 1000VDC				
● MC1206B151K102CT	150	± 10%	21T9887	0.09
● MC1206B221K102CT	220	± 10%	21T9903	0.09
● MC1206B331K102CT	330	± 10%	21T9917	0.09
● MC1206B471K102CT	470	± 10%	21T9935	0.09
● MC1206B681K102CT	680	± 10%	21T9949	0.09
● MC1206B102K102CT	1000	± 10%	21T9875	0.20
● MC1206B152K102CT	1500	± 10%	21T9895	0.13
● MC1206B222K102CT	2200	± 10%	21T9911	0.13
● MC1206B332K102CT	3300	± 10%	21T9925	0.13
● MC1206B472K102CT	4700	± 10%	21T9943	0.07
● MC1206B682K102CT	6800	± 10%	21T9957	0.08
● MC1206B103K102CT	10000	± 10%	21T9881	0.08
1206 CASE SIZE, VOLTAGE: 2000VDC				
● MC1206B151K202CT	150	± 10%	21T9891	0.09
● MC1206B221K202CT	220	± 10%	21T9907	0.09
● MC1206B331K202CT	330	± 10%	21T9921	0.09
● MC1206B471K202CT	470	± 10%	21T9939	0.09
● MC1206B681K202CT	680	± 10%	21T9953	0.09
● MC1206B102K202CT	1000	± 10%	21T9879	0.21
1210 CASE SIZE, VOLTAGE: 200VDC				
● MC1210B102K201CT	1000	± 10%	22T0092	0.09
● MC1210B152K201CT	1500	± 10%	22T0106	0.09
● MC1210B222K201CT	2200	± 10%	22T0118	0.09
● MC1210B332K201CT	3300	± 10%	22T0130	0.09
● MC1210B472K201CT	4700	± 10%	22T0144	0.09
● MC1210B682K201CT	6800	± 10%	22T0156	0.09
● MC1210B103K201CT	10000	± 10%	22T0098	0.09
● MC1210B153K201CT	15000	± 10%	22T0110	0.26
● MC1210B223K201CT	22000	± 10%	22T0122	0.26
● MC1210B333K201CT	33000	± 10%	22T0134	0.27
● MC1210B473K201CT	47000	± 10%	22T0148	0.27
● MC1210B683K201CT	68000	± 10%	22T0160	0.33
● MC1210B104K201CT	100000	± 10%	22T0102	0.33
● MC1210B154K201CT	150000	± 10%	22T0114	0.34
● MC1210B224K201CT	220000	± 10%	22T0126	0.34
● MC1210B334K201CT	330000	± 10%	22T0138	0.46
● MC1210B474K201CT	470000	± 10%	22T0152	0.46
1210 CASE SIZE, VOLTAGE: 630VDC				
● MC1210B102K631CT	1000	± 10%	22T0094	0.09
● MC1210B152K631CT	1500	± 10%	22T0108	0.09
● MC1210B222K631CT	2200	± 10%	22T0120	0.09
● MC1210B332K631CT	3300	± 10%	22T0132	0.09
● MC1210B472K631CT	4700	± 10%	22T0146	0.09
● MC1210B682K631CT	6800	± 10%	22T0158	0.09
● MC1210B103K631CT	10000	± 10%	22T0100	0.09
● MC1210B153K631CT	15000	± 10%	22T0112	0.27
● MC1210B223K631CT	22000	± 10%	22T0124	0.27
● MC1210B333K631CT	33000	± 10%	22T0136	0.28
● MC1210B473K631CT	47000	± 10%	22T0150	0.28
1210 CASE SIZE, VOLTAGE: 1000VDC				
● MC1210B102K102CT	1000	± 10%	22T0090	0.35
● MC1210B152K102CT	1500	± 10%	22T0104	0.35
● MC1210B222K102CT	2200	± 10%	22T0116	0.35
● MC1210B332K102CT	3300	± 10%	22T0128	0.35
● MC1210B472K102CT	4700	± 10%	22T0140	0.42
● MC1210B682K102CT	6800	± 10%	22T0154	0.43
● MC1210B103K102CT	10000	± 10%	22T0096	0.46
1812 CASE SIZE, VOLTAGE: 630VDC				
● MC1812B102K631CT	1000	± 10%	22T0206	0.30
● MC1812B152K631CT	1500	± 10%	22T0217	0.30
● MC1812B222K631CT	2200	± 10%	22T0225	0.30
● MC1812B332K631CT	3300	± 10%	22T0233	0.30
● MC1812B472K631CT	4700	± 10%	22T0241	0.30
● MC1812B682K631CT	6800	± 10%	22T0251	0.30

➤CONTINUED➤

GENERAL PURPOSE SMD MULTILAYER CERAMIC CAPACITORS (CONT.)

1812 CASE SIZE, VOLTAGE: 630VDC

Mfg. Part No.	Cap. (pF)	Tol.	Tape Cut Stock No.	Tape Cut Price Each 1-99
MC1812B103K631CT	10000	± 10%	22T0211	0.30
MC1812B153K631CT	15000	± 10%	22T0221	0.55
MC1812B223K631CT	22000	± 10%	22T0227	0.55
MC1812B333K631CT	33000	± 10%	22T0235	0.55
MC1812B473K631CT	47000	± 10%	22T0243	0.55
MC1812B683K631CT	68000	± 10%	22T0253	0.59
MC1812B104K631CT	100000	± 10%	22T0213	0.63
1812 CASE SIZE, VOLTAGE: 1000VDC				
MC1812B331K102LT	330	± 10%	22T0229	0.34
MC1812B471K102CT	470	± 10%	22T0237	0.31
MC1812B681K102CT	680	± 10%	22T0245	0.31
MC1812B102K102CT	1000	± 10%	22T0202	0.32
MC1812B152K102CT	1500	± 10%	22T0215	0.35
MC1812B222K102CT	2200	± 10%	22T0223	0.33
MC1812B332K102CT	3300	± 10%	22T0231	0.33
MC1812B472K102CT	4700	± 10%	22T0239	0.35
MC1812B682K102CT	6800	± 10%	22T0249	0.33
MC1812B103K102CT	10000	± 10%	22T0208	0.33
MC1812B153K102CT	15000	± 10%	22T0219	0.67
1812 CASE SIZE, VOLTAGE: 3000VDC				
MC1812B681K302CT	680	± 10%	22T0247	0.56
MC1812B102K302CT	1000	± 10%	22T0204	0.56

(192101)

LOW INDUCTANCE SMD CERAMIC CHIP CAPACITORS

RoHS Compliant Available

AVX A KYOCERA GROUP COMPANY

SMD

Specifications
- Operation Temperature Range: X7R = -55°C to +125°C
- Temperature Coefficient: X7R = ±15%
- Voltage Range: 4 - 25 VDC

Mfg. Part No.	Voltage (VDC)	Cap. (uF)	Cap. Tol.	Diel. Char.	Case Size	Tape Cut Stock No.	Tape Cut Price 1-9
0306ZC104KAT2A	10	0.1	± 10%	X7R	0306 [0816]	96M1106	1.28
0306ZC224MAT2A	10	0.22	± 20%	X7R	0306 [0816]	12N3207	1.28
0612ZC105MAT2V	10	1	± 20%	X7R	0612 [1632]	12N3208	1.57
03063C103KAT2A	25	0.01	± 10%	X7R	0306 [0816]	96M1107	1.17
06123C104KAT2A	25	0.1	± 10%	X7R	0612 [1632]	12N3210	1.54
05085C104KAT2A	50	0.1	± 10%	X7R	0508 [1220]	96M1174	1.25

(125576)

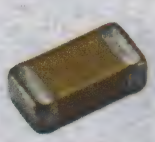
TANCERAM CHIP CAPACITORS

RoHS Compliant Available

JOHANSON DIELECTRICS

Advantages
- Low ESR
- Higher Surge Voltage
- Reduced Chip Size
- Higher Insulation Resistance
- Low DC Leakage
- Non-polarized Devices
- Improved Reliability
- Higher Ripple Current

Applications
- Backlighting Inverters
- DC/DC Converter Smoothing (Input/Output)
- Switching Power Supply Smoothing (Input/Output)
- General Digital Circuits



Mfg. Part No.	Voltage (V)	Cap. (uF)	Tol.	Die. Char.	Case Size	Stock No.	Price Each 1-99
6R3S43X107MV4E	6.3	100	± 20%	X5R	1812 [4532]	18M6764	2.97
100R18Y106ZV4E	10	10	+80%, -20%	Y5V	1206 [3216]	82H2447	0.10
160R18W225KV4E	16	2.2	± 10%	X7R	1206 [3216]	86H5104	0.11
160R18Y475ZV4E	16	4.7	+80%, -20%	Y5V	1206 [3216]	33M1498	0.10
250R18W105KV4E	25	1	± 10%	X7R	1206 [3216]	57J5997	0.20
500R18W104KV4E	50	0.1	± 10%	X7R	1206 [3216]	93F2308	0.05
101S43W105KV4E	100	1	± 10%	X7R	1812 [4532]	22M3833	2.34

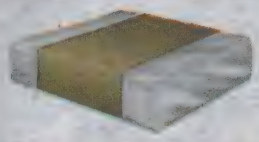
(93049)

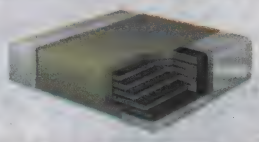
HIGH CAPACITANCE VALUE MULTILAYER CERAMIC CHIP CAPACITORS

SMD

RoHS Compliant Available

The Capacitance Company KEMET CHARGED.





KEMET multilayer ceramic chip capacitors are produced in plants designed specifically for chip capacitor manufacture. The process features a high degree of mechanization, as well as precise conditions. Manufacturing is supplemented by extensive technology, engineering and quality assurance programs. Standard end terminations use a nickel barrier layer and a tin overplate to provide excellent solderability for the customer.

0402 CASE SIZE, VOLTAGE: 6.3V

Mfg. Part No.	Cap. (µF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Tape Cut Price Each 1-9
C0402C224K9PACTU	0.22	± 10%	X5R	14N2169	0.06
C0402C105K9PACTU	1	± 10%	X5R	70K9079	0.06
C0402C225M9PACTU	2.2	± 20%	X5R	93K6009	0.81
0402 CASE SIZE, VOLTAGE: 16V					
C0402C104K4RACTU	0.1	± 10%	X7R	70K9077	0.12
0603 CASE SIZE , VOLTAGE: 6.3V					
C0603C106M9PACTU	10	± 20%	X5R	93K5998	0.22
0603 CASE SIZE , VOLTAGE: 10V					
C0603C475M8PACTU	4.7	± 20%	X5R	12N4440	0.22
0603 CASE SIZE, VOLTAGE: 16V					
C0603C105K4RACTU	1	± 10%	X7R	93K5997	0.47
0603 CASE SIZE, VOLTAGE: 25V					
C0603C224K3RACTU	0.22	± 10%	X7R	93K6000	0.17
C0603C105K3PACTU	1	± 10%	X5R	93K5996	0.05
0603 CASE SIZE, VOLTAGE: 50V					
C0603C154K5RACTU	0.15	± 10%	X7R	93K5999	0.18
0805 CASE SIZE, VOLTAGE: 6.3V					
C0805C476M9PACTU	47	± 20%	X5R	94M5641	1.51
0805 CASE SIZE, VOLTAGE: 10V					
C0805C106K8PACTU	10	± 10%	X5R	70K9138	0.32
0805 CASE SIZE, VOLTAGE: 16V					
C0805C225K4RACTU	2.2	± 10%	X7R	70K9141	0.39
C0805C106K4PACTU	10	± 10%	X5R	13M6695	0.17
0805 CASE SIZE, VOLTAGE: 25V					
C0805C105K3RACTU	1	± 10%	X7R	93K6001	0.18
C0805C475K3PACTU	4.7	± 10%	X5R	12N4441	0.21
C0805C475M3PACTU	4.7	± 20%	X5R	12N4442	0.31
0805 CASE SIZE, VOLTAGE: 50V					
C0805C684K5RACTU	0.68	± 10%	X7R	93K6003	0.31
1206 CASE SIZE, VOLTAGE: 6.3V					
C1206C107M9PACTU	100	± 20%	X5R	94M5669	2.01
1206 CASE SIZE, VOLTAGE: 16V					
C1206C106K4PACTU	10	± 10%	X5R	70K9169	0.20
C1206C106K4RACTU	10	± 10%	X7R	70K9170	0.42
1206 CASE SIZE, VOLTAGE: 25V					
C1206C475K3RACTU	4.7	± 10%	X7R	88K0224	0.30
C1206C106K3PACTU	10	± 10%	X5R	88K0222	0.38
1206 CASE SIZE, VOLTAGE: 50V					
C1206C225K5RACTU	2.2	± 10%	X7R	88K0223	1.11
C1206C475K5PACTU	4.7	± 10%	X5R	94M5673	0.56
C1206C475M5PACTU	4.7	± 20%	X5R	12N4443	0.52
1210 CASE SIZE, VOLTAGE: 6.3V					
C1210C476M9RACTU	47	± 20%	X7R	94M5704	2.19
C1210C107M9PACTU	100	± 20%	X5R	70K9189	1.46
1210 CASE SIZE, VOLTAGE: 10V					
C1210C476M8PACTU	47	± 20%	X5R	12N4446	1.33
1210 CASE SIZE, VOLTAGE: 16V					
C1210C106K4RACTU	10	± 10%	X7R	88K0229	1.28
C1210C476M4PACTU	47	± 20%	X5R	94M5703	1.33
1210 CASE SIZE, VOLTAGE : 25V					
C1210C106K3PACTU	10	± 10%	X5R	70K9188	0.30
C1210C106K3RACTU	10	± 10%	X7R	29M4586	0.29
1210 CASE SIZE, VOLTAGE: 100V					
C1210C225M1RACTU	2.2	± 20%	X7R	12N4444	0.71
1812 CASE SIZE, VOLTAGE : 25V					
C1812C106K3RACTU	10	± 10%	X7R	94M5720	2.59

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HIGH CAPACITANCE VALUE MULTILAYER CERAMIC CHIP CAPACITORS (CONT.)

1812 CASE SIZE, VOLTAGE : 50V

Mfg. Part No.	Cap. (µF)	Tol. +/- %	Diel. Char.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● C1812C333J5GACTU	0.033	± 5%	C0G / NP0	12N4481	1.72
● C1812C104J5GACTU	0.1	± 5%	C0G / NP0	12N4449	1.67
● C1812C475K5RACTU	4.7	± 10%	X7R	94M5721	2.34
1812 CASE SIZE, VOLTAGE : 100V					
● C1812C223J1GACTU	0.022	± 5%	C0G / NP0	12N4467	1.92
● C1812C333J1GACTU	0.033	± 5%	C0G / NP0	12N4479	2.00
● C1812C473J1GACTU	0.047	± 5%	C0G / NP0	12N4483	1.87
● C1812C104J1GACTU	0.1	± 5%	C0G / NP0	12N4447	2.04
● C1812C225K1RACTU	2.2	± 10%	X7R	12N4473	1.35
● C1812C225M1RACTU	2.2	± 20%	X7R	12N4474	1.39
2220 CASE SIZE, VOLTAGE: 50V					
● C2220C334J5GACTU	0.33	± 5%	C0G / NP0	12N4529	4.50
● C2220C474J5GACTU	0.47	± 5%	C0G / NP0	12N4535	4.12
● C2220C106K5RACTU	10	± 10%	X7R	94M5722	4.33
2220 CASE SIZE, VOLTAGE: 100V					
● C2220C224J1GACTU	0.22	± 5%	C0G / NP0	12N4513	4.14

(85899)

HIGH CAPACITANCE SMD MULTILAYER CERAMIC CAPACITORS

SMD

RoHS Compliant Available

multicomp

Features
- Low ESR and excellent frequency characteristics
- Small size with high capacitance

Applications
- Digital circuit coupling or decoupling
- High frequency and high-density type power supplies
- Bypassing

0402 CASE SIZE, VOLTAGE: 6.3 VDC

Mfg. Part No.	Cap. (µF)	Diel. Char.	Cap. Tol.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● MC0402X224K6R3CT	0.22	X5R	± 10%	06R4883	0.03
● MC0402X474K6R3CT	0.47	X5R	± 10%	06R4896	0.03
● MC0402X105K6R3CT	1	X5R	± 10%	06R4875	0.02
● MC0402X225M6R3CT	2.2	X5R	± 20%	06R4886	0.11
0402 CASE SIZE, VOLTAGE: 10 VDC					
● MC0402X563K100CT	0.056	X5R	± 10%	06R4899	0.01
● MC0402X683K100CT	0.068	X5R	± 10%	06R4901	0.01
● MC0402X823K100CT	0.082	X5R	± 10%	06R4906	0.01
● MC0402X104K100CT	0.1	X5R	± 10%	06R4869	0.01
● MC0402X105M100CT	1	X5R	± 20%	06R4877	0.02
0402 CASE SIZE, VOLTAGE: 16 VDC					
● MC0402X273K160CT	0.027	X5R	± 10%	06R4888	0.01
● MC0402X333K160CT	0.033	X5R	± 10%	06R4890	0.01
● MC0402X473K160CT	0.047	X5R	± 10%	06R4894	0.01
● MC0402X683K160CT	0.068	X5R	± 10%	06R4903	0.02
● MC0402X104K160CT	0.1	X5R	± 10%	06R4871	0.01
0603 CASE SIZE, VOLTAGE: 6.3 VDC					
● MC0603X824K6R3CT	0.82	X5R	± 10%	06R5260	0.03
● MC0603X105K6R3CT	1	X5R	± 10%	06R5228	0.02
● MC0603X225K6R3CT	2.2	X5R	± 10%	06R5239	0.05
0603 CASE SIZE, VOLTAGE: 10 VDC					
● MC0603X334K100CT	0.33	X5R	± 10%	06R5245	0.03
● MC0603X474K100CT	0.47	X5R	± 10%	06R5250	0.03
● MC0603X684K100CT	0.68	X5R	± 10%	06R5255	0.03
● MC0603F105Z100CT	1	Y5V	+80%, -20%	06R5073	0.02
● MC0603X105K100CT	1	X5R	± 10%	06R5222	0.02
● MC0603F225Z100CT	2.2	Y5V	+80%, -20%	06R5087	0.04
● MC0603X225M100CT	2.2	X5R	± 20%	06R5241	0.05
0603 CASE SIZE, VOLTAGE: 16 VDC					
● MC0603X224K160CT	0.22	X5R	± 10%	06R5237	0.03
● MC0603X334K160CT	0.33	X5R	± 10%	06R5247	0.03
● MC0603X474K160CT	0.47	X5R	± 10%	06R5252	0.03
● MC0603X684K160CT	0.68	X5R	± 10%	06R5257	0.03
● MC0603X105K160CT	1	X5R	± 10%	06R5224	0.03
● MC0603F105Z160CT	1	Y5V	+80%, -20%	06R5075	0.02

➤CONTINUED➤

HIGH CAPACITANCE SMD MULTILAYER CERAMIC CAPACITORS (CONT.)

0603 CASE SIZE, VOLTAGE: 25 VDC

Mfg. Part No.	Cap. (µF)	Diel. Char.	Cap. Tol.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● MC0603X105K250CT	1	X5R	± 10%	06R5226	0.03
0805 CASE SIZE, VOLTAGE: 6.3 VDC					
● MC0805X155K6R3CT	1.5	X5R	± 10%	06R4156	0.07
● MC0805X225K6R3CT	2.2	X5R	± 10%	06R4164	0.07
● MC0805X335K6R3CT	3.3	X5R	± 10%	06R4175	0.07
0805 CASE SIZE, VOLTAGE: 10 VDC					
● MC0805X225K100CT	2.2	X5R	± 10%	06R4158	0.08
● MC0805F335Z100CT	3.3	Y5V	+80%, -20%	06R3970	0.07
● MC0805X335K100CT	3.3	X5R	± 10%	06R4173	0.08
● MC0805F475Z100CT	4.7	Y5V	+80%, -20%	06R3978	0.05
● MC0805X475K100CT	4.7	X5R	± 10%	06R4177	0.08
● MC0805F106Z100CT	10	Y5V	+80%, -20%	06R3938	0.07
0805 CASE SIZE, VOLTAGE: 16 VDC					
● MC0805F105Z160CT	1	Y5V	+80%, -20%	06R3932	0.03
● MC0805F155Z160CT	1.5	Y5V	+80%, -20%	06R3950	0.05
● MC0805F225Z160CT	2.2	Y5V	+80%, -20%	06R3960	0.04
● MC0805X225K160CT	2.2	X5R	± 10%	06R4160	0.11
● MC0805F475Z160CT	4.7	Y5V	+80%, -20%	06R3980	0.05
● MC0805X475K160CT	4.7	X5R	± 10%	06R4179	0.11
0805 CASE SIZE, VOLTAGE: 25 VDC					
● MC0805F105Z250CT	1	Y5V	+80%, -20%	06R3934	0.03
● MC0805X225K250CT	2.2	X5R	± 10%	06R4162	0.16
● MC0805X475K250CT	4.7	X5R	± 10%	06R4181	0.16
0805 CASE SIZE, VOLTAGE: 50 VDC					
● MC0805F105Z500CT	1	Y5V	+80%, -20%	06R3936	0.04
1206 CASE SIZE, VOLTAGE: 6.3 VDC					
● MC1206X475K6R3CT	4.7	X5R	± 10%	10R6440	0.14
● MC1206X106K6R3CT	10	X5R	± 10%	10R6414	0.25
● MC1206X226M6R3CT	22	X5R	± 20%	10R6430	0.26
1206 CASE SIZE, VOLTAGE: 10 VDC					
● MC1206B155K100CT	1.5	X7R	± 10%	06R4242	0.18
● MC1206X225K100CT	2.2	X5R	± 10%	10R6422	0.15
● MC1206X335K100CT	3.3	X5R	± 10%	10R6432	0.17
● MC1206X475K100CT	4.7	X5R	± 10%	10R6434	0.14
● MC1206X106K100CT	10	X5R	± 10%	10R6409	0.25
● MC1206F106Z100CT	10	Y5V	+80%, -20%	06R4367	0.09
● MC1206X226M100CT	22	X5R	± 20%	10R6428	0.42
● MC1206F226Z100CT	22	Y5V	+80%, -20%	06R4381	0.17
1206 CASE SIZE, VOLTAGE: 16 VDC					
● MC1206B105K160CT	1	X7R	± 10%	06R4213	0.09
● MC1206F105Z160CT	1	Y5V	+80%, -20%	06R4361	0.08
● MC1206B155K160CT	1.5	X7R	± 10%	06R4244	0.19
● MC1206F155Z160CT	1.5	Y5V	+80%, -20%	06R4373	0.09
● MC1206B225K160CT	2.2	X7R	± 10%	06R4278	0.17
● MC1206F225Z160CT	2.2	Y5V	+80%, -20%	06R4377	0.08
● MC1206F335Z160CT	3.3	Y5V	+80%, -20%	06R4383	0.09
● MC1206X475K160CT	4.7	X5R	± 10%	10R6436	0.14
● MC1206F475Z160CT	4.7	Y5V	+80%, -20%	06R4387	0.07
● MC1206X106K160CT	10	X5R	± 10%	10R6410	0.26
● MC1206F106Z160CT	10	Y5V	+80%, -20%	06R4369	0.11
1206 CASE SIZE, VOLTAGE: 25 VDC					
● MC1206B105K250CT	1	X7R	± 10%	06R4215	0.11
● MC1206F105Z250CT	1	Y5V	+80%, -20%	06R4363	0.09
● MC1206F155Z250CT	1.5	Y5V	+80%, -20%	06R4375	0.09
● MC1206X225K250CT	2.2	X5R	± 10%	10R6424	0.16
● MC1206F225Z250CT	2.2	Y5V	+80%, -20%	06R4379	0.08
● MC1206X475K250CT	4.7	X5R	± 10%	10R6438	0.19
● MC1206F475Z250CT	4.7	Y5V	+80%, -20%	06R4389	0.08
● MC1206X106K250CT	10	X5R	± 10%	10R6412	0.28
● MC1206F106Z250CT	10	Y5V	+80%, -20%	06R4371	0.18
1206 CASE SIZE, VOLTAGE: 50 VDC					
● MC1206B105K500CT	1	X7R	± 10%	06R4217	0.13
● MC1206F105Z500CT	1	Y5V	+80%, -20%	06R4365	0.09
1210 CASE SIZE, VOLTAGE: 10 VDC					
● MC1210X106K100CT	10	X5R	± 10%	06R4472	0.31
● MC1210F226Z100CT	22	Y5V	+80%, -20%	06R4464	0.32
● MC1210X226M100CT	22	X5R	± 20%	06R4482	0.50
● MC1210X476M100CT	47	X5R	± 20%	06R4492	1.52
1210 CASE SIZE, VOLTAGE: 16 VDC					
● MC1210X475K160CT	4.7	X5R	± 10%	06R4488	0.31
● MC1210F106Z160CT	10	Y5V	+80%, -20%	06R4458	0.24

➤CONTINUED➤

HIGH CAPACITANCE SMD MULTILAYER CERAMIC CAPACITORS (CONT.)

1210 CASE SIZE, VOLTAGE: 16 VDC

Mfg. Part No.	Cap. (µF)	Diel. Char.	Cap. Tol.	Tape Cut Stock No.	Tape Cut Price Each 1-9
MC1210X106K160CT	10	X5R	± 10%	06R4474	0.31
MC1210F226Z160CT	22	Y5V	+80%, -20%	06R4466	0.34
MC1210X226M160CT	22	X5R	± 20%	06R4484	0.56
1210 CASE SIZE, VOLTAGE: 25 VDC					
MC1210X475K250CT	4.7	X5R	± 10%	06R4490	0.35
MC1210F106Z250CT	10	Y5V	+80%, -20%	06R4460	0.26
MC1210X106M250CT	10	X5R	± 20%	06R4478	0.53
1210 CASE SIZE, VOLTAGE: 50 VDC					
MC1210F475Z500CT	4.7	Y5V	+80%, -20%	06R4468	0.35
1812 CASE SIZE, VOLTAGE: 100 VDC					
MC1812B105M101CT	1	X7R	± 20%	06R4494	0.51

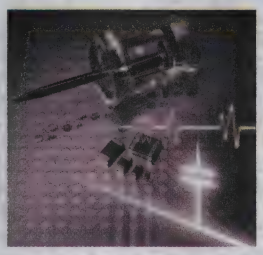
(147258)

STANDARD SMD MULTILAYER CERAMIC CAPACITORS CLASS 2: HIGH DIELECTRIC CONSTANT — Y5V

RoHS Compliant Available

TAIYO YUDEN

SMD



Features
- Improved higher density mounting
- Monolithic structure provides higher reliability
- Improved solderability and heat resistance characteristics
- It also prevents migration and raises the level of reliability.
- Low equivalent series resistance (ESR)
- Higher permissible ripple current values
- Smaller case sizes with high rated voltage

Specifications
- Dielectric characteristic: Y5V
- Operating temperature: -30°C to +85°C
- Capacitance tolerance: +80, -20%

0402 CASE SIZE, VOLTAGE: 6.3V

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Tape Cut Stock No.	Tape Cut Price Each 1-9
JMK105F105ZV-F	1000000	+80%, -20%	86H5616	0.08
0402 CASE SIZE, VOLTAGE: 16 VDC				
EMK105F104ZV-F	100000	+80%, -20%	86H5613	0.10
0402 CASE SIZE, VOLTAGE: 50 VDC				
UMK105F103ZV-F	10000	+80%, -20%	86H5621	0.10
0603 CASE SIZE, VOLTAGE: 6.3 VDC				
JMK107F225ZA-T	2200000	+80%, -20%	08P5145	0.13
0603 CASE SIZE, VOLTAGE: 10 VDC				
LMK107F105ZA-T	1000000	+80%, -20%	86H5287	0.09
LMK107F225ZA-T	2200000	+80%, -20%	08P5166	0.13
0603 CASE SIZE, VOLTAGE: 16 VDC				
EMK107F224ZA-T	220000	+80%, -20%	08P5123	0.06
EMK107F474ZA-T	470000	+80%, -20%	08P5125	0.11
EMK107F225ZA-T	2200000	+80%, -20%	08P5124	0.14
0603 CASE SIZE, VOLTAGE: 25 VDC				
TMK107F104ZA-T	100000	+80%, -20%	30K5540	0.05
TMK107F474ZA-T	470000	+80%, -20%	08P5185	0.10
0603 CASE SIZE, VOLTAGE: 50 VDC				
UMK107F104ZA-T	100000	+80%, -20%	30K5553	0.11
0805 CASE SIZE, VOLTAGE: 6.3 VDC				
JMK212F475ZD-T	4700000	+80%, -20%	08P5152	0.22
JMK212F106ZG-T	10000000	+80%, -20%	08P5151	0.20
0805 CASE SIZE, VOLTAGE: 10 VDC				
LMK212F475ZG-T	4700000	+80%, -20%	08P5172	0.13
LMK212F106ZG-T	10000000	+80%, -20%	86H5290	0.15
0805 CASE SIZE, VOLTAGE: 16 VDC				
EMK212F225ZG-T	2200000	+80%, -20%	08P5127	0.18
0805 CASE SIZE, VOLTAGE: 50 VDC				
UMK212F224ZD-T	220000	+80%, -20%	08P5199	0.12
UMK212F474ZG-T	470000	+80%, -20%	08P5200	0.18
UMK212F105ZG-T	1000000	+80%, -20%	86H5309	0.12
1206 CASE SIZE, VOLTAGE: 6.3 VDC				
JMK316F106ZD-T	10000000	+80%, -20%	08P5157	0.33
1206 CASE SIZE, VOLTAGE: 10 VDC				
LMK316F106ZF-T	10000000	+80%, -20%	08P5177	0.10
LMK316F106ZL-T	10000000	+80%, -20%	08P5178	0.15
LMK316F226ZL-T	22000000	+80%, -20%	30K5489	0.21

CONTINUED

STANDARD SMD MULTILAYER CERAMIC CAPACITORS CLASS 2: HIGH DIELECTRIC CONSTANT — Y5V (CONT.)

1206 CASE SIZE, VOLTAGE: 16 VDC

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Tape Cut Stock No.	Tape Cut Price Each 1-9
EMK316F106ZL-T	10000000	+80%, -20%	86H5254	0.10
1206 CASE SIZE, VOLTAGE: 25 VDC				
TMK316F106ZL-T	10000000	+80%, -20%	18J2760	0.10
1206 CASE SIZE, VOLTAGE: 35 VDC				
GMK316F475ZG-T	4700000	+80%, -20%	08P5137	0.13
GMK316F106ZL-T	10000000	+80%, -20%	30K5465	0.15
1206 CASE SIZE, VOLTAGE: 50 VDC				
UMK316F225ZG-T	2200000	+80%, -20%	08P5201	0.13
1210 CASE SIZE, VOLTAGE: 6.3 VDC				
JMK325F476ZN-T	47000000	+80%, -20%	30K5481	0.66
JMK325F107ZM-T	100000000	+80%, -20%	86H5278	1.30
1210 CASE SIZE, VOLTAGE: 10 VDC				
LMK325F226ZN-T	22000000	+80%, -20%	30K5490	0.21
1210 CASE SIZE, VOLTAGE: 16 VDC				
EMK325 F106ZF-T	10000000	+80%, -20%	08P5130	0.50
EMK325F106ZH-T	10000000	+80%, -20%	08P5134	0.17
EMK325F226ZN-T	22000000	+80%, -20%	30K5463	0.26
1210 CASE SIZE, VOLTAGE: 25 VDC				
TMK325F106ZH-T	10000000	+80%, -20%	30K5550	0.18
1210 CASE SIZE, VOLTAGE: 35 VDC				
GMK325F106ZH-T	10000000	+80%, -20%	86H5266	0.27
1210 CASE SIZE, VOLTAGE: 50 VDC				
UMK325F475ZH-T	4700000	+80%, -20%	08P5203	0.23

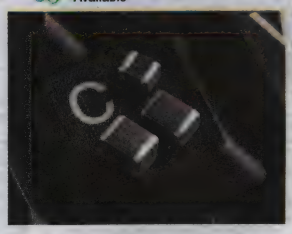
(77716)

MEDIUM-HIGH VOLTAGE SMD MULTILAYER CERAMIC CAPACITORS CLASS 2: HIGH DIELECTRIC CONSTANT — X7R

RoHS Compliant Available

TAIYO YUDEN

SMD



Features
- Nickel electrodes prevents migration and provides high reliability
- Small case sizes with high rated voltage
- Ideal for general telephone exchange, inverters, wireless and telecommunication bases, DC/DC converters

Specifications
- Dielectric characteristic: X7R
- Operating temperature: -55°C to +125°C
- Capacitance tolerance: ±10%, ±20%

0603 CASE SIZE, VOLTAGE: 100 VDC

Mfg. Part No.	Capacitance (pF)	Capacitance Tol.	Tape Cut Stock No.	Tape Cut Price Each 1-9
HMK107B7102KA-T	1000	± 10%	77M8445	0.14
HMK107B7472KA-T	4700	± 10%	77M8449	0.12
HMK107B7103KA-T	10000	± 10%	77M8446	0.15
HMK107B7223KA-T	22000	± 10%	77M8448	0.15
0805 CASE SIZE, VOLTAGE: 100 VDC				
HMK212B7103KG-T	10000	± 10%	77M8450	0.11
HMK212B7103MG-T	10000	± 20%	10P9823	0.11
HMK212B7153KG-T	15000	± 10%	10P9825	0.12
HMK212B7153MG-T	15000	± 20%	10P9826	0.12
HMK212B7223KG-T	22000	± 10%	77M8452	0.14
HMK212B7223MG-T	22000	± 20%	10P9827	0.14
HMK212B7333KG-T	33000	± 10%	10P9828	0.18
HMK212B7333MG-T	33000	± 20%	10P9829	0.18
HMK212B7473KG-T	47000	± 10%	77M8453	0.18
HMK212B7473MG-T	47000	± 20%	10P9830	0.18
HMK212B7104KG-T	100000	± 10%	77M8451	0.11
HMK212B7104MG-T	100000	± 20%	10P9824	0.20
HMK212B7224KG-T	220000	± 10%	84R9118	0.14
0805 CASE SIZE, VOLTAGE: 250 VDC				
QMK212B7102KD-T	1000	± 10%	77M8475	0.11
QMK212B7152KD-T	1500	± 10%	10P9865	0.20
QMK212B7152MD-T	1500	± 20%	10P9866	0.20
QMK212B7222KD-T	2200	± 10%	77M8477	0.20
QMK212B7472KG-T	4700	± 10%	77M8479	0.20
QMK212B7682KG-T	6800	± 10%	10P9876	0.20
QMK212B7103KG-T	10000	± 10%	77M8476	0.17
QMK212B7103MG-T	10000	± 20%	10P9864	0.19
QMK212B7223MG-T	22000	± 20%	10P9871	0.22

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MEDIUM-HIGH VOLTAGE SMD MULTILAYER CERAMIC CAPACITORS CLASS 2: HIGH DIELECTRIC CONSTANT — X7R (CONT.)

Mfg. Part No.	Capacitance (pF)	Capacitance Tol.	Tape Cut Stock No.	Price Each 1-9
1206 CASE SIZE, VOLTAGE: 100 VDC				
● HMK316B7473KL-T	47000	± 10%	77M8456	0.58
● HMK316B7473ML-T	47000	± 20%	10P9833	0.58
● HMK316B7104KL-T	100000	± 10%	77M8454	0.13
● HMK316B7104ML-T	100000	± 20%	10P9831	0.32
● HMK316B7224KL-T	220000	± 10%	77M8455	0.14
● HMK316B7224ML-T	220000	± 20%	10P9832	0.34
● HMK316B7474KL-T	470000	± 10%	77M8457	0.31
● HMK316B7105KL-T	1000000	± 10%	08P5139	0.28
1206 CASE SIZE, VOLTAGE: 250 VDC				
● QMK316B7104ML-T	100000	± 20%	10P9878	0.52
1206 CASE SIZE, VOLTAGE: 630 VDC				
● SMK316B7102KF-T	1000	± 10%	77M8488	0.09
● SMK316B7152MF-T	1500	± 20%	10P9890	0.44
● SMK316B7222KF-T	2200	± 10%	77M8490	0.19
● SMK316B7222MF-T	2200	± 20%	10P9894	0.48
● SMK316B7682KF-T	6800	± 10%	10P9898	0.48
● SMK316B7682MF-T	6800	± 20%	10P9899	0.48
● SMK316B7103KF-T	10000	± 10%	77M8489	0.19
● SMK316B7153KL-T	15000	± 10%	10P9891	0.50
● SMK316B7223KL-T	22000	± 10%	77M8491	0.20
1210 CASE SIZE, VOLTAGE: 100 VDC				
● HMK325B7104KF-T	100000	± 10%	10P9834	0.81
● HMK325B7104MF-T	100000	± 20%	10P9835	0.81
● HMK325B7224KN-T	220000	± 10%	77M8459	0.26
● HMK325B7224MN-T	220000	± 20%	10P9837	0.66
● HMK325B7474KN-T	470000	± 10%	77M8460	0.38
● HMK325B7474MN-T	470000	± 20%	10P9839	1.00
● HMK325B7105KN-T	1000000	± 10%	77M8458	0.44
● HMK325B7105MN-T	1000000	± 20%	10P9836	1.10
● HMK325B7225KN-T	2200000	± 10%	08P5140	0.48
● HMK325B7225MN-T	2200000	± 20%	10P9838	1.21
1210 CASE SIZE, VOLTAGE: 630 VDC				
● SMK325B7473MN-T	47000	± 20%	10P9903	1.02
1812 CASE SIZE, VOLTAGE: 100 VDC				
● HMK432B7474KM-T	470000	± 10%	77M8463	1.76
● HMK432B7474MM-T	470000	± 20%	10P9842	1.76
● HMK432B7105KM-T	1000000	± 10%	77M8461	0.92
● HMK432B7105MM-T	1000000	± 20%	10P9840	2.26
● HMK432B7225KM-T	2200000	± 10%	77M8462	1.05
● HMK432B7225MM-T	2200000	± 20%	10P9841	2.40
1812 CASE SIZE, VOLTAGE: 250 VDC				
● QMK432B7104KM-T	100000	± 10%	77M8485	0.65
● QMK432B7224MM-T	220000	± 20%	10P9886	1.32
● QMK432B7474KM-T	470000	± 10%	77M8487	1.76
● QMK432B7474MM-T	470000	± 20%	10P9887	1.76
1812 CASE SIZE, VOLTAGE: 630 VDC				
● SMK432B7473KM-T	47000	± 10%	77M8495	1.61

(77719)

NEW PRODUCTS ADDED DAILY

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(196562)

STANDARD SMD MULTILAYER CERAMIC CAPACITORS CLASS 2: HIGH DIELECTRIC CONSTANT — X5R

RoHS Compliant Available

TAIYO YUDEN

SMD

Features
- Nickel electrodes prevents migration and provides high reliability
- Small case sizes with high rated voltage
- Ideal for general telephone exchange, inverters, wireless and telecommunication bases, DC/DC converters

Specifications
- Dielectric characteristic: X5R
- Operating temperature: -55°C to +85°C
- Capacitance tolerance: ±10%, ±20%

Mfg. Part No.	Capacitance (µF)	Capacitance Tol.	Tape Cut Stock No.	Price Each 1-9
0201 CASE SIZE, VOLTAGE: 4 VDC				
● AMK063BJ474MP-F	0.47	± 20%	08P5118	0.43
● AMK063ABJ105MP-F	1	± 20%	83T1708	0.50
0201 CASE SIZE, VOLTAGE: 6.3 VDC				
● JMK063BJ473KP-F	0.047	± 10%	30K5274	0.10
● JMK063BJ104KP-F	0.1	± 10%	08P5141	0.12
● JMK063BJ224MP-F	0.22	± 20%	84R9119	0.23
0201 CASE SIZE, VOLTAGE: 10 VDC				
● LMK063BJ472KP-F	4.7	± 10%	30K5279	0.07
● LMK063BJ103KP-F	0.01	± 10%	30K5276	0.07
● LMK063BJ223KP-F	0.022	± 10%	30K5277	0.10
● LMK063BJ473KP-F	0.047	± 10%	84R9731	0.15
● LMK063BJ104KP-F	0.1	± 10%	12T9698	0.15
● LMK063BJ224MP-F	0.22	± 20%	48T3327	0.23
0201 CASE SIZE, VOLTAGE: 16 VDC				
● EMK063BJ222KP-F	2.2	± 10%	30K5272	0.14
● EMK063BJ103KP-F	0.01	± 10%	08P5121	0.15
0201 CASE SIZE, VOLTAGE: 25 VDC				
● TMK063CG100DT-F	10pF	± 0.5pF	48T3330	0.14
● TMK063BJ101KP-F	100pF	± 10%	30K5280	0.14
● TMK063BJ221KP-F	220pF	± 10%	30K5284	0.15
● TMK063BJ471KP-F	470pF	± 10%	30K5286	0.14
● TMK063BJ102KP-F	1000pF	± 10%	30K5282	0.15
0402 CASE SIZE, VOLTAGE: 4 VDC				
● AMK105BJ225MV-F	2.2	± 20%	30K5271	0.27
● AMK105BJ335MV-F	3.3	± 20%	84R9106	0.33
● AMK105BJ475MV-F	4.7	± 20%	08P5119	0.49
0402 CASE SIZE, VOLTAGE: 6.3 VDC				
● JMK105BJ224KV-F	0.22	± 10%	86H5617	0.07
● JMK105BJ474KV-F	0.47	± 10%	18J0969	0.08
● JMK105BJ105KV-F	1	± 10%	18J0966	0.12
● JMK105BJ105MV-F	1	± 20%	22J0345	0.06
● JMK105BJ225MV-F	2.2	± 20%	93K5514	0.26
● JMK105BBJ475MV-F	4.7	± 20%	29T3551	0.52
0402 CASE SIZE, VOLTAGE: 10 VDC				
● LMK105BJ104KV-F	0.1	± 10%	86H5618	0.12
● LMK105BJ104MV-F	0.1	± 20%	08P5161	0.11
● LMK105BJ224KV-F	0.22	± 10%	18J0971	0.08
● LMK105BJ474KV-F	0.47	± 10%	93K5516	0.10
● LMK105BJ105KV-F	1	± 10%	93K5515	0.08
● LMK105BJ225MV-F	2.2	± 20%	78T6311	0.30
0402 CASE SIZE, VOLTAGE: 16 VDC				
● EMK105BJ104KV-F	0.1	± 10%	18J0959	0.12
● EMK105BJ224KV-F	0.22	± 10%	93K5513	0.11
● EMK105BJ105KV-F	1	± 10%	84R9108	0.18
0402 CASE SIZE, VOLTAGE: 25 VDC				
● TMK105BJ104KV-F	0.1	± 10%	93K5517	0.12
0402 CASE SIZE, VOLTAGE: 35 VDC				
● GMK105BJ104KV-F	0.1	± 10%	84R9117	0.12
0402 CASE SIZE, VOLTAGE: 50 VDC				
● UMK105 BJ472KV-F	4700	± 10%	08P5195	0.03
0603 CASE SIZE, VOLTAGE: 4 VDC				
● AMK107BJ226MA-T	22	± 20%	08P5120	1.03
0603 CASE SIZE, VOLTAGE: 6.3 VDC				
● JMK107BJ474KK-T	0.47	± 10%	86H5269	0.15
● JMK107BJ105KK-T	1	± 10%	08P5142	0.16
● JMK107BJ225KA-T	2.2	± 10%	86H5268	0.13
● JMK107BJ335KA-T	3.3	± 10%	08P5143	0.17
● JMK107BJ475KA-T	4.7	± 10%	26K9542	0.14
● JMK107BJ475MA-T	4.7	± 20%	86H5270	0.15

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STANDARD SMD MULTILAYER CERAMIC CAPACITORS CLASS 2: HIGH DIELECTRIC CONSTANT — X5R (CONT.)

Mfg. Part No.	Capacitance (µF)	Capacitance Tol.	Tape Cut Stock No.	Price Each 1-9
0603 CASE SIZE, VOLTAGE: 6.3 VDC				
JMK107BJ475MK-T	4.7	± 20%	84R9123	0.19
JMK107BJ106MA-T	10	± 20%	30K5476	0.24
0603 CASE SIZE, VOLTAGE: 10 VDC				
LMK107BJ105KK-T	1	± 10%	08P5163	0.15
LMK107BJ225KA-T	2.2	± 10%	18J2716	0.16
LMK107BJ475KA-T	4.7	± 10%	28M8243	0.14
LMK107BJ106MALTD	10	± 20%	84R9134	0.35
0603 CASE SIZE, VOLTAGE: 16 VDC				
EMK107BJ105KA-T	1	± 10%	18J2659	0.12
EMK107BJ105KK-T	1	± 10%	84R9110	0.17
EMK107BJ225KA-T	2.2	± 10%	93K5520	0.10
EMK107ABJ475KA-T	4.7	± 10%	29T3547	0.16
0603 CASE SIZE, VOLTAGE: 25 VDC				
TMK107BJ104KA-T	0.1	± 10%	86H5300	0.13
TMK107BJ474KA-T	0.47	± 10%	30K5538	0.16
TMK107BJ105KA-T	1	± 10%	18J2750	0.14
0603 CASE SIZE, VOLTAGE: 35 VDC				
GMK107BJ473KA-T	0.047	± 10%	86H5263	0.20
GMK107BJ105KA-T	1	± 10%	93K5526	0.17
0603 CASE SIZE, VOLTAGE: 50 VDC				
UMK107BJ105KA-T	1	± 10%	84R9158	0.17
0805 CASE SIZE, VOLTAGE: 6.3 VDC				
JMK212BJ105KK-T	1	± 10%	86H5271	0.11
JMK212BJ335KG-T	3.3	± 10%	08P5148	0.13
JMK212BJ475KD-T	4.7	± 10%	86H5273	0.10
JMK212BJ475KG-T	4.7	± 10%	86H5274	0.16
JMK212BJ475MG-T	4.7	± 20%	08P5149	0.13
JMK212BJ106KG-T	10	± 10%	86H5272	0.11
JMK212BJ106KD-T	10	± 10%	18J2700	0.13
JMK212BJ106MG-T	10	± 20%	08P5146	0.12
JMK212BJ226KG-T	22	± 10%	84R9124	0.52
JMK212BJ226MD-T	22	± 20%	08P5147	0.50
JMK212BJ226MG-T	22	± 20%	18J2704	0.26
JMK212BJ476MG-T	47	± 20%	08P5150	0.83
0805 CASE SIZE, VOLTAGE: 10 VDC				
LMK212BJ225KD-T	2.2	± 10%	18J2722	0.17
LMK212BJ475KD-T	4.7	± 10%	18J2726	0.10
LMK212BJ475KG-T	4.7	± 10%	18J2727	0.11
LMK212BJ106KD-T	10	± 10%	08P5168	0.14
LMK212BJ106KG-T	10	± 10%	18J2720	0.11
LMK212 BJ106MG-T	10	± 20%	08P5167	0.13
LMK212BJ226MG-T	22	± 20%	08P5169	0.53
0805 CASE SIZE, VOLTAGE: 16 VDC				
EMK212BJ225KG-T	2.2	± 10%	18J2668	0.12
EMK212BJ475KG-T	4.7	± 10%	18J2674	0.13
EMK212BJ106KG-T	10	± 10%	30K5459	0.21
EMK212BJ106MG-T	10	± 20%	08P5126	0.23
0805 CASE SIZE, VOLTAGE: 25 VDC				
TMK212BJ474KD-T	0.47	± 10%	08P5186	0.15
TMK212BJ105KG-T	1	± 10%	18J2754	0.14
TMK212BJ225KG-T	2.2	± 10%	30K5543	0.12
TMK212BJ225KD-T	2.2	± 10%	84R9144	0.12
TMK212BJ475KG-T	4.7	± 10%	08P5187	0.14
0805 CASE SIZE, VOLTAGE: 35 VDC				
GMK212BJ474KG-T	0.47	± 10%	86H5264	0.15
0805 CASE SIZE, VOLTAGE: 50 VDC				
UMK212BJ105KG-T	1	± 10%	84R9159	0.14
1206 CASE SIZE, VOLTAGE: 4 VDC				
AMK316BJ107ML-T	100	± 20%	93K5519	1.44
1206 CASE SIZE, VOLTAGE: 6.3 VDC				
JMK316BJ106KF-T	10	± 10%	08P5154	0.14
JMK316BJ106KD-T	10	± 10%	86H5275	0.17
JMK316BJ226ML-T	22	± 20%	08P5153	0.93
JMK316BJ226KL-T	22	± 10%	86H5277	0.29
JMK316BJ226MD-T	22	± 20%	84R9128	0.39
JMK316BJ476ML-T	47	± 20%	30K5479	0.68
JMK316BJ476MD-T	47	± 20%	84R9129	1.23
JMK316BJ107ML-T	100	± 20%	08P5155	1.52

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STANDARD SMD MULTILAYER CERAMIC CAPACITORS CLASS 2: HIGH DIELECTRIC CONSTANT — X5R (CONT.)

Mfg. Part No.	Capacitance (µF)	Capacitance Tol.	Tape Cut Stock No.	Price Each 1-9
1206 CASE SIZE, VOLTAGE: 10 VDC				
LMK316BJ475KD-T	4.7	± 10%	08P5174	0.45
LMK316BJ106KD-T	10	± 10%	08P5173	0.18
LMK316BJ106KL-T	10	± 10%	18J2732	0.16
LMK316BJ106ML-T	10	± 20%	48T3329	0.16
LMK316BJ226ML-T	22	± 20%	18J2735	0.37
LMK316BJ476ML-T	47	± 20%	08P5175	0.80
1206 CASE SIZE, VOLTAGE: 16 VDC				
EMK316BJ225KD-T	2.2	± 10%	86H5256	0.12
EMK316BJ475KL-T	4.7	± 10%	86H5258	0.12
EMK316BJ106KL-T	10	± 10%	18J2678	0.18
EMK316BJ106ML-T	10	± 20%	08P5128	0.18
EMK316BJ226ML-T	22	± 20%	93K5523	0.54
1206 CASE SIZE, VOLTAGE: 25 VDC				
TMK316BJ105KD-T	1	± 10%	08P5188	0.35
TMK316BJ475KD-T	4.7	± 10%	83T1720	0.15
TMK316BJ475KL-T	4.7	± 10%	18J2774	0.23
TMK316BJ106KL-T	10	± 10%	18J2766	0.25
TMK316BJ106ML-T	10	± 20%	08P5189	0.25
TMK316ABJ106KD-T	10	± 10%	07W8479	0.23
1206 CASE SIZE, VOLTAGE: 35 VDC				
GMK316BJ106KL-T	10	± 10%	13T1597	0.24
1206 CASE SIZE, VOLTAGE: 50 VDC				
UMK316BJ225KD-T	2.2	± 10%	84R9162	0.11
UMK316BJ475KL-T	4.7	± 10%	84R9163	0.27
1210 CASE SIZE, VOLTAGE: 6.3 VDC				
JMK325BJ106KD-T	10	± 10%	86H5279	0.33
JMK325 BJ226KM-T	22	± 10%	86H5281	0.83
JMK325BJ226MM-T	22	± 20%	08P5159	0.71
JMK325BJ226MY-T	22	± 20%	86H5282	0.50
JMK325BJ476MM-T	47	± 20%	86H5283	1.25
JMK325BJ107MY-T	100	± 20%	08P5158	1.80
JMK325BJ107MM-T	100	± 20%	86H5280	2.38
1210 CASE SIZE, VOLTAGE: 10 VDC				
LMK325BJ475KD-T	4.7	± 10%	08P5181	0.22
LMK325BJ106MD-T	10	± 20%	08P5179	0.29
LMK325BJ106MN-T	10	± 20%	84R9141	0.37
LMK325BJ226MM-T	22	± 20%	86H5297	0.87
LMK325BJ226MY-T	22	± 20%	18J2742	0.62
LMK325BJ476MM-T	47	± 20%	18J2743	1.28
LMK325BJ107MM-T	100	± 20%	08P5180	3.73
1210 CASE SIZE, VOLTAGE: 16 VDC				
EMK325BJ106KD-T	10	± 10%	08P5131	0.33
EMK325BJ106KN-T	10	± 10%	86H5259	0.37
EMK325BJ106MN-T	10	± 20%	08P5132	0.37
EMK325BJ226KM-T	22	± 10%	57J2454	0.75
EMK325BJ226MM-T	22	± 20%	86H5260	0.71
EMK325BJ226MD-T	22	± 20%	48T3322	0.62
EMK325BJ476MM-T	47	± 20%	93K5525	1.33
EMK325ABJ107MM-T	100	± 20%	78T6310	2.58
1210 CASE SIZE, VOLTAGE: 25 VDC				
TMK325BJ106KN-T	10	± 10%	30K5546	0.35
TMK325BJ106KD-T	10	± 10%	84R9736	1.78
TMK325BJ106KM-T	10	± 20%	08P5190	0.60
TMK325BJ106MN-T	10	± 20%	08P5191	0.40
TMK325BJ106MM-T	10	± 20%	86H5305	0.55
TMK325BJ106MY-T	10	± 20%	18J2778	0.52
TMK325BJ106MD-T	10	± 20%	93K5533	0.52
TMK325BJ226MM-T	22	± 20%	84R9148	0.95
1210 CASE SIZE, VOLTAGE: 35 VDC				
GMK325BJ225KN-T	2.2	± 10%	86H5267	0.26
GMK325BJ225MN-T	2.2	± 20%	72J7292	0.26
GMK325BJ475MN-T	4.7	± 20%	08P5138	0.28
GMK325BJ106KN-T	10	± 10%	93K5528	0.50
GMK325BJ106MN-T	10	± 20%	48T3324	0.62
1210 CASE SIZE, VOLTAGE: 50 VDC				
UMK325BJ475MM-T	4.7	± 20%	84R9166	0.65
UMK325BJ106KM-T	10	± 10%	84R9165	0.75
UMK325BJ106MM-T	10	± 20%	08P5202	0.70

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STANDARD SMD MULTILAYER CERAMIC CAPACITORS CLASS 2: HIGH DIELECTRIC CONSTANT — X7R

RoHS Compliant Available

TAIYO YUDEN

SMD

Features
- Nickel electrodes prevents migration and provides high reliability
- Small case sizes with high rated voltage
- Ideal for general telephone exchange, inverters, wireless and telecommunication bases, DC/DC converters

Specifications
- Dielectric characteristic: X7R
- Operating temperature: -55°C to +125°C
- Capacitance tolerance: ±10%, ±20%

0402 CASE SIZE, VOLTAGE: 6.3 VDC

Mfg. Part No.	Capacitance (pF)	Capacitance Tol.	Tape Cut Stock No.	Price Each 1-9
● JMK105B7104KV-F	100000	± 10%	10P9843	0.11
● JMK105B7224KV-F	220000	± 10%	84R9120	0.14
0402 CASE SIZE, VOLTAGE: 10 VDC				
● LMK105B7223KV-F	22000	± 10%	84R9132	0.09
● LMK105B7333KV-F	33000	± 10%	08P5162	0.11
● LMK105B7473KV-F	47000	± 10%	10P9846	0.11
● LMK105B7104KV-F	100000	± 10%	84R9130	0.10
0402 CASE SIZE, VOLTAGE: 16 VDC				
● EMK105B7103KV-F	10000	± 10%	08P5122	0.10
● EMK105B7153KV-F	15000	± 10%	10P9779	0.03
● EMK105B7223KV-F	22000	± 10%	77M8428	0.11
● EMK105B7333KV-F	33000	± 10%	10P9780	0.03
● EMK105B7473KV-F	47000	± 10%	77M8429	0.11
● EMK105B7104KV-F	100000	± 10%	77M8427	0.11
0402 CASE SIZE, VOLTAGE: 25 VDC				
● TMK105B7472KV-F	4700	± 10%	77M8497	0.10
● TMK105B7562KV-F	5600	± 10%	10P9908	0.04
● TMK105B7682KV-F	6800	± 10%	10P9909	0.04
● TMK105B7103KV-F	10000	± 10%	77M8496	0.11
● TMK105B7103MV-F	10000	± 20%	10P9907	0.10
● TMK105B7223KV-F	22000	± 10%	84R9142	0.10
● TMK105B7473KV-F	47000	± 10%	84R9143	0.10
0402 CASE SIZE, VOLTAGE: 50 VDC				
● UMK105B7221KV-F	220	± 10%	77M8510	0.11
● UMK105B7331KV-F	330	± 10%	10P9935	0.04
● UMK105B7471KV-F	470	± 10%	77M8512	0.10
● UMK105B7681KV-F	680	± 10%	10P9937	0.04
● UMK105B7102KV-F	1000	± 10%	77M8509	0.10
● UMK105B7152KV-F	1500	± 10%	10P9934	0.04
● UMK105B7222KV-F	2200	± 10%	77M8511	0.10
● UMK105B7332KV-F	3300	± 10%	10P9936	0.04
● UMK105B7472KV-F	4700	± 10%	84R9152	0.10
● UMK105B7103KV-F	10000	± 10%	84R9151	0.11
0603 CASE SIZE, VOLTAGE: 6.3 VDC				
● JMK107B7105KA-T	1000000	± 10%	08P5144	0.09
0603 CASE SIZE, VOLTAGE: 10 VDC				
● LMK107B7154KA-T	150000	± 10%	10P9847	0.13
● LMK107B7154MA-T	150000	± 20%	10P9848	0.13
● LMK107B7224KA-T	220000	± 10%	08P5165	0.12
● LMK107B7224MA-T	220000	± 20%	10P9849	0.08
● LMK107B7334KA-T	330000	± 10%	77M8467	0.12
● LMK107B7334MA-T	330000	± 20%	10P9850	0.12
● LMK107B7474KA-T	470000	± 10%	77M8468	0.11
● LMK107B7474MA-T	470000	± 20%	10P9851	0.10
● LMK107B7105KA-T	1000000	± 10%	77M8466	0.08
● LMK107B7105MA-T	1000000	± 20%	08P5164	0.08
0603 CASE SIZE, VOLTAGE: 16 VDC				
● EMK107B7333KA-T	33000	± 10%	10P9784	0.08
● EMK107B7333MA-T	33000	± 20%	10P9785	0.08
● EMK107B7473KA-T	47000	± 10%	77M8433	0.12
● EMK107B7473MA-T	47000	± 20%	10P9786	0.08
● EMK107B7683KA-T	68000	± 10%	10P9788	0.08
● EMK107B7683MA-T	68000	± 20%	10P9789	0.08
● EMK107B7104KA-T	100000	± 10%	77M8430	0.11
● EMK107B7104MA-T	100000	± 20%	10P9781	0.05
● EMK107B7224KA-T	220000	± 10%	77M8432	0.10
● EMK107B7224MA-T	220000	± 20%	10P9783	0.09
● EMK107B7474KA-T	470000	± 10%	77M8434	0.11
● EMK107B7474MA-T	470000	± 20%	10P9787	0.10

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STANDARD SMD MULTILAYER CERAMIC CAPACITORS CLASS 2: HIGH DIELECTRIC CONSTANT — X7R (CONT.)

0603 CASE SIZE, VOLTAGE: 16 VDC

Mfg. Part No.	Capacitance (pF)	Capacitance Tol.	Tape Cut Stock No.	Price Each 1-9
● EMK107B7105KA-T	1000000	± 10%	77M8431	0.13
● EMK107B7105MA-T	1000000	± 20%	10P9782	0.12
0603 CASE SIZE, VOLTAGE: 25 VDC				
● TMK107B7223KA-T	22000	± 10%	77M8498	0.11
● TMK107B7223MA-T	22000	± 20%	10P9910	0.07
● TMK107B7224KA-T	220000	± 10%	77M8499	0.12
● TMK107B7474KA-TR	470000	± 10%	24T3655	0.12
0603 CASE SIZE, VOLTAGE: 50 VDC				
● UMK107B7104KA-T	100000	± 10%	77M8513	0.09
● UMK107B7104MA-T	100000	± 20%	10P9938	0.09
0805 CASE SIZE, VOLTAGE: 6.3 VDC				
● JMK212B7106KG-T	10000000	± 10%	84R9126	0.14
● JMK212AB7106KG-T	10000000	± 10%	29T3553	0.14
0805 CASE SIZE, VOLTAGE: 10 VDC				
● LMK212B7684KG-T	680000	± 10%	10P9855	0.18
● LMK212B7684MG-T	680000	± 20%	10P9856	0.18
● LMK212B7105KD-T	1000000	± 10%	77M8469	0.16
● LMK212B7105KG-T	1000000	± 10%	77M8470	0.18
● LMK212B7105MD-T	1000000	± 20%	10P9852	0.16
● LMK212B7105MG-T	1000000	± 20%	08P5170	0.18
● LMK212B7225KG-T	2200000	± 10%	77M8471	0.17
● LMK212B7225MG-T	2200000	± 20%	08P5171	0.17
● LMK212B7335KG-T	3300000	± 10%	10P9853	0.43
● LMK212B7335MG-T	3300000	± 20%	10P9854	0.43
● LMK212B7475KG-T	4700000	± 10%	84R9137	0.12
● LMK212B7106KG-TD	10000000	± 10%	24T3300	0.23
0805 CASE SIZE, VOLTAGE: 16 VDC				
● EMK212B7154KG-T	150000	± 10%	10P9791	0.16
● EMK212B7154MG-T	150000	± 20%	10P9792	0.16
● EMK212B7224KG-T	220000	± 10%	10P9793	0.16
● EMK212B7224MG-T	220000	± 20%	10P9794	0.16
● EMK212B7334KG-T	330000	± 10%	10P9795	0.18
● EMK212B7474KD-T	470000	± 10%	77M8438	0.16
● EMK212B7474KG-T	470000	± 10%	10P9796	0.18
● EMK212B7474MD-T	470000	± 20%	10P9797	0.15
● EMK212B7474MG-T	470000	± 20%	10P9798	0.18
● EMK212B7684KD-T	680000	± 10%	10P9799	0.16
● EMK212B7684KG-T	680000	± 10%	10P9800	0.18
● EMK212B7684MD-T	680000	± 20%	10P9801	0.16
● EMK212B7684MG-T	680000	± 20%	10P9802	0.18
● EMK212B7105KD-T	1000000	± 10%	77M8435	0.17
● EMK212B7105KG-T	1000000	± 10%	77M8436	0.16
● EMK212B7105MD-T	1000000	± 20%	10P9790	0.18
● EMK212B7225KG-T	2200000	± 10%	77M8437	0.13
● EMK212B7225KD-T	2200000	± 10%	84R9111	0.13
● EMK212B7475KG-T	4700000	± 10%	84R9113	0.13
0805 CASE SIZE, VOLTAGE: 25 VDC				
● TMK212B7473KD-T	47000	± 10%	77M8501	0.11
● TMK212B7683KD-T	68000	± 10%	10P9914	0.12
● TMK212B7105KG-T	1000000	± 10%	77M8500	0.16
● TMK212B7105MG-T	1000000	± 20%	10P9912	0.22
0805 CASE SIZE, VOLTAGE: 35 VDC				
● GMK212B7224KG-T	220000	± 10%	10P9815	0.16
● GMK212B7224MG-T	220000	± 20%	10P9816	0.16
● GMK212B7334KG-T	330000	± 10%	10P9817	0.16
● GMK212B7334MG-T	330000	± 20%	10P9818	0.16
● GMK212B7105KG-T	1000000	± 10%	77M8443	0.16
0805 CASE SIZE, VOLTAGE: 50 VDC				
● UMK212B7223KD-T	22000	± 10%	77M8515	0.13
● UMK212B7223MD-T	22000	± 20%	10P9942	0.13
● UMK212B7333KD-T	33000	± 10%	10P9944	0.11
● UMK212B7473KG-T	47000	± 10%	77M8518	0.14
● UMK212B7104KG-T	100000	± 10%	77M8514	0.13
● UMK212B7154KG-T	150000	± 10%	10P9940	0.16
● UMK212B7224KG-T	220000	± 10%	77M8517	0.15
● UMK212B7224MG-T	220000	± 20%	10P9943	0.15
● UMK212B7474KG-T	470000	± 10%	08P5198	0.14
● UMK212B7474MG-T	470000	± 20%	10P9947	0.42
● UMK212B7105KG-T	1000000	± 10%	47T1712	0.18

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STANDARD SMD MULTILAYER CERAMIC CAPACITORS CLASS 2: HIGH DIELECTRIC CONSTANT — X7R (CONT.)

1206 CASE SIZE, VOLTAGE: 6.3 VDC

Mfg. Part No.	Capacitance (pF)	Tol.	Tape Cut Stock No.	Price Each 1-9
JMK316B7106KL-T	10000000	± 10%	77M8464	0.16
JMK316B7106ML-T	10000000	± 20%	08P5156	0.16
JMK316B7226ML-T	22000000	± 20%	77M8465	0.31
1206 CASE SIZE, VOLTAGE: 10 VDC				
LMK316B7225KL-T	2200000	± 10%	10P9858	0.11
LMK316B7335KL-T	3300000	± 10%	10P9859	0.43
LMK316B7335ML-T	3300000	± 20%	10P9860	0.43
LMK316B7475KL-T	4700000	± 10%	77M8473	0.15
LMK316B7475ML-T	4700000	± 20%	08P5176	0.15
LMK316B7106KL-T	10000000	± 10%	77M8472	0.17
LMK316B7106KL-TD	10000000	± 10%	84R9139	0.16
LMK316B7106ML-T	10000000	± 20%	10P9857	0.53
LMK316AB7226ML-TR	22000000	± 20%	29T3557	0.37
1206 CASE SIZE, VOLTAGE: 16 VDC				
EMK316B7684KF-T	680000	± 10%	10P9809	0.36
EMK316B7684MF-T	680000	± 20%	10P9810	0.36
EMK316B7105KF-T	1000000	± 10%	77M8439	0.12
EMK316B7105KL-T	1000000	± 10%	10P9803	0.39
EMK316B7105MF-T	1000000	± 20%	10P9804	0.26
EMK316B7105ML-T	1000000	± 20%	10P9805	0.39
EMK316B7225KL-T	2200000	± 10%	77M8440	0.13
EMK316B7225ML-T	2200000	± 20%	08P5129	0.13
EMK316B7335KL-T	3300000	± 10%	10P9806	0.52
EMK316B7335ML-T	3300000	± 20%	10P9807	0.52
EMK316B7475KL-T	4700000	± 10%	77M8441	0.13
EMK316B7475ML-T	4700000	± 20%	10P9808	0.43
EMK316B7106KL-TD	10000000	± 10%	84R9115	0.24
1206 CASE SIZE, VOLTAGE: 25 VDC				
TMK316B7224MF-T	220000	± 20%	10P9919	0.29
TMK316B7334MF-T	330000	± 20%	10P9922	0.28
TMK316B7684KL-T	680000	± 10%	10P9925	0.46
TMK316B7105KL-T	1000000	± 10%	77M8502	0.13
TMK316B7225KL-T	2200000	± 10%	77M8504	0.12
TMK316B7225ML-T	2200000	± 20%	10P9920	0.42
TMK316AB7475KL-T	2200000	± 10%	79T3106	0.10
TMK316B7106KL-TD	10000000	± 10%	84R9147	0.26
1206 CASE SIZE, VOLTAGE: 35 VDC				
GMK316B7684KL-T	680000	± 10%	10P9820	0.50
GMK316B7684ML-T	680000	± 20%	10P9821	0.50
GMK316B7105KL-T	1000000	± 10%	77M8444	0.14
GMK316B7105ML-T	1000000	± 20%	10P9819	0.42
1206 CASE SIZE, VOLTAGE: 50 VDC				
UMK316B7104KD-T	100000	± 10%	10P9950	0.23
UMK316B7224KL-T	220000	± 10%	77M8519	0.40
UMK316B7224ML-T	220000	± 20%	10P9954	0.40
UMK316B7474ML-T	470000	± 20%	10P9955	0.40
UMK316B7105KL-T	1000000	± 10%	84R9164	0.13
UMK316B7225KL-T	2200000	± 10%	47T1713	0.13
UMK316AB7475KL-T	4700000	± 10%	83T1723	0.14
1210 CASE SIZE, VOLTAGE: 6.3 VDC				
JMK325B7476MM-TR	47000000	± 20%	29T3555	1.27
1210 CASE SIZE, VOLTAGE: 10 VDC				
LMK325B7106KN-T	10000000	± 10%	77M8474	0.37
LMK325B7106MN-T	10000000	± 20%	08P5182	0.37
LMK325B7476MM-TR	47000000	± 20%	29T3559	1.36
1210 CASE SIZE, VOLTAGE: 16 VDC				
EMK325B7475KN-T	4700000	± 10%	77M8442	0.26
EMK325B7475MN-T	4700000	± 20%	08P5133	0.25
EMK325B7106MN-T	10000000	± 20%	84R9116	0.36
EMK325B7226MM-TR	22000000	± 20%	12T3287	0.87
1210 CASE SIZE, VOLTAGE: 25 VDC				
TMK325B7225KH-T	2200000	± 10%	77M8507	0.21
TMK325B7225MH-T	2200000	± 20%	10P9929	0.69
TMK325B7335KN-T	3300000	± 10%	10P9930	0.83
TMK325B7335MN-T	3300000	± 20%	10P9931	0.83
TMK325B7475KN-T	4700000	± 10%	77M8508	0.28
TMK325B7475MN-T	4700000	± 20%	08P5192	0.26
TMK325B7106KN-TR	10000000	± 10%	12T3296	0.39
TMK325B7106KM-TD	10000000	± 10%	84R9149	0.82
TMK325B7106MN-TR	10000000	± 20%	71T6787	1.29

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STANDARD SMD MULTILAYER CERAMIC CAPACITORS CLASS 2: HIGH DIELECTRIC CONSTANT — X7R (CONT.)

1210 CASE SIZE, VOLTAGE: 25 VDC

Mfg. Part No.	Capacitance (pF)	Tol.	Tape Cut Stock No.	Price Each 1-9
TMK325B7106MM-TD	10000000	± 20%	84R9150	0.87
TMK325B7226MM-TR	22000000	± 20%	29T3561	1.04
1210 CASE SIZE, VOLTAGE: 35 VDC				
GMK325B7155MN-T	1500000	± 20%	10P9822	0.79
GMK325AB7106MM-T	10000000	± 20%	29T3549	1.07
1210 CASE SIZE, VOLTAGE: 50 VDC				
UMK325B7105KH-T	1000000	± 10%	77M8521	0.21
UMK325B7475KM-T	4700000	± 10%	24T3665	0.92
UMK325B7475MM-T	4700000	± 20%	29T3563	0.78

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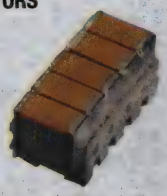
TurboCap™ HIGH-CV SMPS MULTILAYER CERAMIC CAPACITORS

AVX A KYOCERA GROUP COMPANY



Specifications:
- Capacitance Tolerance: ±20%
- Temperature Coefficient: X7R
- Temperature Coefficient: ±15%, -55° to +125°C
- Life Test: 1000 hrs, 200% rated voltage at +125°C

The TurboCap™, MLC capacitors from AVX Corporation are characterized with very high capacitance in a small volume. By vertical stacking of the ceramic elements, the footprint required for mounting the capacitors is greatly reduced. TurboCaps™ are ideally suited as filters in the input and output stages of switch mode power supplies (SMPS). With their ultra-low ESR, these capacitors are designed to handle high ripple current at high frequencies and high power levels.

Mfg. Part No.	Voltage (VDC)	Cap. (µF)	# Leads Per Side	Termination	Stock No.	Price Each 1-9
ST203C686MAJ03	25	68	3	SMD, Leads Formed In	72R7274	17.96
ST125C276MAJ05	50	27	5	SMD, Leads Formed In	72R7267	19.21
ST205C476MAN05	50	47	5	DIP, Straight Lead	10R5816	19.59
ST125C506MAJ10	50	50	10	SMD, Leads Formed In	72R7268	38.58
ST205C107MAN10	50	100	10	DIP, Straight Lead	10R5812	36.54
ST205C107MAL10	50	100	10	SMD, Leads Formed Out	71P5091	36.54
ST121C126MAJ05	100	12	3	SMD, Leads Formed In	72R7265	13.89
ST201C146MAJ03	100	14	3	SMD, Leads Formed In	72R7269	18.68
ST121C226MAJ10	100	22	10	SMD, Leads Formed In	72R7266	16.59
ST201C476MAJ10	100	47	10	SMD, Leads Formed In	72R7271	26.81

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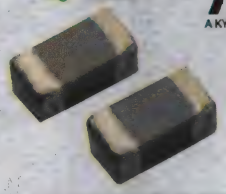
HIGH VOLTAGE MULTILAYER CERAMIC CAPACITORS

RoHS Compliant Available

AVX A KYOCERA GROUP COMPANY

SMD



Features
- Plated Nickel and Tin Termination Barriers
- Operating Temperature: -55°C to 150°C
- Low ESR's at High Frequencies

Applications
- Snubbers in high frequency applications
- High voltage coupling/dc blocking
- Resonators in SMPS

VOLTAGE: 600 / 630 VDC

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Case Size	Tape Cut Stock No.	Price Each 1-9
1206CC103KAT1A	10000	± 10%	1206 [3216]	18M6890	0.95
1812CC333KAT1A	33000	± 10%	1812 [4532]	12P9254	2.30
1812CC473KAT1A	47000	± 10%	1812 [4532]	12P9255	1.58
1808CC683KAT1A	68000	± 10%	1808 [4520 Metric]	52R2426	0.87
1812CC104KAT1A	100000	± 10%	1812 [4532]	18M6906	2.32
1825CC104KAT1A	100000	± 10%	1825 [4564]	96M1576	2.07
2225CC104KAT1A	100000	± 10%	2225 [5664]	10R6110	3.36
2225CC224KAT1A	220000	± 10%	2225 [5664]	12P9265	3.82
1825CC274KAT1A	270000	± 10%	1825 [4564 Metric]	52R2431	2.01
2220CC274KAT1A	270000	± 10%	2220 [5650 Metric]	52R2442	3.68
22252C334KAT1A	330000	± 10%	2225 [5664]	10R6116	3.36
18255C474KAT2A	470000	± 10%	1825 [4564]	96M1578	2.43
3640CC564KATBE	560000	± 10%	3640 [9110]	56J5387	7.62
VOLTAGE: 1000 VDC					
0805AA330KAT1A	33	± 10%	0805 [2012]	18M6885	2.35
1206AA470KAT1A	47	± 10%	1206 [3216]	12P9240	0.79
1206AC101KAT1A	100	± 10%	1206 [3216]	18M6887	0.95
1812AA101JAT1A	100	± 5%	1812 [4532]	10R6056	1.89

CONTINUED

HIGH VOLTAGE MULTILAYER CERAMIC CAPACITORS (CONT.)

VOLTAGE: 1000 VDC

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Case Size	Tape Cut Stock No.	Price Each 1-9
● 1812AA101KAT1A	100	± 10%	1812 [4532]	12P9248	1.58
● 1206AA221JAT1A	220	± 5%	1206 [3216]	12P9239	0.94
● 1812AA221KAT1A	220	± 10%	1812 [4532]	10R6059	1.58
● 1206AA471JAT1A	470	± 5%	1206 [3216]	12P9241	0.94
● 1812AA471JAT1A	470	± 5%	1812 [4532]	10R6060	2.97
● 0805AC102KAT1A	1000	± 10%	0805 [2012]	18M6886	0.81
● 1210AC102KAT1A	1000	± 10%	1210 [3225]	12P9244	1.05
● 1812AA102JAT1A	1000	± 5%	1812 [4532]	10R6057	2.97
● 1812AA102KAT1A	1000	± 10%	1812 [4532]	12P9249	2.47
● 1812AA102MAT1A	1000	± 20%	1812 [4532]	10R6058	1.58
● 1812AC102KAT1A	1000	± 10%	1812 [4532]	12P9251	1.58
● 1206AC222KAT1A	2200	± 10%	1206 [3216]	18M6888	0.95
● 1812AA222JAT1A	2200	± 5%	1812 [4532]	12P9250	1.89
● 2225AA822KAT1A	8200	± 10%	2225 [5664]	12P9264	3.36
● 1825AA332JAT1A	3300	± 5%	1825 [4564]	10R6092	4.13
● 1206AC472KAT1A	4700	± 10%	1206 [3216]	18M6889	0.95
● 1210AC472KAT1A	4700	± 10%	1210 [3225]	18M6895	0.99
● 1812AC472KAT1A	4700	± 10%	1812 [4532]	12P9252	1.58
● 1825AA472JAT1A	4700	± 5%	1825 [4564]	12P9261	3.66
● 1812AC502KAT1A	5000	± 10%	1812 [4532]	12P9253	2.47
● 1210AC103KAT1A	10000	± 10%	1210 [3225]	18M6894	0.99
● 1808AC103KAT1A	10000	± 10%	1808 [4520]	96M1552	1.57
● 2220GC103KAT1A	10000	± 10%	2220 [5650]	96M1579	3.36
● 1812AC223KAT1A	22000	± 10%	1812 [4532]	18M6905	1.48
● 1812AC273KAT1A	27000	± 10%	1812 [4532]	10R6061	2.47
● 1825AC104KAT1A	100000	± 10%	1825 [4564]	18M6910	3.01
● 2220AC104KAT1A	100000	± 10%	2220 [5650 Metric]	52R2438	3.57
● 2225AC104KAT1A	100000	± 10%	2225 [5664]	96M1581	3.36
● 2220AC124KAT1A	120000	± 10%	2220 [5650 Metric]	52R2440	3.67

VOLTAGE: 1500 VDC

● 1812SA561KAT1A	560	± 10%	1812 [4532]	10R6084	2.47
● 1808SC102KAT1A	1000	± 10%	1808 [4520]	12P9246	1.57
● 1812SC562KAT1A	5600	± 10%	1812 [4532]	96M1563	1.58
● 1812SC103KAT1A	10000	± 10%	1812 [4532]	96M1562	1.58
● 2220SC473KAT1A	47000	± 10%	2220 [5650 Metric]	52R2451	3.22
● 2225SC683KAT1A	68000	± 10%	2225 [5664 Metric]	52R2458	2.36

VOLTAGE: 2000 VDC

● 1206GA470KAT1A	47	± 10%	1206 [3216]	96M1424	0.79
● 1206GC101KAT1A	100	± 10%	1206 [3216]	18M6891	0.95
● 1812GA151JAT1A	150	± 5%	1812 [4532]	10R6063	1.89
● 1206GC221KAT1A	220	± 10%	1206 [3216]	12P9243	0.79
● 1808GC471KAT1A	470	± 10%	1808 [4520]	18M6903	1.46
● 1812GA471JAT1A	470	± 5%	1812 [4532]	12P9256	2.97
● 1210GC821KAT1A	820	± 10%	1210 [3225]	10R6022	1.05
● 1206GC102KAT1A	1000	± 10%	1206 [3216]	18M6892	0.12
● 1210GC102KAT1A	1000	± 10%	1210 [3225]	18M6898	0.99
● 1808GC102KAT1A	1000	± 10%	1808 [4520]	18M6901	1.46
● 1808GC102MAT1A	1000	± 20%	1808 [4520]	12P9245	1.57
● 1812GC102KAT1A	1000	± 10%	1812 [4532]	18M6907	1.48
● 1812GC102MAT1A	1000	± 20%	1812 [4532]	12P9257	1.58
● 1210GC332KAT1A	3300	± 10%	1210 [3225 Metric]	52R2425	0.72
● 1812GC472KAT1A	4700	± 10%	1812 [4532]	18M6909	1.48
● 1812GC682KAT1A	6800	± 10%	1812 [4532 Metric]	52R2427	1.13
● 1812GC822KAT1A	8200	± 10%	1812 [4532 Metric]	52R2428	1.82
● 1825GC103KAT1A	10000	± 10%	1825 [4564]	18M6913	3.01
● 2220GC103MAT1A	10000	± 20%	2220 [5650]	10R6104	3.36
● 2225GC103KAT1A	10000	± 10%	2225 [5664]	18M6914	3.19
● 1825GC153KAT1A	15000	± 10%	1825 [4564 Metric]	52R2433	2.35
● 1825GC223KAT1A	22000	± 10%	1825 [4564 Metric]	52R2434	2.72
● 2220GC273KAT1A	27000	± 10%	2220 [5650 Metric]	52R2444	3.34
● 2225GC333KAT1A	33000	± 10%	2225 [5664 Metric]	52R2453	2.48

VOLTAGE: 2500 VDC

● 1825WA102KAT1A	1000	± 10%	1825 [4564]	10R6102	3.06
● 1812WC122MAT1A	1200	± 20%	1812 [4532]	10R6085	1.50
● 1812WC332KAT1A	3300	± 10%	1812 [4532]	10R6086	2.47
● 1825WC562KAT1A	5600	± 10%	1825 [4564]	12P9263	2.07
● 2225WC103KAT1A	10000	± 10%	2225 [5664]	96M1582	2.98
● 1825WC153KAT1A	15000	± 10%	1825 [4564 Metric]	52R2437	1.56
● 2225WC223KAT1A	22000	± 10%	2225 [5664 Metric]	52R2460	2.23

VOLTAGE: 3000 VDC

● 1812HA470JAT1A	47	± 5%	1812 [4532]	12P9258	1.89
● 1812HA101KAT1A	100	± 10%	1812 [4532 Metric]	96M1556	1.58

➤ CONTINUED ➤

HIGH VOLTAGE MULTILAYER CERAMIC CAPACITORS (CONT.)

VOLTAGE: 3000 VDC

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Case Size	Tape Cut Stock No.	Price Each 1-9
● 1812HA221JAT1A	220	± 5%	1812 [4532]	10R6065	1.89
● 1812HA221KAT1A	220	± 10%	1812 [4532]	10R6066	1.89
● 1812HA331KAT1A	330	± 10%	1812 [4532]	10R6067	2.97
● 1812HC471KAT1A	470	± 10%	1812 [4532 Metric]	96M1560	1.58
● 2225HA681KAT1A	680	± 10%	2225 [5664]	12P9266	3.36
● 1808HC102KAT1A	1000	± 10%	1808 [4520]	96M1554	1.57
● 1812HC102KAT1A	1000	± 10%	1812 [4532 Metric]	96M1557	1.58
● 1812HC222KAT1A	2200	± 10%	1812 [4532 Metric]	96M1559	2.47
● 1812HC332KAT1A	3300	± 10%	1812 [4532 Metric]	52R2430	1.36
● 2220HC562KAT1A	5600	± 10%	2220 [5650 Metric]	52R2448	2.97
● 2220HC682KAT1A	6800	± 10%	2220 [5650 Metric]	52R2449	3.15
● 1825HC103KAT1A	10000	± 10%	1825 [4564 Metric]	52R2436	2.52
● 2220HC103KAT1A	10000	± 10%	2220 [5650 Metric]	52R2446	3.09
● 2225HC103KAT1A	10000	± 10%	2225 [5664 Metric]	52R2455	1.89
● 2225HC153KAT1A	15000	± 10%	2225 [5664 Metric]	52R2456	2.48

VOLTAGE: 4000 VDC

● 1812JA270KAT1A	27	± 10%	1812 [4532]	10R6069	1.58
● 1812JA470JAT1A	47	± 5%	1812 [4532]	96M1561	1.89
● 1825JC102KAT1A	1000	± 10%	1825 [4564]	12P9262	2.07

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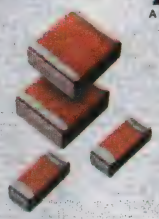
HIGH VOLTAGE MLC CHIPS FLEXITERM® FOR 600V TO 3000V APPLICATION

RoHS Compliant Available

AVX A KYOCERA GROUP COMPANY



Applications:
- Snubbers in high frequency power converters
- Resonators in SMPS
- High voltage coupling/DC blocking

Specifications:
- Tolerance: ±10%
- Operating Temperature Range -55°C to +125°C
- Temperature Characteristic 0 ±30 ppm/°C (0 VDC)

AVX's special high voltage MLC chip capacitors are high value, and low leakage, in a small size for high voltage systems. These high voltage chip designs exhibit low ESRs at high frequencies. The FLEXITERM® layer is designed to enhance the mechanical flexure and temperature cycling performance of a standard ceramic capacitor, giving customers a solution where board flexure or temperature cycle damage are concerns.

630 VDC

Mfg. Part No.	Cap. (uF)	Package	Tape Cut Stock No.	Price Each 1-499
● 1206CC103KAZ1A	0.01	1206 [3216]	54M5355	0.79
● 1812CC104KAZ1A	0.1	1812 [4532]	54M5364	2.47
● 1825CC104KAZ1A	0.1	1825 [4564]	54M5371	2.07
● 2225CC104KAZ1A	0.1	2225 [5664]	54M5375	1.27
● 1825CC274KAZ1A	0.27	1825 [4564 Metric]	52R2432	2.44
● 2220CC274KAZ1A	0.27	2220 [5650 Metric]	52R2443	2.30

1000 VDC

● 1206AC222KAZ1A	0.0022	1206 [3216]	54M5353	0.79
● 1206AC472KAZ1A	0.0047	1206 [3216]	54M5354	0.79
● 1210AC103KAZ1A	0.01	1210 [3225]	54M5358	1.05
● 1812AC103KAZ1A	0.01	1812 [4532]	54M5362	0.46
● 1812AC273KAZ1A	0.027	1812 [4532]	54M5363	2.47
● 1825AC473KAZ1A	0.047	1825 [4564]	54M5370	3.25
● 1825AC104KAZ1A	0.1	1825 [4564]	54M5369	3.25
● 2220AC104KAZ1A	0.1	2220 [5650 Metric]	52R2439	2.34
● 2225AC104KAZ1A	0.1	2225 [5664]	53M5721	3.36
● 2220AC124KAZ1A	0.12	2220 [5650 Metric]	52R2441	2.41

1500 VDC

● 2220SC473KAZ1A	0.047	2220 [5650 Metric]	52R2452	2.18
● 2225SC683KAZ1A	0.068	2225 [5664 Metric]	52R2459	2.13

2000 VDC

● 1206GC471KAZ1A	0.00047	1206 [3216]	54M5357	0.79
● 1206GC102KAZ1A	0.001	1206 [3216]	54M5356	0.79
● 1210GC102KAZ1A	0.001	1210 [3225]	54M5359	1.05
● 1812GC472KAZ1A	0.0047	1812 [4532]	54M5366	2.47
● 1825GC103KAZ1A	0.01	1825 [4564]	54M5372	3.25
● 1825GC223KAZ1A	0.022	1825 [4564 Metric]	52R2435	3.34
● 2220GC273KAZ1A	0.027	2220 [5650 Metric]	52R2445	2.27
● 2225GC333KAZ1A	0.033	2225 [5664 Metric]	52R2454	2.83

2500 VDC

● 2225WC103KAZ1A	0.01	2225 [5664]	12P9267	2.98

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HIGH VOLTAGE MLC CHIPS FLEXITERM® FOR 600V TO 3000V APPLICATION (CONT.)

3000 VDC

Mfg. Part No.	Cap. (uF)	Package	Tape Cut Stock No.	Price Each 1-499
1812HC471KAZ1A	0.0001	1812 [4532]	54M5368	1.58
1808HC102KAZ1A	0.001	1808 [4520]	54M5361	1.57
1812HC102KAZ1A	0.001	1812 [4532]	54M5367	1.58
1812HC272KAZ1A	0.0027	1812 [4532 Metric]	52R2429	1.28
2220HC682KAZ1A	0.0068	2220 [5650 Metric]	52R2450	3.55
2220HC103KAZ1A	0.01	2220 [5650 Metric]	52R2447	2.17
2225HC153KAZ1A	0.015	2225 [5664 Metric]	52R2457	2.69

(100558)

OPEN MODE SURFACE MOUNT MULTILAYER CERAMIC CAPACITORS

SMD — RoHS Compliant Available — The Capacitance Company KEMET CHARGED.

Markets
- Automotive: All applications connected directly to the battery; Conversion to 42V power system
- Power Conversion: Raw power input side filtering

Applications
- Input side filtering (power plane/bus)
- High current applications (battery line)
- Circuits that cannot be fused to open when short circuits occur due to flex cracks

Specifications
- Capacitance Tolerance: ±10%
- Operating Temp. Range: -55°C to +125°C
- X7R Dielectric

KEMET's **Open Mode Ceramic Surface Mount Capacitor** is designed to significantly minimize the probability of a low IR or Short Circuit Condition when forced to failure in a board flex situation. This reduces the potential for causing catastrophic failures.

VOLTAGE: 16 VDC

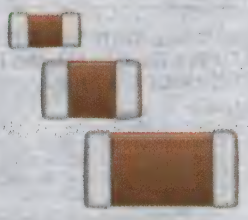
Mfg. Part No.	Cap. (uF)	Case Size	Tape Cut Stock No.	Price Each 1-9	10-49
C0805F684K4RACTU	0.68	0805 [2012]	93K6005	0.37	0.27
VOLTAGE: 25 VDC					
C0805F474K3RACTU	0.47	0805 [2012]	93K6004	0.37	0.26
VOLTAGE: 50 VDC					
C0805F103K5RACTU	0.01	0805 [2012]	70K9148	0.23	0.20
C0805F104K5RACTU	0.1	0805 [2012]	70K9149	0.32	0.23
C0805F224K5RACTU	0.22	0805 [2012]	93K6010	0.37	0.27
C1206F474K5RACTU	0.47	1206 [3216]	93K6012	0.49	0.35
C1206F105K5RACTU	1	1206 [3216]	88K0225	0.60	0.43
C1210F225K5RACTU	2.2	1210 [3225]	88K0232	0.74	0.62
VOLTAGE: 100 VDC					
C1206F104K1RACTU	0.1	1206 [3216]	70K9180	0.41	0.29
C1210F104K1RACTU	0.1	1210 [3225]	93K6007	0.58	0.41
C1210F105K1RACTU	1	1210 [3225]	13M7091	1.11	0.92

(163847)

FLEXIBLE TERMINATION MULTILAYER CERAMIC CAPACITORS (FT-CAP)

SMD — RoHS Compliant Available — The Capacitance Company KEMET CHARGED.

Specifications
- Capacitance Tolerance: ±10%
- Operating Temp. Range: -55°C to +125°C
- X7R Dielectric



The **"Flexible Termination (FT-CAP)"** capacitor is a surface mount multi-layer ceramic capacitor that incorporates a unique, flexible termination system that is integrated with standard termination materials. This technology was developed to address the primary failure mode of MLCC's, flex cracks, which are typically the result of excessive shear stresses produced during board flexure. Flexible termination technology directs board flex stress away from the ceramic body and into the conductive epoxy area, therefore mitigating flex cracks which can result in low-IR or short-circuit failures.

VOLTAGE: 10 VDC

Mfg. Part No.	Cap. (uF)	Case Size	Tape Cut Stock No.	Price Each 1-9	10-49
C0805X225K8RACTU	2.2	0805 [2012]	94M5658	0.67	0.56
VOLTAGE: 16 VDC					
C0805X105K4RACTU	1	0805 [2012]	94M5651	0.29	0.19
C1206X106K4RACTU	10	1206 [3216]	94M5689	1.29	1.06
VOLTAGE: 25 VDC					
C0603X104K3RACTU	0.1	0603 [1608]	94M5630	0.31	0.27
VOLTAGE: 50 VDC					
C0603X102K5RACTU	0.001	0603 [1608]	94M5628	0.27	0.23
C0603X103K5RACTU	0.01	0603 [1608]	94M5629	0.15	0.10
C0603X223K5RACTU	0.022	0603 [1608]	94M5633	0.30	0.26

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FLEXIBLE TERMINATION MULTILAYER CERAMIC CAPACITORS (FT-CAP) (CONT.)

VOLTAGE: 50 VDC

Mfg. Part No.	Cap. (uF)	Case Size	Tape Cut Stock No.	Price Each 1-9	10-49
C0603X473K5RACTU	0.047	0603 [1608]	94M5636	0.28	0.24
C0603X104K5RACTU	0.1	0603 [1608]	94M5632	0.13	0.09
C1206X104K5RACTU	0.1	1206 [3216]	94M5686	0.22	0.19
C0805X474K5RACTU	0.47	0805 [2012]	94M5661	0.62	0.45
C1210X105K5RACTU	1	1210 [3225]	94M5711	0.45	0.32
C1210X225K5RACTU	2.2	1210 [3225]	94M5714	0.57	0.41
C1210X475K5RACTU	4.7	1210 [3225]	94M5716	0.95	0.79
VOLTAGE: 100 VDC					
C1210X104K1RACTU	0.1	1210 [3225]	94M5708	0.38	0.33

(163848)

SWITCH MODE POWER SUPPLY STACKED MLC CAPACITORS

AVX — A KYOCERA GROUP COMPANY

Features:
- Operating Temperature: -55°C to +125°C
- Unencapsulated Ceramic Dielectric

DIP Terminal Type — SMD Terminal Type

The SMPS capacitors are designed for high current, high power and high-temperature applications. These capacitors have very low ESR (Equivalent Series Resistance) and ESL (Equivalent Series Inductance). SMPS Series capacitors offer design and component engineers a proven technology specifically designed for programs requiring high reliability performance in harsh environments.

MIL-PRF-49470 SMPS Series capacitors are primarily used in input/output filters of high-power and high-voltage power supplies as well as in bus filters and DC snubbers for high power inverters and other high-current applications. The MIL-PRF-49470 capacitors are preferred over the DSCC drawing 87106 capacitors. MIL-PRF-49470 specification was created to produce a robust replacement for DSCC 87106.

QUALIFIED TO MIL-PRF-49470/1
VOLTAGE: 50 VDC

Mfg. Part No.	Cap. (µF)	Cap. Tol.	Diel. Char.	# of Pins	Terminal Type	Stock No.	Price Each 1-9
M49470X01105KAN	1	± 10%	X7R	6	DIP	51R0113	21.84
M49470X01125KAN	1.2	± 10%	X7R	6	DIP	51R0121	20.69
M49470X01225KAN	2.2	± 10%	X7R	6	DIP	51R0129	24.25
M49470X01335KAN	3.3	± 10%	X7R	6	DIP	51R0135	27.09
M49470X01335KAJ	3.3	± 10%	X7R	6	Surface Mount	51R0134	27.09
M49470X01475KAN	4.7	± 10%	X7R	6	DIP	51R0140	29.72
M49470X01475KAJ	4.7	± 10%	X7R	6	Surface Mount	51R0139	29.69
M49470X01825KAN	8.2	± 10%	X7R	8	DIP	51R0147	39.82
M49470X01106KAN	10	± 10%	X7R	8	DIP	51R0115	44.72
M49470X01126KAN	12	± 10%	X7R	8	DIP	51R0122	44.72
M49470X01156KAN	15	± 10%	X7R	8	DIP	84M8496	49.85
M49470X01186KAN	18	± 10%	X7R	20	DIP	51R0126	118.11
M49470X01336KAJ	33	± 10%	X7R	20	Surface Mount	51R0137	178.29
M49470X01396KAJ	39	± 10%	X7R	20	Surface Mount	51R0138	209.67
M49470X01476KAJ	47	± 10%	X7R	20	Surface Mount	51R0142	241.24
M49470X01476KAN	47	± 10%	X7R	20	DIP	51R0143	241.56
M49470X01107KAJ	100	± 10%	X7R	30	Surface Mount	51R0117	493.20
M49470X01107KAN	100	± 10%	X7R	30	DIP	51R0118	493.20
M49470X01277KAN	270	± 10%	X7R	40	DIP	51R0133	721.42
VOLTAGE: 100 VDC							
M49470X01105KBN	1	± 10%	X7R	6	DIP	51R0114	23.78
M49470X01125KBN	1.2	± 10%	X7R	6	DIP	74K4568	23.78
M49470X01155KBJ	1.5	± 10%	X7R	6	Surface Mount	51R0124	26.36
M49470X01185KBJ	1.8	± 10%	X7R	6	Surface Mount	51R0125	26.36
M49470X01275KBN	2.7	± 10%	X7R	6	DIP	51R0130	28.88
M49470X01335KBJ	3.3	± 10%	X7R	6	Surface Mount	51R0136	30.86
M49470X01475KBN	4.7	± 10%	X7R	6	DIP	51R0141	38.00
M49470X01685KBJ	6.8	± 10%	X7R	8	Surface Mount	66M8577	42.68
M49470X01825KBJ	8.2	± 10%	X7R	8	Surface Mount	51R0148	47.29
M49470X01825KBN	8.2	± 10%	X7R	8	DIP	51R0149	47.27
M49470X01106KBN	10	± 10%	X7R	8	DIP	51R0116	134.99
M49470X01106KBJ	10	± 10%	X7R	8	Surface Mount	97H3202	134.99
M49470X01276KBJ	27	± 10%	X7R	20	Surface Mount	51R0131	210.96
M49470X01566KBJ	56	± 10%	X7R	40	Surface Mount	51R0145	425.61
M49470X01826KBN	82	± 10%	X7R	30	DIP	51R0151	456.63
M49470X01107KBJ	100	± 10%	X7R	40	Surface Mount	51R0119	434.95
M49470X01107KBN	100	± 10%	X7R	40	DIP	51R0120	539.93
M49470X01187KBJ	180	± 10%	X7R	40	Surface Mount	51R0127	639.95
M49470X01187KBN	180	± 10%	X7R	40	DIP	51R0128	794.42

CONTINUED

SWITCH MODE POWER SUPPLY STACKED MLC CAPACITORS (CONT.)

VOLTAGE: 200 VDC

Mfg. Part No.	Cap. (µF)	Cap. Tol.	Diel. Char.	# of Pins	Terminal Type	Stock No.	Price Each 1-9
M49470R01105KCJ	1	± 10%	X7R	6	Surface Mount	51R0096	28.82
M49470R01105KCN	1	± 10%	X7R	6	DIP	51R0097	28.82
M49470R01225KCN	2.2	± 10%	X7R	8	DIP	51R0105	37.84
M49470R01395KCN	3.9	± 10%	X7R	8	DIP	51R0109	47.15
M49470R01825KCN	8.2	± 10%	X7R	20	DIP	51R0112	161.77
M49470R01106KCN	10	± 10%	X7R	20	DIP	88K2480	185.60
M49470R01106KCJ	10	± 10%	X7R	20	Surface Mount	51R0098	185.60
M49470R01126KCJ	12	± 10%	X7R	20	Surface Mount	51R0101	210.96
M49470R01126KCN	12	± 10%	X7R	20	DIP	04M7484	210.96
M49470R01107KCJ	100	± 10%	X7R	40	Surface Mount	51R0099	794.42
M49470R01107KCN	100	± 10%	X7R	40	DIP	51R0100	794.42
VOLTAGE: 500 VDC							
M49470Q01154KEN	0.15	± 10%	X7R	6	DIP	51R0082	20.69
M49470Q01154KEJ	0.15	± 10%	X7R	6	Surface Mount	51R0081	32.42
M49470Q01474KEJ	0.47	± 10%	X7R	6	Surface Mount	51R0090	26.52
M49470Q01474KEN	0.47	± 10%	X7R	6	DIP	51R0091	26.50
M49470Q01564KEJ	0.56	± 10%	X7R	8	Surface Mount	88H4127	29.02
M49470Q01564KEN	0.56	± 10%	X7R	8	DIP	51R0092	30.61
M49470Q01684KEJ	0.68	± 10%	X7R	6	Surface Mount	51R0094	32.82
M49470Q01684KEN	0.68	± 10%	X7R	6	DIP	51R0095	32.80
M49470Q01105KEN	1	± 10%	X7R	8	DIP	13M4527	37.84
M49470Q01105KEJ	1	± 10%	X7R	8	Surface Mount	51R0079	37.84
M49470Q01125MEN	1.2	± 20%	X7R	8	DIP	51R0080	37.84
M49470Q01155MEJ	1.5	± 20%	X7R	8	Surface Mount	51R0083	42.47
M49470Q01185KEJ	1.8	± 10%	X7R	8	Surface Mount	51R0084	46.97
M49470Q01185KEN	1.8	± 10%	X7R	8	DIP	51R0085	46.97
M49470Q01475KEJ	4.7	± 10%	X7R	20	Surface Mount	16M1985	186.66
M49470Q01475KEN	4.7	± 10%	X7R	20	DIP	27M1651	187.06
M49470Q01565KEJ	5.6	± 10%	X7R	20	Surface Mount	51R0093	212.37
M49470Q01565KEN	5.6	± 10%	X7R	20	DIP	92H7407	212.94
M49470Q01106KEJ	10	± 10%	X7R	40	Surface Mount	16M1988	370.48
M49470Q01106KEN	10	± 10%	X7R	40	DIP	46P3136	370.48
M49470Q01186KEJ	18	± 10%	X7R	30	Surface Mount	51R0086	365.06
M49470Q01186KEN	18	± 10%	X7R	30	DIP	51R0087	453.17
M49470Q01226KEJ	22	± 10%	X7R	40	Surface Mount	51R0088	539.93
M49470Q01396KEJ	39	± 10%	X7R	40	Surface Mount	51R0089	795.93
M49470Q01396KEN	39	± 10%	X7R	40	DIP	10R1068	795.93

DSCC DRAWING 87106 CAPACITORS

VOLTAGE: 50 VDC

Mfg. Part No.	Cap. (µF)	Cap. Tol.	Diel. Char.	# of Pins	Terminal Type	Stock No.	Price Each 1-9
87106-013	3.3	± 10%	X7R	6	DIP	51R0158	26.48
87106-017	4.7	± 10%	X7R	6	DIP	72C7802	28.98
87106-023	10	± 10%	X7R	8	DIP	51R0160	43.83
87106-025	12	± 10%	X7R	8	DIP	51R0161	43.83
VOLTAGE: 100 VDC							
87106-061	1.2	± 10%	X7R	6	DIP	51R0168	23.31
87106-309	1.5	± 10%	X7R	6	Surface Mount	51R0205	25.83
87106-325	6.8	± 10%	X7R	8	Surface Mount	51R0208	41.62
VOLTAGE: 200 VDC							
87106-121	1	± 10%	X7R	6	DIP	51R0176	28.25
87106-145	10	± 10%	X7R	20	DIP	51R0180	176.76
87106-393	10	± 10%	X7R	20	Surface Mount	51R0219	176.76
VOLTAGE: 500 VDC							
87106-173	0.15	± 10%	X7R	6	DIP	51R0186	20.27
87106-421	0.15	± 10%	X7R	6	Surface Mount	51R0225	20.27
87106-446	1.5	± 10%	X7R	8	Surface Mount	51R0230	41.62
87106-207	5.6	± 10%	X7R	20	DIP	51R0194	200.90

(163716)

PCB FABRICATION & ASSEMBLY

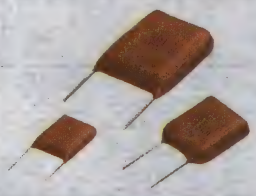
Quality US-based manufacturers—
as fast as 48-hour turnaround!

(197415)

SK/SV SERIES CONFORMALLY LEADED RADIAL MULTILAYER CERAMIC CAPACITORS

RoHS Compliant Available

AVX A KYOCERA GROUP COMPANY



Specifications

- X7R dielectric: -55°C to 125°C
- Z5U dielectric: 10°C to 85°C

SK series capacitors are designed for input or output filtering in switch mode power supplies and are specially processed to handle high currents. The high voltage **SV series** capacitors exhibit low ESR at high frequencies and are ideally suited for applications such as snubbers in high frequency power converters, resonators in SMPS, and high voltage coupling/DC blocking.

SK SERIES

25 VDC

Mfg. Part No.	Voltage (VDC)	Cap. (uF)	Tol. +/- %	Temp. Coeff.	Stock No.	Price Each 1-9
● SK043E106ZAR	25	10	+80%, -20%	Z5U	09R1245	6.11
50 VDC						
● SK055C565KAR	50	5.6	± 10%	X7R	09R1252	6.46
● SK055E106ZAR	50	10	+80%, -20%	Z5U	09R1253	11.07
100 VDC						
● SK041C275KAR	100	2.7	± 10%	X7R	09R1244	10.67
● SK041E475ZAR	100	4.7	+80%, -20%	Z5U	59P2893	6.11
● SK051E685ZAR	100	6.8	+80%, -20%	Z5U	09R1249	16.35
200 VDC						
● SK052C105KAR	200	1	± 10%	X7R	09R1250	14.21
● SK052E475ZAR	200	4.7	+80%, -20%	Z5U	12M5883	16.35
500 VDC						
● SK047A103KAR	500	0.01	± 10%	C0G / NP0	09R1247	15.76
● SK017C103KAR	500	0.01	± 10%	X7R	09R1239	2.66
● SK037C104KAR	500	0.1	± 10%	X7R	09R1242	3.41
● SK037C124KAR	500	0.12	± 10%	X7R	09R1243	3.49
● SK047C274KAR	500	0.27	± 10%	X7R	09R1248	15.76
● SK057C474KAR	500	0.47	± 10%	X7R	09R1254	16.35
SV SERIES						
630 VDC						
● SV13CC473KAR	630	0.047	± 10%	X7R	09R2479	4.75
● SV13CC224KAR	630	0.22	± 10%	X7R	09R2476	8.58
1000 VDC						
● SV02AC472KAR	1000	0.0047	± 10%	X7R	09R2460	3.10
● SV01AC103KAR	1000	0.01	± 10%	X7R	01P2920	2.83
● SV05AC104KAR	1000	0.1	± 10%	X7R	01P1399	3.68
● SV06AC104KAR	1000	0.1	± 10%	X7R	01P2922	4.08
● SV07AC104KAR	1000	0.1	± 10%	X7R	09R2465	6.89
● SV08AC224KAR	1000	0.22	± 10%	X7R	09R2467	10.97
● SV09AC474KAR	1000	0.47	± 10%	X7R	09R2469	12.01
● SV09AC105KAR	1000	1	± 10%	X7R	09R2468	21.21
2000 VDC						
● SV07GC473KAR	2000	0.047	± 10%	X7R	09R2466	6.89
3000 VDC						
● SV03HC102KAR	3000	0.001	± 10%	X7R	09R2462	3.73
● SV03HC472MAR	3000	0.0047	± 20%	X7R	09R2463	3.23

(89607)

SE SERIES SWITCHMODE POWER SUPPLY RADIAL LEAD MULTILAYER CERAMIC CAPACITORS

RoHS Compliant Available

AVX A KYOCERA GROUP COMPANY

Features

- Conformally coated
- Capacitance extension to popular SK ranges
- Compares favorably to high CV ranges offered in much less stable Y5U dielectric
- Designed for input & output filtering applications in switch mode power supplies

Specifications

- Temperature Coefficient : X7R, ±15% over -55°C to +125°C
- Life Test (1000 hrs): 200% rated voltage at +125°C

Mfg. Part No.	Voltage (VDC)	Cap. (µF)	Tol.	Pitch (mm)	Stock No.	Price Each 1-9
● SE033C685KAR	25	6.8	± 10%	5.08	09R9178	8.26
● SE053C186KAR	25	18	± 10%	10.2	09R9184	12.52
● SE015C105KAR	50	1	± 10%	5.08	09R9177	4.45
● SE035C475KAR	50	4.7	± 10%	5.08	09R9179	6.28
● SE045C106KAR	50	10	± 10%	5.08	09R9182	6.30
● SE041C685KAR	100	6.8	± 10%	5.08	09R9180	13.89

(147958)

SR SERIES CONFORMALLY COATED DIPPED RADIAL CAPACITORS - SKYCAP®

RoHS Compliant Available

AVX A KYOCERA GROUP COMPANY

SR "Skycap®" series are conformally coated radial capacitors available in C0G (NP0), X7R and Z5U dielectric characteristics.

SR SERIES PERFORMANCE CHARACTERISTICS

Temp. Coeff.	NP0	X7R	Z5R
TCR	0 ±30ppm/°C for values >20pF 0 +120,-40ppm/°C for values ≤20pF	±15%	+22%, -56%
Insulation Resistance	100,000MΩ	100,000MΩ	10,000MΩ
Operating Temperature	−55°C to +125°C	−55°C to +125°C	+10°C to +85°C

VOLTAGE: 50 VDC, NP0

Mfg. Part No.	Cap. (pF)	Tol.	Stock No.	Price Each 1-9	10-99	100-249
SR305A103JAR	10,000	± 5%	65M4329	1.39	1.10	0.81
VOLTAGE: 50 VDC, X7R						
SR155C103KARTR1	10,000	± 10%	94W2815	0.57	0.37	0.26
SR215C103JAR	10,000	± 5%	56K3755	0.60	0.42	0.29
SR215C103KARTR1	10,000	± 10%	94W2823	0.46	0.30	0.21
SR155C103KAR	10,000	± 10%	36K5964	0.24	0.17	0.11
SR215C103KAR	10,000	± 10%	36K6111	0.19	0.14	0.09
SR155C223KAA	22,000	± 10%	31R8233	0.36	0.26	0.17
SR215C473KAR	47,000	± 10%	36K6154	0.29	0.21	0.14
SR205C104KAATR1	100,000	± 10%	94W2817	0.43	0.38	0.20
SR205C104KAR	100,000	± 10%	55K4482	0.23	0.16	0.11
SR205C104KARTR1	100,000	± 10%	94W2818	0.43	0.38	0.20
SR215C104KAR	100,000	± 10%	36K6116	0.15	0.11	0.08
SR215C224KAR	220,000	± 10%	36K6138	0.42	0.29	0.20
SR305C334KAR	330,000	± 10%	36K6229	0.80	0.63	0.47
SR305C474KAR	470,000	± 10%	56K3827	0.70	0.50	0.34
SR305C105KAATR1	1,000,000	± 10%	26T4182	1.24	1.03	0.74
SR305C105KAR	1,000,000	± 10%	36K6225	0.91	0.71	0.53
VOLTAGE: 50 VDC, Z5U						
SR155E103MAR	10,000	± 20%	70K4799	0.34	0.24	0.16
SR205E104MAR	100,000	± 20%	56K3662	0.17	0.12	0.08
SR205E104MAATR1	100,000	± 20%	94W2819	0.40	0.26	0.18
SR205E104MARTR1	100,000	± 20%	94W2820	0.40	0.26	0.18
SR215E104MARTR1	100,000	± 20%	94W2824	0.40	0.26	0.18
SR215E104MAR	100,000	± 20%	36K6164	0.33	0.23	0.13
SR275E104MAR	100,000	± 20%	56K3801	0.42	0.30	0.20
SR205E224MAR	220,000	± 20%	70K4824	0.42	0.30	0.21
SR215E224MAR	220,000	± 20%	70K4953	0.30	0.21	0.14
SR215E334MAR	330,000	± 20%	70K4955	0.36	0.25	0.18
SR215E474MAR	470,000	± 20%	36K6178	0.58	0.41	0.28
SR215E105MAR	1,000,000	± 20%	36K6169	0.42	0.34	0.25
SR305E105MAR	1,000,000	± 20%	56K3831	0.56	0.44	0.33
SR305E105MARTR1	1,000,000	± 20%	94W2825	0.99	0.94	0.48
VOLTAGE: 100 VDC, NP0						
SR151A100JAR	10	± 5%	36K5897	0.23	0.16	0.11
SR151A150JAR	15	± 5%	36K5905	0.45	0.32	0.21
SR151A180JAR	18	± 5%	36K5909	0.45	0.32	0.21
SR151A220JAR	22	± 5%	36K5911	0.23	0.16	0.11
SR151A270JAR	27	± 5%	56K3578	0.45	0.32	0.21
SR151A330JAR	33	± 5%	56K3580	0.23	0.16	0.11
SR211A330JAR	33	± 5%	36K6024	0.55	0.39	0.27
SR151A470JAR	47	± 5%	70K4749	0.45	0.32	0.21
SR211A560JAR	56	± 5%	70K4868	0.55	0.39	0.27
SR151A101JAR	100	± 5%	36K5899	0.29	0.20	0.14
SR211A101JAR	100	± 5%	70K4830	0.55	0.39	0.27
SR151A101KAR	100	± 10%	56K3574	0.38	0.27	0.18
SR151A121JAR	120	± 5%	36K5904	0.43	0.30	0.21
SR151A221JAR	220	± 5%	36K5916	0.17	0.12	0.08
SR151A221KAR	220	± 10%	70K4739	0.39	0.28	0.18
SR151A271JAR	270	± 5%	70K4741	0.45	0.32	0.22
SR151A331JAR	330	± 5%	36K5919	0.17	0.12	0.08
SR151A471JAR	470	± 5%	36K5923	0.20	0.14	0.10
SR151A471KAR	470	± 10%	70K4752	0.47	0.33	0.22

➤CONTINUED➤

SR SERIES CONFORMALLY COATED DIPPED RADIAL CAPACITORS - SKYCAP® (CONT.)

VOLTAGE: 100 VDC, NP0

Mfg. Part No.	Cap. (pF)	Tol.	Stock No.	Price Each 1-9	10-99	100-249
SR201A102JAR	1000	± 5%	36K5974	0.31	0.22	0.15
SR211A102JAR	1000	± 5%	56K3666	0.28	0.20	0.14
SR211A102JARTR1	1000	± 5%	94W2821	0.53	0.48	0.25
SR301A103JAR	10,000	± 5%	56K3808	1.01	0.80	0.59
VOLTAGE: 100 VDC, X7R						
SR151C102KAR	1000	± 10%	36K5928	0.17	0.12	0.08
SR211C102KAR	1000	± 10%	36K6039	0.39	0.27	0.16
SR151C222KAR	2200	± 10%	36K5934	0.27	0.19	0.13
SR151C472KAR	4700	± 10%	56K3595	0.27	0.19	0.13
SR151C103KAR	10,000	± 10%	36K5932	0.17	0.12	0.08
SR211C103KARTR1	10,000	± 10%	94W2822	0.50	0.32	0.22
SR211C103KAR	10,000	± 10%	36K6043	0.21	0.15	0.10
SR201C223KAR	22,000	± 10%	36K5988	0.43	0.30	0.21
SR211C222KAR	22,000	± 10%	36K6059	0.27	0.19	0.13
SR201C333KAR	33,000	± 10%	56K3641	0.43	0.30	0.21
SR201C473KAR	47,000	± 10%	36K5990	0.46	0.32	0.22
SR211C473KAR	47,000	± 10%	56K3710	0.40	0.28	0.19
SR201C104KAR	100,000	± 10%	56K3637	0.21	0.15	0.10
SR201C104KARTR1	100,000	± 10%	94W2816	0.39	0.35	0.18
SR211C104KAR	100,000	± 10%	36K6052	0.18	0.13	0.09
SR401C105KAR	1,000,000	± 10%	36K6241	2.24	2.02	1.57
VOLTAGE: 100 VDC, Z5U						
SR211E103MAR	10,000	± 20%	70K4907	0.36	0.26	0.17
SR201E104MAR	100,000	± 20%	56K3645	0.47	0.33	0.22
SR211E104MAR	100,000	± 20%	70K4908	0.29	0.21	0.14
SR211E104ZAR	100,000	+80%, -20%	56K3715	0.46	0.33	0.22
SR301E474MAR	470,000	± 20%	56K3818	0.48	0.38	0.28
SR301E105MAR	1,000,000	± 20%	56K3817	0.80	0.63	0.47
VOLTAGE: 200 VDC, NP0						
SR152A470KAR	47	± 10%	70K4773	0.36	0.26	0.17

(50571)

C3XX SERIES CONFORMAL-COATED DIPPED RADIAL CAPACITORS - 100V, 200V, 1000V

RoHS Compliant Available

The Capacitance Company KEMET CHARGED.

C315 SERIES, VOLTAGE: 100 VDC

Mfg. Part No.	Cap. (pF)	Temp. Coeff.	Tol. +/- %	Tape Cut Stock No.	Price Each 1-9	10-49
C315C100J1G5TA	10	C0G / NP0	± 5%	32K5442	0.42	0.29
C315C101J1G5TA	100	C0G / NP0	± 5%	18K5571	0.39	0.28
C315C151J1G5TA	150	C0G / NP0	± 5%	57K7105	0.43	0.30
C315C181J1G5TA	180	C0G / NP0	± 5%	72K6341	0.43	0.30
C315C221J1G5TA	220	C0G / NP0	± 5%	43K3169	0.40	0.28
C315C271F1G5TA	270	C0G / NP0	± 1%	72K6344	1.12	0.89
C315C331J1G5TA	330	C0G / NP0	± 5%	43K3175	0.43	0.30
C315C471J1G5TA	470	C0G / NP0	± 5%	57K8709	0.43	0.30
C315C471K1G5TA	470	C0G / NP0	± 10%	13K6184	0.44	0.31
C315C681J1G5TA	680	C0G / NP0	± 5%	72K6359	0.61	0.43
C315C102J1G5TA	1000	C0G / NP0	± 5%	13K6147	0.49	0.34
C315C102K1R5TA	1000	X7R	± 10%	18K5574	0.33	0.23
C315C102M1U5TA	1000	Z5U	± 20%	72K6331	0.31	0.22
C315C222K1R5TA	2200	X7R	± 10%	43K3171	0.37	0.25
C315C272K1R5TA	2700	X7R	± 10%	86K1012	0.35	0.24
C315C332K1R5TA	3300	X7R	± 10%	13K6177	0.37	0.25
C315C472K1R5TA	4700	X7R	± 10%	57K8710	0.41	0.28
C315C682K1R5TA	6800	X7R	± 10%	18K5618	0.41	0.28
C315C103K1R5TA	10000	X7R	± 10%	97H5336	0.28	0.20
C315C103M1U5TA	10000	Z5U	± 20%	72K6333	0.31	0.22
C315 SERIES, VOLTAGE: 200 VDC						
C315C479D2G5TA	4.7	C0G / NP0	± 0.5pF	32K5446	0.67	0.64
C315C569D2G5TA	5.9	C0G / NP0	± 0.5pF	57K7118	0.67	0.64
C315C689D2G5TA	6.8	C0G / NP0	± 0.5pF	68K2868	0.65	0.46
C315C100J2G5TA	10	C0G / NP0	± 5%	18K5570	0.42	0.29
C315C150J2G5TA	15	C0G / NP0	± 5%	13K6163	0.45	0.31
C315C150K2G5TA	15	C0G / NP0	± 10%	72K6334	0.39	0.28
C315C180J2G5TA	18	C0G / NP0	± 5%	57K8706	0.45	0.32
C315C220J2G5TA	22	C0G / NP0	± 5%	13K6167	0.45	0.31
C315C270J2G5TA	27	C0G / NP0	± 5%	18K5596	0.45	0.32
C315C330J2G5TA	33	C0G / NP0	± 5%	13K6175	0.45	0.32
C315C330K2G5TA	33	C0G / NP0	± 10%	18K5601	0.39	0.28

➤CONTINUED➤

C3XX SERIES CONFORMAL-COATED DIPPED RADIAL CAPACITORS - 100V, 200V, 1000V (CONT.)

C315 SERIES, VOLTAGE: 200 VDC

Mfg. Part No.	Cap. (pF)	Temp. Coeff.	Tol. +/- %	Tape Cut Stock No.	Price Each 1-9	Price Each 10-49
● C315C680K2G5TA	68	C0G / NP0	± 10%	72K6358	0.41	0.29
● C315C101J2G5TA	100	C0G / NP0	± 5%	39K6423	0.38	0.27
● C315C101K2R5TA	100	X7R	± 10%	18K5572	0.43	0.30
● C315C221J2G5TA	220	C0G / NP0	± 5%	57K8707	0.51	0.36
● C315C331J2G5TA	330	C0G / NP0	± 5%	57K7114	0.60	0.42
● C315C471K2R5TA	470	X7R	± 10%	72K6355	0.39	0.28
● C315C102K2R5TA	1000	X7R	± 10%	94H9287	0.43	0.30
● C315C152K2R5TA	1500	X7R	± 10%	72K6336	0.37	0.26
● C315C222K2R5TA	2200	X7R	± 10%	72K6343	0.39	0.28
C317 SERIES, VOLTAGE: 100 VDC						
● C317C151J1G5TA	150	C0G / NP0	± 5%	13K6242	0.40	0.28
● C317C391K1G5TA	390	C0G / NP0	± 10%	72K6384	0.45	0.31
● C317C471F1G5TA	470	C0G / NP0	± 1%	81K1705	1.12	0.89
● C317C102J1G5TA	1000	C0G / NP0	± 5%	18K5640	0.49	0.35
● C317C102K1R5TA	1000	X7R	± 10%	13K6223	0.34	0.23
● C317C332K1R5TA	3300	X7R	± 10%	72K6380	0.29	0.12
● C317C472K1R5TA	4700	X7R	± 10%	39K6827	0.41	0.28
● C317C682K1R5TA	6800	X7R	± 10%	72K6389	0.41	0.28
● DEL-C317C103M1U5TA	10000	Z5U	± 20%	57K7123	0.29	0.20
C317 SERIES, VOLTAGE: 200 VDC						
● C317C100J2G5TA	10	C0G / NP0	± 5%	57K8711	0.42	0.29
● C317C220J2G5TA	22	C0G / NP0	± 5%	39K6742	0.45	0.31
● C317C330J2G5TA	33	C0G / NP0	± 5%	13K6258	0.43	0.30
● C317C470J2G5TA	47	C0G / NP0	± 5%	39K6816	0.45	0.32
● C317C680J2G5TA	68	C0G / NP0	± 5%	72K6388	0.48	0.34
● C317C101J2G5TA	100	C0G / NP0	± 5%	18K5637	0.45	0.32
● C317C221J2G5TA	220	C0G / NP0	± 5%	72K6373	0.51	0.36
● C317C331J2G5TA	330	C0G / NP0	± 5%	13K6260	0.61	0.43
C320 SERIES, VOLTAGE: 100 VDC						
● C320C102G1G5TA	1000	C0G / NP0	± 2%	72K6392	0.88	0.67
● C320C102J1G5TA	1000	C0G / NP0	± 5%	39K6904	0.49	0.35
● C320C152J1G5TA	1500	C0G / NP0	± 5%	72K6396	0.63	0.44
● C320C472J1G5TA	4700	C0G / NP0	± 5%	57K8726	0.46	0.35
● C320C562K1G5TA	5600	C0G / NP0	± 10%	72K6417	0.44	0.33
● C320C103M1U5TA	10000	Z5U	± 20%	72K6394	0.33	0.23
● C320C153K1R5TA	15000	X7R	± 10%	72K6398	0.46	0.32
● C320C223K1R5TA	22000	X7R	± 10%	18K5710	0.44	0.31
● C320C473M1U5TA	47000	Z5U	± 20%	72K6415	0.43	0.30
● C320C683K1R5TA	68000	X7R	± 10%	13K6306	0.54	0.38
● C320C104K1R5TA	100000	X7R	± 10%	18K5695	0.42	0.29
● C320C154M1U5TA	150000	Z5U	± 20%	72K6402	0.60	0.42
C320 SERIES, VOLTAGE: 200 VDC						
● C320C470J2G5TA	47	C0G / NP0	± 5%	72K6411	0.46	0.32
● C320C510J2G5TA	51	C0G / NP0	± 5%	14N6664	0.53	0.40
● C320C102J2G5TA	1000	C0G / NP0	± 5%	72K6393	0.63	0.45
● C320C152K2R5TA	1500	X7R	± 10%	72K6397	0.38	0.27
● C320C472K2R5TA	4700	X7R	± 10%	72K6414	0.44	0.31
● C320C103K2R5TA	10000	X7R	± 10%	43K3192	0.40	0.28
● C320C223K2R5TA	22000	X7R	± 10%	72K6406	0.47	0.33
C322 SERIES, VOLTAGE: 100 VDC						
● C322C103J1R5TA	0.01	X7R	± 5%	72K8294	0.46	0.44
● C322C471J1G5TA	470	C0G / NP0	± 5%	72K6442	0.43	0.30
● C322C681J1G5TA	680	C0G / NP0	± 5%	72K6446	0.59	0.41
● C322C102J1G5TA	1000	C0G / NP0	± 5%	39K7314	0.47	0.33
● C322C222J1G5TA	2200	C0G / NP0	± 5%	18K5766	0.63	0.44
● C322C472F1G5TA	4700	C0G / NP0	± 1%	13M9068	1.72	1.40
● C322C472J1G5TA	4700	C0G / NP0	± 5%	33K2744	0.44	0.33
● C322C472K1R5TA	4700	X7R	± 10%	72K6443	0.42	0.29
● C322C562J1G5TA	5600	C0G / NP0	± 5%	72K6444	0.50	0.38
● C322C103K1R5TA	10000	X7R	± 10%	13K6327	0.36	0.25
● C322C473K1R5TA	47000	X7R	± 10%	18K5791	0.54	0.38
● C322C104M1R5TA	100000	X7R	± 20%	13K6334	0.46	0.33
● C322C104M1U5TA	100000	Z5U	± 20%	13K6336	0.40	0.28
C322 SERIES, VOLTAGE: 200 VDC						
● C322C220J2G5TA	22	C0G / NP0	± 5%	39K7473	0.46	0.32
● C322C470J2G5TA	47	C0G / NP0	± 5%	72K6441	0.46	0.32
● C322C102J2G5TA	1000	C0G / NP0	± 5%	43K3201	0.64	0.45
● C322C152J2G5TA	1500	C0G / NP0	± 5%	72K6431	0.71	0.50
● C322C103K2R5TA	10000	X7R	± 10%	39K7327	0.38	0.27
● C322C153K2R5TA	15000	X7R	± 10%	72K6434	0.47	0.33
● C322C223K2R5TA	22000	X7R	± 10%	39K7495	0.46	0.33

➤ CONTINUED ➤

C3XX SERIES CONFORMAL-COATED DIPPED RADIAL CAPACITORS - 100V, 200V, 1000V (CONT.)

C322 SERIES, VOLTAGE: 1000 VDC

Mfg. Part No.	Cap. (pF)	Temp. Coeff.	Tol. +/- %	Tape Cut Stock No.	Price Each 1-9	Price Each 10-49
● C322C102KDG5TA	1000	C0G / NP0	± 10%	72K8291	1.49	1.18
● C322C103KDR5TA	10000	X7R	± 10%	72K8295	1.62	1.38
C330 SERIES, VOLTAGE: 100 VDC						
● C330C682J1G5TA	6800	C0G / NP0	± 5%	72K6465	0.87	0.66
● C330C103J1G5TA	10000	C0G / NP0	± 5%	18K5866	1.05	0.80
● C330C223J1G5TA	22000	C0G / NP0	± 5%	33K2752	1.75	1.38
● C330C154K1R5TA	150000	X7R	± 10%	72K6454	0.57	0.43
● C330C224K1R5TA	220000	X7R	± 10%	13K6479	0.86	0.65
● C330C224M1U5TA	220000	Z5U	± 20%	72K6458	0.53	0.40
● C330C334K1R5TA	330000	X7R	± 10%	18K5887	1.09	0.82
● C330C334M1U5TA	330000	Z5U	± 20%	39K8431	0.53	0.40
C330 SERIES, VOLTAGE: 200 VDC						
● C330C473K2R5TA	47000	X7R	± 10%	72K6462	0.70	0.49
● C330C563K2R5TA	56000	X7R	± 10%	72K6464	0.74	0.52
● C330C104K2R5TA	100000	X7R	± 10%	91H4548	0.92	0.70
C333 SERIES, VOLTAGE: 100 VDC						
● C333C224K1R5TA	220000	X7R	± 10%	91H4558	0.83	0.63
C333 SERIES, VOLTAGE: 200 VDC						
C333C103K2G5TA	10000	C0G / NP0	± 10%	72K6471	1.00	0.76
C340 SERIES, VOLTAGE: 100 VDC						
● C340C473J1G5TA	47000	C0G / NP0	± 5%	18K5940	3.48	2.81
● C340C683J1G5TA	68000	C0G / NP0	± 5%	72K6485	3.75	3.52
● C340C474K1R5TA	470000	X7R	± 10%	72K6482	1.56	1.24
● C340C155M1U5TA	1500000	Z5U	± 20%	72K6476	2.89	2.34
C340 SERIES, VOLTAGE: 200 VDC						
● C340C104K2R5TA	100000	X7R	± 10%	72K6472	0.94	0.72
● C340C224K2R5TA	220000	X7R	± 10%	72K6479	4.06	3.35
C350 SERIES, VOLTAGE: 100 VDC						
● C350C104J1G5TA	100000	C0G / NP0	± 5%	70K9967	6.02	4.86

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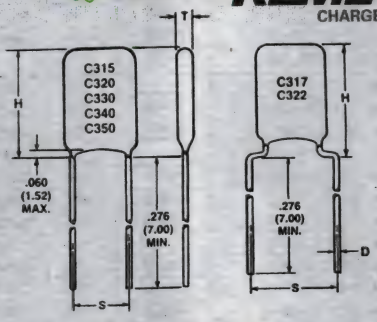
C3XX SERIES CONFORMAL-COATED DIPPED RADIAL CAPACITORS - 50V

RoHS Compliant Available

The Capacitance Company KEMET CHARGED.

- Conformal-Coated Capacitors
- Meets Flame Requirements UL94V-0
- Operating Temperature: -55°C to +85°C



DIMENSIONS

Case Size	L Max.	H Max.	T Max.	S* ±0.030	D +0.004-0.001
C315	0.150″	0.210″	0.100″	0.100″	0.020″
C316	0.150″	0.230″	0.100″	0.100″	...
C317	0.150″	0.230″	0.100″	0.200″	0.020″
C320	0.200″	0.260″	0.125″	0.100″	0.020″
C322	0.200″	0.260″	0.125″	0.200″	0.020″
C324	0.200″	0.260″	0.125″	0.100″	0.020″
C330	0.300″	0.360″	0.150″	0.200″	0.020″
C340	0.400″	0.460″	0.150″	0.200″	0.020″
C350	0.500″	0.560″	0.200″	0.400″	0.025″

* Measured at seating plane

C315 SERIES, VOLTAGE: 50 VDC

Mfg. Part No.	Cap. (pF)	Temp. Coeff.	Tol. +/- %	Tape Cut Stock No.	Price Each 1-9	Price Each 10-49
● C315C332K5R5TA	3300	X7R	± 10%	72K6349	0.37	0.25
● C315C472M5U5TA	4700	Z5U	± 20%	72K6357	0.34	0.24
● C315C103J5R5TA	10000	X7R	± 5%	72K6332	0.45	0.31
● C315C103K5R5TA	10000	X7R	± 10%	97H5337	0.28	0.20
● C315C103M5U5TA	10000	Z5U	± 20%	39K6431	0.32	0.22
● C315C333K5R5TA	33000	X7R	± 10%	97H5345	0.42	0.29
● C315C473M5U5TA	47000	Z5U	± 20%	39K6590	0.35	0.24

➤ CONTINUED ➤

C3XX SERIES CONFORMAL-COATED DIPPED RADIAL CAPACITORS - 50V (CONT.)

Mfg. Part No.	Cap. (pF)	Temp. Coeff.	Tol. +/- %	Tape Cut Stock No.	Price Each 1-9	Price Each 10-49
C315C104M5U5TA	100000	Z5U	± 20%	39K6432	0.25	0.17
C315C474K5R5TA	470000	X7R	± 10%	74M0392	0.72	0.68
C316 SERIES, VOLTAGE: 50 VDC						
C316C473M5U5TA	47000	Z5U	± 20%	13M7822	0.33	0.23
C317 SERIES, VOLTAGE: 50 VDC						
C317C829D5G5TA	8.2	C0G / NP0	± 0.05pF	44P2628	0.63	0.60
C317C221J5G5TA	220	C0G / NP0	± 5%	91H4497	0.39	0.27
C317C103K5R5TA	10000	X7R	± 10%	91H4494	0.40	0.28
C317C103M5U5TA	10000	Z5U	± 20%	39K6665	0.32	0.22
C317C273K5R5TA	27000	X7R	± 10%	72K6378	0.44	0.30
C317C473M5U5TA	47000	Z5U	± 20%	39K6828	0.35	0.24
C317C104M5U5TA	100000	Z5U	± 20%	94H9294	0.26	0.18
C320 SERIES, VOLTAGE: 50 VDC						
C320C102K5R5TA	1000	X7R	± 10%	43K3190	0.34	0.24
C320C103K5R5TA	10000	X7R	± 10%	39K6913	0.34	0.24
C320C103M5U5TA	10000	Z5U	± 20%	72K8259	0.30	0.21
C320C223K5R5TA	22000	X7R	± 10%	72K6407	0.42	0.29
C320C273K5R5TA	27000	X7R	± 10%	72K8274	0.42	0.29
C320C473M5U5TA	47000	Z5U	± 20%	72K6416	0.35	0.24
C320C104J5R5TA	100000	X7R	± 5%	68K2928	0.50	0.35
C320C104K5R5TA	100000	X7R	± 10%	13K6284	0.28	0.20
C320C104M5R5TA	100000	X7R	± 20%	39K6919	0.38	0.26
C320C104M5U5TA	100000	Z5U	± 20%	32K5474	0.32	0.22
C320C154K5R5TA	150000	X7R	± 10%	72K8267	0.58	0.41
C320C154M5U5TA	150000	Z5U	± 20%	72K6403	0.46	0.32
C320C224K5R5TA	220000	X7R	± 10%	97H5348	0.60	0.42
C320C224M5U5TA	220000	Z5U	± 20%	13K6294	0.50	0.35
C320C474M5U5TA	470000	Z5U	± 20%	39K7199	0.63	0.44
C322 SERIES, VOLTAGE: 50 VDC						
C322C222K5R5TA	2200	X7R	± 10%	57K7181	0.35	0.25
C322C223K5R5TA	22000	X7R	± 10%	18K5770	0.45	0.31
C322C104K5R5TA	100000	X7R	± 10%	18K5744	0.29	0.20
C322C104M5R5TA	100000	X7R	± 20%	13K6338	0.35	0.25
C322C104M5U5TA	100000	Z5U	± 20%	33K2740	0.32	0.22
C322C224J5R5TA	220000	X7R	± 5%	57K8729	0.73	0.55
C322C274K5R5TA	270000	X7R	± 10%	72K8318	0.52	0.39
C322C334M5U5TA	330000	Z5U	± 20%	39K7567	0.48	0.34
C322C474M5U5TA	470000	Z5U	± 20%	13K6379	0.63	0.44
C323 SERIES, VOLTAGE: 50 VDC						
DEL-C323C104K5R5TA	100000	X7R	± 10%	91H4519	0.39	0.21
C323C104M5R5TA	100000	X7R	± 20%	97H5349	0.37	0.26
C324 SERIES, VOLTAGE: 50 VDC						
C324C103K5R5TA	10000	X7R	± 10%	13M9700	0.33	0.23
C324C104J5R5TA	100000	X7R	± 5%	13M9708	0.48	0.34
C324C104M5U5TA	100000	Z5U	± 20%	39K8130	0.32	0.22
C326 SERIES, VOLTAGE: 50 VDC						
C326C104K5R5TA	100000	X7R	± 10%	39K8137	0.39	0.27
C330 SERIES, VOLTAGE: 50 VDC						
C330C103K5R5TA	10000	X7R	± 10%	70K8756	0.62	0.44
C330C223J5G5TA	22000	C0G / NP0	± 5%	72K6457	1.72	1.36
C330C104M5U5TA	100000	Z5U	± 20%	72K6452	0.62	0.44
C330C334M5U5TA	330000	Z5U	± 20%	72K6460	0.47	0.36
C330C474K5R5TA	470000	X7R	± 10%	32K5504	0.79	0.60
C330C684K5R5TA	680000	X7R	± 10%	72K6469	1.46	1.16
C330C105M5R5TA	1000000	X7R	± 20%	91H4550	1.07	0.85
C330C684M5U5TA	680000	Z5U	± 20%	72K6470	0.69	0.52
C330C105J5R5TA	1000000	X7R	± 5%	72K6453	1.75	1.38
C330C105K5R5TA	1000000	X7R	± 10%	13K6469	1.07	0.81
C330C105M5U5TA	1000000	Z5U	± 20%	18K5869	0.62	0.47
C330C225M5U5TATR	2200000	Z5U	± 20%	19P1600	1.53	1.30
C333 SERIES, VOLTAGE: 50 VDC						
C333C105K5R5TA	1000000	X7R	± 10%	91H4556	1.18	0.94
C333C105M5U5TA	1000000	Z5U	± 20%	91H4557	0.62	0.47
C340 SERIES, VOLTAGE: 50 VDC						
C340C105K5R5TA	1000000	X7R	± 10%	57K7224	2.33	0.97
C340C105M5U5TA	1000000	Z5U	± 20%	72K6473	0.63	0.47
C340C155K5R5TA	1500000	X7R	± 10%	72K6475	2.65	2.14
C340C225K5R5TA	2200000	X7R	± 10%	33K2754	2.53	2.05
C340C225M5U5TA	2200000	Z5U	± 20%	39K9299	2.40	1.94
C340C335M5U5TA	3300000	Z5U	± 20%	72K6481	2.99	2.42
C340C475M5U5TA	4700000	Z5U	± 20%	43K3241	2.93	2.37

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C3XX SERIES CONFORMAL-COATED DIPPED RADIAL CAPACITORS - 50V (CONT.)

C350 SERIES, VOLTAGE: 50 VDC

Mfg. Part No.	Cap. (pF)	Temp. Coeff.	Tol. +/- %	Tape Cut Stock No.	Price Each 1-9	Price Each 10-49
C350C335K5R5TA	3300000	X7R	± 10%	72K6493	7.18	5.79
C350C685M5U5TA	6800000	Z5U	± 20%	72K6495	7.19	5.80

(168144)

RADIAL LEAD MULTILAYER CERAMIC CAPACITORS - 50V

RoHS Compliant Available

multicomp

These Mono-Cap capacitors have small dimensions, large capacitance, and have excellent frequency characteristics, and due to their small internal inductance are suitable for high frequencies. Widely used in commercial and industrial applications such as ADSL equipment, fax machines, printing machines, mobile phones, wireless telephones, notebook computers, POS, PDA, television, and LCD TVI, etc.

LEAD PITCH: 2.54 mm — LEAD PITCH: 5.08 mm

VOLTAGE: 50 VDC, LEAD PITCH: 2.54 mm

Mfg. Part No.	Cap. (pF)	Cap. Tol.	Temp. Coeff.	Tape Cut Stock No.	Price Each 1-9
MC0805N1R0C500A2.54MM	1	± 0.25pF	C0G / NP0	46P6358	0.07
MC0805N1R2C500A2.54MM	1.2	± 0.25pF	C0G / NP0	46P6364	0.08
MC0805N1R5C500A2.54MM	1.5	± 0.25pF	C0G / NP0	46P6368	0.07
MC0805N2R0C500A2.54MM	2	± 0.25pF	C0G / NP0	46P6450	0.07
MC0805N2R2C500A2.54MM	2.2	± 0.25pF	C0G / NP0	46P6456	0.07
MC0805N2R7C500A2.54MM	2.7	± 0.25pF	C0G / NP0	46P6460	0.07
MC0805N3R0C500A2.54MM	3	± 0.25pF	C0G / NP0	46P6504	0.07
MC0805N3R3C500A2.54MM	3.3	± 0.25pF	C0G / NP0	46P6510	0.07
MC0805N3R9C500A2.54MM	3.9	± 0.25pF	C0G / NP0	46P6516	0.07
MC0805N4R7C500A2.54MM	4.7	± 0.25pF	C0G / NP0	46P6561	0.07
MC0805N5R1C500A2.54MM	5.1	± 0.25pF	C0G / NP0	46P6585	0.07
MC0805N5R6C500A2.54MM	5.6	± 0.25pF	C0G / NP0	46P6589	0.07
MC0805N6R0D500A2.54MM	6	± 0.5pF	C0G / NP0	46P6607	0.07
MC0805N6R8C500A2.54MM	6.8	± 0.25pF	C0G / NP0	46P6615	0.07
MC0805N7R0D500A2.54MM	7	± 0.5pF	C0G / NP0	46P6627	0.07
MC0805N8R0D500A2.54MM	8	± 0.5pF	C0G / NP0	46P6635	0.07
MC0805N8R2C500A2.54MM	8.2	± 0.25pF	C0G / NP0	46P6639	0.07
MC0805N9R0D500A2.54MM	9	± 0.5pF	C0G / NP0	46P6653	0.07
MC0805N9R1C500A2.54MM	9.1	± 0.25pF	C0G / NP0	46P6655	0.07
MC0805N100J500A2.54MM	10	± 5%	C0G / NP0	46P6374	0.07
MC0805N120J500A2.54MM	12	± 5%	C0G / NP0	46P6396	0.07
MC0805N150J500A2.54MM	15	± 5%	C0G / NP0	46P6416	0.07
MC0805N180J500A2.54MM	18	± 5%	C0G / NP0	46P6434	0.07
MC0805N200J500A2.54MM	20	± 5%	C0G / NP0	46P6464	0.07
MC0805N220J500A2.54MM	22	± 5%	C0G / NP0	46P6470	0.08
MC0805N240J500A2.54MM	24	± 5%	C0G / NP0	46P6486	0.07
MC0805N270J500A2.54MM	27	± 5%	C0G / NP0	46P6490	0.07
MC0805N300J500A2.54MM	30	± 5%	C0G / NP0	46P6520	0.07
MC0805N330J500A2.54MM	33	± 5%	C0G / NP0	46P6529	0.07
MC0805N390J500A2.54MM	39	± 5%	C0G / NP0	46P6545	0.07
MC0805N430J500A2.54MM	43	± 5%	C0G / NP0	46P6565	0.07
MC0805N470J500A2.54MM	47	± 5%	C0G / NP0	46P6571	0.07
MC0805N510J500A2.54MM	51	± 5%	C0G / NP0	46P6591	0.07
MC0805N560J500A2.54MM	56	± 5%	C0G / NP0	46P6595	0.07
MC0805N680J500A2.54MM	68	± 5%	C0G / NP0	46P6617	0.07
MC0805N750J500A2.54MM	75	± 5%	C0G / NP0	46P6633	0.07
MC0805N820J500A2.54MM	82	± 5%	C0G / NP0	46P6643	0.07
MC0805N910J500A2.54MM	91	± 5%	C0G / NP0	46P6659	0.08
MC0805N101J500A2.54MM	100	± 5%	C0G / NP0	46P6380	0.07
MC0805N121J500A2.54MM	120	± 5%	C0G / NP0	46P6402	0.08
MC0805N151J500A2.54MM	150	± 5%	C0G / NP0	46P6422	0.08
MC0805N181J500A2.54MM	180	± 5%	C0G / NP0	46P6440	0.08
MC0805B221K500A2.54MM	220	± 10%	X7R	46P6266	0.07
MC0805N221J500A2.54MM	220	± 5%	C0G / NP0	46P6476	0.08
MC0805N271J500A2.54MM	270	± 5%	C0G / NP0	46P6496	0.08
MC0805N301J500A2.54MM	300	± 5%	C0G / NP0	46P6524	0.08
MC0805B331K500A2.54MM	330	± 10%	X7R	46P6290	0.07
MC0805N331J500A2.54MM	330	± 5%	C0G / NP0	46P6535	0.08
MC0805N361J500A2.54MM	360	± 5%	C0G / NP0	46P6541	0.08
MC0805B391K500A2.54MM	390	± 10%	X7R	46P6306	0:07
MC0805N391J500A2.54MM	390	± 5%	C0G / NP0	46P6551	0.08

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RADIAL LEAD MULTILAYER CERAMIC CAPACITORS - 50V (CONT.)

Mfg. Part No.	Cap. (pF)	Cap. Tol.	Temp. Coeff.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● MC0805B471K500A2.54MM	470	± 10%	X7R	46P6312	0.07
● MC0805N471J500A2.54MM	470	± 5%	C0G / NP0	46P6577	0.08
● MC0805B561K500A2.54MM	560	± 10%	X7R	46P6328	0.07
● MC0805N561J500A2.54MM	560	± 5%	C0G / NP0	46P6601	0.08
● MC0805B681K500A2.54MM	680	± 10%	X7R	46P6338	0.07
● MC0805N681J500A2.54MM	680	± 5%	C0G / NP0	46P6623	0.08
● MC0805B821K500A2.54MM	820	± 10%	X7R	46P6352	0.07
● MC0805N821J500A2.54MM	820	± 5%	C0G / NP0	46P6649	0.09
● MC0805B102K500A2.54MM	1000	± 10%	X7R	46P6230	0.07
● MC0805N102J500A2.54MM	1000	± 5%	C0G / NP0	46P6386	0.12
● MC0805N122J500A2.54MM	1200	± 5%	C0G / NP0	46P6406	0.20
● MC0805B152K500A2.54MM	1500	± 10%	X7R	46P6250	0.07
● MC0805N152J500A2.54MM	1500	± 5%	C0G / NP0	46P6426	0.22
● MC0805B182K500A2.54MM	1800	± 10%	X7R	46P6260	0.07
● MC0805N182J500A2.54MM	1800	± 5%	C0G / NP0	46P6444	0.20
● MC0805B222K500A2.54MM	2200	± 10%	X7R	46P6272	0.07
● MC0805N222J500A2.54MM	2200	± 5%	C0G / NP0	46P6480	0.23
● MC0805B272K500A2.54MM	2700	± 10%	X7R	46P6286	0.07
● MC0805B332K500A2.54MM	3300	± 10%	X7R	46P6296	0.07
● MC0805B392K500A2.54MM	3900	± 10%	X7R	46P6308	0.07
● MC0805B472K500A2.54MM	4700	± 10%	X7R	46P6318	0.07
● MC1206N472J500A2.54MM	4700	± 5%	C0G / NP0	46P6687	0.45
● MC0805B562K500A2.54MM	5600	± 10%	X7R	46P6332	0.07
● MC0805B682K500A2.54MM	6800	± 10%	X7R	46P6342	0.07
● MC0805B103K500A2.54MM	10k	± 10%	X7R	46P6234	0.07
● MC0805B153K500A2.54MM	15k	± 10%	X7R	46P6254	0.09
● MC0805B183K500A2.54MM	18k	± 10%	X7R	46P6262	0.09
● MC0805B223K500A2.54MM	22k	± 10%	X7R	46P6276	0.09
● MC0805Y223M500A2.54MM	22k	± 20%	Y5V	46P6673	0.06
● MC0805B333K500A2.54MM	33k	± 10%	X7R	46P6300	0.09
● MC0805Y333M500A2.54MM	33k	± 20%	Y5V	46P6679	0.06
● MC0805B473K500A2.54MM	47k	± 10%	X7R	46P6322	0.09
● MC0805B563K500A2.54MM	56k	± 10%	X7R	46P6334	0.09
● MC0805B683K500A2.54MM	68k	± 10%	X7R	46P6346	0.09
● MC0805B104K500A2.54MM	100k	± 10%	X7R	46P6238	0.09
● MC0805Y104M500A2.54MM	100k	± 20%	Y5V	46P6667	0.09
VOLTAGE: 50 VDC, LEAD PITCH: 5.08 mm					
● MC0805N1R0C500A5.08MM	1	± 0.25pF	C0G / NP0	46P6360	0.07
● MC0805N2R0C500A5.08MM	2	± 0.25pF	C0G / NP0	46P6452	0.07
● MC0805N5R0C500A5.08MM	5	± 0.25pF	C0G / NP0	46P6583	0.07
● MC0805N8R0D500A5.08MM	8	± 0.5pF	C0G / NP0	46P6637	0.07
● MC0805N100J500A5.08MM	10	± 5%	C0G / NP0	46P6376	0.07
● MC0805N120J500A5.08MM	12	± 5%	C0G / NP0	46P6398	0.07
● MC0805N150J500A5.08MM	15	± 5%	C0G / NP0	46P6418	0.07
● MC0805N180J500A5.08MM	18	± 5%	C0G / NP0	46P6436	0.07
● MC0805N220J500A5.08MM	22	± 5%	C0G / NP0	46P6472	0.07
● MC0805N270J500A5.08MM	27	± 5%	C0G / NP0	46P6492	0.07
● MC0805N330J500A5.08MM	33	± 5%	C0G / NP0	46P6531	0.07
● MC0805N390J500A5.08MM	39	± 5%	C0G / NP0	46P6547	0.07
● MC0805N470J500A5.08MM	47	± 5%	C0G / NP0	46P6573	0.07
● MC0805N560J500A5.08MM	56	± 5%	C0G / NP0	46P6597	0.07
● MC0805N680J500A5.08MM	68	± 5%	C0G / NP0	46P6619	0.07
● MC0805N820J500A5.08MM	82	± 5%	C0G / NP0	46P6645	0.07
● MC0805N101J500A5.08MM	100	± 5%	C0G / NP0	46P6382	0.07
● MC0805N121J500A5.08MM	120	± 5%	C0G / NP0	46P6404	0.08
● MC0805N151J500A5.08MM	150	± 5%	C0G / NP0	46P6424	0.09
● MC0805N181J500A5.08MM	180	± 5%	C0G / NP0	46P6442	0.08
● MC0805B221K500A5.08MM	220	± 10%	X7R	46P6268	0.07
● MC0805N221J500A5.08MM	220	± 5%	C0G / NP0	46P6478	0.08
● MC0805N271J500A5.08MM	270	± 5%	C0G / NP0	46P6498	0.08
● MC0805B331K500A5.08MM	330	± 10%	X7R	46P6292	0.07
● MC0805N331J500A5.08MM	330	± 5%	G0G / NP0	46P6537	0.08
● MC0805B471K500A5.08MM	470	± 10%	X7R	46P6314	0.07
● MC0805N471J500A5.08MM	470	± 5%	C0G / NP0	46P6579	0.09
● MC0805N561J500A5.08MM	560	± 5%	C0G / NP0	46P6603	0.08
● MC0805B681K500A5.08MM	680	± 10%	X7R	46P6340	0.07
● MC0805N681J500A5.08MM	680	± 5%	C0G / NP0	46P6625	0.08
● MC0805N821J500A5.08MM	820	± 5%	C0G / NP0	46P6651	0.09
● MC0805B102K500A5.08MM	1000	± 10%	X7R	46P6232	0.07
● MC0805N102J500A5.08MM	1000	± 5%	C0G / NP0	46P6388	0.13
● MC0805N122J500A5.08MM	1200	± 5%	C0G / NP0	46P6408	0.20
● MC0805B152K500A5.08MM	1500	± 10%	X7R	46P6252	0.07
● MC0805N152J500A5.08MM	1500	± 5%	C0G / NP0	46P6428	0.20

➤ CONTINUED ➤

RADIAL LEAD MULTILAYER CERAMIC CAPACITORS - 50V (CONT.)

VOLTAGE: 50 VDC, LEAD PITCH: 5.08 mm

Mfg. Part No.	Cap. (pF)	Cap. Tol.	Temp. Coeff.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● MC0805B222K500A5.08MM	2200	± 10%	X7R	46P6274	0.07
● MC0805N222J500A5.08MM	2200	± 5%	C0G / NP0	46P6482	0.23
● MC0805N272J500A5.08MM	2700	± 5%	C0G / NP0	46P6500	0.23
● MC0805B332K500A5.08MM	3300	± 10%	X7R	46P6298	0.07
● MC0805N332J500A5.08MM	3300	± 5%	C0G / NP0	46P6539	0.23
● MC1206N392J500A5.08MM	3900	± 5%	C0G / NP0	46P6685	0.45
● MC0805B472K500A5.08MM	4700	± 10%	X7R	46P6320	0.07
● MC0805N562J500A5.08MM	5600	± 5%	C0G / NP0	46P6605	0.45
● MC0805B682K500A5.08MM	6800	± 10%	X7R	46P6344	0.07
● MC1206N682J500A5.08MM	6800	± 5%	C0G / NP0	46P6689	0.45
● MC1206N822J500A5.08MM	8200	± 5%	C0G / NP0	46P6691	0.60
● MC0805B103K500A5.08MM	10k	± 10%	X7R	46P6236	0.07
● MC0805N103J500A5.08MM	10k	± 5%	C0G / NP0	46P6390	0.67
● MC0805Y103M500A5.08MM	10k	± 20%	Y5V	46P6665	0.06
● MC0805B153K500A5.08MM	15k	± 10%	X7R	46P6256	0.09
● MC0805B223K500A5.08MM	22k	± 10%	X7R	46P6278	0.09
● MC0805B333K500A5.08MM	33k	± 10%	X7R	46P6302	0.09
● MC0805B473K500A5.08MM	47k	± 10%	X7R	46P6324	0.09
● MC0805Y473M500A5.08MM	47k	± 20%	Y5V	46P6681	0.06
● MC0805B683K500A5.08MM	68k	± 10%	X7R	46P6348	0.09
● MC0805B104K500A5.08MM	100k	± 10%	X7R	46P6240	0.09
● MC0805Y104Z500A5.08MM	100k	+80%, -20%	Y5V	46P6669	0.09
● MC0805B224K500A5.08MM	220k	± 10%	X7R	46P6280	0.13
● MC0805Y224Z500A5.08MM	220k	+80%, -20%	Y5V	46P6677	0.09
● MC0805B334K500A5.08MM	330k	± 10%	X7R	46P6304	0.15
● MC0805B474K500A5.08MM	470k	± 10%	X7R	46P6326	0.17
● MC0805Y474Z500A5.08MM	470k	+80%, -20%	Y5V	46P6683	0.11

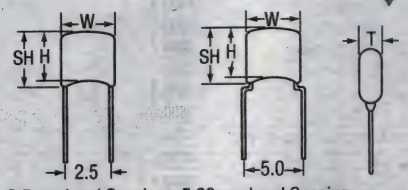
(142150)

50-VOLT MONO-KAP™ LEADED CERAMIC MULTILAYER CAPACITORS

RoHS Compliant Available

VISHAY.

Conformally coated radial leaded capacitors are designed for commercial and industrial applications such as timing, coupling/decoupling, signal comparison and biasing.



2.5mm Lead Spacing 5.08mm Lead Spacing

DIMENSIONS (mm)

Case Size	W max.	H max.	T max.	SH max. 2.5mm LS	SH max. 5.08mm LS
15	4	4	2.5	5.58	6.5
20	5	5	3.2	6.58	7.5

C0G (NP0) DIELECTRIC, TOLERANCE: ±5%

Mfg. Part No.	Cap.	Case Size	Pitch (mm)	Stock No.	Price Each 1-24
● K100J15C0GF5TL2	10pF	15	2.5	95C0947	0.07
● K100J15C0GF53L2	10pF	15	2.5	67H4496	0.07
● K100J15C0GF5TH5	10pF	15	5	95C0946	0.07
● K120J15C0GF5TL2	12pF	15	2.5	95C0986	0.07
● K150J15C0GF5TL2	15pF	15	2.5	95C0990	0.07
● K180J15C0GF5TL2	18pF	15	2.5	95C1003	0.07
● K180J15C0GF5TH5	18pF	15	5	95C1002	0.07
● K220J15C0GF5TL2	22pF	15	2.5	95C1007	0.07
● K220J15C0GF53L2	22pF	15	2.5	83H0584	0.07
● K220J15C0GF5TH5	22pF	15	5	95C1006	0.07
● K270J15C0GF5TL2	27pF	15	2.5	95C1043	0.07
● K270J15C0GF5TH5	27pF	15	5	95C1042	0.07
● K330J15C0GF5TL2	33pF	15	2.5	95C1046	0.07
● K330J15C0GF5TH5	33pF	15	5	95C1045	0.07
● K390J15C0GF5TL2	39pF	15	2.5	95C1058	0.07
● K390J15C0GF5TH5	39pF	15	5	95C1057	0.07
● K470J15C0GF5TL2	47pF	15	2.5	95C1061	0.07
● K470J15C0GF5TH5	47pF	15	5	95C1060	0.07
● K560J15C0GF5TL2	56pF	15	2.5	95C1107	0.03
● K560J15C0GF5TH5	56pF	15	5	95C1106	0.07
● K680J15C0GF5TH5	68pF	15	5	95C1109	0.03
● K820J15C0GF5TL2	82pF	15	2.5	85C4717	0.07

➤ CONTINUED ➤

50-VOLT MONO-KAP™ LEADED CERAMIC MULTILAYER CAPACITORS (CONT.)

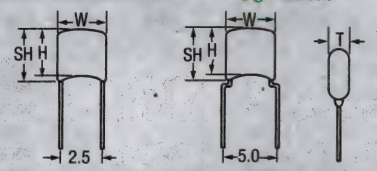
Mfg. Part No.	Cap.	Case Size	Pitch (mm)	Stock No.	Price Each 1-24
K820J15C0GF5TH5	82pF	15	5	95C1120	0.07
K101J15C0GF5TL2	100pF	15	2.5	79C4361	0.07
K101J15C0GF53L2	100pF	15	2.5	68H8147	0.07
K101J15C0GF5TH5	100pF	15	5	95C0950	0.07
K121J15C0GF5TL2	120pF	15	2.5	95C0987	0.08
K151J15C0GF5TL2	150pF	15	2.5	95C0992	0.08
K151J15C0GF5TH5	150pF	15	5	95C0991	0.08
K181J15C0GF5TL2	180pF	15	2.5	95C1004	0.08
K221J15C0GF5TH5	220pF	15	5	95C1010	0.09
K271J15C0GF5TL2	270pF	15	2.5	95C1044	0.10
K331J15C0GF5TH5	330pF	15	5	95C1047	0.11
K391J15C0GF5TL2	390pF	15	2.5	95C1059	0.10
K471J15C0GF5TL2	470pF	15	2.5	95C1065	0.11
K471J15C0GF5TH5	470pF	15	5	95C1064	0.10
K561J15C0GF5TL2	560pF	15	2.5	95C1108	0.12
K681J15C0GF5TL2	680pF	15	2.5	95C1112	0.12
K681J15C0GF5TH5	680pF	15	5	95C1111	0.12
K821J15C0GF5TL2	820pF	15	2.5	95C1121	0.12
K102J15C0GF53L2	1000pF	15	2.5	83H2075	0.20
K102J15C0GF5TH5	1000pF	15	5	95C0953	0.20
K122J15C0GF5TL2	1200pF	15	2.5	95C0988	0.19
K182J15C0GF5TL2	1800pF	15	2.5	95C1005	0.18
K222J15C0GF5TH5	2200pF	15	5	95C1018	0.20
K332J20C0GF5TH5	3300pF	20	5	95C1051	0.45
K472J20C0GF5TH5	4700pF	20	5	95C1071	0.47
X7R DIELECTRIC, TOLERANCE: ±10%					
K221K15X7RF5TL2	220pF	15	2.5	95C1015	0.07
K221K15X7RF5TH5	220pF	15	5	95C1014	0.06
K331K15X7RF5TL2	330pF	15	2.5	95C1050	0.06
K471K15X7RF5TL2	470pF	15	2.5	92C1788	0.06
K471K15X7RF5TH5	470pF	15	5	95C1068	0.06
K681K15X7RF5TL2	680pF	15	2.5	95C1114	0.06
K102K15X7RF5TL2	1000pF	15	2.5	95C0957	0.07
K102K15X7RF5TH5	1000pF	15	5	95C0956	0.06
K152K15X7RF53L2	1500pF	15	2.5	45J0121	0.06
K152K15X7RF5TH5	1500pF	15	5	95C0995	0.06
K222K15X7RF5TL2	2200pF	15	2.5	95C1021	0.07
K222K15X7RF5TH5	2200pF	15	5	95C1020	0.06
K332K15X7RF5TL2	3300pF	15	2.5	95C1053	0.06
K332K15X7RF5TH5	3300pF	15	5	95C1052	0.06
K472K15X7RF5TL2	4700pF	15	2.5	95C1073	0.07
K472K15X7RF5TH5	4700pF	15	5	95C1072	0.07
K682K15X7RF5TL2	6800pF	15	2.5	95C1116	0.03
K682K15X7RF5TH5	6800pF	15	5	95C1115	0.07
K103K15X7RF5TL2	0.01µF	15	2.5	92C7892	0.07
K103K15X7RF5TH5	0.01µF	15	5	95C0960	0.07
K153K15X7RF5TL2	0.015µF	15	2.5	95C0998	0.07
K223K15X7RF5TL2	0.022µF	15	2.5	95C1025	0.07
K223K15X7RF53L2	0.022µF	15	2.5	94H7604	0.07
K223K15X7RF5TH5	0.022µF	15	5	95C1024	0.07
K333K15X7RF5TL2	0.033µF	15	2.5	95C1055	0.08
K473K15X7RF5TL2	0.047µF	15	2.5	95C1077	0.08
K473K15X7RF53L2	0.047µF	15	2.5	25H6497	0.08
K473K15X7RF5TH5	0.047µF	15	5	95C1076	0.08
K683K15X7RF5TL2	0.068µF	15	2.5	95C1117	0.04
K104K15X7RF5TL2	0.1µF	15	2.5	85C4656	0.08
K104K15X7RF5TH5	0.1µF	15	5	95C0971	0.08
K104K15X7RF53H5	0.1µF	15	5	39C5301	0.08
K224K20X7RF5TH5	0.22µF	20	5	95C1035	0.21
K224K20X7RF53H5	0.22µF	20	5	92K2678	0.21
X7R DIELECTRIC, TOLERANCE: ±20%					
K103M15X7RF53L2	0.01µF	15	2.5	07H2781	0.06
K104M15X7RF53L2	0.1µF	15	2.5	87H9132	0.08
K105M20X7RF53H5	1µF	20	5	20J7056	0.49
Y5V DIELECTRIC, 2.5MM LEAD SPACING, TOLERANCE: +80%, -20%					
K104Z15Y5VF5TL2	0.1µF	15	2.5	95C0981	0.06
K104Z15Y5VF5TH5	0.1µF	15	5	95C0980	0.07
K224Z15Y5VF5TL2	0.22µF	15	2.5	95C1041	0.10
K224Z15Y5VF5TH5	0.22µF	15	5	95C1040	0.10
K474Z20Y5VF5TH5	0.47µF	20	5	95C1086	0.18
K105Z20Y5VF5TL2	1µF	20	2.5	95C0984	0.17
K105Z20Y5VF5TH5	1µF	20	5	92C7893	0.17

(73424)

100-VOLT MONO-KAP™ LEADED CERAMIC MULTILAYER CAPACITORS

RoHS Compliant Available

VISHAY.



2.5mm Lead Spacing 5.08mm Lead Spacing

Conformally coated radial leaded capacitors are designed for commercial and industrial applications such as timing, coupling/decoupling, signal comparison and biasing.

DIMENSIONS (mm)

Case Size	W max.	H max.	T max.	SH max. 2.5mm LS	SH max. 5.08mm LS
15	4	4	2.5	5.58	6.5
20	5	5	3.2	6.58	7.5

C0G (NPO) DIELECTRIC, TOLERANCE: ±5%

Mfg. Part No.	Cap.	Case Size	Lead Pitch (mm)	Stock No.	Price Each 1-24
K220J15C0GH5TL2	22pF	15	2.5	95C1009	0.11
K470J15C0GH5TL2	47pF	15	2.5	95C1063	0.10
K470J15C0GH5TH5	47pF	15	5	95C1062	0.11
K101J15C0GH5TL2	100pF	15	2.5	95C0952	0.10
K101J15C0GH53L2	100pF	15	2.5	03H3621	0.10
K101J15C0GH5TH5	100pF	15	5	95C0951	0.11
K221J15C0GH5TL2	220pF	15	2.5	95C1013	0.13
K221J15C0GH5TH5	220pF	15	5	95C1012	0.05
K471J15C0GH5TL2	470pF	15	2.5	95C1067	0.17
K102J20C0GH53L2	1000pF	20	2.5	92K0980	0.49
K102J20C0GH5TH5	1000pF	20	5	95C0954	0.17
X7R DIELECTRIC, TOLERANCE: ±10%					
K221K15X7RH5TH5	220pF	15	5	95C1016	0.03
K471K15X7RH5TH5	470pF	15	5	95C1069	0.07
K102K15X7RH5TL2	1000pF	15	2.5	95C0959	0.07
K102K15X7RH5TH5	1000pF	15	5	95C0958	0.07
K472K15X7RH5TL2	4700pF	15	2.5	95C1075	0.03
K103K15X7RH5TL2	0.01µF	15	2.5	95C0962	0.09
K103K15X7RH5TH5	0.01µF	15	5	95C0961	0.09
K223K15X7RH5TH5	0.022µF	20	5	95C1026	0.13
K473K20X7RH5TH5	0.047µF	20	5	95C1078	0.19
K104K20X7RH5TL2	0.1µF	20	2.5	95C0973	0.18
K104K20X7RH5TH5	0.1µF	20	5	95C0972	0.18

(165094)

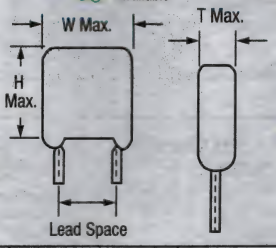
TYPE 1C, 2C, 3C MONOLYTHIC® CERAMIC CAPACITORS

RoHS Compliant Available

VISHAY.

Applications
- Z5U: Bypass and Filtering
- X7R: Computer, Servo Systems, Radio and TV Bypass, Decoupling Circuits
- C0G: Precision Timing Circuits

Specifications
- Temperature Characteristics: Z5U, X7R, C0G
- Tolerance: Z5U: ±20%; X7R: ±10%; C0G: ±5%
- Operating Temperature: Z5U: +10°C to +85°C; X7R and C0G: -55°C to +125°C



DIMENSIONS (in.)

Type	W (Max.)	H (Max.)	T (Max.)
1C	0.200	0.25	0.125
2C	0.300	0.30	0.157
3C	0.400	0.40	0.157

TEMPERATURE-STABLE TYPE X7R

Mfg. Part No.	Cap (pF)	Voltage (VDC)	Lead Space	Stock No.	Price Each 1-9
1C10X7R102K050B	1000	50	0.100″	89F3219	0.42
1C20X7R102K050B	1000	50	0.200″	89F3213	0.41
1C20X7R222K050B	2200	50	0.200″	95F7179	0.42
1C10X7R472K050B	4700	50	0.100″	66C6025	0.19
1C10X7R103K050B	0.01 uF	50	0.100″	89F3220	0.43
1C20X7R103K050B	0.01 uF	50	0.200″	89F3214	0.42
1C25X7R103K050B	0.01 uF	50	0.250″	95F7167	0.42
1C30X7R103K050B	0.01 uF	50	0.300″	95F7172	0.41
1C10X7R223K050B	0.022 uF	50	0.100″	66C6017	0.44
1C20X7R333K050B	0.033 uF	50	0.200″	66C6108	0.42
1C10X7R473K050B	0.047 uF	50	0.100″	95F7178	0.43

CONTINUED

TYPE 1C, 2C, 3C MONOLYTHIC® CERAMIC CAPACITORS (CONT.)

Mfg. Part No.	Cap (pF)	Voltage (VDC)	Lead Space	Stock No.	Price Each 1-9
● 1C10X7R104K050B	0.1 uF	50	0.100"	89F3212	0.19
● 1C20X7R104K050B	0.1 uF	50	0.200"	89F3215	0.19
● 2C20X7R224K050B	0.22 uF	50	0.200"	66C6723	0.65
● 2C20X7R334K050B	0.33 uF	50	0.200"	66C6725	1.43
● 2C20X7R474K050B	0.47 uF	50	0.200"	66C6726	1.43
● 2C20X7R105K050B	1 uF	50	0.200"	66C6721	1.85
● 1C20X7R102K100B	1000	100	0.200"	95F7177	0.47
● 1C10X7R222K100B	2200	100	0.100"	66C6015	0.43
● 1C20X7R332K100B	3300	100	0.200"	95F7176	0.48
● 1C10X7R472K100B	4700	100	0.100"	66C6027	0.41
● 1C10X7R103K100B	0.01 uF	100	0.100"	66C6007	0.20
● 1C10X7R333K100B	0.033 uF	100	0.100"	66C6024	0.46
● 1C10X7R473K100B	0.047 uF	100	0.100"	66C6029	0.47
● 1C10X7R104K100B	0.1 uF	100	0.100"	95F7162	0.47
● 1C25X7R104K100B	0.1 uF	100	0.250"	95F7173	0.51
GENERAL-APPLICATION TYPE Z5U					
● 1C10Z5U103M050B	0.01 uF	50	0.100"	81F2060	0.20
● 1C20Z5U103M050B	0.01 uF	50	0.200"	81F2062	0.20
● 1C25Z5U103M050B	0.01 uF	50	0.250"	29F010	0.20
● 1C25Z5U223M050B	0.022 uF	50	0.250"	29F011	0.41
● 1C10Z5U333M050B	0.033 uF	50	0.100"	95F7163	0.18
● 1C25Z5U333M050B	0.033 uF	50	0.250"	29F012	0.41
● 1C10Z5U473M050B	0.047 uF	50	0.100"	95F7171	0.18
● 1C25Z5U473M050B	0.047 uF	50	0.250"	29F013	0.19
● 1C10Z5U104M050B	0.1 uF	50	0.100"	81F2061	0.13
● 1C20Z5U104M050B	0.1 uF	50	0.200"	17F2165	0.13
● 1C25Z5U104M050B	0.1 uF	50	0.250"	29F014	0.16
● 1C10Z5U224M050B	0.22 uF	50	0.100"	95F7160	0.58
● 1C20Z5U224M050B	0.22 uF	50	0.200"	81F2063	0.58
● 1C25Z5U224M050B	0.22 uF	50	0.250"	29F016	0.59
● 2C37Z5U224M050B	0.22 uF	50	0.370"	29F021	0.52
● 1C10Z5U334M050B	0.33 uF	50	0.100"	95F7158	0.68
● 1C20Z5U334M050B	0.33 uF	50	0.200"	81F2064	0.66
● 1C25Z5U334M050B	0.33 uF	50	0.250"	29F017	0.72
● 2C37Z5U334M050B	0.33 uF	50	0.370"	29F022	0.72
● 2C37Z5U474M050B	0.47 uF	50	0.370"	29F023	0.63
● 2C20Z5U105M050B	1 uF	50	0.200"	90F1907	0.86
● 2C25Z5U105M050B	1 uF	50	0.250"	95F7181	0.88
● 2C37Z5U105M050B	1 uF	50	0.370"	29F025	1.23
1C10Z5U104M100B	0.1 uF	100	0.370"	02B642	0.18
TEMPERATURE-COMPENSATING TYPE C0G					
● 1C10C0G221J050B	220	50	0.100"	66C5980	0.19
● 1C20C0G332J050B	3300	50	0.200"	66C6074	0.70
● 1C10C0G220J100B	22	100	0.100"	66C5978	0.19
● 1C10C0G470J100B	47	100	0.100"	66C5996	0.19
● 1C10C0G101J100B	100	100	0.100"	66C5972	0.20
● 1C20C0G331J100B	330	100	0.200"	66C6073	0.20
● 1C20C0G102J100B	1000	100	0.200"	66C6057	0.48

(7163)

CLASS 1 & 2 CERAMIC DISC CAPACITORS

RoHS Compliant Available

VISHAY.

Features:
- Low losses
- High stability
- High capacitance in small size
- Op. Temp. Range:
  Class 1: - 55 to + 125 °C
  Class 2: - 30 to + 85 °C

Applications:
- Bypassing
- Coupling
- Resonant circuit

VOLTAGE: 100 VDC, CLASS 1 NPO

Mfg. Part No.	Cap. (pF)	Tol. (+/- %)	Stock No.	Price Each 1-99
● D100D20C0GH63L6R	10	± 0.5pF	91K6961	0.26
● D150J20C0GH63L6R	15	± 5%	91K7542	0.13
● D180J20C0GH63L6R	18	± 5%	91K7808	0.13
● D330J20C0GH63L6R	33	± 5%	91K8492	0.21
● D560J25C0GH63L6R	56	± 5%	91K9125	0.21
● D680J25C0GH63L6R	68	± 5%	91K9288	0.21
● D101J29C0GH63L6R	100	± 5%	91K7090	0.40
● D121J33C0GH63L6R	120	± 5%	91K7402	0.47
VOLTAGE: 100 VDC, CLASS 1 N750				
● D221G39U2JH63J5R	220	± 2%	91K8047	0.34
● D221G39U2JH63L2R	220	± 2%	91K8048	0.34
● D331G47U2JH63J5R	330	± 2%	91K8516	0.42
● D331G47U2JH63L2R	330	± 2%	91K8517	0.42

➤CONTINUED➤

CLASS 1 & 2 CERAMIC DISC CAPACITORS (CONT.)

VOLTAGE: 100 VDC, CLASS 2 Y5P

Mfg. Part No.	Cap. (pF)	Tol. (+/- %)	Stock No.	Price Each 1-99
● D101K20Y5PH63L6R	100	± 10%	91K7111	0.14
● D221K20Y5PH63L6R	220	± 10%	91K8089	0.15
● D331K20Y5PH63L6R	330	± 10%	91K8536	0.14
● D471K20Y5PH63L6R	470	± 10%	91K8923	0.15
● D471K20Y5PH63J5R	470	± 10%	91K8921	0.06
● D471K20Y5PH63L2R	470	± 10%	91K8922	0.06
● D681K20Y5PH63J5R	680	± 10%	91K9304	0.06
● D681K20Y5PH63L2R	680	± 10%	91K9305	0.06
● D102K20Y5PH63J5R	1000	± 10%	91K7133	0.06
● D102K20Y5PH63L2R	1000	± 10%	91K7134	0.06
● D152K25Y5PH63J5R	1500	± 10%	91K7628	0.06
● D152K25Y5PH63L2R	1500	± 10%	91K7629	0.06
● D182K25Y5PH63J5R	1800	± 10%	91K7872	0.06
● D182K25Y5PH63L2R	1800	± 10%	91K7873	0.06
● D222K25Y5PH63L6R	2200	± 10%	91K8113	0.14
● D222K25Y5PH63J5R	2200	± 10%	91K8111	0.06
● D222K25Y5PH63L2R	2200	± 10%	91K8112	0.06
● D332K29Y5PH63J5R	3300	± 10%	91K8560	0.08
● D332K29Y5PH63L2R	3300	± 10%	91K8561	0.08
● D332K29Y5PH63L6R	3300	± 10%	91K8562	0.17
● D472K33Y5PH63L6R	4700	± 10%	91K8949	0.17
● D472K33Y5PH63J5R	4700	± 10%	91K8947	0.08
● D472K33Y5PH63L2R	4700	± 10%	91K8948	0.08
● D103K43Y5PH6TJ5R	0.01 uF	± 10%	91R0116	0.16
VOLTAGE: 500 VDC, CLASS 2 C0G				
● D150J20C0GL63L6R	15	± 5%	91K7546	0.31
● D220J25C0GL63L6R	22	± 5%	91K8030	0.27
VOLTAGE: 500 VDC, CLASS 2 Y5P				
● D101K20Y5PL63L6R	100	± 10%	91K7118	0.22
● D151K20Y5PL63L6R	150	± 10%	91K7615	0.22
● D221K20Y5PL63L6R	220	± 10%	91K8096	0.23
● D331K20Y5PL63L6R	330	± 10%	91K8544	0.22
● D222K33Y5PL63L0R	2200	± 10%	91K8124	0.18
● D272K33Y5PL63L6R	2700	± 10%	91K8369	0.33
● D103K69Y5PL63L0R	0.01 uF	± 10%	91K7212	0.28
VOLTAGE: 500 VDC, CLASS 2 X5F				
● D102K29X5FL63L6R	1000	± 10%	91K7152	0.29
VOLTAGE: 500 VDC, CLASS 2 Z5U				
● D203Z59Z5UL63L0R	0.02 uF	+80%, -20%	91K7959	0.21

(108731)

WYO CERAMIC DISC AC SUPPRESSION CAPACITORS

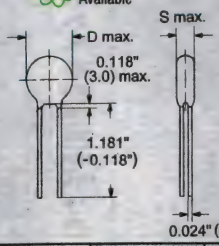
RoHS Compliant Available

VISHAY.

Features
- Epoxy Resin Dipped
- Flame Retardant
- UL Recognized, VDE, IMQ, BSI, SEV, NEMKO, SETI

Applications
- Class "Y" AC Capacitors for Radio Interference Suppression

Specifications
- Voltage: 250 VAC, 50/60Hz
- Lead Spacing: Types BFO: 5.0 mm and Types CFO: 7.5mm
- Tolerance: ±20%
- Dissipation Factor (tanδ): ≤25 x 10^{-3}



Mfg. Part No.	Cap. (pF)	D × S (mm)	Stock No.	Price Each 1-49
● WYO102MCMBF0KR	1000	6.5 x 4.5	43K5678	0.35
● WYO182MCMBF0KR	1800	8 x 4.5	65K4191	0.35
● WYO222MCMBF0KR	2200	9 x 4.5	36K1711	0.44
● WYO252MCMBF0KR	2500	9 x 4.5	64K2449	0.40
● WYO332MCMCF0KR	3300	10 x 4.5	65K4193	0.64
● WYO472MCMCF0KR	4700	12 x 4.5	43K5684	0.46
● WYO502MCMCF0KR	5000	12 x 4.5	65K4194	0.56
● WYO103MCMCF0KR	10000	21 x 4.5	43K5682	1.60

(7307)

561R/562R SERIES GENERAL PURPOSE CERAMIC DISC CAPACITORS

RoHS Compliant Available

VISHAY.

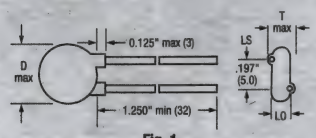


Fig. 1

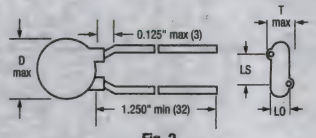


Fig. 2

CASE SIZE (22 AWG TINNED WIRE LEADS)

Case Size	D Max. (in.)	T Max. (in.)	LS (in.)	Case Size	D Max. (in.)	T Max. (in.)	LS (in.)
C	0.25	0.156	0.25	J	0.53	0.156	0.375
E	0.29	0.156	0.25	R	0.51	0.2	0.375
F	0.37	0.156	0.25	T	0.58	0.2	0.375
G	0.56	0.156	0.375	X	0.77	0.2	0.375
H	0.46	0.156	0.25	Y	0.9	0.2	0.375
H3	0.49	0.156	0.25	Q	0.95	0.2	0.375
H7	0.49	0.156	0.375	...	...	...	...

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Temp. Coeff.	Fig.	Case Size	Stock No.	Price Each 1-9	Price Each 10-49
100 VDC								
561RTSQ10	10	± 0.5pF	NP0	2	C	69K4619	1.21	1.01
561RTSQ33	33	± 10%	U2J	2	C	69K4621	1.21	1.01
561RTCXQ47	47	± 10%	X7R	1	C	69K4618	0.58	0.51
562RTST10	100	± 10%	X7R	2	C	69K4805	1.14	0.95
562RTST22	220	± 10%	X7R	2	C	69K4807	1.14	0.95
562RTST47	470	± 10%	X7R	2	C	69K4809	1.29	1.08
TSS22	0.022 uF	± 20%	X7S	1	T	02B556	3.19	2.95
500 VDC								
562R5TSSD10	1000	± 20%	Y5U	2	C	69K5064	1.14	0.95
562R5TSD10	1000	± 10%	X7R	2	E	56K4845	1.14	0.95
562R5HKZS10	0.01 uF	+80%, -20%	Z5U	1	...	69K5045	1.33	1.11
1000 VDC								
561R5GAQ10 E3	10	± 20%	NP0	2	C	18F2677	1.21	1.01
561R5GAQ33	33	± 20%	U2J	2	E	69K4754	1.06	0.89
562R5GAT10	100	± 20%	X5F	2	C	69K5009	1.19	0.99
562R5GAT15	150	± 20%	X5F	1	C	69K5014	1.14	0.95
562R5GAT20	200	± 20%	X5F	2	C	69K5016	1.14	0.95
562R10TST22	220	± 10%	X5F	2	C	66C6373	1.14	0.95
562R5GAT33	330	± 20%	X5F	2	C	69K5024	1.19	0.99
562R5GAT47	470	± 20%	X5F	2	C	69K5028	1.20	1.01
562R5GAT50	500	± 20%	X5F	2	C	69K5034	1.20	1.01
562R5GAD10	1000	± 20%	X7R	2	E	69K4958	1.21	1.01
562R5GAD12	1200	± 20%	Z5U	2	E	69K4969	1.14	0.95
562R5GAD15	1500	± 20%	Z5U	2	E	69K4970	1.20	1.01
562R5GAD20	2000	± 20%	Z5U	2	E	69K4972	1.20	1.01
562R5GAD22	2200	± 20%	Z5U	2	E	69K4974	1.20	1.01
562R5GAD25	2500	± 20%	Z5U	2	E	69K4978	1.14	0.95
562R5GAD30	3000	± 20%	Z5U	2	E	69K4980	1.14	0.95
562R5GAD33	3300	± 20%	Z5U	2	E	18F2721	1.09	0.91
562R5GAD47	4700	± 20%	Z5U	1	F	69K4982	0.93	0.78
562R5GAD68	6800	± 20%	Z5U	1	G	69K4993	1.01	0.85
562R5GAD82	8200	± 20%	Z5U	1	G	69K4995	1.18	0.99
562R5HKS10	0.01 uF	+100%, -0%	Z5U	1	H7	69K5044	1.31	1.09
562R5GAS10	0.01 uF	± 20%	Z5U	1	H7	35K3439	0.94	0.79
562R5HKMS10	0.01 uF	± 20%	Z5U	1	H3	57K9491	1.33	1.11
562R5GAS15	0.01 uF	± 20%	Z5U	1	J	69K5004	1.45	1.28

(163824)

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(211462)

561R/562R SERIES TEMPERATURE AND VOLTAGE STABILIZED CERAMIC DISC CAPACITORS

RoHS Compliant Available

VISHAY.

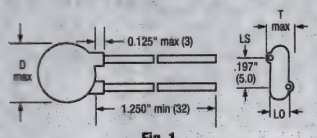

Fig. 1

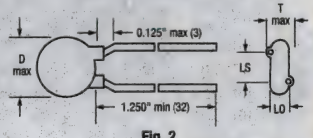

Fig. 2

Features
- Application Range: Up to 1250 VDC, 200 VAC RMS
- Insulation Resistance: 50,000 MΩ minimum, 1000ΩF
- Dissipation Factor: 2.0% maximum
- Dielectric Strength: 2500 VDC, 750 VAC RMS

Specifications
- Voltage Rating: 1000 VDC
- Tolerance: ±10%

CASE SIZE (22 AWG TINNED WIRE LEADS)

Case Size	D Max. (in.)	T Max. (in.)	LS (in.)	Case Size	D Max. (in.)	T Max. (in.)	LS (in.)
C	0.25	0.156	0.25	H7	0.49	0.156	0.375
E	0.29	0.156	0.25	J	0.53	0.156	0.375
H3	0.49	0.156	0.25	L	0.68	0.156	0.375

1000 VDC TEMPERATURE & VOLTAGE STABILIZED

Mfg. Part No.	Cap. (pF)	Temp. Coeff.	Fig.	Case Code	Lead Spacing (mm)	Stock No.	Price Each 1-9	Price Each 10-49
561R10TSQ10	10	NP0	2	C	6.4	69K4748	1.21	1.01
561R10TSQ30	30	U2J	2	C	6.4	83K3579	1.26	1.05
561R10TSQ47	47	U2J	2	E	6.4	69K4749	0.50	0.44
562R10TSQ56	56	X5F	2	C	6.4	45K1407	1.14	0.95
562R10TSQ68	68	X5F	2	C	6.4	69K4913	1.20	1.01
562R10TSQ75	75	X5F	2	C	6.4	66C6365	1.14	0.95
562R10TST10	100	X5F	2	C	6.4	69K4917	1.19	0.99
562R10TST12	120	X5F	2	C	6.4	69K4921	1.20	1.01
562R10TST15	150	X5F	2	C	6.4	69K4922	1.14	0.95
562R10TST18	180	X5F	2	C	6.4	69K4924	1.14	0.95
562R10TST20E3	200	X5F	2	C	6.4	43K0089	1.14	0.95
562R10TST22	220	X5F	2	C	6.4	66C6373	1.14	0.95
562R10TST25 E3	250	X5F	2	C	6.4	69K4930	1.14	0.95
562R10TST27	270	X5F	2	C	6.4	69K4933	1.14	0.95
562R10TST33	330	X5F	2	C	6.4	36K2562	1.14	0.95
562R10TST39	390	X5F	2	C	6.4	69K4939	1.14	0.95
562R10TST47	470	X5F	2	C	6.4	46F5305	1.19	0.99
562R10TST50	500	X5F	2	C	6.4	69K4950	1.19	0.99
562R10TST56	560	X5F	2	E	6.4	65K8998	1.14	0.95
562R10TST68	680	X5F	2	E	6.4	46F5308	1.14	0.95
562R10TST75	750	X5F	2	E	6.4	69K4956	1.14	0.95
562R10TSD10	1000	X5F	2	E	6.4	35K3935	1.19	0.99
562R10TSD15	1500	X5F	1	G	6.4	43K9878	1.18	0.99
562R10TSD20	2000	X5F	1	H3	9.5	69K4908	1.53	1.28

(163825)

561R SERIES 1 kV PRECISION CERAMIC DISC CAPACITORS

RoHS Compliant Available

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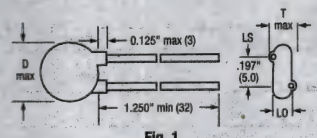

Fig. 1

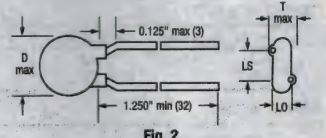

Fig. 2

CASE SIZE (22 AWG TINNED WIRE LEADS)

Case Size	D Max. (in.)	T Max. (in.)	LS (in.)	Case Size	D Max. (in.)	T Max. (in.)	LS (in.)
C	0.25	0.156	0.25	J	0.53	0.156	0.375
E	0.29	0.156	0.25	K	0.63	0.156	0.375
F	0.37	0.156	0.25	L	0.68	0.156	0.375
G	0.56	0.156	0.375	P	0.89	0.156	0.375

PRECISION

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Temp. Coeff.	Fig.	Case Size	Lead Spacing (mm)	Stock No.	Price Each 1-9	Price Each 10-49
561R10TCCV10	1	± 0.5pF	C0G / NP0	2	C	6.4	54K2934	1.26	1.05
561R10TCCV22	2.2	± 0.5pF	C0G / NP0	2	C	6.4	56K5496	1.27	1.06
561R10TCCV27	2.7	± 0.5pF	C0G / NP0	2	C	6.4	69K4720	1.26	1.05
561R10TCCV30	3	± 0.5pF	C0G / NP0	2	C	6.4	41K8788	1.21	1.01
561R10TCCV33	3.3	± 0.5pF	C0G / NP0	2	C	6.4	42K5290	1.27	1.06
561R10TCCV39	3.9	± 0.5pF	C0G / NP0	2	C	6.4	69K4723	1.28	1.07
561R10TCCV47	4.7	± 0.5pF	C0G / NP0	2	C	6.4	69K4725	1.27	1.06

➤CONTINUED➤

561R SERIES 1 kV PRECISION CERAMIC DISC CAPACITORS (CONT.)

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Temp. Coeff.	Fig.	Case Size	Lead Spacing (mm)	Stock No.	Price Each 1-9	Price Each 10-49
561R10TCCV68	6.8	± 0.5pF	C0G / NP0	2	C	6.4	40K5858	1.26	1.05
561R10TCCQ10BA	10	± 0.5pF	C0G / NP0	2	C	6.4	69K4685	1.27	1.06
561R10TCCQ12	12	± 5%	C0G / NP0	2	C	6.4	69K4686	1.27	1.06
561R10TCCQ15	15	± 5%	C0G / NP0	2	C	6.4	69K4688	1.21	1.01
561R10TCCQ18	18	± 5%	C0G / NP0	2	E	6.4	69K4690	1.12	0.93
561R10TCCQ20	20	± 5%	C0G / NP0	2	E	6.4	69K4693	1.12	0.93
561R10TCCQ22	22	± 5%	C0G / NP0	2	E	6.4	69K4696	1.12	0.93
561R10TCCQ27	27	± 5%	C0G / NP0	2	F	6.4	69K4701	1.16	0.97
561R10TCCQ30	30	± 5%	C0G / NP0	2	F	6.4	69K4702	1.10	0.92
561R10TCCQ33	33	± 5%	C0G / NP0	2	F	6.4	52K5603	1.10	0.92
561R10TCCQ39	39	± 5%	C0G / NP0	2	F	6.4	69K4704	1.10	0.92
561R10TCCQ47	47	± 5%	C0G / NP0	1	G	6.4	69K4706	1.33	1.11
561R10TCCQ50	50	± 5%	C0G / NP0	1	G	6.4	69K4707	1.25	1.05
561R10TCCQ56	56	± 5%	C0G / NP0	1	G	6.4	42K5287	1.32	1.11
561R10TCCT10	100	± 5%	C0G / NP0	1	J	9.5	52K7981	1.44	1.18
561R10TCCT22	220	± 5%	C0G / NP0	1	M	9.5	69K4716	2.19	2.03
TEMPERATURE/FREQUENCY/VOLTAGE STABLE									
561R10TCUQ33	33	± 5%	N750	2	E	6.4	69K4734	1.23	1.02
561R10TCUT10	100	± 5%	N750	2	F	6.4	69K4739	0.58	0.56
561R10TCUT68	680	± 5%	N750	1	K	9.5	69K4747	1.55	1.27

(163826)

AC LINE RATED CERAMIC DISC CAPACITORS

RoHS Compliant Available

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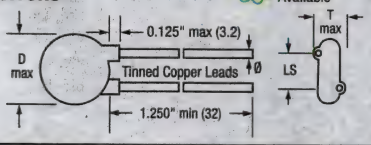


Specifications	125L Series	440L Series
Continuous Voltage Rating	300VAC, 2000VDC	500VAC, 3500VDC
Transient Voltage (Dielectric Strength)	1250VAC, 5000VDC	2000VAC, 7000VDC
Insulation Resistance Min.	50,000MΩ; 500ΩF	150,000MΩ; 750ΩF
Case Breakdown/Flammability Rating	1500VAC/94V0	2500VAC/94V0
Application Service	IEC 161 Class X	IEC Class Y or X

DIMENSIONS

Case Size	D Max. (in.)	Lead Spacing (in.)	Case Size	D Max. (in.)	Lead Spacing (in.)
A	0.33	0.25	L	0.4	0.375
B	0.365	0.25	M	0.43	0.375
C	0.4	0.25	N	0.46	0.375
D	0.43	0.25	O	0.49	0.375
E	0.46	0.25	P	0.53	0.375
F	0.49	0.25	P1	0.56	0.375
G	0.53	0.25	Q	0.62	0.375
H	0.62	0.25	R	0.68	0.375
H1	0.68	0.25	S	0.72	0.375
I	0.72	0.25	T	0.79	0.375
J	0.33	0.375	U	0.85	0.375
K	0.365	0.375	V	0.9	0.375

WIRE LEAD OFFSET

Series	Lead Offset	Series	Lead Offset
440L	0.158″	125L	0.110″
30LVS	0.125″	25Y	0.060″

SPECIFICATIONS

Performance Characteristics	Series 440L	30LVS	125L	25Y
Application Voltage Range	250/500V_{RMS}	250/400V_{RMS}	250V_{RMS}	250/400V_{RMS}
Dielectric Strength	4000V_{RMS}	2500V_{RMS}	2000V_{RMS}	2500V_{RMS}
Max. Dissipation Factor	2%			
Min. Insulation Resistance	1000ΩF			
Mechanical Characteristic	Service Temperature:125°C Max.; Coating Meterial per UL94V0			

Cera-Mite disc capacitors are rugged, high-voltage capacitors specifically designed and tested for use in 125V-600VAC power sources. Certifed for X and Y type worldwide safety agency requirements. Ideal for AC power supplies, across-the-line, line-to-ground and bypass filtering applications. UL recognized, CSA certified, VDE approved.

440L SERIES

Rugged, high dielectric strength, full UL recognition, X1 and Y1 applications. UL 1414 (Across-The-Line, Antenna Coupling, Line-By-Pass); UL 1283 (EMI Filters); CSA 22.2 (No. 1 - Across-The-Line, No. 1 - Isolation); IEC 384-14 2nd Edition (Y1 - 500VAC, X1 - 400VAC).

Mfg. Part No.	Cap. (pF)	Tol. +/- %	AC Leakage (mA)	Temp. Coeff.	Case Size	T (in.)	Tape Cut Stock No.	Tape Cut Price Each 1-9
440LQ15-R	15	±10%	2 uA	U2J	J	0.21	65K2972	1.58
440LQ22-R	22	±10%	3 uA	P3K	J	0.19	65K2973	1.58
440LT10-R	100	±10%	0.02	X7R	J	0.22	58K4045	1.58

CONTINUED

AC LINE RATED CERAMIC DISC CAPACITORS (CONT.)

Mfg. Part No.	Cap. (pF)	Tol. +/- %	AC Leakage (mA)	Temp. Coeff.	Case Size	T (in.)	Tape Cut Stock No.	Tape Cut Price Each 1-9
440LT15-R	150	±10%	0.03	X7R	J	0.235	65K2976	1.66
440LT22-R	220	±10%	0.04	X7R	J	0.235	65K2977	1.58
440LT33-R	330	±20%	0.05	X7R	J	0.225	65K2979	1.66
440LT47-R	470	±20%	0.07	Y5U	J	0.23	66C8253	1.66
440LT56-R	560	±20%	0.08	Y5U	J	0.23	65K2981	1.80
440LD10-R	1000	±20%	0.15	Y5U	K	0.22	36K2563	1.34
440LD15-R	1500	±20%	0.23	Y5U	K	0.22	40K5805	1.34
440LD20-R	2000	±20%	0.3	Y5U	L	0.22	65K2948	1.60
440LD33-R	3300	±20%	0.5	Y5U	O	0.215	65K2957	1.45
440LD50-R	5000	±20%	0.76	Y5U	Q	0.225	65K2963	1.90
440LD68-R	6800	±20%	1.04	Y5U	S	0.235	65K2968	2.22
30LV SERIES								
30LVQ10-R	10	±10%		C0G / NP0	A	0.185	65K2921	1.33
30LVSD22-R	2200	±20%	0.34	Y5U	A	0.17	65K2926	1.40
30LVSD33-R	3300	±20%	0.5	Y5U	C	0.175	66C7445	1.21
30LVSD47-R	4700	±20%	0.72	Y5U	F	0.18	65K2933	1.47
30LVSS10-R	10000	±20%	1.52	Y5U	S	0.2	65K2937	2.25
125L SERIES								
125LD10-R	1000	±20%	0.07	Y5V	A	0.195	65K2763	1.21
125LD47-R	4700	±20%	0.36	Y5V	C	0.185	43K5798	1.38
125LD50-R	5000	±20%	0.38	Y5V	M	0.195	40K5840	1.53
125LS15-R	15000	±20%	1.14	Y5V	S	0.205	65K2768	2.13
125LS20-R	20000	±20%	1.52	Y5V	O	0.24	65K2769	2.33
125LS30-R	30000	±20%	2.28	Y5V	S	0.24	43K5794	2.36
125LS50-R	50000	±20%	3.8	Y5V	V	0.24	65K2770	4.08
20VL SERIES								
20VLSS10-R	0.01	+80%, -20%	...	+22%, -56%	G	0.16	07J9348	1.69

(7093)

Compact size for EMI filtering, X1 and Y2 applications. UL 1414 (Line-By-Pass); UL 1283 (EMI Filters); CSA 22.2 (No. 1 - Isolation, No. 8 - EMI Filters); IEC 384-1 2nd Edition (Y2 - 250VAC, X1 - 400VAC).

Economical, line-by-pass, X1 and Y4 applications. UL 1414 (Line-By-Pass); CSA 22.2 (No.1 - Isolation); IEC 384-14 2nd Edition (Y4 - 125VAC, X1 - 400VAC).

High Cap Valve, Compact Size, X2 Applications. UL 1283 (EMI Filters); CSA 22.2 (No. 8 - EMI Filters); IEC 384-14 2nd Edition (X2 - 400VAC).

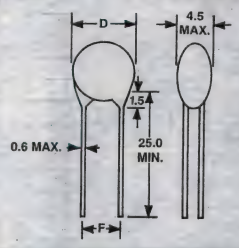
HIGH-VOLTAGE CERAMIC DISC CAPACITORS

RoHS Compliant Available

multicomp

Specifications:

- Voltage: 1000 VDC
- Tolerance: ±10%
- Temperature Characteristic (Y5P): ±10%
- Dissipation Factor (tan δ): 2.5%
- Operating Temperature: –25°C to +85°C
- Insulation Resistance (IR) @ 25°C: 10,000MΩ
- Dielectric Strength: 2X rated WVDC



Ceramic disc capacitor kits available; *go online or call.*

Mfg. Part No.	Cap. (pF)	D x T (mm)	Stock No.	Price Each 1-49	50-99	100-249	250-499
MCC11B101K3AS6L-RH	100	6.5 x 6.35	80K9093	0.15	0.13	0.11	0.11
MCC11B221K3AS6L-RH	220	6.5 x 6.35	80K9100	0.15	0.13	0.12	0.11
MCC11B331K3AS6L-RH	330	6.5 x 6.35	80K9101	0.18	0.15	0.14	0.13
MCC11B821K3AS6L-RH	820	6.5 x 6.35	80K9109	0.25	0.21	0.19	0.18
MCC11B102K3AS6L-RH	1000	6.5 x 6.35	80K9096	0.17	0.15	0.13	0.12
MCC11B332K3AS6L-RH	3300	11 x 6.35	80K9102	0.35	0.30	0.27	0.25
MCC11B472K3AS6L-RH	4700	14 x 9.52	80K9106	0.36	0.31	0.27	0.26
MCC11B562K3AS6L-RH	5600	15 x 9.52	80K9107	0.52	0.45	0.39	0.37
MCC11B682K3AS6L-RH	6800	17 x 9.52	80K9108	0.52	0.45	0.39	0.37
MCC11B103K3AS6L-RH	0.01 uF	19 x 9.52	80K9098	1.88	1.60	1.41	1.34

(39272)

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(212565)

564R & 615R SERIES HIGH VOLTAGE CERAMIC DISC CAPACITORS

RoHS Compliant Available

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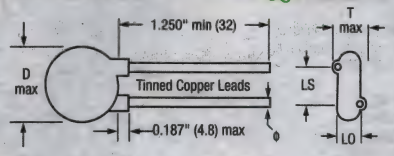


VOLTAGE: 6,000 VDC

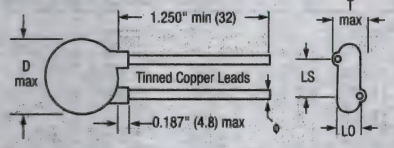
Mfg. Part No.	Cap. (pF)	Dielectric Characteristic	Tol.	Stock No.	Price Each 1-9
564R60GAQ10	10	C0G / NP0	± 20%	69K5391	1.34
564R60GAQ22	22	U2J	± 20%	69K5392	1.72
564R60GAT10	100	X5F	± 20%	66K6064	1.81
564R60GAT22	220	X5F	± 20%	63K3478	1.36
564R60GAT33	330	X5S	± 20%	69K5397	1.36
564R60GAT56	560	Y5U	± 20%	40K5790	1.29
564R60GAD10	1000	Z5U	± 20%	69K5387	1.34
564R60GAD15	1500	Z5U	± 20%	69K5388	1.81
564R60GAD22	2200	Z5U	± 20%	69K5389	1.72
564R60GAD33	3300	Z5U	± 20%	40K5852	1.96
564R60GAD47	4700	Z5U	± 20%	69K5390	2.80
VOLTAGE: 7,500 VDC					
564R75GAT47	470	X5F	± 20%	69K5402	2.40
VOLTAGE: 10,000 VDC					
615R100GAD47	4700	Z5U	+80%, -20%	46F5254	8.36
VOLTAGE: 15,000 VDC					
615R150GATT39	390	N4700	± 20%	14M7775	6.27
615R150GAST50	500	Y5U	+80%, -20%	69K5493	3.04

(163806)

564R SERIES LOWER VOLTAGE CERAMIC DISC CAPACITORS

RoHS Compliant Available

VISHAY.



VOLTAGE: 2, 000 VDC

Mfg. Part No.	Cap. (pF)	Dielectric Characteristic	Tol.	Stock No.	Price Each 1-9
564R20GAS10	0.01 uF	Z5U	± 20%	69K5263	1.52
564R20GASS10	0.01 uF	Y5V	± 20%	69K5262	1.69
VOLTAGE: 3,000 VDC					
564R30GAQ10	10	N750	± 20%	46F5260	1.26
564R30GAQ22	22	R3L	± 20%	69K5333	1.27
564R30GAQ27	27	R3L	± 20%	69K5335	1.27
564R30GAQ33	33	R3L	± 20%	61K2493	1.27
564R30GAQ47	47	X7R	± 20%	66K6072	1.26
564R30GAQ56	56	X7R	± 20%	69K5338	1.27
564R30GAQ68	68	X7R	± 20%	69K5339	1.21
564R30GAT10	100	X7R	± 20%	40K2161	1.21
564R30GAT15	150	X7R	± 20%	69K5347	1.27
564R30GAT27	270	X7R	± 20%	53K6247	1.27
564R30GAT39	390	X7R	± 20%	69K5353	1.27
564R30GAT47	470	X7R	± 20%	69K5354	1.26
564R30GAT68	680	Y5U	± 20%	69K5358	1.27
564R30TST68	680	X7R	± 10%	69K5381	1.27
564R30GAD15	1500	Z5U	± 20%	69K5323	1.34
564R30TSD15	1500	X7R	± 10%	69K5363	1.39
564R30GAD18	1800	Z5U	± 20%	69K5324	1.51
564R30TSD18	1800	X7R	± 10%	69K5364	1.58
564R30GAD22	2200	Z5U	± 20%	43K0199	1.47
564R30TSSD22	2200	Y5S	± 20%	69K5373	1.49
564R30TSD27	2700	X7R	± 10%	69K5366	1.65
564R30GAD33	3300	Z5U	± 20%	53K6096	1.56
564R30TSSD33	3300	Y5S	± 20%	69K5375	1.65
564R30GAD39	3900	Z5U	± 20%	69K5328	1.56
564R30TSD39	3900	X7R	± 10%	69K5367	2.13
564R30GAD47	4700	Z5U	± 20%	36K3896	1.91
564R30TSD47	4700	X7R	± 10%	69K5368	2.22
564R30TSSD56	5600	Y5S	± 20%	69K5378	2.37
564R30GAD68	6800	Z5U	± 20%	66K6075	1.55

➤ CONTINUED ➤

564R SERIES LOWER VOLTAGE CERAMIC DISC CAPACITORS (CONT.)

VOLTAGE: 3,000 VDC

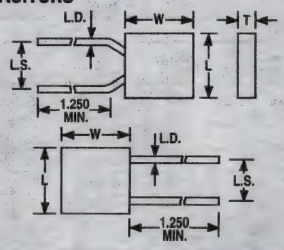
Mfg. Part No.	Cap. (pF)	Dielectric Characteristic	Tol.	Stock No.	Price Each 1-9
564R30GAS10	0.01 uF	Z5U	± 20%	40K5833	2.05
564R30GASS10	0.01 uF	Y5V	± 20%	69K5340	1.96

(163808)

CK05/06 SERIES MIL-C-11015 MOLDED RADIAL CAPACITORS

AVX A KYOCERA GROUP COMPANY

- Meets MIL-C-11015 Specification
- Tolerance: ±10%
- Operating Temperature: -55°C to +125°C
- Dimensions: Thickness (T) 2.29mm, Lead Spacing (L.S.) 5.08mm, and Lead Diameter (L.D.) .64mm



VOLTAGE: 50 VDC

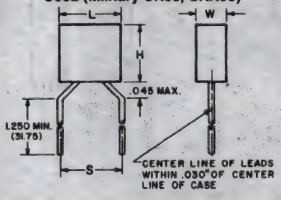
Mfg. Part No.	Cap. (uF)	H (mm)	W (mm)	D (mm)	Stock No.	Price Each 1-9	10-99	100-249
CK06BX224K	0.22	7.37	7.37	2.29	19C5983	1.47	1.16	0.85
CK06BX474K	0.47	7.37	7.37	2.29	19C5985	2.45	1.98	1.52
CK05BX104K	0.1	4.83	4.83	2.29	33C4436	0.60	0.42	0.29
CK06BX105K	1	7.37	7.37	2.29	19C5981	2.82	2.28	1.74
VOLTAGE: 100 VDC								
CK05BX222K	0.0022	4.83	4.83	2.29	19C5977	0.60	0.42	0.29
CK05BX472K	0.0047	4.83	4.83	2.29	19C5979	0.60	0.42	0.29
CK06BX103K	0.01	7.37	7.37	2.29	33C4437	0.51	0.36	0.25
CK06BX223K	0.022	7.37	7.37	2.29	19C5982	0.66	0.47	0.32
CK06BX473K	0.047	7.37	7.37	2.29	19C5984	0.66	0.47	0.32
CK06BX104K	0.1	7.37	7.37	2.29	19C5980	0.65	0.46	0.32
VOLTAGE: 200 VDC								
CK05BX102K	0.001	4.83	4.83	2.29	19C5974	0.60	0.42	0.29

(50570)

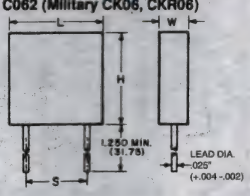
CK & CKR SERIES CERAMIC MOLDED / MIL-C-11015 & MIL-PRF-39014 CAPACITORS

The Capacitance Company KEMET CHARGED.

C052 (Military CK05, CKR05)



C062 (Military CK06, CKR06)



Specifications

- Mil Spec: Type CK = MIL-C-11015; Type CKR = MIL-PRF-39014
- Tolerance: ±10%
- Temperature Characteristic: X7R
- Operating Temperature: –55°C to +125°C

RADIAL DIMENSIONS

Case Size	Military Equivalent Styles	H	L	W	S
C052	CK05, CKR05	0.190±0.010″	0.190±0.010″	0.090±0.010″	0.200±0.015″
C062	CK06, CKR06	0.290±0.010″	0.290±0.010″	0.090±0.010″	0.200±0.015″

AXIAL DIMENSIONS

Case Size	Military Equivalent Styles	L	D	C
C114	CK12, CKR11	0.160±0.010″	0.090±0.010″	0.020″
C124	CK13, CKR12	0.250±0.010″	0.090±0.010″	0.020″
C192	CK14, CKR14	0.390±0.010″	0.140±0.010″	0.025″

RADIAL LEAD MIL-C-11015

Mfg. Part No.	MIL-C-11015	Voltage (VDC)	Cap. (pF)	Tol. +/- %	Stock No.	Price Each 1-9	10-49
CK05BX223K	...	50	22000	±10%	87F4674	0.99	0.75
CK05BX473K	...	50	47000	±10%	87F4675	1.13	0.86
CK05BX104K	...	50	100000	±10%	87F4662	0.56	0.43
CK06BX224K	...	50	220000	±10%	87F4678	2.92	2.31
CK06BX474K	...	50	470000	±10%	87F4679	4.16	3.36
C062K105K5X5CA	...	50	1000000	±10%	87F4680	6.45	5.22

➤ CONTINUED ➤

CK & CKR SERIES CERAMIC MOLDED / MIL-C-11015 & MIL-PRF-39014 CAPACITORS (CONT.)

Mfg. Part No.	MIL-C-11015	Voltage (VDC)	Cap. (pF)	Tol. +/- %	Stock No.	Price Each 1-9	Price Each 10-49
CK05BX222K	...	100	2200	±10%	28C6785	1.23	0.88
CK05BX472K	...	100	4700	±10%	87F4672	1.60	1.12
CK05BX103K	...	100	10000	±10%	87F4673	1.67	1.17
CK06BX104K	...	100	100000	±10%	87F4677	0.92	0.69
CK05BX471K	...	200	470	±10%	87F4670	0.59	0.42
CK05BX102K	...	200	1000	±10%	87F4671	0.60	0.42
CK06BX103K	...	200	10000	±10%	87F4676	1.39	0.98
RADIAL LEAD MIL-PRF-39014							
Mfg. Part No.	**MIL-PRF-39014/05**	**Voltage (VDC)**	**Cap. (pF)**	**Tol. +/- %**	**Stock No.**	**Price Each 1-9**	**Price Each 10-49**
CKR05BX104KR	1553	50	100000	±10%	87F4668	0.98	0.78
CKR05BX104KS	1593	50	100000	±10%	98F9430	1.02	0.81
CKR06BX474KR	1320	50	470000	±10%	87F4684	5.51	4.46
CKR06BX105KM	1407	50	1000000	±10%	98F2904	3.27	2.65
C062T105K5X5CR	1415	50	1000000	±10%	87F4685	3.27	2.65
CKR05BX103KR	1535	100	10000	±10%	87F4666	0.94	0.74
CKR06BX104KR	1310	100	100000	±10%	87F4683	1.56	1.23
CKR05BX102KR	1317	200	1000	±10%	87F4664	1.06	0.80
AXIAL LEAD MIL-C-11015							
Mfg. Part No.	**MIL-C-11015**	**Voltage (VDC)**	**Cap. (pF)**	**Tol. +/- %**	**Stock No.**	**Price Each 1-9**	**Price Each 10-49**
CK12BX103K	...	50	10000	±10%	87F4690	0.68	0.47
CK15BR105K	...	50	1000000	±10%	24C5165	12.63	10.18
CK12BX471K	...	100	470	±10%	87F4687	0.68	0.47
CK12BX102K	...	100	1000	±10%	87F4688	0.68	0.47
CK13BX103K	...	100	10000	±10%	87F4695	4.08	2.86
CK14BR104K	...	100	100000	±10%	87F4700	0.69	0.52
AXIAL LEAD MIL-PRF-39014							
Mfg. Part No.	**MIL-PRF-39014/05**	**Voltage (VDC)**	**Cap. (pF)**	**Tol. +/- %**	**Stock No.**	**Price Each 1-9**	**Price Each 10-49**
CKR14BR104KR	2097	100	100000	±10%	87F4703	1.76	1.40

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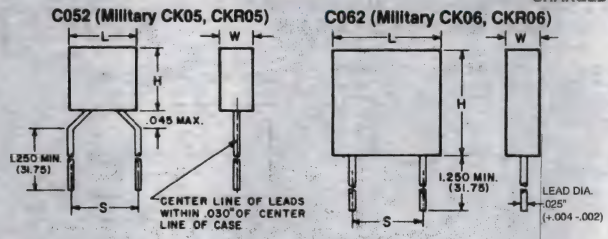
MOLDED CERAMIC RADIAL LEAD CAPACITORS

RoHS Compliant Available

The Capacitance Company KEMET CHARGED.



Features
- Monolithic Block of Ceramic Dielectric with Interdigitated Internal Electrodes
- Molded Case, Radial Leads
- Meets Flame Test Requirements of UL94V-0
- Operating Temperature: -55°C to +125°C

ULTRA-STABLE TEMPERATURE CHARACTERISTIC-C0G (NP0)

Mfg. Part No.	Series	Voltage (VDC)	Cap. (pF)	Tol. +/- %	Tape Cut Stock No.	Price Each 1-9	Price Each 10-49
● C052C104K5R5TA	C052	50	100000	±10%	42M4325	0.48	0.36
C052C102J1G5CA	C052	100	1000	±5%	08B3109	1.96	1.55
C052K221K2X5CA	C052	200	220	±10%	08B3299	3.19	2.23
STABLE TEMPERATURE CHARCTERISTIC - X7R							
C052K102K2X5CA	C052	50	1000	±10%	08B3276	1.44	1.01
C052K104K5X5CA	C052	50	100000	±10%	08B3280	0.56	0.43
C062C105K5R5CA	C062	50	1000000	±10%	08B3926	2.46	1.99
C052K182K1X5CA	C052	100	1800	±10%	08B3295	1.38	1.31
C052C103J1R5CA	C052	100	10000	±5%	25C0813	0.55	0.42

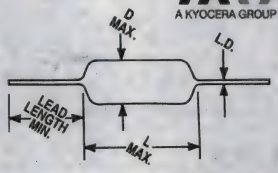
(69041)

SA SERIES DIPPED CERAMIC CAPACITORS - SPINGUARD®

RoHS Compliant Available

AVX A KYOCERA GROUP COMPANY

- Conformally Coated Multilayer Capacitor
- Flame-Retardant Epoxy Case: Conforms to UL Bulletin 492, Par. 280
- Solderable Leads
- Available in C0G (MP0), X7R, Z5U Temperature Coeffiecients
- Dimensions: Lead Length 25.4mm, Lead Diameter (L.D.) .483mm



PERFORMANCE CHARACTERISTICS

Dielectric	NPO	X7R	Z5U
TCR	0 ± 30ppm/°C for values >20pF 0 +120, –40ppm/°C for values ≤20pF	±20%	+30%, –80%
Insulation Resistance	100,000MΩ	100,000MΩ	>10,000MΩ
Operating Temperature	–55°C to +125°C	–55°C to +125°C	–25°C to +85°C

VOLTAGE: 50VDC

Mfg. Part No.	Cap. (uF)	Diel. Char.	Tol.	L (mm)	Dia. (mm)	Tape Cut Stock No.	Price Each 1-9
● SA105A102JAR	0.001	C0G / NP0	± 5%	4.32	2.54	36K5720	0.39
● SA105C103JAR	0.01	X7R	± 5%	4.32	2.54	96M0967	0.55
● SA105C103KAR	0.01	X7R	± 10%	4.32	2.54	75M2748	0.29
● SA105E103MAR	0.01	Z5U	± 20%	4.32	2.54	75M2750	0.30
● SA105C473KAR	0.047	X7R	± 10%	4.32	2.54	96M0968	0.25
● SA105C104KAR	0.1	X7R	± 10%	4.32	2.54	75M2749	0.25
● SA105E104MAR	0.1	Z5U	± 20%	4.32	2.54	75M2751	0.21
● SA105E104ZAR	0.1	Z5U	+80%, -20%	4.32	2.54	75M2752	0.31
● SA115C104KAR	0.1	X7R	± 10%	4.32	3.05	75M2753	0.45
● SA305C224KAR	0.22	X7R	± 10%	7.37	3.81	75M2754	0.91
● SA105E224MAR	0.22	Z5U	± 20%	4.32	2.54	96M0969	0.57
● SA115E334MAR	0.33	Z5U	± 20%	4.32	2.54	96M0970	0.64
● SA305E474MAR	0.47	Z5U	± 20%	7.37	3.81	75M2756	0.74
● SA305E105MAR	1	Z5U	± 20%	7.37	3.81	75M2755	0.97
VOLTAGE: 100VDC							
● SA101A221JAR	0.00022	C0G / NP0	± 5%	4.32	2.54	96M0960	0.35
● SA101A471JAR	0.00047	C0G / NP0	± 5%	4.32	2.54	75M2742	0.35
● SA101C102KAR	0.001	X7R	± 10%	4.32	2.54	75M2743	0.30
● SA101C152KAR	0.0015	X7R	± 10%	4.32	2.54	96M0961	0.32
● SA101C222KAR	0.0022	X7R	± 10%	4.32	2.54	96M0962	0.32
● SA101C332KAR	0.0033	X7R	± 10%	4.32	2.54	96M0963	0.32
● SA101C472KAR	0.0047	X7R	± 10%	4.32	2.54	75M2745	0.31
● SA101C103KAR	0.01	X7R	± 10%	4.32	2.54	75M2744	0.31
● SA101E103MAR	0.01	Z5U	± 20%	4.32	2.54	96M0964	0.37
● SA301C104KAR	0.1	X7R	± 10%	7.37	3.81	96M0971	0.56
VOLTAGE: 200VDC							
● SA102A100JAR	0.00001	C0G / NP0	± 5%	4.32	2.54	96M0965	0.35
● SA102A220JAR	0.000022	C0G / NP0	± 5%	4.32	2.54	75M2747	0.23
● SA102A330JAR	0.000033	C0G / NP0	± 5%	4.32	2.54	96M0966	0.35
● SA102A101JAR	0.0001	C0G / NP0	± 5%	4.32	2.54	75M2746	0.33

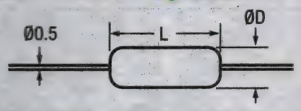
(50572)

(196527)

A SERIES AXIAL CERAMIC CAPACITORS

RoHS Compliant Available

VISHAY



Conformally coated epoxy body. Dissipation factor: 0.1% maximum (C0G); 2.5% maximum (X7R); 4.0% (Z5U). Exhibit no evidence of breakdown for 5 seconds at 25°C to 250% of rated voltage. Operating temperature: -55°C to +125°C (C0G, X7R). Sold in Cut Tape packages, Full Reels are also available. Call for pricing & availability. Most capacitance values are also offered in both 50 VDC & 100 VDC.

DIMENSIONS AND MASS

Case Size	L_{max}	$ØD_{max}$	Mass
15	0.150″ (3.8)	0.100″ (2.5)	0.14g
20	0.200″ (5.0)	0.120″ (3.0)	0.14g

Mfg. Part No.	Voltage (VDC)	Cap. (pF)	Tol. +/- %	Case Size	Stock No.	Price Each 1-99
C0G						
A101J15C0GF5TAA	50	100	±5%	15	05C3803	0.08
A221J15C0GF5TAA	50	220	±5%	15	95C0854	0.03
A471J15C0GF5TAA	50	470	±5%	15	95C0874	0.13
A681J15C0GF5TAA	50	680	±5%	15	95C0884	0.15
A102J15C0GF5TAA	50	1000	±5%	15	05C3804	0.14
A100J15C0GH5TAA	100	10	±5%	15	95C0838	0.13
A180J15C0GH5TAA	100	18	±5%	15	95C0851	0.13
A220J15C0GH5TAA	100	22	±5%	15	95C0853	0.12
A270J15C0GH5TAA	100	27	±10%	15	95C0861	0.12
A470J15C0GH5TAA	100	47	±5%	15	95C0873	0.12
A680J15C0GH5TAA	100	68	±5%	15	97C7831	0.12
A820J15C0GH5TAA	100	82	±5%	15	97C7832	0.04
X7R						
A332K15X7RF5TAA	50	3300	±10%	15	95C0867	0.08
A472K15X7RF5TAA	50	4700	±10%	15	95C0876	0.08
A103K15X7RF5TAA	50	10 000	±10%	15	95C0840	0.07
A153K15X7RF5TAA	50	15 000	±10%	15	95C0850	0.09
A333K15X7RF5TAA	50	33 000	±10%	15	95C0868	0.03
A473K15X7RF5TAA	50	47 000	±10%	15	95C0877	0.10
A104K15X7RF5TAA	50	100 000	±10%	15	95C0843	0.09
A104K15X7RF5UAA	50	100 000	±10%	15	89K8584	0.09
A471K15X7RH5TAA	100	470	±10%	15	95C0875	0.08
A821K15X7RH5TAA	100	820	±10%	15	95C0887	0.08
A102K15X7RH5TAA	100	1000	±10%	15	95C0839	0.09

(73427)

MULTI-LAYER TIGHT TOLERANCE HIGH-Q CAPACITORS - 0402 CASE SIZE

RoHS Compliant Available

JOHANSON TECHNOLOGY

Specifications

- Dielectric Characteristic: NP0
- Temperature Coefficient: 0 ± 30ppm /°C
- Operating Temperature Range: -55 to 125°C

The S-Series capacitors give an ultra-high Q performance, and exhibit NP0 temperature characteristics with excellent RF performance for demanding high frequency applications.

VOLTAGE: 25VDC

Mfg. Part No.	Cap. (pF)	Cap. Tol.	Tape Cut Stock No.	Price Each 1-999
250R07S300GV4T	30	± 2%	41M1519	0.13
250R07S330GV4T	33	± 2%	41M1520	0.13
VOLTAGE: 50VDC				
500R07S0R2AV4T	0.2	± 0.05pF	10M9747	0.05
500R07S0R2BV4T	0.2	± 0.1pF	46W1458	0.03
500R07S0R3AV4T	0.3	± 0.05pF	28M8912	0.05
500R07S0R4AV4T	0.4	± 0.05pF	41M1558	0.05
500R07S0R4BV4T	0.4	± 0.1pF	46W1459	0.03
500R07S0R5AV4T	0.5	± 0.05pF	31K8937	0.05
500R07S0R5BV4T	0.5	± 0.1pF	46W1460	0.03
500R07S0R6AV4T	0.6	± 0.05pF	41M1559	0.07
500R07S0R7AV4T	0.7	± 0.05pF	41M1560	0.08
500R07S0R7BV4T	0.7	± 0.1pF	46W1461	0.04
500R07S0R8AV4T	0.8	± 0.05pF	28M8914	0.08
500R07S0R9BV4T	0.9	± 0.1pF	88K0413	0.04
500R07S1R0BV4T	1	± 0.1pF	21M8630	0.04
500R07S1R1BV4T	1.1	± 0.1pF	41M1561	0.05
500R07S1R2BV4T	1.2	± 0.1pF	41M1562	0.05
500R07S1R3BV4T	1.3	± 0.1pF	41M1563	0.05
500R07S1R5BV4T	1.5	± 0.1pF	69K8383	0.05
500R07S1R8BV4T	1.8	± 0.1pF	92C1561	0.05

➤CONTINUED➤

MULTI-LAYER TIGHT TOLERANCE HIGH-Q CAPACITORS - 0402 CASE SIZE (CONT.)

VOLTAGE: 50VDC

Mfg. Part No.	Cap. (pF)	Cap. Tol.	Tape Cut Stock No.	Price Each 1-999
500R07S2R0BV4T	2	± 0.1pF	41M1571	0.05
500R07S2R2BV4T	2.2	± 0.1pF	41M1572	0.09
500R07S2R4BV4T	2.4	± 0.1pF	41M1573	0.08
500R07S2R7BV4T	2.7	± 0.1pF	41M1574	0.09
500R07S3R0BV4T	3	± 0.1pF	41M1578	0.09
500R07S3R3BV4T	3.3	± 0.1pF	31K8939	0.09
500R07S3R6BV4T	3.6	± 0.1pF	92C1558	0.09
500R07S3R9BV4T	3.9	± 0.1pF	31K8941	0.08
500R07S4R3BV4T	4.3	± 0.1pF	22M5030	0.08
500R07S4R7BV4T	4.7	± 0.1pF	69K8386	0.09
500R07S5R1BV4T	5.1	± 0.1pF	41M1579	0.14
500R07S5R6BV4T	5.6	± 0.1pF	12M7084	0.14
500R07S6R2BV4T	6.2	± 0.1pF	41M1580	0.14
500R07S6R8BV4T	6.8	± 0.1pF	41M1581	0.14
500R07S7R5BV4T	7.5	± 0.1pF	41M1582	0.14
500R07S8R2BV4T	8.2	± 0.1pF	21M6555	0.14
500R07S9R1BV4T	9.1	± 0.1pF	41M1583	0.14
500R07S100GV4T	10	± 2%	41M1564	0.13
500R07S100JV4T	10	± 5%	46W1462	0.06
500R07S110GV4T	11	± 2%	41M1565	0.12
500R07S120GV4T	12	± 2%	41M1566	0.13
500R07S130GV4T	13	± 2%	41M1567	0.12
500R07S150FV4T	15	± 1%	46W1463	0.26
500R07S150GV4T	15	± 2%	41M1568	0.13
500R07S160GV4T	16	± 2%	41M1569	0.12
500R07S180GV4T	18	± 2%	41M1570	0.13
500R07S200GV4T	20	± 2%	41M1575	0.13
500R07S220GV4T	22	± 2%	41M1576	0.13
500R07S270GV4T	27	± 2%	41M1577	0.13

(163996)

MULTI-LAYER TIGHT TOLERANCE HIGH-Q CAPACITORS - 0603 CASE SIZE

RoHS Compliant Available

JOHANSON TECHNOLOGY

Specifications

- Dielectric Characteristic: NP0
- Temperature Coefficient: 0 ± 30ppm /°C
- Operating Temperature Range: -55 to 125°C

The S-Series capacitors give an ultra-high Q performance, and exhibit NP0 temperature characteristics with excellent RF performance for demanding high frequency applications.

VOLTAGE: 250VDC

Mfg. Part No.	Cap. (pF)	Cap. Tol.	Tape Cut Stock No.	Price Each 1-999
251R14S0R2AV4T	0.2	± 0.05pF	41M1521	0.15
251R14S0R3AV4T	0.3	± 0.05pF	41M1522	0.14
251R14S0R4AV4T	0.4	± 0.05pF	41M1523	0.14
251R14S0R5AV4T	0.5	± 0.05pF	41M1524	0.14
251R14S0R6AV4T	0.6	± 0.05pF	41M1525	0.14
251R14S0R7AV4T	0.7	± 0.05pF	41M1526	0.14
251R14S0R8AV4T	0.8	± 0.05pF	73K0582	0.15
251R14S0R9BV4T	0.9	± 0.1pF	41M1527	0.07
251R14S1R0BV4T	1	± 0.1pF	59J7472	0.08
251R14S1R1BV4T	1.1	± 0.1pF	41M1528	0.07
251R14S1R3BV4T	1.3	± 0.1pF	41M1529	0.07
251R14S1R5BV4T	1.5	± 0.1pF	30K5247	0.08
251R14S1R8BV4T	1.8	± 0.1pF	68K9757	0.08
251R14S2R0BV4T	2	± 0.1pF	70K9506	0.07
251R14S2R2BV4T	2.2	± 0.1pF	41M1536	0.10
251R14S2R4AV4T	2.4	± 0.05pF	46W1447	0.40
251R14S2R4BV4T	2.4	± 0.1pF	30K5244	0.10
251R14S2R7BV4T	2.7	± 0.1pF	30K5250	0.10
251R14S3R0BV4T	3	± 0.1pF	41M1537	0.10
251R14S3R3BV4T	3.3	± 0.1pF	41M1538	0.10
251R14S3R6BV4T	3.6	± 0.1pF	41M1539	0.10
251R14S3R9BV4T	3.9	± 0.1pF	30K5246	0.10
251R14S4R3BV4T	4.3	± 0.1pF	41M1542	0.10
251R14S4R7BV4T	4.7	± 0.1pF	73K0585	0.10
251R14S4R7CV4T	4.7	± 0.25pF	46W1450	0.07
251R14S5R1BV4T	5.1	± 0.1pF	10M5950	0.17
251R14S5R6BV4T	5.6	± 0.1pF	41M1545	0.18

➤CONTINUED➤

MULTI-LAYER TIGHT TOLERANCE HIGH-Q CAPACITORS - 0603 CASE SIZE (CONT.)

Mfg. Part No.	Cap. (pF)	Cap. Tol.	Tape Cut Stock No.	Tape Cut Price Each 1-999
251R14S5R6CV4T	5.6	± 0.25pF	46W1452	0.09
251R14S6R2BV4T	6.2	± 0.1pF	41M1547	0.17
251R14S6R8BV4T	6.8	± 0.1pF	41M1548	0.17
251R14S6R8CV4T	6.8	± 0.25pF	46W1453	0.09
251R14S7R5BV4T	7.5	± 0.1pF	41M1550	0.11
251R14S8R2BV4T	8.2	± 0.1pF	41M1551	0.18
251R14S9R1BV4T	9.1	± 0.1pF	41M1553	0.18
251R14S100GV4T	10	± 2%	57K6455	0.19
251R14S100GV4Y	10	± 2%	46W1441	0.58
251R14S110GV4T	11	± 2%	41M1531	0.19
251R14S120GV4T	12	± 2%	04M5143	0.19
251R14S120JV4T	12	± 5%	46W1444	0.11
251R14S130GV4T	13	± 2%	41M1532	0.19
251R14S150GV4T	15	± 2%	41M1533	0.20
251R14S150JV4T	15	± 5%	46W1445	0.11
251R14S160GV4T	16	± 2%	41M1534	0.19
251R14S180GV4T	18	± 2%	41M1535	0.20
251R14S180JV4T	18	± 5%	46W1446	0.11
251R14S200GV4T	20	± 2%	74K3287	0.20
251R14S220GV4T	22	± 2%	57K6458	0.20
251R14S270GV4T	27	± 2%	74K3281	0.22
251R14S270JV4T	27	± 5%	46W1448	0.13
251R14S300GV4T	30	± 2%	88K0409	0.22
251R14S330GV4T	33	± 2%	57K6459	0.24
251R14S330JV4T	33	± 5%	46W1449	0.13
251R14S360GV4T	36	± 2%	41M1540	0.22
251R14S390GV4T	39	± 2%	41M1541	0.14
251R14S430GV4T	43	± 2%	41M1543	0.22
251R14S470GV4T	47	± 2%	41M1544	0.24
251R14S470JV4T	47	± 5%	46W1451	0.13
251R14S560GV4T	56	± 2%	41M1546	0.28
251R14S680GV4T	68	± 2%	41M1549	0.27
251R14S820GV4T	82	± 2%	41M1552	0.29
251R14S101GV4T	100	± 2%	41M1530	0.27
251R14S101JV4T	100	± 5%	46W1443	0.09

(163997)

CERAMIC CAPACITOR KITS

RoHS Compliant Available

JOHANSON DIELECTRICS

A variety of multi-layer chip capacitor sample kits for proto-type design work. Each kit is grouped by type, size, or voltage and contains a selection of popular values and tolerances. The chips are individually packaged in labeled plastic compartments for easy access. The general range of kit contents is described below. Johanson may from time-time adjust actual kit contents based on design demand trends.

GENERAL APPLICATIONS KIT

Mfg. Part No.	Kit Contents	Stock No.	Price Each 1-4
S402DS	1400-Pcs of 1pF to 0.22µF 0402 Size Ceramic Capacitors	32T5043	68.67
S603DS	1400-Pcs of 10pF to 0.22µF 0603 Size Ceramic Capacitors	32T5044	68.67
S805DS	1400-Pcs of 10pF to 0.47µF 0805 Size Ceramic Capacitors	32T5045	68.67

(194827)

TPS SERIES SURFACE MOUNT TANTALUM CAPACITORS

RoHS Compliant Available

AVX A KYOCERA GROUP COMPANY

SMD

- Low ESR
- Designed for Power Supply Applications
- Tolerance: ±10%

TPS series surface mount tantalum capacitors have inherently low ESR and are capable of higher ripple current handling, producing lower ripple voltages, less power and heat dissipation for efficient use of circuit power. Designed for typical power supply applications. Max DF: 6%. Tolerance: ±10% except **type TPSB106M020R1000**, ±20%.

VOLTAGE: 4 VDC

Mfg. Part No.	Cap. (µF)	ESR (mΩ)	Case Size	Tape Cut Stock No.	Tape Cut Price Each 1-9
TPSA476K004R0500	47	0.5	1206	75M9218	1.05
TPSD477K004R0045	470	0.045	2917	64M4890	5.91

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TPS SERIES SURFACE MOUNT TANTALUM CAPACITORS (CONT.)

VOLTAGE: 6.3 VDC

Mfg. Part No.	Cap. (µF)	ESR (mΩ)	Case Size	Tape Cut Stock No.	Tape Cut Price Each 1-9
TPSA106K006R1500	10	1500	1206	84K8346	0.69
TPSR106K006R1000	10	1000	0805	64M4897	0.79
TPSA226K006R0500	22	0.5	1206	75M9217	1.05
TPSA476K006R0800	47	0.8	1206	75M2901	0.60
TPSB686K006R0500	68	500	1210	64M4883	1.31
TPSC107K006R0075	100	0.075	2312	75M2922	1.46
TPSC107K006R0150	100	150	2312	36K3658	1.23
TPSD157K016R0060	150	0.06	2917	10R5884	3.82
TPSC227K006R0070	220	0.07	2312	75M2929	2.08
TPSE477K006R0045	470	0.045	2917	10R5893	3.68
TPSE687K006R0045	680	45	2917	64M4896	10.41
TPSV687K006R0035	680	35	2924	64M4905	9.37
TPSV108M006R0040	1000	40	2924	64M4901	11.30

VOLTAGE: 10 VDC

Mfg. Part No.	Cap. (µF)	ESR (mΩ)	Case Size	Tape Cut Stock No.	Tape Cut Price Each 1-9
TPSA106K010R1800	10	1800	1206	36K3655	0.69
TPST106K010R1000	10	1	1210	96M1071	1.67
TPSA156K010R1000	15	1	1206	35K1283	0.69
TPSB226K010R0400	22	0.4	1210	75M2908	1.31
TPSB226M010R0700	22	0.7	1210	36K3657	1.03
TPST106K010R1000	10	1	1210	96M1071	1.67
TPSC336K010R0150	33	0.15	2312	75M2930	2.28
TPSC336K010R0375	33	375	2312	19C6260	1.14
TPSB476K010R0350	47	350	1210	64M4882	0.85
TPSB476K010R0650	47	650	1210	35K1284	0.75
TPSC476K010R0350	47	0.35	2312	35K1291	1.23
TPSY686K010R0100	68	100	2917	64M4911	3.85
TPSB107M010R0400	100	0.4	1210	10R5878	1.57
TPSC107K010R0075	100	75	2312	84K8358	1.74
TPSC107K010R0100	100	0.1	2312	36K2067	1.32
TPSC107K010R0200	100	200	2312	35K1288	1.31
TPSD107K010R0100	100	0.1	2917	36K3659	1.63
TPSD157K010R0050	150	0.05	2917	89M5401	2.32
TPSD157M010R0050	150	0.05	2917	75M2949	3.44
TPSD157K010R0085	150	0.085	2917	75M9220	2.93
TPSD157K010R0100	150	100	2917	04M4620	2.32
TPSY157K010R0100	150	100	2917	64M4908	3.74
TPSD227K010R0150	220	150	2917	35K1293	2.12
TPSD227M010R0100	220	100	2917	35K1294	3.87
TPSE227K010R0100	220	100	2917	35K1297	2.74
TPSD337K010R0050	330	0.05	2917	75M2963	9.77

VOLTAGE: 16 VDC

Mfg. Part No.	Cap. (µF)	ESR (mΩ)	Case Size	Tape Cut Stock No.	Tape Cut Price Each 1-9
TPSA225K016R1800	2.2	1.8	1206	64M4876	0.92
TPSA335K016R3500	3.3	3.5	1206	75M2898	1.05
TPSB475K016R0800	4.7	0.8	1210	64M4881	0.81
TPSB475K016R1500	4.7	1.5	1210	75M2912	1.31
TPSA685K016R1500	6.8	1.5	1206	64M4877	1.05
TPSB106K016R0500	10	500	1210	10R5877	0.65
TPSC226K016R0375	22	375	2312	35K1290	1.14
TPSC336K016R0300	33	300	2312	36K2068	1.14
TPSC476K016R0350	47	350	2312	35K1292	1.27
TPSD476K016R0080	47	0.08	2917	75M2967	2.01
TPSD476K016R0150	47	150	2917	19C6266	1.79
TPSY686K016R0200	68	0.2	2917	64M4912	3.85
TPSD107K016R0125	100	125	2917	33C4389	2.01
TPSE107K016R0125	100	125	2917	35K1295	6.57
TPSE227K016R0100	220	100	2917	35K5008	2.55
TPSE107K016R0055	100	0.05	2917	10R5891	9.99

VOLTAGE: 20 VDC

Mfg. Part No.	Cap. (µF)	ESR (mΩ)	Case Size	Tape Cut Stock No.	Tape Cut Price Each 1-9
TPSS105K020R6000	1	6	1206	64M4900	1.05
TPSA225K020R3000	2.2	3	1206	75M2896	0.75
TPSB335K020R1300	3.3	1.3	1210	64M4880	1.07
TPSB475K020R1000	4.7	1	1210	75M2913	1.31
TPSB106K020R1000	10	1000	1210	84K8353	0.65
TPSB106M020R1000	10	1000	1210	36K3656	1.03
TPSB226K020R0400	22	0.4	1210	75M2910	0.88
TPSC336K020R0300	33	0.3	2312	96M1068	3.52
TPSE686K020R0125	68	125	2917	35K1301	3.51
TPSV107M020R0085	100	0.085	2924	96M1072	11.80

VOLTAGE: 25 VDC

Mfg. Part No.	Cap. (µF)	ESR (mΩ)	Case Size	Tape Cut Stock No.	Tape Cut Price Each 1-9
TPSA155K025R3000	1.5	3000	1206	35K1282	0.92
TPSC106K025R0500	10	500	2312	35K1285	1.32
TPSC226K025R0275	22	0.275	2312	96M1067	2.70

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TPS SERIES SURFACE MOUNT TANTALUM CAPACITORS (CONT.)

VOLTAGE: 25 VDC

Mfg. Part No.	Cap. (µF)	ESR (mΩ)	Case Size	Tape Cut Stock No.	Price Each 1-9
TPSD226K025R0200	22	200	2917	35K4998	2.69
TPSD336K025R0100	33	0.1	2917	75M2959	2.73
TPSD336K025R0300	33	300	2917	75M2960	3.23
TPSE476M025R0100	47	0.1	2917	96M1070	8.72
TPSB475K025R1500	4.7	1.5	1210	10R5879	0.89
TPSE686K025R0200	68	0.2	2917	10R5894	6.18
VOLTAGE: 35 VDC					
TPSA225K035R1500	2.2	1.5	1206	75M2897	1.05
TPSB475K035R0700	4.7	0.7	1210	75M2915	0.83
TPSC475K035R0600	4.7	600	2312	19C6261	1.37
TPSD106K035R0300	10	0.3	2917	34K0219	2.76
TPSC156K035R0350	15	0.35	2312	75M2926	2.52
TPSD156K035R0300	15	300	2917	36K3660	2.61
TPSD226K035R0200	22	0.2	2917	75M2953	3.50
TPSE226K035R0300	22	0.3	2917	36K3662	3.55
TPSD336K035R0200	33	0.2	2917	64M4889	2.99
TPSE336K035R0100	33	0.1	2917	22J0231	4.19
TPSE476K035R0250	47	250	2917	84K8382	8.46
TPSC156K035R0450	15	0.45	2312	10R5881	2.47
TPSE106K035R0200	10	0.2	2917	10R5890	4.86
VOLTAGE: 50 VDC					
TPSD225K050R1200	2.2	1.2	2917	64M4887	5.09
TPSE106K050R0500	10	0.5	2917	64M4892	8.67
TPSE156M050R0250	15	0.25	2917	64M4894	8.67

(65295)

ST SERIES SuperTan® AXIAL LEADED WET TANTALUM CAPACITORS

RoHS Compliant Available

VISHAY.

Features:
- Standard Tin/lead (Sn/Pb) terminals
- 100% Tin (RoHS compliant) available
- High Capacitance
- Low ESR
- Hermetically Sealed
- Low DCL

Specifications:
- Capacitance range: 10 to 1800µF
- Voltage range: 25 to 125VDC
- Tolerance: ±10%, ±20%
- Temperature range: -55°C to +125°C

VOLTAGE: 25 VDC

Mfg. Part No.	Capacitance (µF)	Tol.	ESR (Ω)	Stock No.	Price Each 1-9
ST120-25T1MI	120	± 20%	1.3	56P4317	66.18
ST560-25T2MI	560	± 20%	0.83	56P4357	79.33
ST560-25T2MX*	560	± 20%	0.83	56P4358	79.33
ST1100-25L2MI	1100	± 20%	0.5	11J5669	107.51
ST1200-25T3KI	1200	± 10%	0.65	56P4318	103.46
ST1200-25T3MI	1200	± 20%	0.65	56P4319	103.46
ST1800-25T4KI	1800	± 10%	0.5	56P4329	119.56
ST1800-25T4MI	1800	± 20%	0.5	56P4330	119.56
VOLTAGE: 30 VDC					
ST100-30T1KI	100	± 10%	1.3	56P4310	66.18
ST100-30T1MI	100	± 20%	1.3	56P4311	66.18
ST470-30T2KI	470	± 10%	0.85	56P4351	79.33
ST470-30T2KIE3	470	± 10%	0.85	56P4352	82.51
ST470-30T2MI	470	± 20%	0.85	50M8313	70.80
ST950-30L2MI	950	± 20%	0.5	56P4367	107.51
ST1000-30T3KI	1000	± 10%	0.7	56P4312	103.46
ST1000-30T3MI	1000	± 20%	0.7	56P4313	103.46
ST1500-30T4MI	1500	± 20%	0.6	56P4328	119.56
VOLTAGE: 50 VDC					
ST68-50T1KI	68	± 10%	1.5	56P4361	66.18
ST68-50T1KIE3	68	± 10%	1.5	56P4362	69.49
ST68-50T1MI	68	± 20%	1.5	70K9608	66.18
ST68-50T1MX*	68	± 20%	1.5	56P4363	66.18
ST220-50T2KI	220	± 10%	0.9	56P4331	79.33
ST220-50T2MI	220	± 20%	0.9	86H3453	70.80
ST450-50L2KI	450	± 10%	0.6	56P4343	107.51
ST450-50L2MI	450	± 20%	0.6	56P4344	107.51
ST470-50T3MI	470	± 20%	0.75	97H3518	103.46
ST470-50T3KI	470	± 10%	0.75	56P4353	103.46
ST470-50T3KIE3	470	± 10%	0.75	56P4354	96.95
ST680-50T4KI	680	± 10%	0.7	56P4364	119.56
ST680-50T4KIE3	680	± 10%	0.7	56P4365	131.18
ST680-50T4MI	680	± 20%	0.7	89K1856	119.56
ST680-50T4MIE3	680	± 20%	0.7	56P4366	125.53

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ST SERIES SuperTan® AXIAL LEADED WET TANTALUM CAPACITORS (CONT.)

VOLTAGE: 60 VDC

Mfg. Part No.	Capacitance (µF)	Tol.	ESR (Ω)	Stock No.	Price Each 1-9
ST47-60T1KI	47	± 10%	2	56P4346	66.18
ST47-60T1KIE3	47	± 10%	2	56P4347	69.49
ST47-60T1MI	47	± 20%	2	56P4348	66.18
ST47-60T1MIE3	47	± 20%	2	56P4349	69.49
ST47-60T1MX*	47	± 20%	2	56P4350	66.18
ST150-60T2KI	150	± 10%	1.1	56P4324	79.33
ST150-60T2KIE3	150	± 10%	1.1	56P4325	83.29
ST150-60T2MI	150	± 20%	1.1	56P4326	79.33
ST150-60T2MIE3	150	± 20%	1.1	56P4327	83.29
ST370-60L2KI	370	± 10%	0.6	56P4340	107.51
ST390-60T3KI	390	± 10%	0.9	56P4341	103.46
ST390-60T3KIE3	390	± 10%	0.9	56P4342	96.95
ST560-60T4KI	560	± 10%	0.8	56P4359	119.56
ST560-60T4MI	560	± 20%	0.8	93K7264	119.56
ST560-60T4KX*	560	± 10%	0.8	56P4360	119.56
VOLTAGE: 75 VDC					
ST33-75T1KI	33	± 10%	2.5	56P4334	66.18
ST33-75T1KIE3	33	± 10%	2.5	56P4335	69.49
ST33-75T1KX*	33	± 10%	2.5	56P4336	66.18
ST33-75T1MI	33	± 20%	2.5	56P4337	66.18
ST33-75T1MX*	33	± 20%	2.5	56P4338	66.18
ST110-75T2KI	110	± 10%	1.3	53M0207	79.33
ST110-75T2KX*	110	± 10%	1.3	56P4314	79.33
ST110-75T2MI	110	± 20%	1.3	56P4315	79.33
ST250-75L2KI	250	± 10%	0.8	56P4332	107.51
ST250-75L2KIE3	250	± 10%	0.8	56P4333	100.75
ST250-75L2MI	250	± 20%	0.8	59J7395	107.51
ST330-75T3KI	330	± 10%	1	53M0212	103.46
ST330-75T3MI	330	± 20%	1	81H0022	92.33
ST330-75T3MIE3	330	± 20%	1	56P4339	96.95
ST470-75T4KI	470	± 10%	0.9	14M4123	119.56
ST470-75T4KIE3	470	± 10%	0.9	56P4355	125.53
ST470-75T4MI	470	± 20%	0.9	30H5017	119.56
ST470-75T4MX*	470	± 20%	0.9	56P4356	119.56
VOLTAGE: 100 VDC					
ST15-100T1MI	15	± 20%	3.5	56P4320	66.18
ST15-100T1MX*	15	± 20%	3.5	56P4321	66.18
ST68-100T2KI	68	± 10%	2.1	73H2101	79.33
ST68-100T2MI	68	± 20%	1.5	54H3962	82.51
ST120-100L2KI	120	± 10%	1	56P4316	107.51
ST120-100L2MI	120	± 20%	1	07P8470	107.51
ST150-100T3MI	150	± 20%	1.6	83H8341	103.46
ST220-100T4KI	220	± 10%	1.2	81H5182	119.56
ST220-100T4MI	220	± 20%	1.2	38C8216	119.56
VOLTAGE: 125 VDC					
ST10-125T1KI	10	± 10%	5.5	56P4304	66.18
ST10-125T1KX*	10	± 10%	5.5	56P4305	66.18
ST10-125T1MI	10	± 20%	5.5	56P4306	66.18
ST10-125T1MX*	10	± 20%	5.5	56P4307	66.18
ST47-125T2KI	47	± 10%	2.3	56P4345	79.33
ST47-125T2MI	47	± 20%	2.3	94H7024	70.80
ST100-125T3MI	100	± 20%	1.8	56P4309	103.46
ST150-125T4KI	150	± 10%	1.6	56P4322	119.56
ST150-125T4MI	150	± 20%	1.6	56P4323	119.56
ST370-60L2MI	370	± 20%	0.6	80K8151	107.51
ST390-60T3MI	390	± 20%	0.9	94H7021	103.46

* Uninsulated
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(109434)

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(196535)

TAJ SERIES SOLID TANTALUM CHIP CAPACITORS

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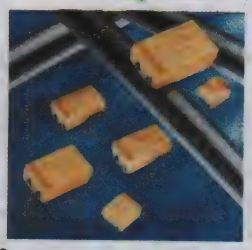

- Applications Include Telecom, Automotive and Computers
- For Case Size Dimensions and Reel Qty., *see TPS Series Capacitors on pages 434-435*

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Mfg. Part No.	Cap. (µF)	Tol.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
0805 CASE SIZE, VOLTAGE: 2.5 VDC					
● TAJP476M002RNJ	47	± 20%	73R9151	0.78	0.73
0805 CASE SIZE, VOLTAGE: 4 VDC					
● TAJP336M004RNJ	33	± 20%	73R9150	0.78	0.73
0805 CASE SIZE, VOLTAGE: 6.3 VDC					
● TAJR225K006RNJ	2.2	± 10%	73R9158	1.15	0.96
● TAJR106M006RNJ	10	± 20%	60R6055	1.13	0.95
● TAJP226M006RNJ	22	± 20%	73R9148	0.78	0.73
0805 CASE SIZE, VOLTAGE: 10 VDC					
● TAJR225K010RNJ	2.2	± 10%	73R9159	1.15	0.96
● TAJP106K010RNJ	10	± 10%	73R9146	1.25	1.05
0805 CASE SIZE, VOLTAGE: 16 VDC					
● TAJR105M016RNJ	1	± 20%	73R9153	1.13	0.95
0805 CASE SIZE, VOLTAGE: 25 VDC					
● TAJR105K025RNJ	1	± 10%	...	...	...
1206 CASE SIZE, VOLTAGE: 2.5 VDC					
● TAJA336K002RNJ	33	± 10%	73R8214	0.69	0.61
● TAJA336M002RNJ	33	± 20%	73R8216	0.69	0.61
1206 CASE SIZE, VOLTAGE: 4 VDC					
● TAJA106K004RNJ	10	± 10%	73R8188	0.63	0.56
● TAJA226M004RNJ	22	± 20%	73R8208	0.68	0.64
● TAJA336K004RNJ	33	± 10%	10R5830	0.47	0.42
● TAJA476K004RNJ	47	± 10%	60R5861	0.53	0.47
1206 CASE SIZE, VOLTAGE: 6.3 VDC					
● TAJA335K006RNJ	3.3	± 10%	73R8209	0.55	0.52
● TAJS475K006RNJ	4.7	± 10%	73R9192	0.76	0.72
● TAJA685K006RNJ	6.8	± 10%	73R8230	0.57	0.54
● TAJS685K006RNJ	6.8	± 10%	73R9198	0.76	0.72
● TAJS685M006RNJ	6.8	± 20%	73R9199	0.76	0.72
● TAJA106K006RNJ	10	± 10%	60R5825	0.44	0.29
● TAJA106K006SNJ	10	± 10%	73R8189	0.52	0.48
● TAJA106M006RNJ	10	± 20%	60R5828	0.73	0.65
● TAJA106M006SNJ	10	± 20%	73R8193	0.47	0.44
● TAJA156K006RNJ	15	± 10%	73R8199	0.49	0.44
● TAJA156M006RNJ	15	± 20%	73R8200	0.57	0.54
● TAJK226M006RNJ	22	± 20%	97M6440	1.24	1.07
● TAJS226M006RNJ	22	± 20%	73R9185	1.23	1.03
● TAJA476K006RNJ	47	± 10%	60R5862	0.48	0.43
● TAJA476M006RNJ	47	± 20%	73R8227	0.91	0.76
1206 CASE SIZE, VOLTAGE: 10 VDC					
● TAJS105M010RNJ	1	± 20%	73R9175	0.76	0.72
● TAJA155K010RNJ	1.5	± 10%	73R8195	0.55	0.52
● TAJA155M010RNJ	1.5	± 20%	73R8196	0.71	0.63
TAJA225K010HNJ	2.2	± 10%	73R8203	2.11	1.77
● TAJA225K010RNJ	2.2	± 10%	60R5836	0.47	0.31
● TAJA225K010SNJ	2.2	± 10%	73R8204	0.21	0.19
● TAJA225M010RNJ	2.2	± 20%	60R5842	0.71	0.63
● TAJS225K010RNJ	2.2	± 10%	73R9181	1.25	1.05
● TAJS225M010RNJ	2.2	± 20%	73R9183	1.23	1.03
● TAJA335M010RNJ	3.3	± 20%	73R8210	0.73	0.65
● TAJA475K010RNJ	4.7	± 10%	60R5856	0.50	0.32
● TAJA475M010SNJ	4.7	± 20%	73R8223	0.47	0.44
● TAJA106K010RNJ	10	± 10%	60R5826	0.44	0.29
● TAJA106K010SNJ	10	± 10%	73R8190	0.50	0.47
● TAJA106M010SNJ	10	± 20%	73R8194	0.52	0.48
● TAJA226K010RNJ	22	± 10%	25R1125	0.40	0.36
● TAJA336K010RNJ	33	± 10%	73R8215	0.58	0.51
● TAJA336M010RNJ	33	± 20%	73R8217	0.68	0.64
1206 CASE SIZE, VOLTAGE: 16 VDC					
● TAJA105K016RNJ	1	± 10%	60R5817	0.44	0.29
● TAJA105K016SNJ	1	± 10%	73R8182	0.30	0.25

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TAJ SERIES SOLID TANTALUM CHIP CAPACITORS (CONT.)

Mfg. Part No.	Cap. (µF)	Tol.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
1206 CASE SIZE, VOLTAGE: 16 VDC					
● TAJA105M016SNJ	1	± 20%	73R8185	0.65	0.60
● TAJA155M016RNJ	1.5	± 20%	73R8197	0.71	0.63
● TAJA225K016RNJ	2.2	± 10%	60R5837	0.47	0.31
TAJA225M016HNJ	2.2	± 20%	73R8205	2.04	1.70
● TAJS225K016RNJ	2.2	± 10%	73R9182	1.25	1.05
● TAJA335M016RNJ	3.3	± 20%	73R8211	0.73	0.65
● TAJA335M016SNJ	3.3	± 20%	73R8212	0.42	0.36
● TAJA475K016SNJ	4.7	± 10%	73R8221	0.55	0.51
● TAJS475M016RNJ	4.7	± 20%	73R9193	0.82	0.77
● TAJA685K016SNJ	6.8	± 10%	09R6157	0.07	0.07
TAJA106K016HNJ	10	± 10%	73R8191	2.09	1.75
● TAJA106K016SNJ	10	± 10%	73R8192	0.62	0.57
● TAJA156M016RNJ	15	± 20%	73R8201	0.71	0.67
1206 CASE SIZE, VOLTAGE: 20 VDC					
● TAJS104M020RNJ	0.1	± 20%	73R9171	0.82	0.77
TAJA105K020HNJ	1	± 10%	73R8183	2.40	2.01
● TAJA105K020RNJ	1	± 10%	60R5818	0.53	0.34
● TAJA105M020RNJ	1	± 20%	60R5822	0.71	0.63
● TAJA105M020SNJ	1	± 20%	73R8186	0.46	0.43
● TAJA155M020RNJ	1.5	± 20%	73R8198	0.56	0.50
● TAJS155K020RNJ	1.5	± 10%	73R9178	0.82	0.77
● TAJS155M020RNJ	1.5	± 20%	73R9179	0.82	0.77
● TAJA225K020RNJ	2.2	± 10%	60R5838	0.56	0.36
● TAJS225M020RNJ	2.2	± 20%	73R9184	0.76	0.72
● TAJA475M020RNJ	4.7	± 20%	73R8225	0.61	0.58
● TAJA685K020RNJ	6.8	± 10%	60R5865	0.63	0.56
1206 CASE SIZE, VOLTAGE: 25 VDC					
● TAJA474M025RNJ	0.47	± 20%	73R8218	1.05	0.88
● TAJS474K025RNJ	0.47	± 10%	73R9188	0.81	0.76
● TAJS474M025RNJ	0.47	± 20%	73R9190	1.23	1.03
● TAJA684K025RNJ	0.68	± 10%	73R8228	0.68	0.60
● TAJS684K025RNJ	0.68	± 10%	73R9195	0.81	0.76
● TAJS684M025RNJ	0.68	± 20%	73R9196	0.81	0.76
● TAJA105K025RNJ	1	± 10%	60R5819	0.53	0.47
● TAJS105M025RNJ	1	± 20%	73R9176	0.81	0.77
● TAJA155K025RNJ	1.5	± 10%	75M2779	0.68	0.60
● TAJA225K025RNJ	2.2	± 10%	60R5839	0.65	0.58
● TAJA225M025RNJ	2.2	± 20%	73R8206	0.68	0.64
● TAJA335M025RNJ	3.3	± 20%	73R8213	0.71	0.67
● TAJA475K025RNJ	4.7	± 10%	73R8222	0.61	0.58
● TAJA475M025RNJ	4.7	± 20%	73R8226	0.71	0.67
1206 CASE SIZE, VOLTAGE: 35 VDC					
● TAJA104M035RNJ	0.1	± 20%	73R8180	0.99	0.83
● TAJS154M035RNJ	0.15	± 20%	73R9177	0.87	0.82
● TAJA224M035RNJ	0.22	± 20%	73R8202	0.99	0.83
● TAJS224M035RNJ	0.22	± 20%	73R9180	1.00	0.94
● TAJA334K035RNJ	0.33	± 10%	60R5847	0.58	0.52
● TAJS334K035RNJ	0.33	± 10%	73R9186	0.87	0.82
● TAJS334M035RNJ	0.33	± 20%	73R9187	0.87	0.82
● TAJS474K035RNJ	0.47	± 10%	73R9189	0.95	0.90
● TAJS474M035RNJ	0.47	± 20%	73R9191	0.95	0.90
● TAJS684M035RNJ	0.68	± 20%	73R9197	0.95	0.90
TAJA105K035HNJ	1	± 10%	73R8184	2.09	1.75
● TAJA105K035RNJ	1	± 10%	60R5820	0.42	0.38
● TAJA225M035RNJ	2.2	± 20%	73R8207	1.02	0.86
1206 CASE SIZE, VOLTAGE: 50 VDC					
● TAJA104M050RNJ	0.1	± 20%	73R8181	1.14	0.96
● TAJA474M050RNJ	0.47	± 20%	73R8219	0.85	0.71
● TAJA105M050RNJ	1	± 20%	73R8187	1.14	0.96
1210 CASE SIZE, VOLTAGE: 2.5 VDC					
● TAJT157M002RNJ	150	± 20%	73R9210	1.39	1.16
1210 CASE SIZE, VOLTAGE: 4 VDC					
● TAJT156K004RNJ	15	± 10%	73R9206	0.84	0.70
● TAJT156M004RNJ	15	± 20%	73R9208	0.84	0.70
● TAJT226K004RNJ	22	± 10%	73R9213	0.84	0.70
● TAJT226M004RNJ	22	± 20%	73R9214	0.84	0.70
● TAJB336M004RNJ	33	± 20%	73R8254	0.84	0.79
● TAJT336K004RNJ	33	± 10%	73R9220	0.84	0.70
● TAJT336M004RNJ	33	± 20%	73R9221	0.84	0.70
● TAJT476M004RNJ	47	± 20%	73R9228	0.84	0.70
● TAJB107M004RNJ	100	± 20%	73R8239	1.05	0.88
● TAJT107M004RNJ	100	± 20%	73R9202	1.43	1.20

➤CONTINUED➤

TAJ SERIES SOLID TANTALUM CHIP CAPACITORS (CONT.)

1210 CASE SIZE, VOLTAGE: 4 VDC

Mfg. Part No.	Cap. (µF)	Tol.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
TAJB157K004RNJ	150	± 10%	73R8243	1.05	0.88
TAJB227M004RNJ	220	± 20%	73R8249	1.05	0.88
1210 CASE SIZE, VOLTAGE: 6.3 VDC					
TAJT685M006RNJ	6.8	± 20%	73R9233	0.85	0.80
TAJB106M006SNJ	10	± 20%	73R8234	0.62	0.58
TAJT156K006RNJ	15	± 10%	73R9207	0.99	0.93
TAJT226M006RNJ	22	± 20%	73R9215	1.46	1.22
TAJB336K006RNJ	33	± 10%	73R8253	0.65	0.58
TAJB336M006RNJ	33	± 20%	73R8255	0.81	0.77
TAJT336M006RNJ	33	± 20%	73R9222	0.99	0.93
TAJT476M006RNJ	47	± 20%	73R9229	1.43	1.20
TAJB686M006RNJ	68	± 20%	73R8269	0.79	0.66
1210 CASE SIZE, VOLTAGE: 10 VDC					
TAJT475M010RNJ	4.7	± 20%	73R9225	0.85	0.80
TAJB685K010HNJ	6.8	± 10%	73R8265	2.17	1.81
TAJT685K010RNJ	6.8	± 10%	73R9231	1.46	1.22
TAJT685M010RNJ	6.8	± 20%	73R9234	0.90	0.84
TAJB106M010SNJ	10	± 20%	73R8235	0.62	0.58
TAJT106M010RNJ	10	± 20%	73R9201	1.43	1.20
TAJT156M010RNJ	15	± 20%	73R9209	0.84	0.70
TAJB226K010SNJ	22	± 10%	73R8245	0.31	0.27
TAJB226M010SNJ	22	± 20%	73R8248	0.74	0.69
TAJT226M010RNJ	22	± 20%	73R9216	0.99	0.93
1210 CASE SIZE, VOLTAGE: 16 VDC					
TAJT335K016RNJ	3.3	± 10%	73R9217	1.46	1.22
TAJT335M016RNJ	3.3	± 20%	73R9218	0.99	0.93
TAJT475K016RNJ	4.7	± 10%	73R9224	0.84	0.70
TAJT475M016RNJ	4.7	± 20%	73R9226	1.43	1.20
TAJB685K016RNJ	6.8	± 10%	73R8266	0.61	0.55
TAJB106K016SNJ	10	± 10%	73R8233	0.65	0.60
TAJB106M016HNJ	10	± 20%	73R8236	2.14	1.79
TAJB106M016SNJ	10	± 20%	73R8237	0.66	0.61
TAJB156M016RNJ	15	± 20%	73R8242	0.81	0.77
1210 CASE SIZE, VOLTAGE: 20 VDC					
TAJT475M020RNJ	4.7	± 20%	73R9227	0.84	0.70
TAJT685K020RNJ	6.8	± 10%	73R9232	0.88	0.74
TAJB226K020SNJ	22	± 10%	73R8246	0.37	0.30
1210 CASE SIZE, VOLTAGE: 25 VDC					
TAJB155K025RNJ	1.5	± 10%	10R5832	0.57	0.54
TAJB155M025RNJ	1.5	± 20%	73R8241	0.68	0.64
TAJT155K025RNJ	1.5	± 10%	73R9203	0.84	0.70
TAJT155M025RNJ	1.5	± 20%	73R9204	0.84	0.70
TAJT225M025RNJ	2.2	± 20%	73R9211	0.91	0.76
TAJB335M025RNJ	3.3	± 20%	73R8251	0.55	0.46
TAJT335M025RNJ	3.3	± 20%	73R9219	1.14	0.96
TAJB106K025RNJ	10	± 10%	94W2826	0.89	0.75
1210 CASE SIZE, VOLTAGE: 35 VDC					
TAJB474M035RNJ	0.47	± 20%	73R8256	0.79	0.66
TAJT474M035RNJ	0.47	± 20%	73R9223	0.84	0.70
TAJT684M035RNJ	0.68	± 20%	73R9230	0.84	0.70
TAJB105K035SNJ	1	± 10%	73R8231	0.30	0.26
TAJB105M035SNJ	1	± 20%	73R8232	0.62	0.58
TAJT105M035RNJ	1	± 20%	73R9200	0.84	0.70
TAJT155M035RNJ	1.5	± 20%	73R9205	1.05	0.88
TAJT225M035RNJ	2.2	± 20%	73R9212	1.11	0.93
TAJB335M035RNJ	3.3	± 20%	73R8252	0.81	0.77
1210 CASE SIZE, VOLTAGE: 50 VDC					
TAJB334K050SNJ	0.33	± 10%	73R8250	0.58	0.48
TAJB474M050RNJ	0.47	± 20%	73R8257	1.07	0.89
2312 CASE SIZE, VOLTAGE: 4 VDC					
TAJW336K004RNJ	33	± 10%	73R9259	1.40	1.16
TAJW336M004RNJ	33	± 20%	73R9261	1.40	1.16
TAJW476K004RNJ	47	± 10%	73R9263	1.30	1.08
TAJW476M004RNJ	47	± 20%	73R9265	1.30	1.08
TAJW686K004RNJ	68	± 10%	73R9267	1.30	1.08
TAJW686M004RNJ	68	± 20%	73R9268	1.30	1.08
TAJC157K004RNJ	150	± 10%	14R8527	1.83	1.54
TAJC337K004RNJ	330	± 10%	97M6424	3.75	3.16
2312 CASE SIZE, VOLTAGE: 6.3 VDC					
TAJC226M006RNJ	22	± 20%	73R9029	1.40	1.18
TAJW226K006RNJ	22	± 10%	73R9254	2.21	1.84

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TAJ SERIES SOLID TANTALUM CHIP CAPACITORS (CONT.)

2312 CASE SIZE, VOLTAGE: 6.3 VDC

Mfg. Part No.	Cap. (µF)	Tol.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
TAJW226M006RNJ	22	± 20%	73R9257	1.40	1.16
TAJC336M006RNJ	33	± 20%	73R9033	1.62	1.36
TAJC476M006RNJ	47	± 20%	73R9041	1.62	1.36
TAJC686M006RNJ	68	± 20%	73R9050	2.01	1.69
TAJC107K006RNJ	100	± 10%	60R5933	0.88	0.83
TAJC107M006RNJ	100	± 20%	73R9018	2.01	1.69
TAJW157M006RNJ	150	± 20%	73R9253	1.62	1.35
TAJF227K006RNJ	220	± 10%	20T0212	2.20	1.83
2312 CASE SIZE, VOLTAGE: 10 VDC					
TAJC156K010RNJ	15	± 10%	73R9020	1.43	1.21
TAJW156K010RNJ	15	± 10%	73R9249	1.40	1.16
TAJW156M010RNJ	15	± 20%	73R9251	1.40	1.16
TAJW226K010HNJ	22	± 10%	73R9255	2.87	2.44
TAJW226K010RNJ	22	± 10%	73R9256	1.40	1.16
TAJW226M010RNJ	22	± 20%	73R9258	1.40	1.16
TAJC336M010RNJ	33	± 20%	73R9034	1.62	1.36
TAJW336K010RNJ	33	± 10%	73R9260	2.21	1.84
TAJW336M010RNJ	33	± 20%	73R9262	2.17	1.81
TAJC686M010RNJ	68	± 20%	73R9051	2.13	1.79
TAJW686M010RNJ	68	± 20%	73R9269	1.30	1.08
TAJW107M010RNJ	100	± 20%	73R9248	2.17	1.81
TAJC157M010RNJ	150	± 20%	73R9024	3.40	2.86
2312 CASE SIZE, VOLTAGE: 16 VDC					
TAJC685M016RNJ	6.8	± 20%	73R9045	1.40	1.18
TAJC106K016RNJ	10	± 10%	60R5925	0.55	0.49
TAJC106K016SNJ	10	± 10%	73R9009	0.86	0.72
TAJC106M016HNJ	10	± 20%	73R9013	3.72	3.13
TAJC106M016SNJ	10	± 20%	73R9014	0.95	0.79
TAJW106K016RNJ	10	± 10%	73R9247	1.16	0.97
TAJC156M016RNJ	15	± 20%	73R9021	1.44	1.21
TAJW156K016RNJ	15	± 10%	73R9250	1.40	1.16
TAJW156M016RNJ	15	± 20%	73R9252	1.40	1.16
TAJC226K016HNJ	22	± 10%	73R9026	1.65	1.39
TAJC226K016RNJ	22	± 10%	60R5942	0.59	0.52
TAJC226M016SNJ	22	± 20%	73R9030	1.09	0.92
TAJC476K016RNJ	47	± 10%	60R5961	1.23	1.15
TAJW476K016RNJ	47	± 10%	...	...	...
TAJW476M016RNJ	47	± 20%	73R9266	2.10	1.75
2312 CASE SIZE, VOLTAGE: 20 VDC					
TAJC475K020RNJ	4.7	± 10%	10R5844	0.89	0.84
TAJC475M020RNJ	4.7	± 20%	73R9038	1.40	1.18
TAJC685M020RNJ	6.8	± 20%	73R9047	1.40	1.18
TAJC336K020RNJ	33	± 10%	60R5953	1.19	1.11
2312 CASE SIZE, VOLTAGE: 25 VDC					
TAJC106K025HNJ	10	± 10%	73R9011	2.21	1.86
TAJC106K025RNJ	10	± 10%	60R5926	0.73	0.69
TAJC106K025SNJ	10	± 10%	73R9012	0.84	0.70
TAJC106M025SNJ	10	± 20%	73R9016	1.09	0.92
TAJC226K025HNJ	22	± 10%	73R9028	2.69	2.26
TAJC226K025RNJ	22	± 10%	60R5944	1.94	1.63
2312 CASE SIZE, VOLTAGE: 35 VDC					
TAJC155K035RNJ	1.5	± 10%	73R9019	1.43	1.21
TAJC335K035RNJ	3.3	± 10%	60R5950	1.22	1.03
TAJC335M035RNJ	3.3	± 20%	10R5843	3.19	2.68
TAJC685M035RNJ	6.8	± 20%	73R9048	1.88	1.58
TAJC106K035RNJ	10	± 10%	60R5927	1.28	1.08
TAJC156M035RNJ	15	± 20%	73R9022	2.47	2.08
2312 CASE SIZE, VOLTAGE: 50 VDC					
TAJC684K050RNJ	0.68	± 10%	97M6427	3.48	2.93
TAJC105K050HNJ	1	± 10%	73R8270	3.23	2.71
TAJC105K050SNJ	1	± 10%	73R8271	0.93	0.88
TAJC105M050HNJ	1	± 20%	73R8272	3.19	2.68
TAJC225K050RNJ	2.2	± 10%	64M4851	2.03	1.71
2917 CASE SIZE, VOLTAGE: 2.5 VDC					
TAJY477K002RNJ	470	± 10%	73R9306	2.07	1.76
TAJY477M002RNJ	470	± 20%	73R9307	2.07	1.76
TAJY687M002RNJ	680	± 20%	73R9313	2.07	1.76
TAJY108M002RNJ	1000	± 20%	73R9281	2.25	1.92
2917 CASE SIZE, VOLTAGE: 4 VDC					
TAJY157K004RNJ	150	± 10%	73R9282	2.07	1.76
TAJY157M004RNJ	150	± 20%	73R9284	2.07	1.76
TAJX227K004RNJ	220	± 10%	73R9273	2.33	1.94

➤CONTINUED➤

TAJ SERIES SOLID TANTALUM CHIP CAPACITORS (CONT.)

2917 CASE SIZE, VOLTAGE: 4 VDC

Mfg. Part No.	Cap. (µF)	Tol.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● TAJX227M004RNJ	220	± 20%	73R9274	2.33	1.94
● TAJY227K004RNJ	220	± 10%	73R9290	2.07	1.76
● TAJY227M004RNJ	220	± 20%	73R9291	2.07	1.76
● TAJX337M004RNJ	330	± 20%	73R9277	1.95	1.66
● TAJY337K004RNJ	330	± 10%	73R9298	2.07	1.76
● TAJY337M004RNJ	330	± 20%	73R9299	2.07	1.76
● TAJD477K004RNJ	470	± 10%	64M4852	2.40	2.02
● TAJY477M004RNJ	470	± 20%	73R9308	2.07	1.76
● TAJD687K004RNJ	680	± 10%	64M4853	3.49	2.93
● TAJY687M004RNJ	680	± 20%	73R9314	2.25	1.92
● TAJD108K004RNJ	1000	± 10%	97M6429	3.10	2.60
● TAJE158K004RNJ	1500	± 10%	97M6434	4.08	3.79

2917 CASE SIZE, VOLTAGE: 6.3 VDC

● TAJD686K006RNJ	68	± 10%	73R9108	3.01	2.54
● TAJD107M006RNJ	100	± 20%	73R9057	2.95	2.49
● TAJY157K006RNJ	150	± 10%	73R9283	2.33	1.94
● TAJY157M006RNJ	150	± 20%	73R9285	2.33	1.94
● TAJE227M006RNJ	220	± 20%	73R9132	3.66	3.07
● TAJX227M006RNJ	220	± 20%	73R9275	2.32	1.93
● TAJY227M006RNJ	220	± 20%	73R9292	2.25	1.92
● TAJD337M006RNJ	330	± 20%	73R9098	2.81	2.36
TAJE337K006HNJ	330	± 10%	73R9138	5.81	5.40
● TAJY337K006RNJ	330	± 10%	53R1776	2.30	1.95
● TAJY337M006RNJ	330	± 20%	73R9300	2.07	1.76
● TAJE687K006RNJ	680	± 10%	97M6436	6.32	5.87

2917 CASE SIZE, VOLTAGE: 10 VDC

● TAJD336M010RNJ	33	± 20%	73R9091	2.43	2.05
● TAJD476M010SNJ	47	± 20%	73R9103	1.64	1.37
● TAJY476K010RNJ	47	± 10%	73R9302	2.07	1.76
● TAJY476M010RNJ	47	± 20%	73R9304	2.07	1.76
● TAJD686K010RNJ	68	± 10%	73R9109	3.01	2.54
● TAJD107K010RNJ	100	± 10%	60R5977	1.30	1.22
● TAJD107M010SNJ	100	± 20%	73R9059	1.99	1.67
● TAJX107K010RNJ	100	± 10%	10R5864	1.99	1.69
● TAJX107M010RNJ	100	± 20%	73R9271	1.95	1.66
● TAJY107K010RNJ	100	± 10%	73R9280	2.30	1.95
● TAJD157M010RNJ	150	± 20%	73R9071	2.24	1.88
● TAJE157K010RNJ	150	± 10%	73R9121	4.07	3.78
● TAJE157M010RNJ	150	± 20%	73R9124	3.99	3.70
● TAJX157M010RNJ	150	± 20%	73R9272	2.10	1.75
● TAJE227M010RNJ	220	± 20%	73R9133	4.63	4.30
● TAJE227M010SNJ	220	± 20%	73R9134	4.78	4.14
● TAJD337K010RNJ	330	± 10%	60R6004	2.87	2.42
● TAJE337M010RNJ	330	± 20%	73R9139	5.87	5.45
● TAJE477M010SNJ	470	± 20%	73R9142	6.30	5.46

2917 CASE SIZE, VOLTAGE: 16 VDC

● TAJY336K016RNJ	33	± 10%	73R9294	2.33	1.94
● TAJD476K016RNJ	47	± 10%	60R6010	1.17	0.99
TAJD476M016HNJ	47	± 20%	73R9104	2.70	2.27
● TAJX476M016RNJ	47	± 20%	73R9278	1.95	1.66
● TAJY476K016RNJ	47	± 10%	73R9303	2.30	1.95
TAJD686K016HNJ	68	± 10%	73R9110	2.97	2.49
● TAJX686M016RNJ	68	± 20%	73R9279	1.95	1.66
TAJD107K016HNJ	100	± 10%	73R9056	2.28	1.92
● TAJE107M016SNJ	100	± 20%	73R9118	4.12	3.57
● TAJY107K016RNJ	100	± 10%	10R5865	2.30	1.95
● TAJE157K016RNJ	150	± 10%	73R9122	4.72	4.39
● TAJY157M016RNJ	150	± 20%	73R9286	2.25	1.92
TAJE227M016HNJ	220	± 20%	73R9135	6.96	6.46
● TAJE227M016SNJ	220	± 20%	73R9136	6.07	5.26

2917 CASE SIZE, VOLTAGE: 20 VDC

● TAJD156K020RNJ	15	± 10%	73R9061	2.12	1.79
TAJD226K020HNJ	22	± 10%	73R9075	2.73	2.30
● TAJD226K020SNJ	22	± 10%	73R9076	0.86	0.81
● TAJD226M020SNJ	22	± 20%	73R9080	1.71	1.43
● TAJD336M020RNJ	33	± 20%	73R9095	2.54	2.14
● TAJX336M020RNJ	33	± 20%	73R9276	1.95	1.66
● TAJY336K020RNJ	33	± 10%	73R9295	2.33	1.94
● TAJY336M020RNJ	33	± 20%	73R9296	2.33	1.94
● TAJY476M020RNJ	47	± 20%	73R9305	2.07	1.76
● TAJY686M020RNJ	68	± 20%	73R9312	2.07	1.76
● TAJE107K020SNJ	100	± 10%	73R9117	6.19	5.37

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TAJ SERIES SOLID TANTALUM CHIP CAPACITORS (CONT.)

2917 CASE SIZE, VOLTAGE: 20 VDC

Mfg. Part No.	Cap. (µF)	Tol.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● TAJE157K020RNJ	150	± 10%	60R6032	3.99	3.70
● TAJE157K020SNJ	150	± 10%	73R9123	4.12	3.57
● TAJE157M020RNJ	150	± 20%	73R9126	3.99	3.70

2917 CASE SIZE, VOLTAGE: 25 VDC

● TAJD106M025SNJ	10	± 20%	73R9053	1.71	1.43
● TAJD156M025RNJ	15	± 20%	73R9065	2.54	2.14
● TAJD226K025SNJ	22	± 10%	73R9077	1.75	1.46
● TAJD226M025SNJ	22	± 20%	73R9081	1.74	1.46
● TAJY226K025RNJ	22	± 10%	73R9287	2.30	1.95
● TAJY226M025RNJ	22	± 20%	73R9288	2.25	1.92
● TAJD336M025RNJ	33	± 20%	73R9097	2.71	2.28
● TAJE336M025RNJ	33	± 20%	73R9137	3.99	3.70
● TAJY336M025RNJ	33	± 20%	73R9297	2.27	1.93
TAJD476K025HNJ	47	± 10%	73R9101	3.92	3.64

2917 CASE SIZE, VOLTAGE: 35 VDC

● TAJD685K035SNJ	6.8	± 10%	73R9106	1.26	1.05
● TAJD685M035RNJ	6.8	± 20%	10R5848	2.59	2.18
● TAJY685K035RNJ	6.8	± 10%	73R9309	2.40	2.00
● TAJY685M035RNJ	6.8	± 20%	73R9310	2.40	2.00
● TAJD106K035RNJ	10	± 10%	60R5972	1.53	1.29
● TAJD106K035SNJ	10	± 10%	73R9052	1.47	1.23
● TAJD106M035SNJ	10	± 20%	73R9054	1.71	1.43
● TAJX106M035RNJ	10	± 20%	73R9270	1.95	1.66
● TAJD156M035RNJ	15	± 20%	73R9066	2.95	2.49
TAJD226K035HNJ	22	± 10%	73R9078	3.57	3.00
● TAJD226K035RNJ	22	± 10%	60R5991	2.44	2.06
● TAJE226K035SNJ	22	± 10%	73R9128	1.95	1.63
● TAJE226M035SNJ	22	± 20%	73R9129	4.12	3.57
● TAJY226M035RNJ	22	± 20%	73R9289	2.25	1.92
● TAJD336K035RNJ	33	± 10%	34R9063	2.16	1.81
● TAJD336K035SNJ	33	± 10%	73R9090	3.12	2.60
TAJE476K035HNJ	47	± 10%	73R9140	7.08	6.58
TAJE476M035HNJ	47	± 20%	73R9141	7.08	6.58

2917 CASE SIZE, VOLTAGE: 50 VDC

TAJD225K050HNJ	2.2	± 10%	73R9073	3.82	3.54
TAJD335K050HNJ	3.3	± 10%	73R9084	4.90	4.55
● TAJD335M050RNJ	3.3	± 20%	73R9086	2.63	2.21
● TAJY335M050RNJ	3.3	± 20%	73R9293	2.25	1.92
TAJD475K050HNJ	4.7	± 10%	73R9099	4.90	4.55
● TAJY475M050RNJ	4.7	± 20%	73R9301	2.25	1.92
TAJD685K050HNJ	6.8	± 10%	73R9107	4.90	4.55
● TAJY685M050RNJ	6.8	± 20%	73R9311	2.25	1.92
● TAJD106M050RNJ	10	± 20%	73R9055	3.74	3.47
TAJE106K050HNJ	10	± 10%	73R9115	9.26	8.60
● TAJE106M050RNJ	10	± 20%	60R6025	8.17	7.59

2924 CASE SIZE, VOLTAGE: 2.5 VDC

● TAJV158M002RNJ	1500	± 20%	73R9238	6.65	6.17

2924 CASE SIZE, VOLTAGE: 4 VDC

● TAJV158M004RNJ	1500	± 20%	73R9239	4.95	4.59

2924 CASE SIZE, VOLTAGE: 6.3 VDC

● TAJV108M006RNJ	1000	± 20%	73R9235	7.63	7.08

2924 CASE SIZE, VOLTAGE: 20 VDC

● TAJV157K020RNJ	150	± 10%	73R9236	6.72	6.24
● TAJV157M020RNJ	150	± 20%	73R9237	4.95	4.59

2924 CASE SIZE, VOLTAGE: 25 VDC

TAJV686M025HNJ	68	± 20%	73R9245	7.74	7.18

2924 CASE SIZE, VOLTAGE: 35 VDC

● TAJV336K035RNJ	33	± 10%	73R9241	6.72	6.24
● TAJV336M035RNJ	33	± 20%	73R9242	6.65	6.17
● TAJV476K035RNJ	47	± 10%	73R9243	6.72	6.24
● TAJV476M035RNJ	47	± 20%	73R9244	6.65	6.17
● TAJV686M035RNJ	68	± 20%	73R9246	6.65	6.17

2924 CASE SIZE, VOLTAGE: 50 VDC

● TAJV226M050RNJ	22	± 20%	73R9240	6.65	6.17

3528-21 CASE SIZE, VOLTAGE: 4 VDC

● TAJB107K004RNJ	100	± 10%	60R5876	0.59	0.56

3528-21 CASE SIZE, VOLTAGE: 6.3 VDC

● TAJB106K006RNJ	10	± 10%	60R5869	0.43	0.39
● TAJB476K006RNJ	47	± 10%	60R5916	0.73	0.65

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TAJ SERIES SOLID TANTALUM CHIP CAPACITORS (CONT.)

Mfg. Part No.	Cap. (µF)	Tol.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
3528-21 CASE SIZE, VOLTAGE: 10 VDC					
TAJB106K010RNJ	10	± 10%	60R5870	0.43	0.39
TAJB336K010RNJ	33	± 10%	60R5903	0.72	0.64
TAJB686K010RNJ	68	± 10%	60R5921	0.74	0.70
3528-21 CASE SIZE, VOLTAGE: 16 VDC					
TAJB475K016RNJ	4.7	± 10%	60R5907	0.43	0.39
TAJB226K016RNJ	22	± 10%	60R5892	0.54	0.48
3528-21 CASE SIZE, VOLTAGE: 20 VDC					
TAJB225K020RNJ	2.2	± 10%	60R5883	0.62	0.55
TAJB106K020RNJ	10	± 10%	60R5871	0.57	0.50
TAJB226K020RNJ	22	± 10%	60R5893	0.65	0.58
3528-21 CASE SIZE, VOLTAGE: 35 VDC					
TAJB105K035RNJ	1	± 10%	60R5866	0.52	0.46
TAJB225K035RNJ	2.2	± 10%	60R5885	0.64	0.61
TAJB475K035RNJ	4.7	± 10%	60R5910	0.69	0.65

(65191)

SOLID TANTALUM SURFACE MOUNT CHIP CAPACITOR WITH BUILT-IN FUSE

RoHS Compliant Available

VISHAY.

Features
- Low ESR
- 100% surge current tested
- High ripple current carrying capability
- Terminations: 100% matte tin, standard
- Molded case available in three case codes
- Compliant terminations
- Meets IEC specification QC300801/US0001 and EIA 535BAAC mechanical and performance requirements
- Moisture sensitivity level 1
- Tolerance: 10%

Applications
- Industrial
- Medical
- Computing
- Telecom infrastructure
- General purpose

Mfg. Part No.	Volt. (V)	Cap. (pF)	ESR (ohm)	Case Style	Stock No.	Price Each 1-9
TF3E107K6R3C0300	6.3	100	0.3	2917 [7343 Metric]	45W5143	6.00
TF3D686K010C0800	10	68	0.8	2917 [7343 Metric]	45W5140	3.29
TF3E686K010C0350	10	68	0.35	2917 [7343 Metric]	45W5152	5.20
TF3D107K010C0400	10	100	0.4	2917 [7343 Metric]	45W5134	2.64
TF3E227K010C0500	10	220	0.5	2917 [7343 Metric]	45W5148	7.22
TF3C226K016C1000	16	22	1	2312 [6032 Metric]	45W5133	1.69
TF3E476K016C0350	16	47	0.35	2917 [7343 Metric]	45W5151	5.37
TF3E107K016C0600	16	100	0.6	2917 [7343 Metric]	45W5142	5.99
TF3C106K020C0800	20	10	0.8	2312 [6032 Metric]	45W5131	2.35
TF3C106K020C2000	20	10	2	2312 [6032 Metric]	45W5132	2.35
TF3D226K020C0350	20	22	0.35	2917 [7343 Metric]	45W5135	2.80
TF3D226K020C1000	20	22	1	2917 [7343 Metric]	45W5136	2.80
TF3E336K020C0900	20	33	0.9	2917 [7343 Metric]	45W5149	5.64
TF3D226K025C0800	25	22	0.8	2917 [7343 Metric]	45W5137	3.09
TF3E226K025C0400	25	22	0.4	2917 [7343 Metric]	45W5146	5.25
TF3E226K025C0900	25	22	0.9	2917 [7343 Metric]	45W5147	5.25
TF3D685K035C1300	35	6.8	1.3	2917 [7343 Metric]	45W5138	3.12
TF3E106K035C1000	35	10	1	2917 [7343 Metric]	45W5141	10.10
TF3E156K035C0500	35	15	0.5	2917 [7343 Metric]	45W5144	5.05
TF3E156K035C0900	35	15	0.9	2917 [7343 Metric]	45W5145	5.05
TF3E475K050C1500	50	4.7	1.5	2917 [7343 Metric]	45W5150	6.62
TF3D685K050C0900	50	6.8	0.9	2917 [7343 Metric]	45W5139	3.57

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F98 SERIES HIGH CAPACITANCE SOLID TANTALUM ELECTROLYTIC CHIP CAPACITORS

RoHS Compliant Available

nichicon

Features
- Frameless Resin-molded Chip
- High Capacitance Series

Specifications
- Tolerance: ± 20%
- Operating Temp. Range: -55°C to +125°C

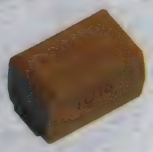
Mfg. Part No.	Cap. (µF)	ESR (mΩ) @100kHz	Size L x W H (mm)	Tape Cut Stock No.	Price Each 1-9
VOLTAGE: 4 VDC					
F980G476MMA	47	8	1.6 x 0.85 x 0.8	84R8913	0.62
F980G107MSA	100	4	2 x 1.25 x 0.8	84R8909	1.24
VOLTAGE: 6.3 VDC					
F980J475MUA	4.7	20	1.1 x 0.6 x 0.55	84R8918	1.47
F980J106MMA	10	6	1.6 x 0.85 x 0.8	70R1051	1.36
F980J106MUA	10	30	1.1 x 0.6 x 0.55	84R8915	1.56
F980J226MMA	22	6	1.6 x 0.85 x 0.8	70R1052	0.91
F980J336MMA	33	8	1.6 x 0.85 x 0.8	84R8916	0.63
F980J476MSA	47	6	2 x 1.25 x 0.8	63R1093	1.23
VOLTAGE: 10 VDC					
F981A106MMA	10	7.5	1.6 x 0.85 x 0.8	70R1053	0.75
F981A336MSA	33	6	2 x 1.25 x 0.8	70R1054	1.42
VOLTAGE: 16 VDC					
F981C105MMA	1	10	1.6 x 0.85 x 0.8	84R8923	0.71
F981C475MMA	4.7	12	1.6 x 0.85 x 0.8	70R1055	0.66
VOLTAGE: 25 VDC					
F981E105MMA	1	10	1.6 x 0.85 x 0.8	84R8926	0.63

(190019)

TPM MULTIANODE TANTALUM ULTRA LOW ESR CAPACITOR

RoHS Compliant Available

AVX
A KYOCERA GROUP COMPANY



Features
- Laser welding of discrete anodes results in highly robust construction
- Hi CV design means all rating are available in standard E size
- Lower profile V case also available
- Advanced MnO_2 technology means equal or lower max ESR than competition
- Lowest ESR, widest voltage range standard size tantalum chip

Applications
- Motherboards
- Servers
- Desktop/Laptop & computer workstations, HDD and storage

AVX's latest addition to the TPS low ESR tantalum chip family is the **TPM Multianode**. The Multianode internal construction allows ultra-low ESR while maintaining standard E case form. The TPM Multianode provides highest ripple capability and lowest output noise and more options for converting Polymer (Tantalum or Aluminum). *Also available in Tape & Reel. Go online or call.*

Mfg. Part No.	Cap. (µF)	ESR (Ω)	Pkg.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
VOLTAGE: 4 VDC						
TPME108K004R0018	1000	0.018	2917 [7343]	59M9603	7.26	6.74
TPME158K004R0015	1500	0.015	2917 [7343]	59M9605	10.89	10.11
VOLTAGE: 6.3 VDC						
TPME477K006R0018	470	0.018	2917 [7343]	59M9615	9.08	8.43
TPME477K006R0023	470	0.023	2917 [7343]	59M9616	10.89	10.11
TPME477K006R0030	470	0.03	2917 [7343]	59M9617	5.74	5.33
TPME687K006R0018	680	0.018	2917 [7343]	59M9622	8.13	7.54
TPME687K006R0023	680	0.023	2917 [7343]	59M9623	5.74	5.33
VOLTAGE: 10 VDC						
TPMD337K010R0035	330	0.035	2917 [7343]	75M9216	5.67	5.26
TPME337K010R0023	330	0.023	2917 [7343]	59M9611	9.99	9.27
TPME337K010R0035	330	0.035	2917 [7343]	59M9612	5.74	5.33
TPME477K010R0023	470	0.023	2917 [7343]	59M9618	7.53	6.99
TPME477K010R0030	470	0.03	2917 [7343]	10R5875	10.89	10.11
VOLTAGE: 16 VDC						
TPME157K016R0040	150	0.04	2917 [7343]	59M9604	10.35	9.61
TPME227K016R0025	220	0.025	2917 [7343]	59M9607	9.93	9.22
TPME227K016R0040	220	0.04	2917 [7343]	59M9608	7.45	6.91
VOLTAGE: 25 VDC						
TPMD476K025R0055	47	0.055	2917 [7343]	68R2168	9.99	9.27
TPME686K025R0045	68	0.045	2917 [7343]	59M9620	10.89	10.11
TPME686K025R0055	68	0.055	2917 [7343]	10R5876	10.89	10.11
VOLTAGE: 35 VDC						
TPME226K035R0060	22	0.06	2917 [7343]	59M9606	10.46	9.71
TPME226K035R0100	22	0.1	2917 [7343]	10R5874	12.71	11.80
TPMD226K035R0070	22	0.07	2917 [7343]	68R2167	11.80	10.96
TPME336K035R0050	33	0.05	2917 [7343]	59M9610	10.46	9.71

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TPM MULTIANODE TANTALUM ULTRA LOW ESR CAPACITOR (CONT.)

VOLTAGE: 35 VDC

Mfg. Part No.	Cap. (µF)	ESR (Ω)	Pkg.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
● TPME476K035R0055	47	0.055	2917 [7343]	59M9613	10.51	9.76
● TPME476K035R0065	47	0.065	2917 [7343]	59M9614	10.12	9.40
VOLTAGE: 50 VDC						
● TPME106K050R0120	10	0.12	2917 [7343]	59M9602	14.52	13.48
● TPMD106M050R0140	10	0.14	2917 [7343]	68R2166	13.62	12.64

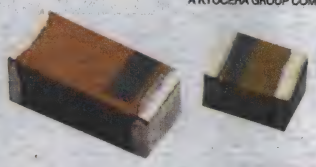
(102141)

TACmicrochip™ STANDARD MICROCHIP

RoHS Compliant Available

AVX A KYOCERA GROUP COMPANY

The world's smallest surface mount Tantalum capacitor, small enough to create space providing room for ideas to grow.
TACmicrochip™ is a major breakthrough in miniaturization without reduction in performance. It offers you the highest energy store in a small case size down to 0402; enhanced high frequency operation through unique ESR performance with temperature and voltage stability is also offered.



VOLTAGE: 4 VDC

Mfg. Part No.	Cap. (µF)	Tol. +/- %	ESR (Ω)	Case Size	Tape Cut Stock No.	Price Each 1-9
● TACR476M004XTA	47	± 20%	5	0805 [2012]	75M2773	3.66
VOLTAGE: 6.3 VDC						
● TACK105M006QTA	1	± 20%	15	0402 [1005]	22K2383	2.34
● TACR106K006XTA	10	± 10%	5	0805 [2012]	75M2768	3.66
● TACL106M006XTA	10	± 20%	6	0603 [1608]	22K2400	2.80
● TACL156M006XTA	15	± 20%	7.5	0603 [1608]	75M2765	2.80
● TACR226M006XTA	22	± 20%	5	0805 [2012]	22K2418	3.66
● TACH226M006XTA	22	± 20%	5	0805 [2012]	10R5819	3.66
● TACR476M006XTA	47	± 20%	5	0805 [2012]	75M2774	3.66
● TACA476M006XTA	47	± 20%	1	1206 [3216]	75M2760	4.00
● TACA107M006XTA	100	± 20%	1	1206 [3216]	10R5817	4.00
VOLTAGE: 10 VDC						
● TACL474K010XTA	0.47	± 10%	7.5	0603 [1608]	10R5822	2.80
● TACK474M010QTA	0.47	± 20%	15	0402 [1005]	22K2390	2.34
● TACK105M010QTA	1	± 20%	15	0402 [1005]	75M2761	4.87
● TACL105K010XTA	1	± 10%	7.5	0603 [1608]	75M2762	2.80
● TACL475M010XTA	4.7	± 20%	6	0603 [1608]	22K2412	2.80
● TACL106M010XTA	10	± 20%	7.5	0603 [1608]	75M2764	2.80
● TACR106K010RTA	10	± 10%	5	0805 [2012]	75M2769	3.31
● TACR106K010XTA	10	± 10%	5	0805 [2012]	16M3841	3.66
● TACR226M010XTA	22	± 20%	5	0805 [2012]	75M2771	3.66
● TACA336M010XTA	33	± 20%	1	1206 [3216]	10R5818	4.00
VOLTAGE: 16 VDC						
● TACL105K016XTA	1	± 10%	7.5	0603 [1608]	75M2763	2.80
● TACL105M016XTA	1	± 20%	7.5	0603 [1608]	22K2394	2.80
● TACL225M016XTA	2.2	± 20%	7.5	0603 [1608]	75M2766	2.80
● TACR106M016XTA	10	± 20%	5	0805 [2012]	54J2823	3.66
VOLTAGE: 20 VDC						
● TACR475M020XTA	4.7	± 20%	5	0805 [2012]	75M2772	3.66
VOLTAGE: 25 VDC						
● TACR105M025XTA	1	± 20%	5	0805 [2012]	75M2767	3.66

(87942)

MCCT SERIES SURFACE MOUNT TANTALUM CAPACITORS

RoHS Compliant Available

multicomp

Features
- General purpose
- High capacitance
- Polarity sensitive

Specifications
- Tolerance: +/-20%
- Capacitance Range: 0.1µF to 47µF
- Temperature Range: -55°C to +85°C

VOLTAGE: 6.3 VDC

Mfg. Part No.	Cap. (µF)	Leakage Current (µA)	ESR (Ω)	Case Size	Stock No.	Price Each 1-9
● MCCTA106M006	10	0.5	6	3216	01M8216	0.19
● MCCTC226M006	22	1.4	2.3	6032	01M8233	0.42
● MCCTC476M006	47	1.9	1.8	6032	01M8236	0.47

➤CONTINUED➤

MCCT SERIES SURFACE MOUNT TANTALUM CAPACITORS (CONT.)

VOLTAGE: 10 VDC

Mfg. Part No.	Cap. (µF)	Leakage Current (µA)	ESR (Ω)	Case Size	Stock No.	Price Each 1-9
● MCCTA475M010	4.7	0.5	5	3216	01M8221	0.22
● MCCTB106M010	10	1	2.5	3528	01M8223	0.29
VOLTAGE: 16 VDC						
● MCCTA105M016	1	0.5	11	3216	87K0501	0.18
● MCCTA225M016	2.2	0.5	6.5	3216	01M8218	0.19
● MCCTB475M016	4.7	0.8	3.5	3528	01M8228	0.28
● MCCTB106M016	10	1.6	2.8	3528	01M8224	0.32
● MCCTC226M016	22	3.5	1.6	6032	01M8234	0.47
● MCCTD336M016	33	5.3	0.9	7343	01M8239	0.85
● MCCTD476M016	47	7.5	0.9	7343	01M8240	0.87
VOLTAGE: 20 VDC						
● MCCTB225M020	2.2	0.5	3.5	3528	01M8225	0.28
● MCCTB335M020	3.3	0.7	3	3528	01M8227	0.28
● MCCTB475M020	4.7	1	3	3528	01M8229	0.29
VOLTAGE: 25 VDC						
● MCCTA105M025	1	0.5	8	3216	01M8215	0.19
● MCCTB225M025	2.2	0.6	4.5	3528	01M8226	0.28
● MCCTC106M025	10	2.5	2.5	6032	01M8231	0.47
VOLTAGE: 35 VDC						
● MCCTA104M035	0.1	0.5	24	3216	01M8214	0.40
● MCCTA474M035	0.47	0.5	12	3216	01M8220	0.66
● MCCTB105M035	1	0.5	6.5	3528	01M8222	0.30
● MCCTC225M035	2.2	0.8	3.5	6032	01M8232	0.43
● MCCTC475M035	4.7	1.6	2.2	6032	01M8235	0.47
● MCCTD685M035	6.8	2.4	1.3	7343	01M8241	0.85
● MCCTD106M035	10	3.5	1	7343	01M8237	0.85

(116547)

MCC81 SERIES SMD TANTALUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

multicomp

Specifications:
- Life: 1000 hours at 85°C
- Operating temperature: -55°C to +125°C
- Working Voltage: 6.3 to 50VDC
- Tolerance: ±20%; ±10%

Features:
- General purpose surface mount type
- Compact size and wide CV range
- High solderabillity and stable characteristics for soldering

DIMENSIONS mm (in)

Case Size	Length	Width	Height
A	3.2 (0.126)	1.6 (0.063)	1.6 (0.063)
B	3.5 (0.137)	2.8 (0.11)	1.9 (0.075)
C	6 (0.236)	3.2 (0.126)	2.5 (0.098)
D	7.3 (0.287)	4.3 (0.169)	2.8 (0.11)

VOLTAGE: 6.3 VDC

Mfg. Part No.	Cap. (µF)	Tol. +/- %	Case Size	Stock No.	Price Each 1-249	Price Each 250-499	Price Each 500-999
● MCC81-B6R3225M	2.2	± 20%	A	58T0925	0.19	0.15	0.13
● MCC81-B6R3335M	3.3	± 20%	A	58T0928	0.19	0.15	0.13
● MCC81-B6R3475K	4.7	± 10%	A	58T0930	0.20	0.15	0.14
● MCC81-B6R3475M	4.7	± 20%	A	58T0931	0.19	0.15	0.13
● MCC81-C6R3106M	10	± 20%	B	58T0983	0.22	0.17	0.15
● MCC81-C6R3106K	10	± 10%	B	58T0982	0.23	0.18	0.16
● MCC81-B6R3106M	10	± 20%	A	58T0924	0.19	0.15	0.13
● MCC81-B6R3226M	22	± 20%	A	58T0927	0.20	0.15	0.14
● MCC81-D6R3226K	22	± 10%	C	58T1050	0.40	0.31	0.27
● MCC81-C6R3226M	22	± 20%	B	58T0987	0.24	0.18	0.16
● MCC81-B6R3226K	22	± 10%	A	58T0926	0.21	0.16	0.14
● MCC81-C6R3226K	22	± 10%	B	58T0986	0.25	0.19	0.17
● MCC81-B6R3336K	33	± 10%	A	58T0929	0.28	0.21	0.19
● MCC81-C6R3336M	33	± 20%	B	58T0988	0.28	0.21	0.19
● MCC81-C6R3476K	47	± 10%	B	58T0989	0.36	0.28	0.25
● MCC81-C6R3476M	47	± 20%	B	58T0990	0.35	0.26	0.24
● MCC81-D6R3476K	47	± 10%	C	58T1053	0.46	0.35	0.31
● MCC81-B6R3476K	47	± 10%	A	58T0932	0.36	0.28	0.25
● MCC81-E6R3686K	68	± 10%	D	58T1108	0.94	0.71	0.64
● MCC81-C6R3686K	68	± 10%	B	58T0991	0.44	0.33	0.29
● MCC81-D6R3107K	100	± 10%	C	58T1048	0.53	0.40	0.36
● MCC81-C6R3107M	100	± 20%	B	58T0985	0.47	0.36	0.32
● MCC81-C6R3107K	100	± 10%	B	58T0984	0.49	0.37	0.33
● MCC81-E6R3107K	100	± 10%	D	58T1104	0.84	0.65	0.59
● MCC81-D6R3157K	150	± 10%	C	58T1049	0.63	0.48	0.43
● MCC81-E6R3227M	220	± 20%	D	58T1105	0.94	0.73	0.66
● MCC81-D6R3227M	220	± 20%	C	58T1052	0.69	0.52	0.47

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MCC81 SERIES SMD TANTALUM ELECTROLYTIC CAPACITORS (CONT.)

Mfg. Part No.	Cap. (µF)	Tol. +/- %	Case Size	Stock No.	Price Each 1-249	250-499	500-999
MCC81-D6R3227K	220	± 10%	C	58T1051	0.73	0.55	0.49
MCC81-E6R3447M	440	± 20%	D	58T1106	1.18	0.92	0.83
MCC81-E6R3477K	470	± 10%	D	58T1107	1.23	0.95	0.86
VOLTAGE: 10 VDC							
MCC81-B010225M	2.2	± 20%	A	58T0937	0.19	0.15	0.13
MCC81-B010335K	3.3	± 10%	A	58T0940	0.20	0.15	0.14
MCC81-B010335M	3.3	± 20%	A	58T0941	0.19	0.15	0.13
MCC81-B010475K	4.7	± 10%	A	58T0942	0.20	0.15	0.14
MCC81-B010475M	4.7	± 20%	A	58T0943	0.19	0.15	0.13
MCC81-C010685M	6.8	± 20%	B	58T1003	0.22	0.17	0.15
MCC81-B010685K	6.8	± 10%	A	58T0944	0.20	0.15	0.14
MCC81-C010685K	6.8	± 10%	B	58T1002	0.23	0.18	0.16
MCC81-B010106K	10	± 10%	A	58T0933	0.22	0.16	0.15
MCC81-C010106K	10	± 10%	B	58T0992	0.25	0.19	0.17
MCC81-C010106M	10	± 20%	B	58T0993	0.24	0.18	0.16
MCC81-B010106M	10	± 20%	A	58T0934	0.20	0.15	0.14
MCC81-B010156K	15	± 10%	A	58T0935	0.23	0.17	0.15
MCC81-C010156M	15	± 20%	B	58T0995	0.23	0.18	0.16
MCC81-B010156M	15	± 20%	A	58T0936	0.22	0.16	0.15
MCC81-D010156M	15	± 20%	C	58T1057	0.38	0.29	0.26
MCC81-D010156K	15	± 10%	C	58T1056	0.40	0.31	0.27
MCC81-C010156K	15	± 10%	B	58T0994	0.25	0.19	0.17
MCC81-C010226M	22	± 20%	B	58T0997	0.27	0.21	0.19
MCC81-B010226M	22	± 20%	A	58T0939	0.24	0.18	0.16
MCC81-D010226K	22	± 10%	C	58T1058	0.40	0.31	0.27
MCC81-B010226K	22	± 10%	A	58T0938	0.25	0.19	0.17
MCC81-C010226K	22	± 10%	B	58T0996	0.29	0.22	0.19
MCC81-D010226M	22	± 20%	C	58T1059	0.38	0.29	0.26
MCC81-C010336K	33	± 10%	B	58T0998	0.34	0.26	0.23
MCC81-D010336K	33	± 10%	C	58T1060	0.44	0.33	0.29
MCC81-C010336M	33	± 20%	B	58T0999	0.32	0.24	0.22
MCC81-E010336M	33	± 20%	D	58T1115	0.83	0.62	0.56
MCC81-E010336K	33	± 10%	D	58T1114	0.87	0.65	0.58
MCC81-D010336M	33	± 20%	C	58T1061	0.42	0.31	0.28
MCC81-C010476M	47	± 20%	B	58T1001	0.42	0.31	0.28
MCC81-D010476K	47	± 10%	C	58T1062	0.49	0.37	0.33
MCC81-C010476K	47	± 10%	B	58T1000	0.44	0.33	0.29
MCC81-E010476M	47	± 20%	D	58T1117	0.83	0.62	0.56
MCC81-E010476K	47	± 10%	D	58T1116	0.87	0.65	0.58
MCC81-D010476M	47	± 20%	C	58T1063	0.47	0.36	0.32
MCC81-E010686M	68	± 20%	D	58T1119	0.90	0.68	0.60
MCC81-E010686K	68	± 10%	D	58T1118	0.94	0.71	0.64
MCC81-D010686K	68	± 10%	C	58T1064	0.57	0.43	0.39
MCC81-C010686K	68	± 10%	B	58T1004	0.53	0.40	0.36
MCC81-D010107M	100	± 20%	C	58T1055	0.60	0.45	0.40
MCC81-E010107K	100	± 10%	D	58T1109	0.84	0.65	0.59
MCC81-E010107M	100	± 20%	D	58T1110	0.81	0.63	0.57
MCC81-D010107K	100	± 10%	C	58T1054	0.63	0.48	0.43
MCC81-E010157K	150	± 10%	D	58T1111	0.99	0.77	0.69
MCC81-E010227K	220	± 10%	D	58T1112	1.13	0.88	0.80
MCC81-E010227M	220	± 20%	D	58T1113	1.07	0.83	0.75
VOLTAGE: 16 VDC							
MCC81-B020105K	1	± 10%	A	58T0958	0.20	0.15	0.14
MCC81-B016105K	1	± 10%	A	58T0945	0.20	0.15	0.14
MCC81-B020105M	1	± 20%	A	58T0959	0.19	0.15	0.13
MCC81-B016105M	1	± 20%	A	58T0946	0.19	0.15	0.13
MCC81-B016155K	1.5	± 10%	A	58T0949	0.20	0.15	0.14
MCC81-B020155K	1.5	± 10%	A	58T0960	0.21	0.16	0.14
MCC81-B016155M	1.5	± 20%	A	58T0950	0.19	0.15	0.13
MCC81-B016225K	2.2	± 10%	A	58T0951	0.20	0.15	0.14
MCC81-B020225K	2.2	± 10%	A	58T0961	0.21	0.16	0.14
MCC81-C016225M	2.2	± 20%	B	58T1009	0.20	0.16	0.14
MCC81-C020225M	2.2	± 20%	B	58T1021	0.22	0.17	0.15
MCC81-B020225M	2.2	± 20%	A	58T0962	0.20	0.15	0.14
MCC81-C016225K	2.2	± 10%	B	58T1008	0.21	0.16	0.14
MCC81-C020225K	2.2	± 10%	B	58T1020	0.23	0.18	0.16
MCC81-B016225M	2.2	± 20%	A	58T0952	0.19	0.15	0.13
MCC81-B016335K	3.3	± 10%	A	58T0953	0.20	0.15	0.14
MCC81-B020335J	3.3	± 5%	A	58T0963	0.23	0.17	0.15
MCC81-C020335K	3.3	± 10%	B	58T1022	0.25	0.19	0.17
MCC81-C016335M	3.3	± 20%	B	58T1013	0.21	0.16	0.14
MCC81-C016335K	3.3	± 10%	B	58T1012	0.22	0.17	0.15
MCC81-B016335M	3.3	± 20%	A	58T0954	0.19	0.15	0.13

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MCC81 SERIES SMD TANTALUM ELECTROLYTIC CAPACITORS (CONT.)

Mfg. Part No.	Cap. (µF)	Tol. +/- %	Case Size	Stock No.	Price Each 1-249	250-499	500-999
VOLTAGE: 16 VDC							
MCC81-C020335M	3.3	± 20%	B	58T1023	0.24	0.18	0.16
MCC81-B016475K	4.7	± 10%	A	58T0955	0.21	0.16	0.14
MCC81-B020475M	4.7	± 20%	A	58T0965	0.23	0.18	0.16
MCC81-C020475K	4.7	± 10%	B	58T1024	0.27	0.21	0.18
MCC81-D020475M	4.7	± 20%	C	58T1083	0.38	0.29	0.26
MCC81-C016475M	4.7	± 20%	B	58T1015	0.22	0.17	0.15
MCC81-D020475K	4.7	± 10%	C	58T1082	0.40	0.31	0.27
MCC81-C020475M	4.7	± 20%	B	58T1025	0.26	0.20	0.18
MCC81-B016475M	4.7	± 20%	A	58T0956	0.20	0.15	0.14
MCC81-B020475K	4.7	± 10%	A	58T0964	0.25	0.19	0.17
MCC81-C016475K	4.7	± 10%	B	58T1014	0.23	0.18	0.16
MCC81-C016685K	6.8	± 10%	B	58T1016	0.25	0.19	0.17
MCC81-C020685K	6.8	± 10%	B	58T1026	0.30	0.23	0.20
MCC81-D020685K	6.8	± 10%	C	58T1084	0.40	0.31	0.27
MCC81-B016685K	6.8	± 10%	A	58T0957	0.21	0.16	0.14
MCC81-C016685M	6.8	± 20%	B	58T1017	0.24	0.18	0.16
MCC81-D016106M	10	± 20%	C	58T1066	0.38	0.29	0.26
MCC81-D016106K	10	± 10%	C	58T1065	0.40	0.31	0.27
MCC81-B016106M	10	± 20%	A	58T0948	0.24	0.18	0.16
MCC81-C020106K	10	± 10%	B	58T1018	0.32	0.24	0.22
MCC81-C016106K	10	± 10%	B	58T1005	0.26	0.20	0.18
MCC81-C020106M	10	± 20%	B	58T1019	0.31	0.23	0.21
MCC81-C016106M	10	± 20%	B	58T1006	0.25	0.19	0.17
MCC81-B016106K	10	± 10%	A	58T0947	0.25	0.19	0.17
MCC81-D020106K	10	± 10%	C	58T1075	0.42	0.31	0.28
MCC81-D020106M	10	± 20%	C	58T1076	0.40	0.30	0.27
MCC81-D016156M	15	± 20%	C	58T1068	0.40	0.30	0.27
MCC81-C016156K	15	± 10%	B	58T1007	0.29	0.22	0.20
MCC81-D020156K	15	± 10%	C	58T1077	0.44	0.33	0.29
MCC81-D016156K	15	± 10%	C	58T1067	0.42	0.31	0.28
MCC81-D016226M	22	± 20%	C	58T1070	0.42	0.31	0.28
MCC81-D020226M	22	± 20%	C	58T1079	0.47	0.36	0.32
MCC81-D016226K	22	± 10%	C	58T1069	0.44	0.33	0.29
MCC81-E020226K	22	± 10%	D	58T1130	0.94	0.71	0.64
MCC81-E016226K	22	± 10%	D	58T1122	0.87	0.65	0.58
MCC81-E016226M	22	± 20%	D	58T1123	0.83	0.62	0.56
MCC81-E020226M	22	± 20%	D	58T1131	0.90	0.68	0.60
MCC81-C016226K	22	± 10%	B	58T1010	0.34	0.26	0.23
MCC81-D020226K	22	± 10%	C	58T1078	0.49	0.37	0.33
MCC81-C016226M	22	± 20%	B	58T1011	0.32	0.24	0.22
MCC81-E016336M	33	± 20%	D	58T1125	0.87	0.65	0.58
MCC81-D020336K	33	± 10%	C	58T1080	0.53	0.40	0.36
MCC81-D016336K	33	± 10%	C	58T1071	0.49	0.37	0.33
MCC81-E020336M	33	± 20%	D	58T1133	0.80	0.62	0.56
MCC81-D020336M	33	± 20%	C	58T1081	0.51	0.38	0.34
MCC81-E016336K	33	± 10%	D	58T1124	0.92	0.70	0.62
MCC81-D016336M	33	± 20%	C	58T1072	0.47	0.36	0.32
MCC81-E020336K	33	± 10%	D	58T1132	0.84	0.65	0.59
MCC81-D016476M	47	± 20%	C	58T1074	0.53	0.40	0.36
MCC81-E020476K	47	± 10%	D	58T1134	0.93	0.72	0.65
MCC81-E020476M	47	± 20%	D	58T1135	0.87	0.67	0.61
MCC81-E016476M	47	± 20%	D	58T1127	0.88	0.67	0.60
MCC81-D016476K	47	± 10%	C	58T1073	0.59	0.45	0.40
MCC81-E016476K	47	± 10%	D	58T1126	0.93	0.70	0.63
MCC81-E016686K	68	± 10%	D	58T1128	0.84	0.65	0.59
MCC81-E020686K	68	± 10%	D	58T1136	0.99	0.77	0.69
MCC81-E016686M	68	± 20%	D	58T1129	0.80	0.62	0.56
MCC81-E016107K	100	± 10%	D	58T1120	0.91	0.70	0.64
MCC81-E016107M	100	± 20%	D	58T1121	0.88	0.68	0.62
VOLTAGE: 25 VDC							
MCC81-B025474K	0.47	± 10%	A	58T0971	0.20	0.15	0.14
MCC81-B025105M	1	± 20%	A	58T0967	0.19	0.15	0.13
MCC81-B025105K	1	± 10%	A	58T0966	0.20	0.15	0.14
MCC81-C025155K	1.5	± 10%	B	58T1028	0.25	0.19	0.17
MCC81-B025155K	1.5	± 10%	A	58T0968	0.22	0.17	0.15
MCC81-C025225M	2.2	± 20%	B	58T1030	0.25	0.19	0.17
MCC81-B025225K	2.2	± 10%	A	58T0969	0.23	0.17	0.15
MCC81-C025225K	2.2	± 10%	B	58T1029	0.26	0.20	0.18
MCC81-C025335M	3.3	± 20%	B	58T1032	0.26	0.20	0.18
MCC81-D025335K	3.3	± 10%	C	58T1089	0.40	0.31	0.27
MCC81-B025335K	3.3	± 10%	A	58T0970	0.25	0.19	0.17
MCC81-C025335K	3.3	± 10%	B	58T1031	0.28	0.21	0.19

CONTINUED

MCC81 SERIES SMD TANTALUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 25 VDC

Mfg. Part No.	Cap. (µF)	Tol. +/- %	Case Size	Stock No.	Price Each 1-249	250-499	500-999
● MCC81-C025475K	4.7	± 10%	B	58T1033	0.29	0.22	0.20
● MCC81-D025475K	4.7	± 10%	C	58T1090	0.42	0.31	0.28
● MCC81-D025475M	4.7	± 20%	C	58T1091	0.42	0.31	0.28
● MCC81-C025475M	4.7	± 20%	B	58T1034	0.28	0.21	0.19
● MCC81-C025685M	6.8	± 20%	B	58T1036	0.31	0.24	0.21
● MCC81-D025685K	6.8	± 10%	C	58T1092	0.44	0.33	0.29
● MCC81-C025685K	6.8	± 10%	B	58T1035	0.33	0.25	0.22
● MCC81-D025106M	10	± 20%	C	58T1086	0.47	0.36	0.32
● MCC81-E025106M	10	± 20%	D	58T1137	0.83	0.62	0.56
● MCC81-C025106K	10	± 10%	B	58T1027	0.40	0.31	0.27
● MCC81-D025106K	10	± 10%	C	58T1085	0.49	0.37	0.33
● MCC81-E025156K	15	± 10%	D	58T1138	0.94	0.71	0.64
● MCC81-E025226M	22	± 20%	D	58T1139	0.81	0.62	0.57
● MCC81-D025226K	22	± 10%	C	58T1087	0.81	0.61	0.54
● MCC81-D025226M	22	± 20%	C	58T1088	0.75	0.57	0.51
● MCC81-E025336K	33	± 10%	D	58T1140	0.99	0.77	0.69
● MCC81-E025476M	47	± 20%	D	58T1142	1.22	0.94	0.85
● MCC81-E025476K	47	± 10%	D	58T1141	1.26	0.98	0.89
VOLTAGE: 35 VDC							
● MCC81-B035104K	0.1	± 10%	A	58T0974	0.24	0.18	0.16
● MCC81-B035224K	0.22	± 10%	A	58T0978	0.24	0.18	0.16
● MCC81-B035334K	0.33	± 10%	A	58T0979	0.23	0.17	0.15
● MCC81-C035474K	0.47	± 10%	B	58T1047	0.25	0.19	0.17
● MCC81-B035474K	0.47	± 10%	A	58T0980	0.23	0.17	0.15
● MCC81-C035105K	1	± 10%	B	58T1040	0.26	0.20	0.18
● MCC81-C035105M	1	± 20%	B	58T1041	0.25	0.19	0.17
● MCC81-B035105K	1	± 10%	A	58T0975	0.23	0.17	0.15
● MCC81-B035105M	1	± 20%	A	58T0976	0.22	0.16	0.15
● MCC81-B035155K	1.5	± 10%	A	58T0977	0.25	0.19	0.17
● MCC81-C035155K	1.5	± 10%	B	58T1042	0.28	0.21	0.19
● MCC81-D035225M	2.2	± 20%	C	58T1099	0.47	0.36	0.32
● MCC81-C035225M	2.2	± 20%	B	58T1044	0.27	0.21	0.19
● MCC81-D035225K	2.2	± 10%	C	58T1098	0.49	0.37	0.33
● MCC81-C035225K	2.2	± 10%	B	58T1043	0.29	0.22	0.19
● MCC81-C035335K	3.3	± 10%	B	58T1045	0.33	0.25	0.22
● MCC81-C035335M	3.3	± 20%	B	58T1046	0.31	0.24	0.21
● MCC81-D035335M	3.3	± 20%	C	58T1101	0.51	0.38	0.34
● MCC81-D035335K	3.3	± 10%	C	58T1100	0.53	0.40	0.36
● MCC81-D035475M	4.7	± 20%	C	58T1102	0.54	0.41	0.37
● MCC81-E035475K	4.7	± 10%	D	58T1148	0.94	0.71	0.64
● MCC81-E035475M	4.7	± 20%	D	58T1149	0.90	0.68	0.60
● MCC81-E035685K	6.8	± 10%	D	58T1150	0.84	0.65	0.59
● MCC81-B035685K	6.8	± 10%	A	58T0981	0.23	0.17	0.15
● MCC81-E035685M	6.8	± 20%	D	58T1151	0.80	0.62	0.56
● MCC81-D035685K	6.8	± 10%	C	58T1103	0.60	0.45	0.40
● MCC81-E035106M	10	± 20%	D	58T1145	0.88	0.68	0.62
● MCC81-D035106M	10	± 20%	C	58T1097	0.77	0.58	0.52
● MCC81-D035106K	10	± 10%	C	58T1096	0.79	0.59	0.53
● MCC81-E035156M	15	± 20%	D	58T1147	0.94	0.73	0.66
● MCC81-E035156K	15	± 10%	D	58T1146	0.99	0.77	0.69
VOLTAGE: 50 VDC							
● MCC81-B050104K	0.1	± 10%	A	58T0972	0.33	0.25	0.22
● MCC81-B050224K	0.22	± 10%	A	58T0973	0.33	0.25	0.22
● MCC81-C050334K	0.33	± 10%	B	58T1038	0.36	0.28	0.25
● MCC81-C050474K	0.47	± 10%	B	58T1039	0.36	0.28	0.25
● MCC81-D050105K	1	± 10%	C	58T1093	0.53	0.40	0.36
● MCC81-D050105M	1	± 20%	C	58T1094	0.51	0.38	0.34
● MCC81-C050105K	1	± 10%	B	58T1037	0.42	0.31	0.28
● MCC81-D050155K	1.5	± 10%	C	58T1095	0.53	0.40	0.36
● MCC81-E050225K	2.2	± 10%	D	58T1143	1.07	0.83	0.75
● MCC81-E050335K	3.3	± 10%	D	58T1144	1.13	0.88	0.80

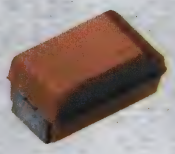
(202253)

T491 SERIES - PRECISION MOLDED CHIP

RoHS Compliant Available

The Capacitance Company KEMET CHARGED.

SMD



Features
- Meets or Exceeds EIA Standard 535BAAC
- Taped and Reeled per EIA 481-1
- Laser-marked Case
- 100% Surge current test on C, D, E, U, V, X sizes
- Halogen Free Epoxy

Specifications
- Capacitance Range: 0.1 µF to 1000µ F
- Voltage Range: 2.5-50 VDC
- Operating Temperature: -55°C to +125°C
- Low Profile Case Sizes Available; *go online or call.*

STANDARD T491 DIMENSIONS

Case Size	EIA	L	W	H
A	3216-18	0.126″ (3.20)	0.063″ (1.60)	0.063″ (1.60)
B	3528-21	0.138″ (3.50)	0.110″ (2.80)	0.075″ (1.90)
C	6032-28	0.236″ (6.00)	0.126″ (3.20)	0.098″ (2.50)
D	7343-31	0.287″ (7.30)	0.169″ (4.29)	0.110″ (2.80)
X	7343-43	0.287″ (7.30)	0.169″ (4.29)	0.157″ (4.00)
E	7260-38	0.287″ (7.30)	0.236″ (6.00)	0.142″ (3.60)

VOLTAGE: 6/6.3 VDC

Mfg. Part No.	Cap. (uF)	Tol. +/- %	Case Size	Tape Cut Stock No.	Price Each 1-9	10-49
● T491A475K006AT	4.7	± 10%	A	57K1702	0.36	0.32
● T491A106K006AT	10	± 10%	A	57K1634	0.26	0.23
● T491B106K006AT	10	± 10%	B	57K1737	0.41	0.30
● T491A226K006AT	22	± 10%	A	57K1670	0.30	0.26
● T491B226K006AT	22	± 10%	B	57K1779	0.35	0.25
● T491C226K006AT	22	± 10%	C	57K1886	0.61	0.58
● T491B336K006AT	33	± 10%	B	57K1799	0.48	0.34
● T491A476M006AT	47	± 20%	A	57K1713	0.63	0.52
● T491B476K006AT	47	± 10%	B	57K1818	0.35	0.29
● T491C476K006AT	47	± 10%	C	57K1923	0.68	0.64
● T491A686K006AT	68	± 10%	A	12N2771	0.63	0.52
● T491D686K006AT	68	± 10%	D	57K2040	1.04	0.89
● T491B107K006AT	100	± 10%	B	57K1748	0.50	0.42
● T491C107K006AT	100	± 10%	C	57K1856	0.70	0.59
● T491D227K006AT	220	± 10%	D	57K1993	1.22	1.00
● T491D337K006AT	330	± 10%	D	57K2011	1.39	1.14
● T491D477M006AT	470	± 20%	D	57K2032	3.39	3.19
VOLTAGE: 10 VDC						
● T491A225K010AT	2.2	± 10%	A	57K1662	0.29	0.25
● T491A335K010AT	3.3	± 10%	A	57K1681	0.35	0.30
● T491A475K010AT	4.7	± 10%	A	57K1703	0.30	0.26
● T491B475K010AT	4.7	± 10%	B	57K1808	0.31	0.22
● T491B685K010AT	6.8	± 10%	B	57K1828	0.40	0.29
● T491A106K010AT	10	± 10%	A	57K1635	0.27	0.23
● T491B106K010AT	10	± 10%	B	57K1738	0.28	0.20
● T491C106K010AT	10	± 10%	C	57K1845	0.51	0.49
● T491B156K010AT	15	± 10%	B	57K1761	0.42	0.30
● T491A226K010AT	22	± 10%	A	57K1671	0.26	0.21
● T491B226K010AT	22	± 10%	B	57K1780	0.34	0.24
● T491C226K010AT	22	± 10%	C	57K1887	0.62	0.59
● T491D226K010AT	22	± 10%	D	57K1983	1.00	0.85
● T491B336K010AT	33	± 10%	B	57K1800	0.35	0.29
● T491C336K010AT	33	± 10%	C	57K1904	0.70	0.67
● T491D336K010AT	33	± 10%	D	57K2002	0.88	0.75
● T491B476K010AT	47	± 10%	B	57K1819	0.37	0.31
● T491C476K010AT	47	± 10%	C	57K1924	0.61	0.52
● T491D476K010AT	47	± 10%	D	57K2021	0.77	0.65
● T491D686K010AT	68	± 10%	D	57K2041	0.98	0.83
● T491B107M010AT	100	± 20%	B	94W4775	0.90	0.75
● T491C107K010AT	100	± 10%	C	57K1857	0.80	0.68
● T491D107K010AT	100	± 10%	D	57K1956	0.91	0.77
● T491D157K010AT	150	± 10%	D	57K1974	1.05	0.86
● T491D227K010AT	220	± 10%	D	57K1994	1.25	1.03
● T491X227K010AT	220	± 10%	X	57K2217	1.23	1.02
● T491D337K010AT	330	± 10%	D	57K2012	1.09	1.02
● T491X337K010AT	330	± 10%	X	57K2227	1.91	1.58
VOLTAGE: 16 VDC						
● T491A105K016AT	1	± 10%	A	57K1624	0.27	0.24
● T491A225K016AT	2.2	± 10%	A	57K1663	0.37	0.32
● T491B225K016AT	2.2	± 10%	B	57K1770	0.40	0.28
● T491A335K016AT	3.3	± 10%	A	57K1682	0.34	0.29
● T491A475K016AT	4.7	± 10%	A	57K1704	0.30	0.26
● T491B475K016AT	4.7	± 10%	B	57K1809	0.33	0.24
● T491A685K016AT	6.8	± 10%	A	57K1725	0.37	0.32
● T491C685K016AT	6.8	± 10%	C	57K1932	0.61	0.58

CONTINUED

T491 SERIES - PRECISION MOLDED CHIP (CONT.)

VOLTAGE: 16 VDC

Mfg. Part No.	Cap. (uF)	Tol. +/- %	Case Size	Tape Cut Stock No.	Price Each 1-9	Price Each 10-49
T491A106K016AT	10	± 10%	A	57K1636	0.24	0.17
T491B106K016AT	10	± 10%	B	57K1739	0.56	0.49
T491C106K016AT	10	± 10%	C	57K1846	0.48	0.46
T491C156K016AT	15	± 10%	C	57K1867	0.61	0.58
T491B226K016AT	22	± 10%	B	57K1781	0.37	0.31
T491C226K016AT	22	± 10%	C	57K1888	0.60	0.57
T491D226K016AT	22	± 10%	D	57K1984	0.60	0.51
T491B336K016AT	33	± 10%	B	94W4776	0.53	0.38
T491C336K016AT	33	± 10%	C	57K1905	0.71	0.60
T491D336K016AT	33	± 10%	D	57K2003	0.91	0.77
T491C476K016AT	47	± 10%	C	57K1925	0.79	0.67
T491D476K016AT	47	± 10%	D	57K2022	0.79	0.67
T491C686K016AT	68	± 10%	C	94W4777	2.20	1.81
T491D107K016AT	100	± 10%	D	57K1957	0.90	0.74
T491X107K016AT	100	± 10%	X	57K2200	1.86	1.52
T491D157K016AT	150	± 10%	D	57K1975	1.65	1.35
T491X157K016AT	150	± 10%	X	57K2211	2.27	1.88
T491E227K016AT	220	± 10%	E	94W4778	6.81	6.40
T491X227K016AT	220	± 10%	X	57K2218	2.55	2.11
VOLTAGE: 20 VDC						
T491A105K020AT	1	± 10%	A	57K1625	0.30	0.26
T491A225K020AT	2.2	± 10%	A	57K1664	0.34	0.29
T491B225K020AT	2.2	± 10%	B	57K1771	0.40	0.28
T491A335K020AT	3.3	± 10%	A	57K1683	0.36	0.31
T491B335K020AT	3.3	± 10%	B	57K1790	0.40	0.28
T491A475K020AT	4.7	± 10%	A	57K1705	0.32	0.28
T491B475K020AT	4.7	± 10%	B	57K1810	0.38	0.27
T491C475K020AT	4.7	± 10%	C	57K1916	0.65	0.62
T491A685M020AT	6.8	± 20%	A	94W4773	0.35	0.25
T491A106M020AT	10	± 20%	A	12N2769	0.63	0.53
T491B106K020AT	10	± 10%	B	57K1740	0.37	0.26
T491C106K020AT	10	± 10%	C	57K1847	0.58	0.55
T491C226K020AT	22	± 10%	C	57K1889	0.75	0.64
T491D226K020AT	22	± 10%	D	57K1985	1.00	0.85
T491D336K020AT	33	± 10%	D	57K2004	1.01	0.86
T491D476K020AT	47	± 10%	D	57K2023	1.32	1.12
T491D686K020AT	68	± 10%	D	57K2043	1.46	1.20
T491X686K020AT	68	± 10%	X	57K2242	2.24	1.84
T491X107K020AT	100	± 10%	X	57K2201	2.06	1.71
T491X157K020AT	150	± 10%	X	12N2773	2.60	2.15
VOLTAGE: 25 VDC						
T491A474K025AT	0.47	± 10%	A	57K1696	0.34	0.30
T491A684K025AT	0.68	± 10%	A	57K1716	0.36	0.31
T491A105K025AT	1	± 10%	A	57K1626	0.39	0.33
T491B105K025AT	1	± 10%	B	57K1732	0.44	0.31
T491B225K025AT	2.2	± 10%	B	57K1772	0.45	0.32
T491C225K025AT	2.2	± 10%	C	57K8137	0.68	0.65
T491C335K025AT	3.3	± 10%	C	57K1898	0.65	0.61
T491A475M025AT	4.7	± 20%	A	12N2770	0.36	0.26
T491B475K025AT	4.7	± 10%	B	57K1811	0.44	0.37
T491C475K025AT	4.7	± 10%	C	57K1917	0.67	0.64
T491B685K025AT	6.8	± 10%	B	57K1831	0.70	0.59
T491C685K025AT	6.8	± 10%	C	57K1934	0.69	0.59
T491B106M025AT	10	± 20%	B	94W4774	1.15	0.96
T491C106K025AT	10	± 10%	C	57K1848	0.65	0.62
T491D106K025AT	10	± 10%	D	57K1947	0.83	0.71
T491D156K025AT	15	± 10%	D	57K1966	0.99	0.84
T491C226K025AT	22	± 10%	C	57K1890	1.08	0.92
T491D226K025AT	22	± 10%	D	57K1986	1.12	0.95
T491D336K025AT	33	± 10%	D	57K2005	1.80	1.48
T491X336K025AT	33	± 10%	X	57K2222	2.50	2.05
T491D476K025AT	47	± 10%	D	57K2024	1.75	1.44
T491X686M025AT	68	± 20%	X	57K2244	2.43	2.01
T491X107M025AT	100	± 20%	X	94W4779	2.88	2.38
VOLTAGE: 35 VDC						
T491A104K035AT	0.1	± 10%	A	57K1618	0.39	0.33
T491A224K035AT	0.22	± 10%	A	57K1659	0.39	0.34
T491A334K035AT	0.33	± 10%	A	57K1676	0.39	0.34
T491B474K035AT	0.47	± 10%	B	57K1804	0.44	0.32
T491A105K035AT	1	± 10%	A	57K1627	0.23	0.17
T491B105K035AT	1	± 10%	B	57K1733	0.34	0.24
T491B225K035AT	2.2	± 10%	B	57K1773	0.52	0.37

➤CONTINUED➤

T491 SERIES - PRECISION MOLDED CHIP (CONT.)

VOLTAGE: 35 VDC

Mfg. Part No.	Cap. (uF)	Tol. +/- %	Case Size	Tape Cut Stock No.	Price Each 1-9	Price Each 10-49
T491C225K035AT	2.2	± 10%	C	57K1881	0.66	0.63
T491B335K035AT	3.3	± 10%	B	57K1792	0.44	0.37
T491C335K035AT	3.3	± 10%	C	57K1899	0.81	0.68
T491C475K035AT	4.7	± 10%	C	57K1918	0.89	0.75
T491D475K035AT	4.7	± 10%	D	57K2016	1.16	0.98
T491C685K035AT	6.8	± 10%	C	57K1935	0.79	0.67
T491D685K035AT	6.8	± 10%	D	57K2035	1.07	0.90
T491C106K035AT	10	± 10%	C	57K1849	0.94	0.79
T491D106K035AT	10	± 10%	D	57K1948	1.44	1.19
T491D156K035AT	15	± 10%	D	57K1967	1.43	1.21
T491D226K035AT	22	± 10%	D	57K1987	1.42	1.17
T491X226K035AT	22	± 10%	X	57K2214	2.25	1.84
T491X336K035AT	33	± 10%	X	57K2223	2.21	1.83
T491X476K035AT	47	± 10%	X	57K2231	2.33	1.93
VOLTAGE: 50 VDC						
T491B224K050AT	0.22	± 10%	B	57K1768	0.50	0.36
T491B334K050AT	0.33	± 10%	B	57K1786	0.50	0.36
T491C474K050AT	0.47	± 10%	C	57K1914	0.84	0.71
T491C105K050AT	1	± 10%	C	57K1843	0.75	0.64
T491D225K050AT	2.2	± 10%	D	57K1980	1.66	1.36
T491D475K050AT	4.7	± 10%	D	57K2017	1.43	1.22
T491D685K050AT	6.8	± 10%	D	57K2036	2.18	1.79
T491D106K050AT	10	± 10%	D	57K1949	1.76	1.46
T491X106K050AT	10	± 10%	X	57K2198	2.42	2.00
T491X156K050AT	15	± 10%	X	57K2207	3.70	3.48
T491X226K050AT	22	± 10%	X	94W4780	5.19	4.87
T491X226M050AT	22	± 20%	X	94W4781	5.12	4.81

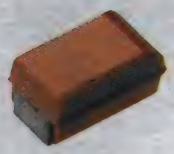
(7387)

T495 SERIES — LOW ESR, SURGE ROBUST

RoHS Compliant Available

The Capacitance Company KEMET CHARGED.

- Designed for very low ESR
- High ripple current capability
- High surge current capability
- 100% accelerated steady-state aging
- 100% Surge Current test
- Meets or Exceeds EIA Standard 535BAAC
- Operating Temperature: -55°C to +125°C
- New Extended Values for Low ESR
- Low Equivalent Series Inductance (2.5nH ESL)
- Precision-molded, laser-marked case
- Taped and reeled per EIA 481-1



VOLTAGE: 4 VDC @ +85°C

Mfg. Part No.	Case Size	Cap. (µF)	Tol.	ESR (mΩ)	Tape Cut Stock No.	Price Each 1-9
T495C337K004ATE700	2312 [6032]	330	± 10%	700	40K0826	2.00
VOLTAGE: 6/6.3 VDC @ +85°C						
T495C476K006ATE250	2312 [6032]	47	± 10%	250	94W4807	2.23
T495C107K006ATE075	2312 [6032]	100	± 10%	75	94W4806	1.32
T495D337K006ATE100	2917 [7343]	330	± 10%	100	40K1022	1.91
T495D337K006ATE040	2917 [7343]	330	± 10%	40	94W4813	2.74
T495D337K006ATE050	2917 [7343]	330	± 10%	50	94W4814	2.33
T495X337K006ATE100	2917 [7343]	330	± 10%	100	40K1300	2.47
T495D477K006ATE100	2917 [7343]	470	± 10%	100	12N2790	2.59
T495D477K006ATE125	2917 [7343]	470	± 10%	125	40K1068	2.47
T495X477K006ATE030	2917 [7343]	470	± 10%	30	12N2794	3.84
T495D477M006ATE045	2917 [7343]	470	± 20%	45	94W4815	2.31
T495X477K006ATE050	2917 [7343]	470	± 10%	50	40K1361	3.98
VOLTAGE: 10 VDC @ +85°C						
T495A106K010ATE1K8	1206 [3216]	10	± 10%	1800	94W4801	1.43
T495D476K010ATE090	2917 [7343]	47	± 10%	90	12N2787	1.87
T495D476K010ATE200	2917 [7343]	47	± 10%	200	40K1040	1.81
T495B686M010ATE900	1411 [3528]	68	± 20%	900	40K0777	1.78
T495D686K010ATE150	2917 [7343]	68	± 10%	150	40K1096	1.72
T495D107K010ATE100	2917 [7343]	100	± 10%	100	40K0867	1.72
T495X107K010ATE100	2917 [7343]	100	± 10%	100	40K1175	2.48
T495D157K010ATE100	2917 [7343]	150	± 10%	100	40K0920	1.76
T495D227K010ATE045	2917 [7343]	220	± 10%	45	12N2785	2.57
T495D227K010ATE075	2917 [7343]	220	± 10%	75	40K0966	2.04
T495D227K010ATE100	2917 [7343]	220	± 10%	100	40K0967	1.95
T495D227K010ATE125	2917 [7343]	220	± 10%	125	40K0968	1.65
T495X227K010ATE070	2917 [7343]	220	± 10%	70	40K1266	3.22

➤CONTINUED➤

T495 SERIES — LOW ESR, SURGE ROBUST (CONT.)

VOLTAGE: 10 VDC @ +85°C

Mfg. Part No.	Case Size	Cap. (µF)	Tol.	ESR (mΩ)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● T495X227K010ATE100	2917 [7343]	220	± 10%	100	40K1267	2.97
● T495X337K010ATE035	2917 [7343]	330	± 10%	35	94W4820	3.36
● T495D337K010ATE125	2917 [7343]	330	± 10%	125	40K1025	2.52
● T495X337K010ATE060	2917 [7343]	330	± 10%	60	40K1306	3.34
VOLTAGE: 16 VDC @ +85°C						
● T495T106M016ATE4K0	1411 [3528]	10	± 20%	4000	40K1116	1.87
● T495D336K016ATE150	2917 [7343]	33	± 10%	150	94W4812	1.96
● T495D336K016ATE225	2917 [7343]	33	± 10%	225	40K0986	1.46
● T495D476K016ATE180	2917 [7343]	47	± 10%	180	72M6473	1.65
● T495D107K016ATE100	2917 [7343]	100	± 10%	100	40K0876	2.26
● T495D107K016ATE125	2917 [7343]	100	± 10%	125	40K0877	2.12
● T495X107K016ATE080	2917 [7343]	100	± 10%	80	40K1182	3.10
● T495X107K016ATE100	2917 [7343]	100	± 10%	100	40K1183	2.82
● T495D157K016ATE085	2917 [7343]	150	± 10%	85	94W4810	3.94
● T495X157K016ATE100	2917 [7343]	150	± 10%	100	40K1228	2.93
VOLTAGE: 20 VDC @ +85°C						
● T495C106K020ATE475	2312 [6032]	10	± 10%	475	94W4805	1.78
● T495B106K020ATE1K0	1411 [3528]	10	± 10%	1000	12N2783	1.99
● T495D336K025ATE090	2917 [7343]	33	± 10%	90	12N2786	2.14
● T495D476K020ATE100	2917 [7343]	47	± 10%	100	12N2788	2.21
● T495D476K020ATE150	2917 [7343]	47	± 10%	150	40K1052	1.84
● T495D476K020ATE175	2917 [7343]	47	± 10%	175	40K1053	1.94
● T495X476K020ATE065	2917 [7343]	47	± 10%	65	12N2792	3.67
● T495X476K020ATE150	2917 [7343]	47	± 10%	150	40K1333	2.61
● T495D686K020ATE150	2917 [7343]	68	± 10%	150	40K1101	1.81
● T495X686K020ATE120	2917 [7343]	68	± 10%	120	40K1382	3.10
● T495X686K020ATE150	2917 [7343]	68	± 10%	150	40K1383	2.86
● T495E157K020ATE080	2924 [7361]	150	± 10%	80	94W4818	10.55
VOLTAGE: 25 VDC @ +85°C						
● T495C106K025ATE450	2312 [6032]	10	± 10%	450	40K0780	2.47
● T495D156K025ATE100	2917 [7343]	15	± 10%	100	94W4809	1.73
● T495D226K025ATE200	2917 [7343]	22	± 10%	200	40K0930	1.43
● T495D226K025ATE230	2917 [7343]	22	± 10%	230	72M6472	1.56
● T495D336K025ATE300	2917 [7343]	33	± 10%	300	40K0999	1.93
● T495X336K025ATE175	2917 [7343]	33	± 10%	175	40K1279	2.27
● T495X476K025ATE080	2917 [7343]	47	± 10%	80	94W4821	3.65
● T495X476K025ATE100	2917 [7343]	47	± 10%	100	94W4822	3.07
● T495D476M025ATE120	2917 [7343]	47	± 20%	120	12N2789	2.58
● T495X476K025ATE150	2917 [7343]	47	± 10%	150	12N2793	2.67
● T495X476M025ATE200	2917 [7343]	47	± 20%	200	40K1350	2.28
● T495X686K025ATE125	2917 [7343]	68	± 10%	125	12N2795	3.25
● T495X686K025ATE150	2917 [7343]	68	± 10%	150	94W4823	2.81
● T495X686K025ATE200	2917 [7343]	68	± 10%	200	40K1386	2.37
● T495D686K025ATE200	2917 [7343]	68	± 10%	200	94W4816	3.39
● T495E107K025ATE100	2924 [7361]	100	± 10%	100	94W4817	10.43
VOLTAGE: 35 VDC @ +85°C						
● T495B474K035ATE2K2	1411 [3528]	0.47	± 10%	2200	94W4804	1.31
● T495B105K035ATE1K7	1411 [3528]	1	± 10%	1700	12N2782	1.38
● T495B225K035ATE1K5	1411 [3528]	2.2	± 10%	1500	94W4803	1.87
● T495C475K035ATE500	2312 [6032]	4.7	± 10%	500	40K0833	2.62
● T495C475K035ATE600	2312 [6032]	4.7	± 10%	600	40K0834	2.34
● T495D685K035ATE400	2917 [7343]	6.8	± 10%	400	40K1074	1.39
● T495X685K035ATE300	2917 [7343]	6.8	± 10%	300	40K1371	2.29
● T495D106M035ATE125	2917 [7343]	10	± 20%	125	94W4808	2.20
● T495D106K035ATE300	2917 [7343]	10	± 10%	300	40K0856	1.67
● T495D106K035ATE250	2917 [7343]	10	± 10%	250	43K4353	1.84
● T495D106K035ATE260	2917 [7343]	10	± 10%	260	72M6469	2.24
● T495X106K035ATE175	2917 [7343]	10	± 10%	175	40K1156	3.34
● T495X106K035ATE250	2917 [7343]	10	± 10%	250	40K1158	2.72
● T495D156K035ATE300	2917 [7343]	15	± 10%	300	40K0903	2.25
● T495D226K035ATE125	2917 [7343]	22	± 10%	125	94W4811	2.26
● T495D226K035ATE200	2917 [7343]	22	± 10%	200	40K0939	1.97
● T495D226K035ATE250	2917 [7343]	22	± 10%	250	40K0940	1.64
● T495D226K035ATE300	2917 [7343]	22	± 10%	300	40K0941	1.45
● T495X226K035ATE275	2917 [7343]	22	± 10%	275	40K1249	2.33
● T495X336K035ATE100	2917 [7343]	33	± 10%	100	94W4819	2.81
● T495X336K035ATE175	2917 [7343]	33	± 10%	175	40K1284	2.48
● T495X336K035ATE250	2917 [7343]	33	± 10%	250	40K1285	2.40
● T495X476K035ATE200	2917 [7343]	47	± 10%	200	40K1338	2.92
● T495X476K035ATE300	2917 [7343]	47	± 10%	300	40K1339	2.51

➤ CONTINUED ➤

T495 SERIES — LOW ESR, SURGE ROBUST (CONT.)

VOLTAGE: 50 VDC @ +85°C

Mfg. Part No.	Case Size	Cap. (µF)	Tol.	ESR (mΩ)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● T495D475K050ATE300	2917 [7343]	4.7	± 10%	300	40K1034	2.26
● T495X475K050ATE300	2917 [7343]	4.7	± 10%	300	40K1321	5.51
● T495D685K050ATE300	2917 [7343]	6.8	± 10%	300	40K1080	2.29
● T495X106K050ATE300	2917 [7343]	10	± 10%	300	40K1161	5.82
● T495X156K050ATE300	2917 [7343]	15	± 10%	300	40K1207	5.79

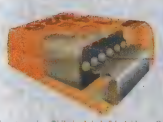
(69237)

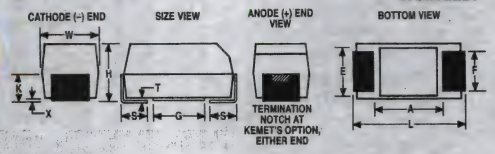
T510 SERIES-HIGH CAPACITANCE-LOW ESR

SMD

RoHS Compliant Available

The Capacitance Company KEMET CHARGED.





Features:

- Ultra-Low ESR <30mΩ
- New E/7260 Case w/ESR <18mΩ
- Up To 5 Amps Ripple Current
- RoHS Compliant & Leadfree Termination
- Operating Temperature: -55°C to +125°C
- 100% Accelerated Steady-State Aging
- 100% Surge Current Test
- Precision - molded, laser-marked case
- Taped and Reeled Per EIA 481-1

DIMENSIONS (mm)

EIA Size	L	W	H
7343-43	7.3 ± 0.3	4.3 ± 0.3	4.0 ± 0.3
7260-38	7.3 ± 0.3	6.0 ± 0.3	3.6 ± 0.2

Mfg. Part No.	Cap. (µF)	Cap. Tol.	ESR (mΩ)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● T510X687K004ATE030	680	± 10%	0.03	14M3935	10.27
Case Size: 7260-38, VDC : 4V					
● T510E108M004ATE018	1000	± 20%	0.018	14M3853	11.43
Case Size: 7343-43, VDC : 6.3V					
● T510X477K006ATE030	470	± 10%	0.03	14M3925	10.06
● T510X477M006ATE030	470	± 20%	0.03	14M3930	9.55
Case Size: 7260-38, VDC : 6.3V					
● T510E687K006ATE012	680	± 10%	0.012	12N2818	12.59
● T510E687K006ATE023	680	± 10%	0.023	29M5947	12.53
● T510E687M006ATE023	680	± 20%	0.023	29M5950	11.43
Case Size: 7343-43, VDC : 10V					
● T510X337K010ATE035	330	± 10%	0.035	14M3915	10.06
● T510X337M010ATE035	330	± 20%	0.035	14M3920	9.55
Case Size: 7343-43, VDC : 16V					
● T510X227K016ATE025	220	± 10%	0.025	70R0979	19.25
● T510X227K016ATE040	220	± 10%	0.04	94W4834	8.84
Case Size: 7343-43, VDC : 20V					
● T510X107K020ATE035	100	± 10%	0.035	70R0978	12.38
● T510X107M020ATE040	100	± 20%	0.04	94W4833	9.91
Case Size: 7343-43, VDC : 25V					
● T510X686K025ATE045	68	± 10%	0.045	94W4835	10.41
Case Size: 7260-38, VDC : 25V					
● T510E107K025ATE050	100	± 10%	0.05	12N2817	12.54
Case Size: 7343-43, VDC : 50V					
● T510X106K050ATE090	10	± 10%	0.09	12N2819	11.57

(48278)

element14 COMMUNITY

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(196545)

T520 SERIES LOW ESR CONDUCTIVE POLYMER CHIP CAPACITORS

RoHS Compliant Available

The Capacitance Company KEMET CHARGED.

Features:

- Polymer Cathode Technology
- Low ESR
- High Frequency Cap Retention
- No-Ignition Failure Mode
- Use Up to 90% of Rated Voltage (10% Derating) for part types ≤ 10 Volts
- 100% Accelerated Steady State Aging
- Use Up to 80% of Rated Voltage (20% Derating) for part types > 10 Volts
- Capacitance 15 to 1000µF (±20%)
- Voltage 2V to 25V
- EIA Standard Case Sizes

- 100% Surge Current Tested
- Operating Temperature -55°C to +105°C
- Self Healing Mechanism

VOLTAGE: 2.5 VDC

Mfg. Part No.	Cap. (µF)	ESR (Ω)	Case Size	Tape Cut Stock No.	Price Each 1-9	Price Each 10-49
T520B227M2R5ATE015	220	0.015	1411 [3528 Metric]	94W4842	2.02	1.66
T520B227M2R5ATE035	220	0.035	1411 [3528 Metric]	18K7492	1.24	1.02
T520V337M2R5ATE007	330	0.007	2917 [7343 Metric]	94W4888	3.96	3.52
T520V337M2R5ATE009	330	0.009	2917 [7343 Metric]	94W4889	3.60	3.20
T520L337M2R5ATE025	330	0.025	2312 [6032 Metric]	94W4876	2.88	2.39
T520L337M2R5ATE025	330	0.025	2312 [6032 Metric]	94W4876	2.88	2.39
T520W337M2R5ATE040	330	0.04	2917 [7343 Metric]	94W4891	3.90	3.23
T520B337M2R5ATE045	330	0.045	1411 [3528 Metric]	94W4848	1.35	1.11
T520D477M2R5ATE007	470	0.007	2917 [7343 Metric]	94W4873	3.48	3.27
T520V477M2R5ATE009	470	0.009	2917 [7343 Metric]	94W4890	3.79	3.37
T520D108M2R5ATE030	1000	0.03	2917 [7343 Metric]	94W4861	3.74	3.10
VOLTAGE: 3 VDC						
T520V337M003ATE025	330	0.025	2917 [7343 Metric]	97H5639	1.46	1.39
VOLTAGE: 4 VDC						
T520B107M004ATE035	100	0.035	1411 [3528 Metric]	94W4838	1.17	0.96
T520B157M004ATE040	150	0.04	1411 [3528 Metric]	91H6457	1.24	1.02
T520B227M004ATE045	220	0.045	1411 [3528 Metric]	43K4380	1.24	1.02
T520V227M004ATE045	220	0.045	2917 [7343 Metric]	97H5636	3.08	2.55
T520D337M004ATE007	330	0.007	2917 [7343 Metric]	94W4867	2.60	2.15
T520D337M004ATE009	330	0.009	2917 [7343 Metric]	94W4868	2.27	1.88
T520V337M004ATE009	330	0.009	2917 [7343 Metric]	94W4884	3.69	3.06
T520D337M004ATE009	330	0.009	2917 [7343 Metric]	40K1639	0.94	0.89
T520V337M004ATE012	330	0.012	2917 [7343 Metric]	32K7145	3.49	2.89
T520D337M004ATE015	330	0.015	2917 [7343 Metric]	87H4534	2.07	1.72
T520V337M004ATE025	330	0.025	2917 [7343 Metric]	94W4886	3.46	2.87
T520D477M004ATE010	470	0.01	2917 [7343 Metric]	32K7139	2.54	2.11
T520D477M004ATE012	470	0.012	2917 [7343 Metric]	97H5632	2.35	1.94
T520D477M004ATE015	470	0.015	2917 [7343 Metric]	87H4543	2.35	1.94
T520D477M004ATE018	470	0.018	2917 [7343 Metric]	94W4870	2.15	1.78
T520D477M004ATE025	470	0.025	2917 [7343 Metric]	91H6486	2.15	1.78
T520D477M004ATE040	470	0.04	2917 [7343 Metric]	97H5633	2.48	2.03
T520Y687M004ATE015	680	0.015	2917 [7343 Metric]	94W4893	3.46	3.25
VOLTAGE: 6 VDC						
T520B157M006ATE025	150	0.025	1411 [3528 Metric]	81R3800	1.62	1.33
T520B227M006ATE035	220	0.035	1411 [3528 Metric]	81R3803	1.80	1.48
T520B227M006ATE070	220	0.07	1411 [3528 Metric]	81R3807	1.36	1.12
VOLTAGE: 6.3 VDC						
T520T156M006ATE100	15	0.1	1411 [3528 Metric]	01J3665	1.07	0.88
T520A226M006ATE090	22	0.09	1206 [3216 Metric]	12N2821	1.12	0.94
T520A226M006ATE100	22	0.1	1206 [3216 Metric]	94W4837	0.91	0.76
T520B336M006ATE025	33	0.025	1411 [3528 Metric]	94W4844	1.45	1.19
T520B336M006ATE040	33	0.04	1411 [3528 Metric]	94W4845	1.17	0.96
T520A336M006ATE070	33	0.07	1206 [3216 Metric]	12N2822	1.19	0.99
T520B336M006ATE070	33	0.07	1411 [3528 Metric]	94W4846	1.31	1.09
T520T336M006ATE070	33	0.07	1411 [3528 Metric]	97H5634	1.35	1.11
T520B476M006ATE025	47	0.025	1411 [3528 Metric]	94W4849	1.53	1.26
T520T476M006ATE040	47	0.04	1411 [3528 Metric]	94W4877	1.39	1.15
T520B476M006ATE070	47	0.07	1411 [3528 Metric]	12N2824	1.32	1.10
T520B686M006ATE025	68	0.025	1411 [3528 Metric]	94W4852	1.45	1.19
T520B686M006ATE040	68	0.04	1411 [3528 Metric]	94W4853	1.11	0.91
T520B686M006ATE070	68	0.07	1411 [3528 Metric]	97H5625	1.24	1.04
T520V107M006ATE007	100	0.007	2917 [7343 Metric]	94W4878	3.74	3.10
T520V107M006ATE009	100	0.009	2917 [7343 Metric]	94W4879	3.49	2.89
T520B107M006ATE015	100	0.015	1411 [3528 Metric]	94W4839	1.95	1.60
T520B107M006ATE018	100	0.018	1411 [3528 Metric]	94W4840	1.80	1.48
T520C107M006ATE025	100	0.025	2312 [6032 Metric]	94W4855	2.00	1.64
T520B107M006ATE040	100	0.04	1411 [3528 Metric]	91H6452	1.24	1.02
T520B107M006ATE045	100	0.045	1411 [3528 Metric]	94W4841	1.19	0.98
T520C107M006ATE045	100	0.045	2312 [6032 Metric]	94W4856	1.75	1.44
T520B107M006ATE070	100	0.07	1411 [3528 Metric]	91H6453	1.41	1.18
T520D157M006ATE007	150	0.007	2917 [7343 Metric]	94W4863	2.60	2.15

➤ CONTINUED ➤

T520 SERIES LOW ESR CONDUCTIVE POLYMER CHIP CAPACITORS (CONT.)

VOLTAGE: 6.3 VDC

Mfg. Part No.	Cap. (µF)	ESR (Ω)	Case Size	Tape Cut Stock No.	Price Each 1-9	Price Each 10-49
T520B157M006ATE045	150	0.045	1411 [3528 Metric]	43K4376	1.24	1.02
T520V157M006ATE009	150	0.009	2917 [7343 Metric]	18K7499	3.84	3.18
T520V157M006ATE045	150	0.045	2917 [7343 Metric]	95H4664	3.08	2.55
T520D157M006ATE055	150	0.055	2917 [7343 Metric]	94W4864	0.77	0.77
T520V227M006ATE007	220	0.007	2917 [7343 Metric]	94W4882	3.96	3.52
T520V227M006ATE012	220	0.012	2917 [7343 Metric]	94W4883	3.79	3.37
T520C227M006ATE015	220	0.015	2312 [6032 Metric]	94W4858	2.16	1.79
T520C227M006ATE018	220	0.018	2312 [6032 Metric]	94W4859	2.35	1.93
T520V227M006ATE015	220	0.015	2917 [7343 Metric]	87H4565	3.60	3.20
T520D227M006ATE015	220	0.015	2917 [7343 Metric]	87H4532	2.07	1.72
T520D227M006ATE050	220	0.05	2917 [7343 Metric]	97H5630	2.25	1.84
T520D337M006ATE009	330	0.009	2917 [7343 Metric]	94W4869	2.23	1.84
T520V337M006ATE018	330	0.018	2917 [7343 Metric]	94W4887	3.93	3.27
T520V337M006ATE025	330	0.025	2917 [7343 Metric]	12N2832	3.67	3.05
T520D337M006ATE015	330	0.015	2917 [7343 Metric]	87H4536	1.79	1.48
T520D337M006ATE025	330	0.025	2917 [7343 Metric]	87H4537	2.04	1.67
T520D337M006ATE040	330	0.04	2917 [7343 Metric]	12N2829	2.04	1.67
T520D337M006ATE045	330	0.045	2917 [7343 Metric]	97H5631	1.78	1.46
T520Y477M006ATE010	470	0.01	2917 [7343 Metric]	94W4892	3.31	3.11
T520D477M006ATE025	470	0.025	2917 [7343 Metric]	94W4871	3.95	3.27
T520D477M006ATE030	470	0.03	2917 [7343 Metric]	94W4872	3.69	3.06
T520X477M006ATE035	470	0.035	2917 [7343 Metric]	97H5642	7.75	7.25
VOLTAGE: 8 VDC						
T520B476M008ATE035	47	0.035	1411 [3528 Metric]	94W4850	1.19	0.98
T520B476M008ATE070	47	0.07	1411 [3528 Metric]	94W4851	1.36	1.13
VOLTAGE: 10 VDC						
T520A106M010ATE080	10	0.08	1206 [3216 Metric]	12N2820	1.44	1.20
T520A156M010ATE080	15	0.08	1206 [3216 Metric]	94W4836	1.12	0.92
T520B336M010ATE025	33	0.025	1411 [3528 Metric]	94W4847	1.53	1.26
T520B336M010ATE040	33	0.04	1411 [3528 Metric]	12N2823	1.15	0.95
T520B476M010ATE070	47	0.07	1411 [3528 Metric]	12N2825	1.17	0.96
T520C686M010ATE045	68	0.045	2312 [6032 Metric]	94W4860	1.85	1.52
T520V686M010ATE045	68	0.045	2917 [7343 Metric]	18K7509	3.28	2.72
T520V686M010ATE060	68	0.06	2917 [7343 Metric]	10J6684	3.08	2.55
T520V107M010ATE018	100	0.018	2917 [7343 Metric]	12N2830	3.97	3.30
T520L107M010ATE025	100	0.025	2312 [6032 Metric]	94W4875	3.10	2.57
T520V107M010ATE025	100	0.025	2917 [7343 Metric]	12N2831	3.62	3.00
T520V107M010ATE045	100	0.045	2917 [7343 Metric]	94W4880	3.41	2.83
T520V107M010ATE050	100	0.05	2917 [7343 Metric]	40K1649	3.41	2.83
T520D107M010ATE080	100	0.08	2917 [7343 Metric]	97H5626	2.25	1.84
T520D157M010ATE040	150	0.04	2917 [7343 Metric]	12N2826	1.94	1.59
T520C157M010ATE055	150	0.055	2312 [6032 Metric]	14N7630	1.95	1.60
T520D157M010ATE055	150	0.055	2917 [7343 Metric]	97H5629	1.69	1.38
T520D227M010ATE025	220	0.025	2917 [7343 Metric]	12N2828	2.27	1.88
T520X337M010ATE040	330	0.04	2917 [7343 Metric]	97H5641	7.70	7.23
VOLTAGE: 16 VDC						
T520B106M016ATE100	10	0.1	1411 [3528 Metric]	09P0966	1.35	1.11
T520C226M016ATE080	22	0.08	2312 [6032 Metric]	94W4857	1.98	1.63
T520V476M016ATE045	47	0.045	2917 [7343 Metric]	43K4393	3.90	3.23
T520V476M016ATE070	47	0.07	2917 [7343 Metric]	10J6682	3.69	3.06
T520D476M016ATE070	47	0.07	2917 [7343 Metric]	87H4539	3.27	2.66
T520D686M016ATE050	68	0.05	2917 [7343 Metric]	94W4874	2.64	2.18
VOLTAGE: 20 VDC						
T520V226M020ATE040	22	0.04	2917 [7343 Metric]	94W4881	4.06	3.36
T521D476M020ATE055	47	0.055	2917 [7343 Metric]	81R3809	4.87	4.58
T521V476M020ATE090	47	0.09	2917 [7343 Metric]	81R3811	5.12	4.55
VOLTAGE: 25 VDC						
T520D156M025ATE080	15	0.08	2917 [7343 Metric]	97H5627	2.71	2.23

(80142)

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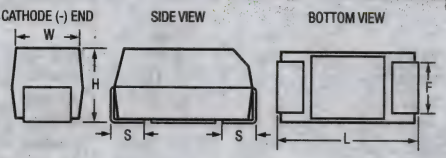
(196560)

T530 CONDUCTIVE POLYMER CHIP CAPACITORS

RoHS Compliant Available

The Capacitance Company KEMET CHARGED.



Features

- Highest CV in Standard EIA Size
- Extremely Low ESR
- Operating Temperature: -55°C to 125°
- Polymer Cathode Technology
- High Frequency Capacitance Retention
- Non-Ignition Failure Mode
- Capacitance: 15 to 1500 µF
- Voltage: 2.5V to 10V
- 100% Accelerated Steady State Aging
- 100% Surge Current Testing
- Utilizes Multiple Tantalum Anode Technology
- Use Up to 90% of Rated Voltage (10% Derating)
- Self-Healing Mechanism

Case Size KEMET	Case Size EIA	L ±0.3	W ±0.3	H	F ±0.1	S ±0.3
D	7343-31	7.3	4.3	2.8 ±0.3	2.4	1.3
X	7343-43	7.3	4.3	4.0 ±0.3	2.4	1.3
Y	7343-40	7.3	4.3	4.0	2.4	1.3

Mfg. Part No.	Voltage (VDC)	Cap. (µF)	ESR (Ω)	Case Size	Tape Cut Stock No.	Tape Cut Price Each 1-9
● T530D567M2R5ATE005	2.5	560	0.005	D	94W4903	7.26
● T530X108M2R5ATE006	2.5	1000	0.006	X	94W4904	8.09
● T530X158M2R5ATE005	2.5	1500	0.005	X	94W4907	8.86
● T530Y108M2R5ATE005	2.5	1000	0.005	Y	94W4911	7.59
● T530X108M003ASE010	3	1000	0.01	X	01J3755	9.76
● T530X108M003ATE010	3	1000	0.01	X	32K7165	3.72
● T530X158M003ATE008	3	1500	0.008	X	18K7512	8.29
● T530D337M004ATE006	4	330	0.006	D	94W4900	6.93
● T530D477M004ATE010	4	470	0.01	D	94W4902	6.44
● T530X687M004ATE004	4	680	0.004	X	94W4908	8.69
● T530X687M004ATE006	4	680	0.006	X	18K7515	7.99
● T530X687M004ATE010	4	680	0.01	X	40K1697	7.38
● T530Y687M004ATE005	4	680	0.005	Y	94W4913	7.23
● T530D227M006ATE005	6.3	220	0.005	D	40K1675	3.48
● T530D337M006ATE006	6.3	330	0.006	D	94W4901	6.93
● T530D337M006ATE010	6.3	330	0.01	D	40K1681	6.52
● T530X477M006ATE005	6.3	470	0.005	X	40K1694	10.59
● T530X477M006ATÉ006	6.3	470	0.006	X	32K7168	7.70
● T530X477M006ATE010	6.3	470	0.01	X	32K7169	7.75
● T530Y477M006ATE005	6.3	470	0.005	Y	94W4912	7.23
● T530X687M006ATE018	6.3	680	0.018	X	94W4910	7.75
● T530D157M010ATE005	10	150	0.005	D	40K1672	9.13
● T530D157M010ATE006	10	150	0.006	D	94W4898	6.93
● T530D227M010ATE006	10	220	0.006	D	57K8208	6.93
● T530D227M010ATE010	10	220	0.01	D	40K1677	8.30
● T530X337M010ATE005	10	330	0.005	X	40K1692	10.59
● T530X337M010ATE006	10	330	0.006	X	18K7513	8.09
● T530X337M010ATE010	10	330	0.01	X	18K7514	7.81
● T530X157M016ATE015	16	150	0.015	X	12N2833	9.17
● T530X157M016ATE025	16	150	0.025	X	94W4905	8.79
● T530X157M016ATE040	16	150	0.04	X	94W4906	8.06

(79223)

PCB FABRICATION & ASSEMBLY

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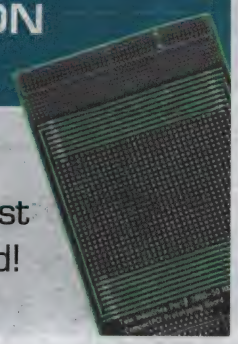


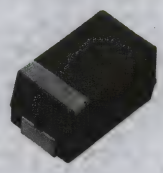
(197416)

293D SERIES SOLID TANTALUM SURFACE MOUNT CAPACITORS - STANDARD INDUSTRIAL GRADE

SMD

RoHS Compliant Available

VISHAY.



Features:

- Molded Case Available in 6 Case Sizes
- Compatible with "High Volume" Automatic Pick and Place Equipment
- Optical Character Recognition Qualified
- Meets IEC Specification QC300801/US0001 and EIA 535BAAC

Specifications:

- Operating temperature: –55°C to +85°C (to +125°C with Voltage Derating)
- Capacitance Range: 0.10µF to 680µF
- Tolerance: ±20% (X0 in Type No.); ±10% (X9 in Type No.)

Mfg. Part No.	Cap. (µF)	Case Code	Max. ESR @+25°C 100kHz (Ω)	Max. Ripple Current I_{rms} @ 100kHz (A)	Tape Cut Stock No.	Tape Cut Price Each 1-9
VOLTAGE: 4 VDC AT +85 °C, 2.7 VDC AT +125 °C						
● 293D107X9004B2TE3	100	1411 [3528]	1.8	0.22	99M0349	0.82
VOLTAGE: 6.3 VDC AT +85 °C, 4 VDC AT +125 °C						
● 293D106X96R3A2TE3	10	1206 [3216]	3.4	0.15	09K5861	0.56
● 293D226X96R3A2TE3	22	1206 [3216]	2.9	0.16	09K6257	0.68
● 293D107X96R3B2TE3	100	1411 [3528]	1.7	0.22	99M0350	0.85
● 293D107X96R3C2TE3	100	2312 [6032]	0.8	0.37	09K5912	0.99
● 293D157X96R3C2TE3	150	2312 [6032]	0.7	0.4	99M0351	1.04
VOLTAGE: 10 VDC AT +85 °C, 7 VDC AT +125 °C						
● 293D225X9010A2TE3	2.2	1206 [3216]	6.3	0.11	65K2844	0.48
● 293D475X9010A2TE3	4.7	1206 [3216]	5	0.11	65K2889	0.59
● 293D685X9010A2TE3	6.8	1206 [3216]	4.2	0.13	65K2907	0.56
● 293D106X9010A2TE3	10	1206 [3216]	3.4	0.15	65K2813	0.62
● 293D106X9010B2TE3	10	1411 [3528]	2.5	0.18	09K5835	0.80
● 293D106X9010C2TE3	10	2312 [6032]	1.8	0.25	99M0347	0.73
● 293D226X9010B2TE3	22	1411 [3528]	1.9	0.21	09K6236	0.63
● 293D226X9010C2TE3	22	2312 [6032]	1.5	0.27	09K6238	0.77
● 293D336X9010B2TE3	33	1411 [3528]	1.9	0.21	09K6430	0.90
● 293D336X9010D2TE3	33	2917 [7343]	0.8	0.43	65K2876	1.14
● 293D476X9010B2TE3	47	1411 [3528]	1.8	0.22	09K6648	0.86
● 293D476X9010D2TE3	47	2917 [7343]	0.7	0.46	09K6652	1.21
● 293D686X9010D2TE3	68	2917 [7343]	0.7	0.46	09K6839	1.14
● 293D107X9010C2TE3	100	2312 [6032]	0.9	0.35	09K5898	1.05
● 293D107X9010D2TE3	100	2917 [7343]	0.6	0.5	65K2823	1.29
● 293D157X9010D2TE3	150	2917 [7343]	0.6	0.5	09K6090	1.61
● 293D227X9010D2TE3	220	2917 [7343]	0.6	0.5	09K6283	0.63
● 293D337X9010E2TE3	330	2917 [7343]	0.5	0.57	09K6467	3.17
VOLTAGE: 16 VDC AT +85 °C, 10 VDC AT +125 °C						
● 293D105X9016A2TE3	1	1206 [3216]	9.3	0.09	65K2801	0.59
● 293D225X9016A2TE3	2.2	1206 [3216]	5.9	0.11	09K6168	0.59
● 293D225X9016B2TE3	2.2	1411 [3528]	4.6	0.14	09K6170	0.76
● 293D335X9016A2TE3	3.3	1206 [3216]	5	0.12	09K6356	0.56
● 293D475X9016A2TE3	4.7	1206 [3216]	5	0.12	65K2892	0.66
● 293D475X9016B2TE3	4.7	1411 [3528]	2.9	0.17	09K6584	0.76
● 293D685X9016B2TE3	6.8	1411 [3528]	2.5	0.18	09K6777	0.80
● 293D106X9016A2TE3	10	1206 [3216]	3	0.09	09K5840	0.67
● 293D106X9016B2TE3	10	1411 [3528]	2.5	0.18	65K2814	0.63
● 293D106X9016C2TE3	10	2312 [6032]	1.8	0.25	09K5844	0.77
● 293D156X9016B2TE3	15	1411 [3528]	2	0.21	09K6043	0.60
● 293D226X9016B2TE3	22	1411 [3528]	1.9	0.21	09K6241	0.86
● 293D226X9016C2TE3	22	2312 [6032]	1.4	0.28	09K6243	0.80
● 293D226X9016D2TE3	22	2917 [7343]	0.8	0.43	09K6245	1.14
● 293D336X9016C2TE3	33	2312 [6032]	1.1	0.32	09K6436	0.99
● 293D476X9016C2TE3	47	2312 [6032]	1	0.33	09K6654	1.04
● 293D476X9016D2TE3	47	2917 [7343]	0.7	0.46	09K6656	1.21
● 293D686X9016D2TE3	68	2917 [7343]	0.6	0.5	09K6841	1.24
● 293D107X9016D2TE3	100	2917 [7343]	0.6	0.5	09K5904	1.68
VOLTAGE: 20 VDC AT +85 °C, 13 VDC AT +125 °C						
● 293D105X9020A2TE3	1	1206 [3216]	8.4	0.5	09K5764	0.48
● 293D225X9020A2TE3	2.2	1206 [3216]	...	0.11	09K6172	0.18
● 293D475X9020A2TE3	4.7	1206 [3216]	5	0.12	09K6588	0.68
● 293D475X9020B2TE3	4.7	1411 [3528]	2.9	0.17	65K2894	0.80
● 293D106X9020B2TE3	10	1411 [3528]	2.5	0.18	09K5846	0.69
● 293D106X9020C2TE3	10	2312 [6032]	1.7	0.25	09K5848	0.73
● 293D156X9020C2TE3	15	2312 [6032]	1.5	0.27	09K6051	0.99
● 293D226X9020C2TE3	22	2312 [6032]	1.1	0.32	09K6247	0.80
● 293D226X9020D2TE3	22	2917 [7343]	0.7	0.46	65K2853	1.14
● 293D476X9020D2TE3	47	2917 [7343]	0.7	0.46	09K6660	1.29
● 293D107X9020E2TE3	100	2917 [7343]	0.5	0.57	09K5908	2.68

➤CONTINUED➤

293D SERIES SOLID TANTALUM SURFACE MOUNT CAPACITORS - STANDARD INDUSTRIAL GRADE (CONT.)

VOLTAGE: 25 VDC AT +85 °C, 17 VDC AT +125 °C

Mfg. Part No.	Cap. (µF)	Case Code	Max. ESR @+25°C 100kHz (Ω)	Max. Ripple Current I_{rms} @ 100kHz (A)	Tape Cut Stock No.	Tape Cut Price Each 1-9
293D684X9025A2TE3	0.68	1206 [3216]	...	0.09	09K6706	0.18
293D105X9025A2TE3	1	1206 [3216]	7.6	0.1	09K5768	0.59
293D105X0025B2TE3	1	1411 [3528]	...	0.13	09K5746	0.76
293D155X9025B2TE3	1.5	1411 [3528]	4.6	0.14	09K5977	0.76
293D225X9025A2TE3	2.2	1206 [3216]	6.3	0.11	09K6176	0.64
293D225X9025B2TE3	2.2	1411 [3528]	3.8	0.15	09K6178	0.60
293D475X9025B2TE3	4.7	1411 [3528]	2.8	0.17	09K6594	0.60
293D475X9025C2TE3	4.7	2312 [6032]	2	0.24	65K2895	0.73
293D106X9025C2TE3	10	2312 [6032]	1.5	0.27	09K5852	0.83
293D106X9025D2TE3	10	2917 [7343]	1	0.39	65K2818	1.14
293D156X9025D2TE3	15	2917 [7343]	0.8	0.43	65K2833	1.12
293D336X9025D2TE3	33	2917 [7343]	0.7	0.46	09K6443	2.23
VOLTAGE: 35 VDC AT +85 °C, 23 VDC AT +125 °C						
293D334X9035A2TE3	0.33	1206 [3216]	13	0.08	65K2859	0.68
293D474X9035A2TE3	0.47	1206 [3216]	...	0.09	09K6510	0.21
293D105X9035A2TE3	1	1206 [3216]	7.5	0.1	09K5772	0.67
293D105X9035B2TE3	1	1411 [3528]	5	0.13	65K2805	0.62
293D225X9035B2TE3	2.2	1411 [3528]	3.8	0.15	09K6182	0.61
293D225X9035C2TE3	2.2	2312 [6032]	2.9	0.2	09K6184	0.66
293D475X9035C2TE3	4.7	2312 [6032]	1.9	0.24	09K6600	0.80
293D475X9035D2TE3	4.7	2917 [7343]	1.3	0.34	09K6602	1.01
293D685X9035D2TE3	6.8	2917 [7343]	1.1	0.37	09K6793	1.06
293D106X9035C2TE3	10	2312 [6032]	1.6	0.26	99M0348	1.04
293D106X9035D2TE3	10	2917 [7343]	0.8	0.43	65K2820	1.19
293D226X9035D2TE3	22	2917 [7343]	0.6	0.52	99M0354	1.29
293D226X9035E2TE3	22	2917 [7343]	0.6	0.52	09K6255	2.20
VOLTAGE: 50 VDC AT +85 °C, 33 VDC AT +125 °C						
293D334X9050B2TE3	0.33	1411 [3528]	10	0.09	09K6307	0.67
293D105X9050B2TE3	1	1411 [3528]	6.7	0.11	65K2807	0.78
293D105X9050C2TE3	1	2312 [6032]	4.6	0.16	65K2809	1.05
293D225X9050D2TE3	2.2	2917 [7343]	2.1	0.27	09K6189	1.33
293D335X9050D2TE3	3.3	2917 [7343]	1.7	0.3	09K6379	1.26
293D475X9050D2TE3	4.7	2917 [7343]	1.2	0.37	09K6604	1.34
293D106X9050E2TE3	10	2917 [7343]	0.8	0.45	65K2822	3.36
VOLTAGE: 50 VDC AT +85 °C, 33 VDC AT +125 °C						
293D475X0063D2TE3	4.7	2917 [7343 Metric]	1.1	0.37	91R0128	5.15
293D106X0063E2TE3	10	2917 [7343 Metric]	1	0.41	91R0126	6.68

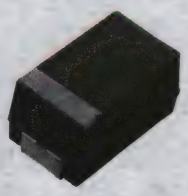
(7192)

TR3 SERIES SOLID TANTALUM CHIP CAPACITORS

SMD RoHS Compliant Available VISHAY.

Features:
- Terminations: 100 % Matte Tin, standard Tin/Lead available
- Molded case available in six case codes
- Compatible with "High Volume" automatic pick and place equipment
- High Ripple Current carrying capability
- Low ESR

Specifications:
- Tolerance: ±10% standard, ±20% available
- Operating Temperature: –55°C to +125°C
- Capacitance Range: 0.47 uF to 680 uF
- Voltage Rating: 4 VDC to 50 VDC



VOLTAGE: 4 VDC

Mfg. Part No.	Cap. (µF)	ESR (Ω)	Case Code	Tape Cut Stock No.	Tape Cut Price Each 1-9
TR3B227M004C1100	220	1.1	1411 [3528]	25R2687	1.23
TR3D477K004C0035	470	0.035	2917 [7343]	97M9763	3.50
TR3D477K004C0100	470	0.1	2917 [7343]	97M9766	1.95
VOLTAGE: 6.3 VDC					
TR3A336K6R3C0600	33	0.6	1206 [3216]	97M9714	0.86
TR3A476K6R3C0800	47	0.8	1206 [3216]	25R2677	1.14
TR3B107K6R3C0400	100	0.4	1411 [3528]	97M9724	1.28
TR3B107K6R3C0500	100	0.5	1411 [3528]	25R2684	1.28
TR3D337K6R3C0035	330	0.035	2917 [7343]	97M9753	3.00
TR3D337K6R3C0060	330	0.06	2917 [7343]	97M9755	1.95
TR3D337K6R3C0100	330	0.1	2917 [7343]	97M9756	2.31
TR3D337K6R3C0125	330	0.125	2917 [7343]	25R2715	2.19
TR3D477M6R3C0200	470	0.2	2917 [7343]	25R2722	1.95

➤ CONTINUED ➤

TR3 SERIES SOLID TANTALUM CHIP CAPACITORS (CONT.)

VOLTAGE: 10 VDC

Mfg. Part No.	Cap. (µF)	ESR (Ω)	Case Code	Tape Cut Stock No.	Tape Cut Price Each 1-9
TR3A475K010C1000	4.7	1	1206 [3216]	25R2675	1.02
TR3B106K010C0750	10	0.75	1411 [3528]	25R2679	1.06
TR3B106K010C0800	10	0.8	1411 [3528]	25R2680	0.96
TR3A106K010C0900	10	0.9	1206 [3216]	25R2667	1.07
TR3A106K010C1000	10	1	1206 [3216]	25R2668	1.06
TR3A106K010C2000	10	2	1206 [3216]	25R2670	0.86
TR3A226K010C0900	22	0.9	1206 [3216]	25R2674	1.07
TR3A226K010C1000	22	1	1206 [3216]	97M9712	1.02
TR3D686K010C0070	68	0.07	2917 [7343]	97M9768	1.85
TR3C686K010C0225	68	0.225	2312 [6032]	25R2703	1.44
TR3B686K010C0900	68	0.9	1411 [3528]	25R2691	1.16
TR3D107K010C0065	100	0.065	2917 [7343]	97M9741	1.93
TR3C107K010C0100	100	0.1	2312 [6032]	97M9736	1.44
TR3C107K010C0150	100	0.15	2312 [6032]	25R2696	1.44
TR3D107K010C0100	100	0.1	2917 [7343]	25R2707	1.55
TR3C107K010C0200	100	0.2	2312 [6032]	25R2697	1.30
TR3D227K010C0050	220	0.05	2917 [7343]	97M9749	3.10
TR3D337M010C0100	330	0.1	2917 [7343]	25R2716	2.34
VOLTAGE: 16 VDC					
TR3A475K016C2000	4.7	2	1206 [3216]	25R2676	0.86
TR3C106K016C0450	10	0.45	2312 [6032]	25R2692	1.18
TR3B106K016C0500	10	0.5	1411 [3528]	25R2681	1.16
TR3A106K016C1700	10	1.7	1206 [3216]	25R2671	0.91
TR3B226K016C0600	22	0.6	1411 [3528]	25R2686	1.23
TR3B336K016C0350	33	0.35	1411 [3528]	25R2688	1.37
TR3B336K016C0700	33	0.7	1411 [3528]	25R2689	1.40
TR3D476K016C0100	47	0.1	2917 [7343]	97M9760	1.96
TR3D686K016C0070	68	0.07	2917 [7343]	97M9770	2.15
TR3D107K016C0100	100	0.1	2917 [7343]	97M9743	2.43
TR3D107K016C0150	100	0.15	2917 [7343]	25R2709	1.99
TR3D157K016C0150	150	0.15	2917 [7343]	25R2710	2.16
VOLTAGE: 20 VDC					
TR3B106K020C1000	10	1	1411 [3528]	25R2683	1.23
TR3C336K020C0350	33	0.35	2312 [6032]	25R2701	1.52
TR3D476K020C0100	47	0.1	2917 [7343]	97M9761	2.15
TR3D686K020C0115	68	0.115	2917 [7343]	97M9772	2.62
TR3D686K020C0150	68	0.15	2917 [7343]	97M9773	1.75
VOLTAGE: 25 VDC					
TR3A105K025C4000	1	4	1206 [3216]	25R2665	0.71
TR3B106K025C1100	10	1.1	1411 [3528]	97M9722	1.85
TR3D226K025C0200	22	0.2	2917 [7343]	25R2711	1.79
TR3C226K025C0250	22	0.25	2312 [6032]	25R2699	1.82
TR3E336K025C0175	33	0.175	2917 [7343]	97M9777	3.00
TR3D476K025C0100	47	0.1	2917 [7343]	25R2719	2.73
TR3D476K025C0150	47	0.15	2917 [7343]	25R2720	1.85
TR3D476K025C0250	47	0.25	2917 [7343]	25R2721	2.16
VOLTAGE: 35 VDC					
TR3A105K035C3000	1	3	1206 [3216]	25R2666	1.23
TR3D106K035C0125	10	0.125	2917 [7343]	25R2704	1.85
TR3D106K035C0250	10	0.25	2917 [7343]	97M9738	1.80
TR3D106K035C0300	10	0.3	2917 [7343]	25R2706	1.55
TR3D226K035C0200	22	0.2	2917 [7343]	25R2712	1.90
VOLTAGE: 50 VDC					
TR3B105K050C2000	1	2	1411 [3528]	25R2678	2.13
TR3B225K050C2000	2.2	2	1411 [3528]	25R2685	2.45
TR3D685K050C0500	6.8	0.5	2917 [7343]	97M9767	2.64
TR3D106K050C0550	10	0.55	2917 [7343]	97M9739	2.88
TR3E106K050C0300	10	0.3	2917 [7343]	97M9774	5.41

(109403)

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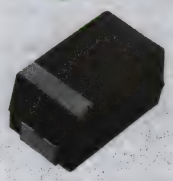
(212569)

593D SERIES SOLID TANTALUM SURFACE MOUNT CAPACITORS - LOW ESR

SMD — RoHS Compliant Available — VISHAY

Features
- Molded Case, Available in 5 Case Code Sizes
- Compatible with "High Volume" Automatic Pick-and-Place Equipment
- High Ripple Current Capability
- Low ESR
- Meets EIA 535BAAE and IEC Specification QC300801/US0001



Specifications
- Operating Temperature: –55°C to +85°C, (To +125°C with Voltage Derating)
- Capacitance Range: 0.47µF to 680µF
- Tolerance: X0: ±20% , X9: ±10%

CASE DIMENSIONS (mm)

Case Size	EIA Size	L	W	H	P	T_W
A	3216	0.126″(3.2)	0.063″(1.6)	0.063″(1.6)	0.031″(0.8)	0.047″ (1.2)
B	3528	0.138″(3.5)	0.110″(2.8)	0.075″(1.9)	0.031″(0.8)	0.087″ (2.2)
C	6032	0.236″(6.0)	0.126″(3.2)	0.098″(2.8)	0.051″(1.3)	0.087″ (2.2)
D	7373	0.287″(7.3)	0.170″(4.3)	0.110″(2.8)	0.051″(1.3)	0.095″ (2.4)
E	7373H	0.287″(7.3)	0.170″(4.3)	0.158″(4.0)	0.051″(1.3)	0.095″ (2.4)

Most popular sizes listed. Additional values available, *go online or call.*

VOLTAGE: 6.3 VDC @ 85°C, 8V SURGE; 4 VDC @ 125°C, 5V SURGE

Mfg. Part No.	Cap. (µF)	Cap. Tol.	Case Code	Max. DCL @+25°C (µA)	Max. ESR @+25°C, 100kHz (Ω)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● 593D227X96R3D2TE3	220	± 10%	2917 [7343]	13.2	0.1	65K3022	1.69
● 593D337X96R3E2TE3	330	± 10%	2917 [7343]	19.8	0.1	65K3042	0.90
VOLTAGE: 10 VDC @ 85°C, 13V SURGE; 7 VDC @ 125°C, 8V SURGE							
● 593D107X9010D2TE3	100	± 10%	2917 [7343]	10	0.1	65K2996	1.45
● 593D107X0010D2TE3	100	± 20%	2917 [7343]	10	0.1	65K2994	1.53
● 593D227X0010E2TE3	220	± 20%	2917 [7343]	22	0.1	65K3018	0.67
● 593D227X9010E2TE3	220	± 10%	2917 [7343]	22	0.1	65K3021	0.67
VOLTAGE: 16 VDC @ 85°C, 20V SURGE; 10 VDC @ 125°C, 12V SURGE							
● 593D106X9016C2TE3	10	± 10%	2312 [6032]	1.6	0.45	65K2987	1.17
● 593D226X9016C2TE3	22	± 10%	2312 [6032]	3.5	0.35	65K3015	1.17
● 593D336X9016D2TE3	33	± 10%	2917 [7343]	4.2	0.225	65K3032	0.78
● 593D107X9016E2TE3	100	± 10%	2917 [7343]	16	0.1	65K2998	2.31
● 593D107X0016E2TE3	100	± 20%	2917 [7343]	16	0.1	65K2995	2.31
VOLTAGE: 20 VDC @ 85°C, 26V SURGE; 13 VDC @ 125°C, 16V SURGE							
● 593D476X9020D2TE3	47	± 10%	2917 [7343]	9.4	0.2	65K3056	1.75
● 593D476X9020E2TE3	47	± 10%	2917 [7343]	7.5	0.15	65K3057	2.31
● 593D107X9020E2TE3	100	± 10%	2917 [7343]		0.15	65K2999	2.67
VOLTAGE: 25 VDC @ 85°C, 32V SURGE; 17 VDC @ 125°C, 20V SURGE							
● 593D106X9025C2TE3	10	± 10%	2312 [6032]	2.5	0.45	65K2990	1.17
● 593D226X9025D2TE3	22	± 10%	2917 [7343]	5.5	0.2	65K3016	1.78
● 593D336X0025E2TE3	33	± 20%	2917 [7343]	8.3	0.2	65K3028	1.00
VOLTAGE: 35 VDC @ 85°C, 46V SURGE; 23 VDC @ 125°C, 28V SURGE							
● 593D156X9035D2TE3	15	± 10%	2917 [7343]	5.3	0.3	65K3004	1.69
● 593D226X9035D2TE3	22	± 10%	2917 [7343]	5.3	0.3	01N1958	2.34
● 593D226X9035E2TE3	22	± 10%	2917 [7343]	7.7	0.275	65K3017	2.43
VOLTAGE: 50 VDC @ 85°C, 65V SURGE; 33 VDC @ 125°C, 40V SURGE							
● 593D475X9050D2TE3	4.7	± 10%	2917 [7343]	2.4	0.6	65K3048	1.90
● 593D106X9050E2TE3	10	± 10%	2917 [7343]	5	0.55	65K2993	10.52

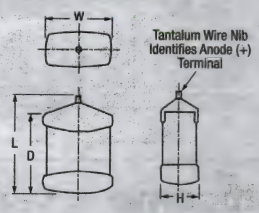
(17033)

595D TANTAMOUNT® SERIES SOLID TANTALUM SURFACE MOUNT CAPACITORS - ±10% TOLERANCE

RoHS Compliant Available — VISHAY

Features:
- Maximum CV
- Large capacitance rating range
- Terminations: Tin (2) standard
- Case Code Compatibility with EIA 535BAAC and CECC30801 Molded Chips

Specifications:
- Tolerance: ±10%
- Operating Temperature: –55°C to +85°C
- Capacitance Range: 1 µF to 1500 µF
- Voltage Rating: 4 WVDC to 50 WVDC



CASE DIMENSIONS

Case Size	L	W	H	D
A	0.146″ (3.7)	0.071″(1.8)	0.055″ (1.4)	0.114″ (2.9)
B	0.157″ (4.0)	0.102″ (2.6)	0.063″ (1.6)	0.126″ (3.2)
C	0.280″ (7.1)	0.126″ (3.2)	0.984″ (2.5)	0.236″ (6.0)
D	0.295″ (7.5)	0.169″ (4.3)	0.110″ (2.8)	0.252″ (6.4)
R	0.283″ (7.2)	0.236″ (6.0)	0.138″ (3.5)	0.244″(6.2)

➤CONTINUED➤

595D TANTAMOUNT® SERIES SOLID TANTALUM SURFACE MOUNT CAPACITORS - ±10% TOLERANCE (CONT.)

VOLTAGE: 6.3 VDC

Mfg. Part No.	Cap. (µF)	Max. DF @ 25°C, 120Hz (%)	Max. ESR @ 25°C, 100kHz (Ω)	Case Size	Tape Cut Stock No.	Tape Cut Price Each 1-9
● 595D226X96R3B2T	22	6	0.57	B	08J0561	2.19
VOLTAGE: 10 VDC						
● 595D106X9010A2T	10	6	1.9	A	96F2172	1.82
● 595D156X9010A2T	15	6	1.8	A	08J0548	2.00
● 595D337X9010R2T	330	8	0.13	R	40K1765	6.10
● 595D477X9010R2T	470	8	0.12	R	08J0582	7.33
VOLTAGE: 16 VDC						
● 595D106X9016B2T	10	6	0.76	B	48F4431	2.19
● 595D107X9016D2T	100	8	0.14	D	95F9820	3.10
● 595D157X9016R2T	150	8	0.13	R	95F9821	6.10
VOLTAGE: 20 VDC						
● 595D107X9020D2T	100	8	0.18	D	08J0539	3.66
● 595D107X9020R2T	100	8	0.14	R	95F9798	6.41
VOLTAGE: 25 VDC						
● 595D106X9025B2T	10	6	1.5	B	40K1752	2.47
● 595D226X9025D2T	22	6	0.28	D	48F4432	3.10
● 595D476X9025D2T	47	6	0.26	D	08J0577	3.66
● 595D107X9025R2T	100	8	0.2	R	08J0541	7.60
VOLTAGE: 35 VDC						
● 595D105X9035A2T	1	4	4.1	A	08J0530	1.82
● 595D106X9035D2T	10	6	0.43	D	95F9802	3.10
● 595D336X9035R2T	33	6	0.28	R	95F9805	6.41
● 595D476X9035R2T	47	6	0.28	R	08J0579	7.33
VOLTAGE: 50 VDC						
● 595D226X9050R2T	22	6	0.39	R	24C9320	8.54

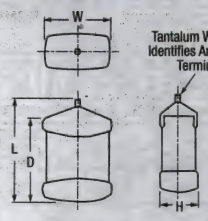
(17034)

595D TANTAMOUNT® SERIES SOLID TANTALUM SURFACE MOUNT CAPACITORS - ±20% TOLERANCE

SMD — RoHS Compliant Available — VISHAY

Features:
- Maximum CV
- Large capacitance rating range
- Terminations: Tin (2) standard
- Case Code Compatibility with EIA 535BAAC and CECC30801 Molded Chips

Specifications:
- Tolerance: ±20%
- Operating Temperature: –55°C to +85°C
- Capacitance Range: 1 µF to 1500 µF
- Voltage Rating: 4 WVDC to 50 WVDC



CASE DIMENSIONS

Case Size	L	W	H	D
A	0.146″ (3.7)	0.071″(1.8)	0.055″ (1.4)	0.114″ (2.9)
B	0.157″ (4.0)	0.102″ (2.6)	0.063″ (1.6)	0.126″ (3.2)
C	0.280″ (7.1)	0.126″ (3.2)	0.984″ (2.5)	0.236″ (6.0)
D	0.295″ (7.5)	0.169″ (4.3)	0.110″ (2.8)	0.252″ (6.4)
R	0.283″ (7.2)	0.236″ (6.0)	0.138″ (3.5)	0.244″(6.2)
T	0.079″ (2.0)	0.045″ (1.1)	0.045″ (1.1)	0.071″ (1.8)

VOLTAGE: 6.3 VDC

Mfg. Part No.	Cap. (µF)	Max. DCL @ 25°C (µA)	Max. DF @ 25°C, 120Hz (%)	Max. DF @ 25°C, 120Hz (%)	Case Size	Tape Cut Stock No.	Tape Cut Price Each 1-9
● 595D107X06R3C2T	100	6.3	8	0.2	C	95F9977	2.19
VOLTAGE: 10 VDC							
● 595D225X0010T2T	2.2	0.5	6	8.6	T	95F9980	2.07
● 595D157X0010D2T	150	15	8	0.14	D	95F9982	3.27
● 595D227X0010R2T	220	22	8	0.13	R	40K1759	6.10
● 595D337X0010R2T	330	33	8	0.13	R	40K1763	6.10
VOLTAGE: 16 VDC							
● 595D475X0016A2T	4.7	0.8	6	2.9	A	40K1767	1.82
● 595D336X0016B2T	33	5.3	6	0.72	B	49C8454	2.47
● 595D686X0016D2T	68	10.9	6	0.14	D	95F9986	3.10
● 595D107X0016C2T	100	16	8	0.27	C	20C4830	2.75
● 595D107X0016D2T	100	16	8	0.14	D	40K1753	3.27
● 595D157X0016D2T	150	24	8	0.14	D	49C8365	3.66
● 595D227X0016R2T	220	35.2	8	0.12	R	08J0562	7.33
VOLTAGE: 20 VDC							
● 595D475X0020B2T	4.7	0.9	6	1.7	B	95F9990	2.19
● 595D476X0020D2T	47	9.4	6	0.19	D	95F9837	3.10

➤CONTINUED➤

595D TANTAMOUNT® SERIES SOLID TANTALUM SURFACE MOUNT CAPACITORS - ±20% TOLERANCE (CONT.)

VOLTAGE: 20 VDC

Mfg. Part No.	Cap. (µF)	Max. DCL @ 25°C (µA)	Max. DF @ 25°C, 120Hz (%)	Max. DF @ 25°C, 120Hz (%)	Case Size	Tape Cut Stock No.	Tape Cut Price Each 1-9
595D107X0020R2T	100	20	8	0.14	R	95F9838	6.10
595D127X0020R2T	120	24	8	0.14	R	08J0544	6.41
VOLTAGE: 25 VDC							
595D336X0025D2T	33	8.3	6	0.27	D	95F9840	3.10
595D686X0025R2T	68	17	6	0.2	R	95F9841	6.41
VOLTAGE: 35 VDC							
595D106X0035D2T	10	3.5	6	0.43	D	95F9842	3.10
595D336X0035R2T	33	11.6	6	0.28	R	40K1761	6.41
VOLTAGE: 35 VDC							
595D106X0050R2T	10	5	6	0.65	R	08J0532	7.05
595D156X0050R2T	15	7.5	6	0.4	R	49C8350	6.71
595D226X0050R2T	22	11	6	0.39	R	31C6833	8.54

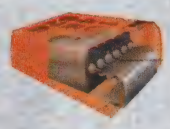
(165120)

T521 SERIES HIGH VOLTAGE POLYMER TANTALUM CHIP CAPACITORS

RoHS Compliant Available

The Capacitance Company KEMET CHARGED.

Features:
- Polymer Cathode Technology
- High Voltage
- Stable temperature characteristics
- Safe failure mode
- High Ripple Current Capability
- Low ESR
- Long Life 125° C/1000 Hrs



VOLTAGE: 20 VDC

Mfg. Part No.	Cap. (µF)	ESR (mΩ)	Case Size	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape & Reel Stock No.	Tape & Reel Price Each 1-499
T521V476M020ATE055	47	0.055	2917 [7343 Metric]	94W4895	5.57	56W3966	2.16
T521D476M020ATE055	47	0.055	2917 [7343 Metric]	81R3809	4.87	81R3810	2.45
T521V476M020ATE090	47	0.09	2917 [7343 Metric]	81R3811	5.12	81R3812	2.25
VOLTAGE: 25 VDC							
T521V226M025ATE060	22	0.06	2917 [7343 Metric]	79R5775	5.40	79R5776	2.37
T521D336M025ATE060	33	0.06	2917 [7343 Metric]	94W4894	4.87	99R3437	2.17
T521V336M025ATE060	33	0.06	2917 [7343 Metric]	79R5777	5.40	79R5778	2.37
VOLTAGE: 35 VDC							
T521V156M035ATE125	15	0.1	2917 [7343 Metric]	09P0986	5.22	09R2756	2.03
T521X476M035ATE070	47	0.07	2917 [7343 Metric]	94W4896	7.52	73T8032	3.36

(147906)

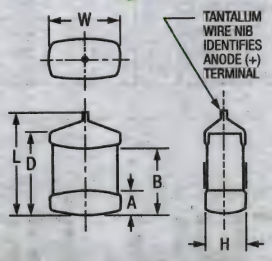
594D SERIES SOLID TANTALUM SURFACE MOUNT CAPACITORS - LOW ESR

SMD

RoHS Compliant Available

VISHAY.

Features:
- New Extended Range Offerings
- Lowest ESR For Surface Mount Tantalum Chip Capacitors
- 100% Surge Current Conditioning for C, D, and R Cases
- Terminations: Tin (2) Standard
- Tolerance: ±20% (X0 in Type No.), ±10% (X9 in Type No.)



DIMENSIONS (mm)

Case Size	L (max.)	W	H	A	B	D (Ref.)	J (Max.)
B	0.158″ (4.0)	0.110 +0.12 -0.016″ (2.8 +0.3 - 0.4)	0.075 +0.012 -0.024″ (1.9 +0.3 - 0.6)	0.031 ±0.012″ (0.8 ±0.3)	0.097 ±0.016″ (2.5 ±0.4)	0.138″ (3.5)	0.004″ (0.1)
C	0.281″ (7.1)	0.126 ±0.12″ (3.2 ±0.3)	0.098 ±0.012″ (2.5 ±0.3)	0.051 ±0.012″ (1.3 ±0.3)	0.180 ±0.025″ (4.6 ±0.6)	0.236″ (6.0)	0.004″ (0.1)
D	0.293″ (7.5)	0.170 ±0.010″ (4.3 ±0.3)	0.110 ±0.012″ (2.8 ±0.3)	0.051 ±0.012″ (1.3 ±0.3)	0.180 ±0.025″ (4.6 ±0.6)	0.253″ (6.4)	0.004″ (0.1)
R	0.283″ (7.2)	0.235 ±0.010″ (6.0 ±0.3)	0.136 ±0.012″ (3.5 ±0.3)	0.051 ±0.012″ (1.3 ±0.3)	0.180 ±0.025″ (4.6 ±0.6)	0.243″ (6.2)	0.004″ (0.1)

CONTINUED

594D SERIES SOLID TANTALUM SURFACE MOUNT CAPACITORS - LOW ESR (CONT.)

TOLERANCE: ±10%

Mfg. Part No.	Voltage (VDC)	Cap. (µF)	Max. DCL @25°C (µA)	Max. Ripple @100kHz I_{RMS} (A)	Case Size	Tape Cut Stock No.	Tape Cut Price Each 1-9
594D226X96R3B2T	6.3	22	1.4	0.47	B	08J0486	1.79
594D227X96R3D2T	6.3	220	13.9	1.37	D	49C8223	3.40
594D397X96R3R2T	6.3	390	24.6	2.36	R	08J0493	7.62
594D108X96R3R2T	6.3	1,000	63	2.89	R	49C8175	9.19
594D686X9010C2T	10	68	6.8	1.05	C	08J0500	2.43
594D227X9010D2T	10	220	22	1.52	D	49C8219	4.59
594D476X9016C2T	16	47	7.5	1	C	49C8250	2.43
594D107X9016C2T	16	100	16	1.17	C	08J0480	2.94
594D107X9016D2T	16	100	16	1.41	D	49C8171	3.40
594D476X9020D2T	20	47	20	1.26	D	08J0495	3.58
594D686X9025R2T	25	68	17	1.6	R	49C8273	7.62
594D336X9035R2T	35	33	11.6	1.12	R	08J0490	7.62
594D156X9050R2T	50	15	7.5	0.85	R	49C8186	8.38
TOLERANCE: ±20%							
594D107X06R3B2T	6.3	100	6.3	0.58	B	08J0479	2.02
594D127X06R3C2T	6.3	120	7.6	1.48	C	93B5838	2.43
594D108X06R3R2T	6.3	1,000	63	2.89	R	50B7345	9.65
594D476X0010B2T	10	47	4.7	0.46	B	08J0494	1.92
594D686X0010C2T	10	68	15	1.11	C	51B1130	2.56
594D107X0010C2T	10	100	10	1.08	C	08J0474	2.56
594D157X0010C2T	10	150	15	1.11	C	08J0482	2.94
594D157X0010D2T	10	150	15	1.41	D	40K1747	3.58
594D337X0010R2T	10	330	33	2.36	R	90B7176	7.62
594D336X0016C2T	16	33	5.3	0.86	C	40K1748	2.43
594D476X0016C2T	16	47	7.5	1	C	49C8247	2.56
594D107X0016C2T	16	100	16	1.17	C	08J0475	3.10
594D107X0016D2T	16	100	16	1.41	D	08J0476	3.40
594D187X0016R2T	16	180	28.8	2.13	R	49C8198	7.62
594D107X0020D2T	20	100	20	1.33	D	08J0477	4.78
594D127X0020R2T	20	120	24	1.77	R	27C0383	3.00
594D156X0025C2T	25	15	3.8	0.7	C	49C8178	2.56
594D336X0025D2T	25	33	8.3	1.05	D	49C8231	3.54
594D686X0025R2T	25	68	17	1.6	R	49C8270	7.62
594D107X0025R2T	25	100	25	1.67	R	08J0478	8.62
594D156X0035D2T	35	15	5.3	0.52	D	49C8180	3.58
594D336X0035R2T	35	33	11.6	1.12	R	90B7171	7.62
594D475X0050C2T	50	4.7	2.4	0.33	C	49C8243	2.68
594D685X0050D2T	50	6.8	3.4	0.58	D	49C8263	3.89
594D156X0050R2T	50	15	7.5	0.85	R	31C0696	8.80

(73723)

TLJ TANTALUM SOLID ELECTROLYTIC CHIP CAPACITORS HIGH CV CONSUMER SERIES

RoHS Compliant Available

AVX A KYOCERA GROUP COMPANY

Features
- High volumetric efficiency
- Environmentally friendly
- Small and low profile cases
- 3x reflow 260°C compatible
- Consumer applications

The **TLJ series** is suitable for wide range of consumer electronic applications such as the latest portable handheld electronics, cellular phones, PDAs or other digital equipment and cameras. Also available in Tape & Reel. Visit us online.

VOLTAGE: 4 VDC

Mfg. Part No.	Cap. (µF)	ESR (mΩ)	Case Size	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape Cut Price Each 10-99
TLJG227M004R3000	220	3	1206 [3216]	68R2162	2.14	1.79
TLJT337M004R2700	330	2.7	1411 [3528]	68R2165	2.53	2.12
VOLTAGE: 6.3 VDC						
TLJA107M006R0500	100	0.5	1206 [3216]	59M9598	2.42	2.02
TLJT227M006R2000	220	2	1411 [3528]	68R2164	2.53	2.12
VOLTAGE: 10 VDC						
TLJR106M010R3000	10	3	0805 [2012]	10R5871	2.34	1.95
TLJR476M010R3200	47	3.2	0805 [2012]	68R2163	2.34	1.95
TLJA476M010R0600	47	0.6	1206 [3216]	10R5868	2.30	1.92
TLJB157M010R0500	150	0.5	1210 [3225]	59M9599	2.53	2.12

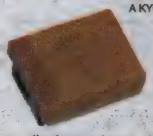
(102140)

TANTALUM CAPACITORS

TCJ SERIES TANTALUM SOLID ELECTROLYTIC CHIP CAPACITORS WITH CONDUCTIVE POLYMER ELECTRODE

RoHS Compliant Available

AVX A KYOCERA GROUP COMPANY



Features

- Conductive polymer electrode offers lower ESR
- Safer non-ignition failure mode and better capacitance retention
- Environmentally friendly component ready for lead-free assembly systems up to 3x reflow with 260°C peak temperature

The **TCJ series** is suitable for powder management systems with operating temperatures up to 125°C. Also available in Tape & Reel. Visit us online.

VOLTAGE: 2.5 VDC

Mfg. Part No.	Cap. (µF)	ESR (mΩ)	Case Size	Tape Cut Stock No.	Tape Cut Price Each 1-9
● TCJA476M004R0200	47	0.2	1206 [3216]	59M9565	2.09
● TCJT107M004R0150	100	0.15	1206 [3216]	59M9584	1.98
● TCJB157M004R0070	150	0.07	1210 [3225]	59M9572	1.66
VOLTAGE: 6.3 VDC					
● TCJA106M006R0300	10	0.3	1206 [3216]	59M9557	1.17
● TCJT226M006R0150	22	0.15	1210 [3225]	59M9585	2.14
● TCJB476M006R0070	47	0.07	1210 [3225]	59M9577	1.38
● TCJT476M006R0080	47	0.08	1206 [3216]	59M9590	1.65
● TCJA476M006R0200	47	0.2	1206 [3216]	59M9566	1.91
● TCJB107M006R0070	100	0.07	1210 [3225]	59M9569	1.38
VOLTAGE: 10 VDC					
● TCJR475M010R0500	4.7	0.5	0805 [2012]	59M9582	2.03
● TCJA106M010R0300	10	0.3	1206 [3216]	59M9558	1.18
● TCJA156M010R0200	15	0.2	1206 [3216]	59M9562	2.58
● TCJC336M010R0100	33	0.1	2312 [6032]	75M9215	2.37
● TCJB476M010R0070	47	0.07	1210 [3225]	59M9578	1.38
VOLTAGE: 16 VDC					
● TCJA106M016R0200	10	0.2	1206 [3216]	59M9559	1.43
● TCJT106M016R0150	10	0.15	1206 [3216]	59M9583	1.98
● TCJB156M016R0150	15	0.15	1210 [3225]	59M9570	1.93
● TCJB226M016R0150	22	0.15	1210 [3225]	59M9574	1.93

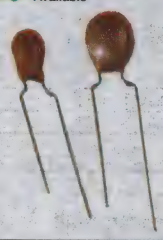
(102139)

TAP SERIES DIPPED RADIAL CAPACITORS

RoHS Compliant Available

AVX A KYOCERA GROUP COMPANY

TAP is a professional grade device manufactured with a flame retardant coating and featuring low leakage current and impedance, very small physical sizes and exceptional temperature stability.



VOLTAGE: 6.3 VDC

Mfg. Part No.	Cap. (µF)	Tol. +/- %	ESR (Ω)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● TAP107K006SCS	100	± 10%	1.6	54J4511	2.52
● TAP157K006CCS	150	± 10%	0.9	54J4713	3.23
● TAP337K006CCS	330	± 10%	0.7	54J5222	6.22
VOLTAGE: 10 VDC					
● TAP225K010SCS	2.2	± 10%	13	54J4767	0.66
● TAP685K010SCS	6.8	± 10%	6	54J5502	0.71
● TAP106K010SCS	10	± 10%	5	97C7098	0.71
● TAP476K010SCS	47	± 10%	1.7	54J5394	1.74
● TAP686K010SCS	68	± 10%	1.3	54J5607	2.52
● TAP107K010SCS	100	± 10%	1	54J4516	3.23
● TAP107K010CCS	100	± 10%	1	67C1917	3.23
● TAP157K010CCS	150	± 10%	0.8	54J4715	5.04
● TAP227K010CCS	220	± 10%	0.6	54J4993	6.22
● TAP337K010CCS	330	± 10%	0.5	54J5224	6.22
VOLTAGE: 16 VDC					
● TAP335K016SCS	3.3	± 10%	6	54J5058	0.66
● TAP475K016SCS	4.7	± 10%	5	07H2526	0.63
● TAP685K016SCS	6.8	± 10%	4	54J5512	0.75
● TAP106K016CCS	10	± 10%	3.2	25C7633	0.77
● TAP106K016SCS	10	± 10%	3.2	73C2825	0.77
● TAP226K016CCS	22	± 10%	2	97C8644	1.01
● TAP226K016SCS	22	± 10%	2	97C5281	1.01
● TAP336K016SCS	33	± 10%	1.6	54J5163	1.74
● TAP476K016SCS	47	± 10%	1.3	97C5283	2.67

➤ CONTINUED ➤

TAP SERIES DIPPED RADIAL CAPACITORS (CONT.)

VOLTAGE: 16 VDC

Mfg. Part No.	Cap. (µF)	Tol. +/- %	ESR (Ω)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● TAP157K016CCS	150	± 10%	0.6	54J4719	6.22
● TAP227K016CCS	220	± 10%	0.5	54J4996	7.64
VOLTAGE: 20 VDC					
● TAP105K020SCS	1	± 10%	10	54J4318	0.66
● TAP225K020SCS	2.2	± 10%	7	35K1046	0.58
● TAP106K020SCS	10	± 10%	2.9	54J4427	0.96
● TAP156K020SCS	15	± 10%	2.3	54J4649	1.03
● TAP226K020SCS	22	± 10%	1.8	54J4906	1.70
● TAP336K020SCS	33	± 10%	1.4	54J5170	2.45
● TAP476K020CCS	47	± 10%	1.2	39C4025	3.03
● TAP686K020CCS	68	± 10%	0.9	54J5612	5.42
● TAP107K020CCS	100	± 10%	0.6	67H3509	6.22
VOLTAGE: 25 VDC					
● TAP105K025SCS	1	± 10%	10	97C5277	0.66
● TAP225K025SCS	2.2	± 10%	6	80H9199	0.63
● TAP335K025SCS	3.3	± 10%	5	97H3950	0.63
● TAP475K025SCS	4.7	± 10%	4	50H7812	0.75
● TAP685K025SCS	6.8	± 10%	3.1	73H0996	1.01
● TAP106K025CCS	10	± 10%	2.5	23H0246	1.01
● TAP156K025SCS	15	± 10%	2	88H2617	1.93
● TAP226K025CCS	22	± 10%	1.5	54J4910	2.52
● TAP336K025SCS	33	± 10%	1.2	88H2627	3.22
● TAP476K025CCS	47	± 10%	1	35K1048	3.84
● TAP476K025SCS	47	± 10%	1	54J5413	3.84
● TAP686K025CCS	68	± 10%	0.8	54J5614	6.22
VOLTAGE: 35 VDC					
● TAP104K035SCS	0.1	± 10%	26	13H6339	0.66
● TAP224K035SCS	0.22	± 10%	17	97C7095	0.66
● TAP474K035SCS	0.47	± 10%	13	07H3641	0.66
● TAP684K035SCS	0.68	± 10%	10	54J5477	0.66
● TAP105K035CCS	1	± 10%	8	07H7519	0.66
● TAP105K035SCS	1	± 10%	8	81C8671	0.66
● TAP225K035SCS	2.2	± 10%	5	81H0636	0.66
● TAP335K035CCS	3.3	± 10%	4	54J5078	0.79
● TAP475K035CCS	4.7	± 10%	3	03H3177	0.84
● TAP226K035CCS	22	± 10%	1.3	54J4918	3.03
● TAP336K035CCS	33	± 10%	1	06H1846	4.18
● TAP476K035CCS	47	± 10%	0.8	79C3962	6.22
VOLTAGE: 50 VDC					
● TAP224K050SCS	0.22	± 10%	17	96H6638	0.74
● TAP334K050SCS	0.33	± 10%	15	90C1140	0.74
● TAP474K050SCS	0.47	± 10%	13	54J5249	0.63
● TAP105K050CCS	1	± 10%	8	54J4339	0.63
● TAP335K050SCS	3.3	± 10%	3	54J5090	1.11
● TAP475K050SCS	4.7	± 10%	2.5	97C7030	1.39
● TAP685K050SCS	6.8	± 10%	2	54J5541	2.93
● TAP106K050SCS	10	± 10%	1.6	38H9224	4.02
● TAP226K050CCS	22	± 10%	1	54J4925	7.24

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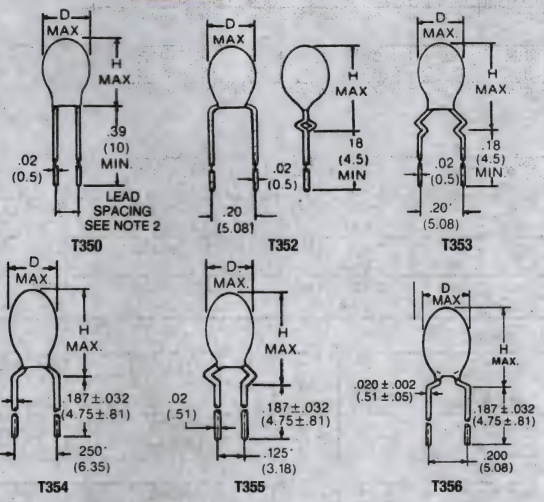
(211463)

T35X SERIES CONFORMALLY COATED TANTALUM CAPACITORS

RoHS Compliant Available

The Capacitance Company KEMET CHARGED.



Features

- Miniature, Dipped Solid Tantalum Capacitors
- Ideal for Use in Filtering, Bypass, Coupling, Blocking and RC Timing
- Available with Sn<Pb terminations and RoHS Compliant.

Specifications

- Tolerance: (Indicated in Mfg. Part No.): K: ±10%; M: ±20%; J: ±5%
- Operating Temperature: -55°C to +125°C

Case Size	All Diameter (D)	T350 Height (H)	T352 Height (H)	T353 Height (H)	T354 Height (H)	T355 Height (H)	T356 Height (H)
A	0.175″	0.280″	0.400″	0.400″	0.340″	0.340″	0.340″
B	0.175″	0.300″	0.410″	0.410″	0.350″	0.350″	0.350″
C	0.196″	0.330″	0.440″	0.440″	0.380″	0.380″	0.390″
D	0.186″	0.340″	0.450″	0.450″	0.390″	0.390″	0.390″
E	0.216″	0.350″	0.460″	0.460″	0.400″	0.400″	0.400″
F	0.236″	0.390″	0.500″	0.500″	0.440″	0.440″	0.440″
G	0.250″	0.400″	0.510″	0.510″	0.450″	0.450″	0.450″
H	0.300″	0.400″	0.520″	0.520″	0.470″	0.470″	0.470″
J*	0.330″	0.500″	...	0.580″	0.550″	...	0.550″
K*	0.350″	0.530″	...	0.630″	0.610″	...	0.610″
L*	0.350″	0.630″	...	0.730″	0.710″	...	0.710″
M*	0.400″	0.670″	...	0.760″	0.740″	...	0.740″

*** T350 series** case sizes A-H have 0.100″ lead spacing; case sizes J-M have 0.200″ lead spacing.

VOLTAGE: 6.3VDC @ 85°C, 4VDC @ 125 °C

Mfg. Part No.	Series	Case Size	Cap. (µF)	Tol. +/- %	Tape Cut Stock No.	Price Each 1-9	Price Each 10-49
T350A475K006AT	T350	A	4.7	± 10%	72K9707	0.91	0.69
T356B106K006AT	T356	B	10	± 10%	70K8912	1.16	0.92
T356F476K006AT	T356	F	47	± 10%	57K8072	1.65	1.31
VOLTAGE: 10VDC @ 85°C, 7VDC @ 125 °C							
T356A225K010AT	T356	A	2.2	± 10%	70K8902	1.07	0.81
T350A475K010AT	T350	A	4.7	± 10%	57K9280	1.07	0.81
T350C106K010AT	T350	C	10	± 10%	57K9288	1.38	1.09
T356C106K010AT	T356	C	10	± 10%	70K8918	1.30	1.03
T356E226K010AT	T356	E	22	± 10%	70K8926	1.70	1.35
T350F336K010AT	T350	F	33	± 10%	57K9303	1.72	1.37
T350J107K010AT	T350	J	100	± 10%	57K9319	3.88	3.13
T356J107K010AT	T356	J	100	± 10%	70K8939	4.29	3.46
VOLTAGE: 16VDC @ 85°C, 10VDC @ 125 °C							
T350A225K016AT	T350	A	2.2	± 10%	53K0644	1.07	0.81
T356A225K016AT	T356	A	2.2	± 10%	57K9399	1.07	0.81
T356A335K016AT	T356	A	3.3	± 10%	70K8906	1.07	0.81
T356B475K016AT	T356	B	4.7	± 10%	57K9402	1.16	0.92
T356C685K016AT	T356	C	6.8	± 10%	70K8920	1.35	1.07
T350E106K016AT	T350	E	10	± 10%	43K4267	1.38	1.09
T350E106M016AT	T350	E	10	± 20%	43K4271	1.26	1.00
T352E106K016AT	T352	E	10	± 10%	70K8882	1.51	1.20
T356E106K016AT	T356	E	10	± 10%	43K4306	1.35	1.07
T350F226K016AT	T350	F	22	± 10%	57K9301	1.63	1.29
T351F226K016AT	T351	F	22	± 10%	57K9354	1.72	1.36
T352F226K016AT	T352	F	22	± 10%	70K8883	1.72	1.36
T355F226K016AT	T355	F	22	± 10%	57K9395	1.72	1.36

➤ CONTINUED ➤

T35X SERIES CONFORMALLY COATED TANTALUM CAPACITORS (CONT.)

VOLTAGE: 16VDC @ 85°C, 10VDC @ 125 °C

Mfg. Part No.	Series	Case Size	Cap. (µF)	Tol. +/- %	Tape Cut Stock No.	Price Each 1-9	Price Each 10-49
T356F226K016AT	T356	F	22	± 10%	57K9408	1.65	1.31
T356H336K016AT	T356	H	33	± 10%	57K8078	2.62	2.12
T350J476K016AT	T350	J	47	± 10%	57K9324	3.65	2.95
T356J476K016AT	T356	J	47	± 10%	57K8088	3.47	2.80
T350K686K016AT	T350	K	68	± 10%	57K9333	4.39	3.54
T350L107K016AT	T350	L	100	± 10%	57K9335	6.81	6.05
T356L107K016AT	T356	L	100	± 10%	57K8091	6.48	5.76
VOLTAGE: 20VDC @ 85°C, 13VDC @ 125 °C							
T356A105J020AT	T356	A	1	± 5%	72K9764	1.19	0.95
T350E106K020AT	T350	E	10	± 10%	57K9295	1.75	1.43
T356E106K020AT	T356	E	10	± 10%	57K9406	1.61	1.28
T350G226K020AT	T350	G	22	± 10%	68K6625	2.83	2.29
T350K476K020AT	T350	K	47	± 10%	70K8878	4.09	3.30
T354K476K020AT	T354	K	47	± 10%	57K9382	4.32	3.48
T350M107K020AT	T350	M	100	± 10%	57K9342	7.64	6.79
T353M107K020AT	T353	M	100	± 10%	57K9365	8.17	7.26
T354M107K020AT	T354	M	100	± 10%	57K9385	8.17	7.26
T356M107K020AT	T356	M	100	± 10%	57K9425	7.80	6.93
VOLTAGE: 25VDC @ 85°C, 16.5VDC @ 125 °C							
T350A105K025AT	T350	A	1	± 10%	57K9269	1.11	0.84
T356A105K025AT	T356	A	1	± 10%	57K8051	1.13	0.85
T350B225K025AT	T350	B	2.2	± 10%	43K4253	1.21	0.96
T356B335K025AT	T356	B	3.3	± 10%	70K8914	1.16	0.92
T356C475K025AT	T356	C	4.7	± 10%	43K4302	1.39	1.11
T350E106K025AT	T350	E	10	± 10%	43K4269	1.28	1.02
T350E106M025AT	T350	E	10	± 20%	43K4273	1.70	1.35
T352E106K025AT	T352	E	10	± 10%	57K9359	1.97	1.56
T353E106K025AT	T353	E	10	± 10%	70K8888	1.97	1.56
T354E106K025AT	T354	E	10	± 10%	57K9372	1.95	1.54
T356E106K025AT	T356	E	10	± 10%	43K4308	1.77	1.40
T356G156K025AT	T356	G	15	± 10%	70K8933	3.00	2.43
T350H226K025AT	T350	H	22	± 10%	57K9312	3.39	2.73
T356H226K025AT	T356	H	22	± 10%	57K9412	3.43	2.77
T350K476K025AT	T350	K	47	± 10%	57K9330	6.58	5.31
T356K476K025AT	T356	K	47	± 10%	52K6322	6.66	5.37
VOLTAGE: 35VDC @ 85°C, 23VDC @ 125 °C							
T350A104K035AT	T350	A	0.1	± 10%	57K9266	1.11	0.84
T356A104K035AT	T356	A	0.1	± 10%	70K8893	1.07	0.81
T356A224K035AT	T356	A	0.22	± 10%	70K8900	1.13	0.85
T356A334K035AT	T356	A	0.33	± 10%	70K8903	1.07	0.81
T356A474K035AT	T356	A	0.47	± 10%	70K8907	1.07	0.81
T350A105K035AT	T350	A	1	± 10%	43K4245	0.69	0.53
T350A105M035AT	T350	A	1	± 20%	43K4247	1.08	0.90
T352A105K035AT	T352	A	1	± 10%	57K9358	1.04	0.83
T355A105K035AT	T355	A	1	± 10%	57K9389	1.11	0.88
T356A105K035AT	T356	A	1	± 10%	43K4288	1.13	0.85
T350C225K035AT	T350	C	2.2	± 10%	43K4261	1.24	0.98
T352C225K035AT	T352	C	2.2	± 10%	70K8881	1.28	1.02
T356C225K035AT	T356	C	2.2	± 10%	43K4298	1.24	0.98
T350D335K035AT	T350	D	3.3	± 10%	57K9293	1.34	1.06
T356D335K035AT	T356	D	3.3	± 10%	70K8922	1.34	1.06
T350E475K035AT	T350	E	4.7	± 10%	43K4275	1.52	1.20
T352E475K035AT	T352	E	4.7	± 10%	57K9360	1.57	1.25
T353E475K035AT	T353	E	4.7	± 10%	70K8889	1.57	1.25
T354E475K035AT	T354	E	4.7	± 10%	57K9373	1.57	1.25
T356E475K035AT	T356	E	4.7	± 10%	43K4314	1.49	1.18
T350F685K035AT	T350	F	6.8	± 10%	43K4282	1.54	1.22
T352F685K035AT	T352	F	6.8	± 10%	70K8885	1.63	1.29
T356F685K035AT	T356	F	6.8	± 10%	57K9409	1.56	1.23
T350G106K035AT	T350	G	10	± 10%	43K4284	1.95	1.58
T350G106M035AT	T350	G	10	± 20%	57K9306	2.10	1.70
T352G106K035AT	T352	G	10	± 10%	70K8886	2.56	2.07
T353G106K035AT	T353	G	10	± 10%	57K9363	2.48	2.01
T354G106K035AT	T354	G	10	± 10%	57K9376	2.48	2.01
T355G106K035AT	T355	G	10	± 10%	57K9397	2.58	2.09
T356G106K035AT	T356	G	10	± 10%	57K9411	1.33	1.05
T356G106J035AT	T356	G	10	± 5%	70K8932	3.09	2.50
T356J156K035AT	T356	J	15	± 10%	70K8940	3.93	3.17
T350K226K035AT	T350	K	22	± 10%	57K9328	4.16	3.36
T353K226K035AT	T353	K	22	± 10%	70K8891	4.32	3.48
T354K226K035AT	T354	K	22	± 10%	57K9381	4.55	3.67
T356K226K035AT	T356	K	22	± 10%	57K9419	4.16	3.36

➤ CONTINUED ➤

T35X SERIES CONFORMALLY COATED TANTALUM CAPACITORS (CONT.)

VOLTAGE: 35VDC @ 85°C, 23VDC @ 125 °C

Mfg. Part No.	Series	Case Size	Cap. (µF)	Tol. +/- %	Tape Cut Stock No.	Price Each 1-9	Price Each 10-49
● T350M476K035AT	T350	M	47	± 10%	57K9346	7.80	6.93
● T354M476K035AT	T354	M	47	± 10%	57K9387	8.40	7.47
● T356M476K035AT	T356	M	47	± 10%	57K9427	7.80	6.93
VOLTAGE: 50VDC @ 85°C, 33VDC @ 125 °C							
● T356A104K050AT	T356	A	0.1	± 10%	70K8894	1.09	0.86
● T356A334K050AT	T356	A	0.33	± 10%	70K8904	1.03	0.82
● T356B474K050AT	T356	B	0.47	± 10%	70K8915	1.23	0.97
● T350B105K050AT	T350	B	1	± 10%	57K9283	1.24	0.98
● T356E225K050AT	T356	E	2.2	± 10%	57K8067	1.79	1.42
● T356G475K050AT	T356	G	4.7	± 10%	70K8934	1.94	1.57
● T350K106K050AT	T350	K	10	± 10%	57K9326	6.90	5.57
● T353K106K050AT	T353	K	10	± 10%	70K8890	7.60	6.13
● T354K106K050AT	T354	K	10	± 10%	57K9380	7.69	6.20
● T356K106K050AT	T356	K	10	± 10%	57K9417	6.90	5.57

(7367)

TDC SERIES SOLID TANTALUM RADIAL LEAD CAPACITORS

RoHS Compliant Available

MALLORY®
Cornell Dubilier Electronics, Inc.

Features
- Tough plastic case
- Low DCL
- Low ESR and impedance
- Low cost
- Temperature stable
- UL94V0 flammability rating
- Resistant to shock and vibration

Specifications
- Capacitance Range: 0.10 µF to 330 µF
- Voltage Range: 6 WVdc to 50 WVdc
- Operating Temperature Range: –55°C to +125°C (with proper derating)

VOLTAGE: 10 VDC

Mfg. Part No.	Cap. (µF)	Tol.	Pitch (mm)	Stock No.	Price Each 1-99	Price Each 100-249	Price Each 250-499	Price Each 500-999
TDC106K010NSF-F	10	± 10%	3.17	75M8148	2.06	1.68	1.54	1.43
● TDC226K010NSF-F	22	± 10%	3.17	75M8162	3.05	2.86	2.29	2.21
VOLTAGE: 20 VDC								
● TDC475K020NSE-F	4.7	± 10%	3.17	75M8176	2.20	2.06	1.65	1.60
● TDC106K020NSF-F	10	± 10%	3.17	47M1537	3.17	2.98	2.70	2.42
VOLTAGE: 25 VDC								
● TDC106M025NSF-F	10	± 20%	3.17	75M8150	2.94	2.75	2.20	2.13
VOLTAGE: 35 VDC								
● TDC334K035NSE-F	0.33	± 10%	3.17	52M9418	1.59	1.49	1.35	1.21
● TDC105K035NSE-F	1	± 10%	3.17	87K0076	1.59	1.49	1.35	1.21
● TDC105M035NSE-F	1	± 20%	3.17	21M6361	1.47	1.38	1.10	1.06
● TDC685K035NSF-F	6.8	± 10%	3.17	40M7689	2.95	2.77	2.51	2.25
● TDC106K035WSF-F	10	± 10%	6.35	75M8149	5.47	5.13	4.10	3.96
VOLTAGE: 50 VDC								
● TDC104K050NSE-F	0.1	± 10%	3.17	55M4576	1.83	1.72	1.56	1.40
● TDC226K050WSG-F	22	± 10%	6.35	03M5805	31.59	29.69	26.90	24.11

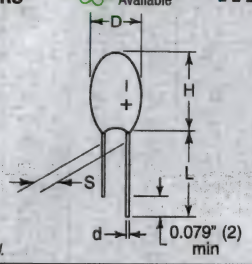
(164001)

DIPPED TANTALUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

multicomp

Features:
- Solid Tantalum Constuction
- Flame Retardant with epoxy coating that meets UL94V-0
- Operating Temperature Range: -55°C ~ +125°C
- Positive Polarity is designated by I and/or +



Capacitor kits available: *go online or call.*

CASE DIMENSIONS

Case Size	H (mm)	D (mm)	L (mm)	S (mm)	d (mm)
A	0.28" (7.0)	0.18" (4.5)	0.630" ±0.160" (16 ±4)	0.100" ±0.020" (2.5 ±0.5)	0.020" ±0.002" (0.55 ±0.05)
B	0.30" (7.5)	0.18" (4.5)	0.630" ±0.160" (16 ±4)	0.100" ±0.020" (2.5 ±0.5)	0.020" ±0.002" (0.55 ±0.05)
C	0.33" (8.5)	0.20" (5.0)	0.630" ±0.160" (16 ±4)	0.100" ±0.020" (2.5 ±0.5)	0.020" ±0.002" (0.55 ±0.05)
D	0.35" (9.0)	0.20" (5.0)	0.630" ±0.160" (16 ±4)	0.100" ±0.020" (2.5 ±0.5)	0.020" ±0.002" (0.55 ±0.05)
E	0.35" (9.0)	0.22" (5.5)	0.630" ±0.160" (16 ±4)	0.100" ±0.020" (2.5 ±0.5)	0.020" ±0.002" (0.55 ±0.05)
F	0.39" (10.0)	0.24" (6.0)	0.630" ±0.160" (16 ±4)	0.100" ±0.020" (2.5 ±0.5)	0.020" ±0.002" (0.55 ±0.05)
G	0.39" (10.0)	0.26" (6.5)	0.630" ±0.160" (16 ±4)	0.100" ±0.020" (2.5 ±0.5)	0.020" ±0.002" (0.55 ±0.05)
H	0.41" (10.5)	0.28" (7.0)	0.630" ±0.160" (16 ±4)	0.100" ±0.020" (2.5 ±0.5)	0.020" ±0.002" (0.55 ±0.05)
J	0.51" (13.0)	0.31" (8.0)	0.630" ±0.160" (16 ±4)	0.100" ±0.020" (2.5 ±0.5)	0.020" ±0.002" (0.55 ±0.05)
K	0.55" (14.0)	0.33" (8.5)	0.630" ±0.160" (16 ±4)	0.100" ±0.020" (2.5 ±0.5)	0.020" ±0.002" (0.55 ±0.05)
L	0.55" (14.0)	0.35" (9.0)	0.630" ±0.160" (16 ±4)	0.100" ±0.020" (2.5 ±0.5)	0.020" ±0.002" (0.55 ±0.05)
M	0.57" (14.5)	0.35" (9.0)	0.630" ±0.160" (16 ±4)	0.100" ±0.020" (2.5 ±0.5)	0.020" ±0.002" (0.55 ±0.05)
N	0.63" (10.5)	0.35" (9.0)	0.630" ±0.160" (16 ±4)	0.100" ±0.020" (2.5 ±0.5)	0.020" ±0.002" (0.55 ±0.05)

➤CONTINUED➤

DIPPED TANTALUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 6.3 VDC

Mfg. Part No.	Cap. (µF)	Tol. +/- %	Case Size	Stock No.	Price Each 1-24	Price Each 25-99	Price Each 100-499
● MCDT10K6R3-1-RH	10	± 10%	B	80K9124	0.85	0.75	0.64
● MCDT47M6R3-1-RH	47	± 20%	F	80K9152	1.30	1.15	0.98
VOLTAGE: 10 VDC							
● MCDT4R7K10-1-RH	4.7	± 10%	A	80K9144	0.72	0.64	0.54
● MCDT10K10-1-RH	10	± 10%	C	80K9120	0.88	0.78	0.66
● MCDT47K10-1-RH	47	± 10%	G	80K9149	1.75	1.56	1.32
● MCDT100M10-2-RH*	100	± 20%	K	80K9126	4.86	4.32	3.66
VOLTAGE: 16 VDC							
● MCDT2R2K16-1-RH	2.2	± 10%	A	80K9131	0.76	0.68	0.57
● MCDT3R3K16-1-RH	3.3	± 10%	A	80K9138	0.76	0.68	0.57
● MCDT4R7K16-1-RH	4.7	± 10%	A	80K9145	0.87	0.78	0.66
● MCDT10K16-1-RH	10	± 10%	C	80K9121	0.92	0.82	0.69
● MCDT22K16-1-RH	22	± 10%	F	80K9135	1.43	1.27	1.08
● MCDT33K16-1-RH	33	± 10%	F	80K9141	1.83	1.62	1.38
● MCDT47M16-1-RH	47	± 20%	H	80K9150	2.86	2.53	2.15
VOLTAGE: 25 VDC							
● MCDT2R2K25-1-RH	2.2	± 10%	A	80K9132	0.78	0.69	0.59
● MCDT4R7K25-1-RH	4.7	± 10%	C	80K9146	1.07	0.95	0.81
● MCDT6R8K25-1-RH	6.8	± 10%	D	80K9153	1.36	1.21	1.03
● MCDT10K25-1-RH	10	± 10%	E	80K9122	1.55	1.38	1.17
● MCDT15K25-1-RH	15	± 10%	F	80K9128	1.69	1.51	1.29
● MCDT22M25-1-RH	22	± 20%	H	80K9136	3.41	3.03	2.57
● MCDT33M25-2-RH*	33	± 20%	J	80K9142	4.00	3.55	3.01
● MCDT47M25-2-RH*	47	± 20%	M	80K9151	6.11	5.42	4.59
● MCDT68M25-2-RH*	68	± 20%	N	80K9157	6.16	5.47	4.63
VOLTAGE: 35 VDC							
● MCDTR10M35-1-RH	0.1	± 20%	A	80K9110	0.77	0.69	0.58
● MCDTR15M35-1-RH	0.15	± 20%	A	80K9112	0.74	0.65	0.56
● MCDTR22M35-1-RH	0.22	± 20%	A	80K9113	0.74	0.65	0.56
● MCDTR47M35-1-RH	0.47	± 20%	A	80K9115	0.88	0.78	0.66
● MCDTR68M35-1-RH	0.68	± 20%	A	80K9117	0.56	0.49	0.42
● MCDT1K35-1-RH	1	± 10%	A	80K9119	0.56	0.49	0.42
● MCDT2R2K35-1-RH	2.2	± 10%	B	80K9133	1.07	0.95	0.81
● MCDT3R3K35-1-RH	3.3	± 10%	C	80K9139	1.43	1.27	1.08
● MCDT4R7K35-1-RH	4.7	± 10%	E	80K9147	0.97	0.86	0.73
● MCDT6R8K35-1-RH	6.8	± 10%	F	80K9154	2.04	1.81	1.53
● MCDT10K35-1-RH	10	± 10%	F	80K9123	2.51	2.25	1.89
● MCDT15M35-1-RH	15	± 20%	H	80K9130	3.24	2.88	2.44
● MCDT22M35-2-RH*	22	± 20%	K	80K9137	6.16	5.47	4.63
● MCDT33M35-2-RH*	33	± 20%	M	80K9143	11.34	10.07	8.53
VOLTAGE: 50 VDC							
● MCDTR10M50-1-RH	0.1	± 20%	A	80K9111	0.74	0.65	0.56
● MCDTR33M50-1-RH	0.33	± 20%	A	80K9114	0.98	0.87	0.74
● MCDTR47M50-1-RH	0.47	± 20%	A	80K9116	0.97	0.86	0.73
● MCDT2R2K50-1-RH	2.2	± 10%	E	80K9134	3.21	2.85	2.41
● MCDT10M50-2-RH*	10	± 20%	J	80K9125	6.52	5.79	4.90

*Lead space: 0.200" ±0.020" (5.0±1.0)
(87979)

199D SERIES TANTALUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

VISHAY.

Features
- Low Leakage Current and Dissipation Factor
- Flame-Retardant Epoxy Coating
- Moisture-Resistant: Encapsulant Will Not Chip or Crack Under Temperature Extremes

Applications
- Ideal for Use in Commercial, Industrial and Consumer Equipment

Specifications
- Tolerance: X9 in mfg. part no.: ±10%, X0 in mfg. part no.: ±20%
- Dissipation Factor: +25°C @ 120Hz
- Operating Temperature: -55°C to +85°C (to +125°C with Voltage Derating)
- Lead Style/Spacing: Indicated by 3rd from Last Digit in Mnf. Part No.

Full tape on reel and 20% tolerance available: *Go online or call.*

DIMENSIONS (mm)

Case Size	Diameter D (Max.)	Length L (Max.)	Seated Height H (Max.)*
A	0.177 (4.40)	0.280 (7.11)	0.340 (8.64)
B	0.196 (5.00)	0.300 (7.62)	0.360 (9.14)
C	0.216 (5.50)	0.360 (9.14)	0.420 (10.67)
D	0.236 (6.00)	0.400 (10.16)	0.460 (11.68)
E	0.340 (8.60)	0.492 (12.50)	0.552 (14.02)
F	0.380 (9.60)	0.650 (16.50)	0.710 (18.03)

*Maximum seated height is identical to maximum length for units ordered with lead style "A"

Mfg. Part No.	Cap. (µF)	Case Size	Tol.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-49
VOLTAGE: 6.3 VDC, 8 VDC SURGE						
199D106X96R3B1V1E3	10	B	± 10%	99M0568	1.28	1.07
199D476X96R3D1V1E3	47	D	± 10%	99M0603	1.80	1.48
VOLTAGE: 10 VDC, 13 VDC SURGE						
199D475X9010A1V1E3	4.7	A	± 10%	99M0594	1.05	0.88
199D106X9010B1V1E3	10	B	± 10%	99M0561	1.33	1.11
199D226X9010C1V1E3	22	C	± 10%	15P6934	1.57	1.28
199D336X9010D1V1E3	33	D	± 10%	15P7138	1.91	1.56
VOLTAGE: 16 VDC, 20 VDC SURGE						
199D225X9016A1V1E3	2.2	A	± 10%	99M0579	1.05	0.88
199D335X9016A1V1E3	3.3	A	± 10%	15P7062	1.04	0.87
199D475X9016B1V1E3	4.7	B	± 10%	99M0595	1.28	1.07
199D106X9016C1V1E3	10	C	± 10%	99M0562	1.39	1.14
199D106X0016C1V1E3	10	C	± 20%	99M0558	1.38	1.13
199D226X9016D1V1E3	22	D	± 10%	99M0586	1.80	1.48
199D226X0016D1V1E3	22	D	± 20%	99M0583	1.80	1.48
199D336X9016D1V1E3	33	D	± 10%	99M0591	2.24	2.07
199D107X9016F6V1E3	100	F	± 10%	99M0569	8.66	7.17
VOLTAGE: 20 VDC, 26 VDC SURGE						
199D106X9020C1V1E3	10	C	± 10%	39M3444	1.73	1.42
199D106X9020CYV1E3	10	C	± 10%	99M0563	1.81	1.48
199D156X9020D1V1E3	15	D	± 10%	99M0574	1.76	1.44
199D226X9020D1V1E3	22	D	± 10%	15P6955	2.36	2.19
199D476X9020E6V1E3	47	E	± 10%	99M0601	4.12	3.54
199D107X9020F6V1E3	100	F	± 10%	99M0570	9.96	8.25
VOLTAGE: 25 VDC, 33 VDC SURGE						
199D105X9025A1V1E3	1	A	± 10%	99M0554	1.04	0.87
199D105X0025A1V1E3	1	A	± 20%	99M0552	1.04	0.87
199D155X9025A1V1E3	1.5	A	± 10%	99M0572	1.00	0.83
199D225X9025A1V1E3	2.2	A	± 10%	99M0580	1.00	0.83
199D225X0025A1V1E3	2.2	A	± 20%	99M0577	1.00	0.83
199D225X9025A2B1E3	2.2	A	± 10%	29M9228	1.00	0.83
199D475X9025B1V1E3	4.7	B	± 10%	99M0596	1.38	1.16
199D685X9025C1V1E3	6.8	C	± 10%	99M0605	1.71	1.40
199D106X9025C1V1E3	10	C	± 10%	77M8063	1.78	1.46
199D106X0025C1V1E3	10	C	± 20%	99M0559	1.82	1.49
199D106X9025CYV1E3	10	C	± 10%	99M0564	1.99	1.63
199D226X9025D1V1E3	22	D	± 10%	99M0587	3.48	3.22
199D226X0025D1V1E3	22	D	± 20%	99M0584	3.55	3.28
199D336X9025E6V1E3	33	E	± 10%	99M0592	4.38	3.76
199D476X9025E6V1E3	47	E	± 10%	15P7376	6.37	5.47
199D476X0025E6V1E3	47	E	± 20%	99M0599	6.61	5.68
199D686X9025F6V1E3	68	F	± 10%	19M8036	9.85	8.15
VOLTAGE: 35 VDC, 42 VDC SURGE						
199D104X9035A1V1E3	0.1	A	± 10%	99M0551	1.04	0.87
199D154X9035A1V1E3	0.15	A	± 10%	99M0571	1.00	0.83
199D224X9035A1V1E3	0.22	A	± 10%	99M0576	1.00	0.83
199D334X9035A1V1E3	0.33	A	± 10%	23M2778	1.00	0.83
199D474X9035A1V1E3	0.47	A	± 10%	88M9670	1.05	0.88
199D474X0035A1V1E3	0.47	A	± 20%	19M0103	1.05	0.88
199D684X9035A1V1E3	0.68	A	± 10%	99M0604	1.05	0.88
199D105X0035A1V1E3	1	A	± 20%	99M0553	1.04	0.87
199D105X9035A1V1E3	1	A	± 10%	99M0556	1.04	0.87
199D105X9035A6V1E3	1	A	± 10%	99M0557	1.05	0.88

➤CONTINUED➤

199D SERIES TANTALUM ELECTROLYTIC CAPACITORS (CONT.)

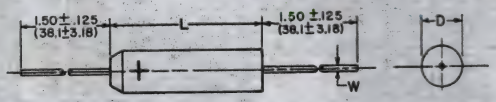
Mfg. Part No.	Cap. (µF)	Case Size	Tol.	Tape Cut Stock No.	Price Each 1-9	Price Each 10-49
VOLTAGE: 35 VDC, 42 VDC SURGE						
199D105X9035AYV1E3	1	A	± 10%	99M0555	1.10	0.92
199D155X9035A1V1E3	1.5	A	± 10%	99M0573	1.17	0.98
199D225X0035B1V1E3	2.2	B	± 20%	99M0578	1.33	1.11
199D225X9035B1V1E3	2.2	B	± 10%	99M0581	1.35	1.13
199D335X9035B1V1E3	3.3	B	± 10%	96M0270	1.27	1.04
199D475X9035C1V1E3	4.7	C	± 10%	99M0597	1.53	1.25
199D475X0035C1V1E3	4.7	C	± 20%	50M1895	1.53	1.25
199D685X9035D1V1E3	6.8	D	± 10%	99M0606	1.71	1.40
199D106X9035D1V1E3	10	D	± 10%	99M0565	2.13	1.97
199D106X0035D1V1E3	10	D	± 20%	99M0560	2.13	1.97
199D106X9035D6V1E3	10	D	± 10%	99M0566	2.09	1.94
199D156X9035E6V1E3	15	E	± 10%	99M0575	4.12	3.54
199D226X9035E6V1E3	22	E	± 10%	99M0588	4.12	3.54
199D226X0035E6V1E3	22	E	± 20%	99M0585	4.12	3.54
199D336X9035F6V1E3	33	F	± 10%	99M0593	7.44	6.38
199D476X9035F6V1E3	47	F	± 10%	99M0602	9.96	8.25
199D476X0035F6V1E3	47	F	± 20%	99M0600	9.96	8.25
VOLTAGE: 50 VDC, 60 VDC SURGE						
199D104X9050A1V1E3	0.1	A	± 10%	26M8435	1.10	0.92
199D224X9050A1V1E3	0.22	A	± 10%	75M2023	1.05	0.88
199D334X9050A1V1E3	0.33	A	± 10%	99M0590	1.28	1.07
199D105X9050B1V1E3	1	B	± 10%	34M2545	1.27	1.06
199D225X9050C1V1E3	2.2	C	± 10%	99M0582	1.80	1.48
199D475X9050D1V1E3	4.7	D	± 10%	99M0598	2.45	2.00
199D106X9050F6V1E3	10	F	± 10%	99M0567	7.19	6.16
199D106X0050F6V1E3	10	F	± 20%	15P6512	7.06	6.05
199D226X9050F6V1E3	22	F	± 10%	99M0589	11.51	9.53

(7102)

T322 SERIES MOLDED SOLID TANTALUM CAPACITORS

RoHS Compliant Available

The Capacitance Company KEMET CHARGED.



Specifications
- Capacitance Range: 0.1 to 330µF
- Voltage Range: 2V to 50V
- Tolerance: ±10%
- Operating Temperature: -55°C to +85°C

Case Size	D(max.)	L(max.)	W
A	0.095"	0.260"	0.020"
B	0.110"	0.290"	0.020"
C	0.180"	0.345"	0.020"
D	0.180"	0.420"	0.020"
E	0.280"	0.530"	0.025"
F	0.300"	0.710"	0.025"

Mfg. Part No.	Cap. (µF)	Tol. +/- %	Case Size	Tape Cut Stock No.	Price Each 1-9	Price Each 10-49
VOLTAGE: 6VDC						
T322E227K006AT	220	± 10%	E	70K8855	6.60	5.33
CASE SIZE: A, VOLTAGE: 10VDC						
T322B106K010AT	10	± 10%	B	70K8798	1.24	0.99
T322D476K010AT	47	± 10%	D	70K8843	2.51	2.03
T322E107K010AT	100	± 10%	E	70K8848	5.23	4.22
T322E157K010AT	150	± 10%	E	70K8852	6.93	5.59
VOLTAGE: 15VDC						
T322D226K015AT	22	± 10%	D	70K8836	2.19	1.77
T322E107K015AT	100	± 10%	E	70K8849	6.60	5.33
VOLTAGE: 20VDC						
T322A105K020AT	1	± 10%	A	70K8780	1.20	0.95
T322B225K020AT	2.2	± 10%	B	70K8802	1.31	1.04
T322B475K020AT	4.7	± 10%	B	70K8811	1.46	1.15
T322C106K020AT	10	± 10%	C	70K8819	2.07	1.67
T322D156K020AT	15	± 10%	D	70K8834	2.68	2.21
T322D226K020AT	22	± 10%	D	70K8837	2.37	1.92
T322F107K020AT	100	± 10%	F	70K8868	10.96	9.75
VOLTAGE: 25VDC						
T322B225K025AT	2.2	± 10%	B	70K8803	1.47	1.17
T322C106K025AT	10	± 10%	C	70K8820	2.07	1.67
T322E226K025AT	22	± 10%	E	70K8853	4.96	4.00

➤CONTINUED➤

T322 SERIES MOLDED SOLID TANTALUM CAPACITORS (CONT.)

VOLTAGE: 35VDC

Mfg. Part No.	Cap. (µF)	Tol. +/- %	Case Size	Tape Cut Stock No.	Price Each 1-9	Price Each 10-49
● T322A104K035AT	0.1	± 10%	A	70K8778	1.14	0.90
● T322A334K035AT	0.33	± 10%	A	70K8790	1.20	0.95
● T322B105K035AT	1	± 10%	B	70K8796	1.31	1.04
● T322C335K035AT	3.3	± 10%	C	70K8828	1.96	1.59
● T322D685K035AT	6.8	± 10%	D	70K8844	2.31	1.87
● T322D106K035AT	10	± 10%	D	70K8833	2.51	2.03
● T322E226K035AT	22	± 10%	E	70K8854	5.16	4.16
● T322E336K035AT	33	± 10%	E	70K8858	6.98	5.63
● T322F476K035AT	47	± 10%	F	70K8876	10.96	9.75
VOLTAGE: 50VDC						
● DEL-T322A104K050AT	0.1	± 10%	A	70K8779	1.69	1.39
● T322B105K050AT	1	± 10%	B	70K8797	1.77	1.41
● T322C155K050AT	1.5	± 10%	C	70K8821	2.22	1.80
● T322C225K050AT	2.2	± 10%	C	70K8825	2.34	1.90
● T322E106K050AT	10	± 10%	E	70K8846	5.65	4.56

(7370)

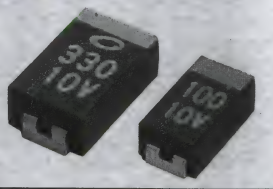
F93 SERIES GENERAL PURPOSE SOLID TANTALUM CHIP CAPACITORS

RoHS Compliant Available

nichicon

Features
- Resin-molded Chip
- Standard Series

Specifications
- Tolerance: ± 10%; ± 20%
- Operating Temp. Range: -55°C to +125°C



VOLTAGE: 6.3 VDC

Mfg. Part No.	Cap. (µF)	Tol.	ESR (mΩ) @100kHz	Case Size	Tape Cut Stock No.	Price Each 1-9
● F930J475MAA	4.7	± 20%	4	1206 [3216 Metric]	58R3255	0.34
● F930J106MAA	10	± 20%	3	1206 [3216 Metric]	58R3249	0.48
● F930J226MAA	22	± 20%	2.5	1206 [3216 Metric]	58R3251	0.43
● F930J226MBA	22	± 20%	1.9	1411 [3528 Metric]	58R3252	0.76
● F930J476MBA	47	± 20%	1	1411 [3528 Metric]	58R3256	0.53
● F930J227MNC	220	± 20%	0.5	2917 [7343 Metric]	58R3253	3.42
VOLTAGE: 10 VDC						
● F931A475MAA	4.7	± 20%	4	1206 [3216 Metric]	58R3271	0.38
● F931A106MAA	10	± 20%	3	1206 [3216 Metric]	58R3260	0.38
● F931A106MBA	10	± 20%	2.1	1411 [3528 Metric]	58R3261	0.50
● F931A226MBA	22	± 20%	1.9	1411 [3528 Metric]	58R3266	0.58
● F931A226KAA	22	± 10%	2.5	1206 [3216 Metric]	44W5378	0.47
● F931A336MBA	33	± 20%	1.4	1411 [3528 Metric]	58R3268	0.52
● F931A107KNC	100	± 10%	0.6	2917 [7343 Metric]	44W5377	2.70
VOLTAGE: 16 VDC						
● F931C105MAA	1	± 20%	7.5	1206 [3216 Metric]	58R3275	0.36
● F931C225MAA	2.2	± 20%	5	1206 [3216 Metric]	58R3279	0.41
● F931C335MAA	3.3	± 20%	4.5	1206 [3216 Metric]	58R3281	0.38
● F931C475MAA	4.7	± 20%	4	1206 [3216 Metric]	58R3283	0.41
● F931C106MBA	10	± 20%	2	1411 [3528 Metric]	58R3276	0.51
● F931C106KAA	10	± 10%	3	1206 [3216 Metric]	44W5379	0.48
● F931C226MCC	22	± 20%	1.1	2312 [6032 Metric]	58R3280	0.70
● F931C336MCC	33	± 20%	1.1	2312 [6032 Metric]	58R3282	1.47
● F931C476MNC	47	± 20%	0.7	2917 [7343 Metric]	58R3284	2.06
● F931C227KNC	220	± 10%	...	2312 [6032 Metric]	44W5380	4.25
VOLTAGE: 20 VDC						
● F931D475MAA	4.7	± 20%	3	1206 [3216 Metric]	58R3294	0.67
● F931D106MBA	10	± 20%	2.1	1411 [3528 Metric]	58R3288	0.77
● F931D106KAA	10	± 10%	...	1206 [3216 Metric]	44W5381	0.64
VOLTAGE:25 VDC						
● F931E105MAA	1	± 20%	7.5	1206 [3216 Metric]	58R3296	0.48
● F931E476KNC	47	± 10%	0.7	2917 [7343 Metric]	44W5382	2.46
● F931E225MAA	2.2	± 20%	6.3	1206 [3216 Metric]	58R3299	0.53
● F931E475MBA	4.7	± 20%	2.8	1411 [3528 Metric]	58R3302	0.76
● F931E106MCC	10	± 20%	1.5	2312 [6032 Metric]	58R3297	1.45
● F931E226MNC	22	± 20%	0.7	2917 [7343 Metric]	58R3300	1.62
VOLTAGE: 35 VDC						
● F931V105MAA	1	± 20%	7.5	1206 [3216 Metric]	58R3305	0.47
● F931V225MBA	2.2	± 20%	3.8	1411 [3528 Metric]	58R3309	0.52

➤ CONTINUED ➤

F93 SERIES GENERAL PURPOSE SOLID TANTALUM CHIP CAPACITORS (CONT.)

VOLTAGE: 35 VDC

Mfg. Part No.	Cap. (µF)	Tol.	ESR (mΩ) @100kHz	Case Size	Tape Cut Stock No.	Price Each 1-9
● F931V475MCC	4.7	± 20%	1.8	2312 [6032 Metric]	58R3312	0.89
● F931V106MCC	10	± 20%	1.6	2312 [6032 Metric]	58R3306	1.73

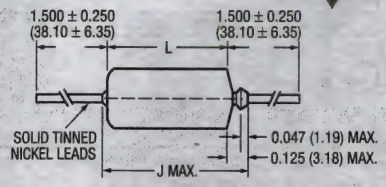
(164660)

150D SERIES COMMERCIAL-GRADE TANTALUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

VISHAY.

Features:
- Solid Tantalum Electrolytes
- Subminiature Size, Axial Leads
- Plastic Film Insulating Sleeve, Hermetically Sealed
- High Capacitance, Low DCL, Low Dissipation Factor and Exceptional Operating Stability
- Commercial Equivalent of CSR13 Military Version



Specifications:
- Tolerance: ±10%
- Life Test: 2000 Hours at 85°C at Rated DC Voltage
- Operating Temperature: -55°C to +85°C (to +125°C with Voltage Derating)

DIMENSIONS (mm)

Case Size	With Insulating Sleeve D	L	J (max)	Lead Size AWG	Nominal Diameter
A	0.135±0.016″ (3.43±0.41)	0.286±0.031″ (7.26±0.79)	0.422″ (10.720)	24	0.020″ (0.51)
B	0.185±0.016″ (4.70±0.41)	0.474±0.031″ (12.04±0.79)	0.610″ (15.490)	24	0.020″ (0.51)
R	0.289±0.016″ (7.34±0.41)	0.686±0.031″ (17.42±0.79)	0.822″ (20.880)	22	0.025″ (0.64)
S	0.351±0.016″ (8.92±0.41)	0.786±0.031″ (19.96±0.79)	0.922″ (23.420)	22	0.025″ (0.64)

VOLTAGE: 15VDC @ 85°C, 10VDC @ 125°C

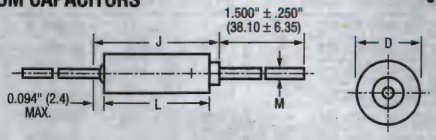
Mfg. Part No.	Cap. (µF)	Case Size	Max. DCL @ +25°C (µA)	Max. DF @ +25°C, 120Hz (%)	Stock No.	Price Each 1-9
● 150D686X9015R2B	68	R	6	6	49C4731	7.91
VOLTAGE: 35VDC @ 85°C, 23VDC @ 125°C						
● 150D474X9035A2B	0.47	A	0.5	2	49C4593	2.47
● 150D105X9035A2BE3	1	A	0.5	2	75M2004	3.83
● 150D156X9035R2BE3	15	R	3	4	75M0943	8.02
VOLTAGE: 50VDC @ 85°C, 33VDC @ 125°C						
● 150D106X9050R2BE3	10	R	3	4	02P6652	9.85

(7058)

CSR13 (MIL-C-39003/01) SERIES SOLID TANTALUM CAPACITORS

VISHAY.

- Hermetically Sealed
- Metal Cased
- Axial Lead
- Tubular



VOLTAGE: 10 VDC

Mfg. Part No.	Voltage (VDC)	Cap. (µF)	Failure Rate Level (%/1000 Hours)	Max. DCL @25°C (µA)	Max. DF @ 25°C, 120Hz (%)	Stock No.	Price Each 1-9
M39003/01-2734	10	4.7	0.01	0.4	4	46C0310	3.40
M39003/01-2265	10	220	1	10	8	47F571	15.34
VOLTAGE: 15 VDC							
M39003/01-2271	15	22	1	2	6	47F577	4.63
VOLTAGE: 20 VDC							
M39003/01-2763	20	2.2	0.01	0.4	4	46C0338	3.58
M39003/01-2286	20	10	1	1.5	6	47F592	4.39
M39003/01-2529	20	15	0.1	2	6	46C0208	5.38
M39003/01-2289	20	15	1	2	6	47F595	4.63
M39003/01-2295	20	47	1	4.5	6	47F601	12.67
VOLTAGE: 35 VDC							
M39003/01-2784	35	6.8	0.01	1.5	6	46C0357	5.88
M39003/01-2304	35	6.8	1	1.5	6	47F610	4.57
M39003/01-6111	35	22	0.001	4	6	46C0931	22.64
M39003/01-2306	35	22	1	4	6	47F612	13.40
M39003/01-2312	35	47	1	8	6	47F619	16.11

➤ CONTINUED ➤

CSR13 (MIL-C-39003/01) SERIES SOLID TANTALUM CAPACITORS (CONT.)

VOLTAGE: 50 VDC

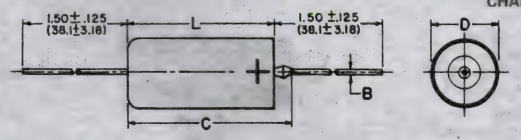
Mfg. Part No.	Voltage (VDC)	Cap. (µF)	Failure Rate Level (%/1000 Hours)	Max. DCL @25°C (µA)	Max. DF @ 25°C, 120Hz (%)	Stock No.	Price Each 1-9
M39003/01-2836	50	1	0.01	0.4	4	46C0387	3.57
M39003/01-2596	50	1	0.1	0.4	4	93B9399	3.44
M39003/01-2356	50	1	1	0.4	4	47F662	3.25
M39003/01-2362	50	2.2	1	0.8	4	47F668	5.02
M39003/01-3088	50	4.7	0.001	1.7	4	46C0539	7.92
M39003/01-7214	50	4.7	0.001	1.7	4	46C1132	11.88
M39003/01-2848	50	4.7	0.01	1.7	4	46C0398	6.64
M39003/01-2608	50	4.7	0.1	1.7	4	46C0256	5.88
M39003/01-2368	50	4.7	1	1.7	4	47F674	5.02
M39003/01-2614	50	10	0.1	2.5	6	46C0260	14.57
M39003\01-2374	50	10	1	2.5	6	06H2424	14.01
M39003/01-2380	50	22	1	5.5	6	47F686	16.92

(79395)

T110 SERIES HERMETICALLY SEALED TANTALUM CAPACITORS

RoHS Compliant Available

The Capacitance Company KEMET CHARGED.



Specifications

- Available in Standard EIA Values
- Capacitance Range: 0.0047µF to 330µF
- Tolerance: K in Type No.: ±10%; J in Type No: ±5%
- CSR13 Series are MIL-C-3900C/01 Graded, Failure Rate Exponential M 1%/khrs
- Available with Sn<Pb terminations (S) or RoHS Compliant (T).

DIMENSIONS

Case Size	D ±0.010" (0.254)	L ±0.031" (0.787)	B ±0.001" (0.025)	C Max.
A	0.135" (3.42)	0.286" (7.26)	0.020" (0.50)	0.422" (10.71)
B	0.185" (4.69)	0.474" (12.03)	0.020" (0.50)	0.610" (15.49)
C	0.289" (7.34)	0.686" (17.42)	0.025" (0.63)	0.822" (20.87)
D	0.351" (8.91)	0.786" (19.96)	0.025" (0.63)	0.922" (23.41)

VOLTAGE: 10 VDC

Mfg. Part No.	Cap. (µF)	Tol.	Case Size	Stock No.	Price Each 1-9
T110B396K010AT	39	± 10%	B	70K8765	3.37
VOLTAGE: 15 VDC					
T110B226K015AT	22	± 10%	B	70K8762	3.37
T110C686K015AT	68	± 10%	C	70K8773	7.60
T110D157K015AT	150	± 10%	D	70K8775	12.10
VOLTAGE: 20 VDC					
T110A225K020AT	2.2	± 10%	A	70K8759	2.84
T110B106K020AT	10	± 10%	B	70K8760	3.37
T110C476K020AT	47	± 10%	C	70K8772	7.98
T110D107K020AT	100	± 10%	D	70K8774	12.10
VOLTAGE: 35 VDC					
T110A105K035AT	1	± 10%	A	70K8757	2.80
T110B475K035AT	4.7	± 10%	B	70K8767	3.37
T110B685K035AT	6.8	± 10%	B	70K8769	3.37
T110C226K035AT	22	± 10%	C	70K8771	6.49
T110D476K035AT	47	± 10%	D	70K8776	12.71
VOLTAGE: 50 VDC					
T110A105K050AT	1	± 10%	A	70K8758	2.91
T110B475K050AT	4.7	± 10%	B	70K8768	3.57

CSR SERIES MIL-C-39003/01 VERSION OF T110 SERIES
VOLTAGE: 20 VDC

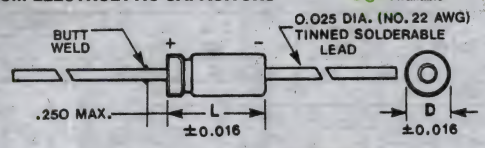
Mfg. Part No.	Cap. (µF)	Tol.	Case Size	Stock No.	Price Each 1-9
CSR13E225KM	2.2	± 10%	A	87F4896	2.83
CSR13E106KM	10	± 10%	B	87F4906	3.20
CSR13E476KM	47	± 10%	C	87F4912	7.69
CSR13E107KM	100	± 10%	D	87F4916	11.54
VOLTAGE: 35 VDC					
CSR13F226KM	22	± 10%	C	87F4913	7.53
CSR13F476KM	47	± 10%	D	87F4918	11.54
VOLTAGE: 50 VDC					
CSR13G105KM	1	± 10%	A	87F4899	3.11
CSR13G226KM	22	± 10%	D	87F4919	11.64

(7242)

109D SERIES SINTERED-ANODE TANTALEX® TANTALUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

VISHAY.



Features

- Outer Plastic Film Insulation
- Meets MIL-DTL-3965
- Commerical Equivalent of Type CL64/CL65

Specifications

- Tolerance: X9 = ±10%, X0 = ±20%
- Lead Length: Suffix "C2" = 1.50"; Suffix "F2", "K2", and "T2" = 2.25"
- Life Test: 2,000 Hours @ +85°C
- Operating Temperature: -55°C to +85°C

DIMENSIONS

Suffix	D x L
C2	0.219 x 0.608"
F2	0.312 x 0.796"
T2	0.406 x 0.921"
K2	0.406 x 1.217"

Mfg. Part No.	Voltage (VDC)	Cap. (µF)	ESR (Ω)	Ripple (mA_{rms})	Stock No.	Price Each 1-4	Price Each 5-9
109D686X9025C2E3	25	68	4	160	18M0365	43.22	39.05
109D107X9025F2E3	25	100	3	270	17M9973	38.95	35.19
109D277X9025F2E3	25	270	2.5	300	18M0165	48.76	44.06
109D567X9025T2E3	25	560	1.8	440	18M0341	65.09	58.82
109D477X9030T2E3	30	470	1.8	...	18M0299	61.41	55.49
109D106X9050C2E3	50	10	4	160	17M9953	34.98	31.61
109D336X9050C2E3	50	33	5	140	18M0189	41.24	37.26
109D476X9050F2E3	50	47	6	...	18M0290	38.95	35.19
109D127X9050F2E3	50	120	2.5	300	18M0007	51.10	46.17
109D277X9050T2E3	50	270	1.8	440	18M0167	61.41	55.49
109D107X9060F2E3	60	100	2.5	300	17M9979	50.66	45.78
109D227X9060T2E3	60	220	1.8	440	18M0129	61.41	55.49
109D226X9075C2E3	75	22	5	140	18M0110	43.71	39.50
109D476X9075F2E3	75	47	3	270	18M0292	50.66	45.78
109D566X9075F2E3	75	56	3	270	18M0327	50.66	45.78
109D826X9075F2E3	75	82	2.5	300	18M0398	48.76	44.06
109D117X9075T2E3	75	110	3.1	...	17M9995	61.41	55.49
109D187X9075T2E3	75	180	1.8	440	18M0089	61.41	55.49
109D227X9075K2E3	75	220	2.2	450	18M0131	84.89	76.70
109D475X9100C2E3	100	4.7	10	...	18M0278	34.98	31.61
109D106X9100C2E3	100	10	6	...	17M9955	41.24	37.26
109D396X9100F2E3	100	39	3.5	...	18M0236	48.76	44.06

(16938)

135D SERIES WET TANTALUM CAPACITORS

RoHS Compliant Available

VISHAY.

135D Series tantalum-case tantalum electrolytic capacitors incorporate the advantages of all the varieties of electrolytic capacitors and eliminate most of the disadvantages. These units have a 3 volt reverse voltage capability at + 85°C and a higher ripple current capability than any other electrolytic type with similar combinations of capacitance and case size. Operating Temperature: - 55 °C to + 85 °C, up to + 200 °C with voltage derating. Type number suffix of '6' indicates a high temperature film insulation, and suffix of '2' indicates an outer polyester-film insulation.

DIMENSIONS

Case Size	Diameter (max)	Length
C	0.188"	0.734"
F	0.281"	0.922"
T	0.375"	1.047"
K	0.375"	1.0343"

VOLTAGE: 10 VDC

Mfg. Part No.	Cap. (µF)	Tol.	Case Size	Stock No.	Price Each 1-4	Price Each 5-9
135D157X9010C6E3	150	± 10%	C	18M0544	64.29	60.92
VOLTAGE: 30 VDC						
135D157X0030F6E3	150	± 20%	T	18M0542	85.37	80.90
VOLTAGE: 50 VDC						
135D106X0050C6E3	10	± 20%	C	18M0420	57.50	54.49
135D106X9050C6E3	10	± 10%	C	18M0429	57.50	54.49
135D127X9050F6E3	120	± 10%	F	18M0503	85.37	80.90
135D167X0050K6E3	160	± 20%	K	18M0551	121.36	115.01
VOLTAGE: 60 VDC						
135D107X0060F6E3	100	± 20%	F	18M0447	90.49	85.75
135D107X9060F6E3	100	± 10%	F	18M0462	85.37	80.90
VOLTAGE: 75 VDC						
135D226X9075C6E3	22	± 10%	C	18M0607	64.29	60.92
135D826X0075F6E3	82	± 20%	F	18M0977	85.37	80.90

➤CONTINUED➤

135D SERIES WET TANTALUM CAPACITORS (CONT.)

VOLTAGE: 100 VDC

Mfg. Part No.	Cap. (µF)	Tol.	Case Size	Stock No.	Price Each 1-4	Price Each 5-9
● 135D106X9100C6E3	10	± 10%	C	18M0432	68.15	64.58
VOLTAGE: 125 VDC						
● 135D685X9125C6E3	6.8	± 10%	C	18M0912	68.15	64.58
● 135D146X9125F6E3	14	± 10%	F	18M0519	80.42	76.21
● 135D276X9125F6E3	27	± 10%	F	18M0654	85.37	80.90
● 135D476X9125T6E3	47	± 10%	T	18M0809	108.66	102.97
● 135D826X0125K6E3	82	± 20%	K	18M0980	136.29	129.16

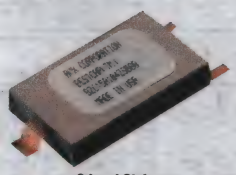
(79354)

BestCap® HIGH POWER PULSE SUPERCAPACITORS

RoHS Compliant Available

AVX
A KYOCERA GROUP COMPANY

Applications
- GSM and GPRS based systems
- Non-battery electronic applications
- Communication equipment
- Memory Backup



Features
- Ultra-low ESR
- Low leakage current
- High specific capacitance

S Lead Style
- High power pulse characteristics
- Low profile planar mount
- Non-polar

Lead Style A, L

AVX's BestCap® technology provides excellent high power pulse characteristics based upon the combination of very high capacitance and ultra-low ESR, together with extremely low leakage current. These capacitors have rapidly become recognized, not only as an excellent compromise between "electronic" or "dielectric" capacitors such as ceramic, tantalum, film and aluminum electrolytic, and batteries, but also as a valuable technology for providing a unique combination of characteristics, particularly very high energy, power and capacitance densities.

VOLTAGE: 3.6 VDC

Mfg. Part No.	Cap. (uF)	ESR (Ω)	Case Size	Lead Style	Stock No.	Price Each 1-9
● BZ013B503ZSB	0.05	0.1	28mm x 17mm	S	01P0608	13.11
● BZ013A703ZSB	0.07	0.14	28mm x 17mm	S	67R2385	16.89
● BZ113B104ZSB	0.1	0.1	28mm x 17mm	S	67R2492	13.56
● BZ013A144ZSB	0.14	0.07	28mm x 17mm	S	12P6387	21.52
● BZ023A284ZAB	0.28	0.045	48mm x 30mm	A	12P6390	26.14
● BZ023A564ZAB	0.56	0.025	48mm x 30mm	A	12P6399	37.52
VOLTAGE: 4.5 VDC						
● BZ054B223ZSBBQ	0.0022	0.17	20mm x 15mm	S	23M5284	14.79
● BZ054B223ZSB	0.022	0.17	20mm x 15mm	S	67R2462	11.53
● BZ014B333ZSB	0.033	0.15	28mm x 17mm	S	67R2395	16.41
VOLTAGE: 5.5 VDC						
● BZ055B153ZSB	0.015	0.25	20mm x 15mm	S	01P0612	12.06
● BZ055A333ZSB	0.033	0.25	20mm x 15mm	S	14N5075	13.94
● BZ055B333ZSB	0.033	0.25	20mm x 15mm	S	67R2479	26.05
● BZ055A683ZSB	0.068	0.125	20mm x 15mm	S	67R2473	21.69
● BZ015B303ZSB	0.03	0.16	28mm x 17mm	S	67R2416	17.83
● BZ015A503ZLB	0.05	0.16	28mm x 17mm	L	01P0609	14.74
● BZ015A503ZSB	0.05	0.16	28mm x 17mm	S	07J1274	19.97
● BZ015B603ZSB	0.06	0.08	28mm x 17mm	S	67R2423	26.08
● BZ015A104ZSB	0.1	0.08	28mm x 17mm	S	07J1279	14.74
● BZ025A204ZAB	0.2	0.06	48mm x 30mm	A	67R2447	27.38
● BZ025A404ZAB	0.4	0.035	48mm x 30mm	A	95C1411	45.33
● BZ125A105ZLB	1	0.035	48mm x 30mm	L	01P0613	47.88
● BZ125A105ZAB	1	0.035	48mm x 30mm	A	67R2507	47.88
VOLTAGE: 9 VDC						
● BZ019B223ZSB	0.022	0.25	28mm x 17mm	S	67R2435	20.32
● BZ019A333ZSB	0.033	0.25	28mm x 17mm	S	82K7452	25.25
● BZ029A124ZAB	0.12	0.07	48mm x 30mm	A	12P6475	36.17
VOLTAGE: 12 VDC						
● BZ05CA103ZSB	0.01	0.5	20mm x 15mm	S	01P0611	16.08
● BZ01CB153ZSB	0.015	0.35	28mm x 17mm	S	67R2378	24.37
● BZ01CA223ZSB	0.022	0.35	28mm x 17mm	S	95C1895	20.10
● BZ02CA903ZAB	0.09	0.09	48mm x 30mm	A	67R2437	45.80
VOLTAGE: 15 VDC						
● BZ05FB682ZSB	0.0068	0.5	20mm x 15mm	S	67R2457	21.93
VOLTAGE: 16 VDC						
● BZ12GA124ZAB	0.12	0.16	48mm x 30mm	A	67R2504	64.91

*mF values included for ease of selection.
(121132)

PAS TYPE POLYACENE SMD COIN CAPACITORS

RoHS Compliant Available

TAIYO YUDEN

Features
- High capacity
- High reliability
- World's smallest coin shaped capacitors

Specifications
- Operating Temp. Range:
  HR TYPE: -25°C to +60°C
  SR TYPE: -25°C to +70°C

Applications
- Memory and RTC back-up power source used for cellular phone, PDA, digital camera, portable radio, etc.

HR SERIES
VOLTAGE: 3.3 VDC

Mfg. Part No.	Cap. (uF)	Internal Resistance (Ω)	D x H (mm)	Stock No.	Price Each 1-9
● PAS311HR-VA6R	30000	120	3.8 x 1.1	12T3290	0.99
● PAS311HR-VG1	30000	120	3.8 x 1.1	12T3291	0.95
● PAS409HR-VE5R	30000	100	4.8 x 0.9	90R9900	0.52
SR SERIES					
VOLTAGE: 2.6 VDC					
● PAS311SR-VA6R	30000	50	3.8 x 1.1	12T3292	0.95

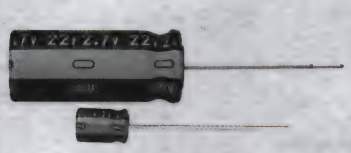
(191921)

UW SERIES RADIAL LEADED ELECTRIC DOUBLE LAYER CAPACITORS

RoHS Compliant Available

nichicon

Features:
- High voltage type
- One rank smaller case sized than UM series
- Wide temperature range



Specifications:
- Operating temperature: -25°C to +70°C
- Voltage range: 2.7V
- Tolerance: ±20%

VOLTAGE: 2.7 VDC

Mfg. Part No.	Cap. (F)	Tol.	D x L (mm)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● JUWT1105MCD	1	± 20%	6.3 x 9	27T9832	0.92
● JUWT1475MPD	4.7	± 20%	10 x 20	27T9838	2.41
● JUWT1685MHD	6.8	± 20%	12.5 x 20	27T9840	3.92
● JUWT1126MPD	12	± 20%	10 x 31.5	27T9833	4.50
● JUWT1336MHD	33	± 20%	16 x 31.5	27T9837	6.08

(194498)

EEV-TG SERIES SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

Panasonic

Features:
- Endurance: 1000h to 2000h at +125°C
- Miniaturization (40% less than **TA series**)
- Low ESR (low temperature)
- Capacitance tolerance: ±20% (120Hz/+20°C)
- Temperature range –40°C to +125°C

Mfg. Part No.	Cap. (µF)	Voltage (VDC)	Dia. x H (mm)	Stock No.	Price Each 1-9
● EEV-TG1C471Q	470	16	12.5 x 13.5	53W3916	2.01
● EEV-TG1C102UQ	1000	16	12.5 x 13.5	53W3915	2.16
● EEV-TG1E471Q	470	25	12.5 x 13.5	53W3919	2.01
● EEV-TG1E681UQ	680	25	12.5 x 13.5	53W3920	2.19
● EEV-TG1E102UM	1000	25	16 x 16.5	53W3917	2.73
● EEV-TG1E222M	2200	25	18 x 16.5	53W3918	3.21
● EEV-TG1V331Q	330	35	12.5 x 13.5	53W3929	2.01
● EEV-TG1V471UQ	470	35	12.5 x 13.5	53W3930	2.19
● EEV-TG1V102M	1000	35	18 x 16.5	53W3928	3.21
● EEV-TG1H221Q	220	50	12.5 x 13.5	53W3922	2.01
● EEV-TG1H331Q	330	50	12.5 x 13.5	53W3923	2.11
● EEV-TG1H471M	470	50	16 x 16.5	53W3924	2.69
● EEV-TG1H102M	1000	50	18 x 16.5	53W3921	3.21
● EEV-TG1J101Q	100	63	12.5 x 13.5	53W3925	2.01
● EEV-TG1J221Q	220	63	12.5 x 13.5	53W3926	2.14
● EEV-TG1J331M	330	63	16 x 16.5	53W3927	2.69
● EEV-TG2A470Q	47	100	12.5 x 13.5	53W3933	2.01
● EEV-TG2A101M	100	100	16 x 16.5	53W3931	2.53
● EEV-TG2A331M	330	100	18 x 16.5	53W3932	3.21

(208937)

EEV-EB SERIES SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

Panasonic

Features:
- Endurance : 3000h to 5000h at 105°C
- Large can size
- Capacitance tolerance: ±20% (120Hz/+20°C)
- Temperature range: –25°C to +105°C

Mfg. Part No.	Cap. (µF)	Voltage (VDC)	D x H (mm)	Stock No.	Price Each 1-9
EEV-EB2C100Q	10	160	13.5 x 13.5	53W3877	1.29
EEV-EB2C330SQ	33	160	12.5 x 16.5	53W3878	2.12
EEV-EB2C470SM	47	160	16 x 16.5	53W3879	2.12
EEV-EB2C680SM	68	160	18 x 16.5	53W3880	2.49
EEV-EB2D220SQ	22	200	12.5 x 16.5	53W3882	1.99
EEV-EB2D470SM	47	200	18 x 16.5	53W3883	2.49
EEV-EB2D101M	100	200	18 x 21.5	53W3881	2.93
EEV-EB2E100Q	10	250	10 x 16.5	53W3884	1.48
EEV-EB2E680M	68	250	18 x 21.5	53W3885	2.79
EEV-EB2G3R3Q	3.3	400	10 x 13.5	53W3888	1.21
EEV-EB2G4R7Q	4.7	400	10 x 16.5	53W3889	1.48
EEV-EB2G100SM	10	400	16 x 16.5	53W3886	2.12
EEV-EB2G220M	22	400	16 x 21.5	53W3887	2.49
EEV-EB2W2R2Q	2.2	450	10 x 13.5	53W3891	1.29
EEV-EB2W3R3Q	3.3	450	10 x 16.5	53W3893	1.39
EEV-EB2W4R7SQ	4.7	450	12.5 x 16.5	53W3894	2.12
EEV-EB2W100SM	10	450	18 x 16.5	53W3890	2.49
EEV-EB2W220M	22	450	18 x 21.5	53W3892	2.79

(208936)

EEU-ED SERIES RADIAL LEAD ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

Panasonic

Features:
- Endurance: 8000h to 10000h at +105°C
- High ripple current (at high frequency)
- Capacitance tolerance: ±20% (120Hz/+20°C)
- Temperature range: –25°C to +105°C

Mfg. Part No.	Cap. (µF)	Voltage (VDC)	Dia. x L (mm)	Stock No.	Price Each 1-9
EEU-ED2C101S	100	160	16 x 20	49W6661	1.71
EEU-ED2C221S	220	160	18 x 25	49W6667	1.99
EEU-ED2D680	68	200	12.5 x 25	53W8323	1.36
EEU-ED2E470S	47	250	16 x 20	49W6689	1.71
EEU-ED2E101S	100	250	18 x 25	49W6684	1.99
EEU-ED2V470S	47	350	18 x 20	49W6708	1.93
EEU-ED2V820S	82	350	18 x 25	53W8324	2.39
EEU-ED2G220S	22	400	16 x 20	49W6699	1.93
EEU-ED2W330S	33	450	18 x 25	49W6716	2.39

(208929)

EEF-SX SERIES SURFACE MOUNT "SP-CAP" CONDUCTIVE POLYMER ALUMINUM CAPACITORS

RoHS Compliant Available

Panasonic

Features:
- Super low ESR yet higher capacitance at the same case size as conventional products
- Excellent noise absorbent characteristics
- High ripple current
- Capacitance tolerance: ±20%
- Temperature range: –40°C to +105°C
- Size: 7.3mmL x 4.3mmW x 1.9mmH

Mfg. Part No.	Cap. (µF)	Voltage (VDC)	ESR (ohm)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape & Reel Stock No.	Tape & Reel Reel Qty	Tape & Reel Price Each 1-3499
EEF-SX0D181ER	180	2	0.009	05X8461	1.92	55W9278	3500	0.57
EEF-SX0D331XE	330	2	0.006	54W2546	2.13	54W2548	3500	0.63
EEF-SX0E181ER	180	2.5	0.009	22T5107	1.92	05X8462	3500	0.57
EEF-SX0E471ER	470	2.5	0.009	49W5355	2.54	01X1157	3500	0.84
EEF-SX0E471XE	470	2.5	0.006	53W3871	2.83	49W5357	3500	0.93
EEF-SX0E471E4	470	2.5	0.0045	53W3870	3.27	49W5356	3500	1.08
EEF-SX0J121E7	120	6.3	0.007	54W2550	2.45	54W2551	3500	0.81

(208927)

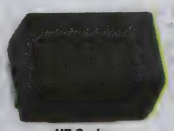
EEF-CD, -CX, -UD AND -UE SERIES SURFACE MOUNT "SP-Cap" CONDUCTIVE POLYMER ALMINUM CAPACITORS

RoHS Compliant Available

Panasonic

CD, CX Series

UD Series



UE Series

Features:
- Low ESR
- Excellent noise absorbent characteristics
- Capacitance tolerance: ±20%
- Temperature range: –40°C to +105°C

Applications:
- PC Servers
- Set Top Box
- Audio Visual
- Testing & Measurement

Mfg. Part No.	Cap. (µF)	Voltage (VDC)	ESR (ohm)	Stock No.	Price Each 1-9
EEF-CD SERIES — 7.3MM L X 4.3MM W X 1.8MM H					
EEF-CD1A390ER	39	100	0.025	53W3864	1.78
EEF-CD1C2R2R	2.2	16	0.11	54W2523	1.61
EEF-CX SERIES — 7.3MM L X 4.3MM W X 1.9MM H					
EEF-CX0D331R	330	2	0.015	54W2527	1.87
EEF-CX0D471R	470	2	0.015	54W2531	2.25
EEF-CX0D561R	560	2	0.015	95W9782	2.23
EEF-CX0E331R	330	2.5	0.015	54W2535	1.85
EEF-CX0E471R	470	2.5	0.015	49W5260	2.37
EEF-CX0G221R	220	4	0.015	54W2538	2.25
EEF-CX0G221XR	220	4	0.012	53W3866	2.40
EEF-CX0G271R	270	4	0.015	95W9783	2.23
EEF-CX0J121R	120	6.3	0.015	53W3867	2.25
EEF-CX0J151R	150	6.3	0.015	54W2542	2.35
EEF-CX0J151XR	150	6.3	0.012	53W8321	2.16
EEF-CX0J181R	180	6.3	0.015	49W5265	2.23
EEF-UD SERIES — 7.3MM L X 4.3MM W X 2.8MM H					
EEF-UD0K101ER	100	8	0.018	53W3872	2.78
EEF-UD0K101R	100	8	0.018	53W3873	2.69
EEF-UE SERIES — 7.3MM L X 4.3MM W X 4.2MM H					
EEF-UE0G331ER	330	4	0.012	53W3874	3.84
EEF-UE0J221ER	220	6.3	0.015	53W3875	3.89
EEF-UE0J221LR	220	6.3	0.007	53W3876	3.84

(208926)

EEF-CT, -SS AND -ST SERIES SURFACE MOUNT "SP-Cap" POLYMER ALUMINUM CAPACITORS

RoHS Compliant Available

Panasonic

Features:
- Low profile
- Low ESR
- High temperature reflow soldering applicable (peak : 260°C 10s, main heating: 230°C 40s)
- Capacitance tolerance: ±20%
- Temperature range: –40°C to +105°C

Mfg. Part No.	Cap. (µF)	Voltage (VDC)	ESR (ohm)	Stock No.	Price Each 1-9
EEF-CT SERIES — 7.3MM L X 4.3MM W X 1.4MM H					
EEF-CT0G181R	180	4	0.015	98W2502	2.11
EEF-CT0J101R	100	6.3	0.015	53W3865	2.18
EEF-CT1A680R	68	10	0.04	17X9828	2.26
EEF-CT1C470R	47	16	0.04	17X9830	2.38
EEF-CT1E220R	22	25	0.04	17X9832	2.38
EEF-SS SERIES — 7.3MM L X 4.3MM W X 1.1MM H					
EEF-SS0D221R	220	2	0.006	53W3868	2.10
EEF-SS0E181R	180	2.5	0.006	98W2503	2.10
EEF-ST SERIES — 7.3MM L X 4.3MM W X 1.4MM H					
EEF-ST0D331R	330	2	0.006	53W3869	2.38
EEF-ST0E271R	270	2.5	0.006	98W2504	2.27

(208966)

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(212565)

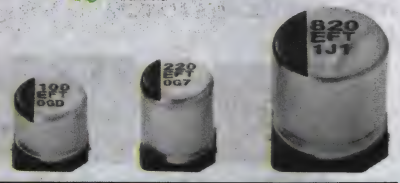
ALUMINUM ELECTROLYTIC CAPACITORS

EEE-FT SERIES SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITOR

RoHS Compliant Available

Panasonic

Features:
- Endurance : 2000h at 105°C
- Miniaturized, Low ESR
- Capacitance tolerance: ±20% (120Hz/+20°C)
- Temperature range: –55°C to +105°C



Mfg. Part No.	Voltage (VDC)	Cap. (µF)	D x H (mm)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape & Reel Stock No.	Reel Qty	Tape & Reel Price Each 1-1999
EEE-FT1A680AR	10	68	4 x 5.8	73T9155	0.45	01X0903	2000	0.10
EEE-FT1A151AR	10	150	5 x 5.8	73T9152	0.55	01X0900	1000	0.14
EEE-FT1A221AP	10	220	6.3 x 5.8	73T9154	0.48	01X0902	1000	0.18
EEE-FT1A102AP	10	1000	8 x 10.2	73T9151	0.93	01X0899	500	0.36
EEE-FT1A152AP	10	1500	10 x 10.2	73T9153	1.34	01X0901	500	0.51
EEE-FT1C470AR	16	47	4 x 5.8	73T9160	0.45	01X0908	2000	0.10
EEE-FT1C680AR	16	68	5 x 5.8	73T9161	0.55	01X0909	1000	0.14
EEE-FT1C101AR	16	100	5 x 5.8	73T9156	0.55	01X0904	1000	0.14
EEE-FT1C151AP	16	150	6.3 x 5.8	73T9158	0.48	01X0906	1000	0.18
EEE-FT1C221AP	16	220	6.3 x 5.8	73T9159	0.48	01X0907	1000	0.18
EEE-FT1C681AP	16	680	8 x 10.2	73T9162	0.93	01X0910	500	0.36
EEE-FT1C102AP	16	1000	10 x 10.2	73T9157	1.42	01X0905	500	0.55
EEE-FT1E220AR	25	22	4 x 5.8	31T8175	0.48	01X0912	2000	0.11
EEE-FT1E330AR	25	33	4 x 5.8	53W8320	0.45	01X0913	2000	0.12
EEE-FT1E470AR	25	47	5 x 5.8	31T8177	0.58	97W6961	1000	0.15
EEE-FT1E680AR	25	68	5 x 5.8	31T8179	0.58	97W6963	1000	0.15
EEE-FT1E101AP	25	100	6.3 x 5.8	31T8174	0.51	01X0911	1000	0.19
EEE-FT1E471AP	25	470	8 x 10.2	31T8178	0.99	97W6962	500	0.38
EEE-FT1E821AP	25	820	10 x 10.2	31T8180	1.42	01X0914	500	0.55
EEE-FT1V220AR	35	22	4 x 5.8	31T8187	0.45	01X0919	2000	0.10
EEE-FT1V330AR	35	33	5 x 5.8	01X2797	0.55	55W9259	1000	0.14
EEE-FT1V470AR	35	47	5 x 5.8	31T8190	0.58	97W6967	1000	0.15
EEE-FT1V680AP	35	68	6.3 x 5.8	31T8192	0.48	01X0921	1000	0.18
EEE-FT1V101AP	35	100	6.3 x 5.8	31T8186	0.51	01X0918	1000	0.18
EEE-FT1V331AP	35	330	8 x 10.2	31T8189	0.99	97W6966	500	0.38
EEE-FT1V561AP	35	560	10 x 10.2	31T8191	1.42	01X0920	500	0.55
EEE-FT1H100AR	50	10	5 x 5.8	31T8181	0.57	01X0915	2000	0.13
EEE-FT1H220AR	50	22	5 x 5.8	31T8182	0.58	97W6964	1000	0.15
EEE-FT1H470AP	50	47	6.3 x 5.8	31T8185	0.51	01X0917	1000	0.19
EEE-FT1H221AP	50	220	8 x 10.2	31T8183	0.99	97W6965	500	0.38
EEE-FT1H331AP	50	330	10 x 10.2	31T8184	1.42	01X0916	500	0.55

(209005)

EEE-HB SERIES SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

Panasonic

Features:
- Endurance : 105°C 2000h
- Vibration-proof product is available upon request

TYPE: HIGH TEMPERATURE

Mfg. Part No.	Voltage (VDC)	Cap. (µF)	D x H (mm)	Stock No.	Price Each 1-9
EEE-HBA101UAP	10	100	6.3 x 5.8	53W3706	0.57
EEE-HB1C100AR	16	10	4 x 5.8	53W3716	0.69
EEE-HBC101UAP	16	100	6.3 x 5.8	53W3707	0.61
EEE-HBC220UAR	16	22	4 x 5.8	53W3708	0.75
EEE-HBC470UAR	16	47	5 x 5.8	53W3709	0.59
EEE-HB1E100AR	25	10	5 x 5.8	53W3718	0.57
EEE-HBE100UAR	25	10	4 x 5.8	53W3710	0.75
EEE-HBE101UAP	25	100	8 x 6.2	53W3711	0.66
EEE-HB1H100AP	50	10	6.3 x 5.8	53W3722	0.64
EEE-HBH101UAP	50	100	10 x 10.2	53W3712	1.12
EEE-HBH221UAP	50	220	10 x 10.2	53W3713	1.06
TYPE: STANDARD					
EEE-HB0G101R	4	100	5 x 5.8	53W3714	0.50
EEE-HB0J330R	6.3	33	4 x 5.8	53W3715	0.61
EEE-HB1C220R	16	22	5 x 5.8	53W3717	0.50
EEE-HB1E6R8R	25	6.8	4 x 5.8	53W3720	0.61
EEE-HB1E330P	25	33	6.3 x 5.8	53W3719	0.59
EEE-HB1V220P	35	22	6.3 x 5.8	53W3726	0.59

➤CONTINUED➤

EEE-HB SERIES SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

TYPE: STANDARD

Mfg. Part No.	Voltage (VDC)	Cap. (µF)	D x H (mm)	Stock No.	Price Each 1-9
EEE-HB1HR10R	50	0.1	4 x 5.8	53W3721	0.61
EEE-HB1H3R3R	50	3.3	4 x 5.8	53W3723	0.61
EEE-HB1H4R7R	50	4.7	5 x 5.8	53W3724	0.47
EEE-HB1H6R8R	50	6.8	5 x 5.8	53W3725	0.59

(206908)

EEE-FK SERIES SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

Panasonic

Features:
- Endurance : 105°C 2000h for standard, 5000h for suffix Q, M, GP
- Vibration-proof product is available upon request.

HIGH TEMPERATURE LEAD-FREE REFLOW TYPE

Mfg. Part No.	Voltage (VDC)	Cap. (µF)	D x H (mm)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape & Reel Stock No.	Reel Qty	Tape & Reel Price Each 1-1999
EEE-FKJ470UAR	6.3	47	4 x 5.8	94W2404	0.85	49W4656	2000	0.11
EEE-FKJ331XAP	6.3	330	6.3 x 7.7	53W3657	0.51	49W4655	900	0.19
EEE-FK0J332AQ	6.3	3300	12.5 x 13.5	53W3661	1.83	49W4662	200	0.88
EEE-FK1A151AP	10	150	6.3 x 5.8	53W3664	0.55	49W4667	1000	0.14
EEE-FK1A221AP	10	220	8 x 6.2	54W2507	0.65	54W2508	1000	0.23
EEE-FKA221XAP	10	220	6.3 x 7.7	94W2401	0.51	49W4648	1000	0.19
EEE-FK1C100AR	16	10	10 x 4	54W2510	0.90	54W2513	2000	0.11
EEE-FK1C220AR	16	22	5 x 5.8	53W8318	0.49	94W2421	1000	0.12
EEE-FKC470UAR	16	47	5 x 5.8	53W3656	0.49	49W4653	1000	0.12
EEE-FKC151XAP	16	150	6.3 x 7.7	53W3654	0.51	49W4650	900	0.19
EEE-FKC221XAP	16	220	6.3 x 7.7	53W3655	0.54	49W4652	900	0.20
EEE-FK1C152AQ	16	1500	12.5 x 13.5	53W3668	1.83	49W4677	200	0.88
EEE-FK1E680AP	25	68	6.3 x 5.8	53W3678	0.58	49W4691	1000	0.15
EEE-FK1E151AP	25	150	8 x 10.2	53W3672	0.79	49W4683	500	0.30
EEE-FK1E102AQ	25	1000	12.5 x 13.5	53W3671	1.83	49W4682	200	0.88
EEE-FK1E222AM	25	2200	16 x 16.5	53W3674	2.39	49W4687	125	1.34
EEE-FK1E332AM	25	3300	18 x 16.5	53W3676	2.82	49W4689	125	1.58
EEE-FKV680XAP	35	68	6.3 x 7.7	53W3658	0.54	49W4658	900	0.20
EEE-FK1V152AM	35	1500	16 x 16.5	53W3688	2.36	49W4716	125	1.32
EEE-FK1H331AQ	50	330	12.5 x 13.5	53W3679	1.83	49W4695	200	0.88
EEE-FK1H471AM	50	470	16 x 16.5	53W3680	2.39	49W4698	125	1.34
EEE-FK1J221AQ	63	220	12.5 x 13.5	53W3681	1.90	49W4702	200	0.91
EEE-FK1J471AM	63	470	16 x 16.5	53W3682	2.51	49W4703	125	1.41
EEE-FK1K101AQ	80	100	12.5 x 13.5	53W3684	1.92	49W4706	200	0.92
EEE-FK1K151AQ	80	150	12.5 x 13.5	53W3685	1.81	49W4707	200	0.87
EEE-FK2A470AQ	100	47	12.5 x 13.5	53W3693	1.92	49W4725	200	0.92
EEE-FK2A680AQ	100	68	12.5 x 13.5	53W3694	1.81	49W4726	200	0.87
EEE-FK2A101AM	100	100	16 x 16.5	53W3690	2.51	49W4721	125	1.41
EEE-FK2A221AM	100	220	18 x 16.5	53W3691	2.96	49W4723	125	1.66
EEE-FK2A331AM	100	330	18 x 16.5	53W3692	2.96	49W4724	125	1.66
STANDARD SURFACT MOUNT TYPE								
EEE-FK0J220R	6.3	22	4 x 5.8	53W8316	0.81	01X0825	2000	0.10
EEE-FK0J470UR	6.3	47	5 x 5.8	53W3662	0.76	49W4663	2000	0.09
EEE-FK0J101UR	6.3	100	5 x 5.8	23T0829	0.67	94W2406	1000	0.13
EEE-FK0J221P	6.3	220	6.3 x 5.8	23T0833	0.52	94W2409	1000	0.13
EEE-FK0J331P	6.3	330	8 x 6.2	53W8317	0.58	01X0827	1000	0.21
EEE-FK0J471P	6.3	470	8 x 10.2	23T0837	0.75	94W2410	500	0.29
EEE-FK0J101P	6.3	100	6.3 x 5.8	53W3659	0.52	49W4659	1000	0.13
EEE-FK0J102GP	6.3	1000	8 x 10.2	53W3660	0.92	49W4660	500	0.35
EEE-FK1A220R	10	22	4 x 5.8	23T0839	0.81	94W2413	2000	0.10
EEE-FK1A330UR	10	33	5 x 5.8	53W3665	0.76	49W4670	2000	0.09
EEE-FK1A151P	10	150	6.3 x 5.8	23T0838	0.52	94W2411	1000	0.13
EEE-FK1A331GP	10	330	8 x 10.2	53W3666	0.86	49W4671	500	0.33
EEE-FK1A471GP	10	470	8 x 10.2	53W3667	0.92	49W4672	500	0.35
EEE-FK1A681P	10	680	8 x 10.2	23T0842	0.71	94W2417	500	0.27
EEE-FK1A102GP	10	1000	10 x 10.2	53W3663	1.08	49W4666	500	0.41
EEE-FK1C470P	16	47	6.3 x 5.8	23T0848	0.52	94W2428	500	0.13
EEE-FK1C680P	16	68	6.3 x 5.8	53W8319	0.52	94W2431	1000	0.13
EEE-FK1C151XP	16	150	6.3 x 7.7	23T0843	0.71	94W2420	1000	0.19
EEE-FK1C221XP	16	220	6.3 x 7.7	23T0845	0.67	94W2425	1000	0.18
EEE-FK1C681P	16	680	10 x 10.2	23T0851	0.88	94W2432	1000	0.34
EEE-FK1C471GP	16	470	8 x 10.2	53W3669	0.92	49W4678	500	0.35

➤CONTINUED➤

EEE-FK SERIES SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

STANDARD SURFACT MOUNT TYPE

Mfg. Part No.	Voltage (VDC)	Cap. (µF)	D x H (mm)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape & Reel Stock No.	Tape & Reel Reel Qty	Tape & Reel Price Each 1-1999
EEE-FK1C681GP	16	680	10 x 10.2	53W3670	1.08	49W4681	500	0.41
EEE-FK1E680P	25	68	6.3 x 5.8	23T0855	0.52	94W2448	1000	0.13
EEE-FK1E101XP	25	100	6.3 x 7.7	23T0852	0.70	94W2437	500	0.18
EEE-FK1E151P	25	150	8 x 10.2	23T0853	0.71	94W2438	500	0.27
EEE-FK1E221GP	25	220	8 x 10.2	53W3673	0.92	49W4686	500	0.35
EEE-FK1E331GP	25	330	8 x 10.2	53W3675	0.92	49W4688	500	0.35
EEE-FK1E471GP	25	470	10 x 10.2	53W3677	1.08	49W4690	500	0.41
EEE-FK1V100R	35	10	5 x 5.8	23T0867	0.67	94W2465	1000	0.13
EEE-FK1V101GP	35	100	8 x 10.2	23T0868	0.92	97W6934	500	0.35
EEE-FK1V680XP	35	68	6.3 x 7.7	23T0873	0.71	94W2478	900	0.19
EEE-FK1V101XP	35	100	6.3 x 7.7	23T0869	0.71	94W2468	900	0.19
EEE-FK1V221GP	35	220	8 x 10.2	53W3689	0.92	49W4717	500	0.35
EEE-FK1H100P	50	10	6.3 x 5.8	23T0856	0.51	94W2449	1000	0.13
EEE-FK1H470XP	50	47	6.3 x 7.7	23T0862	0.71	94W2457	900	0.19
EEE-FK1J680UP	63	68	8 x 10.2	23T0864	0.75	94W2461	500	0.29
EEE-FK1K4R7P	80	4.7	6.3 x 5.8	23T0866	0.55	94W2463	1000	0.14
EEE-FK2A220P	100	22	8 x 10.2	23T0875	0.78	94W2479	500	0.30
EEE-FK2A330P	100	33	10 x 10.2	23T0876	0.90	94W2480	500	0.35

(208906)

EEF-LX SERIES SURFACE MOUNT "SP-CAP" POLYMER ALUMINUM CAPACITORS

RoHS Compliant Available

Panasonic

Features

- Low ESL by structure of SP-Cap 50% ESL of current products
- Super Low-ESR (4.5 m)
- High temperature refl ow soldering applicable

Mfg. Part No.	Voltage (V)	Cap. (uF)	Tol.	ESR (mohm)	Case Style	Stock No.	Price Each 1-9
EEF-LX0E471R	2.5	470	± 20%	6	2917 [7343 Metric]	87W8828	2.11
EEF-LX0E471R4	2.5	470	± 20%	4.5	2917 [7343 Metric]	87W8829	2.11

(210027)

EEE-S SERIES SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

Panasonic

Features:

- Endurance : 85°C 2000h

TYPE - HIGH TEMPERATURE

Mfg. Part No.	Voltage (VDC)	Cap. (µF)	D x L (mm)	Stock No.	Price Each 1-9
EEE-0JA101WAR	6.3	100	5 x 5.4	53W3731	0.49
EEE-0JA331XAP	6.3	330	6.3 x 7.7	53W3740	0.48
EEE-0JS220WR	6.3	22	3 x 5.4	53W3745	0.61
EEE-1AA101WAR	10	100	5 x 5.4	53W3748	0.53
EEE-1AA221AP	10	220	8 x 6.2	53W3753	0.61
EEE-1AA102UAP	10	1000	10 x 10.2	53W3751	0.63
EEE-1CA100AR	16	10	4 x 5.4	53W3761	0.58
EEE-1CA220WAR	16	22	4 x 5.4	53W3767	0.64
EEE-1CA470AP	16	47	6.3 x 5.4	53W3777	0.57
EEE-1CA470WAR	16	47	5 x 5.4	53W3778	0.53
EEE-1CA101WAP	16	100	6.3 x 5.4	53W3764	0.67
EEE-1CA221XAP	16	220	6.3 x 7.7	53W3771	0.51
EEE-1CA471AP	16	470	10 x 10.2	53W3780	0.63
EEE-1CA471UAP	16	470	8 x 10.2	53W3782	0.55
EEE-1EA100WAR	25	10	4 x 5.4	53W3786	0.64
EEE-1EA470WAP	25	47	6.3 x 5.4	53W3802	0.67
EEE-1EA101AP	25	100	8 x 10.2	53W3788	0.54
EEE-1EA101UAP	25	100	8 x 6.2	53W3790	0.61
EEE-1EA101XAP	25	100	6.3 x 7.7	53W3792	0.51
EEE-1EA221UAP	25	220	8 x 10.2	53W3796	0.58
EEE-1EA471UAP	25	470	10 x 10.2	53W3805	0.69
EEE-1VA100WAR	35	10	4 x 5.4	53W3839	0.64
EEE-1VA470WAP	35	47	6.3 x 5.4	53W3855	0.67
EEE-1VA101XAP	35	100	6.3 x 7.7	53W3843	0.51
EEE-1VA221UAP	35	220	8 x 10.2	53W3848	0.58
EEE-1VA331UAP	35	330	10 x 10.2	53W3852	0.69
EEE-1HA1R0AR	50	1	4 x 5.4	53W3809	0.58
EEE-1HA4R7WAR	50	4.7	4 x 5.4	53W3826	0.64
EEE-1HA100AP	50	10	6.3 x 5.4	53W3810	0.53
EEE-1HA100WAR	50	10	5 x 5.4	53W3811	0.53

CONTINUED

EEE-S SERIES SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

Mfg. Part No.	Voltage (VDC)	Cap. (µF)	D x L (mm)	Stock No.	Price Each 1-9
EEE-1HA220WAP	50	22	6.3 x 5.4	53W3819	0.67
EEE-1HA101AP	50	100	10 x 10.2	53W3813	0.63
EEE-1HA101UAP	50	100	8 x 10.2	53W3815	0.58
EEE-1HA221UAP	50	220	10 x 10.2	53W3822	0.69
TYPE - BI POLAR					
EEE-0JA220NR	6.3	22	5 x 5.4	53W3736	0.65
EEE-0JA470NP	6.3	47	6.3 x 5.4	53W3742	0.50
EEE-1AA100NR	10	10	4 x 5.4	53W3746	0.78
EEE-1CA4R7NR	16	4.7	4 x 5.4	53W3776	0.77
EEE-1CA100NR	16	10	5 x 5.4	53W3762	0.65
EEE-1CA220NP	16	22	6.3 x 5.4	53W3766	0.50
EEE-1EA3R3NR	25	3.3	4 x 5.4	53W3798	0.78
EEE-1EA100NP	25	10	6.3 x 5.4	53W3785	0.50
EEE-1VA2R2NR	35	2.2	4 x 5.4	53W3845	0.78
EEE-1VA4R7NR	35	4.7	5 x 5.4	53W3853	0.61
EEE-1VA100NP	35	10	6.3 x 5.4	53W3838	0.49
EEE-1HA010NR	50	1	4 x 5.4	53W3808	0.78
EEE-1HA2R2NR	50	2.2	5 x 5.4	53W3817	0.65
EEE-1HA4R7NP	50	4.7	6.3 x 5.4	53W3825	0.50
TYPE - STANDARD					
EEE-0GA470SR	4	47	4 x 5.4	53W3730	0.51
EEE-0GA101SR	4	100	5 x 5.4	53W3728	0.42
EEE-0GA221SP	4	220	6.3 x 5.4	53W3729	0.50
EEE-0JA330WR	6.3	33	4 x 5.4	53W3738	0.56
EEE-0JA470WR	6.3	47	4 x 5.4	53W3743	0.56
EEE-0JA101WR	6.3	100	5 x 5.4	53W3732	0.46
EEE-0JA221WP	6.3	220	6.3 x 5.4	53W3737	0.59
EEE-0JA331P	6.3	330	8 x 6.2	53W3739	0.54
EEE-0JA331XP	6.3	330	6.3 x 7.7	53W3741	0.68
EEE-0JA471P	6.3	470	8 x 10.2	53W3744	0.58
EEE-0JA102P	6.3	1000	10 x 10.2	53W3733	0.55
EEE-0JA102UP	6.3	1000	8 x 10.2	53W3734	0.51
EEE-0JA152P	6.3	1500	10 x 10.2	53W3735	0.61
EEE-1AA220WR	10	22	4 x 5.4	53W3752	0.51
EEE-1AA330WR	10	33	4 x 5.4	53W3756	0.56
EEE-1AA470WR	10	47	5 x 5.4	53W3758	0.46
EEE-1AA101SP	10	100	6.3 x 5.4	53W3747	0.50
EEE-1AA101WR	10	100	5 x 5.4	53W3749	0.46
EEE-1AA221P	10	220	8 x 6.2	53W3754	0.54
EEE-1AA221XP	10	220	6.3 x 7.7	53W3755	0.68
EEE-1AA331P	10	330	8 x 10.2	53W3757	0.58
EEE-1AA471P	10	470	10 x 10.2	53W3759	0.55
EEE-1AA471UP	10	470	8 x 10.2	53W3760	0.58
EEE-1AA102P	10	1000	10 x 10.2	53W3750	0.55
EEE-1CA220WR	16	22	4 x 5.4	53W3768	0.56
EEE-1CA330WR	16	33	5 x 5.4	53W3773	0.46
EEE-1CA470WR	16	47	5 x 5.4	53W3779	0.46
EEE-1CA101P	16	100	8 x 6.2	53W3763	0.54
EEE-1CA101WP	16	100	6.3 x 5.4	53W3765	0.59
EEE-1CA221P	16	220	8 x 10.2	53W3769	0.57
EEE-1CA221XP	16	220	6.3 x 7.7	53W3772	0.68
EEE-1CA331P	16	330	10 x 10.2	53W3774	0.55
EEE-1CA331UP	16	330	8 x 10.2	53W3775	0.58
EEE-1CA471P	16	470	10 x 10.2	53W3781	0.55
EEE-1CA471UP	16	470	8 x 10.2	53W3783	0.51
EEE-1CA221UP	16	220	6.3 x 10.2	53W3770	0.54
EEE-1EA100WR	25	10	4 x 5.4	53W3787	0.56
EEE-1EA220WR	25	22	5 x 5.4	53W3794	0.43
EEE-1EA330WR	25	33	5 x 5.4	53W3799	0.46
EEE-1EA470WP	25	47	6.3 x 5.4	53W3803	0.59
EEE-1EA101P	25	100	8 x 10.2	53W3789	0.58
EEE-1EA101UP	25	100	8 x 6.2	53W3791	0.54
EEE-1EA101XP	25	100	6.3 x 7.7	53W3793	0.68
EEE-1EA221P	25	220	10 x 10.2	53W3795	0.55
EEE-1EA221UP	25	220	8 x 10.2	53W3797	0.51
EEE-1EA331P	25	330	10 x 10.2	53W3800	0.55
EEE-1EA331UP	25	330	8 x 10.2	53W3801	0.51
EEE-1EA471P	25	470	10 x 10.2	53W3804	0.61
EEE-1VS2R2SR	35	2.2	3 x 5.4	53W3857	0.61
EEE-1VA100WR	35	10	4 x 5.4	53W3840	0.56
EEE-1VA220WR	35	22	5 x 5.4	53W3846	0.46
EEE-1VA330WP	35	33	6.3 x 5.4	53W3850	0.59
EEE-1VA470P	35	47	8 x 6.2	53W3854	0.54

CONTINUED

EEE-S SERIES SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

TYPE - STANDARD

Mfg. Part No.	Voltage (VDC)	Cap. (µF)	D x L (mm)	Stock No.	Price Each 1-9
EEE-1VA470WP	35	47	6.3 x 5.4	53W3856	0.59
EEE-1VA101P	35	100	10 x 10.2	53W3841	0.55
EEE-1VA101UP	35	100	8 x 10.2	53W3842	0.58
EEE-1VA101XP	35	100	6.3 x 7.7	53W3844	0.67
EEE-1VA221P	35	220	10 x 10.2	53W3847	0.55
EEE-1VA221UP	35	220	8 x 10.2	53W3849	0.51
EEE-1VA331P	35	330	10 x 10.2	53W3851	0.61
EEE-1HS0R1SR	50	0.1	3 x 5.4	53W3831	0.61
EEE-1HAR33SR	50	0.33	4 x 5.4	53W3807	0.51
EEE-1HS010SR	50	1	3 x 5.4	53W3832	0.61
EEE-1HA4R7WR	50	4.7	4 x 5.4	53W3827	0.56
EEE-1HA100WR	50	10	5 x 5.4	53W3812	0.46
EEE-1HA220P	50	22	8 x 6.2	53W3818	0.50
EEE-1HA220WP	50	22	6.3 x 5.4	53W3820	0.59
EEE-1HA330UP	50	33	8 x 6.2	53W3823	0.54
EEE-1HA330XP	50	33	6.3 x 7.7	53W3824	0.68
EEE-1HA470P	50	47	10 x 10.2	53W3828	0.55
EEE-1HA470UP	50	47	8 x 10.2	53W3829	0.58
EEE-1HA470XP	50	47	6.3 x 7.7	53W3830	0.68
EEE-1HA101P	50	100	10 x 10.2	53W3814	0.55
EEE-1HA101UP	50	100	8 x 10.2	53W3816	0.51
EEE-1HA221P	50	220	10 x 10.2	53W3821	0.61
EEE-1JA220P	63	22	8 x 10.2	53W3835	0.49
EEE-1JA220UP	63	22	8 x 6.2	53W3836	0.59
EEE-1JA470UP	63	47	8 x 10.2	53W3837	0.52
EEE-1JA101P	63	100	10 x 10.2	53W3834	0.61
EEE-2AA3R3P	100	3.3	8 x 6.2	53W3861	0.56
EEE-2AA4R7UP	100	4.7	8 x 6.2	53W3863	0.62
EEE-2AA100P	100	10	8 x 10.2	53W3858	0.52
EEE-2AA100UP	100	10	8 x 6.2	53W3859	0.65
EEE-2AA220UP	100	22	8 x 10.2	53W3860	0.57
EEE-2AA330P	100	33	10 x 10.2	53W3862	0.61

(192098)

PS SERIES FUNCTIONAL POLYMER ALUMINUM SOLID ELECTROLYTIC CAPACITORS

RoHS Compliant Available

nichicon

Features
- Low ESR at a high frequency range
- High ripple current capability
- Long life and high reliability

Applications
- Switching Power Supply and DC/DC Converter
- Back up Power Supplies of CPU(VRM etc.)
- Miniature high Power Supply

Mfg. Part No.	Voltage (V)	Cap. (uF)	Tol.	D x H (mm)	Stock No.	Price Each 1-9
RPS1C271MCN1GS	16	270	± 20%	8 x 11.7	17W5864	1.82
RPS1E220MCN1GS	25	22	± 20%	8 x 6.7	17W5865	2.26
RPS1H120MCN1GS	50	12	± 20%	6.3 x 5.7	17W5866	2.00
RPS1H220MCN1GS	50	22	± 20%	8 x 6.7	17W5867	2.61
RPS1H330MCN1GS	50	33	± 20%	10 x 7.7	17W5868	2.46
RPS1H470MCN1GS	50	47	± 20%	8 x 11.7	17W5869	3.23
RPS1H820MCN1GS	50	82	± 20%	10 x 12.4	17W5870	5.10
RPS1J8R2MCN1GS	63	8.2	± 20%	6.3 x 5.7	17W5875	1.72
RPS1J120MCN1GS	63	12	± 20%	8 x 6.7	17W5871	2.41
RPS1J220MCN1GS	63	22	± 20%	10 x 7.7	17W5872	2.59
RPS1J330MCN1GS	63	33	± 20%	8 x 11.7	17W5873	3.57
RPS1J560MCN1GS	63	56	± 20%	10 x 12.4	17W5874	5.35

(209959)

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(212569)

VA SERIES FUNCTIONAL POLYMER ALUMINUM SOLID ELECTROLYTIC CAPACITORS

RoHS Compliant Available

nichicon

Applications
- Switching Power Supply and DC/DC Converter
- Back up Power Supplies of CPU(VRM etc.)
- Miniature high Power Supply

Features
- Low ESR at a high frequency range
- High ripple current capability

Mfg. Part No.	Voltage (V)	Cap. (uF)	Tol.	Case Style	Stock No.	Price Each 1-9
RVA0E221MNG	2.5	220	± 20%	2917 [7343 Metric]	17W5887	1.06
RVA0G151MNG	4	150	± 20%	2917 [7343 Metric]	17W5888	1.06
RVA0J101MNG	6.3	100	± 20%	2917 [7343 Metric]	17W5889	1.13
RVA1C270MNG	16	27	± 20%	2917 [7343 Metric]	17W5890	1.44
RVA1C330MNG	16	33	± 20%	2917 [7343 Metric]	17W5891	1.57
RVA1E150MNG	25	15	± 20%	2917 [7343 Metric]	17W5892	1.48

(209970)

NU SERIES FUNCTIONAL POLYMER ALUMINUM SOLID ELECTROLYTIC CAPACITORS

RoHS Compliant Available

nichicon

Features
- Low ESR at a high frequency range
- High ripple current capability
- Long life and high reliability

Applications
- Switching Power Supply and DC/DC Converter
- Back up Power Supplies of CPU(VRM etc.)
- Miniature high Power Supply

Mfg. Part No.	Voltage (V)	Cap. (uF)	Tol.	D x H (mm)	Stock No.	Price Each 1-9
RNU0J221MDS1JX	6.3	220	± 20%	6.3 x 10	17W5851	0.64
RNU1C681MDN1PH	16	680	± 20%	10 x 12.5	17W5852	1.36
RNU1E181MDN1KX	25	180	± 20%	8 x 11.5	17W5853	2.92
RNU1E331MDN1PH	25	330	± 20%	10 x 12.5	17W5854	4.32
RNU1V151MDN1PH	35	150	± 20%	10 x 12.5	17W5861	2.67
RNU1H390MDN1KX	50	39	± 20%	8 x 11.5	17W5855	2.48
RNU1H470MDN1PH	50	47	± 20%	10 x 12.5	17W5856	2.58
RNU1H680MDN1PH	50	68	± 20%	10 x 12.5	17W5857	3.72
RNU1J330MDN1KX	63	33	± 20%	8 x 11.5	17W5858	2.65
RNU1J390MDN1PH	63	39	± 20%	10 x 12.5	17W5859	4.00
RNU1J560MDN1PH	63	56	± 20%	10 x 12.5	17W5860	5.03

(209960)

TZV SERIES SMD CHIP MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

Rubycon

Features:
- Load Life: 2000 hours at 105°C
- Available for high density mounting
- Low impedance at 100kHz with selected materials

Specifications:
- Tolerance: ±20%
- Operating Temp: -55°C to +105°C

Mfg. Part No.	Cap. (µF)	DxL (mm)	Stock No.	Price Each 1-9	10-24
VOLTAGE: 6.3 VDC					
6.3TZV22M4X6.1	22	4 x 6.1	38M7139	0.43	0.42
6.3TZV47M5X6.1	47	5 x 6.1	38M7144	0.48	0.47
6.3TZV100M5X6.1	100	5 x 6.1	38M7136	0.49	0.47
6.3TZV100M6.3X6.1	100	6.3 x 6.1	38M7137	0.58	0.56
6.3TZV220M6.3X6.1	220	6.3 x 6.1	38M7140	0.64	0.61
6.3TZV330M6.3X8	330	6.3 x 8	38M7142	0.65	0.62
6.3TZV1000M8X10.5	1000	8 x 10.5	38M7138	1.02	0.98
VOLTAGE: 10 VDC					
10TZV33M4X6.1	33	4 x 6.1	38M0139	0.43	0.42
10TZV220M6.3X8	220	6.3 x 8	38M0138	0.71	0.68
10TZV470M8X10.5	470	8 x 10.5	38M0140	1.01	0.97
10TZV680M8X10.5	680	8 x 10.5	38M0141	1.00	0.96
10TZV1000M10X10.5	1000	10 x 10.5	38M0137	1.50	1.44
VOLTAGE: 16 VDC					
16TZV10M4X6.1	10	4 x 6.1	38M1312	0.50	0.48
16TZV22M4X6.1	22	4 x 6.1	38M1315	0.47	0.45
16TZV33M5X6.1	33	5 x 6.1	38M1318	0.48	0.47
16TZV47M5X6.1	47	5 x 6.1	38M1320	0.56	0.54
16TZV100M6.3X6.1	100	6.3 x 6.1	38M1313	0.67	0.64
16TZV220M6.3X8	220	6.3 x 8	38M1317	0.76	0.73
16TZV330M8X10.5	330	8 x 10.5	38M1319	1.02	0.98
16TZV470M8X10.5	470	8 x 10.5	38M1322	1.16	1.11
16TZV680M10X10.5	680	10 x 10.5	38M1323	1.27	1.22

CONTINUED

TZV SERIES SMD CHIP MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 25 VDC

Mfg. Part No.	Cap. (µF)	DxL (mm)	Stock No.	Price Each 1-9	Price Each 10-24
25TZV33M5X6.1	33	5 x 6.1	38M3074	0.52	0.50
25TZV33M6.3X6.1	33	6.3 x 6.1	38M3075	0.63	0.61
25TZV47M6.3X6.1	47	6.3 x 6.1	38M3077	0.68	0.65
25TZV100M6.3X8	100	6.3 x 8	38M3072	0.69	0.66
25TZV220M8X10.5	220	8 x 10.5	38M3073	1.10	1.06
25TZV330M8X10.5	330	8 x 10.5	38M3076	1.09	1.05
25TZV470M10X10.5	470	10 x 10.5	38M3078	1.50	1.44
VOLTAGE: 35 VDC					
35TZV4.7M4X6.1	4.7	4 x 6.1	38M4311	0.44	0.42
35TZV10M4X6.1	10	4 x 6.1	38M4302	0.47	0.45
35TZV22M5X6.1	22	5 x 6.1	38M4306	0.53	0.51
35TZV33M6.3X6.1	33	6.3 x 6.1	38M4309	0.59	0.57
35TZV47M6.3X6.1	47	6.3 x 6.1	38M4312	0.63	0.60
35TZV100M6.3X8	100	6.3 x 8	38M4304	0.77	0.74
35TZV220M8X10.5	220	8 x 10.5	38M4308	1.17	1.12
35TZV330M10X10.5	330	10 x 10.5	38M4310	1.52	1.46
VOLTAGE: 50 VDC					
50TZV4.7M4X6.1	4.7	4 x 6.1	39T9001	0.45	0.44
50TZV10M5X6.1	10	5 x 6.1	38M6731	0.54	0.52
50TZV22M6.3X6.1	22	6.3 x 6.1	38M6734	0.61	0.58
50TZV33M6.3X8	33	6.3 x 8	38M6736	0.68	0.65
50TZV47M6.3X8	47	6.3 x 8	38M6738	0.71	0.68
50TZV100M8X10.5	100	8 x 10.5	38M6733	1.14	1.09
50TZV220M10X10.5	220	10 x 10.5	38M6735	1.57	1.50

(195481)

CL SERIES SMD ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

nichicon

Specifications:
- Operating temperature: -55°C to +105°C
- Voltage range: 2.5 to 6.3V
- Tolerance: ±20%
- Load life of 2000 hours at 105°C

Features:
- High ripple current
- Low impedance
- Anti-solvent feature
- SMD

VOLTAGE: 6.3VDC

Mfg. Part No.	Cap. (µF)	D x L (mm)	Tape Cut Stock No.	Tape Cut Price Each 1-9
UCL0J470MCL1GS	47	5 x 5.8	84R8952	0.67
UCL0J101MCL1GS	100	6.3 x 5.8	84R8942	0.59
UCL0J471MCL6GS	470	10 x 7.7	84R8954	1.34
UCL0J471MNL1GS	470	8 x 10	84R8955	1.06
UCL0J102MNL1GS	1000	8 x 10	84R8944	1.06
UCL0J182MNL1GS	1800	10 x 10	84R8946	1.41
UCL0J222MNL1GS	2200	10 x 13.5	84R8949	1.41
VOLTAGE: 10VDC				
UCL1A330MCL1GS	33	5 x 5.8	84R8963	0.67
UCL1A331MCL6GS	330	10 x 7.7	84R8965	1.31
UCL1A102MNL1GS	1000	10 x 10	84R8956	1.32
UCL1A122MNL1GS	1200	10 x 10	84R8957	1.32
UCL1A152MNL1GS	1500	10 x 13.5	84R8959	1.32
VOLTAGE: 16VDC				
UCL1C100MCL1GS	10	4 x 5.8	84R8971	0.60
UCL1C220MCL6GS	22	4 x 5.8	84R8977	0.60
UCL1C680MCL1GS	68	6.3 x 5.8	84R8986	0.59
UCL1C101MCL1GS	100	6.3 x 5.8	84R8972	0.59
UCL1C101MCL6GS	100	6.3 x 7.7	84R8973	0.62
UCL1C151MCL1GS	150	6.3 x 7.7	84R8975	0.69
UCL1C221MCL1GS	220	6.3 x 7.7	84R8978	0.74
UCL1C221MCL6GS	220	8 x 6.2	84R8979	0.80
UCL1C331MCL6GS	330	10 x 7.7	84R8980	1.23
UCL1C471MCL6GS	470	10 x 7.7	84R8984	1.35
UCL1C821MNL1GS	820	10 x 10	84R8989	1.32
UCL1C102MNL1GS	1000	10 x 13.5	84R8974	1.41
VOLTAGE: 25VDC				
UCL1E100MCL1GS	10	4 x 5.8	84R8990	0.63
UCL1E101MCL1GS	100	6.3 x 7.7	84R8991	0.74
UCL1E221MNL1GS	220	8 x 10	84R8997	1.06
UCL1E331MNL1GS	330	8 x 10	84R9000	1.13
UCL1E471MNL1GS	470	10 x 10	84R9002	1.41
UCL1E681MNL1GS	680	10 x 13.5	84R9005	1.41

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CL SERIES SMD ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 35VDC

Mfg. Part No.	Cap. (µF)	D x L (mm)	Tape Cut Stock No.	Tape Cut Price Each 1-9
UCL1V470MCL1GS	47	6.3 x 5.8	84R9018	0.62
UCL1V680MCL1GS	68	6.3 x 7.7	84R9020	0.69
UCL1V101MCL6GS	100	6.3 x 7.7	84R9008	0.66
UCL1V101MNL1GS	100	8 x 10	84R9009	1.06
UCL1V221MNL1GS	220	8 x 10	84R9014	1.06
UCL1V331MNL1GS	330	10 x 10	84R9016	1.32
UCL1V391MNL1GS	390	10 x 10	84R9017	1.32
UCL1V471MNL1GS	470	10 x 13.5	84R9019	1.42

(192341)

CK SERIES CONDUCTIVE POLYMER ALUMINUM SOLID ELECTROLYTIC CAPACITORS

RoHS Compliant Available

nichicon

Features:
- High ripple current
- Low impedance
- High frequency applications
- Ultra-low ESR
- Anti-solvent feature
- SMD

Specifications:
- Operating temperature: -55°C to +105°C
- Voltage range: 2.5 to 6.3V
- Tolerance: ±20%
- Load life of 2000 hours at 105°C

VOLTAGE: 2.5VDC

Mfg. Part No.	Cap. (µF)	D x L (mm)	Tape Cut Stock No.	Tape Cut Price Each 1-9
PCK0E391MC01GS	390	6.3 x 6	84R8929	1.31
PCK0E561MC01GS	560	8 x 7	84R8930	1.62
PCK0E122MC01GS	1200	10 x 8	84R8927	2.05
PCK0E222MC01GS	2200	10 x 10	84R8928	2.35
VOLTAGE: 4VDC				
PCK0G471MC01GS	470	8 x 7	84R8935	1.63
PCK0G561MC01GS	560	8 x 7	84R8936	1.58
PCK0G102MC01GS	1000	10 x 8	84R8932	2.08
VOLTAGE: 6.3VDC				
PCK0J221MC01GS	220	6.3 x 6	84R8938	1.38
PCK0J331MC01GS	330	8 x 7	84R8939	1.61
PCK0J152MC01GS	1500	10 x 10	84R8937	2.36

(200241)

153 CRV SERIES LONG-LIFE VERTICAL SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

SMD

RoHS Compliant Available

VISHAY.

Features
- Polarized Capacitors with Self-Healing Non-Solid Electrolyte
- High CV per Unit Volume
- Charge- and Discharge-Proof, No Peak Current Limitation
- Long Life: 2000 to 3000 Hours at 105°C

Specifications
- Tolerance: ±20%
- Operating Temperature: -55°C to +105°C
- *2222 & MAL2 prefix part numbers are the same*

Applications
- Coupling, decoupling, smoothing, filtering, buffering, timing
- Telecommunications, general industrial, EDP, automotive, portable and lightweight equipment

VOLTAGE: 6.3VDC

Mfg. Part No.	Cap. (uF)	Ripple Current (mA)	ESR 100kHz (ohm)	Case Code	Nominal Case Size L x W x H (mm)	Tape Cut Stock No.	Tape Cut Price Each 1-99
222215373479	47	36	4	0505	5 x 5 x 5.3	94M5886	0.46
222215373101	100	61	2	0605 [1613]	6 x 6 x 5.3	94M5885	0.51
VOLTAGE: 16 VDC							
222215375109	10	16	8	0405 [1012]	4 x 4 x 5.3	94M5887	0.41
222215375479	47	47	2.2	0605 [1613]	6 x 6 x 5.3	94M5888	0.54
VOLTAGE: 35 VDC							
222215370109	10	23	4	0505	5 x 5 x 5.3	94M5877	0.46
222215370229	22	50	2.2	0605 [1613]	6 x 6 x 5.3	94M5878	0.51
VOLTAGE: 50 VDC							
222215371108	1	7	12	0405 [1012]	4 x 4 x 5.3	94M5880	0.40
222215371229	22	10	1.2	...	4 x 4 x 5.3	94M5882	0.87
222215371478	4.7	17	6	0505	5 x 5 x 5.3	94M5883	0.46
222215371109	10	26	3	0605 [1613]	6 x 6 x 5.3	94M5881	0.51

➤CONTINUED➤

153 CRV SERIES LONG-LIFE VERTICAL SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 50 VDC

Mfg. Part No.	Cap. (uF)	Ripple Current (mA)	ESR 100kHz (ohm)	Case Code	Nominal Case Size L x W x H (mm)	Tape Cut Stock No.	Tape Cut Price Each 1-99
● 222215371479	47	180	0.5	0810	8 x 8 x 10	94M5884	1.38
● 222215371101	100	320	0.3	1010	10 x 10 x 10	94M5879	1.51

(110570)

SK SERIES ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

MALLORY
Cornell Dubilier Electronics, Inc.

Features
- General-Purpose Capacitors with Max. Operating Temperature of 85°C
- Radial Terminals, Miniature Size
- Low ESR and Leakage Current
- 2000 Hour Load Life

Applications
- Suitable for Consumer Electronics

Specifications
- Tolerance: ±20%
- Operating Temperature: -40°C to +85°C
- Voltage: 6.3 VDC to 450 VDC
- Capacitance range : .47uF to 15,000uF

VOLTAGE: 10 VDC

Mfg. Part No.	Cap. (µF)	D x L (mm)	Pitch (mm)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape Cut Price Each 10-99
● SK101M010ST	100	5 x 11	2	95B9291	0.15	0.13
VOLTAGE: 16 VDC						
● SK220M016ST	22	5 x 11	2	48F4677	0.15	0.13
● SK471M016ST	470	10 x 13	5	91F6273	0.40	0.35
VOLTAGE: 25 VDC						
● SK100M025ST	10	5 x 11	2	94B3371	0.15	0.13
● SK470M025ST	47	5 x 11	2	91F6275	0.15	0.13
● SK101M025ST	100	6.3 x 11	2.54	91F6276	0.18	0.16
● SK221M025ST	220	8 x 11.5	3.5	18M9325	0.25	0.22
● SK331M025ST	330	10 x 13	5	72K6726	0.40	0.35
● SK471M025ST	470	10 x 16	5	91F6279	0.50	0.44
● SK102M025ST	1000	13 x 21	5	83F2943	0.76	0.67
VOLTAGE: 35 VDC						
● SK100M035ST	10	5 x 11	2	91F6282	0.15	0.13
● SK220M035ST	22	5 x 11	2	91F6283	0.15	0.13
● SK470M035ST	47	6.3 x 11	2.54	91F6284	0.18	0.16
● SK101M035ST	100	8 x 11.5	3.5	91F6285	0.25	0.22
● SK221M035ST	220	10 x 13	5	91F6286	0.36	0.32
● SK331M035ST	330	10 x 16	5	72K6727	0.52	0.46
● SK471M035ST	470	10 x 21	5	72K6729	0.57	0.50
● SK102M035ST	1000	13 x 21	5	72K6722	1.02	0.90
● SK222M035ST	2200	16 x 32	7.5	72K6725	3.20	2.82
VOLTAGE: 50 VDC						
● SK010M050ST	1	5 x 11	2	72K6720	0.15	0.13
● SK2R2M050ST	2.2	5 x 11	2	91F6290	0.15	0.13
● SK100M050ST	10	5 x 11	2	83F2944	0.15	0.13
● SK220M050ST	22	5 x 11	2	08C2610	0.15	0.13
● SK470M050ST	47	6.3 x 11	2.54	83F2076	0.18	0.16
● SK101M050ST	100	8 x 11	3.5	72K6721	0.29	0.25
● SK221M050ST	220	10 x 16	5	72K6723	0.53	0.47
● SK471M050ST	470	13 x 21	5	91F6292	0.82	0.72
VOLTAGE: 63 VDC						
● SK101M063ST	100	10 x 13	5	95B9295	0.38	0.34
VOLTAGE: 100 VDC						
● SK100M100ST	10	6.3 x 11	2.54	83F2075	0.22	0.19

(7158)

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(196525)

VR SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

nichicon

Features
- Miniature Sized
- Anti-Solvent Feature (thru 100V)

Specifications
- Temperature Range: –40 to +85°C (6.3V to 400V) –25 to +85°C (450V)
- Tolerance: ±20% at 120Hz
- Voltage Range: 6.3V to 450V
- Capacitance Range: 0.1 to 33000µF

Bulk part number plus 3-digit suffix indicates tape and reel packaging.

VOLTAGE: 6.3 VDC

Mfg. Part No.	Cap. (µF)	DxL (mm)	Pitch (mm)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● UVR0J102MPD1TD	1000	8x11.5	3.5	65R2708	0.43
VOLTAGE: 10 VDC					
● UVR1A101MDD1TD	100	5x11	2	65R2732	0.28
● UVR1A221MED1TD	220	6.3x11	2.5	65R2738	0.28
● UVR1A471MED1TD	470	6.3x11	2.5	65R2750	0.34
● UVR1A102MPD1TD	1000	10x12.5	5	65R2734	0.50
● UVR1A222MPD1TD	2200	10x20	5	65R2740	0.68
VOLTAGE: 16 VDC					
● UVR1C220MDD1TD	22	5x11	2	65R2757	0.25
● UVR1C101MDD1TD	100	5x11	2	55K2066	0.26
● UVR1C331MPD1TD	330	8x11.5	3.5	65R2765	0.32
● UVR1C471MPD1TD	470	8x11.5	3.5	65R2769	0.39
● UVR1C102MPD1TD	1000	10x16	5	65R2755	0.62
● UVR1C222MHD1TO	2200	12.5x20	5	65R2761	0.88
● UVR1C472MHD1TN	4700	16x25	7.5	65R2770	1.50
VOLTAGE: 25 VDC					
● UVR1E4R7MDD1TD	4.7	5x11	2	65R2781	0.27
● UVR1E220MDD1TD	22	5x11	2.5	58R3502	0.27
● UVR1E330MDD1TD	33	5x11	2	65R2775	0.25
● UVR1E101MED1TD	100	6.3x11	2.5	58R3500	0.29
● UVR1E221MPD1TD	220	8x11.5	3.5	18M6640	0.30
● UVR1E331MPD1TD	330	10x12.5	5	65R2777	0.23
● UVR1E471MPD1TD	470	10x12.5	5	55K2109	0.42
● UVR1E102MPD1TD	1000	10x20	5	58R3501	0.57
● UVR1E222MHD1TO	2200	12.5x25	5	65R2773	1.37
● UVR1E332MHD1TN	3300	16x25	7.5	65R2779	1.30
● UVR1E472MHD*	4700	16x31.5	7.5	52K6486	1.36
VOLTAGE: 35 VDC					
● UVR1V100MDD1TD	10	5x11	2	55K2159	0.27
● UVR1V220MDD1TD	22	5x11	2	65R2823	0.27
● UVR1V470MDD1TD	47	5x11	2	65R2833	0.25
● UVR1V101MED1TD	100	6.3x11	2.5	57R4038	0.33
● UVR1V221MPD1TD	220	10x12.5	5	55K2166	0.41
● UVR1V331MPD1TD	330	10x12.5	5	65R2829	0.48
● UVR1V471MPD1TD	470	10x16	5	65R2835	0.56
● UVR1V102MHD1TO	1000	12.5x20	5	65R2821	0.81
● UVR1V222MHD1TN	2200	16x25	7.5	65R2825	1.51
● UVR1V332MHD*	3300	16x35.5	7.5	55K2170	1.25
● UVR1V472MHD*	4700	18x35.5	10	55K2173	1.70
VOLTAGE: 50 VDC					
● UVR1H0R1MDD1TD	0.1	5x11	2	65R2789	0.27
● UVR1H3R3MDD1TD	3.3	5x11	2	65R2799	0.27
● UVR1H4R7MDD1TD	4.7	5x11	2	55K2135	0.24
● UVR1H100MDD1TD	10	5x11	2	65R2791	0.27
● UVR1H330MDD1TD	33	5x11	2	65R2801	0.25
● UVR1H101MPD1TD	100	8x11.5	3.5	65R2793	0.35
● UVR1H221MPD1TD	220	10x12.5	5	65R2797	0.63
● UVR1H331MPD1TD	330	10x16	5	65R2803	0.59
● UVR1H102MHD1TO	1000	12.5x25	5	65R2795	1.26
● UVR1H222MHD*	2200	16x35.5	7.5	33K4405	1.89
● UVR1H332MHD*	3300	18x35.5	10	55K2131	1.95
● UVR1H472MRD*	4700	20x40	10	55K2137	2.90
VOLTAGE: 63 VDC					
● UVR1J100MDD1TD	10	5x11	2	65R2805	0.25
● UVR1J101MPD1TD	100	10x12.5	5	55K2143	0.43
● UVR1J221MPD1TD	220	10x16	5	65R2811	0.60
● UVR1J471MHD1TO	470	12.5x20	5	65R2817	1.11
● UVR1J102MHD1TN	1000	16x25	7.5	65R2807	1.39
● UVR1J222MHD*	2200	18x35.5	7.5	55K2146	1.92

CONTINUED

VR SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 100 VDC

Mfg. Part No.	Cap. (µF)	DxL (mm)	Pitch (mm)	Tape Cut Stock No.	Price Each 1-9
UVR2A010MDD1TD	1	5x11	2	65R2845	0.27
UVR2A100MED1TD	10	6.3x11	2.5	94M5836	0.28
UVR2A220MED1TD	22	6.3x11	2.5	65R2851	0.32
UVR2A470MPD1TD	47	10x12.5	5	65R2863	0.44
UVR2A101MPD1TD	100	10x20	5	65R2847	0.60
UVR2A102MHD*	1000	18x40	7.5	55K2183	2.23
VOLTAGE: 250 VDC					
UVR2E100MPD1TD	10	10x16	5	65R2909	0.54
VOLTAGE: 400 VDC					
UVR2G4R7MPD1TD	4.7	10x16	5	65R2935	0.58
VOLTAGE: 450 VDC					
UVR2W220MHD1TN	22	16x25	7.5	65R2957	1.04

* Bulk Packaging
(165104)

GENERAL PURPOSE RADIAL ALUMINUM ELECTROLYTIC CAPACITORS (85°C)

RoHS Compliant Available

multicomp

Features
- Wide CV Value Range
- Safety Vent Construction

Specifications
- Tolerance: ±20%
- Load Life: 2000 hours @ 85°C
- Operating Temp.: –40°C to +85°C

VOLTAGE: 6.3 VDC

Mfg. Part No.	Cap. (µF)	Dimensions DxL (mm)	Pitch (mm)	Stock No.	Price Each 1-9	10-99
MCGPR6.3V108M8X12	1000	8x12	3.5	97M4111	0.12	0.11
MCGPR6.3V338M13X21	3300	13x21	5	97M4113	0.37	0.34
VOLTAGE: 16 VDC						
MCGPR16V106M5X11-RH	10	5x11	2	70K9669	0.06	0.05
MCGPR16V226M5X11	22	5x11	2	70K9672	0.05	0.05
MCGPR16V336M5X11	33	5x11	2	70K9675	0.06	0.05
MCGPR16V476M5X11	47	5x11	2	70K9677	0.06	0.05
MCGPR16V107M6.3X11	100	6.3x11	2.54	70K9670	0.08	0.07
MCGPR16V227M6.3X11	220	6.3x11	2.54	70K9673	0.10	0.09
MCGPR16V337M8X11	330	8x11	3.5	70K9676	0.11	0.10
MCGPR16V477M8X11	470	8x11	3.5	70K9678	0.16	0.14
MCGPR16V108M10X16	1000	10x16	5	70K9671	0.25	0.22
MCGPR16V228M13X21	2200	13x21	5	70K9674	0.50	0.44
MCGPR16V478M16X26	4700	16x26	7.5	70K9679	0.95	0.84
VOLTAGE: 25 VDC						
MCGPR25V106M5X11-RH	10	5x11	2	70K9680	0.06	0.05
MCGPR25V226M5X11	22	5x11	2	70K9683	0.06	0.05
MCGPR25V476M5X11	47	5x11	2	70K9685	0.07	0.06
MCGPR25V107M6.3X11-RH	100	6.3x11	2.54	70K9681	0.10	0.09
MCGPR25V227M8X11	220	8x11	3.5	70K9684	0.13	0.11
MCGPR25V337M8X14	330	8x14	3.5	97M4092	0.14	0.13
MCGPR25V477M10X16	470	10x16	5	70K9686	0.23	0.20
MCGPR25V108M10X21	1000	10x21	5	70K9682	0.42	0.37
MCGPR25V228M13X26	2200	13x26	5	97M4091	0.70	0.63
VOLTAGE: 35 VDC						
MCGPR35V475M5X11	4.7	5x11	2	70K9695	0.05	0.05
MCGPR35V106M5X11	10	5x11	2	70K9687	0.06	0.05
MCGPR35V226M5X11	22	5x11	2	70K9690	0.06	0.05
MCGPR35V336M5X11	33	5x11	2	70K9693	0.06	0.05
MCGPR35V476M6.3X11	47	6.3x11	2.54	70K9696	0.08	0.07
MCGPR35V107M8X11	100	8x11	3.5	70K9688	0.12	0.10
MCGPR35V227M10X13	220	10x13	5	70K9691	0.22	0.20
MCGPR35V337M10X16	330	10x16	5	70K9694	0.26	0.23
MCGPR35V477M10X21-RH	470	10x21	5	70K9697	0.32	0.28
MCGPR35V108M13X21-RH	1000	13x21	5	70K9689	0.61	0.53
MCGPR35V228M16X32	2200	16x32	7.5	70K9692	1.18	1.02

(115472)

HIGH VOLTAGE MINIATURE RADIAL ALUMINUM ELECTROLYTIC CAPACITORS (85°C)

RoHS Compliant Available

multicomp

Features
- Wide CV Value Range
- Safety Vent Construction

Specifications
- Tolerance: ±20%
- Load Life: 2000 hours @ 85°C
- Operating Temp.: –40°C to +85°C

VOLTAGE: 50 VDC

Mfg. Part No.	Cap. (µF)	Dimensions DxL (mm)	Pitch (mm)	Stock No.	Price Each 1-9	10-99
MCGPR50V474M5X11	0.47	5x11	2	70K9705	0.06	0.05
MCGPR50V105M5X11	1	5x11	2	70K9698	0.06	0.05
MCGPR50V225M5X11	2.2	5x11	2	70K9702	0.06	0.05
MCGPR50V475M5X11-RH	4.7	5x11	2	70K9706	0.05	0.05
MCGPR50V106M5X11	10	5x11	2	70K9699	0.07	0.06
MCGPR50V226M5X11	22	5x11	2	70K9703	0.07	0.06
MCGPR50V476M6.3X11-RH	47	6.3x11	2.54	70K9707	0.09	0.08
MCGPR50V107M8X11	100	8x11	3.5	70K9700	0.13	0.11
MCGPR50V227M10X16	220	10x16	5	70K9704	0.28	0.25
MCGPR50V477M13X21	470	13x21	5	70K9708	0.48	0.42
MCGPR50V108M16X26	1000	16x26	7.5	70K9701	0.87	0.76
VOLTAGE: 63 VDC						
MCGPR63V105M5X11	1	5x11	2	70K9709	0.06	0.05
MCGPR63V225M5X11	2.2	5x11	2	70K9713	0.06	0.05
MCGPR63V475M5X11	4.7	5x11	2	70K9716	0.06	0.05
MCGPR63V106M5X11-RH	10	5x11	2	70K9710	0.06	0.05
MCGPR63V226M6.3X11	22	6.3x11	2.54	70K9714	0.09	0.08
MCGPR63V476M8X11	47	8x11	3.5	70K9717	0.12	0.11
MCGPR63V107M10X13	100	10x13	5	70K9711	0.31	0.27
MCGPR63V227M10X21	220	10x21	5	70K9715	0.42	0.37
MCGPR63V477M13X26	470	13x26	5	70K9718	0.79	0.69
MCGPR63V108M16X32	1000	16x32	7.5	70K9712	1.64	1.41
VOLTAGE: 100 VDC						
MCGPR100V105M5X11	1	5x11	2	70K9660	0.06	0.05
MCGPR100V225M5X11	2.2	5x11	2	70K9663	0.06	0.05
MCGPR100V475M5X11	4.7	5x11	2	70K9666	0.06	0.05
MCGPR100V106M6.3X11	10	6.3x11	2.54	70K9661	0.09	0.08
MCGPR100V226M8X11	22	8x11	3.5	70K9664	0.17	0.15
MCGPR100V476M10X16	47	10x16	5	70K9667	0.24	0.21
MCGPR100V107M13X21-RH	100	13x21	5	70K9662	0.43	0.37
MCGPR100V227M16X26	220	16x26	7.5	70K9665	0.81	0.72
MCGPR100V477M16X32	470	16x32	7.5	70K9668	1.38	1.19
VOLTAGE: 200 VDC						
MCGPR200V106M10X13	10	10x13	5	97M4089	0.18	0.16

(163095)

515D SERIES RADIAL ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

VISHAY.

Specifications:
- Operating Temperature: -40°C to +85°C
- Tolerance: ±20%
- Life Validation Test: 2000 Hours @ +85°C
- DC Leakage Current Rated Voltage for 1 and 2 Minutes for 6.3 WVDC to 100 WVDC Units: I < 0.03 CV or 4µA, Whichever Is Greater; I < 0.01 CV or 3µA, Whichever Is Greater
- DC Leakage Current Rated Voltage for 1 Minute for 160 WVDC to 450 WVDC Units: I < 0.01 CV + 40µA and CV ≤ 1000; I < 0.04 CV + 100µA and CV > 1000

CASE SIZE (INCLUDES INSULATION)

Case Size	Dia. × Length	Case Size	Dia. × Length	Case Size	Dia. × Length
AA	0.25 × 0.43″	CD	0.39 × 0.63″	EK	0.63 × 0.98″
AW	0.25 × 0.28″	CG	0.39 × 0.79″	HW	0.16 × 0.28″
BB	0.31 × 0.45″	DG	0.39 × 0.79″	JA	0.20 × 0.43″
CC	0.39 × 0.49″	DK	0.49 × 0.98″	JW	0.20 × 0.28″

VOLTAGE: 16 VDC, 20 VDC SURGE

Mfg. Part No.	Cap. (µF)	Case Size	Ripple (mA)	Stock No.	Price Each 1-9	10-49
515D107M016AA6AE3	100	AA	175	83K6055	0.45	0.37
515D227M016BB6AE3	220	BB	300	83K6127	0.55	0.46
515D477M016CC6AE3	470	CC	470	83K6223	0.65	0.54
515D108M016CG6AE3	1000	CG	790	83K6077	1.15	0.96
VOLTAGE: 25 VDC, 32 VDC SURGE						
515D106M025JA6AE3	10	JA	33	83K6035	0.14	0.14
515D226M025JA6AE3	22	JA	51	83K6109	0.18	0.17
515D107M025AA6AE3	100	AA	185	83K6057	0.52	0.44
515D227M025BB6AE3	220	BB	320	83K6128	0.69	0.58
515D337M025CC6AE3	330	CC	420	83K6170	0.66	0.55

➤CONTINUED➤

515D SERIES RADIAL ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

Mfg. Part No.	Cap. (µF)	Case Size	Ripple (mA)	Stock No.	Price Each 1-9	Price Each 10-49
VOLTAGE: 25 VDC, 32 VDC SURGE						
● 515D477M025CD6AE3	470	CD	540	83K6224	0.85	0.71
● 515D108M025DG6AE3	1000	DG	950	83K6079	1.41	1.16
VOLTAGE: 35 VDC, 44 VDC SURGE						
● 515D106M035JA6AE3	10	JA	36	83K6036	0.15	0.14
● 515D106M035JW6AE3	10	JW	36	83K6039	0.57	0.47
● 515D336M035JA6AE3	33	JA	105	83K6159	0.18	0.17
● 515D476M035AA6AE3	47	AA	140	83K6211	0.45	0.37
● 515D107M035BB6AE3	100	BB	230	83K6059	0.67	0.56
● 515D227M035CC6AE3	220	CC	370	83K6130	0.65	0.54
● 515D477M035CG6AE3	470	CG	640	83K6225	1.09	0.91
● 515D108M035DK6AE3	1000	DK	1100	83K6081	2.16	1.77
● 515D228M035EN6AE3	2200	EN	1850	83K6144	2.48	2.30
VOLTAGE: 50 VDC, 63 VDC SURGE						
● 515D105M050JA6AE3	1	JA	10	83K6025	0.15	0.14
● 515D225M050JA6AE3	2.2	JA	19	83K6094	0.14	0.14
● 515D335M050JA6AE3	3.3	JA	24	83K6150	0.25	0.24
● 515D475M050JA6AE3	4.7	JA	29	83K6191	0.14	0.14
● 515D106M050JA6AE3	10	JA	44	83K6042	0.18	0.17
● 515D226M050JA6AE3	22	JA	95	83K6116	0.18	0.17
● 515D476M050AA6AE3	47	AA	150	83K6212	0.50	0.41
● 515D107M050BB6AE3	100	BB	250	83K6062	0.66	0.55
● 515D337M050CG6AE3	330	CG	580	83K6174	1.15	0.96
● 515D108M050EK6AE3	1000	EK	1350	83K6082	2.52	2.07
VOLTAGE: 63 VDC, 79 VDC SURGE						
● 515D106M063JA6AE3	10	JA	70	83K6044	0.17	0.16
● 515D476M063BB6AE3	47	BB	190	83K6215	0.67	0.56
● 515D107M063CC6AE3	100	CC	300	83K6064	0.66	0.55
● 515D227M063CG6AE3	220	CG	490	83K6134	1.15	0.96
● 515D477M063DK6AE3	470	DK	880	83K6228	2.05	1.68

(7106)

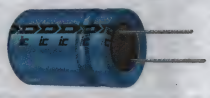
KXM SERIES LOW IMPEDANCE ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

ILLINOIS CAPACITOR, INC.

Features:
- High ripple current
- High frequency
- Extended life

Specifications:
- Voltage range: 6.3 VDC to 100 VDC
- Capacitance range: 47uF to 15,000uF
- Tolerance: ±20% at 120Hz, 20°C
- Lead spacing: 2mm to 7.5mm
- Operating temperature: -55°C to 105°C



Most popular values listed. More values available. Go online or call.

Mfg. Part No.	Cap. (uF)	ESR 120 Hz (Ω)	Ripple 100 kHz (mA)	D x L (mm)	Lead Spacing (mm)	Stock No.	Price Each 1-24	Price Each 25-99
VOLTAGE: 6.3 VDC								
● 158KXM6R3M	1500	0.138	2500	10 x 20	7.5	69K8219	0.34	0.30
● 228KXM6R3M	2200	0.196	2150	10 x 25	5	69K8231	0.30	0.26
VOLTAGE: 10 VDC								
● 107KXM010M	100	3.150	250	5 x 11	2	69K8199	0.08	0.07
● 128KXM010M	1200	0.290	1820	10 x 20	5	69K8209	0.30	0.26
● 158KXM010M	1500	0.232	2150	10 x 25	5	69K8217	0.44	0.39
VOLTAGE: 25 VDC								
● 107KXM025M	100	2.321	405	6.3 x 11	2.5	69K8200	0.14	0.12
● 227KXM025M	220	1.055	760	8 x 11.5	3.5	69K8226	0.16	0.14
● 337KXM025MLN	330	0.703	700	10 x 12.5	5	69K8238	0.20	0.18
● 477KXM025MLQ	470	0.494	920	10 x 16	5	69K8249	0.29	0.26
● 108KXM025M	1000	0.199	2360	12.5 x 20	5	69K8203	0.53	0.46
VOLTAGE: 35 VDC								
● 336KXM035M	33	6.029	250	5 x 11	2	69K8234	0.05	0.05
● 157KXM035M	150	1.326	760	8 x 11.5	3.5	69K8214	0.16	0.14
● 227KXM035M	220	0.904	995	8 x 15	3.5	69K8227	0.26	0.23
● 227KXM035MLN	220	0.904	630	10 x 12.5	5	69K8228	0.21	0.19
● 567KXM035M	560	0.355	2150	10 x 25	5	69K8259	0.33	0.29
● 687KXM035M	680	0.293	2360	12.5 x 20	5	69K8267	0.54	0.48
VOLTAGE: 50 VDC								
● 226KXM050M	22	7.536	238	5 x 11	2	69K8223	0.06	0.05
● 566KXM050M	56	2.960	385	6.3 x 11	2.5	69K8256	0.11	0.10
● 107KXM050M	100	1.658	724	8 x 11.5	3.5	69K8201	0.16	0.14
● 127KXM050M	120	1.382	950	8 x 15	3.5	69K8207	0.29	0.25
● 187KXM050M	180	0.921	1190	8 x 20	3.5	69K8221	0.34	0.30

➤CONTINUED➤

KXM SERIES LOW IMPEDANCE ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

Mfg. Part No.	Cap. (uF)	ESR 120 Hz (Ω)	Ripple 100 kHz (mA)	D x L (mm)	Lead Spacing (mm)	Stock No.	Price Each 1-24	Price Each 25-99
VOLTAGE: 50 VDC								
● 227KXM050M	220	0.754	1370	10 x 16	5	69K8229	0.31	0.27
● 337KXM050M	330	0.502	1870	10 x 25	5	69K8239	0.51	0.45
● 477KXM050M	470	0.353	2050	12.5 x 20	5	69K8251	0.46	0.40
● 827KXM050M	820	0.202	3960	12.5 x 35.5	5	69K8273	1.63	1.44
● 108KXM050M	1000	0.166	3010	16 x 25	7.5	69K8204	1.06	0.93
● 158KXM050M	1500	0.133	3010	16 x 35.5	7.5	69K8218	1.43	1.26
● 228KXM050M	2200	0.106	3690	18 x 35.5	7.5	69K8230	2.06	1.81
VOLTAGE: 63 VDC								
● 476KXM063M	47	2.822	370	8 x 11.5	3.5	69K8245	0.13	0.11
● 277KXM063M	270	0.491	1350	12.5 x 25	5	69K8233	0.52	0.46

(85878)

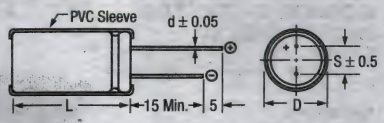
SEK SERIES ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

MALLORY
Cornell Dubilier Electronics, Inc.

Features
- General-Purpose Capacitors
- High Reliability, Long Life
- High CV Product
- Very High Volumetric Efficiency

Applications
- Suitable for General-Purpose Applications Such as Coupling, Decoupling, Bypass and Filtering Circuits



Specifications
- Tolerance: ±20%
- Operating Temperature: -40°C to +105°C
- Voltage range : 6.3VDC to 450VDC
- Capacitance range: .47uF to 15,000uF

Mfg. Part No.	Cap. (µF)	D x L (mm)	Pitch (mm)	Stock No.	Price Each 1-9	Price Each 10-99
VOLTAGE: 16 VDC						
● SEK101M016ST	100	6.3 x 11	2.5	91F6296	0.19	0.16
● SEK102M016ST	1000	10 x 21	5	72K6694	0.55	0.46
● SEK222M016ST	2200	13 x 21	5	72K6699	1.00	0.84
VOLTAGE: 25 VDC						
● SEK100M025ST	10	5 x 11	2	08C2426	0.16	0.13
● SEK220M025ST	22	5 x 11	2	72K6697	0.16	0.13
● SEK470M025ST	47	5 x 11	2	83F2072	0.16	0.14
● SEK101M025ST	100	6.3 x 11	2.5	08C2431	0.23	0.19
● SEK221M025ST	220	8 x 11.5	3.5	91F6301	0.29	0.25
● SEK471M025ST	470	10 x 16	5	91F6302	0.51	0.43
● SEK102M025ST	1000	13 x 21	5	83F2071	0.74	0.63
● SEK222M025ST	2200	13 x 26	5	72K6700	1.14	0.97
● SEK332M025ST	3300	16 x 32	7.5	72K6705	1.45	1.23
● SEK472M025ST	4700	18 x 36	7.5	72K6711	2.44	2.06
VOLTAGE: 35 VDC						
● SEK470M035ST	47	6.3 x 11	2.5	72K6708	0.23	0.19
● SEK101M035ST	100	8 x 11.5	3.5	91F6304	0.22	0.19
● SEK221M035ST	220	10 x 13	5	91F6305	0.36	0.30
● SEK471M035ST	470	13 x 20	5	72K6710	0.56	0.47
● SEK222M035ST	2200	16 x 32	7.5	72K6701	2.21	1.87
● SEK332M035ST	3300	18 x 36	7.5	72K6706	2.69	2.27
● SEK472M035ST	4700	18 x 42	7.5	08C2496	2.81	2.37
VOLTAGE: 50 VDC						
● SEK010M050ST	1	5 x 11	2	72K6693	0.16	0.14
● SEK3R3M050ST	3.3	5 x 11	2	08C2460	0.13	0.11
● SEK4R7M050ST	4.7	5 x 11	2	72K6707	0.16	0.14
● SEK100M050ST	10	5 x 11	2	80K6142	0.16	0.14
● SEK220M050ST	22	5 x 11	2	91F6311	0.13	0.11
● SEK330M050ST	33	6.3 x 11	2.5	18M9317	0.23	0.19
● SEK470M050ST	47	6.3 x 11	2.5	84F543	0.23	0.19
● SEK101M050ST	100	8 x 11.5	3.5	50B4929	0.29	0.25
● SEK331M050ST	330	10 x 21	5	78K6128	0.61	0.52
● SEK471M050ST	470	13 x 21	5	91F6314	0.74	0.63
● SEK102M050ST	1000	16 x 25	7.5	72K6695	1.73	1.46
● SEK222M050ST	2200	18 x 36	7.5	91F6316	2.37	2.00
VOLTAGE: 63 VDC						
● SEK101M063ST	100	10 x 13	5	91B0517	0.38	0.33
VOLTAGE: 100 VDC						
● SEK100M100ST	10	6.3 x 11	2.5	59K0257	0.23	0.19
● SEK220M100ST	22	8 x 11	3.5	90B7814	0.32	0.28
● SEK101M100ST	100	13 x 20	5	91F6318	0.74	0.63
● SEK331M100ST	330	16 x 25	7.5	08C2477	1.61	1.36

➤CONTINUED➤

SEK SERIES ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 200 VDC

Mfg. Part No.	Cap. (µF)	D x L (mm)	Pitch (mm)	Stock No.	Price Each 1-9	Price Each 10-99
SEK010M200ST	1	6.3 x 11	2.5	08C2422	0.19	0.16
SEK100M200ST	10	10 x 13	5	08C2427	0.59	0.50
VOLTAGE: 250 VDC						
SEK010M250ST	1	6.3 x 11	2.5	08C2423	0.19	0.16
SEK4R7M250ST	4.7	8 x 11	3.5	08C2485	0.29	0.25

(7160)

KA SERIES AUDIO GRADE ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

nichicon

Features:
- For audio use
- Wide temperature range
- Anti-solvent feature
- Radial leaded

Specifications:
- Operating temperature: -55°C to +105°C
- Voltage range: 6.3 to 50V
- Tolerance: ±20%
- Load life of 2000 hours at 105°C

VOLTAGE: 6.3VDC

Mfg. Part No.	Cap. (µF)	D x L (mm)	Tape Cut Stock No.	Tape Cut Price Each 1-9
UKA0J220MDD1TD	22	5 x 11	82T5976	0.44
UKA0J330MDD1TD	33	5 x 11	82T5979	0.44
UKA0J470MDD1TD	47	5 x 11	82T5982	0.44
UKA0J101MDD1TD	100	5 x 11	82T5974	0.44
UKA0J221MED1TD	220	6.3 x 11	82T5977	0.68
UKA0J331MED1TD	330	6.3 x 11	82T5980	0.68
UKA0J471MPD1TD	470	8 x 11.5	82T5983	0.82
UKA0J222MPD1TD	2200	10 x 20	82T5978	1.30
UKA0J332MHD1T0	3300	12.5 x 20	82T5981	1.63
UKA0J472MHD1T0	4700	12.5 x 25	82T5984	2.11
UKA0J682MHD	6800	12.5 x 35.5	75T4877	2.22
UKA0J103MHD	10000	12.5 x 40	75T4865	2.68
UKA0J153MHD	15000	16 x 35.5	75T4866	2.76
UKA0J223MHD	22000	18 x 40	75T4870	3.83
UKA0J102MPD1TD	1000	10 x 12.5	82T5975	1.33
VOLTAGE: 10VDC				
UKA1A220MDD1TD	22	5 x 11	82T5987	0.44
UKA1A330MDD1TD	33	5 x 11	82T5989	0.47
UKA1A470MDD1TD	47	5 x 11	82T5992	0.44
UKA1A101MDD1TD	100	5 x 11	82T5985	0.44
UKA1A221MED1TD	220	6.3 x 11	82T5988	0.68
UKA1A471MPD1TD	470	8 x 11.5	82T5993	0.85
UKA1A331MPD1TD	330	8 x 11.5	82T5990	0.85
UKA1A102MPD1TD	1000	10 x 16	82T5986	1.25
UKA1A222MHD	2200	12.5 x 20	75T4884	1.14
UKA1A332MHD1T0	3300	12.5 x 25	82T5991	2.11
UKA1A472MHD	4700	12.5 x 35.5	75T4890	2.22
UKA1A682MHD	6800	12.5 x 40	75T4891	2.68
UKA1A103MHD	10000	16 x 35.5	75T4880	2.86
UKA1A153MHD	15000	18 x 40	75T4881	3.87
VOLTAGE: 16VDC				
UKA1C220MDD1TD	22	5 x 11	82T5996	0.44
UKA1C330MDD1TD	33	5 x 11	82T5999	0.47
UKA1C470MDD1TD	47	5 x 11	82T6001	0.44
UKA1C101MDD1TD	100	5 x 11	82T5994	0.61
UKA1C221MED1TD	220	6.3 x 11	82T5997	0.68
UKA1C331MPD1TD	330	8 x 11.5	82T6000	0.88
UKA1C471MPD1TD	470	8 x 11.5	82T6002	0.88
UKA1C102MPD1TD	1000	10 x 16	82T5995	1.33
UKA1C222MHD1T0	2200	12.5 x 20	82T5998	1.63
UKA1C332MHD	3300	12.5 x 31.5	75T4900	1.82
UKA1C472MHD	4700	12.5 x 35.5	75T4903	2.22
UKA1C682MHD	6800	16 x 31.5	75T4904	2.68
UKA1C103MHD	10000	18 x 35.5	75T4894	3.46
VOLTAGE: 25VDC				
UKA1E220MDD1TD	22	5 x 11	82T6005	0.44
UKA1E330MDD1TD	33	5 x 11	82T6007	0.44
UKA1E470MDD1TD	47	5 x 11	82T6009	0.58
UKA1E101MED1TD	100	6.3 x 11	82T6003	0.68
UKA1E221MPD1TD	220	8 x 11.5	82T6006	0.88
UKA1E331MPD1TD	330	8 x 11.5	82T6008	0.88
UKA1E471MPD1TD	470	10 x 12.5	82T6010	1.33

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KA SERIES AUDIO GRADE ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 25VDC

Mfg. Part No.	Cap. (µF)	D x L (mm)	Tape Cut Stock No.	Tape Cut Price Each 1-9
UKA1E102MPD1TD	1000	10 x 20	82T6004	1.30
UKA1E222MHD	2200	12.5 x 31.5	75T4909	1.82
UKA1E332MHD	3300	12.5 x 35.5	75T4912	2.22
UKA1E472MHD	4700	16 x 31.5	75T4915	2.30
UKA1E682MHD	6800	18 x 35.5	75T4916	3.45
VOLTAGE: 35VDC				
UKA1V220MDD1TD	22	5 x 11	82T6020	0.44
UKA1V330MDD1TD	33	5 x 11	82T6022	0.58
UKA1V470MDD1TD	47	5 x 11	82T6024	0.58
UKA1V101MED1TD	100	6.3 x 11	82T6018	0.68
UKA1V221MPD1TD	220	8 x 11.5	82T6021	0.88
UKA1V471MPD1TD	470	10 x 16	82T6025	1.63
UKA1V102MHD1T0	1000	12.5 x 25	82T6019	2.11
UKA1V222MHD	2200	12.5 x 40	75T4931	2.68
UKA1V332MHD	3300	16 x 35.5	75T4934	2.72
UKA1V472MHD	4700	18 x 35.5	75T4937	3.49
UKA1V331MPD1TD	330	10 x 12.5	82T6023	1.33
VOLTAGE: 50VDC				
UKA1H220MDD1TD	22	5 x 11	82T6012	0.58
UKA1H330MDD1TD	33	5 x 11	82T6014	0.58
UKA1H470MED1TD	47	6.3 x 11	82T6016	0.68
UKA1H101MPD1TD	100	8 x 11.5	82T6011	0.88
UKA1H221MPD1TD	220	10 x 12.5	82T6013	1.33
UKA1H331MPD1TD	330	10 x 16	82T6015	1.53
UKA1H471MHD1T0	470	12.5 x 20	82T6017	1.75
UKA1H102MHD	1000	12.5 x 31.5	75T4918	1.82
UKA1H222MHD	2200	16 x 35.5	75T4921	2.75
UKA1H332MHD	3300	18 x 35.5	75T4924	3.56

(201266)

ECA-M SERIES RADIAL TYPE ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

Panasonic

Features:
- Endurance : 85°C 2000h
- Smaller than series SU
- Capacitance Tolerance of ±20%

Mfg. Part No.	Cap. (µF)	Voltage (VDC)	D x L (mm)	Stock No.	Price Each 1-9
ECA-0JM102B	1000	6.3	8 x 11.5	48W7535	0.42
ECA-0JM222B	2200	6.3	10 x 16	48W7540	0.49
ECA-0JM332B	3300	6.3	10 x 20	48W7543	0.50
ECA-1AM102B	1000	10	10 x 12.5	48W7564	0.57
ECA-1AM222B	2200	10	10 x 20	48W7567	0.50
ECA-1AM472	4700	10	12.5 x 25	53W8291	0.91
ECA-1AM101I	100	10	5 x 11	48W7563	0.22
ECA-1CM101I	100	16	5 x 11	48W7598	0.25
ECA-1CM101B	100	16	5 x 11	48W7597	0.25
ECA-1CM221B	220	16	6.3 x 11.2	48W7603	0.26
ECA-1CM221I	220	16	6.3 x 11.2	48W7604	0.26
ECA-1CM471B	470	16	8 x 11.5	48W7613	0.42
ECA-1CM102B	1000	16	10 x 16	48W7599	0.49
ECA-1CHG102B	1000	16	10 x 16	48W7582	0.54
ECA-1EM101I	100	25	6.3 x 11.2	48W7639	0.26
ECA-1EM101B	100	25	6.3 x 11.2	48W7638	0.26
ECA-1EM331B	330	25	8 x 11.5	48W7648	0.42
ECA-1EM471B	470	25	10 x 12.5	48W7653	0.44
ECA-1EM102B	1000	25	10 x 20	48W7640	0.54
ECA-1EHG102B	1000	25	10 x 20	48W7623	0.71
ECA-1EM470B	47	25	5 x 11	48W7651	0.25
ECA-1EM470I	47	25	5 x 11	48W7652	0.25
ECA-1EM221B	220	25	8 x 11.5	48W7643	0.42
ECA-1VM470B	47	35	5 x 11	48W7792	0.42
ECA-1VM470I	47	35	5 x 11	48W7793	0.42
ECA-1VM101B	100	35	6.3 x 11.2	48W7781	0.46
ECA-1VM101I	100	35	6.3 x 11.2	48W7782	0.46
ECA-1VM221B	220	35	8 x 11.5	48W7786	0.51
ECA-1VM331B	330	35	10 x 12.5	48W7791	0.44

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ALUMINUM ELECTROLYTIC CAPACITORS

ECA-M SERIES RADIAL TYPE ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

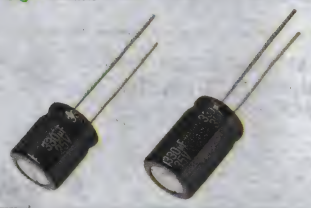
Mfg. Part No.	Cap. (µF)	Voltage (VDC)	D x L (mm)	Stock No.	Price Each 1-9
ECA-1VM471B	470	35	10 x 16	48W7794	0.50
ECA-1VM102B	1000	35	12.5 x 20	48W7783	0.87
ECA-1HM2R2I	2.2	50	5 x 11	48W7719	0.37
ECA-1HM2R2B	2.2	50	5 x 11	48W7718	0.37
ECA-1HM4R7B	4.7	50	5 x 11	48W7729	0.37
ECA-1HM4R7I	4.7	50	5 x 11	48W7730	0.37
ECA-1HM100I	10	50	5 x 11	48W7714	0.37
ECA-1HM100B	10	50	5 x 11	48W7713	0.37
ECA-1HHG100B	10	50	5 x 11	48W7676	0.43
ECA-1HM220B	22	50	5 x 11	48W7720	0.42
ECA-1HM220I	22	50	5 x 11	48W7721	0.42
ECA-1HM470B	47	50	6.3 x 11.2	48W7731	0.46
ECA-1HM470I	47	50	6.3 x 11.2	48W7732	0.46
ECA-1HM101B	100	50	8 x 11.5	48W7715	0.51
ECA-1HM010B	1	50	5 x 11	48W7711	0.37
ECA-1HM221B	220	50	10 x 12.5	48W7722	0.47
ECA-1HM331B	330	50	10 x 16	48W7728	0.53
ECA-1HM471B	470	50	10 x 20	48W7733	0.59
ECA-1HHG101B	100	50	8 x 11.5	48W7679	0.49
ECA-1HHG471B	470	50	10 x 20	48W7702	0.79
ECA-2AHG470B	47	100	10 x 12.5	48W7815	0.56
ECA-2AM101B	100	100	10 x 16	48W7823	0.60
ECA-2CHG330	33	160	10 x 20	53W8292	0.56
ECA-2CM221	220	160	16 x 31.5	53W8293	1.78
ECA-2WHG100B	10	450	12.5 x 20	48W7955	1.18

(208892)

EEU-FM SERIES RADIAL LEAD ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

Panasonic



Features:
- Endurance: 2000h to 7000h at +105°C
- Low impedance
- Capacitance tolerance: ±20% (120Hz/+20°C)
- Temperature range: –40°C to +105°C

Mfg. Part No.	Cap. (µF)	Voltage (VDC)	Dia. x L (mm)	Stock No.	Price Each 1-9
EEU-FM0J561	560	6.3	8 x 11.5	49W7270	0.58
EEU-FM0J122	1200	6.3	10 x 16	49W7261	0.54
EEU-FM1A222	2200	10	12.5 x 20	53W8327	0.89
EEU-FM1C152	1500	16	12.5 x 20	49W7294	0.90
EEU-FM1C392	3900	16	16 x 25	49W7302	1.67
EEU-FM1E152	1500	25	12.5 x 25	49W7311	1.13
EEU-FM1E182S	1800	25	16 x 20	49W7313	1.40
EEU-FM1E182L	1800	25	12.5 x 30	54W2555	1.17
EEU-FM1V122S	1200	35	16 x 20	49W7343	1.40
EEU-FM1H271	270	50	10 x 20	49W7334	0.64
EEU-FM1H561	560	50	12.5 x 25	49W7339	1.13

(208918)

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(211463)

EEU-FR SERIES RADIAL LEAD ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

Panasonic

Features:
- Endurance : 5000h to 10000h at +105°C
- Low ESR
- Capacitance tolerance: ±20% (120Hz/+20°C)
- Temperature range: –40°C to +105°C

Applications:
- Swtiching mode power supplies
- LCD backlighting
- LED systems
- Applications with long life requirements

Mfg. Part No.	Cap. (µF)	Voltage (VDC)	Dia. x L (mm)	Stock No.	Price Each 1-24
EEU-FR0J471	470	6.3	6.3 x 11.2	49W7370	0.38
EEU-FR0J152LB	1500	6.3	8 x 20	49W7364	0.60
EEU-FR0J182B	1800	6.3	10 x 16	49W7365	0.68
EEU-FR0J222B	2200	6.3	10 x 20	49W7366	0.77
EEU-FR1A101B	100	10	5 x 11	49W7377	0.35
EEU-FR1A221B	220	10	6.3 x 11.2	49W7383	0.43
EEU-FR1A102LB	1000	10	8 x 15	49W7378	0.48
EEU-FR1A152LB	1500	10	8 x 20	49W7381	0.56
EEU-FR1A152B	1500	10	10 x 16	49W7380	0.68
EEU-FR1A222LB	2200	10	10 x 25	49W7384	1.02
EEU-FR1A332B	3300	10	12.5 x 20	49W7385	1.21
EEU-FR1C101B	100	16	5 x 11	49W7391	0.35
EEU-FR1C221B	220	16	6.3 x 11.2	49W7399	0.43
EEU-FR1C471B	470	16	8 x 11.5	49W7404	0.52
EEU-FR1C681LB	680	16	8 x 15	49W7410	0.48
EEU-FR1C102B	1000	16	10 x 16	49W7392	0.67
EEU-FR1C102LB	1000	16	8 x 20	49W7393	0.55
EEU-FR1C152B	1500	16	10 x 20	49W7396	0.78
EEU-FR1C222B	2200	16	12.5 x 20	49W7400	1.21
EEU-FR1E681B	680	25	10 x 16	49W7431	0.68
EEU-FR1E470B	47	25	5 x 11	49W7424	0.35
EEU-FR1E680	68	25	5 x 11	71T6999	0.35
EEU-FR1E101B	100	25	6.3 x 11.2	49W7411	0.43
EEU-FR1E331B	330	25	8 x 11.5	49W7421	0.52
EEU-FR1E471Y	470	25	8 x 15	49W7427	0.52
EEU-FR1E471YB	470	25	8 x 15	49W7428	0.52
EEU-FR1E471LB	470	25	8 x 20	49W7426	0.56
EEU-FR1E471B	470	25	10 x 12.5	49W7425	0.61
EEU-FR1E681LB	680	25	8 x 20	49W7432	0.56
EEU-FR1E821B	820	25	10 x 20	49W7433	0.78
EEU-FR1E102B	1000	25	10 x 20	49W7412	0.97
EEU-FR1E102LB	1000	25	10 x 25	49W7414	1.01
EEU-FR1E152B	1500	25	12.5 x 20	49W7417	1.21
EEU-FR1E222SB	2200	25	16 x 20	49W7419	2.01
EEU-FR1E332B	3300	25	16 x 25	49W7422	1.89
EEU-FR1V330B	33	35	5 x 11	49W7474	0.35
EEU-FR1V181B	180	35	8 x 11.5	49W7470	0.52
EEU-FR1V471B	470	35	10 x 16	49W7476	0.68
EEU-FR1V471LB	470	35	8 x 20	49W7477	0.56
EEU-FR1V561B	560	35	10 x 20	49W7478	0.78
EEU-FR1V681LB	680	35	10 x 25	49W7481	1.01
EEU-FR1V821LB	820	35	10 x 25	49W7482	1.01
EEU-FR1V102B	1000	35	12.5 x 20	49W7467	1.19
EEU-FR1V122B	1200	35	12.5 x 25	49W7468	1.41
EEU-FR1V222B	2200	35	16 x 25	49W7471	1.89
EEU-FR1H220B	22	50	5 x 11	49W7439	0.35
EEU-FR1H101B	100	50	8 x 11.5	49W7434	0.52
EEU-FR1H221B	220	50	10 x 16	49W7440	0.68
EEU-FR1H331LB	330	50	10 x 25	49W7442	1.01
EEU-FR1H471B	470	50	12.5 x 20	49W7443	1.21
EEU-FR1H102B	1000	50	16 x 25	49W7435	1.89
EEU-FR1J271U	270	63	10 x 20	49W7458	1.03

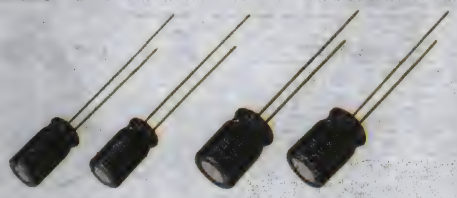
(208919)

ECE-A SU (BIPOLAR) SERIES RADIAL LEAD ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

Panasonic

Features:
- Endurance: 2000h at +85°C
- Capacitance tolerance: ±20% (120Hz/+20°C)
- Temperature range: –40°C to +85°C



Mfg. Part No.	Cap. (µF)	Voltage (VDC)	Dia. x L (mm)	Stock No.	Price Each 1-9
ECE-A0JN471X	470	6.3	10 x 12.5	48W8026	0.63
ECE-A0JN102U	1000	6.3	10 x 20	48W8012	0.86
ECE-A1AN470U	47	10	5 x 11	48W8065	0.39
ECE-A1AN101X	100	10	6.3 x 11.2	48W8050	0.41
ECE-A1AN221U	220	10	8 x 11.5	48W8056	0.56
ECE-A1AN471U	470	10	10 x 16	48W8067	0.71
ECE-A1AN102X	1000	10	12.5 x 20	48W8052	1.26
ECE-A1CN100U	10	16	5 x 11	48W8092	0.39
ECE-A1CN220U	22	16	5 x 11	48W8098	0.39
ECE-A1CN330U	33	16	5 x 11	48W8103	0.39
ECE-A1CN470U	47	16	6.3 x 11.2	48W8108	0.41
ECE-A1CN221X	220	16	10 x 12.5	48W8100	0.57
ECE-A1CN331U	330	16	10 x 16	48W8105	0.71
ECE-A1CN471U	470	16	10 x 20	48W8110	0.86
ECE-A1CN102U	1000	16	12.5 x 25	48W8096	1.42
ECE-A1EN100U	10	25	5 x 11	48W8134	0.39
ECE-A1EN220X	22	25	5 x 11	48W8141	0.39
ECE-A1EN330U	33	25	6.3 x 11.2	48W8149	0.41
ECE-A1EN470U	47	25	6.3 x 11.2	48W8155	0.41
ECE-A1EN101U	100	25	8 x 11.5	48W8137	0.48
ECE-A1EN221U	220	25	10 x 16	48W8143	0.71
ECE-A1EN471U	470	25	12.5 x 20	48W8158	1.14
ECE-A1EN102U	1000	25	16 x 25	48W8139	1.99
ECE-A1EN222U	2200	25	18 x 35.5	48W8145	2.55
ECE-A1VN100U	10	35	5 x 11	48W8247	0.39
ECE-A1VN220U	22	35	6.3 x 11.2	48W8251	0.41
ECE-A1VN470U	47	35	8 x 11.5	48W8261	0.49
ECE-A1VN101U	100	35	10 x 16	48W8249	0.71
ECE-A1VN221U	220	35	12.5 x 20	48W8253	0.93
ECE-A1VN471U	470	35	12.5 x 25	48W8263	1.42
ECE-A1HN3R3U	3.3	50	5 x 11	48W8215	0.39
ECE-A1HN330U	33	50	8 x 11.5	48W8217	0.49
ECE-A1HN221U	220	50	12.5 x 25	48W8213	1.28
ECE-A1HN331U	330	50	16 x 25	48W8220	1.64
ECE-A1HN471U	470	50	16 x 31.5	48W8224	1.81

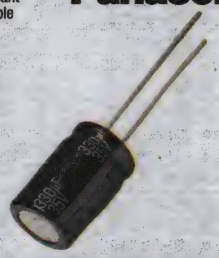
(208923)

EEU-TP SERIES RADIAL LEAD ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

Panasonic

Features:
- Endurance: 2000h to 5000h at +125°C; 1000h to 2000h at +135°C
- Smaller than TA series
- High ripple current (at high frequency): 20 to 40% higher than TA series
- Capacitance tolerance: ±20% (120Hz/+20°C)
- Temperature range: –40°C to +135°C



Mfg. Part No.	Cap. (µF)	Voltage (VDC)	Dia. x L (mm)	Stock No.	Price Each 1-9
EEU-TP1E221	220	25	10 x 12.5	47T2037	1.33
EEU-TP1E221B	220	25	10 x 12.5	49W7621	1.33
EEU-TP1E471	470	25	10 x 16	47T2047	1.76
EEU-TP1E471B	470	25	10 x 16	49W7629	1.60
EEU-TP1V101B	100	35	10 x 12.5	49W7633	1.33
EEU-TP1V101	100	35	10 x 12.5	47T2053	1.31
EEU-TP1V331B	330	35	10 x 20	49W7646	1.09
EEU-TP1V471	470	35	12.5 x 20	47T2072	2.08
EEU-TP1V471B	470	35	12.5 x 20	49W7648	2.08
EEU-TP1V102	1000	35	16 x 20	47T2054	2.87
EEU-TP1V102B	1000	35	16 x 20	49W7634	2.87

(208921)

EEU-HD SERIES RADIAL LEAD ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

Panasonic

Features:
- Endurance: 1000h to 2000h at +105°C
- Minaturize size with high capacitance
- Capacitance tolerance: ±20% (120Hz/+20°C)
- Temperature range: –55°C to +105°C

Mfg. Part No.	Voltage (VDC)	Cap. (µF)	Dia. x L (mm)	Stock No.	Price Each 1-24
EEU-HD1E221	25	220	8 x 11.5	58T9376	0.80
EEU-HD1E221B	25	220	8 x 11.5	49W7500	0.78
EEU-HD1E102	25	1000	10 x 16	58T9374	1.30
EEU-HD1E102B	25	1000	10 x 16	49W7499	1.22
EEU-HD1E222	25	2200	12.5 x 20	58T9377	1.83
EEU-HD1E222B	25	2200	12.5 x 20	49W7501	1.83
EEU-HD1V101	35	100	6.3 x 11.2	58T9408	0.63
EEU-HD1V101B	35	100	6.3 x 11.2	49W7529	0.61
EEU-HD1V222	35	2200	12.5 x 25	58T9410	2.20
EEU-HD1V222B	35	2200	12.5 x 25	49W7531	2.20
EEU-HD1H470	50	47	6.3 x 11.2	58T9403	0.63
EEU-HD1H470B	50	47	6.3 x 11.2	49W7524	0.61
EEU-HD1H101	50	100	8 x 11.5	58T9392	0.80
EEU-HD1H101B	50	100	8 x 11.5	49W7515	0.78
EEU-HD1H101B	50	100	8 x 11.5	49W7515	0.78

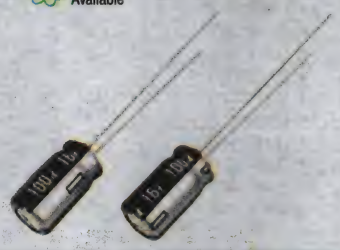
(208920)

EEA-GA SERIES RADIAL LEAD ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

Panasonic

Features:
- Endurance: 1000h at +105°C
- Capacitance tolerance: ±20% (120Hz/+20°C)
- Temperature range: –55°C to +105°C



Mfg. Part No.	Cap. (µF)	Voltage (VDC)	Dia. x L (mm)	Stock No.	Price Each 1-24
EEA-GA1A101H	100	10	6.3 x 7	49W4545	0.29
EEA-GA1C100H	10	16	4 x 7	49W4557	0.21
EEA-GA1E100B	10	25	4 x 7	49W4568	0.24
EEA-GA1E100H	10	25	4 x 7	49W4569	0.24
EEA-GA1E150H	15	25	5 x 7	49W4571	0.24
EEA-GA1V100B	10	35	5 x 7	49W4610	0.27
EEA-GA1V100H	10	35	5 x 7	49W4611	0.27
EEA-GA1V220H	22	35	6.3 x 7	49W4615	0.29
EEA-GA1H4R7B	4.7	50	4 x 7	49W4606	0.24
EEA-GA1H4R7H	4.7	50	4 x 7	49W4607	0.21
EEA-GA1H100B	10	50	6.3 x 7	49W4594	0.32
EEA-GA1H100H	10	50	6.3 x 7	49W4595	0.32

(208914)

EEU-FC SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

Panasonic

Features
- Low impedance

Specifications
- Endurance : 1000h to 5000h at 105°C
- Capacitance tolerance: ±20% (120Hz/+20°C)
- Operating temperature range: –55°C to +105°C

VOLTAGE: 6.3VDC

Mfg. Part No.	Cap. (µF)	DxL (mm)	Stock No.	Price 1-9
EEU-FC0J151	150	5x15	49W6781	0.42
EEU-FC0J331S	330	6.3x11.2	49W6803	0.44
EEU-FC0J561	560	8x11.5	25M9145	0.42
EEU-FC0J102	1000	10x12.5	25M9142	0.58
EEU-FC0J122	1200	10x16	25M9143	0.57
EEU-FC0J152S	1500	12.5x15	49W6785	1.09
EEU-FC0J222S	2200	16x15	49W6792	1.45
EEU-FC0J272L	2700	10x30	49W6799	0.95
EEU-FC0J272	2700	12.5x20	49W6797	0.96
EEU-FC0J272S	2700	16x15	34M5922	1.36
EEU-FC0J392	3900	12.5x25	34M5923	1.21
EEU-FC0J472	4700	12.5x30	25M9144	1.25

CONTINUED

2

EEU-FC SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

Mfg. Part No.	Cap. (µF)	DxL (mm)	Stock No.	Price 1-9
● EEU-FC0J562	5600	16x20	25M9146	0.89
● EEU-FC0J682	6800	16x25	25M9147	1.78
● EEU-FC0J103S	10000	18x25	49W6774	2.04
VOLTAGE: 10VDC				
● EEU-FC1A181	180	6.3x11.2	25M9151	0.44
● EEU-FC1A221	220	6.3x15	25M9152	0.53
● EEU-FC1A391	390	8x11.5	49W6864	0.42
● EEU-FC1A471	470	8x11.5	25M9155	0.42
● EEU-FC1A561	560	10x12.5	49W6873	0.58
● EEU-FC1A681	680	10x12.5	49W6878	0.58
● EEU-FC1A102	1000	10x16	25M9148	0.57
● EEU-FC1A122	1200	10x20	25M9150	0.69
● EEU-FC1A122S	1200	12.5x15	49W6840	1.09
● EEU-FC1A182S	1800	16x15	49W6850	1.45
● EEU-FC1A222	2200	12.5x20	25M9153	0.95
● EEU-FC1A332	3300	12.5x30	25M9154	1.23
● EEU-FC1A332S	3300	16x20	49W6862	1.50
● EEU-FC1A562	5600	16x25	34M5924	1.06
● EEU-FC1A682	6800	16x31.5	25M9156	1.81
● EEU-FC1A103	10000	18x35.5	25M9149	2.55
VOLTAGE: 16VDC				
● EEU-FC1C390	39	4x11	49W6920	0.57
● EEU-FC1C560	56	5x11	49W6936	0.35
● EEU-FC1C680	68	5x11	49W6940	0.35
● EEU-FC1C820	82	5x15	34M5925	0.42
● EEU-FC1C121	120	6.3x11.2	49W6893	0.44
● EEU-FC1C181	180	6.3x15	25M9158	0.53
● EEU-FC1C331	330	8x11.5	25M9159	0.42
● EEU-FC1C391	390	10x12.5	49W6923	0.58
● EEU-FC1C471	470	10x12.5	25M9160	0.58
● EEU-FC1C681	680	10x16	49W6943	0.57
● EEU-FC1C821	820	10x20	25M9163	0.69
● EEU-FC1C122	1200	10x25	25M9157	0.77
● EEU-FC1C122S	1200	16x15	49W6897	1.36
● EEU-FC1C152	1500	12.5x20	49W6899	0.96
● EEU-FC1C152S	1500	16x15	49W6901	1.45
● EEU-FC1C182S	1800	18x15	49W6906	1.81
● EEU-FC1C222	2200	12.5x25	12M6559	1.20
● EEU-FC1C222S	2200	16x20	49W6911	1.50
● EEU-FC1C332	3300	12.5x35	02M6200	1.62
● EEU-FC1C332S	3300	18x20	49W6918	1.91
● EEU-FC1C392	3900	16x25	49W6925	1.78
● EEU-FC1C392S	3900	18x20	49W6927	2.03
● EEU-FC1C472	4700	16x31.5	25M9161	1.81
● EEU-FC1C682	6800	16x40	49W6947	2.29
● EEU-FC1C822	8200	18x35.5	25M9164	2.55
VOLTAGE: 25VDC				
● EEA-FC1E100	10	4x7	49W4526	0.32
● EEA-FC1E220	22	5x7	49W4529	0.35
● EEU-FC1E390	39	5x11	49W6985	0.44
● EEU-FC1E560	56	5x15	49W6997	0.42
● EEU-FC1E820	82	6.3x11.2	49W7005	0.44
● EEU-FC1E121	120	6.3x15	25M9166	0.53
● EEU-FC1E181	180	8x11.5	49W6967	0.42
● EEU-FC1E221	220	8x11.5	25M9167	0.41
● EEU-FC1E271	270	10x12.5	49W6977	0.58
● EEU-FC1E331	330	10x12.5	19M1226	0.57
● EEU-FC1E471	470	10x16	80K8337	0.57
● EEU-FC1E561	560	10x20	25M9171	0.69
● EEU-FC1E561S	560	12.5x15	49W7001	1.09
● EEU-FC1E821	820	10x25	25M9172	0.76
● EEU-FC1E102	1000	12.5x20	25M9165	0.95
● EEU-FC1E102S	1000	16x15	49W6956	1.45
● EEU-FC1E122	1200	12.5x25	49W6960	1.21
● EEU-FC1E122S	1200	18x15	49W6962	1.81
● EEU-FC1E152S	1500	16x20	49W6965	1.50
● EEU-FC1E182	1800	16x20	34M5926	1.48
● EEU-FC1E222	2200	12.5x35	25M9168	1.60
● EEU-FC1E332	3300	16x31.5	25M9169	1.81
● EEU-FC1E332S	3300	18x25	49W6983	2.04
● EEU-FC1E392	3900	18x31.5	49W6990	2.36
● EEU-FC1E472	4700	18x35.5	25M9170	2.55
● EEU-FC1E562	5600	18x40	49W7003	3.00

➤CONTINUED➤

EEU-FC SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

Mfg. Part No.	Cap. (µF)	DxL (mm)	Stock No.	Price 1-9
VOLTAGE: 35VDC				
● EEU-FC1V220	22	5x11	49W7154	0.35
● EEU-FC1V270	27	5x11	49W7162	0.35
● EEU-FC1V390	39	5x15	25M9197	0.42
● EEU-FC1V560	56	6.3x11.2	25M9198	0.43
● EEU-FC1V820	82	6.3x15	25M9200	0.53
● EEU-FC1V151	150	8x11.5	25M9194	0.41
● EEU-FC1V181	180	10x12.5	49W7149	0.58
● EEU-FC1V221	220	10x12.5	80K8401	0.58
● EEU-FC1V271	270	10x16	49W7165	0.57
● EEU-FC1V331	330	10x16	25M9195	0.57
● EEU-FC1V391	390	10x20	49W7176	0.69
● EEU-FC1V561	560	10x25	49W7185	0.77
● EEU-FC1V561S	560	12.5x20	49W7188	0.96
● EEU-FC1V681	680	12.5x20	25M9199	0.95
● EEU-FC1V681S	680	16x15	49W7193	1.45
● EEU-FC1V102	1000	12.5x25	25M9192	1.23
● EEU-FC1V122	1200	16x20	25M9193	1.48
● EEU-FC1V152	1500	16x25	49W7142	1.78
● EEU-FC1V152S	1500	18x20	49W7144	2.03
● EEU-FC1V182	1800	16x25	34M5928	1.78
● EEU-FC1V182S	1800	18x20	49W7152	2.03
● EEU-FC1V222	2200	16x31.5	82K9806	1.81
● EEU-FC1V222S	2200	18x25	49W7160	2.04
● EEU-FC1V272	2700	18x31.5	49W7167	2.36
● EEU-FC1V332	3300	18x35.5	25M9196	2.55
● EEU-FC1V392	3900	18x40	49W7179	3.00
VOLTAGE: 50VDC				
● EEU-FC1H2R2H	2.2	5x11	49W7039	0.35
● EEU-FC1H100	10	4x11	25M9173	0.57
● EEU-FC1H180	18	5x11	25M9177	0.35
● EEU-FC1H220H	22	5x11	49W7041	0.35
● EEU-FC1H270	27	5x11	25M9179	0.42
● EEU-FC1H330	33	6.3x11.2	25M9180	0.44
● EEU-FC1H470H	47	6.3x11.2	49W7065	0.44
● EEU-FC1H560	56	6.3x15	49W7066	0.53
● EEU-FC1H680	68	8x11.5	49W7073	0.42
● EEU-FC1H820	82	8x11.5	25M9183	0.42
● EEU-FC1H121	120	10x12.5	25M9175	0.55
● EEU-FC1H151	150	10x16	49W7029	0.57
● EEU-FC1H221	220	10x20	49W7042	0.69
● EEU-FC1H221S	220	12.5x15	49W7044	1.09
● EEU-FC1H271	270	10x25	34M5927	0.77
● EEU-FC1H391	390	12.5x20	25M9181	0.96
● EEU-FC1H391S	390	16x15	49W7060	1.45
● EEU-FC1H561	560	12.5x25	49W7069	1.21
● EEU-FC1H561S	560	18x15	49W7071	1.81
● EEU-FC1H681	680	16x20	25M9182	1.50
● EEU-FC1H102	1000	16x25	25M9174	1.76
● EEU-FC1H122	1200	16x31.5	25M9176	1.81
● EEU-FC1H122S	1200	18x25	49W7025	1.92
● EEU-FC1H182	1800	18x31.5	49W7037	2.36
● EEU-FC1H182L	1800	16x40	53W8325	2.29
● EEU-FC1H222	2200	18x35.5	25M9178	2.55
● EEU-FC1H222C	2200	18x35.5	49W7046	2.55
VOLTAGE: 63VDC				
● EEU-FC1J120	12	5x11	49W7083	0.35
● EEU-FC1J220	22	6.3x11.2	25M9187	0.44
● EEU-FC1J390	39	6.3x15	10M9663	0.50
● EEU-FC1J560	56	8x11.5	49W7116	0.42
● EEU-FC1J820	82	10x12.5	49W7127	0.58
● EEU-FC1J101	100	10x12.5	25M9184	0.59
● EEU-FC1J121	120	10x16	49W7086	0.57
● EEU-FC1J181	180	10x20	12M6541	0.69
● EEU-FC1J221	220	10x25	25M9188	0.77
● EEU-FC1J221X	220	10x20	49W7100	0.69
● EEU-FC1J271	270	16x15	49W7102	1.45
● EEU-FC1J331	330	12.5x20	49W7106	0.96
● EEU-FC1J391	390	12.5x25	25M9189	1.21
● EEU-FC1J391S	390	18x15	49W7111	1.81
● EEU-FC1J471	470	16x20	25M9190	1.48
● EEU-FC1J561	560	16x25	49W7119	1.78
● EEU-FC1J681	680	16x25	25M9191	1.78

➤CONTINUED➤

EEU-FC SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 63VDC

Mfg. Part No.	Cap. (µF)	DxL (mm)	Stock No.	Price 1-9
EEU-FC1J681L	680	12.5x35	53W8326	1.62
EEU-FC1J821S	820	18x25	49W7130	2.04
EEU-FC1J102	1000	16x35.5	25M9185	2.08
EEU-FC1J122	1200	18x31.5	25M9186	2.36
EEU-FC1J152	1500	18x35.5	49W7090	2.55
VOLTAGE: 100VDC				
EEU-FC2A2R2	2.2	5x11	49W7219	0.38
EEU-FC2A4R7	4.7	5x11	49W7240	0.38
EEU-FC2A100	10	6.3x11.2	49W7201	0.48
EEU-FC2A100E	10	6.3x11.2	49W7203	0.49
EEU-FC2A220	22	8x11.5	25M9202	0.45
EEU-FC2A330	33	10x12.5	25M9203	0.47
EEU-FC2A470	47	10x20	49W7243	0.75
EEU-FC2A101	100	12.5x20	25M9201	1.06
EEU-FC2A151	150	12.5x25	49W7211	1.29
EEU-FC2A221	220	16x25	02M8437	1.96
EEU-FC2A331	330	16x31.5	25M9204	1.99
EEU-FC2A331S	330	18x25	49W7233	2.27
EEU-FC2A471	470	16x40	11M0817	2.51
EEU-FC2A681	680	18x40	14M7977	3.10

(180483)

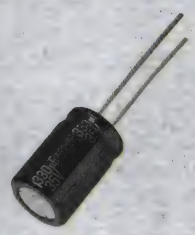
NHG SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

Panasonic

Features
- General Purpose
- Extended Temperature Range

Specifications
- Tolerance: ±20% (120 Hz/+20°C)
- Endurance:
  6.3 VDC to 100 VDC:
  (ø5 to ø8) = 1000 hours
  (ø10 to ø18) = 2000 hours
  160 VDC to 450 VDC = 2000 hours
- Operating Temp. Range:
  6.3 VDC to 100 VDC: –55°C to +105°C
  160 VDC to 450 VDC: –25°C to +105°C



VOLTAGE: 6.3 VDC

Mfg. Part No.	Cap. (µF)	DxL (mm)	Tape Cut Stock No.	Price Each 1-9
ECA-0JHG102	1000	8x11.5	96K9139	0.42
VOLTAGE: 10 VDC				
ECA-1AHG332	3300	12.5x20	96K9140	0.92
ECA-1AHG472	4700	12.5x25	96K9141	1.25
ECA-1AHG682	6800	16x25	96K9142	1.71
VOLTAGE: 16 VDC				
ECA-1CHG331	330	8x11.5	96K9145	0.39
ECA-1CHG471	470	8x11.5	96K9146	0.42
ECA-1CHG102	1000	10x16	96K9143	0.54
ECA-1CHG222	2200	12.5x20	96K9144	0.93
ECA-1CHG472	4700	16x25	96K9147	1.71
VOLTAGE: 25 VDC				
ECA-1EHG101	100	6.3x11.2	96K9155	0.39
ECA-1EHG221	220	8x11.5	96K9156	0.38
ECA-1EHG471	470	10x12.5	96K9159	0.60
ECA-1EHG222	2200	12.5x25	96K9157	1.23
ECA-1EHG332	3300	16x25	96K9158	1.82
VOLTAGE: 35 VDC				
ECA-1VHG102	1000	12.5x20	96K9196	0.95
VOLTAGE: 50 VDC				
ECA-1HHG2R2	2.2	5x11	96K9164	0.25
ECA-1HHG3R3	3.3	5x11	96K9168	0.25
ECA-1HHG4R7	4.7	5x11	96K9171	0.25
ECA-1HHG100	10	5x11	96K9161	0.25
ECA-1HHG100B	10	5x11	48W7676	0.43
ECA-1HHG220	22	5x11	96K9165	0.25
ECA-1HHG330	33	5x11	96K9169	0.25
ECA-1HHG470	47	6.3x11.2	96K9172	0.39
ECA-1HHG101	100	8x11.5	96K9162	0.40
ECA-1HHG221	220	10x12.5	96K9166	0.60

➤CONTINUED➤

NHG SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 50 VDC

Mfg. Part No.	Cap. (µF)	DxL (mm)	Tape Cut Stock No.	Price Each 1-9
ECA-1HHG331	330	10x16	96K9170	0.59
ECA-1HHG471	470	10x20	96K9173	0.71
ECA-1HHG102	1000	12.5x25	96K9163	1.23
ECA-1HHG222	2200	16x31.5	96K9167	1.79
VOLTAGE: 63 VDC				
ECA-1JHG330	33	6.3x11.2	96K9186	0.41
ECA-1JHG470	47	6.3x11.2	96K9188	0.41
ECA-1JHG221	220	10x16	96K9185	0.59
ECA-1JHG331	330	10x20	96K9187	0.79
ECA-1JHG471	470	12.5x20	96K9189	1.07
ECA-1JHG102	1000	16x25	96K9184	1.89
VOLTAGE: 100 VDC				
ECA-2AHG2R2	2.2	5x11	96K9211	0.26
ECA-2AHG3R3	3.3	5x11	96K9214	0.25
ECA-2AHG4R7	4.7	5x11	96K9217	0.26
ECA-2AHG100	10	6.3x11.2	96K9209	0.41
ECA-2AHG220	22	6.3x11.2	96K9212	0.41
ECA-2AHG330	33	8x11.5	96K9215	0.46
ECA-2AHG470	47	10x12.5	96K9218	0.56
ECA-2AHG101	100	10x20	96K9210	0.79
ECA-2AHG221	220	12.5x25	96K9213	1.27
ECA-2AHG331	330	16x25	96K9216	1.78
ECA-2AHG471	470	16x25	96K9219	2.13
VOLTAGE: 160 VDC				
ECA-2CHG4R7	4.7	6.3x11.2	96K9229	0.44
ECA-2CHG100	10	10x12.5	96K9228	0.56
VOLTAGE: 200 VDC				
ECA-2DHG3R3	3.3	6.3x11.2	96K9231	0.39
ECA-2DHG220	22	10x20	96K9230	0.53
ECA-2DHG470	47	12.5x20	96K9232	0.77
ECA-2DHG101	100	16x25	96K2874	1.34
VOLTAGE: 250 VDC				
ECA-2EHG010	1	6.3x11.2	96K9233	0.44
ECA-2EHG2R2	2.2	6.3x11.2	96K9235	0.44
ECA-2EHG4R7	4.7	8x11.5	96K9238	0.44
ECA-2EHG100	10	10x16	96K9234	0.54
ECA-2EHG220	22	12.5x20	96K9236	0.82
ECA-2EHG330	33	12.5x20	96K9237	0.89
ECA-2EHG470	47	12.5x25	96K9239	1.14
VOLTAGE: 400 VDC				
ECA-2GHG010	1	6.3x11.2	96K9248	0.44
ECA-2GHG2R2	2.2	8x11.5	96K9250	0.44
ECA-2GHG3R3	3.3	10x12.5	96K9252	0.58
ECA-2GHG4R7	4.7	10x16	72K5802	0.54
ECA-2GHG100	10	10x20	96K9249	0.61
ECA-2GHG220	22	12.5x25	96K9251	1.21
ECA-2GHG330	33	16x25	96K9253	1.71
ECA-2GHG470	47	16x31.5	96K9254	2.01
VOLTAGE: 450 VDC				
ECA-2WHG010	1	8x11.5	96K9257	0.48
ECA-2WHG2R2	2.2	10x12.5	96K9259	0.58
ECA-2WHG3R3	3.3	10x16	96K9261	0.56
ECA-2WHG4R7	4.7	10x20	96K9263	0.61
ECA-2WHG100	10	12.5x20	96K9258	1.07
ECA-2WHG220	22	16x25	96K9260	1.71
ECA-2WHG330	33	16x31.5	54W2485	2.13

(180478)

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(196535)

ALUMINUM ELECTROLYTIC CAPACITORS

EEU-EE SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

Panasonic

Features
- High ripple current (at high frequency)

Specifications
- Tolerance: ±20% (120 Hz/+20°C)
- Endurance: 8000 h to 10000 h @ 105°C
- Operating Temperature Range: -25°C to +105°C

VOLTAGE: 160 VDC

Mfg. Part No.	Cap. (µF)	DxL (mm)	Pitch (mm)	Stock No.	Price 1-9
● EEU-EE2C220	22	10x20	5	39P9878	0.72
● EEU-EE2C470	47	10x20	5	39P9883	0.72
● EEU-EE2C680	68	12.5x20	5	39P9884	1.10
● EEU-EE2C820	82	12.5x25	5	39P9885	1.39
● EEU-EE2C101	100	12.5x25	5	39P9874	1.38
● EEU-EE2C101S	100	16x20	7.5	39P9875	1.79
● EEU-EE2C151	150	16x25	7.5	39P9876	2.07
● EEU-EE2C151S	150	18x20	7.5	39P9877	2.08
● EEU-EE2C221	220	16x31.5	7.5	39P9879	1.99
● EEU-EE2C221S	220	18x25	7.5	39P9880	1.95
● EEU-EE2C331	330	18x31.5	7.5	39P9882	3.46
VOLTAGE: 200 VDC					
● EEU-EE2D220	22	10x20	5	39P9889	0.72
● EEU-EE2D330	33	10x20	5	39P9891	0.71
● EEU-EE2D470	47	12.5x20	5	39P9893	1.10
● EEU-EE2D680	68	12.5x25	5	39P9894	1.39
● EEU-EE2D680S	68	16x20	7.5	39P9895	1.68
● EEU-EE2D820S	82	16x20	7.5	39P9896	1.79
● EEU-EE2D101	100	16x25	7.5	39P9886	2.07
● EEU-EE2D101S	100	18x20	7.5	39P9887	2.21
● EEU-EE2D151	150	16x25	7.5	39P9888	2.07
● EEU-EE2D221	220	18x31.5	7.5	39P9890	3.46
● EEU-EE2D331	330	18x40	7.5	39P9892	3.24
VOLTAGE: 250 VDC					
● EEU-EE2E220	22	10x20	5	39P9900	0.67
● EEU-EE2E330	33	12.5x20	5	39P9902	1.10
● EEU-EE2E470	47	12.5x25	5	39P9903	1.39
● EEU-EE2E470S	47	16x20	7.5	39P9904	1.79
● EEU-EE2E680S	68	16x20	7.5	39P9905	1.68
● EEU-EE2E820	82	16x25	7.5	39P9906	2.07
● EEU-EE2E101	100	16x31.5	7.5	39P9897	1.99
● EEU-EE2E101S	100	18x25	7.5	39P9898	1.98
● EEU-EE2E151	150	18x31.5	7.5	39P9899	3.46
● EEU-EE2E221	220	18x40	7.5	39P9901	3.05
VOLTAGE: 350 VDC					
● EEU-EE2V150	15	10x20	5	39P9919	0.82
● EEU-EE2V220	22	12.5x20	5	39P9920	1.25
● EEU-EE2V330	33	12.5x25	5	39P9921	1.57
● EEU-EE2V330S	33	16x20	7.5	39P9922	2.00
● EEU-EE2V470	47	16x25	7.5	39P9923	1.82
● EEU-EE2V470S	47	18x20	7.5	39P9924	1.93
● EEU-EE2V680	68	16x31.5	7.5	39P9925	2.39
● EEU-EE2V680S	68	18x25	7.5	39P9926	2.35
● EEU-EE2V820S	82	18x25	7.5	54W2554	2.50
● EEU-EE2V101	100	18x31.5	7.5	39P9918	2.48
VOLTAGE: 400 VDC					
● EEU-EE2G100	10	10x20	5	39P9908	0.82
● EEU-EE2G150	15	12.5x20	5	39P9910	1.18
● EEU-EE2G220	22	12.5x25	5	39P9911	1.55
● EEU-EE2G220S	22	16x20	7.5	39P9912	2.00
● EEU-EE2G330S	33	16x20	7.5	39P9913	2.00
● EEU-EE2G470	47	16x25	7.5	39P9914	1.82
● EEU-EE2G470S	47	18x20	7.5	39P9915	1.99
● EEU-EE2G680	68	18x25	7.5	39P9916	2.58
● EEU-EE2G820	82	18x31.5	7.5	39P9917	2.48
● EEU-EE2G101	100	18x40	7.5	39P9909	3.24
VOLTAGE: 450 VDC					
● EEU-EE2W100	10	12.5x20	5	39P9928	1.25
● EEU-EE2W100U	10	10x20	5	39P9929	0.82
● EEU-EE2W150	15	12.5x25	5	39P9930	1.48
● EEU-EE2W220S	22	16x20	7.5	39P9931	2.00
● EEU-EE2W330	33	16x25	7.5	39P9932	1.93
● EEU-EE2W330S	33	18x20	7.5	39P9933	1.99

➤CONTINUED➤

EEU-EE SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 450 VDC

Mfg. Part No.	Cap. (µF)	DxL (mm)	Pitch (mm)	Stock No.	Price 1-9
● EEU-EE2W470	47	16x31.5	7.5	39P9934	2.44
● EEU-EE2W470S	47	18x25	7.5	39P9935	2.61
● EEU-EE2W560	56	18x31.5	7.5	39P9936	2.48
● EEU-EE2W680	68	18x40	7.5	39P9937	3.24

(180474)

HE SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

nichicon

Features
- Low Impedance
- High Reliability
- Long Life
- Anti-Solvent Feature

Specifications
- Temperature Range: –40 to +105°C
- Tolerance: ±20% at 120Hz
- Voltage Range: 6.3 to 100V
- Capacitance Range: 0.47 to 18000µF

Bulk part number plus 3-digit suffix indicates tape and reel packaging.

VOLTAGE: 6.3 VDC

Mfg. Part No.	Cap. (µF)	DxL (mm)	Pitch (mm)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● UHE0J151MDD1TD	150	8x11.5	3.5	65R1859	0.35
● UHE0J102MPD1TD	1000	8x15	3.5	65R1851	0.49
● UHE0J152MPD1TD	1500	10x20	5	65R1861	0.66
● UHE0J182MHD1TO	1800	12.5x15	5	65R1863	0.80
● UHE0J222MPD1TD	2200	10x25	5	65R1865	0.87
● UHE0J332MHD1TO	3300	12.5x20	5	65R1869	1.15
● UHE0J562MHD6TN	5600	16x20	7.5	65R1871	1.37
VOLTAGE: 10 VDC					
● UHE1A221MED1TD	220	6.3x11	2.5	65R1890	0.48
● UHE1A471MPD1TD	470	8x11.5	3.5	65R1902	0.53
● UHE1A102MPD6TD	1000	10x16	5	65R1882	0.74
● UHE1A222MHD3TN	2200	16x15	7.5	65R1892	1.38
● UHE1A272MHD1TN	2700	18x15	7.5	65R1896	1.46
● UHE1A332MHD1TO	3300	12.5x25	5	65R1898	1.43
● UHE1A392MHD6TN	3900	16x20	7.5	65R1900	1.34
VOLTAGE: 16 VDC					
● UHE1C560MDD1TD	56	5x11	2	65R1936	0.34
● UHE1C331MPD1TD	330	8x11.5	3.5	65R1924	0.50
● UHE1C471MPD1TD	470	8x15	3.5	65R1930	0.73
● UHE1C471MPD6TD	470	10x12.5	5	65R1932	0.55
● UHE1C681MPD1TD	680	8x20	3.5	65R1938	0.73
● UHE1C102MPD1TD	1000	10x20	5	65R1910	0.79
● UHE1C102MHD6TO	1000	12.5x15	5	65R1908	1.05
● UHE1C122MPD1TD	1200	10x25	5	65R1916	1.32
● UHE1C222MHD1TO	2200	12.5x25	5	65R1920	1.38
● UHE1C392MHD3TN	3900	16x20	7.5	65R1926	1.65
● UHE1C392MHD6TN	3900	16x25	7.5	65R1928	2.13
● UHE1C472MHD6TN	4700	18x25	7.5	65R1934	2.23
VOLTAGE: 25 VDC					
● UHE1E470MDD1TD	47	5x11	2	65R1966	0.41
● UHE1E101MED1TD	100	6.3x11	2.5	65R1942	0.38
● UHE1E221MPD1TD	220	8x11.5	3.5	65R1954	0.64
● UHE1E331MPD1TD	330	10x12.5	5	65R1960	0.64
● UHE1E331MPD6TD	330	10x12.5	5	65R1962	0.59
● UHE1E471MPD1TD	470	8x20	3.5	65R1968	0.70
● UHE1E471MPD6TD	470	10x16	5	65R1970	0.70
● UHE1E681MPD1TD	680	10x20	5	65R1978	0.84
● UHE1E821MPD1TD	820	10x25	5	65R1980	0.96
● UHE1E102MHD6TO	1000	12.5x20	5	65R1946	1.28
● UHE1E102MHD3TN	1000	16x15	7.5	65R1944	1.33
● UHE1E182MHD6TN	1800	16x20	7.5	65R1952	1.42
● UHE1E272MHD6TN	2700	16x25	7.5	65R1958	1.76
● UHE1E472MHD6TN	4700	18x35.5	7.5	65R1972	2.30
VOLTAGE: 35 VDC					
● UHE1V330MDD1TD	33	5x11	2	65R2070	0.38
● UHE1V151MPD1TD	150	8x11.5	3.5	65R2058	0.56
● UHE1V221MPD1TD	220	8x15	3.5	65R2062	0.76
● UHE1V271MPD1TD	270	8x20	3.5	65R2068	0.76
● UHE1V471MPD1TD	470	10x20	5	65R2080	0.83
● UHE1V471MHD6TO	470	12.5x15	5	65R2078	0.95
● UHE1V102MHD1TO	1000	12.5x25	5	65R2052	1.41

➤CONTINUED➤

HE SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 35 VDC

Mfg. Part No.	Cap. (µF)	DxL (mm)	Pitch (mm)	Tape Cut Stock No.	Price Each 1-9
UHE1V102MHD6TN	1000	18x15	7.5	65R2054	1.58
UHE1V222MHD6TN	2200	18x25	7.5	65R2066	2.30
UHE1V392MHD1TN	3900	18x40	7.5	65R2076	2.61
VOLTAGE: 50 VDC					
UHE1H220MDD1TD	22	5x11	2	65R1994	0.39
UHE1H101MPD1TD	100	8x11.5	3.5	65R1982	0.71
UHE1H221MPD1TD	220	10x16	5	65R1996	0.59
UHE1H271MHD6T0	270	12.5x15	5	65R2000	0.94
UHE1H331MPD1TD	330	10x25	5	65R2006	0.90
UHE1H471MHD6T0	470	12.5x20	5	65R2010	1.42
UHE1H471MHD3TN	470	16x15	7.5	65R2008	1.43
UHE1H561MHD1T0	560	12.5x25	5	65R2014	1.26
UHE1H102MHD6TN	1000	16x25	7.5	65R1986	1.93
UHE1H102MHD3TN	1000	18x20	7.5	65R1984	2.13
VOLTAGE: 63 VDC					
UHE1J820MPD1TD	82	8x15	3.5	65R2050	0.58
UHE1J271MHD6T0	270	12.5x20	5	65R2034	1.20
VOLTAGE: 100 VDC					
UHE2A470MPD1TD	47	10x12.5	5	65R2114	0.65
UHE2A101MPD1TD	100	10x25	5	65R2090	0.72
UHE2A271MHD6TN	270	16x25	7.5	65R2106	1.58

* Bulk Packaging
(164708)

VZ SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

nichicon

Features
- Wide Temperature Range
- Anti-Solvent Feature (thru 100V)

Specifications
- Temperature Range: –55 to +105°C (6.3V to 100V)
  –40 to +105°C (160V to 400V)
  –25 to +105°C (450V)
- Tolerance: ±20% at 120Hz
- Voltage Range: 6.3 to 450V
- Capacitance Range: 0.1 to 33000µF

Bulk part number plus 3-digit suffix indicates tape and reel packaging.

VOLTAGE: 6.3 VDC

Mfg. Part No.	Cap. (µF)	DxL (mm)	Pitch (mm)	Tape Cut Stock No.	Price Each 1-9	10-24	25-49
UVZ0J471MED1TD	470	6.3x11	2.5	65R3091	0.37	0.35	0.23
UVZ0J102MPD1TD	1000	8x11.5	3.5	65R3079	0.52	0.43	0.29
UVZ0J222MPD1TD	2200	10x20	5	65R3085	0.74	0.68	0.55
UVZ0J332MPD1TD	3300	10x20	5	65R3089	0.76	0.71	0.57
VOLTAGE: 10 VDC							
UVZ1A471MED1TD	470	6.3x11	2.5	65R3111	0.37	0.35	0.23
UVZ1A102MPD1TD	1000	10x12.5	5	65R3099	0.60	0.57	0.35
UVZ1A222MPD1TD	2200	10x20	5	65R3105	0.77	0.72	0.57
VOLTAGE: 16 VDC							
UVZ1C101MDD1TD	100	5x11	2	65R3119	0.31	0.26	0.18
UVZ1C221MED1TD	220	6.3x11	2.5	65R3125	0.33	0.31	0.20
UVZ1C471MPD1TD	470	8x11.5	3.5	65R3137	0.51	0.42	0.29
UVZ1C102MPD1TD	1000	10x16	5	65R3121	0.61	0.56	0.45
UVZ1C222MHD1T0	2200	12.5x20	5	65R3127	1.00	0.84	0.72
UVZ1C332MHD1T0	3300	12.5x25	5	65R3133	1.36	1.27	1.15
VOLTAGE: 25 VDC							
UVZ1E100MDD1TD	10	5x11	2	65R3141	0.29	0.25	0.17
UVZ1E220MDD1TD	22	5x11	2	65R3147	0.29	0.25	0.17
UVZ1E470MDD1TD	47	5x11	2	65R3161	0.29	0.25	0.17
UVZ1E221MPD1TD	220	8x11.5	3.5	65R3149	0.40	0.37	0.25
UVZ1E331MPD1TD	330	10x12.5	5	65R3155	0.40	0.38	0.23
UVZ1E471MPD1TD	470	10x12.5	5	58R3366	0.59	0.57	0.34
UVZ1E102MPD1TD	1000	10x20	5	65R3145	0.67	0.62	0.49
UVZ1E222MHD1T0	2200	12.5x25	5	65R3151	1.58	1.30	1.18
UVZ1E332MHD1TN	3300	16x25	7.5	65R3157	1.62	1.51	1.37
UVZ1E472MHD*	4700	16x31.5	7.5	55K2530	1.79	1.53	1.29
VOLTAGE: 35 VDC							
UVZ1V100MDD1TD	10	5x11	2	65R3211	0.31	0.26	0.18
UVZ1V220MDD1TD	22	5x11	2	65R3217	0.31	0.26	0.18
UVZ1V470MDD1TD	47	5x11	2	65R3229	0.31	0.26	0.18
UVZ1V101MED1TD	100	6.3x11	2.5	65R3213	0.33	0.31	0.20

➤ CONTINUED ➤

VZ SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 35 VDC

Mfg. Part No.	Cap. (µF)	DxL (mm)	Pitch (mm)	Tape Cut Stock No.	Price Each 1-9	10-24	25-49
UVZ1V221MPD1TD	220	10x12.5	5	65R3219	0.44	0.41	0.25
UVZ1V331MPD1TD	330	10x12.5	5	65R3225	0.64	0.61	0.37
UVZ1V471MPD1TD	470	10x16	5	65R3231	0.61	0.56	0.45
UVZ1V102MHD1T0	1000	12.5x20	5	65R3215	1.05	0.88	0.76
UVZ1V222MHD1TN	2200	16x25	7.5	65R3221	1.69	1.58	1.43
UVZ1V472MHD*	4700	18x35.5	7.5	55K2579	1.92	1.67	1.57
VOLTAGE: 50 VDC							
UVZ1H0R1MDD1TD	0.1	5x11	2	65R3169	0.29	0.25	0.17
UVZ1HR47MDD1TD	0.47	5x11	2	65R3167	0.29	0.25	0.17
UVZ1H010MDD1TD	1	5x11	2	65R3171	0.31	0.26	0.18
UVZ1H2R2MDD1TD	2.2	5x11	2	65R3177	0.29	0.25	0.17
UVZ1H4R7MDD1TD	4.7	5x11	2	65R3189	0.31	0.26	0.18
UVZ1H100MDD1TD	10	5x11	2	58R3367	0.31	0.26	0.18
UVZ1H220MDD1TD	22	5x11	2	65R3179	0.31	0.26	0.18
UVZ1H470MED1TD	47	6.3x11	2.5	65R3191	0.34	0.32	0.21
UVZ1H101MPD1TD	100	8x11.5	3.5	65R3173	0.42	0.40	0.26
UVZ1H221MPD1TD	220	10x12.5	5	65R3181	0.61	0.58	0.35
UVZ1H331MPD1TD	330	10x16	5	65R3187	0.62	0.57	0.46
UVZ1H471MHD1T0	470	12.5x20	5	65R3193	0.97	0.81	0.70
UVZ1H102MHD1T0	1000	12.5x25	5	65R3175	1.38	1.13	1.02
UVZ1H222MHD*	2200	16x35.5	7.5	55K2543	1.72	1.47	1.24
UVZ1H332MHD*	3300	18x35.5	7.5	55K2547	2.09	1.81	1.70
UVZ1H472MRD*	4700	20x40	10	55K2551	3.22	2.78	2.62
VOLTAGE: 63 VDC							
UVZ1J470MED1TD	47	6.3x11	2.5	65R3207	0.37	0.34	0.23
UVZ1J221MPD1TD	220	10x16	5	65R3201	0.62	0.57	0.46
UVZ1J222MHD*	2200	18x35.5	7.5	55K2558	2.46	2.13	2.01
VOLTAGE: 100 VDC							
UVZ2A100MED1TD	10	6.3x11	2.5	65R3243	0.32	0.29	0.20
UVZ2A220MED1TD	22	6.3x11	2.5	65R3249	0.35	0.32	0.21
UVZ2A101MPD1TD	100	10x20	5	65R3245	0.81	0.75	0.60
VOLTAGE: 160 VDC							
UVZ2C101MHD1T0	100	12.5x25	5	65R3269	1.33	1.10	0.99
VOLTAGE: 250 VDC							
UVZ2E100MPD1TD	10	10x16	5	65R3305	0.64	0.59	0.47
UVZ2E101MHD*	100	16x31.5	7.5	55K2628	1.57	1.35	1.13
VOLTAGE: 400 VDC							
UVZ2G2R2MPD1TD	2.2	10x12.5	5	65R3323	0.53	0.50	0.31
UVZ2G3R3MPD1TD	3.3	10x12.5	5	65R3327	0.59	0.56	0.34
UVZ2G4R7MPD1TD	4.7	10x16	5	65R3329	0.66	0.61	0.49
UVZ2G100MHD1T0	10	12.5x20	5	65R3321	1.03	0.87	0.75
VOLTAGE: 450 VDC							
UVZ2W100MHD1T0	10	12.5x20	5	65R3345	1.15	0.96	0.83
UVZ2W220MHD1TN	22	16x25	7.5	65R3349	1.59	1.49	1.34

Mfg. Part No.	Cap. (µF)	DxL (mm)	Pitch (mm)	Tape Cut Stock No.	Price Each 1-9
VOLTAGE: 6.3V					
UHE0J151MDD1TD	150	8x11.5	3.5	65R1859	0.35
UVZ0J220MDD	22	5x11	2	55K2474	0.27
UVZ0J330MDD	33	5x11	2	55K2478	0.27
UVZ0J470MDD	47	5x11	2	55K2482	0.27
UVZ0J101MDD	100	5x11	2	55K2470	0.27
UVZ0J101MDD1TD	100	5x11	2	65R3077	0.29
UVZ0J221MDD	220	5x11	2	55K2475	0.27
UVZ0J221MDD1TD	220	5x11	2	65R3083	0.31
UVZ0J221MDD1TD	220	5x11	2	65R3084	0.08
UVZ0J331MED	330	6.3x11	2.5	55K2479	0.26
UVZ0J471MED1TD	470	6.3x11	2.5	65R3091	0.37
UVZ0J471MED1TD	470	6.3x11	2.5	65R3092	0.09
UVZ0J102MPD	1000	8x11.5	3.5	55K2471	0.36
UVZ0J102MPD1TD	1000	8x11.5	3.5	65R3079	0.52
UVZ0J102MPD1TD	1000	8x11.5	3.5	65R3080	0.10
UVZ0J222MPD	2200	10x20	5	55K2476	0.59
UVZ0J222MPD1TD	2200	10x20	5	65R3085	0.74
UVZ0J222MPD1TD	2200	10x20	5	65R3086	0.25
UVZ0J332MPD	3300	10x20	5	55K2480	0.61
UVZ0J332MPD1TD	3300	10x20	5	65R3089	0.76
UVZ0J332MPD1TD	3300	10x20	5	65R3090	0.26
UVZ0J682MHD	6800	12.5x25	5	55K2485	0.99
UVZ0J682MHD1T0	6800	12.5x25	5	65R3095	1.41

➤ CONTINUED ➤

VZ SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

Mfg. Part No.	Cap. (µF)	DxL (mm)	Pitch (mm)	Tape Cut Stock No.	Tape Cut Price Each 1-9
VOLTAGE: 6.3V					
● UVZ0J682MHD1TO	6800	12.5x25	5	65R3096	0.58
● UVZ0J103MHD	10000	16x25	7.5	55K2472	1.05
● UVZ0J103MHD1TN	10000	16x25	7.5	65R3081	1.50
● UVZ0J103MHD1TN	10000	16x25	7.5	65R3082	0.72
● UVZ0J153MHD	15000	16x35.5	7.5	55K2473	1.70
● UVZ0J223MHD	22000	18x40	7.5	55K2477	2.21
● UVZ0J333MRD	33000	22x50	10	55K2481	3.73
VOLTAGE: 10V					
● UVZ1A220MDD1TD	22	5x11	2	65R3101	0.29
● UVZ1A470MDD	47	5x11	2	55K2498	0.27
● UVZ1A470MDD1TD	47	5x11	2	65R3109	0.29
● UVZ1A101MDD1TD	100	5x11	2	65R3097	0.29
● UVZ1A221MED1TD	220	6.3x11	2.5	65R3103	0.32
● UVZ1A221MED1TD	220	6.3x11	2.5	65R3104	0.08
● UVZ1A331MED	330	6.3x11	2.5	55K2495	0.29
● UVZ1A331MED1TD	330	6.3x11	2.5	65R3107	0.35
● UVZ1A331MED1TD	330	6.3x11	2.5	65R3108	0.09
● UVZ1A471MED	470	6.3x11	2.5	55K2499	0.29
● UVZ1A471MED1TD	470	6.3x11	2.5	65R3111	0.37
● UVZ1A471MED1TD	470	6.3x11	2.5	65R3112	0.08
● UVZ1A102MPD	1000	10x25	5	55K2487	0.51
● UVZ1A102MPD1TD	1000	10x12.5	5	65R3099	0.60
● UVZ1A102MPD1TD	1000	10x12.5	5	65R3100	0.17
● UVZ1A222MPD	2200	10x20	5	55K2492	0.60
● UVZ1A222MPD1TD	2200	10x20	5	65R3105	0.77
● UVZ1A222MPD1TD	2200	10x20	5	65R3106	0.26
● UVZ1A332MHD	3300	12.5x20	5	55K2496	0.81
● UVZ1A472MHD	4700	12.5x25	5	55K2500	1.01
● UVZ1A472MHD1TO	4700	12.5x25	5	65R3113	1.45
● UVZ1A472MHD1TO	4700	12.5x25	5	65R3114	0.59
● UVZ1A682MHD	6800	16x25	7.5	55K2501	1.15
● UVZ1A682MHD1TN	6800	16x25	7.5	65R3115	1.64
● UVZ1A682MHD1TN	6800	16x25	7.5	65R3116	0.79
● UVZ1A153MHD	15000	18x35.5	7.5	55K2489	2.68
● UVZ1A223MRD	22000	20x40	10	55K2493	4.10
VOLTAGE: 16V					
● UVZ1C100MDD	10	5x11	2	55K2502	0.27
● UVZ1C100MDD1TD	10	5x11	2	65R3117	0.29
● UVZ1C220MDD	22	5x11	2	55K2507	0.27
● UVZ1C220MDD1TD	22	5x11	2	65R3123	0.29
● UVZ1C220MDD1TD	22	5x11	2	65R3124	0.07
● UVZ1C330MDD1TD	33	5x11	2	65R3129	0.29
● UVZ1C470MDD	47	5x11	2	55K2514	0.27
● UVZ1C470MDD1TD	47	5x11	2	65R3135	0.29
● UVZ1C101MDD	100	5x11	2	55K2503	0.27
● UVZ1C101MDD1TD	100	5x11	2	65R3119	0.31
● UVZ1C101MDD1TA	100	5x11	2	27T1917	0.07
● UVZ1C101MDD1TD	100	5x11	2	65R3120	0.07
● UVZ1C221MED	220	6.3x11	2.5	55K2508	0.26
● UVZ1C221MED1TD	220	6.3x11	2.5	65R3125	0.33
● UVZ1C221MED1TD	220	6.3x11	2.5	65R3126	0.07
● UVZ1C331MPD1TD	330	8x11.5	3.5	65R3131	0.46
● UVZ1C331MPD1TD	330	8x11.5	3.5	65R3132	0.10
● UVZ1C471MPD	470	8x11.5	3.5	55K2515	0.34
● UVZ1C471MPD1TD	470	8x11.5	3.5	65R3137	0.51
● UVZ1C471MPD1TA	470	8x11.5	3.5	27T1923	0.10
● UVZ1C471MPD1TD	470	8x11.5	3.5	65R3138	0.12
● UVZ1C102MPD	1000	10x16	5	55K2504	0.51
● UVZ1C102MPD1TD	1000	10x16	5	65R3121	0.61
● UVZ1C102MPD1TD	1000	10x16	5	65R3122	0.21
● UVZ1C222MHD	2200	12.5x20	5	55K2509	0.76
● UVZ1C222MHD1TO	2200	12.5x20	5	65R3127	1.00
● UVZ1C222MHD1TO	2200	12.5x20	5	65R3128	0.32
● UVZ1C332MHD	3300	12.5x25	5	55K2512	0.96
● UVZ1C332MHD1TO	3300	12.5x25	5	65R3133	1.36
● UVZ1C332MHD1TO	3300	12.5x25	5	65R3134	0.56
● UVZ1C472MHD	4700	16x25	7.5	55K2516	0.97
● UVZ1C472MHD1TN	4700	16x25	7.5	65R3139	1.38
● UVZ1C682MHD	6800	16x35.5	7.5	55K2517	1.70
● UVZ1C103MHD	10000	18x35.5	7.5	55K2505	1.83
● UVZ1C153MRD	15000	20x40	10	55K2506	2.62
● UVZ1C223MRD	22000	25x50	12.5	36K7934	4.82

➤ CONTINUED ➤

VZ SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

Mfg. Part No.	Cap. (µF)	DxL (mm)	Pitch (mm)	Tape Cut Stock No.	Tape Cut Price Each 1-9
VOLTAGE: 25V					
● UVZ1E4R7MDD	4.7	5x11	2	55K2528	0.27
● UVZ1E4R7MDD1TD	4.7	5x11	2	65R3159	0.31
● UVZ1E100MDD	10	5x11	2	55K2518	0.27
● UVZ1E100MDD1TD	10	5x11	2	65R3141	0.29
● UVZ1E100MDD1TD	10	5x11	2	65R3142	0.07
● UVZ1E220MDD	22	5x11	2	55K2522	0.27
● UVZ1E220MDD1TD	22	5x11	2	65R3147	0.29
● UVZ1E220MDD1TD	22	5x11	2	65R3148	0.07
● UVZ1E330MDD1TD	33	5x11	2	65R3153	0.29
● UVZ1E470MDD	47	5x11	2	55K2529	0.27
● UVZ1E470MDD1TA	47	5x11	2	27T1929	0.07
● UVZ1E470MDD1TD	47	5x11	2	65R3161	0.29
● UVZ1E470MDD1TD	47	5x11	2	65R3162	0.07
● UVZ1E101MED1TA	100	6.3x11	2.5	33R2021	0.08
● UVZ1E101MED	100	6.3x11	2.5	37J1149	0.26
● UVZ1E101MED1TD	100	6.3x11	2.5	65R3143	0.32
● UVZ1E101MED1TD	100	6.3x11	2.5	65R3144	0.07
● UVZ1E221MPD	220	8x11.5	3.5	55K2523	0.31
● UVZ1E221MPD1TD	220	8x11.5	3.5	65R3149	0.40
UVZ1E221MPH	220	8x11.5	3.5	36B5971	0.52
● UVZ1E221MPD1TD	220	8x11.5	3.5	65R3150	0.08
● UVZ1E331MPD	330	10x12.5	5	55K2526	0.33
● UVZ1E331MPD1TD	330	10x12.5	5	65R3155	0.40
● UVZ1E331MPD1TD	330	10x12.5	5	65R3156	0.12
● UVZ1E471MPD	470	10x12.5	5	41J3990	0.47
● UVZ1E471MPD1TD	470	10x12.5	5	12P9590	0.17
● UVZ1E471MPD1TD	470	10x12.5	5	58R3366	0.59
● UVZ1E102MPD	1000	10x20	5	55K2519	0.52
● UVZ1E102MPD1TD	1000	10x20	5	65R3145	0.67
● UVZ1E102MPD1TD	1000	10x20	5	65R3146	0.20
● UVZ1E222MHD	2200	12.5x25	5	55K2524	1.05
● UVZ1E222MHD1TO	2200	12.5x25	5	65R3151	1.58
● UVZ1E222MHD1TO	2200	12.5x25	5	65R3152	0.54
● UVZ1E332MHD	3300	16x25	7.5	55K2527	1.08
● UVZ1E332MHD1TN	3300	16x25	7.5	65R3157	1.62
● UVZ1E332MHD1TN	3300	16x25	7.5	65R3158	0.78
● UVZ1E472MHD	4700	16x31.5	7.5	55K2530	1.79
● UVZ1E682MHD	6800	18x35.5	7.5	55K2531	2.16
● UVZ1E103MRD	10000	20x40	10	55K2520	3.05
● UVZ1E153MRD	15000	22x50	10	55K2521	4.06
● UVZ1E223MRD	22000	25x50	12.5	55K2525	5.00
VOLTAGE: 35V					
● UVZ1V4R7MDD	4.7	5x11	2	55K2576	0.27
● UVZ1V100MDD	10	5x11	2	55K2566	0.27
● UVZ1V100MDD1TD	10	5x11	2	65R3211	0.31
● UVZ1V100MDD1TD	10	5x11	2	65R3212	0.08
● UVZ1V220MDD	22	5x11	2	55K2571	0.27
● UVZ1V220MDD1TD	22	5x11	2	65R3217	0.31
● UVZ1V220MDD1TD	22	5x11	2	65R3218	0.08
● UVZ1V330MDD1TD	33	5x11	2	65R3223	0.31
● UVZ1V470MDD	47	5x11	2	55K2577	0.27
● UVZ1V470MDD1TD	47	5x11	2	65R3229	0.31
● UVZ1V470MDD1TD	47	5x11	2	65R3230	0.08
● UVZ1V101MED	100	6.3x11	2.5	55K2567	0.26
● UVZ1V101MED1TD	100	6.3x11	2.5	65R3213	0.33
● UVZ1V101MED1TD	100	6.3x11	2.5	65R3214	0.07
● UVZ1V221MPD	220	10x12.5	5	55K2572	0.36
● UVZ1V221MPD1TD	220	10x12.5	5	65R3219	0.44
● UVZ1V221MPD1TD	220	10x12.5	5	65R3220	0.13
● UVZ1V331MPD	330	10x12.5	5	55K2574	0.50
● UVZ1V331MPD1TD	330	10x12.5	5	65R3225	0.64
● UVZ1V331MPD1TD	330	10x12.5	5	65R3226	0.18
● UVZ1V471MPD	470	10x16	5	55K2578	0.49
● UVZ1V471MPD1TD	470	10x16	5	65R3231	0.61
● UVZ1V471MPD1TD	470	10x16	5	65R3232	0.21
● UVZ1V102MHD	1000	12.5x20	5	55K2568	0.74
● UVZ1V102MHD1TO	1000	12.5x20	5	65R3215	1.05
● UVZ1V102MHD1TO	1000	12.5x20	5	65R3216	0.34
● UVZ1V222MHD	2200	16x25	7.5	18K5172	1.19
● UVZ1V222MHD1TN	2200	16x25	7.5	65R3221	1.69
● UVZ1V222MHD1TN	2200	16x25	7.5	65R3222	0.81
● UVZ1V332MHD	3300	16x35.5	7.5	55K2575	1.28

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VZ SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 35V

Mfg. Part No.	Cap. (µF)	DxL (mm)	Pitch (mm)	Tape Cut Stock No.	Price Each 1-9
UVZ1V472MHD	4700	18x35.5	7.5	55K2579	1.92
UVZ1V682MRD	6800	20x40	10	55K2580	2.99
UVZ1V103MRD	10000	22x50	10	55K2569	3.88
UVZ1V153MRD	15000	25x50	12.5	34M4176	4.89
VOLTAGE: =5,4358044=5,4358044					
UVZ1H0R1MDD	0.1	5x11	2	55K2535	0.27
UVZ1H0R1MDD1TD	0.1	5x11	2	65R3169	0.29
UVZ1H0R1MDD1TD	0.1	5x11	2	65R3170	0.07
UVZ1HR22MDD	0.22	5x11	2	55K2532	0.27
UVZ1HR22MDD1TD	0.22	5x11	2	65R3163	0.29
UVZ1HR22MDD1TD	0.22	5x11	2	65R3164	0.07
UVZ1HR47MDD1TD	0.47	5x11	2	65R3167	0.29
UVZ1HR47MDD1TD	0.47	5x11	2	65R3168	0.07
UVZ1H010MDD	1	5x11	2	55K2536	0.27
UVZ1H010MDD1TA	1	5x11	2	27T1934	0.07
UVZ1H010MDD1TD	1	5x11	2	65R3171	0.31
UVZ1H010MDD1TD	1	5x11	2	65R3172	0.07
UVZ1H2R2MDD	2.2	5x11	2	55K2540	0.27
UVZ1H2R2MDD1TA	2.2	5x11	2	27T1936	0.07
UVZ1H2R2MDD1TD	2.2	5x11	2	65R3177	0.29
UVZ1H2R2MDD1TD	2.2	5x11	2	65R3178	0.07
UVZ1H3R3MDD	3.3	5x11	2	55K2544	0.27
UVZ1H3R3MDD1TD	3.3	5x11	2	65R3184	0.07
UVZ1H3R3MDD1TD	3.3	5x11	2	65R3183	0.29
UVZ1H4R7MDD	4.7	5x11	2	55K2548	0.27
UVZ1H4R7MDD1TA	4.7	5x11	2	27T1940	0.07
UVZ1H4R7MDD1TD	4.7	5x11	2	65R3189	0.31
UVZ1H4R7MDD1TD	4.7	5x11	2	65R3190	0.08
UVZ1H100MDD	10	5x11	2	55K2537	0.27
UVZ1H100MDD1TD	10	5x11	2	12P9588	0.07
UVZ1H100MDD1TD	10	5x11	2	58R3367	0.31
UVZ1H100MDD1TA	10	5x11	2	27T1935	0.07
UVZ1H220MDD	22	5x11	2	55K2541	0.27
UVZ1H220MDD1TD	22	5x11	2	65R3179	0.31
UVZ1H220MDD1TD	22	5x11	2	65R3180	0.08
UVZ1H330MDD	33	5x11	2	55K2545	0.27
UVZ1H330MDD1TA	33	5x11	2	27T1939	0.07
UVZ1H330MDH	33	5x11	2	36B5994	0.43
UVZ1H330MDD1TD	33	5x11	2	65R3185	0.29
UVZ1H330MDD1TD	33	5x11	2	65R3186	0.07
UVZ1H470MED	47	6.3x11	2.5	55K2549	0.26
UVZ1H470MED1TA	47	6.3x11	2.5	27T1941	0.08
UVZ1H470MEH	47	6.3x11	2.5	36B5997	0.26
UVZ1H470MED1TD	47	6.3x11	2.5	65R3191	0.34
UVZ1H470MED1TD	47	6.3x11	2.5	65R3192	0.08
UVZ1H101MPD	100	8x11.5	3.5	55K2538	0.34
UVZ1H101MPD1TD	100	8x11.5	3.5	65R3173	0.42
UVZ1H101MPD1TD	100	8x11.5	3.5	65R3174	0.09
UVZ1H221MPD	220	10x12.5	5	55K2542	0.48
UVZ1H221MPD1TD	220	10x12.5	5	65R3181	0.61
UVZ1H221MPD1TD	220	10x12.5	5	65R3182	0.18
UVZ1H331MPD	330	10x16	5	55K2546	0.49
UVZ1H331MPD1TD	330	10x16	5	65R3187	0.62
UVZ1H331MPD1TD	330	10x16	5	65R3188	0.21
UVZ1H471MHD	470	12.5x20	5	55K2550	0.70
UVZ1H471MHD1TO	470	12.5x20	5	65R3193	0.97
UVZ1H471MHD1TO	470	12.5x20	5	65R3194	0.31
UVZ1H102MHD	1000	12.5x25	5	41K0838	0.91
UVZ1H102MHD1TO	1000	12.5x25	5	65R3175	1.38
UVZ1H102MHD1TO	1000	12.5x25	5	65R3176	0.47
UVZ1H222MHD	2200	16x35.5	7.5	55K2543	1.72
UVZ1H332MHD	3300	18x35.5	7.5	55K2547	2.09
UVZ1H472MRD	4700	20x40	10	55K2551	3.22
UVZ1H682MRD	6800	22x50	10	55K2552	4.05
UVZ1H103MRD	10000	25x50	12.5	55K2539	5.12
VOLTAGE: 63V					
UVZ1J100MDD	10	5x11	2	55K2553	0.27
UVZ1J100MDD1TD	10	5x11	2	65R3195	0.31
UVZ1J220MDD	22	5x11	2	55K2556	0.27
UVZ1J220MDD1TD	22	5x11	2	65R3199	0.31
UVZ1J220MDD1TD	22	5x11	2	65R3200	0.08
UVZ1J330MED1TD	33	6.3x11	2.5	65R3203	0.34

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VZ SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 63V

Mfg. Part No.	Cap. (µF)	DxL (mm)	Pitch (mm)	Tape Cut Stock No.	Price Each 1-9
UVZ1J470MED	47	6.3x11	2.5	55K2562	0.29
UVZ1J470MED1TD	47	6.3x11	2.5	65R3207	0.37
UVZ1J470MED1TD	47	6.3x11	2.5	65R3208	0.08
UVZ1J101MPD	100	10x12.5	5	55K2554	0.33
UVZ1J101MPD1TD	100	10x12.5	5	77M9434	0.42
UVZ1J101MPD1TD	100	10x12.5	5	27X7753	0.15
UVZ1J221MPD	220	10x16	5	55K2557	0.49
UVZ1J221MPD1TD	220	10x16	5	65R3201	0.62
UVZ1J221MPD1TD	220	10x16	5	65R3202	0.21
UVZ1J331MPD1TD	330	10x20	5	65R3205	0.77
UVZ1J331MPD1TD	330	10x20	5	65R3206	0.26
UVZ1J471MHD	470	12.5x20	5	55K2563	0.80
UVZ1J471MHD1TO	470	12.5x20	5	65R3209	1.12
UVZ1J102MHD	1000	16x25	7.5	55K2555	1.08
UVZ1J102MHD1TN	1000	16x25	7.5	65R3197	1.64
UVZ1J102MHD1TN	1000	16x25	7.5	65R3198	0.79
UVZ1J222MHD	2200	18x35.5	7.5	55K2558	2.46
UVZ1J332MRD	3300	20x40	10	55K2561	3.65
UVZ1J472MRD	4700	22x50	10	55K2564	4.48
UVZ1J682MRD	6800	25x50	12.5	55K2565	6.30
VOLTAGE: 100V					
UVZ2A0R1MDD1TD	0.1	5x11	2	65R3239	0.29
UVZ2A0R1MDD1TD	0.1	5x11	2	65R3240	0.07
UVZ2AR47MDD	0.47	5x11	2	55K2583	0.27
UVZ2A010MDD	1	5x11	2	55K2584	0.27
UVZ2A010MDD1TD	1	5x11	2	65R3241	0.29
UVZ2A2R2MDD1TD	2.2	5x11	2	65R3247	0.31
UVZ2A3R3MDD1TD	3.3	5x11	2	65R3253	0.29
UVZ2A3R3MDD1TD	3.3	5x11	2	65R3254	0.07
UVZ2A4R7MDD	4.7	5x11	2	55K2596	0.27
UVZ2A4R7MDD1TD	4.7	5x11	2	65R3259	0.31
UVZ2A4R7MDD1TD	4.7	5x11	2	65R3260	0.08
UVZ2A100MED	10	6.3x11	2.5	55K2585	0.26
UVZ2A100MED1TD	10	6.3x11	2.5	65R3243	0.32
UVZ2A100MED1TD	10	6.3x11	2.5	65R3244	0.07
UVZ2A220MED	22	6.3x11	2.5	55K2589	0.27
UVZ2A220MEH	22	6.3x11	2.5	36B6039	0.49
UVZ2A220MED1TD	22	6.3x11	2.5	65R3249	0.35
UVZ2A220MED1TD	22	6.3x11	2.5	65R3250	0.08
UVZ2A330MPD	33	8x11.5	3.5	55K2593	0.36
UVZ2A330MPD1TD	33	8x11.5	3.5	65R3255	0.49
UVZ2A330MPD1TD	33	8x11.5	3.5	65R3256	0.11
UVZ2A470MPD	47	10x12.5	5	36K3931	0.47
UVZ2A470MPD1TD	47	10x12.5	5	65R3261	0.57
UVZ2A470MPD1TD	47	10x12.5	5	65R3262	0.16
UVZ2A101MPD	100	10x20	5	55K2586	0.64
UVZ2A101MPD1TD	100	10x20	5	65R3245	0.81
UVZ2A101MPD1TD	100	10x20	5	65R3246	0.27
UVZ2A221MHD	220	12.5x25	5	55K2590	0.92
UVZ2A221MHD1TO	220	12.5x25	5	65R3251	1.39
UVZ2A331MHD	330	12.5x25	5	55K2594	1.23
UVZ2A331MHD1TO	330	12.5x25	5	65R3257	1.30
UVZ2A471MHD	470	16x25	7.5	55K2597	1.14
UVZ2A471MHD1TN	470	16x25	7.5	65R3263	1.74
UVZ2A471MHD1TN	470	16x25	7.5	65R3264	0.83
UVZ2A102MHD	1000	18x40	7.5	55K2587	2.86
UVZ2A222MRD	2200	22x50	10	55K2591	5.32
UVZ2A332MRD	3300	25x50	12.5	55K2595	6.93
VOLTAGE: 160V					
UVZ2CR47MED	0.47	6.3x11	2.5	55K2598	0.26
UVZ2C010MED1TD	1	6.3x11	2.5	65R3265	0.32
UVZ2C2R2MEH	2.2	6.3x11	2.5	36B6054	0.41
UVZ2C4R7MED1TD	4.7	6.3x11	2.5	65R3279	0.35
UVZ2C100MPD	10	8x11.5	3.5	55K2600	0.36
UVZ2C100MPD1TD	10	8x11.5	3.5	65R3267	0.52
UVZ2C220MPD1TD	22	10x16	5	65R3273	0.60
UVZ2C220MPD1TD	22	10x16	5	65R3274	0.20
UVZ2C330MPD	33	10x20	5	55K2607	0.64
UVZ2C330MPD1TD	33	10x20	5	65R3277	0.76
UVZ2C330MPD1TD	33	10x20	5	65R3278	0.26
UVZ2C470MHD	47	12.5x20	5	55K2610	0.75
UVZ2C470MHD1TO	47	12.5x20	5	65R3281	0.89

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ALUMINUM ELECTROLYTIC CAPACITORS

VZ SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 160V

Mfg. Part No.	Cap. (µF)	DxL (mm)	Pitch (mm)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● UVZ2C101MHD	100	12.5x25	5	55K2601	0.88
● UVZ2C101MHD1TO	100	12.5x25	5	65R3269	1.33
● UVZ2C101MHD1TO	100	12.5x25	5	65R3270	0.46
● UVZ2C221MHD	220	16x35.5	7.5	55K2605	1.44
● UVZ2C471MRD	470	22x40	10	55K2611	2.49
● UVZ2C102MRD	1000	25x50	12.5	55K2602	4.12
VOLTAGE: 200V					
● UVZ2DR47MED	0.47	6.3x11	2.5	55K2612	0.26
● UVZ2D2R2MED	2.2	6.3x11	2.5	55K2616	0.26
● UVZ2D100MPD	10	10x12.5	5	55K2614	0.43
● UVZ2D100MPD1TD	10	10x12.5	5	65R3287	0.51
● UVZ2D100MPD1TD	10	10x12.5	5	65R3288	0.17
● UVZ2D220MPD	22	10x20	5	55K2617	0.63
● UVZ2D220MPD1TD	22	10x20	5	65R3291	0.75
● UVZ2D220MPD1TD	22	10x20	5	65R3292	0.25
● UVZ2D470MHD	47	12.5x20	5	55K2623	0.76
● UVZ2D470MHD1TO	47	12.5x20	5	65R3299	0.91
● UVZ2D470MHD1TO	47	12.5x20	5	65R3300	0.31
● UVZ2D101MHD	100	16x31.5	7.5	55K2615	1.22
● UVZ2D221MHD	220	18x35.5	7.5	55K2618	2.01
● UVZ2D331MRD	330	20x40	10	55K2621	2.77
● UVZ2D471MRD	470	22x50	10	55K2624	3.53
VOLTAGE: 250V					
● UVZ2ER47MED	0.47	6.3x11	2.5	55K2625	0.26
● UVZ2ER47MED1TD	0.47	6.3x11	2.5	65R3301	0.32
● UVZ2E010MED	1	6.3x11	2.5	55K2626	0.26
● UVZ2E010MED1TD	1	6.3x11	2.5	65R3303	0.34
● UVZ2E010MED1TD	1	6.3x11	2.5	65R3304	0.08
● UVZ2E2R2MED1TD	2.2	6.3x11	2.5	65R3307	0.34
● UVZ2E3R3MPD	3.3	8x11.5	3.5	55K2632	0.35
● UVZ2E3R3MPD1TA	3.3	8x11	3.5	27T1978	0.11
● UVZ2E4R7MPD1TD	4.7	8x11.5	3.5	65R3315	0.61
● UVZ2E100MPD	10	10x16	5	55K2627	0.50
● UVZ2E100MPD1TD	10	10x16	5	65R3305	0.64
● UVZ2E100MPD1TD	10	10x16	5	65R3306	0.22
● UVZ2E220MHD	22	12.5x20	5	55K2630	0.66
● UVZ2E220MHD1TO	22	12.5x20	5	65R3309	0.78
● UVZ2E330MHD	33	12.5x20	5	55K2633	0.76
● UVZ2E330MHD1TO	33	12.5x20	5	65R3313	0.90
● UVZ2E470MHD	47	12.5x25	5	55K2636	0.96
● UVZ2E470MHD1TO	47	12.5x25	5	65R3317	1.37
● UVZ2E101MHD	100	16x31.5	7.5	55K2628	1.57
● UVZ2E221MRD	220	20x40	10	55K2631	2.72
● UVZ2E331MRD	330	22x50	10	55K2634	3.67
● UVZ2E471MRD	470	22x50	10	55K2637	4.51
VOLTAGE: 315V					
● UVZ2F3R3MPD	3.3	10x12.5	5	55K2644	0.39
● UVZ2F331MRD	330	25x50	12.5	55K2646	5.19
VOLTAGE: 350V					
● UVZ2V2R2MPD1TD	2.2	8x11.5	3.5	65R3333	0.52
● UVZ2V4R7MPD1TD	4.7	10x12.5	5	65R3341	0.62
● UVZ2V100MPD	10	10x20	5	55K2660	0.67
● UVZ2V100MPD1TD	10	10x20	5	65R3331	0.79
● UVZ2V220MHD	22	12.5x25	5	55K2663	0.92
● UVZ2V330MHD1TN	33	16x25	7.5	65R3339	1.50
● UVZ2V470MHD	47	16x35.5	7.5	55K2668	1.44
● UVZ2V101MHD	100	18x40	7.5	55K2661	2.35
● UVZ2V221MRD	220	22x50	10	55K2664	4.22
VOLTAGE: 400V					
● UVZ2G010MPD	1	8x11.5	3.5	55K2649	0.40
● UVZ2G010MPD1TD	1	8x11.5	3.5	65R3319	0.55
● UVZ2G2R2MPD	2.2	10x12.5	5	55K2652	0.44
● UVZ2G2R2MPD1TD	2.2	10x12.5	5	65R3323	0.53
● UVZ2G2R2MPD1TD	2.2	10x12.5	5	65R3324	0.15
● UVZ2G3R3MPD	3.3	10x12.5	5	55K2655	0.49
● UVZ2G3R3MPD1TD	3.3	10x12.5	5	65R3327	0.59
● UVZ2G3R3MPD1TD	3.3	10x12.5	5	65R3328	0.17
● UVZ2G4R7MPD	4.7	10x16	5	55K2657	0.52
● UVZ2G4R7MPD1TD	4.7	10x16	5	65R3329	0.66
● UVZ2G4R7MPD1TD	4.7	10x16	5	65R3330	0.22
● UVZ2G100MHD	10	12.5x20	5	55K2650	0.78
● UVZ2G100MHD1TO	10	12.5x20	5	65R3321	1.03

➤CONTINUED➤

VZ SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 400V

Mfg. Part No.	Cap. (µF)	DxL (mm)	Pitch (mm)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● UVZ2G100MHD1TO	10	12.5x20	5	65R3322	0.33
● UVZ2G220MHD	22	16x25	7.5	55K2653	0.91
● UVZ2G220MHD1TN	22	16x25	7.5	65R3325	1.30
● UVZ2G330MHD	33	16x31.5	7.5	55K2656	1.35
● UVZ2G470MHD	47	16x35.5	7.5	55K2658	1.70
● UVZ2G101MRD	100	20x40	10	55K2651	3.06
● UVZ2G221MRD	220	25x50	12.5	55K2654	5.02
VOLTAGE: 450V					
● UVZ2W010MPD	1	8x11.5	3.5	55K2669	0.42
● UVZ2W010MPD1TD	1	8x11.5	3.5	65R3343	0.58
● UVZ2W010MPD1TD	1	8x11.5	3.5	65R3344	0.13
● UVZ2W2R2MPD	2.2	10x12.5	5	55K2672	0.50
● UVZ2W2R2MPD1TD	2.2	10x12.5	5	65R3347	0.61
● UVZ2W2R2MPD1TD	2.2	10x12.5	5	65R3348	0.18
● UVZ2W4R7MPD	4.7	10x20	5	55K2676	0.67
● UVZ2W4R7MPD1TD	4.7	10x20	5	65R3353	0.80
● UVZ2W100MHD	10	12.5x20	5	55K2670	0.82
● UVZ2W100MHD1TO	10	12.5x20	5	65R3345	1.15
● UVZ2W100MHD1TO	10	12.5x20	5	65R3346	0.37
● UVZ2W220MHD	22	16x25	7.5	55K2673	1.05
● UVZ2W220MHD1TN	22	16x25	7.5	65R3349	1.59
● UVZ2W220MHD1TN	22	16x25	7.5	65R3350	0.77
● UVZ2W330MHD	33	16x35.5	7.5	55K2675	1.41
UVZ2W330MHH	33	16x35.5	7.5	36B6125	1.86
● UVZ2W470MHD	47	18x40	7.5	55K2677	1.87
● UVZ2W101MRD	100	22x40	10	55K2671	4.00

* Bulk Packaging (164696)

PW SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

nichicon

Features
- Low Impedance
- High Reliability
- Long Life
- For Switching Power Supplies
- Anti-solvent feature(thru 100V)

Specifications
- Temperature Range: –55 to +105°C (6.3 to 100V)
  -40 to +105°C (160 to 400V)
  -25to +105°C (450V)
- Tolerance: ±20% at 120Hz
- Voltage Range: 6.3 to 450V
- Capacitance Range: 0.47 to 15000µF

Bulk part number plus 3-digit suffix indicates tape and reel packaging.

VOLTAGE: 6.3 VDC

Mfg. Part No.	Cap. (µF)	DxL (mm)	Pitch (mm)	Tape Cut Stock No.	Tape Cut Price 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price 1-1999
● UPW0J220MDD1TD	22	5x11	2	65R3874	0.28	65R3875	200	0.07
● UPW0J470MDD1TD	47	5x11	2	65R3888	0.28	65R3889	200	0.07
● UPW0J470MDD6TP	47	5x7	2	65R3890	0.28	65R3891	200	0.07
● UPW0J680MDD1TD	68	4x11	1.5	65R3898	0.31	65R3899	200	0.07
● UPW0J101MDD1TD	100	5x11	2	65R3860	0.30	65R3861	200	0.07
● UPW0J121MDD1TD	120	6.3x7	2.5	65R3866	0.41	65R3867	200	0.09
● UPW0J221MED1TD	220	6.3x11	2.5	65R3876	0.41	65R3877	200	0.10
● UPW0J331MED1TD	330	6.3x15	2.5	65R3882	0.44	65R3883	200	0.11
● UPW0J471MPD1TD	470	8x11.5	3.5	65R3892	0.44	65R3893	200	0.10
● UPW0J561MPD1TD	560	8x11.5	3.5	65R3896	0.48	65R3897	200	0.11
● UPW0J681MPD1TD	680	10x12.5	5	65R3900	0.49	65R3901	200	0.14
● UPW0J821MPD1TD	820	8x15	3.5	65R3904	0.67	65R3905	200	0.14
● UPW0J821MPD6TD	820	10x12.5	5	65R3906	0.55	65R3907	200	0.19
● UPW0J102MPD1TD	1000	10x12.5	5	65R3862	0.61	65R3863	200	0.18
● UPW0J122MPD1TD	1200	8x20	3.5	65R3868	0.55	65R3869	200	0.16
● UPW0J122MPD6TD	1200	10x16	5	65R3870	0.53	65R3871	200	0.18
● UPW0J152MPD1TD	1500	10x20	5	65R3872	0.74	65R3873	200	0.25
● UPW0J222MPD6TD	2200	10x25	5	65R3880	1.30	65R3881	200	0.44
● UPW0J222MHD1TO	2200	12.5x20	5	65R3878	1.17	65R3879	100	0.38
● UPW0J272MPD*	2700	10x31.5	5	55K0105	0.95	...	...	...
● UPW0J332MHD1TO	3300	12.5x20	5	65R3884	1.19	65R3885	100	0.38
● UPW0J392MHD1TO	3900	12.5x25	5	65R3886	1.40	65R3887	100	0.57
● UPW0J472MHD6*	4700	12.5x31.5	5	55K0116	0.91	...	...	...
● UPW0J472MHD1TN	4700	16x25	7.5	65R3894	1.50	65R3895	50	0.61

➤CONTINUED➤

PW SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

Mfg. Part No.	Cap. (µF)	DxL (mm)	Pitch (mm)	Tape Cut Stock No.	Tape Cut Price 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price 1-1999
UPW0J682MHD1TN	6800	18x20	7.5	65R3902	1.87	65R3903	50	0.90
UPW0J103MHD6TN	10000	18x25	7.5	65R3864	2.39	65R3865	50	1.18
VOLTAGE: 10 VDC								
UPW1A220MDD1TD	22	5x11	2	65R3926	0.28	65R3927	200	0.07
UPW1A220MDD6TP	22	4x7	1.5	65R3928	0.28	65R3929	200	0.07
UPW1A470MDD1TD	47	5x11	2	65R3944	0.28	65R3945	200	0.07
UPW1A820MDD1TD	82	6.3x7	2.5	65R3956	0.30	65R3957	200	0.07
UPW1A101MDD1TD	100	5x11	2	65R3908	0.32	65R3909	200	0.08
UPW1A101MDD6TD	100	5x15	2	65R3910	0.40	65R3911	200	0.10
UPW1A151MED1TD	150	6.3x11	2.5	65R3918	0.44	65R3919	200	0.10
UPW1A181MED1TD	180	6.3x11	2.5	65R3924	0.47	65R3925	200	0.11
UPW1A221MED1TD	220	6.3x11	2.5	65R3930	0.42	65R3931	200	0.09
UPW1A221MED6TD	220	6.3x15	2.5	65R3932	0.51	65R3933	200	0.12
UPW1A331MPD1TD	330	8x11.5	3.5	65R3938	0.48	65R3939	200	0.11
UPW1A471MPD1TD	470	8x11.5	3.5	65R3948	0.51	65R3949	200	0.11
UPW1A681MPD1TD	680	10x12.5	5	65R3952	0.58	65R3953	200	0.20
UPW1A681MPD6TD	680	8x15	3.5	65R3954	0.64	65R3955	200	0.19
UPW1A102MPD1TD	1000	10x16	5	65R3912	0.64	65R3913	200	0.22
UPW1A102MPD6TD	1000	8x20	3.5	65R3914	0.66	65R3915	200	0.19
UPW1A122MPD*	1200	10x20	5	55K0133	0.63	...	...	...
UPW1A152MPD1TD	1500	10x20	5	65R3920	0.79	65R3921	200	0.27
UPW1A152MPD6TD	1500	10x25	5	65R3922	1.09	65R3923	200	0.35
UPW1A222MPD6*	2200	10x31.5	5	55K0144	0.86	...	...	...
UPW1A222MHD1TO	2200	12.5x20	5	65R3934	1.13	65R3935	100	0.37
UPW1A272MHD1TO	2700	12.5x25	5	65R3936	1.39	65R3937	100	0.48
UPW1A332MHD1TO	3300	12.5x25	5	65R3940	1.51	65R3941	100	0.52
UPW1A332MHD6*	3300	12.5x31.5	5	55K0150	0.96	...	...	...
UPW1A392MHD*	3900	12.5x35.5	5	55K0152	1.14	...	...	...
UPW1A392MHD6TN	3900	16x20	7.5	65R3942	1.76	65R3943	50	0.85
UPW1A472MHD1TN	4700	16x25	7.5	65R3950	1.76	65R3951	50	0.84
UPW1A103MHD1TN	10000	18x35.5	7.5	65R3916	2.76	65R3917	50	1.40
VOLTAGE: 16 VDC								
UPW1C100MDD1TD	10	5x11	2	65R3958	0.30	65R3959	200	0.07
UPW1C150MDD1TP	15	4x7	1.5	65R3970	0.28	65R3971	200	0.07
UPW1C220MDD1TD	22	5x11	2	65R3978	0.30	65R3979	200	0.07
UPW1C220MDD6TP	22	5x7	2	65R3980	0.28	65R3981	200	0.07
UPW1C270MDD1TP	27	5x7	2	65R3986	0.28	65R3987	200	0.07
UPW1C330MDD1TD	33	5x11	2	65R3988	0.29	65R3989	200	0.07
UPW1C330MDD6TD	33	6.3x7	2.5	65R3990	0.31	65R3991	200	0.07
UPW1C470MDD1TD	47	5x11	2	65R4000	0.29	65R4001	200	0.07
UPW1C560MDD1TD	56	5x11	2	65R4008	0.29	65R4009	200	0.07
UPW1C560MDD6TD	56	6.3x7	2.5	65R4010	0.35	65R4011	200	0.08
UPW1C820MDD1TD	82	5x15	2	65R4018	0.41	65R4019	200	0.10
UPW1C101MED1TD	100	6.3x11	2.5	65R3960	0.44	65R3961	200	0.10
UPW1C121MED1TD	120	6.3x11	2.5	65R3966	0.44	65R3967	200	0.11
UPW1C151MED1TD	150	6.3x11	2.5	65R3972	0.49	65R3973	200	0.11
UPW1C181MED1TD	180	6.3x15	2.5	65R3976	0.47	65R3977	200	0.11
UPW1C221MPD1TD	220	8x11.5	3.5	65R3982	0.48	65R3983	200	0.11
UPW1C331MPD1TD	330	8x11.5	3.5	65R3992	0.67	65R3993	200	0.14
UPW1C471MPD1TD	470	10x12.5	5	65R4002	0.59	65R4003	200	0.17
UPW1C471MPD6TD	470	8x15	3.5	65R4004	0.68	65R4005	200	0.15
UPW1C681MPD1TD	680	10x16	5	65R4012	0.68	65R4013	200	0.23
UPW1C681MPD6TD	680	8x20	3.5	65R4014	0.75	65R4015	200	0.22
UPW1C821MPD1TD	820	10x20	5	65R4020	0.65	...	...	...
UPW1C102MPD1TD	1000	10x20	5	65R3962	0.70	65R3963	200	0.21
UPW1C122MPD1TD	1200	10x20	5	65R3968	1.21	65R3969	200	0.39
UPW1C152MPD6*	1500	10x31.5	5	55K0177	0.92	...	...	...
UPW1C152MHD1TO	1500	12.5x20	5	65R3974	1.17	65R3975	100	0.38
UPW1C222MHD1TO	2200	12.5x25	5	65R3984	0.87	...	...	...
UPW1C332MHD6*	3300	12.5x35.5	5	55K0190	1.24	...	...	...
UPW1C332MHD1TN	3300	16x25	7.5	65R3994	1.67	65R3995	50	0.80
UPW1C392MHD1TN	3900	16x25	7.5	65R3996	1.78	65R3997	50	0.85
UPW1C392MHD6TN	3900	18x20	7.5	65R3998	1.90	65R3999	50	0.91
UPW1C472MHD*	4700	16x31.5	7.5	55K0196	1.84	...	...	...
UPW1C472MHD6TN	4700	18x25	7.5	65R4006	2.48	65R4007	50	1.19
UPW1C682MHD1TN	6800	18x35.5	7.5	65R4016	2.61	65R4017	50	1.32
UPW1C103MHD1TN	10000	18x40	7.5	65R3964	3.02	65R3965	50	1.53
VOLTAGE: 25 VDC								
UPW1E4R7MDD1TD	4.7	5x11	2	65R4060	0.30	65R4061	200	0.07
UPW1E100MDD1TD	10	5x11	2	65R4024	0.28	65R4025	200	0.07
UPW1E100MDD6TP	10	4x7	1.5	65R4026	0.30	65R4027	200	0.07
UPW1E220MDD1TD	22	5x11	2	65R4038	0.30	65R4039	200	0.07
UPW1E220MDD6TP	22	5x7	2	65R4040	0.30	65R4041	200	0.07

CONTINUED

PW SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

Mfg. Part No.	Cap. (µF)	DxL (mm)	Pitch (mm)	Tape Cut Stock No.	Tape Cut Price 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price 1-1999
VOLTAGE: 25 VDC								
UPW1E330MDD1TD	33	5x11	2	65R4052	0.28	65R4053	200	0.07
UPW1E390MDD6TD	39	6.3x7	2.5	65R4058	0.40	65R4059	200	0.10
UPW1E470MDD1TD	47	5x11	2	65R4062	0.30	65R4063	200	0.07
UPW1E560MDD1TD	56	5x15	2	65R4070	0.44	65R4071	200	0.11
UPW1E820MED1TD	82	6.3x11	2.5	65R4078	0.41	65R4079	200	0.10
UPW1E101MED*	100	6.3x11	2.5	55K0210	0.36	...	...	...
UPW1E121MED1TD	120	6.3x15	2.5	65R4030	0.49	65R4031	200	0.11
UPW1E151MPD1TD	150	8x11.5	3.5	65R4032	0.56	65R4033	200	0.12
UPW1E221MPD1TD	220	8x11.5	3.5	65R4042	0.61	65R4043	200	0.13
UPW1E331MPD6TD	330	8x15	3.5	65R4054	0.64	65R4055	200	0.14
UPW1E331MPD*	330	10x12.5	5	55K0228	0.47	...	...	...
UPW1E471MPD6TD	470	8x20	3.5	65R4066	0.56	65R4067	200	0.16
UPW1E471MPD1TD	470	10x16	5	65R4064	0.54	65R4065	200	0.19
UPW1E561MPD1TD	560	10x20	5	65R4072	0.88	65R4073	200	0.30
UPW1E681MPD1TD	680	10x20	5	65R4074	0.85	65R4075	200	0.29
UPW1E821MPD1TD	820	10x25	5	65R4080	1.13	65R4081	200	0.37
UPW1E102MPD6*	1000	10x31.5	5	55K0212	0.88	...	...	...
UPW1E102MHD1TO	1000	12.5x20	5	65R4028	0.97	65R4029	100	0.33
UPW1E152MHD6TO	1500	12.5x25	5	65R4034	1.48	65R4035	100	0.51
UPW1E152MHD*	1500	16x25	7.5	55K0215	0.95	...	...	...
UPW1E182MHD*	1800	12.5x31.5	5	55K0217	0.98	...	...	...
UPW1E182MHD6TN	1800	16x20	7.5	65R4036	1.47	65R4037	50	0.71
UPW1E222MHD3*	2200	12.5x35.5	5	55K0223	1.14	...	...	...
UPW1E222MHD1TN	2200	16x25	7.5	65R4044	1.59	65R4045	50	0.76
UPW1E222MHD6TN	2200	18x20	7.5	65R4046	1.73	65R4047	50	0.83
UPW1E272MHD1TN	2700	16x25	7.5	65R4050	1.92	65R4051	50	0.92
UPW1E332MHD*	3300	16x31.5	7.5	55K0230	1.63	...	...	...
UPW1E332MHD6TN	3300	18x25	7.5	65R4056	2.34	65R4057	50	1.12
UPW1E472MHD1TN	4700	18x35.5	7.5	65R4068	2.45	65R4069	50	1.12
VOLTAGE: 35 VDC								
UPW1V4R7MDD1TD	4.7	5x11	2	65R4245	0.28	65R4246	200	0.07
UPW1V6R8MDD1TP	6.8	4x7	1.5	65R4257	0.30	65R4258	200	0.07
UPW1V100MDD1TD	10	5x11	2	65R4203	0.28	65R4204	200	0.07
UPW1V100MDD6TP	10	5x7	2	65R4205	0.30	65R4206	200	0.07
UPW1V120MDD1TP	12	5x7	2	65R4209	0.28	65R4210	200	0.07
UPW1V180MDD1TD	18	4x11	1.5	65R4217	0.43	65R4218	200	0.10
UPW1V220MDD1TD	22	5x11	2	65R4224	0.30	65R4225	200	0.07
UPW1V270MDD1TD	27	6.3x7	2.5	65R4231	0.33	65R4232	200	0.08
UPW1V330MDD1TD	33	5x11	2	65R4233	0.31	65R4234	200	0.08
UPW1V390MDD1TD	39	5x15	2	65R4241	0.43	65R4242	200	0.09
UPW1V470MED1TD	47	6.3x11	2.5	65R4247	0.39	65R4248	200	0.11
UPW1V560MED1TD	56	6.3x11	2.5	65R4253	0.41	65R4254	200	0.10
UPW1V820MED1TD	82	6.3x15	2.5	65R4261	0.49	65R4262	200	0.11
UPW1V101MPD*	100	8x11.5	3.5	55K0324	0.35	...	...	...
UPW1V151MPD1TD	150	8x11.5	3.5	65R4213	0.54	65R4214	200	0.12
UPW1V221MPD6TD	220	8x15	3.5	65R4227	0.63	65R4228	200	0.14
UPW1V221MPD1TD	220	10x12.5	5	65R4226	0.56	...	...	...
UPW1V331MPD6TD	330	8x20	3.5	65R4237	0.80	65R4238	200	0.23
UPW1V331MPD1TD	330	10x16	5	65R4235	0.81	65R4236	200	0.27
UPW1V391MPD1TD	390	10x20	5	65R4243	0.85	65R4244	200	0.29
UPW1V471MPD1TD	470	10x20	5	65R4249	0.74	65R4250	200	0.25
UPW1V561MPD1TD	560	10x25	5	65R4255	1.14	65R4256	200	0.37
UPW1V681MPD6*	680	10x31.5	5	55K0357	1.03	...	...	...
UPW1V681MHD1TO	680	12.5x20	5	65R4259	1.19	65R4260	100	0.39
UPW1V102MHD1TO	1000	12.5x25	5	65R4207	1.57	65R4208	100	0.54
UPW1V122MHD*	1200	12.5x31.5	5	55K0327	1.05	...	...	...
UPW1V122MHD6TN	1200	16x20	7.5	65R4211	1.61	65R4212	50	0.77
UPW1V152MHD6*	1500	12.5x35.5	5	55K0331	1.26	...	...	...
UPW1V152MHD1TN	1500	16x25	7.5	65R4215	1.65	65R4216	50	0.79
UPW1V182MHD1TN	1800	16x25	7.5	65R4219	1.91	65R4221	50	0.92
UPW1V182MHD6TN	1800	18x20	7.5	65R4222	2.32	65R4223	50	1.11
UPW1V222MHD*	2200	16x31.5	7.5	55K0338	1.60	...	...	...
UPW1V222MHD6TN	2200	18x25	7.5	65R4229	2.28	65R4230	50	1.12
UPW1V272MHD*	2700	16x35.5	7.5	55K0342	1.82	...	...	...
UPW1V272MHD6*	2700	18x31.5	7.5	55K0343	1.82	...	...	...
VOLTAGE: 50 VDC								
UPW1HR47MDD1TD	0.47	5x11	2	65R4082	0.28	65R4083	200	0.07
UPW1H010MDD1TD	1	5x11	2	65R4084	0.30	65R4085	200	0.07
UPW1H2R2MDD1TD	2.2	5x11	2	65R4108	0.29	65R4109	200	0.07
UPW1H3R3MDD1TD	3.3	5x11	2	65R4123	0.28	65R4124	200	0.07
UPW1H4R7MDD1TD	4.7	5x11	2	65R4131	0.29	65R4132	200	0.07
UPW1H100MDD1TD	10	5x11	2	65R4086	0.29	65R4087	200	0.07

CONTINUED

ALUMINUM ELECTROLYTIC CAPACITORS

PW SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

Mfg. Part No.	Cap. (µF)	DxL (mm)	Pitch (mm)	Tape Cut Stock No.	Tape Cut Price 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price 1-1999
VOLTAGE: 50 VDC								
● UPW1H180MDD1TD	18	5x11	2	65R4102	0.28	65R4103	200	0.07
● UPW1H220MDD1TD	22	5x11	2	65R4110	0.30	65R4111	200	0.07
● UPW1H270MDD1TD	27	5x15	2	65R4118	0.44	65R4120	200	0.11
● UPW1H330MED1TD	33	6.3x11	2.5	65R4125	0.47	65R4126	200	0.11
● UPW1H470MED1TD	47	6.3x11	2.5	65R4133	0.43	65R4134	200	0.09
● UPW1H560MED1TD	56	6.3x15	2.5	65R4137	0.52	65R4138	200	0.12
● UPW1H820MPD1TD	82	8x11.5	3.5	65R4145	0.61	65R4146	200	0.13
● UPW1H101MPD1TD	100	8x11.5	3.5	65R4090	0.51	65R4091	200	0.10
● UPW1H121MPD1TD	120	8x15	3.5	65R4094	0.61	65R4095	200	0.13
● UPW1H121MPD6TD	120	10x12.5	5	65R4096	0.53	65R4097	200	0.18
● UPW1H151MPD1TD	150	10x12.5	5	65R4100	0.52	65R4101	200	0.18
● UPW1H181MPD1TD	180	8x20	3.5	65R4104	0.54	65R4105	200	0.16
● UPW1H181MPD6TD	180	10x16	5	65R4106	0.56	65R4107	200	0.19
● UPW1H221MPD1TD	220	10x16	5	65R4112	0.61	65R4113	200	0.21
● UPW1H221MPD6TD	220	10x20	5	65R4114	0.84	65R4115	200	0.29
● UPW1H271MPD1TD	270	10x25	5	65R4121	0.93	65R4122	200	0.30
● UPW1H331MPD1TD	330	10x20	5	65R4127	0.86	65R4128	200	0.29
● UPW1H331MPD6*	330	10x31.5	5	55K0274	1.02	...	...	...
● UPW1H391MHD1TO	390	12.5x20	5	65R4129	1.07	65R4130	100	0.35
● UPW1H471MHD1TO	470	12.5x20	5	65R4135	1.15	65R4136	100	0.37
● UPW1H561MHD1TO	560	12.5x25	5	65R4139	1.35	65R4140	100	0.46
● UPW1H681MHD1TO	680	12.5x25	5	65R4141	1.60	65R4142	100	0.55
● UPW1H681MHD6TN	680	16x20	7.5	65R4143	1.45	65R4144	50	0.58
● UPW1H821MHD*	820	12.5x35.5	5	55K0283	1.28	...	...	...
● UPW1H821MHD6TN	820	18x20	7.5	65R4147	2.13	65R4148	50	1.02
● UPW1H102MHD1TN	1000	16x25	7.5	65R4092	1.72	65R4093	50	0.83
● UPW1H122MHD6TN	1200	18x25	7.5	65R4098	2.17	65R4099	50	1.04
● UPW1H152MHD*	1500	16x35.5	7.5	55K0258	1.68	...	...	...
VOLTAGE: 63 VDC								
● UPW1J4R7MDD1TD	4.7	5x11	2	65R4185	0.30	65R4186	200	0.07
● UPW1J6R8MDD1TD	6.8	5x11	2	65R4193	0.30	65R4194	200	0.07
● UPW1J100MDD1TD	10	5x11	2	65R4149	0.30	65R4150	200	0.07
● UPW1J120MDD1TD	12	5x11	2	65R4155	0.28	65R4156	200	0.07
● UPW1J150MED1TD	15	10x11	5	65R4157	0.41	65R4158	200	0.10
● UPW1J180MDD1TD	18	5x15	2	65R4163	0.41	65R4164	200	0.10
● UPW1J220MED1TD	22	6.3x11	2.5	65R4167	0.41	65R4168	200	0.09
● UPW1J330MED1TD	33	6.3x11	2.5	65R4177	0.41	65R4178	200	0.10
● UPW1J390MED1TD	39	6.3x15	2.5	65R4181	0.48	65R4182	200	0.11
● UPW1J470MPD1TD	47	8x11.5	3.5	65R4187	0.50	65R4188	200	0.12
● UPW1J680MPD1TD	68	8x11.5	3.5	65R4197	0.67	...	...	...
● UPW1J101MPD1TD	100	10x12.5	5	65R4151	0.53	65R4152	200	0.18
● UPW1J101MPD6TD	100	8x15	3.5	65R4153	0.55	65R4154	200	0.16
● UPW1J151MPD1TD	150	10x16	5	65R4159	0.62	65R4160	200	0.21
● UPW1J181MHD6TO	180	12.5x15	5	65R4165	1.14	65R4166	100	0.37
● UPW1J221MPD1TD	220	10x20	5	65R4169	0.91	65R4170	200	0.31
● UPW1J221MPD6TD	220	10x25	5	65R4171	1.34	65R4172	200	0.43
● UPW1J271MHD1TN	270	16x15	7.5	65R4175	1.21	65R4176	50	0.46
● UPW1J331MHD1TO	330	12.5x20	5	65R4179	1.16	65R4180	100	0.37
● UPW1J391MHD6TN	390	18x15	7.5	65R4183	1.32	65R4184	50	0.53
● UPW1J471MHD1TO	470	12.5x25	5	65R4191	1.26	65R4192	100	0.43
● UPW1J471MHD3*	470	16x20	7.5	55K0312	0.98	...	...	...
● UPW1J681MHD6*	680	12.5x35.5	5	55K0319	1.16	...	...	...
● UPW1J681MHD1TN	680	16x25	7.5	65R4198	1.55	65R4199	50	0.74
● UPW1J681MHD3TN	680	18x20	7.5	65R4200	1.66	...	...	...
● UPW1J821MHD6TN	820	18x25	7.5	65R4201	2.29	65R4202	50	1.10
● UPW1J102MHD*	1000	16x31.5	7.5	55K0288	1.64	...	...	...
● UPW1J102MHD6*	1000	16x35.5	7.5	55K0289	1.57	...	...	...
● UPW1J122MHD*	1200	18x31.5	7.5	55K0292	1.77	...	...	...
● UPW1J152MHD1TN	1500	18x35.5	7.5	65R4161	2.82	65R4162	50	1.43
VOLTAGE: 100 VDC								
● UPW2A010MDD1TD	1	5x11	2	65R4263	0.30	65R4264	200	0.07
● UPW2A2R2MDD1TD	2.2	5x11	2	65R4277	0.33	65R4278	200	0.07
● UPW2A3R3MDD1TD	3.3	5x11	2	65R4283	0.30	65R4284	200	0.07
● UPW2A4R7MDD1TD	4.7	5x11	2	65R4293	0.25	...	...	...
● UPW2A6R8MDD1TD	6.8	5x11	2	65R4299	0.28	65R4300	200	0.07
● UPW2A100MED1TD	10	6.3x11	2.5	65R4265	0.41	65R4266	200	0.10
● UPW2A150MPD1TD	15	8x11.5	3.5	65R4271	0.52	65R4272	200	0.11
● UPW2A180MED1TD	18	6.3x15	2.5	65R4275	0.52	65R4276	200	0.12
● UPW2A220MPD1TD	22	8x11.5	3.5	65R4279	0.64	65R4280	200	0.14
● UPW2A330MPD1TD	33	10x12.5	5	65R4285	0.52	65R4286	200	0.18
● UPW2A330MPD6TD	33	8x15	3.5	65R4287	0.55	65R4288	200	0.16
● UPW2A470MPD1TD	47	10x16	5	65R4295	0.60	65R4296	200	0.17

➤CONTINUED➤

PW SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

Mfg. Part No.	Cap. (µF)	DxL (mm)	Pitch (mm)	Tape Cut Stock No.	Tape Cut Price 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price 1-1999
VOLTAGE: 100 VDC								
● UPW2A470MPD6TD	47	8x20	3.5	65R4297	0.74	65R4298	200	0.16
● UPW2A680MPD1TD	68	10x20	5	65R4301	0.90	65R4302	200	0.30
● UPW2A101MHD1TO	100	12.5x20	5	65R4267	1.11	65R4268	100	0.32
● UPW2A151MHD1TO	150	12.5x25	5	65R4273	1.39	65R4274	100	0.45
● UPW2A221MHD1TN	220	18x20	7.5	65R4281	1.53	65R4282	50	0.61
● UPW2A331MHD1TN	330	16x25	7.5	65R4289	1.60	65R4290	50	0.77
● UPW2A391MHD1TN	390	18x25	7.5	65R4291	1.98	65R4292	50	0.95
● UPW2A471MHD*	470	16x35.5	7.5	55K0380	1.78	...	...	...
● UPW2A681MHD*	680	16x35.5	7.5	55K0384	1.87	...	...	...
VOLTAGE: 160 VDC								
● UPW2CR47MED1TD	0.47	6.3x11	2.5	65R4303	0.47	65R4304	200	0.11
● UPW2C010MED1TD	1	6.3x11	2.5	65R4305	0.47	65R4306	200	0.11
● UPW2C2R2MED1TD	2.2	6.3x11	2.5	65R4311	0.52	65R4312	200	0.12
● UPW2C4R7MPD1TD	4.7	8x11.5	3.5	65R4319	0.67	65R4320	200	0.15
● UPW2C100MPD1TD	10	10x12.5	5	65R4307	0.66	65R4308	200	0.22
● UPW2C220MPD1TD	22	10x20	5	65R4313	0.82	65R4314	200	0.28
● UPW2C330MHD1TO	33	12.5x20	5	65R4317	0.99	65R4318	100	0.32
● UPW2C470MHD1TO	47	12.5x25	5	65R4321	1.24	65R4322	100	0.40
● UPW2C101MHD1TN	100	16x25	7.5	65R4309	1.31	65R4310	50	0.63
● UPW2C221MHD1TN	220	18x35.5	7.5	65R4315	3.11	65R4316	50	1.57
VOLTAGE: 200 VDC								
● UPW2D010MED1TD	1	6.3x11	2.5	65R4323	0.49	65R4324	200	0.11
● UPW2D2R2MED1TD	2.2	6.3x11	2.5	65R4327	0.63	65R4328	200	0.14
● UPW2D3R3MPD1TD	3.3	8x11.5	3.5	65R4333	0.67	65R4334	200	0.15
● UPW2D4R7MPD1TD	4.7	10x12.5	5	65R4337	0.52	65R4338	200	0.18
● UPW2D100MPD1TD	10	10x16	5	65R4325	0.64	65R4326	200	0.22
● UPW2D220MPD1TD	22	10x20	5	65R4329	0.82	65R4330	200	0.28
● UPW2D330MHD1TO	33	12.5x25	5	65R4335	1.24	65R4336	100	0.40
● UPW2D470MHD1TO	47	12.5x25	5	65R4339	1.39	65R4340	100	0.45
● UPW2D101MHD*	100	16x31.5	7.5	55K0403	1.51	...	...	...
● UPW2D221MHD1TN	220	18x40	7.5	65R4331	3.75	65R4332	50	1.90
● UPW2D221MRD6*	220	20x35	10	55K0407	2.52	...	...	...
● UPW2D331MRD*	330	22x40	10	55K0410	3.41	...	...	...
● UPW2D471MRD*	470	22x50	10	55K0413	3.83	...	...	...
VOLTAGE: 250 VDC								
● UPW2ER47MED1TD	0.47	6.3x11	2.5	65R4341	0.52	65R4342	200	0.12
● UPW2E010MED1TD	1	6.3x11	2.5	65R4343	0.52	65R4344	200	0.12
● UPW2E2R2MPD1TD	2.2	8x11.5	3.5	65R4349	0.67	65R4350	200	0.15
● UPW2E3R3MPD1TD	3.3	10x12.5	5	65R4353	0.50	65R4354	200	0.17
● UPW2E4R7MPD1TD	4.7	10x12.5	5	65R4357	0.57	65R4358	200	0.19
● UPW2E100MPD1TD	10	10x20	5	65R4345	0.81	65R4346	200	0.28
● UPW2E220MHD1TO	22	12.5x25	5	65R4351	1.07	65R4352	100	0.35
● UPW2E330MHD1TO	33	12.5x25	5	65R4355	1.24	65R4356	100	0.40
● UPW2E470MHD1TN	47	16x25	7.5	65R4359	1.63	65R4360	50	0.78
● UPW2E101MHD1TN	100	18x35.5	7.5	65R4347	3.11	65R4348	50	1.57
● UPW2E101MRD6*	100	20x31	10	55K0418	2.13	...	...	...
● UPW2E221MRD*	220	20x40	10	55K0421	3.34	...	...	...
● UPW2E331MRD*	330	22x50	10	55K0424	4.06	...	...	...
VOLTAGE: 315 VDC								
● UPW2F220MHD1TO	22	12.5x25	5	65R4361	1.21	65R4362	100	0.39
VOLTAGE: 350 VDC								
● UPW2VR47MPD1TD	0.47	8x11.5	3.5	65R4377	0.64	65R4378	200	0.14
● UPW2V010MPD1TD	1	10x12.5	5	65R4379	0.50	65R4380	200	0.17
● UPW2V2R2MPD1TD	2.2	10x16	5	65R4383	0.54	65R4384	200	0.18
● UPW2V3R3MPD1TD	3.3	10x16	5	65R4387	0.64	65R4388	200	0.22
● UPW2V100MHD1TO	10	12.5x20	5	65R4381	1.06	65R4382	100	0.34
● UPW2V220MHD1TN	22	16x25	7.5	65R4385	1.53	65R4386	50	0.61
● UPW2V330MHD*	33	16x31.5	7.5	55K0458	1.65	...	...	...
● UPW2V221MRD*	220	25x50	12.5	55K0456	5.74	...	...	...
VOLTAGE: 400 VDC								
● UPW2G010MPD1TD	1	10x12.5	5	65R4363	0.55	65R4364	200	0.19
● UPW2G2R2MPD1TD	2.2	10x16	5	65R4367	0.65	65R4368	200	0.22
● UPW2G3R3MPD1TD	3.3	10x20	5	65R4371	0.76	65R4372	200	0.26
● UPW2G4R7MPD1TD	4.7	10x20	5	65R4373	1.05	65R4374	200	0.34
● UPW2G100MHD1TO	10	12.5x25	5	65R4365	1.29	65R4366	100	0.42
● UPW2G220MHD1TN	22	16x25	7.5	65R4369	1.59	65R4370	50	0.76
● UPW2G330MHD*	33	16x31.5	7.5	55K0446	1.51	...	...	...
● UPW2G470MHD1TN	47	18x35.5	7.5	65R4375	3.62	65R4376	50	1.83
● UPW2G470MRD6*	47	20x31	10	55K0449	2.77	...	...	...
● UPW2G101MRD*	100	22x50	10	55K0442	4.35	...	...	...

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PW SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 450 VDC

Mfg. Part No.	Cap. (µF)	DxL (mm)	Pitch (mm)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-1999
UPW2W010MPD1TD	1	10x12.5	5	65R4389	0.56	65R4390	200	0.19
UPW2W2R2MPD1TD	2.2	10x20	5	65R4393	0.73	65R4394	200	0.25
UPW2W4R7MHD1TO	4.7	12.5x20	5	65R4397	1.11	65R4398	100	0.36
UPW2W100MHD1TN	10	16x25	7.5	65R4391	1.53	65R4392	50	0.61
UPW2W220MHD*	22	16x31.5	7.5	55K0466	1.43	...	...	...
UPW2W330MHD1TN	33	18x35.5	7.5	65R4395	3.62	65R4396	50	1.83
UPW2W330MRD6*	33	20x31	10	55K0469	2.53	...	...	...
UPW2W470MRD*	47	20x40	10	55K0471	2.59	...	...	...
UPW2W101MRD*	100	25x50	12.5	55K0464	4.65	...	...	...

* Bulk Packaging
(165099)

PM SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

nichicon

Features
- Extremely Low Impedance
- High Reliability
- Long Life
- Anti-solvent feature (thru 100V)

Specifications
- Temperature Range: –55 to +105°C (6.3 to 100V)
  -40 to +105°C (160 to 400V)
  -25to +105°C (450V)
- Tolerance: ±20% at 120Hz
- Voltage Range: 6.3 to 450V
- Capacitance Range: 0.47 to 15000µF

Bulk part number plus 3-digit suffix indicates tape and reel packaging.

VOLTAGE: 6.3 VDC

Mfg. Part No.	Cap. (µF)	DxL (mm)	Pitch (mm)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-999
UPM0J821MPD1TD	820	8x20	3.5	65R3527	0.70	65R3528	200	0.15
UPM0J272MHD1TO	2700	12.5x25	5	65R3525	1.50	65R3526	100	0.51
VOLTAGE: 10 VDC								
UPM1A331MPD1TD	330	6.3x15	2.5	65R3537	0.69	65R3538	200	0.15
UPM1A471MPD1TD	470	8x15	3.5	65R3539	0.69	65R3540	200	0.20
UPM1A471MPD6TD	470	10x12.5	5	65R3541	0.65	65R3542	200	0.22
UPM1A681MPD1TD	680	8x20	3.5	65R3543	0.67	65R3544	200	0.15
UPM1A102MPD1TD	1000	10x20	5	65R3529	0.73	65R3530	200	0.25
UPM1A152MPD*	1500	10x31.5	5	54K9408	0.86	...	...	...
UPM1A182MHD1TO	1800	12.5x20	5	65R3531	1.32	65R3532	100	0.43
UPM1A222MHD1TO	2200	12.5x25	5	65R3533	1.50	65R3534	100	0.51
UPM1A222MHD6TN	2200	18x15	7.5	65R3535	1.34	65R3536	300	0.54
VOLTAGE: 16 VDC								
UPM1C680MED1TD	68	6.3x11	2.5	65R3563	0.42	65R3564	200	0.10
UPM1C101MED1TD	100	6.3x11	2.5	65R3545	0.40	65R3546	200	0.10
UPM1C121MED1TD	120	6.3x11	2.5	65R3549	0.36	65R3550	200	0.09
UPM1C221MPD1TD	220	8x11.5	3.5	65R3553	0.52	65R3554	200	0.11
UPM1C331MPD1TD	330	8x15	3.5	65R3555	0.57	65R3556	200	0.12
UPM1C331MPD6TD	330	10x12.5	5	65R3557	0.56	65R3558	200	0.16
UPM1C471MPD1TD	470	8x20	3.5	65R3559	0.67	65R3560	200	0.14
UPM1C471MPD6TD	470	10x15	5	65R3561	0.51	65R3562	200	0.18
UPM1C681MPD1TD	680	10x20	5	65R3565	0.71	65R3566	200	0.24
UPM1C102MHD6TN	1000	16x15	7.5	65R3547	1.50	65R3548	50	0.61
UPM1C152MHD1TO	1500	12.5x25	5	65R3551	1.36	65R3552	100	0.44
UPM1C332MHD*	3300	12.5x40	5	54K9463	1.22	...	...	...
VOLTAGE: 25 VDC								
UPM1E330MDD1TD	33	5x11	2	65R3581	0.32	65R3582	200	0.08
UPM1E470MED1TD	47	6.3x11	2.5	65R3587	0.39	65R3588	200	0.09
UPM1E680MED1TD	68	6.3x11	2.5	65R3593	0.51	65R3594	200	0.12
UPM1E820MED1TD	82	6.3x11	2.5	65R3597	0.41	65R3598	200	0.10
UPM1E101MED1TD	100	6.3x15	2.5	65R3567	0.68	65R3568	200	0.16
UPM1E151MPD1TD	150	8x11.5	3.5	65R3573	0.41	65R3574	200	0.09
UPM1E221MPD1TD	220	8x15	3.5	65R3575	0.59	65R3576	200	0.13
UPM1E221MPD6TD	220	10x12.5	5	65R3577	0.59	65R3578	200	0.17
UPM1E331MPD1TD	330	8x20	3.5	65R3583	0.71	65R3584	200	0.15
UPM1E331MPD6TD	330	10x15	5	65R3585	0.58	65R3586	200	0.20
UPM1E471MPD1TD	470	10x20	5	65R3591	0.78	65R3592	200	0.26
UPM1E471MHD6TO	470	12.5x15	5	65R3589	0.99	65R3590	100	0.32
UPM1E681MHD6TN	680	16x15	7.5	65R3595	1.48	65R3596	50	0.59
UPM1E821MHD1TO	820	12.5x20	5	65R3599	1.11	65R3600	100	0.36
UPM1E102MHD1TO	1000	12.5x25	5	65R3569	1.35	65R3570	100	0.55

➤ CONTINUED ➤

PM SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 25 VDC

Mfg. Part No.	Cap. (µF)	DxL (mm)	Pitch (mm)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-999
UPM1E102MHD6TN	1000	18x15	7.5	65R3571	1.37	65R3572	50	0.52
UPM1E222MHD*	2200	12.5x40	5	54K9502	1.48	...	...	...
UPM1E222MHD6TN	2200	18x20	7.5	65R3579	2.32	65R3580	50	1.11
VOLTAGE: 35 VDC								
UPM1V220MDD1TD	22	5x11	2	65R3685	0.30	65R3686	200	0.07
UPM1V270MDD1TD	27	5x11	2	65R3691	0.31	65R3692	200	0.08
UPM1V330MED1TD	33	6.3x11	2.5	65R3693	0.37	65R3694	200	0.09
UPM1V470MED1TD	47	6.3x11	2.5	65R3702	0.48	65R3703	200	0.11
UPM1V560MED1TD	56	6.3x11	2.5	65R3706	0.51	65R3707	200	0.12
UPM1V680MED1TD	68	6.3x15	2.5	65R3712	0.65	65R3713	200	0.15
UPM1V820MED1TD	82	6.3x15	2.5	65R3716	0.54	65R3717	200	0.13
UPM1V101MPD1TD	100	8x11.5	3.5	65R3675	0.56	65R3676	200	0.16
UPM1V121MPD1TD	120	8x15	3.5	65R3679	0.55	65R3680	200	0.16
UPM1V151MPD6TD	150	10x12.5	5	65R3681	0.56	65R3682	200	0.19
UPM1V221MPD1TD	220	8x20	3.5	65R3687	0.77	65R3688	200	0.22
UPM1V221MPD6TD	220	10x15	5	65R3689	0.78	65R3690	200	0.27
UPM1V331MHD6TO	330	12.5x15	5	65R3696	1.09	65R3697	100	0.35
UPM1V331MPD1TD	330	10x20	5	65R3698	0.67	65R3699	200	0.25
UPM1V471MPD*	470	10x31.5	5	54K9697	0.99	...	...	...
UPM1V471MHD6TN	470	16x15	7.5	65R3704	1.41	65R3705	50	0.68
UPM1V561MHD1TO	560	12.5x20	5	65R3708	1.01	65R3709	100	0.33
UPM1V561MHD6TN	560	16x15	7.5	65R3710	1.41	65R3711	50	0.68
UPM1V681MHD1TO	680	12.5x25	5	65R3714	1.52	65R3715	100	0.52
UPM1V821MHD1TO	820	12.5x25	5	65R3718	1.42	65R3719	100	0.58
UPM1V102MHD*	1000	12.5x31.5	5	54K9664	0.93	...	...	...
UPM1V102MHD6TN	1000	16x20	7.5	65R3677	1.52	65R3678	50	0.73
UPM1V152MHD*	1500	12.5x40	5	54K9672	1.52	...	...	...
UPM1V152MHD6TN	1500	18x20	7.5	65R3683	2.23	65R3684	50	1.07
UPM1V222MHD*	2200	16x35.5	7.5	54K9681	1.82	...	...	...
UPM1V332MHD1TN	3300	18x40	7.5	65R3700	2.99	65R3701	50	1.51
VOLTAGE: 50 VDC								
UPM1HR47MDD1TD	0.47	5x11	2	65R3601	0.32	65R3602	200	0.08
UPM1HR68MDD1TD	0.68	5x11	2	65R3603	0.40	65R3604	200	0.10
UPM1H010MDD1TD	1	5x11	2	65R3605	0.29	65R3606	200	0.07
UPM1H4R7MDD1TD	4.7	5x11	2	65R3629	0.34	65R3630	200	0.07
UPM1H100MDD1TD	10	5x11	2	65R3607	0.31	65R3608	200	0.08
UPM1H150MDD1TD	15	5x11	2	65R3613	0.42	65R3614	200	0.10
UPM1H220MED1TD	22	6.3x11	2.5	65R3617	0.54	65R3618	200	0.12
UPM1H330MED1TD	33	6.3x11	2.5	65R3625	0.65	65R3626	200	0.15
UPM1H470MED1TD	47	6.3x15	2.5	65R3631	0.66	65R3632	200	0.15
UPM1H560MED1TD	56	6.3x15	2.5	65R3637	0.65	65R3638	200	0.15
UPM1H680MPD1TD	68	8x11.5	3.5	65R3639	0.73	65R3640	200	0.16
UPM1H820MPD6TD	82	10x12.5	5	65R3643	0.56	65R3644	200	0.19
UPM1H101MPD1TD	100	8x20	3.5	65R3609	0.64	65R3610	200	0.19
UPM1H101MPD6TD	100	10x15	5	65R3611	0.82	65R3612	200	0.28
UPM1H121MPD1TD	120	8x20	3.5	53M6003	0.20	...	...	...
UPM1H181MHD6TO	180	12.5x15	5	65R3615	0.98	65R3616	100	0.32
UPM1H221MHD6TO	220	12.5x15	5	65R3619	1.02	65R3620	100	0.33
UPM1H221MPD1TD	220	10x25	5	65R3621	0.96	65R3622	200	0.31
UPM1H331MPD*	330	10x31.5	5	54K9563	1.02	...	...	...
UPM1H331MHD6TN	330	16x15	7.5	65R3627	1.56	65R3628	50	0.75
UPM1H471MHD1TO	470	12.5x25	5	65R3633	1.58	65R3634	100	0.64
UPM1H471MHD6TN	470	18x15	7.5	65R3635	1.46	65R3636	50	0.59
UPM1H681MHD6TN	680	16x20	7.5	65R3641	1.50	65R3642	50	0.72
UPM1H102MHD*	1000	16x31.5	7.5	54K9536	1.36	...	...	...
UPM1H222MHD1TN	2200	18x40	7.5	65R3623	3.44	65R3624	50	1.74
VOLTAGE: 63 VDC								
UPM1J100MDD1TD	10	5x11	2	65R3645	0.48	65R3646	200	0.11
UPM1J470MPD1TD	47	8x11.5	3.5	65R3659	0.72	65R3660	200	0.16
UPM1J680MPD6TD	68	10x12.5	5	65R3663	0.58	65R3664	200	0.20
UPM1J101MPD1TD	100	10x20	5	65R3647	0.78	65R3648	200	0.26
UPM1J221MHD1TO	220	12.5x20	5	65R3651	1.20	65R3652	100	0.39
UPM1J221MHD6TN	220	16x15	7.5	65R3653	1.62	65R3654	50	0.78
UPM1J331MHD1TO	330	12.5x25	5	65R3655	1.42	65R3656	100	0.49
UPM1J331MHD6TN	330	18x15	7.5	65R3657	1.11	65R3658	50	0.42
UPM1J471MHD*	470	12.5x35.5	5	54K9607	1.01	...	...	...
UPM1J471MHD6TN	470	16x25	7.5	65R3661	1.62	65R3662	50	0.78
UPM1J561MHD*	560	18x20	7.5	54K9611	1.40	...	...	...
UPM1J102MHD*	1000	16x40	7.5	54K9582	1.96	...	...	...
UPM1J102MHD6TN	1000	18x35.5	7.5	65R3649	2.67	65R3650	50	1.22

➤ CONTINUED ➤

PM SERIES RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 80 VDC

Mfg. Part No.	Cap. (µF)	DxL (mm)	Pitch (mm)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-999
● UPM1K4R7MDD1TD	4.7	5x11	2	65R3671	0.46	65R3672	200	0.11
● UPM1K470MPD1TD	47	8x15	3.5	65R3673	0.64	65R3674	200	0.19
● UPM1K101MPD1TD	100	10x25	5	65R3667	1.09	65R3668	200	0.35
● UPM1K101MHD6TO	100	12.5x15	5	65R3665	1.17	65R3666	100	0.38
● UPM1K221MHD6TN	220	18x15	7.5	65R3669	1.63	65R3670	50	0.78
● UPM1K471MHD*	470	16x31.5	7.5	54K9649	1.85	...	...	...
VOLTAGE: 100 VDC								
● UPM2AR68MDD1TD	0.68	5x11	2	65R3720	0.46	65R3721	200	0.11
● UPM2A010MDD1TD	1	5x11	2	65R3722	0.46	65R3723	200	0.11
● UPM2A1R5MDD1TD	1.5	5x11	2	65R3724	0.46	65R3725	200	0.11
● UPM2A2R2MDD1TD	2.2	5x11	2	65R3728	0.46	65R3729	200	0.11
● UPM2A120MED1TD	12	6.3x11	2.5	65R3726	0.51	65R3727	200	0.12
● UPM2A470MPD1TD	47	10x20	5	65R3730	0.69	65R3731	200	0.23
● UPM2A221MHD*	220	12.5x35.5	5	54K9725	1.18	...	...	...
● UPM2A471MHD*	470	16x40	7.5	54K9743	2.00	...	...	...
VOLTAGE: 200 VDC								
● UPM2D330MHD1TN	33	8x15	3.5	65R3732	1.86	65R3733	50	0.89
VOLTAGE: 450 VDC								
● UPM2W100MHD1TN	10	6.3x11	2.5	65R3734	2.30	65R3735	50	1.10

* Bulk Packaging
(165101)

KXW SERIES RADIAL LEADED MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

Rubycon

Features:
- Body diameter of 10mm to 18mm with high ripple current capability
- This series is one class smaller than the current AXW series
- For switching adapter

Specifications:
- Load Life: 2000 hours at 105°C
- Tolerance: ±20%
- Operating Temp: -25°C to +105°C

VOLTAGE: 200 VDC

Mfg. Part No.	Cap. (µF)	DxL (mm)	Stock No.	Price Each 1-9	Price Each 10-24
● 200KXW100MEFC10X35	100	10 x 35	39T8640	1.45	1.17
● 200KXW150MEFC12.5X30	150	12.5 x 30	39T8641	2.05	1.65
● 200KXW180MEFC12.5X35	180	12.5 x 35	39T8642	2.35	1.89
● 200KXW220MEFC12.5X40	220	12.5 x 40	39T8643	2.53	2.04
● 200KXW220MEFC14.5X30	220	14.5 x 30	39T8644	3.11	2.50
● 200KXW270MEFC16X30	270	16 x 30	39T8645	2.93	2.36
● 200KXW330MEFC16X35	330	16 x 35	39T8646	3.43	2.76
● 200KXW330MEFC18X30	330	18 x 30	39T8647	3.29	2.65
● 200KXW390MEFC18X35	390	18 x 35	39T8648	3.44	2.77
● 200KXW470MEFC18X40	470	18 x 40	39T8649	5.02	4.04
● 200KXW560MEFC18X45	560	18 x 45	39T8650	4.81	3.87

(194896)

QXW SERIES RADIAL LEADED MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

Rubycon

Features:
- Load Life: 2000 hours at 105°C
- Body diameter of 10mm to 18mm with high ripple current capability
- This series is one class smaller than the current KXW series

Specifications:
- Tolerance: ±20%
- Operating Temp: -25°C to +105°C

VOLTAGE: 450 VDC

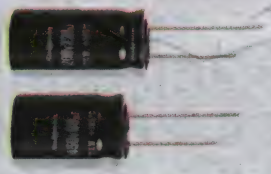
Mfg. Part No.	Cap. (µF)	DxL (mm)	Stock No.	Price Each 1-9	Price Each 10-24
● 450QXW39MEFC10X40	39	10 x 40	39T8973	1.73	1.40
● 450QXW47MEFC10X45	47	10 x 45	39T8974	2.08	1.67
● 450QXW68MEFC12.5X40	68	12.5 x 40	39T8976	2.94	2.37
● 450QXW82MEFC14.5X35	82	14.5 x 35	39T8977	3.52	2.84
● 450QXW100MEFC16X35	100	16 x 35	39T8968	3.98	3.21
● 450QXW120MEFC18X31.5	120	18 x 31.5	39T8969	4.59	3.70
● 450QXW150MEFC18X40	150	18 x 40	39T8970	5.78	4.65
● 450QXW220MEFC18X50	220	18 x 50	39T8972	10.15	8.17

(195476)

TXW SERIES RADIAL LEADED MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

Rubycon



Features:
- Load Life: 10000 hours at 105°C
- Body diameter of 8mm to 18mm
- High ripple current capability
- Smaller size than the current VXW series

Specifications:
- Tolerance: ±20%
- Operating Temp: -25°C to +105°C

VOLTAGE: 200 VDC

Mfg. Part No.	Cap. (µF)	DxL (mm)	Stock No.	Price Each 1-9	Price Each 10-24
● 200TXW150MEFC12.5X30	150	12.5 x 30	39T8661	2.79	2.27
● 200TXW180MEFC16X25	180	16 x 25	39T8662	2.96	2.41
● 200TXW220MEFC16X30	220	16 x 30	39T8663	2.87	2.33
● 200TXW330MEFC18X30	330	18 x 30	39T8664	3.83	3.11
● 200TXW390MEFC18X35	390	18 x 35	39T8665	4.28	3.47
● 200TXW470MEFC18X40	470	18 x 40	39T8666	5.47	4.44
● 200TXW560MEFC18X45	560	18 x 45	84R3900	5.69	4.61
VOLTAGE: 250 VDC					
● 250TXW100MEFC12.5X30	100	12.5 x 30	39T8723	2.07	1.68
● 250TXW180MEFC16X30	180	16 x 30	39T8724	2.90	2.35
● 250TXW220MEFC18X30	220	18 x 30	39T8725	3.74	3.03
● 250TXW390MEFC18X45	390	18 x 45	39T8726	6.01	4.88
VOLTAGE: 450 VDC					
● 450TXW33MEFC12.5X30	33	12.5 x 30	39T8981	2.22	1.80
● 450TXW39MEFC12.5X35	39	12.5 x 35	39T8982	2.53	2.06
● 450TXW47MEFC16X25	47	16 x 25	39T8983	2.66	2.16
● 450TXW56MEFC16X30	56	16 x 30	39T8984	3.50	2.84
● 450TXW68MEFC18X25	68	18 x 25	39T8985	3.49	2.83
● 450TXW82MEFC18X30	82	18 x 30	39T8986	4.28	3.47
● 450TXW100MEFC18X35	100	18 x 35	39T8978	5.24	4.25
● 450TXW120MEFC18X40	120	18 x 40	39T8979	6.07	4.92
● 450TXW150MEFC18X45	150	18 x 45	39T8980	7.59	6.16

(195480)

PX SERIES RADIAL LEADED MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

Rubycon

Features:
- Load Life: 2000 hours at 105°C (D>=10); 1000 hours at 105°C (D<=8)

Specifications:
- Tolerance: ±20%
- Operating temp: -55°C to +105°C (6.3-100VDC); -40°C to +105°C (160-400VDC); -25°C to +105°C (450VDC)

VOLTAGE: 6.3 VDC

Mfg. Part No.	Cap. (µF)	DxL (mm)	Stock No.	Price Each 1-9	Price Each 10-24
● 6.3PX680MEFC6.3X11	680	6.3 x 11	39T9022	0.32	0.23
● 6.3PX1000MEFC8X11.5	1000	8 x 11.5	39T9019	0.44	0.32
● 6.3PX2200MEFC10X16	2200	10 x 16	39T9021	0.69	0.49
● 6.3PX15000MEFC16X31.5	15000	16 x 31.5	39T9020	3.39	2.41
VOLTAGE: 10 VDC					
● 10PX470MEFC6.3X11	470	6.3 x 11	39T8329	0.27	0.20
● 10PX1000MEFC8X11.5	1000	8 x 11.5	39T8326	0.45	0.32
● 10PX2200MEFC10X16	2200	10 x 16	39T8327	0.85	0.61
● 10PX3300MEFC10X20	3300	10 x 20	39T8328	1.11	0.79
● 10PX4700MEFC12.5X20	4700	12.5 x 20	39T8330	1.44	1.02
VOLTAGE: 16 VDC					
● 16PX220MEFC6.3X11	220	6.3 x 11	39T8560	0.27	0.20
● 16PX330MEFC6.3X11	330	6.3 x 11	39T8562	0.29	0.21
● 16PX470MEFC8X11.5	470	8 x 11.5	39T8565	0.42	0.30
● 16PX1000MEFC10X12.5	1000	10 x 12.5	39T8556	0.60	0.43
● 16PX2200MEFC10X20	2200	10 x 20	39T8561	1.06	0.75
● 16PX3300MEFC12.5X20	3300	12.5 x 20	39T8564	1.47	1.04
● 16PX4700MEFC12.5X25	4700	12.5 x 25	39T8566	1.93	1.38
● 16PX6800MEFC16X25	6800	16 x 25	39T8567	2.82	2.00
● 16PX10000MEFC16X31.5	10000	16 x 31.5	39T8557	3.96	2.82
● 16PX15000MEFC18X35.5	15000	18 x 35.5	39T8559	5.61	3.99
VOLTAGE: 25 VDC					
● 25PX47MEFC5X11	47	5 x 11	39T8685	0.17	0.12
● 25PX220MEFC6.3X11	220	6.3 x 11	39T8682	0.29	0.21
● 25PX2200MEFC12.5X20	2200	12.5 x 20	39T8683	1.56	1.11
● 25PX330MEFC8X11.5	330	8 x 11.5	39T8684	0.43	0.31

➤ CONTINUED ➤

PX SERIES RADIAL LEADED MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

Mfg. Part No.	Cap. (µF)	DxL (mm)	Stock No.	Price Each 1-9	Price Each 10-24
VOLTAGE: 25 VDC					
25PX470MEFC8X11.5	470	8 x 11.5	39T8686	0.46	0.33
25PX680MEFC10X12.5	680	10 x 12.5	39T8688	0.73	0.52
25PX1000MEFC10X16	1000	10 x 16	39T8680	0.81	0.57
25PX4700MEFC16X25	4700	16 x 25	39T8687	2.96	2.10
25PX10000MEFC18X35.5	10000	18 x 35.5	39T8681	6.30	4.48
VOLTAGE: 35 VDC					
35PX220MEFC8X11.5	220	8 x 11.5	39T8911	0.39	0.28
35PX330MEFC10X12.5	330	10 x 12.5	39T8913	0.63	0.45
35PX470MEFC10X12.5	470	10 x 12.5	39T8915	0.72	0.51
35PX680MEFC10X16	680	10 x 16	39T8917	0.90	0.64
35PX1000MEFC10X20	1000	10 x 20	39T8910	1.06	0.75
35PX2200MEFC16X25	2200	16 x 25	39T8912	2.53	1.80
35PX3300MEFC16X25	3300	16 x 25	39T8914	3.16	2.25
35PX4700MEFC16X35.5	4700	16 x 35.5	39T8916	4.21	2.99
35PX6800MEFC18X35.5	6800	18 x 35.5	25T0532	5.78	4.10
VOLTAGE: 50 VDC					
50PX47MEFC6.3X11	47	6.3 x 11	39T8998	0.26	0.19
50PX100MEFC8X11.5	100	8 x 11.5	39T8993	0.41	0.29
50PX220MEFC10X12.5	220	10 x 12.5	39T8995	0.60	0.43
50PX330MEFC10X16	330	10 x 16	39T8997	0.73	0.52
50PX470MEFC10X20	470	10 x 20	39T8999	0.88	0.63
50PX680MEFC12.5X20	680	12.5 x 20	39T9000	1.49	1.06
50PX1000MEFC12.5X25	1000	12.5 x 25	39T8994	1.80	1.28
50PX2200MEFC16X31.5	2200	16 x 31.5	39T8996	3.75	2.66
VOLTAGE: 63 VDC					
63PX100MEFC8X11.5	100	8 x 11.5	39T9037	0.41	0.29
63PX330MEFC10X20	330	10 x 20	39T9040	1.10	0.78
63PX470MEFC12.5X20	470	12.5 x 20	39T9041	1.56	1.11
63PX1000MEFC16X25	1000	16 x 25	39T9038	2.95	2.10
63PX2200MEFC18X31.5	2200	18 x 31.5	39T9039	6.04	4.29
VOLTAGE: 100 VDC					
100PX33MEFC8X11.5	33	8 x 11.5	39T8346	0.38	0.27
100PX47MEFC8X11.5	47	8 x 11.5	39T8348	0.47	0.34
100PX100MEFC10X16	100	10 x 16	39T8343	0.82	0.58
100PX220MEFC12.5X20	220	12.5 x 20	39T8345	1.55	1.10
100PX330MEFC12.5X25	330	12.5 x 25	39T8347	2.18	1.55
100PX680MEFC16X31.5	680	16 x 31.5	39T8349	4.68	3.33
100PX1000MEFC18X35.5	1000	18 x 35.5	39T8344	5.79	4.11
VOLTAGE: 200 VDC					
200PX4.7MEFC6.3X11	4.7	6.3 x 11	39T8659	0.22	0.16
200PX10MEFC8X11.5	10	8 x 11.5	39T8656	0.35	0.25
200PX22MEFC10X16	22	10 x 16	39T8657	0.65	0.46
200PX47MEFC10X20	47	10 x 20	39T8660	1.01	0.72
200PX220MEFC16X35.5	220	16 x 35.5	39T8658	4.11	2.92
VOLTAGE: 250 VDC					
350PX2.2MEFC6.3X11	2.2	6.3 x 11	39T8936	0.27	0.19
350PX10MEFC10X16	10	10 x 16	39T8935	0.80	0.57
250PX22MEFC10X16	22	10 x 16	39T8720	0.92	0.66
250PX33MEFC10X20	33	10 x 20	39T8721	1.11	0.79
250PX47MEFC12.5X20	47	12.5 x 20	39T8722	1.62	1.15
250PX100MEFC16X25	100	16 x 25	39T8719	2.97	2.11
VOLTAGE: 400 VDC					
400PX2.2MEFC8X11.5	2.2	8 x 11.5	39T8952	0.36	0.26
400PX3.3MEFC8X11.5	3.3	8 x 11.5	39T8954	0.39	0.28
400PX10MEFC10X16	10	10 x 16	39T8951	0.90	0.64
400PX22MEFC12.5X20	22	12.5 x 20	39T8953	1.91	1.36
400PX47MEFC16X25	47	16 x 25	39T8956	3.09	2.20
VOLTAGE: 450 VDC					
450PX1MEFC6.3X11	1	6.3 x 11	39T8961	0.30	0.21
450PX2.2MEFC8X11.5	2.2	8 x 11.5	39T8963	0.42	0.30
450PX4.7MEFC10X12.5	4.7	10 x 12.5	39T8966	0.70	0.50
450PX10MEFC10X20	10	10 x 20	39T8962	1.05	0.75
450PX22MEFC12.5X25	22	12.5 x 25	39T8964	2.16	1.54
450PX33MEFC16X25	33	16 x 25	39T8965	3.14	2.23
450PX47MEFC16X31.5	47	16 x 31.5	39T8967	4.34	3.08

(195495)

GENERAL-PURPOSE RADIAL LEADED ALUMINUM ELECTROLYTIC CAPACITORS (105°C)

RoHS Compliant Available

multicomp

Features:
- Wide CV Value Range
- Safety Vent Construction

Specifications:
- Tolerance: ±20%
- Lead Dia.: 0.5mm for 5-6mm Dia., 0.6mm for 8-13mm Dia., and 0.8mm for 16-18mm Dia. Capacitors
- Load Life: 1000 hrs. @ 105°C
- Operating Temp.: –40°C to +105°C

Mfg. Part No.	Cap. (µF)	D x L (mm)	Lead Spacing (mm)	Stock No.	Price Each 1-9	Price Each 10-99	Price Each 100-499	Price Each 500-999
VOLTAGE: 10 VDC								
MCRH10V226M5X11	22	5 x 11	2	70K9721	0.07	0.06	0.06	0.05
MCRH10V476M5X11	47	5 x 11	2	70K9726	0.08	0.07	0.06	0.06
MCRH10V107M5X11	100	5 x 11	2	70K9719	0.10	0.08	0.07	0.07
MCRH10V227M6.3X11	220	6.3 x 11	2.54	70K9722	0.12	0.10	0.09	0.08
MCRH10V477M8X11	470	8 x 11	3.5	70K9727	0.16	0.14	0.12	0.11
MCRH10V108M10X16	1000	10 x 16	5	70K9720	0.31	0.27	0.24	0.23
MCRH10V228M13X21	2200	13 x 21	5	70K9723	0.61	0.52	0.47	0.43
MCRH10V338M13X21	3300	13 x 21	5	70K9725	0.81	0.70	0.62	0.58
MCRH10V478M16X26	4700	16 x 26	7.5	70K9728	1.24	1.07	0.95	0.88
VOLTAGE: 16 VDC								
MCRH16V106M5X11	10	5 x 11	2	70K9740	0.07	0.06	0.06	0.05
MCRH16V226M5X11	22	5 x 11	2	70K9743	0.08	0.07	0.06	0.06
MCRH16V336M5X11	33	5 x 11	2	70K9746	0.08	0.07	0.06	0.06
MCRH16V476M5X11	47	5 x 11	2	70K9749	0.08	0.07	0.06	0.06
MCRH16V107M6.3X11	100	6.3 x 11	2.54	70K9741	0.11	0.10	0.09	0.08
MCRH16V227M8X11	220	8 x 11	3.5	70K9744	0.13	0.12	0.10	0.10
MCRH16V337M8X11	330	8 x 11	3.5	70K9747	0.19	0.16	0.14	0.13
MCRH16V477M10X13	470	10 x 13	5	70K9750	0.23	0.20	0.18	0.17
MCRH16V108M10X21	1000	10 x 21	5	70K9742	0.37	0.32	0.28	0.26
MCRH16V228M13X21	2200	13 x 21	5	70K9745	0.76	0.65	0.58	0.54
MCRH16V338M13X26	3300	13 x 26	5	70K9748	1.22	1.06	0.94	0.87
MCRH16V478M16X32	4700	16 x 32	7.5	70K9751	1.31	1.14	1.01	0.94
VOLTAGE: 25 VDC								
MCRH25V226M5X11	22	5 x 11	2	97M4177	0.08	0.07	0.06	0.06
MCRH25V336M5X11	33	5 x 11	2	70K9756	0.10	0.08	0.08	0.07
MCRH25V476M5X11	47	5 x 11	2	70K9759	0.09	0.08	0.07	0.07
MCRH25V107M6.3X11	100	6.3 x 11	2.54	70K9752	0.14	0.12	0.11	0.10
MCRH25V227M8X11	220	8 x 11	3.5	70K9754	0.31	0.27	0.24	0.22
MCRH25V337M10X13	330	10 x 13	5	70K9757	0.33	0.29	0.25	0.24
MCRH25V477M10X16	470	10 x 16	5	70K9760	0.37	0.32	0.28	0.26
MCRH25V108M13X21	1000	13 x 21	5	70K9753	0.62	0.53	0.48	0.44
MCRH25V228M13X26	2200	13 x 26	5	70K9755	1.08	0.94	0.83	0.77
MCRH25V338M16X32	3300	16 x 32	7.5	70K9758	1.60	1.38	1.23	1.14
VOLTAGE: 35 VDC								
MCRH35V475M5X11	4.7	5 x 11	2	70K9769	0.07	0.06	0.06	0.05
MCRH35V106M5X11	10	5 x 11	2	70K9761	0.08	0.07	0.06	0.06
MCRH35V226M5X11	22	5 x 11	2	70K9764	0.09	0.08	0.07	0.06
MCRH35V336M5X11	33	5 x 11	2	70K9767	0.10	0.09	0.08	0.07
MCRH35V476M6.3X11	47	6.3 x 11	2.54	70K9770	0.11	0.10	0.09	0.08
MCRH35V107M8X11	100	8 x 11	3.5	70K9762	0.17	0.15	0.13	0.12
MCRH35V127M8X12	120	8 x 12	3.5	97M4179	0.21	0.18	0.16	0.15
MCRH35V227M10X13	220	10 x 13	5	70K9765	0.32	0.28	0.25	0.23
MCRH35V337M10X16	330	10 x 16	5	70K9768	0.38	0.33	0.29	0.27
MCRH35V477M10X21	470	10 x 21	5	70K9771	0.48	0.41	0.37	0.34
MCRH35V687M13X21	680	13 x 21	5	97M4183	0.63	0.54	0.48	0.45
MCRH35V108M13X21	1000	13 x 21	5	70K9763	0.87	0.76	0.67	0.62
MCRH35V228M16X32	2200	16 x 32	7.5	70K9766	1.67	1.45	1.29	1.19
MCRH35V338M16X36	3300	16 x 36	7.5	97M4181	1.88	1.63	1.45	1.34

(163830)

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(196545)

ALUMINUM ELECTROLYTIC CAPACITORS

HIGH VOLTAGE MINIATURE ALUMINUM RADIAL ELECTROLYTIC CAPACITORS (105°C)

RoHS Compliant Available

multicomp

Features:
- Wide CV Value Range
- Safety Vent Construction

Specifications:
- Tolerance: ±20%
- Lead Dia.: 0.5mm for 5-6mm Dia., 0.6mm for 8-13mm Dia., and 0.8mm for 16-18mm Dia. Capacitors
- Load Life: 1000 hrs. @ 105°C
- Operating Temp.: –40°C to +105°C

VOLTAGE: 50 VDC

Mfg. Part No.	Cap. (µF)	D x L (mm)	Lead Spacing (mm)	Stock No.	Price Each 1-9	10-99	100-499	500-999
● MCRH50V474M5X11	0.47	5 x 11	2	70K9779	0.09	0.07	0.07	0.06
● MCRH50V105M5X11	1	5 x 11	2	70K9772	0.08	0.07	0.07	0.06
● MCRH50V225M5X11	2.2	5 x 11	2	70K9776	0.08	0.07	0.07	0.06
● MCRH50V475M5X11	4.7	5 x 11	2	70K9780	0.08	0.07	0.06	0.06
● MCRH50V106M5X11	10	5 x 11	2	70K9773	0.10	0.09	0.08	0.07
● MCRH50V226M5X11	22	5 x 11	2	70K9777	0.12	0.10	0.09	0.09
● MCRH50V476M6.3X11	47	6.3 x 11	2.54	70K9781	0.18	0.15	0.14	0.13
● MCRH50V686M8X11	68	8 x 11	3.5	97M4184	0.28	0.24	0.22	0.20
● MCRH50V107M8X11	100	8 x 11	3.5	70K9774	0.30	0.26	0.23	0.21
● MCRH50V227M10X16	220	10 x 16	5	70K9778	0.49	0.42	0.38	0.35
● MCRH50V477M13X21	470	13 x 21	5	70K9782	0.96	0.84	0.74	0.69
● MCRH50V687M13X32	680	13 x 32	5	97M4185	1.38	1.19	1.06	0.98
● MCRH50V108M16X26	1000	16 x 26	7.5	70K9775	1.97	1.71	1.52	1.41
VOLTAGE: 63 VDC								
● MCRH63V105M5X11	1	5 x 11	2	70K9783	0.08	0.07	0.06	0.06
● MCRH63V225M5X11	2.2	5 x 11	2	70K9785	0.08	0.07	0.06	0.06
● MCRH63V335M5X11	3.3	5 x 11	2	70K9788	0.08	0.07	0.06	0.06
● MCRH63V475M5X11	4.7	5 x 11	2	70K9791	0.08	0.07	0.06	0.06
● MCRH63V226M6.3X11	22	6.3 x 11	2.54	70K9786	0.20	0.18	0.16	0.15
● MCRH63V336M6.3X11	33	6.3 x 11	2.54	70K9789	0.23	0.20	0.18	0.17
● MCRH63V476M8X11	47	8 x 11	3.5	70K9792	0.25	0.22	0.19	0.18
● MCRH63V227M10X21	220	10 x 21	5	70K9787	0.66	0.57	0.51	0.47
● MCRH63V337M13X21	330	13 x 21	5	70K9790	1.13	0.98	0.87	0.80
● MCRH63V477M13X26	470	13 x 26	5	70K9793	1.17	1.01	0.90	0.83
● MCRH63V108M16X32	1000	16 x 32	7.5	70K9784	2.33	2.01	1.79	1.66
VOLTAGE: 100 VDC								
● MCRH100V105M5X11	1	5 x 11	2	70K9729	0.08	0.07	0.07	0.06
● MCRH100V225M5X11	2.2	5 x 11	2	70K9732	0.08	0.07	0.07	0.06
● MCRH100V335M5X11	3.3	5 x 11	2	70K9735	0.08	0.07	0.07	0.06
● MCRH100V475M5X11	4.7	5 x 11	2	70K9738	0.08	0.07	0.07	0.06
● MCRH100V106M6.3X11	10	6.3 x 11	2.54	70K9730	0.12	0.10	0.09	0.08
● MCRH100V226M8X11	22	8 x 11	3.5	70K9733	0.17	0.15	0.13	0.13
● MCRH100V336M10X13	33	10 x 13	5	70K9736	0.32	0.28	0.25	0.23
● MCRH100V476M10X16	47	10 x 16	5	70K9739	0.34	0.30	0.26	0.24
● MCRH100V107M13X21	100	13 x 21	5	70K9731	0.60	0.52	0.47	0.43
● MCRH100V227M16X26	220	16 x 26	7.5	70K9734	1.21	1.04	0.93	0.86
● MCRH100V337M16X26	330	16 x 26	7.5	70K9737	1.64	1.42	1.26	1.17

(163831)

KMG SERIES MINIATURE RADIAL LEAD CAPACITORS - 6.3V to 63V

RoHS Compliant Available

UNITED CHEMI-CON

Specifications:
- Tolerance: ±20% (M) @ +20°C, 120Hz
- Load Life: 1000 Hours for 6.3-450V (5-10mm Case Diameter); 1000 Hours for 6.3-100V; and 2000 Hours for 160-450V (12.5-18mm Case Diameter)
- Operating Temperature: -55°C to +105°C (6.3 to 100VDC rated voltage); -40°C to +105°C (160 to 400VDC); -25°C to +105°C (450VDC)

VOLTAGE: 6.3VDC, 8VDC SURGE

Mfg. Part No.	Cap. (µF)	Ripple (mA_{rms})	D x L (mm)	Lead Pitch (mm)	Stock No.	Price Each 1-9	10-49
● EKMG6R3ELL470ME11D	47	64	5 x 11	2	23K3693	0.24	0.18
● EKMG6R3ELL101ME11D	100	94	5 x 11	2	23K3685	0.25	0.19
● EKMG6R3ELL221ME11D	220	140	5 x 11	2	23K3688	0.25	0.19
● EKMG6R3ELL471MF11D	470	230	6.3 x 11	2.5	23K3694	0.32	0.24
● EKMG6R3ELL102MHB5D	1000	380	8 x 11.5	3.5	23K3686	0.34	0.25
● EKMG6R3ELL222MJ20S	2200	710	10 x 20	5	23K3689	0.82	0.62
● EKMG6R3ELL332MJ20S	3300	840	10 x 20	5	23K3692	0.85	0.64
● EKMG6R3ELL472MK20S	4700	1090	12.5 x 20	5	23K3695	1.48	1.11
● EKMG6R3ELL103ML25S	10000	1650	16 x 25	7.5	23K3687	2.64	1.98
● EKMG6R3ELL223MM40S	22000	2350	18 x 40	7.5	23K3690	4.98	3.74
VOLTAGE: 10 VDC, 13VDC SURGE							
● EKMG100ELL220ME11D	22	46	5 x 11	2	23K3547	0.24	0.18
● EKMG100ELL330ME11D	33	57	5 x 11	2	23K3550	0.24	0.18

➤CONTINUED➤

KMG SERIES MINIATURE RADIAL LEAD CAPACITORS - 6.3V to 63V (CONT.)

VOLTAGE: 10 VDC, 13VDC SURGE

Mfg. Part No.	Cap. (µF)	Ripple (mA_{rms})	D x L (mm)	Lead Pitch (mm)	Stock No.	Price Each 1-9	10-49
● EKMG100ELL470ME11D	47	68	5 x 11	2	23K3553	0.25	0.19
● EKMG100ELL101ME11D	100	100	5 x 11	2	23K3543	0.26	0.19
● EKMG100ELL221MF11D	220	170	6.3 x 11	2.5	23K3548	0.30	0.22
● EKMG100ELL471MF11D	470	260	6.3 x 11	2.5	34M3789	0.31	0.23
● EKMG100ELL471MHB5D	470	260	8 x 11.5	3.5	23K3554	0.48	0.36
● EKMG100ELL102MJC5S	1000	460	10 x 12.5	5	23K3544	0.69	0.52
● EKMG100ELL222MJ20S	2200	760	10 x 20	5	23K3549	0.86	0.65
● EKMG100ELL332MK20S	3300	1000	12.5 x 20	5	23K3552	1.45	1.09
● EKMG100ELL472MK25S	4700	1260	12.5 x 25	5	23K3555	1.63	1.23
● EKMG100ELL682ML25S	6800	1570	16 x 25	7.5	23K3556	2.50	1.88
● EKMG100ELL103MLP1S	10000	1890	16 x 35.5	7.5	23K3545	3.35	2.51
VOLTAGE: 16 VDC, 20VDC SURGE							
● EKMG160ELL100ME11D	10	34	5 x 11	2	23K3574	0.25	0.19
● EKMG160ELL220ME11D	22	51	5 x 11	2	23K3578	0.24	0.18
● EKMG160ELL330ME11D	33	63	5 x 11	2	23K3582	0.27	0.20
● EKMG160ELL470ME11D	47	75	5 x 11	2	23K3585	0.26	0.19
● EKMG160ELL101ME11D	100	110	5 x 11	2	23K3575	0.26	0.19
● EKMG160ELL151MF11D	150	...	6.3 x 11	2.5	34M3792	0.27	0.21
● EKMG160ELL221MF11D	220	180	6.3 x 11	2.5	23K3580	0.30	0.22
● EKMG160ELL331MHB5D	330	260	8 x 11.5	3.5	23K3583	0.47	0.35
● EKMG160ELL471MHB5D	470	310	8 x 11.5	3.5	23K3586	0.33	0.25
● EKMG160ELL102MJ16S	1000	560	10 x 16	5	23K3576	0.50	0.38
● EKMG160ELL222MK20S	2200	920	12.5 x 20	5	23K3581	0.95	0.71
● EKMG160ELL332MK25S	3300	1170	12.5 x 25	5	23K3584	1.70	1.27
● EKMG160ELL472ML25S	4700	1480	16 x 25	7.5	23K3587	2.40	1.80
● EKMG160ELL682MLN3S	6800	1780	16 x 31.5	7.5	23K3588	3.10	2.33
● EKMG160ELL103MMP1S	10000	2060	18 x 35.5	7.5	23K3577	4.38	3.29
VOLTAGE: 25 VDC, 32VDC SURGE							
● EKMG250ELL4R7ME11D	4.7	25	5 x 11	2	23K3615	0.24	0.18
● EKMG250ELL100ME11D	10	36	5 x 11	2	23K3606	0.26	0.19
● EKMG250ELL220ME11D	22	54	5 x 11	2	23K3609	0.26	0.19
● EKMG250ELL470ME11D	47	80	5 x 11	2	23K3616	0.17	0.13
● EKMG250ELL101MF11D	100	130	6.3 x 11	2.5	23K3607	0.20	0.16
● EKMG250ELL221MHB5D	220	230	8 x 11.5	3.5	23K3610	0.33	0.25
● EKMG250ELL331MHB5D	330	310	8 x 11.5	3.5	23K3613	0.50	0.38
● EKMG250ELL471MJC5S	470	380	10 x 12.5	5	23K3617	0.46	0.35
● EKMG250ETD471MJC5S	470	380	10 x 12.5	5	34M3798	0.68	0.51
● EKMG250ELL681MJ20S	680	...	10 x 20	5	16M6226	0.84	0.63
● EKMG250ELL102MJ20S	1000	680	10 x 20	5	23K3608	0.59	0.44
● EKMG250ELL222MK25S	2200	1090	12.5 x 25	5	23K3611	1.17	0.88
● EKMG250ELL332ML25S	3300	1400	16 x 25	7.5	23K3614	2.74	2.06
● EKMG250ELL472MLN3S	4700	1710	16 x 31.5	7.5	23K3618	2.20	1.65
● EKMG250ELL682MMP1S	6800	2040	18 x 35.5	7.5	23K3619	4.93	3.70
VOLTAGE: 35 VDC, 44VDC SURGE							
● EKMG350ELL4R7ME11D	4.7	28	5 x 11	2	23K3637	0.24	0.18
● EKMG350ELL100ME11D	10	41	5 x 11	2	23K3629	0.25	0.19
● EKMG350ELL330ME11D	33	75	5 x 11	2	23K3635	0.25	0.19
● EKMG350ELL470ME11D	47	90	5 x 11	2	23K3638	0.25	0.19
● EKMG350ETC470ME11D	47	90	5 x 11	2	34M3805	0.24	0.18
● EKMG350ELL101MF11D	100	150	6.3 x 11	2.5	23K3630	0.21	0.16
● EKMG350ELL221MHB5D	220	270	8 x 11.5	3.5	23K3633	0.33	0.25
● EKMG350ELL331MJC5S	330	350	10 x 12.5	5	23K3636	0.70	0.52
● EKMG350ELL102MK20S	1000	810	12.5 x 20	5	23K3631	1.03	0.77
● EKMG350ELL222ML25S	2200	1260	16 x 25	7.5	23K3634	1.65	1.24
● EKMG350ELL332MLP1S	3300	1610	16 x 35.5	7.5	16M6230	3.56	2.67
● EKMG350ELL472MMP1S	4700	1910	18 x 35.5	7.5	23K3640	3.41	2.56
VOLTAGE: 50 VDC, 63VDC SURGE							
● EKMG500ELLR22ME11D	0.22	2.9	5 x 11	2	23K3667	0.26	0.20
● EKMG500ELLR33ME11D	0.33	4.3	5 x 11	2	23K3668	0.26	0.20
● EKMG500ELLR47ME11D	0.47	6.2	5 x 11	2	23K3669	0.25	0.19
● EKMG500ELL1R0ME11D	1	13	5 x 11	2	23K3670	0.17	0.13
● EKMG500ELL2R2ME11D	2.2	20	5 x 11	2	23K3674	0.26	0.20
● EKMG500ELL3R3ME11D	3.3	25	5 x 11	2	23K3678	0.26	0.20
● EKMG500ELL4R7ME11D	4.7	30	5 x 11	2	23K3682	0.25	0.19
● EKMG500ELL100ME11D	10	40	5 x 11	2	23K3671	0.17	0.13
● EKMG500ELL220ME11D	22	65	5 x 11	2	23K3675	0.18	0.13
● EKMG500ELL330ME11D	33	90	5 x 11	2	23K3679	0.17	0.13
● EKMG500ELL470MF11D	47	110	6.3 x 11	2.5	23K3683	0.21	0.16
● EKMG500ELL101MHB5D	100	180	8 x 11.5	3.5	23K3672	0.34	0.26
● EKMG500ETD221MJC5S	220	300	10 x 12.5	5	34M3811	0.70	0.52
● EKMG500ELL221MJC5S	220	300	10 x 12.5	5	23K3676	0.48	0.36
● EKMG500ELL331MJ16S	330	410	10 x 16	5	23K3680	0.80	0.60

➤CONTINUED➤

KMG SERIES MINIATURE RADIAL LEAD CAPACITORS - 6.3V to 63V (CONT.)

VOLTAGE: 50 VDC, 63VDC SURGE

Mfg. Part No.	Cap. (µF)	Ripple (mA_{rms})	D x L (mm)	Lead Pitch (mm)	Stock No.	Price Each 1-9	Price Each 10-49
EKMG500ELL471MJ20S	470	530	10 x 20	5	23K3684	0.60	0.45
EKMG500ELL102MK25S	1000	950	12.5 x 25	5	23K3673	1.30	0.98
EKMG500ELL332MMP1S	3300	1770	18 x 35.5	7.5	23K3681	3.57	2.68
VOLTAGE: 63 VDC, 79VDC SURGE							
EKMG630ELL100ME11D	10	46	5 x 11	2	23K3697	0.17	0.13
EKMG630ETD100ME11D	10	46	5 x 11	2	34M3818	0.26	0.19
EKMG630ELL220ME11D	22	71	5 x 11	2	23K3700	0.26	0.20
EKMG630ETC220ME11D	22	71	5 x 11	2	34M3816	0.26	0.20
EKMG630ETD220ME11D	22	71	5 x 11	2	34M3820	0.25	0.19
EKMG630ELL330MF11D	33	100	6.3 x 11	2.5	23K3702	0.31	0.23
EKMG630ELL470MF11D	47	120	6.3 x 11	2.5	23K3704	0.32	0.24
EKMG630ETC470MF11D	47	120	6.3 x 11	2.5	34M3817	0.32	0.24
EKMG630ETD470MF11D	47	120	6.3 x 11	2.5	34M3821	0.31	0.23
EKMG630ELL101MJC5S	100	215	10 x 12.5	5	23K3698	0.67	0.51
EKMG630ELL221MJ16S	220	335	10 x 16	5	23K3701	0.53	0.40
EKMG630ELL331MJ20S	330	510	10 x 20	5	23K3703	0.59	0.44
EKMG630ELL471MK20S	470	640	12.5 x 20	5	23K3705	1.03	0.78
EKMG630ELL102ML25S	1000	930	16 x 25	7.5	23K3699	2.05	1.54

(73703)

KMG SERIES MINIATURE RADIAL LEAD CAPACITORS - 100V to 450V

RoHS Compliant Available

UNITED CHEMI-CON

Specifications:

- Tolerance: ±20% (M) @ +20°C, 120Hz
- Load Life: 1000 Hours for 6.3-450V (5-10mm Case Diameter); 1000 Hours for 6.3-100V; and 2000 Hours for 160-450V (12.5-18mm Case Diameter)
- Operating Temperature: -55°C to +105°C (6.3 to 100VDC rated voltage); -40°C to +105°C (160 to 400VDC); -25°C to +105°C (450VDC)

VOLTAGE: 100VDC, 125VDC SURGE

Mfg. Part No.	Cap. (µF)	Ripple (mA_{rms})	D x L (mm)	Lead Pitch (mm)	Stock No.	Price Each 1-9	Price Each 10-49
EKMG101ELLR10ME11D	0.1	1.5	5 x 11	2	23K3557	0.25	0.19
EKMG101ELLR22ME11D	0.22	3.4	5 x 11	2	23K3558	0.24	0.18
EKMG101ELLR33ME11D	0.33	5	5 x 11	2	23K3559	0.24	0.18
EKMG101ELLR47ME11D	0.47	7.1	5 x 11	2	23K3560	0.25	0.19
EKMG101ELL1R0ME11D	1	15	5 x 11	2	23K3561	0.26	0.20
EKMG101ETC1R0ME11D	1	15	5 x 11	2	34M3791	0.25	0.19
EKMG101ELL2R2ME11D	2.2	21	5 x 11	2	23K3565	0.26	0.19
EKMG101ELL3R3ME11D	3.3	29	5 x 11	2	23K3568	0.26	0.20
EKMG101ELL4R7ME11D	4.7	32	5 x 11	2	23K3571	0.26	0.20
EKMG101ELL100MF11D	10	54	6.3 x 11	2.5	23K3562	0.31	0.23
EKMG101ELL220MHB5D	22	93	8 x 11.5	3.5	23K3566	0.46	0.35
EKMG101ELL330MHB5D	33	130	8 x 11.5	3.5	23K3569	0.48	0.36
EKMG101ELL470MJC5S	47	165	10 x 12.5	5	23K3572	0.70	0.52
EKMG101ELL101MJ20S	100	265	10 x 20	5	23K3563	0.87	0.65
EKMG101ELL221MK25S	220	440	12.5 x 25	5	23K3567	1.66	1.25
EKMG101ELL331ML25S	330	540	16 x 25	7.5	23K3570	2.60	1.95
EKMG101ELL471MLN3S	470	715	16 x 31.5	7.5	23K3573	2.15	1.61
EKMG101ELL102MM40S	1000	985	18 x 40	7.5	23K3564	5.91	4.44
VOLTAGE: 160 VDC, 200VDC SURGE							
EKMG161ELL3R3MF11D	3.3	28	6.3 x 11	2.5	23K3593	0.63	0.48
EKMG161ELL4R7MF11D	4.7	34	6.3 x 11	2.5	23K3596	0.63	0.47
EKMG161ELL100MJC5S	10	67	10 x 12.5	5	23K3589	0.90	0.68
EKMG161ELL220MJ20S	22	120	10 x 20	5	23K3591	1.19	0.90
EKMG161ELL330MJ20S	33	145	10 x 20	5	23K3594	1.12	0.84
EKMG161ELL470MK20S	47	195	12.5 x 20	5	23K3597	1.54	1.16
EKMG161ELL101ML25S	100	335	16 x 25	7.5	23K3590	2.76	2.07
EKMG161ELL221MLN3S	220	540	16 x 31.5	7.5	23K3592	3.41	2.56
EKMG161ELL331MMP1S	330	705	18 x 35.5	7.5	23K3595	5.09	3.83
VOLTAGE: 200 VDC, 300VDC SURGE							
EKMG201ELL3R3MF11D	3.3	28	6.3 x 11	2.5	23K3602	0.65	0.49
EKMG201ELL4R7MHB5D	4.7	39	8 x 11.5	3.5	23K3604	0.91	0.68
EKMG201ELL100MJ16S	10	74	10 x 16	5	23K3598	0.98	0.73
EKMG201ELL220MJ20S	22	120	10 x 20	5	23K3600	1.10	0.83
EKMG201ELL330MK20S	33	160	12.5 x 20	5	23K3603	1.90	1.43
EKMG201ELL101ML25S	100	335	16 x 25	7.5	23K3599	2.80	2.10
VOLTAGE: 250 VDC, 300VDC SURGE							
EKMG251ELL2R2MF11D	2.2	23	6.3 x 11	2.5	23K3622	0.65	0.49
EKMG251ELL3R3MHB5D	3.3	32	8 x 11.5	3.5	23K3625	0.88	0.66
EKMG251ELL4R7MHB5D	4.7	39	8 x 11.5	3.5	23K3627	0.97	0.73
EKMG251ELL100MJ16S	10	74	10 x 16	5	23K3620	1.01	0.76

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KMG SERIES MINIATURE RADIAL LEAD CAPACITORS - 100V to 450V (CONT.)

VOLTAGE: 250 VDC, 300VDC SURGE

Mfg. Part No.	Cap. (µF)	Ripple (mA_{rms})	D x L (mm)	Lead Pitch (mm)	Stock No.	Price Each 1-9	Price Each 10-49
EKMG251ELL220MK20S	22	130	12.5 x 20	5	23K3623	1.63	1.23
EKMG251ELL330MK20S	33	160	12.5 x 20	5	23K3626	2.00	1.50
EKMG251ELL470MK25S	47	210	12.5 x 25	5	23K3628	2.26	1.69
EKMG251ELL101MLN3S	100	365	16 x 31.5	7.5	23K3621	3.61	2.71
EKMG251ELL221MM40S	220	585	18 x 40	7.5	23K3624	6.02	4.51
VOLTAGE: 350 VDC, 400VDC SURGE (NOT SOLVENT PROOF)							
EKMG351ELLR47MF11D	0.47	11	6.3 x 11	2.5	23K3641	0.85	0.64
EKMG351ELL1R0MF11D	1	15	6.3 x 11	2.5	23K3642	0.84	0.63
EKMG351ELL2R2MHB5D	2.2	26	8 x 11.5	3.5	23K3644	1.13	0.85
EKMG351ELL3R3MJC5S	3.3	38	10 x 12.5	5	23K3646	0.95	0.71
EKMG351ELL4R7MJ16S	4.7	50	10 x 16	5	23K3648	1.05	0.79
EKMG351ELL100MJ20S	10	80	10 x 20	5	23K3643	1.18	0.89
EKMG351ELL330ML25S	33	195	16 x 25	7.5	23K3647	3.63	2.73
EKMG351ELL470ML25S	47	230	16 x 25	7.5	23K3649	3.57	2.69
VOLTAGE: 400 VDC, 500VDC SURGE (NOT SOLVENT PROOF)							
EKMG401ELL3R3MJC5S	3.3	38	10 x 12.5	5	23K3655	0.86	0.65
EKMG401ELL4R7MJ16S	4.7	50	10 x 16	5	23K3657	0.95	0.71
EKMG401ELL100MJ20S	10	80	10 x 20	5	23K3651	1.09	0.82
EKMG401ELL220MK25S	22	145	12.5 x 25	5	23K3654	2.01	1.51
EKMG401ELL470MLN3S	47	250	16 x 31.5	7.5	23K3658	3.45	2.59
EKMG401ELL101ML40S	100	350	16 x 40	7.5	23K3652	5.73	4.30
VOLTAGE: 450 VDC, 500VDC SURGE (NOT SOLVENT PROOF)							
EKMG451ELL1R0MJC5S	1	13	10 x 12.5	5	23K3659	0.89	0.67
EKMG451ELL2R2MJC5S	2.2	23	10 x 12.5	5	23K3661	0.86	0.65
EKMG451ELL3R3MJ16S	3.3	31	10 x 16	5	23K3663	1.01	0.76
EKMG451ELL4R7MJ20S	4.7	40	10 x 20	5	23K3665	1.15	0.87
EKMG451ELL100MK20S	10	65	12.5 x 20	5	23K3660	2.03	1.53
EKMG451ELL220ML25S	22	115	16 x 25	7.5	23K3662	3.35	2.51
EKMG451ELL330MLN3S	33	155	16 x 31.5	7.5	23K3664	3.05	2.29

(168146)

EKXG SERIES MINIATURE, LONG LIFE RADIAL LEAD ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

UNITED CHEMI-CON

Features

- Downsized from current KMX series
- For electronic ballast circuits and other long life required applications
- Endurance with ripple current : 105°C - 8000 to 10000 hours
- Non solvent-proof type
- Capacitance Tolerance: ±20%

VDC: 160V

Mfg. Part No.	Cap. (µF)	D x L (mm)	Rated Ripple Current (mA_{rms}/105°C, 100kHz)	Stock No.	Price Each 1-9
EKXG161ELL220MJ20S	22	10 x 20	500	23K3709	0.85
EKXG161ELL470MJ20S	47	10 x 20	750	23K3713	0.91
EKXG161ELL101MK25S	100	12.5 x 25	1395	23K3706	1.16
EKXG161ELL101ML20S	100	16 x 20	1395	23K3707	1.93
EKXG161ELL151ML20S	150	16 x 20	1735	23K3708	2.14
EKXG161ELL221ML25S	220	16 x 25	2295	23K3710	2.61
EKXG161ELL331MMN3S	330	18 x 31.5	3130	23K3712	3.56
VDC : 200V					
EKXG201ELL100MJ16S	10	10 x 16	315	23K3714	0.49
EKXG201ELL330MJ20S	33	10 x 20	650	23K3719	0.85
EKXG201ELL470MK20S	47	12.5 x 20	975	23K3721	1.39
EKXG201ELL680MK20S	68	12.5 x 20	1175	23K3722	1.39
EKXG201ELL331MMP1S	330	18 x 35.5	3220	23K3720	3.18
VDC : 250V					
EKXG251ELL220MJ20S	22	10 x 20	500	23K3726	0.64
EKXG251ELL470MK20S	47	12.5 x 20	975	23K3728	1.40
EKXG251ELL680ML20S	68	16 x 20	1300	23K3729	2.11
EKXG251ELL820ML20S	82	16 x 20	1375	23K3730	2.32
EKXG251ELL151MM25S	150	18 x 25	1935	23K3725	3.49
VDC : 350V					
EKXG351ELL100MJ20S	10	10 x 20	350	23K3731	1.00
EKXG351ELL330ML20S	33	16 x 20	900	23K3736	2.25
EKXG351ELL680ML25S	68	16 x 25	1400	23K3739	2.98
EKXG351ELL820MM25S	82	18 x 25	1525	23K3741	3.62
EKXG351ELL101MM25S	100	18 x 25	1575	23K3732	3.72

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ALUMINUM ELECTROLYTIC CAPACITORS

EKXG SERIES MINIATURE, LONG LIFE RADIAL LEAD ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VDC : 350V

Mfg. Part No.	Cap. (µF)	D x L (mm)	Rated Ripple Current (mA_{rms}/105°C, 100kHz)	Stock No.	Price Each 1-9
● EKXG351ELL121MMN3S	120	18 x 31.5	1865	23K3733	5.02
● EKXG351ELL151MMP1S	150	18 x 35.5	2160	23K3734	4.11
VDC : 400V					
● EKXG401ELL100MJ20S	10	10 x 20	350	23K3742	0.64
● EKXG401ELL150MK20S	15	12.5 x 20	550	23K3745	1.61
● EKXG401ELL220MK20S	22	12.5 x 20	650	23K3747	1.05
● EKXG401ELL330ML20S	33	16 x 20	900	23K3748	1.56
● EKXG401ELL470ML25S	47	16 x 25	1175	23K3749	2.10
● EKXG401ELL680MM25S	68	18 x 25	1465	23K3752	3.91
● EKXG401ELL820MM25S	82	18 x 25	1525	23K3753	4.33
● EKXG401ELL101MMN3S	100	18 x 31.5	1720	23K3743	3.36
● EKXG401ELL121MMP1S	120	18 x 35.5	1945	23K3744	6.02
● EKXG401ELL151MM40S	150	18 x 40	2215	23K3746	4.38
VDC : 450V					
● EKXG451ELL6R8MJ20S	6.8	10 x 20	275	23K3761	0.96
● EKXG451ELL100MK20S	10	12.5 x 20	450	23K3754	1.47
● EKXG451ELL330ML25S	33	16 x 25	975	23K3758	3.55
● EKXG451ELL820MMP1S	82	18 x 35.5	1,785	16M7339	3.43

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KZE SERIES HIGH VOLTAGE MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

UNITED CHEMI-CON

Features

- Ultra low impedance for personal computer and storage equipment
- Endurance with ripple current: 105°C - 1,000 to 5,000 hours
- Non solvent-proof type
- Capacitance Tolerance: ±20%
- Temperature Range: -40 to +105°C

WORKING VOLTAGE (Vdc): 50V

Mfg. Part No.	Cap. (µF)	Size D x L (mm)	Impedance (Ωmax/ 100kHz, 20°C)	Rated Ripple Current (mArms/ 105°C, 100kHz)	Stock No.	Price Each 1-49
● EKZE500ELL100ME07D	10	5 x 7	0.5	210	23K3985	0.16
● EKZE500ELL560MF11D	56	6.3 x 11	0.14	385	16M7395	0.20
● EKZE500ELL101MHB5D	100	8 x 11.5	0.074	724	23K3986	0.31
● EKZE500ELL121MH15D	120	8 x 15	0.061	950	23K3988	0.53
● EKZE500ELL151MJC5S	150	10 x 12.5	0.061	979	23K3989	0.67
● EKZE500ELL181MH20D	180	8 x 20	0.046	1190	23K3990	0.69
● EKZE500ELL221MJ16S	220	10 x 16	0.042	1370	23K3992	0.72
● EKZE500ELL271MJ20S	270	10 x 20	0.03	1580	23K3993	0.79
● EKZE500ELL331MJ25S	330	10 x 25	0.028	1870	23K3994	1.02
● EKZE500ELL471MK20S	470	12.5 x 20	0.027	2050	23K3995	0.95
● EKZE500ELL561MK25S	560	12.5 x 25	0.023	2410	23K3997	1.09
● EKZE500ELL681MK30S	680	12.5 x 30	0.021	2860	23K3998	1.86
● EKZE500ELL821MK35S	820	12.5 x 35	0.019	2960	23K3999	2.29
● EKZE500ELL821ML20S	820	16 x 20	0.023	2730	23K4000	2.61
WORKING VOLTAGE (Vdc): 63V						
● EKZE630ELL150ME11D	15	5 x 11	0.88	165	23K4019	0.24
● EKZE630ELL330MF11D	33	6.3 x 11	0.35	265	23K4024	0.31
● EKZE630ELL560MHB5D	56	8 x 11.5	0.22	500	16M7408	0.46
● EKZE630ELL820MJC5S	82	10 x 12.5	0.11	690	23K4030	0.73
● EKZE630ELL820MH15D	82	8 x 15	0.16	665	23K4029	0.61
● EKZE630ELL181MK16S	180	12.5 x 16	0.072	1150	23K4021	1.44
● EKZE630ELL221MJ25S	220	10 x 25	0.046	1350	23K4023	0.69
● EKZE630ELL391MK25S	390	12.5 x 25	0.031	1900	23K4025	1.81
● EKZE630ELL471MK30S	470	12.5 x 30	0.028	2300	23K4026	1.19
● EKZE630ELL681MK40S	680	12.5 x 40	0.021	2800	23K4028	2.72
● EKZE630ELL102MLP1S	1000	16 x 35.5	0.019	2900	23K4017	3.59
WORKING VOLTAGE (Vdc): 100V						
● EKZE101ELL270MHB5D	27	8 x 11.5	0.36	355	23K3927	0.50
● EKZE101ELL390MH15D	39	8 x 15	0.25	450	70J9030	0.51
● EKZE101ELL101MK16S	100	12.5 x 16	0.11	750	23K3923	0.91
● EKZE101ELL121MJ25S	120	10 x 25	0.069	900	23K3924	0.70
● EKZE101ELL221MK25S	220	12.5 x 25	0.047	1250	23K3926	1.78
● EKZE101ELL271MK30S	270	12.5 x 30	0.042	1500	23K3928	2.21
● EKZE101ELL331MM20S	330	18 x 20	0.045	1500	23K3930	3.43
● EKZE101ELL471MM25S	470	18 x 25	0.036	1750	23K3933	3.61

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KZE SERIES HIGH VOLTAGE MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

WORKING VOLTAGE (Vdc): 100V

Mfg. Part No.	Cap. (µF)	Size D x L (mm)	Impedance (Ωmax/ 100kHz, 20°C)	Rated Ripple Current (mArms/ 105°C, 100kHz)	Stock No.	Price Each 1-49
● EKZE101ELL561MLP1S	560	16 x 35.5	0.029	2000	16M7365	3.80
● EKZE101ELL821MM40S	820	18 x 40	0.026	2700	23K3937	6.09

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KZE SERIES MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

UNITED CHEMI-CON

Features

- Ultra low impedance for personal computer and storage equipment
- Endurance with ripple current: 105°C - 1,000 to 5,000 hours
- Non solvent-proof type
- Capacitance Tolerance: ±20%
- Temperature Range: -40 to +105°C

WORKING VOLTAGE (Vdc): 6.3V

Mfg. Part No.	Cap. (µF)	Size D x L (mm)	Impedance (Ωmax/ 100kHz, 20°C)	Rated Ripple Current (mArms/ 105°C, 100kHz)	Stock No.	Price Each 1-9
● EKZE6R3ELL151ME11D	150	5 x 11	0.3	250	23K4004	0.21
● EKZE6R3ELL331MF11D	330	6.3 x 11	0.13	405	23K4008	0.30
● EKZE6R3ELL561MHB5D	560	8 x 11.5	0.072	760	23K4012	0.53
● EKZE6R3ELL821MH15D	820	8 x 15	0.056	995	23K4016	0.51
● EKZE6R3ELL102MJC5S	1000	10 x 12.5	0.053	1030	23K4001	0.42
● EKZE6R3ELL122MJ16S	1200	10 x 16	0.038	1430	23K4003	0.80
● EKZE6R3ELL122MH20D	1200	8 x 20	0.041	1250	23K4002	0.56
● EKZE6R3ELL152MJ20S	1500	10 x 20	0.023	1820	23K4005	0.82
● EKZE6R3ELL222MJ25S	2200	10 x 25	0.022	2150	23K4007	0.97
● EKZE6R3ELL332MK20S	3300	12.5 x 20	0.021	2360	23K4009	1.46
● EKZE6R3ELL392MK25S	3900	12.5 x 25	0.018	2770	23K4010	1.29
● EKZE6R3ELL472MK30S	4700	12.5 x 30	0.016	3290	23K4011	2.04
● EKZE6R3ELL562MK35S	5600	12.5 x 35	0.015	3400	23K4013	2.17
● EKZE6R3ELL562ML20S	5600	16 x 20	0.018	3140	23K4014	2.46
● EKZE6R3ELL682ML25S	6800	16 x 25	0.016	3460	23K4015	2.05
WORKING VOLTAGE (Vdc): 10V						
● EKZE100ELL101ME11D	100	5 x 11	0.3	250	23K3908	0.17
● EKZE100ELL221MF11D	220	6.3 x 11	0.13	405	23K3914	0.28
● EKZE100ELL471MHB5D	470	8 x 11.5	0.072	760	23K3919	0.30
● EKZE100ELL681MH15D	680	8 x 15	0.056	995	23K3922	0.33
● EKZE100ELL681MJC5S	680	10 x 12.5	0.053	1030	16M7357	0.64
● EKZE100ELL102MJ16S	1000	10 x 16	0.038	1430	23K3910	0.73
● EKZE100ELL102MH20D	1000	8 x 20	0.041	1250	23K3909	0.59
● EKZE100ELL122MJ20S	1200	10 x 20	0.023	1820	23K3911	0.80
● EKZE100ELL152MJ25S	1500	10 x 25	0.022	2150	23K3912	1.00
● EKZE100ELL222MK20S	2200	12.5 x 20	0.021	2360	23K3915	1.40
● EKZE100ELL332MK25S	3300	12.5 x 25	0.018	2770	23K3916	1.67
● EKZE100ELL392MK30S	3900	12.5 x 30	0.016	3290	23K3917	1.73
● EKZE100ELL392ML20S	3900	16 x 20	0.018	3140	23K3918	2.48
● EKZE100ELL472MK35S	4700	12.5 x 35	0.015	3400	23K3920	2.21
● EKZE100ELL562ML25S	5600	16 x 25	0.016	3460	23K3921	2.54
WORKING VOLTAGE (Vdc): 16V						
● EKZE160ELL560ME11D	56	5 x 11	0.3	250	16M7369	0.26
● EKZE160ELL680MF07D	68	6.3 x 7	0.24	300	16M7370	0.30
● EKZE160ELL121MF11D	120	6.3 x 11	0.13	405	23K3940	0.33
● EKZE160ELL331MHB5D	330	8 x 11.5	0.072	760	23K3946	0.45
● EKZE160ELL471MJC5S	470	10 x 12.5	0.053	1030	23K3950	0.64
● EKZE160ELL681MJ16S	680	10 x 16	0.038	1430	23K3954	0.79
● EKZE160ELL681MH20D	680	8 x 20	0.041	1250	23K3953	0.37
● EKZE160ELL102MJ20S	1000	10 x 20	0.023	1820	23K3939	0.81
● EKZE160ELL122MJ25S	1200	10 x 25	0.022	2150	23K3941	0.96
● EKZE160ELL152MK20S	1500	12.5 x 20	0.021	2360	23K3942	1.44
● EKZE160ELL222MK25S	2200	12.5 x 25	0.018	2770	23K3943	1.02
● EKZE160ELL272MK30S	2700	12.5 x 30	0.016	3290	23K3944	1.94
● EKZE160ELL272ML20S	2700	16 x 20	0.018	3140	23K3945	2.38
● EKZE160ELL332MK35S	3300	12.5 x 35	0.015	3400	23K3947	2.04
● EKZE160ELL392ML25S	3900	16 x 25	0.016	3460	23K3948	2.76

➤ CONTINUED ➤

KZE SERIES MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

WORKING VOLTAGE (Vdc): 25V

Mfg. Part No.	Cap. (µF)	Size D x L (mm)	Impedance (Ωmax/ 100kHz, 20°C)	Rated Ripple Current (mArms/ 105°C, 100kHz)	Stock No.	Price Each 1-9
EKZE250ELL470ME11D	47	5 x 11	0.3	250	23K3965	0.17
EKZE250ELL101MF11D	100	6.3 x 11	0.13	405	23K3955	0.20
EKZE250ELL221MHB5D	220	8 x 11.5	0.072	760	23K3960	0.31
EKZE250ELL331MJC5S	330	10 x 12.5	0.053	1030	23K3964	0.64
EKZE250ELL331MH15D	330	8 x 15	0.056	995	23K3963	0.57
EKZE250ELL471MJ16S	470	10 x 16	0.038	1430	23K3967	0.48
EKZE250ELL471MH20D	470	8 x 20	0.041	1250	23K3966	0.38
EKZE250ELL681MJ20S	680	10 x 20	0.023	1820	23K3968	0.81
EKZE250ELL821MJ25S	820	10 x 25	0.022	2150	23K3969	0.63
EKZE250ELL102MK20S	1000	12.5 x 20	0.021	2360	23K3956	0.95
EKZE250ELL152MK25S	1500	12.5 x 25	0.018	2770	23K3957	1.63
EKZE250ELL182MK30S	1800	12.5 x 30	0.016	3290	23K3958	1.77
EKZE250ELL182ML20S	1800	16 x 20	0.018	3140	23K3959	2.44
EKZE250ELL222MK35S	2200	12.5 x 35	0.015	3400	23K3961	1.90
EKZE250ELL272ML25S	2700	16 x 25	0.016	3460	23K3962	3.01
WORKING VOLTAGE (Vdc): 35V						
EKZE350ELL330ME11D	33	5 x 11	0.3	250	23K3979	0.30
EKZE350ELL560MF11D	56	6.3 x 11	0.13	405	23K3982	0.30
EKZE350ELL151MHB5D	150	8 x 11.5	0.072	760	23K3973	0.48
EKZE350ELL221MJC5S	220	10 x 12.5	0.053	1030	23K3977	0.67
EKZE350ELL221MH15D	220	8 x 15	0.056	995	23K3976	0.52
EKZE350ELL271MH20D	270	8 x 20	0.041	1250	23K3978	0.55
EKZE350ELL331MJ16S	330	10 x 16	0.038	1430	23K3980	0.75
EKZE350ELL471MJ20S	470	10 x 20	0.023	1820	23K3981	0.81
EKZE350ELL561MJ25S	560	10 x 25	0.022	2150	23K3983	0.65
EKZE350ELL681MK20S	680	12.5 x 20	0.021	2360	23K3984	0.93
EKZE350ELL102MK25S	1000	12.5 x 25	0.018	2770	23K3970	1.07
EKZE350ELL122ML20S	1200	16 x 20	0.018	3140	23K3972	2.42
EKZE350ELL152MK35S	1500	12.5 x 35	0.015	3400	23K3974	1.37
EKZE350ELL182ML25S	1800	16 x 25	0.016	3460	23K3975	1.64

(163828)

LXY SERIES MINIATURE RADIAL LEAD ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

UNITED CHEMI-CON

Features:
- Low impedance
- High reliability
- Solvent-proof design

Specifications:
- Rated lifetime: 2,000–5,000 hours @ +105°C
- Tolerance: ±20%
- Operating temperature: -55°C to +105°C

VOLTAGE: 10 VDC

Mfg. Part No.	Cap. (µF)	D x L (mm)	Impedance* (Ω)	Ripple** (mA)	Stock No.	Price Each 1-9
ELXY100ELL181MFB5D	180	6.3 x 11.5	0.35	273	23K4034	0.22
ELXY100ELL221MF15D	220	6.3 x 15	0.25	390	23K4036	0.26
ELXY100ELL391MJC5S	390	10 x 12.5	0.12	625	23K4042	0.39
ELXY100ELL681MH20D	680	8 x 20	0.095	740	23K4047	0.44
ELXY100ELL681MJ16S	680	10 x 16	0.084	825	23K4048	0.52
ELXY100ELL102MJ20S	1000	10 x 20	0.062	1040	23K4031	0.75
ELXY100ELL122MJ25S	1200	10 x 25	0.052	1260	23K4032	0.73
ELXY100ELL152MJ30S	1500	10 x 30	0.044	1440	23K4033	0.81
ELXY100ELL182MK20S	1800	12.5 x 20	0.046	1340	23K4035	1.25
ELXY100ELL222MK25S	2200	12.5 x 25	0.034	1690	23K4037	1.52
ELXY100ELL272MK30S	2700	12.5 x 30	0.03	1950	23K4038	1.60
ELXY100ELL332ML20S	3300	16 x 20	0.038	1630	23K4041	1.64
ELXY100ELL392ML25S	3900	16 x 25	0.028	2070	23K4044	1.86
ELXY100ELL562ML30S	5600	16 x 30	0.025	2350	23K4046	2.03
ELXY100ELL682ML35S	6800	16 x 35	0.022	2550	23K4049	3.08
ELXY100ELL822ML40S	8200	16 x 40	0.018	2900	23K4051	2.62
VOLTAGE: 16VDC						
ELXY160ELL121MFB5D	120	6.3 x 11.5	0.35	273	23K4052	0.26
ELXY160ELL181MF15D	180	6.3 x 15	0.25	390	23K4056	0.26
ELXY160ELL271MH12D	270	8 x 12	0.17	445	23K4059	0.35
ELXY160ELL271MJC5S	270	10 x 12.5	0.12	625	23K4060	0.48
ELXY160ELL331MH15D	330	8 x 15	0.13	555	23K4063	0.40
ELXY160ELL471MH20D	470	8 x 20	0.095	740	23K4066	0.46
ELXY160ELL821MJ25S	820	10 x 25	0.052	1260	23K4072	0.88
ELXY160ELL122MJ30S	1200	10 x 30	0.044	1440	23K4053	0.96

➤ CONTINUED ➤

LXY SERIES MINIATURE RADIAL LEAD ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 16VDC

Mfg. Part No.	Cap. (µF)	D x L (mm)	Impedance* (Ω)	Ripple** (mA)	Stock No.	Price Each 1-9
ELXY160ELL122MK20S	1200	12.5 x 20	0.046	1340	23K4054	1.31
ELXY160ELL152MK25S	1500	12.5 x 25	0.034	1690	23K4055	1.52
ELXY160ELL222MK30S	2200	12.5 x 30	0.03	1950	23K4057	1.35
ELXY160ELL222ML20S	2200	16 x 20	0.038	1630	23K4058	1.57
ELXY160ELL272ML25S	2700	16 x 25	0.028	2070	23K4062	1.92
ELXY160ELL332MK40S	3300	12.5 x 40	0.022	2390	23K4064	1.87
ELXY160ELL472ML35S	4700	16 x 35	0.022	2550	23K4068	2.54
ELXY160ELL562ML40S	5600	16 x 40	0.018	2900	23K4070	3.50
VOLTAGE: 25 VDC						
ELXY250ELL390MEB5D	39	5 x 11.5	0.75	163	16M7424	0.21
ELXY250ELL121MF15D	120	6.3 x 15	0.25	390	23K4074	0.33
ELXY250ELL151MH12D	150	8 x 12	0.17	445	23K4075	0.29
ELXY250ELL331MH20D	330	8 x 20	0.095	740	23K4084	0.50
ELXY250ELL331MJ16S	330	10 x 16	0.084	825	23K4085	0.61
ELXY250ELL471MJ20S	470	10 x 20	0.062	1040	23K4089	0.49
ELXY250ELL561MJ25S	560	10 x 25	0.052	1260	23K4090	0.87
ELXY250ELL821MK20S	820	12.5 x 20	0.046	1340	23K4093	1.31
ELXY250ELL102MK25S	1000	12.5 x 25	0.034	1690	23K4073	0.98
ELXY250ELL152MK30S	1500	12.5 x 30	0.03	1950	23K4076	1.68
ELXY250ELL152ML20S	1500	16 x 20	0.038	1630	23K4077	1.84
ELXY250ELL182MK35S	1800	12.5 x 35	0.024	2220	23K4079	1.53
ELXY250ELL182ML25S	1800	16 x 25	0.028	2070	23K4080	2.19
ELXY250ELL222MK40S	2200	12.5 x 40	0.022	2390	23K4082	2.25
ELXY250ELL272ML30S	2700	16 x 30	0.025	2350	23K4083	2.49
ELXY250ELL332ML35S	3300	16 x 35	0.022	2550	23K4086	2.49
ELXY250ELL392ML40S	3900	16 x 40	0.018	2900	23K4088	2.82
VOLTAGE: 35 VDC						
ELXY350ELL270MEB5D	27	5 x 11.5	0.75	163	23K4106	0.22
ELXY350ELL560MFB5D	56	6.3 x 11.5	0.35	273	79K3817	0.18
ELXY350ELL820MF15D	82	6.3 x 15	0.25	390	23K4114	0.33
ELXY350ETC121MH12D	120	8 x 12	0.17	445	16M7436	0.29
ELXY350ELL121MH12D	120	8 x 12	0.17	445	23K4096	0.29
ELXY350ELL181MH15D	180	8 x 15	0.13	555	23K4101	0.48
ELXY350ELL221MH20D	220	8 x 20	0.095	740	23K4103	0.34
ELXY350ELL221MJ16S	220	10 x 16	0.084	825	23K4104	0.43
ELXY350ELL331MJ20S	330	10 x 20	0.062	1040	23K4108	0.71
ELXY350ELL391MJ25S	390	10 x 25	0.052	1260	23K4109	0.73
ELXY350ELL561MJ30S	560	10 x 30	0.044	1440	23K4111	0.81
ELXY350ELL561MK20S	560	12.5 x 20	0.046	1340	23K4112	1.05
ELXY350ELL681MK25S	680	12.5 x 25	0.034	1690	23K4113	1.52
ELXY350ELL102ML20S	1000	16 x 20	0.038	1630	23K4095	1.58
ELXY350ELL122MK35S	1200	12.5 x 35	0.024	2220	23K4098	1.58
ELXY350ELL122ML25S	1200	16 x 25	0.028	2070	23K4099	1.84
ELXY350ELL182ML30S	1800	16 x 30	0.025	2350	23K4102	2.48
ELXY350ELL222ML35S	2200	16 x 35	0.022	2550	23K4105	2.65
ELXY350ELL272ML40S	2700	16 x 40	0.018	2900	23K4107	2.54
VOLTAGE: 50 VDC						
ELXY500ELL180MEB5D	18	5 x 11.5	1.2	129	23K4120	0.18
ELXY500ELL390MFB5D	39	6.3 x 11.5	0.54	219	16M7445	0.27
ELXY500ELL680MH12D	68	8 x 12	0.3	340	16M7447	0.43
ELXY500ELL820MJC5S	82	10 x 12.5	0.2	480	23K4133	0.47
ELXY500ELL121MH20D	120	8 x 20	0.14	610	23K4116	0.56
ELXY500ELL181MJ20S	180	10 x 20	0.088	945	23K4121	0.59
ELXY500ELL221MJ25S	220	10 x 25	0.073	1150	23K4122	0.90
ELXY500ELL331MJ30S	330	10 x 30	0.054	1260	23K4123	0.80
ELXY500ELL331MK20S	330	12.5 x 20	0.059	1190	23K4124	1.22
ELXY500ELL471MK25S	470	12.5 x 25	0.044	1490	23K4126	0.98
ELXY500ELL561MK30S	560	12.5 x 30	0.039	1720	23K4128	1.33
ELXY500ELL681ML20S	680	16 x 20	0.05	1420	23K4131	1.61
ELXY500ELL821MK40S	820	12.5 x 40	0.058	2030	23K4134	1.72
ELXY500ELL821ML25S	820	16 x 25	0.068	1880	23K4135	1.80
ELXY500ELL102ML30S	1000	16 x 30	0.03	2150	23K4115	1.58
ELXY500ELL122ML35S	1200	16 x 35	0.027	2320	23K4118	2.12
VOLTAGE: 63 VDC						
ELXY630ELL100MEB5D	10	5 x 11.5	1.9	103	23K4136	0.19
ELXY630ELL180MFB5D	18	6.3 x 11.5	1	161	23K4140	0.24
ELXY630ELL330MF15D	33	6.3 x 15	0.61	233	23K4144	0.23
ELXY630ELL470MH12D	47	8 x 12	0.47	274	23K4147	0.24
ELXY630ELL560MJC5S	56	10 x 12.5	0.27	418	16M7456	0.50
ELXY630ELL680MH15D	68	8 x 15	0.34	360	16M7457	0.42
ELXY630ELL680MJ16S	68	10 x 16	0.21	525	16M7458	0.65
ELXY630ELL820MH20D	82	8 x 20	0.21	500	23K4155	0.38

➤ CONTINUED ➤

LXY SERIES MINIATURE RADIAL LEAD ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 63 VDC

Mfg. Part No.	Cap. (µF)	D x L (mm)	Impedance* (Ω)	Ripple** (mA)	Stock No.	Price Each 1-9
● ELXY630ELL121MJ20S	120	10 x 20	0.16	650	23K4138	0.42
● ELXY630ELL151MJ25S	150	10 x 25	0.13	783	23K4139	0.79
● ELXY630ELL181MJ30S	180	10 x 30	0.1	960	23K4141	0.68
● ELXY630ELL221MK20S	220	12.5 x 20	0.11	870	23K4142	0.87
● ELXY630ELL271MK25S	270	12.5 x 25	0.074	1150	16M7455	1.20
● ELXY630ELL471MK35S	470	12.5 x 35	0.063	1390	23K4148	1.25
● ELXY630ELL821ML35S	820	16 x 35	0.04	1910	23K4156	2.08

*@20°C, 100kHz **@+105°C, 100kHz
(65784)

150 RMI SERIES LOW IMPEDANCE, RADIAL ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

VISHAY.

Features
- Polarized Capacitors with Non-Solid Electrolyte
- Excellent Ripple Current Capability
- Charge- and Discharge-Proof
- Very Long Life: 4000 to 10,000 Hours at 105°C
- Very Low ESR or Impedance

Specifications
- Tolerance: ±20%
- Operating Temperature: -55°C to +105°C
- *2222 & MAL2 prefix part numbers are the same*

VOLTAGE: 10 VDC

Mfg. Part No.	Cap. (pF)	ESR (Ω)	D x L (mm)	Stock No.	Price Each 1-9	Price Each 10-99
● MAL215064102E3	1000	0.300	10 x 16	14M6723	1.54	1.03
● MAL215064222E3	2200	0.152	12.5 x 20	18C4712	2.61	1.74
VOLTAGE: 16 VDC						
● MAL215065471E3	470	0.540	10 x 12	18C4714	1.42	0.94
VOLTAGE: 25 VDC						
● MAL215066471E3	470	0.474	10 x 16	18C4716	1.54	1.03
● MAL215066102E3	1000	0.222	12.5 x 20	14M6724	2.75	1.83
VOLTAGE: 35 VDC						
● MAL215060221E3	220	0.869	10 x 12	18C4706	1.50	1.00
● MAL215060471E3	470	0.407	10 x 20	18C4708	1.90	1.27
● MAL215060222E3	2200	0.101	16 x 31	18C4707	5.31	3.53
VOLTAGE: 50 VDC						
● MAL215061471E3	470	0.339	12.5 x 20	18C4710	2.72	1.81
● MAL215061102E3	1000	0.159	16 x 25	18C4709	4.72	3.14
VOLTAGE: 63 VDC						
● MAL215068101E3	100	1.592	10 x 12	18C4717	1.42	0.94
● MAL215068471E3	470	0.339	12.5 x 25	14M6725	3.16	2.10

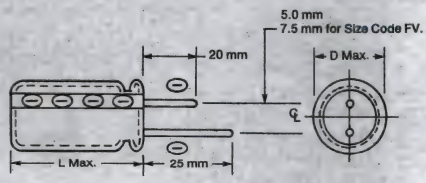
(63572)

678D SERIES ALUMINUM ELECTROLYTIC CAPACITORS

VISHAY.

Features
- Exceptional CV Efficiency, High Ripple Current Capability, Stable Performance and High Reliability

Specifications
- Tolerance: ±20%
- Life Validation Test: 3000 Hours @ +105°C (Size Code CC, CD, CG); 4000 Hours @ +105°C (Size Code DG, DM, DS, EK, FV)
- Terminals: 2 Leads Standard
- Operating Temperature: -55°C to +105°C



Ultra-low ESR miniature radial-leaded aluminum electrolytic capacitors with resin-sealed PVC sleeve.

DIMENSIONS

Case Size	D max. In. (mm)	L max. In. (mm)	Lead Diameter Nom.	Lead Diameter AWG
CC	0.413 (10.5)	0.630 (16.0)	0.63″	22
CD	0.413 (10.5)	0.740 (18.8)	0.63″	22
CG	0.413 (10.5)	0.906 (23.0)	0.63″	22
DG	0.512 (13.0)	0.906 (23.0)	0.81″	20
DM	0.512 (13.0)	1.161 (29.5)	0.81″	20
DS	0.512 (13.0)	1.791 (45.5)	0.81″	20
EK	0.650 (16.5)	1.098 (27.9)	0.81″	20
FV	0.728 (18.5)	1.693 (43.0)	0.81″	20

➤CONTINUED➤

678D SERIES ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 16 VDC

Mfg. Part No.	Cap. (µF)	Case Size	Stock No.	Price Each 1-9	Price Each 10-49
678D227M016CC3D	220	CC	90F7553	5.02	4.30
678D108M016DM3D	1000	DM	90F7555	5.95	5.10
VOLTAGE: 25 VDC					
678D227M025CG3D	220	CG	90F7543	11.21	9.29
678D337M025DG3D	330	DG	90F7544	5.78	4.95
678D477M025DM3D	470	DM	90F7545	5.95	5.10
678D108M025DS3D	1000	DS	90F7546	6.54	5.61
678D228M025FV3D	2200	FV	90F7547	9.67	8.01
VOLTAGE: 40 VDC					
678D107M040CD3D	100	CD	90F7548	4.95	4.25
678D337M040DM3D	330	DM	90F7556	5.95	5.10
678D477M040EK3D	470	EK	90F7557	7.67	6.57
VOLTAGE: 50 VDC					
678D107M050CG3D	100	CG	90F7559	5.00	4.29
678D227M050DM3D	220	DM	90F7560	6.17	5.29
678D108M050FV3D	1000	FV	90F7561	11.16	9.24
VOLTAGE: 63 VDC					
678D476M063CD3D	47	CD	90F7562	4.76	4.08
678D227M063EK3D	220	EK	90F7564	8.07	6.92

(7165)

TTA SERIES 85°C STANDARD AXIAL ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

ILLINOIS CAPACITOR, INC.

Features
- High ripple current ratings
- Solvent tolerant end seals standard (≤250 WVDC)

Specifications
- Tolerance: ±20% at 120Hz, 20°C
- Operating Temperature: 450VDC: -40°C to +85°C
  ≥ 450VDC: -25°C to +85°C

VOLTAGE: 10 VDC

Mfg. Part No.	Cap. (uF)	ESR (Ω)	Ripple (mA_{rms})	Dimensions (mm) D	Dimensions (mm) L	Stock No.	Price Each 1-24
● 109TTA010M	10000	0.033	2340	18	40	30K6621	3.52
VOLTAGE: 16 VDC							
● 476TTA016M	47	5.947	95	5	12.5	30K6760	0.32
● 108TTA016M	1000	0.282	785	10	25	30K6609	0.78
● 478TTA016M	4700	0.088	2060	16	31.5	30K6773	2.38
● 109TTA016M	10000	0.058	2680	18	40	30K6622	4.59
● 159TTA016M	15000	0.05	2890	22	50	30K6650	6.18
VOLTAGE: 25 VDC							
● 476TTA025M	47	5.291	125	6.3	12.5	30K6761	0.33
● 107TTA025M	100	2.487				30K6600	0.28
● 108TTA025M	1000	0.249	935	12.5	25	77M9891	1.07
● 228TTA025M	2200	0.143	1480	16	30	51M6859	2.26
● 338TTA025M	3300	0.106	1910	16	30	30K6729	2.01
● 478TTA025M	4700	0.081	2170	16	40	30K6774	2.51
VOLTAGE: 35 VDC							
● 106TTA035M	10	19.894	47	5	12.5	30K6594	0.28
● 226TTA035M	22	9.043	72	5	12.5	30K6677	0.32
● 107TTA035M	100	1.989	210	8	16	30K6601	0.43
● 108TTA035M	1000	0.199	1050	12.5	25	30K6610	1.11
● 158TTA035M	1500	0.155	1280	16	30	30K6646	2.69
● 338TTA035M	3300	0.09	2050	16	40	30K6730	3.45
● 478TTA035M	4700	0.064	2470	22	40	30K6775	4.89
● 688TTA035M	6800	0.059	2720	22	50	30K6800	6.61
● 109TTA035M	10000	0.05	3500	25	50	72K7757	8.59
VOLTAGE: 50 VDC							
● 105TTA050M	1	165.66	12	5	12.5	30K6585	0.27
● 475TTA050M	4.7	35.274	36	5	12.5	30K6758	0.27
● 106TTA050M	10	16.579	52	5	12.5	30K6595	0.32
● 226TTA050M	22	7.536	90	6.3	12.5	30K6678	0.33
● 476TTA050M	47	3.527	145	6.3	16	58K9813	0.35
● 227TTA050M	220	0.754	440	10	20	84M4682	0.65
● 337TTA050M	330	0.502	565	10	25	30K6725	0.63
● 477TTA050M	470	0.353	740	12.5	25	82K7747	1.01
● 108TTA050M	1000	0.166	1255	16	30	30K6611	1.74
● 158TTA050M	1500	0.133	1480	16	40	30K6647	2.74
● 228TTA050M	2200	0.106	1920	16	40	30K6693	2.87
VOLTAGE: 63 VDC							
● 108TTA063M	1000	0.166	1330	16	30	30K6612	2.72

➤CONTINUED➤

TTA SERIES 85°C STANDARD AXIAL ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

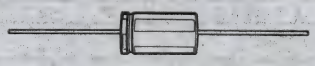
Mfg. Part No.	Cap. (uF)	ESR (Ω)	Ripple (mA_{rms})	Dimensions (mm) D	Dimensions (mm) L	Stock No.	Price Each 1-24
VOLTAGE: 80 VDC							
108TTA080M	1000	0.149	1500	16	40	30K6613	3.08
228TTA080M	2200	0.106	2260	22	50	30K6694	6.32
VOLTAGE: 100 VDC							
474TTA100M	0.47	705.474	12	5	12.5	30K6754	0.23
105TTA100M	1	331.573	21	5	12.5	30K6586	0.28
225TTA100M	2.2	150.719	28	5	12.5	30K6675	0.28
335TTA100M	3.3	100.477	35	5	12.5	30K6715	0.30
106TTA100M	10	33.157	68	6.3	12.5	30K6596	0.34
107TTA050M	100	1.658	230	8	16	75K6216	0.50
227TTA100M	220	1.005	560	12.5	25	30K6687	1.40
337TTA100M	330	1.005	770	12.5	30	30K6726	2.41
108TTA100M	1000	0.332	1650	18	40	30K6614	5.35
228TTA100M	2200	0.181	2590	25	50	17M8379	10.22
VOLTAGE: 160 VDC							
336TTA160M	33	10.048	170	12.5	25	30K6718	1.24
VOLTAGE: 250 VDC							
335TTA250M	3.3	100.477	35	8	16	30K6716	0.48
106TTA250M	10	33.157	70	10	20	30K6597	0.97
226TTA250M	22	15.072	140	12.5	25	30K6679	1.66
476TTA250M	47	7.055	255	16	30	30K6762	2.29
227TTA250M	220	1.507	680	22	40	30K6688	6.65
VOLTAGE: 350 VDC							
105TTA350M	1	331.573	15	6.3	16	30K6587	0.49
475TTA350M	4.7	70.547	50	8	20	30K6759	1.14
106TTA350M	10	33.157	90	12.5	25	84M4159	1.31
336TTA350M	33	10.048	210	16	31.5	30K6719	3.13
476TTA350M	47	7.055	290	16	40	30K6763	3.51
107TTA350M	100	3.316	400	18	40	30K6602	5.23
VOLTAGE: 450 VDC							
105TTA450M	1	414.66	16	8	16	30K6588	0.72
225TTA450M	2.2	188.394	31	10	20	30K6676	0.92
106TTA450M	10	41.447	85	12.5	25	30K6598	1.31
226TTA450M	22	18.839	150	16	30	30K6680	3.00
336TTA450M	33	12.56	230	16	40	30K6720	3.99
107TTA450M	100	4.145	500	22	50	30K6603	8.10

(84772)

TC SERIES TUBULAR ALUMINUM ELECTROLYTIC CAPACITORS

MALLORY
Cornell Dubilier Electronics, Inc.

Features:
- Axial Leads for Low Profile Mounting
- Suitable for Consumer Electronic Equipment
- High Reliability and High Ripple Current
- PVC Insulating Sleeve



Specifications:
- Lead Length: 2.250±0.250"
- Capacitance Range: 1µF to 5,000µF
- Voltage Range: 16WVDC to 450WVDC
- Operating Temperature: –40°C to +85°C

Mfg. Part No.	Cap. (µF)	Tol.	D x L (in.)	Stock No.	Price Each 1-24	Price Each 25-49
VOLTAGE: 75 VDC						
TC75251	250	+75%, -10%	0.750 x 1.625"	14F374	33.36	28.39
TC75501	500	+75%, -10%	0.875 x 2.125"	14F375	18.00	15.32
VOLTAGE: 150 VDC						
TC493	100	+50%, -10%	0.750 x 1.625"	16F1704	34.36	29.24
TC495	150	+50%, -10%	0.875 x 1.625"	72K6734	36.92	31.41
TC499	300	+50%, -10%	1.000 x 2.125"	16F1706	25.62	21.80
VOLTAGE: 250 VDC						
TC55	20	+50%, -10%	0.750 x 1.125"	16F1709	34.53	29.38
VOLTAGE: 350 VDC						
TC69	100	+50%, -10%	0.875 x 2.625"	67F3000	37.18	31.64
VOLTAGE: 450 VDC						
TC72	10	+50%, -10%	0.875 x 1.375"	14F178	39.32	33.46
TC75	20	+50%, -10%	0.875 x 1.625"	72K6739	36.34	30.92
TC77	30	+50%, -10%	1.00 x 1.625"	14F397	51.24	43.61
TC79	50	+50%, -10%	1.00 x 2.125"	14F183	39.34	33.48
TC807	100	+50%, -10%	1.00 x 3.125"	67F3003	36.84	31.35

(7143)

ALUMINUM ELECTROLYTIC CAPACITOR ENGINEERING KIT

RoHS Compliant Available

MALLORY
Cornell Dubilier Electronics, Inc.

Mfg. part no. TC151A. Assorted **mfg. part no. TC** axial aluminum electrolytics to 450VDC. Values 10µF to 1000µF. Housed in a Mallo-bin® 15-drawer stackable cabinet.

Mfg. Part No.	Stock No.	Price 1-4
TC151A KIT	81F9282	335.24

Mfg. part no. SKSEK151 contains 72 miniature radial aluminum electrolytics in 85°C and 105°C, from 1µF to 2200µF. Voltages from 16 to 400 VDC.

Mfg. Part No.	Stock No.	Price Each 1-4
SKSEK151	95B9280	102.23

(7144)

021 ASM SERIES AXIAL STANDARD MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

VISHAY.

Features
- Polarized Capacitors with Non-Solid Electrolyte
- High CV per Unit Volume
- Charge- and Discharge-Proof
- Insulated Case

Specifications
- Tolerance: ±20%
- Operating Temperature: -40°C to +85°C
- *2222 & MAL2 prefix part numbers are the same*

Mfg. Part No.	Cap. (µF)	Leakage Current* (µA)	Ripple Current** (mA)	D x L (mm)	Stock No.	Price Each 1-9	Price Each 10-49
VOLTAGE: 6.3VDC							
MAL202133471E3	470	10	260	8 x 11	95C1153	1.05	0.98
VOLTAGE: 10 VDC							
MAL202134101E3	100	6	100	4.5 x 10	95C1154	0.78	0.73
MAL202134221E3	220	8.4	160	6 x 10	95C1156	0.83	0.78
MAL202134331E3	330	11	230	8 x 11	14M8257	1.05	0.98
MAL202134471E3	470	13	310	6.5 x 18	14M8258	1.08	1.01
MAL202134102E3	1000	24	550	10 x 18	95C1155	1.45	1.36
MAL202114682E3	6800	140	1590	18 x 30	95C1136	3.71	3.48
MAL202114153E3	15000	304	2250	21 x 38	14M6649	3.05	2.90
VOLTAGE: 16 VDC							
MAL202135689E3	68	6.2	90	4.5 x 10	95C1165	0.79	0.74
MAL202135151E3	150	8.8	140	6 x 10	95C1160	0.83	0.78
MAL202135221E3	220	11	210	8 x 11	95C1161	1.09	1.02
MAL202135331E3	330	15	290	6.5 x 18	95C1162	1.05	0.98
MAL202135471E3	470	19	380	8 x 18	95C1163	1.28	1.20
MAL202135681E3	680	26	500	10 x 18	14M8260	1.45	1.36
MAL202190518E3	1000	36	660	10 x 25	97C7970	1.82	1.71
MAL202115102E3	1000	36	700	10 x 30	14M6652	2.08	1.95
MAL202115152E3	1500	52	950	12.5 x 30	14M8250	2.30	2.16
MAL202115222E3	2200	74	1040	12.5 x 30	18C4447	2.70	2.53
MAL202115332E3	3300	110	1290	15 x 30	14M8251	3.31	3.11
MAL202115103E3	10000	324	2170	21 x 38	18C4446	6.47	6.06
VOLTAGE: 25 VDC							
MAL202136479E3	47	6.4	80	4.5 x 10	95C1169	0.80	0.75
MAL202136101E3	100	9	150	6 x 10	95C1166	0.86	0.81
MAL202136151E3	150	12	210	6.5 x 18	14M8261	1.05	0.98
MAL202136221E3	220	15	250	6.5 x 18	97C7966	1.09	1.02
MAL202136331E3	330	21	340	8 x 18	14M8262	1.21	1.13
MAL202136471E3	470	28	450	10 x 18	95C1168	1.46	1.37
MAL202190528E3	680	38	560	10 x 25	95C1198	1.85	1.73
MAL202116102E3	1000	54	840	12.5 x 30	18C4449	2.39	2.24
MAL202116222E3	2200	114	1180	15 x 30	18C4450	3.28	3.08
MAL202116332E3	3300	169	1470	18 x 30	95C1141	3.82	3.58
MAL202116682E3	6800	344	2070	21 x 38	95C1143	6.14	5.76
VOLTAGE: 40 VDC							
MAL202137229E3	22	5.8	60	4.5 x 10	14M8263	0.78	0.73
MAL202137479E3	47	7.8	110	6 x 10	95C1174	0.88	0.82
MAL202190538E3	100	12	170	8 x 11	14M6659	1.09	1.02
MAL202137101E3	100	12	190	6.5 x 18	95C1170	1.11	1.04
MAL202137151E3	150	16	250	8 x 18	97C7968	1.27	1.19
MAL202137221E3	220	22	330	10 x 18	95C1171	1.43	1.34
MAL202137331E3	330	30	430	10 x 25	95C1173	1.75	1.64

➤CONTINUED➤

021 ASM SERIES AXIAL STANDARD MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

Mfg. Part No.	Cap. (µF)	Leakage Current* (µA)	Ripple Current** (mA)	D x L (mm)	Stock No.	Price Each 1-9	Price Each 10-49
VOLTAGE: 40 VDC							
● MAL202190515E3	470	42	520	10 x 25	95C1196	1.86	1.74
● MAL202117471E3	470	42	590	10 x 30	14M6653	2.09	1.96
● MAL202117681E3	680	58	800	12.5 x 30	14M8253	2.31	2.17
● MAL202117152E3	1500	124	1120	15 x 30	95C1144	3.10	2.90
● MAL202117222E3	2200	180	1390	18 x 30	18C4453	4.09	3.84
● MAL202117332E3	3300	268	1810	18 x 38	18M4043	5.06	4.75
● MAL202117472E3	4700	380	1940	21 x 38	18C4455	6.83	6.40
VOLTAGE: 63 VDC							
● MAL202138477E3	0.47	4.1	8	4.5 x 10	95C1183	0.68	0.64
● MAL202138108E3	1	4.3	12	4.5 x 10	95C1176	0.71	0.67
● MAL202138228E3	2.2	4.4	21	4.5 x 10	95C1180	0.73	0.68
● MAL202138338E3	3.3	4.6	25	4.5 x 10	95C1182	0.71	0.67
● MAL202138478E3	4.7	5.3	31	4.5 x 10	95C1184	0.71	0.67
● MAL202138109E3	10	5.9	50	4.5 x 10	95C1177	0.73	0.68
● MAL202138159E3	15	6.8	55	4.5 x 10	95C1179	0.75	0.71
● MAL202138229E3	22	8.2	90	6 x 10	95C1181	0.78	0.73
● MAL202138339E3	33	10	100	6 x 10	97C7969	0.86	0.81
● MAL202190542E3	47	10	140	8 x 11	95C1201	1.05	0.98
● MAL202138479E3	47	13	150	6.5 x 18	14M8264	1.09	1.02
● MAL202190545E3	68	13	160	8 x 11	95C1202	1.05	0.98
● MAL202138689E3	68	17	170	6.5 x 18	14M8265	1.05	0.98
● MAL202138101E3	100	23	250	8 x 18	17M9377	1.21	1.13
● MAL202138151E3	150	32	320	10 x 18	95C1178	1.38	1.29
● MAL202190512E3	220	32	430	10 x 25	14M8268	1.75	1.64
● MAL202118221E3	220	46	480	10 x 30	18C4457	2.04	1.91
● MAL202118331E3	330	63	610	12.5 x 30	14M8254	2.31	2.17
● MAL202118471E3	470	90	700	12.5 x 30	18C4459	2.66	2.50
● MAL202118681E3	680	130	890	15 x 30	14M6656	3.14	2.94
● 222202118102	1000	193	1170	18 x 30	14M6654	3.84	3.60
● MAL202118152E3	1500	281	1530	18 x 38	29M7233	4.98	4.67
● MAL202118222E3	2200	836	1780	21 x 38	14M6655	6.59	6.18
VOLTAGE: 100 VDC							
● MAL202139108E3	1	4.2	14	4.5 x 10	95C1187	0.72	0.68
● MAL202139228E3	2.2	4.4	20	4.5 x 10	95C1189	0.68	0.64
● MAL202139478E3	4.7	4.9	30	4.5 x 10	95C1192	0.75	0.71
● MAL202139109E3	10	6	65	6 x 10	95C1188	0.82	0.77
● MAL202190548E3	15	7	77	8 x 11	14M8269	1.05	0.98
● MAL202190552E3	22	8.4	95	8 x 11	14M8270	1.10	1.04
● MAL202139229E3	22	8.4	100	6.5 x 18	14M8266	1.05	0.98
● MAL202139339E3	33	10.6	120	6.5 x 18	14M8267	1.11	1.04
● MAL202139479E3	47	13.4	160	8 x 18	95C1193	1.25	1.18
● MAL202139689E3	68	17.6	220	10 x 18	95C1194	1.38	1.29
● MAL202190532E3	100	24	300	10 x 25	95C1199	1.82	1.71
● MAL202119101E3	100	24	340	10 x 30	21M5204	2.00	1.88
● MAL202119221E3	220	48	560	12.5 x 30	14M6657	2.57	2.41
● MAL202119331E3	330	70	740	15 x 30	14M8255	3.17	2.98
● MAL202119471E3	470	98	980	18 x 30	18C4463	4.09	3.83
● MAL202119681E3	680	140	1260	18 x 38	14M8256	5.32	4.99
● MAL202119102E3	1000	204	1470	21 x 38	26M8365	6.79	6.37

*after 5 minutes **@100 Hz, 85°C
(62992)

TVA SERIES ATOM® ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

VISHAY.

Features
- Metal Casing with Thermoplastic Outer Sleeve

Specifications
- Mfg. Part No. TVA1720: Single End with Flexible 8" Leads
- Operating Temperature:
  Under 100VDC: -40°C to +85°C
  100VDC: -20°C to +85°C
  Over 500VDC: -20°C to +65°C

Applications
- Consumer Electronics
- Speaker Crossover Networks

DIMENSIONS

Case Size	Dia.	Length	Case Size	Dia.	Length	Case Size	Dia.	Length
BA	0.250"	0.500"	FH	0.485"	1.500"	JJ	1.000"	1.625"
BB	0.250"	0.687"	FK	0.485"	1.750"	JK	1.000"	1.875"
CB	0.312"	0.687"	GH	0.625"	1.500"	JL	1.000"	2.125"
CC	0.312"	0.812"	GK	0.625"	1.750"	JN	1.000"	2.375"
DC	0.375"	0.812"	GJ	0.750"	1.625"	JP	1.000"	2.625"
DD	0.375"	0.937"	HG	0.875"	1.375"	JR	1.000"	2.875"
DF	0.375"	1.250"	HJ	0.875"	1.625"	JW	1.000"	3.875"
DH	0.375"	1.500"	HK	0.875"	1.875"	KP	1.125"	2.625"

CONTINUED

TVA SERIES ATOM® ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

Case Size	Dia.	Length	Case Size	Dia.	Length	Case Size	Dia.	Length
EF	0.438"	1.250"	HL	0.875"	2.125"	LS	1.250"	3.125"
EH	0.438"	1.500"	JB	1.000"	3.375"	MT	1.375"	3.625"

Mfg. Part No.	Cap. (µF)	Case Size	Stock No.	Price Each 1-9	Price Each 10-49
VOLTAGE: 16 VDC					
● TVA1160-E3	100	CB	65K2200	3.39	2.91
VOLTAGE: 25 VDC					
● TVA1204-E3	10	BA	65K2207	3.33	3.08
● TVA1205-E3	25	BA	65K2208	3.46	3.20
● TVA1206-E3	50	BB	65K2209	3.49	2.99
● TVA1207-E3	100	CC	65K2211	3.58	3.07
VOLTAGE: 50 VDC					
● TVA1300-E3	1	BA	65K2218	3.33	3.08
● TVA1301-E3	2	BA	65K2219	3.51	3.25
● TVA1303-E3	5	BA	65K2220	3.46	3.20
● TVA1305-E3	15	BB	65K2223	3.35	2.87
● TVA1305.5-E3	20	BB	65K2222	3.52	3.02
● TVA1306-E3	25	BB	65K2224	3.52	3.02
● TVA1308-E3	50	CC	65K2225	3.63	3.11
● TVA1310-E3	100	DC	65K2226	3.81	3.28
● TVA1311-E3	150	DD	65K2228	4.37	3.76
● TVA1312-E3	250	DH	65K2230	4.81	4.13
● TVA1315-E3	500	FH	65K2231	6.18	5.30
● TVA1316-E3	1000	GK	65K2232	8.42	7.22
● TVA1318-E3	1500	HL	65K2235	17.87	16.36
VOLTAGE: 100 VDC					
● TVA1346-E3	100	EH	65K2237	5.72	4.90
VOLTAGE: 150 VDC					
● TVA1414-E3	50	EH	65K2249	5.72	4.90
● TVA1420-E3	100	GK	65K2251	8.12	6.96
VOLTAGE: 250 VDC					
● TVA1512-E3	50	HG	65K2262	17.06	15.63
VOLTAGE: 350 VDC					
● TVA1608-E3	20	GK	65K2267	8.12	6.96
● TVA1620-E3	100	JP	65K2269	19.72	18.05
VOLTAGE: 450 VDC					
● TVA1711-E3	30	HK	65K2278	18.49	16.93
● TVA1712-E3	40	HL	65K2279	17.83	16.32
● TVA1718-E3	100	LS	65K2282	26.37	24.14
VOLTAGE: 500 VDC					
● TVA1903-E3	10	...	70M6551	15.27	13.98
● TVA1908-E3	40	JN	65K2287	20.46	18.74
VOLTAGE: 600 VDC					
● TVA1966-E3	20	JW	65K2289	28.88	26.22

(7092)

39D SERIES AXIAL LEAD COMPUTER-GRADE ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

VISHAY.

Features:
- Designed for applications requiring greatest possible capacitance in small physical case sizes
- Offers lower capacitance values in smaller sizes with axial leads than original Type 36D can-type capacitors
- Welds at all critical anode and cathode terminals
- Pressure-sensitive safety vent

Specifications:
- Operating Temp. Range: -20°C to +85°C
- Useful life: 500 hours @ 85°C

SERIES 39D SIZE CODE (INCLUDES INSULATION)

Case Size	D x L	Case Size	D x L	Case Size	D x L
FL	0.687 × 2.25"	HE	0.937 × 1.25"	JP	1.062 × 2.75"
FJ	0.687 × 1.75"	HL	0.937 × 2.25"	JS	1.062 × 3.25"
GJ	0.812 × 1.75"	HP	0.937 × 2.75"	JT	1.062 × 3.75"
GL	0.812 × 2.25"	JE	1.062 × 1.25"	...	...
GP	0.812 × 2.75"	JL	1.062 × 2.25"	...	...

Mfg. Part No.	Cap. (µF)	Tol.	Case Size	Price Each Stock No.	Price Each 1-9	Price Each 10-49
VOLTAGE: 25 VDC, 30 VDC SURGE						
● 39D507G025HE6-E3	500	+75%, -10%	HE	65K2947	16.81	15.39
39D108G025GL6	1000	+75%, -10%	GL	18F2638	14.83	13.58
39D228G025HP6	2200	+75%, -10%	HP	18F2639	16.15	14.78
VOLTAGE: 40 VDC, 50 VDC SURGE						
39D507G040GJ6	500	+75%, -10%	GJ	66C8045	14.54	13.31

CONTINUED

39D SERIES AXIAL LEAD COMPUTER-GRADE ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 50 VDC, 65 VDC SURGE

Mfg. Part No.	Cap. (µF)	Tol.	Case Size	Price Each Stock No.	1-9	10-49
39D507G050GL6	500	+75%, -10%	GL	18F2651	15.68	14.35
39D118G050HP6	1100	+75%, -10%	HP	18F2652	16.92	15.49
39D238G050JT6	2300	+75%, -10%	JT	18F2653	19.40	17.77
VOLTAGE: 75 VDC, 95 VDC SURGE						
39D257G075JE6	250	+75%, -10%	JE	73C7025	16.80	15.38
39D108G075JP6	1000	+75%, -10%	JP	89F2741	17.90	16.38
VOLTAGE: 250 VDC, 300 VDC SURGE						
39D506F250JE6	50	+75%, -10%	JE	18F2660	18.19	16.65
39D107F250HL6	100	+75%, -10%	HL	73C9297	17.10	15.67
39D207F250JP6	200	+75%, -10%	JP	18F2662	18.55	16.99
39D307F250JT6	300	+75%, -10%	JT	73C6729	20.86	19.10

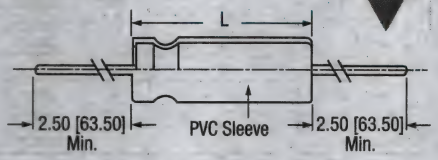
Note: Previous version (Mfg. Part No. with 4 suffix) had clear sleeves. Current version has blue sleeve.
(7107)

53D SERIES GENERAL PURPOSE ALUMINUM ELECTROLYTIC CAPACITORS

VISHAY.

Features
- Service Life: Greater Than 10 Years in Normal Applications
- Tinned Copper Terminals and Maximum Volumetric Efficiency
- PVC Sleeves

Specifications
- Tolerance: 16-63 VDC: -10%, +75%; 200, 400 VDC: -10%, +50%
- Operating Temperature: -40°C to +85°C



CASE DIMENSIONS

Case Size	Dia.	L	Case Size	Dia.	L
GE	0.760″	1.141″	JL	1.010″	2.141″
GJ	0.760″	1.641″	JP	1.010″	2.641″
HJ	0.885″	1.641″	JS	1.010″	3.141″
HL	0.885″	2.141″	KT	1.135″	3.641″

16 VDC

Mfg. Part No.	Cap. (µF)	Ripple (mA_{rms})	Case Size	Stock No.	Price Each 1-9
53D462G016GJ6	4600	...	GJ	44F2343	15.53
53D103G016HL6	10000	2840	HL	44F2321	16.46
25 VDC					
53D282G025GJ6	2800	1650	GJ	44F2335	15.63
53D432G025HJ6	4300	2170	HJ	44F2341	15.56
53D113G025JP6	11000	4230	JP	44F2326	17.83
35 VDC					
53D212G035GJ6	2100	1590	GJ	44F2330	15.17
53D472G035HL6	4700	2780	HL	44F2345	16.50
53D832G035JP6	8300	4110	JP	89F2739	18.57
50 VDC					
53D102G050GE6	1000	950	GE	89F2729	15.69
53D282G050HL6	2800	2540	HL	44F2336	16.14
53D502G050JP6	5000	3810	JP	44F2348	18.34
63 VDC					
53D102G063GJ6	1000	1400	GJ	44F2320	14.97
53D222G063HL6	2200	2210	HL	44F2332	15.85
53D402G063JP6	4000	...	JP	44F2340	19.18
200 VDC					
53D351F200JL6	350	1000	JL	44F2338	17.87
53D461F200JP6	460	1250	JP	44F2342	18.84
400 VDC					
53D470F400HJ6	47	...	HJ	44F2344	16.96
53D101F400JL6	100	560	JL	89F2728	20.16
53D151F400JS6	150	820	JS	89F2734	22.76

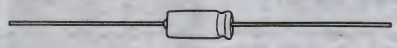
(7100)

NEW PRODUCTS ADDED DAILY
See the newest products, technologies and suppliers on our website.
(196560)

516D SERIES AXIAL ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

VISHAY.



Features:
- Solvent Resistant Construction
- High CV per case size

Specifications:
- Tolerance: ±20%
- Operating Temperature: -40°C to +85°C

TYPE 516D CASE SIZE (INCLUDES INSULATION)

Case Size	Dia. × Length	Case Size	Dia. × Length	Case Size	Dia. × Length
JL	0.20 × 0.47″	MN	0.31 × 0.79″	PS	0.51 × 1.24″
LL	0.25 × 0.47″	NP	0.39 × 0.83″	QS	0.63 × 1.24″
LM	0.25 × 0.63″	NR	0.39 × 1.02″	...	...
MM	0.31 × 0.63″	PR	0.51 × 1.02″	...	...

VOLTAGE: 16 VDC

Mfg. Part No.	Cap. (µF)	Case Size	Ripple (mA_{rms})	Stock No.	Price Each 1-9
516D477M016MN6AE3	470	MN	430	83K6387	1.37
VOLTAGE: 25 VDC					
516D476M025LL6AE3	47	LL	100	83K6372	1.16
516D107M025LM6AE3	100	LM	170	83K6263	1.19
516D337M025MN6AE3	330	MN	380	83K6347	1.38
516D477M025NR6AE3	470	NR	510	83K6389	2.06
516D108M025PR6AE3	1000	PR	900	83K6282	1.99
VOLTAGE: 35 VDC					
516D226M035JL6AE3	22	JL	70	83K6297	0.95
516D476M035LM6AE3	47	LM	120	83K6374	0.96
516D107M035MM6AE3	100	MM	210	83K6265	1.17
516D227M035MN6AE3	220	MN	340	83K6313	1.38
516D108M035PS6AE3	1000	PS	1060	83K6284	2.39
VOLTAGE: 50 VDC					
516D105M050JL6AE3	1	JL	10	83K6237	0.77
516D106M050JL6AE3	10	JL	50	83K6249	1.08
516D226M050LL6AE3	22	LL	85	83K6299	0.99
516D107M050MM6AE3	100	MM	220	83K6267	1.36
516D227M050NP6AE3	220	NP	410	83K6315	1.69
516D477M050PR6AE3	470	PR	730	83K6394	2.07
516D108M050QS6AE3	1000	QS	1260	83K6286	3.85
VOLTAGE: 63 VDC					
516D106M063JL6AE3	10	JL	60	83K6251	0.99
516D226M063LL6AE3	22	LL	120	83K6301	1.16
516D336M063LM6AE3	33	LM	150	83K6340	1.12
516D476M063MM6AE3	47	MM	190	83K6378	1.12
516D107M063MN6AE3	100	MN	340	83K6269	1.38
516D227M063NR6AE3	220	NR	560	83K6317	2.24
516D477M063PS6AE3	470	PS	970	83K6396	2.71

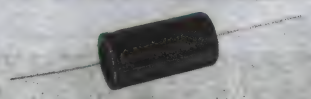
(7105)

GENERAL PURPOSE AXIAL LEAD ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

multicomp

Specifications
- Operating Temperature:
  –40°C to +105°C for 6.3-100VDC
  –25°C to +105°C for 160-450VDC
- Rated Life: 2,000 hours @ +105°C



VOLTAGE: 16 VDC

Mfg. Part No.	Cap. (uF)	Cap. Tol.	D x L (mm)	Stock No.	Price Each 1-24	25-49	50-99
MCAX16V106K6X13	10	± 10%	6 x 13	97M3984	0.32	0.27	0.24
MCAX16V257K8X16	250	± 20%	8 x 16	97M3986	0.44	0.37	0.33
VOLTAGE: 25 VDC							
MCAX25V106K6X13	10	± 10%	6 x 13	97M3988	0.35	0.29	0.26
MCAX25V226M6X13	22	± 20%	6 x 13	97M3995	0.31	0.26	0.23
MCAX25V256K6X13	25	± 10%	6 x 13	97M3997	0.34	0.28	0.25
MCAX25V476M6X13	47	± 20%	6 x 13	97M3998	0.32	0.27	0.24
MCAX25V506M6X13	50	± 20%	6 x 13	97M5049	0.45	0.38	0.34
MCAX25V107K8X13	100	± 10%	8 x 13	97M3989	0.41	0.35	0.31
MCAX25V107M8X16	100	± 20%	8 x 16	97M3991	0.47	0.39	0.35
MCAX25V207K8X16	200	± 10%	8 x 16	97M3994	0.51	0.43	0.38
MCAX25V227M8X16	220	± 20%	8 x 16	97M3996	0.47	0.40	0.35
MCAX25V257M8X16	250	± 20%	8 x 16	97M5048	0.52	0.44	0.39
MCAX25V477M10X21	470	± 20%	10 x 21	97M3999	0.57	0.49	0.43
MCAX25V507M10X21	500	± 20%	10 x 21	97M5050	0.64	0.54	0.48
MCAX25V108M13X22	1000	± 20%	13 x 22	97M3992	0.91	0.77	0.68
VOLTAGE: 35 VDC							
MCAX35V106M6X13	10	± 20%	6 x 13	97M4002	0.32	0.27	0.24
MCAX35V476K6X13	47	± 10%	6 x 13	97M5052	0.32	0.27	0.24
MCAX35V107M8X16	100	± 20%	8 x 16	97M4003	0.46	0.39	0.34

CONTINUED

GENERAL PURPOSE AXIAL LEAD ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

Mfg. Part No.	Cap. (uF)	Cap. Tol.	D x L (mm)	Stock No.	Price Each 1-24	25-49	50-99
VOLTAGE: 40 VDC							
● MCAX40V227M10X21	220	± 20%	10 x 21	97M4009	0.68	0.58	0.51
● MCAX40V687M16X28	680	± 20%	16 x 28	97M4013	1.61	1.35	1.18
● MCAX40V108M16X32	1000	± 20%	16 x 32	97M4007	2.16	1.84	1.63
● MCAX40V228M18X36	2200	± 20%	18 x 36	97M4010	2.28	1.94	1.71
● MCAX40V478M20X36	4700	± 20%	20 x 36	97M4012	3.49	2.97	2.58
VOLTAGE: 50 VDC							
● MCAX50V105K6X13	1	± 10%	6 x 13	97M4015	0.31	0.26	0.23
● MCAX50V205K6X13	2	± 10%	6 x 13	97M4021	0.32	0.27	0.24
● MCAX50V106M6X13	10	± 20%	6 x 13	97M5060	0.32	0.27	0.24
● MCAX50V156K6X13	15	± 10%	6 x 13	97M4020	0.34	0.29	0.25
● MCAX50V206K6X13	20	± 10%	6 x 13	97M4022	0.34	0.28	0.25
● MCAX50V226M6X13	22	± 20%	6 x 13	97M4023	0.32	0.27	0.24
● MCAX50V256M6X13	25	± 20%	6 x 13	97M5063	0.48	0.41	0.36
● MCAX50V476M8X16	47	± 20%	8 x 16	97M4027	0.44	0.38	0.33
● MCAX50V506K8X16	50	± 10%	8 x 16	97M4028	0.42	0.35	0.31
● MCAX50V107K8X16	100	± 10%	8 x 16	97M4017	0.46	0.39	0.35
● MCAX50V157M10X21	150	± 20%	10 x 21	97M5062	0.67	0.57	0.50
● MCAX50V108M16X32	1000	± 20%	16 x 32	97M4018	2.04	1.74	1.53
● MCAX50V108M16X38	1000	± 20%	16 x 38	97M5061	1.89	1.63	1.42
● MCAX50V508K22X42	5000	± 10%	22 x 42	97M4030	6.02	5.10	4.49
VOLTAGE: 63 VDC							
● MCAX63V105M6X13	1	± 20%	6 x 13	97M4031	0.32	0.27	0.24
● MCAX63V225M6X13	2.2	± 20%	6 x 13	97M4035	0.32	0.27	0.24
● MCAX63V106M6X13	10	± 20%	6 x 13	97M4032	0.34	0.28	0.25
● MCAX63V226M6X13	22	± 20%	6 x 13	97M4036	0.34	0.29	0.25
● MCAX63V476M8X16	47	± 20%	8 x 16	97M4041	0.49	0.41	0.36
● MCAX63V107M10X21	100	± 20%	10 x 21	97M4033	0.55	0.47	0.41
● MCAX63V227M13X22	220	± 20%	13 x 22	97M4037	0.92	0.78	0.68
● MCAX63V337M13X27	330	± 20%	13 x 27	97M4039	1.21	1.04	0.89
● MCAX63V108M16X36	1000	± 20%	16 x 36	97M4034	2.03	1.73	1.53
● MCAX63V228M20X36	2200	± 20%	20 x 36	97M4038	3.73	3.18	2.78
VOLTAGE: 150 VDC							
● MCAX150V106K10X21	10	± 10%	10 x 21	97M3983	1.02	0.87	0.76
● MCAX150V506M13X27	50	± 20%	13 x 27	97M5045	1.36	1.16	1.00
VOLTAGE: 350 VDC							
● MCAX350V106M10X21	10	± 20%	10 x 21	97M5053	0.87	0.74	0.64
● MCAX350V107M18X36	100	± 20%	18 x 36	97M5054	4.34	3.67	3.23
VOLTAGE: 450 VDC							
● MCAX450V205M10X21	2	± 20%	10 x 21	97M5056	0.83	0.70	0.62
● MCAX450V805M13X25	8	± 20%	13 x 25	97M5059	1.38	1.18	1.02
● MCAX450V106M13X25	10	± 20%	13 x 25	97M5055	1.41	1.21	1.04
● MCAX450V206M13X32	20	± 20%	13 x 32	97M5057	2.04	1.74	1.53
● MCAX450V226M16X32	22	± 20%	16 x 32	97M4014	1.98	1.71	1.49
● MCAX450V406M18X36	40	± 20%	18 x 36	97M5058	4.33	3.70	3.26

(163994)

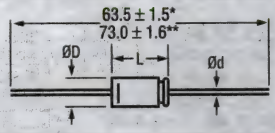
(197417)

AML 138 AXIAL MINIATURE LONG-LIFE ELECTROLYTIC CAPACITORS

RoHS Compliant Available

VISHAY.

Applications:
- Industrial, Automotive, EDP and Telecommunications
- Smoothing, Filtering, Buffering in SMPS; Coupling, Decoupling, Timing
- Portable and Mobile Equipment (Small Size, Low Mass)
- Standby Applications
- Low Mounting Height Boards
- Vibration and Shock Resistant



* Case ØD xL = 6.3mm x 12.7mm and 7.7mm x 12.7mm
** Case ØD xL = 6.5mm x 18mm and 10mm x 25mm

Polarized aluminum electrolytic capacitors, non-solid. Axial leads, cylindrical aluminum case, with a blue sleeve (case ∅6.3 x 12.7mm and 7.7 x 12.7mm are molded with flame-retardant plastic material). Taped versions up to case ∅15 x 30mm available for automatic insertion. Charge- and discharge-proof. Long useful life: 2,000 to 10,000 hours at +105°C, high reliability. High ripple current capability. Miniaturized, high CV-product per unit volume. Tolerance on C_R: ±20%. Category temperature: -40°C to +105°C. *2222 & MAL2 prefix part numbers are the same.*

Mfg. Part No.	Cap. (µF)	Max. Leakage Current After 5 Min. (µA)	Ripple (mA_{rms})	Dimensions (mm) L	∅D	Stock No.	Price Each 1-9
VOLTAGE: 6.3V							
● MAL213833101E3	100	99	5.3	12.7	6.3	14M6712	2.10
● MAL213833471E3	470	250	9.9	18	6.5	95C1350	0.86
● MAL213833102E3	1000	430	17	18	10	95C1347	2.46
VOLTAGE: 10V							
● MAL213834471E3	470	300	13	18	8	95C1354	1.95
● MAL213814682E3	6800	1980	140	38	18	14M6689	5.75
VOLTAGE: 16V							
● MAL213835229E3	22	4.7	58	12.7	6.3	95C1357	2.21
● MAL213835479E3	47	5.5	83	12.7	6.3	95C1359	2.21
● MAL213835101E3	100	7.2	130	12.7	7.7	14M6718	2.41
● MAL213835221E3	220	11	230	18	8	15M2057	2.03
● MAL213835471E3	470	19	360	18	10	95C1358	2.56
● MAL213815102E3	1000	36	630	30	10	14M6690	2.76
● MAL213815222E3	2200	74	1090	30	15	14M6692	3.82
● MAL213815472E3	4700	150	1480	30	18	14M6694	5.98
● MAL213815682E3	6800	220	1930	38	18	14M6695	7.43
● MAL213815103E3	10000	320	2100	38	21	14M6691	10.64
VOLTAGE: 25V							
● MAL213836109E3	10	4.5	46	12.7	6.3	95C1360	2.18
● MAL213836229E3	22	5.1	61	12.7	6.3	95C1362	2.18
● MAL213836339E3	33	5.7	74	12.7	6.3	95C1363	2.21
● MAL213836479E3	47	6.4	96	12.7	7.7	95C1364	2.41
● MAL213836101E3	100	9.0	160	18	6.5	97C7978	1.91
● MAL213836221E3	220	15	270	18	10	14M6719	2.59
● MAL213836471E3	470	28	440	25	10	14M6720	3.12
● MAL213816681E3	680	38	580	30	10	14M6698	2.22
● MAL213816102E3	1000	54	790	30	12.5	18C4654	3.12
● MAL213816152E3	1500	79	1020	30	15	14M6696	3.83
● MAL213816222E3	2200	110	1320	30	18	18C4655	4.77
● MAL213816332E3	3300	170	1720	38	18	14M6697	5.94
● MAL213816472E3	4700	240	1840	38	18	26M8367	8.18
40V							
● MAL213837339E3	33	6.6	91	12.7	7.7	95C1367	0.89
● MAL213837479E3	47	7.8	120	18	6.5	14M6721	1.90
● MAL213837101E3	100	12	180	18	8	95C1365	2.03
● MAL213837221E3	220	22	350	25	10	95C1366	2.96
● MAL213817331E3	330	30	490	30	10	14M6700	2.49
● MAL213817471E3	470	42	650	30	12.5	14M6702	2.90
● MAL213817681E3	680	58	750	30	12.5	14M6703	3.21
● MAL213817102E3	1000	84	970	30	15	16M1409	4.01
● MAL213817222E3	2200	180	1640	38	18	28M9368	6.60
● MAL213817332E3	3300	270	1810	38	21	14M6701	8.49
VOLTAGE: 63V							
● MAL213838478E3	4.7	4.6	35	12.7	6.3	95C1372	2.21
● MAL213838109E3	10	5.3	59	12.7	7.7	95C1370	2.41
● MAL213838229E3	22	6.8	100	18	6.5	16M1410	1.88
● MAL213838479E3	47	9.9	150	18	8	97C7979	2.03
● MAL213818151E3	150	23	410	30	10	14M6704	2.45
● MAL213818221E3	220	32	560	30	12.5	14M6705	2.85
● MAL213818331E3	330	46	660	30	12.5	14M6706	3.20
● MAL213818471E3	470	63	860	30	15	18C4662	4.01
● MAL213818681E3	680	90	1130	30	18	14M6707	4.92
● MAL213818102E3	1000	130	1460	38	18	28M9369	6.30
VOLTAGE: 100V							
● MAL213839108E3	1	4.2	16	12.7	6.3	21M5205	2.10
● MAL213839109E3	10	6.0	67	18	6.5	95C1374	1.91

➤CONTINUED➤

AML 138 AXIAL MINIATURE LONG-LIFE ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 100V

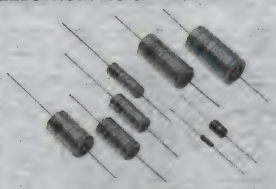
Mfg. Part No.	Cap. (µF)	Max. Leakage Current After 5 Min. (µA)	Ripple (mA_{rms})	Dimensions (mm) L	Dimensions (mm) ØD	Stock No.	Price Each 1-9
MAL213839229E3	22	8.4	100	18	8	95C1376	2.03
MAL213839479E3	47	13	190	25	10	95C1378	1.20
MAL213819689E3	68	18	300	30	10	95C1343	2.60
MAL213819101E3	100	24	410	30	12.5	18C4663	3.03
MAL213819151E3	150	34	550	30	15	14M6708	3.56
MAL213819221E3	220	48	650	30	15	14M6709	4.05
MAL213819331E3	330	70	880	30	18	95C1341	5.10
MAL213819471E3	470	98	1130	38	18	14M6710	6.43

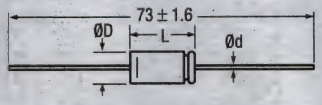
(73426)

118AHT SERIES HIGH-TEMPERATURE AXIAL ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

VISHAY.





Polarized capacitors ideal for automotive, industrial and telecommunication applications. High reliability, extra-long useful life: up to 8000 hours @125°C. Non-solid electrolyte, cylindrical aluminum case insulated with a blue sleeve. Charge and discharge proof. High CV per unit volume. *2222 & MAL2 prefix part numbers are the same.*

Mfg. Part No.	Cap. (µF)	Max. Leakage Current after 1 min. (µA)	Ripple (mA_{rms})	D x L (mm)	Stock No.	Price Each 1-9
MAL211834221E3	220	20	109	6.5 x 18	95C1233	2.86
MAL211834331E3	330	24	150	8 x 18	95C1234	2.94
MAL211814222E3	2200	136	830	12.5 x 30	18C4623	4.42
MAL211814472E3	4700	286	1350	18 x 30	18C4624	6.74
VOLTAGE: 16V						
MAL211835221E3	220	25	145	8 x 18	18M4046	3.10
MAL211835331E3	330	36	204	10 x 18	95C1237	3.08
MAL211835471E3	470	49	243	10 x 18	95C1238	3.08
MAL211815102E3	1000	100	720	12.5 x 30	14M6662	3.75
MAL211815152E3	1500	148	790	12.5 x 30	14M8272	1.70
MAL211815222E3	2200	215	1010	15 x 30	14M6663	5.38
MAL211815472E3	4700	455	1670	18 x 38	14M6664	8.74
VOLTAGE: 25V						
MAL211836101E3	100	20	102	6.5 x 18	14M8283	2.98
MAL211836221E3	220	37	196	10 x 18	14M8284	3.21
MAL211836331E3	330	54	274	10 x 25	95C1240	3.23
MAL211816471E3	470	75	490	10 x 30	14M6667	3.56
MAL211816102E3	1000	154	760	12.5 x 30	14M6665	4.68
MAL211816222E3	2200	334	1240	18 x 30	14M6666	7.19
MAL211816472E3	4700	709	1710	21 x 38	14M6668	12.41
VOLTAGE: 40V						
MAL211837479E3	47	20	89.8	6.5 x 18	14M6677	2.86
MAL211837101E3	100	28	147	8 x 18	14M8285	3.06
MAL211837151E3	150	40	207	10 x 18	14M6676	3.25
MAL211890512E3	220	57	287	10 x 25	95C1255	3.40
MAL211817221E3	220	57	390	10 x 30	18C4633	3.50
MAL211817331E3	330	83	570	12.5 x 30	95C1224	4.14
MAL211817471E3	470	117	620	12.5 x 30	18C4635	4.84
MAL211817681E3	680	167	810	15 x 30	14M8277	5.49
MAL211817102E3	1000	244	1070	18 x 30	14M6669	7.14
MAL211817152E3	1500	364	1390	18 x 38	14M8276	9.05
MAL211817222E3	2200	532	1540	21 x 38	14M6670	12.49
VOLTAGE: 63V						
MAL211838478E3	4.7	20	35.6	6.5 x 18	14M6679	2.98
MAL211838109E3	10	20	51.9	6.5 x 18	97C7972	3.04
MAL211838229E3	22	20	77	6.5 x 18	14M6678	2.95
MAL211838479E3	47	22	126	8 x 18	95C1247	3.06
MAL211890514E3	100	42	243	10 x 25	95C1256	3.43
MAL211818101E3	100	42	340	10 x 30	18C4636	3.69
MAL211818151E3	150	61	490	12.5 x 30	14M8278	4.00
MAL211818221E3	220	87	550	12.5 x 30	30M8006	4.90

CONTINUED

118AHT SERIES HIGH-TEMPERATURE AXIAL ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 63V

Mfg. Part No.	Cap. (µF)	Max. Leakage Current after 1 min. (µA)	Ripple (mA_{rms})	D x L (mm)	Stock No.	Price Each 1-9
MAL211818331E3	330	129	730	15 x 30	95C1227	5.81
MAL211818471E3	470	182	970	18 x 30	14M6672	7.22
MAL211818102E3	1000	383	1400	21 x 38	14M6671	12.55
VOLTAGE: 100V						
MAL211839478E3	4.7	20	36	6.5 x 18	14M6680	2.98
MAL211839109E3	10	20	52	6.5 x 18	95C1248	2.95
MAL211839229E3	22	20	91	8 x 18	16M2886	2.94
MAL211839339E3	33	24	140	10 x 25	95C1250	3.23
MAL211890536E3	47	33	170	10 x 25	18M4047	3.40
MAL211819479E3	47	33	240	10 x 30	14M6675	3.91
MAL211819689E3	68	45	320	12.5 x 30	95C1231	4.14
MAL211819101E3	100	64	380	12.5 x 30	18C4640	4.99
MAL211819221E3	220	136	690	18 x 30	14M6673	7.26
MAL211819471E3	470	286	1050	21 x 38	14M6674	12.76
VOLTAGE: 200V						
MAL211890538E3	2.2	20	27	6.5 x 18	17M8378	3.04
MAL211890541E3	4.7	20	46	8 x 18	14M6683	3.10
MAL211890543E3	10	20	85	10 x 25	95C1259	3.43
MAL211892159E3	15	22	150	10 x 30	26M8366	3.46
MAL211892229E3	22	31	210	12.5 x 30	18C4645	4.17
MAL211892479E3	47	61	390	18 x 30	18C4646	6.39
MAL211892689E3	68	86	500	18 x 38	14M6685	7.93
MAL211892101E3	100	124	610	21 x 38	14M6684	10.91

VOLTAGE: 10V
(63197)

MLP SERIES FLATPACK ALUMINUM ELECTROLYTIC CAPACITORS

CDE CORNELL DUBILIER

Features:
- Low-profile replacement for snap-ins
- Double the ripple capability with a heatsink
- Near-hermetic welded seal assures 50-year life
- Withstands more than 80,000 feet altitude
- 25-year shelf life

Specifications:
- Capacitance Tolerance: ±20%
- Operating Temp. Range:
  –55 °C to +85 °C up to 250 Vdc
  –40 °C to 85 °C 300 Vdc & up
- Load Life: 2,000 h @ +85 °C
- Lead Spacing: 1 in. (2.54 mm)

Dimensions

Case Code	Length in. (mm)
EK	1.5 (38.1)
EA	2 (50.8)
EB	3 (76.2)

VOLTAGE: 25 VDC

Mfg. Part No.	Cap. (µF)	ESR (mΩ)	Ripple (A)	Case Code	Stock No.	Price Each 1-9	Price Each 10-24
MLP802M025EK0A	8000	0.087	3.9	EK	85H0205	87.27	75.39
MLP203M025EB0A	20000	0.034	8.6	EB	85H0188	109.22	94.35
VOLTAGE: 35 VDC							
MLP562M035EK0A	5600	0.09	3.4	EK	39C6228	87.27	75.39
VOLTAGE: 50 VDC							
MLP442M050EK1A	4400	0.097	3.7	EK	92H2680	72.74	62.84
MLP113M050EB0A	11000	0.036	8.3	EB	25H9593	111.84	96.61
VOLTAGE: 63 VDC							
MLP222M063EK0A	2200	0.101	3.7	EK	85H0190	87.27	75.39
VOLTAGE: 80 VDC							
MLP332M080EB0A	3300	0.044	7.5	EB	85H0195	109.22	94.35
VOLTAGE: 100 VDC							
MLP272M100EB0A	2700	0.046	7.4	EB	85H0191	109.22	94.35
VOLTAGE: 200 VDC							
MLP401M200EK0A	400	0.388	1.9	EK	85H0198	87.27	75.39
MLP102M200EB1A	1000	0.158	3.8	EB	70C4214	109.22	94.35
VOLTAGE: 300 VDC							
MLP561M300EB0A	560	0.24	3.2	EB	85H0203	129.67	112.02
VOLTAGE: 400 VDC							
MLP131M400EK0A	130	1.32	1	EK	95B9938	103.60	89.50
MLP331M400EB0A	330	0.53	2.1	EB	85H0194	111.34	105.91

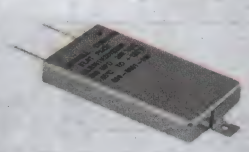
(163840)

ALUMINUM ELECTROLYTIC CAPACITORS

MLS SERIES FLATPACK, ULTRA-LONG LIFE, ALUMINUM CAPACITORS

CDE CORNELL DUBILIER

Features:
- Near-hermetic welded seal
- Stainless-steel case
- 100 years expected operating life



Specifications:
- Capacitance Tolerance: ±20%
- Operating Temp. Range: –55 °C to +125 °C
- Load Life: 2,000 h @ +125 °C

Dimensions

Case Code	Length in. (mm)
EK	1.5 (38.1)
EB	3 (76.2)

Mfg. Part No.	Cap. (µF)	ESR (mΩ)	Ripple (A)	Case Code	Stock No.	Price Each 1-9	Price Each 10-24
VOLTAGE: 40 VDC							
MLS442M040EK0A	4400	0.097	10.3	EK	16M4723	192.42	184.36
MLS113M040EB0A	11000	0.036	16.9	EB	66H5330	240.78	230.69
VOLTAGE: 60 VDC							
MLS152M060EK0A	1500	0.106	9.8	EK	09J9815	192.42	184.36
MLS332M060EB0A	3300	0.044	15.3	EB	92H1750	240.78	230.69
VOLTAGE: 75 VDC							
MLS112M075EK0A	1100	0.112	9.6	EK	43K8735	192.42	184.36
VOLTAGE: 150 VDC							
MLS401M150EK0A	400	0.388	5.1	EK	57J3937	197.04	188.78
VOLTAGE: 200 VDC							
MLS331M200EK1A	330	0.426	4.9	EK	27P7601	160.35	153.63
VOLTAGE: 250 VDC							
MLS561M250EB1A	560	0.24	6.5	EB	27P7603	246.56	236.23

(163841)

380LQ SERIES COMPACT, HIGH-RIPPLE, SNAP-IN ALUMINUM CAPACITORS

RoHS Compliant Available

CDE CORNELL DUBILIER

Features
- Compact Size: 27% Smaller and More Than 10mm Shorter Than Type 380L

Specifications
- Tolerance: ±20%
- Ripple Test: 2000 Hours at Full Load @ 85°C
- Operating Temperature:
  -40°C to +85°C for Values ≤315 VDC
  -25°C to +85°C for Values ≥350 VDC
- Load Life: 2,000 h @ full load at +85°C
- Only devices above 200V contain an end disk.

Most popular values listed. Additional values available, *go online or call.*

Mfg. Part No.	Cap. (µF)	ESR-Max. Ω @ 25°C 120Hz	Max. Ripple Current (A) @ 85°C 120Hz	Case Size DxL (mm)	Tape Cut Stock No.	Price Each 1-24	Price Each 25-99
VOLTAGE: 200 VDC (250 VDC SURGE)							
● 380LQ102M200J032	1000	0.232	3.25	25x35	59K0405	4.94	4.16
● 380LQ122M200K022	1200	0.199	3.32	30x30	59K0407	6.16	5.20
● 380LQ222M200K052	2200	0.904	1.41	30x50	59K0412	10.16	8.56
VOLTAGE: 250 VDC (350 VDC SURGE)							
● 380LQ331M250H022	330	0.737	1.60	22x30	59K0415	3.29	2.77
● 380LQ471M250H032	470	0.51	2.13	22x35	59K0421	3.83	3.23
● 380LQ102M250K032	1000	0.199	3.32	30x35	59K0406	7.00	5.90
● 380LQ122M250A032	1200	0.199	3.32	35x35	59K0408	8.46	7.13
● 380LQ222M250A052	2200	0.904	1.41	35x50	35C0838	13.41	11.29
VOLTAGE: 400 VDC (450 VDC SURGE)							
● 380LQ271M400K022	270	0.737	1.60	30x30	59K0413	5.27	4.44
● 380LQ331M400K022	330	0.603	1.82	30x30	59K0416	5.68	4.78
● 380LQ391M400K032	390	0.510	2.13	30x35	59K0418	6.48	5.45
● 380LQ471M400K042	470	0.423	2.39	30x40	59K0422	7.44	6.26
● 380LQ561M400A032	560	0.355	2.69	35x35	59K0424	8.39	7.07
● 380LQ681M400K052	680	0.293	2.96	30x50	59K0428	10.63	8.95
● 380LQ821M400A052	820	1.326	1.19	35x50	59K0431	11.51	9.70
VOLTAGE: 450 VDC (500 VDC SURGE)							
● 380LQ121M450H022	120	0.199	3.32	22x30	35C0830	3.26	2.75
● 380LQ271M450K022	270	0.737	1.60	30x30	59K0414	6.14	5.17
● 380LQ331M450K042	330	0.603	1.82	30x40	59K0417	7.69	6.47
● 380LQ391M450K042	390	0.510	2.13	30x40	59K0419	8.64	7.28
● 380LQ471M450A042	470	0.423	2.53	35x40	35C0850	10.28	8.66
● 380LQ561M450A452	560	0.355	2.82	35x45	59K0425	11.51	9.70

(68911)

380LX SERIES SNAP-IN ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

CDE CORNELL DUBILIER

Features
- Ideal for Use in Power Supplies and Motor Drives
- 10mm Terminal Spacing
- Rated Voltage: 16VDC to 500VDC
- Capacitance: 33µF to 120,000µF

Specifications
- Tolerance: ±20%
- Operating Temperature:
  -40°C to 85°C, ≤ 300VDC
  -25°C to 85°C, ≥ 315Vdc
- Load Life: 3,000 h @full load at +85°C
- Only devices above 200V contain an end disk.

Most popular values listed. Additional values available, *go online or call.*

Mfg. Part No.	Cap. (µF)	D x L (mm)	Tape Cut Stock No.	Price Each 1-24	Price Each 25-99	Price Each 100-199
VOLTAGE: 25 VDC						
● 380LX333M025K052	33000	30 x 50	59K0443	7.82	6.47	5.73
● 380LX473M025A052	47000	35 x 50	59K0452	10.07	8.34	7.38
VOLTAGE: 35 VDC						
● 380LX223M035A042	22000	35 x 40	59K0441	7.55	6.25	5.53
VOLTAGE: 50 VDC						
● 380LX332M050H022	3300	22 x 30	12C7484	2.63	2.17	1.93
● 380LX472M050J022	4700	25 x 30	12C7545	3.16	2.62	2.32
● 380LX472M050H032	4700	22 x 35	59K0450	2.99	2.47	2.19
● 380LX822M050K032	8200	30 x 35	12C7633	5.00	4.14	3.66
● 380LX153M050K052	15000	30 x 50	59K0437	7.47	6.19	5.48
● 380LX223M050A052	22000	35 x 50	12C7441	9.76	8.08	7.16
VOLTAGE: 63 VDC						
● 380LX472M063K022	4700	30 x 30	59K0451	4.29	3.55	3.15
VOLTAGE: 100 VDC						
● 380LX102M100H022	1000	22 x 30	12C7302	2.88	2.38	2.11
● 380LX472M100K052	4700	30 x 50	12C7554	9.45	8.82	7.53
● 380LX472M100A042	4700	35 x 40	12C7553	9.76	9.11	7.78
● 380LX682M100A052	6800	35 x 50	93B6940	11.81	9.77	8.65
VOLTAGE: 200 VDC						
● 380LX122M200K452	1200	30 x 45	12C7341	6.06	5.02	4.44
● 380LX152M200A042	1500	35 x 40	12C7375	8.13	6.72	5.96
● 380LX222M200A052	2200	35 x 50	59K0440	10.26	8.49	7.52
VOLTAGE: 400 VDC						
● 380LX561M400A052	560	35 x 50	98F7410	10.35	9.66	8.25
VOLTAGE: 450 VDC						
● 380LX470M450J202	47	25 x 20	12C7526	2.88	2.38	2.11
● 380LX221M450J052	220	25 x 30	59K0439	5.29	4.38	3.88

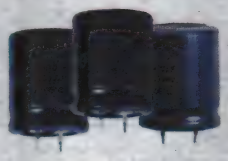
(7399)

SLPX SERIES SNAP-IN ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

CDE CORNELL DUBILIER

Features
- Small case size with high capacitance
- Best value snap-in type
- High ripple current



Specifications
- Operating Temperature Range:
  –40°C to +85°C (10 Vdc–250 Vdc)
  –25°C to +85°C (315 Vdc–450 Vdc)
- Tolerance: ±20%
- 3000 h @ full load @ +85°C
- 22 mm to 35 mm diameter, 10 mm lead spacing

Applications
- DC filtering
- Switching power supplies

Mfg. Part No.	Cap. (µF)	Max. ESR 120 Hz/25°C (Ω)	Max. Ripple 120 Hz/105°C (A_{rms})	Size D x L (mm)	Tape Cut Stock No.	Price Each 1-9	Price Each 10-49
VOLTAGE: 10 VDC (13 VDC SURGE)							
● SLPX103M016A3P3	10000	0.066	2.89	22 x 30	97M5099	1.21	0.94
VOLTAGE: 25 VDC (32 VDC SURGE)							
● SLPX103M025A5P3	10000	0.060	3.31	22 x 35	97M5100	1.70	1.32
● SLPX153M025A9P3	15000	0.040	4.21	22 x 50	97M5161	2.14	1.65
● SLPX333M025H4P3	33000	0.018	6.75	35 x 45	97M5265	4.49	3.47
VOLTAGE: 35 VDC (44 VDC SURGE)							
● SLPX472M035A3P3	4700	0.113	2.46	22 x 30	97M5302	1.39	1.07
● SLPX682M035C3P3	6800	0.078	2.89	25 x 30	97M5366	1.71	1.32
● SLPX103M035C7P3	10000	0.053	3.65	25 x 40	97M5104	2.30	1.78
● SLPX103M035E3P3	10000	0.053	3.61	30 x 30	97M5105	2.43	1.88
● SLPX223M035H4P3	22000	0.024	6.38	35 x 45	97M5215	4.46	3.45

➤CONTINUED➤

SLPX SERIES SNAP-IN ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

Mfg. Part No.	Cap. (µF)	Max. ESR 120 Hz/25°C (Ω)	Max. Ripple 120 Hz/105°C (A_{rms})	Size D x L (mm)	Tape Cut Stock No.	Price Each 1-9	Price Each 10-49
VOLTAGE: 50 VDC (63 VDC SURGE)							
SLPX222M050A1P3	2200	0.211	1.93	22 x 25	97M5194	1.16	0.90
SLPX332M050A3P3	3300	0.141	2.41	22 x 30	97M5247	1.47	1.13
SLPX332M050C1P3	3300	0.141	2.38	25 x 25	97M5248	1.51	1.17
SLPX472M050A7P3	4700	0.099	3.02	22 x 40	97M5304	1.83	1.42
SLPX472M050C3P3	4700	0.099	3.07	25 x 30	97M5305	1.91	1.48
SLPX472M050E1P3	4700	0.099	3.01	30 x 25	97M5306	2.09	1.62
SLPX682M050C7P3	6800	0.068	3.87	25 x 40	97M5369	2.46	1.90
SLPX682M050E5P3	6800	0.068	3.93	30 x 35	97M5370	2.61	2.02
SLPX103M050E7P3	10000	0.046	5.08	30 x 40	97M5106	3.29	2.55
SLPX153M050H4P3	15000	0.031	6.56	35 x 45	97M5167	4.65	3.59
SLPX223M050H9P3	22000	0.021	7.89	35 x 50	97M5216	6.40	4.95
VOLTAGE: 63 VDC (79 VDC SURGE)							
SLPX222M063A3P3	2200	0.181	2.35	22 x 30	97M5195	1.50	1.16
SLPX472M063E3P3	4700	0.085	3.54	30 x 30	97M5309	2.77	2.14
SLPX682M063E7P3	6800	0.059	4.55	30 x 40	97M5372	3.60	2.79
SLPX682M063H3P3	6800	0.059	4.44	35 x 30	97M5373	3.71	2.87
SLPX103M063E9P3	10000	0.040	5.78	30 x 50	97M5108	4.65	3.59
SLPX103M063H7P3	10000	0.040	5.57	35 x 40	97M5109	5.01	3.87
SLPX123M063E9P3	12000	0.033	6.20	30 x 50	97M5140	5.10	3.94
VOLTAGE: 80 VDC (100 VDC SURGE)							
SLPX222M080C3P3	2200	0.151	2.53	25 x 30	97M5198	2.22	1.72
SLPX472M080H3P3	4700	0.071	4.12	35 x 30	97M5312	4.26	3.29
SLPX682M080E9P3	6800	0.049	5.27	30 x 50	97M5374	5.40	4.18
VOLTAGE: 100 VDC (125 VDC SURGE)							
SLPX102M100A3P3	1000	0.265	2.02	22 x 30	97M5083	1.65	1.27
SLPX222M100C7P3	2200	0.121	3.21	25 x 40	97M5201	3.13	2.42
SLPX222M100E3P3	2200	0.121	3.17	30 x 30	97M5202	3.25	2.51
SLPX332M100E7P3	3300	0.080	4.18	30 x 40	97M5256	4.43	3.43
SLPX682M100H9P3	6800	0.039	6.01	35 x 50	97M5376	8.00	6.18
VOLTAGE: 200 VDC (250 VDC SURGE)							
SLPX102M200C4P3	1000	0.199	3.28	25 x 45	97M5089	3.49	2.70
SLPX152M200E4P3	1500	0.133	4.13	30 x 45	97M5150	5.30	4.10
VOLTAGE: 400 VDC (450 VDC SURGE)							
SLPX101M400A3P3	100	1.99	0.99	22 x 30	52R2383	1.93	1.50
SLPX221M400C3P3	220	0.9	1.54	25 x 30	52R2387	3.50	2.71
SLPX331M400E3P3	330	0.737	1.82	30 x 30	52R2392	4.92	3.81
SLPX471M400H7P3	470	0.423	2.54	35 x 40	52R2396	6.66	5.15
SLPX561M400H7P3	560	0.355	2.85	35 x 40	52R2399	7.94	6.13
SLPX821M400H9P3	820	0.24	3.4	35 x 50	52R2402	11.06	8.55
VOLTAGE: 450 VDC (500 VDC SURGE)							
SLPX680M450A1P3	68	3.903	0.71	22 x 25	52R2401	1.91	1.48
SLPX181M450E1P3	180	1.47	1.35	30 x 25	52R2386	4.05	3.13
SLPX221M450C7P3	220	1.206	1.59	25 x 40	52R2389	4.86	3.75

(164654)

LBB SERIES +85°C SNAP-MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

ILLINOIS CAPACITOR, INC.

Features:
- Extended Life
- Rugged Design
- High Ripple Current Ratings
- Large Case Size Selection

Specifications:
- Tolerance: ±20% @ 120Hz, 20°C
- Operating Temperature Range: ≤160 WVDC: -40°C to +85°C
  >160 WVDC: -25°C to +85°C

Mfg. Part No.	Cap. (µF)	ESR (Ω)	Ripple (A)	Dim. (mm) D	Dim. (mm) L	Stock No.	Price Each 1-24	Price Each 25-99
VOLTAGE: 25 WVDC								
688LBB025M2BD	6800	0.073	2.4	22	30	70K9494	2.58	2.45
109LBB025M2BE	10000	0.05	3.2	22	35	30K6616	2.20	2.08
159LBB025M2BG	15000	0.033	3.7	22	45	70K9465	2.92	2.77
229LBB025M2DE	22000	0.023	4.52	30	35	70K9472	4.06	3.85
339LBB025M2EF	33000	0.015	6.33	35	40	70K9481	7.04	6.67
VOLTAGE: 35 WVDC								
478LBB035M2CC	4700	0.088	2.42	25	25	30K6769	2.77	2.63
688LBB035M2BE	6800	0.061	2.82	22	35	82K8193	2.21	2.09
688LBB035M2DC	6800	0.061	2.97	30	25	30K6794	3.68	3.49
109LBB035M2CE	10000	0.041	3.06	25	35	30K6617	4.21	3.99
159LBB035M2CH	15000	0.028	4.54	25	50	70K9466	4.14	3.92

➤CONTINUED➤

LBB SERIES +85°C SNAP-MOUNT ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

Mfg. Part No.	Cap. (µF)	ESR (Ω)	Ripple (A)	Dim. (mm) D	Dim. (mm) L	Stock No.	Price Each 1-24	Price Each 25-99
VOLTAGE: 50 WVDC								
338LBB050M2CC	3300	0.1	2.38	25	25	30K6727	2.85	2.70
478LBB050M2BE	4700	0.071	2.72	22	35	30K6770	2.62	2.48
688LBB050M2CF	6800	0.049	3.81	25	40	30K6796	5.08	4.81
109LBB050M2DE	10000	0.033	3.35	30	35	70K9460	6.80	6.44
VOLTAGE: 63 WVDC								
478LBB063M2DD	4700	0.053	3.32	30	30	30K6771	5.24	4.97
688LBB063M2ED	6800	0.037	4.15	35	30	30K6798	5.07	4.80
109LBB063M2DG	10000	0.025	3.72	30	45	30K6619	5.91	5.60
159LBB063M2EH	15000	0.017	5.3	35	50	30K6649	10.36	9.83
VOLTAGE: 80 WVDC								
108LBB080M2BC	1000	0.249	1.5	22	25	30K6604	2.41	2.29
338LBB080M2CF	3300	0.075	3.21	25	40	30K6728	3.37	3.19
478LBB080M2ED	4700	0.053	4.09	35	30	30K6772	6.38	6.05
VOLTAGE: 100 WVDC								
228LBB100M2CF	2200	0.113	3.13	25	40	30K6689	3.26	3.09
VOLTAGE: 200 WVDC								
227LBB200M2BC	220	0.754	1.25	22	25	30K6681	2.08	1.98
337LBB200M2BD	330	0.502	1.66	22	30	30K6722	2.58	2.46
477LBB200M2BE	470	0.353	1.78	22	35	70K9486	2.34	2.21
687LBB200M2EC	680	0.366	2.92	35	25	30K6792	4.59	4.35
827LBB200M2DD	820	0.202	3.13	30	30	30K6803	4.11	3.90
108LBB200M2CH	1000	0.166	3.87	25	50	30K6605	4.78	4.54
VOLTAGE: 250 WVDC								
227LBB250M2BC	220	0.754	1.31	22	25	30K6682	2.29	2.17
108LBB250M2DG	1000	0.166	4.28	30	45	30K6608	7.40	7.01
VOLTAGE: 350 WVDC								
227LBB350M2BF	220	1.13	1.32	22	40	30K6683	4.14	3.92
VOLTAGE: 400 WVDC								
826LBB400M2BC	82	3.033	0.76	22	25	70K9497	1.91	1.81
107LBB400M2BD	100	2.487	0.91	22	30	30K6599	2.79	2.64
107LBB400M2CC	100	2.487	0.91	25	25	70K9459	2.73	2.59
227LBB400M2CF	220	1.13	1.64	25	40	30K6685	4.58	4.34
227LBB400M2EC	220	1.130	1.66	35	25	70K9470	5.54	5.25
687LBB400M2EH	680	0.366	3.85	35	50	70K9493	11.28	10.69
VOLTAGE: 450 WVDC								
157LBB450M2BG	150	1.658	1.33	22	45	70K9464	4.19	3.97
157LBB450M2CE	150	1.658	1.28	25	35	30K6642	4.22	4.00
337LBB450M2DG	330	0.754	2.35	30	45	70K9480	8.15	7.72

(84796)

LPX SERIES RADIAL SNAP-MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

MALLORY
Cornell Dubilier Electronics, Inc.

Features
- 85°C - High Voltage General Purpose
- High Capacitance
- 22-35mm Diam.; 10mm Terminal Spacing

Applications
- Ideal for Input Filter in SMPS

Specifications
- Tolerance: ±20%
- Voltage Range: 160 VDC to 450 VDC
- Capacitance Range: 56 µF to 2,700 µF
- Operating Temperature: –40° C to +85°C

Most popular values listed. Additional values available, *go online or call.*

Mfg. Part No.	Cap. (µF)	D x L (in.)	Stock No.	Price Each 1-9	Price Each 10-49
VOLTAGE: 200 VDC					
LPX821M200E5P3	820	1.181 x 1.378″	18M9162	7.01	6.68
LPX222M200H9P3	2200	1.378 x 2.000″	95F3425	20.13	19.17
VOLTAGE: 250 VDC					
LPX152M250H9P3	1500	1.38 x 2.00″	18M9156	10.03	9.55
VOLTAGE: 400 VDC					
LPX101M400A3P3	100	0.87 x 1.18″	72K6660	2.18	2.08
LPX331M400E7P3	330	1.181 x 1.575″	59K0221	9.82	9.35
LPX681M400H9P3	680	1.38 x 2.00″	95F3410	19.73	18.77
VOLTAGE: 450 VDC					
LPX471M450H9P3	470	1.38 x 2.00″	73K6076	18.47	17.59

(7162)

ALUMINUM ELECTROLYTIC CAPACITORS

ESMQ SERIES SNAP-IN ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

UNITED CHEMI-CON

Specifications:
- Capacitance range: 82 to 3,900 µF
- Voltage range: 160 to 450 VDC
- Category temperature range: -25°C to +85°C
- Standard capacitance tolerance: +/-20%
- Rated lifetime: 2,000 hours at +85°C
- Pin Spacing: 10 mm

Snap-In

Mfg. Part No.	Cap. (uF)	DxL (mm)	Stock No.	Price Each 1-199
VOLTAGE: 160 VDC				
● ESMQ161VSN152MR30S	1500	30x30	16M8451	6.02
● ESMQ161VSN182MQ45S	1800	25.4x45	16M8452	7.05
● ESMQ161VSN332MA45S	3300	35x45	16M8455	10.75
● ESMQ161VSN392MA50S	3900	35x50	16M8456	12.15
VOLTAGE: 200 VDC				
● ESMQ201VSN391MP25S	390	22x25	16M8470	3.37
● ESMQ201VSN471MP30S	470	22x30	16M8471	3.37
● ESMQ201VSN561MP30S	560	22x30	16M8473	3.87
● ESMQ201VSN821MP40S	820	22x40	16M8476	5.19
● ESMQ201VSN102MP45S	1000	22x45	16M8460	5.97
● ESMQ201VSN102MQ35S	1000	25.4x35	16M8461	5.53
● ESMQ201VSN102MR30S	1000	30x30	16M8462	7.15
● ESMQ201VSN122MQ40S	1200	25.4x40	16M8463	6.04
● ESMQ201VSN152MQ50S	1500	25.4x50	16M8464	7.05
● ESMQ201VSN182MR45S	1800	30x45	16M8466	8.30
● ESMQ201VSN222MA40S	2200	35x40	16M8467	9.12
● ESMQ201VSN222MR50S	2200	30x50	16M8468	9.60
● ESMQ201VSN272MA50S	2700	35x50	16M8469	12.66
VOLTAGE: 250 VDC				
● ESMQ251VSN391MP30S	390	22x30	16M8484	4.02
● ESMQ251VSN471MP35S	470	22x35	16M8485	4.74
● ESMQ251VSN561MQ30S	560	25.4x30	16M8488	5.25
● ESMQ251VSN821MQ40S	820	25.4x40	16M8492	6.80
● ESMQ251VSN102MQ45S	1000	25.4x45	16M8478	8.23
● ESMQ251VSN102MR35S	1000	30x35	16M8479	7.97
● ESMQ251VSN182MA45S	1800	35x45	16M8483	14.80
VOLTAGE: 350 VDC				
● ESMQ351VSN151MP25S	150	22x25	16M8496	3.39
● ESMQ351VSN271MQ30S	270	25.4x30	16M8497	5.00
● ESMQ351VSN471MR35S	470	30x35	16M8499	8.15
● ESMQ351VSN821MA45S	820	35x45	16M8502	10.02
● ESMQ351VSN821MR50S	820	30x50	16M8503	8.84
VOLTAGE: 400 VDC				
● ESMQ401VSN151MP30S	150	22x30	16M8504	3.64
● ESMQ401VSN181MP35S	180	22x35	16M8505	4.10
● ESMQ401VSN221MP40S	220	22x40	16M8506	4.91
● ESMQ401VSN221MQ30S	220	25.4x30	16M8507	4.70
● ESMQ401VSN271MP45S	270	22x45	16M8508	5.48
● ESMQ401VSN331MP50S	330	22x50	16M8512	7.09
● ESMQ401VSN331MQ40S	330	25.4x40	16M8513	5.38
● ESMQ401VSN391MQ45S	390	25.4x45	16M8514	7.95
● ESMQ401VSN471MQ50S	470	25.4x50	16M8515	7.40
● ESMQ401VSN471MR40S	470	30x40	16M8516	7.57
● ESMQ401VSN561MR45S	560	30x45	16M8517	8.55
● ESMQ401VSN681MA40S	680	35x40	16M8518	14.13
● ESMQ401VSN821MA45S	820	35x45	16M8520	11.77
VOLTAGE: 450 VDC				
● ESMQ451VSN820MP25S	82	22x25	16M8537	3.06
● ESMQ451VSN101MP25S	100	22x25	16M8522	3.54
● ESMQ451VSN121MP30S	120	22x30	16M8523	3.90
● ESMQ451VSN151MQ25S	150	25.4x25	16M8524	4.10
● ESMQ451VSN181MP40S	180	22x40	16M8525	4.83
● ESMQ451VSN181MQ30S	180	25.4x30	16M8526	4.56
● ESMQ451VSN331MQ50S	330	25.4x50	16M8531	4.39
● ESMQ451VSN391MR40S	390	30x40	16M8533	10.14

(106833)

ESMH SERIES SNAP-MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

UNITED CHEMI-CON

- Ideal for Use in Power Supply Filter Circuits
- Load Life is 2000 Hours at 85°C with Ripple Current Applied
- Not Recommended When Halogenated Cleaning Solvents are Used
- Tolerance: +/-20%
- Lead Spacing: 10 mm

Mfg. Part No.	Cap. (µF)	ESR† (Ω)	Ripple* (A_{rms})	D x L (mm)	Stock No.	Price Each 1-24	Price Each 25-49
VOLTAGE: 35 VDC; 44 VDC SURGE							
● ESMH350VNN153MQ50T	15000	0.028	4.54	25.4X50	16M7914	10.42	9.69
VOLTAGE: 50 VDC; 63 VDC SURGE							
● ESMH500VNN222MP25T	2200	0.151	1.91	22X25	16M8113	4.94	4.59
● ESMH500VNN472MP40T	4700	0.071	2.99	22X40	16M8119	6.93	6.44
● ESMH500VNN682MP50T	6800	0.049	3.81	22X50	16M8124	8.64	8.03
● ESMH500VNN103MR45T	10000	0.033	4.97	30X45	16M8106	7.80	7.26
● ESMH500VNN153MA45T	15000	0.022	6.44	35X45	16M8110	15.04	13.99
● ESMH500VNN223MA63T	22000	0.013	7.23	35X63	16M8114	19.79	18.41
VOLTAGE: 63 VDC; 79 VDC SURGE							
● ESMH630VNN123MA45T	12000	0.021	6.19	35X45	16M8189	17.76	16.52
VOLTAGE: 80 VDC; 100 VDC SURGE							
● ESMH800VNN392MR35T	3900	0.064	3.57	30X35	16M8254	9.83	9.14
● ESMH800VNN472MQ50T	4700	0.053	4.05	25.4X50	16M8257	11.05	10.27
● ESMH800VNN682MA40T	6800	0.037	5.13	35X40	16M8261	15.12	14.06
● ESMH800VNN822MA45T	8200	0.03	5.83	35X45	16M8262	16.09	14.96
● ESMH800VNN103MA50T	10000	0.025	6.63	35X50	16M8249	12.71	11.81
● ESMH800VRT223MB80T	22000	0.011	11.62	40X80	21M5973	37.14	34.55
VOLTAGE: 100 VDC; 125 VDC SURGE							
● ESMH101VNN472MR50T	4700	0.511	5.11	30X50	16M7734	10.11	9.39
VOLTAGE: 200 VDC; 250 VDC SURGE							
● ESMH201VNN471MP35T	470	0.353	1.78	22X35	88K2942	7.22	6.72
● ESMH201VNN102MR40T	1000	0.166	2.95	30X40	88K2963	7.96	7.40
● ESMH201VNN222MA50T	2200	0.113	4.92	35X50	16M7817	13.81	12.84
VOLTAGE: 400 VDC; 450 VDC SURGE							
● ESMH401VNN101MP30T	100	2.486	0.9	22X30	16M7978	7.09	6.59
● ESMH401VNN331MA30T	330	0.753	1.87	35X30	16M8000	8.88	8.27
VOLTAGE: 450 VDC; 500 VDC SURGE							
● ESMH451VNN101MP35T	100	2.486	0.93	22X35	16M8045	7.96	7.40
● ESMH451VNN181MA25T	180	1.381	1.33	35X25	16M8056	7.34	6.63
● ESMH451VNN331MA40T	330	0.753	2	35X40	16M8065	19.06	17.73
● ESMH451VNN331MR50T	330	0.753	2.01	30X50	16M8069	14.77	13.73

†@+20°C, 120Hz *@+85°C, 120Hz
(7386)

80D SERIES SNAP MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

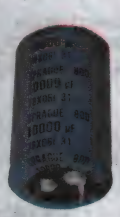
RoHS Compliant Available

VISHAY.

Features
- Snap-Lock Terminals for Economical Solder Assembly to PC Boards
- High-Frequency Characteristics and Parametric Stability up to 100kHz
- Metal Encased with Thermoplastic Outer Insulating Sleeve and Polymer Seat

Applications
- Input/Output Filter Capacitors in Switching Power Supplies
- Other Industrial/Commercial Applications

Specifications
- Tolerance: -10%, +30%
- Life Validation Test: 2000 Hours @ +85°C
- Operating Temperature: -40°C to +85°C



Mfg. Part No.	Cap. (µF)	D x L (in.)	Stock No.	Price Each 1-9	Price Each 10-49
VOLTAGE: 16 WVDC, 20 VDC SURGE					
● 80D103P016JC2DE3	10k	1.00 x 1.38"	65K3074	8.75	7.25
VOLTAGE: 25 WVDC, 30 VDC SURGE					
● 80D682P025KB2DE3	6.8k	1.18 x 1.18"	65K3099	12.11	10.45
● 80D103P025JE2DE3	10k	1.00 x 2.00"	65K3075	10.36	8.59
● 80D153P025KE2DE3	15k	1.18 x 2.00"	65K3081	11.69	9.69
VOLTAGE: 35 WVDC, 44 VDC SURGE					
● 80D332P035KA2DE3	3.3k	1.18 x 1.00"	65K3088	8.38	6.94
● 80D472P035KB2DE3	4.7k	1.18 x 1.18"	65K3094	10.04	8.32
● 80D682P035JE2DE3	6.8k	1.00 x 2.00"	65K3100	9.47	7.85
● 80D103P035KE2DE3	10k	1.18 x 2.00"	65K3076	12.40	10.27
● 80D123P035KE2DE3	12k	1.38 x 1.38"	65K3079	12.51	10.36

➤CONTINUED➤

80D SERIES SNAP MOUNT ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 50 WVDC, 63 VDC SURGE

Mfg. Part No.	Cap. (µF)	D x L (in.)	Stock No.	Price Each 1-9	Price Each 10-49
80D332P050JD2DE3	3.3k	1.00 x 1.57″	65K3089	9.67	8.01
80D332P050KB2DE3	3.3k	1.18 x 1.18″	65K3090	9.17	7.59
80D472P050JE2DE3	4.7k	1.18 x 1.57″	65K3095	10.11	8.38
80D682P050KE2DE3	6.8k	1.18 x 1.97″	65K3101	13.36	11.07
VOLTAGE: 63 WVDC, 79 VDC SURGE					
80D222P063KB2DE3	2.2k	1.18 x 1.18″	65K3084	10.32	8.55
80D472P063KE2DE3	4.7k	1.18 x 1.97″	65K3096	13.67	11.33
VOLTAGE: 80 WVDC, 100 VDC SURGE					
80D392P080KE2DE3	3.9k	1.18 x 2.00″	65K3091	13.97	11.58
VOLTAGE: 100 WVDC, 125 VDC SURGE					
80D222P100KE2DE3	2.2k	1.18 x 2.00″	65K3085	13.67	11.33
VOLTAGE: 200 WVDC, 250 VDC SURGE					
80D151P200JA2DE3	150	1.00 x 1.00″	65K3080	7.70	6.38
80D221P200KA2DE3	220	1.18 x 1.00″	65K3082	12.01	9.95
80D102P200ME2DE3	1k	1.38 x 2.00″	65K3073	18.57	17.00
VOLTAGE: 250 WVDC, 300 VDC SURGE					
80D101P250JA2DE3	100	1.00 x 1.00″	65K3072	9.28	7.67

(7057)

SLP SERIES SNAP-IN ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

CDE CORNELL DUBILIER

Features
- Small case size with high capacitance
- Best value snap-in type
- High ripple current

Specifications
- Operating Temperature Range:
  –40°C to +105°C (10 Vdc–100 Vdc)
  –25°C to +105°C (160 Vdc–450 Vdc)
- Tolerance: ±20%
- 3000 h ripple load life at rated voltage @ +105°C
- 22 mm to 35 mm diameter, 10 mm lead spacing

Applications
- DC filtering
- Switching power supplies

VOLTAGE: 25 VDC (32 VDC SURGE)

Mfg Part No.	Cap. (µF)	Max. ESR 120 Hz/25°C (Ω)	Max. Ripple 120 Hz/105°C (A_{rms})	Size D x L (mm)	Stock No.	Price Each 1-9	Price Each 10-49
SLP153M025C4P3	15000	0.040	3.60	25 x 45	97M5479	2.65	2.00
VOLTAGE: 35 VDC (44 VDC SURGE)							
SLP472M035C1P3	4700	0.113	2.20	25 x 25	97M5623	1.72	1.29
SLP103M035C7P3	10000	0.053	3.04	25 x 40	97M5430	2.84	2.13
SLP223M035H9P3	22000	0.024	5.48	35 x 50	97M5532	5.50	4.13
VOLTAGE: 50 VDC (63 VDC SURGE)							
SLP332M050C3P3	3300	0.141	2.00	25 x 30	97M5568	1.95	1.47
SLP472M050C5P3	4700	0.099	2.43	25 x 35	97M5626	2.52	1.90
VOLTAGE: 63 VDC (79 VDC SURGE)							
SLP222M063C3P3	2200	0.181	2.00	25 x 30	97M5515	2.08	1.57
SLP332M063E3P3	3300	0.121	2.50	30 x 30	97M5571	2.88	2.17
SLP682M063H7P3	6800	0.059	3.84	35 x 40	97M5691	5.05	3.80
VOLTAGE: 100 VDC (125 VDC SURGE)							
SLP681M100A1P3	680	0.390	1.09	22 x 25	97M5664	1.88	1.41
SLP102M100C1P3	1000	0.265	1.45	25 x 25	97M5410	2.52	1.90
SLP222M100C4P3	2200	0.121	2.53	25 x 45	97M5519	4.71	3.54
SLP472M100H4P3	4700	0.056	3.80	35 x 45	97M5633	9.15	6.88
VOLTAGE: 160 VDC (200 VDC SURGE)							
SLP331M160A1P3	330	0.603	1.20	22 x 25	97M5555	1.49	1.12
SLP471M160A3P3	470	0.423	1.55	22 x 30	97M5607	1.73	1.30
VOLTAGE: 200 VDC (250 VDC SURGE)							
SLP221M200A1P3	220	0.905	0.99	22 x 25	97M5508	1.51	1.14
SLP331M200A3P3	330	0.603	1.25	22 x 30	97M5557	1.93	1.45
SLP561M200C5P3	560	0.355	1.70	25 x 35	97M5644	2.73	2.05
SLP681M200C5P3	680	0.293	1.72	25 x 35	97M5672	3.21	2.42
SLP821M200C4P3	820	0.243	2.10	25 x 45	97M5700	3.68	2.77
SLP102M200E7P3	1000	0.199	2.30	30 x 40	97M5417	4.28	3.22
SLP122M200E4P3	1200	0.166	2.65	30 x 45	97M5445	5.31	4.00
VOLTAGE: 250 VDC (300 VDC SURGE)							
SLP221M250A3P3	220	0.905	1.00	22 x 30	97M5511	1.85	1.40
SLP331M250A3P3	330	0.603	1.15	22 x 30	97M5562	2.49	1.88
SLP331M250A7P3	330	0.603	1.30	22 x 40	97M5563	2.43	1.83
SLP102M250E9P3	1000	0.199	2.70	30 x 50	97M5421	6.58	4.95
SLP152M250H9P3	1500	0.144	3.61	35 x 50	97M5473	9.25	6.96
VOLTAGE: 400 VDC (450 VDC SURGE)							
SLP470M400A1P3	47	7.058	0.42	22 x 25	52R2415	1.43	1.08
SLP151M400C3P3	150	2.212	0.83	25 x 30	52R2405	3.28	2.47

➤CONTINUED➤

SLP SERIES SNAP-IN ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 400 VDC (450 VDC SURGE)

Mfg Part No.	Cap. (µF)	Max. ESR 120 Hz/25°C (Ω)	Max. Ripple 120 Hz/105°C (A_{rms})	Size D x L (mm)	Stock No.	Price Each 1-9	Price Each 10-49
SLP391M400H5P3	390	0.851	1.6	35 x 35	52R2414	7.58	5.70
SLP681M400H4P3	680	0.488	2.34	35 x 45	52R2421	12.23	9.20
VOLTAGE: 450 VDC (500 VDC SURGE)							
SLP101M450A3P3	100	3.317	0.65	22 x 30	52R2403	3.31	2.49
SLP221M450E3P3	220	1.508	1.05	30 x 30	52R2408	5.34	4.02
SLP271M450H5P3	270	1.229	1.28	35 x 35	52R2410	6.30	4.74
SLP331M450H5P3	330	1.005	1.37	35 x 35	52R2412	7.39	5.56
SLP471M450H4P3	470	0.706	1.77	35 x 45	52R2417	9.55	7.19
SLP471M450H9P3	470	0.706	1.85	35 x 50	52R2418	9.90	7.45

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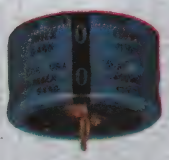
381LX SERIES SNAP-IN ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

CDE CORNELL DUBILIER



Specifications:
- Voltage: 10 VDC to 450 VDC
- Capacitance: 35µF to 150,000µF
- Tolerance: ±20%
- Operating Temperature:
  -40°C to +105°C for Values ≤ 315 VDC;
  -35°C to +105°C for Values ≥ 350 VDC
- Load Life: 3,000 h @full load at +105°C
- Only devices above 200V contain an end disk.

Applications:
- Power Supplies and Motor Drives

VOLTAGE: 16 VDC

Mfg. Part No.	Cap. (µF)	D x L (mm)	Stock No.	Tape Cut Price Each 1-24	Tape Cut Price Each 25-99	Tape Cut Price Each 100-249
381LX103M016J012	10000	25 x 25	12C7837	2.81	2.59	2.35
381LX153M016J032	15000	25 x 35	12C7907	3.75	3.46	3.13
VOLTAGE: 25 VDC						
381LX153M025J452	15000	25 x 35	64K2286	4.32	3.98	3.60
VOLTAGE: 35 VDC						
381LX472M035J012	4700	25 x 25	12C8098	2.46	2.27	2.05
381LX223M035A052	22000	35 x 50	12C7982	6.66	6.14	5.56
VOLTAGE: 63 VDC						
381LX472M063A022	4700	35 x 30	12C8103	5.36	4.94	4.48
381LX682M063A042	6800	35 x 40	59K0481	5.59	5.16	4.67
VOLTAGE: 200 VDC						
381LX221M200H012	220	22 x 25	59K0467	2.35	2.16	1.96
381LX331M200J012	330	25 x 25	59K0471	2.85	2.63	2.38
381LX391M200H022	390	22 x 30	63H1122	2.83	2.61	2.36
381LX471M200H032	470	22 x 35	59K0474	3.05	2.82	2.55
381LX681M200K022	680	30 x 30	59K0480	3.96	3.65	3.31
381LX122M200K052	1200	30 x 50	16F7814	6.58	6.07	5.49
381LX222M200A052	2200	35 x 50	12C7974	11.19	10.32	9.34
VOLTAGE: 250 VDC						
381LX152M250A052	1500	35 x 50	59K0466	10.69	9.86	8.93
VOLTAGE: 400 VDC						
381LX470M400H012	47	22 x 25	59K0473	2.76	2.56	2.31
VOLTAGE: 450 VDC						
381LX680M450J022	68	25 x 30	59K0477	3.30	3.04	2.75
381LX151M450K022	150	30 x 30	59K0464	4.56	4.20	3.81
381LX221M450A042	220	35 x 40	60K7124	8.15	7.52	6.81
381LX331M450A042	330	35 x 40	59K0472	8.50	7.84	7.10
381LX471M450A052	470	35 x 45	59K0476	10.16	9.37	8.48

(7291)

(211462)

ALUMINUM ELECTROLYTIC CAPACITORS

GN SERIES SNAP-IN ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

nichicon

Features:
- High endurance
- One rank smaller case sized than GU series

Specifications:
- Operating temperature: -25°C to +105°C
- Voltage range: 500V
- Tolerance: ±20%
- Load life of 3000 hours at 105°C

VOLTAGE: 500 VDC

Mfg. Part No.	Cap. (µF)	Tol.	D x L (mm)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● LGN2H560MELZ25	56	± 20%	22 x 25	27T9828	3.68
● LGN2H680MELA25	68	± 20%	25 x 25	27T9829	4.01
● LGN2H680MELZ30	68	± 20%	22 x 30	27T9830	3.87
● LGN2H820MELZ35	82	± 20%	22 x 35	27T9831	4.60
● LGN2H101MELA30	100	± 20%	25 x 30	27T9810	4.77
● LGN2H101MELB25	100	± 20%	30 x 25	27T9811	5.22
● LGN2H101MELZ40	100	± 20%	22 x 40	27T9812	4.90
● LGN2H121MELA35	120	± 20%	25 x 35	27T9813	5.71
● LGN2H121MELB30	120	± 20%	30 x 30	27T9814	5.63
● LGN2H121MELZ45	120	± 20%	22 x 45	27T9815	5.86
● LGN2H151MELA45	150	± 20%	25 x 45	27T9816	6.77
● LGN2H151MELC25	150	± 20%	35 x 25	27T9817	7.37
● LGN2H151MELZ50	150	± 20%	22 x 50	27T9818	6.65
● LGN2H181MELA50	180	± 20%	25 x 50	27T9819	7.59
● LGN2H181MELB35	180	± 20%	30 x 35	27T9820	7.83
● LGN2H181MELC30	180	± 20%	35 x 30	27T9821	8.00
● LGN2H221MELB45	220	± 20%	30 x 45	27T9822	9.69
● LGN2H221MELC35	220	± 20%	35 x 35	27T9823	10.21
● LGN2H271MELB50	270	± 20%	30 x 50	27T9824	11.28
● LGN2H271MELC40	270	± 20%	35 x 40	27T9825	11.11
● LGN2H331MELC45	330	± 20%	35 x 45	27T9826	13.64
● LGN2H391MELC50	390	± 20%	35 x 50	27T9827	16.20

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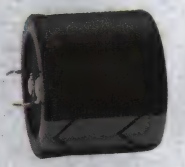
LP SERIES SNAP MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

CDE CORNELL DUBILIER



Features
- 105°C - Long Life
- 22 to 35mm Diam.; 10mm Terminal Spacing
- Stable ESR

Application
- Ideal for Switchable Power Supplies

Specifications
- Tolerance: ± 20%
- Voltage Range: 16 VDC to 250 VDC
- Capacitance Range: 100 µF to 47,000 µF
- Operating Temperature: –40°C to +105°C

Most popular values listed. Additional values available, *go online or call.*

Case Size	Dia.	Length	Case Size	Dia.	Length	Case Size	Dia.	Length
A1	0.867″	1.000″	E5	1.181″	1.378″	...	...	...
C1	1.000″	1.000″	E7	1.181″	1.575″	H7	1.378″	1.575″
C5	1.000″	1.38″	...	...	...	...	...	...
E1	1.181″	1.000″	E9	1.181″	2.000″	H9	1.378″	2.000″
E3	1.181″	1.181″	H3	1.378″	1.181″	...	...	...

VOLTAGE: 16 VDC

Mfg. Part No.	Cap. (µF)	Case Size	Stock No.	Price Each 1-9	Price Each 10-49
● LP472M016A1P3	4700	A1	34H3104	1.36	1.18
● LP153M016H3P3	15000	H3	19M1077	3.36	2.91
VOLTAGE: 25 VDC					
● LP103M025H3P3	10000	H3	18M9165	3.70	3.21
● LP223M025H9P3	22000	H9	72K6663	5.66	4.91
VOLTAGE: 35 VDC					
● LP272M035C1P3	2700	C1	44F1604	3.29	2.87
VOLTAGE: 50 VDC					
● LP122M050A1P3	1200	A1	73K4034	1.10	0.96
● LP152M050A1P3	1500	A1	44F1611	1.53	1.33
● LP222M050A5P3	2200	A1	08C0042	2.72	2.36
● LP332M050E3P3	3300	E3	44F1614	3.27	2.85
● LP472M050H3P3	4700	H3	72K6665	3.70	3.21
● LP682M050E9P3	6800	E9	72K6666	7.78	6.75
VOLTAGE: 63 VDC					
● LP682M063H9P3	6800	H9	72K6667	7.82	6.80

➤CONTINUED➤

LP SERIES SNAP MOUNT ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 200 VDC

Mfg. Part No.	Cap. (µF)	Case Size	Stock No.	Price Each 1-9	Price Each 10-49
● LP151M200C1P3	150	C1	34H3100	1.99	1.73
● LP471M200H3P3	470	H3	18M9171	3.89	3.38
● LP102M200H9P3	1000	H9	18M9164	7.45	6.46

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GU SERIES SNAP-IN ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

nichicon

Features
- Withstanding 3000 hours application of rated ripple current at 105°C
- Anti-solvent feature

Specifications
- Temperature Range: –40 to +105°C (16 to 250V) -25 to +105°C (315 to 450V)
- Tolerance: ±20% at 120Hz
- Voltage Range: 16 to 450V
- Capacitance Range: 47 to 47000µF

VOLTAGE: 200 VDC

Mfg. Part No.	Cap. (µF)	DxL (mm)	Pitch (mm)	Stock No.	Price Each 1-9
● LGU2D221MELY	220	20x25	10	54K5922	2.13
● LGU2D471MELZ	470	22x35	10	54K5935	3.35
● LGU2D102MELC	1000	35x30	10	54K5916	5.73
VOLTAGE: 250 VDC					
● LGU2E151MELY	150	20x25	10	54K5950	2.21
● LGU2E681MELB	680	30x40	10	54K5974	5.52
VOLTAGE: 400 VDC					
● LGU2G560MELY	56	20x25	10	54K6037	2.16
● LGU2G820MELZ	82	22x25	10	54K6041	2.55
● LGU2G101MELA	100	25x25	10	54K6010	2.82
● LGU2G121MELZ	120	22x35	10	54K6015	3.22
● LGU2G151MELA	150	25x30	10	19K7867	3.79
● LGU2G221MELB	220	30x30	10	54K6024	4.45
● LGU2G331MELB	330	30x40	10	54K6031	6.46
● LGU2G471MELB	470	30x50	10	54K6035	8.65
● LGU2G471MELC	470	35x40	10	54K6036	8.39
VOLTAGE: 450 VDC					
● LGU2W470MELY	47	20x25	10	54K6090	2.70
● LGU2W101MELA	100	25x30	10	54K6070	3.92
● LGU2W471MELC	470	35x50	10	54K6091	12.61

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KMH SERIES SNAP-MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

UNITED CHEMI-CON

Features:
- Large Capacitance
- High CV
- High Ripple Current
- Max. Temperature: +105°C
- Load life: 2,000 hours at +105°C
- **Not** solvent proof

VOLTAGE: 6.3 VDC; 8 VDC SURGE

Mfg. Part No.	Cap. (µF)	ESR† (Ω)	Ripple* (A_{rms})	D x L (mm)	Stock No.	Price Each 1-24	Price Each 25-49
● EKMH6R3VSN273MQ35T	27000	0.037	2.57	25.4 x 35	66K7008	8.02	6.19
● EKMH6R3VSN473MR40T	47000	0.021	3.69	30 x 40	16M6821	10.89	8.40
VOLTAGE: 10 VDC; 13 VDC SURGE							
● EKMH100VSN333MQ45T	33000	0.025	3.3	25.4 x 45	16M6253	9.04	6.98
● EKMH100VSN683MA50T	68000	0.012	5.46	35 x 50	16M6260	14.88	11.48
VOLTAGE: 16 VDC; 20 VDC SURGE							
● EKMH160VSN103MQ25T	10000	0.066	1.97	25.4 x 25	16M6328	6.84	5.28
● EKMH160VSN123MQ30T	12000	0.055	2.24	25.4 x 30	16M6330	7.35	5.67
● EKMH160VSN153MQ35T	15000	0.044	2.58	25.4 x 35	16M6332	7.63	5.89
● EKMH160VSN223MQ45T	22000	0.03	3.32	25.4 x 45	16M6339	8.61	6.64
● EKMH160VSN223MR35T	22000	0.03	3.29	30 x 35	16M6340	6.66	5.14
● EKMH160VSN333MR45T	33000	0.02	4.3	30 x 45	66K7003	12.30	9.49
● EKMH160VNN473MA45T	47000	0.014	5.43	35 x 45	28M8597	14.05	10.84
● EKMH160VSN473MA45T	47000	0.014	5.43	35 x 45	16M6347	14.49	11.18
VOLTAGE: 25 VDC; 32 VDC SURGE							
● EKMH250VSN103MQ35T	10000	0.05	2.42	25.4 x 35	16M6450	7.59	5.85
● EKMH250VSN123MQ40T	12000	0.041	2.74	25.4 x 40	16M6453	8.17	6.30
● EKMH250VSN153MQ45T	15000	0.033	3.15	25.4 x 45	16M6456	9.04	6.98
● EKMH250VSN153MR35T	15000	0.033	3.13	30 x 35	16M6457	10.31	7.95

➤CONTINUED➤

KMH SERIES SNAP-MOUNT ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

Mfg. Part No.	Cap. (µF)	ESR† (Ω)	Ripple* (A_{rms})	D x L (mm)	Stock No.	Price Each 1-24	Price Each 25-49
VOLTAGE: 25 VDC; 32 VDC SURGE							
EKMH250VSN183MQ50T	18000	0.028	3.54	25.4 x 50	16M6459	10.31	7.96
EKMH250VSN183MR40T	18000	0.028	3.54	30 x 40	16M6460	11.04	8.52
EKMH250VSN273MA45T	27000	0.018	4.73	35 x 45	16M6463	13.90	10.73
VOLTAGE: 35 VDC; 44 VDC SURGE							
EKMH350VSN472MQ25T	4700	0.088	1.8	25.4 x 25	16M6564	6.76	5.22
EKMH350VSN562MQ30T	5600	0.074	1.96	25.4 x 30	16M6566	7.29	5.63
EKMH350VSN682MQ35T	6800	0.061	2.23	25.4 x 35	16M6569	8.12	6.27
EKMH350VSN822MQ40T	8200	0.051	2.23	25.4 x 40	16M6572	8.36	6.45
EKMH350VNN103MQ45T	10000	0.041	2.87	25.4 x 45	16M6519	9.24	7.13
EKMH350VNN103MR35T	10000	0.041	2.9	30 x 35	16M6521	10.57	8.16
EKMH350VSN123MQ50T	12000	0.035	3.24	25.4 x 50	16M6550	10.02	7.73
EKMH350VSN153MA35T	15000	0.028	3.67	35 x 35	16M6552	13.17	10.16
EKMH350VSN223MA50T	22000	0.019	4.92	35 x 50	16M6557	15.65	12.08
VOLTAGE: 50 VDC; 63 VDC SURGE							
EKMH500VSN272MQ25T	2700	0.123	1.7	25.4 x 25	16M6787	6.91	5.33
EKMH500VSN332MQ30T	3300	0.1	1.89	25.4 x 30	16M6791	7.54	5.82
EKMH500VSN392MQ35T	3900	0.085	2.18	25.4 x 35	16M6793	8.07	6.23
EKMH500VSN472MQ35T	4700	0.071	2.39	25.4 x 35	16M6799	8.88	6.86
EKMH500VSN562MR35T	5600	0.059	2.76	30 x 35	16M6806	10.55	8.14
EKMH500VSN682MR40T	6800	0.049	3.3	30 x 40	16M6810	11.49	8.86
EKMH500VSN822MA35T	8200	0.04	3.55	35 x 35	16M6811	12.83	9.90
EKMH500VSN822MR45T	8200	0.04	3.6	30 x 45	16M6812	12.74	9.83
EKMH500VSN103MR50T	10000	0.033	4.04	30 x 50	16M6780	14.75	11.38
EKMH500VSN103MA40T	10000	0.033	4.03	35 x 40	60K8430	14.96	11.54
EKMH500VSN123MA45T	12000	0.028	4.55	35 x 45	16M6782	15.75	12.15
VOLTAGE: 63 VDC; 79 VDC SURGE							
EKMH630VSN222MQ30T	2200	0.113	1.74	25.4 x 30	16M6858	7.34	5.67
EKMH630VSN272MQ35T	2700	0.092	1.99	25.4 x 35	16M6861	8.12	6.27
EKMH630VSN472MQ50T	4700	0.053	2.86	25.4 x 50	16M6872	6.81	5.26
EKMH630VSN472MR40T	4700	0.053	2.86	30 x 40	16M6873	10.74	8.29
EKMH630VSN562MR45T	5600	0.044	3.32	30 x 45	16M6876	12.40	9.57
EKMH630VSN682MA40T	6800	0.037	3.64	35 x 40	16M6877	13.76	10.62
EKMH630VSN682MR50T	6800	0.037	3.65	30 x 50	43K5523	13.51	10.43
EKMH630VSN822MA45T	8200	0.03	3.9	35 x 45	16M6878	15.07	11.63
EKMH630VSN103MA50T	10000	0.025	4.4	35 x 50	16M6848	17.61	13.59
VOLTAGE: 100 VDC; 125 VDC SURGE							
EKMH101VSN102MP35T	1000	0.249	1.5	22 x 35	16M6288	5.62	4.34
EKMH101VSN102MQ30T	1000	0.249	1.51	25.4 x 30	63K2294	7.54	5.82
EKMH101VNN122MQ35T	1200	0.207	1.71	25.4 x 35	84K9829	8.41	6.49
EKMH101VSN122MQ35T	1200	0.207	1.71	25.4 x 35	16M6292	8.12	6.27
EKMH101VSN152MQ40T	1500	0.166	1.98	25.4 x 40	16M6296	9.39	7.25
EKMH101VSN222MR40T	2200	0.113	2.7	30 x 40	16M6303	12.06	9.30
EKMH101VSN272MR45T	2700	0.092	2.88	30 x 45	16M6305	12.69	9.79
EKMH101VSN332MA40T	3300	0.075	3.27	35 x 40	16M6307	15.07	11.63
EKMH101VSN332MR50T	3300	0.075	3.28	30 x 50	16M6309	9.85	7.60
EKMH101VSN392MA45T	3900	0.064	3.67	35 x 45	16M6310	16.82	12.98
EKMH101VSN472MA50T	4700	0.053	3.8	35 x 50	16M6312	21.80	16.82
VOLTAGE: 200 VDC; 250 VDC SURGE							
EKMH201VNN331MQ25T	330	0.502	1.21	25.4 x 25	16M6395	7.59	5.85
EKMH201VNN471MQ30T	470	0.353	1.41	25.4 x 30	16M6398	6.03	4.65
EKMH201VNN681MQ40T	680	0.244	1.74	25.4 x 40	16M6405	10.45	8.07
EKMH201VNN122MR50T	1200	0.138	2.6	30 x 50	16M6381	15.26	11.78
VOLTAGE: 250 VDC; 300 VDC SURGE							
EKMH251VNN331MQ30T	330	0.502	1.2	25.4 x 30	16M6483	8.90	6.87
EKMH251VNN471MQ40T	470	0.353	1.57	25.4 x 40	16M6488	7.51	5.79
EKMH251VNN102MA40T	1000	0.249	2.3	35 x 40	34M3833	19.35	14.93
VOLTAGE: 400 VDC; 450 VDC SURGE							
EKMH401VNN271MR40T	270	0.921	1.21	30 x 40	16M6618	12.64	9.75
EKMH401VNN331MR45T	330	0.753	1.39	30 x 45	16M6627	10.07	7.77
EKMH401VNN471MA45T	470	0.529	1.74	35 x 45	16M6631	19.01	14.67
EKMH401VNN102MA80T	1000	0.249	3.01	35 x 80	04M7107	41.05	31.68
VOLTAGE: 450 VDC; 500 VDC SURGE							
EKMH451VNN221MQ50T	220	1.13	0.98	25.4 x 50	16M6710	12.54	9.68
EKMH451VNN221MA30T	220	1.13	1	35 x 30	16M6708	9.71	7.49
EKMH451VNN271MA35T	270	0.921	1.17	35 x 35	16M6714	15.60	12.04
EKMH451VNN331MA40T	330	0.753	1.38	35 x 40	16M6717	12.10	9.34
EKMH451VNN821MA80T	820	0.303	2.73	35 x 80	16M6730	26.64	20.55

†@+20°C, 120Hz
*@+105°C, 120Hz
(7319)

DCM SERIES SCREW TERMINAL ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

CDE CORNELL DUBILIER

Applications
- Power Supply Filters
- Energy Storage Situations

Specifications
- Operating Temperature: –40°C to +85°C
- Tolerance: -10%, +75% up to 100 VDC; -10%, +50% for 160 VDC and Up

Mounting brackets ordered separately, *on pages 499-500*

See dimension table in DCMC series module, *on pages 495-496*

Mfg. Part No.	Cap. (µF)	ESR Max. (Ω) @120Hz	Ripple (A) @85°C 120Hz	Case Size	Stock No.	Price Each
VOLTAGE: 50 VDC						
DCM413U050DC2B	41000	0.018	14	DC	59K0181	60.32
VOLTAGE: 75 VDC						
DCM472U075AH2B	4700	0.07	4.2	AH	59K0184	27.02
VOLTAGE: 100 VDC						
DCM243U100DC2B	24000	0.016	13	DC	68K6398	93.68
VOLTAGE: 200 VDC						
DCM742T200DF2B	7400	0.038	10.2	DF	60K5392	85.68
VOLTAGE: 250 VDC						
DCM202T250BC2A	2000	0.52	5.8	BC	59K0175	67.42
VOLTAGE: 450 VDC						
DCM202T450CD2D	2000	0.067	5.961	CD	96B2204	104.40
DCM242T450DF2B	2400	0.36	10.58	DF	59K0176	123.55

(7385)

DCMC SERIES SCREW TERMINAL ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

CDE CORNELL DUBILIER

Features
- Low ESR
- Handle Large Ripple Currents
- Thermal-Pak™ Extended Cathode Construction Helps Assure Cool Operation with Heat Flow from the Capacitor Element to the Can
- Ideal for Power Supplies and UPS Systems

Specifications
- Tolerance: -10%, +75% up to 100 VDC; -10%, +50% for 160 VDC and Up
- Operating Temperature: –40°C to +85°C

For mounting brackets, see *on pages 499-500*

UNINSULATED CASE DIMENSIONS (mm)*

Case Size	Dia. (±0.78)	Length (±1.57)	Pitch (±0.38)	Case Size	Dia. (±0.78)	Length (±1.57)	Pitch (±0.38)
AK	34.93	41.28	12.7	DC	76.2	104.78	31.75
AA	34.93	53.98	12.7	DD	76.2	117.48	31.75
AH	34.93	66.68	12.7	DE	76.2	130.18	31.75
AC	34.93	104.78	12.7	DF	76.2	142.88	31.75
BB	50.8	79.38	22.23	DP	76.2	149.23	31.75
BC	50.8	104.78	22.23	DN	76.2	193.68	31.75
BD	50.8	117.48	22.23	DG	76.2	219.08	31.75
BF	50.8	142.88	22.23	FE	88.9	130.18	31.75
CC	63.5	104.78	28.58	FG	88.9	219.08	31.75
CF	63.5	142.88	28.58	...	...	...	...

Mfg. Part No.	Cap. (µF)	ESR (Ω)	Ripple (A)	Case Size	Stock No.	Price Each
VOLTAGE: 16 VDC						
DCMC353U016AA2B	35000	0.0265	6.1	AA	64K2260	24.71
DCMC134U016BB2B	13000	0.0105	15.4	BB	95B8754	59.48
VOLTAGE: 25 VDC						
DCMC203U025AA2B	20000	0.0236	6.5	AA	59K0145	24.06
VOLTAGE: 35 VDC						
DCMC533U035BB2B	53000	0.0159	11.6	BB	59K0159	47.09
DCMC214U035DC2B	21000	0.0052	28	DC	59K0146	125.77
VOLTAGE: 50 VDC						
DCMC103U050AA2B	10000	0.0309	5.6	AA	59K0136	24.95
DCMC163U050AB2B	16000	0.0236	7.4	AB	59K0141	29.55
DCMC263U050AC2B	26000	0.0187	10.4	AC	59K0149	38.95
DCMC383U050BB2B	38000	0.0163	11.9	BB	95B8776	52.51
DCMC603U050BC2B	60000	0.0119	13.8	BC	95B8784	71.47
DCMC154U050DC2B	15000	0.0067	23.7	DC	60K5377	150.29
DCMC244U050DP2D	24000	0.0054	30.2	DP	59K0148	158.72
VOLTAGE: 75 VDC						
DCMC143U075AC2B	14000	0.0305	8.1	AC	59K0139	34.74
DCMC303U075BC2B	30000	0.0156	12.1	BC	19C2013	59.11

➤ CONTINUED ➤

DCMC SERIES SCREW TERMINAL ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 75 VDC

Mfg. Part No.	Cap. (µF)	ESR (Ω)	Ripple (A)	Case Size	Stock No.	Price Each
● DCMC463U075BF2B	46000	0.012	15.8	BF	59K0154	80.12
● DCMC743U075DC2B	74000	0.0129	17	DC	59K0163	117.07
VOLTAGE: 100 VDC						
● DCMC203U100BC2B	20000	0.0199	10.7	BC	09J4805	77.47
DCMC163U100EC2B	16000	24.8	8	EC	26P6902	58.79
● DCMC763U100DF2B	76000	0.0112	21.3	DF	59K0164	160.62
VOLTAGE: 160 VDC						
● DCMC502T160AC2B	5000	0.0429	6.9	AC	59K0156	46.58
VOLTAGE: 200 VDC						
● DCMC152T200AH2B	1500	0.1005	3.4	AH	19C1991	29.01
● DCMC243T200DF2B	24000	0.0133	19.5	DF	95B8767	158.48
VOLTAGE: 250 VDC						
● DCMC152T250AB2B	1500	0.1005	3.4	AB	59K0140	33.90
● DCMC192T250AJ2B	1900	0.0696	5.2	AJ	59K0143	38.65
● DCMC682T250BF2B	6800	0.0212	11.9	BF	59K0161	100.63
VOLTAGE: 450 VDC						
● DCMC681T450AC2B	680	0.1695	3.4	AC	60K5379	43.03
● DCMC102T450BB2B	1000	0.137	4.3	BB	59K0135	62.21
● DCMC332T450CE2B	3300	0.0404	9.2	CE	59K0151	153.10
● DCMC562T450DF2B	5600	0.0288	13.3	DF	28H9102	169.98
DCMC822T450DG2B	8200	...	17.9	DG	26P6904	264.90

*Dimensions applicable to DCMC, DCM and 550C Series
(64073)

CGH SERIES SCREW TERMINAL ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

MALLORY
Cornell Dubilier Electronics, Inc.

Features
- High Ripple Current @ 85°C Max.
- High Reliability

Application
- Suitable for Use in Most AC Drive and UPS Applications

Specifications
- Tolerance: -10%, +50%
- Voltage Range: 250 VDC to 500 VDC
- Capacitance Range: 350 µF to 22,000 µF
- Operating Temperature: -40°C to +85°C

Most popular values listed. Additional values available, *go online or call.*

VOLTAGE: 250 VDC

Mfg. Part No.	Cap. (µF)	D x L (in.)	Stock No.	Price Each 1-9	Price Each 10-24
● CGH172T250V2L	1700	2.000 x 2.625″	69K1773	67.68	60.08
● CGH292T250V3L	2900	2.000 x 3.625″	74K3712	77.62	68.89
● CGH502T250W3L	5000	2.500 x 3.625″	95F3377	142.58	126.55
● CGH223T250X8L	22000	2.000 x 2.625″	69K1774	679.06	602.73
VOLTAGE: 450 VDC					
● CGH102T450V3L	1000	2.000 x 3.625″	69K1772	104.19	92.48
● CGH242T450W4L	2400	2.500 x 4.625″	95F3399	192.85	171.17
● CGH312T450W5L	3100	2.500 x 5.625″	69K1775	210.26	186.62
● CGH362T450X4L	3600	3.000 x 4.625″	95F3402	269.44	239.15
● CGH462T450X5L	4600	3.000 x 5.625″	69K1776	380.87	338.05

(7161)

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(196526)

CGS SERIES SCREW TERMINAL ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

MALLORY
Cornell Dubilier Electronics, Inc.

Features
- High CV Product
- Screw Terminals

Applications
- High Current Filtering or Energy Storage

Specifications
- Tolerance: 6.3 VDC to 150 VDC: -10%, +75%; 200 VDC to 450 VDC: -10%, +50%
- Capacitance Range: 75 µF to 1,500,000 µF
- Voltage Range: 6.3 to 500 VDC
- Operating Temperature: -40°C to +85°C

Mounting brackets ordered separately, go online or call. Additional values available, *go online or call for details.*

VOLTAGE: 10 VDC; 12 VDC SURGE

Mfg. Part No.	Cap. (µF)	D × L (in.)	Stock No.	Price Each 1-9	Price Each 10-24
● CGS183U010R2C	18k	1.375 × 2.125	90B2822	21.20	18.65
VOLTAGE: 16 VDC; 20 VDC SURGE					
● CGS153U016R2L	15k	2.000 × 3.625	70K9915	22.79	20.06
● CGS173U016R3C	17k	1.375 × 3.125	69K1823	21.10	18.56
● CGS243U016R3C	24k	1.375 × 3.125	69K1843	22.70	19.97
● CGS253U016R4C	25k	1.375 × 4.125	69K1847	26.37	23.20
● CGS383U016V3C	38k	2.000 × 3.125	69K1861	28.26	24.86
● CGS503U016V3C	50k	2.000 × 3.125	69K1880	30.21	26.58
● CGS553U016V3L	55k	2.000 × 3.625	69K1883	33.43	29.41
● CGS663U016V4C	66k	2.000 × 4.125	69K1895	38.43	33.80
● CGS114U016W4C	110k	2.500 × 4.125	69K1799	48.60	42.76
● CGS214U016X5R	210k	3.000 × 5.875	69K7591	74.70	65.72
VOLTAGE: 25 VDC; 30 VDC SURGE					
● CGS302U025R2C	3k	1.375 x 2.125	18C5349	21.37	18.80
● CGS562U025R3C	5.6k	1.375 × 3.125	60F3677	23.34	20.53
● CGS892U025R3C	8.9k	1.375 × 3.125	69K1906	23.70	20.85
● CGS103U025R3C	10k	1.375 × 3.125	69K1792	23.21	20.43
● CGS183U025R4C	18k	1.375 × 4.125	69K1826	26.98	23.73
● CGS473U025V4C	47k	2.000 × 4.125	69K1876	37.16	32.70
VOLTAGE: 30 VDC; 40 VDC SURGE					
● CGS802U030R3C	8k	1.375 × 3.125	50F6803	21.25	18.69
● CGS124U050X5L	12k	3.000 × 5.625	92B7606	126.65	111.42
● CGS303U030V4C	30k	2.000 × 4.125	69K1854	35.42	31.16
● CGS553U030W4C	55k	2.500 × 4.125	69K1884	46.04	40.50
● CGS104U030X5L	100k	3.000 × 5.625	50B4883	75.81	66.69
VOLTAGE: 35 VDC; 45 VDC SURGE					
● CGS103U035V2C	10k	2.000 × 2.125	73K0920	28.65	25.21
● CGS123U035R4C	12k	1.375 × 4.125	69K1803	26.71	23.50
VOLTAGE: 40 VDC; 50 VDC SURGE					
● CGS222U040R2C	2.2k	1.375 × 2.125	69K1835	21.62	19.02
● CGS272U040R2C	2.7k	1.375 × 2.125	69K1849	21.25	18.69
● CGS352U040R2C	3.5k	1.375 × 3.125	74K2455	20.87	18.36
● CGS472U040R2C	4.7k	1.375 × 2.125	69K1875	21.76	19.14
● CGS512U040R3C	5.1k	1.375 × 3.125	69K1881	24.23	21.32
● CGS602U040R3C	6k	1.375 × 3.125	69K1890	23.70	20.85
● CGS902U040R4C	9k	1.375 × 4.125	69K1907	26.96	23.71
● CGS113U040V3C	11k	2.000 × 3.125	69K1798	31.29	27.53
● CGS203U040V5L	20k	2.000 × 5.625	69K1830	42.12	37.05
● CGS223U040V3C	22k	2.000 × 3.125	69K1837	32.71	28.78
● CGS233U040V4C	23k	2.000 × 4.125	69K1839	34.57	30.41
● CGS403U040W4C	40k	2.500 × 4.125	69K1864	45.38	39.92
● CGS683U040X4C	68k	3.000 × 4.125	69K1898	66.34	58.36
VOLTAGE: 50 VDC; 65 VDC SURGE					
● CGS162U050R2C	1.6k	1.375 × 2.125	69K1820	20.87	18.36
● CGS222U050R2C	2.2k	1.375 × 2.125	94B9413	22.49	19.79
● CGS292U050R3C	2.9k	1.375 × 3.125	69K1851	24.67	21.69
● CGS412U050R3C	4.1k	1.375 × 3.125	69K1866	24.47	21.52
● CGS432U050R4C	4.3k	1.375 × 4.125	69K1870	26.37	23.20
● CGS502U050R3C	5k	1.375 × 3.125	94F3724	23.61	20.77
● CGS572U050R3C	5.7k	1.375 × 3.125	69K1887	21.86	19.23
● CGS652U050V3C	6.5k	2.000 × 3.125	69K1894	31.97	28.13
● CGS682U050R3C	6.8k	1.375 × 3.125	69K1896	22.35	19.66
● CGS962U050V4C	9.6k	2.000 × 4.125	69K1909	35.42	31.16
● CGS103U050R4C	10k	1.375 × 4.125	69K1793	26.49	23.30
● CGS133U050V3C	13k	2.000 × 3.125	90F1672	31.08	27.34
● CGS153U050V4C	15k	2.000 × 4.125	69K1816	33.28	29.27
● CGS183U050V3C	18k	2.000 × 3.125	34C6378	34.20	30.08
● CGS203U050V4C	20k	2.000 × 4.125	69K1831	35.80	31.49
● CGS243U050W3C	24k	2.500 × 3.125	07C9717	45.98	40.45
● CGS253U050W4C	25k	2.500 × 4.125	69K1848	43.87	38.60

➤ CONTINUED ➤

CGS SERIES SCREW TERMINAL ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 50 VDC; 65 VDC SURGE

Mfg. Part No.	Cap. (µF)	D x L (in.)	Stock No.	Price Each 1-9	Price Each 10-24
CGS313U050W4C	31k	2.500 × 4.125	92B4494	48.95	43.06
CGS483U050X4C	48k	3.000 × 4.125	07C9738	76.02	66.88
CGS563U050X3L	56k	3.000 × 3.625	69K1886	74.56	65.59
CGS603U050X5C	60k	3.000 × 5.125	69K1891	78.34	68.92
VOLTAGE: 75 VDC; 95 VDC SURGE					
CGS152U075R3C	1.5k	1.375 × 3.125	69K1814	23.46	20.64
CGS222U075R2C	2.2k	1.375 × 2.125	69K1836	21.25	18.69
CGS292U075R3C	2.9k	1.375 × 3.125	69K1852	34.83	30.64
CGS422U075R4C	4.2k	1.375 × 4.125	69K1869	29.20	25.69
CGS482U075V3C	4.8k	2.000 × 3.125	69K1878	33.36	29.36
CGS632U075R5L	6.3k	1.375 × 5.625	69K1892	30.10	26.48
CGS103U075R3C	10k	1.375 × 3.125	97B1168	35.71	31.42
CGS103U075V3C	10k	2.000 × 3.125	69K1794	33.38	29.37
CGS123U075V4C	12k	2.000 × 4.125	88F2673	37.17	32.70
CGS153U075V5L	15k	2.000 × 5.625	69K1817	39.73	34.95
CGS173U075X4C	17k	3.000 × 4.125	69K1824	66.21	58.24
CGS253U075W5L	25k	2.500 × 5.625	88F1812	58.86	51.79
CGS253U075X4C	25k	3.000 × 4.125	95B9256	56.75	49.92
CGS373U075X5L	37k	3.000 × 5.625	69K1860	78.17	68.77
VOLTAGE: 100 VDC; 125 VDC SURGE					
CGS122U100R3C	1.2k	1.375 × 3.125	69K1801	23.43	20.61
CGS402U100V4C	4k	2.000 × 4.125	69K1863	35.71	31.42
CGS103U100W4C	10k	2.500 × 4.125	74K4900	46.51	40.91
CGS153U100X4C	15k	3.000 × 4.125	69K1818	61.61	54.20
VOLTAGE: 150 VDC; 175 VDC SURGE					
CGS401U150R2C	400	1.375 × 2.125	72K6625	22.62	19.89
CGS112U150R4C	1.1k	1.375 × 4.125	69K1797	26.19	23.04
CGS352U150V5L	3.5k	2.000 × 5.625	69K1859	39.07	34.36
CGS872U150X5R	8.7k	3.000 × 5.875	69K1904	78.66	69.20
VOLTAGE: 200 VDC; 250 VDC SURGE					
CGS591T200R3C	590	1.375 × 3.125	94F3726	23.70	20.85
CGS102T200R4C	1k	1.375 × 4.125	69K1788	26.19	23.04
CGS142T200V3C	1.4k	2.000 × 3.125	69K1810	66.57	58.57
CGS162T200V3C	1.6k	2.000 × 3.125	69K1819	32.25	28.37
CGS202T200V4C	2k	2.000 × 4.125	69K1828	36.15	31.80
CGS222T200V4C	2.2k	2.000 × 4.125	07C9712	38.56	33.92
CGS272T200V4C	2.7k	2.000 × 4.125	01C6229	42.84	37.69
CGS502T200W5C	5k	2.500 × 5.125	69K1879	69.96	61.54
CGS542T200X4L	5.4k	3.000 x 4.625	69K1882	81.08	71.33
CGS742T200X5L	7.4k	3.000 × 5.625	69K1899	100.75	88.63
CGS772T200X5L	7.7k	3.000 × 5.625	69K1901	86.14	75.79
CGS103T250X5L	10k	3.000 × 5.625	94B0709	138.14	121.53
VOLTAGE: 250 VDC; 300 VDC SURGE					
CGS201T250R2C	200	1.375 × 2.125	69K1827	23.57	20.74
CGS251T250R2C	250	1.375 × 2.125	69K1844	21.76	19.14
CGS551T250R4C	550	1.375 × 4.125	69K8372	26.43	23.25
CGS122T250V3C	1.2k	2.000 × 3.125	69K1800	32.95	28.98
CGS252T250V5L	2.5k	2.000 × 5.625	69K1846	49.27	43.34
CGS422T250W5L	4.2k	2.500 × 5.625	69K1868	84.63	74.45
CGS602T250X5L	6k	3.000 × 5.625	69K1888	102.90	90.53
CGS103T250X5L	10k	3.000 × 5.625	94B0709	138.14	121.53
VOLTAGE: 350 VDC; 400 VDC SURGE					
CGS251T350R3C	250	1.375 × 3.125	07C9718	24.43	21.49
CGS381T350R4C	380	1.375 × 4.125	07C9729	28.38	24.97
CGS102T350V4C	1k	2.000 × 4.125	69K1789	40.25	35.41
CGS222T350W5L	2.2k	2.500 × 5.625	69K1833	88.29	77.67
CGS292T350X5L	2.9k	3.000 × 5.625	88F1216	119.95	105.53
CGS302T350X5R	3k	3.000 × 5.875	95F2914	121.37	106.77
CGS332T350X5L	3.3k	3.000 x 5.625	69K1856	99.82	87.81
VOLTAGE: 450 VDC; 525 VDC SURGE					
CGS750T450R2C	75	1.375 × 2.125	69K1900	21.62	19.02
CGS101T450R2C	100	1.375 × 2.125	69K1787	22.68	19.95
CGS141T450R3C	140	1.375 × 3.125	69K1809	24.51	21.57
CGS171T450R3C	170	1.375 × 3.125	69K1821	24.91	21.92
CGS211T450R4C	210	1.375 × 4.125	69K1832	26.19	23.04
CGS321T450V3C	320	2.000 × 3.125	69K1855	33.59	29.55
CGS401T450R5L	400	1.375 × 5.625	69K1862	38.27	33.68
CGS451T450V3C	450	2.000 × 3.125	69K1873	39.99	35.18
CGS481T450V4C	480	2.000 × 4.125	69K1877	37.92	33.36
CGS651T450V4C	650	2.000 × 4.125	69K1893	44.88	39.48
CGS801T450V4L	800	2.000 × 4.625	72K7276	56.10	49.36

CONTINUED

CGS SERIES SCREW TERMINAL ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 450 VDC; 525 VDC SURGE

Mfg. Part No.	Cap. (µF)	D x L (in.)	Stock No.	Price Each 1-9	Price Each 10-24
CGS102T450W4C	1k	2.500 × 4.125	69K1790	58.38	51.36
CGS142T450W5C	1.4k	2.500 × 5.125	69K1811	76.50	67.30
CGS152T450X5C	1.5k	3.000 × 5.125	69K1813	86.82	76.38
CGS182T450X5R	1.8k	3.000 × 5.875	69K1825	91.55	80.54
CGS202T450X5C	2k	3.000 × 5.125	69K1829	105.20	92.55
CGS222T450X4C	2.2k	3.000 × 4.125	69K1834	124.78	109.78
CGS242T450X5L	2.4k	3.000 × 5.625	69K1840	119.61	105.22
CGS332T450X5L	3.3k	3.000 × 5.625	69K1857	154.44	135.86
CGS472T450X5C	4.7k	3.000 × 5.125	69K1874	202.48	178.13

(7141)

042 ASH SERIES HIGH VOLTAGE ALUMINUM CAPACITORS

RoHS Compliant Available

VISHAY.

Features
- Useful life: 5000h to 15,000h at 85°C
- High rated voltage: Up to 450V
- Polarized aluminum electrolytic capacitors, non-solid electrolyte
- Axial leads, cylindrical aluminum case, insulated with a blue sleeve

Applications
- General purpose, industrial, power supply, audio-video
- Smoothing, filtering, buffering at high voltages
- Boards with restricted mounting height, vibration and shock resistant

Mfg. Part No.	Voltage (VAC)	Cap. (uF)	Tol.	D x H (mm)	Stock No.	Price Each 1-9
MAL204211479E3	160	47	+50%, -10%	15 x 30	98K6700	1.98
MAL204211101E3	160	100	+50%, -10%	18 x 30	98K6699	2.80
MAL204213229E3	250	22	+50%, -10%	12.5 x 30	98K6701	1.92
MAL204313101E3	250	100	+50%, -10%	21 x 38	98K6710	4.68
MAL204225109E3	350	10	+50%, -10%	12.5 x 30	98K6707	1.63
MAL204315479E3	350	47	+50%, -10%	18 x 38	98K6711	3.76
MAL204216229E3	400	22	+50%, -10%	18 x 30	98K6704	2.77
MAL204217229E3	450	22	+50%, -10%	15 x 30	98K6706	3.44

(209968)

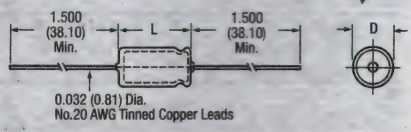
TE SERIES ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

VISHAY.

Features:
- Metal Case with Plastic Outer Insulating Sleeve
- Welded Terminal Connections

Specifications:
- Tolerance: 6–50VDC: +75%, -10%; 100–150VDC: +50%, -10%
- Operating Temperature: -40°C to 105°C



*E3 suffix indicates RoHS compliant. Non-RoHS parts still available. Call or go online.

CASE DIMENSIONS

Case Size	Dia. x L	Case Size	Dia. x L	Case Size	Dia. x L
BA	0.260 x 0.536″	CC	0.322 x 0.848″	DD	0.385 x 0.973″
BB	0.260 x 0.723″	...	...	DF	0.385 x 1.286″
CB	0.322 x 0.723″	DC	0.385 x 0.848″	DH	0.385 x 1.536″

VOLTAGE: 16 VDC

Mfg. Part No.	Cap. (µF)	Case Size	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99
TE1160-E3	50	CB	70M6230	3.39	2.91	2.40
TE1162-E3	100	DC	70M6231	3.70	3.18	2.63
VOLTAGE: 25 VDC						
TE1204-E3	10	BB	70M6235	3.34	2.87	2.37
TE1207-E3	25	CB	70M6237	3.53	3.03	2.50
TE1211-E3	100	DD	70M6239	4.01	3.44	2.84
VOLTAGE: 50 VDC						
TE1300-E3	1	BA	70M6241	3.46	3.20	2.63
TE1301-E3	2	BA	70M6242	3.33	3.08	2.53
TE1302-E3	3	BA	70M6243	3.46	3.20	2.63
TE1303-E3	5	BB	70M6244	3.48	2.99	2.47
TE1304-E3	10	CB	70M6246	3.39	2.91	2.40
TE1305.5-E3	25	CC	70M6247	3.44	2.95	2.44
TE1307-E3	50	DD	86K9606	4.17	3.58	2.96
TE1309-E3	100	DH	83K4120	4.76	4.09	3.38
VOLTAGE: 100 VDC						
TE1401-E3	2	BB	70M6250	3.34	2.87	2.37
VOLTAGE: 150 VDC						
TE1503-E3	4	CC	65K2148	3.64	3.12	2.58
TE1507-E3	10	DD	70M6254	4.26	3.65	3.03

(7063)

ALUMINUM ELECTROLYTIC CAPACITORS

36D SERIES POWERLYTIC® ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

VISHAY.

Features:
- High Ripple Current Capability and Excellent Load Life
- Low ESR, Low Leakage Current
- Pressure Relief Vent in the Case Cover, Outer-Plastic Insulation and Low Screw Inserts
- Mounting Brackets sold separately, *go online or call*.

Applications:
- Used in Power Supply Filters and Other High-Energy Applications

Specifications:
- Operating Temperature: -40°C to +85°C
- Tolerance: 10 to 100 VDC is +75%, -10%; 200 to 450 VDC is +50%, -10%
- Equivalent Series Resistance @ 25°C: 0.012 to 2.8Ω Max. @120Hz, Depending on Capacitance and Voltage
- Ripple Current @ 85°C: 0.53 - 19.87A at 120Hz, Depending on Capacitance and Voltage
- Load Life Capability: 100Hrs. @ +85°C
- Operational Life in Excess of Ten Years in Normal Circuit Conditions

36D SERIES DIMENSIONS

Case Size	D	L	M	Case Size	D	L	M
AA	1.375″	2.125″	0.500″	CC	2.500″	4.125″	1.125″
AB	1.375″	3.125″	0.500″	CD	2.500″	4.625″	1.125″
AC	1.375″	4.125″	0.500″	DE	3.000″	5.125″	1.250″
BB	2.000″	3.125″	0.875″	DF	3.000″	5.625″	1.250″
BC	2.000″	4.125″	0.875″	...	...	...	...

Mfg. Part No.	Voltage (VDC)	Cap. (µF)	Case Size	Stock No.	Price Each 1-9	Price Each 10-24
VOLTAGE: 25 VDC						
● 36D272G025AA2A	25	2,700	AA	17M8435	33.58	30.49
● 36D822G025AC2A	25	8,200	AC	17M8440	35.84	32.54
VOLTAGE: 40 VDC						
● 36D552G040AC2A	40	5,500	AC	17M9379	44.34	40.26
● 36D842G040BB2A	40	8,400	BB	17M8441	86.00	78.09
● 36D123G040BC2A	40	12,000	BC	17M8431	50.41	45.77
● 36D253G040CD2A	40	25,000	CD	18F2467	60.85	55.26
VOLTAGE: 50 VDC						
● 36D132G050AA2A	50	1,300	AA	17M8432	35.09	31.86
● 36D262G050AB2A	50	2,600	AB	17M8434	35.70	32.42
● 36D602G050BB2A	50	6,000	BB	17M8438	44.86	40.74
● 36D902G050BC2A	50	9,000	BC	17M8442	48.21	43.78
● 36D153G050CC2A	50	15,000	CC	17M8433	61.20	55.57
VOLTAGE: 75 VDC						
● 36D392G075BB2A	75	3,900	BB	17M8437	48.33	43.88
● 36D103G075CC2A	75	10,000	CC	17M8429	60.64	55.06
● 36D223G075DF2A	75	22,000	DF	20M4415	82.82	75.20
VOLTAGE: 150 VDC						
● 36D782F150DF2A	150	7,800	DF	17M8439	87.07	79.06

(7096)

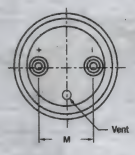
36DX SERIES POWERLYTIC® ALUMINUM ELECTROLYTIC CAPACITORS

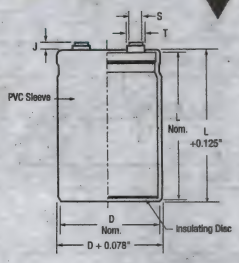
RoHS Compliant Available

VISHAY.

Features:
- Improved Version of Sprague 36D Series with Up to 50% More Capacitance
- Designed for Operating Life in Excess of 10 Years
- Outer Plastic Film Insulation, Low Screw-Insert Terminals
- Mounting Brackets sold separately, *go online or call*.

Specifications:
- Operating Temp: -40°C to +85°C
- Pressure Safety Vent
- Tolerance: 10 to 100 VDC: -10%, +75%; 200 to 450 VDC: -10%, +50%





36DX SERIES CASE SIZE CODES

Case Size	D	L	M	Case Size	D	L	M
AA	1.375″	2.125″	0.500″	BF	2.000″	5.625″	0.875″
AB	1.375″	3.125″	0.500″	CC	2.500″	4.125″	1.125″
AC	1.375″	4.125″	0.500″	CF	2.500″	5.625″	1.125″
AE	1.375″	5.125″	0.500″	DC	3.000″	4.125″	1.250″
AF	1.375″	5.625″	0.500″	DF	3.000″	5.625″	1.250″
BB	2.000″	3.125″	0.875″	DJ	3.000″	8.625″	1.250″
BC	2.000″	4.125″	0.875″	...	...	...	...

Mfg. Part No.	Cap. (µF)	Case Size	Stock No.	Price Each 1-9	Price Each 10-24
VOLTAGE: 15 VDC					
● 36DX153G015AB2A	15,000	AB	17M8392	35.02	31.80
● 36DX503G015BC2A	50,000	BC	17M8418	48.43	43.97
● 36DX833G015CC2A	83,000	CC	17M8427	63.26	57.44

CONTINUED

36DX SERIES POWERLYTIC® ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

Mfg. Part No.	Cap. (µF)	Case Size	Stock No.	Price Each 1-9	Price Each 10-24
VOLTAGE: 25 VDC					
● 36DX452G025AA2A	4,500	AA	18M9789	32.14	29.17
● 36DX133G025AC2A	13,000	AC	20M7092	36.62	33.25
● 36DX203G025AF2A	20,000	AF	17M8399	36.44	33.08
● 36DX303G025BC2A	30,000	BC	17M8405	52.28	47.47
● 36DX503G025CC2A	50,000	CC	17M8419	61.18	55.56
VOLTAGE: 30 VDC					
● 36DX402G030AA2A	4,000	AA	17M8412	35.89	32.59
● 36DX183G030AF2A	18,000	AF	17M8396	42.30	38.41
● 36DX263G030BC2A	26,000	BC	17M8403	50.51	45.87
VOLTAGE: 40 VDC					
● 36DX292G040AA2A	2,900	AA	66C7675	32.13	29.17
● 36DX582G040AB2A	5,800	AB	17M8422	35.36	32.10
● 36DX203G040BC2A	20,000	BC	17M8400	49.72	45.16
● 36DX343G040CC2A	34,000	CC	17M8408	64.41	58.47
● 36DX763G040DF2A	76,000	DF	17M8425	89.96	81.69
● 36DX124G040DJ2A	120,000	DJ	17M8390	116.06	105.38
VOLTAGE: 50 VDC					
● 36DX242G050AA2A	2,400	AA	18M4214	36.46	33.11
● 36DX482G050AB2A	4,800	AB	47F2062	36.96	33.56
● 36DX722G050AC2A	7,200	AC	17M8423	49.43	44.90
● 36DX163G050BC2A	16,000	BC	17M8394	50.53	45.88
● 36DX243G050BF2A	24,000	BF	17M8401	60.04	54.51
● 36DX403G050CF2A	40,000	CF	17M8413	71.30	64.74
● 36DX413G050DC2A	41,000	DC	17M8414	78.52	71.29
● 36DX104G050DJ2A	100,000	DJ	17M8389	122.54	116.00
VOLTAGE: 75 VDC					
● 36DX142G075AA2A	1,400	AA	17M8391	33.51	30.43
● 36DX282G075AB2A	2,800	AB	17M8404	37.48	34.04
● 36DX422G075AC2A	4,200	AC	17M8416	36.71	33.33
● 36DX103G075BC2A	10,000	BC	17M8388	52.37	47.55
● 36DX173G075CC2A	17,000	CC	17M8395	64.92	58.95
● 36DX373G075DF2A	37,000	DF	17M8410	99.16	90.04
● 36DX603G075DJ2A	60,000	DJ	26M8375	119.74	113.34
VOLTAGE: 100 VDC					
● 36DX982G100CC2A	9,800	CC	17M8428	65.28	59.27
VOLTAGE: 200 VDC					
● 36DX851F200AC2A	850	AC	27F501	38.33	34.80
● 36DX202F200BC2A	2,000	BC	17M8397	55.71	50.58
● 36DX282F200BC2A	2,800	BC	21M5210	57.29	52.02
● 36DX342F200CC2A	3,400	CC	17M8407	70.52	64.03
● 36DX742F200DF2A	7,400	DF	17M8424	100.57	91.32
VOLTAGE: 250 VDC					
● 36DX501F250AB2A	500	AB	17M8417	38.92	35.34
● 36DX122F250BB2A	1,200	BB	20M7091	53.17	48.28
● 36DX292F250CC2A	2,900	CC	27F478	80.30	72.90
● 36DX422F250CF2A	4,200	CF	17M8415	96.52	87.65
● 36DX103F250DJ2A	10,000	DJ	18M9788	128.46	121.60
VOLTAGE: 350 VDC					
● 36DX332F350DF2A	3,300	DF	17M8406	109.31	103.47
● 36DX372F350DF2A	3,700	DF	20M1925	112.97	106.95
VOLTAGE: 450 VDC					
● 36DX231F450AC2A	230	AC	26M8374	57.44	52.15
● 36DX381F450BB2A	380	BB	17M8411	58.88	53.46
● 36DX541F450BC2A	540	BC	17M8421	62.55	56.78
● 36DX202F450DF2A	2,000	DF	17M8398	126.22	114.61
● 36DX352F450DJ2A	3,500	DJ	17M8409	159.27	150.75

(7094)

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(212569)

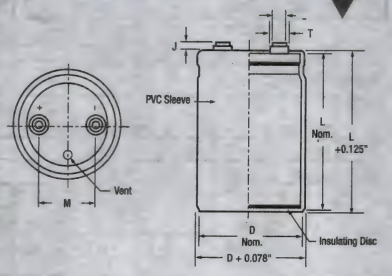
36DY SERIES POWERLYTIC® ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

VISHAY.

Features:
- The industry standard for large can aluminum capacitors
- Ideal for high wattage power supplies and energy storage applications
- Capacitance values to 2.2 farads
- Largest CV available
- Highest voltage available
- Mounting Brackets sold separately, *go online or call.*

Specifications:
- Operating Temp: -40°C to +85°C
- Tolerance: -10%, +50%



36DY SERIES CASE SIZE CODES

Case Size	D	L	M	Case Size	D	L	M
AA	1.375″	2.125″	0.500″	CC	2.500″	4.125″	1.125″
AC	1.375″	4.125″	0.500″	CD	2.500″	4.625″	1.125″
BC	2.000″	4.125″	0.875″	CF	2.500″	5.625″	1.125″
BF	2.000″	5.625″	0.875″	DC	3.000″	4.125″	1.250″
BL	2.000″	3.625″	0.875″	DE	3.000″	5.125″	1.250″
BM	2.000″	2.625″	0.875″	DF	3.000″	5.625″	1.250″
CB	2.500″	3.125″	1.125″	DL	3.000″	3.625″	1.250″

Mfg. Part No.	Cap. (uF)	Voltage (VDC)	Case Size	Stock No.	Price Each 1-9
36DY123F025AA2A	12000	25	AA	66C7768	33.76
36DY563F025BL2A	56000	25	BL	66C7825	50.67
36DY104F025BF2A	100000	25	BF	66C7763	63.16
36DY712F040AA2A	7100	40	AA	66C7835	32.11
36DY333F040BL2A	33000	40	BL	66C7806	51.71
36DY403F040BC2A	40000	40	BC	66C7813	59.71
36DY104F040DC2A	100000	40	DC	66C7764	89.59
36DY562F050AA2A	5600	50	AA	66C7820	32.04
36DY153F050BM2A	15000	50	BM	66C7776	49.15
36DY273F050BL2A	27000	50	BL	66C7798	54.73
36DY563F050CC2A	56000	50	CC	66C7826	79.74
36DY683F050DL2A	68000	50	DL	66C7833	93.71
36DY183F075BC2A	18000	75	BC	66C7784	58.51
36DY223F075CB2A	22000	75	CB	66C7791	70.72
36DY393F075CD2A	39000	75	CD	66C7812	90.46
36DY473F075DC2A	47000	75	DC	66C7818	97.78
36DY472F100AC2A	4700	100	AC	66C7814	48.80
36DY822F100BL2A	8200	100	BL	66C7837	55.26
36DY103F100CB2A	10000	100	CB	66C7762	68.17
36DY223F100CF2A	22000	100	CF	66C7792	86.24
36DY123F150DE2A	12000	150	DE	66C7769	114.41
36DY561F200AA2A	560	200	AA	66C7819	35.69
36DY123F200DF2A	12000	200	DF	66C7770	116.33
36DY152F250AC2A	1500	250	AC	66C7773	45.07
36DY222F250BC2A	2200	250	BC	66C7788	63.21
36DY102F450BC2A	1000	450	BC	66C7758	79.23
36DY152F450BF2A	1500	450	BF	66C7775	93.45
36DY182F450CC2A	1800	450	CC	66C7783	116.94

(108547)

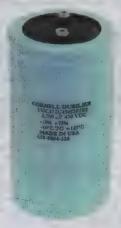
550C SERIES INVERTER GRADE SCREW TERMINAL ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

CDE CORNELL DUBILIER

Features
- Ultra Ripple (up to 105 A)
- Long-Life (100,000 hour in typical applications)
- ESRs to 7 mΩ

Specifications
- Tolerance: –10% +50%
- Operating Temperature: –40°C to +105°C
- Life Test: 10,000 hours with rated ripple & voltage @ 85°C and 5,000 hours @ 105°C



Mounting brackets ordered separately, *on pages 499-500*

See dimension table in DCMC series module, *on pages 495-496*

VOLTAGE: 250 VDC (300 VDC SURGE)

Mnf. Part No.	Cap. (µF)	Max. ESR 120 Hz/25°C (mΩ)	Max. Ripple 120Hz/85°C (A)	Case Size	Stock No.	Price Each 1-4
550C902T250DE2B	9000	0.0139	24.6	DE	06M4279	102.36
VOLTAGE: 400 VDC (450 VDC SURGE)						
550C562T400DP2B	5600	0.0181	22.4	DP	94C3038	126.58

➤ CONTINUED ➤

550C SERIES INVERTER GRADE SCREW TERMINAL ALUMINUM ELECTROLYTIC CAPACITORS (CONT.)

VOLTAGE: 450 VDC (500 VDC SURGE)

Mnf. Part No.	Cap. (µF)	Max. ESR 120 Hz/25°C (mΩ)	Max. Ripple 120Hz/85°C (A)	Case Size	Stock No.	Price Each 1-4
550C142T450BF2B	1400	0.0533	10.2	BF	04R6388	81.29
550C372T450DF2B	3700	0.0202	20.9	DF	58K3688	117.74
550C442T450FE2D	4400	0.017	24.3	FE	57K2250	159.52
VOLTAGE: 500 VDC (550 VDC SURGE)						
550C372T500DP2B	3700	0.0324	16.8	DP	04R6389	168.60

(121668)

CGR SERIES SCREW TERMINAL ALUMINUM ELECTROLYTIC CAPACITORS

RoHS Compliant Available

MALLORY Cornell Dubilier Electronics, Inc.

Features
- High Ripple Current
- Very Low ESR
- 105°C Operation
- Commercial Equivalent of MIL-C-35018/04, 06, 10

Specifications
- Tolerance: -10%, +75%: 7.5 VDC to 50 VDC
- Capacitance Range: 330 µF to 100,000 µF
- Voltage Range: 7.5 to 200 VDC
- Operating Temperature: -40°C to +105°C

Most popular values listed. Additional values available, *go online or call.*

VOLTAGE: 30 VDC

Mfg. Part No.	Cap. (µF)	D × L (in.)	Stock No.	Price Each 1-9
CGR103U030R4L	10000	1.375 x 4.625	69K1779	56.43
VOLTAGE: 40 VDC				
CGR392U040R3C	3900	1.375 × 3.125	69K1785	46.28
CGR962U040V3L	9600	2.000 × 3.625	13F3718	46.80
CGR223U040W4L	22000	2.500 × 4.625	69K1784	75.60
VOLTAGE: 50 VDC				
CGR762U050V3C	7600	2.000 × 3.125	69K1786	47.28
CGR103U050V4C	10000	2.000 × 4.125	69K1780	46.92
CGR213U050W4L	21000	2.500 x 4.625	69K1783	107.11

(7142)

CAPACITOR MOUNTING HARDWARE

RoHS Compliant Available

MALLORY Cornell Dubilier Electronics, Inc.

Fig. 1

Fig. 2

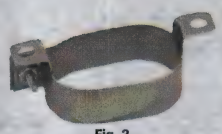


Fig. 3

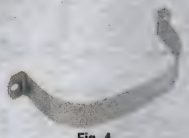


Fig. 4

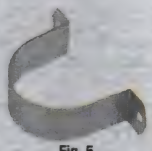


Fig. 5

TYPE TH HORIZONTAL MOUNTING CLIPS (FIG. 1)

Mfg. Part No.	Nominal Component Dia. (In.)	Stock No.	Price Each 1-24	Price Each 25-49
TH25	1.375	14F420	3.14	2.90
TYPE VR VERTICAL MOUTNING CLAMPS (FIG. 2)				
VR1A	1-1.0625	14F409	3.23	2.99
VR3A	1.375-1.4375	14F410	2.36	2.19
VR4A	1.500-1.5625	14F411	3.64	3.36
VR6A	1.750-1.8125	14F412	3.79	3.51
VR6+	1.750-1.8125	08C3126	3.79	3.51
VR8+	2-2.0625	99F5918	3.48	3.22
VR8A	2-2.0625	14F413	3.48	3.22
VR10A	2.5-2.5625	60F2292	3.84	3.55
VR12+	3-3.125	50B4943	4.20	3.89
VR12A	3-3.125	60F2113	4.20	3.89

➤ CONTINUED ➤

CAPACITOR MOUNTING HARDWARE (CONT.)

OVAL MOUNTING BRACKETS (FIG. 3)

Mfg. Part No.	Nominal Component Dia. (In.)	Stock No.	Price Each 1-24	Price Each 25-49
● 32107-1	A	90B7511	4.07	3.61
● 32107-3	D	95C2923	6.14	5.46

TYPE HB METAL SNAP-IN BRACKETS (FOR MOTOR START CAPACITORS)

Mfg. Part No.	Nominal Component Length (In.)	Stock No.	Price Each 1-24	Price Each 25-49
● HB2	2.75	72K6658	8.13	7.52
● HB4	3.375	72K6659	7.13	6.60
● HB8	4.375	73K2430	8.18	7.56

TYPE PL PLASTIC END CAPS (FOR MOTOR START CAPACITORS)

Mfg. Part No.	Nominal Component Dia. (In.)	Stock No.	Price Each 1-24	Price Each 25-49
● PLA3	1.438	87F1301	3.17	2.93
● PLA6	1.813	87F1302	3.02	2.80
● PLA8	2.063	87F1303	3.68	3.41

TYPE OB OVAL WRAPAROUND BRACKETS (FIG. 4)

Mfg. Part No.	Case Code	Size (In.)	Stock No.	Price Each 1-24	Price Each 25-49
● OB2	32	1.313 x 2.156	94F3941	3.43	3.18
● OB4	37	1.968 x 2.906	95F2825	3.52	3.26
● OB3	38	1.968 x 3.656	95F2826	3.66	3.39

TYPE RB CYLINDRICAL WRAPAROUND BRACKETS (FIG. 5)

● RB175	21	1.750	95F2820	3.89	3.60
● RB200	23	2.000	95F2821	3.36	3.11
● RB250	24	2.500	95F2822	3.66	3.39

INSULATING TERMINAL BOOT

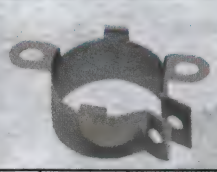
Mfg. Part No.	For Use With	Stock No.	Price Each 1-49
● 32108-2	Oval Case Style Capacitors	88F5927	3.01

* Down Wire Cap
(7155)

BRACKETS FOR 36D, 36DE, AND 36DX SERIES CAPACITORS

RoHS Compliant Available

VISHAY



Mfg. Part No.	Cap. Dia. (In)	Stock No.	Price Each 1-9	Price Each 10-49
● 1245860035A	1.375	30M6943	3.99	3.43
● 1245860036A	2	94F2562	5.66	4.86
● 1245860037A	2.5	01M5010	4.42	3.79
● 1245860038A	3	06M6824	5.13	4.40

(90590)

BRACKETS AND ACCESSORIES FOR AC/DC AND SCR CAPACITORS

RoHS Compliant Available

Footed Bracket

Wrap-Around

Protective Boot

Universal - Oval Case

Universal - Round Case

FOOTED BRACKETS FOR OVAL OR ROUND CASE SIZES

Mfg. Part No.	Case Height	Stock No.	Price Each 1-24	Price Each 25-49
● M302C920210	2.12″	45P3780	1.08	0.95
302C920000200	2.62″	96B0336	5.64	5.35

➤ CONTINUED ➤

BRACKETS AND ACCESSORIES FOR AC/DC AND SCR CAPACITORS (CONT.)

Mfg. Part No.	Case Height	Stock No.	Price Each 1-24	Price Each 25-49
302C920000122	4.25″	96B0329	5.39	5.12
● M302C920116	4.75″	12C2120	2.35	2.07

PROTECTIVE BOOT

Mfg. Part No.	Temperature Rating	Stock No.	Price Each 1-24	Price Each 25-49
● M614A52721	60°C	13M4034	0.88	0.78

WRAP-AROUND BRACKETS

Mfg. Part No.	Case Size	Dim. F	Stock No.	Price Each 1-49	Price Each 50-99
9827065000021	A	2.56″	96B0358	2.20	2.09
● M982706521	A	2.56″	01C4725	0.62	0.55
● M614A30161	C	3.31″	13M2556	1.07	0.94
● M614A30151	D	4.06″	13M2555	3.35	2.94
● M279A723524	P	2.50″	13M2150	1.86	1.64
● M279A723522	S	2.75″	13M2543	2.17	1.91
● M279A723523	T	3.25″	13M2544	2.22	1.96

UNIVERSAL WRAP-AROUND BRACKETS

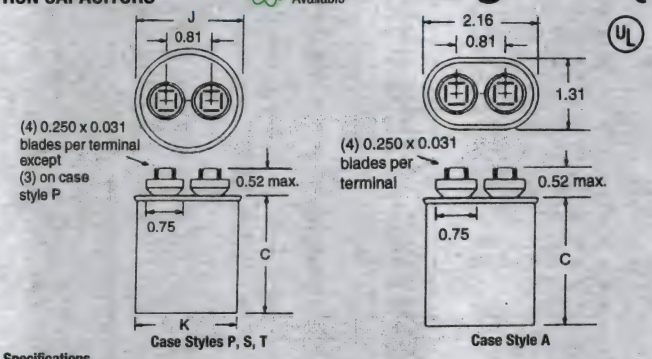
Mfg. Part No.	Case Size	Mtg. Dim. F	Mtg. Dim. G	Stock No.	Price Each 1-24	Price Each 25-49
● M128A2244AC21	A	2.69″	...	45P3767	2.04	1.80
128A2244AB022	C	3.44″	...	01C5668	9.61	9.12
● 295A6016-31M	P	...	1.75″	13M3909	4.00	3.53
● M295A601632	S	...	2″	13M2545	3.20	2.82
● 295A6016-33	T	...	2.5″	13M3910	3.74	3.29

(7359)

GENTEQ MOTOR RUN CAPACITORS

RoHS Compliant Available

genteq



Specifications

- High grade metallized polypropylene film
- Tolerance: ±6%
- Leakage Current: 30μA Max.
- Frequency: 50/60 Hz
- Operating Life: 60,000 Hours with 94% Survival
- Dissipation Factor: 0.1% Max.
- Operating Temperature: -40°C to +70°C
- Unpainted Aluminum case, terne plate steel cover
- 'Combo' terminal: 0.250″ x 0.031″ quick connect blades

CASE SIZE DIMENSIONS

Round Case: Case Size	K	J	Oval Case: Case Size	A	B
P	1.75″ (44.45)	1.88″ (47.75)	A	2.16″ (54.86)	1.31″ (33.27)
S	2.00″ (50.80)	2.12″ (53.84)	C	2.91″ (73.91)	2.81″ (71.37)
T	2.50″ (63.50)	2.62″ (66.55)	...	...	...

Mfg. Part No.	Cap. (μF)	Case Size	Dim. C	Stock No.	Price Each 1-24	Price Each 25-49
VOLTAGE: 280 VAC						
97F6836	48	C	1.56″	05H4168	23.65	21.67
VOLTAGE: 370 VAC						
● 27L1020	2	A	1.56″	39P9011	11.92	10.66
● 97F5503	3	A	2.12″	13M4405	5.99	5.37
● 27L571	4	A	1.56″	49H7092	7.86	7.03
● 27L570	5	A	1.56″	49H7088	8.12	7.26
● 97F5706	6	A	2.12″	13M4407	8.70	7.79
● 27L566	7.5	A	2.88″	96K4559	8.94	7.98
● 97F9001	7.5	P	2.88″	13M4447	10.51	9.48
● 27L1026	8	A	2.12″	39P9013	13.90	12.43
● 97F9002	10	A	2.88″	13M4448	6.44	5.74
● 97F9121	15	C	2.12″	90B5615	18.43	16.53
● 27L567	15	A	2.88″	84M7464	11.44	10.23
● 97F9602	20	P	2.88″	13M4456	13.86	12.39
● 97F9803	25 / 5 uF*	S	2.88″	35C3459	27.37	24.66

➤ CONTINUED ➤

GENTEQ MOTOR RUN CAPACITORS (CONT.)

VOLTAGE: 370 VAC

Mfg. Part No.	Cap. (µF)	Case Size	Dim. C	Stock No.	Price Each 1-24	Price Each 25-49
97F9606	*	P	2.88″	27C6657	19.84	17.87
97F9608	30	P	3.88″	13M4457	16.93	15.13
97F9833	30 / 5 uF*	S	3.88″	90C0536	30.53	27.50
27L877	30 / 5 uF*	S	2.88″	39P6234	27.82	25.07
97F9613	35	S	2.88″	63J2190	30.67	27.42
97F9614	40	P	3.88″	31C1143	22.07	19.73
97F9849	40 / 5 uF*	S	3.88″	89C3272	34.35	30.95
97F9884	45	P	4.75″	56J8994	23.81	21.29
27L880	45 / 5 uF*	S	3.88″	39P6235	34.14	30.76
97F9970	50 / 5 uF*	S	4.75″	81C9407	39.12	35.25
97F5276	60	T	3.88″	13M4400	30.22	27.01
VOLTAGE: 440 VAC						
27L1021	2	A	1.56″	39P9012	11.24	10.05
27L1022	3	A	1.56″	39P6162	8.57	7.67
27L1023	4	A	1.56″	39P6163	9.30	8.32
27L1025	6	A	2.12″	39P6165	8.59	7.69
27L695	7.5	A	2.88″	39P6211	9.96	8.90
97F9037	15	P	2.88″	13M4450	13.25	11.85
97F9038	17.5	P	3.88″	13M4451	15.66	14.00
97F9039	20	P	3.88″	13M4452	15.29	13.65
97F9632	25	P	3.88″	98H1326	18.60	16.67
97F9040	25	P	4.75″	13M4453	18.58	16.61
97F9981	30 / 5 uF*	S	3.88″	63J2235	30.14	27.16
97F9041	35	S	4.75″	13M4454	23.58	21.08
97F9848	35 / 5 uF*	S	4.75″	92B5789	36.14	32.56
97F9642	40	S	3.88″	25C4005	24.66	22.05
27L946	40 / 5 uF*	T	2.88″	39P9043	24.93	22.46
27L945	45	S	3.88″	39P9042	23.33	20.86
27L889	45 / 5 uF*	S	4.75″	39P6236	25.97	23.40
97F5211	50	T	3.88″	13M4398	18.80	16.84
97F9839	55 / 5 uF*	T	4.75″	63J2213	50.95	45.90
97F9043	60	T	4.75″	13M4455	31.53	28.19
97F5251	70	T	4.75″	13M4399	23.15	20.74

* Dual Rating – 2 Concentric Sections - 3 Terminals
(163846)

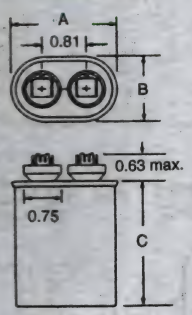
GENTEQ HID LIGHTING CAPACITORS

RoHS Compliant Available

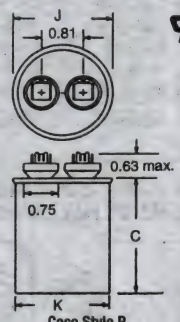
genteq

Applications
- Ballast Circuits for Mercury Vapor, Metal Halide or High-Pressure Sodium Lamps

Specifications
- Tolerance: ±3%
- Operating Temperature: -40°C to +90°C
- Two 0.250 x 0.031″ Blades and Fork per Terminal
- Dissipation factor: 0.1% Max
- Operating life: 60,000 Hours with 94% Survival
- Frequency: 50/60 Hz
- Leakage current: 30µA Max



Case Styles A, B, C



Case Style P

Case Size	A	B	Case Size	K	J
A	2.16″	1.31″	...	...	...
B	2.69″	1.56″	P	1.75″	1.88″
C	2.91″	1.91″	...	...	...

VOLTAGE: 280 VAC

Mfg. Part No.	Cap. (µF)	Case Size	Dim. C	Stock No.	Price Each 1-24	Price Each 25-49
97F6858	10	A	2.88″	83H0150	10.35	9.30
97F6873	24	B	3.88″	63J2125	16.98	15.26
97F6865	35	C	3.88″	93B6035	20.35	18.29
VOLTAGE: 330 VAC						
97F6703	8	A	2.88″	83C8329	10.66	9.58
97F6768	14	B	2.88″	99B1887	13.70	12.31
VOLTAGE: 400 VAC						
97F6601	10	A	3.88″	13M4410	11.95	10.73
97F6606	10	B	2.88″	13M4411	8.73	7.87
97F6526	10	P	3.88″	13M4408	11.03	9.91
97F6602	15	B	3.88″	50F1892	13.56	12.18
97F6621	15	C	2.88″	13M4412	13.71	12.32
97F6622	24	C	3.88″	13M4413	13.43	12.11

➤CONTINUED➤

GENTEQ HID LIGHTING CAPACITORS (CONT.)

VOLTAGE: 400 VAC

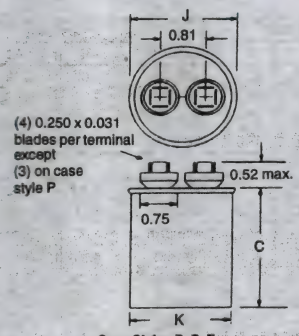
Mfg. Part No.	Cap. (µF)	Case Size	Dim. C	Stock No.	Price Each 1-24	Price Each 25-49
97F6535	24	P	3.88″	13M4409	16.06	14.43
97F6535RC*	24	P	3.88″	50B3631	16.79	15.08
VOLTAGE: 480 VAC						
97F6694	20	C	3.88″	13M4415	13.72	12.36
97F6680	24	C	3.88″	13M4414	15.80	14.24
97F6680RC*	24	C	3.88″	45P4344	21.89	19.71
97F8237RR+	39.87	T	3.88″	66K6967	25.84	22.73
VOLTAGE: 540 VAC						
97F6924	13	B	3.88″	63J2129	25.59	23.00
97F6934	26	D	3.88″	26H2422	36.72	33.00
VOLTAGE: 580 VAC						
97F6948	14.5	B	3.88″	93B0217	24.49	22.02
97F6945	24	C	4.75″	63J2133	35.16	31.60
97F6921	26	C	4.75″	99F7364	32.84	29.51

* RC suffix indicates metal film resistor in series with terminals, + RR suffix indicates bleed resistor in series with terminals
(7249)

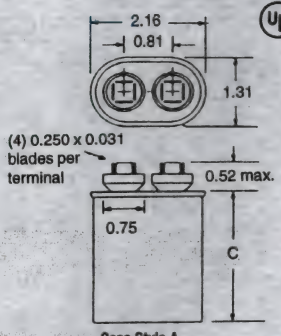
GENTEQ AC POWER SUPPLY CAPACITORS

RoHS Compliant Available

genteq



Case Styles P, S, T



Case Style A

Specifications
- High grade metallized polypropylene film
- Tolerance: ±6%
- Leakage Current: 30µA Max.
- Frequency: 50/60 Hz
- Operating Life: 60,000 Hours with 94% Survival
- Dissipation Factor: 0.1% Max.
- Operating Temperature: -40°C to +70°C
- Unpainted Aluminum Case, Tin Plated Steel Cover
- 'Combo' terminal: 0.250″ x 0.031″ quick connect blades

CASE SIZE DIMENSIONS

Case Size	K	J	Case Size	A	B
P	1.75″ (44.45)	1.88″ (47.75)	A	2.16″ (54.86)	1.31″ (33.27)
S	2.00″ (50.80)	2.12″ (53.84)	...	...	...
T	2.50″ (63.50)	2.62″ (66.55)	...	...	...

VOLTAGE: 240 VAC

Mfg. Part No.	Cap. (µF)	ESR (Ω)	Case Size	Dim. C	Stock No.	Price Each 1-24	Price Each 25-49
97F8036	15	0.0257	P	2.88″	13M4416	8.55	7.53
97F8090	20	...	P	2.88″	74M7968	15.90	13.97
97F8037	25	0.018	P	2.88″	89F2045	16.58	14.55
97F8038	30	0.0228	P	3.88″	13M4417	19.58	17.20
97F8039	35	0.0206	P	3.88″	13M4418	19.21	16.87
97F8040	40	0.019	P	3.88″	95C0419	22.02	19.33
97F8042	50	0.0226	P	4.75″	13M4419	27.83	24.44
97F8044	60	0.0215	S	4.75″	89F2052	32.49	28.54
97F8046	70	0.0198	S	4.75″	64C9892	35.99	31.62
97F8048	80	0.0164	T	3.88″	92B7821	40.41	35.49
97F8052	100	0.0189	T	4.75″	13M4422	49.60	43.57
97F8053	120	0.0176	T	4.75″	13M4423	50.56	44.41
VOLTAGE: 370 VAC							
97F8054	3	0.07	A	2.12″	20M7448	9.42	8.27
97F8055	4	0.0539	A	2.12″	13M4424	5.77	5.09
97F8056	5	0.0586	A	2.88″	13M4425	10.43	9.16
97F8057	6	0.0499	A	2.88″	13M4426	9.75	8.56
97F8058	7.5	0.0411	A	2.88″	89F2064	9.84	8.64
97F8060	12.5	0.0392	A	2.88″	13M4427	12.75	11.20
97F8061	15	0.0244	P	2.88″	13M4428	13.55	11.90
97F8063	20	0.0281	P	3.88″	13M4429	15.84	13.92
97F8064	25	0.024	P	3.88″	13M4430	19.29	16.94
97F8065	30	0.0213	P	3.88″	13M4431	19.31	16.96
97F8066	35	0.0262	P	3.88″	13M4432	23.76	20.86

➤CONTINUED➤

GENTEQ AC POWER SUPPLY CAPACITORS (CONT.)

VOLTAGE: 370 VAC

Mfg. Part No.	Cap. (µF)	ESR (Ω)	Case Size	Dim. C	Stock No.	Price Each 1-24	Price Each 25-49
● 97F8067	40	0.024	P	4.75″	13M4433	24.42	21.45
● 97F8069	50	0.0222	S	4.75″	13M4434	30.10	26.44
● 97F8071	60	0.0175	T	3.88″	13M4435	33.07	29.06

(163987)

MAB SERIES AC/MOTOR RUN METALLIZED FILM CAPACITORS

RoHS Compliant Available

ILLINOIS CAPACITOR, INC.

Features:
- SMPS
- Motor Run
- Motor Speed Controls
- General Purpose AC application
- High Frequency Electronic Ballasts
- Switching Capacitor for Industrial Controls

Specifications:
- Dielectric: Polypropylene
- Tolerance: ±10% at 1kHz, 20°C
- Temperature Coefficient: -200ppm/°C ±100ppm/°C
- Operating Temperature Range:
  -40°C to +105°C without use of approvals
  -25°C to +85°C for use of approvals

For Agency Standards and Approval Classifications see datasheet online.

VOLTAGE CODE A03, 475 WVDC

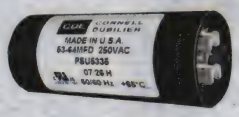
Mfg. Part No.	Cap. (µF)	Dimensions (mm) L x H x T	Dimensions (mm) P	Stock No.	Price Each 1-24	Price Each 25-49
● 125MABA03KHS	1.2	32 x 17 x 9	27.5	30K6624	2.67	2.19
● 255MABA03KHS	2.5	32 x 22 x 13	27.5	30K6697	3.74	3.06
● 805MABA03KJS	8	42.5 x 30 x 22	37.5	30K6802	8.69	7.12
● 106MABA03KJS	10	42.5 x 30 x 22	37.5	30K6590	9.86	8.08
VOLTAGE CODE A02, 575 WVDC						
● 105MABA02KHS	1	32 x 20 x 11	27.5	30K6574	2.60	2.13
● 155MABA02KHS	1.5	32 x 22 x 13	27.5	30K6633	3.23	2.65
● 225MABA02KHS	2.2	32 x 28 x 14	27.5	30K6670	4.02	3.29
● 275MABA02KHS	2.7	32 x 28 x 14	27.5	30K6699	4.36	3.57
● 305MABA02KIS	3	39.5 x 26 x 15	35	30K6702	4.29	3.51
● 405MABA02KJS	4	42.5 x 28 x 17	37.5	30K6732	5.46	4.47
● 635MABA02KJS	6.3	42.5 x 30 x 22	37.5	30K6780	9.66	7.91
● 805MABA02KJS	8	42.5 x 37 x 28	37.5	30K6801	11.02	9.02
● 106MABA02KJS	10	42.5 x 37 x 28	37.5	30K6589	9.14	7.48
● 126MABA02KJS	12	42.5 x 45 x 30	37.5	30K6625	14.86	12.17
VOLTAGE CODE A01, 775 WVDC						
● 104MABA01KGS	0.1	26.5 x 16 x 7	22.5	30K6565	1.63	1.34
● 224MABA01KGS	0.22	26.5 x 18.5 x 10	22.5	30K6659	1.78	1.46
● 474MABA01KHS	0.47	32 x 20 x 11	27.5	30K6745	2.44	2.00
● 684MABA01KHS	0.68	32 x 20 x 11	27.5	30K6784	2.49	2.04
● 105MABA01KIS	1	39.5 x 26 x 15	35	30K6573	3.43	2.81
● 125MABA01KIS	1.2	39.5 x 26 x 15	35	30K6623	3.84	3.14
● 155MABA01KIS	1.5	39.5 x 26 x 15	35	30K6632	3.83	3.14
● 225MABA01KJS	2.2	42.5 x 28 x 17	37.5	30K6669	5.03	4.12
● 405MABA01KJS	4	42.5 x 37 x 28	37.5	30K6731	7.85	6.42
● 475MABA01KJS	4.7	42.5 x 37 x 28	37.5	30K6755	8.44	6.91
VOLTAGE CODE A05, 1150 WVDC						
● 105MABA05KJS	1	42.5 x 28 x 17	37.5	30K6575	5.78	4.74
● 225MABA05KJS	2.2	42.5 x 37 x 28	37.5	30K6671	9.42	7.72

(84786)

PSU SERIES AC MOTOR START CAPACITORS

RoHS Compliant Available

MALLORY
Cornell Dubilier Electronics, Inc.



Features
- Dual Quick Connect Terminals
- Compact Size; Easily Mounted
- Moisture- and Oil-Resistant Plastic Case

Applications
- For Motor Starting and Other Intermittent Duty AC Applications

Specifications
- Operating Frequency: 50 to 60Hz
- Power Factor: 10% Max. (12% ≤30µF)
- Meets EIA RS-463 Type 2 (Normal Performance)
- Operating Temperature: -40°C to +65°C
- Storage Temperature: -55°C to +85°C

For mounting brackets see pages 493-494.

VOLTAGE: 110 / 125 VOLTS

Mfg. Part No.	Cap. (µF)	D x L (in.)	Stock No.	Price Each 1-24	Price Each 25-99
● PSU13015	130-156	1.4375 x 2.750″	72K6672	4.87	4.49
● PSU14515	145-174	1.4375 x 2.750″	87F1264	5.12	4.74
● PSU16115	161-193	1.4375 x 2.750″	87F1265	5.23	4.83

➤CONTINUED➤

PSU SERIES AC MOTOR START CAPACITORS (CONT.)

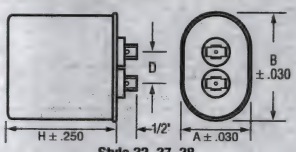
Mfg. Part No.	Cap. (µF)	D x L (in.)	Stock No.	Price Each 1-24	Price Each 25-99
● PSU18915A	189-227	1.4375 x 2.750″	72K6674	5.48	5.06
● PSU21615	216-259	1.4375 x 3.375″	72K6677	6.10	5.64
● PSU23315A	233-280	1.4375 x 3.375″	72K6678	6.14	5.67
● PSU27015A	270-324	1.4375 x 3.375″	72K6679	6.50	6.01
● PSU30015	300-360	1.8125 x 3.375″	72K6680	7.27	6.71
● PSU34015	340-408	1.8125 x 3.375″	72K6682	7.59	7.01
● PSU37815	378-454	1.8125 x 3.375″	18M9295	7.94	7.33
● PSU40015	400-480	1.8125 x 3.375″	72K6684	8.05	7.43
● PSU40015A	400-480	1.4375 x 3.375″	96B7546	7.89	7.29
● PSU46015A	460-552	1.8125 x 3.375″	87F1275	8.70	8.03
● PSU54015A	540-648	1.8125 x 3.375″	96B8393	9.46	8.73
● PSU54015B	540-648	1.8125 x 4.375″	72K6687	10.23	9.45
● PSU59015A	590-708	1.8125 x 4.375″	72K6688	10.50	9.70
● PSU70815	708-850	1.8125 x 4.375″	72K6689	11.83	10.92
● PSU100015A	1000-1200	2.0625 x 4.375″	80K7686	15.50	14.33
VOLTAGE: 165VOLTS					
● PSU40065A	400-480	1.8125 x 3.375″	08C2339	9.94	9.18
VOLTAGE: 220 / 250 VOLTS					
● PSU2135	21-25	1.4375 x 2.75″	72K6676	6.78	6.26
● PSU4335B	43-52	1.0625 x 3.375″	72K6685	7.06	6.51
● PSU5335	53-64	1.0625 x 3.375″	87F1281	7.22	6.67
● PSU6435	64-77	1.4375 x 3.375″	18M9298	7.78	7.19
● PSU8835	88-106	1.8125 x 3.375″	79K8528	8.62	7.96
● PSU10835A	108-130	1.8125 x 3.375″	72K6669	9.55	8.82
● PSU13035A	130-156	1.8125 x 3.375″	08C2297	10.17	9.39
● PSU14535	145-174	1.8125 x 4.375″	72K6673	12.01	11.10
● PSU18935A	189-227	2.0625 x 4.375″	99F8956	15.85	14.64
● PSU21635A	216-259	2.0625 x 4.375″	73K1299	16.76	15.47
● PSU23335A	233-280	2.0625 x 4.375″	87F1290	17.42	16.09
● PSU27035A	270-324	2.0625 x 4.375″	87F1291	16.30	15.05
VOLTAGE: 330 VOLTS					
● PSU2130	21-25	1.4375 x 2.75″	72K6675	6.78	6.26
● PSU2530	25-30	1.4375 x 3.375″	90F1667	7.43	6.87
● PSU3030	30-36	1.4375 x 3.375″	72K6681	7.80	7.21
● PSU3630	36-43	1.4375 x 3.375″	72K6683	8.33	7.70
● PSU5330B	53-64	1.8125 x 3.375″	72K6686	9.35	8.63
● PSU6430	64-77	1.8125 x 3.375″	18M9297	10.21	9.44
● PSU7230B	72-86	1.8125 x 4.375″	72K6691	10.23	9.45
● PSU10830B	108-130	2.0625 x 4.375″	87F1296	14.15	13.06
● PSU12430A	124-149	2.0625 x 4.375″	72K6671	15.03	13.88
● PSU14530A	146-174	2.0625 x 4.375″	87F1299	16.19	14.95
● PSU16130	161-193	2.5625 x 4.375″	18M9293	17.25	15.93
● PSU18930	189-227	2.5625 x 4.375″	08C2305	18.43	17.02
● PSU21630	216-259	2.5625 x 4.375″	78K6115	19.54	18.04
● PSU46030	460-552	2.5625 x 4.375″	08C2346	33.19	30.64

(7153)

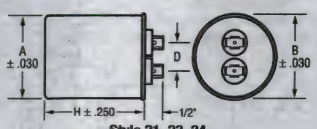
MPF SERIES AC POWER SUPPLY AND MOTOR RUN CAPACITORS

RoHS Compliant Available

MALLORY
Cornell Dubilier Electronics, Inc.



Style 32, 37, 38



Style 21, 23, 24

Applications
- Lighting
- Motors
- Power Factor Correction
- Phase Shifting
- Air Conditioning
- Refrigeration

Features
- Internal Protector
- Small Size; Light Weight
- Long Life and High Reliability
- Double Rolled Seams

Specifications
- Tolerance: ±10%
- Dissipation Factor: 0.1% Max. @ 60Hz
- Operating Temperature: -40°C to +70°C
- UL Recognized

DIMENSIONS

OVAL

Style	A	B	D	Industry Type
32	1.3125″ (33.34 mm)	2.156″ (54.77 mm)	13/16″ (20.64 mm)	1.25″ Flat Oval
37	1.906″ (48.42 mm)	2.906″ (73.82 mm)	13/16″ (20.64 mm)	1.75″ Flat Oval
38	1.969″ (50 mm)	3.656″ (92.87 mm)	13/16″ (20.64 mm)	2″ Flat Oval

ROUND

Style	A	B	D	Industry Type
21	1.75″ (44.5 mm)	1.875″ (48 mm)	13/16″ (20.64 mm)	1.75″ Round
23	2″ (50.8 mm)	2.125″ (54 mm)	13/16″ (20.64 mm)	2″ Round
24	2.5″ (63.5 mm)	2.625″ (67 mm)	13/16″ (20.64 mm)	2.5″ Round

➤CONTINUED➤

MPF SERIES AC POWER SUPPLY AND MOTOR RUN CAPACITORS (CONT.)

MPF SERIES – 370 VAC (FLAT OVAL CONTAINER)

Mfg. Part No.	Cap. (µF)	Base Style	Height (In.)	Stock No.	Price Each 1-24	Price Each 25-99
32FD3702-F	2	32	2.13	62M9008	8.65	7.88
32FD3704-F	4	32	2.13	34M4396	8.96	8.16
32FD3705-F	5	32	2.38	64M1110	7.93	7.21
32FD3706-F	6	32	2.38	75M8933	8.29	7.54
32FD37075-F	7.5	32	2.38	75M8934	8.47	7.70
32FD3710-F	10	32	2.88	75M8935	9.51	8.65
37FD3715-F	15	37	2.63	29M8640	12.09	11.02
37FD3720-F	20	37	2.63	47M3226	13.18	11.98
37FD3725-F	25	37	2.63	75M8947	14.61	13.29
MPF SERIES – 370 VAC (ROUND CONTAINER)						
21FD3710-F	10	21	2.63	75M8896	10.42	9.48
21FD3715-F	15	21	2.63	70M8489	10.80	9.84
21FD37175-F	17.5	21	2.63	69M1525	11.85	10.80
21FD3720-F	20	21	2.63	60M2895	12.73	11.58
21FD3725-F	25	21	3.00	67M9231	13.83	12.58
21FD3730-F	30	21	3.00	72M5635	14.66	13.37
23FD3735-F	35	23	3.00	75M8913	17.16	15.61
23FD3740-F	40	23	3.00	69M1714	17.29	15.72
23FD3750-F	50	23	3.75	22M5023	20.09	18.31
23FD3760-F	60	23	3.75	28M8971	24.34	22.19
24FD3770-F	70	24	3.75	21M6310	27.12	24.72
MPF SERIES – 440 VAC (ROUND CONTAINER)						
24FB4435-F	35	24	3.00	75M8916	19.90	18.10
24FB4450-F	50	24	3.75	17M6415	25.29	23.05

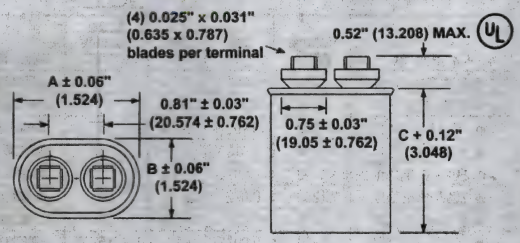
(7154)

27L6000 SERIES METALIZED POLYPROPYLENE FILM AC CAPACITORS

RoHS Compliant Available

genteq

Applications
- General-Purpose AC: Power Supplies, UPS and Power Conversion Equipment
- Useful in Applications Where Voltage Waveform is Non-Sinusoidal



Specifications
- Tolerance: ±6%
- Voltage: 660 VAC
- Operating Life: 60,000 Hours With 94% Survival
- Operating Temperature: -40°C to +70°C
- Termination: 0.25 x 0.31 Q.C. blades
- Leakage current: 30µA max
- Frequency 50/60Hz
- Dissipation factor: 0.1% max

Mounting Brackets sold separately, *on page 500.*

CASE DIMENSIONS

Case Size	A	B
A	2.16″	1.31″
B	2.69″	1.56″
D	3.66″	1.97″

CASE SIZE A

Mfg. Part No.	Cap. (µF)	Dim. C	Stock No.	Price Each 1-24
27L6095	2	3.88″	13M3908	11.75
27L6093	2.5	3.88″	13M3907	10.67
27L6094	3	3.88″	83H0241	11.37
27L6012	4	3.88″	97F7851	8.54
27L6013	5	3.88″	13M3899	13.58
27L6014	6	4.75″	13M3900	14.74
27L6015	7	4.75″	13M3901	15.79
27L6016	8	4.75″	97F7855	16.08
27L6073	15	4.75″	95C0416	23.89
27L6089	18	4.75″	13M3906	32.63
27L6082	20	4.75″	13M3905	31.15
CASE SIZE B				
27L6017	10	3.88″	13M3902	14.57
27L6018	12	4.75″	13M3903	21.36
CASE SIZE D				
27L6022	25	4.75″	13M3904	26.34
27L6023	30	4.75″	97F7862	28.54

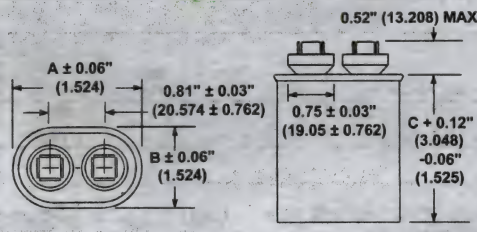
(7327)

97F8200 SERIES METALIZED POLYPROPYLENE FILM AC CAPACITORS

RoHS Compliant Available

genteq

Applications:
- General-Purpose AC: Power Supplies, Power Conversion Equipment



Specifications:
- Voltage: 600 VAC Nominal
- Tolerance: ±6%
- Dissipation Factor: 0.1% Max.
- Operating Life: 60,000 Hours with 94% Survival Rate
- Four 0.250 x 0.031″ (6.35 x 0.787) Blades per Terminal
- Operating Temperature: -40°C to +70°C

Mounting brackets sold separately, *on page 500.*

Case Size	Dimension A	Dimension B
A	2.16″ (54.86)	1.31″ (33.27)
B	2.69″ (68.33)	1.56″ (39.62)
D	3.66″ (92.96)	1.97″ (50.04)

CASE SIZE A

Mfg. Part No.	Cap. (µF)	Dim. C	Stock No.	Price Each 1-24	Price Each 25-49
97F8240	1.5	2.12″ (53.84)	13M4436	5.86	5.15
97F8241	2	2.12″ (53.84)	13M4437	8.12	7.13
97F8242	2.5	2.88″ (73.15)	13M4438	8.51	7.48
97F8244	4	2.88″ (73.15)	13M4440	10.35	9.09
97F8245	5	3.88″ (98.55)	50F1873	11.50	10.10
97F8246	6	3.88″ (98.55)	50F1874	12.04	10.60
97F8248	8	4.75″ (120.65)	13M4441	13.62	11.96
CASE SIZE B					
97F8249	10	3.88″ (98.55)	13M4442	9.74	8.54
97F8251	15	3.88″ (98.55)	50F1861	17.86	15.68
97F8253	20	4.75″ (120.65)	13M4443	20.82	18.29
CASE SIZE D					
97F8256	35	4.75″ (102.65)	50F1866	35.28	30.99
97F8257	40	4.75″ (102.65)	13M4445	42.35	37.20
97F8258	45	4.75″ (120.65)	13M4446	45.07	39.59

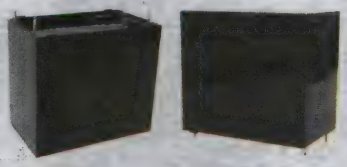
(7259)

EZP-E SERIES OF METALLIZED POLYPROPYLENE DC LINK FILM CAPACITORS

RoHS Compliant Available

Panasonic

Features
- High-safety, self-healing/self-protecting function built-in
- Long life, high-reliability
- Low loss, low ESR
- Flame-retardant case and sealing resin -- UL94V-0
- Rated voltage: 800VDC or 1100VDC
- Tinned wires, 2 or 4 pin versions
- Operating temperature range: –40°C to +85°C, rated voltage gets derated beyond 70°C (700VDC and 920VDC beyond 70°C)
- Capacitance range: 10 to 60µF for 800VDC, 10 to 40µF for 1100VDC
- *WARNING - Do not connect directly across an AC mains line*



Applications
- DC filtering, DC link circuit
- Solar inverters
- Wind power generation
- Industrial power supplies
- Inverter circuit in appliances such as air conditioners

800VDC

Mfg. Part No.	Cap. (pF)	Cap. Tol.	No. of Pins	Tape Cut Stock No.	Tape Cut Price Each 1-9
EZP-E80106LTA	10	± 10%	2	44W8351	7.70
EZP-E80156MTA	15	± 10%	4	44W8352	10.23
EZP-E80206MTA	20	± 10%	4	44W8353	11.77
EZP-E80256MTA	25	± 10%	4	44W8354	12.34
EZP-E80306MTA	30	± 10%	4	44W8355	13.64
EZP-E80356MTA	35	± 10%	4	44W8356	14.31
EZP-E80406MTA	40	± 10%	4	44W8357	15.99
EZP-E80456MTA	45	± 10%	4	44W8358	17.32
EZP-E80506MTA	50	± 10%	4	44W8359	19.01
EZP-E80556MTA	55	± 10%	4	44W8360	18.28
EZP-E80606MTA	60	± 10%	4	44W8361	18.55
1100VDC					
EZP-E1B106MTA	10	± 10%	4	44W8344	9.21
EZP-E1B156MTA	15	± 10%	4	44W8345	11.63
EZP-E1B206MTA	20	± 10%	4	44W8346	11.45
EZP-E1B256MTA	25	± 10%	4	44W8347	12.66
EZP-E1B306MTA	30	± 10%	4	44W8348	13.53

➤CONTINUED➤

EZP-E SERIES OF METALLIZED POLYPROPYLENE DC LINK FILM CAPACITORS (CONT.)

1100VDC

Mfg. Part No.	Cap. (pF)	Cap. Tol.	No. of Pins	Tape Cut Stock No.	Tape Cut Price Each 1-9
● EZP-E1B356MTA	35	± 10%	4	44W8349	14.89
● EZP-E1B406MTA	40	± 10%	4	44W8350	16.39

(208942)

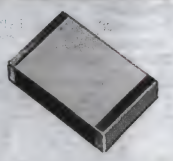
ECH-U(C) SERIES OF PPS FILM CHIP CAPACITORS

RoHS Compliant Available

Panasonic

Features
- Small size
- Low loss and excellent frequency
- Ideal for reflow soldering
- Rated voltage: 100VDC
- Operating temperature range: –55°C to +105°C
- Capacitance range: 0.010 to 0.22µF

Applications
- Time-constant
- Filtering
- Oscillation and resonance
- Resonance circuit for LCD backlight inverter unit



ECHU(C) series stacked metallized polyphenylene sulphide (PPS) film chip capacitor as dielectric with simple moldless construction.

Mfg. Part No.	Cap. (uF)	Cap. Tol.	Stock No.	Price Each 1-9
● ECH-U1153GC9	0.015	± 2%	53W3622	1.37
● ECH-U1103GC9	0.01	± 2%	53W3618	1.33
● ECH-U1103JC9	0.01	± 5%	53W3619	1.32
● ECH-U1104GC9	0.1	± 2%	53W3620	2.71
● ECH-U1104JC9	0.1	± 5%	53W3621	2.43

(208902)

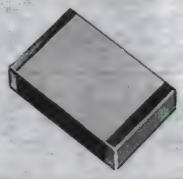
ECH-U(X) SERIES OF PPS FILM CHIP CAPACITORS

RoHS Compliant Available

Panasonic

Features
- Small size
- Ideal for reflow soldering
- Rated voltage: 16VDC, 50VDC
- 85°C, 85% RH, W.V. x 1.0 for 500 hours
- Operating temperature range: –55°C to +125°C
- Tolerance range: 2% and 5%
- Capacitance range: 16VDC, 0.00010 to 0.10µF; 50VDC, 0.00010 to 0.22µF

Applications
- Time-constant
- Filtering
- Oscillation and resonance



ECHU(X) series stacked metallized polyphenylene sulphide (PPS) film chip capacitor as dielectric with simple moldless construction.

16VDC

Mfg. Part No.	Cap. (µF)	Cap. Tol.	Stock No.	Price Each 1-9
● ECH-U1C101GX5	0.0001	± 2%	53W3587	0.56
● ECH-U1C101JX5	0.0001	± 5%	53W3588	0.45
● ECH-U1C151GX5	0.00015	± 2%	53W3590	0.56
● ECH-U1C221GX5	0.00022	± 2%	53W3593	0.56
● ECH-U1C221JX5	0.00022	± 5%	53W3594	0.45
● ECH-U1C271GX5	0.00027	± 2%	53W3596	0.56
● ECH-U1C331GX5	0.00033	± 2%	53W3598	0.56
● ECH-U1H331JX5	0.00033	± 5%	53W8301	0.52
● ECH-U1C331JX5	0.00033	± 5%	53W3599	0.45
● ECH-U1C391GX5	0.00039	± 2%	53W3600	0.55
● ECH-U1C471GX5	0.00047	± 2%	53W3601	0.58
● ECH-U1C471JX5	0.00047	± 5%	53W3602	0.53
● ECH-U1C561GX5	0.00056	± 2%	53W3603	0.55
● ECH-U1C681GX5	0.00068	± 2%	53W3604	0.58
● ECH-U1C681JX5	0.00068	± 5%	53W3605	0.50
● ECH-U1C821GX5	0.00082	± 2%	53W3608	0.55
● ECH-U1C102JX5	0.001	± 5%	53W3589	0.54
● ECH-U1C152JX5	0.0015	± 5%	53W3591	0.51
● ECH-U1H182GX5	0.0018	± 2%	54W2495	0.48
● ECH-U1C222JX5	0.0022	± 5%	53W3595	0.54
● ECH-U1C272GX5	0.0027	± 2%	54W2488	0.60
● ECH-U1C272JX5	0.0027	± 5%	53W3597	0.54
● ECH-U1C332JX5	0.0033	± 5%	54W2490	0.54
● ECH-U1C392JX5	0.0039	± 5%	53W8295	0.54
● ECH-U1C472JX5	0.0047	± 5%	53W8296	0.57
● ECH-U1C562JX5	0.0056	± 5%	53W8297	0.54
● ECH-U1C682JX5	0.0068	± 5%	53W3606	0.58
● ECH-U1C153JX5	0.015	± 5%	53W3592	0.66
● ECH-U1C273JX5	0.027	± 5%	53W8294	0.57
● ECH-U1C563GX5	0.056	± 2%	54W2492	0.85
● ECH-U1C563JX5	0.056	± 5%	53W8298	0.72

➤ CONTINUED ➤

ECH-U(X) SERIES OF PPS FILM CHIP CAPACITORS (CONT.)

Mfg. Part No.	Cap. (µF)	Cap. Tol.	Stock No.	Price Each 1-9
● ECH-U1C683JX5	0.068	± 5%	53W3607	0.81
● ECH-U1C823JX5	0.082	± 5%	53W3609	0.85
50VDC				
● ECH-U1H182JX5	0.0018	± 5%	53W8299	0.55
● ECH-U1H272JX5	0.0027	± 5%	53W8300	0.58
● ECH-U1H392JX5	0.0039	± 5%	53W8468	0.64
● ECH-U1H473GX9	0.047	± 2%	53W3615	1.33
● ECH-U1H683GX9	0.068	± 2%	53W3616	1.39
● ECH-U1H823GX9	0.082	± 2%	53W3617	1.50
● ECH-U1C823JX5	0.082	± 5%	53W3609	0.85
● ECH-U1H104GX9	0.1	± 2%	53W3610	1.47
● ECH-U1H124GX9	0.12	± 2%	53W3611	1.73
● ECH-U1H154GX9	0.15	± 2%	53W3612	1.84
● ECH-U1H184GX9	0.18	± 2%	53W3613	2.04
● ECH-U1H224GX9	0.22	± 2%	53W3614	2.13

(208900)

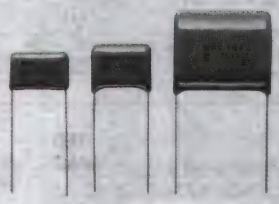
ECW-H(V) SERIES METALLIZED POLYPROPYLENE FILM CAPACITORS

RoHS Compliant Available

Panasonic

Features
- Voltage range: 1250VDC, 1600VDC, 2000VDC
- Capacitance range: 1000VDC: 0.0075 to 0.1uF 1250VDC: 0.0036 to 0.1uF 1600VDC: 0.0013 to 0.056uF 2000VDC: 0.0010 to 0.015uF
- Operating temperature range: -40°C to +105°C
- Tolerance: ± 3% and ± 5%
- Low-loss and inherent temperature rise
- Excellent electrical characteristics
- Flame retardant epoxy resin coating

Applications
- Electronic Ballast, Motors



Mfg. Part No.	Voltage (VDC)	Cap. (µF)	Cap. Tol.	Lead Spacing (mm)	Stock No.	Price Each 1-9
● ECW-H12102JV	1250	0.0010	± 5%	15	49W3438	0.94
● ECW-H12103JV	1250	0.010	± 5%	15	49W3444	1.35
● ECW-H12104JV	1250	0.10	± 5%	25	49W3450	2.76
● ECW-H12153JV	1250	0.015	± 5%	15	49W3496	1.56
● ECW-H12222JV	1250	0.0022	± 5%	15	49W3538	1.03
● ECW-H12223JV	1250	0.022	± 5%	20	49W3544	1.89
● ECW-H12273JV	1250	0.027	± 5%	20	49W3568	1.82
● ECW-H12332JV	1250	0.0033	± 5%	15	49W3586	1.09
● ECW-H12392JV	1250	0.0039	± 5%	15	49W3610	1.09
● ECW-H12472JV	1250	0.0047	± 5%	15	49W3634	1.09
● ECW-H12473JV	1250	0.047	± 5%	20	49W3640	2.21
● ECW-H12562JV	1250	0.0056	± 5%	15	49W3658	1.13
● ECW-H12822JV	1250	0.0082	± 5%	15	49W3698	1.31
● ECW-H16102JV	1600	0.0010	± 5%	15	49W3718	0.76
● ECW-H16103JV	1600	0.010	± 5%	20	49W3724	0.91
● ECW-H16122JV	1600	0.0012	± 5%	15	49W3742	0.76
● ECW-H16123JV	1600	0.012	± 5%	20	49W3748	2.13
● ECW-H16152JV	1600	0.0015	± 5%	15	49W3766	0.76
● ECW-H16153JV	1600	0.015	± 5%	20	49W3772	2.13
● ECW-H16182JV	1600	0.0018	± 5%	15	49W3790	0.76
● ECW-H16222JV	1600	0.0022	± 5%	15	49W3814	0.76
● ECW-H16223JV	1600	0.022	± 5%	25	49W3820	2.25
● ECW-H16272JV	1600	0.0027	± 5%	15	49W3834	0.76
● ECW-H16332JV	1600	0.0033	± 5%	15	49W3854	0.76
● ECW-H16392JV	1600	0.0039	± 5%	15	49W3874	0.76
● ECW-H16472JV	1600	0.0047	± 5%	20	49W3894	0.85
● ECW-H16562JV	1600	0.0056	± 5%	20	49W3914	0.91
● ECW-H16563JV	1600	0.056	± 5%	25	49W3920	2.61
● ECW-H16822JV	1600	0.0082	± 5%	20	49W3942	0.91

(208897)

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(212565)

ECW-H(A) SERIES POLYPROPYLENE DC FILM CAPACITORS

RoHS Compliant Available

Panasonic

Features
- Voltage range: 800VDC and 1600VDC
- Capacitance range: 0.01uF to 0.047uF
- Operating temperature range: -40°C to +105°C
- Tolerance: ± 3% and ± 5%
- Self healing
- Smal size

Applications
- Power supplies
- Tuning
- Filtering
- Specifically designed for resonance applications

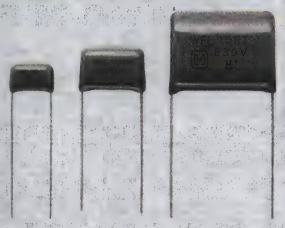
Mfg. Part No.	Cap. (µF)	Cap. Tol.	Lead Spacing (mm)	Stock No.	Price Each 1-9
ECW-HA3C102JB	0.001	± 5%	10	49W2845	0.56
ECW-HA3C103H	0.010	± 3%	17.5	49W2848	0.60
ECW-HA3C103J	0.010	± 5%	17.5	49W2852	0.57
ECW-HA3C153J	0.015	± 5%	17.5	49W2909	0.68
ECW-HA3C223J	0.022	± 5%	17.5	49W2966	0.84
ECW-HA3C332HB	0.0033	± 3%	10	49W3013	0.47
ECW-HA3C332JB	0.0033	± 5%	10	49W3016	0.60
ECW-HA3C393J	0.039	± 5%	17.5	49W3052	1.26
ECW-HA3C472H	0.0047	± 3%	15	49W3070	0.46
ECW-HA3C472J	0.0047	± 5%	15	49W3074	0.59
ECW-HA3C473J	0.047	± 5%	17.5	49W3082	1.40
ECW-HA3C622H	0.0062	± 3%	15	49W3102	0.55

(208896)

ECW-F(L) SERIES METALLIZED POLYPROPYLENE FILM CAPACITORS

RoHS Compliant Available

Panasonic



Features
- Small in size
- Excellent frequency characteristics
- Low loss
- 85 °C, 85 % RH, W.V..1.0 for 500 hours
- Tolerance range: 3% and 5%
- Capacitance range: 400VDC, 0.022 to 2.4µF; 630VDC, 0.01 to 1.3µF

Specifications
- Rated voltage: 400 VDC, 630 VDC
- Operating Temp. Range: –40°C to +105°C

Applications
- Lighting
- High frequency and high current circuits
- TVs, Monitors, Power Supplies, etc.

Mfg. Part No.	Voltage (VDC)	Cap. (µF)	Cap. Tol.	Lead Spacing (mm)	Stock No.	Price Each 1-9
ECW-F4104HL	400	0.10	± 3%	12.5	52W5421	2.02
ECW-F4104JB	400	0.10	± 5%	7.5	52W5423	1.88
ECW-F4104JL	400	0.10	± 5%	12.5	52W5425	1.71
ECW-F4105HL	400	1.0	± 3%	12.5	52W5433	2.59
ECW-F4105JB	400	1.0	± 5%	12.5	52W5435	2.42
ECW-F4105JL	400	1.0	± 5%	20	52W5437	2.20
ECW-F4155JL	400	1.5	± 5%	25	52W5519	2.34
ECW-F4205HL	400	2.0	± 3%	25	52W5569	3.29
ECW-F4223HL	400	0.022	± 3%	10	52W5575	1.61
ECW-F4223JL	400	0.022	± 5%	10	52W5579	1.33
ECW-F4224HL	400	0.22	± 3%	12.5	52W5587	1.83
ECW-F4224JB	400	0.22	± 5%	7.5	52W5589	2.14
ECW-F4224JL	400	0.22	± 5%	12.5	52W5591	1.94
ECW-F4225HL	400	2.2	± 3%	25	52W5597	3.21
ECW-F4225JL	400	2.2	± 5%	25	52W5599	2.93
ECW-F4245JL	400	2.4	± 5%	25	52W5628	3.05
ECW-F4334HL	400	0.33	± 3%	15	52W5692	1.95
ECW-F4473HL	400	0.047	± 3%	10	52W5782	1.91
ECW-F4473JL	400	0.047	± 5%	10	52W5786	1.59
ECW-F4474HL	400	0.47	± 3%	15	52W5795	2.15
ECW-F4474JB	400	0.47	± 5%	10	52W5797	1.99
ECW-F4474JL	400	0.47	± 5%	15	52W5800	2.27
ECW-F4683HL	400	0.068	± 3%	10	52W5886	2.02
ECW-F6103HL	630	0.010	± 3%	10	52W5976	1.63
ECW-F6103HLB	630	0.010	± 3%	7.5	52W5977	1.65
ECW-F6103JL	630	0.010	± 5%	10	52W5978	1.36
ECW-F6104HL	630	0.10	± 3%	15	52W5982	2.24
ECW-F6104JL	630	0.10	± 5%	15	52W5984	1.93
ECW-F6105HL	630	1.0	± 3%	25	52W5988	2.83
ECW-F6105JL	630	1.0	± 5%	25	52W5990	2.20
ECW-F6113HL	630	0.011	± 3%	10	52W5992	1.53

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ECW-F(L) SERIES METALLIZED POLYPROPYLENE FILM CAPACITORS (CONT.)

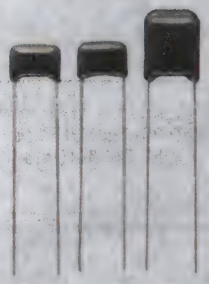
Mfg. Part No.	Voltage (VDC)	Cap. (µF)	Cap. Tol.	Lead Spacing (mm)	Stock No.	Price Each 1-9
ECW-F6153JL	630	0.011	± 5%	10	52W6042	1.36
ECW-F6203HL	630	0.020	± 3%	10	52W6076	1.69
ECW-F6203JL	630	0.020	± 5%	10	52W6078	1.43
ECW-F6204JL	630	0.20	± 5%	15	52W6084	2.15
ECW-F6223HL	630	0.022	± 3%	10	52W6088	1.71
ECW-F6223JL	630	0.022	± 5%	10	52W6090	1.50
ECW-F6224HL	630	0.22	± 3%	15	52W6094	2.06
ECW-F6224JL	630	0.22	± 5%	15	52W6096	2.16
ECW-F6333HL	630	0.033	± 3%	10	52W6138	1.96
ECW-F6333JL	630	0.033	± 5%	10	52W6140	1.63
ECW-F6473HL	630	0.047	± 3%	12.5	52W6187	2.12
ECW-F6473JL	630	0.047	± 5%	12.5	52W6189	1.77
ECW-F6474HL	630	0.47	± 3%	17.5	52W6193	2.29
ECW-F6474JL	630	0.47	± 5%	17.5	52W6195	1.93

(208894)

ECQ-V(L)/(M) SERIES RADIAL LEADED STACKED METALLIZED PLASTIC FILM CAPACITORS

RoHS Compliant Available

Panasonic



Features
- Designed for high density insertion applications
- Small size and large capacitance
- Excellent electric characteristics in non-inductive construction
- Wide range for automatic insertion

Specifications
- Tolerance: ±5%
- Operating Temp. Range: -40°C to +105°C
- Voltage Range: 50VDC, 63VDC and 100VDC

Applications
- General purpose
- Noise suppression for logic circuits

VOLTAGE: 50 VDC

Mfg. Part No.	Cap. (µF)	L x H (mm)	Pitch (mm)	Stock No.	Price 1-9
ECQ-V1H103JL	0.01	7.3 x 5	5	39P9862	0.31
ECQ-V1H103JL5	0.010	7.3 x 5.5	5	53W3623	0.56
ECQ-V1H103JL3	0.010	7.3 x 7.3	5	49W2127	0.33
ECQ-V1H123JL	0.012	7.3 x 5	5	39P9863	0.41
ECQ-V1H153JL	0.015	7.3 x 5	5	39P9864	0.33
ECQ-V1H153JL3	0.015	7.3 x 5.5	5	49W2157	0.33
ECQ-V1H183JL	0.018	7.3 x 5	5	39P9865	0.41
ECQ-V1H223JL	0.022	7.3 x 5	5	39P9866	0.35
ECQ-V1H223JL3	0.022	7.3 x 5	5	49W2184	0.25
ECQ-V1H273JL3	0.027	7.3 x 5	5	49W2197	0.36
ECQ-V1H333JL3	0.033	7.3 x 11	5	49W2207	0.38
ECQ-V1H473JL	0.047	7.3 x 5	5	32R8867	0.28
ECQ-V1H473JL3	0.047	7.3 x 5	5	49W2230	0.29
ECQ-V1H473JL2	0.047	7.3 x 5	5	49W2229	0.27
ECQ-V1H563JL3	0.056	7.3 x 5	5	49W2240	0.29
ECQ-V1H683JL	0.068	7.3 x 5	5	32R8869	0.30
ECQ-V1H683JL3	0.068	10.2 x 9	5	49W2251	0.30
ECQ-V1H104JL	0.1	7.3 x 5	5	32R8862	0.31
ECQ-V1H104JL5	0.10	7.3 x 7.3	5	49W2134	0.31
ECQ-V1H104JL3	0.10	7.5 x 5	5	49W2133	0.31
ECQ-V1H104JLW	0.10	7.5 x 5	5	49W2131	0.31
ECQ-V1H104JL9	0.10	7.3 x 5	5	53W3624	0.53
ECQ-V1H124JL3	0.12	7.5 x 6.8	5	49W2149	0.31
ECQ-V1H154JL3	0.15	7.3 x 5.5	5	49W2162	0.33
ECQ-V1H224JL	0.22	7.3 x 5.5	5	32R8864	0.38
ECQ-V1H224JL5	0.22	7.5 x 5.5	5	53W3626	0.66
ECQ-V1H224JL3	0.22	7.3 x 5	5	49W2189	0.38
ECQ-V1H224JL2	0.22	7.3 x 5.5	5	49W2188	0.38
ECQ-V1H334JL	0.33	7.3 x 7	5	32R8866	0.43
ECQ-V1H334JL3	0.33	10.2 x 10	5	49W2213	0.43
ECQ-V1H474JL	0.47	7.3 x 7.3	5	32R8868	0.51
ECQ-V1H474JL5	0.47	10.2 x 10	5	53W3627	0.59
ECQ-V1H474JL3	0.47	7.3 x 5	5	49W2235	0.51
ECQ-V1H474JL2	0.47	7.3 x 5	5	49W2234	0.51
ECQ-V1H474JLW	0.47	7.3 x 5	5	49W2233	0.51
ECQ-V1H684JL	0.68	7.3 x 10	5	32R8870	0.61
ECQ-V1H684JL3	0.68	10.2 x 9	5	49W2256	0.61
ECQ-V1H824JL3	0.82	7.5 x 7	5	49W2266	0.61
ECQ-V1H105JL3	1	7.3 x 5.5	5	49W2138	0.54
ECQ-V1H105JL	1	7.3 x 11	5	32R8863	0.55

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ECQ-V(L)/(M) SERIES RADIAL LEADED STACKED METALLIZED PLASTIC FILM CAPACITORS (CONT.)

Mfg. Part No.	Cap. (µF)	L x H (mm)	Pitch (mm)	Stock No.	Price 1-9
ECQ-V1H105JL5	1	7.3 x 5	5	53W3625	0.60
ECQ-V1H225JL	2.2	7.3 x 5	7.5	32R8865	1.30
VOLTAGE: 63 VDC					
ECQ-V1J563JM	0.056	7.3 x 7.3	5	32R8872	0.29
ECQ-V1J104JM	0.1	7.3 x 7.3	5	32R8871	0.31
ECQ-V1J564JM	0.56	7.3 x 5	7.5	53W8306	0.41
VOLTAGE: 100 VDC					
ECQ-V1103JM	0.01	7.3 x 5	5	80P4098	0.38
ECQ-V1153JM	0.015	7.3 x 10	5	80P4099	0.38
ECQ-V1223JM	0.022	7.5 x 7	5	39P9868	0.41
ECQ-V1333JM	0.033	10.2 x 9	5	39P9869	0.44
ECQ-V1473JM	0.047	7.5 x 7	5	40P3007	0.39
ECQ-V1563JM	0.056	7.5 x 7	5	32R8873	0.33
ECQ-V1683JM	0.068	7.5 x 7	5	39P9870	0.34
ECQ-V1104JM	0.1	7.5 x 7	5	39P9867	0.36
ECQ-V1104JM3	0.10	7.3 x 5	5	49W2383	0.37
ECQ-V1104JM2	0.10	7.5 x 7	5	49W2382	0.37
ECQ-V1104JM5	0.10	7.5 x 7	5	53W3628	0.43
ECQ-V1224JM9	0.22	7.3 x 5	7.5	53W3629	0.79
ECQ-V1274JM	0.27	7.3 x 5	7.5	53W8307	0.48

(180500)

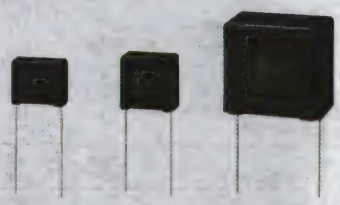
ECQ-U(G) [CLASS X1] TYPE METALLIZED POLYESTER FILM RADIAL LEADED CAPACITORS

RoHS Compliant Available

Panasonic

Features
- Equipped with a safety mechanism
- Flame-retardant plastic case and non combustible resin
- Capacitance range: 0.010 to 1.0µF
- Rated voltage: UL recognized for 250VAC, IEC recognized for 300VAC
- Tolerance range: 10% and 20%

Applications
- Interference suppressors



Mfg. Part No.	Cap. (µF)	Cap. Tol.	Lead Spacing (mm)	Stock No.	Price Each 1-9
ECQ-U3A473MG	0.047	± 20%	12.5	53W8305	0.46
ECQ-U3A105MG	1	± 20%	22.5	53W8304	1.95

(208964)

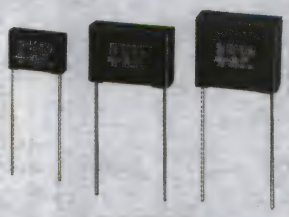
ECQ-U(L) [CLASS X2] [CLASS Y2/X2] TYPE METALLIZED POLYESTER FILM CAPACITORS

RoHS Compliant Available

Panasonic

Features
- Compact
- Flame-retardant plastic case and non-combustible resin
- UL rated for 250VAC, 0.0010 to 2.2uF (0.0010 to 0.0068 is for X2 & Y2 applications, while greater than 0.0068 is for X2 applications only)
- Tolerance: 10% or 20%

Recommended Applications:
- Interference suppressors



Mfg. Part No.	Cap. (µF)	Cap. Tol.	Lead Spacing (mm)	Stock No.	Price Each 1-9
ECQ-U2A102ML	0.0010	± 20%	12.5	49W1965	0.49
ECQ-U2A152ML	0.0015	± 20%	12.5	49W1995	0.44
ECQ-U2A222ML	0.0022	± 20%	12.5	49W2022	0.49
ECQ-U2A332MLA	0.0033	± 20%	12.5	49W2049	0.47
ECQ-U2A332ML	0.0033	± 20%	12.5	49W2048	0.42
ECQ-U2A472ML	0.0047	± 20%	12.5	49W2069	0.42
ECQ-U2A682ML	0.0068	± 20%	12.5	49W2089	0.44
ECQ-U2A153ML	0.015	± 20%	12.5	49W1998	0.42
ECQ-U2A273ML	0.027	± 20%	12.5	49W2040	0.41
ECQ-U2A333ML	0.033	± 20%	12.5	53W8302	0.49
ECQ-U2A563ML	0.056	± 20%	15	49W2082	0.41
ECQ-U2A683ML	0.068	± 20%	15	49W2092	0.52
ECQ-U2A823ML	0.082	± 20%	15	49W2102	0.41
ECQ-U2A104KL	0.010	± 10%	15	49W1970	0.45
ECQ-U2A274ML	0.27	± 20%	15	49W2044	0.51
ECQ-U2A394ML	0.39	± 20%	22.5	49W2065	0.55

➤CONTINUED➤

ECQ-U(L) [CLASS X2] [CLASS Y2/X2] TYPE METALLIZED POLYESTER FILM CAPACITORS (CONT.)

Mfg. Part No.	Cap. (µF)	Cap. Tol.	Lead Spacing (mm)	Stock No.	Price Each 1-9
ECQ-U2A474MLA	0.47	± 20%	22.5	49W2075	0.77
ECQ-U2A474KL	0.47	± 10%	22.5	49W2074	0.84
ECQ-U2A564ML	0.56	± 20%	22.5	49W2085	0.81
ECQ-U2A824ML	0.82	± 20%	22.5	49W2106	1.17
ECQ-U2A105KL	1	± 10%	22.5	49W1974	1.38
ECQ-U2A125ML	1.2	± 20%	27.5	49W1991	1.63
ECQ-U2A155ML	1.5	± 20%	27.5	49W2003	1.96
ECQ-U2A225MLA	2.2	± 20%	27.5	49W2033	1.84
ECQ-U2A225ML	2.2	± 20%	27.5	49W2032	1.82

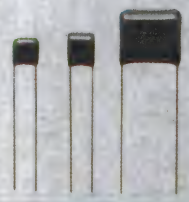
(208952)

ECQ-E(B) TYPE METALLIZED POLYESTER FILM CAPACITORS

RoHS Compliant Available

Panasonic

Features
- Self-healing property
- Excellent electrical characteristics
- Flame retardant epoxy resin coating
- Capacitance range: 250VDC, 0.01 to 4.7uF
- Tolerance: 5% and 10%



250 VDC

Mfg. Part No.	Cap. (µF)	Cap. Tol.	Lead Spacing (mm)	Stock No.	Price Each 1-9
ECQ-E2103KB	0.01	± 10%	5	49W0775	0.47
ECQ-E2103JB	0.01	± 5%	5	49W0768	0.51
ECQ-E2123JB	0.012	± 5%	5	49W0829	0.32
ECQ-E2153JB	0.015	± 5%	5	49W0884	0.32
ECQ-E2183JB	0.018	± 5%	5	49W0940	0.32
ECQ-E2223KB	0.022	± 10%	5	49W0997	0.44
ECQ-E2223JB	0.022	± 5%	5	49W0990	0.32
ECQ-E2273JB	0.027	± 5%	5	49W1040	0.32
ECQ-E2333KB	0.033	± 10%	5	49W1099	0.47
ECQ-E2333JB	0.033	± 5%	5	49W1092	0.32
ECQ-E2393JB	0.039	± 5%	5	49W1141	0.32
ECQ-E2473KB	0.047	± 10%	5	49W1198	0.38
ECQ-E2473JB	0.047	± 5%	5	49W1191	0.51
ECQ-E2563JB	0.056	± 5%	5	49W1241	0.32
ECQ-E2683JB	0.068	± 5%	5	49W1283	0.32
ECQ-E2823JB	0.082	± 5%	5	49W1324	0.36
ECQ-E2104KB	0.1	± 10%	5	49W0792	0.46
ECQ-E2104JB	0.1	± 5%	5	49W0785	0.51
ECQ-E2124JB	0.12	± 5%	5	49W0847	0.41
ECQ-E2154JB	0.15	± 5%	5	49W0902	0.44
ECQ-E2184JB	0.18	± 5%	7.5	49W0958	0.46
ECQ-E2224KB	0.22	± 10%	7.5	49W1014	0.43
ECQ-E2224JB	0.22	± 5%	7.5	49W1007	0.51
ECQ-E2274JB	0.27	± 5%	7.5	49W1058	0.56
ECQ-E2334KB	0.33	± 10%	7.5	49W1116	0.58
ECQ-E2334JB	0.33	± 5%	7.5	49W1109	0.49
ECQ-E2394JB	0.39	± 5%	10	49W1159	0.53
ECQ-E2474KB	0.47	± 10%	10	49W1215	0.58
ECQ-E2474JB	0.47	± 5%	10	49W1209	0.48
ECQ-E2564KB	0.56	± 10%	10	49W1266	0.55
ECQ-E2564JB	0.56	± 5%	10	49W1259	0.62
ECQ-E2684KB	0.68	± 10%	10	49W1306	0.60
ECQ-E2684JB	0.68	± 5%	10	49W1300	0.68
ECQ-E2824JB	0.82	± 5%	12.5	49W1342	0.76
ECQ-E2105KB	1	± 10%	12.5	49W0810	0.54
ECQ-E2105JB	1	± 5%	12.5	49W0803	0.55
ECQ-E2125JB	1.2	± 5%	12.5	49W0865	0.89
ECQ-E2155KB	1.5	± 10%	12.5	49W0927	0.93
ECQ-E2155JB	1.5	± 5%	12.5	49W0920	1.11
ECQ-E2185KB	1.8	± 10%	17.5	49W0983	1.09
ECQ-E2185JB	1.8	± 5%	17.5	49W0978	0.71
ECQ-E2225KB	2.2	± 10%	17.5	49W1032	1.20
ECQ-E2225JB	2.2	± 5%	17.5	49W1027	0.78
ECQ-E2275JB	2.7	± 5%	17.5	49W1079	0.88
ECQ-E2335KB	3.3	± 10%	17.5	49W1133	1.63
ECQ-E2335JB	3.3	± 5%	17.5	49W1128	1.07
ECQ-E2395JB	3.9	± 5%	17.5	49W1178	1.77

➤CONTINUED➤

ECQ-E(B) TYPE METALLIZED POLYESTER FILM CAPACITORS (CONT.)

Mfg. Part No.	Cap. (µF)	Cap. Tol.	Lead Spacing (mm)	Stock No.	Price Each 1-9
ECQ-E2475KB	4.7	± 10%	17.5	49W1232	2.33
ECQ-E2475JB	4.7	± 5%	17.5	49W1227	1.64

(208951)

ECW-FD SERIES METALLIZED POLYPROPYLENE FILM CAPACITORS

RoHS Compliant Available

Panasonic

Features
- Small in size
- Excellent frequency characteristics
- Low loss
- Flame-retardant epoxy resin coating
- Low Hum Sound Noise

Applications
- Active filter circuits
- High frequency and high current circuits

Specifications
- Rated voltage: 450 VDC
- Operating Temp. Range: –40°C to +110°C (derate beyond 85°C)
- Tolerance range: 5% and 10%

Mfg. Part No.	Cap. (µF)	Cap. Tol.	Lead Spacing (mm)	Stock No.	Price Each 1-24
ECW-FD2W104J4	0.1	± 5%	7.5	95W7591	0.54
ECW-FD2W104JB	0.1	± 5%	7.5	95W7589	0.54
ECW-FD2W104JQ	0.1	± 5%	10	95W7590	0.51
ECW-FD2W104KB	0.1	± 10%	7.5	95W7592	0.49
ECW-FD2W104KQ	0.1	± 10%	10	95W7593	0.47
ECW-FD2W124J4	0.12	± 5%	7.5	95W7597	0.55
ECW-FD2W124JQ	0.12	± 5%	10	95W7596	0.52
ECW-FD2W124KQ	0.12	± 10%	10	95W7599	0.47
ECW-FD2W154JQ	0.15	± 5%	10	95W7602	0.53
ECW-FD2W154KB	0.15	± 10%	7.5	95W7604	0.51
ECW-FD2W154KQ	0.15	± 10%	10	95W7605	0.49
ECW-FD2W224JQ	0.22	± 5%	10	95W7614	0.57
ECW-FD2W224K4	0.22	± 10%	7.5	95W7618	0.55
ECW-FD2W224KB	0.22	± 10%	7.5	95W7616	0.55
ECW-FD2W224KQ	0.22	± 10%	10	95W7617	0.52
ECW-FD2W274J4	0.27	± 5%	7.5	95W7621	0.51
ECW-FD2W274JB	0.27	± 5%	7.5	95W7619	0.51
ECW-FD2W274JQ	0.27	± 5%	10	95W7620	0.48
ECW-FD2W274K4	0.27	± 10%	7.5	95W7624	0.57
ECW-FD2W274KQ	0.27	± 10%	10	95W7623	0.54
ECW-FD2W334JQ	0.33	± 5%	10	95W7630	0.51
ECW-FD2W334KB	0.33	± 10%	7.5	95W7632	0.49
ECW-FD2W334KQ	0.33	± 10%	10	95W7633	0.57
ECW-FD2W394JB	0.39	± 5%	7.5	95W7639	0.56
ECW-FD2W394KQ	0.39	± 10%	10	95W7643	0.48
ECW-FD2W474P1	0.47	± 5%	10	95W7649	0.57
ECW-FD2W474Q1	0.47	± 10%	10	95W7650	0.52
ECW-FD2W474J	0.47	± 5%	15	49W2568	0.49
ECW-FD2W474J4	0.47	± 5%	7.5	49W2570	0.51
ECW-FD2W474K	0.47	± 10%	15	49W2571	0.55
ECW-FD2W474K4	0.47	± 10%	7.5	49W2573	0.50
ECW-FD2W564J	0.56	± 5%	15	49W2574	0.53
ECW-FD2W564J4	0.56	± 5%	7.5	49W2576	0.55
ECW-FD2W564K	0.56	± 10%	15	49W2577	0.48
ECW-FD2W564K4	0.56	± 10%	7.5	49W2579	0.50
ECW-FD2W564KB	0.56	± 10%	7.5	49W2578	0.50
ECW-FD2W684J	0.68	± 5%	15	49W2580	0.58
ECW-FD2W684J4	0.68	± 5%	7.5	49W2582	0.60
ECW-FD2W684K	0.68	± 10%	15	49W2583	0.52
ECW-FD2W684K4	0.68	± 10%	7.5	49W2585	0.55
ECW-FD2W824J	0.82	± 5%	15	49W2586	0.61
ECW-FD2W824J4	0.82	± 5%	7.5	49W2588	0.64
ECW-FD2W824K	0.82	± 10%	15	49W2589	0.56
ECW-FD2W824K4	0.82	± 10%	7.5	49W2591	0.59
ECW-FD2W824KB	0.82	± 10%	7.5	49W2590	0.59
ECW-FD2W105J	1	± 5%	15	49W2538	0.69
ECW-FD2W105J4	1	± 5%	7.5	49W2540	0.72
ECW-FD2W105JB	1	± 5%	7.5	49W2539	0.72
ECW-FD2W105K	1	± 10%	15	49W2541	0.63
ECW-FD2W105K4	1	± 10%	7.5	49W2543	0.66
ECW-FD2W155JB	1.5	± 5%	7.5	49W2551	0.92
ECW-FD2W225J	2.2	± 5%	15	49W2562	1.12
ECW-FD2W225J4	2.2	± 5%	7.5	49W2564	0.68
ECW-FD2W225K	2.2	± 10%	15	49W2565	1.02
ECW-FD2W225K4	2.2	± 10%	7.5	49W2567	1.07
ECW-FD2W225KB	2.2	± 10%	7.5	49W2566	1.07
ECW-FD2W275J	2.7	± 5%	22.5	95W7625	1.10

CONTINUED

ECW-FD SERIES METALLIZED POLYPROPYLENE FILM CAPACITORS (CONT.)

Mfg. Part No.	Cap. (µF)	Cap. Tol.	Lead Spacing (mm)	Stock No.	Price Each 1-24
ECW-FD2W275K	2.7	± 10%	22.5	95W7627	1.00
ECW-FD2W335K	3.3	± 10%	22.5	95W7637	1.15
ECW-FD2W395JB	3.9	± 5%	15	95W7646	0.87
ECW-FD2W475J	4.7	± 5%	22.5	95W7651	0.95

(209874)

SF SERIES METALLIZED POLYPROPYLENE AC CAPACITORS

RoHS Compliant Available

CDE CORNELL DUBILIER

Features:
- Dielectric: Low loss, self-healing metallized polypropylene
- Casing: Oval and round tin-plated steel
- Oil: Non-PCB, environmentally safe
- UL recognized under E71645
- Meets EIA Standard: EIA-456-A
- CSA File Number 223507
- CUL File Number CYWT8

Specifications:
- Temperature range: -40°C to +70°C
- Operating frequency: 50-60 Hz
- Tolerance: +/-10%

Other temperatures and tolerances available by special order.

Case Size	A	C	D	P	S	T
Common Name	1.25″ Oval	1.75″ Oval	2.50″ Oval	1.75″ Round	2.50″ Round	2.50″ Round
Thickness	1.31″	1.91″	1.97″	---	---	---
Width	2.16″	2.91″	3.66″	---	---	---
Diameter	---	---	---	1.87″	2.12″	2.62″

OVAL CASE STYLE

Mfg. Part No.	Case Size	Voltage (VAC)	Cap. (µF)	Height (in.)	Tape Cut Stock No.	Tape Cut Price Each 1-9
SFA37S7.5K219B-F	A	370	7.5	2.19	39M5022	11.82
SFA37S10K288B-F	A	370	10	2.88	15M6120	13.86
SFC37S20K291B-F	C	370	20	2.91	16M3554	20.10
SFA44S5K219B-F	A	440	5	2.19	16M5086	5.22
SFA44S10K375B-F	A	440	10	3.75	75M7826	17.69
SFA66S1K156B-F	A	660	1	1.56	75M7837	9.89
SFA66S1K219B-F	A	660	1	2.19	23M4642	7.23
SFA66S4K288B-F	A	660	4	2.88	20M0566	5.84
SFA66S5K375B-F	A	660	5	3.75	17M6206	16.66
SFA66S6K375B-F	A	660	6	3.75	31M3558	7.03
SFA66S8K475B-F	A	660	8	4.75	27M1658	9.30
SFC66S12K391B-F	C	660	12	3.91	41M0016	18.70
SFC66S15K391B-F	C	660	15	3.91	75M7846	19.85
SFD66S30K391B-F	D	660	30	3.91	27M1675	19.88
SFP37S30K288B-F	P	370	30	2.88	35M5067	23.35
SFS37S50K375B-F	S	370	50	3.75	59M6524	12.53

TYPE SF & MPF MOUNTING HARDWARE

Mfg. Part No.	Case Style	Case Size CDE	Case Size Mallory	Stock No.	Price Each 1-49	Price Each 50-99
30393-5	Oval	A	32	72K7382	2.26	2.01
OB2	Oval	C	37	94F3941	3.43	3.18
OB4	Oval	D	38	95F2825	3.52	3.26
RB175	Round	P	21	95F2820	3.89	3.60
RB200	Round	S	23	95F2821	3.36	3.11
RB250	Round	T	24	95F2822	3.66	3.39

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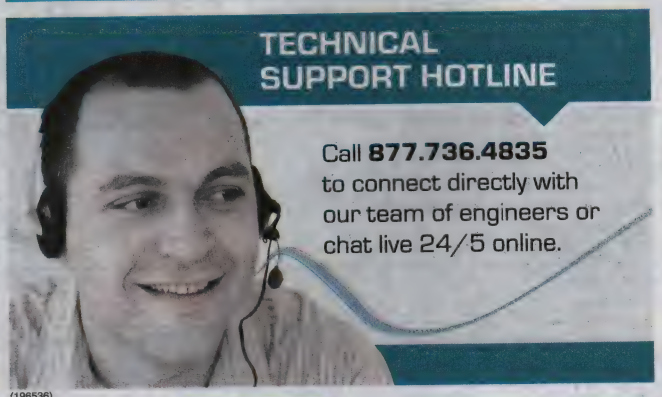

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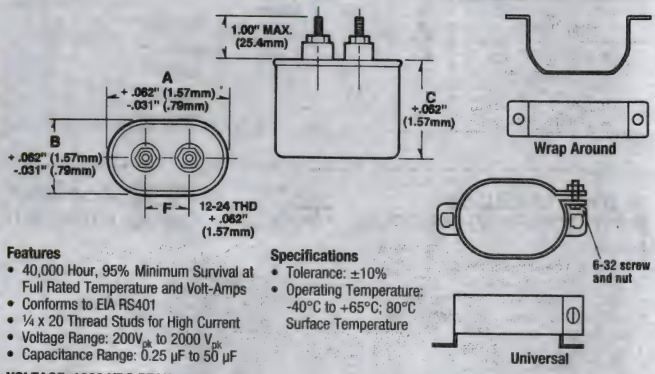
SCR COMMUTATING CAPACITORS

RoHS Compliant Available

CDE CORNELL DUBILIER



Features
- 40,000 Hour, 95% Minimum Survival at Full Rated Temperature and Volt-Amps
- Conforms to EIA RS401
- ¼ x 20 Thread Studs for High Current
- Voltage Range: 200V_{pk} to 2000 V_{pk}
- Capacitance Range: 0.25 µF to 50 µF

Specifications
- Tolerance: ±10%
- Operating Temperature: -40°C to +65°C; 80°C Surface Temperature

VOLTAGE: 1000 VDC PEAK

Mfg. Part No.	Cap. (µF)	Case Size	Dimensions A	B	C	F	Stock No.	Price Each 1-9	10-49
● SCRN233R-F	1	A	1.31″	2.16″	2.13″	0.81″	21M9028	55.39	52.27
● SCRN234R-F	2	A	1.31″	2.16″	3.125″	0.81″	75M7813	98.58	93.03
VOLTAGE: 1500 VDC PEAK									
● SCRN240R-F	0.5	A	1.31″	2.16″	2.13″	0.81″	61M0215	63.00	59.46
● SCRN241R-F	1	A	1.31″	2.16″	2.875″	0.81″	21M6336	102.05	96.31
● SCRN242R-F	2	B	1.56″	2.69″	3.500″	1.25″	50M0589	135.01	127.41
● SCRN244R-F	5	C	1.91″	2.91″	5.75″	1.38″	04M7006	75.28	71.10
VOLTAGE: 2000 VDC PEAK									
● SCRN246R-F	0.25	A	1.31″	2.16″	2.13″	0.81″	75M7818	62.31	58.80
● SCRN247R-F	0.5	A	1.31″	2.16″	2.675″	0.81″	55M6760	54.03	50.99
● SCRN248R-F	1	A	1.31″	2.16″	3.13″	0.81″	75M3089	50.68	47.83
● SCRN253R-F	5	D	1.97″	3.66″	5.75″	1.38″	23M2480	143.27	135.31
● SCRN256R-F	10	F	3.75″	4.56″	5.75″	2.00″	20M4782	395.99	373.99

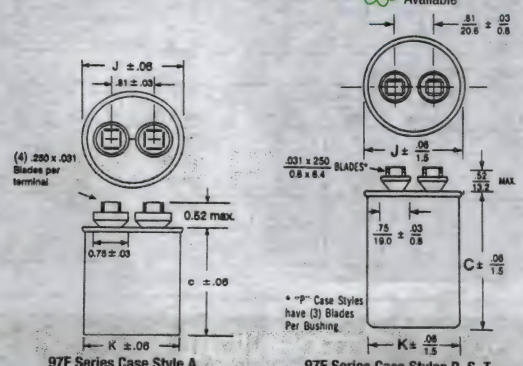
MOUNTING HARDWARE

Mfg. Part No.	Bracket Style	Case Size	Stock No.	Price Each 1-49	50-99
● 32107-1	Universal	A	90B7511	4.07	3.61
● 30393-5	Wrap-Around	A	72K7382	2.26	2.01
● 30393-9	Wrap-Around	C	87F6850	2.49	2.22
● 32107-3	Universal	D	95C2923	6.14	5.46
● OB3	Wrap-Around	D	95F2826	3.66	3.39

(7251)

GENERAL PURPOSE DC CAPACITORS

RoHS Compliant Available



97F Series Case Style A

97F Series Case Styles P, S, T

Specifications
- Dielectric: Polypropylene
- Operating Life: 60,000 hours with 94% Survival
- Operating Temperature: -30°C to +70°C
- 97F Series: Dual Voltage Rated: 440 VAC / 1000 VDC
- Tolerance: ±6%
- 26F Series: Tolerance: ±10%

Mounting brackets are available, *go online or call.*

Applications
- DC Filter Circuits for Voltages, Frequencies or Other Uses Where Long Life is Essential

CASE DIMENSIONS

Case Size	A	B	Case Size	J	K
A	2.16″	1.31″	P	1.88″	1.75″
...	...	...	S	2.12″	2.00″
C	2.91″	1.91″	T	2.62″	2.50″

➤ CONTINUED ➤

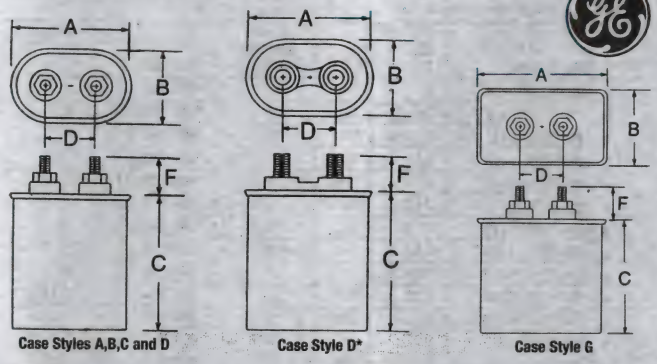
GENERAL PURPOSE DC CAPACITORS (CONT.)

VOLTAGE: DUAL-RATED, 1000 VDC / 440 VAC

Mfg. Part No.	Cap. (µF)	Case Size	Dim. C	Stock No.	Price Each 1-24	25-49
● 97F5437	3	A	2.12″	13M4404	8.70	8.25
● 97F5337	4	A	2.88″	13M4401	9.24	8.76
● 97F5339	5	A	2.88″	13M4402	9.71	9.21
● 97F5436	6	A	2.88″	13M4403	10.18	9.66
● 97F5300	10	A	3.88″	46F3403	13.77	13.08
● 97F5001	12.5	P	2.88″	13M4395	12.70	12.04
● 97F5023	30	P	4.75″	13M4396	20.82	19.74
● 97F5116	40	S	4.75″	13M4397	21.78	20.68
● 97F5209	45	T	3.88″	46F3419	28.03	26.59

(7333)

SCR COMMUTATION CAPACITORS



Applications
- SCR Commutation, Snubbers for SCRs and Power Semiconductors
- Circuits Where Combination of Frequency and Voltage Results in High RMS Currents

Order brackets for capacitors separately on page 500.

Specifications
- Terminal Length: 0.58″; Style D*: 0.72″
- Case Material: Styles A-D: Aluminum; Style G: Steel
- Unpainted Case and Cover

CASE DIMENSIONS FOR A97F7500 / A97F8600

Case Size	A	B	D	F
A	2.16″	1.31″	0.81″	1.18″
B	2.69″	1.56″	0.81″	1.12″
C	2.91″	1.91″	1.38″	1.12″
D	3.66″	1.97″	1.38″	1.12″
D*	3.66″	1.97″	1.25″	0.91″
G	4.56″	2.84″	2.00″	1.12″

*100 amp terminals

VOLTAGE: 600 VDC PEAK

Mfg. Part No.	Cap. (µF)	Case Size	Dim. C	Stock No.	Price Each 1-4	5-9
A97F8672S	10	C	4.25″	74R9416	197.49	179.47
A97F8673S	20	D	...	74R9417	639.70	581.32
A97F8674S	30	D	7.25″	74R9418	671.04	609.81
VOLTAGE: 1000 VDC PEAK						
A97F8618S	10	D	6.25″	74R9406	513.64	466.77
A97F8619S	10	D*	...	74R9407	789.77	717.70
VOLTAGE: 1500 VDC PEAK						
A97F8620S	1	A	3.88″	74R9408	129.77	117.93
A97F8622S	3	C	4.50″	74R9410	463.83	421.50
A97F8625S	10	G	5.18″	74R9413	1002.08	910.64

(7358)

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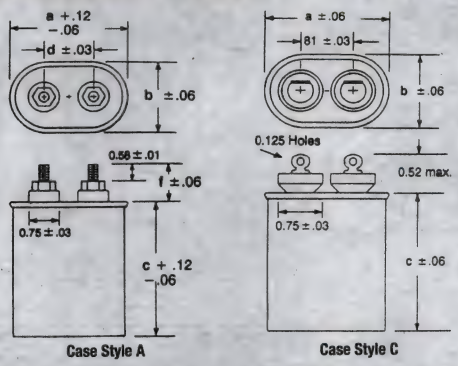
(196545)

28F5000 SERIES SNUBBER CAPACITORS



Case Style A

Case Style C

Specifications
- Dielectric: Polypropylene with Foil Electrodes
- Dimensions for Case Style A: a=2.16″, b=1.31″
- Dimensions for Case Style C: a=2.91″, b=1.91″

Applications
- Power Semiconductor Circuit Protection: Limits Rate of Voltage Rise

VOLTAGE: 1000 VDC PEAK

Mfg. Part No.	Cap. (µF)	Case Size	Dim. C	Stock No.	Price Each 1-24	Price Each 25-49
A28F5502S	0.5	A	2.12″	74R9393	53.03	51.94
A28F5503S	1	A	2.12″	74R9394	55.17	54.03
A28F5504S	2	A	2.88″	74R9395	60.40	59.15
A97F8614S	2	A	...	74R9402	165.38	150.29
A97F8615S	3	C	...	74R9403	165.59	150.48
A97F8616S	5	C	...	74R9404	532.22	483.66
VOLTAGE: 2000 VDC PEAK						
A28F5601S	0.1	A	2.12″	74R7914	49.31	48.30
A28F5615S	0.1	...	...	74R9401	161.85	158.51
A28F5602S	0.25	A	2.12″	74R9396	36.94	36.17
A28F5605S	0.25	...	...	74R9399	107.28	105.07
A28F5606S	0.5	...	...	74R9400	114.59	112.23
A28F5603S	0.5	A	2.88″	74R9397	37.49	36.74
A28F5604S	1	A	4.50″	74R9398	40.61	39.77
A28F5688S	2	C	4.25″	72R4545	209.25	204.93

(7357)

40L & 42L SERIES SNUBBER & HIGH-CURRENT DC CAPACITORS

RoHS Compliant Available

genteq

40L Series Oval

42L Series Round

Features
- Polypropylene film dielectric
- Extended Electrode, Metal Spray and Contacts
- Electroplated Solid Copper Terminals Welded to Contacts
- Units Wrapped in Flame-Retardant Tape and End-Dipped with Polyurethane

Specifications
- Dissipation Factor: 0.1% max. @ 25°C, 1kHz
- Capacitance Tolerance: 40L Series ±10%; 42L Series ±5%
- Operating Temperature: 40L -55°C to + 105°C; 42L -40°C to + 85°C

40L: SNUBBER & HIGH-CURRENT DC
VOLTAGE: 400 VDC (250 VAC)

Mfg. Part No.	Cap. (uF)	dV/dt (V/µs)	IPKR (A)	ESR (Ω)	Irms (A)	Stock No.	Price Each 1-24	Price Each 25-49
40L3472	0.47	70	100	0.021	4	13M3934	2.19	2.08
40L3682	0.68	70	150	0.013	6	94H6953	2.08	1.97
40L3101	1	70	200	0.011	9	13M3930	2.12	2.01
40L3151	1.5	70	250	0.009	10	46F1223	11.87	11.22
40L3221	2.2	70	350	0.008	11	13M3931	4.51	4.25
40L3331	3.3	70	500	0.007	15	13M3932	6.05	5.72
40L3471	4.7	50	450	0.007	17	13M3933	6.87	6.51
40L3681	6.8	50	550	0.007	17	14M6756	11.48	10.85
40L3100	10	50	700	0.007	17	15M6236	52.97	50.07
VOLTAGE: 600 VDC (330 VAC)								
40L6472	0.47	100	200	0.013	4	13M3938	2.42	2.29
40L6682	0.68	100	200	0.01	6	46F1229	12.47	11.78
40L6101	1	100	200	0.008	9	13M3935	3.90	3.67
40L6151	1.5	100	250	0.007	11	13M3936	7.34	6.95
40L6221	2.2	75	300	0.01	13	13M3937	7.56	7.15

CONTINUED

40L & 42L SERIES SNUBBER & HIGH-CURRENT DC CAPACITORS (CONT.)

42L: SNUBBER & HIGH-CURRENT DC
VOLTAGE: 850 VDC (450 VAC)

Mfg. Part No.	Cap. (µF)	dV/dt (V/µs)	IPKR (A)	ESR (mΩ)	Irms (A)	Stock No.	Price Each 1-24	Price Each 25-49
42L1222	0.22	300	6.6	66	7	66F8191	12.46	11.47
42L1472	0.47	300	3.5	140	9	66F8193	25.50	23.48
42L1151	1.5	200	2.3	300	11	66F8196	58.74	54.08
VOLTAGE: 1200 VDC (500 VAC)								
42L2222	0.22	1100	4.5	240	9	66F8238	23.78	21.89
42L2472	0.47	650	3.6	305	9	45P4284	37.27	34.32
VOLTAGE: 2000 VDC (630 VAC)								
42L3333	0.033	1750	21.4	58	4	91B7933	3.35	3.09
42L3473	0.047	1750	15.2	80	5	96B1516	10.98	10.11
42L3683	0.068	1750	10.8	120	7	66F8229	15.75	14.50
42L3102	0.1	1750	7.6	175	9	66F8230	19.23	17.69
42L3222	0.22	1000	5.4	220	9	66F8232	34.29	31.57
42L3332	0.33	1000	3.9	330	11	66F8233	50.01	46.04
42L3562	0.56	650	3.9	365	11	66F8217	71.22	65.56
VOLTAGE: 3000 VDC (750 VAC)								
42L4103	0.01	2750	61.6	28	2	62J2700	14.41	13.26
42L4333	0.033	2750	19.2	90	5	62J2703	26.82	24.69
42L4473	0.047	1600	17.9	75	6	02H0475	39.57	36.43
42L4102	0.1	1600	8.8	160	11	66F8224	54.87	50.52

(163805)

FFLI SERIES FILM CAPACITORS

RoHS Compliant Available

AVX A KYOCERA GROUP COMPANY

Features:
- Aluminium cylindrical case
- Self extinguishing thermosetting resin
- Self extinguishing plastic cover
- No risk of explosion at the end of life

Specifications:
- Dielectric material: Polypropylene
- Lifetime: 10000 hours @ 65°C
- Operating temperature: -40°C to +95°C

VOLTAGE: 800 VDC

Mfg. Part No.	Cap. (µF)	Lead Spacing (mm)	Stock No.	Price Each 1-9
FFLI6B1607K--	1600	50	24T5930	315.35
VOLTAGE: 1000 VDC				
FFLI6L0267K--	260	32	24T5932	111.24
FFLI6L0657K--	650	50	24T5933	171.90
VOLTAGE: 1200 VDC				
FFLI6U0157K--	150	32	24T5936	98.84
FFLI6U0437K--	430	32	24T5937	136.80
FFLI6U0867K--	860	50	24T5938	238.97
VOLTAGE: 1400 VDC				
FFLI6Q0257K--	250	32	24T5934	116.10
FFLI6Q0607K--	600	50	24T5935	198.36

(192379)

(211464)

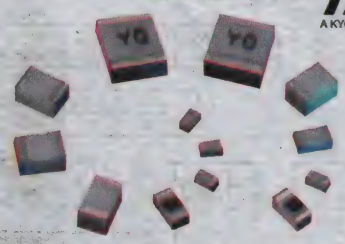
ACCU-P THIN FILM RF/ MICROWAVE CAPACITORS

RoHS Compliant Available

AVX A KYOCERA GROUP COMPANY

SMD

Applications
- Cellular/Military Communications
- CT2/PCN
- Satellite/Cable TV
- GPS
- Vehicle Alarm Systems
- Paging
- Radar Systems
- Video Switching
- Test & Measurements
- Filters
- VCO's
- Matching Networks



Accu-P capacitors use very low-loss dielectric materials (silicon dioxide and silicon oxynitride), in conjunction with highly conductive electrode metals to achieve not only a high Q but also low ESR at VHF, UHF, and microwave frequencies. These high-frequency characteristics change at a slower rate with increasing frequency than for ceramic microwave capacitors and are obtained without significant compromise of properties required for surface mounting. The **Accu-P** capacitors also achieve high stability with respect to time, temperature, frequency and voltage variation and have the added advantage of being enhanced for RF power handling capabilities. The terminations are nickel/solder-coated to provide excellent solderability and leach resistance.

0402 CASE SIZE, VOLTAGE: 16 VDC

Mfg. Part No.	Cap. (pF)	Tol. +/- %	Temp. Coeff.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● 0402YJ8R2BBSTR	8.2	± 0.1pF	0 ± 30ppm/°C	23M9754	0.81
● 0402YJ100FBSTR	10	± 1%	0 ± 30ppm/°C	12P9231	0.94
● 0402YJ100GBSTR	10	± 2%	0 ± 30ppm/°C	23M9752	0.94
0402 CASE SIZE, VOLTAGE: 25 VDC					
● 04023J0R1PBSTR	0.1	± 0.02pF	0 ± 30ppm/°C	23M9758	2.35
● 04023J0R2PBSTR	0.2	± 0.02pF	0 ± 30ppm/°C	23M9759	2.35
● 04023J0R3PBSTR	0.3	± 0.02pF	0 ± 30ppm/°C	23M9760	2.35
● 04023J0R4PBSTR	0.4	± 0.02pF	0 ± 30ppm/°C	23M9761	2.35
● 04023J0R5PBSTR	0.5	± 0.02pF	0 ± 30ppm/°C	23M9762	2.35
● 04023J0R6PBSTR	0.6	± 0.02pF	0 ± 30ppm/°C	23M9763	2.35
● 04023J0R7PBSTR	0.7	± 0.02pF	0 ± 30ppm/°C	23M9764	2.35
● 04023J0R8ABSTR	0.8	± 0.05pF	0 ± 30ppm/°C	10R5915	0.98
● 04023J0R9PBSTR	0.9	± 0.02pF	0 ± 30ppm/°C	23M9766	2.35
● 04023J1R0ABSTR	1	± 0.05pF	0 ± 30ppm/°C	23M9767	1.39
● 04023J1R1ABSTR	1.1	± 0.05pF	0 ± 30ppm/°C	23M9768	1.39
● 04023J1R2ABSTR	1.2	± 0.05pF	0 ± 30ppm/°C	23M9769	0.98
● 04023J1R4ABSTR	1.4	± 0.05pF	0 ± 30ppm/°C	23M9771	1.39
● 04023J1R5ABSTR	1.5	± 0.05pF	0 ± 30ppm/°C	23M9772	1.39
● 04023J1R6ABSTR	1.6	± 0.05pF	0 ± 30ppm/°C	23M9773	1.39
● 04023J1R8ABSTR	1.8	± 0.05pF	0 ± 30ppm/°C	23M9775	1.39
● 04023J1R9ABSTR	1.9	± 0.05pF	0 ± 30ppm/°C	23M9776	1.39
● 04023J2R0ABSTR	2	± 0.05pF	0 ± 30ppm/°C	23M9777	1.39
● 04023J2R2BBSTR	2.2	± 0.1pF	0 ± 30ppm/°C	23M9779	0.81
● 04023J2R4BBSTR	2.4	± 0.1pF	0 ± 30ppm/°C	23M9781	0.81
● 04023J2R7BBSTR	2.7	± 0.1pF	0 ± 30ppm/°C	23M9784	0.81
● 04023J3R0BBSTR	3	± 0.1pF	0 ± 30ppm/°C	23M9787	0.81
● 04023J3R3BBSTR	3.3	± 0.1pF	0 ± 30ppm/°C	23M9789	0.81
● 04023J4R7BBSTR	4.7	± 0.1pF	0 ± 30ppm/°C	23M9795	0.81
● 04023J5R6BBSTR	5.6	± 0.1pF	0 ± 30ppm/°C	23M9796	0.81
● 04023J6R8BBSTR	6.8	± 0.1pF	0 ± 30ppm/°C	23M9797	0.81
0603 CASE SIZE, VOLTAGE: 25 VDC					
● 06033J150GBSTR	15	± 2%	0 ± 30ppm/°C	23M9798	1.20
● 06033J220GBSTR	22	± 2%	0 ± 30ppm/°C	12P9232	1.20
● 06033K220GBSTR	22	± 2%	± 60ppm/°C	23M9800	1.78
0603 CASE SIZE, VOLTAGE: 50 VDC					
● 06035J0R1PBSTR	0.1	± 0.02pF	0 ± 30ppm/°C	23M9801	2.35
● 06035J0R2PBSTR	0.2	± 0.02pF	0 ± 30ppm/°C	23M9802	2.35
● 06035J0R4PBSTR	0.4	± 0.02pF	0 ± 30ppm/°C	23M9804	2.35
● 06035J0R5PBSTR	0.5	± 0.02pF	0 ± 30ppm/°C	23M9805	2.35
● 06035J0R7PBSTR	0.7	± 0.02pF	0 ± 30ppm/°C	23M9807	2.35
● 06035J1R0BBSTR	1	± 0.1pF	0 ± 30ppm/°C	23M9810	1.78
● 06035J1R1BBSTR	1.1	± 0.1pF	0 ± 30ppm/°C	23M9811	1.78
● 06035J1R2BBSTR	1.2	± 0.1pF	0 ± 30ppm/°C	23M9812	1.78
● 06035J1R5BBSTR	1.5	± 0.1pF	0 ± 30ppm/°C	23M9813	1.78
● 06035J1R8BBSTR	1.8	± 0.1pF	0 ± 30ppm/°C	23M9814	1.78
● 06035J2R2BBSTR	2.2	± 0.1pF	0 ± 30ppm/°C	23M9818	1.78
● 06035J5R6BBSTR	5.6	± 0.1pF	0 ± 30ppm/°C	23M9825	1.78
● 06035J8R2BBSTR	8.2	± 0.1pF	0 ± 30ppm/°C	23M9827	1.78
● 06035J100GBSTR	10	± 2%	0 ± 30ppm/°C	23M9815	1.20

(89852)

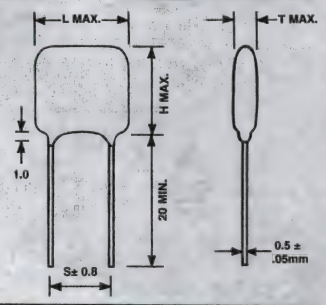
DSF SERIES POLYESTER FILM CAPACITORS

RoHS Compliant Available

CDE CORNELL DUBILIER

Features
- Stacked Metalized Polyester
- Ideal for Use in General-Purpose DC Applications
- Available in 50 to 100VDC Sizes
- Capacitance Range: 0.010µF to 2.2µF

Specifications
- Tolerance: ±5%
- Operating Temperature: -40°C to +85°C



VOLTAGE: 50 VDC

Mfg. Part No.	Cap. (uF)	Dimensions (Inches) T	H	L	S	Stock No.	Price Each 1-24	25-49
● DSF050J103	0.01	0.126	0.197	0.287	0.197	98B5754	0.24	0.21
● DSF050J123	0.012	0.126	0.197	0.287	0.197	01M7372	0.23	0.20
● DSF050J183	0.018	0.126	0.197	0.287	0.197	01M7374	0.29	0.25
● DSF050J223	0.022	0.126	0.197	0.287	0.197	98B5764	0.30	0.26
● DSF050J333	0.033	0.126	0.197	0.287	0.197	98B5769	0.30	0.26
● DSF050J473	0.047	0.126	0.197	0.287	0.197	98B5773	0.24	0.21
● DSF050J683	0.068	0.126	0.197	0.287	0.197	98B5777	0.32	0.28
● DSF050J104	0.1	0.157	0.197	0.287	0.197	12C4351	0.29	0.25
● DSF050J224	0.22	0.189	0.217	0.287	0.197	98B5765	0.34	0.30
● DSF050J334	0.33	0.205	0.276	0.287	0.197	72K7280	0.51	0.45
● DSF050J474	0.47	0.236	0.287	0.287	0.197	98B5774	0.56	0.49
● DSF050J105	1	0.315	0.433	0.287	0.197	73K6075	1.08	0.95
● DSF050J225	2.2	0.311	0.472	0.402	0.295	98B5766	2.38	2.09
VOLTAGE: 100 VDC								
● DSF100J103	0.01	0.126	0.276	0.295	0.197	98B5781	0.36	0.31
● DSF100J683	0.068	0.157	0.276	0.295	0.197	98B5799	0.40	0.35
● DSF100J104	0.1	0.177	0.276	0.295	0.197	98B5782	0.44	0.39
● DSF100J474	0.47	0.268	0.413	0.402	0.295	98B5797	0.71	0.62

(64373)

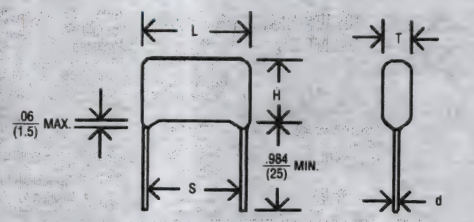
DME SERIES RADIAL POLYESTER FILM CAPACITORS

RoHS Compliant Available

CDE CORNELL DUBILIER

Features
- Self-Heals Shorts Caused by Overvoltage Transients
- Available Voltages: 100VDC to 1000VDC
- Capacitance Range: 0.01µF to 10µF

Specifications
- Tolerance: 10% (K Suffix); 5% (J Suffix)
- Operating Temperature: -55°C to +125°C



VOLTAGE: 100 VDC (65 VAC)

Mfg. Part No.	Cap. (uF)	Dimensions (See Above) T x H x L (in.)	Terminal Space(s)	Stock No.	Price Each 1-9	10-99
● DME1W1K-F	1	0.276 x 0.551 x 0.472″	0.394″	66K1950	1.16	0.72
● DME1W2P2K-F	2.2	0.295 x 0.610 x 0.728″	0.591″	66K1955	1.91	1.17
● DME1W3P3K-F	3.3	0.354 x 0.650 x 0.728″	0.591″	66K1957	2.70	1.66
● DME1W4P7K-F	4.7	0.315 x 0.669 x 1.024″	0.886″	66K1959	3.54	2.17
● DME1W10K-F	10	0.453 x 0.827 x 1.024″	0.886″	66K1954	6.46	3.96
VOLTAGE: 250 VDC (160 VAC)						
● DME2S1K-F	0.01	0.177 x 0.291 x 0.406″	0.295″	66K1991	0.48	0.30
● DME2S22K-F	0.022	0.177 x 0.295 x 0.406″	0.295″	66K1995	0.47	0.29
● DME2S33K-F	0.033	0.173 x 0.295 x 0.406″	0.295″	66K1996	0.49	0.30
● DME2S47K-F	0.047	0.177 x 0.295 x 0.406″	0.295″	66K1998	0.49	0.30
● DME2P1K-F	0.1	0.228 x 0.335 x 0.406″	0.295″	66K1979	0.61	0.38
● DME2P15K-F	0.15	0.236 x 0.425 x 0.406″	0.295″	66K1981	0.66	0.40
● DME2P22K-F	0.22	0.236 x 0.413 x 0.472″	0.394″	66K1983	0.71	0.44
● DME2P33K-F	0.33	0.256 x 0.472 x 0.492″	0.394″	66K1985	0.78	0.48
● DME2P47K-F	0.47	0.236 x 0.492 x 0.728″	0.591″	66K1987	0.93	0.57
● DME2P56K-F	0.56	0.217 x 0.512 x 0.728″	0.591″	66K1988	1.00	0.61
● DME2P68K-F	0.68	0.256 x 0.531 x 0.728″	0.591″	66K1989	1.09	0.67
● DME2W1K-F	1	0.315 x 0.610 x 0.728″	0.591″	66K2002	1.31	0.80
● DME2W1P8K-F	1.8	0.295 x 0.61 x 1.024″	0.886″	66K2004	1.93	1.18
● DME2W2P2K-F	2.2	0.354 x 0.669 x 1.024″	0.886″	66K2006	2.17	1.33
● DME2W3P3K-F	3.3	0.406 x 0.709 x 1.024″	0.886″	66K2008	2.92	1.79
● DME2W4P7K-F	4.7	0.492 x 0.886 x 1.024″	0.886″	66K2010	5.21	3.20
● DME2W5P6K-F	5.6	0.465 x 0.827 x 1.22″	1.083″	66K2011	6.70	4.11
● DME2W6P8K-F	6.8	0.512 x 0.882 x 1.22″	1.083″	66K2012	7.39	4.53

➤ CONTINUED ➤

DME SERIES RADIAL POLYESTER FILM CAPACITORS (CONT.)

VOLTAGE: 250 VDC (160 VAC)

Mfg. Part No.	Cap. (uF)	Dimensions (See Above) T x H x L (in.)	Terminal Space(s)	Stock No.	Price Each 1-9	10-99
DME2W8P2K-F	8.2	0.563 x 0.925 x 1.22″	1.083″	66K2013	8.80	5.40
DME2W10K-F	10	0.630 x 1.024 x 1.22″	1.083″	66K2005	9.86	6.05
VOLTAGE: 400 VDC (200 VAC)						
DME4S22K-F	0.022	0.189 x 0.311 x 0.406″	0.295″	66K2030	0.68	0.42
DME4S47K-F	0.047	0.217 x 0.335 x 0.472″	0.394″	66K2034	0.77	0.47
DME4S68K-F	0.068	0.213 x 0.413 x 0.492″	0.394″	66K2036	0.81	0.50
DME4P1K-F	0.1	0.248 x 0.472 x 0.472″	0.394″	66K2014	0.77	0.47
DME4P56K-F	0.56	0.256 x 0.63 x 1.024″	0.886″	66K2023	1.71	1.05
DME4P68K-F	0.68	0.276 x 0.65 x 1.024″	0.886″	66K2024	1.87	1.15
DME4W1K-F	1	0.335 x 0.728 x 1.024″	0.886″	66K2037	2.20	1.35
DME4W1P5K-F	1.5	0.374 x 0.748 x 1.22″	1.083″	66K2039	3.23	1.98
DME4W2P2K-F	2.2	0.433 x 0.866 x 1.22″	1.083″	66K2041	4.38	2.68
VOLTAGE: 630 VDC (250 VAC)						
DME6S1K-F	0.01	0.197 x 0.315 x 0.472″	0.394″	56K5746	0.62	0.38
DME6S22K-F	0.022	0.217 x 0.413 x 0.472″	0.394″	66K2057	0.67	0.41
DME6S47K-F	0.047	0.276 x 0.531 x 0.472″	0.394″	66K2061	0.77	0.47
DME6S56K-F	0.056	0.213 x 0.413 x 0.728″	0.591″	66K2062	0.78	0.48
DME6S68K-F	0.068	0.228 x 0.433 x 0.728″	0.591″	66K2063	0.87	0.54
DME6P1K-F	0.1	0.256 x 0.551 x 0.728″	0.591″	66K2042	1.02	0.63
DME6P15K-F	0.15	0.295 x 0.606 x 0.728″	0.591″	66K2044	1.21	0.75
DME6P22K-F	0.22	0.374 x 0.669 x 0.728″	0.591″	66K2046	1.44	0.88
DME6P33K-F	0.33	0.307 x 0.669 x 1.024″	0.886″	66K2048	1.87	1.15
DME6P39K-F	0.39	0.335 x 0.705 x 1.024″	0.886″	66K2049	1.93	1.18
DME6P56K-F	0.56	0.394 x 0.728 x 1.024″	0.886″	66K2051	2.58	1.58
DME6W1K-F	1	0.512 x 0.866 x 1.22″	1.083″	66K2065	4.45	2.73
DME6W1P5K-F	1.5	0.602 x 0.972 x 1.22″	1.083″	66K2067	5.63	3.45
DME6W2P2K-F	2.2	0.787 x 1.142 x 1.22″	1.083″	66K2069	7.13	4.37

(7397)

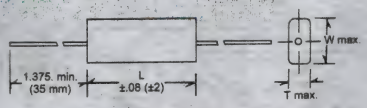
MMP SERIES POLYESTER FILM CAPACITORS

RoHS Compliant Available

CDE CORNELL DUBILIER

Features
- Non-Inductive and Self-Healing
- Low Profile

Specifications
- Tolerance: ±10%
- Operating Temperature: -55°C to +85°C



VOLTAGE: 250 VDC

Mfg. Part No.	Cap. (µF)	Dimensions (in.) Thick.	Width	Length	Stock No.	Price Each 1-24	25-99
MMP2P1K-F	0.1	0.22	0.33	0.59	66K3772	2.21	1.87
MMP2P47K-F	0.47	0.28	0.43	0.83	66K3776	1.59	1.34
MMP2W2P2K-F	2.2	0.37	0.71	1.3	66K3781	5.70	4.80
MMP2W10K-F	10	0.63	0.98	1.85	66K3780	8.25	6.95
VOLTAGE: 400 VDC							
MMP4P47K-F	0.47	0.35	0.61	0.98	66K3786	3.35	2.82
VOLTAGE: 630 VDC							
MMP6S1K-F	0.01	0.2	0.35	0.59	66K3803	1.49	1.26
MMP6P1K-F	0.1	0.31	0.51	0.83	66K3797	2.89	2.44
MMP6P22K-F	0.22	0.33	0.57	0.98	66K3799	2.76	2.32
MMP6P33K-F	0.33	0.39	0.67	0.98	66K3800	4.48	3.77
MMP6P47K-F	0.47	0.35	0.69	1.3	66K3801	3.51	2.96
MMP6W1K-F	1	0.51	0.87	1.46	66K3809	6.38	5.38

(7254)

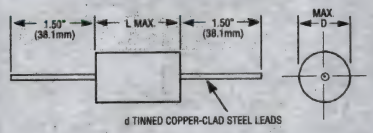
WMF SERIES POLYESTER FILM CAPACITORS

RoHS Compliant Available

CDE CORNELL DUBILIER

Features
- Ideal for Commercial Applications, Especially Those with High Peak Currents
- Capacitance Range: 0.001µF to 5µF

Specifications
- Tolerance: ±10% (K Suffix); ±5% (J Suffix)
- Operating Temperature: -55°C to 85°C



VOLTAGE: 50 WVDC

Mfg. Part No.	Cap. (uF)	D x L (in.)	Stock No.	Tape Cut Price Each 1-9	10-49
WMF05P1K-F	0.1	0.280 x 0.812″	66K4969	3.01	2.48
WMF05P22K-F	0.22	0.360 x 0.812″	66K4971	3.28	2.71
WMF05P47K-F	0.47	0.407 x 1.062″	66K4974	5.50	4.53
WMF05W1K-F	1	0.562 x 1.375″	66K4976	5.49	4.53

➤CONTINUED➤

WMF SERIES POLYESTER FILM CAPACITORS (CONT.)

VOLTAGE: 100 WVDC

Mfg. Part No.	Cap. (uF)	D x L (in.)	Stock No.	Tape Cut Price Each 1-9	10-49
WMF1D1K-F	1000	0.188 x 0.562″	66K4978	2.40	1.98
WMF1D22K-F	2200	0.188 x 0.562″	66K4980	1.56	1.29
WMF1D47K-F	4700	0.188 x 0.562″	66K4983	2.31	1.91
WMF1S1K-F	0.01	0.200 x 0.562″	66K4995	1.56	1.29
WMF1S15K-F	0.015	0.245 x 0.562″	66K4996	2.40	1.98
WMF1S22K-F	0.022	0.220 x 0.687″	60K7642	1.63	1.34
WMF1S33K-F	0.033	0.250 x 0.687″	63K2195	2.31	1.91
WMF1S47K-F	0.047	0.255 x 0.812″	66K4999	2.44	2.01
WMF1P1K-F	0.1	0.295 x 0.937″	66K4988	1.84	1.52
WMF1P22K-F	0.22	0.370 x 1.062″	66K4990	1.97	1.63
WMF1P47K-F	0.47	0.450 x 1.250″	66K4992	3.45	2.85
WMF1W1K-F	1	0.585 x 1.500″	66K5003	4.98	4.10
VOLTAGE: 200 WVDC					
WMF2P22K-F	0.22	0.385 x 1.187″	66K5012	2.90	2.39
WMF2W2K-F	2	0.965 x 1.875″	66K5022	10.79	8.90
VOLTAGE: 400 WVDC					
WMF4S1K-F	0.01	0.330 x 0.687″	66K5031	1.76	1.45
WMF4S47K-F	0.047	0.432 x 0.875″	66K5034	2.10	1.74
WMF4P1K-F	0.1	0.490 x 1.062″	66K5026	4.67	3.84
WMF4P22K-F	0.22	0.595 x 1.375″	66K5028	6.46	5.34
WMF4P47K-F	0.47	0.730 x 1.625″	66K5030	5.98	4.94
WMF4P68K-F	0.68	0.820 x 1.750″	44K0282	11.72	9.67
VOLTAGE: 600 WVDC					
WMF6S1K-F	0.01	0.290 x 0.812″	66K5043	2.23	1.84
WMF6S22K-F	0.022	0.335 x 0.937″	66K5045	3.22	2.66
WMF6P1K-F	0.1	0.580 x 1.375″	66K5037	7.72	6.36
WMF6P22K-F	0.22	0.722 x 1.625″	66K5039	8.10	6.68
WMF6P47K-F	0.47	0.885 x 2.000″	66K5041	9.59	7.91
WMF6W1K-F	1	1.185 x 2.562″	66K5048	14.34	11.82

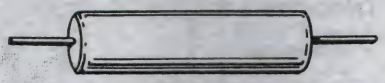
(7369)

MMWA SERIES METALLIZED POLYESTER FILM CAPACITORS

RoHS Compliant Available

CDE CORNELL DUBILIER

Features
- Voltage Range: 50VAC to 1000VAC
- Capacitance Range: 0.1µF to 10µF
- Moisture-Resistant Epoxy End Seals



Specifications
- Tolerance: ±10% (K Suffix); ±5% (J Suffix), Except Mfg. Part No. MMWA05W5M: ±20%
- Operating Temperature: -55°C to +85°C

Most popular values listed, *other values available, go online or call.*

VOLTAGE: 50 WVDC

Mfg. Part No.	Cap. (uF)	Cap. Tol.	D x L (in.)	Stock No.	Price Each 1-9	10-24	25-49
MMWA05W1M-F	1	...	0.335 x 1.000″	66K3817	6.82	6.14	5.51
VOLTAGE: 200 WVDC							
MMWA2P1K-F	0.1	± 10%	0.240 x 0.687″	66K3822	5.00	3.25	2.60
MMWA2W1K-F	1	± 10%	0.430 x 1.062″	66K3828	8.24	5.36	4.28
VOLTAGE: 400 WVDC							
MMWA4W1K-F	1	± 10%	0.470 x 1.750″	66K3834	16.28	10.59	8.46
MMWA4W2K-F	2	± 10%	0.650 x 1.750″	66K3835	25.27	16.45	13.13
VOLTAGE: 600 WVDC							
MMWA6P1K-F	0.1	± 10%	0.340 x 1.000″	66K3836	7.46	4.85	3.88
MMWA6P22K-F	0.22	± 10%	0.430 x 1.250″	66K3837	7.10	4.62	3.69
MMWA6P47K-F	0.47	± 10%	0.470 x 1.750″	66K3838	10.39	6.76	5.40
MMWA6W1K-F	1	± 10%	0.685 x 1.750″	66K3839	23.36	15.20	12.14

(7253)

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See the newest products, technologies and suppliers on our website.

(196560)

Q/QRL SERIES QUENCHARC® METALLIZED POLYESTER FILM CAPACITOR ARC SUPPRESSOR/ SNUBBER NETWORKS

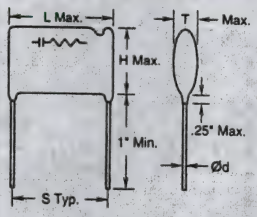
RoHS Compliant Available

MALLORY® Cornell Dubilier Electronics, Inc.

Features
- Metallized Polyester Construction in Series with a Carbon Composition Resistor
- Flame-Resistant, Epoxy-Coated Case

Applications
- Noise and Arc Suppression
- Relay Contact Protection
- Noise Reduction on Controllers/Drivers
- EMI/RFI reduction

Specifications
- Capacitance Tolerance: ±20%
- Resistance Tolerance: ±10%
- Resistor Power Rating: ½ W
- Voltage: 200 VDC to 600 VDC (125 VAC to 250 VAC)
- Operating Temperature: -55°C to +85°C
- Terminal diameter: 0.032"



VOLTAGE: 200 VDC / 125 VAC

Mfg. Part No.	Cap. (µF)	Resist. (Ω)	Dimensions L	H	T	S	Tape Cut Stock No.	Price Each 1-24
● 504M02QA100	0.5	100	1.08"	0.64"	0.37"	0.82"	16F3697	6.93
● 504M02QA220	0.5	220	1.08"	0.64"	0.37"	0.82"	16F3698	6.93
● 105M02QB47	1	47	1.45"	0.66"	0.39"	1.20"	72K6760	7.96
VOLTAGE: 600 VDC / 250 VAC								
● 104M06QC22	0.1	22	1.08"	0.66"	0.39"	0.82"	16F3700	6.11
● 104M06QC47	0.1	47	1.08"	0.66"	0.39"	0.82"	16F3701	6.11
● 104M06QC100	0.1	100	1.08"	0.66"	0.39"	0.82"	72K6759	6.11
● 104M06QC150	0.1	150	1.08"	0.66"	0.39"	0.82"	16F3703	6.60
● 254M06QD100	0.25	100	1.45"	0.42"	0.75"	1.20"	71J0507	8.83
● 254M06QD150	0.25	150	1.45"	0.42"	0.75"	1.20"	78K7151	6.27
● 504M06QE100	0.5	100	1.45"	0.59"	0.92"	1.20"	50H7101	13.57
● 504M06QE150	0.5	150	1.45"	0.59"	0.92"	1.20"	85C1735	12.63
VOLTAGE: 1200 VDC / 480 VAC								
● 104M48QH39	0.1	39*	1.60"	0.64"	1.04"	1.29"	88M9856	37.29
VOLTAGE: 125 VAC								
● 104MACQRL150	0.1	150	1.08"	0.66"	0.44"	0.82"	72K6758	6.97

* 2W Wirewound Resistor (7224)

B32520 - B32529 SERIES METALLIZED POLYESTER FILM CAPACITORS (MKT)

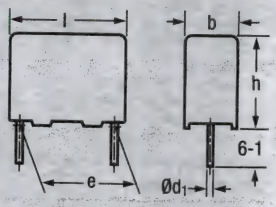
RoHS Compliant Available

EPCOS

Features
- High Pulse Strength
- High Contact Reliability
- Dielectric: Polyethylene Terephthalate (polyester, PET)
- Stacked Film Technology for lead spacing 5 to 15 mm
- Wound technology for lead spacing 10 to 27.5 mm
- Flame-Retardant Plastic Case (UL 94 V-0)
- Epoxy resin sealing (UL 94 V-0)

Applications
- Blocking
- Coupling, decoupling
- Bypassing
- RFI for automotive

Specifications
- Tolerance : ±5%, ±10%
- Service Life: 200,000 Hours
- Max. operating temperature: 125°C



VOLTAGE: 63 VDC

Mfg. Part No.	Cap. (µF)	Tol.	b x h x l (mm)	Lead Pitch (mm)	Stock No.	Price Each 1-9	10-99
● B32529C102J	0.001	± 5%	2.5 x 6.5 x 7.2	5	21C0440	0.32	0.27
● B32529C222J	0.0022	± 5%	2.5 x 6.5 x 7.2	5	21C0534	0.32	0.27
● B32529C332J	0.0033	± 5%	2.5 x 6.5 x 7.2	5	21C0579	0.31	0.25
● B32529C472J	0.0047	± 5%	2.5 x 6.5 x 7.2	5	21C0620	0.31	0.25
● B32529C103J	0.01	± 5%	2.5 x 6.5 x 7.2	5	21C0452	0.32	0.27
● B32529C103K	0.01	± 10%	2.5 x 6.5 x 7.2	5	21C0458	0.29	0.24
● B32529C153J	0.015	± 5%	2.5 x 6.5 x 7.2	5	21C0498	0.32	0.27
● B32529C223J	0.022	± 5%	2.5 x 6.5 x 7.2	5	21C0546	0.32	0.27
● B32529C333J	0.033	± 5%	2.5 x 6.5 x 7.2	5	21C0591	0.31	0.25
● B32529C473J	0.047	± 5%	2.5 x 6.5 x 7.2	5	21C0632	0.32	0.27
● B32529C683J	0.068	± 5%	2.5 x 6.5 x 7.2	5	21C0667	0.31	0.25
● B32529C104J	0.1	± 5%	2.5 x 6.5 x 7.2	5	26M8219	0.32	0.27
● B32520C104J	0.1	± 5%	2.5 x 7 x 10	7.5	20C9473	0.64	0.53
● B32529C154J	0.15	± 5%	2.5 x 6.5 x 7.2	5	21C0510	0.37	0.31
● B32529C224J	0.22	± 5%	2.5 x 6.5 x 7.2	5	26M8221	0.43	0.35
● B32520C224J	0.22	± 5%	2.5 x 7 x 10	7.5	20C9505	0.80	0.66
● B32529C334J	0.33	± 5%	2.5 x 6.5 x 7.2	5	26M8222	0.67	0.55
● B32529C474J	0.47	± 5%	2.5 x 6.5 x 7.2	5	26M8223	0.78	0.64
● B32520C474J	0.47	± 5%	3 x 8 x 10	7.5	20C9529	0.56	0.43
● B32529C684J	0.68	± 5%	2.5 x 6.5 x 7.2	5	21C0679	0.53	0.40
● B32529C105J	1	± 5%	4.5 x 9.5 x 7.3	5	26M8220	0.88	0.72
● B32520C105J	1	± 5%	5 x 10.5 x 10	7.5	20C9481	1.02	0.77

CONTINUED

B32520 - B32529 SERIES METALLIZED POLYESTER FILM CAPACITORS (MKT) (CONT.)

Mfg. Part No.	Cap. (µF)	Tol.	b x h x l (mm)	Lead Pitch (mm)	Stock No.	Price Each 1-9	10-99
● B32521C105J	1	± 5%	4 x 9 x 13	10	20C9773	0.97	0.73
● B32520C225J	2.2	± 5%	6 x 12 x 10.3	7.5	20C9513	1.44	1.14
● B32521C225J	2.2	± 5%	5 x 11 x 13	10	20C9785	1.51	1.19
● B32522C225J	2.2	± 5%	5 x 10.5 x 18	15	20C9982	1.84	1.49
● B32529D335J	3.3	± 10%	...	5	06R6588	1.89	1.50
● B32521C335J	3.3	± 5%	6 x 12 x 13	10	20C9791	1.88	1.52
● B32522C335J	3.3	± 5%	6 x 11 x 18	15	20C9988	2.21	1.79
● B32522C475J	4.7	± 5%	7 x 12.5 x 18	15	20C9994	2.79	2.25
VOLTAGE: 100 VDC							
● B32529C1102J	0.001	± 5%	2.5 x 6.5 x 7.2	5	21C0691	0.31	0.25
● B32529C1222J	0.0022	± 5%	2.5 x 6.5 x 7.2	5	21C0761	0.32	0.27
● B32529C1332J	0.0033	± 5%	2.5 x 6.5 x 7.2	5	21C0796	0.31	0.25
● B32529C1472J	0.0047	± 5%	2.5 x 6.5 x 7.2	5	21C0831	0.31	0.25
● B32529C1103J	0.01	± 5%	2.5 x 6.5 x 7.2	5	21C0703	0.31	0.25
● B32529C1103K	0.01	± 10%	2.5 x 6.5 x 7.2	5	21C0709	0.30	0.25
● B32529C1223J	0.022	± 5%	2.5 x 6.5 x 7.2	5	21C0773	0.32	0.27
● B32529C1333J	0.033	± 5%	2.5 x 6.5 x 7.2	5	21C0808	0.32	0.27
● B32529C1473J	0.047	± 5%	2.5 x 6.5 x 7.2	5	21C0843	0.31	0.25
● B32529C1104J	0.1	± 5%	2.5 x 6.5 x 7.2	5	26M8224	0.31	0.25
● B32520C1104J	0.1	± 5%	2.5 x 7 x 10	7.5	20C9553	0.68	0.56
● B32521C1104J	0.1	± 5%	4 x 7 x 13	10	07C7945	0.67	0.55
● B32529C1224J	0.22	± 5%	2.5 x 6.5 x 7.2	5	26M8226	0.57	0.48
● B32529C1224K	0.22	± 10%	3.5 x 8 x 7.2	5	21C0790	0.53	0.44
● B32520C1224J	0.22	± 5%	3 x 8 x 10	7.5	20C9569	0.45	0.34
● B32521C1224J	0.22	± 5%	4 x 7 x 13	10	20C9826	0.47	0.36
● B32529C1334J	0.33	± 5%	2.5 x 6.5 x 7.2	5	26M8227	0.76	0.63
● B32529C1474J	0.47	± 5%	4.5 x 9.5 x 7.3	5	26M8228	0.50	0.38
● B32520C1474J	0.47	± 5%	5 x 10.5 x 10	7.5	20C9593	0.64	0.48
● B32529D1105J	1	± 5%	7.8 x 13 x 7.8	5	43J2695	1.08	0.85
● B32521C1105J	1	± 5%	6 x 12 x 13	10	20C9814	1.03	0.78
● B32522C1105J	1	± 5%	5 x 10.5 x 18	15	21C0007	1.09	0.86
● B32522C1225J	2.2	± 5%	7 x 12.5 x 18	15	21C0019	1.88	1.52
● B32522C1335J	3.3	± 5%	8.5 x 14.5 x 18	15	21C0031	2.45	1.99
VOLTAGE: 250 VDC							
● B32529C3102J	0.001	± 5%	2.5 x 6.5 x 7.2	5	21C0896	0.35	0.29
● B32529C3103J	0.01	± 5%	2.5 x 6.5 x 7.2	5	21C0908	0.35	0.29
● B32521C3473J	0.047	± 5%	4 x 7 x 13	10	20C9880	0.66	0.54
● B32529C3104J	0.1	± 5%	4.5 x 9.5 x 7.3	5	26M8229	0.73	0.61
● B32520C3104J	0.1	± 5%	4 x 8.5 x 10	7.5	20C9617	0.68	0.56
● B32521C3104J	0.1	± 5%	4 x 7 x 13	10	20C9850	0.69	0.57
● B32522C3104J	0.1	± 5%	5 x 10.5 x 18	15	21C0049	0.64	0.48
● B32529C3104K	0.1	± 10%	4.5 x 9.5 x 7.3	5	01C1839	0.68	0.56
● B32559C3104K	0.1	± 10%	...	5	16R1638	0.65	0.54
● B32521C3104K	0.1	± 10%	4 x 7 x 13	10	20C9853	0.65	0.54
● B32521C3474J	0.47	± 5%	6 x 12 x 13	10	20C9886	0.87	0.66
● B32522C3474J	0.47	± 5%	6 x 11 x 18	15	21C0079	0.94	0.71
● B32522C3105J	1	± 5%	8.5 x 14.5 x 18	15	21C0055	1.10	0.87
● B32522C3105K	1	± 10%	8.5 x 14.5 x 18	15	21C0058	1.05	0.83
● B32522N3105J	1	± 5%	8.5 x 14.5 x 18	15	21C0127	1.15	0.87
● B32523Q3335J	3.3	± 10%	11 x 20.5 x 26.5	22.5	21C0253	2.59	2.10
VOLTAGE: 400 VDC							
● B32520C6102J	0.001	± 5%	2.5 x 7 x 10	7.5	20C9677	0.53	0.44
● B32529C6472J	0.0047	± 5%	2.5 x 6.5 x 7.2	5	21C1234	0.39	0.33
● B32529C6103J	0.01	± 5%	3 x 6.5 x 7.2	5	21C1163	0.43	0.36
● B32520C6103J	0.01	± 5%	2.5 x 7 x 10	7.5	20C9685	0.53	0.44
● B32520C6103K	0.01	± 10%	2.5 x 7 x 10	7.5	20C9689	0.51	0.42
● B32521C6103J	0.01	± 5%	4 x 7 x 13	10	20C9898	0.58	0.48
● B32559C6103K	0.01	± 10%	...	5	34R3099	0.30	0.25
● B32521C6223J	0.022	± 5%	4 x 7 x 13	10	20C9916	0.65	0.54
● B32529D6104J	0.1	± 5%	7.8 x 13 x 7.8	5	83H0214	0.62	0.47
● B32521C6104J	0.1	± 5%	6 x 12 x 13	10	20C9904	0.52	0.39
● B32521C6104K	0.1	± 10%	6 x 12 x 13	10	20C9907	0.49	0.37
● B32522C6474K	0.47	± 10%	...	15	05J2423	1.22	0.97
● B32523Q6105K	1	± 10%	10.5 x 16.5 x 26.5	22.5	05J2453	1.64	1.30
VOLTAGE: 450 VDC							
● B32522N6104J	0.1	± 5%	5 x 10.5 x 18	15	21C0133	0.58	0.44
● B32522N6224J	0.22	± 10%	6 x 11 x 18	15	21C0145	0.78	0.59
● B32522N6334J	0.33	± 10%	7 x 12.5 x 18.0	15	21C0151	0.84	0.63
● B32522N6474J	0.47	± 5%	8.5 x 14.5 x 18	15	21C0157	0.96	0.76
VOLTAGE: 630 VDC							
● B32529C8102J	0.001	± 5%	2.5 x 6.5 x 7.2	5	26M8235	0.64	0.53
● B32529C8222J	0.0022	± 5%	2.5 x 6.5 x 7.2	5	95B5799	0.64	0.53

CONTINUED

B32520 - B32529 SERIES METALLIZED POLYESTER FILM CAPACITORS (MKT) (CONT.)

VOLTAGE: 630 VDC

Mfg. Part No.	Cap. (µF)	Tol.	b x h x l (mm)	Lead Pitch (mm)	Stock No.	Price Each 1-9	Price Each 10-99
B32529C8472J	0.0047	± 5%	3.5 x 8 x 7.2	5	26M8237	0.70	0.58
B32529C8103J	0.01	± 5%	5 x 10 x 7.5	5	21C1263	0.46	0.35
B32522Q8104J	0.1	± 5%	7 x 12.5 x 18	15	21C0169	0.84	0.63

(163989)

RADIAL LEAD METALLIZED FILM CAPACITORS

RoHS Compliant Available

ILLINOIS CAPACITOR, INC.

Features:
- **MSR:** Metallized Polyester Epoxy Dipped, -55°C to +125°C
- **MMR:** Metallized Polyester Small Size Epoxy Dipped, -40°C to +105°C
- **MPR:** Metallized Polypropylene Epoxy Dipped, -55°C to +105°C
- Applications include:
  Bypass
  Coupling
  Filtering
  Blocking

MSR: METALLIZED POLYESTER FILM

Mfg. Part No.	Voltage (VDC)	Cap. (µF)	Tol.	L x H x T (mm)	Lead Pitch (mm)	Stock No.	Price Each 1-24	Price Each 25-99
104MSR250K	250	0.1	± 10%	12.5 x 11 x 6	10	80K8114	0.24	0.20
224MSR250K	250	0.22	± 10%	17.5 x 11 x 6.5	15	84M4524	0.32	0.27
334MSR250K	250	0.33	± 10%	17.5 x 12.5 x 7	15	84M4780	0.34	0.29
474MSR250K	250	0.47	± 10%	22.5 x 12.5 x 7.5	20	59K0071	0.36	0.30
473MSR400K	400	0.047	± 10%	12.5 x 11 x 6.5	10	84M4993	0.27	0.22
104MSR400K	400	0.1	± 10%	17.5 x 11.5 x 6.5	15	86K9438	0.28	0.24
103MSR630K	630	0.01	± 10%	12.5 x 10 x 5	10	84M4073	0.22	0.18
104MSR630K	630	0.1	± 10%	17.5 x 15.5 x 10	15	84M4082	0.41	0.34
MMR: METALLIZED POLYESTER FILM								
224MMR250K	250	0.22	± 10%	12 x 10.5 x 5.5	10	84M4516	0.22	0.21
104MMR630K	630	0.1	± 10%	18.5 x 14 x 6.5	15	84M4078	0.32	0.30
MPR: METALLIZED POLYPROPYLENE FILM								
104MPR250K	250	0.1	± 10%	13 x 11 x 7	10	84M4079	0.52	0.47
104MPR400K	400	0.1	± 10%	18 x 12.5 x 7.5	15	54M8290	0.51	0.46
105MPR400K	400	1	± 10%	31 x 22 x 15	27.5	55M3968	2.22	2.02

(115544)

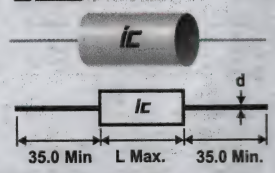
MWS SERIES METALLIZED POLYESTER FILM CAPACITORS FOR HIGH VOLTAGE APPLICATION

RoHS Compliant Available

ILLINOIS CAPACITOR, INC.

Features:
- High Voltage
- Voltage Multipliers

Specifications:
- 1200 dv/dt (v/µs)
- Tolerance: ±10%@1kHz, 20°C
- Operating Temperature: -40°C to +105°C
- Temperature Coefficient: +400ppm/°C ±200ppm/°C
- Dissipation Factor: 0.8% (1KHz, 20°C)
  1.5% (10kHz, 20°C)
  3.0% (100kHz, 20°C)



D	d
< 8.0	0.6
8 ≤ D ≤ 22	0.8
> 22	1.0

VOLTAGE: 10,000 WVDC, 1200 VAC

Mfg. Part No.	Cap. (µF)	D x L (mm)	Stock No.	Price Each 1-24	Price Each 25-49
152MWS103KT	0.0015	15.5 x 63 mm	30K6627	14.29	12.86
103MWS103KT	0.01	33 x 63 mm	30K6559	31.56	28.41
153MWS103KT	0.015	39 x 63 mm	30K6629	42.59	38.33

(84784)

R82 SERIES METALLIZED POLYESTER FILM CAPACITORS

RoHS Compliant Available

The Capacitance Company KEMET CHARGED.

Specifications
- Operating temperature range: -40 to +85°C
- Capacitance range: 1000 pF to 4.7 uF
- Capacitance Tolerance: J = ± 5 %K = ± 10 %, M = ± 20 %
- Voltage Range: 50 VDC - 400 VDC
- Lead Pitch: 5 mm

VOLTAGE: 63 VDC / 40 VAC

Mfg. Part No.	Capacitance (uF)	Tolerance	Max. dv/dt (V/us)	Dimensions B x H x L (mm)	Tape Cut Stock No.	Tape Cut Price Each 1-9
R82DC3100AA50J	0.1	± 5%	160	2.5 x 6.5 x 7.2	16R1049	0.23
R82DC3100DQ50J	0.1	± 5%	160	2.5 x 6.5 x 7.2	94M8805	0.27
R82DC3220DQ60J	0.22	± 5%	160	2.5 x 6.5 x 7.2	94M8806	0.30
R82DC3470DQ60J	0.47	± 5%	160	3.5 x 7.5 x 7.2	94M8807	0.38
R82DC4100DQ60J	1	± 5%	160	5 x 10 x 7.2	94M8808	0.56
VOLTAGE: 100 VDC / 63 VAC						
R82EC1100DQ50J	0.001	± 5%	200	2.5 x 6.5 x 7.2	94M8809	0.26
R82EC1470DQ50J	0.0047	± 5%	200	2.5 x 6.5 x 7.2	94M8810	0.26
R82EC2100DQ50J	0.01	± 5%	200	2.5 x 6.5 x 7.2	94M8811	0.24
R82EC2220DQ50J	0.022	± 5%	200	2.5 x 6.5 x 7.2	94M8812	0.25
R82EC2470DQ60J	0.047	± 5%	200	2.5 x 6.5 x 7.2	94M8813	0.29
R82EC3100DQ70J	0.1	± 5%	200	2.5 x 6.5 x 7.2	94M8814	0.27
R82EC3470DQ70J	0.47	± 5%	200	4.5 x 9.5 x 7.2	94M8815	0.50
R82EC4100DQ70J	1	± 5%	200	6 x 11 x 7.2	94M8816	0.53
VOLTAGE: 250 VDC / 140 VAC						
R82IC3100DQ60J	0.1	± 5%	250	5 x 10 x 7.2	94M8817	0.42

(110622)

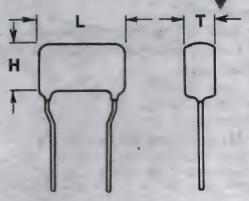
225P SERIES Filmite® "E", ORANGE DROP® POLYESTER FILM CAPACITORS

RoHS Compliant Available

VISHAY.

Features
- Wound from Polyester Film and Thin-Gauge Foil
- Radial Terminals Facilitate PC Board Insertion Process
- Epoxy Conformal Coating Protects Against Moisture
- For use in computers, instrumentation and telecommunications equipment

Specifications
- Tolerance: ±10%
- Lead Length: 1.25"(31.75mm)
- Tinned Copper-Clad Steel Terminals: 20AWG
- Terminal Diameter: 0.032" (0.81)
- Operating Temperature: -55°C to +85°C



VOLTAGE: 100 VDC

Mfg. Part No.	Cap. (µF)	L x T x H (in.)	Stock No.	Price Each 1-9	Price Each 10-49
225P33291WD3	0.0033	0.70 x 0.35 x 0.25"	18F2567	1.74	1.61
225P56291WD3	0.0056	0.70 x 0.35 x 0.25"	66C7102	1.74	1.61
225P68291WD3	0.0068	0.70 x 0.35 x 0.25"	36M1990	1.74	1.61
225P33391WD3	0.033	0.70 x 0.37 x 0.27"	18F2579	1.57	1.49
225P47391WD3	0.047	0.70 x 0.42 x 0.30"	18F2581	1.59	1.52
225P68391WD3	0.068	0.70 x 0.49 x 0.34"	36M1991	1.62	1.54
225P47491XD3	0.47	0.80 x 0.86 x 0.60"	47F2007	3.87	3.32
VOLTAGE: 200 VDC					
225P10392XD3	0.01	0.80 x 0.58 x 0.28"	36M1982	1.52	1.45
225P10492XD3	0.1	0.80 x 0.71 x 0.37"	47F168	2.31	2.14
225P68492YD3	0.68	1.25 x 1.14 x 0.84"	36M1992	4.37	4.15
VOLTAGE: 400 VDC					
225P10294XD3	0.001	0.80 x 0.55 x 0.25"	36M1981	2.11	1.95
225P47494YD3	0.47	1.25 x 1.14 x 0.84"	47F151	9.06	7.51

(7119)

PCB FABRICATION & ASSEMBLY

Quality US-based manufacturers—
as fast as 48-hour turnaround!

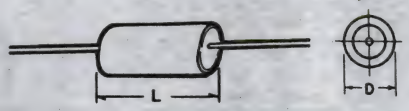
(197415)

430P SERIES WRAP-AND-FILL METALLIZED POLYESTER FILM CAPACITORS

RoHS Compliant Available

VISHAY.

Specifications
- Tolerance: ±10%
- Dissipation Factor: 1.0% Maximum
- Life Test: 125% of Noted Voltage at +85°C
- Operating Temperature: -55°C to +85°C



Mfg. Part No.	Cap. (µF)	D x L (in.)	Stock No.	Price Each 1-9	Price Each 10-49
VOLTAGE: 100 VDC					
● V-430P105X9100	1	0.286 x 1.250″	37M0526	5.94	5.10
● V-430P205X9100	2	0.393 x 1.250″	37M0557	7.87	6.75
VOLTAGE: 200VDC					
● V-430P104X9200	0.1	0.221 x 0.750″	37M0522	4.79	4.11
● V-430P474X9200	0.47	0.321 x 1.000″	37M0604	5.05	4.33
● V-430P105X9200	1	0.380 x 1.250″	37M0527	6.89	5.90
● V-430P205X9200	2	0.469 x 1.500″	37M0558	8.72	7.22
● V-430P405X9200	4	0.580 x 1.750″	37M0597	7.47	6.40
VOLTAGE: 400VDC					
● V-430P104X9400	0.1	0.310 x 0.750″	37M0523	5.42	4.65
VOLTAGE: 600VDC					
● V-430P104X9600	0.1	0.365 x 1.00″	37M0524	6.34	5.44
● V-430P474X9600	0.47	0.497 x 1.750″	37M0606	9.00	7.45

(7060)

F1710 POLYESTER FILM SUPPRESSION AC-CAPACITORS CLASS Y2 AC 250V (MKT)

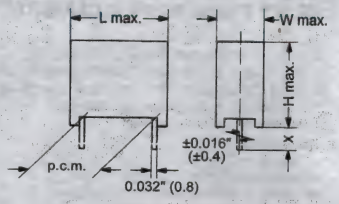
RoHS Compliant Available

VISHAY.

Features
- Plastic Can, Epoxy Resin-Sealed with Flame-Retardant Coating
- Tinned Copper Alloy Wire Terminals

Applications
- Class "Y2" Interference Suppression
- Cross the Line, Antenna Coupling and Line Bypass

Specifications
- Tolerance: ±20%
- Voltage: 250 VAC
- Lead Length: 6mm
- See spec for additional lead lengths
- Operating Temperature: -40°C to +100°C
- Approvals: UL Recognized, CSA, EN



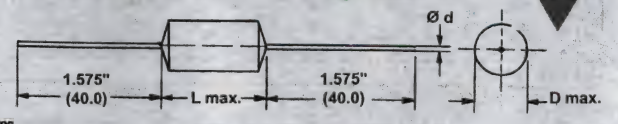
Mfg. Part No.	Cap. (uF)	W × H × L (mm)	Lead Spacing (mm)	Stock No.	Price Each 1-49	Price Each 50-99
● F17102101000	0.001	5.3 × 10.3 × 17.8	15	95F9062	2.14	1.83
● F17102471000	0.0047	5.3 × 10.3 × 17.8	15	95F9065	0.45	0.38
● F17103101030	0.01	6.3 × 12.3 × 17.8	15	65C0104	1.40	1.20
● F17103101000	0.01	6.3 × 12.3 × 17.8	15	95F9066	0.47	0.40
● F17103471000	0.047	8.3 × 16.3 × 26.3	22.5	95F9068	2.10	1.80
● F17104101000	0.1	11 × 20.3 × 31.3	27.5	95F9069	1.52	1.30

(7304)

MKT1813 METALLIZED POLYESTER FILM CAPACITORS

RoHS Compliant Available

VISHAY.



Features
- Polyester Film Dielectric
- Plastic-Wrapped Case, Epoxy Resin Sealed
- Tinned Wire Terminals

Applications
- Blocking, Bypassing, Filtering, Timing, Coupling, and Low Pulse Operations

Mfg. Part No.	Cap. (uF)	Tol.	D x L (mm)	Stock No.	Price Each 1-49	Price Each 50-99
VOLTAGE: 63 VDC						
● MKT1813447064	0.47	± 5%	7 x 14	95F8751	1.84	1.55
● MKT1813522064	2.2	± 5%	8.5 x 26.5	95F8753	3.15	2.66
● MKT1813533064	3.3	± 5%	10 x 26.5	28M9255	4.09	3.45
VOLTAGE: 100 VDC						
● MKT1813410014	0.1	± 5%	5 x 11	95F8748	1.27	1.07
● MKT1813410015	0.1	± 10%	5 x 11	90B0346	1.21	1.02
● MKT1813422015	0.22	± 10%	6 x 14	90B0370	0.72	0.61
● MKT1813510014	1	± 5%	8.5 x 19	95F8752	2.16	1.82
● MKT1813510015	1	± 10%	8.5 x 19	90B0418	2.21	1.86
● MKT1813547015	4.7	± 10%	12 x 31.5	90B0479	5.35	4.51

➤CONTINUED➤

MKT1813 METALLIZED POLYESTER FILM CAPACITORS (CONT.)

Mfg. Part No.	Cap. (uF)	Tol.	D x L (mm)	Stock No.	Price Each 1-49	Price Each 50-99
VOLTAGE: 250 VDC						
● MKT1813-322254	0.022	± 5%	5 x 11	18M2495	1.17	0.99
● MKT1813410254	0.1	± 5%	6 x 14	18M9239	1.25	1.05
● MKT1813410255	0.1	± 10%	6 x 14	26C1286	1.26	1.06
● MKT1813510255	1.0	± 10%	8.5 x 19	11M5204	2.28	1.92
VOLTAGE: 400 VDC						
● MKT1813-310404	0.01	± 5%	5 x 11	18M2494	1.18	0.99
● MKT1813410405	0.1	± 10%	7 x 19	65C1165	1.38	1.17

(7292)

935 SERIES METALIZED POLYPROPYLENE FILM CAPACITORS

RoHS Compliant Available

CDE CORNELL DUBILIER

Features
- High Capacitance, Low ESR
- Ideal for 20-100kHz Switching Power Supply Input Filtering, DC Blocking, and Output Filter Applications
- Flame-Retardant Outer Wrap and Epoxy End Seals

Specifications
- Tolerance: ±10% (K Suffix); ±5% (J Suffix)
- Operating Temperature: -55°C to +105°C

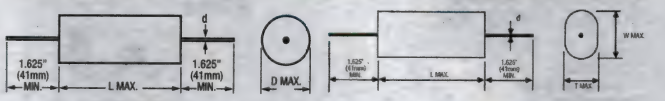
Mfg. Part No.	Cap. (µF)	D x L (in.)	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99
VOLTAGE: 100 VDC						
● 935C1W2K-F	2	0.534 x 0.938″	53K6103	11.09	8.74	7.49
● 935C1W3K-F	3	0.624 x 0.938″	66K5341	11.74	9.25	7.93
● 935C1W5K-F	5	0.669 x 1.250″	66K5343	11.14	8.77	7.52
● 935C1W10K-F	10	0.805 x 1.500″	66K5339	28.42	22.40	19.20
● 935C1W20K-F	20	0.875 x 2.250″	66K5340	20.36	16.05	13.76
● 935C1W30K-F	30	1.075 x 2.250″	66K5342	38.49	30.34	26.01
VOLTAGE: 200 VDC						
● 935C2W1K-F	1	0.450 x 1.250″	66K5344	7.69	6.06	5.19
● 935C2W2K-F	2	0.605 x 1.250″	66K5346	9.50	7.49	6.42
● 935C2W5K-F	5	0.769 x 1.750″	66K5349	8.55	6.74	5.78
● 935C2W10K-F	10	0.905 x 2.250″	66K5345	16.41	12.94	11.09
VOLTAGE: 400 VDC						
● 935C4W1K-F	1	0.620 x 1.500″	66K5350	6.86	5.41	4.64
● 935C4W2K-F	2	0.802 x 1.750″	66K5352	12.01	9.47	8.11
● 935C4W3K-F	3	0.961 x 1.750″	66K5353	16.41	12.94	11.09
● 935C4W10K-F	10	1.543 x 2.250″	66K5351	26.85	21.17	18.14

(7252)

940C AND 941C SERIES FILM CAPACITORS

RoHS Compliant Available

CDE CORNELL DUBILIER



940C 941C

Specifications:
- Tolerance: ±10%
- Operating Temperature: -55°C to 105°C

Mfg. part nos. 940C round axial film capacitors and **941C** flat, oval film capacitors use polypropylene film and dual metallized electrodes for both self healing properties and high peak current carrying capability (dV/dt). This series features low ESR characteristics, excellent high frequency and high voltage capabilities.

Mfg. Part No.	Cap. (µF)	D x L (in.)	ESR (mΩ)	dV/dt (V/µs)	I_{Peak} (A)	I_{RMS} (A)	Tape Cut Stock No.	Tape Cut Price Each 1-9
VOLTAGE: 600 VDC (275 VAC)								
● 940C6P1K-F	0.10	0.0.354 x 1.339″	28	196	20	2.5	66K5399	2.75
● 940C6P22K-F	0.22	0.453 x 1.339″	12	196	43	4.4	66K5401	2.44
● 940C6P33K-F	0.33	0.531 x 1.339″	9	196	65	5.6	66K5402	2.65
● 940C6P47K-F	0.47	0.531 x 1.339″	9	196	92	6.9	66K5403	3.07
● 940C6P68K-F	0.68	0.709 x 1.339″	12	196	43	4.4	66K5404	7.55
● 940C6W1K-F	1	0.827 x 1.339″	6	196	196	8.9	66K5405	4.42
● 940C6W3P3K-F	3.3	1.063 x 2.126″	4	105	346	15.3	66K5408	9.18
● 940C6W4P7K-F	4.7	1.240 x 2.126″	4	105	492	16.8	66K5409	12.77
VOLTAGE: 850 VDC (450 VAC)								
● 940C8W2K-F	2	1.201 x 1.811″	3	400	800	17.9	66K5417	13.58
● 940C8W2P2K-F	2.2	1.26 x 1.811″	3	400	880	18.4	66K5418	14.49
● 940C8W2P5K-F	2.5	1.339 x 1.811″	3	400	1000	19.1	66K5419	16.08
VOLTAGE: 1000 VDC (500 VAC)								
● 940C10P15K-F	0.15	0.591 x 1.339″	7	856	128	6.7	66K5355	3.11
● 940C10P22K-F	0.22	0.689 x 1.339″	7	856	188	7.4	66K5356	3.66
● 940C10P33K-F	0.33	0.807 x 1.339″	6	856	283	8.8	66K5357	4.75

➤CONTINUED➤

940C AND 941C SERIES FILM CAPACITORS (CONT.)

Mfg. Part No.	Cap. (µF)	D x L (in.)	ESR (mΩ)	dV/dt (V/µs)	I_{Peak} (A)	I_{RMS} (A)	Stock No.	Price Each 1-9
VOLTAGE: 1000 VDC (500 VAC)								
940C10P47K-F	0.47	0.945 x 1.339″	5	856	402	10.6	66K5358	6.15
940C10P68K-F	0.68	1.102 x 1.339″	5	856	582	11.7	66K5359	7.80
940C10W1K-F	1	1.024 x 1.811″	5	480	480	12.5	66K5360	8.61
940C10W2K-F	2	1.398 x 1.811″	3	480	960	19.6	66K5362	15.61
VOLTAGE: 1200 VDC (500 VAC)								
940C12P1K-F	0.1	0.61 x 1.339″	9	1142	114	6.1	66K5363	2.93
940C12P22K-F	0.22	0.846 x 1.339″	7	1142	251	8.4	66K5365	4.61
940C12P33K-F	0.33	0.787 x 1.811″	7	640	211	9	66K5366	5.14
940C12P47K-F	0.47	0.906 x 1.811″	7	640	301	9.8	66K5367	6.40
940C12W1K-F	1	1.299 x 1.811″	5	640	640	14.5	66K5369	11.25
940C12W1P5K-F	1.5	1.378 x 2.126″	4	502	754	17.9	66K5370	15.32
VOLTAGE: 1600 VDC (630 VAC)								
940C16P1K-F	0.1	0.709 x 1.339″	7	1427	143	7.5	66K5371	3.55
940C16P33K-F	0.33	0.709 x 1.339″	7	1427	264	10	66K5374	6.51
940C16P15K-F	0.15	0.846 x 1.339″	5	1427	214	9.9	66K5372	4.50
940C16P22K-F	0.22	1.004 x 1.339″	7	1427	314	9.3	66K5373	5.77
940C16P47K-F	0.47	1.083 x 1.811″	6	800	376	11.8	66K5375	7.99
940C16W1K-F	1	1.535 x 1.811″	5	800	800	16.2	66K5377	15.12
940C16W1P5K-F	1.5	1.654 x 2.126″	4	628	942	20.1	66K5378	19.92
VOLTAGE: 2000 VDC (630 VAC)								
940C20S22K-F	0.022	0.453 x 1.339″	35	1712	38	2.6	66K5386	2.29
940C20S47K-F	0.047	0.591 x 1.339″	12	1712	80	5.2	66K5388	2.74
940C20P1K-F	0.1	0.827 x 1.339″	7	1712	171	8.3	66K5379	3.94
940C20P15K-F	0.15	0.768 X 1.811″	7	960	144	8.9	66K5380	4.52
940C20P22K-F	0.22	0.866 x 1.811″	8	960	211	9	66K5381	5.52
940C20P33K-F	0.33	0.866 x 1.811″	8	960	317	10	66K5382	7.58
940C20S33K-F	0.33	0.866 x 1.811″	8	1712	57	3.8	66K5387	2.54
940C20P47K-F	0.47	1.26 x 1.811″	6	960	451	13	66K5383	9.89
940C20W1K-F	1	1.614 x 2.126″	5	754	754	17.7	66K5390	17.35
VOLTAGE: 3000 VDC (750 VAC)								
940C30S1K-F	0.01	0.453 x 1.339″	60	2568	26	2	66K5393	2.21
940C30S15K-F	0.015	0.531 X 1.339″	40	2568	39	2.7	66K5394	2.47
940C30S47K-F	0.047	0.650 x 1.811″	14	1440	68	5.7	66K5397	3.32
940C30P1K-F	0.1	0.886 X 1.811″	10	1440	144	8.1	66K5391	5.16
940C30P15K-F	0.15	1.063 X 1.811″	8	1440	216	10.1	66K5392	6.65

(72957)

UNL ELECTROFILM METALLIZED POLYPROPYLENE FILM CAPACITORS

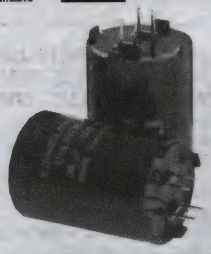
RoHS Compliant Available

CDE CORNELL DUBILIER

Features
- Film Alternative to Electrolytic Capacitors
- Moisture-Resistant Epoxy End Seals

Specifications
- Voltage Range: 400VDC to 1500VDC
- Capacitance Range: 4.7µF to 35µF
- Capacitance Tolerance: ±10%
- Operating Temperature Range: -55°C to +85°C
- Case Size: 53.72mm x 35.15mm

Designed for DC High Ripple Current Applications Ideal for aluminum electrolytic replacement or applications requiring high ripple current capacitors.



Mfg. Part No.	VDC	Cap. (µF)	ESR (Ω)	Stock No.	Price Each 1-4	5-9	10-19
UNL4W30K-F	400	30	0.006	30M8916	37.64	32.26	29.44
UNL6W30K-F	600	30	0.009	29M8946	30.64	26.26	23.96
UNL7W20K-F	700	20	0.01	30M8913	43.88	37.61	34.32
UNL7W50K-F	750	50	0.007	31P2403	60.04	51.46	46.96
UNL10W10K-F	1000	10	0.012	30M8909	40.32	34.56	31.54
UNL15W4P7K-F	1500	4.7	0.015	30M8911	35.07	30.07	27.43

(90464)

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(211462)

944U SERIES POLYPROPYLENE FILM DC FILTERING CAPACITORS

RoHS Compliant Available

CDE CORNELL DUBILIER

Specifications
- Capacitance Range: 33 µF to 220 µF
- Voltage Range: 800 VDC to 1400 VDC
- Capacitance Tolerance: ±10% standard
- Operating Temperature Range: –40°C to +85°C
- Diameter: 84.5 mm
- Terminal Spacing: 45 mm
- Flange Hole Spacing: 101 mm

Type 944U is specifically designed for use in medium power DC filtering applications. The low inductance internal construction utilizes low loss metallized polypropylene for high ripple current capability. These capacitors are housed in a rugged UL 94V0 rated flame retardant plastic case and resin fill.

Mfg. Part No.	Cap. (µF)	Max ESR 10kHz (mΩ)	Max I_{rms} 55°C (A)	Height (mm)	Stock No.	Price Each 1-9
VOLTAGE: 800 VDC						
944U101K801AAM	100	0.5	74	40	26R5160	61.48
944U161K801ABM	160	0.8	73	51	26R5162	73.23
944U221K801ACM	220	1	72	64	26R5163	86.25
VOLTAGE: 1200 VDC						
944U101K122ACM	100	1.3	64	64	26R5159	71.44
VOLTAGE: 1400 VDC						
944U520K142ABM	52	1.1	60	51	26R5166	56.51
944U700K142ACM	70	1.4	59	64	26R5169	67.11

(156189)

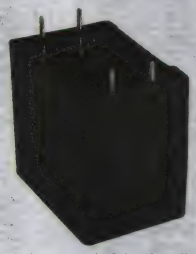
BLC SERIES POLYPROPYLENE BOARD MOUNT DC LINK CAPACITORS

RoHS Compliant Available

CDE CORNELL DUBILIER

Features:
- High capacitance
- High ripple current
- Self-healing
- Durable plastic case, rated UL94V-0
- Dry resin material, rated UL94V-0
- Tin-plated copper terminals

Specifications:
- Capacitance range: 8µF to 55µF
- Voltage range: 700VDC to 1100VDC
- Capacitance tolerance: ±5% standard
- Operating temperature range: –45°C to +85°C
- Maximum rms voltage: 230VAC
- Life test: 5000h @ 85°C, rated voltage



Type BLC series uses the most advanced metallized film technology for long life and high reliability in DC Link applications. This series combines high capacitance and very high ripple current capability needed for today's inverter designs for medium power wind, solar, fuel cells, UPS systems and more.

Mfg. Part No.	Cap. (µF)	Typ ESR 10kHz (mΩ)	Typ I_{rms} 55°C (A)	Dimensions (mm) W	H	L	Lead Spacing (mm)	Stock No.	Price Each 1-24
VOLTAGE: 700VDC									
BLC150J701B4A	15	5.2	15	20	40	41.5	37.5/10.2	44W9036	11.45
BLC200J701B4B	20	3.9	17	28	37	41.5	37.5/10.2	44W9039	12.34
BLC220J701B4C	22	3.6	19	24	44	41.5	37.5/10.2	44W9041	12.65
BLC300J701B4D	30	2.6	23	30	45	41.5	37.5/20.3	44W9043	14.61
BLC450J701B4E	45	3.6	22	30	45	57.5	52.5/20.3	44W9046	20.49
BLC550J701B4F	55	2.9	25	35	50	57.5	52.5/20.3	44W9047	18.93
VOLTAGE: 900VDC									
BLC120J901B4A	12	5.2	15	20	40	41.5	37.5/10.2	44W9034	9.43
BLC140J901B4B	14	4.5	16	28	37	41.5	37.5/10.2	44W9035	10.03
BLC160J901B4C	16	3.9	18	24	44	41.5	37.5/10.2	44W9037	10.12
BLC200J901B4D	20	3.1	21	30	45	41.5	37.5/20.3	44W9040	10.86
BLC300J901B4E	30	4.3	20	30	45	57.5	52.5/20.3	44W9044	15.01
BLC400J901B4F	40	3.2	25	35	50	57.5	52.5/20.3	44W9045	20.39
VOLTAGE: 1100VDC									
BLC080J112B4A	8	6.5	13	20	40	41.5	37.5/10.2	44W9031	10.48
BLC100J112B4B	10	5.2	15	28	37	41.5	37.5/10.2	44W9032	10.90
BLC120J112B4D	12	4.3	18	30	45	41.5	37.5/20.3	44W9033	11.36
BLC200J112B4E	20	5.3	18	30	45	57.5	52.5/20.3	44W9038	13.26
BLC250J112B4F	25	4.2	21	35	50	57.5	52.5/20.3	44W9042	15.01

(208885)

B32921 - B32926 SERIES EMI SUPPRESSION CAPACITORS (MKP)

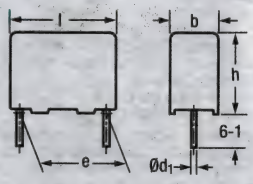
RoHS Compliant Available

EPCOS

Features
- Very small dimensions
- Self-healing properties
- Dielectric: Polypropylene
- Plastic Case (UL 94 V-0)
- Epoxy resin sealing

Applications
- X2 class for interference suppression
- "Across the line" applications

Specifications
- Voltage: 305 VAC
- Tolerance : ±20%
- Max. operating temperature: 125°C



VOLTAGE: 305 VAC

Mfg. Part No.	Cap. (µF)	b x h x l (mm)	Stock No.	Price Each 1-9999
● B32921C3103M189	0.01	4 x 9 x 13	29M0604	0.17
● B32921C3223M	0.022	4 x 9 x 13	66K1471	0.46
● B32921C3104M	0.1	6 x 12 x 13	66K1469	0.54
● B32922C3104M189	0.1	5 x 10.5 x 18	29M0639	0.19
● B32922C3224M	0.22	7 x 12.5 x 18	66K1481	0.67
● B32922C3334M	0.33	8 x 14 x 18	66K1483	0.81
● B32922C3474M189	0.47	9 x 17.5 x 18	29M0667	0.43
● B32922C3684M	0.68	11 x 18.5 x 18	66K1490	1.35
● B32923C3105M189	1	11 x 20.5 x 26.5	29M0689	0.71
● B32923C3155M	1.5	12 x 22 x 26.5	66K1496	1.90
● B32924C3155K*	1.5	12.5 x 21.5 x 31.5	60K0795	1.99
● B32923C3225M	2.2	14.5 x 29.5 x 26.5	66K1497	2.80
● B32923E3225M	2.2	14.5 x 29.5 x 26.5	13P2347	2.80
● B32924C3225M189	2.2	14 x 24.5 x 31.5	29M0734	1.32
● B32924E3225M	2.2	14 x 24.5 x 31.5	89M4757	2.60
● B32924C3335M	3.3	18 x 27.5 x 31.5	60K0799	3.27
● B32924C3475M	4.7	18 x 33 x 31.5	60K0800	4.83
● B32926C3106M	10	28 x 42.5 x 41.5	60K0807	8.59
VOLTAGE: 330 VAC				
● B32911A3103M	0.01	...	07P7401	0.90
● B32912A3104M	0.1	...	07P7443	0.96

* Tolerance = +/-10%
(136203)

B3202* SERIES RADIAL LEADED EMI SUPPRESSION CAPACITORS (MKP)

RoHS Compliant Available

EPCOS

Features
- Very small dimensions
- Good self-healing properties
- High voltage capability

Specifications
- Rated AC voltage: 300 V (50/60 Hz)
- Max. continuous DC voltage (VDC): 1500 V
- Max. continuous AC voltage (VAC): 480 V (50/60 Hz)
- Dielectric: Polypropylene (MKP)
- Capacitance tolerance: ±20%
- Max. operating temperature: 110°C

Applications
- Y2 class for interference suppression
- "Line to ground" applications

Mfg. Part No.	Cap. (µF)	D x L (mm)	Pitch (mm)	Stock No.	Price Each 1-9
● B32021A3102M	0.001	4 x 9 x 13	10	48M4508	1.10
● B32021A3472M	0.0047	5 x 11 x 13	10	60M3235	0.71
● B32022A3103M	0.01	5 x 10.5 x 18	15	07P6591	0.94
● B32022A3223M	0.022	6 x 12 x 18	15	89M4748	1.06
● B32022A3473M	0.047	8.5 x 14.5 x 18	15	07P6594	1.36
● B32023A3104M	0.1	8.5 x 16.5 x 26.5	22.5	48M4528	1.44
● B32023A3224M	0.22	12 x 22 x 26.5	22.5	07P6602	2.11

(167104)

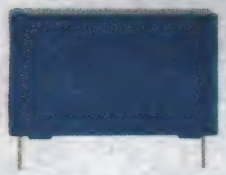
B32671 - B32672 SERIES RADIAL LEADED METALLIZED POLYPROPYLENE FILM CAPACITORS (MKP)

RoHS Compliant Available

EPCOS

Features
- High VAC, high temperature (wound)
- Dielectric: metallized polypropylene (PP)
- Capacitance tolerance: ±5%
- Max. operating temperature: 125°C

Applications
- Electronic ballasts (resonant circuits)
- SMPS
- High-frequency AC loads
- Pulse circuits



Mfg. Part No.	V_{RMS} (VAC)	V_R (VDC)	Cap. (µF)	D x L (mm)	Pitch (mm)	Stock No.	Price Each 1-9
● B32671L103J	500	1000	0.01	6 x 12 x 13	10	06R6693	0.55
● B32671L472J	500	1000	0.0047	4 x 9 x 13	10	06R6714	0.79

➤CONTINUED➤

B32671 - B32672 SERIES RADIAL LEADED METALLIZED POLYPROPYLENE FILM CAPACITORS (MKP) (CONT.)

Mfg. Part No.	V_{RMS} (VAC)	V_R (VDC)	Cap. (µF)	D x L (mm)	Pitch (mm)	Stock No.	Price Each 1-9
● B32671L1222J	600	1600	0.0022	5 x 11 x 13	10	06R6699	0.84
● B32672L1103J	600	1600	0.01	6 x 121x 18	15	29M0438	0.63
● B32672L8102J	700	2000	0.001	5 x 10.5 x 18	15	06R6738	0.45
● B32672L8472J	700	2000	0.0047	5 x 10.5 x 18	15	29M0478	0.49
● B32672L8822J	700	2000	0.0082	6 x 12 x 18	15	06R6763	0.67
● B32672L8103J	700	2000	0.01	7 x 12.5 x 18	15	29M0456	0.78

(167149)

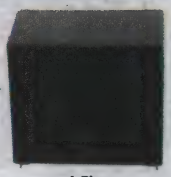
B32674, B32676, B32678 SERIES RADIAL LEADED DC LINK CAPACITORS (MKP)

RoHS Compliant Available

EPCOS

Specifications
- Wound technology
- Dielectric: Polypropylene film (MKP)
- Capacitance tolerance: ±10%
- Max. operating temperature: 100°C

2-Pin



4-Pin

Mfg. Part No.	Cap. (µF)	D x L (mm)	Pitch (mm)	Stock No.	Price Each 1-9
V_R = 300 VDC / V_{op} = 450 VDC / V_p = 450 VDC / V_{RMS} = 160 VAC					
● B32674D3225K	2.2	11 x 19 x 31.5	27.5	29M0509	2.37
● B32674D3475K	4.7	14 x 24.5 x 31.5	27.5	29M0511	3.12
● B32674D3805K	8	16 x 32 x 31.5	27.5	29M0513	5.66
● B32674D3106K	10	21 x 31 x 31.5	27.5	29M0507	6.22
● B32678G3606K*	60	35 x 50 x 57.5	52.5/20.3	07P7379	15.74
V_R = 450 VDC / V_{op} = 630 VDC / V_p = 675 VDC / V_{RMS} = 275 VAC					
● B32674D4155K	1.5	11 x 19 x 31.5	27.5	29M0514	2.16
● B32674D4225K	2.2	12.5 x 21.5 x 31.5	27.5	29M0515	2.61
● B32674D4335K	3.3	15 x 24.5 x 31.5	27.5	29M0516	3.34
● B32674D4475K	4.7	18 x 27.5 x 31.5	27.5	29M0517	3.98
V_R = 630 VDC / V_{op} = 800 VDC / V_p = 950 VDC / V_{RMS} = 350 VAC					
● B32674D6105K	1	11 x 19 x 31.5	27.5	29M0523	2.19
● B32674D6155K	1.5	12.5 x 21.5 x 31.5	27.5	29M0524	2.45
● B32674D6225K	2.2	15 x 24.5 x 31.5	27.5	29M0525	3.27
● B32674D6505K	5	22 x 36.5 x 31.5	27.5	29M0528	5.59
V_R = 875 VDC / V_{op} = 1050 VDC / V_p = 1300 VDC / V_{RMS} = 400 VAC					
● B32674D8474K	0.47	11 x 19 x 31.5	27.5	29M0532	1.96
● B32674D8105K	1	13.5 x 23 x 31.5	27.5	29M0529	2.45

* 4-Pin
(167152)

EMI SUPPRESSOR METALLIZED POLYPROPYLENE FILM CAPACITORS by EVOX RIFA, A KEMET COMPANY

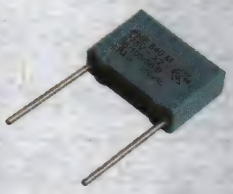
RoHS Compliant Available

The Capacitance Company KEMET CHARGED.

Specifications
- Rated voltage: 275 VAC 50/60 Hz (ENEC), 280 VAC 50/60 Hz (UL, CSA)
- Capacitance tolerance: ± 20% standard
- Temperature range: –55 to +105°C

Typical Application
- Worldwide use as an EMI suppressor in all X2 and across-the-line applications

Metallized polypropylene film encapsulated with self-extinguishing epoxy resin in a box of material recognized to UL 94 V-0. Other values available; *go online or call.*



Mfg. Part No.	Cap. (uF)	Dimensions (mm)	Pitch (mm)	Stock No.	Price Each 1-9
● PHE840MB6100MB05R17	0.1	18.0 x 12.5 x 5.5	15	61M2379	0.70
● PHE840MX6220MB06R17	0.22	18.0 x 14.5 x 7.5	15	61M2382	0.74
● PHE840MB6470MB16R17	0.47	18.0 x 19.0 x 11.0	15	61M2380	0.96
● PHE840MY6470MD14R06L2	0.47	26.0 x 16.0 x 8.0	22.5	61M2383	1.07
● PHE840MY7100MD16R06L2	1	26.0 x 21.5 x 11.0	22.5	61M2384	1.74
● PHE840MZ7100MF11R06L2	1	31.5 x 20.5 x 10.5	27.5	61M2385	2.84
● PHE840MZ7220MF14R06L2	2.2	31.5 x 28.0 x 17.5	27.5	61M2386	3.41
● PHE840MR7220MR05R06L2	2.2	41.0 x 24.0 x 13.0	37.5	61M2381	4.53

(104009)

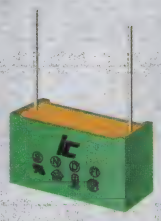
MKP SERIES CLASS X2 RADIAL METALLIZED POLYPROPYLENE CAPACITORS

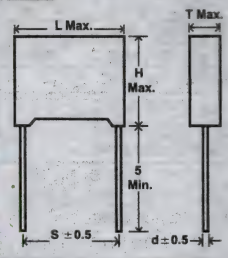
RoHS Compliant Available

ILLINOIS CAPACITOR, INC.

Features:
- EMI Filter
- Antenna coupling
- Across the line
- Line bypass

Specifications:
- Operating Temperature Range: -40°C to 100°C (IEC 60384-14) -40°C to 85°C (UL, SCA)
- Tolerance: ±10% at 1KHz, 25°C
- Temperature Coefficient: -200 ppm/°C, ±100ppm/°C
- Dissipation Factor: 0.1% at 1 KHz, 25°C; 0.3% at 10 KHz, 25°C





Safety Agency	Standard	Voltage
UL	1414, 1283	310 VAC
CSA	C22.2 Class 222101	250 VAC
CQC	GB/14472-1998	275 VAC
ENEC	IEC 60384	275 VAC

Mfg. Part No.	Cap. (µF)	Dimensions (mm) L x H x T	S	d	Stock No.	Price Each 1-24	25-99
472MKP275K	0.0047	13 x 10 x 5 mm	10	0.6	30K6736	0.24	0.20
103MKP275KC	0.01	10 x 8 x 4 mm	7.5	0.6	31M9455	0.25	0.21
103MKP275K	0.01	13 x 10 x 5 mm	10	0.6	30K6557	0.33	0.28
223MKP275K	0.022	13 x 11 x 5 mm	10	0.6	30K6657	0.31	0.26
333MKP275K	0.033	13 x 12 x 6 mm	10	0.6	30K6708	0.34	0.28
473MKP275K	0.047	18 x 11 x 5 mm	15	0.8	30K6739	0.29	0.24
683MKP275K	0.068	18 x 12 x 6 mm	15	0.8	30K6783	0.34	0.29
104MKP275KD	0.1	13 x 14 x 8 mm	10	0.8	30K6567	0.26	0.22
104MKP275K	0.1	18 x 11 x 5 mm	15	0.8	30K6566	0.25	0.21
154MKP275K	0.15	26.5 x 16.5 x 7 mm	22.5	0.8	30K6630	0.45	0.37
224MKP275K	0.22	26 x 14.5 x 6 mm	22.5	0.8	30K6660	0.42	0.35
224MKP275KB	0.22	18 x 14 x 8 mm	15	0.8	30K6661	0.36	0.30
334MKP275KE	0.33	18 x 13.5 x 10 mm	15	0.8	64M0759	0.60	0.50
334MKP275K	0.33	26 x 17 x 8.5 mm	22.5	0.8	30K6711	0.85	0.71
474MKP275KB	0.47	26.5 x 19 x 10 mm	22.5	0.8	30K6747	0.57	0.48
474MKP275K	0.47	31 x 10 x 9 mm	27.5	0.8	30K6746	1.01	0.84
105MKP275K	1	31 x 20 x 11 mm	27.5	0.8	30K6576	1.40	1.18
225MKP275K	2.2	31 x 26 x 18 mm	27.5	0.8	30K6672	2.27	1.90
475MKP275KH	4.7	31.5 x 37 x 22 mm	27.5	1	14N7744	4.30	3.60

(84782)

PHC SERIES METALLIZED POLYPROPYLENE CAPACITORS

RoHS Compliant Available

ILLINOIS CAPACITOR, INC.

Features:
- SMPS
- High end audio
- Induction heaters
- Resonant circuits
- Motor speed control
- High frequency electronic ballasts
- Switching capacitor for industrial controls

Specifications:
- Tolerance: ±10% at 1kHz, 20°C
- Operating Temperature Range: -40°C to +85°C
- Temperature Coefficient: -200ppm/°C ±100ppm/°C
- Max. Dissipation Factor at 1 KHz, 20°C: C ≤ 5µF = 0.06%. 5µF < C ≤ 30µF = 0.1%. C > 30µF = 0.15%.

VOLTAGE: 250 WVDC

Mfg. Part No.	Cap. (µF)	RMS (A)	ESR (mΩ)	D x L (mm)	Stock No.	Price Each 1-24	25-99
305PHC250K	3	7	4.6	15 x 34 mm	30K6703	4.14	3.57
505PHC250K	5	9	3.2	18.5 x 34 mm	30K6776	5.74	4.94
685PHC250K	6.8	9	2.9	21 x 34 mm	30K6789	10.54	9.09
106PHC250K	10	9	2.4	24 x 34 mm	30K6591	10.81	9.32
156PHC250K	15	12	2.6	25.5 x 46 mm	30K6640	15.07	12.99
206PHC250K	20	12	5	29 x 46 mm	30K6655	19.33	16.67
256PHC250K	25	12	4.4	32 x 46 mm	30K6698	17.21	14.84
406PHC250K	40	12	3.9	36 x 55 mm	30K6735	28.74	24.77
506PHC250K	50	12	3.5	40 x 55 mm	30K6778	38.24	32.96
VOLTAGE: 400 WVDC							
684PHC400K	0.68	5.5	8.5	12 x 34 mm	30K6787	2.34	2.02
105PHC400K	1	6	6.4	13 x 34 mm	30K6578	2.19	1.89
155PHC400K	1.5	7	5.3	15.5 x 34 mm	30K6635	3.27	2.83
205PHC400K	2	9	4.4	17.5 x 34 mm	30K6652	3.00	2.59
305PHC400K	3	9	3.6	21 x 34 mm	30K6704	5.61	4.84
405PHC400K	4	9	3.7	20.5 x 46 mm	30K6733	5.86	5.05
475PHC400K	4.7	9	7.7	22 x 46 mm	30K6756	6.73	5.80
505PHC400K	5	9	7.5	22.5 x 46 mm	30K6777	8.18	7.06
685PHC400K	6.8	11	6.4	26 x 46 mm	30K6790	9.41	8.11

CONTINUED

PHC SERIES METALLIZED POLYPROPYLENE CAPACITORS (CONT.)

VOLTAGE: 400 WVDC

Mfg. Part No.	Cap. (µF)	RMS (A)	ESR (mΩ)	D x L (mm)	Stock No.	Price Each 1-24	25-99
106PHC400K	10	12	6.3	27 x 55 mm	30K6592	10.77	9.29
156PHC400K	15	12	5	33 x 55 mm	30K6641	14.69	12.66
VOLTAGE: 600 WVDC							
105PHC600K	1	8	5.8	17.5 x 34 mm	30K6579	2.78	2.39
205PHC600K	2	9	5	20 x 46 mm	30K6653	5.39	4.65
305PHC600K	3	9	4	24 x 46 mm	30K6705	5.86	5.05
405PHC600K	4	12	3.4	27 x 46 mm	30K6734	7.98	6.88
685PHC600K	6.8	12	6.5	30 x 55 mm	30K6791	12.34	10.64
106PHC600K	10	12	0.0054	35 x 55 mm	30K6593	12.64	10.90
VOLTAGE: 850 WVDC							
224PHC850K	0.22	5.5	8.4	13.5 x 34 mm	30K6663	2.69	2.32

(84795)

PPA SERIES METALLIZED POLYPROPYLENE CAPACITORS - AXIAL TERMINAL

RoHS Compliant Available

ILLINOIS CAPACITOR, INC.

Features:
- SMPS
- High current and Voltage
- Induction heaters
- High Pulse Current Applications
- Snubber Capacitor for Energy Conversion in Power Semiconductor Circuits

Specifications:
- Operating Temperature Range: -40°C to +85°C
- Tolerance: ±10% at 1kHz, 20°C
- Temperature Coefficient: -200ppm/°C, ±100ppm/°C
- Max. Dissipation Factor at 1 KHz, 20°C: C ≤ 1µF = 0.05% C > 1µF = 0.06%

VOLTAGE: 850 WVDC

Mfg. Part No.	Cap. (µF)	RMS (A)	dv/dt (v/µs)	ESR (mΩ)	D x L (mm)	Stock No.	Price Each 1-24	25-99
104PPA850K	0.1	4	850	10.4	13 x 29 mm	30K6571	2.60	2.05
224PPA850K	0.22	6.5	700	6.6	15 x 34 mm	30K6666	3.36	2.65
474PPA850K	0.47	9	700	4	21.5 x 34 mm	30K6750	7.57	5.97
684PPA850K	0.68	9	400	4.1	21 x 46 mm	36K2464	6.18	4.88
155PPA850K	1.5	12	400	2.8	29.5 x 46 mm	30K6638	12.21	9.62
VOLTAGE: 1200 WVDC								
104PPA122K	0.1	5	1100	10.7	14 x 34 mm	30K6568	3.91	3.08
224PPA122K	0.22	9	1100	5.4	19.5 x 34 mm	30K6664	3.35	2.64
474PPA122K	0.47	9	650	4.8	22 x 46 mm	30K6749	6.08	4.79
105PPA122K	1	12	650	3.4	32 x 46 mm	30K6580	13.82	10.90
205PPA122K	2	12	400	2.9	39 x 55 mm	30K6654	21.56	17.00
VOLTAGE: 2000 WVDC								
473PPA202K	0.047	4.5	1750	16.8	15 x 34 mm	30K6741	3.11	2.46
104PPA202K	0.1	7	1000	12.4	20 x 34 mm	30K6569	4.92	3.88
224PPA202K	0.22	9	1000	6	23 x 46 mm	30K6665	7.55	5.95
474PPA202K	0.47	12	1000	3.9	32.5 x 46 mm	84M5016	13.85	10.92
105PPA202K	1	12	650	3.3	39 x 55 mm	30K6581	17.90	14.11
VOLTAGE: 3000 WVDC								
103PPA302K	0.01	2	2750	54.5	12 x 34 mm	30K6560	3.48	2.75
104PPA302K	0.1	11	1600	9.4	25 x 46 mm	30K6570	6.89	5.43

(84794)

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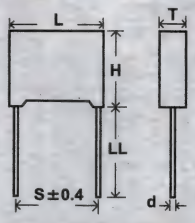
(196526)

FILM CAPACITORS

PPB SERIES +105°C METALLIZED POLYPROPYLENE CAPACITORS

RoHS Compliant Available

ILLINOIS CAPACITOR, INC.



L	18	26.5	32	42.5
S	15	22.5	27.5	37.5
LL	5±1.0		30±1.0	
d	0.8			1.0

Specifications:
- Operating Temperature Range: -55°C to +105°C
- Tolerance: ±10% (K) at 1kHz, 25°C
- Temperature Coefficient: -200 ppm/°C, ±100 ppm/°C
- Dissipation Factor @ Freq. 1kHz: C ≤ 1.0μF = 0.03%
  C > 1.0μF = 0.04%

Designed for UPS, inverters and power semiconductor applications.

VOLTAGE: 250 WVDC

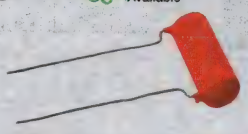
Mfg. Part No.	Cap. (μF)	dv/dt (v/μs)	L x H x T (mm)	Stock No.	Price Each 1-24	Price Each 25-49
● 473PPB250K	0.047	560	18 x 11 x 5	30K6744	0.58	0.52
● 225PPB250K	2.2	240	32 x 28 x 14	30K6673	4.72	3.40
● 475PPB250K	4.7	170	42.5 x 30 x 22	30K6757	8.19	5.90
VOLTAGE: 400 WVDC						
● 474PPB400K	0.47	400	32 x 22 x 13	30K6752	2.18	1.57
VOLTAGE: 630 WVDC						
● 103PPB630K	0.01	3300	18 x 11 x 5	30K6564	0.77	0.56
● 104PPB630K	0.1	2050	26.5 x 17 x 8.5	30K6572	1.27	0.92
● 105PPB630K	1	950	42.5 x 30 x 22	30K6584	6.47	4.66
VOLTAGE: 1000 WVDC						
● 333PPB102K	0.033	2600	26.5 x 16 x 7	30K6709	1.04	0.75
● 224PPB102K	0.22	1850	32 x 28 x 14	30K6667	3.07	2.21
● 474PPB102K	0.47	1200	42.5 x 30 x 22	30K6751	4.73	3.41
● 105PPB102K	1	1200	42.5 x 37 x 28	30K6583	9.43	6.79
VOLTAGE: 1600 WVDC						
● 103PPB162K	0.01	3800	26.5 x 15 x 6	30K6562	0.79	0.57
● 473PPB162K	0.047	2700	32 x 20 x 11	30K6743	1.56	1.12
● 224PPB162K	0.22	1700	42.5 x 28 x 17	30K6668	3.22	2.32
VOLTAGE: 2000 WVDC						
● 102PPB202KE	0.001	9000	18 x 11 x 5	30K6556	0.79	0.57
● 332PPB202KB	0.0033	9000	18 x 13.5 x 7.5	36K2462	0.77	0.56
● 103PPB202K	0.01	6200	26.5 x 17 x 8.5	30K6563	0.95	0.69
● 223PPB202K	0.022	4200	32 x 20 x 11	30K6658	1.51	1.09

(84787)

715P ORANGE DROP® POLYPROPYLENE FILM CAPACITORS

RoHS Compliant Available

VISHAY.



Features
- High AC Current Carrying
- Extremely Low Dissipation Factor
- Epoxy Conformal Coating Protects Against Moisture

Specifications
- Negative Temperature Coefficent: Virtually Linear at 180ppm/°C
- Tined Copper-Clad Steel Terminals: 20AWG
- Terminal Diameter: 0.032" (0.81)
- Operating Temperature: +25°C to +105°C
- Tolerance: ±5%

Applications
- Snubbers, CRT Deflection for RF Generators, Pulse-Forming Networks

VOLTAGE: 200 WVDC

Mfg. Part No.	Cap. (uF)	L x D (mm)	Pitch (mm)	Stock No.	Price Each 1-24	Price Each 25-99
● 715P10352JD3	0.01	19.05 x 10.16	9.525	03B9536	1.18	1.15
● 715P33352JD3	0.033	19.05 x 10.67	9.525	52M9276	2.38	2.20
● 715P47356LD3	0.047	33.02 x 15.24	18.263	36M2009	4.06	3.48
● 715P10452LD3	0.1	33.02 x 11.43	18.263	89F3466	3.39	3.13
● 715P22452LD3	0.22	33.02 x 15.75	18.263	89F3471	4.30	3.68
● 715P47452MD3	0.47	43.18 x 19.05	27.788	89F3475	5.75	4.93
VOLTAGE: 400 WVDC						
● 715P68254JD3	0.0068	19.05 x 10.16	9.525	36M2010	1.30	1.27
● 715P47354LD3	0.047	33.02 x 12.70	18.263	03B9583	2.94	2.72
● 715P47354LD3	0.047	33.02 x 12.70	18.263	03B9583	2.94	2.72
● 715P47454MD3	0.47	43.18 x 22.86	27.788	17F2208	7.59	6.51
VOLTAGE: 600 WVDC						
● 715P15256JD3	0.0015	19.05 x 10.16	9.525	36M1996	2.14	1.98
● 715P33256JD3	0.0033	19.05 x 10.16	9.525	15F2703	2.28	2.11
● 715P10356KD3	0.01	24.13 x 11.43	9.525	15F2706	2.48	2.29
● 715P15356KD3	0.015	21.13 x 12.7	9.525	45M4862	2.54	2.35

➤CONTINUED➤

715P ORANGE DROP® POLYPROPYLENE FILM CAPACITORS (CONT.)

VOLTAGE: 600 WVDC

Mfg. Part No.	Cap. (uF)	L x D (mm)	Pitch (mm)	Stock No.	Price Each 1-24	Price Each 25-99
● 715P33356LD3	0.033	33.02 x 13.97	18.263	36M2003	3.47	2.98
● 715P10456LD3	0.1	33.02 x 19.05	18.263	36M1995	5.65	4.85
VOLTAGE: 800 WVDC						
● 715P47358MD3	0.047	43.18 x 17.78	27.788	03B9584	4.56	3.91
● 715P68358MD3	0.068	43.18 x 20.32	27.788	41M6618	3.02	2.94
VOLTAGE: 1200 WVDC						
● 715P153512LD3	0.015	33.02 x 16.51	18.263	36M1997	2.35	2.28
● 715P473512MD3	0.047	43.18 x 21.59	27.788	17F2215	6.27	5.38
VOLTAGE: 1600 WVDC						
● 715P102516LD3	0.001	33.02 x 12.7	18.263	02B1303	1.22	1.19
● 715P152516LD3	0.0015	31.75 x 7.37	18.263	02B1313	1.43	1.39
● 715P153516MD3	0.015	43.18 x 19.05	27.788	15F2719	2.82	2.75
● 715P333516MD3	0.033	43.18 x 24.13	27.788	15F2721	6.82	5.85

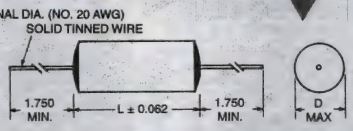
(7120)

730P SERIES METALLIZED-POLYPROPYLENE FILM CAPACITORS

RoHS Compliant Available

VISHAY.

Specifications
- Tolerance: ±10%
- Operating Temperature: -55°C to +85°C
- Dissipation Factor: 0.1% Maximum, Measure All Units at 1000Hz at +25°C



VOLTAGE: 250 WVDC

Mfg. Part No.	Cap. (μF)	Dimensions D max.	Dimensions L	Stock No.	Price Each 1-9
● V-730P104X9250	0.1	0.279"	0.750"	35M5156	5.04
● V-730P474X9250	0.47	0.422"	1.000"	35M5294	5.88
● V-730P205X9250	2	0.700"	1.250"	35M5211	5.59
VOLTAGE: 400 WVDC					
● V-730P104X9400	0.1	0.348"	0.750"	35M5157	5.48
● V-730P474X9400	0.47	0.545"	1.000"	35M5295	5.94
● V-730P205X9400	2	0.752"	1.750"	35M5212	5.79
VOLTAGE: 630 WVDC					
● V-730P104X9630	0.1	0.408"	1.000"	35M5158	3.80
● V-730P105X9630	1	0.794"	1.750"	35M5164	11.44

(7166)

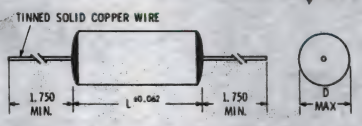
735P SERIES METALLIZED POLYPROPYLENE FILM CAPACITORS

RoHS Compliant Available

VISHAY.

Features
- Low Inductance and ESR
- High Stability

Specifications
- Tolerance: ±10%
- High Ripple Current: Up to 30A
- Wire Terminals
- Operating Temperature: -55°C to +105°C



VOLTAGE: 100 VDC

Mfg. Part No.	Cap. (μF)	D x L (in.)	Stock No.	Price Each 1-9	Price Each 10-49
● V-735P505X9100L	5	0.733 x 1.250"	37M0709	18.18	16.64
VOLTAGE: 200 VDC					
● V-735P205X9200L	2	0.698 x 1.250"	37M0675	7.94	6.58
● V-735P106X9200L	10	1.030 x 2.250"	37M0663	17.12	15.67
VOLTAGE: 400 VDC					
● V-735P105X9400L	1	0.713 x 1.500"	37M0653	10.84	8.97
● V-735P205X9400L	2	0.895 x 1.750"	37M0677	12.46	10.32
● V-735P305X9400L	3	1.066 x 1.750"	37M0697	15.45	14.15
● V-735P505X9400L	5	1.192 x 2.250"	37M0713	23.53	21.55

(7064)

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(212565)

MKP 338 SERIES INTERFERENCE SUPPRESSION X2 CAPACITORS

RoHS Compliant Available

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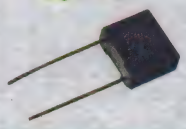


Miniature metallized polypropylene film capacitors are well-suited for use in electronic ballasts and SMPS. **Voltage: 275 VAC.** Operating temperature: 105°C max. Qualified in accordance to UL94V-0.

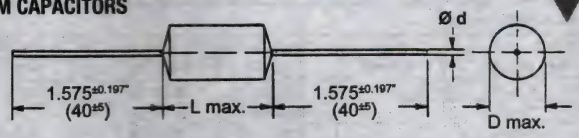
Mfg. Part No.	Cap. (µF)	Lead Spacing	Lead Length	Stock No.	Price Each 1-9	10-99	100-499	500-999
BFC233822152	0.0015	7.5mm	5mm	96B2298	1.65	1.50	1.19	0.99
BFC233820222	0.0022	7.5mm	3.5mm	96B2280	1.05	0.95	0.76	0.63
BFC233824222	0.0022	7.5mm	25mm	96B2324	1.74	1.58	1.26	1.05
BFC233820332	0.0033	7.5mm	3.5mm	96B2284	0.39	0.36	0.28	0.24
BFC233820472	0.0047	7.5mm	3.5mm	96B2288	1.19	1.08	0.86	0.72
BFC233820103	0.01	7.5mm	3.5mm	96B2273	0.44	0.40	0.32	0.27
BFC233810103	0.01	15mm	3.5mm	03J6942	2.00	1.81	1.45	1.20
BFC233822103	0.01	7.5mm	5mm	96B2295	2.11	1.91	1.52	1.27
BFC233820223	0.022	7.5mm	3.5mm	96B2281	0.91	0.83	0.66	0.55
BFC233824223	0.022	7.5mm	25mm	96B2325	0.46	0.42	0.33	0.28
BFC233824333	0.033	7.5mm	25mm	96B2329	1.88	1.70	1.36	1.13
BFC233820473	0.047	7.5mm	3.5mm	96B2289	0.50	0.45	0.36	0.30
BFC233824473	0.047	7.5mm	25mm	96B2333	2.12	1.92	1.54	1.28
BFC233814473	0.047	15mm	25mm	03J6972	2.81	2.55	2.03	1.69
BFC233820104	0.1	10mm	3.5mm	74K3513	0.42	0.38	0.31	0.25
BFC233824104	0.1	10mm	25mm	96B2318	0.45	0.40	0.32	0.27
BFC233620104	0.1	15mm	3.5mm	53H7026	0.62	0.56	0.45	0.37
BFC233814104	0.1	22.5mm	25mm	03J6965	1.93	1.75	1.39	1.16
BFC233822154	0.15	15mm	5mm	96B2300	2.18	1.98	1.58	1.31
BFC233824224	0.22	15mm	25mm	18M4055	2.94	2.67	2.12	1.77
BFC233810224	0.22	22.5mm	3.5mm	03J6946	1.87	1.69	1.35	1.12
BFC233824334	0.33	15mm	25mm	18M4057	3.17	2.87	2.29	1.91
BFC233820474	0.47	22.5mm	3.5mm	96B2290	1.00	0.91	0.73	0.60
BFC233814474	0.47	27.5mm	25mm	03J6973	1.78	1.61	1.28	1.07
BFC233824105	1	22.5mm	25mm	18M4053	1.78	1.61	1.29	1.07
BFC233820335	3.3	27.5mm	3.5mm	18M4050	8.14	7.37	5.88	4.89
BFC233824335	3.3	27.5mm	25mm	96B2331	19.81	17.94	14.30	11.90

(47575)

MKP1845 SERIES METALLIZED POLYPROPYLENE LOW ESR FILM CAPACITORS

RoHS Compliant Available

VISHAY.



Features
- Flame-Retardant Tape Wrap with Epoxy End Seals
- Tinned Wire Terminals

Applications
- High Voltage, High Current and High Pulse Operations

Specifications
- Tolerance: ±5%
- Operating Temperature: -55°C to +85°C
- Voltage Derating from 100°C: 1.25%/°C

Mfg. Part No.	Voltage	Cap. (µF)	D x L (in.)	Terminal Dia.	Stock No.	Price Each 1-24	25-49
MKP1845310634	630	0.01	0.276 x 0.866"	0.0276"	18M2490	2.87	2.81
MKP1845447634	630	0.47	0.827 x 1.732"	0.0394"	18M2493	12.17	11.92
MKP1845422134	1600	0.22	0.866 x 1.732"	0.0394"	18M2492	12.32	12.07
MKP1845210204	2000	0.001	0.256 x 1.142"	0.0276"	96F3284	3.18	3.11
MKP1845410204	2000	0.1	0.827 x 1.732"	0.0394"	18M2491	11.70	11.47

(7309)

multicomp AT NEWARK ELEMENT14

Affordable, performance board level & box build components at

newark.com/multicomp

(212569)

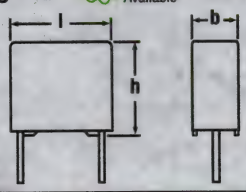
MMKP383 SERIES METALLIZED POLYPROPYLENE FILM CAPACITORS

RoHS Compliant Available

VISHAY.

Features
- Low Contact Resistance
- Low Loss Dielectric
- Small Dimensions for High Density Packaging

Specifications
- Tolerance: ±5%
- Wire Terminals
- Maximum Application Temperature: +105°C



VOLTAGE: 630 VDC

Mfg. Part No.	Cap. (µF)	l x h x b (mm)	Pitch (mm)	Stock No.	Price Each 1-9	10-99
BFC238320303	0.030	17.5 x 11 x 5	15	04J4073	2.59	2.34
BFC238320333	0.033	17.5 x 11 x 5	15	04J4075	1.50	1.35
BFC238320513	0.051	17.5 x 12 x 6	15	04J4083	2.95	2.67
BFC238320683	0.068	17.5 x 13.5 x 7	15	04J4089	3.05	2.76
BFC238320224	0.22	26 x 18 x 8.5	22.5	04J4070	3.00	2.71
BFC238320334	0.33	31 x 21 x 11	27.5	04J4076	2.97	2.69
BFC238320474	0.47	31 x 23 x 13	27.5	86H6595	5.30	4.80
BFC238320105	1	31 x 28 x 18	27.5	86H6594	14.20	12.86
VOLTAGE : 1000 VDC						
BFC238330104	0.1	26 x 19.5 x 10	22.5	04J4216	2.81	2.54
BFC238330224	0.22	31 x 23 x 13	27.5	29H2925	6.65	6.02
BFC238330334	0.33	31 x 25 x 15	27.5	04J4237	13.89	12.58
BFC238330474	0.47	31 x 28 x 18	27.5	88H3724	6.69	6.05
VOLTAGE : 1600 VDC						
BFC238350562	0.0056	17.5 x 12 x 6	15	04J4586	2.87	2.60
BFC238350682	0.0068	17.5 x 13.5 x 7	15	04J4590	3.02	2.74
BFC238350822	0.0082	17.5 x 15 x 8.5	15	04J4594	3.37	3.06
BFC238350103	0.01	17.5 x 15 x 8.5	15	04J4557	0.70	0.64
BFC238350104	0.1	31 x 25 x 15	27.5	04J4558	7.19	6.51

(108724)

TYPE PS ORANGE DROP® POLYPROPYLENE FILM CAPACITORS

RoHS Compliant Available

VISHAY.

Features
- Extremely Low Dissipation Factor
- Epoxy Conformal Coating Protects Against Moisture

Specifications
- Tined Copper-Clad Steel Terminals: 20AWG
- Operating Temperature: -40°C to +85°C
- Tolerance: ±10%

VOLTAGE: 600 WVDC

Mfg. Part No.	Cap. (uF)	L x D (mm)	Pitch (mm)	Stock No.	Price Each 1-9	10-49
6PSP10	0.1	30.48 x 16.51	24.613	02B1257	3.04	2.82
6PSP22	0.22	40.64 x 20.32	34.138	02B1260	4.66	3.99

(108743)

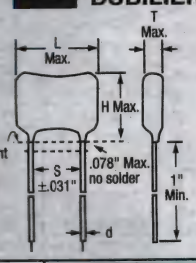
MINIATURE DIPPED MICA CAPACITORS

RoHS Compliant Available

CDE CORNELL DUBILIER

- Voltage Range: 50 VDC to 500 VDC
- Capacitance Range: 1 pF to 40,000 pF
- Tolerance: ±1/2 pF (D), ±5% (J)
- Operating Temperature: -55°C to +125°C
- 20,000 V/µs dV/dt Pulse Capability Minimum (Miniature)

Miniature dipped silvered mica capacitors fit tight spots in modules and high-density electronics. Most popular values listed, additional values available; *go online or call.*



Mfg. Part No.	Voltage (VDC)	Cap. (pF)	Dimensions (in.) L	H	T	S	d	Tape Cut Stock No.	Price Each 1-24
CD5CC050D03F	300	5	0.270	0.190	0.110	0.120	0.016	81K1285	1.85
CD5CC100J03F	300	10	0.270	0.190	0.110	0.120	0.016	81K1295	1.30
CD5CC100J03	300	10	0.270	0.190	0.110	0.120	0.016	70B5547	1.35
CD5CC150J03F	300	15	0.270	0.190	0.120	0.120	0.016	81K1301	1.30
CD5EC200J03F	300	20	0.270	0.200	0.120	0.120	0.016	81K1305	1.37
CD5EC470J03	300	47	0.270	0.210	0.114	0.120	0.016	07H2136	1.83
CD5FC101J03	300	100	0.270	0.240	0.118	0.120	0.016	91B8159	2.69

(72955)

MULTILAYER RADIAL LEAD MICA CAPACITORS

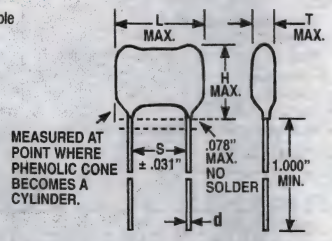
RoHS Compliant Available

CDE CORNELL DUBILIER

Features
- Mil-C-5 Military Style (CM04, 05, 06 & 07) Available
- 20,000 V/us dV/dt pulse capability
- Reel packaging available
- Extremely high Q
- Very low ESR for RF applications

Specifications
- Voltage range from 100 VDC to 2500 VDC
- Capacitance range from 1 pF to 91,000 pF
- Tolerance: ±1/2pF (D); ±1pF (C); ±0.5% (E); ±1% (F); ±2% (G); ±5% (J)
- Operating Temperature: -55°F to +125°F

Most popular values listed. Additional values available, *go online or call.*



CD10 SERIES

Mfg. Part No.	Voltage (VDC)	Cap. (pF)	Dimensions L	H	S	Tape Cut Stock No.	Price Each 1-24	25-99
● CD10FA331J03F	100	330	0.390″	0.370″	0.141″	81K0454	3.93	3.36
● CD10CD050D03F	500	5	0.360″	0.330″	0.141″	81K0395	2.69	2.30
● CD10CD100D03F	500	10	0.360″	0.330″	0.141″	81K0403	2.88	2.46
● CD10CD100J03F	500	10	0.360″	0.330″	0.141″	81K0404	2.88	2.46
● CD10ED200J03F	500	20	0.360″	0.330″	0.141″	81K0412	2.18	1.87
● CD10ED220J03F	500	22	0.360″	0.330″	0.141″	81K0414	2.10	1.80
● CD10ED300J03F	500	30	0.370″	0.340″	0.141″	81K0420	1.98	1.69
● CD10ED330J03F	500	33	0.370″	0.340″	0.141″	81K0422	2.18	1.87
● CD10ED470J03F	500	47	0.370″	0.340″	0.141″	81K0430	2.47	2.11
● CD10ED680J03F	500	68	0.370″	0.340″	0.141″	81K0445	2.56	2.19
● CD10FD101J03F	500	100	0.370″	0.350″	0.141″	81K0469	2.62	2.25
● CD10FD151J03F	500	150	0.380″	0.360″	0.141″	81K0481	2.72	2.33
● CD10FD201J03F	500	200	0.390″	0.370″	0.141″	81K0490	3.44	2.94
● CD10FD221J03F	500	220	0.390″	0.380″	0.141″	81K0493	3.71	3.18

CD15 SERIES

Mfg. Part No.	Voltage (VDC)	Cap. (pF)	Dimensions L	H	S	Tape Cut Stock No.	Price Each 1-9	10-24
CD15FC561J03	300	560	0.460″	0.380″	0.234″	15F864	2.50	2.36
CD15FC681J03	300	680	0.470″	0.390″	0.234″	15F2608	2.98	2.81
● CD15FC751J03F	300	750	0.470″	0.390″	0.234″	81K0586	4.80	4.11
● CD15CD010D03F	500	1	0.450″	0.360″	0.234″	81K0503	1.49	1.27
● CD15CD030D03F	500	3	0.450″	0.360″	0.234″	81K0505	1.49	1.27
● CD15CD050D03F	500	5	0.450″	0.360″	0.234″	81K0507	1.49	1.27
● CD15CD100D03F	500	10	0.450″	0.360″	0.234″	81K0511	1.49	1.27
● CD15CD100J03F	500	10	0.450″	0.360″	0.234″	81K0512	1.43	1.23
CD15CD150J03	500	15	0.450″	0.360″	0.234″	15F2602	0.94	0.89
● CD15CD180J03F	500	18	0.450″	0.360″	0.234″	81K0518	1.37	1.17
● CD15ED200J03F	500	20	0.450″	0.360″	0.234″	81K0520	1.31	1.12
● CD15ED220J03F	500	22	0.450″	0.360″	0.234″	81K0522	1.46	1.25
● CD15ED270J03F	500	27	0.450″	0.360″	0.234″	81K0526	1.38	1.18
CD15ED270J03	500	27	0.450″	0.360″	0.234″	15F1211	0.98	0.93
CD15ED300J03	500	30	0.450″	0.360″	0.234″	15F1212	0.98	0.93
● CD15ED330J03F	500	33	0.450″	0.360″	0.234″	81K0530	1.46	1.25
● CD15ED390J03F	500	39	0.450″	0.360″	0.234″	81K0534	1.46	1.25
● CD15ED470J03F	500	47	0.450″	0.360″	0.234″	81K0538	1.43	1.22
● CD15ED510J03F	500	51	0.450″	0.360″	0.234″	81K0544	1.37	1.17
● CD15ED620J03F	500	62	0.450″	0.360″	0.234″	81K0550	1.43	1.23
● CD15ED680J03F	500	68	0.450″	0.360″	0.234″	81K0553	1.49	1.27
● CD15ED820J03F	500	82	0.450″	0.360″	0.234″	81K0559	1.49	1.27
● CD15FD101J03F	500	100	0.460″	0.360″	0.234″	81K0592	0.98	0.84
CD15FD121J03	500	120	0.460″	0.370″	0.234″	15F2604	1.09	1.03
● CD15FD121J03F	500	120	0.460″	0.370″	0.234″	81K0598	1.60	1.37
● CD15FD151J03F	500	150	0.460″	0.370″	0.234″	81K0604	1.74	1.49
● CD15FD181J03F	500	180	0.460″	0.370″	0.234″	81K0610	1.96	1.68
CD15FD201J03	500	200	0.460″	0.380″	0.234″	15F1233	1.31	1.23
● CD15FD221J03F	500	220	0.460″	0.380″	0.234″	81K0616	2.03	1.73
● CD15FD241J03F	500	240	0.460″	0.380″	0.234″	81K0619	2.13	1.82
CD15FD251J03	500	250	0.470″	0.390″	0.234″	15F880	1.46	1.38
● CD15FD251J03F	500	250	0.470″	0.390″	0.234″	81K0622	2.21	1.89
CD15FD271J03	500	270	0.470″	0.390″	0.234″	15F1237	1.59	1.50
● CD15FD271J03F	500	270	0.470″	0.390″	0.234″	81K0625	2.34	2.00
CD15FD301J03	500	300	0.470″	0.390″	0.234″	15F1238	1.72	1.62
● CD15FD301J03F	500	300	0.470″	0.390″	0.234″	81K0628	2.60	2.22
● CD15FD331J03F	500	330	0.470″	0.390″	0.234″	81K0631	2.78	2.38
● CD15FD361J03F	500	360	0.470″	0.390″	0.234″	81K0634	2.92	2.50
● CD15FD391J03F	500	390	0.470″	0.390″	0.234″	81K0637	3.03	2.60
● CD15FD501J03F	500	500	0.470″	0.400″	0.234″	81K0646	3.59	3.07

➤CONTINUED➤

MULTILAYER RADIAL LEAD MICA CAPACITORS (CONT.)

CD19 SERIES

Mfg. Part No.	Voltage (VDC)	Cap. (pF)	Dimensions L	H	S	Tape Cut Stock No.	Price Each 1-9	10-24
CD19FD471J03	500	470	0.640″	0.510″	0.344″	15F1243	1.89	1.88
● CD19FD471J03F	500	470	0.640″	0.510″	0.344″	81K0912	1.88	1.80
● CD19FD511J03F	500	510	0.650″	0.510″	0.344″	81K0924	1.81	1.73
CD19FD681J03	500	680	0.650″	0.510″	0.344″	15F1248	2.22	2.20
● CD19FD681J03F	500	680	0.650″	0.510″	0.344″	81K0936	2.19	2.09
CD19FD821J03	500	820	0.650″	0.510″	0.344″	15F1250	2.22	2.20
● CD19FD821J03F	500	820	0.650″	0.510″	0.344″	81K0942	2.19	2.09
CD19FD122J03	500	1200	0.650″	0.520″	0.344″	15F1254	2.61	2.59
● CD19FD122J03F	500	1200	0.650″	0.520″	0.344″	81K0840	2.52	2.40
● CD19FD152J03F	500	1500	0.660″	0.520″	0.344″	81K0849	2.91	2.77
● CD19FD182J03F	500	1800	0.670″	0.530″	0.344″	81K0858	3.69	3.52
● CD19FD202J03F	500	2000	0.670″	0.530″	0.344″	81K0861	3.70	3.53
CD19FD222J03	500	2200	0.670″	0.530″	0.344″	15F1260	3.87	3.84
● CD19FD222J03F	500	2200	0.670″	0.530″	0.344″	81K0867	3.70	3.53
● CD19FD272J03F	500	2700	0.680″	0.540″	0.344″	81K0879	4.14	3.95
● CD19FD302J03F	500	3000	0.680″	0.550″	0.344″	81K0885	4.56	4.35
● CD19FD332J03F	500	3300	0.770″	0.860″	0.438″	81K0891	4.75	4.52
● CD19FD392J03F	500	3900	0.690″	0.560″	0.344″	81K0903	5.69	5.42
● CD19FD472J03F	500	4700	0.700″	0.580″	0.344″	81K0915	6.20	5.91
● CDV19FF681J03F	1000	680	0.660″	0.520″	0.344″	81K0385	4.35	3.72
● CDV19FF102J03F	1000	1000	0.670″	0.530″	0.344″	81K0365	5.00	4.27

CD30 SERIES

Mfg. Part No.	Voltage (VDC)	Cap. (pF)	Dimensions L	H	S	Tape Cut Stock No.	Price Each 1-24	25-99
● CD30FD103J03F	500	0.01	0.800″	0.890″	0.438″	81K0969	13.74	13.10

(7337)

TRIMMER CAPACITORS

RoHS Compliant Available

Johanson

TRIMMERS

Mfg. Part No.	Capacitance	Type	Stock No.	Price Each 1-999
● 2322-0GR1	0.6pF to 2.5pF	Cera-Trim	73K9836	6.72
● 17273R5	0.6pF to 4.5pF	Giga-Trim	73K9787	12.26
● 9702-8	5pF to 15pF	Thin-Trim	24R5011	4.83

TUNING ELEMENTS

Mfg. Part No.	Rod Material	Thread (UNS-2A)	Stock No.	Price Each 1-24
6926-17	Brass	0.234-64	03M6005	12.62
L6995-0	...	0.094-80	67H5557	7.75
L6997-5	...	0.190-64	24R3394	8.41

(192114)

AIR DIELECTRIC VARIABLE CAPACITORS

RoHS Compliant Available

Johanson

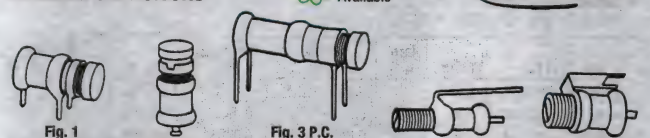


Fig. 1 P.C. Board Mount — Fig. 2 Turret — Fig. 3 P.C. Board Mount — Fig. 4 Vertical — Fig. 5 Vertical

Features:
- 1-Piece, Self-Locking, Constant-Torque Drive
- High Q
- Low Dynamic Tuning Noise

Specifications
- Voltage:
  Figures 1, 2, 3 and 5: 250 V
  Figure 4: 500 V
- Brass and Invar Structure, Gold, Silver and Chromate Finish

Applications:
- RF Applications
- VHF Through Microwave
- Glazed Alumina Insulation, Silicone Rubber Seal Washer
- Operating Temperature: -65°C to +125°C

STANDARD AIR DIELECTRIC VARIABLE CAPACITORS

Mfg. Part No.	Fig.	Min. Q @ 100MHz	Cap. Range (pF)	L × D (in.)	Stock No.	Price Each 1-24	25-49
● 5201	1	5000	0.8 - 10.0	.510 x .285	17F154	12.84	11.06
● 5401	1	3000	1.0 - 14.0	.510 x .285	17F160	14.91	12.81
● 5501	1	1500	1.0 - 20.0	.740 x .285	11F463	23.51	20.21
● 5601	3	800	1.0 - 30.0	.920 x .285	19F002	27.05	23.25
● 5202	2	5000	0.8 - 10.0	.500 x .285	17F155	16.56	14.23

➤CONTINUED➤

AIR DIELECTRIC VARIABLE CAPACITORS (CONT.)

VERTICAL MOUNT AIR DIELECTRIC VARIABLE CAPACITORS

Mfg. Part No.	Fig.	Min. Q @ 100MHz	Cap. Range (pF)	L x D (in.)	Stock No.	Price Each 1-24	Price Each 25-49
8052	4	5000	1.0 - 10.0	.460 x .285	44F3351	28.04	24.11
8092	5	2000	1.5 - 14.0	.460 x .285	44F3356	43.32	37.23

(7243)

NON-MAGNETIC AIR DIELECTRIC VARIABLE CAPACITORS

RoHS Compliant Available

Johanson

Features:
- 1-pc. Self-Locking Constant-Torque Drive Mechanism for Uniform Torque
- High Q
- Low Dynamic Tuning Noise

Applications:
- Medical Electronics
- Nuclear Magnetic Resonance
- Other Applications that Require Non-Magnetic Construction

Specifications:
- Voltage: 250 VDC
- Operating Temp.: -65°C to +125°C

Mfg. Part No.	Min. Q @ 100MHz	Capacitance Range (pF)	L x D (in.)	Stock No.	Price Each 1-24	Price Each 25-49
5641	800	1pF–30pF	0.920 x 0.285″	16F1223	56.59	48.85

(48798)

SERIES GHz VARIABLE CAPACITORS

RoHS Compliant Available

Johanson

Features:
- Sapphire Dielectric
- High Q
- Constant Torque Drive Mechanism

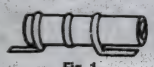


Fig. 1

Fig. 2

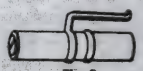


Fig. 3

Specifications:
- Voltage: 500 VDC
- Rotational Life: 50 Cycles
- Brass and Invar Structure, Gold and Silver Finish
- Operating Temperature: -65°C to +125°C

Applications:
- Impedence Matching, Crystal Trimming
- Interstage Coupling, Base Station Amplifier

Mfg. Part No.	Fig.	Min. Q @ 250MHz	Capacitance Range (pF)	L x D (in.)	Stock No.	Price Each 1-24	Price Each 25-49
27271SL	1	3000	0.6-4.5	.31 x .14″	44F3358	23.14	20.84
27291SL	1	3000*	0.8-8.0	.48 x .14″	44F3360	19.41	17.48
27271	2	>3000	0.6-4.5	.31 x .14″	38C7732	23.34	21.03
27263	3	>5000	0.3-1.2	.23 x .075″	38C7731	22.03	19.84
27283	3	>4000	0.4-2.5	.23 x .14″	91B0497	20.13	18.13
47273	3	>3000	0.6-4.5	.31 x .14″	38C7734	13.30	11.98

* @ 100MHz

(7244)

9400 SERIES THIN-TRIM CAPACITORS

RoHS Compliant Available

Johanson

Features:
- Square Drive Tuning Mechanism Ensures Captive, Non-Slip, Tamper-Proof Adjustments Eliminating Backlash Problems Associated with Screwdriver Adjustment Slots

Specifications:
- Voltage: 250 VDC
- Operating Temperature: –55°C to +125°C

Q = 3000 @ 10MHz

Mfg. Part No.	Capacitance Range (pF)	Temp. Coeff. (ppm/°C)	Stock No.	Price Each 1-49	Price Each 50-99
9702-0	0.50 to 2.5	100±100	70K8748	3.24	3.00
Q = 1000 @ 10MHz*					
9701-0	0.25 to 0.7	50±50	96K3532	3.09	2.86
9701-1	0.50 to 1.3	NP0±100	96K3533	4.03	3.73
9702-1	1.00 to 5.0	100±200	96K3535	3.23	2.99
9702-2	2.50 to 10.0	–50±100	84K9193	3.23	2.99
9710-1	2.50 to 10.0	–100±20	96K3538	4.05	3.75
Q = 300 @ 10MHz					
9702-6	6.00 to 25.0	–1100±300	96K3537	5.88	5.45
Q = 200 @ 10MHz					
9710-5	8.00 to 50.0	–1500±500	96K3539	6.14	5.69

(7322)

2320 SERIES CERAMIC VARIABLE CAPACITORS

RoHS Compliant Available

Johanson

Features:
- Automated Tuning Devices for Positive Nonslip Tamperproof Adjustments
- Alumina Housing Provides Mechanical Strength with Outstanding Electrical and Heat-Resistant Properties

Specifications:
- Rated Voltage: 250 VDC (Test Voltage 500 VDC)
- Operating Temperature: -55°C to +125°C
- Dimensions: 0.165L x 0.180W x 0.10″H

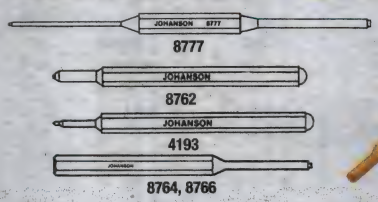
Mfg. Part No.	Min. Q @ 100MHz	Capacitance Range (pF)	Temp. Coeff. ppm/°C	Stock No.	Price Each 1-49	Price Each 50-99
2322-0G	3000	0.6 to 2.5	100±200	73K9835	6.45	5.98
2322-1G	1000	1 to 5	100±200	73K9839	5.60	5.19
2322-2G	1000	2.5 to 10	100±200	73K9843	5.69	5.27
2322-3G	500	5 to 18	–450±300	73K9847	8.15	7.55

(7246)

TUNING TOOLS FOR VARIABLE CAPACITORS

RoHS Compliant Available

Johanson



Tuning tools provide captive, non-slip, tamper-proof adjustments and help eliminate backlash problems.

Mfg. Part No.	Fits Series	Stock No.	Price Each 1-49	Price Each 50-99
8777	5200, 5400, 5500, 5600, 5700, 5800, 27000	81F4903	15.64	14.71
8766	27270, 27280, 27290, 37270, 37280, 37290, 47270, 5800	95F9897	10.42	9.79
8764	5200, 5300, 5400, 5500, 5600, 5700, 9300	95F9898	11.74	11.03
8762	27260	44F4100	15.84	14.89
4193	9610, 9410	13F5056	7.73	7.27
4192	9620, 2320, 9401, 9402	44F3380	6.75	6.35
2190	9692, 9694, 9910	90F6582	12.22	11.48
2191	9343	95B0267	14.70	13.81
4194	9401, 9402	95B0264	10.29	9.66

(7247)

(211464)

THIN FILM RESISTORS – SMD

ERA SERIES METAL FILM (THIN FILM) CHIP RESISTORS — 100W, PACKAGE 0603 (1608 METRIC)

RoHS Compliant Available

Panasonic

Features:
- High reliability — Stable at high temperature and humidity (85°C 85% RH rated load, category temperature range: -55°C to +155°C)
- High accuracy — Small resistance tolerance and temperature coefficient of resistance
- High performance — Low current noise, excellent linearity

ERA-3AEB SERIES — 100 WATT

Mfg. Part No.	Resistance	Temperature Coefficient	Stock No.	Price Each 1-9
● ERA-3AEB470V	47 ohm	± 25ppm/°C	53W8343	0.46
● ERA-3AEB560V	56 ohm	± 25ppm/°C	08N2128	0.46
● ERA-3AEB680V	68 ohm	± 25ppm/°C	05X8542	0.46
● ERA-3AEB121V	120 ohm	± 25ppm/°C	08N2097	0.43
● ERA-3AEB221V	220 ohm	± 25ppm/°C	08N2109	0.46
● ERA-3AED2490V	249 ohm	± 25ppm/°C	49W9289	0.26
● ERA-3AEB301V	300 ohm	± 25ppm/°C	53W8342	0.46
● ERA-3AEB331V	330 ohm	± 25ppm/°C	08N2117	0.46
● ERA-3AEB391V	390 ohm	± 25ppm/°C	08N2121	0.46
● ERA-3AEB471V	470 ohm	± 25ppm/°C	08N2125	0.46
● ERA-3AEB4990V	499 ohm	± 25ppm/°C	53W8344	0.46
● ERA-3AEB681V	680 ohm	± 25ppm/°C	08N2133	0.46
● ERA-3AEB112V	1.1 kohm	± 25ppm/°C	53W8338	0.46
● ERA-3AEB152V	1.5 kohm	± 25ppm/°C	08N2102	0.46
● ERA-3AEB122V	1.2 kohm	± 25ppm/°C	54W2558	0.46
● ERA-3AEB2491V	2.49 kohm	± 25ppm/°C	53W8341	0.46
● ERA-3AEB332V	3.3 kohm	± 25ppm/°C	08N2118	0.46
● ERA-3AEB4991V	4.99 kohm	± 25ppm/°C	87R1526	0.05
● ERA-3AEB133V	13 kohm	± 25ppm/°C	53W8339	0.46
● ERA-3AEB184V	180 kohm	± 25ppm/°C	53W8340	0.46
● ERA-3AEB244V	240 kohm	± 25ppm/°C	54W2563	0.46
ERA-3ARW AND ERA-3AHD SERIES — 100 WATT				
● ERA-3ARW122V	1.2 kohm	± 10ppm/°C	53W3945	0.94
● ERA-3AHD120V	12 ohm	± 50ppm/°C	49W9566	0.26
● ERA-3AHD18R2V	18.2 ohm	± 50ppm/°C	49W9582	0.28
● ERA-3AHD27R4V	27.4 ohm	± 50ppm/°C	49W9602	0.26
● ERA-3AHD41R2V	41.2 ohm	± 50ppm/°C	49W9624	0.28
ERA-3AED SERIES — 100 WATT				
● ERA-3AED470V	47 ohm	± 25ppm/°C	49W9404	0.26
● ERA-3AED69R8V	69.8 ohm	± 25ppm/°C	49W9487	0.26
● ERA-3AED1070V	107 ohm	± 25ppm/°C	49W9129	0.26
● ERA-3AED1650V	165 ohm	± 25ppm/°C	49W9209	0.26
● ERA-3AED3740V	374 ohm	± 25ppm/°C	49W9367	0.26
● ERA-3AED5490V	549 ohm	± 25ppm/°C	49W9436	0.26
● ERA-3AED622V	622 ohm	± 25ppm/°C	49W9465	0.28
● ERA-3AED821V	821 ohm	± 25ppm/°C	49W9517	0.26
● ERA-3AED1241V	1.24 kohm	± 25ppm/°C	49W9158	0.28
● ERA-3AED1961V	1.96 kohm	± 25ppm/°C	49W9242	0.26
● ERA-3AED2673V	2.67 kohm	± 25ppm/°C	49W9304	0.26
● ERA-3AED2941V	2.94 kohm	± 25ppm/°C	49W9322	0.28
● ERA-3AED3322V	3.32 kohm	± 25ppm/°C	49W9349	0.26
● ERA-3AED432V	4.3 kohm	± 25ppm/°C	49W9389	0.28
● ERA-3AED4992V	49.9 kohm	± 25ppm/°C	49W9418	0.26
● ERA-3AED9531V	9.53 kohm	± 25ppm/°C	49W9549	0.28
● ERA-3AED153V	15 kohm	± 25ppm/°C	49W9191	0.28
● ERA-3AED2262V	22.6 kohm	± 25ppm/°C	49W9271	0.26
● ERA-3AED7322V	73.2 kohm	± 25ppm/°C	49W9498	0.26
● ERA-3AED1133V	113 kohm	± 25ppm/°C	49W9139	0.26
● ERA-3AED1743V	174 kohm	± 25ppm/°C	49W9220	0.26
ERA3ARB SERIES — 100 WATT				
● ERA3ARB1021V	1.02 kohm	± 10ppm/°C	93T7302	0.44
● ERA3ARB1051V	1.05 kohm	± 10ppm/°C	93T7303	0.44
● ERA3ARB1071V	1.07 kohm	± 10ppm/°C	93T7305	0.44
● ERA3ARB1131V	1.13 kohm	± 10ppm/°C	93T7307	0.44
● ERA3ARB1151V	1.15 kohm	± 10ppm/°C	93T7308	0.44
● ERA3ARB1211V	1.21 kohm	± 10ppm/°C	93T7309	0.44
● ERA3ARB1241V	1.24 kohm	± 10ppm/°C	93T7311	0.44
● ERA3ARB1371V	1.37 kohm	± 10ppm/°C	93T7315	0.44
● ERA3ARB1401V	1.4 kohm	± 10ppm/°C	93T7317	0.44
● ERA3ARB1431V	1.43 kohm	± 10ppm/°C	93T7319	0.44
● ERA3ARB1581V	1.58 kohm	± 10ppm/°C	93T7322	0.44
● ERA3ARB1651V	1.65 kohm	± 10ppm/°C	93T7325	0.44
● ERA3ARB1691V	1.69 kohm	± 10ppm/°C	93T7327	0.44
● ERA3ARB1741V	1.74 kohm	± 10ppm/°C	93T7329	0.44
● ERA3ARB1781V	1.78 kohm	± 10ppm/°C	93T7330	0.44
● ERA3ARB1821V	1.82 kohm	± 10ppm/°C	93T7331	0.46

➤ CONTINUED ➤

ERA SERIES METAL FILM (THIN FILM) CHIP RESISTORS — 100W, PACKAGE 0603 (1608 METRIC) (CONT.)

ERA3ARB SERIES — 100 WATT

Mfg. Part No.	Resistance	Temperature Coefficient	Stock No.	Price Each 1-9
● ERA3ARB1911V	1.91 kohm	± 10ppm/°C	93T7333	0.44
● ERA3ARB1961V	1.96 kohm	± 10ppm/°C	93T7335	0.46
● ERA3ARB2101V	2.1 kohm	± 10ppm/°C	93T7338	0.44
● ERA3ARB2211V	2.21 kohm	± 10ppm/°C	93T7340	0.44
● ERA3ARB2321V	2.32 kohm	± 10ppm/°C	93T7343	0.44
● ERA3ARB2371V	2.37 kohm	± 10ppm/°C	93T7345	0.44
● ERA3ARB2431V	2.43 kohm	± 10ppm/°C	93T7346	0.44
● ERA3ARB2491V	2.49 kohm	± 10ppm/°C	93T7348	0.44
● ERA3ARB2551V	2.55 kohm	± 10ppm/°C	93T7350	0.44
● ERA3ARB2611V	2.61 kohm	± 10ppm/°C	93T7352	0.44
● ERA3ARB2671V	2.67 kohm	± 10ppm/°C	93T7354	0.44
● ERA3ARB2741V	2.74 kohm	± 10ppm/°C	93T7356	0.45
● ERA3ARB2871V	2.87 kohm	± 10ppm/°C	93T7358	0.44
● ERA3ARB2941V	2.94 kohm	± 10ppm/°C	93T7360	0.44
● ERA3ARB3011V	3.01 kohm	± 10ppm/°C	93T7362	0.46
● ERA3ARB3091V	3.09 kohm	± 10ppm/°C	93T7364	0.44
● ERA3ARB3161V	3.16 kohm	± 10ppm/°C	93T7366	0.44
● ERA3ARB3401V	3.4 kohm	± 10ppm/°C	93T7370	0.44
● ERA3ARB3481V	3.48 kohm	± 10ppm/°C	93T7372	0.46
● ERA3ARB3571V	3.57 kohm	± 10ppm/°C	93T7373	0.44
● ERA3ARB3741V	3.74 kohm	± 10ppm/°C	93T7375	0.44
● ERA3ARB3831V	3.83 kohm	± 10ppm/°C	93T7377	0.44
● ERA3ARB3921V	3.92 kohm	± 10ppm/°C	93T7379	0.44
● ERA3ARB4021V	4.02 kohm	± 10ppm/°C	93T7380	0.44
● ERA3ARB4121V	4.12 kohm	± 10ppm/°C	93T7382	0.44
● ERA3ARB4641V	4.64 kohm	± 10ppm/°C	93T7388	0.44
● ERA3ARB4751V	4.75 kohm	± 10ppm/°C	93T7389	0.44
● ERA3ARB4871V	4.87 kohm	± 10ppm/°C	93T7391	0.46
● ERA3ARB4991V	4.99 kohm	± 10ppm/°C	93T7393	0.44
● ERA3ARB5111V	5.11 kohm	± 10ppm/°C	93T7395	0.44
● ERA3ARB5361V	5.36 kohm	± 10ppm/°C	93T7398	0.44
● ERA3ARB5491V	5.49 kohm	± 10ppm/°C	93T7400	0.44
● ERA3ARB5621V	5.62 kohm	± 10ppm/°C	93T7402	0.46
● ERA3ARB5761V	5.76 kohm	± 10ppm/°C	93T7404	0.44
● ERA3ARB5901V	5.9 kohm	± 10ppm/°C	93T7406	0.44
● ERA-3ARB9311V	9.31 kohm	± 10ppm/°C	93T7428	0.72
● ERA3ARB1052V	10.5 kohm	± 10ppm/°C	93T7304	0.44
● ERA3ARB1072V	10.7 kohm	± 10ppm/°C	93T7306	0.44
● ERA3ARB1242V	12.4 kohm	± 10ppm/°C	93T7312	0.44
● ERA3ARB1272V	12.7 kohm	± 10ppm/°C	93T7313	0.44
● ERA3ARB1332V	13.3 kohm	± 10ppm/°C	93T7314	0.46
● ERA3ARB1372V	13.7 kohm	± 10ppm/°C	93T7316	0.44
● ERA3ARB1402V	14 kohm	± 10ppm/°C	93T7318	0.44
● ERA3ARB1472V	14.7 kohm	± 10ppm/°C	93T7320	0.44
● ERA3ARB1542V	15.4 kohm	± 10ppm/°C	93T7321	0.44
● ERA3ARB1582V	15.8 kohm	± 10ppm/°C	93T7323	0.44
● ERA3ARB1652V	16.5 kohm	± 10ppm/°C	93T7326	0.44
● ERA3ARB1692V	16.9 kohm	± 10ppm/°C	93T7328	0.44
● ERA3ARB1872V	18.7 kohm	± 10ppm/°C	93T7332	0.44
● ERA3ARB1912V	19.1 kohm	± 10ppm/°C	93T7334	0.44
● ERA3ARB1962V	19.6 kohm	± 10ppm/°C	93T7336	0.44
● ERA3ARB2052V	20.5 kohm	± 10ppm/°C	93T7337	0.44
● ERA3ARB2102V	21 kohm	± 10ppm/°C	93T7339	0.44
● ERA3ARB2212V	22.1 kohm	± 10ppm/°C	93T7341	0.44
● ERA3ARB2262V	22.6 kohm	± 10ppm/°C	93T7342	0.44
● ERA3ARB2322V	23.2 kohm	± 10ppm/°C	93T7344	0.44
● ERA3ARB2432V	24.3 kohm	± 10ppm/°C	93T7347	0.44
● ERA3ARB2492V	24.9 kohm	± 10ppm/°C	93T7349	0.45
● ERA3ARB2552V	25.5 kohm	± 10ppm/°C	93T7351	0.44
● ERA3ARB2672V	26.7 kohm	± 10ppm/°C	93T7355	0.44
● ERA3ARB2742V	27.4 kohm	± 10ppm/°C	93T7357	0.45
● ERA3ARB2872V	28.7 kohm	± 10ppm/°C	93T7359	0.44
● ERA3ARB2942V	29.4 kohm	± 10ppm/°C	93T7361	0.44
● ERA3ARB3012V	30.1 kohm	± 10ppm/°C	93T7363	0.44
● ERA3ARB3092V	30.9 kohm	± 10ppm/°C	93T7365	0.44
● ERA3ARB3162V	31.6 kohm	± 10ppm/°C	93T7367	0.44
● ERA3ARB3322V	33.2 kohm	± 10ppm/°C	93T7369	0.44
● ERA3ARB3402V	34 kohm	± 10ppm/°C	93T7371	0.44
● ERA3ARB3572V	35.7 kohm	± 10ppm/°C	93T7374	0.44
● ERA3ARB3742V	37.4 kohm	± 10ppm/°C	93T7376	0.44
● ERA3ARB3832V	38.3 kohm	± 10ppm/°C	93T7378	0.44

➤ CONTINUED ➤

ERA SERIES METAL FILM (THIN FILM) CHIP RESISTORS — 100W, PACKAGE 0603 (1608 METRIC) (CONT.)

ERA3ARB SERIES — 100 WATT

Mfg. Part No.	Resistance	Temperature Coefficient	Stock No.	Price Each 1-9
ERA3ARB4022V	40.2 kohm	± 10ppm/°C	93T7381	0.45
ERA3ARB4122V	41.2 kohm	± 10ppm/°C	93T7383	0.44
ERA3ARB4222V	42.2 kohm	± 10ppm/°C	93T7384	0.44
ERA3ARB4322V	43.2 kohm	± 10ppm/°C	93T7385	0.44
ERA3ARB4422V	44.2 kohm	± 10ppm/°C	93T7386	0.44
ERA3ARB4532V	45.3 kohm	± 10ppm/°C	93T7387	0.44
ERA3ARB4752V	47.5 kohm	± 10ppm/°C	93T7390	0.46
ERA3ARB4872V	48.7 kohm	± 10ppm/°C	93T7392	0.44
ERA3ARB4992V	49.9 kohm	± 10ppm/°C	93T7394	0.44
ERA3ARB5112V	51.1 kohm	± 10ppm/°C	93T7396	0.46
ERA3ARB5232V	52.3 kohm	± 10ppm/°C	93T7397	0.44
ERA3ARB5362V	53.6 kohm	± 10ppm/°C	93T7399	0.44
ERA3ARB5492V	54.9 kohm	± 10ppm/°C	93T7401	0.46
ERA3ARB9092V	90.9 kohm	± 10ppm/°C	93T7427	0.44
ERA3ARB9312V	93.1 kohm	± 10ppm/°C	93T7429	0.44
ERA3ARB9532V	95.3 kohm	± 10ppm/°C	93T7430	0.46
ERA3ARB9762V	97.6 kohm	± 10ppm/°C	93T7431	0.44

(209151)

ERA SERIES METAL FILM (THIN FILM) CHIP RESISTORS — 125W, PACKAGE 0805 (2012 METRIC)

RoHS Compliant Available

Panasonic

Features:
- High reliability — Stable at high temperature and humidity (85°C 85% RH rated load, category temperature range: -55°C to +155°C)
- High accuracy — Small resistance tolerance and temperature coefficient of resistance
- High performance — Low current noise, excellent linearity

ERA-6AEB SERIES — 125 WATT

Mfg. Part No.	Resistance	Temperature Coefficient	Stock No.	Price Each 1-9
ERA-6AEB49R9V	49.9 ohm	± 25ppm/°C	53W8346	0.46
ERA-6AEB331V	330 ohm	± 25ppm/°C	53W8345	0.46
ERA-6AEB4991V	4.99 kohm	± 25ppm/°C	74R4062	0.27
ERA-6AEB4992V	49.9 kohm	± 25ppm/°C	53W8347	0.46
ERA-6ARW AND ERA-6AHD SERIES — 125 WATT				
ERA-6ARW273V	27 kohm	± 10ppm/°C	53W3953	0.98
ERA-6AHD10R7V	10.7 ohm	± 50ppm/°C	50W0719	0.26
ERA-6AHD16R5V	16.5 ohm	± 50ppm/°C	50W0739	0.26
ERA-6AHD24R9V	24.9 ohm	± 50ppm/°C	50W0759	0.28
ERA-6AHD37R4V	37.4 ohm	± 50ppm/°C	50W0781	0.28
ERA-6AED SERIES — 125 WATT				
ERA-6AED78R7V	78.7 ohm	± 25ppm/°C	50W0657	0.28
ERA-6AED2370V	237 ohm	± 25ppm/°C	50W0383	0.28
ERA-6AED3160V	316 ohm	± 25ppm/°C	50W0443	0.26
ERA-6AED6490V	649 ohm	± 25ppm/°C	50W0613	0.28
ERA-6AED1271V	1.27 kohm	± 25ppm/°C	50W0268	0.26
ERA-6AED1961V	1.96 kohm	± 25ppm/°C	50W0348	0.26
ERA-6AED222V	2.2 kohm	± 25ppm/°C	50W0372	0.26
ERA-6AED332V	3.3 kohm	± 25ppm/°C	50W0452	0.28
ERA-6AED4221V	4.22 kohm	± 25ppm/°C	50W0504	0.26
ERA-6AED682V	6.8 kohm	± 25ppm/°C	50W0629	0.26
ERA-6AED752V	7.5 kohm	± 25ppm/°C	50W0649	0.26
ERA-6AED273V	27 kohm	± 25ppm/°C	50W0413	0.28
ERA-6AED363V	36 kohm	± 25ppm/°C	50W0473	0.26
ERA-6AED4322V	43.2 kohm	± 25ppm/°C	50W0511	0.28
ERA-6AED5112V	51.1 kohm	± 25ppm/°C	50W0552	0.28
ERA-6AED5622V	56.2 kohm	± 25ppm/°C	50W0578	0.26
ERA-6AED1133V	113 kohm	± 25ppm/°C	50W0245	0.26
ERA-6AED134V	130 kohm	± 25ppm/°C	50W0278	0.26
ERA-6AED1543V	154 kohm	± 25ppm/°C	50W0302	0.28
ERA-6AED1783V	178 kohm	± 25ppm/°C	50W0330	0.26
ERA-6AED2053V	205 kohm	± 25ppm/°C	50W0358	0.26
ERA-6AED4753V	475 kohm	± 25ppm/°C	50W0536	0.26
ERA-6AED8253V	825 kohm	± 25ppm/°C	50W0676	0.26
ERA-6AED9093V	909 kohm	± 25ppm/°C	50W0696	0.26
ERA6ARB SERIES — 125 WATT				
ERA6ARB1051V	1.05 kohm	± 10ppm/°C	93T7433	0.48
ERA6ARB1071V	1.07 kohm	± 10ppm/°C	93T7434	0.48
ERA6ARB1131V	1.13 kohm	± 10ppm/°C	93T7436	0.48
ERA6ARB1181V	1.18 kohm	± 10ppm/°C	93T7439	0.48

➤CONTINUED➤

ERA SERIES METAL FILM (THIN FILM) CHIP RESISTORS — 125W, PACKAGE 0805 (2012 METRIC) (CONT.)

ERA6ARB SERIES — 125 WATT

Mfg. Part No.	Resistance	Temperature Coefficient	Stock No.	Price Each 1-9
ERA6ARB1211V	1.21 kohm	± 10ppm/°C	93T7441	0.48
ERA6ARB1241V	1.24 kohm	± 10ppm/°C	93T7443	0.48
ERA6ARB1271V	1.27 kohm	± 10ppm/°C	93T7445	0.48
ERA6ARB1371V	1.37 kohm	± 10ppm/°C	93T7447	0.48
ERA6ARB1401V	1.4 kohm	± 10ppm/°C	93T7448	0.48
ERA6ARB1431V	1.43 kohm	± 10ppm/°C	93T7450	0.48
ERA6ARB1471V	1.47 kohm	± 10ppm/°C	93T7452	0.48
ERA6ARB1541V	1.54 kohm	± 10ppm/°C	93T7454	0.48
ERA6ARB1621V	1.62 kohm	± 10ppm/°C	93T7456	0.48
ERA6ARB1651V	1.65 kohm	± 10ppm/°C	93T7458	0.48
ERA6ARB1741V	1.74 kohm	± 10ppm/°C	93T7460	0.48
ERA6ARB1821V	1.82 kohm	± 10ppm/°C	93T7463	0.48
ERA6ARB1871V	1.87 kohm	± 10ppm/°C	93T7465	0.48
ERA6ARB1911V	1.91 kohm	± 10ppm/°C	93T7467	0.48
ERA6ARB1961V	1.96 kohm	± 10ppm/°C	93T7469	0.48
ERA6ARB2051V	2.05 kohm	± 10ppm/°C	93T7471	0.48
ERA6ARB2101V	2.1 kohm	± 10ppm/°C	93T7472	0.48
ERA6ARB2211V	2.21 kohm	± 10ppm/°C	93T7474	0.48
ERA6ARB2261V	2.26 kohm	± 10ppm/°C	93T7476	0.48
ERA6ARB2321V	2.32 kohm	± 10ppm/°C	93T7478	0.48
ERA6ARB2491V	2.49 kohm	± 10ppm/°C	93T7482	0.50
ERA6ARB2611V	2.61 kohm	± 10ppm/°C	93T7484	0.48
ERA6ARB2671V	2.67 kohm	± 10ppm/°C	93T7486	0.48
ERA6ARB2801V	2.8 kohm	± 10ppm/°C	93T7489	0.48
ERA6ARB2871V	2.87 kohm	± 10ppm/°C	93T7491	0.48
ERA6ARB2941V	2.94 kohm	± 10ppm/°C	93T7493	0.48
ERA6ARB3011V	3.01 kohm	± 10ppm/°C	93T7495	0.48
ERA6ARB3091V	3.09 kohm	± 10ppm/°C	93T7497	0.48
ERA6ARB3161V	3.16 kohm	± 10ppm/°C	93T7499	0.48
ERA6ARB3241V	3.24 kohm	± 10ppm/°C	93T7501	0.48
ERA6ARB3321V	3.32 kohm	± 10ppm/°C	93T7503	0.48
ERA6ARB3401V	3.4 kohm	± 10ppm/°C	93T7505	0.48
ERA6ARB3481V	3.48 kohm	± 10ppm/°C	93T7507	0.48
ERA6ARB3651V	3.65 kohm	± 10ppm/°C	93T7509	0.48
ERA6ARB3741V	3.74 kohm	± 10ppm/°C	93T7511	0.48
ERA6ARB3831V	3.83 kohm	± 10ppm/°C	93T7513	0.50
ERA6ARB3921V	3.92 kohm	± 10ppm/°C	93T7515	0.48
ERA6ARB4021V	4.02 kohm	± 10ppm/°C	93T7517	0.48
ERA6ARB4321V	4.32 kohm	± 10ppm/°C	93T7520	0.48
ERA6ARB4531V	4.53 kohm	± 10ppm/°C	93T7523	0.48
ERA6ARB4641V	4.64 kohm	± 10ppm/°C	93T7525	0.48
ERA6ARB4751V	4.75 kohm	± 10ppm/°C	93T7527	0.48
ERA6ARB4991V	4.99 kohm	± 10ppm/°C	93T7530	0.48
ERA6ARB5111V	5.11 kohm	± 10ppm/°C	93T7532	0.48
ERA6ARB5491V	5.49 kohm	± 10ppm/°C	93T7536	0.48
ERA6ARB5621V	5.62 kohm	± 10ppm/°C	93T7538	0.48
ERA6ARB5901V	5.9 kohm	± 10ppm/°C	93T7539	0.48
ERA6ARB9091V	9.09 kohm	± 10ppm/°C	93T7561	0.48
ERA6ARB9311V	9.31 kohm	± 10ppm/°C	93T7563	0.48
ERA6ARB9761V	9.76 kohm	± 10ppm/°C	93T7566	0.50
ERA6ARB1022V	10.2 kohm	± 10ppm/°C	93T7432	0.48
ERA6ARB1072V	10.7 kohm	± 10ppm/°C	93T7435	0.48
ERA6ARB1132V	11.3 kohm	± 10ppm/°C	93T7437	0.48
ERA6ARB1152V	11.5 kohm	± 10ppm/°C	93T7438	0.48
ERA6ARB1182V	11.8 kohm	± 10ppm/°C	93T7440	0.48
ERA6ARB1212V	12.1 kohm	± 10ppm/°C	93T7442	0.48
ERA6ARB1242V	12.4 kohm	± 10ppm/°C	93T7444	0.48
ERA6ARB1332V	13.3 kohm	± 10ppm/°C	93T7446	0.48
ERA6ARB1402V	14 kohm	± 10ppm/°C	93T7449	0.48
ERA6ARB1432V	14.3 kohm	± 10ppm/°C	93T7451	0.48
ERA6ARB1472V	14.7 kohm	± 10ppm/°C	93T7453	0.48
ERA6ARB1582V	15.8 kohm	± 10ppm/°C	93T7455	0.48
ERA6ARB1622V	16.2 kohm	± 10ppm/°C	93T7457	0.48
ERA6ARB1652V	16.5 kohm	± 10ppm/°C	93T7459	0.48
ERA6ARB1742V	17.4 kohm	± 10ppm/°C	93T7461	0.48
ERA6ARB1782V	17.8 kohm	± 10ppm/°C	93T7462	0.48
ERA6ARB1822V	18.2 kohm	± 10ppm/°C	93T7464	0.48
ERA6ARB1872V	18.7 kohm	± 10ppm/°C	93T7466	0.48
ERA6ARB1912V	19.1 kohm	± 10ppm/°C	93T7468	0.48
ERA6ARB1962V	19.6 kohm	± 10ppm/°C	93T7470	0.48
ERA6ARB2102V	21 kohm	± 10ppm/°C	93T7473	0.48

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ERA SERIES METAL FILM (THIN FILM) CHIP RESISTORS — 125W, PACKAGE 0805 (2012 METRIC) (CONT.)

ERA6ARB SERIES — 125 WATT

Mfg. Part No.	Resistance	Temperature Coefficient	Stock No.	Price Each 1-9
● ERA6ARB2212V	22.1 kohm	± 10ppm/°C	93T7475	0.46
● ERA6ARB2262V	22.6 kohm	± 10ppm/°C	93T7477	0.48
● ERA6ARB2322V	23.2 kohm	± 10ppm/°C	93T7479	0.48
● ERA6ARB2372V	23.7 kohm	± 10ppm/°C	93T7480	0.48
● ERA6ARB2432V	24.3 kohm	± 10ppm/°C	93T7481	0.48
● ERA6ARB2492V	24.9 kohm	± 10ppm/°C	93T7483	0.48
● ERA6ARB2612V	26.1 kohm	± 10ppm/°C	93T7485	0.48
● ERA6ARB2742V	27.4 kohm	± 10ppm/°C	93T7488	0.48
● ERA6ARB2802V	28 kohm	± 10ppm/°C	93T7490	0.48
● ERA6ARB2872V	28.7 kohm	± 10ppm/°C	93T7492	0.48
● ERA6ARB2942V	29.4 kohm	± 10ppm/°C	93T7494	0.48
● ERA6ARB3012V	30.1 kohm	± 10ppm/°C	93T7496	0.48
● ERA6ARB3092V	30.9 kohm	± 10ppm/°C	93T7498	0.48
● ERA6ARB3162V	31.6 kohm	± 10ppm/°C	93T7500	0.48
● ERA6ARB3242V	32.4 kohm	± 10ppm/°C	93T7502	0.50
● ERA6ARB3322V	33.2 kohm	± 10ppm/°C	93T7504	0.48
● ERA6ARB3402V	34 kohm	± 10ppm/°C	93T7506	0.48
● ERA6ARB3482V	34.8 kohm	± 10ppm/°C	93T7508	0.48
● ERA6ARB3652V	36.5 kohm	± 10ppm/°C	93T7510	0.48
● ERA6ARB3742V	37.4 kohm	± 10ppm/°C	93T7512	0.48
● ERA6ARB3832V	38.3 kohm	± 10ppm/°C	93T7514	0.48
● ERA6ARB3922V	39.2 kohm	± 10ppm/°C	93T7516	0.50
● ERA6ARB4022V	40.2 kohm	± 10ppm/°C	93T7518	0.48
● ERA6ARB4122V	41.2 kohm	± 10ppm/°C	93T7519	0.48
● ERA6ARB4422V	44.2 kohm	± 10ppm/°C	93T7522	0.48
● ERA6ARB4532V	45.3 kohm	± 10ppm/°C	93T7524	0.48
● ERA6ARB4642V	46.4 kohm	± 10ppm/°C	93T7526	0.48
● ERA6ARB4752V	47.5 kohm	± 10ppm/°C	93T7528	0.48
● ERA6ARB4872V	48.7 kohm	± 10ppm/°C	93T7529	0.48
● ERA6ARB4992V	49.9 kohm	± 10ppm/°C	93T7531	0.50
● ERA6ARB5112V	51.1 kohm	± 10ppm/°C	93T7533	0.48
● ERA6ARB5232V	52.3 kohm	± 10ppm/°C	93T7534	0.48
● ERA6ARB5492V	54.9 kohm	± 10ppm/°C	93T7537	0.48
● ERA6ARB9092V	90.9 kohm	± 10ppm/°C	93T7562	0.50
● ERA6ARB9312V	93.1 kohm	± 10ppm/°C	93T7564	0.48
● ERA6ARB9532V	95.3 kohm	± 10ppm/°C	93T7565	0.48
● ERA6ARB9762V	97.6 kohm	± 10ppm/°C	93T7567	0.48

(209152)

ERA SERIES METAL FILM (THIN FILM) CHIP RESISTORS — 250W PACKAGE 1206 (3216 METRIC)

RoHS Compliant Available

Panasonic

Features:

- High reliability — Stable at high temperature and humidity (85°C 85% RH rated load, category temperature range: -55°C to +155°C)
- High accuracy — Small resistance tolerance and temperature coefficient of resistance
- High performance — Low current noise, excellent linearity

ERA-8AEB SERIES — 250 WATT

Mfg. Part No.	Resistance	Temperature Coefficient	Tape Cut Stock No.	Tape Cut Price Each 1-9
● ERA-8AEB49R9V	49.9 ohm	± 25ppm/°C	93T7678	0.53
● ERA-8AEB54R9V	54.9 ohm	± 25ppm/°C	93T7688	0.50
● ERA-8AEB60R4V	60.4 ohm	± 25ppm/°C	93T7694	0.53
● ERA-8AEB88R7V	88.7 ohm	± 25ppm/°C	93T7717	0.50
● ERA-8AEB1400V	140 ohm	± 25ppm/°C	93T7590	0.53
● ERA-8AEB2150V	215 ohm	± 25ppm/°C	93T7617	0.53
● ERA-8AEB2800V	280 ohm	± 25ppm/°C	93T7639	0.50
● ERA-8AEB4990V	499 ohm	± 25ppm/°C	93T7679	0.53
● ERA-8AEB5110V	511 ohm	± 25ppm/°C	93T7682	0.53
● ERA-8AEB102V	1 kohm	± 25ppm/°C	15R1333	0.53
● ERA-8AEB1021V	1.02 kohm	± 25ppm/°C	93T7568	0.50
● ERA-8AEB1051V	1.05 kohm	± 25ppm/°C	93T7571	0.50
● ERA-8AEB1071V	1.07 kohm	± 25ppm/°C	93T7574	0.50
● ERA-8AEB1131V	1.13 kohm	± 25ppm/°C	93T7575	0.50
● ERA-8AEB1151V	1.15 kohm	± 25ppm/°C	93T7578	0.50
● ERA-8AEB1211V	1.21 kohm	± 25ppm/°C	93T7579	0.50
● ERA-8AEB1241V	1.24 kohm	± 25ppm/°C	93T7581	0.53
● ERA-8AEB1581V	1.58 kohm	± 25ppm/°C	93T7598	0.53
● ERA-8AEB1271V	1.27 kohm	± 25ppm/°C	93T7583	0.53

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ERA SERIES METAL FILM (THIN FILM) CHIP RESISTORS — 250W PACKAGE 1206 (3216 METRIC) (CONT.)

Mfg. Part No.	Resistance	Temperature Coefficient	Tape Cut Stock No.	Tape Cut Price Each 1-9
● ERA-8AEB1371V	1.37 kohm	± 25ppm/°C	93T7587	0.50
● ERA-8AEB1401V	1.4 kohm	± 25ppm/°C	93T7591	0.53
● ERA-8AEB1431V	1.43 kohm	± 25ppm/°C	93T7593	0.53
● ERA-8AEB1541V	1.54 kohm	± 25ppm/°C	93T7597	0.53
● ERA-8AEB1621V	1.62 kohm	± 25ppm/°C	93T7600	0.53
● ERA-8AEB1651V	1.65 kohm	± 25ppm/°C	93T7602	0.50
● ERA-8AEB1691V	1.69 kohm	± 25ppm/°C	93T7604	0.53
● ERA-8AEB1741V	1.74 kohm	± 25ppm/°C	93T7607	0.50
● ERA-8AEB1781V	1.78 kohm	± 25ppm/°C	93T7608	0.53
● ERA-8AEB1821V	1.82 kohm	± 25ppm/°C	93T7609	0.50
● ERA-8AEB1911V	1.91 kohm	± 25ppm/°C	93T7611	0.53
● ERA-8AEB1961V	1.96 kohm	± 25ppm/°C	93T7612	0.53
● ERA-8AEB2101V	2.1 kohm	± 25ppm/°C	93T7615	0.53
● ERA-8AEB2261V	2.26 kohm	± 25ppm/°C	93T7620	0.50
● ERA-8AEB2321V	2.32 kohm	± 25ppm/°C	93T7622	0.53
● ERA-8AEB2491V	2.49 kohm	± 25ppm/°C	93T7628	0.53
● ERA-8AEB2551V	2.55 kohm	± 25ppm/°C	93T7630	0.53
● ERA-8AEB2611V	2.61 kohm	± 25ppm/°C	93T7632	0.53
● ERA-8AEB2671V	2.67 kohm	± 25ppm/°C	93T7634	0.53
● ERA-8AEB2741V	2.74 kohm	± 25ppm/°C	93T7636	0.53
● ERA-8AEB2801V	2.8 kohm	± 25ppm/°C	93T7640	0.53
● ERA-8AEB2871V	2.87 kohm	± 25ppm/°C	93T7642	0.53
● ERA-8AEB2941V	2.94 kohm	± 25ppm/°C	93T7644	0.53
● ERA-8AEB3011V	3.01 kohm	± 25ppm/°C	93T7645	0.53
● ERA-8AEB3091V	3.09 kohm	± 25ppm/°C	93T7646	0.50
● ERA-8AEB3161V	3.16 kohm	± 25ppm/°C	93T7649	0.53
● ERA-8AEB3241V	3.24 kohm	± 25ppm/°C	93T7651	0.53
● ERA-8AEB3321V	3.32 kohm	± 25ppm/°C	93T7653	0.53
● ERA-8AEB3401V	3.4 kohm	± 25ppm/°C	93T7655	0.50
● ERA-8AEB3481V	3.48 kohm	± 25ppm/°C	93T7657	0.53
● ERA-8AEB3831V	3.83 kohm	± 25ppm/°C	93T7662	0.50
● ERA-8AEB3921V	3.92 kohm	± 25ppm/°C	93T7664	0.53
● ERA-8AEB4021V	4.02 kohm	± 25ppm/°C	93T7666	0.53
● ERA-8AEB4121V	4.12 kohm	± 25ppm/°C	93T7668	0.50
● ERA-8AEB4641V	4.64 kohm	± 25ppm/°C	93T7673	0.50
● ERA-8AEB4751V	4.75 kohm	± 25ppm/°C	93T7674	0.53
● ERA-8AEB4871V	4.87 kohm	± 25ppm/°C	93T7676	0.53
● ERA-8AEB4991V	4.99 kohm	± 25ppm/°C	93T7680	0.53
● ERA-8AEB5111V	5.11 kohm	± 25ppm/°C	93T7683	0.50
● ERA-8AEB5361V	5.36 kohm	± 25ppm/°C	93T7686	0.50
● ERA-8AEB5621V	5.62 kohm	± 25ppm/°C	93T7690	0.50
● ERA-8AEB5761V	5.76 kohm	± 25ppm/°C	93T7691	0.50
● ERA-8AEB5901V	5.9 kohm	± 25ppm/°C	93T7693	0.50
● ERA-8AEB9091V	9.09 kohm	± 25ppm/°C	93T7719	0.53
● ERA-8AEB1022V	10.2 kohm	± 25ppm/°C	93T7569	0.53
● ERA-8AEB1052V	10.5 kohm	± 25ppm/°C	93T7572	0.50
● ERA-8AEB1132V	11.3 kohm	± 25ppm/°C	93T7576	0.53
● ERA-8AEB1212V	12.1 kohm	± 25ppm/°C	93T7580	0.53
● ERA-8AEB1242V	12.4 kohm	± 25ppm/°C	93T7582	0.53
● ERA-8AEB1272V	12.7 kohm	± 25ppm/°C	93T7584	0.50
● ERA-8AEB1332V	13.3 kohm	± 25ppm/°C	93T7585	0.53
● ERA-8AEB1372V	13.7 kohm	± 25ppm/°C	93T7588	0.53
● ERA-8AEB1402V	14 kohm	± 25ppm/°C	93T7592	0.50
● ERA-8AEB1432V	14.3 kohm	± 25ppm/°C	93T7594	0.50
● ERA-8AEB1472V	14.7 kohm	± 25ppm/°C	93T7596	0.50
● ERA-8AEB1582V	15.8 kohm	± 25ppm/°C	93T7599	0.50
● ERA-8AEB1622V	16.2 kohm	± 25ppm/°C	93T7601	0.53
● ERA-8AEB1652V	16.5 kohm	± 25ppm/°C	93T7603	0.53
● ERA-8AEB1692V	16.9 kohm	± 25ppm/°C	93T7605	0.50
● ERA-8AEB1872V	18.7 kohm	± 25ppm/°C	93T7610	0.50
● ERA-8AEB1962V	19.6 kohm	± 25ppm/°C	93T7613	0.53
● ERA-8AEB2052V	20.5 kohm	± 25ppm/°C	93T7614	0.53
● ERA-8AEB2102V	21 kohm	± 25ppm/°C	93T7616	0.50
● ERA-8AEB2212V	22.1 kohm	± 25ppm/°C	93T7619	0.53
● ERA-8AEB2262V	22.6 kohm	± 25ppm/°C	93T7621	0.53
● ERA-8AEB2322V	23.2 kohm	± 25ppm/°C	93T7623	0.50
● ERA-8AEB2372V	23.7 kohm	± 25ppm/°C	93T7624	0.50
● ERA-8AEB2432V	24.3 kohm	± 25ppm/°C	93T7626	0.53
● ERA-8AEB2492V	24.9 kohm	± 25ppm/°C	93T7629	0.53
● ERA-8AEB2672V	26.7 kohm	± 25ppm/°C	93T7635	0.50
● ERA-8AEB2742V	27.4 kohm	± 25ppm/°C	93T7637	0.53
● ERA-8AEB2802V	28 kohm	± 25ppm/°C	93T7641	0.53

➤ CONTINUED ➤

ERA SERIES METAL FILM (THIN FILM) CHIP RESISTORS — 250W PACKAGE 1206 (3216 METRIC) (CONT.)

Mfg. Part No.	Resistance	Temperature Coefficient	Tape Cut Stock No.	Tape Cut Price Each 1-9
ERA-8AEB2872V	28.7 kohm	± 25ppm/°C	93T7643	0.50
ERA-8AEB3092V	30.9 kohm	± 25ppm/°C	93T7647	0.53
ERA-8AEB3162V	31.6 kohm	± 25ppm/°C	93T7650	0.50
ERA-8AEB3242V	32.4 kohm	± 25ppm/°C	93T7652	0.53
ERA-8AEB3322V	33.2 kohm	± 25ppm/°C	93T7654	0.53
ERA-8AEB3402V	34 kohm	± 25ppm/°C	93T7656	0.53
ERA-8AEB3482V	34.8 kohm	± 25ppm/°C	93T7658	0.53
ERA-8AEB3572V	35.7 kohm	± 25ppm/°C	93T7660	0.53
ERA-8AEB3742V	37.4 kohm	± 25ppm/°C	93T7661	0.53
ERA-8AEB3832V	38.3 kohm	± 25ppm/°C	93T7663	0.50
ERA-8AEB3922V	39.2 kohm	± 25ppm/°C	93T7665	0.53
ERA-8AEB4022V	40.2 kohm	± 25ppm/°C	93T7667	0.53
ERA-8AEB4122V	41.2 kohm	± 25ppm/°C	93T7669	0.53
ERA-8AEB4322V	43.2 kohm	± 25ppm/°C	93T7670	0.53
ERA-8AEB4422V	44.2 kohm	± 25ppm/°C	93T7671	0.53
ERA-8AEB4532V	45.3 kohm	± 25ppm/°C	93T7672	0.45
ERA-8AEB4752V	47.5 kohm	± 25ppm/°C	93T7675	0.53
ERA-8AEB4872V	48.7 kohm	± 25ppm/°C	93T7677	0.53
ERA-8AEB4992V	49.9 kohm	± 25ppm/°C	93T7681	0.53
ERA-8AEB5112V	51.1 kohm	± 25ppm/°C	93T7684	0.53
ERA-8AEB5232V	52.3 kohm	± 25ppm/°C	93T7685	0.53
ERA-8AEB5362V	53.6 kohm	± 25ppm/°C	93T7687	0.53
ERA-8AEB5492V	54.9 kohm	± 25ppm/°C	93T7689	0.53
ERA-8AEB9092V	90.9 kohm	± 25ppm/°C	93T7720	0.50
ERA-8AEB9312V	93.1 kohm	± 25ppm/°C	93T7721	0.53
ERA-8AEB9532V	95.3 kohm	± 25ppm/°C	93T7722	0.50
ERA-8AEB9762V	97.6 kohm	± 25ppm/°C	93T7723	0.53
ERA-8AEB1023V	102 kohm	± 25ppm/°C	93T7570	0.53
ERA-8AEB1053V	105 kohm	± 25ppm/°C	93T7573	0.53
ERA-8AEB1133V	113 kohm	± 25ppm/°C	93T7577	0.53
ERA-8AEB1333V	133 kohm	± 25ppm/°C	93T7586	0.53
ERA-8AEB1373V	137 kohm	± 25ppm/°C	93T7589	0.53
ERA-8AEB1433V	143 kohm	± 25ppm/°C	93T7595	0.50
ERA-8AEB1693V	169 kohm	± 25ppm/°C	93T7606	0.53
ERA-8AEB2373V	237 kohm	± 25ppm/°C	93T7625	0.50
ERA-8AEB2433V	243 kohm	± 25ppm/°C	93T7627	0.53
ERA-8AEB2553V	255 kohm	± 25ppm/°C	93T7631	0.50
ERA-8AEB2613V	261 kohm	± 25ppm/°C	93T7633	0.50
ERA-8AEB2743V	274 kohm	± 25ppm/°C	93T7638	0.53
ERA-8AEB3093V	309 kohm	± 25ppm/°C	93T7648	0.50
ERA-8AEB3483V	348 kohm	± 25ppm/°C	93T7659	0.50
ERA-8AHD SERIES — 250 WATT				
ERA-8AHD150V	15 ohm	± 25ppm/°C	50W1713	0.55
ERA-8AHD22R6V	22.6 ohm	± 50ppm/°C	50W1730	0.52
ERA-8AHD46R4V	46.4 ohm	± 50ppm/°C	50W1768	0.52
ERA-8AED SERIES — 250 WATT				
ERA-8AED54R9V	54.9 ohm	± 25ppm/°C	50W1543	0.52
ERA-8AED63R4V	63.4 ohm	± 25ppm/°C	50W1583	0.52
ERA-8AED69R8V	69.8 ohm	± 25ppm/°C	50W1608	0.52
ERA-8AED3010V	301 ohm	± 25ppm/°C	50W1408	0.52
ERA-8AED3480V	348 ohm	± 25ppm/°C	50W1439	0.52
ERA-8AED9760V	976 ohm	± 25ppm/°C	50W1689	0.52
ERA-8AED1151V	1.15 kohm	± 25ppm/°C	50W1224	0.52
ERA-8AED1781V	1.78 kohm	± 25ppm/°C	50W1304	0.52
ERA-8AED302V	3 kohm	± 25ppm/°C	50W1412	0.52
ERA-8AED5621V	5.62 kohm	± 25ppm/°C	50W1553	0.52
ERA-8AED6191V	6.19 kohm	± 25ppm/°C	50W1575	0.52
ERA-8AED9531V	9.53 kohm	± 25ppm/°C	50W1685	0.52
ERA-8AED1152V	11.5 kohm	± 25ppm/°C	50W1225	0.52
ERA-8AED1542V	15.4 kohm	± 25ppm/°C	50W1277	0.52
ERA-8AED1742V	17.4 kohm	± 25ppm/°C	50W1301	0.52
ERA-8AED203V	20 kohm	± 25ppm/°C	50W1329	0.52
ERA-8AED2672V	26.7 kohm	± 25ppm/°C	50W1385	0.52
ERA-8AED4752V	47.5 kohm	± 25ppm/°C	50W1511	0.52
ERA-8AED7682V	76.8 kohm	± 25ppm/°C	50W1631	0.52
ERA-8AED8252V	82.5 kohm	± 25ppm/°C	50W1651	0.52
ERA-8AED1273V	127 kohm	± 25ppm/°C	50W1246	0.52
ERA-8AED1963V	196 kohm	± 25ppm/°C	50W1326	0.52
ERA-8AED2263V	226 kohm	± 25ppm/°C	50W1354	0.52

➤CONTINUED➤

ERA SERIES METAL FILM (THIN FILM) CHIP RESISTORS — 250W PACKAGE 1206 (3216 METRIC) (CONT.)

ERA-8AED SERIES — 250 WATT

Mfg. Part No.	Resistance	Temperature Coefficient	Tape Cut Stock No.	Tape Cut Price Each 1-9
ERA-8AED394V	390 kohm	± 25ppm/°C	50W1470	0.52
ERA-8AED4123V	412 kohm	± 25ppm/°C	50W1478	0.52

(209153)

TNPU SERIES HIGH PRECISION THIN FILM CHIP RESISTORS

RoHS Compliant Available

VISHAY

Features:
- Low temperature coefficient and tight tolerances (±0.05%; ±5ppm/K)
- Superior moisture resistivity ≤ 0.25% (85°C; 56 days; 85% RH)
- Waste gas resistant
- AEC-Q200 qualified

Applications:
- Industrial equipment
- Telecommunication
- Medical equipment
- Instrumentation
- Test and measuring equipment
- Automotive

0603 PACKAGE CASE

Mfg. Part No.	Resistance	Temperature Coefficient	Tape Cut Stock No.	Tape Cut Price Each 1-49
TNPU0603100RBZEN00	100ohm	± 5ppm/K	91T9819	2.48
TNPU06032K00BZEN00	2kohm	± 5ppm/K	91T9826	2.41
TNPU06032K49BZEN00	2.49kohm	± 5ppm/K	91T9828	2.48
TNPU06034K99BZEN00	4.99kohm	± 5ppm/K	91T9847	2.41
TNPU060315K0BZEN00	15kohm	± 5ppm/K	91T9821	2.41
TNPU060320K0BZEN00	20kohm	± 5ppm/K	91T9830	2.41
TNPU060324K9BZEN00	24.9kohm	± 5ppm/K	91T9836	2.50
TNPU060349K9BZEN00	49.9kohm	± 5ppm/K	91T9851	2.41
TNPU0603100KBZEN00	100kohm	± 5ppm/K	91T9817	2.48
0805 PACKAGE CASE				
TNPU0805100RBZEN00	100ohm	± 5ppm/K	91T9878	2.53
TNPU08052K00BZEN00	2kohm	± 5ppm/K	91T9887	2.46
TNPU08054K99BZEN00	4.99kohm	± 5ppm/K	91T9907	2.46
TNPU080520K0BZEN00	20kohm	± 5ppm/K	91T9891	2.46
TNPU080549K9BZEN00	49.9kohm	± 5ppm/K	91T9910	2.46
TNPU0805100KBZEN00	100kohm	± 5ppm/K	91T9876	2.53
1206 PACKAGE CASE				
TNPU1206100RBZEN00	100ohm	± 5ppm/K	91T9929	3.39
TNPU12062K00BZEN00	2kohm	± 5ppm/K	91T9936	3.29
TNPU12064K99BZEN00	4.99kohm	± 5ppm/K	91T9947	3.29
TNPU120620K0BZEN00	20kohm	± 5ppm/K	91T9938	3.39
TNPU120649K9BZEN00	49.9kohm	± 5ppm/K	91T9948	3.29
TNPU1206100KBZEN00	100kohm	± 5ppm/K	91T9926	3.29

(203966)

TNPW SERIES THIN FILM PRECISION CHIP RESISTORS

RoHS Compliant Available

VISHAY

SMD

Features
- Metal Film Layer on High Quality Ceramic
- Protective Top Coat
- Solderable Contacts on Ni Barrier Layer
- Approvals: EIA 575, CECC40000/40400/40401-801

Applications
- Instrumentation
- Test Equipment
- Guidance Systems
- Precision Designs

Specifications
- Temp. Coefficient: +/-25ppm/°K
- Termination: Surface Mount
- Material: Thin Film

Additional values available, *go online or call.*

TNPW0603 SERIES

Mfg .Part No.	Res. (Ohms)	Res. Tol. (+/- %)	Power Rating (mW)	Stock No.	Price Each 1-24
TNPW060310R0BEEN	10	± 0.1%	100	71M1229	1.04
TNPW060349R9BEEN	49.9	± 0.1%	100	71M1245	1.07
TNPW06031K00BEEN	1k	± 0.1%	100	71M1223	0.89
TNPW06031K00BEEA	1k	± 0.1%	100	26R4217	0.59
TNPW06031K02BEEA	1.02k	± 0.1%	100	08N3224	0.44
TNPW06034K70BEEA	4.7k	± 0.1%	100	34P2508	0.59
TNPW06032K00BEEN	2k	± 0.1%	100	71M1233	0.86
TNPW06033K01BEEN	3.01k	± 0.1%	100	71M1241	0.85
TNPW06034K99BEEN	4.99k	± 0.1%	100	71M1243	0.86
TNPW06034K99BEEA	4.99k	± 0.1%	100	26R4220	0.61
TNPW060310K0BEEA	10k	± 0.1%	100	26R4218	0.61
TNPW060310K0BEEN	10k	± 0.1%	100	71M1225	0.87
TNPW060320K0BEEN	20k	± 0.1%	100	71M1235	0.86

➤CONTINUED➤

TNPW SERIES THIN FILM PRECISION CHIP RESISTORS (CONT.)

Mfg .Part No.	Res. (Ohms)	Res. Tol. (+/- %)	Power Rating (mW)	Stock No.	Price Each 1-24
● TNPW060324K9BEEN	24.9k	± 0.1%	100	71M1239	0.86
● TNPW060330K1BEEA	30.1k	± 0.1%	100	89M5439	0.59
● TNPW0603100KBEEN	100k	± 0.1%	100	71M1231	0.86
● TNPW0603100KBEEA	100k	± 0.1%	100	26R4219	0.61
● TNPW0603200KBEEN	200k	± 0.1%	100	71M1237	1.04
● TNPW06034K02BEEA	4.02k	± 0.1%	100	89M0189	0.59
TNPW0805 SERIES					
● TNPW080510R0BEEN	10	± 0.1%	125	71M1247	0.86
● TNPW080549R9BEEN	49.9	± 0.1%	125	71M1268	0.86
● TNPW080549R9BEEA	49.9	± 0.1%	125	26R4221	0.61
● TNPW0805100RBEEA	100	± 0.1%	125	27K5898	0.59
● TNPW0805200RBEEN	200	± 0.1%	125	71M1256	0.86
● TNPW0805499RBEEA	499	± 0.1%	125	27K5904	0.61
● TNPW08051K00BEEN	1k	± 0.1%	125	70K8480	0.87
● TNPW08052K00BEEN	2k	± 0.1%	125	54M6144	0.87
● TNPW08052K49BEEN	2.49k	± 0.1%	125	71M1252	0.86
● TNPW08053K01BEEN	3.01k	± 0.1%	125	71M1260	0.86
● TNPW08054K02BEEN	4.02k	± 0.1%	125	71M1264	0.86
● TNPW08054K99BEEN	4.99k	± 0.1%	125	63K9790	0.87
● TNPW08056K49BEEN	6.49k	± 0.1%	125	71M1274	0.89
● TNPW080510K0BEEA	10k	± 0.1%	125	27K5899	0.59
● TNPW080520K0BEEA	20k	± 0.1%	125	27K5901	0.61
● TNPW080524K9BEEN	24.9k	± 0.1%	125	71M1258	0.86
● TNPW080530K1BEEN	30.1k	± 0.1%	125	71M1262	0.86
● TNPW080549K9BEEN	49.9k	± 0.1%	125	71M1266	0.86
● TNPW080551K1BEEN	51.1k	± 0.1%	125	71M1270	0.86
● TNPW080590K9BEEN	90.9k	± 0.1%	125	71M1276	0.86
● TNPW0805100KBEEN	100k	± 0.1%	125	16M0342	0.85
TNPW0805101KBETA	101k	± 0.1%	125	65C6828	0.61
● TNPW0805499RBEEN	499k	± 0.1%	125	40P2273	0.88
TNPW1206 SERIES					
● TNPW120649R9BEEN	49.9	± 0.1%	250	71M1294	0.88
● TNPW1206249RBEEN	249	± 0.1%	250	71M1284	0.86
● TNPW1206499RBEEN	499	± 0.1%	250	71M1298	0.88
● TNPW12061K00BEEA	1k	± 0.1%	250	26R4222	0.85
● TNPW12061M00BEEA	1k	± 0.1%	250	35M3804	1.83
● TNPW12062K00BEEA	2k	± 0.1%	250	26R4223	0.87
● TNPW12062K00BEEN	2k	± 0.1%	250	71M1280	0.86
● TNPW12064K99BEEN	4.99k	± 0.1%	250	71M1288	0.86
TNPW120610K0BETY	10k	± 0.1%	250	65C9038	0.88
● TNPW120615K0BEEN	15k	± 0.1%	250	71M1278	0.86
● TNPW120620K0BEEN	20k	± 0.1%	250	71M1282	0.87
● TNPW120649K9BEEN	49.9k	± 0.1%	250	71M1292	0.85
● TNPW1206100RBEEN	100k	± 0.1%	250	51M8152	0.90
● TNPW1206499KBEEN	499k	± 0.1%	250	71M1296	1.83
TNPW0402 SERIES					
● TNPW04021K00BEED	1k	± 0.1%	63	89M5431	0.59
● TNPW04022K00BEED	2k	± 0.1%	63	78K7194	0.59
● TNPW04022K49BEED	2.49k	± 0.1%	63	78K7198	0.59
● TNPW04024K99BEED	4.99k	± 0.1%	63	10R2094	0.59
● TNPW040249K9BEED	49.9k	± 0.1%	63	85K8701	0.59
● TNPW040210K0BEED	10k	± 0.1%	63	11R2753	0.59
● TNPW0402100KBEED	100k	± 0.1%	63	12M6521	0.59
● TNPW040215K0BEED	15k	± 0.1%	63	89M5438	0.59

(17047)

MCTF SERIES THIN FILM PRECISION CHIP RESISTORS

RoHS Compliant Available

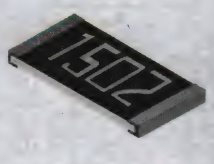
multicomp

SMD

Features
- Excellent TCR
- Tight Resistance tolerance

Applications
- Medical Equipment
- Testing and Measurement
- Communication devices, Cell phone, GPS, PDA

Specifications
- Temp coeff.: ±25ppm/°C
- Oper. temp. range: -55°C to +155°C



CASE SIZE 0603 - 50V, ±0.01% TOL.

Mfg. Part No.	Resistance (Ω)	Power Rating @ 70°C (mW)	Tape Cut Stock No.	Tape Cut Price Each 1-49
● MCTF0603TTZ1001	1k	31.25	41P0368	4.92
● MCTF0603TTX1001	1k	100	41P0361	2.51
● MCTF0603TTZ1002	10k	31.25	41P0369	4.67

➤CONTINUED➤

MCTF SERIES THIN FILM PRECISION CHIP RESISTORS (CONT.)

Mfg. Part No.	Resistance (Ω)	Power Rating @ 70°C (mW)	Tape Cut Stock No.	Tape Cut Price Each 1-49
● MCTF0603TTY1002	10k	62.5	41P0365	3.12
● MCTF0603TTX1002	10k	100	41P0362	2.66
CASE SIZE 0805 - 100V, ±0.01% TOL.				
● MCTF0805TTZ1000	100	31.25	41P0400	5.15
● MCTF0805TTY1000	100	62.5	41P0396	3.08
● MCTF0805TTX1000	100	100	41P0392	2.65
● MCTF0805TTZ1001	1k	31.25	41P0401	5.15
● MCTF0805TTY1001	1k	62.5	41P0397	3.12
● MCTF0805TTX1001	1k	100	41P0393	2.51
● MCTF0805TTZ1002	10k	31.25	41P0402	4.89
● MCTF0805TTY1002	10k	62.5	41P0398	3.12
● MCTF0805TTX1002	10k	100	41P0394	2.65
● MCTF0805TTY1003	100k	62.5	41P0399	3.05
● MCTF0805TTX1003	100k	100	41P0395	2.51
CASE SIZE 0603 - 50V, ±0.05% TOL.				
● MCTF0603ATZ750	75	31.25	41P0360	2.28
● MCTF0603ATX1502	15k	62.5	41P0344	1.25
● MCTF0603ATY2002	20k	62.5	41P0352	1.37
● MCTF0603ATX2002	20k	62.5	41P0345	1.25
● MCTF0603ATY1203	120k	62.5	41P0350	1.37
● MCTF0603ATY2203	220k	62.5	41P0353	1.37
CASE SIZE 0805 - 100V, ±0.05% TOL.				
● MCTF0805ATZ499	49.9	31.25	41P0391	2.28
● MCTF0805ATX499	49.9	100	41P0377	1.25
● MCTF0805ATX750	75	100	41P0378	1.25
● MCTF0805ATY2001	2k	62.5	41P0381	1.37
● MCTF0805ATY4991	4.99k	62.5	41P0385	1.42
● MCTF0805ATX1202	12k	100	41P0370	1.25
● MCTF0805ATY2002	20k	62.5	41P0382	1.44
● MCTF0805ATX2002	20k	100	41P0374	1.25
● MCTF0805ATY4992	49.9k	62.5	41P0386	1.37
● MCTF0805ATY1503	150k	62.5	41P0380	1.37
● MCTF0805ATY2003	200k	62.5	41P0383	1.37
● MCTF0805ATX2003	200k	100	41P0375	1.25
CASE SIZE 0603 - 50V, ±0.1% TOL.				
● MCTF0603BTC1000	100	62.5	01P2055	0.28
● MCTF0603BTC1002	10k	62.5	01P2059	0.29
● MCTF0603BTC1502	15k	62.5	01P2065	0.28
● MCTF0603BTC1003	100k	62.5	01P2061	0.28
CASE SIZE 0805 - 100V, ±0.1% TOL.				
● MCTF0805BTC1000	100	100	01P2077	0.29
● MCTF0805BTC3001	3k	100	01P2101	0.30
● MCTF0805BTC4991	4.99k	100	01P2103	0.29
● MCTF0805BTC1202	12k	100	01P2087	0.29
● MCTF0805BTC1003	100k	100	01P2083	0.29
● MCTF0805BTC2003	200k	100	01P2099	0.29
● MCTF0805BTC1004	1M	100	01P2085	0.30
CASE SIZE 0805 - 100V, ±0.5% TOL.				
● MCTF0805DTC1002	10k	100	01P2111	0.07

(105931)

PFC SERIES PRECISION THIN FILM CHIP RESISTORS

RoHS Compliant Available

TT electronics IRC

Features
- Standard 6⁰/₀₀ Sn/Pb and Pb-free (RoHS compliant) terminations available
- Tested for COTS applications
- Available as low as ±10ppm/°C
- Oper. Temp. Range: -55°C to +155°C
- Res. Tolerance: ±0.1%

The TaNFilm® **PFC series** chip resistors provides the high precision and ultra stable performance of our Tantalum Nitride resistive film system in 0603, 0805, and 1206 sizes. Specially selected materials and processes insure initial precision is maintained in the harshest surface mount soldering environment. Wrap-around terminations with leach-resistant nickel barriers insure high integrity solder connections. The unique characteristics of the passivated Tantalum Nitride film insure long term life stability and stability in most environments. Additional values available, *go online or call.*

0603 - POWER: 100mW, VOLTAGE: 75V

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49
● PFC-W0603LF-03-75R0-B	75	88K2598	0.93
● PFC-W0603LF-03-1001-B	1k	88K2591	0.93

➤CONTINUED➤

PFC SERIES PRECISION THIN FILM CHIP RESISTORS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49
PFC-W0603LF-03-1002-B	10k	88K2592	0.93
PFC-W0603LF-03-2002-B	20k	88K2593	0.93
0805 - POWER: 250 mW, VOLTAGE: 100V			
PFC-W0805LF-03-10R0-B	10	88K2600	1.50
PFC-W0805LF-03-1000-B	100	88K2601	0.93
PFC-W0805LF-03-1001-B	1k	88K2602	0.93
PFC-W0805LF-03-2001-B	2k	88K2610	1.00
PFC-W0805LF-03-4991-B	4.99k	88K2616	1.00
PFC-W0805LF-03-1002-B	10k	88K2603	0.93
PFC-W0805LF-03-1202-B	12k	88K2608	0.93
PFC-W0805LF-03-1502-B	15k	88K2609	1.00
PFC-W0805LF-03-2002-B	20k	88K2611	0.93
PFC-W0805LF-03-3012-B	30.1k	88K2614	0.93

➤ CONTINUED ➤

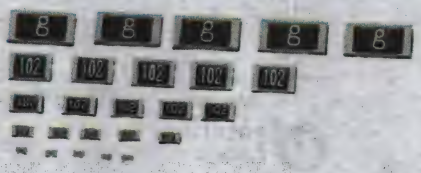
PFC SERIES PRECISION THIN FILM CHIP RESISTORS (CONT.)

1206 - POWER: 333 mW, VOLTAGE: 200V

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49
PFC-W1206LF-03-10R0-B	10	88K2620	1.91
PFC-W1206LF-03-1000-B	100	88K2621	1.05
PFC-W1206LF-03-4990-B	499	88K2636	0.99
PFC-W1206LF-03-1001-B	1k	88K2622	1.05
PFC-W1206LF-03-2491-B	2.49k	88K2631	0.99
PFC-W1206LF-03-4991-B	4.99k	88K2637	0.99
PFC-W1206LF-03-1002-B	10k	88K2623	0.99
PFC-W1206LF-03-1502-B	15k	88K2627	0.99
PFC-W1206LF-03-2002-B	20k	88K2629	0.99
PFC-W1206LF-03-4992-B	49.9k	88K2638	0.99
PFC-W1206LF-03-1003-B	100k	88K2624	0.99
PFC-W1206LF-03-2003-B	200k	88K2630	0.99

(88674)

RR SERIES PRECISION THIN FILM CHIP RESISTORS



RoHS Compliant Available

SSM THIN FILM TECHNOLOGY SUSUMU

FEATURES

- Excellent TCR
- Excellent Current Noise Characteristics
- Excellent Third Harmonic Distortion Characteristics
- Tight Resistance Tolerance and High Stability

For a complete list of stocked values and full reels, please visit us online.

ELECTRICAL SPECIFICATIONS

Model	EIA Size (Inch)	Power Rating @ 70°C (W)	Temperature Coefficient (ppm/°C)	Tolerance	Resistance Range (Ohms)	Working Voltage (V)
RR0510	0402	0.0625	100 25	0.5%	10R - 97.6R 100R - 100K	25
RR0816	0603	0.0625	50 25	0.5%	10R - 97.6R 100R - 360K	75
RR1220	0805	0.1	50 25	0.5%	10R - 97.6R 100R - 1M	100

RR0510 (0402) SERIES, TOLERANCE: 0.5%, POWER: 62.5mW, VOLTAGE: 25V

Tape Cut Stock No.	Price Each 1-9	Res. (Ohms)	Res. Tol. (+/- %)	Tape Cut Stock No.	Price Each 1-9	Res. (Ohms)	Res. Tol. (+/- %)	Tape Cut Stock No.	Price Each 1-9	Res. (Ohms)	Res. Tol. (+/- %)	Tape Cut Stock No.	Price Each 1-9	Res. (Ohms)	Res. Tol. (+/- %)
28K0386	0.09	10	± 0.5%	28K0308	0.10	100	± 0.5%	28K0328	0.09	15k	± 0.5%	28K0366	0.09	47k	± 0.5%
28K0397	0.09	33	± 0.5%	28K0364	0.09	4.7	± 0.5%	28K0346	0.09	30k	± 0.5%	28K0314	0.10	100k	± 0.5%
RR0816 (0603) SERIES, TOLERANCE: 0.1%, POWER: 62.5mW, VOLTAGE: 75V															
28K0908	0.10	75	± 0.5%	28K0832	0.50	750	± 0.1%	28K0860	0.47	8.45k	± 0.1%	28K0745	0.11	47k	± 0.5%
28K0453	0.47	120	± 0.1%	28K0433	0.47	1.07k	± 0.1%	28K0870	0.47	9.1k	± 0.1%	28K0780	0.47	51k	± 0.1%
28K0489	0.10	150	± 0.5%	28K0437	0.47	1.1k	± 0.1%	28K0876	0.49	9.31k	± 0.1%	28K0796	0.47	56.2k	± 0.1%
28K0539	0.11	200	± 0.5%	28K0543	0.10	2k	± 0.5%	28K0429	0.47	10.5k	± 0.1%	28K0826	0.50	68k	± 0.1%
28K0561	0.47	220	± 0.1%	28K0555	0.47	2.1k	± 0.1%	28K0435	0.47	10.7k	± 0.1%	28K0822	0.47	68.1k	± 0.1%
28K0563	0.10	220	± 0.5%	28K0569	0.50	2.2k	± 0.1%	28K0441	0.47	11k	± 0.1%	28K0852	0.47	82k	± 0.1%
28K0595	0.50	249	± 0.1%	28K0603	0.47	2.55k	± 0.1%	28K0443	0.47	11.3k	± 0.1%	28K0882	0.50	95.3k	± 0.1%
28K0609	0.47	270	± 0.1%	28K0613	0.10	2.7k	± 0.5%	28K0487	0.47	14.7k	± 0.1%	28K0447	0.47	110k	± 0.1%
28K0625	0.47	300	± 0.1%	28K0663	0.10	3.3k	± 0.5%	28K0515	0.50	16.5k	± 0.1%	28K0475	0.47	130k	± 0.1%
28K0657	0.50	330	± 0.1%	28K0697	0.49	3.92k	± 0.1%	28K0533	0.47	18.7k	± 0.1%	28K0483	0.50	140k	± 0.1%
28K0659	0.11	330	± 0.5%	28K0713	0.50	4.12k	± 0.1%	28K0599	0.50	24.9k	± 0.1%	28K0501	0.11	150k	± 0.5%
28K0721	0.10	430	± 0.5%	28K0761	0.10	4.99k	± 0.5%	28K0615	0.47	27k	± 0.1%	28K0551	0.10	200k	± 0.5%
28K0737	0.10	470	± 0.5%	28K0778	0.10	5.1k	± 0.5%	28K0631	0.50	30.1k	± 0.1%	28K0601	0.47	249k	± 0.1%
28K0757	0.10	499	± 0.5%	28K0794	0.47	5.62k	± 0.1%	28K0651	0.47	31.6k	± 0.1%	28K0671	0.10	330k	± 0.5%
28K0768	0.47	510	± 0.1%	28K0814	0.49	6.2k	± 0.1%	28K0665	0.47	33.2k	± 0.1%	...	...	...	...
28K0784	0.49	549	± 0.1%	28K0824	0.50	6.8k	± 0.1%	28K0709	0.47	40.2k	± 0.1%	...	...	...	...
28K0786	0.47	560	± 0.1%	28K0850	0.11	8.2k	± 0.5%	28K0743	0.50	47k	± 0.1%	...	...	...	...
RR1220 (0805) SERIES, TOLERANCE: 0.1%, POWER: 100mW, VOLTAGE: 100V															
28K1334	0.10	12	± 0.5%	28K1276	0.10	680	± 0.5%	28K1256	0.10	6.04k	± 0.5%	28K1168	0.47	39k	± 0.1%
28K1336	0.11	20	± 0.5%	28K0920	0.50	1.02k	± 0.1%	28K1264	0.47	6.2k	± 0.1%	28K1174	0.47	40.2k	± 0.1%
28K1338	0.10	22	± 0.5%	28K0960	0.10	1.2k	± 0.5%	28K1280	0.49	6.8k	± 0.1%	28K1208	0.47	47.5k	± 0.1%
28K1342	0.10	27	± 0.5%	28K0966	0.50	1.24k	± 0.1%	28K1318	0.50	8.66k	± 0.1%	28K1248	0.47	56.2k	± 0.1%
28K1344	0.10	33	± 0.5%	28K0974	0.47	1.3k	± 0.1%	28K1326	0.50	9.1k	± 0.1%	28K1268	0.47	62k	± 0.1%
28K1352	0.10	51	± 0.5%	28K0992	0.11	1.5k	± 0.5%	28K0922	0.47	10.2k	± 0.1%	28K1290	0.47	71.5k	± 0.1%
28K1356	0.10	68	± 0.5%	28K1008	0.47	1.62k	± 0.1%	28K0996	0.11	15k	± 0.5%	28K1314	0.47	82.5k	± 0.1%
28K0942	0.49	110	± 0.1%	28K1058	0.47	2.2k	± 0.1%	28K1010	0.47	16k	± 0.1%	28K0948	0.50	110k	± 0.1%
28K0956	0.10	120	± 0.5%	28K1082	0.10	2.49k	± 0.5%	28K1030	0.47	19.1k	± 0.1%	28K0950	0.10	110k	± 0.5%
28K0970	0.50	130	± 0.1%	28K1100	0.47	2.7k	± 0.1%	28K1048	0.50	21k	± 0.1%	28K0964	0.47	120k	± 0.1%
28K0988	0.10	150	± 0.5%	28K1142	0.47	3.32k	± 0.1%	28K1050	0.47	21.5k	± 0.1%	28K1000	0.11	150k	± 0.5%
28K1018	0.10	180	± 0.5%	28K1156	0.47	3.6k	± 0.1%	28K1064	0.10	22k	± 0.5%	28K1046	0.10	200k	± 0.5%
28K1052	0.50	220	± 0.1%	28K1166	0.10	3.9k	± 0.5%	28K1056	0.47	22.1k	± 0.1%	28K1150	0.47	330k	± 0.1%
28K1054	0.10	220	± 0.5%	28K1176	0.50	4.22k	± 0.1%	28K1076	0.47	24k	± 0.1%	28K1172	0.10	390k	± 0.5%
28K1098	0.10	270	± 0.5%	28K1204	0.49	4.75k	± 0.1%	28K1084	0.50	24.9k	± 0.1%	28K1202	0.10	470k	± 0.5%
28K1162	0.10	390	± 0.5%	28K1218	0.11	4.99k	± 0.5%	28K1116	0.50	30.1k	± 0.1%	28K1250	0.10	560k	± 0.5%
28K1252	0.50	604	± 0.1%	28K1232	0.10	5.1k	± 0.5%	28K1148	0.10	33k	± 0.5%	28K1284	0.10	680k	± 0.5%

(92282)

ULTRA HIGH PRECISION Z-FOIL MOLDED SMD RESISTORS

RoHS Compliant Available

VISHAY PRECISION GROUP

Specifications:
- Tolerance: to ± 0.01 %
- Electrostatic Discharge (ESD) above 25 000 Volts
- Load Life Stability: ± 0.005 % (70°C, 2000 hours at Rated Power)
- Power Rating: to 600 mW at 70°C
- Non Inductive, Non Capacitive Design
- Current Noise: - 40 dB
- Voltage Coefficient: < 0.1 ppm/V
- Non Hot Spot Design

Applications:
- Precision Amplifiers
- High Precision Instrumentation
- Automatic Test Equipment (ATE)
- Audio (High End Stereo Equipment)
- EB Application
- Pulse Application

Mfg. Part No.	Resistance	Tolerance	Package	Stock No.	Price Each 1-24	Price Each 25-49
● Y174510R0000B9R	10 ohm	± 0.1%	2412 [6032 Metric]	39T1702	17.33	16.51
● Y174550R0000T9R	50 ohm	± 0.01%	2412 [6032 Metric]	39T1706	19.57	18.64
● Y1745100R000T9R	100 ohm	± 0.01%	2412 [6032 Metric]	39T1703	20.54	19.57
● Y17451K00000T9R	1 kohm	± 0.01%	2412 [6032 Metric]	39T1700	23.55	22.44
● Y17455K00000T9R	5 kohm	± 0.01%	2412 [6032 Metric]	39T1705	20.54	19.57
● Y174510K0000T9R	10 kohm	± 0.01%	2412 [6032 Metric]	39T1701	22.13	21.09
● Y174520K0000T9R	20 kohm	± 0.01%	2412 [6032 Metric]	39T1704	21.00	20.01

(203734)

HIGH PRECISION BULK METAL® FOIL RESISTORS

RoHS Compliant Available

VISHAY PRECISION GROUP

Specifications:
- Rated power: to 1W at +125°C
- Tolerance: ± 0.005% (50 ppm)
- Load life stability: to ± 0.005% at 70°C, 2000h at rated power
- Electrostatic discharge up to 25,000V
- Non inductive, non capacitive design
- Rise time: 1ns effectively no ringing
- Current noise: 0.010μVRMS/V of applied voltage (< -40dB)
- Thermal EMF: 0.05μV/°C typical
- Voltage coefficient: < 0.1ppm/V
- Non hot spot design

Applications:
- High precision amplifiers
- Down-hole (high temperature)
- High precision instrumentation
- Medical and test equipment
- Audio (high end stereo equipment)
- EB applications (electron beam scanning and recording equipment, electron microscopes)

Mfg. Part No.	Resistance	Tolerance	Stock No.	Price Each 1-24	Price Each 25-49
● Y0785250R000T9L	250 ohm	± 0.01%	98K1201	20.24	19.29
● Y0785350R000T9L	350 ohm	± 0.01%	98K1202	22.05	21.01
● Y07851K00000T9L	1 kohm	± 0.01%	98K1192	22.31	21.26
● Y078510K0000T9L	10 kohm	± 0.01%	98K1193	22.05	21.01
● Y078520K0000T9L	20 kohm	± 0.01%	98K1199	22.05	21.01
● Y0785100K000T9L	100 kohm	± 0.01%	98K1194	34.95	33.29

(203750)

MOLDED HIGH PRECISION BULK METAL® FOIL SMD RESISTORS

RoHS Compliant Available

VISHAY PRECISION GROUP

Specifications:
- Tolerance: to ± 0.01%
- Electrostatic discharge (ESD) above 25,000V
- Load life stability: ± 0.005% (70°C, 2000h at rated power)
- Power rating: to 600mW at 70°C
- Non inductive, non capacitive design
- Current noise: - 40dB
- Voltage coefficient: < 0.1ppm/V
- Non hot spot design

Applications:
- Precision amplifiers
- High precision instrumentation
- Automatic test equipment (ATE)
- Audio (high end stereo equipment)
- EB application
- Pulse application

Mfg. Part No.	Resistance	Tolerance	Package	Stock No.	Price Each 1-24	Price Each 25-49
● Y1169100R000T9R	100 ohm	± 0.01%	2917 [7343 Metric]	98K0094	28.18	26.85
● Y1121250R000T9R	250 ohm	± 0.01%	2412 [6032 Metric]	98K0086	22.43	21.37
● Y1121350R000T9R	350 ohm	± 0.01%	2412 [6032 Metric]	98K0087	19.61	18.68
● Y1121500R000T9R	500 ohm	± 0.01%	2412 [6032 Metric]	98K0089	22.43	21.37
● Y11692K50000T9R	2.5 kohm	± 0.01%	2817 [7143 Metric]	98K0095	26.13	24.90
● Y112120K0000T9R	20 kohm	± 0.01%	2412 [6032 Metric]	98K0084	24.01	22.88

(203751)

DEV KIT HQ™

Newest technology, Development Kits & Evaluation Boards from the best suppliers.

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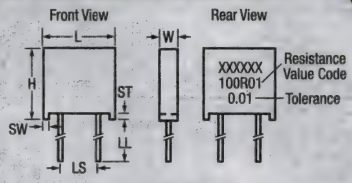
(196525)

S102 SERIES BULK METAL FOIL PRECISION RESISTORS

VISHAY.

Features:
- Bulk Metal® Foil Technology
- High Precision
- Low Temperature Coefficient



Specifications:
- Power Rating: 0.6 W @ 70°C
- Tolerance: ±0.01%
- Temperature Coefficient: <0.6ppm/°C Nominal, 0°C to +60°C
- Shelf Life Stability: ±25 ppm/Year
- Load Life Stability: ±50 ppm/°C Typical at Full Rated Power for 2000 Hours
- Thermal EMF: <0.1μV/°C Max.
- Rise/Decay Time: 1ns @ 1kΩ
- Working Voltage: 300 VDC or AC Peak

Applications
- High Precision Amplifiers
- Down-Hole (High Temperature)
- High Precision Instrumentation
- Medical and Test Equipment
- Industrial
- Audio (High End Stereo Equipment)
- EB Applications (Electron Beam Scanning and Recording Equipment, Electron Microscopes)
- Military, Airborne
- Measurement Instrumentation

DIMENSIONS (mm)

L	W	H	ST*	SW	LL	LS
0.300 ±0.010 (7.62 ±0.25)	0.105 ±0.010 (2.67 ±0.25)	0.326 ±0.010 (8.28 ±0.25)	0.010 min. (0.254 min.)	0.040 ±0.005 (1.02 ±0.13)	1.000 ±0.125 (25.4 ±3.18)	0.150 ±0.005 (3.81 ±0.13)

*Standoffs should be located so lead clearance is 0.010″ minimum between resistor body and PC board when standoffs are seated on PC board.

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
S102C 100R00 0.01%	100	35H5066	19.83	18.14
S102C 120R00 0.01%	120	35H5067	20.91	19.12
S102C 250R00 0.01%	250	35H5072	19.21	17.56
S102C 350R00 0.01%	350	35H5073	20.70	18.93
S102C 500R00 0.01%	500	35H5076	21.61	19.76
S102C 1K0000 0.01%	1k	35H5063	23.41	21.41
S102C 2K0000 0.01%	2k	35H5068	40.80	37.30
S102C 2K5000 0.01%	2.5k	35H5069	40.80	37.30
S102C 5K0000 0.01%	5k	35H5074	23.50	21.49
S102C 10K 0.01%	10k	35H5064	20.91	19.12
S102C 20K000 0.01%	20k	35H5070	38.49	35.19
S102C 25K000 0.01%	25k	35H5071	43.75	40.00
S102C 50K 0.01%	50k	35H5075	43.75	40.00
S102C 100K00 0.01%	100k	35H5065	58.17	53.19

(75183)

HIGH POWER FLANGED & FLANGELESS RESISTORS & TERMINATORS

RoHS Compliant Available

Johanson

Specifications
- Tolerance: ± 5%
- Operating temperature: -55°C to +100°C
- Temperature coefficient: ± 100ppm/°C

Applications
- RF applications
- Power amplifier

RF SERIES - FLANGED HIGH POWER RESISTORS

Mfg.Part No.	Res (Ω)	VSWR (num:1)	Material	Power Rating (W)	Stock No.	Price Each 1-24	Price Each 25-49
● TF010AB1L	50	1.2	AlN	10	16R3439	12.81	11.55
● TF010BB1L	50	1.2	BeO	10	16R3440	12.81	11.55
● TF010BB1R	50	1.35	BeO	10	16R3441	12.81	11.55
● TF020AB3C	50	1.2	AlN	20	16R3442	13.35	12.04
● TF040BB04	50	1.2	BeO	40	16R3443	18.93	17.08
● TF050BB6L	50	1.2	BeO	50	16R3444	22.53	20.33
● TF100BB08	50	1.2	BeO	100	16R3445	18.93	17.08
● TF100BB3C	50	1.2	BeO	100	16R3446	18.47	16.66
● TF100BB3R	50	1.2	BeO	100	16R3447	18.47	16.66
● TF150AB11-006	50	1.06 / 1.1	AlN	150	16R3449	14.76	13.32
● TF150BB09	50	1.2	BeO	150	16R3450	20.01	18.05
● TF250AB12-007	50	1.05 / 1.1	AlN	250	16R3452	14.76	13.32
● TF250BB12	50	1.2	BeO	250	61M0158	14.13	12.75
● TF400AB13	50	1.2	AlN	400	16R3453	25.59	23.09
● TF400BB13	50	1.2	BeO	400	16R3454	25.59	23.09
● TF800BB14-6B1	50	...	BeO	800	20R5568	47.07	42.45
TF SERIES - FLANGLESS HIGH POWER TERMINATORS							
● TL030AB16	50	1.2	AlN	30	16R3458	8.82	7.96
● TL250AB21	50	1.2	AlN	250	16R3460	15.87	14.32
CT SERIES - CHIP HIGH POWER TERMINATORS							
● CT1206CB5C	50	1.2	Al_2O_3	10	16R3380	1.49	1.34
● CT2010AB5C	50	1.05	AlN	10	16R3381	1.78	1.61
● CT2335AB5C-04	50	1.1	AlN	150	20R5561	3.02	2.72

➤ CONTINUED ➤

HIGH POWER FLANGED & FLANGELESS RESISTORS & TERMINATORS (CONT.)

CT SERIES - CHIP HIGH POWER TERMINATORS

Mfg.Part No.	Res (Ω)	VSWR (num:1)	Material	Power Rating (W)	Stock No.	Price Each 1-24	Price Each 25-49
CT2525AB5C-02	50	1.06 / 1.11	AlN	100	16R3382	2.95	2.66
CT3725AB5C-03	50	1.06 / 1.11	AlN	150	16R3383	3.42	3.09

TF SERIES - FLANGED HIGH POWER TERMINATORS

Mfg.Part No.	Res (Ω)	Material	Power Rating (W)	Stock No.	Price Each 1-24	Price Each 25-49
RF010BB01	50	BeO	10	16R3416	8.89	8.02
RF010BA01	100	BeO	10	58P0603	8.89	8.02
RF020BB03	50	BeO	20	16R3418	13.77	12.43
RF020BA03	100	BeO	20	16R3417	13.77	12.43
RF040BB03	50	BeO	40	16R3421	13.77	12.43
RF040BA03	100	BeO	40	16R3419	13.77	12.43
RF040BA04	100	BeO	40	16R3420	15.24	13.75
RF050BA06	100	BeO	50	16R3422	13.77	12.43
RF100BA08	100	BeO	100	16R3423	15.24	13.75
RF150AB11	50	AlN	150	16R3425	15.79	14.25
RF150BB09	50	BeO	150	16R3428	15.79	14.25
RF150AA11	100	AlN	150	16R3424	14.76	13.32
RF150BA09	100	BeO	150	16R3426	14.76	13.32
RF150BA11	100	BeO	150	16R3427	14.76	13.32
RF250AB12	50	AlN	250	16R3429	14.76	13.32
RF250BB12	50	BeO	250	16R3430	14.76	13.32
RF250AA12	100	AlN	250	58P0604	14.76	13.32
RF400BB13	50	BeO	400	16R3431	25.59	23.09
RF400BA13	100	BeO	400	61M0159	25.59	23.09
RF500BB15-040	50	BeO	500	16R3433	39.64	35.76
RF500BA15-040	100	BeO	500	16R3432	37.40	33.74
RF800BB14-004	50	BeO	800	16R3435	67.85	61.21
RF800BA14-004	100	BeO	800	16R3434	66.72	60.19

RL SERIES - FLANGLESS HIGH POWER RESISTORS

RL030BB16	50	BeO	30	16R3437	7.95	7.17
RL030AA16	100	AlN	30	16R3436	7.95	7.17
RL040AA17	100	AlN	40	16R3438	13.75	12.41

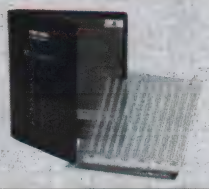
(176234)

SURFACE MOUNT RESISTOR KITS

RoHS Compliant Available

multicomp

- Ring binder surface mount resistor kits
- 0603, 0805 and 1206 case sizes
- ±5% and ±1% tolerance options
- Available in E6, E12 and E24 series values
- Kits contain 100 pieces of each ohmic value from 10Ω to 1MΩ plus jumper
- All resistors are individually marked and supplied on 8mm tapes
- Kits can be restocked when required



Contents:	E6 kits 32 values, E12 kits 62 values, E24 kits 121 values

➤ CONTINUED ➤

Mfg. Part No.	Contents	Tolerance	Case Size	Stock No.	Price Each
0603WGFE240KIT	E24	±1%	0603	38K9940	227.07
0603WGJE060KIT	E6	±5%	0603	39K0068	149.82
0603WGJE012KIL	E12	±5%	0603	39K0069	163.95
0805WAFE240KIT	E24	±1%	0805	39K0197	227.07
0805WAJE120KIT	E12	±5%	0805	39K0324	163.95
1206W8FE240KIT	E24	±1%	1206	39K0868	227.07

Mfg. Part No.	Insert Sheets	Stock No.	Price Per Pack 1-49
MCINSERT-CHIPKIT	Pack of 5	24M4440	16.30

(116621)

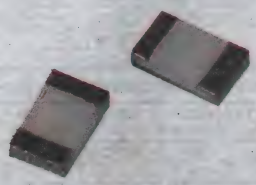
CRCW SERIES HIGH POWER THICK FILM CHIP RESISTORS

RoHS Compliant Available

VISHAY.

Features
- Excellent pulse load capability
- Enhanced power rating
- Double side printed resistor element
- Protective overglaze
- Pure tin solder contacts on Ni barrier
- Halogen-free

Specifications
- Power Rating: 0.125W to 1.5W
- Voltage rating: 50V to 500V
- Tolerance: ±1%
- Temperature coefficient: ±100ppm/K
- Operating Temperature: -55°C to 155°C



Mfg. Part No.	Res. (Ohms)	Voltage (V)	Stock No.	Price Each 1-9	Price Each 10-99
CASE SIZE 0402 — VOLTAGE: 50V					
CRCW04020000Z0EDHP	0	50	68R2980	0.18	0.10
CRCW04021K00FKEDHP	1k	50	68R2983	0.18	0.10
CRCW040210K0FKEDHP	10k	50	68R2985	0.19	0.11
CASE SIZE 0603 — VOLTAGE: 75V					
CRCW06030000Z0EAHP	0	75	68R2987	0.16	0.09
CRCW06031K00FKEAHP	1k	75	68R2989	0.18	0.10
CRCW060310K0FKEAHP	10k	75	68R2991	0.17	0.10
CASE SIZE 0805 — VOLTAGE: 150V					
CRCW08050000Z0EAHP	0	150	68R2993	0.23	0.13
CRCW08051K00FKEAHP	1k	150	68R2995	0.25	0.14
CRCW080510K0FKEAHP	10k	150	68R2997	0.26	0.14
CASE SIZE 1206 — VOLTAGE: 200V					
CRCW12060000Z0EAHP	0	200	68R2999	0.43	0.19
CRCW12061K00FKEAHP	1k	200	68R3001	0.47	0.21
CRCW120610K0FKEAHP	10k	200	68R3003	0.48	0.22
CASE SIZE 2010 — VOLTAGE: 400V					
CRCW2010100RFKEFHP	100	400	68R3009	0.77	0.42
CRCW20101K00FKEFHP	1k	400	68R3005	0.75	0.42
CRCW201010K0FKEFHP	10k	400	68R3007	1.26	0.68
CASE SIZE 2512 — VOLTAGE: 500V					
CRCW2512100RFKEGHP	10	500	68R3013	0.56	0.46
CRCW2512100RFKEGHP	100	500	68R3015	0.54	0.44
CRCW25121K00FKEGHP	1k	500	68R3011	0.51	0.46

(178007)

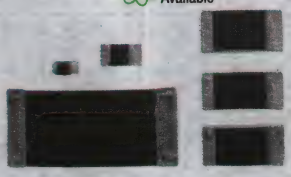
CRCW SERIES THICK FILM, 1% TOLERANCE RECTANGULAR CHIP RESISTORS

RoHS Compliant Available

VISHAY.

FEATURES
- High Volume Product Suitable for Commercial and Special Applications
- Metal Glaze on High Quality Ceramic
- Protective Overglaze
- Lead (Pb)-Free Solder Contacts on Ni Barrier Layer
- Pure Tin Plating Provides Compatibility with Lead (Pb)-Free and Lead Containing Soldering Processes
- Compatible with "Restriction of the use of Hazardous
- Excellent Stability (ΔR/R ≤ 1 % for 1000 h at 70°C)

Many more 1% & 5% Tolerance Values are available. *Go on line or call.*
Available in Cut Tape and Full Reels.



ELECTRICAL SPECIFICATIONS

Model	EIA Case Size (Inch)	Power Rating @ 70°C (W)	Temperature Coefficient (ppm/K)	Tolerance	Resistance Range (Ohms)	E-Series
CRCW0201	0201	0.05	100	1%	10R - 1M	24 + 96
			200	5%		24
CRCW0402	0402	0.063	100	1%	10R - 10M	24 + 96
			200	5%	000 - 7R5	24
CRCW0603	0603	0.1	100	1%	10R - 30M	24 + 96
			200	5%	000 - 5R6	24
CRCW0805	0805	0.125	100	1%	10R - 2M	24 + 96
			200	5%	000 - 9R1	24
CRCW1206	1206	0.25	100	1%	10R - 100M	24 + 96
			200	5%	000 - 8R06	24
CRCW1206...-HR	1206	0.25	500	5%	11M - 470M	24

➤ CONTINUED ➤

CRCW SERIES THICK FILM, 1% TOLERANCE RECTANGULAR CHIP RESISTORS (CONT.)

Model	EIA Case Size (Inch)	Power Rating @ 70°C (W)	Temperature Coefficient (ppm/K)	Tolerance	Resistance Range (Ohms)	E-Series
CRCW1210	1210	0.5	100 200	1%	20R - 10k	24 + 96 24
CRCW2010	2010	0.75	100 200	1% 5%	000 - 2k2	24 + 96 24
CRCW2512	2512	1	100 200	1%	10R - 1K0 2R0 - 4R99	24 + 96

	Tape Cut Price Each				Tape & Reel	
Description	1-9	10-99	100-999	1000+	Reel Qty.	Price Each
CRCW0201 Series	0.11	0.06	0.05	0.04	...	...
CRCW0402 Series	0.09	0.02	0.02	0.02	10000	0.01
CRCW0603 Series	0.12	0.07	0.04	0.03	5000	0.03
CRCW0805 Series	0.08	0.05	0.03	0.02	...	...
CRCW1206 Series	0.12	0.06	0.03	0.02	5000	0.02
CRCW1210 Series	0.29	0.16	0.09	0.06	...	...
CRCW2010 Series	0.28	0.16	0.10	0.07	...	...
CRCW2512 Series	0.35	0.16	0.12	0.08	...	...

CRCW SERIES THICK FILM RESISTORS - CASE SIZE 0201

Tape Cut Stock No.	Res. (ohm)	Tape Cut Stock No.	Res. (ohm)	Tape Cut Stock No.	Res. (ohm)	Tape Cut Stock No.	Res. (ohm)	Tape Cut Stock No.	Res. (ohm)	Tape Cut Stock No.	Res. (ohm)	Tape Cut Stock No.	Res. (ohm)	Tape Cut Stock No.	Res. (ohm)
19M5079	10	48P7333	22	46M4789	49.9	73K1758	49.9	52R2476	4.99k	71R4422	10k	63R7663	20k	48P7296	100k
52R2470	1M	...	...	...	...	...	...	...	...	...	...	...	...	...	...

CRCW SERIES THICK FILM RESISTORS - CASE SIZE 0402

52K6543	0	52K6714	15	52K6721	150	52K7270	750	52K7034	4.02k	07J7498	10k	52K7097	47k	52K6825	200k
52K5648	1	52K6821	20	52K6826	200	23C6830	1k	52K7044	4.64k	52K6595	10k	52K7100	47.5k	52K6884	249k
47P3315	2	52K6879	24.9	52K6853	220	52K6545	1k	52K7045	4.7k	52K6621	11k	52K7113	49.9k	52K6959	301k
16P3569	2.2	52K6980	33.2	52K6886	249	52K6559	1.21k	52K7046	4.75k	52K6708	15k	07J7829	49.9k	52K7116	499k
47P3361	3.32	52K7016	37.4	52K6960	301	52K6575	1.5k	52K7048	4.99k	52K6817	20k	52K7159	56.2k	52K6593	1M
47P3384	4.02	52K7114	49.9	52K6981	330	52K6583	1.69k	52K7119	5.11k	52K6843	22k	52K7250	71.5k	52K6599	10M
47P3392	4.7	52K7132	51.1	52K6984	332	52K6788	2k	52K7180	6.04k	52K6874	24.3k	52K6607	100k	...	...
46M4461	4.99	52K7267	75	52K7033	392	52K6795	2.21k	52K7181	6.19k	52K6954	30.1k	52K6633	110k	...	...
47P3403	5.1	52K6609	100	52K7103	475	52K6801	2.43k	52K7185	6.49k	52K7007	36.5k	52K6719	150k	...	...
47P3442	7.5	52K6663	124	52K7117	499	52K6803	2.49k	52K7245	7.5k	52K7028	39.2k	52K6765	182k	...	...
52K6600	10	52K6679	130	52K7136	511	52K6935	3.01k	52K7337	9.76k	52K7049	40.2k	52K6780	191k	...	...

CRCW SERIES THICK FILM RESISTORS - CASE SIZE 0603

48P7899	0	52K8320	24.9	48P9084	330	52K8047	1.8k	52K8485	4.12k	25H9887	10k	52K8288	22.1k	52K8765	90.9k
52K8014	0	52K8347	27	66F9069	332	52K8051	1.96k	65J0950	4.7k	65J0526	10k	52K8316	24.9k	48P8200	100k
52K8061	1	52K8406	30.1	97C5958	365	52K8223	2k	52K8494	4.7k	26R4043	10k	52K8346	27.4k	52K8141	140k
21M8694	1.5	52K8429	33	01C8203	422	52K8227	2.15k	52K8497	4.75k	52K8062	10k	52K8357	28.7k	52K8158	150k
53K7679	2	52K8430	33.2	01C8206	464	48P8511	2.2k	52K8498	4.87k	52K8087	11.5k	52K8399	30k	52K8182	165k
52K8258	2	43C4442	49.9	29C2072	470	52K8228	2.2k	43C4391	4.99k	52K8103	12k	52K8401	30.1k	52K8272	200k
55M8178	2.2	52K8740	82.5	92B6372	499	52K8229	2.21k	52K8500	4.99k	52K8105	12.1k	07J3288	30.1k	52K8296	220k
86K8597	3	48P8213	100	92B6521	511	52K8233	2.4k	52K8571	5.1k	52K8106	12.4k	52K8416	31.6k	52K8299	221k
96M9097	4.7	31K8856	100	36C9272	590	52K8236	2.49k	52K8573	5.11k	52K8121	13k	52K8427	33k	52K8326	249k
47P3595	4.75	52K8078	100	97C5975	680	52K8241	2.67k	52K8634	6.04k	52K8122	13.3k	52K8474	39k	52K8411	301k
64K0232	4.99	52K8095	110	36C9304	732	52K8244	2.74k	52K8635	6.19k	52K8135	14.3k	52K8475	39.2k	52K8555	470k
42K3902	4.99	48P8390	150	36C9319	806	52K8368	3k	52K8637	6.49k	48P8365	15k	48P9345	47k	52K8568	499k
47P3603	5.1	66F9066	150	07H2487	1k	52K8370	3.01k	52K8641	6.81k	52K8151	15k	52K8548	47k	52K8645	604k
47P3604	5.11	36C9093	165	52K8015	1k	52K8372	3.09k	52K8696	7.5k	52K8154	15.8k	52K8550	47.5k	52K8053	1M
92R5015	5.6	36C9111	187	52K8025	1.2k	52K8374	3.16k	52K8722	8.06k	52K8168	16.2k	52K8563	49.9k	52K8249	2M
43C4104	10	48F4404	200	52K8027	1.21k	52K8376	3.3k	52K8724	8.2k	52K8169	16.5k	52K8588	51k	07J4124	3M
52K8073	10	48P8738	220	52K8030	1.27k	52K8379	3.32k	52K8726	8.25k	52K8213	19.1k	52K8590	51.1k	52K8502	4.75M
52K8269	20	36C9156	255	52K8031	1.3k	52K8389	3.9k	52K8729	8.66k	43C4227	20k	52K8614	56.2k	59K9986	5.6M
52K8291	22	36C9164	280	21J6074	1.47k	52K8390	3.92k	52K8762	9.31k	52K8267	20k	52K8708	75k	52K8071	10M
52K8293	22.1	01C8181	316	52K8036	1.5k	52K8483	4.02k	52K8763	9.53k	52K8286	22k	52K8737	82.5k	97H9119	30M

CRCW SERIES THICK FILM RESISTORS - CASE SIZE 0805

48P9971	0	65J2103	49.9	53K0146	301	52K9729	1.1k	53K0099	3.32k	53K0478	8.06k	52K9925	18.7k	53K0348	56.2k
52K9721	0	53K0293	49.9	53K0164	330	52K9734	1.2k	53K0106	3.74k	53K0480	8.25k	65J1661	20k	53K0402	60.4k
52K9792	1	53K0328	51	53K0166	332	65J1295	1.5k	53K0109	3.92k	53K0525	9.09k	52K9995	20k	53K0466	75k
11J7895	3.3	53K0329	51.1	53K0187	365	52K9744	1.5k	53K0205	4.02k	65J1362	10k	53K0011	21.5k	53K0548	91k
47P3744	5.1	53K0467	75	53K0247	402	36C9468	1.74k	65J2003	4.7k	52K9797	10k	53K0020	22.1k	65J1373	100k
53K0322	5.62	57K6355	100	53K0284	470	52K9754	1.8k	53K0215	4.7k	52K9818	11k	53K0043	24.9k	49P0227	100k
47P3764	9.1	52K9809	100	53K0286	475	52K9758	1.96k	53K0217	4.75k	52K9836	12k	53K0073	27.4k	65J1376	100k
65J1344	10	52K9845	120	65J2108	499	65J1649	2k	53K0219	4.99k	52K9837	12.1k	53K0136	30k	52K9843	120k
52K9804	10	52K9862	130	53K0296	499	52K9945	2k	49H8224	5k	52K9838	12.4k	53K0137	30.1k	52K9891	150k
52K9888	15	52K9892	150	53K0332	510	65J1601	2.2k	53K0298	5.1k	52K9839	12.7k	53K0158	33k	49P0626	200k
52K9999	20	52K9930	180	53K0427	665	52K9951	2.2k	53K0300	5.11k	52K9871	14.7k	53K0159	33.2k	53K0004	200k
49P0664	22	53K0006	200	53K0435	681	52K9952	2.21k	53K0306	5.62k	52K9882	15k	53K0197	39k	53K0145	301k
53K0023	22.1	53K0026	220	53K0461	715	52K9959	2.49k	53K0366	6.19k	52K9898	16.2k	53K0277	47k	53K0295	499k
53K0046	24.9	53K0029	221	53K0470	750	52K9964	2.7k	53K0368	6.2k	52K9899	16.5k	53K0278	47.5k	49P0051	1M
53K0161	33	53K0048	240	53K0512	825	52K9966	2.8k	53K0372	6.8k	52K9900	16.9k	53K0291	49.9k	42K4237	1.5M
53K0162	33.2	53K0052	249	48P9976	1k	53K0091	3k	53K0373	6.81k	52K9914	17.4k	53K0326	51k	42K4362	2M
53K0279	47	53K0077	270	65J1337	1k	53K0092	3.01k	53K0440	7.15k	52K9923	18k	53K0327	51.1k	...	...
65J2106	49.9	53K0144	300	52K9725	1k	53K0097	3.3k	53K0442	7.5k	52K9924	18.2k	53K0346	56k	...	...

CRCW SERIES THICK FILM RESISTORS - CASE SIZE 1206

49P1777	0	53K1916	10	53K2043	180	53K2484	511	53K2061	2.21k	42K5139	6.81k	53K2150	22k	53K2000	150k
53K1777	0	53K1996	15	07J5703	200	42K5124	560	92B7735	2.43k	53K2583	7.5k	53K2174	24.9k	53K2157	220k

➤ CONTINUED ➤

CRCW SERIES THICK FILM, 1% TOLERANCE RECTANGULAR CHIP RESISTORS (CONT.)

CRCW SERIES THICK FILM RESISTORS - CASE SIZE 1206

Tape Cut Stock No.	Res. (ohm)	Tape Cut Stock No.	Res. (ohm)	Tape Cut Stock No.	Res. (ohm)	Tape Cut Stock No.	Res. (ohm)	Tape Cut Stock No.	Res. (ohm)	Tape Cut Stock No.	Res. (ohm)	Tape Cut Stock No.	Res. (ohm)	Tape Cut Stock No.	Res. (ohm)
08N3336	1	42K4894	20	53K2137	200	53K2548	604	53K2067	2.49k	53K2634	8.25k	53K2206	28k	53K2158	221k
53K1855	1	53K2279	30.1	42K4926	240	42K5172	680	53K2072	2.7k	53K2680	9.09k	42K4978	30k	53K2179	240k
53K1888	1.5	53K2299	33	53K2182	243	53K2575	681	53K2220	3.01k	65J2564	10k	42K4979	30.1k	53K2183	249k
47P3802	2	42K5029	39.2	53K2184	249	53K2611	715	53K2224	3.3k	65J2567	10k	42K4997	33k	53K2281	300k
53K2101	2	53K2425	47	53K2202	270	53K2620	750	53K2225	3.32k	42K4755	10k	53K2297	33.2k	53K2440	499k
73K3209	2.2	42K5081	47.5	53K2204	274	53K2665	820	53K2233	3.9k	53K1907	10k	53K2389	40.2k	53K1810	1M
53K2258	3.01	53K2478	51	53K2282	300	42K5214	825	53K2345	4.02k	53K1930	11k	53K2422	47k	65J2545	1M
73K3210	3.3	53K2479	51.1	53K2284	301	65J2538	1k	53K2349	4.3k	53K1948	12k	53K2423	47.5k	53K2074	2M
49P2527	3.3	53K2571	68	53K2302	330	53K1779	1k	53K2353	4.64k	53K1949	12.1k	53K2436	49.9k	53K1912	10M
53K2262	3.32	53K2617	75	53K2305	332	53K1781	1k	53K2354	4.7k	53K1966	13k	53K2477	51.1k	09P9027	100M
26R4050	4.7	53K2661	82	53K2394	402	53K1782	1.02k	53K2356	4.75k	53K1980	14k	53K2550	61.9k	...	...
73K3212	4.7	65J2575	100	53K2402	422	53K1789	1.2k	53K2360	4.99k	53K1982	14.7k	53K2569	68k	...	...
47P3845	4.99	53K1922	100	53K2429	470	53K1797	1.5k	53K2444	5.11k	53K1992	15k	53K2616	75k	...	...
47P3871	8.06	53K1957	120	53K2431	475	92B7638	1.54k	42K5135	6.19k	53K1994	15.4k	53K2699	90.9k	...	...
53K1914	10	53K1960	121	53K2442	499	53K2055	2k	92B8037	6.65k	53K2012	16.9k	65J2580	100k	...	...
53K1915	10	42K4824	150	53K2482	510	53K2060	2.2k	53K2520	6.8k	53K2130	20k	53K1920	100k	...	...

CRCW SERIES THICK FILM RESISTORS - CASE SIZE 1210

53K2996	20	53K3305	47	53K3308	470	53K2727	1k	53K2963	2k	53K3253	4.7k	53K3326	5.1k	53K2785	10k

CRCW SERIES THICK FILM RESISTORS - CASE SIZE 2010

53K3572	0	53K3606	10	53K3574	1k	53K3590	1.5k	53K3596	1.96k	53K3682	2.2k	...	...	...	...

CRCW SERIES THICK FILM RESISTORS - CASE SIZE 2512

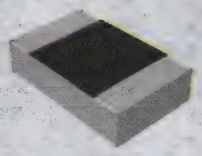
49P4598	2	03P3734	4.02	53K3941	10	53K3975	49.9	53K3944	100k	53K3977	499k	...	...	...	...
92R5016	3.83	08P3704	4.99	37C0299	15	47P5467	95.3	53K3957	200k	53K3938	1k	...	...	...	...

(91199)

ERJ SERIES PRECISION THICK FILM CHIP RESISTORS, 0402 CASE

RoHS Compliant Available

Panasonic



Features:
- Small size and lightweight
- High reliability Metal glaze thick film resistive element and three layers of electrodes
- Compatible with placement machines
- Taping packaging available
- Suitable for both reflow and flow soldering
- Temperature Coefficent of ±100ppm/°C
- Temperature Range of -55°C to +155°C

63mW POWER RATING

Mfg. Part No.	Resistance	Voltage Rating (V)	Resistance Tolerance	Tape Cut Stock No.	Tape Cut Price Each 1-49
ERJ-2RKF18R2X	18.2ohm	50	± 1%	73T6482	0.09
ERJ-2RKF20R0X	20ohm	50	± 1%	73T6484	0.09
ERJ-2RKF22R1X	22.1ohm	50	± 1%	73T6489	0.09
ERJ-2RKF24R9X	24.9ohm	50	± 1%	73T6494	0.09
ERJ-2RKF27R4X	27.4ohm	50	± 1%	73T6501	0.09
ERJ-2RKF30R1X	30.1ohm	50	± 1%	73T6504	0.09
ERJ-2RKF33R2X	33.2ohm	50	± 1%	73T6512	0.09
ERJ-2RKF37R4X	37.4ohm	50	± 1%	73T6517	0.09
ERJ-2RKF40R2X	40.2ohm	50	± 1%	73T6518	0.09
ERJ-2RKF49R9X	49.9ohm	50	± 1%	73T6527	0.09
ERJ-2RKF51R1X	51.1ohm	50	± 1%	73T6532	0.09
ERJ-2RKF75R0X	75ohm	50	± 1%	73T6540	0.09
ERJ-2RKF1100X	110ohm	50	± 1%	73T6466	0.09
ERJ-2RKF1210X	121ohm	50	± 1%	73T6470	0.09
ERJ-2RKF1300X	130ohm	50	± 1%	73T6475	0.09
ERJ-2RKF1820X	182ohm	50	± 1%	73T6483	0.09
ERJ-2RKF2000X	200ohm	50	± 1%	73T6485	0.09
ERJ-2RKF2210X	221ohm	50	± 1%	73T6490	0.09
ERJ-2RKF2400X	240ohm	50	± 1%	73T6495	0.09
ERJ-2RKF2490X	249ohm	50	± 1%	73T6496	0.09
ERJ-2RKF3010X	301ohm	50	± 1%	73T6505	0.09
ERJ-2RKF3320X	332ohm	50	± 1%	73T6513	0.09
ERJ-2RKF4020X	402ohm	50	± 1%	73T6519	0.09
ERJ-2RKF4750X	475ohm	50	± 1%	73T6524	0.09
ERJ-2RKF4990X	499ohm	50	± 1%	73T6528	0.09
ERJ-2RKF7500X	750ohm	50	± 1%	73T6541	0.09
ERJ-2RKF1101X	1.1kohm	50	± 1%	73T6467	0.09
ERJ-2RKF1211X	1.21kohm	50	± 1%	73T6471	0.09
ERJ-2RKF1301X	1.3kohm	50	± 1%	73T6476	0.09
ERJ-2RKF1651X	1.65kohm	50	± 1%	73T6479	0.09
ERJ-2RKF2001X	2kohm	50	± 1%	73T6486	0.09
ERJ-2RKF2211X	2.21kohm	50	± 1%	73T6491	0.09
ERJ-2RKF2321X	2.32kohm	50	± 1%	73T6493	0.09

➤CONTINUED➤

ERJ SERIES PRECISION THICK FILM CHIP RESISTORS, 0402 CASE (CONT.)

Mfg. Part No.	Resistance	Voltage Rating (V)	Resistance Tolerance	Tape Cut Stock No.	Tape Cut Price Each 1-49
ERJ-2RKF2491X	2.49kohm	50	± 1%	73T6497	0.09
ERJ-2RKF2741X	2.74kohm	50	± 1%	73T6502	0.09
ERJ-2RKF3011X	3.01kohm	50	± 1%	73T6506	0.09
ERJ-2RKF3091X	3.09kohm	50	± 1%	73T6509	0.09
ERJ-2RKF3321X	3.32kohm	50	± 1%	73T6514	0.09
ERJ-2RKF3401X	3.4kohm	50	± 1%	73T6516	0.09
ERJ-2RKF4021X	4.02kohm	50	± 1%	73T6520	0.09
ERJ-2RKF4321X	4.32kohm	50	± 1%	73T6522	0.09
ERJ-2RKF4751X	4.75kohm	50	± 1%	73T6525	0.09
ERJ-2RKF4991X	4.99kohm	50	± 1%	73T6529	0.09
ERJ-2RKF5111X	5.11kohm	50	± 1%	73T6533	0.09
ERJ-2RKF6041X	6.04kohm	50	± 1%	73T6536	0.09
ERJ-2RKF6811X	6.81kohm	50	± 1%	73T6539	0.09
ERJ-2RKF7501X	7.5kohm	50	± 1%	73T6542	0.09
ERJ-2RKF8061X	8.06kohm	50	± 1%	73T6544	0.09
ERJ-2RKF8251X	8.25kohm	50	± 1%	73T6546	0.09
ERJ-2RKF9091X	9.09kohm	50	± 1%	73T6547	0.09
ERJ-2RKF1072X	10.7kohm	50	± 1%	73T6465	0.09
ERJ-2RKF1102X	11kohm	50	± 1%	73T6468	0.09
ERJ-2RKF1212X	12.1kohm	50	± 1%	73T6472	0.09
ERJ-2RKF1622X	16.2kohm	50	± 1%	73T6478	0.09
ERJ-2RKF2002X	20kohm	50	± 1%	73T6487	0.09
ERJ-2RKF2212X	22.1kohm	50	± 1%	73T6492	0.09
ERJ-2RKF2492X	24.9kohm	50	± 1%	73T6498	0.09
ERJ-2RKF2742X	27.4kohm	50	± 1%	73T6503	0.09
ERJ-2RKF3012X	30.1kohm	50	± 1%	73T6507	0.09
ERJ-2RKF3162X	31.6kohm	50	± 1%	73T6510	0.09
ERJ-2RKF3242X	32.4kohm	50	± 1%	73T6511	0.09
ERJ-2RKF3322X	33.2kohm	50	± 1%	73T6515	0.09
ERJ-2RKF4022X	40.2kohm	50	± 1%	73T6521	0.09
ERJ-2RKF4422X	44.2kohm	50	± 1%	73T6523	0.09
ERJ-2RKF4752X	47.5kohm	50	± 1%	73T6526	0.09
ERJ-2RKF4992X	49.9kohm	50	± 1%	73T6530	0.09
ERJ-2RKF5232X	52.3kohm	50	± 1%	73T6534	0.09
ERJ-2RKF5622X	56.2kohm	50	± 1%	73T6535	0.09
ERJ-2RKF6042X	60.4kohm	50	± 1%	73T6537	0.09
ERJ-2RKF6192X	61.9kohm	50	± 1%	73T6538	0.09
ERJ-2RKF7502X	75kohm	50	± 1%	73T6543	0.09
ERJ-2RKF8062X	80.6kohm	50	± 1%	73T6545	0.09
ERJ-2RKF9092X	90.9kohm	50	± 1%	73T6548	0.09
ERJ-2RKF1103X	110kohm	50	± 1%	73T6469	0.09
ERJ-2RKF1213X	121kohm	50	± 1%	73T6473	0.09
ERJ-2RKF1653X	165kohm	50	± 1%	73T6480	0.09

➤CONTINUED➤

ERJ SERIES PRECISION THICK FILM CHIP RESISTORS, 0402 CASE (CONT.)

Mfg. Part No.	Resistance	Voltage Rating (V)	Resistance Tolerance	Tape Cut Stock No.	Tape Cut Price Each 1-49
● ERJ-2RKF1693X	169kohm	50	± 1%	73T6481	0.09
● ERJ-2RKF2003X	200kohm	50	± 1%	73T6488	0.09
● ERJ-2RKF2493X	249kohm	50	± 1%	73T6499	0.09
● ERJ-2RKF3013X	301kohm	50	± 1%	73T6508	0.09
● ERJ-2RKF4993X	499kohm	50	± 1%	73T6531	0.09
100mW POWER RATING					
● ERJ-2GEJ1R0X	1ohm	50	± 5%	65T8244	0.09
● ERJ-2GEJ2R0X	2ohm	50	± 5%	65T8260	0.09
● ERJ-2GEJ2R2X	2.2ohm	50	± 5%	53W4152	0.09
● ERJ-2GEJ3R3X	3.3ohm	50	± 5%	53W4158	0.09
● ERJ-2GEJ4R7X	4.7ohm	50	± 5%	65T8284	0.09
● ERJ-2GEJ5R1X	5.1ohm	50	± 5%	65T8291	0.09
● ERJ-2GEJ5R6X	5.6ohm	50	± 5%	53W4169	0.09
● ERJ-2GEJ6R8X	6.8ohm	50	± 5%	53W4173	0.08
● ERJ-2GEJ100X	10ohm	50	± 5%	65T8245	0.09
● ERJ-2RKF15R0X	15ohm	50	± 1%	53W8361	0.09
● ERJ-2GEJ150X	15ohm	50	± 5%	53W4146	0.09
● ERJ-2RKF17R4X	17.4ohm	50	± 1%	53W4243	0.09
● ERJ-2RKF17R8X	17.8ohm	50	± 1%	53W4244	0.09
● ERJ-2GEJ180X	18ohm	50	± 5%	65T8258	0.09
● ERJ-2GEJ200X	20ohm	50	± 5%	53W4153	0.09
● ERJ-2GEJ220X	22ohm	50	± 5%	65T8266	0.09
● ERJ-2GEJ240X	24ohm	50	± 5%	65T8272	0.09
● ERJ-2RKF24R0X	24ohm	50	± 1%	53W4284	0.09
● ERJ-2RKF25R5X	25.5ohm	50	± 1%	53W4292	0.09
● ERJ-2GEJ270X	27ohm	50	± 5%	65T8273	0.09
● ERJ-2GEJ300X	30ohm	50	± 5%	53W4159	0.08
● ERJ-2RKF30R0X	30ohm	50	± 1%	53W4318	0.09
● ERJ-2GEJ330X	33ohm	50	± 5%	65T8278	0.09
● ERJ-2GEJ360X	36ohm	50	± 5%	53W4164	0.09
● ERJ-2RKF36R0X	36ohm	50	± 1%	53W4340	0.09
● ERJ-2RKF39R0X	39ohm	50	± 1%	53W8364	0.09
● ERJ-2GEJ390X	39ohm	50	± 5%	65T8282	0.09
● ERJ-2RKF39R2X	39.2ohm	50	± 1%	53W4356	0.09
● ERJ-2RKF43R2X	43.2ohm	50	± 1%	53W4369	0.09
● ERJ-2RKF44R2X	44.2ohm	50	± 1%	53W4377	0.09
● ERJ-2RKF45R3X	45.3ohm	50	± 1%	53W4379	0.09
● ERJ-2RKF47R5X	47.5ohm	50	± 1%	53W4387	0.09
● ERJ-2GEJ510X	51ohm	50	± 5%	65T8292	0.09
● ERJ-2RKF51R0X	51ohm	50	± 1%	53W4393	0.09
● ERJ-2RKF52R3X	52.3ohm	50	± 1%	53W4401	0.09
● ERJ-2GEJ560X	56ohm	50	± 5%	65T8296	0.09
● ERJ-2RKF56R2X	56.2ohm	50	± 1%	53W4412	0.09
● ERJ-2RKF59R0X	59ohm	50	± 1%	53W4420	0.09
● ERJ-2RKF60R4X	60.4ohm	50	± 1%	53W4425	0.09
● ERJ-2RKF61R9X	61.9ohm	50	± 1%	53W4428	0.09
● ERJ-2GEJ620X	62ohm	50	± 5%	53W4174	0.09
● ERJ-2RKF62R0X	62ohm	50	± 1%	53W4432	0.09
● ERJ-2RKF64R9X	64.9ohm	50	± 1%	53W4438	0.09
● ERJ-2GEJ680X	68ohm	50	± 5%	65T8299	0.09
● ERJ-2RKF68R1X	68.1ohm	50	± 1%	53W4447	0.09
● ERJ-2RKF71R5X	71.5ohm	50	± 1%	53W4455	0.09
● ERJ-2GEJ750X	75ohm	50	± 5%	65T8302	0.09
● ERJ-2RKF80R6X	80.6ohm	50	± 1%	53W4470	0.09
● ERJ-2RKF82R5X	82.5ohm	50	± 1%	53W4473	0.09
● ERJ-2RKF84R5X	84.5ohm	50	± 1%	53W4477	0.09
● ERJ-2RKF90R9X	90.9ohm	50	± 1%	53W4489	0.09
● ERJ-2RKF95R3X	95.3ohm	50	± 1%	53W4498	0.09
● ERJ-2GEJ101X	100ohm	50	± 5%	65T8246	0.09
● ERJ-2RKF1050X	105ohm	50	± 1%	53W4184	0.09
● ERJ-2RKF1071X	107ohm	50	± 1%	53W4188	0.09
● ERJ-2GEJ111X	110ohm	50	± 5%	53W4139	0.08
● ERJ-2RKF1150X	115ohm	50	± 1%	53W4193	0.09
● ERJ-2RKF1200X	120ohm	50	± 1%	53W8359	0.09
● ERJ-2GEJ121X	120ohm	50	± 5%	65T8252	0.09
● ERJ-2RKF1240X	124ohm	50	± 1%	53W4200	0.09
● ERJ-2RKF1270X	127ohm	50	± 1%	53W4203	0.09
● ERJ-2GEJ131X	130ohm	50	± 5%	53W4143	0.09
● ERJ-2RKF1400X	140ohm	50	± 1%	53W4215	0.09
● ERJ-2RKF1430X	143ohm	50	± 1%	53W4219	0.09
● ERJ-2GEJ151X	150ohm	50	± 5%	65T8254	0.09
● ERJ-2RKF1600X	160ohm	50	± 1%	53W4232	0.09
● ERJ-2RKF1650X	165ohm	50	± 1%	53W4238	0.09

➤ CONTINUED ➤

ERJ SERIES PRECISION THICK FILM CHIP RESISTORS, 0402 CASE (CONT.)

100mW POWER RATING

Mfg. Part No.	Resistance	Voltage Rating (V)	Resistance Tolerance	Tape Cut Stock No.	Tape Cut Price Each 1-49
● ERJ-2RKF1690X	169ohm	50	± 1%	53W4240	0.09
● ERJ-2RKF1740X	174ohm	50	± 1%	53W4245	0.09
● ERJ-2GEJ181X	180ohm	50	± 5%	65T8259	0.09
● ERJ-2RKF1910X	191ohm	50	± 1%	53W4258	0.09
● ERJ-2RKF1960X	196ohm	50	± 1%	53W4262	0.09
● ERJ-2GEJ221X	220ohm	50	± 5%	65T8267	0.09
● ERJ-2GEJ241X	240ohm	50	± 5%	53W4154	0.09
● ERJ-2RKF2430X	243ohm	50	± 1%	53W4288	0.09
● ERJ-2RKF2610X	261ohm	50	± 1%	53W4296	0.09
● ERJ-2RKF2670X	267ohm	50	± 1%	53W4300	0.09
● ERJ-2GEJ271X	270ohm	50	± 5%	65T8274	0.09
● ERJ-2RKF2740X	274ohm	50	± 1%	53W4304	0.09
● ERJ-2RKF2800X	280ohm	50	± 1%	53W4306	0.09
● ERJ-2RKF2870X	287ohm	50	± 1%	53W4310	0.09
● ERJ-2RKF2940X	294ohm	50	± 1%	53W4314	0.09
● ERJ-2GEJ301X	300ohm	50	± 5%	65T8277	0.09
● ERJ-2RKF3000X	300ohm	50	± 1%	53W4319	0.09
● ERJ-2RKF3090X	309ohm	50	± 1%	53W4323	0.09
● ERJ-2GEJ331X	330ohm	50	± 5%	65T8279	0.09
● ERJ-2RKF3480X	348ohm	50	± 1%	53W4333	0.09
● ERJ-2GEJ361X	360ohm	50	± 5%	53W4165	0.09
● ERJ-2RKF3600X	360ohm	50	± 1%	53W4341	0.09
● ERJ-2RKF3650X	365ohm	50	± 1%	53W4345	0.09
● ERJ-2RKF3740X	374ohm	50	± 1%	53W4349	0.09
● ERJ-2GEJ391X	390ohm	50	± 5%	65T8283	0.09
● ERJ-2RKF3920X	392ohm	50	± 1%	53W4357	0.09
● ERJ-2RKF4220X	422ohm	50	± 1%	53W4365	0.09
● ERJ-2GEJ431X	430ohm	50	± 5%	53W4168	0.09
● ERJ-2RKF4300X	430ohm	50	± 1%	53W4370	0.09
● ERJ-2RKF4320X	432ohm	50	± 1%	53W4374	0.09
● ERJ-2RKF4530X	453ohm	50	± 1%	53W4380	0.09
● ERJ-2GEJ471X	470ohm	50	± 5%	65T8286	0.09
● ERJ-2RKF4870X	487ohm	50	± 1%	53W4389	0.09
● ERJ-2GEJ511X	510ohm	50	± 5%	65T8293	0.09
● ERJ-2RKF5100X	510ohm	50	± 1%	53W4394	0.09
● ERJ-2RKF5110X	511ohm	50	± 1%	53W4398	0.09
● ERJ-2RKF5360X	536ohm	50	± 1%	53W4404	0.09
● ERJ-2RKF5490X	549ohm	50	± 1%	53W4408	0.09
● ERJ-2GEJ561X	560ohm	50	± 5%	65T8297	0.09
● ERJ-2RKF5620X	562ohm	50	± 1%	53W4413	0.09
● ERJ-2RKF5760X	576ohm	50	± 1%	53W4416	0.09
● ERJ-2RKF5900X	590ohm	50	± 1%	53W4421	0.09
● ERJ-2RKF6040X	604ohm	50	± 1%	53W4426	0.09
● ERJ-2RKF6190X	619ohm	50	± 1%	53W4429	0.09
● ERJ-2GEJ621X	620ohm	50	± 5%	53W4175	0.09
● ERJ-2RKF6200X	620ohm	50	± 1%	53W4433	0.09
● ERJ-2RKF6490X	649ohm	50	± 1%	53W4439	0.09
● ERJ-2RKF6650X	665ohm	50	± 1%	53W4443	0.09
● ERJ-2GEJ681X	680ohm	50	± 5%	65T8300	0.09
● ERJ-2RKF6810X	681ohm	50	± 1%	53W4448	0.09
● ERJ-2RKF6980X	698ohm	50	± 1%	53W4451	0.09
● ERJ-2RKF7150X	715ohm	50	± 1%	53W4456	0.09
● ERJ-2RKF7320X	732ohm	50	± 1%	53W4460	0.09
● ERJ-2GEJ751X	750ohm	50	± 5%	53W4178	0.09
● ERJ-2RKF7680X	768ohm	50	± 1%	53W4464	0.09
● ERJ-2RKF7870X	787ohm	50	± 1%	53W4467	0.09
● ERJ-2RKF8060X	806ohm	50	± 1%	53W4471	0.09
● ERJ-2RKF8200X	820ohm	50	± 1%	53W8366	0.09
● ERJ-2GEJ821X	820ohm	50	± 5%	53W4179	0.09
● ERJ-2RKF8250X	825ohm	50	± 1%	53W4474	0.09
● ERJ-2RKF8450X	845ohm	50	± 1%	53W4478	0.09
● ERJ-2RKF8660X	866ohm	50	± 1%	53W4482	0.09
● ERJ-2RKF8870X	887ohm	50	± 1%	53W4485	0.09
● ERJ-2RKF9090X	909ohm	50	± 1%	53W4490	0.09
● ERJ-2RKF9100X	910ohm	50	± 1%	53W4492	0.09
● ERJ-2RKF9310X	931ohm	50	± 1%	53W4495	0.09
● ERJ-2RKF9530X	953ohm	50	± 1%	53W4499	0.09
● ERJ-2RKF9760X	976ohm	50	± 1%	53W4503	0.09
● ERJ-2GEJ102X	1kohm	50	± 5%	65T8247	0.09
● ERJ-2RKF1021X	1.02kohm	50	± 1%	53W4181	0.09
● ERJ-2RKF1051X	1.05kohm	50	± 1%	53W4185	0.09
● ERJ-2GEJ112X	1.1kohm	50	± 5%	53W4140	0.09

➤ CONTINUED ➤

ERJ SERIES PRECISION THICK FILM CHIP RESISTORS, 0402 CASE (CONT.)

100mW POWER RATING

Mfg. Part No.	Resistance	Voltage Rating (V)	Resistance Tolerance	Tape Cut Stock No.	Tape Cut Price Each 1-49
ERJ-2RKF1131X	1.13kohm	50	± 1%	53W4190	0.09
ERJ-2RKF1151X	1.15kohm	50	± 1%	53W4194	0.09
ERJ-2RKF1181X	1.18kohm	50	± 1%	53W4197	0.09
ERJ-2RKF1201X	1.2kohm	50	± 1%	53W8360	0.09
ERJ-2GEJ122X	1.2kohm	50	± 5%	65T8253	0.09
ERJ-2RKF1241X	1.24kohm	50	± 1%	53W4201	0.09
ERJ-2RKF1271X	1.27kohm	50	± 1%	53W4204	0.09
ERJ-2GEJ132X	1.3kohm	50	± 5%	53W4144	0.09
ERJ-2RKF1331X	1.33kohm	50	± 1%	53W4209	0.09
ERJ-2RKF1371X	1.37kohm	50	± 1%	53W4212	0.09
ERJ-2RKF1401X	1.4kohm	50	± 1%	53W4216	0.09
ERJ-2RKF1431X	1.43kohm	50	± 1%	53W4220	0.09
ERJ-2RKF1471X	1.47kohm	50	± 1%	53W4223	0.09
ERJ-2RKF1501X	1.5kohm	50	± 1%	53W8362	0.09
ERJ-2GEJ152X	1.5kohm	50	± 5%	65T8255	0.09
ERJ-2RKF1541X	1.54kohm	50	± 1%	53W4226	0.09
ERJ-2RKF1581X	1.58kohm	50	± 1%	53W4229	0.09
ERJ-2GEJ162X	1.6kohm	50	± 5%	53W4148	0.09
ERJ-2RKF1601X	1.6kohm	50	± 1%	53W4233	0.09
ERJ-2RKF1621X	1.62kohm	50	± 1%	53W4236	0.09
ERJ-2RKF1691X	1.69kohm	50	± 1%	53W4241	0.09
ERJ-2RKF1741X	1.74kohm	50	± 1%	53W4246	0.09
ERJ-2RKF1781X	1.78kohm	50	± 1%	53W4249	0.09
ERJ-2GEJ182X	1.8kohm	50	± 5%	53W4149	0.09
ERJ-2RKF1821X	1.82kohm	50	± 1%	53W4252	0.09
ERJ-2RKF1871X	1.87kohm	50	± 1%	53W4255	0.09
ERJ-2RKF1911X	1.91kohm	50	± 1%	53W4259	0.09
ERJ-2RKF1961X	1.96kohm	50	± 1%	53W4263	0.09
ERJ-2GEJ202X	2kohm	50	± 5%	65T8262	0.09
ERJ-2RKF2051X	2.05kohm	50	± 1%	53W4266	0.09
ERJ-2RKF2101X	2.1kohm	50	± 1%	53W4269	0.09
ERJ-2RKF2151X	2.15kohm	50	± 1%	53W4272	0.09
ERJ-2GEJ222X	2.2kohm	50	± 5%	65T8268	0.09
ERJ-2RKF2261X	2.26kohm	50	± 1%	53W4276	0.09
ERJ-2RKF2371X	2.37kohm	50	± 1%	53W4281	0.09
ERJ-2GEJ242X	2.4kohm	50	± 5%	53W4155	0.09
ERJ-2RKF2401X	2.4kohm	50	± 1%	53W4285	0.09
ERJ-2RKF2431X	2.43kohm	50	± 1%	53W4289	0.09
ERJ-2RKF2551X	2.55kohm	50	± 1%	53W4293	0.09
ERJ-2RKF2611X	2.61kohm	50	± 1%	53W4297	0.09
ERJ-2RKF2671X	2.67kohm	50	± 1%	53W4301	0.09
ERJ-2GEJ272X	2.7kohm	50	± 5%	65T8275	0.09
ERJ-2RKF2801X	2.8kohm	50	± 1%	53W4307	0.09
ERJ-2RKF2871X	2.87kohm	50	± 1%	53W4311	0.09
ERJ-2RKF2941X	2.94kohm	50	± 1%	53W4315	0.09
ERJ-2GEJ302X	3kohm	50	± 5%	53W4160	0.09
ERJ-2RKF3001X	3kohm	50	± 1%	53W4320	0.09
ERJ-2RKF3161X	3.16kohm	50	± 1%	53W4326	0.09
ERJ-2RKF3241X	3.24kohm	50	± 1%	53W4328	0.09
ERJ-2GEJ332X	3.3kohm	50	± 5%	65T8280	0.09
ERJ-2RKF3481X	3.48kohm	50	± 1%	53W4334	0.09
ERJ-2RKF3571X	3.57kohm	50	± 1%	53W4337	0.09
ERJ-2RKF3601X	3.6kohm	50	± 1%	53W4342	0.09
ERJ-2RKF3651X	3.65kohm	50	± 1%	53W4346	0.09
ERJ-2RKF3741X	3.74kohm	50	± 1%	53W4350	0.09
ERJ-2RKF3831X	3.83kohm	50	± 1%	53W4353	0.09
ERJ-2GEJ392X	3.9kohm	50	± 5%	53W4166	0.09
ERJ-2RKF3921X	3.92kohm	50	± 1%	53W4358	0.09
ERJ-2RKF4121X	4.12kohm	50	± 1%	53W4362	0.09
ERJ-2RKF4221X	4.22kohm	50	± 1%	53W4366	0.09
ERJ-2RKF4301X	4.3kohm	50	± 1%	53W4371	0.09
ERJ-2RKF4421X	4.42kohm	50	± 1%	53W4378	0.09
ERJ-2RKF4531X	4.53kohm	50	± 1%	53W4381	0.09
ERJ-2RKF4641X	4.64kohm	50	± 1%	53W4384	0.09
ERJ-2GEJ472X	4.7kohm	50	± 5%	65T8287	0.09
ERJ-2RKF4871X	4.87kohm	50	± 1%	53W4390	0.09
ERJ-2GEJ512X	5.1kohm	50	± 5%	65T8294	0.09
ERJ-2RKF5101X	5.1kohm	50	± 1%	53W4395	0.09
ERJ-2RKF5231X	5.23kohm	50	± 1%	53W4402	0.09
ERJ-2RKF5361X	5.36kohm	50	± 1%	53W4405	0.09
ERJ-2RKF5491X	5.49kohm	50	± 1%	53W4409	0.09
ERJ-2GEJ562X	5.6kohm	50	± 5%	53W4172	0.09

➤CONTINUED➤

ERJ SERIES PRECISION THICK FILM CHIP RESISTORS, 0402 CASE (CONT.)

100mW POWER RATING

Mfg. Part No.	Resistance	Voltage Rating (V)	Resistance Tolerance	Tape Cut Stock No.	Tape Cut Price Each 1-49
ERJ-2RKF5621X	5.62kohm	50	± 1%	53W4414	0.09
ERJ-2RKF5761X	5.76kohm	50	± 1%	53W4417	0.09
ERJ-2RKF5901X	5.9kohm	50	± 1%	53W4422	0.09
ERJ-2RKF6191X	6.19kohm	50	± 1%	53W4430	0.09
ERJ-2GEJ622X	6.2kohm	50	± 5%	53W4176	0.08
ERJ-2RKF6201X	6.2kohm	50	± 1%	53W4434	0.09
ERJ-2RKF6341X	6.34kohm	50	± 1%	53W4436	0.09
ERJ-2RKF6491X	6.49kohm	50	± 1%	53W4440	0.09
ERJ-2RKF6651X	6.65kohm	50	± 1%	53W4444	0.09
ERJ-2GEJ682X	6.8kohm	50	± 5%	65T8301	0.09
ERJ-2RKF6981X	6.98kohm	50	± 1%	53W4452	0.09
ERJ-2RKF7151X	7.15kohm	50	± 1%	53W4457	0.09
ERJ-2RKF7321X	7.32kohm	50	± 1%	53W4461	0.09
ERJ-2GEJ752X	7.5kohm	50	± 5%	65T8303	0.09
ERJ-2RKF7681X	7.68kohm	50	± 1%	53W4465	0.09
ERJ-2RKF7871X	7.87kohm	50	± 1%	53W4468	0.09
ERJ-2GEJ822X	8.2kohm	50	± 5%	65T8306	0.09
ERJ-2RKF8451X	8.45kohm	50	± 1%	53W4479	0.09
ERJ-2RKF8661X	8.66kohm	50	± 1%	53W4483	0.09
ERJ-2RKF8871X	8.87kohm	50	± 1%	53W4486	0.09
ERJ-2RKF9101X	9.1kohm	50	± 1%	53W4493	0.09
ERJ-2RKF9311X	9.31kohm	50	± 1%	53W4496	0.09
ERJ-2RKF9531X	9.53kohm	50	± 1%	53W4500	0.09
ERJ-2RKF9761X	9.76kohm	50	± 1%	53W4504	0.09
ERJ-2GEJ103X	10kohm	50	± 5%	65T8248	0.09
ERJ-2RKF1022X	10.2kohm	50	± 1%	53W4182	0.09
ERJ-2RKF1052X	10.5kohm	50	± 1%	53W4186	0.09
ERJ-2RKF1132X	11.3kohm	50	± 1%	53W4191	0.09
ERJ-2RKF1152X	11.5kohm	50	± 1%	53W4195	0.09
ERJ-2RKF1182X	11.8kohm	50	± 1%	53W4198	0.09
ERJ-2GEJ123X	12kohm	50	± 5%	53W4141	0.09
ERJ-2RKF1272X	12.7kohm	50	± 1%	53W4205	0.09
ERJ-2GEJ133X	13kohm	50	± 5%	53W4145	0.09
ERJ-2RKF1302X	13kohm	50	± 1%	53W4207	0.09
ERJ-2RKF1332X	13.3kohm	50	± 1%	53W4210	0.09
ERJ-2RKF1372X	13.7kohm	50	± 1%	53W4213	0.09
ERJ-2RKF1402X	14kohm	50	± 1%	53W4217	0.09
ERJ-2RKF1432X	14.3kohm	50	± 1%	53W4221	0.09
ERJ-2RKF1472X	14.7kohm	50	± 1%	53W4224	0.09
ERJ-2GEJ153X	15kohm	50	± 5%	65T8256	0.09
ERJ-2RKF1542X	15.4kohm	50	± 1%	53W4227	0.09
ERJ-2RKF1582X	15.8kohm	50	± 1%	53W4230	0.09
ERJ-2RKF1602X	16kohm	50	± 1%	53W4234	0.09
ERJ-2RKF1623X	16.2kohm	50	± 1%	53W4237	0.09
ERJ-2RKF1652X	16.5kohm	50	± 1%	53W4239	0.09
ERJ-2RKF1692X	16.9kohm	50	± 1%	53W4242	0.09
ERJ-2RKF1742X	17.4kohm	50	± 1%	53W4247	0.09
ERJ-2RKF1782X	17.8kohm	50	± 1%	53W4250	0.09
ERJ-2GEJ183X	18kohm	50	± 5%	53W4150	0.09
ERJ-2RKF1822X	18.2kohm	50	± 1%	53W4253	0.09
ERJ-2RKF1872X	18.7kohm	50	± 1%	53W4256	0.09
ERJ-2RKF1912X	19.1kohm	50	± 1%	53W4260	0.09
ERJ-2RKF1962X	19.6kohm	50	± 1%	53W4264	0.09
ERJ-2GEJ203X	20kohm	50	± 5%	65T8263	0.09
ERJ-2RKF2052X	20.5kohm	50	± 1%	53W4267	0.09
ERJ-2RKF2102X	21kohm	50	± 1%	53W4270	0.09
ERJ-2RKF2152X	21.5kohm	50	± 1%	53W4273	0.09
ERJ-2RKF2202X	22kohm	50	± 1%	53W8363	0.09
ERJ-2GEJ223X	22kohm	50	± 5%	65T8269	0.09
ERJ-2RKF2262X	22.6kohm	50	± 1%	53W4277	0.09
ERJ-2RKF2322X	23.2kohm	50	± 1%	53W4279	0.09
ERJ-2RKF2372X	23.7kohm	50	± 1%	53W4282	0.09
ERJ-2GEJ243X	24kohm	50	± 5%	53W4156	0.09
ERJ-2RKF2402X	24kohm	50	± 1%	53W4286	0.09
ERJ-2RKF2432X	24.3kohm	50	± 1%	53W4290	0.09
ERJ-2RKF2552X	25.5kohm	50	± 1%	53W4294	0.09
ERJ-2RKF2612X	26.1kohm	50	± 1%	53W4298	0.09
ERJ-2RKF2672X	26.7kohm	50	± 1%	53W4302	0.09
ERJ-2GEJ273X	27kohm	50	± 5%	65T8276	0.09
ERJ-2RKF2802X	28kohm	50	± 1%	53W4308	0.09
ERJ-2RKF2872X	28.7kohm	50	± 1%	53W4312	0.09
ERJ-2RKF2942X	29.4kohm	50	± 1%	53W4316	0.09

➤CONTINUED➤

ERJ SERIES PRECISION THICK FILM CHIP RESISTORS, 0402 CASE (CONT.)

100mW POWER RATING

Mfg. Part No.	Resistance	Voltage Rating (V)	Resistance Tolerance	Tape Cut Stock No.	Tape Cut Price Each 1-49
● ERJ-2GEJ303X	30kohm	50	± 5%	53W4161	0.09
● ERJ-2RKF3002X	30kohm	50	± 1%	53W4321	0.09
● ERJ-2RKF3092X	30.9kohm	50	± 1%	53W4324	0.09
● ERJ-2GEJ333X	33kohm	50	± 5%	65T8281	0.09
● ERJ-2RKF3402X	34kohm	50	± 1%	53W4331	0.09
● ERJ-2RKF3482X	34.8kohm	50	± 1%	53W4335	0.09
● ERJ-2RKF3572X	35.7kohm	50	± 1%	53W4338	0.09
● ERJ-2RKF3602X	36kohm	50	± 1%	53W4343	0.09
● ERJ-2RKF3652X	36.5kohm	50	± 1%	53W4347	0.09
● ERJ-2RKF3742X	37.4kohm	50	± 1%	53W4351	0.09
● ERJ-2RKF3832X	38.3kohm	50	± 1%	53W4354	0.09
● ERJ-2GEJ393X	39kohm	50	± 5%	53W4167	0.09
● ERJ-2RKF3922X	39.2kohm	50	± 1%	53W4359	0.09
● ERJ-2RKF4122X	41.2kohm	50	± 1%	53W4363	0.09
● ERJ-2RKF4222X	42.2kohm	50	± 1%	53W4367	0.09
● ERJ-2RKF4302X	43kohm	50	± 1%	53W4372	0.09
● ERJ-2RKF4322X	43.2kohm	50	± 1%	53W4375	0.09
● ERJ-2RKF4532X	45.3kohm	50	± 1%	53W4382	0.09
● ERJ-2RKF4642X	46.4kohm	50	± 1%	53W4385	0.09
● ERJ-2GEJ473X	47kohm	50	± 5%	65T8288	0.09
● ERJ-2RKF4872X	48.7kohm	50	± 1%	53W4391	0.09
● ERJ-2RKF5102X	51kohm	50	± 1%	53W4396	0.09
● ERJ-2RKF5112X	51.1kohm	50	± 1%	53W4399	0.09
● ERJ-2RKF5362X	53.6kohm	50	± 1%	53W4406	0.09
● ERJ-2RKF5492X	54.9kohm	50	± 1%	53W4410	0.09
● ERJ-2GEJ563X	56kohm	50	± 5%	65T8298	0.09
● ERJ-2RKF5762X	57.6kohm	50	± 1%	53W4418	0.09
● ERJ-2RKF5902X	59kohm	50	± 1%	53W4423	0.09
● ERJ-2RKF6202X	62kohm	50	± 1%	53W4435	0.09
● ERJ-2RKF6342X	63.4kohm	50	± 1%	53W4437	0.09
● ERJ-2RKF6492X	64.9kohm	50	± 1%	53W4441	0.09
● ERJ-2RKF6652X	66.5kohm	50	± 1%	53W4445	0.09
● ERJ-2GEJ683X	68kohm	50	± 5%	53W4177	0.09
● ERJ-2RKF6812X	68.1kohm	50	± 1%	53W4449	0.09
● ERJ-2RKF6982X	69.8kohm	50	± 1%	53W4453	0.09
● ERJ-2RKF7152X	71.5kohm	50	± 1%	53W4458	0.09
● ERJ-2RKF7322X	73.2kohm	50	± 1%	53W4462	0.09
● ERJ-2GEJ753X	75kohm	50	± 5%	65T8304	0.09
● ERJ-2RKF7682X	76.8kohm	50	± 1%	53W4466	0.09
● ERJ-2RKF7872X	78.7kohm	50	± 1%	53W4469	0.09
● ERJ-2RKF8202X	82kohm	50	± 1%	53W8367	0.09
● ERJ-2GEJ823X	82kohm	50	± 5%	53W4180	0.09
● ERJ-2RKF8252X	82.5kohm	50	± 1%	53W4475	0.09
● ERJ-2RKF8452X	84.5kohm	50	± 1%	53W4480	0.09
● ERJ-2RKF8662X	86.6kohm	50	± 1%	53W4484	0.09
● ERJ-2RKF8872X	88.7kohm	50	± 1%	53W4487	0.09
● ERJ-2RKF9102X	91kohm	50	± 1%	53W4494	0.09
● ERJ-2RKF9312X	93.1kohm	50	± 1%	53W4497	0.09
● ERJ-2RKF9532X	95.3kohm	50	± 1%	53W4501	0.09
● ERJ-2RKF9762X	97.6kohm	50	± 1%	53W4505	0.09
● ERJ-2GEJ104X	100kohm	50	± 5%	65T8249	0.09
● ERJ-2RKF1023X	102kohm	50	± 1%	53W4183	0.09
● ERJ-2RKF1053X	105kohm	50	± 1%	53W4187	0.09
● ERJ-2RKF1073X	107kohm	50	± 1%	53W4189	0.09
● ERJ-2RKF1133X	113kohm	50	± 1%	53W4192	0.09
● ERJ-2RKF1153X	115kohm	50	± 1%	53W4196	0.09
● ERJ-2RKF1183X	118kohm	50	± 1%	53W4199	0.09
● ERJ-2GEJ124X	120kohm	50	± 5%	53W4142	0.09
● ERJ-2RKF1243X	124kohm	50	± 1%	53W4202	0.09
● ERJ-2RKF1273X	127kohm	50	± 1%	53W4206	0.09
● ERJ-2RKF1303X	130kohm	50	± 1%	53W4208	0.09
● ERJ-2RKF1333X	133kohm	50	± 1%	53W4211	0.09
● ERJ-2RKF1373X	137kohm	50	± 1%	53W4214	0.09
● ERJ-2RKF1403X	140kohm	50	± 1%	53W4218	0.09
● ERJ-2RKF1433X	143kohm	50	± 1%	53W4222	0.09
● ERJ-2RKF1473X	147kohm	50	± 1%	53W4225	0.09
● ERJ-2GEJ154X	150kohm	50	± 5%	65T8257	0.08
● ERJ-2RKF1543X	154kohm	50	± 1%	53W4228	0.09
● ERJ-2RKF1583X	158kohm	50	± 1%	53W4231	0.09
● ERJ-2RKF1603X	160kohm	50	± 1%	53W4235	0.09
● ERJ-2RKF1743X	174kohm	50	± 1%	53W4248	0.09
● ERJ-2RKF1783X	178kohm	50	± 1%	53W4251	0.09

➤CONTINUED➤

ERJ SERIES PRECISION THICK FILM CHIP RESISTORS, 0402 CASE (CONT.)

100mW POWER RATING

Mfg. Part No.	Resistance	Voltage Rating (V)	Resistance Tolerance	Tape Cut Stock No.	Tape Cut Price Each 1-49
● ERJ-2RKF1823X	182kohm	50	± 1%	53W4254	0.09
● ERJ-2RKF1873X	187kohm	50	± 1%	53W4257	0.09
● ERJ-2RKF1913X	191kohm	50	± 1%	53W4261	0.09
● ERJ-2RKF1963X	196kohm	50	± 1%	53W4265	0.09
● ERJ-2GEJ204X	200kohm	50	± 5%	65T8264	0.09
● ERJ-2RKF2053X	205kohm	50	± 1%	53W4268	0.09
● ERJ-2RKF2103X	210kohm	50	± 1%	53W4271	0.09
● ERJ-2RKF2153X	215kohm	50	± 1%	53W4274	0.09
● ERJ-2GEJ224X	220kohm	50	± 5%	65T8270	0.09
● ERJ-2RKF2213X	221kohm	50	± 1%	53W4275	0.09
● ERJ-2RKF2263X	226kohm	50	± 1%	53W4278	0.09
● ERJ-2RKF2323X	232kohm	50	± 1%	53W4280	0.09
● ERJ-2RKF2373X	237kohm	50	± 1%	53W4283	0.09
● ERJ-2RKF2403X	240kohm	50	± 1%	53W4287	0.09
● ERJ-2RKF2433X	243kohm	50	± 1%	53W4291	0.09
● ERJ-2RKF2553X	255kohm	50	± 1%	53W4295	0.09
● ERJ-2RKF2613X	261kohm	50	± 1%	53W4299	0.09
● ERJ-2RKF2673X	267kohm	50	± 1%	53W4303	0.09
● ERJ-2GEJ274X	270kohm	50	± 5%	53W4157	0.08
● ERJ-2RKF2743X	274kohm	50	± 1%	53W4305	0.09
● ERJ-2RKF2803X	280kohm	50	± 1%	53W4309	0.09
● ERJ-2RKF2873X	287kohm	50	± 1%	53W4313	0.09
● ERJ-2RKF2943X	294kohm	50	± 1%	53W4317	0.09
● ERJ-2GEJ304X	300kohm	50	± 5%	53W4162	0.09
● ERJ-2RKF3003X	300kohm	50	± 1%	53W4322	0.09
● ERJ-2RKF3093X	309kohm	50	± 1%	53W4325	0.09
● ERJ-2RKF3163X	316kohm	50	± 1%	53W4327	0.09
● ERJ-2RKF3243X	324kohm	50	± 1%	53W4329	0.09
● ERJ-2GEJ334X	330kohm	50	± 5%	53W4163	0.09
● ERJ-2RKF3323X	332kohm	50	± 1%	53W4330	0.09
● ERJ-2RKF3403X	340kohm	50	± 1%	53W4332	0.09
● ERJ-2RKF3483X	348kohm	50	± 1%	53W4336	0.09
● ERJ-2RKF3573X	357kohm	50	± 1%	53W4339	0.09
● ERJ-2RKF3603X	360kohm	50	± 1%	53W4344	0.09
● ERJ-2RKF3653X	365kohm	50	± 1%	53W4348	0.09
● ERJ-2RKF3743X	374kohm	50	± 1%	53W4352	0.09
● ERJ-2RKF3833X	383kohm	50	± 1%	53W4355	0.09
● ERJ-2RKF3903X	390kohm	50	± 1%	53W8365	0.09
● ERJ-2RKF3923X	392kohm	50	± 1%	53W4360	0.09
● ERJ-2RKF4023X	402kohm	50	± 1%	53W4361	0.09
● ERJ-2RKF4123X	412kohm	50	± 1%	53W4364	0.09
● ERJ-2RKF4223X	422kohm	50	± 1%	53W4368	0.09
● ERJ-2RKF4303X	430kohm	50	± 1%	53W4373	0.09
● ERJ-2RKF4323X	432kohm	50	± 1%	53W4376	0.09
● ERJ-2RKF4533X	453kohm	50	± 1%	53W4383	0.09
● ERJ-2RKF4643X	464kohm	50	± 1%	53W4386	0.09
● ERJ-2GEJ474X	470kohm	50	± 5%	65T8289	0.09
● ERJ-2RKF4753X	475kohm	50	± 1%	53W4388	0.09
● ERJ-2RKF4873X	487kohm	50	± 1%	53W4392	0.09
● ERJ-2GEJ514X	510kohm	50	± 5%	53W4170	0.09
● ERJ-2RKF5103X	510kohm	50	± 1%	53W4397	0.09
● ERJ-2RKF5113X	511kohm	50	± 1%	53W4400	0.09
● ERJ-2RKF5233X	523kohm	50	± 1%	53W4403	0.09
● ERJ-2RKF5493X	549kohm	50	± 1%	53W4411	0.09
● ERJ-2RKF5623X	562kohm	50	± 1%	53W4415	0.09
● ERJ-2RKF5363X	563kohm	50	± 1%	53W4407	0.09
● ERJ-2RKF5763X	576kohm	50	± 1%	53W4419	0.09
● ERJ-2RKF5903X	590kohm	50	± 1%	53W4424	0.09
● ERJ-2RKF6043X	604kohm	50	± 1%	53W4427	0.09
● ERJ-2RKF6193X	619kohm	50	± 1%	53W4431	0.09
● ERJ-2RKF6493X	649kohm	50	± 1%	53W4442	0.09
● ERJ-2RKF6653X	665kohm	50	± 1%	53W4446	0.09
● ERJ-2RKF6813X	681kohm	50	± 1%	53W4450	0.09
● ERJ-2RKF6983X	698kohm	50	± 1%	53W4454	0.09
● ERJ-2RKF7153X	715kohm	50	± 1%	53W4459	0.09
● ERJ-2RKF7503X	750kohm	50	± 1%	53W4463	0.09
● ERJ-2RKF8063X	806kohm	50	± 1%	53W4472	0.09
● ERJ-2RKF8203X	820kohm	50	± 1%	53W8368	0.09
● ERJ-2RKF8253X	825kohm	50	± 1%	53W4476	0.09
● ERJ-2RKF8453X	845kohm	50	± 1%	53W4481	0.09
● ERJ-2RKF8873X	887kohm	50	± 1%	53W4488	0.09
● ERJ-2RKF9093X	909kohm	50	± 1%	53W4491	0.09

➤CONTINUED➤

ERJ SERIES PRECISION THICK FILM CHIP RESISTORS, 0402 CASE (CONT.)

100mW POWER RATING

Mfg. Part No.	Resistance	Voltage Rating (V)	Resistance Tolerance	Tape Cut Stock No.	Tape Cut Price Each 1-49
ERJ-2RKF9533X	953kohm	50	± 1%	53W4502	0.09
ERJ-2RKF9763X	976kohm	50	± 1%	53W4506	0.09
ERJ-2GEJ105X	1Mohm	50	± 5%	65T8250	0.09
ERJ-2GEJ155X	1500kohm	50	± 5%	53W4147	0.09
ERJ-2GEJ185X	1800kohm	50	± 5%	53W4151	0.09
ERJ-2GEJ205X	2Mohm	50	± 5%	65T8265	0.09
ERJ-2GEJ225X	2.2Mohm	50	± 5%	65T8271	0.09
ERJ-2GEJ475X	4.7Mohm	50	± 5%	65T8290	0.09
ERJ-2GEJ515X	5100kohm	50	± 5%	53W4171	0.09
ERJ-2GEJ106X	10Mohm	50	± 5%	65T8251	0.09
ERJ-2GE0R00X	0ohm	50	...	65T8307	0.09

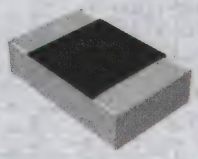
(209154)

ERJ SERIES PRECISION THICK FILM CHIP RESISTORS, 0805 CASE

RoHS Compliant Available

Panasonic

Features:
- Small size and lightweight
- High reliability Metal glaze thick film resistive element and three layers of electrodes
- Compatible with placement machines
- Taping packaging available
- Suitable for both reflow and flow soldering
- Temperature Coefficent of ±100ppm/°C
- Power Rating: 125mW
- Temperature Range of -55°C to +155°C



Mfg. Part No.	Resistance	Voltage Rating (V)	Resistance Tolerance	Tape Cut Stock No.	Tape Cut Price Each 1-4999	Tape & Reel Stock No.	Tape & Reel Reel Qty	Tape & Reel Price Each 1-4999
ERJ-6GEY0R00V	0ohm	150	-	65T8846	0.10	97W7729	5000	0.01
ERJ-6GEYJ1R0V	1ohm	150	± 5%	65T8775	0.10	97W7662	5000	0.01
ERJ-6GEYJ2R0V	2ohm	150	± 5%	53W4945	0.10	52W0289	5000	0.01
ERJ-6GEYJ2R2V	2.2ohm	150	± 5%	65T8795	0.10	97W7681	5000	0.01
ERJ-6GEYJ3R0V	3ohm	150	± 5%	53W4950	0.10	52W0300	5000	0.01
ERJ-6GEYJ3R3V	3.3ohm	150	± 5%	53W4951	0.10	52W0301	5000	0.01
ERJ-6GEYJ4R7V	4.7ohm	150	± 5%	65T8823	0.10	97W7708	5000	0.01
ERJ-6GEYJ5R1V	5.1ohm	150	± 5%	53W4962	0.10	52W0325	5000	0.01
ERJ-6GEYJ100V	10ohm	150	± 5%	65T8776	0.10	97W7663	5000	0.01
ERJ-6GEYJ150V	15ohm	150	± 5%	65T8787	0.10	97W7673	5000	0.01
ERJ-6GEYJ180V	18ohm	150	± 5%	53W4942	0.10	52W0285	5000	0.01
ERJ-6ENF20R0V	20ohm	150	± 1%	65T8713	0.10	97W7605	5000	0.01
ERJ-6GEYJ200V	20ohm	150	± 5%	53W4946	0.10	52W0291	5000	0.01
ERJ-6GEYJ220V	22ohm	150	± 5%	65T8802	0.10	97W7687	5000	0.01
ERJ-6ENF22R1V	22.1ohm	150	± 1%	65T8719	0.10	97W7611	5000	0.01
ERJ-6ENF24R9V	24.9ohm	150	± 1%	65T8723	0.10	97W7615	5000	0.01
ERJ-6GEYJ270V	27ohm	150	± 5%	65T8810	0.10	97W7695	5000	0.01
ERJ-6GEYJ300V	30ohm	150	± 5%	65T8813	0.10	97W7698	5000	0.01
ERJ-6ENF30R0V	30ohm	150	± 1%	53W4806	0.10	52W0021	5000	0.01
ERJ-6GEYJ330V	33ohm	150	± 5%	65T8816	0.10	97W7701	5000	0.01
ERJ-6ENF33R2V	33.2ohm	150	± 1%	65T8738	0.10	97W7629	5000	0.01
ERJ-6GEYJ390V	39ohm	150	± 5%	53W4957	0.10	52W0315	5000	0.01
ERJ-6ENF39R2V	39.2ohm	150	± 1%	53W4838	0.10	52W0077	5000	0.01
ERJ-6ENF40R2V	40.2ohm	150	± 1%	65T8744	0.10	97W7634	5000	0.01
ERJ-6GEYJ470V	47ohm	150	± 5%	65T8825	0.10	97W7709	5000	0.01
ERJ-6ENF47R5V	47.5ohm	150	± 1%	65T8747	0.10	97W7637	5000	0.01
ERJ-6ENF49R9V	49.9ohm	150	± 1%	65T8752	0.10	97W7641	5000	0.01
ERJ-6GEYJ510V	51ohm	150	± 5%	65T8830	0.10	97W7714	5000	0.01
ERJ-6ENF51R0V	51ohm	150	± 1%	53W4861	0.10	52W0122	5000	0.01
ERJ-6ENF51R1V	51.1ohm	150	± 1%	65T8757	0.10	97W7645	5000	0.01
ERJ-6GEYJ560V	56ohm	150	± 5%	65T8833	0.10	97W7717	5000	0.01
ERJ-6ENF60R4V	60.4ohm	150	± 1%	53W4878	0.10	52W0156	5000	0.01
ERJ-6GEYJ680V	68ohm	150	± 5%	65T8838	0.10	97W7721	5000	0.01
ERJ-6ENF68R1V	68.1ohm	150	± 1%	53W4895	0.10	52W0184	5000	0.01
ERJ-6ENF75R0V	75ohm	150	± 1%	65T8767	0.10	97W7655	5000	0.01
ERJ-6GEYJ750V	75ohm	150	± 5%	65T8842	0.10	97W7725	5000	0.01
ERJ-6GEYJ820V	82ohm	150	± 5%	53W4971	0.10	52W0347	5000	0.01
ERJ-6ENF82R5V	82.5ohm	150	± 1%	53W4915	0.10	52W0218	5000	0.01
ERJ-6ENF90R9V	90.9ohm	150	± 1%	53W4922	0.10	52W0235	5000	0.01
ERJ-6GEYJ101V	100ohm	150	± 5%	65T8777	0.10	97W7664	5000	0.01
ERJ-6ENF1100V	110ohm	150	± 1%	53W4713	0.10	51W9807	5000	0.01
ERJ-6GEYJ121V	120ohm	150	± 5%	65T8783	0.10	97W7669	5000	0.01
ERJ-6ENF1210V	121ohm	150	± 1%	65T8705	0.10	97W7598	5000	0.01

➤CONTINUED➤

ERJ SERIES PRECISION THICK FILM CHIP RESISTORS, 0805 CASE (CONT.)

Mfg. Part No.	Resistance	Voltage Rating (V)	Resistance Tolerance	Tape Cut Stock No.	Tape Cut Price Each 1-4999	Tape & Reel Stock No.	Tape & Reel Reel Qty	Tape & Reel Price Each 1-4999
ERJ-6ENF1240V	124ohm	150	± 1%	53W4721	0.10	51W9832	5000	0.01
ERJ-6ENF1300V	130ohm	150	± 1%	65T8709	0.10	97W7602	5000	0.01
ERJ-6GEYJ131V	130ohm	150	± 5%	53W4939	0.09	52W0274	5000	0.01
ERJ-6ENF1400V	140ohm	150	± 1%	53W4733	0.10	51W9861	5000	0.01
ERJ-6GEYJ151V	150ohm	150	± 5%	65T8788	0.10	97W7674	5000	0.01
ERJ-6GEYJ161V	160ohm	150	± 5%	53W4941	0.10	52W0281	5000	0.01
ERJ-6ENF1740V	174ohm	150	± 1%	53W4758	0.10	51W9914	5000	0.01
ERJ-6GEYJ181V	180ohm	150	± 5%	65T8793	0.10	97W7679	5000	0.01
ERJ-6ENF1820V	182ohm	150	± 1%	53W4764	0.10	51W9927	5000	0.01
ERJ-6ENF2000V	200ohm	150	± 1%	65T8714	0.10	97W7606	5000	0.01
ERJ-6GEYJ201V	200ohm	150	± 5%	65T8797	0.10	97W7682	5000	0.01
ERJ-6GEYJ221V	220ohm	150	± 5%	65T8803	0.10	97W7688	5000	0.01
ERJ-6ENF2210V	221ohm	150	± 1%	65T8720	0.10	97W7612	5000	0.01
ERJ-6GEYJ241V	240ohm	150	± 5%	65T8808	0.10	97W7693	5000	0.01
ERJ-6ENF2400V	240ohm	150	± 1%	53W4786	0.10	51W9982	5000	0.01
ERJ-6ENF2430V	243ohm	150	± 1%	65T8724	0.10	97W7616	5000	0.01
ERJ-6ENF2490V	249ohm	150	± 1%	65T8725	0.10	97W7617	5000	0.01
ERJ-6GEYJ271V	270ohm	150	± 5%	65T8811	0.10	97W7696	5000	0.01
ERJ-6ENF2740V	274ohm	150	± 1%	65T8729	0.10	97W7621	5000	0.01
ERJ-6ENF2800V	280ohm	150	± 1%	53W4798	0.10	52W0009	5000	0.01
ERJ-6ENF2870V	287ohm	150	± 1%	53W4801	0.09	52W0013	5000	0.01
ERJ-6GEYJ301V	300ohm	150	± 5%	65T8814	0.10	97W7699	5000	0.01
ERJ-6ENF3000V	300ohm	150	± 1%	53W4807	0.10	52W0024	5000	0.01
ERJ-6ENF3010V	301ohm	150	± 1%	65T8734	0.10	97W7625	5000	0.01
ERJ-6GEYJ331V	330ohm	150	± 5%	65T8817	0.10	97W7702	5000	0.01
ERJ-6ENF3320V	332ohm	150	± 1%	65T8739	0.10	97W7630	5000	0.01
ERJ-6ENF3400V	340ohm	150	± 1%	53W4819	0.10	52W0044	5000	0.01
ERJ-6ENF3480V	348ohm	150	± 1%	53W4822	0.10	52W0048	5000	0.01
ERJ-6GEYJ361V	360ohm	150	± 5%	53W4955	0.10	52W0310	5000	0.01
ERJ-6ENF3600V	360ohm	150	± 1%	53W4827	0.10	52W0059	5000	0.01
ERJ-6ENF3650V	365ohm	150	± 1%	53W4830	0.10	52W0063	5000	0.01
ERJ-6ENF3740V	374ohm	150	± 1%	53W4833	0.10	52W0068	5000	0.01
ERJ-6GEYJ391V	390ohm	150	± 5%	65T8820	0.10	97W7705	5000	0.01
ERJ-6ENF3920V	392ohm	150	± 1%	53W4839	0.10	52W0078	5000	0.01
ERJ-6ENF4020V	402ohm	150	± 1%	53W4841	0.10	52W0080	5000	0.01
ERJ-6ENF4220V	422ohm	150	± 1%	53W4845	0.10	52W0088	5000	0.01
ERJ-6GEYJ431V	430ohm	150	± 5%	53W4959	0.10	52W0320	5000	0.01
ERJ-6ENF4530V	453ohm	150	± 1%	53W4854	0.10	52W0108	5000	0.01
ERJ-6GEYJ471V	470ohm	150	± 5%	65T8826	0.10	97W7710	5000	0.01
ERJ-6ENF4750V	475ohm	150	± 1%	65T8748	0.10	97W7638	5000	0.01
ERJ-6ENF4990V	499ohm	150	± 1%	65T8753	0.10	97W7642	5000	0.01
ERJ-6GEYJ511V	510ohm	150	± 5%	65T8831	0.10	97W7715	5000	0.01
ERJ-6ENF5100V	510ohm	150	± 1%	53W4862	0.10	52W0123	5000	0.01
ERJ-6ENF5110V	511ohm	150	± 1%	65T8758	0.10	97W7646	5000	0.01
ERJ-6ENF5490V	549ohm	150	± 1%	53W4870	0.10	52W0139	5000	0.01
ERJ-6GEYJ561V	560ohm	150	± 5%	65T8834	0.10	97W7718	5000	0.01
ERJ-6ENF5620V	562ohm	150	± 1%	53W4873	0.10	52W0144	5000	0.01
ERJ-6ENF6040V	604ohm	150	± 1%	53W4879	0.10	52W0157	5000	0.01
ERJ-6ENF6190V	619ohm	150	± 1%	53W4881	0.10	52W0160	5000	0.01
ERJ-6GEYJ621V	620ohm	150	± 5%	53W4966	0.10	52W0334	5000	0.01
ERJ-6ENF6200V	620ohm	150	± 1%	53W4884	0.10	52W0165	5000	0.01
ERJ-6ENF6490V	649ohm	150	± 1%	53W4889	0.10	52W0175	5000	0.01
ERJ-6ENF6650V	665ohm	150	± 1%	53W4892	0.10	52W0180	5000	0.01
ERJ-6GEYJ681V	680ohm	150	± 5%	65T8839	0.10	97W7722	5000	0.01
ERJ-6ENF6810V	681ohm	150	± 1%	65T8765	0.10	97W7653	5000	0.01
ERJ-6ENF6980V	698ohm	150	± 1%	53W4897	0.10	52W0188	5000	0.01
ERJ-6ENF7150V	715ohm	150	± 1%	53W4900	0.10	52W0193	5000	0.01
ERJ-6ENF7320V	732ohm	150	± 1%	53W4903	0.10	52W0198	5000	0.01
ERJ-6ENF7500V	750ohm	150	± 1%	65T8768	0.10	97W7656	5000	0.01
ERJ-6GEYJ751V	750ohm	150	± 5%	65T8843	0.10	97W7726	5000	0.01
ERJ-6ENF7870V	787ohm	150	± 1%	53W4909	0.10	52W0209	5000	0.01
ERJ-6ENF8060V	806ohm	150	± 1%	53W4912	0.10	52W0214	5000	0.01
ERJ-6GEYJ821V	820ohm	150	± 5%	65T8844	0.10	97W7727	5000	0.01
ERJ-6ENF8250V	825ohm	150	± 1%	65T8771	0.10	97W7659	5000	0.01
ERJ-6ENF8870V	887ohm	150	± 1%	53W4920	0.10	52W0231	5000	0.01
ERJ-6ENF9090V	909ohm	150	± 1%	53W4923	0.10	52W0236	5000	0.01
ERJ-6ENF9530V	953ohm	150	± 1%	53W4929	0.10	52W0250	5000	0.01
ERJ-6ENF9760V	976ohm	150	± 1%	53W4932	0.10	52W0255	5000	0.01
ERJ-6GEYJ102V	1kohm	150	± 5%	65T8778	0.10	97W7665	5000	0.01
ERJ-6ENF1021V	1.02kohm	150	± 1%	53W4705	0.10	51W9790	5000	0.01
ERJ-6ENF1051V	1.05kohm	150	± 1%	53W4707	0.10	51W9794	5000	0.01
ERJ-6ENF1071V	1.07kohm	150	± 1%	53W4710	0.10	51W9799	5000	0.01
ERJ-6GEYJ112V	1.1kohm	150	± 5%	53W4936	0.10	52W0267	5000	0.01

➤CONTINUED➤

ERJ SERIES PRECISION THICK FILM CHIP RESISTORS, 0805 CASE (CONT.)

Mfg. Part No.	Resistance	Voltage Rating (V)	Resistance Tolerance	Tape Cut Stock No.	Tape Cut Price Each 1-4999	Tape & Reel Stock No.	Tape & Reel Reel Qty	Tape & Reel Price Each 1-4999
● ERJ-6ENF1101V	1.1kohm	150	± 1%	53W4714	0.10	51W9808	5000	0.01
● ERJ-6GEYJ122V	1.2kohm	150	± 5%	65T8784	0.10	97W7670	5000	0.01
● ERJ-6ENF1211V	1.21kohm	150	± 1%	65T8706	0.10	97W7599	5000	0.01
● ERJ-6ENF1241V	1.24kohm	150	± 1%	53W4722	0.10	51W9833	5000	0.01
● ERJ-6ENF1271V	1.27kohm	150	± 1%	53W4724	0.10	51W9837	5000	0.01
● ERJ-6GEYJ132V	1.3kohm	150	± 5%	65T8786	0.10	97W7672	5000	0.01
● ERJ-6ENF1301V	1.3kohm	150	± 1%	53W4726	0.10	51W9844	5000	0.01
● ERJ-6ENF1331V	1.33kohm	150	± 1%	53W4729	0.09	51W9849	5000	0.01
● ERJ-6ENF1401V	1.4kohm	150	± 1%	53W4734	0.10	51W9862	5000	0.01
● ERJ-6ENF1431V	1.43kohm	150	± 1%	53W4737	0.10	51W9867	5000	0.01
● ERJ-6ENF1471V	1.47kohm	150	± 1%	53W4740	0.10	51W9872	5000	0.01
● ERJ-6GEYJ152V	1.5kohm	150	± 5%	65T8789	0.10	97W7675	5000	0.01
● ERJ-6ENF1541V	1.54kohm	150	± 1%	53W4743	0.10	51W9880	5000	0.01
● ERJ-6ENF1581V	1.58kohm	150	± 1%	53W4746	0.10	51W9885	5000	0.01
● ERJ-6GEYJ162V	1.6kohm	150	± 5%	65T8792	0.10	97W7678	5000	0.01
● ERJ-6ENF1601V	1.6kohm	150	± 1%	53W4749	0.10	51W9894	5000	0.01
● ERJ-6ENF1621V	1.62kohm	150	± 1%	53W4751	0.10	51W9899	5000	0.01
● ERJ-6ENF1651V	1.65kohm	150	± 1%	53W4752	0.10	51W9903	5000	0.01
● ERJ-6ENF1691V	1.69kohm	150	± 1%	53W4755	0.10	51W9908	5000	0.01
● ERJ-6ENF1741V	1.74kohm	150	± 1%	53W4759	0.10	51W9915	5000	0.01
● ERJ-6ENF1781V	1.78kohm	150	± 1%	53W4761	0.10	51W9920	5000	0.01
● ERJ-6GEYJ182V	1.8kohm	150	± 5%	65T8794	0.10	97W7680	5000	0.01
● ERJ-6ENF1821V	1.82kohm	150	± 1%	65T8711	0.10	97W7604	5000	0.01
● ERJ-6ENF1871V	1.87kohm	150	± 1%	53W4767	0.10	51W9932	5000	0.01
● ERJ-6ENF1911V	1.91kohm	150	± 1%	53W4769	0.10	51W9939	5000	0.01
● ERJ-6ENF2001V	2kohm	150	± 1%	65T8715	0.10	97W7607	5000	0.01
● ERJ-6GEYJ202V	2kohm	150	± 5%	65T8798	0.10	97W7683	5000	0.01
● ERJ-6ENF2051V	2.05kohm	150	± 1%	53W4773	0.10	51W9950	5000	0.01
● ERJ-6ENF2101V	2.1kohm	150	± 1%	53W4775	0.10	51W9956	5000	0.01
● ERJ-6ENF2151V	2.15kohm	150	± 1%	53W4777	0.10	51W9961	5000	0.01
● ERJ-6GEYJ222V	2.2kohm	150	± 5%	65T8804	0.10	97W7689	5000	0.01
● ERJ-6ENF2211V	2.21kohm	150	± 1%	65T8721	0.10	97W7613	5000	0.01
● ERJ-6ENF2261V	2.26kohm	150	± 1%	53W4780	0.10	51W9967	5000	0.01
● ERJ-6ENF2321V	2.32kohm	150	± 1%	53W4782	0.10	51W9973	5000	0.01
● ERJ-6ENF2371V	2.37kohm	150	± 1%	53W4784	0.10	51W9977	5000	0.01
● ERJ-6GEYJ242V	2.4kohm	150	± 5%	53W4947	0.10	52W0294	5000	0.01
● ERJ-6ENF2401V	2.4kohm	150	± 1%	53W4787	0.10	51W9983	5000	0.01
● ERJ-6ENF2431V	2.43kohm	150	± 1%	53W4789	0.10	51W9986	5000	0.01
● ERJ-6ENF2491V	2.49kohm	150	± 1%	65T8726	0.10	97W7618	5000	0.01
● ERJ-6ENF2551V	2.55kohm	150	± 1%	53W4791	0.10	51W9991	5000	0.01
● ERJ-6ENF2611V	2.61kohm	150	± 1%	53W4793	0.10	51W9997	5000	0.01
● ERJ-6ENF2671V	2.67kohm	150	± 1%	53W4795	0.10	52W0002	5000	0.01
● ERJ-6GEYJ272V	2.7kohm	150	± 5%	65T8812	0.10	97W7697	5000	0.01
● ERJ-6ENF2741V	2.74kohm	150	± 1%	65T8730	0.10	97W7622	5000	0.01
● ERJ-6ENF2801V	2.8kohm	150	± 1%	53W4799	0.10	52W0010	5000	0.01
● ERJ-6ENF2871V	2.87kohm	150	± 1%	53W4802	0.10	52W0014	5000	0.01
● ERJ-6ENF2941V	2.94kohm	150	± 1%	53W4804	0.10	52W0018	5000	0.01
● ERJ-6ENF3001V	3kohm	150	± 1%	65T8733	0.10	97W7624	5000	0.01
● ERJ-6GEYJ302V	3kohm	150	± 5%	65T8815	0.10	97W7700	5000	0.01
● ERJ-6ENF3011V	3.01kohm	150	± 1%	65T8735	0.10	97W7626	5000	0.01
● ERJ-6ENF3091V	3.09kohm	150	± 1%	53W4811	0.10	52W0029	5000	0.01
● ERJ-6ENF3161V	3.16kohm	150	± 1%	53W4814	0.10	52W0034	5000	0.01
● ERJ-6ENF3241V	3.24kohm	150	± 1%	53W4816	0.10	52W0038	5000	0.01
● ERJ-6GEYJ332V	3.3kohm	150	± 5%	65T8818	0.10	97W7703	5000	0.01
● ERJ-6ENF3321V	3.32kohm	150	± 1%	65T8740	0.10	97W7631	5000	0.01
● ERJ-6ENF3401V	3.4kohm	150	± 1%	53W4820	0.10	52W0045	5000	0.01
● ERJ-6ENF3481V	3.48kohm	150	± 1%	53W4823	0.10	52W0049	5000	0.01
● ERJ-6ENF3571V	3.57kohm	150	± 1%	53W4825	0.10	52W0054	5000	0.01
● ERJ-6GEYJ362V	3.6kohm	150	± 5%	53W4956	0.10	52W0311	5000	0.01
● ERJ-6ENF3601V	3.6kohm	150	± 1%	53W4828	0.10	52W0060	5000	0.01
● ERJ-6ENF3651V	3.65kohm	150	± 1%	53W4831	0.10	52W0064	5000	0.01
● ERJ-6ENF3741V	3.74kohm	150	± 1%	53W4834	0.10	52W0069	5000	0.01
● ERJ-6ENF3831V	3.83kohm	150	± 1%	53W4836	0.10	52W0074	5000	0.01
● ERJ-6GEYJ392V	3.9kohm	150	± 5%	65T8821	0.10	97W7706	5000	0.01
● ERJ-6ENF3921V	3.92kohm	150	± 1%	65T8742	0.10	97W7632	5000	0.01
● ERJ-6ENF4021V	4.02kohm	150	± 1%	65T8745	0.10	97W7635	5000	0.01
● ERJ-6ENF4121V	4.12kohm	150	± 1%	53W4843	0.10	52W0084	5000	0.01
● ERJ-6ENF4221V	4.22kohm	150	± 1%	53W4846	0.10	52W0089	5000	0.01
● ERJ-6GEYJ432V	4.3kohm	150	± 5%	53W4960	0.10	52W0321	5000	0.01
● ERJ-6ENF4301V	4.3kohm	150	± 1%	53W4848	0.10	52W0095	5000	0.01
● ERJ-6ENF4321V	4.32kohm	150	± 1%	53W4850	0.10	52W0099	5000	0.01
● ERJ-6ENF4421V	4.42kohm	150	± 1%	53W4852	0.10	52W0104	5000	0.01
● ERJ-6ENF4531V	4.53kohm	150	± 1%	53W4855	0.10	52W0109	5000	0.01

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ERJ SERIES PRECISION THICK FILM CHIP RESISTORS, 0805 CASE (CONT.)

Mfg. Part No.	Resistance	Voltage Rating (V)	Resistance Tolerance	Tape Cut Stock No.	Tape Cut Price Each 1-4999	Tape & Reel Stock No.	Tape & Reel Reel Qty	Tape & Reel Price Each 1-4999
● ERJ-6ENF4641V	4.64kohm	150	± 1%	53W4857	0.10	52W0114	5000	0.01
● ERJ-6GEYJ472V	4.7kohm	150	± 5%	65T8827	0.10	97W7711	5000	0.01
● ERJ-6ENF4871V	4.87kohm	150	± 1%	65T8751	0.10	97W7640	5000	0.01
● ERJ-6GEYJ512V	5.1kohm	150	± 5%	65T8832	0.10	97W7716	5000	0.01
● ERJ-6ENF5101V	5.1kohm	150	± 1%	53W4863	0.10	52W0124	5000	0.01
● ERJ-6ENF5111V	5.11kohm	150	± 1%	65T8759	0.10	97W7647	5000	0.01
● ERJ-6ENF5231V	5.23kohm	150	± 1%	53W4866	0.10	52W0130	5000	0.01
● ERJ-6ENF5361V	5.36kohm	150	± 1%	53W4868	0.10	52W0135	5000	0.01
● ERJ-6ENF5491V	5.49kohm	150	± 1%	53W4871	0.10	52W0140	5000	0.01
● ERJ-6GEYJ562V	5.6kohm	150	± 5%	65T8835	0.10	97W7719	5000	0.01
● ERJ-6ENF5621V	5.62kohm	150	± 1%	65T8761	0.10	97W7649	5000	0.01
● ERJ-6ENF5761V	5.76kohm	150	± 1%	53W4874	0.10	52W0148	5000	0.01
● ERJ-6ENF5901V	5.9kohm	150	± 1%	53W4876	0.10	52W0153	5000	0.01
● ERJ-6ENF6041V	6.04kohm	150	± 1%	65T8763	0.10	97W7651	5000	0.01
● ERJ-6ENF6191V	6.19kohm	150	± 1%	53W4882	0.10	52W0161	5000	0.01
● ERJ-6GEYJ622V	6.2kohm	150	± 5%	53W4967	0.10	52W0335	5000	0.01
● ERJ-6ENF6201V	6.2kohm	150	± 1%	53W4885	0.10	52W0166	5000	0.01
● ERJ-6ENF6341V	6.34kohm	150	± 1%	53W4887	0.10	52W0171	5000	0.01
● ERJ-6ENF6491V	6.49kohm	150	± 1%	53W4890	0.10	52W0176	5000	0.01
● ERJ-6ENF6651V	6.65kohm	150	± 1%	53W4893	0.10	52W0181	5000	0.01
● ERJ-6GEYJ682V	6.8kohm	150	± 5%	65T8840	0.10	97W7723	5000	0.01
● ERJ-6ENF6811V	6.81kohm	150	± 1%	65T8766	0.10	97W7654	5000	0.01
● ERJ-6ENF6981V	6.98kohm	150	± 1%	53W4898	0.10	52W0189	5000	0.01
● ERJ-6ENF7151V	7.15kohm	150	± 1%	53W4901	0.10	52W0194	5000	0.01
● ERJ-6ENF7321V	7.32kohm	150	± 1%	53W4904	0.10	52W0199	5000	0.01
● ERJ-6ENF7501V	7.5kohm	150	± 1%	65T8769	0.10	97W7657	5000	0.01
● ERJ-6GEYJ752V	7.5kohm	150	± 5%	53W4969	0.10	52W0342	5000	0.01
● ERJ-6ENF7681V	7.68kohm	150	± 1%	53W4907	0.10	52W0205	5000	0.01
● ERJ-6ENF7871V	7.87kohm	150	± 1%	53W4910	0.10	52W0210	5000	0.01
● ERJ-6ENF8061V	8.06kohm	150	± 1%	53W4913	0.10	52W0215	5000	0.01
● ERJ-6GEYJ822V	8.2kohm	150	± 5%	53W4972	0.10	52W0348	5000	0.01
● ERJ-6ENF8251V	8.25kohm	150	± 1%	65T8772	0.10	97W7660	5000	0.01
● ERJ-6ENF8451V	8.45kohm	150	± 1%	53W4917	0.10	52W0222	5000	0.01
● ERJ-6ENF8661V	8.66kohm	150	± 1%	53W4919	0.10	52W0227	5000	0.01
● ERJ-6ENF8871V	8.87kohm	150	± 1%	53W4921	0.10	52W0232	5000	0.01
● ERJ-6ENF9091V	9.09kohm	150	± 1%	65T8774	0.10	97W7661	5000	0.01
● ERJ-6GEYJ912V	9.1kohm	150	± 5%	65T8845	0.10	97W7728	5000	0.01
● ERJ-6ENF9101V	9.1kohm	150	± 1%	53W4926	0.10	52W0241	5000	0.01
● ERJ-6ENF9311V	9.31kohm	150	± 1%	53W4928	0.10	52W0246	5000	0.01
● ERJ-6ENF9531V	9.53kohm	150	± 1%	53W4930	0.10	52W0251	5000	0.01
● ERJ-6ENF9761V	9.76kohm	150	± 1%	53W4933	0.10	52W0256	5000	0.01
● ERJ-6GEYJ103V	10kohm	150	± 5%	67T1248	0.09	18X0450	5000	0.01
● ERJ-6ENF1022V	10.2kohm	150	± 1%	65T8703	0.10	97W7596	5000	0.01
● ERJ-6ENF1052V	10.5kohm	150	± 1%	53W4708	0.10	51W9795	5000	0.01
● ERJ-6ENF1072V	10.7kohm	150	± 1%	53W4711	0.10	51W9800	5000	0.01
● ERJ-6GEYJ113V	11kohm	150	± 5%	53W4937	0.10	52W0268	5000	0.01
● ERJ-6ENF1102V	11kohm	150	± 1%	53W4715	0.10	51W9809	5000	0.01
● ERJ-6ENF1132V	11.3kohm	150	± 1%	65T8704	0.10	97W7597	5000	0.01
● ERJ-6ENF1152V	11.5kohm	150	± 1%	53W4717	0.10	51W9818	5000	0.01
● ERJ-6ENF1182V	11.8kohm	150	± 1%	53W4719	0.10	51W9823	5000	0.01
● ERJ-6GEYJ123V	12kohm	150	± 5%	65T8785	0.10	97W7671	5000	0.01
● ERJ-6ENF1212V	12.1kohm	150	± 1%	65T8707	0.10	97W7600	5000	0.01
● ERJ-6ENF1242V	12.4kohm	150	± 1%	65T8708	0.10	97W7601	5000	0.01
● ERJ-6ENF1272V	12.7kohm	150	± 1%	53W4725	0.10	51W9838	5000	0.01
● ERJ-6GEYJ133V	13kohm	150	± 5%	53W4940	0.10	52W0275	5000	0.01
● ERJ-6ENF1302V	13kohm	150	± 1%	53W4727	0.10	51W9845	5000	0.01
● ERJ-6ENF1332V	13.3kohm	150	± 1%	53W4730	0.10	51W9850	5000	0.01
● ERJ-6ENF1372V	13.7kohm	150	± 1%	53W4732	0.10	51W9855	5000	0.01
● ERJ-6ENF1402V	14kohm	150	± 1%	53W4735	0.10	51W9863	5000	0.01
● ERJ-6ENF1432V	14.3kohm	150	± 1%	53W4738	0.10	51W9868	5000	0.01
● ERJ-6ENF1472V	14.7kohm	150	± 1%	53W4741	0.10	51W9873	5000	0.01
● ERJ-6GEYJ153V	15kohm	150	± 5%	65T8790	0.10	97W7676	5000	0.01
● ERJ-6ENF1542V	15.4kohm	150	± 1%	53W4744	0.10	51W9881	5000	0.01
● ERJ-6ENF1582V	15.8kohm	150	± 1%	53W4747	0.10	51W9886	5000	0.01
● ERJ-6ENF1602V	16kohm	150	± 1%	53W4750	0.10	51W9895	5000	0.01
● ERJ-6ENF1622V	16.2kohm	150	± 1%	65T8710	0.10	97W7603	5000	0.01
● ERJ-6ENF1652V	16.5kohm	150	± 1%	53W4753	0.10	51W9904	5000	0.01
● ERJ-6ENF1692V	16.9kohm	150	± 1%	53W4756	0.10	51W9909	5000	0.01
● ERJ-6ENF1742V	17.4kohm	150	± 1%	53W4760	0.10	51W9916	5000	0.01
● ERJ-6ENF1782V	17.8kohm	150	± 1%	53W4762	0.10	51W9921	5000	0.01
● ERJ-6GEYJ183V	18kohm	150	± 5%	53W4943	0.10	52W0286	5000	0.01
● ERJ-6ENF1822V	18.2kohm	150	± 1%	53W4765	0.10	51W9928	5000	0.01
● ERJ-6ENF1872V	18.7kohm	150	± 1%	53W4768	0.10	51W9933	5000	0.01

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ERJ SERIES PRECISION THICK FILM CHIP RESISTORS, 0805 CASE (CONT.)

Mfg. Part No.	Resistance	Voltage Rating (V)	Resistance Tolerance	Tape Cut Stock No.	Tape Cut Price Each 1-4999	Tape & Reel Stock No.	Tape & Reel Reel Qty	Tape & Reel Price Each 1-4999
ERJ-6ENF1912V	19.1kohm	150	± 1%	53W4770	0.10	51W9940	5000	0.01
ERJ-6ENF2002V	20kohm	150	± 1%	65T8716	0.10	97W7608	5000	0.01
ERJ-6GEYJ203V	20kohm	150	± 5%	65T8799	0.10	97W7684	5000	0.01
ERJ-6ENF2052V	20.5kohm	150	± 1%	53W4774	0.10	51W9951	5000	0.01
ERJ-6ENF2102V	21kohm	150	± 1%	53W4776	0.10	51W9957	5000	0.01
ERJ-6ENF2152V	21.5kohm	150	± 1%	65T8718	0.10	97W7610	5000	0.01
ERJ-6GEYJ223V	22kohm	150	± 5%	65T8805	0.10	97W7690	5000	0.01
ERJ-6ENF2212V	22.1kohm	150	± 1%	65T8722	0.10	97W7614	5000	0.01
ERJ-6ENF2262V	22.6kohm	150	± 1%	53W4781	0.10	51W9968	5000	0.01
ERJ-6ENF2322V	23.2kohm	150	± 1%	53W4783	0.10	51W9974	5000	0.01
ERJ-6ENF2372V	23.7kohm	150	± 1%	53W4785	0.10	51W9978	5000	0.01
ERJ-6GEYJ243V	24kohm	150	± 5%	65T8809	0.10	97W7694	5000	0.01
ERJ-6ENF2402V	24kohm	150	± 1%	53W4788	0.10	51W9984	5000	0.01
ERJ-6ENF2432V	24.3kohm	150	± 1%	53W4790	0.10	51W9987	5000	0.01
ERJ-6ENF2492V	24.9kohm	150	± 1%	65T8727	0.10	97W7619	5000	0.01
ERJ-6ENF2552V	25.5kohm	150	± 1%	53W4792	0.10	51W9992	5000	0.01
ERJ-6ENF2612V	26.1kohm	150	± 1%	53W4794	0.10	51W9998	5000	0.01
ERJ-6ENF2672V	26.7kohm	150	± 1%	53W4796	0.10	52W0003	5000	0.01
ERJ-6GEYJ273V	27kohm	150	± 5%	53W4948	0.10	52W0297	5000	0.01
ERJ-6ENF2742V	27.4kohm	150	± 1%	65T8731	0.10	97W7623	5000	0.01
ERJ-6ENF2802V	28kohm	150	± 1%	53W4800	0.10	52W0011	5000	0.01
ERJ-6ENF2872V	28.7kohm	150	± 1%	53W4803	0.10	52W0015	5000	0.01
ERJ-6ENF2942V	29.4kohm	150	± 1%	53W4805	0.10	52W0019	5000	0.01
ERJ-6GEYJ303V	30kohm	150	± 5%	53W4952	0.10	52W0304	5000	0.01
ERJ-6ENF3002V	30kohm	150	± 1%	53W4808	0.10	52W0025	5000	0.01
ERJ-6ENF3012V	30.1kohm	150	± 1%	65T8736	0.10	97W7627	5000	0.01
ERJ-6ENF3092V	30.9kohm	150	± 1%	53W4812	0.10	52W0030	5000	0.01
ERJ-6ENF3162V	31.6kohm	150	± 1%	53W4815	0.10	52W0035	5000	0.01
ERJ-6ENF3242V	32.4kohm	150	± 1%	53W4817	0.10	52W0039	5000	0.01
ERJ-6GEYJ333V	33kohm	150	± 5%	65T8819	0.10	97W7704	5000	0.01
ERJ-6ENF3402V	34kohm	150	± 1%	53W4821	0.10	52W0046	5000	0.01
ERJ-6ENF3482V	34.8kohm	150	± 1%	53W4824	0.10	52W0050	5000	0.01
ERJ-6ENF3572V	35.7kohm	150	± 1%	53W4826	0.10	52W0055	5000	0.01
ERJ-6ENF3602V	36kohm	150	± 1%	53W4829	0.10	52W0061	5000	0.01
ERJ-6ENF3652V	36.5kohm	150	± 1%	53W4832	0.10	52W0065	5000	0.01
ERJ-6ENF3742V	37.4kohm	150	± 1%	53W4835	0.10	52W0070	5000	0.01
ERJ-6ENF3832V	38.3kohm	150	± 1%	53W4837	0.10	52W0075	5000	0.01
ERJ-6GEYJ393V	39kohm	150	± 5%	65T8822	0.10	97W7707	5000	0.01
ERJ-6ENF3922V	39.2kohm	150	± 1%	65T8743	0.10	97W7633	5000	0.01
ERJ-6ENF4022V	40.2kohm	150	± 1%	65T8746	0.10	97W7636	5000	0.01
ERJ-6ENF4122V	41.2kohm	150	± 1%	53W4844	0.10	52W0085	5000	0.01
ERJ-6ENF4222V	42.2kohm	150	± 1%	53W4847	0.10	52W0090	5000	0.01
ERJ-6ENF4302V	43kohm	150	± 1%	53W4849	0.09	52W0096	5000	0.01
ERJ-6ENF4322V	43.2kohm	150	± 1%	53W4851	0.10	52W0100	5000	0.01
ERJ-6ENF4422V	44.2kohm	150	± 1%	53W4853	0.10	52W0105	5000	0.01
ERJ-6ENF4532V	45.3kohm	150	± 1%	53W4856	0.10	52W0110	5000	0.01
ERJ-6ENF4642V	46.4kohm	150	± 1%	53W4858	0.10	52W0115	5000	0.01
ERJ-6GEYJ473V	47kohm	150	± 5%	65T8828	0.10	97W7712	5000	0.01
ERJ-6ENF4752V	47.5kohm	150	± 1%	65T8750	0.10	97W7639	5000	0.01
ERJ-6ENF4872V	48.7kohm	150	± 1%	53W4860	0.10	52W0120	5000	0.01
ERJ-6ENF4992V	49.9kohm	150	± 1%	65T8755	0.10	97W7643	5000	0.01
ERJ-6GEYJ513V	51kohm	150	± 5%	53W4963	0.10	52W0327	5000	0.01
ERJ-6ENF5102V	51kohm	150	± 1%	53W4864	0.10	52W0125	5000	0.01
ERJ-6ENF5112V	51.1kohm	150	± 1%	65T8760	0.10	97W7648	5000	0.01
ERJ-6ENF5232V	52.3kohm	150	± 1%	53W4867	0.10	52W0131	5000	0.01
ERJ-6ENF5362V	53.6kohm	150	± 1%	53W4869	0.10	52W0136	5000	0.01
ERJ-6ENF5492V	54.9kohm	150	± 1%	53W4872	0.10	52W0141	5000	0.01
ERJ-6GEYJ563V	56kohm	150	± 5%	65T8836	0.10	97W7720	5000	0.01
ERJ-6ENF5622V	56.2kohm	150	± 1%	65T8762	0.10	97W7650	5000	0.01
ERJ-6ENF5762V	57.6kohm	150	± 1%	53W4875	0.10	52W0149	5000	0.01
ERJ-6ENF5902V	59kohm	150	± 1%	53W4877	0.10	52W0154	5000	0.01
ERJ-6ENF6042V	60.4kohm	150	± 1%	65T8764	0.10	97W7652	5000	0.01
ERJ-6ENF6192V	61.9kohm	150	± 1%	53W4883	0.10	52W0162	5000	0.01
ERJ-6GEYJ623V	62kohm	150	± 5%	53W4968	0.10	52W0336	5000	0.01
ERJ-6ENF6202V	62kohm	150	± 1%	53W4886	0.10	52W0167	5000	0.01
ERJ-6ENF6342V	63.4kohm	150	± 1%	53W4888	0.10	52W0172	5000	0.01
ERJ-6ENF6492V	64.9kohm	150	± 1%	53W4891	0.10	52W0177	5000	0.01
ERJ-6ENF6652V	66.5kohm	150	± 1%	53W4894	0.10	52W0182	5000	0.01
ERJ-6GEYJ683V	68kohm	150	± 5%	65T8841	0.10	97W7724	5000	0.01
ERJ-6ENF6812V	68.1kohm	150	± 1%	53W4896	0.10	52W0185	5000	0.01
ERJ-6ENF6982V	69.8kohm	150	± 1%	53W4899	0.10	52W0190	5000	0.01
ERJ-6ENF7152V	71.5kohm	150	± 1%	53W4902	0.10	52W0195	5000	0.01
ERJ-6ENF7322V	73.2kohm	150	± 1%	53W4905	0.10	52W0200	5000	0.01

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ERJ SERIES PRECISION THICK FILM CHIP RESISTORS, 0805 CASE (CONT.)

Mfg. Part No.	Resistance	Voltage Rating (V)	Resistance Tolerance	Tape Cut Stock No.	Tape Cut Price Each 1-4999	Tape & Reel Stock No.	Tape & Reel Reel Qty	Tape & Reel Price Each 1-4999
ERJ-6ENF7502V	75kohm	150	± 1%	65T8770	0.10	97W7658	5000	0.01
ERJ-6GEYJ753V	75kohm	150	± 5%	53W4970	0.10	52W0343	5000	0.01
ERJ-6ENF7682V	76.8kohm	150	± 1%	53W4908	0.10	52W0206	5000	0.01
ERJ-6ENF7872V	78.7kohm	150	± 1%	53W4911	0.10	52W0211	5000	0.01
ERJ-6ENF8062V	80.6kohm	150	± 1%	53W4914	0.10	52W0216	5000	0.01
ERJ-6GEYJ823V	82kohm	150	± 5%	53W4973	0.10	52W0349	5000	0.01
ERJ-6ENF8252V	82.5kohm	150	± 1%	53W4916	0.10	52W0219	5000	0.01
ERJ-6ENF8452V	84.5kohm	150	± 1%	53W4918	0.09	52W0223	5000	0.01
ERJ-6ENF9092V	90.9kohm	150	± 1%	53W4924	0.10	52W0237	5000	0.01
ERJ-6ENF9102V	91kohm	150	± 1%	53W4927	0.10	52W0242	5000	0.01
ERJ-6ENF9532V	95.3kohm	150	± 1%	53W4931	0.10	52W0252	5000	0.01
ERJ-6ENF9762V	97.6kohm	150	± 1%	53W4934	0.09	52W0257	5000	0.01
ERJ-6GEYJ104V	100kohm	150	± 5%	65T8779	0.10	97W7666	5000	0.01
ERJ-6ENF1023V	102kohm	150	± 1%	53W4706	0.10	51W9791	5000	0.01
ERJ-6ENF1053V	105kohm	150	± 1%	53W4709	0.09	51W9796	5000	0.01
ERJ-6ENF1073V	107kohm	150	± 1%	53W4712	0.10	51W9801	5000	0.01
ERJ-6ENF1103V	110kohm	150	± 1%	53W4716	0.10	51W9810	5000	0.01
ERJ-6ENF1153V	115kohm	150	± 1%	53W4718	0.10	51W9819	5000	0.01
ERJ-6GEYJ124V	120kohm	150	± 5%	53W4938	0.10	52W0271	5000	0.01
ERJ-6ENF1213V	121kohm	150	± 1%	53W4720	0.10	51W9830	5000	0.01
ERJ-6ENF1243V	124kohm	150	± 1%	53W4723	0.10	51W9834	5000	0.01
ERJ-6ENF1303V	130kohm	150	± 1%	53W4728	0.10	51W9846	5000	0.01
ERJ-6ENF1333V	133kohm	150	± 1%	53W4731	0.10	51W9851	5000	0.01
ERJ-6ENF1403V	140kohm	150	± 1%	53W4736	0.10	51W9864	5000	0.01
ERJ-6ENF1433V	143kohm	150	± 1%	53W4739	0.10	51W9869	5000	0.01
ERJ-6GEYJ154V	150kohm	150	± 5%	65T8791	0.10	97W7677	5000	0.01
ERJ-6ENF1543V	154kohm	150	± 1%	53W4745	0.10	51W9882	5000	0.01
ERJ-6ENF1583V	158kohm	150	± 1%	53W4748	0.10	51W9887	5000	0.01
ERJ-6ENF1653V	165kohm	150	± 1%	53W4754	0.10	51W9905	5000	0.01
ERJ-6ENF1693V	169kohm	150	± 1%	53W4757	0.10	51W9910	5000	0.01
ERJ-6ENF1783V	178kohm	150	± 1%	53W4763	0.10	51W9922	5000	0.01
ERJ-6GEYJ184V	180kohm	150	± 5%	53W4944	0.10	52W0287	5000	0.01
ERJ-6ENF1823V	182kohm	150	± 1%	53W4766	0.10	51W9929	5000	0.01
ERJ-6ENF1913V	191kohm	150	± 1%	53W4771	0.10	51W9941	5000	0.01
ERJ-6ENF2003V	200kohm	150	± 1%	65T8717	0.10	97W7609	5000	0.01
ERJ-6GEYJ204V	200kohm	150	± 5%	65T8800	0.10	97W7685	5000	0.01
ERJ-6GEYJ224V	220kohm	150	± 5%	65T8806	0.10	97W7691	5000	0.01
ERJ-6ENF2213V	221kohm	150	± 1%	53W4779	0.10	51W9965	5000	0.01
ERJ-6ENF2493V	249kohm	150	± 1%	65T8728	0.10	97W7620	5000	0.01
ERJ-6GEYJ274V	270kohm	150	± 5%	53W4949	0.10	52W0298	5000	0.01
ERJ-6ENF2743V	274kohm	150	± 1%	53W4797	0.10	52W0006	5000	0.01
ERJ-6GEYJ304V	300kohm	150	± 5%	53W4953	0.10	52W0305	5000	0.01
ERJ-6ENF3003V	300kohm	150	± 1%	53W4809	0.10	52W0026	5000	0.01
ERJ-6ENF3013V	301kohm	150	± 1%	53W4810	0.10	52W0027	5000	0.01
ERJ-6ENF3093V	309kohm	150	± 1%	53W4813	0.10	52W0031	5000	0.01
ERJ-6ENF3163V	316kohm	150	± 1%	65T8737	0.09	97W7628	5000	0.01
ERJ-6GEYJ334V	330kohm	150	± 5%	53W4954	0.10	52W0307	5000	0.01
ERJ-6ENF3323V	332kohm	150	± 1%	53W4818	0.10	52W0041	5000	0.01
ERJ-6GEYJ394V	390kohm	150	± 5%	53W4958	0.10	52W0316	5000	0.01
ERJ-6ENF3923V	392kohm	150	± 1%	53W4840	0.10	52W0079	5000	0.01
ERJ-6ENF4023V	402kohm	150	± 1%	53W4842	0.10	52W0081	5000	0.01
ERJ-6GEYJ474V	470kohm	150	± 5%	65T8829	0.10	97W7713	5000	0.01
ERJ-6ENF4753V	475kohm	150	± 1%	53W4859	0.10	52W0117	5000	0.01
ERJ-6ENF4993V	499kohm	150	± 1%	65T8756	0.10	97W7644	5000	0.01
ERJ-6GEYJ514V	510kohm	150	± 5%	53W4964	0.10	52W0328	5000	0.01
ERJ-6ENF5103V	510kohm	150	± 1%	53W4865	0.10	52W0126	5000	0.01
ERJ-6ENF6043V	604kohm	150	± 1%	53W4880	0.10	52W0158	5000	0.01
ERJ-6ENF7503V	750kohm	150	± 1%	53W4906	0.10	52W0202	5000	0.01
ERJ-6ENF9093V	909kohm	150	± 1%	53W4925	0.10	52W0238	5000	0.01
ERJ-6ENF9763V	976kohm	150	± 1%	53W4935	0.10	52W0258	5000	0.01
ERJ-6GEYJ105V	1Mohm	150	± 5%	65T8780	0.10	97W7667	5000	0.01
ERJ-6ENF1504V	1.5Mohm	150	± 1%	53W4742	0.10	51W9878	5000	0.01
ERJ-6GEYJ205V	2Mohm	150	± 5%	65T8801	0.10	97W7686	5000	0.01
ERJ-6ENF2004V	2Mohm	150	± 1%	53W4772	0.10	51W9948	5000	0.01
ERJ-6GEYJ225V	2.2Mohm	150	± 5%	65T8807	0.10	97W7692	5000	0.01
ERJ-6ENF2204V	2.2Mohm	150	± 1%	53W4778	0.10	51W9964	5000	0.01
ERJ-6GEYJ475V	4700kohm	150	± 5%	53W4961	0.10	52W0324	5000	0.01
ERJ-6GEYJ515V	5100kohm	150	± 5%	53W4965	0.10	52W0329	5000	0.01
ERJ-6GEYJ106V	10Mohm	150	± 5%	65T8781	0.10	97W7668	5000	0.01
ERJ-6GEYK156V	15Mohm	150	± 10%	53W4974	0.11	52W0359	5000	0.01
ERJ-6GEYK226V	22Mohm	150	± 10%	53W4975	0.11	52W0361	5000	0.01

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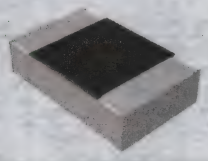
ERJ SERIES PRECISION THICK FILM CHIP RESISTORS, 1206 CASE

RoHS Compliant Available

Panasonic

Features:
- Small size and lightweight
- High reliability Metal glaze thick film resistive element and three layers of electrodes
- Compatible with placement machines
- Taping packaging available
- Suitable for both reflow and flow soldering
- Temperature Coefficent of ±100ppm/°C
- Power Rating: 250mW
- Temperature Range of -55°C to +155°C



Mfg. Part No.	Resistance (kohm)	Voltage Rating (V)	Resistance Tolerance	Tape Cut Stock No.	Tape Cut Price Each 1-49	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-4999
ERJ-8GEY0R00V	0	200	...	65T8967	0.10	97W7827	5000	0.01
ERJ-8GEYJ1R0V	0.001	200	± 5%	65T8891	0.10	97W7762	5000	0.01
ERJ-8GEYJ2R0V	0.002	200	± 5%	65T8910	0.10	97W7779	5000	0.01
ERJ-8GEYJ2R2V	0.0022	200	± 5%	65T8911	0.09	97W7780	5000	0.01
ERJ-8GEYJ4R7V	0.0047	200	± 5%	65T8939	0.10	97W7804	5000	0.01
ERJ-8GEYJ5R1V	0.0051	200	± 5%	65T8946	0.10	97W7809	5000	0.01
ERJ-8GEYJ100V	0.01	200	± 5%	65T8892	0.10	97W7763	5000	0.01
ERJ-8GEYJ150V	0.015	200	± 5%	53W5009	0.10	52W1022	5000	0.01
ERJ-8GEYJ180V	0.018	200	± 5%	53W5010	0.09	52W1029	5000	0.01
ERJ-8ENF20R0V	0.02	200	± 1%	65T8853	0.11	97W7734	5000	0.01
ERJ-8GEYJ200V	0.02	200	± 5%	65T8912	0.10	97W7781	5000	0.01
ERJ-8GEYJ220V	0.022	200	± 5%	65T8917	0.10	97W7786	5000	0.01
ERJ-8ENF22R1V	0.0221	200	± 1%	65T8858	0.11	97W7739	5000	0.01
ERJ-8ENF24R9V	0.0249	200	± 1%	65T8862	0.11	97W7743	5000	0.01
ERJ-8GEYJ330V	0.033	200	± 5%	65T8930	0.10	97W7796	5000	0.01
ERJ-8GEYJ390V	0.039	200	± 5%	65T8936	0.10	97W7802	5000	0.01
ERJ-8GEYJ470V	0.047	200	± 5%	65T8942	0.10	97W7805	5000	0.01
ERJ-8ENF49R9V	0.0499	200	± 1%	65T8877	0.11	97W7753	5000	0.01
ERJ-8GEYJ510V	0.051	200	± 5%	65T8947	0.10	97W7810	5000	0.01
ERJ-8ENF51R0V	0.051	200	± 1%	53W4993	0.11	52W0855	5000	0.01
ERJ-8GEYJ560V	0.056	200	± 5%	65T8952	0.10	97W7815	5000	0.01
ERJ-8ENF60R4V	0.0604	200	± 1%	65T8884	0.11	97W7759	5000	0.01
ERJ-8GEYJ680V	0.068	200	± 5%	65T8956	0.10	97W7818	5000	0.01
ERJ-8ENF75R0V	0.075	200	± 1%	65T8888	0.11	97W7760	5000	0.01
ERJ-8GEYJ750V	0.075	200	± 5%	65T8960	0.10	97W7822	5000	0.01
ERJ-8GEYJ820V	0.082	200	± 5%	65T8962	0.10	97W7824	5000	0.01
ERJ-8GEYJ101V	0.1	200	± 5%	65T8893	0.10	97W7764	5000	0.01
ERJ-8GEYJ121V	0.12	200	± 5%	65T8900	0.10	97W7770	5000	0.01
ERJ-8ENF1210V	0.121	200	± 1%	65T8848	0.11	97W7731	5000	0.01
ERJ-8GEYJ131V	0.13	200	± 5%	53W5008	0.10	52W1018	5000	0.01
ERJ-8GEYJ151V	0.15	200	± 5%	65T8902	0.10	97W7772	5000	0.01
ERJ-8GEYJ181V	0.18	200	± 5%	65T8907	0.10	97W7776	5000	0.01
ERJ-8ENF2000V	0.2	200	± 1%	65T8854	0.11	97W7735	5000	0.01
ERJ-8GEYJ201V	0.2	200	± 5%	65T8913	0.10	97W7782	5000	0.01
ERJ-8GEYJ221V	0.22	200	± 5%	65T8918	0.10	97W7787	5000	0.01
ERJ-8ENF2210V	0.221	200	± 1%	65T8859	0.11	97W7740	5000	0.01
ERJ-8GEYJ241V	0.24	200	± 5%	65T8922	0.10	97W7791	5000	0.01
ERJ-8ENF2400V	0.24	200	± 1%	53W4979	0.11	52W0702	5000	0.01
ERJ-8ENF2430V	0.243	200	± 1%	53W4981	0.11	52W0706	5000	0.01
ERJ-8ENF2490V	0.249	200	± 1%	65T8863	0.11	97W7744	5000	0.01
ERJ-8GEYJ271V	0.27	200	± 5%	65T8924	0.10	97W7792	5000	0.01
ERJ-8ENF3000V	0.3	200	± 1%	53W4984	0.11	52W0749	5000	0.01
ERJ-8ENF3010V	0.301	200	± 1%	65T8866	0.11	97W7746	5000	0.01
ERJ-8GEYJ331V	0.33	200	± 5%	65T8931	0.10	97W7797	5000	0.01
ERJ-8ENF3320V	0.332	200	± 1%	65T8868	0.11	97W7748	5000	0.01
ERJ-8GEYJ361V	0.36	200	± 5%	65T8935	0.10	97W7801	5000	0.01
ERJ-8GEYJ391V	0.39	200	± 5%	65T8937	0.10	97W7803	5000	0.01
ERJ-8ENF4020V	0.402	200	± 1%	53W4990	0.11	52W0811	5000	0.01
ERJ-8GEYJ471V	0.47	200	± 5%	65T8943	0.10	97W7806	5000	0.01
ERJ-8ENF4750V	0.475	200	± 1%	65T8874	0.11	97W7750	5000	0.01
ERJ-8ENF4990V	0.499	200	± 1%	65T8878	0.11	97W7754	5000	0.01
ERJ-8GEYJ511V	0.51	200	± 5%	65T8948	0.10	97W7811	5000	0.01
ERJ-8ENF5100V	0.51	200	± 1%	53W4994	0.11	52W0857	5000	0.01
ERJ-8ENF5110V	0.511	200	± 1%	53W4997	0.11	52W0861	5000	0.01
ERJ-8GEYJ561V	0.56	200	± 5%	65T8953	0.10	97W7816	5000	0.01
ERJ-8ENF6040V	0.604	200	± 1%	53W4998	0.11	52W0893	5000	0.01
ERJ-8GEYJ621V	0.62	200	± 5%	65T8955	0.10	97W7817	5000	0.01
ERJ-8GEYJ681V	0.68	200	± 5%	65T8957	0.10	97W7819	5000	0.01
ERJ-8ENF7500V	0.75	200	± 1%	65T8889	0.11	97W7761	5000	0.01
ERJ-8GEYJ751V	0.75	200	± 5%	65T8961	0.10	97W7823	5000	0.01
ERJ-8GEYJ821V	0.82	200	± 5%	65T8963	0.10	97W7825	5000	0.01
ERJ-8GEYJ102V	1	200	± 5%	65T8894	0.10	97W7765	5000	0.01
ERJ-8ENF1101V	1.1	200	± 1%	53W4976	0.11	52W0522	5000	0.01

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ERJ SERIES PRECISION THICK FILM CHIP RESISTORS, 1206 CASE (CONT.)

Mfg. Part No.	Resistance (kohm)	Voltage Rating (V)	Resistance Tolerance	Tape Cut Stock No.	Tape Cut Price Each 1-49	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-4999
ERJ-8GEYJ122V	1.2	200	± 5%	53W5005	0.10	52W1013	5000	0.01
ERJ-8ENF1211V	1.21	200	± 1%	65T8849	0.11	97W7732	5000	0.01
ERJ-8ENF1301V	1.3	200	± 1%	65T8851	0.11	97W7733	5000	0.01
ERJ-8GEYJ132V	1.3	200	± 5%	65T8901	0.10	97W7771	5000	0.01
ERJ-8GEYJ152V	1.5	200	± 5%	65T8903	0.10	97W7773	5000	0.01
ERJ-8GEYJ182V	1.8	200	± 5%	65T8908	0.10	97W7777	5000	0.01
ERJ-8ENF2001V	2	200	± 1%	65T8855	0.11	97W7736	5000	0.01
ERJ-8GEYJ202V	2	200	± 5%	65T8914	0.10	97W7783	5000	0.01
ERJ-8GEYJ222V	2.2	200	± 5%	65T8919	0.10	97W7788	5000	0.01
ERJ-8ENF2211V	2.21	200	± 1%	65T8860	0.11	97W7741	5000	0.01
ERJ-8GEYJ242V	2.4	200	± 5%	53W5012	0.10	52W1037	5000	0.01
ERJ-8ENF2401V	2.4	200	± 1%	53W4980	0.11	52W0703	5000	0.01
ERJ-8ENF2491V	2.49	200	± 1%	65T8864	0.11	97W7745	5000	0.01
ERJ-8ENF2701V	2.7	200	± 1%	53W8374	0.11	53W8459	5000	0.01
ERJ-8GEYJ272V	2.7	200	± 5%	65T8925	0.10	97W7793	5000	0.01
ERJ-8GEYJ302V	3	200	± 5%	65T8928	0.10	97W7795	5000	0.01
ERJ-8ENF3001V	3	200	± 1%	53W4985	0.11	52W0750	5000	0.01
ERJ-8ENF3011V	3.01	200	± 1%	65T8867	0.11	97W7747	5000	0.01
ERJ-8GEYJ332V	3.3	200	± 5%	65T8932	0.10	97W7798	5000	0.01
ERJ-8ENF3321V	3.32	200	± 1%	65T8869	0.11	97W7749	5000	0.01
ERJ-8GEYJ392V	3.9	200	± 5%	65T8938	0.10	01X1474	5000	0.01
ERJ-8ENF4021V	4.02	200	± 1%	53W4991	0.11	52W0812	5000	0.01
ERJ-8GEYJ472V	4.7	200	± 5%	65T8944	0.10	97W7807	5000	0.01
ERJ-8ENF4751V	4.75	200	± 1%	65T8875	0.11	97W7751	5000	0.01
ERJ-8ENF4991V	4.99	200	± 1%	65T8879	0.11	97W7755	5000	0.01
ERJ-8GEYJ512V	5.1	200	± 5%	65T8949	0.10	97W7812	5000	0.01
ERJ-8ENF5101V	5.1	200	± 1%	53W4995	0.11	52W0858	5000	0.01
ERJ-8ENF5111V	5.11	200	± 1%	65T8882	0.11	97W7758	5000	0.01
ERJ-8GEYJ562V	5.6	200	± 5%	53W5018	0.10	52W1068	5000	0.01
ERJ-8ENF6041V	6.04	200	± 1%	53W4999	0.11	52W0894	5000	0.01
ERJ-8ENF6801V	6.8	200	± 1%	53W8376	0.11	53W8461	5000	0.01
ERJ-8GEYJ682V	6.8	200	± 5%	65T8958	0.10	97W7820	5000	0.01
ERJ-8ENF6811V	6.81	200	± 1%	53W5000	0.11	52W0922	5000	0.01
ERJ-8ENF7501V	7.5	200	± 1%	53W5001	0.11	52W0939	5000	0.01
ERJ-8ENF8061V	8.06	200	± 1%	53W5003	0.11	52W0954	5000	0.01
ERJ-8GEYJ822V	8.2	200	± 5%	65T8964	0.10	97W7826	5000	0.01
ERJ-8ENF9091V	9.09	200	± 1%	53W5004	0.11	52W0978	5000	0.01
ERJ-8GEYJ103V	10	200	± 5%	65T8895	0.10	97W7766	5000	0.01
ERJ-8GEYJ123V	12	200	± 5%	53W5006	0.10	52W1014	5000	0.01
ERJ-8ENF1212V	12.1	200	± 1%	53W4977	0.11	52W0545	5000	0.01
ERJ-8GEYJ153V	15	200	± 5%	65T8904	0.10	97W7774	5000	0.01
ERJ-8GEYJ183V	18	200	± 5%	65T8909	0.10	97W7778	5000	0.01
ERJ-8ENF2002V	20	200	± 1%	65T8856	0.11	97W7737	5000	0.01
ERJ-8GEYJ203V	20	200	± 5%	65T8915	0.10	97W7784	5000	0.01
ERJ-8GEYJ223V	22	200	± 5%	65T8920	0.10	97W7789	5000	0.01
ERJ-8ENF2212V	22.1	200	± 1%	65T8861	0.11	97W7742	5000	0.01
ERJ-8ENF2492V	24.9	200	± 1%	53W4982	0.11	52W0710	5000	0.01
ERJ-8ENF2702V	27	200	± 1%	53W8375	0.11	53W8460	5000	0.01
ERJ-8GEYJ273V	27	200	± 5%	53W5013	0.10	52W1041	5000	0.01
ERJ-8GEYJ303V	30	200	± 5%	53W5015	0.10	52W1048	5000	0.01
ERJ-8ENF3002V	30	200	± 1%	53W4986	0.11	52W0751	5000	0.01
ERJ-8ENF3012V	30.1	200	± 1%	53W4987	0.11	52W0753	5000	0.01
ERJ-8GEYJ333V	33	200	± 5%	65T8933	0.10	97W7799	5000	0.01
ERJ-8ENF3322V	33.2	200	± 1%	53W4989	0.11	52W0770	5000	0.01
ERJ-8GEYJ393V	39	200	± 5%	53W5016	0.10	52W1056	5000	0.01
ERJ-8ENF4022V	40.2	200	± 1%	53W4992	0.11	52W0813	5000	0.01
ERJ-8GEYJ473V	47	200	± 5%	65T8945	0.10	97W7808	5000	0.01
ERJ-8ENF4752V	47.5	200	± 1%	65T8876	0.11	97W7752	5000	0.01
ERJ-8ENF4992V	49.9	200	± 1%	65T8880	0.11	97W7756	5000	0.01
ERJ-8GEYJ513V	51	200	± 5%	65T8950	0.10	97W7813	5000	0.01
ERJ-8GEYJ683V	68	200	± 5%	65T8959	0.10	97W7821	5000	0.01
ERJ-8ENF7502V	75	200	± 1%	53W5002	0.11	52W0940	5000	0.01
ERJ-8GEYJ104V	100	200	± 5%	65T8896	0.10	97W7767	5000	0.01
ERJ-8GEYJ124V	120	200	± 5%	53W5007	0.10	52W1015	5000	0.01
ERJ-8GEYJ154V	150	200	± 5%	65T8905	0.10	97W7775	5000	0.01
ERJ-8ENF2003V	200	200	± 1%	65T8857	0.11	97W7738	5000	0.01
ERJ-8GEYJ204V	200	200	± 5%	65T8916	0.10	97W7785	5000	0.01
ERJ-8GEYJ224V	220	200	± 5%	65T8921	0.10	97W7790	5000	0.01
ERJ-8ENF2493V	249	200	± 1%	53W4983	0.11	52W0711	5000	0.01
ERJ-8GEYJ274V	270	200	± 5%	53W5014	0.10	52W1042	5000	0.01
ERJ-8ENF3013V	301	200	± 1%	53W4988	0.11	52W0754	5000	0.01
ERJ-8GEYJ334V	330	200	± 5%	65T8934	0.09	97W7800	5000	0.01
ERJ-8GEYJ474V	470	200	± 5%	53W5017	0.10	52W1064	5000	0.01

➤CONTINUED➤

ERJ SERIES PRECISION THICK FILM CHIP RESISTORS, 1206 CASE (CONT.)

Mfg. Part No.	Resistance (kohm)	Voltage Rating (V)	Resistance Tolerance	Tape Cut Stock No.	Tape Cut Price Each 1-49	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-4999
ERJ-8ENF4993V	499	200	± 1%	65T8881	0.11	97W7757	5000	0.01
ERJ-8GEYJ514V	510	200	± 5%	65T8951	0.10	97W7814	5000	0.01
ERJ-8ENF5103V	510	200	± 1%	53W4996	0.11	52W0860	5000	0.01
ERJ-8GEYJ105V	1000	200	± 5%	65T8897	0.10	97W7768	5000	0.01
ERJ-8GEYJ205V	2000	200	± 5%	53W5011	0.10	52W1034	5000	0.01
ERJ-8ENF2004V	2000	200	± 1%	53W4978	0.11	52W0666	5000	0.01
ERJ-8GEYJ106V	10000	200	± 5%	65T8898	0.10	97W7769	5000	0.01
ERJ-8GEYK226V	22000	200	± 10%	53W5019	0.09	52W1096	5000	0.01

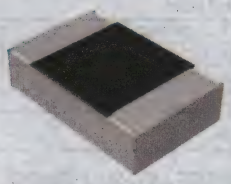
(209281)

ERJ SERIES PRECISION THICK FILM CHIP RESISTORS, 2010 CASE

RoHS Compliant Available

Panasonic

Features:
- Small size and lightweight
- High reliability Metal glaze thick film resistive element and three layers of electrodes
- Compatible with placement machines
- Taping packaging available
- Suitable for both reflow and flow soldering
- Temperature Coefficent of ±100ppm/°C
- Power Rating: 750mW
- Temperature Range of -55°C to +155°C



Mfg. Part No.	Resistance (kohm)	Voltage Rating (V)	Resistance Tolerance	Stock No.	Price Each 1-9
ERJ-12ZYJ1R0U	0.001	200	± 5%	53W4080	0.49
ERJ-12ZYJ100U	0.01	200	± 5%	53W4081	0.49
ERJ-12SF10R0U	0.01	200	± 1%	53W4077	0.61
ERJ-12ZYJ101U	0.1	200	± 5%	53W4082	0.49
ERJ-12SF1000U	0.1	200	± 1%	53W4078	0.61
ERJ-12ZYJ121U	0.12	200	± 5%	53W4085	0.49
ERJ-12ZYJ471U	0.47	200	± 5%	53W4089	0.49
ERJ-12ZYJ102U	1	200	± 5%	53W4083	0.49
ERJ-12SF1001U	1	200	± 1%	53W4079	0.61
ERJ-12ZYJ122U	1.2	200	± 5%	53W4086	0.49
ERJ-12ZYJ152U	1.5	200	± 5%	53W4087	0.49
ERJ-12ZYJ222U	2.2	200	± 5%	53W4088	0.49
ERJ-12ZYJ103U	10	200	± 5%	53W4084	0.46

(209283)

ERJ SERIES ANTI-SURGE THICK FILM CHIP RESISTORS

RoHS Compliant Available

Panasonic

Features:
- ESD surge characteristics superior to standard metal film resistors
- High reliability
- Metal glaze thick film resistive element and three layers of electrodes
- Suitable for both reflow and flow soldering

0603 CASE STYLE, POWER RATING: 200 mW

Mfg. Part No.	Resistance	Resistance Tolerance	Tape Cut Stock No.	Tape Cut Price Each 1-4999	Tape & Reel Stock No.	Tape & Reel Reel Qty	Tape & Reel Price Each 1-4999
ERJ-P03J1R0V	1ohm	± 5%	05X8659	0.35	56W0336	5000	0.03
ERJ-P03J1R2V	1.2ohm	± 5%	32R9401	0.35	05X8660	5000	0.03
ERJ-P03J1R5V	1.5ohm	± 5%	05X8661	0.35	56W0337	5000	0.03
ERJ-P03J1R8V	1.8ohm	± 5%	32R9403	0.37	05X8662	5000	0.03
ERJ-P03J2R2V	2.2ohm	± 5%	32R9404	0.35	05X8663	5000	0.03
ERJ-P03J2R7V	2.7ohm	± 5%	32R9405	0.35	05X8664	5000	0.03
ERJ-P03J3R3V	3.3ohm	± 5%	32R9406	0.35	05X8665	5000	0.03
ERJ-P03J3R9V	3.9ohm	± 5%	32R9407	0.35	05X8666	5000	0.03
ERJ-P03J4R7V	4.7ohm	± 5%	32R9408	0.37	05X8667	5000	0.03
ERJ-P03J5R6V	5.6ohm	± 5%	32R9409	0.35	05X8668	5000	0.03
ERJ-P03J6R8V	6.8ohm	± 5%	32R9410	0.35	05X8669	5000	0.03
ERJ-P03J8R2V	8.2ohm	± 5%	05X8670	0.35	56W0338	5000	0.03
ERJ-P03F12R0V	12ohm	± 1%	32R9344	0.40	05X8600	5000	0.05
ERJ-P03F15R0V	15ohm	± 1%	32R9349	0.40	05X8604	5000	0.05
ERJ-P03F18R0V	18ohm	± 1%	32R9354	0.43	05X8609	5000	0.05
ERJ-P03F22R0V	22ohm	± 1%	32R9359	0.43	05X8614	5000	0.05
ERJ-P03F27R0V	27ohm	± 1%	05X8619	0.40	56W0329	5000	0.05
ERJ-P03F30R0V	30ohm	± 1%	55T5681	0.40	05X8624	5000	0.05
ERJ-P03F33R0V	33ohm	± 1%	32R9369	0.40	05X8629	5000	0.05
ERJ-P03F39R0V	39ohm	± 1%	32R9374	0.40	05X8634	5000	0.05

CONTINUED

ERJ SERIES ANTI-SURGE THICK FILM CHIP RESISTORS (CONT.)

Mfg. Part No.	Resistance	Resistance Tolerance	Tape Cut Stock No.	Tape Cut Price Each 1-4999	Tape & Reel Stock No.	Tape & Reel Reel Qty	Tape & Reel Price Each 1-4999
ERJ-P03F47R0V	47ohm	± 1%	32R9379	0.40	05X8639	5000	0.05
ERJ-P03F56R0V	56ohm	± 1%	32R9384	0.40	05X8644	5000	0.05
ERJ-P03F68R0V	68ohm	± 1%	05X8649	0.40	56W0333	5000	0.05
ERJ-P03F82R0V	82ohm	± 1%	32R9395	0.40	05X8654	5000	0.05
ERJ-P03F1000V	100ohm	± 1%	32R9339	0.43	05X8595	5000	0.05
ERJ-P03F1500V	150ohm	± 1%	32R9350	0.40	05X8605	5000	0.05
ERJ-P03F1800V	180ohm	± 1%	32R9355	0.40	05X8610	5000	0.05
ERJ-P03F2200V	220ohm	± 1%	32R9360	0.40	05X8615	5000	0.05
ERJ-P03F2700V	270ohm	± 1%	05X8620	0.40	56W0330	5000	0.05
ERJ-P03F3000V	300ohm	± 1%	55T5682	0.40	05X8625	5000	0.05
ERJ-P03F3300V	330ohm	± 1%	32R9370	0.40	05X8630	5000	0.05
ERJ-P03F3900V	390ohm	± 1%	32R9375	0.40	05X8635	5000	0.05
ERJ-P03F4700V	470ohm	± 1%	05X8640	0.40	56W0332	5000	0.05
ERJ-P03F5600V	560ohm	± 1%	32R9385	0.40	05X8645	5000	0.05
ERJ-P03F6800V	680ohm	± 1%	32R9390	0.40	05X8650	5000	0.05
ERJ-P03F8200V	820ohm	± 1%	32R9396	0.40	05X8655	5000	0.05
ERJ-P03F1001V	1kohm	± 1%	32R9340	0.43	05X8596	5000	0.05
ERJ-P03F1201V	1.2kohm	± 1%	32R9346	0.40	05X8601	5000	0.05
ERJ-P03F1501V	1.5kohm	± 1%	32R9351	0.43	05X8606	5000	0.05
ERJ-P03F1801V	1.8kohm	± 1%	32R9356	0.40	05X8611	5000	0.05
ERJ-P03F2201V	2.2kohm	± 1%	32R9361	0.40	05X8616	5000	0.05
ERJ-P03F2701V	2.7kohm	± 1%	32R9366	0.40	05X8621	5000	0.05
ERJ-P03F3001V	3kohm	± 1%	55T5683	0.40	05X8626	5000	0.05
ERJ-P03F3301V	3.3kohm	± 1%	32R9371	0.40	05X8631	5000	0.05
ERJ-P03F3901V	3.9kohm	± 1%	32R9376	0.43	05X8636	5000	0.05
ERJ-P03F4701V	4.7kohm	± 1%	32R9381	0.40	05X8641	5000	0.05
ERJ-P03F5601V	5.6kohm	± 1%	32R9386	0.40	05X8646	5000	0.05
ERJ-P03F6801V	6.8kohm	± 1%	32R9391	0.40	05X8651	5000	0.05
ERJ-P03F8201V	8.2kohm	± 1%	32R9397	0.40	05X8656	5000	0.05
ERJ-P03F1002V	10kohm	± 1%	32R9341	0.43	05X8597	5000	0.05
ERJ-P03F1202V	12kohm	± 1%	05X8602	0.40	56W0328	5000	0.05
ERJ-P03F1502V	15kohm	± 1%	32R9352	0.40	05X8607	5000	0.05
ERJ-P03F1802V	18kohm	± 1%	32R9357	0.40	05X8612	5000	0.05
ERJ-P03F2202V	22kohm	± 1%	32R9362	0.40	05X8617	5000	0.05
ERJ-P03F2702V	27kohm	± 1%	05X8622	0.40	56W0331	5000	0.05
ERJ-P03F3002V	30kohm	± 1%	55T5684	0.40	05X8627	5000	0.05
ERJ-P03F3302V	33kohm	± 1%	32R9372	0.40	05X8632	5000	0.05
ERJ-P03F3902V	39kohm	± 1%	32R9377	0.40	05X8637	5000	0.05
ERJ-P03F4702V	47kohm	± 1%	32R9382	0.40	05X8642	5000	0.05
ERJ-P03F5602V	56kohm	± 1%	32R9387	0.40	05X8647	5000	0.05
ERJ-P03F6802V	68kohm	± 1%	32R9392	0.40	05X8652	5000	0.05
ERJ-P03F8202V	82kohm	± 1%	32R9398	0.40	05X8657	5000	0.05
ERJ-P03F1003V	100kohm	± 1%	32R9342	0.40	05X8598	5000	0.05
ERJ-P03F1203V	120kohm	± 1%	32R9348	0.40	05X8603	5000	0.05
ERJ-P03F1503V	150kohm	± 1%	32R9353	0.40	05X8608	5000	0.05
ERJ-P03F1803V	180kohm	± 1%	32R9358	0.40	05X8613	5000	0.05
ERJ-P03F2203V	220kohm	± 1%	32R9363	0.40	05X8618	5000	0.05
ERJ-P03F2703V	270kohm	± 1%	32R9368	0.40	05X8623	5000	0.05
ERJ-P03F3003V	300kohm	± 1%	55T5685	0.40	05X8628	5000	0.05
ERJ-P03F3303V	330kohm	± 1%	32R9373	0.40	05X8633	5000	0.05
ERJ-P03F3903V	390kohm	± 1%	32R9378	0.40	05X8638	5000	0.05
ERJ-P03F4703V	470kohm	± 1%	32R9383	0.43	05X8643	5000	0.05
ERJ-P03F5603V	560kohm	± 1%	32R9388	0.40	05X8648	5000	0.05
ERJ-P03F6803V	680kohm	± 1%	32R9393	0.40	05X8653	5000	0.05
ERJ-P03F8203V	820kohm	± 1%	32R9399	0.40	05X8658	5000	0.05
ERJ-P03F1004V	1Mohm	± 1%	32R9343	0.40	05X8599	5000	0.05
0805 CASE STYLE, PQWER RATING: 500 mW							
ERJ-P06J100V	10ohm	± 5%	53W3974	0.26	50W4609	5000	0.02
ERJ-P06J470V	47ohm	± 5%	53W3985	0.26	50W4690	5000	0.02
ERJ-P06J101V	100ohm	± 5%	53W3975	0.26	50W4610	5000	0.02
ERJ-P06J121V	120ohm	± 5%	53W3979	0.26	50W4621	5000	0.02
ERJ-P06J151V	150ohm	± 5%	53W3980	0.26	50W4631	5000	0.02
ERJ-P06J221V	220ohm	± 5%	53W3982	0.26	50W4651	5000	0.02
ERJ-P06J331V	330ohm	± 5%	53W3984	0.26	50W4671	5000	0.02
ERJ-P06J471V	470ohm	± 5%	53W3986	0.26	50W4691	5000	0.02
ERJ-P06J102V	1kohm	± 5%	53W3976	0.25	50W4611	5000	0.02
ERJ-P06J202V	2kohm	± 5%	53W3981	0.26	50W4647	5000	0.02
ERJ-P06J222V	2.2kohm	± 5%	53W3983	0.26	50W4652	5000	0.02
ERJ-P06J472V	4.7kohm	± 5%	53W3987	0.26	50W4692	5000	0.02
ERJ-P06J103V	10kohm	± 5%	50W4612	0.25	...	...	...
ERJ-P06J104V	100kohm	± 5%	53W3977	0.26	50W4613	5000	0.02
ERJ-P06J105V	1Mohm	± 5%	53W3978	0.26	50W4614	5000	0.02

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ERJ SERIES ANTI-SURGE THICK FILM CHIP RESISTORS (CONT.)

1206 CASE STYLE, POWER RATING: 660 mW

Mfg. Part No.	Resistance	Resistance Tolerance	Tape Cut Stock No.	Tape Cut Price Each 1-4999	Tape & Reel Stock No.	Tape & Reel Reel Qty	Tape & Reel Price Each 1-4999
● ERJ-P08J100V	10ohm	± 5%	53W3988	0.23	50W5751	5000	0.02
● ERJ-P08J101V	100ohm	± 5%	53W3989	0.23	50W5752	5000	0.02
● ERJ-P08J102V	1kohm	± 5%	53W3990	0.23	50W5753	5000	0.02
● ERJ-P08J103V	10kohm	± 5%	50W5754	0.14	...	...	...
1210 CASE STYLE, POWER RATING: 500 mW							
● ERJ-P14J100U	10ohm	± 5%	53W3991	0.42	50W6893	5000	0.04
● ERJ-P14J101U	100ohm	± 5%	53W3992	0.42	50W6894	5000	0.04
● ERJ-P14J102U	1kohm	± 5%	53W3993	0.42	50W6895	5000	0.04

(208973)

ERJ SERIES THICK FILM CHIP LOW RESISTANCE RESISTORS

RoHS Compliant Available

Panasonic

Features:

- Small size and lightweight
- High reliability: Metal glaze thick film resistive element and three layers of electrodes
- Suitable for both reflow and flow soldering

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2512 CASE STYLE

Mfg. Part No.	Resistance (ohm)	Resistance Tolerance (%)	Power Rating (mW)	Stock No.	Price Each 1-9
● ERJ-L1WKJ50MU	0.05	±1	1000	53W3970	0.99
● ERJ-L1WKJ10CU	0.1	±1	1000	53W3969	0.99
● ERJ-1TRQFR24U	0.24	±1	1000	55T5979	0.70
● ERJ-1TRQFR30U	0.3	±1	1000	55T5980	0.72
● ERJ-1TRQFR51U	0.51	±1	1000	55T5983	0.63
● ERJ-1TRQFR62U	0.62	±1	1000	55T5984	0.64
● ERJ-1TRQFR75U	0.75	±1	1000	55T5985	0.64
● ERJ-1TRQF1R0U	1	±1	1000	15R1361	0.65
● ERJ-1TRQF2R0U	2	±1	1000	55T5990	0.64
● ERJ-1TRQF3R0U	3	±1	1000	55T5992	0.63
● ERJ-1TRQF4R7U	4.7	±1	1000	53W8358	0.71
● ERJ-1TRQF5R1U	5.1	±1	1000	55T5995	0.63
● ERJ-1TRSJR10U	0.1	±5	1000	53W4049	1.10
● ERJ-1TRQJR22U	0.22	±5	1000	53W4046	0.71
● ERJ-1TRQJR33U	0.33	±5	1000	53W4047	0.71
● ERJ-1TRQJR47U	0.47	±5	1000	53W4048	0.71
0402 CASE STYLE					
● ERJ-2BSFR10X	0.1	±1	166	53W4137	0.50
● ERJ-2BSFR20X	0.2	±1	166	53W4138	0.50
● ERJ-2BQFR51X	0.51	±1	166	53W4136	0.47
0603 CASE STYLE					
● ERJ-3RSFR10V	0.1	±1	100	15R1445	0.44
● ERJ-3RQJR22V	0.22	±5	100	53W4703	0.32
● ERJ-3RQF5R6V	5.6	±1	100	53W8369	0.27
● ERJ-3RSJR10V	0.1	±5	100	53W4704	0.39
● ERJ-L03KF10CV	0.1	±1	100	53W8348	0.49
● ERJ-L03KJ50MV	0.05	±5	200	53W3964	0.65
● ERJ-3BWFR022V	0.022	±1	330	73R4959	0.52
● ERJ-3BWFR027V	0.027	±1	330	56W0586	0.52
● ERJ-3BWFR033V	0.033	±1	330	56W0587	0.52
● ERJ-3BWFR039V	0.039	±1	330	73R4964	0.55
● ERJ-3BWFR047V	0.047	±1	330	73R4966	0.55
● ERJ-3BWFR056V	0.056	±1	330	73R4968	0.55
● ERJ-3BWFR082V	0.082	±1	330	56W0588	0.55
● ERJ-3BWFR100V	0.1	±1	330	73R4974	0.52
0805 CASE STYLE					
● ERJ-6RQF4R7V	4.7	±1	125	53W8371	0.42
● ERJ-6BWFR018V	0.018	±1	500	56W0599	0.79
● ERJ-6BWFR022V	0.022	±1	500	56W0600	0.79
● ERJ-6BWFR027V	0.027	±1	500	56W0602	0.74
● ERJ-6BWFR030V	0.03	±1	500	53W8370	0.79
● ERJ-6BWFR033V	0.033	±1	500	56W0603	0.74
● ERJ-6BWFR047V	0.047	±1	500	56W0606	0.74
● ERJ-6BWFR056V	0.056	±1	500	73R4976	0.74
● ERJ-6BWFR068V	0.068	±1	500	73R4978	0.74
● ERJ-6BWFR082V	0.082	±1	500	73R4980	0.74
● ERJ-6BWFR100V	0.1	±1	500	73R4982	0.79
1206 CASE STYLE					
● ERJ-L08KF10CV	0.1	±1	250	53W8349	0.62
● ERJ-8RSJR10V	0.1	±5	250	53W5020	0.51

➤ CONTINUED ➤

ERJ SERIES THICK FILM CHIP LOW RESISTANCE RESISTORS (CONT.)

1206 CASE STYLE

Mfg. Part No.	Resistance (ohm)	Resistance Tolerance (%)	Power Rating (mW)	Stock No.	Price Each 1-9
● ERJ-8RQFR22V	0.22	±1	250	53W8377	0.49
● ERJ-8RQF2R2V	2.2	±1	250	53W8378	0.49
● ERJ-L08KJ10CV	0.1	±5	330	53W3965	0.86
● ERJ-L08KJ50MV	0.05	±5	330	53W3966	0.86
● ERJ-8BWFR012V	0.012	±1	1000	56W0623	0.80
● ERJ-8BWFR018V	0.018	±1	1000	53W8372	0.80
● ERJ-8BWFR033V	0.033	±1	1000	53W8373	0.80
● ERJ-8BWFR047V	0.047	±1	1000	56W0630	0.75
● ERJ-8BWFR056V	0.056	±1	1000	56W0632	0.80
1210 CASE STYLE					
● ERJ-L14KF20MU	0.02	±1	330	53W8350	0.58
● ERJ-L14UF25MU	0.025	±1	330	53W3971	0.58
● ERJ-L14KF39MU	0.039	±1	330	53W8351	0.58
2010 CASE STYLE					
● ERJ-L1DKF50MU	0.05	±1	500	53W3968	0.82
● ERJ-L1DKF10CU	0.1	±1	500	53W3967	0.87
2512 CASE STYLE					
● ERJ-L1WKF50MU	0.05	±1	1000	54W2569	1.14

(208933)

ERJ SERIES ANTI-SULFURATED THICK FILM CHIP RESISTORS, 0402 CASE

RoHS Compliant Available

Panasonic

NEW

Features:

- High resistance to sulfurization achieved by adopting an Ag-Pb based inner electrode
- Metal glaze thick film resistive element and three layers of electrodes
- Suitable for both reflow and flow soldering
- Power Rating: 100mW
- Voltage Rating: 50V
- Temperature Coefficient: ±200ppm/°C

Specifications:

- Power Rating: 100mW
- Voltage Rating: 50V

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Mfg. Part No.	Resistance	Resistance Tolerance	Tape Cut Stock No.	Tape Cut Price Each 1-49
● ERJ-U020R00X	0 ohm	-	51W3639	0.19
● ERJ-U02J1R0X	1 ohm	± 5%	44X4886	0.18
● ERJ-U02J1R5X	1.5 ohm	± 5%	44X4887	0.18
● ERJ-U02J2R2X	2.2 ohm	± 5%	44X4900	0.18
● ERJ-U02J3R3X	3.3 ohm	± 5%	44X4908	0.18
● ERJ-U02J4R7X	4.7 ohm	± 5%	44X4914	0.18
● ERJ-U02J6R8X	6.8 ohm	± 5%	44X4920	0.18
● ERJ-U02F10R0X	10 ohm	± 1%	51W2911	0.25
● ERJ-U02J100X	10 ohm	± 5%	44X4888	0.18
● ERJ-U02F12R0X	12 ohm	± 1%	51W2952	0.24
● ERJ-U02F15R0X	15 ohm	± 1%	51W3002	0.24
● ERJ-U02J150X	15 ohm	± 5%	44X4894	0.18
● ERJ-U02F18R0X	18 ohm	± 1%	51W3047	0.24
● ERJ-U02F22R0X	22 ohm	± 1%	51W3092	0.24
● ERJ-U02J220X	22 ohm	± 5%	44X4902	0.18
● ERJ-U02F27R0X	27 ohm	± 1%	51W3147	0.24
● ERJ-U02F33R0X	33 ohm	± 1%	51W3197	0.24
● ERJ-U02F39R0X	39 ohm	± 1%	51W3242	0.24
● ERJ-U02F47R0X	47 ohm	± 1%	51W3292	0.24
● ERJ-U02J470X	47 ohm	± 5%	44X4915	0.18
● ERJ-U02F56R0X	56 ohm	± 1%	51W3337	0.24
● ERJ-U02F68R0X	68 ohm	± 1%	51W3387	0.24
● ERJ-U02J680X	68 ohm	± 5%	44X4921	0.18
● ERJ-U02F82R0X	82 ohm	± 1%	51W3432	0.24
● ERJ-U02F1000X	100 ohm	± 1%	51W2915	0.24
● ERJ-U02J101X	100 ohm	± 5%	44X4889	0.18
● ERJ-U02F1200X	120 ohm	± 1%	51W2956	0.24
● ERJ-U02F1500X	150 ohm	± 1%	51W3005	0.24
● ERJ-U02J151X	150 ohm	± 5%	44X4895	0.18
● ERJ-U02F1800X	180 ohm	± 1%	51W3050	0.24
● ERJ-U02F2200X	220 ohm	± 1%	51W3095	0.24
● ERJ-U02J221X	220 ohm	± 5%	44X4903	0.18
● ERJ-U02F2700X	270 ohm	± 1%	51W3149	0.24
● ERJ-U02F3300X	330 ohm	± 1%	51W3199	0.24
● ERJ-U02J331X	330 ohm	± 5%	44X4909	0.18

➤ CONTINUED ➤

ERJ SERIES ANTI-SULFURATED THICK FILM CHIP RESISTORS, 0402 CASE (CONT.)

Mfg. Part No.	Resistance	Resistance Tolerance	Tape Cut Stock No.	Price Each 1-49
ERJ-U02F3900X	390 ohm	± 1%	51W3244	0.24
ERJ-U02F4700X	470 ohm	± 1%	51W3294	0.25
ERJ-U02J471X	470 ohm	± 5%	44X4916	0.18
ERJ-U02F5600X	560 ohm	± 1%	51W3339	0.24
ERJ-U02F6800X	680 ohm	± 1%	51W3389	0.24
ERJ-U02J681X	680 ohm	± 5%	44X4922	0.18
ERJ-U02F8200X	820 ohm	± 1%	51W3434	0.24
ERJ-U02F1001X	1 kohm	± 1%	51W2916	0.25
ERJ-U02J102X	1 kohm	± 5%	44X4890	0.18
ERJ-U02F1201X	1.2 kohm	± 1%	51W2957	0.24
ERJ-U02F1501X	1.5 kohm	± 1%	51W3006	0.24
ERJ-U02J152X	1.5 kohm	± 5%	44X4896	0.18
ERJ-U02F1801X	1.8 kohm	± 1%	51W3051	0.24
ERJ-U02F2201X	2.2 kohm	± 1%	51W3096	0.25
ERJ-U02J222X	2.2 kohm	± 5%	44X4904	0.18
ERJ-U02F2701X	2.7 kohm	± 1%	51W3150	0.24
ERJ-U02F3301X	3.3 kohm	± 1%	51W3200	0.24
ERJ-U02J332X	3.3 kohm	± 5%	44X4910	0.18
ERJ-U02F3901X	3.9 kohm	± 1%	51W3245	0.24
ERJ-U02F4701X	4.7 kohm	± 1%	51W3295	0.25
ERJ-U02J472X	4.7 kohm	± 5%	44X4917	0.18
ERJ-U02F5601X	5.6 kohm	± 1%	51W3340	0.24
ERJ-U02F6801X	6.8 kohm	± 1%	51W3390	0.24
ERJ-U02J682X	6.8 kohm	± 5%	44X4923	0.18
ERJ-U02F8201X	8.2 kohm	± 1%	51W3435	0.24
ERJ-U02F1002X	10 kohm	± 1%	51W2917	0.25
ERJ-U02J103X	10 kohm	± 5%	44X4891	0.18
ERJ-U02F1202X	12 kohm	± 1%	51W2958	0.24
ERJ-U02F1502X	15 kohm	± 1%	51W3007	0.24
ERJ-U02J153X	15 kohm	± 5%	44X4897	0.18
ERJ-U02F1802X	18 kohm	± 1%	51W3052	0.24
ERJ-U02F2202X	22 kohm	± 1%	51W3097	0.24
ERJ-U02J223X	22 kohm	± 5%	44X4905	0.18
ERJ-U02F2702X	27 kohm	± 1%	51W3151	0.24
ERJ-U02F3302X	33 kohm	± 1%	51W3201	0.24
ERJ-U02J333X	33 kohm	± 5%	44X4911	0.18
ERJ-U02F3902X	39 kohm	± 1%	51W3246	0.24
ERJ-U02F4702X	47 kohm	± 1%	51W3296	0.24
ERJ-U02J473X	47 kohm	± 5%	44X4918	0.18
ERJ-U02F5602X	56 kohm	± 1%	51W3341	0.24
ERJ-U02F6802X	68 kohm	± 1%	51W3391	0.24
ERJ-U02J683X	68 kohm	± 5%	44X4924	0.18
ERJ-U02F8202X	82 kohm	± 1%	51W3436	0.24
ERJ-U02F1003X	100 kohm	± 1%	51W2918	0.25
ERJ-U02J104X	100 kohm	± 5%	44X4892	0.18
ERJ-U02F1203X	120 kohm	± 1%	51W2959	0.24
ERJ-U02F1503X	150 kohm	± 1%	51W3008	0.25
ERJ-U02J154X	150 kohm	± 5%	44X4898	0.18
ERJ-U02F1803X	180 kohm	± 1%	51W3053	0.24
ERJ-U02F2203X	220 kohm	± 1%	51W3098	0.24
ERJ-U02J224X	220 kohm	± 5%	44X4906	0.18
ERJ-U02F2703X	270 kohm	± 1%	51W3152	0.24
ERJ-U02F3303X	330 kohm	± 1%	51W3202	0.24
ERJ-U02J334X	330 kohm	± 5%	44X4912	0.18
ERJ-U02F3903X	390 kohm	± 1%	51W3247	0.24
ERJ-U02F4703X	470 kohm	± 1%	51W3297	0.24
ERJ-U02J474X	470 kohm	± 5%	44X4919	0.18
ERJ-U02F5603X	560 kohm	± 1%	51W3342	0.24
ERJ-U02F6803X	680 kohm	± 1%	51W3392	0.24
ERJ-U02J684X	680 kohm	± 5%	44X4925	0.18
ERJ-U02F8203X	820 kohm	± 1%	51W3437	0.24
ERJ-U02F1004X	1 Mohm	± 1%	51W2919	0.24
ERJ-U02J105X	1 Mohm	± 5%	44X4893	0.18
ERJ-U02J155X	1.5 Mohm	± 5%	44X4899	0.18
ERJ-U02J205X	2 Mohm	± 5%	44X4901	0.18
ERJ-U02J225X	2.2 Mohm	± 5%	44X4907	0.18
ERJ-U02J335X	3.3 Mohm	± 5%	44X4913	0.18

(211979)

SLIM-MOX THICK FILM RESISTORS

RoHS Compliant Available

OHMITE

Features
- High dielectric & low outgassing epoxy coating
- Space saving planar design
- Low resistor noise
- Non-inductive
- Thick film on alumina

Specifications
- Resistance range: 100Ω to 5,000M
- Power rating: 0.25W to 5.5W
- Voltage rating: 1500V to 25000V
- Tolerance:0.5% to 20%
- Operating temperature: -55°C to 110°C
- Temperature coefficient: 25ppm/°C

Applications
- HV Power Supplies
- Medical Instrumentation
- Current Pulse Limiters
- Ionization Chambers

Slim-Mox resistors are precision thick film planar resistors, that provide a stable performance for a wide range of resistance values, with voltage rating up to 25KV.

ELECTRICAL SPECIFICATIONS

Series	Resistance Range (Ohms)	Power @ 70°C	Voltage
SLIM-MOX102	200Ω to 5,000M	1W	5,000V
SLIM-MOX104	500Ω to 5,000M	1.5W	10,000V
SLIM-MOX108	1K to 5,000M	2.5W	20,000V
SLIM-MOX204	1K to 5,000M	2W	10,000V

Mfg. Part No.	Res. (Ohms)	Res. Tol. (+/- %)	Power Rating (W)	Stock No.	Price Each 1-9	Price Each 10-49
SM102031005FE	10M	± 1%	1	66K6869	4.29	3.45
SM102031006FE	100M	± 1%	1	66K6870	4.40	3.54
SM102031007FE	1G	± 1%	1	66K6871	4.40	3.54
SM104031005FE	10M	± 1%	1.5	66K6872	4.85	3.90
SM102031005JE	10M	± 5%	1.5	18M5255	5.19	4.17
SM102034005FE	40M	± 1%	1.5	59M9354	4.29	3.45
SM104035005FE	50M	± 1%	1.5	51M1794	4.85	4.03
SM104031006FE	100M	± 1%	1.5	66K6873	4.97	4.13
SM104035006FE	500M	± 1%	1.5	51M1795	4.97	4.13
SM102031007JE	1G	± 5%	1.5	18M5257	5.19	4.17
SM104031007JE	1G	± 5%	1.5	18M5260	5.20	4.58
SM104031007FE	1G	± 1%	1.5	66K6874	4.85	3.90
SM104035007FE	5G	± 1%	1.5	51M1796	5.28	4.24
SM108035003FE	500k	± 1%	2	51M1827	6.30	5.24
SM204031005FE	10M	± 1%	2	66K6875	5.58	4.64
SM108032005FE	20M	± 1%	2	51M1802	6.30	5.23
SM204031006FE	100M	± 1%	2	66K6877	6.08	5.05
SM108035006FE	500M	± 1%	2	51M1830	6.08	5.05
SM204031007FE	1G	± 1%	2	66K6879	6.08	5.05
SM204031007JE	1G	± 5%	2	66K6880	7.62	6.70
SM204031004JE	1M	± 5%	3.25	51M1835	6.26	5.20
SM102031006JE	100M	± 5%	1.5	18M5256	5.19	4.17

(85785)

HVC SERIES THICK FILM HIGH VOLTAGE CHIP RESISTORS

RoHS Compliant Available

OHMITE

Features:
- High value chip resistors in thick film technology
- Suitable for high vacuum applications - no organics
- Wraparound terminals
- High working voltage up to 3000V

Specifications:
- Power Rating: 125mW to 1000mW
- Voltage Rating: 200V to 2000V
- Operating Temperature: -55°C to +155°C
- Temperature Coefficient: ±100ppm, ±250ppm

POWER: 125 mW, CASE SIZE 0805, VOLTAGE: 200 V

Mfg. Part No.	Res.	Tol.	Temp. Coeff.	Tape Cut Stock No.	Price Each 1-999
HVC4020V1004JET	1 Mohm	± 5%	± 50ppm/°C	45X8184	3.08
HVC0402T1004JET	1 Mohm	± 5%	± 100ppm/°C	45X8113	1.43
HVC4020V2504JET	2.5 Mohm	± 5%	± 50ppm/°C	45X8192	3.01
HVC0402T2504JET	2.5 Mohm	± 5%	± 100ppm/°C	45X8119	1.43
HVC4020V5004JET	5 Mohm	± 5%	± 50ppm/°C	45X8198	3.08
HVC0402T5004JET	5 Mohm	± 5%	± 100ppm/°C	45X8123	1.43
HVC4020V1005JET	10 Mohm	± 5%	± 50ppm/°C	45X8186	3.63
HVC0402T1005JET	10 Mohm	± 5%	± 100ppm/°C	45X8115	1.43
HVC4020V2505JET	25 Mohm	± 5%	± 50ppm/°C	45X8194	3.63
HVC0402T2505JET	25 Mohm	± 5%	± 100ppm/°C	45X8121	1.83
HVC4020V5005JET	50 Mohm	± 5%	± 50ppm/°C	45X8200	3.63

CONTINUED

HVC SERIES THICK FILM HIGH VOLTAGE CHIP RESISTORS (CONT.)

Mfg. Part No.	Res.	Tol.	Temp. Coeff.	Stock No.	Tape Cut Price Each 1-999
● HVC0402T5005JET	50 Mohm	± 5%	± 100ppm/°C	45X8125	1.83
● HVC4020V1006JET	100 Mohm	± 5%	± 50ppm/°C	45X8188	3.63
● HVC0402T1006JET	100 Mohm	± 5%	± 100ppm/°C	45X8117	1.83
● HVC4020V2506JET	250 Mohm	± 5%	± 50ppm/°C	45X8196	5.06
● HVC0402Z2506JET	250 Mohm	± 5%	± 250ppm/°C	45X8127	4.21
● HVC4020V5006JET	500 Mohm	± 5%	± 50ppm/°C	45X8202	5.09
● HVC0402E5006KET	500 Mohm	± 10%	± 500ppm/°C	45X8107	4.21
● HVC0402N1007KET	1 Gohm	± 10%	± 1000ppm/°C	45X8109	7.18
● HVC0402N5007KET	5 Gohm	± 10%	± 1000ppm/°C	45X8111	8.79
● HVC4020V5007JET	5 Gohm	± 5%	± 50ppm/°C	45X8204	8.06
● HVC4020V1008KET	10 Gohm	± 10%	± 50ppm/°C	45X8190	8.06
● HVC4020Z2508KET	25 Gohm	± 10%	± 250ppm/°C	45X8206	10.55
POWER: 100 mW, CASE SIZE 0603, VOLTAGE: 75 V					
● HVC0603T1004FET	1 Mohm	± 1%	± 100ppm/°C	45X8133	1.14
● HVC0603T2504FET	2.5 Mohm	± 1%	± 100ppm/°C	45X8139	1.14
● HVC0603T5004FET	5 Mohm	± 1%	± 100ppm/°C	45X8143	1.14
● HVC0603T1005FET	10 Mohm	± 1%	± 100ppm/°C	45X8135	1.14
● HVC0603T2505FET	25 Mohm	± 1%	± 100ppm/°C	45X8141	1.43
● HVC0603T5005FET	50 Mohm	± 1%	± 100ppm/°C	45X8145	1.40
● HVC0603T1006FET	100 Mohm	± 1%	± 100ppm/°C	45X8137	1.40
● HVC0603Z2506FET	250 Mohm	± 1%	± 250ppm/°C	45X8147	3.52
● HVC0603Z5006JET	500 Mohm	± 5%	± 250ppm/°C	45X8149	3.52
● HVC0603N1007KET	1 Gohm	± 10%	± 1000ppm/°C	45X8129	5.97
● HVC0603N5007KET	5 Gohm	± 10%	± 1000ppm/°C	45X8131	7.36
POWER: 125 mW, CASE SIZE 0603, VOLTAGE: 200 V					
● HVC0805T1004JET	1 Mohm	± 5%	± 100ppm/°C	58T0076	0.92
● HVC0805T2504JET	2.5 Mohm	± 5%	± 100ppm/°C	45X8156	1.13
● HVC0805T5004JET	5 Mohm	± 5%	± 100ppm/°C	58T0079	0.77
● HVC0805T1005JET	10 Mohm	± 5%	± 100ppm/°C	58T0077	1.11
● HVC0805T2505JET	25 Mohm	± 5%	± 100ppm/°C	45X8158	1.43
● HVC0805T5005JET	50 Mohm	± 5%	± 100ppm/°C	58T0080	1.11
● HVC0805T1006JET	100 Mohm	± 5%	± 100ppm/°C	58T0078	1.11
● HVC0805Z2506JET	250 Mohm	± 5%	± 250ppm/°C	45X8163	1.27
● HVC0805Z5006JET	500 Mohm	± 5%	± 250ppm/°C	58T0083	3.87
● HVC0805Z1007JET	1 Gohm	± 5%	± 250ppm/°C	58T0081	6.40
● HVC0805E5007KET	5 Gohm	± 10%	± 500ppm/°C	45X8151	7.51
● HVC0805Z1008KET	10 Gohm	± 10%	± 250ppm/°C	58T0082	6.06
POWER: 250 mW, CASE SIZE 1206, VOLTAGE: 600 V					
● HVC1206T1004JET	1 Mohm	± 5%	± 100ppm/°C	58T0084	0.81
● HVC1206Z2504JET	2.5 Mohm	± 5%	± 250ppm/°C	45X8173	1.27
● HVC1206T5004JET	5 Mohm	± 5%	± 100ppm/°C	58T0087	0.78
● HVC1206T1005JET	10 Mohm	± 5%	± 100ppm/°C	58T0085	1.03
● HVC1206Z2505JET	25 Mohm	± 5%	± 250ppm/°C	45X8175	1.27
● HVC1206T5005JET	50 Mohm	± 5%	± 100ppm/°C	58T0088	0.99
● HVC1206T1006JET	100 Mohm	± 5%	± 100ppm/°C	58T0086	1.03
● HVC1206Z2506JET	250 Mohm	± 5%	± 250ppm/°C	45X8177	3.17
● HVC1206Z5006JET	500 Mohm	± 5%	± 250ppm/°C	58T0091	3.31
● HVC1206Z1007JET	1 Gohm	± 5%	± 250ppm/°C	58T0089	5.58
● HVC1206Z5007KET	5 Gohm	± 10%	± 250ppm/°C	45X8180	6.65
● HVC1206Z1008KET	10 Gohm	± 10%	± 250ppm/°C	58T0090	5.18
POWER: 1000 mW, CASE SIZE 2512, VOLTAGE: 2000 V					
● HVC2512T1004JET	1 Mohm	± 5%	± 100ppm/°C	58T0092	2.78
● HVC2512T5004JET	5 Mohm	± 5%	± 100ppm/°C	58T0095	2.47
● HVC2512T1005JET	10 Mohm	± 5%	± 100ppm/°C	58T0093	2.78
● HVC2512T5005JET	50 Mohm	± 5%	± 100ppm/°C	58T0096	2.68
● HVC2512T1006JET	100 Mohm	± 5%	± 100ppm/°C	58T0094	2.68
● HVC2512Z5006JET	500 Mohm	± 5%	± 250ppm/°C	58T0098	5.37
● HVC2512Z1007JET	1 Gohm	± 5%	± 250ppm/°C	58T0097	7.48

(196692)

YC/TC SERIES THICK FILM CHIP RESISTOR ARRAYS

RoHS Compliant Available

Innovative Service Around the Globe YAGEO

Features:
- High reliability
- Small size

SPECIFICATIONS

Model	Power (mW)	Voltage (VDC)	Case	L (mm)	W (mm)	H (mm)
YC122	62.5	50	0402	1 mm	1 mm	0.3 mm
TC124	62.5	25	0402	2 mm	1 mm	0.4 mm
YC124	62.5	25	0402	2 mm	1 mm	0.45 mm
YC164	62.5	25	0603	3.2 mm	1.6 mm	0.6 mm

➤CONTINUED➤

YC/TC SERIES THICK FILM CHIP RESISTOR ARRAYS (CONT.)

Description	Tape Cut 1-99
YC122	0.10
TC124	0.01
YC124	0.03
YC164	0.01

YC122 SERIES — 62.5mW, 50VDC, 0402 CASE SIZE

Res. (Ω)	Tol.	Stock No.	Res. (Ω)	Tol.	Stock No.	Res. (Ω)	Tol.	Stock No.	Res. (Ω)	Tol.	Stock No.
0	± 5%	68R0317	10	± 5%	68R0318	47	± 5%	68R0321	...	...	...
3	± 5%	68R0320	22	± 5%	68R0319	56	± 5%	68R0322	...	...	...
TC124 SERIES — 62.5mW, 25VDC, 0402 CASE SIZE											
22	± 5%	68R0316	...	...	...	...	...	...	...	...	...
YC124 SERIES — 62.5mW, 25VDC, 0402 CASE SIZE											
0	± 5%	68R0323	22	± 5%	68R0329	82	± 5%	68R0337	4.7k	± 5%	68R0332
3	± 5%	68R0330	33	± 5%	68R0331	100	± 5%	68R0327	8.2k	± 5%	68R0336
7.5	± 5%	68R0335	47	± 5%	68R0333	150	± 5%	68R0328	10k	± 5%	68R0325
10	± 5%	68R0326	56	± 5%	68R0334	1k	± 5%	68R0324	...	...	...
YC164 SERIES — 62.5mW, 25VDC, 0603 CASE SIZE											
0	± 5%	68R0338	47	± 5%	68R0346	82	± 5%	68R0351	8.2k	± 5%	68R0350
10	± 5%	68R0341	51	± 5%	68R0347	100	± 5%	68R0342	10k	± 5%	68R0340
22	± 5%	68R0343	68	± 5%	68R0348	1k	± 5%	68R0339	...	...	...
33	± 5%	68R0344	75	± 5%	68R0349	4.7k	± 5%	68R0345	...	...	...

(169506)

RC SERIES THICK FILM CHIP RESISTORS

RoHS Compliant Available

Innovative Service Around the Globe YAGEO

Features:
- High reliability
- Small size

SPECIFICATIONS

Model	Power (mW)	Voltage (VDC)	Case	L (mm)	W (mm)	H (mm)
RC0201	500	25	0201	0.6	0.3	0.23
RC0402	62.5	50	0402	1	0.5	0.32
RC0603	100	50	0603	1.6	0.8	0.45
RC0805	125	150	0805	2	1.25	0.5
RC1206	250	200	1206	3.1	1.6	0.55

Description	Tape Cut 1-49
RC0201	0.05
RC0402	0.04
RC0603	0.04
RC0805	0.05
RC1206	0.06

RC0201 SERIES — 500mW, 25VDC, 0201 CASE SIZE

Res. (Ω)	Tol.	Stock No.	Res. (Ω)	Tol.	Stock No.	Res. (Ω)	Tol.	Stock No.	Res. (Ω)	Tol.	Stock No.
0	...	67R9864	2k	± 5%	67R9871	10k	± 5%	67R9867	100k	± 5%	67R9868
33	± 5%	67R9874	2.2k	± 5%	67R9872	15k	± 5%	67R9870	470k	± 5%	67R9876
100	± 5%	67R9869	3.3k	± 5%	67R9873	47k	± 5%	67R9875	1M	± 5%	67R9866
1k	± 5%	67R9865	10k	± 1%	67R9862	100k	± 1%	67R9863	...	...	...
RC0402 SERIES — 62.5mW, 50VDC, 0402 CASE SIZE											
1	± 1%	67R9883	75	± 5%	68R0031	1.58k	± 1%	67R9881	24k	± 5%	67R9988
1	± 5%	68R2090	82	± 1%	67R9958	1.8k	± 5%	68R2088	26.1k	± 1%	67R9918
2.2	± 5%	67R9982	82	± 5%	68R0034	2k	± 1%	67R9902	27k	± 5%	67R9990
3	± 5%	67R9996	100	± 1%	67R9962	2k	± 5%	67R9979	30k	± 1%	67R9923
4.7	± 5%	68R0010	100	± 5%	68R0039	2.2k	± 1%	67R9903	30k	± 5%	67R9997
5.1	± 5%	68R0018	107	± 1%	67R9889	2.2k	± 5%	67R9980	33k	± 5%	68R0001
5.6	± 5%	68R0019	110	± 1%	67R9891	2.21k	± 1%	67R9904	36.5k	± 1%	67R9928
10	± 1%	67R9886	120	± 1%	67R9894	2.49k	± 1%	67R9905	39k	± 1%	67R9929
10	± 5%	67R9966	120	± 5%	67R9972	2.7k	± 5%	67R9981	39k	± 5%	68R0005
12	± 5%	67R9970	121	± 1%	67R9896	3k	± 5%	67R9993	39.2k	± 1%	67R9930
15	± 5%	67R9974	124	± 1%	67R9897	3.16k	± 1%	67R9920	47k	± 1%	67R9937
18	± 5%	68R2092	150	± 1%	67R9900	3.3k	± 1%	67R9921	47k	± 5%	68R0012
20	± 1%	67R9907	150	± 5%	67R9976	3.3k	± 5%	67R9994	47.5k	± 1%	67R9938
20	± 5%	67R9983	180	± 5%	67R9978	3.74k	± 1%	67R9922	51k	± 5%	68R0020
22	± 1%	67R9912	200	± 1%	67R9909	3.9k	± 5%	67R9995	56k	± 1%	67R9950
22	± 5%	67R9985	200	± 5%	68R2095	4.64k	± 1%	67R9932	56k	± 5%	68R0023
22.1	± 1%	67R9913	220	± 1%	67R9914	4.7k	± 1%	67R9933	68k	± 5%	68R0028
24	± 5%	67R9989	220	± 5%	67R9987	4.7k	± 5%	68R0040	75k	± 1%	67R9956
24.9	± 1%	67R9916	243	± 1%	67R9917	4.75k	± 1%	67R9934	82k	± 5%	68R0033
27	± 5%	67R9991	270	± 5%	67R9992	4.99k	± 1%	67R9935	95.3k	± 1%	67R9959
27.4	± 1%	67R9919	300	± 5%	67R9999	5.1k	± 1%	67R9944	100k	± 1%	67R9961
30	± 5%	67R9998	301	± 1%	67R9924	5.1k	± 5%	68R0016	100k	± 5%	67R9967
33	± 5%	68R0002	330	± 1%	67R9927	5.11k	± 1%	67R9945	120k	± 5%	67R9971
33	± 1%	67R9925	330	± 5%	68R0004	5.6k	± 5%	68R0017	121k	± 1%	67R9895
33.2	± 1%	67R9926	390	± 5%	68R0008	6.8k	± 5%	68R0026	150k	± 1%	67R9899

➤CONTINUED➤

RC SERIES THICK FILM CHIP RESISTORS (CONT.)

RC0402 SERIES — 62.5mW, 50VDC, 0402 CASE SIZE

Res. (Ω)	Tol.	Stock No.	Res. (Ω)	Tol.	Stock No.	Res. (Ω)	Tol.	Stock No.	Res. (Ω)	Tol.	Stock No.
39	± 5%	68R0006	470	± 1%	67R9940	7.5k	± 1%	67R9955	150k	± 5%	67R9975
39.2	± 1%	67R9931	470	± 5%	68R0015	8.2k	± 5%	68R0032	180k	± 1%	67R9901
40.2	± 1%	67R9936	475	± 1%	67R9941	10k	± 1%	67R9960	180k	± 5%	67R9977
43	± 5%	68R0011	499	± 1%	67R9943	10k	± 5%	68R0038	200k	± 1%	67R9908
47	± 5%	68R0013	510	± 5%	68R0022	11.3k	± 1%	67R9890	200k	± 5%	68R2094
49.9	± 1%	67R9942	549	± 1%	67R9949	12k	± 1%	67R9892	220k	± 5%	67R9986
51	± 1%	67R9946	560	± 5%	68R0025	12k	± 5%	67R9969	330k	± 5%	68R0003
51	± 5%	68R0021	680	± 5%	68R0030	12.1k	± 1%	67R9893	390k	± 5%	68R0007
51.1	± 1%	67R9947	681	± 1%	67R9954	15k	± 1%	67R9898	470k	± 1%	67R9939
54.9	± 1%	67R9948	820	± 5%	68R0035	15k	± 5%	67R9973	470k	± 5%	68R0014
56	± 1%	67R9951	1k	± 1%	67R9877	18k	± 5%	68R2091	1M	± 1%	67R9882
56	± 5%	68R0024	1k	± 5%	68R0037	20k	± 1%	67R9906	1M	± 5%	68R2089
56.2	± 1%	67R9952	1.1k	± 1%	67R9878	20k	± 5%	68R2093	10M	± 1%	67R9885
60.4	± 1%	67R9953	1.2k	± 5%	68R2086	22k	± 1%	67R9910	10M	± 5%	67R9965
62	± 5%	68R0027	1.3k	± 1%	67R9879	22k	± 5%	67R9984	...	...	...
68	± 5%	68R0029	1.5k	± 1%	67R9880	22.1k	± 1%	67R9911	...	...	...

RC0603 SERIES — 100mW, 50VDC, 0603 CASE SIZE

0	...	68R0041	150	± 1%	68R0061	2.7k	± 1%	68R0067	27k	± 5%	68R0171
0	...	68R0219	150	± 5%	68R0155	2.7k	± 5%	68R0161	30k	± 1%	68R0082
1	± 1%	68R0048	180	± 5%	68R0158	3k	± 1%	68R0078	30k	± 5%	68R0179
1	± 5%	68R0142	200	± 1%	68R0071	3k	± 5%	68R0175	33k	± 1%	68R0084
2.2	± 5%	68R0162	200	± 5%	68R0166	3.3k	± 1%	68R0079	33k	± 5%	68R0181
3.3	± 5%	68R0178	220	± 1%	68R0075	3.3k	± 5%	68R0176	39k	± 1%	68R0090
4.7	± 5%	68R0189	220	± 5%	68R0170	3.6k	± 1%	68R0080	39k	± 5%	68R0185
10	± 1%	68R0129	270	± 5%	68R0174	3.9k	± 1%	68R0081	47k	± 1%	68R0126
10	± 5%	68R0146	300	± 1%	68R0083	3.9k	± 5%	68R0177	47k	± 5%	68R0224
15	± 5%	68R0153	300	± 5%	68R0180	4.7k	± 1%	68R0133	47.5k	± 1%	68R0096
18	± 5%	68R0157	330	± 1%	68R0088	4.7k	± 5%	68R0223	51k	± 1%	68R0103
20	± 1%	68R0069	330	± 5%	68R0184	4.75k	± 1%	68R0093	51k	± 5%	68R0196
22	± 1%	68R0073	390	± 1%	68R0091	5.1k	± 1%	68R0101	56k	± 5%	68R0199
22	± 5%	68R0168	390	± 5%	68R0187	5.1k	± 5%	68R0194	68k	± 1%	68R0110
24.9	± 1%	68R0076	470	± 1%	68R0099	5.6k	± 1%	68R0102	68k	± 5%	68R0204
27	± 5%	68R0172	470	± 5%	68R0193	5.6k	± 5%	68R0195	75k	± 1%	68R0114
33	± 1%	68R0085	510	± 1%	68R0105	6.8k	± 1%	68R0109	82k	± 1%	68R0117
33	± 5%	68R0182	510	± 5%	68R0198	6.8k	± 5%	68R0202	82k	± 5%	68R0210
33.2	± 1%	68R0086	560	± 1%	68R0108	7.5k	± 1%	68R0113	100k	± 1%	68R0130
47	± 1%	68R0097	560	± 5%	68R0201	7.5k	± 5%	68R0207	100k	± 5%	68R0216
47	± 5%	68R0191	680	± 1%	68R0112	8.2k	± 1%	68R0116	120k	± 5%	68R0150
49.9	± 1%	68R0100	680	± 5%	68R0206	8.2k	± 5%	68R0209	150k	± 1%	68R0060
51	± 1%	68R0104	820	± 5%	68R0212	10k	± 1%	68R0128	150k	± 5%	68R0154
51	± 5%	68R0197	1k	± 1%	68R0127	10k	± 5%	68R0221	200k	± 1%	68R0070
56	± 5%	68R0200	1k	± 5%	68R0220	11k	± 1%	68R0053	200k	± 5%	68R0165
56.2	± 1%	68R0107	1.1k	± 1%	68R0043	12k	± 1%	68R0054	220k	± 1%	68R0074
62	± 5%	68R0203	1.2k	± 1%	68R0044	12k	± 5%	68R0149	220k	± 5%	68R0169
68	± 1%	68R0134	1.2k	± 5%	68R0138	12.1k	± 1%	68R0055	270k	± 5%	68R0173
68	± 5%	68R0205	1.5k	± 1%	68R0045	13k	± 1%	68R0057	330k	± 1%	68R0087
75	± 1%	68R0115	1.5k	± 5%	68R0139	15k	± 1%	68R0059	330k	± 5%	68R0183
75	± 5%	68R0208	1.8k	± 1%	68R0046	15k	± 5%	68R0152	390k	± 5%	68R0186
82	± 1%	68R0118	1.8k	± 5%	68R0140	18k	± 1%	68R0062	470k	± 1%	68R0098
82	± 5%	68R0211	2k	± 1%	68R0132	18k	± 5%	68R0156	470k	± 5%	68R0192
100	± 1%	68R0131	2k	± 5%	68R0159	20k	± 1%	68R0068	1M	± 1%	68R0047
100	± 5%	68R0222	2.2k	± 1%	68R0123	20k	± 5%	68R0163	1M	± 5%	68R0141
120	± 1%	68R0056	2.2k	± 5%	68R0160	22k	± 1%	68R0124	10M	± 5%	68R0145
120	± 5%	68R0151	2.4k	± 1%	68R0065	22k	± 5%	68R0167	...	...	...
130	± 1%	68R0058	2.49k	± 1%	68R0066	27k	± 1%	68R0077	...	...	...

RC0805 SERIES — 125mW, 150VDC, 0805 CASE SIZE

0	...	68R0285	150	± 5%	68R0262	2.2k	± 1%	68R0236	33k	± 1%	68R0242
1	± 5%	68R0257	220	± 5%	68R0269	3.3k	± 5%	68R0270	47k	± 1%	68R0250
1	± 1%	68R0228	330	± 5%	68R0272	3.3k	± 1%	68R0241	47k	± 5%	68R0289
2.2	± 5%	68R0265	470	± 5%	68R0276	4.7k	± 1%	68R0243	68k	± 5%	68R0278
2.2	± 1%	68R0237	470	± 1%	68R0245	4.7k	± 5%	68R0288	100k	± 5%	68R0260
10	± 5%	68R0259	1k	± 1%	68R0246	5.1k	± 5%	68R0277	100k	± 1%	68R0231
10	± 1%	68R0230	1k	± 5%	68R0286	10k	± 1%	68R0251	150k	± 1%	68R0234
22	± 5%	68R0268	1.2k	± 5%	68R0254	10k	± 5%	68R0287	200k	± 1%	68R0239
33	± 5%	68R0271	1.5k	± 5%	68R0255	15k	± 1%	68R0249	1M	± 1%	68R0247
47	± 5%	68R0275	1.5k	± 1%	68R0226	20k	± 5%	68R0266	1M	± 5%	68R0256
75	± 5%	68R0279	2k	± 5%	68R0263	20k	± 1%	68R0238	...	...	...
100	± 5%	68R0261	2k	± 1%	68R0235	22k	± 5%	68R0267	...	...	...
100	± 1%	68R0232	2.2k	± 5%	68R0264	22k	± 1%	68R0240	...	...	...

RC1206 SERIES — 250mW, 200VDC, 1206 CASE SIZE

0	...	68R0314	15	± 5%	68R0307	1k	± 5%	68R0298	100k	± 1%	68R0294
1	± 1%	68R0296	47	± 5%	68R0311	1.2k	± 5%	68R0299	100k	± 5%	68R0305
1	± 5%	68R0302	100	± 1%	68R0295	1.5k	± 5%	68R0300	330k	± 5%	68R0309
2.2	± 5%	68R0308	100	± 5%	68R0306	4.7k	± 5%	68R0310	1M	± 5%	68R0301
10	± 1%	68R0293	470	± 5%	68R0312	10k	± 1%	68R0292	...	...	...
10	± 5%	68R0304	1k	± 1%	68R0290	10k	± 5%	68R0303	...	...	...

(168176)

LPS SERIES THICK FILM POWER RESISTORS

RoHS Compliant Available

VISHAY

Features
- 300W at 85°C case temperature
- Wide resistance range: 0.3Ω to 900kΩ E24 series
- Non inductive
- Easy mounting
- Low thermal radiation of the case
- For Mounting onto a Heatsink

Specifications
- Power rating: 0.3W to 0.8W
- Voltage rating: 5kV
- Tolerance: ±5%
- Temperature coefficient: 150ppm/°C to 300ppm/°C
- Operating Temperature: -55°C to 120°C

Mfg. Part No.	Res. (Ohms)	Temp Coeff.	Stock No.	Price Each 1-4	Price Each 5-24
POWER RATING: 300W					
LPS0300H1R00JB	1	± 500ppm/°C	58R2591	54.29	47.92
LPS0300H4R70JB	4.7	± 300ppm/°C	58R2594	54.29	47.92
LPS0300H10R0JB	10	± 300ppm/°C	58R2592	56.98	50.29
LPS0300H47R0JB	47	± 150ppm/°C	58R2595	54.29	47.92
LPS0300H1000JB	100	± 150ppm/°C	58R2593	54.29	47.92
LPS0300H4700JB	470	± 150ppm/°C	58R2596	54.29	47.92
POWER RATING: 600W					
LPS0600H1R00JB	1	± 500ppm/°C	55R4168	80.50	71.05
LPS0600H4R70JB	4.7	± 300ppm/°C	58R2598	76.70	67.70
LPS0600H10R0JB	10	± 300ppm/°C	58R2597	76.70	67.70
LPS0600H47R0JB	47	± 150ppm/°C	58R2599	76.70	67.70
LPS0600H1000JB	100	± 150ppm/°C	55R4170	80.50	71.05
LPS0600H4700JB	470	± 150ppm/°C	58R2600	76.70	67.70
POWER RATING: 800W					
LPS0800H1R00JB	1	± 500ppm/°C	58R2601	123.27	108.81
LPS0800H10R0JB	10	± 300ppm/°C	58R2602	123.27	108.81
LPS0800H4R70JB	4.7	± 300ppm/°C	58R2604	123.27	108.81
LPS0800H47R0JB	47	± 150ppm/°C	55R4205	123.27	108.81
LPS0800H1000JB	100	± 150ppm/°C	58R2603	123.27	108.81
LPS0800H4700JB	470	± 150ppm/°C	58R2605	123.27	108.81

(178028)

3520 SERIES SMD THICK FILM POWER RESISTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features
- Small size to power ratio
- Suitable for drop-in placement
- Low profile

Applications
- Volume control
- High frequency

Specifications
- Tolerance: ± 5%
- Power Rating @70°C: 1W
- TCR: above 10Ω: ± 200ppm/°C; below 10Ω: ± 350ppm/°C

Mfg. Part No.	Resistance (Ohm)	Stock No.	Price Each 1-99
35201R0JT	1	18R3500	0.10
35201R2JT	1.2	18R3501	0.25
35201R5JT	1.5	18R3502	0.25
35201R8JT	1.8	18R3503	0.26
35202R2JT	2.2	18R3526	0.15
35203R3JT	3.3	18R3543	0.26
35203R9JT	3.9	18R3544	0.25
35205R6JT	5.6	18R3562	0.14
35206R8JT	6.8	18R3569	0.16
352010RJT	10	18R3506	0.12
352012RJT	12	18R3510	0.25
352018RJT	18	18R3518	0.14
352022RJT	22	18R3531	0.16
352033RJT	33	18R3547	0.19
352047RJT	47	64M6542	0.16
352056RJT	56	18R3564	0.25
3520100RJT	100	18R3508	0.08
3520120RJT	120	18R3512	0.07
3520150RJT	150	18R3516	0.16
3520180RJT	180	18R3520	0.25
3520220RJT	220	09R2905	0.16
3520270RJT	270	18R3536	0.25
3520330RJT	330	18R3549	0.15
3520390RJT	390	18R3553	0.16
3520680RJT	680	18R3573	0.15
35201K0JT	1k	18R3492	0.25
35202K2JT	2.2k	18R3522	0.16
35203K3JT	3.3k	18R3538	0.06
352010KJT	10k	18R3504	0.15
352033KJT	33k	18R3546	0.16
3520330KJT	330k	18R3548	0.16
3520470KJT	470k	18R3558	0.06

(177897)

THICK FILM RESISTORS – SMD

PWR220T SERIES TO-220 STYLE THICK FILM POWER RESISTORS

RoHS Compliant Available

BOURNS®

Features
- Low inductance
- Resistor electrically isolated from the backplate
- High power rating

Applications
- Power supplies
- Motor drives
- Test and measurement
- Rectifiers

Specifications
- Tolerance: ± 1% or ± 5%
- Power Rating @ 25°C: 20W
- Inductance: 0.1 µH max.
- Temperature Coefficient: ± 100ppm/°C
- Operating Temperature Range: -55°C to +155°C

Mfg. Part No.	Res. (Ohm)	Res. Tol.	Stock No.	Price Each 1-9	Price Each 10-24
● PWR220T-20-R100F	0.1	± 1%	55R1097	4.17	3.73
● PWR220T-20-R500F	0.5	± 1%	55R1098	4.01	3.59
● PWR220T-20-R750F	0.75	± 1%	55R1099	4.17	3.73
● PWR220T-20-1R00F	1	± 1%	55R1100	4.01	3.59
● PWR220T-20-1R50F	1.5	± 1%	55R1101	4.01	3.59
● PWR220T-20-2R00F	2	± 1%	55R1105	4.01	3.59
● PWR220T-20-2R50F	2.5	± 1%	55R1106	4.17	3.73
● PWR220T-20-3R00F	3	± 1%	55R1107	4.01	3.59
● PWR220T-20-3R30F	3.3	± 1%	55R1108	4.01	3.59
● PWR220T-20-4R70F	4.7	± 1%	55R1110	4.17	3.73
● PWR220T-20-5R60F	5.6	± 1%	55R1113	3.74	3.35
● PWR220T-20-7R50F	7.5	± 1%	55R1115	3.64	3.27
● PWR220T-20-10R0F	10	± 1%	55R1102	3.74	3.35
● PWR220T-20-47R0F	47	± 1%	55R1111	3.64	3.27
● PWR220T-20-50R0F	50	± 1%	55R1114	3.64	3.27
● PWR220T-20-75R0F	75	± 1%	55R1116	3.64	3.27
● PWR220T-20-1000F	100	± 1%	55R1103	3.79	3.40
● PWR220T-20-3300F	330	± 1%	55R1109	3.64	3.27
● PWR220T-20-4700F	470	± 1%	55R1112	3.64	3.27
● PWR220T-20-1001F	1k	± 1%	55R1104	3.64	3.27

(156349)

CRM SERIES THICK FILM POWER RESISTORS

RoHS Compliant Available

BOURNS®

Specifications
- Power Rating @70°C: 2W
- Resistance Tolerance: ±1 %, ±5 %
- Resistance Range:
  - 0.047 - 0.91Ω (E24 Values)
  - 1 - 9.1Ω (E24 Values)
  - 10Ω - 1MΩ (E24 + E96 Values)
- Temperature Coefficient:
  - 0.047 to 0.091Ω: ±100 PPM/°C
  - 0.1 to 0.91Ω: ±100 PPM/°C
  - 1Ω to 1MΩ: ±200 PPM/°C
  - 10Ω to 1MΩ: ±100 PPM/°C
- Operating Temperature Range: -55°C to +155°C

Features
- Wide resistance range

Applications
- Power supply circuits
- Current sensing
- Inrush current limiting

Mfg. Part No.	Res. (Ohms)	Res. Tol.	Tape Cut Stock No.	Tape Cut Price Each 1-9
CASE SIZE: 0805, POWER RATING: 250 mW				
● CRM0805-FW-R050ELF	0.05	± 1%	17T4231	0.36
● CRM0805-FX-51R0ELF	51	± 1%	17T4241	0.10
CASE SIZE: 1206, POWER RATING: 500 mW				
● CRM1206-FZ-R050ELF	0.05	± 1%	17T4261	0.51
● CRM1206-FX-R100ELF	0.1	± 1%	17T4249	0.40
● CRM1206-FX-R820ELF	0.82	± 1%	17T4253	0.24
● CRM1206-JW-1R0ELF	1	± 5%	17T4263	0.11
● CRM1206-JW-2R2ELF	2.2	± 5%	17T4265	0.11
● CRM1206-FX-10R0ELF	10	± 1%	17T4257	0.10
● CRM1206-FX-51R0ELF	51	± 1%	17T4259	0.10
CASE SIZE: 2010, POWER RATING: 1 WATT				
● CRM2010-FZ-R050ELF	0.05	± 1%	17T4277	0.67
● CRM2010-JW-1R0ELF	1	± 5%	17T4283	0.27
● CRM2010-FX-51R0ELF	51	± 1%	17T4275	0.33
CASE SIZE: 2512, POWER RATING: 2 WATT (PULSE RESISTANT)				
● CRM2512-JX-R100ELF	0.1	± 5%	14P5614	0.37
● CRM2512-FX-R200ELF	0.2	± 1%	14P5591	0.57
● CRM2512-FX-R300ELF	0.3	± 1%	14P5592	0.55
● CRM2512-FX-R510ELF	0.51	± 1%	14T0334	0.36
● CRM2512-JW-1R0ELF	1	± 5%	14T0335	0.37
● CRM2512-JW-2R2ELF	2.2	± 5%	14T0338	0.38
● CRM2512-JW-4R7ELF	4.7	± 5%	14T0341	0.36
● CRM2512-JW-100ELF	10	± 5%	14T0336	0.36
● CRM2512-JW-201ELF	200	± 5%	14T0340	0.38

(195533)

SURFACE MOUNT THICK FILM CHIP RESISTORS

SMD

RoHS Compliant Available

multicomp

Features
- Metal-Glazed Film on High Purity Alumina Substrate
- Surface Mount Package

Available in Cut Tape and Full Reels. Additional resistance values available; *go online or call.*

ELECTRICAL SPECIFICATIONS

Model	EIA Size (Inch)	Power Rating @ 70°C (W)	Tolerance	Temperature Coefficient (ppm/°C)	Resistance Range (Ohms)	Working Voltage (V)	Dielectric Withstanding Voltage (V)
MC0402	0402	0.063	1%	100	10R -100R 101R -1M	25	100
MC0603	0603	0.1	1%	100	10R -100R 101R -1M	50	500
MC0805	0805	0.125	1%	100	10R -100R 101R -1M	75	500
MC1206	1206	0.25	1%	100	10R -100R 101R -1M	150	100
MC1210	1210	0.33	1%	100	10R -100R 101R -1M	200	500
MC2010	2010	0.5	1%	100	10R -100R 101R -1M	400	500
MC2512	2512	1	1%	100	10R -100R 101R -1M	500	500

Description	Tape Cut Price Each 1-49	50-199	200-999	1000+
MC0402 Series	0.02	0.02	0.01	0.01
MC0603 Series	0.04	0.02	0.02	0.01
MC0805 Series	0.02	0.02	0.01	0.01
MC1206 Series	0.05	0.03	0.02	0.01
MC2010 Series	0.33	0.20	0.12	0.07
MC2512 Series	0.26	0.16	0.10	0.06

➤ CONTINUED ➤

SURFACE MOUNT THICK FILM CHIP RESISTORS (CONT.)

MC SERIES THICK FILM RESISTORS - CASE SIZE 0402

Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)
79M5879	24.9	79M5894	51.1	79M5890	499	79M5883	3.01k	79M5891	4.99k	79M5898	9.76k	79M5896	56.2k
79M5885	33.2	79M5880	249	79M5878	2.21k	79M5886	4.02k	79M5895	5.11k	79M5884	30.1k	04P0210	80.6k
79M5889	49.9	79M5887	475	79M5881	2.49k	79M5888	4.75k	79M5897	6.49k	79M5892	49.9k	79M5893	499k

MC SERIES THICK FILM RESISTORS - CASE SIZE 0603

Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)
79M5899	0	04P0506	91	04P0233	1.18k	04P0422	4.22k	79M5923	16.2k	04P0458	59k	04P0327	215k
79M5900	10	04P0510	93.1	79M5908	1.2k	04P0427	4.32k	79M5924	16.5k	04P0460	61.9k	79M5937	220k
04P0212	10.2	04P0514	97.6	79M5911	1.21k	04P0432	4.53k	04P0287	16.9k	04P0462	62k	79M5942	221k
04P0216	10.5	79M5901	100	79M5913	1.27k	79M5975	4.7k	04P0297	18k	04P0466	66.5k	04P0335	232k
04P0220	10.7	79M5906	110	79M5914	1.3k	79M5979	4.75k	04P0302	18.2k	04P0470	68k	04P0339	237k
04P0224	11	04P0229	115	04P0251	1.33k	79M5982	4.87k	04P0306	18.7k	04P0473	68.1k	04P0343	240k
04P0236	12	04P0232	118	04P0257	1.4k	79M5985	4.99k	79M5927	19.1k	04P0476	69.8k	79M5947	249k
04P0238	12.1	04P0237	120	04P0261	1.43k	79M5988	5.1k	04P0313	19.6k	04P0479	71.5k	04P0352	255k
04P0242	12.4	79M5910	121	79M5919	1.5k	79M5992	5.11k	79M5931	20k	79M6001	75k	04P0367	280k
04P0245	12.7	04P0256	140	04P0275	1.6k	04P0447	5.23k	04P0319	20.5k	04P0490	80.6k	04P0375	300k
04P0248	13	04P0260	143	04P0280	1.62k	04P0450	5.36k	04P0323	21k	04P0493	82k	79M5959	301k
04P0255	14	04P0268	154	04P0283	1.65k	04P0451	5.49k	04P0326	21.5k	79M6006	82.5k	04P0381	316k
04P0259	14.3	04P0279	162	04P0286	1.69k	04P0453	5.6k	79M5936	22k	04P0498	84.5k	04P0386	324k
04P0265	15	04P0285	169	04P0290	1.74k	04P0457	5.9k	79M5941	22.1k	04P0501	86.6k	04P0388	330k
04P0289	17.4	04P0300	182	04P0293	1.78k	79M5995	6.04k	04P0331	22.6k	04P0502	88.7k	04P0390	332k
79M5929	20	04P0315	200	79M5926	1.8k	79M5997	6.19k	04P0338	23.7k	79M6008	90.9k	04P0396	348k
04P0321	21	04P0317	205	04P0301	1.82k	79M5998	6.49k	04P0342	24k	04P0509	91k	04P0402	360k
04P0325	21.5	04P0328	220	04P0305	1.87k	04P0469	6.8k	79M5946	24.9k	04P0511	93.1k	04P0413	383k
79M5934	22	04P0336	237	79M5928	1.96k	79M5999	6.81k	04P0355	26.1k	04P0513	95.3k	04P0416	392k
79M5938	22.1	04P0341	240	79M5930	2k	04P0475	6.98k	04P0360	27k	04P0516	97.6k	04P0418	402k
04P0329	22.6	04P0345	243	79M5935	2.2k	04P0478	7.15k	79M5951	27.4k	04P0211	100k	04P0424	422k
04P0340	24	04P0350	255	79M5940	2.21k	04P0481	7.32k	04P0366	28k	04P0215	102k	04P0429	432k
79M5944	24.9	04P0358	270	04P0337	2.37k	79M6000	7.5k	79M5952	28.7k	04P0219	105k	04P0434	453k
04P0349	25.5	04P0374	300	79M5943	2.4k	04P0488	7.87k	79M5958	30.1k	04P0223	107k	04P0438	464k
04P0353	26.1	79M5956	301	04P0346	2.43k	79M6002	8.06k	04P0377	30.9k	04P0225	110k	79M5977	470k
04P0357	26.7	04P0387	330	79M5945	2.49k	79M6003	8.2k	79M5962	31.6k	04P0235	118k	04P0442	475k
79M5949	27	79M5967	332	04P0351	2.55k	79M6005	8.25k	79M5965	33k	04P0240	121k	04P0444	487k
04P0362	27.4	04P0400	360	04P0354	2.61k	04P0497	8.45k	04P0389	33.2k	04P0244	124k	79M5987	499k
04P0364	28	04P0411	383	79M5948	2.67k	79M6007	8.66k	04P0395	34.8k	04P0247	127k	04P0445	510k
04P0371	29.4	04P0419	412	04P0359	2.7k	04P0504	9.09k	04P0405	36.5k	04P0249	130k	04P0454	560k
04P0373	30	04P0426	432	79M5950	2.74k	04P0508	9.1k	04P0408	37.4k	04P0252	133k	04P0455	562k
79M5955	30.1	04P0436	464	04P0365	2.8k	79M6009	9.31k	04P0412	38.3k	04P0254	137k	79M5996	604k
04P0382	32.4	79M5978	475	04P0369	2.87k	79M5903	10k	79M5970	39k	79M5917	140k	04P0461	619k
79M5963	33	79M5984	499	79M5953	3k	04P0214	10.2k	79M5972	39.2k	04P0264	147k	04P0471	680k
79M5966	33.2	79M5991	511	79M5957	3.01k	04P0222	10.7k	04P0417	40.2k	79M5921	150k	04P0474	681k
04P0391	34	04P0446	523	79M5960	3.09k	79M5907	11.5k	04P0423	42.2k	04P0271	154k	04P0482	750k
04P0403	36.5	04P0465	649	79M5961	3.16k	04P0234	11.8k	04P0425	43k	04P0273	158k	04P0491	806k
04P0406	37.4	04P0468	680	79M5964	3.3k	79M5909	12k	04P0428	43.2k	04P0277	160k	04P0494	820k
04P0414	39	04P0472	681	79M5968	3.32k	79M5912	12.4k	04P0433	45.3k	04P0281	162k	04P0499	845k
04P0415	39.2	04P0484	768	04P0392	3.4k	04P0246	12.7k	04P0437	46.4k	79M5925	165k	79M5904	1M
04P0439	47	04P0507	910	04P0398	3.57k	79M5915	13k	79M5976	47k	04P0288	169k	04P0266	1.5M
79M5983	49.9	79M5902	1k	04P0401	3.6k	04P0258	14k	79M5980	47.5k	04P0295	178k	79M5981	4.75M
04P0483	76.8	04P0213	1.02k	04P0407	3.74k	79M5918	14.3k	79M5986	49.9k	04P0298	180k	79M5905	10M
04P0492	82	04P0218	1.05k	79M5969	3.9k	04P0263	14.7k	79M5989	51k	04P0303	182k	...	...
79M6004	82.5	04P0221	1.07k	79M5971	3.92k	79M5920	15k	79M5993	51.1k	04P0307	187k	...	...
04P0496	84.5	04P0227	1.13k	79M5973	4.02k	79M5922	15.8k	04P0448	52.3k	79M5932	200k	...	...
04P0500	86.6	04P0230	1.15k	79M5974	4.12k	04P0276	16k	79M5994	56.2k	04P0320	205k	...	...

MC SERIES THICK FILM RESISTORS - CASE SIZE 0805

Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)
79M6013	0	79M6053	220	79M6128	825	79M6078	3.3k	04P0643	7.87k	04P0582	21k	79M6113	60.4k
79M6014	10	79M6056	221	04P0650	909	79M6081	3.32k	79M6127	8.06k	79M6052	21.5k	04P0634	68k
79M6029	15	04P0585	237	79M6016	1k	04P0604	3.48k	79M6129	8.25k	79M6058	22.1k	04P0636	68.1k
04P0577	18.2	79M6059	240	79M6018	1.1k	79M6084	3.74k	79M6130	9.09k	04P0587	23.7k	04P0640	73.2k
79M6047	20	04P0589	243	04P0557	1.18k	04P0610	3.83k	04P0653	9.31k	79M6063	24.9k	79M6126	75k
79M6055	22.1	79M6061	249	04P0558	1.2k	04P0612	3.9k	04P0655	9.76k	04P0593	25.5k	04P0656	80.6k
04P0588	24	04P0592	255	79M6023	1.21k	79M6086	3.92k	79M6017	10k	04P0595	27k	04P0651	90.9k
79M6060	24.9	04P0594	267	04P0566	1.33k	79M6088	4.02k	04P0552	10.7k	79M6066	27.4k	79M6012	91k
04P0596	27.4	79M6064	270	04P0571	1.47k	04P0616	4.3k	79M6019	11k	04P0599	28k	04P0551	105k
79M6076	33	04P0597	274	79M6031	1.5k	04P0618	4.42k	04P0555	11.5k	04P0600	29.4k	04P0553	110k
79M6080	33.2	79M6068	300	04P1101	1.62k	79M6093	4.7k	79M6021	12k	79M6070	30k	04P0556	115k
79M6090	47	79M6071	301	04P0574	1.65k	79M6095	4.75k	79M6024	12.1k	79M6073	30.1k	79M6022	120k
04P0619	47.5	79M6077	330	04P0576	1.69k	04P0622	4.87k	79M6026	12.7k	79M6075	31.6k	04P0563	124k
79M6097	49.9	04P0603	348	79M6041	1.8k	79M6099	4.99k	04P0564	13k	79M6079	33k	04P0565	130k
79M6102	51	79M6087	402	79M6043	1.82k	79M6104	5.1k	04P0569	14k	79M6082	33.2k	04P0568	137k
79M6106	51.1	04P0617	432	79M6046	1.96k	79M6107	5.11k	04P0570	14.3k	04P0605	34.8k	79M6033	150k
04P0629	60.4	79M6091	470	79M6049	2k	04P0625	5.36k	79M6028	14.7k	04P0611	38.3k	79M6051	200k
79M6123	75	79M6094	475	04P0583	2.15k	79M6110	5.62k	79M6032	15k	79M6085	39k	04P0584	221k
04P0645	82	79M6098	499	79M6054	2.2k	04P0627	5.9k	79M6034	15.4k	79M6089	40.2k	04P0591	249k
79M6015	100	79M6103	510	79M6057	2.21k	04P0630	6.04k	79M6035	16.2k	04P0615	41.2k	79M6074	301k
79M6020	120	04P0624	511	04P0586	2.37k	79M6114	6.19k	79M6036	16.5k	79M6092	47k	04P0620	475k
04P0559	121	04P0626	560	79M6062	2.49k	79M6116	6.2k	79M6037	16.9k	79M6096	47.5k	04P0637	681k

CONTINUED

THICK FILM RESISTORS – SMD

2

SURFACE MOUNT THICK FILM CHIP RESISTORS (CONT.)

Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)
04P0561	124	04P0631	620	79M6065	2.7k	04P0632	6.34k	79M6038	17.4k	04P0623	48.7k	04P0550	1M
79M6027	130	79M6120	681	04P0598	2.74k	79M6117	6.49k	79M6039	17.8k	79M6100	49.9k	...	...
79M6030	150	79M6122	715	79M6067	2.8k	79M6119	6.8k	79M6042	18k	79M6105	51k	...	...
04P0575	169	79M6124	750	79M6069	3k	79M6121	6.81k	79M6044	18.2k	79M6108	51.1k	...	...
79M6040	180	04P0642	787	79M6072	3.01k	04P0638	6.98k	79M6045	18.7k	79M6109	56k	...	...
04P0578	182	04P0644	806	04P0601	3.16k	04P0639	7.32k	04P0580	19.6k	79M6111	56.2k	...	...
79M6048	200	04P0646	820	04P0602	3.24k	79M6125	7.5k	79M6050	20k	04P0628	59k	...	...

MC SERIES THICK FILM RESISTORS - CASE SIZE 1206

Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)
79M6131	0	04P1030	84.5	04P0951	549	04P0783	2.1k	79M6135	10k	04P0930	46.4k	04P0853	309k
79M6132	10	04P1052	95.3	79M6217	560	04P0788	2.15k	04P0668	10.5k	79M6202	47k	04P0857	316k
04P0691	12	79M6133	100	79M6219	604	79M6161	2.2k	79M6142	12k	04P0936	48.7k	04P0863	330k
04P0721	14.3	79M6140	120	04P0975	619	79M6164	2.21k	04P0699	12.4k	04P0938	51k	04P0865	332k
04P0731	15.8	04P0702	127	04P0978	620	04P0797	2.26k	04P0703	12.7k	79M6216	51.1k	04P0878	357k
04P0748	16.9	04P0706	130	04P0991	665	04P0809	2.4k	79M6145	13k	04P0943	52.3k	04P0887	365k
04P0791	22	04P0715	137	79M6223	680	79M6170	2.49k	04P0716	13.7k	04P0948	53.6k	04P0891	374k
04P0792	22.1	79M6149	150	79M6226	681	79M6174	2.7k	79M6151	15k	04P0959	56.2k	04P0900	390k
04P0804	23.7	04P0732	158	79M6228	715	04P0846	3k	79M6153	15.4k	79M6225	68k	04P0904	402k
04P0808	24	04P0741	162	04P1007	732	04P0860	3.24k	04P0746	16.5k	04P1025	82k	04P0922	442k
04P0829	27	79M6155	180	79M6231	750	79M6186	3.3k	04P0756	17.8k	04P1028	82.5k	04P0927	453k
04P0832	27.4	04P0775	196	04P1015	787	04P0868	3.4k	04P0760	18k	04P1055	95.3k	04P0931	464k
04P0845	30	79M6157	200	04P1020	806	04P0872	3.48k	04P0765	18.2k	79M6136	100k	04P0932	470k
79M6180	30.1	04P0782	210	79M6235	820	04P0881	3.6k	04P0769	18.7k	04P0663	102k	04P0933	475k
04P0849	30.9	79M6160	220	79M6236	825	04P0886	3.65k	04P0776	19.6k	04P0669	105k	79M6210	499k
04P0854	31.6	04P0800	232	04P1031	845	04P0902	3.92k	79M6159	20k	04P0692	120k	04P0940	511k
79M6184	33	79M6166	240	04P1042	909	04P0917	4.32k	04P0779	20.5k	04P0700	124k	04P0965	576k
04P0864	33.2	79M6169	249	04P1053	953	79M6201	4.7k	04P0784	21k	04P0704	127k	04P0976	619k
04P0897	39	04P0817	255	79M6134	1k	79M6205	4.75k	04P0789	21.5k	04P0713	133k	04P0984	634k
79M6193	40.2	04P0825	267	79M6138	1.02k	79M6209	4.99k	79M6162	22k	04P0720	140k	04P0993	665k
04P0912	43	79M6173	270	04P0675	1.1k	79M6215	5.11k	04P0794	22.1k	79M6152	150k	04P0994	680k
04P0923	45.3	04P0836	280	79M6141	1.2k	04P0952	5.49k	04P0807	23.7k	04P0743	162k	04P1002	698k
79M6199	47	79M6177	300	04P0694	1.21k	79M6218	5.62k	04P0810	24k	04P0757	178k	04P1005	715k
79M6203	47.5	04P0850	309	04P0707	1.3k	04P0971	6.04k	04P0812	24.3k	04P0761	180k	04P1009	750k
79M6207	49.9	79M6185	330	04P0711	1.33k	04P0987	6.49k	79M6171	24.9k	04P0766	182k	04P1013	768k
79M6211	51	79M6188	332	04P0723	1.43k	79M6224	6.8k	04P0822	26.1k	04P0777	200k	04P1018	787k
04P0941	52.3	04P0880	360	79M6150	1.5k	79M6227	6.81k	04P0833	27.4k	04P0785	210k	04P1023	806k
04P0945	53.6	04P0898	390	04P0737	1.6k	79M6229	7.15k	79M6178	30k	79M6163	220k	04P1047	910k
04P0970	60.4	04P0901	392	04P0742	1.62k	79M6232	7.5k	79M6183	30.1k	79M6165	221k	04P1051	931k
04P0980	63.4	04P0913	430	04P0752	1.74k	04P1021	8.06k	04P0852	30.9k	79M6172	249k	04P1061	976k
04P0995	68.1	04P0929	464	04P0759	1.8k	04P1024	8.2k	79M6187	33k	04P0819	255k	79M6137	1M
79M6230	75	79M6200	470	04P0764	1.82k	79M6237	8.25k	79M6190	33.2k	04P0823	261k	...	...
04P1010	76.8	04P0935	487	04P0768	1.87k	04P1035	8.66k	04P0869	34k	04P0831	270k	...	...
04P1014	78.7	79M6208	499	04P0771	1.91k	79M6238	9.09k	04P0882	36k	79M6179	300k	...	...
79M6234	82	79M6212	510	79M6158	2k	04P1054	9.53k	04P0910	42.2k	04P0848	301k	...	...

MC SERIES THICK FILM RESISTORS - CASE SIZE 1210

Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)
04P1102	10	04P1391	59	04P1188	205	04P1314	383	04P1470	931	04P1265	30k	04P1207	221k
04P1115	11	04P1405	63.4	04P1193	210	04P1324	402	79M6240	1k	04P1291	34k	04P1217	232k
04P1144	15	04P1419	68.1	04P1201	220	04P1329	412	04P1463	8.87k	04P1311	37.4k	04P1231	249k
04P1148	15.4	04P1432	73.2	04P1204	221	04P1336	432	04P1471	9.31k	04P1376	53.6k	04P1250	274k
04P1187	20.5	04P1434	75	04P1228	249	04P1340	442	79M6241	10k	04P1385	56.2k	04P1312	374k
04P1218	23.7	04P1453	84.5	04P1257	287	79M6245	470	04P1125	12k	04P1416	66.5k	04P1343	442k
04P1227	24.9	04P1457	86.6	04P1264	300	04P1353	475	04P1130	12.4k	04P1437	75k	04P1364	499k
04P1266	30.1	04P1469	93.1	04P1267	301	04P1361	499	04P1182	19.6k	04P1460	86.6k	04P1369	511k
04P1273	31.6	04P1103	100	04P1282	330	04P1371	523	04P1185	20k	04P1468	90.9k	04P1373	523k
04P1335	43.2	04P1123	120	04P1298	357	04P1378	549	04P1195	21k	04P1104	100k	04P1399	604k
79M6244	47	04P1132	127	04P1302	360	04P1435	750	04P1202	22k	04P1118	113k	04P1477	953k
04P1357	48.7	04P1145	150	04P1305	365	04P1446	806	04P1216	23.2k	04P1143	147k	04P1105	1M
04P1370	52.3	04P1184	200	04P1309	374	04P1450	825	04P1262	29.4k	04P1186	200k	...	...

MC SERIES THICK FILM RESISTORS - CASE SIZE 2010

Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Mfg. Part No.	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)
79M6248	0	04P1539	24.9	04P1601	56.2	04P1490	115	04P1529	215	● MC1210W2F2741T4E	04P1545	2.74k	04P1625	80.6k
79M6249	10	04P1547	30.1	04P1607	60.4	04P1492	120	04P1536	237	● MC1210W2F3011T4E	04P1549	3.01k	04P1481	100k
04P1502	13.3	04P1556	33.2	04P1609	61.9	04P1495	121	04P1540	249	● MC1210W2F3241T4E	04P1555	3.24k	04P1489	110k
04P1505	14	04P1564	36.5	04P1613	66.5	04P1498	127	04P1553	316	● MC1210W2F3601T4E	04P1563	3.6k	04P1511	150k
04P1513	16.2	04P1575	42.2	04P1614	68	04P1503	133	04P1557	332	● MC2010W2F3651T4E	04P1565	3.65k	04P1542	249k
04P1517	16.9	04P1577	43.2	04P1627	82.5	04P1506	140	04P1562	360	● MC1210W2F3831T4E	04P1568	3.83k	04P1592	499k
04P1523	19.6	04P1581	45.3	04P1634	95.3	04P1509	150	04P1571	402	● MC1210W2F4021T4E	04P1572	4.02k	04P1596	511k
04P1526	20.5	04P1593	51	04P1479	100	04P1514	162	04P1576	422	● MC2010W2F4991T4E	04P1591	4.99k	04P1591	1
04P1532	22.1	04P1594	51.1	04P1486	110	04P1519	178	04P1635	2.49k	● MC1210W2F7502T4E	04P1623	75k	...	...

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SURFACE MOUNT THICK FILM CHIP RESISTORS (CONT.)

MC SERIES THICK FILM RESISTORS - CASE SIZE 2512

Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)
79M6255	10	04P1649	47.5	04P1644	249	79M6257	1k	04P1645	2.74k	04P1651	4.99k	...	...
04P1639	20	79M6254	100	04P1646	301	04P1640	2k	04P1648	3.32k	04P1636	100k	...	...
04P1641	22.1	79M6258	200	79M6260	499	04P1643	2.21k	04P1650	4.75k	...	...	...	...

(92285)

SURFACE MOUNT THICK FILM RESISTORS - 0201 CASE SIZE

RoHS Compliant Available

multicomp

NEW

Features:
- Small size and light weight
- Reliable multilayer electrode construction
- Compatible with all solder processes

Specifications:
- Power Rating: 50mW
- Tolerance: ±1%
- Temperature Coefficient: ±200ppm/°C
- Voltage Rating: 25V

Applications:
- Telecommunication equipment
- Radio and tape recorders, TV tuners
- Digital cameras, watches, pocket calculators
- Automotive industry
- Computers, instruments
- Medical and military equipment

			Tape Cut		Tape and Reel		
				Price Each			Price Each
Mfg. Part No.	Resistance	Tolerance	Stock No.	1-9	Stock No.	Reel Qty.	1-29999
MCRE000220	1 ohm	± 1%	94W5206	0.28	94W3135	15000	0.02
MCRE000221	1.1 ohm	± 1%	94W5207	0.28	94W3136	15000	0.02
MCRE000222	1.2 ohm	± 1%	94W5208	0.28	94W3137	15000	0.02
MCRE000223	1.3 ohm	± 1%	94W5209	0.28	94W3138	15000	0.02
MCRE000087	1.5 ohm	± 1%	94W5101	0.28	94W3017	15000	0.02
MCRE000224	1.6 ohm	± 1%	94W4645	0.28	94W3139	15000	0.02
MCRE000225	1.8 ohm	± 1%	94W4646	0.28	94W2977	15000	0.02
MCRE000226	2 ohm	± 1%	94W5210	0.28	94W3140	15000	0.02
MCRE000088	2.2 ohm	± 1%	94W5102	0.28	94W3018	15000	0.02
MCRE000227	2.4 ohm	± 1%	94W5211	0.28	94W3141	15000	0.02
MCRE000228	2.7 ohm	± 1%	94W5212	0.28	94W3142	15000	0.02
MCRE000229	3 ohm	± 1%	94W5213	0.28	94W3143	15000	0.02
MCRE000089	3.3 ohm	± 1%	94W5103	0.28	94W3019	15000	0.02
MCRE000230	3.6 ohm	± 1%	94W5214	0.28	94W3144	15000	0.02
MCRE000231	3.9 ohm	± 1%	94W5215	0.28	94W3145	15000	0.02
MCRE000232	4.3 ohm	± 1%	94W5216	0.28	94W3146	15000	0.02
MCRE000090	4.7 ohm	± 1%	94W5104	0.28	94W3020	15000	0.02
MCRE000233	5.1 ohm	± 1%	94W5217	0.28	94W3147	15000	0.02
MCRE000234	5.6 ohm	± 1%	94W5218	0.28	94W3148	15000	0.02
MCRE000235	6.2 ohm	± 1%	94W5219	0.28	94W3149	15000	0.02
MCRE000091	6.8 ohm	± 1%	94W5105	0.28	94W3021	15000	0.02
MCRE000236	7.5 ohm	± 1%	94W5220	0.28	94W2978	15000	0.02
MCRE000237	8.2 ohm	± 1%	94W5221	0.29	94W3150	15000	0.02
MCRE000238	9.1 ohm	± 1%	94W5222	0.28	94W3151	15000	0.02
MCRE000092	10 ohm	± 1%	94W5106	0.15	94W3022	15000	0.01
MCRE000093	11 ohm	± 1%	94W5107	0.14	94W3023	15000	0.01
MCRE000094	12 ohm	± 1%	94W5108	0.14	94W3024	15000	0.01
MCRE000095	13 ohm	± 1%	94W5109	0.14	94W3025	15000	0.01
MCRE000096	15 ohm	± 1%	94W5110	0.14	94W3026	15000	0.01
MCRE000097	16 ohm	± 1%	94W5111	0.14	94W2969	15000	0.01
MCRE000098	18 ohm	± 1%	94W5112	0.14	94W3027	15000	0.01
MCRE000099	20 ohm	± 1%	94W4624	0.14	94W3028	15000	0.01
MCRE000100	22 ohm	± 1%	94W5113	0.14	94W3029	15000	0.01
MCRE000101	24 ohm	± 1%	94W5114	0.14	94W3030	15000	0.01
MCRE000102	27 ohm	± 1%	94W5115	0.14	94W3031	15000	0.01
MCRE000103	30 ohm	± 1%	94W5116	0.14	94W3032	15000	0.01
MCRE000104	33 ohm	± 1%	94W5117	0.14	94W3033	15000	0.01
MCRE000105	36 ohm	± 1%	94W5118	0.14	94W3034	15000	0.01
MCRE000106	39 ohm	± 1%	94W5119	0.14	94W3035	15000	0.01
MCRE000107	43 ohm	± 1%	94W5120	0.14	94W3036	15000	0.01
MCRE000108	47 ohm	± 1%	94W5121	0.14	94W3037	15000	0.01
MCRE000109	51 ohm	± 1%	94W4625	0.14	94W3038	15000	0.01
MCRE000110	56 ohm	± 1%	94W5122	0.14	94W3039	15000	0.01
MCRE000111	62 ohm	± 1%	94W5123	0.14	94W3040	15000	0.01
MCRE000112	68 ohm	± 1%	94W5124	0.14	94W3041	15000	0.01
MCRE000113	75 ohm	± 1%	94W4626	0.14	94W3042	15000	0.01
MCRE000114	82 ohm	± 1%	94W5125	0.14	94W3043	15000	0.01
MCRE000115	91 ohm	± 1%	94W5126	0.14	94W3044	15000	0.01
MCRE000116	100 ohm	± 1%	94W5127	0.14	94W2970	15000	0.01
MCRE000117	110 ohm	± 1%	94W5128	0.14	94W3045	15000	0.01
MCRE000118	120 ohm	± 1%	94W4627	0.14	94W3046	15000	0.01
MCRE000119	130 ohm	± 1%	94W5129	0.14	94W3047	15000	0.01
MCRE000120	150 ohm	± 1%	94W5130	0.15	94W3048	15000	0.01
MCRE000121	160 ohm	± 1%	94W5131	0.14	94W3049	15000	0.01

➤CONTINUED➤

SURFACE MOUNT THICK FILM RESISTORS - 0201 CASE SIZE (CONT.)

			Tape Cut		Tape and Reel		
				Price Each			Price Each
Mfg. Part No.	Resistance	Tolerance	Stock No.	1-9	Stock No.	Reel Qty.	1-29999
MCRE000122	180 ohm	± 1%	94W5132	0.14	94W3050	15000	0.01
MCRE000123	200 ohm	± 1%	94W5133	0.14	94W3051	15000	0.01
MCRE000124	220 ohm	± 1%	94W5134	0.14	94W3052	15000	0.01
MCRE000125	240 ohm	± 1%	94W5135	0.14	94W2971	15000	0.01
MCRE000126	270 ohm	± 1%	94W4628	0.14	94W3053	15000	0.01
MCRE000127	300 ohm	± 1%	94W5136	0.14	94W3054	15000	0.01
MCRE000128	330 ohm	± 1%	94W5137	0.14	94W3055	15000	0.01
MCRE000129	360 ohm	± 1%	94W5138	0.14	94W3056	15000	0.01
MCRE000130	390 ohm	± 1%	94W5139	0.14	94W3057	15000	0.01
MCRE000131	430 ohm	± 1%	94W5140	0.14	94W3058	15000	0.01
MCRE000132	470 ohm	± 1%	94W5141	0.14	94W3059	15000	0.01
MCRE000133	510 ohm	± 1%	94W5142	0.14	94W2972	15000	0.01
MCRE000134	560 ohm	± 1%	94W5143	0.14	94W2973	15000	0.01
MCRE000135	620 ohm	± 1%	94W5144	0.14	94W3060	15000	0.01
MCRE000136	680 ohm	± 1%	94W5145	0.14	94W3061	15000	0.01
MCRE000137	750 ohm	± 1%	94W5146	0.14	94W3062	15000	0.01
MCRE000138	820 ohm	± 1%	94W5147	0.14	94W3063	15000	0.01
MCRE000139	910 ohm	± 1%	94W5148	0.14	94W3064	15000	0.01
MCRE000140	1 kohm	± 1%	94W5149	0.14	94W3065	15000	0.01
MCRE000141	1.1 kohm	± 1%	94W4629	0.14	94W3066	15000	0.01
MCRE000142	1.2 kohm	± 1%	94W5150	0.14	94W3067	15000	0.01
MCRE000143	1.3 kohm	± 1%	94W4630	0.14	94W3068	15000	0.01
MCRE000144	1.5 kohm	± 1%	94W5151	0.14	94W3069	15000	0.01
MCRE000145	1.6 kohm	± 1%	94W5152	0.14	94W3070	15000	0.01
MCRE000146	1.8 kohm	± 1%	94W5153	0.14	94W3071	15000	0.01
MCRE000147	2 kohm	± 1%	94W5154	0.14	94W3072	15000	0.01
MCRE000148	2.2 kohm	± 1%	94W4631	0.14	94W3073	15000	0.01
MCRE000149	2.2 kohm	± 1%	94W5155	0.14	94W3074	15000	0.01
MCRE000150	2.7 kohm	± 1%	94W4632	0.14	94W3075	15000	0.01
MCRE000151	3 kohm	± 1%	94W4633	0.14	94W3076	15000	0.01
MCRE000152	3.3 kohm	± 1%	94W5156	0.14	94W3077	15000	0.01
MCRE000153	3.6 kohm	± 1%	94W5157	0.14	94W3078	15000	0.01
MCRE000154	3.9 kohm	± 1%	94W4634	0.14	94W3079	15000	0.01
MCRE000155	4.3 kohm	± 1%	94W4635	0.14	94W3080	15000	0.01
MCRE000156	4.7 kohm	± 1%	94W5158	0.14	94W3081	15000	0.01
MCRE000157	5.1 kohm	± 1%	94W5159	0.14	94W3082	15000	0.01
MCRE000158	5.6 kohm	± 1%	94W5160	0.14	94W3083	15000	0.01
MCRE000159	6.2 kohm	± 1%	94W5161	0.14	94W3084	15000	0.01
MCRE000160	6.8 kohm	± 1%	94W4636	0.14	94W3085	15000	0.01
MCRE000161	7.5 kohm	± 1%	94W5162	0.14	94W3086	15000	0.01
MCRE000162	8.2 kohm	± 1%	94W4637	0.14	94W3087	15000	0.01
MCRE000163	9.1 kohm	± 1%	94W5163	0.14	94W3088	15000	0.01
MCRE000164	10 kohm	± 1%	94W4638	0.14	94W3089	15000	0.01
MCRE000165	11 kohm	± 1%	94W5164	0.14	94W3090	15000	0.01
MCRE000166	12 kohm	± 1%	94W5165	0.14	94W3091	15000	0.01
MCRE000167	13 kohm	± 1%	94W4639	0.14	94W3092	15000	0.01
MCRE000168	15 kohm	± 1%	94W5166	0.14	94W3093	15000	0.01
MCRE000169	16 kohm	± 1%	94W4640	0.14	94W3094	15000	0.01
MCRE000170	18 kohm	± 1%	94W5167	0.14	94W3095	15000	0.01
MCRE000171	20 kohm	± 1%	94W5168	0.14	94W3096	15000	0.01
MCRE000172	22 kohm	± 1%	94W5169	0.14	94W3097	15000	0.01
MCRE000173	24 kohm	± 1%	94W5170	0.14	94W3098	15000	0.01
MCRE000174	27 kohm	± 1%	94W4641	0.14	94W3099	15000	0.01
MCRE000175	30 kohm	± 1%	94W5171	0.14	94W3100	15000	0.01
MCRE000176	33 kohm	± 1%	94W5172	0.14	94W3101	15000	0.01
MCRE000177	36 kohm	± 1%	94W5173	0.14	94W3102	15000	0.01
MCRE000178	39 kohm	± 1%	94W5174	0.14	94W3103	15000	0.01
MCRE000179	43 kohm	± 1%	94W4642	0.14	94W3104	15000	0.01
MCRE000180	47 kohm	± 1%	94W5175	0.14	94W3105	15000	0.01
MCRE000181	51 kohm	± 1%	94W5176	0.14	94W3106	15000	0.01
MCRE000182	56 kohm	± 1%	94W5177	0.14	94W3107	15000	0.01
MCRE000183	62 kohm	± 1%	94W5178	0.14	94W3108	15000	0.01
MCRE000184	68 kohm	± 1%	94W5179	0.14	94W3109	15000	0.01

➤CONTINUED➤

SURFACE MOUNT THICK FILM RESISTORS - 0201 CASE SIZE (CONT.)

Mfg. Part No.	Resistance	Tolerance	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-29999
MCRE000185	75 kohm	± 1%	94W5180	0.14	94W3110	15000	0.01
MCRE000186	82 kohm	± 1%	94W5181	0.14	94W3111	15000	0.01
MCRE000187	91 kohm	± 1%	94W5182	0.14	94W3112	15000	0.01
MCRE000188	100 kohm	± 1%	94W5183	0.14	94W3113	15000	0.01
MCRE000189	110 kohm	± 1%	94W5184	0.14	94W3114	15000	0.01
MCRE000190	120 kohm	± 1%	94W5185	0.14	94W3115	15000	0.01
MCRE000191	130 kohm	± 1%	94W5186	0.14	94W3116	15000	0.01
MCRE000192	150 kohm	± 1%	94W5187	0.14	94W3117	15000	0.01
MCRE000193	160 kohm	± 1%	94W5188	0.14	94W3118	15000	0.01
MCRE000194	180 kohm	± 1%	94W5189	0.14	94W3119	15000	0.01
MCRE000195	200 kohm	± 1%	94W5190	0.14	94W3120	15000	0.01
MCRE000196	220 kohm	± 1%	94W5191	0.14	94W3121	15000	0.01
MCRE000197	240 kohm	± 1%	94W5192	0.14	94W3122	15000	0.01
MCRE000198	270 kohm	± 1%	94W5193	0.14	94W3123	15000	0.01
MCRE000199	300 kohm	± 1%	94W5194	0.14	94W3124	15000	0.01
MCRE000200	330 kohm	± 1%	94W5195	0.14	94W3125	15000	0.01
MCRE000201	360 kohm	± 1%	94W4643	0.14	94W3126	15000	0.01
MCRE000202	390 kohm	± 1%	94W5196	0.14	94W3127	15000	0.01
MCRE000203	430 kohm	± 1%	94W4644	0.14	94W3128	15000	0.01
MCRE000204	470 kohm	± 1%	94W5197	0.14	94W3129	15000	0.01
MCRE000205	510 kohm	± 1%	94W5198	0.14	94W3130	15000	0.01
MCRE000206	560 kohm	± 1%	94W5199	0.14	94W3131	15000	0.01
MCRE000207	620 kohm	± 1%	94W5200	0.14	94W3132	15000	0.01
MCRE000208	680 kohm	± 1%	94W5201	0.14	94W2974	15000	0.01
MCRE000209	750 kohm	± 1%	94W5202	0.14	94W2975	15000	0.01
MCRE000210	820 kohm	± 1%	94W5203	0.14	94W3133	15000	0.01
MCRE000211	910 kohm	± 1%	94W5204	0.14	94W3134	15000	0.01
MCRE000212	1 Mohm	± 1%	94W5205	0.14	94W2976	15000	0.01
MCRE000239	1.1 Mohm	± 1%	94W5223	0.28	94W2979	15000	0.02
MCRE000240	1.2 Mohm	± 1%	94W5224	0.28	94W3152	15000	0.02
MCRE000241	1.3 Mohm	± 1%	94W5225	0.28	94W2980	15000	0.02
MCRE000242	1.5 Mohm	± 1%	94W5226	0.28	94W3153	15000	0.02
MCRE000243	1.6 Mohm	± 1%	94W4647	0.29	94W3154	15000	0.02
MCRE000244	1.8 Mohm	± 1%	94W5227	0.28	94W3155	15000	0.02
MCRE000245	2 Mohm	± 1%	94W4648	0.28	94W3156	15000	0.02
MCRE000246	2.2 Mohm	± 1%	94W5228	0.28	94W3157	15000	0.02
MCRE000247	2.2 Mohm	± 1%	94W5229	0.28	94W3158	15000	0.02
MCRE000248	2.7 Mohm	± 1%	94W4649	0.28	94W2981	15000	0.02
MCRE000249	3 Mohm	± 1%	94W5230	0.28	94W3159	15000	0.02
MCRE000250	3.3 Mohm	± 1%	94W5231	0.28	94W3160	15000	0.02
MCRE000251	3.6 Mohm	± 1%	94W5232	0.28	94W3161	15000	0.02
MCRE000252	3.9 Mohm	± 1%	94W5233	0.28	94W3162	15000	0.02
MCRE000253	4.3 Mohm	± 1%	94W5234	0.28	94W3163	15000	0.02
MCRE000254	4.7 Mohm	± 1%	94W5235	0.28	94W3164	15000	0.02
MCRE000255	5.1 Mohm	± 1%	94W5236	0.28	94W3165	15000	0.02
MCRE000256	5.6 Mohm	± 1%	94W5237	0.28	94W2982	15000	0.02
MCRE000257	6.2 Mohm	± 1%	94W5238	0.28	94W3166	15000	0.02
MCRE000258	6.8 Mohm	± 1%	94W5239	0.28	94W3167	15000	0.02
MCRE000259	7.5 Mohm	± 1%	94W5240	0.28	94W3168	15000	0.02
MCRE000260	8.2 Mohm	± 1%	94W5241	0.28	94W3169	15000	0.02
MCRE000261	9.1 Mohm	± 1%	94W5242	0.28	94W3170	15000	0.02
MCRE000262	10 Mohm	± 1%	94W5243	0.28	94W2983	15000	0.02

(211578)

SURFACE MOUNT THICK FILM RESISTORS - 0603 CASE SIZE

RoHS Compliant Available

multicomp

NEW

Features:
- Small size and light weight
- Suitable for both wave and reflow soldering

Specifications:
- Power Rating: 62.5mW
- Tolerance: ±1%
- Voltage Rating: 50V

Mfg. Part No.	Resistance	Temperature Coefficient	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-29999
MC0063W060311R0	1 ohm	± 400ppm/°C	94W5638	0.25	94W3499	5000	0.02
MC0063W060311R10	1.1 ohm	± 400ppm/°C	94W5639	0.25	94W3500	5000	0.02
MC0063W060311R15	1.15 ohm	± 400ppm/°C	94W5640	0.25	94W3501	5000	0.02
MC0063W060311R20	1.2 ohm	± 400ppm/°C	94W5641	0.25	94W3502	5000	0.02
MC0063W060311R21	1.21 ohm	± 400ppm/°C	94W4691	0.25	94W3503	5000	0.02
MC0063W060311R27	1.27 ohm	± 400ppm/°C	94W4692	0.25	94W3504	5000	0.02
MC0063W060311R30	1.3 ohm	± 400ppm/°C	94W5642	0.25	94W3505	5000	0.02
MC0063W060311R33	1.33 ohm	± 400ppm/°C	94W5643	0.25	94W3506	5000	0.02

CONTINUED

SURFACE MOUNT THICK FILM RESISTORS - 0603 CASE SIZE (CONT.)

Mfg. Part No.	Resistance	Temperature Coefficient	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-29999
MC0063W060311R40	1.4 ohm	± 400ppm/°C	94W5644	0.25	94W3507	5000	0.02
MC0063W060311R47	1.47 ohm	± 400ppm/°C	94W5645	0.25	94W3508	5000	0.02
MC0063W060311R5	1.5 ohm	± 400ppm/°C	94W5646	0.25	94W3509	5000	0.02
MC0063W060311R54	1.54 ohm	± 400ppm/°C	94W5647	0.25	94W3510	5000	0.02
MC0063W060311R60	1.6 ohm	± 400ppm/°C	94W5648	0.25	94W3511	5000	0.02
MC0063W060311R62	1.62 ohm	± 400ppm/°C	94W5649	0.25	94W3512	5000	0.02
MC0063W060311R78	1.78 ohm	± 400ppm/°C	94W5650	0.25	94W3513	5000	0.02
MC0063W060311R80	1.8 ohm	± 400ppm/°C	94W4693	0.25	94W3514	5000	0.02
MC0063W060311R87	1.87 ohm	± 400ppm/°C	94W5651	0.25	94W3515	5000	0.02
MC0063W060311R96	1.96 ohm	± 400ppm/°C	94W5652	0.25	94W3516	5000	0.02
MC0063W060312R0	2 ohm	± 400ppm/°C	94W5735	0.25	94W3588	5000	0.03
MC0063W060312R2	2.2 ohm	± 400ppm/°C	94W5736	0.26	94W3589	5000	0.02
MC0063W060312R40	2.4 ohm	± 400ppm/°C	94W5737	0.25	94W3590	5000	0.02
MC0063W060312R49	2.49 ohm	± 400ppm/°C	94W5738	0.25	94W3591	5000	0.02
MC0063W060312R70	2.7 ohm	± 400ppm/°C	94W4702	0.25	94W3592	5000	0.02
MC0063W060312R74	2.74 ohm	± 400ppm/°C	94W5739	0.25	94W3593	5000	0.02
MC0063W060312R87	2.87 ohm	± 400ppm/°C	94W5740	0.25	94W3594	5000	0.02
MC0063W060313R0	3 ohm	± 400ppm/°C	94W5798	0.25	94W3642	5000	0.02
MC0063W060313R16	3.16 ohm	± 400ppm/°C	94W5799	0.25	94W3643	5000	0.02
MC0063W060313R3	3.3 ohm	± 400ppm/°C	94W5800	0.25	94W3644	5000	0.03
MC0063W060313R32	3.32 ohm	± 400ppm/°C	94W5801	0.25	94W3645	5000	0.02
MC0063W060313R48	3.48 ohm	± 400ppm/°C	94W4705	0.25	94W3646	5000	0.02
MC0063W060313R60	3.6 ohm	± 400ppm/°C	94W5802	0.25	94W3647	5000	0.02
MC0063W060313R65	3.65 ohm	± 400ppm/°C	94W5803	0.25	94W3648	5000	0.02
MC0063W060313R83	3.83 ohm	± 400ppm/°C	94W5804	0.25	94W3649	5000	0.02
MC0063W060313R90	3.9 ohm	± 400ppm/°C	94W5805	0.25	94W3650	5000	0.02
MC0063W060314R22	4.22 ohm	± 400ppm/°C	94W4707	0.25	94W3686	5000	0.02
MC0063W060314R30	4.3 ohm	± 400ppm/°C	94W5853	0.25	94W3687	5000	0.02
MC0063W060314R42	4.42 ohm	± 400ppm/°C	94W5854	0.25	94W3688	5000	0.02
MC0063W060314R64	4.64 ohm	± 400ppm/°C	94W5855	0.25	94W3689	5000	0.02
MC0063W060314R7	4.7 ohm	± 400ppm/°C	94W5856	0.25	94W3690	5000	0.03
MC0063W060314R87	4.87 ohm	± 400ppm/°C	94W5857	0.25	94W3691	5000	0.02
MC0063W060315R10	5.1 ohm	± 400ppm/°C	94W5895	0.20	94W3726	5000	0.02
MC0063W060315R11	5.11 ohm	± 400ppm/°C	94W5896	0.20	94W3727	5000	0.02
MC0063W060315R60	5.6 ohm	± 400ppm/°C	94W5897	0.20	94W3728	5000	0.02
MC0063W060315R62	5.62 ohm	± 400ppm/°C	94W5898	0.20	94W3729	5000	0.02
MC0063W060315R90	5.9 ohm	± 400ppm/°C	94W5899	0.20	94W3730	5000	0.02
MC0063W060316R19	6.19 ohm	± 400ppm/°C	94W5927	0.20	94W3754	5000	0.02
MC0063W060316R20	6.2 ohm	± 400ppm/°C	94W5928	0.20	94W3755	5000	0.02
MC0063W060316R49	6.49 ohm	± 400ppm/°C	94W5929	0.20	94W3756	5000	0.02
MC0063W060316R8	6.8 ohm	± 400ppm/°C	94W5930	0.20	94W3757	5000	0.02
MC0063W060316R81	6.81 ohm	± 400ppm/°C	94W5931	0.20	94W3758	5000	0.02
MC0063W060317R15	7.15 ohm	± 400ppm/°C	94W5953	0.20	94W3774	5000	0.02
MC0063W060317R50	7.5 ohm	± 400ppm/°C	94W5954	0.20	94W3775	5000	0.02
MC0063W060317R87	7.87 ohm	± 400ppm/°C	94W5955	0.20	94W3776	5000	0.02
MC0063W060318R20	8.2 ohm	± 400ppm/°C	94W5969	0.21	94W3788	5000	0.02
MC0063W060318R25	8.25 ohm	± 400ppm/°C	94W5970	0.20	94W3789	5000	0.02
MC0063W060318R66	8.66 ohm	± 400ppm/°C	94W5971	0.20	94W3790	5000	0.02
MC0063W060319R10	9.1 ohm	± 400ppm/°C	94W5987	0.20	94W3803	5000	0.02
MC0063W060319R53	9.53 ohm	± 400ppm/°C	94W5988	0.20	94W3804	5000	0.02
MC0063W0603110R5	10.5 ohm	± 200ppm/°C	94W5655	0.08	94W3519	5000	0.01
MC0063W0603111R	11 ohm	± 200ppm/°C	94W5659	0.08	58K4456	5000	0.01
MC0063W0603111R5	11.5 ohm	± 200ppm/°C	94W5660	0.08	94W3523	5000	0.01
MC0063W0603112R	12 ohm	± 200ppm/°C	94W5666	0.08	58K4466	5000	0.01
MC0063W0603112R1	12.1 ohm	± 200ppm/°C	94W5667	0.08	94W3529	5000	0.01
MC0063W0603113R	13 ohm	± 200ppm/°C	94W5676	0.08	94W3535	5000	0.01
MC0063W0603114R	14 ohm	± 200ppm/°C	94W5682	0.08	94W3540	5000	0.01
MC0063W0603114R7	14.7 ohm	± 200ppm/°C	94W5683	0.08	94W3541	5000	0.01
MC0063W0603115R	15 ohm	± 200ppm/°C	94W5689	0.08	58K4484	5000	0.01
MC0063W0603115R4	15.4 ohm	± 200ppm/°C	94W5690	0.08	94W3547	5000	0.01
MC0063W0603116R	16 ohm	± 200ppm/°C	94W5696	0.08	58K4494	5000	0.01
MC0063W0603116R2	16.2 ohm	± 200ppm/°C	94W5697	0.08	94W3552	5000	0.01
MC0063W0603116R9	16.9 ohm	± 200ppm/°C	94W5698	0.08	94W3553	5000	0.01
MC0063W0603117R8	17.8 ohm	± 200ppm/°C	94W5705	0.09	94W3559	5000	0.01
MC0063W0603118R	18 ohm	± 200ppm/°C	94W5709	0.08	58K4504	5000	0.01
MC0063W0603118R7	18.7 ohm	± 200ppm/°C	94W5710	0.08	94W3563	5000	0.01
MC0063W0603119R6	19.6 ohm	± 200ppm/°C	94W5715	0.08	94W3567	5000	0.01
MC0063W0603120R	20 ohm	± 200ppm/°C	94W5742	0.08	58K4514	5000	0.01
MC0063W0603120R5	20.5 ohm	± 200ppm/°C	94W5743	0.08	94W3596	5000	0.01
MC0063W0603121R5	21.5 ohm	± 200ppm/°C	94W5748	0.08	94W3600	5000	0.01
MC0063W0603122R	22 ohm	± 200ppm/°C	58K4524	0.01	58K4525	5000	0.01
MC0063W0603122R6	22.6 ohm	± 200ppm/°C	94W5752	0.08	94W3604	5000	0.01

CONTINUED

SURFACE MOUNT THICK FILM RESISTORS - 0603 CASE SIZE (CONT.)

Mfg. Part No.	Resistance	Temperature Coefficient	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-29999
MC0063W0603123R7	23.7 ohm	± 200ppm/°C	94W5755	0.08	94W3608	5000	0.01
MC0063W0603124R	24 ohm	± 200ppm/°C	94W5760	0.08	58K4534	5000	0.01
MC0063W0603124R9	24.9 ohm	± 200ppm/°C	94W5761	0.08	94W3612	5000	0.01
MC0063W0603126R1	26.1 ohm	± 200ppm/°C	94W5767	0.08	94W3616	5000	0.01
MC0063W0603127R	27 ohm	± 200ppm/°C	94W5771	0.08	58K4544	5000	0.01
MC0063W0603127R4	27.4 ohm	± 200ppm/°C	94W5772	0.08	94W3620	5000	0.01
MC0063W0603128R7	28.7 ohm	± 200ppm/°C	94W5776	0.08	94W3624	5000	0.01
MC0063W0603130R	30 ohm	± 200ppm/°C	94W5807	0.08	58K4554	5000	0.01
MC0063W0603130R1	30.1 ohm	± 200ppm/°C	94W5808	0.08	94W3652	5000	0.01
MC0063W0603131R6	31.6 ohm	± 200ppm/°C	94W5813	0.08	94W3656	5000	0.01
MC0063W0603133R	33 ohm	± 200ppm/°C	94W5817	0.08	58K4564	5000	0.01
MC0063W0603133R2	33.2 ohm	± 200ppm/°C	94W5818	0.09	94W3660	5000	0.01
MC0063W0603134R8	34.8 ohm	± 200ppm/°C	94W5823	0.08	94W3664	5000	0.01
MC0063W0603136R	36 ohm	± 200ppm/°C	94W5828	0.08	58K4574	5000	0.01
MC0063W0603136R5	36.5 ohm	± 200ppm/°C	94W5829	0.08	94W3668	5000	0.01
MC0063W0603138R3	38.3 ohm	± 200ppm/°C	94W5835	0.08	94W3672	5000	0.01
MC0063W0603139R	39 ohm	± 200ppm/°C	94W5838	0.08	58K4584	5000	0.01
MC0063W0603140R2	40.2 ohm	± 200ppm/°C	94W5859	0.08	94W3693	5000	0.01
MC0063W0603142R2	42.2 ohm	± 200ppm/°C	94W5862	0.08	94W3697	5000	0.01
MC0063W0603143R	43 ohm	± 200ppm/°C	94W5866	0.08	58K4594	5000	0.01
MC0063W0603144R2	44.2 ohm	± 200ppm/°C	94W5870	0.08	94W3701	5000	0.01
MC0063W0603146R4	46.4 ohm	± 200ppm/°C	94W5874	0.09	94W3705	5000	0.01
MC0063W0603147R	47 ohm	± 200ppm/°C	94W5878	0.08	58K4604	5000	0.01
MC0063W0603148R7	48.7 ohm	± 200ppm/°C	94W5881	0.08	94W3711	5000	0.01
MC0063W0603149R9	49.9 ohm	± 200ppm/°C	94W5885	0.09	94W3715	5000	0.01
MC0063W0603151R1	51.1 ohm	± 200ppm/°C	94W5902	0.08	94W3732	5000	0.01
MC0063W0603153R6	53.6 ohm	± 200ppm/°C	94W5907	0.08	94W3736	5000	0.01
MC0063W0603156R	56 ohm	± 200ppm/°C	94W5911	0.08	58K4624	5000	0.01
MC0063W0603156R2	56.2 ohm	± 200ppm/°C	94W5912	0.08	94W3740	5000	0.01
MC0063W0603159R	59 ohm	± 200ppm/°C	94W5916	0.08	94W3744	5000	0.01
MC0063W0603161R9	61.9 ohm	± 200ppm/°C	94W5932	0.08	94W3760	5000	0.01
MC0063W0603162R	62 ohm	± 200ppm/°C	94W5935	0.08	58K4634	5000	0.01
MC0063W0603164R9	64.9 ohm	± 200ppm/°C	94W5938	0.08	94W3764	5000	0.01
MC0063W0603168R	68 ohm	± 200ppm/°C	94W5943	0.08	58K4644	5000	0.01
MC0063W0603168R1	68.1 ohm	± 200ppm/°C	94W5944	0.08	94W3768	5000	0.01
MC0063W0603171R5	71.5 ohm	± 200ppm/°C	94W4715	0.08	94W3778	5000	0.01
MC0063W0603178R7	78.7 ohm	± 200ppm/°C	94W5963	0.08	94W3782	5000	0.01
MC0063W0603182R	82 ohm	± 200ppm/°C	94W4717	0.08	58K4664	5000	0.01
MC0063W0603182R5	82.5 ohm	± 200ppm/°C	94W5974	0.08	94W3792	5000	0.01
MC0063W0603186R6	86.6 ohm	± 200ppm/°C	94W5979	0.08	94W3796	5000	0.01
MC0063W0603190R9	90.9 ohm	± 200ppm/°C	94W5990	0.08	94W3806	5000	0.01
MC0063W0603191R	91 ohm	± 200ppm/°C	94W5994	0.09	58K4674	5000	0.01
MC0063W0603195R3	95.3 ohm	± 200ppm/°C	94W5998	0.08	94W3810	5000	0.01
MC0063W06031105R	105 ohm	± 100ppm/°C	94W5657	0.08	94W3521	5000	0.01
MC0063W06031110R	110 ohm	± 100ppm/°C	94W4694	0.08	58K4458	5000	0.01
MC0063W06031115R	115 ohm	± 100ppm/°C	94W5663	0.08	94W3525	5000	0.01
MC0063W06031120R	120 ohm	± 100ppm/°C	94W5669	0.08	58K4468	5000	0.01
MC0063W06031121R	121 ohm	± 100ppm/°C	94W5671	0.08	94W3531	5000	0.01
MC0063W06031127R	127 ohm	± 100ppm/°C	94W5673	0.08	94W3533	5000	0.01
MC0063W06031133R	133 ohm	± 100ppm/°C	94W5679	0.08	94W3537	5000	0.01
MC0063W06031140R	140 ohm	± 100ppm/°C	94W5685	0.08	94W3543	5000	0.01
MC0063W06031147R	147 ohm	± 100ppm/°C	94W5687	0.08	94W3545	5000	0.01
MC0063W06031150R	150 ohm	± 100ppm/°C	94W5691	0.08	58K4486	5000	0.01
MC0063W06031154R	154 ohm	± 100ppm/°C	94W5693	0.08	94W3549	5000	0.01
MC0063W06031160R	160 ohm	± 100ppm/°C	94W5700	0.08	58K4496	5000	0.01
MC0063W06031162R	162 ohm	± 100ppm/°C	94W5702	0.08	94W3555	5000	0.01
MC0063W06031169R	169 ohm	± 100ppm/°C	94W5704	0.08	94W3557	5000	0.01
MC0063W06031178R	178 ohm	± 100ppm/°C	94W5707	0.08	94W3561	5000	0.01
MC0063W06031180R	180 ohm	± 100ppm/°C	58K4506	0.02	58K4507	5000	0.01
MC0063W06031187R	187 ohm	± 100ppm/°C	94W5713	0.08	94W3565	5000	0.01
MC0063W06031196R	196 ohm	± 100ppm/°C	94W5717	0.08	94W3569	5000	0.01
MC0063W06031200R	200 ohm	± 100ppm/°C	94W5744	0.08	58K4516	5000	0.01
MC0063W06031205R	205 ohm	± 100ppm/°C	94W5746	0.08	94W3598	5000	0.01
MC0063W06031215R	215 ohm	± 100ppm/°C	94W5750	0.08	94W3602	5000	0.01
MC0063W06031220R	220 ohm	± 100ppm/°C	58K4526	0.01	58K4527	5000	0.01
MC0063W06031226R	226 ohm	± 100ppm/°C	94W4703	0.08	94W3606	5000	0.01
MC0063W06031237R	237 ohm	± 100ppm/°C	94W5757	0.08	94W3610	5000	0.01
MC0063W06031240R	240 ohm	± 100ppm/°C	94W5763	0.08	58K4536	5000	0.01
MC0063W06031249R	249 ohm	± 100ppm/°C	94W5765	0.08	94W3614	5000	0.01
MC0063W06031261R	261 ohm	± 100ppm/°C	94W5769	0.08	94W3618	5000	0.01
MC0063W06031274R	274 ohm	± 100ppm/°C	94W5775	0.08	94W3622	5000	0.01
MC0063W06031287R	287 ohm	± 100ppm/°C	94W5778	0.08	94W3626	5000	0.01

➤ CONTINUED ➤

SURFACE MOUNT THICK FILM RESISTORS - 0603 CASE SIZE (CONT.)

Mfg. Part No.	Resistance	Temperature Coefficient	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-29999
MC0063W06031301R	301 ohm	± 100ppm/°C	94W5811	0.08	94W3654	5000	0.01
MC0063W06031316R	316 ohm	± 100ppm/°C	94W5815	0.08	94W3658	5000	0.01
MC0063W06031332R	332 ohm	± 100ppm/°C	94W5821	0.08	94W3662	5000	0.01
MC0063W06031348R	348 ohm	± 100ppm/°C	94W5825	0.08	94W3666	5000	0.01
MC0063W06031360R	360 ohm	± 100ppm/°C	94W5831	0.08	58K4576	5000	0.01
MC0063W06031365R	365 ohm	± 100ppm/°C	94W5833	0.08	94W3670	5000	0.01
MC0063W06031383R	383 ohm	± 100ppm/°C	94W5836	0.08	94W3673	5000	0.01
MC0063W06031390R	390 ohm	± 100ppm/°C	58K4586	0.02	58K4587	5000	0.01
MC0063W06031402R	402 ohm	± 100ppm/°C	94W4708	0.08	94W3695	5000	0.01
MC0063W06031422R	422 ohm	± 100ppm/°C	94W5864	0.08	94W3699	5000	0.01
MC0063W06031430R	430 ohm	± 100ppm/°C	94W5868	0.08	58K4596	5000	0.01
MC0063W06031442R	442 ohm	± 100ppm/°C	94W5872	0.08	94W3703	5000	0.01
MC0063W06031464R	464 ohm	± 100ppm/°C	94W5876	0.08	94W3707	5000	0.01
MC0063W06031475R	475 ohm	± 100ppm/°C	94W5879	0.09	94W3709	5000	0.01
MC0063W06031487R	487 ohm	± 100ppm/°C	94W5883	0.08	94W3713	5000	0.01
MC0063W06031510R	510 ohm	± 100ppm/°C	58K4616	0.02	58K4617	5000	0.01
MC0063W06031511R	511 ohm	± 100ppm/°C	94W5905	0.08	94W3734	5000	0.01
MC0063W06031536R	536 ohm	± 100ppm/°C	94W5909	0.08	94W3738	5000	0.01
MC0063W06031560R	560 ohm	± 100ppm/°C	94W5914	0.08	58K4626	5000	0.01
MC0063W06031562R	562 ohm	± 100ppm/°C	94W4711	0.08	94W3742	5000	0.01
MC0063W06031590R	590 ohm	± 100ppm/°C	94W5918	0.08	94W3746	5000	0.01
MC0063W06031619R	619 ohm	± 100ppm/°C	94W5934	0.08	94W3762	5000	0.01
MC0063W06031649R	649 ohm	± 100ppm/°C	94W5940	0.08	94W3766	5000	0.01
MC0063W06031680R	680 ohm	± 100ppm/°C	94W5946	0.09	58K4646	5000	0.01
MC0063W06031681R	681 ohm	± 100ppm/°C	94W5948	0.08	94W3770	5000	0.01
MC0063W06031715R	715 ohm	± 100ppm/°C	94W5958	0.08	94W3780	5000	0.01
MC0063W06031750R	750 ohm	± 100ppm/°C	94W5961	0.08	58K4656	5000	0.01
MC0063W06031787R	787 ohm	± 100ppm/°C	94W5964	0.08	94W3784	5000	0.01
MC0063W06031820R	820 ohm	± 100ppm/°C	94W5975	0.08	58K4666	5000	0.01
MC0063W06031825R	825 ohm	± 100ppm/°C	94W5977	0.08	94W3794	5000	0.01
MC0063W06031866R	866 ohm	± 100ppm/°C	94W5981	0.08	94W3798	5000	0.01
MC0063W06031909R	909 ohm	± 100ppm/°C	94W5992	0.08	94W3808	5000	0.01
MC0063W06031910R	910 ohm	± 100ppm/°C	94W5996	0.08	58K4676	5000	0.01
MC0063W06031953R	953 ohm	± 100ppm/°C	94W5999	0.08	94W3812	5000	0.01
MC0063W060311K05	1.05 kohm	± 100ppm/°C	94W5606	0.08	94W3469	5000	0.01
MC0063W060311K1	1.1 kohm	± 100ppm/°C	94W5607	0.08	58K4460	5000	0.01
MC0063W060311K15	1.15 kohm	± 100ppm/°C	94W5608	0.08	94W3470	5000	0.01
MC0063W060311K21	1.21 kohm	± 100ppm/°C	94W5609	0.08	94W3471	5000	0.01
MC0063W060311K27	1.27 kohm	± 100ppm/°C	94W5610	0.08	94W3472	5000	0.01
MC0063W060311K3	1.3 kohm	± 100ppm/°C	94W5611	0.08	58K4478	5000	0.01
MC0063W060311K33	1.33 kohm	± 100ppm/°C	94W5612	0.08	94W3473	5000	0.01
MC0063W060311K4	1.4 kohm	± 100ppm/°C	94W5613	0.08	94W3474	5000	0.01
MC0063W060311K47	1.47 kohm	± 100ppm/°C	94W5614	0.08	94W3475	5000	0.01
MC0063W060311K54	1.54 kohm	± 100ppm/°C	94W5615	0.08	94W3476	5000	0.01
MC0063W060311K6	1.6 kohm	± 100ppm/°C	94W5616	0.08	58K4498	5000	0.01
MC0063W060311K62	1.62 kohm	± 100ppm/°C	94W5617	0.08	94W3477	5000	0.01
MC0063W060311K69	1.69 kohm	± 100ppm/°C	94W5618	0.08	94W3478	5000	0.01
MC0063W060311K78	1.78 kohm	± 100ppm/°C	94W5619	0.08	94W3479	5000	0.01
MC0063W060311K8	1.8 kohm	± 100ppm/°C	94W5620	0.08	58K4508	5000	0.01
MC0063W060311K87	1.87 kohm	± 100ppm/°C	94W5621	0.08	94W3480	5000	0.01
MC0063W060311K96	1.96 kohm	± 100ppm/°C	94W5622	0.08	94W3481	5000	0.01
MC0063W060312K05	2.05 kohm	± 100ppm/°C	94W5718	0.08	94W3570	5000	0.01
MC0063W060312K15	2.15 kohm	± 100ppm/°C	94W5719	0.08	94W3571	5000	0.01
MC0063W060312K2	2.2 kohm	± 100ppm/°C	58K4528	0.02	58K4529	5000	0.01
MC0063W060312K26	2.26 kohm	± 100ppm/°C	94W5720	0.08	94W3572	5000	0.01
MC0063W060312K37	2.37 kohm	± 100ppm/°C	94W5721	0.08	94W3573	5000	0.01
MC0063W060312K4	2.4 kohm	± 100ppm/°C	94W5722	0.08	58K4538	5000	0.01
MC0063W060312K49	2.49 kohm	± 100ppm/°C	94W5723	0.08	94W3574	5000	0.01
MC0063W060312K61	2.61 kohm	± 100ppm/°C	94W5724	0.08	94W3575	5000	0.01
MC0063W060312K7	2.7 kohm	± 100ppm/°C	94W5725	0.08	58K4548	5000	0.01
MC0063W060312K74	2.74 kohm	± 100ppm/°C	94W5726	0.08	94W3576	5000	0.01
MC0063W060312K87	2.87 kohm	± 100ppm/°C	94W5727	0.08	94W3577	5000	0.01
MC0063W060313K	3 kohm	± 100ppm/°C	94W5779	0.08	58K4558	5000	0.01
MC0063W060313K01	3.01 kohm	± 100ppm/°C	94W5780	0.08	94W3627	5000	0.01
MC0063W060313K16	3.16 kohm	± 100ppm/°C	94W5781	0.08	94W3628	5000	0.01
MC0063W060313K3	3.3 kohm	± 100ppm/°C	94W5782	0.08	58K4568	5000	0.01
MC0063W060313K32	3.32 kohm	± 100ppm/°C	94W5783	0.08	94W3629	5000	0.01
MC0063W060313K48	3.48 kohm	± 100ppm/°C	94W5784	0.08	94W3630	5000	0.01
MC0063W060313K6	3.6 kohm	± 100ppm/°C	94W5785	0.08	58K4578	5000	0.01
MC0063W060313K65	3.65 kohm	± 100ppm/°C	94W5786	0.08	94W3631	5000	0.01
MC0063W060313K83	3.83 kohm	± 100ppm/°C	94W5787	0.08	94W3632	5000	0.01
MC0063W060313K9	3.9 kohm	± 100ppm/°C	94W5788	0.08	58K4588	5000	0.01

➤ CONTINUED ➤

SURFACE MOUNT THICK FILM RESISTORS - 0603 CASE SIZE (CONT.)

Mfg. Part No.	Resistance	Temperature Coefficient	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-29999
● MC0063W060314K02	4.02 kohm	± 100ppm/°C	94W5840	0.08	94W3674	5000	0.01
● MC0063W060314K22	4.22 kohm	± 100ppm/°C	94W5841	0.08	94W3675	5000	0.01
● MC0063W060314K3	4.3 kohm	± 100ppm/°C	94W5842	0.08	58K4598	5000	0.01
● MC0063W060314K42	4.42 kohm	± 100ppm/°C	94W5843	0.08	94W3676	5000	0.01
● MC0063W060314K64	4.64 kohm	± 100ppm/°C	94W5844	0.08	94W3677	5000	0.01
● MC0063W060314K75	4.75 kohm	± 100ppm/°C	94W5845	0.08	94W3678	5000	0.01
● MC0063W060314K87	4.87 kohm	± 100ppm/°C	94W5846	0.08	94W3679	5000	0.01
● MC0063W060314K99	4.99 kohm	± 100ppm/°C	94W5847	0.08	94W3680	5000	0.01
● MC0063W060315K1	5.1 kohm	± 100ppm/°C	58K4618	0.02	58K4619	5000	0.01
● MC0063W060315K11	5.11 kohm	± 100ppm/°C	94W5887	0.08	94W3717	5000	0.01
● MC0063W060315K36	5.36 kohm	± 100ppm/°C	94W5888	0.08	94W3718	5000	0.01
● MC0063W060315K6	5.6 kohm	± 100ppm/°C	94W5889	0.08	58K4628	5000	0.01
● MC0063W060315K62	5.62 kohm	± 100ppm/°C	94W5890	0.08	94W3719	5000	0.01
● MC0063W060315K9	5.9 kohm	± 100ppm/°C	94W5891	0.08	94W3720	5000	0.01
● MC0063W060316K04	6.04 kohm	± 100ppm/°C	94W5919	0.08	94W3747	5000	0.01
● MC0063W060316K19	6.19 kohm	± 100ppm/°C	94W5920	0.08	94W3748	5000	0.01
● MC0063W060316K2	6.2 kohm	± 100ppm/°C	94W5921	0.08	58K4638	5000	0.01
● MC0063W060316K49	6.49 kohm	± 100ppm/°C	94W5922	0.08	94W3749	5000	0.01
● MC0063W060316K8	6.8 kohm	± 100ppm/°C	58K4648	0.02	58K4649	5000	0.01
● MC0063W060316K81	6.81 kohm	± 100ppm/°C	94W5923	0.08	94W3750	5000	0.01
● MC0063W060317K15	7.15 kohm	± 100ppm/°C	94W5949	0.08	94W3771	5000	0.01
● MC0063W060317K5	7.5 kohm	± 100ppm/°C	94W5950	0.08	58K4658	5000	0.01
● MC0063W060317K87	7.87 kohm	± 100ppm/°C	94W5951	0.08	94W3772	5000	0.01
● MC0063W060318K2	8.2 kohm	± 100ppm/°C	94W5965	0.08	58K4668	5000	0.01
● MC0063W060318K25	8.25 kohm	± 100ppm/°C	94W5966	0.08	94W3785	5000	0.01
● MC0063W060318K66	8.66 kohm	± 100ppm/°C	94W5967	0.08	94W3786	5000	0.01
● MC0063W060319K09	9.09 kohm	± 100ppm/°C	94W5982	0.09	94W3799	5000	0.01
● MC0063W060319K1	9.1 kohm	± 100ppm/°C	94W5983	0.09	58K4678	5000	0.01
● MC0063W060319K53	9.53 kohm	± 100ppm/°C	94W5984	0.08	94W3800	5000	0.01
● MC0063W0603110K5	10.5 kohm	± 100ppm/°C	94W5653	0.08	94W3517	5000	0.01
● MC0063W0603111K	11 kohm	± 100ppm/°C	58K4462	0.02	58K4463	5000	0.01
● MC0063W0603111K5	11.5 kohm	± 100ppm/°C	94W5658	0.08	94W3522	5000	0.01
● MC0063W0603112K	12 kohm	± 100ppm/°C	94W5664	0.08	58K4472	5000	0.01
● MC0063W0603112K1	12.1 kohm	± 100ppm/°C	94W4695	0.08	94W3526	5000	0.01
● MC0063W0603112K4	12.4 kohm	± 100ppm/°C	94W4696	0.08	94W3527	5000	0.01
● MC0063W0603112K7	12.7 kohm	± 100ppm/°C	94W5665	0.08	94W3528	5000	0.01
● MC0063W0603113K	13 kohm	± 100ppm/°C	94W5674	0.08	58K4480	5000	0.01
● MC0063W0603113K3	13.3 kohm	± 100ppm/°C	94W5675	0.08	94W3534	5000	0.01
● MC0063W0603114K	14 kohm	± 100ppm/°C	94W5680	0.08	94W3538	5000	0.01
● MC0063W0603114K7	14.7 kohm	± 100ppm/°C	94W5681	0.08	94W3539	5000	0.01
● MC0063W0603115K4	15.4 kohm	± 100ppm/°C	94W5688	0.08	94W3546	5000	0.01
● MC0063W0603116K	16 kohm	± 100ppm/°C	94W4697	0.08	58K4500	5000	0.01
● MC0063W0603116K2	16.2 kohm	± 100ppm/°C	94W5694	0.08	94W3550	5000	0.01
● MC0063W0603116K9	16.9 kohm	± 100ppm/°C	94W5695	0.08	94W3551	5000	0.01
● MC0063W0603117K8	17.8 kohm	± 100ppm/°C	94W4698	0.09	94W3558	5000	0.01
● MC0063W0603118K	18 kohm	± 100ppm/°C	58K4510	0.02	58K4511	5000	0.01
● MC0063W0603118K7	18.7 kohm	± 100ppm/°C	94W5708	0.08	94W3562	5000	0.01
● MC0063W0603119K6	19.6 kohm	± 100ppm/°C	94W5714	0.08	94W3566	5000	0.01
● MC0063W0603120K	20 kohm	± 100ppm/°C	58K4520	0.03	58K4521	5000	0.01
● MC0063W0603120K5	20.5 kohm	± 100ppm/°C	94W5741	0.08	94W3595	5000	0.01
● MC0063W0603121K5	21.5 kohm	± 100ppm/°C	94W5747	0.08	94W3599	5000	0.01
● MC0063W0603122K6	22.6 kohm	± 100ppm/°C	94W5751	0.08	94W3603	5000	0.01
● MC0063W0603123K7	23.7 kohm	± 100ppm/°C	94W5754	0.08	94W3607	5000	0.01
● MC0063W0603124K	24 kohm	± 100ppm/°C	94W5758	0.08	58K4540	5000	0.01
● MC0063W0603124K9	24.9 kohm	± 100ppm/°C	94W5759	0.08	94W3611	5000	0.01
● MC0063W0603126K1	26.1 kohm	± 100ppm/°C	94W5766	0.08	94W3615	5000	0.01
● MC0063W0603127K	27 kohm	± 100ppm/°C	58K4550	0.02	58K4551	5000	0.01
● MC0063W0603127K4	27.4 kohm	± 100ppm/°C	94W5770	0.08	94W3619	5000	0.01
● MC0063W0603128K7	28.7 kohm	± 100ppm/°C	94W4704	0.08	94W3623	5000	0.01
● MC0063W0603130K	30 kohm	± 100ppm/°C	94W5806	0.08	58K4560	5000	0.01
● MC0063W0603130K1	30.1 kohm	± 100ppm/°C	94W4706	0.08	94W3651	5000	0.01
● MC0063W0603131K6	31.6 kohm	± 100ppm/°C	94W5812	0.08	94W3655	5000	0.01
● MC0063W0603133K2	33.2 kohm	± 100ppm/°C	94W5816	0.08	94W3659	5000	0.01
● MC0063W0603134K8	34.8 kohm	± 100ppm/°C	94W5822	0.08	94W3663	5000	0.01
● MC0063W0603136K	36 kohm	± 100ppm/°C	94W5826	0.08	58K4580	5000	0.01
● MC0063W0603136K5	36.5 kohm	± 100ppm/°C	94W5827	0.08	94W3667	5000	0.01
● MC0063W0603138K3	38.3 kohm	± 100ppm/°C	94W5834	0.08	94W3671	5000	0.01
● MC0063W0603139K	39 kohm	± 100ppm/°C	94W5837	0.08	58K4590	5000	0.01
● MC0063W0603140K2	40.2 kohm	± 100ppm/°C	94W5858	0.08	94W3692	5000	0.01
● MC0063W0603142K2	42.2 kohm	± 100ppm/°C	94W5861	0.08	94W3696	5000	0.01
● MC0063W0603143K	43 kohm	± 100ppm/°C	94W5865	0.08	58K4600	5000	0.01
● MC0063W0603144K2	44.2 kohm	± 100ppm/°C	94W5869	0.08	94W3700	5000	0.01

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SURFACE MOUNT THICK FILM RESISTORS - 0603 CASE SIZE (CONT.)

Mfg. Part No.	Resistance	Temperature Coefficient	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-29999
● MC0063W0603146K4	46.4 kohm	± 100ppm/°C	94W5873	0.08	94W3704	5000	0.01
● MC0063W0603147K5	47.5 kohm	± 100ppm/°C	94W5877	0.08	94W3708	5000	0.01
● MC0063W0603148K7	48.7 kohm	± 100ppm/°C	94W5880	0.08	94W3710	5000	0.01
● MC0063W0603149K9	49.9 kohm	± 100ppm/°C	94W5884	0.09	94W3714	5000	0.01
● MC0063W0603151K	51 kohm	± 100ppm/°C	94W5900	0.08	58K4620	5000	0.01
● MC0063W0603151K1	51.1 kohm	± 100ppm/°C	94W5901	0.08	94W3731	5000	0.01
● MC0063W0603153K6	53.6 kohm	± 100ppm/°C	94W5906	0.08	94W3735	5000	0.01
● MC0063W0603156K	56 kohm	± 100ppm/°C	58K4630	0.02	58K4631	5000	0.01
● MC0063W0603156K2	56.2 kohm	± 100ppm/°C	94W5910	0.08	94W3739	5000	0.01
● MC0063W0603159K	59 kohm	± 100ppm/°C	94W4712	0.09	94W3743	5000	0.01
● MC0063W0603161K9	61.9 kohm	± 100ppm/°C	94W4713	0.08	94W3759	5000	0.01
● MC0063W0603162K	62 kohm	± 100ppm/°C	94W4714	0.08	58K4640	5000	0.01
● MC0063W0603164K9	64.9 kohm	± 100ppm/°C	94W5937	0.08	94W3763	5000	0.01
● MC0063W0603168K	68 kohm	± 100ppm/°C	94W5941	0.08	58K4650	5000	0.01
● MC0063W0603168K1	68.1 kohm	± 100ppm/°C	94W5942	0.08	94W3767	5000	0.01
● MC0063W0603171K5	71.5 kohm	± 100ppm/°C	94W5956	0.08	94W3777	5000	0.01
● MC0063W0603175K	75 kohm	± 100ppm/°C	94W5959	0.08	58K4660	5000	0.01
● MC0063W0603178K7	78.7 kohm	± 100ppm/°C	94W5962	0.08	94W3781	5000	0.01
● MC0063W0603182K	82 kohm	± 100ppm/°C	94W5972	0.08	58K4670	5000	0.01
● MC0063W0603182K5	82.5 kohm	± 100ppm/°C	94W5973	0.08	94W3791	5000	0.01
● MC0063W0603186K6	86.6 kohm	± 100ppm/°C	94W5978	0.08	94W3795	5000	0.01
● MC0063W0603190K9	90.9 kohm	± 100ppm/°C	94W5989	0.08	94W3805	5000	0.01
● MC0063W0603191K	91 kohm	± 100ppm/°C	94W5993	0.08	58K4680	5000	0.01
● MC0063W0603195K3	95.3 kohm	± 100ppm/°C	94W5997	0.08	94W3809	5000	0.01
● MC0063W06031105K	105 kohm	± 100ppm/°C	94W5656	0.08	94W3520	5000	0.01
● MC0063W06031110K	110 kohm	± 100ppm/°C	94W5661	0.08	58K4464	5000	0.01
● MC0063W06031115K	115 kohm	± 100ppm/°C	94W5662	0.08	94W3524	5000	0.01
● MC0063W06031120K	120 kohm	± 100ppm/°C	94W5668	0.08	58K4474	5000	0.01
● MC0063W06031121K	121 kohm	± 100ppm/°C	94W5670	0.08	94W3530	5000	0.01
● MC0063W06031127K	127 kohm	± 100ppm/°C	94W5672	0.08	94W3532	5000	0.01
● MC0063W06031130K	130 kohm	± 100ppm/°C	94W5677	0.08	58K4482	5000	0.01
● MC0063W06031133K	133 kohm	± 100ppm/°C	94W5678	0.08	94W3536	5000	0.01
● MC0063W06031140K	140 kohm	± 100ppm/°C	94W5684	0.08	94W3542	5000	0.01
● MC0063W06031147K	147 kohm	± 100ppm/°C	94W5686	0.08	94W3544	5000	0.01
● MC0063W06031154K	154 kohm	± 100ppm/°C	94W5692	0.08	94W3548	5000	0.01
● MC0063W06031160K	160 kohm	± 100ppm/°C	94W5699	0.08	58K4502	5000	0.01
● MC0063W06031162K	162 kohm	± 100ppm/°C	94W5701	0.08	94W3554	5000	0.01
● MC0063W06031169K	169 kohm	± 100ppm/°C	94W5703	0.08	94W3556	5000	0.01
● MC0063W06031178K	178 kohm	± 100ppm/°C	94W5706	0.08	94W3560	5000	0.01
● MC0063W06031180K	180 kohm	± 100ppm/°C	94W5711	0.08	58K4512	5000	0.01
● MC0063W06031187K	187 kohm	± 100ppm/°C	94W5712	0.08	94W3564	5000	0.01
● MC0063W06031196K	196 kohm	± 100ppm/°C	94W5716	0.08	94W3568	5000	0.01
● MC0063W06031200K	200 kohm	± 100ppm/°C	58K4522	0.02	58K4523	5000	0.01
● MC0063W06031205K	205 kohm	± 100ppm/°C	94W5745	0.08	94W3597	5000	0.01
● MC0063W06031215K	215 kohm	± 100ppm/°C	94W5749	0.08	94W3601	5000	0.01
● MC0063W06031220K	220 kohm	± 100ppm/°C	58K4532	0.02	58K4533	5000	0.01
● MC0063W06031226K	226 kohm	± 100ppm/°C	94W5753	0.08	94W3605	5000	0.01
● MC0063W06031237K	237 kohm	± 100ppm/°C	94W5756	0.08	94W3609	5000	0.01
● MC0063W06031240K	240 kohm	± 100ppm/°C	94W5762	0.08	58K4542	5000	0.01
● MC0063W06031249K	249 kohm	± 100ppm/°C	94W5764	0.08	94W3613	5000	0.01
● MC0063W06031261K	261 kohm	± 100ppm/°C	94W5768	0.08	94W3617	5000	0.01
● MC0063W06031270K	270 kohm	± 100ppm/°C	94W5773	0.08	58K4552	5000	0.01
● MC0063W06031274K	274 kohm	± 100ppm/°C	94W5774	0.08	94W3621	5000	0.01
● MC0063W06031287K	287 kohm	± 100ppm/°C	94W5777	0.08	94W3625	5000	0.01
● MC0063W06031300K	300 kohm	± 100ppm/°C	94W5809	0.08	58K4562	5000	0.01
● MC0063W06031301K	301 kohm	± 100ppm/°C	94W5810	0.08	94W3653	5000	0.01
● MC0063W06031316K	316 kohm	± 100ppm/°C	94W5814	0.08	94W3657	5000	0.01
● MC0063W06031330K	330 kohm	± 100ppm/°C	94W5819	0.08	58K4572	5000	0.01
● MC0063W06031332K	332 kohm	± 100ppm/°C	94W5820	0.08	94W3661	5000	0.01
● MC0063W06031348K	348 kohm	± 100ppm/°C	94W5824	0.08	94W3665	5000	0.01
● MC0063W06031360K	360 kohm	± 100ppm/°C	94W5830	0.08	58K4582	5000	0.01
● MC0063W06031365K	365 kohm	± 100ppm/°C	94W5832	0.08	94W3669	5000	0.01
● MC0063W06031390K	390 kohm	± 100ppm/°C	94W5839	0.08	58K4592	5000	0.01
● MC0063W06031402K	402 kohm	± 100ppm/°C	94W5860	0.08	94W3694	5000	0.01
● MC0063W06031422K	422 kohm	± 100ppm/°C	94W5863	0.08	94W3698	5000	0.01
● MC0063W06031430K	430 kohm	± 100ppm/°C	94W5867	0.08	58K4602	5000	0.01
● MC0063W06031442K	442 kohm	± 100ppm/°C	94W5871	0.08	94W3702	5000	0.01
● MC0063W06031464K	464 kohm	± 100ppm/°C	94W5875	0.08	94W3706	5000	0.01
● MC0063W06031487K	487 kohm	± 100ppm/°C	94W5882	0.08	94W3712	5000	0.01
● MC0063W06031499K	499 kohm	± 100ppm/°C	94W5886	0.08	94W3716	5000	0.01
● MC0063W06031510K	510 kohm	± 100ppm/°C	94W5903	0.08	58K4622	5000	0.01
● MC0063W06031511K	511 kohm	± 100ppm/°C	94W5904	0.08	94W3733	5000	0.01

➤CONTINUED➤

SURFACE MOUNT THICK FILM RESISTORS - 0603 CASE SIZE (CONT.)

Mfg. Part No.	Resistance	Temperature Coefficient	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-29999
MC0063W06031536K	536 kohm	± 100ppm/°C	94W5908	0.08	94W3737	5000	0.01
MC0063W06031560K	560 kohm	± 100ppm/°C	94W5913	0.08	58K4632	5000	0.01
MC0063W06031562K	562 kohm	± 100ppm/°C	94W5915	0.08	94W3741	5000	0.01
MC0063W06031590K	590 kohm	± 100ppm/°C	94W5917	0.08	94W3745	5000	0.01
MC0063W06031619K	619 kohm	± 100ppm/°C	94W5933	0.08	94W3761	5000	0.01
MC0063W06031620K	620 kohm	± 100ppm/°C	94W5936	0.08	58K4642	5000	0.01
MC0063W06031649K	649 kohm	± 100ppm/°C	94W5939	0.08	94W3765	5000	0.01
MC0063W06031680K	680 kohm	± 100ppm/°C	94W5945	0.08	58K4652	5000	0.01
MC0063W06031681K	681 kohm	± 100ppm/°C	94W5947	0.08	94W3769	5000	0.01
MC0063W06031715K	715 kohm	± 100ppm/°C	94W5957	0.08	94W3779	5000	0.01
MC0063W06031750K	750 kohm	± 100ppm/°C	94W5960	0.08	58K4662	5000	0.01
MC0063W06031787K	787 kohm	± 100ppm/°C	94W4716	0.08	94W3783	5000	0.01
MC0063W06031820K	820 kohm	± 100ppm/°C	94W4718	0.08	58K4672	5000	0.01
MC0063W06031825K	825 kohm	± 100ppm/°C	94W5976	0.08	94W3793	5000	0.01
MC0063W06031866K	866 kohm	± 100ppm/°C	94W5980	0.08	94W3797	5000	0.01
MC0063W06031909K	909 kohm	± 100ppm/°C	94W5991	0.08	94W3807	5000	0.01
MC0063W06031910K	910 kohm	± 100ppm/°C	94W5995	0.08	58K4682	5000	0.01
MC0063W06031953K	953 kohm	± 100ppm/°C	94W4719	0.08	94W3811	5000	0.01
MC0063W060311M	1 Mohm	± 100ppm/°C	94W5623	0.05	58K4454	5000	0.01
MC0063W060311M05	1.05 Mohm	± 100ppm/°C	94W5624	0.20	94W3482	5000	0.02
MC0063W060311M10	1.1 Mohm	± 100ppm/°C	94W5625	0.20	94W3483	5000	0.02
MC0063W060311M15	1.15 Mohm	± 100ppm/°C	94W5626	0.20	94W3484	5000	0.02
MC0063W060311M20	1.2 Mohm	± 100ppm/°C	94W5627	0.20	94W3485	5000	0.02
MC0063W060311M21	1.21 Mohm	± 100ppm/°C	94W5628	0.20	94W3486	5000	0.02
MC0063W060311M27	1.27 Mohm	± 100ppm/°C	94W5629	0.20	94W3487	5000	0.02
MC0063W060311M30	1.3 Mohm	± 100ppm/°C	94W5630	0.20	94W3488	5000	0.02
MC0063W060311M33	1.33 Mohm	± 100ppm/°C	94W4688	0.20	94W3489	5000	0.02
MC0063W060311M40	1.4 Mohm	± 100ppm/°C	94W5631	0.20	94W3490	5000	0.02
MC0063W060311M50	1.5 Mohm	± 100ppm/°C	94W4689	0.20	94W3491	5000	0.02
MC0063W060311M54	1.54 Mohm	± 100ppm/°C	94W5632	0.20	94W3492	5000	0.02
MC0063W060311M60	1.6 Mohm	± 100ppm/°C	94W5633	0.20	94W3493	5000	0.02
MC0063W060311M62	1.62 Mohm	± 100ppm/°C	94W5634	0.20	94W3494	5000	0.02
MC0063W060311M69	1.69 Mohm	± 100ppm/°C	94W5635	0.20	94W3495	5000	0.02
MC0063W060311M78	1.78 Mohm	± 100ppm/°C	94W5636	0.20	94W3496	5000	0.02
MC0063W060311M80	1.8 Mohm	± 100ppm/°C	94W5637	0.20	94W3497	5000	0.02
MC0063W060311M87	1.87 Mohm	± 100ppm/°C	94W4690	0.20	94W3498	5000	0.02
MC0063W060312M00	2 Mohm	± 100ppm/°C	94W5728	0.20	94W3578	5000	0.02
MC0063W060312M20	2.2 Mohm	± 100ppm/°C	94W5729	0.20	94W3579	5000	0.02
MC0063W060312M26	2.26 Mohm	± 100ppm/°C	94W5730	0.20	94W3580	5000	0.02
MC0063W060312M37	2.37 Mohm	± 100ppm/°C	94W4699	0.20	94W3581	5000	0.02
MC0063W060312M40	2.4 Mohm	± 100ppm/°C	94W5731	0.20	94W3582	5000	0.02
MC0063W060312M49	2.49 Mohm	± 100ppm/°C	94W5732	0.20	94W3583	5000	0.02
MC0063W060312M61	2.61 Mohm	± 100ppm/°C	94W5733	0.20	94W3584	5000	0.02
MC0063W060312M70	2.7 Mohm	± 100ppm/°C	94W5734	0.20	94W3585	5000	0.02
MC0063W060312M74	2.74 Mohm	± 100ppm/°C	94W4700	0.20	94W3586	5000	0.02
MC0063W060312M87	2.87 Mohm	± 100ppm/°C	94W4701	0.20	94W3587	5000	0.02
MC0063W060313M00	3 Mohm	± 100ppm/°C	94W5789	0.20	94W3633	5000	0.02
MC0063W060313M01	3.01 Mohm	± 100ppm/°C	94W5790	0.20	94W3634	5000	0.02
MC0063W060313M30	3.3 Mohm	± 100ppm/°C	94W5791	0.20	94W3635	5000	0.02
MC0063W060313M32	3.32 Mohm	± 100ppm/°C	94W5792	0.20	94W3636	5000	0.02
MC0063W060313M48	3.48 Mohm	± 100ppm/°C	94W5793	0.20	94W3637	5000	0.02
MC0063W060313M60	3.6 Mohm	± 100ppm/°C	94W5794	0.20	94W3638	5000	0.02
MC0063W060313M65	3.65 Mohm	± 100ppm/°C	94W5795	0.20	94W3639	5000	0.02
MC0063W060313M83	3.83 Mohm	± 100ppm/°C	94W5796	0.20	94W3640	5000	0.02
MC0063W060313M90	3.9 Mohm	± 100ppm/°C	94W5797	0.20	94W3641	5000	0.02
MC0063W060314M02	4.02 Mohm	± 100ppm/°C	94W5848	0.20	94W3681	5000	0.02
MC0063W060314M30	4.3 Mohm	± 100ppm/°C	94W5849	0.04	94W3682	5000	0.02
MC0063W060314M42	4.42 Mohm	± 100ppm/°C	94W5850	0.20	94W3683	5000	0.02
MC0063W060314M64	4.64 Mohm	± 100ppm/°C	94W5851	0.20	94W3684	5000	0.02
MC0063W060314M70	4.7 Mohm	± 100ppm/°C	94W5852	0.20	94W3685	5000	0.02
MC0063W060315M10	5.1 Mohm	± 100ppm/°C	94W4709	0.25	94W3721	5000	0.02
MC0063W060315M11	5.11 Mohm	± 100ppm/°C	94W5892	0.25	94W3722	5000	0.02
MC0063W060315M60	5.6 Mohm	± 100ppm/°C	94W5893	0.25	94W3723	5000	0.02
MC0063W060315M62	5.62 Mohm	± 100ppm/°C	94W4710	0.25	94W3724	5000	0.02
MC0063W060315M90	5.9 Mohm	± 100ppm/°C	94W5894	0.25	94W3725	5000	0.02
MC0063W060316M20	6.2 Mohm	± 100ppm/°C	94W5924	0.25	94W3751	5000	0.02
MC0063W060316M49	6.49 Mohm	± 100ppm/°C	94W5925	0.25	94W3752	5000	0.02
MC0063W060316M80	6.8 Mohm	± 100ppm/°C	94W5926	0.25	94W3753	5000	0.02
MC0063W060317M50	7.5 Mohm	± 100ppm/°C	94W5952	0.25	94W3773	5000	0.02
MC0063W060318M20	8.2 Mohm	± 100ppm/°C	94W5968	0.25	94W3787	5000	0.02
MC0063W060319M10	9.1 Mohm	± 100ppm/°C	94W5985	0.25	94W3801	5000	0.02

➤CONTINUED➤

SURFACE MOUNT THICK FILM RESISTORS - 0603 CASE SIZE (CONT.)

Mfg. Part No.	Resistance	Temperature Coefficient	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-29999
MC0063W060319M53	9.53 Mohm	± 100ppm/°C	94W5986	0.25	94W3802	5000	0.02
MC0063W0603110M0	10 Mohm	± 100ppm/°C	94W5654	0.05	94W3518	5000	0.03

(211600)

SURFACE MOUNT THICK FILM RESISTORS - 0805 CASE SIZE

RoHS Compliant Available

multicomp

NEW

Features:
- Small size and light weight
- Suitable for both wave and reflow soldering

Specifications:
- Power Rating: 100mW
- Tolerance: ±1%
- Voltage Rating: 150V

Mfg. Part No.	Resistance	Temperature Coefficient	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-29999
MC01W080511R0	1 ohm	± 400ppm/°C	94W6035	0.31	94W3843	5000	0.02
MC01W080511R10	1.1 ohm	± 400ppm/°C	94W6036	0.30	94W3844	5000	0.02
MC01W080511R15	1.15 ohm	± 400ppm/°C	94W6037	0.30	94W3845	5000	0.02
MC01W080511R20	1.2 ohm	± 400ppm/°C	94W6038	0.31	94W3846	5000	0.02
MC01W080511R21	1.21 ohm	± 400ppm/°C	94W6039	0.30	94W3847	5000	0.02
MC01W080511R27	1.27 ohm	± 400ppm/°C	94W6040	0.30	94W3848	5000	0.02
MC01W080511R30	1.3 ohm	± 400ppm/°C	94W6041	0.30	94W3849	5000	0.02
MC01W080511R33	1.33 ohm	± 400ppm/°C	94W6042	0.30	94W3850	5000	0.02
MC01W080511R40	1.4 ohm	± 400ppm/°C	94W6043	0.30	94W3851	5000	0.02
MC01W080511R5	1.5 ohm	± 200ppm/°C	94W6044	0.31	94W3852	5000	0.02
MC01W080511R60	1.6 ohm	± 400ppm/°C	94W6045	0.30	94W3853	5000	0.02
MC01W080511R62	1.62 ohm	± 400ppm/°C	94W6046	0.30	94W3854	5000	0.02
MC01W080511R69	1.69 ohm	± 400ppm/°C	94W6047	0.31	94W3855	5000	0.02
MC01W080511R80	1.8 ohm	± 400ppm/°C	94W6048	0.30	94W3856	5000	0.02
MC01W080511R87	1.87 ohm	± 400ppm/°C	94W6049	0.30	94W3857	5000	0.02
MC01W080511R96	1.96 ohm	± 400ppm/°C	94W6050	0.30	94W3858	5000	0.02
MC01W080512R0	2 ohm	± 400ppm/°C	94W6138	0.30	94W3931	5000	0.02
MC01W080512R15	2.15 ohm	± 400ppm/°C	94W6139	0.30	94W3932	5000	0.02
MC01W080512R2	2.2 ohm	± 400ppm/°C	94W6140	0.08	94W3933	5000	0.02
MC01W080512R26	2.26 ohm	± 400ppm/°C	94W6141	0.30	94W3934	5000	0.02
MC01W080512R37	2.37 ohm	± 400ppm/°C	94W6142	0.30	94W3935	5000	0.02
MC01W080512R40	2.4 ohm	± 400ppm/°C	94W6143	0.30	94W3936	5000	0.02
MC01W080512R49	2.49 ohm	± 400ppm/°C	94W6144	0.30	94W3937	5000	0.02
MC01W080512R61	2.61 ohm	± 400ppm/°C	94W6145	0.30	94W3938	5000	0.02
MC01W080512R70	2.7 ohm	± 400ppm/°C	94W6146	0.08	94W3939	5000	0.02
MC01W080512R74	2.74 ohm	± 400ppm/°C	94W6147	0.30	94W3940	5000	0.02
MC01W080512R87	2.87 ohm	± 400ppm/°C	94W6148	0.30	94W3941	5000	0.02
MC01W080513R0	3 ohm	± 400ppm/°C	94W6204	0.08	94W3990	5000	0.02
MC01W080513R16	3.16 ohm	± 400ppm/°C	94W6205	0.30	94W3991	5000	0.02
MC01W080513R3	3.3 ohm	± 400ppm/°C	94W6206	0.31	94W3992	5000	0.02
MC01W080513R32	3.32 ohm	± 400ppm/°C	94W6207	0.31	94W3993	5000	0.02
MC01W080513R48	3.48 ohm	± 400ppm/°C	94W6208	0.30	94W3994	5000	0.02
MC01W080513R60	3.6 ohm	± 400ppm/°C	94W6209	0.30	94W3995	5000	0.02
MC01W080513R65	3.65 ohm	± 400ppm/°C	94W6210	0.30	94W3996	5000	0.02
MC01W080513R83	3.83 ohm	± 400ppm/°C	94W6211	0.30	94W3997	5000	0.02
MC01W080513R90	3.9 ohm	± 400ppm/°C	94W6212	0.31	94W3998	5000	0.01
MC01W080514R22	4.22 ohm	± 400ppm/°C	94W6260	0.30	94W4035	5000	0.02
MC01W080514R30	4.3 ohm	± 400ppm/°C	94W6261	0.30	94W4036	5000	0.02
MC01W080514R42	4.42 ohm	± 400ppm/°C	94W6262	0.30	94W4037	5000	0.02
MC01W080514R64	4.64 ohm	± 400ppm/°C	94W6263	0.30	94W4038	5000	0.02
MC01W080514R7	4.7 ohm	± 400ppm/°C	94W6264	0.31	94W4039	5000	0.02
MC01W080514R87	4.87 ohm	± 400ppm/°C	94W6265	0.30	94W4040	5000	0.02
MC01W080515R10	5.1 ohm	± 400ppm/°C	94W6305	0.25	94W4074	5000	0.02
MC01W080515R11	5.11 ohm	± 400ppm/°C	94W6306	0.25	94W4075	5000	0.02
MC01W080515R36	5.36 ohm	± 400ppm/°C	94W6307	0.25	94W4076	5000	0.02
MC01W080515R60	5.6 ohm	± 400ppm/°C	94W6308	0.08	94W4077	5000	0.02
MC01W080515R62	5.62 ohm	± 400ppm/°C	94W6309	0.25	94W4078	5000	0.02
MC01W080515R90	5.9 ohm	± 400ppm/°C	94W6310	0.25	94W4079	5000	0.02
MC01W080516R19	6.19 ohm	± 400ppm/°C	94W6344	0.25	94W4104	5000	0.02
MC01W080516R20	6.2 ohm	± 400ppm/°C	94W6345	0.25	94W4105	5000	0.02
MC01W080516R49	6.49 ohm	± 400ppm/°C	94W6346	0.25	94W4106	5000	0.02
MC01W080516R8	6.8 ohm	± 400ppm/°C	94W6347	0.26	94W4107	5000	0.02
MC01W080516R81	6.81 ohm	± 400ppm/°C	94W6348	0.25	94W4108	5000	0.02
MC01W080517R15	7.15 ohm	± 400ppm/°C	94W6370	0.25	94W4124	5000	0.02
MC01W080517R50	7.5 ohm	± 400ppm/°C	94W6371	0.25	94W4125	5000	0.02
MC01W080517R87	7.87 ohm	± 400ppm/°C	94W6372	0.25	94W4126	5000	0.02
MC01W080518R20	8.2 ohm	± 400ppm/°C	94W6389	0.26	94W4138	5000	0.02

➤CONTINUED➤

SURFACE MOUNT THICK FILM RESISTORS - 0805 CASE SIZE (CONT.)

Mfg. Part No.	Resistance	Temperature Coefficient	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-29999
● MC01W080518R25	8.25 ohm	± 400ppm/°C	94W6390	0.25	94W4139	5000	0.02
● MC01W080518R66	8.66 ohm	± 400ppm/°C	94W6391	0.25	94W4140	5000	0.02
● MC01W080519R10	9.1 ohm	± 400ppm/°C	94W6408	0.25	94W4153	5000	0.02
● MC01W080519R53	9.53 ohm	± 400ppm/°C	94W6409	0.26	94W4154	5000	0.02
● MC01W0805110R	10 ohm	± 200ppm/°C	58K4686	0.02	58K4687	5000	0.01
● MC01W0805110R5	10.5 ohm	± 200ppm/°C	94W6053	0.10	94W3861	5000	0.01
● MC01W0805111R	11 ohm	± 200ppm/°C	94W6058	0.10	58K4698	5000	0.01
● MC01W0805111R5	11.5 ohm	± 200ppm/°C	94W6059	0.10	94W3865	5000	0.01
● MC01W0805112R	12 ohm	± 200ppm/°C	58K4708	0.02	58K4709	5000	0.01
● MC01W0805112R1	12.1 ohm	± 200ppm/°C	94W6067	0.10	94W3871	5000	0.01
● MC01W0805112R7	12.7 ohm	± 200ppm/°C	94W6068	0.10	94W3872	5000	0.01
● MC01W0805113R	13 ohm	± 200ppm/°C	94W6076	0.10	94W3878	5000	0.01
● MC01W0805113R3	13.3 ohm	± 200ppm/°C	94W6077	0.10	94W3879	5000	0.01
● MC01W0805114R0	14 ohm	± 200ppm/°C	94W6084	0.10	94W3884	5000	0.01
● MC01W0805114R7	14.7 ohm	± 200ppm/°C	94W6085	0.10	94W3885	5000	0.01
● MC01W0805115R	15 ohm	± 200ppm/°C	94W6091	0.11	58K4727	5000	0.01
● MC01W0805115R4	15.4 ohm	± 200ppm/°C	94W6092	0.10	94W3891	5000	0.01
● MC01W0805116R	16 ohm	± 200ppm/°C	94W6097	0.10	58K4737	5000	0.01
● MC01W0805116R2	16.2 ohm	± 200ppm/°C	94W4720	0.10	94W3896	5000	0.01
● MC01W0805116R9	16.9 ohm	± 200ppm/°C	94W6098	0.10	94W3897	5000	0.01
● MC01W0805117R8	17.8 ohm	± 200ppm/°C	94W6106	0.10	94W3903	5000	0.01
● MC01W0805118R	18 ohm	± 200ppm/°C	94W6111	0.11	58K4747	5000	0.01
● MC01W0805118R7	18.7 ohm	± 200ppm/°C	94W6112	0.10	94W3907	5000	0.01
● MC01W0805119R6	19.6 ohm	± 200ppm/°C	94W6117	0.10	94W3911	5000	0.01
● MC01W0805120R	20 ohm	± 200ppm/°C	94W6150	0.11	58K4757	5000	0.01
● MC01W0805120R5	20.5 ohm	± 200ppm/°C	94W6151	0.10	94W3943	5000	0.01
● MC01W0805121R5	21.5 ohm	± 200ppm/°C	94W6156	0.10	94W3947	5000	0.01
● MC01W0805122R	22 ohm	± 200ppm/°C	58K4767	0.02	58K4768	5000	0.01
● MC01W0805122R6	22.6 ohm	± 200ppm/°C	94W6160	0.10	94W3951	5000	0.01
● MC01W0805123R7	23.7 ohm	± 200ppm/°C	94W6164	0.10	94W3955	5000	0.01
● MC01W0805124R	24 ohm	± 200ppm/°C	94W6168	0.10	58K4777	5000	0.01
● MC01W0805124R9	24.9 ohm	± 200ppm/°C	94W6169	0.10	94W3959	5000	0.01
● MC01W0805126R1	26.1 ohm	± 200ppm/°C	94W6174	0.10	94W3963	5000	0.01
● MC01W0805127R	27 ohm	± 200ppm/°C	58K4787	0.02	58K4788	5000	0.01
● MC01W0805127R4	27.4 ohm	± 200ppm/°C	94W6179	0.10	94W3967	5000	0.01
● MC01W0805128R7	28.7 ohm	± 200ppm/°C	94W6184	0.10	94W3971	5000	0.01
● MC01W0805130R	30 ohm	± 200ppm/°C	94W6215	0.10	58K4797	5000	0.01
● MC01W0805130R1	30.1 ohm	± 200ppm/°C	94W6216	0.10	94W4000	5000	0.01
● MC01W0805131R6	31.6 ohm	± 200ppm/°C	94W6221	0.10	94W4004	5000	0.01
● MC01W0805133R	33 ohm	± 200ppm/°C	58K4807	0.02	58K4808	5000	0.01
● MC01W0805133R2	33.2 ohm	± 200ppm/°C	94W6225	0.10	94W4008	5000	0.01
● MC01W0805134R8	34.8 ohm	± 200ppm/°C	94W6229	0.10	94W4012	5000	0.01
● MC01W0805136R	36 ohm	± 200ppm/°C	94W6234	0.11	58K4817	5000	0.01
● MC01W0805136R5	36.5 ohm	± 200ppm/°C	94W6235	0.10	94W4016	5000	0.01
● MC01W0805138R3	38.3 ohm	± 200ppm/°C	94W6241	0.10	94W4020	5000	0.01
● MC01W0805139R	39 ohm	± 200ppm/°C	94W6245	0.08	58K4827	5000	0.01
● MC01W0805140R2	40.2 ohm	± 200ppm/°C	94W6267	0.10	94W4042	5000	0.01
● MC01W0805142R2	42.2 ohm	± 200ppm/°C	94W6271	0.10	94W4046	5000	0.01
● MC01W0805143R	43 ohm	± 200ppm/°C	94W6275	0.10	58K4837	5000	0.01
● MC01W0805144R2	44.2 ohm	± 200ppm/°C	94W6279	0.10	94W4050	5000	0.01
● MC01W0805146R4	46.4 ohm	± 200ppm/°C	94W6283	0.10	94W4054	5000	0.01
● MC01W0805147R	47 ohm	± 200ppm/°C	58K4847	0.02	58K4848	5000	0.01
● MC01W0805148R7	48.7 ohm	± 200ppm/°C	94W6289	0.10	94W4060	5000	0.01
● MC01W0805149R9	49.9 ohm	± 200ppm/°C	94W6293	0.08	94W4064	5000	0.01
● MC01W0805151R	51 ohm	± 200ppm/°C	94W6313	0.10	58K4857	5000	0.01
● MC01W0805151R1	51.1 ohm	± 200ppm/°C	94W6314	0.11	94W4081	5000	0.01
● MC01W0805153R6	53.6 ohm	± 200ppm/°C	94W6319	0.10	94W4085	5000	0.01
● MC01W0805156R	56 ohm	± 200ppm/°C	94W6324	0.08	58K4867	5000	0.01
● MC01W0805156R2	56.2 ohm	± 200ppm/°C	94W6325	0.10	94W4089	5000	0.01
● MC01W0805159R0	59 ohm	± 200ppm/°C	94W6331	0.10	94W4093	5000	0.01
● MC01W0805161R9	61.9 ohm	± 200ppm/°C	94W6350	0.11	94W4110	5000	0.01
● MC01W0805162R	62 ohm	± 200ppm/°C	94W6354	0.11	58K4877	5000	0.01
● MC01W0805164R9	64.9 ohm	± 200ppm/°C	94W6358	0.10	94W4114	5000	0.01
● MC01W0805168R1	68.1 ohm	± 200ppm/°C	94W6362	0.10	94W4118	5000	0.01
● MC01W0805171R5	71.5 ohm	± 200ppm/°C	94W6374	0.11	94W4128	5000	0.01
● MC01W0805175R	75 ohm	± 200ppm/°C	94W6378	0.11	58K4897	5000	0.01
● MC01W0805178R7	78.7 ohm	± 200ppm/°C	94W6382	0.10	94W4132	5000	0.01
● MC01W0805182R	82 ohm	± 200ppm/°C	94W6394	0.11	58K4907	5000	0.01
● MC01W0805182R5	82.5 ohm	± 200ppm/°C	94W6395	0.10	94W4142	5000	0.01
● MC01W0805186R6	86.6 ohm	± 200ppm/°C	94W6400	0.10	94W4146	5000	0.01
● MC01W0805190R9	90.9 ohm	± 200ppm/°C	94W4721	0.11	94W4156	5000	0.01
● MC01W0805191R	91 ohm	± 200ppm/°C	94W6414	0.10	58K4917	5000	0.01

➤CONTINUED➤

SURFACE MOUNT THICK FILM RESISTORS - 0805 CASE SIZE (CONT.)

Mfg. Part No.	Resistance	Temperature Coefficient	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-29999
● MC01W0805195R3	95.3 ohm	± 200ppm/°C	94W6418	0.10	94W4160	5000	0.01
● MC01W08051105R	105 ohm	± 100ppm/°C	94W6055	0.10	94W3863	5000	0.01
● MC01W08051110R	110 ohm	± 100ppm/°C	94W6061	0.11	58K4700	5000	0.01
● MC01W08051115R	115 ohm	± 100ppm/°C	94W6063	0.10	94W3867	5000	0.01
● MC01W08051120R	120 ohm	± 100ppm/°C	58K4710	0.02	58K4711	5000	0.01
● MC01W08051121R	121 ohm	± 100ppm/°C	94W6071	0.10	94W3874	5000	0.01
● MC01W08051127R	127 ohm	± 100ppm/°C	94W6073	0.10	94W3876	5000	0.01
● MC01W08051130R	130 ohm	± 100ppm/°C	94W6079	0.11	58K4718	5000	0.01
● MC01W08051133R	133 ohm	± 100ppm/°C	94W6081	0.10	94W3881	5000	0.01
● MC01W08051140R	140 ohm	± 100ppm/°C	94W6087	0.11	94W3887	5000	0.01
● MC01W08051147R	147 ohm	± 100ppm/°C	94W6089	0.10	94W3889	5000	0.01
● MC01W08051154R	154 ohm	± 100ppm/°C	94W6094	0.10	94W3893	5000	0.01
● MC01W08051160R	160 ohm	± 100ppm/°C	94W6100	0.10	58K4739	5000	0.01
● MC01W08051162R	162 ohm	± 100ppm/°C	94W6102	0.10	94W3899	5000	0.01
● MC01W08051169R	169 ohm	± 100ppm/°C	94W6104	0.10	94W3901	5000	0.01
● MC01W08051178R	178 ohm	± 100ppm/°C	94W6108	0.10	94W3905	5000	0.01
● MC01W08051180R	180 ohm	± 100ppm/°C	94W6113	0.08	58K4749	5000	0.01
● MC01W08051187R	187 ohm	± 100ppm/°C	94W6115	0.10	94W3909	5000	0.01
● MC01W08051196R	196 ohm	± 100ppm/°C	94W6119	0.08	94W3913	5000	0.01
● MC01W08051205R	205 ohm	± 100ppm/°C	94W6154	0.10	94W3945	5000	0.01
● MC01W08051215R	215 ohm	± 100ppm/°C	94W6158	0.10	94W3949	5000	0.01
● MC01W08051220R	220 ohm	± 100ppm/°C	58K4769	0.02	58K4770	5000	0.01
● MC01W08051226R	226 ohm	± 100ppm/°C	94W6162	0.10	94W3953	5000	0.01
● MC01W08051237R	237 ohm	± 100ppm/°C	94W6166	0.10	94W3957	5000	0.01
● MC01W08051249R	249 ohm	± 100ppm/°C	94W6172	0.11	94W3961	5000	0.01
● MC01W08051261R	261 ohm	± 100ppm/°C	94W6176	0.10	94W3965	5000	0.01
● MC01W08051270R	270 ohm	± 100ppm/°C	58K4789	0.02	58K4790	5000	0.01
● MC01W08051274R	274 ohm	± 100ppm/°C	94W6182	0.11	94W3969	5000	0.01
● MC01W08051287R	287 ohm	± 100ppm/°C	94W6186	0.10	94W3973	5000	0.01
● MC01W08051301R	301 ohm	± 100ppm/°C	94W6219	0.11	94W4002	5000	0.01
● MC01W08051316R	316 ohm	± 100ppm/°C	94W6223	0.10	94W4006	5000	0.01
● MC01W08051332R	332 ohm	± 100ppm/°C	94W6227	0.10	94W4010	5000	0.01
● MC01W08051348R	348 ohm	± 100ppm/°C	94W6231	0.10	94W4014	5000	0.01
● MC01W08051360R	360 ohm	± 100ppm/°C	94W6237	0.10	58K4819	5000	0.01
● MC01W08051365R	365 ohm	± 100ppm/°C	94W6239	0.10	94W4018	5000	0.01
● MC01W08051383R	383 ohm	± 100ppm/°C	94W6243	0.10	94W4022	5000	0.01
● MC01W08051402R	402 ohm	± 100ppm/°C	94W6269	0.11	94W4044	5000	0.01
● MC01W08051422R	422 ohm	± 100ppm/°C	94W6273	0.10	94W4048	5000	0.01
● MC01W08051430R	430 ohm	± 100ppm/°C	94W6277	0.10	58K4839	5000	0.01
● MC01W08051442R	442 ohm	± 100ppm/°C	94W6281	0.10	94W4052	5000	0.01
● MC01W08051464R	464 ohm	± 100ppm/°C	94W6285	0.10	94W4056	5000	0.01
● MC01W08051470R	470 ohm	± 100ppm/°C	58K4849	0.02	58K4850	5000	0.01
● MC01W08051475R	475 ohm	± 100ppm/°C	94W6287	0.11	94W4058	5000	0.01
● MC01W08051487R	487 ohm	± 100ppm/°C	94W6291	0.10	94W4062	5000	0.01
● MC01W08051510R	510 ohm	± 100ppm/°C	94W6315	0.11	58K4859	5000	0.01
● MC01W08051511R	511 ohm	± 100ppm/°C	94W6317	0.10	94W4083	5000	0.01
● MC01W08051536R	536 ohm	± 100ppm/°C	94W6321	0.10	94W4087	5000	0.01
● MC01W08051560R	560 ohm	± 100ppm/°C	94W6327	0.11	58K4869	5000	0.01
● MC01W08051562R	562 ohm	± 100ppm/°C	94W6329	0.10	94W4091	5000	0.01
● MC01W08051590R	590 ohm	± 100ppm/°C	94W6333	0.10	94W4095	5000	0.01
● MC01W08051619R	619 ohm	± 100ppm/°C	94W6352	0.10	94W4112	5000	0.01
● MC01W08051620R	620 ohm	± 100ppm/°C	94W6356	0.11	58K4879	5000	0.01
● MC01W08051649R	649 ohm	± 100ppm/°C	94W6360	0.10	94W4116	5000	0.01
● MC01W08051680R	680 ohm	± 100ppm/°C	58K4889	0.02	58K4890	5000	0.01
● MC01W08051681R	681 ohm	± 100ppm/°C	94W6365	0.07	94W4120	5000	0.01
● MC01W08051715R	715 ohm	± 100ppm/°C	94W6376	0.10	94W4130	5000	0.01
● MC01W08051750R	750 ohm	± 100ppm/°C	94W6380	0.10	58K4899	5000	0.01
● MC01W08051787R	787 ohm	± 100ppm/°C	94W6384	0.10	94W4134	5000	0.01
● MC01W08051825R	825 ohm	± 100ppm/°C	94W6398	0.11	94W4144	5000	0.01
● MC01W08051866R	866 ohm	± 100ppm/°C	94W6402	0.10	94W4148	5000	0.01
● MC01W08051909R	909 ohm	± 100ppm/°C	94W6412	0.10	94W4158	5000	0.01
● MC01W08051910R	910 ohm	± 100ppm/°C	94W6416	0.10	58K4919	5000	0.01
● MC01W08051953R	953 ohm	± 100ppm/°C	94W6420	0.10	94W4162	5000	0.01
● MC01W080511K05	1.05 kohm	± 100ppm/°C	94W6000	0.11	94W3813	5000	0.01
● MC01W080511K1	1.1 kohm	± 100ppm/°C	94W6001	0.10	58K4702	5000	0.01
● MC01W080511K15	1.15 kohm	± 100ppm/°C	94W6002	0.10	94W3814	5000	0.01
● MC01W080511K2	1.2 kohm	± 100ppm/°C	94W6003	0.11	58K4712	5000	0.01
● MC01W080511K21	1.21 kohm	± 100ppm/°C	94W6004	0.11	94W3815	5000	0.01
● MC01W080511K27	1.27 kohm	± 100ppm/°C	94W6005	0.10	94W3816	5000	0.01
● MC01W080511K3	1.3 kohm	± 100ppm/°C	94W6006	0.10	58K4721	5000	0.01
● MC01W080511K33	1.33 kohm	± 100ppm/°C	94W6007	0.10	94W3817	5000	0.01
● MC01W080511K40	1.4 kohm	± 100ppm/°C	94W6008	0.10	94W3818	5000	0.01

➤CONTINUED➤

SURFACE MOUNT THICK FILM RESISTORS - 0805 CASE SIZE (CONT.)

Mfg. Part No.	Resistance	Temperature Coefficient	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-29999
MC01W080511K47	1.47 kohm	± 100ppm/°C	94W6009	0.10	94W3819	5000	0.01
MC01W080511K54	1.54 kohm	± 100ppm/°C	94W6010	0.10	94W3820	5000	0.01
MC01W080511K6	1.6 kohm	± 100ppm/°C	94W6011	0.11	58K4741	5000	0.01
MC01W080511K62	1.62 kohm	± 100ppm/°C	94W6012	0.10	94W3821	5000	0.01
MC01W080511K69	1.69 kohm	± 100ppm/°C	94W6013	0.10	94W3822	5000	0.01
MC01W080511K78	1.78 kohm	± 100ppm/°C	94W6014	0.10	94W3823	5000	0.01
MC01W080511K8	1.8 kohm	± 100ppm/°C	94W6015	0.08	58K4751	5000	0.01
MC01W080511K87	1.87 kohm	± 100ppm/°C	94W6016	0.10	94W3824	5000	0.01
MC01W080511K96	1.96 kohm	± 100ppm/°C	94W6017	0.10	94W3825	5000	0.01
MC01W080512K05	2.05 kohm	± 100ppm/°C	94W6120	0.10	94W3914	5000	0.01
MC01W080512K15	2.15 kohm	± 100ppm/°C	94W6121	0.10	94W3915	5000	0.01
MC01W080512K2	2.2 kohm	± 100ppm/°C	58K4771	0.02	58K4772	5000	0.01
MC01W080512K26	2.26 kohm	± 100ppm/°C	94W6122	0.10	94W3916	5000	0.01
MC01W080512K37	2.37 kohm	± 100ppm/°C	94W6123	0.10	94W3917	5000	0.01
MC01W080512K4	2.4 kohm	± 100ppm/°C	94W6124	0.10	58K4781	5000	0.01
MC01W080512K49	2.49 kohm	± 100ppm/°C	94W6125	0.11	94W3918	5000	0.01
MC01W080512K61	2.61 kohm	± 100ppm/°C	94W6126	0.11	94W3919	5000	0.01
MC01W080512K7	2.7 kohm	± 100ppm/°C	58K4791	0.02	58K4792	5000	0.01
MC01W080512K74	2.74 kohm	± 100ppm/°C	94W6127	0.10	94W3920	5000	0.01
MC01W080512K87	2.87 kohm	± 100ppm/°C	94W6128	0.10	94W3921	5000	0.01
MC01W080513K	3 kohm	± 100ppm/°C	58K4801	0.02	58K4802	5000	0.01
MC01W080513K01	3.01 kohm	± 100ppm/°C	94W6187	0.10	94W3974	5000	0.01
MC01W080513K16	3.16 kohm	± 100ppm/°C	94W6188	0.10	94W3975	5000	0.01
MC01W080513K32	3.32 kohm	± 100ppm/°C	94W6189	0.10	94W3976	5000	0.01
MC01W080513K48	3.48 kohm	± 100ppm/°C	94W6190	0.11	94W3977	5000	0.01
MC01W080513K6	3.6 kohm	± 100ppm/°C	58K4821	0.02	58K4822	5000	0.01
MC01W080513K65	3.65 kohm	± 100ppm/°C	94W6191	0.10	94W3978	5000	0.01
MC01W080513K83	3.83 kohm	± 100ppm/°C	94W6192	0.10	94W3979	5000	0.01
MC01W080513K9	3.9 kohm	± 100ppm/°C	94W6193	0.11	58K4831	5000	0.01
MC01W080514K02	4.02 kohm	± 100ppm/°C	94W6247	0.10	94W4023	5000	0.01
MC01W080514K22	4.22 kohm	± 100ppm/°C	94W6248	0.11	94W4024	5000	0.01
MC01W080514K3	4.3 kohm	± 100ppm/°C	94W6249	0.10	58K4841	5000	0.01
MC01W080514K42	4.42 kohm	± 100ppm/°C	94W6250	0.10	94W4025	5000	0.01
MC01W080514K64	4.64 kohm	± 100ppm/°C	94W6251	0.10	94W4026	5000	0.01
MC01W080514K75	4.75 kohm	± 100ppm/°C	94W6252	0.11	94W4027	5000	0.01
MC01W080514K87	4.87 kohm	± 100ppm/°C	94W6253	0.11	94W4028	5000	0.01
MC01W080514K99	4.99 kohm	± 100ppm/°C	94W6254	0.11	94W4029	5000	0.01
MC01W080515K1	5.1 kohm	± 100ppm/°C	94W6295	0.11	58K4861	5000	0.01
MC01W080515K11	5.11 kohm	± 100ppm/°C	94W6296	0.11	94W4066	5000	0.01
MC01W080515K36	5.36 kohm	± 100ppm/°C	94W6297	0.10	94W4067	5000	0.01
MC01W080515K6	5.6 kohm	± 100ppm/°C	94W6298	0.11	58K4871	5000	0.01
MC01W080515K62	5.62 kohm	± 100ppm/°C	94W6299	0.07	94W4068	5000	0.01
MC01W080515K90	5.9 kohm	± 100ppm/°C	94W6300	0.10	94W4069	5000	0.01
MC01W080516K04	6.04 kohm	± 100ppm/°C	94W6334	0.11	94W4096	5000	0.01
MC01W080516K19	6.19 kohm	± 100ppm/°C	94W6335	0.10	94W4097	5000	0.01
MC01W080516K2	6.2 kohm	± 100ppm/°C	94W6336	0.11	58K4881	5000	0.01
MC01W080516K49	6.49 kohm	± 100ppm/°C	94W6337	0.11	94W4098	5000	0.01
MC01W080516K8	6.8 kohm	± 100ppm/°C	94W6338	0.11	58K4891	5000	0.01
MC01W080516K81	6.81 kohm	± 100ppm/°C	94W6339	0.10	94W4099	5000	0.01
MC01W080517K15	7.15 kohm	± 100ppm/°C	94W6366	0.10	94W4121	5000	0.01
MC01W080517K5	7.5 kohm	± 100ppm/°C	94W6367	0.10	58K4901	5000	0.01
MC01W080517K87	7.87 kohm	± 100ppm/°C	94W6368	0.10	94W4122	5000	0.01
MC01W080518K2	8.2 kohm	± 100ppm/°C	94W6385	0.11	58K4911	5000	0.01
MC01W080518K25	8.25 kohm	± 100ppm/°C	94W6386	0.10	94W4135	5000	0.01
MC01W080518K66	8.66 kohm	± 100ppm/°C	94W6387	0.10	94W4136	5000	0.01
MC01W080519K09	9.09 kohm	± 100ppm/°C	94W6403	0.10	94W4149	5000	0.01
MC01W080519K1	9.1 kohm	± 100ppm/°C	94W6404	0.10	58K4921	5000	0.01
MC01W080519K53	9.53 kohm	± 100ppm/°C	94W6405	0.10	94W4150	5000	0.01
MC01W0805110K5	10.5 kohm	± 100ppm/°C	94W6051	0.10	94W3859	5000	0.01
MC01W0805111K	11 kohm	± 100ppm/°C	94W6056	0.11	58K4704	5000	0.01
MC01W0805111K5	11.5 kohm	± 100ppm/°C	94W6057	0.10	94W3864	5000	0.01
MC01W0805112K	12 kohm	± 100ppm/°C	58K4714	0.02	58K4715	5000	0.01
MC01W0805112K1	12.1 kohm	± 100ppm/°C	94W6064	0.10	94W3868	5000	0.01
MC01W0805112K4	12.4 kohm	± 100ppm/°C	94W6065	0.10	94W3869	5000	0.01
MC01W0805112K7	12.7 kohm	± 100ppm/°C	94W6066	0.10	94W3870	5000	0.01
MC01W0805113K	13 kohm	± 100ppm/°C	94W6074	0.10	58K4723	5000	0.01
MC01W0805113K3	13.3 kohm	± 100ppm/°C	94W6075	0.10	94W3877	5000	0.01
MC01W0805114K0	14 kohm	± 100ppm/°C	94W6082	0.10	94W3882	5000	0.01
MC01W0805114K7	14.7 kohm	± 100ppm/°C	94W6083	0.10	94W3883	5000	0.01
MC01W0805115K4	15.4 kohm	± 100ppm/°C	94W6090	0.11	94W3890	5000	0.01
MC01W0805116K	16 kohm	± 100ppm/°C	58K4743	0.02	58K4744	5000	0.01
MC01W0805116K2	16.2 kohm	± 100ppm/°C	94W6095	0.11	94W3894	5000	0.01

➤ CONTINUED ➤

SURFACE MOUNT THICK FILM RESISTORS - 0805 CASE SIZE (CONT.)

Mfg. Part No.	Resistance	Temperature Coefficient	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-29999
MC01W0805116K9	16.9 kohm	± 100ppm/°C	94W6096	0.10	94W3895	5000	0.01
MC01W0805117K8	17.8 kohm	± 100ppm/°C	94W6105	0.10	94W3902	5000	0.01
MC01W0805118K	18 kohm	± 100ppm/°C	94W6109	0.11	58K4753	5000	0.01
MC01W0805118K7	18.7 kohm	± 100ppm/°C	94W6110	0.10	94W3906	5000	0.01
MC01W0805119K6	19.6 kohm	± 100ppm/°C	94W6116	0.10	94W3910	5000	0.01
MC01W0805120K5	20.5 kohm	± 100ppm/°C	94W6149	0.10	94W3942	5000	0.01
MC01W0805121K5	21.5 kohm	± 100ppm/°C	94W6155	0.10	94W3946	5000	0.01
MC01W0805122K	22 kohm	± 100ppm/°C	58K4773	0.02	58K4774	5000	0.01
MC01W0805122K6	22.6 kohm	± 100ppm/°C	94W6159	0.10	94W3950	5000	0.01
MC01W0805123K7	23.7 kohm	± 100ppm/°C	94W6163	0.10	94W3954	5000	0.01
MC01W0805124K	24 kohm	± 100ppm/°C	58K4783	0.02	58K4784	5000	0.01
MC01W0805124K9	24.9 kohm	± 100ppm/°C	94W6167	0.08	94W3958	5000	0.01
MC01W0805126K1	26.1 kohm	± 100ppm/°C	94W6173	0.10	94W3962	5000	0.01
MC01W0805127K	27 kohm	± 100ppm/°C	94W6177	0.11	58K4793	5000	0.01
MC01W0805127K4	27.4 kohm	± 100ppm/°C	94W6178	0.10	94W3966	5000	0.01
MC01W0805128K7	28.7 kohm	± 100ppm/°C	94W6183	0.10	94W3970	5000	0.01
MC01W0805130K	30 kohm	± 100ppm/°C	94W6213	0.08	58K4803	5000	0.01
MC01W0805130K1	30.1 kohm	± 100ppm/°C	94W6214	0.11	94W3999	5000	0.01
MC01W0805131K6	31.6 kohm	± 100ppm/°C	94W6220	0.11	94W4003	5000	0.01
MC01W0805133K2	33.2 kohm	± 100ppm/°C	94W6224	0.10	94W4007	5000	0.01
MC01W0805134K8	34.8 kohm	± 100ppm/°C	94W6228	0.10	94W4011	5000	0.01
MC01W0805136K	36 kohm	± 100ppm/°C	94W6232	0.10	58K4823	5000	0.01
MC01W0805136K5	36.5 kohm	± 100ppm/°C	94W6233	0.10	94W4015	5000	0.01
MC01W0805138K3	38.3 kohm	± 100ppm/°C	94W6240	0.11	94W4019	5000	0.01
MC01W0805139K	39 kohm	± 100ppm/°C	94W6244	0.11	58K4833	5000	0.01
MC01W0805140K2	40.2 kohm	± 100ppm/°C	94W6266	0.10	94W4041	5000	0.01
MC01W0805142K2	42.2 kohm	± 100ppm/°C	94W6270	0.10	94W4045	5000	0.01
MC01W0805143K	43 kohm	± 100ppm/°C	94W6274	0.10	58K4843	5000	0.01
MC01W0805144K2	44.2 kohm	± 100ppm/°C	94W6278	0.10	94W4049	5000	0.01
MC01W0805146K4	46.4 kohm	± 100ppm/°C	94W6282	0.10	94W4053	5000	0.01
MC01W0805147K	47 kohm	± 100ppm/°C	58K4853	0.02	58K4854	5000	0.01
MC01W0805147K5	47.5 kohm	± 100ppm/°C	94W6286	0.10	94W4057	5000	0.01
MC01W0805148K7	48.7 kohm	± 100ppm/°C	94W6288	0.10	94W4059	5000	0.01
MC01W0805149K9	49.9 kohm	± 100ppm/°C	94W6292	0.08	94W4063	5000	0.01
MC01W0805151K	51 kohm	± 100ppm/°C	94W6311	0.11	58K4863	5000	0.01
MC01W0805151K1	51.1 kohm	± 100ppm/°C	94W6312	0.10	94W4080	5000	0.01
MC01W0805153K6	53.6 kohm	± 100ppm/°C	94W6318	0.10	94W4084	5000	0.01
MC01W0805156K	56 kohm	± 100ppm/°C	94W6322	0.11	58K4873	5000	0.01
MC01W0805156K2	56.2 kohm	± 100ppm/°C	94W6323	0.10	94W4088	5000	0.01
MC01W0805159K0	59 kohm	± 100ppm/°C	94W6330	0.10	94W4092	5000	0.01
MC01W0805161K9	61.9 kohm	± 100ppm/°C	94W6349	0.10	94W4109	5000	0.01
MC01W0805162K	62 kohm	± 100ppm/°C	94W6353	0.10	58K4883	5000	0.01
MC01W0805164K9	64.9 kohm	± 100ppm/°C	94W6357	0.10	94W4113	5000	0.01
MC01W0805168K1	68.1 kohm	± 100ppm/°C	94W6361	0.10	94W4117	5000	0.01
MC01W0805171K5	71.5 kohm	± 100ppm/°C	94W6373	0.11	94W4127	5000	0.01
MC01W0805175K	75 kohm	± 100ppm/°C	94W6377	0.11	58K4903	5000	0.01
MC01W0805178K7	78.7 kohm	± 100ppm/°C	94W6381	0.10	94W4131	5000	0.01
MC01W0805182K	82 kohm	± 100ppm/°C	94W6392	0.11	58K4913	5000	0.01
MC01W0805182K5	82.5 kohm	± 100ppm/°C	94W6393	0.10	94W4141	5000	0.01
MC01W0805186K6	86.6 kohm	± 100ppm/°C	94W6399	0.10	94W4145	5000	0.01
MC01W0805190K9	90.9 kohm	± 100ppm/°C	94W6410	0.11	94W4155	5000	0.01
MC01W0805191K	91 kohm	± 100ppm/°C	94W6413	0.10	58K4923	5000	0.01
MC01W0805195K3	95.3 kohm	± 100ppm/°C	94W6417	0.10	94W4159	5000	0.01
MC01W08051105K	105 kohm	± 100ppm/°C	94W6054	0.10	94W3862	5000	0.01
MC01W08051110K	110 kohm	± 100ppm/°C	94W6060	0.11	58K4706	5000	0.01
MC01W08051115K	115 kohm	± 100ppm/°C	94W6062	0.11	94W3866	5000	0.01
MC01W08051120K	120 kohm	± 100ppm/°C	94W6069	0.11	58K4716	5000	0.01
MC01W08051121K	121 kohm	± 100ppm/°C	94W6070	0.10	94W3873	5000	0.01
MC01W08051127K	127 kohm	± 100ppm/°C	94W6072	0.10	94W3875	5000	0.01
MC01W08051130K	130 kohm	± 100ppm/°C	94W6078	0.08	58K4725	5000	0.01
MC01W08051133K	133 kohm	± 100ppm/°C	94W6080	0.10	94W3880	5000	0.01
MC01W08051140K	140 kohm	± 100ppm/°C	94W6086	0.10	94W3886	5000	0.01
MC01W08051147K	147 kohm	± 100ppm/°C	94W6088	0.10	94W3888	5000	0.01
MC01W08051150K	150 kohm	± 100ppm/°C	58K4735	0.02	58K4736	5000	0.01
MC01W08051154K	154 kohm	± 100ppm/°C	94W6093	0.10	94W3892	5000	0.01
MC01W08051160K	160 kohm	± 100ppm/°C	94W6099	0.10	58K4745	5000	0.01
MC01W08051162K	162 kohm	± 100ppm/°C	94W6101	0.10	94W3898	5000	0.01
MC01W08051169K	169 kohm	± 100ppm/°C	94W6103	0.10	94W3900	5000	0.01
MC01W08051178K	178 kohm	± 100ppm/°C	94W6107	0.10	94W3904	5000	0.01
MC01W08051180K	180 kohm	± 100ppm/°C	58K4755	0.02	58K4756	5000	0.01
MC01W08051187K	187 kohm	± 100ppm/°C	94W6114	0.10	94W3908	5000	0.01
MC01W08051196K	196 kohm	± 100ppm/°C	94W6118	0.10	94W3912	5000	0.01

➤ CONTINUED ➤

SURFACE MOUNT THICK FILM RESISTORS - 0805 CASE SIZE (CONT.)

Mfg. Part No.	Resistance	Temperature Coefficient	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-29999
● MC01W08051200K	200 kohm	± 100ppm/°C	94W6152	0.11	58K4765	5000	0.01
● MC01W08051205K	205 kohm	± 100ppm/°C	94W6153	0.10	94W3944	5000	0.01
● MC01W08051215K	215 kohm	± 100ppm/°C	94W6157	0.10	94W3948	5000	0.01
● MC01W08051220K	220 kohm	± 100ppm/°C	58K4775	0.02	58K4776	5000	0.01
● MC01W08051226K	226 kohm	± 100ppm/°C	94W6161	0.10	94W3952	5000	0.01
● MC01W08051237K	237 kohm	± 100ppm/°C	94W6165	0.10	94W3956	5000	0.01
● MC01W08051240K	240 kohm	± 100ppm/°C	94W6170	0.10	58K4785	5000	0.01
● MC01W08051249K	249 kohm	± 100ppm/°C	94W6171	0.10	94W3960	5000	0.01
● MC01W08051261K	261 kohm	± 100ppm/°C	94W6175	0.10	94W3964	5000	0.01
● MC01W08051270K	270 kohm	± 100ppm/°C	94W6180	0.11	58K4795	5000	0.01
● MC01W08051274K	274 kohm	± 100ppm/°C	94W6181	0.11	94W3968	5000	0.01
● MC01W08051287K	287 kohm	± 100ppm/°C	94W6185	0.10	94W3972	5000	0.01
● MC01W08051300K	300 kohm	± 100ppm/°C	94W6217	0.11	58K4805	5000	0.01
● MC01W08051301K	301 kohm	± 100ppm/°C	94W6218	0.10	94W4001	5000	0.01
● MC01W08051316K	316 kohm	± 100ppm/°C	94W6222	0.10	94W4005	5000	0.01
● MC01W08051330K	330 kohm	± 100ppm/°C	58K4815	0.02	58K4816	5000	0.01
● MC01W08051332K	332 kohm	± 100ppm/°C	94W6226	0.10	94W4009	5000	0.01
● MC01W08051348K	348 kohm	± 100ppm/°C	94W6230	0.10	94W4013	5000	0.01
● MC01W08051360K	360 kohm	± 100ppm/°C	94W6236	0.10	58K4825	5000	0.01
● MC01W08051365K	365 kohm	± 100ppm/°C	94W6238	0.10	94W4017	5000	0.01
● MC01W08051383K	383 kohm	± 100ppm/°C	94W6242	0.10	94W4021	5000	0.01
● MC01W08051390K	390 kohm	± 100ppm/°C	94W6246	0.11	58K4835	5000	0.01
● MC01W08051402K	402 kohm	± 100ppm/°C	94W6268	0.10	94W4043	5000	0.01
● MC01W08051422K	422 kohm	± 100ppm/°C	94W6272	0.10	94W4047	5000	0.01
● MC01W08051430K	430 kohm	± 100ppm/°C	94W6276	0.10	58K4845	5000	0.01
● MC01W08051442K	442 kohm	± 100ppm/°C	94W6280	0.10	94W4051	5000	0.01
● MC01W08051464K	464 kohm	± 100ppm/°C	94W6284	0.10	94W4055	5000	0.01
● MC01W08051470K	470 kohm	± 100ppm/°C	58K4855	0.02	58K4856	5000	0.01
● MC01W08051487K	487 kohm	± 100ppm/°C	94W6290	0.10	94W4061	5000	0.01
● MC01W08051499K	499 kohm	± 100ppm/°C	94W6294	0.10	94W4065	5000	0.01
● MC01W08051510K	510 kohm	± 100ppm/°C	58K4865	0.02	58K4866	5000	0.01
● MC01W08051511K	511 kohm	± 100ppm/°C	94W6316	0.11	94W4082	5000	0.01
● MC01W08051536K	536 kohm	± 100ppm/°C	94W6320	0.10	94W4086	5000	0.01
● MC01W08051560K	560 kohm	± 100ppm/°C	94W6326	0.08	58K4875	5000	0.01
● MC01W08051562K	562 kohm	± 100ppm/°C	94W6328	0.10	94W4090	5000	0.01
● MC01W08051590K	590 kohm	± 100ppm/°C	94W6332	0.10	94W4094	5000	0.01
● MC01W08051619K	619 kohm	± 100ppm/°C	94W6351	0.10	94W4111	5000	0.01
● MC01W08051620K	620 kohm	± 100ppm/°C	94W6355	0.10	58K4885	5000	0.01
● MC01W08051649K	649 kohm	± 100ppm/°C	94W6359	0.10	94W4115	5000	0.01
● MC01W08051680K	680 kohm	± 100ppm/°C	94W6363	0.11	58K4895	5000	0.01
● MC01W08051681K	681 kohm	± 100ppm/°C	94W6364	0.10	94W4119	5000	0.01
● MC01W08051715K	715 kohm	± 100ppm/°C	94W6375	0.10	94W4129	5000	0.01
● MC01W08051750K	750 kohm	± 100ppm/°C	94W6379	0.10	58K4905	5000	0.01
● MC01W08051787K	787 kohm	± 100ppm/°C	94W6383	0.10	94W4133	5000	0.01
● MC01W08051820K	820 kohm	± 100ppm/°C	94W6396	0.11	58K4915	5000	0.01
● MC01W08051825K	825 kohm	± 100ppm/°C	94W6397	0.10	94W4143	5000	0.01
● MC01W08051866K	866 kohm	± 100ppm/°C	94W6401	0.10	94W4147	5000	0.01
● MC01W08051909K	909 kohm	± 100ppm/°C	94W6411	0.10	94W4157	5000	0.01
● MC01W08051910K	910 kohm	± 100ppm/°C	94W6415	0.10	58K4925	5000	0.01
● MC01W08051953K	953 kohm	± 100ppm/°C	94W6419	0.10	94W4161	5000	0.01
● MC01W080511M	1 Mohm	± 100ppm/°C	58K4696	0.02	58K4697	5000	0.01
● MC01W080511M05	1.05 Mohm	± 100ppm/°C	94W6018	0.25	94W3826	5000	0.02
● MC01W080511M10	1.1 Mohm	± 100ppm/°C	94W6019	0.25	94W3827	5000	0.02
● MC01W080511M15	1.15 Mohm	± 100ppm/°C	94W6020	0.25	94W3828	5000	0.02
● MC01W080511M20	1.2 Mohm	± 100ppm/°C	94W6021	0.08	94W3829	5000	0.02
● MC01W080511M21	1.21 Mohm	± 100ppm/°C	94W6022	0.25	94W3830	5000	0.02
● MC01W080511M30	1.3 Mohm	± 100ppm/°C	94W6023	0.25	94W3831	5000	0.02
● MC01W080511M33	1.33 Mohm	± 100ppm/°C	94W6024	0.25	94W3832	5000	0.02
● MC01W080511M40	1.4 Mohm	± 100ppm/°C	94W6025	0.25	94W3833	5000	0.02
● MC01W080511M47	1.47 Mohm	± 100ppm/°C	94W6026	0.25	94W3834	5000	0.02
● MC01W080511M50	1.5 Mohm	± 100ppm/°C	94W6027	0.26	94W3835	5000	0.02
● MC01W080511M60	1.6 Mohm	± 100ppm/°C	94W6028	0.25	94W3836	5000	0.02
● MC01W080511M62	1.62 Mohm	± 100ppm/°C	94W6029	0.26	94W3837	5000	0.02
● MC01W080511M69	1.69 Mohm	± 100ppm/°C	94W6030	0.25	94W3838	5000	0.02
● MC01W080511M78	1.78 Mohm	± 100ppm/°C	94W6031	0.25	94W3839	5000	0.02
● MC01W080511M80	1.8 Mohm	± 100ppm/°C	94W6032	0.26	94W3840	5000	0.02
● MC01W080511M87	1.87 Mohm	± 100ppm/°C	94W6033	0.25	94W3841	5000	0.02
● MC01W080511M96	1.96 Mohm	± 100ppm/°C	94W6034	0.26	94W3842	5000	0.02
● MC01W080512M00	2 Mohm	± 100ppm/°C	94W6129	0.08	94W3922	5000	0.01
● MC01W080512M05	2.05 Mohm	± 100ppm/°C	94W6130	0.25	94W3923	5000	0.02
● MC01W080512M20	2.2 Mohm	± 100ppm/°C	94W6131	0.08	94W3924	5000	0.02
● MC01W080512M37	2.37 Mohm	± 100ppm/°C	94W6132	0.25	94W3925	5000	0.02

➤CONTINUED➤

SURFACE MOUNT THICK FILM RESISTORS - 0805 CASE SIZE (CONT.)

Mfg. Part No.	Resistance	Temperature Coefficient	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-29999
● MC01W080512M40	2.4 Mohm	± 100ppm/°C	94W6133	0.25	94W3926	5000	0.02
● MC01W080512M49	2.49 Mohm	± 100ppm/°C	94W6134	0.26	94W3927	5000	0.02
● MC01W080512M61	2.61 Mohm	± 100ppm/°C	94W6135	0.25	94W3928	5000	0.02
● MC01W080512M70	2.7 Mohm	± 100ppm/°C	94W6136	0.26	94W3929	5000	0.02
● MC01W080512M74	2.74 Mohm	± 100ppm/°C	94W6137	0.25	94W3930	5000	0.02
● MC01W080513M00	3 Mohm	± 100ppm/°C	94W6194	0.25	94W3980	5000	0.02
● MC01W080513M01	3.01 Mohm	± 100ppm/°C	94W6195	0.25	94W3981	5000	0.02
● MC01W080513M16	3.16 Mohm	± 100ppm/°C	94W6196	0.25	94W3982	5000	0.02
● MC01W080513M30	3.3 Mohm	± 100ppm/°C	94W6197	0.08	94W3983	5000	0.02
● MC01W080513M32	3.32 Mohm	± 100ppm/°C	94W6198	0.25	94W3984	5000	0.02
● MC01W080513M48	3.48 Mohm	± 100ppm/°C	94W6199	0.25	94W3985	5000	0.02
● MC01W080513M60	3.6 Mohm	± 100ppm/°C	94W6200	0.25	94W3986	5000	0.02
● MC01W080513M65	3.65 Mohm	± 100ppm/°C	94W6201	0.25	94W3987	5000	0.02
● MC01W080513M83	3.83 Mohm	± 100ppm/°C	94W6202	0.26	94W3988	5000	0.02
● MC01W080513M90	3.9 Mohm	± 100ppm/°C	94W6203	0.26	94W3989	5000	0.02
● MC01W080514M02	4.02 Mohm	± 100ppm/°C	94W6255	0.25	94W4030	5000	0.02
● MC01W080514M30	4.3 Mohm	± 100ppm/°C	94W6256	0.25	94W4031	5000	0.02
● MC01W080514M42	4.42 Mohm	± 100ppm/°C	94W6257	0.25	94W4032	5000	0.02
● MC01W080514M64	4.64 Mohm	± 100ppm/°C	94W6258	0.25	94W4033	5000	0.02
● MC01W080514M70	4.7 Mohm	± 100ppm/°C	94W6259	0.08	94W4034	5000	0.02
● MC01W080515M10	5.1 Mohm	± 100ppm/°C	94W6301	0.31	94W4070	5000	0.02
● MC01W080515M11	5.11 Mohm	± 100ppm/°C	94W6302	0.30	94W4071	5000	0.02
● MC01W080515M60	5.6 Mohm	± 100ppm/°C	94W6303	0.08	94W4072	5000	0.02
● MC01W080515M90	5.9 Mohm	± 100ppm/°C	94W6304	0.30	94W4073	5000	0.02
● MC01W080516M20	6.2 Mohm	± 100ppm/°C	94W6340	0.30	94W4100	5000	0.02
● MC01W080516M49	6.49 Mohm	± 100ppm/°C	94W6341	0.30	94W4101	5000	0.02
● MC01W080516M80	6.8 Mohm	± 100ppm/°C	94W6342	0.31	94W4102	5000	0.02
● MC01W080516M81	6.81 Mohm	± 100ppm/°C	94W6343	0.30	94W4103	5000	0.02
● MC01W080517M50	7.5 Mohm	± 100ppm/°C	94W6369	0.30	94W4123	5000	0.02
● MC01W080518M20	8.2 Mohm	± 100ppm/°C	94W6388	0.31	94W4137	5000	0.02
● MC01W080519M09	9.09 Mohm	± 100ppm/°C	94W6406	0.30	94W4151	5000	0.02
● MC01W080519M10	9.1 Mohm	± 100ppm/°C	94W6407	0.30	94W4152	5000	0.02
● MC01W0805110M0	10 Mohm	± 100ppm/°C	94W6052	0.31	94W3860	5000	0.02

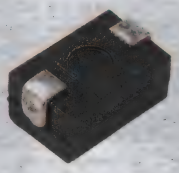
(211601)

WSC SERIES SURFACE MOUNT PRECISION POWER WIREWOUND RESISTORS

SMD

RoHS Compliant Available

VISHAY.



Features
- Molded Encapsulation
- Wrap Around Terminations
- Excellent Stability
- Superior Surge Capability
- All Welded Construction

Specifications
- Tolerance: F = ±1%
- Dielectric Withstanding Voltage: >500VAC

PRODUCT SPECIFICATIONS

Series	Wattage (W)	Temperature Coefficient	Operating Temp.	Encapsulation
WSC0001	1.0	0.1Ω - 0.99Ω = ± 90 1.0Ω - 26.5Ω = ± 50 26.51Ω and above = ± 20	-65°C to +175°C	Epoxy
WSC0002	2.0	0.1Ω - 0.99Ω = ± 90 1.0Ω - 9.9Ω = ± 50 10.0Ω and above = ± 20	-65°C to +175°C	Epoxy
WSC2515	1.0	0.1Ω - 0.99Ω = ± 90 1.0Ω - 26.5Ω = ± 50 26.51Ω and above = ± 20	-65°C to +175°C	Thermoplastic
WSC4527	2.0	0.1Ω - 0.3Ω = ± 150	-65°C to +275°C	Thermoplastic
WSC6927	3.0	0.31Ω - 0.99Ω = ± 90 1.0Ω - 9.9Ω = ± 50 10Ω and above = ± 20	-65°C to +175°C	Thermoplastic

DIMENSIONS (mm)

Series	L	H	T	W	W_1
WSC0001	0.250 ± 0.020 [6.35 ± 0.508]	0.110 ± 0.015 [2.79 ± 0.381]	0.045 ± 0.010 [1.14 ± 0.254]	0.150 ± 0.005 [3.81 ± 0.127]	0.098 ± 0.005 [2.49 ± 0.127]
WSC0002	0.445 ± 0.032 [11.30 ± 0.813]	0.162 ± 0.015 [4.11 ± 0.381]	0.100 ± 0.010 [2.54 ± 0.254]	0.275 ± 0.005 [6.98 ± 0.127]	0.215 ± 0.005 [5.46 ± 0.127]
WSC2515	0.250 ± 0.020 [6.35 ± 0.508]	0.110 ± 0.015 [2.79 ± 0.381]	0.045 ± 0.010 [1.14 ± 0.254]	0.150 ± 0.005 [3.81 ± 0.127]	0.098 ±0 .005 [2.49 ± 0.127]
WSC4527	0.455 ± 0.020 [11.56 ± 0.508]	0.167 ± 0.010 [4.24 ± 0.254]	0.100 ± 0.010 [2.54 ± 0.254]	0.275 ± 0.005 [6.98 ± 0.127]	0.215 ± 0.005 [5.46 ± 0.127]
WSC6927	0.690 ± 0.032 [17.53 ± 0.813]	0.280 ± 0.015 [7.11 ± 0.381]	0.100 ± 0.010 [2.54 ± 0.254]	0.275 ± 0.005 [6.98 ± 0.127]	0.215 ± 0.015 [5.46 ± 0.381]

➤CONTINUED➤

WSC SERIES SURFACE MOUNT PRECISION POWER WIREWOUND RESISTORS (CONT.)

WSC-1: EIA SIZE 2515, 1 WATT

Mfg. Part No.	Res. (Ohms)	Tape Cut Stock No.	Price Each 1-24
WSC01/2R1000FEA	0.1	55P8384	1.60
WSC01/21R000FEA	1	55P9343	1.60
WSC01/24R990FEA	4.99	55P9868	1.60
WSC-1/2: EIA SIZE 4527, 0.5 WATT			
WSC0001R1000FEA	0.11	41K9271	1.72
WSC0001R2500FEA	0.25	55P7626	1.91
WSC0001R3300FEA	0.33	55P7635	1.83
WSC00011R000FEK	1	72M6520	1.87
WSC00011R000FEA	1	55P7686	1.21
WSC00011R500FTA	1.5	66C3034	1.21
WSC00014R020FEA	4.02	55P7879	1.04
WSC000115R00FTA	15	73K6334	1.21
WSC000115R00FEA	15	55P7755	1.34
WSC000120R00FEA	20	72R4705	0.52
WSC000120R00FTA	20	66C3178	1.21
WSC000122R00FTA	22	66C3195	1.21
WSC000139R00FTA	39	66C3323	1.64
WSC0001100R0FEA	100	65K3972	0.70
WSC0001200R0FTA	200	66C3185	0.70
WSC0001300R0FTA	300	66C3291	1.75
WSC0001200R0FEA	200	15P8263	1.82
WSC0001499R0FTA	499	66C3396	0.93
WSC00011K000FEK	1k	72M6519	2.74
WSC-2: EIA SIZE 4527, 2 WATT			
WSC0002R2000FTA	0.2	43K5439	1.52
WSC0002R2000FEA	0.2	77M8947	1.82
WSC0002R3010FTA	0.3	66C3561	1.52
WSC00021R000FEA	1	55P8060	1.52
WSC00021R500FEA	1.5	55P8073	1.29
WSC00022R000FTA	2	66C3751	0.73
WSC00022R000FEA	2	55P8159	1.33
WSC00022R000FEB	2	72M6521	1.29
WSC00022R200FEA	2.2	55P8162	1.15
WSC00024R990FTA	4.99	66C3916	0.73
WSC000210R00FEA	10	55P8078	1.34
WSC000220R00FTA	20	33K1171	1.34
WSC000251R00FEA	51	65K3982	1.77
WSC0002100R0FEA	100	55P8087	2.12
WSC-2515: EIA SIZE 2515, 1 WATT			
WSC2515R2500FEA	0.25	65K3984	1.72
WSC2515R3320FEA	0.332	65K3985	1.72
WSC2515R5000FEA	0.5	60P0135	1.72
WSC2515R6810FEA	0.681	65K3988	1.72
WSC25151R200FEA	1.2	65K3992	0.64
WSC25151R500FEA	1.5	65K3995	1.48
WSC25152R000FEA	2	65K3997	1.65
WSC25153R300FEA	3.3	65K4001	1.48
WSC25154R830FEA	4.83	65K4006	1.48
WSC25158R060FEA	8.06	65K4014	1.63
WSC251533R00FEA	33	65K4002	0.82
WSC2515100R0FEA	100	02M5836	2.04
WSC2515150R0FEA	150	60P1993	2.04
WSC25151K000FEA	1k	60P0653	2.31
WSC25151K000FEK	1k	72M6524	2.64
WSC25152K000FEA	2k	60P2320	2.31
WSC-4527: EIA SIZE 4527, 1 WATT			
WSC6927R5000FEA	0.5	61P2169	3.57
WSC45271R000FEK	1	72M6527	2.04
WSC45271R000FEA	1	58M3535	1.92
WSC45272R000FEK	2	72M6530	1.87
WSC45275R000FEA	5	36K3869	1.63
WSC452710R00FEA	10	65K4018	1.38
WSC452720R00FEA	20	60P8777	1.65
WSC452720R00FEK	20	72M6531	1.87
WSC452733R00FEA	33	65K4028	1.58
WSC452750R00FEA	50	61P0590	2.08
WSC4527100R0FEA	100	13P0519	2.36
WSC4527150R0FEA	150	60P8081	2.36
WSC4527400R0FEA	400	61P0216	2.03
WSC45271K000FEA	1k	65K4016	3.20
WSC45272K000FEA	2k	60P8347	3.32
WSC45274K700FEA	4.7k	65K4030	2.13

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WSC SERIES SURFACE MOUNT PRECISION POWER WIREWOUND RESISTORS (CONT.)

WSC-6927: EIA SIZE 6927, 1 WATT

Mfg. Part No.	Res. (Ohms)	Tape Cut Stock No.	Price Each 1-24
WSC69271R000FEK	1	72M6535	3.87
WSC692710R00FEA	10	41K9275	3.03
WSC6927100R0FEA	100	12N4552	3.33

(49272)

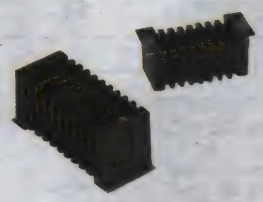
RW SERIES HIGH-POWER 5W SURFACE MOUNT WIREWOUND RESISTORS

RoHS Compliant Available

OHMITE SMD

Features:
- Finned design facilitates cooling
- High power density
- Wide resistance range
- Tight tolerance
- Low TCR

Specifications:
- Power: 5W
- Load life: 1000 hours ar 25C ±1%+0.05ohm
- Operating temperature: -55C to +155C
- Standard base
- Flammability rated: UL94V0
- Overall dimensions: 20.47mmL x 9.27mmW x 10.31mmH



Mfg. Part No.	Res. (Ohms)	Res. Tol.	Temp. Coeff (ppm/°C)	Stock No.	Price Each 1-24
RW5S0FAR100FE	0.1	± 1%	± 90ppm/°C	55W5013	1.00
RW5S0FA1R00FE	1	± 1%	± 50ppm/°C	55W5015	1.00
RW5S0FA10R0JE	10	± 5%	± 50ppm/°C	55W5017	1.00
RW5S0FA20R0JE	20	± 5%	± 20ppm/°C	55W5019	0.96
RW5S0FA47R0JE	47	± 5%	± 20ppm/°C	55W5021	0.96
RW5S0FA100RJE	100	± 5%	± 20ppm/°C	55W5018	0.96
RW5S0FA1K00JE	1k	± 5%	± 20ppm/°C	55W5014	0.96
RW5S0FA4K70JE	4.7k	± 5%	± 20ppm/°C	55W5020	0.96
RW5S0FA10K0JE	10k	± 5%	± 20ppm/°C	55W5016	0.96

(209286)

SM SERIES MOULDED POWER RESISTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Specifications:
- Tolerance: ± 5%
- Temperature Coefficient: ± 200ppm/°C
- Insulation Resistance: 10,000MΩ
- Short Time Overload: ± 1%
- Rated Load: ± 1%
- Load Life: ± 2%
- Humidity Load Life: ± 2%

Features:
- Wirewound
- Low profile design
- Very Wide Value Range
- Ideal for Power Circuitry

2W POWER RATING

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-1999	Price Each 2000+
SMW2R27JT	0.27	98K0112	0.58	0.50
SMW2R68JT	0.68	17R7007	0.40	0.37
SMW21R0JT	1	98K0119	0.53	0.48
SMW22R2JT	2.2	98K0131	0.63	0.54
SMW23R3JT	3.3	98K0135	0.58	0.50
SMW23R9JT	3.9	18R0263	0.40	0.37
SMW25R6JT	5.6	18R4201	0.26	0.25
SMW26R8JT	6.8	98K0143	0.53	0.48
SMW28R2JT	8.2	98K0145	0.58	0.50
SMW210RJT	10	98K0123	0.63	0.54
SMW212RJT	12	98K0125	0.58	0.50
SMW215RJT	15	18R8995	0.62	0.54
SMW218RJT	18	18R8996	0.58	0.50
SMW222RJT	22	98K0133	0.58	0.50
SMW227RJT	27	98K0134	0.55	0.50
SMW247RJT	47	98K0140	0.63	0.54
SMW268RJT	68	98K0144	0.64	0.55
SMW282RJT	82	98K0146	0.58	0.50
SMW2100RJT	100	19R8033	0.56	0.55
SMW2120RJT	120	98K0126	0.58	0.50
SMW2150RJT	150	98K0128	0.53	0.48
SMW2180RJT	180	98K0130	0.58	0.50
3W POWER RATING				
SMW3R22JT	0.22	54R8776	0.65	0.51
SMW32R2JT	2.2	18R0424	0.63	0.55
SMW33R9JT	3.9	18R0427	0.70	0.63

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SM SERIES MOULDED POWER RESISTORS (CONT.)

3W POWER RATING

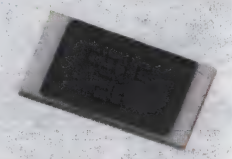
Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-1999	Price Each 2000+
● SMW38R2JT	8.2	98K0187	0.69	0.61
● SMW310RJT	10	18R4349	0.24	0.23
● SMW312RJT	12	18R9104	0.62	0.60
● SMW322RJT	22	18R9107	0.65	0.51
● SMW327RJT	27	98K0175	0.68	0.59
● SMW333RJT	33	19R4858	0.67	0.59
● SMW3100RJT	100	98K0164	0.63	0.55
● SMW3120RJT	120	98K0166	0.58	0.52
● SMW3150RJT	150	19R8073	0.28	0.26
5W POWER RATING				
● SMW54R7JT	4.7	94M9537	1.06	1.04
● SMW5100RJT	100	54M0845	1.06	1.04
● SMW5150RJT	150	54M0848	1.14	1.12

(178377)

HVF SERIES HIGH VOLTAGE FLIP CHIP FILM RESISTOR

RoHS Compliant Available

OHMITE



Features
- High Voltage up to 3,000V
- Industry Standard Sizes
- Designed for Automatic Insertion

Specifications
- Resistance Range: 1KΩ to 100GΩ
- Resistance Tolerance: ±1% std.
- Temperature Coefficient: ±100ppm std.
- Solder Pad Material: Silver (PdAg)
- Operating temp. range: -55°C to +200°C

HVF SERIES SURFACE MOUNT RESISTOR - CASE SIZE 1206

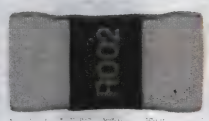
Mfg. Part No.	Res. (Ohm)	Stock No.	Price Each 1-9	Price Each 10-49
● HVF1206T5002FE	50k	41M3281	3.83	3.29
● HVF1206T2503FE	250k	41M3279	3.83	3.29
● HVF1206T5003FE	500k	41M3282	3.83	3.29
● HVF1206T1004FE	1M	41M3274	3.83	3.29
HVF SERIES SURFACE MOUNT RESISTOR - CASE SIZE 2512				
● HVF2512T2502FE	25k	41M3291	4.08	3.50
● HVF2512T5002FE	50k	41M3294	4.24	3.64
● HVF2512T1004FE	1M	41M3287	4.08	3.50
● HVF2512T2504FE	2.5M	41M3293	4.08	3.50
● HVF2512T5004FE	5M	41M3296	4.08	3.50
● HVF2512T1007FE	1G	41M3288	3.70	3.17
● HVF2512T5007FE	5G	41M3297	4.19	3.59

(91221)

ERJ-M SERIES LOW RESISTANCE VALUE CHIP RESISTORS (CURRENT SENSING RESISTORS)

RoHS Compliant Available

Panasonic



Features:
- Low resistance values and high precision (1 mohm to 20 mohm)
- Stable resistance not influenced by measurement position
- High heat emission
- Low profile, strong body
- Inductance less than 1.0 nH for the metal plate structure

2512 CASE STYLE

Mfg. Part No.	Res. (Ohms)	Temp. Coeff.	Res. Tol.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● ERJ-M1WTF1M0U	0.001	± 350ppm/°C	± 1%	53W8355	0.66
● ERJ-M1WTJ1M0U	0.001	+250ppm/°C to +450ppm/°C	± 5%	05X8591	0.95
● ERJ-M1WTF1M5U	0.0015	± 350ppm/°C	± 1%	53W8356	0.66
● ERJ-M1WTF2M0U	0.002	± 100ppm/°C	± 1%	53W8357	0.66
● ERJ-M1WTJ2M0U	0.002	+50ppm/°C to +150ppm/°C	± 5%	05X8592	0.89
● ERJ-M1WTF3M0U	0.003	+50ppm/°C to +150ppm/°C	± 1%	05X8589	0.62
● ERJ-M1WSF3M0U	0.003	± 350ppm/°C	± 1%	53W8353	0.57
● ERJ-M1WTJ3M0U	0.003	+50ppm/°C to +150ppm/°C	± 5%	05X8593	0.89
● ERJ-M1WTF4M0U	0.004	+50ppm/°C to +150ppm/°C	± 1%	05X8590	0.66
● ERJ-M1WTJ4M0U	0.004	+50ppm/°C to +150ppm/°C	± 5%	05X8594	0.89
● ERJ-M1WSJ4M0U	0.004	+50ppm/°C to +150ppm/°C	± 5%	05X8584	0.83
● ERJ-M1WSJ5M0U	0.005	± 100ppm/°C	± 5%	05X8585	0.88
● ERJ-M1WSF6M0U	0.006	± 75ppm/°C	± 1%	53W8354	0.57
● ERJ-M1WSJ6M0U	0.006	± 100ppm/°C	± 5%	05X8586	0.88
● ERJ-M1WSF7M0U	0.007	...	± 1%	05X8581	0.54
● ERJ-M1WSJ7M0U	0.007	...	± 5%	05X8587	0.84
● ERJ-M1WSF8M0U	0.008	± 100ppm/°C	± 1%	53W3972	0.57

➤CONTINUED➤

ERJ-M SERIES LOW RESISTANCE VALUE CHIP RESISTORS (CURRENT SENSING RESISTORS) (CONT.)

Mfg. Part No.	Res. (Ohms)	Temp. Coeff.	Res. Tol.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● ERJ-M1WSJ8M0U	0.008	...	± 5%	05X8588	0.83
● ERJ-M1WSJ10MU	0.01	± 100ppm/°C	± 5%	53W3973	0.91
● ERJ-M1WSF12MU	0.012	± 100ppm/°C	± 1%	50W2421	0.57
● ERJ-M1WSJ12MU	0.012	...	± 5%	50W2428	0.85
● ERJ-M1WSF15MU	0.015	± 75ppm/°C	± 1%	53W8352	0.57
● ERJ-M1WSJ15MU.	0.015	± 100ppm/°C	± 5%	05X8583	0.97
0603 CASE STYLE					
● ERJ-M03NF10MV	0.01	± 100ppm/°C	± 1%	28W1316	0.97

(208991)

FC4L SERIES 4-TERMINAL METAL FOIL CURRENT SENSE RESISTORS

RoHS Compliant Available

OHMITE

Features
- Extension of **FCSL series**
- 4-terminal Kelvin connection
- Very stable TCR
- Designed for automatic insertion
- Industry standard sizes
- High heat resistant use
- Low heat electromotive use

Specifications
- Power rating: **FC4L32 series:** 1W, **FC4L64 series:** 2W, **FC4L110 series:** 5W
- Temperature coefficient: ± 100ppm/°C otherwise ± 50ppm/°C for **FC4L32 and FC4L64 series:** 0.004Ω or higher, **FC4L110 series:** 0.002Ω or higher
- Operating temperature range: -55°C to +155°C

FC4L32 SERIES — 1 WATT, 0.126 L X 0.063″ W (3.2 X 1.6MM) SMD PACKAGE

Mfg. Part No.	Res. (Ohm)	Res. Tol.	Temp. Coeff.	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape and Reel Stock No.	Tape and Reel Price Each 1-9
FC4L32R001JER	0.001	± 5%	± 100ppm/°C	28X4812	0.37	28X4813	0.44
FC4L32R002GER	0.002	± 2%	± 100ppm/°C	28X4814	0.37	28X4815	0.44
FC4L32R003FER	0.003	± 1%	± 100ppm/°C	28X4816	0.37	28X4817	0.44
FC4L32R005FER	0.005	± 1%	± 50ppm/°C	28X4818	0.37	28X4819	0.44
FC4L32R010FER	0.01	± 1%	± 50ppm/°C	28X4820	0.37	28X4821	0.44
FC4L32R025FER	0.025	± 1%	± 50ppm/°C	28X4822	0.37	28X4823	0.44
FC4L32R050FER	0.05	± 1%	± 50ppm/°C	28X4824	0.37	28X4825	0.44
FC4L64 SERIES — 2 WATT, 0.251 L X 0.126″ W (6.4 X 3.2MM) SMD PACKAGE							
● FC4L64R001JER	0.001	± 5%	± 100ppm/°C	24W1002	0.74	17W6168	0.85
● FC4L64R002GER	0.002	± 2%	± 100ppm/°C	24W1003	0.74	17W6169	0.85
● FC4L64R005FER	0.005	± 1%	± 50ppm/°C	24W1004	0.74	17W6170	0.85
● FC4L64R010FER	0.01	± 1%	± 50ppm/°C	24W1005	0.74	17W6171	0.85
● FC4L64R025FER	0.025	± 1%	± 50ppm/°C	24W1006	0.74	17W6172	0.85
● FC4L64R050FER	0.05	± 1%	± 50ppm/°C	24W1007	0.74	17W6173	0.85
FC4L110 SERIES — 5 WATT, 0.433 L X 0.197″ W (11 X 5MM) SMD PACKAGE							
● FC4L110R001JER	0.001	± 5%	± 100ppm/°C	30T0944	1.93	28X4805	1.68
● FC4L110R002GER	0.002	± 2%	± 50ppm/°C	30T0945	1.93	28X4806	1.68
FC4L110R003FER	0.003	± 1%	± 50ppm/°C	28X4807	2.65	58T0071	1.68
● FC4L110R005FER	0.005	± 1%	± 50ppm/°C	30T0946	2.01	28X4808	1.75
● FC4L110R010FER	0.01	± 1%	± 50ppm/°C	30T0947	2.01	28X4809	1.75
● FC4L110R025FER	0.025	± 1%	± 50ppm/°C	30T0948	1.93	28X4810	1.68
● FC4L110R050FER	0.05	± 1%	± 50ppm/°C	30T0949	2.01	28X4811	1.75

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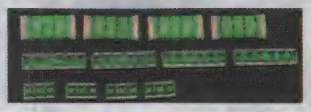
RL SERIES CURRENT SENSE CHIP RESISTORS

RoHS Compliant Available

SSM THIN FILM TECHNOLOGY SUSUMU



Features
- Excellent performance in resistance tolerance, noise, long term stability and heat dissipation
- Low resistance value chip resistors

Specifications
- RL1220 and RL1632 have short-side electrodes
- RL3720W and RL7520W have long-side electrodes

RL1220 (0805) SERIES, POWER RATING: 250 mW, REEL QUANTITY: 5000

Mfg. Part No.	Res. (Ohms)	Res. Tol. (+/- %)	Temp. Coefficient (ppm/°C)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape Cut Price Each 10-99
● RL1220-KIT	1240-Pcs of 0.01ohm to 10ohm 0805 Size Thin Film Resistors			85K1513	137.35	...
● RL1220T-R022-G	0.022	±2	0 +350	28K1646	0.38	0.33
● RL1220T-R025-J	0.025	±5	0 +350	28K1648	0.38	0.33
● RL1220T-R033-G	0.033	±2	0 +350	28K1650	0.40	0.36
● RL1220T-R047-G	0.047	±2	0 +350	28K1652	0.40	0.36
● RL1220T-R050-G	0.05	±2	0 +350	28K1654	0.40	0.36

➤CONTINUED➤

RL SERIES CURRENT SENSE CHIP RESISTORS (CONT.)

Mfg. Part No.	Res. (Ohms)	Res. Tol. (+/- %)	Temp. Coefficient (ppm/°C)	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
RL1220T-R068-G	0.068	±2	0 +350	28K1658	0.38	0.33
RL1220S-R10-F	0.1	±1	0 +200	28K1608	0.40	0.36
RL1220S-R10-G	0.1	±2	0 +200	28K1610	0.38	0.33
RL1220S-R15-F	0.15	±1	0 +200	28K1662	0.38	0.33
RL1220S-R18-F	0.18	±1	0 +200	28K1614	0.40	0.36
RL1220S-R20-F	0.2	±1	0 +200	28K1616	0.40	0.36
RL1220S-R22-F	0.22	±1	0 +200	28K1618	0.40	0.36
RL1220S-R24-F	0.24	±1	0 +200	28K1620	0.38	0.33
RL1220S-R30-G	0.3	±2	0 +200	28K1624	0.38	0.33
RL1220S-R33-F	0.33	±1	0 +200	28K1626	0.40	0.36
RL1220S-R39-F	0.39	±1	0 +200	28K1630	0.38	0.33
RL1220S-R47-F	0.47	±1	0 +200	28K1632	0.38	0.33
RL1220S-R50-F	0.5	±1	0 +200	28K1634	0.38	0.33
RL1220S-R68-F	0.68	±1	0 +200	28K1636	0.40	0.35
RL1220S-R91-F	0.91	±1	0 +200	28K1638	0.38	0.33
RL1220S-1R0-F	1	±1	0 +200	28K1640	0.38	0.33
RL1220S-4R7-F	4.7	±1	0 +200	28K1644	0.38	0.33
RL1220S-100-F	10	±1	0 +200	28K1642	0.40	0.36
RL1632 (1206) SERIES, POWER RATING: 500 mW, REEL QUANTITY: 5000						
RL1632T-R010-G	0.01	±2	0 +200	28K1664	1.20	1.06
RL1632T-R012-G	0.012	±2	0 +200	28K1668	1.29	1.14
RL1632T-R015-G	0.015	±2	0 +200	28K1672	1.20	1.06
RL1632T-R018-G	0.018	±2	0 +200	28K1674	1.20	1.06
RL1632T-R020-G	0.02	±2	0 +200	28K1676	1.29	1.14
RL1632T-R027-F	0.027	±1	0 +200	28K1682	1.20	1.06
RL1632T-R030-F	0.03	±1	0 +200	28K1684	1.20	1.06
RL1632S-R039-F	0.039	±1	0 +200	28K1688	1.29	1.14
RL1632S-R050-F	0.05	±1	0 +200	28K1692	1.20	1.06
RL1632R-R068-F	0.068	±1	0 +200	28K1697	1.29	1.14
RL1632R-R082-F	0.082	±1	0 +200	28K1699	1.20	1.06
RL1632R-R100-F	0.1	±1	0 +200	28K1701	1.29	1.14
RL1632R-R120-F	0.12	±1	0 +200	28K1703	1.29	1.14
RL1632R-R180-F	0.18	±1	0 +200	28K1705	1.20	1.06
RL1632R-R200-F	0.2	±1	0 +200	28K1707	1.27	1.12
RL1632R-R220-F	0.22	±1	0 +200	28K1709	1.29	1.14
RL1632R-R330-F	0.33	±1	0 +200	28K1713	1.20	1.06
RL1632R-R470-F	0.47	±1	0 +200	28K1717	1.20	1.06
RL1632R-R820-F	0.82	±1	0 +200	28K1723	1.20	1.06
RL3720W (0815) SERIES, POWER RATING: 1 W, REEL QUANTITY: 4000						
RL3720W-KIT	600-Pcs of 0.001ohm to 1ohm 0815 Size Thin Film Resistors			85K1514	114.52	...
RL3720WT-R008-J	0.008	±5	0 +500	28K1733	1.93	1.70
RL3720WT-R010-F	0.01	±1	0 +350	28K1735	2.07	1.83
RL3720WT-R018-G	0.018	±1	0 +350	28K1741	1.93	1.70
RL3720WT-R020-F	0.02	±1	0 +350	28K1743	1.93	1.70
RL3720WT-R025-F	0.025	±1	0 +350	28K1747	1.93	1.70
RL3720WS-R10-F	0.1	±1	0 +350	28K1761	1.93	1.70
RL7520W (0830) SERIES, POWER RATING: 2 W, REEL QUANTITY: 4000						
RL7520WT-R006-J	0.006	±5	0 +420	28K1775	2.08	1.83
RL7520WT-R015-F	0.018	±1	0 +350	28K1783	2.08	1.83
RL7520WT-R020-F	0.02	±1	0 +350	28K1785	2.08	1.83
RL7520WT-R001-J	0.027	±1	0 +350	28K1789	2.08	1.83
RL7520WS-R47-F	0.082	±1	0 +350	28K1799	2.24	1.97

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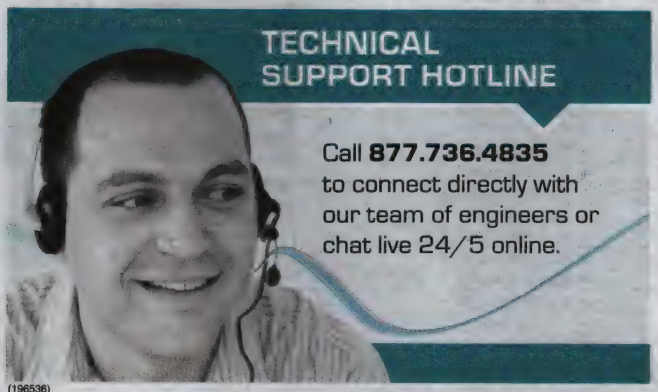
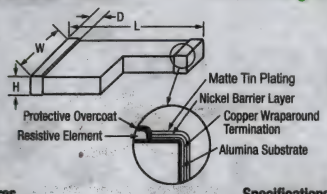


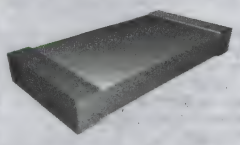
(196536)

LRC SERIES CURRENT SENSE CHIP RESISTORS

RoHS Compliant Available

TT electronics IRC





Features
- Lower Hot Spot Temperature, ⅔ of Metal Strip
- Low Inductance

Applications
- Current Sensing
- Power Management Circuits
- Feedback Control Loops

Specifications
- Low Tolerance - 1%
- Dielectric Withstanding Voltage: 200V
- Temperature Coefficient: 100ppm/C
- "LRC-LR" denotes values greater than 0.025 Ohms
- "LRC-LRF" denotes values equal or less than 0.025 Ohms

LR SERIES DIMENSIONS

Mfg. Part No.	L	W	H	D	Reel Qty.
LR2010	0.206" ±0.015"	0.104" ±0.010"	0.029" ±0.004"	0.019" ±0.010"	3,000
LR2512	0.256" ±0.015"	0.128" ±0.010"	0.029" ±0.004"	0.019" ±0.010"	1,800
LR1206	0.126" ±0.012"	0.064" ±0.008"	0.024" ±0.004"	0.019" ±0.010"	3,000

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-99
1206 CASE SIZE, POWER: 0.5 WATT			
LRC-LRF1206LF-01-R010-F	0.01	88K2530	0.53
LRC-LRF1206LF-01-R012-F	0.012	88K2531	0.54
LRC-LRF1206LF-01-R015-F	0.015	88K2532	0.50
LRC-LRF1206LF-01-R020-F	0.02	88K2533	0.53
LRC-LRF1206LF-01-R025-F	0.025	88K2534	1.51
LRC-LR1206LF-01-R033-F	0.033	88K2549	0.46
LRC-LR1206LF-01-R050-F	0.05	88K2551	0.46
LRC-LR1206LF-01-R100-F	0.1	88K2554	0.46
LRC-LR1206LF-01-R150-F	0.15	88K2556	0.46
LRC-LR1206LF-01-R200-F	0.2	88K2557	0.44
LRC-LR1206LF-01-R250-F	0.25	70K8688	0.44
LRC-LR1206LF-01-R300-F	0.3	88K2558	0.44
LRC-LR1206LF-01-R500-F	0.5	70K8690	0.46
2010 CASE SIZE, POWER: 1 WATT			
LRC-LRF2010LF-01-R010-F	0.01	88K2535	0.69
LRC-LRF2010LF-01-R015-F	0.015	88K2537	0.65
LRC-LRF2010LF-01-R020-F	0.02	88K2538	0.69
LRC-LRF2010LF-01-R025-F	0.025	88K2539	1.51
LRC-LR2010LF-01-R033-F	0.033	88K2561	0.57
LRC-LR2010LF-01-R050-F	0.05	88K2564	0.57
LRC-LR2010LF-01-R075-F	0.075	88K2567	0.61
LRC-LR2010LF-01-R100-F	0.1	88K2569	0.54
LRC-LR2010LF-01-R200-F	0.2	88K2571	0.54
LRC-LR2010LF-01-R250-F	0.25	88K2573	0.59
LRC-LR2010LF-01-R500-F	0.5	88K2575	0.59
LRC-LR2010LF-01-R681-F	0.681	88K2576	0.97
LRC-LR2010LF-01-1R00-F	1	88K2577	0.59
2512 CASE SIZE, POWER: 2 WATT			
LRC-LRF2512LF-01-R010-F	0.01	88K2542	0.83
LRC-LRF2512LF-01-R015-F	0.015	88K2544	0.84
LRC-LRF2512LF-01-R018-F	0.018	88K2545	0.78
LRC-LRF2512LF-01-R020-F	0.02	88K2546	0.84
LRC-LRF2512LF-01-R025-F	0.025	88K2547	1.71
LRC-LR2512LF-01-R027-F	0.027	88K2578	0.60
LRC-LR2512LF-01-R030-F	0.03	88K2579	0.65
LRC-LR2512LF-01-R033-F	0.033	88K2580	0.65
LRC-LR2512LF-01-R040-F	0.04	88K2581	1.51
LRC-LR2512LF-01-R050-F	0.05	88K2582	1.62
LRC-LR2512LF-01-R075-F	0.075	88K2583	0.60
LRC-LR2512LF-01-R100-F	0.1	88K2584	0.58
LRC-LR2512LF-01-R150-F	0.15	88K2585	0.58
LRC-LR2512LF-01-R200-F	0.2	88K2586	0.58
LRC-LR2512LF-01-R300-F	0.3	70K8713	0.63
LRC-LR2512LF-01-R500-F	0.5	88K2588	0.58
LRC-LR2512LF-01-1R00-F	1	88K2590	0.62

(88673)

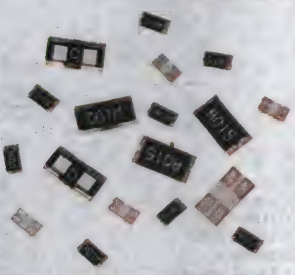
LVK SERIES FOUR TERMINAL PRECISION CURRENT SENSE CHIP RESISTORS

RoHS Compliant Available

OHMITE

Features
- Designed for Automatic Insertion
- Configuration Allows for More Precise Current Measurement
- Industry Standard Sizes
- High-Precision Kelvin Connect
- Small Package

Specifications
- Working temperature range: -55°C to 200°C
- Resistance Tolerance: ±0.5% and ±1% std.
- Temperature Coefficient: ±50ppm and ±100ppm std.
- Solder Pad Material: 100% Matte Tin



LVK SERIES RESISTOR - TOLERANCE +/- 0.5%

Mfg. Part No.	Resistance (Ohms)	Power Rating (W)	Temp. Coeff. (ppm/°C)	Stock No.	Price Each 1-24
● LVK12R010DER	0.01	500	± 50ppm/°C	47M0565	0.50
● LVK12R020DER	0.02	500	± 50ppm/°C	47M0567	0.50
● LVK12R050DER	0.05	500	± 50ppm/°C	47M0573	0.52
● LVK20R010DER	0.01	750	± 50ppm/°C	47M0575	0.52
● LVK24R010DER	0.01	1000	± 50ppm/°C	47M0586	1.23
● LVK24R020DER	0.02	1000	± 50ppm/°C	47M0590	0.76
LVK SERIES RESISTOR - TOLERANCE +/- 1%					
● LVK12R010FER	0.01	500	± 50ppm/°C	47M0566	0.45
● LVK12R012FER	0.012	500	± 50ppm/°C	47M0563	0.45
● LVK12R020FER	0.02	500	± 50ppm/°C	47M0568	0.45
● LVK12R024FER	0.024	500	± 50ppm/°C	47M0569	0.45
● LVK12R030FER	0.03	500	± 50ppm/°C	47M0571	0.45
● LVK12R050FER	0.05	500	± 50ppm/°C	47M0574	0.45
● LVK20R015FER	0.015	750	± 50ppm/°C	47M0577	0.45
● LVK20R039FER	0.039	750	± 50ppm/°C	47M0583	0.45
● LVK24R010FER	0.01	1000	± 50ppm/°C	47M0587	1.03
● LVK25R001FER	0.001	2000	± 300ppm/°C	47M0598	0.92

(91220)

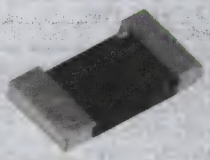
WSL SERIES POWER METAL STRIP® CURRENT SENSE RESISTORS

SMD

RoHS Compliant Available

VISHAY.

Specifications
- Tolerance: F = ±1%
- Operating Temperature: -65°C to +170°C
- Temperature Coefficient: ±275ppm/°C for 1mΩ to 2.9mΩ
  ±150ppm/°C for 3mΩ to 4.9mΩ
  ±110ppm/°C for 5mΩ to 6.9mΩ
  ±75ppm/°C for 7mΩ to 0.5Ω



Features
- Solid Metal Nickel-Chrome or Manganese-Copper Alloy Resistive Element
- Solderable Terminations
- Excellent Frequency Response
- Low Thermal EMF
- Very Low Inductance: 0.5nH to 5nH

Additional values available; *go online or call.*

Applications
- Ideal for All Types of Current Sensing, Voltage Division and Pulse Applications Including Switching and Linear Power Supplies, Instruments, and Power Amplifiers

EIA SIZE 0603, 0.1 WATT

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49	50-99
● WSL0603R0100FEA	0.01	15R7604	0.76	0.62
● WSL0603R0100FEA18	0.01	18X4669	0.85	0.71
● WSL0603R0150FEA	0.015	67P3294	0.74	0.60
● WSL0603R0150FEA18	0.015	18X4671	0.85	0.71
● WSL0603R0200FEA	0.02	26R4233	0.76	0.62
● WSL0603R0200FEA18	0.02	18X4672	0.85	0.71
● WSL0603R0250FEA	0.02	77R9118	0.77	0.62
● WSL0603R0250FEA18	0.025	18X4674	0.85	0.71
● WSL0603R0300FEA	0.03	77R9123	0.74	0.60
● WSL0603R0300FEA18	0.03	18X4676	0.85	0.71
● WSL0603R0330FEA	0.033	77R9129	0.74	0.60
● WSL0603R0330FEA18	0.033	18X4678	0.85	0.71
● WSL0603R0400FEA	0.04	18X4679	0.55	0.44
● WSL0603R0400FEA18	0.04	18X4680	0.85	0.71
● WSL0603R0500FEA	0.05	08P4578	0.76	0.62
● WSL0603R0500FEA18	0.05	18X4681	0.85	0.71
● WSL0603R0800FEA	0.08	18X4682	0.44	0.35
● WSL0603R1000FEA18	0.1	18X4683	0.58	0.46
EIA SIZE 0805, 0.125 WATT				
● WSL0805R0100FEA	0.01	26R4234	0.74	0.60
● WSL0805R0100FEA18	0.01	26R4235	1.13	0.92

➤ CONTINUED ➤

WSL SERIES POWER METAL STRIP® CURRENT SENSE RESISTORS (CONT.)

EIA SIZE 0805, 0.125 WATT

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49	50-99
● WSL0805R0100FEK	0.01	65K4042	1.25	1.02
● WSL0805R0150FEA	0.015	83K9105	0.74	0.60
● WSL0805R0150FEA18	0.015	18X4684	0.85	0.71
● WSL0805R0150FEK	0.015	65K4043	1.25	1.02
● WSL0805R0200FEA	0.02	26R4236	0.74	0.60
● WSL0805R0200FEA18	0.02	26R4237	1.09	0.89
● WSL0805R0250FEA	0.025	77R9247	0.74	0.60
● WSL0805R0250FEA18	0.025	18X4687	0.85	0.71
● WSL0805R0300FEA	0.03	77R9270	0.74	0.60
● WSL0805R0300FEA18	0.03	18X4689	0.85	0.71
● WSL0805R0300FEB	0.03	72M6542	1.17	0.91
● WSL0805R0330FEA	0.033	77R9281	0.77	0.62
● WSL0805R0330FEA18	0.033	18X4691	0.85	0.71
● WSL0805R0400FEA	0.04	77R9293	0.74	0.60
● WSL0805R0400FEA18	0.04	18X4693	0.85	0.71
● WSL0805R0500FEA	0.05	77R9326	0.74	0.60
● WSL0805R0500FEA18	0.05	18X4695	0.85	0.71
● WSL0805R0800FEA	0.08	77R9388	0.44	0.35
● WSL0805R0800FEK	0.08	72M6548	1.04	0.85
● WSL0805R1000FEA	0.1	54K3867	0.61	0.49
● WSL0805R1000FEA18	0.1	18X4697	0.58	0.46
● WSL0805R1500FEA	0.15	77R9446	0.59	0.48
● WSL0805R1500FEA18	0.15	18X4699	0.58	0.46
● WSL0805R2000FEA	0.2	40K2274	0.44	0.35
● WSL0805R2000FEA18	0.2	18X4700	0.58	0.46
EIA SIZE 1206, 0.25 WATT				
● WSL12061L000FEA	0.001	18X4707	1.57	1.19
● WSL12061L000FEA18	0.001	18X4708	2.05	1.56
● WSL12062L000FEA	0.002	59J6974	1.34	1.10
● WSL12062L000FEA18	0.002	18X4709	2.05	1.56
● WSL12062L000FEB	0.002	72M6558	1.71	1.39
● WSL12063L000FEA	0.003	77R9855	1.57	1.19
● WSL12063L000FEA18	0.003	18X4711	2.05	1.56
● WSL12064L000FEA	0.004	53R2299	1.29	1.05
● WSL12064L000FEA18	0.004	18X4713	2.05	1.56
● WSL12064L000FEB	0.004	72M6560	1.71	1.33
● WSL12065L000FEA	0.005	26R4245	1.47	1.11
● WSL12065L000FEA18	0.005	18X4714	1.92	1.46
● WSL12066L000FEA	0.006	62M9224	1.21	0.99
● WSL12066L000FEA18	0.006	18X4715	1.92	1.46
● WSL12067L000FEA	0.007	18X4716	1.47	1.11
● WSL12067L000FEA	0.007	77R9900	0.49	0.46
● WSL12067L000FEK	0.007	72M6564	1.75	1.42
● WSL12068L000FEA	0.008	18X4717	1.47	1.11
● WSL12068L000FEA	0.008	10R2168	0.47	0.47
● WSL12069L000FEA	0.009	18X4718	1.47	1.11
● WSL12069L000FEA	0.009	77R9918	0.47	0.47
● WSL12069L000FEA18	0.009	18X4719	1.92	1.46
● WSL1206R0100FEA	0.01	26R4238	0.81	0.66
● WSL1206R0100FEB	0.01	77R9479	1.30	1.06
● WSL1206R0150FEA	0.015	26R4239	0.76	0.61
● WSL1206R0200FEA	0.02	26R4240	0.83	0.68
● WSL1206R0210FEK	0.021	65K4049	1.33	1.08
● WSL1206R0230FEK	0.023	65K4051	1.33	1.08
● WSL1206R0250FEA	0.025	26R4241	0.83	0.68
● WSL1206R0250FEK	0.025	41K9280	1.33	1.08
● WSL1206R0300FEA	0.03	87K2115	0.84	0.69
● WSL1206R0300FEA18	0.03	18X4701	1.44	1.10
● WSL1206R0300FEK	0.03	72M6554	1.33	1.08
● WSL1206R0330FEA	0.033	26R4242	0.83	0.68
● WSL1206R0400FEA	0.04	33K3804	0.84	0.69
● WSL1206R0400FEA18	0.04	18X4702	1.44	1.10
● WSL1206R0500FEA	0.05	15R0131	0.83	0.68
● WSL1206R0500FEA18	0.05	26R4243	1.24	1.01
● WSL1206R0500FEK	0.05	41K9282	1.33	1.08
● WSL1206R0600FEA	0.06	18X4704	0.76	0.61
● WSL1206R0600FEA	0.06	77R9691	0.38	0.37
● WSL1206R0670FEK	0.067	65K4058	1.33	1.08
● WSL1206R0700FEA	0.07	50M0469	0.66	0.54
● WSL1206R0800FEA	0.08	35M5495	0.69	0.56
● WSL1206R0900FEA	0.09	77R9735	0.66	0.54
● WSL1206R1000FEK	0.1	41K9286	1.17	0.95
● WSL1206R1000FEK	0.1	41K9286	1.17	0.95

➤ CONTINUED ➤

WSL SERIES POWER METAL STRIP® CURRENT SENSE RESISTORS (CONT.)

EIA SIZE 1206, 0.25 WATT

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49	Price Each 50-99
WSL1206R1500FEA	0.15	57J0429	0.68	0.56
WSL1206R2000FEA	0.2	26R4244	0.69	0.56
EIA SIZE 2010, 0.5 WATT				
WSL20101L000FEA	0.001	78R0406	1.58	1.29
WSL20101L000FEA18	0.001	18X4744	2.50	1.90
WSL20101L000FEK18	0.001	72M6584	2.46	2.03
WSL20102L000FEA	0.002	18X4745	1.92	1.46
WSL20102L000FEA	0.002	78R0440	0.64	0.61
WSL20103L000FEA	0.003	18X4746	1.92	1.46
WSL20104L000FEA	0.004	73K0866	1.58	1.29
WSL20104L000FEK	0.004	65K4117	1.93	1.62
WSL20105L000FEA	0.005	79K4008	1.54	1.26
WSL20106L000FEA	0.006	67K8925	1.56	1.27
WSL20106L000FEA18	0.006	18X4747	2.38	1.80
WSL20107L000FEA	0.007	20K7581	1.50	1.22
WSL20107L000FEA18	0.007	18X4748	2.38	1.80
WSL20107L000FEK	0.007	72M6586	1.83	1.51
WSL20107L500FEK	0.0075	65K4119	1.83	1.51
WSL20108L000FEA	0.008	78R0539	1.82	1.38
WSL20108L000FEA18	0.008	18X4750	2.38	1.80
WSL20109L000FEA	0.009	18X4751	1.82	1.38
WSL20109L000FEA	0.009	78R0549	0.58	0.58
WSL2010R0100FEA	0.01	26R4246	1.04	0.85
WSL2010R0100FEA18	0.01	26R4247	1.39	1.14
WSL2010R0100FEK	0.01	65K4068	1.50	1.22
WSL2010R0150FEA	0.015	07R7612	1.09	0.89
WSL2010R0150FEA18	0.015	18X4721	1.65	1.25
WSL2010R0150FEK	0.015	41K9291	1.50	1.22
WSL2010R0200FEA	0.02	26R4248	1.07	0.87
WSL2010R0200FEA18	0.02	18X4722	1.65	1.25
WSL2010R0200FEK	0.02	65K4072	1.56	1.27
WSL2010R0200FEK	0.02	65K4072	1.56	1.27
WSL2010R0220FEK	0.022	65K4074	1.50	1.22
WSL2010R0250FEA	0.025	26R4249	1.09	0.89
WSL2010R0250FEA18	0.025	18X4724	1.65	1.25
WSL2010R0300FEA	0.03	17M6380	1.04	0.85
WSL2010R0300FEA18	0.03	18X4725	1.65	1.25
WSL2010R0300FEK	0.03	65K4078	1.50	1.22
WSL2010R0300FEK	0.03	65K4078	1.50	1.22
WSL2010R0330FEA	0.033	01P1856	1.07	0.87
WSL2010R0330FEA18	0.033	18X4726	1.65	1.25
WSL2010R0350FEK	0.035	65K4079	1.50	1.22
WSL2010R0400FEA	0.04	18X4727	1.27	0.96
WSL2010R0400FEA	0.04	78R0101	0.40	0.40
WSL2010R0400FEA18	0.04	18X4728	1.65	1.25
WSL2010R0410FEK	0.041	65K4082	1.50	1.22
WSL2010R0470FEK	0.047	65K4083	1.50	1.22
WSL2010R0500FEA	0.05	26R4250	1.04	0.85
WSL2010R0500FEA18	0.05	18X4730	1.65	1.25
WSL2010R0510FEK	0.051	65K4085	1.50	1.22
WSL2010R0600FEA	0.06	78R0163	1.27	0.96
WSL2010R0600FEK	0.06	65K4086	1.50	1.22
WSL2010R0700FEA	0.07	18X4732	0.72	0.59
WSL2010R0700FEA	0.07	78R0188	0.34	0.34
WSL2010R0800FEA	0.08	12M5971	0.79	0.65
WSL2010R0800FEA18	0.08	18X4733	1.39	1.06
WSL2010R0900FEA	0.09	18X4734	0.72	0.59
WSL2010R1000FEA	0.1	26R4251	0.79	0.65
WSL2010R1000FEA18	0.1	26R4252	1.15	0.94
WSL2010R1000FEK	0.1	41K9299	1.25	1.02
WSL2010R1000FEK	0.1	41K9299	1.25	1.02
WSL2010R1100FEA	0.11	18X4736	0.72	0.59
WSL2010R1300FEK	0.13	65K4097	1.25	1.02
WSL2010R1500FEA	0.15	51P2830	0.77	0.63
WSL2010R1500FEA18	0.15	18X4737	1.39	1.06
WSL2010R2000FEA	0.2	26R4253	0.79	0.65
WSL2010R2000FEA18	0.2	12X9003	1.39	1.06
WSL2010R2000FEK	0.2	41K9303	1.25	1.02
WSL2010R2500FEA	0.25	18X4738	0.72	0.59
WSL2010R2500FEA	0.25	78R0315	0.37	0.35
WSL2010R3000FEA	0.3	78R0334	0.77	0.63
WSL2010R3300FEA	0.33	18X4740	0.72	0.59
WSL2010R3300FEA	0.33	78R0348	0.37	0.35

➤CONTINUED➤

WSL SERIES POWER METAL STRIP® CURRENT SENSE RESISTORS (CONT.)

EIA SIZE 2010, 0.5 WATT

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49	Price Each 50-99
WSL2010R4000FEA	0.4	18X4741	0.72	0.59
WSL2010R4000FEA	0.4	78R0377	0.37	0.35
WSL2010R4300FEK	0.43	65K4112	1.25	1.02
WSL2010R5000FEA	0.5	26R4254	0.79	0.65
WSL2010R5000FEA18	0.5	18X4742	1.39	1.06
WSL2010R5000FEK	0.5	65K4114	1.25	1.02
EIA SIZE 2512, 1 WATT				
WSL25121L000FEA	0.001	87K2577	1.88	1.63
WSL25121L000FEK	0.001	72M6591	1.97	1.63
WSL25122L000FEA	0.002	26R4265	1.96	1.69
WSL25123L000FEA	0.003	44W4982	1.88	1.63
WSL25123L000FEA	0.003	78R1111	0.68	0.68
WSL25123L000FEK	0.003	65K4170	1.97	1.63
WSL25124L000FEA	0.004	08X6455	1.76	1.43
WSL25124L000FEA	0.004	78R1145	0.68	0.68
WSL25125L000FEA	0.005	26R4266	1.86	1.61
WSL25125L000FEK	0.005	41K9330	1.90	1.57
WSL25126L000FEA	0.006	78R1205	1.86	1.61
WSL25127L000FEA	0.007	01P4575	1.86	1.61
WSL25128L000FEA	0.008	71P7508	1.86	1.61
WSL25129L000FEA	0.009	18X4764	1.81	1.56
WSL25129L000FEK	0.009	65K4174	1.90	1.57
WSL2512R0100FEA	0.01	26R4255	1.46	1.19
WSL2512R0100FEA18	0.01	18X4752	1.72	1.25
WSL2512R0100FEK	0.01	65K4121	1.60	1.30
WSL2512R0100FEK	0.01	65K4121	1.60	1.30
WSL2512R0120FEK	0.012	41K9308	1.54	1.25
WSL2512R0150FEA	0.015	26R4256	1.33	0.97
WSL2512R0200FEA	0.02	26R4257	1.46	1.19
WSL2512R0200FEK	0.02	65K4126	1.54	1.25
WSL2512R0240FEK	0.024	65K4128	1.54	1.25
WSL2512R0250FEA	0.025	26R4258	1.46	1.19
WSL2512R0250FEB	0.025	78R0653	1.47	1.20
WSL2512R0250FEK	0.025	65K4129	1.54	1.25
WSL2512R0300FEA	0.03	14N9895	1.33	0.97
WSL2512R0300FEK	0.03	41K9313	1.54	1.25
WSL2512R0330FEA	0.033	18X4753	1.33	0.97
WSL2512R0330FEA	0.033	25R3418	0.57	0.54
WSL2512R0400FEA	0.04	26R4259	1.47	1.20
WSL2512R0400FEK	0.04	41K9315	1.54	1.25
WSL2512R0430FEK	0.043	65K4137	1.54	1.25
WSL2512R0500FEA	0.05	26R4260	1.47	1.20
WSL2512R0500FEB	0.05	41K9317	1.42	1.16
WSL2512R0500FEK	0.05	41K9318	1.60	1.30
WSL2512R0500FEK	0.05	41K9318	1.60	1.30
WSL2512R0600FEA	0.06	14N8472	1.42	1.16
WSL2512R0700FEA	0.07	18X4754	1.17	0.86
WSL2512R0700FEA	0.07	78R0780	0.50	0.48
WSL2512R0700FEK	0.07	41K9320	1.33	1.08
WSL2512R0800FEA	0.08	33P4312	1.17	0.86
WSL2512R0820FEK	0.082	65K4144	1.33	1.08
WSL2512R0900FEA	0.09	78R0811	1.17	0.86
WSL2512R0900FEB	0.09	72M6589	1.25	0.98
WSL2512R1000FEA	0.1	26R4261	1.29	1.05
WSL2512R1000FEB	0.1	78R0820	1.25	0.98
WSL2512R1000FEK	0.1	65K4147	1.33	1.08
WSL2512R1500FEA	0.15	18X4756	1.17	0.86
WSL2512R1510FEA	0.151	18X4757	1.17	0.86
WSL2512R2000FEA	0.2	26R4262	1.29	1.05
WSL2512R2000FEB	0.2	03P3737	1.25	0.98
WSL2512R2000FEK	0.2	65K4155	1.33	1.08
WSL2512R2210FEK	0.221	65K4159	1.33	1.08
WSL2512R2500FEA	0.25	26R4263	1.30	1.06
WSL2512R2500FEK	0.25	41K9324	1.33	1.08
WSL2512R3000FEA	0.3	60K8449	1.17	0.86
WSL2512R3300FEA	0.33	18X4759	1.17	0.86
WSL2512R3300FEA	0.33	10R0102	0.50	0.48
WSL2512R3900FEK	0.39	65K4161	1.33	1.08
WSL2512R4000FEA	0.4	08R3863	1.25	1.02
WSL2512R4000FEB	0.4	78R0979	1.25	0.98
WSL2512R5000FEA	0.5	26R4264	1.29	1.05
WSL2512R5000FEK	0.5	65K4168	1.33	1.08

➤CONTINUED➤

WSL SERIES POWER METAL STRIP® CURRENT SENSE RESISTORS (CONT.)

EIA SIZE 2816, 2 WATT

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49	Price Each 50-99
● WSL2816R1000FEK	0.1	72M6594	1.74	1.42
EIA SIZE 3637, 3 WATT				
● WSL36373L000FEA	0.003	56P3663	0.68	0.68
● WSL36374L000FEA	0.004	78R1419	2.13	1.61
● WSL36375L000FEA	0.005	78R1429	1.71	1.40
● WSL36375L000FEK	0.005	72M6598	2.11	1.74
● WSL3637R0100FEA	0.01	26R2067	1.24	1.01
● WSL3637R0100FEK	0.01	72M6595	1.79	1.45
EIA SIZE 5931, 5 WATT				
● WSL59311L000FEA	0.001	42M1404	2.49	2.15

(49270)

WSH2818 SERIES POWER METAL STRIP® RESISTORS

SMD — RoHS Compliant Available — VISHAY.

Features
- Case Style: 2818
- Power Rating: 5W
- Tolerance: ± 1%
- Very low inductance no greater than 5 nH
- Frequency response up to 50 MHz
- Low thermal EMF (<3 µV/°C)

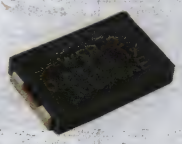
Mfg. Part No.	Res. (Ohms)	Temp. Coeff.	Stock No.	Price Each 1-49
● WSH28181L000FEA	0.001	± 200ppm/°C	79T5806	3.19
● WSH28182L000FEA	0.002	± 200ppm/°C	79T5807	3.07
● WSH28183L000FEA	0.003	± 200ppm/°C	79T5808	3.19
● WSH28184L000FEA	0.004	± 200ppm/°C	79T5809	3.07
● WSH28185L000FEA	0.005	± 200ppm/°C	79T5810	3.07
● WSH28186L000FEA	0.006	± 75ppm/°C	79T5811	3.19
● WSH28187L000FEA	0.007	± 75ppm/°C	79T5812	3.19
● WSH28188L000FEA	0.008	± 75ppm/°C	79T5813	3.19
● WSH28189L000FEA	0.009	± 75ppm/°C	79T5814	3.07
● WSH2818R0100FEA	0.01	± 75ppm/°C	79T5793	2.63
● WSH2818R0150FEA	0.015	± 75ppm/°C	79T5794	2.53
● WSH2818R0200FEA	0.02	± 75ppm/°C	79T5795	2.60
● WSH2818R0250FEA	0.025	± 75ppm/°C	79T5796	2.53
● WSH2818R0300FEA	0.03	± 75ppm/°C	79T5797	2.53
● WSH2818R0330FEA	0.033	± 75ppm/°C	79T5798	2.53
● WSH2818R0400FEA	0.04	± 75ppm/°C	79T5799	2.53
● WSH2818R0500FEA	0.05	± 75ppm/°C	79T5800	2.60
● WSH2818R0600FEA	0.06	± 75ppm/°C	79T5801	2.63
● WSH2818R0700FEA	0.07	± 75ppm/°C	79T5802	2.53
● WSH2818R0800FEA	0.08	± 75ppm/°C	79T5803	2.63
● WSH2818R0900FEA	0.09	± 75ppm/°C	79T5804	2.63
● WSH2818R1000FEA	0.1	± 75ppm/°C	79T5805	2.60

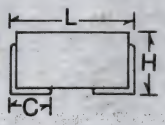
(202057)

POWER METAL STRIP® CURRENT SENSE RESISTORS

SMD — RoHS Compliant Available — VISHAY.

Applications
- Ideal for Current Sensing, Voltage Division or Pulse Applications
- Switching and Linear Power Supplies, Instruments, Power Amplifiers





Specifications
- Tolerance: F= ±1%
- Temperature Coefficient: ±110ppm/°C for 0.005Ω–0.0099Ω; ±75ppm/°C for 0.010Ω–1.0Ω
- Operating Temperature: -65°C to +275°C
- Case Size: 4527
- Very Low Inductance 0.5 nH to 5 nH
- Excellent Frequency Response to 50 MHz
- Low Thermal EMF (< 3 µV/ °C)

Features
- Molded High Temperature Encapsulation
- Solid Metal Nickel-Chrome or Manganese-Copper Alloy Resistive Element
- All-Welded Construction
- Solderable Terminations

DIMENSIONS (mm)

L	W	H	T	W_1
0.455 ± 0.032 (11.56 ±0.813)	0.275 ± 0.005 (6.98 ± 0.127)	0.095 ± 0.005 (2.41 ± 0.127)	0.100 ± 0.010 (2.54 ± 0.254)	0.215 ± 0.005 (5.46 ± 0.127)

EA suffix denotes Tape & Reel Packaging; **EK suffix** denotes Bulk packaging. For details *go online or call.*

2 WATT

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-99	Price Each 100-249
● WSR21L000FEA	0.001	18X5143	1.92	1.51	1.35
● WSR21L000FEK	0.001	72M6605	2.04	1.69	1.51
● WSR22L000FEA	0.002	18X5144	1.92	1.51	1.35

➤CONTINUED➤

POWER METAL STRIP® CURRENT SENSE RESISTORS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-99	Price Each 100-249
● WSR23L000FEA	0.003	18X5145	1.92	1.51	1.35
● WSR24L000FEA	0.004	18X5146	1.92	1.51	1.35
● WSR25L000FEA	0.005	64K0131	1.99	1.63	1.38
● WSR26L000FEA	0.006	18X5147	1.80	1.42	1.26
● WSR27L000FEA	0.007	18X5148	1.80	1.42	1.26
● WSR28L000FEA	0.008	18X5149	1.80	1.42	1.26
● WSR29L000FEA	0.009	18X5150	1.87	1.48	1.31
● WSR29L000FEK	0.009	65K4187	1.93	1.60	1.43
● WSR2R0100FEA	0.01	64J4304	1.63	1.33	1.13
● WSR2R0100FEK	0.01	41K9332	1.87	1.52	1.31
● WSR2R0150FEA	0.015	67P2330	1.49	1.17	1.05
● WSR2R0150FEK	0.015	41K9333	1.87	1.52	1.31
● WSR2R0200FEA	0.02	67P2342	1.49	1.17	1.05
● WSR2R0250FEA	0.025	67P2359	1.49	1.17	1.05
● WSR2R0300FEA	0.03	67P2367	1.49	1.17	1.05
● WSR2R0300FEK	0.03	72M6600	1.87	1.52	1.31
● WSR2R0330FEA	0.033	67P2375	1.49	1.17	1.05
● WSR2R0400FEA	0.04	18X5133	1.49	1.17	1.05
● WSR2R0500FEA	0.05	46P3641	1.49	1.17	1.05
● WSR2R0500FEK	0.05	41K9338	1.87	1.52	1.31
● WSR2R0600FEA	0.06	18X5134	1.49	1.17	1.05
● WSR2R0610FEK	0.061	65K4176	1.87	1.52	1.31
● WSR2R0700FEA	0.07	18X5135	1.49	1.17	1.05
● WSR2R0800FEA	0.08	18X5136	1.49	1.17	1.05
● WSR2R0900FEA	0.09	18X5137	1.49	1.17	1.05
● WSR2R1000FEA	0.1	18X5138	1.33	1.05	0.94
● WSR2R1000FEK	0.1	41K9339	1.77	1.44	1.24
● WSR2R1500FEA	0.15	18X5139	1.33	1.05	0.94
● WSR2R2000FEA	0.2	67P2512	1.33	1.05	0.94
● WSR2R2210FEK	0.221	41K9343	1.71	1.39	1.19
● WSR2R2500FEA	0.25	83K8175	1.33	1.05	0.94
● WSR2R3000FEA	0.3	67P2566	1.38	1.09	0.97
● WSR2R3000FEK	0.3	72M6602	1.71	1.39	1.19
● WSR2R3300FEA	0.33	18X5140	1.33	1.05	0.94
● WSR2R3300FEK	0.33	72M6603	1.71	1.39	1.19
● WSR2R4000FEA	0.4	18X5141	1.33	1.05	0.94
● WSR2R4000FEK	0.4	72M6604	1.71	1.39	1.19
● WSR2R5000FEA	0.5	18X5142	1.33	1.05	0.94
● WSR2R5000FEB	0.5	67P2653	1.42	1.11	0.88
● WSR2R5000FEK	0.5	41K9345	1.71	1.39	1.19
● WSR2R6000FEK	0.6	41K9346	1.71	1.39	1.19
● WSR2R7500FEA	0.75	67P2701	1.33	1.05	0.94
● WSR2R8000FEK	0.8	65K4183	1.71	1.39	1.19
● WSR21R000FEA	1	26R4267	1.33	1.05	0.94
● WSR21R000FEK	1	41K9347	1.77	1.44	1.24
3 WATT					
● WSR31L000FEA	0.001	19M8623	1.81	1.56	1.40
● WSR31L000FEK	0.001	72M6611	2.07	1.72	1.53
● WSR32L000FEA	0.002	18X5156	1.80	1.45	1.30
● WSR33L000FEA	0.003	64M2126	0.65	0.65	0.64
● WSR33L000FEA	0.003	08X6456	1.80	1.45	1.30
● WSR34L000FEA	0.004	18X5157	1.80	1.45	1.30
● WSR35L000FEA	0.005	67P2983	2.00	1.63	1.39
● WSR35L000FEK	0.005	72M6613	2.00	1.66	1.48
● WSR36L000FEA	0.006	18X5158	1.88	1.48	1.32
● WSR37L000FEA	0.007	18X5159	1.88	1.48	1.32
● WSR38L000FEA	0.008	18X5160	1.88	1.48	1.32
● WSR39L000FEA	0.009	18X5161	1.88	1.48	1.32
● WSR3R0100FEA	0.01	67P2791	1.63	1.33	1.13
● WSR3R0150FEA	0.015	67P2812	1.53	1.21	1.07
● WSR3R0150FEK	0.015	41K9353	1.91	1.55	1.34
● WSR3R0200FEA	0.02	67P2829	1.53	1.21	1.07
● WSR3R0250FEA	0.025	83K0420	1.53	1.21	1.07
● WSR3R0250FEK	0.025	72M6606	1.91	1.55	1.34
● WSR3R0300FEA	0.03	46P4401	1.53	1.21	1.07
● WSR3R0300FEK	0.03	72M6607	1.91	1.55	1.34
● WSR3R0330FEA	0.033	67P2862	1.53	1.21	1.07
● WSR3R0330FEK	0.033	72M6608	1.91	1.55	1.34
● WSR3R0400FEA	0.04	18X5151	1.53	1.21	1.07
● WSR3R0500FEA	0.05	61M4604	1.53	1.21	1.07
● WSR3R0500FEK	0.05	72M6609	1.91	1.55	1.34
● WSR3R0700FEA	0.07	18X5152	1.53	1.21	1.07
● WSR3R0700FEK	0.07	72M6610	1.91	1.55	1.34
● WSR3R0900FEA	0.09	18X5153	1.53	1.21	1.07

➤CONTINUED➤

POWER METAL STRIP® CURRENT SENSE RESISTORS (CONT.)

3 WATT

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	25-99	100-249
WSR3R1000FEA	0.1	26R4268	1.50	1.22	1.04
WSR3R1000FEB	0.1	67P2922	1.52	1.24	1.05
WSR3R1000FEK	0.1	41K9356	1.82	1.48	1.27
WSR3R1500FEA	0.15	18X5154	1.37	1.08	0.96
WSR3R2000FEA	0.2	18X5155	1.37	1.08	0.96
WSR3R2000FEK	0.2	41K9357	1.75	1.42	1.22
5 WATT					
WSR5R0100FEA	0.01	67P3007	3.03	2.43	2.18
WSR5R0500FEA	0.05	67P3064	3.03	2.43	2.18
WSR5R2000FEA	0.2	35M4874	2.63	2.11	1.89

(49185)

TGHG SERIES HIGH POWER PRECISION CURRENT SENSE RESISTORS

RoHS Compliant Available

OHMITE

Features
- Resistance Range from 0.0005 to 0.10hms
- Resistance Tolerance: ±1%
- Temp. Coeff.: ±60ppm/°C
- Power Rating: 100 Watts
- SOT-227 Package
- Kelvin Connection

TGH Series resistors are ideally suited for many current monitoring and controls applications. By direct mounting on a heatsink, significant cost advantages can be realized.

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	25-99
TGHGCR0005FE	0.0005	59M9781	27.89	25.49
TGHGCR0010FE	0.001	59M9782	28.73	26.25
TGHGCR0020FE	0.002	59M9783	24.97	22.82
TGHGCR0050FE	0.005	59M9784	28.73	26.25
TGHGCR0100FE	0.01	59M9785	22.34	20.42
TGHGCR0200FE	0.02	59M9787	24.97	22.82
TGHGCR0250FE	0.025	59M9788	37.82	34.57
TGHGCR0500FE	0.05	59M9789	37.82	34.57
TGHGCR1000FE	0.1	59M9791	34.75	31.76

(102188)

LOB SERIES METAL ELEMENT CURRENT SENSE RESISTORS

RoHS Compliant Available

TT electronics IRC

Features
- Inherently Non-Inductive (≤0.02uh @ 0.5MHz)
- Low Temperature Coefficient of Resistance
- High Stability Over Life

Dimensions
- **LOB-1 series**: Length = 0.390″ (9.90mm). Diameter = 0.140″ (3.60mm)
- **LOB-3 series**: Length = 0.560″ (14.224mm). Diameter = 0.210″ (5.334mm)
- **LOB-5 series**: Length = 0.920″ (23.368mm). Diameter = 0.330″ (8.382mm)

Specifications
- Tinned Copper Leads
- Molded Body
- Tolerance: ±1%

Applications
- Switching and Linear Power Supplies
- Instrumentation
- Current Sensing Circuits
- Regulators

1 WATT

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	10-99	100-249
LOB1R005FLF	0.005	55M7086	1.07	0.91	0.84
LOB1R010FLF	0.01	55M7087	0.92	0.79	0.73
LOB1R020FLF	0.02	55M7088	0.99	0.85	0.79
3 WATT					
LOB3R005FLF	0.005	55M7089	1.18	1.01	0.93
LOB3R010FLF	0.01	55M7090	1.18	1.01	0.93
LOB3R020FLF	0.02	55M7091	1.10	0.94	0.87
LOB3R040FLF	0.04	55M7092	0.43	0.42	...
LOB3R050FLF	0.05	55M7093	1.18	1.01	0.93
5 WATT					
LOB5 R010 FLF	0.01	55M7097	1.80	1.54	1.42
LOB5R020FLF	0.02	55M7098	1.80	1.54	1.42
LOB5R050FLF	0.05	55M7099	1.67	1.43	1.32
LOB5R100FLF	0.1	55M7100	1.80	1.54	1.42

(78869)

LVR SERIES WIREWOUND CURRENT SENSE RESISTORS

RoHS Compliant Available

VISHAY.

Features:
- Excellent load life stability
- Low temperature coefficient
- Low inductance
- Cooler operation for high power to size ratio

Specifications:
- Tolerance: ±1%
- Dielectric Withstanding Voltage: 1000VAC
- Operating Temperatures:
  LVR-1: -65°C to +175°C
  LVR-3, LVR-5: -65°C to +275°C

Applications:
- Switching and Linear Power Supplies, Instruments and Power Amplifiers

DIMENSIONS

Model	A ±0.010″ (0.254)	B ±0.010″ (0.254)	C ±0.002″ (0.051)
LVR-1	0.427″ (10.85)	0.115″ (2.92)	0.020″ (0.508)
LVR-3	0.560″ (14.22)	0.205″ (5.21)	0.032″ (0.813)
LVR-5	0.925″ (23.50)	0.330″ (8.38)	0.040″ (1.02)

Mfg. Part No.	Res. (Ohms)	Power (W)	Stock No.	Price Each 1-24	25-99
LVR01R0100FE70	0.01	1	51P4659	1.58	1.24
LVR01R0250FE70	0.025	1	65K1703	0.64	0.61
LVR01R0500FE70	0.05	1	19X7142	1.96	1.68
LVR01R1000FE12	0.1	1	41K9020	1.20	0.97
LVR01R1000FE70	0.1	1	51P4711	1.17	0.95
LVR035L000FE70	0.005	3	65K1718	2.94	2.40
LVR03R0100FE12	0.01	3	65K1705	1.97	1.63
LVR03R0100FE70	0.01	3	65K1706	1.63	1.33
LVR03R0150FE12	0.015	3	51P4743	1.97	1.63
LVR03R0150FE70	0.015	3	19X7143	2.10	1.80
LVR03R0200FE70	0.02	3	65K1708	1.58	1.29
LVR03R0200FE12	0.02	3	29M8009	1.97	1.63
LVR03R0250FE12	0.025	3	51P4781	1.97	1.63
LVR03R0300FE70	0.03	3	65K1710	1.58	1.24
LVR03R0300FE12	0.03	3	51P4800	1.97	1.63
LVR03R0400FE12	0.04	3	41K9023	1.97	1.63
LVR03R0400FE70	0.04	3	19X7145	2.10	1.80
LVR03R0500FE12	0.05	3	65K1712	1.83	1.51
LVR03R0500FE70	0.05	3	65K1713	1.65	1.34
LVR03R0800FE70	0.08	3	19X7146	2.10	1.80
LVR03R1000FE70	0.1	3	65K1714	1.58	1.29
LVR03R1000FE12	0.1	3	51P4947	1.87	1.52
LVR03R1500FE12	0.15	3	41K9026	1.95	1.58
LVR03R1500FE70	0.15	3	19X7147	1.58	1.24
LVR03R2000FE12	0.2	3	51P5013	1.95	1.58
LVR03R2000FE70	0.2	3	65K1716	1.63	1.33
LVR055L000FE73	0.005	5	51P5364	2.91	2.38
LVR05R0100FE12	0.01	5	51P5062	2.27	1.87
LVR05R0100FE73	0.01	5	51P5063	1.99	1.72
LVR05R0150FE12	0.015	5	41K9027	2.27	1.87
LVR05R0200FE73	0.02	5	65K1721	2.32	1.90
LVR05R0200FE12	0.02	5	51P5098	2.18	1.80
LVR05R0250FE12	0.025	5	65K1722	2.18	1.80
LVR05R0500FE12	0.05	5	41K9029	2.27	1.87
LVR05R0500FE73	0.05	5	51P5201	2.32	1.90
LVR05R1000FE12	0.1	5	41K9033	1.71	1.39
LVR05R1000FE73	0.1	5	51P5281	2.12	1.73
LVR05R1500FE12	0.15	5	65K1726	2.01	1.66
LVR05R2000FE12	0.2	5	65K1727	2.01	1.66
LVR05R2500FE12	0.25	5	65K1728	2.01	1.66
LVR05R3000FE12	0.3	5	41K9034	2.01	1.66

(4131)

(211463)

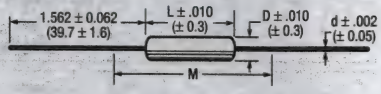
10 SERIES LO-MITE® MOLDED SILICONE AXIAL TERMINAL CURRENT SENSE RESISTORS

RoHS Compliant Available

OHMITE

Features
- Ideal for Current Sensing Applications
- 1% Tolerance
- Low Inductance (Non-Inductive Below 0.25W)

Specifications
- Encapsulation: Silicone Molding Compound
- Derating: Linearly from 100% @ +25°C to 0% @ +275°C
- Power Rating: Based on 25°C Free Air Rating
- Overload: 5X Rated Wattage for 5 Seconds
- Dielectric Withstanding Voltage: 1000 V_{RMS} for 3 and 5 Watt; 500 V_{RMS} for 2 Watt
- Thermal EMF: <±2µV/°C
- Operating Temp.: -55°C to +275°C



SPECIFICATIONS

Series	Wattage	Resistance (Ω)	Dimensions (mm) Length (L)	Dia.	"M"	Lead ga.
12	2	0.005-0.10	0.406" (10.3)	0.094" (2.4)	1.156" (29.4)	20
13	3	0.005-0.20	0.560" (14.2)	0.205" (5.2)	1.310" (33.3)	20
15	5	0.005-0.30	0.330" (23.5)	0.330" (8.4)	1.675" (42.5)	18

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49	50-99	100-249	250-499	500-999
2 WATT							
● 12FR005E	0.005	64K7856	1.90	1.79	1.58	1.51	1.43
● 12FR010E	0.01	64K7857	1.90	1.79	1.58	1.51	1.43
● 12FR015E	0.015	64K7858	1.98	1.86	1.64	1.56	1.49
● 12FR020E	0.02	64K7859	1.90	1.79	1.58	1.51	1.43
● 12FR025E	0.025	64K7860	1.88	1.77	1.56	1.49	1.41
● 12FR030E	0.03	64K7861	1.96	1.84	1.63	1.55	1.47
● 12FR040E	0.04	64K7862	1.88	1.77	1.56	1.49	1.41
● 12FR050E	0.05	64K7863	1.83	1.72	1.52	1.45	1.37
● 12FR070E	0.07	64K7865	1.90	1.79	1.58	1.51	1.43
● 12FR100E	0.1	64K7868	2.08	1.96	1.73	1.65	1.56
3 WATT							
● 13FR005E	0.005	64K7885	1.88	1.77	1.56	1.49	1.41
● 13FR010E	0.01	64K7886	1.78	1.68	1.48	1.41	1.34
● 13FR020E	0.02	64K7888	1.75	1.64	1.45	1.38	1.31
● 13FR025E	0.025	64K7889	1.70	1.60	1.42	1.35	1.28
● 13FR030E	0.03	64K7890	1.70	1.60	1.42	1.35	1.28
● 13FR040E	0.04	64K7891	1.75	1.65	1.45	1.38	1.31
● 13FR050E	0.05	64K7892	1.75	1.65	1.45	1.38	1.31
● 13FR070E	0.07	64K7894	1.88	1.77	1.56	1.49	1.41
● 13FR100E	0.1	64K7897	1.93	1.82	1.61	1.53	1.45
● 13FR200E	0.2	64K7899	1.93	1.82	1.61	1.53	1.45
5 WATT							
● 15FR005E	0.005	64K7914	2.32	2.19	1.93	1.84	1.74
● 15FR010E	0.01	64K7915	2.22	2.09	1.84	1.76	1.67
● 15FR015E	0.015	64K7916	2.16	2.03	1.80	1.71	1.62
● 15FR020E	0.02	64K7917	2.25	2.11	1.87	1.78	1.69
● 15FR025E	0.025	64K7918	2.16	2.03	1.80	1.71	1.62
● 15FR030E	0.03	64K7919	2.16	2.03	1.80	1.71	1.62
● 15FR050E	0.05	64K7921	2.21	2.08	1.83	1.75	1.66
● 15FR100E	0.1	64K7926	2.10	1.98	1.75	1.66	1.58
● 15FR150E	0.15	64K7927	2.19	2.06	1.82	1.73	1.64
● 15FR200E	0.2	64K7928	2.15	2.03	1.80	1.70	1.62
● 15FR250E	0.25	64K7929	2.15	2.03	1.80	1.70	1.62
7 WATT, FOUR TERMINAL							
● 17FPR010E	0.01	64K7932	9.70	7.29	6.57	5.95	5.23

(72692)

element14 COMMUNITY

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element14.com

(196545)

PWR4412-2S SERIES METAL ELEMENT CURRENT SENSE RESISTORS

RoHS Compliant Available

BOURNS®

Features
- Low temp. coefficient
- High current capability
- Low inductance
- Low ohmic values

Applications
- Power supplies
- UPS
- Motor drives

Specifications
- Resistance range: 0.005ohm - 0.05ohm
- Resistance tolerance: ±1% (±5% also available; *go online or call*)
- Oper. temp range: -40°C to +125°C
- Temperature coefficient: ±20ppm/°C
- Inductance: 10nH

Mfg. Part No.	Res. (Ohms)	Power (W)	Stock No.	Price Each 1-9	10-24
● PWR4412-2SBR0500F	0.05	1	32M9540	1.27	1.10
● PWR4412-2SCR005F	0.005	3	32M9541	1.27	1.10
● PWR4412-2SCR0100F	0.01	3	17M1682	1.27	1.10
● PWR4412-2SDR0100F	0.01	5	14P6727	1.27	1.10
● PWR4412-2SDR015F	0.015	5	32M9547	1.32	1.14

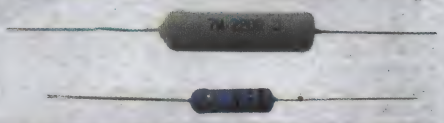
(103582)

MOR SERIES METAL OXIDE RESISTORS

RoHS Compliant Available

multicomp

Features
- High safety standard
- Excellent non-flame coating
- High purity ceramic core
- Stable performance in diverse environment



Specifications	MOR0S2	MOR01S	MOR03S	MOR07W
Working voltage	250V	350V	350V	750V
Power rating @ 70°C	0.5W	1W	3W	7W
Resistance tolerance	±5%	±5%	±5%	±5%
Temperature coefficient	±350ppm/°C	±350ppm/°C	±350ppm/°C	±350ppm/°C

Description	Stock No.	Price Each 1-49
MOR0S2 SERIES	All Values	0.04
MOR01S SERIES	All Values	0.05
MOR03S SERIES	All Values	0.11
MOR07S SERIES	All Values	0.82

Stock No.	Res. (Ohms)	Stock No.	Res. (Ohms)	Stock No.	Res. (Ohms)	Stock No.	Res. (Ohms)
MOR0S2 - 0.5 WATT							
74M3295	10	74M3296	100	74M3297	1k	74M3298	10k
74M3303	22	...	...	74M3305	2.2k	...	...
74M3307	33	74M3308	330	74M3309	3.3k	...	...
74M3311	47	74M3312	470	74M3313	4.7k	...	...
74M3315	68	74M3316	680	74M3317	6.8k	...	...
MOR01S - 1 WATT							
74M3318	10	74M3338	68	74M3335	470	74M3336	4.7k
74M3322	15	74M3319	100	74M3339	680	74M3321	10k
74M3326	22	74M3323	150	74M3320	1k	74M3337	47k
74M3330	33	74M3327	220	74M3328	2.2k	...	...
74M3334	47	74M3331	330	74M3332	3.3k	...	...
MOR03S - 3 WATT							
74M3341	10	74M3342	100	74M3343	1k	74M3344	10k
74M3345	15	74M3346	150	74M3347	1.5k	74M3348	15k
74M3349	22	74M3350	220	74M3351	2.2k	74M3352	22k
74M3353	33	74M3354	330	74M3355	3.3k	74M3356	33k
74M3357	47	74M3358	470	74M3359	4.7k	74M3360	47k
74M3361	68	74M3362	680	74M3363	6.8k	...	...
MOR07S - 7 WATT							
74M3379	47	74M3380	470	74M3385	6.8k	74M3382	47k
74M3364	100	74M3365	1k	74M3366	10k	74M3386	68k
74M3368	150	74M3369	1.5k	74M3370	15k	74M3367	100k

(116652)

MINI-MOX SERIES HIGH VOLTAGE METAL OXIDE RESISTORS

RoHS Compliant Available

OHMITE

Applications
- Avionics
- Medical electronics
- High gain feedback
- Current pulse limiters
- Vacuum and space applications

Specifications
- Power rating: 0.25W to 1.5W
- Silicone or epoxy coating
- Voltage rating: 500V to 7500V
- Tolerance: 0.1% to 20%
- Temperature coefficient: 25ppm/°C
- Operating Temperature: -55°C to 220°C

Epoxy Coated (standard); also available in high temperature silicone coating, *go online or call.*

ELECTRICAL SPECIFICATIOINS

Series	Resistance Range (Ohms)	Power @ 70°C (W)	Voltage (V)
MOX-200-23	100k to 1,500M	0.25	500
MOX-300-23	100k to 2,500M	0.5	1000
MOX-400-23	500 to 300,000M	0.75	2500
MOX-750-23	1K to 600,000M	1	5000
MOX-1125-23	1K to 1,000,000M	1.5	7500

EPOXY COATED

Mfg. Part No.	Res. (Ohms)	Res. Tol. (+/- %)	Power Rating (mW)	Stock No.	Price Each 1-9	Price Each 10-49
MOX-200001005FE	10M	± 1%	250	26K1788	2.74	2.20
MOX-200001005JE	10M	± 5%	250	30K6148	2.41	1.94
MOX-200001006FE	100M	± 1%	250	19K8601	4.54	3.77
MOX-200001006JE	100M	± 5%	250	22K8822	2.05	1.65
MOX-200001007FE	1G	± 1%	250	26K1786	20.47	17.00
MOX-200001007JE	1G	± 5%	250	12K5484	6.01	5.00
MOX-300001004FE	1M	± 1%	500	67K7497	4.76	3.95
MOX-300002004FE	2M	± 1%	500	51M1554	4.63	3.84
MOX-300001005JE	10M	± 5%	500	66K6823	4.85	3.90
MOX-300001005FE	10M	± 1%	500	39K4202	5.40	4.49
MOX-300005005FE	50M	± 1%	500	73K3422	4.93	4.09
MOX-300001006FE	100M	± 1%	500	66K6824	6.46	5.37
MOX-300001006JE	100M	± 5%	500	89K7247	4.43	3.68
MOX-300001007FE	1G	± 1%	500	66K6825	23.66	19.65
MOX-400231005FE	10M	± 1%	750	66K6826	8.31	6.90
MOX-400231005JE	10M	± 5%	750	66K6827	6.69	3.88
MOX-400231006FE	100M	± 1%	750	66K6828	8.31	6.90
MOX-400231006JE	100M	± 5%	750	51M1559	5.33	4.43
MOX-400231007FE	1G	± 1%	750	31K8894	8.73	7.25
MOX-400231007JE	1G	± 5%	750	66K6829	5.69	4.73
MOX-750231007FE	1G	± 1%	1W	51M1561	9.80	8.13
MOX-750231005FE	10M	± 1%	1W	66K6832	9.69	8.04
MOX-750231006JE	100M	± 5%	1W	66K6834	6.09	5.06
MOX-750231006FE	100M	± 1%	1W	51M1560	9.80	8.13
MOX-750231007JE	1G	± 5%	1W	66K6835	6.09	5.06
MOX1125231005FE	10M	± 1%	1.5W	66K6836	10.42	8.65

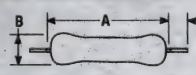
(85786)

MAXI-MOX PRECISION THICK FILM HIGH VOLTAGE/HIGH RESISTANCE RESISTORS

RoHS Compliant Available

OHMITE

NEW



Features:
- Power rating: 2W to 12.5W
- Resistance range: 250 ohmsto 1 tera ohm
- Voltage handling up to 50kV
- Epoxy coating
- Non-inductive
- Axial terminal

Applications:
- HV power supplies
- Power distribution
- Medical instrumentation
- Avionics

BODY DIMENSIONS

Series	Length (A)	Width (B)
MOX-1N-13	1.140″	0.345″
MOX-2N-13	2.140″	0.345″
MOX-3N-13	3.140″	0.345″
MOX-4N-13	4.140″	0.345″
MOX-5N-13	5.140″	0.345″

CONTINUED

MAXI-MOX PRECISION THICK FILM HIGH VOLTAGE/HIGH RESISTANCE RESISTORS (CONT.)

2W, 10kV

Mfg. Part No.	Res.	Tol.	Temp. Coeff.	Stock No.	Price Each 1-24	Price Each 25-99
MOX-1N-131004FE	1Mohm	± 1%	25ppm/°C	99W6171	8.50	7.70
MOX-1N-131005FE	10Mohm	± 1%	25ppm/°C	99W6172	8.50	7.70
MOX-1N-132505FE	25Mohm	± 1%	25ppm/°C	99W6175	8.50	7.70
MOX-1N-135005FE	50Mohm	± 1%	25ppm/°C	99W6176	8.50	7.70
MOX-1N-131006FE	100Mohm	± 1%	50ppm/°C	99W6173	8.81	7.98
MOX-1N-131007JE	1Gohm	± 5%	± 100ppm/°C	99W6174	8.50	7.70
3W, 20kV						
MOX-2N-131004FE	1Mohm	± 1%	25ppm/°C	99W6177	11.35	10.38
MOX-2N-135004FE	5Mohm	± 1%	25ppm/°C	99W6182	11.35	10.38
MOX-2N-131005FE	10Mohm	± 1%	25ppm/°C	99W6178	11.35	10.38
MOX-2N-131505FE	15Mohm	± 1%	25ppm/°C	99W6181	11.69	10.69
MOX-2N-131006FE	100Mohm	± 1%	25ppm/°C	99W6179	11.35	10.38
MOX-2N-131007JE	1Gohm	± 5%	50ppm/°C	99W6180	11.35	10.38
4W, 30kV						
MOX-3N-131004FE	1Mohm	± 1%	25ppm/°C	99W6183	15.80	14.44
MOX-3N-131005FE	10Mohm	± 1%	25ppm/°C	99W6184	15.80	14.44
MOX-3N-132505FE	25Mohm	± 1%	25ppm/°C	99W6187	15.80	14.44
MOX-3N-135005FE	50Mohm	± 1%	25ppm/°C	99W6188	15.80	14.44
MOX-3N-131006FE	100Mohm	± 1%	25ppm/°C	99W6185	15.80	14.44
MOX-3N-131007JE	1Gohm	± 5%	50ppm/°C	99W6186	15.80	14.44
5W, 40kV						
MOX-4N-131004FE	1Mohm	± 1%	25ppm/°C	99W6189	22.42	20.49
MOX-4N-135004FE	5Mohm	± 1%	25ppm/°C	99W6194	22.42	20.49
MOX-4N-131005FE	10Mohm	± 1%	25ppm/°C	99W6190	22.42	20.49
MOX-4N-131505FE	15Mohm	± 1%	25ppm/°C	99W6193	22.42	20.49
MOX-4N-131006FE	100Mohm	± 1%	25ppm/°C	99W6191	22.42	20.49
MOX-4N-131007JE	1Gohm	± 5%	50ppm/°C	99W6192	22.42	20.49
6W, 50kV						
MOX-5N-131004FE	1Mohm	± 1%	25ppm/°C	99W6195	27.27	24.93
MOX-5N-131005FE	10Mohm	± 1%	25ppm/°C	99W6196	27.27	24.93
MOX-5N-132505FE	25Mohm	± 1%	25ppm/°C	99W6199	27.27	24.93
MOX-5N-135005FE	50Mohm	± 1%	25ppm/°C	99W6200	27.27	24.93
MOX-5N-131006FE	100Mohm	± 1%	25ppm/°C	99W6197	27.27	24.93
MOX-5N-131007JE	1Gohm	± 5%	50ppm/°C	99W6198	27.27	24.93

(212394)

SUPER-MOX THICK FILM RESISTORS

RoHS Compliant Available

OHMITE

- Power Rating: 3.8W to 20W
- Silicone coating
- Voltage rating: 15kV to 90kV
- Tolerance: 0.05% to 10%
- Temperature coefficient: 5ppm/°C to 100ppm/°C
- Operating Temperature: -55°C to 225°C

Super-Mox resistors are a precision thick film axial lead high voltage/high resistance resistors. These were designed to meet requirements of high voltage power supplies, microscopes, X-ray systems, high resolution CRT displays, and geophysical instruments.

SPECIFICATIONS

Series	Resistance Range (Ohms)	Power @ 70°C	Voltage
MOX910	1K to 5G	3.8W	15KV
MOX920	1K to 10G	5.0W	21KV
MOX930	1K to 15G	7.5W	30KV
MOX940	1K to 25G	10W	45KV
MOX950	1K to 30G	13.5W	60KV
MOX960	1K to 40G	16W	72KV
MOX970	1K to 50G	20W	90KV

Mfg. Part No.	Res. (Ohms)	Res. Tol. (+/- %)	Power Rating (W)	Stock No.	Price Each 1-24	Price Each 25-99
MOX91021004FVE	1M	± 1%	3.8	11M0754	11.60	10.61
MOX91021005FVE	10M	± 1%	3.8	18M5094	11.20	10.24
MOX91022505FTE	25M	± 1%	3.8	84K8891	11.20	10.24
MOX91025004FVE	5M	± 1%	3.8	18M5095	9.89	9.04
MOX92021005FVE	10M	± 1%	5	87K0115	14.76	13.50
MOX92021006FVE	100M	± 1%	5	87K0671	12.15	11.11
MOX92025005FVE	50M	± 1%	5	02M8523	14.25	13.03
MOX92021007FTE	1G	± 1%	5	51M1564	12.59	11.51
MOX93021004FVE	1M	± 1%	7.5	18M5096	17.58	16.08
MOX93021005FVE	10M	± 1%	7.5	18M5097	17.79	16.27
MOX93025004FVE	5M	± 1%	7.5	18M5099	17.17	15.70
MOX94021005FVE	10M	± 1%	10	87K0113	19.68	17.99
MOX94021006FVE	100M	± 1%	10	84K8894	20.15	18.42

CONTINUED

HIGH VOLTAGE RESISTORS – AXIAL TERMINAL

SUPER-MOX THICK FILM RESISTORS (CONT.)

Mfg. Part No.	Res. (Ohms)	Res. Tol. (+/- %)	Power Rating (W)	Stock No.	Price Each 1-24	Price Each 25-99
● MOX94025005FVE	50M	± 1%	10	84K8892	19.68	17.99
● MOX94021007FTE	1G	± 1%	10	51M1566	20.39	18.64
● MOX95021004FVE	1M	± 1%	13.5	18M5101	24.28	22.19
● MOX95021005FVE	10M	± 1%	13.5	18M5102	23.44	21.42
● MOX95025004FVE	5M	± 1%	13.5	18M5104	23.44	21.42
● MOX96021005FVE	10M	± 1%	16	18M5105	28.04	25.63
● MOX96021006FVE	100M	± 1%	16	06M5215	27.22	24.88
● MOX96021007FTE	1G	± 1%	16	18M5106	28.04	25.63
● MOX97021004FVE	1M	± 1%	20	18M5107	35.70	32.63
● MOX97021005FVE	10M	± 1%	20	18M5108	35.70	32.63

(113238)

HIGH OHMIC/HIGH VOLTAGE METAL GLAZE LEADED RESISTORS

RoHS Compliant Available

VISHAY.

Applications
- Safety component in combination with high voltage
- Picture tubes
- High voltage bleeders
- Cascade switches
- White goods
- High humidity environment
- Power supplies

VR series resistors are ideal where high resistance, high stability and high reliability at high voltage are required.

Mfg. Part No.	Resistance (Ohms)	Power (W)	Voltage Rating (V)	Stock No.	Price Each 1-49
● VR25000001004JR500	1M	250	1.6	26R4224	0.09
● VR25000001005JR500	10M	250	1.6	26R4225	0.09
● VR37000001004JR500	1M	500	3.5	26R4226	0.18
● VR37000001005JR500	10M	500	3.5	26R4227	0.17
● VR37000002005JR500	20M	500	3.5	26R4228	0.17
● VR37000002205JR500	22M	500	3.5	26R4229	0.18
● VR37000003305JR500	33M	500	3.5	26R4230	0.18
● VR68000002205JAC00	22M	1	10	26R4231	0.29
● VR68000006805JAC00	68M	1	10	60K7296	0.59

(177912)

SPECIAL PURPOSE, HIGH-VOLTAGE METAL OXIDE RESISTORS

RoHS Compliant Available

VISHAY.

Features
- High-Temperature Fired Cermet Film
- Alumina Core
- Epoxy Coating: Types RNX– ¼ and RNX–3/8

Applications
- For Oil Bath or Open Air Operation

Specifications
- Voltage Rating (Approx.): RNX– ¼: 750V; RNX–3/8: 1.5KV; RNX–1/2: 2KV; RNX–3/4: 3KV
- Insulation Resistance: ≥ $10^{11}\Omega$
- Operating Temperature: –55°C to +155°C
- Power Rating @ 70°C: 0.36W (RNX025); 0.72W (RNX038); 0.86W (RNX050); 1.44W (RNX075)

DIMENSIONS (mm)

Series	L	L_1 Max.
RNX025	0.290±0.020" (7.37±0.508)	0.358" (9.09)
RNX038	0.420±0.020" (10.67±0.508)	0.470" (11.94)
RNX050	0.540±0.020" (13.72±0.508)	0.595" (15.11)
RNX075	0.790±0.020" (20.07±0.508)	0.845" (21.46)

PRODUCT SPECIFICATIONS IN TYPE NO.

Series	Resistance (Ω)	Tolerance	Temperature Coefficient
RNX–1/2	10K1	F (±1%) J (±5%)	M= ±200ppm/°C K= ±100ppm/°C H= ±50ppm/°C

Mfg. Part No.	Res. (Ohms)	Res. Tol. (+/- %)	Temp. Coeff.	Stock No.	Price Each 1-49
● RNX0251M00FKEL	1M	± 1%	± 100ppm/°C	41K9179	2.71
● RNX02510M0FKEL	10M	± 1%	± 100ppm/°C	41K9180	2.81
● RNX02547M0JNEL	47M	± 5%	± 100ppm/°C	41K9181	2.81
● RNX02570M0FKEL	70M	± 1%	± 100ppm/°C	41K9183	2.71
● RNX0381M00FKEL	1M	± 1%	± 100ppm/°C	41K9184	2.49
● RNX0382M00FNEL	2M	± 1%	± 200ppm/°C	41K9188	2.49
● RNX03810M0FKEL	10M	± 1%	± 100ppm/°C	41K9185	2.52
● RNX03815M0FKEL	15M	± 1%	± 100ppm/°C	41K9187	2.52
● RNX038100MFKEL	100M	± 1%	± 100ppm/°C	41K9186	2.49
● RNX038200MFNEL	200M	± 1%	± 200ppm/°C	41K9189	3.46
● RNX05010M0JNEL	10M	± 5%	± 200ppm/°C	65K2644	4.33
● RNX07540K2FKEL	40.2k	± 1%	± 100ppm/°C	41K9191	5.32
● RNX0753M30JNEL	3.3M	± 5%	± 200ppm/°C	41K9190	4.84

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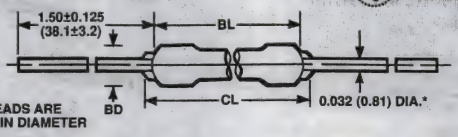
HIGH-VOLTAGE THICK FILM RESISTORS

TT electronics IRC



Specifications
- Tolerance: ±1%
- Temperature Coefficent: ±50ppm/°C
- VCR: 0 to -5ppm/V
- Voltage Rating (Approx.): CGH- ¼: 750V; CGH- ½: 1,500V; CGH-1: 3000V; CGH-2: 5,000V; CGH-3: 10,000V; CGH-5: 20,000V

Features
- Diamond Spiraled Thick Film Element
- Epoxy Coated
- All Welded Cap and Lead Construction

DIMENSIONS (mm)

Series	Body Length	Body Diameter	CL to CL	P @ 70°C
CGH–1/4	0.275±0.031 (6.98±0.79)	0.88±0.010 (2.22±0.25)	0.400 (10.16)	¼W
CGH–1/2	0.400±0.031 (10.61±0.79)	0.138±0.016 (3.51±0.41)	0.525 (13.34)	½W
CGH–1	0.690±0.062 (17.53±1.57)	0.297±0.031 (7.54±0.79)	0.900 (22.86)	1W
CGH–2	1.062±0.062 (26.97±1.57)	0.297±0.031 (7.54±0.79)	1.250 (31.75)	2W
CGH–3	2.062±0.062 (52.37±1.57)	0.297±0.031 (7.54±0.79)	2.250 (57.15)	3W
CGH–5	3.062±0.062 (77.77±1.57)	0.297±0.031 (7.54±0.79)	3.250 (82.55)	5W

Mfg. Part No.	Res. (Ohms)	Voltage	Stock No.	Price Each 1-99
0.25W				
CGH1/4501004F	1M	750	95B5831	6.72
CGH1/4501006F	100M	750	04F9931	7.40
0.5W				
CGH1/2501004F	1M	1.5	95B5818	9.66
1.0W				
CGH1501004F	1M	3000	95B5803	19.65
CGH1501005F	10M	3000	95B5804	19.07
2W				
CGH2501003F	100k	5000	95B5842	27.00
CGH2501004F	1M	5000	95B5843	26.01
CGH2501006F	100M	5000	95B5845	27.57
3W				
CGH3501004F	1M	10000	95B5857	30.78
CGH3501005F	10M	10000	95B5858	29.88
5W				
CGH5503003F	300k	20	95B5878	66.78
CGH5501004F	1M	20	95B5872	66.60
CGH5505004F	5M	20	95B5880	63.00
CGH5501006F	100M	20	95B5874	70.60
CGH5505006F	500M	20	95B5882	66.60

(49398)

MGRF SERIES METAL GLAZED FILM HIGH VALUE RESISTORS

RoHS Compliant Available

multicomp

Features
- Small in dimension and broad range in high resistance
- Metal glaze resistor elements provide high stable performance against environmental conditions and overload
- Excellent in absorption of pulse and surge voltage

Specifications
- Power rating @ 70°C: 1W
- Max. working voltage: 3500V
- Overload voltage rated @ 4000V
- Operating temperature: -55°C to +155°C
- Temperature coefficient: ±200 ppm/°C

Description	Stock No.	Price Each 1-49
MGRF1W Series	All Values	0.30
MGRF2W Series	All Values	0.42

1 WATT

Stock No.	Res. (Ohms)	Stock No.	Res. (Ohms)	Stock No.	Res. (Ohms)	Stock No.	Res. (Ohms)
74M3221	1.2M	74M3227	2.7M	74M3232	5.6M	...	...
74M3222	1.5M	74M3228	3.3M	74M3220	10M	...	...
74M3224	1.8M	74M3230	3.9M	74M3226	22M	...	...
74M3225	2.2M	74M3231	4.7M	...	...	...	...
2 WATT							
74M3236	1.2M	74M3243	3.3M	74M3248	6.8M	74M3244	33M
74M3237	1.5M	74M3245	3.9M	74M3235	10M	...	...

➤ CONTINUED ➤

MGRF SERIES METAL GLAZED FILM HIGH VALUE RESISTORS (CONT.)

2 WATT

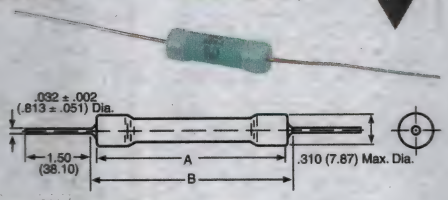
Stock No.	Res. (Ohms)	Stock No.	Res. (Ohms)	Stock No.	Res. (Ohms)	Stock No.	Res. (Ohms)
74M3240	2.2M	74M3246	4.7M	74M3238	15M	...	...
74M3242	2.7M	74M3247	5.6M	74M3241	22M	...	...

(116649)

SPECIAL PURPOSE, HIGH VOLTAGE METAL OXIDE HIGH POWER RESISTORS

RoHS Compliant Available

VISHAY.



Features
- High Temperature Fired Cermet Film Element
- High-Purity 96% Alumina Cores, Tubular or Solid
- Solder-Coated Copper Leads

Applications
- Oil Bath or Open Air Operation

Specifications
- Res. Tolerance: ±1%
- Power Rating ($P_{125°C}$): ROX–1/2: 1W; ROX–1: 2W; ROX–2: 3W; ROX–3: 5W
- Voltage Rating (Approx.): ROX–1/2: 2kV; ROX–1: 7.5kV; ROX–2: 15kV; ROX–3: 22.5kV
- Operating Temperature: –55°C to +155°C
- Insulation Resistance: $\geq 10^{11}\Omega$

DIMENSIONS (mm)

Series	A	B
ROX–1/2	0.55±0.032″ (13.97±0.813)	0.7″ (17.78)
ROX–1	0.92±0.032″ (23.37±0.813)	1.02″ (25.91)
ROX–2	2.05±0.032″ (52.07±0.813)	2.15″ (54.61)

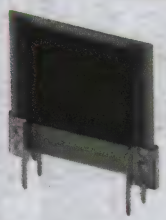
Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9
ROX0501M00FKEL	1M	65K1898	4.02
ROX1001M00FKEL	1M	65K1899	6.44
ROX10020M0FKEL	20M	41K9193	6.37
ROX100100MFKEL	100M	41K9192	6.44
ROX200250KFKEL	250k	65K1900	7.06
ROX200100MFKEL	100M	41K9195	7.14

(59678)

TP SERIES THICK FILM ON ALUMINA SUBSTRATE POWER CHIP RESISTORS

RoHS Compliant Available

OHMITE



Features
- High-Temp Terminal Construction
- Wide Resistance Range
- Low Inductance (50nH-100nH)
- High Power Density
- Easy to install, PC-mountable

10 WATTS; WRAPAROUND TERMINALS, 0.8″ SPACING

Mfg. Part No.	Resistance	Tolerance	Stock No.	Price Each 1-24
TP810PW10R0JE	10 ohm	± 5%	66W8255	8.09
TP810PW20R0JE	20 ohm	± 5%	66W8257	8.09
TP810PW50R0JE	50 ohm	± 5%	66W8260	8.09
TP810PW100RJE	100 ohm	± 5%	66W8256	8.28
TP810PW470RJE	470 ohm	± 5%	66W8259	8.09
TP810PW1K00JE	1 kohm	± 5%	66W8253	8.09
TP810PW4K70JE	4.7 kohm	± 5%	66W8258	8.09
TP810PW10K0JE	10 kohm	± 5%	66W8254	8.09

(209973)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196580)

POWER-MOX SERIES PRECISION POWER METAL OXIDE HIGH VOLTAGE/ HIGH RESISTANCE TUBULAR RESISTORS W/ RADIAL BAND OPTION

RoHS Compliant Available

OHMITE

Features
- Wide Resistance Ranges
- Outstanding Voltage Coefficient
- Metal Oxide Resistive Elements

Applications:
- Power Transmitters
- Pollution Control Systems
- Industrial Control Systems
- Current Pulse Limiters
- Vacuum and Space Application

Specifications
- Resistance Range: 20K to 1,000,000M
- Power Rating: up to 75W
- Voltage Rating: up to 60KV
- Operating Temperature: -65°C to +180°C
- Temperature Coefficient: 25ppm: 0° to 85°C; 50ppm -55° to 180°C

Mfg. Part No.	ohms	Stock No.	Price Each 1-4	Price Each 5-9
POWER-MOX SERIES RESISTOR, 25W, 20KV				
MOX-F-025003FE	500k	41M3594	102.56	93.55
POWER-MOX SERIES RESISTOR, 40W, 30KV				
MOX-G-021005FE	10M	41M3595	126.16	115.07
POWER-MOX SERIES RESISTOR, 50W, 45KV				
MOX-H-025002FE	50k	41M3601	151.50	138.18
MOX-H-025003FE	500k	41M3602	151.50	138.18
MOX-H-025004FE	5M	41M3603	155.14	141.50
POWER-MOX SERIES RESISTOR, 75W, 60KV				
MOX-J-021004FE	1M	41M3606	194.72	177.60
MOX-J-021006FE	100M	41M3608	190.16	173.44

(91214)

PULSEATERS® CERAMIC COMPOSITION RADIAL LEADED RESISTORS

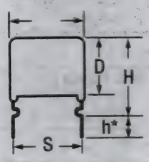
RoHS Compliant Available

OHMITE

Features
- Designed for Applications Where High Energy Handling Capabilities Are Crucial
- Unique Design Allows Uniform Distribution of Energy Throughout Their Structure for Low Thermal Stress
- High Temperature, Solvent-Resistant Epoxy Coating: Rated UL94V0
- Non-Inductive

Applications
- Motor Drives
- Power Supplies, UPS
- Power Conversion
- In-Rush Current Limiting

Specifications
- Resistance Element: Bulk Ceramic
- Tolerance: ±10% Standard
- Derating: Derates Linearly From 100°C @ 50°C to 0% @ 150°C
- Temperature Rise: 100°C @ 100% Rated Power, 50°C Ambient
- Short Term Overload: 10X Rated Power. 5 Seconds ON, 5 Seconds OFF, 5 Cycles



Style A single lead (AW, AX, AY)

Series	P avg.[1] (W)	Dimensions L (max)	D (max)	H (max)	S (norm)	Lead Gauge	Impulse[2] Voltage (V)	Energy[3] (Joules)
AV	2	15mm	13mm	22mm	12.5mm	20AWG	1500	400
AW	2.5	20mm	13mm	19mm	17.5mm	20AWG	1500	400
AX	3.5	15mm	21mm	26mm	12.5mm	18AWG	1000	700
AY	4.5	25mm	21mm	26mm	22.5mm	18AWG	2000	1400
AZ	5.5	30mm	26mm	...	27mm	18AWG	2500	2800

[1] Free Air 40°C Ambient [2] In Air [3] Single Impulse
Additional values available; *go online or call.*

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-99
2 WATTS, 250 JOULES				
AV33GKE	3.3	46T3855	13.71	12.53
AV47GKE	4.7	46T3857	13.71	12.53
AV100KE	10	46T3848	14.20	12.98
AV150KE	15	46T3851	14.20	12.98
AV220KE	22	46T3853	13.71	12.53
AV390KE	39	46T3856	14.20	12.98
AV470KE	47	46T3858	14.20	12.98
AV101KE	100	46T3849	13.71	12.53
AV151KE	150	46T3852	13.71	12.53
AV221KE	220	46T3854	13.71	12.53
AV471KE	470	46T3859	13.71	12.53
AV102KE	1k	46T3850	13.71	12.53
2.5 WATTS, 400 JOULES				
AW68GKE	6.8	64K3570	15.14	13.84
AW100KE	10	64K3547	15.50	14.17

CONTINUED

PULSEATERS® CERAMIC COMPOSITION RADIAL LEADED RESISTORS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-99
2.5 WATTS, 400 JOULES				
● AW560KE	56	64K3568	15.14	13.84
● AW680KE	68	64K3571	15.14	13.84
3.5 WATTS, 700 JOULES				
● AX10GKE	1	64K3576	16.54	15.12
4.5 WATTS, 1400 JOULES				
● AY22GKE	2.2	64K3622	17.47	15.97
● AY100KE	10	64K3613	17.47	15.97
● AY150KE	15	64K3618	17.47	15.97
● AY220KE	22	64K3623	17.47	15.97
● AY390KE	39	64K3632	17.47	15.97
● AY470KE	47	64K3635	18.10	16.54
● AY101KE	100	64K3614	17.47	15.97
5.5 WATTS, 2800 JOULES				
● AZ101KE	100	64K3647	26.66	24.37

(73104)

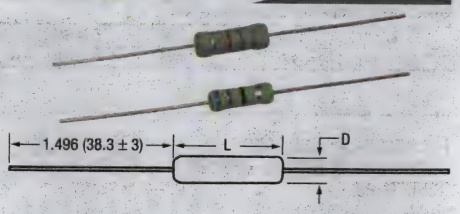
OX/OY SERIES CERAMIC COMPOSITION RESISTORS

RoHS Compliant Available

OHMITE

Features
- Ideal for Circuitry Associated with Surges, High Peak Power or High Energy
- Replacement for 1 and 2 Watt Carbon Composition Resistors

Applications:
- Offer Enhanced High Performance in High Voltage Power Supplies, R-C Snubber Circuits and Inrush Limiters



Specifications
- Tolerance: ±10% Standard
- Temperature Coefficient: -1300 ±300ppm/°C
- Approval Category: MIL-STD-202, Method 108
- Coating: UL-94 V0 approved silicone
- Derating: Linear from 100% @ +70°C to 0% @ +200°C
- Operating Temp. Range: -40°C to +220°C

Additional values available, *go online or call.*

PERFORMANCE CHARACTERISTICS

Test	OX Series	OY Series
Watts: Max at 70°C	1	2
Max Working Voltage	300V	400V
Dielectric Strength	500V	700V
Max Overload Voltage	600V	800V
Max Pulse Voltage	14kV	20kV

DIMENSIONS (mm)

Series	Max. Length (L)	Diameter (D)	Lead Diameter
OX	0.67″ (17.0)	0.217 ±0.5″ (5.5 ±1)	0.031″ (0.8)
OY	0.89″ (22.6)	0.276 ±0.5″ (7.0 ±1)	0.031″ (0.8)

OX SERIES, 1 WATT

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-99
● OX33GKE	3.3	21K6599	0.95	0.86
● OX47GKE	4.7	64K5372	0.99	0.89
● OX68GKE	6.8	64K5382	0.99	0.89
● OX82GKE	8.2	64K5387	0.99	0.89
● OX100KE	10	64K5340	0.95	0.86
● OX120KE	12	64K5345	0.95	0.86
● OX150KE	15	64K5348	0.99	0.89
● OX180KE	18	64K5352	1.08	0.97
● OX220KE	22	31K9055	1.12	1.01
● OX270KE	27	64K5359	1.08	0.97
● OX330KE	33	64K5363	1.12	1.01
● OX390KE	39	64K5368	1.08	0.97
● OX470KE	47	64K5373	1.08	0.97
● OX560KE	56	64K5378	1.12	1.01
● OX680KE	68	64K5383	1.08	0.97
● OX820KE	82	64K5388	1.12	1.01
● OX101KE	100	64K5341	1.08	0.97
● OX121KE	120	64K5346	0.95	0.86
● OX151KE	150	64K5349	0.95	0.86
● OX181KE	180	64K5353	0.98	0.88
● OX221KE	220	64K5356	0.99	0.89
● OX271KE	270	64K5360	0.95	0.86
● OX331KE	330	64K5364	0.99	0.89
● OX391KE	390	64K5369	0.99	0.89
● OX471KE	470	64K5374	0.99	0.89
● OX561KE	560	64K5379	0.95	0.86
● OX681KE	680	64K5384	0.95	0.86

➤ CONTINUED ➤

OX/OY SERIES CERAMIC COMPOSITION RESISTORS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-99
● OX102KE	1k	64K5342	0.95	0.86
● OX122KE	1.2k	21K6598	0.99	0.89
● OX152KE	1.5k	64K5350	0.99	0.89
● OX222KE	2.2k	64K5357	0.95	0.86
● OX272KE	2.7k	64K5361	0.98	0.88
● OX332KE	3.3k	64K5365	0.99	0.89
● OX392KE	3.9k	64K5370	0.99	0.89
● OX472KE	4.7k	64K5375	0.99	0.89
● OX562KE	5.6k	64K5380	0.99	0.89
● OX682KE	6.8k	64K5385	0.95	0.86
● OX822KE	8.2k	64K5390	0.95	0.86
● OX103KE	10k	64K5343	0.95	0.86
● OX123KE	12k	64K5347	0.95	0.86
● OX153KE	15k	64K5351	0.95	0.86
● OX223KE	22k	64K5358	0.99	0.89
● OX273KE	27k	64K5362	0.98	0.88
● OX333KE	33k	64K5366	0.95	0.86
● OX393KE	39k	64K5371	0.99	0.89
● OX473KE	47k	64K5376	0.95	0.86
● OX563KE	56k	64K5381	0.98	0.88
● OX683KE	68k	64K5386	0.95	0.86
● OX104KE	100k	64K5344	0.95	0.86
OY SERIES, 2 WATT				
● OY33GKE	3.3	64K5418	1.43	1.29
● OY39GKE	3.9	64K5424	1.43	1.29
● OY47GKE	4.7	64K5429	1.43	1.29
● OY56GKE	5.6	64K5434	1.43	1.29
● OY68GKE	6.8	64K3253	1.43	1.29
● OY82GKE	8.2	33K4317	1.43	1.29
● OY100KE	10	29K8631	1.43	1.29
● OY120KE	12	64K5397	1.43	1.29
● OY150KE	15	64K5402	1.49	1.34
● OY180KE	18	64K5405	1.43	1.29
● OY220KE	22	64K5410	1.47	1.32
● OY270KE	27	64K5414	1.49	1.34
● OY330KE	33	64K5419	1.49	1.34
● OY390KE	39	56K8251	1.43	1.29
● OY470KE	47	64K5430	1.47	1.32
● OY560KE	56	64K5435	1.43	1.29
● OY680KE	68	64K5438	1.49	1.34
● OY820KE	82	60K8742	1.43	1.29
● OY101KE	100	64K5392	1.47	1.32
● OY121KE	120	64K5398	1.34	1.21
● OY151KE	150	48K7355	1.34	1.21
● OY181KE	180	64K5406	1.30	1.17
● OY221KE	220	64K5411	1.34	1.21
● OY271KE	270	64K5415	1.30	1.17
● OY331KE	330	64K5420	1.30	1.17
● OY391KE	390	64K5425	1.30	1.17
● OY471KE	470	64K5431	1.30	1.17
● OY561KE	560	58K3450	1.30	1.17
● OY681KE	680	12B9980	1.36	1.22
● OY821KE	820	12K5259	1.30	1.17
● OY102KE	1k	64K5393	1.30	1.17
● OY122KE	1.2k	64K5399	1.36	1.22
● OY152KE	1.5k	64K5403	1.36	1.22
● OY182KE	1.8k	64K5407	1.30	1.17
● OY222KE	2.2k	64K5412	1.36	1.22
● OY272KE	2.7k	64K5416	1.34	1.21
● OY332KE	3.3k	64K5421	1.36	1.22
● OY392KE	3.9k	64K5426	1.36	1.22
● OY472KE	4.7k	64K5432	1.36	1.22
● OY562KE	5.6k	33K4328	1.36	1.22
● OY682KE	6.8k	64K5439	1.36	1.22
● OY822KE	8.2k	64K5442	1.30	1.17
● OY103KE	10k	64K5394	1.30	1.17
● OY123KE	12k	64K5400	1.30	1.17
● OY153KE	15k	31K8350	1.30	1.17
● OY183KE	18k	64K5408	1.30	1.17
● OY223KE	22k	64K5413	1.34	1.21
● OY273KE	27k	64K5417	1.30	1.17
● OY333KE	33k	64K5422	1.34	1.21
● OY393KE	39k	64K5427	1.30	1.17
● OY473KE	47k	13B003	1.34	1.21

➤ CONTINUED ➤

OX/OY SERIES CERAMIC COMPOSITION RESISTORS (CONT.)

OY SERIES, 2 WATT

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-99
OY563KE	56k	64K5436	1.36	1.22
OY683KE	68k	64K5440	1.33	1.20
OY823KE	82k	64K5443	1.33	1.20
OY104KE	100k	64K5395	1.36	1.23
OY124KE	120k	64K5401	1.53	1.38
OY154KE	150k	64K5404	1.59	1.43
OY184KE	180k	64K5409	1.57	1.41
OY224KE	220k	13B011	1.53	1.38
OY274KE	270k	52K9550	1.59	1.43
OY334KE	330k	64K5423	1.59	1.43
OY394KE	390k	64K5428	1.53	1.38
OY474KE	470k	64K5433	1.59	1.43
OY564KE	560k	64K5437	1.53	1.38
OY684KE	680k	64K5441	1.53	1.38
OY824KE	820k	64K5444	1.53	1.38
OY105KE	1M	64K5396	1.53	1.38

(72819)

CBT SERIES AXIAL CARBON COMPOSITON RESISTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features
- Wide Range of Resistance Values
- Designed for Pulse Withstand
- High Performance

Specifications
- Tolerance: ± 5%
- Voltage Coefficient: ± 0.0355/V
- Operating Temp. Range: -55°C to +125°C

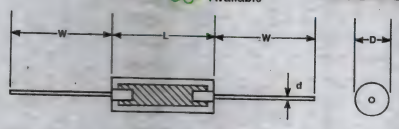
Mfg. Part No.	Resistance (Ohm)	Power Rating (mW)	Stock No.	Price Each 1-99
CBT25J1R0	1	250	21R0183	0.18
CBT25J220R	220	250	21R0186	0.32
CBT25J470R	470	250	22R0633	0.16
CBT25J1K0	1k	250	21R0179	0.18
CBT25J2K2	2.2k	250	21R8105	0.31
CBT25J47K	47k	250	22R0634	0.29
CBT25J100K	100k	250	51R8601	0.15
CBT25J1M5	1.5M	250	21R0182	0.48
CBT50J1R5	1.5	500	22R2867	0.22
CBT50J6R8	6.8	500	22R9712	0.57
CBT50J10R	10	500	22R0644	0.17
CBT50J22R	22	500	20R0433	0.56
CBT50J100R	100	500	21R8113	0.18
CBT50J150R	150	500	22R0646	0.18
CBT50J220R	220	500	22R2869	0.24
CBT50J1K0	1k	500	20R0429	0.17
CBT50J2K2	2.2k	500	22R2872	0.24
CBT50J47K	47k	500	22R5589	0.19
CBT50J22M	22M	500	22R2871	0.26

(177900)

CARBON COMPOSITION RESISTORS

RoHS Compliant Available

multicomp



ELECTRICAL SPECIFICATIONS

Model	Power Rating @ 55°C (W)	Resistance Range (Ohms)	Tolerance	L (mm)	D⊖(mm)	d⊖. (mm)	Working Voltage (V)	Overload Voltage (V)
MCRC-1/4	0.25	2R2 - 5.6 M	±5%	6.4 ±0.7	2.3 ±0.2	0.6	250	400
MCRC-1/2	0.5	2R2 - 15M	±5%	9.5 ±0.7	3.6 ±0.3	0.74	350	700
MCRC-1	1	2R7 - 1M	±10%	14.3 ±0.7	5.7 ±0.3	0.92	500	1000V

MCRC-1/4

Res. (Ohms)	Tape Cut Stock No.	Price Each 1-49	Res. (Ohms)	Tape Cut Stock No.	Price Each 1-49	Res. (Ohms)	Tape Cut Stock No.	Price Each 1-49
3.3	73K0301	0.35	510	73K0334	0.35	30k	73K0307	0.37
3.6	73K0302	0.35	560	73K0339	0.35	33k	72K6196	0.37
4.7	73K0322	0.35	620	73K0347	0.35	39k	72K6197	0.37
5.1	73K0331	0.35	680	72K6203	0.37	43k	73K0326	0.35

➤ CONTINUED ➤

CARBON COMPOSITION RESISTORS (CONT.)

Res. (Ohms)	Tape Cut Stock No.	Price Each 1-49	Res. (Ohms)	Tape Cut Stock No.	Price Each 1-49	Res. (Ohms)	Tape Cut Stock No.	Price Each 1-49
5.6	73K0332	0.35	750	73K0352	0.34	47k	72K6201	0.37
6.8	73K0345	0.35	820	72K6206	0.35	51k	73K0336	0.37
10	72K6176	0.36	910	73K0358	0.35	56k	73K0341	0.35
15	73K0270	0.35	1k	72K6178	0.37	68k	72K6204	0.35
20	73K0285	0.35	1.1k	73K0259	0.35	75k	73K0354	0.35
22	73K0289	0.37	1.2k	73K0264	0.36	82k	72K6208	0.37
30	73K0304	0.35	1.3k	73K0269	0.37	100k	72K6180	0.36
33	72K6193	0.35	1.5k	72K6183	0.37	110k	73K0260	0.55
39	73K0316	0.35	1.6k	73K0275	0.33	120k	73K0266	0.35
43	73K0323	0.37	1.8k	73K0279	0.37	150k	73K0272	0.35
47	72K6198	0.36	2k	72K6186	0.34	160k	73K0276	0.35
51	73K0333	0.37	2.2k	72K6188	0.37	200k	73K0287	0.35
56	72K6202	0.37	2.4k	73K0294	0.37	220k	73K0290	0.37
62	73K0346	0.35	2.7k	73K0297	0.37	270k	73K0298	0.35
68	73K0349	0.35	3k	73K0306	0.37	300k	73K0308	0.37
75	72K6205	0.35	3.3k	72K6195	0.36	330k	73K0310	0.35
82	73K0356	0.35	3.6k	73K0313	0.35	430k	73K0327	0.35
91	73K0357	0.35	3.9k	73K0318	0.35	470k	73K0329	0.34
100	72K6177	0.37	4.3k	73K0325	0.35	510k	73K0337	0.35
110	72K6182	0.42	4.7k	72K6200	0.37	560k	73K0342	0.35
120	73K0263	0.36	5.1k	73K0335	0.35	680k	73K0351	0.35
130	73K0268	0.37	5.6k	73K0340	0.36	910k	73K0360	0.35
150	73K0271	0.34	6.2k	73K0348	0.35	1M	72K6181	0.39
160	73K0274	0.37	6.8k	73K0350	0.37	1.1M	73K0261	0.37
180	73K0278	0.37	7.5k	73K0353	0.37	1.2M	73K0267	0.37
200	72K6185	0.36	8.2k	72K6207	0.37	1.5M	73K0273	0.38
220	72K6187	0.37	9.1k	73K0359	0.35	1.8M	73K0281	0.37
240	73K0293	0.35	10k	72K6179	0.36	2M	73K0288	0.38
270	72K6191	0.36	12k	73K0265	0.37	2.2M	73K0291	0.37
300	73K0305	0.37	15k	72K6184	0.37	2.4M	73K0296	0.55
330	72K6194	0.37	18k	73K0280	0.35	2.7M	73K0299	0.37
360	73K0312	0.35	20k	73K0286	0.37	3M	73K0309	0.37
390	73K0317	0.34	22k	72K6189	0.35	3.9M	73K0320	0.37
430	73K0324	0.35	24k	73K0295	0.35	4.7M	73K0330	0.38
470	72K6199	0.36	27k	72K6192	0.35	5.1M	73K0338	0.39

MCRC-1/2

2.2	73K0192	0.42	300	73K0211	0.44	15k	72K6150	0.43
2.4	73K0193	0.55	330	72K6160	0.44	18k	73K0190	0.42
2.7	73K0194	0.42	360	73K0217	0.44	20k	73K0197	0.44
3	73K0207	0.42	390	73K0221	0.44	22k	73K0199	0.44
6.2	73K0241	0.42	430	73K0227	0.42	24k	73K0204	0.42
3.3	73K0208	0.42	470	72K6164	0.44	27k	72K6158	0.44
3.9	73K0209	0.35	510	72K6167	0.43	30k	73K0213	0.44
4.7	73K0226	0.43	560	73K0237	0.43	33k	72K6162	0.43
5.1	73K0230	0.44	620	73K0244	0.43	47k	72K6166	0.43
5.6	73K0231	0.42	680	72K6170	0.42	51k	73K0235	0.42
6.8	73K0242	0.42	750	72K6174	0.44	56k	73K0239	0.42
8.2	73K0251	0.42	820	73K0253	0.44	62k	73K0246	0.44
10	72K6141	0.44	910	73K0257	0.42	68k	72K6172	0.44
15	72K6147	0.44	1k	72K6143	0.44	82k	73K0255	0.42
16	73K0185	0.42	1.1k	73K0169	0.43	100k	72K6145	0.43
20	73K0195	0.44	1.2k	73K0174	0.43	120k	73K0176	0.42
27	72K6155	0.42	1.3k	73K0179	0.44	150k	73K0182	0.42
30	73K0210	0.42	1.5k	72K6149	0.43	180k	73K0191	0.42
33	72K6159	0.43	1.6k	73K0187	0.42	200k	73K0198	0.44
39	73K0220	0.42	1.8k	73K0189	0.44	220k	72K6154	0.43
47	72K6163	0.43	2k	73K0196	0.43	270k	73K0205	0.44
51	73K0233	0.44	2.2k	72K6153	0.44	300k	73K0214	0.42
56	72K6168	0.42	2.4k	73K0203	0.43	330k	73K0215	0.42
62	73K0243	0.42	2.7k	72K6157	0.42	430k	73K0228	0.42
68	72K6169	0.42	3k	73K0212	0.44	470k	73K0229	0.43
75	72K6173	0.44	3.3k	72K6161	0.43	510k	73K0236	0.42
82	73K0252	0.42	3.6k	73K0218	0.44	560k	73K0240	0.42
91	73K0256	0.42	3.9k	73K0222	0.43	620k	73K0247	0.42
100	72K6142	0.44	4.7k	72K6165	0.44	1M	72K6146	0.52
110	73K0168	0.42	5.1	73K0234	0.43	2.2M	73K0200	0.52
120	73K0173	0.43	5.6	73K0238	0.44	3.3M	73K0216	0.57
150	72K6148	0.44	6.2	73K0245	0.42	10M	73K0167	0.53
180	73K0188	0.44	6.8k	72K6171	0.44	11M	73K0171	0.55
200	72K6151	0.42	8.2k	73K0254	0.42	12M	73K0177	0.55
220	72K6152	0.44	9.1k	73K0258	0.42	15M	73K0184	0.52
240	73K0202	0.42	10k	72K6144	0.43	...	...	...
270	72K6156	0.44	12k	73K0175	0.43	...	...	...

MCRC-1

2.7	73K0374	2.17	220	72K6218	2.12	10k	72K6212	2.14
4.7	73K0382	2.06	270	72K6223	2.17	15k	72K6216	2.18
6.8	73K0389	2.17	330	72K6226	2.06	18k	73K0372	2.06
8.2	73K0393	2.06	470	72K6230	2.14	22k	72K6220	2.06

➤ CONTINUED ➤

CARBON COMPOSITION RESISTORS (CONT.)

MCRC-1

Res. (Ohms)	Tape Cut Stock No.	Price Each 1-49	Res. (Ohms)	Tape Cut Stock No.	Price Each 1-49	Res. (Ohms)	Tape Cut Stock No.	Price Each 1-49
10	72K6209	2.14	560	73K0386	2.14	27k	72K6224	2.17
18	73K0369	2.06	680	73K0391	2.06	33k	72K6228	2.06
22	72K6217	1.92	820	73K0395	2.06	39k	73K0381	2.06
27	72K6222	2.06	1k	72K6211	2.14	47k	72K6232	2.06
33	72K6225	2.17	1.2k	73K0363	2.14	100k	72K6213	2.18
39	73K0378	2.06	1.5k	73K0367	2.17	150k	73K0368	2.17
47	72K6229	2.14	1.8k	73K0371	2.06	220k	72K6221	2.17
56	73K0385	2.06	2.2k	72K6219	2.17	270k	73K0376	2.06
68	73K0390	2.06	2.7k	73K0375	2.06	330k	73K0377	2.14
100	72K6210	2.06	3.3k	72K6227	2.12	470k	73K0383	2.06
120	73K0362	2.06	4.7k	72K6231	2.17	560k	73K0388	2.06
150	73K0366	2.06	5.6k	73K0387	2.06	1M	72K6214	2.06
180	73K0370	2.06	6.8k	73K0392	2.06	...	...	...

(92284)

30 SERIES HIGH ENERGY AXIAL LEADED WIREWOUND RESISTORS

RoHS Compliant Available

OHMITE

The High Energy Wirewound family of resistors employ special winding techniques to maximize the effective joule rating of each resistor.

DIMENSIONS (mm)

Series	Power (W)	Res. Range (Ohms)	Dimensions (mm) L	Dimensions (mm) D	Voltage (V)	Lead ga.
33	3	1-100	0.593" (15.1)	0.218" (5.5)	200	20
35	5	1.5-75	0.937" (23.8)	0.343" (8.7)	460	18
30	10	2-100	1.842" (46.8)	1.78" (10.3)	1000	18

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-49
3 WATT				
● 33J1R0E	1	64K8453	1.29	1.11
● 33J5R0E	5	64K8460	1.24	1.07
● 33J10RE	10	64K8454	1.24	1.07
● 33J50RE	50	64K8461	1.24	1.07
● 33J100E	100	64K8455	1.24	1.07
5 WATT				
● 35J2R5E	2.5	64K8468	1.41	1.21
● 35J12RE	12	64K8466	1.43	1.23
● 35J36RE	36	64K8470	1.41	1.21
● 35J47RE	47	64K8471	1.38	1.18
10 WATT				
● 30J2R0E	2	64K8416	1.78	1.53
● 30J4R7E	4.7	64K8419	1.85	1.59
● 30J6R8E	6.8	64K8421	1.83	1.57
● 30J15RE	15	64K8414	1.78	1.53
● 30J27RE	27	64K8417	1.78	1.53
● 30J50RE	50	64K8420	1.78	1.53
● 30J100E	100	64K8413	1.78	1.53

(88073)

PCB FABRICATION & ASSEMBLY

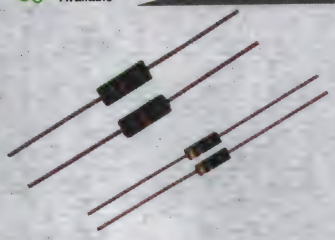
Quality US-based manufacturers—as fast as 48-hour turnaround!

(197415)

LITTLE DEMON™ CARBON COMPOSITION MOLDED RESISTORS

RoHS Compliant Available

OHMITE



Features

- Molded insulation for high dielectric strength
- Rugged construction
- High surge capabilities
- Comparable to "Mil" RC07, RC20, and RC32 types

The Little Demon Series are small, reliable carbon composition resistors with exceptional strength. They are made tough by a molding process that combines the leads, insulation and resistive element into an integrated unit. Along with their small size, Little Demons perform with low noise, dissipate heat rapidly and offer high temperature stability.

SPECIFICATIONS

Model	Wattage	Tolerance	Dimensions (in. / mm) Length	Dimensions (in. / mm) Max Diam.	Max. Voltage	Dielectic (VAC)	Lead dia.
0D	0.25	±5%	0.276 / 7	0.098 / 2.5	250	500	0.024 / 0.60
0F	0.5	±5%	0.406 / 10.3	0.15 / 3.8	350	700	0.028 / 0.70
0A	1	±10%	0.591 / 15	0.236 / 6	500	1000	0.035 / 0.9

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49	Price Each 50-99
0A SERIES				
● 0A22GKE	2.2	64K5064	2.20	2.07
● 0A27GKE	2.7	64K5067	2.29	2.15
● 0A33GKE	3.3	64K5070	2.20	2.07
● 0A51GKE	5.1	64K5078	2.20	2.07
● 0A56GKE	5.6	78K8684	2.20	2.07
● 0A100KE	10	64K5051	2.20	2.07
● 0A150KE	15	64K5058	2.20	2.07
● 0A220KE	22	78K8659	2.29	2.15
● 0A330KE	33	78K8666	2.29	2.15
● 0A390KE	39	64K5073	2.20	2.07
● 0A470KE	47	78K8675	2.20	2.07
● 0A560KE	56	64K5079	2.20	2.07
● 0A680KE	68	64K5082	2.26	2.12
● 0A101KE	100	64K5052	2.26	2.12
● 0A121KE	120	64K5056	2.20	2.07
● 0A151KE	150	78K8654	2.20	2.07
● 0A221KE	220	64K5065	2.29	2.15
● 0A271KE	270	64K5068	2.20	2.07
● 0A331KE	330	64K5071	2.20	2.07
● 0A471KE	470	64K5076	2.29	2.15
● 0A681KE	680	78K8690	2.20	2.07
● 0A751KE	750	64K5083	2.29	2.15
● 0A821KE	820	78K8700	2.20	2.07
● 0A122KE	1.2k	78K8650	2.20	2.07
● 0A152KE	1.5k	64K5059	2.20	2.07
● 0A222KE	2.2k	78K8660	2.20	2.07
● 0A272KE	2.7k	78K8664	2.20	2.07
● 0A472KE	4.7k	64K5077	2.29	2.15
● 0A562KE	5.6k	64K5080	2.29	2.15
● 0A103KE	10k	64K5054	2.26	2.12
● 0A123KE	12k	64K5057	2.20	2.07
● 0A153KE	15k	64K5060	2.20	2.07
● 0A183KE	18k	78K8656	2.20	2.07
● 0A223KE	22k	78K8661	2.20	2.07
● 0A273KE	27k	64K5069	2.29	2.15
● 0A333KE	33k	78K8668	2.29	2.15
● 0A473KE	47k	78K8676	2.20	2.07
● 0A563KE	56k	64K5081	2.26	2.12
● 0A104KE	100k	78K8648	2.29	2.15
● 0A184KE	180k	64K5063	2.20	2.07
● 0A474KE	470k	78K8677	2.20	2.07
● 0A105KE	1M	64K5055	2.29	2.15
0D SERIES				
● 0D22GJE	2.2	78K8728	0.42	0.40
● 0D27GJE	2.7	64K5110	0.44	0.41
● 0D47GJE	4.7	78K8765	0.42	0.40
● 0D51GJE	5.1	78K8766	0.44	0.41
● 0D100JE	10	64K5084	0.42	0.40
● 0D120JE	12	78K8710	0.42	0.40
● 0D200JE	20	78K8725	0.42	0.40
● 0D220JE	22	64K5102	0.42	0.40
● 0D240JE	24	64K5106	0.42	0.40
● 0D270JE	27	64K5111	0.42	0.40
● 0D330JE	33	64K5115	0.42	0.40
● 0D390JE	39	78K8755	0.42	0.40
● 0D430JE	43	78K8760	0.42	0.40

➤CONTINUED➤

LITTLE DEMON™ CARBON COMPOSITION MOLDED RESISTORS (CONT.)

OD SERIES

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49	Price Each 50-99
0D470JE	47	64K5121	0.44	0.41
0D510JE	51	64K5127	0.44	0.42
0D560JE	56	78K8770	0.42	0.40
0D620JE	62	78K8774	0.42	0.40
0D680JE	68	64K5135	0.44	0.41
0D750JE	75	64K5137	0.42	0.40
0D820JE	82	64K5140	0.42	0.40
0D101JE	100	64K5085	0.44	0.41
0D121JE	120	64K5090	0.44	0.41
0D151JE	150	64K5093	0.44	0.41
0D181JE	180	64K5096	0.42	0.40
0D201JE	200	78K8726	0.44	0.41
0D221JE	220	64K5103	0.44	0.41
0D241JE	240	64K5107	0.44	0.42
0D271JE	270	64K5112	0.44	0.41
0D301JE	300	64K5114	0.42	0.40
0D331JE	330	64K5116	0.44	0.41
0D391JE	390	64K5118	0.42	0.40
0D471JE	470	64K5122	0.44	0.41
0D511JE	510	64K5128	0.44	0.41
0D561JE	560	64K5131	0.42	0.40
0D621JE	620	78K8775	0.42	0.40
0D681JE	680	64K5136	0.44	0.41
0D751JE	750	78K8783	0.42	0.40
0D821JE	820	64K5141	0.42	0.40
0D102JE	1k	64K5086	0.42	0.40
0D122JE	1.2k	64K5091	0.42	0.40
0D152JE	1.5k	64K5094	0.44	0.41
0D182JE	1.8k	64K5097	0.42	0.40
0D202JE	2k	64K5099	0.42	0.40
0D222JE	2.2k	64K5104	0.44	0.41
0D242JE	2.4k	64K5108	0.42	0.40
0D272JE	2.7k	64K5113	0.44	0.41
0D302JE	3k	78K8739	0.42	0.40
0D332JE	3.3k	64K5117	0.44	0.41
0D392JE	3.9k	64K5119	0.42	0.40
0D472JE	4.7k	64K5123	0.42	0.40
0D512JE	5.1k	64K5129	0.44	0.41
0D562JE	5.6k	64K5132	0.42	0.40
0D622JE	6.2k	64K5134	0.42	0.40
0D752JE	7.5k	64K5138	0.42	0.40
0D822JE	8.2k	78K8786	0.42	0.40
0D912JE	9.1k	64K5143	0.42	0.40
0D103JE	10k	64K5087	0.42	0.40
0D123JE	12k	78K8711	0.42	0.40
0D153JE	15k	78K8717	0.44	0.42
0D203JE	20k	64K5100	0.42	0.40
0D223JE	22k	64K5105	0.42	0.40
0D273JE	27k	78K8734	0.42	0.40
0D333JE	33k	78K8744	0.44	0.41
0D393JE	39k	78K8756	0.42	0.40
0D473JE	47k	64K5124	0.42	0.40
0D513JE	51k	64K5130	0.42	0.40
0D563JE	56k	78K8771	0.42	0.40
0D104JE	100k	64K5088	0.44	0.41
0D154JE	150k	69K6249	0.42	0.40
0D204JE	200k	64K5101	0.42	0.40
0D224JE	220k	78K8729	0.42	0.40
0D244JE	240k	64K5109	0.44	0.42
0D334JE	330k	78K8745	0.42	0.40
0D474JE	470k	64K5125	0.42	0.40
0D514JE	510k	78K8767	0.42	0.40
0D564JE	560k	64K5133	0.44	0.41
0D105JE	1M	64K5089	0.44	0.41
0D155JE	1.5M	64K5095	0.42	0.40
0F SERIES				
0F22GJE	2.2	78K8815	0.52	0.49
0F27GJE	2.7	78K8825	0.52	0.49
0F33GJE	3.3	64K5178	0.54	0.51
0F39GJE	3.9	78K8841	0.54	0.51
0F47GJE	4.7	64K5184	0.52	0.49
0F51GJE	5.1	78K8855	0.52	0.49
0F100JE	10	64K5144	0.54	0.51

➤CONTINUED➤

LITTLE DEMON™ CARBON COMPOSITION MOLDED RESISTORS (CONT.)

0F SERIES

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49	Price Each 50-99
0F200JE	20	64K5163	0.52	0.49
0F220JE	22	64K5168	0.54	0.51
0F330JE	33	78K8832	0.52	0.49
0F390JE	39	78K8842	0.54	0.51
0F470JE	47	64K5185	0.54	0.51
0F680JE	68	64K5195	0.52	0.49
0F750JE	75	78K8877	0.54	0.51
0F820JE	82	64K5198	0.52	0.49
0F101JE	100	64K5145	0.52	0.49
0F111JE	110	64K5150	0.52	0.49
0F121JE	120	64K5151	0.55	0.51
0F131JE	130	64K5154	0.52	0.49
0F151JE	150	64K5156	0.54	0.51
0F181JE	180	64K5161	0.52	0.49
0F201JE	200	64K5164	0.52	0.49
0F221JE	220	64K5169	0.52	0.49
0F271JE	270	64K5173	0.52	0.49
0F331JE	330	64K5179	0.55	0.51
0F391JE	390	78K8843	0.52	0.49
0F471JE	470	64K5186	0.54	0.51
0F511JE	510	64K5190	0.54	0.51
0F621JE	620	78K8868	0.52	0.49
0F681JE	680	64K5196	0.54	0.51
0F751JE	750	78K8878	0.52	0.49
0F821JE	820	78K8883	0.52	0.49
0F911JE	910	78K8889	0.54	0.51
0F102JE	1k	64K5146	0.54	0.51
0F122JE	1.2k	64K5152	0.54	0.51
0F132JE	1.3k	64K5155	0.54	0.51
0F152JE	1.5k	64K5157	0.54	0.51
0F182JE	1.8k	64K5162	0.52	0.49
0F202JE	2k	64K5165	0.54	0.51
0F222JE	2.2k	64K5170	0.54	0.51
0F272JE	2.7k	64K5174	0.52	0.49
0F302JE	3k	64K5176	0.52	0.49
0F332JE	3.3k	64K5180	0.55	0.51
0F392JE	3.9k	78K8844	0.52	0.49
0F472JE	4.7k	73K6611	0.54	0.51
0F562JE	5.6k	64K5192	0.52	0.49
0F822JE	8.2k	78K8884	0.54	0.51
0F103JE	10k	64K5147	0.54	0.51
0F153JE	15k	78K8802	0.52	0.49
0F183JE	18k	78K8808	0.52	0.49
0F203JE	20k	64K5166	0.52	0.49
0F223JE	22k	78K8817	0.55	0.51
0F273JE	27k	64K5175	0.52	0.49
0F333JE	33k	64K5181	0.54	0.51
0F473JE	47k	64K5187	0.52	0.49
0F513JE	51k	64K5191	0.54	0.51
0F683JE	68k	74K2996	0.52	0.49
0F823JE	82k	64K5199	0.52	0.49
0F104JE	100k	78K8794	0.55	0.51
0F124JE	120k	64K5153	0.54	0.51
0F154JE	150k	78K8803	0.54	0.51
0F204JE	200k	64K5167	0.52	0.49
0F224JE	220k	64K5171	0.52	0.49
0F244JE	240k	66K6841	0.54	0.51
0F274JE	270k	78K8826	0.52	0.49
0F334JE	330k	78K8833	0.52	0.49
0F474JE	470k	64K5188	0.55	0.51
0F754JE	750k	64K5197	0.52	0.49
0F105JE	1M	64K5148	0.55	0.51
0F165JE	1.6M	64K5160	0.52	0.49
0F205JE	2M	78K8813	0.52	0.49
0F475JE	4.7M	64K5189	0.52	0.49
0F106JE	10M	64K5149	0.52	0.49
0F156JE	15M	78K8805	0.54	0.51
0F206JE	20M	78K8814	0.54	0.51

(80008)

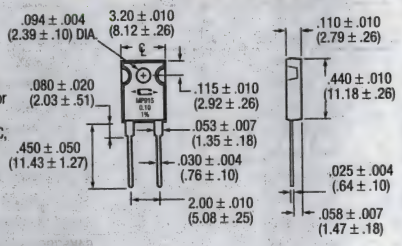
THICK FILM RESISTORS – HEAT SINKABLE

MP915 SERIES TO-126 STYLE POWER FILM RESISTORS

RoHS Compliant Available

CADDOCK HIGH PERFORMANCE FILM RESISTORS

Features:
- Non-inductive design
- Heat sink mountable



Specifications:
- Power Rating and Derating: 15 Watts at +25°C case temp., see General Notes for the MP series for Derating *on* [88116]. Without a heat sink, in Free Air at +25°C, the MP915 is rated for 1.25 Watts.
- Temperature Coefficient, TC referenced to +25°C, ΔR taken at +150C:
- 0.50Ω to 1.00K: -20 to +80ppm/°C; 0.050Ω to 0.49Ω: 0 to +200ppm/°C; 0.020Ω to 0.049Ω: 0 to +300ppm/°C. Continuous Operating Voltage: 200VAC$_{RMS}$
- Dielectric Strength: 1500VAC$_{RMS}$, Resistor element is isolated from the case
- Thermal Resistance (Film to Case): 8.33°C/W

Mfg. Part No.	Res. (Ohms)	Res. Tol.	Stock No.	Price Each 1-49	Price Each 50-99
● MP915-0.020-5%	0.02	5 %	02H2351	7.03	5.65
● MP915-0.050-1%	0.05	1%	02H2352	7.11	5.72
● MP915-0.10-1%	0.1	1%	02H2353	5.23	4.21
● MP915-0.20-1%	0.2	1%	02H2354	4.92	3.96
● MP915-0.50-1%	0.5	1%	02H2355	4.92	3.96
● MP915-1.00-1%	1	1%	02H2356	4.91	3.94
● MP915-2.00-1%	2	1%	02H2360	4.17	3.35
● MP915-5.00-1%	5	1%	02H2363	4.98	4.00
● MP915-10.0-1%	10	1%	02H2358	4.43	3.56
● MP915-20.0-1%	20	1%	02H2361	4.43	3.56
● MP915-25.0-1%	25	1%	86H8817	5.31	5.07
● MP915-50.0-1%	50	1%	02H2364	4.43	3.56
● MP915-75.0-1%	75	1%	04K3536	3.06	2.92
● MP915-100-1%	100	1%	02H2359	4.33	3.48
● MP915-200-1%	200	1%	02H2362	4.43	3.56
● MP915-1.00K-1%	1k	1%	02H2357	20.25	16.27

(73478)

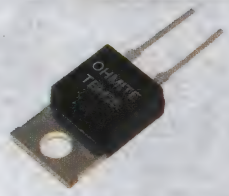
TBH25 SERIES 25 WATT THICK FILM RESISTORS

RoHS Compliant Available

OHMITE

Features
- Non-Inductive Performance
- Low Thermal Resistance
- Resistive element is electrically insulated from metal heat sink mounting tab.

Applications
- Power Supplies
- Industrial Controls
- Automotive Steering
- Pre-load/Damping
- Snubber/Bleeder



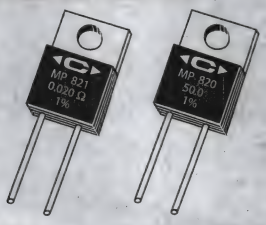
Specifications
- Tolerance: ±5%
- Power Rating @ 20°C: 25W
- Package: TO-220
- Max. Operating Voltage: 350V
- Dielectric Strength: 1000 VDC
- Operating Temp. Range: -55°C to +150°C
- Temperature Coeff.: 2 to 10Ω @ ±100ppm/°C; 11 to 10kΩ @ ±50ppm/°C

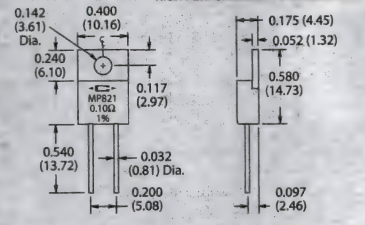
Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-99	Price Each 100-249
● TBH25P2R00JE	2	64K6741	6.08	5.47	4.84
● TBH25P3R90JE	3.9	64K6743	6.08	5.47	4.84
● TBH25P5R10JE	5.1	64K6748	6.08	5.47	4.84
● TBH25P7R50JE	7.5	64K6750	6.08	5.47	4.84
● TBH25P10R0JE	10	64K6735	6.30	5.67	5.01
● TBH25P15R0JE	15	64K6737	5.95	5.36	4.74
● TBH25P22R0JE	22	64K0621	5.95	5.36	4.74
● TBH25P24R0JE	24	64K0623	5.95	5.36	4.74
● TBH25P33R0JE	33	64K6744	5.95	5.36	4.74
● TBH25P39R0JE	39	51M1917	5.95	5.36	4.74
● TBH25P47R0JE	47	64K6746	5.95	5.36	4.74
● TBH25P51R0JE	51	51M1918	5.95	5.36	4.74
● TBH25P75R0JE	75	64K6751	5.95	5.36	4.74
● TBH25P100RJE	100	64K6736	5.95	5.36	4.74
● TBH25P150RJE	150	64K6738	5.95	5.36	4.74
● TBH25P470RJE	470	64K6747	5.95	5.36	4.74
● TBH25P1K00JE	1k	64K6733	5.95	5.36	4.74

(80132)

MP820, MP821: TO-220 STYLE POWER FILM RESISTORS

CADDOCK HIGH PERFORMANCE FILM RESISTORS





Features
- Up to 20 Watts at +25°C Case Temp.
- Heat Sink Mountable with Rugged Metal Tab Construction
- Resistor element is electrically isolated from the mounting surface
- Non-Inductive design for high speed switching, snubbers, and rf applications

Specifications
- Power Rating: 20 Watts at +25°C Case Temp., see General Notes for the MP series Derating online.
- Without a heat sinkn, in free air at +25°C, the **MP820 series** and **MP821 series** are rated at 2.25 Watts
- Voltage Rating: 300 Volts rms AC
- Dielectric Strength: 1500 Volts rms AC

Mfg. Part No.	Res. (Ohms)	Res. Tol. (+/- %)	Temp. Coef. (ppm/°C)	Stock No.	Price Each 1-49	Price Each 50-99	Price Each 100-499
MP821-0.020-1%	0.02	1%	0, +300ppm/°C	95H7698	14.87	11.92	11.02
MP821-0.10-1%	0.1	1%	0ppm/°C to +200ppm/°C	87H8469	14.06	11.26	10.42
MP821-0.50-1%	0.5	1%	-20ppm/°C to +80ppm/°C	92H5905	13.28	10.64	9.84
MP821-1.0-1%	1	1%	-20ppm/°C to +80ppm/°C	73H3593	11.93	9.56	8.83
MP821-2.00-1%	2	1%	-20ppm/°C to +80ppm/°C	97H8014	12.08	9.67	8.94
MP821-5.00-1%	5	1%	+50, -20ppm/°C	45J3601	11.93	9.56	8.83
MP820-10.0-1%	10	1%	+50, -20ppm/°C	87H8070	9.34	7.48	6.92
MP820-20.0-1%	20	1%	+50, -20ppm/°C	87H8075	8.82	7.07	6.54
MP820-25.0-1%	25	1%	+50, -20ppm/°C	87H8078	9.34	7.48	6.92
MP820-50.0-1%	50	1%	+50, -20ppm/°C	87H8079	8.82	7.07	6.54
MP820-75.0-1%	75	1%	+50, -20ppm/°C	87H8080	9.34	7.48	6.92
MP820-100-1%	100	1%	+50, -20ppm/°C	73H3595	9.22	7.39	6.84
MP820-1.00K-1%	1 K	1%	+50, -20ppm/°C	87H8090	7.08	5.67	5.24

(80226)

MP916, MP930, MP925 SERIES TO-220 STYLE POWER FILM RESISTORS

RoHS Compliant Available

CADDOCK HIGH PERFORMANCE FILM RESISTORS

Features:
- Up to 30W at +25°C case temperature
- Non-inductive, from 0.010Ω to 100kΩ
- Heat Sink Mountable

Specifications:
- Power Rating: At +25°C case temp.: MP916: 16 Watts, MP930: 30 Watts, MP925: 25 Watts, see General Notes for the MP series *on* [88116].
- Without a heat sink, in Free Air at +25°C, the MP916, MP925, and MP930 are rated for 2.25 Watts.
- Available values: MP916: 0.010Ω to 0.019Ω, 16W; MP930: 0.020Ω to 4.99kΩ, 30W; MP925: 5kΩ to 100kΩ, 25W
- Temperature Coefficient: TC Referenced to +25°C, ΔR Taken at +150°C: 0.50Ω and Above: -20 to +80ppm/°C; 0.050 to 0.49Ω: 0 to +200 ppm/°C; 0.020Ω to 0.049Ω: 0 to +300 ppm/°C; 0.010Ω: 0 to +500 ppm/°C
- Maximum Continuous Operating Voltages: MP916: Power Limited; MP930: 250VAC$_{RMS}$; MP925: 500VAC$_{RMS}$
- Dielectric Strength: 1500VAC$_{RMS}$, With the Resistor Element Isolated From Case
- Thermal Resistance (Film to Case): MP916: 7.8°C/W; MP930: 4.2°C/W; MP925: 5°C/W

Mfg. Part No.	Res. (Ohms)	Res. Tol. (+/- %)	Watts	Stock No.	Price Each 1-9	Price Each 10-24
● MP916-0.010-5%	0.01	5 %	16	02H2366	9.47	8.36
● MP930-0.020-5%	0.02	5 %	30	02H2372	7.66	6.76
● MP930-0.050-1%	0.05	1%	30	02H2373	7.66	6.76
● MP930-0.10-1%	0.1	1%	30	02H2374	5.45	4.81
● MP930-0.20-1%	0.2	1%	30	02H2375	5.62	4.97
● MP930-0.50-1%	0.5	1%	30	02H2376	5.57	4.92
● MP930-1.00-1%	1	1%	30	02H2377	5.35	4.73
● MP930-2.00-1%	2	1%	30	02H2381	4.80	4.24
● MP930-5.00-1%	5	1%	30	02H2386	5.35	4.73
● MP930-10.0-1%	10	1%	30	02H2379	4.93	4.36
● MP930-20.0-1%	20	1%	30	02H2383	4.93	4.36
● MP930-25.0-1%	25	1%	30	02H2385	4.93	4.36
● MP930-50.0-1%	50	1%	30	02H2387	4.87	4.30
● MP930-75.0-1%	75	1%	30	02H2389	4.80	4.24
● MP930-100-1%	100	1%	30	02H2380	4.80	4.24
● MP930-200-1%	200	1%	30	02H2384	4.87	4.29
● MP930-500-1%	500	1%	30	02H2388	4.87	4.29
● MP930-1.00K-1%	1k	1%	30	02H2378	5.42	4.78
● MP930-2.00K-1%	2k	1%	30	02H2382	4.87	4.29
● MP925-5.00K-1%	5k	1%	25	02H2370	4.87	4.29
● MP925-10.0K-1%	10k	1%	25	02H2367	8.95	7.90
● MP925-20.0K-1%	20k	1%	25	02H2369	8.95	7.90

➤CONTINUED➤

MP916, MP930, MP925 SERIES TO-220 STYLE POWER FILM RESISTORS (CONT.)

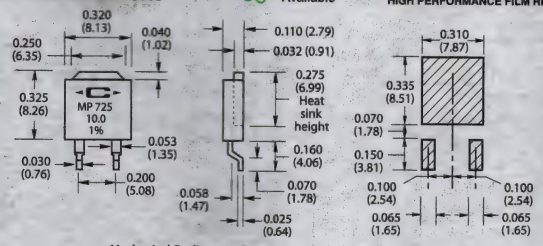
Mfg. Part No.	Res. (Ohms)	Res. Tol. (+/- %)	Watts	Stock No.	Price Each 1-9	Price Each 10-24
MP925-50.0K-1%	50k	1%	25	02H2371	4.87	4.29
MP925-100K-1%	100k	1%	25	02H2368	9.47	8.36

(73480)

MP725: D-PAK STYLE SMT POWER FILM RESISTORS

RoHS Compliant Available

CADDOCK HIGH PERFORMANCE FILM RESISTORS



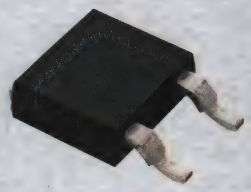
Mechanical Outline

Solderable Contact Area

All Dimensions in Inches and (millimeters)

Features:
- Up to 25 Watts at +25° Case Temp.
- Non-inductive design

Specifications:
- Power rating: 25 Watts at +25° Case Temp., see General Notes for the MP series *on* [88116].
- Voltage: 200 VRMS AC
- Temp. Coeff. ΔR taken at +150°C, ref. +25°C:
  0.50 ohm to 1.00K: -20 to +80 ppm/°C
  0.050 ohm to 0.49 ohm: 0 to +200 ppm/°C
  0.020 to 0.049 ohm: 0 to +300 ppm/°C
- Dielectric Strength: 1500 VRMS AC, the resistor element is isolated from the metal mounting surface.
- Soldering Note: During surface mount soldering the soldering temperature profile must not cause the metal tab of this resistor to exceed 219°C. The MP725 is not compatible with high temperature "Lead(Pb)-Free" solder reflow profiles.



Mfg. part No.	Res. (Ohms)	Res. Tol. (+/- %)	Watts	Stock No.	Price Each 1-9	Price Each 10-24
MP725-0.050-1%	0.05	1%	25	88H1043	9.11	8.07
MP725-0.10-1%	0.1	1%	25	81H3871	6.68	5.92
MP725-0.20-1%	0.2	1%	25	87H5670	7.07	6.27
MP725-0.50-1%	0.5	1%	25	87H8850	6.68	5.92
MP725-1.00-1%	1	1%	25	81H3869	9.30	8.23
MP725-2.00-1%	2	1%	25	83H8056	5.70	5.04
MP725-5.00-1%	5	1%	25	04K3531	6.75	5.98
MP725-10.0-1%	10	1%	25	04K3529	8.41	7.45
MP725-20.0-1%	20	1%	25	77C4957	22.45	19.87
MP725-25.0-1%	25	1%	25	65H8018	6.03	5.33
MP725-50.0-1%	50	1%	25	22C7948	6.03	5.33
MP725-75.0-1%	75	1%	25	07J6750	5.70	5.04
MP725-100-1%	100	1%	25	65H8015	5.70	5.04
MP725-500-1%	500	1%	25	19J7380	5.70	5.04

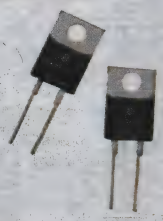
(84929)

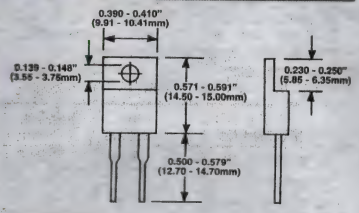
TCH35 SERIES 35 WATT THICK FILM POWER RESISTORS

RoHS Compliant Available

OHMITE

Applications
- Switching Power Supplies
- Low & High Frequency Snubbers





Features
- 35W Power Rating @ 25°C
- Very Low Inductance
- Single Screw Mounting
- Low Thermal Resistance to Heat Sink: R_{Th}<4.28°C/W
- Resistance Element Electrically Insulated From Metal Heat Sink Mounting Tab.

Tighter tolerances available; *go online or call.*

Specifications
- Tolerance: J = ±5%
- Temperature Coefficient: 1Ω–10Ω: ±(100ppm+0.002Ω/°C; 10Ω and Above: ±50ppm/°C
- Max. Operating Voltage: 350V
- Dielectric Strength: 1800VAC
- Operating Temperature: -55°C to +175°C
- Case Style: TO-220

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-99	Price Each 100-249	Price Each 250-499
TCH35PR100JE	0.1	64K6753	9.23	8.31	7.35	6.24
TCH35PR220JE	0.22	64K6756	9.23	8.31	7.35	6.24

➤CONTINUED➤

TCH35 SERIES 35 WATT THICK FILM POWER RESISTORS (CONT.)

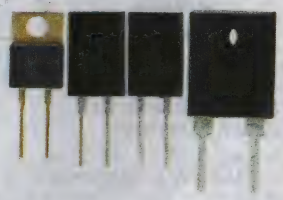
Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-99	Price Each 100-249	Price Each 250-499
TCH35PR330JE	0.33	64K6758	9.23	8.31	7.35	6.24
TCH35PR510JE	0.51	64K6761	9.23	8.31	7.35	6.24
TCH35P1R00JE	1	54K5022	6.98	6.28	5.56	4.72
TCH35P1R50JE	1.5	64K6766	6.98	6.28	5.56	4.72
TCH35P2R00JE	2	64K6773	7.23	6.51	5.76	4.89
TCH35P2R20JE	2.2	57K6134	6.98	6.28	5.56	4.72
TCH35P3R30JE	3.3	64K6782	7.15	6.43	5.69	4.83
TCH35P3R90JE	3.9	64K6783	6.98	6.28	5.56	4.72
TCH35P5R60JE	5.6	64K6792	6.98	6.28	5.56	4.72
TCH35P7R50JE	7.5	64K6796	6.98	6.28	5.56	4.72
TCH35P10R0JE	10	73J8664	6.98	6.28	5.56	4.72
TCH35P15R0JE	15	64K6769	8.68	7.81	6.91	5.87
TCH35P24R0JE	24	64K6778	6.98	6.28	5.56	4.72
TCH35P33R0JE	33	73J8663	6.98	6.28	5.56	4.72
TCH35P51R0JE	51	64K6793	6.98	6.28	5.56	4.72
TCH35P75R0JE	75	64K6797	6.98	6.28	5.56	4.72
TCH35P100RJE	100	73J8660	6.98	6.28	5.56	4.72
TCH35P220RJE	220	64K6777	6.98	6.28	5.56	4.72
TCH35P330RJE	330	73J8656	6.98	6.28	5.56	4.72
TCH35P1K00JE	1k	64K6764	6.98	6.28	5.56	4.72
TCH35P10K0JE	10k	64K6767	6.98	6.28	5.56	4.72

(48982)

MCTR SERIES 20W, 35W, AND 50W TO-220 AND 100W TO-247 STYLE POWER RESISTORS

RoHS Compliant Available

multicomp



Features
- Non-inductive package
- Electrically isolated case
- Molded case for environmental protection
- 35W and 50W have single screw mounting to heat sink

Specifications
- Tolerance: ±5%
- Maximum working voltage: 350V
- Temp. coeff: ±100ppm/°C (T1); ±50ppm/°C (T2)
- Power rating @ 25°C w/ heat sink: Up to 100W
- Oper. temp. Range: -65C to +150°C

Mfg. Part No.	Resistance (Ω)	Stock No.	Price Each 1-24
MCTR100 SERIES, POWER RATING: 100W, TO-247 STYLE			
MCTR100T3-1R00JB	1	01P2120	16.79
MCTR100T1-5R00JB	5	01P2122	16.79
MCTR100T2-15R0JB	15	01P2126	16.79
MCTR100T2-22R0JB	22	01P2128	17.63
MCTR100T2-150RJB	150	01P2127	16.79
MCTR100T2-220RJB	220	01P2129	16.79
MCTR100T2-2701JB	2.7k	01P2131	16.79
MCTR20 SERIES, POWER RATING: 20W, TO-220 STYLE			
MCTR20T1-5R00JB	5	01P2139	5.60
MCTR20T2-22R0JB	22	01P2145	5.60
MCTR20T2-51R0JB	51	01P2153	5.60
MCTR20T2-150RJB	150	01P2144	5.60
MCTR20T2-220RJB	220	01P2146	5.60
MCTR20T2-470RJB	470	01P2151	5.60
MCTR20T2-1001JB	1k	01P2141	5.60
MCTR20T2-1002JB	10k	01P2142	5.60
MCTR35 SERIES, POWER RATING: 35W, TO-220 STYLE			
MCTR35T3-1R00JB	1	01P2154	6.53
MCTR35T1-5R00JB	5	01P2156	6.53
MCTR35T1-10R0JB	10	01P2155	6.53
MCTR35T2-15R0JB	15	01P2160	6.53
MCTR35T2-22R0JB	22	01P2162	6.86
MCTR35T2-33R0JB	33	01P2166	6.86
MCTR35T2-100RJB	100	01P2157	6.53
MCTR35T2-220RJB	220	01P2163	6.86
MCTR35T2-1001JB	1k	01P2158	6.86
MCTR35T2-2701JB	2.7k	01P2165	6.53
MCTR35T2-5001JB	5k	01P2169	6.53
MCTR35T2-1002JB	10k	01P2159	6.53
MCTR50 SERIES, POWER RATING: 50W, TO-220 STYLE			
MCTR50T1-10R0JB	10	01P2172	8.40
MCTR50T2-15R0JB	15	01P2177	8.40
MCTR50T2-24R0JB	24	01P2181	8.40
MCTR50T2-51R0JB	51	01P2187	8.40

➤CONTINUED➤

THICK FILM RESISTORS – HEAT SINKABLE

MCTR SERIES 20W, 35W, AND 50W TO-220 AND 100W TO-247 STYLE POWER RESISTORS (CONT.)

MCTR50 SERIES, POWER RATING: 50W, TO-220 STYLE

Mfg. Part No.	Resistance (Ω)	Stock No.	Price Each 1-24
● MCTR50T2-150RJB	150	01P2178	8.40
● MCTR50T2-220RJB	220	01P2180	8.40
● MCTR50T2-470RJB	470	01P2185	8.40
● MCTR50T2-1001JB	1k	01P2175	8.40
● MCTR50T2-2701JB	2.7k	01P2182	8.40
● MCTR50T2-5001JB	5k	01P2186	8.40
● MCTR50T2-1002JB	10k	01P2176	8.82

(132352)

TDH35 SERIES THICK–FILM POWER RESISTORS

RoHS Compliant Available

OHMITE

Features
- SMD - TO-263 package configuration
- A molded case for environmental protection
- Resistor element is electrically insulated from the metal sink tab
- Ideal for pulse-loading, pre-charge, bleeder, and snubber applications

Features
- Power rating @ 25°C: 35W
- Heat resistance to cooling plate: Rth <4.28 °K/W
- Dielectric Strength: 1,800VAC
- Operating Temperature Range: -55°C to +150°C
- Temperature Coeff.: Between 1 ohms and 11Ω, ± (100ppm+0.002Ω)/°C; 10Ω and above, ±50ppm/°C (referenced to 25°C, Δ-R taken at +105°C

Mfg. Part No.	Res. (Ohms)	Res. Tol. (+/- %)	Stock No.	Price Each 1-9	Price Each 10-49
● TDH35P5R00JE	5	± 5%	64K6828	10.12	8.68
● TDH35P47R0JE	47	± 5%	64K6826	8.91	7.65
● TDH35P100RJE	100	± 5%	64K6812	8.91	7.65

(80011)

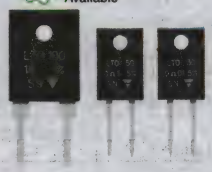
LTO SERIES THICK FILM POWER RESISTORS

RoHS Compliant Available

VISHAY

Features
- Direct mounting ceramic on heatsink
- Compact TO-247 or TO-220 package
- Non Inductive element

Specifications
- Resistance Tol.: ±5%
- Limiting Element Voltage Max.: 375V
- Oper. Temp. Range Max.: -55°C to +175°C



LTO30 SERIES, VOLTAGE: 250V, TO-220, POWER: 30 WATT

Mfg. Part No.	Res. (Ohms)	Temp. Coeff.	Stock No.	Price Each 1-9
● LTO030FR0100JTE3	0.01	± 900ppm/°C	67M0130	6.99
● LTO030FR1000JTE3	0.1	± 250ppm/°C	67M0152	5.82
● LTO030F1R000JTE3	1	± 150ppm/°C	67M0161	5.16
● LTO030F2R200JTE3	2.2	± 150ppm/°C	67M0181	4.85
● LTO030F5R000JTE3	5	± 150ppm/°C	67M0213	5.65
● LTO030F10R00JTE3	10	± 150ppm/°C	67M0165	4.85
● LTO030F15R00JTE3	15	± 150ppm/°C	67M0174	4.85
● LTO030F22R00JTE3	22	± 150ppm/°C	67M0187	4.85
● LTO030F10001JTE3	10k	± 150ppm/°C	67M0171	4.85
LTO50 SERIES, VOLTAGE: 250V, TO-220, POWER: 50 WATT				
● LTO050FR0220JTE3	0.022	± 700ppm/°C	67M0235	8.52
● LTO050F1R000JTE3	1	± 150ppm/°C	67M0253	5.91
● LTO050F5R000JTE3	5	± 150ppm/°C	67M0287	6.50
● LTO050F10R00JTE3	10	± 150ppm/°C	67M0256	5.91
● LTO050F100R0JTE3	100	± 150ppm/°C	67M0258	6.26
LTO100 SERIES, VOLTAGE: 375V, TO-247, POWER: 100 WATT				
● LTO100F1R000JTE3	1	± 150ppm/°C	67M0312	10.93
● LTO100F6R800FTE3	6.8	± 150ppm/°C	09N0338	13.62
● LTO100F10R00JTE3	10	± 150ppm/°C	46M5828	10.93
● LTO100F15R00JTE3	15	± 150ppm/°C	67M0327	10.93
● LTO100F100R0JTE3	100	± 150ppm/°C	67M0316	10.93
● LTO100F10000JTE3	1k	± 150ppm/°C	67M0319	10.93

(105958)

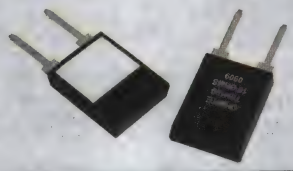
TEH100 SERIES 100 WATT THICK FILM POWER RESISTORS FOR HIGH FREQUENCY AND PULSE LOADING APPLICATIONS

RoHS Compliant Available

OHMITE

Features
- Non-Inductive design
- Low thermal resistance
- TO-247 package
- Single screw mounting
- Resistor package insulated from heat sink

Specifications
- Resistance range: 0.05Ω to 1MΩ
- Max. working voltage: 350V
- Temp. Coefficient. ± 50ppm/°C



Mfg. Part No.	Resistance (Ohms)	Res. Tol.	Stock No.	Price Each 1-24	Price Each 25-99
● TEH100MR050JE	0.05	± 5%	51R4520	12.21	11.16
● TEH100MR075JE	0.075	± 5%	51R4521	12.21	11.16
● TEH100MR100JE	0.1	± 5%	51R4522	12.21	11.16
● TEH100MR200JE	0.2	± 5%	51R4523	12.21	11.16
● TEH100MR500JE	0.5	± 5%	51R4524	12.21	11.16
● TEH100M1R00FE	1	± 1%	51R4526	11.09	10.13
● TEH100M1R00JE	1	± 5%	51R4527	10.61	9.69
● TEH100M2R00FE	2	± 1%	51R4534	10.70	9.78
● TEH100M2R00JE	2	± 5%	51R4535	10.61	9.69
● TEH100M2R50FE	2.5	± 1%	51R4536	10.70	9.78
● TEH100M2R50JE	2.5	± 5%	51R4537	10.61	9.69
● TEH100M3R00FE	3	± 1%	51R4542	10.70	9.78
● TEH100M3R00JE	3	± 5%	51R4543	10.99	10.04
● TEH100M5R00FE	5	± 1%	51R4545	10.70	9.78
● TEH100M5R00JE	5	± 5%	51R4546	10.61	9.69
● TEH100M7R50FE	7.5	± 1%	51R4549	10.70	9.78
● TEH100M7R50JE	7.5	± 5%	51R4550	10.61	9.69
● TEH100M10R0FE	10	± 1%	51R4528	10.70	9.78
● TEH100M10R0JE	10	± 5%	51R4529	10.61	9.69
● TEH100M15R0FE	15	± 1%	51R4532	10.70	9.78
● TEH100M15R0JE	15	± 5%	51R4533	10.61	9.69
● TEH100M20R0FE	20	± 1%	51R4538	10.70	9.78
● TEH100M20R0JE	20	± 5%	51R4539	10.61	9.69
● TEH100M24R0JE	24	± 5%	51R4540	10.61	9.69
● TEH100M25R0FE	25	± 1%	51R4541	10.70	9.78
● TEH100M50R0FE	50	± 1%	51R4547	11.09	10.13
● TEH100M50R0JE	50	± 5%	51R4548	10.61	9.69
● TEH100M100RFE	100	± 1%	51R4530	10.70	9.78
● TEH100M100RJE	100	± 5%	51R4531	10.61	9.69
● TEH100M470RJE	470	± 5%	51R4544	10.61	9.69
● TEH100M750RJE	750	± 5%	51R4551	10.61	9.69
● TEH100M1K00JE	1k	± 5%	51R4525	10.61	9.69

(176214)

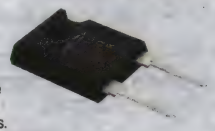
MP9100 SERIES TO-247 STYLE POWER FILM RESISTORS

RoHS Compliant Available

CADDOCK HIGH PERFORMANCE FILM RESISTORS

Features
- 100W at +25°C Case Temperature
- Non-Inductive Design
- Heat Sink Mountable

Specifications
- Power Rating and Derating: 100 Watts at +25°C case temp., see General Notes for the MP series Derating *on* [88116]. Without a heat sink, in free air at +25°C, the MP9100 is rated for 3.5 Watts.
- Temperature Coefficient: TC Referenced to +25°C, ΔR Taken at +175°C: 0.50Ω and above: -20 to +80 ppm/°C; 0.050 to 0.49Ω: 0 to +150 ppm/°C
- Max. Continuous Operating Voltage: Power Limited
- Dielectric Strength: 1500VAC$_{RMS}$, Resistor Element Isolated From the Case
- Thermal Resistance (Film to Case): 1.5°C/W



Mfg. Part No.	Res. (Ohms)	Res. Tol. (+/- %)	Watts	Stock No.	Price Each 1-9	Price Each 10-24
● MP9100-0.050-1%	0.05	1%	100	73K1962	19.42	15.64
● MP9100-0.10-1%	0.1	1%	100	73K3595	18.63	15.01
● MP9100-0.20-1%	0.2	1%	100	73K1963	17.99	14.49
● MP9100-0.50-1%	0.5	1%	100	73K3596	19.04	15.34
● MP9100-1.00-1%	1	1%	100	73K1964	17.34	13.97
● MP9100-2.00-1%	2	1%	100	73K1967	15.90	12.81
● MP9100-5.00-1%	5	1%	100	73K1969	14.64	11.79
● MP9100-10.0-1%	10	1%	100	73K1965	16.10	12.97
● MP9100-20.0-1%	20	1%	100	73K1968	16.30	13.14
● MP9100-25.0-1%	25	1%	100	86H5205	14.64	11.79
● MP9100-50.0-1%	50	1%	100	73K1970	14.82	11.95
● MP9100-75.0-1%	75	1%	100	68H8460	14.64	11.79
● MP9100-100-1%	100	1%	100	73K1966	15.90	12.81

(73479)

TGH SERIES SOT227 120 AND 200 WATT THICK FILM POWER RESISTORS

RoHS Compliant Available

OHMITE

Features
- Power rating up to 200 watts @ 80°C
- Resistance range from 0.1 to 1MOhms
- Maximum working voltage up to 500V
- Temperature Coefficient: +/- 200ppm
- Dielectric Strength up to 4 kVDC against ground
- Working Temp. Range : -50°C to +155°C

Application
- Variable Speed Drivers
- Power Supplies
- Control Devices
- Telecom
- Robotics
- Motor Controls
- Switching Designs

TGH Series resistors are ideally suited for high frequency and pulse load applications. By direct mounting on a heatsink significant cost advantages can be realized. For current sense values in similar package, see **TGHG series** *on page 561.*

Mfg. Part No.	Res. (Ohms)	Res. Tol.	Stock No.	Price Each 1-24	Price Each 25-99
120 WATT					
TGHHV5R00JE	5	± 5%	83K9848	39.86	36.44
TGHHV10R0JE	10	± 5%	83K9843	39.89	36.46
200 WATT					
TGHLVR100JE	0.1	± 5%	83K9852	55.29	50.43
TGHLVR500JE	0.5	± 5%	83K9853	53.68	48.96
TGHLV1R00JE	1	± 5%	83K9855	55.29	50.43
TGHLV25R0JE	25	± 5%	83K9860	48.70	44.51
TGHLV33R0JE	33	± 5%	83K9861	47.75	43.64
TGHLV100RJE	100	± 5%	83K9858	49.18	44.95
TGHLV150RJE	150	± 5%	83K9859	49.18	44.95
TGHLV500RJE	500	± 5%	83K9863	47.75	43.64
TGHLV1K00JE	1k	± 5%	83K9854	47.75	43.64

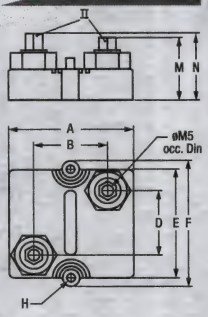
(68077)

TAP600 SERIES 600 WATT HEAT SINKABLE PLANAR RESISTORS

RoHS Compliant Available

OHMITE

Features
- Designed For Low Inductance and Capacitance
- Easy Termination to Contacts With M5 Screws
- Calibrated Mounting Simplifies Assembly
- Designed for Liquid or Air Cooled Heat Sink Systems



Applications
- Variable Speed Drives
- Power Supplies
- Robotics
- Motor Control
- Other Control Devices

Specifications
- Tolerance: K = ±10%
- Temperature Coefficient: ±150ppm/°C
- Maximum Working Voltage: 5000VDC
- Power Rating: 600W @ 70°C Heat Sink Temperature
- Dielectric Strength: Up To 12kV$_{RMS}$, 50Hz, 1 Min.
- Operating Temperature: -55°C to +150°C

Available in dielectric strengths up to 12kV, *go online or call.*

DIMENSIONS (mm)

Dimension	Minimum	Maximum
A	2.331″ (59.2)	2.394″ (60.8)
B	1.409″ (35.8)	1.425″ (36.2)
D	1.331″ (33.8)	1.346″ (34.2)
E	2.236″ (56.8)	2.252″ (57.2)
F	2.527″ (64.2)	2.591″ (65.8)
H	0.159″ (4.05)	0.169″ (4.3)
M	1.161″ (29.5)	1.201″ (30.5)
N	1.24″ (31.5)	1.279″ (32.5)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-49
TAP600KR25E	0.25	05T6779	261.92	243.38
TAP600KR33E	0.33	05T6780	255.78	237.68
TAP600K1R0E	1	64K6388	125.44	116.57
TAP600K2R0E	2	64K6391	127.45	118.44
TAP600K3R0E	3	64K6393	125.44	116.57
TAP600K4R0E	4	66K6882	125.44	116.57
TAP600K5R0E	5	64K6394	127.45	118.44
TAP600K10RE	10	64K6390	125.44	116.57
TAP600K22RE	22	64K6392	127.45	118.44
TAP600K50RE	50	64K6395	125.44	116.57
TAP600K100E	100	18C2896	125.44	116.57
TAP600K500E	500	66K6883	128.45	119.37
TAP600K1K0E	1k	64K6387	127.45	118.44
TAP600K10KE	10k	64K6389	128.45	119.37

(64970)

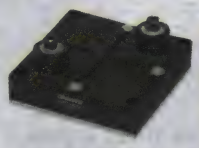
TAP SERIES 1000 AND 2000 WATT HEATSINKABLE PLANAR RESISTORS

RoHS Compliant Available

OHMITE

Features
- High Energy Rating
- Low Inductance
- Resistor Element Electrically Isolated
- Small Footprint

Applications
- Power semiconductor balancing
- Motor control
- Inrush current limiting



Specifications
- Tolerance: ± 10%
- Power rating @ 85°C: 1000W or 2000W
- Temperature coeff.: ± 250ppm/°C
- Operating Temperature Range: -55°C to +85°C

Mfg. Part No.	Resistance (Ohms)	Stock No.	Price Each 1-4
TA1K0PH2R50KE	2.5	64K6451	198.22
TA1K0PH5R00KE	5	64K6457	202.98
TA1K0PH10R0KE	10	64K6449	202.98
TA1K0PH15R0KE	15	64K6450	202.98
TA1K0PH25R0KE	25	64K6452	198.22
TA1K0PH30R0KE	30	64K6454	198.22
TA1K0PH42R0KE	42	64K6456	202.98
TA1K0PH50R0KE	50	63K9244	165.19
TA1K0PH250RKE	250	05T6786	198.22
TA1K0PH500RKE	500	05T6787	198.22
TA1K0PH750RKE	750	05T6788	205.27
TA1K0PH100RKE	100	05T6785	198.22
TA1K0PH1K00KE	1k	05T6784	198.22
2000W			
TA2K0PHR500KE	0.5	13T0779	280.19
TA2K0PH1R00KE	1	13T0781	280.19
TA2K0PH2R50KE	2.5	13T0785	280.19
TA2K0PH5R00KE	5	13T0788	280.19
TA2K0PH7R50KE	7.5	13T0791	273.62
TA2K0PH10R0KE	10	13T0782	273.62
TA2K0PH15R0KE	15	13T0784	280.19
TA2K0PH25R0KE	25	13T0786	273.62
TA2K0PH50R0KE	50	13T0789	273.62
TA2K0PH100RKE	100	13T0783	273.62
TA2K0PH250RKE	250	13T0787	280.19
TA2K0PH500RKE	500	13T0790	273.62
TA2K0PH750RKE	750	13T0792	280.19
TA2K0PH1K00KE	1k	13T0780	273.62

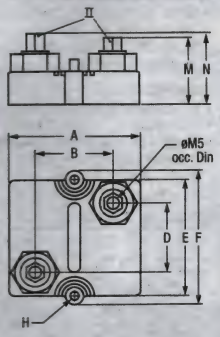
(195373)

TAP800 SERIES HEAT SINKABLE PLANAR RESISTORS

RoHS Compliant Available

OHMITE

Features
- Electric support ideal for heat transfer and optimum discharge.
- Designed for low inductance and capacitance.
- Provides stable performance in addition to high wattage and pulse loading capability.
- Contacts allow for easy load connecting with M4 or M5 screws.
- Materials meet the requirements of UL94-V0.



Specifications
- Tolerance: K = ±10%
- Temperature Coefficient: ±150ppm/°C
- Maximum Working Voltage: 5000VDC
- Power Rating: 800W @ 70°C Heat Sink Temperature
- Dielectric Strength: Up To 12kVRMS, 50Hz, 1 Min.
- Operating Temperature: -55°C to +150°C

Available in dielectric strengths up to 12kV, *go online or call.*

DIMENSIONS (mm)

Dimension	Minimum	Maximum
A	2.331″ (59.2)	2.394″ (60.8)
B	1.409″ (35.8)	1.425″ (36.2)
D	1.331″ (33.8)	1.346″ (34.2)
E	2.236″ (56.8)	2.252″ (57.2)
F	2.527″ (64.2)	2.591″ (65.8)
H	0.159″ (4.05)	0.169″ (4.3)
M	1.161″ (29.5)	1.201″ (30.5)
N	1.24″ (31.5)	1.279″ (32.5)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
TAP800KR25E	0.25	05T6781	215.24	196.32
TAP800KR33E	0.33	05T6782	215.24	196.32
TAP800KR50E	0.5	05T6783	159.44	145.42
TAP800K5R0E	5	59M9778	159.44	145.42
TAP800K10RE	10	59M9771	159.44	145.42

➤CONTINUED➤

TAP800 SERIES HEAT SINKABLE PLANAR RESISTORS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
● TAP800K100E	100	59M9772	163.27	148.91
● TAP800K390E	390	59M9776	163.27	148.91
● TAP800K5K0E	5k	59M9777	159.44	145.42

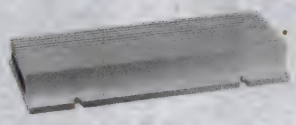
(102187)

BA SERIES ALUMINUM CASED RESISTORS

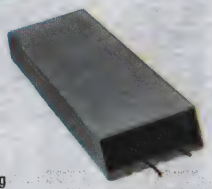
RoHS Compliant Available

OHMITE

NEW



BA1



BA2
BA3

Features:
- Tolerance: ±10%
- Three extrusion forms available
- Heatsinkable
- Rugged design
- Up to 1000W
- Thermal cut-off available
- Scalable, custom lengths available
- Custom leads available

Applications:
- Dynamic braking
- Motor starting
- Power control

500 WATT

Mfg. Part No.	Res. (Ohms)	Termination	Stock No.	Price Each 1-49	Price Each 50+
● BA11601R00KE	1	Wire Leads	88W4352	66.11	61.02
● BB116010R0KE	10	Solid Terminals	88W4358	66.11	61.02
● BA116020R0KE	20	Wire Leads	88W4353	66.11	61.02
700 WATT					
● BA232010R0KE	10	Wire Leads	88W4354	88.14	81.36
● BB232025R0KE	25	Solid Terminals	88W4359	88.14	81.36
● BA232050R0KE	50	Wire Leads	88W4355	88.14	81.36
1000 WATT					
● BA326610R0KE	10	Wire Leads	88W4356	130.75	120.69
● BA326622R0KE	22	Wire Leads	88W4357	130.75	120.69

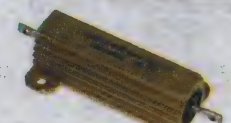
(212387)

89 SERIES METAL-MITE AXIAL TERMINAL WIREWOUND RESISTORS

RoHS Compliant Available

OHMITE

Features
- High-Stability: ±0.5% DR
- High-Power to Size Ratio
- Metal Housing Allows Chassis Mounting and Provides Heat Sink Capability
- Well suited for withstanding vibration, shock, and harsh environmental conditions



Specifications
- Housing: Metal, Anodized Aluminum
- Ceramic Core
- Solder-Coated Axial Lead Terminals
- Derating: Linearly from 100% @ +25°C to 0°C @ +275°C
- Tolerance: ± 1%
- Temperature Coefficient: ± 90ppm/°C (<1Ω); ± 50ppm/°C (1 to 9.99Ω); ± 20ppm/°C (10Ω and Over)
- Dielectric Withstanding Voltage: 2250VAC
- Approvals: Meets MIL-R-18546 Specifications

805 SERIES, 5 WATT

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99	Price Each 100+
● 805F1R0E	1	64K9624	4.08	3.79	3.39	3.20
● 805F2R0E	2	64K9634	3.93	3.65	3.26	3.08
● 805F5R0E	5	64K9652	4.03	3.74	3.34	3.16
● 805F7R5E	7.5	51M2183	3.93	3.65	3.26	3.08
● 805F10RE	10	64K9627	4.03	3.74	3.34	3.16
● 805F15RE	15	64K9630	4.03	3.74	3.34	3.16
● 805F25RE	25	64K9639	4.08	3.79	3.39	3.20
● 805F50RE	50	64K9653	4.50	4.18	3.74	3.52
● 805F100E	100	64K9628	4.50	4.18	3.73	3.52
● 805F250E	250	64K9640	4.44	4.12	3.68	3.48
● 805F500E	500	64K9654	4.50	4.18	3.74	3.52
810 SERIES, 10 WATT						
● 810F1R0E	1	64K9716	4.25	3.95	3.53	3.32
● 810F2R0E	2	64K9726	4.30	4.00	3.57	3.37
● 810F5R0E	5	64K9744	4.25	3.95	3.53	3.32
● 810F10RE	10	64K9719	4.25	3.95	3.53	3.32
● 810F15RE	15	64K9722	4.30	4.00	3.57	3.37
● 810F20RE	20	64K9728	4.30	4.00	3.57	3.37
● 810F50RE	50	64K9746	4.30	4.00	3.57	3.37

➤CONTINUED➤

89 SERIES METAL-MITE AXIAL TERMINAL WIREWOUND RESISTORS (CONT.)

810 SERIES, 10 WATT

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99	Price Each 100+
● 810F75RE	75	64K9749	4.30	4.00	3.57	3.37
● 810F100E	100	64K9720	4.25	3.95	3.53	3.33
● 810F250E	250	64K9732	4.30	4.00	3.57	3.37
● 810F500E	500	64K9747	4.30	4.00	3.57	3.37
825 SERIES, 25 WATT						
● 825FR10E	0.1	64K9751	6.04	5.61	5.02	4.73
● 825FR30E	0.3	64K9752	6.11	5.68	5.07	4.79
● 825FR50E	0.5	64K9753	6.11	5.68	5.08	4.79
● 825FR70E	0.7	64K9754	5.90	5.48	4.90	4.62
● 825F1R0E	1	64K9757	5.46	5.07	4.53	4.27
● 825F2R0E	2	64K9765	5.46	5.07	4.53	4.27
● 825F3R0E	3	64K9771	5.52	5.13	4.58	4.32
● 825F5R0E	5	64K9773	5.46	5.07	4.53	4.27
● 825F7R5E	7.5	46M4035	5.33	4.95	4.42	4.17
● 825F10RE	10	64K9759	5.33	4.95	4.42	4.17
● 825F15RE	15	64K9762	5.46	5.07	4.53	4.27
● 825F20RE	20	35M2746	5.46	5.07	4.53	4.27
● 825F25RE	25	64K9768	5.46	5.07	4.53	4.27
● 825F50RE	50	64K9774	5.33	4.95	4.42	4.17
● 825F75RE	75	64K9777	5.33	4.95	4.42	4.17
● 825F150E	150	64K9763	5.69	5.29	4.72	4.45
● 825F250E	250	64K9769	5.69	5.29	4.72	4.45
● 825F500E	500	64K9775	5.69	5.29	4.73	4.46
● 825F750E	750	64K9778	5.69	5.29	4.72	4.45
● 825F1K0E	1k	64K9755	6.13	5.70	5.09	4.80
● 825F10KE	10k	64K9758	6.75	6.27	5.60	5.28
● 825F25KE	25k	64K9767	8.66	8.05	7.20	6.79
850 SERIES, 50 WATT						
● 850FR10E	0.1	65K0053	7.65	7.11	6.35	5.99
● 850F1R0E	1	65K0059	6.13	5.70	5.09	4.80
● 850F2R0E	2	65K0068	6.13	5.70	5.09	4.80
● 850F3R0E	3	65K0074	6.28	5.84	5.21	4.92
● 850F5R0E	5	65K0076	6.28	5.84	5.21	4.92
● 850F10RE	10	65K0061	6.13	5.70	5.09	4.80
● 850F15RE	15	65K0065	6.28	5.84	5.21	4.92
● 850F25RE	25	65K0071	6.13	5.70	5.09	4.80
● 850F40RE	40	51M2192	10.21	9.49	8.48	7.99
● 850F50RE	50	65K0077	6.13	5.70	5.09	4.80
● 850F75RE	75	65K0079	6.28	5.84	5.21	4.92
● 850F100E	100	65K0062	6.28	5.84	5.21	4.92
● 850F150E	150	65K0066	6.28	5.84	5.21	4.92
● 850F250E	250	65K0072	6.13	5.70	5.09	4.80
● 850F500E	500	65K0078	6.28	5.84	5.21	4.92
● 850F750E	750	65K0080	6.35	5.91	5.27	4.97
● 850F1K0E	1k	65K0057	7.23	6.72	6.00	5.67
● 850F1K5E	1.5k	65K0058	6.98	6.49	5.79	5.47
● 850F2K5E	2.5k	51M2191	9.97	9.26	8.28	7.81
● 850F5K0E	5k	65K0075	6.98	6.49	5.79	5.47
● 850F10KE	10k	65K0060	7.60	7.07	6.31	5.96
● 850F100KE	100k	65K0063	11.60	10.78	9.63	9.09

(73477)

THS SERIES ALUMINUM HOUSED AXIAL POWER WIREWOUND RESISTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Applications
- Braking resistor
- Capacitor charging/discharging
- Crowbar
- Filter

Features
- Extremely stable
- High Power dissipation
- Low surface temperature

Specifications
- Tolerance: ± 5%
- Temp. Coeff: below 100 ohm: ±50ppm/°C; above 100 ohm: ±30ppm/°C

Mfg. Part No.	Resistance (Ohm)	Power Rating (W)	Stock No.	Price Each 1-49
● THS10R50J	0.5	10	17R5610	3.61
● THS101R0J	1	10	16R9893	1.47
● THS102R0J	2	10	16R9896	1.38
● THS102R2J	2.2	10	16R9897	2.19
● THS103R3J	3.3	10	16R9899	2.06
● THS103R9J	3.9	10	16R9900	2.06

➤CONTINUED➤

THS SERIES ALUMINUM HOUSED AXIAL POWER WIREWOUND RESISTORS (CONT.)

Mfg. Part No.	Resistance (Ohm)	Power Rating (W)	Stock No.	Price Each 1-49
THS104R7J	4.7	10	16R9901	2.29
THS105R0J	5	10	16R9902	1.73
THS1010RJ	10	10	17R7298	1.47
THS1012RJ	12	10	17R7299	1.87
THS1015RJ	15	10	17R7300	1.47
THS1022RJ	22	10	17R7301	1.73
THS1039RJ	39	10	17R7303	1.73
THS1075RJ	75	10	18R0451	2.06
THS10100RJ	100	10	18R0453	2.11
THS10150RJ	150	10	18R0455	2.19
THS10220RJ	220	10	18R0456	2.15
THS10470RJ	470	10	18R0459	2.19
THS10500RJ	500	10	18R4365	1.76
THS101K0J	1k	10	18R4368	2.06
THS105K6J	5.6k	10	18R4373	1.73
THS1010KJ	10k	10	18R9124	2.24
THS15R05J	0.05	15	17R5611	3.66
THS15R22J	0.22	15	17R5613	3.66
THS155R0J	5	15	16R9907	2.37
THS156R8J	6.8	15	16R9908	2.23
THS1522RJ	22	15	16R9912	2.23
THS15150RJ	150	15	18R0460	2.23
THS15220RJ	220	15	18R0461	2.03
THS15330RJ	330	15	18R0463	2.37
THS15470RJ	470	15	18R0465	1.53
THS156K8J	6.8k	15	18R4378	2.23
THS1510KJ	10k	15	18R4379	2.23
THS25R02J	0.02	25	17R5621	2.20
THS251R0J	1	25	16R9916	1.88
THS251R5J	1.5	25	16R9917	3.04
THS252R2J	2.2	25	16R9919	2.86
THS255R0J	5	25	17R7316	2.49
THS255R6J	5.6	25	17R7318	5.00
THS258R2J	8.2	25	17R7319	1.88
THS2510RJ	10	25	17R7320	3.22
THS2512RJ	12	25	17R7321	2.35
THS2533RJ	33	25	18R0470	2.86
THS2547RJ	47	25	18R0472	2.86
THS50100RJ	100	50	18R0449	3.58
THS25150RJ	150	25	18R4380	2.86
THS25470RJ	470	25	18R4385	3.04
THS252K2J	2.2k	25	18R9125	2.35
THS2510KJ	10k	25	18R9130	2.86
THS50R33J	0.33	50	17R5599	2.99
THS50R05J	0.05	50	17R5595	2.99
THS50R50J	0.5	50	17R5601	2.39
THS501R2J	1.2	50	16R9885	2.54
THS502R2J	2.2	50	16R9889	2.54
THS503R3J	3.3	50	16R9891	3.58
THS503R9J	3.9	50	16R9892	3.58
THS506R8J	6.8	50	17R7290	3.84
THS508R2J	8.2	50	17R7291	2.39
THS5010RJ	10	50	17R7292	2.51
THS5012RJ	12	50	17R7293	2.54
THS5015RJ	15	50	17R7294	2.38
THS5018RJ	18	50	17R7295	5.52
THS5022RJ	22	50	51R1955	7.04
THS5027RJ	27	50	18R0441	3.37
THS5033RJ	33	50	18R0442	2.54
THS5047RJ	47	50	18R0444	3.58
THS5068RJ	68	50	70M9148	3.58
THS5075RJ	75	50	18R0447	3.37
THS50220RJ	220	50	18R4358	2.54
THS50470RJ	470	50	18R4362	3.37
THS50560RJ	560	50	18R4364	3.37
THS501K5J	1.5k	50	18R9117	3.58
THS502K2J	2.2k	50	18R9118	3.37
THS5010KJ	10k	50	18R9123	3.37
THS5047KJ	47k	50	19R4870	5.84
THS5050KJ	50k	50	19R4871	2.38
THS753R3J	3.3	75	51R8391	10.90

➤CONTINUED➤

THS SERIES ALUMINUM HOUSED AXIAL POWER WIREWOUND RESISTORS (CONT.)

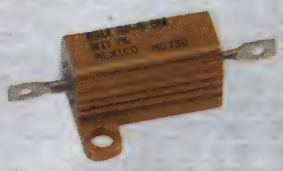
Mfg. Part No.	Resistance (Ohm)	Power Rating (W)	Stock No.	Price Each 1-49
THS7522RJ	22	75	51R8390	10.30
THS7533RJ	33	75	51R8392	10.29

(165126)

RH SERIES (MIL-R-18546D, TYPE RE) CHASSIS MOUNT WIREWOUND RESISTORS

RoHS Compliant Available

VISHAY.



- Molded, Welded Construction for Total Environmental Protection
- Meets MIL-PRF-18546
- Available in Noninductive Styles (Series NH) with Aryton-Perry Winding for Lowest Reactive Components
- Mounts on Chassis to Utilize Heat-Sink Effect
- Excellent Stability in Operation

STANDARD ELECTRICAL SPECIFICATIONS

Type	MIL-PRF-18546 Mfg. Part No.	Power Rating @ 25°C (W)* Dale	Military
RH-5	RE60G	7.5 (5)	5
RH-10	RE-65G	12.5 (10)	10
RH-25	RE70G	25	20
RH-50	RE75G	50	30
RH-100	RE77G	100	75
RH-250	RE80G	250	120

* Vishay RH resistor wattage ratings are based on mounting to a suitable heat sink.

RH-5

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49	50-99	100-499
RH005R1000FE02	0.1	65K1823	3.57	2.95	2.64
RH005R1500FE02	0.15	65K1824	7.63	6.61	6.26
RH005R5000FE02	0.5	41K9061	7.63	6.61	6.26
RH0051R000FE02	1	41K9062	3.39	2.80	2.50
RH0052R000FE02	2	41K9069	7.26	6.28	5.95
RH0055R000FE02	5	41K9075	3.30	2.73	2.44
RH0057R000FE02	7	65K1838	7.52	6.51	6.17
RH0058R000FE02	8	65K1840	3.43	2.84	2.53
RH00510R00FE02	10	41K9064	3.43	2.84	2.53
RH00512R00FE02	12	65K1827	7.26	6.28	5.95
RH00520R00FE02	20	41K9070	7.52	6.51	6.17
RH00525R00FE02	25	41K9072	3.43	2.84	2.53
RH00530R00FE02	30	65K1832	3.43	2.84	2.53
RH00540R00FE02	40	65K1836	3.43	2.84	2.53
RH00550R00FE02	50	41K9076	3.39	2.80	2.50
RH00560R00FE02	60	65K1837	3.43	2.84	2.53
RH00575R00FE02	75	65K1839	3.43	2.84	2.53
RH005100R0FE02	100	41K9065	3.43	2.84	2.53
RH005120R0FE02	120	65K1828	3.43	2.84	2.53
RH005150R0FE02	150	41K9067	3.43	2.84	2.53
RH005180R0FE02	180	41K9068	3.39	2.80	2.50
RH005200R0FE02	200	41K9071	7.26	6.28	5.95
RH005220R0FE02	220	65K1831	3.43	2.84	2.53
RH005250R0FE02	250	41K9073	3.30	2.73	2.44
RH005270R0FE02	270	41K9074	7.52	6.51	6.17
RH005300R0FE02	300	65K1833	3.39	2.80	2.50
RH005330R0FE02	330	65K1834	7.52	6.51	6.17
RH005390R0FE02	390	65K1835	7.52	6.51	6.17
RH005500R0FE02	500	41K9077	3.43	2.84	2.53
RH0051K000FE02	1k	65K1825	3.43	2.84	2.53
RH0051K500FE02	1.5	65K1826	3.47	2.87	2.56
RH0052K000FE02	2k	65K1830	3.34	2.76	2.46
RH00510K00FE02	10k	41K9063	3.47	2.87	2.56
RH00515K00FE02	15k	65K1829	4.17	3.61	3.42

RH-10

RH010R0100FE02	0.01	65K1841	3.58	2.96	2.64
RH010R1000FE02	0.1	41K9079	3.53	2.92	2.61
RH010R2000FE02	0.2	65K1842	3.44	2.85	2.54
RH010R5000FE02	0.5	65K1844	3.53	2.92	2.61
RH0101R000FE02	1	41K9081	2.92	2.42	2.16
RH0101R500FE02	1.5	65K1846	5.21	4.51	4.27
RH0102R000FE02	2	65K1849	2.89	2.39	2.13
RH0102R500FE02	2.5	65K1850	2.89	2.39	2.13
RH0103R000FE02	3	41K9091	4.87	4.02	3.59
RH0104R000FE02	4	65K1855	2.89	2.39	2.13
RH0105R000FE02	5	41K9096	2.67	2.21	1.97
RH01012R00FE02	12	65K1848	2.89	2.39	2.13

➤CONTINUED➤

RH SERIES (MIL-R-18546D, TYPE RE) CHASSIS MOUNT WIREWOUND RESISTORS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49	50-99	100-499
RH-10					
● RH01020R00FE02	20	65K1851	2.89	2.39	2.13
● RH01025R00FE02	25	41K9088	2.60	2.15	1.92
● RH01030R00FE02	30	41K9092	2.92	2.42	2.16
● RH01033R00FE02	33	65K1852	2.89	2.39	2.13
● RH01035R00FE02	35	65K1854	2.92	2.42	2.16
● RH01047R00FE02	47.1	41K9094	5.03	4.35	4.12
● RH01050R00FE02	50	41K9097	2.60	2.15	1.92
● RH01075R00FE02	75	41K9099	2.67	2.21	1.97
● RH010100R0FE02	100	65K1847	2.67	2.21	1.97
● RH010150R0FE02	150	41K9084	2.89	2.39	2.13
● RH010200R0FE02	200	41K9087	2.92	2.42	2.16
● RH010250R0FE02	250	41K9089	2.67	2.21	1.97
● RH010300R0FE02	300	41K9093	5.03	4.35	4.12
● RH010330R0FE02	330	65K1853	2.92	2.42	2.16
● RH010500R0FE02	500	41K9098	2.89	2.39	2.13
● RH0101K000FE02	1k	41K9080	2.81	2.32	2.08
● RH0101K500FE02	1.5k	65K1845	2.99	2.47	2.21
● RH0102K000FE02	2k	41K9085	2.67	2.21	1.97
● RH0102K500FE02	2.5k	41K9086	2.67	2.21	1.97
● RH0105K000FE02	5k	41K9095	2.99	2.47	2.21
● RH01010K00FE02	10k	41K9082	3.03	2.51	2.24
RH-25					
● RH025R0200FE02	0.02	65K1857	11.53	10.02	9.51
● RH025R1000FE02	0.1	41K9101	4.39	3.80	3.60
● RH025R2000FE02	0.2	65K1858	4.93	4.27	4.04
● RH025R2500FE02	0.25	65K1859	4.93	4.27	4.04
● RH025R5000FE02	0.5	41K9102	4.39	3.80	3.60
● RH025R7500FE02	0.75	65K1860	4.93	4.27	4.04
● RH0251R000FE02	1	65K1861	3.80	3.29	3.12
● RH0251R500FE02	1.5	65K1862	3.90	3.37	3.20
● RH0252R000FE02	2	41K9110	3.80	3.29	3.12
● RH0252R500FE02	2.5	41K9111	4.20	3.64	3.45
● RH0253R000FE02	3	41K9116	4.20	3.64	3.45
● RH0253R300FE02	3.3	41K9117	4.20	3.64	3.45
● RH0254R000FE02	4	65K1871	3.80	3.29	3.12
● RH0255R000FE02	5	41K9126	3.80	3.29	3.12
● RH0256R000FE02	6	41K9129	3.80	3.29	3.12
● RH0257R000FE02	7	41K9132	4.20	3.64	3.45
● RH0257R500FE02	7.5	41K9133	3.80	3.29	3.12
● RH0258R000FE02	8	41K9137	3.80	3.29	3.12
● RH02510R00FE02	10	65K1863	3.80	3.29	3.12
● RH02512R00FE02	12	41K9107	3.80	3.29	3.12
● RH02515R00FE02	15	65K1865	3.80	3.29	3.12
● RH02516R00FE02	16	41K9108	8.64	7.48	7.08
● RH02520R00FE02	20	65K1868	3.80	3.29	3.12
● RH02522R50FE02	22.5	65K1869	8.64	7.48	7.08
● RH02525R00FE02	25	41K9114	3.80	3.29	3.12
● RH02530R00FE02	30	41K9118	3.80	3.29	3.12
● RH02533R00FE02	33	41K9120	4.26	3.69	3.49
● RH02535R00FE02	35	41K9121	4.10	3.55	3.36
● RH02540R00FE02	40	41K9123	4.20	3.64	3.45
● RH02547R00FE02	47	41K9124	8.64	7.48	7.08
● RH02550R00FE02	50	41K9127	3.80	3.29	3.12
● RH02560R00FE02	60	41K9130	4.20	3.64	3.45
● RH02575R00FE02	75	41K9135	4.26	3.69	3.49
● RH02580R00FE02	80	65K1873	4.20	3.64	3.45
● RH025100R0FE02	100	65K1864	4.20	3.64	3.45
● RH025150R0FE02	150	65K1866	3.90	3.37	3.20
● RH025200R0FE02	200	41K9113	3.80	3.29	3.12
● RH025250R0FE02	250	65K1870	3.95	3.42	3.24
● RH025300R0FE02	300	41K9119	4.26	3.69	3.49
● RH025500R0FE02	500	41K9128	4.10	3.55	3.36
● RH025750R0FE02	750	41K9136	3.80	3.29	3.12
● RH0251K000FE02	1k	41K9103	3.90	3.37	3.20
● RH0251K200FE02	1.2k	41K9104	4.09	3.54	3.35
● RH0251K500FE02	1.5k	41K9105	6.70	5.80	5.49
● RH0252K000FE02	2k	41K9109	3.44	2.85	2.54
● RH0252K200FE02	2.2k	65K1867	4.09	3.54	3.35
● RH0253K000FE02	3k	41K9115	4.09	3.54	3.35
● RH0254K000FE02	4k	41K9122	4.09	3.54	3.35
● RH0255K000FE02	5k	41K9125	3.44	2.85	2.54

CONTINUED

RH SERIES (MIL-R-18546D, TYPE RE) CHASSIS MOUNT WIREWOUND RESISTORS (CONT.)

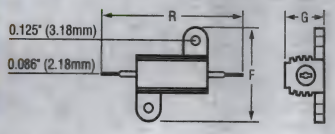
Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49	50-99	100-499
RH-25					
● RH02510K00FE02	10k	41K9106	3.44	2.85	2.54
● RH02550K00FE02	50k	65K1872	5.72	4.95	4.69
RH-50					
● RH050R0100FE02	0.01	65K1874	6.87	5.97	5.66
● RH050R0200FE02	0.02	41K9138	8.37	8.16	8.05
● RH050R0500FE02	0.05	65K1875	6.87	5.97	5.66
● RH050R1000FE02	0.1	41K9139	9.30	8.05	7.63
● RH050R1500FE02	0.15	65K1876	8.37	8.16	8.05
● RH050R2000FE02	0.2	41K9140	8.37	8.16	8.05
● RH050R2500FE02	0.25	65K1877	6.95	6.04	5.73
● RH050R3000FE02	0.3	41K9141	14.49	12.60	11.95
● RH050R5000FE02	0.5	41K9142	8.37	8.16	8.05
● RH0501R000FE02	1	41K9144	4.91	4.25	4.03
● RH0501R500FE02	1.5	41K9145	4.91	4.25	4.03
● RH0502R000FE02	2	65K1882	4.91	4.25	4.03
● RH0502R500FE02	2.5	41K9156	5.49	4.75	4.50
● RH0503R000FE02	3	65K1887	4.91	4.25	4.03
● RH0503R300FE02	3.3	41K9162	5.04	4.37	4.14
● RH0504R000FE02	4	41K9167	4.91	4.25	4.03
● RH0505R000FE02	5	65K1890	4.91	4.25	4.03
● RH0506R000FE02	6	41K9174	4.91	4.25	4.03
● RH0507R000FE02	7	41K9176	5.49	4.75	4.50
● RH0507R500FE02	7.5	41K9177	5.49	4.75	4.50
● RH0508R000FE02	8	41K9178	4.91	4.25	4.03
● RH05010R00FE02	10	65K1879	4.91	4.25	4.03
● RH05012R00FE02	12	41K9149	4.91	4.25	4.03
● RH05015R00FE02	15	41K9152	4.91	4.25	4.03
● RH05016R00FE02	16	41K9154	5.49	4.75	4.50
● RH05020R00FE02	20	65K1883	5.04	4.37	4.14
● RH05022R50FE02	22.5	41K9159	7.64	6.64	6.30
● RH05025R00FE02	25	65K1885	4.91	4.25	4.03
● RH05030R00FE02	30	41K9163	4.91	4.25	4.03
● RH05033R00FE02	33	41K9165	4.91	4.25	4.03
● RH05035R00FE02	35	41K9166	5.49	4.75	4.50
● RH05040R00FE02	40	41K9168	5.49	4.75	4.50
● RH05045R00FE02	45	41K9170	5.55	4.81	4.56
● RH05047R00FE02	47	41K9171	5.04	4.37	4.14
● RH05050R00FE02	50	65K1891	4.91	4.25	4.03
● RH05060R00FE02	60	41K9175	4.91	4.25	4.03
● RH05075R00FE02	75	65K1893	5.36	4.64	4.40
● RH05080R00FE02	80	65K1895	5.55	4.81	4.56
● RH050100R0FE02	100	41K9148	4.91	4.25	4.03
● RH050120R0FE02	120	41K9150	5.49	4.75	4.50
● RH050150R0FE02	150	41K9153	5.36	4.64	4.40
● RH050200R0FE02	200	41K9158	5.49	4.75	4.50
● RH050250R0FE02	250	41K9160	5.55	4.81	4.56
● RH050270R0FE02	270	65K1886	5.49	4.75	4.50
● RH050300R0FE02	300	41K9164	5.49	4.75	4.50
● RH050330R0FE02	330	65K1888	5.36	4.64	4.40
● RH050390R0FE02	390	65K1889	7.37	6.41	6.08
● RH050400R0FE02	400	41K9169	5.49	4.75	4.50
● RH050500R0FE02	500	65K1892	5.04	4.37	4.14
● RH050750R0FE02	750	65K1894	5.55	4.81	4.56
● RH0501K000FE02	1k	65K1878	5.49	4.75	4.50
● RH0501K500FE02	1.5k	41K9143	5.32	4.61	4.37
● RH0502K000FE02	2k	41K9155	5.95	5.15	4.88
● RH0502K500FE02	2.5k	65K1881	5.95	5.15	4.88
● RH0503K000FE02	3k	41K9161	5.95	5.15	4.88
● RH0505K000FE02	5k	41K9172	5.95	5.15	4.88
● RH05010K00FE02	10k	41K9146	5.32	4.61	4.37
● RH05015K00FE02	15k	41K9151	11.97	10.36	9.81
● RH05020K00FE02	20k	41K9157	7.78	6.73	6.38
● RH05025K00FE02	25k	65K1884	8.79	7.61	7.21
● RH05050K00FE02	50k	41K9173	8.69	7.52	7.13
● RH050100K0FE02	100k	41K9147	8.69	7.52	7.13
● RH050150K0FE02	150k	65K1880	8.95	7.78	7.38
RH-110					
● RH1001R000FE01	1	65K1896	46.03	41.85	37.66
RH-250					
● RH2501R000FE01	1	65K1897	83.39	75.81	68.23

(9556)

CHASSIS MOUNT, ALUMINUM HOUSED WIREWOUND RESISTORS

RoHS Compliant Available

multicomp



Specifications:
- Tolerance: ±1%
- Core: Ceramic
- Internal Coating: Silicone
- Housing: Metal, anodized aluminum
- Terminals: Solder-coated axial lead
- Derating: Linearly from 100% @ +25°C to 0% @ +275°C
- Power Rating: Rating is based on chassis mounting area and temperature stability
- Heat Sink: 10W units, 4″ x 6″ x 2″ x .040″ Aluminum chassis
  50W units, 12″ x 12″ x .059″ Aluminum panel
- Overload: 5 times rated wattage for 5 seconds
- Temperature Coefficient: <1Ω: ±90 ppm/°C.
  1Ω to 9.99Ω: ±50 ppm/°C.
  ≥10Ω: ±20 ppm/°C
- Dielectric withstanding voltage: 10W: 1000 VAC.
  50W: 2250 VAC

Features:
- High Stability: ±0.5% DR
- High Power to Size Ratio
- Metal Housing Allows Chassis Mounting and Provides Heat Sink Capability

DIMENSIONS

Power (W)	Voltage	DIMENSIONS (in/mm) Length (R)	Height (G)	Width (F)
10	320	1.375/34.93	0.390/9.91	0.800/20.32
50	1170	2.781/70.64	0.610/15.49	1.140/28.96

10 WATT

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	10-49	50-99
MC14722	0.1	28K6336	4.57	4.15	3.66
MC14723	0.5	28K6337	4.39	3.99	3.52
MC14724	100	28K6338	4.39	3.99	3.52
MC14725	10	28K6339	4.63	4.21	3.71
MC14726	1	28K6340	4.63	4.21	3.71
MC14727	300	28K6341	4.39	3.99	3.52
MC14728	50	28K6342	4.58	4.15	3.67
50 WATT					
MC14729	0.1	28K6343	6.00	5.44	4.82
MC14730	0.15	28K6344	5.88	5.34	4.72
MC14731	0.2	28K6345	5.88	5.34	4.72
MC14732	0.3	28K6346	5.88	5.34	4.72
MC14733	0.5	28K6347	6.00	5.44	4.82
MC14734	100	28K6348	5.95	5.41	4.78
MC14735	10	28K6349	5.88	5.34	4.72
MC14736	1	28K6350	6.00	5.44	4.82
MC14737	15	28K6351	5.88	5.34	4.72
MC14738	2.5	28K6352	5.95	5.41	4.78
MC14739	2	28K6353	5.95	5.41	4.78
MC14740	250	28K6354	5.95	5.41	4.78
MC14741	25	28K6355	5.95	5.41	4.78
MC14742	3.3	28K6356	5.88	5.34	4.72
MC14743	300	28K6357	5.88	5.34	4.72
MC14744	500	28K6358	5.95	5.41	4.78
MC14745	50	28K6359	5.95	5.41	4.78
MC14746	5	28K6360	5.88	5.34	4.72

(84660)

CMC SERIES CHASSIS MOUNT WIREWOUND RESISTORS

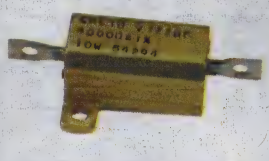
RoHS Compliant Available

Honeywell

Sensing and Control

SELECTION, SPEED, SERVICE. All Found Here.

Features
- Aluminum Housing
- Screw Mounts on Chassis Surface
- Protection Against Extreme Environments
- Terminals are Copperweld, Tinned with Axial Leads
- Heat Sink Capabilities
- Welded and Molded Construction



Specifications
- Tolerance: ±1%
- Dielectric Strength: 1000VAC
- Temperature Coefficient: ±90ppm/°C
- Operating Temperature: -55°C to +275°C

Applications
- Harsh Environments
- High Temperature
- Load Adjustors for Power Amplifiers

Dimensions:

Power (W)	Length	Height	Width
50	2.781″(70.64)	0.615″(15.62)	1.14″(28.96)

CONTINUED

CMC SERIES CHASSIS MOUNT WIREWOUND RESISTORS (CONT.)

CMC-50 SERIES—50 WATT

CMC50.1	0.1	03F6486	21.91	19.94
CMC501	1.0	03F6491	20.86	18.99
CMC5015	15.0	03F6498	17.69	16.12
CMC50100	100.0	03F6503	17.64	16.07

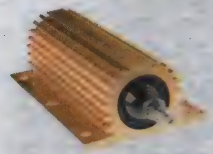
(9458)

WH SERIES ALUMINUM HOUSED WIREWOUND RESISTORS

RoHS Compliant Available

Welwyn

Features
- Suitable for severe environments
- Designed for excellent thermal conductivity to heatsink



Specifications
- Tolerance: ± 5%
- Power rating: Up to 50 Watts
- Temperature coeff.:
  from 10ohm to less than 100ohm: ± 50ppm/°C
  ≥100ohm: ± 25ppm/°C

Mfg. Part No.	Res. (Ohms)	Power Rating (W)	Stock No.	Price Each 1-499
WH5-R10JI	0.1	10	78R5437	7.06
WH5-R47JI	0.47	10	78R5438	6.75
WH5-1R0JI	1	10	78R5439	6.75
WH5-1R5JI	1.5	10	78R5440	6.75
WH5-2R2JI	2.2	10	78R5446	7.14
WH5-2R7JI	2.7	10	78R5447	6.75
WH5-3R3JI	3.3	10	78R5453	7.14
WH5-4R7JI	4.7	10	78R5456	6.75
WH5-6R8JI	6.8	10	78R5462	6.75
WH5-10RJI	10	10	78R5441	7.14
WH5-15RJI	15	10	78R5444	6.75
WH5-22RJI	22	10	78R5448	6.75
WH5-27RJI	27	10	78R5450	7.14
WH5-33RJI	33	10	78R5454	6.75
WH5-43RJI	43	10	78R5457	6.75
WH5-47RJI	47	10	78R5458	6.75
WH5-50RJI	50	10	78R5460	4.90
WH5-56RJI	56	10	78R5461	6.75
WH5-68RJI	68	10	78R5463	6.75
WH5-100RJI	100	10	78R5442	6.75
WH5-120RJI	120	10	78R5443	6.75
WH5-150RJI	150	10	78R5445	7.06
WH5-220RJI	220	10	78R5449	7.14
WH5-270RJI	270	10	78R5451	6.75
WH5-330RJI	330	10	78R5455	6.75
WH5-470RJI	470	10	78R5459	7.14
WH5-680RJI	680	10	78R5464	6.75
WH5-3K3JI	3.3k	10	78R5452	9.53
WH10-R10JI	0.1	15	78R5361	7.26
WH10-R22JI	0.22	15	78R5362	7.26
WH10-R25JI	0.25	15	78R5363	7.26
WH10-1R0JI	1	15	78R5366	7.26
WH10-1R5JI	1.5	15	78R5367	7.26
WH10-2R2JI	2.2	15	78R5374	7.26
WH10-3R3JI	3.3	15	78R5379	7.26
WH10-5R0JI	5	15	78R5382	7.26
WH10-10RJI	10	15	78R5368	7.26
WH10-12RJI	12	15	78R5370	7.26
WH10-15RJI	15	15	78R5372	7.26
WH10-20RJI	20	15	78R5375	7.68
WH10-22RJI	22	15	78R5376	7.26
WH10-47RJI	47	15	78R5380	7.26
WH10-68RJI	68	15	78R5383	7.26
WH10-100RJI	100	15	78R5369	7.26
WH10-120RJI	120	15	78R5371	7.26
WH10-150RJI	150	15	78R5373	7.26
WH10-220RJI	220	15	78R5377	7.26
WH10-270RJI	270	15	78R5378	7.26
WH10-1K0JI	1k	15	78R5364	7.26
WH10-1K5JI	1.5k	15	78R5365	7.26
WH10-5K0JI	5k	15	78R5381	7.38
WH25-R01JI	0.01	25	78R5384	7.60
WH25-R05JI	0.05	25	78R5385	7.02
WH25-R10JI	0.1	25	78R5386	7.89
WH25-R15JI	0.15	25	78R5387	7.89
WH25-R22JI	0.22	25	78R5388	7.89

CONTINUED

WH SERIES ALUMINUM HOUSED WIREWOUND RESISTORS (CONT.)

Mfg. Part No.	Res. (Ohms)	Power Rating (W)	Stock No.	Price Each 1-499
● WH25-R24JI	0.24	25	78R5389	7.89
● WH25-R33JI	0.33	25	78R5390	7.89
● WH25-R47JI	0.47	25	78R5391	7.89
● WH25-R56JI	0.56	25	78R5392	7.89
● WH25-1R0JI	1	25	78R5395	7.89
● WH25-1R5JI	1.5	25	78R5396	8.35
● WH25-2R0JI	2	25	78R5408	7.89
● WH25-2R2JI	2.2	25	78R5409	7.89
● WH25-3R3JI	3.3	25	78R5416	7.89
● WH25-3R9JI	3.9	25	78R5417	7.89
● WH25-4R7JI	4.7	25	78R5422	8.35
● WH25-5R0JI	5	25	78R5426	7.89
● WH25-6R8JI	6.8	25	78R5431	8.17
● WH25-8R2JI	8.2	25	78R5435	8.35
● WH25-10RJI	10	25	78R5398	7.89
● WH25-12RJI	12	25	78R5400	7.89
● WH25-15RJI	15	25	78R5403	8.35
● WH25-16RJI	16	25	78R5405	8.35
● WH25-18RJI	18	25	78R5406	7.89
● WH25-22RJI	22	25	78R5410	7.89
● WH25-24RJI	24	25	78R5412	7.89
● WH25-27RJI	27	25	78R5413	8.35
● WH25-33RJI	33	25	78R5418	8.35
● WH25-39RJI	39	25	78R5420	7.89
● WH25-47RJI	47	25	78R5423	7.89
● WH25-50RJI	50	25	78R5427	7.89
● WH25-56RJI	56	25	78R5428	8.35
● WH25-68RJI	68	25	78R5432	7.89
● WH25-82RJI	82	25	78R5436	7.89
● WH25-100RJI	100	25	78R5399	7.89
● WH25-120RJI	120	25	78R5401	8.35
● WH25-150RJI	150	25	78R5404	7.89
● WH25-220RJI	220	25	78R5411	7.89
● WH25-330RJI	330	25	78R5419	7.89
● WH25-470RJI	470	25	78R5424	7.89
● WH25-560RJI	560	25	78R5429	7.89
● WH25-680RJI	680	25	78R5433	7.89
● WH25-1K0JI	1k	25	78R5393	7.89
● WH25-1K5JI	1.5k	25	78R5394	7.89
● WH25-2K2JI	2.2k	25	78R5407	7.89
● WH25-3K3JI	3.3k	25	78R5414	8.35
● WH25-3K9JI	3.9k	25	78R5415	8.35
● WH25-4K7JI	4.7k	25	78R5421	7.89
● WH25-5K6JI	5.6k	25	78R5425	8.35
● WH25-6K8JI	6.8k	25	78R5430	10.61
● WH25-8K2JI	8.2k	25	78R5434	11.23
● WH25-10KJI	10k	25	78R5397	10.61
● WH25-15KJI	15k	25	78R5402	11.23
● WH50-R05JI	0.05	50	78R5465	13.61
● WH50-R10JB006	0.1	50	78R5466	9.20
● WH50-R22JB006	0.22	50	78R5467	11.17
● WH50-R33JB006	0.33	50	78R5468	9.20
● WH50-R47JB006	0.47	50	78R5469	7.96
● WH50-R50JB006	0.5	50	78R5470	8.52
● WH50-R68JB006	0.68	50	78R5471	8.43
● WH50-1R0JB006	1	50	78R5474	8.70
● WH50-1R5JI	1.5	50	78R5475	11.17
● WH50-2R0JB006	2	50	78R5487	9.21
● WH50-2R2JB006	2.2	50	78R5488	7.02
● WH50-3R3JB006	3.3	50	78R5498	8.70
● WH50-4R7JB006	4.7	50	78R5506	8.17
● WH50-5R0JB006	5	50	78R5510	11.82
● WH50-5R6JB006	5.6	50	78R5511	9.21
● WH50-6R8JB006	6.8	50	78R5517	11.17
● WH50-10RJB006	10	50	78R5477	7.02
● WH50-12RJB006	12	50	78R5479	11.17
● WH50-15RJB006	15	50	78R5481	11.82
● WH50-18RJB006	18	50	78R5484	8.83
● WH50-20RJIB006	20	50	78R5489	7.84
● WH50-22RJB006	22	50	78R5491	8.34
● WH50-24RJB006	24	50	78R5493	7.84
● WH50-27RJB006	27	50	78R5494	8.83
● WH50-30RJB006	30	50	78R5499	8.34
● WH50-33RJB006	33	50	78R5501	8.34

➤ CONTINUED ➤

WH SERIES ALUMINUM HOUSED WIREWOUND RESISTORS (CONT.)

Mfg. Part No.	Res. (Ohms)	Power Rating (W)	Stock No.	Price Each 1-499
● WH50-39RJB006	39	50	78R5503	8.34
● WH50-47RJI	47	50	78R5508	8.72
● WH50-50RJI	50	50	78R5513	7.75
● WH50-56RJB006	56	50	78R5514	8.83
● WH50-68RJB006	68	50	78R5519	8.34
● WH50-100RJB006	100	50	78R5478	7.84
● WH50-120RJB006	120	50	78R5480	7.84
● WH50-150RJB006	150	50	78R5482	8.34
● WH50-180RJB006	180	50	78R5485	8.34
● WH50-220RJB006	220	50	78R5492	8.34
● WH50-270RJB006	270	50	78R5495	8.34
● WH50-330RJB006	330	50	78R5502	7.02
● WH50-390RJB006	390	50	78R5504	7.84
● WH50-470RJB006	470	50	78R5509	8.83
● WH50-560RJB006	560	50	78R5515	8.34
● WH50-620RJB006	620	50	78R5518	8.34
● WH50-680RJB006	680	50	78R5520	8.34
● WH50-820RJB006	820	50	78R5521	8.30
● WH50-1K0JB006	1k	50	78R5472	8.83
● WH50-1K2JB006	1.2k	50	78R5473	8.34
● WH50-2K2JB006	2.2k	50	78R5486	8.34
● WH50-3K3JB006	3.3k	50	78R5496	8.34
● WH50-3K9JB006	3.9k	50	78R5497	8.43
● WH50-4K7JB006	4.7k	50	78R5505	7.96
● WH50-6K8JB006	6.8k	50	78R5516	8.19
● WH50-10KJB006	10k	50	78R5476	8.67
● WH50-16KJB006	16k	50	78R5483	8.34
● WH50-22KJB006	22k	50	78R5490	8.34
● WH50-33KJB006	33k	50	78R5500	7.96
● WH50-47KJB006	47k	50	78R5507	7.02
● WH50-50KJB006	50k	50	78R5512	10.59

(195430)

METALOHM SERIES STEEL ENCASED WIREWOUND HEATSINKABLE RESISTOR

RoHS Compliant Available

OHMITE

Features
- Flameproof and Inorganic
- Higher Power Rating Due to Heatsink Capacity
- High Surge Welded Construction

Specifications
- Resistance Tolerance: ±5%
- Wattage: Based on a 275°C "U" characteristic derating curve
- Dielectric strength: 2500V
- Creepage: term. style 276: 0.7"

Non Inductive & Other Terminal Styles available ; *go online or call.*

DIMENSIONS (in)

Type	DIMENSIONS A	B	C	D
40/70MN	2-9/16	3	3-7/16	3/4
50/100MN	3-11/16	4-1/8	4-9/16	3/4
60/115MN	5-9/16	6	6-7/16	3/4

Mfg. Part No.	Res. (ohms)	Temp. Coeff	Power Rating	Power Rating w/ Heatsink	Stock No.	Price Each 1-9	10-49
● 40/70MNJ2R00DE	2	± 180ppm/°C	40	70	41M6591	14.28	13.27
● 40/70MNJ5R00DE	5	± 180ppm/°C	40	70	41M6593	14.28	13.27
● 40/70MNJ10R0DE	10	± 50ppm/°C	40	70	41M6589	13.78	12.81
● 40/70MNJ50R0DE	50	± 90ppm/°C	40	70	41M6594	14.28	13.27
● 40/70MNJ100RDE	100	± 90ppm/°C	40	70	41M6590	13.03	12.11
● 50/100MNJ5R00DE	5	± 180ppm/°C	50	100	41M6600	15.37	14.29
● 50/100MNJ10R0DE	10	± 50ppm/°C	50	100	41M6596	15.37	14.29
● 50/100MNJ25R0DE	25	± 90ppm/°C	50	100	41M6598	14.84	13.79
● 50/100MNJ50R0DE	50	± 90ppm/°C	50	100	41M6601	14.11	13.12
● 50/100MNJ100RDE	100	± 90ppm/°C	50	100	41M6597	14.84	13.79
● 50/100MNJ500RDE	500	± 90ppm/°C	50	100	41M6602	15.37	14.29

(91190)

HS SERIES ALUMINUM HOUSED POWER WIREWOUND RESISTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features
- Wide resistance range
- High power dissapation
- Extremely stable

Applications
- Breaking or Balancing Resistor
- Capacitor charging & discharging
- Crowbar
- Filter

Specifications
- Tolerance: ± 5%
- TCR: below 100Ω = ± 50ppm/°C
  above 100Ω = ± 30ppm/°C

Mfg. Part No.	Resistance (Ohm)	Power Rating (W)	Stock No.	Price Each 1-49
HSC1003R3J	3.3	50	16R5380	12.50
HSC3004R7J	4.7	75	16R5513	54.04
HSC100R10J	0.1	100	16R5340	10.42
HSC100R22J	0.22	100	16R5343	10.42
HSC100R47J	0.47	100	16R5345	12.27
HSC1001R0J	1	100	16R5354	10.42
HSC1001R5J	1.5	100	16R5355	11.03
HSC1002R2J	2.2	100	16R5367	11.03
HSC1004R7J	4.7	100	16R5390	14.87
HSC1006R8J	6.8	100	16R5402	11.03
HSC10010RJ	10	100	23K1715	10.42
HSC10015RJ	15	100	01P2398	10.42
HSC10022RJ	22	100	23M2397	10.42
HSC10033RJ	33	100	16R5381	12.50
HSC10047RJ	47	100	16R5392	14.87
HSC10068RJ	68	100	16R5406	10.72
HSC100100RJ	100	100	16R5357	10.42
HSC100220RJ	220	100	16R5374	14.87
HSC100470RJ	470	100	16R5393	11.03
HSC1001K0J	1k	100	16R5349	10.89
HSC1502R2J	2.2	150	16R5414	16.75
HSC15010RJ	10	150	20J4375	18.75
HSC15033RJ	33	150	16R5420	16.75
HSC150100RJ	100	150	16R5412	16.97
HSC150330RJ	330	150	53R3459	15.82
HSC150470RJ	470	150	51R2349	16.75
HSC200R10J	0.1	200	16R5426	40.88
HSC200R47J	0.47	200	16R5430	38.95
HSC2001R0J	1	200	16R5435	40.45
HSC2002R2J	2.2	200	16R5450	40.88
HSC2006R8J	6.8	200	16R5469	38.95
HSC20010RJ	10	200	16R5437	38.95
HSC20022RJ	22	200	16R5455	38.95
HSC20047RJ	47	200	16R5463	38.95
HSC200100RJ	100	200	16R5438	38.95
HSC200150RJ	150	200	16R5446	40.88
HSC200220RJ	220	200	59M9411	38.95
HSC200470RJ	470	200	16R5464	38.95
HSC2001K0J	1k	200	16R5431	38.95
HSC250R47J	0.47k	250	01P0359	61.82
HSC2503R3J	3.3k	250	01P0366	64.53
HSC2504R7J	4.7k	250	01P0369	64.53
HSC25010RJ	10k	250	01P0360	63.22
HSC25022RJ	22k	250	01P0364	63.80
HSC250150RJ	150k	250	01P0362	64.53
HSC250220RJ	220k	250	01P0365	61.82
HSC3001R0J	1	300	16R5493	54.04
HSC3006R8J	6.8	300	16R5516	54.04
HSC30010RJ	10	300	16R5495	56.71
HSC30022RJ	22	300	16R5503	54.04
HSC30047RJ	47	300	16R5514	56.71
HSC300100RJ	100	300	16R5496	54.04
HSC300330RJ	330	300	16R5510	54.04
HSC300680RJ	680	300	06WX4785	65.07
HSC3001K0J	1k	300	06WX4743	65.07

(177894)

(211462)

CAW/CAF SERIES COMMERCIAL GRADE AXIAL TERMINAL POWER WIREWOUND AND METAL FILM RESISTOR

RoHS Compliant Available

TT electronics IRC

Features
- Flameproof Ceramic Case with Inorganic Potting Material
- Non-Inductive Winding Available

Specifications
- Dielectric Withstanding Voltage: 1000V
- Temperature Coefficient: ±400 ppm/°C (0-20 ohms); ±350 ppm/°C (≥20 ohms)
- Res. Tolerance = ±5%

CAW SERIES WIREWOUND RESISTORS - POWER: 5W

Mfg. Part No.	Res (Ohms)	Stock No.	Price Each 1-49
CAW5R100JLF	0.1	40M8195	0.22
CAW5R150JLF	0.15	40M8196	0.22
CAW5R220JLF	0.22	40M8197	0.22
CAW5R330JLF	0.33	40M8198	0.22
CAW5R470JLF	0.47	40M8199	0.22
CAW5R560JLF	0.56	40M8200	0.21
CAW5R680JLF	0.68	40M8201	0.22
CAW5R820JLF	0.82	40M8202	0.21
CAW51R00JLF	1	40M8203	0.22
CAW51R50JLF	1.5	40M8204	0.22
CAW52R20JLF	2.2	40M8207	0.22
CAW53R30JLF	3.3	40M8209	0.21
CAW54R70JLF	4.7	40M8211	0.21
CAW56R80JLF	6.8	40M8213	0.22
CAW510R0JLF	10	40M8205	0.22
CAW515R0JLF	15	40M8206	0.21
CAW522R0JLF	22	40M8208	0.22
CAW533R0JLF	33	40M8210	0.21
CAW547R0JLF	47	40M8212	0.21
CAW SERIES WIREWOUND RESISTORS - POWER: 10W			
CAW10R100JLF	0.1	40M8168	0.50
CAW10R220JLF	0.22	40M8170	0.50
CAW10R330JLF	0.33	40M8171	0.46
CAW10R470JLF	0.47	40M8172	0.50
CAW101R00JLF	1	40M8176	0.51
CAW101R50JLF	1.5	40M8177	0.46
CAW102R20JLF	2.2	40M8182	0.46
CAW103R30JLF	3.3	40M8185	0.50
CAW104R70JLF	4.7	40M8188	0.46
CAW106R80JLF	6.8	40M8191	0.50
CAW1010R0JLF	10	40M8178	0.49
CAW1015R0JLF	15	40M8180	0.49
CAW1022R0JLF	22	40M8183	0.49
CAW1033R0JLF	33	40M8186	0.50
CAW1047R0JLF	47	40M8189	0.46
CAW1068R0JLF	68	40M8192	0.46
CAW1082R0JLF	82	40M8194	0.46
CAW101000JLF	100	40M8179	0.46
CAW101500JLF	150	40M8181	0.50
CAW102200JLF	220	40M8184	0.50
CAW103300JLF	330	40M8187	0.46
CAW104700JLF	470	40M8190	0.46
CAW106800JLF	680	40M8193	0.46
CAF SERIES METAL FILM RESISTORS - POWER: 5W			
CAF51000JLF	100	40M8155	0.21
CAF51500JLF	150	40M8158	0.20
CAF52200JLF	220	40M8160	0.21
CAF53300JLF	330	40M8162	0.21
CAF54700JLF	470	40M8164	0.20
CAF56800JLF	680	40M8166	0.20
CAF51001JLF	1k	40M8156	0.20
CAF51501JLF	1.5k	40M8159	0.20
CAF52201JLF	2.2k	40M8161	0.20
CAF53301JLF	3.3k	40M8163	0.20
CAF54701JLF	4.7k	40M8165	0.20
CAF56801JLF	6.8k	40M8167	0.20
CAF51002JLF	10k	40M8157	0.20
CAF SERIES METAL FILM RESISTORS - POWER: 10W			
CAF101001JLF	1k	40M8145	0.47
CAF101501JLF	1.5k	40M8147	0.44
CAF102201JLF	2.2k	40M8149	0.47
CAF103301JLF	3.3k	40M8151	0.47
CAF104701JLF	4.7k	40M8153	0.44

CONTINUED

WIREWOUND RESISTORS – AXIAL TERMINAL

CAW/CAF SERIES COMMERCIAL GRADE AXIAL TERMINAL POWER WIREWOUND AND METAL FILM RESISTOR (CONT.)

CAF SERIES METAL FILM RESISTORS - POWER: 10W

Mfg. Part No.	Res (Ohms)	Stock No.	Price Each 1-49
● CAF106801JLF	6.8k	40M8154	0.44
● CAF101002JLF	10k	40M8146	0.44
● CAF101502JLF	15k	40M8148	0.44
● CAF103302JLF	33k	40M8152	0.47

(91439)

WH/WN SERIES MINIATURE WIREWOUND RESISTORS

RoHS Compliant Available

OHMITE

Features
- Designed to meet the most stringent MIL-R-26F, MIL-STD-202 standard requirements
- Miniaturization leads to better power to dimension ratios

Specifications
- Tolerance: F = ± 1%; J = ± 5%
- Temperature Coefficient (ppm/°C):
  ± 90ppm/°C for 0.1Ω
  ± 20 for less than 0.1Ω
- Operating Temp. Range: -55°C to +150°C

WHM SERIES - ULTRA HIGH OHMIC VALUE PRECISION RESISTORS

Mfg. Part No.	Resistance (Ohms)	Stock No.	Price Each 1-24
● WHDR10FET	0.1	13T1761	0.96
● WHDR50FET	0.5	13T1763	1.00
● WHD1R0FET	1	13T1767	1.00
● WHD5R0FET	5	13T1781	0.96
● WHD10RFET	10	13T1771	0.96
● WHD15RFET	15	13T1775	0.96
● WHD100FET	100	13T1773	1.00
● WHD250FET	250	13T1777	1.00
● WHD560FET	560	13T1783	1.00
● WHD1K0FET	1k	13T1765	0.96
● WHD5K0FET	5k	13T1779	1.00
● WHD10KFET	10k	13T1769	1.00
● WHER10FET	0.1	13T1785	1.02
● WHER50FET	0.5	13T1787	1.02
● WHE1R0FET	1	13T1791	0.98
● WHE5R0FET	5	13T1807	0.98
● WHE10RFET	10	13T1795	0.98
● WHE15RFET	15	13T1799	1.02
● WHE100FET	100	13T1797	0.98
● WHE250FET	250	13T1803	1.02
● WHE560FET	560	13T1809	1.02
● WHE1K0FET	1k	13T1789	0.98
● WHE5K0FET	5k	13T1805	1.02
● WHE10KFET	10k	13T1793	1.02
● WHE25KFET	25k	13T1801	1.02

WNM SERIES - ARYTON PERRY WOUND RESISTORS

● WNER10FET	0.1	13T1833	1.26
● WNER10FET	0.1	13T1833	1.26
● WNDR50FET	0.5	13T1813	1.23
● WNER50FET	0.5	13T1835	1.21
● WND1R0FET	1	13T1817	1.23
● WNE1R0FET	1	13T1839	1.26
● WND2K5FET	2.5	13T1825	1.23
● WND5R0FET	5	13T1829	1.18
● WNE5R0FET	5	13T1853	1.26
● WND10RFET	10	13T1819	1.23
● WNE10RFET	10	13T1843	1.26
● WND15RFET	15	13T1823	1.23
● WNE15RFET	15	13T1847	1.26
● WND100FET	100	13T1821	1.23
● WNE100FET	100	13T1845	1.21
● WND250FET	250	13T1827	1.23
● WNE250FET	250	13T1849	1.26
● WND560FET	560	13T1831	1.23
● WNE560FET	560	13T1855	1.26
● WND1K0FET	1k	13T1815	1.18
● WNE1K0FET	1k	13T1837	1.21
● WNE5K0FET	5k	13T1851	1.26
● WNE10KFET	10k	13T1841	1.26

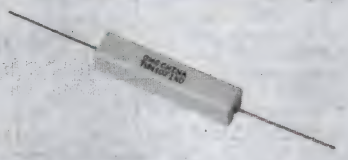
(194922)

TUM/TUW SERIES WIREWOUND & METAL OXIDE CERAMIC HOUSED AXIAL POWER RESISTORS

RoHS Compliant Available

OHMITE

Features
- Economical Commercial Grade for general purpose use
- Wirewound and Metal Oxide construction
- Wide resistance range
- Flameproof inorganic construction



Specifications
- Housing: Ceramic
- Core: Fiberglass or metal oxide
- Filling: Cement based
- Tolerance: 5% standard
- Temperature coeff.: 0.01-20Ω ±400ppm/°C; 20-150KΩ ±350ppm/°C
- Dielectric withstanding voltage: 1,000VAC
- Short time overload TUW: 10x rated power for 5 sec.; TUM: 5x rated power for 5 sec.

The TUM/TUW Series resistors are our most economical power resistors. They are recommended for commercial applications where low cost is critical.

PRODUCT SPECIFICATIONS

Series	Power (W)	Resistance (Ω)	Voltage (V)	Element
TUW3	3	0.01-39	350	Wirewound
TUW5	5	0.01-47	350	Wirewound
TUW7	7	0.10-680	500	Wirewound
TUW10	10	0.10-990	750	Wirewound
TUW15	15	0.10-1K	1000	Wirewound
TUM5	5	220-50K	350	Metal oxide
TUM7	7	910-50K	500	Metal oxide
TUM10	10	1K-50K	750	Metal oxide
TUM15	15	1.1K-150K	1000	Metal oxide

DIMENSIONS (mm)

Series	Length (L)	Height (H)	Width (W)
TUW3	0.87″ (22)	0.31″ (8)	0.31″ (8)
TUW5	0.87″ (22)	0.35″ (9)	0.39″ (10)
TUW7	1.48″ (35)	0.35″ (9)	0.39″ (10)
TUW10	1.93″ (49)	0.35″ (9)	0.39″ (10)
TUW15	1.93″ (49)	0.45″ (11.5)	0.49″ (12.5)
TUM5	0.87″ (22)	0.35″ (9)	0.39″ (10)
TUM7	1.48″ (35)	0.35″ (9)	0.39″ (10)
TUM10	1.93″ (49)	0.35″ (9)	0.39″ (10)
TUM15	1.93″ (49)	0.45″ (11.5)	0.49″ (12.5)

TUW SERIES WIREWOUND POWER RESISTORS

Mfg. Part No.	Res. (Ohms)	Power (W)	Stock No.	Price Each 1-49
● TUM3J4K7E	4.7k	3	64K7002	0.38
● TUM5J470E	470	5	64K7028	0.44
● TUM5J1K5E	1.5k	5	64K7014	0.42
● TUM5J2K0E	2k	5	64K7016	0.42
● TUM5J6K8E	6.8k	5	64K7031	0.42
● TUM7J10KE	10k	7	64K7039	0.50
● TUM10J1K0E	1k	10	64K6961	0.63
● TUM10J10KE	10k	10	64K6963	0.60
● TUM15J2K7E	2.7k	15	64K6978	0.64

TUM SERIES METAL OXIDE POWER RESISTORS

● TUW5JR47E	0.47	5	64K7205	0.42
● TUW5J27RE	27	5	64K7220	0.42
● TUW5J100E	100	5	64K7213	0.42
● TUW5J200E	200	5	64K7219	0.44
● TUW7J47RE	47	7	64K7277	0.50
● TUW7J100E	100	7	64K7255	0.50
● TUW10J2R0E	2	10	64K7070	0.60
● TUW10J4R7E	4.7	10	64K7086	0.60
● TUW10J100E	100	10	64K7067	0.60
● TUW10J330E	330	10	64K7082	0.60
● TUW15J10RE	10	15	64K7119	0.69
● TUW15J20RE	20	15	64K7125	0.66
● TUW15J47RE	47	15	64K7142	0.69

(176232)

CERAMIC HOUSED WIREWOUND AND METAL FILM AXIAL RESISTORS

RoHS Compliant Available

multicomp

Features:
- Self extinguishing
- Excellent flame and moisture resistance
- Small, sturdy and mechanical safe

METAL FILM, POWER: 1W, TOL: ±1%, TCR: ±350ppm/°C

Res. (Ohms)	Stock No.	Price Each 1-9	Res. (Ohms)	Stock No.	Price Each 1-9	Res. (Ohms)	Stock No.	Price Each 1-9
100	16R3384	0.28	10	16R3386	0.33	10k	16R3386	0.33
150	16R3387	0.28	1k	16R3385	0.28	...	...	...

➤CONTINUED➤

CERAMIC HOUSED WIREWOUND AND METAL FILM AXIAL RESISTORS (CONT.)

Res. (Ohms)	Stock No.	Price Each 1-9	Res. (Ohms)	Stock No.	Price Each 1-9	Res. (Ohms)	Stock No.	Price Each 1-9
METAL FILM, POWER: 3W, TOL: ±5%, TCR: ±350ppm/°C								
82	16R2193	0.32	820	16R2194	0.32	8.2k	16R2195	0.34
100	16R2170	0.32	1k	16R2171	0.34	10k	16R2172	0.32
150	16R2173	0.34	1.5k	16R2174	0.33	15k	16R2175	0.34
750	16R2191	0.33	7.5k	16R2192	0.33	...	...	...
METAL FILM, POWER: 3W, TOL: ±5%, TCR: ±400ppm/°C								
0.2	16R2203	0.32	2.7	16R2205	0.32	20	16R2204	0.32
2	16R2202	0.32	15	16R2201	0.32	...	...	...
METAL FILM, POWER: 5W, TOL: ±5%, TCR: ±350ppm/°C								
300	16R2229	0.38	3k	16R2230	0.41	33k	16R2233	0.38
330	16R2231	0.41	3.3k	16R2232	0.36	...	...	...
2k	16R2228	0.41	2k	16R2228	0.41	...	...	...
METAL FILM, POWER: 10W, TOL: ±5%, TCR: ±350ppm/°C								
1k	16R2014	0.84	4.7k	16R2027	0.89	100k	16R2017	0.89
3.3k	16R2025	0.84	10k	16R2016	0.88	...	...	...
3.9k	16R2026	0.84	11k	16R2018	0.88	...	...	...
WIREWOUND, POWER: 1W, TOL: ±5%, TCR: ± 400ppm/°C								
1	16R3405	0.33	10	16R3406	0.33	15	16R3407	0.28
WIREWOUND, POWER: 2W, TOL: ±5%, TCR: ± 400ppm/°C								
0.1	16R2098	0.29	2	16R2100	0.29	8.2	16R2111	0.29
0.82	16R2112	0.29	5.6	16R2108	0.29	20	16R2101	0.29
1	16R2097	0.33	6.8	16R2109	0.29	...	...	...
1.5	16R2099	0.33	7.5	16R2110	0.29	...	...	...
WIREWOUND, POWER: 5W, TOL: ±5%, TCR: ± 400ppm/°C								
1	16R2240	0.38	10	16R2241	0.41	47	16R2253	0.38
6.8	16R2254	0.41	15	16R2242	0.36	...	...	...
WIREWOUND, POWER: 7W, TOL: ±5%, TCR: ± 400ppm/°C								
1	16R2255	0.67	20	16R2261	0.67	200	16R2262	0.70
3	16R2265	0.66	27	16R2263	0.66	270	16R2264	0.66
10	16R2256	0.01	30	16R2266	0.66	...	...	...
WIREWOUND, POWER: 10W, TOL: ±5%, TCR: ± 400ppm/°C								
1	16R2028	0.87	10	16R2029	0.87	430	16R2046	0.79
5.6	16R2050	0.87	43	16R2045	0.79	...	...	...
WIREWOUND, POWER: 15W, TOL: ±5%, TCR: ± 400ppm/°C								
1	16R2061	1.32	33	16R2077	1.32	1k	16R2065	1.32
10	16R2062	1.39	300	16R2076	1.23	...	...	...
WIREWOUND, POWER: 20W, TOL: ±5%, TCR: ± 400ppm/°C								
4.7	16R2121	1.57	100	16R2115	1.77	150	16R2116	1.65
WIREWOUND, POWER: 25W, TOL: ±5%, TCR: ± 400ppm/°C								
2	16R2137	2.50	15	16R2135	2.53	150	16R2136	1.84
2.7	16R2140	2.40	20	16R2138	2.53	200	16R2139	2.53
10	16R2132	2.53	100	16R2133	2.53	1k	16R2134	2.53

(177448)

CP SERIES METAL OXIDE AXIAL LEADED WIREWOUND RESISTORS

NEW

RoHS Compliant Available

VISHAY.

Features:
- High performance
- Meets or exceeds requirements of EIA Standard RS-344
- High power to size ratio
- Special inorganic potting compound and ceramic case provide high thermal conductivity in a fireproof package

Mfg. Part No.	Res. (ohms	Power Rating (W)	Tol.	Temp. Coeff.	Stock No.	Price Each 1-99
CP0005R3300JE14	0.33	5	± 5%	± 600ppm/°C	69P4707	1.65
CP00051R000JE14	1	5	± 5%	± 300ppm/°C	69P4733	0.44
CP000510R00KE14	10	5	± 10%	± 300ppm/°C	69P4746	0.44
CP000533R00JE14	33	5	± 5%	± 300ppm/°C	69P4818	1.31
CP000550R00JE14	50	5	± 5%	± 300ppm/°C	83R8184	0.44
CP0005150R0JE14	150	5	± 5%	± 300ppm/°C	10P9983	0.44
CP0005330R0JE14	330	5	± 5%	± 300ppm/°C	69P4819	0.44
CP0010100R0KE14	100	10	± 10%	± 300ppm/°C	69P4919	1.76
CP0015500R0KE14	500	15	± 10%	± 300ppm/°C	41K8904	0.76

(212431)

TYPE RWR (MIL-PRF-39007) AXIAL TERMINAL WIREWOUND RESISTORS

VISHAY.

Specifications
- Res. Tolerance.: ±1%
- Temp. Coeff.: ±20ppm/°C to ±650ppm/°C
- Oper. Temp. Range: -65°C to +250°C
- Failure Rate:
  R = 0.01 %/1000 h
  S = 0.001 %/1000 h

FEATURES
- Meets Requirements of MIL-PRF-39007
- High temperature silicone coated
- Complete welded construction

Mfg. Part No.	Res. (ohm)	Temp. Coeff. (ppm/°C)	Stock No.	Price Each 1-9	Price Each 10-24
RWR80S STYLE INDUCTIVE WIREWOUND RESISTOR - 2 WATTS					
RWR80S1R00FR	1	± 400ppm/°C	63C2598	7.52	6.51
RWR80S1R00FS	1	± 400ppm/°C	63C2603	10.09	8.73
RWR80S2R00FR	2	± 50ppm/°C	63C3565	7.26	6.28
RWR80S10R0FRB12	10	± 50ppm/°C	63C2824	7.26	6.28
RWR80S20R0FR	20	± 20ppm/°C	63C3691	7.52	6.51
RWR80S1000FRB12	100	± 20ppm/°C	63C2861	7.26	6.28
RWR80S2000FR	200	± 20ppm/°C	63C3717	7.26	6.28
RWR80S1001FR	1k	± 20ppm/°C	63C2883	7.52	6.51
RWR80S1211FR	1.21k	± 20ppm/°C	63C3057	7.26	6.28
RWR80S1501FR	1.5k	± 20ppm/°C	63C3278	7.26	6.28
RWR81S STYLE INDUCTIVE WIREWOUND RESISTORS - 1 WATT					
RWR81SR200FR	0.2	± 650ppm/°C	73C1157	7.45	6.48
RWR81SR499FR	0.499	± 650ppm/°C	63C7767	7.72	6.72
RWR81S1R00FRB12	1	± 400ppm/°C	50B2644	6.55	5.67
RWR81S1R00FS	1	± 400ppm/°C	63C8065	9.41	8.14
RWR81S2R00FR	2	± 50ppm/°C	63C9229	6.55	5.67
RWR81S2R00FS	2	± 50ppm/°C	63C9236	9.41	8.14
RWR81S4R99FRB12	4.99	± 50ppm/°C	64C0594	6.79	5.88
RWR81S5R11FR	5.11	± 50ppm/°C	64C0944	6.55	5.67
RWR81S10R0FR	10	± 50ppm/°C	63C8376	6.79	5.88
RWR81S10R0FS	10	± 50ppm/°C	63C8384	9.08	7.86
RWR81S20R0FS	20	± 20ppm/°C	27C4480	9.08	7.86
RWR81S1000FR	100	± 20ppm/°C	93B4141	6.55	5.67
RWR81S1000FS	100	± 20ppm/°C	63C8440	9.41	8.14
RWR81S1001FRB12	1k	± 20ppm/°C	96B4819	6.79	5.88
RWR81S1001FS	1k	± 20ppm/°C	63C8475	9.41	8.14
RWR89S STYLE INDUCTIVE WIREWOUND RESISTOR - 3 WATTS					
RWR89SR100FRB12	0.1	± 650ppm/°C	64C5211	8.79	7.61
RWR89S1R00FRB12	1	± 400ppm/°C	91B9276	6.33	5.48
RWR89S10R0FR	10	± 50ppm/°C	64C6079	6.10	5.28
RWR89S10R0FS	10	± 50ppm/°C	64C6086	8.56	7.41
RWR89S1001FR	1k	± 20ppm/°C	90B5509	6.10	5.28

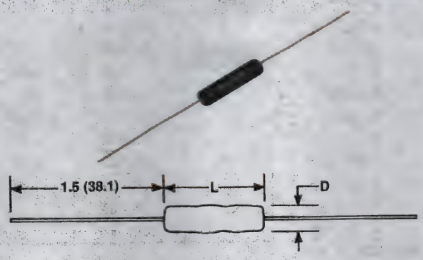
(108535)

90 SERIES LEAD-FREE VITREOUS ENAMEL MOLDED WIREWOUND RESISTORS

RoHS Compliant Available

OHMITE

Specifications
- Tolerance: ±5%
- Power Ratings Based On 25°C Free Air Rating
- Temperature Coefficents:
  1 to 9.99Ω: ±100ppm/°C
  Over 10Ω: ±30ppm/°C
- Dielectric Withstanding Voltage:
  2, 3, 5 and 11W: 1000VAC



Features
- Molded Construction Permits Mounting in Clips For Extended Power Rating
- Meets MIL-R-26 Requirements For Insulated Resistors
- All-Welded Construction
- Flame-Resistant Enamel Coating
- Solder-Coated Copper-Clad Leads
- Compact Sizes With Higher Ratings

Mounting Clips
- Prevents Severe Vibration or Mechanical Shock
- Increase Resistor Wattage Up To 100% When Mounted On Metal Surfaces (1.5 x 1.5 x 0.040″ Min. Per Watt Dissipated)
- Holes–2

Additional values available; *go online or call.*

DIMENSIONS (mm)

Series	Length	Diameter	Lead Ga.
93	0.562″ (14.3)	0.234″ (5.9)	20
95	0.953″ (24.2)	0.234″ (5.9)	20
90	1.796″ (45.6)	0.343″ (8.7)	20

➤CONTINUED➤

WIREWOUND RESISTORS – AXIAL TERMINAL

90 SERIES LEAD-FREE VITREOUS ENAMEL MOLDED WIREWOUND RESISTORS (CONT.)

92J SERIES, 2¼ WATT

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	25-99	100-249	250+
● 92J27RE	27	65K0381	2.77	2.51	2.24	2.01
93 SERIES, 3¼ WATT						
● 93J1R0E	1	65K0444	2.96	2.68	2.39	2.14
● 93J2R0E	2	65K0471	2.85	2.58	2.30	2.06
● 93J3R0E	3	65K0490	2.85	2.58	2.30	2.06
● 93J5R0E	5	65K0521	2.85	2.58	2.30	2.06
● 93J10RE	10	65K0452	2.52	2.29	2.04	1.83
● 93J100E	100	65K0453	2.52	2.29	2.04	1.83
● 93J250E	250	65K0482	2.43	2.20	1.96	1.76
● 93J330E	330	65K0497	2.52	2.29	2.04	1.83
● 93J1K0E	1k	65K0436	3.48	3.15	2.81	2.52
● 93J3K0E	3k	65K0485	4.28	3.88	3.45	3.10
● 93J4K7	4.7k	02F1558	4.66	4.23	3.76	3.37
● 93J5K0E	5k	65K0518	5.12	4.64	4.14	3.70
● 93J5K6E	5.6k	65K0520	4.93	4.47	3.98	3.56
● 93J10KE	10k	65K0451	4.93	4.47	3.98	3.56
95 SERIES, 5 WATT						
● 95J1R0E	1	65K0565	3.55	3.22	2.87	2.57
● 95J2R0E	2	65K0600	3.55	3.22	2.87	2.57
● 95J3R0E	3	65K0623	3.42	3.10	2.76	2.47
● 95J5R0E	5	65K0654	3.51	3.18	2.83	2.53
● 95J10RE	10	65K0573	3.12	2.82	2.51	2.26
● 95J15RE	15	65K0586	3.04	2.75	2.45	2.20
● 95J20RE	20	65K0605	3.04	2.75	2.45	2.20
● 95J22RE	22	65K0608	3.04	2.75	2.45	2.20
● 95J25RE	25	65K0614	3.04	2.75	2.45	2.20
● 95J47RE	47	65K0649	3.16	2.86	2.55	2.29
● 95J50RE	50	65K0657	3.16	2.86	2.55	2.29
● 95J68RE	68	65K0671	3.04	2.75	2.45	2.20
● 95J75RE	75	65K0677	3.04	2.75	2.45	2.20
● 95J100E	100	65K0574	2.82	2.56	2.28	2.04
● 95J150E	150	65K0587	3.04	2.75	2.45	2.20
● 95J180E	180	65K0594	3.04	2.75	2.45	2.20
● 95J200E	200	65K0606	3.12	2.82	2.51	2.26
● 95J250E	250	65K0615	3.04	2.75	2.45	2.20
● 95J470E	470	65K0650	3.16	2.86	2.55	2.29
● 95J500E	500	65K0658	3.44	3.11	2.77	2.48
● 95J1K0E	1k	65K0557	4.24	3.84	3.42	3.07
● 95J1K5E	1.5k	65K0562	4.41	3.99	3.55	3.19
● 95J2K0E	2k	65K0595	4.41	3.99	3.55	3.19
● 95J2K2E	2.2k	65K0596	4.24	3.84	3.42	3.07
● 95J2K7E	2.7k	65K0599	5.14	4.65	4.15	3.72
● 95J3K0E	3k	65K0618	5.14	4.66	4.15	3.72
● 95J3K3E	3.3k	65K0619	5.08	4.60	4.09	3.67
● 95J3K9E	3.9k	65K0622	4.95	4.48	3.99	3.58
● 95J4K3E	4.3k	65K0638	4.95	4.48	3.99	3.58
● 95J4K7E	4.7k	65K0640	5.08	4.60	4.10	3.67
● 95J5K0E	5k	65K0651	6.02	5.45	4.86	4.35
● 95J10KE	10k	65K0572	6.17	5.59	4.97	4.46
● 95J15KE	15k	65K0585	6.24	5.65	5.03	4.51
● 95J20KE	20k	65K0604	7.46	6.77	6.02	5.40
● 95J25KE	25k	65K0613	7.20	6.53	5.81	5.21
90 SERIES, 11 WATT						
● 90J1R0E	1	65K0096	4.84	4.38	3.90	3.50
● 90J5R0E	5	65K0195	4.56	4.12	3.67	3.29
● 90J10RE	10	65K0104	4.44	4.02	3.58	3.21
● 90J25RE	25	65K0145	4.61	4.18	3.72	3.34
● 90J50RE	50	65K0199	4.44	4.02	3.58	3.21
● 90J100E	100	65K0105	4.56	4.12	3.67	3.29
● 90J150E	150	65K0118	4.44	4.02	3.58	3.21
● 90J500E	500	65K0200	4.97	4.50	4.01	3.59
● 90J1K0E	1k	65K0088	5.75	5.21	4.64	4.16
● 90J1K5E	1.5k	65K0093	5.62	5.09	4.53	4.06
● 90J2K0E	2k	65K0126	5.82	5.27	4.69	4.21
● 90J2K5E	2.5k	65K0129	6.40	5.80	5.16	4.63
● 90J4K0E	4k	65K0174	6.48	5.86	5.22	4.68
● 90J5K0E	5k	65K0192	7.60	6.89	6.13	5.49
● 90J6K0E	6k	65K0206	7.34	6.65	5.92	5.30
● 90J10KE	10k	65K0103	7.52	6.81	6.06	5.43
● 90J20KE	20k	65K0135	8.53	7.73	6.88	6.16

➤CONTINUED➤

90 SERIES LEAD-FREE VITREOUS ENAMEL MOLDED WIREWOUND RESISTORS (CONT.)

90 SERIES, 11 WATT

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	25-99	100-249	250+
● 90J30KE	30k	65K0159	8.33	7.55	6.72	6.02
● 90J50KE	50k	65K0198	8.33	7.55	6.72	6.02

MOUNTING CLIPS FOR 90 SERIES

Mfg. Part No.	Series	L x W x H	Stock No.	Price Each 1-24
● 5904E	93	0.50 x 0.257 x 0.319″	64K9314	2.12
● 5906E	95	0.90 x 0.237 x 0.284″	64K9316	1.63
● 5908E	90	1.75 x 0.333 x 0.377″	64K9317	1.67

(9604)

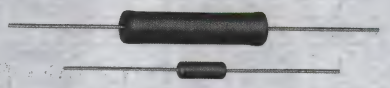
RS SERIES (MIL-R-26E, RW SERIES) AXIAL TERMINAL WIREWOUND RESISTORS

RoHS Compliant Available

VISHAY.

Features

- Meets Applicable Requirements of MIL-PRF-26
- High temperature coating (> 350 °C)
- Complete welded construction
- Excellent stability in operation (typical resistance shift < 0.5 %)



Specifications

- Tolerance: ±1%
- Dielectric Strength: 1000VAC
- Temperature Coefficents: <1Ω: ±90ppm/°C; 1Ω to 9.9Ω: ±50ppm/°C; ≥10Ω: ±20ppm/°C
- Operating Temperature: -65°C to +250°C

Most popular values listed. Other values available from 0.01Ω to 275kΩ; *go online or call.*

DIMENSIONS (mm)

Type	A	B_{max}	C	D
RS-1A	0.406″ ± 0.031″ (10.31 ± 0.787)	0.437″ (11.10)	0.094″ ± 0.031″ (2.39 ± 0.787)	0.020″ ± 0.002″ (0.508 ± 0.051)
RS-2B	0.560″±0.062″ (14.22±1.57)	0.622″ (15.80)	0.187″± 0.031″ (4.75 ± 0.787)	0.032″± 0.002″ (0.813 ± 0.051)
RS-5	0.875″±0.062″ (22.23±1.57)	1.0″ (25.4)	0.312″± 0.031″ (7.92 ± 0.787)	0.040″± 0.002″ (1.02 ± 0.051)
RS-10	1.78″±0.062″ (45.21±1.57)	1.87″ (47.50)	0.375″± 0.031″ (9.53 ± 0.787)	0.040″± 0.002″ (1.02 ± 0.051)

RS-1A, 1 WATT MILITARY NO. PRF-26

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49	50-99	100-499
● RS01AR1000FE12	0.1	63M2651	1.90	1.57	1.40
● RS01AR1500FE12	0.15	52P1374	1.97	1.63	1.46
● RS01AR2500FE12	0.25	52P1416	1.90	1.57	1.40
● RS01AR3300FE12	0.33	63M2652	1.97	1.63	1.46
● RS01AR5000FE12	0.5	63M2653	1.90	1.57	1.40
● RS01A1R000FE12	1	65K2658	1.29	1.05	0.90
● RS01A3R000FE12	3	52P1971	1.90	1.55	1.33
● RS01A10R00FE12	10	63M2656	1.90	1.55	1.33
● RS01A20R00FE12	20	52P1846	1.90	1.55	1.33
● RS01A25R00FE12	25	52P1921	1.90	1.55	1.33
● RS01A40R00FE12	40	52P2078	1.90	1.55	1.33
● RS01A50R00FE12	50	63M2660	1.90	1.55	1.33
● RS01A60R00FE12	60	52P2217	1.88	1.53	1.31
● RS01A100R0FE12	100	63M2657	1.90	1.55	1.33
● RS01A200R0FE12	200	63M2658	1.88	1.53	1.31
● RS01A220R0FE12	220	52P1891	1.90	1.55	1.33
● RS01A250R0FE12	250	63M2659	1.29	1.05	0.90
● RS01A300R0FE12	300	52P1992	1.90	1.55	1.33
● RS01A400R0FE12	400	52P2084	1.90	1.55	1.33
● RS01A500R0FE12	500	63M2661	1.29	1.05	0.90
● RS01A510R0FE12	510	52P2161	1.90	1.55	1.33
● RS01A1K000FE12	1k	63M2654	1.88	1.53	1.31
● RS01A2K000FE12	2k	52P1771	1.99	1.62	1.39
● RS01A10K00FE12	10k	63M2655	4.33	3.75	3.55
RS-2B, 3 WATT MILITARY NO. RW79					
● RS02BR1000FE12	0.1	65K2665	2.05	1.66	1.43
● RS02BR2000FE12	0.2	65K2666	1.93	1.60	1.43
● RS02BR5000FE12	0.5	41K9239	1.86	1.54	1.38
● RS02B1R000FE12	1	65K2668	1.17	0.95	0.82
● RS02B1R500FE12	1.5	65K2669	1.42	1.15	0.99
● RS02B2R000FE12	2	41K9247	1.17	0.95	0.82
● RS02B2R500FE12	2.5	63M2663	1.20	0.97	0.84
● RS02B3R000FE12	3	65K2679	1.45	1.18	1.02
● RS02B3R300FE12	3.3	63M2664	1.47	1.20	1.03
● RS02B5R000FE12	5	65K2685	1.20	0.97	0.84

➤CONTINUED➤

RS SERIES (MIL-R-26E, RW SERIES) AXIAL TERMINAL WIREWOUND RESISTORS (CONT.)

RS-2B, 3 WATT MILITARY NO. RW79

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49	50-99	100-499
RS02B10R00FE12	10	65K2670	1.45	1.18	1.02
RS02B15R00FE12	15	41K9245	1.47	1.20	1.03
RS02B20R00FE12	20	41K9249	1.43	1.16	1.00
RS02B25R00FE12	25	65K2677	1.47	1.20	1.03
RS02B30R00FE12	30	63M2665	1.47	1.20	1.03
RS02B33R00FE12	33	65K2681	1.47	1.20	1.03
RS02B40R00FE12	40	65K2683	1.17	0.95	0.82
RS02B47R00FE12	47	41K9254	1.41	1.15	0.99
RS02B50R00FE12	50	41K9256	1.41	1.15	0.99
RS02B75R00FE12	75	65K2687	1.45	1.18	1.02
RS02B100R0FE12	100	65K2671	1.20	0.97	0.84
RS02B110R0FE12	110	63M2662	1.47	1.20	1.03
RS02B120R0FE12	120	65K2689	1.47	1.20	1.03
RS02B150R0FE12	150	65K2672	1.42	1.15	0.99
RS02B200R0FE12	200	65K2675	1.17	0.95	0.82
RS02B220R0FE12	220	65K2676	1.47	1.20	1.03
RS02B250R0BE12	250	41K9250	4.32	3.74	3.54
RS02B250R0FE12	250	41K9251	1.17	0.95	0.82
RS02B300R0FE12	300	65K2680	1.43	1.16	1.00
RS02B330R0FE12	330	41K9252	1.43	1.16	1.00
RS02B400R0FE12	400	41K9253	1.41	1.15	0.99
RS02B470R0FE12	470	65K2684	1.47	1.20	1.03
RS02B500R0FE12	500	41K9257	1.41	1.15	0.99
RS02B620R0FE12	620	65K2686	1.47	1.20	1.03
RS02B1K000FE12	1k	65K2667	1.17	0.95	0.82
RS02B1K200FE12	1.2k	41K9240	1.71	1.39	1.19
RS02B1K500FE12	1.5k	41K9241	1.75	1.42	1.22
RS02B2K000FE12	2k	41K9246	1.77	1.44	1.24
RS02B2K200FE12	2.2k	65K2673	1.77	1.44	1.24
RS02B2K500FE12	2.5k	65K2674	1.75	1.42	1.22
RS02B3K000FE12	3k	65K2678	1.75	1.42	1.22
RS02B4K000FE12	4k	65K2682	1.67	1.35	1.17
RS02B5K000FE12	5k	41K9255	1.69	1.37	1.18
RS02B8K200FE12	8.2k	65K2688	1.71	1.39	1.19
RS02B10K00FE12	10k	41K9242	1.37	1.12	0.96
RS02B15K00FE12	15k	41K9244	2.39	1.98	1.77
RS02B20K00FE12	20k	41K9248	2.39	1.98	1.77

RS-5, 5 WATT MILITARY NO. RW67 AND RWP21

Mfg. Part No.	Res. (Ohms)	Stock No.	1-49	50-99	100-499
RS005R1000FE12	0.1	65K2647	2.48	2.05	1.83
RS005R5000FE12	0.5	65K2648	2.39	1.98	1.77
RS0051R000FE12	1	65K2649	2.16	1.78	1.59
RS0052R000FE12	2	41K9202	2.13	1.76	1.57
RS0055R000FE12	5	41K9208	2.16	1.78	1.59
RS0057R500FE12	7.5	41K9211	2.16	1.78	1.59
RS00510R00FE12	10	41K9197	2.07	1.72	1.53
RS00515R00FE12	15	41K9200	1.81	1.49	1.33
RS00520R00FE12	20	41K9203	1.95	1.61	1.44
RS00525R00FE12	25	65K2652	2.16	1.78	1.59
RS00533R00FE12	33	65K2656	2.16	1.78	1.59
RS00550R00FE12	50	41K9210	1.95	1.61	1.44
RS00575R00FE12	75	52P1259	2.07	1.72	1.53
RS005100R0FE12	100	41K9198	2.07	1.72	1.53
RS005150R0FE12	150	41K9201	2.07	1.72	1.53
RS005200R0FE12	200	41K9204	2.13	1.76	1.57
RS005250R0FE12	250	41K9205	2.16	1.78	1.59
RS0051K000FE12	1k	41K9196	2.16	1.78	1.59
RS0055K000FE12	5k	41K9207	1.99	1.62	1.39
RS0058K200FE12	8.2k	41K9212	1.91	1.55	1.34
RS00510K00FE12	10k	65K2650	1.67	1.35	1.17
RS00515K00FE12	15k	41K9199	2.27	1.88	1.68
RS00520K00FE12	20k	63M2650	2.39	1.98	1.77
RS00525K00FE12	25k	65K2651	2.48	2.05	1.83
RS00530K00FE12	30k	41K9206	2.00	1.66	1.48
RS00550K00FE12	50k	41K9209	2.60	2.15	1.92

RS-10, 10 WATT MILITARY NO. RW68 AND RWP23

Mfg. Part No.	Res. (Ohms)	Stock No.	1-49	50-99	100-499
RS010R1000FE12	0.1	65K2659	2.60	2.15	1.92
RS010R2000FE12	0.2	41K9213	2.39	1.98	1.77
RS010R5000FE12	0.5	41K9214	2.96	2.45	2.18
RS0101R000FE12	1	41K9216	2.09	1.73	1.55
RS0102R000FE12	2	41K9224	2.27	1.87	1.67
RS0103R000FE12	3	41K9230	2.27	1.87	1.67

➤ CONTINUED ➤

RS SERIES (MIL-R-26E, RW SERIES) AXIAL TERMINAL WIREWOUND RESISTORS (CONT.)

RS-10, 10 WATT MILITARY NO. RW68 AND RWP23

Mfg. Part No.	Res. (Ohms)	Stock No.	1-49	50-99	100-499
RS0104R000FE12	4	41K9232	2.27	1.87	1.67
RS0105R000FE12	5	41K9235	2.18	1.80	1.61
RS01010R00FE12	10	41K9217	2.24	1.85	1.65
RS01015R00FE12	15	41K9219	2.27	1.87	1.67
RS01020R00FE12	20	41K9225	2.00	1.66	1.48
RS01025R00FE12	25	41K9228	2.12	1.75	1.57
RS01030R00FE12	30	41K9231	2.27	1.87	1.67
RS01040R00FE12	40	41K9234	2.24	1.85	1.65
RS01050R00FE12	50	65K2664	2.12	1.75	1.57
RS010100K0FE12	100	41K9218	7.70	6.67	6.31
RS010100R0FE12	100	65K2661	2.09	1.73	1.55
RS010150R0FE12	150	41K9221	2.27	1.87	1.67
RS010200R0FE12	200	41K9226	2.27	1.87	1.67
RS010500R0FE12	500	41K9237	2.18	1.80	1.61
RS0101K000FE12	1k	41K9215	2.24	1.85	1.65
RS0102K000FE12	2k	41K9222	2.67	2.20	1.97
RS0102K500FE12	2.5k	41K9223	2.67	2.20	1.97
RS01010K00FE12	10k	65K2660	2.67	2.20	1.97
RS01025K00FE12	25k	41K9227	3.86	3.34	3.17
RS01040K00FE12	40k	41K9233	6.63	5.74	5.43
RS01050K00FE12	50k	41K9236	5.60	4.85	4.60
RS010150K0FE12	150k	41K9220	7.11	6.18	5.87

(9560)

AXIAL TERMINAL WIREWOUND RESISTORS

RoHS Compliant Available

multicomp

SPECIFICATIONS

Series	Resistance Range (Ohms)	Tolerance	Power @ 70°C (W)	Operating Voltage (V)
KNP0A	1	±5%	1W	500
KNP03	0.1 to 5K		3W	
KNP07	1 to 10K	±1%	7W	
KNP0A	1 to 100		10W	

Mfg. Part No.	Res. (Ohms)	Temperature Coefficient	Stock No.	Price Each 1-9
MCKNP01SF100KA10	1	± 50ppm/°C	97M9479	0.35
MCKNP03UJ010KB00	0.1	± 90ppm/°C	97M9481	0.34
MCKNP03UJ020KB00	0.2	± 90ppm/°C	97M9489	0.34
MCKNP03UJ050KB00	0.5	± 90ppm/°C	97M9503	0.34
MCKNP03UJ010JB00	1	± 50ppm/°C	97M9480	0.34
MCKNP03UJ020JB00	2	± 50ppm/°C	97M9488	0.32
MCKNP03UJ050JB00	5	± 50ppm/°C	97M9502	0.33
MCKNP03UJ0100B00	10	± 20ppm/°C	97M9482	0.32
MCKNP03UJ0250B00	25	± 20ppm/°C	97M9493	0.34
MCKNP03UJ0400B00	40	± 20ppm/°C	97M9498	0.32
MCKNP03UJ0500B00	50	± 20ppm/°C	97M9504	0.34
MCKNP03UJ0750B00	75	± 20ppm/°C	97M9507	0.32
MCKNP03UJ0101B00	100	± 20ppm/°C	97M9483	0.34
MCKNP03UJ0121B00	120	± 20ppm/°C	97M9485	0.34
MCKNP03UJ0201B00	200	± 20ppm/°C	97M9490	0.64
MCKNP03UJ0221B00	220	± 20ppm/°C	97M9492	0.57
MCKNP03UJ0251B00	250	± 20ppm/°C	97M9494	0.59
MCKNP03UJ0301B00	300	± 20ppm/°C	97M9495	0.57
MCKNP03UJ0331B00	330	± 20ppm/°C	97M9497	0.57
MCKNP03UJ0401B00	400	± 20ppm/°C	97M9499	0.57
MCKNP03UJ0471B00	470	± 20ppm/°C	97M9501	0.57
MCKNP03UJ0501B00	500	± 20ppm/°C	97M9505	0.60
MCKNP03UJ0102B00	1k	± 20ppm/°C	97M9484	0.57
MCKNP03UJ0122B00	1.2k	± 20ppm/°C	97M9486	0.60
MCKNP03UJ0152B00	1.5k	± 20ppm/°C	97M9487	0.60
MCKNP03UJ0202B00	2k	± 20ppm/°C	97M9491	0.57
MCKNP03UJ0302B00	3k	± 20ppm/°C	97M9496	0.60
MCKNP03UJ0402B00	4k	± 20ppm/°C	97M9500	0.57
MCKNP03UJ0502B00	5k	± 20ppm/°C	97M9506	0.60
MCKNP07SF100KB00	1	± 50ppm/°C	97M9509	0.95
MCKNP07SF100JB00	10	± 20ppm/°C	97M9508	0.95
MCKNP07SF500JB00	50	± 20ppm/°C	97M9515	0.90
MCKNP07SF1000B00	100	± 20ppm/°C	97M9510	0.95
MCKNP07SF2000B00	200	± 20ppm/°C	97M9513	0.95
MCKNP07SF2500B00	250	± 20ppm/°C	97M9514	0.95
MCKNP0ASF100KB00	1	± 50ppm/°C	97M9474	2.20

➤ CONTINUED ➤

AXIAL TERMINAL WIREWOUND RESISTORS (CONT.)

Mfg. Part No.	Res. (Ohms)	Temperature Coefficient	Stock No.	Price Each 1-9
● MCKNP0ASF200KB00	2	± 50ppm/°C	97M9477	2.09
● MCKNP0ASF100JB00	10	± 20ppm/°C	97M9473	2.20
● MCKNP0ASF150JB00	15	± 20ppm/°C	97M9476	2.09
● MCKNP0ASF300JB00	30	± 20ppm/°C	97M9478	2.20
● MCKNP0ASF1000B00	100	± 20ppm/°C	97M9475	2.09

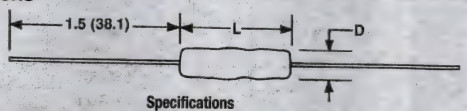
(116695)

40 SERIES OHMICONE® SILICONE-CERAMIC CONFORMAL WIREWOUND RESISTORS

RoHS Compliant Available

OHMITE

Applications
- Commercial Industrial and Communications Equipment



Features
- Economical Conformable Silicone-Ceramic Coated
- Low Temperature Coefficients and Resistance To Thermal Shock
- Stable Under High Temperature Conditions
- All-Welded Construction
- Solder-Coated, Copper-Clad Axial Leads

Specifications
- Tolerance: J= ±5%, F = ±1%
- Power Ratings Based On 25°C Free Air Rating
- Temperature Coefficients: <1Ω: ±90ppm/°C; 1 to 9.99Ω: ±50ppm/°C; ≥10Ω: ±20ppm/°C

PRODUCT SPECIFICATIONS

Series	Power (W)	Resistance (Ω)	Voltage (V)
41	1	0.1 - 2K	150
42	2	10 - 270	100
43	3	0.1 - 10K	200
45	5	0.1 - 25K	460
40	10	0.1 - 10K	1000

DIMENSIONS (mm)

Series	Length (L)	Diameter (D)	Lead Ga.
41	0.437" (11.1)	0.125" (3.2)	20
42	0.406" (10.3)	0.219" (5.6)	20
43	0.593" (15.1)	0.218" (5.5)	20
45	0.937" (23.8)	0.343" (8.7)	18
40	1.642" (41.7)	0.406" (10.3)	18

1 WATT, 150 V

Mfg. Part No.	Res. (Ohms)	Res. Tol.	Stock No.	Price Each 1-24	25-99	100-249	250-499
● 41FR10E	0.1	± 1%	64K8654	2.65	2.39	2.11	1.80
● 41FR20E	0.2	± 1%	64K8656	2.65	2.39	2.11	1.80
● 41FR30E	0.3	± 1%	64K8657	2.65	2.39	2.11	1.80
● 41FR50E	0.5	± 1%	64K8658	2.55	2.30	2.03	1.73
● 41F1R0E	1	± 1%	64K8665	2.58	2.32	2.05	1.74
● 41F2R0E	2	± 1%	64K8680	2.48	2.23	1.97	1.68
● 41F3R0E	3	± 1%	64K8692	2.48	2.23	1.97	1.68
● 41F4R0E	4	± 1%	64K8701	2.48	2.23	1.97	1.68
● 41F5R0E	5	± 1%	64K8707	2.48	2.23	1.97	1.68
● 41F10RE	10	± 1%	64K8667	2.13	1.92	1.70	1.44
● 41F15RE	15	± 1%	64K8672	2.13	1.92	1.70	1.44
● 41F20RE	20	± 1%	64K8682	2.13	1.92	1.70	1.44
● 41F25RE	25	± 1%	64K8687	2.13	1.92	1.70	1.44
● 41F40RE	40	± 1%	64K8702	2.13	1.92	1.70	1.44
● 41F47RE	47	± 1%	64K8705	2.13	1.92	1.70	1.44
● 41F50RE	50	± 1%	64K8708	2.21	1.99	1.77	1.50
● 41F56RE	56	± 1%	64K8710	2.13	1.92	1.70	1.44
● 41F68RE	68	± 1%	64K8714	2.13	1.92	1.70	1.44
● 41F100E	100	± 1%	64K8668	2.40	2.16	1.91	1.63
● 41F150E	150	± 1%	64K8673	2.40	2.16	1.91	1.63
● 41F180E	180	± 1%	64K8675	2.40	2.16	1.91	1.63
● 41F200E	200	± 1%	64K8683	2.40	2.16	1.91	1.63
● 41F250E	250	± 1%	64K8688	2.40	2.16	1.91	1.63
● 41F330E	330	± 1%	64K8696	2.40	2.16	1.91	1.63
● 41F400E	400	± 1%	64K8703	2.49	2.24	1.98	1.69
● 41F470E	470	± 1%	64K8706	2.49	2.24	1.98	1.69
● 41F500E	500	± 1%	64K8709	2.70	2.43	2.14	1.83
● 41F1K0E	1k	± 1%	64K8660	3.12	2.81	2.48	2.11
● 41F1K5E	1.5k	± 1%	64K8663	3.12	2.81	2.48	2.11
● 41F1K8E	1.8k	± 1%	64K8664	3.00	2.70	2.39	2.03
● 41F2K0E	2k	± 1%	64K8676	3.75	3.37	2.98	2.53
2 WATT, 100 V							
● 42JR10E	0.1	± 5%	64K8825	2.20	1.98	1.76	1.49
● 42JR20E	0.2	± 5%	64K8827	2.29	2.06	1.83	1.55
● 42JR50E	0.5	± 5%	64K8830	2.29	2.06	1.83	1.55
● 42JR75E	0.75	± 5%	64K8831	2.20	1.98	1.76	1.49
● 42J1R0E	1	± 5%	64K8837	1.41	1.27	1.12	0.95
● 42J1R5E	1.5	± 5%	64K8838	1.35	1.22	1.08	0.92

➤CONTINUED➤

40 SERIES OHMICONE® SILICONE-CERAMIC CONFORMAL WIREWOUND RESISTORS (CONT.)

2 WATT, 100 V

Mfg. Part No.	Res. (Ohms)	Res. Tol.	Stock No.	Price Each 1-24	25-99	100-249	250-499
● 42J10RE	10	± 5%	64K8839	1.10	0.99	0.87	0.74
● 42J15RE	15	± 5%	64K8844	1.05	0.95	0.84	0.71
● 42J20RE	20	± 5%	64K8854	1.05	0.95	0.84	0.71
● 42J22RE	22	± 5%	64K8856	1.05	0.95	0.84	0.71
● 42J47RE	47	± 5%	64K8877	1.05	0.95	0.84	0.71
● 42J100E	100	± 5%	64K8840	1.03	0.93	0.82	0.70
● 42J120E	120	± 5%	64K8842	1.07	0.96	0.85	0.72
● 42J270E	270	± 5%	64K8862	1.07	0.96	0.85	0.72
● 42J500E	500	± 5%	64K8881	1.44	1.30	1.15	0.98
3 WATT, 200 V							
● 43FR10E	0.1	± 1%	64K8895	2.01	1.81	1.60	1.36
● 43JR10E	0.1	± 5%	64K8978	1.77	1.59	1.41	1.20
● 43FR20E	0.2	± 1%	64K8897	2.03	1.83	1.62	1.37
● 43JR20E	0.2	± 5%	64K8980	1.70	1.53	1.36	1.15
● 43FR30E	0.3	± 1%	64K8898	1.95	1.76	1.56	1.32
● 43JR30E	0.3	± 5%	64K8982	1.70	1.53	1.36	1.15
● 43FR50E	0.5	± 1%	64K8900	2.03	1.83	1.62	1.37
● 43JR50E	0.5	± 5%	64K8985	1.70	1.53	1.36	1.15
● 43JR75E	0.75	± 5%	64K8986	1.77	1.59	1.41	1.20
● 43F1R0E	1	± 1%	64K8907	1.62	1.45	1.29	1.09
● 43F1R5E	1.5	± 1%	64K8908	1.55	1.40	1.24	1.05
● 43F2R0E	2	± 1%	64K8923	1.60	1.44	1.27	1.08
● 43F3R0E	3	± 1%	64K8938	1.55	1.40	1.24	1.05
● 43F4R0E	4	± 1%	64K8950	1.62	1.45	1.29	1.09
● 43F5R0E	5	± 1%	64K8956	1.55	1.40	1.24	1.05
● 43F10RE	10	± 1%	64K8910	1.31	1.18	1.05	0.89
● 43F12RE	12	± 1%	64K8912	1.28	1.15	1.02	0.87
● 43F20RE	20	± 1%	64K8925	1.28	1.15	1.02	0.87
● 43F22RE	22	± 1%	64K8927	1.28	1.15	1.02	0.87
● 43F25RE	25	± 1%	64K8930	1.33	1.20	1.06	0.90
● 43F30RE	30	± 1%	64K8939	1.28	1.15	1.02	0.87
● 43F33RE	33	± 1%	64K8941	1.28	1.15	1.02	0.87
● 43F40RE	40	± 1%	64K8951	1.28	1.15	1.02	0.87
● 43F47RE	47	± 1%	57K1511	1.28	1.15	1.02	0.87
● 43F50RE	50	± 1%	64K8957	1.33	1.20	1.06	0.90
● 43J50RE	50	± 5%	64K9043	1.03	0.93	0.82	0.70
● 43F56RE	56	± 1%	64K8959	1.33	1.20	1.06	0.90
● 43F68RE	68	± 1%	64K8965	1.28	1.15	1.02	0.87
● 43F75RE	75	± 1%	64K8970	1.33	1.20	1.06	0.90
● 43F82RE	82	± 1%	64K8974	1.33	1.20	1.06	0.90
● 43F100E	100	± 1%	64K8911	1.20	1.08	0.96	0.81
● 43J100E	100	± 5%	64K8996	0.99	0.89	0.79	0.67
● 43F120E	120	± 1%	64K8913	1.20	1.08	0.96	0.81
● 43F150E	150	± 1%	64K8916	1.20	1.08	0.96	0.81
● 43F180E	180	± 1%	64K8918	1.18	1.07	0.94	0.80
● 43F200E	200	± 1%	64K8926	1.20	1.08	0.96	0.81
● 43F220E	220	± 1%	64K8928	1.15	1.04	0.92	0.78
● 43F250E	250	± 1%	64K8931	1.18	1.07	0.94	0.80
● 43F330E	330	± 1%	64K8942	1.15	1.04	0.92	0.78
● 43F400E	400	± 1%	64K8952	1.20	1.08	0.96	0.81
● 43F470E	470	± 1%	64K8954	1.20	1.08	0.96	0.81
● 43F500E	500	± 1%	64K8958	1.20	1.08	0.96	0.81
● 43J500E	500	± 5%	64K9044	0.95	0.86	0.76	0.65
● 43F600E	600	± 1%	64K8963	1.20	1.08	0.96	0.81
● 43F750E	750	± 1%	64K8971	1.20	1.08	0.96	0.81
● 43F900E	900	± 1%	64K8977	1.15	1.04	0.92	0.78
● 43F1K0E	1k	± 1%	64K8902	1.39	1.25	1.11	0.94
● 43F1K5E	1.5k	± 1%	64K8905	1.41	1.27	1.12	0.95
● 43F2K0E	2k	± 1%	64K8919	1.82	1.64	1.45	1.23
● 43F2K2E	2.2k	± 1%	64K8920	1.75	1.58	1.40	1.19
● 43F3K0E	3k	± 1%	64K8934	2.10	1.89	1.68	1.42
● 43F4K5E	4.5k	± 1%	64K8948	2.10	1.89	1.68	1.42
● 43F5K0E	5k	± 1%	64K8955	2.55	2.30	2.03	1.73
● 43F7K5E	7.5k	± 1%	64K8968	2.73	2.46	2.17	1.85
● 43F10KE	10k	± 1%	64K8909	2.73	2.46	2.17	1.85
5 WATT, 460 V							
● 45FR10E	0.1	± 1%	64K9064	2.24	2.01	1.79	1.51
● 45JR10E	0.1	± 5%	64K9156	1.97	1.78	1.58	1.34
● 45FR15E	0.15	± 1%	64K9065	2.18	1.96	1.74	1.47
● 45FR20E	0.2	± 1%	64K9066	2.18	1.96	1.74	1.47
● 45FR25E	0.25	± 1%	51M3667	2.18	1.96	1.74	1.47

➤CONTINUED➤

40 SERIES OHMICONE® SILICONE-CERAMIC CONFORMAL WIREWOUND RESISTORS (CONT.)

5 WATT, 460 V

Mfg. Part No.	Res. (Ohms)	Res. Tol.	Stock No.	Price Each 1-24	25-99	100-249	250-499
45FR50E	0.5	± 1%	64K9069	2.24	2.01	1.79	1.51
45JR50E	0.3	± 5%	64K9163	1.90	1.71	1.52	1.29
45FR75E	0.75	± 1%	64K9070	2.18	1.96	1.74	1.47
45F1R0E	1	± 1%	64K9076	1.57	1.41	1.25	1.06
45J1K0E	1	± 5%	64K9165	1.28	1.15	1.02	0.87
45F1K2E	1.2	± 1%	64K9073	1.48	1.33	1.18	1.00
45F1R5E	1.5	± 1%	64K9077	1.53	1.38	1.22	1.03
45F2K2E	2.2	± 1%	64K9093	1.48	1.33	1.18	1.00
45F2R0E	2	± 1%	64K9096	1.59	1.43	1.27	1.08
45F3R0E	3	± 1%	64K9114	1.59	1.43	1.27	1.08
45F4R0E	4	± 1%	64K9127	1.57	1.41	1.25	1.06
45F5R0E	5	± 1%	64K9134	1.53	1.38	1.22	1.03
45J5R0E	5	± 5%	64K9220	1.38	1.24	1.10	0.94
45F7R5E	7.5	± 1%	64K9147	1.53	1.38	1.22	1.03
45F10RE	10	± 1%	64K9079	1.41	1.27	1.12	0.95
45J10RE	10	± 5%	64K9173	1.12	1.01	0.89	0.76
45F15RE	15	± 1%	64K9087	1.41	1.27	1.12	0.95
45F15KE	15	± 1%	64K9086	2.40	2.16	1.91	1.63
45F20RE	20	± 1%	64K9099	1.41	1.27	1.12	0.95
45F22RE	22	± 1%	64K9102	1.41	1.27	1.12	0.95
45F25RE	25	± 1%	64K9106	1.35	1.22	1.08	0.92
45F30RE	30	± 1%	64K9116	1.35	1.22	1.08	0.92
45F40RE	40	± 1%	64K9128	1.41	1.27	1.12	0.95
45F50RE	50	± 1%	64K9135	1.41	1.27	1.12	0.95
45J50RE	50	± 5%	64K9221	1.08	0.97	0.86	0.73
45F68RE	68	± 1%	64K9143	1.35	1.22	1.08	0.92
45F75RE	75	± 1%	64K9148	1.41	1.27	1.12	0.95
45F82RE	82	± 1%	64K9152	1.35	1.22	1.08	0.92
45F100E	100	± 1%	64K9080	1.31	1.18	1.05	0.89
45J100E	100	± 5%	64K9174	1.08	0.97	0.86	0.73
45F120E	120	± 1%	64K9083	1.31	1.18	1.05	0.89
45F150E	150	± 1%	64K9088	1.28	1.15	1.02	0.87
45F200E	200	± 1%	64K9100	1.33	1.20	1.06	0.90
45F220E	220	± 1%	64K9103	1.28	1.15	1.02	0.87
45F250E	250	± 1%	64K9107	1.28	1.15	1.02	0.87
45F300E	300	± 1%	64K9117	1.33	1.20	1.06	0.90
45F470E	470	± 1%	64K9132	1.28	1.15	1.02	0.87
45F500E	500	± 1%	64K9136	1.28	1.15	1.02	0.87
45F560E	560	± 1%	64K9138	1.28	1.15	1.02	0.87
45F600E	600	± 1%	64K9141	1.70	1.53	1.36	1.15
45F750E	750	± 1%	64K9149	1.28	1.15	1.02	0.87
45F1K0E	1k	± 1%	64K9071	1.48	1.33	1.18	1.00
45F1K5E	1.5k	± 1%	64K9074	1.48	1.33	1.18	1.00
45F2K0E	2k	± 1%	64K9092	1.52	1.37	1.21	1.03
45F2K5E	2.5k	± 1%	64K9094	1.54	1.38	1.22	1.04
45J2K7E	2.7k	± 5%	64K9185	1.28	1.15	1.02	0.87
45F3K5E	3.5k	± 1%	64K9112	1.70	1.53	1.36	1.15
45F4K7E	4.7k	± 1%	64K9126	1.70	1.53	1.36	1.15
45F5K0E	5k	± 1%	64K9133	1.77	1.59	1.41	1.20
45F7K5E	7.5k	± 1%	64K9146	2.25	2.03	1.80	1.53
45F10KE	10k	± 1%	64K9078	2.46	2.22	1.96	1.67
45J10KE	10k	± 5%	64K9172	2.55	2.30	2.03	1.73
45F20KE	20k	± 1%	64K9098	3.07	2.76	2.44	2.08
45F25KE	25k	± 1%	64K9105	3.03	2.73	2.41	2.05

10 WATT, 1000 V

40JR10E	0.1	± 5%	64K8570	2.47	2.22	1.96	1.67
40FR20E	0.2	± 1%	64K8476	2.81	2.52	2.23	1.90
40J5R0E	5	± 5%	64K8632	1.88	1.69	1.50	1.27
40J10RE	10	± 5%	64K8585	1.58	1.42	1.26	1.07
40F15RE	15	± 1%	64K8497	1.85	1.67	1.48	1.25
40J25RE	25	± 5%	64K8605	1.64	1.48	1.31	1.11
40J50RE	50	± 5%	64K8633	1.58	1.42	1.26	1.07
40F68RE	68	± 1%	64K8557	1.85	1.67	1.48	1.25
40J100E	100	± 5%	64K8586	1.58	1.42	1.26	1.07
40J150E	150	± 5%	64K8591	1.58	1.42	1.26	1.07
40J5K0E	5k	± 5%	64K8631	2.03	1.83	1.62	1.37
40J10KE	10k	± 5%	64K8584	2.15	1.94	1.72	1.46

(9585)

CW SERIES SILICONE-COATED AXIAL TERMINAL WIREWOUND RESISTORS

RoHS Compliant Available

VISHAY.

Features:
- High Temperature Silicone Coating
- Complete Welded Construction
- Excellent Stability in Operation
- High Power-to-Size Ratio

Specifications:
- Tolerance: J = ±5% except where noted, K = ±10%
- Temperature Coefficient: ±90ppm/°C (<1Ω); ±50ppm/°C (1Ω to 9.9Ω); ±30ppm/°C (≥10Ω)
- Dielectric Withstanding Voltage: 100VAC
- Short Time Overload: 5 x Rated Power at 5 Seconds for 3.75W Size and Smaller; 10 x Rated Power at 5 Seconds for 4W Size and Greater

Type	Power Rating (Max. Hot Spot) 275°C	350°C	Max. Wt. (grams)
CW-1	1	...	0.34
CW-2B	3	3.75	0.7
CW-5	5	6.5	4.2
CW-10	10	13	9

DIMENSIONS: INCHES (mm)

Additional values availabe, *go online or call.*

Type	A	B (Max.)	C	D
CW-1	0.406 ± 0.031 (10.31 ± 0.787)	0.437 (11.10)	0.094 ± 0.031 (2.39 ±0.787)	0.020 ±0.002 (0.508 ± 0.051)
CW-2B	0.562 ± 0.062 (14.27 ± 1.57)	0.622 (15.80)	0.188 ± 0.032 (4.78 ± .813)	0.032 ± 0.002 (0.813 ± 0.051)
CW-5	0.875 ± 0.062 (22.22 ± 1.57)	1.0 (25.40)	0.312 ± 0.032 (7.92 ± 0.813)	0.040 ± 0.002 (1.02 ± 0.051)
CW-10	1.781 ± 0.062 (45.24 ± 1.57)	1.875 (47.62)	0.375 ± 0.032 (9.52 ± 0.813)	0.040 ± 0.002 (1.02 ± 0.051)

1 WATT

Mfg. Part No.	Res. (Ohms)	Tape Cut Stock No.	Price Each 1-999
CW001R1500JE70	0.15	65K3445	0.42
CW001R2000JE70	0.2	65K3446	1.05
CW0014R000JE70	4	65K3463	0.66
CW00110R00JE70	10	65K3452	0.67
CW00115R00JE70	15	65K3456	0.41
CW00120R00JE70	20	65K3458	0.32
CW00122R00JE70	22	65K3459	0.32
CW00127R00JE70	27	65K3460	0.69
CW00140R00JE70	40	65K3464	0.68
CW00147R00JE70	47	65K3465	0.71
CW00168R00JE70	68	65K3467	0.69
CW001100R0JE70	100	65K3454	0.68
CW001100R0JE73	100	65K3453	0.57
CW001150R0JE70	150	65K3457	0.69
CW001390R0JE70	390	65K3462	0.68
CW001560R0JE70	560	65K3466	0.69
CW001820R0JE70	820	65K3468	0.69
CW0011K000JE70	1k	65K3449	0.71

2 WATT

CW0021K000JE70	1k	65K3469	0.42

3 WATT

CW02BR1000KE12	0.1	41K8955	1.52
CW02BR1000JE70	0.1	65K3688	1.32
CW02BR1500JE70	0.15	65K3691	1.27
CW02BR2000JE70	0.2	65K3693	1.32
CW02BR2500JE70	0.25	65K3696	1.32
CW02BR3000JE12	0.3	41K8956	1.68
CW02BR3300JE70	0.33	65K3698	1.30
CW02BR4700JE12	0.47	41K8957	1.68
CW02BR4700JE70	0.47	65K3699	1.32
CW02BR5000JE12	0.5	41K8958	1.68
CW02BR7500JE70	0.75	65K3701	0.51
CW02B1R000JE12	1	41K8960	1.35
CW02C1R000JE70	1	65K3871	0.70
CW02B1R000JE70	1	65K3714	0.69
CW02B1R500JE70	1.5	65K3718	0.33
CW02B2R000JE73	2	65K3751	0.60
CW02B2R000JE70	2	65K3752	0.72
CW02B2R700JE70	2.7	65K3755	0.33
CW02B2R700JE12	2.7	65K3754	1.35
CW02C3R000JE70	3	65K3883	0.70
CW02B4R000JE70	4	65K3803	0.72
CW02B5R000JE70	5	65K3821	0.70
CW02B5R000JE12	5	65K3820	1.35
CW02B7R500JE70	7.5	65K3851	0.70

➤CONTINUED➤

WIREWOUND RESISTORS – AXIAL TERMINAL

CW SERIES SILICONE-COATED AXIAL TERMINAL WIREWOUND RESISTORS (CONT.)

3 WATT

Mfg. Part No.	Res. (Ohms)	Tape Cut Stock No.	Tape Cut Price Each 1-999
● CW02B10R00JE12	10	65K3721	0.74
● CW02B10R00JE70	10	65K3722	0.70
● CW02B15R00JE70	15	65K3732	0.70
● CW02B18R00JE73	18	65K3736	0.60
● CW02C20R00JE70	20	65K3882	0.33
● CW02B20R00JE70	20	65K3758	0.33
● CW02B22R00JE12	22	41K8962	1.35
● CW02B22R00JE70	22	65K3760	0.72
● CW02B27R00JE70	27	65K3771	0.72
● CW02B30R00JE70	30	65K3779	0.70
● CW02B30R00JE73	30	27K6490	0.52
● CW02B33R00JE12	33	41K8967	1.35
● CW02C33R00JE7014	33	65K3885	0.70
● CW02B33R00JE70	33	65K3782	0.70
● CW02B35R00JE70	35	65K3787	0.33
● CW02B39R00JE70	39	65K3791	0.70
● CW02B40R00JE70	40	65K3805	0.70
● CW02B47R00JE70	47	65K3811	0.70
● CW02B47R00JE12	47	65K3810	1.41
● CW02B50R00JE12	50	65K3823	1.35
● CW02B50R00JE70	50	65K3824	0.71
● CW02B56R00JE70	56	65K3828	0.70
● CW02B68R00JE70	68	65K3842	0.33
● CW02B75R00JE70	75	65K3854	0.70
● CW02B82R00JE70	82	65K3863	0.70
● CW02B100R0JE70	100	65K3724	0.70
● CW02B100R0JE12	100	65K3723	0.75
● CW02C100R0JE7014	100	65K3875	0.33
● CW02B125R0JE70	125	65K3728	0.70
● CW02C150R0JE70	150	65K3878	0.70
● CW02B150R0JE70	150	65K3734	0.69
● CW02C180R0JE70	180	65K3879	0.33
● CW02B220R0JE12	220	65K3762	1.35
● CW02B220R0JE73	220	65K3764	0.35
● CW02B220R0JE70	220	65K3763	0.72
● CW02B225R0JE70	225	65K3765	0.33
● CW02B250R0JE70	250	65K3768	0.71
● CW02B330R0JE12	330	65K3784	1.41
● CW02B330R0JE70	330	65K3785	0.33
● CW02B350R0JE70	350	65K3789	0.72
● CW02B390R0JE70	390	65K3793	0.70
● CW02B450R0JE70	450	65K3808	0.70
● CW02B470R0JE70	470	65K3814	0.70
● CW02B500R0JE70	500	65K3826	0.69
● CW02B560R0JE70	560	65K3830	0.70
● CW02B600R0JE70	600	65K3837	0.70
● CW02B620R0JE73	620	65K3839	0.60
● CW02B680R0JE73	680	65K3844	0.60
● CW02B680R0JE70	680	65K3845	0.33
● CW02B700R0JE70	700	65K3853	0.72
● CW02B800R0JE70	800	65K3861	0.69
● CW02B820R0JE70	820	65K3865	0.70
● CW02B900R0JE70	900	65K3867	0.33
● CW02B1K000JE12	1k	41K8959	0.71
● CW02C1K000JE70	1k	65K3869	0.33
● CW02B1K100JE70	1.1k	65K3702	0.76
● CW02B1K250JE70	1.25k	65K3705	0.74
● CW02B1K500JE73	1.5k	65K3707	0.36
● CW02B1K500JE70	1.5k	65K3708	0.73
● CW02B1K600JE70	1.6k	65K3709	0.74
● CW02B1K800JE70	1.8k	65K3712	0.74
● CW02B2K000JE70	2k	65K3740	0.75
● CW02B2K200JE73	2.2k	65K3742	0.80
● CW02B2K500JE70	2.5k	65K3746	0.73
● CW02B2K700JE70	2.7k	65K3749	0.35
● CW02B3K000JE12	3k	41K8964	1.46
● CW02B3K000JE70	3k	65K3773	0.77
● CW02B3K300JE12	3.3k	41K8965	1.68
● CW02B3K500JE70	3.5k	65K3775	0.89
● CW02B4K000JE70	4k	65K3795	0.90
● CW02B4K500JE73	4.5k	65K3797	0.80

➤ CONTINUED ➤

CW SERIES SILICONE-COATED AXIAL TERMINAL WIREWOUND RESISTORS (CONT.)

3 WATT

Mfg. Part No.	Res. (Ohms)	Tape Cut Stock No.	Tape Cut Price Each 1-999
● CW02B4K700JE12	4.7k	65K3799	1.68
● CW02B4K700JE70	4.7k	65K3800	0.89
● CW02B5K000JE73	5k	27K6492	1.00
● CW02B5K000JE70	5k	65K3816	0.94
● CW02B5K600JE70	5.6k	65K3818	0.94
● CW02B6K000JE70	6k	65K3832	0.89
● CW02B6K800JE70	6.8k	65K3834	0.42
● CW02B7K000JE70	7k	65K3847	0.89
● CW02B7K500JE70	7.5k	65K3849	0.42
● CW02B8K000JE70	8k	65K3857	0.90
● CW02B8K200JE70	8.2k	65K3859	0.42
● CW02B9K000JE70	9k	65K3866	0.90
● CW02C10K00JE70	10k	65K3873	0.42
● CW02B10K00JE12	10k	65K3720	1.04
● CW02B11K00JE73	11k	65K3725	0.90
● CW02B12K50JE70	12.5k	65K3727	1.14
● CW02B15K00JE73	15k	65K3730	0.82

5 WATT

Mfg. Part No.	Res. (Ohms)	Tape Cut Stock No.	Tape Cut Price Each 1-999
● CW005R1000JE12	0.1	41K8906	1.88
● CW005R1500JE12	0.15	41K8907	1.81
● CW005R2000JE12	0.2	41K8908	1.81
● CW005R3000JE73	0.3	65K3470	0.61
● CW005R3300JE73	0.33	65K3471	0.61
● CW005R4700JE73	0.47	65K3472	1.12
● CW005R5000JE73	0.5	65K3474	0.61
● CW005R7500JE73	0.75	65K3475	1.12
● CW0051R000JE12	1	41K8909	1.19
● CW0051R500JE73	1.5	65K3488	0.70
● CW0052R000JE12	2	65K3516	1.40
● CW0052R000JE73	2	65K3517	0.70
● CW0052R500JE73	2.5	65K3519	0.81
● CW0053R000JE73	3	65K3531	0.88
● CW0053R300JE12	3.3	65K3533	1.15
● CW0054R000JE12	4	41K8934	1.45
● CW0055R000JE12	5	63M1032	0.87
● CW0055R600JE12	5.6	41K8940	1.19
● CW0057R500JE73	7.5	65K3572	0.70
● CW00510R00JE55	10	65K3491	1.31
● CW00510R00JE12	10	41K8910	0.83
● CW00515R00JE12	15	65K3499	1.45
● CW00518R00JE73	18	65K3505	0.88
● CW00520R00JE12	20	41K8917	0.91
● CW00525R00JE12	25	65K3522	0.86
● CW00522R00JE12	22	41K8920	1.40
● CW00527R00JE12	27	41K8925	1.40
● CW00527R00JE73	27	65K3523	0.85
● CW00530R00JE12	30	41K8929	1.40
● CW00535R00JE73	35	65K3536	0.88
● CW00539R00JE73	39	65K3538	0.73
● CW00540R00JE73	40	65K3544	0.70
● CW00547R00JE12	47	41K8937	0.90
● CW00550R00JE12	50	63M1033	1.45
● CW00550R00JE73	50	65K3551	0.73
● CW00556R00JE73	56	65K3554	0.73
● CW00568R00JE73	68	65K3561	0.73
● CW00575R00JE73	75	65K3576	0.85
● CW00582R00JE73	82	65K3584	0.85
● CW005100R0JE12	100	41K8911	0.85
● CW005120R0JE12	120	41K8913	0.90
● CW005125R0JE73	125	65K3497	0.70
● CW005150R0JE12	150	63M1029	0.85
● CW005180R0JE73	180	65K3506	0.85
● CW005200R0JE12	200	41K8918	0.92
● CW005220R0JE12	220	41K8921	1.40
● CW005220R0JE73	220	19X7138	0.70
● CW005225R0JE73	225	65K3521	0.40
● CW005250R0JE12	250	41K8923	1.45
● CW005270R0JE12	270	41K8926	0.87
● CW005300R0JE55	300	65K3534	1.19
● CW005330R0JE12	330	41K8932	0.85
● CW005350R0JE73	350	65K3537	0.70

➤ CONTINUED ➤

CW SERIES SILICONE-COATED AXIAL TERMINAL WIREWOUND RESISTORS (CONT.)

5 WATT

Mfg. Part No.	Res. (Ohms)	Tape Cut Stock No.	Tape Cut Price Each 1-999
CW005390R0JE73	390	65K3540	0.70
CW005400R0JE73	400	65K3545	0.87
CW005450R0JE73	450	65K3547	0.70
CW005470R0JE12	470	41K8938	1.40
CW005500R0JE73	500	65K3553	0.85
CW005500R0JE12	500	41K8941	0.85
CW005560R0JE73	560	65K3556	0.88
CW005600R0JE73	600	65K3559	0.87
CW005680R0JE73	680	65K3564	0.87
CW005700R0JE73	700	65K3574	0.70
CW005750R0JE73	750	65K3578	0.70
CW005800R0JE73	800	65K3581	0.70
CW005820R0JE73	820	65K3587	0.73
CW005900R0JE73	900	65K3590	0.85
CW0051K000JE12	1k	65K3476	1.45
CW0051K100JE73	1.1k	65K3477	0.85
CW0051K200JE12	1.2k	65K3479	1.05
CW0051K250JE73	1.25k	65K3480	0.82
CW0051K500JE73	1.5k	65K3483	1.10
CW0051K800JE73	1.8k	65K3486	1.15
CW0052K000JE12	2k	41K8915	1.61
CW0052K200JE73	2.2k	65K3509	1.08
CW0052K500JE73	2.5k	65K3511	1.13
CW0052K700JE73	2.7k	65K3514	1.15
CW0053K000JE12	3k	41K8927	1.08
CW0053K300JE73	3.3k	65K3525	1.15
CW0053K500JE73	3.5k	65K3527	0.85
CW0053K900JE73	3.9k	65K3528	0.82
CW0054K700JE12	4.7k	41K8933	1.14
CW0055K000JE12	5k	63M1031	1.08
CW0054K000JE73	4k	65K3542	1.13
CW0056K000JE12	6k	65K3557	1.61
CW0056K800JE12	6.8k	41K8943	1.33
CW0057K000JE73	7k	65K3566	0.82
CW0057K500JE12	7.5k	65K3568	1.55
CW0057K500JE73	7.5k	65K3569	0.82
CW0058K000JE73	8k	65K3580	1.10
CW0058K200JE12	8.2k	41K8945	1.55
CW0059K000JE73	9k	65K3589	0.44
CW00510K00JE12	10k	65K3490	1.08
CW00510K00JE73	10k	19X7137	0.82
CW00511K00JE73	11k	65K3492	1.53
CW00512K50JE73	12.5k	65K3496	0.59
CW00512K00JE73	12k	65K3494	1.53
CW00515K00JE12	15k	41K8914	1.32
CW00516K00JE73	16k	65K3500	1.08
CW00518K00JE73	18k	65K3503	1.47
CW00520K00JE12	20k	41K8916	1.50
CW00522K00JE12	22k	41K8919	2.04
CW00522K50JE73	22.5k	65K3520	0.66
CW00525K00JE12	25k	41K8922	1.46
CW00527K00JE12	27k	41K8924	1.46
CW00530K00JE12	30k	41K8928	1.50
CW00533K00JE12	33k	41K8931	1.50
CW00540K00JE12	40k	41K8935	2.04
CW00543K00JE12	43k	41K8936	1.94
CW00547K00JE73	47k	65K3549	1.70

7 WATT

CW00750R00JE73	50	65K3594	0.62
CW007100R0JE73	100	65K3592	1.15

10 WATT

CW010R1000JE73	0.1	65K3595	3.33
CW010R2000JE73	0.2	65K3596	3.33
CW010R3300JE73	0.33	65K3597	1.29
CW010R5000JE73	0.5	65K3598	3.33
CW0101R000JE73	1	65K3606	1.77
CW0101R500JE73	1.5	65K3607	0.74
CW0102R000JE73	2	65K3626	1.91
CW0103R000JE73	3	65K3649	1.39
CW0103R000JE12	3	65K3648	2.03
CW0104R000JE73	4	65K3659	1.91

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CW SERIES SILICONE-COATED AXIAL TERMINAL WIREWOUND RESISTORS (CONT.)

10 WATT

Mfg. Part No.	Res. (Ohms)	Tape Cut Stock No.	Tape Cut Price Each 1-999
CW0105R000JE73	5	65K3665	1.77
CW0107R500JE73	7.5	65K3680	0.74
CW01010R00JE73	10	65K3608	1.91
CW01012R00JE73	12	65K3611	1.35
CW01015R00JE73	15	65K3614	1.79
CW01018R00JE73	18	65K3620	1.91
CW01020R00JE73	20	65K3628	1.91
CW01022R00JE73	22	65K3635	1.72
CW01025R00JE73	25	65K3639	1.91
CW01027R00JE73	27	65K3641	0.74
CW01030R00JE73	30	65K3651	1.35
CW01033R00JE73	33	65K3653	1.35
CW01035R00JE73	35	65K3655	1.91
CW01040R00JE73	40	65K3660	1.79
CW01047R00JE73	47	65K3662	0.74
CW01050R00JE73	50	65K3666	1.91
CW01056R00JE73	56	65K3671	1.35
CW01062R00JE73	62	65K3675	1.91
CW01075R00JE73	75	65K3681	1.91
CW01082R00JE73	82	65K3685	1.91
CW010100R0JE12	100	12P8900	1.96
CW010120R0JE73	120	65K3612	1.91
CW010125R0JE73	125	65K3613	1.35
CW010150R0JE73	150	65K3615	1.35
CW010150R0JE12	150	41K8950	2.03
CW010180R0JE73	180	65K3621	1.83
CW010200R0JE73	200	65K3631	1.72
CW010220R0JE73	220	65K3636	1.41
CW010250R0JE12	250	65K3640	1.89
CW010270R0JE73	270	65K3642	1.35
CW010300R0JE73	300	65K3652	1.79
CW010330R0JE73	330	65K3654	1.88
CW010350R0JE73	350	65K3656	1.35
CW010400R0JE73	400	65K3661	1.83
CW010470R0JE12	470	65K3663	2.11
CW010500R0JE73	500	65K3669	1.88
CW010600R0JE73	600	65K3674	1.35
CW010680R0JE73	680	65K3678	1.41
CW010750R0JE73	750	65K3682	1.41
CW010800R0JE73	800	65K3684	1.41
CW0101K000JE73	1k	65K3599	1.83
CW0101K200JE73	1.2k	65K3601	2.01
CW0101K250JE73	1.25k	65K3602	0.81
CW0101K500JE73	1.5k	65K3603	1.48
CW0101K750JE73	1.75k	65K3604	0.81
CW0101K800JE73	1.8k	65K3605	1.48
CW0102K250JE73	2.25k	65K3623	0.81
CW0102K500JE73	2.5k	65K3624	1.89
CW0102K700JE73	2.7k	65K3625	2.09
CW0103K000JE73	3k	65K3643	1.48
CW0103K300JE73	3.3k	65K3645	2.06
CW0103K500JE73	3.5k	65K3646	1.48
CW0103K900JE73	3.9k	65K3647	1.48
CW0104K000JE73	4k	65K3657	1.48
CW0104K700JE73	4.7k	65K3658	2.09
CW0105K000JE73	5k	65K3664	2.09
CW0106K000JE73	6k	65K3672	1.48
CW0106K800JE73	6.8k	65K3673	2.09
CW0107K500JE73	7.5k	65K3679	1.48
CW0108K200JE73	8.2k	65K3683	1.48
CW0109K000JE73	9k	65K3687	1.48
CW01010K00JE12	10k	41K8947	2.08
CW01011K00JE73	11k	65K3610	2.50
CW01018K00JE73	18k	65K3618	2.23
CW01020K00JE73	20k	65K3627	2.14
CW01022K00JE73	22k	65K3633	2.90
CW01022K50JE73	22.5k	65K3634	1.12
CW01025K00JE73	25k	65K3638	2.45
CW010100K0JE12	100k	41K8948	2.42

(12630)

WIREWOUND RESISTORS – AXIAL TERMINAL

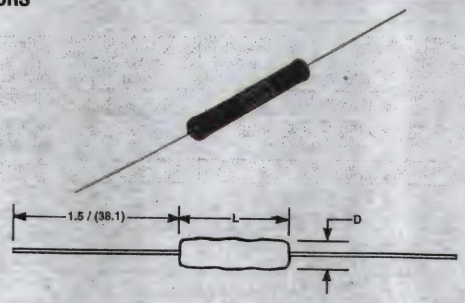
20 SERIES VITREOUS ENAMEL CONFORMAL COATED WIREWOUND RESISTORS

RoHS Compliant Available

OHMITE

Features

- Durable Construction, Ideal For Industrial Applications Where Reliability is Paramount
- All-Welded Construction
- Flame-Resistant Lead-Free Vitreous Enamel Coating
- Withstands High Humidity and Temperature cycling



Specifications

- Tolerance: J = ±5%
- Derating Linearity: 100% @ +25°C to 0% @ 350°C
- Power Rating Based on 25°C Free Air Rating
- Overload: <7W: 5X Rated Wattage for 5 Sec; ≥7W: 10X Rated Wattage for 5 Sec
- Temperature Coefficient: ±90ppm/°C (<1Ω); ±50ppm/°C (1 to 9.99Ω); ±30ppm/°C (>10Ω)

DIMENSIONS (mm)

Series	Length	Diameter	Lead Ga.
21	0.406″ (10.3)	0.156″ (4.0)	24
23	0.500″ (12.7)	0.220″ (5.6)	20
25	1.000″ (25.4)	0.276″ (7.0)	20
20	1.844″ (46.8)	0.394″ (100)	20

1 WATT, 75 V

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	25-99	100-249	250-499
● 21J1R0E	1	64K8024	3.15	2.84	2.51	2.13
● 21J2R0E	2	64K8033	3.27	2.95	2.61	2.21
● 21J10RE	10	64K8025	2.90	2.61	2.31	1.96
● 21J33RE	33	64K8038	2.90	2.61	2.31	1.96
● 21J47RE	47	64K8041	2.90	2.61	2.31	1.96
● 21J100E	100	64K8026	3.64	3.27	2.90	2.46
● 21J120E	120	64K8027	3.59	3.23	2.86	2.43
● 21J500E	500	64K8042	4.21	3.79	3.36	2.85
● 21J1K0E	1k	64K8022	4.41	3.97	3.52	2.99
● 21J1K5E	1.5k	64K8023	4.41	3.97	3.52	2.99
● 21J2K2E	2.2k	64K8031	4.47	4.02	3.56	3.02

3 WATT, 135 V

● 23JR10E	0.1	64K8160	2.08	1.87	1.66	1.41
● 23JR15E	0.15	62K3505	2.18	1.96	1.74	1.47
● 23JR20E	0.2	64K8162	2.18	1.96	1.74	1.47
● 23JR25E	0.25	64K8163	2.27	2.04	1.81	1.53
● 23JR30E	0.3	64K8164	2.18	1.96	1.74	1.47
● 23JR33E	0.33	64K8165	2.18	1.96	1.74	1.47
● 23JR50E	0.5	64K8166	1.51	1.36	1.20	1.02
● 23J1R0E	1	64K8173	1.49	1.34	1.19	1.01
● 23J1R5E	1.5	64K8174	1.51	1.36	1.20	1.02
● 23J2R0E	2	64K8189	1.49	1.34	1.19	1.01
● 23J3R0E	3	64K8204	1.49	1.34	1.19	1.01
● 23J4R0E	4	64K8216	1.45	1.31	1.16	0.99
● 23J5R0E	5	64K8223	1.45	1.31	1.16	0.99
● 23J10RE	10	64K8176	1.31	1.18	1.05	0.89
● 23J12RE	12	64K8178	1.33	1.20	1.06	0.90
● 23J15RE	15	64K8181	1.33	1.20	1.06	0.90
● 23J18RE	18	64K8183	1.33	1.20	1.06	0.90
● 23J20RE	20	64K8191	1.28	1.15	1.02	0.87
● 23J22RE	22	64K8193	1.28	1.15	1.02	0.87
● 23J25RE	25	64K8196	1.33	1.20	1.06	0.90
● 23J27RE	27	64K8198	1.28	1.15	1.02	0.87
● 23J30RE	30	64K8205	1.31	1.18	1.05	0.89
● 23J33RE	33	64K8207	1.28	1.15	1.02	0.87
● 23J39RE	39	64K8211	1.28	1.15	1.02	0.87
● 23J40RE	40	64K8217	1.28	1.15	1.02	0.87
● 23J47RE	47	64K8220	1.31	1.18	1.05	0.89
● 23J50RE	50	64K8224	1.33	1.20	1.06	0.90
● 23J56RE	56	64K8226	1.28	1.15	1.02	0.87
● 23J68RE	68	64K8232	1.28	1.15	1.02	0.87
● 23J75RE	75	64K8237	1.31	1.18	1.05	0.89
● 23J82RE	82	64K8241	1.33	1.20	1.06	0.90
● 23J100E	100	64K8177	1.18	1.06	0.94	0.80
● 23J120E	120	64K8179	1.18	1.06	0.94	0.80
● 23J125E	125	64K8180	1.18	1.06	0.94	0.80
● 23J150E	150	64K8182	1.18	1.06	0.94	0.80
● 23J180E	180	64K8184	1.18	1.06	0.94	0.80

➤CONTINUED➤

20 SERIES VITREOUS ENAMEL CONFORMAL COATED WIREWOUND RESISTORS (CONT.)

3 WATT, 135 V

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	25-99	100-249	250-499
● 23J200E	200	64K8192	1.21	1.09	0.96	0.82
● 23J220E	220	64K8194	1.23	1.10	0.98	0.83
● 23J250E	250	64K8197	1.23	1.10	0.98	0.83
● 23J270E	270	64K8199	1.18	1.06	0.94	0.80
● 23J300E	300	64K8206	1.23	1.10	0.98	0.83
● 23J330E	330	64K8208	1.23	1.10	0.98	0.83
● 23J390E	390	64K8212	1.23	1.10	0.98	0.83
● 23J400E	400	64K8218	1.23	1.10	0.98	0.83
● 23J470E	470	64K8221	1.30	1.17	1.04	0.88
● 23J500E	500	64K8225	1.29	1.16	1.03	0.87
● 23J560E	560	64K8227	1.25	1.13	1.00	0.85
● 23J600E	600	64K8230	1.25	1.13	1.00	0.85
● 23J680E	680	64K8233	1.30	1.17	1.04	0.88
● 23J750E	750	64K8238	1.30	1.17	1.04	0.88
● 23J820E	820	64K8242	1.25	1.13	1.00	0.85
● 23J1K0E	1k	64K8168	1.77	1.60	1.41	1.20
● 23J1K2E	1.2k	64K8170	1.73	1.56	1.38	1.17
● 23J1K5E	1.5k	64K8171	1.77	1.60	1.41	1.20
● 23J1K8E	1.8k	64K8172	1.80	1.62	1.43	1.22
● 23J2K0E	2k	64K8185	1.80	1.62	1.43	1.22
● 23J2K2E	2.2k	64K8186	1.73	1.56	1.38	1.17
● 23J2K5E	2.5k	64K8187	1.73	1.56	1.38	1.17
● 23J2K7E	2.7k	64K8188	1.80	1.62	1.43	1.22
● 23J3K0E	3k	64K8200	1.73	1.56	1.38	1.17
● 23J3K3E	3.3k	64K8201	1.80	1.62	1.43	1.22
● 23J3K9E	3.9k	64K8203	1.73	1.56	1.38	1.17
● 23J4K7E	4.7k	64K8215	1.80	1.62	1.43	1.22
● 23J5K0E	5k	64K8222	2.26	2.03	1.81	1.53
● 23J6K0E	6k	64K8228	2.20	1.98	1.76	1.49
● 23J6K8E	6.8k	64K8229	2.29	2.06	1.83	1.55
● 23J7K5E	7.5k	64K8235	2.70	2.43	2.15	1.83
● 23J8K0E	8k	64K8239	2.60	2.34	2.07	1.76
● 23J10KE	10k	64K8175	2.60	2.34	2.07	1.76

10 WATT

● 20J18RE	18	64K7976	2.13	1.92	1.70	1.44
● 20J62RE	62	64K8013	2.10	1.90	1.68	1.43
● 20J120E	120	64K7970	1.93	1.73	1.53	1.30
● 20J180E	180	64K7977	1.85	1.67	1.48	1.25
● 20J400E	400	51M2149	1.85	1.67	1.48	1.25
● 20J15KE	15k	64K7973	3.30	2.97	2.63	2.23

5 WATT, 330 V

● 25JR10E	0.1	64K8245	1.80	1.62	1.44	1.22
● 25JR15E	0.15	64K8247	1.80	1.62	1.44	1.22
● 25JR25E	0.25	64K8249	1.80	1.62	1.44	1.22
● 25JR30E	0.3	64K8250	1.80	1.62	1.44	1.22
● 25JR33E	0.33	64K8251	1.88	1.69	1.49	1.27
● 25JR50E	0.5	64K8252	1.85	1.67	1.47	1.25
● 25JR75E	0.75	64K8253	1.88	1.69	1.49	1.27
● 25J1R0E	1	64K8259	1.80	1.62	1.43	1.22
● 25J1R5E	1.5	64K8260	1.80	1.62	1.43	1.22
● 25J2R0E	2	64K8277	1.80	1.62	1.43	1.22
● 25J2R2E	2.2	64K8278	1.80	1.62	1.43	1.22
● 25J3R0E	3	64K8295	1.80	1.62	1.43	1.22
● 25J4R0E	4	64K8307	1.73	1.56	1.38	1.17
● 25J5R0E	5	64K8314	1.77	1.60	1.41	1.20
● 25J7R5E	7.5	64K8327	1.77	1.60	1.41	1.20
● 25J10RE	10	64K8262	1.69	1.53	1.35	1.15
● 25J12RE	12	64K8265	1.72	1.55	1.37	1.16
● 25J15RE	15	64K8269	1.72	1.55	1.37	1.16
● 25J18RE	18	64K8271	1.72	1.55	1.37	1.16
● 25J20RE	20	64K8280	1.65	1.49	1.32	1.12
● 25J22RE	22	64K8283	1.72	1.55	1.37	1.16
● 25J25RE	25	64K8287	1.70	1.53	1.35	1.15
● 25J27RE	27	64K8289	1.65	1.49	1.32	1.12
● 25J30RE	30	64K8296	1.70	1.53	1.35	1.15
● 25J33RE	33	64K8298	1.72	1.55	1.37	1.16
● 25J40RE	40	64K8308	1.70	1.53	1.35	1.15
● 25J47RE	47	64K8311	1.65	1.49	1.32	1.12
● 25J50RE	50	64K8315	1.65	1.49	1.32	1.12
● 25J56RE	56	64K8317	1.72	1.55	1.37	1.16
● 25J68RE	68	64K8323	1.65	1.49	1.32	1.12

➤CONTINUED➤

20 SERIES VITREOUS ENAMEL CONFORMAL COATED WIREWOUND RESISTORS (CONT.)

5 WATT, 330 V

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	25-99	100-249	250-499
25J75RE	75	64K8328	1.69	1.53	1.35	1.15
25J100E	100	64K8263	1.42	1.27	1.13	0.96
25J120E	120	64K8266	1.38	1.24	1.10	0.93
25J125E	125	64K8267	1.38	1.24	1.10	0.93
25J150E	150	64K8270	1.42	1.27	1.13	0.96
25J180E	180	64K8272	1.43	1.29	1.14	0.97
25J200E	200	64K8281	1.42	1.27	1.13	0.96
25J220E	220	64K8284	1.38	1.24	1.10	0.93
25J250E	250	64K8288	1.38	1.24	1.10	0.93
25J270E	270	64K8290	1.38	1.24	1.10	0.93
25J300E	300	64K8297	1.43	1.29	1.14	0.97
25J330E	330	64K8299	1.43	1.29	1.14	0.97
25J350E	350	64K8301	1.38	1.24	1.10	0.93
25J400E	400	64K8309	1.43	1.29	1.14	0.97
25J450E	450	64K8310	1.38	1.24	1.10	0.93
25J470E	470	64K8312	1.43	1.29	1.14	0.97
25J500E	500	64K8316	1.58	1.42	1.26	1.07
25J560E	560	64K8318	1.58	1.42	1.26	1.07
25J600E	600	64K8321	1.58	1.42	1.26	1.07
25J750E	750	64K8329	1.58	1.42	1.26	1.07
25J820E	820	64K8333	1.58	1.42	1.26	1.07
25J1K0E	1k	64K8254	1.93	1.74	1.54	1.31
25J1K2E	1.2k	64K8256	1.88	1.69	1.50	1.27
25J1K5E	1.5k	64K8257	1.93	1.74	1.54	1.31
25J2K0E	2k	64K8273	1.88	1.69	1.50	1.27
25J2K2E	2.2k	64K8274	1.95	1.76	1.56	1.32
25J2K5E	2.5k	64K8275	1.93	1.74	1.54	1.31
25J3K0E	3k	64K8291	1.93	1.74	1.54	1.31
25J3K3E	3.3k	64K8292	1.95	1.76	1.56	1.32
25J3K5E	3.5k	64K8293	1.95	1.76	1.56	1.32
25J3K9E	3.9k	64K8294	1.88	1.69	1.50	1.27
25J4K0E	4k	64K8304	1.93	1.74	1.54	1.31
25J4K7E	4.7k	64K8306	1.88	1.69	1.50	1.27
25J5K0E	5k	64K8313	2.44	2.20	1.94	1.65
25J6K0E	6k	64K8319	2.47	2.22	1.96	1.67
25J6K8E	6.8k	64K8320	2.44	2.20	1.94	1.65
25J7K0E	7k	64K8325	2.38	2.14	1.89	1.61
25J7K5E	7.5k	64K8326	2.47	2.22	1.96	1.67
25J10KE	10k	64K8261	2.65	2.39	2.11	1.80
25J12KE	12k	64K8264	2.76	2.48	2.20	1.87
25J15KE	15k	64K8268	2.72	2.45	2.17	1.84
25J20KE	20k	64K8279	3.21	2.89	2.55	2.18
25J22KE	22k	64K8282	3.13	2.82	2.49	2.12
25J25KE	25k	64K8286	3.25	2.93	2.59	2.20

10 WATT, 720 V

Mfg. Part No.	Res. (Ohms)	Stock No.	1-24	25-99	100-249	250-499
20JR10E	0.1	64K7952	2.32	2.09	1.85	1.57
20JR13E	0.13	64K7953	2.23	2.01	1.78	1.51
20JR15E	0.15	64K7954	2.29	2.06	1.82	1.55
20JR20E	0.2	64K7955	2.23	2.01	1.78	1.51
20JR50E	0.5	64K7959	2.32	2.09	1.85	1.57
20J1R5E	1.5	64K7965	2.18	1.96	1.74	1.47
20J1R0E	1	64K7964	2.24	2.01	1.79	1.51
20J2R0E	2	64K7982	2.24	2.01	1.79	1.51
20J3R0E	3	64K7993	2.18	1.96	1.74	1.47
20J4R0E	4	64K8002	2.26	2.04	1.80	1.53
20J5R0E	5	64K8007	2.26	2.04	1.80	1.53
20J7R5E	7.5	64K8017	2.24	2.01	1.79	1.51
20J10RE	10	64K7967	2.10	1.90	1.68	1.43
20J12RE	12	64K7969	2.05	1.85	1.64	1.39
20J15RE	15	64K7974	2.13	1.92	1.70	1.44
20J22RE	22	64K7987	2.05	1.85	1.64	1.39
20J25RE	25	64K7989	2.10	1.90	1.68	1.43
20J30RE	30	64K7995	2.10	1.90	1.68	1.43
20J33RE	33	64K7997	2.10	1.90	1.68	1.43
20J40RE	40	64K8004	2.13	1.92	1.70	1.44
20J47RE	47	64K8005	2.10	1.90	1.68	1.43
20J50RE	50	64K8009	2.10	1.90	1.68	1.43
20J20RE	20	64K7985	2.13	1.92	1.70	1.44
20J68RE	68	64K8014	2.10	1.90	1.68	1.43
20J75RE	75	64K8018	2.05	1.85	1.64	1.39
20J82RE	82	64K8020	2.13	1.92	1.70	1.44

CONTINUED

20 SERIES VITREOUS ENAMEL CONFORMAL COATED WIREWOUND RESISTORS (CONT.)

10 WATT, 720 V

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	25-99	100-249	250-499
20J100E	100	64K7968	1.85	1.67	1.48	1.25
20J125E	125	64K7971	1.85	1.67	1.48	1.25
20J150E	150	64K7975	1.85	1.67	1.48	1.25
20J200E	200	64K7986	1.93	1.73	1.53	1.30
20J250E	250	64K7990	1.85	1.67	1.48	1.25
20J300E	300	64K7996	1.90	1.71	1.52	1.29
20J350E	350	64K7998	1.90	1.71	1.52	1.29
20J470E	470	66K6904	1.93	1.73	1.53	1.30
20J500E	500	64K8010	1.90	1.71	1.52	1.29
20J600E	600	64K8012	1.85	1.67	1.48	1.25
20J680E	680	64K8015	1.93	1.73	1.53	1.30
20J820E	820	64K8021	1.85	1.67	1.48	1.25
20J1K0E	1k	64K7961	2.26	2.04	1.80	1.53
20J1K2E	1.2k	64K7962	2.20	1.98	1.76	1.49
20J1K5E	1.5k	64K7963	2.29	2.06	1.83	1.55
20J2K0E	2k	64K7978	2.20	1.98	1.76	1.49
20J2K2E	2.2k	64K7979	2.26	2.03	1.81	1.53
20J2K5E	2.5k	64K7980	2.20	1.98	1.76	1.49
20J2K7E	2.7k	64K7981	2.26	2.04	1.80	1.53
20J3K0E	3k	64K7991	2.60	2.34	2.06	1.75
20J4K0E	4k	64K8000	2.63	2.37	2.09	1.78
20J4K7E	4.7k	64K8001	2.53	2.28	2.01	1.71
20J5K0E	5k	64K8006	2.95	2.66	2.35	2.00
20J6K0E	6k	64K8011	2.99	2.69	2.38	2.03
20J7K5E	7.5k	64K8016	2.88	2.59	2.29	1.95
20J8K0E	8k	64K8019	2.88	2.59	2.29	1.95
20J10KE	10k	64K7966	3.39	3.05	2.70	2.29
20J20KE	20k	64K7984	3.30	2.97	2.63	2.23
20J25KE	25k	64K7988	3.88	3.49	3.09	2.62
20J30KE	30k	64K7994	3.88	3.49	3.09	2.62
20J40KE	40k	64K8003	3.73	3.36	2.97	2.52
20J50KE	50k	64K8008	3.73	3.36	2.97	2.52

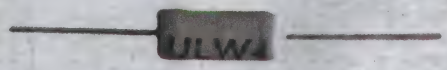
(9582)

ULW SERIES UL RECOGNIZED WIREWOUND RESISTORS

RoHS Compliant Available

Welwyn

Features
- UL1412 recognised fusible resistor
- Failsafe mains fusing at 120 / 240Vrms
- Inrush and surge withstanding
- UL94-V0 flameproof coating



Specifications
- Tolerance: ± 5%
- Temperature coeff: ± 200ppm/°C
- Ambient temp. range: -55°C to +155°C

Mfg. Part No.	Res. (Ohms)	Power Rating (W)	Stock No.	Price Each 1-499
ULW2-22RJA25	22	2	78R5315	0.60
ULW2-33RJA25	33	2	78R5316	0.60
ULW2-47RJA25	47	2	78R5317	0.60
ULW2-68RJA25	68	2	78R5318	0.64
ULW2-100RJA25	100	2	78R5314	0.60
ULW3-10RJA1	10	3	78R5319	0.79
ULW3-22RJA1	22	3	78R5321	0.75
ULW3-27RJA1	27	3	78R5322	0.75
ULW3-33RJA1	33	3	78R5323	0.75
ULW3-47RJA1	47	3	78R5324	0.75
ULW3-68RJA1	68	3	78R5325	0.75
ULW3-100RJA1	100	3	78R5320	0.75

(195429)

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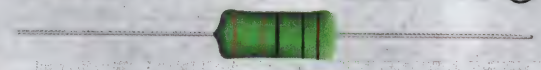
(212565)

2

FWxxA SERIES FUSIBLE WIREWOUND AXIAL-LEADED POWER RESISTORS

RoHS Compliant Available

BOURNS®



Features:
- Provides inrush current protection
- Provides fusible overcurrent protection
- Fuses at 120V or 240V
- E24 resistance value — 10 ohms
- UL listed — File E349323

Applications:
- White goods
- inverters
- Lighting
- Metering

Specifications:
- Wirewound around ceramic core
- Tinned copper lead wire
- Insulated resin housing
- Power: 1, 2, 3, 5, 7W
- Tolerance: ±5%
- Temperature Coefficient: ±200ppm/°C
- Operating temperature: -55°C to +155°C

FWxxA series of axial-leaded wirewound resistors is designed to fuse under abnormal conditions such as sudden surges in voltage or circuit malfunctions. The resistor will fuse upon application of 120 or 240 voltages.

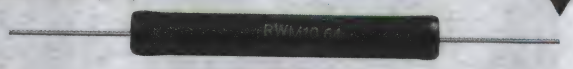
Mfg. Part No.	Power Rating (W)	Fuses @ V	Resistance (Ohms)	Stock No.	Price Each 1-9	Price Each 10-49
● FW10A10R0JA	1	120 or 240	10	53W9250	0.32	0.29
● FW20A10R0JA	2	120 or 240	10	53W9251	0.32	0.29
● FW30A10R0JA	3	120 or 240	10	53W9252	0.43	0.39
● FW50A10R0JA	5	120 or 240	10	53W9253	0.69	0.62
● FW70A10R0JA	7	240 Only	10	53W9254	0.79	0.72

(209278)

RWM SERIES AXIAL TERMINAL VITREOUS ENAMEL WIREWOUND POWER RESISTOR

RoHS Compliant Available

VISHAY.



Features
- Fire Proof
- All Welded Construction
- Excellent Endurance typical drift ± 1.5 % after 1000 hours

Specifications
- Res. Tolerance.: ±5%
- Power Rating Max.: 100 W @ 25°C
- Limiting Element Voltage Max.: 350V
- Oper. Temp. Range Max.: -55°C to +200°C

RWM SERIES WIREWOUND RESISTOR: 4 x 10 STYLE

Mfg. Part No.	Res. (Ohms)	Power @ +25°C (W)	Temp. Coeff.	Stock No.	Price Each 1-99
● RWM0410R100JR15E1	0.1	2.6	± 75ppm/°C	73M8332	0.83
● RWM0410R120JR15E1	0.12	2.6	± 75ppm/°C	73M8331	0.78
● RWM0410R220JR15E1	0.22	2.6	± 75ppm/°C	73M8334	0.78
● RWM0410R270JR15E1	0.27	2.6	± 75ppm/°C	73M8335	0.78
● RWM0410R330JR15E1	0.33	2.6	± 75ppm/°C	73M8336	0.78
● RWM0410R390JR15E1	0.39	2.6	± 75ppm/°C	73M8337	0.78
● RWM0410R470JR15E1	0.47	2.6	± 75ppm/°C	73M8338	0.78
● RWM04101R00JR15E1	1	2.6	± 75ppm/°C	73M8339	0.67
● RWM04102R20JR15E1	2.2	3	± 75ppm/°C	73M8349	0.67
● RWM04103R30JR15E1	3.3	3	± 75ppm/°C	73M8356	0.67
● RWM04104R70JR15E1	4.7	3	± 75ppm/°C	73M8363	0.67
● RWM04106R80JR15E1	6.8	3	± 75ppm/°C	73M8369	0.70
● RWM041010R0JR15E1	10	2.6	± 75ppm/°C	73M8340	0.71
● RWM041015R0JR15E1	15	2.6	± 75ppm/°C	73M8346	0.67
● RWM041022R0JR15E1	22	3	± 75ppm/°C	73M8351	0.67
● RWM041027R0JR15E1	27	3	± 75ppm/°C	73M8354	0.67
● RWM041033R0JR15E1	33	3	± 75ppm/°C	73M8357	0.67
● RWM041039R0JR15E1	39	3	± 75ppm/°C	73M8360	0.67
● RWM041047R0JR15E1	47	3	± 75ppm/°C	73M8364	0.67
● RWM041056R0JR15E1	56	3	± 75ppm/°C	73M8367	0.67
● RWM04101000JR15E1	100	2.6	± 75ppm/°C	73M8341	0.67
● RWM04101200JR15E1	120	2.6	± 75ppm/°C	73M8344	0.67
● RWM04101500JR15E1	150	2.6	± 75ppm/°C	73M8347	0.67
● RWM04102200JR15E1	220	3	± 75ppm/°C	73M8352	0.67
● RWM04103300JR15E1	330	3	± 75ppm/°C	73M8358	0.67
● RWM04103900JR15E1	390	3	± 75ppm/°C	73M8361	0.67
● RWM04104700JR15E1	470	3	± 75ppm/°C	73M8365	0.67
● RWM04106800JR15E1	680	3	± 75ppm/°C	73M8371	0.67
● RWM04101001JR15E1	1k	2.6	± 75ppm/°C	73M8342	0.67
● RWM04101201JR15E1	1.2k	2.6	± 75ppm/°C	73M8345	0.67
● RWM04101501JR15E1	1.5k	2.6	± 75ppm/°C	73M8348	0.67
● RWM04102201JR15E1	2.2k	3	± 75ppm/°C	73M8353	0.67
● RWM04103301JR15E1	3.3k	3	± 75ppm/°C	73M8359	0.97
● RWM04103901JR15E1	3.9k	3	± 75ppm/°C	73M8362	0.97

➤ CONTINUED ➤

RWM SERIES AXIAL TERMINAL VITREOUS ENAMEL WIREWOUND POWER RESISTOR (CONT.)

RWM SERIES WIREWOUND RESISTOR: 6 x 22 STYLE

Mfg. Part No.	Res. (Ohms)	Power @ +25°C (W)	Temp. Coeff.	Stock No.	Price Each 1-99
● RWM0622R100JA15E1	0.1	6	± 100ppm/°C	70M3792	0.83
● RWM0622R220JA15E1	0.22	6	± 100ppm/°C	70M3805	0.83
● RWM0622R330JA15E1	0.33	6	± 100ppm/°C	70M3810	0.83
● RWM0622R470JA15E1	0.47	6	± 100ppm/°C	70M3815	0.83
● RWM06224R70JA15E1	4.7	6	± 100ppm/°C	70M3985	0.60
● RWM062210R0JA15E1	10	6	± 100ppm/°C	70M3840	1.17
● RWM062215R0JA15E1	15	6	± 100ppm/°C	70M3871	0.60
● RWM062227R0JA15E1	27	6	± 100ppm/°C	70M3939	0.60
● RWM062256R0JA15E1	56	6	± 100ppm/°C	70M4008	1.25
● RWM062268R0JA15E1	68	6	± 100ppm/°C	70M4024	0.60
● RWM06221000JA15E1	100	6	± 100ppm/°C	70M3843	1.17
● RWM06221200JA15E1	120	6	± 100ppm/°C	70M3859	1.17
● RWM06221500JA15E1	150	6	± 100ppm/°C	70M3873	0.60
● RWM06222200JA15E1	220	6	± 100ppm/°C	70M3921	1.17
● RWM06224700JA15E1	470	6	± 100ppm/°C	70M3993	1.17
● RWM06225600JA15E1	560	6	± 100ppm/°C	70M4010	1.17
● RWM06221001JA15E1	1k	6	± 100ppm/°C	70M3846	0.60
● RWM06224701JA15E1	4.7k	6	± 100ppm/°C	70M3995	0.60
● RWM06226801JA15E1	6.8k	6	± 100ppm/°C	70M4028	0.60
● RWM06221002JA15E1	10k	6	± 100ppm/°C	70M3849	1.17
● RWM06221502JA15E1	15k	6	± 100ppm/°C	70M3877	1.68

(105961)

200 SERIES "BROWN DEVIL®" VITREOUS ENAMEL POWER RESISTORS

RoHS Compliant Available

OHMITE

Features
- Durable Ceramic Core Resistors Have All-Welded Construction
- Self-Supporting Lead Mounting Option
- High Power Ratings
- Flame-Resistant, Lead-Free Coating
- Also Available in Non-inductive Versions

Specifications
- Tolerance: J = ±5%, 1Ω and over; K = ±10%, under 1Ω
- Power Ratings Based On 25°C Free Air Rating
- Temperature Coefficent:
  ≤5Ω: ±400ppm/°C
  >5Ω: ±260ppm/°C

Use mounting bracket no. 5 for 8 and 12-Watt resistors; no. 7 bracket for 20-Watt resistors. Order brackets separately. Additional values available; *go online or call*.

5¼ WATT, 187 V

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-99
● B5J10RE	10	64K3831	4.28	3.88
● B5J68RE	68	64K3907	4.28	3.88
● B5J150E	150	64K3844	4.45	4.03
● B5J1K0E	1k	64K3816	3.90	3.53
● B5J10KE	10k	64K3830	4.79	4.33

8 WATT, 250 V

● B8J1R0E	1	64K3927	4.64	4.21
● B8J2R0E	2	64K3942	3.94	3.56
● B8J3R0E	3	64K3953	4.47	4.05
● B8J5R0E	5	64K3965	3.79	3.43
● B8J7R5E	7.5	64K3972	4.47	4.05
● B8J10RE	10	64K3930	4.43	4.02
● B8J15RE	15	64K3936	4.49	4.06
● B8J20RE	20	64K3944	4.32	3.91
● B8J35RE	35	64K3956	4.32	3.91
● B8J50RE	50	64K3966	3.77	3.42
● B8J75RE	75	64K3974	4.32	3.91
● B8J100E	100	64K3931	4.49	4.06
● B8J125E	125	64K3934	4.32	3.91
● B8J200E	200	64K3945	3.42	3.09
● B8J250E	250	64K3950	4.43	4.01
● B8J300E	300	64K3955	4.32	3.91
● B8J400E	400	64K3962	4.49	4.06
● B8J450E	450	64K3963	4.32	3.91
● B8J500E	500	64K3967	4.43	4.02
● B8J600E	600	64K3969	4.02	3.64
● B8J750E	750	64K3975	4.18	3.78
● B8J900E	900	64K3979	4.02	3.64
● B8J1K0E	1k	64K3921	3.18	2.88

➤ CONTINUED ➤

200 SERIES "BROWN DEVIL®" VITREOUS ENAMEL POWER RESISTORS (CONT.)

8 WATT, 250 V

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-99
B8J1K2E	1.2k	64K3923	4.02	3.64
B8J1K25E	1.25k	64K3924	4.02	3.64
B8J1K5E	1.5k	64K3925	4.02	3.64
B8J2K0E	2k	64K3939	3.25	2.95
B8J2K25E	2.25k	64K3940	4.28	4.07
B8J2K5E	2.5k	64K3941	4.09	3.71
B8J3K0E	3k	64K3951	4.09	3.71
B8J4K0E	4k	64K3958	4.20	3.81
B8J4K5E	4.5k	64K3959	4.09	3.71
B8J5K0E	5k	64K3964	3.17	2.88
B8J6K0E	6k	64K3968	4.09	3.71
B8J7K0E	7k	64K3970	4.09	3.71
B8J7K5E	7.5k	64K3971	4.25	3.85
B8J9K0E	9k	64K3978	4.09	3.71
B8J10KE	10k	64K3929	3.92	3.54
B8J15KE	15k	64K3935	4.44	4.02
B8J22K5E	22.5k	64K3946	5.20	4.71

12 WATT, 625 V

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-99
B12J1R0E	1	64K3687	4.32	3.91
B12J2R0E	2	64K3707	4.49	4.06
B12J3R0E	3	64K3718	4.32	3.91
B12J5R0E	5	64K3734	3.42	3.09
B12J10RE	10	64K3690	3.36	3.04
B12J12RE	12	64K3695	3.97	3.59
B12J15RE	15	64K3700	3.97	3.59
B12J20RE	20	64K3709	2.93	2.65
B12J25RE	25	64K3714	3.01	2.72
B12J30RE	30	64K3720	3.82	3.46
B12J40RE	40	64K3729	3.97	3.59
B12J50RE	50	64K3736	3.01	2.72
B12J75RE	75	64K3744	3.92	3.55
B12J100E	100	64K3691	3.01	2.72
B12J200E	200	64K3710	3.82	3.46
B12J250E	250	64K3715	2.93	2.65
B12J300E	300	64K3721	3.97	3.59
B12J400E	400	64K3730	3.82	3.46
B12J500E	500	64K3737	2.93	2.65
B12J600E	600	64K3739	3.82	3.46
B12J750E	750	64K3745	3.97	3.59
B12J900E	900	64K3750	3.82	3.46
B12J1K0E	1k	64K3681	3.29	2.99
B12J1K25E	1.25k	64K3684	4.17	3.78
B12J1K5E	1.5k	64K3685	4.17	3.78
B12J1K75E	1.75k	64K3686	4.17	3.78
B12J2K0E	2k	64K3704	3.29	2.98
B12J2K25E	2.25k	64K3705	3.72	3.38
B12J2K5E	2.5k	64K3706	3.72	3.38
B12J3K0E	3k	64K3716	4.41	3.99
B12J3K5E	3.5k	64K3717	4.41	4.00
B12J4K0E	4k	64K3725	4.24	3.84
B12J4K5E	4.5k	64K3726	4.47	4.05
B12J5K0E	5k	64K3733	3.53	3.20
B12J6K0E	6k	64K3738	4.59	4.16
B12J7K5E	7.5k	64K3741	4.47	4.05
B12J8K0E	8k	64K3746	4.47	4.05
B12J9K0E	9k	64K3749	4.47	4.05
B12J10KE	10k	64K3689	4.03	3.65
B12J12KE	12k	64K3693	4.79	4.34
B12J15KE	15k	64K3699	3.88	3.52
B12J20KE	20k	64K3708	3.77	3.42
B12J25KE	25k	64K3713	4.76	4.31
B12J30KE	30k	64K3719	4.95	4.48
B12J40KE	40k	64K3728	4.95	4.48
B12J50KE	50k	64K3735	4.63	4.19

20 WATT, 750 V

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-99
B20KR50E	0.5	64K3815	4.59	4.16
B20J1R0E	1	64K3757	4.75	4.30
B20J2R0E	2	64K3770	4.19	3.79
B20J3R0E	3	64K3778	5.43	4.92
B20J4R0E	4	64K3785	5.43	4.92
B20J5R0E	5	64K3791	4.19	3.79
B20J10RE	10	64K3759	4.19	3.79

CONTINUED

200 SERIES "BROWN DEVIL®" VITREOUS ENAMEL POWER RESISTORS (CONT.)

20 WATT, 750 V

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-99
B20J25RE	25	64K3774	4.30	3.89
B20J40RE	40	64K3787	4.80	4.34
B20J50RE	50	64K3793	4.19	3.79
B20J75RE	75	64K3805	5.28	4.79
B20J100E	100	64K3760	3.88	3.52
B20J150E	150	64K3765	4.36	3.95
B20J200E	200	64K3772	4.35	3.94
B20J250E	250	64K3775	4.24	3.84
B20J300E	300	64K3780	5.08	4.61
B20J500E	500	64K3794	3.98	3.61
B20J650E	650	64K3799	4.41	4.00
B20J1K0E	1k	64K3752	3.88	3.52
B20J1K2E	1.2k	64K3753	4.41	4.00
B20J1K5E	1.5k	64K3755	4.41	3.99
B20J2K0E	2k	64K3766	3.88	3.52
B20J3K0E	3k	64K3776	4.07	3.69
B20J5K0E	5k	64K3790	4.92	4.46
B20J10KE	10k	64K3758	4.99	4.52
B20J12K5E	12.5k	64K3762	5.70	5.16
B20J15KE	15k	64K3764	6.31	5.71
B20J20KE	20k	64K3771	4.84	4.38
B20J25KE	25k	64K3773	6.46	5.85
B20J30KE	30k	64K3779	4.97	4.49
B20J50KE	50k	64K3792	5.08	4.61
B20J100KE	100k	64K3761	6.65	6.02

(9603)

250 SERIES THIN STACKOHM® VITREOUS ENAMEL POWER RESISTORS

RoHS Compliant Available

OHMITE

Features
- Small Size-to-Power Ratio
- Stackable
- Integrated bracket conducts heat to mounting surface
- Low profile for limited space

SPECIFICATIONS

Series	Power (W)	Voltage (V)	Tolerance (+/- %)	Temperature Coefficient	Dielectric Withstanding Voltage	Length (in.)
F30	30	281	5%	±400 ppm/°C (1 to 20Ω)	1000 VAC	1.25
F40	40	655		±260 ppm/°C (20Ω)		2
F55	55	1405				3.5

30 WATT

Mfg. Part No.	Res. (Ohms)	Amps Max.	Stock No.	Price Each 1-24	Price Each 25-99
F30J3R0E	3	3.16	64K4518	12.14	11.10
F30J100E	100	0.55	64K4508	11.91	10.88

40 WATT

Mfg. Part No.	Res. (Ohms)	Amps Max.	Stock No.	Price Each 1-24	Price Each 25-99
F40J100E	100	0.632	64K4535	12.04	11.00
F40J500E	500	0.283	64K4555	12.47	11.40

55 WATT

Mfg. Part No.	Res. (Ohms)	Amps Max.	Stock No.	Price Each 1-24	Price Each 25-99
F55J10RE	10	2.35	64K4565	12.73	11.63
F55J25RE	25	1.48	64K4575	14.27	13.03
F55J50RE	50	1.05	64K4586	13.04	11.91

(80080)

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(212569)

WIREWOUND RESISTORS – HIGH POWER

210 SERIES DIVIDOHM® VITREOUS ENAMEL ADJUSTABLE POWER RESISTORS

RoHS Compliant Available

OHMITE

Features

- Terminals Suitable for Soldering or Bolt Connection
- Additional Adjustable Lug Supplied
- All-Welded Construction
- Flame-Resistant Coating
- Adjustability is 10% to 90% of full value wattage in proportion to this adjusted resistance value

Specifications

- Tolerance: ±10%
- Temperature Coeffiecient: 260ppm/°C
- Dielectric Withstanding Voltage
  1000VAC: 12W to 100W Rating
  3000VAC: 175W and 225W Rating
- Power Rating: Based on 25°C Free Air Rating. The Stated Wattage Rating Applies Only when the Entire Resistance is in the Circuit.

Order lugs separately below.

12 WATT, 565 V
Use no. 5 bracket; *ordered separately on page 594.*

Mfg. Part No.	Res. (Ohms)	Amps Max.	Stock No.	Price Each 1-24	Price Each 25-99
● D12K1R0E	1	3.46	64K4184	11.48	10.49
● D12K2R0E	2	2.45	64K4193	11.48	10.49
● D12K3R0E	3	2.45	64K4200	11.48	10.49
● D12K5R0E	5	1.54	64K4207	11.76	10.74
● D12K7R5E	7.5	1.54	64K4214	11.39	10.41
● D12K10RE	10	1.09	64K4186	11.66	10.66
● D12K20RE	20	1.09	64K4194	11.39	10.41
● D12K25RE	25	0.69	64K4196	11.39	10.41
● D12K50RE	50	0.49	64K4208	11.39	10.41
● D12K75RE	75	0.4	64K4215	11.39	10.41
● D12K100E	100	0.34	64K4187	11.39	10.41
● D12K150E	150	0.28	64K4189	11.80	10.78
● D12K200E	200	0.24	64K4195	11.80	10.78
● D12K250E	250	0.22	64K4197	12.20	11.16
● D12K300E	300	0.22	64K4201	11.78	10.77
● D12K400E	400	0.22	64K4205	11.78	10.77
● D12K500E	500	0.15	64K4209	11.78	10.77
● D12K1K0E	1k	0.11	64K4181	12.65	11.56
● D12K2K0E	2k	0.077	64K4190	12.21	11.16
● D12K2K5E	2.5k	0.022	64K4192	12.21	11.16
● D12K3K0E	3k	0.022	64K4198	10.40	9.51
● D12K5K0E	5k	0.045	64K4206	12.45	11.38
● D12K10KE	10k	0.045	64K4185	12.90	11.79
● D175K10RE	10k	4.18	64K4225	37.42	34.21
● D225K10KE	10k	4.18	64K4248	32.72	29.91
● D25K20KE	20k	4.18	64K4284	12.88	11.77
● D50K25KE	25k	0.045	64K4327	17.43	15.93
● D50K100KE	100k	0.045	64K4317	18.08	16.53

25 WATT, 625 V
Use no. 9 bracket; *ordered separately on page 594.*

Mfg. Part No.	Res. (Ohms)	Amps Max.	Stock No.	Price Each 1-24	Price Each 25-99
● D25K1R0E	1	5	64K4272	13.90	12.70
● D25K2R0E	2	3.54	64K4283	11.47	10.48
● D25K3R0E	3	2.88	64K4292	11.83	10.82
● D25K5R0E	5	2.24	64K4298	11.69	10.69
● D25K7R5E	7.5	1.82	64K4304	11.83	10.82
● D25K10RE	10	1.58	64K4274	9.74	8.90
● D25K15RE	15	1.29	64K4278	9.85	9.00
● D25K20RE	20	1.12	64K4285	8.58	7.84
● D25K25RE	25	1	64K4288	11.69	10.69
● D25K50RE	50	0.71	64K4299	11.69	10.69
● D25K75RE	75	0.58	64K4305	11.84	10.82
● D25K100E	100	0.5	64K4275	11.42	10.44
● D25K150E	150	0.41	64K4279	11.84	10.82
● D25K200E	200	0.35	64K4286	11.42	10.44
● D25K250E	250	0.32	64K4289	8.79	8.03
● D25K300E	300	0.29	64K4293	9.74	8.90
● D25K400E	400	0.25	64K4296	11.83	10.82
● D25K500E	500	0.22	64K4300	8.58	7.84
● D25K1K0E	1k	0.16	64K4269	9.82	8.98
● D25K1K5E	1.5k	0.13	64K4271	12.10	11.06
● D25K2K0E	2k	0.077	64K4280	12.25	11.19
● D25K3K0E	3k	0.091	64K4290	11.82	10.80
● D25K5K0E	5k	0.07	64K4297	12.93	11.82
● D25K6K0E	6k	0.065	64K4301	12.48	11.41
● D25K10KE	10k	0.045	64K4273	12.48	11.41
● D25K25KE	25k	0.032	64K4287	12.88	11.77

➤ CONTINUED ➤

210 SERIES DIVIDOHM® VITREOUS ENAMEL ADJUSTABLE POWER RESISTORS (CONT.)

50 WATT, 1625 V
Use no. 9 bracket; *ordered separately on page 594.*

Mfg. Part No.	Res. (Ohms)	Amps Max.	Stock No.	Price Each 1-24	Price Each 25-99
● D50K1R0E	1	7.07	64K4313	14.34	13.11
● D50K2R0E	2	5	64K4324	16.29	14.89
● D50K3R0E	3	4.08	64K4332	16.29	14.89
● D50K4R0E	4	3.536	64K4337	16.19	14.79
● D50K5R0E	5	3.16	64K4341	19.17	17.52
● D50K10RE	10	2.23	64K4315	16.71	15.27
● D50K25RE	25	1.41	64K4328	16.71	15.27
● D50K50RE	50	1	64K4343	13.60	12.43
● D50K75RE	75	0.82	64K4349	16.32	14.91
● D50K100E	100	0.71	64K4316	16.32	14.91
● D50K150E	150	0.58	64K4320	16.91	15.45
● D50K200E	200	0.5	64K4326	16.32	14.91
● D50K250E	250	0.45	64K4329	16.32	14.91
● D50K300E	300	0.41	64K4334	16.32	14.91
● D50K400E	400	0.35	64K4339	16.91	15.45
● D50K500E	500	0.32	64K4344	13.60	12.43
● D50K750E	750	0.26	64K4350	16.71	15.27
● D50K1K0E	1k	0.22	64K4310	17.49	15.98
● D50K1K5E	1.5k	0.028	64K4312	17.69	16.17
● D50K2K0E	2k	0.16	64K4321	17.08	15.61
● D50K2K5E	2.5k	0.13	64K4323	17.08	15.61
● D50K5K0E	5k	0.1	64K4340	18.06	16.50
● D50K10KE	10k	0.071	64K4314	17.43	15.93
● D50K20KE	20k	0.05	64K4325	18.06	16.50
● D50K50KE	50k	0.028	64K4342	18.06	16.50

75 WATT, 2625 V
Use no. 9 bracket; *ordered separately on page 594.*

● D75K50RE	50	1.225	64K4390	23.79	21.75

100 WATT, 2845 V
Use no. 12 bracket; *ordered separately on page 594.*

Mfg. Part No.	Res. (Ohms)	Amps Max.	Stock No.	Price Each 1-24	Price Each 25-99
● D100K1R0E	1	10	64K4159	27.49	25.13
● D100K2R0E	2	7.07	64K4166	27.33	24.97
● D100K3R0E	3	5.77	64K4171	26.79	24.48
● D100K4R0E	4	5	64K4173	27.33	24.97
● D100K5R0E	5	4.47	64K4176	24.87	22.73
● D100K10RE	10	3.16	64K4161	27.33	24.97
● D100K25RE	25	2	64K4169	24.07	22.00
● D100K50RE	50	1.41	64K4178	22.36	20.44
● D100K100E	100	1	64K4162	22.36	20.44
● D100K250E	250	0.63	64K4170	22.81	20.85
● D100K500E	500	0.45	64K4179	24.07	22.00
● D100K1K0E	1k	0.32	64K4157	24.07	22.00
● D100K1K5E	1.5k	0.26	64K4158	24.55	22.44
● D100K2K5E	2.5k	0.2	64K4165	24.79	22.66
● D100K5K0E	5k	0.14	64K4175	24.79	22.66
● D100K10KE	10k	0.1	64K4160	22.19	20.29
● D100K100KE	100k	0.028	64K4163	24.46	22.36

175 WATT, 3595 V
Use no. 18 bracket; *ordered separately on page 594.*

Mfg. Part No.	Res. (Ohms)	Amps Max.	Stock No.	Price Each 1-24	Price Each 25-99
● D175K5R0E	5	5.92	64K4240	40.81	37.30
● D175K25RE	25	...	64K4233	31.12	28.45
● D175K50RE	50	...	64K4242	33.71	30.81
● D175K100E	100	1.32	64K4226	27.08	24.75
● D175K250E	250	...	64K4234	26.55	24.26
● D175K500E	500	0.59	64K4243	31.61	28.90
● D175K1K0E	1k	0.59	64K4221	31.47	28.76

225 WATT, 4595 V
Use no. 18 bracket; *ordered separately on page 594.*

Mfg. Part No.	Res. (Ohms)	Amps Max.	Stock No.	Price Each 1-4	Price Each 5-9
● D225K1R0E	1	15	64K4247	56.75	51.77
● D225K2R0E	2	10.61	64K4254	41.31	37.76
● D225K3R0E	3	8.67	64K4259	45.67	41.74
● D225K5R0E	5	6.72	64K4264	38.03	34.75
● D225K10RE	10	4.74	64K4249	33.22	30.37
● D225K25RE	25	3	64K4257	36.68	33.53
● D225K50RE	50	2.12	64K4266	33.22	30.37
● D225K100E	100	1.5	64K4250	28.02	25.61

➤ CONTINUED ➤

210 SERIES DIVIDOHM® VITREOUS ENAMEL ADJUSTABLE POWER RESISTORS (CONT.)

Mfg. Part No.	Res. (Ohms)	Amps Max.	Stock No.	Price Each 1-4	Price Each 5-9
D225K250E	250	0.95	64K4258	28.02	25.61
D225K500E	500	0.67	64K4267	28.02	25.61
D225K1K0E	1k	0.47	64K4245	28.02	25.61
D225K1K5E	1.5k	0.387	64K4246	32.72	29.91
D225K2K5E	2.5k	0.3	64K4253	31.03	28.36
D225K5K0E	5k	0.21	64K4263	28.02	25.61

ADJUSTABLE LUGS FOR SERIES 210

Mfg. Part No.	Contact Button	Watts	Adjust by	Stock No.	Price Each 1-24	Price Each 25-99
2121E	Standard	25, 50	Screwdriver	64K8080	1.76	1.60
2125E	Standard	100	Screwdriver	64K8084	2.26	2.05
2133E	Standard	225	Screwdriver	64K8088	2.10	1.91
2135E	Silver	225	Screwdriver	64K8090	10.75	9.83

(9451)

270 SERIES LUG-TYPE VITREOUS ENAMEL POWER RESISTORS

RoHS Compliant Available

OHMITE

Features
- Terminal Lugs Suitable For Soldering or Bolting
- Ideal For High-Wattage Applications
- All-Welded Construction
- Flame-Resistant Coating

Specifications
- Tolerance: ±5%
- Power Rating Based On 25°C Free Air Rating
- Temperature Coefficient: 1 to 20Ω: ±400ppm/°C; Above 20Ω: ±260ppm/°C
- Dielectric Withstanding Voltage: 1000VAC: 12 to 100W Rating; 3000VAC: 175 to 225W Rating

Non-inductive versions are denoted by **LN prefix** in the mfg. part nos. listed in the tables below. Additional non-inductive parts are available; *go online or call.*

Use No. 5 bracket; *ordered separately on page 594.*

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-99
L12J1R0E	1	64K4840	6.06	5.18
L12J10RE	10	64K4843	4.78	4.09
L12J100E	100	64K4844	4.33	3.70
L12J150E	150	64K4850	5.61	4.80
L12J330E	330	64K4868	5.61	4.80
L12J1K5E	1.5k	64K4838	5.74	4.91
L12J10KE	10k	64K4842	8.43	7.21

Use No. 9 bracket; *ordered separately on page 594.*

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-99
L25J1R0E	1	64K4954	5.33	4.56
L25J2R0E	2	64K2082	6.21	5.30
L25J3R0E	3	64K4972	6.06	5.18
L25J4R0E	4	64K4976	7.26	6.21
L25J5R0E	5	64K4979	6.06	5.18
L25J10RE	10	64K4956	5.90	5.05
L25J15RE	15	64K4961	5.30	4.54
L25J25RE	25	64K4968	5.18	4.43
L25J50RE	50	64K4981	5.18	4.43
L25J75RE	75	64K4987	5.97	5.11
L25J100E	100	64K4957	5.18	4.43
L25J150E	150	64K4962	5.18	4.43
L25J200E	200	64K4966	5.90	5.05
L25J250E	250	64K4969	7.08	6.06
L25J500E	500	64K4982	5.90	5.05
L25J750E	750	64K4988	5.18	4.43
L25J1K0E	1k	64K4952	6.06	5.18
L25J1K5E	1.5k	64K4953	7.41	6.34
L25J2K0E	2k	64K4963	6.21	5.30
L25J2K5E	2.5k	64K4964	5.46	4.67
L25J3K0E	3k	64K4970	6.06	5.18
L25J3K5E	3.5k	64K4971	7.41	6.34
L25J4K0E	4k	64K4975	7.32	6.26
L25J5K0E	5k	64K4978	6.25	5.35
L25J6K0E	6k	64K4983	7.58	6.49
L25J7K5E	7.5k	64K4985	7.58	6.49
L25J10KE	10k	64K4955	7.50	6.41
L25J12KE	12k	64K4959	6.75	5.78
L25J15KE	15k	64K4960	7.50	6.41
L25J20KE	20k	64K4965	6.60	5.64
L25J25KE	25k	64K4967	7.50	6.41

➤CONTINUED➤

270 SERIES LUG-TYPE VITREOUS ENAMEL POWER RESISTORS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-99
L25J40KE	40k	64K4977	7.26	6.21
L25J50KE	50k	64K4980	8.07	6.90
L25J100KE	100k	64K4958	8.61	7.37

Use 61xx bracket; *ordered separately*

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-99
L25J10RE-MT1	10	86R9224	18.05	16.49
L25J15RE-MT1	15	86R9226	18.05	16.49
L25J25RE-MT1	25	86R9228	18.05	16.49
L25J50RE-MT1	50	86R9229	18.05	16.49
L25J100E-MT1	100	86R9225	18.05	16.49
L25J150E-MT1	150	86R9227	18.05	16.49
L25J500E-MT1	500	86R9230	18.05	16.49
L25J1K0E-MT1	1k	86R9223	18.36	16.78

Use No. 9 bracket; *ordered separately on page 594.*

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-99
L50J1R0E	1	64K4993	8.16	6.98
L50J2R0E	2	64K5005	8.70	7.44
L50J3R0E	3	64K5014	9.18	8.39
L50J5R0E	5	64K5019	7.64	6.54
L50J10RE	10	64K4995	7.49	6.41
L50J25RE	25	64K5010	7.49	6.41
L50J50RE	50	64K5021	8.35	7.14
L50J75RE	75	64K5025	7.49	6.41
L50J100E	100	64K4996	7.49	6.41
L50J150E	150	64K5000	9.00	8.23
L50J200E	200	64K5007	8.35	7.14
L50J250E	250	64K5011	8.90	8.13
L50J500E	500	64K5022	7.49	6.41
L50J750E	750	64K5026	7.49	6.41
L50J1K0E	1k	64K4991	7.70	6.58
L50J1K5E	1.5k	64K4992	7.43	6.35
L50J2K0E	2k	64K5003	8.24	7.05
L50J2K5E	2.5k	64K5004	7.43	6.35
L50J3K0E	3k	64K5013	7.34	6.71
L50J4R0E	4k	64K5017	8.86	8.10
L50J5K0E	5k	64K5018	7.43	6.35
L50J7K5E	7.5k	64K5023	8.93	8.16
L50J10KE	10k	64K4994	9.01	7.71
L50J15KE	15k	64K4999	8.80	7.53
L50J20KE	20k	64K5006	9.19	8.40
L50J25KE	25k	64K5009	13.51	12.35
L50J35KE	35k	64K5015	11.13	10.17
L50J50KE	50k	64K5020	13.51	12.35
L50J75KE	75k	64K5024	13.35	12.21
L50J100KE	100k	64K4997	11.09	10.14
L50J150KE	150k	64K5001	14.38	13.15
L50J200KE	200k	64K5008	15.32	14.00
L50J250KE	250k	64K5012	12.78	11.68

Use 61xx bracket; *ordered separately*

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-99
L50J10RE-MT1	10	86R9232	21.78	19.91
L50J25RE-MT1	25	86R9234	21.78	19.91
L50J50RE-MT1	50	86R9236	21.78	19.91
L50J100E-MT1	100	86R9233	13.04	11.92
L50J500E-MT1	500	86R9237	21.78	19.91
L50J1K0E-MT1	1k	86R9231	21.71	19.84

Use No. 12 bracket; *ordered separately on page 594.*

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-99
L100J1R0E	1	64K4807	11.93	10.90
L100J2R0E	2	64K4817	13.33	12.19
L100J3R0E	3	64K4823	12.82	11.72
L100J5R0E	5	64K4827	12.82	11.72
L100J10RE	10	64K4809	10.87	9.93
L100J25RE	25	64K4820	10.87	9.93
L100J50RE	50	64K4829	10.87	9.93
L100J75RE	75	64K4834	12.84	11.73
L100J100E	100	64K4810	10.62	9.71
L100J150E	150	64K4814	11.85	10.83
L100J250E	250	64K4821	11.85	10.83
L100J500E	500	64K4830	10.87	9.94
L100J1K0E	1k	64K4805	10.20	9.32
L100J2K0E	2k	64K4815	10.20	9.32
L100J2K5E	2.5k	64K4816	10.56	9.66

➤CONTINUED➤

270 SERIES LUG-TYPE VITREOUS ENAMEL POWER RESISTORS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-99
● L100J3K0E	3k	64K4822	10.57	9.66
● L100J5K0E	5k	64K4826	10.44	9.54
● L100J4R0E	4k	64K4825	12.97	11.86
● L100J7K5E	7.5k	64K4832	11.42	10.43
● L100J10KE	10k	64K4808	10.53	9.63
● L100J20KE	20k	64K4818	11.76	10.74
● L100J50KE	50k	64K4828	13.35	12.21
● L100J100KE	100k	64K4811	15.48	14.15
Use 61xx bracket; *ordered separately*				
● L100J10RE-MT1	10	86R9214	42.47	38.82
● L100J100E-MT1	100	86R9215	25.83	23.61
● L100J150E-MT1	150	86R9216	25.08	22.92
● L100J500E-MT1	500	86R9218	41.87	38.27

Use No. 18 bracket; *ordered separately on this page.*

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-99
● L175J3R0E	3	64K4907	20.67	18.89
● L175J10RE	10	64K4893	19.64	17.95
● L175J25RE	25	64K4904	19.64	17.95
● L175J50RE	50	64K4914	21.41	19.57
● L175J100E	100	64K4894	17.76	16.23
● L175J150E	150	64K4898	17.96	16.42
● L175J250E	250	64K4905	17.76	16.23
● L175J500E	500	64K4915	18.70	17.09
● L175J1K0E	1k	64K4889	17.96	16.42

Use No. 18 bracket; *ordered separately on this page.*

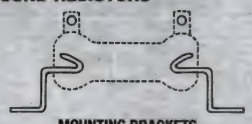
Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-99
● L225J1R0E	1	64K4923	40.79	37.28
● L225J2R0E	2	64K4932	27.13	24.80
● L225J3R0E	3	64K4938	23.64	21.61
● L225J4R0E	4	64K4940	25.73	23.52
● L225J5R0E	5	64K4943	21.39	19.55
● L225J10RE	10	64K4925	18.55	16.95
● L225J25RE	25	64K4935	18.99	17.36
● L225J50RE	50	64K4945	18.55	16.95
● L225J75RE	75	64K4950	18.55	16.95
● L225J100E	100	64K4926	18.55	16.95
● L225J150E	150	64K4929	17.71	16.19
● L225J250E	250	64K4936	17.71	16.19
● L225J500E	500	64K4946	19.64	17.95
● L225J750E	750	64K4951	17.71	16.19
● L225J1K0E	1k	64K4921	17.12	15.64
● L225J1K5E	1.5k	64K4922	17.12	15.64
● L225J2K0E	2k	64K4930	13.69	12.52
● L225J2K5E	2.5k	64K4931	17.12	15.64
● L225J3K0E	3k	64K4937	17.12	15.64
● L225J5K0E	5k	64K4942	17.12	15.64
● L225J10KE	10k	64K4924	17.79	16.26
● L225J15KE	15k	64K4928	21.47	19.62
● L225J20KE	20k	64K4933	20.72	18.94
● L225J25KE	25k	64K4934	20.72	18.94
● L225J30KE	30k	64K4939	20.72	18.94
● L225J50KE	50k	64K4944	22.03	20.14
● L225J100KE	100k	64K4927	21.30	19.47
Use 61xx bracket; ordered separately				
● L225J25RE-MT1	25	86R9220	62.56	57.06
● L225J100E-MT1	100	86R9219	62.56	57.06
● L225J250E-MT1	250	86R9221	60.70	55.37
● L225J500E-MT1	500	86R9222	60.70	55.37

(9555)

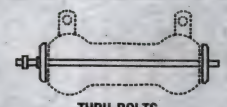
MOUNTING BRACKETS AND THRU-BOLTS FOR 200, 210 AND 270 SERIES LUG-TYPE WIREWOUND RESISTORS

RoHS Compliant Available

OHMITE



MOUNTING BRACKETS



THRU-BOLTS

Brackets remain in place by spring tension.

Mtg. Screw Size (Max.)	For Resistors (Power Rating)
6	8, 12 Watt
6	25, 70, 75 Watt
10	100 Watt
10	175, 225 Watt

MOUNTING BRACKETS

Mfg. Part No.	Package	For Ohmite Resistor Type	Stock No.	Price Each 1-24
5/BRACKET	Each	210-12, 270-12	13F097	0.69
● 5E-10	Each	210-12, 270-12	66K7084	0.65
9/BRACKET	Each	210-25, 210-50, 270-25, 270-50	13F098	0.63
● 9E-10	Each	210-25, 210-50, 270-25, 270-50	66K7103	0.58
● 12E-10	10	200, 210, 270	66K6903	8.93
● 12E-100	Each	200, 210, 270	66K6789	0.97
18/BRACKET	Each	210-175, 210-225, 270-175, 270-225	13F100	1.17
● 18E-10	Each	210-175, 210-225, 270-175, 270-225	66K6790	1.07
● 18E-10	10	210-175, 210-225, 270-175, 270-225	64K7946	8.97
● 18SE-10	10	200, 210, 270	64K7948	16.77
● 18E-100	100	200, 210, 270	64K7947	68.18

THRU-BOLTS

200 thru-bolts, with centering and mica insulation washers, permit perpendicular mounting of **210** and **270 series** resistors in panels up to 0.25″ thick.

Mfg. Part No.	Bolt Size Length	Bolt Size No.	For Resistors (Power Ratings)	Stock No.	Price Each 1-24
● 7PA10E	2½″	8	12 Watt	64K9429	5.21
7PA25	2¾″	10	25 Watt	94F1789	7.69
● 7PA25E	2¾″	10	25 Watt	64K9434	5.42
7PA50	4¾″	10	50 Watt	89F400	6.68
● 7PA50E	4¾″	10	50 Watt	64K9436	6.12
7PA100	7⁵⁄₁₆″	10	100 Watt	90F3640	9.08
● 7PA100E	7⁵⁄₁₆″	10	100 Watt	64K9430	7.52
● 7PA160E	9½″	¼″	175 Watt	64K9431	10.68
● 7PA160E	9½″	¼″	175 Watt	64K9431	10.68
7PA200	11½″	¼″	225 Watt	98F702	12.00
● 7PA200E	11½″	¼″	225 Watt	64K9433	11.02

THRU-BOLT MOUNTING BRACKETS

6126-P8-1/2 elongated and **6110-10-1/2** (slotted) thru-bolt mounting brackets fit **7PA series** thru-bolts to mount both **200, 210** and **270 series** resistors.

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● 6101-2E	Slotted thru-bolt mounting brackets	64K9385	8.01
● 6101-4E	Slotted thru-bolt mounting brackets	64K9386	8.37
6104-61-2	Slotted thru-bolt mounting brackets	70B1826	9.68
● 6104-6 1-2E	Slotted thru-bolt mounting brackets	64K9388	8.86
● 6110-10 1-2E	Slotted thru-bolt mounting brackets	64K9389	16.80
● 6120D-1 3-4E	Elongated thru-bolt mounting brackets	64K9391	6.05
● 6120K-2E	Elongated thru-bolt mounting brackets	64K9392	7.92
● 6120K-4E	Elongated thru-bolt mounting brackets	64K9393	8.50
● 6128P-8 1-2E	Elongated thru-bolt mounting brackets	64K9396	22.18

METAL CENTERING WASHERS

Mfg. Part No.	Diameter Outer	Diameter Inner	Max Screw Size	For Resistors (Power Ratings)	Stock No.	Price Each 1-24
6013	1.125″	0.25″	0.25″	175 W, 225 W	12B4976	0.66

(4117)

FIXED WIREWOUND POWER RESISTORS

RoHS Compliant Available

multicomp

Features
- All-welded construction.
- Flame resistant coating.
- High wattage applications.
- Rugged lead free vitreous enamel coating.
- Terminals suitable for soldering or bolt connection.

Specifications
- Tolerance: ±5%
- Core: Tubular ceramic.
- Terminals: Solder coated radial lug.
- Material Coating: Lead free vitreous enamel.
- Derating: Linearly from 100% @ +25°C to 0% @ +350°C.
- Temperature coefficient: 1 to 20Ω: ±400 ppm/°C.; >20Ω: ±260 ppm/°C
- Dielectric withstanding voltage: 1000 VAC: 12 to 100 watt rating; 3000 VAC: 175 to 225 watt rating

These fixed resistors are ideal for applications requiring high wattage. They are equipped with lug terminals suitable for soldering or sturdy bolt connection. When secure mounting is required, the hollow core of these resistors permit fastening with spring type brackets, thru bolts or thru bolts with slotted-steel brackets. Two mounting brackets required. Mounting brackets available *on page 597*.

DIMENSIONS

Power (W)	L	D	C
25	2.000″	0.563″	0.313″
50	4.000″	0.563″	0.313″
100	6.500″	0.750″	0.500″
225	10.500″	1.125″	0.750″

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	25-99	100-249
25 WATT					
MC14655	10 ohm	28K6269	4.45	4.17	3.72
MC14656	25 ohm	28K6270	4.41	4.13	3.69
MC14657	50 ohm	28K6271	4.45	4.17	3.72
MC14658	5 ohm	28K6272	4.28	4.02	3.58
MC14659	100 ohm	28K6273	4.33	4.07	3.63
MC14660	1 kohm	28K6274	4.33	4.07	3.63
50 WATT					
MC14661	1 ohm	28K6275	6.20	5.83	5.19
MC14662	5 ohm	28K6276	6.27	5.88	5.25
MC14663	10 ohm	28K6277	6.19	5.81	5.19
MC14664	25 ohm	28K6278	6.19	5.81	5.19
MC14665	50 ohm	28K6279	6.19	5.81	5.19
MC14666	100 ohm	28K6280	6.19	5.81	5.19
MC14667	1 kohm	28K6281	6.27	5.88	5.25
100 WATT					
MC14668	1 ohm	28K6282	9.67	9.08	8.12
MC14669	2 ohm	28K6283	9.67	9.08	8.10
MC14670	5 ohm	28K6284	9.67	9.08	8.10
MC14671	10 ohm	28K6285	9.67	9.08	8.12
MC14672	25 ohm	28K6286	9.79	9.19	8.20
MC14673	50 ohm	28K6287	9.32	8.75	7.81
MC14674	100 ohm	28K6288	9.67	9.08	8.10
MC14675	150 ohm	28K6289	9.32	8.75	7.81
MC14676	250 ohm	28K6290	9.32	8.75	7.81
225 WATT					
MC14677	1 ohm	28K6291	19.65	18.45	16.47
MC14678	2 ohm	28K6292	19.53	18.33	16.36
MC14679	5 ohm	28K6293	19.30	18.11	16.16
MC14680	10 ohm	28K6294	19.30	18.11	16.16
MC14681	25 ohm	28K6295	19.30	18.11	16.16
MC14682	50 ohm	28K6296	19.53	18.33	16.36
MC14683	100 ohm	28K6297	19.12	17.95	16.02
MC14684	150 ohm	28K6298	19.53	18.33	16.36
MC14685	250 ohm	28K6299	19.65	18.45	16.47
MC14686	500 ohm	28K6300	18.60	17.46	15.58
MC14687	1 kohm	28K6301	19.31	18.13	16.17
MC14688	100 kohm	28K6302	19.30	18.11	16.16

(70054)

DEV KIT HQ™

Newest technology, Development Kits & Evaluation Boards from the best suppliers.

newark.com/dev-kits

(196525)

HL, HLZ, AND NHL SERIES WIREWOUND TUBULAR RESISTORS

RoHS Compliant Available

VISHAY.

Features
- High temperature silicon coating
- Complete welded construction
- Available in non-inductive styles (model NHL) with Aryton-Perry winding
- Tight tolerance of 5 % for values above 1 Ω
- Excellent stability in operation (< 3 % change in resistance)

HL SERIES, INDUCTIVE

Mfg. Part No.	Resistance (Ohms)	Power (W)	Stock No.	Price Each 1-49
HL02506E1R000JE	1	25	71M0799	3.10
HL02506Z1R000JJ	1	25	96B1096	10.24
HL02506E2R000JE	2	25	71M0804	10.24
HL02506Z2R000JJ	2	25	90B3127	8.11
HL02506E3R000JE	3	25	71M0808	10.24
HL02506Z3R000JJ	3	25	57H7284	10.61
HL02506E5R000JE	5	25	71M0809	10.24
HL02506Z5R000JJ	5	25	06M5237	10.24
HL02506E10R00JE	10	25	71M0801	10.24
HL02506Z10R00JJ	10	25	05C3776	10.24
HL02506E20R00JE	20	25	71M0805	10.24
HL02506E25R00JE	25	25	71M0807	10.24
HL02506Z25R00JJ	25	25	45C2077	10.61
HL02506E50R00JE	50	25	71M0810	10.24
HL02506Z50R00JJ	50	25	20H0554	8.11
HL02506E100R0JE	100	25	71M0802	10.24
HL02506E150R0JE	150	25	71M0803	10.24
HL02506E200R0JE	200	25	71M0806	10.24
HL02506E1K000JE	1k	25	71M0798	10.24
HL02506E10K00JE	10k	25	71M0800	12.17
HL02506Z10K00JJ	10k	25	23C1546	12.17
HL03509Z3K000JJ	3k	35	94B7535	9.49
HL05006E1R000JE	1	50	71M0812	9.39
HL05006E3R000JE	3	50	71M0817	9.39
HL05006Z3R000JJ	3	50	45C2122	9.39
HL05006E5R000JE	5	50	71M0818	9.06
HL05006Z5R000JJ	5	50	50B2711	9.06
HL05006E10R00JE	10	50	71M0813	9.06
HL05006Z10R00JJ	10	50	88F4056	9.39
HL05006E20R00JE	20	50	71M0815	9.06
HL05006E25R00JE	25	50	71M0816	9.39
HL05006Z25R00JJ	25	50	94B4763	9.06
HL05006E100R0JE	100	50	71M0814	9.06
HL05006Z100R0JJ	100	50	99F8395	9.06
HL05006E1K000JE	1k	50	71M0811	9.06
HL05006Z50K00JJ	50k	50	45C2131	11.89
HL10006E1R000JE	1	100	71M0821	10.53
HL10006Z1R000JJ	1	100	41J3358	28.12
HL10006E2R000JE	2	100	71M0824	28.96
HL10006Z2R000JJ	2	100	45C2190	28.12
HL10006E3R000JE	3	100	71M0827	8.90
HL10006Z3R000JJ	3	100	45C2194	28.12
HL10006E5R000JE	5	100	71M0828	28.12
HL10006Z5R000JJ	5	100	45C2198	28.12
HL10006E10R00JE	10	100	71M0822	28.12
HL10006Z10R00JJ	10	100	45C2184	28.12
HL10006E15R00JE	15	100	64P2738	9.22
HL10006E25R00JE	25	100	71M0826	28.12
HL10006E50R00JE	50	100	71M0829	28.12
HL10006Z50R00JJ	50	100	45C2199	10.53
HL10006E100R0JE	100	100	71M0823	28.12
HL10006Z100R0JJ	100	100	24C5812	28.96
HL10006E200R0JE	200	100	71M0825	28.12
HL10006Z200R0JJ	200	100	45C2191	28.12
HL10006E500R0JE	500	100	71M0830	28.96
HL10006E1K000JE	1k	100	71M0820	28.12
HL10006Z1K000JJ	1k	100	45C2181	28.12
HL22507E1R000JE	1	225	71M0831	27.82
HL22507Z1R000JJ	1	225	78K5355	47.27
HL22507E2R000JE	2	225	71M0835	47.27
HL22507Z2R000JJ	2	225	78K5357	47.27
HL22507Z4R000JJ	4	225	64P3028	48.69
HL22507E5R000JE	5	225	71M0837	47.27
HL22507Z5R000JJ	5	225	79K3510	47.27
HL22507E10R00JE	10	225	71M0832	48.69
HL22507Z10R00JJ	10	225	98B5142	47.27
HL22507E25R00JE	25	225	71M0836	47.27
HL22507Z25R00JJ	25	225	45C2216	47.27

CONTINUED

HL, HLZ, AND NHL SERIES WIREWOUND TUBULAR RESISTORS (CONT.)

Mfg. Part No.	Resistance (Ohms)	Power (W)	Stock No.	Price Each 1-49
● HL22507E50R00JE	50	225	71M0838	47.27
HL22507Z50R00JJ	50	225	94B9326	47.27
● HL22507E100R0JE	100	225	71M0833	8.85
HL22507Z100R0JJ	100	225	50B2390	47.27
● HL22507E150R0JE	150	225	71M0834	47.27
HL22507Z150R0JJ	150	225	45C2211	47.27
● HL22507Z200R0JJ	200	225	45C2215	12.57
HLZ SERIES, INDUCTIVE				
● HLZ-300-07Z .3< 10%	0.3	300	94B4180	41.27
NHL SERIES, NON-INDUCTIVE				
NHL22507Z8R000JJ	8	225	05C1962	43.34

(103590)

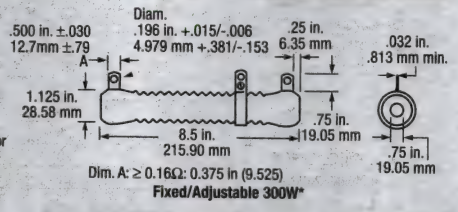
280 SERIES CORRIB® FIXED AND ADJUSTABLE VITREOUS ENAMEL POWER RESISTORS

RoHS Compliant Available

OHMITE

Features
- Ribbed Construction For Rapid Cooling
- Ideal for Equipment Requiring Low Resistance Loads at Low Ohms and High Current Capacity
- Especially Constructed for Motor Starting, Dynamic Braking, etc.

Specifications
- Tolerance: ±10%
- Power Rating: Based on 25°C Free Air Rating
- Derates Linearly from 100% @ +25°C to 0% @ +400°C
- Temperature Coefficient: 400ppm/°C
- Dielectric Withstanding Voltage: 1000VAC



PRODUCT SPECIFICATIONS IN MFG. PART NO.

Type	Power (W)	Tolerance	Resistance (Ω)
C (Fixed) E (Adjustable Version)	300	K (±10%)	1R0

FIXED: 300 WATT

Mfg. Part No.	Res. (Ohms)	Amps Max.	Stock No.	Price Each 1-24	25-99
● C300KR10E	0.1	54.7	64K4134	42.81	39.13
● C300KR20E	0.2	38.7	64K4136	32.18	29.41
● C300KR25E	0.25	34.6	64K4137	35.41	32.36
● C300KR31E	0.31	31.1	64K4138	34.71	31.73
● C300KR50E	0.5	24.5	64K4140	28.93	26.44
● C300KR63E	0.63	21.8	64K4141	38.72	35.39
● C300K1R0E	1	17.3	64K4143	16.82	15.37
● C300K1R2E	1.2	15.8	64K4144	26.40	24.12
● C300K1R6E	1.6	13.7	64K4145	25.88	23.65
● C300K2R0E	2	12.2	64K4149	23.92	21.87
● C300K2R5E	2.5	10.9	64K4150	23.92	21.87
● C300K3R1E	3.1	9.8	64K4152	23.92	21.87
● C300K4R0E	4	8.6	64K4153	23.92	21.87
● C300K5R0E	5	7.7	64K4154	22.86	20.90
● C300K6R3E	6.3	6.9	64K4155	23.32	21.32
● C300K8R0E	8	6.1	64K4156	22.86	20.90
● C300K10RE	10	5.5	64K4146	22.05	20.15
● C300K12RE	12	5.0	64K4147	22.05	20.15
● C300K16RE	16	4.3	64K4148	22.05	20.15
● C300K20RE	20	3.8	64K4151	22.05	20.15
ADJUSTABLE: 300 WATT					
● E300KR10E	0.1	54.7	64K4410	57.39	52.34
● E300KR12E	0.12	54.7	64K4411	53.53	48.82
● E300KR16E	0.16	43.3	64K4412	49.74	45.46
● E300KR20E	0.2	38.7	64K4413	51.23	46.82
● E300KR25E	0.25	34.6	64K4414	51.23	46.82
● E300KR40E	0.4	27.4	64K4416	36.56	33.41
● E300KR50E	0.5	24.5	64K4417	47.53	43.45
● E300KR63E	0.63	21.8	64K4418	47.53	43.45
● E300KR80E	0.8	19.3	64K4419	35.49	32.44
● E300K1R0E	1	17.3	64K4420	32.33	29.55
● E300K1R6E	1.6	13.7	64K4422	43.28	39.56
● E300K2R0E	2	12.2	64K4426	30.91	28.25
● E300K2R5E	2.5	10.9	64K4427	30.30	27.70
● E300K3R1E	3.1	9.8	64K4429	39.36	35.98
● E300K4R0E	4	8.6	64K4430	36.35	33.22

➤ CONTINUED ➤

280 SERIES CORRIB® FIXED AND ADJUSTABLE VITREOUS ENAMEL POWER RESISTORS (CONT.)

ADJUSTABLE: 300 WATT

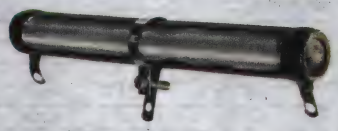
Mfg. Part No.	Res. (Ohms)	Amps Max.	Stock No.	Price Each 1-24	25-99
● E300K5R0E	5	7.7	64K4431	29.75	27.19
● E300K6R3E	6.3	6.9	64K4432	39.03	35.67
● E300K8R0E	8	6.1	64K4433	29.75	27.19
● E300K10RE	10	5.5	64K4423	28.85	26.36
● E300K12RE	12	5.0	64K4424	37.89	34.64
● E300K16RE	16	4.3	64K4425	34.61	31.63
● E300K20RE	20	3.8	64K4428	34.61	31.63

(9576)

VITREOUS ENAMEL ADJUSTABLE WIREWOUND POWER RESISTORS

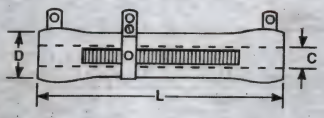
RoHS Compliant Available

multicomp



Features
- Adjustable lug supplied.
- All-welded construction.
- Flame resistant coating.
- High wattage applications.
- Rugged lead free vitreous enamel coating.
- Terminals suitable for soldering or bolt connection.

Specifications
- Tolerance: ±10%
- Core: Tubular ceramic.
- Coating: Lead free vitreous enamel.
- Terminals: Solder coated radial lug.
- Temperature coefficient: ±260 ppm/°C
- Adjustable terminal: Nickel plated steel.
- Overload: 10 times rated wattage for 5 seconds.
- Derating: Linearly from 100% @ +25°C to 0% @ +350°C.
- Dielectric withstanding voltage: 1000 VAC: 12 to 100 watt rating.
  3000 VAC: 175 and 225 watt rating



These wirewound resistors are equipped with an adjustable lug, making them ideal for adjusting circuits, obtaining odd resistance values and setting equipment to meet various line voltages. They feature a hollow core to permit secure fastening with spring-type clips or thru bolts with washers. They also offer the durability of lead free vitreous enamel coating and all-welded construction. Two mounting brackets required. Mounting brackets available *on page 597.*

DIMENSIONS

Power (W)	L	D	C
100	6.500″	0.750″	0.500″
225	10.500″	1.125″	0.750″

100 WATT

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	25-99	100-249
● MC14635	100	28K6249	22.73	21.69	20.82
● MC14636	10	28K6250	22.46	21.43	20.57
● MC14637	250	28K6251	22.73	21.69	20.82
● MC14638	25	28K6252	21.65	20.66	19.83
● MC14639	50	28K6253	21.65	20.66	19.83
225 WATT					
● MC14640	100	28K6254	27.96	26.69	25.62
● MC14641	10	28K6255	27.96	26.69	25.62
● MC14642	1	28K6256	28.24	26.95	25.86
● MC14643	250	28K6257	28.24	26.95	25.86
● MC14644	25	28K6258	28.24	26.95	25.86
● MC14645	500	28K6259	27.96	26.69	25.62
● MC14646	50	28K6260	27.15	25.91	24.87
● MC14647	5	28K6261	27.15	25.91	24.87

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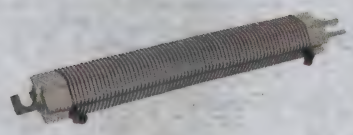
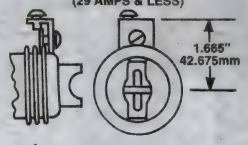
(211463)

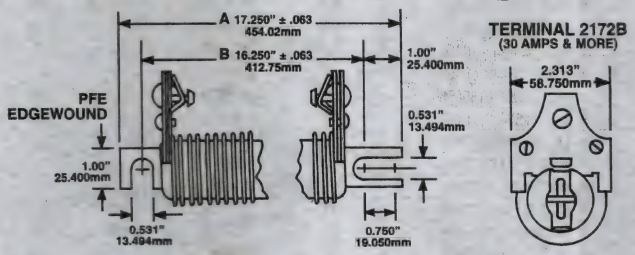
POWR-RIB® EDGEWOUND ROUND WIRE POWER RESISTORS

RoHS Compliant Available

OHMITE







Features
- Handles 700–1000W
- Constructed of a Heavy Resistance Alloy Mounted on Ceramic Insulators and Supported by a Metal Mounting
- Heavily Plated to Help Prevent Oxidation and Corrosion
- Terminals: Clamps, Movable Along Resistor Wire for Setting Intermediate Resistance Values
- Mounting: Metal Mounting Bar is Slotted on Each End to Facilitate Installation

Specifications
- Tolerance: ±10%
- Temperature Coefficient: >50A: ±300ppm/°C; <47A: ±500ppm/°C

Also available in 2, 3 and 4 sections and **PFR series** round wire resistors; *go online or call.*

Mfg. Part No.	Res. (Ohms)	Amps Max.	Stock No.	Price Each 1-4	Price Each 5-9
PFE5K1R60E	1.6	26	64K5479	124.86	113.88

EXTRA TERMINALS FOR EDGEWOUND RESISTORS
Extra terminals may be used as taps.

Mfg. Part No.	For Use With	Stock No.	Price Each 1-24	Price Each 25-99
2172BE	33A and more	64K8093	25.77	23.56
2172GE	29A and less	64K8094	14.31	13.08

PFE SERIES
(9579)

VITREOUS ENAMEL EDGEWOUND HIGH POWER RESISTORS

RoHS Compliant Available

multicomp

Features
- Ribbed construction aids in rapid cooling
- Especially constructed for motor starting, dynamic braking, etc.
- Designed for equipment requiring low resistance loads at low ohmic values and high current capacity

Specifications
- Tolerance: ±10%
- Core: Tubular Ceramic
- Terminals: Tinned lug with hole
- Temperature coefficient: ±400 ppm/°C
- Power rating: Based on 25°C free air rating
- Overload: 10 times rated wattage for 5 seconds
- Derating: Linearly from 100% @ +25°C to 0% @ +400°C
- Dielectric withstanding voltage: 1000 VAC measured from terminal to mounting bracket
- Coating: Lead free vitreous enamel except for extreme low resistance 35 watt models, and very large models (1000 watts and up), which are supplied in Silicone Ceramic

These resistors are ideal for applications involving high currents at very low resistance values as low as 0.1Ω for the 300 Watt units. These large, heavy-duty resistors are designed to withstand frequent start-stop cycles characteristic of motor starting, dynamic braking and other similar applications. They are manufactured with corrugated resistive wire. To accelerate cooling, the wire is securely fused to the ceramic core by the protective vitreous enamel coating to improve durability. Corrib resistors are hollow-core units which can be securely fastened to chassis surfaces with thru bolts and brackets. Two mounting brackets required. Mounting brackets available *on this page.*

DIMENSIONS

Power (W)	Length	O.D.	I.D.
300	8½″	1⅛″	¾″

300 WATT

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49
MC14648	10	28K6262	28.16	26.80	23.96
MC14649	1	28K6263	28.59	27.21	24.31
MC14650	20	28K6264	28.17	26.81	23.97
MC14651	4	28K6265	28.16	26.80	23.96
MC14652	5	28K6266	27.96	26.61	23.78
MC14653	0.1	28K6267	28.59	27.21	24.31
MC14654	0.5	28K6268	28.16	26.80	23.96

(70664)

WIREWOUND RESISTOR HARDWARE

RoHS Compliant Available

OHMITE

Mounting bracket sets and adjustable lugs fit Ohmite **300W Corrib®** resistors. Bracket sets include 2 each: bracket, bolt, washers (centering, mica, lock) and nut. Single resistor types have 1 bolt and nut; 2 each of all washers.

Mfg. Part No.	Style	Resistors	Stock No.	Price Each 1-9
6110-8 1-2E	Slotted	1	64K9390	12.19
6126P-8 1-2	Elongated	1	94F1433	14.97
6126P-8 1-2E	Elongated	1	64K9394	14.27
6127P-8 1-2E	Elongated	2	64K9395	20.02
6128P-8 1-2E	Elongated	3	64K9396	22.18
6129P-8 1-2E	Elongated	4	64K9397	40.75

EXTRA ADJUSTABLE LUGS

Mfg. Part No.	Fits Resistors	Stock No.	Price Each 1-24
1974AE	0.1-0.63Ω, 1.0-5.0Ω, 8.0-20.0Ω	64K7950	6.77

(68352)

WIREWOUND RESISTOR MOUNTING BRACKETS

RoHS Compliant Available

multicomp

Thru-Bolt Mounting Brackets

Spring Grip Brackets

Thru-Bolt Mounting Brackets include center bolts, centering washers and insulating washers. Spring Grip Brackets fit inside the resistor core and are held in place by spring tension. Brackets are zinc-plated steel.

SPRING GRIP MOUNTING BRACKETS

Mfg. Part No.	For Use With	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99
MC14689	Single 25 or 50 Watt Wirewound Resistor	28K6303	0.58	0.54	0.49
MC14690	Single 100 Watt Wirewound Resistor	28K6304	0.63	0.59	0.54
MC14691	Single 200 or 300 Watt Wirewound Resistor	28K6305	0.69	0.64	0.58

THRU-BOLT MOUNTING BRACKETS

MC14761	Single 300 Watt Wirewound Resistor	33K3838	8.29	7.45	6.63
MC14762	Two 300W Wirewound Resistor	33K3839	10.01	9.00	7.99
MC14692	Three 300 Watt Wirewound Resistor	28K6306	11.57	10.41	9.25

(84811)

CARBON FILM ±5% RESISTOR KITS

RoHS Compliant Available

multicomp

Features
- 0.25W and 0.5W carbon film resistor kits
- E6 and E12 series of standard decade values
- 100 pieces of each preferred value from 10Ω to 1MΩ

0.25 WATT

Mfg. Part No.	Type	Values	Stock No.	Price Each
CFR0W4JE006KIL	E6 Kit	43	24M1011	51.22
CFR0W4JE012KIL	E12 Kit	85	24M1012	93.16

0.5 WATT

CFR0S2JE006KIL	E6 Kit	37	24M1009	59.34
CFR0S2JE012KIL	E12 Kit	73	24M1010	117.11

(116537)

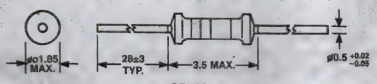
CARBON FILM RESISTORS

CARBON FILM RESISTORS

RoHS Compliant Available

multicomp

- Tolerance: ±5%
- Rated Wattage: 0.125W, 0.25W, and 0.5W
- Working Voltage: 200V, 250V, and 350V max.
- Overload Voltage: 400V, 500V, and 700V max.
- Dielectric Withstanding Voltage: 400V, 500V, and 700V max.



CR-½

Power Rating	Body Length	Max. Dia.	Lead Length	Lead Dia.
⅛ Watt	3.5mm	1.85mm	28±3mm	0.5mm
¼ Watt	6.8mm	2.50mm	28±3mm	0.6mm
½ Watt	10.0mm	3.50mm	28±3mm	0.6mm

⅛ WATT

Mfg. Part No.	Res. (Ohms)	Tape Cut [StockNo]	Price Each 1-49	Price Each 50-199
● MCCFR0W8J010JA20	1	58K5080	0.04	0.04
● MCCFR0W8J012JA20	1.2	58K5086	0.04	0.03
● MCCFR0W8J015JA20	1.5	58K5091	0.04	0.03
● MCCFR0W8J022JA20	2.2	58K5101	0.04	0.04
● MCCFR0W8J033JA20	3.3	58K5110	0.04	0.03
● MCCFR0W8J039JA20	3.9	58K5116	0.04	0.03
● MCCFR0W8J047JA20	4.7	58K5121	0.04	0.03
● MCCFR0W8J056JA20	5.6	58K5126	0.04	0.03
● MCCFR0W8J068JA20	6.8	58K5130	0.04	0.04
● MCCFR0W8J082JA20	8.2	58K5135	0.04	0.04
● MCCFR0W8J0100A20	10	58K5081	0.04	0.04
● MCCFR0W8J0150A20	15	58K5092	0.04	0.03
● MCCFR0W8J0180A20	18	58K5097	0.04	0.03
● MCCFR0W8J0220A20	22	58K5102	0.04	0.04
● MCCFR0W8J0270A20	27	58K5106	0.04	0.04
● MCCFR0W8J0330A20	33	58K5111	0.04	0.04
● MCCFR0W8J0390A20	39	58K5117	0.04	0.03
● MCCFR0W8J0470A20	47	58K5122	0.04	0.04
● MCCFR0W8J0560A20	56	58K5127	0.04	0.04
● MCCFR0W8J0680A20	68	58K5131	0.04	0.03
● MCCFR0W8J0820A20	82	58K5136	0.04	0.03
● MCCFR0W8J0101A20	100	58K5082	0.04	0.04
● MCCFR0W8J0121A20	120	58K5088	0.04	0.04
● MCCFR0W8J0151A20	150	58K5093	0.04	0.04
● MCCFR0W8J0181A20	180	58K5098	0.04	0.03
● MCCFR0W8J0221A20	220	58K5103	0.04	0.04
● MCCFR0W8J0271A20	270	58K5107	0.04	0.04
● MCCFR0W8J0331A20	330	58K5112	0.04	0.03
● MCCFR0W8J0391A20	390	58K5118	0.04	0.04
● MCCFR0W8J0471A20	470	58K5123	0.04	0.04
● MCCFR0W8J0561A20	560	58K5128	0.04	0.03
● MCCFR0W8J0681A20	680	58K5132	0.04	0.04
● MCCFR0W8J0821A20	820	58K5137	0.04	0.04
● MCCFR0W8J0102A20	1k	59K8413	0.04	0.04
● MCCFR0W8J0332A20	3.3k	58K5113	0.04	0.04
● MCCFR0W8J0103A20	10k	58K5083	0.04	0.04
● MCCFR0W8J0123A20	12k	58K5089	0.04	0.03
● MCCFR0W8J0153A20	15k	58K5094	0.04	0.04
● MCCFR0W8J0183A20	18k	58K5099	0.04	0.03
● MCCFR0W8J0223A20	22k	58K5104	0.04	0.03
● MCCFR0W8J0273A20	27k	58K5108	0.04	0.03
● MCCFR0W8J0333A20	33k	58K5114	0.04	0.03
● MCCFR0W8J0473A20	47k	58K5124	0.04	0.04
● MCCFR0W8J0563A20	56k	58K5129	0.04	0.04
● MCCFR0W8J0683A20	68k	58K5133	0.04	0.04
● MCCFR0W8J0104A20	100k	58K5084	0.04	0.03
● MCCFR0W8J0154A20	150k	58K5095	0.04	0.03
● MCCFR0W8J0224A20	220k	58K5105	0.04	0.03
● MCCFR0W8J0274A20	270k	58K5109	0.04	0.03
● MCCFR0W8J0334A20	330k	58K5115	0.04	0.03
● MCCFR0W8J0474A20	470k	58K5125	0.04	0.03
● MCCFR0W8J0684A20	680k	58K5134	0.04	0.03
● MCCFR0W8J0105A20	1M	58K5085	0.04	0.04

1/4 WATT

Mfg. Part No.	Res. (Ohms)	Tape Cut [StockNo]	Price Each 1-49	Price Each 50-199
● MCZOT0W400000A50	0	58K5144	0.06	0.05
● MCCFR0W4J010JA50	1	58K4998	0.05	0.04
● MCCFR0W4J012JA50	1.2	58K5006	0.04	0.04
● MCCFR0W4J015JA50	1.5	58K5012	0.04	0.04
● MCCFR0W4J018JA50	1.8	58K5019	0.05	0.04
● MCCFR0W4J022JA50	2.2	58K5027	0.05	0.04
● MCCFR0W4J033JA50	3.3	58K5040	0.04	0.04

➤ CONTINUED ➤

CARBON FILM RESISTORS (CONT.)

1/4 WATT

Mfg. Part No.	Res. (Ohms)	Tape Cut [StockNo]	Price Each 1-49	Price Each 50-199
● MCCFR0W4J039JA50	3.9	58K5047	0.05	0.04
● MCCFR0W4J047JA50	4.7	58K5053	0.05	0.04
● MCCFR0W4J056JA50	5.6	58K5060	0.04	0.04
● MCCFR0W4J068JA50	6.8	58K5066	0.05	0.04
● MCCFR0W4J082JA50	8.2	58K5073	0.04	0.04
● MCCFR0W4J0100A50	10	58K4999	0.05	0.04
● MCCFR0W4J0120A50	12	58K5007	0.05	0.04
● MCCFR0W4J0150A50	15	58K5013	0.05	0.04
● MCCFR0W4J0180A50	18	58K5020	0.05	0.04
● MCCFR0W4J0220A50	22	58K5028	0.04	0.04
● MCCFR0W4J0270A50	27	58K5034	0.05	0.04
● MCCFR0W4J0330A50	33	58K5041	0.05	0.04
● MCCFR0W4J0390A50	39	58K5048	0.05	0.04
● MCCFR0W4J0470A50	47	58K5054	0.05	0.04
● MCCFR0W4J0560A50	56	58K5061	0.05	0.04
● MCCFR0W4J0680A50	68	58K5067	0.05	0.04
● MCCFR0W4J0820A50	82	58K5074	0.05	0.04
● MCCFR0W4J0101A50	100	58K5000	0.05	0.05
● MCCFR0W4J0121A50	120	58K5008	0.05	0.05
● MCCFR0W4J0151A50	150	58K5014	0.05	0.04
● MCCFR0W4J0181A50	180	58K5021	0.05	0.04
● MCCFR0W4J0221A50	220	58K5029	0.05	0.05
● MCCFR0W4J0271A50	270	58K5035	0.05	0.04
● MCCFR0W4J0331A50	330	58K5042	0.05	0.05
● MCCFR0W4J0391A50	390	58K5049	0.05	0.04
● MCCFR0W4J0471A50	470	58K5055	0.05	0.05
● MCCFR0W4J0511A50	510	59K8386	0.05	0.04
● MCCFR0W4J0561A50	560	58K5062	0.05	0.04
● MCCFR0W4J0681A50	680	58K5068	0.05	0.05
● MCCFR0W4J0821A50	820	58K5075	0.05	0.04
● MCCFR0W4J0102A50	1k	58K5001	0.05	0.04
● MCCFR0W4J0122A50	1.2k	59K8332	0.05	0.04
● MCCFR0W4J0132A50	1.3k	59K8336	0.05	0.04
● MCCFR0W4J0152A50	1.5k	58K5015	0.05	0.04
● MCCFR0W4J0202A50	2k	58K5025	0.05	0.04
● MCCFR0W4J0222A50	2.2k	58K5030	0.05	0.05
● MCCFR0W4J0272A50	2.7k	58K5036	0.05	0.04
● MCCFR0W4J0332A50	3.3k	58K5043	0.05	0.04
● MCCFR0W4J0392A50	3.9k	59K8375	0.05	0.04
● MCCFR0W4J0472A50	4.7k	58K5056	0.05	0.04
● MCCFR0W4J0562A50	5.6k	59K8391	0.05	0.04
● MCCFR0W4J0682A50	6.8k	58K5069	0.05	0.04
● MCCFR0W4J0822A50	8.2k	58K5076	0.05	0.04
● MCCFR0W4J0103A50	10k	58K5002	0.05	0.04
● MCCFR0W4J0123A50	12k	58K5009	0.05	0.04
● MCCFR0W4J0153A50	15k	58K5016	0.05	0.04
● MCCFR0W4J0183A50	18k	58K5022	0.05	0.04
● MCCFR0W4J0203A50	20k	58K5026	0.05	0.05
● MCCFR0W4J0223A50	22k	58K5031	0.05	0.04
● MCCFR0W4J0273A50	27k	58K5037	0.05	0.04
● MCCFR0W4J0333A50	33k	58K5044	0.05	0.04
● MCCFR0W4J0393A50	39k	58K5050	0.05	0.04
● MCCFR0W4J0473A50	47k	58K5057	0.05	0.05
● MCCFR0W4J0563A50	56k	58K5063	0.05	0.04
● MCCFR0W4J0683A50	68k	58K5070	0.05	0.04
● MCCFR0W4J0823A50	82k	58K5077	0.05	0.04
● MCCFR0W4J0104A50	100k	58K5003	0.05	0.05
● MCCFR0W4J0124A50	120k	58K5010	0.05	0.04
● MCCFR0W4J0154A50	150k	58K5017	0.05	0.04
● MCCFR0W4J0184A50	180k	58K5023	0.05	0.04
● MCCFR0W4J0224A50	220k	58K5032	0.05	0.04
● MCCFR0W4J0274A50	270k	58K5038	0.05	0.04
● MCCFR0W4J0334A50	330k	58K5045	0.05	0.04
● MCCFR0W4J0394A50	390k	58K5051	0.04	0.04
● MCCFR0W4J0474A50	470k	58K5058	0.05	0.04
● MCCFR0W4J0564A50	560k	58K5064	0.05	0.04
● MCCFR0W4J0684A50	680k	58K5071	0.05	0.04
● MCCFR0W4J0824A50	820k	58K5078	0.04	0.04
● MCCFR0W4J0105A50	1M	58K5004	0.05	0.04
● MCCFR0W4J0125A50	1.2M	58K5011	0.05	0.04
● MCCFR0W4J0155A50	1.5M	58K5018	0.05	0.04
● MCCFR0W4J0185A50	1.8M	58K5024	0.05	0.04

➤ CONTINUED ➤

CARBON FILM RESISTORS (CONT.)

1/4 WATT

Mfg. Part No.	Res. (Ohms)	Tape Cut [StockNo]	Price Each 1-49	Price Each 50-199
MCCFR0W4J0225A50	2.2M	58K5033	0.05	0.04
MCCFR0W4J0275A50	2.7M	58K5039	0.05	0.04
MCCFR0W4J0335A50	3.3M	58K5046	0.05	0.04
MCCFR0W4J0395A50	3.9M	58K5052	0.05	0.04
MCCFR0W4J0475A50	4.7M	58K5059	0.05	0.04
MCCFR0W4J0565A50	5.6M	58K5065	0.04	0.04
MCCFR0W4J0685A50	6.8M	58K5072	0.04	0.04
MCCFR0W4J0825A50	8.2M	58K5079	0.04	0.04
MCCFR0W4J0106A50	10M	58K5005	0.05	0.04

1/2 WATT

MCCFR0S2J0100A20	10	58K4934	0.07	0.06
MCCFR0S2J0120A20	12	58K4941	0.07	0.06
MCCFR0S2J0150A20	15	58K4946	0.06	0.06
MCCFR0S2J0180A20	18	58K4951	0.06	0.06
MCCFR0S2J0220A20	22	58K4957	0.07	0.06
MCCFR0S2J0270A20	27	58K4963	0.06	0.06
MCCFR0S2J0330A20	33	58K4968	0.06	0.06
MCCFR0S2J0390A20	39	58K4973	0.07	0.06
MCCFR0S2J0470A20	47	58K4978	0.07	0.06
MCCFR0S2J0560A20	56	58K4983	0.06	0.06
MCCFR0S2J0680A20	68	58K4988	0.06	0.06
MCCFR0S2J0820A20	82	58K4993	0.07	0.06
MCCFR0S2J0101A20	100	58K4935	0.07	0.06
MCCFR0S2J0121A20	120	58K4942	0.07	0.06
MCCFR0S2J0151A20	150	58K4947	0.07	0.06
MCCFR0S2J0181A20	180	58K4952	0.07	0.06
MCCFR0S2J0221A20	220	58K4958	0.07	0.06
MCCFR0S2J0271A20	270	58K4964	0.06	0.06
MCCFR0S2J0331A20	330	58K4969	0.07	0.06
MCCFR0S2J0391A20	390	58K4974	0.07	0.06
MCCFR0S2J0471A20	470	58K4979	0.07	0.06
MCCFR0S2J0561A20	560	58K4984	0.07	0.06
MCCFR0S2J0681A20	680	58K4989	0.07	0.06
MCCFR0S2J0821A20	820	58K4994	0.07	0.06
MCCFR0S2J0102A20	1k	58K4936	0.07	0.06
MCCFR0S2J0222A20	2.2k	58K4959	0.07	0.06
MCCFR0S2J0472A20	4.7k	59K8290	0.07	0.06
MCCFR0S2J0103A20	10k	58K4937	0.07	0.06
MCCFR0S2J0123A20	12k	58K4943	0.06	0.06
MCCFR0S2J0153A20	15k	58K4948	0.07	0.06
MCCFR0S2J0183A20	18k	58K4953	0.06	0.06
MCCFR0S2J0203A20	20k	58K4956	0.06	0.06
MCCFR0S2J0223A20	22k	58K4960	0.07	0.06
MCCFR0S2J0273A20	27k	58K4965	0.07	0.06
MCCFR0S2J0333A20	33k	58K4970	0.07	0.06
MCCFR0S2J0393A20	39k	58K4975	0.06	0.06
MCCFR0S2J0473A20	47k	58K4980	0.07	0.06
MCCFR0S2J0563A20	56k	58K4985	0.07	0.06
MCCFR0S2J0683A20	68k	58K4990	0.07	0.06
MCCFR0S2J0823A20	82k	58K4995	0.07	0.06
MCCFR0S2J0104A20	100k	58K4938	0.07	0.06
MCCFR0S2J0124A20	120k	58K4944	0.07	0.06
MCCFR0S2J0154A20	150k	58K4949	0.06	0.06
MCCFR0S2J0184A20	180k	58K4954	0.06	0.06
MCCFR0S2J0224A20	220k	58K4961	0.07	0.06
MCCFR0S2J0274A20	270k	58K4966	0.07	0.06
MCCFR0S2J0334A20	330k	58K4971	0.06	0.06
MCCFR0S2J0394A20	390k	58K4976	0.06	0.06
MCCFR0S2J0474A20	470k	58K4981	0.06	0.06
MCCFR0S2J0564A20	560k	58K4986	0.06	0.06
MCCFR0S2J0684A20	680k	58K4991	0.06	0.06
MCCFR0S2J0824A20	820k	58K4996	0.06	0.06
MCCFR0S2J0105A20	1M	58K4939	0.07	0.06
MCCFR0S2J0125A20	1.2M	58K4945	0.07	0.06
MCCFR0S2J0155A20	1.5M	58K4950	0.06	0.06
MCCFR0S2J0185A20	1.8M	58K4955	0.06	0.06
MCCFR0S2J0225A20	2.2M	58K4962	0.07	0.06
MCCFR0S2J0275A20	2.7M	58K4967	0.07	0.06
MCCFR0S2J0335A20	3.3M	58K4972	0.07	0.06
MCCFR0S2J0395A20	3.9M	58K4977	0.07	0.06
MCCFR0S2J0475A20	4.7M	58K4982	0.07	0.06
MCCFR0S2J0565A20	5.6M	58K4987	0.07	0.06

CONTINUED

CARBON FILM RESISTORS (CONT.)

1/2 WATT

Mfg. Part No.	Res. (Ohms)	Tape Cut [StockNo]	Price Each 1-49	Price Each 50-199
MCCFR0S2J0685A20	6.8M	58K4992	0.06	0.06
MCCFR0S2J0825A20	8.2M	58K4997	0.06	0.06
MCCFR0S2J0106A20	10M	58K4940	0.06	0.06

(28977)

MCF SERIES 1W AND 2W CARBON FILM RESISTORS

RoHS Compliant Available

multicomp

Features
- Automatically insertable
- High quality performance

Specifications
- Res. tolerance: ±5%
- Overload voltage rated @ 700V(1W) and 1000V(2W)
- Operating temp. range: -55°C to +155°C
- Temperature coeff.: 10Ω = ±350ppm/°C 11Ω to 99kΩ = ±450ppm/°C 100kΩ = -700ppm/°C, +0ppm/°C

L=12mm, Dia.=5mm
Lead length=28mm, Lead dia.=0.7mm
Supplied bandoliered on tape (box=1K pcs)

L=16mm, Dia.=5.5mm
Lead length=28mm, Lead dia.=0.8mm
Supplied bandoliered on tape (box=1K pcs)

Description	Price Each 1-249
MCF 1W Series	0.06
MCF 2W Series	0.09

1 WATT, 350V

Stock No.	Res. (Ohms)	Stock No.	Res. (Ohms)	Stock No.	Res. (Ohms)	Stock No.	Res. (Ohms)
38K0397	1	38K0423	47	38K0413	2.2k	38K0433	68k
38K0404	1.5	38K0430	68	38K0419	3.3k	38K0402	100k
38K0410	2.2	38K0399	100	38K0425	4.7k	38K0409	150k
38K0416	3.3	38K0406	150	38K0428	5.6k	38K0415	220k
38K0422	4.7	38K0412	220	38K0432	6.8k	38K0421	330k
38K0429	6.8	38K0418	330	38K0401	10k	38K0427	470k
38K0398	10	38K0424	470	38K0408	15k	38K0434	680k
38K0405	15	38K0431	680	38K0414	22k	38K0403	1M
38K0411	22	38K0400	1k	38K0420	33k	...	...
38K0417	33	38K0407	1.5k	38K0426	47k	...	...

2 WATT, 500V

38K0435	10	38K0447	220	38K0458	4.7k	38K0439	100k
38K0441	15	38K0452	330	38K0463	6.8k	38K0445	150k
38K0446	22	38K0457	470	38K0438	10k	38K0450	220k
38K0451	33	38K0462	680	38K0444	15k	38K0455	330k
38K0456	47	38K0437	1k	38K0449	22k	38K0460	470k
38K0461	68	38K0443	1.5k	38K0454	33k	38K0465	680k
38K0436	100	38K0448	2.2k	38K0459	47k	38K0440	1M
38K0442	150	38K0453	3.3k	38K0464	68k	...	...

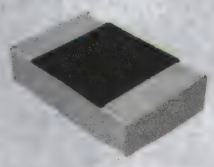
(116536)

ERA SERIES METAL FILM THERMOSENSITIVE CHIP RESISTORS

RoHS Compliant Available

Panasonic

Features:
- Suitable for temperature correction circuits
- Temperature coefficient value 1500 to 3900 x 10–6/°C
- High performance Quick response to temperature change
- Linearity Excellent linear resistance value change in wide temperature range (–40 °C to +125 °C)
- High reliability, High density placing
- Small size and lightweight for PWB size reduction and lightweight products
- Suitable for both reflow and flow soldering



Mfg. Part No.	Resistance (ohms)	Dimensions	Power Rating (mW)	Case Style	Stock No.	Price Each 1-9
ERA-S33J102V	100	± 5%	100	0805 [2012 Metric]	53W3935	0.70

(209134)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

METAL FILM RESISTORS

ERA SERIES RECTANGULAR TYPE METAL FILM CHIP RESISTORS

RoHS Compliant Available

Panasonic

Features:
- Small size and lightweight
- High reliability
- Low T.C.R. & current noise, excellent non-linearity
- Suitable for both reflow and flow soldering

Mfg. Part No.	Resistance	Temperature Coefficient	Package	Stock No.	Price Each 1-9
● ERA-6YEB512V	5.1 kohm	± 25ppm/°C	0805 [2012 Metric]	53W3963	0.59
● ERA-6YEB302V	3 kohm	± 25ppm/°C	0805 [2012 Metric]	53W3962	0.60
● ERA-6YEB203V	20 kohm	± 25ppm/°C	0805 [2012 Metric]	53W3961	0.59
● ERA-6YEB202V	2 kohm	± 25ppm/°C	0805 [2012 Metric]	53W3960	0.59
● ERA-6YEB153V	15 kohm	± 25ppm/°C	0805 [2012 Metric]	53W3959	0.60
● ERA-6YEB152V	1.5 kohm	± 25ppm/°C	0805 [2012 Metric]	53W3958	0.60
● ERA-6YEB104V	100 kohm	± 25ppm/°C	0805 [2012 Metric]	53W3957	0.59
● ERA-6YEB103V	10 kohm	± 25ppm/°C	0805 [2012 Metric]	53W3956	0.60
● ERA-6YEB102V	1 kohm	± 25ppm/°C	0805 [2012 Metric]	53W3955	0.59
● ERA-6YEB101V	100 ohm	± 25ppm/°C	0805 [2012 Metric]	53W3954	0.60
● ERA-3YEB472V	4.7 kohm	± 25ppm/°C	0603 [1608 Metric]	53W3952	0.95
● ERA-3YEB203V	20 kohm	± 25ppm/°C	0603 [1608 Metric]	53W3951	0.94
● ERA-3YEB202V	2 kohm	± 25ppm/°C	0603 [1608 Metric]	53W3950	0.95
● ERA-3YEB153V	15 kohm	± 25ppm/°C	0603 [1608 Metric]	53W3949	0.95
● ERA-3YEB103V	10 kohm	± 25ppm/°C	0603 [1608 Metric]	53W3948	0.94
● ERA-3YEB102V	1 kohm	± 25ppm/°C	0603 [1608 Metric]	53W3947	0.94
● ERA-3YEB101V	100 ohm	± 25ppm/°C	0603 [1608 Metric]	53W3946	0.95
● ERA-14EB102U	1 kohm	± 25ppm/°C	1210 [3225 Metric]	49W8553	0.67

(208990)

METAL FILM RESISTORS

VISHAY.

Features
- Small size - conformal coated
- Flame retardant epoxy coating
- Excellent high frequency characteristics
- Exceptionally low noise; typically 0.10 uV/V
- Low voltage coefficient to ± 5ppm/Volt

CMF07 STYLE INDUSTRIAL METAL FILM RESISTORS - 0.5 WATT, 250V

Mfg. Part No.	Res. (ohm)	Res. Tol.	Temp. Coeff.	Stock No.	Price Each 1-49	Price Each 50-99
Y00894R99000BR0L	4.99	± 0.1%	± 10ppm/°C	58P6716	41.27	39.23
Y008910R0000BR0L	10	± 0.1%	± 10ppm/°C	58P5611	41.27	39.23
Y008975R0000BR0L	75	± 0.1%	± 10ppm/°C	58P7238	34.91	33.18
Y008998R8000AP0L	98.8	± 0.05%	± 10ppm/°C	58P7456	37.86	35.98
Y0089100R000VP0L	100	± 0.005 %	± 10ppm/°C	58P5638	52.34	49.75
Y0089100R000TR0L	100	± 0.01%	± 10ppm/°C	58P5636	41.01	38.98
Y0089249R000BR0L	249	± 0.1%	± 10ppm/°C	58P6268	34.91	33.18
Y0089499R000TR0L	499	± 0.01%	± 10ppm/°C	58P6862	43.47	41.32
Y0089549R000BR0L	549	± 0.1%	± 10ppm/°C	58P6988	34.91	33.18
Y00891K00000TR0L	1k	± 0.01%	± 10ppm/°C	58P5379	43.47	41.32
Y00892K00000BR0L	2k	± 0.1%	± 10ppm/°C	58P6022	36.59	34.78
Y00892K49000TR0L	2.49k	± 0.01%	± 10ppm/°C	58P6112	41.01	38.98
Y00894K99000BP0L	4.99k	± 0.1%	± 10ppm/°C	40P2579	34.91	33.18
Y00895K00000TR0L	5k	± 0.01%	± 10ppm/°C	58P6867	41.01	38.98
Y00899K09000TR0L	9.09k	± 0.01%	± 10ppm/°C	58P7386	41.01	38.98
Y008910K0000BR0L	10k	± 0.1%	± 10ppm/°C	58P5571	37.00	35.17
Y008910K0000BP0L	10k	± 0.1%	± 10ppm/°C	58P5570	34.91	33.18
Y008910K0000TR0L	10k	± 0.01%	± 10ppm/°C	19P1874	41.01	38.98
Y008910K0000TP0L	10k	± 0.01%	± 10ppm/°C	58P5576	41.01	38.98
Y008913K3000BR0L	13.3k	± 0.1%	± 10ppm/°C	58P5800	34.91	33.18
Y008913K7000TR0L	13.7k	± 0.01%	± 10ppm/°C	58P5808	41.01	38.98
Y008916K9000TR0L	16.9k	± 0.01%	± 10ppm/°C	58P5937	41.01	38.98
Y008920K0000BR0L	20k	± 0.1%	± 10ppm/°C	58P6161	34.91	33.18
Y008920K0000TR0L	20k	± 0.01%	± 10ppm/°C	58P6167	41.01	38.98
Y008924K9000BP0L	24.9k	± 0.1%	± 10ppm/°C	58P6253	34.91	33.18
Y008941K2000BP0L	41.2k	± 0.1%	± 10ppm/°C	58P6742	34.91	33.18
Y008942K2000TR0L	42.2k	± 0.01%	± 10ppm/°C	58P6755	41.01	38.98
Y008944K8000BP0L	44.8k	± 0.1%	± 10ppm/°C	58P6781	34.91	33.18
Y008949K9000BP0L	49.9k	± 0.1%	± 10ppm/°C	58P6850	34.91	33.18
Y0089100K000BP0L	100k	± 0.1%	± 10ppm/°C	58P5620	45.49	43.24
Y0089100K000TR0L	100k	± 0.01%	± 10ppm/°C	58P5625	54.60	51.90
Y0089105K000BP0L	105k	± 0.1%	± 10ppm/°C	58P5660	45.49	43.24

(199665)

METAL PRECISION, ULTRA–HIGH STABILITY FILM RESISTORS

RoHS Compliant Available

VISHAY.

Features
- Very Stable at High Frequencies
- Low Temperature Coefficient of Resistance
- Low Noise and Voltage Coefficient
- Replaces Wirewound Bobbins
- Proprietary Epoxy Coating For Superior Moisture Protection
- Small Package

Applications
- Precision Test Equipment
- Instrumentation

Specifications
- Rated Dissipation @ 85°C: **Series PTF-56**: 0.125W; **Series PTF-65**: 0.25W
- Limiting Element Voltage (Approx.): PTF-56: 300V; PTF-65: 500V

PTF56 SERIES

Mfg. Part No.	Res. (Ohms)	Res. Tol. (+/- %)	Temp. Coeff. (ppm/°C)	Tape Cut Stock No.	Tape Cut Price Each 1-99
● PTF5650R000BYEK	50	± 0.1%	± 10ppm/°C	41K9057	1.73
● PTF5650R000BZEK	50	± 0.1%	± 5ppm/°C	04R7978	2.14
● PTF56100R00BYEK	100	± 0.1%	± 10ppm/°C	41K9040	2.22
● PTF56120R00BZEK	120	± 0.1%	± 5ppm/°C	41K9041	2.11
● PTF56125R00BYEK	125	± 0.1%	± 10ppm/°C	41K9042	1.73
● PTF56200R00BYEK	200	± 0.1%	± 10ppm/°C	41K9050	1.90
● PTF56250R00BYEK	250	± 0.1%	± 10ppm/°C	65K1817	1.68
● PTF56350R00BZEK	350	± 0.1%	± 5ppm/°C	41K9052	2.06
● PTF56500R00BYEK	500	± 0.1%	± 10ppm/°C	65K1820	1.68
● PTF56600R00BZEK	600	± 0.1%	± 5ppm/°C	65K1821	2.35
● PTF561K0000BYEK	1k	± 0.1%	± 10ppm/°C	41K9035	1.73
● PTF561K0000BZEK	1k	± 0.1%	± 5ppm/°C	71M1159	2.11
● PTF561K5000BZEK	1.5k	± 0.1%	± 5ppm/°C	41K9036	3.14
● PTF562K0000BYEK	2k	± 0.1%	± 10ppm/°C	41K9045	0.93
● PTF562K5000BYEK	2.5k	± 0.1%	± 10ppm/°C	41K9046	0.91
● PTF563K0000BYEK	3k	± 0.1%	± 10ppm/°C	41K9051	1.26
● PTF564K0000BYEK	4k	± 0.1%	± 10ppm/°C	41K9053	1.12
● PTF564K5000AZEA	4.5k	± 0.05%	± 5ppm/°C	65K1818	2.48
● PTF564K9900BYEK	4.99k	± 0.1%	± 10ppm/°C	41K9054	0.93
● PTF565K0000BZEK	5k	± 0.1%	± 5ppm/°C	41K9056	1.50
● PTF567K5000BYEK	7.5k	± 0.1%	± 10ppm/°C	41K9058	1.60
● PTF5610K000BXEK	10k	± 0.1%	± 15ppm/°C	71M1160	1.56
● PTF5610K000BYEB	10k	± 0.1%	± 10ppm/°C	84M3760	0.88
● PTF5610K000BYEK	10k	± 0.1%	± 10ppm/°C	41K9037	0.91
● PTF5610K000FZEA	10k	± 1%	± 5ppm/°C	65K1815	1.09
● PTF5610K000BZEK	10k	± 0.1%	± 5ppm/°C	41K9038	1.46
● PTF5615K000BYEK	15k	± 0.1%	± 10ppm/°C	41K9043	1.60
● PTF5615K000BZEK	15k	± 0.1%	± 5ppm/°C	41K9044	2.16
● PTF5620K000BYEK	20k	± 0.1%	± 10ppm/°C	41K9047	1.58
● PTF5620K000BZEK	20k	± 0.1%	± 5ppm/°C	34M2983	2.16
● PTF5640K000BYEK	40k	± 0.1%	± 10ppm/°C	41K9055	0.94
● PTF5650K000BYEA	50k	± 0.1%	± 10ppm/°C	65K1819	0.91
● PTF56100K00BYEA	100k	± 0.1%	± 10ppm/°C	65K1816	0.91
● PTF56100K00BZEK	100k	± 0.1%	± 5ppm/°C	41K9039	1.99
● PTF56200K00BYEK	200k	± 0.1%	± 10ppm/°C	41K9048	2.27
● PTF56200K00BZEK	200k	± 0.1%	± 5ppm/°C	22M4855	3.98
● PTF56200K00FZEK	200k	± 1%	± 5ppm/°C	41K9049	1.97
PTF65 SERIES					
PTF6550R000BYBF	50	± 0.1%	± 10ppm/°C	60C9886	2.38
● PTF65100R00BYEK	100	± 0.1%	± 10ppm/°C	71M1165	2.38
PTF-65120R0BT-13	120	± 0.1%	± 10ppm/°C	94B2077	1.79
● PTF65250R00AYEK	250	± 0.05%	± 10ppm/°C	71M1166	1.86
PTF-65-250R A T-13	250	± 0.05%	± 10ppm/°C	91B7562	2.99
● PTF651K0000BYEK	1k	± 0.1%	± 10ppm/°C	41K9059	2.12
PTF6510K000BZBF	10k	± 0.1%	± 5ppm/°C	58C3327	3.09
● PTF6510K000BZEK	10k	± 0.1%	± 5ppm/°C	71M1164	3.21
● PTF5650K000BZEK	50k	± 0.1%	± 5ppm/°C	71M1161	2.16
● PTF65100K00BYEK	100k	± 0.1%	± 10ppm/°C	41K9060	2.04
PTF651M0000AYBF	1M	± 0.05%	± 10ppm/°C	58C3256	3.43
PTF651M0000BYBF	1M	± 0.1%	± 10ppm/°C	58C3273	2.57
● PTF651M0000BXEK	1M	± 0.1%	± 15ppm/°C	71M1162	2.43
● PTF651M0000BYEK	1M	± 0.1%	± 10ppm/°C	71M1163	2.67
● PTF651M0000BZEK	1M	± 0.1%	± 5ppm/°C	65K1822	3.61

(59770)

HVR SERIES HIGH OHMIC/HIGH VOLTAGE METAL FILM LEADED RESISTORS

RoHS Compliant Available

VISHAY

Features
- High pulse loading (up to 10 kV) capability
- Small size (0207/6411)
- Compatible with lead (Pb)-free and lead containing soldering processes

Applications
- Power supplies
- Electronic ballast
- White goods
- Television

Mfg. Part No.	Res (Ohms)	Res. Tol.	Stock No.	Price Each 1-49
0.25 WATT RATED POWER DISSAPATION				
HVR2500001003JR500	100k	± 5%	26R4051	0.12
HVR2500002203JR500	220k	± 5%	26R4053	0.11
HVR2500001004FR500	1M	± 1%	24R8876	0.17
HVR2500001004JR500	1M	± 5%	26R4052	0.12
0.5 WATT RATED POWER DISSAPATION				
HVR3700001003FR500	100k	± 1%	58P0335	0.25
HVR3700001003JR500	100k	± 5%	26R4054	0.21
HVR3700001103JR500	110k	± 5%	26R4058	0.20
HVR3700003303FR500	330k	± 1%	26R4070	0.23
HVR3700004703FR500	470k	± 1%	26R4073	0.24
HVR3700004703JR500	470k	± 5%	26R4074	0.21
HVR3700001004FR500	1M	± 1%	26R4055	0.24
HVR3700001004JR500	1M	± 5%	26R4056	0.21
HVR3700001204FR500	1.2M	± 1%	26R4060	0.23
HVR3700002004FR500	2M	± 1%	26R4063	0.25
HVR3700002204FR500	2.2M	± 1%	26R4065	0.25
HVR3700002204JR500	2.2M	± 5%	26R4066	0.20
HVR3700003004FR500	3M	± 1%	26R4067	0.24
HVR3700003004JR500	3M	± 5%	26R4068	0.20
HVR3700003304JR500	3.3M	± 5%	26R4071	0.20
HVR3700004704FR500	4.7M	± 1%	26R4075	0.23
HVR3700004704JR500	4.7M	± 5%	26R4076	0.20
HVR3700004994FR500	4.99M	± 1%	24R8886	0.23
HVR3700005104FR500	5.1M	± 1%	14R8163	0.23
HVR3700009094FR500	9.09M	± 1%	26R4077	0.23
HVR3700001005JR500	10M	± 5%	26R4057	0.20

(177851)

R SERIES AXIAL POWER METAL FILM RESISTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features
- Excellent stability
- Very low noise
- Low Tolerance

Specifications
- Tolerance: ± 0.1%
- Power Rating: 250 mW
- Temp. Coefficient: ± 15ppm/°C
- Operating Temp. Range: -65°C to +155°C

Mfg. Part No.	Res (Ohm)	Stock No.	Price Each 1-49
YR1B10RCC	10	51R8628	0.31
YR1B11RCC	11	55R0147	0.36
YR1B15RCC	15	21R8656	0.52
YR1B18R2CC	18.2	21R8662	0.37
YR1B20RCC	20	22R1032	0.52
YR1B24R9CC	24.9	22R3125	0.33
YR1B26R1CC	26.1	22R3128	0.56
YR1B27R4CC	27.4	22R3131	0.37
YR1B30R1CC	30.1	22R6815	0.52
YR1B38R3CC	38.3	23R2734	0.21
YR1B41R2CC	41.2	23R2739	0.37
YR1B42R2CC	42.2	23R2741	0.37
YR1B48R7CC	48.7	23R4987	0.52
YR1B49R9CC	49.9	23R6480	0.32
YR1B52R3CC	52.3	55R0151	0.26
YR1B54R9CC	54.9	55R0153	0.21
YR1B59RCC	59	20R9485	0.52
YR1B63R4CC	63.4	21R2098	0.26
YR1B66R5CC	66.5	23R6465	0.28
YR1B69R8CC	69.8	21R2102	0.39
YR1B90R9CC	90.9	20R9553	0.37
YR1B97R6CC	97.6	22R1044	0.37
YR1B100RCC	100	20R9243	0.55
YR1B102RCC	102	20R9245	0.52
YR1B124RCC	124	20R9267	0.52
YR1B133RCC	133	20R9276	0.37
YR1B150RCC	150	20R9291	0.56
YR1B158RCC	158	20R9295	0.52

CONTINUED

R SERIES AXIAL POWER METAL FILM RESISTORS (CONT.)

Mfg. Part No.	Res (Ohm)	Stock No.	Price Each 1-49
YR1B169RCC	169	20R9304	0.37
YR1B226RCC	226	20R9357	0.26
YR1B23K2CC	28.2	20R9358	0.37
YR1B243RCC	243	20R9368	0.37
YR1B249RCC	249	20R9370	0.52
YR1B267RCC	267	20R9378	0.52
YR1B499RCC	499	20R9459	0.52
YR1B576RCC	576	20R9483	0.37
YR1B590RCC	590	20R9486	0.52
YR1B649RCC	649	20R9503	0.37
YR1B909RCC	909	20R9555	0.52
YR1B1K0CC	1k	20R9208	0.52
YR1B1K43CC	1.43k	20R9223	0.37
YR1B1K58CC	1.58k	20R9227	0.37
YR1B2K0CC	2k	20R9323	0.52
YR1B2K49CC	2.49k	20R9332	0.33
YR1B2K94CC	2.94k	20R9339	0.29
YR1B3K57CC	3.57k	20R9395	0.30
YR1B3K92CC	3.92k	20R9399	0.52
YR1B4K12CC	4.12k	20R9429	0.30
YR1B4K75CC	4.75k	20R9435	0.52
YR1B4K99CC	4.99k	20R9437	0.52
YR1B5K9CC	5.9k	20R9465	0.52
YR1B6K04CC	6.04k	20R9487	0.39
YR1B7K87CC	7.87k	20R9516	0.56
YR1B8K45CC	8.45k	20R9533	0.52
YR1B10K7CC	10.7k	20R9241	0.21
YR1B11K3CC	11.3k	20R9251	0.52
YR1B11K8CC	11.8k	20R9253	0.39
YR1B14KCC	14k	20R9279	0.39
YR1B14K3CC	14.3k	20R9280	0.23
YR1B19K1CC	19.1k	20R9317	0.37
YR1B20KCC	20k	20R9340	0.32
YR1B22K1CC	22.1k	20R9352	0.52
YR1B46K4	46.4k	20R9451	0.37
YR1B49K9CC	49.9k	20R9458	0.52
YR1B56K2CC	56.2k	20R9478	0.37
YR1B100KCC	100k	20R9242	0.56
YR1B105KCC	105k	20R9246	0.52
YR1B121KCC	121k	20R9264	0.52
YR1B130KCC	130k	20R9273	0.39
YR1B140KCC	140k	20R9282	0.56
YR1B165KCC	165k	20R9301	0.52
YR1B182KCC	182k	20R9313	0.52
YR1B196KCC	196k	20R9321	0.37
YR1B200KCC	200k	20R9342	0.52
YR1B210KCC	210k	20R9348	0.52
YR1B226KCC	226k	20R9356	0.39
YR1B309KCC	309k	22R6814	0.52
YR1B392KCC	392k	20R9426	0.52
YR1B931KCC	931k	22R1040	0.52
YR1B1MCC	1M	20R9237	0.52

(165130)

ULTRA-PRECISION AXIAL LEADED METAL FILM RESISTORS

RoHS Compliant Available

multicomp

Specifications
- Tolerance: ±0.1%
- Power rating: 250mW except **MCMF0S2BB1001A20** which is 500mW

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49	Price Each 50-199
MCMF0W4BB500JA50	50	97M6275	1.63	1.22
MCMFR0W4BB1000A50	100	97M6266	1.53	1.14
MCMFR0W4BB1200A50	120	97M6270	1.53	1.14
MCMF0W4BB2500A50	250	97M6273	1.58	1.20
MCMFR0W4BB5000A50	500	97M6276	1.59	1.19
MCMF0S2BB1001A20	1k	97M6264	2.09	1.57
MCMF0W4BB1001A5	1k	97M6267	1.59	1.19
MCMFR0W4BB2001A50	2k	97M6272	1.53	1.14
MCMF0W4BB5001A50	5k	97M6277	1.62	1.21
MCMF0W4BB1002A50	10k	97M6268	1.59	1.19
MCMF0W4BB2002A50	20k	97M6271	1.53	1.14

CONTINUED

ULTRA-PRECISION AXIAL LEADED METAL FILM RESISTORS (WT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 50-199
● MCMFR0W4BB5002A50	50k	97M6278	1.59	1.19
● MCMF0W4BB1003A50	100k	97M6269	1.52	1.15

(116694)

NFR SERIES FUSIBLE AXIAL METAL FILM RESISTORS

RoHS Compliant Available

VISHAY.

Features
- High power in small package
- High stability, reliability and uniformity characteristics
- Defined interruption behaviour (fusing time)
- Non-flammable

Applications
- Audio
- Video

Specifications
- Tolerance: ± 5%
- Operating temp. range: -55°C to +155°C

Mfg. Part No.	Res (Ohm)	Power Rating (W)	TCR	Stock No.	Price Each 1-49
● NFR2500002207JR500	0.22	330	± 200ppm/K	26R4150	0.18
● NFR2500003307JR500	0.33	330	± 200ppm/K	26R4152	0.17
● NFR2500004707JR500	0.47	330	± 200ppm/K	26R4153	0.17
● NFR2500001008JR500	1	330	± 200ppm/K	26R4148	0.12
● NFR2500004708JR500	4.7	330	± 200ppm/K	26R4154	0.12
● NFR2500001009JA500	10	330	± 200ppm/K	26R4149	0.12
● NFR2500002209JA500	22	330	± 100ppm/K	26R4151	0.06
● NFR25H0002207JR500	0.22	500	± 200ppm/K	26R4131	0.24
● NFR25H0003307JR500	0.33	500	± 200ppm/K	26R4136	0.24
● NFR25H0004707JA500	0.47	500	± 200ppm/K	26R4141	0.24
● NFR25H0001008JA500	1	500	± 200ppm/K	26R4125	0.15
● NFR25H0001008JR500	1	500	± 200ppm/K	26R4126	0.15
● NFR25H0001508JR500	1.5	500	± 200ppm/K	26R4128	0.15
● NFR25H0002201JR500	2.2	500	± 100ppm/K	26R4130	0.15
● NFR25H0002208JA500	2.2	500	± 200ppm/K	26R4132	0.15
● NFR25H0002208JR500	2.2	500	± 200ppm/K	26R4133	0.15
● NFR25H0003308JR500	3.3	500	± 200ppm/K	26R4137	0.15
● NFR25H0004708JR500	4.7	500	± 200ppm/K	26R4142	0.15
● NFR25H0006808JR500	6.8	500	± 100ppm/K	26R4145	0.15
● NFR25H0008208JA500	8.2	500	± 100ppm/K	26R4147	0.15
● NFR25H0001009JR500	10	500	± 100ppm/K	26R4127	0.15
● NFR25H0002209JR500	22	500	± 100ppm/K	26R4134	0.15
● NFR25H0003309JR500	33	500	± 100ppm/K	26R4138	0.15
● NFR25H0004709JR500	47	500	± 100ppm/K	26R4143	0.15
● NFR25H0006809JR500	68	500	± 100ppm/K	26R4146	0.15
● NFR25H0001000JR500	100	500	± 100ppm/K	26R4122	0.15
● NFR25H0002200JR500	220	500	± 100ppm/K	26R4129	0.15
● NFR25H0003300JR500	330	500	± 100ppm/K	26R4135	0.15
● NFR25H0004700JR500	470	500	± 100ppm/K	26R4139	0.15
● NFR25H0006800JR500	680	500	± 100ppm/K	26R4144	0.15
● NFR25H0001001JR500	1k	500	± 100ppm/K	26R4123	0.15
● NFR25H0001002JR500	10k	500	± 100ppm/K	26R4124	0.15
● NFR25H0004701JR500	4.7k	500	± 100ppm/K	26R4140	0.15
● NFR0100004707JR500	0.47	1	± 200ppm/K	26R4116	0.35
● NFR0100001009JR500	10	1	± 200ppm/K	26R4115	0.31
● NFR0100001000JR500	100	1	± 200ppm/K	26R4112	0.12
● NFR0200001001JR500	1k	2	± 200ppm/K	26R4117	0.51
● NFR0300001008JAC00	1	3	± 200ppm/K	26R4119	0.37

(177855)

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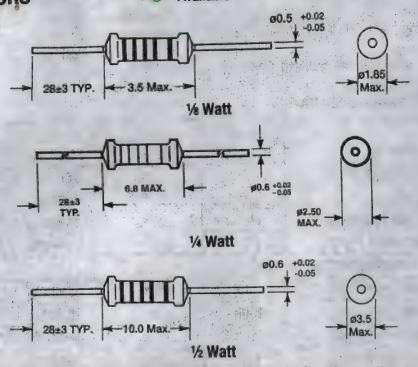
(196546)

PRECISION METAL FILM RESISTORS

RoHS Compliant Available

multicomp



Resistors feature nichrome elements for stable performance and low noise in various environments. Epoxy-coated for maximum moisture protection. Tolerance: ±1%. Temperature coefficient: ±50ppm/°C. Operating temperature: -55°C to +125°C. *Additional values available; go online or call.*

⅛ WATT

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49	Price Each 50-199
● MCMF0W8FF100JA20	10	58K3883	0.09	0.07
● MCMF0W8FF150JA20	15	58K3899	0.09	0.07
● MCMF0W8FF180JA20	18	58K3905	0.08	0.06
● MCMF0W8FF200JA20	20	58K3909	0.09	0.07
● MCMF0W8FF220JA20	22	58K3911	0.09	0.07
● MCMF0W8FF240JA20	24	58K3915	0.08	0.06
● MCMF0W8FF270JA20	27	58K3918	0.09	0.07
● MCMF0W8FF300JA20	30	58K3922	0.08	0.06
● MCMF0W8FF330JA20	33	58K3924	0.09	0.07
● MCMF0W8FF360JA20	36	58K3929	0.08	0.06
● MCMF0W8FF390JA20	39	58K3931	0.09	0.07
● MCMF0W8FF470JA20	47	58K3937	0.09	0.07
● MCMF0W8FF510JA20	51	58K3941	0.09	0.07
● MCMF0W8FF560JA20	56	58K3943	0.09	0.07
● MCMF0W8FF680JA20	68	58K3947	0.09	0.07
● MCMF0W8FF750JA20	75	58K3951	0.09	0.07
● MCMF0W8FF820JA20	82	58K3952	0.09	0.07
● MCMF0W8FF910JA20	91	58K3956	0.08	0.06
● MCMF0W8FF1000A20	100	58K3884	0.09	0.07
● MCMF0W8FF1100A20	110	58K3890	0.08	0.06
● MCMF0W8FF1200A20	120	58K3893	0.09	0.07
● MCMF0W8FF1500A20	150	58K3900	0.09	0.07
● MCMF0W8FF1800A20	180	58K3906	0.08	0.06
● MCMF0W8FF2000A20	200	58K3910	0.09	0.07
● MCMF0W8FF2200A20	220	58K3912	0.09	0.07
● MCMF0W8FF2400A20	240	58K3916	0.08	0.06
● MCMF0W8FF2700A20	270	58K3919	0.09	0.07
● MCMF0W8FF3000A20	300	58K3923	0.09	0.07
● MCMF0W8FF3300A20	330	58K3926	0.09	0.07
● MCMF0W8FF3600A20	360	58K3930	0.08	0.06
● MCMF0W8FF3900A20	390	58K3932	0.09	0.07
● MCMF0W8FF4300A20	430	58K3936	0.08	0.06
● MCMF0W8FF4700A20	470	58K3938	0.09	0.07
● MCMF0W8FF5100A20	510	58K3942	0.09	0.07
● MCMF0W8FF5600A20	560	58K3944	0.09	0.07
● MCMF0W8FF6800A20	680	58K3948	0.09	0.07
● MCMF0W8FF8200A20	820	58K3953	0.09	0.07
● MCMF0W8FF1001A20	1k	58K3885	0.09	0.07
● MCMF0W8FF1002A20	10k	58K3886	0.10	0.07
● MCMF0W8FF1102A20	11k	58K3891	0.09	0.07
● MCMF0W8FF1202A20	12k	58K3895	0.09	0.07
● MCMF0W8FF1502A20	15k	58K3901	0.09	0.07
● MCMF0W8FF1802A20	18k	58K3907	0.08	0.06
● MCMF0W8FF2202A20	22k	58K3913	0.09	0.07
● MCMF0W8FF2402A20	24k	58K3917	0.08	0.06
● MCMF0W8FF2702A20	27k	58K3920	0.09	0.07
● MCMF0W8FF3302A20	33k	58K3927	0.09	0.07
● MCMF0W8FF4702A20	47k	58K3939	0.09	0.07
● MCMF0W8FF5602A20	56k	58K3945	0.09	0.07
● MCMF0W8FF6802A20	68k	58K3949	0.09	0.07
● MCMF0W8FF8202A20	82k	58K3954	0.08	0.06
● MCMF0W8FF1003A20	100k	58K3887	0.09	0.07
● MCMF0W8FF1203A20	120k	58K3896	0.08	0.06
● MCMF0W8FF1503A20	150k	58K3902	0.09	0.07

➤ CONTINUED ➤

PRECISION METAL FILM RESISTORS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49	Price Each 50-199
MCMF0W8FF1803A20	180k	58K3908	0.08	0.06
MCMF0W8FF2203A20	220k	58K3914	0.09	0.07
MCMF0W8FF3303A20	330k	58K3928	0.08	0.06
MCMF0W8FF3903A20	390k	58K3934	0.09	0.07
MCMF0W8FF4703A20	470k	58K3940	0.09	0.07
MCMF0W8FF5603A20	560k	58K3946	0.08	0.06
MCMF0W8FF1004A20	1M	58K3888	0.09	0.07
1/4 WATT				
MCMF0W4FF100JA50	10	58K3794	0.10	0.08
MCMF0W4FF110JA50	11	58K3800	0.09	0.07
MCMF0W4FF120JA50	12	58K3803	0.09	0.07
MCMF0W4FF130JA50	13	58K3808	0.09	0.07
MCMF0W4FF150JA50	15	58K3810	0.09	0.07
MCMF0W4FF160JA50	16	58K3815	0.09	0.07
MCMF0W4FF180JA50	18	58K3817	0.09	0.07
MCMF0W4FF200JA50	20	58K3821	0.09	0.07
MCMF0W4FF220JA50	22	58K3826	0.09	0.07
MCMF0W4FF240JA50	24	58K3831	0.09	0.07
MCMF0W4FF270JA50	27	58K3835	0.09	0.07
MCMF0W4FF300JA50	30	58K3839	0.09	0.07
MCMF0W4FF330JA50	33	58K3842	0.09	0.07
MCMF0W4FF360JA50	36	58K3848	0.09	0.07
MCMF0W4FF390JA50	39	58K3850	0.09	0.07
MCMF0W4FF430JA50	43	58K3854	0.09	0.07
MCMF0W4FF470JA50	47	58K3856	0.10	0.08
MCMF0W4FF510JA50	51	58K3865	0.10	0.07
MCMF0W4FF560JA50	56	58K3868	0.09	0.07
MCMF0W4FF680JA50	68	58K3873	0.09	0.07
MCMF0W4FF750JA50	75	58K3877	0.10	0.07
MCMF0W4FF820JA50	82	58K3878	0.09	0.07
MCMF0W4FF1000A50	100	58K3795	0.09	0.07
MCMF0W4FF1100A50	110	58K3801	0.09	0.07
MCMF0W4FF1200A50	120	58K3804	0.09	0.07
MCMF0W4FF1300A50	130	58K3809	0.09	0.07
MCMF0W4FF1500A50	150	58K3811	0.09	0.07
MCMF0W4FF1600A50	160	58K3816	0.09	0.07
MCMF0W4FF1800A50	180	58K3818	0.10	0.07
MCMF0W4FF2000A50	200	58K3822	0.10	0.07
MCMF0W4FF2200A50	220	58K3827	0.09	0.07
MCMF0W4FF2400A50	240	58K3832	0.09	0.07
MCMF0W4FF2700A50	270	58K3836	0.09	0.07
MCMF0W4FF3000A50	300	58K3840	0.09	0.07
MCMF0W4FF3300A50	330	58K3843	0.10	0.07
MCMF0W4FF3600A50	360	58K3849	0.10	0.07
MCMF0W4FF3900A50	390	58K3851	0.09	0.07
MCMF0W4FF4700A50	470	58K3857	0.10	0.08
MCMF0W4FF5100A50	510	58K3866	0.09	0.07
MCMF0W4FF5600A50	560	58K3869	0.09	0.07
MCMF0W4FF6800A50	680	58K3874	0.10	0.07
MCMF0W4FF8200A50	820	58K3879	0.09	0.07
MCMF0W4FF1001A50	1k	58K3796	0.10	0.07
MCMF0W4FF1002A50	10k	58K3797	0.09	0.07
MCMF0W4FF1102A50	11k	58K3802	0.09	0.07
MCMF0W4FF1202A50	12k	58K3806	0.09	0.07
MCMF0W4FF1502A50	15k	58K3813	0.10	0.08
MCMF0W4FF1802A50	18k	58K3819	0.09	0.07
MCMF0W4FF2002A50	20k	58K3824	0.09	0.07
MCMF0W4FF2202A50	22k	58K3829	0.09	0.07
MCMF0W4FF2402A50	24k	58K3833	0.09	0.07
MCMF0W4FF2702A50	27k	58K3837	0.09	0.07
MCMF0W4FF3302A50	33k	58K3845	0.09	0.07
MCMF0W4FF3902A50	39k	58K3852	0.09	0.07
MCMF0W4FF4702A50	47k	58K3860	0.09	0.07
MCMF0W4FF5602A50	56k	58K3870	0.09	0.07
MCMF0W4FF6802A50	68k	58K3875	0.09	0.07
MCMF0W4FF8202A50	82k	58K3881	0.09	0.07
MCMF0W4FF1003A50	100k	58K3798	0.09	0.07
MCMF0W4FF1203A50	120k	58K3807	0.09	0.07
MCMF0W4FF1503A50	150k	58K3814	0.09	0.07
MCMF0W4FF1803A50	180k	58K3820	0.09	0.07
MCMF0W4FF2003A50	200k	58K3825	0.09	0.07
MCMF0W4FF2203A50	220k	58K3830	0.09	0.07
MCMF0W4FF2263A50	226k	58K9104	0.09	0.07
MCMF0W4FF2703A50	270k	58K3838	0.09	0.07

CONTINUED

PRECISION METAL FILM RESISTORS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49	Price Each 50-199
1/4 WATT				
MCMF0W4FF3303A50	330k	58K3846	0.09	0.07
MCMF0W4FF3903A50	390k	58K3853	0.09	0.07
MCMF0W4FF4703A50	470k	58K3861	0.09	0.07
MCMF0W4FF5603A50	560k	58K3871	0.09	0.07
MCMF0W4FF6803A50	680k	58K3876	0.09	0.07
MCMF0W4FF8203A50	820k	58K3882	0.09	0.07
MCMF0W4FF1004A50	1M	58K3799	0.10	0.08
1/2 WATT				
MF50 1R	1	38K5138	0.06	0.05
MCMF0W2FF100JA10	10	58K3722	0.14	0.11
MCMF0W2FF120JA10	12	58K3731	0.14	0.11
MCMF0W2FF150JA10	15	58K3737	0.14	0.11
MCMF0W2FF160JA10	16	58K3741	0.14	0.11
MCMF0W2FF180JA10	18	58K3743	0.14	0.11
MCMF0W2FF200JA10	20	58K3747	0.15	0.11
MCMF0W2FF220JA10	22	58K3749	0.15	0.11
MCMF0W2FF240JA10	24	58K3753	0.14	0.10
MCMF0W2FF270JA10	27	58K3756	0.14	0.10
MCMF0W2FF300JA10	30	58K3760	0.15	0.11
MCMF0W2FF330JA10	33	58K3762	0.14	0.11
MCMF0W2FF360JA10	36	58K3766	0.14	0.11
MCMF0W2FF390JA10	39	58K3768	0.15	0.11
MCMF0W2FF430JA10	43	58K3772	0.14	0.11
MCMF0W2FF470JA10	47	58K3774	0.15	0.11
MCMF0W2FF510JA10	51	58K3778	0.14	0.11
MCMF0W2FF560JA10	56	58K3780	0.14	0.11
MCMF0W2FF680JA10	68	58K3784	0.15	0.11
MCMF0W2FF750JA10	75	58K3788	0.14	0.10
MCMF0W2FF820JA10	82	58K3789	0.15	0.11
MCMF0W2FF910JA10	91	58K3793	0.14	0.10
MCMF0W2FF1000A10	100	58K3723	0.14	0.11
MCMF0W2FF1100A10	110	58K3729	0.14	0.11
MCMF0W2FF1200A10	120	58K3732	0.14	0.11
MCMF0W2FF1300A10	130	58K3736	0.14	0.11
MCMF0W2FF1500A10	150	58K3738	0.14	0.11
MCMF0W2FF1600A10	160	58K3742	0.14	0.11
MCMF0W2FF1800A10	180	58K3744	0.14	0.11
MCMF0W2FF2000A10	200	58K3748	0.14	0.11
MCMF0W2FF2200A10	220	58K3750	0.14	0.11
MCMF0W2FF2400A10	240	58K3754	0.14	0.11
MCMF0W2FF2700A10	270	58K3757	0.15	0.11
MCMF0W2FF3000A10	300	58K3761	0.14	0.11
MCMF0W2FF3300A10	330	58K3763	0.15	0.11
MF50 330R	330	38K5203	0.03	0.02
MCMF0W2FF3600A10	360	58K3767	0.14	0.11
MCMF0W2FF3900A10	390	58K3769	0.14	0.11
MCMF0W2FF4300A10	430	58K3773	0.14	0.11
MCMF0W2FF4700A10	470	58K3775	0.14	0.11
MF50 470R	470	38K5224	0.03	0.02
MCMF0W2FF5100A10	510	58K3779	0.14	0.11
MCMF0W2FF5600A10	560	58K3781	0.14	0.11
MCMF0W2FF6800A10	680	58K3785	0.14	0.11
MCMF0W2FF8200A10	820	58K3790	0.14	0.11
MCMF0W2FF1001A10	1k	58K3724	0.14	0.11
MCMF0W2FF1002A10	10k	58K3725	0.15	0.11
MF50 10K	10k	38K5141	0.03	0.02
MCMF0W2FF1102A10	11k	58K3730	0.14	0.10
MCMF0W2FF1202A10	12k	58K3733	0.14	0.11
MCMF0W2FF1502A10	15k	58K3739	0.14	0.11
MCMF0W2FF1802A10	18k	58K3745	0.14	0.11
MCMF0W2FF2202A10	22k	58K3751	0.30	0.23
MCMF0W2FF2402A10	24k	58K3755	0.14	0.11
MCMF0W2FF2702A10	27k	58K3758	0.14	0.11
MCMF0W2FF3302A10	33k	58K3764	0.14	0.11
MCMF0W2FF3902A10	39k	58K3770	0.14	0.10
MCMF0W2FF4702A10	47k	58K3776	0.14	0.11
MCMF0W2FF5602A10	56k	58K3782	0.14	0.11
MCMF0W2FF6802A10	68k	58K3786	0.14	0.11
MCMF0W2FF8202A10	82k	58K3791	0.14	0.11
MCMF0W2FF1003A10	100k	58K3726	0.14	0.11
MCMF0W2FF1203A10	120k	58K3734	0.14	0.11
MCMF0W2FF1503A10	150k	58K3740	0.14	0.10
MCMF0W2FF1803A10	180k	58K3746	0.14	0.11

CONTINUED

PRECISION METAL FILM RESISTORS (CONT.)

1/2 WATT

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49	Price Each 50-199
● MCMF0W2FF2203A10	220k	58K3752	0.14	0.11
● MCMF0W2FF2703A10	270k	58K3759	0.15	0.11
● MCMF0W2FF3303A10	330k	58K3765	0.14	0.11
● MCMF0W2FF3903A10	390k	58K3771	0.14	0.11
● MCMF0W2FF4703A10	470k	58K3777	0.14	0.11
● MCMF0W2FF5603A10	560k	58K3783	0.15	0.11
● MCMF0W2FF6803A10	680k	58K3787	0.14	0.10
● MCMF0W2FF8203A10	820k	58K3792	0.14	0.10
● MCMF0W2FF1004A10	1M	58K3727	0.14	0.10
● MF50 1M	1M	38K5143	0.03	0.02

(28976)

MRS25 SERIES PROFESSIONAL LEADED METAL FILM RESISTORS

RoHS Compliant Available

VISHAY.

Features
- MBB/SMA 0207 professional
- Small outline package
- Low noise

Specifications
- Tolerance: ± 1%
- Temp. Coeff.: ± 50ppm/K
- Power rating @70C: 600mW

Mfg. Part No.	Resistance (Ohm)	Stock No.	Price Each 1-49
● MRS25000C2008FRP00	2	60R3430	0.10
● MRS25000C4708FC100	4.7	54R4744	0.19
● MRS25000C1009FRP00	10	26R4086	0.10
● MRS25000C2009FRP00	20	26R4096	0.10
● MRS25000C2219FRP00	22.1	26R4101	0.10
● MRS25000C4999FRP00	49.9	26R4110	0.10
● MRS25000C1000FRP00	100	26R4081	0.10
● MRS25000C1500FRP00	150	26R4089	0.10
● MRS25000C2200FRP00	220	60R3431	0.10
● MRS25000C2210FRP00	221	26R4098	0.10
● MRS25000C2490FRP00	249	26R4102	0.10
● MRS25000C3320FRP00	332	26R4104	0.10
● MRS25000C4990FRP00	499	26R4107	0.10
● MRS25000C7500FRP00	750	26R4111	0.10
● MRS25000C1001FCT00	1k	26R4082	0.10
● MRS25000C1101FRP00	1.1k	26R4087	0.10
● MRS25000C1501FRP00	1.5k	26R4090	0.10
● MRS25000C2001FRP00	2k	26R4092	0.10
● MRS25000C2211FRP00	2.21k	26R4099	0.10
● MRS25000C2201FCT00	2.2k	54R4270	0.10
● MRS25000C2401FCT00	2.4k	54R4332	0.10
● MRS25000C3011FRP00	3.01k	26R4103	0.10
● MRS25000C4701FC100	4.7k	66M8576	0.19
● MRS25000C4701FRP00	4.7k	60R3432	0.10
● MRS25000C4751FRP00	4.75k	26R4105	0.10
● MRS25000C4991FRP00	4.99k	26R4108	0.10
● MRS25000C1002FRP00	10k	26R4084	0.10
● MRS25000C1502FRP00	15k	26R4091	0.10
● MRS25000C2002FRP00	20k	26R4093	0.10
● MRS25000C2202FC100	22k	54R4272	0.19
● MRS25000C2212FRP00	22.1k	26R4100	0.10
● MRS25000C4752FRP00	47.5k	26R4106	0.10
● MRS25000C4992FRP00	49.9k	26R4109	0.10
● MRS25000C1003FRP00	100k	26R4085	0.10
● MRS25000C2003FRP00	200k	26R4094	0.10
● MRS25000C3013FCT00	301k	54R4479	0.10
● MRS25000C1004FRP00	1M	60R3428	0.10
● MRS25000C1204FRP00	1.2M	26R4088	0.29
● MRS25000C2004FRP00	2M	26R4095	0.29
● MRS25000C2204FRP00	2.2M	26R4097	0.29
● MRS25000C5104FC100	5.1M	54R4776	0.29
● MRS25000C1005FRP00	10M	60R3429	0.30

(177898)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

MIL TYPE 55182 RNC (ERC) METAL FILM RESISTORS

VISHAY.

Features
- Meets Requirements of MIL-PRF-55182
- Very Low Noise (- 40 dB)
- Verified Failure Rate (Contact Factory for Current Level)
- 100 % Stabilization and Screening Tests. Group A Testing, if Desired, to Customer Requirements
- Controlled Temperature Coefficient
- Epoxy Coating Provides Superior Moisture Protection
- Standard Lead on RNC Product is Solderable and Weldable

Specifications
- Working Voltage: 200V (RNC50 and RNC55), 250 V (RNC60)
- Operating Temperature Range: - 65/+ 175°C
- Exceeds MIL-R-10509

Axial lead resistors. MIL-R-55182 qualified, have "S" level failure rate. Tolerance: 0.1%. Operating temperature: -65°C to +175°C. Most popular values listed, additional values available; *go online or call.*

DIMENSIONS (mm)

Type	A	B	C_{max}	D	E
RNC50	0.150″± 0.020″ (3.81 ± 0.51)	0.070″± 0.010″ (1.78 ± 0.25)	0.187″ (4.75)	0.016″ (0.41)	1.25″±0.266″ (31.75 ± 6.76)
RNC55	0.250″+ 0.03,- 0.046″ (6.35 + 0.79 - 1.17)	0.091″± 0.009″ (2.31 ± 0.23)	0.300″ (7.62)	0.025″ (0.64)	1.50″±0.125″ (38.1 ± 3.18)
RNC60	0.280″± 0.020″ (7.11 ± 0.51)	0.094″± 0.009″ (2.39 ± 0.23)	0.350″ (8.89)	0.025″ (0.64)	1.50″±0.125″ (38.1 ± 3.18)

Mfg. Part No.	Res.	Temp. Coeff. (ppm/°C)	Res. Tol.	Stock No.	Price Each 1-9	Price Each 10-24
0.1 WATT @ 70°C						
RNC50J1000BS	100 ohm	± 25ppm/°C	± 0.1%	04F7776	9.86	8.54
RNC50H1002BS	10 kohm	± 50ppm/°C	± 0.1%	04F7768	8.97	7.76
0.125 WATT @ 70°C						
RNC55H-499< .1%S	499 ohm	± 50ppm/°C	± 0.1%	04F7649	6.29	5.45
RNC55H1001BS	1 kohm	± 50ppm/°C	± 0.1%	04F7650	1.88	1.53
RNC55H1001FSB14	1 kohm	± 50ppm/°C	± 0.1%	90B5038	0.82	0.69
RNC55H2001BSB14	2 kohm	± 50ppm/°C	± 0.1%	04F7651	7.10	5.77
RNC55H1002BS	10 kohm	± 50ppm/°C	± 0.1%	04F7662	7.12	5.78
RNC55H1002FS	10 kohm	± 25ppm/°C	± 0.1%	20C8526	0.82	0.69
RNC55J1002BS	10 kohm	± 25ppm/°C	± 0.1%	04F7824	2.25	1.83
RNC55H2002BSB14	20 kohm	± 50ppm/°C	± 0.1%	04F7666	1.90	1.55
RNC55J2002BS	20 kohm	± 25ppm/°C	± 0.1%	04F7833	7.33	6.34
RNC55H1003BS	100 kohm	± 50ppm/°C	± 0.1%	04F7674	1.90	1.55
RNC55J2003BSB14	200 kohm	± 25ppm/°C	± 0.1%	04F7847	7.07	6.12
0.25 WATT @ 70°C						
RNC60H2000BSB14	200 ohm	± 50ppm/°C	± 0.1%	04F7678	7.64	6.64
RNC60H1001BSB14	1 kohm	± 50ppm/°C	± 0.1%	04F7679	7.64	6.64

(9536)

CMF SERIES INDUSTRIAL METAL FILM RESISTORS

RoHS Compliant Available

VISHAY.

Features
- Small size - conformal coated
- Flame retardant epoxy coating
- Excellent high frequency characteristics
- Exceptionally low noise; typically 0.10 uV/V
- Low voltage coefficient to ± 5ppm/Volt

Mfg. Part No.	Res. (ohm)	Res. Tol.	Temp. Coeff.	Stock No.	Price Each 1-49	Price Each 50-99
CMF07 STYLE INDUSTRIAL METAL FILM RESISTORS - 0.5 WATT, 250V						
● CMF075K0000JNEK	5k	± 5%	± 200ppm/°C	14M7153	0.10	0.09
CMF20 STYLE INDUSTRIAL METAL FILM RESISTORS - 1 WATT, 500V						
● CMF2010K000JNEK	10k	± 5%	± 200ppm/°C	63M2666	1.76	1.45
CMF50 STYLE INDUSTRIAL METAL FILM RESISTORS - 0.25 WATTS, 200V						
● CMF5010R000FHEK	10	± 1%	± 50ppm/°C	63M2668	1.76	1.45
● CMF5010R000FHEB	10	± 1%	± 50ppm/°C	26R4015	0.38	0.31
● CMF5022R100FHEB	22.1	± 1%	± 50ppm/°C	67P6428	0.37	0.30
● CMF5047R500FHEB	47.5	± 1%	± 50ppm/°C	26R4025	0.37	0.33
● CMF5049R900FHEB	49.9	± 1%	± 50ppm/°C	26R4026	0.38	0.31
● CMF5049R900FHEK	49.9	± 1%	± 50ppm/°C	63M2675	1.76	1.45
● CMF5075R000FHEB	75	± 1%	± 50ppm/°C	67P8202	0.38	0.31
● CMF5075R000FHEK	75	± 1%	± 50ppm/°C	63M2678	1.76	1.45
● CMF50100R00FHEB	100	± 1%	± 50ppm/°C	26R4017	0.38	0.31
● CMF50121R00FHEB	121	± 1%	± 50ppm/°C	67P5621	0.38	0.31
● CMF50150R00FHEB	150	± 1%	± 50ppm/°C	26R4018	0.38	0.31
● CMF50200R00FHEB	200	± 1%	± 50ppm/°C	67P6306	0.38	0.31
● CMF50221R00FHEB	221	± 1%	± 50ppm/°C	67P6474	0.38	0.31
● CMF50249R00FHEB	249	± 1%	± 50ppm/°C	67P6598	0.38	0.31
● CMF50301R00FHEB	301	± 1%	± 50ppm/°C	67P6950	0.38	0.31
● CMF50332R00FHEK	332	± 1%	± 50ppm/°C	63M2670	1.76	1.45
● CMF50332R00FHEB	332	± 1%	± 50ppm/°C	67P7053	0.38	0.31
● CMF50392R00FHEB	392	± 1%	± 50ppm/°C	67P7223	0.37	0.30
● CMF50475R00FHEB	475	± 1%	± 50ppm/°C	67P7584	0.38	0.31

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CMF SERIES INDUSTRIAL METAL FILM RESISTORS (CONT.)

CMF50 STYLE INDUSTRIAL METAL FILM RESISTORS - 0.25 WATTS, 200V

Mfg. Part No.	Res. (ohm)	Res. Tol.	Temp. Coeff.	Stock No.	Price Each 1-49	Price Each 50-99
CMF50499R00FHEB	499	± 1%	± 50ppm/°C	67P7641	0.38	0.31
CMF50499R00FHEK	499	± 1%	± 50ppm/°C	63M2676	1.83	1.51
CMF50604R00FHEB	604	± 1%	± 50ppm/°C	67P7980	0.37	0.30
CMF50750R00FHEB	750	± 1%	± 50ppm/°C	67P8221	0.37	0.30
CMF501K0000FHEK	1k	± 1%	± 50ppm/°C	41K8804	0.39	0.33
CMF501K0000FHEB	1k	± 1%	± 50ppm/°C	26R4013	0.37	0.30
CMF501K1000FHEB	1.1k	± 1%	± 50ppm/°C	67P5100	0.37	0.33
CMF501K2100FHEB	1.21k	± 1%	± 50ppm/°C	67P5127	0.38	0.31
CMF501K5000FHEB	1.5k	± 1%	± 50ppm/°C	67P5178	0.38	0.31
CMF502K0000FHEB	2k	± 1%	± 50ppm/°C	26R4019	0.39	0.32
CMF502K2100FHEB	2.21k	± 1%	± 50ppm/°C	26R4020	0.38	0.31
CMF502K4900FHEB	2.49k	± 1%	± 50ppm/°C	67P6163	0.37	0.30
CMF502K7400FHEB	2.74k	± 1%	± 50ppm/°C	67P6197	0.38	0.31
CMF503K0100FHEB	3.01k	± 1%	± 50ppm/°C	03P0937	0.38	0.31
CMF503K3200FHEB	3.32k	± 1%	± 50ppm/°C	67P6840	0.38	0.31
CMF503K4000FHEB	3.4k	± 1%	± 50ppm/°C	67P6848	0.37	0.33
CMF503K8300FHEB	3.83k	± 1%	± 50ppm/°C	67P6877	0.37	0.30
CMF503K9200FHEB	3.92k	± 1%	± 50ppm/°C	67P6894	0.37	0.30
CMF504K0200FHEB	4.02k	± 1%	± 50ppm/°C	67P7230	0.37	0.30
CMF504K7500FHEB	4.75k	± 1%	± 50ppm/°C	26R4023	0.38	0.31
CMF504K9900FHEB	4.99k	± 1%	± 50ppm/°C	26R4024	0.38	0.31
CMF504K9900FHEK	4.99k	± 1%	± 50ppm/°C	63M2671	1.76	1.45
CMF505K1100FHEB	5.11k	± 1%	± 50ppm/°C	67P7665	0.37	0.33
CMF505K6200FHEK	5.62k	± 1%	± 50ppm/°C	63M2677	1.76	1.45
CMF506K8100FHEB	6.81k	± 1%	± 50ppm/°C	67P7948	0.37	0.30
CMF505K6200FHEB	5.62k	± 1%	± 50ppm/°C	67P7701	0.37	0.33
CMF507K5000FHEB	7.5k	± 1%	± 50ppm/°C	67P8140	0.38	0.31
CMF508K0600FHEB	8.06k	± 1%	± 50ppm/°C	67P8259	0.37	0.30
CMF508K2500FHEB	8.25k	± 1%	± 50ppm/°C	67P8277	0.37	0.30
CMF509K0900FHEB	9.09k	± 1%	± 50ppm/°C	67P8421	0.37	0.33
CMF5010K000BEEB	10k	± 0.1%	± 25ppm/°C	67P5278	1.81	1.48
CMF5010K000FHEB	10k	± 1%	± 50ppm/°C	26R4014	0.37	0.30
CMF5010K000FHEK	10k	± 1%	± 50ppm/°C	63M2667	0.39	0.33
CMF5012K100FHEB	12.1k	± 1%	± 50ppm/°C	67P5563	0.37	0.33
CMF5014K000FHEB	14k	± 1%	± 50ppm/°C	67P5723	0.38	0.31
CMF5015K000FHEB	15k	± 1%	± 50ppm/°C	67P5797	0.38	0.31
CMF5020K000FHEB	20k	± 1%	± 50ppm/°C	26R4021	0.38	0.31
CMF5022K100FHEB	22.1k	± 1%	± 50ppm/°C	26R4022	0.37	0.30
CMF5024K900FHEB	24.9k	± 1%	± 50ppm/°C	16P3402	0.37	0.30
CMF5030K100FHEB	30.1k	± 1%	± 50ppm/°C	67P6915	0.38	0.31
CMF5033K200FHEB	33.2k	± 1%	± 50ppm/°C	67P7001	0.38	0.31
CMF5039K200FHEB	39.2k	± 1%	± 50ppm/°C	67P7190	0.37	0.30
CMF5040K200FHEB	40.2k	± 1%	± 50ppm/°C	03P0941	0.37	0.30
CMF5047K500FHEB	47.5k	± 1%	± 50ppm/°C	67P7525	0.38	0.31
CMF5047K500FHEK	47.5k	± 1%	± 50ppm/°C	63M2672	1.76	1.45
CMF5048K700FHEK	48.7k	± 1%	± 50ppm/°C	63M2673	1.76	1.45
CMF5049K900FHEB	49.9k	± 1%	± 50ppm/°C	67P7607	0.38	0.31
CMF5049K900FHEK	49.9k	± 1%	± 50ppm/°C	63M2674	1.76	1.45
CMF5056K200FHEB	56.2k	± 1%	± 50ppm/°C	67P7830	0.37	0.30
CMF5068K100FHEB	68.1k	± 1%	± 50ppm/°C	67P8060	0.37	0.30
CMF5090K900FHEB	90.9k	± 1%	± 50ppm/°C	67P8449	0.37	0.30
CMF50100K00FHEK	100k	± 1%	± 50ppm/°C	63M2669	0.67	0.56
CMF50100K00FHEB	100k	± 1%	± 50ppm/°C	26R4016	0.38	0.31
CMF50150K00FHEB	150k	± 1%	± 50ppm/°C	67P5846	0.71	0.58
CMF50200K00FHEB	200k	± 1%	± 50ppm/°C	67P6291	0.73	0.60
CMF50221K00FHEB	221k	± 1%	± 50ppm/°C	67P6465	0.71	0.58
CMF50499K00FHEB	499k	± 1%	± 50ppm/°C	03P1234	0.74	0.60

CMF55 STYLE INDUSTRIAL METAL FILM RESISTORS - 0.5 WATTS, 250V

Mfg. Part No.	Res. (ohm)	Res. Tol.	Temp. Coeff.	Stock No.	Price Each 1-49	Price Each 50-99
CMF551R0000FKEK	1	± 1%	± 100ppm/°C	65K2368	1.44	1.17
CMF5510R000BEEK	10	± 0.1%	± 25ppm/°C	68P0173	0.66	0.56
CMF5510R000FHEB	10	± 1%	± 50ppm/°C	26R4033	0.42	0.19
CMF5510R000FHEK	10	± 1%	± 50ppm/°C	63M2682	0.16	0.13
CMF5510R000FKEB	10	± 1%	± 100ppm/°C	48P5941	0.43	0.19
CMF5515R000FHEB	15	± 1%	± 50ppm/°C	68P1753	0.63	0.29
CMF5520R000FHEB	20	± 1%	± 50ppm/°C	68P3778	0.61	0.27
CMF5524R900FHEB	24.9	± 1%	± 50ppm/°C	68P4609	0.61	0.27
CMF5540R200FHEB	40.2	± 1%	± 50ppm/°C	68P7795	0.61	0.27
CMF5547R500FHEB	47.5	± 1%	± 50ppm/°C	68P8406	0.63	0.29
CMF5547R500FHEK	47.5	± 1%	± 50ppm/°C	68P8407	1.83	1.51
CMF5549R900FHEB	49.9	± 1%	± 50ppm/°C	68P8632	0.63	0.29
CMF5549R900FHEK	49.9	± 1%	± 50ppm/°C	63M2691	1.76	1.45
CMF5575R000FHEB	75	± 1%	± 50ppm/°C	69P1113	0.61	0.27
CMF55100R00BHEK	100	± 0.1%	± 50ppm/°C	12M7018	0.39	0.33

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CMF SERIES INDUSTRIAL METAL FILM RESISTORS (CONT.)

CMF55 STYLE INDUSTRIAL METAL FILM RESISTORS - 0.5 WATTS, 250V

Mfg. Part No.	Res. (ohm)	Res. Tol.	Temp. Coeff.	Stock No.	Price Each 1-49	Price Each 50-99
CMF55100R00FHEB	100	± 1%	± 50ppm/°C	26R4035	0.62	0.28
CMF55100R00FHEK	100	± 1%	± 50ppm/°C	22M4613	0.16	0.13
CMF55121R00FHEB	121	± 1%	± 50ppm/°C	68P0973	0.63	0.29
CMF55150R00FHEK	150	± 1%	± 50ppm/°C	61M2519	1.83	1.51
CMF55150R00FHEB	150	± 1%	± 50ppm/°C	68P1826	0.61	0.27
CMF55182R00FHEB	182	± 1%	± 50ppm/°C	68P2546	0.63	0.29
CMF55200R00FHEB	200	± 1%	± 50ppm/°C	03M4346	0.63	0.29
CMF55220R00FHEK	220	± 1%	± 50ppm/°C	63M2689	0.15	0.12
CMF55221R00FHEB	221	± 1%	± 50ppm/°C	68P4300	0.63	0.29
CMF60221R00FHEK	221	± 1%	± 50ppm/°C	26R4041	1.83	1.51
CMF55243R00FHEB	243	± 1%	± 50ppm/°C	03M4350	0.61	0.27
CMF55249R00FHEB	249	± 1%	± 50ppm/°C	68P4712	0.63	0.29
CMF55249R00FHEK	249	± 1%	± 50ppm/°C	68P4713	0.16	0.13
CMF55250R00BHEK	250	± 0.1%	± 50ppm/°C	68P4797	0.32	0.27
CMF55301R00FHEB	301	± 1%	± 50ppm/°C	68P6187	0.61	0.27
CMF55330R00FHEK	330	± 1%	± 50ppm/°C	68P6510	0.16	0.13
CMF55332R00FHEB	332	± 1%	± 50ppm/°C	68P6563	0.63	0.29
CMF55475R00FHEB	475	± 1%	± 50ppm/°C	68P8502	0.61	0.27
CMF55475R00FHEK	475	± 1%	± 50ppm/°C	19M5311	0.16	0.13
CMF55499R00FHEB	499	± 1%	± 50ppm/°C	26R4039	0.18	0.16
CMF55499R00FHEK	499	± 1%	± 50ppm/°C	63M2692	0.16	0.13
CMF55500R00FEBF	500	± 1%	± 25ppm/°C	41C6100	0.47	0.40
CMF55511R00FHEB	511	± 1%	± 50ppm/°C	68P9332	0.63	0.29
CMF55604R00FHEB	604	± 1%	± 50ppm/°C	69P0255	0.63	0.29
CMF55619R00FHEB	619	± 1%	± 50ppm/°C	69P0330	0.63	0.29
CMF551K0000BEEK	1k	± 0.1%	± 25ppm/°C	67P8682	1.18	0.96
CMF551K0000BHEB	1k	± 0.1%	± 50ppm/°C	26R4027	0.38	0.31
CMF551K0000BHEK	1k	± 0.1%	± 50ppm/°C	65K2364	0.39	0.33
CMF551K0000FKEB	1k	± 1%	± 100ppm/°C	48P5759	0.43	0.19
CMF551K0000FHEB	1k	± 1%	± 50ppm/°C	26R4028	0.62	0.28
CMF551K0000FHEK	1k	± 1%	± 50ppm/°C	50M7405	0.16	0.13
CMF551K0000FKEA	1k	± 1%	± 100ppm/°C	26R4029	0.37	0.17
CMF551K0000FKEK	1k	± 1%	± 100ppm/°C	65K2365	0.11	0.09
CMF551K1000FHEB	1.1k	± 1%	± 50ppm/°C	67P8811	0.61	0.27
CMF551K2100FHEK	1.21k	± 1%	± 50ppm/°C	67P8911	0.16	0.13
CMF551K5000FHEK	1.5k	± 1%	± 50ppm/°C	63M2679	1.76	1.45
CMF551K5000FHEB	1.5k	± 1%	± 50ppm/°C	67P9115	0.61	0.27
CMF551K8200FHEB	1.82k	± 1%	± 50ppm/°C	67P9337	0.61	0.27
CMF552K0000FHEK	2k	± 1%	± 50ppm/°C	63M2685	1.83	1.51
CMF552K0000BHEB	2k	± 0.1%	± 50ppm/°C	68P2753	0.39	0.32
CMF552K0000FHEB	2k	± 1%	± 50ppm/°C	26R4036	0.63	0.29
CMF552K2000FHEK	2.2k	± 1%	± 50ppm/°C	63M2686	0.16	0.13
CMF552K2100FHEK	2.21k	± 1%	± 50ppm/°C	68P2897	1.76	1.45
CMF552K2100FHEB	2.21k	± 1%	± 50ppm/°C	26R4037	0.63	0.29
CMF552K4900FHEB	2.49k	± 1%	± 50ppm/°C	68P3030	0.63	0.29
CMF553K0100FHEB	3.01k	± 1%	± 50ppm/°C	68P5383	0.63	0.29
CMF553K3200FHEB	3.32k	± 1%	± 50ppm/°C	68P5488	0.63	0.29
CMF553K3200FHEK	3.32k	± 1%	± 50ppm/°C	68P5489	1.80	1.45
CMF554K0200FHEB	4.02k	± 1%	± 50ppm/°C	68P7192	0.63	0.29
CMF554K7000FHEK	4.7k	± 1%	± 50ppm/°C	68P7382	0.16	0.13
CMF554K7000FKEB	4.7k	± 1%	± 100ppm/°C	48P6709	0.43	0.19
CMF554K7500FHEB	4.75k	± 1%	± 50ppm/°C	68P7421	0.18	0.16
CMF554K7500FHEK	4.75k	± 1%	± 50ppm/°C	68P7423	1.83	1.51
CMF554K9900FHEB	4.99k	± 1%	± 50ppm/°C	26R4038	0.19	0.16
CMF554K9900FHEK	4.99k	± 1%	± 50ppm/°C	17M9897	1.76	1.45
CMF555K0000BHEB	5k	± 0.1%	± 50ppm/°C	68P8706	0.40	0.32
CMF555K0000BHEK	5k	± 0.1%	± 50ppm/°C	63M2693	0.40	0.34
CMF555K1100FHEB	5.11k	± 1%	± 50ppm/°C	68P8766	0.61	0.27
CMF555K1100FHEK	5.11k	± 1%	± 50ppm/°C	63M2694	1.76	1.45
CMF555K6200FHEB	5.62k	± 1%	± 50ppm/°C	68P8890	0.63	0.29
CMF556K0400FHEB	6.04k	± 1%	± 50ppm/°C	68P9848	0.61	0.27
CMF556K8100FHEB	6.81k	± 1%	± 50ppm/°C	68P9986	0.63	0.29
CMF556K8100FHEK	6.81k	± 1%	± 50ppm/°C	63M2695	1.83	1.51
CMF557K5000FHEB	7.5k	± 1%	± 50ppm/°C	69P0807	0.61	0.27
CMF558K2500FHEB	8.25k	± 1%	± 50ppm/°C	69P1385	0.63	0.29
CMF5510K000BEEB	10k	± 0.1%	± 25ppm/°C	67P9971	0.64	0.52
CMF5510K000BEEK	10k	± 1%	± 25ppm/°C	65K2370	1.17	0.95
CMF5510K000BHEB	10k	± 0.1%	± 50ppm/°C	26R4031	0.39	0.32
CMF5510K000BHEK	10k	± 0.1%	± 50ppm/°C	12P6367	0.77	0.65
CMF5510K000FHEK	10k	± 1%	± 50ppm/°C	19M5305	0.16	0.13
CMF5510K000FKEK	10k	± 1%	± 100ppm/°C	10M8947	1.76	1.45
CMF6010K000FKEB	10k	± 1%	± 100ppm/°C	26R4040	0.28	0.21
CMF5510K000FHEB	10k	± 1%	± 50ppm/°C	26R4032	0.63	0.29

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CMF SERIES INDUSTRIAL METAL FILM RESISTORS (CONT.)

CMF55 STYLE INDUSTRIAL METAL FILM RESISTORS - 0.5 WATTS, 250V

Mfg. Part No.	Res. (ohm)	Res. Tol.	Temp. Coeff.	Stock No.	Price Each 1-49	Price Each 50-99
● CMF5510K000FKEB	10k	± 1%	± 100ppm/°C	48P5928	0.43	0.19
● CMF5510K500FHEB	10.5k	± 1%	± 50ppm/°C	68P0068	0.61	0.27
● CMF5511K000FHEB	11k	± 1%	± 50ppm/°C	68P0433	0.63	0.29
● CMF5511K000FHEK	11k	± 1%	± 50ppm/°C	68P0434	1.76	1.45
● CMF5515K000FHEB	15k	± 1%	± 50ppm/°C	68P1596	0.63	0.29
● CMF5515K000FHEK	15k	± 1%	± 50ppm/°C	63M2684	1.76	1.45
● CMF5520K000BHEB	20k	± 0.1%	± 50ppm/°C	68P3670	0.39	0.32
● CMF5520K000FHEB	20k	± 1%	± 50ppm/°C	68P3684	0.63	0.29
● CMF5520K000FHEK	20k	± 1%	± 50ppm/°C	63M2687	1.76	1.45
● CMF5520K000FKEK	20k	± 1%	± 100ppm/°C	48P6270	1.76	1.45
● CMF5522K100FHEB	22.1k	± 1%	± 50ppm/°C	68P4117	0.63	0.29
● CMF5522K100FHEK	22.1k	± 1%	± 50ppm/°C	21M6788	1.83	1.51
● CMF5524K900FHEB	24.9k	± 1%	± 50ppm/°C	68P4570	0.63	0.29
● CMF5527K400FHEB	27.4k	± 1%	± 50ppm/°C	68P5015	0.63	0.29
● CMF5530K100FHEB	30.1k	± 1%	± 50ppm/°C	18M4482	0.61	0.27
● CMF5533K200FHEB	33.2k	± 1%	± 50ppm/°C	68P6437	0.63	0.29
● CMF5533K200FHEK	33.2k	± 1%	± 50ppm/°C	68P6439	1.76	1.45
● CMF5540K000BHEB	40k	± 0.1%	± 50ppm/°C	68P7747	0.40	0.32
● CMF5547K000FHEK	47k	± 1%	± 50ppm/°C	63M2690	0.16	0.13
● CMF5547K500FHEB	47.5k	± 1%	± 50ppm/°C	68P8355	0.63	0.29
● CMF5549K900FHEB	49.9k	± 1%	± 50ppm/°C	68P8602	0.63	0.29
● CMF5549K900FHEK	49.9k	± 1%	± 50ppm/°C	19M5308	1.76	1.45
CMF5550K000BER6	50k	± 0.1%	± 25ppm/°C	41C6038	0.84	0.69
● CMF5556K200FHEB	56.2k	± 1%	± 50ppm/°C	68P9590	0.63	0.29
● CMF5568K100FHEB	68.1k	± 1%	± 50ppm/°C	69P0596	0.61	0.27
● CMF5575K000FHEB	75k	± 1%	± 50ppm/°C	69P1090	0.63	0.29
● CMF55100K00BEEB	100k	± 0.1%	± 25ppm/°C	68P0239	0.64	0.52
● CMF55100K00BHEK	100k	± 0.1%	± 50ppm/°C	74K3312	0.40	0.34
● CMF55100K00FHEB	100k	± 1%	± 50ppm/°C	26R4034	0.63	0.29
● CMF55100K00FHEK	100k	± 1%	± 50ppm/°C	63M2683	0.16	0.13
● CMF55100K00FKEK	100k	± 1%	± 100ppm/°C	48P5947	0.11	0.09
● CMF55110K00FHEK	110k	± 1%	± 50ppm/°C	68P0608	1.80	1.45
● CMF55150K00FHEB	150k	± 1%	± 50ppm/°C	68P1800	0.18	0.16
● CMF55150K00FHEK	150k	± 1%	± 50ppm/°C	15M6093	1.76	1.45
● CMF55200K00FHEB	200k	± 1%	± 50ppm/°C	31P7333	0.63	0.29
● CMF55200K00FHEK	200k	± 1%	± 50ppm/°C	68P3824	1.76	1.45
● CMF55221K00FHEB	221k	± 1%	± 50ppm/°C	68P4283	0.61	0.27
● CMF55249K00FHEB	249k	± 1%	± 50ppm/°C	68P4690	0.61	0.27
● CMF55301K00FHEB	301k	± 1%	± 50ppm/°C	68P6155	0.61	0.27
● CMF55332K00FHEB	332k	± 1%	± 50ppm/°C	68P6542	0.63	0.29
● CMF55475K00FHEB	475k	± 1%	± 50ppm/°C	68P8486	0.63	0.29
● CMF55499K00FHEB	499k	± 1%	± 50ppm/°C	68P8661	0.61	0.27
● CMF551M0000BEEK	1M	± 0.1%	± 25ppm/°C	29M7809	2.57	2.12
● CMF551M0000BHEB	1M	± 0.1%	± 50ppm/°C	67P9422	0.43	0.35
● CMF551M0000BHEK	1M	± 0.1%	± 50ppm/°C	88K2391	1.83	1.51
● CMF551M0000FHEB	1M	± 1%	± 50ppm/°C	26R4030	0.29	0.16
● CMF551M0000FHEK	1M	± 1%	± 50ppm/°C	63M2680	1.76	1.45
● CMF551M0000FKEB	1M	± 1%	± 100ppm/°C	48P5844	0.66	0.30
● CMF551M0000FKEK	1M	± 1%	± 100ppm/°C	65K2366	1.83	1.51
● CMF552M0000FHEB	2M	± 1%	± 50ppm/°C	68P3225	1.60	1.31
CMF5522M000JNBF	22M	± 5%	± 200ppm/°C	41C1179	1.76	1.45
● CMF552M2100FHEB	2.21M	± 1%	± 50ppm/°C	68P3344	1.56	1.22
● CMF553M0000FKEK	3M	± 1%	± 100ppm/°C	68P5706	0.93	0.79
CMF553M3000FKR6	3.3M	± 1%	± 100ppm/°C	41C2890	0.88	0.71
● CMF554M9900FHEB	4.99M	± 1%	± 50ppm/°C	68P7618	1.62	1.32
● CMF5510M000FHEK	10M	± 1%	± 50ppm/°C	63M2681	3.04	2.51
CMF5510M000FKBF	10M	± 1%	± 100ppm/°C	40C7166	1.83	1.51
● CMF5510M000FKEB	10M	± 1%	± 100ppm/°C	68P0114	1.26	1.03
● CMF5510M000FKEK	10M	± 1%	± 100ppm/°C	65K2372	1.83	1.51
CMF5522M000FKBF	22M	± 1%	± 100ppm/°C	41C1170	1.68	1.37
● CMF5522M000FKEK	22M	± 1%	± 100ppm/°C	63M2688	2.24	1.85

CMF60 STYLE INDUSTRIAL METAL FILM RESISTORS - 0.75 WATTS, 300V

● CMF601R0000FLEK	1	± 1%	± 150ppm/°C	63M2699	2.05	1.67
● CMF60100R00FHEK	100	± 1%	± 50ppm/°C	63M2702	1.76	1.45
● CMF60100R00FKEK	100	± 1%	± 100ppm/°C	75K6215	0.40	0.33
● CMF60150R00FHEK	150	± 1%	± 50ppm/°C	63M2703	1.76	1.45
● CMF60221R00FHEK	221	± 1%	± 50ppm/°C	26R4041	1.83	1.51
● CMF60330R00FKEA	330	± 1%	± 100ppm/°C	14M7652	0.50	0.28
● CMF601K0000FHEK	1k	± 1%	± 50ppm/°C	63M2696	1.83	1.51
● CMF601K0000FKEK	1	± 1%	± 100ppm/°C	06M6428	0.40	0.33
● CMF601K5000FHEK	1.5k	± 1%	± 50ppm/°C	63M2697	0.40	0.33
● CMF6010K000FHEK	10k	± 1%	± 50ppm/°C	63M2700	0.25	0.21
● CMF6047K500FHEK	47.5k	± 1%	± 50ppm/°C	63M2704	1.76	1.45

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CMF SERIES INDUSTRIAL METAL FILM RESISTORS (CONT.)

CMF60 STYLE INDUSTRIAL METAL FILM RESISTORS - 0.75 WATTS, 300V

Mfg. Part No.	Res. (ohm)	Res. Tol.	Temp. Coeff.	Stock No.	Price Each 1-49	Price Each 50-99
● CMF60100K00FHEK	100k	± 1%	± 50ppm/°C	63M2701	0.40	0.33
● CMF60470K00FHEK	470k	± 1%	± 50ppm/°C	63M2705	0.25	0.21
● CMF601M0000FHEK	1M	± 1%	± 50ppm/°C	63M2698	1.76	1.45
● CMF601M0000FKEB	1M	± 1%	± 100ppm/°C	46P4776	0.50	0.28
● CMF6010M000FKEK112	10M	± 1%	± 100ppm/°C	57K2699	2.04	1.67

(105820)

RN SERIES, MIL-R-10509 QUALIFIED METAL FILM RESISTORS

VISHAY.

Features

- Very Low Noise (-40 dB)
- Very Low Voltage Coefficient (5 ppm/V)
- Controlled Temperature Coefficient
- Flame Retardant Epoxy Coating
- Commercial Alternatives to Military Styles are Available with Higher Power Ratings.

ELECTRICAL SPECIFICATIONS

Model	Power Rating @ 70°C (W) RNxxD (100ppm)	Power Rating @ 125°C (W) RNxxC (50ppm) & RNxxE (25ppm)	Max. Working Voltage (V)	Dielectric Withstanding Voltage (V_{AC})
RN55	0.125	0.1	200	450
RN60	0.25	0.125	300	500
RN65	0.5	0.25	350	900

Type RN55D will meet or exceed electrical, environmental, dimensional requirements of MIL-R-10509. Operating temperature: –55°C to +175°C. For a complete list of stocked values, please call or visit us online.

RN50C SERIES METAL FILM RESISTORS, +/-50 PPM/°C

Res. (Ohms)	Res. Tol. (+/- %)	Tape Cut Stock No.	Tape Cut Price Each 1-49	Res. (Ohms)	Res. Tol. (+/- %)	Tape Cut Stock No.	Tape Cut Price Each 1-49
1k	± 1%	54C5158	0.39	4.75k	± 1%	54C6240	1.83
2k	± 1%	54C5648	1.76	47.5k	± 1%	54C6247	1.76

RN55C SERIES METAL FILM RESISTORS, +/-50 PPM/°C

100	± 0.1%	83F1208	0.40	4.32k	± 0.1%	35C1052	1.76
100	± 1%	83F1209	0.11	4.75k	± 1%	83F1272	0.16
249	± 0.1%	83F1241	0.40	4.99k	± 1%	83F1277	0.11
499	± 1%	83F1274	1.83	10k	± 0.1%	83F1212	0.32
1k	± 0.1%	83F1210	0.40	10k	± 1%	83F1213	0.10
1k	± 1%	83F1211	0.11	10k	± 1%	54C7278	0.63
1k	± 1%	54C7264	0.63	20k	± 1%	83F1232	0.11
1.5k	± 1%	83F1220	0.15	100k	± 0.1%	83F1214	0.39
2k	± 1%	83F1230	0.16	100k	± 1%	83F1502	0.11

RN55D SERIES METAL FILM RESISTORS, +/-100 PPM/°C

10	± 1%	83F1322	0.09	4.99k	± 1%	83F1476	0.09
10	± 1%	55C3920	0.43	5.1k	± 1%	24C9282	0.18
15	± 1%	03F7863	1.83	5.11k	± 1%	83F1480	0.11
20	± 1%	83F1381	0.11	5.36k	± 1%	03F8113	1.76
22.1	± 1%	83F1391	1.76	5.62k	± 1%	83F1487	0.11
33.2	± 1%	83F1438	0.11	5.76k	± 1%	03F8116	1.83
40.2	± 1%	83F1457	0.10	6.04k	± 1%	83F1493	1.83
46.4	± 1%	03F7910	0.11	6.65k	± 1%	03F8122	0.11
47.5	± 1%	83F1473	0.11	6.81k	± 1%	83F1511	0.11
49.9	± 1%	83F1478	0.11	6.98k	± 1%	83F1515	0.11
51.1	± 1%	83F1482	0.11	7.15k	± 1%	83F1518	1.83
68.1	± 1%	83F1513	1.83	7.5k	± 1%	83F1523	0.11
75	± 1%	83F1525	0.11	7.68k	± 1%	83F1526	1.80
80.6	± 1%	23C6159	1.76	8.06k	± 1%	83F1530	0.10
82.5	± 1%	83F1535	0.11	8.25k	± 1%	83F1533	0.11
100	± 1%	83F1313	0.09	8.45k	± 1%	83F1536	0.10
100	± 1%	55C3937	0.43	8.66k	± 1%	83F1537	1.83
110	± 1%	83F1323	0.11	8.87k	± 1%	38C8561	1.76
121	± 1%	83F1332	0.09	9.09k	± 1%	83F1539	0.10
133	± 1%	83F1345	1.76	9.53k	± 1%	03F8137	0.11
143	± 1%	03F7957	1.83	9.76k	± 1%	83F1544	1.83
150	± 1%	83F1354	0.11	10k	± 1%	83F1315	0.09
150	± 1%	58C4670	0.13	10k	± 1%	83R8771	0.43
200	± 1%	83F1375	0.11	10.2k	± 1%	83F1318	0.10
200	± 1%	58C5151	0.41	11k	± 1%	83F1325	0.11
221	± 1%	83F1387	0.09	11.3k	± 1%	83F1328	1.83
232	± 1%	83F1392	1.83	12.1k	± 1%	83F1334	0.11
237	± 1%	83F1395	1.83	12.4k	± 1%	83F1338	1.83
243	± 1%	83F1397	0.11	12.7k	± 1%	92B6304	1.76
249	± 1%	83F1401	0.11	13k	± 1%	83F1343	1.83
261	± 1%	38C8474	1.83	13.3k	± 1%	83F1347	1.83
274	± 1%	83F1415	0.10	14k	± 1%	38C8437	1.73
280	± 1%	38C8479	1.76	14.3k	± 1%	03F8154	1.83
294	± 1%	38C8482	1.76	14.7k	± 1%	83F1352	0.10
301	± 1%	83F1423	0.10	15k	± 1%	83F1356	0.11

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RN SERIES, MIL-R-10509 QUALIFIED METAL FILM RESISTORS (CONT.)

RN55D SERIES METAL FILM RESISTORS, +/-100 PPM/°C

Res. (Ohms)	Res. Tol. (+/- %)	Tape Cut Stock No.	Tape Cut Price Each 1-49	Res. (Ohms)	Res. Tol. (+/- %)	Tape Cut Stock No.	Tape Cut Price Each 1-49
330	± 1%	83F1434	0.17	15.8k	± 1%	83F1358	1.83
332	± 1%	83F1435	0.11	16.2k	± 1%	83F1363	0.10
348	± 1%	83F1440	0.10	16.9k	± 1%	03F8162	1.76
357	± 1%	83F1442	1.76	17.8k	± 1%	03F8164	1.83
374	± 1%	03F8000	1.83	18.2k	± 1%	83F1370	0.11
383	± 1%	23C7377	2.05	19.6k	± 1%	83F1374	1.83
392	± 1%	83F1450	0.11	20k	± 1%	83F1377	0.09
402	± 1%	03F8003	0.10	21.5k	± 1%	83F1385	0.11
464	± 1%	83F1467	1.83	22.1k	± 1%	03F8174	0.11
475	± 1%	83F1470	0.11	22.6k	± 1%	38C8467	0.10
487	± 1%	03F8011	1.83	24.3k	± 1%	83F1399	0.11
499	± 1%	83F1475	0.09	24.9k	± 1%	83F1403	0.11
511	± 1%	83F1479	0.11	26.1k	± 1%	83F1411	1.83
549	± 1%	03F8016	1.76	27.4k	± 1%	83F1417	1.76
562	± 1%	83F1486	1.83	30.1k	± 1%	83F1425	0.11
604	± 1%	83F1492	0.11	31.6k	± 1%	83F1431	1.76
634	± 1%	03F8022	1.83	32.4k	± 1%	83F1433	0.11
681	± 1%	83F1510	0.11	33k	± 1%	58C6061	0.17
715	± 1%	83F1517	1.83	33.2k	± 1%	83F1437	0.11
750	± 1%	83F1522	0.11	34k	± 1%	38C8494	1.83
806	± 1%	83F1529	0.10	37.4k	± 1%	38C8499	1.83
825	± 1%	83F1532	0.11	38.3k	± 1%	24C0599	0.09
909	± 1%	83F1538	0.11	40.2k	± 1%	83F1456	0.11
1k	± 1%	83F1314	0.09	42.2k	± 1%	83F1459	0.11
1k	± 1%	83R8770	0.43	45.3k	± 1%	83F1466	0.11
1.02k	± 1%	83F1317	1.83	46.4k	± 1%	83F1469	1.83
1.1k	± 1%	83F1324	0.11	47.5k	± 1%	83F1472	0.11
1.21k	± 1%	83F1333	0.11	49.9k	± 1%	83F1477	0.11
1.24k	± 1%	83F1337	0.11	51.1k	± 1%	83F1481	0.11
1.3k	± 1%	83F1342	0.11	53.6k	± 1%	38C8526	1.76
1.33k	± 1%	83F1346	1.83	56.2k	± 1%	83F1488	0.10
1.4k	± 1%	83F1349	1.83	60.4k	± 1%	83F1494	0.10
1.47k	± 1%	03F8059	0.11	64.9k	± 1%	38C8542	1.81
1.5k	± 1%	83F1355	0.11	68.1k	± 1%	38C8547	0.11
1.5k	± 1%	58C4675	0.13	69.8k	± 1%	83F1516	1.83
1.62k	± 1%	83F1362	1.83	75k	± 1%	83F1524	0.10
1.78k	± 1%	83F1367	0.11	80.6k	± 1%	83F1531	0.10
1.82k	± 1%	83F1369	1.76	82.5k	± 1%	83F1534	0.11
1.96k	± 1%	83F1373	1.83	90.9k	± 1%	83F1540	0.11
2k	± 1%	83F1376	0.11	95.3k	± 1%	83F1543	0.11
2k	± 1%	58C5156	0.43	97.6k	± 1%	83F1545	1.83
2.05k	± 1%	83F1379	1.76	100k	± 1%	83F1316	0.09
2.1k	± 1%	83F1382	0.10	100k	± 1%	55C3953	0.43
2.15k	± 1%	38C8456	0.10	121k	± 1%	83F1335	0.11
2.21k	± 1%	83F1388	0.11	150k	± 1%	83F1357	0.11
2.32k	± 1%	83F1393	0.10	178k	± 1%	38C8450	1.83
2.37k	± 1%	83F1396	1.83	182k	± 1%	83F1371	1.83
2.43k	± 1%	83F1398	0.10	200k	± 1%	83F1378	1.83
2.49k	± 1%	83F1402	0.11	215k	± 1%	38C8464	1.83
2.55k	± 1%	83F1407	0.11	221k	± 1%	83F1390	1.83
2.61k	± 1%	38C8458	1.83	249k	± 1%	83F1404	0.11
2.67k	± 1%	83F1413	0.11	392k	± 1%	38C8502	1.83
2.74k	± 1%	83F1416	0.11	402k	± 1%	20C8365	1.83
2.8k	± 1%	83F1420	0.10	464k	± 1%	93B7362	1.76
2.87k	± 1%	98B1747	1.76	499k	± 1%	25C5777	0.11
3.01k	± 1%	83F1424	0.11	604k	± 1%	38C8537	1.83
3.16k	± 1%	83F1430	0.10	681k	± 1%	38C8548	1.83
3.24k	± 1%	83F1432	0.11	1M	± 1%	25C0076	0.16
3.32k	± 1%	83F1436	0.11	1M	± 1%	55C3958	0.63
3.48k	± 1%	83F1441	0.11	1.58M	± 1%	25C0068	1.83
3.57k	± 1%	38C8487	1.76	2M	± 1%	24C5732	0.31
3.83k	± 1%	38C8488	1.83	3.01M	± 1%	38C8484	1.83
3.92k	± 1%	83F1451	0.11	3.32M	± 1%	38C8486	1.76
4.02k	± 1%	83F1455	0.11	4.7M	± 1%	58C6781	0.89
4.12k	± 1%	03F8102	1.83	4.99M	± 1%	38C8506	1.83
4.32k	± 1%	38C8503	0.11	5M	± 1%	29C6386	0.82
4.42k	± 1%	83F1464	1.83	10M	± 1%	99F7944	1.31
4.53k	± 1%	03F8106	0.11	10M	± 1%	55C3963	1.26
4.64k	± 1%	83F1468	0.11	15M	± 1%	30C9560	2.24
4.75k	± 1%	83F1471	0.10	20M	± 1%	38C8460	1.68
4.87k	± 1%	83F1474	1.83	22.1M	± 1%	38C8465	2.30
RN60C SERIES METAL FILM RESISTORS, +/-50 PPM/°C							
100	± 0.1%	83F1557	0.42	10k	± 1%	58C7502	0.19
100	± 1%	83F1558	0.17	100k	± 0.1%	83F1563	0.42
1k	± 0.1%	83F1559	0.42	20k	± 1%	83F1575	1.83
1k	± 1%	83F1560	0.17	250k	± 0.1%	83F1584	0.41
10k	± 0.1%	83F1561	0.41	499k	± 1%	83F1597	0.16

➤CONTINUED➤

RN SERIES, MIL-R-10509 QUALIFIED METAL FILM RESISTORS (CONT.)

RN60D SERIES METAL FILM RESISTORS, +/-100 PPM/°C

Res. (Ohms)	Res. Tol. (+/- %)	Tape Cut Stock No.	Tape Cut Price Each 1-49	Res. (Ohms)	Res. Tol. (+/- %)	Tape Cut Stock No.	Tape Cut Price Each 1-49
10	± 1%	83F1618	0.13	3.32k	± 1%	83F1682	0.13
49.9	± 1%	83F1707	0.13	4.02k	± 0.1%	83F1691	0.13
75	± 1%	83F1734	1.76	4.75k	± 1%	83F1699	0.12
100	± 1%	83F1611	0.12	4.99k	± 1%	83F1704	0.13
150	± 1%	83F1634	0.13	5k	± 1%	59C1998	0.21
221	± 1%	83F1654	1.83	10k	± 1%	83F1613	0.12
250	± 1%	91B2783	0.18	10k	± 1%	59C0685	0.50
475	± 1%	03F8457	0.13	20k	± 1%	83F1650	0.13
499	± 1%	83F1703	0.12	49.9k	± 1%	83F1705	0.13
1k	± 1%	83F1612	0.13	100k	± 1%	83F1614	0.13
1k	± 1%	59C0681	0.50	499k	± 1%	83F1706	1.76
1.5k	± 1%	83F1635	0.13	500k	± 1%	83H5671	0.21
2	± 1%	83F1649	0.13	511k	± 1%	83F1708	0.13
2k	± 1%	59C1187	0.48	1M	± 1%	83F1615	0.13
2.21k	± 1%	83F1655	0.13	1M	± 1%	59C0692	0.50
RN65C SERIES METAL FILM RESISTORS, +/-50 PPM/°C							
249	± 1%	83F1758	0.49	1k	± 1%	83F1748	0.41
RN65D SERIES METAL FILM RESISTORS, +/-100 PPM/°C							
49.9	± 1%	83F1796	1.83	10k	± 1%	83F1766	0.29
100	± 1%	83F1764	0.29	20k	± 1%	83F1777	1.83
249	± 1%	83F1783	0.33	39.2k	± 1%	92B2400	1.76
499	± 1%	83F1792	0.28	100k	± 1%	83F1767	0.29
1k	± 1%	83F1765	0.29	499k	± 1%	83F1795	0.40
1.5k	± 1%	83F1774	0.40	1M	± 1%	83F1768	0.40

(92281)

RN SERIES MIL-R-10509 METAL GLAZED RESISTORS

TT electronics IRC

Features:
- Digital marking per MIL-R-10509
- Spiralled or laser helixed to resistance value, tolerance
- High Temperature soldered termination-lead assembly
- Tin-lead electroplated copper leads
- Tough molded jacket

MIL Type	Tolerance (+/- %)	Temp. Coeff. (ppm/°C)	MIL Power Rating (Watts)	Voltage Rating (max)
RN55D	1 %	100	1/8 @ 70°C	200
RN55C	1 %	50	1/10 @ 125°C	200
RN60D	1 %	100	1/4 @ 70°C	300
RN60C	1 %	50	1/8 @ 125°C	250

Additional values available; *go online or call.*

RN55C

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-99	Price Each 100-499
RN55C1000F	100	01F3055	0.51	0.43
RN55C2000F	200	01F3056	0.51	0.43
RN55C3010F	301	01F3057	0.23	0.22
RN55C4990F	499	01F3058	0.54	0.46
RN55C5110F	511	01F3059	0.51	0.43
RN55C1001F	1k	01F3064	0.54	0.46
RN55C2001F	2k	01F3069	0.54	0.46
RN55C2211F	2.21k	01F3070	0.23	0.22
RN55C4991F	4.99k	01F3083	0.51	0.43
RN55C9091F	9.09k	01F3091	0.54	0.46
RN55C1002F	10k	01F3092	0.54	0.45
RN55C1212F	12.1k	01F3094	0.54	0.46
RN55C2002F	20k	01F3101	0.51	0.43
RN55C3012F	30.1k	01F3107	0.23	0.22
RN55C1003F	100k	01F3116	0.54	0.46
RN55D				
RN55D10R0F	10	01F2709	0.25	0.23
RN55D49R9F	49.9	01F2711	0.51	0.43
RN55D75R0F	75	01F2715	0.51	0.43
RN55D1210F	121	01F2724	0.54	0.45
RN55D2000F	200	01F2745	0.51	0.43
RN55D4750F	475	01F2781	0.51	0.43
RN55D4990F	499	01F2783	0.54	0.45
RN55D1001F	1k	01F2812	0.54	0.45
RN55D1501F	1.5k	01F2829	0.54	0.46
RN55D3321F	3.32k	01F2862	0.51	0.43
RN55D4991F	4.99k	01F2880	0.51	0.43
RN55D6811F	6.81k	01F2893	0.54	0.46
RN55D1002F	10k	01F2909	0.54	0.45
RN55D1102F	11k	01F2913	0.23	0.22
RN55D2002F	20k	01F2938	0.51	0.43

➤CONTINUED➤

RN SERIES MIL-R-10509 METAL GLAZED RESISTORS (CONT.)

RN55D

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-99	Price Each 100-499
RN55D3012F	30.1k	01F2955	0.51	0.43
RN55D4992F	49.9k	01F2976	0.54	0.46
RN55D1003F	100k	01F3005	0.51	0.43
RN55D2003F	200k	01F3034	0.54	0.46
RN55D1004F	1M	01F3481	0.58	0.49
RN60C				
RN60C1002F	10k	01F3323	0.53	0.45
RN60C1003F	100k	01F3330	0.53	0.45
RN60D				
RN60D1001F	1k	01F3165	0.54	0.46
RN60D1501F	1.5k	01F3180	0.51	0.43
RN60D2001F	2k	01F3189	0.51	0.43
RN60D2002F	20k	01F3262	0.23	0.22
RN60D2492F	24.9k	01F3265	0.51	0.43
RN60D3012F	30.1k	01F3268	0.25	0.23
RN60D2003F	200k	01F3287	0.51	0.43
RN60D3013F	301k	01F3291	0.51	0.43
RN60D1004F	1M	01F3302	0.54	0.46

(80215)

5063JD (VISHAY MBA) SERIES SPACE MISER METAL FILM RESISTORS

RoHS Compliant Available

VISHAY.

Features
- Approved according to CECC 40101-806
- Advanced thin film technology
- Excellent overall stability: class 0.25

Specifications
- Power dissipation rating up to 1 W
- Wide professional range: 0.22Ω- 22 MΩ
- Temperature Coeff.: ±100ppm/°C
- Working Voltage: 200V
- Res. Tolerance: ±1%
- Power Rating: 0.4W

Specifications
- Industrial
- Telecommunication
- Medical equipment

A homogeneous film of metal alloy is deposited on high grade BALOX ceramic body. Coated with a blue lacquer for electrical, mechanical and climatic protection. Encapsulation is resistant to all cleaning solvents in accordance with "MIL-STD-202E, method 215" and "IEC 60068-2-45." Nominal Resistance and Tolerance are Marked Using 5 Colored Bands. For a complete list of stocked values, please visit us online.

DIMENSIONS (mm)

Model	D Max. (mm)	L_1 Max. (mm)	L_2 Max. (mm)	d (mm)
5063JD Series	0.063" (1.6)	0.142" (3.6)	1.14" (29)	0.020" (0.5)

Description	Tape Cut Price Each 1-99	100-499	500-999	1000-4999
5063JD Series	0.13	0.11	0.10	0.09

Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)
94C3274	10	94C3585	511	94C3536	4.99k	94C3565	47.5k
94C3274	10	94C3589	523	94C3575	5.11k	94C3573	49.9k
94C3289	11	94C3597	549	94C3578	5.49k	94C3582	51.1k
94C3304	12.1	94C3601	562	94C3579	5.62k	94C3586	52.3k
94C3318	13.7	94C3605	576	94C3580	5.76k	94C3594	54.9k
94C3340	15	94C3619	604	94C3610	6.04k	85C4731	60.4k
94C3404	20	94C3623	619	94C3611	6.19k	94C3632	66.5k
94C3405	20.5	94C3640	681	94C3612	6.34k	94C3658	75k
94C3421	22.6	94C3653	715	94C3615	6.81k	94C3676	80.6k
88C9985	24.9	94C3661	750	94C3616	6.98k	94C3680	82.5k
94C3483	30.1	94C3684	825	94C3647	7.5k	94C3701	90.9k
94C3497	33.2	94C3692	866	94C3649	7.87k	94C3705	91k
94C3538	40.2	94C3704	909	94C3670	8.06k	94C3710	95.3k
94C3562	46.4	94C3709	931	94C3671	8.2k	94C3278	100k
94C3566	47.5	94C3212	1k	94C3672	8.25k	94C3293	110k
89C0042	49.9	94C3213	1.02k	94C3673	8.45k	94C3307	121k
94C3583	51.1	94C3214	1.05k	94C3697	9.09k	94C3331	140k
94C3607	59	94C3215	1.07k	94C3698	9.31k	94C3343	150k
94C3629	64.9	94C3216	1.1k	94C3699	9.53k	94C3354	162k
94C3659	75	94C3219	1.18k	85C4699	10k	94C3372	182k
94C3663	76.8	94C3220	1.21k	94C3271	10.2k	94C3382	196k
94C3702	90.9	94C3223	1.3k	94C3285	11k	94C3406	200k
94C3711	95.3	94C3224	1.33k	94C3301	12.1k	94C3422	220k
85C4661	100	94C3226	1.4k	94C3302	12.4k	94C3423	221k
94C3280	102	94C3227	1.43k	94C3313	13k	94C3425	226k
94C3308	121	94C3229	1.5k	94C3325	14k	94C3438	243k
94C3310	124	94C3232	1.62k	94C3327	14.7k	94C3440	249k
85C4721	150	94C3235	1.74k	94C3339	15.8k	94C3498	332k
94C3373	182	94C3236	1.78k	94C3348	16.2k	94C3510	357k

➤ CONTINUED ➤

5063JD (VISHAY MBA) SERIES SPACE MISER METAL FILM RESISTORS (CONT.)

Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)	Tape Cut Stock No.	Res. (Ohms)
94C3381	191	94C3240	1.96k	94C3350	16.9k	94C3520	383k
94C3383	196	94C3384	2k	94C3361	17.8k	94C3539	402k
94C3407	200	94C3388	2.21k	94C3376	19.1k	94C3559	453k
94C3424	221	94C3392	2.43k	94C3402	20k	94C3567	475k
94C3439	243	94C3393	2.49k	94C3418	22.1k	94C3574	499k
94C3441	249	94C3397	2.74k	94C3419	22.6k	94C3584	511k
94C3463	280	94C3398	2.8k	94C3435	24.3k	94C3618	604k
94C3485	301	94C3399	2.87k	94C3436	24.9k	94C3638	680k
94C3499	332	94C3470	3.01k	94C3458	28k	94C3639	681k
94C3505	340	94C3472	3.16k	94C3481	30.1k	94C3660	750k
94C3507	348	81C9474	3.32k	94C3496	33.2k	94C3678	806k
94C3524	390	94C3475	3.48k	94C3501	34.8k	94C3245	1.1M
94C3526	392	94C3477	3.65k	94C3512	36.5k	94C3258	1.5M
94C3540	402	94C3478	3.74k	94C3518	38.3k	94C3260	1.58k
94C3544	412	94C3480	3.92k	94C3522	39.2k	94C3263	1.65M
94C3548	422	94C3527	4.02k	94C3537	40.2k	94C3267	1.82M
94C3560	453	94C3531	4.42k	94C3541	41.2k	94C3401	2M
94C3568	475	94C3532	4.53k	94C3549	43.2k	...	...
96B4584	499	94C3534	4.75k	94C3553	44.2k	...	...

(92278)

SFR25(5043E) SERIES STANDARD METAL FILM RESISTORS

RoHS Compliant Available

VISHAY.

Features
- Low Noise (max 1.5uV/V for Res. Less Than 1 MΩ)
- Small Size (SFR16S-0204, SFR25/25H-0207)

Specifications
- Power Rating @ 70°C: 0.4W or 0.5W
- Temp. Coefficient: ±100ppm/°C
- Tolerance: ±1%
- Working Voltage 200V or 250V

Encapsulation is Resistant to all Cleaning Solvents, in Accordance With "MIL-STD-202E, Method 215", and "IEC 60068-2045".

Many more values in stock, please call or visit us online for a complete listing.

POWER RATING: 400mW — 250V

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49	Price Each 50-99
● SFR2500001009FR500	10	94C4838	0.05	0.05
● SFR2500002009FR500	20	94C4969	0.05	0.05
● SFR2500004759FR500	47.5	94C5132	0.05	0.05
● SFR2500004999FR500	49.9	04H9347	0.05	0.05
● SFR2500005119FR500	51.1	94C5152	0.05	0.05
● SFR2500006049FR500	60.4	94C5188	0.05	0.05
● SFR2500006209FR500	62	94C5195	0.05	0.05
● SFR2500007509FR500	75	74C3026	0.05	0.05
● SFR2500008069FR500	80.6	94C5245	0.05	0.05
● SFR2500001000FR500	100	94C4843	0.05	0.05
● SFR2500001100FR500	110	94C4859	0.05	0.05
● SFR2500001210FR500	121	94C4875	0.05	0.05
● SFR2500001470FR500	147	94C4902	0.05	0.05
● SFR2500001500FR500	150	94C4910	0.05	0.05
● SFR2500001650FR500	165	94C4924	0.05	0.05
● SFR2500001740FR500	174	94C4932	0.05	0.05
● SFR2500001780FR500	178	94C4934	0.05	0.05
● SFR2500002000FR500	200	94C4972	0.05	0.05
● SFR2500002200FR500	220	94C4986	0.05	0.05
● SFR2500002370FR500	237	94C4998	0.05	0.05
● SFR2500002430FR500	243	94C5004	0.05	0.05
● SFR2500002490FR500	249	94C5006	0.05	0.05
● SFR2500002670FR500	267	94C5018	0.05	0.05
● SFR2500003320FR500	332	14C3507	0.05	0.05
● SFR2500003830FR500	383	94C5089	0.05	0.05
● SFR2500003920FR500	392	94C5093	0.05	0.05
● SFR2500004020FR500	402	94C5105	0.05	0.05
● SFR2500004750FR500	475	94C5134	0.05	0.05
● SFR2500004990FR500	499	94C5141	0.05	0.05
● SFR2500005110FR500	511	94C5154	0.05	0.05
● SFR2500005900FR500	590	94C5179	0.05	0.05
● SFR2500006040FR500	604	94C5190	0.05	0.05
● SFR2500006190FR500	619	94C5194	0.05	0.05
● SFR2500006490FR500	649	94C5203	0.05	0.05
● SFR2500006810FR500	681	94C5211	0.05	0.05
● SFR2500007150FR500	715	94C5223	0.05	0.05
● SFR2500007500FR500	750	94C5230	0.05	0.05
● SFR2500008250FR500	825	94C5251	0.05	0.05
● SFR2500009090FR500	909	94C5270	0.05	0.05

➤ CONTINUED ➤

SFR25(5043E) SERIES STANDARD METAL FILM RESISTORS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49	Price Each 50-99
SFR2500001001FR500	1k	86C4789	0.05	0.05
SFR2500001101FR500	1.1k	94C4780	0.05	0.05
SFR2500001211FR500	1.21k	94C4784	0.05	0.05
SFR2500001241FR500	1.24k	94C4785	0.05	0.05
SFR2500001271FR500	1.27k	94C4786	0.04	0.04
SFR2500001301FR500	1.3k	94C4787	0.05	0.05
SFR2500001401FR500	1.4k	94C4790	0.05	0.05
SFR2500001501FR500	1.5k	94C4793	0.05	0.05
SFR2500001821FR500	1.82k	94C4801	0.05	0.05
SFR2500002001FR500	2k	85C1926	0.05	0.05
SFR2500002101FR500	2.1k	94C4951	0.05	0.05
SFR2500002211FR500	2.21k	94C4953	0.05	0.05
SFR2500002371FR500	2.37k	94C4956	0.05	0.05
SFR2500002491FR500	2.49k	94C4958	0.05	0.05
SFR2500002671FR500	2.67k	94C4961	0.05	0.05
SFR2500002741FR500	2.74k	94C4962	0.05	0.05
SFR2500002801FR500	2.8k	94C4963	0.05	0.05
SFR2500003011FR500	3.01k	94C5036	0.05	0.05
SFR2500003321FR500	3.32k	94C5040	0.05	0.05
SFR2500003741FR500	3.74k	94C5045	0.05	0.05
SFR2500003921FR500	3.92k	94C5047	0.05	0.05
SFR2500004021FR500	4.02k	94C5094	0.05	0.05
SFR2500004321FR500	4.32k	94C5097	0.05	0.05
SFR2500004751FR500	4.75k	94C5101	0.05	0.05
SFR2500004991FR500	4.99k	93B7237	0.05	0.05
SFR2500005101FR500	5.1k	94C5142	0.05	0.05
SFR2500005111FR500	5.11k	94C5143	0.05	0.05
SFR2500005601FR500	5.6k	94C5147	0.05	0.05
SFR2500005621FR500	5.62k	94C5148	0.05	0.05
SFR2500006041FR500	6.04k	94C5180	0.05	0.05
SFR2500006191FR500	6.19k	94C5181	0.05	0.05
SFR2500006651FR500	6.65k	94C5184	0.05	0.05
SFR2500006811FR500	6.81k	94C5185	0.05	0.05
SFR2500006981FR500	6.98k	94C5186	0.05	0.05
SFR2500007501FR500	7.5k	94C5218	0.05	0.05
SFR2500008061FR500	8.06k	94C5239	0.05	0.05
SFR2500008251FR500	8.25k	94C5240	0.05	0.05
SFR2500009091FR500	9.09k	94C5264	0.05	0.05
SFR2500009531FR500	9.53k	94C5266	0.05	0.05
SFR2500001002FR500	10k	53M5115	0.05	0.05
SFR2500001102FR500	11k	94C4850	0.05	0.05
SFR2500001212FR500	12.1k	94C4866	0.05	0.05
SFR2500001502FR500	15k	94C4903	0.05	0.05
SFR2500002002FR500	20k	94C4967	0.05	0.05
SFR2500002052FR500	20.5k	94C4968	0.05	0.05
SFR2500002152FR500	21.5k	94C4976	0.04	0.04
SFR2500002212FR500	22.1k	94C4983	0.05	0.05
SFR2500002432FR500	24.3k	94C4999	0.05	0.05
SFR2500002492FR500	24.9k	94C5000	0.05	0.05
SFR2500002672FR500	26.7k	94C5012	0.05	0.05
SFR2500002742FR500	27.4k	94C5019	0.05	0.05
SFR2500003012FR500	30.1k	94C5048	0.05	0.05
SFR2500003322FR500	33.2k	89C1381	0.05	0.05
SFR2500004022FR500	40.2k	94C5103	0.05	0.05
SFR2500004222FR500	42.2k	94C5110	0.05	0.05
SFR2500004752FR500	47.5k	94C5131	0.05	0.05
SFR2500004992FR500	49.9k	94C5139	0.05	0.05
SFR2500005112FR500	51.1k	94C5151	0.05	0.05
SFR2500005902FR500	59k	94C5176	0.05	0.05
SFR2500006192FR500	61.9k	94C5191	0.05	0.05
SFR2500006812FR500	68.1k	94C5208	0.05	0.05
SFR2500007322FR500	73.2k	94C5224	0.04	0.04
SFR2500009092FR500	90.9k	94C5267	0.05	0.05
SFR2500001003FR500	100k	94C4842	0.05	0.05
SFR2500001103FR500	110k	94C4858	0.05	0.05
SFR2500001203FR500	120k	94C4873	0.05	0.05
SFR2500001243FR500	124k	94C4876	0.04	0.04
SFR2500001503FR500	150k	94C4909	0.05	0.05
SFR2500002003FR500	200k	94C4971	0.05	0.05
SFR2500002703FR500	270k	94C5021	0.05	0.05
SFR2500003323FR500	332k	94C5065	0.05	0.05
SFR2500004753FR500	475k	94C5133	0.05	0.05
SFR2500004993FR500	499k	94C5140	0.05	0.05
SFR2500006043FR500	604k	94C5189	0.05	0.05

CONTINUED

SFR25(5043E) SERIES STANDARD METAL FILM RESISTORS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49	Price Each 50-99
SFR2500001004FR500	1M	53M5099	0.05	0.05
SFR2500001504FR500	1.5M	94C4822	0.14	0.13
SFR2500002004FR500	2M	94C4966	0.15	0.13
POWER RATING: 500mW — 200V				
SFR16S0001208JR500*	1.2	54R7029	0.04	0.04
SFR16S0001009FR500	10	26R4168	0.05	0.04
SFR16S0002009FR500	20	26R4180	0.05	0.04
SFR16S0003019FR500	30.1	46P3137	0.05	0.04
SFR16S0003929FR500	39.2	26R4194	0.05	0.04
SFR16S0004759FR500	47.5	26R4198	0.05	0.04
SFR16S0004999FR500	49.9	08R4748	0.06	0.04
SFR16S0007509FR500	75	26R4210	0.05	0.04
SFR16S0001000FR500	100	26R4167	0.06	0.04
SFR25H0001000FR500	100	26R4214	0.05	0.04
SFR16S0001210FR500	121	26R4169	0.06	0.04
SFR16S0001500FR500	150	26R4171	0.05	0.04
SFR16S0001500JR500*	150	54R7090	0.04	0.04
SFR16S0002000FR500	200	26R4175	0.06	0.04
SFR16S0002210FR500	221	15N6610	0.03	0.03
SFR16S0002490FR500	249	26R4184	0.05	0.04
SFR16S0003010FR500	301	26R4186	0.05	0.04
SFR16S0003320FR500	332	26R4189	0.06	0.04
SFR16S0003900FR500	390	26R4191	0.05	0.04
SFR16S0003920FR500	392	26R4192	0.05	0.04
SFR16S0004750FR500	475	05R0199	0.06	0.04
SFR16S0004990FR500	499	26R4166	0.06	0.04
SFR16S0005620FR500	562	26R4203	0.05	0.04
SFR16S0006040FR500	604	11R7396	0.05	0.04
SFR16S0006810FR500	681	26R4204	0.05	0.04
SFR16S0007500FR500	750	26R4207	0.05	0.04
SFR16S0008250FR500	825	26R4212	0.05	0.04
SFR16S0001001FR500	1k	73P9618	0.05	0.04
SFR25H0001001FR500	1k	26R4215	0.05	0.04
SFR16S0001001JR500	1k	60R3433	0.04	0.03
SFR16S0001211FR500	1.21k	26R4170	0.05	0.04
SFR16S0001501FR500	1.5k	05R0204	0.05	0.04
SFR16S0001821FR500	1.82k	26R4174	0.03	0.03
SFR16S0002001FR500	2k	26R4176	0.05	0.04
SFR16S0002201FR500	2.2k	54R7217	0.03	0.03
SFR16S0002211FR500	2.21k	26R4182	0.05	0.04
SFR16S0002491FR500	2.49k	26R4185	0.05	0.04
SFR16S0002741FR500	2.74k	06R6445	0.06	0.04
SFR16S0003011FR500	3.01k	26R4187	0.05	0.04
SFR16S0003321FR500	3.32k	26R4190	0.05	0.04
SFR16S0003921FR500	3.92k	26R4193	0.06	0.04
SFR16S0004751FR500	4.75k	26R4195	0.05	0.04
SFR16S0004991FR500	4.99k	26R4199	0.05	0.04
SFR16S0005111FR500	5.11k	26R4202	0.05	0.04
SFR16S0007501FR500	7.5k	26R4208	0.05	0.04
SFR16S0008201FR500	8.2k	26R4211	0.05	0.04
SFR16S0009091FR500	9.09k	26R4213	0.03	0.03
SFR16S0001002JA500	10k	88K0648	0.04	0.03
SFR16S0001002FR500	10k	02P9844	0.05	0.04
SFR16S0001502FR500	15k	26R4172	0.05	0.04
SFR16S0001622FR500	16.2k	26R4173	0.05	0.04
SFR16S0002002FR500	20k	26R4177	0.06	0.04
SFR16S0002212FR500	22.1k	26R4183	0.06	0.04
SFR16S0003012FR500	30.1k	26R4188	0.05	0.04
SFR16S0003322FR500	33.2k	05R0205	0.05	0.04
SFR16S0004752FR500	47.5k	26R4196	0.05	0.04
SFR16S0004992FR500	49.9k	26R4200	0.06	0.04
SFR16S0006812FR500	68.1k	26R4205	0.05	0.04
SFR16S0007322FR500	73.2k	26R4206	0.05	0.04
SFR16S0007502FR500	75k	26R4209	0.05	0.04
SFR16S0001003FR500	100k	05R0211	0.05	0.04
SFR16S0001003JR500*	100k	45P5954	0.04	0.03
SFR16S0001503FR500	150k	05R0215	0.05	0.04
SFR16S0002003FR500	200k	26R4178	0.05	0.04
SFR16S0002203FR500	220k	26R4181	0.05	0.04
SFR16S0004753FR500	475k	26R4197	0.06	0.04
SFR16S0004993FR500	499k	26R4201	0.05	0.04
SFR16S0001004FR500	1M	05R0217	0.06	0.04

CONTINUED

SFR25(5043E) SERIES STANDARD METAL FILM RESISTORS (CONT.)

POWER RATING: 500mW — 200V

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49	Price Each 50-99
● SFR16S0002004FR500	2M	26R4179	0.09	0.07
● SFR2500001005JR500*	10M	26R4216	0.05	0.04

*Tolerance: ±5%
(92279)

B0207C-F LEGACY PROFESSIONAL LEADED THIN FILM RESISTORS

RoHS Compliant Available

VISHAY.

Applications
- Industrial
- Telecommunication
- Medical Equipment

Features
- Advanced Thin Film Technology
- Excellent Overall Stability: Class 0, 25
- Current callout is the Vishay MBB series
- Sizes: DIN 0207, CECC B

General purpose resistor for all fields of professional electronics where reliability and stability is of major concern. Tested in accordance with CECC 40101-806 which refers to EN 140000 (IEC 60115-1) and EN 140100 (IEC 60115-2). For a complete list of stocked values, please visit us online.

DIMENSIONS (mm)

Model	D_{max} (mm)	L_{max} (mm)	d_{nom} (mm)	l_{min} (mm)	M_{min} (mm)
B0207C-F Series	2.5	6.3	0.6	28	10.0*

ELECTRICAL SPECIFICATIONS

Model	Power Rating @ 70°C (W)	Temperature Coefficient (ppm/°C)	Tolerance	Resistance Range (Ohms)	Working Voltage (V)
B0207C-F Series	0.6	50	1%	10R - 2M2	200

B0207C-F SERIES

Mfg. Part No.	Res (Ohms)	Stock No.	Price Each 1-199	Price Each 200-999
● MBB02070C1009FRP00	10	74C0178	0.31	0.13
● MBB02070C2009FRP00	20	94C1944	0.31	0.13
● MBB02070C4759FRP00	47.5	94C2100	0.31	0.13
● MBB02070C4999FRP00	49.9	94C2108	0.31	0.13
● MBB02070C8259FRP00	82.5	94C2208	0.31	0.13
● MBB02070C9099FRP00	90.9	94C2228	0.31	0.13
● MBB02070C1000FRP00	100	74C0168	0.31	0.13
● MBB02070C1100FRP00	110	94C1841	0.33	0.14
● MBB02070C1210FRP00	121	94C1854	0.33	0.14
● MBB02070C1300FRP00	130	94C1864	0.33	0.14
● MBB02070C1330FRP00	133	94C1866	0.31	0.13
● MBB02070C2000FRP00	200	94C1947	0.31	0.13
● MBB02070C2210FRP00	221	94C1962	0.31	0.13
● MBB02070C2490FRP00	249	04H6868	0.31	0.13
● MBB02070C3320FRP00	332	94C2034	0.31	0.13
● MBB02070C3740FRP00	374	94C2054	0.33	0.14
● MBB02070C4640FRP00	464	94C2098	0.33	0.14
● MBB02070C4750FRP00	475	94C2102	0.33	0.14
● MBB02070C4990FRP00	499	94C2110	0.31	0.13
● MBB02070C5110FRP00	511	74C0216	0.31	0.13
● MBB02070C5900FRP00	590	94C2140	0.31	0.13
● MBB02070C6810FRP00	681	94C2170	0.31	0.13
● MBB02070C7150FRP00	715	94C2182	0.31	0.13
● MBB02070C7500FRP00	750	94C2189	0.31	0.13
● MBB02070C8250FRP00	825	94C2210	0.31	0.13
● MBB02070C9090FRP00	909	94C2230	0.33	0.14
● MBB02070C1001FRP00	1k	90B3345	0.34	0.15
● MBB02070C1211FRP00	1.21k	94C1795	0.33	0.14
● MBB02070C1301FRP00	1.3k	94C1798	0.33	0.14
● MBB02070C1401FRP00	1.4k	74C0191	0.31	0.13
● MBB02070C1501FRP00	1.5k	94C1803	0.31	0.13
● MBB02070C2051FRP00	2.05k	94C1929	0.31	0.13
● MBB02070C2211FRP00	2.21k	94C1931	0.31	0.13
● MBB02070C2491FRP00	2.49k	94C1933	0.31	0.13
● MBB02070C3011FRP00	3.01k	94C2008	0.33	0.14
● MBB02070C3321FRP00	3.32k	74C0211	0.31	0.13
● MBB02070C3921FRP00	3.92k	74C0213	0.33	0.14
● MBB02070C4021FRP00	4.02k	94C2063	0.31	0.13
● MBB02070C4751FRP00	4.75k	94C2070	0.31	0.13
● MBB02070C4991FRP00	4.99k	94C2072	0.31	0.13
● MBB02070C5111FRP00	5.11k	74C0220	0.31	0.13
● MBB02070C6811FRP00	6.81k	94C2145	0.31	0.13
● MBB02070C6981FRP00	6.98k	94C2146	0.09	0.09

➤CONTINUED➤

B0207C-F LEGACY PROFESSIONAL LEADED THIN FILM RESISTORS (CONT.)

Mfg. Part No.	Res (Ohms)	Stock No.	Price Each 1-199	Price Each 200-999
● MBB02070C9091FRP00	9.09k	94C2223	0.31	0.13
● MBB02070C1002FRP00	10k	74C0155	0.33	0.14
● MBB02070C1212FRP00	12.1k	94C1847	0.31	0.13
● MBB02070C1502FRP00	15k	94C1881	0.31	0.13
● MBB02070C2002FRP00	20k	74C0193	0.31	0.13
● MBB02070C2492FRP00	24.9k	94C1974	0.31	0.13
● MBB02070C3012FRP00	30.1k	74C0209	0.31	0.13
● MBB02070C3322FRP00	33.2k	94C2031	0.31	0.13
● MBB02070C4752FRP00	47.5k	94C2099	0.31	0.13
● MBB02070C4992FRP00	49.9k	94C2107	0.31	0.13
● MBB02070C7502FRP00	75k	74C0224	0.31	0.13
● MBB02070C9092FRP00	90.9k	94C2227	0.31	0.13
● MBB02070C1003FRP00	100k	74C0161	0.31	0.13
● MBB02070C1153FRP00	115k	94C1844	0.31	0.13
● MBB02070C2003FRP00	200k	94C1946	0.31	0.13
● MBB02070C4753FRP00	475k	94C2101	0.31	0.13
● MBB02070C1204FRP00	1.2M	94C1816	0.31	0.13
● MBB02070C1504FRP00	1.5M	94C1818	0.31	0.13
● MBB02070C2004FRP00	2M	94C1941	0.31	0.13
● MBB02070C2204FRP00	2.2M	94C1942	0.31	0.13

(92277)

CCF55/CCF60 SERIES INDUSTRIAL METAL FILM RESISTORS

RoHS Compliant Available

VISHAY.

Specifications
- Temperature Coeff.: ±100 ppm
- Voltage Rating: 250V; 350V **(CCF02 only)**; 500V **(CCF60 only)**
- Operating Temp. Range: -65°C to +230°C **(CCF02 only)**
  -65°C to +150°C **(CCF07)**
  -65°C to +165°C **(CCF55 & CCF60)**

Features
- Superior electrical performance
- Flame retardant epoxy conformal coating

CCF02 SERIES, POWER RATING: 2 WATTS

Mfg. Part No.	Res. (Ohms)	Res. Tol.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● CCF0247K0JKE36	47k	± 5%	71M0978	0.45
CCF07 SERIES, POWER RATING: 0.5 WATTS				
● CCF0710R0GKE36	10	± 2%	26R3979	0.19
● CCF0722R0JKE36	22	± 5%	26R3986	0.19
● CCF0747R0GKE36	47	± 2%	26R3997	0.19
● CCF07100RGKE36	100	± 2%	26R3980	0.19
● CCF07120RGKE36	120	± 2%	26R3981	0.19
● CCF07220RGKE36	220	± 2%	26R3988	0.19
● CCF07220RJKE36	220	± 5%	71M1007	0.19
● CCF07240RGKE36	240	± 2%	26R3989	0.19
● CCF07270RGKE36	270	± 2%	26R3990	0.19
● CCF07330RGKE36	330	± 2%	26R3993	0.19
● CCF07390RGKE36	390	± 2%	26R3995	0.19
● CCF07390RJKE36	390	± 5%	26R3996	0.24
● CCF07470RGKE36	470	± 2%	26R3998	0.19
● CCF07470RJKE36	470	± 5%	71M1021	0.19
● CCF07680RJKE36	680	± 5%	26R4000	0.19
● CCF07820RGKE36	820	± 2%	71M1023	0.23
● CCF071K00GKE36	1k	± 2%	71M0980	0.19
● CCF071K50JNE36	1.5k	± 5%	71M0983	0.18
● CCF072K00GKE36	2k	± 2%	26R3983	0.19
● CCF072K20GKE36	2.2k	± 2%	71M0997	0.19
● CCF073K00GKE36	3k	± 2%	26R3991	0.19
● CCF073K30GKE36	3.3k	± 2%	71M1009	0.23
● CCF074K70GKE36	4.7k	± 2%	71M1013	0.19
● CCF074K70JKE36	4.7k	± 5%	71M1015	0.23
● CCF0710K0GKE36	10k	± 2%	71M0987	0.24
● CCF0710K0JKE36	10k	± 5%	71M0989	0.19
● CCF0715K0JKE36	15k	± 5%	26R3982	0.19
● CCF0720K0JKE36	20k	± 5%	71M1001	0.23
● CCF0722K0GKE36	22k	± 2%	26R3985	0.19
● CCF0733K0GKE36	33k	± 2%	26R3992	0.19
● CCF0733K0JKE36	33k	± 5%	71M1011	0.23
● CCF0739K0GKE36	39k	± 2%	26R3994	0.19
● CCF0747K0GKE36	47k	± 2%	71M1017	0.19
● CCF0747K0JKE36	47k	± 5%	71M1019	0.23
● CCF0756K0GKE36	56k	± 2%	26R3999	0.19
● CCF07100KGKE36	100k	± 2%	71M0991	0.19
● CCF07200KGKE36	200k	± 2%	26R3984	0.19

➤CONTINUED➤

CCF55/CCF60 SERIES INDUSTRIAL METAL FILM RESISTORS (CONT.)

CCF07 SERIES, POWER RATING: 0.5 WATTS

Mfg. Part No.	Res. (Ohms)	Res. Tol.	Tape Cut Stock No.	Price Each 1-9
CCF07220KGKE36	220k	± 2%	26R3987	0.19
CCF07220KJKE36	220k	± 5%	71M1005	0.24
CCF071M00JKE36	1M	± 5%	71M0985	0.19
CCF071M00GKE36	1M	± 2%	26R3978	0.19
CCF55 SERIES, POWER RATING: 0.5 WATTS				
CCF5510R0FKE36	10	± 1%	71M1031	0.19
CCF5520R0FKE36	20	± 1%	26R3976	0.19
CCF5549R9FKE36	49.9	± 1%	26R4010	0.19
CCF55150RFKE36	150	± 1%	71M1042	0.19
CCF55200RFKE36	200	± 1%	71M1052	0.19
CCF55221RFKE36	221	± 1%	71M1058	0.24
CCF55332RFKE36	332	± 1%	71M1068	0.19
CCF55499RFKE36	499	± 1%	71M1082	0.19
CCF55562RFKE36	562	± 1%	71M1088	0.19
CCF55750RFKE36	750	± 1%	71M1098	0.19
CCF551K00FKE36	1k	± 1%	71M1025	0.19
CCF551K10FKE36	1.1k	± 1%	26R4001	0.19
CCF551K50FKE36	1.5k	± 1%	71M1026	0.19
CCF551K82FKE36	1.82k	± 1%	26R4002	0.24
CCF552K00FKE36	2k	± 1%	71M1044	0.19
CCF552K21FKE36	2.2k	± 1%	71M1046	0.19
CCF552K49FKE36	2.49k	± 1%	26R4006	0.19
CCF554K32FKE36	4.32k	± 1%	26R4009	0.23
CCF554K75FKE36	4.75k	± 1%	71M1070	0.19
CCF554K99FKE36	4.99k	± 1%	71M1072	0.19
CCF555K11FKE36	5.11k	± 1%	71M1084	0.19
CCF555K62FKE36	5.62k	± 1%	71M1086	0.19
CCF556K81FKE36	6.81k	± 1%	71M1090	0.19
CCF5510K0FKE36	10k	± 1%	71M1030	0.19
CCF5511K0FKE36	11k	± 1%	26R4004	0.19
CCF5512K1FKE36	12.1k	± 1%	26R4005	0.19
CCF5515K0FKE36	15k	± 1%	71M1038	0.19
CCF5520K0FKE36	20k	± 1%	71M1050	0.19
CCF5522K1FKE36	22.1k	± 1%	71M1054	0.19
CCF5533K2FKE36	33.2k	± 1%	71M1066	0.23
CCF5549K9FKE36	49.9k	± 1%	71M1080	0.19
CCF5551K1FKE36	51.1k	± 1%	26R4011	0.23
CCF5568K1FKE36	68.1k	± 1%	71M1092	0.23
CCF5575K0FKE36	75k	± 1%	71M1096	0.19
CCF55100KFKE36	100k	± 1%	71M1032	0.19
CCF55150KFKE36	150k	± 1%	71M1040	0.19
CCF55200KFKE36	200k	± 1%	26R4008	0.19
CCF55221KFKE36	221k	± 1%	71M1056	0.23
CCF55475KFKE36	475k	± 1%	71M1076	0.23
CCF55750KFKE36	750k	± 1%	26R4012	0.19
CCF551M00FKE36	1M	± 1%	71M1028	0.19
CCF551M50FKE36	1.5M	± 1%	26R4003	0.19
CCF552M00FKE36	2M	± 1%	71M1048	0.19
CCF552M21FKE36	2.21M	± 1%	26R4007	0.03
CCF60 SERIES, POWER RATING: 1 WATTS				
CCF6010R0FKE36	10	± 1%	71M1109	0.25
CCF60100RFKE36	100	± 1%	71M1113	0.25
CCF60150RFKE36	150	± 1%	71M1117	0.25
CCF601K00FKE36	1k	± 1%	71M1099	0.25
CCF601K50FKE36	1.5k	± 1%	71M1101	0.25
CCF601K82FKE36	1.82k	± 1%	71M1103	0.24
CCF602K21FKE36	2.21k	± 1%	71M1119	0.25
CCF604K75FKE36	4.75k	± 1%	71M1127	0.25
CCF6010K0FKE36	10k	± 1%	71M1107	0.24
CCF6015K0FKE36	15k	± 1%	71M1115	0.25
CCF6022K1FKE36	22.1k	± 1%	71M1121	0.25
CCF6047K5FKE36	47.5k	± 1%	71M1129	0.25
CCF6056K2FKE36	56.2k	± 1%	71M1133	0.10
CCF6068K1FKE36	68.1k	± 1%	71M1135	0.25
CCF6082K5FKE36	82.5k	± 1%	71M1137	0.25
CCF60100KFKE36	100k	± 1%	71M1111	0.25
CCF60221KFKE36	221k	± 1%	71M1123	0.25
CCF60332KFKE36	332k	± 1%	71M1125	0.25
CCF60475KFKE36	475k	± 1%	71M1131	0.25
CCF601M00FKE36	1M	± 1%	71M1105	0.25

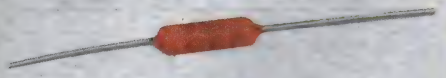
(105954)

TYPE RLR (MIL-PRF-39017) AXIAL LEAD METAL FILM RESISTORS

VISHAY.

FEATURES

- High Reliability
- Meets Requirements of MIL-PRF-39017 (RLR Only)
- Epoxy Coated Construction Provides Superior Moisture Protection
- Very Low Noise (- 40 dB)



ELECTRICAL SPECIFICATIONS

MIL Type	Tolerance	T.C. (ppm/°C)	MIL Power Rating @ 70°C (W)	Voltage Rating (Max)
RLR07C	±1%, ±2%	100	0.25	250
RLR05C	±2%	100	1	500

RLR05C STYLE METAL FILM RESISTORS

Mfg. Part No.	Res. (ohm)	Res. Tol	Stock No.	Price Each 1-49	Price Each 50-99
RLR05C10R0FSB14	10	± 1%	07H1883	3.37	2.79
RLR05C47R0GSB14	47	± 2%	92B4867	3.23	2.67
RLR05C1000FSB14	100	± 1%	96B1301	3.51	2.90
RLR05C1200GSB14	120	± 2%	61C9640	3.36	2.78
RLR05C1500GSB14	150	± 2%	93B3165	3.36	2.78
RLR05C2200GSB14	220	± 2%	50C1087	3.36	2.78
RLR05C3300GSB14	330	± 2%	88C0669	3.23	2.67
RLR05C4700GSB14	470	± 2%	50C4114	3.23	2.67
RLR05C6800GSB14	680	± 2%	50C5656	3.23	2.67
RLR05C1001FSB14	1k	± 1%	01C1936	3.51	2.90
RLR05C1201GSB14	1.2k	± 2%	61C9657	3.23	2.67
RLR05C1501FSB14	1.5k	± 1%	18C2594	3.37	2.79
RLR05C1501GSB14	1.5k	± 2%	49C9714	3.23	2.67
RLR05C2001FSB14	2k	± 1%	18C2623	3.37	2.79
RLR05C2201GSB14	2.2k	± 2%	64M0816	3.23	2.67
RLR05C3301GSB14	3.3k	± 2%	50C2661	3.23	2.67
RLR05C3901GSB14	3.9k	± 2%	25C2394	3.23	2.67
RLR05C4701GSB14	4.7k	± 2%	16M3509	3.23	2.67
RLR05C5101GSB14	5.1k	± 2%	50C4591	3.23	2.67
RLR05C5601GSB14	5.6k	± 2%	24C0374	3.23	2.67
RLR05C6201GSB14	6.2k	± 2%	50C5403	3.23	2.67
RLR05C1502GSB14	15k	± 2%	49C9760	3.23	2.67
RLR05C2002FSB14	20k	± 1%	91B8126	3.37	2.79
RLR05C2202GSB14	22k	± 2%	14C7895	3.23	2.67
RLR05C3002GSB14	30k	± 2%	50C2321	3.23	2.67
RLR05C4702GSB14	47k	± 2%	50C4189	3.23	2.67
RLR05C1003FSB14	100k	± 1%	82K6230	3.37	2.79
RLR05C1004GPB14	1M	± 2%	61C9147	11.93	10.37
RLR05C2000GSB14	200M	± 2%	50C0706	3.23	2.67
RLR05C6200GSB14	620M	± 2%	50C5387	3.23	2.67
ERL-07/ RLR07C STYLE METAL FILM RESISTORS					
RLR07C10R0FSB14	10	± 1%	98B8811	0.71	0.60
RLR07C10R0GSB14	10	± 2%	90B4656	1.97	1.63
RLR07C20R0FSB14	20	± 1%	51C0174	2.00	1.66
RLR07C22R0GSB14	22	± 2%	51C0734	1.97	1.63
RLR07C39R0GSB14	39	± 2%	51C3568	1.97	1.63
RLR07C47R0GSB14	47	± 2%	03M5447	1.97	1.63
RLR07C49R9FSB14	49.9	± 1%	51C4757	2.08	1.72
RLR07C51R0GSB14	51	± 2%	84H0627	2.05	1.69
RLR07C51R1FSB14	51.1	± 1%	90H9360	2.00	1.66
RLR07C56R0GSB14	56	± 2%	64M0817	1.97	1.63
RLR07C75R0FSB14	75	± 1%	51C6660	2.08	1.72
RLR07C75R0GSB14	75	± 2%	51C6687	1.97	1.63
RLR07C1000GSB14	100	± 2%	81H5886	1.97	1.63
RLR07C1500FSB14	150	± 1%	94B8284	2.00	1.66
RLR07C1500GSB14	150	± 2%	19C8908	1.97	1.63
RLR07C1800GSB14	180	± 2%	81H5871	1.97	1.63
RLR07C2000FSB14	200	± 1%	51C0238	0.71	0.60
RLR07C2000GSB14	200	± 2%	88F2648	1.97	1.63
RLR07C2200GSB14	220	± 2%	81H5887	2.05	1.69
RLR07C2210FSB14	221	± 1%	51C0940	2.00	1.66
RLR07C2400GSB14	240	± 2%	98B8815	1.97	1.63
RLR07C2700GSB14	270	± 2%	13C2663	1.97	1.63
RLR07C3000GSB14	300	± 2%	51C2360	2.05	1.69
RLR07C3010FSB14	301	± 1%	81H6373	2.15	1.81
RLR07C3300GSB14	330	± 2%	83H3549	1.97	1.63
RLR07C3320FSB14	332	± 1%	96H5713	2.00	1.66
RLR07C4700GSB14	470	± 2%	81H6369	0.67	0.56
RLR07C4750FSB14	475	± 1%	81H4051	2.00	1.66
RLR07C4990FSB14	499	± 1%	39C0155	2.00	1.66

CONTINUED

TYPE RLR (MIL-PRF-39017) AXIAL LEAD METAL FILM RESISTORS (CONT.)

ERL-07/ RLR07C STYLE METAL FILM RESISTORS

Mfg. Part No.	Res. (ohm)	Res. Tol	Stock No.	Price Each 1-49	Price Each 50-99
RLR07C5100GSB14	510	± 2%	51C5015	0.67	0.67
RLR07C5600GSB14	560	± 2%	23K2628	2.05	1.69
RLR07C6800GSB14	680	± 2%	51C6275	1.97	1.63
RLR07C7500FSB14	750	± 1%	51C6709	2.00	1.66
RLR07C7500GSB14	750	± 2%	51C6733	1.97	1.63
RLR07C8200GSB14	820	± 2%	51C7092	2.05	1.69
RLR07C1001GRB14	1k	± 2%	08C4964	0.67	0.56
RLR07C1001GSB14	1k	± 2%	94B6917	0.66	0.56
RLR07C1101FSB14	1.1k	± 1%	50C7704	2.08	1.72
RLR07C1201GSB14	1.2k	± 2%	92B2262	0.62	0.52
RLR07C1211FSB14	1.21k	± 1%	50C8227	2.15	1.81
RLR07C1501GSB14	1.5k	± 2%	29C4902	0.67	0.56
RLR07C1801GSB14	1.8k	± 2%	81H6466	1.97	1.63
RLR07C2001FSB14	2k	± 1%	83H3570	0.71	0.60
RLR07C2001GSB14	2k	± 2%	81H5876	2.05	1.69
RLR07C2201GSB14	2.2k	± 2%	20H0083	0.67	0.56
RLR07C2401GSB14	2.4k	± 2%	51C1304	1.97	1.63
RLR07C2491FSB14	2.49k	± 1%	51C1517	2.08	1.72
RLR07C2701GSB14	2.7k	± 2%	13C2668	2.11	1.78
RLR07C2741FSB14	2.74k	± 1%	51C1992	2.00	1.66
RLR07C3001GSB14	3k	± 2%	97H5175	2.05	1.69
RLR07C3011FSB14	3.01k	± 1%	51C2508	2.00	1.66
RLR07C3301GSB14	3.3k	± 2%	51C2871	2.05	1.69
RLR07C3321FSB14	3.32k	± 1%	51C3002	2.00	1.66
RLR07C3601GSB14	3.6k	± 2%	51C3309	2.05	1.69
RLR07C3901GSB14	3.9k	± 2%	51C3643	1.97	1.63
RLR07C3921FSB14	3.92k	± 1%	51C3745	2.00	1.66
RLR07C4021FSB14	4.02k	± 1%	51C3872	2.00	1.66
RLR07C4301GSB14	4.3k	± 2%	51C4100	1.97	1.63
RLR07C4751FSB14	4.75k	± 1%	81H4052	2.08	1.72
RLR07C4991FSB14	4.99k	± 1%	49H5464	0.71	0.60
RLR07C5101GSB14	5.1k	± 2%	93B6104	0.67	0.56
RLR07C5601GSB14	5.6k	± 2%	51C5512	2.05	1.69
RLR07C6801GSB14	6.8k	± 2%	51C6315	1.97	1.63
RLR07C6811FSB14	6.81k	± 1%	51C6403	2.00	1.66
RLR07C7501FSB14	7.5k	± 1%	51C6756	2.00	1.66
RLR07C7501GSB14	7.5k	± 2%	51C6779	1.97	1.63
RLR07C8201GSB14	8.2k	± 2%	51C7120	1.97	1.63
RLR07C8251FSB14	8.25k	± 1%	93B6106	2.00	1.66
RLR07C9091FSB14	9.09k	± 1%	81H4062	2.00	1.66
RLR07C1002GRB14	10k	± 2%	50C7299	0.67	0.56
RLR07C1002GSB14	10k	± 2%	83H3545	0.66	0.56
RLR07C1102FSB14	11k	± 1%	92B7313	2.08	1.72
RLR07C1202GSB14	12k	± 2%	50C8132	1.97	1.63
RLR07C1822FSB14	18.2k	± 1%	93B6108	2.08	1.72
RLR07C2202GSB14	22k	± 2%	90B6871	1.97	1.63
RLR07C2212FSB14	22.1k	± 1%	96B1205	2.00	1.66
RLR07C2702GSB14	27k	± 2%	51C1918	1.97	1.63
RLR07C2742FSB14	27.4k	± 1%	96B5675	2.00	1.66
RLR07C3012FSB14	30.1k	± 1%	51C2525	2.00	1.66
RLR07C4022FSB14	40.2k	± 1%	81H5889	2.00	1.66
RLR07C4302GSB14	43k	± 2%	51C4118	1.97	1.63
RLR07C4702GSB14	47k	± 2%	83H3562	1.97	1.63
RLR07C4752FSB14	47.5k	± 1%	73K0801	2.00	1.66
RLR07C4992FSB14	49.9k	± 1%	51C4828	2.00	1.66
RLR07C5102GSB14	51k	± 2%	51C5085	1.97	1.63
RLR07C5602GSB14	56k	± 2%	69K6809	1.97	1.63
RLR07C1003GSB14	100k	± 2%	89C0443	0.64	0.54
RLR07C2003FSB14	200k	± 1%	50B2509	2.08	1.72
RLR07C3003GSB14	300k	± 2%	51C2447	1.97	1.63
RLR07C4703GSB14	470k	± 2%	25C0687	1.97	1.63
RLR07C1004FSB14	1M	± 1%	83H4264	2.25	1.86
RLR07C1004GSB14	1M	± 2%	50C7426	2.11	1.74
RLR07C2004FSB14	2M	± 1%	51C0458	3.58	2.96
RLR07C2204GSB14	2.2M	± 2%	51C0918	3.48	2.88
RLR07C2211FSB14	2.21M	± 1%	50B9558	2.15	1.81
RLR07C1005GPB14	10M	± 2%	96B1777	5.14	4.45
RLR07C1002FRB14	10M	± 1%	50C7264	0.70	0.59
RLR07C1502FSB14	15M	± 1%	83H4387	2.00	1.66
RLR07C1802GSB14	18M	± 2%	50C9829	1.97	1.63
RLR07C2002GSB14	20M	± 2%	83H3556	1.97	1.63
RLR07C2430FSB14	243M	± 1%	51C1409	2.00	1.66
RLR07C3322FSB14	33.2M	± 1%	51C3035	2.00	1.66

➤CONTINUED➤

TYPE RLR (MIL-PRF-39017) AXIAL LEAD METAL FILM RESISTORS (CONT.)

RLR32C METAL FILM RESISTORS

Mfg. Part No.	Res. (ohm)	Res. Tol	Stock No.	Price Each 1-49	Price Each 50-99
RLR32C1001GRB14	1k	± 2%	52C0916	9.20	8.00

(103515)

PR (5073NW LEGACY) SERIES PROFESSIONAL POWER METAL FILM RESISTORS

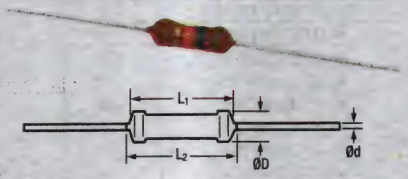
RoHS Compliant Available

VISHAY.

Features
- Vishay PR Series (displaying legacy nomenclature)
- High power in small packages (1 W/0207 size to 3 W/0617 size)
- Defined interruption behavior

Applications
- All General Purpose Power Applications

Specifications
- Temp. Coefficient: ±250ppm/°C
- Res. Tolerance: ±5%
- Working Voltage: 350V



Coated with a red, nonflammable lacquer which provides electrical, mechanical and climatic protection. Coating is not resistant to aggressive fluxes. Encapsulation is resistant to all cleaning solvents in accordance with MIL-STD-202E, method 215, and IEC 60068-2-45. Approval Category: IEC 60115-1, IEC 60115-4

DIMENSIONS

Model	ØD Max. (mm)	L_1 Max. (mm)	L_2 Max. (mm)	Ød (mm)
5073NW	2.5	6.5	8.5	0.58 ±0.05
5083NW	3.9	10.0	12.0	0.8 ±0.03
5093NW	5.2	16.7	19.5	0.8 ±0.03

5073NW SERIES, 1 WATT

Res. (Ohms)	Tape Cut Stock No.	Tape Cut Price Each 1-99	Res. (Ohms)	Tape Cut Stock No.	Tape Cut Price Each 1-99
1	94C2288	0.10	1.2k	94C2283	0.09
1.1	53M5121	0.09	1.3k	94C2284	0.10
1.5	94C2292	0.09	1.5k	94C2285	0.10
1.8	53M5124	0.09	1.6k	53M5120	0.09
2	94C2326	0.10	1.8k	94C2287	0.10
2.2	54M6088	0.09	2k	94C2322	0.10
2.7	94C2329	0.10	2.2k	94C2323	0.10
3	53M5155	0.09	2.4k	94C2324	0.10
3.3	94C2351	0.10	2.7k	94C2325	0.09
3.6	53M5156	0.09	3k	94C2346	0.09
3.9	53M5157	0.09	3.3k	53M5153	0.10
4.7	94C2373	0.10	3.9k	53M5154	0.09
5.1	94C2384	0.09	4.7k	94C2371	0.10
6.2	53M5180	0.09	5.1k	94C2382	0.10
6.8	94C2397	0.09	5.6k	94C2383	0.09
8.2	53M5190	0.10	6.2k	94C2394	0.09
10	94C2295	0.10	6.8k	53M5179	0.09
18	53M5141	0.10	7.5k	94C2406	0.09
22	94C2335	0.09	8.2k	94C2412	0.10
30	53M5158	0.09	9.1k	53M5194	0.09
33	53M5161	0.10	10k	91C4006	0.10
43	53M5170	0.09	12k	26R4156	0.19
47	94C2379	0.09	18k	94C2318	0.10
51	94C2387	0.09	22k	94C2334	0.09
68	94C2403	0.10	24k	53M5146	0.09
75	94C2409	0.09	30k	94C2354	0.09
100	53M5125	0.10	33k	53M5160	0.09
120	94C2305	0.10	47k	94C2378	0.10
150	94C2313	0.09	51k	53M5174	0.10
180	94C2321	0.10	62k	53M5181	0.09
200	53M5144	0.09	82k	53M5191	0.09
220	94C2337	0.10	91k	53M5196	0.09
270	53M5152	0.10	100k	94C2296	0.10
300	94C2357	0.09	120k	53M5131	0.09
330	94C2361	0.10	150k	94C2312	0.10
390	94C2369	0.09	200k	94C2332	0.10
470	94C2381	0.10	220k	53M5145	0.10
510	94C2389	0.09	240k	53M5148	0.09
560	94C2393	0.09	300k	53M5159	0.10
620	94C2401	0.09	330k	94C2360	0.04
680	94C2405	0.10	510k	53M5175	0.10
750	53M5189	0.09	1M	86C7213	0.10
820	94C2417	0.09	...	...	...
1k	94C2281	0.10	...	...	...

➤CONTINUED➤

PR (5073NW LEGACY) SERIES PROFESSIONAL POWER METAL FILM RESISTORS (CONT.)

PR (5063NW LEGACY) SERIES PROFESSIONAL POWER METAL FILM RESISTORS

Res. (Ohms)	Tape Cut Stock No.	Tape Cut Price Each 1-99	Res. (Ohms)	Tape Cut Stock No.	Tape Cut Price Each 1-99
1	90C0880	0.19	390	54M6090	0.19
1.8	94C2437	0.18	470	94C2523	0.19
2	53M5223	0.18	510	94C2531	0.18
2.2	94C2470	0.18	560	94C2535	0.19
2.7	53M5225	0.18	680	53M5269	0.19
3	53M5238	0.18	910	94C2565	0.18
3.3	53M5239	0.19	1k	94C2424	0.19
3.9	26R4161	0.18	1.2k	94C2426	0.18
4.7	54M6091	0.18	1.5k	26R4157	0.19
...	...	...	1.8k	53M5202	0.18
5.1	26R4162	0.18	2k	94C2465	0.19
6.8	53M5264	0.18	2.2k	94C2466	0.19
8.2	53M5276	0.19	3.3k	53M5235	0.18
10	94C2439	0.19	4.7k	94C2513	0.18
12	94C2446	0.18	5.1k	94C2524	0.18
15	53M5216	0.19	5.6k	94C2525	0.18
20	53M5226	0.19	6.8k	53M5262	0.18
22	94C2477	0.18	8.2k	53M5275	0.18
24	53M5228	0.18	10k	94C2438	0.19
33	94C2501	0.19	12k	94C2445	0.18
39	53M5248	0.18	12k	26R4156	0.19
47	94C2521	0.19	15k	94C2453	0.18
51	94C2529	0.18	20k	26R4158	0.18
56	94C2533	0.18	22k	94C2476	0.19
56	26R4163	0.19	24k	94C2480	0.18
75	53M5272	0.18	27k	26R4159	0.08
100	94C2440	0.19	30k	26R4160	0.19
110	94C2444	0.18	33k	94C2500	0.18
120	94C2448	0.18	47k	94C2520	0.19
150	94C2456	0.19	62k	94C2540	0.19
160	94C2460	0.18	68k	94C2544	0.18
200	94C2475	0.19	100k	77C5058	0.19
220	94C2479	0.19	150k	94C2455	0.18
240	53M5230	0.19	220k	94C2478	0.19
270	53M5233	0.19	470k	53M5255	0.18
330	94C2503	0.19	1M	94C2431	0.18
360	53M5246	0.18	...	...	...
5093NW SERIES, 3 WATT					
10	94C3726	0.38	3.3k	94C3774	0.36
47	53M5308	0.38	5.1k	94C3803	0.38
51	94C3806	0.36	5.6k	26R4164	0.36
75	53M5315	0.38	10k	94C3725	0.38
100	94C3728	0.36	20k	53M5295	0.38
120	94C3736	0.38	22k	94C3761	0.38
150	94C3744	0.38	27k	94C3769	0.36
200	53M5296	0.36	33k	94C3781	0.36
220	94C3764	0.37	68k	94C3819	0.38
240	53M5298	0.36	82k	94C3829	0.36
270	94C3772	0.38	150k	94C3743	0.38
300	53M5301	0.36	200k	94C3759	0.38
470	94C3802	0.36	220k	94C3763	0.38
620	94C3818	0.36	470k	94C3801	0.38
680	94C3822	0.38	1M	24C8733	0.37
1k	94C3718	0.37	...	...	...
2.2k	53M5293	0.36	...	...	...
2.4k	94C3755	0.38	...	...	...

(92280)

POWER METAL FILM RESISTORS

RoHS Compliant Available

multicomp

Specifications

- Tolerance: ±5% Standard
- Power Rating @ 70°C: 2W (max.)
- Temperature Coeff.: +/-250ppm/°C; +/-100ppm/°C (MFF04 only)

0.4 WATT

Mfg. Part No.	Res. (ohms)	Stock No.	Price Each 1-99	Price Each 100-499
MCMFF04FF1000A50	100ohm	99M0834	0.03	0.02
MCMFF04FF4990A50	499	99M0839	0.03	0.02
MCMFF04FF1001A50	1k	99M0835	0.22	0.14
MCMFF04FF2001A50	2k	99M0837	0.03	0.02
MCMFF04FF2211A50	2.21k	99M0838	0.03	0.02
MCMFF04FF1002A50	10k	99M0836	0.03	0.02

➤CONTINUED➤

POWER METAL FILM RESISTORS (CONT.)

1 WATT

Mfg. Part No.	Res. (ohms)	Stock No.	Price Each 1-99	Price Each 100-499
MCMF01WJJ047JA10	4.7	99M0849	0.06	0.04
MCMF01WJJ0100A10	10	99M0840	0.06	0.04
MCMF01WJJ0510A10	51	99M0852	0.06	0.04
MCMF01WJJ0101A10	100	99M0841	0.06	0.04
MCMF01WJJ0121A10	120	99M0844	0.06	0.04
MCMF01WJJ0151A10	150	99M0845	0.06	0.04
MCMF01WJJ0181A10	180	99M0846	0.06	0.04
MCMF01WJJ0471A10	470	99M0850	0.06	0.04
MCMF01WJJ0681A10	680	99M0853	0.06	0.04
MCMF01WJJ0302A10	3k	99M0847	0.06	0.04
MCMF01WJJ0392A10	3.9k	99M0848	0.06	0.04
MCMF01WJJ0472A10	4.7k	99M0851	0.06	0.04
MCMF01WJJ0103A10	10k	99M0842	0.06	0.04
MCMF01WJJ0104A10	100k	99M0843	0.06	0.04
2 WATT				
MCMF02WJJ010JA10	1	99M0854	0.12	0.08
MCMF02WJJ022JA10	2.2	99M0861	0.12	0.08
MCMF02WJJ0100A10	10	99M0855	0.09	0.06
MCMF02WJJ0101A10	100	99M0856	0.09	0.06
MCMF02WJJ0201A19	200	99M0859	0.09	0.06
MCMF02WJJ0102A10	1k	99M0857	0.10	0.06
MCMF02WJJ0202A10	2k	99M0860	0.09	0.06
MCMF02WJJ103A10	10k	99M0863	0.09	0.06
MCMF02WJJ0153A10	15k	99M0858	0.09	0.06
MCMF02WJJ0243A10	24k	99M0862	0.09	0.06

(116693)

CPF SERIES HIGH TEMPERATURE FLAMEPROOF METAL FILM POWER RESISTORS

RoHS Compliant Available

VISHAY.

Features

- High-power rating, small size
- Flameproof, high-temperature coating
- Low noise and low voltage coefficient
- Excellent high frequency characteristics
- Special filming and coating process

Specifications

- Rated Dissipation @ 70°C: **SeriesCPF–1**: 1W; **Series CPF–2**: 2W; Type CPF–3: 3W
- Limiting Element Voltage: Approx. 250V for **Series CPF-1**; 350V for **CPF-2**; 500V for **CPF-3**
- Operating Temperature: -65°C to +230°C
- Insulation Resistance: $10^{10}\Omega$
- Tolerance: F = ±1%; J = ±5%

DIMENSIONS (mm)

Series	L	D	L_1 (Max.)	d
CPF–1	0.240±0.020 (6.10±0.508)	0.090±0.008 (2.29±0.203)	0.310 (7.87)	0.025±0.002 (0.635±0.051)
CPF–2	0.344±0.031 (8.74±0.787)	0.145±0.015 (3.68±0.381)	0.425 (10.80)	0.032±0.002 (0.813±0.051)
CPF–3	0.555±0.041 (14.10±1.04)	0.180±0.015 (4.57±0.381)	0.650 (16.51)	0.032±0.002 (0.813±0.051)

CPF-1 SERIES

Mfg. Part No.	Res. (Ohms)	Res. Tol.	Stock No.	Price Each 1-99	Price Each 100-299
CPF1R22000JNE14	0.22	± 5%	63M2706	1.86	1.51
CPF11R0000FKE14	1	± 1%	63M2707	0.89	0.75
CPF12R0000FKE14	2	± 1%	63M2709	0.90	0.76
CPF110R000FKE14	10	± 1%	41K8832	0.51	0.43
CPF150R000FEE14	50	± 1%	34P1894	0.68	0.58
CPF1100R00FKE14	100	± 1%	41K8834	0.51	0.43
CPF1470R00GKE14	470	± 2%	63M2711	0.56	0.47
CPF11K0000FKE14	1k	± 1%	41K8830	0.40	0.34
CPF110K000FKE14	10k	± 1%	41K8831	0.51	0.43
CPF133K000FKE14	33k	± 1%	63M2710	0.51	0.43
CPF1100K00FKE14	100k	± 1%	41K8833	0.51	0.43
CPF-2 SERIES					
CPF2R10000JNE14	0.1	± 5%	65K2393	1.87	1.52
CPF21R0000FKE14	1	± 1%	41K8838	1.07	0.87
CPF21R0000FKE36	1	± 1%	65K2394	1.09	0.89
CPF22R0000FKE14	2	± 1%	65K2397	1.08	0.88
CPF24R7000FKE14	4.7	± 1%	41K8863	1.08	0.88
CPF26R8000JKE14	6.8	± 5%	41K8871	0.82	0.69
CPF210R000FKE14	10	± 1%	65K2395	0.51	0.43
CPF215R000FKE14	15	± 1%	41K8844	0.67	0.56
CPF220R000FKE14	20	± 1%	41K8853	0.66	0.56
CPF222R000FKE14	22	± 1%	41K8856	0.66	0.56

➤CONTINUED➤

CPF SERIES HIGH TEMPERATURE FLAMEPROOF METAL FILM POWER RESISTORS (CONT.)

CPF-2 SERIES

Mfg. Part No.	Res. (Ohms)	Res. Tol.	Stock No.	Price Each 1-99	Price Each 100-299
● CPF250R000FKE14	50	± 1%	65K2403	0.66	0.56
● CPF256R000JKE14	56	± 5%	65K2406	0.82	0.69
● CPF251R100FKE14	51.1	± 1%	41K8868	0.67	0.56
● CPF2150R00FKE14	150	± 1%	41K8846	0.66	0.56
● CPF2200R00FKE14	200	± 1%	41K8854	0.66	0.56
● CPF2220R00FKE14	220	± 1%	41K8857	0.66	0.56
● CPF2249R00FHE14	249	± 1%	41K8858	0.94	0.80
● CPF2360R00FKE14	360	± 1%	41K8861	0.83	0.70
● CPF2442R00FKE14	442	± 1%	41K8864	0.83	0.70
● CPF2470R00FKE14	470	± 1%	41K8867	0.51	0.43
● CPF2499R00FKE14	499	± 1%	65K2401	0.66	0.56
● CPF2510R00JKE14	510	± 5%	65K2404	0.63	0.53
● CPF2680R00JKE14	680	± 5%	41K8873	0.79	0.67
● CPF2898R00BEE14	898	± 0.1%	41K8875	1.35	1.10
● CPF21K0000FKE14	1k	± 1%	41K8835	0.64	0.54
● CPF21K2000FKE14	1.2k	± 1%	41K8836	0.67	0.56
● CPF21K8000FKE14	1.8k	± 1%	41K8837	0.86	0.73
● CPF22K0000FKE14	2k	± 1%	41K8848	0.67	0.56
● CPF22K2000JKE14	2.2k	± 5%	41K8849	0.82	0.69
● CPF22K7000FKE14	2.7k	± 1%	41K8850	0.67	0.56
● CPF23K0000JKE14	3k	± 5%	65K2398	0.79	0.67
● CPF23K3000FKE14	3.3k	± 1%	41K8860	0.67	0.56
● CPF24K7000GKE14	4.7k	± 2%	63M2713	0.79	0.67
● CPF25K6000JKE14	5.6k	± 5%	65K2402	0.79	0.67
● CPF210K000FKE14	10k	± 1%	63M2712	0.66	0.56
● CPF211K000FKE14	11k	± 1%	41K8841	0.83	0.70
● CPF215K000FKE14	15k	± 1%	41K8843	0.66	0.56
● CPF218K000JKE14	18k	± 5%	41K8847	0.79	0.67
● CPF220K000FKE14	20k	± 1%	41K8851	0.66	0.56
● CPF220K000JKE14	20k	± 5%	41K8852	0.79	0.67
● CPF222K000FKE14	22k	± 1%	41K8855	0.66	0.56
● CPF227K400FKE14	27.4k	± 1%	41K8859	0.83	0.70
● CPF230K000JKE36	30k	± 5%	65K2399	0.62	0.51
● CPF233K000FKE14	33k	± 1%	65K2400	0.67	0.56
● CPF247K000JKE14	47k	± 5%	41K8865	0.79	0.67
● CPF247K500FKE14	47.5k	± 1%	41K8866	0.83	0.70
● CPF256K000FKE36	56k	± 1%	65K2405	0.63	0.51
● CPF2100K00FKE14	100k	± 1%	41K8840	0.66	0.56
● CPF2100K00FKEE6	100k	± 1%	65K2396	0.64	0.52
● CPF2150K00FKE14	150k	± 1%	41K8845	0.67	0.56

CPF-3 SERIES

● CPF3R10000GNE14	0.1	± 2%	63M2714	1.83	1.49
● CPF31R0000FKE14	1	± 1%	41K8877	1.20	0.97
● CPF32R0000FKE14	2	± 1%	41K8888	1.43	1.16
● CPF32R7000JKE14	2.7	± 5%	41K8889	1.99	1.62
● CPF37R5000FKE14	7.5	± 1%	41K8903	1.17	0.95
● CPF310R000FKE14	10	± 1%	41K8879	1.07	0.87
● CPF312R000JKE14	12	± 5%	41K8883	1.11	0.90
● CPF315R000FKE14	15	± 1%	41K8886	1.21	0.99
● CPF320R000FKE14	20	± 1%	41K8890	1.08	0.88
● CPF330R900FKE14	30.9	± 1%	41K8896	1.17	0.95
● CPF351R000FKE14	51	± 1%	41K8901	1.21	0.99
● CPF3100R00FKE14	100	± 1%	41K8882	1.07	0.87
● CPF3330R00JKE14	330	± 5%	41K8897	1.11	0.90
● CPF3430R00FKE14	430	± 1%	41K8899	1.21	0.99
● CPF3680R00FKE14	680	± 1%	41K8902	1.21	0.99
● CPF31K0000BHE14	1k	± 0.1%	65K2407	1.50	1.22
● CPF31K0000FKE14	1k	± 1%	41K8876	1.21	0.99
● CPF310K000FKE14	10k	± 1%	41K8878	1.04	0.85
● CPF315K000JKE14	15k	± 5%	41K8885	1.15	0.94
● CPF316K200FKE14	16.2k	± 1%	41K8887	1.17	0.95
● CPF322K100FKE14	22.1k	± 1%	41K8892	1.17	0.95
● CPF328K000FKE14	28k	± 1%	41K8894	1.08	0.88
● CPF324K900FKE14	24.9k	± 1%	65K2410	1.17	0.95
● CPF347K000FKE14	47k	± 1%	65K2412	1.21	0.99
● CPF351K100FKE14	51.1k	± 1%	41K8900	1.17	0.95
● CPF362K000FKE14	62k	± 1%	65K2413	1.17	0.95
● CPF3100K00FKE14	100k	± 1%	41K8880	1.04	0.85
● CPF3100K00JKE14	100k	± 5%	41K8881	1.14	0.92
● CPF3120K00FKE14	120k	± 1%	65K2408	1.21	0.99

(59683)

MFP SERIES FLAMEPROOF POWER METAL FILM RESISTORS

RoHS Compliant Available

Welwyn

Features
- Smallest size for power rating

Specifications
- Tolerance: ± 5%
- Power Rating: MFP1: 1W, MFP2: 2W
- Ambient temperature range: -5°C to 155°C

Mfg. Part No.	Res. (Ohms)	TCR	Stock No.	Price Each 1-99
● MFP1-1R0JI	1	± 200ppm/°C	78R4715	0.46
● MFP1-1R2JI	1.2	± 200ppm/°C	78R4716	0.46
● MFP1-1R5JI	1.5	± 200ppm/°C	78R4717	0.46
● MFP1-2R2JI	2.2	± 200ppm/°C	78R4733	0.46
● MFP1-2R7JI	2.7	± 200ppm/°C	78R4734	0.48
● MFP1-3R3JI	3.3	± 200ppm/°C	78R4743	0.48
● MFP1-4R7JI	4.7	± 200ppm/°C	78R4750	0.46
● MFP1-6R8JI	6.8	± 200ppm/°C	78R4760	0.46
● MFP1-8R2JI	8.2	± 200ppm/°C	78R4766	0.46
● MFP1-10RJI	10	± 200ppm/°C	78R4719	0.46
● MFP1-12RJI	12	± 50ppm/°C	78R4722	0.46
● MFP1-15RJI	15	± 50ppm/°C	78R4725	0.46
● MFP1-18RJI	18	± 50ppm/°C	78R4729	0.46
● MFP1-22RJI	22	± 50ppm/°C	78R4736	0.32
● MFP1-27RJI	27	± 50ppm/°C	78R4740	0.32
● MFP1-33RJI	33	± 50ppm/°C	78R4744	0.34
● MFP1-39RJI	39	± 50ppm/°C	78R4747	0.32
● MFP1-47RJI	47	± 50ppm/°C	78R4752	0.34
● MFP1-56RJI	56	± 50ppm/°C	78R4757	0.32
● MFP1-68RJI	68	± 50ppm/°C	78R4762	0.32
● MFP1-82RJI	82	± 50ppm/°C	78R4768	0.32
● MFP1-100RJI	100	± 50ppm/°C	78R4721	0.34
● MFP1-120RJI	120	± 50ppm/°C	78R4724	0.32
● MFP1-150RJI	150	± 50ppm/°C	78R4727	0.32
● MFP1-180RJI	180	± 50ppm/°C	78R4730	0.32
● MFP1-220RJI	220	± 50ppm/°C	78R4738	0.34
● MFP1-270RJI	270	± 50ppm/°C	78R4741	0.33
● MFP1-330RJI	330	± 50ppm/°C	78R4745	0.32
● MFP1-390RJI	390	± 50ppm/°C	78R4748	0.34
● MFP1-470RJI	470	± 50ppm/°C	78R4754	0.32
● MFP1-560RJI	560	± 50ppm/°C	78R4758	0.32
● MFP1-680RJI	680	± 50ppm/°C	78R4764	0.34
● MFP1-820RJI	820	± 50ppm/°C	78R4770	0.32
● MFP1-1K0JI	1k	± 50ppm/°C	78R4710	0.34
● MFP1-1K2JI	1.2k	± 50ppm/°C	78R4711	0.34
● MFP1-1K5JI	1.5k	± 50ppm/°C	78R4712	0.32
● MFP1-1K8JI	1.8k	± 50ppm/°C	78R4713	0.32
● MFP1-2K2JI	2.2k	± 50ppm/°C	78R4731	0.32
● MFP1-2K7JI	2.7k	± 50ppm/°C	78R4732	0.32
● MFP1-3K3JI	3.3k	± 50ppm/°C	78R4742	0.32
● MFP1-4K7JI	4.7k	± 50ppm/°C	78R4749	0.32
● MFP1-5K6JI	5.6k	± 50ppm/°C	78R4755	0.32
● MFP1-6K8JI	6.8k	± 50ppm/°C	78R4759	0.32
● MFP1-8K2JI	8.2k	± 50ppm/°C	78R4765	0.32
● MFP1-10KJI	10k	± 50ppm/°C	78R4718	0.32
● MFP1-18KJI	18k	± 50ppm/°C	78R4728	0.32
● MFP1-22KJI	22k	± 50ppm/°C	78R4735	0.32
● MFP1-27KJI	27k	± 50ppm/°C	78R4739	0.32
● MFP1-39KJI	39k	± 50ppm/°C	78R4746	0.32
● MFP1-47KJI	47k	± 50ppm/°C	78R4751	0.34
● MFP1-56KJI	56k	± 50ppm/°C	78R4756	0.32
● MFP1-68KJI	68k	± 50ppm/°C	78R4761	0.32
● MFP1-82KJI	82k	± 50ppm/°C	78R4767	0.32
● MFP1-100KJI	100k	± 50ppm/°C	78R4720	0.32
● MFP1-120KJI	120k	± 50ppm/°C	78R4723	0.32
● MFP1-150KJI	150k	± 50ppm/°C	78R4726	0.32
● MFP1-220KJI	220k	± 50ppm/°C	78R4737	0.32
● MFP1-470KJI	470k	± 50ppm/°C	78R4753	0.32
● MFP1-680KJI	680k	± 50ppm/°C	78R4763	0.32
● MFP1-820KJI	820k	± 50ppm/°C	78R4769	0.32
● MFP1-1M0JI	1M	± 50ppm/°C	78R4714	0.32
● MFP2-1R0JI	1	± 100ppm/°C	78R4776	0.64
● MFP2-1R5JI	1.5	± 200ppm/°C	78R4777	0.61
● MFP2-1R8JI	1.8	± 200ppm/°C	78R4778	0.61
● MFP2-2R2JI	2.2	± 200ppm/°C	78R4797	0.61
● MFP2-2R7JI	2.7	± 200ppm/°C	78R4798	0.61

CONTINUED

MFP SERIES FLAMEPROOF POWER METAL FILM RESISTORS (CONT.)

Mfg. Part No.	Res. (Ohms)	TCR	Stock No.	Price Each 1-99
MFP2-3R3JI	3.3	± 200ppm/°C	78R4809	0.61
MFP2-3R9JI	3.9	± 200ppm/°C	78R4810	0.61
MFP2-4R7JI	4.7	± 200ppm/°C	78R4819	0.61
MFP2-5R6JI	5.6	± 200ppm/°C	78R4825	0.61
MFP2-6R8JI	6.8	± 200ppm/°C	78R4829	0.61
MFP2-8R2JI	8.2	± 200ppm/°C	78R4834	0.61
MFP2-10RJI	10	± 200ppm/°C	78R4780	0.64
MFP2-12RJI	12	± 50ppm/°C	78R4784	0.61
MFP2-15RJI	15	± 50ppm/°C	78R4788	0.64
MFP2-18RJI	18	± 50ppm/°C	78R4792	0.61
MFP2-22RJI	22	± 50ppm/°C	78R4800	0.61
MFP2-27RJI	27	± 50ppm/°C	78R4804	0.61
MFP2-33RJI	33	± 50ppm/°C	78R4812	0.61
MFP2-39RJI	39	± 50ppm/°C	78R4816	0.61
MFP2-47RJI	47	± 50ppm/°C	78R4821	0.61
MFP2-56RJI	56	± 50ppm/°C	78R4827	0.64
MFP2-68RJI	68	± 50ppm/°C	78R4831	0.61
MFP2-82RJI	82	± 50ppm/°C	78R4836	0.61
MFP2-100RJI	100	± 50ppm/°C	78R4782	0.52
MFP2-120RJI	120	± 50ppm/°C	78R4786	0.52
MFP2-150RJI	150	± 50ppm/°C	78R4790	0.52
MFP2-180RJI	180	± 50ppm/°C	78R4794	0.52
MFP2-220RJI	220	± 50ppm/°C	78R4802	0.52
MFP2-270RJI	270	± 50ppm/°C	78R4806	0.56
MFP2-330RJI	330	± 50ppm/°C	78R4814	0.56
MFP2-390RJI	390	± 50ppm/°C	78R4817	0.52
MFP2-470RJI	470	± 50ppm/°C	78R4823	0.52
MFP2-560RJI	560	± 50ppm/°C	78R4828	0.52
MFP2-680RJI	680	± 50ppm/°C	78R4832	0.52
MFP2-820RJI	820	± 50ppm/°C	78R4837	0.56
MFP2-1K0JI	1k	± 100ppm/°C	78R4771	0.52
MFP2-1K2JI	1.2k	± 200ppm/°C	78R4772	0.52
MFP2-1K5JI	1.5k	± 200ppm/°C	78R4773	0.52
MFP2-1K8JI	1.8k	± 200ppm/°C	78R4774	0.52
MFP2-2K2JI	2.2k	± 50ppm/°C	78R4795	0.52
MFP2-2K7JI	2.7k	± 50ppm/°C	78R4796	0.56
MFP2-3K3JI	3.3k	± 50ppm/°C	78R4807	0.52
MFP2-3K9JI	3.9k	± 50ppm/°C	78R4808	0.52
MFP2-4K7JI	4.7k	± 50ppm/°C	78R4818	0.52
MFP2-5K6JI	5.6k	± 50ppm/°C	78R4824	0.52
MFP2-8K2JI	8.2k	± 50ppm/°C	78R4833	0.52
MFP2-10KJI	10k	± 50ppm/°C	78R4779	0.52
MFP2-12KJI	12k	± 50ppm/°C	78R4783	0.52
MFP2-15KJI	15k	± 50ppm/°C	78R4787	0.52
MFP2-18KJI	18k	± 50ppm/°C	78R4791	0.56
MFP2-22KJI	22k	± 50ppm/°C	78R4799	0.52
MFP2-27KJI	27k	± 50ppm/°C	78R4803	0.56
MFP2-33KJI	33k	± 50ppm/°C	78R4811	0.52
MFP2-39KJI	39k	± 50ppm/°C	78R4815	0.52
MFP2-47KJI	47k	± 50ppm/°C	78R4820	0.56
MFP2-56KJI	56k	± 50ppm/°C	78R4826	0.52
MFP2-68KJI	68k	± 50ppm/°C	78R4830	0.52
MFP2-82KJI	82k	± 50ppm/°C	78R4835	0.52
MFP2-100KJI	100k	± 50ppm/°C	78R4781	0.56
MFP2-120KJI	120k	± 50ppm/°C	78R4785	0.63
MFP2-150KJI	150k	± 50ppm/°C	78R4789	0.59
MFP2-180KJI	180k	± 50ppm/°C	78R4793	0.59
MFP2-220KJI	220k	± 50ppm/°C	78R4801	0.63
MFP2-270KJI	270k	± 50ppm/°C	78R4805	0.59
MFP2-330KJI	330k	± 50ppm/°C	78R4813	0.59
MFP2-470KJI	470k	± 50ppm/°C	78R4822	0.63
MFP2-1M0JI	1M	± 100ppm/°C	78R4775	0.59

(195399)

PCB FABRICATION & ASSEMBLY

Quality US-based manufacturers—
as fast as 48-hour turnaround!

(197415)

MFR SERIES AXIAL TERMINAL METAL FILM RESISTORS

RoHS Compliant Available

Welwyn

Specifications
- Temperature Coeff:
- MFR3: ± 50ppm/°C
- MFR4: ± 50ppm/°C
- MFR5:less than or equal to 10:150ppm/°C more than 10:100ppm/°C

Features
- Professional grade approved to BSCECC 40101-803 and 019
- Tolerances down to 0.5%
- Temperature coefficient down to 50ppm/°C

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-99
MFR3-10RFC	10	78R4844	0.15
MFR3-100RFC	100	78R4846	0.16
MFR3-120RFC	120	78R4848	0.15
MFR3-150RFC	150	78R4850	0.15
MFR3-220RFC	220	78R4856	0.16
MFR3-330RFC	330	78R4861	0.15
MFR3-470RFC	470	78R4864	0.16
MFR3-560RFC	560	78R4865	0.15
MFR3-680RFC	680	78R4866	0.15
MFR3-1K0FC	1k	78R4838	0.16
MFR3-1K2FC	1.2k	78R4839	0.15
MFR3-1K5FC	1.5k	78R4840	0.15
MFR3-1K8FC	1.8k	78R4841	0.16
MFR3-2K2FC	2.2k	78R4852	0.15
MFR3-2K7FC	2.7k	78R4853	0.15
MFR3-3K3FC	3.3k	78R4858	0.16
MFR3-3K9FC	3.9k	78R4859	0.15
MFR3-4K7FC	4.7k	78R4862	0.16
MFR3-10KFC	10k	78R4843	0.16
MFR3-12KFC	12k	78R4847	0.15
MFR3-15KFC	15k	78R4849	0.15
MFR3-18KFC	18k	78R4851	0.15
MFR3-22KFC	22k	78R4854	0.16
MFR3-27KFC	27k	78R4857	0.16
MFR3-33KFC	33k	78R4860	0.15
MFR3-47KFC	47k	78R4863	0.16
MFR3-100KFC	100k	78R4845	0.15
MFR3-220KFC	220k	78R4855	0.15
MFR3-1M0FC	1M	78R4842	0.15
MFR4-1R0FI	1	78R4872	0.50
MFR4-1R5FI	1.5	78R4873	0.47
MFR4-4R7FI	4.7	78R4909	0.50
MFR4-8R2FI	8.2	78R4925	0.47
MFR4-10RFI	10	78R4875	0.33
MFR4-22RFI	22	78R4893	0.33
MFR4-33RFI	33	78R4903	0.33
MFR4-47RFI	47	78R4911	0.33
MFR4-51RFI	51	78R4916	0.31
MFR4-68RFI	68	78R4921	0.31
MFR4-100RFI	100	78R4877	0.33
MFR4-120RFI	120	78R4880	0.33
MFR4-150RFI	150	78R4883	0.31
MFR4-180RFI	180	78R4885	0.31
MFR4-220RFI	220	78R4895	0.33
MFR4-240RFI	240	78R4896	0.31
MFR4-270RFI	270	78R4898	0.33
MFR4-330RFI	330	78R4905	0.33
MFR4-390RFI	390	78R4907	0.33
MFR4-470RFI	470	78R4913	0.33
MFR4-560RFI	560	78R4918	0.33
MFR4-600RFI	600	78R4920	0.19
MFR4-680RFI	680	78R4922	0.33
MFR4-750RFI	750	78R4923	0.31
MFR4-1K0FI	1k	78R4867	0.33
MFR4-1K2FI	1.2k	78R4868	0.33
MFR4-1K5FI	1.5k	78R4869	0.33
MFR4-1K8FI	1.8k	78R4870	0.33
MFR4-2K0FI	2k	78R4886	0.33
MFR4-2K2FI	2.2k	78R4887	0.33
MFR4-2K4FI	2.4k	78R4888	0.31
MFR4-2K7FI	2.7k	78R4889	0.33
MFR4-3K0FI	3k	78R4899	0.33
MFR4-3K3FI	3.3k	78R4900	0.31
MFR4-3K9FI	3.9k	78R4901	0.31
MFR4-4K7FI	4.7k	78R4908	0.33
MFR4-5K1FI	5.1k	78R4914	0.33
MFR4-5K6FI	5.6k	78R4915	0.33
MFR4-6K8FI	6.8k	78R4919	0.33

CONTINUED

MFR SERIES AXIAL TERMINAL METAL FILM RESISTORS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-99
● MFR4-8K2FI	8.2k	78R4924	0.33
● MFR4-10KFI	10k	78R4874	0.33
● MFR4-12KFI	12k	78R4878	0.31
● MFR4-15KFI	15k	78R4881	0.31
● MFR4-18KFI	18k	78R4884	0.31
● MFR4-20KFI	20k	78R4890	0.31
● MFR4-22KFI	22k	78R4892	0.33
● MFR4-27KFI	27k	78R4897	0.33
● MFR4-33KFI	33k	78R4902	0.33
● MFR4-39KFI	39k	78R4906	0.31
● MFR4-47KFI	47k	78R4910	0.31
● MFR4-56KFI	56k	78R4917	0.31
● MFR4-82KFI	82k	78R4926	0.33
● MFR4-100KFI	100k	78R4876	0.33
● MFR4-120KFI	120k	78R4879	0.31
● MFR4-150KFI	150k	78R4882	0.31
● MFR4-200KFI	200k	78R4891	0.31
● MFR4-220KFI	220k	78R4894	0.31
● MFR4-330KFI	330k	78R4904	0.33
● MFR4-470KFI	470k	78R4912	0.31
● MFR4-1M0FI	1M	78R4871	0.33
● MFR5-56RFA25	56	78R4940	0.65
● MFR5-68RFA25	68	78R4942	0.58
● MFR5-120RFA25	120	78R4933	0.58
● MFR5-220RFA25	220	78R4936	0.65
● MFR5-470RFA25	470	78R4939	0.65
● MFR5-560RFA25	560	78R4941	0.58
● MFR5-1K0FA25	1k	78R4927	0.58
● MFR5-1K5FA25	1.5k	78R4928	0.43
● MFR5-2K2FA25	2.2k	78R4934	0.58
● MFR5-8K2FA25	8.2k	78R4943	0.69
● MFR5-10KFA25	10k	78R4929	0.65
● MFR5-22KFA25	22k	78R4935	0.58
● MFR5-47KFA25	47k	78R4937	0.58
● MFR5-100KFA25	100k	78R4930	0.69
● MFR5-120KFA25	120k	78R4932	0.58
● MFR5-470KFA25	470k	78R4938	0.58

(195401)

RC SERIES PRECISION AXIAL TERMINAL METAL FILM RESISTORS

RoHS Compliant Available

Welwyn

Features
- Meets or exceedes CECC requirements
- Low TCR and tolerance
- Low noise and negligible voltage coefficient

Specifications
- Tolerance: ± 0.1%
- Power rating @ 70°C: 250mW
- Temperature coeff.: ± 15ppm/°C

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-499
RC55Y-51R1BI	51.1	78R5232	6.94
● RC55Y-59RBI	59	78R5242	6.94
● RC55Y-61R9BI	61.9	78R5253	6.94
● RC55Y-75RBI	75	78R5269	7.35
● RC55Y-86R6BI	86.6	78R5278	6.94
● RC55Y-90R9BI	90.9	78R5283	7.35
● RC55Y-95R3BI	95.3	78R5286	6.94
● RC55Y-100RBI	100	78R5077	3.47
● RC55Y-102RBI	102	78R5079	3.69
● RC55Y-105RBI	105	78R5081	3.69
● RC55Y-110RBI	110	78R5086	3.47
● RC55Y-118RBI	118	78R5089	3.47
● RC55Y-121RBI	121	78R5092	3.47
● RC55Y-124RBI	124	78R5093	3.47
● RC55Y-127RBI	127	78R5095	3.69
● RC55Y-130RBI	130	78R5100	3.69
● RC55Y-143RBI	143	78R5107	3.47
● RC55Y-147RBI	147	78R5109	3.69
● RC55Y-150RBI	150	78R5113	3.69

➤CONTINUED➤

RC SERIES PRECISION AXIAL TERMINAL METAL FILM RESISTORS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-499
● RC55Y-162RBI	162	78R5116	3.47
● RC55Y-178RBI	178	78R5120	3.47
● RC55Y-182RBI	182	78R5124	3.47
● RC55Y-196RBI	196	78R5129	3.47
● RC55Y-200RBI	200	78R5146	3.47
● RC55Y-215RBI	215	78R5150	3.69
● RC55Y-221RBI	221	78R5154	3.47
● RC55Y-226RBI	226	78R5156	3.47
● RC55Y-237RBI	237	78R5158	3.47
● RC55Y-243RBI	243	78R5162	3.47
● RC55Y-249RBI	249	78R5164	3.69
● RC55Y-255RBI	255	78R5167	3.69
● RC55Y-261RBI	261	78R5170	3.47
● RC55Y-274RBI	274	78R5173	3.69
● RC55Y-280RBI	280	78R5175	3.47
● RC55Y-287RBI	287	78R5176	3.47
● RC55Y-301RBI	301	78R5188	3.47
● RC55Y-316RBI	316	78R5190	3.47
● RC55Y-332RBI	332	78R5193	3.69
● RC55Y-348RBI	348	78R5196	3.69
● RC55Y-374RBI	374	78R5200	3.47
● RC55Y-453RBI	453	78R5219	3.47
● RC55Y-392RBI	392	78R5204	3.47
● RC55Y-402RBI	402	78R5213	3.64
● RC55Y-475RBI	475	78R5222	3.47
● RC55Y-499RBI	499	78R5225	3.69
● RC55Y-511RBI	511	78R5234	3.69
● RC55Y-536RBI	536	78R5237	3.47
● RC55Y-549RBI	549	78R5238	3.47
● RC55Y-562RBI	562	78R5240	3.47
● RC55Y-590RBI	590	78R5243	3.47
● RC55Y-604RBI	604	78R5251	3.47
● RC55Y-619RBI	619	78R5254	3.47
● RC55Y-649RBI	649	78R5256	3.47
● RC55Y-681RBI	681	78R5260	3.47
● RC55Y-750RBI	750	78R5270	3.69
● RC55Y-787RBI	787	78R5271	3.47
● RC55Y-806RBI	806	78R5275	3.47
● RC55Y-909RBI	909	78R5285	3.47
● RC55Y-1K0BI	1k	78R5055	3.69
● RC55Y-1K02BI	1.02k	78R5056	3.47
● RC55Y-1K07BI	1.07k	78R5057	3.47
● RC55Y-1K1BI	1.1k	78R5058	3.47
● RC55Y-1K13BI	1.13k	78R5059	3.47
● RC55Y-1K21BI	1.21k	78R5060	3.47
● RC55Y-1K24BI	1.24k	78R5061	3.69
● RC55Y-1K27BI	1.27k	78R5062	3.47
● RC55Y-1K3BI	1.3k	78R5063	3.47
● RC55Y-1K33BI	1.33k	78R5064	3.47
● RC55Y-1K37BI	1.37k	78R5065	3.69
● RC55Y-1K4BI	1.4k	78R5066	3.47
● RC55Y-1K5BI	1.5k	78R5067	3.69
● RC55Y-1K65BI	1.65k	78R5068	3.47
● RC55Y-1K69BI	1.69k	78R5069	3.47
● RC55Y-1K82BI	1.82k	78R5070	3.69
● RC55Y-2K0BI	2k	78R5130	3.69
● RC55Y-2K05BI	2.05k	78R5131	3.47
● RC55Y-2K1BI	2.1k	78R5132	3.47
● RC55Y-2K15BI	2.15k	78R5133	3.47
● RC55Y-2K21BI	2.21k	78R5134	3.47
● RC55Y-2K26BI	2.26k	78R5135	3.47
● RC55Y-2K43BI	2.43k	78R5136	3.47
● RC55Y-2K49BI	2.49k	78R5137	3.47
● RC55Y-2K55BI	2.55k	78R5138	3.69
● RC55Y-2K67BI	2.67k	78R5139	3.47
● RC55Y-2K74BI	2.74k	78R5140	3.69
● RC55Y-2K8BI	2.8k	78R5141	3.47
● RC55Y-2K94BI	2.94k	78R5142	3.69
● RC55Y-3K01BI	3.01k	78R5177	3.47
● RC55Y-3K16BI	3.16k	78R5178	3.47
● RC55Y-3K32BI	3.32k	78R5179	3.64
● RC55Y-3K48BI	3.48k	78R5180	3.69
● RC55Y-3K57BI	3.57k	78R5181	3.47
● RC55Y-3K65BI	3.65k	78R5182	3.47

➤CONTINUED➤

RC SERIES PRECISION AXIAL TERMINAL METAL FILM RESISTORS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-499
RC55Y-3K74BI	3.74k	78R5183	3.69
RC55Y-3K92BI	3.92k	78R5184	3.47
RC55Y-4K02BI	4.02k	78R5205	3.47
RC55Y-4K42BI	4.42k	78R5206	3.69
RC55Y-4K53BI	4.53k	78R5207	3.47
RC55Y-4K64BI	4.64k	78R5208	3.47
RC55Y-4K75BI	4.75k	78R5209	3.47
RC55Y-4K87BI	4.87k	78R5210	3.69
RC55Y-4K99BI	4.99k	78R5211	3.47
RC55Y-5K11BI	5.11k	78R5226	3.47
RC55Y-5K23BI	5.23k	78R5227	3.47
RC55Y-5K36BI	5.36k	78R5228	3.47
RC55Y-5K62BI	5.62k	78R5229	3.47
RC55Y-5K9BI	5.9k	78R5230	3.47
RC55Y-6K04BI	6.04k	78R5244	3.47
RC55Y-6K19BI	6.19k	78R5245	3.47
RC55Y-6K34BI	6.34k	78R5246	3.47
RC55Y-6K49BI	6.49k	78R5247	3.47
RC55Y-6K81BI	6.81k	78R5248	3.47
RC55Y-6K98BI	6.98k	78R5249	3.47
RC55Y-7K15BI	7.15k	78R5262	3.47
RC55Y-7K32BI	7.32k	78R5263	3.47
RC55Y-7K5BI	7.5k	78R5264	3.47
RC55Y-7K68BI	7.68k	78R5265	3.69
RC55Y-8K25BI	8.25k	78R5272	3.47
RC55Y-8K45BI	8.45k	78R5273	3.47
RC55Y-8K66BI	8.66k	78R5274	3.47
RC55Y-9K09BI	9.09k	78R5279	3.47
RC55Y-9K53BI	9.53k	78R5280	3.47
RC55Y-9K76BI	9.76k	78R5281	3.47
RC55Y-10KBI	10k	78R5072	3.69
RC55Y-10K2BI	10.2k	78R5073	3.47
RC55Y-10K5BI	10.5k	78R5074	3.69
RC55Y-10K7BI	10.7k	78R5075	3.47
RC55Y-11KBI	11k	78R5083	3.47
RC55Y-11K5BI	11.5k	78R5084	3.47
RC55Y-11K8BI	11.8k	78R5085	3.47
RC55Y-12K1BI	12.1k	78R5090	3.69
RC55Y-13KBI	13k	78R5096	3.47
RC55Y-13K3BI	13.3k	78R5097	3.47
RC55Y-13K7BI	13.7k	78R5098	3.47
RC55Y-14KBI	14k	78R5102	3.47
RC55Y-14K3BI	14.3k	78R5103	3.47
RC55Y-14K7BI	14.7k	78R5104	3.47
RC55Y-15KBI	15k	78R5110	3.47
RC55Y-15K8BI	15.8k	78R5111	3.47
RC55Y-16K5BI	16.5k	78R5115	3.47
RC55Y-17K8BI	17.8k	78R5119	3.47
RC55Y-18K2BI	18.2k	78R5121	3.69
RC55Y-18K7BI	18.7k	78R5122	3.47
RC55Y-19K1BI	19.1k	78R5125	3.47
RC55Y-19K6BI	19.6k	78R5126	3.69
RC55Y-20KBI	20k	78R5143	3.47
RC55Y-20K5BI	20.5k	78R5144	3.69
RC55Y-21K5BI	21.5k	78R5148	3.69
RC55Y-22K1BI	22.1k	78R5151	3.47
RC55Y-22K6BI	22.6k	78R5152	3.47
RC55Y-23K2BI	23.2k	78R5157	3.69
RC55Y-24K3BI	24.3k	78R5159	3.47
RC55Y-24K9BI	24.9k	78R5160	3.47
RC55Y-25K5BI	25.5k	78R5165	3.69
RC55Y-26K1BI	26.1k	78R5168	3.47
RC55Y-26K7BI	26.7k	78R5169	3.69
RC55Y-27K4BI	27.4k	78R5172	3.69
RC55Y-28KBI	28k	78R5174	3.47
RC55Y-30K1BI	30.1k	78R5185	3.69
RC55Y-30K9BI	30.9k	78R5186	3.47
RC55Y-31K6BI	31.6k	78R5189	3.69
RC55Y-33K2BI	33.2k	78R5191	3.47
RC55Y-34KBI	34k	78R5194	3.47
RC55Y-34K8BI	34.8k	78R5195	3.47
RC55Y-35K7BI	35.7k	78R5197	3.69
RC55Y-36K5BI	36.5k	78R5199	3.47
RC55Y-38K3BI	38.3k	78R5201	3.47

CONTINUED

RC SERIES PRECISION AXIAL TERMINAL METAL FILM RESISTORS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-499
RC55Y-39K2BI	39.2k	78R5202	3.47
RC55Y-40K2BI	40.2k	78R5212	3.47
RC55Y-41K2BI	41.2k	78R5214	3.47
RC55Y-43K2BI	43.2k	78R5215	3.47
RC55Y-44K2BI	44.2k	78R5217	3.47
RC55Y-45K3BI	45.3k	78R5218	3.47
RC55Y-47K5BI	47.5k	78R5220	3.69
RC55Y-48K7BI	48.7k	78R5223	3.47
RC55Y-49K9BI	49.9k	78R5224	3.47
RC55Y-51K1BI	51.1k	78R5231	3.47
RC55Y-52K3BI	52.3k	78R5235	3.47
RC55Y-53K6BI	53.6k	78R5236	3.47
RC55Y-59KBI	59k	78R5241	3.69
RC55Y-60K4BI	60.4k	78R5250	3.47
RC55Y-61K9BI	61.9k	78R5252	3.69
RC55Y-64K9BI	64.9k	78R5255	3.47
RC55Y-66K5BI	66.5k	78R5257	3.69
RC55Y-68K1BI	68.1k	78R5258	3.47
RC55Y-69K8BI	69.8k	78R5261	3.69
RC55Y-71K5BI	71.5k	78R5266	3.47
RC55Y-73K2BI	73.2k	78R5267	3.69
RC55Y-75KBI	75k	78R5268	3.69
RC55Y-82K5BI	82.5k	78R5276	3.47
RC55Y-90K9BI	90.9k	78R5282	3.47
RC55Y-97K6BI	97.6k	78R5287	3.47
RC55Y-100KBI	100k	78R5076	3.69
RC55Y-102KBI	102k	78R5078	3.47
RC55Y-105KBI	105k	78R5080	3.47
RC55Y-107KBI	107k	78R5082	3.47
RC55Y-115KBI	115k	78R5087	3.69
RC55Y-118KBI	118k	78R5088	3.47
RC55Y-121KBI	121k	78R5091	3.69
RC55Y-127KBI	127k	78R5094	3.47
RC55Y-130KBI	130k	78R5099	3.47
RC55Y-133KBI	133k	78R5101	3.47
RC55Y-140KBI	140k	78R5105	3.47
RC55Y-143KBI	143k	78R5106	3.69
RC55Y-147KBI	147k	78R5108	3.47
RC55Y-150KBI	150k	78R5112	3.47
RC55Y-154KBI	154k	78R5114	3.47
RC55Y-165KBI	165k	78R5117	3.47
RC55Y-169KBI	169k	78R5118	3.47
RC55Y-182KBI	182k	78R5123	3.47
RC55Y-191KBI	191k	78R5127	3.47
RC55Y-196KBI	196k	78R5128	3.47
RC55Y-200KBI	200k	78R5145	3.69
RC55Y-205KBI	205k	78R5147	3.47
RC55Y-210KBI	210k	78R5149	3.69
RC55Y-221KBI	221k	78R5153	3.47
RC55Y-226KBI	226k	78R5155	3.47
RC55Y-243KBI	243k	78R5161	3.47
RC55Y-249KBI	249k	78R5163	3.47
RC55Y-255KBI	255k	78R5166	3.47
RC55Y-267KBI	267k	78R5171	3.47
RC55Y-301KBI	301k	78R5187	3.47
RC55Y-332KBI	332k	78R5192	3.47
RC55Y-357KBI	357k	78R5198	3.47
RC55Y-392KBI	392k	78R5203	6.94
RC55Y-432KBI	432k	78R5216	6.94
RC55Y-475KBI	475k	78R5221	6.94
RC55Y-511KBI	511k	78R5233	7.35
RC55Y-562KBI	562k	78R5239	6.94
RC55Y-681KBI	681k	78R5259	6.94
RC55Y-825KBI	825k	78R5277	6.94
RC55Y-909KBI	909k	78R5284	6.94
RC55Y-1M0BI	1M	78R5071	6.94

(195419)

THICK FILM CHIP RESISTOR KITS, SURFACE MOUNT

SMD

RoHS Compliant Available

VISHAY

Features
- New engineering design kits contain ¼ E96 series
- Values specified as ± 1% tolerance and ± 100ppm/K temp. coefficient

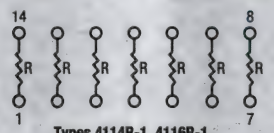
Mfg. Part No.	Kit Contents	Range of Resistor Values	Stock No.	Price 1-2
● LAE1ACHIP0402KFE96	100 Each of 122 Values of 0402 Chip Resistors	10ohm to 1Mohm + Jumper	78T2136	378.62
● LAE1BCHIP0603KFE96	50 Each of 122 Values of 0603 Chip Resistors	10ohm to 1Mohm + Jumper	78T2137	427.23
● LAE1CCHIP0805KFE96	50 Each of 122 Values of 0805 Chip Resistors	10ohm to 1Mohm + Jumper	78T2138	482.56
● LAE1DCHIP1206KFE96	50 Each of 122 Values of 1206 Chip Resistors	10ohm to 1Mohm + Jumper	76T3404	522.00

(198769)

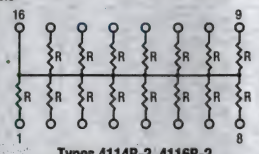
4100R SERIES THICK FILM MOLDED DIPS

RoHS Compliant Available

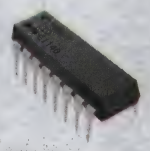
BOURNS



Types 4114R-1, 4116R-1



Types 4114R-2, 4116R-2



Features
- Compatible with Automatic Insertion Equipment
- Marking on Contrasting Background for Permanent Identification

Specifications
- Tolerance Isolated and Bussed:10 ohm–49 ohm: ±1 ohms; 50 ohm–5 Mohm: ±2%
- Tolerance Dual Terminator: below 100 ohms ±2 ohms; 100 ohm to 5 Mohm ±2 %
- Resistance Range: 10Ω to 10MΩ
- Maximum Operating Voltage: 100V
- Temperature Coefficient: 50Ω to 2.2MΩ: ± 100 ppm/°C; 50Ω: ± 250ppm/°C; 2.2MΩ: ± 250ppm/°C
- TCR Tracking: 50ppm/°C
- Operating Temperature: -55°C to + 125°C
- Insulation Resistance: 10,000MΩ Min.
- Dielectric Withstanding Voltage: $200V_{RMS}$
- Lead Solderability: Meet Requirements of MIL-STD-202 Method 208
- Package Power Rating @ 70°C: 4114R: 1.69W, 4116R: 2.25W

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
14-PIN — ISOLATED				
● 4114R-1-470LF	47	32K8357	0.69	0.60
● 4114R-1-221LF	220	32K8335	0.71	0.62
● 4114R-1-271LF	270	32K8342	0.71	0.62
● 4114R-1-331LF	330	32K8347	0.69	0.60
● 4114R-1-102LF	1k	32K8310	0.71	0.62
● 4114R-1-222LF	2.2k	32K8336	0.69	0.60
● 4114R-1-103LF	10k	32K8312	0.70	0.61
● 4114R-1-104LF	100k	43K2423	0.71	0.62
14-PIN — BUSSED				
● 4114R-2-202LF	2k	32K8396	0.80	0.70
● 4114R-2-472LF	4.7k	32K8412	0.69	0.60
14-PIN — DUAL TERMINATOR				
● 4114R-3-181/391LF	390	32K8424	1.34	1.18
16-PIN — ISOLATED				
● 4116R-1-100LF	10	32K8429	0.72	0.62
● 4116R-1-220LF	22	32K8459	0.75	0.65
● 4116R-1-330LF	33	32K8481	0.74	0.64
● 4116R-1-470LF	47	32K8494	0.75	0.65
● 4116R-1-470LF	47	32K8494	0.75	0.65
● 4116R-1-560LF	56	32K8511	0.74	0.64
● 4116R-1-680LF	68	32K8521	0.72	0.62
● 4116R-1-101LF	100	32K8430	0.74	0.64
● 4116R-1-101LF	100	32K8430	0.74	0.64
● 4116R-1-121LF	120	32K8440	0.72	0.62
● 4116R-1-151LF	150	32K8447	0.75	0.65
● 4116R-1-181LF	180	32K8451	0.75	0.65
● 4116R-1-221LF	220	32K8460	0.74	0.64
● 4116R-1-271LF	270	32K8472	0.72	0.62
● 4116R-1-331LF	330	32K8482	0.74	0.64
● 4116R-1-471LF	470	32K8495	0.75	0.65
● 4116R-1-511LF	510	32K8508	0.72	0.62
● 4116R-1-561LF	560	32K8513	0.75	0.65
● 4116R-1-681LF	680	32K8522	0.75	0.65

➤CONTINUED➤

4100R SERIES THICK FILM MOLDED DIPS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
16-PIN — ISOLATED				
● 4116R-1-821LF	820	32K8532	0.75	0.65
● 4116R-1-102LF	1k	32K8431	0.74	0.64
● 4116R-1-122LF	1.2k	32K8441	0.72	0.62
● 4116R-1-152LF	1.5k	32K8448	0.75	0.65
● 4116R-1-202LF	2k	32K8457	0.72	0.62
● 4116R-1-222LF	2.2k	32K8461	0.74	0.64
● 4116R-1-272LF	2.70k	32K8473	0.74	0.64
● 4116R-1-332LF	3.3k	32K8483	0.74	0.64
● 4116R-1-472LF	4.7k	32K8497	0.75	0.65
● 4116R-1-103LF	10k	32K8433	0.72	0.62
● 4116R-1-123LF	12k	32K8442	0.72	0.62
● 4116R-1-223LF	22k	32K8462	0.75	0.65
● 4116R-1-333LF	33k	32K8484	0.75	0.65
● 4116R-1-473LF	47k	32K8499	0.75	0.65
● 4116R-1-104LF	100k	32K8435	0.75	0.65
● 4116R-1-184LF	180k	32K8454	0.84	0.73
● 4116R-1-224LF	220k	32K8463	0.72	0.62
● 4116R-1-105LF	1M	32K8437	0.72	0.62
16-PIN — BUSSED				
● 4116R-2-101LF	100	32K8538	0.72	0.62
● 4116R-2-271LF	270	32K8561	0.72	0.62
● 4116R-2-471LF	470	32K8577	0.72	0.62
● 4116R-2-102LF	1k	32K8539	0.74	0.64
● 4116R-2-202LF	2k	32K8554	0.72	0.62
● 4116R-2-332LF	3.3k	32K8568	0.72	0.62
● 4116R-2-472LF	4.7k	32K8579	0.72	0.62
● 4116R-2-822LF	8.2k	32K8599	0.84	0.73
● 4116R-2-103LF	10k	43K2425	0.74	0.64
16-PIN — DUAL TERMINATOR				
● 4116R-3-221/331LF	330	32K8606	1.38	1.21
● 4116R-3-181/391LF	390	32K8604	1.38	1.21

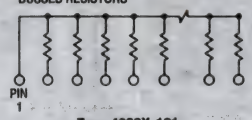
(73697)

4600X SERIES LOW-PROFILE CONFORMAL SIP RESISTOR NETWORKS

RoHS Compliant Available

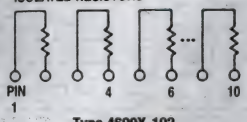
BOURNS

BUSSED RESISTORS



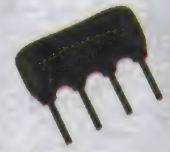
Type 4600X-101

ISOLATED RESISTORS



Type 4600X-102

Features
- Low-profile provides compatibility with DIPs
- Recommended for rosin flux and solvent clean or no clean flux processes
- Marking on contrasting background for permanent identification



Specifications
- Tolerance: ±2%
- Temperature Coefficient: ±100ppm/°C
- Dielectric Withstanding Voltage: $200V_{RMS}$
- Moisture Resistance: ±0.50%
- Load Life: ±1.00%
- Operating Temperature: -55° to +125°C

Additional resistance values available; *go online or call*.

PACKAGE POWER RATING (WATTS)

Model	Ambient Temperature 70°C
4605X	0.63
4606X	0.75
4608X	1.00
4609X	1.13
4610X	1.25

Mfg. Part No.	Res. (Ohms)	No.of Elements	Power Rating Per Elements (mW)	Stock No.	Price Each 1-9	Price Each 10-24
5-PIN — BUSSED						
● 4605X-101-102LF	1k	4	200	62J2801	0.16	0.16
● 4605X-101-472LF	4.7k	4	200	62J2807	0.16	0.16
● 4605X-101-103LF	10k	4	200	62J2802	0.16	0.16
6-PIN — BUSSED						
● 4606X-101-102LF	1k	5	200	62J2819	0.16	0.16
● 4606X-101-472LF	4.7k	5	200	62J2828	0.17	0.16
● 4606X-101-103LF	10k	5	200	62J2820	0.16	0.16

➤CONTINUED➤

4600X SERIES LOW-PROFILE CONFORMAL SIP RESISTOR NETWORKS (CONT.)

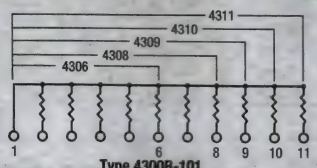
Mfg. Part No.	Res. (Ohms)	No.of Elements	Power Rating Per Elements (mW)	Stock No.	Price Each 1-9	Price Each 10-24
6-PIN — ISOLATED						
4606X-102-102LF	1k	3	300	62J2832	0.16	0.16
4606X-102-103LF	10k	3	300	62J2833	0.17	0.16
8-PIN — BUSSED						
4608X-101-102LF	1k	7	200	62J2849	0.21	0.20
4608X-101-472LF	4.7k	7	200	62J2860	0.21	0.20
4608X-101-103LF	10k	7	200	62J2850	0.20	0.19
8-PIN — ISOLATED						
4608X-102-101LF	100	4	300	62J2863	0.21	0.20
4608X-102-102LF	1k	4	300	62J2864	0.20	0.19
4608X-102-152LF	1.5k	4	300	62J2870	0.21	0.20
4608X-102-202LF	2k	4	300	32K9950	0.20	0.19
4608X-102-222LF	2.2k	4	300	62J2876	0.20	0.19
4608X-102-472LF	4.7k	4	300	62J2887	0.20	0.19
4608X-102-103LF	10k	4	300	62J2865	0.20	0.19
4608X-102-203LF	20k	4	300	62J2874	0.20	0.19
4608X-102-104LF	100k	4	300	62J2866	0.20	0.19
9-PIN — BUSSED						
4609X-101-331LF	330	8	200	62J2915	0.26	0.24
4609X-101-102LF	1k	8	200	62J2905	0.27	0.25
4609X-101-222LF	2.2k	8	200	62J2913	0.27	0.25
4609X-101-472LF	4.7k	8	200	62J2921	0.26	0.24
4609X-101-103LF	10k	8	200	62J2906	0.26	0.24
10-PIN — BUSSED						
4610X-101-221LF	220	9	200	33K0244	0.26	0.25
4610X-101-471LF	470	9	200	62J2951	0.26	0.25
4610X-101-102LF	1k	9	200	62J2939	0.26	0.25
4610X-101-332LF	3.3k	9	200	62J2949	0.27	0.25
4610X-101-472LF	4.7k	9	200	62J2952	0.26	0.25
4610X-101-103LF	10k	9	200	62J2940	0.26	0.25
4610X-101-223LF	22k	9	200	62J2947	0.26	0.25
4610X-101-473LF	47k	9	200	62J2953	0.26	0.25
4610X-101-104LF	100k	9	200	62J2941	0.27	0.26
10-PIN — ISOLATED						
4610X-102-103LF	10k	5	300	62J2958	0.27	0.25

(9469)

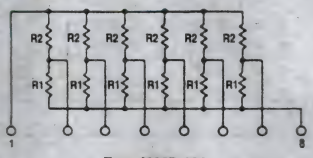
4300R SERIES MOLDED SIP RESISTOR NETWORKS

RoHS Compliant Available

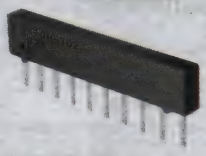
BOURNS®



Type 4300R-101
Bussed Configuration



Type 4300R-104
Dual-Terminator



Features
- Low-profile provides compatibility with DIPs
- Compatible with automatic insertion equipment
- Marking on contrasting background for permanent identification
- Superior package integrity

Specifications
- Tolerance Isolated and Bussed:10 ohm–49 ohm: ±1 ohms; 50 ohm–5 Mohm: ±2%
- Tolerance Dual Terminator: below 100 ohms ±2 ohms; 100 ohm to 5 Mohm ±2 %
- Temperature Coefficient: ±100ppm/°C (50Ω to 2.2MΩ); ±250ppm/°C (> 2.2MΩ or < 50Ω)
- Dielectric Withstanding Voltage: $200V_{RMS}$
- Moisture Resistance: ±0.50%
- Load Life: ±1.00%
- Operating Temperature: -55° to +125°C

Additional values available; *go online or call.*

Pkg.	Power Rating @ 70°C
4306X	0.75W
4308X	1.00W
4309X	1.13W
4310X	1.25W

6-PIN — BUSSED

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
4306R-101-102LF	1k	32K8703	0.62	0.57
4306R-101-332LF	3.3k	32K8736	0.60	0.56
4306R-101-472LF	4.7k	32K8746	0.62	0.57

CONTINUED

4300R SERIES MOLDED SIP RESISTOR NETWORKS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
4306R-101-103LF	10k	32K8704	0.62	0.57
4306R-101-104LF	100k	32K8705	0.63	0.58
8-PIN — BUSSED				
4308R-101-102LF	1k	32K8922	0.62	0.54
4308R-101-472LF	4.7k	32K8961	0.62	0.54
4308R-101-103LF	10k	32K8923	0.62	0.54
8-PIN — ISOLATED				
4308R-102-101LF	100	32K8982	0.64	0.56
4308R-102-471LF	470	32K9033	0.64	0.55
4308R-102-102LF	1k	32K8983	0.64	0.56
4308R-102-222LF	2.2k	32K9010	0.62	0.54
4308R-102-472LF	4.7k	32K9034	0.64	0.55
4308R-102-103LF	10k	32K8984	0.62	0.54
4308R-102-473LF	47k	32K9036	0.62	0.54
4308R-102-104LF	100k	32K8986	0.62	0.54
9-PIN — BUSSED				
4309R-101-102LF	1k	32K9075	0.67	0.58
4309R-101-222LF	2.2k	32K9089	0.68	0.59
4309R-101-472LF	4.7k	32K9100	0.67	0.58
4309R-101-103LF	10k	32K9076	0.67	0.58
10-PIN — BUSSED				
4310R-101-331LF	330	32K9253	0.78	0.68
4310R-101-471LF	470	32K9263	0.75	0.65
4310R-101-102LF	1k	32K9215	0.78	0.68
4310R-101-222LF	2.2k	32K9240	0.75	0.65
4310R-101-332LF	3.3k	32K9254	0.75	0.65
4310R-101-472LF	4.7k	32K9264	0.77	0.67
4310R-101-562LF	5.6k	32K9276	0.78	0.68
4310R-101-103LF	10k	32K9217	0.75	0.65
4310R-101-223LF	22k	32K9241	0.75	0.65
4310R-101-473LF	47k	32K9265	0.78	0.68
4310R-101-104LF	100k	32K9218	0.78	0.68
10-PIN — ISOLATED				
4310R-102-102LF	1k	32K9293	0.75	0.65
4310R-102-103LF	10k	32K9295	0.78	0.68
10-PIN — STANDARD R/2R				
4310R-R2R-103LF	10k	75K9799	1.05	0.91

(9470)

EXB-A, EXB-D EXB-E SERIES THICK FILM CHIP RESISTOR NETWORKS

RoHS Compliant Available

Panasonic

Features:
- High density
- Thick film resistive element
- 10 terminals, 8 resistors
- Resistance tolerance: ±5%
- Temperature coefficient: ±200ppm/°C
- Power rating at 70°C: 0.063W **EXB-A, EXB-E series**; 0.05W **EXB-D series**
- Operating temperature range: -55°C to +125°C

CASE SIZE 1206, 3.2MM X 1.6MM, CENTER COMMON CIRCUIT — 25V

Mfg. Part No.	Res. (kOhms)	Stock No.	Price Each 1-9	Price Each 10-99
EXB-D10C472J	4.7	53W5035	0.97	0.44
EXB-D10C103J	10	53W5034	0.95	0.43
CASE SIZE 1608, 4MM X 2.1MM, CENTER COMMON CIRCUIT — 25V				
EXB-E10C472J	4.7	53W5037	0.51	0.36
EXB-E10C103J	10	53W5036	0.51	0.36
CASE SIZE 2512, 6.4MM X 3.1MM, DIAGONAL COMMON CIRCUIT — 50V				
EXB-A10P472J	4.7	53W5033	0.66	0.47
EXB-A10P103J	10	53W5031	0.65	0.46
EXB-A10P104J	100	53W5032	0.66	0.47

(208945)

(211462)

CSC SERIES COATED THICK FILM SIP NETWORKS

RoHS Compliant Available

VISHAY.

Specifications
- Res. tolerance: ±2%
- Temperature coefficient: ±100ppm/°C
- Dielectric strength: 200VAC
- Operating temperature: -55°C to +125°C
- Height: 0.195″ (4.95)
- Lead spacing: 0.100″ (2.54)

Features
- Low profile
- Reduces total assembly costs
- Resistor elements protected by tough epoxy conformal coating
- Wide resistance range

Most popular sizes listed. Additional values available; *go online or call.*

DIMENSIONS

Series	Dimensions (mm) Body W (max)	Pin-to-Pin W (max)
CSC04	0.39″ (9.9)	0.3″ (7.62)
CSC05	0.49″ (12.45)	0.4″ (10.16)
CSC06	0.59″ (14.99)	0.5″ (12.7)
CSC08	0.79″ (20.07)	0.7″ (17.78)
CSC09	0.89″ (22.61)	0.8″ (20.32)
CSC10	0.99″ (25.15)	0.9″ (22.86)

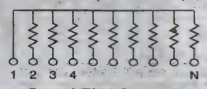
Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49
BUSSED 0.4 WATT, 3 RESISTORS, 4-PIN			
● CSC04A0110K0GEK	10k	71M1499	0.22
BUSSED 0.62 WATT, 4 RESISTORS, 5-PIN			
● CSC05A0110K0GEK	10k	71M1500	0.22
BUSSED 0.75 WATT, 5 RESISTORS, 6-PIN			
● CSC06A-01 2K 2% EK E3	2k	05N4957	0.17
● CSC06A012K20GEK	2.2k	71M1501	0.17
● CSC06A-01 100K 2% EK E3	100k	05N4932	0.17
● CSC06A-01 2K 2% EK E3	2k	05N4957	0.17
● CSC06A-01 100K 2% EK E3	100k	05N4932	0.17
BUSSED 1 WATT, 7 RESISTORS, 8-PIN			
● CSC08A01100KGEK	100k	65K2422	0.23
ISOLATED 0.75 WATT, 3 RESISTORS, 6-PIN			
● CSC06A031K00GEK	1k	71M1502	0.17
BUSSED 1.12 WATT, 8 RESISTORS, 9-PIN			
● CSC09A01330RGEK	330	71M1507	0.31
● CSC09A011K00GEK	1k	71M1506	0.31
● CSC09A014K70GEK	4.7k	71M1508	0.31
● CSC09A0147K0GEK	47k	71M1509	0.31
BUSSED 1.25 WATT, 9 RESISTORS, 10-PIN			
● CSC10A-01 56 2% EK E3	56	05N6030	0.27
● CSC10A011K50GEK	1.5k	71M1510	0.27
● CSC10A0147K0GEK	47k	71M1511	0.27
ISOLATED 1 WATT, 4 RESISTORS, 8-PIN			
● CSC08A034K70GEK	4.7k	71M1505	0.23
ISOLATED 1.25 WATT, 5 RESISTORS, 10-PIN			
● CSC10A031K00GEK	1k	71M1512	0.27
● CSC10A0310K0GEK	10k	65K2440	0.27
● CSC10A03100KGEK	100k	71M1513	0.27

(9569)

MIL-PRF-83401 QUALIFIED THIN FILM SIP RESISTOR NETWORKS

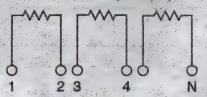
VISHAY.

C Schematic (Pin 1 Common)



Bussed (Pin 1 Common)

G Schematic (Isolated)



Isolated

Features
- MIL-PRF-83401 qualified (cage code 57489)
- Low profile design
- Rugged molded construction with standoff
- Choice of 6, 8 or 10 pin/leads
- Hot fused tin/lead 60/40 solder dipped
- 100% screened to groups A MIL-PRF-83410 testing
- Bussed or isolated (schematic C and G)

Specifications
- Res. tolerances to 0.2%
- Temperature coefficient: 50ppm/°C
- Working voltage: 100V
- Operating temperature: -55°C to +125°C
- Height: 0.195″ (4.95mm)
- Lead spacing: 0.100″ (2.54mm)

Single-In-Line (SIP) resistor networks are available in 6, 8, and 10 pins in schematic C (Bussed - Pin 1 Common) and G (Isolated) styles. They incorporate Vishay Dale Thin Film's patented passivated nichrome film to give superior performance on temperature coefficient of resistance, thermal stability, noise, voltage coefficient, power handling and resistance stability. Leads are attached to the metallized alumina substrates by Thermo-Compression bonding. Body is molded thermoset plastic with gold-plated copper alloy leads.

➤ CONTINUED ➤

MIL-PRF-83401 QUALIFIED THIN FILM SIP RESISTOR NETWORKS (CONT.)

Mfg. Part No.	Res. (kOhms)	Res. Tol.	Stock No.	Price Each 1-9	Price Each 10-24
SIP 6-PIN — ISOLATED					
M8340107H1001FGUF	1	± 1%	92T5224	8.66	8.44
M8340107H1002FGUF	10	± 1%	92T5226	8.66	8.44
SIP 8-PIN — ISOLATED					
M8340108H1001FGUF	1	± 1%	92T5232	8.83	8.60
M8340108H2001FGUF	2	± 1%	92T5243	8.83	8.60
M8340108H1002BGUF	10	± 0.1%	92T5233	9.92	9.66
M8340108H1002FGUF	10	± 1%	92T5235	8.83	8.60
M8340108H1102FGUF	11	± 1%	92T5239	8.83	8.60
M8340108H1003BGUF	100	± 0.1%	92T5237	9.92	9.66
M8340108H1003FGUF	100	± 1%	92T5238	8.83	8.60
SIP 10-PIN — ISOLATED					
M8340109H1001GGUF	1	± 2%	92T5263	8.89	8.66
M8340109H1002FGUF	10	± 1%	92T5264	9.02	8.78
SIP 10-PIN — BUSSED (PIN 1 COMMON)					
M8340109H2001FCUF	2	± 1%	92T5270	9.02	8.78
M8340109H1002GCUF	10	± 2%	92T5265	8.89	8.66

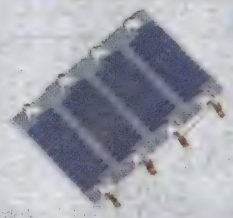
(206209)

MC4 SERIES HIGH VOLTAGE DIP RESISTOR NETWORKS

RoHS Compliant Available

OHMITE

NEW



Features:
- Unique terminals allow spacing between board and resistor
- Design allows multiple configurations
- 2500V max. per resistor per pack; 10KV total
- 8-pin isolated network

Specifications:
- Power rating per resistor: 750mW
- No. of resistors: 4
- Voltage rating: 2.5kV

Mfg. Part No.	Res.	Tol.	Temp. Coeff.	Stock No.	Price Each 1-24	Price Each 25-99
● MC4-1003JE	100kohm	± 5%	50ppm/°C	08X5348	4.72	4.28
● MC4-5003JE	500kohm	± 5%	50ppm/°C	08X5353	4.72	4.28
● MC4-1004JE	1Mohm	± 5%	50ppm/°C	08X5349	4.72	4.28
● MC4-5004JE	5Mohm	± 5%	50ppm/°C	08X5354	4.72	4.28
● MC4-1005JE	10Mohm	± 5%	50ppm/°C	08X5350	4.90	4.45
● MC4-5005JE	50Mohm	± 5%	50ppm/°C	08X5355	4.72	4.28
● MC4-1006JE	100Mohm	± 5%	50ppm/°C	08X5351	4.90	4.45
● MC4-5006JE	500Mohm	± 5%	100ppm/°C	08X5356	4.90	4.45
● MC4-1007KE	1Gohm	± 10%	100ppm/°C	08X5352	4.90	4.45
● MC4-5007KE	5Gohm	± 10%	100ppm/°C	08X5357	4.72	4.28

(211509)

EXB SERIES THICK FILM CHIP RESISTOR ARRAYS

RoHS Compliant Available

Panasonic

Features:
- High density
- Isolated
- Convex or concave terminal construction
- Thick film resistive element
- Resistance tolerance: ±5%
- Temperature coefficient: ±200ppm/°C
- Operating temperature range: -55°C to +125°C

Mfg. Part No.	Res. (Ohms)	No. of Resistors	Tape Cut Stock No.	Tape Cut Price Each 1-49	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-9999
CASE SIZE 0402 ARRAY, 8 CONVEX TERMINALS — 50V							
● EXB-28VR000X	0 (Jumper)	4	97W7860	0.02	97W7860	10000	0.02
● EXB-28V100JX	10	4	97W7861	0.02	97W7861	10000	0.02
● EXB-28V220JX	22	4	97W7866	0.02	97W7866	10000	0.02
● EXB-28V330JX	33	4	97W7867	0.02	97W7867	10000	0.02
● EXB-28V470JX	47	4	97W7868	0.02	97W7868	10000	0.02
● EXB-28V510JX	51	4	97W7870	0.02	97W7870	10000	0.02
● EXB-28V101JX	100	4	97W7862	0.02	97W7862	10000	0.02
● EXB-28V102JX	1k	4	97W7863	0.02	97W7863	10000	0.02
● EXB-28V472JX	4.7k	4	97W7869	0.02	97W7869	10000	0.02
● EXB-28V103JX	10k	4	97W7864	0.02	97W7864	10000	0.02
● EXB-28V104JX	100k	4	97W7865	0.02	97W7865	10000	0.02
CASE SIZE 0402 ARRAY, 16 CONVEX TERMINALS — 25V							
● EXB-2HVR000V	0 (Jumper)	8	01X1475	0.05	01X1475	5000	0.05
● EXB-2HV100JV	10	8	01X1476	0.05	01X1476	5000	0.05
● EXB-2HV220JV	22	8	01X1480	0.05	01X1480	5000	0.05

➤ CONTINUED ➤

EXB SERIES THICK FILM CHIP RESISTOR ARRAYS (CONT.)

CASE SIZE 0402 ARRAY, 16 CONVEX TERMINALS — 25V

Mfg. Part No.	Res. (Ohms)	No. of Resistors	Tape Cut Stock No.	Tape Cut Price Each 1-49	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-9999
EXB-2HV330JV	33	8	01X1482	0.05	01X1482	5000	0.05
EXB-2HV470JV	47	8	01X1483	0.05	01X1483	5000	0.05
EXB-2HV560JV	56	8	01X1485	0.05	01X1485	5000	0.05
EXB-2HV221JV	220	8	01X1481	0.05	01X1481	5000	0.05
EXB-2HV102JV	1k	8	01X1477	0.05	01X1477	5000	0.05
EXB-2HV472JV	4.7k	8	01X1484	0.05	01X1484	5000	0.05
EXB-2HV103JV	10k	8	01X1478	0.05	01X1478	5000	0.05
EXB-2HV104JV	100k	8	01X1479	0.05	01X1479	5000	0.05
CASE SIZE 0603 ARRAY, 8 CONVEX TERMINALS — 50V							
EXB-38VR000V	0 (Jumper)	4	97W7871	0.01	97W7871	5000	0.01
EXB-38V100JV	10	4	97W7872	0.01	97W7872	5000	0.01
EXB-38V220JV	22	4	97W7877	0.01	97W7877	5000	0.01
EXB-38V330JV	33	4	97W7880	0.01	97W7880	5000	0.01
EXB-38V470JV	47	4	97W7883	0.01	97W7883	5000	0.01
EXB-38V101JV	100	4	97W7873	0.01	97W7873	5000	0.01
EXB-38V221JV	220	4	97W7878	0.01	97W7878	5000	0.01
EXB-38V331JV	330	4	97W7881	0.01	97W7881	5000	0.01
EXB-38V471JV	470	4	97W7884	0.01	97W7884	5000	0.01
EXB-38V102JV	1k	4	97W7874	0.01	97W7874	5000	0.01
EXB-38V222JV	2.2k	4	97W7879	0.01	97W7879	5000	0.01
EXB-38V332JV	3.3k	4	97W7882	0.01	97W7882	5000	0.01
EXB-38V472JV	4.7k	4	97W7885	0.01	97W7885	5000	0.01
EXB-38V103JV	10k	4	97W7875	0.01	97W7875	5000	0.01
EXB-38V473JV	47k	4	97W7886	0.01	97W7886	5000	0.01
EXB-38V104JV	100k	4	97W7876	0.01	97W7876	5000	0.01
CASE SIZE 0402 ARRAY, 8 CONCAVE TERMINALS — 50V							
EXB-N8VR000X	0 (Jumper)	4	97W7840	0.01	97W7840	10000	0.01
EXB-N8V220JX	22	4	97W7843	0.01	97W7843	10000	0.01
EXB-N8V330JX	33	4	97W7844	0.01	97W7844	10000	0.01
EXB-N8V510JX	51	4	97W7846	0.01	97W7846	10000	0.01
EXB-N8V102JX	1k	4	97W7841	0.01	97W7841	10000	0.01
EXB-N8V472JX	4.7k	4	97W7845	0.01	97W7845	10000	0.01
EXB-N8V103JX	10k	4	97W7842	0.01	97W7842	10000	0.01
CASE SIZE 0603 ARRAY, 8 CONCAVE TERMINALS — 50V							
EXB-V8VR000V	0 (Jumper)	4	97W7847	0.02	97W7847	5000	0.02
EXB-V8V100JV	10	4	97W7848	0.02	97W7848	5000	0.02
EXB-V8V220JV	22	4	97W7853	0.02	97W7853	5000	0.02
EXB-V8V330JV	33	4	97W7855	0.02	97W7855	5000	0.02
EXB-V8V470JV	47	4	97W7857	0.02	97W7857	5000	0.02
EXB-V8V101JV	100	4	97W7849	0.02	97W7849	5000	0.02
EXB-V8V331JV	330	4	97W7856	0.02	97W7856	5000	0.02
EXB-V8V102JV	1k	4	97W7850	0.02	97W7850	5000	0.02
EXB-V8V222JV	2.2k	4	97W7854	0.02	97W7854	5000	0.02
EXB-V8V472JV	4.7k	4	97W7858	0.02	97W7858	5000	0.02
EXB-V8V103JV	10k	4	97W7851	0.02	97W7851	5000	0.02
EXB-V8V473JV	47k	4	97W7859	0.02	97W7859	5000	0.02
EXB-V8V104JV	100k	4	97W7852	0.02	97W7852	5000	0.02
EXB-V8V471JV	470k	4	52W3896	0.02	52W3896	5000	0.02

(208944)

MEGASURGE NTC INRUSH CURRENT LIMITERS

RoHS Compliant Available

AMETHERM Circuit Protection Thermistors

Applications
- AC Motors
- Power Supplies
- Motor Drives
- Audio Amplifiers
- Battery Charges
- Frequency Generators
- Plasma Cutting Tools
- MRI Machines
- Toroidal Transformers up to 4.0kVA

440V VOLTAGE RATING

Mfg. Part No.	R @ 25°C (Ohms)	Max SSI (A)	Max Energy (Joules)	Rhot @ 100% SSI	Dia. (mm)	Stock No.	Price Each 1-9	Price Each 10-99
MS32 1R036	1	36	300	0.009	32	72J6619	6.27	5.15
MS32 2R025	2	25	350	0.02	32	72J6622	6.35	5.21
MS32 5R020	5	20	325	0.045	32	72J6625	6.35	5.21
MS22 10008	10	8	200	0.09	22	72J6608	5.10	4.18
MS32 10015	10	15	250	0.06	32	72J6620	6.19	5.08
MS22 20005	20	5	150	0.18	22	72J6612	4.73	3.88
MS32 20010	20	10	250	0.18	32	72J6624	6.19	5.08
MS22 50004	50	4	240	0.36	22	72J6615	5.03	4.12
MS22 75004	75	4	240	0.41	22	72J6616	5.03	4.12

➤CONTINUED➤

MEGASURGE NTC INRUSH CURRENT LIMITERS (CONT.)

Mfg. Part No.	R @ 25°C (Ohms)	Max SSI (A)	Max Energy (Joules)	Rhot @ 100% SSI	Dia. (mm)	Stock No.	Price Each 1-9	Price Each 10-99
MS22 12103	120	3	220	1.28	22	72J6610	5.03	4.12
MS22 12104	120	4	220	0.75	22	72J6611	5.03	4.12
680V VOLTAGE RATING								
MS35 0R550	0.5	50	900	0.008	35	72J6628	9.48	7.77
MS35 1R040	1	40	800	0.012	35	72J6629	9.61	7.87
MS35 2R035	2	35	750	0.02	35	72J6631	9.48	7.77
MS35 3R030	3	30	700	0.02	35	72J6633	9.37	7.67
MS35 5R025	5	25	600	0.03	35	72J6634	9.49	7.77
MS35 10018	10	18	500	0.05	35	72J6630	9.61	7.87
MS35 20010	20	10	500	0.1	35	72J6632	9.48	7.77

(83970)

bigAMP™ INRUSH CURRENT LIMITERS

RoHS Compliant Available

AMETHERM Circuit Protection Thermistors

Applications
- Switching Power Supplies
- AC Motors
- Uninterruptible Power Supplies (UPSs)
- Frequency Generators

Ametherm's bigAMP™ Surge Limiters are specially designed Inrush Current Limiters able to withstand up to 36 amperes of continuous current and 260 joules of input energy.

Mfg. Part No.	R @ 25°C (Ohm)	Thermistor Tolerance	Steady State Current Max. (A)	Energy Rating Max. (J)	Dissipation Constant (mW/°C)	Stock No.	Price Each 1-9
SL32 0R530	0.5	-20% to +20%	30	150	45.4	72J6840	2.97
SL32 1R030	1	-20% to +20%	30	160	45.4	72J6842	3.01
SL32 1R036	1	-20% to +20%	36	160	45.4	72J6843	2.94
SL32 2R023	2	-20% to +20%	23	250	80	72J6845	3.05
SL32 2R025	2	-15% to +15%	25	300	45.4	72J6846	2.92
SL32 5R020	5	-20% to +20%	20	300	45.4	72J6848	3.01
SL32 10015	10	-20% to +20%	15	150	45.4	72J6844	3.01

(83963)

NTC INRUSH CURRENT LIMITERS

RoHS Compliant Available

EPCOS

Features
- Low power

Applications
- Switch-mode power supplies
- Soft-start motors

Mfg. Part No.	R @ 25°C (Ohm)	I_{MAX} (A)	B (@ 25/100°C) (K)	Stock No.	Price Each 1-9
B57153S479M	4.7	3	2800	21C9584	0.73
B57153S100M	10	2	2800	21C9581	0.79
B57153S150M	15	1.8	2900	21C9582	0.73
B57235S509M	5	4.2	2800	21C9655	0.91
B57236S100M	10	3.5	2900	21C9658	1.09
B57237S150M	15	3	3000	30C7939	1.32
B57237S220M	22	2.5	3300	30C7940	1.32
B57237S479M	4.7	5.1	2900	30C7944	1.32
B57364S109M	1	16	2800	21C9668	2.52
B57364S259M	2.5	11	2900	21C9671	2.71
B57364S509M	5	8.5	3060	21C9673	2.52

(136534)

GE's THERMOMETRICS NTC TYPE CL SERIES

RoHS Compliant Available

Amphenol Advanced Sensors

- Disc Thermistor with Uninsulated Lead Wires
- Suitable for AC/DC Switching Power Supplies
- Operating Temperature: -50°C to +175°C

"A" suffix denotes kinked leads.

Mfg. Part No.	R @ 25°C (Ω)	IMAX (A)	Cx Max (uF) @120 VAC	Cx Max (uF) @240 VAC	Stock No.	Price Each 1-9	Price Each 10-24
CL-11	0.7	12	2700	675	16F5006	4.92	4.33
CL-21	1.3	8	800	200	16F5007	3.09	2.72

➤CONTINUED➤

GE's THERMOMETRICS NTC TYPE CL SERIES (CONT.)

Mfg. Part No.	R @ 25°C (Ω)	IMAX (A)	Cx Max (uF) @120 VAC	Cx Max (uF) @240 VAC	Stock No.	Price Each 1-9	Price Each 10-24
● CL-30	2.5	8	6000	1500	81F3387	1.56	1.37
● CL-30A	2.5	8	...	...	90B6312	2.56	2.25
● CL-40	5	6	5200	1300	81F3388	1.92	1.69
● CL-50	7	5	5000	1250	81F3389	2.75	2.42
● CL-60	10	5	5000	1250	81F3390	1.56	1.37
● CL-70	16	4	5000	1250	81F3391	2.51	2.21
● CL-80	47	3	5000	1250	81F3392	1.92	1.69
● CL-90	120	2	5000	1250	81F3393	3.15	2.77
● CL-101	0.5	16	4000	1000	16F5008	5.91	5.20
● CL-110	10	3.2	600	150	46F455	1.39	1.23
● CL-120	10	1.7	600	150	81F3395	1.26	1.11
● CL-130	50	1.6	600	150	46F456	2.42	2.13
● CL-140	50	1.1	600	150	81F3396	2.39	2.10
● CL-150	5	4.7	1600	400	46F457	2.44	2.15
● CL-160	5	2.8	1600	400	81F3397	2.30	2.03
● CL-170	16	2.7	1600	400	46F458	2.30	2.03
● CL-180	16	1.7	1600	400	81F3398	2.30	2.03
● CL-190	25	2.4	800	200	46F416	2.31	2.03
● CL-200	25	1.7	800	200	81F3399	2.30	2.03
● CL-210	30	1.5	600	150	96F3302	2.39	2.10

(4182)

NTC THERMISTORS

RoHS Compliant Available

EPCOS

Features
- Coated thermistor disk
- Kinked leads of tinned copper wire
- Wide resistance range

Applications
- Switch-mode power supplies
- Soft-start motors
- Vacuum cleaners

Mfg. Part No.	Resistance (Ω)	Tol.	Beta	Stock No.	Price Each 1-9	Price Each 10-99
● B57237S109M	1	-20% to +20%	2700	30C7938	1.32	1.05
● B57464S209M	2	-20% to +20%	2900	29M3209	6.82	5.51
● B57237S229M	2.2	-20% to +20%	2800	30C7941	1.32	1.05
● B57237S259M	2.5	-20% to +20%	2800	30C7942	1.32	1.05
● B57238S259M	2.5	-20% to +20%	2800	84H9641	1.38	1.09
● B57238S479M	4.7	-20% to +20%	2965	05J7791	1.38	1.09
● B57236S509M	5	-20% to +20%	2800	21C9665	1.09	0.86
● B57237S509M	5	-20% to +20%	2900	30C7945	1.32	1.05
● B57238S509M	5	-20% to +20%	2965	43J3495	1.38	1.09
● B57464S509M	5	-20% to +20%	3060	07P7901	6.82	5.51
● B57235S100M51	10	-20% to +20%	2900	59T4304	1.08	0.96
● B57464S100M	10	-20% to +20%	3300	29M3208	6.32	5.11
● B57237S100M	10	-20% to +20%	3060	30C7937	1.42	1.12
● B57238S100M	10	-20% to +20%	3065	05J7782	1.49	1.17
● B57238S150M	15	-20% to +20%	3165	05J7784	1.38	1.09
● B57236S160M	16	-20% to +20%	2965	21C9660	1.09	0.86
● B57238S160M	16	-20% to +20%	3165	05J7786	1.60	1.27
● B57236S200M	20	-20% to +20%	3065	21C9661	1.09	0.86
● B57237S220M51	22	-20% to +20%	3300	59T4305	1.43	1.34
● B57238S220M	22	-20% to +20%	...	05J7787	1.38	1.09
● B57236S250M	25	-20% to +20%	3065	21C9662	1.09	0.86
● B57238S250M	25	-20% to +20%	3265	05J7789	1.60	1.27
● B57237S330M	33	-20% to +20%	3300	30C7943	1.32	1.05
● B57236S500M	50	-20% to +20%	3165	21C9664	1.09	0.86
● B57891M102J	1k	-5% to +5%	3930	21C9770	1.03	0.78
● B57861S202F40	2k	-1% to +1%	3560	43J3637	2.65	2.14
● B57891M222J	2.2k	-5% to +5%	3900	21C9790	1.03	0.78
● B57861S302F40	3k	-1% to +1%	3988	21C9732	2.85	2.30
● B57891M472J	4.7k	-5% to +5%	3980	21C9802	0.96	0.73
● B57540G502F	5k	-1% to +1%	3497	43J3553	4.03	3.26
● B57550G502F	5k	-1% to +1%	3497	43J3579	3.81	3.07
● B57861S502F40	5k	-1% to +1%	3988	21C9738	2.85	2.30
● B57891S502F8	5k	-1% to +1%	3980	43J3684	1.89	1.53
● B57891M682J	6.8k	...	3980	21C9808	1.03	0.78
● B57560G103F	10k	-1% to +1%	3492	43J3588	6.17	5.49
B57620C5103J62	10k	-5% to +5%	3730	59T4306	0.74	0.65
● B57891S103F8	10k	-1% to +1%	3950	43J3681	2.04	1.65

➤ CONTINUED ➤

NTC THERMISTORS (CONT.)

Mfg. Part No.	Resistance (Ω)	Tol.	Beta	Stock No.	Price Each 1-9	Price Each 10-99
● B57869S103F140	10k	...	3988	59T4307	3.76	3.50
● B57871S103F2	10k	-1% to +1%	3460	43J3658	2.54	2.05
● B57891M153J	15k	-5% to +5%	4100	21C9786	0.96	0.73
● B57703M303G40	30k	-2% to +2%	3964	43J3627	4.01	3.24
● B57861S303F40	30k	-1% to +1%	3964	21C9735	2.81	2.27
● B57891M333J	33k	-5% to +5%	4300	21C9798	1.02	0.77
● B57540G503F	50k	-1% to +1%	4006	43J3556	4.27	3.46
● B57550G104F	100k	-1% to +1%	4092	43J3564	3.54	2.86
● B57861S104F40	100k	-1% to +1%	4540	43J3634	2.81	2.27
● B57891S104F8	100k	-1% to +1%	4450	43J3682	2.04	1.65
● B57891M104J	100k	-5% to +5%	4450	21C9774	1.03	0.78
● B57891M474J	470k	-5% to +5%	5000	21C9806	0.96	0.73

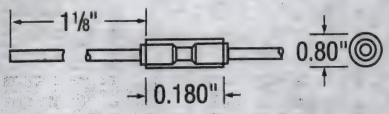
(177826)

HONEYWELL FENWAL GLASS-ENCAPSULATED CHIP NTC THERMISTORS, 135 SERIES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE. All Found Here.

Features
- Rugged DO-35 Glass Encapsulation
- Hermetically-Sealed
- Solderable, Weldable, Tinned Copper-Clad Steel Leads
- Tighter tolerances available



Specifications
- Operating Temp: -60°C to +300°C
- Time Constant: 4 Sec. Max.
- DC Power: 2.5mW/°C
- Tolerance: ±10 %, except **mfr. part no. 135-xxxLFW**, ±1°C from 0°C to 100°C

Applications
- Telecom, Automation, Appliances

Mfr. Part No.	Resistance (Ω)	Stock No.	Price Each 1-49	Price Each 50-99
● 135-202FAG-J01	2k	10M5322	0.87	0.79
● 135-103FAG-J01	10k	30F1746	2.78	1.67
● 135-503LAG-J01	50k	10M5324	2.23	2.11
● 135-503LFW-J01	50k	96F8016	6.55	6.08
● 135-204QAG-J01	200k	10M5323	1.70	1.00
● 135-504QAG-J01	5k	10M5325	0.69	0.63
● 135-104LAF-J01	100k	10M5320	1.13	1.08
135-105QAG-J01	1M	30F1750	1.84	1.56
135-102DAG-J01	1M	46F3210	0.67	0.65

(4177)

HONEYWELL FENWAL UNI-CURVE® R-T MATCHED INTERCHANGEABLE NTC THERMISTORS, 192 SERIES

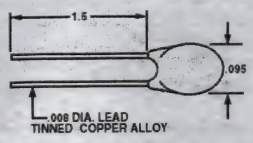
RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE. All Found Here.

Features
- Resistance Temperature Curve Interchangeability
- High Stability and Reliability
- Epoxy-Coated

Specifications
- Time Constant: 15 Sec.
- DC Power: 0.75mW/°C
- Operating Temperature: 0°C to +125°C

Applications
- Temperature Measurement and Control



Mfr. Part No.	Resistance (Ω)	Resistance Ratio	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99
● 192-102DEW-A01	1k	6.35	10M5345	4.87	4.62	4.40
● 192-302LET-A01	3k	9.1	30F1797	4.96	3.09	2.90
● 192-502LET-A01	5k	9.1	10M5352	5.88	3.66	3.43
● 192-103LEV-A01	10k	9.1	10M5347	7.07	4.61	4.14
● 192-103LEW-A01	10k	9.1	96F6247	2.98	2.69	2.34
● 192-303KET-A01	30k	8.72	10M5350	7.04	6.69	6.37
● 192-104QET-A01	100k	8.72	10M5348	3.32	3.17	3.02
● 192-503QET-A01	50k	8.72	46F3215	8.00	6.12	5.76

(4178)

ENGINEERS START HERE
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(212565)

HONEYWELL FENWAL GLASS PROBE NTC THERMISTORS, 120 AND 121 SERIES

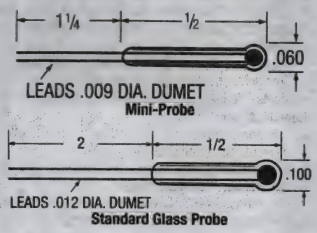
RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE. All Found Here.

Features
- Shock-Resistant, Hermetically-Sealed Glass Probes
- Weldable/Solderable Dumet Leads

Specifications
- Tolerance: ±20%
- Time Constant: 120 Series: 10 Sec.; 121 Series: 22 Sec.
- DC Power: 120 Series: 0.5mW/°C; 121 Series: 1mW/°C
- Max. Operating Temperature: 300°C

Applications
- Temperature Measurement and Control in Fluids and Air Sensors



Mfr. Part No.	Resistance (Ω)	Stock No.	Price Each 1-9	Price Each 10-99
MINI-PROBE				
120-102EAJQ01	1k	98F588	12.34	8.07
STANDARD GLASS PROBE				
121-202EAJ-Q01	2k	10M8467	12.75	8.33
121-103FAJ-Q01	10k	10M8466	9.36	8.89
112-104KAJ-B01	100k	46F5987	12.79	8.72
121-102EAJ-Q01	1k	10M8465	18.81	17.87
121-102EAJ-Q01	1k	10M8465	18.81	17.87
111-103EAJ-H01	10k	96F8005	8.61	8.17
112-103FAJ-B01	10k	30F1725	12.29	8.39

(4175)

GE's Thermometrics NTC Type MS Series

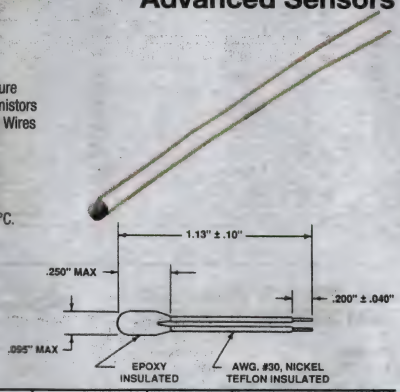
RoHS Compliant Available

Amphenol
Advanced Sensors

Features
- Low-Cost Solid-State Sensor
- High Sensitivity to Changes in Temperature
- Epoxy-Coated Point-Matched Disc Thermistors have 0.010" Nickel PTFE Insulated Lead Wires

Specifications
- Temperature Accuracy: ±1°C @ 25°C
- Dissipation Constant: 1.4 mW/°C
- Time Constant: 15 sec.
- Operating Temperature: –50°C to +150°C.

Applications
- Suitable for Temperature Measurement, Control and Compensation
- Suitable for PCB and Probe Mountings



Mfg. Part No.	R_0 @ 25°C	Temp. Coef. %/°C @ 25°C	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49
RL0503-1248-73-MS	2kohm	-3.83	59J7489	1.95	1.72	1.56
RL0503-2890-95-MS	5kohm	–4.43	83C8458	3.20	2.82	2.57
RL0503-5820-97-MS	10kohm	–4.39	96F3308	3.22	2.84	2.58
RL0503-17.56K-96-MS	30kohm	–4.32	90B0695	1.95	1.72	1.56
RL0503-27.53K-120-MS	50kohm	–4.84	96F3309	3.27	2.88	2.62
RL0503-55.36K-122-MS	100kohm	–4.78	96F3310	3.22	2.84	2.58

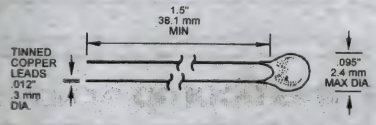
(4197)

GE's Thermometrics NTC Interchangeable Type DC95 Series

Amphenol
Advanced Sensors

Features
- Epoxy Coating with Tinned Copper Leads
- Interchangeable Sensor @ 0.1°C
- Replacements Do Not Require Trimming or Recalibration

Specifications
- Dissipation Constant: (Still Air): 1mW/°C; (Stirred Oil): 8mW/°C
- Thermal Time Constant: (Still Air): 10 sec.; (Stirred Oil): 1 sec.
- Max. Power @ 25°C: 75mW
- Operating Temperature: ±0.2°C over 0°C to +70°C
- Lead Size: 1.5" x 0.012" Dia.



Mfg. Part No.	Resistance (Ω)	Tolerance	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49
DC95F232W	2.252k	-0.2°C to +0.2°C	52F3326	6.12	5.49	4.93
DC95F502W	5k	-0.2°C to +0.2°C	52F3328	5.80	5.20	4.67

CONTINUED

GE's Thermometrics NTC Interchangeable Type DC95 Series (CONT.)

Mfg. Part No.	Resistance (Ω)	Tolerance	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49
EC95F103W	10k	-0.2°C to +0.2°C	52F3336	6.46	5.81	5.22
DC95F302W	3k	-0.2°C to +0.2°C	27C4775	6.33	5.67	5.09
DC95H303W	30k	-0.2°C to +0.2°C	90B3189	5.80	5.20	4.67

(4220)

NTC TEMPERATURE-SENSING THERMISTORS

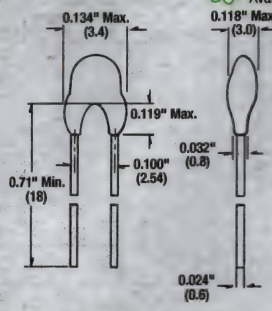
RoHS Compliant Available

VISHAY.

Features
- Accuracy Over A Wide Temperature Range
- High Stability
- Excellent Performance Ratio
- Color Band Markings for Easier Identification

Specifications
- Radial-Leaded
- Solder Mounts in Any Position
- Operating Temperature: -40°C to +150°C
- Dissipation Factor: 7mw/°K

Applications
- Temperature Sensing and Control



Thermistors have negative temperature coefficient. Device consists of a chip with 2 tinned solid copper-plated leads. Gray lacquered and color-coded but not insulated.

Mfg. Part No.	Resistance @25°C (ohms)	Stock No.	Price Each 1-24	Price Each 25-49
NTCLE100E3478JB0	4.7	41M1126	0.84	0.74
NTCLE100E3102JB0	1k	54K2709	0.84	0.74
NTCLE100E3103JB0	10k	50F7750	0.91	0.80
NTCLE100E3153JB0	15k	11M2239	0.90	0.80
NTCLE100E3223JB0	22k	52K9634	0.90	0.80
NTCLE100E3339JB0	33	49H6290	0.84	0.74
NTCLE100E3473JB0	47k	31K8399	0.89	0.79
NTCLE100E3683JB0	68k	41M1128	0.84	0.74
NTCLE100E3104JB0	100k	56K5512	0.84	0.74
NTCLE100E3154JB0	150k	56K5482	0.84	0.74

(16025)

NTC CERAMIC THERMISTORS

RoHS Compliant Available

VISHAY.

Features
- Conformally Coated for Standard PC Board Mounting or Assembly in Probes
- Point Matched or Curve Tracking Thermistors
- Small size
- Wide resistance range

Mfg. Part No.	Resistance (Ω)	Curve Number	Resistance Tolerance	Stock No.	Price Each 1-49	Price Each 50-99
01T1001FP	1k	1	-1% to +1%	07J8195	2.81	2.32
01C1001JF	1k	1	-5% to +5%	46M2586	1.75	1.42
01C3001FF	3k	1	-1% to +1%	41K9361	1.76	1.43
01M5001JF	5k	1	-5% to +5%	41K9365	1.75	1.42
01C1002FP	10k	1	-1% to +1%	07J8183	2.03	1.65
01T1002FF	10k	1	-1% to +1%	41K9366	2.98	2.46
01M1002JF	10k	1	-5% to +5%	46M2587	1.75	1.42
02C1000JF	100	2	-5% to +5%	41K9368	1.75	1.42
02C5000FF	500	2	-1% to +1%	41K9374	2.06	1.67
02C5000JF	500	2	-5% to +5%	41K9375	1.75	1.42
02C1001FF	1k	2	-1% to +1%	41K9369	3.72	3.22
02M1501JF	1.5k	2	-5% to +5%	41K9379	1.75	1.42
02J5001JR	5k	2	-5% to +5%	07J8206	1.29	0.94
02J1002JF	10k	2	-5% to +5%	41K9376	1.37	1.12
04T1003FF	100k	4	-1% to +1%	41K9381	2.81	2.32
07C5002JF	50k	7	-5% to +5%	41K9385	1.91	1.55
07M1003JF	100k	7	-5% to +5%	41K9386	1.75	1.42
07M2003JF	200k	7	-5% to +5%	41K9387	1.91	1.55
08M1003JF	100k	8	-5% to +5%	46M2589	1.75	1.42
09M1002FP	10k	9	-1% to +1%	07J8222	2.06	1.67

(59575)

EPOXY INTERCHANGEABLE NTC THERMISTORS, 44000 SERIES

RoHS Compliant Available

measurement SPECIALTIES

Specifications
- Time Constant: 1 Sec. Max. in Oil Bath
- Time Constant: 10 Sec. Max. in Still Air
- Operating Temperature: -80°C to +120°C

Provide accurate and stable temperature sensing for application of temperature measurement, control, indication and compensation. Time constant: 1 sec. max. in oil bath, 10 sec. max. in still air.

±0.2°C INTERCHANGEABILITY TOLERANCE

Mfg. Part No.	Resistance (Ω)	Tolerance	Resistance Ratio	Stock No.	Price Each 1-9	10-24	25-49
● 44001ARC	100	-1% to +1%	11.49	70K8736	20.78	20.17	19.26
● 44003ARC	1k	-1% to +1%	17.33	70K8737	20.52	19.91	19.02
● 44004RC	2.252k	-1% to +1%	29.26	70K8738	15.74	15.28	14.60
● 44005RC	3k	-1% to +1%	29.26	70K8739	15.74	15.28	14.60
● 44007RC	5k	-1% to +1%	29.26	70K8741	15.74	15.28	14.60
● 44016RC	10k	-1% to +1%	29.26	70K8744	15.94	15.48	14.78
● 44006RC	10k	-1% to +1%	23.51	70K8740	15.74	15.28	14.60
● 44008RC	30k	-1% to +1%	29.15	70K8742	15.74	15.28	14.60
● 44011RC	100k	-1% to +1%	34.82	70K8743	20.78	20.17	19.26
±0.1°C INTERCHANGEABILITY TOLERANCE Working temperature for best stability: –80°C to +75°C.							
● 44031RC	10k	-0.5% to +0.5%	23.51	70K8745	23.44	22.74	21.71
● 44033RC	2.252	-0.5% to +0.5%	29.26	70K8746	23.72	23.02	21.98

(4207)

3303 SERIES SMD TRIMMING POTENTIOMETERS

RoHS Compliant Available

BOURNS®

Features
- Recommended for reflow processing
- Rotor design compatible with pick and place and automatic adjustment equipment
- Supplied in 8 mm embossed tape, compatible with automatic assembly equipment
- Rear adjust version available
- 3 mm size meets EIA/EIAJ standard trimmer footprint
- RoHS compliant* - see processing information on lead free surface mount trimmers

Mfg. Part No.	Resistance (KOhm)	Stock No.	Price Each 1-9
● 3303W-3-502E	5	04B2962	0.47
● 3303W-3-103E	10	04B2958	0.48
● 3303W-3-203E	20	04B2961	0.47
● 3303X-3-103E	10	61H2248	0.37
● 3303X-3-104E	100	10C0858	0.36

(177911)

3313 SERIES 3mm SINGLE-TURN SMT, CERMET TRIMMERS

RoHS Compliant Available

BOURNS® SMD

Features
- Surface Mount, 3mm Square, Single-Turn Cermet, Sealed Trimming Potentiometer
- Compatible With SMD Manufacturing Processes
- Rotor Stop for "In-Circuit" Adj.
- Plastic Housing for RF Applications

Specifications
- Tolerance: ±20%
- Dielectric Strength: 500 VAC
- Standard Resistance Range: 10Ω to 2MΩ
- Power Rating @ 70°C: 0.125 Watt; @ +125°C: 0 Watt
- Temperature Coefficient: >100Ω: ±100 ppm/°C
- Operating Temperature: -55°C to +125°C
- Rotational Life: 100 Cycles
- Torque: 50g-cm Max.
- Stop Strength: 200g-cm Min.

3313J SERIES - J-HOOK CONFIGURATION

Mfg. Part No.	Res. (Ohms)	Tape Cut Stock No.	Price Each 1-9	10-24
● 3313J-1-201E	200	58K3062	1.88	1.76
● 3313J-1-501E	500	58K3063	1.80	1.69
● 3313J-1-102E	1k	04F8034	1.85	1.73
● 3313J-1-202E	2k	78M8848	1.88	1.76
● 3313J-1-502E	5k	58K3064	1.80	1.69
● 3313J-1-103E	10k	60K7112	1.80	1.69
● 3313J-1-203E	20k	96M0897	1.85	1.73
● 3313J-1-503E	50k	96M0898	1.80	1.69
● 3313J-1-104E	100k	59K0391	1.80	1.69
3313S SERIES - WITH MOUNTING BRACKET				
● 3313S-1-103E	10k	10C0982	1.98	1.86

(15240)

3314 SERIES 4mm SQUARE SINGLE-TURN, SMT, CERMET TRIMMING POTENTIOMETERS

RoHS Compliant Available

BOURNS® SMD

Features
- Surface Mount, 4mm Square, Single Turn, Cermet, Industrial, Sealed Trimming Potentiometer
- Compatible With Surface Mount Manufacturing Processes
- Compatible With Popular Vacuum Pick-And-Place Equipment
- Side-Adjust Style, J-Hook, Gull-Wing and Pinned Configurations Available, *go online or call*
- Meets EIA, EIAJ, IPC, VRCI SMD Standard Trimmer Designs

Specifications
- Tolerance: ±20%
- Dielectric Strength: 500 VAC
- Standard Resistance Range: 10Ω to 2MΩ
- Solderability: Per MIL-STD-202
- Power Rating @ 70°C: 0.25 Watt; @125°C: 0 Watt
- Temperature Coefficient: ±100 ppm/°C
- Operating Temp.: -55°C to +125°C
- Contact Resistance Variation: 3% or 3Ω
- Rotational Life: 100 Cycles
- Torque: 180g-cm Typical
- Stop Strength: 300g-cm Typical

3314G SERIES - GULL WING CONFIGURATION

Mfg. Part No.	Res. (Ohms)	Tape Cut Stock No.	Price Each 1-9
● 3314G-1-101E	100	58K3065	1.88
● 3314G-1-201E	200	04F5975	1.88
● 3314G-1-501E	500	58K3074	1.85
● 3314G-1-102E	1k	59K0392	1.80
● 3314G-1-202E	2k	59K0393	1.85
● 3314G-1-502E	5k	04F5979	1.88
● 3314G-1-103E	10k	04F5980	1.80
● 3314G-1-203E	20k	58K3072	1.80
● 3314G-1-503E	50k	04F5983	1.88
● 3314G-1-104E	100k	58K3067	1.88
● 3314G-1-504E	500k	78M8852	1.50
3314J SERIES - J-HOOK CONFIGURATION			
● 3314J-1-101E	100	58K3077	1.88
● 3314J-1-201E	200	96M0899	1.80
● 3314J-1-501E	500	04F5959	1.80
● 3314J-1-102E	1k	58K3079	1.85
● 3314J-1-202E	2k	04F5961	1.85
● 3314J-1-502E	5k	58K3089	1.88
● 3314J-1-103E	10k	59K0394	1.80
● 3314J-1-203E	20k	58K3085	1.85
● 3314J-1-104E	100k	58K3083	1.88
● 3314J-1-204E	200k	78M8853	1.80
● 3314J-1-504E	500k	78M8854	1.88

(34272)

3345 SERIES ½" ROUND SINGLE-TURN WIREWOUND TRIMMERS

RoHS Compliant Available

BOURNS®

Features
- ½" Dia., Single Turn, Industrial, Wirewound, Sealed Trimmer
- Also available with a thumbwheel or screwdriver adjustment. *Go online or call for availability.*

Specifications
- Tolerance: ±5%
- Dielectric Strength: 1500 VAC
- Power Rating @ 70°C: 1 Watt
- Operating Temperature: -55°C to +150°C
- Rotational Life: 200 cycles
- Torque: 5 oz.-in max
- Temperature Coefficient +/-50 ppm/°C max.

Mfg. Part No.	Res. (Ohms)	Nominal Resolution	Stock No.	Price Each 1-9	10-49
● 3345P-1-500			01F8248	11.28	10.26
● 3345P-1-101			01F8249	10.88	9.90
● 3345P-1-501	500	0.38%	26M8372	10.88	9.90
● 3345P-1-102	1 k	0.30%	26M8370	10.88	9.90
● 3345P-1-202	2 k	0.24%	26M8371	11.28	10.26
● 3345P-1-502	5 k	0.18%	01F8255	10.88	9.90
● 3345P-1-103	10 k	0.14%	01F8256	11.28	10.26

(9599)

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(212569)

3352 SERIES THUMBWHEEL TRIMMERS

RoHS Compliant Available

BOURNS®

Features
- ⅜" Diameter Single-Turn, Cermet, Industrial, Open Frame Trimming Potentiometer
- Stable Cermet Element Offers Infinite Resolution
- 7 Pin Styles Available

Specifications
- Tolerance: ±20%
- Absolute Minimum Resistance: 2Ω
- Dielectric Strength: 500 VAC
- Power Rating @ 85°C: 0.50 Watt; @ +125°C: 0 Watt
- Temperature Coefficient: ≥2k: ±100 ppm/°C; <2k: ±150 ppm/°C
- Operating Temperature: -55°C to +125°C
- Contact Resistance Variation: 1% or 1Ω (Whichever is Greater)
- Rotational Life: 200 Cycles
- Torque: 3.0 oz.-in. Max.
- Stop Strength: 8 oz.-in. Min.

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
TYPE 3352E TOP ADJUST				
3352E-1-103LF	10k	32K8087	1.50	1.30
3352E-1-104LF	100k	32K8088	1.52	1.32
TYPE 3352H SIDE ADJUST				
3352H-1-502LF	5k	32K8118	1.46	1.27
3352H-1-103LF	10k	32K8105	1.52	1.32
3352H-1-203LF	20k	32K8111	1.15	1.04
3352H-1-503LF	50k	32K8119	1.46	1.27
TYPE 3352P TOP ADJUST				
3352P-1-103LF	10k	32K8142	1.50	1.30
TYPE 3352T TOP ADJUST				
3352T-1-201LF	200	32K8165	1.46	1.27
3352T-1-501LF	500	32K8173	1.50	1.30
3352T-1-102LF	1k	32K8160	1.46	1.27
3352T-1-202LF	2k	32K8166	1.52	1.32
3352T-1-502LF	5k	32K8174	1.52	1.32
3352T-1-103LF	10k	32K8161	1.50	1.30
3352T-1-203LF	20k	32K8167	1.46	1.27
3352T-1-503LF	50k	32K8175	1.46	1.27
3352T-1-104LF	100k	32K8162	1.52	1.32
3352T-1-504LF	500k	32K8176	1.52	1.32
3352T-1-105LF	1M	32K8163	1.52	1.32
TYPE 3352W SIDE ADJUST				
3352W-1-102LF	1k	32K8195	1.52	1.32
3352W-1-202LF	2k	32K8201	1.46	1.27
3352W-1-502LF	5k	32K8209	1.46	1.27
3352W-1-103LF	10k	32K8196	1.52	1.32
3352W-1-503LF	50k	32K8210	1.46	1.27
3352W-1-104LF	100k	32K8197	1.52	1.32

(9597)

3362 SERIES ¼" SQUARE SINGLE TURN CERMET TRIMMERS

RoHS Compliant Available

BOURNS®

Features
- Sealed body suitable for Industrial applications
- Miniature Package
- Rotor Designed For Automatic Machine Adjust Interface
- Withstands Harsh Environments and Immersion Cleaning Processes

Specifications
- Tolerance: ±10%
- Absolute Minimum Resistance: 1% or 2Ω (Whichever is Greater)
- Dielectric Strength: 900 VAC
- Power Rating: 0.50 Watt @ 70°C; @ 125°C: 0 Watt
- Operating Temperature: -55°C to +125°C
- Rotational Life: 200 Cycles
- Torque: 3.0 oz.-in. Max.
- Stop Strength: 7.0 oz.-in. Min.
- Contact Resistance Variation: 1% or 2Ω (Whichever Is Greater)
- Temperature Coefficient: ±100 ppm/°C

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
TYPE 3362H - TOP ADJUST				
3362F-1-103LF	10k	33M2824	1.01	0.88
TYPE 3362H - SIDE ADJUST				
3362H-1-501LF	500	62J1839	0.98	0.85
3362H-1-102LF	1k	62J1826	0.98	0.85
3362H-1-202LF	2k	62J1832	0.98	0.85
3362H-1-502LF	5k	62J1840	0.98	0.85
3362H-1-103LF	10k	62J1827	0.98	0.85
3362H-1-503LF	50k	62J1841	1.01	0.88
3362H-1-104LF	100k	62J1828	1.01	0.88
TYPE 3362M - SIDE ADJUST				
3362M-1-101LF	100	62J1844	0.98	0.85
3362M-1-102LF	1k	62J1846	0.98	0.85
3362M-1-502LF	5k	62J1873	1.01	0.88

➤CONTINUED➤

3362 SERIES ¼" SQUARE SINGLE TURN CERMET TRIMMERS (CONT.)

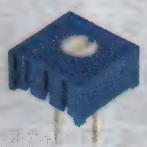
Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
TYPE 3362M - SIDE ADJUST				
3362M-1-103LF	10k	62J1849	0.98	0.85
3362M-1-503LF	50k	62J1875	0.98	0.85
3362M-1-104LF	100k	62J1852	0.98	0.85
TYPE 3362P - TOP ADJUST				
3362P-1-101LF	100	62J1880	0.98	0.85
3362P-1-201LF	200	62J1886	0.98	0.85
3362P-1-501LF	500	62J1901	1.00	0.87
3362P-1-102LF	1k	62J1881	1.01	0.88
3362P-1-202LF	2k	62J1887	1.00	0.87
3362P-1-502LF	5k	62J1902	1.00	0.87
3362P-1-103LF	10k	62J1882	0.98	0.85
3362P-1-103TLF*	10k	17M3619	1.79	1.56
3362P-1-203LF	20k	62J1888	1.00	0.87
3362P-1-223LF	22k	62J1892	0.98	0.85
3362P-1-253LF	25k	62J1893	1.01	0.88
3362P-1-503LF	50k	62J1903	0.98	0.85
3362P-1-104LF	100k	62J1883	1.01	0.88
3362P-1-204LF	200k	62J1889	0.98	0.85
3362P-1-504LF	500k	62J1904	1.01	0.88
3362P-1-105LF	1M	62J1884	1.01	0.88
TYPE 3362R - TOP ADJUST				
3362R-1-502LF	5k	97M3553	0.98	0.85
3362R-1-103LF	10k	97M3551	0.98	0.85
3362R-1-104LF	100k	97M3552	0.98	0.85
TYPE 3362U - TOP ADJUST				
3362U-1-102LF	1k	62J1952	1.01	0.88
3362U-1-202LF	2k	62J1967	1.01	0.88
3362U-1-502LF	5k	62J1988	0.98	0.85
3362U-1-103LF	10k	62J1955	1.01	0.88
3362U-1-203LF	20k	62J1970	1.01	0.88
3362U-1-503LF	50k	62J1991	0.98	0.85
3362U-1-104LF	100k	62J1958	1.00	0.87
TYPE 3362W - SIDE ADJUST				
3362W-1-101LF	100	62J1998	0.98	0.85
3362W-1-501LF	500	62J2014	1.01	0.88
3362W-1-102LF	1k	62J1999	0.98	0.85
3362W-1-502LF	5k	62J2015	0.98	0.85
3362W-1-103LF	10k	62J2000	1.00	0.87
3362W-1-203LF	20k	62J2006	0.98	0.85
3362W-1-503LF	50k	62J2016	1.01	0.88
TYPE 3362X - SIDE ADJUST				
3362X-1-202LF	2k	62J2026	0.81	0.75
3362X-1-502LF	5k	62J2034	1.01	0.88
3362X-1-103LF	10k	62J2021	1.01	0.88
3362X-1-104LF	100k	62J2022	0.98	0.85

* with knob
(4145)

3386 SERIES ⅜" SQUARE SINGLE-TURN CERMET TRIMMERS

RoHS Compliant Available

BOURNS®



Features
- Sealed body suitable for Industrial applications
- Knob style for finger adjustments, extended shaft style, cross-slot rotor style and high-voltage types are available; *go online or call.*

Specifications
- Tolerance: ±10%
- Standard Resistance Range: 10Ω to 2MΩ
- Contact Resistance Variation: 2% or 3Ω Max. (Whichever Is Greater)
- Temperature Coefficient: ±100 ppm/°C
- Dielectric Strength: 900 VAC
- Power Rating @ 85°C: 0.5 Watt
- Operating Temperature: -55°C to +125°C
- Rotational Life: 200 Cycles
- Torque: 5.0 oz.-in. Max.
- Stop Strength: 15.0 oz.-in. Min.

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
3386C SERIES — SIDE ADJUST				
3386C-1-501LF	500	62J2082	1.38	1.22
3386C-1-102LF	1k	62J2066	1.43	1.26
3386C-1-202LF	2k	62J2072	1.38	1.22
3386C-1-502LF	5k	62J2083	1.38	1.22
3386C-1-103LF	10k	62J2067	1.43	1.26
3386C-1-203LF	20k	62J2073	1.38	1.22
3386C-1-503LF	50k	62J2084	1.43	1.26
3386C-1-104LF	100k	62J2068	1.38	1.22

➤CONTINUED➤

3386 SERIES ⅜" SQUARE SINGLE-TURN CERMET TRIMMERS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
● 3386C-1-204LF	200k	62J2074	1.43	1.26
● 3386C-1-504LF	500k	62J2085	1.43	1.26
3386F SERIES — TOP ADJUST				
● 3386F-1-101LF	100	62J2088	1.29	1.14
● 3386F-1-201LF	200	62J2100	1.24	1.10
● 3386F-1-501LF	500	62J2121	1.29	1.14
● 3386F-1-102LF	1k	62J2090	1.24	1.10
● 3386F-1-202LF	2k	62J2102	1.29	1.14
● 3386F-1-502TLF	5k	62J2124	2.37	2.07
● 3386F-1-502LF	5k	62J2123	1.28	1.13
● 3386F-1-103TLF	10k	62J2093	2.47	2.15
● 3386F-1-103LF	10k	62J2092	1.28	1.13
● 3386F-1-203LF	20k	62J2104	1.24	1.10
● 3386F-1-253LF	25k	62J2113	1.29	1.14
● 3386F-1-503LF	50k	62J2125	1.28	1.13
● 3386F-1-104LF	100k	62J2094	1.28	1.13
● 3386F-1-254LF	250k	62J2115	1.29	1.14
● 3386F-1-504LF	500k	62J2127	1.29	1.14
● 3386F-1-105LF	1M	62J2096	1.29	1.14
● 3386F-1-205LF	2M	62J2108	1.29	1.14
3386G SERIES — TOP ADJUST				
● 3386G-1-103LF	10k	62J2133	1.24	1.10
3386H SERIES — SIDE ADJUST				
● 3386H-1-101LF	100	62J2168	1.29	1.14
● 3386H-1-201LF	200	62J2178	1.24	1.10
● 3386H-1-501LF	500	62J2194	1.29	1.14
● 3386H-1-102LF	1k	62J2169	1.29	1.14
● 3386H-1-202LF	2k	62J2179	1.24	1.10
● 3386H-1-502LF	5k	62J2195	1.28	1.13
● 3386H-1-103LF	10k	62J2171	1.28	1.13
● 3386H-1-203LF	20k	62J2181	1.29	1.14
● 3386H-1-503LF	50k	62J2197	1.29	1.14
● 3386H-1-104LF	100k	62J2173	1.28	1.13
3386P SERIES — TOP ADJUST				
● 3386P-1-100LF	10	62J2242	1.24	1.10
● 3386P-1-500LF	50	62J2283	1.24	1.10
● 3386P-1-101LF	100	62J2244	1.28	1.13
● 3386P-1-201LF	200	62J2257	1.29	1.14
● 3386P-1-501LF	500	62J2285	1.28	1.13
● 3386P-1-102LF	1k	62J2246	1.24	1.10
● 3386P-1-202LF	2k	62J2259	1.24	1.10
● 3386P-1-502LF	5k	62J2287	1.24	1.10
● 3386P-1-103LF	10k	62J2248	1.24	1.10
● 3386P-1-103TLF	10k	62J2249	2.47	2.15
● 3386P-1-203LF	20k	62J2261	1.28	1.13
● 3386P-1-253LF	25k	62J2274	1.24	1.10
● 3386P-1-503LF	50k	62J2289	1.24	1.10
● 3386P-1-104LF	100k	62J2250	1.24	1.10
● 3386P-1-104TLF	100k	62J2251	2.47	2.15
● 3386P-1-204LF	200k	62J2263	1.24	1.10
● 3386P-1-254LF	250k	62J2276	1.29	1.14
● 3386P-1-504LF	500k	62J2291	1.24	1.10
● 3386P-1-105LF	1M	62J2252	1.29	1.14
● 3386P-1-205LF	2M	62J2265	1.28	1.13
3386R SERIES — TOP ADJUST				
● 3386R-1-502LF	5k	62J2314	1.43	1.26
3386S SERIES — SIDE ADJUST				
● 3386T-1-502LF	5k	62J2364	1.43	1.26
3386W SERIES — SIDE ADJUST				
● 3386W-1-101LF	100	62J2438	1.24	1.10
● 3386W-1-201LF	200	62J2452	1.24	1.10
● 3386W-1-501LF	500	62J2466	1.29	1.14
● 3386W-1-102LF	1k	62J2441	1.29	1.14
● 3386W-1-202LF	2k	62J2454	1.29	1.14
● 3386W-1-502LF	5k	62J2469	1.28	1.13
● 3386W-1-103LF	10k	62J2444	1.29	1.14
● 3386W-1-203LF	20k	62J2456	1.29	1.14
● 3386W-1-503LF	50k	62J2471	1.29	1.14
● 3386W-1-104LF	100k	62J2447	1.29	1.14
● 3386W-1-504LF	500k	62J2473	1.29	1.14
● 3386W-1-105LF	1M	62J2449	1.29	1.14

➤CONTINUED➤

3386 SERIES ⅜" SQUARE SINGLE-TURN CERMET TRIMMERS (CONT.)

3386X SERIES — SIDE ADJUST

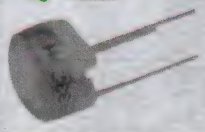
Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
● 3386X-1-101LF	100	62J2478	1.52	1.34
● 3386X-1-501LF	500	62J2518	1.24	1.10
● 3386X-1-202LF	2k	62J2494	1.29	1.14
● 3386X-1-502LF	5k	62J2520	1.29	1.14
● 3386X-1-103LF	10k	62J2482	1.29	1.14
● 3386X-1-503LF	50k	62J2522	1.29	1.14
● 3386X-1-104LF	100k	62J2484	1.29	1.14
● 3386X-1-105LF	1M	62J2486	1.29	1.14

(9605)

3329 SERIES ¼" ROUND SINGLE-TURN CERMET TRIMMERS

RoHS Compliant Available

BOURNS®



Features
- 5 Standard Terminal Styles
- Listed on the QPL for style RJ50 per MIL-PRF-22097 and RJR50 per High-Rel MIL-PRF-39035

Specifications
- Tolerance: ±10%
- Dielectric Strength: 600 VAC
- Rated Power @ 85°C: 0.5 Watt
- Standard Resistance: 10Ω to 1MΩ
- Contact Resistance Variation: 3% or 3Ω Max. (Whichever Is Greater)
- Temperature Coefficient: ±100 ppm/°C
- Operating Temperature: -55°C to +150°C
- Rotational Life: 200 Cycles
- Torque: 5.0 oz-in. Max.
- Stop Strength: 5.0 oz.-in. Min.

Additional values and terminal styles available, *go online or call.*

TYPE 3329H

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
● 3329H-1-500LF	50	62J1698	3.12	2.72
● 3329H-1-101LF	100	62J1673	3.12	2.72
● 3329H-1-201LF	200	62J1680	3.01	2.62
● 3329H-1-501LF	500	62J1699	3.12	2.72
● 3329H-1-102LF	1k	62J1674	3.08	2.69
● 3329H-1-202LF	2k	62J1681	3.12	2.72
● 3329H-1-502LF	5k	62J1700	3.01	2.62
● 3329H-1-103LF	10k	62J1675	3.08	2.69
● 3329H-1-203LF	20k	62J1682	3.12	2.72
● 3329H-1-253LF	25k	62J1691	3.01	2.62
● 3329H-1-503LF	50k	62J1701	3.12	2.72
● 3329H-1-104LF	100k	62J1676	3.12	2.72
● 3329H-1-204LF	200k	62J1683	3.01	2.62
● 3329H-1-105LF	1M	62J1677	3.01	2.62
TYPE 3329P				
● 3329P-1-501LF	500	62J1724	3.12	2.72
● 3329P-1-102LF	1k	62J1707	3.01	2.62
● 3329P-1-202LF	2k	62J1713	3.01	2.62
● 3329P-1-502LF	5k	62J1725	3.12	2.72
● 3329P-1-103LF	10k	62J1708	3.12	2.72
● 3329P-1-503LF	50k	62J1726	3.01	2.62
● 3329P-1-104LF	100k	62J1709	3.12	2.72
TYPE 3329W				
● 3329W-1-103LF	10k	62J1760	3.20	2.87

(9613)

3306 SERIES 6mm ROUND SINGLE TURN TRIMMERS

RoHS Compliant Available

BOURNS®

Features
- 6mm Round/Single-Turn/Cermet Industrial/Open-Frame
- Dust resistant/splash resistant covers
- Cross Slot Adjustment Options
- Horizontal and Vertical Mounting Styles
- PC Board Standoffs and Retention

Specifications
- Tolerance: ±25%
- Absolute minimum resistance: 2% max. (≤2K = 30Ω)
- Contact resistance Variation: 3% max.
- Power rating (100V Max.) at 70°C: 0.2W
- Operating Temperature: -25°C to +100°C
- Temperature coefficient: ±250ppm/°C
- Load Life: 1,000 hours 0.2W @ 70°C (5% ΔTR)
- Torque (Operating): 4.5 oz-in. max.

3306F SERIES — TOP-ADJUST

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
● 3306F-1-501	500	04B2995	0.43	0.40
● 3306F-1-102	1k	04B2985	0.42	0.38
● 3306F-1-202	2k	04B2990	0.42	0.38
● 3306F-1-502	5k	04B2996	0.43	0.40

➤CONTINUED➤

3306 SERIES 6mm ROUND SINGLE TURN TRIMMERS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
3306F-1-103	10k	04B2986	0.43	0.40
3306F-1-203	20k	04B2991	0.42	0.38
3306F-1-503	50k	04B2997	0.42	0.38
3306F-1-104	100k	04B2987	0.42	0.38
3306K SERIES — SIDE-ADJUST				
3306K-1-103	10k	04B3001	0.43	0.40
3306P SERIES — TOP-ADJUST				
3306P-1-101	100	04B3014	0.42	0.38
3306P-1-501	500	46F1081	0.42	0.38
3306P-1-102	1k	46F1082	0.43	0.40
3306P-1-202	2k	46F1083	0.43	0.40
3306P-1-502	5k	46F1084	0.43	0.40
3306P-1-103	10k	46F1085	0.43	0.39
3306P-1-203	20k	46F1086	0.42	0.38
3306P-1-503	50K	46F1087	0.42	0.38
3306P-1-104	100k	46F1088	0.43	0.40
3306P-1-204	200k	04B3016	0.43	0.40
3306P-1-504	500k	04B3018	0.42	0.38
3306P-1-105	1M	04B3015	0.42	0.38
3306W SERIES — SIDE-ADJUST				
3306W-1-501	500	46F1090	0.42	0.38
3306W-1-202	2k	46F1092	0.42	0.38
3306W-1-502	5k	46F1093	0.42	0.38
3306W-1-103	10k	46F1094	0.43	0.40
3306W-1-503	50k	46F1096	0.42	0.38
3306W-1-104	100k	46F1097	0.44	0.39
3306W-1-105	1M	04B3020	0.42	0.38

(73693)

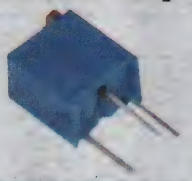
MCWIW1015 SERIES 6mm SQUARE INDUSTRIAL SINGLE TURN CERMET TRIMMERS

RoHS Compliant Available

multicomp

Specifications
- Resistance Tolerance: ±10%
- Temperature coeff.: ±100ppm/°C
- Oper. Temp. Range: -55°C to +125°C
- Power Rating @ 70°C: 0.25W
- Max. Working Voltage: 200V
- Torque: 25 mN-m max.
- Load Life: 1,000 hours 0.25W @ 70°C
- Rotational Life: 200 cycles

Features
- Top adjust trimmer
- Wash process compatible
- Fully sealed



Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9
MCWIW1015-W-501-LF	500	05N1584	1.48
MCWIW1015-W-102-LF	1k	05N1581	1.42
MCWIW1015-W-502-LF	5k	05N1585	1.42
MCWIW1015-W-103-LF	10k	05N1582	1.48
MCWIW1015-W-203-LF	20k	05N1583	1.42
MCWIW1015-W-503-LF	50k	05N1586	1.50

(121114)

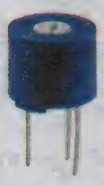
3339 SERIES 5/16″ ROUND FOUR-TURN CERMET TRIMMERS

RoHS Compliant Available

BOURNS

Features
- Sealed body suitable for industrial applications
- Unique planetary drive offers precise wiper setting of a multi-turn into a single-turn package size

Specifications
- Tolerance: ±10%
- Dielectric Strength: 600 VAC
- Power Rating @ 85°C: 0.5 Watt
- Operating Temperature: -55°C to +150°C
- Temperature Coefficient: ±100 ppm/°C
- Standard Resistance Range: 10Ω to 1MΩ
- Contact Resistance Variation: 3% or 3Ω Max. (Whichever Is Greater)
- Rotational Life: 200 Cycles
- Torque: 3 oz.-in. Max.



TYPE 3339H - TOP ADJUST

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
3339H-1-103LF	10k	32K8016	5.59	5.01
TYPE 3339P - TOP ADJUST				
3339P-1-101LF	100	32K8031	5.59	5.01
3339P-1-501LF	500	32K8049	5.59	5.01
3339P-1-102LF	1k	32K8032	5.38	4.82
3339P-1-202LF	2k	32K8038	5.38	4.82
3339P-1-502LF	5k	32K8050	5.59	5.01
3339P-1-103LF	10k	32K8033	5.59	5.01

CONTINUED

3339 SERIES 5/16″ ROUND FOUR-TURN CERMET TRIMMERS (CONT.)

TYPE 3339P - TOP ADJUST

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
3339P-1-203LF	20k	32K8039	5.38	4.82
3339P-1-503LF	50k	32K8051	5.38	4.82
3339P-1-104LF	100k	32K8034	5.59	5.01
3339P-1-504LF	500k	32K8052	5.59	5.01
TYPE 3339W - SIDE ADJUST				
3339W-1-103LF	10k	32K8071	7.73	6.93
3339W-1-203LF	20k	32K8077	7.07	5.69

(9598)

MCWIW1028-F SERIES 9mm SQUARE INDUSTRIAL SINGLE TURN CERMET TRIMMERS

RoHS Compliant Available

multicomp

Specifications
- Resistance Tolerance: ±10%
- Temperature coeff.: ±100ppm/°C
- Oper. Temp. Range: -55°C to +125°C
- Power Rating @ 70°C: 0.5W
- Max. Working Voltage: 250V
- Torque: 20 mN-m max
- Stop Strength: 50 mN-m min.
- Load Life: 1,000 hours 0.5W @ 70°C
- Rotational Life: 200 cycles

Features
- Fully sealed
- Compact design
- 3 solderable pins (2.5mm offset spacing)
- Ideal for precise resistance adjustments

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9
MCWIW1028-F-100-LF	10	05N1587	0.57
MCWIW1028-F-501-LF	500	05N1592	0.57
MCWIW1028-F-102-LF	1k	05N1588	0.59
MCWIW1028-F-502-LF	5k	05N1593	0.59
MCWIW1028-F-103-LF	10k	05N1589	0.61
MCWIW1028-F-503-LF	50k	05N1594	0.57
MCWIW1028-F-104-LF	100k	05N1590	0.60
MCWIW1028-F-105-LF	1M	05N1591	0.60

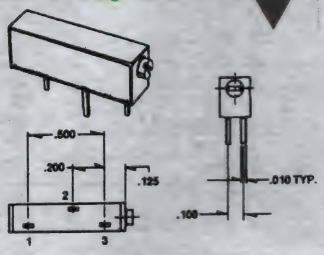
(121116)

43P SERIES 0.75″ RECTANGULAR INDUSTRIAL 18 TURN CERMET TRIMMERS

RoHS Compliant Available

VISHAY

Features
- Fully Sealed
- Panel mount
- Solder terminations for improved reliability
- Multi-finger wiper for improved C.R.V.
- Screwdriver Adjustment



Specifications
- Tolerance: ±10%
- Power Rating @ 70°C: 0.5 Watt
- Temperature Coefficient: 10, 20, and 50Ω: -100 to +200 ppm/°C; 100Ω to 2MΩ: ±100 ppm/°C
- Contact Resistance Variation: 1% or 1 (Whichever is Greater)
- Operating Temperature: -55°C to + 125°C
- Rotational Life: 200 Cycles
- Max. Voltage: 250 V
- Operating Torque: 2 Ncm

Applications
- Automatic Soldering
- General-Purpose

Order **mfg. part no. 8T000** *trimmer adjustment tool separately on page 637.*

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-49
043P100	10	01F8178	2.01	1.84
043P200	20	01F8179	1.74	1.59
043P500	50	01F8180	1.90	1.74
043P101	100	01F8181	1.88	1.72
043P201	200	01F8182	2.01	1.84
043P501	500	01F8183	1.88	1.72
043P102	1k	01F8184	1.85	1.69
043P202	2k	01F8185	1.72	1.58
043P502	5k	01F8186	1.76	1.61
043P103	10k	01F8187	1.76	1.61
043P203	20k	01F8188	1.81	1.66
043P253KB40	25k	61M2875	2.01	1.84
043P503	50k	01F8189	1.72	1.58
043P104	100k	01F8190	1.81	1.66
043P204	200k	01F8191	1.90	1.74
043P254	250k	01F8192	1.90	1.74
043P504	500k	01F8193	1.98	1.81
043P105	1M	01F8194	1.81	1.66
043P205	2M	01F8195	2.01	1.84

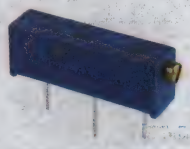
(9619)

MULTI-TURN TRIMMERS

3006 SERIES LOW PROFILE ¾" RECTANGULAR 15-TURN CERMET TRIMMERS

RoHS Compliant Available

BOURNS®



Features
- Sealed body suitable for Industrial applications
- Low PC Board Profile: only ¼" High
- Transparent Housing on Type 3006P Allows Visual Set-Up Without Hook-Up and Instrumentation
- Panel Mount Option: add "Z" suffix. *Go online or call for availability.*

Specifications
- Tolerance: ±10%
- Standard Resistance Range: 10Ω to 5MΩ
- Dielectric Strength: 1000 VAC
- Power Rating @ 70°C: 0.75 Watt
- Temperature Coefficient: ±100ppm/°C
- Contact Resistance Variation: 1.0% or 1Ω max. (Whichever is Greater)
- Operating Temperature: -55°C to +125°C
- Rotational Life: 200 Cycles
- Adjustment Angle: 15 Turns Nominal
- Torque: 5.0 oz.-in. Max.
- Nominal Resolution: Infinite

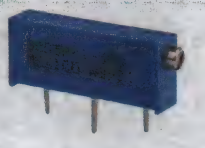
Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
3006P STANDARD				
● 3006P-1-100LF	10	32K7289	2.05	1.78
● 3006P-1-200LF	20	32K7297	2.05	1.78
● 3006P-1-500LF	50	32K7306	2.05	1.78
● 3006P-1-101LF	100	32K7290	2.05	1.78
● 3006P-1-201LF	200	32K7298	1.99	1.74
● 3006P-1-501LF	500	32K7307	2.05	1.78
● 3006P-1-102LF	1k	32K7291	1.99	1.74
● 3006P-1-202LF	2k	32K7299	2.05	1.78
● 3006P-1-502LF	5k	32K7308	1.99	1.74
● 3006P-1-502ZLF	5k	37J0817	3.18	2.85
● 3006P-1-103LF	10k	32K7292	1.99	1.74
● 3006P-1-203LF	20k	32K7301	1.99	1.74
● 3006P-1-253LF	25k	32K7304	2.07	1.80
● 3006P-1-503LF	50k	32K7309	1.99	1.74
● 3006P-1-104LF	100k	32K7294	1.99	1.74
● 3006P-1-204LF	200k	32K7302	2.07	1.80
● 3006P-1-504LF	500k	32K7311	2.05	1.78
● 3006P-1-105LF	1M	32K7295	2.05	1.78
● 3006P-1-205LF	2M	43K2292	2.07	1.80
● 3006P-1-254LF	250k	32K7305	1.99	1.74
3006W STANDARD				
● 3006W-1-501LF	500	62K3134	2.15	1.87
● 3006W-1-102LF	1k	32K7322	2.21	1.92
● 3006W-1-202LF	2k	62K3132	2.24	1.95
● 3006W-1-502LF	5k	62K3135	2.24	1.95
● 3006W-1-103LF	10k	43K2296	2.15	1.87
● 3006W-1-203LF	20k	62K3133	2.15	1.87
● 3006W-1-503LF	50k	62K3136	2.24	1.95
3006Y STANDARD				
● 3006Y-1-102LF	1k	43K2297	2.47	2.15
● 3006Y-1-103LF	10k	43K2298	2.47	2.15

(9593)

3005P SERIES ¾" RECTANGULAR 15 TURN WIREWOUND TRIMMERS

RoHS Compliant Available

BOURNS®



Features
- Industrial Standard
- Sealed to prevent contamination from fluxing, soldering and cleaning
- Low Board Profile
- Solder PC Pin Terminals
- Panel mount option available, add "Z" suffix. *Go online or call for availability.*

Specifications
- Tolerance: ±10%
- Dielectric Strength: 1000 VAC
- Power Rating @ 70°C: 1 Watt
- Operating Temperature: -65°C to +125°C
- Rotational Life: 200 Cycles

Mfg. Part No.	Res. (Ohms)	Nominal Resolution	Stock No.	Price Each 1-9	Price Each 10-49
● 3005P-1-100	10	1.7%	01F8457	12.81	11.65
● 3005P-1-101	100	0.8%	01F8460	12.81	11.65
● 3005P-1-501	500	0.5%	01F8462	13.12	11.93
● 3005P-1-102	1k	0.5%	01F8463	13.27	12.07
● 3005P-1-202	2k	0.4%	01F8464	13.12	11.93
● 3005P-1-502	5k	0.8%	01F8465	13.12	11.93
● 3005P-1-103	10k	0.3%	01F8466	13.27	12.07

(9594)

89 SERIES ¾" RECTANGULAR MULTI-TURN CERMET TRIMMERS

RoHS Compliant Available

TT electronics
BI Technologies

- Tolerance: ±10%
- Contact Resistance Variation: 1% or 1 Ohm, whichever is greater
- Torque: 5 oz-in.
- Rotational Life: 200 Cycles
- Input voltage: 200 VDC
- Power rating: 0.75 Watt
- Dielectric strength: 1000 V_{rms}
- Insulation resistance: 1000 MΩ
- Temperature coefficient: ±100 ppm/°C
- Operating temperature range: -55°C to +125°C
- Panel Mount Adapter Available, part number 89B available online

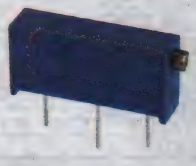
Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-49
● 89PR500LF	500	15M5305	2.49	2.17
● 89PR1KLF	1k	15M5250	2.35	2.05
● 89PR2KLF	2k	15M5268	2.35	2.05
● 89PR5KLF	5k	15M5293	2.39	2.08
● 89PR10KLF	10k	15M5257	2.42	2.10
● 89PR20KLF	20k	15M5276	2.39	2.08
● 89PR50KLF	50k	15M5298	2.65	2.31
● 89PR100KLF	100k	15M5262	2.39	2.08

(89544)

3009 SERIES ¾" RECTANGULAR 15-TURN CERMET TRIMMERS

RoHS Compliant Available

BOURNS®



Features
- Sealed body suitable for Industrial applications
- Meet MIL-STD-202
- Stable, infinite resolution cermet element
- Panel mount option available, add "Z" suffix. *Go online or call for availability.*

Specifications
- Tolerance: ±10%
- Power Rating @ 70°C: 0.75 W
- Rotational Life: 200 Cycles
- Operating Temperature: -55°C to +125°C
- Temperature Coefficient: ±100ppm/°C
- Dielectric Strength: 1000VAC
- Resolution: Infinite
- Contact Resistance Variation: 1% or 1 Ohm, whichever is greater

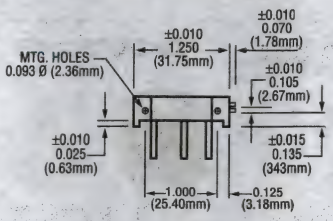
Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
● 3009P-1-102LF	1k	32K7326	3.21	2.80
● 3009P-1-202LF	2k	32K7335	3.26	2.83
● 3009P-1-502LF	5k	32K7348	3.21	2.80
● 3309P-1-103	10k	46F1103	0.55	0.51
● 3009P-1-103LF	10k	32K7327	3.13	2.73
● 3009P-1-203LF	20k	32K7336	3.13	2.73
● 3009P-1-503LF	50k	32K7349	3.26	2.83
● 3009P-1-104LF	100k	32K7329	3.26	2.83
● 3009Y-1-103LF	10k	32K7355	3.26	2.83

(9595)

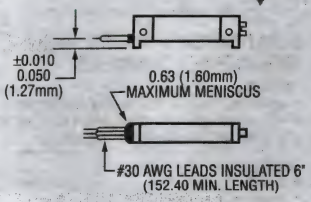
70 SERIES 1.25" RECTANGULAR 20 TURN CERMET TRIMMERS

RoHS Compliant Available

VISHAY.



Type 70Y



Type 70L

Features
- Units Are Resistant to Humidity, Shock and Vibration
- 20-Turn Screwdriver Adjustment with Idling End Stops
- Type 70Y PC Pin Units; Type 70L Insulated Wire Lead Units
- Body Mounting Holes: 0.093" (2.38) on 1" (25.40)

Applications
- High-Wattage and Temperature

Specifications
- Tolerance: ±10%
- Power Rating @ 70°C: 0.5 Watt
- Operating Temperature: -55°C to +150°C
- Resistance Range: 10Ω to 2MΩ
- Temperature Coefficient: ±100 ppm/°C
- CRV: 3% or 3Ω, whichever is greater

Order **mfg. part no. 8T000** *trimmer adjustment tool separately on page 637.*

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
● 070Y501	500	04F2159	14.83	13.12
● 070Y102	1k	04F2160	14.83	13.12
● 070Y502	5k	04F2162	14.83	13.12
● 070Y103	10k	04F2163	14.83	13.12
● 070Y203	20k	04F2164	15.57	13.78
● 070Y104	100k	04F2167	14.83	13.12

➤ CONTINUED ➤

70 SERIES 1.25″ RECTANGULAR 20 TURN CERMET TRIMMERS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
070L102	1k	04F2179	18.01	15.93
070L202	2k	04F2180	18.01	15.93
070L502	5k	04F2181	17.55	15.52
M70L103KB25	10k	04F2182	18.04	15.95
070L503	50k	04F2184	18.91	16.73

(9620)

3059 SERIES 1¼″ RECTANGULAR, 22 TURN CERMET TRIMMERS

RoHS Compliant Available

BOURNS®

Features
- Sealed body suited for industrial applications
- Listed on the QPL for style RJ12 per MIL-PRF-22097
- Panel mount option available, *add suffix 'M' to type number*

Specifications
- Tolerance: ±10%
- Dielectric strength: 900 VAC
- Power rating @ 70°C: 1 Watt
- Standard resistance: 10Ω to 2MΩ
- Absolute minimum resistance: 1% or 2Ω Max. (whichever is greater)
- Effective travel: 22 Turns Nom.

Y Style

- Temperature coefficient: ±100 ppm/°C
- Operating temperature: -55°C to +150°C
- Rotational life: 200 Cycles
- Torque: 5 oz.-in. Max.

P-STYLE

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
3059P-1-102LF	1k	32K7444	6.77	6.07
3059P-1-103LF	10k	32K7446	6.77	6.07
3059P-1-203LF	20k	32K7455	6.61	5.93
Y-STYLE				
3059Y-1-101LF	100	32K7472	6.85	6.14
3059Y-1-501LF	500	32K7498	6.77	6.07
3059Y-1-102LF	1k	32K7474	6.85	6.14
3059Y-1-202LF	2k	32K7484	6.77	6.07
3059Y-1-502LF	5k	32K7500	6.77	6.07
3059Y-1-103LF	10k	32K7476	6.61	5.93
3059Y-1-203LF	20k	32K7486	6.61	5.93
3059Y-1-503LF	50k	32K7502	6.85	6.14
3059Y-1-104LF	100k	32K7478	6.85	6.14

(9612)

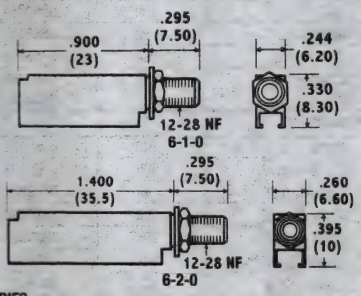
6 SERIES SNAP-ON PANEL MOUNT EXTENDING ADAPTERS FOR 43 & 70 SERIES

RoHS Compliant Available

VISHAY.

Features
- Optional Adjustment Shafts Available
- Snap-in Assembly
- 6-1 indicates 43 Series; 6-2 indicates 70 Series

Mechanical Specifications
- Body Material: Molded Polyester Plastic
- Bushing Material: Brass, Nickel-Plated
- Bushing Hardware: Panel Nut and Lock Washer



SERIES 6-1 FOR USE WITH 43 SERIES

Mfg. Part No.	Shaft Extension	Stock No.	Price Each 1-24	Price Each 25-49
006-1-0	No Extra Shaft	20M1633	5.01	4.61
006-1-1	Shaft Flush with Bushing	20M1634	7.28	6.70
006-1-2	0.575″ (14.6) Shaft Extension	26M8317	7.94	7.30
SERIES 6-2 FOR USE WITH 70 SERIES				
006-2-0	No Extra Shaft	20M1636	7.26	6.67
006-2-2	0.575″ (14.6) Shaft Extension	26M8318	9.31	8.56

(4193)

T93 SERIES MULTI-TURN CERMET TRIMMING POTENTIOMETERS

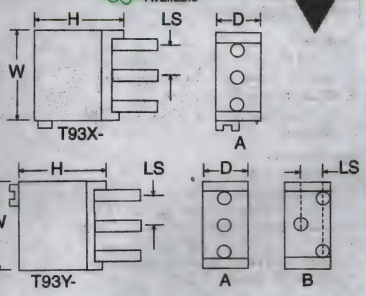
RoHS Compliant Available

VISHAY.

Features
- Fully Sealed, Water Washable Container IP67

Specifications
- Tolerance: ±10%
- Power Rating @ 85°C: 0.5 Watt
- Electrical Travel: 19 Turns ±2
- Dielectric Strength: 1000 V_{RMS}
- Operating Temp.: -55°C to +155°C
- Dimensions: 0.386H x 0.382W x 0.197D″
- Lead Length: 0.197″
- Lead Spacing (LS): 0.1″
- Lead Dia.: 0.02″
- Adjustment Slot: 0.024 x 0.024″

"A" in type number denotes in-line configuration; "B" denotes offset configuration; see diagrams above.



T93XA SERIES

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-49
T93XA101KT20	100	61M2856	1.68	1.35
T93XA201KT20	200	66C2548	1.68	1.35
T93XA501KT20	500	66C2559	1.68	1.35
T93XA 1K 10%	1k	74M8381	1.76	1.42
T93XA 5K 10%	5k	74M8383	1.68	1.35
T93XA 10K 10%	10k	74M8382	1.78	1.44
T93XA203KT20	20k	61M2857	1.68	1.35
T93XA 50K 10%	50k	74M8384	1.78	1.44
T93XA 100K 10%	100k	16F7141	1.78	1.44
T93XB102KT20	1k	61M2858	1.68	1.35
T93XB103KT20	10k	61M2859	1.68	1.35
T93YA SERIES				
T93YA100KT20	10	66C2591	1.78	1.44
T93YA500KT20	50	61M2864	1.78	1.44
T93YA101KT20	100	21M4644	1.76	1.42
T93YA201KT20	200	61M2861	1.76	1.42
T93YA501KT20	500	06M3600	1.81	1.45
T93YA102KT20	1k	63M9480	1.81	1.45
T93YA 5K 10%	5k	63M9481	1.73	1.39
T93YA 10K 10%	10k	16F7158	1.73	1.39
T93YA203KT20	20k	61M2862	1.76	1.42
T93YA253KT20	25k	06M3595	1.68	1.35
T93YA 50K 10%	50k	63M9482	1.73	1.39
T93YA 100K 10%	100k	16F7161	1.73	1.39
T93YA204KT20	200k	61M2863	1.78	1.44
T93YA504KT20	500k	61M2865	1.76	1.42
T93YA105KT20	1M	61M2860	1.68	1.35
T93YB SERIES				
T93YB101KT20	100	61M2866	1.68	1.35
T93YB201KT20	200	61M2868	1.68	1.35
T93YB501KT20	500	61M2872	1.68	1.35
T93YB 1K 10%	1k	16F7165	1.68	1.35
T93YB202KT20	2k	61M2869	1.78	1.44
T93YB502KT20	5k	63M9485	1.76	1.42
T93YB 10K 10%	10k	63M9483	1.69	1.36
T93YB203KT20	20k	61M2870	1.78	1.44
T93YB503KT20	50k	61M2873	1.78	1.44
T93YB 100K 10%	100k	63M9484	1.68	1.35

(4158)

DEV KIT HQ™

Newest technology, Development Kits & Evaluation Boards from the best suppliers.

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(196526)

MULTI-TURN TRIMMERS

3214 SERIES 4mm 5-TURN SMT, CERMET TRIMMING POTENTIOMETERS

SMD RoHS Compliant Available BOURNS

Features
- Surface Mount, 4mm Square, Multiturn Cermet, Industrial, Sealed Trimming Potentiometer
- Withstands Board Wash Processing
- Pick-And-Place Centering Design, With Flush Adjustment

Specifications
- Tolerance: ±10%
- Dielectric Strength: 600 VAC
- Standard Resistance Range: 10Ω to 2MΩ
- Contact Resistance Variation: 3% or 3Ω Max.
- Adjustment Angle: 5-Turns Nom.
- Temperature Coefficient: ±100 ppm/°C
- Solderability: Per MIL-STD-202
- Power Rating @ 85°C: 0.25 Watt
- Operating Temp.: -65°C to +150°C
- Rotational Life: 200 Cycles
- Torque: 180g-cm Max.

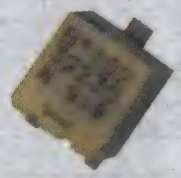
3214G SIDE ADJUST

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-499	Price Each 500-999
3214G-1-502E	5k	58K3037	2.76	2.59
3214J - SIDE ADJUST				
3214J-1-201E	200	52F6833	2.87	2.69
3214J-1-501E	500	78M8799	2.87	2.69
3214J-1-102E	1k	58K3039	2.87	2.69
3214J-1-202E	2k	52F6836	2.87	2.69
3214J-1-502E	5k	78M8800	2.87	2.69
3214J-1-103E	10k	59K0379	2.83	2.66
3214J-1-203E	20k	78M8797	2.83	2.66
3214J-1-503E	50k	58K3040	2.87	2.69
3214J-1-104E	k	59K0380	2.87	2.69
3214W - SIDE ADJUST				
3214W-1-101E	100	58K3041	2.87	2.69
3214W-1-201E	200	52F6794	2.87	2.69
3214W-1-501E	500	60K7110	2.83	2.66
3214W-1-102E	1k	52F6796	2.76	2.59
3214W-1-202E	2k	52F6797	2.83	2.66
3214W-1-502E	5k	59K0383	2.83	2.66
3214W-1-103E	10k	59K0381	2.76	2.59
3214W-1-203E	20k	60K7109	2.76	2.59
3214W-1-503E	50k	52F6801	2.83	2.66
3214W-1-104E	100k	59K0382	2.83	2.66
3214W-1-204E	200k	10C0708	2.87	2.69
3214W-1-504E	500k	58K3042	2.87	2.69
3214X - SIDE ADJUST				
3214X-1-103E	1k	61H2008	2.87	2.69

(4151)

3223 SERIES 11-TURN 3mm SQUARE SMT, CERMET TRIMMERS

RoHS Compliant Available BOURNS SMD



Features
- Surface Mount, 3mm Square, Multiturn Cermet, Industrial, Sealed Trimming Potentiometer
- Withstands Board Wash Processing
- Pick-And-Place Centering Design, With Flush Adjustment
- Low CRV: 1%

Specifications
- Tolerance: ±20%
- Dielectric Strength: 600 VAC
- Standard Resistance Range: 10Ω to 2MΩ
- Solderability: Per MIL-STD-202
- Power Rating @ 85°C: 0.125 Watt
- Temperature Coefficient: ±100 ppm/°C
- Operating Temp.: -65°C to +150°C
- Adjustment Angle: 11-Turns Nom.
- Rotational Life: 200 Cycles
- Torque: 180g-cm Max.

3223J SIDE-ADJUST

Mfg. Part No.	Res. (Ohms)	Tape Cut Stock No.	Price Each 1-9	Price Each 10-24
3223J-1-103E	10k	78M8812	2.69	2.36
3223W TOP-ADJUST				
3223W-1-500E	50	97M3848	2.79	2.45
3223W-1-101E	100	78M8818	2.79	2.45
3223W-1-201E	200	78M8822	2.79	2.45
3223W-1-501E	500	78M8827	2.79	2.45
3223W-1-102E	1k	78M8819	2.76	2.42
3223W-1-202E	2k	78M8823	2.79	2.45
3223W-1-502E	5k	78M8828	2.76	2.42
3223W-1-103E	10k	96M0894	2.69	2.36
3223W-1-203E	20k	78M8824	2.79	2.45
3223W-1-503E	50k	78M8829	2.76	2.42

CONTINUED

3223 SERIES 11-TURN 3mm SQUARE SMT, CERMET TRIMMERS (CONT.)

3223W TOP-ADJUST

Mfg. Part No.	Res. (Ohms)	Tape Cut Stock No.	Price Each 1-9	Price Each 10-24
3223W-1-104E	100k	78M8820	2.76	2.42
3223W-1-204E	200k	78M8825	2.69	2.36
3223W-1-504E	500k	78M8830	2.69	2.36
3223W-1-105E	1M	78M8821	2.69	2.36
3223W-1-205E	2M	78M8826	2.69	2.36

(107894)

3224 SERIES 4MM SQUARE, 11-TURN, SMT CERMET TRIMMERS

RoHS Compliant Available BOURNS SMD

Features
- Sealed body suitable for Industrial applications
- 4mm design meets EIA/EIAJ/IPC/CEDI SMD standard trimmer footprint
- DESC selected material drawing #92021
- Withstands Board Wash Processing
- Pick-And-Place Centering Design, With Flush Adjustment
- Low CRV: 1%

Specifications
- Tolerance: ±10%
- Dielectric Strength: 600 VAC
- Standard Resistance Range: 10Ω to 2MΩ
- Solderability: Per MIL-STD-202
- Power Rating @ 85°C: 0.25 Watt
- Temperature Coefficient: ±100 ppm/°C
- Operating Temp.: -65°C to +150°C
- Adjustment Angle: 11-Turns Nom.
- Rotational Life: 200 Cycles
- Torque: 180g-cm Max.

3224G SIDE-ADJUST

Mfg. Part No.	Res. (Ohms)	Tape Cut Stock No.	Price Each 1-9	Price Each 10-24
3224G-1-102E	1k	89M6412	3.64	3.19
3224W-1-202E	2k	59K0388	2.39	2.39
3224W-1-502E	5k	58K3059	2.45	2.45
3224G-1-103E	10k	96M0895	3.73	3.27
3224G-1-203E	20k	96M0896	3.78	3.31
3224G-1-104E	100k	78M8832	3.64	3.19
3224J SIDE-ADJUST*				
3224J-1-101E	100	78M8840	3.64	3.19
3224J-1-201E	200	78M8841	3.64	3.19
3224J-1-501E	500	78M8843	3.78	3.31
3224J-1-102E	1k	04B2467	3.73	3.27
3224J-1-202E	2k	58K3045	3.64	3.19
3224J-1-502E	5k	58K3049	3.64	3.19
3224J-1-103E	10k	59K0384	3.64	3.19
3224J-1-203E	20k	58K3047	3.78	3.31
3224J-1-503E	50k	58K3051	3.64	3.19
3224J-1-104E	100k	04B2469	3.78	3.31
3224J-1-204E	200k	78M8842	3.78	3.31
3224W TOP-ADJUST*				
3224W-1-101E	100	58K3053	3.73	3.27
3224W-1-501E	500	59K0389	3.64	3.19
3224W-1-102E	1k	04F8029	3.64	3.19
3224W-1-502E	5k	59K0390	3.73	3.27
3224W-1-103E	10k	58K3056	3.64	3.19
3224W-1-203E	20k	04F8032	3.64	3.19
3224W-1-503E	50k	04F8033	3.64	3.19
3224W-1-104E	100k	59K0385	3.73	3.27
3224W-1-204E	200k	04B2488	3.73	3.27
3224W-1-504E	500k	78M8847	3.64	3.19
3224W-1-105E	1M	78M8845	3.78	3.31
3224X Top-ADJUST				
3224X-1-102E	1k	04B2494	3.78	3.31
3224X-1-202E	2k	04B2500	3.78	3.31
3224X-1-502E	5k	04B2506	3.64	3.19
3224X-1-203E	20k	04B2501	3.64	3.19
3224X-1-503E	50k	04B2507	3.78	3.31
3224X-1-104E	100k	04B2496	3.73	3.27
3224X-1-204E	200k	04B2502	3.64	3.19

*Tape & Reel: **3224J series** - QTY. 500 / **3224W series** - QTY. 250

(9606)

3266 SERIES ¼" SQUARE 12 TURN CERMET TRIMMERS

RoHS Compliant Available

BOURNS

Features
- Sealed body suitable for Industrial applications
- Patented Drive Mechanism
- Standoffs Allow Thorough PC Board Washing

Specifications
- Tolerance: ±10%
- Dielectric Strength: 600 VAC
- Power Rating @ 70°C: 0.25 Watt
- Absolute Minimum Resistance: 1% or 2Ω (Whichever is Greater)
- Contact Resistance Variation: 3% or 3Ω (Whichever Is Greater)
- Temperature Coefficient: ±100ppm/°C
- Rotational Life: 200 Cycles
- Torque: 3.0 oz.-in. Max.
- Operating Temperature: -55°C to +150°C

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
3266P SERIES				
3266P-1-102LF	1k	62J1260	3.79	3.40
3266P-1-502LF	5k	62J1273	3.79	3.40
3266P-1-103LF	10k	62J1261	3.79	3.40
3266P-1-203LF	20k	62J1267	3.79	3.40
3266W SERIES				
3266W-1-100LF	10	62J1277	3.64	3.27
3266W-1-500LF	50	62J1292	3.64	3.27
3266W-1-101LF	100	62J1278	3.79	3.40
3266W-1-201LF	200	62J1285	3.64	3.27
3266W-1-501LF	500	62J1293	3.64	3.27
3266W-1-102LF	1k	62J1279	3.74	3.35
3266W-1-202LF	2k	62J1286	3.64	3.27
3266W-1-502LF	5k	62J1294	3.64	3.27
3266W-1-103LF	10k	62J1280	3.64	3.27
3266W-1-203LF	20k	62J1287	3.64	3.27
3266W-1-253LF	25k	62J1290	3.64	3.27
3266W-1-503LF	50k	62J1295	3.64	3.27
3266W-1-104LF	100k	62J1281	3.64	3.27
3266W-1-204LF	200k	62J1288	3.79	3.40
3266W-1-254LF	250k	62J1291	3.79	3.40
3266W-1-504LF	500k	62J1296	3.74	3.35
3266W-1-105LF	1M	62J1282	3.79	3.40
3266X SERIES				
3266X-1-101LF	100	62J1298	3.64	3.27
3266X-1-201LF	200	62J1303	3.44	2.79
3266X-1-501LF	500	62J1310	3.79	3.40
3266X-1-102LF	1k	62J1299	3.74	3.35
3266X-1-202LF	2k	62J1304	3.64	3.27
3266X-1-502LF	5k	62J1311	3.64	3.27
3266X-1-103LF	10k	21J9543	3.74	3.35
3266X-1-203LF	20k	62J1305	3.64	3.27
3266X-1-503LF	50k	62J1312	3.74	3.35
3266X-1-104LF	100k	62J1300	3.74	3.35
3266X-1-204LF	200k	62J1306	3.79	3.40
3266X-1-504LF	500k	62J1313	3.44	2.79
3266X-1-105LF	1M	62J1301	3.64	3.27
3266Y SERIES				
3266Y-1-502LF	5k	62J1339	3.79	3.40
3266Y-1-503LF	50k	62J1341	3.64	3.27

(9614)

3262 SERIES ¼" 12-TURN CERMET TRIMMERS

RoHS Compliant Available

BOURNS

Features
- Sealed body suited for Industrial applications
- Listed on the QPL for style RJ26 per MIL-R-22097 and RJR26 per High-Rel MIL-R-39035
- Patented drive mechanism

Specifications
- Tolerance: ±10%
- Dielectric Strength: 600V
- Absolute Minimum Resistance: 1% or 2Ω (whichever is greater)
- Contact Resistance Variation: 3% or 3Ω (whichever is greater)
- Effective Travel: 12-Turns Nom.
- Power Rating @ 85°C: 0.25W
- Temperature Coefficient: ±100ppm/°C
- Rotatonal Life: 200 Cycles
- Torque: 3.0 oz.-in. Max.

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-49
TOP ADJUST				
3262W-1-101LF	100	32K7653	12.50	11.37
3262W-1-501LF	500	32K7668	12.07	10.98

➤CONTINUED➤

3262 SERIES ¼" 12-TURN CERMET TRIMMERS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-49
3262W-1-102LF	1k	32K7654	12.07	10.98
3262W-1-202LF	2k	32K7660	12.07	10.98
3262W-1-502LF	5k	32K7669	12.50	11.37
3262W-1-103LF	10k	32K7655	12.36	11.24
3262W-1-203LF	20k	32K7661	12.36	11.24
3262W-1-503LF	50k	32K7670	12.07	10.98
3262W-1-104LF	100k	32K7656	12.07	10.98
SIDE ADJUST				
3262X-1-102LF	1k	32K7674	12.50	11.37
3262X-1-103LF	10k	32K7675	12.36	11.24
3262X-1-203LF	20k	32K7681	12.74	11.34
3262X-1-104LF	100k	32K7676	12.07	10.98

(73696)

45 SERIES 4mm SQUARE, 15-TURN SMD CERMET TRIMMING POTENTIOMETERS

RoHS Compliant Available

TT electronics BI Technologies

Specifications
- Tolerance: ± 10%
- Input Voltage: 300 VDC **max.** or rms not to exceed power rating
- Slider Current 100 mA **max.** or within rated power, whichever is less
- Power Rating @ 85°C: 250 mW
- Actual Electrical Travel: 9 turns nominal
- Dielectric Strength: 600 Vrms
- Rotational Life: 200 cycles (3% ΔRT, 1% CRV)
- Temperature Coefficient: ± 100ppm/°C
- Operating Temperature Range: –65°C to +150°C

Features
- High resolution
- Space saving SMD package for the most compact board designs
- Sealed to withstand aggressive water wash
- Long life - set and forget construction

Mfg. Part No.	Res. (Ohms)	Adjustment Type	Stock No.	Price Each 1-99
45GR100LFTB	100	Side	83R8355	3.27
45JR10KLFTB	10k	Top	83R8404	3.27
45WR1KLFTB	1k	Side	83R8455	3.08
45WR10KLFTB	10k	Side	83R8461	3.08
45WR100KLFTB	100k	Side	83R8468	3.08

(195716)

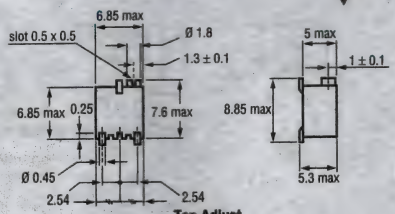
TS63 SERIES ¼" SQUARE, 13-TURN SMT CERMET TRIMMERS

SMD

RoHS Compliant Available

VISHAY

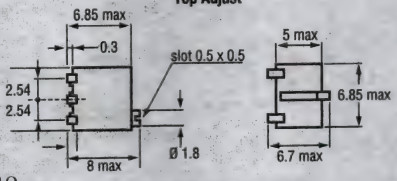
Top Adjust



Top Adjust

Features
- Sealed body suited for Industrial applications
- Low Contact Resistance

Specifications
- Tolerance: ±10%
- Power Rating @ 85°C: 0.25 Watt
- Mechanical Travel: 13 Turns ±2°
- Operating Temp.: -55°C to +155°C
- Max. Voltage: 250 V
- Rotational Life: 200 turns
- Temperature Coefficient: 100 ppm
- Contact Resistance Variation: 2% R_N or 2 Ω



Side Adjust

Mfg. Part No.	Res (Ohms)	Stock No.	Price Each 1-24	Price Each 25-49
TOP ADJUST				
TS63Y-200-10-D06	200	46M3178	4.04	3.24
TS63Y501KT20	500	61M2848	4.04	3.24
TS63Y-2K-10-D06	2k	46M3177	4.30	3.45
TS63Y502KR10	5k	72M6987	4.30	3.45
TS63Y-5K-10-D06	5k	46M3179	4.04	3.24
TS63Y-10K-10-D06	10k	95B8058	4.24	3.40
TS63Y-100K-10-D06	100k	95B8060	4.04	3.24
SIDE ADJUST				
TS63Z-2K-10-D06	2k	46M3181	4.04	3.24
TS63Z-5K-10-D06	5k	95B8071	4.04	3.24
TS63Z103KT20	10k	95B8068	4.04	3.24
TS63Y503KT20	50k	61M2849	4.30	3.45
TS63Z-100K-10-D06	100k	46M3180	4.04	3.24

(49771)

MULTI-TURN TRIMMERS

3269 SERIES ¼" SQUARE SMD 12 TURN CERMET TRIMMERS

RoHS Compliant Available

BOURNS® SMD

Features
- Compatible With Surface Mount Manufacturing Processes
- Top and Side Adjust Styles
- Embossed Tape Packaging Available, *Go online or call*

Specifications
- Tolerance: ±10%
- Dielectric Strength: 600 VAC
- Absolute Minimum Resistance: 1% or 2Ω (Whichever is Greater)
- Contact Resistance Variation: 3% or 3Ω (Whichever is Greater)
- Temperature Coefficient: ±100 ppm/°C
- Power Rating @ 85°C: 0.25 Watt
- Operating Temperature: -65°C to +150°C
- Rotational Life: 200 Cycles
- Torque: 3.0 oz.-in. Max.

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	10-49
TYPE 3269P SIDE-ADJUST				
● 3269P-1-102LF	1k	32K7695	3.87	3.53
● 3269P-1-202LF	2k	32K7706	4.51	4.05
● 3269P-1-103LF	10k	32K7697	4.51	4.05
● 3269P-1-203LF	20k	32K7708	4.69	4.20
TYPE 3269W TOP-ADJUST				
● 3269W-1-101LF	100	32K7726	4.51	4.05
● 3269W-1-201LF	200	32K7736	4.51	4.05
● 3269W-1-501LF	500	32K7750	4.51	4.05
● 3269W-1-102LF	1k	32K7727	4.69	4.20
● 3269W-1-202LF	2k	32K7738	4.69	4.20
● 3269W-1-502LF	5k	32K7752	4.51	4.05
● 3269W-1-103LF	10k	32K7728	4.63	4.15
● 3269W-1-103GLF	10k	62J1364	4.08	3.58
● 3269W-1-203LF	20k	32K7739	4.51	4.05
● 3269W-1-503LF	50k	32K7754	4.69	4.20
● 3269W-1-104LF	100k	32K7730	4.63	4.15
● 3269W-1-504LF	500k	32K7756	4.69	4.20
TYPE 3269X TOP ADJUST				
● 3269X-1-104LF	100k	32K7768	4.51	4.05

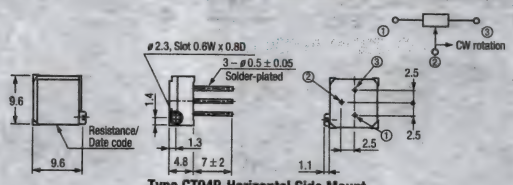
(9897)

CT94 SERIES CERMET MULTITURN TRIMMERS

RoHS Compliant Available

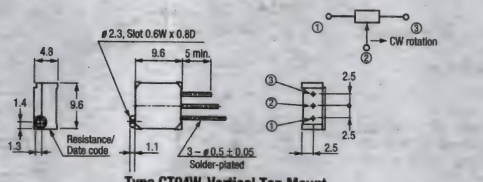
VISHAY.

Unless otherwise specified, tolerance: ±0.3 (Unit: mm)

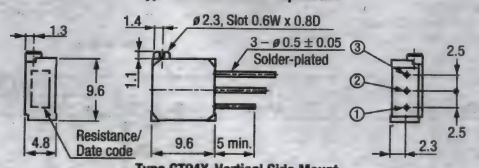


Type CT94P-Horizontal Side Mount

Unless otherwise specified, tolerance: ±0.3 (Unit: mm)



Type CT94W-Vertical Top Mount



Type CT94X-Vertical Side Mount

Electrical Specifications
- Total Resistance Tolerance: ±10%
- Power Rating @ 70°C: 0.5 Watt
- Maximum Input Voltage: 300 VDC or Power Rating, Whichever Is Smaller
- Maximum Wiper Current: 100 mA or Power Rating, Whichever Is Smaller
- Contact Resistance Variation: 1% or 3Ω, Whichever Is Greater
- Temperature Coefficient: 10 to 20Ω: ±250 ppm/°C, 50Ω ~ 1MΩ: ±100 ppm/°C
- Insulation Resistance: 1000MΩ Minimum (DC500V)
- Operating Temp: -55°C to +125°C
- Torque: 35 Ncm
- Dielectric Strength: 900 VAC

Mechanical Specifications
- Mechanical Turn: 18 Turns
- Rotational Life: 200 Cycles

Features
- Thin Body Design (4.8mm Thick)
- 18 Turn, Sealed, Precision Type
- 9mm Square Cermet

➤ CONTINUED ➤

CT94 SERIES CERMET MULTITURN TRIMMERS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	10-99	100-499
HORIZONTAL SIDE MOUNT					
● CT-94EP500	50	32M8764	2.06	1.93	1.70
● CT-94EP102	100	32M8754	2.06	1.93	1.70
● CT-94EP502	500	26M8002	2.06	1.93	1.70
VERTICAL TOP MOUNT					
● CT-94EW200	20	32M8771	2.06	1.93	1.70
● CT-94EW101	100	32M8769	2.74	2.56	2.25
● CT-94EW201	200	32M8772	2.18	2.04	1.79
● CT-94EW102	1k	02M9164	2.18	2.04	1.79
● CT-94EW202	2k	32M8773	2.06	1.93	1.70
● CT-94EW502	5k	32M8778	2.06	1.93	1.70
● CT-94EW103	10k	93K8018	2.18	2.04	1.79
● CT-94EW503	50k	32M8779	2.82	2.65	2.33
● CT-94EW204	200k	32M8774	2.06	1.93	1.70
VERTICAL SIDE MOUNT					
● CT-94EX202	2k	32M8786	2.06	1.93	1.70
● CT-94EZ502	5k	02M6495	1.98	1.85	1.63
● CT-94EX502	5k	32M8792	2.18	2.04	1.79
● CT-94EX105	1M	32M8783	2.06	1.93	1.70

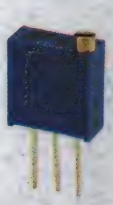
(47175)

3292 SERIES ⅜" SQUARE, 25-TURN CERMET TRIMMERS

RoHS Compliant Available

BOURNS®

Features:
- Sealed body suitable for Industrial applications
- Thin Body Profile
- Patented Drive Mechanism
- Optional panel mount available, add "M" suffix. *Go online or call for availability.*



Specifications:
- Tolerance: ±10%
- Dielectric Strength: 1000 VAC
- Absolute Minimum Resistance: 1% or 2Ω (Whichever is Greater)
- Temperature Coefficient: ±100 ppm/°C
- Power Rating @ 85°C: 0.5 Wat
- Contact Resistance Variation: 1% or 3Ω (Whichever is Greater)
- Operating Temperature: -65°C to +150°C
- Rotational Life: 200 Cycles
- Torque Max: 5.0 oz.-in.

Mfg. Part No.56276	Res. (Ohms)	Stock No.	Price Each 1-9	10-49
TOP ADJUST				
● 3292W-1-102LF	1k	32K7853	13.56	12.33
● 3292W-1-502LF	5k	32K7877	13.09	11.90
● 3292W-1-103LF	10k	32K7855	13.56	12.33
● 3292W-1-503LF	50k	32K7879	13.09	11.90
● 3292W-1-104LF	100k	32K7857	13.09	11.90
SIDE ADJUST				
● 3292X-1-103LF	10k	32K7887	13.09	11.90

(9549)

67 SERIES ⅜" SQUARE MULTI-TURN CERMET TRIMMERS

RoHS Compliant Available

TT electronics BI Technologies

Specifications
- Tolerance: ±10%
- Input voltage: 200 VDC
- Power rating: 0.5 Watt
- Dielectric strength: 900 V_{rms}
- Insulation resistance: 1000 MΩ
- Temperature coefficient: ±100 ppm/°C
- Operating temperature range: -55°C to +125°C
- Torque: 5 oz.-in.
- Rotational Life: 200 cycles
- Contact Resistance Variation: 1% or 1 Ohm, whichever is greater

67P SERIES SIDE ADJUSTMENT - Square Surface Horizontal to Board

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	25-49
● 67PR5KLF	5k	15M3620	2.77	2.42
● 67PR10KLF	10k	15M3593	2.77	2.42
● 67PR20KLF	20k	15M3608	2.61	2.28
● 67PR100KLF	100k	15M3598	2.77	2.42
67X SERIES SIDE ADJUSTMENT - Square Surface Vertical to Board				
● 67XR10KLF	10k	15M3759	2.28	1.99
67W SERIES TOP ADJUSTMENT - Leads in a Straight Line				
● 67WR100LF	100	15M3683	2.64	2.31
● 67WR500LF	500	15M3711	2.64	2.31
● 67WR1KLF	1k	15M3670	2.31	2.02

➤ CONTINUED ➤

67 SERIES ⅜" SQUARE MULTI-TURN CERMET TRIMMERS (CONT.)

67W SERIES TOP ADJUSTMENT - Leads in a Straight Line

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-49
67WR2KLF	2k	15M3686	2.31	2.02
67WR5KLF	5k	15M7770	2.28	1.99
67WR10KLF	10k	15M3676	2.28	1.99
67WR20KLF	20k	15M3691	2.31	2.02
67WR50KLF	50k	15M7772	2.28	1.99
67WR100KLF	100k	15M3681	2.64	2.31
67Y SERIES TOP ADJUSTMENT - Leads Staggered in V Formation				
67YR1KLF	1k	15M3800	2.48	2.17
67YR5KLF	5k	15M3838	2.64	2.31
67YR10KLF	10k	15M3807	2.64	2.31
67YR1MEGLF	1M	15M3803	2.64	2.31

(89540)

RJ24 & RJ26 TRIMMING POTENTIOMETERS

BOURNS®

Specifications
- Multiturn, Cermet, Industrial, Sealed
- Absolute Minimum Resistance: 2 % or 20 Ω max. (Whichever is Greater)
- Tolerance: ±10%
- Temperature Coefficient: ±100ppm/°C
- Operating Temperature: -55°C to +150°C
- Rotational Life: 200 Cycles
- Number of Turnss: 25 Turns - RJ24
  12 Turns - RJ26

RJ24 SERIES

Mfg. Part No.	Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
RJ24FW201	200	200	04B2042	4.54	4.07
RJ24FW102	1	1	04F4790	4.54	4.07
RJ24FW502	5	5	04F4791	4.72	4.23
RJ24FW503	50	50	04F4794	4.54	4.07
RJ24FW104	100	100	04B2040	4.54	4.07
RJ24FX103	10	10	04F4799	4.72	4.23
RJ24FX104	100	100	04B2050	4.46	3.65
RJ24FX203	20	20	04F4800	4.54	4.07
RJR24 SERIES					
RJR24FW201R	200	200	04B1641	5.32	4.77
RJR24FW501R	500	500	04B1657	5.52	4.95
RJR24FW102P	1	1	04B1628	5.52	4.95
RJR24FW102R	1	1	04B1629	5.32	4.77
RJR24FW202P	2	2	04B1643	5.52	4.95
RJR24FW202R	2	2	04B1644	5.32	4.77
RJR24FW502R	5	5	04F4807	5.32	4.77
RJR24FP103R	10	10	04B1592	5.32	4.77
RJR24FW103P	10	10	04B1631	5.52	4.95
RJR24FW103R	10	10	04F4808	5.52	4.95
RJR24FW203R	20	20	04F4809	5.32	4.77
RJR24FW503R	50	50	04B1662	5.32	4.77
RJR24FW104R	100	100	04B1634	5.52	4.95
RJR24FX102R	1	1	04F4810	5.32	4.77
RJR24FX202P	2	2	04B1682	5.32	4.77
RJR24FX202R	2	2	04B1683	5.32	4.77
RJR24FX502R	5	5	04B1701	5.32	4.77
RJR24FX103P	10	10	04B1671	5.45	4.89
RJR24FX103R	10	10	04B1672	5.52	4.95
RJR24FX203P	20	20	04B1685	5.52	4.95
RJR24FX203R	20	20	04B1686	5.52	4.95
RJR24FX503R	50	50	04B1704	5.32	4.77
RJR24FX104R	100	100	04B1675	5.32	4.77
RJ26 Series					
RJ26FP103	10	10	04F4801	3.76	3.37
RJ26FP203	20	20	04B2106	3.76	3.37
RJ26FW101	100	100	04F8710	3.76	3.37
RJ26FW501	500	500	04F8711	3.76	3.37
RJ26FX501	500	500	04F4803	3.76	3.37
RJ26FW105	1	1	04B2115	3.90	3.50
RJ26FX102	1	1	96F9305	3.76	3.37
RJ26FW202	2	2	04F8713	3.76	3.37
RJ26FX502	5	5	04B2132	3.90	3.50
RJ26FX103	10	10	04F4804	3.76	3.37
RJ26FX253	25	25	04B2129	3.76	3.37
RJ26FW503	50	50	04F8717	3.90	3.50
RJ26FX503	50	50	04B2133	3.76	3.37
RJR24FP104R	100	100	04B1595	5.32	4.77
RJR24FW105R	1	1	04B1637	5.32	4.77

➤CONTINUED➤

RJ24 & RJ26 TRIMMING POTENTIOMETERS (CONT.)

RJR26 SERIES

Mfg. Part No.	Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
RJR26FW101R	100	100	04F4811	5.49	4.92
RJR26FP501R	500	500	04B1761	5.49	4.92
RJR26FP102R	1	1	04B1730	5.69	5.10
RJR26FW102P	1	1	04B1777	5.49	4.92
RJR26FW102R	1	1	04F4812	5.69	5.10
RJR26FP502R	5	5	04B1764	5.49	4.92
RJR26FW103P	10	10	04B1779	5.62	5.04
RJR26FP103R	10	10	04B1733	5.49	4.92
RJR26FP104R	100	100	04B1736	5.49	4.92
RJR26FW103R	10	10	04F4815	5.49	4.92
RJR26FW104P	100	100	04B1781	5.69	5.10
RJR26FW104R	100	100	04B1782	5.49	4.92
RJR26FW201R	200	200	04B1790	5.49	4.92
RJR26FW202P	2	2	04B1792	5.69	5.10
RJR26FW202R	2	2	04F4813	5.39	4.41
RJR26FW203P	20	20	04B1794	5.49	4.92
RJR26FW203R	20	20	04F4816	5.69	5.10
RJR26FW501P	500	500	04B1805	5.69	5.10
RJR26FW501R	500	500	04B1806	5.49	4.92
RJR26FW502P	5	5	04B1808	5.69	5.10
RJR26FW502R	5	5	04F4814	5.62	5.04
RJR26FW503P	50	50	04B1810	5.69	5.10
RJR26FW503R	50	50	04F4817	5.49	4.92
RJR26FW504R	500	500	04B1813	5.49	4.92
RJR26FX101R	100	100	04B1819	5.49	4.92
RJR26FX102R	1	1	04B1822	5.69	5.10
RJR26FX103P	10	10	04B1824	5.49	4.92
RJR26FX103R	10	10	04F4819	5.49	4.92
RJR26FX104R	100	100	04B1826	5.69	5.10
RJR26FX201R	200	200	04B1835	5.69	5.10
RJR26FX202P	2	2	04B1837	5.49	4.92
RJR26FX202R	2	2	04B1838	5.49	4.92
RJR26FX203P	20	20	04B1840	5.49	4.92
RJR26FX203R	20	20	04F4820	5.49	4.92
RJR26FX501R	500	500	04B1852	5.49	4.92
RJR26FX502P	5	5	04B1854	5.49	4.92
RJR26FX502R	5	5	04F4818	5.49	4.92
RJR26FX503P	50	50	04B1856	5.49	4.92
RJR26FX503R	50	50	04B1857	5.39	4.41
RJR26FX504R	500	500	04B1860	5.69	5.10

(85519)

3296 SERIES ⅜" SQUARE 25-TURN CERMET TRIMMERS

RoHS Compliant Available

BOURNS®

Features
- Sealed body suitable for Industrial applications
- Listed on the QPL for style RJ24 per MIL-R-22097 and RJR24 per High-Rel MIL-R-39035
- 5-Terminal Styles
- Chevron Seal Design

Specifications
- Tolerance: ±10%
- Contact Resistance Variation: 1% or 3 Ohms Max. (Whichever Is Greater)
- Dielectric Strength: 900 VAC
- Power Rating @ 70°C: 0.5 Watt
- Temperature Coefficient: ±100 ppm/°C
- Operating Temperature: -55°C to +150°C
- Rotational Life: 200 Cycles
- Torque Max: 3.0 oz.-in.

More values and mounting hardware (H-117P) are available, *go online or call.*

P-STYLE

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
3296P-1-101LF	100	62J1373	2.40	2.09
3296P-1-201LF	200	62J1379	2.40	2.09
3296P-1-501LF	500	62J1390	2.40	2.09
3296P-1-102LF	1k	62J1374	2.31	2.01
3296P-1-202LF	2k	62J1380	2.40	2.09
3296P-1-502LF	5k	62J1391	2.37	2.06
3296P-1-103LF	10k	62J1375	2.40	2.09
3296P-1-203LF	20k	62J1381	2.37	2.06
3296P-1-503LF	50k	62J1392	2.40	2.09
3296P-1-104LF	100k	62J1376	2.40	2.09
3296P-1-204LF	200k	62J1382	2.40	2.09
3296P-1-504LF	500k	62J1393	2.40	2.09

➤CONTINUED➤

3296 SERIES ⅜" SQUARE 25-TURN CERMET TRIMMERS (CONT.)

W-STYLE

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
● 3296W-1-100LF	10	62J1414	2.37	2.06
● 3296W-1-200LF	20	62J1431	2.31	2.01
● 3296W-1-500LF	50	62J1465	2.37	2.06
● 3296W-1-101LF	100	62J1417	2.31	2.01
● 3296W-1-201LF	200	62J1433	2.37	2.06
● 3296W-1-501LF	500	62J1468	2.31	2.01
● 3296W-1-102LF	1k	62J1420	2.31	2.01
● 3296W-1-202LF	2k	62J1436	2.31	2.01
● 3296W-1-502LF	5k	62J1471	2.31	2.01
● 3296W-1-103LF	10k	62J1423	2.31	2.01
● 3296W-1-203LF	20k	62J1439	2.31	2.01
● 3296W-1-253LF	25k	62J1454	2.37	2.06
● 3296W-1-503LF	50k	62J1474	2.31	2.01
● 3296W-1-104LF	100k	62J1426	2.31	2.01
● 3296W-1-204LF	200k	62J1442	2.37	2.06
● 3296W-1-254LF	250k	62J1457	2.40	2.09
● 3296W-1-504LF	500k	62J1477	2.37	2.06
● 3296W-1-105LF	1M	62J1429	2.37	2.06
● 3296W-1-205LF	2M	62J1445	2.37	2.06
● 3296W-1-505LF	5M	62J1479	2.37	2.06
X-STYLE				
● 3296X-1-100LF	10	62J1493	2.31	2.01
● 3296X-1-200LF	20	62J1506	2.31	2.01
● 3296X-1-500LF	50	62J1524	2.40	2.09
● 3296X-1-101LF	100	62J1494	2.31	2.01
● 3296X-1-201LF	200	62J1507	2.40	2.09
● 3296X-1-501LF	500	62J1526	2.37	2.06
● 3296X-1-102LF	1k	62J1496	2.37	2.06
● 3296X-1-202LF	2k	62J1510	2.37	2.06
● 3296X-1-502LF	5k	62J1528	2.40	2.09
● 3296X-1-103LF	10k	62J1499	2.31	2.01
● 3296X-1-203LF	20k	62J1513	2.37	2.06
● 3296X-1-503LF	50k	62J1531	2.40	2.09
● 3296X-1-104LF	100k	62J1502	2.31	2.01
● 3296X-1-204LF	200k	62J1515	2.31	2.01
● 3296X-1-504LF	500k	62J1533	2.40	2.09
● 3296X-1-105LF	1M	62J1505	2.40	2.09
● 3296X-1-205LF	2M	62J1516	2.31	2.01
● 3296X-1-505LF	5M	62J1534	2.31	2.01
Y-STYLE				
● 3296Y-1-100LF	10	62J1536	2.40	2.09
● 3296Y-1-200LF	20	62J1542	2.31	2.01
● 3296Y-1-500LF	50	62J1556	2.40	2.09
● 3296Y-1-101LF	100	62J1537	2.40	2.09
● 3296Y-1-201LF	200	62J1543	2.40	2.09
● 3296Y-1-501LF	500	62J1557	2.37	2.06
● 3296Y-1-102LF	1k	62J1538	2.31	2.01
● 3296Y-1-202LF	2k	62J1544	2.37	2.06
● 3296Y-1-502LF	5k	62J1558	2.37	2.06
● 3296Y-1-103LF	10k	62J1539	2.31	2.01
● 3296Y-1-203LF	20k	62J1545	2.37	2.06
● 3296Y-1-253LF	25k	62J1552	2.31	2.01
● 3296Y-1-503LF	50k	62J1559	2.40	2.09
● 3296Y-1-104LF	100k	62J1540	2.31	2.01
● 3296Y-1-204LF	200k	62J1546	2.40	2.09
● 3296Y-1-504LF	500k	62J1560	2.40	2.09
● 3296Y-1-105LF	1M	62J1541	2.40	2.09
● 3296Y-1-205LF	2M	62J1547	2.40	2.09
● 3296Y-1-505LF	5M	62J1561	2.40	2.09
Z-STYLE				
● 3296Z-1-500LF	50	62J1576	2.31	2.01
● 3296Z-1-101LF	100	62J1562	2.40	2.09
● 3296Z-1-501LF	500	62J1577	2.40	2.09
● 3296Z-1-102LF	1k	62J1563	2.40	2.09
● 3296Z-1-202LF	2k	62J1569	2.40	2.09
● 3296Z-1-502LF	5k	62J1578	2.40	2.09
● 3296Z-1-103LF	10k	62J1564	2.31	2.01
● 3296Z-1-203LF	20k	62J1570	2.40	2.09
● 3296Z-1-503LF	50k	62J1579	2.40	2.09
● 3296Z-1-104LF	100k	62J1565	2.31	2.01
● 3296Z-1-504LF	500k	62J1580	2.40	2.09
● 3296Z-1-105LF	1M	62J1566	2.31	2.01

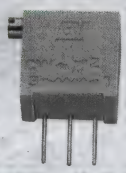
(9615)

68 SERIES ⅜" SQUARE MULTI-TURN CERMET TRIMMERS

RoHS Compliant Available

TT electronics BI Technologies

- Tolerance: ±10%
- Contact Resistance Variation: 1% or 10hm, whichever is greater
- Torque: 5 oz.-in.
- Rotational Life: 200 Cycles
- Input voltage: 200 VDC
- Power rating: 0.5 Watt
- Dielectric strength: 900 V_{rms}
- Insulation resistance: 1000 MΩ
- Temperature coefficient: ±100 ppm/°C
- Operating temperature range: -55°C to +125°C



68W SERIES TOP ADJUSTMENT

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-49
● 68WR100LF	100	15M3985	2.83	2.48
● 68WR500LF	500	15M4023	3.01	2.63
● 68WR2KLF	2k	15M3988	3.01	2.63
● 68WR5KLF	5k	15M4011	2.83	2.48
● 68WR10KLF	10k	15M3977	2.72	2.38
● 68WR20KLF	20k	15M3994	3.01	2.63
● 68WR50KLF	50k	15M4015	2.83	2.48
● 68WR100KLF	100k	15M3983	3.01	2.63
68X SERIES SIDE ADJUSTMENT				
● 68XR10KLF	10k	15M4071	3.01	2.63

(89541)

3299 SERIES ⅜" SQUARE 25-TURN CERMET TRIMMERS

RoHS Compliant Available

BOURNS®

Features
- Sealed body suited for Industrial applications
- 5-Terminal Styles
- Patented Drive Mechanism
- Standoffs

Specifications
- Tolerance: ±10%
- Dielectric Strength: 900 VAC
- Standard Resistance: 10Ω to 2MΩ
- Absolute Minimum Resistance: 1% or 2Ω (Whichever is Greater)
- Contact Resistance Variation: 1% or 3Ω (Whichever Is Greater)
- Power Rating @ 70°C: 0.5 Watt
- Operating Temperature: -55°C to +125°C
- Rotational Life: 200 Cycles
- Max. Torque: 3.0 oz.-in.
- Effective Travel: 25 Turns Nom.
- Temperature Coefficient: ±100 ppm/°C

P-STYLE

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
● 3299P-1-102LF	1k	32K7915	3.20	2.87
● 3299P-1-202LF	2k	32K7921	3.28	2.94
● 3299P-1-502LF	5k	32K7929	3.28	2.94
● 3299P-1-103LF	10k	32K7916	3.20	2.87
● 3299P-1-203LF	20k	32K7922	3.20	2.87
● 3299P-1-503LF	50k	32K7930	3.20	2.87
● 3299P-1-104LF	100k	32K7917	3.20	2.87
W-STYLE				
● 3299W-1-100LF	10	32K7932	3.09	2.77
● 3299W-1-200LF	20	32K7938	3.09	2.77
● 3299W-1-500LF	50	32K7945	3.09	2.77
● 3299W-1-101LF	100	32K7933	2.97	2.66
● 3299W-1-201LF	200	62J1582	2.97	2.66
● 3299W-1-501LF	500	32K7946	2.97	2.66
● 3299W-1-102LF	1k	32K7934	2.97	2.66
● 3299W-1-202LF	2k	32K7939	2.97	2.66
● 3299W-1-502LF	5k	32K7947	2.97	2.66
● 3299W-1-103LF	10k	32K7935	2.97	2.66
● 3299W-1-203LF	20k	32K7940	2.97	2.66
● 3299W-1-253LF	25k	32K7943	3.05	2.73
● 3299W-1-503LF	50k	32K7948	2.97	2.66
● 3299W-1-104LF	100k	32K7936	2.97	2.66
● 3299W-1-204LF	200k	32K7941	3.05	2.73
● 3299W-1-254LF	250k	32K7944	3.09	2.77
● 3299W-1-504LF	500k	32K7949	3.05	2.73
● 3299W-1-105LF	1M	32K7937	2.97	2.66
● 3299W-1-205LF	2M	32K7942	3.09	2.77
● 3299W-1-505LF	5M	62K3139	2.97	2.66
X-STYLE				
● 3299X-1-100LF	10	32K7950	3.27	3.00
● 3299X-1-101LF	100	32K7951	2.97	2.66
● 3299X-1-201LF	200	32K7957	3.09	2.77
● 3299X-1-501LF	500	32K7965	2.97	2.66

➤ CONTINUED ➤

3299 SERIES ⅜″ SQUARE 25-TURN CERMET TRIMMERS (CONT.)

X-STYLE

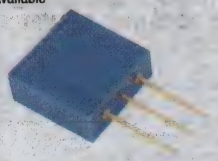
Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
3299X-1-102LF	1k	32K7952	3.05	2.73
3299X-1-202LF	2k	32K7958	3.09	2.77
3299X-1-502LF	5k	32K7966	3.09	2.77
3299X-1-103LF	10k	32K7953	3.05	2.73
3299X-1-203LF	20k	32K7959	3.05	2.73
3299X-1-503LF	50k	32K7967	3.09	2.77
3299X-1-104LF	100k	32K7954	3.05	2.73
3299X-1-105LF	1M	32K7955	2.97	2.66
Y-STYLE				
3299Y-1-101LF	100	32K7970	3.09	2.77
3299Y-1-201LF	200	32K7975	3.09	2.77
3299Y-1-501LF	500	32K7983	3.05	2.73
3299Y-1-102LF	1k	32K7971	3.05	2.73
3299Y-1-202LF	2k	32K7976	3.09	2.77
3299Y-1-502LF	5k	32K7984	3.09	2.77
3299Y-1-103LF	10k	62J1583	3.05	2.73
3299Y-1-203LF	20k	32K7977	3.05	2.73
3299Y-1-253LF	25k	32K7980	2.97	2.66
3299Y-1-503LF	50k	32K7985	2.97	2.66
3299Y-1-104LF	100k	32K7972	3.05	2.73
3299Y-1-204LF	200k	32K7978	3.09	2.77
3299Y-1-504LF	500k	62J1584	3.09	2.77
Z-STYLE				
3299Z-1-102LF	1k	32K7988	2.97	2.66
3299Z-1-202LF	2k	32K7994	2.97	2.66
3299Z-1-502LF	5k	62J1585	3.09	2.77
3299Z-1-103LF	10k	32K7989	3.05	2.73
3299Z-1-203LF	20k	32K7995	2.97	2.66
3299Z-1-503LF	50k	32K8002	2.97	2.66
3299Z-1-104LF	100k	32K7990	3.09	2.77

(9546)

3290 SERIES ⅜″ SQUARE, 25-TURN WIREWOUND TRIMMERS

RoHS Compliant Available

BOURNS®



Features
- Sealed body suitable for Industrial applications
- Listed on the QPL for Style RT24 per MIL-R-27208 and RTR24 per High-Rel MIL-R-39015

Specifications
- Tolerance: ±5%
- Dielectric Strength: 1000 VAC
- Standard Resistance Range: 10Ω to 50kΩ
- Power Rating @ 85°C: 1.0 Watt
- Temperature Coefficient: ±50 ppm/°C
- Rotational Life: 200 Cycles
- Torque: 5.0 oz.-in. Max.
- Operating Temperature: -65°C to +150°C

TOP ADJUST

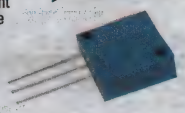
Mfg. Part No.	Res. (Ohms)	Nominal Resolution	Stock No.	Price Each 1-9	Price Each 10-49
3290W-1-502	5 kohm	0.20%	01F8866	29.79	27.10
3290W-1-103	10 kohm	0.17%	01F8867	30.69	27.91
3290W-1-203	20 kohm	0.14%	01F9228	29.79	27.10
SIDE ADJUST					
3290H-1-102	1 kohm	0.33%	01F8846	29.79	27.10
3290H-1-103	10 kohm	0.17%	01F8849	29.79	27.10

(9552)

3250 SERIES ½″ SQUARE 25 TURN WIREWOUND TRIMMERS

RoHS Compliant Available

BOURNS®



Features
- Sealed body suited for industrial applications
- Meets MIL-R-27208; MIL-R-39015
- Panel mount option available, add **M** suffix; *go online or call.*

Specifications
- Tolerance: ±5%
- Dielectric Strength: 1000 VAC
- Standard Resistance Range: 10Ω to 50kΩ
- Power Rating @ 85°C: 1.0 Watt
- Temperature Coefficient: ±50 ppm/°C
- Rotational Life: 200 Cycles
- Torque: 5.0 oz.-in. Max.
- Operating Temperature: -65°C to +150°C

Mfg. Part No.	Res. (Ohms)	Nominal Resolution	Stock No.	Price Each 1-9	Price Each 10-49
3250W-1-100	10 ohm	0.90%	01F9166	16.62	15.11
3250W-1-501	500 ohm	0.60%	01F9171	17.21	15.66
3250W-1-102	1 kohm	0.40%	01F9172	17.01	15.48
3250W-1-202	2 kohm	0.30%	01F9173	17.21	15.66
3250W-1-502	5 kohm	0.25%	01F9174	17.01	15.48

➤CONTINUED➤

3250 SERIES ½″ SQUARE 25 TURN WIREWOUND TRIMMERS (CONT.)

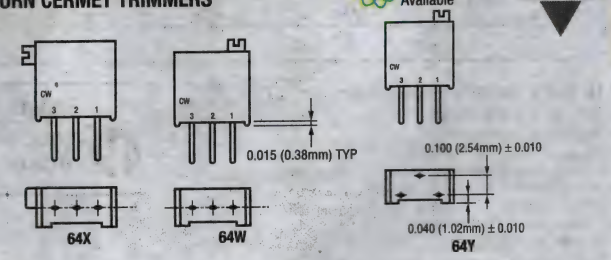
Mfg. Part No.	Res. (Ohms)	Nominal Resolution	Stock No.	Price Each 1-9	Price Each 10-49
3250W-1-103	10 kohm	0.19%	01F9175	17.01	15.48
3250W-1-203	20 kohm	0.16%	01F9164	17.21	15.66

(9600)

64 SERIES 0.375″ SQUARE INDUSTRIAL 21 TURN CERMET TRIMMERS

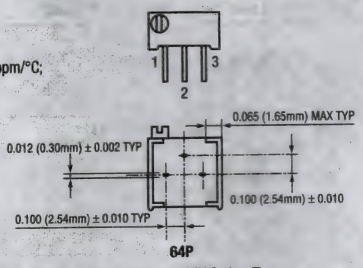
RoHS Compliant Available

VISHAY.



Specifications
- Tolerance: ±10%
- Power Rating @ 70°C: 0.5 Watt
- Temperature Coefficient: < 100Ω, 0 to +250 ppm/°C; ≥ 100Ω, 100 ppm/°C
- Operating Temperature: –55°C to +125°C
- Contact Resistance Variation: <1% typical
- Operating Torque: 1.5 Ncm
- Rotational Life: 200 cycles
- Dielectric Strength: 1000 Volts

Features
- Fully Sealed
- Excellent Operational Stability
- Positive Gear Drive and Solder Terminations
- 25-Turn Nominal Effective Travel
- Adjustment Screw Position: 64P Series and 64X Series, Side; 64W Series and 64Y Series, Top



Order **mfg. part no. 8T000** *trimmer adjustment tool separately on page 637.*

64P - SIDE ADJUST

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-49
064P102	1k	67F5761	2.32	2.10
064P202	2k	67F5762	2.32	2.10
064P502	5k	67F5763	2.32	2.10
064P103	10k	20M2174	2.45	2.21
064P203	20k	67F5765	2.32	2.10
064P104	100k	67F5768	2.45	2.21
64X - SIDE ADJUST				
064X201	200	67F5778	2.10	1.89
064X102	1k	67F5780	2.10	1.89
064X202	2k	67F5781	1.99	1.80
064X103	10k	67F5783	2.10	1.89
064X203	20k	67F5784	2.10	1.89
064X503	50k	67F5786	1.99	1.80
064X104	100k	67F5787	2.10	1.89
64W - TOP ADJUST				
064W200	20	67F5822	2.10	1.89
064W101	100	67F5824	2.10	1.89
064W201	200	67F5825	2.10	1.89
064W501	500	67F5826	1.89	1.71
064W102	1k	67F5827	1.93	1.74
064W202	2k	67F5828	1.96	1.77
064W502	5k	67F5829	1.89	1.71
064W103	10k	67F5830	1.80	1.63
064W203	20k	67F5831	1.96	1.77
064W253	25k	67F5832	1.99	1.80
064W503	50k	67F5833	1.89	1.71
064W104	100k	67F5834	1.80	1.63
064W204	200k	67F5835	2.10	1.89
064W254	250k	67F5836	1.99	1.80
064W504	500k	67F5837	2.10	1.89
064W105	1M	67F5838	1.99	1.80
64Y - TOP ADJUST				
064Y100	10	67F5840	1.99	1.80
064Y200	20	67F5841	1.99	1.80
064Y101	100	67F5843	2.07	1.87
064Y201	200	67F5844	1.99	1.80
064Y501	500	67F5845	1.96	1.77
064Y102	1k	67F5846	1.96	1.77
064Y202	2k	67F5847	2.10	1.89
064Y502	5k	67F5848	2.07	1.87

➤CONTINUED➤

MULTI-TURN TRIMMERS

64 SERIES 0.375″ SQUARE INDUSTRIAL 21 TURN CERMET TRIMMERS (CONT.)

64Y - TOP ADJUST

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-49
● 064Y103	10k	67F5849	1.84	1.66
● 064Y203	20k	67F5850	1.99	1.80
● 064Y503	50k	67F5852	1.99	1.80
● 064Y104	100k	67F5853	2.07	1.87
● 064Y204	200k	67F5854	2.10	1.89
● 064Y504	500k	67F5856	1.99	1.80

(15937)

ULTRA HIGH PRECISION BULK METAL® TRIMMING POTENTIOMETERS

RoHS Compliant Available

VISHAY PRECISION GROUP

Features:
- A smooth and unidirectional resistance with leadscrew adjustment
- Settability: 0.05% typical; 0.1% maximum
- Setting stability: 0.1% typical; 0.5% maximum, DSS
- Power rating: 0.25W at + 85°C
- Electrostatic discharge (ESD) up to 25,000V

1240P SERIES: HORIZONTAL MOUNT, SIDE ADJUST

Mfg. Part No.	Track Resistance	Tolerance	No. of Turns	Stock No.	Price Each 1-24	Price Each 25-49
● Y40532K00000J0L	2 kohm	± 5%	21	39T1716	40.37	38.45
● Y40535K00000J0L	5 kohm	± 5%	21	39T1717	42.20	40.19
1240W SERIES: EDGE MOUNT, TOP ADJUST						
● Y4053100R000J0L	100 ohm	± 5%	21	39T1715	42.20	40.19
● Y4053500R000J0L	500 ohm	± 5%	21	39T1718	42.75	40.71
● Y40531K00000J0L	1 kohm	± 5%	21	39T1713	41.72	39.73
● Y00532K00000J0L	2 kohm	± 5%	21	39T1663	42.75	40.71
● Y00535K00000J0L	5 kohm	± 5%	21	39T1664	42.20	40.19

(203741)

ULTRA HIGH PRECISION BULK METAL® FOIL TRIMMERS

RoHS Compliant Available

VISHAY PRECISION GROUP

Specifications:
- A smooth and unidirectional resistance with leadscrew adjustment
- Load life stability: 0.5% maximum ΔR under full rated power at +25°C for 2000h
- Electrostatic discharge (ESD) up to 25,000V
- Settability: 0.05% typical; 0.1% maximum
- Setting stability: 0.1% typical; 0.5% maximum, ΔSS
- Power rating: 0.75W at + 25°C
- Backlash: < 0.05%
- Tap test: 0.05% typical; 0.1% maximum
- "O"-ring prevents ingress of fluids during any board cleaning operation

Mfg. Part No.	Resistance	Tolerance	No. of Turns	Stock No.	Price Each 1-24	Price Each 25-49
● Y0056500R000K0L	500 ohm	± 10%	26	39T1668	15.71	14.97
● Y005610K0000K0L	10 kohm	± 10%	26	39T1665	17.82	16.96
● Y005620K0000K0L	20 kohm	± 10%	26	39T1667	16.74	15.95

(203752)

MCWIW1012 SERIES ¾″ RECTANGULAR INDUSTRIAL 22-TURN CERMET TRIMMERS

RoHS Compliant Available

multicomp

Features
- Fully sealed
- Miniature package
- Wash process compatible

Specifications
- Resistance Tolerance: ±10%
- Temperature coeff.: ±100ppm/°C
- Oper. Temp Range: -55°C to +125°C
- Power Rating @ 70°C: 0.5W
- Max. Working Voltage: 315V
- Dielectric strength: 600V_{AC}
- Torque: 15 mN-m max.
- Load Life: 1,000 hours 0.5W @ 70°C
- Rotational Life: 200 cycles

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24
● MCWIW1012-1-500-LF	50	05N1561	0.61
● MCWIW1012-1-101-LF	100	05N1552	0.61
● MCWIW1012-1-201-LF	200	05N1557	0.61
● MCWIW1012-1-501-LF	500	05N1562	0.61
● MCWIW1012-1-102-LF	1k	05N1553	0.61
● MCWIW1012-1-202-LF	2k	05N1558	0.61
● MCWIW1012-1-502-LF	5k	05N1563	0.63
● MCWIW1012-1-103-LF	10k	05N1554	0.64
● MCWIW1012-1-203-LF	20k	05N1559	0.61
● MCWIW1012-1-503-LF	50k	05N1564	0.61

➤CONTINUED➤

MCWIW1012 SERIES ¾″ RECTANGULAR INDUSTRIAL 22-TURN CERMET TRIMMERS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24
● MCWIW1012-1-104-LF	100k	05N1555	0.63
● MCWIW1012-1-204-LF	200k	05N1560	0.61
● MCWIW1012-1-504-LF	500k	05N1565	0.61
● MCWIW1012-1-105-LF	1M	05N1556	0.61

(120782)

MCWWPT SERIES ⅞″ DIA. 10-TURN WIREWOUND POTENTIOMETER

RoHS Compliant Available

multicomp

Features
- Fully sealed
- Bushing mount
- Wash process compatible

Specifications
- Resistance Tolerance: ±5%
- Temperature coeff.: ±100ppm/°C
- Oper. Temp Range: -55°C to +125°C
- Power Rating @ 70°C: 2W
- Max. Working Voltage: 500V
- Dielectric strength: 1000V_{AC}
- Torque: 36 mN-m max.
- Stop Strength: 50 mN-m min.
- Load Life: 1,000 hours 2W @ 70°C
- Rotational Life: 200 cycles

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-14
● MCWWPT-10-101-LF	100	05N1625	11.70
● MCWWPT-10-201-LF	200	05N1629	11.70
● MCWWPT-10-501-LF	500	05N1632	11.14
● MCWWPT-10-102-LF	1k	05N1626	8.19
● MCWWPT-10-202-LF	2k	05N1630	8.19
● MCWWPT-10-502-LF	5k	05N1633	8.66
● MCWWPT-10-103-LF	10k	05N1627	10.44
● MCWWPT-10-203-LF	20k	05N1631	11.14
● MCWWPT-10-503-LF	50k	05N1634	11.14
● MCWWPT-10-104-LF	100k	05N1628	11.14

(121120)

MCWIW1029-P SERIES SQUARE 25-TURN INDUSTRIAL CERMET TRIMMERS

RoHS Compliant Available

multicomp

Specifications
- Resistance Tolerance: ±10%
- Temperature coeff.: ±100ppm/°C
- Oper. Temp Range: -55°C to +125°C
- Power Rating @70°C: 0.5W
- Max. Working Voltage: 300V
- Torque: 36 mN-m max
- Stop Strength: 50 mN-m min.
- Load Life: 1,000 hours 0.5W @ 70°C
- Rotational Life: 200 cycles

Features
- Fully sealed
- Miniature package
- Wash process compatible
- Front adjust trimmer

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24
● MCWIW1029-P-101-LF	100	05N1598	0.99
● MCWIW1029-P-501-LF	500	05N1604	0.99
● MCWIW1029-P-102-LF	1k	05N1599	0.79
● MCWIW1029-P-202-LF	2k	05N1602	0.79
● MCWIW1029-P-502-LF	5k	05N1605	0.79
● MCWIW1029-P-203-LF	20k	05N1603	0.79
● MCWIW1029-P-104-LF	100k	05N1601	0.82
● MCWIW1029-P-504-LF	500k	05N1607	0.99

(121117)

MCWIW1029-X SERIES SQUARE 25-TURN INDUSTRIAL CERMET TRIMMERS

RoHS Compliant Available

multicomp

Specifications
- Resistance Tolerance: ±10%
- Temperature coeff.: ±100ppm/°C
- Oper. Temp Range: -55°C to +125°C
- Power Rating @ 70°C: 0.5W
- Max. Working Voltage: 300V
- Torque: 36 mN-m max
- Stop Strength: 50 mN-m min.
- Load Life: 1,000 hours 0.5W @ 70°C
- Rotational Life: 200 cycles

Features
- Fully sealed
- Miniature package
- Wash process compatible
- Side adjust trimmer

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24
● MCWIW1029-X-102-LF	1k	05N1608	0.79
● MCWIW1029-X-502-LF	5k	05N1613	0.82
● MCWIW1029-X-103-LF	10k	05N1609	0.82

➤CONTINUED➤

MCWIW1029-X SERIES SQUARE 25-TURN INDUSTRIAL CERMET TRIMMERS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24
MCWIW1029-X-253-LF	25k	05N1612	0.99
MCWIW1029-X-503-LF	50k	05N1614	0.79
MCWIW1029-X-104-LF	100k	05N1610	0.82
MCWIW1029-X-504-LF	500k	05N1615	0.99
MCWIW1029-X-105-LF	1M	05N1611	0.99

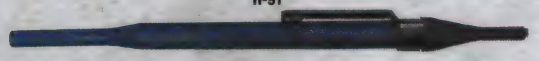
(121118)

TRIMMER ADJUSTMENT TOOLS

RoHS Compliant Available

BOURNS®

H-91



H-90

Features:
- Extended As Well As Recessed Blade for Critical Adjustments
- Overall Length: 5", Diameter: 0.255"

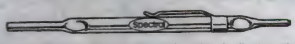
Mfg. Part No.	For Use With	Stock No.	Price Each 1-9
H-90	All Bourns trimmers except Type 20	12F9866	2.31
H-91	Type 20 trimmers only	81F014	2.31

(4140)

TYPE 8T000 TRIMMER ADJUSTMENT TOOL

RoHS Compliant Available

VISHAY.



Adjust trimmers of all sizes. Extended as well as recessed blade for critical adjustments. Overall length is 5", diameter is 0.255".

Mfg. Part No.	Stock No.	Price Each 1-4
008T000	67F5795	1.95

(15029)

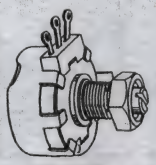
HONEYWELL CLAROSTAT RV4 SERIES PLASTIC MILITARY POTENTIOMETERS

RoHS Compliant Available

Honeywell
Sensing and Control

SELECTION, SPEED, SERVICE.
All Found Here.

Specifications
- Power Rating @ 70°C: 2 Watt
- Effective Rotation: 270°, -0°/+10°
- Resistance Tolerance: ±10%
- Dielectric Strength: 1000 VAC
- Working Voltage: 500 VDC Across End Terminals, Not Exceeding Power Rating
- Electrical and Mechanical Rotation: 312°±3°
- Operating Temperature: -55°C to +120°C
- Most popular values shown, additional values available; *go online or call.*



RV4LAYSA

RV4NAYSD

COMMERICAL EQUIVALENTS FOR RV4 SERIES POTENTIOMETERS

Type	Commercial Equivalent	Ohmic Values
RV4LAYSA	53C2 Series	1k to 5M
RV4NAYSD	53C3 Series	1k to 5M

RV4LAYSA SERIES
0.500" (12.70) long locking bushing, 0.625" (15.58) long slotted shaft FMS.

Mfg. Part No.	Res. (Ohms)	Stock No.	Mfg. Part No.	Res. (Ohms)	Stock No.
RV4LAYSA500A	50	01F3522	RV4LAYSA503A	50k	01F2661
RV4LAYSA101A	100	01F2653	RV4LAYSA104A	100k	01F2662
RV4LAYSA501A	500	01F2655	RV4LAYSA154A	150k	01F3527
RV4LAYSA102A	1k	01F2656	RV4LAYSA254A	250k	01F2663
RV4LAYSA252A	2.5k	01F2657	RV4LAYSA504A	500k	01F2664
RV4LAYSA502A	5k	01F2658	RV4LAYSA105A	1M	01F2665
RV4LAYSA103A	10k	01F2659	RV4LAYSA205B	2M	01F3528
RV4LAYSA153A	15k	01F3526	RV4LAYSA255B	2.5M	01F2666
RV4LAYSA253A	25k	01F2660	...	...	...

Mfg. Part No.	Price Each 1-9	10-49
RV4LAYSA	12.16	8.40

53C1 SERIES
Commercial version of **RV4 series** with 2" long round shaft, ⅜" long bushing. Additional values available; *go online or call.*

➤CONTINUED➤

HONEYWELL CLAROSTAT RV4 SERIES PLASTIC MILITARY POTENTIOMETERS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	10-49
53C1-100	100	10M5380	12.98	9.45
53C1500<	500	08N5649	9.63	9.33
53C11K	1k	10M5382	9.63	9.33
53C12K	2k	93B2490	13.24	9.65
53C12.5K	2.5k	32M7223	9.23	8.95
53C15K	5k	10M5386	11.98	11.31
53C110K	10K	10M5383	10.92	10.13
53C125K	25k	10M5385	10.48	9.93
53C150K	50k	10M5387	10.11	9.80
53C1100K	100k	15M2460	12.83	9.34
53C1250K	250k	10M9204	9.63	9.33

RV4NAY SERIES
0.375" (9.53) long plain bushing. **SD** in type number indicate 0.875" (22.23) long shaft. **SK** in type number indicates 2.500" (63.50) long slotted shaft FMS.

Mfg. Part No.	Res. (Ohms)	Stock No.	Mfg. Part No.	Res. (Ohms)	Stock No.
RV4NAYSD500A	50	01F3513	RV4NAYSK103A	10k	01F3530
RV4NAYSD101A	100	01F2638	RV4NAYSD203A	20k	04F8775
RV4NAYSD251A	250	01F2639	RV4NAYSD253A	25k	01F2645
RV4NAYSD501A	500	01F2640	RV4NAYSD753A	75k	01F3517
RV4NAYSD102A	1k	01F2641	RV4NAYSD104A	100k	01F2647
RV4NAYSK502A	5k	01F3529	RV4NAYSD504A	500k	01F2649
RV4NAYSD103A	10k	01F2644	RV4NAYSD105A	1M	01F2650

Mfg. Part No.	Price Each 1-9	10-24
RV4NAYS	8.42	8.16

53C3 SERIES–COMMERICAL VERSION
⅞" slotted shaft, ⅜" long bushing with ⅜ x 32-NEF 2A thread.

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-14	15-24
53C31K	1k	04F5991	10.96	10.39
53C325K	25k	04F9332	12.22	8.44
53C350K	50k	95F5082	8.16	7.89
53C3100K	100k	04F8769	12.22	8.44
53C3150K	150k	96F9319	11.98	8.28
53C3250K	250k	04F8770	8.14	7.63
53C3500K	500k	95F5081	8.14	7.89
53C3-5MEG	5M	04F9374	8.27	8.00

RV4LAYSD SERIES
0.500" (12.70) long locking bushing, 0.875" (22.23) long slotted shaft FMS.

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-14	15-24
RV4LAYSD102A	1k	01F2629	19.63	17.41
RV4LAYSD103A	10k	01F2631	16.32	15.02
RV4LAYSD104A	100k	01F2634	16.21	14.94

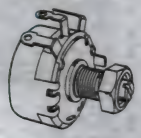
(9634)

RA20 SERIES WIREWOUND POTENTIOMETERS

RoHS Compliant Available

CLAROSTAT

Specifications
- Power Rating: 2W @ 40°C
- Tolerance: ±10%
- Effective Rotation: 280°±5°w/o Switch; 260°±5° w/Switch
- Electrical Rotation: 300°±5°



Military Version of the 43M Series.

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-5	6-14
RA20NASD100A	10	01F2668	94.15	88.95
RA20NASD250A	25	01F2669	94.15	88.95
RA20NASD102A	1k	01F2675	58.75	46.71
RA20LASB102A	1k	01F2687	104.82	99.02
RA20NASD502A	5k	01F2678	57.86	56.03
RA20LASB502A	5k	01F2689	105.34	100.08
RA20NASD103A	10k	01F2679	57.86	56.03
RA20LASB103A	10k	01F2690	68.40	54.63

(9480)

POTENTIOMETERS

RA30 4-W LINEAR RESISTANCE WIREWOUND POTENTIOMETERS

RoHS Compliant Available

CLAROSTAT

±10% tolerance. 1.688″ (42.86) dia. **RA30NASD:** 0.375″ (9.53) long standard bushing. Slotted shaft 0.250″ (6.35) dia. 0.875″ (22.23) long FMS.

Mfr. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
RA30NASD500A	50	01F2693	75.91	73.49
RA30NASD101A	100	01F2694	66.47	64.34
● RA30NASD202A	2k	01F2699	100.54	97.05
● RA30NASD502A	5k	01F2701	75.91	73.49
RA30NASD103A	10k	01F2703	65.84	63.74

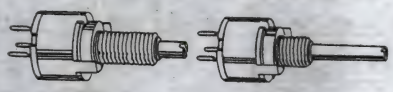
(9482)

HONEYWELL CLAROSTAT 392/ RV6 SERIES THICK FILM 0.5-WATT POTENTIOMETERS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Specifications
- Tolerance: up to 1 Mohm ±10%, above 1 Mohm to 5 Mohm ±20%
- Power Rating @ 70°C: 0.5 Watt
- Mechanical/Electrical Rotation: 295°±5°
- Effective Rotation: 265°, -0°/+10°
- Dielectric Voltage: 750 VAC for 60 sec.



RV6L RV6N

Type	Commercial Equivalent	Ohmic Values
RV6	392JA, 392JB* Series	1k to 1M

*392JA series has metal shaft and bushing, 392JB series has plastic shaft and bushing

RV6NAYSD SERIES STANDARD - SOLDER HOOK TERMINALS

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-14	Price Each 15-24
RV6NAYSD501A	500	01F3571	9.44	8.59
RV6NAYSD102A	1k	01F3572	9.04	8.57
RV6NAYSD252A	2.5k	01F3573	9.76	8.87
RV6NAYSD502A	5k	01F3574	12.42	9.05
RV6NAYSD253A	25k	01F3576	8.96	8.55
RV6NAYSD503A	50k	01F3577	8.95	8.60
RV6NAYSD104A	100k	01F3578	8.78	8.43
RV6NAYSD504A	500k	01F3579	8.46	7.97

RV6L SERIES LOCKING - SOLDER HOOK TERMINALS

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-49
RV6LAYSA501A	500	01F3557	9.22	8.71
RV6LAYSA102A	1k	01F3558	12.42	9.05
RV6LAYSA252A	2.5k	01F3559	10.04	9.21
RV6LAYSA502A	5k	01F3560	12.41	9.04
RV6LAYSA103AP	10k	01F3561	9.15	8.50

392JA SERIES - METAL SHAFT & BUSHING - PC TERMINALS

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
● 392JA1K	1k	04F4328	7.90	7.65
● 392JA5K	5k	04F4330	7.75	7.51
● 392JA10K	10k	04F4331	8.99	8.51
● 392JA25K	25k	10M5377	7.99	7.74
● 392JA100K	100k	10M5376	7.99	7.74
● 392JA1MEG	1M	10M5375	7.61	7.37
392JB SERIES - PLASTIC SHAFT & BUSHING - PC TERMINALS				
● 392JB100	100	95M4802	7.35	6.63
● 392JB250	250	04F4341	10.05	6.94
● 392JB1K	1k	04F4343	7.08	6.85
392JB2500	2.5K	04F4344	10.56	7.29
● 392JB10K	10k	10M5379	7.35	6.63
● 392JB-25K	25k	04F4347	10.05	6.94
● 392JB100K	100k	04F4349	10.56	7.29

(9635)

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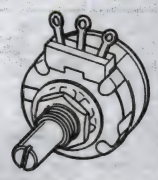
(211462)

HONEYWELL CLAROSTAT 380 SERIES 2W CONDUCTIVE PLASTIC POTENTIOMETERS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Specifications
- Tolerance: up to 1 Mohm ±10%, above 1 Mohm ±20%
- Power Rating @ 70°C: 2 Watt
- Mechanical/Electrical Rotation: 312°±3°
- Effective Rotation: 270°, -0°/+10%
- Dielectric Strength: 100 VAC



380C1 2″ round shaft FMS; ⅜″ long bushing with ⅜ x 32-NEF-2A thread
380C2 ⅝″ screwdriver slotted shaft FMS; with a ½″ split locking bushing
380C3 ⅞″ screwdriver slotted shaft FMS; ⅜″ long bushing with ⅜ x 32-NEF-2A thread.

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
380C1-1K	1k	04F8781	12.56	11.61
380C1-2.5K	2.5k	01C4293	12.72	11.75
380C1-5K	5k	10M5372	14.31	13.55
380C1-10K	10k	10M5371	16.90	12.33
380C1-100K	100k	01C4287	12.72	11.75
380C1-250	250k	01C4291	12.31	11.72
380C2-25K	25k	10M5373	19.23	14.00
380C3-500	500	10M5374	15.39	11.21
380C3-1K	1k	01C4305	11.46	10.63
380C3-2.5K	2.5k	01C4309	12.32	11.38
380C3-5K	5k	04F8759	14.35	13.60
380C3-10K	10k	04F8997	14.66	13.88
380C3-25K	25k	05F1977	11.65	10.77
380C3-50K	50k	08N5644	12.09	11.17
380C3-500K	500k	05F1911	12.09	11.17

(9484)

381 SERIES POTENTIOMETERS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Specifications
- Tolerance: below 1MΩ: ±10%, above or equal to 1MΩ: ±20%
- Power Rating 1W
- Mechanical Rotation: 300°

381N 19.05mm slotted shaft; 6.35mm long bushing with 6.35mm x 32-NEF-2A thread

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9
● 381N100	100	01C4321	29.98
● 381N500	500	01C4330	24.11
381L-5K	5k	04F9321	21.63
381L10K	10k	99F5698	20.80
● 381N10K	10k	01F1406	15.74
● 381NS10K	10k	01C4317	51.07
381N-25K	25k	01F1407	22.49
● 381NS50K	50k	01C4319	38.67
● 381N100K	100k	01F1408	23.12
● 381N1MEG	1M	01F1410	23.61
● 381N5MEG	5M	01C4328	31.29

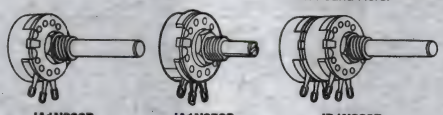
(108799)

HONEYWELL CLAROSTAT J SERIES CARBON PANEL POTENTIOMETERS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Specifications
- Tolerance: ±10%
- Power Rating @ 70°C: 2 Watt
- Electrical/Mechanical Rotation: 312°±3°
- Dielectric Strength: 1000 VAC
- Working Voltage: 500 V Max.
- Operating Temperature: -55°C to +120°C



JA1N200P JA1N056S JD1N200P

10% TOLERANCE—LOG TAPER
⅜″ long plain bushing. ⅞″ long, ¼″ dia. slotted shaft.

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
● JA1N056S503AA	50k	10F4406	25.75	24.37

10% TOLERANCE—LINEAR TAPER
Plain ⅜″ long bushing, ⅞″ long ¼″ diameter slotted shaft.

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
● JA1N056S102UA	1k	01F6267	50.11	48.53
● JA1N056S252UA	2.5k	01F6270	50.83	49.23

➤ CONTINUED ➤

HONEYWELL CLAROSTAT J SERIES CARBON PANEL POTENTIOMETERS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
JA1N056S502UA	5k	01F6272	50.11	48.53
JA1N056S103UA	10k	01F6274	50.11	48.53
JA1N056S203UA	20K	01F6276	55.18	43.87
JA1N056S253UA	25k	01F6277	52.01	41.36
JA1N056S503UA	50k	01F6279	50.10	48.51
JA1N056S154UA	150k	01F6282	19.96	18.86

10% TOLERANCE—LINEAR TAPER
⅜" long plain bushing, 2" long, ¼" diameter plain end shaft.

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
JA1N200P104UA	100k	01F6309	25.54	24.16
JA1N200P254UA	250k	01F6312	25.54	24.16

10% TOLERANCE—LOG TAPER
⅜" long plain bushing, 2" long ¼ diameter plain end shaft. Stocked in various values to 5 megaohms; *go online or call.*

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
JA1N200P104AA	100k	01F6322	28.25	26.73

10% TOLERANCE—DUAL LINEAR
⅜" long plain bushing. 2" long, ¼" dia. plain end shaft.

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
JD1N200P105UA	1M	01F6655	55.01	52.06

10% TOLERANCE—LINEAR TAPER
1/2" Locking bushing; 5/8" long, 1/4" dia. slotted shaft

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-49
JA1L040S254UC	250k	01F6257	23.29	18.52

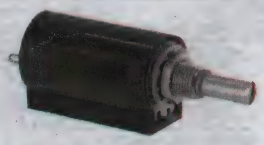
(9639)

HONEYWELL CLAROSTAT 62JA SERIES 10-TURN WIREWOUND PRECISION POTENTIOMETERS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Specifications
- Tolerance: ±5%
- Power Rating @ 25°C: 2 Watt; derated to 0 Watt @ 85°C
- Electrical Rotation: 3600°, +10°/-0°
- Effective Rotation: 3600° Nominal
- Dielectric Strength: 1000 VAC
- Working Voltage: 450 V Max.
- Mechanical Rotation: 3600°, +10°/-0°
- Linearity: 0.25%
- Body Diameter: ⅞"
- Solder Lug Terminals
- Temperature Coefficient: 20 ppm



Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9
62JA100	100	01F2299	273.03
62JA1K	1k	01F2419	193.41
62JA2K	2k	01F2620	254.49
62JA5K	5k	01F2621	182.00
62JA10K	10k	01F2622	181.53
62JA100K	100k	01F2626	208.98

(9636)

CLAROSTAT 73JA SERIES 10-TURN WIREWOUND PRECISION POTENTIOMETERS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Specifications
- Power Rating@ 70°C: 2 Watt
- Resistance Tolerance: ±5%
- Operating Temp: -40°C to +120°C
- Linearity: 0.25%
- Working Voltage: 500 V Max
- Dielectric Strength: 1000 VAC
- Mechanical Rotation: 3600°, +10°/0°
- Electrical and Effective Rotation: 3600°, +10°/0°
- Rotational Life: 50,000 cycles
- Body Diameter: 0.875 in.
- Shaft Style: Slotted
- Shaft Diameter: 0.25 in.
- Shaft Length: 0.812 in.

Features
- Stainless steel shaft
- Wirewound element
- Linear taper
- 10-turn construction

Applications
- Manuals controls
- Welding and heating

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
73JA100	100	01F3544	38.12	36.90
73JA200	200	01F3545	37.56	36.37
73JA500	500	01F3546	38.12	36.90
73JA1K	1k	01F3547	37.58	36.38

CONTINUED

CLAROSTAT 73JA SERIES 10-TURN WIREWOUND PRECISION POTENTIOMETERS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
73JA2K	2k	01F3548	37.58	36.38
73JA5K	5k	01F3549	37.67	28.19
73JA10K	10k	01F3550	31.58	29.94
73JA20K	20k	01F3551	38.12	36.90
73JA25K	25k	01F3552	45.88	34.34
73JA50K	50k	01F3553	45.54	43.54
73JA100K	100k	01F3554	50.00	48.40

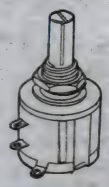
(9633)

73JB SERIES 10-TURN POTENTIOMETERS

RoHS Compliant Available

CLAROSTAT

Specifications
- Power rating: 2W @ 70°C
- Electrical and effective rotation: 3600°, +10°/0°
- Resistance tolerance: ±5%
- Dielectric strength: 1000VAC
- Working voltage: 500V
- Mechanical rotation: 3600°, +10°/0°
- Glass-filled nylon shaft



Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-49
73JB100<	100	04F5865	37.54	29.85
73JB1K	1k	04F5868	32.48	31.46
73JB2K	2k	04F5869	32.31	31.29
73JB10K	10k	04F5871	32.48	31.46
73JB20K	20k	04F5872	28.68	27.78
73JB50K	50k	04F5874	46.37	44.89
73JB100K	100k	04F5875	43.51	41.60

(9632)

43C SERIES 2-WATT WIREWOUND POTENTIOMETERS

RoHS Compliant Available

CLAROSTAT

Tolerance: ±10%. 310VDC. 0.625" (15.88) long screwdriver slotted shaft. Diameter 1.125" (28.58), Meets MIL-R-19, style RA20L. Military version is RA20.

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-5	Price Each 6-14
43C225	25	01F1426	65.26	64.14
43C150	50	01F3477	60.78	50.26
43C1-100<	100	04F8998	83.54	82.10
43C11000	1k	01F3479	59.47	56.85
43C15000	5k	01F3480	62.01	49.30
43C110K	10k	94F521	61.25	58.56

(78835)

HONEYWELL CLAROSTAT 58C SERIES SINGLE-TURN WIREWOUND POTENTIOMETERS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Specifications
- Tolerance: ±10%
- Power Rating @ 40°C: 4 Watt
- Electrical Rotation: 300°±5°
- Effective Rotation: 280°±5°
- Operating Temperature: -55°C to +105°C
- Dielectric Strength: 1000 VAC
- Linearity: 2%
- Rotational Life: 25000 cycles

Potential Applications
- Manual controls
- Welding and heating

Features
- Robust nickel-plated brass shaft and bushings
- Wirewound element
- Linear taper
- Very stable over the operating temperature

Bushing: ⅜ x ⅜". Shaft: ¼ x 2" FMS plain round. Diameter 1.688" (42.86) x 0.813" (20.64) deep. Military version is RA30.

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9
58C12500	500	01F2211	78.96
58C11500	1.5k	01F1867	73.06
58C12K	2k	01F2210	78.12
58C15000	5k	01F2212	80.15

(9476)

RV4 AND RV6 SERIES ⅞″ DIAMETER SINGLE-TURN ROUND PANEL MOUNT POTENTIOMETERS

RoHS Compliant Available

ETI SYSTEMS

Specifications
- Resistance Element: Carbon
- Tolerance: ±10% or ±20%
- Mechanical rotation: 295°
- Dielectric strength: 750VRMS (RV4); 900VRMS (RV6)
- Operating Voltage 500V (RV4); 350V (RV6)
- Derating: Derates Linearly @ 70°C and to 0% @ 120°C
- Operating Temp Range: -65°C to +125°C
- Rotational life: 25,000 cycles
- Load life: 1000 hours at 70°
- Torque: 0.5 oz/in to 6 oz/in

Features
- Hot molded carbon element
- Gold-plated terminals
- Stainless-steel shaft and housing
- Quality meeting or exceeding MIL-R-94 - QPL listed
- Fourth (center) terminal
- High life

RV4 SERIES - POWER RATING: 2W

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
● RV4NAYSD101A	100	79M6932	14.17	13.20
● RV4NAYSD501A	500	79M6938	15.00	13.97
● RV4NAYSD102A	1k	79M6933	14.82	13.80
● RV4NAYSD252A	2.5k	79M6937	14.82	13.80
● RV4NAYSD502A	5k	79M6939	15.19	14.14
● RV4NAYSD103A	10k	79M6934	15.00	13.97
● RV4NAYSD503A	50k	79M6940	15.19	14.14
● RV4NAYSD104A	100k	79M6935	15.00	13.97
● RV4NAYSD105A	1M	79M6936	14.17	13.20
● RV4NAYSJ102A	1k	79M6941	15.00	13.97
● RV4NAYSJ502A	5k	79M6943	15.19	14.14
● RV4NAYSJ103A	10k	79M6942	15.19	14.14
● RV4LAYSA502A	5k	79M6930	14.89	13.87
● RV4LAYSA103A	10k	79M6929	14.89	13.87
● RV4LAYSA503A	50k	79M6931	14.89	13.87
RV6 SERIES - POWER RATING: 0.5W				
● RV6LAYSA103A	10k	79M6945	18.00	16.77
● RV6NAYSD102A	1k	79M6947	15.68	14.60
● RV6NAYSD502A	50k	79M6949	16.60	15.45
● RV6NAYSD103A	10k	79M6948	16.60	15.45

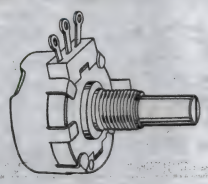
(116681)

53C SERIES CONDUCTIVE PLASTIC POTS

RoHS Compliant Available

CLAROSTAT

Commercial version of **RV4 series**. 500V, 2W pots enclosed and sealed against moisture, elements. 1.032″ (33.33) diameter, 0.563″ (14.28)D. Operating temperature: –55°C to +120°C.

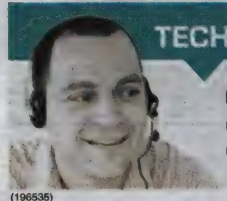


2″ LONG ROUND SHAFT, ⅜″ LONG BUSHING

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-24
● 53C11K	1k	10M5382	9.63	9.33
● 53C12.5K	2.5k	32M7223	9.23	8.95
● 53C15K	5k	10M5386	11.98	11.31
● 53C110K	10k	10M5383	10.92	10.13
● 53C125K	25k	10M5385	10.48	9.93
● 53C150K	50k	10M5387	10.11	9.80
● 53C1100K	100k	15M2460	12.83	9.34
● 53C1250K	250k	10M9204	9.63	9.33
● 53C1500K	500k	10M5388	9.63	9.33
53C25K	5k	04F9005	8.98	8.51
53C210K	10k	04F8768	8.42	8.16
53C225K	25k	95F5080	11.62	11.25

(9631)

TECHNICAL SUPPORT HOTLINE



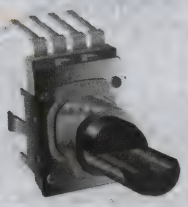
Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

PTV111 SERIES 11mm SINGLE TURN POTENTIOMETERS

RoHS Compliant Available

BOURNS®



Features
- Carbon element
- Insulated shaft
- Snap-in clip
- Center detent option

Specifications
- Tolerance: +/-20%
- Power rating: 0.05 Watt
- Max. operating voltage: 50 VAC, 20 VDC
- Rotational life: 10,000 cycles minimum
- Torque: 20 to 200 gcm

Applications
- Audio/TV sets
- Car radio
- Amplifiers/mixers/drum machines/synthesizers
- PCs/monitors
- Appliances

FLATTENED INSULATED SHAFT - LINEAR TAPER

Mfg. Part No.	Res. (Ohms)	Shaft Length (mm)	Detent Option	Body Style	Stock No.	Price Each 1-9
● PTV111-4420A-B502	5k	20	None	Straight w/o Bushing	32K6335	1.28
● PTV111-3415A-B103	10k	15	None	Straight w/Bushing	88K6311	0.85
● PTV111-3420A-B103	10k	20	None	Straight w/Bushing	10C0399	1.28
● PTV111-3220A-B103	10k	20	Center	Straight w/Bushing	17M1605	1.24
● PTV111-3415A-B503	50k	15	None	Straight w/Bushing	20C4273	1.28
FLATTENED INSULATED SHAFT - AUDIO TAPER						
● PTV111-1415A-A103	10k	15	None	Right Angle w/Bushing	88K6306	1.24
● PTV111-3420A-A203	20k	20	None	Straight w/Bushing	61J7605	1.24

(90074)

50 SERIES ½″ PANEL CONTROLS

RoHS Compliant Available

BOURNS®

Features
- Conductive Plastic, Square, Sealed Control
- Linear and Audio Tapers
- PC Board and Bushing Mount
- Gangable
- Metal Bushing and Shaft

Specifications
- Dielectric Strength: 1500 VAC Min.
- Power Rating @ 70°C: Linear Taper: 0.5 Watt; Audio Taper: 0.25 Watt
- Stop Strength: 5 in.-lb.
- Operating Temperature: +1°C to +125°C
- Shaft Torque: 0.2 to 2.0 in.-oz. (0.15-1.4Ncm)

PC PIN TERMINALS

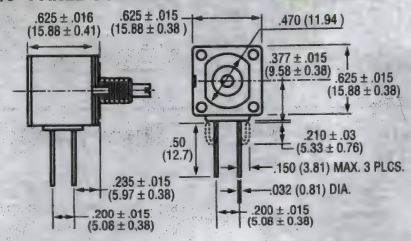
Mfg. Part No.	Res. (Ohms)	Res. Tol.	Bush.	Dia.	Lgth.	Stock No.	Price Each 1-9
● 51AAD-B24-A15L	10k	± 10%	0.375″	0.25″	0.75″	62K3285	7.83
● 51CAD-E24-A15L	10k	± 10%	0.25″	0.125″	0.75″	62K3289	7.83
● 51CAD-E28-A10L	1k	± 10%	0.25″	0.125″	0.875″	62K3290	7.83
● 51CAD-E28-D15L	10k	± 20%	0.25″	0.125″	0.875″	62K3293	8.53
SOLDER LUG TERMINALS							
● 53AAA-B28-B15L	10k	± 20%	0.375″	0.25″	0.875″	62K3297	8.35

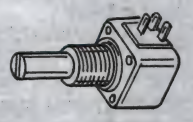
(4163)

81 SERIES SINGLE-TURN ⅝″ PANEL CONTROL

RoHS Compliant Available

BOURNS®





Specifications
- Dielectric Strength: 1500 VAC Min.
- Insulation Resistance: 1000 MΩ Min.
- Rotational Life: 100,000 Cycles
- Stop Strength: 4 in.-lb.
- Running Torque:
- (Nonlocking Bushings): 0.2 to 1.5 oz. in. (0.14-1.06Ncm);
- (Locking Bushings): 0.2 to 4.0 in.-oz. (0.15-2.82Ncm)

Features
- Single-Turn, Square, Wirewound Control
- Metal Shaft and Bushing
- Consistant, Smooth Rotation
- Gangable
- Up to 4 Section Types Available, *Go online or call*

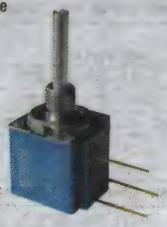
Mfg. Part No.	Res. (Ohms)	Res. Tol.	Power Rating (W)	Shaft Dia.	Stock No.	Price Each 1-9	Price Each 10-24
● 81A1A-B28-A10L	1k	± 20%	2	0.250″	62K3298	10.38	9.31
● 81A1A-B28-A13L	5k	± 20%	2	0.250″	62K3299	10.14	9.09
● 81C1A-E28-A13L	5k	± 10%	2	0.125″	10M7120	10.14	9.09
● 81A1A-B28-A15L	10k	± 20%	2	0.250″	62K3300	10.14	9.09
● 81A1A-B28-A23L	500k	± 10%	2	0.250″	62K3301	9.16	8.21
● 81C1A-E28-A15L	10k	± 10%	2	0.125″	62K3303	10.14	9.09
● 81A1A-B28-B25L	1M	± 20%	2	0.250″	62K3302	10.14	9.09

(12764)

83/84 SERIES 5/8″ PANEL CONTROL

RoHS Compliant Available

BOURNS®



Features
- 10-Turn, Square, Wirewound Control
- Compatible with Other Series 80 Models
- Modular Panel Control Package
- Up to 3 Section Types Available, *go online or call*

Specifications
- Power Rating: 1W
- Dielectric Strength: 1500 VAC Min.
- Insulation Resistance: 1000 MΩ Min.
- Operating Temp.: +1°C to +125°C
- Rotational Life: 1,000,000 revolutions, except where noted*
- Shaft Torque: 0.25 to 2.0 in.-oz. (0.18-1.41Ncm)
- Stop Strength: 48 oz.-in. (33.90Ncm) Min.

83/84 SERIES

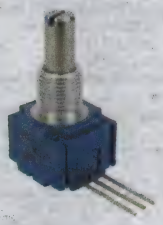
Mfg. Part No.	Res. (Ohms)	Res. Tol.	Stock No.	Price Each 1-9	Price Each 10-49
83A1A-B28-J10L	1k	± 5%	62K3304	31.60	28.74
83A1A-B28-J13L	5k	± 5%	62K3305	31.60	28.74
83A1A-B28-J15L	10k	± 5%	62K3306	31.60	28.74
83A1D-C28-K13L	5k	± 10%	62K3307	29.20	26.56
84A1A-B28-J13L	5k	± 5%	62K3309	31.60	28.74
84A1A-B28-J15L	10k	± 5%	62K3310	31.60	28.74

(12767)

90 SERIES 16mm SINGLE-TURN PANEL CONTROL

RoHS Compliant Available

BOURNS®



Features
- 1-Pc. Molded Plastic Panel Control
- Virtually Infinite Electrical Circuit

Specifications
- Tolerance: ±20% except where noted
- Dielectric Strength: 1500 VAC Min.
- Insulation Resistance: 1000 MΩ Min.
- Operating Temp.: +1°C to +125°C
- Rotational Life: 100,000 Cycles
- Shaft Torque: 0.3 to 1.5 in.-oz. (0.21-1.06Ncm)
- Stop Strength: 4-in.-lb. (45.19Ncm)

Mfg. Part No.	Res. (Ohms)	Power Rating (W)	Shaft Dia. (Inches)	Stock No.	Price Each 1-9
LINEAR TAPER CONDUCTIVE PLASTIC - 3/4″ LONG SHAFT - IN-LINE PINS					
91A1A-B24-B10L	1k	500	0.25	62K3311	5.21
91A1A-B24-B13L	5k	500	0.25	62K3312	5.15
91A1A-B24-B15L	10k	500	0.25	62K3313	5.15
91A1A-B24-B18L	50k	500	0.25	62K3315	5.15
91A1A-B24-B20L	100k	500	0.25	62K3316	5.02
LINEAR TAPER CONDUCTIVE PLASTIC - 7/8″ LONG SHAFT - IN-LINE PINS					
91A1A-B28-A13L	5k	500	0.25	17M5375	5.21
91A1A-B28-A15L	10k	500	0.25	17M5376	5.21
LINEAR TAPER CONDUCTIVE PLASTIC - 7/8″ LONG SHAFT - IN-LINE PINS					
91A1A-B28-B10L	1k	500	0.25	62K3321	5.21
91A1A-B28-B12L	2.5k	500	0.25	62K3322	5.02
91A1A-B28-B13L	5k	500	0.25	62K3323	5.02
91A1A-B28-B15L	10k	500	0.25	62K3324	5.02
91A2A-B28-B15/B15L	10k	500	0.25	62K3333	9.05
91A1A-B28-B17L	25k	500	0.25	62K3325	5.21
91A1A-B28-B20L	100k	500	0.25	62K3327	5.21
91A1A-B28-B22L	250k	500	0.25	62K3328	5.21
AUDIO TAPER, CONDUCTIVE PLASTIC - 3/4″ LONG SHAFT - IN-LINE PINS					
91A1A-B24-D15L	10k	250	0.25	62K3317	5.86
91A1A-B24-D20L	100k	250	0.25	62K3318	5.66
AUDIO TAPER, CONDUCTIVE PLASTIC - 7/8″ LONG SHAFT - IN-LINE PINS					
91A1A-B28-D15L	10k	250	0.25	62K3330	5.80
91A2A-B28-D15/D15L	k	250	0.25	62K3334	10.39
LINEAR TAPER, CERMET - 10% TOLERANCE - 7/8″ LONG SHAFT - IN-LINE PINS					
95A1A-B28-A13L**	5k	500	0.25	03P0957	5.77

** 10% Tolerance
(12768)

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(196545)

P160 SERIES 16mm COMMERCIAL PANEL POTENTIOMETERS

RoHS Compliant Available

TT electronics
BI Technologies

Specifications
- Metal Shaft/Bushing
- Rotational Life: 100,000 Cycles
- Operating Torque: 2.5 oz-in
- Resistance Tolerance: ±20%
- Residual Resistance: 20Ω max.
- Power Rating: 0.2W
- Dielectric Strength: $500V_{AC}$
- Insulation Resistance: 100 MΩ @ $250V_{DC}$
- Input Voltage: $200V_{AC}$ max.
- Operating Temp. Range: -20°C to +70°C

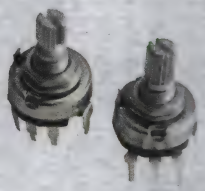
Mfg. Part No.	Res. (Ohm)	Description	Stock No.	Price Each 1-24	Price Each 25-49
AUDIO TAPER					
P160KNP-0EC15A10K	10k	Side Adjust, Solder Lugs	14N5348	0.95	0.90
P160KNP-0EC15A25K	25k	Side Adjust, Solder Lugs	14N5350	0.95	0.90
P160KNP-0EC15A100K	100k	Side Adjust, Solder Lugs	14N5349	0.95	0.90
P160KNP-0EC15A500K	500k	Side Adjust, Solder Lugs	14N5351	0.95	0.90
P160KNP-0EC15A1MEG	1M	Side Adjust, Solder Lugs	14N5347	0.95	0.90
LINEAR TAPER					
P160KNP-0EC15B2K	2k	Side Adjust, Solder Lugs	14N5353	0.95	0.90
P160KNPD-2QC25B2K	2k	Rear Adjust, PC pins	46M2495	0.95	0.90
P160KNP-0FC25B5K	5k	Side Adjust, Solder Lugs	46M2494	0.93	0.88
P160KNP-0EC15B25K	25k	Side Adjust, Solder Lugs	14N5354	0.95	0.90
P160KNP-0EC15B100K	100k	Side Adjust, Solder Lugs	14N5352	0.95	0.90
P160KNP-0EC15B250K	250k	Side Adjust, Solder Lugs	14N5355	0.95	0.90
REVERSE AUDIO TAPER					
P160KNP-0EC15C100K	100k	Side Adjust, Solder Lugs	14N5356	0.95	0.90
P160KNP-0EC15C500K	500k	Side Adjust, Solder Lugs	14N5357	0.95	0.90

(94500)

P170 SERIES 17mm SINGLE TURN, CONDUCTIVE PLASTIC COMMERCIAL PANEL POTENTIOMETERS W/ OPTIONAL SWITCH

RoHS Compliant Available

TT electronics
BI Technologies



Specifications
- Metal Shaft / Bushing
- Operating Torque: 2.5 oz-in
- Rotational Life: 100,000 cycles
- Resistance Tolerance: ±20%
- Residual Resistance: 10Ω max.
- Power Rating: 0.1W
- Dielectric Strength: $500V_{AC}$
- Insulation Resistance: 50 MΩ @ $500V_{DC}$
- Input Voltage: $200V_{AC}$ max.
- Operating Temp. Range: -20°C to +70°C

Mfg. Part No.	Description	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-99
P170N2-QC25BR1K	Side Adjust, PCB pins, no switch	1k	46M2496	0.70	0.62
P170S-FC20BR10K	Side Adjust, Solder Lugs with switch	10k	46M2497	0.92	0.82

(94501)

PDB18 SERIES 17mm SINGLE-TURN POTENTIOMETERS

RoHS Compliant Available

BOURNS®

Specifications
- Tolerance: ± 20%
- Mechanical Angle: 300° ± 5°
- Rotational Torque: 10 to 150 gf-cm
- Detent Torque: 150 to 500 g-cm
- Stop Strength: 5 kg-cm min.
- Rotational Life: 15,000 cycles
- Operating Temp Range: -10°C to +50°C

Features
- Carbon element
- Single and dual section control
- Metal shaft styles
- Center detent option
- Plain or knurled shaft options

Mfg. Part No.	Res. (Ohm)	Stock No.	Price Each 1-9
PDB181-K220K-102B	1k	10C0275	1.25
PDB181-K415K-102A2	1k	10C0280	1.12
PDB181-K420K-102A	1k	04B9681	1.07
PDB182-K220K-102B	1k	10C0284	1.97
PDB182-K220K-502B	5k	10C0286	1.97
PDB181-K420K-502B	5k	43K0671	1.14
PDB181-K220K-103B	10k	10C0276	1.23
PDB181-K420K-103B	10k	04B9684	1.15
PDB182-K425K-103A	10k	14P6199	1.79
PDB182-K420K-203B	20k	10C0287	1.79
PDB181-K220K-503B	50k	10C0279	1.25
PDB182-K430K-503A	50k	14P6201	1.81
PDB182-D420K-503A	50k	14P6194	1.81
PDB181-K220K-104B	100k	10C0277	1.25
PDB182-K430K-104A	100k	14P6200	1.79
PDB181-K420K-204A	200k	04B9690	1.07

CONTINUED

PDB18 SERIES 17mm SINGLE-TURN POTENTIOMETERS (CONT.)

Mfg. Part No.	Res. (Ohm)	Stock No.	Price Each 1-9
● PDB181-GTR01-504A2	500k	79R7037	2.07
● PDB181-E420K-105B	1M	02J2827	1.15

(175960)

3800 SERIES PANEL CONTROLS

RoHS Compliant Available

BOURNS®

Features
- **Types 3851, 3852** and **3856** are ¾" dia., conductive plastic or cermet panel mount controls
- Requires minimal depth
- **Type 3862** is ½" dia., cermet panel mount control

All panel controls are single-turn except **type 3856** which are 3¾"-turn. Type numbers with **"A"** or **"AL" suffix** feature linear tapers with +/-10% tolerance; **"BL" suffix** feature linear tapers with +/-20% tolerance.

Specifications	Type 3851, 3852, 3856	Type 3862
Taper	Linear	
Dielectric Strength	900 VAC Min.	750 VAC Min.
Solderability	Meets MIL-STD-202, Method 301	
Operating Temperature	−1°C to +125°C	
Rotational Life	50,000 Cycles	
Shaft Torque	0.5 to 6.0 oz.-in. for ⅜" Bushing 0.3 to 6.0 oz.-in. for ¼" Bushing	5 oz.-in. Max.
Stop Strength	5 in.-lb. Max.	3 in.-lb. Max.

3800A SERIES

Mfg. Part No.	Res. (Ohms)	Bushing	Shaft Dimensions Dia.	Shaft Dimensions Lgth.	Stock No.	Price Each 1-9	Price Each 10-24
● 3852A-282-101AL	100	⅜"-32	¼"•	⅞"	62K3236	10.63	9.89
● 3852A-162-102AL	1k	⅜"-32	¼"	½"	62K3230	10.42	9.34
● 3852A-282-102AL	1k	⅜"-32	¼"	⅞"	62K3237	10.06	9.01
● 3856A-282-102AL	1k	⅜"-32	¼"	⅞"	62K3253	21.65	19.69
● 3852A-162-252AL	2.5k	⅜"-32	⅛"	½"	62K3233	10.06	9.01
● 3852A-282-252AL	2.5k	⅜"-32	¼"	⅞"	62K3241	10.06	9.01
● 3852A-162-502AL	5k	⅜"-32	⅛"	½"	62K3234	10.06	9.01
● 3852A-282-502AL	5k	⅜"-32	¼"	⅞"	62K3245	10.06	9.01
● 3851A-282-502BL	5k	⅜"-32	¼"	⅞"	62K3228	10.06	9.01
● 3852A-162-103AL	10k	⅜"-32	⅛"	½"	62K3231	10.06	9.01
● 3852A-202-103AL	10k	⅜"-32	⅛"	½"	17M3664	10.06	9.01
● 3852A-282-103AL	10k	⅜"-32	¼"	⅞"	62K3238	10.06	9.01
● 3856A-282-103AL	10k	⅜"-32	¼"	⅞"	62K3254	21.02	19.12
● 3851A-282-103BL	10k	⅜"-32	¼"	⅞"	62K3227	10.06	9.01
● 3852A-282-503AL	50k	⅜"-32	¼"	⅞"	62K3246	10.06	9.01
● 3852A-162-104AL	100k	⅜"-32	⅛"	½"	62K3232	10.06	9.01
● 3852A-282-104AL	100k	⅜"-32	¼"	⅞"	62K3239	10.30	9.23
● 3856A-282-104AL	100k	⅜"-32	¼"	⅞"	62K3255	21.02	19.12
● 3856A-282-105AL	1M	⅜"-32	¼"	⅞"	62K3256	17.75	16.14
3800C SERIES							
● 3852C-282-102AL	1k	¼"-32	¼"	⅞"	62K3249	10.06	9.01
● 3852C-282-502AL	5k	¼"-32	¼"	⅞"	62K3251	10.30	9.23
● 3862C-282-502AL	5k	¼"-32	⅛"	⅞"	62K3262	13.13	11.94
● 3852C-282-103AL	10k	¼"-32	⅛"	⅞"	62K3250	10.30	9.23
● 3862C-282-103AL	10k	¼"-32	⅛"	⅜"	62K3261	13.13	11.94
● 3862C-286-103AL	10k	¼"-32	⅛"	⅞"	62K3263	13.13	11.94

(12827)

PDB24 SERIES 17mm SINGLE-TURN POTENTIOMETERS

RoHS Compliant Available

BOURNS®

Features
- High rotational life
- Metal shaft styles
- Carbon element
- Center detent option
- Solder Lug Termination

Applications
- Various commercial applications
- Sound processing equipment
- Guitar and sound system amplifiers
- Appliances

Specifications
- Operating Temperature: -10°C to +70°C
- Power Rating: 0.5W (Lin), 0.25W (Audio)
- Max. Operating Voltage: 500V (Lin); 250V (Audio)
- Rotational Noise: 150 mV max.
- Mechanical Angle: 300 ° ±5 °
- Rotational Torque: 20 to 200 g-cm
- Stop Strength: 8 kg-cm min.
- Rotational Life:
  15,000 cycles min. (Std.)
  500,000 cycles min. (High)

STANDARD - KNURLED SHAFT - REAR FACING

Mfg. Part No.	Res. (kohm)	Track Taper	[StockNo]	Price Each 1-9
● PDB241-E420K-504B0	500	Linear	32M9485	2.18
STANDARD - PLAIN SHAFT - REAR FACING				
● PDB241-E420P-103B0	10	Linear	32M9486	2.18
STANDARD - PLAIN SHAFT - DOWN FACING				
● PDB241-S420P-103B0	10	Linear	32M9498	2.18

➤ CONTINUED ➤

PDB24 SERIES 24mm SINGLE-TURN POTENTIOMETERS (CONT.)

STANDARD - GUITAR POT - KNURLED SHAFT - REAR FACING

Mfg. Part No.	Res. (kohm)	Track Taper	[StockNo]	Price Each 1-9
● PDB241-GTR01-254C2	250	Log (Audio)	76T0461	3.17
● PDB241-GTR01-504C2	500	Log (Audio)	76T0463	3.17
STANDARD - GUITAR POT - KNURLED SHAFT (18-TOOTH) - REAR FACING				
● PDB241-GNL01-254B0	250	Linear	76T0445	3.62
● PDB241-GNL01-504B0	500	Linear	76T0447	3.62
STANDARD - GUITAR POT - KNURLED SHAFT (18-TOOTH, LONG) - REAR FACING				
● PDB241-GNL03-504B0	500	Linear	76T0453	4.01
STANDARD - GUITAR POT - KNURLED SHAFT (LONG) - REAR FACING				
● PDB241-GTR03-504C2	500	Log (Audio)	76T0467	3.61
STANDARD - GUITAR POT - PLAIN SHAFT - REAR FACING				
● PDB241-GNL02-254B0	250	Linear	76T0449	3.48
● PDB241-GTR02-104B0	100	Linear	05R7973	2.89
● PDB241-GTR02-504A2	500	Audio	32M9494	3.00

(175962)

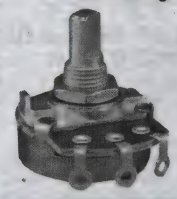
P231 SERIES 24mm SINGLE TURN, CONDUCTIVE PLASTIC INDUSTRIAL PANEL POTENTIOMETERS

RoHS Compliant Available

TT electronics BI Technologies

Specifications
- Resistance Tolerance: ±20%
- Rotational Torque, Maximum 2.5 oz-in
- Residual Resistance: 3Ω max.
- Power Rating: 0.5W
- Dielectric Strength: 500V_{AC}
- Insulation Resistance: 100 Mohms @ 1000V_{DC}
- Input Voltage: 200V_{AC} max.
- Operating Temp. Range: -20°C to +70°C

Features
- Metal Shaft/ Bushing
- 100,000 Cycle Life
- Side Adjust, Solder Lugs
- 300° ±10% Total Mechanical Travel



Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-24	Price Each 25-99
● P231-FC20BR10K	10k	46M2510	1.66	1.48
● P231-EC20AR500K	500k	14N5358	1.54	1.37
● P231-EC20CR1MEG	1M	14N5359	1.64	1.46
● P231-QC15AR250K	250k	14N5360	1.54	1.37
● P231-QC20AR250K	250k	14N5361	1.64	1.46
● P231-QC20AR500K	500k	14N5362	1.64	1.46

(94503)

6637 SERIES ⅞" DIAMETER CONDUCTIVE PLASTIC, SINGLE-TURN PRECISION POTENTIOMETERS

RoHS Compliant Available

BOURNS®

Features
- Single Turn, Conductive Plastic, Precision Potentiometer
- Excellent Resolution
- High Rotational Life
- Bushing Mount
- Additional Options Available, *go online or call*

Specifications
- Tolerance: ±10%
- Power Rating: 1W @ 70°C
- Dielectric Strength: 750 VAC
- Temperature Coefficient: ±500 ppm°/C Max.
- Solderability: Meets MIL-STD-202 Method 301
- Rotational Life: 10,000,000 Cycles
- Torque: 0.5oz.-in. (0.40Ncm) Max.
- Linearity: 1%
- Operating Temp. Range: +1°C to +125°C

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-49
● 6637S-1-102	1k	12F7100	36.07	32.80
● 6637S-1-502	5k	12F7102	35.36	32.16
● 6637S-1-103	10k	05B992	36.07	32.80

(4133)

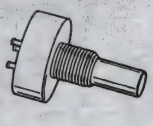
NEW PRODUCTS ADDED DAILY
See the newest products, technologies and suppliers on our website.

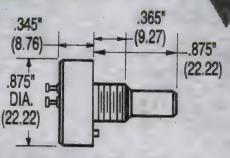
(196560)

157 SERIES 0.875″ SINGLE-TURN CONDUCTIVE PLASTIC PRECISION POTENTIOMETERS

RoHS Compliant Available

VISHAY





Features
- Bushing Mount Unit
- Plated Brass Terminals
- Aluminum Housing 11/32″ Behind Panel; 1/4″ Stainless Steel, Non-Magnetized Shaft

Specifications
- Tolerance: ±20%
- Power Rating @ 40°C: 1 Watt
- Temperature Coefficient: ±600 ppm/°C
- Dielectric Strength: 1000 V_{rms}
- Rotational Life: 5 million shaft revolutions
- Torque: 0.25oz.-in.
- Linearity: ±2%
- Operating Temp.: –55°C to +125°C

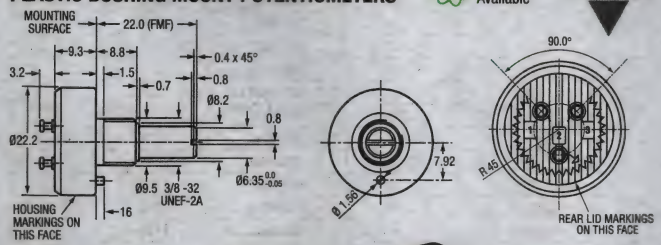
Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
157-11-102	1k	20M1756	25.76	24.12
157-11-202	2k	20M1758	25.59	23.97
157-11-502	5k	93F9883	25.28	23.69
157-11-103	10k	20M1757	25.30	23.70

(4192)

357 SERIES SINGLE-TURN CONDUCTIVE PLASTIC BUSHING MOUNT POTENTIOMETERS

RoHS Compliant Available

VISHAY



Features
- Compact, Single-Turn Conductive Plastic Position Sensors Offer Versatility in a Variety of Applications
- Plastic Housing
- Brass, Nickel-Plated Bushing
- Solder-Plated, Turret-Style Terminals
- 1/4″ Stainless Steel Non-Magnetic Shaft

Specifications
- Standard Tolerance: ±20%
- Power Rating @ 70°C: 1W
- Dielectric Strength: 1000 V_{rms}
- Temperature Coefficient: ±600ppm/°C
- Output Smoothness: 0.1% Max.
- Torque: 0.5oz.-in.
- Linearity: ±2%
- Mechanical Rotation: 360° Continuous
- Electrical Rotation: 340°± 3°
- Mechanical Life: 10,000,000 Cycles
- Operating Temperature: -55°C to +125°C

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
357-00-1P22-102	1k	24C4928	19.40	17.83
357-0-0-1P22-202	2k	20M1924	19.17	17.62
357-0-0-1P22-502	5k	95B9046	19.53	17.95
357-0-0-1P22-103	10k	95B9044	19.53	17.95

(48484)

6657 SERIES 1 5/16″ DIAMETER SINGLE TURN CONDUCTIVE PLASTIC POTENTIOMETERS

RoHS Compliant Available

BOURNS

Features
- Shaft Supported by Front Sleeve Bearing
- High Rotational Life
- Bushing Mount
- Additional Options Available, *go online or call*

Specifications
- Tolerance: ±10%
- Power Rating: 1.5W @ 70°C
- Dielectric Strength: 750 VAC
- Temperature Coefficient: ±500 ppm/°C Max.
- Solderability: Meets MIL-STD-202 Method 301
- Rotational Life: 10,000,000 Cycles
- Torque: 0.5oz.-in. (0.40Ncm) Max.
- Linearity: 1%
- Operating Temp: -40°C to +125°C

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-49
6657S-1-102	1k	12F7107	36.24	32.96
6657S-1-202	2k	12F7108	37.33	33.95
6657S-1-502	5k	12F7109	36.24	32.96
6657S-1-103	10k	92B0130	36.24	32.96

(4134)

LCP12 SERIES GENERAL-PURPOSE LINEAR MOTION POTENTIOMETERS

RoHS Compliant Available

ETI SYSTEMS

Applications
- Test and Lab Equipment
- Industrial Applications
- Medical Equipment (non-life support)

Features
- Conductive Plastic Element
- Black, Anodized Aluminum Body
- Stainless Steel Shaft
- Gold-Plated Terminals

Specifications
- Tolerance: 20%
- Linearity: 0.5% to 1.5%
- Friction: 1.8 oz.
- Unit Weight: 10 to 35 grams
- Life Expectancy: 20 million strokes

Mfg. Part No.	Res. (Ohms)	Stroke Length	Linearity (%)	Power (W)	Stock No.	Price Each 1-4	Price Each 5-9
#4-40 THREADED SHAFT							
LCP12A-25-10K	10k	25 mm	1	0.4	83H7218	140.44	133.30
LCP12A-50-5K	5k	50 mm	0.7	0.7	83H7220	171.16	162.46
LCP12A-50-10K	10k	50 mm	0.7	0.7	83H7219	175.40	166.48
LCP12A-100-10K	10k	100 mm	0.5	1.2	83H7215	200.93	190.72
PLAIN SHAFT WITH EXTERNAL SPRING RETURN							
LCP12S-12-10K	10k	12 mm	1.5	0.2	83H7226	144.84	137.48
LCP12S-25-10K	10k	25 mm	1	0.4	83H7228	162.40	154.14

(80087)

LCP8 SERIES MINIATURE LINEAR MOTION POTENTIOMETERS

RoHS Compliant Available

ETI SYSTEMS

Applications
- Medical Equipment (non-life support)
- Test and Lab Equipment
- Robotics

Features
- Conductive Plastic Element
- Bronze Bearings

Specifications
- Tolerance: 15% standard
- Linearity: 2% standard
- Power Rating: 0.2 Watt
- Life Expectancy: 20 million strokes
- Electrical Stroke: 0.433 - 0.500 inches
- Friction: 30 grams
- Unit Weight: 0.2 ounces

Type **LCP8P** has plain shaft; Type **LCP8T** has a threaded 2-56 UNC-2A shaft; Type **LCP8S** has internal spring return

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
LCP8P-10-1K	1k	83H7255	58.42	55.02
LCP8P-10-5K	5k	83H7257	59.04	55.60
LCP8T-10-5K	5k	83H7263	79.69	75.05
LCP8T-10-10K	10k	83H7262	79.69	75.05
LCP8S-10-1K	1k	83H7258	83.63	78.76
LCP8S-10-5K	5k	83H7260	83.63	78.76
LCP8S-10-10K	10k	83H7259	83.63	78.76

(80090)

SP22E/SW22E SERIES GENERAL-PURPOSE SINGLE TURN POTENTIOMETERS

RoHS Compliant Available

ETI SYSTEMS

Features
- Conductive Plastic Element
- Gold Plated Terminals
- High Temp. Thermoplastic Housing
- Stainless Steel Shaft

Specifications
- Tolerance: ±10%
- Linearity: ±1.0%
- Power Rating: 1 Watt
- Electrical Angle: 320° ±5°
- Mechanical Angle: 320° ±5°
- Torque: Below 0.8 oz.-in.
- Weight: Approx. 0.7 oz.
- Life Expectancy: 10 million turns

Applications
- Robotics
- Industrial
- Non-Life support Medical Equipment
- Test and Lab Equipment

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
CONDUCTIVE PLASTIC SINGLE TURN POTENTIOMETERS				
SP22E-1K	1k	83H7878	29.77	24.36
SP22E-2K	2k	83H7880	29.77	24.36
SP22E-5K	5k	83H7881	29.77	24.36
SP22E-10K	10k	83H7879	29.46	24.11
WIREOUND SINGLE TURN POTENTIOMETERS				
SW22E-100	100	83H7905	40.88	33.45
SW22E-1K	1k	83H7903	41.31	33.80
SW22E-2K	2k	83H7906	38.95	31.87
SW22E-5K	5k	83H7907	40.45	33.10
SW22E-10K	10k	83H7904	40.45	33.10

(80108)

SP22G SERIES HIGH-TEMPERATURE PLASTIC HOUSING SINGLE TURN POTENTIOMETERS

RoHS Compliant Available

ETI SYSTEMS

Features
- Brass Bushing
- Conductive Plastic Element
- Solderable Double Turret Terminals
- ⅛" Dia. Stainless Steel Shaft
- High Temperature Plastic Housing

Applications
- Robotics
- Industrial
- Heavy Equipment
- Test and Lab Equipment

SP22GS

Specifications
- Tolerance: ±10% standard
- Linearity: ±1.0% standard
- Power Rating: 1 Watt
- Operating Temperature: -55°C to +125°C
- Contact Resistance Variation: below 2%
- End Resistance: 0.2% max.
- Mechanical Angle: 360°(continuous)
- Electrical Angle: 340° ±4°
- Hysterisis (backlash effect): below 0.5°
- Torque: 0.7 oz. in.
- Weight: Approx. 1.1 oz. max.
- Life Expectancy: 10 million turns

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
BRASS BUSHING MOUNT				
● SP22G-1K	1k	83H7882	25.01	22.82
● SP22G-5K	5k	83H7885	26.47	24.15
● SP22G-10K	10k	83H7883	26.15	23.86
SERVO MOUNT (BALL BEARING)				
● SP22GS-1K	1k	83H7886	61.35	55.97
● SP22GS-5K	5k	83H7889	64.38	58.74
● SP22GS-10K	10k	83H7887	64.38	58.74

(80109)

M SERIES POTENTIOMETERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features:
- Cermet Element
- Proven Reliability
- Strong Construction
- Sealed to Military Standard
- Sealing: Fully enclosed
- Rugged Terminations

Specifications:
- Tolerance: ± 10%
- Power Rating @ 70°C: 2 Watt
- Standard Resistance: 100Ω to 1MΩ
- Power Rating @ 70°C: 2 Watt
- Temperature Coefficient: 0.75%

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-49	Price Each 50-99
● 404802692043	10ohm	18R7080	19.38	18.69
● 404802692045	47ohm	18R7082	10.08	9.82
● 404802692046	220ohm	18R7083	11.12	10.83
● 404802692032	100ohm	18R7071	11.12	10.83
● 404802692035	1kohm	18R7073	10.08	9.82
● 404802692036	2.2kohm	18R7074	11.12	10.83
● 404802692037	4.7kohm	18R7075	10.96	10.69
● 404802692038	10kohm	33M8321	11.12	10.83
● 404802692039	22kohm	18R7076	10.08	9.82
● 404802692041	220kohm	18R7078	10.08	9.82
● 404802692042	1Mohm	18R7079	10.08	9.82

(178363)

P270 SERIES 27mm SINGLE TURN INDUSTRIAL CONDUCTIVE PLASTIC PANEL POTENTIOMETERS

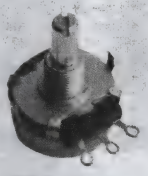
RoHS Compliant Available

TT electronics

BI Technologies

Specifications
- Resistance Tolerance: ±10%
- Residual Resistance: 6Ω max.
- Power Rating: 2W
- Dielectric Strength: $1000V_{AC}$
- Insulation Resistance: 50 MΩ @ $500V_{DC}$
- Input Voltage: $500V_{DC}$ not to exceed power rating
- Operating Temp. Range: -55°C to +120°C
- Seal Type: S (Sealed), D (Dust Proof)
- Rotational Torque: Dust Proof: 2.0 oz.-in, Sealed: 3.5 oz.-in

Features
- Metal Shaft, 6.5mm Brass Bushing
- 1 Million Cycle Life
- Panel Mount, Solder Lugs
- 300° ±10% Total Mechanical Travel
- Heavy Duty Applications



Mfg. Part No.	Resistance (Ohm)	Style	Stock No.	Price Each 1-9	Price Each 10-24
● P270-DS21R5K	5000	Single Gang	46M2513	11.61	10.19
● P270-SF21R10K	10,000	Single Gang	46M2514	12.77	11.20
● P271-DS21R10K	10,000	w/ Center Tap	46M2515	15.96	14.01

(94505)

MOLDED COMPOSITION POTENTIOMETERS

RoHS Compliant Available

OHMITE

Specifications
- Power Rating: 2 Watt
- Voltage (RMS): 500 V
- Operating Temperature: -55°C to +120°C
- Behind Panel: 0.625"
- Diameter: 1.16"
- Rotation: 312°±3°

Features
- Low noise, smooth operation
- In accordance with "Mil" RV4N (CU and CMU Series) & RV4L (CLU Series)

Ohmite molded composition potentiometers are designed for applications in military devices, industrial equipment and in equipment requiring a convenient resistance control device. Elements are molded into a single, integral structure and have a metal cover that protects and shields the internal parts.

Models **CU**, **CLU**, and **CMU** are 0.625" behind panel, Model **CCU** is 1.266 behind panel

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-49
● CU1021E	1k	64K4104	21.48	19.96
● CU2521E	2.5k	64K4115	21.91	20.36
● CU5021E	5k	64K4126	21.48	19.96
● CU1031E	10k	64K4105	18.43	17.12
● CU5031E	50k	64K4127	21.48	19.96
● CU1041E	100k	64K4106	21.91	20.36
● CU5041E	500k	64K4128	21.48	19.96
● CU1052E	1M	64K4107	22.12	20.56
● CLU1021E	1k	64K4031	22.90	21.28
● CLU2521E	2.5k	64K4042	22.90	21.28
● CLU5021E	5k	64K4053	22.90	21.28
● CLU1031E	10k	64K4032	22.90	21.28
● CLU2531E	25k	64K4043	23.59	21.92
● CLU5031E	50k	64K4054	22.90	21.28
● CLU1041E	100k	64K4033	22.90	21.28
● CMU1021E	1k	64K4062	14.82	13.77
● CMU2521E	2.5k	64K4073	21.15	19.65
● CMU5021E	5k	64K4084	14.82	13.77
● CMU1031E	10k	64K4063	14.82	13.77
● CMU2531E	25k	64K4074	20.65	19.19
● CMU1041E	100k	64K4064	20.65	19.19
● CMU1052E	1M	64K4065	21.39	19.88
● CCU1031E	10k	64K4023	74.89	69.59

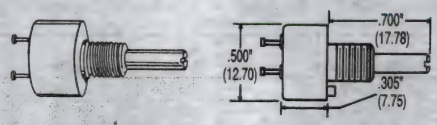
(80129)

140 SERIES SINGLE-TURN WIREWOUND POTENTIOMETERS

RoHS Compliant Available

VISHAY.

Features
- Smallest size available: 12.7 mm
- Mechanical stops on request
- High torque and sealed versions available



Specifications
- Tolerance: ±5%
- Power Rating @ 40°C: 2.0 Watt
- Dielectric Strength: 1000 V_{rms}
- Operating Temp.: -55°C to +125°C
- Independent linearity: ±1.0%
- Rotational Life: 500,000 Shaft Revolutions
- Shaft length with bushing: 0.7 x 0.125" diameter
- Bushing: ¼-32 x 5/16"
- Operating Torque: 0.2 oz.-in

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
● 140-0-0-501	500	01F8066	67.69	61.59
● 140-0-0-102	1k	20M4366	67.69	61.59
● 140-0-0-202	2k	20M1721	67.69	61.59
● 140-0-0-502	5k	20M1722	67.04	61.00
● 140-0-0-103	10k	20M1720	68.02	61.89
High Torque				
● 140-0-2-103	10k	94M5364	133.93	121.85

(9623)

PCB FABRICATION & ASSEMBLY

Quality US-based manufacturers—as fast as 48-hour turnaround!

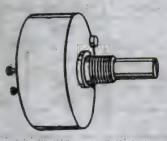
(197415)

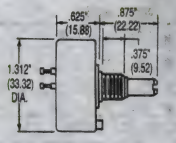
132 SERIES SINGLE-TURN WIREWOUND POTENTIOMETERS

RoHS Compliant Available

VISHAY

Features
- Independent linearity: to 200Ω, ±1%; over 200Ω, ±0.5%
- Shaft length including bushing: 0.875 x 0.25″ diameter
- Bushing: ⅜-32 x ⅜″
- 0-0 in mfg. part no. = continuous; 2-0 in mfg. part no. = stops





Specifications
- Tolerance: ±3%
- Power Rating @ 40°C: 2.75W
- Dielectric Strength: 1000 V_{rms}
- Temperature Coefficient: ±20 ppm/°C
- Electrical Rotation: continuous 352° ±2°; 336° ±2° for units with stops*
- Rotational Life: 500,000 Shaft Revolutions
- Operating Temperature: –55°C to +125°C

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
132-0-0-101	100	20M1710	43.02	39.13
132-0-0-501	500	01F8151	42.38	38.56
132-0-0-102	1k	20M1711	42.40	38.57
132-0-0-202	2k	20M1713	42.38	38.56
132-0-0-502	5k	20M1715	42.40	38.57
132-0-0-103	10k	20M1712	42.40	38.57
132-0-0-203	20k	20M1714	43.02	39.13
132-2-0-102*	1k	20M4364	42.38	38.56
132-2-0-502*	5k	20M1717	43.02	39.13
132-2-0-103*	10k	20M1716	43.02	39.13

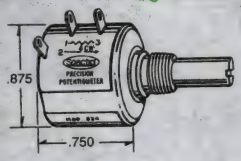
(9622)

533/534/535/536 SERIES PRECISION WIREWOUND POTENTIOMETERS

RoHS Compliant Available

VISHAY

Features
- Two-Gang, Rear Shaft Extensions
- Special Shafts
- Dual Concentric
- Shaft Size: 0.812″ x 0.250″dia.
- Bushing: ⅜″ 2A



Specifications
- Standard Tolerance: ±5%
- Dielectric Strength: 1000 V_{rms} min. 60Hz
- Load Life: 900 Hours
- Operating Temperature: -55°C to +125°C
- Power Rating @ 70°C: 1.0 Watt (Type 533); 2.0 Watt (Type 534 and Type 536); 1.5 Watt (Type 535)
- Temperature Coefficient of Resistance: 20 ppm/°C
- Linearity: ±0.25%
- Rotational Life (Shaft Revolutions): 300,000 (Type 533), 1Million (Type 534 and Type 536), 500,000 (Type 535)

533 SERIES 3-TURN POTENTIOMETERS

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
533-1-1-201	200	20M1949	23.54	22.00
533-1-1-501	500	27M9675	23.54	22.00
533-1-1-102	1k	20M1947	23.69	22.14
533-1-1-202	2k	20M1950	23.69	22.14
533-1-1-502	5k	20M1952	23.27	21.74
533-1-1-103	10k	20M1948	23.27	21.74

534 SERIES 10-TURN POTENTIOMETERS

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
534-1-1-101	100	20M1953	17.27	16.14
534-1-1-201	200	20M1957	16.97	15.86
534-1-1-501	500	20M1960	17.27	16.14
534-1-1-102	1k	20M1954	16.97	15.86
534-1-1-202	2k	20M1958	16.97	15.86
534-1-1-502	5k	20M1961	16.64	15.56
534-1-1-103	10k	20M1955	16.64	15.56
534-1-1-203	20k	20M1959	16.97	15.86
534-1-1-503	50k	20M1962	22.61	21.13
534-1-1-104	100k	20M1956	26.18	24.48
534-2-1-502	5k	20M1965	46.95	43.88
534-12-103	10k	20M1963	55.04	51.45

535 SERIES 5-TURN POTENTIOMETERS

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
535-11-102	1k	20M1966	24.15	22.58
535-11-202	2k	20M1967	23.72	22.17
535-11-502	5k	20M1969	23.73	22.18
535-11-103	10k	93F9212	23.73	22.18
535-11-203	20k	20M1968	25.75	24.07

➤CONTINUED➤

533/534/535/536 SERIES PRECISION WIREWOUND POTENTIOMETERS (CONT.)

536 SERIES 10-TURN POTENTIOMETERS

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
536-1-1-201	200	20M1973	17.71	16.55
536-1-1-501	500	03F3919	16.76	15.66
536-1-1-102	1k	20M1970	17.39	16.25
536-1-1-202	2k	20M1974	17.60	16.44
536-1-1-502	5k	20M1976	17.71	16.55
536-1-1-103	10k	20M1971	17.71	16.55
536-1-1-203	20k	20M1975	17.60	16.44
536-1-1-503	50k	20M1977	23.38	21.85
536-1-1-104	100k	20M1972	25.60	23.92

(9625)

404 SERIES SPRING RETURN LINEAR ACTUATION CONDUCTIVE PLASTIC POSITION SENSORS

TT electronics
BI Technologies

- Tolerance: ±10%
- Linearity: ±1%
- Power rating: 0.25 Watt
- Dielectric strength: 1000 V_{rms}
- Insulation resistance: 1000 MΩ
- Input voltage: 400 VDC not to exceed power rating.

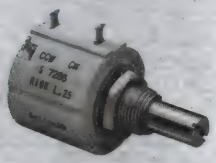
Mfg. Part No.	Res. (Ohm)	Stock No.	Price Each 1-24	Price Each 25-49
404R1KL1.0	1k	15M2423	22.65	20.60
404R5KL1.0	5k	15M2437	23.21	21.11
404R10KL1.0	10k	15M2426	22.93	20.87

(89524)

7280 SERIES ⅞″ DIA 10-TURN WIREWOUND PRECISION POTENTIOMETER

RoHS Compliant Available

TT electronics
BI Technologies



- Tolerance: ±5%
- Linearity: ±0.25%
- Power rating: 2 Watt
- Dielectric strength: 1000 V_{rms}
- Insulation resistance: 1000 MΩ
- Operating Temperature: Static: -55°C to +125°C, Dynamic: -40°C to +125°C
- Rotational Life: 1 mil. shaft rev.
- Operating Torque: 0.8 oz.-in.

7286 series has ¼″ shaft and ⅜″ bushing.

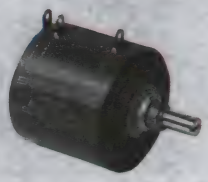
Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
7286R100L.25	100	15M7843	17.70	15.52
7286R500L.25	500	15M7849	15.27	13.39
7286R1KL.25	1k	15M7840	15.27	13.39
7286R2KL.25	2k	15M7844	14.89	13.05
7286R5KL.25	5k	15M7847	15.09	13.23
7286R10KL.25	10k	15M7841	17.47	15.32
7286R10KL.25LF	10k	69R7563	17.47	15.32
7286R20KL.25	20k	15M7845	14.89	13.05
7286R50KL.25	50k	15M7848	17.47	15.32
7286R100KL.25	100k	15M7842	17.70	15.52

(89526)

3400S SERIES 1 13/16″ DIA. 10 TURN WIREWOUND PRECISION POTENTIOMETERS

RoHS Compliant Available

BOURNS



Features
- 10-Turn, Wirewound, Precision Potentiometer
- Bushing Mount, Sealable
- High Stop Strength
- Gold-Plated Solder Lugs

Specifications
- Tolerance: ±3%
- Dielectric Strength: 1000 VAC
- Power Rating @ 40°C: 5 Watts
- Temp. Coefficient: ±20 ppm/°C Max.
- Solderability: Meets MIL-STD-202, Method 301
- Rotational Life: 2,000,000 Cycles
- Stop Strength: 550oz.-in. (388Ncm)
- Torque: 2.0oz.-in. (1.4Ncm) Max.
- Operating Temp: +1°C to +125°C
- Independent Linearity: 0.15%

±0.05% linearity available; *go online or call*.

Mfg. Part No.	Res. (Ohms)	Resolution (%)	Stock No.	Price Each 1-9	Price Each 10-49
3400S-1-501L	500	0.023%	62K3180	113.60	102.36
3400S-1-102L	1k	0.020%	62K3173	111.81	100.75
3400S-1-202L	2k	0.016%	62K3177	111.81	100.75
3400S-1-502L	5k	0.013%	62K3181	111.81	100.75
3400S-1-103L	10k	0.010%	62K3174	111.81	100.75

➤CONTINUED➤

3400S SERIES 1 13/16″ DIA. 10 TURN WIREWOUND PRECISION POTENTIOMETERS (CONT.)

Mfg. Part No.	Res. (Ohms)	Resolution (%)	Stock No.	Price Each 1-9	Price Each 10-49
● 3400S-1-503L	50k	0.008%	62K3182	122.17	110.09
● 3400S-1-104L	100k	0.006%	62K3175	131.30	118.31
● 3400S-1-204L	200k	0.005%	62K3179	140.73	126.81
● 3400S-1-504L	500k	0.003%	62K3183	195.75	176.39

(9543)

3500S & 3501H SERIES 7/8″ DIA. POTENTIOMETERS

RoHS Compliant Available

BOURNS®

Features
- 10-Turn, Wirewound/Hybrid Precision Potentiometer
- Bushing Mount
- Sealable, Gangable
- Terminals: Gold-Plated Solder Lugs
- Resistance Range Available: 50 to 200kΩ
- Optional High Torque, Center Tap and Custom Features Available, *Go online or call*

Specifications
- Tolerance: ±3%
- Power Rating @ +70°C: 2 Watt
- Independent Linearity: ±0.20%
- Dielectric Strength: 1500 VAC
- Temperature Coefficient: ±50 ppm/°C Max.
- Solderability: Meets MIL-STD-202, Method 301
- Rotational Life: 2,000,000 Cycles
- Stop Strength: 96oz.-in. (67.8Ncm) Min.
- Torque: 0.6oz.-in. (0.42Ncm) Max.
- Ganging: 2 Cups Max.

3500S SERIES WIREWOUND POTENTIOMETERS

Mfg. Part No.	Res. (Ohms)	Resolution (%)	Stock No.	Price Each 1-9	Price Each 10-49
● 3500S-2-201L	200	0.004	62K3187	45.32	40.57
● 3500S-2-501L	500	0.003	62K3191	46.23	41.38
● 3500S-2-102L	1k	0.030	62K3184	45.32	40.57
● 3500S-2-202L	2k	0.024	62K3188	45.32	40.57
● 3500S-2-502L	5k	0.018	62K3192	45.32	40.57
● 3500S-2-103L	10k	0.019	62K3185	45.32	40.57
● 3500S-2-203L	20k	0.015	62K3189	45.32	40.57
● 3500S-2-503L	50k	0.011	62K3193	51.20	45.83
● 3500S-2-104L	100k	0.008	62K3186	53.30	47.71
● 3500S-2-204L	200k	0.008	62K3190	84.06	75.24

3501H SERIES HYBRID POTENTIOMETERS

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-49
● 3501H-1-102L	1k	62K3194	65.18	58.34
● 3501H-1-502L	5k	62K3196	66.48	59.51
● 3501H-1-103L	10k	62K3195	65.18	58.34

(4129)

MW22 SERIES AND MH22 HYBRID SERIES WIREWOUND PRECISION MULTI-TURN POTENTIOMETERS

RoHS Compliant Available

ETI SYSTEMS

Specifications
- Tolerance- MW22: ±5% standard, MH22: ±10% standard
- Linearity: MW22: ±0.25% standard, MH22: ±0.3% standard
- Power Rating: 3 Watt (10 turn), 1 Watt (5 turn), 0.7 Watt (3 turn)
- High Temp Thermo Plastic Housing
- Bushing Mount Standard
- Life Expectancy: 1 million turns
- Torque: 0.7 oz.-in. max.

MW SERIES

Mfg. Part No.	No. of Turns	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
● MW22B-3-100	3	100	83H7576	18.90	17.45
● MW22B-3-200	3	200	83H7579	18.08	16.69
● MW22B-3-500	3	500	83H7581	19.13	17.66
● MW22B-3-1K	3	1k	83H7574	18.90	17.45
● MW22B-3-2K	3	2k	83H7577	19.37	17.88
● MW22B-3-5K	3	5k	83H7580	19.37	17.88
● MW22B-3-10K	3	10k	83H7575	19.37	17.88
● MW22B-3-20K	3	20k	83H7578	19.13	17.66
● MW22B-5-1K	5	1k	83H7582	18.90	17.45
● MW22B-5-5K	5	5k	83H7585	18.90	17.45
● MW22B-5-10K	5	10k	83H7583	19.37	17.88
● MW22B-5-20K	5	20k	83H7584	18.08	16.69
● MW22B-10-100	10	100	83H7566	14.90	13.76
● MW22B-10-200	10	200	83H7570	15.09	13.93
● MW22B-10-500	10	500	83H7573	15.09	13.93
● MW22B-10-1K	10	1k	83H7564	15.09	13.93
● MW22B-10-2K	10	2k	83H7568	14.90	13.76
● MW22B-10-5K	10	5k	83H7571	15.27	14.10

➤ CONTINUED ➤

MW22 SERIES AND MH22 HYBRID SERIES WIREWOUND PRECISION MULTI-TURN POTENTIOMETERS (CONT.)

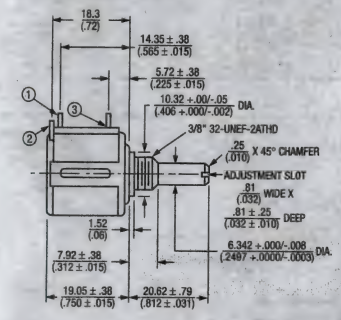
Mfg. Part No.	No. of Turns	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
● MW22B-10-10K	10	10k	83H7565	15.09	13.93
● MW22B-10-20K	10	20k	83H7569	15.27	14.10
● MW22B-10-50K	10	50k	83H7572	18.67	17.24
● MW22B-10-100K	10	100k	83H7567	18.27	16.87
MH22 HYBRID SERIES					
● MH22B-3-5K	3	5k	83H7328	90.16	83.23
● MH22B-3-10K	3	10k	83H7327	92.34	85.24
● MH22B-10-1K	10	1k	83H7322	93.31	86.13
● MH22B-10-2K	10	2k	83H7324	90.26	83.32
● MH22B-10-5K	10	5k	83H7325	94.73	87.44
● MH22B-10-10K	10	10k	83H7323	94.73	87.44

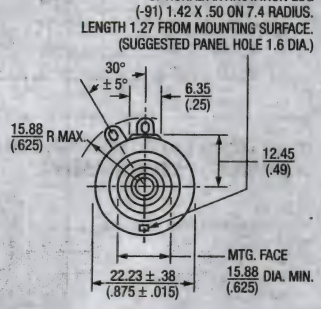
(84000)

3540S WIREWOUND AND 3541H HYBRITON®, 7/8″ DIAMETER, 10 TURN, PRECISION POTENTIOMETERS

RoHS Compliant Available

BOURNS®





Features
- 10-Turn, Wirewound/Hybrid Precision Potentiometer
- Bushing Mount
- Gangable with Common or Concentric Shafts
- Optional Anti-Rotation Lug, High Torque, 0.1% Linearity and Custom Specs Available, *Go online or call*

Specifications
- Tolerance: ±5% (Type 3540S); ±10% (Type 3541H)
- Power Rating: 2W @ 70C
- Temperature Coeff.: ±50ppm/°C (3540S) and ±100ppm/°C(3541H)
- Operating Temp. Range: -40°C to +125°C
- Dielectric Strength: 1000 VAC
- Solderability: Meets MIL-STD-202, Method 301
- Rotational Life: 1,000,000 (Type 3540S); 5,000,00 (type 3541H) Revolutions
- Stop Strength: 75oz.-in. (53Ncm) Min.
- Torque: 0.6oz.-in. (0.35Ncm) Max.

3540S SERIES WIREWOUND POTENTIOMETERS

Mfg. Part No.	Res. (Ohms)	Resolution (%)	Stock No.	Price Each 1-9	Price Each 10-49
● 3540S-1-101L	100	0.055%	17M3627	23.30	21.19
● 3540S-1-201L	200	0.042%	88K8194	23.30	21.19
● 3540S-1-501L	500	0.031%	88K8197	23.30	21.19
● 3540S-1-102L	1k	0.027%	88K8191	23.30	21.19
● 3540S-1-202L	2k	0.021%	88K8195	23.30	21.19
● 3540S-1-502L	5k	0.021%	88K8198	23.30	21.19
● 3540S-1-103L	10k	0.019%	88K8192	23.30	21.19
● 3540S-1-203L	20k	0.014%	88K8196	23.30	21.19
● 3540S-1-503L	50k	0.011%	88K8199	25.94	23.59
● 3540S-1-104L	100k	0.008%	88K8193	29.14	26.51

3541H SERIES HYBRID POTENTIOMETERS

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-49
● 3541H-1-102L	1k	88K8200	43.90	39.29
● 3541H-1-202L	2k	88K8202	43.90	39.29
● 3541H-1-502L	5k	10M6742	43.90	39.29
● 3541H-1-103L	10k	88K8201	43.90	39.29

(9610)

Find thousands of NEW parts for
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(211462)

3590S SERIES 7/8" DIAMETER, 10 TURN, WIREWOUND PRECISION POTENTIOMETER

RoHS Compliant Available

BOURNS®

Features
- Plastic or Metal Shaft and Bushings
- Anti-Rotation Pin, PC Pin, and other custom options available, *Go online or call*
- Bushing Mount
- Solder Lug Style
- Full body sealed
- Designed for use in HMI applications

Specifications
- Tolerance: ±5%
- Power Rating: 2W @ 40°C
- Absolute Minimum Resistance: 1Ω or 0.1% (Whichever is Greater)
- Dielectric Strength: 2000 VAC
- Temperature Coefficient: ±50 ppm/°C
- Solderability: Meets MIL-STD-202, Method 301
- Rotational Life: 1,000,000 Cycles
- Stop Strength: 64oz.-in. (45Ncm) Min.
- Torque: 0.5oz.-in. (0.40Ncm) Max.
- Linearity: 0.25%

Mfg. Part No.	Res. (Ohms)	Resolution (%)	Shaft	Stock No.	Price Each 1-9	Price Each 10-49
PC PIN MOUNT - PLASTIC BUSHING/SHAFT						
3590P-1-103L	10k	0.02	Plastic	62K3197	11.77	10.70
SOLIDER LUG - PLASTIC BUSHING/SHAFT						
3590S-1-501L	500	0.033	Plastic	62K3202	12.05	10.96
3590S-1-102L	1k	0.029	Plastic	62K3198	11.63	10.58
3590S-1-502L	5k	0.025	Plastic	62K3203	11.63	10.58
3590S-1-103L	10k	0.02	Plastic	62K3199	11.63	10.58
3590S-1-203L	20k	0.016	Plastic	62K3201	11.63	10.58
3590S-1-503L	50k	0.013	Plastic	62K3204	14.04	12.77
3590S-1-104L	100k	0.009	Plastic	62K3200	15.06	13.70
SOLDER LUG - METAL BUSHING/SHAFT						
3590S-2-201L	200	0.035	Metal	62K3208	11.91	10.83
3590S-2-501L	500	0.033	Metal	62K3211	11.91	10.83
3590S-2-102L	1k	0.029	Metal	62K3205	11.63	10.58
3590S-2-202L	2k	0.023	Metal	62K3209	11.63	10.58
3590S-2-502L	5k	0.025	Metal	62K3212	11.63	10.58
3590S-2-103L	10k	0.02	Metal	62K3206	11.63	10.58
3590S-2-203L	20k	0.016	Metal	62K3210	11.63	10.58
3590S-2-503L	50k	0.013	Metal	62K3213	14.04	12.77
3590S-2-104L	100k	0.009	Metal	62K3207	15.06	13.70
SOLDER LUG - SEALED METAL BUSHING/SHAFT						
3590S-4-103L	10k	0.013	Metal	62K3214	15.71	14.29
SOLDER LUG - METRIC METAL BUSHING/SHAFT						
3590S-6-103L	10k	0.013	Metal	17M3655	14.04	12.77

(4148)

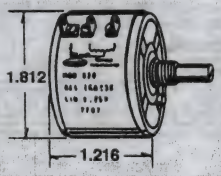
830 SERIES 1 13/16" 3-TURN WIREWOUND POTENTIOMETERS

RoHS Compliant Available

VISHAY.

Features
- Shaft Length with Bushing: 0.812 × 0.250" Dia.
- Bushing: 3/8-32×5/16"

Specifications
- Tolerance: <200 Ohms: ±5%; ≥200 Ohms: ±3%
- Power Rating: 0.5 W @ 70°C
- Dielectric Strength: 1000 V_{rms}
- Electrical Rotation: 1080°+4° to –0°
- Independent Linearity: ±0.25%
- Rotational Life: 500,000 Shaft Revolutions
- Operating Temperature: –55°C to +125°C
- Linearity: +/- 0.25% standard
- Operating Torque: 1.26 oz.-in.



Applications:
- Machine Controls and Industrial Test Instruments

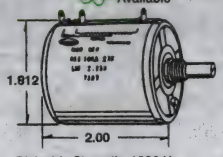
Mfg. Part No.	Res., (Ohms)	Wire Temp. Coeff. (ppm/°C)	Stock No.	Price Each 1-4	Price Each 5-9
830-11501	500	110	54M3093	114.50	107.01
830-11102	1k	110	01F8074	114.50	107.01
830-11202	2k	20	01F8075	116.17	108.57
830-11502	5k	20	01F8076	115.22	107.69

(9629)

860 SERIES 1 13/16" 10-TURN WIREWOUND POTENTIOMETERS

RoHS Compliant Available

VISHAY.



Features
- Bushing Mount
- Shaft Length with Bushing: 0.812 x 0.250" dia.
- Bushing: 3/8-32 x 5/16"

Specifications
- Tolerance: <200 Ohms, ±3%; ≥200 Ohms, ±1%
- Power Rating @ 40°C: 8.0 W att
- Linearity: +/-0.25 % standard
- Torque: 1.26 oz. - in
- Dielectric Strength: 1000 V_{rms}
- Rotational Life: 500,000 Shaft Revolutions
- Operating Temperature: -55°C to 125°C

Mfg. Part No.	Res. (Ohms)	Wire Temp. Coeff. (ppm/°C)	Stock No.	Price Each 1-4	Price Each 5-9
860-11200	20	800	01F8080	152.44	136.73
860-11500	50	800	01F8081	151.80	136.16
860-11101	100	800	01F8082	146.81	131.68
860-11201	200	180	01F8083	149.62	134.20
860-11501	500	20	01F8084	151.80	136.16
860-11102	1k	20	01F8085	150.56	135.05
860-11202	2k	110	01F8086	152.44	136.73
860-11502	5k	20	01F8087	150.56	135.05
860-11103	10k	20	01F8088	150.56	135.05
860-11203	20k	20	01F8089	151.80	136.16
860-11503	50k	20	54M3106	149.62	134.20

(9948)

P08x SERIES CONDUCTIVE PLASTIC ROTARY POTENTIOMETERS

RoHS Compliant Available

TT electronics
BI Technologies

Specfications
- Resistance tolerance: ± 20%
- Input voltage: 50VAC **max.**
- Power rating: 0.05W (B taper); 0.025W (A taper)
- Dielectric strength: 300VAC, sea level
- Insulation resistance: 100 MΩ **min.**
- Actual electrical travel: 270°; w/ Switch = 230° **nom.**
- Switch power rating: 3A @ 16VDC
- Operating temperature range -55°C to +125°C
- Rotational life: 30,000 cycles (Switch); 100,000 cycles (Pot)

Features
- Side Adjust
- Dust proof
- Rotary switch option
- Detent option
- Multiple gangs available

Mfg. Part No.	Res. (kOhms)	No. of Gangs	Module Type	Stock No.	Price Each 1-4
P081N-271F2CBR10K	10	1	Standard Potentiometer	27T9269	1.29
P081S-71F2CAR10K	10	1	Pot w/ Rotary Switch	28T0530	1.49
P082D-27CBR10K	10	2	Pot w/ Dual Shaft	27T9270	3.43
P084E-7CBR10K	10	4	Pot w/ Dual Shaft, Rotary Switch	27T9271	5.53

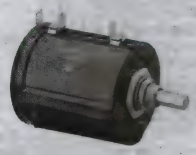
(195400)

A SERIES 1 13/16" DIA 10-TURN WIREWOUND PRECISION POTENTIOMETERS

RoHS Compliant Available

TT electronics
BI Technologies

- Tolerance: ±3%
- Linearity: ±0.25%
- Power rating: 5 Watt
- Dielectric strength: 1000 V_{rms}
- Insulation resistance: 1000 MΩ
- Input Voltage: 1000 VDC not to exceed power rating
- Operating Temperature Range: Static: -65°C to +85°C, Dynamic: -40°C to +85°C
- Rotational Load Life: 2 mil. shaft rev.
- Operating Torque: 3.0 oz.-in.



A series has 1/4" shaft and 3/8" bushing.

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
AR1KL.25	1k	15M6354	77.03	74.96
AR5KL.25	5k	15M6365	77.86	75.77
AR10KL.25	10k	15M6355	78.66	76.55

(89527)

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(212565)

POTENTIOMETERS

SMR46 SERIES PRECISION MULTI-TURN WIREWOUND POTENTIOMETER

RoHS Compliant Available

ETI SYSTEMS

Features
- Wirewound Element. Aluminum Anodized Housing and Servo Lid
- Snap Action Switches at Each End of Travel
- Switches Isolated from Pot Circuit
- Stainless Steel Shaft. Silver Plated Terminals. Bushing Bearings

Application
- Robotics
- Heavy Equipment
- Industrial Applications

Specifications
- Resistance Tolerance: ± 3% standard
- Linearity Tolerance: ± 0.3% standard
- Power Rating: 5 Watts (10 turn) 2.5 Watts
- Rotational Torque: 28 oz. in.
- Life Expectancy: 2 million turns

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● SMR46B-10-1-5K	Limit switch 1 13/16" dia.	83H7863	215.05

(138954)

3610 SERIES 10 TURN PRECISION KNOBPOT WITH DIGITAL DISPLAY

BOURNS

Features
- Space-Saving, Snap-In Mounting: Extends only 5/8" Behind Most Panels
- Easily Read 3 Character Digital Dial
- Gold-Plated J-Hook Terminals

Specifications
- Tolerance: ±5%
- Power Rating @ +25°C: 1.5 Watt
- Dielectric Withstanding Voltage: 1000 VAC Min.
- Temperature Coefficient: ±50 ppm/°C Max./Wire
- Solderability: Meets MIL-STD-202, Method 301
- Rotational Life: 50,000 Revolutions
- Torque: 7.0 oz.-in.
- Stop Strength: 20 oz.-in. (14Ncm) Min.
- Operating Temperature: +1°C to +85°C

Mfg. Part No.	Res. (Ohms)	Resolution (%)	Stock No.	Price Each 1-9	Price Each 10-49
3610S-1-102	1k	0.035	01F8328	118.03	106.36
3610S-1-202	2k	0.030	01F8329	118.03	106.36
3610S-1-502	5k	0.027	01F8330	118.03	106.36
3610S-1-103	10k	0.022	01F8331	118.03	106.36
3610S-1-203	20k	0.017	01F8332	116.28	104.78
3610S-1-104	100k	0.012	01F8334	114.45	103.13

(9440)

P16S SERIES KNOB POTENTIOMETERS WITH SWITCH

RoHS Compliant Available

VISHAY

Features
- Ideal for military, professional and industrial applications
- Compact (integrated)
- On/Off switch — actuation counter clockwise
- Detent and electric cut off at beginning of travel
- Linear taper
- Fully sealed — container and panel
- 16mm dia. black plastic control knob
- Test according to CECC 41000 or IEC 60393-1
- Compliant to RoHS Directive 2002/95/EC

Specifications
- Power rating @ 40°C: 1W
- Electrical travel: 220° ±10°
- Mechanical travel: 300° ±5°
- Switching current: 100mA max.
- Dielectric strength on knob: 2000 V_{rms}
- Operating temperature: -40°C to +85°C

P16S series panel-mount cermet potentiometers features knob driving. Mounting hardware and terminals are situated on the back side of the panel reducing required clearance.

Mfg. Part No.	Res. (Ohms)	Res Tol.	Stock No.	Price Each 1-9	Price Each 10-24
● P16SNP101MAB15	100	± 20%	94T7847	21.60	20.22
● P16SNP471MAB15	470	± 20%	94T7851	21.60	20.22
● P16SNP102MAB15	1k	± 20%	94T7848	19.93	18.66
● P16SNP472MAB15	4.7k	± 20%	94T7852	20.41	19.10
● P16SNP103MAB15	10k	± 20%	47T8816	26.59	22.88
● P16SNP223MAB15	22k	± 20%	94T7850	20.41	19.10
● P16SNP473MAB15	47k	± 20%	94T7853	21.60	20.22
● P16SNP104MAB15	100k	± 20%	94T7849	21.60	20.22

(206210)

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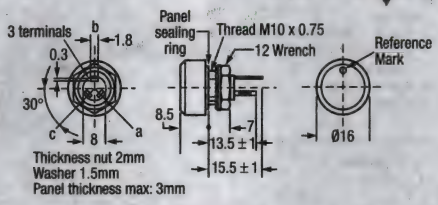
(212569)

P16NP SERIES SINGLE-TURN CERMET "POT IN THE KNOB" POTENTIOMETERS

RoHS Compliant Available

VISHAY



Features
- Flush Mounts on Front of Panels
- Mounting Hardware and Terminals Situated on Back Side
- Sealed Construction
- Linear Taper
- 10mm Dia. Plastic Knob

Specifications
- Power Rating @ 40°C: 1 Watt
- Mechanical Travel: 300°±5°
- Dielectric Strength: 2500 V_{rms}
- Operating Temperature: -55°C to +85°C

Mfg. Part No.	Res. (Ohms)	Res Tol.	Stock No.	Price Each 1-24	Price Each 25-49
● P16NP-1K-10-A	1k	± 10%	76M9955	12.10	11.75
● P16 NP 2K 10% A B0 E3	2k	± 10%	95B8595	12.76	12.38
● P16NP-5K-10-A	5k	± 10%	95B8621	12.88	12.49
● PA16NP103KAB15	10k	± 10%	71M0672	11.53	11.19
● P16NP-20K-10-A E3	20k	± 10%	05M3777	13.23	12.83
● P16NP-100K-10-A	100k	± 10%	69M7416	14.29	13.87
● P16NP101MAB15	100	± 20%	61M2832	12.98	12.60
● P16NP102MAB15	1k	± 20%	61M2833	12.68	12.31
● P16NP222MAB15	2.2k	± 20%	61M2837	13.74	13.34
● P16NP472MAB15	4.7k	± 20%	61M2839	12.01	11.65
● PA16NP502KAB15	5k	± 20%	61M2830	14.78	14.34
● P16NP103KAB15	10k	± 20%	61M2834	11.65	11.30
● P16NP103MAB15	10k	± 20%	61M2835	10.99	10.67
● P16NP473MAB15	47k	± 20%	61M2840	13.74	13.34
● P16NP104MAB15	100k	± 20%	61M2836	12.98	12.60
● P16NP474MAB15	470k	± 20%	61M2841	12.98	12.60
● P16NP105MAB15	1M	± 20%	69M7426	12.98	12.60

(49773)

3680 SERIES PUSH BUTTON PANEL POTENTIOMETERS

RoHS Compliant Available

BOURNS

Features
- Repeatable Settings
- Easily Read Digital Dial
- Resolution:
  3682 Series: 1%
  3683 Series: 0.1%
- Snap-In Mount

Specifications
- Tolerance: ±3%
- T.C. = 100 ppm
- Power Rating @ +25°C: 2 Watt
- Dielectric Withstanding Voltage: 1000 VAC Min.
- Solderability: Meets MIL-STD-202, Method 301
- Load Life: 1000 Hours @ 2W
- Expected Life: 75,000 Button Operation per Decade
- Each decade has 10 positions (0-9)
- Operating Temp: -25°C to +85°C

DIMENSIONS (mm)

Series	a	b	c	d	e±0.015" (±0.381)
3682	1.050" (26.67)	0.990" (25.15)	0.420" (10.67)	0.47" (11.94)	0.330" (8.38)
3683	1.460" (37.08)	1.390" (35.31)	0.730" (18.54)	0.47" (11.94)	0.165" (4.19)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-49
● 3682S-1-102L	1k	62K3215	33.39	30.37
● 3682S-1-502L	5k	62K3219	33.39	30.37
● 3682S-1-103L	10k	62K3216	33.39	30.37
● 3682S-1-104L	100k	62K3217	33.39	30.37
● 3682S-1-105L	1M	62K3218	33.39	30.37
● 3683S-1-102L	1k	62K3220	42.58	38.11
● 3683S-1-202L	2k	62K3224	42.58	38.11
● 3683S-1-502L	5k	62K3225	42.58	38.11
● 3683S-1-103L	10k	62K3221	42.58	38.11
● 3683S-1-104L	100k	62K3222	42.58	38.11
● 3683S-1-105L	1M	62K3223	42.58	38.11

PANEL MOUNT BOOTS

Mnf. Part No.	For Use With	Frame Dimensions	Panel Cutout	Screw Hole Spacing	Stock No.	Price Each 1-9
● H-385-3	Model 3683	1.63" x 2.39"	0.83" x 1.42"	1.95"	66F2856	45.24

(9439)

DC22 SERIES DIAL/ POTENTIOMETER COMBINATION

RoHS Compliant Available

ETI SYSTEMS

Specifications
- Uses ETI Systems Potentiometer MW22B
- Tolerance: ±5% standard (±1% special order)
- Linearity: ±0.25% standard (±0.1% special order)
- Power Rating: 2 Watts (10 turn)
- Counts 10 turns (000 to 999 counts)
- Accuracy: ±0.35% of Voltage Ratio
- Repeatability: ±0.02% or Resolution of Pot
- High Temp. Black Plastic Housing.
- Over the Center Lock
- Diameter - 1 1/16"; Extension from Panel - 1.24"
- Operating Temperature -30°C to +85°C

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
DC22-10-1K	1k	83H6489	86.97	79.73
DC22-10-2K	2k	83H6491	86.06	78.89
DC22-10-5K	5k	83H6492	87.89	80.56
DC22-10-10K	10k	83H6490	86.97	79.73

(83980)

DW22 COMBO® 3 SERIES DIAL/ POTENTIOMETER COMBINATION

RoHS Compliant Available

ETI SYSTEMS

Specifications
- Uses ETI Systems Potentiometer MW22B
- Tolerance: ±5%.
- Power Rating: 2 Watts
- Gold plated terminal lugs
- Read-Out Accuracy: ±0.5%.
- Rotational life: 1,000,000 turns

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
DW22-10-100	100	83H6500	105.64	96.45
DW22-10-1K	1k	83H6498	109.92	100.36
DW22-10-2K	2k	83H6502	110.87	101.23
DW22-10-5K	5k	83H6503	109.92	100.36
DW22-10-10K	10k	83H6499	109.92	100.36

(83984)

H SERIES TURN COUNTING DIALS

RoHS Compliant Available

BOURNS®

Features
- Analog Readout, No Backlash
- Compact Design Requires Minimal Panel Space
- Use With Precision Potentiometers or Other Rotating Devices
- Accepts ¼" (6.35) Diameter Shafts

Applications
- Power Supplies, Sensors, Medical and Test Equipment

H-506-1/4 SERIES

H-22 SERIES

SPECIFICATIONS

Mfg. Part No.	Turns	Divisions	Diameter	Depth	Weight.
H-506-1/4	0-15	50	22.7 mm	25 mm	7g
H-22	0-15	50	22.2 mm	22.2 mm	15g
H-46	0-20	100	46 mm	24 mm	73g

Mfg. Part No.	Finish	Accepts Shaft Diameter	Stock No.	Price Each 1-9	Price Each 10-24
H-516-6A	Satin Chrome	6.35mm	51T5155	8.96	8.04
H-22-6A	Satin Chrome	6.35mm	16F9386	12.32	11.21
H-22-6A-SB	Satin Body/ Black Chrome	6.35mm	78R4153	12.77	11.61
H-22-6A-B	All Black	6.35mm	48F1533	12.62	11.48
H-46-6A	Satin Chrome	6.35mm	70B9808	24.32	22.12
H-46-6A-1	Satin Chrome	6.35mm	10C0139	25.13	22.86

(9947)

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(196525)

TYPES CT-23/CT-26 10-TURN COUNTING DIALS

RoHS Compliant Available

BOURNS®

Features
- No Backlash–Mounts Directly on Potentiometer Shaft
- Use with Precision Potentiometers or Other Rotating Devices Up to 10 Turns
- High Force, Positive Brake
- Accepts ¼" (6.35) Diameter Shafts

Specifications
- Readability: Within 1/500 of a Turn
- Weight: 34g
- Shaft Extension Beyond Locator Plate Face: CT-23: 11.05mm Min.; CT-26: 16.25mm Max.

Mfg. Part No.	Diameter	Stock No.	Price Each 1-9	Price Each 10-49
CT-23-6A	27mm	13F1710	25.32	23.02
CT-26-6A	28mm	13F1711	25.32	23.02

(4111)

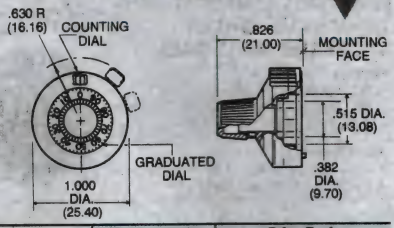
11-TURN VERNIER SCALE DIALS

RoHS Compliant Available

VISHAY.

Features
- Single Numeral in Window (0-10) Indicates Complete Turns, Graduated Circular Dial Shows Percent of Partial Turn
- Black Numerals and Index Marks, Black Plastic Turning Knob and Brake Lever
- Mounting Hardware Included

Specifications
- 1.00" (25.40) Diameter Dial
- For ¼" (6.35) Diameter Shafts
- Count to 10.99 Turns



Mfg. Part No.	Finish	Stock No.	Price Each 1-4	Price Each 5-9
011-1-11	Satin Chrome	20M1640	22.26	21.58
011-1-31	Brushed Chrome	12F4491	22.66	21.99

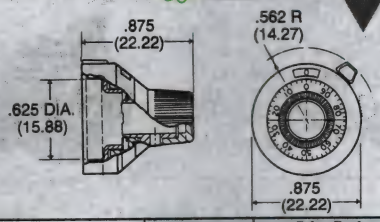
(4171)

18 SERIES 15-TURN VERNIER SCALE DIAL

RoHS Compliant Available

VISHAY.

Characteristics
- 0.875" (22.23) Diameter Dial
- For ¼" (6.35) Diameter Shafts
- Counts to 14.99 Turns
- Positive Brake Action, Brake Lever Adjustment for Higher Torque
- Numeral in Window (0-14) Indicates Completed Turns, Graduated Circular Dial Shows Percent of Partial Turn
- Mounting Hardware Included



Mfg. Part No.	Numerals/Background	Stock No.	Price Each 1-4	Price Each 5-9
18-A-11	Black/White	96K4879	12.83	12.44
018-1-21	White/Black	03M2710	14.15	13.73

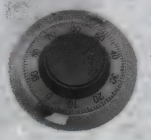
(4169)

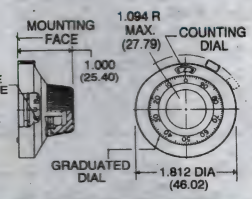
21 SERIES 15/11-TURN VERNIER SCALE DIALS

RoHS Compliant Available

VISHAY.

Characteristics
- 1.812" (46.02) Diameter Dial
- For 0.25" (6.35) Diameter Shaft
- Counts to 14.99
- Numeral in Center of Window (0-14) Indicates Complete Turns
- Graduated Circular Dial Shows Percent of Partial Turn
- Black Plastic Turning Knob and Brake Lever





METAL
Satin chrome finish with black markings

Mfg. Part No.	Turns	Stock No.	Price Each 1-4	Price Each 5-9
21-A-11	15	08F898	22.63	21.94

(4172)

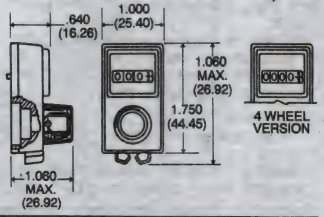
10 AND 100 TURN DIGITAL SCALE DIALS

RoHS Compliant Available

VISHAY

Characteristics
- Three Digit Models Count to 9.99 Turns
- Removable Knob Conceals Setscrews and Permits Access to Pot Shaft for Fast, Accurate Phasing
- Positive Braking Action
- Left Digit Indicates Number of Completed Turns; Right Two Digits Show Percent of Partial Turn
- Type 15-1-11: Open Bezel; Type 15-1-31: Clear Plastic Window Bezel; Type 15-2-11: Same as Type 15-1-11 Except is Four-Digit; Counts to 99.99 Turns

Mounting hardware included. Satin clear anodized finish. Knobs, bezel and base are matte black plastic. White numerals on black background.



Mfg. Part No.	Shaft Dia.	Stock No.	Price Each 1-4	Price Each 5-9
● 015-1-11	1/4"	20M1641	26.40	25.35
● 015-1-31*	1/4"	20M1642	28.88	27.71
● 015-2-11	1/8"	20M1643	29.90	28.69

*has clear plastic window
(4168)

HONEYWELL CLAROSTAT COMMERCIAL 10-TURN CALIBRATED SCALE DIALS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features
- Accurate Readings
- Zero Backlash
- Brake Lever Option

Specifications
- Mounting Requirement: 1 sq. in. Panel Space
- For ¼" (6.35) diameter shafts

Mfg. Part No.	Finish	Brake	Stock No.	Price Each 1-9	Price Each 10-24
● 412	Black	Yes	08F585	36.42	35.26
● 411	Black	No	08F586	41.04	29.43
● 462 DIAL	Clear	Yes	08F587	39.12	37.00

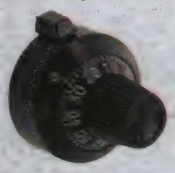
(4195)

HONEYWELL CLAROSTAT 316 SERIES SCALE DIGITAL READOUT DIALS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features
- 15-Turns
- Large, Easy-to-Read Numerals
- 0.875" (22.23) Diameter Dial
- Minimum Backlash
- Positive Brake Lever
- For ¼" (6.35) diameter shafts



Mfg. Part No.	Description	Stock No.	Price Each 1-5	Price Each 6-14
● 31611	Clear Anodized	89F2532	38.21	36.41

(4196)

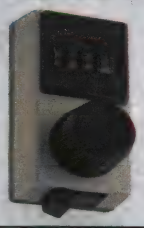
HONEYWELL CLAROSTAT DIGITAL READ-OUT DIALS FOR MULTI-TURN POTENTIOMETERS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features
Type DR300
- 10-Turn, 3-Digit Dial Counts to 999

Type DR400
- 100-Turns, 4-Digit Readout
- 2 Digits Indicate Number of Revolutions, 2 digits Indicate % of Revolutions



Mfg. Part No.	Stock No.	Price Each 1-9	Price Each 10-24
● DR300	81F022	73.03	70.72
● DR400	81F023	81.67	79.40

(4194)

⅞" DIA LOW COST PLASTIC ANALOG TURNS COUNTING DIALS

RoHS Compliant Available

TT electronics
BI Technologies

Characteristics
- 0.875" (22.23) Diameter Dial
- Counts to 9.99 Turns
- Positive Action Locking Mechanism, Brake Lever Adjustment for Higher Torque
- Numeral in Window (0-9) Indicates Completed Turns, Graduated Circular Dial Shows Percent of Partial Turn
- Mounting Hardware Included

Mfg. Part No.	Numerals/Background	Shaft Diameter	Stock No.	Price Each 1-4
● 2696	White/Black	0.25"	46M2503	12.46
● 2694	White/Black	6 mm	46M2502	12.65

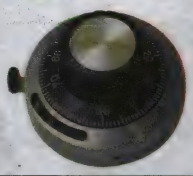
(94489)

MF46 SERIES CONCENTRIC TURNS COUNTING DIAL

RoHS Compliant Available

ETI SYSTEMS

Specifications
- Counts up to 20 turns.
- 100 Dial Gradations.
- Aluminum Housing. Black Nylon Knob.
- Special Flexible Coupling Prevents Irregular Rotation and Non-uniform Torque.
- Dial with 100 Gradations for Exceptional Setability.
- Diameter - 1 13/16"; Extension from Panel - 1"



Mfg. Part No.	Shaft Dia.	Finish	Over Center Lock	Stock No.	Price Each 1-4	Price Each 5-9
● MFA46L-1/4	1/4"	Black	Yes	83H7313	79.32	68.03
● MF46L-1/4	1/4"	Satin	Yes	83H7314	76.68	65.77

(83986)

RB SERIES 1 13/16" DIA ANALOG TURNS COUNTING DIAL

RoHS Compliant Available

TT electronics
BI Technologies

Characteristics
- 1 13/16" (46.03) Diameter Dial
- For 0.25" (6.35) Diameter Shaft
- Counts to 14.99 Turns
- Positive Brake Action, Brake Lever Adjustment for Higher Torque
- Numeral in Window (0-14) Indicates Completed Turns, Graduated Circular Dial Shows Percent of Partial Turn
- Mounting Hardware Included

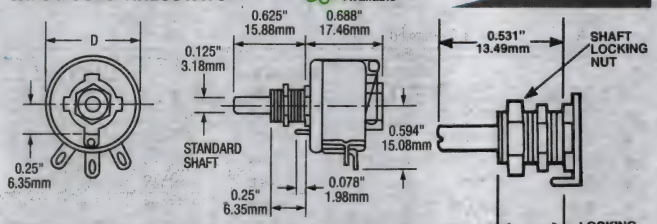
Mfg. Part No.	Numerals/Background	Stock No.	Price Each 1-4
● RB	Black/Satin Chrome	15M1937	37.03

(89519)

12-½ WATT LINEAR WIREWOUND RHEOSTATS

RoHS Compliant Available

OHMITE



Features
- Operates at Max. Hot Spot Temperature Rise of 300° @ 40°C Ambient
- Useful for Operating at High Military Ambients Derated Linearly at Zero at 340°
- Vitreous Enamel Coating Except for Units 3500 Ohms or More
- Open Core Design

Specifications
- Shaft Torque: 1-6oz.-in.
- Rotation: 300° ±5°
- Tolerance: ±10%
- Mounts with ¼-32 Bushing and Hex Nut on Panels to 0.125" (3.18) Thick

Order **mfg. part no. 5151E** *knob separately on page 652.*

Mfg. Part No.	Res. (Ohms)	Amps	Stock No.	Price Each 1-24	Price Each 25-99
● RES1R0E	1	3.530	64K5656	37.63	34.39
● RES2R0E	2	2.500	64K5667	36.53	33.39
● RES3R0E	3	2.040	64K5673	28.65	26.18
● RES8R0E	8	1.250	64K5684	33.71	30.81
● RES10RE	10	1.120	64K5658	29.30	26.78
● RES15RE	15	0.910	64K5663	34.60	31.62
● RES25RE	25	0.710	64K5670	26.62	24.33
● RES50RE	50	0.500	64K5678	29.30	26.78
● RES75RE	75	0.400	64K5682	34.60	31.62

CONTINUED

12-½ WATT LINEAR WIREWOUND RHEOSTATS (CONT.)

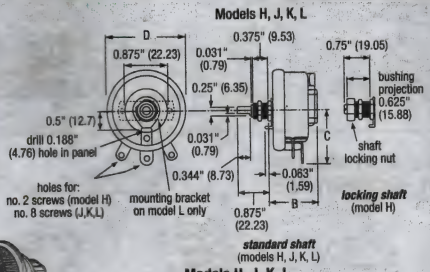
Mfg. Part No.	Res. (Ohms)	Amps	Stock No.	Price Each 1-24	Price Each 25-99
RES100E	100	0.360	64K5659	26.62	24.33
RES125E	125	0.320	64K5661	35.64	32.57
RES175E	175	0.270	64K5665	35.64	32.57
RES250E	250	0.220	64K5671	35.29	32.26
RES350E	350	0.190	64K5675	35.64	32.57
RES500E	500	0.160	64K5679	27.38	25.03
RES1K0E	1,000	0.100	64K5654	25.71	23.50
RES1K5E	1,500	0.090	64K5655	36.64	33.49
RES2K5E	2,500	0.070	64K5666	35.60	32.53
RES3K5E	3,500	0.060	64K5672	32.00	29.24
RES5K0E	5,000	0.050	64K5676	38.57	35.26
RES10KE	10,000	0.035	64K5657	38.84	35.49

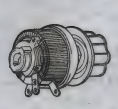
(9472)

WIREWOUND POWER RHEOSTATS

RoHS Compliant Available

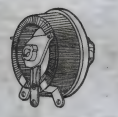
OHMITE





RHS (Model H)

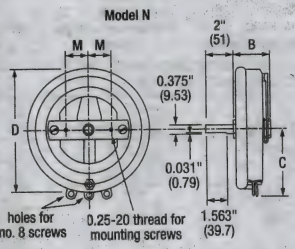
RJS (Model J)



RKS (Model K)

RLS (Model L)

RNS (Model N)



Dimension "M" 1.188" (30.16)

Mounting: Panels to 1.25" (31.75) thick with 0.25-20 flat-head screws

Model N

Specifications:

- Resistance Wire is Wound on Solid Ceramic Core
- Turns Are Locked in with Either Vitreous Enamel or Silicone-Ceramic Material
- Contact Brushes Are Metal Graphite
- Terminals at Each End of Winding Permit Unit to Be Used as a Potentiometer
- Current Ratings Shown Assume Use in Free Air.
- If Units are Enclosed, Wattage Should be Reduced to as Much as 50%, Depending on Ventilation

Model	Shaft Dia.	Shaft Torque	Rotation (±5°)	Max. Panel Thickness	Mounting Hardware
E	⅛"	1-6 oz. in.	300°	to ⅛"	¼-32 Bushing and Hex Nut
G	¼"	0.5-2 lb. in.	300°	to ¼"	⅜-32 Bushing and Hex Nut
H	¼"	0.25-0.5 lb. in.	300°	to ¼"	⅜-32 Bushing and Hex Nut
J	¼"	0.25-2 lb. in.	300°	to ¼"	⅜-32 Bushing and Hex Nut
K	¼"	0.5-2 lb. in.	300°	to ¼"	⅜-32 Bushing and Hex Nut
L	¼"	0.5-3 lb. in.	300°	to ¼"	⅜-32 Bushing and Hex Nut or 10-32 x ¾ F.H. Screws
N	⅜"	2.5-5 lb. in.	320°	to 1¼"	¼-20 F.H. Screws
U	⅜"	3.5-7 lb. in.	335°	to 1¼"	¼-20 F.H. Screws

DIMENSIONS (mm)

Model	B	D	C	M
E	0.688" (17.46)	0.875" (22.23)	0.594" (15.08)	...
G	1.750" (44.45)	2.75" (69.25)	1.78" (45.21)	...
H	1.375" (34.93)	1.560" (39.62)	0.940" (23.88)	...
J	1.375" (34.93)	2.31" (58.67)	1.56" (39.62)	...
K	1.750" (44.45)	3.125" (79.38)	1.91" (48.51)	...
L	2.00" (50.8)	4.00" (101.60)	2.28" (57.91)	...
N	2.375" (60.33)	6.00" (152.40)	3.44" (87.38)	1.188" (30.16)
U	3.000" (76.23)	12.00" (304.80)	6.38" (162.05)	3.000" (76.23)

MODEL E, 12.5 WATT
Knob **mfg. part no. 5151E** is recommended; *order separately on page 652.* Mfg. part nos. 3.5kΩ and above are ceramic coated.

➤CONTINUED➤

WIREWOUND POWER RHEOSTATS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
REL5R0E	5	64K5646	51.00	46.51
REL50RE	50	64K5647	51.52	46.02

MODEL H, 25 WATT
Knob **mfg. part no. 5150E** recommended; *order separately on page 652.* Mfg. part nos. 10kΩ and above are ceramic coated; 500V max. Not UL approved above 5kΩ.

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-9	Price Each 10-49
RHS1R0E	1	64K5739	37.74	33.71
RHS2R0E	2	64K5748	49.50	44.22
RHS3R0E	3	64K5754	40.18	36.18
RHS6R0E	6	64K5760	42.02	37.54
RHS8R0E	8	64K5764	42.44	37.91
RHS10RE	10	64K5741	38.35	34.53
RHS15RE	15	64K5745	40.16	35.87
RHS25RE	25	64K5751	36.08	32.49
RHS35RE	35	64K5755	46.82	41.82
RHS50RE	50	64K5758	38.35	34.53
RHS75RE	75	64K5762	36.08	32.49
RHS100E	100	64K5742	38.35	34.53
RHS125E	125	64K5743	36.08	32.49
RHS175E	175	64K5746	39.37	35.17
RHS250E	250	64K5752	38.35	34.53
RHS350E	350	64K5756	46.82	41.82
RHS500E	500	64K5759	36.07	32.22
RHS750E	750	64K5763	32.78	29.28
RHS1K0E	1k	64K5737	37.33	33.62
RHS1K5E	1.5k	64K5738	40.73	36.38
RHS2K5E	2.5k	64K5747	41.54	37.11
RHS3K5E	3.5k	64K5753	47.53	42.45
RHS5K0E	5k	64K5757	37.33	33.62
RHS10KE	10k	64K5740	40.47	36.44
RHS15KE	15k	64K5744	53.05	47.38
RHS20KE	20k	64K5749	56.49	50.45
RHS25KE	25k	64K5750	48.42	43.25
LOCKING TYPE				
RHL5K0E	5k	64K5729	52.50	46.90

MODEL J, 50 WATT
Knob **mfg. part no. 5150E** recommended; *order separately on page 652.* **Mfg. part no. RJS50K** is not UL approved. Silicone-ceramic coated.

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
RJSR50E	0.5	64K5790	50.58	46.14
RJS1R0E	1	64K5793	51.13	45.67
RJS2R0E	2	64K5801	50.30	45.87
RJS4R0E	4	64K5810	46.50	41.53
RJS6R0E	6	64K5816	57.52	52.46
RJS8R0E	8	64K5818	46.50	41.53
RJS12RE	12	64K5795	50.29	45.87
RJS16RE	16	64K5799	44.73	39.95
RJS22RE	22	64K5803	50.24	44.89
RJS35RE	35	64K5809	50.24	44.89
RJS50RE	50	64K5814	38.26	34.17
RJS80RE	80	64K5819	45.62	40.75
RJS125E	125	64K5796	49.76	44.45
RJS150E	150	64K5798	44.73	39.95
RJS225E	225	64K5804	39.08	34.91
RJS300E	300	64K5808	47.83	42.72
RJS500E	500	64K5815	39.08	34.91
RJS800E	800	64K5820	48.30	43.14
RJS1K0E	1k	64K5791	42.75	38.18
RJS1K6E	1.6k	64K5792	52.88	48.23
RJS2K5E	2.5k	64K5800	47.01	41.99
RJS3K5E	3.5k	64K5806	54.47	49.68
RJS5K0E	5k	64K5812	52.29	46.70
RJS10KE	10k	64K5794	47.01	41.99
RJS50KE	50k	64K5813	55.03	50.19

MODEL G, 75 WATT
Knob **mfg. part no. 5150E** recommended; *order separately on page 652.* Mfg. part nos. 5kΩ and above are ceramic coated.

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
RGS7R5E	7.5	64K5706	71.09	64.84
RGS200E	200	64K5696	58.67	53.51
RGS1K0E	1k	64K5686	58.09	52.99

MODEL K, 100 WATT
Knob **mfg. part no. 5150E** recommended; *order separately on page 652.*

➤CONTINUED➤

WIREWOUND POWER RHEOSTATS (CONT.)

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
● RKSR50E	0.5	64K5821	99.70	90.94
● RKS1R0E	1	64K5824	77.32	70.52
● RKS2R0E	2	64K5831	96.65	88.15
● RKS5R0E	5	64K5838	77.32	70.52
● RKS7R5E	7.5	64K5842	79.23	72.26
● RKS10RE	10	64K5826	56.41	51.45
● RKS16RE	16	64K5828	79.23	72.26
● RKS25RE	25	64K5833	62.81	57.29
● RKS50RE	50	64K5839	57.54	52.48
● RKS75RE	75	64K5843	63.42	57.85
● RKS100E	100	64K5827	56.41	51.45
● RKS200E	200	64K5832	63.42	57.84
● RKS300E	300	64K5835	56.41	51.45
● RKS400E	400	64K5836	79.23	72.26
● RKS500E	500	64K5840	62.80	57.28
● RKS750E	750	64K5844	79.23	72.26
● RKS1K0E	1k	64K5822	70.31	64.13
● RKS2K5E	2.5k	64K5830	70.31	64.13
● RKS5K0E	5k	64K5837	64.47	58.80
● RKS10KE	10k	64K5825	102.32	93.33

MODEL L, 150 WATT
Knob **mfg. part no. 5150E** recommended; *order separately on this page.*

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
● RLSR50E	0.5	64K5845	92.21	84.10
● RLS1R0E	1	64K5848	91.50	83.45
● RLS5R0E	5	64K5864	99.83	91.06
● RLS10RE	10	64K5850	84.15	76.75
● RLS15RE	15	64K5852	75.61	68.96
● RLS25RE	25	64K5857	75.61	68.96
● RLS35RE	35	64K5861	105.15	95.91
● RLS50RE	50	64K5865	82.50	75.25
● RLS75RE	75	64K5869	106.18	96.85
● RLS100E	100	64K5851	84.16	76.76
● RLS150E	150	64K5853	84.15	76.75
● RLS200E	200	64K5856	103.09	94.03
● RLS250E	250	64K5858	105.56	96.29
● RLS500E	500	64K5866	84.98	77.51
● RLS1K25E	1.25k	64K5846	112.99	103.05
● RLS2K25E	2.25k	64K5854	112.99	103.05
● RLS4K5E	4.5k	64K5863	90.41	82.47
● RLS10KE	10k	64K5849	102.29	93.30

MODEL N, 300 WATT
Knob **mfg. part no. 5105E** recommended; *order separately on this page.*

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
● RNS1R0E	1	64K5899	240.36	219.23
● RNS5R0E	5	64K5913	211.70	193.09
● RNS10RE	10	64K5900	183.68	167.53
● RNS15RE	15	64K5902	198.97	181.48
● RNS25RE	25	64K5908	183.68	167.53
● RNS50RE	50	64K5914	183.68	167.53
● RNS100E	100	64K5901	186.62	170.21
● RNS150E	150	64K5903	203.75	185.84
● RNS300E	300	64K5910	203.75	185.84
● RNS400E	400	64K5912	186.62	170.21
● RNS700E	700	64K5916	203.75	185.84
● RNS2K5E	2.5k	64K5905	221.69	202.20

MODEL U, 1000 WATT
Knob **mfg. part no. 5105E** recommended; *order separately on this page.*

Mfg. Part No.	Res. (Ohms)	Stock No.	Price Each 1-4	Price Each 5-9
● RUS25RE	25	64K5979	725.58	661.80

(4112)

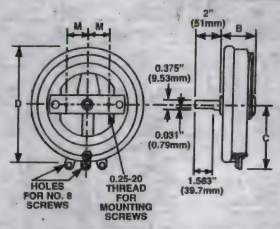
500 WATT RHEOSTATS

RoHS Compliant Available

OHMITE

Features
- Metal/Ceramic Construction with Vitreous Enamel Coating
- Linear Wirewound Design for Rheostat and Potentiometer Applications

Specifications
- Rotation: 325°±5°
- 8″ (203.10) Diameter, 1.25″ Thick
- Shaft Diameter: ⅜″ (9.53)



Order **mfg. part nos. 5104E** *or* **5105E** *knobs separately on this page. Order* **mfg. part no. 5001** *dial plate separately on this page.*

Mfg. Part No.	Res. (Ohms)	Amps	Stock No.	Price Each 1-4	Price Each 5-9
● RRS5R0E	5	10	64K5960	285.71	260.59
● RRS12R5E	12.5	6.30	64K5946	321.53	293.26
● RRS25RE	25	4.47	64K5954	324.07	295.57
● RRS50RE	50	3.16	64K5961	316.47	288.64
● RRS80RE	80	2.52	64K5965	316.47	288.64
● RRS125E	125	2	64K5947	316.47	288.64
● RRS250E	250	1.410	64K5955	324.07	295.57
● RRS500E	500	1	64K5962	321.53	293.26

(9471)

RHEOSTAT AND TAP SWITCH HARDWARE

RoHS Compliant Available

OHMITE

5104, 5106 Handwheel with Pointer

5105 Handwheel without Pointer

5110 Fingergrip Knob without Pointer

5103, 5116 Barknob

Any knob can be used with any rheostat and tap switch model which has the corresponding shaft diameter. Knobs are fastened to shafts with slotted set screws.

Mfg. Part No.	Shaft Diameter	Stock No.	Price Each 1-24	Price Each 25-99
● 5103E	1/4″ (6.35)	64K9287	7.35	6.28
● 5104E	3/8″ (9.53)	64K9289	29.91	27.34
● 5105E	3/8″ (9.53)	64K9291	24.41	22.31
● 5106E	1/4″ (6.35)	64K9293	33.86	30.95
● 5109E	1/4″ (6.35)	64K9296	30.35	27.74
● 5110E	1/4″ (6.35)	64K9298	26.04	23.80
● 5111E	1/4″ (6.35)	64K9300	29.95	27.37
● 5116E	1/4″ (6.35)	64K9305	11.73	10.72
● 5150E	1/4″ (6.35)	64K9307	9.29	8.49
● 5151E	1/8″ (3.18)	64K9308	7.62	6.52

(4121)

RHEOSTAT DIAL PLATES

RoHS Compliant Available

OHMITE

Features
- Figures and Lines are Etched on Black Background for Contrast and Ease of Reading
- Divisions Indicate Approximate Percentage of Rheostat Resistance in Circuit

Order knobs separately; *on this page.*

Mfg. Part No.	For Knob	Dial Dia.	Stock No.	Price Each 1-9
● 5001E	5104, 5106	5½″	64K9246	14.37
● 5002-12E	5109, 5116, 5150	2¾″	64K9249	16.76
● 5000E	5116, 5150	2³⁄₁₆″	64K9245	2.09
● 5007E	5151	1¼″	64K9276	2.20

(4122)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

EVQWK SERIES EDGE DRIVE JOG ENCODERS

RoHS Compliant Available

Panasonic

Features:
- Tactile rotary operation and push operation

Specifications:
- Encoder detents: 15 points
- Encoder rotation torque: 1mN m to 10mN m
- Encoder contact resistance: 1ohm (max.)
- Push-on switch operating force: 4.5N
- Push-on switch contact resistance: 100mohm

Applications:
- Memory paging and transmitting
- Menu selection and input for portable electronic equipment

Mfg. Part No.	Encoder Resolution Pulses/360°	Push-On Switch Travel (mm)	Rotational Life (Revolutions)	Height (mm)	Stock No.	Price Each 1-9
EVQ-WK4001	15	0.3	100000	5.4	52W2548	5.20
EVQ-WKA001	15	0.2	100000	3.65	53W5030	6.73

(208979)

EVE-V SERIES 11MM SQUARE GS ENCODER

RoHS Compliant Available

Panasonic

Specifications:
- Rotation angle: 360° (endless)
- Shaft pull/push strength: 100N (min.)
- Shaft wobble: 0.6xL/30mm (max.)
- Standard rotation torque: 3mN m to 20mN m
- Output signal: Phase A and B
- Contact resistance: 1ohm (max.)
- Chattering: 2ms (max.)
- Insulation resistance: 50Mohm (min.) at 250VDC
- Dielectric withstanding voltage: 300VAC for 1 minute
- Push-on switch: SPST
- Switch rating: 20mA 16VDC

Applications:
- Car audio, navigation, air conditioners

Applications:
- Low profile: wave soldering 4mm

Mfg. Part No.	Resolution Pulses/360°	Operating Life (Cycles min.) Encoder/Switch	Stock No.	Price Each 1-9
EVE-VCGJL016B	16	30000/30000	52W2250	2.55

(208994)

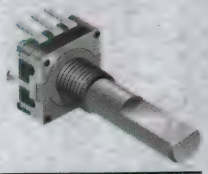
PEC11 SERIES - 12mm INCREMENTAL ENCODERS

RoHS Compliant Available

BOURNS®

Specifications:
- Rotational life: 30,000 revolutions
- Rotational speed: 60 rpm maximum
- Contact Rating: 1 mA @ 5 VDC

Features:
- Push switch option
- Compact, rugged design
- Metal bushing/shaft



METAL FLATTED SHAFT

Mfg. Part No.	Pulses/Rev.	Switch	Shaft Length	Stock No.	Price Each 1-9	10-24
PEC11-4115F-S0018	18	Push Momentary	15mm	61H4048	2.18	1.90
PEC11-4215F-N0024	24	None	15mm	02J2845	1.98	1.72

(90076)

EM14 SERIES ROTARY OPTICAL ENCODER WITH SWITCH

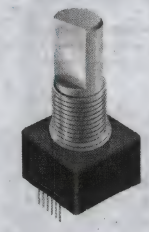
RoHS Compliant Available

BOURNS®

Specifications:
- Supply Voltage: 5 VDC +/- 0.25 VDC
- Switch Power Rating: 12 VDC/20 mA
- Rotational life: 1,000,000 cycles
- No detent
- Mechanical Angle: 360°
- Operating temperature: -40°C to 70°C
- Mounting torque: 18 lb-in. max

Applications:
- Medical Equipment
- Professional Audio
- Test and Measurement
- Industrial Controls
- Avionics

Features:
- Compact Package Size
- Lead free
- 2-bit quadrature code
- HCMOS, CMOS, and TTL compatible
- Splashproof shaft seal
- High Rotational Cycle Life
- Axial lead
- Cable/Connector Option



1/4" DIA. FLATTED END

Mfg. Part No.	Pulses/Rev.	Switch	Shaft Length	Stock No.	Price Each 1-9	10-49
EM14A0D-C24-L064S	64	Push Switch	0.750"	58K1358	26.29	23.91
EM14A0D-C24-L008N	8	None	0.750"	58K1355	21.13	17.46
EM14A0D-C24-L032N	32	None	0.750"	58K1356	24.63	22.40
EM14A0D-C24-L064N	64	None	0.750"	58K1357	25.11	22.84

1/8" DIA. SLOTTED END

EM14C0D-E24-L064S	64	Push Switch	0.750"	58K1365	24.57	22.35

CONTINUED

EM14 SERIES ROTARY OPTICAL ENCODER WITH SWITCH (CONT.)

6MM DIA. SLOTTED END

Mfg. Part No.	Pulses/Rev.	Switch	Shaft Length	Stock No.	Price Each 1-9	10-49
EM14R0D-R20-L064S	64	Push Switch	20mm	58K1375	26.29	23.91
EM14R0D-R20-L032N	32	None	20mm	58K1373	23.85	21.69

(84410)

EN SERIES ROTARY OPTICAL ENCODERS

RoHS Compliant Available

BOURNS®

Features
- 2-Channel Quadrature Output
- Bushing or Servo Mount
- Square Wave Signal
- Compact
- CMO and TTL Compatible
- Long Life
- High Operating Speed

Specifications
- Operating Temperature: -40°C to +85°C
- Torque: A and C Bushings: 1.5 oz.-in. Max.; S Bushing: 0.1 oz.-in. Max.
- Contact Rating: 26mA @ 5VDC
- Supply Voltage: 5VDC

Bushing Configurations (third character in Part Numbers)
- A=3/8 "D X ⅜ "L Threaded
- C=1/4 "D X ¼ "L Threaded
- S=3/8 "D X ⅜ "L Threaded (Ball Bearing)
- T=1/4 "D X ⅜ "L Threaded(Ball Bearing)

Mfg. Part No.	Rotational Life (Revolutions)	Resolution Cycles/Rev.	Stock No.	Price Each 1-9
ENA1J-B28-L00064L	10000000	64 CPR	62K3104	43.43
ENA1J-B28-L00100L	10000000	100 CPR	62K3105	45.52
ENA1J-B28-L00128L	10000000	128 CPR	62K3106	43.43
ENC1J-D28-L00128L	10000000	128 CPR	62K3107	46.04
ENT1J-D28-L00128L	10000000	128 CPR	62K3110	51.82
ENS1J-B28-L00128L	200000000	128 CPR	62K3108	55.87
ENS1J-B28-L00256L	200000000	256 CPR	62K3109	64.28

(4142)

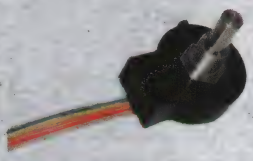
HONEYWELL CLAROSTAT 600 SERIES OPTICAL ROTARY ENCODERS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features
- 1 ⅛" diameter
- Continuous Shaft Rotation in Either Direction
- 4-Lead Ribbon Cable with 0.050"(1.27) Spacing
- 0.025 x 0.012"(0.635 x 0.305) Terminals

Specifications
- Output Rate: 128 Pulses/Revolution
- Input Power: 5 Vdc @ 30 mA
- Channels: 2 Separate Output Channels in Quadrature, 90°±45°
- Voltage: High Level: 2.4V Min. w/10kΩ Load to Ground; Low Level: 0.4V Max.
- Operating Temperature: -40°C to +65°C
- Operating Speed: 300 RPM max.
- Rotational Life: 10 million cycles
- Shaft: ¼" diameter, metal
- Bushing, ⅜" diameter, metal



Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-24
600EN128CBL	7.5" Cable/Lead	89F2536	31.58	30.59

(4119)

(211464)

ELJ-FA ELJ-FB AND ELJ-FC SERIES SMD GENERAL-USE WIREWOUND FIXED CHIP INDUCTORS

RoHS Compliant Available

Panasonic

Features:
- Resin molded
- Capable of being re-flow or flow soldered
- Good for mounting
- Operating temperature : –20°C to +85°C

Applications:
- AV equipment
- Wireless communication equipment
- General electronic equipment

FC TYPE 2520 (1008)

Mfg. Part No.	Inductance nH	Inductance Tol.	I_{DC} (mA)	R_{DC} (Ω)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape & Reel Stock No.	Tape & Reel Reel Qty	Tape & Reel Price Each 1-9
● ELJ-FC100KF	10	± 10%	80	3.7	53W3934	0.45	49W7943	2000	0.11
● ELJ-FC470JF	47	± 5%	80	11	46T6442	0.43	05X8474	2000	0.10
FA TYPE 3225 (1210)									
● ELJ-FA4R7KF	4.7	± 10%	165	1.5	49W7878	0.46	05X8471	2000	0.11
● ELJ-FA100KF	10	± 10%	140	2.1	49W7859	0.46	01X1505	2000	0.11
● ELJ-FA101KF	100	± 10%	60	10	49W7860	0.46	01X1507	2000	0.11
● ELJ-FA181JF	180	± 5%	50	17	49W7867	0.46	05X8470	2000	0.11
FB TYPE 4532 (1812)									
● ELJ-FB4R7KF	4.7	± 10%	350	0.81	05X8473	0.50	55W9331	500	0.16
● ELJ-FB221JF	220	± 5%	85	13	05X8472	0.50	55W9329	500	0.16

(208939)

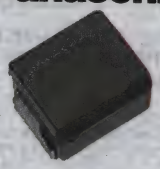
ELJ SERIES SMD HIGH FREQUENCY FIXED CHIP INDUCTORS

RoHS Compliant Available

Panasonic

Features:
- High-frequency capability due to non-magnetic core
- Capable of being re-flow or flow soldered
- Good for mounting
- Operating temperature : –40°C to +85°C (RE), –20°C to +85°C (ND)

Applications:
- RF circuitry for cellular phones and wireless communication equipment



ND

ND TYPE 2012 (0805)

Mfg. Part No.	Inductance nH	Inductance Tol.	I_{DC} (mA)	R_{DC} (Ω)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape & Reel Stock No.	Tape & Reel Reel Qty	Tape & Reel Price Each 1-2999
● ELJ-ND10NKF	10	± 10%	540	0.18	46T6513	0.57	01X1547	3000	0.14
RF TYPE 1005 (0402)									
● ELJ-RF1N0DFB	1	± 0.3nH	400	0.05	55W9371	0.40	05X8496	10000	0.03
● ELJ-RF3N3DFB	3.3	± 0.3nH	400	0.12	55W9378	0.38	05X8499	10000	0.03
● ELJ-RF5N6DFB	5.6	± 0.3nH	340	0.19	55W9380	0.40	05X8500	10000	0.03
● ELJ-RF6N8JFB	6.8	± 5%	320	0.3	55W9382	0.38	05X8501	10000	0.03
● ELJ-RF10NJFB	10	± 5%	320	0.41	55W9372	0.40	05X8497	10000	0.03
● ELJ-RF12NJFB	12	± 5%	320	0.45	55W9373	0.40	05X8498	10000	0.03
● ELJ-RFR10JFB	100	± 5%	90	5.5	49W8155	0.38	05X8495	10000	0.03
RE TYPE 1608 (0603)									
● ELJ-RE2N2ZFA	2.2	± 0.2nH	500	0.09	46T6588	0.50	05X8490	3000	0.05
● ELJ-RE3N3DFA	3.3	± 0.3nH	500	0.12	49W8141	0.41	05X8491	3000	0.04
● ELJ-RE4N7JFA	4.7	± 5%	450	0.17	55W9370	0.38	05X8493	3000	0.04
● ELJ-RE33NGFA	33	± 2%	300	0.6	49W8144	0.50	05X8492	3000	0.05
● ELJ-RE47NGFA	47	± 2%	250	0.95	49W8147	0.50	05X8494	3000	0.05
● ELJ-RE68NJFA	68	± 5%	250	1.3	53W8329	0.41	53W8414	3000	0.04
● ELJ-RER12GFA	120	± 2%	130	3	46T6580	0.50	05X8488	3000	0.05
● ELJ-RER15JFA	150	± 5%	100	4.5	49W8125	0.41	97W7111	3000	0.04
● ELJ-RER22GFA	220	± 2%	70	7.5	46T6583	0.53	05X8489	3000	0.06

(208938)

Find thousands of NEW parts for
FULL REEL PASSIVES
Available for next-day delivery at
newark.com/production

(211462)

ELJ-EA SERIES SMD LOW DC RESISTANCE FIXED CHIP INDUCTOR

RoHS Compliant Available

Panasonic

Features:
- Low DCR, suitable for power circuitry
- Magnetic shield effect using ferrite mixed outer molding
- Capable of being re-flow or flow soldered
- Good for mounting
- Operating temperature : –20°C to +85°C

Applications:
- AV equipment
- Wireless communication equipment
- General electronic equipment

EA TYPE 3225 (1210)

Mfg. Part No.	Inductance nH	Inductance Tol.	I_{DC} (mA)	R_{DC} (Ω)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape & Reel Stock No.	Tape & Reel Reel Qty	Tape & Reel Price Each 1-1999
● ELJ-EA1R0MF	1	± 20%	500	0.07	49W7831	0.58	01X1499	2000	0.13
● ELJ-EA6R8MF	6.8	± 20%	200	0.19	49W7845	0.54	05X8469	2000	0.12
● ELJ-EA100KF	10	± 10%	160	0.26	49W7833	0.58	05X8465	2000	0.13
● ELJ-EA220KF	22	± 10%	115	0.5	49W7838	0.58	05X8467	2000	0.13
● ELJ-EA101KF	100	± 10%	50	2.4	49W7834	0.58	05X8466	2000	0.13
● ELJ-EA331KF	330	± 10%	30	7.1	49W7842	0.58	05X8468	2000	0.13

(208940)

CM453232, CM252016 AND CM322522 SERIES WIREWOOD-CHIP INDUCTORS

RoHS Compliant Available

BOURNS®

Features
- High resistance to heat and humidity
- Resistance to mechanical shock and pressure
- Accurate dimensions for automatic
- surface mounting

Specifications
- Temprature Rise 20°C Max.
- Operating temperature -40 to +100 °C
- Wide inductance range (1.0 nH to 1000 µH)

Mfg. Part No.	L (Induct.) (µH)	Q Min.	Test Frequency (MHz)	SRF (MHz)	DCR (mΩ)	I_{DC} (mA)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● CM453232-1R0KL	1	50	7.96	100	0.5	450	61J5171	0.27
● CM453232-4R7KL	4.7	35	7.96	35	1	315	61J5221	0.29
● CM453232-100KL	10	50	2.52	20	1.6	250	61J5179	0.29
● CM453232-220KL	22	50	2.52	13	3.2	180	61J5201	0.27
● CM453232-470KL	47	50	2.52	10	5	140	61J5223	0.29
● CM453232-680KL	68	50	2.52	9	6	130	61J5236	0.27
● CM453232-101KL	100	40	2.52	8	8	110	61J5181	0.29
● CM453232-221KL	220	20	0.796	4	10	100	61J5203	0.29
● CM453232-331KL	330	40	0.796	3.5	14	85	61J5215	0.29
● CM453232-471KL	470	40	0.796	3	26	62	61J5226	0.27
● CM453232-681KL	680	30	0.796	3	30	50	61J5238	0.29
● CM453232-102KL	1	30	0.252	2.5	40	30	61J5183	0.29
● CM322522-100KL	10	30	2.52	36	2.1	140	62K3085	0.42
● CM322522-101KL	100	20	0.796	10	10	60	62K3086	0.40

(136926)

CW100505 SERIES HIGH Q CERAMIC CHIP INDUCTORS

RoHS Compliant Available

BOURNS®

Features
- 0402 miniature size
- Ceramic core provides stable electrical characteristics
- High Q
- High self-resonant frequency
- Flat top surface for automated assembly

Applications
- RF modules
- Cellular phones
- GPS receivers
- Wireless PDAs, LANs
- CATV fi lters, tuners
- Cable modems, set-top boxes

Mfr. Part No.	L (Ind.) (nH)	Ind. Tol.	Q Min.	Test Freq. (MHz)	DCR (ohm)	SRF (MHz)	I_{DC} (mA)	Stock No.	Price Each 1-9
● CW100505-1N0D	1	± 0.3nH	13	250	0.045	6	1.36A	24W8968	0.28
● CW100505-2N2D	2.2	± 0.3nH	18	250	0.07	6	960	24W8973	0.28
● CW100505-2N7D	2.7	± 0.3nH	16	250	0.12	6	640	24W8974	0.28
● CW100505-3N9J	3.9	± 5%	20	250	0.066	5.8	840	24W8978	0.28
● CW100505-4N7J	4.7	± 5%	15	250	0.13	4.775	640	24W8981	0.28
● CW100505-6N8J	6.8	± 5%	20	250	0.083	4.8	680	24W8985	0.26
● CW100505-8N2J	8.2	± 5%	25	250	0.104	4.4	680	24W8987	0.28
● CW100505-10NJ	10	± 5%	23	250	0.195	3.9	480	24W8969	0.28
● CW100505-12NJ	12	± 5%	26	250	0.12	3.6	640	24W8970	0.26
● CW100505-15NJ	15	± 5%	26	250	0.172	3.28	560	24W8971	0.26
● CW100505-18NJ	18	± 5%	25	250	0.23	3.1	420	24W8972	0.28
● CW100505-22NJ	22	± 5%	25	250	0.3	2.8	400	24W8975	0.28
● CW100505-27NJ	27	± 5%	26	250	0.298	2.48	400	24W8976	0.26
● CW100505-33NJ	33	± 5%	24	250	0.35	2.35	400	24W8979	0.26
● CW100505-39NJ	39	± 5%	25	250	0.55	2.1	320	24W8980	0.26
● CW100505-47NJ	47	± 5%	26	200	0.83	2.1	210	24W8982	0.28
● CW100505-56NJ	56	± 5%	22	200	0.97	1.76	200	24W8984	0.28
● CW100505-68NJ	68	± 5%	22	200	1.12	1.62	180	24W8986	0.26

➤CONTINUED➤

CW100505 SERIES HIGH Q CERAMIC CHIP INDUCTORS (CONT.)

Mfr. Part No.	L (Ind.) (nH)	Ind. Tol.	Q Min.	Test Freq. (MHz)	DCR (ohm)	SRF (MHz)	I_{DC} (mA)	Stock No.	Price Each 1-9
CW100505-82NJ	82	± 5%	20	150	1.25	1.5	150	24W8988	0.26
CW100505-R12J	120	± 5%	20	150	2.66	1.1	110	24W8967	0.26

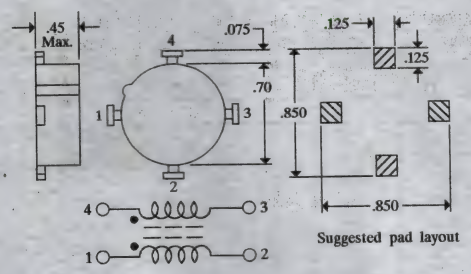
(210155)

PM3700 SERIES SURFACE MOUNT COMMON MODE INDUCTORS

RoHS Compliant Available

J.W.Miller MAGNETICS A Bourns Company

SMD



PM3700 series inductors suppress conductive EMI emissions. Ideal for switching power supplies and battery chargers. Effective attenuation from 10kHz to 100MHz. Compact package. Encapsulated in a high-strength LCP cup.

Mfg. Part No.	L (Ind.) (min.) mH	I_{DC} (min.) Amps	R_{DC} (max.) Ohms	Frequency Range*	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape & Reel Reel Qty. 200 Stock No.	Tape & Reel Price Each 1-199
PM3700-20-RC	0.5	6	0.01	4MHz–40MHz	63K2818	2.83	63K2819	1.59
PM3700-30-RC	0.75	5.5	0.012	1MHz–20MHz	63K2820	2.67	63K2821	1.24
PM3700-40-RC	1	4	0.02	500kHz–40MHz	63K2822	2.83	63K2823	1.59
PM3700-50-RC	2	3.5	0.03	300kHz–20MHz	63K2824	2.83	63K2825	1.59
PM3700-60-RC	5	2	0.07	100kHz–10MHz	63K2826	2.87	63K2827	1.61
PM3700-70-RC	10	1.5	0.15	50kHz–5MHz	63K2828	2.67	63K2829	1.50
PM3700-80-RC	20	1	0.25	25kHz–4MHz	63K2830	2.83	63K2831	1.59

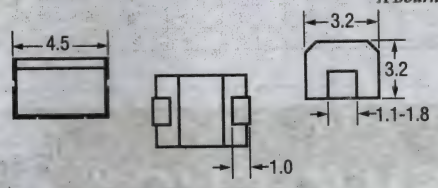
*20dB attenuation
(48771)

PM SERIES SURFACE MOUNT CHIP INDUCTORS

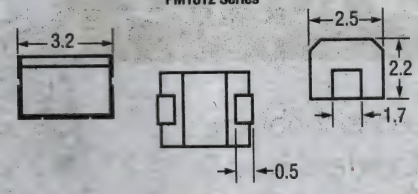
SMD

RoHS Compliant Available

J.W.Miller MAGNETICS A Bourns Company



PM1812 Series



PM1210 Series

PM1210 and **PM1812** series surface mount chip inductors, molded construction for high reliability and superior environmental protection. High resistance to solder heat and moisture. Operating temperature -55 to +105°C. Current to cause 20°C maximum temperature rise. Tape & reel packaged: **PM1210**: 500/reel; **PM1812**: 2000/reel.

PM1210 SERIES, ±10% TOLERANCE

Mfg. Part No.	L (Ind.) (µH)	Q Min.	Test Freq. (MHz)	SRF Min. (MHz)	R_{DC} (max.) Ohms	I_{DC} (mA)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape Cut Price Each 10-24
PM1210-R033J-RC	0.033	25	100	1400	0.24	450	63K3072	0.34	0.30
PM1210-R039J-RC	0.039	25	100	1300	0.27	450	63K3073	0.34	0.30
PM1210-R047J-RC	0.047	26	100	1200	0.30	450	63K3074	0.34	0.30
PM1210-R082J-RC	0.082	27	100	900	0.40	450	63K3077	0.34	0.30
PM1210-R15J-RC	0.15	28	25.2	450	0.25	450	63K3080	0.34	0.30
PM1210-R18J-RC	0.18	28	25.2	400	0.28	450	63K3081	0.34	0.30
PM1210-R22J-RC	0.22	28	25.2	350	0.32	450	63K3082	0.34	0.30
PM1210-R27J-RC	0.27	28	25.2	320	0.36	450	63K3083	0.34	0.30
PM1210-R33J-RC	0.33	28	25.2	300	0.40	450	63K3084	0.34	0.30

➤CONTINUED➤

PM SERIES SURFACE MOUNT CHIP INDUCTORS (CONT.)

Mfg. Part No.	L (Ind.) (µH)	Q Min.	Test Freq. (MHz)	SRF Min. (MHz)	R_{DC} (max.) Ohms	I_{DC} (mA)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape Cut Price Each 10-24
PM1210-R39J-RC	0.39	28	25.2	250	0.45	450	63K3085	0.34	0.30
PM1210-1R0J-RC	1	30	7.96	115	0.70	230	63K3090	0.34	0.30
PM1210-1R2J-RC	1.2	30	7.96	100	0.75	215	63K3091	0.34	0.30
PM1210-1R5J-RC	1.5	30	7.96	90	0.85	210	63K3092	0.34	0.30
PM1210-2R2J-RC	2.2	30	7.96	80	1	190	63K3102	0.34	0.30
PM1210-4R7J-RC	4.7	30	7.96	55	1.7	165	63K3111	0.34	0.30
PM1210-6R8J-RC	6.8	30	2.52	45	2	150	63K3115	0.34	0.30
PM1210-100J-RC	10	30	2.52	36	2.5	140	63K3094	0.36	0.33
PM1210-150J-RC	15	30	2.52	30	3.2	120	63K3098	0.34	0.30
PM1210-220J-RC	22	30	2.52	25	4	105	63K3104	0.34	0.30
PM1210-470J-RC	47	30	2.52	15	7	75	63K3112	0.34	0.30
PM1210-101J-RC	100	20	0.796	10	10	60	63K3095	0.34	0.30
PM1210-181J-RC	180	20	0.796	7	17	50	63K3101	0.34	0.30
PM1210-221J-RC	220	20	0.796	7	21	45	63K3105	0.34	0.30

PM1812 SERIES, ±10% TOLERANCE

Mfg. Part No.	L (Ind.) (µH)	Q Min.	Test Freq. (MHz)	SRF Min. (MHz)	D_{CR} Max. (Ω)	I_{DC} (mA)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape Cut Price Each 10-24
PM1812-1R0J-RC	1	50	7.96	100	0.50	450	63K3131	0.34	0.30
PM1812-100J-RC	10	50	2.52	20	1.6	250	63K3135	0.36	0.33
PM1812-180J-RC	18	50	2.52	15	2.8	190	63K3142	0.34	0.30
PM1812-101J-RC	100	40	0.796	8	8	110	63K3136	0.36	0.33
PM1812-221J-RC	220	40	0.796	4	10	100	63K3147	0.34	0.30
PM1812-102J-RC	1000	30	0.796	2.5	40	30	63K3137	0.36	0.33

(72677)

HM78D SERIES SMD COUPLED INDUCTORS

RoHS Compliant Available

TT electronics BI Technologies

Applications
- Mobile phones
- CD/DVD players
- Digital cameras
- GPS systems

1210 CASE SIZE

Mfg. Part No.	Inductance (µH)	DCR (ohm)	Current Rating (A)	Stock No.	Price Each
HM78D-12104R7MLFTR	4.7	0.014	10.6	85W3255	1.18
HM78D-12106R8MLFTR	6.8	0.017	10.4	85W3259	1.18
HM78D-12108R2MLFTR	8.2	0.018	9.5	85W3261	1.18
HM78D-1210100MLFTR	10	0.02	8.6	85W3249	1.18
HM78D-1210220MLFTR	22	0.04	5.4	85W3252	1.18
HM78D-1210330MLFTR	33	0.05	4.5	85W3253	1.18
HM78D-1210470MLFTR	47	0.065	3.7	85W3256	1.18
HM78D-1210560MLFTR	56	0.081	3.28	85W3258	1.18
HM78D-1210680MLFTR	68	0.098	2.96	85W3260	1.18
HM78D-1210101MLFTR	100	0.128	2.54	85W3250	1.18
HM78D-1210121MLFTR	120	0.17	2.38	85W3251	1.18
HM78D-1210331MLFTR	330	0.44	1.32	85W3254	1.18
HM78D-1210471MLFTR	470	0.57	1.22	85W3257	1.18

128 CASE SIZE

HM78D-1284R7MLFTR	4.7	0.019	7.4	85W3271	0.88
HM78D-1286R8MLFTR	6.8	0.024	6.9	85W3274	0.88
HM78D-128100MLFTR	10	0.029	6.2	85W3262	0.88
HM78D-128150MLFTR	15	0.036	5.8	85W3265	0.88
HM78D-128220MLFTR	22	0.048	5.2	85W3267	0.88
HM78D-128330MLFTR	33	0.075	4.2	85W3269	0.88
HM78D-128470MLFTR	47	0.09	3	85W3272	0.88
HM78D-128680MLFTR	68	0.105	2.6	85W3275	0.88
HM78D-128101MLFTR	100	0.15	2	85W3263	0.88
HM78D-128151KLFTR	150	0.23	1.8	85W3266	0.88
HM78D-128221KLFTR	220	0.345	1.6	85W3268	0.88
HM78D-128331KLFTR	330	0.51	1.3	85W3270	0.88
HM78D-128471KLFTR	470	0.765	870mA	85W3273	0.88
HM78D-128681KLFTR	680	1.145	760mA	85W3276	0.88
HM78D-128102KLFTR	1mH	1.415	600mA	85W3264	0.88

755 CASE SIZE

HM78D-755R33MLFTR	330nH	7.4µohm	6.2	85W3277	0.95
HM78D-7551R5MLFTR	1.5	0.012	4.96	85W3278	0.95
HM78D-7553R3MLFTR	3.3	0.018	3.94	85W3283	0.95
HM78D-7556R8MLFTR	6.8	0.042	2.6	85W3286	0.95
HM78D-755100MLFTR	10	0.049	2.41	85W3279	0.95
HM78D-755220MLFTR	22	0.093	1.75	85W3282	0.95
HM78D-755470MLFTR	47	0.22	1.15	85W3285	0.95
HM78D-755820MLFTR	82	0.35	910mA	85W3288	0.95
HM78D-755151MLFTR	150	0.59	690mA	85W3281	0.95

➤CONTINUED➤

HM78D SERIES SMD COUPLED INDUCTORS (CONT.)

755 CASE SIZE

Mfg. Part No.	Inductance (µH)	DCR (ohm)	Current Rating (A)	Stock No.	Price Each
● HM78D-755331MLFTR	330	1.41	450mA	85W3284	0.95
● HM78D-755681MLFTR	680	2.58	330mA	85W3287	0.95
● HM78D-755102MLFTR	1mH	3.89	270mA	85W3280	0.95

(210189)

IMC SERIES HIGH-FREQUENCY MOLDED INDUCTORS

RoHS Compliant Available

VISHAY.

IMC series inductors feature high self-resonant frequency values and high Q values at higher frequencies. Wirewound, molded construction for superior strength and moisture resistance. EIA sizes 0402 and 0603 has laser spiral and coated coil. **0805-01 series** has open construction. Inductance tolerance: ±20% for 3.9-8.2nH; ±10% for 6.8-1000nH; ±5% for 33-1000nH. Compatible with vapor phase and reflow soldering. Non-magnetic core. Inductance value (nH) and EIA size are indicated in mfg. part no.

Mfg. Part No.	L (Induct.)	SRF (MHz)	DCR Max. (Ω)	I_{DC} (mA)	Tape Cut Stock No.	Price Each 1-49	Price Each 50-99
0402							
● IMC0402ER4N7S	4.7nH	4800	0.17	360	53K5134	0.12	0.10
● IMC0402ER6N8J	6.8nH	4000	0.3	320	53K5138	0.11	0.09
● IMC0402ER8N2J	8.2nH	3500	0.35	320	53K5140	0.11	0.09
● IMC0402ER10NJ	10nH	2800	0.41	320	53K5122	0.11	0.09
● IMC0402ER12NJ	12nH	2800	0.45	320	53K5123	0.11	0.09
● IMC0402ER18NJ	18nH	2200	0.7	240	53K5125	0.11	0.09
● IMC0402ER22NJ	22nH	2000	0.8	200	53K5128	0.11	0.09
● IMC0402ER27NJ	27nH	1800	1.2	200	53K5129	0.11	0.09
● IMC0402ER39NJ	39nH	1800	1.7	150	53K5133	0.11	0.09
● IMC0402ER68NJ	68nH	1500	4	120	53K5139	0.11	0.10
● IMC0402ER82NJ	82nH	1400	4.5	110	53K5141	0.11	0.10
● IMC0402ERR10J	100nH	1200	5.5	90	53K5117	0.12	0.10
0603							
● IMC0603ER1N8S	1.8nH	6000	0.08	500	53K5143	0.08	0.08
● IMC0603ER39NJ	39nH	1800	0.8	300	53K5147	0.09	0.07
0805							
● IMC0805ER5N6J01	5.6nH	5800	0.08	600	53K5180	0.17	0.13
● IMC0805ER6N8J01	6.8nH	5500	0.06	600	53K5182	0.17	0.13
● IMC0805ER8N2J01	8.2nH	5500	0.06	600	53K5184	0.17	0.13
● IMC0805ER10NJ01	10nH	4800	0.08	600	53K5165	0.18	0.14
● IMC0805ER12NJ01	12nH	4100	0.08	600	53K5167	0.18	0.14
● IMC0805ER15NJ01	15nH	3600	0.08	600	53K5168	0.17	0.13
● IMC0805ER18NJ01	18nH	3400	0.08	600	53K5169	0.17	0.13
● IMC0805ER22NJ01	22nH	3300	0.1	600	53K5172	0.17	0.13
● IMC0805ER27NJ01	27nH	2600	0.12	600	53K5173	0.93	0.51
● IMC0805ER33NJ01	33nH	2400	0.15	500	53K5176	0.17	0.13
● IMC0805ER39NJ01	39nH	2100	0.18	500	53K5177	0.17	0.13
● IMC0805ER47NJ01	47nH	1700	0.15	500	53K5179	0.18	0.14
● IMC0805ER56NJ01	56nH	1600	0.25	500	53K5181	0.17	0.13
● IMC0805ER68NJ01	68nH	1450	0.27	500	53K5183	0.17	0.13
● IMC0805ER82NJ01	82nH	1350	0.32	500	53K5186	0.17	0.13
● IMC0805ERR10J01	100nH	1200	0.43	500	53K5149	0.18	0.14
● IMC0805ERR12J01	120nH	1100	0.48	500	53K5150	0.17	0.13
● IMC0805ERR15J01	150nH	950	0.67	400	53K5151	0.93	0.51
● IMC0805ERR18J01	180nH	900	0.85	350	53K5152	0.17	0.13
● IMC0805ERR22J01	220nH	860	1.1	300	53K5153	0.17	0.13
● IMC0805ERR27J01	270nH	850	1.46	250	53K5154	0.93	0.51
● IMC0805ERR33J01	330nH	800	1.65	200	53K5155	0.18	0.14
● IMC0805ERR47J01	470nH	750	0.99	330	53K5157	0.13	0.12
● IMC0805ERR56J01	560nH	730	1.1	300	53K5158	0.18	0.14
● IMC0805ERR68J01	680nH	650	1.2	280	53K5159	0.17	0.13
● IMC0805ERR82J01	820nH	550	2.21	150	53K5160	0.60	0.33
● IMC0805ER1R0J01	1000nH	480	2.5	120	53K5161	0.18	0.14
● IMC0805ER1R2J01	1200nH	220	0.85	400	53K5162	0.99	0.54
● IMC0805ER1R5J01	1500nH	200	1	350	53K5163	0.17	0.13
● IMC0805ER1R8J01	1800nH	120	1.05	350	53K5164	0.17	0.13
● IMC0805ER2R2J01	2200nH	100	1.15	320	53K5170	0.17	0.13
● IMC0805ER2R7J01	2700nH	100	1.25	320	53K5171	0.18	0.14
● IMC0805ER3R3J01	3300nH	70	1.45	300	53K5175	0.19	0.15
● IMC0805ER4R7J01	4700nH	50	1.75	270	53K5178	0.19	0.15
● IMC0805ER100J01	10000nH	40	3.15	150	53K5166	0.63	0.35
1008							
● IMC1008ER10NJ	10nH	4300	0.08	600	53K5203	0.17	0.13
● IMC1008ER12NJ	12nH	3600	0.08	600	53K5204	0.17	0.13
● IMC1008ER27NJ	27nH	1800	0.1	600	53K5209	0.13	0.12
● IMC1008ER33NJ	33nH	1700	0.1	600	53K5212	0.17	0.13

➤CONTINUED➤

IMC SERIES HIGH-FREQUENCY MOLDED INDUCTORS (CONT.)

Mfg. Part No.	L (Induct.)	SRF (MHz)	DCR Max. (Ω)	I_{DC} (mA)	Tape Cut Stock No.	Price Each 1-49	Price Each 50-99
1008							
● IMC1008ER47NJ	47nH	1500	0.1	600	53K5215	0.17	0.13
● IMC1008ERR18J	180nH	800	0.33	500	53K5190	0.17	0.13
● IMC1008ERR22J	220nH	730	0.45	500	53K5191	0.17	0.13
● IMC1008ERR27J	270nH	650	0.75	500	53K5192	0.17	0.13
● IMC1008ERR33J	330nH	570	0.9	500	53K5193	0.18	0.14
● IMC1008ERR39J	390nH	530	1.2	400	53K5194	0.17	0.13
● IMC1008ERR47J	470nH	480	1.3	400	53K5195	0.13	0.12
● IMC1008ERR68J	680nH	380	2.45	200	53K5197	0.13	0.12
● IMC1008ER2R2J	2200nH	105	1.55	200	53K5207	0.18	0.14
● IMC1008ER3R9J	3900nH	48	2.1	180	53K5211	0.18	0.14
● IMC1008ER4R7J	4700nH	43	2.3	175	53K5214	0.13	0.13
1210							
● IMC1210ERR10K	0.1µH	700	0.44	450	53K5220	0.38	0.31
● IMC1210ERR15K	0.15µH	450	0.25	548	53K5222	0.38	0.31
● IMC1210ERR27K	0.27µH	320	0.36	456	53K5225	0.38	0.31
● IMC1210ERR39K	0.39µH	250	0.45	450	53K5227	0.38	0.31
● IMC1210ERR56K	0.56µH	180	0.55	450	53K5229	0.38	0.31
● IMC1210ER1R0K	1µH	120	0.7	400	53K5232	0.41	0.33
● IMC1210ER1R5K	1.5µH	85	0.85	370	53K5233	0.38	0.31
● IMC1210ER2R2K	2.2µH	75	1	320	53K5237	0.38	0.31
● IMC1210ER3R3K	3.3µH	60	1.2	260	53K5238	0.38	0.31
● IMC1210ER4R7K	4.7µH	50	1.5	224	53K5239	0.38	0.31
● IMC1210ER6R8K	6.8µH	40	1.8	204	53K5243	0.38	0.31
● IMC1210ER100K	10µH	33	2.1	189	53K5234	0.63	0.51
● IMC1210ER470K	47µH	14	9	91	53K5241	0.43	0.35
● IMC1210ER101K	100µH	9	14	73	53K5236	0.43	0.35
1812							
● IMC1812ES100K	10µH	20	1.6	250	53K5249	0.40	0.32
● IMC1812ER150K	15µH	17	2.5	200	53K5247	0.62	0.50
● IMC1812ES121K	120µH	6	8	110	53K5251	0.42	0.40
● IMC1812ES221J	220µH	4	10	100	53K5254	0.68	0.55
● IMC1812ES681J	680µH	3	30	50	53K5259	0.72	0.58
● IMC1812ES102J	1000µH	2.5	40	30	53K5250	0.72	0.58
1812							
● IMC1812ER1R0K	1µH	100	0.5	450	41M0978	0.82	0.74
● IMC1812ER4R7K	4.7µH	35	1	315	67R4053	0.77	0.69
● IMC1812ER100K	10µH	20	1.6	250	67R4051	0.77	0.69
● IMC1812ES330K	33µH	11	4	160	18C6809	0.43	0.34
● IMC1812ER101K	100µH	8	8	110	67R4052	0.95	0.85
● IMC1812ES101K	100µH	8	8	110	18C6806	0.58	0.46

(16942)

(196527)

ISC SERIES SHIELDED MOLDED INDUCTORS

RoHS Compliant Available

VISHAY.

ISC series surface mount, molded, shielded inductors provide superior strength and moisture prevention. The shielded construction also minimizes coupling to other components. Compatible with vapor phase, infrared and wave soldering methods. Operating temperature: -55°C to +125°C.

Mfg. Part No.	L (Ind.) (µH)	SRF (MHz)	DCR_{max} (Ω)	I_{DC} (mA)	Tape Cut Stock No.	Tape Cut Price Each
ISC1210ERR10M	0.1	700	0.5	450	53K5298	0.35
ISC1210ERR56K	0.56	200	0.46	455	53K5316	0.33
ISC1210ERR68M	0.68	180	0.48	450	53K5318	0.35
ISC1210ER1R0K	1	120	0.6	400	53K5322	0.32
ISC1210ER2R7K	2.7	60	1	290	53K5342	0.32
ISC1210ER6R8K	6.8	40	1.6	205	53K5364	0.32
ISC1210ER100K	10	30	2	185	53K5330	0.32
ISC1210ER101K	100	6	12	80	53K5332	0.41
ISC1812ES1R2K	1.2	120	0.38	429	53K5398	0.35
ISC1812ES1R8K	1.8	90	0.43	403	53K5402	0.35
ISC1812ES3R3K	3.3	61	0.55	357	53K5434	0.37
ISC1812ES4R7K	4.7	50	0.62	336	53K5446	0.35
ISC1812ES100K	10	25	0.9	279	53K5404	0.35
ISC1812ES330K	33	12	1.72	202	53K5438	0.39
ISC1812ES101K	100	7	3.25	147	53K5406	0.39
ISC1812ES331K	330	3.7	7.54	96	53K5440	0.45
ISC1812ES471K	470	3.3	9.2	87	53K5450	0.67
ISC1812ES561K	560	2.8	10.5	82	53K5456	0.63
ISC1812ES102K	1000	2	16	66	53K5408	0.67

(73329)

MLO HI-Q SMD INDUCTORS

RoHS Compliant Available

AVX A KYOCERA GROUP COMPANY

Features
- High Q
- High SRF
- High Frequency
- Low DC Resistance
- 0402 Case Size

Applications
- Mobile communications
- Satellite Applications
- GPS
- Collision Avoidance
- Wireless LAN's

Mfr. Part No.	Iinductance (nH)	Ind. Tol.	Q Typ.	DC Res. (ohm)	Reson. Freq. (MHz)	Stock No.	Price Each 1-9
HLQ021R0BTTR	1	± 0.1nH	17	0.1	7	28W2906	0.64
HLQ021R1BTTR	1.1	± 0.1nH	17	0.1	7	28W2907	0.64
HLQ021R2BTTR	1.2	± 0.1nH	17	0.11	7	28W2908	0.64
HLQ021R3BTTR	1.3	± 0.1nH	17	0.13	7	28W2909	0.64
HLQ021R5BTTR	1.5	± 0.1nH	17	0.15	7	28W2910	0.64
HLQ021R6BTTR	1.6	± 0.1nH	17	0.15	7	28W2911	0.64
HLQ021R8BTTR	1.8	± 0.1nH	17	0.16	7	28W2912	0.64
HLQ022R0BTTR	2	± 0.1nH	17	0.18	7	28W2917	0.64
HLQ022R2BTTR	2.2	± 0.1nH	17	0.2	7	28W2918	0.64
HLQ022R4BTTR	2.4	± 0.1nH	17	0.2	7	28W2919	0.64
HLQ022R7BTTR	2.7	± 0.1nH	17	0.25	7	28W2920	0.64
HLQ023R0BTTR	3	± 0.1nH	17	0.3	7	28W2923	0.64
HLQ023R3BTTR	3.3	± 0.1nH	17	0.34	7	28W2924	0.64
HLQ023R6BTTR	3.6	± 0.1nH	17	0.35	7	28W2925	0.64
HLQ023R9BTTR	3.9	± 0.1nH	17	0.4	7	28W2926	0.64
HLQ024R7BTTR	4.7	± 0.1nH	17	0.48	7	28W2928	0.68
HLQ025R6BTTR	5.6	± 0.1nH	17	0.5	7	28W2929	0.68
HLQ026R8BTTR	6.8	± 0.1nH	17	0.6	7	28W2930	0.68
HLQ028R2BTTR	8.2	± 0.1nH	17	0.8	6	28W2931	0.68
HLQ02100HTTR	10	± 3%	17	1	5	28W2913	0.68
HLQ02120HTTR	12	± 3%	17	1.1	4	28W2914	0.68
HLQ02150HTTR	15	± 3%	17	1.2	4	28W2915	0.68
HLQ02180HTTR	18	± 3%	17	1.5	3	28W2916	0.68
HLQ02220HTTR	22	± 3%	17	1.9	3	28W2921	0.68
HLQ02270HTTR	27	± 3%	17	2.1	3	28W2922	0.68
HLQ02320HTTR	32	± 3%	17	2.2	2	28W2927	0.68

(210151)

SIMID SERIES SMD INDUCTORS

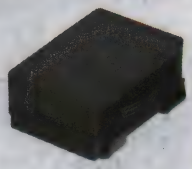
SMD

RoHS Compliant Available

EPCOS

Features
- High resonance frequency
- Close inductance tolerance
- Cubic coil with ceramic or ferrite core
- Epoxy-molded flat top for vacuum pickup
- Winding ends welded to terminals

Applications
- Antenna amplifiers
- Multimedia
- Wireless communication systems
- Car access systems
- Tire Pressure Monitoring System
- Global Positioning System



EIA SIZE 0805

Mfg. Part No.	Inductance µH	Inductance Tol.	Q Factor @ Frequency	I_{DC} (mA)	R_{DC} (Ω)	Res. Freq. (GHz)	Stock No.	Price Each 1-9999	Price Each 10000-24999
B82498F1682J	6.8	± 5%	20 @ 7.96MHz	80	4.7	0.14	69K9713	0.33	0.32
B82498F3829K	8.2	± 10%	50 @ 1000MHz	700	0.09	5	06J1077	0.80	0.71
B82498F3120J	12	± 5%	50 @ 500 MHz	700	0.09	4	06J1035	0.80	0.71
B82498F3180J	18	± 5%	60 @ 500MHz	700	0.08	3.3	65H8430	0.80	0.71
B82498F3270J	27	± 5%	60 @ 500MHz	700	0.09	2.5	06J1047	0.85	0.75
B82498F3390J	39	± 5%	65 @ 500MHz	600	0.12	2.1	06J1056	0.80	0.71
B82498F3560J	56	± 5%	60 @ 500MHz	600	0.14	1.7	06J1064	0.80	0.71
B82498F3121J	120	± 5%	50 @ 250 MHz	440	0.31	1.25	06J1037	0.83	0.73
B82498F3151J	150	± 5%	45 @ 250MHz	400	0.42	1.15	06J1040	0.80	0.71
B82498F3821J	820	± 5%	23 @ 50MHz	180	1.9	0.3	06J1076	0.80	0.71
EIA SIZE 1812									
B82432T1332K	3300	± 10%	10 @ 7.96MHz	900	0.19	50	06J0733	1.03	0.91

(177815)

SIMID 0805-F CERAMIC OR FERRITE CORE SMD INDUCTORS

RoHS Compliant Available

EPCOS

SMD

Features
- High resonance frequency
- Close inductance tolerance

Applications
- Antenna amplifiers
- Multimedia
- Wireless communication systems
- Car access systems
- TPMS (Tire Pressure Monitoring System)
- GPS (Global Positioning System)

Mfg. Part No.	Core	L (Induct.) (nH)	Q Factor	Test Freq. (MHz)	SRF (GHz)	I_{DC} (mA)	DCR (mΩ)	Stock No.	Price Each 1-9
B82498F3569K	Ceramic	5.6	50	250	7	900	0.04	06J1067	0.80
B82498F3100J	Ceramic	10	50	500	5	700	0.09	06J1031	0.28
B82498F3220J	Ceramic	22	60	500	2.5	700	0.08	65H8431	0.86
B82498F3470J	Ceramic	47	65	500	2	600	0.13	06J1060	0.80
B82498F3101J	Ceramic	100	55	500	1.35	450	0.28	06J1033	0.85
B82498F3150J	Ceramic	15	50	250	3.3	650	0.13	65H8426	0.80
B82498F3221J	Ceramic	220	45	250	0.95	320	0.7	06J1046	0.85
B82498F1222J	Ferrite	2200	20	7.96	0.33	130	1.6	43J3932	0.96

(147916)

NLV SERIES SMD SIGNAL LINE INDUCTORS

RoHS Compliant Available

TDK

Features:
- Excellent heat durability
- Good connection reliability
- Heat resistant thermoplastic package

Specifications:
- Operating temperature: -40°C to +105°C

Mfg. Part No.	Inductance µH	Inductance Tol.	I_{DC} (mA)	R_{DC} (Ω)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape & Reel Stock No.	Tape & Reel Reel Qty	Tape & Reel Price Each 1-1999
NLV32T-010J-PF	10nH	± 5%	450	0.13	89R9027	0.28	91R2416	2000	0.10
NLV32T-R15J-PF	150nH	± 5%	450	0.25	89R9017	0.28	99R3651	2000	0.10
NLV32T-R22J-PF	220nH	± 5%	450	0.32	89R9019	0.28	99R3652	2000	0.10
NLV32T-R33J-PF	330nH	± 5%	450	0.4	89R9021	0.28	91R2413	2000	0.11
NLV32T-R47J-PF	470nH	± 5%	450	0.5	89R9023	0.28	99R3653	2000	0.10
NLV32T-R56J-PF	560nH	± 5%	450	0.55	89R9024	0.28	91R2414	2000	0.10
NLV32T-R68J-PF	680nH	± 5%	450	0.6	89R9025	0.28	91R2415	2000	0.10
NLV25T-R68J-PF	680nH	± 5%	300	0.85	89R8976	0.28	91R2400	2000	0.10
NLV25T-1R0J-PF	1µH	± 5%	245	1.1	89R8990	0.28	91R2401	2000	0.10
NLV32T-1R0J-PF	1µH	± 5%	400	0.7	89R9039	0.28	91R2417	2000	0.10
NLV25T-1R2J-PF	1.2µH	± 5%	230	1.2	89R8991	0.28	91R2402	2000	0.10
NLV25T-1R5J-PF	1.5µH	± 5%	220	1.3	89R8992	0.28	91R2403	2000	0.10
NLV32T-1R5J-PF	1.5µH	± 5%	370	0.85	89R9041	0.28	91R2418	2000	0.10
NLV25T-1R8J-PF	1.8µH	± 5%	210	1.45	89R8993	0.28	91R2404	2000	0.10
NLV25T-2R2J-PF	2.2µH	± 5%	200	1.55	89R8999	0.28	91R2407	2000	0.10
NLV32T-2R2J-PF	2.2µH	± 5%	320	1	89R9051	0.28	91R2419	2000	0.10
NLV32T-3R3J-PF	3.3µH	± 5%	260	1.2	89R9057	0.28	91R2420	2000	0.10
NLV25T-3R9J-PF	3.9µH	± 5%	180	2.1	05X0445	0.28	89R9004	2000	0.10
NLV25T-4R7J-PF	4.7µH	± 5%	175	2.3	89R9007	0.28	91R2410	2000	0.10
NLV32T-4R7J-PF	4.7µH	± 5%	220	1.5	89R9063	0.28	99R3665	2000	0.10

CONTINUED

NLV SERIES SMD SIGNAL LINE INDUCTORS (CONT.)

Mfg. Part No.	Inductance µH	Inductance Tol.	I_{DC} (mA)	R_{DC} (Ω)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape & Reel Stock No.	Tape & Reel Reel Qty	Tape & Reel Price Each 1-1999
● NLV25T-6R8J-PF	6.8µH	± 5%	165	2.7	89R9011	0.28	91R2412	2000	0.10
● NLV32T-100J-PF	10µH	± 5%	150	2.1	89R9043	0.28	99R3658	2000	0.10
● NLV25T-100J-PF	10µH	± 5%	155	3.5	89R8994	0.28	91R2405	2000	0.10
● NLV25T-220J-PF	22µH	± 5%	125	5.5	89R9001	0.28	91R2408	2000	0.10
● NLV32T-220J-PF	22µH	± 5%	110	3.7	89R9053	0.28	99R3662	2000	0.10
● NLV25T-330J-PF	33µH	± 5%	110	7.1	89R9005	0.28	91R2409	2000	0.10
● NLV25T-470J-PF	47µH	± 5%	80	11.1	89R9008	0.28	91R2411	2000	0.10
● NLV32T-470J-PF	47µH	± 5%	60	7	89R9064	0.28	99R3666	2000	0.10
● NLV32T-101J-PF	100µH	± 5%	40	10	89R9044	0.28	99R3659	2000	0.10
● NLV25T-101J-PF	100µH	± 5%	60	21	89R8995	0.28	91R2406	2000	0.10
● NLV32T-221J-PF	220µH	± 5%	50	21	89R9054	0.28	99R3663	2000	0.11
● NLV32T-471J-PF	470µH	± 5%	25	40	89R9065	0.28	99R3667	2000	0.10

(194440)

LOW INDUCTANCE HIGH FREQUENCY CHIP INDUCTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

SMD

Features
- Choice of four package sizes
- Wire wound construction
- Smooth top aids placement
- High Q factor
- High S.R.F

Specifications
- Operating temperature: -40°C to +125°C

0402

Mfg. Part No.	Inductance nH	Inductance Tol.	I_{DC} (mA)	R_{DC} (Ω)	Stock No.	Price Each 1-49	Price Each 50-99
● 36501E1N0KTDG	1	± 10%	1.36	0.045	35M1358	0.58	...
● 36501E2N2JTDG	2.2	± 5%	960	0.07	51R8629	0.58	0.50
● 36501E2N2JTDG	2.2	± 5%	960	0.07	35M1369	0.58	...
● 36501E2N7JTDG	2.7	± 5%	640	0.12	51R8630	0.58	0.50
● 36501E3N9JTDG	3.9	± 5%	840	0.066	51R8631	0.58	0.50
● 36501E3N9JTDG	3.9	± 5%	840	0.066	35M1379	0.58	...
● 36501E4N7JTDG	4.7	± 5%	640	0.13	35M1385	0.58	...
● 36501E6N8JTDG	6.8	± 5%	680	0.083	35M1393	0.58	...
● 36501E5N6J	5.6	± 5%	760	0.083	18R3852	0.58	0.50
● 36501E8N2J	8.2	± 5%	680	0.104	18R3853	0.40	0.37
● 36501E10NJ	10	± 5%	480	0.195	18R3846	0.58	0.50
● 36501E10NJTDG	10	± 5%	480	0.195	35M1360	0.63	0.57
● 36501E12NJTDG	12	± 5%	640	0.12	35M1362	0.63	0.57
● 36501E12NJ	12	± 5%	640	0.12	18R3847	0.58	0.50
● 36501E15NJ	15	± 5%	560	0.172	18R3848	0.58	0.51
● 36501E18NJTDG	18	± 5%	420	0.23	35M1366	0.58	...
● 36501E22NJTDG	22	± 5%	400	0.3	35M1373	0.58	...
● 36501E27NJTDG	27	± 5%	400	0.3	35M1376	0.63	0.57
● 36501E30NJTDG	30	± 5%	400	0.35	51R8632	0.63	0.54
● 36501E33NJTDG	33	± 5%	400	0.35	35M1381	0.58	...
● 36501E36NJ	36	± 5%	320	0.44	18R3850	0.58	0.50
● 36501E39NJTDG	39	± 5%	200	0.55	51R8633	0.58	0.50
EIA SIZE 0603							
● 36501J1N6JTDG	1.6	± 5%	700	0.04	51R8638	0.49	0.43
● 36501J1N6JTDG	1.6	± 5%	700	0.04	35M1410	0.49	...
● 36501J1N8JTDG	1.8	± 5%	700	0.045	55R0310	0.33	0.31
● 36501J2N2JTDG	2.2	± 5%	700	0.1	35M1418	0.49	...
● 36501J3N3JTDG	3.3	± 5%	700	0.08	35M1423	0.50	...
● 36501J3N6JTDG	3.6	± 5%	700	0.063	35M1424	0.49	...
● 36501J3N9JTDG	3.9	± 5%	700	0.08	35M1425	0.49	...
● 36501J4N7JTDG	4.7	± 5%	700	0.12	35M1431	0.49	...
● 36501J5N6JTDG	5.6	± 5%	700	0.17	19R4660	0.49	0.43
● 36501J7N5JTDG	7.5	± 5%	700	0.11	35M1440	0.47	0.42
● 36501J010JTDG	10	± 5%	700	0.13	35M1412	0.47	0.42
● 36501J012JTDG	12	± 5%	700	0.13	35M1414	0.47	0.42
● 36501J15NJTDG	15	± 5%	700	0.17	35M1415	0.55	...
● 36501J16NJTDG	16	± 5%	700	0.11	51R8639	0.49	0.43
● 36501J18NJTDG	18	± 5%	700	0.17	19R7942	0.34	0.32
● 36501J022JTDG	22	± 5%	700	0.19	35M1419	0.47	0.42
● 36501J027JTDG	27	± 5%	600	0.22	35M1422	0.47	0.42
● 36501J039JTDG	39	± 5%	600	0.25	35M1429	0.50	0.45
● 36401J47NGTDF	47	± 2%	200	3	14N7858	0.31	0.29
● 36501J068JTDG	68	± 5%	600	0.34	35M1439	0.50	0.45
● 36501J82NJTDG	82	± 5%	400	0.54	35M1444	0.47	0.42
● 36501JR12JTDG	120	± 5%	300	0.65	35M1402	0.50	0.45
● 36501JR15JTDG	150	± 5%	280	0.95	35M1403	0.55	...
● 36501JR18JTDG	180	± 5%	250	1.4	35M1404	0.55	...
● 36501JR22JTDG	220	± 5%	250	1.6	35M1405	0.55	...

➤ CONTINUED ➤

LOW INDUCTANCE HIGH FREQUENCY CHIP INDUCTORS (CONT.)

Mfg. Part No.	Inductance nH	Inductance Tol.	I_{DC} (mA)	R_{DC} (Ω)	Stock No.	Price Each 1-49	Price Each 50-99
EIA SIZE 0603							
● 36501JR27JTDG	270	± 5%	200	2.1	35M1407	0.49	...
● 36501JR33JTDG	330	± 5%	100	3.8	35M1408	0.55	...
● 36501JR39JTDG	390	± 5%	100	4.35	35M1409	0.49	...
● 36501JR10J	100	± 5%	400	0.58	18R3854	0.49	0.43
● 36501JR11JTDG	110	± 5%	300	0.61	51R8634	0.49	0.43
● 36501JR12J	120	± 5%	300	0.65	16R9047	0.49	0.43
● 36501JR27JTDG	270	± 5%	200	2.1	51R8635	0.49	0.43
● 36501JR33JTDG	330	± 5%	100	3.8	51R8636	0.49	0.43
● 36501JR39JTDG	390	± 5%	100	4.35	51R8637	0.49	0.43
EIA SIZE 0805							
● 36502A3N3JTDG	3.3	± 5%	600	0.08	51R8647	0.56	0.49
● 36502A5N6JTDG	5.6	± 5%	600	0.08	51R8648	0.56	0.49
● 36502A6N8JTDG	6.8	± 5%	600	0.11	35M1490	0.58	...
● 36502A10NJTDG	10	± 5%	600	0.1	35M1471	0.56	...
● 36502A10NJTDG	10	± 5%	600	0.1	51R8644	0.56	0.49
● 36502A15NJTDG	15	± 5%	600	0.17	35M1473	0.56	...
● 36502A18NJTDG	18	± 5%	600	0.2	35M1474	0.58	...
● 36502A27NJTDG	27	± 5%	500	0.25	35M1480	0.56	...
● 36502A27NJTDG	27	± 5%	500	0.25	51R8646	0.56	0.49
● 36502A39NJTDG	39	± 5%	500	0.29	35M1485	0.56	...
● 36502A56NJTDG	56	± 5%	500	0.34	35M1489	0.56	...
● 36502A82NJTDG	82	± 5%	400	0.42	35M1496	0.58	...
● 36502AR11JTDG	110	± 5%	400	0.48	35M1447	0.56	...
● 36502AR12JTDG	120	± 5%	400	0.51	35M1448	0.56	...
● 36502AR15JTDG	150	± 5%	400	0.56	35M1449	0.56	...
● 36502AR18JTDG	180	± 5%	400	0.64	35M1450	0.56	...
● 36502AR22JTDG	220	± 5%	400	0.7	35M1452	0.62	...
● 36502AR56JTDG	560	± 5%	210	1.9	35M1462	0.56	...
● 36502AR68JTDG	680	± 5%	190	2.2	35M1464	0.56	...
● 36502AR10JTDG	100	± 5%	400	0.46	51R8640	0.56	0.49
● 36502AR12JTDG	120	± 5%	400	0.51	51R8641	0.56	0.49
● 36502AR27JTDG	270	± 5%	350	1	51R8642	0.56	0.49
● 36502AR33JTDG	330	± 5%	310	1.4	51R8643	0.56	0.49
● 36502A2R7JTDG	2700	± 5%	150	2.95	51R8645	0.58	0.50
● 36502A1R0JTDG	1000	± 5%	170	2.5	35M1467	0.56	...
● 36502A1R2JTDG	1200	± 5%	170	2.5	35M1468	0.56	...
● 36502A2R2JTDG	2200	± 5%	160	2.7	35M1476	0.56	...
EIA SIZE 1008							
● 36502C10NJTDG	10	± 5%	1000	0.08	55R0352	0.43	0.40
● 36502C22NJTDG	22	± 5%	1000	0.12	35M1530	0.63	...
● 36502C47NJTDG	47	± 5%	1000	0.16	35M1538	0.63	...
● 36502C68NJTDG	68	± 5%	1000	0.2	35M1544	0.63	...
● 36502CR12JTDG	120	± 5%	650	0.63	35M1499	0.63	...
● 36502CR18JTDG	180	± 5%	620	0.77	35M1501	0.63	...
● 36502CR47JTDG	470	± 5%	470	1.19	35M1510	0.63	...
● 36502CR56JTDG	560	± 5%	400	1.33	35M1511	0.63	...
● 36502CR68JTDG	680	± 5%	400	1.47	35M1513	0.63	...
● 36502C1R5JTDG	1500	± 5%	330	2.3	35M1519	0.63	...
● 36502C103JTDG	10000	± 5%	150	9	51R8649	0.63	0.55

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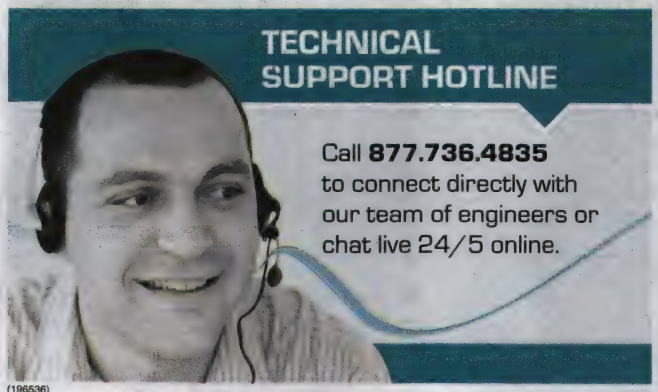

(196536)

MCWL SERIES WIRE WOUND CHIP INDUCTORS

RoHS Compliant Available

multicomp SMD

Features:
- Ceramic base provide high SRF
- Ultra-compact inductors provide high Q factors
- Low profile, high current are available
- Miniature SMD chip inductor for fully automated assembly
- Outstanding endurance from Pull-up force, mechanical shock and pressure
- Tighter tolerance down to ±2%
- Smaller size of 0402 (1005)

Applications:
- RF Products
- Broad Band Applications
- IT Applications

Mfg. Part No.	Inductance nH	Inductance Tol.	I_{DC} (mA)	SRF (GHz)	Tape Cut Stock No.	Tape Cut Price Each 1-49	Tape & Reel Stock No.	Tape & Reel Reel Qty.	Tape & Reel Price 1-3999
MCWL02 - 0402 CASE									
MCWL02KT2N2	2.2	± 5%	960	10.8	20T1005	0.20	20T1006	4000	0.12
MCWL02JT5N6	5.6	± 5%	760	4.8	20T1001	0.20	20T1002	4000	0.12
MCWL02JT6N2	6.2	± 5%	760	4.8	20T1003	0.20	20T1004	4000	0.12
MCWL03 - 0603 CASE									
MCWL03KT1N6	1.6	± 10%	700	12.5	20T1025	0.38	20T1026	4000	0.06
MCWL03KT1N8	1.8	± 10%	700	12.5	20T1027	0.38	20T1028	4000	0.06
MCWL03KT3N3	3.3	± 10%	700	6	20T1029	0.38	20T1030	4000	0.06
MCWL03KT4N3	4.3	± 10%	700	5.8	20T1031	0.38	20T1032	4000	0.06
MCWL03KT4N7	4.7	± 10%	700	5.8	20T1033	0.38	20T1034	4000	0.06
MCWL03KT5N1	5.1	± 10%	700	5.8	20T1035	0.38	20T1036	4000	0.06
MCWL03KT5N6	5.6	± 10%	700	5.8	20T1037	0.38	20T1038	4000	0.06
MCWL03JT8N7	8.7	± 5%	700	4.8	20T1023	0.38	20T1024	4000	0.06
MCWL03JT11N	11	± 5%	700	4	20T1009	0.38	20T1010	4000	0.06
MCWL03JT16N	16	± 5%	700	3.3	20T1011	0.38	20T1012	4000	0.06
MCWL03JT23N	23	± 5%	700	2.85	20T1013	0.38	20T1014	4000	0.06
MCWL03JT24N	24	± 5%	700	2.8	20T1015	0.38	20T1016	4000	0.06
MCWL03JT30N	30	± 5%	600	2.8	20T1017	0.38	20T1018	4000	0.06
MCWL03JT36N	36	± 5%	600	2.3	20T1019	0.38	20T1020	4000	0.06
MCWL03JT51N	51	± 5%	600	1.9	20T1021	0.38	20T1022	4000	0.06
MCWL03JTR11	110	± 5%	300	1.35	20T1007	0.38	20T1008	4000	0.06
MCWL05 - 0805 CASE									
MCWL05JT2N8	2.8	± 5%	800	7.9	20T1049	0.38	20T1050	2000	0.06
MCWL05JT3N3	3.3	± 5%	600	6	20T1051	0.38	20T1052	2000	0.06
MCWL05JT6N8	6.8	± 5%	600	5.5	20T1053	0.38	20T1054	2000	0.06
MCWL05KT10N	10	± 10%	600	4.2	20T1073	0.07	20T1074	2000	0.06
MCWL05KT18N	18	± 10%	600	3.3	20T1075	0.38	20T1076	2000	0.06
MCWL05KT22N	22	± 10%	500	2.6	20T1077	0.38	20T1078	2000	0.06
MCWL05GT33N	33	± 2%	500	2.05	20T1043	0.46	20T1044	2000	0.08
MCWL05KT33N	33	± 10%	500	2.05	20T1079	0.14	20T1080	2000	0.08
MCWL05GT43N	43	± 2%	500	1.65	20T1045	0.46	20T1046	2000	0.08
MCWL05KT47N	47	± 10%	500	1.65	20T1081	0.38	20T1082	2000	0.06
MCWL05GT56N	56	± 2%	500	1.55	20T1047	0.46	20T1048	2000	0.08
MCWL05KT56N	56	± 10%	500	1.55	20T1083	0.38	20T1084	2000	0.06
MCWL05KT68N	68	± 10%	500	1.45	20T1085	0.38	20T1086	2000	0.06
MCWL05KT82N	82	± 10%	400	1.3	20T1087	0.14	20T1088	2000	0.08
MCWL05KTR10	100	± 10%	400	1.2	20T1057	0.07	20T1058	2000	0.06
MCWL05KTR18	180	± 10%	400	0.87	20T1059	0.38	20T1060	2000	0.06
MCWL05KTR22	220	± 10%	400	0.85	20T1061	0.38	20T1062	2000	0.06
MCWL05GTR27	270	± 2%	350	0.65	20T1039	0.46	20T1040	2000	0.08
MCWL05KTR27	270	± 10%	350	0.65	20T1063	0.14	20T1064	2000	0.08
MCWL05GTR33	330	± 2%	310	0.6	20T1041	0.46	20T1042	2000	0.08
MCWL05KTR33	330	± 10%	310	0.6	20T1065	0.14	20T1066	2000	0.08
MCWL05KTR47	470	± 10%	250	0.375	20T1067	0.14	20T1068	2000	0.08
MCWL05KTR68	680	± 10%	190	0.2	20T1069	0.38	20T1070	2000	0.06
MCWL05KT1R0	1	± 10%	170	0.1	20T1071	0.38	20T1072	2000	0.06
MCWL06 - 1206 CASE									
MCWL06KT6N8	6.8	± 10%	1000	5.5	20T1105	0.45	20T1106	2000	0.22
MCWL06KT10N	10	± 10%	1000	4	20T1095	0.45	20T1096	2000	0.22
MCWL06KT15N	15	± 10%	1000	3.2	20T1097	0.45	20T1098	2000	0.22
MCWL06KT22N	22	± 10%	1000	2.2	20T1099	0.45	20T1100	2000	0.22
MCWL06KT33N	33	± 10%	1000	1.8	20T1101	0.45	20T1102	2000	0.22
MCWL06KT47N	47	± 10%	1000	1.5	20T1103	0.45	20T1104	2000	0.22
MCWL06KT68N	68	± 10%	950	1.2	20T1107	0.45	20T1108	2000	0.22
MCWL06KTR10	100	± 10%	850	1.1	20T1091	0.45	20T1092	2000	0.22
MCWL06KT1R0	1	± 10%	320	0.4	20T1093	0.45	20T1094	2000	0.22
MCWL06JT1R2	1.2	± 5%	300	0.38	20T1089	0.45	20T1090	2000	0.22
MCWL08 - 1008 CASE									
MCWL08KT22N	22	± 10%	1000	2.4	20T1145	0.38	20T1146	2000	0.06
MCWL08GT33N	33	± 2%	1000	1.6	20T1113	0.47	20T1114	2000	0.08
MCWL08KT39N	39	± 10%	1000	1.5	20T1149	0.07	20T1150	2000	0.06
MCWL08GTR10	100	± 2%	650	1	20T1109	0.47	20T1110	2000	0.08
MCWL08KTR22	220	± 10%	500	0.7	20T1137	0.07	20T1138	2000	0.06
MCWL08JTR33	330	± 5%	450	0.57	20T1117	0.38	20T1118	2000	0.06
MCWL08JTR39	390	± 5%	630	0.5	20T1119	0.38	20T1120	2000	0.06

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MCWL SERIES WIRE WOUND CHIP INDUCTORS (CONT.)

Mfg. Part No.	Inductance nH	Inductance Tol.	I_{DC} (mA)	SRF (GHz)	Tape Cut Stock No.	Tape Cut Price Each 1-49	Tape & Reel Stock No.	Tape & Reel Reel Qty.	Tape & Reel Price 1-3999
MCWL08 - 1008 CASE									
MCWL08JTR47	470	± 5%	470	0.45	20T1121	0.07	20T1122	2000	0.06
MCWL08JTR56	560	± 5%	580	0.415	20T1123	0.38	20T1124	2000	0.06
MCWL08JTR62	620	± 5%	300	0.375	20T1125	0.14	20T1126	2000	0.08
MCWL08GTR68	680	± 2%	540	0.375	20T1111	0.47	20T1112	2000	0.08
MCWL08JTR68	680	± 5%	540	0.375	20T1127	0.38	20T1128	2000	0.06
MCWL08JTR82	820	± 5%	400	0.35	20T1129	0.38	20T1130	2000	0.06
MCWL08JTR91	910	± 5%	380	0.32	20T1131	0.38	20T1132	2000	0.06
MCWL08JT1R0	1	± 5%	370	0.29	20T1133	0.07	20T1134	2000	0.06
MCWL08KT1R0	1	± 10%	370	0.29	20T1139	0.38	20T1140	2000	0.06
MCWL08KT1R5	1.5	± 10%	330	0.2	20T1141	0.38	20T1142	2000	0.06
MCWL08KT2R2	2.2	± 10%	280	0.16	20T1143	0.14	20T1144	2000	0.08
MCWL08KT3R3	3.3	± 10%	290	0.11	20T1147	0.38	20T1148	2000	0.06
MCWL08JT4R7	4.7	± 5%	260	0.9	20T1135	0.38	20T1136	2000	0.06

(1195689)

SDC SERIES INDUCTORS

RoHS Compliant Available

multicomp

Features:
- Ferrite based SMD Inductor with lower core loss
- Inductance Range: 1.5µH to 15000µH
- High current output chokes, up to 10 Amps with max. 10% roll off
- Low profile

Applications:
- LCD driver
- DSC/DVC
- Notebook PC
- High density board design

Mfg. Part No.	Induct. (µH)	Q	Test Freq. (MHz)	Self Reson. Freq. (MHz)	DCR (ohm)	DC Current (Arms)	Stock No.	Price Each 1-99
MCSDC 0503 Series								
MCSDC0503-100MU	10	10	2.52	30	0.13	1.3	75R0017	0.31
MCSDC0503-150MU	15	20	2.52	27	0.19	1.05	75R0021	0.29
MCSDC0503-470KU	47	20	2.52	14	0.6	0.75	75R0027	0.29
MCSDC0503-101KU	100	40	0.796	9	0.4	0.48	75R0018	0.31
MCSDC0503-221KU	220	35	0.796	6	0.25	0.34	75R0023	0.29
MCSDC0503-331KU	330	30	0.796	5	0.21	0.28	75R0025	0.29
MCSDC0503-471KU	470	30	0.796	5	0.18	0.22	75R0028	0.29
MCSDC0503-681KU	680	30	0.796	4	0.14	0.16	75R0029	0.29
MCSDC0503-102KU	1000	40	0.252	3	0.11	0.135	75R0019	0.31
MCSDC0503-222JU	2200	40	0.252	2	0.53	0.07	75R0024	0.29
MCSDC0503-332JU	3300	40	0.252	2	0.045	0.062	75R0026	0.29
MCSDC0503-103JU	10000	40	0.0796	1	0.027	0.04	75R0020	0.31
MCSDC0503-153JU	15000	40	0.0796	1	0.02	0.032	75R0022	0.29
MCSDC 0603 Series								
MCSDC0603-2R5MU	2.5	21	7.96	74	0.05	2.35	75R0031	0.31
MCSDC0603-3R9MU	3.9	22	7.96	62	0.05	2.1	75R0032	0.29
MCSDC0603-150MU	15	22	2.52	28	0.18	0.93	75R0030	0.31
MCSDC0603-560KU	56	17	2.52	12	0.62	0.48	75R0033	0.31
MCSDC 0604 Series								
MCSDC0604-1R5MU	1.5	35	7.96	108	0.03	3.6	75R0034	0.29
MCSDC0604-2R2MU	2.2	33	7.96	79	0.06	2.8	75R0039	0.29
MCSDC0604-3R3MU	3.3	22	7.96	60	0.07	2	75R0041	0.31
MCSDC0604-4R7MU	4.7	20	7.96	34	0.08	1.8	75R0043	0.29
MCSDC0604-100MU	10	30	2.52	23	0.1	1.45	75R0035	0.29
MCSDC0604-150YU	15	30	2.52	20	0.14	1.3	75R0037	0.29
MCSDC0604-220YU	22	30	2.52	16	0.19	1.1	75R0040	0.31
MCSDC0604-470KU	47	22	2.52	12	0.37	0.72	75R0044	0.29
MCSDC0604-101KU	100	20	0.796	9	0.7	0.48	75R0036	0.29
MCSDC0604-151KU	150	20	0.796	6	1.1	0.4	75R0038	0.29
MCSDC0604-331KU	330	25	0.796	3	2.25	0.27	75R0042	0.29
MCSDC 0805 Series								
MCSDC0805-100MU	10	25	2.52	22	0.07	2.3	75R0045	0.34
MCSDC0805-150MU	15	25	2.52	16	0.09	1.8	75R0047	0.34
MCSDC0805-180MU	18	20	2.52	15	0.1	1.6	75R0048	0.34
MCSDC0805-220MU	22	20	2.52	13	0.11	1.5	75R0049	0.37
MCSDC0805-270KU	27	20	2.52	12	0.12	1.3	75R0051	0.34
MCSDC0805-330KU	33	15	2.52	10	0.14	1.2	75R0052	0.34
MCSDC0805-470KU	47	15	2.52	9	0.2	1	75R0054	0.34
MCSDC0805-680KU	68	15	2.52	8	0.3	0.85	75R0056	0.34
MCSDC0805-101KU	100	12	0.796	7	0.45	0.72	75R0046	0.34
MCSDC0805-221KU	220	12	0.796	5	0.96	0.49	75R0050	0.34
MCSDC0805-331KU	330	12	0.796	4	1.26	0.4	75R0053	0.34
MCSDC0805-471KU	470	12	0.796	4	1.96	0.34	75R0055	0.34

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SDC SERIES INDUCTORS (CONT.)

MCSDC 0906 Series

Mfg. Part No.	Induct. (µH)	Q	Test Freq. (MHz)	Self Reson. Freq. (MHz)	DCR (ohm)	DC Current (Arms)	Stock No.	Price Each 1-99
MCSDC0906-270KU	27	35	2.52	15	0.15	1.4	75R0057	0.41
MCSDC0906-330KU	33	35	2.52	14	0.18	1.25	75R0058	0.41
MCSDC0906-680KU	68	20	2.52	10	0.31	1	75R0059	0.41
MCSDC 1006 Series								
MCSDC1006-1R5MU	1.5	35	7.96	105	0.018	6.4	75R0060	0.52
MCSDC1006-3R3MU	3.3	34	7.96	55	0.024	5	75R0072	0.52
MCSDC1006-4R7MU	4.7	33	7.96	40	0.036	4	75R0076	0.52
MCSDC1006-6R8MU	6.8	33	7.96	32	0.044	3.4	75R0080	0.52
MCSDC1006-120MU	12	30	2.52	20	0.07	2.45	75R0063	0.52
MCSDC1006-150MU	15	30	2.52	16	0.08	2.25	75R0064	0.52
MCSDC1006-180MU	18	30	2.52	15	0.09	2.15	75R0067	0.52
MCSDC1006-220MU	22	25	2.52	13	0.1	1.95	75R0068	0.52
MCSDC1006-330KU	33	25	2.52	10	0.12	1.5	75R0073	0.52
MCSDC1006-470KU	47	20	2.52	8	0.17	1.25	75R0077	0.52
MCSDC1006-560KU	56	20	2.52	7.5	0.19	1.15	75R0079	0.52
MCSDC1006-680KU	68	15	2.52	7	0.22	1.1	75R0081	0.52
MCSDC1006-101KU	100	15	0.796	5.2	0.35	0.97	75R0061	0.52
MCSDC1006-151KU	150	15	0.796	4.5	0.47	0.78	75R0065	0.52
MCSDC1006-221KU	220	12	0.796	3.8	0.73	0.66	75R0069	0.52
MCSDC1006-271KU	270	12	0.796	3.5	0.97	0.57	75R0070	0.52
MCSDC1006-331KU	330	12	0.796	3.2	1.15	0.52	75R0074	0.52
MCSDC1006-471KU	470	12	0.796	2.5	1.48	0.42	75R0078	0.52
MCSDC1006-681KU	680	12	0.796	2.1	2.25	0.28	75R0082	0.52
MCSDC1006-821KU	820	10	0.796	2	2.55	0.24	75R0083	0.52
MCSDC1006-102KU	1000	30	0.252	1.9	3.1	0.23	75R0062	0.52
MCSDC1006-152KU	1500	31	0.252	1.7	5	0.19	75R0066	0.52
MCSDC1006-332KU	3300	32	0.252	1.3	13.5	0.12	75R0075	0.52

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NL SERIES WOUND CHIP INDUCTORS

RoHS Compliant Available

multicomp

Features:
- Resistant to mechanical shocks and pressures
- Accurate dimensions for automatically surface mounted
- Low resistance and high current, suitable for power line applications

Applications:
- Video cameras
- Automobile audio systems
- Computer products and peripherals
- LCD's

MCNL 32252 Series

Mfg. Part No.	L (Induct.) µH	Ind. Tol.	DC Current Rating (mA)	Self Resonant Frequency (MHz)	Stock No.	Price Each 1-249
MCNL322522B2-R10K	0.1	± 10%	...	...	74R9931	0.33
MCNL322522B2-1R5K	1.5	± 10%	370	85	74R9932	0.33
MCNL322522B2-3R3K	3.3	± 10%	260	60	74R9935	0.33
MCNL322522B2-4R7K	4.7	± 10%	220	50	74R9936	0.33
MCNL322522B2-150K	15	± 10%	130	20	74R9933	0.33
MCNL322522B2-220K	22	± 10%	110	20	74R9934	0.33
MCNL322522B2-470K	47	± 10%	60	15	74R9937	0.33
MCNL322522B2-680K	68	± 10%	50	12	74R9938	0.33
MCNL 45323 Series						
MCNL453232-R10M	0.1	± 10%	800	300	74R9939	0.35
MCNL453232-R15M	0.15	± 10%	770	250	74R9940	0.35
MCNL453232-R27M	0.27	± 10%	635	180	74R9941	0.35
MCNL453232-R39M	0.39	± 10%	575	150	74R9942	0.35
MCNL453232-R47M	0.47	± 10%	545	145	74R9943	0.35
MCNL453232-R56M	0.56	± 10%	520	140	74R9944	0.35
MCNL453232-R68M	0.68	± 10%	500	135	74R9945	0.35
MCNL453232-1R5K	1.5	± 10%	410	70	74R9946	0.35
MCNL453232-2R2K	2.2	± 10%	380	60	74R9952	0.35
MCNL453232-2R7K	2.7	± 10%	370	50	74R9953	0.35
MCNL453232-3R3K	3.3	± 10%	355	45	74R9956	0.35
MCNL453232-3R9K	3.9	± 10%	330	40	74R9957	0.35
MCNL453232-5R6K	5.6	± 10%	300	33	74R9961	0.35
MCNL453232-6R8K	6.8	± 10%	285	27	74R9963	0.35
MCNL453232-8R2K	8.2	± 10%	270	25	74R9965	0.35
MCNL453232-100K	10	± 10%	...	...	74R9948	0.45
MCNL453232-150K	15	± 10%	200	17	74R9949	0.35
MCNL453232-270K	27	± 10%	170	12	74R9954	0.35
MCNL453232-330K	33	± 10%	160	11	74R9958	0.35
MCNL453232-560K	56	± 10%	135	9	74R9962	0.35

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NL SERIES WOUND CHIP INDUCTORS (CONT.)

MCNL 45323 Series

Mfg. Part No.	L (Induct.) µH	Ind. Tol.	DC Current Rating (mA)	Self Resonant Frequency (MHz)	Stock No.	Price Each 1-249
MCNL453232-820K	82	± 10%	120	8	74R9966	0.35
MCNL453232-101K	100	± 10%	110	8	74R9947	0.38
MCNL453232-151K	150	± 10%	105	5	74R9950	0.45
MCNL453232-181K	180	± 10%	102	5	74R9951	0.35
MCNL453232-271K	270	± 10%	92	4	74R9955	0.35
MCNL453232-331K	330	± 10%	85	3.5	74R9959	0.35
MCNL453232-391K	390	± 10%	85	3	74R9960	0.35
MCNL453232-681K	680	± 10%	50	3	74R9964	0.38

MCNL 08JT Series

Mfg. Part No.	Induct. (µH)	Ind. Tol.	DC Current Rating (mA)	Self Reson. Freq. (MHz)	Tape Cut Stock No.	Tape Cut Price Each 1-24	Tape & Reel Stock No.	Tape & Reel Price Each 1-1999
MCNL08JT1R2	1.2	± 5%	600	230	20T0783	0.37	20T0784	0.20
MCNL08KT1R2	1.2	± 10%	600	230	20T0785	0.37	20T0786	0.20
MCNL 12KT Series								
MCNL12KT101	100	± 10%	110	8	20T0787	0.37	20T0788	0.20
MCNL12KT150	15	± 10%	200	17	20T0789	0.37	20T0790	0.20
MCNL12KT151	150	± 10%	105	5	20T0791	0.37	20T0792	0.20
MCNL12KT220	22	± 10%	180	13	20T0793	0.37	20T0794	0.20
MCNL12KT221	220	± 10%	100	4	20T0795	0.37	20T0796	0.20
MCNL12KT330	33	± 10%	160	11	20T0797	0.37	20T0798	0.20
MCNL12KT331	330	± 10%	85	3.5	20T0799	0.37	20T0800	0.20
MCNL12KT470	47	± 10%	140	10	20T0801	0.37	20T0802	0.20
MCNL12KT471	470	± 10%	62	3	20T0803	0.37	20T0804	0.20
MCNL12KT561	560	± 10%	50	3	20T0805	0.37	20T0806	0.20
MCNL12KT681	680	± 10%	50	3	20T0807	0.21	20T0808	0.20

(195561)

BR SERIES - WOUND CHIP AND SMD INDUCTORS

RoHS Compliant Available

TAIYO YUDEN

Features:
- Suitable for the use as a choke coil in smaller DC/DC converters
- Operating temperature: -40°C to +105°C

Applications:
- Cellular Phones
- DVC
- DSC
- LCD Displays

Compact Power Inductors are commonly found across a broad range of the most popular consumer electronics, including mobile phones, HDDs, DSCs, DVCs, portable audio players and notebook ODDs. As more and more features are being packaged into smaller and sleeker devices, the number of circuit blocks, DC-DC converters and high-performance inductors is growing with each successive generation. Accordingly, the need for compact, efficient and well designed inductors is growing too. Fortunately, Taiyo Yuden is meeting that need head on by continually developing and refining components that meet or surpass critical design and performance criteria for size, weight, run-time etc. enabling the feature-rich products we've come to expect.

BRC2518 SERIES

Mfg. Part No.	Inductance µH	Inductance Tol.	I_{DC} (mA)	R_{DC} (Ω)	Stock No.	Price Each 1-9	Price Each 10-49
BRC2518T1R0M	1	± 20%	2550	0.05	84R3430	0.28	0.27
BRC2518T1R5M	1.5	± 20%	2100	0.08	84R3432	0.28	0.27
BRC2518T2R2M	2.2	± 20%	1800	0.12	84R3446	0.28	0.27
BRC2518T3R3M	3.3	± 20%	1450	0.175	84R3452	0.28	0.27
BRC2518T4R7M	4.7	± 20%	1250	0.23	84R3458	0.28	0.27
BRC2518T6R8M	6.8	± 20%	1050	0.28	84R3464	0.28	0.27
BRC2518T100K	10	± 10%	610	0.35	84R3434	0.28	0.27
BRC2518T100M	10	± 20%	610	0.35	84R3436	0.28	0.27
BRC2518T150K	15	± 10%	550	0.43	84R3442	0.28	0.27
BRC2518T150M	15	± 20%	550	0.43	84R3444	0.28	0.27
BRC2518T220K	22	± 10%	490	0.56	84R3448	0.28	0.27
BRC2518T220M	22	± 20%	490	0.56	84R3450	0.28	0.27
BRC2518T330K	33	± 10%	390	0.85	84R3454	0.28	0.27
BRC2518T330M	33	± 20%	390	0.85	84R3456	0.28	0.27
BRC2518T470K	47	± 10%	300	1.45	84R3460	0.28	0.27
BRC2518T470M	47	± 20%	300	1.45	84R3462	0.28	0.27
BRC2518T680K	68	± 10%	230	2.4	84R3466	0.28	0.27
BRC2518T680M	68	± 20%	230	2.4	84R3468	0.28	0.27
BRC2518T101K	100	± 10%	190	3.6	84R3438	0.28	0.27
BRC2518T101M	100	± 20%	190	3.6	84R3440	0.28	0.27
BRC2012 SERIES							
BRC2012T1R0M	1	± 20%	1400	0.06	46T8525	0.30	0.28
BRC2012T1R5MD	1.5	± 20%	1100	0.09	46T8526	0.28	0.26
BRC2012T2R2MD	2.2	± 20%	1000	0.11	46T8527	0.30	0.28
BRC2012T3R3MD	3.3	± 20%	870	0.17	46T8528	0.30	0.28
BRC2012T4R7MD	4.7	± 20%	600	0.265	46T8529	0.30	0.28

CONTINUED

BR SERIES - WOUND CHIP AND SMD INDUCTORS (CONT.)

BRC1608 SERIES

Mfg. Part No.	Inductance µH	Inductance Tol.	I_{DC} (mA)	R_{DC} (Ω)	Stock No.	Price Each 1-9	Price Each 10-49
BRC1608TR20M	0.2	± 20%	980	0.06	84R6388	0.30	0.28
BRC1608TR35M	0.35	± 20%	810	0.08	84R6389	0.30	0.28
BRC1608TR43M6	430	± 20%	1100	0.082	07W8461	0.30	0.28
BRC1608TR45M	0.45	± 20%	800	0.09	84R6390	0.30	0.28
BRC1608TR50M6	500	± 20%	1050	0.09	07W8462	0.30	0.28
BRC1608TR56M	0.56	± 20%	760	0.095	84R6391	0.30	0.28
BRC1608TR60M6	600	± 20%	940	0.099	07W8463	0.30	0.28
BRC1608TR72M6	720	± 20%	810	0.144	07W8464	0.30	0.28
BRC1608TR77M	0.77	± 20%	660	0.11	84R6392	0.30	0.28
BRC1608TR82M6	820	± 20%	730	0.176	07W8465	0.30	0.28
BRC1608T1R0M	1	± 20%	520	0.18	84R6393	0.32	0.30
BRC1608T1R0M6	1	± 20%	680	0.188	07W8466	0.30	0.28
BRC1608T1R5M	1.5	± 20%	410	0.3	84R6394	0.30	0.28
BRC1608T2R2M	2.2	± 20%	280	0.55	84R6395	0.30	0.28
BRFL2518 SERIES							
BRFL2518T1R0M	1	± 20%	1200	0.09	84R3470	0.29	0.27
BRFL2518T1R5M	1.5	± 20%	1100	0.11	84R3471	0.29	0.27
BRFL2518T2R2M	2.2	± 20%	950	0.13	84R3472	0.29	0.27
BRFL2518T3R3M	3.3	± 20%	700	0.22	84R3473	0.29	0.27
BRFL2518T4R7M	4.7	± 20%	650	0.33	84R3474	0.29	0.27
BRHL2518 SERIES							
BRHL2518T1R0M	1	± 20%	1400	0.055	29T3667	0.29	0.27
BRHL2518T1R5M	1.5	± 20%	1100	0.085	29T3669	0.29	0.27
BRHL2518T2R2M	2.2	± 20%	1000	0.115	29T3671	0.29	0.27
BRHL2518T3R3MD	3.3	± 20%	800	0.165	29T3673	0.29	0.27
BRHL2518T4R7MD	4.7	± 20%	750	0.245	29T3675	0.29	0.27
BRL3225 SERIES							
BRL3225T1R5M	1.5	± 20%	2200	0.045	84R6401	0.24	0.22
BRL3225T3R3M	3.3	± 20%	1450	0.12	84R6405	0.24	0.22
BRL3225T6R8M	6.8	± 20%	1050	0.27	84R6409	0.24	0.22
BRL3225T150K	15	± 10%	530	0.57	84R6403	0.24	0.22
BRL3225T330K	33	± 10%	420	0.84	84R6407	0.24	0.22
BRL3225T680K	68	± 10%	300	1.4	84R6411	0.24	0.22
BRL2518 SERIES							
BRL2518T1R0M	1	± 20%	1000	0.08	84R6396	0.30	0.28
BRL2518T1R5M	1.5	± 20%	920	0.1	84R6397	0.30	0.28
BRL2518T2R2M	2.2	± 20%	850	0.135	84R6398	0.30	0.28
BRL2518T3R3M	3.3	± 20%	580	0.3	24T3021	0.31	0.29
BRL2518T4R7M	4.7	± 20%	470	0.4	84R6400	0.30	0.28
BRL2515 SERIES							
BRL2515T1R0M	1	± 20%	1500	0.07	84R3475	0.29	0.27
BRL2515T1R5M	1.5	± 20%	1200	0.1	84R3477	0.29	0.27
BRL2515T2R2M	2.2	± 20%	1000	0.135	84R3479	0.29	0.27
BRL2515T3R3MD	3.3	± 20%	750	0.215	84R3481	0.29	0.27
BRL2515T4R7MD	4.7	± 20%	700	0.265	84R3483	0.29	0.27
BRL1608 SERIES							
BRL1608T1R0M	1	± 20%	650	0.23	46T8530	0.30	0.28
BRL1608T1R5M	1.5	± 20%	590	0.28	46T8531	0.32	0.30
BRL1608T100M	10	± 20%	220	2	46T8532	0.32	0.30
BRL1608T150M	15	± 20%	200	2.56	46T8533	0.30	0.28
BRL1608T2R2M	2.2	± 20%	500	0.4	46T8534	0.32	0.30
BRL1608T3R3M	3.3	± 20%	390	0.65	46T8535	0.30	0.28
BRL1608T4R7M	4.7	± 20%	310	1	46T8536	0.30	0.28
BRL1608T6R8M	6.8	± 20%	250	1.64	46T8537	0.30	0.28

(191928)

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(196546)

NR SERIES - WOUND CHIP AND SMD INDUCTORS

RoHS Compliant Available

TAIYO YUDEN

Features:
- Small and Low profile inductor
- It corresponds to High current
- Simple and original magnetic shield structure
- Durable structure against dropping impact
- Operating temperature: -20°C to +120°C

Applications:
- Cellular Phones
- DVC
- DSC
- LCD Displays

Compact Power Inductors are commonly found across a broad range of the most popular consumer electronics, including mobile phones, HDDs, DSCs, DVCs, portable audio players and notebook ODDs. As more and more features are being packaged into smaller and sleeker devices, the number of circuit blocks, DC-DC converters and high-performance inductors is growing with each successive generation. Accordingly, the need for compact, efficient and well designed inductors is growing too. Fortunately, Taiyo Yuden is meeting that need head on by continually developing and refining components that meet or surpass critical design and performance criteria for size, weight, run-time etc. enabling the feature-rich products we've come to expect.

NRG4026 SERIES

Mfg. Part No.	Inductance µH	Inductance Tol.	I_{DC} (mA)	R_{DC} (Ω)	Stock No.	Price Each 1-9	Price Each 10-49
NRG4026T1R2N	1.2	± 30%	3100	0.03	84R3526	0.36	0.34
NRG4026T2R3N	2.3	± 30%	2100	0.04	84R3532	0.36	0.34
NRG4026T3R5M	3.5	± 20%	1800	0.05	84R3536	0.36	0.34
NRG4026T4R7M	4.7	± 20%	1450	0.055	84R3540	0.36	0.34
NRG4026T6R6M	6.6	± 20%	1300	0.065	84R3544	0.36	0.34
NRG4026T100M	10	± 20%	1000	0.085	84R3528	0.36	0.34
NRG4026T150M	15	± 20%	900	0.11	84R3530	0.36	0.34
NRG4026T220M	22	± 20%	610	0.165	84R3534	0.38	0.36
NRG4026T330M	33	± 20%	540	0.2	84R3538	0.36	0.34
NRG4026T470M	47	± 20%	410	0.3	84R3542	0.36	0.34
NRH2410 SERIES							
NRH2410TR68NN4	0.68	± 30%	2200	0.06	84R3546	0.37	0.35
NRH2410T1R0NN4	1	± 30%	1800	0.07	84R3548	0.37	0.35
NRH2410T1R5MN	1.5	± 20%	1550	0.11	84R3550	0.37	0.35
NRH2410T2R2MN	2.2	± 20%	1290	0.15	84R3556	0.37	0.35
NRH2410T3R3MN	3.3	± 20%	1000	0.22	84R3560	0.37	0.35
NRH2410T4R7MN	4.7	± 20%	880	0.29	84R3562	0.37	0.35
NRH2410T6R8MN	6.8	± 20%	750	0.41	84R3564	0.37	0.35
NRH2410T100MN	10	± 20%	550	0.69	84R3552	0.37	0.35
NRH2410T150MN	15	± 20%	470	1.02	84R3554	0.37	0.35
NRH2410T220MN	22	± 20%	390	1.47	84R3558	0.37	0.35
NRS4010 SERIES							
NRS4010T1R0NDGG	1	± 30%	1900	0.056	46T8538	0.41	0.39
NRS4010T2R2MDGG	2.2	± 20%	1500	0.085	46T8541	0.41	0.39
NRS4010T3R3MDGG	3.3	± 20%	1400	0.1	46T8543	0.41	0.39
NRS4010T4R7MDGG	4.7	± 20%	1200	0.14	46T8544	0.41	0.39
NRS4010T6R8MDGG	6.8	± 20%	1000	0.2	46T8545	0.41	0.39
NRS4010T100MDGG	10	± 20%	750	0.3	46T8539	0.41	0.39
NRS4010T150MDGG	15	± 20%	600	0.43	46T8540	0.41	0.39
NRS4010T220MDGG	22	± 20%	500	0.57	46T8542	0.41	0.39
NRS4012 SERIES							
NRS4012T1R0NDGG	1	± 30%	2200	0.042	46T8546	0.39	0.37
NRS4012T2R2MDGJ	2.2	± 20%	1900	0.06	46T8549	0.39	0.37
NRS4012T3R3MDGJ	3.3	± 20%	1700	0.07	46T8551	0.42	0.40
NRS4012T4R7MDGJ	4.7	± 20%	1500	0.095	46T8552	0.39	0.37
NRS4012T6R8MDGJ	6.8	± 20%	1300	0.125	46T8553	0.42	0.40
NRS4012T100MDGJ	10	± 20%	1100	0.17	46T8547	0.39	0.37
NRS4012T150MDGJ	15	± 20%	750	0.26	46T8548	0.39	0.37
NRS4012T220MDGJ	22	± 20%	620	0.4	46T8550	0.39	0.37
NRS4018 SERIES							
NRS4018T1R0NDGJ	1	± 30%	3200	0.027	46T8554	0.38	0.36
NRS4018T2R2MDGJ	2.2	± 20%	2200	0.042	46T8557	0.38	0.36
NRS4018T3R3MDGJ	3.3	± 20%	2000	0.055	46T8559	0.38	0.36
NRS4018T4R7MDGJ	4.7	± 20%	1700	0.07	46T8561	0.36	0.34
NRS4018T6R8MDGJ	6.8	± 20%	1450	0.098	46T8562	0.36	0.34
NRS4018T100MDGJ	10	± 20%	1200	0.15	46T8555	0.38	0.36
NRS4018T150MDGJ	15	± 20%	850	0.21	46T8556	0.36	0.34
NRS4018T220MDGJ	22	± 20%	720	0.29	46T8558	0.36	0.34
NRS4018T330MDGJ	33	± 20%	550	0.46	46T8560	0.38	0.36
NRS5012 SERIES							
NRS5012T1R0NMGF	1	± 30%	4500	0.053	84R3566	0.39	0.36
NRS5012T1R5NMGF	1.5	± 30%	3800	0.07	84R3568	0.39	0.36
NRS5012T2R2MMGF	2.2	± 20%	3100	0.085	84R3572	0.39	0.36
NRS5012T3R3MMGF	3.3	± 20%	2400	0.16	84R3574	0.39	0.36
NRS5012T4R7MMGF	4.7	± 20%	2200	0.18	84R3576	0.39	0.36
NRS5012T6R8MMGF	6.8	± 20%	1700	0.26	84R3578	0.39	0.36
NRS5012T100MMGF	10	± 20%	1400	0.42	84R3570	0.39	0.36
NRS5012T150MMGF	15	± 20%	640	0.67	82T8644	0.39	0.36
NRS5014 SERIES							
NRS5014T100MMGG	10	± 20%	1050	0.2	82T8645	0.39	0.36

➤CONTINUED➤

NR SERIES - WOUND CHIP AND SMD INDUCTORS (CONT.)

Mfg. Part No.	Inductance µH	Inductance Tol.	I_{DC} (mA)	R_{DC} (Ω)	Stock No.	Price Each 1-9	Price Each 10-49
NRS5020 SERIES							
NRS5020T1R0NMGJ	1	± 30%	4000	0.021	84R3580	0.39	0.36
NRS5020T1R5NMGJ	1.5	± 30%	3350	0.026	84R3582	0.39	0.36
NRS5020T2R2NMGJ	2.2	± 30%	2900	0.035	84R3589	0.39	0.36
NRS5020T3R3NMGJ	3.3	± 30%	2400	0.048	84R3593	0.42	0.39
NRS5020T4R7MMGJ	4.7	± 20%	2000	0.06	84R3595	0.42	0.39
NRS5020T6R8MMGJ	6.8	± 20%	1600	0.09	84R3597	0.42	0.39
NRS5020T100MMGJ	10	± 20%	1300	0.12	84R3585	0.39	0.36
NRS5020T150MMGJ	15	± 20%	1100	0.165	84R3587	0.39	0.36
NRS5020T220MMGJ	22	± 20%	900	0.26	84R3591	0.39	0.36
NRS6010 SERIES							
NRS6010T1R5MMGF	1.5	± 20%	2400	0.09	84R3599	0.42	0.39
NRS6010T2R2MMGF	2.2	± 20%	1900	0.11	84R3603	0.42	0.39
NRS6010T3R3MMGF	3.3	± 20%	1600	0.135	84R3607	0.42	0.39
NRS6010T4R7MMGF	4.7	± 20%	1300	0.165	84R3609	0.42	0.39
NRS6010T6R8MMGF	6.8	± 20%	1200	0.22	84R3611	0.42	0.39
NRS6010T100MMGF	10	± 20%	1000	0.27	84R3601	0.42	0.39
NRS6010T220MMGF	22	± 20%	650	0.58	84R3605	0.42	0.39
NRV3012 SERIES							
NRV3012T2R2M	2.2	± 20%	1800	0.12	84R3613	0.32	0.30
NR6028 SERIES							
NR6028T0R9N	0.9	± 30%	4600	0.013	84R6432	0.33	0.31
NR6028T1R5N	1.5	± 30%	4200	0.016	84R6433	0.33	0.31
NR6028T2R2N	2.2	± 30%	3700	0.02	84R6437	0.35	0.33
NR6028T3R0N	3	± 30%	3400	0.023	09P6308	0.16	0.15
NR6028T4R7M	4.7	± 20%	3000	0.031	84R6441	0.35	0.33
NR6028T6R0M	6	± 20%	2500	0.04	84R6443	0.35	0.33
NR6028T100M	10	± 20%	1900	0.065	84R6434	0.35	0.33
NR6028T150M	15	± 20%	1800	0.095	84R6436	0.35	0.33
NR6028T220M	22	± 20%	1400	0.135	24T3460	0.33	0.31
NR6028T330M	33	± 20%	1100	0.22	84R6440	0.36	0.34
NR6028T470M	47	± 20%	920	0.3	84R6442	0.35	0.33
NR6028T680M	68	± 20%	770	0.42	84R6444	0.35	0.33
NR6028T101M	100	± 20%	660	0.6	84R6435	0.35	0.33
NR6045 SERIES							
NR6045T1R0N	1	± 30%	4200	0.014	84R6445	0.42	0.40
NR6045T1R3N	1.3	± 30%	4000	0.016	84R6446	0.39	0.37
NR6045T1R8N	1.8	± 30%	3700	0.018	84R6447	0.39	0.37
NR6045T2R3N	2.3	± 30%	3500	0.021	84R6451	0.39	0.37
NR6045T3R0N	3	± 30%	3200	0.024	84R6453	0.39	0.37
NR6045T4R5M	4.5	± 20%	3000	0.031	84R6455	0.39	0.37
NR6045T6R3M	6.3	± 20%	2800	0.038	24T3464	0.39	0.37
NR6045T100M	10	± 20%	2500	0.047	24T3461	0.39	0.37
NR6045T150M	15	± 20%	1900	0.077	84R6450	0.39	0.37
NR6045T220M	22	± 20%	1500	0.115	84R6452	0.42	0.40
NR6045T330M	33	± 20%	1400	0.145	24T3462	0.39	0.37
NR6045T470M	47	± 20%	1100	0.22	24T3463	0.39	0.37
NR6045T680M	68	± 20%	900	0.33	84R6458	0.42	0.40
NR6045T101M	100	± 20%	700	0.5	84R6449	0.42	0.40
NR8040 SERIES							
NR8040T0R9N	0.9	± 30%	7800	0.006	84R6459	0.58	0.54
NR8040T1R4N	1.4	± 30%	7000	0.007	24T3465	0.58	0.54
NR8040T2R0N	2	± 30%	6300	0.009	24T3469	0.58	0.54
NR8040T3R6N	3.6	± 30%	4900	0.015	24T3471	0.58	0.54
NR8040T4R7N	4.7	± 30%	4100	0.018	24T3473	0.58	0.54
NR8040T6R8N	6.8	± 30%	3700	0.025	24T3475	0.58	0.54
NR8040T100M	10	± 20%	3100	0.034	24T3466	0.58	0.54
NR8040T150M	15	± 20%	2400	0.05	24T3468	0.58	0.54
NR8040T220M	22	± 20%	2200	0.066	24T3470	0.61	0.58
NR8040T330M	33	± 20%	1700	0.1	24T3472	0.58	0.54
NR8040T470M	47	± 20%	1400	0.15	24T3474	0.58	0.54
NR8040T680M	68	± 20%	1100	0.23	24T3476	0.58	0.54
NR8040T101M	100	± 20%	1000	0.29	24T3467	0.58	0.54

(191954)

CVH252009 SERIES MULTILAYER POWER CHIP INDUCTORS

RoHS Compliant Available

BOURNS®

Features
- Monolithic construction offering high reliability
- Magnetically shielded construction providing low radiation
- Low DC resistance
- Low profi le, 1008 size (2.5 x 2 x 0.9 mm)

Applications
- Smart phones
- DVCs / DSCs
- Tablets
- HDDs / SSDs
- Mobile electronic devices

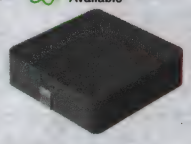
Mfr. Part No.	L (Ind.) (µH)	Ind. Tol.	DCR (ohm)	SRF (MHz)	I_{DC} (A)	Stock No.	Price Each 1-9
CVH252009-R47M	0.47	± 20%	0.04	100	1.8	24W0970	0.41
CVH252009-1R0M	1	± 20%	0.055	60	1.6	24W0971	0.44
CVH252009-1R5M	1.5	± 20%	0.07	50	1.5	24W0972	0.41
CVH252009-2R2M	2.2	± 20%	0.08	40	1.3	24W0973	0.44
CVH252009-3R3M	3.3	± 20%	0.1	30	1.2	24W0974	0.41
CVH252009-4R7M	4.7	± 20%	0.11	25	1.1	24W0975	0.43

(210158)

SRP4012 SERIES SMD SHIELDED POWER INDUCTORS

RoHS Compliant Available

BOURNS®



Features
- Shielded construction
- Flat wire
- Unit height of 1.2 mm
- Inductance range: 0.22 to 1.5µH
- Rated current up to 9A

Applications
- DC/DC converters
- Portable communications equipment
- Laptop computers
- Camcorders, HDTV, car audio systems
- Video game consoles

Specifications
- Test voltage: 0.25V
- Test frequency: 100KHz
- Operating temperature: -55°C to +125°C
- Core material: Iron
- Wire: Enameled copper

Mfg. Part No.	Inductance (µH)	Inductance Tol.	R_{DC} (Ω)	I_{DC} (A)	Tape Cut Stock No.	Tape Cut Price Each 1-9
SRP4012-R22M	0.22	± 20%	9300	9	82T9966	1.18
SRP4012-R56M	0.56	± 20%	0.025	5.5	82T9968	1.18
SRP4012-R47M	0.47	± 20%	0.02	6.5	82T9967	1.18
SRP4012-1R0M	1	± 20%	0.0336	4.8	82T9969	1.18
SRP4012-1R2M	1.2	± 20%	0.045	3	82T9970	1.18
SRP4012-1R5M	1.5	± 20%	0.05	3	82T9971	1.18

(202170)

IHLP-1212 SERIES LOW PROFILE HIGH CURRENT INDUCTORS

RoHS Compliant Available

VISHAY.

Features:
- Shielded construction
- Lowest DCR/µH, in this package size
- Handles high transient current spikes without saturation
- Ultra low buzz noise, du to composite construction

Specifications:
- Frequency range up to 1.0 MHz
- Operating temperature range:
- - 55 °C to + 125 °C
- Inductance Tolerance: ± 20%

Applications:
- PDA/notebook/desktop/server applications
- High current POL converters
- Low Profile, high current power supplies
- Battery powered devices
- DC/DC converters in distributed power systems
- DC/DC converter for Field Programmable Gate Array (FPGA)
- Currently not recommended for automotive applications

Mfg. Part No.	Inductance (nH)	R_{DC} (Ω)	I_{DC} (A)	Tape Cut Stock No.	Tape Cut Price Each 1-24
IHLP1212BZERR22M11	220	0.0114	6.5	70R1504	1.06
IHLP1212BZER1R0M11	1	0.024	5	70R1509	1.58
IHLP1212BZER1R5M11	1.5	0.032	5	70R1511	1.60

(178380)

MLO HIGH CURRENT SMD INDUCTORS

RoHS Compliant Available

AVX A KYOCERA GROUP COMPANY

Features
- High Q
- High SRF
- High Frequency
- High Current Handling
- Low DC Resistance
- 0402 Case Size

Applications
- Mobile communications
- Satellite Applications
- GPS
- Collision Avoidance
- Wireless LAN's

Mfr. Part No.	Iinductance (nH)	Ind. Tol.	Q Typ.	DC Res. (ohm)	Reson. Freq. (MHz)	Stock No.	Price Each 1-9
HLC021R0BTTR	1	± 0.1nH	25	0.1	20	28W2880	0.43
HLC021R1BTTR	1.1	± 0.1nH	24	0.1	20	28W2881	0.43
HLC021R2BTTR	1.2	± 0.1nH	24	0.11	20	28W2882	0.43
HLC021R3BTTR	1.3	± 0.1nH	25	0.13	19	28W2883	0.43
HLC021R5BTTR	1.5	± 0.1nH	25	0.15	19	28W2884	0.43
HLC021R6BTTR	1.6	± 0.1nH	25	0.15	18	28W2885	0.43
HLC021R8BTTR	1.8	± 0.1nH	25	0.16	18	28W2886	0.43
HLC022R0BTTR	2	± 0.1nH	26	0.18	17	28W2891	0.43
HLC022R2BTTR	2.2	± 0.1nH	27	0.2	16	28W2892	0.43
HLC022R4BTTR	2.4	± 0.1nH	27	0.2	15	28W2893	0.43
HLC022R7BTTR	2.7	± 0.1nH	27	0.25	14	28W2894	0.43
HLC023R0BTTR	3	± 0.1nH	27	0.3	12	28W2897	0.43
HLC023R3BTTR	3.3	± 0.1nH	27	0.34	11	28W2898	0.43
HLC023R6BTTR	3.6	± 0.1nH	27	0.35	10	28W2899	0.43
HLC023R9BTTR	3.9	± 0.1nH	28	0.4	10	28W2900	0.43
HLC024R7BTTR	4.7	± 0.1nH	29	0.48	9	28W2902	0.68
HLC025R6BTTR	5.6	± 0.1nH	30	0.5	8	28W2903	0.68
HLC026R8BTTR	6.8	± 0.1nH	30	0.6	7	28W2904	0.68
HLC028R2BTTR	8.2	± 0.1nH	29	0.8	6	28W2905	0.68
HLC02100HTTR	10	± 3%	30	1	5	28W2887	0.48
HLC02120HTTR	12	± 3%	32	1.1	4	28W2888	0.48
HLC02150HTTR	15	± 3%	32	1.2	4	28W2889	0.48
HLC02180HTTR	18	± 3%	28	1.5	3	28W2890	0.48
HLC02220HTTR	22	± 3%	30	1.9	3	28W2895	0.48
HLC02270HTTR	27	± 3%	29	2.1	3	28W2896	0.48
HLC02320HTTR	32	± 3%	28	2.2	2	28W2901	0.48

(210150)

IHLP SERIES HIGH CURRENT INDUCTORS

RoHS Compliant Available

VISHAY.

Features:
- Shielded construction
- Frequency range up to 1.0 MHz
- Lowest DCR/µH, in this package size
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- Compliant to RoHS Directive 2002/95/EC
- Halogen-free according to IEC 61249-2-21 definition

Applications:
- PDA/notebook/desktop/server applications
- High current POL converters
- Low profile, high current power supplies
- Battery powered devices
- DC/DC converters in distributed power systems
- DC/DC converter for Field Programmable Gate Array (FPGA)

Mfg. Part No.	L (Induct.) (nH)	Ind. Tol.	DCR Max (Ohm)	DC Current Rating (A)	Stock No.	Price Each 1-24
IHLP1212ABERR22M11	220	± 20%	0.0114	9.3	27T2298	1.50
IHLP1212ABERR33M11	330	± 20%	0.0143	7.2	27T2299	1.50
IHLP1212ABERR47M11	470	± 20%	0.0195	6.4	27T2300	1.50
IHLP1212ABERR56M11	560	± 20%	0.022	5.1	27T2301	1.54
IHLP1212AEER1R0M11	1000	± 20%	...	...	27T2308	1.50
IHLP1212AEERR22M11	220	± 20%	0.0114	9.3	27T2302	1.46
IHLP1212AEERR33M11	330	± 20%	0.0138	7.2	27T2303	1.46
IHLP1212AEERR47M11	470	± 20%	0.015	6.4	27T2304	1.46
IHLP1212AEERR56M11	560	± 20%	0.0204	5.1	27T2305	1.50
IHLP1212AEERR68M11	680	± 20%	...	...	27T2306	1.50
IHLP1212AEERR82M11	820	± 20%	...	...	27T2307	1.50

(195529)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

IHLP SERIES LOW PROFILE HIGH CURRENT INDUCTORS

SMD

RoHS Compliant Available

VISHAY.

IHLP series low-profile, high-current surface mount inductors feature lowest height and DCR/µH ratio in each package size. Shielded construction. Frequency range up to 5.0MHz. Handles high transient current spikes without saturation. Ultra-low buzz noise due to composite construction. 100% lead (Pb) free. Current rating based on 40°C temperature rise. Saturation current will cause L_0 to drop 20%. Operating temperature: -55°C to +125°C. **Tolerance: ±20%, Test frequency: 100 kHz**

Mfg. Part No.	L_0 @100kHz, .25V, 0A (µH)±20%	DCR Max. @25°C (mΩ)	Heat Rating I_{DC} (A)	Tape Cut Stock No.	Tape Cut Price Each 1-24
IHLP-2525CZ-01 SERIES					
IHLP2525CZERR10M01	100	1.7	32.5	53K4835	2.06
IHLP2525CZERR20M01	200	3	24	53K4839	2.32
IHLP2525CZERR33M01	330	3.9	20	53K4843	2.21
IHLP2525CZERR47M01	470	4.2	17.5	53K4845	2.38
IHLP2525CZERR68M01	680	5.5	15.5	53K4847	2.32
IHLP2525CZERR82M01	820	8	13	53K4848	2.35
IHLP2525CZER1R0M01	1	10	11	53K4850	2.38
IHLP2525CZER2R2M01	2.2	20	8	53K4855	2.38
IHLP2525CZER3R3M01	3.3	30	6	53K4857	2.21
IHLP2525CZER4R7M01	4.7	40	5.5	53K4859	2.35
IHLP-5050CE-01 SERIES					
IHLP5050CEER1R0M01	1	3.5	24	53K4875	4.56
IHLP5050CEER1R5M01	1.5	5.5	19	53K4877	4.56
IHLP5050CEER2R2M01	2.2	8	16	53K4882	4.79
IHLP5050CEER3R3M01	3.3	12	12	53K4884	4.56
IHLP5050CEER4R7M01	4.7	15	10	53K4886	4.79
IHLP-5050EZ-01 SERIES					
IHLP5050EZER4R7M01	4.7	15	12	53K4914	6.77
IHLP5050EZER6R8M01	6.8	18.5	11	53K4918	7.59
IHLP5050EZER7R8M01	7.8	20.5	10	53K4920	7.59
IHLP5050EZER8R2M01	8.2	22.5	9.5	53K4922	7.59
IHLP5050EZER100M01	10	25.5	9	53K4908	7.84
IHLP-5050FD-01 SERIES					
IHLP5050FDER5R6M01	5.6	10	13.5	27M9724	3.73
IHLP5050FDER6R8M01	6.8	14	11.5	10M9502	3.73
IHLP-1616AB-01 SERIES					
IHLP1616ABER47NM01	47	3.75	15	45M5853	2.31
IHLP1616ABERR22M01	220	11	12	45M5844	2.31
IHLP1616ABERR47M01	470	22	9.5	45M5846	2.36
IHLP1616ABER1R0M01	1	50	15	45M5848	2.36
IHLP-1616AB-11 SERIES					
IHLP1616ABER1R0M11	1	47	15	45M5849	2.69
IHLP-1616BZ-11 SERIES					
IHLP1616BZER1R0M11	1	24	15	45M5862	2.40
IHLP1616BZER2R2M11	2.2	61	15	45M5864	2.40
IHLP1616BZER4R7M11	4.7	95	12	45M5866	2.57
IHLP-2020AB-01 SERIES					
IHLP2020ABERR10M01	100	4.6	13.5	45W5571	1.95
IHLP2020ABERR47M01	470	19.2	6.5	45W5572	1.95
IHLP2020ABER1R0M01	1	46.5	4.4	45W5573	1.95
IHLP2020ABER2R2M01	2.2	77.3	3.4	45W5574	1.95
IHLP2020ABER3R3M01	3.3	103	2.8	45W5575	1.95
IHLP2020ABER4R7M01	4.7	168	2.2	45W5576	1.95
IHLP-2020BZ-01 SERIES					
IHLP2020BZER1R0M01	1	18.9	7	67R4045	2.16
IHLP2020BZER2R2M01	2.2	45.6	4.2	67R4046	2.16
IHLP2020BZER4R7M01	4.7	108	2.8	67R4047	2.16
IHLP2020BZER5R6M01	5.6	113	2.5	67R4048	2.16
IHLP2020BZER6R8M01	6.8	139	2.4	67R4049	2.16
IHLP-2020CZ-11 SERIES					
IHLP2020CZER220M11	22	250	1.9	67R4050	2.16
IHLP-3232DZ-11 SERIES					
IHLP3232DZERR22M11	220	1.35	34	37T8064	1.66
IHLP3232DZERR47M11	470	2.38	25	37T8066	1.66
IHLP3232DZER1R0M11	1	4.63	18.2	37T8069	1.77
IHLP3232DZER100M11	10	51.8	5.4	37T8070	1.81
IHLP3232DZER2R2M11	2.2	9.41	14.5	37T8072	1.71
IHLP3232DZER4R7M11	4.7	22.6	8	37T8076	1.81
IHLP3232DZER220M11	22	94.2	4.3	37T8073	2.08
IHLP-4040DZ-01 SERIES					
IHLP4040DZERR56M01	560	1.8	27.5	18M2329	2.87
IHLP4040DZER1R0M01	1	4.1	25	18M2333	1.11
IHLP4040DZER1R5M01	1.5	5.8	15	94M7744	2.45
IHLP4040DZER2R2M01	2.2	9	12	19P7114	1.11

CONTINUED

IHLP SERIES LOW PROFILE HIGH CURRENT INDUCTORS (CONT.)

IHLP-4040DZ-01 SERIES

Mfg. Part No.	L_0 @100kHz, .25V, 0A (µH)±20%	DCR Max. @25°C (mΩ)	Heat Rating I_{DC} (A)	Tape Cut Stock No.	Tape Cut Price Each 1-24
IHLP4040DZER4R7M01	4.7	16.5	9.5	18M2340	1.11
IHLP4040DZER100M01	10	36.5	7.5	18M2336	1.11
IHLP4040DZER470M11	47	145	3.3	60R3427	2.71
IHLP-6767GZ-11 SERIES					
IHLP6767GZER1R0M11	1	1.27	55.5	74P0269	5.61
IHLP6767GZER2R2M11	2.2	1.94	43.5	74P0280	5.61
IHLP6767GZER4R7M11	4.7	4.18	30	74P0287	5.94
IHLP6767GZER100M11	10	9.33	19	74P0275	5.87
IHLP6767GZER220M11	22	21	12	74P0281	5.61
IHLP6767GZER470M11	47	42.7	8.7	74P0288	5.87
IHLP6767GZER101M11	100	110	5	74P0276	5.59

(73326)

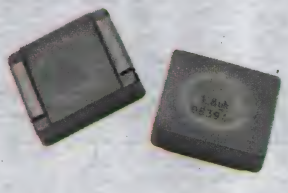
IHLP-6767 SERIES LOW PROFILE HIGH CURRENT INDUCTORS

RoHS Compliant Available

VISHAY.

Features:
- Shielded construction
- Frequency range up to 2.0 MHz
- Lowest DCR/µH, in this package size
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- Compliant to RoHS Directive 2002/95/EC

Applications:
- PDA/notebook/desktop/server applications
- High current POL converters
- Low profile, high current power supplies
- Battery powered devices
- DC/DC converters in distributed power systems
- DC/DC converter for Field Programmable Gate Array (FPGA)



IHLP-6767DZ-11 - FREQUENCY RANGE UP TO 750KHz

Mfg. Part No.	Ind. (µH)	DCR	IDC (A)	Tape Cut Stock No.	Tape Cut Price Each 1-24
IHLP6767DZER1R0M11	1	2050 µohm	41	01T1356	5.58
IHLP6767DZER1R5M11	1.5	3430 µohm	31	01T1358	5.58
IHLP6767DZER2R2M11	2.2	5030 µohm	26	01T1362	5.51
IHLP6767DZER3R3M11	3.3	7300 µohm	20.5	01T1366	5.58
IHLP6767DZER4R7M11	4.7	9320 µohm	18	01T1370	5.58
IHLP6767DZER5R6M11	5.6	0.0122 ohm	15	01T1374	5.58
IHLP6767DZER6R8M11	6.8	0.01379 ohm	14.5	01T1376	5.91
IHLP6767DZER8R2M11	8.2	...	...	01T1378	5.32
IHLP6767DZER100M11	10	0.01892 ohm	12	01T1360	5.58
IHLP6767DZER220M11	22	0.04697 ohm	7.2	01T1364	5.58
IHLP6767DZER330M11	33	0.07084 ohm	6.5	01T1368	5.84
IHLP6767DZER470M11	47	0.10846 ohm	5	01T1372	5.84
IHLP-6767DZ-01 - FREQUENCY RANGE UP TO 2MHz					
IHLP6767DZERR22M01	0.22	880 µohm	75	74R9274	5.58
IHLP6767DZERR33M01	0.33	1280 µohm	56	74R9275	5.58
IHLP6767DZERR47M01	0.47	1380 µohm	49	74R9276	5.91
IHLP6767DZERR56M01	0.56	1520 µohm	47	74R9277	5.58
IHLP6767DZERR68M01	0.68	2000 µohm	41	74R9278	5.58
IHLP6767DZERR82M01	0.82	2280 µohm	38.5	74R9279	5.58
IHLP6767DZER1R0M01	1	2660 µohm	31.5	74R9280	5.51
IHLP6767DZER1R5M01	1.5	4730 µohm	23.5	74R9281	5.51
IHLP6767DZER2R2M01	2.2	6400 µohm	19	74R9283	5.51
IHLP6767DZER3R3M01	3.3	9510 µohm	18.5	74R9284	5.51
IHLP6767DZER4R7M01	4.7	0.0112 ohm	16	74R9285	5.58
IHLP6767DZER5R6M01	5.6	0.014 ohm	14	74R9286	5.51
IHLP6767DZER6R8M01	6.8	0.016 ohm	13.2	74R9287	5.51
IHLP6767DZER8R2M01	8.2	0.0176 ohm	11.5	74R9288	5.58
IHLP6767DZER100M01	10	0.0256 ohm	10.5	74R9282	5.58

(195712)

SRP7030F SERIES SMD SHIELDED POWER INDUCTORS

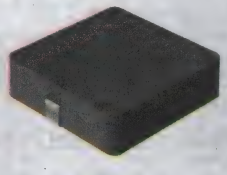
RoHS Compliant Available

BOURNS® SMD

Applications
- DC/DC converters
- Power supplies for:
- Portable communications equipment
  Video game consoles
  Laptop computers
  Camcorders, HDTV, car audio systems

Features
- Low 3mm Profile
- Sheilded construction

Specifications
- Tolerance: ± 20%
- Test Voltage: 0.25V
- Test Frequency: 100 kHz
- Operating Temperature: -55°C to +125°C



Mfg. Part No.	L (Induct.) (µH)	DCR (mohm)	I_{SAT} (A)	I_{RMS} (A)	Tape Cut Stock No.	Tape Cut Price Each 1-999
SRP7030-1R0FM	1	7000	13	11	69R8008	0.62
SRP7030-1R5FM	1.5	10	12	10	69R8011	1.18
SRP7030-2R2FM	2.2	20	11	7	69R8015	1.11
SRP7030-3R3FM	3.3	24	10	7	69R8017	1.20
SRP7030-4R7FM	4.7	35	7	5	69R8019	1.20
SRP7030-5R6FM	5.6	45	6	5	69R8021	1.20
SRP7030-6R8FM	6.8	50	5.5	4.5	69R8023	1.20
SRP7030-8R2FM	8.2	54	5	4.5	69R8025	1.22
SRP7030-100FM	10	60	5	3.5	69R8013	1.11

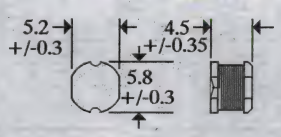
(136933)

PM54 SERIES SMT POWER INDUCTORS

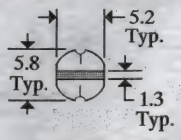
SMD

RoHS Compliant Available

J.W.Miller MAGNETICS A Bourns Company



Terminal Dimensions



Dimensions – mm

PM54 series power inductors uses "under the unit" mounting for extremely high-density packaging. Top surface consistancy is ideal for use in pick-and-place equipment. Test frequency: 2.5MHz except **mfg. part nos. PM54-101K-RC, PM54-221K-RC**: 1kHz.

±20% TOLERANCE

Mfg. Part No.	L (Induct.) (µH)	Ind. Tol.	R_{DC} Max. (Ω)	I_{DC} Max. (mA)	Stock No.	Price Each 1-9
PM54-100M-RC	10	± 20%	100	1440	63K2859	0.87
PM54-150M-RC	15	± 20%	140	1440	63K2863	0.87
PM54-220M-RC	22	± 20%	180	1110	63K2867	0.87
PM54-330L-RC	33	± 15%	230	880	63K2870	0.87
PM54-470L-RC	47	± 15%	370	720	63K2872	0.94
PM54-680K-RC	68	± 10%	460	610	63K2874	0.87
PM54-101K-RC	100	± 10%	700	520	63K2860	0.93
PM54-151K-RC	150	± 10%	1.1	400	63K2864	0.87
PM54-221K-RC	220	± 10%	1.57	350	63K2868	0.87

(48774)

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Quality US-based manufacturers—as fast as 48-hour turnaround!

(197415)

SDR SERIES SMD POWER INDUCTORS

SMD · RoHS Compliant Available · BOURNS®

Applications:
- Input/output of DC/DC converters
- Power supplies for:
  Portable communications equipment
  Camcorders
  LCD TVs
  Car radios

Specifications:
- Operating and Storage Temperature: -40 °C to +125 °C
- Core Material- Ferrite DR
- Wire Material- Enameled copper

Fig. A

Fig. B

RoHS COMPLIANT — SDR0302 SERIES-FIG. A

Mfg. Part No.	Inductance 1kHz (µH)	Ind. Tol.	Q Ref	Test Freq. (MHz)	Stock No.	Price Each 1-9	10-24	25-49
SDR0302-1R0ML	1	± 20%	20	7.96	04P1868	0.61	0.51	0.43
SDR0302-100ML	10	± 20%	18	2.52	04P1870	0.65	0.54	0.46
SDR0302-102KL	1000	± 10%	40	0.252	04P1872	0.61	0.51	0.43
SDR0302-2R2ML	2.2	± 20%	22	7.96	04P1875	0.61	0.51	0.43
SDR0302-220ML	22	± 20%	23	2.52	04P1876	0.61	0.51	0.43
SDR0302-221KL	220	± 10%	40	0.796	04P1877	0.61	0.51	0.43
SDR0302-3R3ML	3.3	± 20%	23	7.96	04P1878	0.61	0.51	0.43
SDR0302-331KL	330	± 10%	40	0.796	04P1880	0.61	0.51	0.43
SDR0302-4R7ML	4.7	± 20%	18	7.96	04P1881	0.65	0.54	0.46
SDR0302-471KL	470	± 10%	42	0.796	04P1883	0.65	0.54	0.46
SDR0302-6R8ML	6.8	± 20%	18	7.96	04P1884	0.61	0.51	0.43
RoHS COMPLIANT-SDR0403 SERIES FIG. A								
SDR0403-1R0ML	1	± 20%	28	7.96	04P1887	0.61	0.51	0.43
SDR0403-1R4ML	1.4	± 20%	28	7.96	04P1888	0.65	0.54	0.46
SDR0403-4R7ML	4.7	± 20%	20	7.96	04P1900	0.65	0.54	0.46
SDR0403-100ML	10	± 20%	28	2.52	04P1889	0.61	0.51	0.43
SDR0403-220ML	22	± 20%	25	2.52	04P1895	0.61	0.51	0.43
SDR0403-101KL	100	± 10%	35	0.796	04P1890	0.61	0.51	0.43
SDR0403-102KL	1000	± 10%	38	0.252	04P1891	0.61	0.51	0.43
SDR0403-150ML	15	± 20%	28	2.52	04P1892	0.61	0.51	0.43
SDR0403-2R2ML	2.2	± 20%	28	7.96	04P1894	0.61	0.51	0.43
SDR0403-220ML	22	± 20%	25	2.52	04P1895	0.61	0.51	0.43
SDR0403-270KL	27	± 10%	23	2.52	07W8486	0.32	0.30	0.28
SDR0403-221KL	220	± 10%	50	0.796	04P1896	0.65	0.54	0.46
SDR0403-3R3ML	3.3	± 20%	28	7.96	04P1897	0.66	0.55	0.47
SDR0403-330KL	33	± 10%	23	2.52	04P1898	0.61	0.51	0.43
SDR0403-4R7ML	4.7	± 20%	20	7.96	04P1900	0.65	0.54	0.46
SDR0403-470KL	47	± 10%	20	2.52	04P1901	0.65	0.54	0.46
SDR0403-6R8ML	6.8	± 20%	28	7.96	04P1903	0.65	0.54	0.46
RoHS COMPLIANT-SDR1806 SERIES FIG. B								
SDR1806-100ML	10	± 20%	22	2.52	04P1907	0.90	0.85	0.79
SDR1806-101KL	100	± 10%	25	0.796	04P1908	0.90	0.85	0.79
SDR1806-102KL	1000	± 10%	10	0.252	04P1909	0.90	0.85	0.79
SDR1806-151KL	150	± 10%	23	0.796	04P1911	0.97	0.91	0.85
SDR1806-220ML	22	± 20%	22	2.52	04P1913	0.90	0.85	0.79
SDR1806-221KL	220	± 10%	20	0.796	04P1914	0.97	0.91	0.85
SDR1806-330ML	33	± 20%	24	2.52	04P1916	0.90	0.85	0.79
SDR1806-331KL	330	± 10%	18	0.796	04P1917	0.90	0.85	0.79
SDR1806-470ML	47	± 20%	22	2.52	04P1918	0.97	0.91	0.85
SDR1806-680ML	68	± 20%	22	2.52	04P1921	0.90	0.85	0.79
SDR1806-681KL	680	± 10%	12	0.796	04P1922	0.90	0.85	0.79

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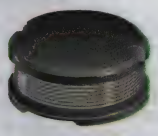
SDR0503/0604 SERIES SMD POWER INDUCTORS

SMD · RoHS Compliant Available · BOURNS®

Features
- Low Profile:
  SDR0503 Series—3.3mm Max.
  SDR0604 Series—4.8mm Max.
- Small Diameter:
  SDR0503 Series—5.3mm Max.
  SDR0604 Series—5.8mm Max.

Specifications
- Operating Temperature: -40°C to +105°C



Applications
- Input/Output of DC/DC Converters
- Power Supplies for Portable Communications Equipment, Camcorders, LCD TVs, Car Radios

Suffix	Inductance Tolerance
J	±5%
K	±10%
M	±20%
Y	±15%

SDR0503, REEL QUANTITY: 500

Mfg. Part No.	L (Induct.) (µH)	Q Ref.	SRF Min.	RDC (Ω)	Stock No.	Price Each 1-9	10-24
SDR0503-100ML	10	10	30	0.13	61J8059	0.50	0.47
SDR0503-220ML	22	20	22	0.28	61J8074	0.50	0.47
SDR0503-330KL	33	15	18	0.38	61J8080	0.50	0.47
SDR0503-101KL	100	40	9	1.6	61J8060	0.53	0.50
SDR0503-151KL	150	40	7	2	61J8068	0.50	0.47
SDR0503-221KL	220	35	6	2.5	61J8075	0.50	0.47
SDR0503-331KL	330	30	5	3.3	61J8081	0.50	0.47
SDR0503-471KL	470	30	5	4.9	61J8087	0.54	0.51
SDR0503-102KL	1000	40	3	11.5	61J8061	0.54	0.51
SDR0503-222JL	2200	40	2	22	61J8076	0.50	0.47
SDR0503-472JL	4.7	40	1	48	61J8088	0.26	0.26
SDR0503-103JL	10000	30	1	110	61J8062	0.54	0.51
SDR0503-153JL	15	30	1	168	61J8070	0.50	0.47

SDR0604, REEL QUANTITY: 400

Mfg. Part No.	L (Induct.) (µH)	Q	SRF Min. (MHz)	RDC (mΩ)	Stock No.	Price Each 1-9
SDR0604-2R2ML	2.2	33	79	60	61J8160	0.47
SDR0604-3R3ML	3.3	22	60	70	61J8166	0.50
SDR0604-4R7ML	4.7	20	34	80	61J8171	0.50
SDR0604-100ML	10	30	23	100	61J8151	0.49
SDR0604-150YL	15	30	20	140	61J8156	0.47
SDR0604-220YL	22	30	16	190	61J8163	0.50
SDR0604-330KL	33	24	13	250	61J8168	0.47
SDR0604-470KL	47	22	12	370	61J8172	0.47
SDR0604-680KL	68	22	10	520	61J8178	0.47
SDR0604-820KL	82	20	9	600	07W8487	0.22
SDR0604-101KL	100	20	9	700	61J8152	0.47
SDR0604-151KL	150	20	6	1100	61J8157	0.47
SDR0604-221KL	220	20	6	1570	61J8164	0.47
SDR0604-331KL	330	25	3	2250	61J8169	0.47
SDR0604-471KL	470	25	3	3300	61J8173	0.47
SDR0604-681KL	680	26	2	4650	61J8179	0.50

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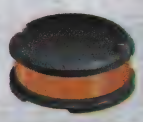
SDR SERIES SMD POWER INDUCTORS

SMD · RoHS Compliant Available · BOURNS®

Features:
- Small Design: 5.8mm Max. Diameter
- Low 3.8mm Profile
- Ferrite DR Core
- Enameled Copper Wire

Applications:
- Input/Output of DC/DC Converters
- Power Supplies for Portable Communications Equipment, Camcorders, Car Radios, LCD TVs

Specifications:
- Operating Temperature: –40°C to +125°C


SDR0805, SDR1006

SDR1105

SDR0805 SERIES

Mfg. Part No.	Inductance 1kHz (µH)	Ind. Tol.	Q. Ref.	Test Freq. (MHz)	Stock No.	Price Each 1-9	10-24	25-49
SDR0805-100ML	10	± 20%	25	2.52	61J8221	0.55	0.48	0.45
SDR0805-120ML	12	± 20%	25	2.52	61J8224	0.55	0.48	0.45
SDR0805-220ML	22	± 20%	20	2.52	61J8233	0.55	0.48	0.45
SDR0805-330KL	33	± 10%	15	2.52	61J8242	0.55	0.48	0.45
SDR0805-470KL	47	± 10%	15	2.52	61J8249	0.55	0.48	0.45
SDR0805-680KL	68	± 10%	15	2.52	61J8256	0.59	0.52	0.49
SDR0805-101KL	100	± 10%	12	0.796	61J8222	0.55	0.48	0.45

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SDR SERIES SMD POWER INDUCTORS (CONT.)

Mfg. Part No.	Inductance 1kHz (µH)	Ind. Tol.	Q. Ref.	Test Freq. (MHz)	Stock No.	Price Each 1-9	10-24	25-49
● SDR0805-121KL	120	± 10%	12	0.796	61J8225	0.24	0.24	0.24
● SDR0805-151KL	150	± 10%	12		61J8227	0.55	0.48	0.45
● SDR0805-181KL	180	± 10%	12	0.796	61J8230	0.28	0.27	0.25
● SDR0805-221KL	220	± 10%	12	0.796	61J8235	0.55	0.48	0.45
● SDR0805-271KL	270	± 10%	12	0.796	61J8238	0.28	0.27	0.25
● SDR0805-331KL	330	± 10%	12	0.796	61J8243	0.55	0.48	0.45
● SDR0805-471KL	470	± 10%	12	0.796	61J8250	0.55	0.48	0.45
SDR1006 SERIES								
● SDR1006-4R7ML	4.7	± 20%	33	7.96	61J8364	0.73	0.65	0.61
● SDR1006-100ML	10	± 20%	30	2.52	61J8339	0.68	0.60	0.57
● SDR1006-150ML	15	± 20%	30	2.52	61J8345	0.68	0.60	0.57
● SDR1006-220ML	22	± 20%	25	2.52	61J8352	0.73	0.65	0.61
● SDR1006-270KL	27	± 10%	25	2.52	61J8355	0.30	0.30	0.29
● SDR1006-330KL	33	± 10%	25	2.52	57J3826	0.68	0.60	0.57
● SDR1006-470KL	47	± 10%	20	2.52	61J8365	0.73	0.65	0.61
● SDR1006-680KL	68	± 10%	15	2.52	61J8372	0.73	0.65	0.61
● SDR1006-101KL	100	± 10%	15	0.796	61J8341	0.72	0.64	0.60
● SDR1006-121KL	120	± 10%	15	0.796	61J8344	0.28	0.28	0.27
● SDR1006-151KL	150	± 10%	15	0.796	61J8346	0.68	0.60	0.57
● SDR1006-181KL	180	± 10%	12	0.796	61J8349	0.28	0.28	0.27
● SDR1006-221KL	220	± 10%	12	0.796	61J8353	0.72	0.64	0.60
● SDR1006-271KL	270	± 10%	12	0.796	61J8356	0.73	0.65	0.61
● SDR1006-331KL	330	± 10%	12	0.796	61J8359	0.68	0.60	0.57
● SDR1006-471KL	470	± 10%	12	0.796	61J8366	0.73	0.65	0.61
● SDR1006-102KL	1000	± 10%	30	0.252	61J8342	0.68	0.60	0.57
● SDR1006-222KL	2200	± 10%	31	0.252	61J8354	0.68	0.60	0.57
● SDR1006-332KL	3300	± 10%	32	0.252	61J8360	0.68	0.60	0.57
SDR1105 SERIES								
● SDR1105-101KL	100	± 10%	...	...	07W8488	0.34	0.32	0.29

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SDR1005 SERIES SMD POWER INDUCTORS

SMD — RoHS Compliant Available — BOURNS®

Features
- Low Profile: 7.0mm
- Ferrite DR Core

Applications
- Input/Output of DC/DC Converters
- Power Supplies for Portable Communications Equipment, Camcorders, LCD TVs, Car Radios

Specifications
- Operating Temperature: -40°C to +105°C

Mfg. Part No.	Inductance (µH)	Tol.	Q Ref.	SRF Min. (MHz)	R_{DC} (Ω)	I_{rms} Max. (A)	I_{sat} Typ. (A)	Stock No.	Price Each 1-9
● SDR1005-1R0ML	1	± 20%	20	137	0.01	7.5	9	61J8304	0.65
● SDR1005-3R3ML	3.3	± 20%	50	54	0.02	5	6.4	61J8320	0.65
● SDR1005-4R7ML	4.7	± 20%	50	42	0.02	4.5	5.4	61J8327	0.65
● SDR1005-100ML	10	± 20%	50	26	0.05	2.9	3.7	61J8306	0.65
● SDR1005-150ML	15	± 20%	50	22	0.06	2.5	3	61J8310	0.65
● SDR1005-220ML	22	± 20%	40	18	0.1	2	2.5	61J8315	0.65
● SDR1005-330KL	33	± 10%	25	14	0.12	1.8	2	61J8321	0.65
● SDR1005-470KL	47	± 10%	25	12	0.19	1.4	1.6	61J8328	0.65
● SDR1005-680KL	68	± 10%	25	11	0.24	1.2	1.4	61J8333	0.65
● SDR1005-101KL	100	± 10%	30	8	0.33	1	1.2	61J8307	0.69
● SDR1005-151KL	150	± 10%	30	6	0.59	0.8	1	61J8311	0.65
● SDR1005-221KL	220	± 10%	33	5	0.78	0.7	0.8	61J8316	0.65
● SDR1005-331KL	330	± 10%	33	4	1.15	0.55	0.6	61J8324	0.65
● SDR1005-471KL	470	± 10%	57	4	1.7	0.45	0.5	61J8329	0.65
● SDR1005-102KL	1000	± 10%	81	2	3.9	0.3	0.35	61J8308	0.65
● SDR1005-103KL	10000	± 10%	101	1	39	0.1	0.11	61J8309	0.65

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SRF SERIES SHIELDED POWER INDUCTORS

SMD — RoHS Compliant Available — BOURNS®

Features:
- Multiple applications: parallel, series, dual-inductor and transformer
- Magnetically shielded, low radiation
- Inductance range: 0.33 to 4000 µH
- Rated current up to 17.9 A

Specifications:
- Test Voltage: 0.25 V
- Hi-pot: 500 Vrms, 3 mA, 3 sec.
- Reflow Soldering: 230°C; 50 sec. max.
- Operating Temperature: -40°C to +105°C (Temperature rise included)
- Storage Temperature: -40°C to +125°C
- Resistance to Solder Heat: +260°C for 10 sec.

Applications:
- SEPIC topology
- Power supplies for:
  Communication equipment
  Notebooks, Desktop computers, Servers
  LDCs, Flat panels
  Backlights
  Camcorders
  HDTVs
  Car audio systems

Mfg. Part No.	L (Induct.) µH	Ind. Tol.	DCR Max (Ohm)	DC Current Rating (A)	Tape Cut Stock No.	Tape Cut Price Each 1-9
SRF0703 Series						
● SRF0703-3R3M	3.3	± 20%	0.0316	3.31	14T0890	0.80
● SRF0703-4R7M	4.7	± 20%	0.0406	3.09	14T0896	0.80
● SRF0703-100M	10	± 20%	0.0826	2.08	14T0874	0.80
● SRF0703-220M	22	± 20%	0.15	1.62	14T0886	0.80
● SRF0703-470M	47	± 20%	0.338	1.08	14T0898	0.80
● SRF0703-101M	100	± 20%	0.715	0.73	14T0876	0.80
● SRF0703-151M	150	± 20%	0.986	0.58	14T0882	0.86
● SRF0703-102M	1000	± 20%	6.11	0.26	14T0878	0.86
SRF1260 Series						
● SRF1260-220M	22	± 20%	0.0451	3.7	14T0933	1.08
● SRF1260-470M	47	± 20%	0.086	2.71	14T0945	1.17
● SRF1260-680M	68	± 20%	0.117	2.22	14T0951	1.08
● SRF1260-101M	100	± 20%	0.171	1.78	14T0922	1.17
SRF1280 Series						
● SRF1280-8R2Y	8.2	± 20%	0.0191	6.32	14T1001	1.41
● SRF1280-220M	22	± 20%	0.0503	4	14T0979	1.41
● SRF1280-330M	33	± 20%	0.0664	3.23	14T0985	1.41
● SRF1280-680M	68	± 20%	0.123	2.44	14T0997	1.41
● SRF1280-101M	100	± 20%	0.175	1.96	14T0969	1.52
● SRF1280-221M	220	± 20%	0.343	1.29	14T0981	1.41
SRF4532 Series						
● SRF4532-110Y	11	+50%, -30%	0.8	0.3	63W2962	0.61
● SRF4532-510Y	51	+50%, -30%	3.5	0.2	63W2964	0.61

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SRN SERIES SMD POWER INDUCTORS

RoHS Compliant Available — BOURNS®

Applications
- DC/DC converters
- Notebook computers
- Digital video cameras
- Televisions, LCD displays

Features
- Semi-shielded construction
- High inductance
- High rated current

Mfr. Part No.	L (Induct.) (µH)	Ind. Tol.	DCR (ohm)	I_{DC} (A)	Stock No.	Price Each 1-49
SRN1060 SERIES						
● SRN1060-100M	10	± 20%	0.029	5.4	54W0028	0.70
● SRN1060-180M	18	± 20%	0.043	3.85	54W0031	0.70
● SRN1060-220M	22	± 20%	0.053	3.4	54W0032	0.70
● SRN1060-330M	33	± 20%	0.072	3.15	54W0034	0.70
● SRN1060-470M	47	± 20%	0.11	2.5	54W0036	0.70
● SRN1060-101M	100	± 20%	0.21	1.7	54W0029	0.70
● SRN1060-151M	150	± 20%	0.3	1.25	54W0030	0.70
● SRN1060-221M	220	± 20%	0.46	1	54W0033	0.70
● SRN1060-331M	330	± 20%	0.62	0.9	54W0035	0.70
● SRN1060-471M	470	± 20%	0.95	0.8	54W0037	0.70
SRN3010 SERIES						
● SRN3010-1R0Y	1	± 30%	0.063	2.3	54W0038	0.41
● SRN3010-1R2Y	1.2	± 30%	0.081	2.1	54W0039	0.41
● SRN3010-1R5Y	1.5	± 30%	0.091	2	54W0040	0.41
● SRN3010-2R2M	2.2	± 20%	0.096	1.9	54W0043	0.41
● SRN3010-3R3M	3.3	± 20%	0.156	1.8	54W0045	0.41
● SRN3010-4R7M	4.7	± 20%	0.21	1.7	54W0047	0.41
● SRN3010-6R8M	6.8	± 20%	0.312	1.3	54W0049	0.41
● SRN3010-100M	10	± 20%	0.42	0.9	54W0041	0.41
● SRN3010-150M	15	± 20%	0.612	0.8	54W0042	0.41
● SRN3010-220M	22	± 20%	0.936	0.7	54W0044	0.41
● SRN3010-330M	33	± 20%	1.32	0.5	54W0046	0.41
● SRN3010-470M	47	± 20%	1.92	0.35	54W0048	0.41

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SRN SERIES SMD POWER INDUCTORS (CONT.)

SRN4018 SERIES

Mfr. Part No.	L (Induct.) (µH)	Ind. Tol.	DCR (ohm)	I_{DC} (A)	Stock No.	Price Each 1-49
SRN4018-R82Y	820	± 30%	0.019	4	54W0050	0.41
SRN4018-1R0Y	1	± 30%	0.023	3.7	54W0051	0.41
SRN4018-1R2Y	1.2	± 30%	0.025	3.5	54W0052	0.41
SRN4018-1R5Y	1.5	± 30%	0.032	3.1	54W0053	0.41
SRN4018-2R2M	2.2	± 20%	0.044	2.9	54W0058	0.41
SRN4018-2R7M	2.7	± 20%	0.052	2.3	54W0059	0.41
SRN4018-3R3M	3.3	± 20%	0.066	2.2	54W0062	0.41
SRN4018-4R7M	4.7	± 20%	0.084	1.9	54W0064	0.41
SRN4018-6R8M	6.8	± 20%	0.118	1.5	54W0066	0.41
SRN4018-100M	10	± 20%	0.18	1.3	54W0054	0.41
SRN4018-150M	15	± 20%	0.264	1	54W0056	0.41
SRN4018-220M	22	± 20%	0.348	0.9	54W0060	0.41
SRN4018-330M	33	± 20%	0.552	0.7	54W0063	0.41
SRN4018-470M	47	± 20%	0.78	0.6	54W0065	0.41
SRN4018-680M	68	± 20%	1.128	0.5	54W0067	0.41
SRN4018-101M	100	± 20%	1.596	0.42	54W0055	0.41
SRN4018-151M	150	± 20%	2.4	0.32	54W0057	0.41
SRN4018-221M	220	± 20%	3.552	0.28	54W0061	0.41
SRN5020 SERIES						
SRN5020-1R0Y	1	± 30%	0.025	3.6	54W0068	0.41
SRN5020-1R5Y	1.5	± 30%	0.031	3.2	54W0069	0.41
SRN5020-2R2Y	2.2	± 30%	0.042	2.9	54W0072	0.41
SRN5020-3R3M	3.3	± 20%	0.058	2.4	54W0074	0.41
SRN5020-4R7M	4.7	± 20%	0.072	2	54W0076	0.41
SRN5020-5R6M	5.6	± 20%	0.106	1.8	54W0077	0.41
SRN5020-6R8M	6.8	± 20%	0.108	1.65	54W0078	0.41
SRN5020-100M	10	± 20%	0.144	1.45	54W0070	0.41
SRN5020-150M	15	± 20%	0.198	1.2	54W0071	0.41
SRN5020-220M	22	± 20%	0.312	1	54W0073	0.41
SRN5020-330M	33	± 20%	0.516	0.9	54W0075	0.41

(210156)

WE-PD2SR SERIES SMD POWER INDUCTORS

RoHS Compliant Available

WÜRTH ELEKTRONIK

NEW

Features:
- Magnetic shielded version from the WE-PD2, which results in low leakage field
- Stable inductance current due the self-centering shielding ring construction
- Pin compatible with the PD2 size 7850 ready to solder and test
- Recommended solder profile: reflow
- Operating temperature: -40°C to +125°C
- Dimensions: 7.8mm x 7mm x 5mm

Applications:
- Switching regulators with low operation voltage like in portable devices
- Integrated DC/DC converters

TOLERANCE: ±30%

Mfg. Part No.	L (Induct.)	I_{dc}	DCR Max.	I_{rms}	I_{sat}	Stock No.	Price Each 1-9
744787012	1.2µH	4.85A	0.013ohm	4.85A	6A	97W4421	1.93
744787027	2.7µH	4.35A	0.017ohm	4.35A	4.5A	97W4422	1.93
744787039	3.9µH	3.8A	0.02ohm	3.8A	4A	97W4423	1.93
744787047	4.7µH	3.3A	0.029ohm	3.3A	3.6A	97W4424	1.93
TOLERANCE: ±20%							
744787068	6.8µH	3A	0.033ohm	3A	3A	97W4425	1.93
744787082	8.2µH	2.7A	0.039ohm	2.7A	2.8A	97W4426	1.93
744787100	10µH	2.6A	0.043ohm	2.6A	2.6A	97W4427	1.93
744787120	12µH	2.45A	0.052ohm	2.45A	2.4A	97W4429	1.93
744787150	15µH	2.3A	0.06ohm	2.3A	2.1A	97W4431	1.93
744787180	18µH	2.15A	0.078ohm	2.15A	1.9A	97W4433	1.93
744787220	22µH	1.83A	0.103ohm	1.83A	1.7A	97W4435	1.93
744787330	33µH	1.48A	0.161ohm	1.48A	1.3A	97W4437	1.93
744787470	47µH	1.25A	0.243ohm	1.25A	1.15A	97W4438	1.93
744787680	68µH	1.12A	0.29ohm	1.12A	1A	97W4439	1.93
744787820	82µH	1.04A	0.328ohm	1.04A	900mA	97W4440	1.93
744787101	100µH	950mA	0.467ohm	950mA	870mA	97W4428	1.93
744787121	120µH	730mA	0.643ohm	730mA	800mA	97W4430	1.93
744787151	150µH	710mA	0.719ohm	710mA	700mA	97W4432	1.93
744787181	180µH	680mA	0.794ohm	680mA	620mA	97W4434	1.93
744787221	220µH	670mA	0.876ohm	670mA	580mA	97W4436	1.93

(211475)

LB SERIES M TYPE WIRE-WOUND CHIP POWER INDUCTORS

RoHS Compliant Available

TAIYO YUDEN

Features:
- Small size wound chip inductor for signal line
- High Q and narrow tolerance
- Operating temperature: -40°C to +105°C

Applications:
- Analog signal lines
- DSC, DVC, HDD, LCD-TV
- Audio-visual equipment

CASE SIZE 0806

Mfg. Part No.	Inductance (µH)	Inductance Tol.	R_{DC} (Ω)	I_{DC} (A)	SRF (MHz)	Stock No.	Price Each 1-9
LBM2016T1R2J	1.2	± 5%	0.41	370	180	82T8632	0.16
LBM2016T1R8J	1.8	± 5%	0.48	345	100	82T8633	0.17
LBM2016T2R7J	2.7	± 5%	0.59	310	55	82T8636	0.17
LBM2016T3R9J	3.9	± 5%	0.74	275	43	82T8638	0.16
LBM2016T5R6J	5.6	± 5%	0.88	255	36	82T8640	0.16
LBM2016T8R2J	8.2	± 5%	1.1	225	30	82T8642	0.16
LBM2016T120J	12	± 5%	1.4	200	23	82T8634	0.16
LBM2016T180J	18	± 5%	2.5	150	18	82T8635	0.16
LBM2016T270J	27	± 5%	3.2	130	16	82T8637	0.17
LBM2016T390J	39	± 5%	3.9	120	14	82T8639	0.16
LBM2016T560J	56	± 5%	5.9	95	12	82T8641	0.17
LBM2016T820J	82	± 5%	7.7	85	10	82T8643	0.16
LBM2016TR12J	120	± 5%	0.13	610	600	82T8626	0.16
LBM2016TR18J	180	± 5%	0.15	560	500	82T8627	0.16
LBM2016TR27J	270	± 5%	0.21	510	425	82T8628	0.16
LBM2016TR39J	390	± 5%	0.26	440	375	82T8629	0.16
LBM2016TR56J	560	± 5%	0.29	410	300	82T8630	0.16
LBM2016TR82J	820	± 5%	0.34	390	250	82T8631	0.16

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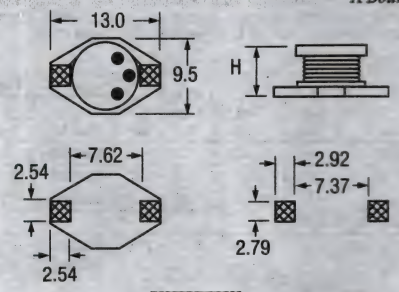
PM3300 SERIES SURFACE MOUNT POWER INDUCTORS

SMD

RoHS Compliant Available

J.W.Miller MAGNETICS A Bourns Company



PM3308-100M

PM3308, **PM3316** and **PM3340 series** surface mount power inductors have a high current capacity and high reliability. Low DCR. Ferrite bobbin core; low profile, compact size. High heat resistance, ideal for reflow soldering. Operating temperature: -55°C to +105°C. Test frequency: 100 KHz. Saturation DC current to cause 10% max. inductance drop. Rms current to cause max. temperature rise of 30°C in **PM3308**, 15°C in **PM3316** and 20°C in **PM3340**. Dimension H: **PM3308** = 3.0mm; **PM3316** = 5.2mm; **PM3340** = 11.5mm. **Tape and reel packaged (PM3308: 1000/reel; PM3316: 500/reel; PM3340: 225/reel).**

PM3308 SERIES, ±20% TOLERANCE

Mfg. Part No.	L (Induct.) (µH)	DCR Max. (Ω)	I_{sat} (A)	I_{rms} (A)	Tape Cut Stock No.	Price Each 1-9	10-24	25-49
PM3308-100M-RC	10	110	2.4	2	63K3540	1.02	0.96	0.90
PM3308-101M-RC	100	800	700	0.6	63K3541	1.02	0.96	0.90
PM3316 SERIES, ±20% TOLERENCE								
PM3316-2R2M-RC	2.2	0.012	7	6.1	63K3560	0.99	0.93	0.87
PM3316-3R3M-RC	3.3	0.015	6.4	5.4	63K3563	0.99	0.93	0.87
PM3316-6R8M-RC	6.8	0.03	4.5	4.4	63K3569	0.99	0.93	0.87
PM3316-100M-RC	10	0.05	3.7	3.9	63K3555	0.99	0.93	0.87
PM3316-150M-RC	15	0.06	3	3.1	63K3558	1.07	1.00	0.93
PM3316-220M-RC	22	0.1	2.5	2.7	63K3561	0.99	0.93	0.87
PM3316-330M-RC	33	0.12	2	2.1	63K3564	0.99	0.93	0.87
PM3316-470M-RC	47	0.19	1.6	1.8	63K3567	1.05	0.99	0.92
PM3316-680M-RC	68	0.24	1.4	1.5	63K3570	1.07	1.00	0.93
PM3316-101M-RC	100	0.33	1.2	1.3	63K3556	1.07	1.00	0.93
PM3316-151M-RC	150	0.59	1	1	63K3559	0.99	0.93	0.87
PM3316-221M-RC	220	0.78	800	0.8	63K3562	0.99	0.93	0.87
PM3316-331M-RC	330	1.15	600	0.6	63K3565	0.99	0.93	0.87
PM3316-471M-RC	470	1.7	500	0.5	63K3568	1.07	1.00	0.93
PM3340 SERIES, ±20% TOLERANCE								
PM3340-100M-RC	10	0.033	8	3.5	63K3572	1.05	0.99	0.92
PM3340-150M-RC	15	0.042	7	3	63K3575	1.05	0.99	0.92
PM3340-220M-RC	22	0.054	5.5	2.5	63K3577	1.05	0.99	0.92
PM3340-330M-RC	33	0.08	4	2.0	63K3579	1.05	0.99	0.92
PM3340-470M-RC	47	0.1	3.8	1.6	63K3581	1.05	0.99	0.92

CONTINUED

PM3300 SERIES SURFACE MOUNT POWER INDUCTORS (CONT.)

PM3340 SERIES, ±20% TOLERANCE

Mfg. Part No.	L (Induct.) (µH)	DCR Max. (Ω)	I_{sat} (A)	I_{rms} (A)	Tape Cut Stock No.	Price Each 1-9	10-24	25-49
● PM3340-680M-RC	68	0.17	3	1.2	**63K3583**	1.05	0.99	0.92
● PM3340-101M-RC	100	0.22	2.5	1.2	**63K3573**	1.13	1.06	0.99
● PM3340-221M-RC	220	0.44	1.6	0.7	**63K3578**	1.05	0.99	0.92

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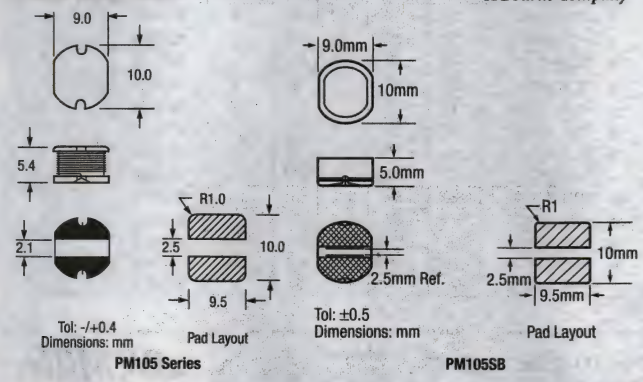
PM105 AND PM105SB SERIES SURFACE MOUNT POWER INDUCTORS

SMD — RoHS Compliant Available — J.W.Miller MAGNETICS A Bourns Company



PM105 and **PM105SB series** surface mount power inductors have a high current capacity. Ferrite bobbin core; low core loss for high frequency power application. Compact size. Large terminal surface for strong PC board bonding. **PM105SB** magnetically shielded for low radiation. Operating temperature: -30°C to +100°C. Current to cause 10% max. inductance drop or temperature rise of 40°C. **Sold in tape and reel packages of 500.**

PM105 SERIES, ±10% TOLERANCE

Mfg. Part No.	L (Ind.) (µH)	Test Freq.	DCR Max. (Ω)	I_{DC} (A)	Tape Cut Stock No.	Price Each 1-9	10-24	25-49
● PM105-680K-RC	68	2.52MHz	0.22	1.11	**63K3515**	1.23	1.15	1.08
● PM105-101K-RC	100	1kHz	0.35	0.97	**63K3496**	1.14	1.07	1.00
● PM105-471K-RC	470	1kHz	1.48	0.42	**63K3512**	1.80	1.75	1.46
PM105SB SERIES, ±20% TOLERANCE								
● PM105SB-100M-RC	10	2.52MHz	0.06	2.06	**63K3519**	0.89	0.83	0.78
● PM105SB-220M-RC	22	2.52MHz	0.08	1.42	**63K3527**	0.89	0.83	0.78
PM105SB SERIES, ±15% TOLERANCE								
● PM105SB-470L-RC	47	2.52MHz	0.14	1	**63K3535**	0.89	0.83	0.78
PM105SB SERIES, ±10% TOLERANCE								
● PM105SB-101K-RC	100	1kHz	0.34	0.72	**63K3520**	0.89	0.83	0.78
● PM105SB-221K-RC	220	1kHz	0.78	0.47	**63K3528**	0.89	0.83	0.78

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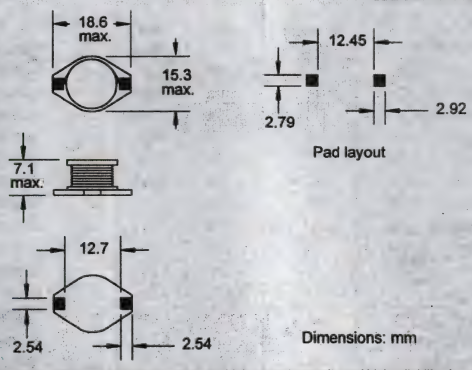
PM5022 SERIES SURFACE MOUNT POWER INDUCTORS

SMD — RoHS Compliant Available — J.W.Miller MAGNETICS A Bourns Company



PM5022 series surface mount power inductors have a very high current capacity and high reliability. Low DCR. Ferrite bobbin core; compact size. High heat resistance, ideal for reflow soldering. Operating temperature: -55°C to +105°C. Test frequency: 100 KHz. Saturation DC current to cause 10% max inductance drop. RMS current to cause max. temperature rise of 40°C. Also available in Tape & Reel; *go online or call.*

±20% TOLERANCE

Mfg. Part No.	L (Induct.) (µH)	DCR Max. (mΩ)	I_{RMS} (A)	I_{SAT} (A)	Tape Cut Stock No.	Price Each 1-249	250-499	500-749
● PM5022-5R6M-RC	5.6	22	5.3	12	**63K3626**	0.45	0.43	0.40
● PM5022-100M-RC	10	32	4.3	10	**63K3614**	0.81	0.76	0.71
● PM5022-220M-RC	22	47	3.5	7	**63K3620**	0.88	0.82	0.77
● PM5022-330M-RC	33	66	3	5.5	**63K3623**	0.88	0.82	0.77
● PM5022-470M-RC	47	87	2.6	4.5	**43K8943**	0.86	0.81	0.75
● PM5022-680M-RC	68	130	2.3	3.5	**63K3627**	0.88	0.82	0.77
● PM5022-101M-RC	100	190	1.8	3	**63K3615**	0.88	0.82	0.77
● PM5022-151M-RC	150	250	1.5	2.6	**63K3618**	0.81	0.76	0.71
● PM5022-221M-RC	220	380	1.2	2.4	**63K3621**	0.88	0.82	0.77
● PM5022-331M-RC	330	560	1	1.9	**63K3624**	0.86	0.81	0.75
● PM5022-471M-RC	470	850	0.82	1.4	**63K3625**	0.88	0.82	0.77
● PM5022-681M-RC	680	1200	0.72	1.2	**63K3628**	0.88	0.82	0.77
● PM5022-102M-RC	1000	1800	0.56	1	**63K3616**	0.81	0.76	0.71

(72683)

DRA SERIES HIGH POWER DENSITY, HIGH EFFICIENCY, SHIELDED INDUCTORS

RoHS Compliant Available — COILTRONICS®

Features:
- 165°C maximum total temperature operation
- Five sizes of Automotive grade shielded drum core inductors
- Inductance range from 0.28µH to 1000µH
- Current range up to 56 Amps
- Mechanical secure mounting for high shock and vibration environments
- Good thermal dispersion with thermal conductive epoxy
- Customized dual winding versions available upon request for SEPIC or Flyback configurations

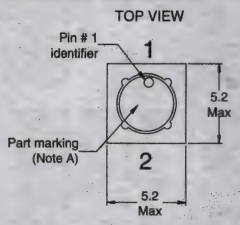
Applications:
- Automotive Electronics (under the hood, interior/exterior)
- Telematics
- DC-DC converters
- Buck, boost, forward, and resonant converters
- Noise filtering and filter chokes

Mfg. Part No.	L (Induct.) (µH)	OCL (µh)	I_{rms} (A)	Isat (A)	DCR Typ. (Ω)	Stock No.	Price Each 1-9
● DRA74-100-R	10	9.62	2.56	2.97	0.043	**99M2860**	1.89
● DRA127-100-R	10	9.63	6.02	11.2	0.017	**99M2814**	2.18
● DRA74-220-R	22	22.25	1.68	1.96	0.1	**99M2866**	1.89
● DRA124-220-R	22	23	2.44	4.16	0.071	**99M2774**	1.92
● DRA73-330-R	33	31.84	1.25	1.35	0.183	**99M2846**	2.13
● DRA74-330-R	33	33.21	1.37	1.61	0.151	**99M2869**	1.89
● DRA125-221-R	220	218.8	0.479	0.51	1.23	**99M2798**	1.96

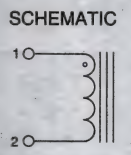
(178351)

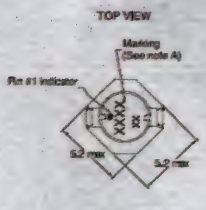
SD SERIES HIGH POWER DENSITY, LOW PROFILE, SHIELDED INDUCTORS

SMD · RoHS Compliant Available · COILTRONICS

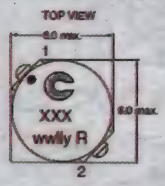


SD10, 12, 14, and 18

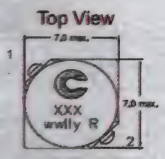




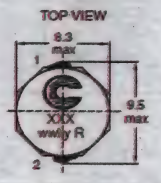
SD53



SD6020



SD7030



SD8328

Features
- Variety of sizes and shapes
- Ferrite shielded, low EMI
- 125°C maximum temperature operation
- Solder reflow temperature 260°C max for 10 sec. max

Mfg. Part No.	L (Induct.) (µH)	OCL (µh)	I_{rms} (A)	I_{sat} (A)	DCR Typ. (Ω)	Tape Cut Stock No.	Tape Cut Price Each 1-49
SD12-100-R	10	10.89	0.938	818	0.2844	29K6707	2.33
SD18-2R2-R	2.2	2.25	2.55	2.16	0.0398	29K6710	2.27
SD53-2R0-R	2	2	2.64	3.3	0.027	99M5529	1.86
SD53-6R8-R	6.8	6.8	1.65	1.85	0.068	99M5534	1.97
SD53-220-R	22	22	0.81	940	0.208	99M5530	1.86
SD53-470-R	47	47	0.64	640	0.352	99M5533	1.86
SD6020-100-R	10	9.7	1.39	1.2	0.124	20M1550	2.05
SD6030-100-R	10	9.3	2.15	1.3	0.065	99M5536	1.93
SD6030-220-R	22	20.4	1.57	900	0.122	99M5545	1.84
SD6030-440-R	44	44	1.1	620	0.25	99M5555	1.39
SD6030-680-R	68	65.6	0.92	520	0.355	99M5561	1.39
SD7030-3R3-R	3.3	3.3	3.7	3	0.024	99M5577	1.73
SD7030-5R0-R	5	4.9	3.2	2.4	0.031	99M5585	1.86
SD7030-100-R	10	95.5	2.1	1.7	0.065	99M5565	1.86
SD8328-101-R	100	97	0.8	0.8	0.43	20M1567	1.34
SD8328-150-R	15	14.5	2.35	2	0.068	20M1568	2.71
SD8350-101-R	100	99.7	0.8	1.3	0.36	01N3980	2.79
SD8350-220-R	22	20.4	1.8	2.6	0.075	01N3982	2.75
SD8350-680-R	68	65.1	1	1.5	0.24	01N3987	2.60
SD8350-6R8-R	6.8	6.8	3.9	4.4	0.25	88M8723	2.60

Additional values available; *go online or call*.
(84715)

HC9 SERIES HIGH CURRENT POWER INDUCTORS

RoHS Compliant Available · COILTRONICS

Features:
- 155°C maximum total operating temperature
- Surface mount inductors designed for higher speed switch mode applications requiring lower inductance, low voltage and high current
- Design utilizes high temperature powder iron material with a non-organic binder to eliminate thermal aging
- Inductance Range from 0.2µH to 47.0µH
- Current Range from 3.65 amps to 95.0 amps
- Frequency Range 1kHz to 500kHz

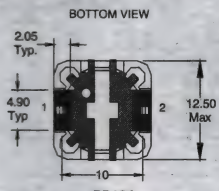
Applications:
- Next generation processors
- High current DC-DC converters
- VRM, multi-phase buck regulator
- PC, workstations, routers, servers

Mfg. Part No.	L (Induct.) (µH)	OCL (µh)	I_{rms} (A)	Isat (A)	DCR Typ. (Ω)	Stock No.	Price Each 1-49
HC9-4R3-R	4.3	49.2	13	19.1	0.0059	20M1323	2.93
HC9-220-R	22	22.4	6.3	8.7	0.0257	20M1321	3.35
HC9-470-R	47	4.67	3.65	5.7	0.0723	20M1324	2.72

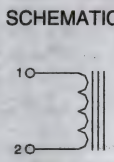
(178352)

DR SERIES HIGH POWER DENSITY, HIGH EFFICIENCY, SHIELDED INDUCTORS

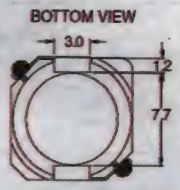
SMD · RoHS Compliant Available · COILTRONICS



DR124



DR Series



DR1030 and DR1050 Series

Features
- 125°C max. Total Temperature Operation
- Eight Sizes of Shielded Drum Core Inductors
- Inductance Range From 0.33µH to 1000µH
- Secure Mounting
- Solder Reflow Temperature: +260°C for 10 Sec. Max.

Also available in Tape & Reel; *go online or call*.

Mfg. Part No.	L (Induct.) (µH)	OCL (µh)	I_{rms} (A)	I_{sat} (A)	DCR Typ. (Ω)	Tape Cut Stock No.	Tape Cut Price Each 1-49
DR124-4R7-R	4.7	4.88	6.5	7.65	0.0162	20M1119	1.87
DR1050-4R7-R	4.7	4.43	6.13	6.7	0.0095	20M1088	1.80
DR1030-5R2-R	5.2	5.2	3.7	4.75	0.0229	20M1062	1.80
DR1030-220-R	22	22.8	1.8	2.19	0.0955	20M1058	1.93
DR1030-470-R	47	47.9	1.3	1.52	0.1666	20M1061	1.80
DR1050-470-R	47	47.1	2.06	2.1	0.089	20M1089	1.80
DR1050-560-R	56	56.7	1.96	1.94	0.098	20M1091	1.80
DR1050-221-R	220	221.8	1	0.98	0.377	20M1080	0.91

(84711)

SRP SERIES SHIELDED POWER INDUCTORS

SMD · RoHS Compliant Available · BOURNS

Specifications:
- Test Frequency- 100 KHz
- Reflow Soldering: 230 °C; 50 sec max
- Temperature Rise: 40 °C at rated I_{rms}
- Resistance to Soldering Heat: 260 °C for 10 sec.
- Wire Material- Enameled copper
- Core Material- Iron
- Wire Material- Enameled copper
- Rated Current- Ind. drops 20 % at I_{sat}

Applications:
- Input/output of DC/DC converters
- Power supplies for:
  Portable communications equipment
  Camcorders
  LCD TVs
  Car radios

Mfg. Part No.	L (Induct.) µH	DC Current Rating (A)	DCR Max (ohm)	Stock No.	Price Each 1-9	Price Each 10-99	Price Each 100-499
SRP1040 SERIES							
SRP1040-R47M	470	38	1600	04P1925	1.62	1.38	1.27
SRP1040-1R0M	1	28	0.0035	04P1928	1.35	1.27	1.18
SRP1040-2R2M	2.2	17	0.0086	04P1932	1.35	1.27	1.18
SRP1040-4R7M	4.7	13	0.0014	04P1936	1.46	1.36	1.27
SRP1040-100M	10	9	0.035	04P1930	1.46	1.36	1.27
SRP1040-150M	15	7	0.057	04P1931	1.46	1.36	1.27
SRP1235 SERIES							
SRP1235-4R7M	4.7	16	0.015	04P1953	1.20	1.13	1.05
SRP1250 SERIES							
SRP1250-1R0M	1	50	0.0025	04P1961	1.44	1.35	1.26
SRP1250-100M	10	16	0.0255	04P1963	1.55	1.45	1.36
SRP1250-2R2M	2.2	32	0.0055	04P1964	1.55	1.45	1.36
SRP1250-3R3M	3.3	32	0.0092	04P1965	1.55	1.45	1.36
SRP1250-4R7M	4.7	27	0.015	04P1966	1.55	1.45	1.36
SRP1270 SERIES							
SRP1270-1R0M	1	50	0.0086	04P1970	1.46	1.36	1.27
SRP1270-1R5M	1.5	48	0.0086	04P1971	1.46	1.36	1.27
SRP1270-2R2M	2.2	40	0.0086	04P1972	1.46	1.36	1.27
SRP1270-3R3M	3.3	35	0.0086	04P1973	1.35	1.27	1.18
SRP1270-4R7M	4.7	30	0.0112	08P4223	1.46	1.36	1.27
SRP1270-6R8M	6.8	21	0.014	04P1974	1.46	1.36	1.27
SRP1270-100M	10	16	0.0168	08P4222	1.35	1.27	1.18
SRP5030 SERIES							
SRP5030T-4R7M	4.7	4.6	0.053	54W0091	1.28	1.20	1.12
SRP6540 SERIES							
SRP6540-1R0M	1	12	7200	54W0097	1.20	1.04	0.96
SRP6540-470M	47	1.6	0.366	72W0905	1.46	1.27	1.17
SRP7030 SERIES							
SRP7030-R47M	0.47	26	0.0042	04P1981	1.11	1.04	0.97
SRP7030-1R0M	1	15	7000	04P1984	1.11	1.04	0.97
SRP7030-1R5M	1.5	14	0.01	04P1985	1.11	1.04	0.97
SRP7030-2R2M	2.2	12	0.02	04P1987	1.11	1.04	0.97

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SRP SERIES SHIELDED POWER INDUCTORS (CONT.)

SRP7030 SERIES

Mfg. Part No.	L (Induct.) µH	DC Current Rating (A)	DCR Max (ohm)	Stock No.	Price Each 1-9	10-99	100-499
● SRP7030-3R3M	3.3	10	0.024	04P1988	1.11	1.04	0.97
● SRP7030-4R7M	4.7	6.5	0.035	04P1989	1.20	1.12	1.05
● SRP7030-6R8M	6.8	6	0.05	04P1991	1.11	1.04	0.97
● SRP7030-100M	10	4.5	0.06	04P1986	1.11	1.04	0.97

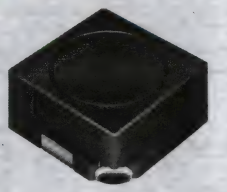
(135711)

SRR SERIES SHIELDED POWER INDUCTORS

SMD RoHS Compliant Available BOURNS®

Applications:
- Input/output of DC/DC converters
- Power supplies for:
  Portable communications equipment
  Camcorders
  LCD TVs
  Car radios

Specifications:
- Operating Temperature: -40°C to +125°C
- Wire Material: Enameled copper
- Test Voltage: 0.1 V



SRR0603

Mfg. Part No.	L (Induct.) µH	Q Nom.	SRF MHz	Stock No.	Price Each 1-9	10-24	25-49
● SRR0603-4R7ML	4.7 ± 20%	13	45	62K3118	0.75	0.66	0.62
● SRR0603-100ML	10 ± 20%	16	25	61J8888	0.80	0.71	0.67
● SRR0603-470KL	47 ± 10%	13	13	53K7837	0.75	0.66	0.62
SRR0604							
● SRR0604-3R3ML	3.3 ± 20%	21	90	61J8918	0.38	0.37	0.34
● SRR0604-4R7ML	4.7 ± 20%	10	50	62K3120	0.75	0.66	0.62
● SRR0604-680KL	68 ± 10%	15	15	62K3122	0.80	0.71	0.67
SRR0805							
● SRR0805-100M	10 ± 20%	40	28	16C0825	0.75	0.66	0.62
● SRR0805-150M	15 ± 20%	40	22	16C0829	0.75	0.66	0.62
● SRR0805-331K	330 ± 10%	36	3.8	34C8912	0.75	0.66	0.62
SRR1206							
● SRR1206-100ML	10 ± 20%	18	18	62K3123	0.91	0.85	0.79
● SRR1206-101YL	100 ± 15%	13	6	62K3124	0.91	0.85	0.79
SRR1208							
● SRR1208-100ML	10 ± 20%	20	15	61J9071	0.91	0.85	0.79
● SRR1208-101YL	100 ± 15%	15	4	61J9073	0.91	0.85	0.79
● SRR1208-331KL	330 ± 10%	13	1.8	62K3128	0.84	0.79	0.74
● SRR1208-102KL	1000 ± 10%	11	1	62K3127	0.91	0.85	0.79
SRR1210							
● SRR1210-180M	18 ± 20%	13	8	07W8489	1.10	1.01	0.93
● SRR1210-390M	39 ± 20%	16	4.5	07W8490	1.10	1.01	0.93
● SRR1210-820M	82 ± 20%	15	3.5	07W8491	1.10	1.01	0.93
SRR1240							
● SRR1240-4R7M	4.7 ± 20%	16	33	04P2004	0.93	0.88	0.82
● SRR1240-6R8M	6.8 ± 20%	14	34	04P2007	0.93	0.88	0.82
● SRR1240-100M	10 ± 20%	17	27	04P1994	1.00	0.94	0.88
● SRR1240-150M	15 ± 20%	16	22	04P1997	0.99	0.93	0.87
● SRR1240-220M	22 ± 20%	18	16	04P1999	1.03	0.96	0.90
● SRR1240-221K	220 ± 10%	12	6.6	04P2000	0.93	0.88	0.82
● SRR1240-330M	33 ± 20%	19	15	04P2002	0.93	0.88	0.82
● SRR1240-470M	47 ± 20%	19	13	04P2005	0.93	0.88	0.82
● SRR1240-680M	68 ± 20%	19	11	04P2008	0.93	0.88	0.82
● SRR1240-151K	150 ± 10%	12	7.5	04P1998	1.00	0.94	0.88
● SRR1240-331K	330 ± 10%	12	5.5	04P2003	1.06	0.88	0.72
SRR1260							
● SRR1260-4R7Y	4.7 ± 30%	19	36.7	04P2023	0.93	0.88	0.82
● SRR1260-100M	10 ± 20%	32	21	04P2012	1.00	0.94	0.88
● SRR1260-120M	12 ± 20%	27	19.4	02J3129	1.00	0.94	0.88
● SRR1260-150M	15 ± 20%	25	17.6	04P2015	1.00	0.94	0.88
● SRR1260-220M	22 ± 20%	29	13.4	04P2018	0.93	0.88	0.82
● SRR1260-330M	33 ± 20%	27	9.97	04P2021	1.00	0.94	0.88
● SRR1260-470M	47 ± 20%	22	7.63	04P2024	1.00	0.94	0.88
● SRR1260-680M	68 ± 20%	22	7.43	04P2027	1.00	0.94	0.88
● SRR1260-101M	100 ± 20%	26	6.07	04P2013	1.00	0.94	0.88
● SRR1260-151K	150 ± 10%	20	5	04P2016	0.93	0.88	0.82
● SRR1260-181K	180 ± 10%	26	4.5	07W8492	1.03	0.95	0.88
● SRR1260-221K	220 ± 10%	22	4.2	04P2019	1.00	0.94	0.88
● SRR1260-331K	330 ± 10%	22	3.2	04P2022	1.00	0.94	0.88
● SRR1260-471K	470 ± 10%	18	2.6	04P2025	0.93	0.88	0.82

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SRR SERIES SHIELDED POWER INDUCTORS (CONT.)

SRR1260

Mfg. Part No.	L (Induct.) µH	Q Nom.	SRF MHz	Stock No.	Price Each 1-9	10-24	25-49
● SRR1260-681K	680 ± 10%	18	2.2	04P2028	0.93	0.88	0.82
● SRR1260-102K	1000 ± 10%	30	1.8	04P2014	1.00	0.94	0.88
SRR1280							
● SRR1280-100M	10 ± 20%	24	17	07W8493	1.03	0.95	0.88
● SRR1280-220M	22 ± 20%	20	11	07W8494	1.03	0.95	0.88
● SRR1280-270M	27 ± 20%	26	10	07W8495	1.03	0.95	0.88
● SRR1280-680M	68 ± 20%	20	6.5	07W8496	1.03	0.95	0.88
● SRR1280-820M	82 ± 20%	20	5	07W8497	1.03	0.95	0.88
SRR1806							
● SRR1806-100M	10 ± 20%	22	25	04P2029	1.00	0.94	0.88
● SRR1806-101M	100 ± 20%	25	7	04P2030	1.00	0.94	0.88
● SRR1806-330M	33 ± 20%	24	11	04P2036	1.00	0.94	0.88
SRR7032							
● SRR7032-471M	470 ± 20%	34	5.1	07W8498	0.31	0.27	0.26
SRR7045							
● SRR7045-331M	330 ± 20%	65	4	07W8499	0.31	0.27	0.26
● SRR7045-471M	470 ± 20%	80	3	07W8500	0.31	0.27	0.26

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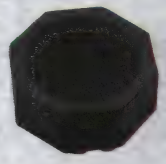
SRU SERIES - SHIELDED SMD POWER INDUCTORS

SMD RoHS Compliant Available BOURNS®

Applications
- Input/output of DC/DC converters
- Power supplies for portable communications equipment, camcorders
- LCD TVs, car radios

Specifications
- Reflow Soldering: 230°C, 10 sec. max.
- Operating Temperature: -40°C to +125°C



SRU1028: 2.8mm UNIT HEIGHT, 7A CURRENT

Mfg. Part No.	Inductance 100 KHz (µH)	Ind. Tol.	Q Ref.	SRF Min. (MHz)	RDC (mΩ)	I_{rms} Max. (A)	I_{sat} Typ. (A)	Tape Cut Stock No.	Price Each 1-9
● SRU1028-3R3Y	3.3	± 30%	14	55	15	4.6	4.3	09J2959	0.78
● SRU1028-100Y	10	± 30%	20	25	40	2.8	2.4	09J2952	0.85
SRU1038: 3.8mm UNIT HEIGHT, 7.2A CURRENT									
● SRU1038-100Y	10	± 30%	24	20	25	3.8	3.6	09J2969	0.83
● SRU1038-150Y	15	± 30%	24	16	37	2.8	2.7	09J2971	0.75
● SRU1038-220Y	22	± 30%	20	12	55.8	2.2	2.3	09J2974	0.81
● SRU1038-330Y	33	± 30%	22	10	86	1.8	1.8	09J2977	0.81
● SRU1038-470Y	47	± 30%	22	8	121	1.65	1.6	09J2979	0.81
● SRU1038-101Y	100	± 30%	24	6	220	1.3	1.1	09J2970	0.81
● SRU1038-151Y	150	± 30%	20	5	358	900	800	09J2972	0.75
● SRU1038-221Y	220	± 30%	22	4	565	650	650	09J2975	0.85
● SRU1038-331Y	330	± 30%	20	3	773	550	520	09J2978	0.81
SUR1038: 4.8mm UNIT HEIGHT, 7.8A CURRENT									
● SRU1048-1R5Y	1.5	± 30%	14	70	4.3	7	7.2	09J2984	0.85
● SRU1048-6R8Y	6.8	± 30%	10	20	13.6	4.8	4.1	09J2998	0.75
● SRU1048-8R2Y	8.2	± 30%	8	18	15	4.6	3.8	09J3000	0.81
● SRU1048-100Y	10	± 30%	26	16	18.5	4.5	3.7	09J2985	0.81
● SRU1048-150Y	15	± 30%	30	14	29	3.2	2.7	09J2987	0.75
● SRU1048-220Y	22	± 30%	22	12	42	2.6	2	09J2990	0.80
● SRU1048-330Y	33	± 30%	24	10	63	2.1	1.7	09J2993	0.80
● SRU1048-470Y	47	± 30%	26	8	94	1.7	1.5	09J2996	0.75
● SRU1048-680Y	68	± 30%	24	6	127	1.4	1.25	09J2999	0.75
● SRU1048-101Y	100	± 30%	26	5	160	1.2	1	09J2986	0.75
● SRU1048-151Y	150	± 30%	24	4.5	235	1	0.8	09J2988	0.75
● SRU1048-221Y	220	± 30%	20	4	350	800	700	09J2991	1.04
● SRU1048-331Y	330	± 30%	18	3	490	650	520	09J2994	1.04
SUR1063: 6.5mm UNIT HEIGHT									
● SRU1063-220Y	22	± 30%	15	10	60	3	3.2	07W8501	0.40
SUR5016: 1.6mm UNIT HEIGHT, 18A CURRENT									
● SRU5016-100Y	10	± 30%	15	40	84	1	0.9	09J3023	0.65
SUR5018: 1.8mm UNIT HEIGHT, 2.8A CURRENT									
● SRU5018-2R2Y	2.2	± 30%	10	130	20.5	2.3	2.1	09J3038	0.79
● SRU5018-4R7Y	4.7	± 30%	8.5	80	36	2	1.55	09J3042	0.65
● SRU5018-100Y	10	± 30%	12	50	65	1.25	1.05	09J3035	0.79
SUR5028: 2.8mm UNIT HEIGHT, 3.5A CURRENT									
● SRU5028-2R2Y	2.2	± 30%	10	130	21	3.2	2.5	09J3050	0.65
● SRU5028-3R3Y	3.3	± 30%	10	90	24	2.8	2.1	09J3052	0.70
● SRU5028-4R7Y	4.7	± 30%	9	50	32	2.2	1.85	09J3054	0.65
● SRU5028-6R8Y	6.8	± 30%	10	55	42	2	1.55	09J3056	0.79
● SRU5028-100Y	10	± 30%	18	25	63	1.4	1.4	09J3047	0.70

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SRU SERIES - SHIELDED SMD POWER INDUCTORS (CONT.)

Mfg. Part No.	Inductance 100 KHz (µH)	Ind. Tol.	Q Ref.	SRF Min. (MHz)	RDC (mΩ)	I_{rms} Max. (A)	I_{sat} Typ. (A)	Tape Cut Stock No.	Price Each 1-9
SUR5028: 2.8mm UNIT HEIGHT, 3.5A CURRENT									
SRU5028-470Y	47	± 30%	13	13	285	0.7	0.62	09J3055	0.70
SRU5028-101Y	100	± 30%	15	8	625	...	0.42	09J3048	0.65
SUR8028: 2.8mm UNIT HEIGHT, 4.5A CURRENT									
SRU8028-2R5Y	2.5	± 30%	15	65	13.6	4.5	4.2	09J3061	1.00
SUR8043: 4.3mm UNIT HEIGHT, 5.4A CURRENT									
SRU8043-3R9Y	3.9	± 30%	15	42	14.6	4.8	4	09J3074	0.82
SRU8043-100Y	10	± 30%	27	20	30	3.5	2.7	09J3069	0.88
SRU8043-150Y	15	± 30%	26	15	46	2.7	2	09J3071	0.82
SRU8043-220Y	22	± 30%	24	12	72.5	2.2	1.7	09J3073	0.82
SRU8043-470Y	47	± 30%	21	9	120	1.5	1.2	09J3077	0.82
SRU8043-680Y	68	± 30%	20	7	192	1.2	1	09J3079	0.88
SRU8043-101Y	100	± 30%	50	6	287	1	800	09J3070	0.82

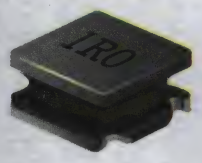
(80010)

SRN3015 SERIES SEMI-SHIELDED POWER INDUCTORS

RoHS Compliant Available

BOURNS®

Features:
- Semi-shielded construction
- Miniature size
- Component height 1.5mm
- Inductance range: 1 to 100µH
- Rated current up to 2.35A



Applications
- DC/DC converters
- Notebook computers
- Digital video cameras
- HDDs
- Cell phones
- Television, LCD displays

Specifications:
- Operating temperature: -40°C to +125°C
- Core material: Ferrite
- Wire: Enameled copper
- Terminal finish: Sn
- Coating: Magnetic epoxy resin

Mfg. Part No.	Inductance (µH)	Tol.	SRF (MHz)	R_{DC} (Ω)	I_{DC} (A)	Tape Cut Stock No.	Price Each 1-9
SRN3015-1R0Y	1	± 30%	145	0.048	2.35	64T2364	0.47
SRN3015-1R5Y	1.5	± 30%	130	0.066	2.1	64T2365	0.47
SRN3015-2R2M	2.2	± 20%	90	0.072	1.8	64T2370	0.48
SRN3015-3R3M	3.3	± 20%	75	0.112	1.6	64T2372	0.47
SRN3015-4R7M	4.7	± 20%	65	0.136	1.4	64T2374	0.48
SRN3015-6R8M	6.8	± 20%	50	0.211	1.1	64T2376	0.48
SRN3015-100M	10	± 20%	45	0.276	1	64T2366	0.48
SRN3015-150M	15	± 20%	33	0.422	0.8	64T2368	0.47
SRN3015-220M	22	± 20%	28	0.622	0.6	64T2371	0.48
SRN3015-470M	47	± 20%	18	1.406	0.4	64T2375	0.47
SRN3015-101M	100	± 20%	11	2.92	0.29	64T2367	0.47

(201271)

2700 SERIES SMD POWER INDUCTORS

RoHS Compliant Available

muRata Ps Murata Power Solutions

Features:
- Up to 1.6A I_{DC}
- 4.7µH to 1mH
- Low R_{DC}
- Ultra-low profi le
- UL 94V-0 packaging materials
- J-STD-020D reflow

Specifications:
- Operating temperature: -40°C to 125°C
- Peak reflow solder temperature: 260°C
- Pin finish: Gold
- Moisture sensitivity level[4]: 1

Applications:
- Handheld devices
- DC-DC converters
- Notebook computers

Mfg. Part No.	Inductance (µH)	Tol.	R_{DC} (Ω)	I_{DC} (mA)	Stock No.	Price Each 1-4
27472C	4.7	± 20%	0.1	1600	83T6079	1.19
27682C	6.8	± 20%	0.13	1400	83T6082	1.19
27103C	10	± 20%	0.15	1100	83T6070	1.19
27153C	15	± 20%	0.23	900	83T6073	1.19
27223C	22	± 20%	0.3	750	83T6075	1.19
27333C	33	± 20%	0.45	600	83T6077	1.19

CONTINUED

2700 SERIES SMD POWER INDUCTORS (CONT.)

Mfg. Part No.	Inductance (µH)	Tol.	R_{DC} (Ω)	I_{DC} (mA)	Stock No.	Price Each 1-4
27473C	47	± 20%	0.7	500	83T6080	1.19
27683C	68	± 20%	0.9	420	83T6083	1.19
27104C	100	± 20%	1.3	350	83T6071	1.19
27154C	150	± 20%	2	280	83T6074	1.19
27224C	220	± 20%	3	240	83T6076	1.19
27334C	330	± 20%	4.5	190	83T6078	1.19
27474C	470	± 20%	6.5	160	83T6081	1.19
27684C	680	± 20%	8.5	140	83T6084	1.19
27105C	1000	± 20%	14	110	83T6072	1.19

(202172)

2700T SERIES SMD POWER INDUCTORS

RoHS Compliant Available

muRata Ps Murata Power Solutions

Features:
- Up to 2.0A I_{DC}
- 1.0µH to 330µH
- Low R_{DC}
- Ultra-low profi le
- UL 94V-0 packaging materials
- J-STD-020D reflow

Specifications:
- Operating temperature: -40°C to 125°C
- Peak reflow solder temperature: 260°C
- Pin finish: Gold
- Moisture sensitivity level[4]: 1

Applications:
- Handheld devices
- DC-DC converters
- Notebook computers

Mfg. Part No.	Inductance (µH)	Tol.	R_{DC} (Ω)	I_{DC} (mA)	Stock No.	Price Each 1-4
27T102C	1	± 20%	0.08	2000	83T6054	0.91
27T152C	1.5	± 20%	0.1	1600	83T6057	0.91
27T222C	2.2	± 20%	0.12	1400	83T6060	0.91
27T332C	3.3	± 20%	0.16	1200	83T6063	0.91
27T472C	4.7	± 20%	0.2	1000	83T6066	0.91
27T682C	6.8	± 20%	0.32	850	83T6068	0.91
27T103C	10	± 20%	0.41	700	83T6055	0.91
27T153C	15	± 20%	0.55	600	83T6058	0.91
27T223C	22	± 20%	0.85	500	83T6061	0.91
27T333C	33	± 20%	1.3	400	83T6064	0.91
27T473C	47	± 20%	1.8	320	83T6067	0.91
27T683C	68	± 20%	2.5	280	83T6069	0.91
27T104C	100	± 20%	3.5	230	83T6056	0.91
27T154C	150	± 20%	5	170	83T6059	0.91
27T224C	220	± 20%	7	150	83T6062	0.91
27T334C	330	± 20%	15	130	83T6065	0.91

(202171)

(211464)

POWER INDUCTORS – SMD

3700 SERIES FLAT COIL SMD POWER INDUCTORS

RoHS Compliant Available

muRata Ps Murata Power Solutions

Features:
- High current, low DCR
- Surface mount
- Pick & place compatible
- J-STD-020D reflow
- Backward compatible with Sn/Pb soldering systems

Specifications:
- Operating temperature: -40°C to 130°C
- Peak reflow solder temperature: 245°C
- Pin finish: Pure tin dip
- Moisture sensitivity level: 1

Applications:
- Laptop computers
- Plasma screens

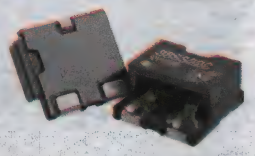
Mfg. Part No.	Inductance (µH)	Inductance Tol.	R_{DC} (Ω)	I_{DC} (A)	Stock No.	Price Each 1-4
37301C	0.3	± 20%	900	19.5	59T0248	2.28
37501C	0.5	± 20%	1000	19.5	59T0251	2.28
37951C	0.95	± 20%	1300	18	59T0252	2.28
37112C	1.1	± 10%	2200	14.5	59T0244	2.28
37142C	1.4	± 10%	1900	16	59T0245	2.28
37222C	2.2	± 10%	4000	11.5	59T0246	2.28
37242C	2.4	± 10%	3000	12	59T0247	2.28
37302C	3	± 10%	4800	9	59T0249	2.28
37392C	3.9	± 10%	4200	10	59T0250	2.45

(202173)

3800 SERIES FLAT COIL SMD POWER INDUCTORS

RoHS Compliant Available

muRata Ps Murata Power Solutions



Features:
- High current, low DCR
- Surface mount
- Pick & place compatible
- J-STD-020D reflow
- Backward compatible with Sn/Pb soldering systems

Specifications:
- Operating temperature: -40°C to 130°C
- Peak reflow solder temperature: 245°C
- Pin finish: Matte tin
- Moisture sensitivity level: 1

Applications:
- Laptop computers
- Plasma screens

Mfg. Part No.	Inductance (µH)	Inductance Tol.	R_{DC} (Ω)	I_{DC} (A)	Stock No.	Price Each 1-4
38H151C	0.15	± 30%	1900	18	59T0254	1.66
38S221C	0.22	± 30%	2200	18	59T0273	1.66
38H301C	0.3	± 30%	2200	16	59T0258	1.66
38L361C	0.36	± 30%	1800	18	59T0265	1.66
38S451C	0.45	± 20%	2600	16	59T0277	1.66
38H501C	0.5	± 20%	3700	12.5	59T0260	1.66
38L801C	0.8	± 20%	2500	16	59T0269	1.66
38S801C	0.8	± 20%	3700	12.5	59T0279	1.66
38H801C	0.8	± 20%	5000	10.5	59T0261	1.66
38H122C	1.2	± 20%	6800	9	59T0253	1.66
38S132C	1.3	± 20%	5000	10.5	59T0271	1.66
38L142C	1.4	± 20%	3700	12	59T0262	1.74
38H152C	1.5	± 20%	9500	7.2	59T0255	1.66
38S182C	1.8	± 20%	6800	9	59T0272	1.66
38H202C	2	± 20%	0.0118	6.5	59T0256	1.66
38L222C	2.2	± 20%	5000	9.6	59T0263	1.66
38S252C	2.5	± 20%	9700	7.2	59T0274	1.66
38H252C	2.5	± 20%	0.0151	5.5	59T0257	1.66
38H302C	3	± 20%	0.0194	4.9	59T0259	1.66
38L322C	3.2	± 20%	6800	7.8	59T0264	1.66
38S322C	3.2	± 20%	0.0119	6.5	59T0275	1.66
38S402C	4	± 20%	0.0151	5.5	59T0276	1.66
38L432C	4.3	± 20%	9700	6.8	59T0266	1.66
38S502C	5	± 20%	0.0203	4.9	59T0278	1.66
38L572C	5.7	± 20%	0.0119	5.8	59T0267	1.66
38L722C	7.2	± 20%	0.0155	5.3	59T0268	1.66
38L882C	8.8	± 20%	0.0196	4.8	59T0270	1.66

(202178)

3900 SERIES FLAT COIL SMD POWER INDUCTORS

RoHS Compliant Available

muRata Ps Murata Power Solutions

Features:
- Compact size
- Surface mount
- Pick & place compatible
- J-STD-020D reflow
- Backward compatible with Sn/Pb soldering systems

Specifications:
- Operating temperature: -40°C to 125°C
- Peak reflow solder temperature: 245°C
- Pin finish: Matte tin
- Moisture sensitivity level: 1

Applications:
- Laptop computers
- Plasma screens

Mfg. Part No.	Inductance (µH)	Inductance Tol.	R_{DC} (Ω)	I_{DC} (A)	Stock No.	Price Each 1-4
39U351C	0.35	± 30%	1900	19.5	59T0297	1.87
39H471C	0.47	± 30%	1900	19.5	59T0284	1.87
39S681C	0.68	± 30%	1900	19.5	59T0292	1.87
39U801C	0.8	± 30%	2500	18	59T0300	1.87
39H102C	1	± 20%	2500	17.5	59T0280	1.87
39S152C	1.5	± 30%	2500	13.5	59T0288	1.87
39H182C	1.8	± 20%	3900	13.5	59T0281	1.87
39S252C	2.5	± 20%	3900	10	59T0289	1.87
39H282C	2.8	± 20%	5400	11	59T0282	1.87
39U142C	1.4	± 20%	3900	13.5	59T0294	1.87
39U222C	2.2	± 20%	5400	11	59T0295	1.87
39U322C	3.2	± 20%	8000	9.7	59T0296	1.87
39S402C	4	± 20%	5400	8.3	59T0290	1.87
39H402C	4	± 20%	8000	9.7	59T0283	1.87
39U432C	4.3	± 20%	0.0114	8.2	59T0298	1.87
39H562C	5.6	± 20%	0.0114	8.2	59T0285	1.87
39U562C	5.6	± 20%	0.0135	6.6	59T0299	1.87
39S602C	6	± 20%	8000	6.7	59T0291	1.87
39H722C	7.2	± 20%	0.0135	6.6	59T0286	1.87
39S822C	8.2	± 20%	0.0114	5.8	59T0293	1.87
39S103C	10	± 20%	0.0135	5	59T0287	1.87

(202179)

BR SERIES WIRE-WOUND CHIP POWER INDUCTORS

RoHS Compliant Available

TAIYO YUDEN

Applications:
- Anti-noise measure
- DC-DC converters
- DSC, DVC, LCD-TV

Features:
- Useable as a choke coil
- Operating temperature: -40°C tp +105°C

Mfg. Part No.	Inductance (µH)	Inductance Tol.	R_{DC} (Ω)	I_{DC} (A)	Stock No.	Price Each 1-9
HIGH CURRENT						
BRC2016T150K	15	± 10%	0.6	410	82T8556	0.26
BRC2016T330K	33	± 10%	1.7	240	82T8557	0.26
BRC2016T680K	68	± 10%	2.8	190	82T8558	0.26
LOW PROFILE						
BRL3225TR27M	0.27	± 20%	0.022	2.85	82T8566	0.24
BRL3225TR36M	0.36	± 20%	0.025	2.75	82T8567	0.24
BRL2012TR47M	0.47	± 20%	0.09	1.05	82T8559	0.26
BRL3225TR51M	0.51	± 20%	0.029	2.55	82T8568	0.26
BRL2012T1R5M	1.5	± 20%	0.18	750	82T8560	0.28
BRL2012T3R3M	3.3	± 20%	0.5	440	82T8562	0.26
BRL2012T6R8M	6.8	± 20%	0.75	350	82T8564	0.26
BRL2012T150M	15	± 20%	1	300	82T8561	0.28
BRL2012T330M	33	± 20%	2	220	82T8563	0.28
BRL2012T680M	68	± 20%	5.8	110	82T8565	0.28

(202668)

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(212569)

NS SERIES HIGH CURRENT SHIELDED SMD INDUCTORS

RoHS Compliant Available

TAIYO YUDEN

Features:
- SMD inductors
- Low R_{DC} and high current
- Magnetic shield structure
- Operating temperature: -40°C tp +125°C

Applications:
- Power supply circuits
- DC-DC converters
- LCD TVs
- PCs

10145 PACKAGE - 10.1× 10.1× 4.5mm (WxLxH)

Mfg. Part No.	Inductance (µH)	DCR (mOhm)	IDC (A)	Tape Cut Stock No.	Price Each 1-9
NS10145T1R0NNA	1	4900	8.9	82T8454	1.27
NS10145T1R5NNA	1.5	6000	7.99	82T8455	1.27
NS10145T152MNA	1	3.7	0.27	82T8461	1.27
NS10145T2R2NNA	2.2	8500	6.64	82T8462	1.27
NS10145T3R3NNA	3.3	0.01	6.1	82T8465	1.27
NS10145T4R7NNA	4.7	0.0144	5.03	82T8468	1.27
NS10145T5R6NNA	5.6	0.018	4.45	82T8471	1.27
NS10145T6R8NNA	6.8	0.02	4.22	82T8472	1.27
NS10145T100MNA	10	0.025	3.77	82T8456	1.27
NS10145T150MNA	15	0.038	3	82T8459	1.27
NS10145T680MNA	68	0.15	1.45	82T8473	1.27
NS10145T220MNA	22	0.052	2.55	82T8463	1.27
NS10145T330MNA	33	0.082	2.01	82T8466	1.27
NS10145T470MNA	47	0.1	1.8	82T8469	1.27
NS10145T471MNA	470	1.03	0.52	82T8470	1.35
NS10145T151MNA	150	0.341	0.94	82T8460	1.27
NS10145T101MNA	100	0.2	1.25	82T8457	1.27
NS10145T221MNA	220	0.485	0.78	82T8464	1.27
NS10145T331MNA	330	0.7	0.64	82T8467	1.35
NS10145T681MNA	680	1.57	0.42	82T8474	1.27
NS10145T102MNA	1000	2.58	0.32	82T8458	1.27

10155 PACKAGE - 10.1× 10.1× 5.5mm (WxLxH)

NS10155T1R5NNA	1.5	6000	8.39	82T8475	1.34
NS10155T2R2NNA	2.2	7000	7.61	82T8478	1.34
NS10155T3R3NNA	3.3	0.01	6.49	82T8480	1.34
NS10155T4R7NNA	4.7	0.011	6.01	82T8481	1.34
NS10155T6R8NNA	6.8	0.016	4.98	82T8482	1.34
NS10155T100MNA	10	0.02	4.4	82T8476	1.34
NS10155T220MNA	22	0.038	3.12	82T8479	1.34
NS10155T150MNA	15	0.028	3.65	82T8477	1.43

10155 PACKAGE - 10.1× 10.1× 6.5mm (WxLxH)

NS10165T1R5NNA	1.5	6000	8.04	82T8483	1.41
NS10165T2R2NNA	2.2	7000	7.32	82T8486	1.41
NS10165T3R3NNA	3.3	9000	6.76	82T8488	1.41
NS10165T4R7NNA	4.7	0.011	5.88	82T8489	1.41
NS10165T6R8NNA	6.8	0.014	5.22	82T8490	1.41
NS10165T100MNA	10	0.017	4.66	82T8484	1.50
NS10165T220MNA	22	0.031	3.41	82T8487	1.41
NS10165T150MNA	15	0.025	3.84	82T8485	1.41

12555 PACKAGE - 12.5×12.5×5.5mm (WxLxH)

NS12555T6R0NN	6	0.014	5.6	29T3713	1.45
NS12555T100MN	10	0.0175	5.04	29T3689	1.45
NS12555T150MN	15	0.0233	4.18	29T3695	1.45
NS12555T220MN	22	0.0297	3.81	29T3701	1.56
NS12555T330MN	33	0.0415	3.16	29T3705	1.45
NS12555T470MN	47	0.0551	2.7	29T3709	1.45
NS12555T680MN	68	0.0797	2.14	29T3715	1.45
NS12555T101MN	100	0.117	1.86	29T3691	1.45
NS12555T151MN	150	0.176	1.43	29T3697	1.45
NS12555T221MN	220	0.27	1.18	29T3703	1.45
NS12555T331MN	330	0.41	0.96	29T3707	1.45
NS12555T471MN	470	0.52	0.8	29T3711	1.45
NS12555T681MN	680	0.76	0.72	29T3717	1.45
NS12555T102MN	1000	1120	0.59	29T3693	1.45
NS12555T152MN	1500	1730	0.44	29T3699	1.56

12565 PACKAGE - 12.5×12.5×6.5mm (WxLxH)

NS12565T2R0NN	2	8000	7.6	29T3727	1.62
NS12565T4R2NN	4.2	0.0126	5.91	29T3735	1.62
NS12565T7R0NN	7	0.0162	5.21	29T3741	1.62
NS12565T100MN	10	0.0199	4.75	29T3719	1.62
NS12565T150MN	15	0.0237	4.33	29T3723	1.62
NS12565T220MN	22	0.031	3.91	29T3729	1.62
NS12565T330MN	33	0.039	3.22	29T3733	1.62
NS12565T470MN	47	0.0575	2.78	29T3737	1.62
NS12565T680MN	68	0.0775	2.3	29T3739	1.62
NS12565T101MN	100	0.123	1.81	29T3721	1.62

CONTINUED

NS SERIES HIGH CURRENT SHIELDED SMD INDUCTORS (CONT.)

12565 PACKAGE - 12.5×12.5×6.5mm (WxLxH)

Mfg. Part No.	Inductance (µH)	DCR (mOhm)	IDC (A)	Tape Cut Stock No.	Price Each 1-9
NS12565T151MN	150	0.173	1.54	29T3725	1.62
NS12565T221MN	220	0.273	1.18	29T3731	1.62

12575 PACKAGE - 12.5×12.5×7.5mm (WxLxH)

NS12575T1R2NN	1.2	5800	9.15	29T3743	1.72
NS12575T6R8NN	6.8	0.0131	5.84	29T3769	1.72
NS12575T100MN	10	0.0156	5.55	29T3745	1.72
NS12575T150MN	15	0.0184	5.22	29T3751	1.85
NS12575T220MN	22	0.026	4.05	29T3757	1.72
NS12575T680MN	68	0.072	2.49	29T3771	1.85
NS12575T101MN	100	0.11	2.01	29T3747	1.72
NS12575T151MN	150	0.161	1.51	29T3753	1.72
NS12575T221MN	220	0.245	1.35	29T3759	1.72
NS12575T102MN	1000	0.927	0.68	29T3749	1.72

(195721)

HC SERIES HIGH CURRENT, HIGH FREQUENCY, POWER INDUCTORS

RoHS Compliant Available

COILTRONICS

Applications:
- Point-of-load modules
- Multi-phase regulators
- Voltage Regulator Module (VRM)
- Desktop and server VRMs and EVRDs
- Data networking and storage systems
- Notebook regulators
- Graphics cards and battery power systems

Features:
- Halogen free
- 125°C maximum total temperature operation
- High current carrying capacity, low core losses
- Inductance range from 0.15µH to 10.0µH
- Current range from 3.2 to 110 Amps
- Frequency range up to 5MHz

1007 PACKAGE - 10.3 x 8.1 x 6.65mm (FERRITE CORE)

Mfg. Part No.	Inductance nH	Tol.	I_{DC} (A)	R_{DC} (µΩ)	Stock No.	Price Each 1-49
HCF1007-R56-R	560	± 20%	26	1300	77R1523	3.74
HCF1007-1R0-R	1000	± 20%	16	2650	77R1525	3.74
HCF1007-1R5-R	1500	± 20%	13	4150	77R1526	3.74
HCF1007-2R2-R	2200	± 20%	10.7	6350	77R1528	3.74
HCF1007-3R3-R	3300	± 20%	10	7500	77R1529	4.02
HCF1007-4R7-R	4700	± 20%	9.4	8650	77R1530	3.74
HCF1007-6R8-R	6800	± 20%	9.4	8650	77R1532	4.02
HCF1007-100-R	10000	± 20%	9.4	8650	77R1527	3.92

0703 PACKAGE - 7.4 x 7.0 x 3.0mm (POWDER IRON CORE)

HCM0703-R15-R	150	± 20%	26	2500	77R1533	2.38
HCM0703-R22-R	220	± 20%	23	2800	77R1534	2.38
HCM0703-R47-R	470	± 20%	17.5	4200	77R1535	2.38
HCM0703-R68-R	680	± 20%	15.5	5500	77R1536	2.38
HCM0703-R82-R	820	± 20%	13	8000	77R1537	2.38
HCM0703-1R0-R	1000	± 20%	11	10000	77R1538	2.38
HCM0703-1R5-R	1500	± 20%	9	15000	77R1539	2.38
HCM0703-2R2-R	2200	± 20%	8	20000	77R1541	2.38
HCM0703-3R3-R	3300	± 20%	6	30000	77R1542	2.53
HCM0703-4R7-R	4700	± 20%	5.5	40000	77R1543	2.56
HCM0703-6R8-R	6800	± 20%	4.5	60000	77R1544	2.38
HCM0703-8R2-R	8200	± 20%	4	68000	77R1545	2.56
HCM0703-100-R	10000	± 20%	3.2	77600	77R1540	2.38

1103 PACKAGE - 11.5x 10.3 x 3.0mm (POWDER IRON CORE)

HCM1103-R12-R	120	± 20%	30	610	28W2869	2.15
HCM1103-R36-R	360	± 20%	23	1300	28W2870	2.15
HCM1103-R47-R	470	± 20%	20	2000	65T1255	2.15
HCM1103-R68-R	680	± 20%	21	3400	28W2871	2.15
HCM1103-1R0-R	1000	± 20%	15	6000	28W2872	2.15
HCM1103-2R2-R	2200	± 20%	13	9000	28W2875	2.15
HCM1103-3R3-R	3300	± 20%	9	16000	28W2877	2.15
HCM1103-4R7-R	4700	± 20%	7	22500	28W2878	2.15
HCM1103-8R2-R	8200	± 20%	5	38500	28W2879	2.15
HCM1103-100-R	10000	± 20%	5	44000	28W2873	2.15
HCM1103-150-R	15000	± 20%	4	65000	28W2874	2.15
HCM1103-220-R	22000	± 20%	3	99000	28W2876	2.15

1104 PACKAGE - 11.5x 10.3 x 4.0mm (POWDER IRON CORE)

HCM1104-R20-R	200	± 20%	32	6300	86R1137	2.60

1305 PACKAGE - 13.8x 12.5 x 5.0mm (POWDER IRON CORE)

HCM1305-R22-R	220	± 20%	51	630	86R1147	4.35
HCM1305-R47-R	470	± 20%	38	800	86R1149	4.35

(195722)

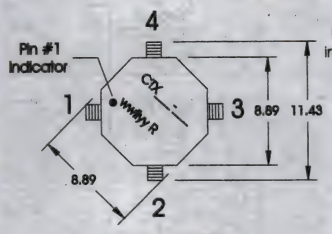
ECONO-PAC™/OCTA-PAC® POWER INDUCTORS AND TRANSFORMERS

SMD

RoHS Compliant Available

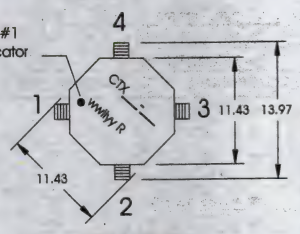
COILTRONICS

TOP VIEW



CTX 1, CTX 1P, CTX 2, CTX 2P Series

TOP VIEW



CTX 3, CTX 3P, CTX 4, CTX 4P Series

Specifications
- Solder Reflow Temperature: +260°C for 10 Sec. Max.
- Tolerance: ±20%
- RoHS Compliant

Mfg. Part No.	Parallel Mode O.C. L (µH)	Parallel Mode F.L. L (µH)	Parallel Mode DCR max. (Ω)	Series Mode O.C. L (µH)	Series Mode F.L. L (µH)	Series Mode DCR max. (Ω)	Stock No.	Price Each 1-49
● CTX2-2P-R	2.18	1.56	0.014	8.7	6.26	0.055	29K6539	3.24
● CTX5-4P-R	5.15	3.56	0.027	20.62	14.23	0.107	29K6158	3.72
● CTX10-1P-R	9.62	6.23	0.057	38.48	24.94	0.227	29K6149	3.59
● CTX10-2P-R	9.83	6.73	0.045	39.3	26.92	0.179	29K6151	3.49
● CTX10-4P-R	9.88	6.7	0.047	39.53	26.79	0.187	29K6154	3.72
● CTX20-2P-R	19.58	13.37	0.097	78.34	53.48	0.387	29K6540	3.24
OCTA-PAC — CUT TAPE								
● CTX5-2-R	4.7	2.66	0.021	18.8	10.65	0.084	29K6156	5.19
● CTX5-4-R	4.9	2.59	0.014	19.6	10.37	0.056	29K6157	5.64
● CTX10-3-R	9.6	4.38	0.028	38.4	17.54	0.111	29K6152	6.16
● CTX10-4-R	9.6	4.82	0.019	38.42	19.28	0.078	29K6153	6.49
● CTX10-1-R	10	4.85	0.044	40	19.4	0.176	29K6148	5.46
● CTX10-2-R	10.58	5.18	0.031	42.3	20.72	0.125	29K6150	5.55
● CTX20-4-R	19.6	10.68	0.055	78.4	42.73	0.22	29K6542	6.06
● CTX20-3-R	20.18	10.76	0.078	80.74	43.04	0.312	29K6541	5.64
● CTX50-4-R	50.18	25.03	0.111	200.7	100.11	0.443	29K6160	6.40
● CTX100-4-R	99.23	54.56	0.302	396.9	218.25	1.21	29K6604	6.06
● CTX150-4-R	148.23	77.17	0.372	592.9	308.69	1.488	29K6155	6.06

(84685)

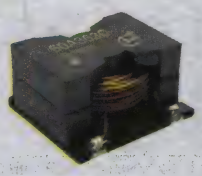
6000A SERIES SURFACE MOUNT POWER INDUCTORS

RoHS Compliant Available

muRata Ps Murata Power Solutions

Features:
- Up to 22A saturation current
- 5.8µH to 57.8µH
- High energy storage, low resistance
- UL 94V-0 packaging materials
- J-STD-020D.1 reflow

Applications:
- Power applications
- DC-DC converters
- Energy storage
- Input or output filtering



Specifications:
- Operating temperature : -40°C to 85°C
- Peak reflow solder temperature: 245°C
- Pin finish: Pure tin
- Moisture sensitivity level[3]: 1

Mfg. Part No.	Inductance (µH)	Inductance Tol.	SRF (MHz)	R_{DC} (Ω)	I_{DC} (A)	Stock No.	Price Each 1-4
● 60A582C	5.8	± 10%	31	5000	14.5	65T7962	2.86
● 60A782C	7.8	± 10%	26	6000	13.5	65T7964	2.86
● 60A103C	10.2	± 10%	21	7000	12	65T7954	3.08
● 60A163C	16	± 10%	17	9000	9.6	65T7955	2.86
● 60A193C	19.4	± 10%	15	0.011	8.5	65T7956	2.86
● 60A233C	23	± 10%	13	0.012	8.4	65T7957	2.86
● 60A273C	27	± 10%	13	0.015	7.5	65T7958	3.08
● 60A313C	31.4	± 10%	12	0.018	6.8	65T7959	2.86
● 60A363C	36	± 10%	11	0.02	6.4	65T7960	2.86
● 60A413C	41	± 10%	10	0.026	5.6	65T7961	2.86
● 60A583C	57.8	± 10%	8	0.036	4.9	65T7963	2.86

(201265)

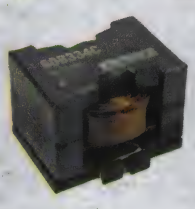
6000B SERIES SURFACE MOUNT POWER INDUCTORS

RoHS Compliant Available

muRata Ps Murata Power Solutions

Features:
- Up to 10.5A I_{DC}
- 47µH to 680µH
- High energy storage, very low resistance
- UL 94V-0 packaging materials
- J-STD-020D.1 reflow

Applications:
- Power applications
- DC-DC converters
- Energy storage
- Input or output filtering



Specifications:
- Operating temperature: -40°C to 85°C
- Peak reflow solder temperature: 245°C
- Pin finish: Pure tin
- Moisture sensitivity level[3]: 1

Mfg. Part No.	Inductance (µH)	Inductance Tol.	SRF (MHz)	R_{DC} (Ω)	I_{DC} (A)	Stock No.	Price Each 1-4
● 60B473C	47	± 15%	7.45	0.013	10.5	65T7969	4.07
● 60B683C	68	± 15%	6.07	0.017	9	65T7971	3.79
● 60B154C	150	± 15%	3.9	0.038	6	65T7966	4.07
● 60B224C	220	± 15%	3.21	0.05	5	65T7967	3.79
● 60B104C	100	± 15%	4.98	0.025	7.5	65T7965	3.79
● 60B334C	330	± 15%	2.66	0.08	4	65T7968	4.07
● 60B474C	470	± 15%	2.15	0.1	3.5	65T7970	4.07
● 60B684C	680	± 15%	1.59	0.135	3	65T7972	3.79

(202187)

SLF SERIES SMD POWER LINE INDUCTORS

RoHS Compliant Available

TDK

Features:
- Low profile
- Low DC resistance
- High current handling capacities
- Magnetically shielded
- Flat bottom surface ensures secure, reliable mounting

Specifications:
- Operating temperature: -40°C to +85°C

Mfg. Part No.	Inductance L	Inductance Tol.	I_{DC}	R_{DC} (Ω)	Stock No.	Tape Cut Price Each 1-9
● SLF7045T-3R3M2R5-PF	3.3µH	± 20%	2.5A	0.02	90R0715	1.15
● SLF6028T-4R7M1R6-PF	4.7µH	± 20%	1.6A	0.0284	90R0679	1.03
● SLF7045T-4R7M2R0-PF	4.7µH	± 20%	2A	0.03	90R0718	1.15
● SLF6045T-4R7N2R4-3PF	4.7µH	± 30%	2.4A	0.0265	90R0690	1.11
● SLF7055T-4R7N3R1-3PF	4.7µH	± 30%	3.1A	0.028	90R0730	1.19
● SLF6028T-6R8M1R5-PF	6.8µH	± 20%	1.5A	0.0354	90R0681	1.03
● SLF7045T-6R8M1R7-PF	6.8µH	± 20%	1.7A	0.039	90R0721	1.15
● SLF6045T-6R8N2R0-3PF	6.8µH	± 30%	2A	0.033	90R0691	1.11
● SLF6028T-100M1R3-PF	10µH	± 20%	1.3A	0.0532	90R0672	1.03
● SLF7045T-100M1R3-PF	10µH	± 20%	1.3A	0.036	90R0708	1.15
● SLF6045T-100M1R6-3PF	10µH	± 20%	1.6A	0.039	90R0685	1.11
● SLF7032T-100M1R4-2PF	10µH	± 20%	1.4A	0.053	05X0446	1.11
● SLF10145T-100M2R5-PF	10µH	± 20%	2.5A	0.0364	90R0599	1.23
● SLF7055T-100M2R5-3PF	10µH	± 20%	2.5A	0.0391	90R0725	1.19
● SLF6028T-150M1R0-PF	15µH	± 20%	1A	0.0745	90R0674	1.03
● SLF7045T-150M1R1-PF	15µH	± 20%	1.1A	0.052	90R0711	1.15
● SLF10145T-150M2R2-PF	15µH	± 20%	2.2A	0.0472	90R0602	1.23
● SLF6028T-220MR77-PF	22µH	± 20%	770mA	0.104	90R0676	1.03
● SLF7045T-220MR90-PF	22µH	± 20%	900mA	0.061	90R0713	1.15
● SLF6045T-220M1R1-3PF	22µH	± 20%	1.1A	0.082	90R0688	1.11
● SLF7055T-220M1R7-3PF	22µH	± 20%	1.7A	0.0643	90R0728	1.19
● SLF10145T-220M1R9-PF	22µH	± 20%	1.9A	0.0591	90R0605	1.23
● SLF7045T-330MR82-PF	33µH	± 20%	820mA	0.096	90R0716	1.15
● SLF10145T-330M1R6-PF	33µH	± 20%	1.6A	0.0815	90R0608	1.23
● SLF7032T-470MR67-2PF	47µH	± 20%	670mA	0.24	05X0447	1.11
● SLF7045T-470MR75-PF	47µH	± 20%	750mA	0.125	90R0719	1.15
● SLF10145T-470M1R4-PF	47µH	± 20%	1.4A	0.1	90R0610	1.23
● SLF7045T-680MR60-PF	68µH	± 20%	600mA	0.175	90R0722	1.15
● SLF10145T-680M1R2-PF	68µH	± 20%	1.2A	0.14	90R0613	1.23
● SLF6028T-101MR42-PF	100µH	± 20%	420mA	0.43	90R0673	1.03
● SLF7045T-101MR50-PF	100µH	± 20%	500mA	0.25	90R0709	1.15
● SLF10145T-101M1R0-PF	100µH	± 20%	1A	0.2	90R0600	1.23
● SLF7045T-151MR40-PF	150µH	± 20%	400mA	0.34	90R0712	1.15
● SLF10145T-151MR79-PF	150µH	± 20%	790mA	0.35	90R0603	1.23
● SLF7045T-221MR33-PF	220µH	± 20%	330mA	0.52	90R0714	1.15
● SLF10145T-221MR65-PF	220µH	± 20%	650mA	0.47	90R0606	1.23
● SLF7045T-331MR25-PF	330µH	± 20%	250mA	0.74	90R0717	1.15
● SLF10145T-331MR54-PF	330µH	± 20%	540mA	0.68	90R0609	1.23
● SLF10145T-471MR47-PF	470µH	± 20%	470mA	1.03	90R0611	1.23
● SLF7045T-681MR20-PF	680µH	± 20%	200mA	1.48	90R0723	1.15
● SLF7045T-102MR14-PF	1mH	± 20%	140mA	2.28	90R0710	1.15

(194441)

WE-PD HV SERIES SMD POWER INDUCTORS

RoHS Compliant Available

WÜRTH ELEKTRONIK

NEW

Features:
- Magnetically shielded
- Designed for 400VDC applications
- Operating temperature: -40°C to +125°C
- Tolerance: ±20%

Applications:
- Non-isolated buck or Buck-Boost converter like Pi LinkSwitch-TN
- Constant current LED driver
- Utility metering
- Filter for power supply

DIMENSIONS: 7.3mm x 7.3mm x 4.5mm

Mfg. Part No.	L (Induct.)	I_{dc}	DCR Max.	I_{rms}	I_{sat}	Stock No.	Price Each 1-9
7687779221	220µH	560mA	1.3ohm	560mA	500mA	97W4618	3.20
7687779471	470µH	350mA	3.2ohm	350mA	370mA	97W4619	3.20
7687779561	560µH	330mA	3.6ohm	330mA	350mA	97W4620	3.20
7687779681	680µH	300mA	4ohm	300mA	300mA	97W4621	3.20
7687779102	1mH	240mA	6ohm	240mA	250mA	97W4617	3.39
DIMENSIONS: 10mm x 10mm x 6mm							
7687714221	220µH	950mA	0.68ohm	950mA	1.15A	97W4613	3.53
7687714471	470µH	600mA	1.45ohm	600mA	800mA	97W4615	3.53
7687714681	680µH	550mA	2.25ohm	550mA	610mA	97W4616	3.53
7687714102	1mH	400mA	3.2ohm	400mA	550mA	97W4611	3.53
7687714152	1.5mH	320mA	4.6ohm	320mA	460mA	97W4612	3.53
7687714222	2.2mH	260mA	6.5ohm	260mA	370mA	97W4614	3.53
DIMSNSIONS: 12mm x 12mm x 10.5mm							
7687709221	220µH	1.3A	0.35ohm	1.3A	2A	97W4606	4.61
7687709471	470µH	970mA	0.8ohm	970mA	1.4A	97W4609	4.61
7687709681	680µH	800mA	1.15ohm	800mA	1.2A	97W4610	4.61
7687709102	1mH	720mA	1.4ohm	720mA	900mA	97W4604	4.61
7687709152	1.5mH	520mA	2.2ohm	520mA	800mA	97W4605	4.61
7687709222	2.2mH	430mA	3.7ohm	430mA	650mA	97W4607	4.61
7687709332	3.3mH	370mA	5.2ohm	370mA	520mA	97W4608	4.61

(211474)

NLC SERIES SMD POWER LINE INDUCTORS

RoHS Compliant Available

TDK

Features:
- Excellent heat durability
- Good connection reliability
- Heat resistant thermoplastic package

Specifications:
- Operating temperature: -40°C to +105°C

Mfg. Part No.	Inductance µH	Inductance Tol.	I_{DC} (mA)	R_{DC} (Ω)	Stock No.	Price Each 1-9	Price Each 10-49
NLCV32T-R47M-PFR	0.047	± 20%	2000	0.038	89R8867	0.28	0.25
NLCV32T-R10M-PFR	0.1	± 20%	2850	0.02	89R8863	0.28	0.25
NLCV25T-1R0M-PF	1	± 20%	475	0.34	89R8846	0.28	0.25
NLCV32T-1R0M-PF	1	± 20%	1000	0.055	89R8869	0.28	0.25
NLC453232T-1R0K-PF	1	± 10%	1050	0.11	89R8892	0.47	0.42
NLCV32T-1R0M-PFR	1	± 20%	1700	0.055	89R8870	0.28	0.25
NLCV32T-2R2M-PF	2.2	± 20%	1.2	0.115	89R8878	0.28	0.25
NLCV32T-2R2M-PFR	2.2	± 20%	1200	0.115	89R8879	0.28	0.25
NLC453232T-2R2K-PF	2.2	± 10%	850	0.18	89R8904	0.47	0.42
NLCV32T-3R3M-PF	3.3	± 20%	1	0.16	89R8882	0.28	0.25
NLCV32T-3R3M-PFR	3.3	± 20%	1000	0.16	89R8883	0.28	0.25
NLCV32T-4R7M-PF	4.7	± 20%	900	0.2	89R8886	0.28	0.25
NLC453232T-4R7K-PF	4.7	± 10%	650	0.27	89R8915	0.47	0.42
NLCV32T-4R7M-PFR	4.7	± 20%	900	0.2	89R8887	0.28	0.25
NLCV25T-100K-PF	10	± 20%	210	1.69	89R8850	0.28	0.25
NLCV32T-100K-PF	10	± 20%	600	0.42	89R8873	0.28	0.25
NLC453232T-100K-PF	10	± 10%	550	0.5	89R8896	0.47	0.42
NLCV32T-100K-PFR	10	± 20%	600	0.42	89R8874	0.28	0.25
NLCV32T-150K-PF	15	± 10%	370	0.56	89R8876	0.28	0.25
NLC453232T-150K-PF	15	± 10%	450	0.7	89R8900	0.47	0.42
NLCV32T-220K-PF	22	± 10%	300	0.77	89R8880	0.28	0.25
NLC453232T-220K-PF	22	± 10%	370	0.9	89R8906	0.47	0.42
NLCV32T-330K-PF	33	± 10%	240	1.1	89R8884	0.28	0.25
NLC453232T-330K-PF	33	± 10%	300	1.4	89R8912	0.47	0.42
NLCV32T-470K-PF	47	± 10%	180	1.64	89R8888	0.28	0.25
NLC453232T-470K-PF	47	± 10%	260	1.9	89R8916	0.47	0.42
NLCV32T-101K-PF	100	± 10%	120	3.7	89R8875	0.28	0.25
NLCV32T-151K-PF	150	± 10%	100	6.1	89R8877	0.28	0.25
NLCV32T-221K-PF	220	± 10%	80	8.4	89R8881	0.28	0.25
NLCV32T-331K-PF	330	± 10%	70	12.3	89R8885	0.28	0.25
NLC453232T-101K-PF	100	± 10%	180	4	89R8897	0.47	0.42
NLC453232T-221K-PF	220	± 10%	120	9	89R8907	0.47	0.42

(194439)

SMD POWER INDUCTORS

SMD RoHS Compliant Available EPCOS

Features
- Temperature range up to 150 °C
- High rated current
- Low DC resistance
- Ferrite core
- Magnetically shielded
- Winding: enamel copper wire
- Winding welded to terminals

Applications
- Filtering of supply voltages
- Coupling, decoupling
- DC/DC converters
- Automotive electronics
- Industrial electronics

SIZE: 10.4 x 10.4 x 4.8 mm — RATED UP TO 150°C

Mfg. Part No.	Inductance µH	Inductance Tol.	I_{DC} (A)	R_{DC} (Ω)	Stock No.	Price Each 1-9	Price Each 10-99
B82464G4472M	4.7	± 20%	4.9	0.015	06J0825	2.71	2.49
B82464G4103M	10	± 20%	3.4	0.03	06J0813	1.09	1.06
B82464G4153M	15	± 20%	2.75	0.04	06J0817	2.55	2.34
B82464G4683M	68	± 20%	1.3	0.13	06J0829	2.55	2.34
B82464G4154M	150	± 20%	0.85	0.32	06J0818	2.71	2.49
B82464G4334M	330	± 20%	0.59	0.65	06J0824	1.09	1.06
B82464G4105M	1000	± 20%	0.34	2.2	06J0815	2.55	2.34

(177816)

SMD POWER INDUCTORS

SMD RoHS Compliant Available EPCOS

Features
- Temperature range up to 150 °C
- High rated current
- Low DC resistance
- Ferrite core
- Winding: enamel copper wire
- Winding soldered to terminals
- Plastic terminal carrier

Applications
- Filtering of supply voltages
- Coupling, decoupling
- DC/DC converters
- Automotive electronics
- Industrial electronics
- Consumer electronics

SIZE: 12.95 x 9.4 x 5.08 mm

Mfg. Part No.	Inductance µH	Inductance Tol.	I_{DC} (A)	R_{DC} (Ω)	Stock No.	Price Each 1-9	Price Each 10-99
B82476A1103M	10	± 10%	3.9	0.027	06J0882	1.89	1.73
B82476A1333M	33	± 10%	2.1	0.088	06J0892	1.98	1.82
SIZE: 12.3 x 12.3 x 6 mm							
B82477G2103M	10	± 20%	4	0.025	07R6604	1.99	1.61
SIZE: 12.8 x 12.8 x 8 mm							
B82477G4473M	47	± 20%	2.5	0.082	43J3922	2.19	2.01

(177817)

BFS SERIES SMD POWER INDUCTORS

RoHS Compliant Available

multicomp

Applications:
- DC-DC converter used in notebook computers
- PDA and mobile handphones
- Stepup and stepdown converters
- Flash memory

Features:
- Low profile and shielded very effective in space conscious applications
- Low resistance and high energy storage

The SMD inductors are designed for the smallest possible size and high performance. They are with high energy storage and very low resistance making them the ideal inductors for DC-DC conversion.

MCBFS 5220 Series

Mfg. Part No.	L (Induct.) µH	Ind. Tol.	DC Current Rating (A)	DCR (ohm)	Stock No.	Price Each 1-249
MCBFS5220-1R0MU	1	± 20%	8.3	0.014	74R9861	0.90
MCBFS5220-1R5MU	1.5	± 20%	6.7	0.018	74R9862	0.90
MCBFS5220-2R2MU	2.2	± 20%	5.6	0.027	74R9870	0.90
MCBFS5220-3R3MU	3.3	± 20%	4.5	0.036	74R9874	0.90
MCBFS5220-4R7MU	4.7	± 20%	3.8	0.05	74R9878	0.90
MCBFS5220-6R8MU	6.8	± 20%	3.2	0.07	74R9882	0.90
MCBFS5220-100MU	10	± 20%	2.6	0.1	74R9863	0.90
MCBFS5220-150MU	15	± 20%	2.2	0.14	74R9867	0.90
MCBFS5220-220MU	22	± 20%	1.8	0.218	74R9871	0.90
MCBFS5220-330KU	33	± 10%	1.5	0.36	74R9875	0.90
MCBFS5220-470KU	47	± 10%	1.2	0.5	74R9879	0.90
MCBFS5220-470MU	47	± 20%	1.2	0.5	74R9880	0.90
MCBFS5220-680KU	68	± 10%	1	0.73	74R9883	0.90
MCBFS5220-680MU	6.8	± 20%	1	0.07	74R9884	0.97
MCBFS5220-101KU	100	± 10%	0.85	1.02	74R9864	0.90
MCBFS5220-151KU	150	± 10%	0.7	1.56	74R9868	0.97
MCBFS5220-221KU	220	± 10%	0.56	2.16	74R9872	0.90
MCBFS5220-331KU	330	± 10%	...	...	74R9876	0.90
MCBFS5220-471KU	470	± 10%	...	...	74R9881	0.90
MCBFS5220-681KU	680	± 10%	...	...	74R9885	0.90
MCBFS5220-102KU	1000	± 10%	0.25	10.3	74R9865	0.90

CONTINUED

BFS SERIES SMD POWER INDUCTORS (CONT.)

MCBFS 7330 Series

Mfg. Part No.	L (Induct.) µH	Ind. Tol.	DC Current Rating (A)	DCR (ohm)	Stock No.	Price Each 1-249
● MCBFS7330-100MU	10	± 20%	6.5	0.04	74R9886	0.85
● MCBFS7330-150MU	15	± 20%	5.3	0.048	74R9889	0.92
● MCBFS7330-220MU	22	± 20%	4.4	0.059	74R9891	0.92
● MCBFS7330-330MU	33	± 20%	3.6	0.075	74R9893	0.85
● MCBFS7330-470MU	47	± 20%	3	0.097	74R9895	0.92
● MCBFS7330-680MU	68	± 20%	2.5	0.138	74R9897	0.85
● MCBFS7330-101MU	100	± 20%	2	0.207	74R9887	0.90
● MCBFS7330-151MU	150	± 20%	1.7	0.293	74R9890	0.90
● MCBFS7330-221MU	220	± 20%	1.4	0.47	74R9892	0.90
● MCBFS7330-331MU	3.3	± 20%	1.15	0.78	74R9894	0.90
● MCBFS7330-471MU	470	± 20%	0.96	1.08	74R9896	0.97
● MCBFS7330-681MU	680	± 20%	0.8	1.4	74R9898	0.90
● MCBFS7330-102LU	1000	± 15%	0.65	2.04	74R9888	0.95

(195558)

BF SERIES SMD POWER INDUCTORS

RoHS Compliant Available

multicomp

Features:
- Specially designed for automation standard interface applications
- Highest possible current in the smallest case size
- High self resonant frequency

Applications:
- VGA display card
- Notebook computers
- PDAs
- Step up and step down converters

MCBF 7330 Series

Mfg. Part No.	L (Induct.) µH	Ind. Tol.	DC Current Rating (A)	Self Resonant Frequency (MHz)	Stock No.	Price Each 1-249
● MCBF7330-1R0MU	1	± 20%	12	80	74R9899	0.81
● MCBF7330-2R2MU	2.2	± 20%	9.2	50	74R9905	0.81
● MCBF7330-3R3MU	3.3	± 20%	8.1	40	74R9908	0.81
● MCBF7330-5R6MU	5.6	± 20%	7.5	30	74R9914	0.81
● MCBF7330-100MU	10	± 20%	5.4	20	74R9900	0.87
● MCBF7330-150MU	15	± 20%			74R9903	0.87
● MCBF7330-220MU	22	± 20%	3.7	13	74R9906	0.81
● MCBF7330-330MU	33	± 20%	3.2	10	74R9909	0.81
● MCBF7330-470MU	47	± 20%	2.8	8	74R9912	0.81
● MCBF7330-680MU	68	± 20%	2.4	7	74R9915	0.81
● MCBF7330-101MU	100	± 20%	2	5.5	74R9901	0.85
● MCBF7330-151MU	150	± 20%	1.7	5	74R9904	0.91
● MCBF7330-221MU	220	± 20%	1.3	4.5	74R9907	0.91
● MCBF7330-331MU	330	± 20%	1.1	3	74R9910	0.91
● MCBF7330-391MU	390	± 20%	...	...	74R9911	0.85
● MCBF7330-471MU	470	± 20%	0.95	2.5	74R9913	0.85
● MCBF7330-681MU	680	± 20%	0.8	2.2	74R9916	0.88
● MCBF7330-102MU	1000	± 20%	0.68	2	74R9902	0.85

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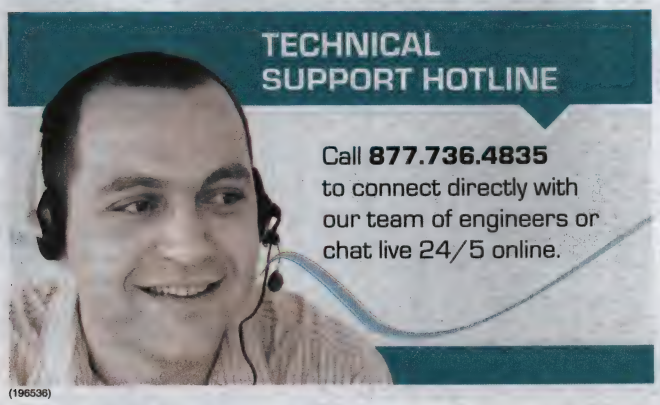

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SD SERIES SMD POWER INDUCTORS

SMD RoHS Compliant Available multicomp

Features:
- Excellent terminal strength construction
- Excellent soderability and high heat resistance
- Packed in embossed carrier tape and can be used by automatic mounting machine

Applications:
- Notebook computers
- LCD displays
- DC/DC converters

MCSD 43 SERIES (SIZE 4x4.5x3.2mm)

Mfg. Part No.	L (Induct.) µH	Ind. Tol.	DC Current Rating (A)	DCR (ohm)	Stock No.	Price Each 1-249
● MCSD43-1R0MU	1	± 20%	3.8	0.049	75R0111	0.39
● MCSD43-1R8MU	1.8	± 20%	2.9	0.064	75R0112	0.39
● MCSD43-2R2MU	2.2	± 20%	2.6	0.071	75R0117	0.39
● MCSD43-2R7MU	2.7	± 20%	2.4	0.079	75R0118	0.39
● MCSD43-3R3MU	3.3	± 20%	2.2	0.086	75R0121	0.39
● MCSD43-3R9MU	3.9	± 20%	1.98	0.0937	75R0122	0.39
● MCSD43-4R7MU	4.7	± 20%	1.7	0.11	75R0125	0.39
● MCSD43-5R6MU	5.6	± 20%	1.5	0.126	75R0127	0.39
● MCSD43-6R8MU	6.8	± 20%	1.3	0.131	75R0129	0.42
● MCSD43-8R2MU	8.2	± 20%	1.25	0.146	75R0131	0.39
● MCSD43-100MU	10	± 20%	1.2	0.182	75R0113	0.39
● MCSD43-120MU	12	± 20%	1.1	0.21	75R0114	0.42
● MCSD43-150MU	15	± 20%	0.92	0.235	75R0115	0.39
● MCSD43-180MU	18	± 20%	0.84	0.31	75R0116	0.39
● MCSD43-220MU	22	± 20%	0.76	0.34	75R0119	0.39
● MCSD43-270MU	27	± 20%	0.71	0.38	75R0120	0.39
● MCSD43-330KU	33	± 10%	0.64	0.54	75R0123	0.42
● MCSD43-390KU	39	± 10%	0.59	0.587	75R0124	0.39
● MCSD43-470KU	47	± 10%	0.54	0.884	75R0126	0.39
● MCSD43-560KU	56	± 10%	0.5	0.937	75R0128	0.39
● MCSD43-680KU	68	± 10%	0.46	1.117	75R0130	0.39
MCSD 54 SERIES (SIZE 5.2x5.8x4.5mm)						
● MCSD54-R33MU	330	± 20%	12	0.008	75R0132	0.40
● MCSD54-2R2MU	2.2	± 20%	3.8	0.041	75R0140	0.40
● MCSD54-2R7MU	2.7	± 20%	3.4	0.0455	75R0141	0.40
● MCSD54-3R3MU	3.3	± 20%	3.3	0.0555	75R0145	0.40
● MCSD54-4R7MU	4.7	± 20%	2.8	0.071	75R0148	0.40
● MCSD54-6R8MU	6.8	± 20%	2.1	0.082	75R0151	0.40
● MCSD54-100MU	8.2	± 20%	1.44	0.1	75R0133	0.40
● MCSD54-120MU	12	± 20%	1.4	0.12	75R0135	0.40
● MCSD54-150MU	15	± 20%	1.3	0.14	75R0137	0.40
● MCSD54-180MU	18	± 20%	1.23	0.15	75R0138	0.40
● MCSD54-220MU	22	± 20%	1.11	0.18	75R0142	0.40
● MCSD54-270MU	27	± 20%	0.97	0.2	75R0144	0.43
● MCSD54-330LU	33	± 15%	0.88	0.23	75R0146	0.40
● MCSD54-390LU	39	± 15%	0.8	0.32	75R0147	0.40
● MCSD54-470LU	47	± 15%	0.72	0.37	75R0149	0.40
● MCSD54-560KU	56	± 10%	0.68	0.42	75R0150	0.40
● MCSD54-680KU	68	± 10%	0.61	0.46	75R0152	0.40
● MCSD54-820KU	82	± 10%	0.58	0.56	75R0153	0.40
● MCSD54-101KU	100	± 10%	0.52	0.7	75R0134	0.40
● MCSD54-121KU	120	± 10%	0.48	0.8	75R0136	0.40
● MCSD54-181KU	180	± 10%	0.38	1.05	75R0139	0.40
● MCSD54-221KU	220	± 10%	0.35	1.57	75R0143	0.40
MCSD 75 SERIES (SIZE 7x7.8x5mm)						
● MCSD75-100KU	10	± 10%	2.3	0.045	75R0154	0.31
● MCSD75-120KU	12	± 10%	2	0.06	75R0156	0.31
● MCSD75-150KU	15	± 10%	1.8	0.08	75R0158	0.31
● MCSD75-180KU	18	± 10%	1.6	0.09	75R0160	0.31
● MCSD75-220KU	22	± 10%	1.5	0.1	75R0163	0.34
● MCSD75-330KU	33	± 10%	1.2	0.13	75R0166	0.31
● MCSD75-390KU	39	± 10%	1.15	0.16	75R0168	0.31
● MCSD75-470KU	47	± 10%	1.1	0.18	75R0169	0.31
● MCSD75-560KU	56	± 10%	0.94	0.22	75R0172	0.31
● MCSD75-680KU	68	± 10%	0.85	0.28	75R0173	0.31
● MCSD75-820KU	82	± 10%	0.78	0.32	75R0175	0.31
● MCSD75-101KU	100	± 10%	0.72	0.4	75R0155	0.31
● MCSD75-121KU	120	± 10%	0.66	0.43	75R0157	0.31
● MCSD75-151KU	150	± 10%	0.58	0.56	75R0159	0.31
● MCSD75-181KU	180	± 10%	0.51	0.65	75R0161	0.34
● MCSD75-271KU	270	± 10%	0.42	1	75R0164	0.31
● MCSD75-331KU	330	± 10%	0.4	1.2	75R0167	0.34
● MCSD75-471KU	470	± 10%	0.34	1.75	75R0170	0.31
● MCSD75-302KU	3000	± 10%	0.12	10	75R0165	0.31
● MCSD75-472KU	4700	± 10%	0.1	13.8	75R0171	0.31

➤ CONTINUED ➤

SD SERIES SMD POWER INDUCTORS (CONT.)

MCSD 75 SERIES (SIZE 7x7.8x5mm)

Mfg. Part No.	L (Induct.) µH	Ind. Tol.	DC Current Rating (A)	DCR (ohm)	Stock No.	Price Each 1-249
MCSD75-802KU	8000	± 10%	0.1	40	75R0174	0.31
MCSD75-183KU	18000	± 10%	0.5	72	75R0162	0.34
MCSD 105 SERIES (SIZE 9x10x5.4mm)						
MCSD105-100MU	10	± 20%	2.6	0.06	75R0084	0.47
MCSD105-120MU	12	± 20%	2.45	0.036	75R0086	0.47
MCSD105-150MU	15	± 20%	2.27	0.065	75R0088	0.47
MCSD105-180MU	18	± 20%	2.15	0.07	75R0090	0.47
MCSD105-220MU	22	± 20%	1.95	0.08	75R0091	0.47
MCSD105-270MU	27	± 20%	1.76	0.09	75R0092	0.47
MCSD105-330MU	33	± 20%	1.5	0.11	75R0094	0.47
MCSD105-390MU	39	± 20%	1.37	0.13	75R0096	0.47
MCSD105-470KU	47	± 10%	1.28	0.15	75R0097	0.47
MCSD105-560KU	56	± 10%	1.17	0.18	75R0099	0.47
MCSD105-680KU	68	± 10%	1.11	0.19	75R0101	0.47
MCSD105-820KU	82	± 10%	1	0.25	75R0104	0.47
MCSD105-101KU	100	± 10%	0.98	0.35	75R0085	0.50
MCSD105-121KU	120	± 10%	0.89	0.4	75R0087	0.47
MCSD105-151KU	150	± 10%	0.78	0.47	75R0089	0.47
MCSD105-271KU	270	± 10%	0.57	0.97	75R0093	0.47
MCSD105-331KU	330	± 10%	0.52	1.15	75R0095	0.47
MCSD105-471KU	470	± 10%	0.42	1.48	75R0098	0.47
MCSD105-561KU	560	± 10%	0.33	1.9	75R0100	0.47
MCSD105-681KU	680	± 10%	0.28	2.25	75R0102	0.47
MCSD105-821KU	820	± 10%	0.24	2.55	75R0105	0.50
MCSD105-802KU	8000	± 10%	0.18	18	75R0103	0.47
MCSD 106 SERIES (SIZE 9x10x6.5mm)						
MCSD106-302KU	3000	± 10%	0.4	7	75R0106	1.15
MCSD106-402KU	4000	± 10%	0.25	8	75R0107	1.15
MCSD106-472KU	4700	± 10%	0.3	12	75R0108	1.15
MCSD106-602KU	6000	± 10%	0.27	14	75R0109	1.15
MCSD106-802KU	8000	± 10%	0.22	16	75R0110	1.15

(195563)

SDRH SERIES SMD POWER INDUCTORS

SMD — RoHS Compliant Available — multicomp

Features:
- Magnetically shielded SMD inductor with high current rating
- High storage capacity
- Low self-losses
- Highest possible current loading for SMD inductor

Applications:
- Integrated DC/DC converter
- Notebook Computers

MCSDRH 125B Series

Mfg. Part No.	L (Induct.) µH	Ind. Tol.	DC Current Rating (A)	DCR (ohm)	Stock No.	Price Each 1-249
MCSDRH125B-R82MHF	0.82	± 20%	...	...	82R4322	0.95
MCSDRH125B-1R5MHF	1.5	± 20%	12.5	6250	82R4323	0.95
MCSDRH125B-2R2MHF	2.2	± 20%	...	...	82R4329	0.95
MCSDRH125B-3R3MHF	3.3	± 20%	...	...	82R4332	0.95
MCSDRH125B-4R7MHF	4.7	± 20%	...	...	82R4335	0.95
MCSDRH125B-6R8MHF	6.8	± 20%	...	...	82R4338	0.95
MCSDRH125B-8R2MHF	8.2	± 20%	...	...	82R4341	0.95
MCSDRH125B-100MHF	10	± 20%	4	0.0255	82R4324	0.95
MCSDRH125B-150MHF	15	± 20%	3.3	0.0347	82R4327	0.95
MCSDRH125B-220MHF	22	± 20%	2.8	0.046	82R4330	1.02
MCSDRH125B-330MHF	33	± 20%	2.1	0.0645	82R4333	0.95
MCSDRH125B-470MHF	47	± 20%	1.8	0.09	82R4336	0.95
MCSDRH125B-680MHF	68	± 20%	1.5	0.128	82R4339	1.02
MCSDRH125B-820MHF	82	± 20%	1.4	0.144	82R4342	0.95
MCSDRH125B-101MHF	100	± 20%	1.3	0.188	82R4325	1.02
MCSDRH125B-151MHF	150	± 20%	1	0.27	82R4328	0.95
MCSDRH125B-221MHF	220	± 20%	0.8	0.4	82R4331	0.95
MCSDRH125B-331MHF	330	± 20%	0.68	0.56	82R4334	0.95
MCSDRH125B-471MHF	470	± 20%	0.58	0.83	82R4337	0.95
MCSDRH125B-681MHF	680	± 20%	0.48	1.2	82R4340	0.95
MCSDRH125B-821MHF	820	± 20%	0.43	1.45	82R4343	0.95
MCSDRH125B-102MHF	1000	± 20%	0.4	1.85	82R4326	0.95

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SDRH SERIES SMD POWER INDUCTORS (CONT.)

MCSDRH 73B Series

Mfg. Part No.	L (Induct.) µH	Ind. Tol.	DC Current Rating (A)	DCR (ohm)	Stock No.	Price Each 1-249
MCSDRH73B-1R0MHF	1	± 20%	4.5	0.0109	82R4344	0.43
MCSDRH73B-1R5MHF	1.5	± 20%	...	...	82R4345	0.43
MCSDRH73B-2R2MHF	2.2	± 20%	3.9	0.0216	82R4351	0.43
MCSDRH73B-3R3MHF	3.3	± 20%	...	...	82R4354	0.43
MCSDRH73B-4R7MHF	4.7	± 20%	2.5	0.0356	82R4357	0.43
MCSDRH73B-6R8MHF	6.8	± 20%	...	...	82R4360	0.43
MCSDRH73B-8R2MHF	8.2	± 20%	...	...	82R4363	0.43
MCSDRH73B-100MHF	10	± 20%	1.8	0.0787	82R4346	0.46
MCSDRH73B-150MHF	15	± 20%	1.5	0.096	82R4349	0.43
MCSDRH73B-220MHF	22	± 20%	1.2	0.13	82R4352	0.46
MCSDRH73B-330MHF	33	± 20%	1.05	0.199	82R4355	0.46
MCSDRH73B-470MHF	47	± 20%	0.9	0.277	82R4358	0.43
MCSDRH73B-680MHF	68	± 20%	0.7	0.397	82R4361	0.43
MCSDRH73B-820MHF	82	± 20%	0.64	0.492	82R4364	0.43
MCSDRH73B-101MHF	100	± 20%	0.58	0.589	82R4347	0.43
MCSDRH73B-151MHF	150	± 20%	0.45	0.901	82R4350	0.46
MCSDRH73B-221MHF	220	± 20%	0.36	1.26	82R4353	0.43
MCSDRH73B-471MHF	470	± 20%	0.25	2.604	82R4359	0.43
MCSDRH73B-681MHF	680	± 20%	0.21	3.744	82R4362	0.43
MCSDRH73B-821MHF	820	± 20%	0.2	4.812	82R4365	0.43

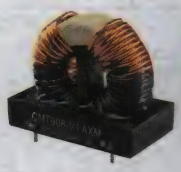
(195564)

COMMON-MODE EMI SUPPRESSION TOROIDAL INDUCTORS

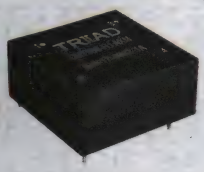
RoHS Compliant Available — TRIAD

Features
- Compact
- Highly dependable
- Eliminates noise and minimizes AC line transmitted interference
- Meets VDE, IEC, UL, and CSA requirements
- Constructed with UL rated 130C materials

Applications
- Power supplies
- Differential mode filtering
- High frequency circuits



CMT-V SERIES



CMT-H SERIES

Mfg. Part No.	L (Induct.) (mH)	L (Induct.) Leakage (µH)	DCR Max. (Ω)	I_{DC} (A)	Nominal Dimensions (in.) H	W	L	Stock No.	Price Each 1-9	10-24
CMT908-V1	2	25	0.02	7.5	1.5	0.8	1.45	37B8976	6.61	5.82
CMT908-V2	4	45	0.04	5.2	1.5	0.8	1.45	37B8977	6.18	5.44
CMT908-V3	8	90	0.12	3.2	1.5	0.8	1.45	37B8978	6.18	5.44
CMT908-V4	16	180	0.16	2.6	1.5	0.8	1.45	37B8979	6.61	5.82
CMT908-H1	2	25	0.02	7.5	0.8	1.5	1.5	37B8972	9.65	8.50
CMT908-H2	4	45	0.04	5.2	0.8	1.5	1.5	37B8973	9.02	7.94
CMT908-H3	8	90	0.12	3.2	0.8	1.5	1.5	37B8974	9.65	8.50
CMT908-H4	16	180	0.16	2.6	0.8	1.5	1.5	37B8975	9.02	7.94

(115456)

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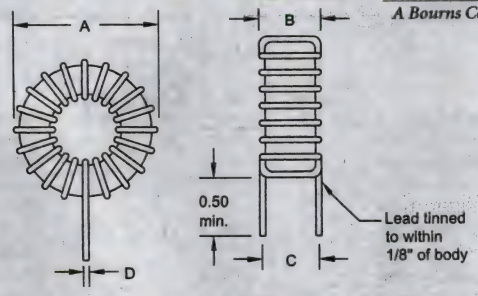
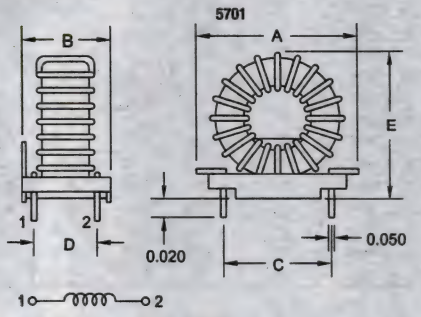
(196546)

HIGH CURRENT TOROID INDUCTORS

RoHS Compliant Available

J.W.Miller MAGNETICS A Bourns Company





6706

5700 and **6700 series** high current toroid inductors feature low radiation, high current capacity and high inductance. **5700 series**- low cost. **6700 series** mounted on a VW-1 rated header with fixed pins for easy PC board insertion. Operating temperature: -55°C to +105°C. Tolerance: ±20%

5700 SERIES

Mfg. Part No.	L (Ind.) (µH)	L (Ind.) @ Rated I (µH)	DCR Max. (Ω)	I_{DC} (A)	Nominal Dimensions (in.) A	B	C	D	Stock No.	Price Each 1-9
● 5701-RC	10	5	0.008	11	0.875	0.437	0.32	0.064	63K3779	3.94
● 5703-RC	125	70	0.12	2.75	0.875	0.437	0.3	0.02	63K3781	4.22
● 5705-RC	450	250	0.49	1.5	0.875	0.437	0.3	0.012	63K3783	3.94
● 5707-RC	75	40	0.04	5	1.125	0.562	0.42	0.036	63K3785	4.22
● 5711-RC	50	25	0.012	9.5	1.25	0.625	0.53	0.064	63K3789	3.94
● 5712-RC	150	85	0.046	4.75	1.25	0.625	0.5	0.036	63K3790	4.22
● 5717-RC	500	275	0.15	4	1.812	0.75	0.65	0.032	63K3795	5.66
● 5726-RC	25	16	0.04	2.5	0.55	0.22	0.21	0.02	63K3804	5.02
● 5731-RC	40	30	0.025	4	0.85	0.36	0.34	0.032	63K3809	3.53

6700 SERIES WITH HEADER

Mfg. Part No.	L (Ind.) (µH)	L (Ind.) @ Rated I (µH)	DCR Max. (Ω)	I_{DC} (A)	Nominal Dimensions (in.) A	B	C	D	E	Stock No.	Price Each 1-9
● 6711-RC	50	25	0.012	9.5	1.25	0.8	0.9	0.6	1.375	63K3923	8.48

(72704)

2100HT/ 2200HT/ 2300HT SERIES HIGH TEMPERATURE, HIGH CURRENT TOROID INDUCTORS

RoHS Compliant Available

J.W.Miller MAGNETICS A Bourns Company

Features
- High temperature rating
- Low magnetic radiation
- High current capacity
- Horizonta lor vertical mount

Applications
- DC/DC converters
- Output chokes
- EMI fi lters

Specifications
- Tolerance: ±15%
- Test frequency: 1kHz
- Operating temp.: -55°C to +200°C
- Current to cause 50°C max. temperature rise

2100 SERIES - HORIZONTAL MOUNT

Mfg. Part No.	L (Ind.) (µH)	I_{DC} (A)	L (Ind.) @ I_{Rated} (µH)	DCR Max. (Ω)	Nominal Dimensions (in.) A	B	C	Stock No.	Price Each 1-9	10-24
● 2100HT-330H-RC	33	6.1	24	0.031	0.35	0.79	0.034	86K6833	2.37	2.18
● 2100HT-470H-RC	47	5.6	33.1	0.036	0.35	0.79	0.034	86K6843	2.20	2.03
● 2100HT-101H-RC	100	4.6	64.5	0.053	0.35	0.79	0.034	86K6799	2.37	2.18
● 2100HT-102H-RC	1	1.6	608.2	0.43	0.37	0.81	0.022	86K6803	2.37	2.18
2100 SERIES - VERTICAL MOUNT										
● 2100HT-100-V-RC	10	9.9	7.6	0.012	0.33	0.76	0.042	86K6798	2.37	2.18
● 2100HT-470V-RC	47	5.6	33.1	0.036	0.35	0.79	0.034	86K6844	2.20	2.03

➤CONTINUED➤

2100HT/ 2200HT/ 2300HT SERIES HIGH TEMPERATURE, HIGH CURRENT TOROID INDUCTORS (CONT.)

2100 SERIES - VERTICAL MOUNT

Mfg. Part No.	L (Ind.) (µH)	I_{DC} (A)	L (Ind.) @ I_{Rated} (µH)	DCR Max. (Ω)	Nominal Dimensions (in.) A	B	C	Stock No.	Price Each 1-9	10-24
● 2100HT-101V-RC	100	4.6	64.5	0.053	0.35	0.79	0.034	86K6800	2.20	2.03
● 2100HT-331-V-RC	330	2.7	206	0.16	0.35	0.79	0.027	86K6836	2.37	2.18
2200 SERIES - HORIZONTAL MOUNT										
● 2200HT-390-H-RC	39	8.1	27.4	0.026	0.45	0.87	0.042	86K6971	2.50	2.29
● 2200HT-101H-RC	100	5.3	68.9	0.061	0.48	0.90	0.034	86K6937	2.50	2.29
● 2200HT-181H-RC	180	4.6	115.6	0.082	0.48	0.90	0.034	86K6951	3.73	2.60
2200 SERIES - VERTICAL MOUNT										
● 2200HT-101V-RC	100	5.3	68.9	0.061	0.48	0.9	0.034	86K6938	2.50	2.29
2300 SERIES - HORIZONTAL MOUNT										
● 2300HT-151H-RC	150	7.5	97.9	0.05	0.56	1.17	0.042	86K7080	4.12	3.78
● 2300HT-221H-RC	220	6.8	136.6	0.061	0.56	1.17	0.042	86K7090	4.07	3.73
● 2300HT-471H-RC	470	4.5	297.9	0.14	0.54	1.16	0.037	86K7110	4.12	3.78
2300 SERIES - VERTICAL MOUNT										
● 2300HT-100V-RC	10	23.3	7.2	6000	0.56	1.18	0.066	86K7069	4.12	3.78
● 2300HT-220V-RC	22	19	14.5	8000	0.56	1.18	0.066	86K7089	3.85	3.53

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2100LL/ 2200LL SERIES HIGH CURRENT TOROID INDUCTORS

RoHS Compliant Available

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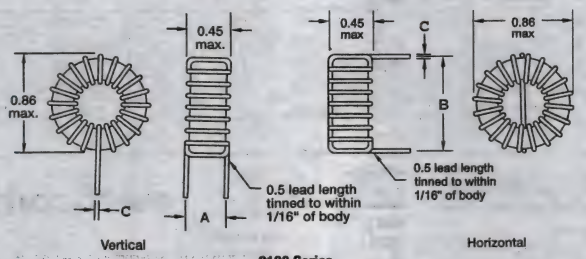
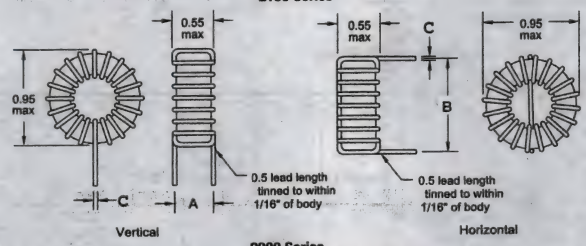


2100 Series



2200 Series

Features
- Low core loss
- Low magnetic radiation
- High current capacity
- Horizontal mount

Applications
- Switch mode power supplies
- DC/DC converters
- Output chokes
- EMI fi lters

Specifications
- Tolerance: ±15%
- Test frequency: 1kHz
- Operating temp.: -55°C to +125°C
- Current to cause 30°C max. temperature rise

2100 SERIES - HORIZONTAL MOUNT

Mfg. Part No.	L (Ind.) (µH)	I_{DC} (A)	L (Ind.) @ I_{Rated} (µH)	DCR Max. (Ω)	Nominal Dimensions (in.) A	B	C	Stock No.	Price Each 1-9	10-49
● 2100LL-101-H-RC	100	4.3	46.2	0.036	0.4	0.76	0.034	04P2043	2.79	2.55
● 2100LL-151-H-RC	150	3.9	63.8	0.043	0.4	0.76	0.034	04P2046	2.76	2.53
● 2100LL-221-H-RC	220	3.5	53.5	0.053	0.4	0.76	0.034	04P2048	2.63	2.41
● 2100LL-331-H-RC	330	2.5	145.1	0.103	0.37	0.75	0.022	04P2050	2.63	2.41
● 2100LL-471-H-RC	470	2.3	190.1	0.124	0.38	0.76	0.027	04P2052	2.63	2.41
● 2100LL-102-H-RC	1000	1.5	421.5	0.284	0.37	0.75	0.022	04P2044	2.63	2.41
2200 SERIES - HORIZONTAL MOUNT										
● 2200LL-H-470-RC	47	10.3	20.9	0.012	0.47	1.05	0.053	04P2064	3.57	3.26
● 2200LL-102-H-RC	1000	2.4	412.5	0.216	0.47	0.99	0.027	04P2057	3.57	3.26

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2100-2300 SERIES HIGH CURRENT TOROID INDUCTORS

RoHS Compliant Available

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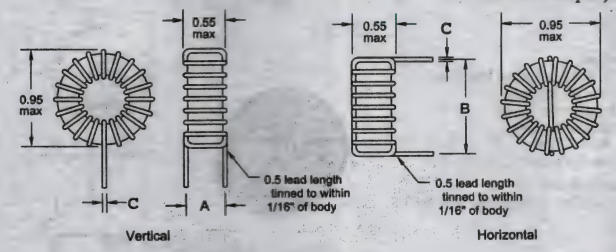
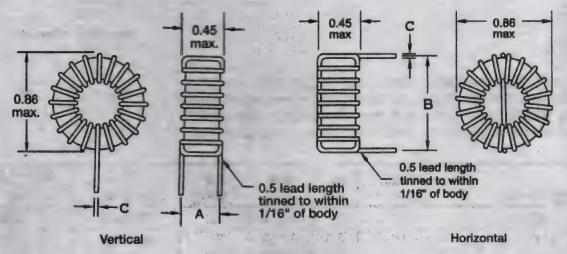
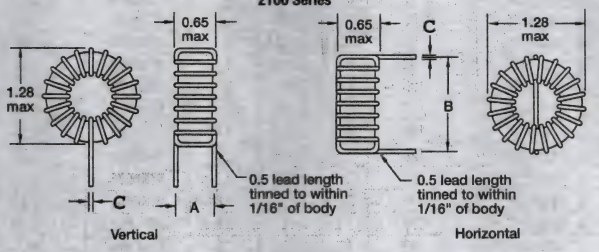


2200 Series



2100 Series



2300 Series

2100, 2200 and **2300 series** high current toroid inductors feature DC-DC converter, EMI filter applications. Low Radiation, high current capacity, and low core loss. Vertical or horizontal mounts. Operating temperature: -55°C to +105°C. Current to cause 30°C maximum temperature rise. Tolerance: ±15%, Test frequency: 1kHz

2100 SERIES: VERTICAL MOUNT

Mfg. Part No.	L (Induct.) (µH)	L (Induct.) @ I Rated (µH)	DCR Max. (Ω)	I_{DC} (A)	Nominal Dimensions (in.) A	B	C	Stock No.	Price Each 1-9	10-24
2101-V-RC	10	6.3	0.006	10.8	0.34	0.77	0.053	63K3630	2.25	2.07
2105-V-RC	22	14.2	0.015	7	0.33	0.76	0.042	63K3634	2.25	2.07
2107-V-RC	33	22.8	0.029	5	0.32	0.75	0.034	63K3636	2.22	2.05
2112-V-RC	100	75.2	0.13	2.4	0.31	0.74	0.022	63K3642	2.22	2.05
2114-V-RC	150	84.3	0.062	3.4	0.35	0.79	0.034	63K3646	2.25	2.07
2115-V-RC	180	113.1	0.11	2.6	0.34	0.77	0.027	63K3648	2.09	1.93
2116-V-RC	220	134.4	0.12	2.4	0.34	0.77	0.027	63K3650	2.25	2.07
2118-V-RC	330	216.3	0.23	1.7	0.33	0.76	0.022	63K3654	2.25	2.07
2124-V-RC	1000	559.2	0.4	1.3	0.37	0.81	0.022	63K3666	2.19	2.02
2100 SERIES: HORIZONTAL MOUNT										
2101-H-RC	10	6.3	0.006	10.8	0.34	0.77	0.053	63K3415	2.09	1.93
2103-H-RC	15	10.2	0.012	7.7	0.33	0.76	0.042	63K3417	2.09	1.93
2105-H-RC	22	14.2	0.015	7	0.33	0.76	0.042	63K3419	2.25	2.07
2106-H-RC	27	19.1	0.026	5.3	0.32	0.75	0.034	63K3420	2.09	1.93
2107-H-RC	33	22.8	0.029	5	0.32	0.75	0.034	63K3421	2.09	1.93
2108-H-RC	39	26.4	0.032	4.8	0.32	0.75	0.034	63K3422	2.09	1.93
2109-H-RC	47	34.7	0.055	3.6	0.31	0.75	0.027	63K3423	2.09	1.93
2111-H-RC	68	48.3	0.067	3.3	0.31	0.75	0.027	63K3425	2.09	1.93
2112-H-RC	100	75.2	0.13	2.4	0.31	0.74	0.022	63K3641	2.25	2.07
2114-H-RC	150	84.3	0.062	3.4	0.35	0.79	0.034	63K3645	2.25	2.07
2116-H-RC	220	134.4	0.12	2.4	0.34	0.77	0.027	63K3649	2.25	2.07
2120-H-RC	470	293.8	0.28	1.6	0.35	0.76	0.022	63K3657	2.80	2.10
2121-H-RC	560	341.5	0.3	1.5	0.35	0.79	0.022	63K3659	2.09	1.93
2124-H-RC	1000	559.2	0.4	1.3	0.37	0.81	0.022	63K3665	2.25	2.07
2200 SERIES: VERTICAL MOUNT										
2205-V-RC	22	13.4	0.01	10.3	0.46	0.88	0.053	63K3676	3.25	2.97
2207-V-RC	33	21.6	0.02	7.4	0.45	0.87	0.042	63K3680	3.02	2.76
2209-V-RC	47	29.3	0.024	6.7	0.45	0.87	0.042	63K3684	3.25	2.97
2210-V-RC	56	34.1	0.026	6.4	0.45	0.87	0.042	63K3686	3.02	2.76
2212-V-RC	100	64	0.056	4.4	0.44	0.86	0.034	63K3690	3.02	2.76
2216-V-RC	220	125.6	0.083	3.6	0.48	0.9	0.034	63K3699	3.25	2.97

CONTINUED

2100-2300 SERIES HIGH CURRENT TOROID INDUCTORS (CONT.)

Mfg. Part No.	L (Induct.) (µH)	L (Induct.) @ I Rated (µH)	DCR Max. (Ω)	I_{DC} (A)	Nominal Dimensions (in.) A	B	C	Stock No.	Price Each 1-9	10-24
2200 SERIES: VERTICAL MOUNT										
2218-V-RC	330	176.8	0.1	3.3	0.48	0.9	0.034	63K3703	3.48	3.19
2222-V-RC	680	377.2	0.23	2.1	0.49	0.91	0.027	63K3711	3.24	2.97
2200 SERIES: HORIZONTAL MOUNT										
2205-H-RC	22	13.4	0.01	10.3	0.46	0.88	0.053	63K3675	2.76	2.53
2206-H-RC	27	16	0.011	9.8	0.46	0.88	0.053	63K3677	2.57	2.35
2209-H-RC	47	29.3	0.024	6.7	0.45	0.87	0.042	63K3683	3.73	2.80
2210-H-RC	56	34.1	0.026	6.4	0.45	0.87	0.042	63K3685	2.57	2.35
2212-H-RC	100	64	0.056	4.4	0.44	0.86	0.034	63K3689	2.57	2.35
2218-H-RC	330	176.8	0.1	3.3	0.48	0.9	0.034	63K3702	2.79	2.56
2220-H-RC	470	275.9	0.19	2.3	0.46	0.88	0.027	63K3706	2.79	2.56
2224-H-RC	1000	521.3	0.28	1.9	0.49	0.91	0.027	63K3714	3.00	2.75
2300 SERIES: VERTICAL MOUNT										
2301-V-RC	10	6.7	0.005	20	0.56	1.18	0.066	63K3717	3.22	2.95
2305-V-RC	22	13.2	0.007	16.4	0.56	1.18	0.066	63K3725	3.00	2.74
2306-V-RC	27	15.7	8000	15.6	0.56	1.18	0.066	63K3727	3.22	2.95
2307-V-RC	33	21.3	0.013	11.7	0.53	1.14	0.053	63K3729	3.22	2.95
2309-V-RC	47	29	0.016	10.7	0.53	1.14	0.053	63K3733	3.22	2.95
2310-V-RC	56	33.7	0.017	10.2	0.53	1.14	0.053	63K3735	3.22	2.95
2311-V-RC	68	45.2	0.03	7.7	0.52	1.13	0.042	63K3737	3.00	2.74
2312-V-RC	100	63.1	0.037	7	0.52	1.13	0.042	63K3739	3.18	2.90
2313-V-RC	120	73.9	0.04	6.7	0.52	1.13	0.042	63K3741	3.22	2.95
2314-V-RC	150	101.4	0.071	5	0.51	1.12	0.034	63K3743	3.18	2.90
2316-V-RC	220	123.8	0.054	5.8	0.56	1.17	0.042	63K3747	3.00	2.74
2317-V-RC	270	147.2	0.06	5.5	0.56	1.17	0.042	63K3749	3.00	2.74
2318-V-RC	330	174.1	0.067	5.2	0.56	1.17	0.042	63K3751	3.00	2.74
2319-V-RC	390	200.2	0.072	5	0.56	1.17	0.042	63K3753	3.22	2.95
2320-V-RC	470	271.4	0.13	3.8	0.54	1.16	0.034	63K3755	3.22	2.95
2324-V-RC	1000	593.6	0.3	2.4	0.53	1.14	0.027	63K3763	3.18	2.90
2300 SERIES: HORIZONTAL MOUNT										
2301-H-RC	10	6.7	0.005	20	0.56	1.18	0.066	63K3716	3.22	2.95
2303-H-RC	15	9.5	0.006	18	0.56	1.18	0.066	63K3720	3.00	2.74
2305-H-RC	22	13.2	0.007	16.4	0.56	1.18	0.066	63K3724	3.00	2.74
2306-H-RC	27	15.7	0.008	15.6	0.56	1.18	0.066	63K3726	3.00	2.74
2309-H-RC	47	29	0.016	10.7	0.53	1.14	0.053	63K3732	3.00	2.74
2310-H-RC	56	33.7	0.017	10.2	0.53	1.14	0.053	63K3734	3.22	2.95
2312-H-RC	100	63.1	0.037	7	0.52	1.13	0.042	63K3738	3.22	2.95
2316-H-RC	220	123.8	0.054	5.8	0.56	1.17	0.042	63K3746	3.22	2.95
2318-H-RC	330	174.1	0.067	5.2	0.56	1.17	0.042	63K3750	3.00	2.74
2319-H-RC	390	200.2	0.072	5	0.56	1.17	0.042	63K3752	3.22	2.95
2322-H-RC	680	370.7	0.15	3.4	0.54	1.16	0.034	63K3758	3.22	2.95
2324-H-RC	1000	593.6	0.3	2.4	0.53	1.14	0.027	63K3762	3.22	2.95

(72706)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

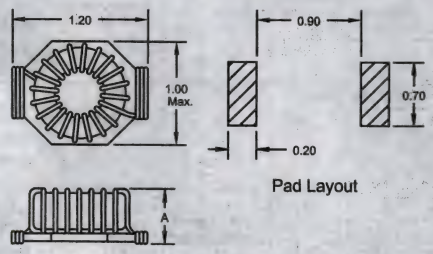
(196561)

PM2110 AND PM2120 SERIES SURFACE MOUNT HIGH CURRENT TOROID INDUCTORS

SMD

RoHS Compliant Available

J.W.Miller MAGNETICS
A Bourns Company



Pad Layout

PM2110 SERIES

PM2110 and **PM2120** series surface mount high current toroid inductors. DC-DC converter, EMI filter applications. Low radiation, low core loss, low cost. Ideal for reflow soldering. Operating temperature -55 to +105°C. Current to cause 30°C maximum temperature rise. Tolerance: ±20%, Test Frequency: 1kHz

Mfg. Part No.	L (Induct.) (µH)	I_{DC} (A)	L (Induct.) @ Rated I (µH)	D_{CR} Max. (Ω)	Dim. A Max. (in.)	Tape Cut Stock No.	Price Each 1-9	Price Each 10-24
● PM2110-150K-RC	15	10.7	9.2	0.008	0.57	63K3177	2.22	2.05
● PM2110-180K-RC	18	10.2	10.7	0.009	0.57	63K3179	2.22	2.05
● PM2110-220K-RC	22	9.7	12.7	0.01	0.57	63K3183	2.39	2.21
● PM2110-270K-RC	27	8.2	16	0.014	0.54	63K3185	2.22	2.05
● PM2110-330K-RC	33	7	20.1	0.019	0.52	63K3189	2.39	2.21
● PM2110-390K-RC	39	6.8	23.2	0.02	0.62	63K3191	2.39	2.21
● PM2110-470K-RC	47	6.5	27.2	0.022	0.62	63K3194	2.39	2.21
● PM2110-560K-RC	56	6.2	31.6	0.024	0.62	63K3197	2.39	2.21
● PM2110-680K-RC	68	5.9	37.1	0.027	0.62	63K3200	2.39	2.21
● PM2110-101K-RC	100	5.4	51.4	0.032	0.62	63K3173	2.39	2.21
● PM2110-151K-RC	150	4.3	77.3	0.049	0.59	63K3178	2.22	2.05
● PM2110-221K-RC	220	3.5	113.8	0.074	0.60	63K3184	2.39	2.21
● PM2110-271K-RC	270	3.4	134.9	0.082	0.60	63K3186	2.22	2.05
● PM2110-391K-RC	390	3.1	182.9	0.098	0.60	63K3192	2.39	2.21
● PM2110-471K-RC	470	2.6	230.4	0.133	0.57	63K3195	2.22	2.05
● PM2110-102K-RC	1000	1.9	463.7	0.244	0.60	63K3174	2.39	2.21
PM2120 SERIES								
● PM2120-180K-RC	18	11.8	12	0.009	0.82	63K3216	2.42	2.22
● PM2120-220K-RC	22	11	14.2	0.011	0.82	63K3220	2.25	2.06
● PM2120-330K-RC	33	10.1	20.3	0.013	0.82	63K3226	2.39	2.19
● PM2120-390K-RC	39	9.6	23.3	0.014	0.82	63K3228	2.42	2.22
● PM2120-470K-RC	47	8.2	29.2	0.019	0.79	63K3232	2.42	2.22
● PM2120-560K-RC	56	7.9	33.9	0.021	0.79	63K3235	2.42	2.22
● PM2120-680K-RC	68	6.7	42.2	0.029	0.77	63K3238	2.25	2.06
● PM2120-820K-RC	82	6.4	49.5	0.032	0.87	63K3241	2.25	2.06
● PM2120-101K-RC	100	6.1	58.7	0.035	0.87	63K3210	2.42	2.22
● PM2120-121K-RC	120	5.8	68.1	0.039	0.87	63K3213	2.39	2.19
● PM2120-151K-RC	150	5.5	82.5	0.043	0.87	63K3215	2.25	2.06
● PM2120-181K-RC	180	5.3	96.2	0.047	0.83	63K3217	2.25	2.06
● PM2120-221K-RC	220	5	113.7	0.052	0.83	63K3221	2.39	2.19
● PM2120-271K-RC	270	4.2	144.5	0.072	0.80	63K3223	2.47	2.27
● PM2120-331K-RC	330	3.6	183.4	0.1	0.78	63K3227	2.25	2.06
● PM2120-471K-RC	470	3.3	247.1	0.119	0.85	63K3233	2.42	2.22
● PM2120-681K-RC	680	3	336.3	0.142	0.85	63K3239	2.25	2.06
● PM2120-102K-RC	1000	2.5	499.7	0.215	0.82	63K3211	2.42	2.22

(72678)

PCB FABRICATION & ASSEMBLY

Quality US-based manufacturers—as fast as 48-hour turnaround!

(197416)

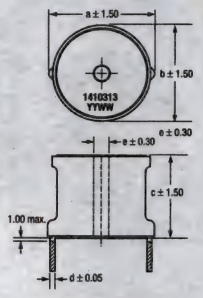
1400 SERIES BOBBIN INDUCTORS

RoHS Compliant Available

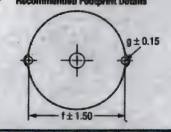
muRata Ps
Murata Power Solutions

Features
- PC Board or Chassis Mountable
- Fully Tinned Leads
- Lead Length: 10mm
- Low DC Resistance
- Radial Format
- Low Temperature Dependance

Specifications
- Operating Temperature: -40°C to 85°C



Recommended Footprint Details



High-current bobbin core inductors designed for switching regulators along with filter and power line applications. Nonmagnetic screw provides mechanical stability. Core manufactured from high-saturation flux density material, winding is insulated by a heat-shrunk sleeve. Tolerance: ±10%.

Mfg. Part No.	L (Induct.) (µH)	I_{DC} (A)	DCR (Ω)	SRF (MHz)	Stock No.	Price Each 1-4
● 1422311C	22	11	0.014	9.3	61K4858	2.59
● 1447383C	47	8.3	0.019	6	61K4956	2.94
● 1447385C	47	8.5	0.021	6.7	61K4957	2.79
● 1468373C	68	7.3	0.025	5.3	61K4971	2.94
● 1468362C	68	6.2	0.032	5.3	61K4970	2.59
● 1410454C	100	5.4	0.046	4.6	61K4770	2.84
● 1410478C	100	7.8	0.04	3.3	61K4772	4.21
● 1410460C	100	6	0.033	3.9	61K4771	2.94
● 1415440C	150	4	0.069	3.4	61K4801	2.59
● 1422435C	220	3.5	0.096	2.8	61K4859	2.79
● 1422455C	220	5.5	0.062	2.2	61K4861	4.53
● 1430430C	300	3	0.14	2.6	61K4888	2.59
● 1433428C	330	2.8	0.15	2.5	61K4892	2.79
● 1433445C	330	4.5	0.091	1.6	61K4894	4.21
● 1447423C	470	2.3	0.25	2	61K4959	2.59
● 1447440C	470	4	0.125	1.4	61K4961	4.21
● 1468420C	680	2	0.3	1.6	61K4972	2.59
● 1410516C	1mH	1.6	0.46	1.4	61K4773	2.59
● 1410524C	1mH	2.4	0.277	1	61K4775	4.53
● 1422509C	2.2mH	0.9	1	0.9	61K4863	2.59
● 1422514C	2.2mH	1.4	0.622	0.6	61K4865	4.53
● 1468505C	6.8mH	0.5	2.88	0.5	61K4975	2.59
● 1410606C	10mH	0.6	2.6	0.2	61K4778	4.53

(66173)

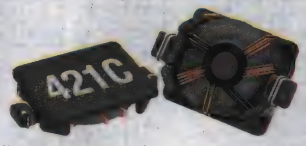
8300 SERIES TOROIDAL SMD POWER INDUCTORS

RoHS Compliant Available

muRata Ps
Murata Power Solutions

Features:
- Up to 3A I_{DC}
- 0.42µH to 100µH
- Low R_{DC}
- Small footprint
- Ultra-low profi le
- UL 94V-0 packaging materials
- J-STD-020D reflow

Specifications:
- Operating temperature: -40°C to +85°C
- Peak reflow solder temperature: 260°C
- Pin finish: Tin
- Moisture sensitivity level[4]: 1



Applications:
- Handheld devices
- DC-DC converters
- Notebook computers

Mfg. Part No.	Inductance (µH)	Inductance Tol.	R_{DC} (Ω)	I_{DC} (A)	Stock No.	Price Each 1-4
● 83421C	0.42	± 20%	0.024	3	59T0312	1.51
● 83751C	0.75	± 20%	0.03	2.7	59T0317	1.51
● 83122C	1.2	± 20%	0.065	1.7	59T0305	1.51
● 83172C	1.7	± 20%	0.073	1.55	59T0307	1.51
● 83232C	2.3	± 20%	0.086	1.4	59T0309	1.51
● 83332C	3.3	± 20%	0.098	1.35	59T0310	1.51
● 83472C	4.7	± 20%	0.13	1.1	59T0313	1.51
● 83682C	6.8	± 20%	0.15	0.95	59T0315	1.51
● 83852C	8.5	± 20%	0.167	0.85	59T0319	1.51
● 83103C	10	± 20%	0.185	0.75	59T0303	1.51
● 83153C	15	± 20%	0.3	0.6	59T0306	1.51
● 83223C	22	± 20%	0.35	0.5	59T0308	1.51
● 83333C	33	± 20%	0.6	0.42	59T0311	1.51

CONTINUED

8300 SERIES TOROIDAL SMD POWER INDUCTORS (CONT.)

Mfg. Part No.	Inductance (µH)	Inductance Tol.	R_{DC} (Ω)	I_{DC} (A)	Stock No.	Price Each 1-4
83473C	47	± 20%	0.71	0.35	59T0314	1.51
83683C	68	± 20%	0.85	0.3	59T0316	1.51
83823C	82	± 20%	1.25	0.27	59T0318	1.51
83104C	100	± 20%	1.32	0.24	59T0304	1.51

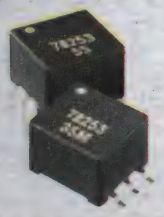
(202180)

78253 SERIES MAX253 COMPATIBLE CONVERTER TRANSFORMERS

RoHS Compliant Available

muRata Ps Murata Power Solutions

Features
- Maxim Compatible
- 5V Version
- Isolation to 4kV
- Frequency Range to 500kHz
- Toroidal Construction
- Industry Standard Pinout
- UL 94V-0 Package Material
- Fully Encapsulated
- Low Profile
- Surface Mount Available



78253 series converter transformers are specifically designed for use with the MAX253 chip set to provide isolated power supplies. The 5V version can supply 1W. A center tapped secondary winding allows for full bridge, half bridge or voltage doubling.

Mfg. Part No.	Input Voltage	Output Voltage	Output Current (mA)	Isolation Voltage (VDC)	Style	Stock No.	Price Each 1-4
78253/35C	3.3	5	100	1500	DIP	62K0984	2.89
78253/35MC	3.3	5	100	1500	SM	62K0985	2.89
78253/55C	5	5	200	1500	DIP	62K0990	2.93
78253/55MC	5	5	200	1500	SM	62K0991	2.98
78253/55VC	5	5	200	4000	DIP	62K0995	3.58
78253/55MVC	5	5	200	4000	SM	62K0993	3.79

(70360)

AXIAL LEADED POWER INDUCTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features:
- Wide inductance range
- Insulated packaging
- Four sizes
- Flame retardant
- Wide temperature range
- Established reliability
- Fully protected from the environment

Tyco quality and reliability are guaranteed in this range of insulated and shielded RF inductors. The insulated range has a self-extinguishing polyolefin sleeve. Their small size make them ideal for use when space is at a premium. And they are fully protected from environmental factors.

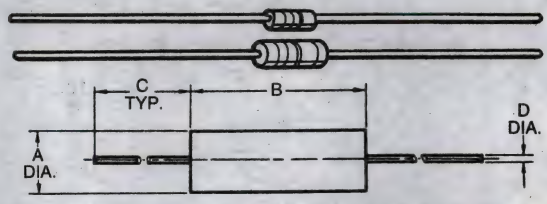
Mfg. Part No.	L (Ind.) (µH)	Q Factor	SRF (MHz)	Stock No.	Price Each 1-49
SC30R12KT	0.12	40	640	16R6835	4.43
SC30R15KT	0.15	38	600	16R6837	4.43
SC30R22KT	0.22	33	510	16R6841	4.76
SC30R33KT	0.33	30	410	43K2684	4.43
SC30R47KT	0.47	30	330	43K4573	4.43
SC30R68KT	0.68	28	275	16R6852	4.43
SC301R0KT	1	25	230	16R6855	4.76
SC301R5KT	1.5	28	140	01M5085	4.43
SC302R2KT	2.2	30	115	16R6877	4.43
SC303R3KT	3.3	45	90	16R6887	4.43
SC304R7KT	4.7	45	75	16R6895	4.43
SC305R6KT	5.6	45	65	16R6899	4.43
SC308R2KT	8.2	55	55	16R6906	4.43
SC30100KT	10	55	50	16R6861	2.31
SC30220KT	22	50	25	16R6881	4.43
SC30330KT	33	45	24	16R6890	4.76
SC30470KT	47	45	20	16R6897	4.43
SC30680KT	68	50	15	16R6904	4.43
SC30101KT	100	25	13	16R6863	4.43
SC30151KT	150	30	11	16R6872	4.43
SC30331KT	330	30	7	16R6891	4.43
SC30102KT	1000	30	3.4	16R6865	4.43

(178354)

MFG. PART NO. IM-2, IM-4, IMS-5 MIL-C-15305 MOLDED INDUCTORS

RoHS Compliant Available

VISHAY.



Sturdy epoxy-molded inductors. Tolerance: ±10%. Operating temperature: —55°C to +105°C. Flame-retardant coating. **mfg. part no. IMS-5** offers electromagnetic shielding.

DIMENSIONS

Mfg. Part No.	A	B	C	D
IM-2	0.105 (2.67)	0.260 (6.60)	1.626 (41.30)	0.0215 (0.546)
IM-2	0.085 (2.16)	0.240 (6.10)	1.250 (31.75)	0.0185 (0.470)
IM-4	0.165 (4.19)	0.385 (9.78)	1.625 (41.28)	0.027 (0.686)
IM-4	0.145 (3.68)	0.365 (9.27)	1.250 (31.75)	0.023 (0.584)
IMS-5	0.162 ± 0.010	0.410 ± 0.020	1.438 ± 0.1881	0.025 ± 0.002

Mfg. Part No.	L (Induct.) (µH)	I_{DC} (mA)	Stock No.	Price Each 1-9	10-24	25+
IM02EBR10K	0.1	1350	53K5263	0.59	0.40	0.37
IM02EBR33K	0.33	815	53K5266	0.56	0.38	0.35
IM02EBR47K	0.47	650	53K5267	0.56	0.38	0.35
IM02EBR68K	0.68	495	53K5269	0.59	0.40	0.37
IM02EB1R0K	1	385	53K5270	0.59	0.40	0.37
IM02EB1R8K	1.8	455	53K5273	0.68	0.46	0.43
IM02EB2R2K	2.2	395	53K5279	0.71	0.49	0.45
IM02EB2R7K	2.7	355	53K5280	0.68	0.46	0.43
IM02EB3R3K	3.3	270	53K5283	0.68	0.46	0.43
IM02EB4R7K	4.7	230	53K5287	0.68	0.46	0.43
IM02EB5R6K	5.6	185	53K5290	0.68	0.46	0.43
IM02EB6R8K	6.8	175	53K5292	0.72	0.49	0.45
IM02EB8R2K	8.2	155	53K5293	0.72	0.49	0.45
IM02EB100K	10	130	53K5274	0.71	0.49	0.45
IM02EB150K	15	150	53K5277	0.68	0.46	0.43
IM02EB220K	22	140	53K5281	0.71	0.49	0.45
IM02EB330K	33	130	53K5284	0.78	0.53	0.49
IM02EB390K	39	125	53K5286	0.78	0.53	0.49
IM02EB470K	47	110	53K5288	0.78	0.53	0.49
IM02EB560K	56	100	53K5291	0.78	0.53	0.49
IM02EB101K	100	84	53K5275	0.90	0.61	0.56
IM02EB221K	220	52	53K5282	0.85	0.58	0.54
IM02EB331K	330	45	53K5285	0.92	0.63	0.58
IM02EB471K	470	36	53K5289	0.98	0.66	0.61
IM02EB102K	1000	28	53K5276	1.14	0.77	0.71
IM04EB100K	10	290	53K5294	0.65	0.44	0.41
IM04EB101J	100*	133	53K5295	0.75	0.51	0.47
IMS05EB102K	1000	70	53K5261	1.40	0.95	0.88

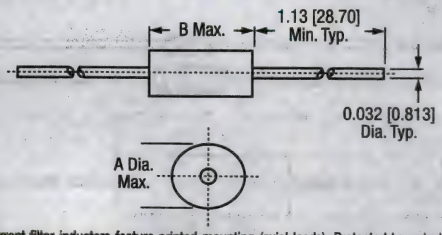
* ±5% tolerance
(7299)

(211464)

IHD SERIES HIGH CURRENT FILTER INDUCTORS

RoHS Compliant Available

VISHAY.



IHD series high current filter inductors feature printed mounting (axial leads). Protected by polyolefin tubing. High saturation bobbin allows high inductance with low DC resistance. Pre-tinned leads. High resistivity core offers very high parallel resistance, resulting in maximum coil performance. 20 sleeveless models available at reduced cost. Operating current rating based on +40°C temperature rise. Operating temperature: -55°C to +85°C at full rated current. **Test Frequency: 1kHz**

DIMENSIONS (mm)

Series	A (max.)	B (max.)	Lead Size
IHD-1	0.270″ (6.85)	0.700″ (17.78)	20AWG
IHD-3	0.460″ (11.68)	0.900″ (22.86)	20AWG

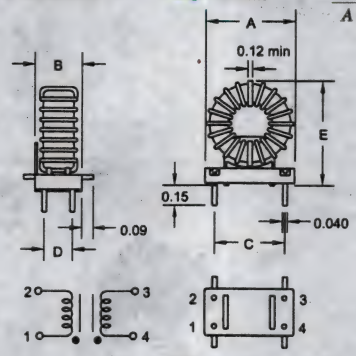
Mfg. Part No.	L (Induct.) (µH)	D_{CR} Max. (Ω)	Rated I_{DC} (A)	Stock No.	Price Each 1-9	Price Each 10-24
● IHD1EB1R0L	1	0.009	5.3	53K4729	2.47	2.02
● IHD1EB1R2L	1.2	0.01	5	53K4730	4.83	3.97
● IHD1EB1R8L	1.8	0.012	4.6	53K4732	4.83	3.97
● IHD1EB2R2L	2.2	0.013	4.4	53K4749	4.83	3.97
● IHD1EB3R3L	3.3	0.016	4	53K4757	4.83	3.97
● IHD1EB6R8L	6.8	0.026	3.1	53K4773	4.83	3.97
● IHD1EB100L	10	0.033	2.8	53K4733	2.43	1.99
● IHD1EB220L	22	0.05	2.2	53K4751	4.83	3.97
● IHD1EB270L	27	0.07	1.9	53K4754	4.83	3.97
● IHD1EB560L	56	0.13	1.4	53K4770	5.37	4.41
● IHD1EB820L	82	0.152	1.3	53K4778	5.68	4.67
● IHD1EB101L	100	0.208	1.1	53K4734	5.37	4.41
● IHD1EB121L	120	0.283	0.94	53K4738	5.37	4.41
● IHD1EB221L	220	0.505	0.7	53K4752	5.37	4.41
● IHD1EB331L	330	0.65	0.62	53K4760	5.37	4.41
● IHD1EB471L	470	1.03	0.49	53K4767	6.33	5.20
● IHD1EB821L	820	1.98	0.36	53K4779	6.33	5.20
● IHD1EB822L	8200	20.8	0.11	53K4780	6.80	5.59
● IHD1EB103L	10000	23.4	0.1	53K4736	6.63	5.45
● IHD1EB183L	18000	40	0.08	53K4748	6.63	5.45
● IHD3EB5R6L	5.6	0.011	4	53K4820	3.20	2.63
● IHD3EB100L	10	0.016	4	53K4781	3.40	2.80
● IHD3EB180L	18	0.022	4	53K4794	3.20	2.63
● IHD3EB220L	22	0.024	4	53K4798	3.20	2.63
● IHD3EB270L	27	0.025	4	53K4802	3.20	2.63
● IHD3EB470L	47	0.034	4	53K4816	3.20	2.63
● IHD3EB560L	56	0.043	3.2	53K4821	3.20	2.63
● IHD3EB680L	68	0.059	2.5	53K4826	3.40	2.80
● IHD3EB820L	82	0.066	2	53K4831	2.61	2.16
● IHD3EB101L	100	0.084	1.6	53K4782	2.46	2.03
● IHD3EB121L	120	0.113	1.6	53K4787	2.55	2.11
● IHD3EB151L	150	0.129	1.6	53K4791	2.61	2.16
● IHD3EB221L	220	0.162	1.6	53K4799	2.46	2.03
● IHD3EB331L	330	0.257	1.6	53K4808	2.98	2.44
● IHD3EB391L	390	0.288	1.6	53K4812	2.80	2.30
● IHD3EB471L	470	0.393	1.2	53K4817	2.80	2.30
● IHD3EB681L	680	0.57	1	53K4827	2.98	2.44
● IHD3EB102L	1000	0.844	0.8	53K4783	2.80	2.30
● IHD3EB152L	1500	1.18	0.6	53K4792	2.98	2.44
● IHD3EB222L	2200	1.76	0.5	53K4800	2.80	2.30
● IHD3EB472L	4700	3.79	0.4	53K4818	3.27	2.69
● IHD3EB562L	5600	4.24	0.32	53K4823	3.27	2.69
● IHD3EB682L	6800	5.75	0.25	53K4828	3.08	2.53
● IHD3EB822L	8200	6.44	0.25	53K4833	3.08	2.53
● IHD3EB103L	10000	7.3	0.25	53K4784	3.54	2.91
● IHD3EB153L	15000	10.7	0.2	53K4793	3.54	2.91
● IHD3EB223L	22000	18	0.13	53K4801	3.33	2.74
● IHD3EB473L	47000	33.7	0.1	53K4819	3.50	2.88
● IHD3EB104L	100000	76	0.07	53K4785	3.67	3.02

(73324)

8100 SERIES COMMON MODE INDUCTORS WITH HEADERS

RoHS Compliant Available

J.W.Miller MAGNETICS A Bourns Company



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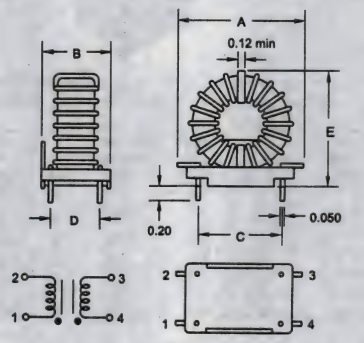

8104

8100 series common mode inductors (with header) are single-layer wound. Excellent EMI suppression capability over wide frequency spectrum. High current capacity. Dielectric strength: 1500V_{RMS}. Coil mount on VW-1 rated plastic header. Fixed pin spacing allows easy PC board insertion. Operating temperature: -55°C to +105°C. Current to cause maximum temperature rise of 35°C. Test Frequency: 1KHz

Mfg. Part No.	$L_{min.}$ (Induct.) (mH)	DCR Max. (mΩ)	I_{DC} (A)	Dimensions (in.) A (Max.)	B ±0.01	C ±0.015	D ±0.015	E (Max.)	Stock No.	Price Each 1-9
● 8101-RC	4	173	1.7	0.76	0.425	0.6	0.25	0.9	63K4068	4.52
● 8102-RC	2.5	90	2.4	0.76	0.425	0.6	0.25	0.9	63K4069	4.58
● 8103-RC	1	22	4.8	0.76	0.425	0.6	0.25	0.9	63K4070	4.52
● 8104-RC	10	170	2.4	1.2	0.6	0.8	0.4	1.2	63K4071	5.86
● 8106-RC	5	70	3.7	1.2	0.6	0.8	0.4	1.2	63K4073	5.86
● 8107-RC	2	22	6.6	1.2	0.6	0.8	0.4	1.2	63K4074	5.99
● 8108-RC	1	10	10	1.2	0.6	0.8	0.4	1.2	63K4075	5.86
● 8112-RC	8	55	5.6	1.35	0.8	0.9	0.6	1.45	63K4079	7.47
● 8113-RC	5	22	8.9	1.45	0.8	0.9	0.6	1.5	63K4080	7.47
● 8114-RC	2.5	11	12.5	1.45	0.8	0.9	0.6	1.5	63K4081	7.56
● 8115-RC	1.2	6	16	1.5	0.8	0.9	0.6	1.53	63K4082	7.56
● 8119-RC	4	12	14.5	1.7	0.9	1.2	0.7	1.65	63K4087	9.49
● 8120-RC	2.4	8	17	1.7	0.9	1.2	0.7	1.65	63K4088	9.62
● 8121-RC	1	7	20	1.7	0.9	1.2	0.7	1.65	63K4089	9.62

(72705)

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(196526)

1100R SERIES RADIAL TERMINAL INDUCTORS

RoHS Compliant Available

Murata Power Solutions

Features
- Compact size
- Low DC resistance
- Ideal for high density applications

Specifications
- Operating Temperature: -40°C to +85°C

Mfg. Part No.	Inductance (µH)	Inductance Ind. Tol.	RDC (Ω)	IDC Max. (mA)	Tape Cut Stock No.	Tape Cut Price Each 1-24
11R102C	1	± 20%	0.02	3000	46P8717	0.33
11R152C	1.5	± 20%	0.03	2400	46P8720	0.31
11R222C	2.2	± 20%	0.05	1900	46P8723	0.31
11R332C	3.3	± 20%	0.07	1500	46P8726	0.33
11R472C	4.7	± 20%	0.09	1300	46P8729	0.33
11R682C	6.8	± 20%	0.1	1100	46P8732	0.33
11R103C	10	± 10%	0.14	950	46P8718	0.33
11R153C	15	± 10%	0.19	800	46P8721	0.33
11R223C	22	± 10%	0.27	650	46P8724	0.33
11R333C	33	± 10%	0.42	550	46P8727	0.31
11R473C	47	± 10%	0.54	500	46P8730	0.33
11R683C	68	± 10%	0.85	400	46P8733	0.33
11R104C	100	± 10%	1.1	350	46P8719	0.33
11R154C	150	± 10%	1.65	300	46P8722	0.31
11R224C	220	± 10%	2.4	240	46P8725	0.31
11R334C	330	± 10%	3.6	190	46P8728	0.31
11R474C	470	± 10%	6.4	140	46P8731	0.34

(147228)

1200LRS SERIES RADIAL TERMINAL SHIELDED INDUCTORS

RoHS Compliant Available

Murata Power Solutions

Features
- Integral EMI shield
- Compact size
- Low DC resistance

Application
- Power line filtering
- Switching power supply circuits
- Protecting circuits susceptible to EMI

Specifications
- Inductance Range: 6.8µH to 22mH
- Current Rating: Up to 4.7A
- Test Voltage: 0.1V
- Test Frequency: 10kHz
- Operating Temp. Range: -40°C to +85°C

Mfg. Part No.	L (Ind.) (µH)	Ind. Tol.	IDC (A)	DCR (ohm)	Stock No.	Price Each 1-9
12LRS682C	6.8	± 20%	4.7	0.02	11R2214	0.75
12LRS103C	10	± 20%	3.4	0.05	11R2196	0.75
12LRS153C	15	± 20%	3	0.07	11R2200	0.75
12LRS223C	22	± 20%	2.6	0.09	11R2204	0.75
12LRS473C	47	± 20%	1.7	0.14	11R2211	0.75
12LRS683C	68	± 15%	1.6	0.16	11R2215	0.75
12LRS104C	100	± 15%	1.4	0.2	11R2197	0.75
12LRS154C	150	± 15%	1	0.35	11R2201	0.75
12LRS224C	220	± 15%	0.78	0.54	11R2205	0.75
12LRS474C	470	± 15%	0.53	1.23	11R2212	0.75
12LRS105C	1000	± 15%	0.5	2.3	11R2198	0.75
12LRS155C	1500	± 15%	0.4	3.4	11R2202	0.75
12LRS335C	3300	± 15%	0.28	8.7	11R2210	0.75
12LRS475C	4700	± 15%	0.2	10.5	11R2213	0.75
12LRS685C	6800	± 15%	0.15	15	11R2217	0.75
12LRS684C	6800	± 15%	0.18	1.65	11R2216	0.75
12LRS106C	10000	± 15%	0.12	24	11R2199	0.75
12LRS156C	15000	± 15%	0.095	37	11R2203	0.75
12LRS226C	22000	± 15%	0.073	70	11R2207	0.75

(94528)

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(212565)

1300R SERIES RADIAL TERMINAL INDUCTORS

RoHS Compliant Available

Murata Power Solutions

Applications
- Low DC resistance
- Power supplies
- General purpose filtering designs

Specifications
- Operating Temperature: -40°C to +85°C

Mfg. Part No.	Inductance	Ind. Tol.	RDC (Ω)	IDC Max. (mA)	Tape Cut Stock No.	Tape Cut Price Each 1-4
13R152C	1.5 µH	± 20%	0.008	6300	46P8742	0.61
13R222C	2.2 µH	± 20%	0.01	5300	46P8747	0.61
13R332C	3.3 µH	± 20%	0.013	4800	46P8752	0.61
13R472C	4.7 µH	± 20%	0.017	4300	46P8757	0.66
13R682C	6.8 µH	± 20%	0.023	3500	46P8762	0.66
13R103C	10 µH	± 10%	0.031	3000	46P8738	0.66
13R153C	15 µH	± 10%	0.042	2500	46P8743	0.61
13R223C	22 µH	± 10%	0.07	2000	46P8748	0.66
13R333C	33 µH	± 10%	0.092	1800	46P8753	0.66
13R473C	47 µH	± 10%	0.11	1500	46P8758	0.66
13R683C	68 µH	± 10%	0.15	1300	46P8763	0.66
13R104C	100 µH	± 10%	0.24	1000	46P8739	0.66
13R154C	150 µH	± 10%	0.33	820	46P8744	0.66
13R224C	220 µH	± 10%	0.47	700	46P8749	0.61
13R334C	330 µH	± 10%	0.64	580	46P8754	0.65
13R474C	470 µH	± 10%	1.05	450	46P8759	0.66
13R684C	680 µH	± 10%	1.5	420	46P8764	0.66
13R105C	1 mH	± 10%	2.1	330	46P8740	0.66
13R155C	1.5 mH	± 10%	3.1	280	46P8745	0.61
13R225C	2.2 mH	± 10%	4.5	240	46P8750	0.66
13R335C	3.3 mH	± 10%	7	190	46P8755	0.66
13R475C	4.7 mH	± 10%	9.3	160	46P8760	0.66
13R685C	6.8 mH	± 10%	13.5	130	46P8765	0.61
13R106C	10 mH	± 10%	23.8	85	46P8741	0.65
13R156C	15 mH	± 10%	31	80	46P8746	0.66
13R226C	22 mH	± 10%	48	70	46P8751	0.66
13R336C	33 mH	± 10%	68	60	46P8756	0.66
13R476C	47 mH	± 10%	120	45	46P8761	0.65
13R686C	68 mH	± 10%	152	40	46P8766	0.66

(147229)

INDUCTORS

RoHS Compliant Available

Murata Power Solutions

Features
- Low DC resistance
- Miniature size
- PCB mounting

The **1500** and **1700 Series** are general purpose inductors suitable for low to medium current applications. The **1700 Series** is ideal for high density applications where a chip inductor will not cope with the power requirement. Operating temperature: -0°C to 70°C. The **1500 Series** is ideal for applications such as power supply and other general purpose filtering designs. The central hole allows mechanical fixing with a nonmagnetic screw. Operating temperature: -40°C to 85°C. The **1800 Series** of inductors are particularly suited to use with a wide variety of switching regulators. Offering high current handling with a low mounting height, the devices are ideal where space is at a premium. Operating temperature: -0°C to 70°C. The **2800 series** is a range of bobbin-wound, surface-mount inductors designed for use in switching power supply, and power line filter circuits. They are suitable for any application requiring a high saturation current in a miniature surface-mount footprint. Operating temperature: -40°C to 125°C.

Mfg. Part No.	Inductance µH	Inductance Tol.	I_{DC} (mA)	R_{DC} (Ω)	Stock No.	Price Each 1-4	Price Each 5-9
1700 SERIES—GENERAL PURPOSE INDUCTORS, RADIAL LEADED							
17333C	33	± 10%	1000	0.13	61K7493	1.54	1.43
17473C	47	± 10%	860	0.2	61K7585	1.54	1.43
17104C	100	± 10%	740	0.35	61K7093	1.54	1.43
17224C	220	± 10%	480	0.75	61K7195	1.54	1.43
17334C	330	± 10%	420	1.1	61K7494	1.54	1.43
17105C	1000	± 10%	190	3.3	61K7094	1.54	1.43
1500 SERIES—GENERAL PURPOSE INDUCTORS, RADIAL LEADED							
15105C	1000	± 10%	910	0.887	12P8161	2.00	1.91
1800 SERIES—HIGH CURRENT INDUCTORS, AXIAL LEADED							
18223C	22	± 10%	2400	0.025	62K0032	1.42	1.41
18105C	1000	± 10%	440	1	61K9781	1.42	1.41
2800 SERIES—BOBBIN WOUND INDUCTORS, SMD							
28334C	330	...	950	0.575	12N4096	1.47	1.31
28474C	470	...	780	0.816	12N4100	1.36	1.21

(178239)

MINIATURE RADIAL TERMINAL INDUCTORS

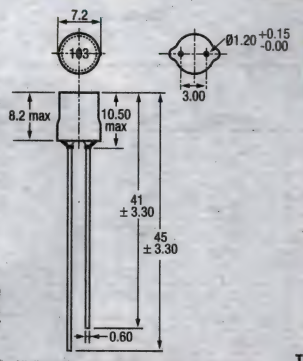
RoHS Compliant Available

muRata Ps Murata Power Solutions

Features
- PC Board Mounting
- MIL-I-23053/5 Class I and II Sleeving

Specifications
- Operating Temp. Range: -25°C to +70°C

General-purpose inductors are suitable for low- to medium-current applications. Their small footprint make them ideal for high-density applications.



All dimensions in mm xx.x ± 0.50, xx.xx ± 0.25

Type 22R224

Mfg. Part No.	L (Induct.) (µH)	DCR (Ω)	I_{Max} (mA)	Stock No.	Price Each 1-9
1800R SERIES					
● 18R103C	10	0.015	3450	61K9507	1.53
● 18R223C	22	0.025	2420	61K9514	1.53
● 18R333C	33	0.04	2000	61K9518	1.65
● 18R104C	100	0.1	1200	61K9508	1.53
● 18R224C	220	0.23	910	61K9515	1.53
● 18R334C	330	0.335	730	61K9519	1.53
● 18R474C	470	0.465	620	61K9523	1.65
● 18R105C	1mH	1	430	61K9509	1.53
1900R SERIES					
● 19R105C	1mH	0.844	730	08R2128	1.90
● 19R106C	10mH	7.3	230	08R2129	2.04
● 19R107C	100mH	90	70	08R2130	2.02
2200R SERIES					
● 22R103C	10	0.05	1500	62K0491	0.66
● 22R223C	22	0.09	1000	62K0499	0.61
● 22R333C	33	0.14	920	62K0503	0.61
● 22R473C	47	0.22	780	62K0507	0.61
● 22R683C	68	0.28	770	62K0511	0.61
● 22R104C	100	0.39		62K0492	0.61
● 22R224C	220	0.83	440	62K0500	0.61
● 22R334C	330	1.21	380	62K0504	0.66
● 22R154C	150	0.54	520	62K0496	0.66
● 22R474C	470	1.65	310	62K0508	0.61
● 22R684C	680	2.64	250	62K0512	0.61
● 22R105C	1mH	3.63	170	62K0493	0.66
● 22R155C	1.5mH	6.49	130	62K0497	0.61
● 22R225C	2.2mH	8.58	110	62K0501	0.61
● 22R335C	3.3mH	11	100	62K0505	0.61
● 22R475C	4.7mH	15	81	62K0509	0.61
● 22R685C	6.8mH	22	80	62K0513	0.61
● 22R106C	10mH	37.4	70	62K0494	0.87
● 22R226C	22mH	82.5	45	62K0502	0.87
● 22R336C	33mH	118.8	36	62K0506	0.87
● 22R476C	47mH	169.4	27	62K0510	0.87
● 22R686C	68mH	242	18	62K0514	0.94

(66176)

5000 AND 5100 SERIES COMMON MODE CHOKES

RoHS Compliant Available

muRata Ps Murata Power Solutions

Features
- Surface mount
- Compact size
- UL94V-0 pacakage materials

The **5000 series** is a range of surface-mount common mode chokes designed to attenuate up to 100MHz common mode noise where line filtering is required, such as low current switching power supplies and telecom applications. The **5100 series** is a range of through-hole common mode chokes designed to attenuate up to 100MHz common mode noise where line filtering is required, such as high current switching power supplies and telecom applications.

Mfg. Part No.	Inductance mH	Inductance Tol.	I_{DC} (mA)	R_{DC} (Ω)	Stock No.	Price Each 1-4	Price Each 5-9
5000 SERIES—SURFACE MOUNT							
● 50474C	470	+50%, -30%	0.7	0.3	40M4489	1.67	1.60
● 50105C	1	+50%, -30%	0.7	0.3	40M4460	1.73	1.66
● 50225C	2.2	+50%, -30%	0.5	0.4	40M4482	1.67	1.60
● 50475C	4.7	+50%, -30%	0.4	0.7	40M4490	1.70	1.63
5100 SERIES—THROUGH HOLE, TOROIDAL CONSTRUCTION							
● 51504C	500	...	4.1	0.027	12N4234	2.82	2.74
● 51105C	1	...	3.3	0.038	12N4232	2.82	2.74

➤CONTINUED➤

5000 AND 5100 SERIES COMMON MODE CHOKES (CONT.)

5100 SERIES—THROUGH HOLE, TOROIDAL CONSTRUCTION

Mfg. Part No.	Inductance mH	Inductance Tol.	I_{DC} (mA)	R_{DC} (Ω)	Stock No.	Price Each 1-4	Price Each 5-9
● 51305C	3	...	1.9	0.097	12N4233	2.82	2.74
● 52305C	3	...	3.5	0.045	12N4237	3.43	3.29
● 51505C	5	...	1.2	0.197	12N4235	2.82	2.74
● 52505C	5	...	2.4	0.091	12N4238	3.43	3.29
● 52106C	10	...	1.7	0.193	12N4236	3.43	3.29

(178375)

7100 SERIES COMMON MODE EMI CHOKES

RoHS Compliant Available

J.W.Miller MAGNETICS A Bourns Company

Features
- Reduce conductive EMI emission
- High current capacity
- High impedance at low frequency
- Coil wound on VW-1 rated plastic cased ferrite core

Specifications
- Dielectric strength: 3750 Vrms
- Operating temperature: -55°C to +105 °C

Mfg. Part No.	L (Induct.) (µH)	DCR (mΩ)	I_{DC} (A)	Stock No.	Price Each 1-9
● 7124-RC	2.55	0.02	10	86K7606	4.08
● 7111-RC	850	0.03	3	86K7594	3.07
● 7109-RC	2.55	0.075	2	86K7592	3.03
● 7116-RC	6.8	0.2	2	52K7993	2.86

(136922)

RL622 SERIES RADIAL TERMINAL RF CHOKES

RoHS Compliant Available

J.W.Miller MAGNETICS A Bourns Company

Features
- High current capacity
- Ferrite bobbin core
- Low core loss
- High reliability and efficiency
- Winding covered with shrink tubing

Applications
- Switch mode power supplies
- DC/DC converters
- Output chokes
- EMI fi lters

Specifications
- Operating temperature: -55°C to +105°C

Mfg. Part No.	L (Induct.) (µH)	Q @ Freq	SRF (MHz)	DCR (Ω)	I_{DC} (mA)	Stock No.	Price Each 1-9
● RL622-1R0K-RC	1	20 @ 7.96 MHz	150	0.013	10A	86K3356	0.75
● RL622-3R3K-RC	3.3	20 @ 7.96 MHz	79	0.025	5500	86K3384	0.74
● RL622-100K-RC	10	50 @ 2.52 MHz	14	0.045	3000	86K3358	0.74
● RL622-150K-RC	15	40 @ 2.52 MHz	12	0.056	2300	86K3367	0.68
● RL622-220K-RC	22	40 @ 2.52 MHz	9.2	0.07	2000	86K3376	0.68
● RL622-390K-RC	39	30 @ 2.52 MHz	6.9	0.1	1500	86K3389	0.68
● RL622-470K-RC	47	30 @ 2.52 MHz	6.5	0.16	1400	86K3394	0.68
● RL622-680K-RC	68	30 @ 2.52 MHz	4.9	0.21	1200	86K3403	0.68
● RL622-820K-RC	82	30 @ 2.52 MHz	4.1	0.23	1100	86K3407	0.74
● RL622-101K-RC	100	20 @ 0.796 MHz	3.7	0.28	910	86K3359	0.68
● RL622-121K-RC	120	20 @ 0.796 MHz	3.4	0.32	840	86K3364	0.68
● RL622-151K-RC	150	20 @ 0.796 MHz	3.2	0.37	750	86K3368	0.68
● RL622-221K-RC	220	20 @ 0.796 MHz	2.7	0.65	640	86K3377	0.68
● RL622-331K-RC	330	20 @ 0.796 MHz	2.3	0.85	540	86K3386	0.68
● RL622-391K-RC	390	20 @ 0.796 MHz	2.1	1	480	86K3390	0.68
● RL622-471K-RC	470	20 @ 0.796 MHz	1.9	1.1	460	86K3395	0.74
● RL622-102K-RC	1000	50 @ 0.252 MHz	1.3	2.9	290	86K3360	0.68
● RL622-222K-RC	2.2	20 @ 0.252 MHz	900	6.8	80	86K3378	1.16
● RL622-103K-RC	10mH	40 @ 0.079 MHz	0.3	25	50	86K3361	0.74
● RL622-393K-RC	39	30 @ 0.079 MHz	100	80	30	86K3392	0.74
● RL622-473K-RC	47	20 @ 0.079 MHz	100	99	30	86K3397	0.74
● RL622-563K-RC	56	20 @ 0.079 MHz	100	135	20	86K3401	0.74
● RL622-683K-RC	68	20 @ 0.079 MHz	100	150	20	86K3406	1.16
● RL622-104K-RC	100mH	20 @ 0.025 MHz	0.1	235	20	86K3362	0.74

(136508)

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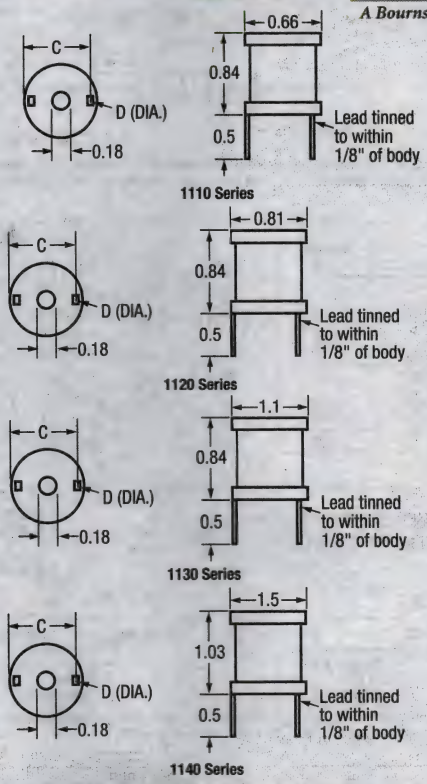
1100 SERIES HIGH-CURRENT RF CHOKES

RoHS Compliant Available

J.W.Miller MAGNETICS A Bourns Company



1100 series RF chokes have very high current capacity, low resistance. Epoxy-coated ferrite bobbin core, VW-1 rated shrink tubing to cover winding. Self-leaded. Fixed lead spacing. Center hole for mechanical mounting. Dielectric withstanding voltage: 2500V_{RMS} terminal to shrink tube cover; 1000V_{RMS} terminal to core. Rated current to cause 50°C max. temperature rise and 5% max. inductance drop. Operating temperature: -55°C to +105°C. Test frequency: 1kHz.

Mfg. Part No.	L (Induct.) (µH)	DCR Max. (Ω)	I_{DC} (A)	Dim. C Approx. (in.)	Dim. D Nom. (in.)	Stock No.	Price Each 1-9	Price Each 10-49
1110 SERIES; ±10% TOLERANCE								
1110-100K-RC	10	0.01	9	0.55	0.051	63K3247	2.49	2.28
1110-101K-RC	100	0.095	2.8	0.5	0.032	63K3248	2.37	2.17
1120 SERIES; ±10% TOLERANCE								
1120-101K-RC	100	0.08	4	0.62	0.036	63K3281	3.58	3.28
1130 SERIES; ±10% TOLERANCE								
1130-101K-RC	100	0.034	9	0.79	0.051	63K3321	4.96	4.53
1130-471K-RC	470	0.187	4	0.77	0.036	63K3351	4.64	4.23
1130-152K-RC	1500	0.518	2	0.75	0.025	63K3328	4.64	4.23
1130-472K-RC	4700	1.86	1	0.75	0.02	63K3352	4.96	4.53
1140 SERIES; ±10% TOLERANCE								
1140-180K-RC	18	0.008	27	1.15	0.081	63K3375	7.19	6.38
1140-390K-RC	39	0.012	21	1.15	0.072	63K3391	7.19	6.38
1140-101K-RC	100	0.025	14.4	1.15	0.064	63K3364	7.19	6.38
1140-121K-RC	120	0.028	14.4	1.15	0.057	63K3368	7.69	6.83
1140-331K-RC	330	0.074	11.4	1.15	0.051	63K3389	7.86	6.97
1140-391K-RC	390	0.082	9	1.15	0.045	63K3392	7.69	6.83
1140-821K-RC	820	0.154	7.2	1.15	0.04	63K3407	7.19	6.38
1140-102K-RC	1000	0.216	5.5	1.15	0.04	63K3365	7.86	6.97
1140-152K-RC	1500	0.324	4.5	1.14	0.036	63K3373	7.69	6.83
1140-222K-RC	2200	0.494	4	1.1	0.032	63K3382	7.69	6.83
1140-272K-RC	2700	0.555	4	1.12	0.032	63K3385	7.19	6.38
1140-472K-RC	4700	1.14	2	1.12	0.029	63K3397	7.69	6.83
1140-103K-RC	10,000	2.76	1.3	1.11	0.023	63K3366	7.59	6.74
1140-153K-RC	15,000	3.39	1.3	1.1	0.02	63K3374	7.19	6.38

(72676)

SCH SERIES THROUGH HOLE INDUCTORS

RoHS Compliant Available

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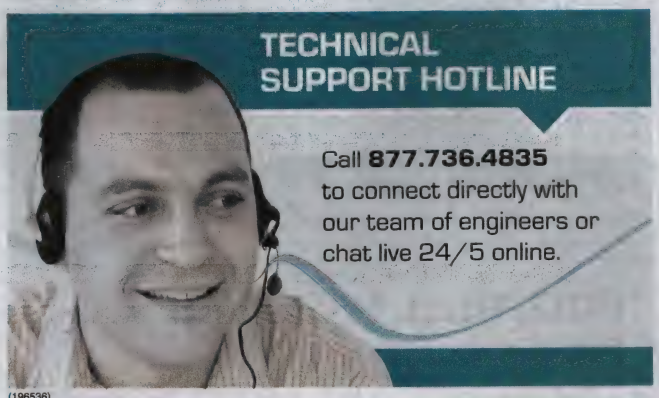
Applications:
- Power supply for VTR
- OA equipment
- LCD Displays
- Notebook PC
- Portable communications equipment
- DC/DC Converters

Mfg. Part No.	L (Induct.) µH	Ind. Tol.	Stock No.	Price Each 1-249
MCSCH 110 Series				
MCSCH110-100MU	10	± 20%	74R9967	0.76
MCSCH110-330KU	33	± 10%	74R9969	0.76
MCSCH110-680KU	68	± 10%	74R9971	0.76
MCSCH110-101MU	100	± 20%	74R9968	0.89
MCSCH110-561KU	560	± 10%	74R9970	0.89
MCSCH110-802MU	8000	± 20%	74R9972	0.83
MCSCH 664 Series				
MCSCH664-6R8KU	6.8	± 10%	74R9974	0.54
MCSCH664-100KU	10	± 10%	74R9973	0.54
MCSCH664-680KU	68	± 10%	74R9975	0.54
MCSCH 855U Series				
MCSCH855U-101KU	100	± 10%	74R9976	0.39
MCSCH855U-221KU	220	± 10%	74R9978	0.38
MCSCH855U-471KU	470	± 10%	74R9980	0.39
MCSCH855U-102KU	1000	± 10%	74R9977	0.38
MCSCH855U-222KU	2200	± 10%	74R9979	0.38
MCSCH 895 Series				
MCSCH895-1R0MU	1	± 20%	74R9981	0.41
MCSCH895-2R2MU	2.2	± 20%	74R9989	0.38
MCSCH895-3R3MU	3.3	± 20%	74R9993	0.41
MCSCH895-6R8MU	6.8	± 20%	75R0003	0.38
MCSCH895-100LU	10	± 15%	74R9982	0.41
MCSCH895-200KU	20	± 10%	74R9990	0.41
MCSCH895-220KU	22	± 10%	74R9991	0.41
MCSCH895-330KU	33	± 10%	74R9994	0.41
MCSCH895-470KU	47	± 10%	74R9997	0.38
MCSCH895-560KU	56	± 10%	75R0001	0.41
MCSCH895-680KU	68	± 10%	75R0004	0.38
MCSCH895-820KU	82	± 10%	75R0006	0.41
MCSCH895-101KU	100	± 10%	74R9983	0.40
MCSCH895-121KU	120	± 10%	74R9986	0.43
MCSCH895-221KU	220	± 10%	74R9992	0.43
MCSCH895-331KU	330	± 10%	74R9995	0.43
MCSCH895-471KU	470	± 10%	74R9998	0.40
MCSCH895-561KU	560	± 10%	75R0002	0.43
MCSCH895-681KU	680	± 10%	75R0005	0.43
MCSCH895-821JU	820	± 5%	75R0007	0.40
MCSCH895-102KU	1000	± 10%	74R9984	0.46
MCSCH895-152KU	1500	± 10%	74R9987	0.49
MCSCH895-182KU	1800	± 10%	74R9988	0.49
MCSCH895-332KU	3300	± 10%	74R9996	0.45
MCSCH895-103KU	10000	± 10%	74R9985	0.49
MCSCH895-473KU	47000	± 10%	74R9999	0.49

(195562)

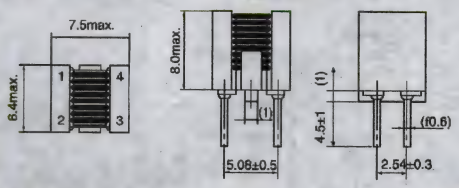


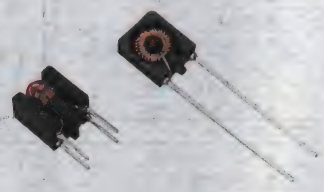
(196536)

PCB MOUNTED FILTERS/CHOKES

RoHS Compliant Available

multicomp





Specifications
- Voltage rating: 50V
- Current rating: 500mA
- Operating temperature:
- Differential mode chokes: 25°C to +85°C
- Common mode chokes: 25°C to +70°C

Features a range of compact data line filters employing a high performance toroidal core. These common mode and differential mode chokes have a plastic carrier for ease of PCB mounting.

Mfg. Part No.	Inductance (µH)	Resistance (mΩ)	Operating Temp. Range (°C) Min.	Max.	Stock No.	Price Each 1-24
DIFFERENTIAL MODE						
● MCAS809535-100U	10	...	25	85	74R9851	0.38
● MCAS809535-560U	56	...	25	85	74R9858	0.38
COMMON MODE						
● SBT-0140W	40	40	25	70	97K9436	0.70
● SBT-0180W	80	55	25	70	89K7261	0.72

(116506)

5200 SERIES HASH CHOKES

RoHS Compliant Available

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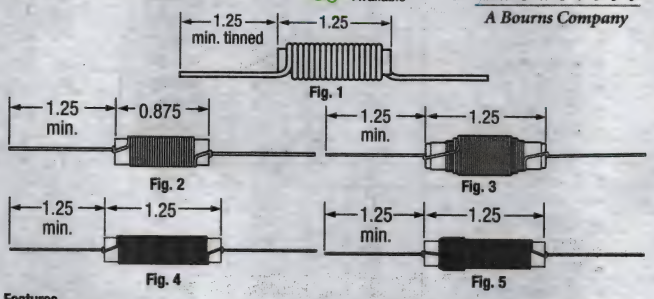

Features
- Low-Cost, Low-DCR
- High-Current Capacity
- Varnish-Coated
- Operating Temperature: -55°C to +105°C
- Ideal for Use as EMI, Output Choke, Smoothing Coil
- Current to Cause 10% Max. Inductance Drop or 35°C Max. Temperature Rise
- Tolerance: ±20%

Mfg. Part No.	L (Induct.) (µH)	DCR Max. (mΩ)	I_{Max} (A)	Test Freq.	Coil Dia. Max. (in.)	Fig.	Stock No.	Price Each 1-9	10-24	25-49
● 5218-RC	3.35	10	20	7.96MHz	0.6	1	63K2756	2.47	2.28	2.09
● 5219-RC	4.9	16	15	7.96MHz	0.6	1	63K2757	2.47	2.28	2.09
● 5220-RC	8.8	21	10	7.96MHz	0.56	1	63K2758	2.47	2.28	2.09
● 5230-RC	4	12	8	7.96MHz	0.38	2	63K2759	1.29	1.20	1.11
● 5240-RC	40	82	3	1 KHz	0.31	4	63K2760	1.37	1.27	1.17
● 5248-RC	68	54	5	1 KHz	0.56	3	63K2761	1.37	1.27	1.17
● 5250-RC	100	216	2	1 KHz	0.38	5	63K2762	1.42	1.32	1.21
● 5252-RC	125	80	3.5	1 KHz	0.5	3	63K2763	1.39	1.29	1.19
● 5254-RC	250	170	2.5	1 KHz	0.44	3	63K2764	1.39	1.29	1.19
● 5256-RC	500	260	2	1 KHz	0.56	3	63K2765	1.37	1.27	1.17
● 5258-RC	1000	550	1	1 KHz	0.5	3	63K2766	1.37	1.27	1.17

(33798)

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(211462)

5300 SERIES MINIATURE HIGH-CURRENT RF CHOKES

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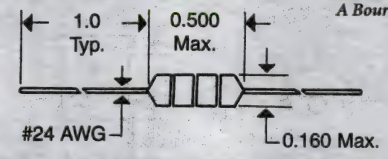

A low-cost filter used with DC, 60Hz and 400Hz lines from conducted and radiated RF. For EMI filter and switching power supply applications. Epoxy conformal coating. Operating temperature: –55°C to +105°C. Dielectric strength: 500 V_{RMS}. Tolerance: ± 10%

Mfg. Part No.	L (Induct.) (µH)	63K3773	I_{Max} (mA)	Stock No.	Price Each 1-9	10-24
● 5300-01-RC	1	0.018	3300	86K7370	0.94	0.87
● 5300-03-RC	1.5	0.02	3100	63K3772	0.95	0.88
● 5300-13-RC	10	0.095	1500	63K3774	0.94	0.87
● 5300-17-RC	22	0.19	1000	63K3775	0.88	0.82
● 5300-19-RC	33	0.24	910	63K3776	0.88	0.82
● 5300-25-RC	100	0.67	550	63K3777	0.94	0.87
● 5300-33-RC	470	3.4	240	63K3778	0.95	0.88
● 5300-37-RC	1000	7.9	160	86K7399	0.95	0.88

(7405)

5800 AND 5900 SERIES HIGH-CURRENT RF CHOKES

RoHS Compliant Available

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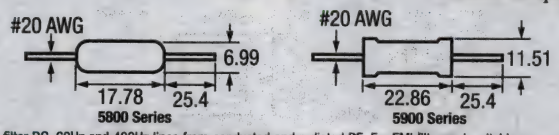

Used to filter DC, 60Hz and 400Hz lines from conducted and radiated RF. For EMI filter and switching power supply applications. Operating temperature: –55°C to +105°C. Tolerance: ±10%

Mfg. Part No.	L (Induct.) (µH)	R_{Max} (Ω)	Current (A) Saturated	Rated	Stock No.	Price Each 1-9	10-24
5800 SERIES							
● 5800-4R7-RC	4.70	0.022	6.3	1.28	63K3839	0.95	0.88
● 5800-100-RC	10	0.033	4.1	1.28	63K3810	0.95	0.88
● 5800-220-RC	22	0.05	2.7	1.28	63K3826	0.95	0.88
● 5800-330-RC	33	0.075	2.2	1.008	63K3833	0.95	0.88
● 5800-470-RC	47	0.109	1.8	0.804	63K3840	0.95	0.88
● 5800-680-RC	68	0.145	1.5	0.804	63K3847	1.36	1.02
● 5800-820-RC	82	0.152	1.4	0.804	63K3851	0.93	0.87
● 5800-101-RC	100	0.208	1.2	0.632	63K3811	0.95	0.88
● 5800-121-RC	120	0.283	1.1	0.508	63K3815	0.88	0.82
● 5800-151-RC	150	0.34	1	0.508	63K3819	0.88	0.82
● 5800-221-RC	220	0.43	0.86	0.508	63K3827	0.88	0.82
● 5800-331-RC	330	0.665	0.7	0.4	63K3834	0.95	0.88
● 5800-391-RC	390	0.772	0.64	0.4	63K3837	0.95	0.88
● 5800-471-RC	470	1.15	0.59	0.315	57K2530	0.95	0.88
● 5800-681-RC	680	1.61	0.49	0.25	63K3848	0.88	0.82
● 5800-102-RC	1000	2.3	0.4	0.2	63K3812	0.95	0.88
● 5800-222-RC	2200	4.48	0.27	0.158	63K3828	0.95	0.88
● 5800-272-RC	2700	5.9	0.24	0.125	63K3831	0.88	0.82
● 5800-472-RC	4700	10.5	0.18	0.1	63K3841	0.88	0.82
● 5800-103-RC	10000	26.4	0.125	0.05	63K3813	0.88	0.82
● 5800-153-RC	15000	42.5	0.098	0.039	63K3821	0.88	0.82
● 5800-183-RC	18000	48.3	0.091	0.039	63K3825	0.95	0.88
5900 SERIES							
● 5900-100-RC	10	0.017	8.7	4	63K3854	1.77	1.64
● 5900-220-RC	22	0.026	6.07	4	63K3871	1.65	1.53
● 5900-470-RC	47	0.035	3.98	4	63K3889	1.65	1.53
● 5900-680-RC	68	0.047	3.31	2.5	63K3899	1.65	1.53
● 5900-101-RC	100	0.09	2.79	1.6	63K3855	1.75	1.62
● 5900-151-RC	150	0.129	2.22	1.6	63K3864	1.65	1.53
● 5900-221-RC	220	0.162	1.89	1.6	63K3872	1.65	1.53
● 5900-331-RC	330	0.212	1.51	1.6	63K3881	1.77	1.64
● 5900-391-RC	390	0.281	1.39	1.6	63K3885	1.65	1.53
● 5900-471-RC	470	0.38	1.24	1.2	63K3890	1.77	1.64
● 5900-681-RC	680	0.548	1.05	1	63K3900	1.65	1.53
● 5900-102-RC	1000	0.844	0.87	0.8	63K3856	1.77	1.64
● 5900-222-RC	2200	2	0.58	0.5	63K3873	1.65	1.53
● 5900-472-RC	4700	3.19	0.39	0.4	63K3891	1.77	1.64
● 5900-822-RC	8200	6.32	0.293	0.25	63K3906	1.65	1.53

CONTINUED

5800 AND 5900 SERIES HIGH-CURRENT RF CHOKES (CONT.)

5900 SERIES

Mfg. Part No.	L (Induct.) (µH)	R_{Max} (Ω)	Current (A) Saturated	Current (A) Rated	Stock No.	Price Each 1-9	Price Each 10-24
5900-103-RC	10000	7.3	0.266	0.25	63K3857	1.77	1.64
5900-104-RC	100000	89.7	0.081	0.065	63K3858	1.65	1.53

(7406)

9250A SERIES MOLDED AXIAL INDUCTORS

J.W.Miller MAGNETICS A Bourns Company

Features
- Shielded
- High Q value

Applications
- Filters
- Output chokes

Specifications
- Dielectric strength: 1000 VRMS
- Oper.Temp. Range: -55°C to +125°C

Mfg. Part No.	L (Induct.) (µH)	Q @ Freq	SRF (MHz)	DCR (Ω)	I_{DC} (mA)	Tape Cut Stock No.	Tape Cut Price Each 1-9
9250A-153-RC	15	45 @ MHz	49	0.8	315	86K8199	1.21
9250A-825-RC	8.2	...	540	119	26	86K8311	1.29
9250A-103-RC	10	50 @ 7.9 MHz	46	1.62	220	86K8173	1.31
9250A-333-RC	33	45 @ 2.5 MHz	34	1.37	240	86K8247	1.21
9250A-473-RC	47	50 @ 2.5 MHz	27	2.11	195	86K8271	1.21
9250A-104-RC	100	50 @ 2.5 MHz	10	3.12	160	86K8175	1.31
9250A-224-RC	220	55 @ 0.79 MHz	7.5	5	125	86K8225	1.21
9250A-474-RC	470	60 @ 0.79 MHz	5.7	9.5	92	86K8273	1.21
9250A-105-RC	1000	60 @ 0.79 MHz	3.8	17.5	70	86K8177	1.21
9250A-225-RC	2200	45 @ 0.25 MHz	970	33.8	50	86K8227	1.31
9250A-475-RC	4700	45 @ 0.25 MHz	740	81.6	31	86K8275	1.21

(136931)

CONFORMAL COATED RF CHOKES

RoHS Compliant Available

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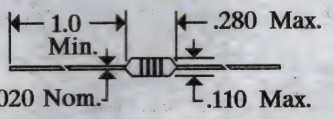

78F series chokes have ferrite cores with tinned copper leads and epoxy coating. Working voltage: 250V max. Terminal pull: 5 lbs. Operating temperature: –20°C to +105°C.

Mfg. Part No.	L (Ind.) (µH)	Q Min.	Ind. Tol.	D_{CR} Max. (Ω)	I_{DC} (mA)	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49
78FR10M-RC	0.1	40	± 10%	0.06	500	63K2906	0.20	0.18	0.16
78FR15M-RC	0.15	40	± 10%	0.07	500	63K2908	0.22	0.20	0.17
78FR22K-RC	0.22	40	± 10%	0.08	1025	63K2910	0.22	0.20	0.17
78FR27K-RC	0.27	40	± 10%	0.08	950	63K2911	0.22	0.20	0.17
78FR33K-RC	0.33	40	± 10%	0.08	815	63K2912	0.22	0.20	0.17
78FR39K-RC	0.39	40	± 10%	0.09	700	63K2913	0.22	0.20	0.17
78FR47K-RC	0.47	40	± 10%	0.1	650	63K2914	0.22	0.20	0.17
78FR56K-RC	0.56	40	± 10%	0.11	545	63K2915	0.22	0.20	0.17
78FR68K-RC	0.68	40	± 10%	0.12	495	63K2916	0.22	0.20	0.17
78FR82K-RC	0.82	40	± 10%	0.12	415	63K2917	0.22	0.20	0.17
78F1R0K-RC	1	40	± 10%	0.15	385	63K2918	0.20	0.18	0.16
78F1R2K-RC	1.2	40	± 10%	0.18	590	63K2919	0.22	0.20	0.17
78F1R8K-RC	1.8	50	± 10%	0.18	455	63K2921	0.20	0.18	0.16
78F2R2K-RC	2.2	50	± 10%	0.28	395	63K2930	0.22	0.20	0.17
78F4R7J-RC	4.7	45	± 5%	0.35	230	63K2943	0.22	0.20	0.17
78F8R2J-RC	8.2	40	± 5%	0.55	155	63K2952	0.21	0.19	0.17
78F100J-RC	10	40	± 5%	0.72	130	54K3050	0.22	0.20	0.18
78F120J-RC	12	45	± 5%	0.8	155	63K2924	0.20	0.18	0.16
78F150J-RC	15	50	± 5%	0.88	150	63K2926	0.20	0.18	0.16
78F180J-RC	18	50	± 5%	1	145	63K2928	0.20	0.18	0.16
78F220J-RC	22	50	± 5%	1.2	140	63K2932	0.20	0.18	0.16
78F470J-RC	47	60	± 5%	2.3	167	63K2944	0.20	0.18	0.16
78F680J-RC	68	60	± 5%	2.9	137	63K2950	0.22	0.20	0.17
78F820J-RC	82	60	± 5%	3.2	132	63K2953	0.22	0.20	0.17
78F101J-RC	100	60	± 5%	3.5	165	63K2922	0.22	0.20	0.17
78F121J-RC	120	60	± 5%	3.8	100	63K2925	0.20	0.18	0.16
78F151J-RC	150	60	± 5%	4.4	90	63K2927	0.22	0.20	0.17
78F221J-RC	220	60	± 5%	5.7	76	63K2933	0.22	0.20	0.17
78F331J-RC	330	60	± 5%	9.5	65	63K2940	0.22	0.20	0.17
78F471J-RC	470	60	± 5%	11.6	53	63K2945	0.22	0.20	0.17
78F681J-RC	680	60	± 5%	18	45	63K2951	0.20	0.18	0.16
78F102J-RC	1000	60	± 5%	26	60	63K2923	0.22	0.20	0.17

(48686)

RADIAL TERMINAL HI-CURRENT RF CHOKES

RoHS Compliant Available

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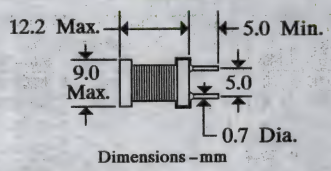


6000 series RF chokes are designed for high current applications. Rated DC tested at 1kHz. VW1 rated sleeving.

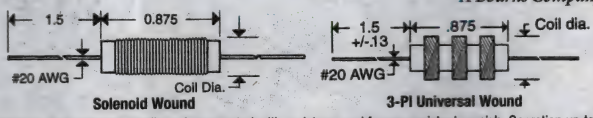
Mfg. Part No.	L (Induct.) (µH)	Q Min.	DCR Max. (Ω)	I_{DC} Amps	Stock No.	Price Each 1-9	Price Each 10-24
±20% TOLERANCE							
6000-1R0M-RC	1	20	0.013	10	63K2876	0.70	0.65
6000-3R3M-RC	3.3	20	0.025	5.5	63K2891	0.66	0.61
6000-4R7M-RC	4.7	20	0.03	4.6	63K2896	0.71	0.66
±10% TOLERANCE							
6000-100K-RC	10	50	0.045	3.4	63K2878	0.71	0.66
6000-220K-RC	22	40	0.07	2.4	63K2887	0.71	0.66
6000-470K-RC	47	30	0.16	1.77	63K2897	0.71	0.66
6000-680K-RC	68	30	0.21	1.36	63K2901	0.71	0.66
6000-101K-RC	100	20	0.28	1.4	63K2879	0.71	0.66
6000-151K-RC	150	20	0.37	1.15	63K2883	0.66	0.61
6000-221K-RC	220	20	0.65	1	63K2888	0.71	0.66
6000-331K-RC	330	20	0.85	0.78	63K2893	0.70	0.65
6000-471K-RC	470	20	1.1	0.68	63K2898	0.71	0.66
6000-681K-RC	680	20	1.6	0.59	63K2902	0.71	0.66
6000-102K-RC	1000	50	2.9	0.51	63K2880	0.73	0.67

(48677)

RF CHOKES WITH AXIAL TERMINALS

RoHS Compliant Available

J.W.Miller MAGNETICS A Bourns Company



Solenoid or 3-pi universal windings. Impregnated with moisture- and fungus-resistant varnish. Operation up to UHF. Lead length: 1.5". Tolerance: ± 5%

Mfg. Part No.	L (Induct.) (µH)	Resistance Max. (Ω)	Rated Current (mA)	Coil Dia. Max.	Stock No.	Price Each 1-9	Price Each 10-24
PHENOLIC WOUND							
4602-RC	1	0.05	2000	0.27"	86K7321	1.43	1.32
4612-RC	10	1.5	500	0.27"	63K3764	1.35	1.24
4652-RC	1000	19	160	0.56"	86K7337	1.93	1.78
IRON CORE SOLENOID WOUND							
4622-RC	10	0.11	1500	0.29"	63K3765	1.35	1.24
4624-RC	15	0.17	1000	0.29"	63K3766	1.41	1.30
4626-RC	24	0.34	800	0.29"	63K3767	1.35	1.24
4629-RC	55	1	500	0.29"	63K3768	1.35	1.24
4632-RC	100	3	400	0.29"	63K3769	1.35	1.24
FERRITE CORE 3-PI UNIVERSAL WOUND							
6302-RC	2500	9	160	0.47"	63K3908	1.66	1.53
6304-RC	5000	14	160	0.53"	63K3909	1.66	1.53
6306-RC	10000	31	100	0.53"	63K3910	1.56	1.44
6310-RC	50000	127	65	0.53"	63K3912	1.71	1.58

(7363)

70F SERIES SUBMINIATURE RF CHOKES

RoHS Compliant Available

J.W.Miller MAGNETICS A Bourns Company

Designed for demand of high-reliability ultraminiature components. Coils impregnated with moisture-resistant lacquer. Specification "Q" denotes quality factor. Core material indicated by mfg. part no. suffix: I = iron; F = ferrite. P = Phenolic. Lead length: 1.25" min.

Mfg. Part No.	L (Induct.) (µH)	Q Min	DCR Max. (Ω)	I_{DC} (mA)	Coil Dia. Max (in)	Stock No.	Price Each 1-9	Price Each 10-24
20% TOLERANCE								
70F106AI-RC	1	41	0.048	2041	0.16	63K3948	0.71	0.66
±10% TOLERANCE								
70F336AI-RC	3.3	40	0.24	912	0.15	63K3995	0.66	0.61

CONTINUED

70F SERIES SUBMINIATURE RF CHOKES (CONT.)

±5% TOLERANCE

Mfg. Part No.	L (Induct.) (µH)	Q Min	DCR Max. (Ω)	I_{DC} (mA)	Coil Dia. Max (in)	Stock No.	Price Each 1-9	Price Each 10-24
● 70F103AI-RC	1000	30	24	79	0.22	63K3945	1.11	1.03
● 70F253AI-RC	2500	48	45.6	57	0.26	63K3979	1.18	1.09
● 70F333AI-RC	3300	52	51.6	53	0.26	63K3991	1.19	1.11
● 70F102AI-RC	10,000	41	101	38	0.33	63K3944	1.32	1.21
● 70F332AF-RC	33,000	61	134	43	0.35	63K3990	1.32	1.21
● 70F502AF-RC	50,000	57	175	37	0.4	63K4012	2.04	1.53
● 70F101AF-RC	100,000	48	278	29	0.44	63K3943	2.27	2.10
±5% TOLERANCE, TEST FREQ: 1kHz								
● 70F221AF-RC	220,000	51	424	39	0.54	63K3970	2.27	2.10
● 70F471AF-RC	470,000	55	704	30	0.61	63K4004	2.27	2.10
● 70F501AF-RC	500,000	53	736	30	0.63	63K4011	2.41	2.22

(7364)

Z SERIES RF PLATE CHOKES

RoHS Compliant Available

OHMITE

Ohmite radio frequency plate chokes have a single-layer winding designed to avoid adverse harmonic effects and prevents breakdown from high r.f. potentials. Windings are insulated and protected by a moisture-proof coating.

Mfg. Part No.	Inductance @ 1KHz (µH)	DC Current (A)	DCR (Ohms)	Freq. Range (MHz)	SRF (MHz)	Stock No.	Price Each 1-9	Price Each 10-49
● Z7E	84	1	4.7	3 - 20	13	64K7834	27.28	25.34
Z14	44	0.68	2.6	7 - 35	23	94F1427	13.19	12.26
● Z14E	44	0.68	2.6	7 - 35	23	64K7824	12.25	11.38
● Z50E	7	1	0.96	35 - 110	79	64K7833	4.96	4.61

(87531)

RN SERIES COMMON MODE CHOKES

RoHS Compliant Available

SCHAFFNER

PC mount common mode chokes for low level EMI problems or as part of a larger filter with capacitors. Highest attenuation at resonant frequency (F res). **RN112** is a horizontal mount package, 0.67 x 0.67 x 0.5" (17 x 17 x 13) high. **RN122** is a horizontal mount, 1.1 x 1.1 x 0.65" (28 x 28 x 16.5mm). **RN222** is a vertical mount, 0.71 x 1.22" (18 x 31) footprint and 1.2" (29.3) height. UL recognized and VDE approved.

Mfg. Part No.	I (A)	L (mH)	F res (kHz)	R (Ω)	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99
● RN102-1-02	1	3	1400	0.205	37K6102	2.33	1.88	1.74
● RN102-2-02	2	1.1	2400	0.075	37K6103	2.36	1.90	1.76
● RN112-1.5-02	1.5	3.3	800	0.135	37K6104	2.50	2.01	1.86
● RN102-0.3-02	0.3	12	...	...	11B3646	2.46	1.95	1.84
● RN102-0.6-02	0.6	4.4	...	...	11B3647	2.46	1.95	1.84
● RN112-0.4-02	0.4	39	...	...	11B3649	2.46	1.95	1.84
● RN112-0.5-02	0.5	27	...	...	92F5330	2.46	1.95	1.84
● RN112-0.6-02	0.6	15	...	...	11B3650	2.46	1.95	1.84
● RN112-0.8-02	0.8	10	...	...	11B3651	2.29	1.82	1.72
● RN112-1.2-02	1.2	6.8	...	...	11B3652	2.46	1.95	1.84
● RN114-0.8-02	0.8	27	...	...	11B3656	2.80	2.23	2.10
● RN114-3-02	3	2	...	...	88F3860	3.15	2.50	2.36
● RN222-4-02	4	3.3	...	...	92F5333	2.93	2.33	2.20
● RN152-10-02	10	1.8	...	...	90C0511	6.84	5.43	5.13
● RN152-6-02	6	3.9	...	...	89C0825	6.82	5.42	5.12
● RN152-8-02	8	2.7	...	...	90C0506	7.30	5.80	5.48
● RN202-0.3-02	0.3	12	...	...	61K1570	2.29	1.82	1.72
● RN212-0.4-02	0.4	39	...	...	11B3660	2.29	1.82	1.72
● RN212-1.2-02	1.2	6.8	...	...	11B3663	2.46	1.95	1.84
● RN214-0.8-02	0.8	27	...	...	11B3667	2.77	2.20	2.08
● RN214-2.5-02	2.5	3.3	...	...	11B3670	2.61	2.07	1.96
● RN214-4-02	4	1.5	...	...	11B3672	2.80	2.23	2.10
● RN112-4-02	4	0.7	...	0.027	37K6105	2.36	1.90	1.76
● RN114-4-02	4	1.5	2300	0.035	37K6107	3.16	2.54	2.36
● RN202-1.5-02	1.5	1.6	1900	0.1	94M5343	2.32	1.87	1.73
● RN222-1-02	1	18	200	0.61	97F8196	2.98	2.40	2.22

(7469)

MULTILAYER SURFACE MOUNT FERRITE CHIP BEADS

SMD

RoHS Compliant Available

Fair-Rite Products Corp. Your Signal Solution

Surface mount ferrite chip beads in standard EIA sizes. Suitable for wave and flow soldering processes. Ideal for EMI suppression. 100% controlled impedance and DCR.

Mfg. Part No.	Case Size	Z @ 100MHz (Ω)	I_{Max} (mA)	Stock No.	Price Each 1-99
● 2506033007Y3	0603 [1608 Metric]	41	3000	03P0848	0.06
● 2506031017Y0	0603 [1608 Metric]	144	...	72K6763	0.05
● 2506031027Y0	0603 [1608 Metric]	1k		07H4201	0.06
● 2508051107Y0	0805 [2012 Metric]	16		82H1620	0.06
● 2508056007Y0	0805 [2012 Metric]	89		14P4946	0.06
● 2508053017Y0	0805 [2012 Metric]	300		83F7369	0.06
● 2508056017Y2	0805 [2012 Metric]	600		22J0387	0.07
● 2508051527Y0	0805 [2012 Metric]	1.5k		24C2336	0.07
● 2512063007Y3	1206 [3216 Metric]	40	3000	50B9866	0.09
● 2512065007Y3	1206 [3216 Metric]	70	3000	95C0793	0.09
● 2512065007Y6	1206 [3216 Metric]	68	6000	72C8321	0.09
● 2512061217Y0	1206 [3216 Metric]	151		32C8661	0.09
● 2512061217Y5	1206 [3216 Metric]	137	5000	97H6813	0.09
● 2512066017Y0	1206 [3216 Metric]	600		72K6765	0.09
● 2518065007Y6	1806 [4516 Metric]	63	6000	83F7367	0.14
● 2518066007Y3	1806 [4516 Metric]	94	3000	31M8877	0.06

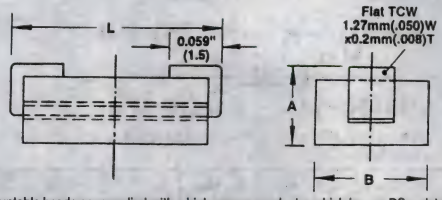
(31685)

SURFACE MOUNT EMI SUPPRESSION BEADS

RoHS Compliant Available

Fair-Rite Products Corp. Your Signal Solution

SMD



These surface mountable beads are supplied with a high copper conductor which lowers DC resistance and increases current carrying capacity, compared to plated beads. Plating is RoHS compliant 100% tin. SM beads are designed for differential and common-mode applications, and are offered in a range of materials 73, 43 / 44 and 52 / 61(3rd and 4th digit) which cover frequencies from 500kHz to 1GHz.

LOW FREQUENCY

Mfg. Part No.	Z (Ω) @ 10MHz	Z (Ω) @ 25MHz	Dimensions (in.) A	B	C	Stock No.	Price Each 1-99
● 2773019447	31	40	0.112	0.12	0.184	93B9533	0.23
● 2773021447	60	78	0.112	0.12	0.359	50B3456	0.27

MID-RANGE FREQUENCY

Mfg. Part No.	Z (Ω) @ 25MHz	Z (Ω) @ 100MHz	Dimensions (in.) A	B	C	Stock No.	Price Each 1-99
● 2743019447	29	47	0.112	0.12	0.184	26C2847	0.13
● 2743021447	56	95	0.112	0.12	0.359	24C0338	0.29
● 2744555577	425	600	0.197	0.197	0.433	76K2696	0.40
● 2744041447	20	33	0.112	0.22	0.185	57J1201	0.30
● 2744065447	145	255	0.112	0.22	0.335	08N1937	0.73
● 2744045447	38	60	0.112	0.22	0.335	73C7704	0.50
● 2744051447	100	230	0.177	0.262	0.472	11C1594	0.96

(7344)

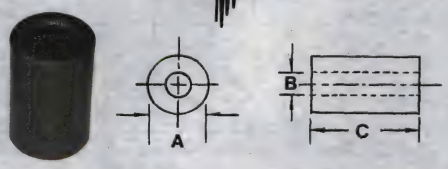
EMI SHIELD BEADS AND CABLE CORES

RoHS Compliant Available

Fair-Rite Products Corp. Your Signal Solution

Material

- 73 = 50MHz
- 31 = 1MHz to 300MHz
- 43 = 25MHz to 300MHz
- 46 = Low cost alternative of 43 material
- 61 = 200MHz to 1GHz



Offered in a range of sizes and materials (3rd and 4th digit) to suppress conducted EMI frequencies from 1MHz to 1GHz.

➤CONTINUED➤

EMI SHIELD BEADS AND CABLE CORES (CONT.)

Mfg. Part No.	Z (Ω) @10 MHz	Z (Ω) @25 MHz	Z (Ω) @100 MHz	Dimensions (in.) A	Dimensions (in.) B	Dimensions (in.) C	Stock No.	Price Each 1-9
ROUND CABLE EMI SUPPRESSION CORES — LOW FREQUENCY, 31 MATERIAL								
2631480002	115	175	295	0.484	0.195	1.000	75C9539	0.54
2631540202	58	88	140	0.563	0.250	0.543	32H7194	0.78
2631540002	119	181	300	0.563	0.250	1.126	89C2322	0.84
2631625102	103	156	260	0.640	0.311	1.126	79K4486	0.71
2631665702	89	138	225	0.687	0.374	1.126	74C0278	0.77
2631102002	103	156	260	1.020	0.504	1.126	85C4595	1.89
2631101902	106	163	270	1.122	0.543	1.126	29H4106	3.03
ROUND CABLE EMI SUPPRESSION CORES — BROADBAND FREQUENCY, 43 MATERIAL								
2643480002	102	165	236	0.484	0.195	1.000	99F6293	1.00
2643480102	52	84	121	0.484	0.195	0.500	40C1396	0.70
2643540002	105	171	250	0.563	0.250	1.126	88F5751	0.65
2643625202	158	235	384	0.626	0.311	2.000	81C9718	1.28
2643665702	78	125	200	0.687	0.374	1.126	93B2482	1.06
2643665802	35	55	88	0.687	0.374	0.500	91B9940	0.60
2643626502	138	225	348	0.736	0.400	2.000	22C5039	1.91
2643800502	27	45	82	0.825	0.520	0.469	72K6779	0.49
2643806402	30	53	90	1.000	0.610	0.500	94B8935	0.86
2643801502	22	34	53	1.000	0.500	0.250	97H4189	0.55
2643102002	145	235	235	1.020	0.504	1.126	24C4674	1.67
2643102402	68	110	183	1.020	0.504	0.839	72K6776	1.62
2643101902	93	145	230	1.122	0.543	1.126	72K6775	2.36
2643801002	17	28	47	1.142	0.748	0.295	50B3452	0.69
2643804502	37	60	100	1.224	0.750	0.642	72K6784	1.35
2643802702	28	48	80	1.400	0.900	0.500	06C1035	1.85
2643626202	118	193	336	2.000	1.000	1.500	34C2988	13.27
2643626002	157	240	360	2.000	1.000	2.000	50B3451	40.15
2643803802	33	58	108	2.402	1.400	0.500	14N5458	4.25
ROUND CABLE EMI SUPPRESSION CORES — BROADBAND FREQUENCY, 46 MATERIAL								
2646480002	83	125	212	0.484	0.195	1.000	12N1156	0.56
2646540002	89	134	225	0.563	0.250	1.126	75M9122	0.77
2646102002	74	118	212	1.020	0.504	1.126	12N1155	1.68
2646804502	33	49	90	1.224	0.750	0.642	12N1158	1.14
2646803802	30	44	100	2.402	1.400	0.500	12N1157	4.55
ROUND CABLE EMI SUPPRESSION CORES — HIGH FREQUENCY, 61 MATERIAL								
2661480002	210	325	210	0.484	0.195	1.000	11N8372	1.22
2661540002	205	295	205	0.563	0.250	1.126	86H7644	1.90
2661665702	190	280	190	0.687	0.374	1.126	08H0912	1.24
2661102002	190	300	190	1.020	0.504	1.126	60K7842	5.21
EMI SUPPRESSION BEADS — LOW FREQUENCY, 73 MATERIAL								
2673000101	25	35	...	0.138	0.051	0.128	83F7364	0.09
2673000301	57	63	...	0.138	0.051	0.236	83F7365	0.05
EMI SUPPRESSION BEADS — LOW FREQUENCY, 43 MATERIAL								
2643000101	17	26	40	0.138	0.051	0.128	26C0536	0.03
2643000301	29	46	60	0.138	0.051	0.236	92B2104	0.04
2643000801	42	63	92	0.295	0.089	0.297	73K4052	0.09
2643006302	34	53	80	0.374	0.187	0.409	92B9801	0.17
2643002402	16	26	43	0.380	0.197	0.199	42J4922	0.08
EMI SUPPRESSION BEADS — HIGH FREQUENCY, 61 MATERIAL								
2661000301	...	...	54	0.138	0.051	0.236	28H8327	0.07

(7342)

MPZ SERIES SMD FERRITE BEAD INDUCTORS

SMD — RoHS Compliant Available — TDK

MPZ 1005 Series

Mfg. Part No.	Impedance (Ohm)	DCR Max (Ohm)	DC Current Rating (A)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape & Reel Stock No.	Tape & Reel Reel Qty	Tape & Reel Price Each 1-9999
MPZ1005S100C	10ohm	0.025	2	89R3140	0.14	99R3633	10000	0.04
MPZ1005S121C	120ohm	0.09	1.2	89R3141	0.14	99R3634	10000	0.03
MPZ1005S300C	30ohm	0.035	1.7	89R3142	0.14	99R3635	10000	0.04
MPZ1005S600C	60ohm	0.06	1.5	89R3143	0.14	99R3636	10000	0.04
MPZ 1608 Series								
MPZ1608D101B	100ohm	0.15	1	89R3144	0.11	99R3637	4000	0.03
MPZ1608B471A	470ohm	0.15	1	05X0442	0.11	86T2417		0.03
MPZ1608D600B	60ohm	0.1	1.2	89R3146	0.11	99R3639	4000	0.03
MPZ1608R391A	390ohm	0.12	1.2	89R3147	0.11	91R2361	4000	0.03
MPZ1608S101A	100ohm	0.03	3	89R3148	0.11	99R3640	4000	0.03
MPZ1608S221A	220ohm	0.05	2.2	89R3149	0.11	91R2362	4000	0.03
MPZ1608S300A	30ohm	0.01	5	89R3150	0.11	99R3641	4000	0.03
MPZ1608S331A	330ohm	0.08	1.7	88T9828	0.11	05X0443		0.03

➤CONTINUED➤

MPZ SERIES SMD FERRITE BEAD INDUCTORS (CONT.)

MPZ 1608 Series

Mfg. Part No.	Impedance (Ohm)	DCR Max (Ohm)	DC Current Rating (A)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape & Reel Stock No.	Tape & Reel Reel Qty	Tape & Reel Price Each 1-9999
MPZ1608S600A	60ohm	0.02	3.5	89R3151	0.11	99R3642	4000	0.03
MPZ1608S601A	600ohm	0.15	1	89R3152	0.11	99R3643	4000	0.03
MPZ1608Y101B	100ohm	0.04	2	89R3153	0.11	91R2363	4000	0.03
MPZ 2012 Series								
MPZ2012S101A	100ohm	0.02	4	89R3156	0.22	99R3646	4000	0.03
MPZ2012S102A	1kohm	0.15	1.5	88T9831	0.22	05X0444		0.03
MPZ2012S221A	220ohm	0.04	3	89R3157	0.22	99R3647	4000	0.03
MPZ2012S300A	30ohm	0.01	6	89R3158	0.22	91R2364	4000	0.03
MPZ2012S331A	330ohm	0.05	2.5	89R3159	0.22	91R2365	4000	0.03
MPZ2012S601A	600ohm	0.1	2	89R3160	0.22	99R3648	4000	0.03

(195526)

MMZ SERIES SMD FERRITE BEAD INDUCTORS

SMD — RoHS Compliant Available — TDK

MMZ 1005 Series

Mfg. Part No.	Impedance (Ohm)	DCR Max (Ohm)	DC Current Rating	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape & Reel Stock No.	Tape & Reel Reel Qty	Tape & Reel Price Each 1-9999
MMZ1005A222E	2.2kohm	2.2	150mA	05X0438	0.33	89R3048	10000	0.05
MMZ1005B601C	600ohm	0.85	200mA	89R3051	0.10	99R3584	10000	0.03
MMZ1005S102C	1kohm	0.75	200mA	89R3059	0.10	99R3592	10000	0.03
MMZ1005S102E	1.4kohm	1	250mA	89R3060	0.33	91R2340	10000	0.08
MMZ1005S121C	120ohm	0.22	500mA	89R3061	0.10	99R3593	10000	0.03
MMZ1005S241C	240ohm	0.28	400mA	89R3062	0.10	99R3594	10000	0.03
MMZ1005S601C	600ohm	0.52	300mA	89R3063	0.10	99R3595	10000	0.02
MMZ1005Y102C	1kohm	0.7	200mA	89R3066	0.10	99R3597	10000	0.02
MMZ1005Y152C	1.5kohm	1	100mA	89R3068	0.10	99R3599	10000	0.03
MMZ1005Y301C	300ohm	0.38	250mA	89R3070	0.10	91R2341	10000	0.02
MMZ1005Y601C	600ohm	0.54	250mA	89R3073	0.10	99R3603	10000	0.03
MMZ 1608 Series								
MMZ1608A252B	2.5kohm	0.8	200mA	05X0439	0.18	17T6673	4000	0.03
MMZ1608B121C	120ohm	0.15	600mA	89R3075	0.10	99R3605	4000	0.02
MMZ1608B301C	300ohm	0.25	500mA	89R3076	0.10	99R3606	4000	0.03
MMZ1608B601C	600ohm	0.4	500mA	89R3077	0.10	99R3607	4000	0.02
MMZ1608D301B	300ohm	0.7	300mA	89R3082	0.18	99R3608	4000	0.03
MMZ1608R102A	1kohm	0.5	400mA	89R3085	0.10	91R2342	4000	0.02
MMZ1608R121A	120ohm	0.18	500mA	89R3086	0.10	99R3609	4000	0.03
MMZ1608R150A	15ohm	0.05	1.5A	89R3087	0.10	99R3610	4000	0.03
MMZ1608R300A	30ohm	0.05	1.5A	89R3088	0.10	99R3611	4000	0.03
MMZ1608R301A	300ohm	0.25	500mA	89R3089	0.10	91R2343	4000	0.02
MMZ1608R600A	60ohm	0.1	800mA	89R3090	0.10	99R3612	4000	0.03
MMZ1608R601A	600ohm	0.4	500mA	89R3091	0.10	91R2344	4000	0.02
MMZ1608S102A	1kohm	0.5	400mA	89R3092	0.10	91R2345	4000	0.02
MMZ1608S121A	120ohm	0.15	500mA	89R3093	0.10	91R2346	4000	0.02
MMZ1608S301A	300ohm	0.3	500mA	89R3095	0.10	91R2348	4000	0.03
MMZ1608S400A	40ohm	0.1	600mA	89R3096	0.10	99R3613	4000	0.03
MMZ1608S601A	600ohm	0.35	500mA	89R3097	0.10	91R2349	4000	0.02
MMZ1608S800A	80ohm	0.15	500mA	89R3098	0.10	91R2350	4000	0.03
MMZ1608Y102B	1kohm	0.5	400mA	05X0440	0.10	89R3099	4000	0.02
MMZ1608Y301B	300ohm	0.3	500mA	05X0441	0.10	89R3104	4000	0.02
MMZ1608Y152B	1.5kohm	0.6	300mA	89R3102	0.10	91R2351	4000	0.03
MMZ1608Y600B	60ohm	0.15	500mA	89R3105	0.10	99R3616	4000	0.03
MMZ1608Y601B	600ohm	0.4	500mA	89R3106	0.10	91R2352	4000	0.03
MMZ 2012 Series								
MMZ2012D301B	300ohm	0.5	400mA	89R3108	0.11	91R2353	4000	0.03
MMZ2012R102A	1kohm	0.3	500mA	89R3110	0.11	99R3619	4000	0.03
MMZ2012R121A	120ohm	0.12	800mA	89R3111	0.11	99R3620	4000	0.03
MMZ2012R150A	15ohm	0.05	1.5A	89R3112	0.11	99R3621	4000	0.04
MMZ2012R300A	30ohm	0.05	1.5A	89R3113	0.11	99R3622	4000	0.04
MMZ2012R301A	300ohm	0.15	600mA	89R3114	0.11	99R3623	4000	0.04
MMZ2012R600A	60ohm	0.1	1A	89R3115	0.11	91R2354	4000	0.03
MMZ2012R601A	600ohm	0.2	500mA	89R3116	0.11	91R2355	4000	0.03
MMZ2012S102A	1kohm	0.35	500mA	89R3117	0.11	99R3624	4000	0.04
MMZ2012S121A	120ohm	0.15	800mA	89R3118	0.11	91R2356	4000	0.04
MMZ2012S400A	40ohm	0.1	1A	89R3121	0.11	91R2357	4000	0.04
MMZ2012S601A	600ohm	0.3	500mA	89R3122	0.11	91R2358	4000	0.03
MMZ2012S800A	80ohm	0.1	800mA	89R3123	0.11	91R2359	4000	0.04
MMZ2012Y102B	1kohm	0.3	500mA	89R3124	0.11	99R3625	4000	0.04
MMZ2012Y152B	1.5kohm	0.4	500mA	89R3127	0.11	91R2360	4000	0.03
MMZ2012Y202B	2kohm	0.5	400mA	89R3128	0.11	99R3628	4000	0.03

➤CONTINUED➤

2

MMZ SERIES SMD FERRITE BEAD INDUCTORS (CONT.)

MMZ 2012 Series

Mfg. Part No.	Impedance (Ohm)	DCR Max (Ohm)	DC Current Rating	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape & Reel Stock No.	Tape & Reel Reel Qty	Tape & Reel Price Each 1-9999
● MMZ2012Y301B	300ohm	0.15	600mA	89R3130	0.11	99R3630	4000	0.04
● MMZ2012Y600B	600ohm	0.1	1A	89R3131	0.11	99R3631	4000	0.04
● MMZ2012Y601B	600ohm	0.2	500mA	89R3132	0.11	99R3632	4000	0.03

(195523)

ACC SERIES POWER LINE FERRITE CHIP BEADS

RoHS Compliant Available

TDK

Features:
- Facilitates selection of the most appropriate part for any given application
- Effective EMC suppression over a broad band

Mfg. Part No.	Z (Ω)	I_{DC} (mA)	DCR (Ω)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape & Reel Stock No.	Tape & Reel Reel Qty	Tape & Reel Price Each 1-1999
2012 [0805] CASE								
● HF70ACB201209-T	10	600	0.1	89R2346	0.26	91R2335	2000	0.09
3216 [1206] CASE								
● HF70ACB321611-T	26	500	0.2	89R2347	0.35	91R2336	2000	0.11
● HF50ACB321611-T	31	500	0.2	89R2336	0.35	91R2331	2000	0.10
● HF50ACC321611-T	31	1500	0.04	05X0423	0.35	89R2340	2000	0.09
3225 [1210] CASE								
● HF70ACB322513-T	52	400	0.3	05X0424	0.26	89R2348	2000	0.09
● HF50ACB322513-T	60	400	0.3	89R2337	0.26	91R2332	2000	0.09
● HF50ACC322513-T	60	1500	0.05	89R2341	0.26	91R2333	2000	0.09
4532 [1812] CASE								
● HF50ACB453215-T	125	300	0.4	05X0422	0.32	89R2338	2000	0.09
● HF50ACC453215-T	125	1500	0.05	89R2342	0.32	91R2334	1000	0.10
● HF70ACC453215-T	120	1500	0.05	89R2353	0.32	91R2337	1000	0.09
● HF30ACC453215-T	70	1500	0.05	05X0421	0.32	89R2331	2000	0.09

(194472)

WE-TMSD SERIES MULTILAYER SUPPRESSION BEAD INDUCTORS

RoHS Compliant Available

WE WÜRTH ELEKTRONIK

- Perfect for minitiaurization of EMI solutions
- Operating temperature: -55°C to +125°C
- Applications include: general signal & low power lines and audio - / video - / clocklines

Mfg. Part No.	Impedance (Ohm)	DCR Max. (Ohm)	DC Current Rating (mA)	Stock No.	Price Each 1-99
● 742692002	60	0.35	300	97W4417	0.26
● 742692003	120	0.45	200	97W4418	0.26
● 742692004	240	0.75	200	97W4419	0.26
● 742692005	300	0.9	150	97W4420	0.26

(211441)

WOUND EMI SHIELD BEADS

RoHS Compliant Available

Fair-Rite Products Corp. Your Signal Solution

Impedance is increased by adding turns; max. impedance reached at lower frequency due to additional capacitive effects. Med. permeability "Type 44" material, suppress signals between 25–200MHz. Six-holes, wound with oxygen-free, high-conductivity tinned copper wire, 24 AWG (0.53mm). Wire length: 1.500" (38.10).

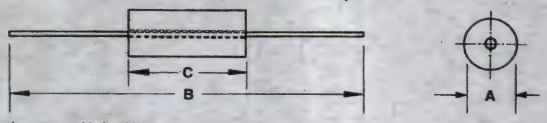
Mfg. Part No.	Z Min. (Ω) @ 50MHz	Z Min. (Ω) @ 100MHz	Turns	Pkg. of	Stock No.	Price Each 1-9
● 2944770301	219†	338	5	1	83H1631	1.26
● 2944778301	219†	338	4	1	72K6801	1.11
● 2961666681	315	470	1½	1	50B3459	0.95
● 2961666671	690	845	2½	1	31C9624	0.44
● 2961666631	815	780	3	1	34C4640	0.79
● 2944777741	1250	500	4½	1	26H3285	1.29

(7345)

EMI SHIELD BEADS ON LEADS

RoHS Compliant Available

Fair-Rite Products Corp. Your Signal Solution



Shield beads are assembled on high-conductivity 22AWG tinned copper wire with 100% tin coating to aid automated circuit assembly. For all, O.D. = 0.138" (3.5); wire length = 2.44" (62.0).

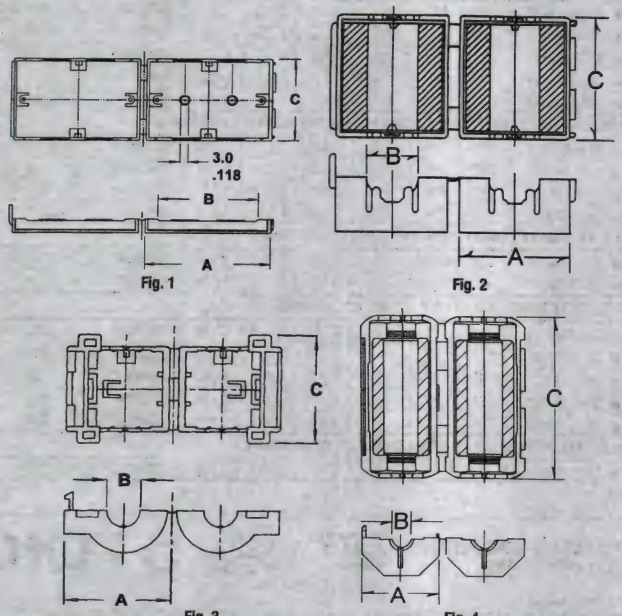
Mfg. Part No.	Z (Ω) @ 100MHz	Bead Length "C"	Pkg. of	Stock No.	Price per Pkg. 1-49
● 2743001111	68	0.175"	1	97B0025	0.11
● 2743015112	82	0.206"	1	25C6146	0.11
● 2743004111	115	0.300"	1	23C2196	0.15
● 2743004112	115	0.300"	1	96B9378	0.12
● 2743002111	134	0.350"	1	72K6788	0.15
● 2743002112	134	0.350"	500*	51R4497	0.10
● 2743007112	150	0.374"	1	90B2439	0.14
● 2743008 112	180	0.450"	1	85C0252	0.17
● 2743009111	220	0.545"	1	05C0408	0.18
● 2743014221	391	0.650"	1	93B0283	0.66
● 2744051447	275	0.472"	1	11C1594	0.96

(7343)

EMI SUPPRESSION CORES WITH CASES

RoHS Compliant Available

Fair-Rite Products Corp. Your Signal Solution



Attenuate EMI from ribbon and round cable with cores that accommodate a range of sizes and conductors. Flat cases have serrated teeth to grip and center cable. Feature combination case and two ferrite parts. "Mfr.part no. 43" or "Mfr.part no. 44" materials, polypropylene. Flammability: UL 94-V0. **Suffix B** in mfr.part no. number indicates **package of 2.**

FLAT CABLE CORES WITH CASES

Mfg. Part No.	Fig.	Z (Ω) @ 100MHz	Dimensions (in.) A	Dimensions (in.) B	Dimensions (in.) C	Stock No.	Price Each 1-9	Price Each 10-49
● 0443163951	1	290	2.67	2.05	1.272	72K6745	4.03	3.68
● 0443 166 651	1	290	1.95	1.35	1.27	93B2474	2.80	2.51
● 0461164181	1	435	1.142	0.514	1.28	96H8973	3.44	3.35
ROUND CABLE CORES WITH CASES								
● 0443164251	2	275	0.705	0.2	1.272	91B3159	1.91	1.78
● 0443167251	2	285	0.87	0.4	1.272	72K6749	2.04	1.65
● 0444167281	4	260	0.933	0.4	1.55	93B1123	2.01	1.89
● 0444173551	2	322	1.15	0.74	1.65	73K2458	3.19	2.88
● 0444176451	4	365	1.52	0.722	1.87	78K6137	6.55	5.90
● 0443665806	3	122	1.035	0.362	0.843	81C7667	1.50	1.27

➤ CONTINUED ➤

EMI SUPPRESSION CORES WITH CASES (CONT.)

ROUND CABLE CORES WITH CASES

Mfg. Part No.	Fig.	Z (Ω) @ 100MHz	Dimensions (in.) A	B	C	Stock No.	Price Each 1-9	10-49
0443625006	3	188	0.972	0.311	0.898	98B2768	1.10	1.00
0443806406	3	90	1.35	0.591	0.835	61H8872	1.23	1.13
0444164951	4	245	0.68	0.2	1.424	16F002	1.00	0.91
0444177081	4	335	2.22	1	1.69	72K6754	22.69	20.77

(7341)

ROUND CABLE SNAP-ITS

RoHS Compliant Available

Fair-Rite Products Corp. Your Signal Solution

Round cable Snap-Its can accommodate round cable with diameters from 0.160″ to 0.750″. Can be used to suppress frequencies up to 500MHz. These cable cores will provide common-mode filtering for multi-strand cable and differential mode filtering for single conductors.

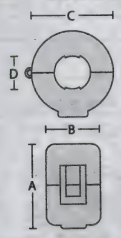
Mfg. Part No.	Cable Max Dia.	Z (Ω) @ 100MHz	Stock No.	Price Each 1-9	10-49
0431164951	0.21″	280	90B5610	1.76	1.47
0431164281	0.275″	310	73K6078	2.18	1.82
0431167281	0.41″	270	72K6744	2.40	2.00
0431173551	0.75″	310	96B5352	4.91	4.10
0431173951	0.21″	208	90B5618	1.29	1.08
0431176451	0.736″	380	03H8829	8.28	7.46
0431177081	1.02″	375	54H0362	20.85	16.04
0431178181	0.169″	183	03M4856	1.64	1.37

(80225)

UNIVERSAL WIDEBAND CABLE SNAP FERRITES FOR ROUND CABLES

RoHS Compliant Available

FerriShield® Ferrite Suppressors



Ferrite assembly in fully enclosed nylon case. Snap closed around wire by clasping shut to position assembly. **Round Cable Snap** may also be mounted with a flat-head screw through the .120" (3,0mm) diameter hole in the bottom by temporarily removing lower ferrite half. **Internal Locking System** ensures that snap cannot be reopened after snapping closed into position, so that suppressor cannot be removed.

CABLE SNAP FERRITES FOR ROUND CABLES UP TO 1GHz

Mfg. Part No.	Dimensions (in.) A	B	C	D	Z (Ohms) @ 100MHz	Color	Stock No.	Price Each 1-9
CS28B1642	0.852	0.885	0.84	0.282	100	Grey	02M1334	10.32
CS28B1805	1.04	0.667	1.025	0.34	73	Grey	02M1335	11.94
CS28B1937	1.182	0.78	1.188	0.425	117	Grey	02M1336	13.71
CS28B1984	1.218	0.705	1.22	0.525	62	Grey	02M1337	13.95
CS28B2000	2.35	1.851	2.309	0.96	380	Grey	02M1338	66.30

(89346)

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element14.com

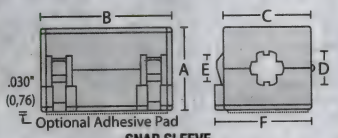
(196546)

SPLIT SLEEVE SNAP FERRITES FOR ROUND CABLES UP TO 1GHz

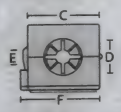
RoHS Compliant Available

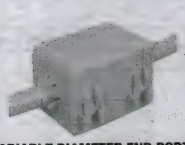
FerriShield® Ferrite Suppressors

SNAP SLEEVE



SNAP SLEEVE





VARIABLE DIAMETER END PORTS

VARIABLE DIAMETER END PORTS

Perfect for USB and RFID Applications

SNAP SLEEVE

Mfg. Part No.	Dimensions (in.) A	B	C	E	F	Z (Ohms) @ 100MHz	Stock No.	Price Each 1-9
SS28B2033	0.79	1.265	0.77	0.29	0.885	200	02M1866	13.33
VARIABLE DIAMETER END PORTS								
SS28B2034	0.585	1.25	0.585	0.12	0.68	220	02M1867	7.22
SS28B2037	0.79	1.45	0.77	0.2	0.885	200	02M1873	14.14
SS28B2032	1.155	1.45	1.125	0.2	1.23	230	02M1865	19.97
SS28B2044	1.7	1.8	1.8	0.2	1.83	260	02M1878	39.16
VARIABLE DIAMETER END PORTS FOR USB CABLE								
USB28B2034K	.585	1.25	.585	0.12	0.68	220	02M1922	9.72

(89350)

ZCAT SERIES CLAMP FILTERS

RoHS Compliant Available

TDK

Features:

- Can easily be attached without cutting the cable.
- Possesses better mechanical strength and operational temperature range (–40 to + 125°C) than existing products.
- The plastic case has a self-sustaining mechanism that prevents slipping on the cable after being clamped.
- Possesses excellent high-frequency noise absorption effect.
- Works against common mode noise, allowing for noise suppression without affecting signal quality.
- Effective for EMS (Electromagnetic Susceptibility), immunity against surges/noise.

ZCAT 1325 Series

Mfg. Part No.	Imped. (Ohm)	Outer Dimens. (mm)	Length (mm)	Inner Dimens. (mm)	Stock No.	Price Each 1-9
ZCAT1325-0530A		13	25	5	90R3109	1.19
ZCAT1325-0530A-BK	50	13	25	5	90R3110	1.19
ZCAT1518-0730	35	15	18	7	90R3111	1.19
ZCAT1518-0730-BK	35	15	18	7	90R3112	1.19
ZCAT1730-0730A		17	30	7	90R3113	1.97
ZCAT1730-0730A-BK	50	17	30	7	90R3114	1.97
ZCAT2017-0930-BK	35	20	17	9	90R3116	1.97
ZCAT2035-0930A		20	35	9	90R3117	2.37
ZCAT2035-0930A-BK	80	20	35	9	90R3118	2.37
ZCAT2132-1130	50	21	32	11	90R3119	2.76
ZCAT2235-1030A		22	35	10	90R3121	2.96
ZCAT2235-1030A-BK	80	22	35	10	90R3122	2.96
ZCAT2436-1330A	50	24	36	13	90R3123	3.95
ZCAT2436-1330A-BK	50	24	36	13	90R3124	3.95
ZCAT3035-1330	100	30	35	13	90R3125	5.72
ZCAT3035-1330-BK	100	30	35	13	90R3126	5.72
ZCAT3618-2630D-BK	30	36	18	26	90R3128	2.80
ZCAT4625-3430D-BK	35	46	25	34	90R3130	4.20

(195527)

FERRITE CABLE CORES/SLEEVES • SHIELDING FABRICS/GASKETS

EMI SLEEVES

RoHS Compliant Available

multicomp

Applications
- Computers
- Peripherals
- Digital Audio Systems

Ferrite sleeves provide attenuation of EMI on power and data cables, without affecting data transmitted through the cable. *Note: To enable the cable to pass smoothly through the sleeve an allowance should be made for tolerances in the OD of the cable and the ID of the sleeve.*

Sold in Multiples of 5

Mfg. Part No.	Dimensions (mm) OD	ID	H
● 33RH14.2X28.5X6.35	14.2	6.35	28.5
● 33RH14.2X28.5X7	14.2	7.0	28.5
● 33RH16X17X9	16	9.0	17
● 33RH17.5X28.5X9.5	17.5	9.5	28.5
● 33RH17.5X28.5X10.7	17.5	10.7	28.5
● 33RH26X28.5X13	26	13	28.5

Mfg. Part No.	Min. Impedance (Ω) @ 25MHz	@ 100MHz	Stock No.	Price Each 1-99	100-249
● 33RH14.2X28.5X6.35	130	185	67K8960	0.74	0.60
● 33RH14.2X28.5X7	130	210	98K8783	0.82	0.66
● 33RH16X17X9	60	140	98K8785	0.84	0.68
● 33RH17.5X28.5X9.5	90	150	98K8786	0.84	0.68
● 33RH17.5X28.5X10.7	90	160	80K9818	0.84	0.68
● 33RH26X28.5X13	130	200	98K8787	3.90	3.13

(116512)

HINGED CLAMP CORES

RoHS Compliant Available

multicomp

Specifications
- Frequency range: 10MHz to 300MHz
- Case material: Black Nylon 66 to UL94V-0
- Insulation resistance: 10MΩ (min) between case and cores

A range of easy to fit data line filters, providing a simple solution to the problems of radiated noise emissions generated by electronic equipment. The filter simply clips around the cable to be shielded, and locks closed with no need to disconnect the cable, or remove connectors. No grounding is required, unlike with cable shields.

Mfg. Part No.	Dimensions (mm) L	W	H	Z (Ω) @ 25MHz	@ 100MHz	Cable Diameter (mm)
● LF-65B	32	19.5	19	135	220	6.5
● LF-100B	32	24.5	23	90	190	10
● LF-130B	32	31.5	30	105	190	13

Mfg. Part No.	Dimensions (mm) L	∅	Z (Ω) @ 25MHz	@ 100MHz	Cable Diameter (mm)
● LF35B	25.2	14.5	4.5	115	3.5
● LF50B	29.6	16	45	115	5.0

RECTANGULAR

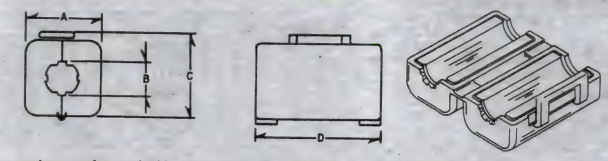
Mfg. Part No.	Stock No.	Price Each 1-9
● LF-65B	97K3064	2.48
● LF-100B	97K3063	3.08
● LF-130B	93K7989	4.39
OVAL		
● LF35B	97K3067	2.03
● LF50B	97K3076	2.24

(116507)

SPLIT SLEEVE EMI SUPPRESSION CORES WITH PLASTIC CASE

RoHS Compliant Available

pro-POWER



Suppression cores for round cables attenuate any form of EMI emission. Nylon case for easy assembly. Ideal for use in equipment where retrofit and test are a necessity. Impedance values based on single-turn measurements.

Mfg. Part No.	Dimensions (mm) A	B	C	D	Z (Ω) @ 25MHz	@ 100MHz	Cable Diameter (mm) From	To
● SPC5302	19.8	6.5	19.2	32.7	133	308	5.5	6.5
● SPC5300	30.5	13.05	30.3	32.7	137	268	12	13

Mfg. Part No.	Stock No.	Price Each 1-49	50-99	100-249	250-499
● SPC5302	50N668	4.48	3.99	3.52	3.41
● SPC5300	50N666	8.63	7.69	6.81	6.56

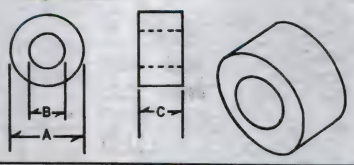
(35535)

FERRITE BEAD CORES

RoHS Compliant Available

pro-POWER

Bead cores offer EMI shielding and provide impedance specification over a wide frequency range. Ideal for use on wire assemblies and MATV/CATV industries.



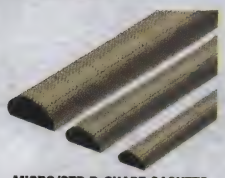
Mfg. Part No.	Z @100MHz	Dimensions (mm) A	B	C	Stock No.	Price Each 1-99	100-499	500-999
● SPC5305	218Ω	14.2	6.35	28.5	50N671	0.77	0.68	0.63
● SPC5306	178Ω	17.5	9.5	28.5	50N672	0.90	0.79	0.73

(35537)

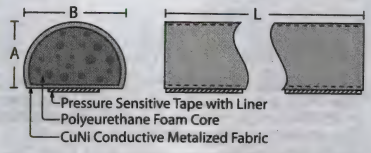
METALIZED FABRIC OVER FOAM EMI - RFI SHEILDING GASKETS

RoHS Compliant Available

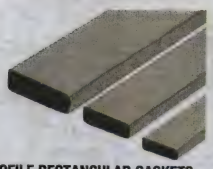
LEADER TECH a HEICO company



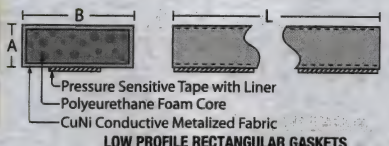
MICRO/STD D-SHAPE GASKETS



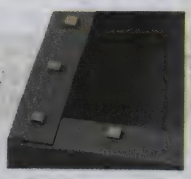
MICRO/STD D-SHAPE GASKETS



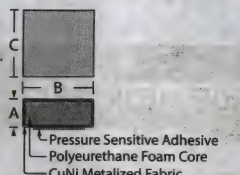
LOW PROFILE RECTANGULAR GASKETS



LOW PROFILE RECTANGULAR GASKETS



SHIELDING CONTACTS



SHIELDING CONTACTS

Specifications
- Foam Core: open-cell polyurethane foam
- Metalized Fabric: nickel plate over copper substrate
- Service Temperature: -40°F to 158°F (-40°C to +70°C)
- Compression Set: 2.6% (ASTM D3574)
- Compression Deflection Force: 1.47 p.s.i. (ASTM D3574)
- Shielding Effectiveness: 100dB @ 1GHz
- Surface Resistivity: 0.005 - 0.010xxx/lin.in
- Includes a very high bond pressure sensitive tape
- Flammability: UL94-V0

➤ CONTINUED ➤

METALIZED FABRIC OVER FOAM EMI - RFI SHEILDING GASKETS (CONT.)

D-SHAPE RFI SHIELDING GASKETS

Mfg. Part No.	Dimensions (in.) A	B	L	Stock No.	Price Each 1-9
SG187250D-24	0.187	4.7	610	02M1793	11.57
SG250375D-24	0.25	6.4	610	02M1800	13.14
SG375500D-24	0.375	12.7	610	02M1806	19.21
MICRO D-SHAPE RFI SHIELDING GASKETS					
SG125187D-24	0.125	3.2	610	02M1785	9.85
LOW PROFILE RECTANGULAR RFI SHIELDING GASKETS					
SG060125R-24	0.06	...	610	02M1781	4.60
SG125250R-24	0.125	...	610	02M1787	8.74
SG187375R-24	0.187	...	610	02M1795	11.91

SHIELDING CONTACTS WITH VERY HIGH BOND PRESSURE SENSITIVE ADHESIVE MOUNTING

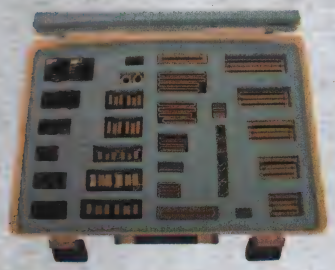
Mfg. Part No.	Dimensions (in.) A	B	C	Stock No.	Price Each 1-9
SC060138R	0.06	1.2	3.5	02M1742	0.59

(89339)

FERRITE KITS

RoHS Compliant Available

pro-POWER



SPC12271

Mfg. part no. SPC12271 for quick and easy EMI suppression evaluation. The **SPC12271** contains split cores for round and flat cable as well as solid cores for flat cable. The split cores for round cables are held in a plastic case that snaps shut over the cable for a retro-fit design. The split cores for flat cable are held together with a spring clip for retro-fit design. Kit contains 32 sizes.

Mfg. Part No.	Stock No.	Price Each
SPC12271	08H0339	294.80

(74269)

SAW FILTERS

RoHS Compliant Available

TAIYO YUDEN

Features:
- Low Insertion Loss
- High Attenuation
- Small Size Package
- High Reliability with Hermetic Sealing (MSL1)
- Environmentally Conscions

Applications:
- UMTS (W-CDMA)
- GSM
- CDMA
- LTE
- GPS

FAR-F5 SERIES

Mfg Part No.	Freq. Min	Freq. Max	Package Case	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape & Reel Stock No.	Tape & Reel Price Each 3000-5999
F5KA833M0D4MG-Z	700MHz	1GHz	1.4x1x0.5	82T8622	0.56	65T1239	0.24
F5KY878M0B4ND-Z	700MHz	1GHz	1.4x1x0.5	82T8623	0.62	65T1240	0.26
F5QB881M5P2BG-J	700MHz	1GHz	1.4x1x0.5	82T8624	0.56	65T1241	0.24
FAR-F5KA-710M00-D4VQ-Z	700MHz	1GHz	1.4×1×0.5	44T9283	0.56	41T3808	0.21
FAR-F5KA-782M00-D4VP-Z	700MHz	1GHz	1.4×1×0.5	44T9284	0.56	41T3809	0.21
FAR-F5KA-836M50-D4DF-Z	700MHz	1GHz	1.4×1×0.5	44T9285	0.56	41T3811	0.21
FAR-F5KA-881M50-D4DB-Z	700MHz	1GHz	1.4×1×0.5	44T9286	0.66	41T3812	0.25
FAR-F5KA-897M50-D4DC-Z	700MHz	1GHz	1.4×1×0.5	44T9287	0.56	41T3813	0.21
FAR-F5KB-836M50-B4EG-Z	700MHz	1GHz	1.4×1×0.5	44T9288	0.56	41T3816	0.21
FAR-F5KB-881M50-B4ED-Z	700MHz	1GHz	1.4×1×0.5	44T9289	0.62	41T3819	0.23
FAR-F5KB-942M50-B4EB-Z	700MHz	1GHz	1.4×1×0.5	44T9290	0.62	41T3821	0.23
FAR-F5KY-740M00-B4UR-Z	700MHz	1GHz	1.4x1x0.5	82T8620	0.62	65T1231	0.26
FAR-F5KY-881M50-B4UZ-Z	700MHz	1GHz	1.4×1×0.5	44T9291	0.62	41T3823	0.23
FAR-F5QA-915M00-M2AK-J	700MHz	1GHz	1.1×0.9×0.5	44T9292	0.56	41T3825	0.21
FAR-F6 SERIES							
F6KA2G535L4AM-Z	1GHz	5GHz	1.4x1x0.5	82T8625	0.59	65T1242	0.25
FAR-F6KA-1G5754-L4AB-Z	1GHz	5GHz	1.4 x1 x0.5	83T1711	0.66	41T3829	0.28
FAR-F6KA-1G5754-L4AJ-Z	1GHz	5GHz	1.4×1×0.5	44T9293	0.62	41T3830	0.23
FAR-F6KA-1G7400-D4DE-Z	1GHz	5GHz	1.4×1×0.5	44T9294	0.56	41T3831	0.21
FAR-F6KA-1G8800-L4AF-Z	1GHz	5GHz	1.4×1×0.5	44T9295	0.56	41T3835	0.21
FAR-F6KA-1G9500-D4DG-Z	1GHz	5GHz	1.4×1×0.5	44T9296	0.56	41T3838	0.21
FAR-F6KA-1G9600-D4MT-Z	1GHz	5GHz	1.4×1×0.5	44T9297	0.62	41T3841	0.23

➤CONTINUED➤

SAW FILTERS (CONT.)

FAR-F6 SERIES

Mfg Part No.	Freq. Min	Freq. Max	Package Case	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape & Reel Stock No.	Tape & Reel Price Each 3000-5999
FAR-F6KA-2G0175-D4DR-Z	1GHz	5GHz	1.4×1×0.5	44T9298	0.62	41T3842	0.23
FAR-F6KA-2G1400-D4CG-Z	1GHz	5GHz	1.4×1×0.5	44T9299	0.62	41T3843	0.23
FAR-F6KB-1G8425-B4GA-Z	1GHz	5GHz	1.4×1×0.5	44T9300	0.62	41T3848	0.23
FAR-F6KB-1G9500-B4GJ-Z	1GHz	5GHz	1.4×1×0.5	44T9301	0.56	41T3851	0.21
FAR-F6KB-1G9600-B4GB-Z	1GHz	5GHz	1.4×1×0.5	44T9302	0.62	41T3852	0.23
FAR-F6KB-1G9600-B4GP-Z	1GHz	5GHz	1.4×1×0.5	44T9303	0.62	41T3853	0.23
FAR-F6KB-2G1400-B4GC-Z	1GHz	5GHz	1.4×1×0.5	44T9304	0.62	41T3854	0.23
FAR-G6 SERIES							
FAR-G6KZ-1G8425-Y4WY-Z	1GHz	5GHz	1.8×1.4×0.5	44T9305	0.84	41T3866	0.31
FAR-G6KZ-1G8425-Y4WZ-Z	1GHz	5GHz	1.8×1.4×0.5	44T9306	0.84	41T3867	0.31

(196046)

EMI SUPPRESSION EVALUATION KITS

RoHS Compliant Available

Fair-Rite Products Corp. Your Signal Solution

Expanded Cable and Connector EMI Suppressor Kit. Specifically designed to attenuate EMI in all types of cable-connected systems. Features 82 components, including a variety of shield beads, one- and two-piece cable suppressor cores and multi-hole suppressor plates for connectors. Made of "Type 43" material, which provides high impedance over a wide frequency range. Includes nylon cases and steel clips for assembly of split cable suppressor cores.

Chip Beads Kit. Surface mount beads in 4 EIA standard package sizes. Assorted current chip beads are suitable for wave and reflow solder processes. Ideal for suppressing EMI in computers, cellular phones, digital communications, pagers, TV and VCRs. 100% controlled impedance and DCR.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
0199000005	Expanded Cable and Connector EMI Suppressor Kit	95F755	208.80
0199000018	Chip Beads Kit	83F7366	122.94
0199000034	Expanded Snap-in Kit	05H9900	368.82
0199000017	Snap-In Cable Connector Kit	25C0483	84.42

(7340)

EXC SERIES TWO MODE SMD NOISE FILTER

SMD

Panasonic

Features:
- Burst/radiation noise filtering for audio circuits
- Optimally magnetic-coupled ferrite beads allow for filtering of both common and normal mode noises
- Strong multi-layer structure provides high-resistance to reflow soldering heat and high mounting reliability
- Magnetic shield type
- High impedance: 600ohm
- Low resistance value: 0.9ohm max.

Applications:
- Receiver lines, speaker lines, microphone lines and headset of mobile phones
- Audio signal lines of portable audio equipment, PCs, PDAs

Mfg. Part No.	Imped. Typ (Ohm)	DCR Max (Ohm)	DC Current Max. (mA)	Volt. Rating (VDC)	Stock No.	Price Each 1-9
EXC-24CN601X	600	0.9	200	5	52W5092	0.27

(208948)

ELK-E SERIES CHIP EMI FILTERS

RoHS Compliant Available

Panasonic

Features:
- Small size — 3218
- Steep attenuation
- Stable frequency characteristics at high impedance load

Mfg. Part No.	Current Rating (A)	Cut Off Freq.fc (MHz)	Voltage Rating (V)	Stock No.	Price Each 1-9
ELK-E103FA	2	0.5/DC	50	53W8330	0.79
ELK-EA103FA	6	0.5/DC	50	49W8229	0.79
ELK-EA333FA	6	0.2/DC	25	49W8233	0.87

(209007)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

PCB MOUNT FILTERS

ACH SERIES 3-TERMINAL SMD FILTERS

RoHS Compliant Available

TDK

ACH32C TYPE

Mfg. Part No.	Frequency Range (MHz)	Voltage Rating (V)	Current Rating (A)	DCR	Tape Cut Stock No.	Tape Cut Price Each 1-9
ACH32C-103-T	30 to 200	50	6	2mohm	87R1829	0.64
ACH32C-104-T	3.5 to 200	50	6	2mohm	87R1830	0.64
ACH32C-222-T	55 to 300	50	6	2mohm	05X0413	0.64
ACH32C-333-T	10 to 300	50	6	2mohm	87R1834	0.64
ACH3218						
ACH3218-103-TD01	17 to 60	20	1.5	0.06ohm	87R1838	0.57
ACH3218-223-TD01	11 to 55	20	1.5	0.06ohm	87R1844	0.57
ACH3218						
ACH4518-333-TD01	6 to 60	50	2	0.04ohm	87R1867	0.66

(194776)

ACM SERIES SMD AUTOMOTIVE ECU COMMON MODE FILTERS

RoHS Compliant Available

TDK

Features:
- Miniaturized while keeping characteristics
- Square type closed magnetic cores
- Low profile design suitable for a surface mount
- High impedance characteristic
- Operating temperature: -40°C to +125°C

Applications:
- Reduce common mode noise
- DC power lines of electronic
- Control equipment
- Multi-media equipment
- Electronic equipment power supply lines

1211 CASE

Mfg. Part No.	Imped.	DCR (ohm)	I_{DC}	Voltage (VDC)	Tape Cut Stock No.	Tape Cut Price Each 1-499
ACM1211-102-2PL-TL01	1kohm	0.014	6A	80	87R1875	2.71
2012 CASE						
ACM2012-900-2P-T	90ohm	0.19	400mA	50	87R1881	0.57
ACM2012H-900-2P-T	90ohm	0.3	300mA	20	87R1883	0.50
ACM2012-900-2P-T002	90ohm	0.19	400mA	50	44W9168	0.57
ACM2012-121-2P-T	120ohm	0.22	370mA	50	87R1878	0.57
ACM2012-121-2P-T002	120ohm	0.22	370mA	50	44W9166	0.57
ACM2012-201-2P-T	200ohm	0.25	350mA	50	87R1879	0.57
ACM2012-361-2P-T002	360ohm	0.5	220mA	50	87R1880	0.57
7060 CASE						
ACM7060-701-2PL-TL01	700ohm	0.015	4A	80	87R1901	1.95
7 x 6mm CASE						
ACM70V-701-2PL-TL00	700ohm	0.015	4A	80	87R1899	2.14
9 x 7mm CASE						
ACM90V-701-2PL-TL00	700ohm	0.01	5A	80	87R1902	2.48
12 x 11mm CASE						
ACM12V-701-2PL-TL00	700ohm	0.006	8A	80	87R1874	2.98

(194471)

ACF SERIES 3-TERMINAL SMD FILTERS

RoHS Compliant Available

TDK

Features:
- The ACF series consists of products with superior attenuation characteristics, in which the T-type filter circuit is magnetically shielded with ferrite.
- The series offers even greater attenuation characteristics when used in a stable circuit on the ground.
- The ACF series is ideal for high-density circuit design, since the series is vertically mounted and does not require much mounting space.
- Available for reflow soldering.

SIGNAL LINE, T-TYPE

Mfg. Part No.	25dB Attenuation Freq. Range (MHz)	Voltage Rating (V)	Current Rating (mA)	DCR (Ω)	Tape Cut Stock No.	Tape Cut Price Each 1-9
ACF321825-223-TD01	11 to 55	20	300	0.15	87R1776	0.57
ACF321825-471-TD01	120 to 180	20	300	0.15	05X0412	0.57
ACF451832-103-TD01	15 to 75	20	300	0.15	87R1790	0.62
ACF451832-153-TD01	11 to 70	20	300	0.15	87R1796	0.62
ACF451832-333-TD01	7 to 60	20	300	0.15	87R1812	0.62

(194469)

SMD SAW FILTERS FOR LOW-LOSS MOBILE COMMUNICATION

RoHS Compliant Available

EPCOS SMD

Specifications
- Operating temperature range: -40°C to +85°C
- Voltage rating: 3VDC
- Power rating: 25 watts max.
- Impedance: 50Ω

Features
- Low-loss RF filter for GPS
- Low amplitude ripple
- Ceramic package
- Gold-plated Nickel Terminals

Mfg. Part No.	Center Frequency (MHz)	Bandwidth (MHz)	Insertion Loss (dB)	Stock No.	Price Each 1-9	Price Each 10-99
B39921B3588U410	915	928	3.5	01H9318	1.58	1.49
B39871B3715U410	869	870	3.1	29M0918	2.79	2.57
B39431B3710U410	433.92	434.71	2.7	29M0902	2.21	1.79
B39321B3711U410	315	315.3	2.9	83J9000	2.11	1.71

(147915)

SRF0504/0602/0905 SERIES SMD LINE FILTERS

RoHS Compliant Available

BOURNS

Specifications
- Voltage Rating: 50V
- Operating Temp. Range: -40°C to +125°C

Applications
- EMI Suppression

SRF0504 SERIES

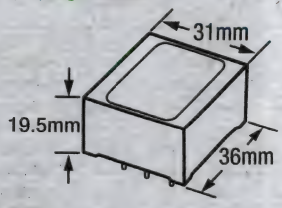
Mfg. Part No.	Induc. (µH)	Leak. Induc. (µH)	DCR (Ohm)	I_{DC}(mA)	Freq. Range (MHz) Min.	Freq. Range (MHz) Max.	Imped. (Ohm)	Stock No.	Price Each 1-9
SRF0504-191Y	600	60	0.02	5000	70	1200	190	05R8203	1.29
SRF0504-351Y	1.1	65	0.04	2000	55	900	350	05R8205	1.20
SRF0504-102Y	1000	85	0.06	1500	40	420	1	05R8201	1.20
SRF0504-152Y	1500	190	0.1	1000	30	300	1.5	05R8202	1.30
SRF0504-302Y	3000	435	0.2	500	30	150	3	05R8204	1.30
SRF0504-402Y	4000	150	0.3	200	70	120	4	05R8206	1.30
SRF0602 SERIES									
SRF0602-100Y	10	1	0.24	300	35	570	600	05R8207	2.03
SRF0602-470Y	47	4	0.16	300	4	1600	140	05R8212	2.03
SRF0602-820Y	82	4	0.02	300	3	850	220	05R8213	2.03
SRF0602-101Y	100	8	0.22	300	3	660	260	05R8208	2.03
SRF0602-181Y	180	8	0.25	300	3	250	500	05R8209	2.03
SRF0602-221Y	220	10	0.28	300	3	210	600	05R8210	2.03
SRF0602-331Y	330	10	0.3	300	3	120	900	05R8211	2.07
SRF0905 SERIES									
SRF0905-100Y	10	8	0.08	1.6	20	200	200	05R8214	1.17
SRF0905-250Y	25	16	0.16	1	20	600	600	05R8217	0.50
SRF0905-400Y	40	18	0.25	0.9	20	800	800	05R8219	1.17
SRF0905-500Y	50	22	0.32	0.8	20	1500	1.5	05R8222	1.24
SRF0905-251Y	250	0.11	0.13	1.2	3	600	600	05R8218	1.26
SRF0905-471Y	470	0.12	0.14	1.1	2	1000	1	05R8220	1.17
SRF0905-501Y	500	0.12	0.15	1	1	1000	1	05R8223	1.17
SRF0905-102Y	1	0.17	0.31	0.8	1	1500	1.5	05R8215	1.26
SRF0905-202Y	2	0.25	0.42	0.6	1	3000	3	05R8216	1.17
SRF0905-472Y	4.7	0.36	0.9	0.4	0.3	4000	4	05R8221	1.17
SRF0905-652Y	6.5	0.39	1.05	0.3	0.3	5000	5	05R8224	1.08

(156347)

FN405 SERIES PC MOUNT FILTERS

RoHS Compliant Available

SCHAFFNER



FN405 Series

Horizontal PC mount filters for smaller systems. 250VAC rated with maximum leakage current of 0.5mA @ 220VAC/50Hz. General purpose filter for situations where space is critical. **FN405 series** attenuates common mode and differential mode noise in the 150kHz to 30MHz range.

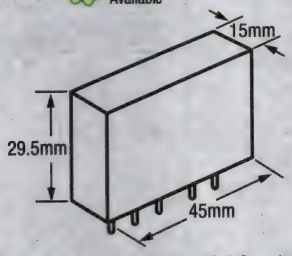
Mfg. Part No.	I (A)	L (mH)	Cx (µF)	Cy (pF)	Stock No.	Price Each 1-24	Price Each 25-49
FN405-1-02	1A	10	0.015	2200	37K6085	11.54	10.16
FN405-3-02	3A	2	0.015	2200	37K6086	11.39	10.03
FN405-10-02	10A	0.5	0.015	2200	11B3403	14.91	13.13

(7468)

FN406 SERIES VERTICAL PC MOUNT FILTERS

RoHS Compliant Available

SCHAFFNER



Vertical PC mount, single stage filters for situations where space is critical. General-purpose filter for small systems. Dimensions: 1.8W x 1.1H x 0.6" D. 250VAC rating with maximum leakage current of 0.5mA. Attentuates 150kHz to 30MHz.

Mfg. Part No.	I	Cx (µF)	Cy (nF)	Stock No.	Price Each 1-24	25-49	50-99
FN406-0.5-02	500mA	0.1	2.2	20M8074	11.42	9.53	8.69
FN406-1-02	1A	0.1	2.2	92F5327	12.22	10.20	9.30
FN406-3-02	3A	0.1	2.2	69M3597	12.06	10.06	9.18
FN406-6-02	6A	0.1	2.2	92F5329	12.06	10.06	9.18
FN406-8.4-02	8.4A	0.1	2.2	67C2089	11.99	10.01	9.12

(7575)

CORCOM EDP AND EOP SERIES PC BOARD MOUNT RFI FILTERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features
- Space-saving compact design
- Low leakage current for European safety requirements
- Maximum leakage current, each line to ground @ 120VAC 60Hz: 0.22mA; @ 250VAC 50Hz: 0.38mA
- Current rating: 16A
- Voltage rating: 250VAC max.
- Operating frequency: 50/60 Hz

EDP series PC board mountable RFI filters provide enhanced differential mode performance for applications requiring more line-to-line protection. **EOP series** general-purpose RFI power line filters are effective in removing both common and differential mode noise for susceptibility applications. Both series are UL recognized, CSA certified, VDE approved.

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-24
EDP SERIES — 0.95"H x 1.44"W x 1.24"D			
1EDP	1	99M1040	17.48
10EDP	10	99M1043	18.63
EOP SERIES — 0.78"H x 1.44"W x 1.24"D			
1EOP	1	99M1041	14.38

(147868)

SURFACE MOUNT FILTERS

RoHS Compliant Available

JOHANSON TECHNOLOGY

Specifications
- Impedance: 50Ω
- Frequency: Up to 5900 MHz
- Operating Temperature: -40°C to +85°C
- Power rating: 3W; 500mW

Applications
- Satellite
- Automotive
- Wireless solutions (WLAN, Bluetooth, HomeRF, 5.5 GHz ISM & UNII)

Mfg. Part No.	Frequency (GHz) Min.	Max.	Insertion Loss (dB)	Package	Stock No.	Price Each 1-9	10-99
2450MHz BAND PASS FILTER							
2450BP07A0100T	2.4	2.5	1.3	0402 [1005 Metric]	11N6601	0.63	0.55
2450BP39D100CE	2.4	2.5	1.2	1008 [2520 Metric]	46W1438	0.72	0.63
2450MHz HIGH PASS FILTER							
2450HP15A100E	2.4	2.5	0.85	0805 [2012 Metric]	11N6605	1.19	1.04
2450MHz LOW PASS FILTER							
2450LP15A050E	2.4	2.5	0.5	0805 [2012 Metric]	11N6610	0.59	0.52
5500MHz BAND PASS FILTER							
5515BP15B975E	4.9	5.875	1.5	0805 [2012 Metric]	11N6623	0.46	0.40
5515BP15C725E	5.15	5.875	2	0805 [2012 Metric]	11N6626	0.56	0.49
5487BP15B675E	5.15	5.825	1.8	0805 [2012 Metric]	94C4634	0.66	0.57
5500MHz LOW PASS FILTER							
5515LP15A730E	5.15	5.875	0.5	0805 [2012 Metric]	11N6628	0.59	0.52
SPLITTER							
1575CH15A0030E	1.56	1.59	3.3	...	46W1429	0.99	0.86

(132427)

CERAMIC CHIP ANTENNAS

RoHS Compliant Available

TAIYO YUDEN

Specifications
- Impedance: 50Ω
- Frequency: Up to 5900 MHz
- Operating Temperature: -40°C to +85°C
- Power rating: 3W; 500mW **(5400AT18A1000E only)**
- Return loss: 9.5dB; 8.5dB **(2450AD46A5400E only)**

Applications
- Wireless communication (Bluetooth, UNII, Wi-Fi)

5500MHz ANTENNA

Mfg. Part No.	Frequency (MHz)	Stock No.	Price Each 1-9	10-49
AF216M245001-T	2450	09P2754	1.53	1.44
AF816M157502-T	1575	09P2757	2.18	2.05
AH083F245001-T	2450	09P2758	2.88	2.68
AH212M245001-T	2450	46T5705	1.44	1.35
AH086M555003-T	5550	83T0066	2.68	2.52
AH104N2450D1-T	2450	83T0068	2.74	2.58
AH316M245001-T	2450	83T0070	1.60	1.51
AH316M157501	1575	87R1564	1.72	1.62

(208887)

PA25 SERIES 25mm SQUARE RF PATCH ANTENNAS

RoHS Compliant Available

api technologies corp.

Features
- Low return loss
- Uniform dielectric constant
- Offset single-point feeding method
- Silver plated electrode and probe

Specifications
- Operating Temperature: -40°C to +105°C
- Impedance: 50 ohm

Mfg. Part No.	Center Frequency (MHz)	Gain (dB)	Stock No.	Price Each 1-9
PA251575008SALF	1575	2.5	05R6059	7.19
PA251615025SALF	1615	3	05R6061	4.34
PA251621025SALF	1621	4	05N1134	10.50

(147281)

2.4GHZ / 5GHZ WIFI STAND ALONE ANTENNAS

RoHS Compliant Available

molex

- Ground-plane-independent design significantly reduces costs and engineering resources needed to tune and optimize ground-plane-dependent antennas
- High-radiation efficiency 34.9 x 9mm version antenna offers Total Efficiency values of 75% minimum in the 2.4GHz band and 60% minimum in the 5GHz band
- Higher radiation efficiency 35.9 x 15.9mm version antenna offers Total Efficiency values of 80% minimum in the 2.4 GHz band and 70% minimum in the 5GHz band
- Poly-flexible, double-sided adhesive tape on antenna enables easy peel-and-stick mounting anywhere within the device casing
- Robust coaxial cable to flexi-antenna with Pull Force of over 18.0N ensures maximum reliability of antenna
- Choice of several miniature coaxial cable length options provides for maximum flexibility for antenna placement in the wireless device

Mfg. Part No.	Flexi-Antenna Dim. (mm)	Peak Gain (dBi)	Total Efficiency (%)	Stock No.	Price Each 1-9
47950-2001	34.9 x 9	2.9 to 5.9	>70	61T7359	5.55
47950-2011	35.9 x 15.9	3.4 to 5.5	>75	61T7360	6.53

(202198)

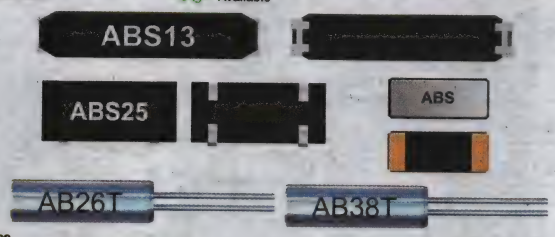
Find thousands of NEW parts for
FULL REEL PASSIVES
Available for next-day delivery at
newark.com/production

(211462)

36.768 KHz CRYSTALS

RoHS Compliant Available

ABRACON CORPORATION



Features
- Low frequency in small size SMD
- Low height ideal for high density circuit boards
- Ceramic package offers excellent environmental & heat resistance
- Extended temperature -40°C to +85°C for industrial applications

Specifications
- Frequency tolerance: ±20 ppm
- Output load: 12.5 pF max.
- Operating temperature: -40°C to +85°C
- Turn-over Temperature: +25°C to ±5°C

Applications
- Clock source for communication or A/V equipment
- Real time clock
- Measuring instruments

LOW PROFILE CRYSTAL - SMD

Mfg. Part No.	Case Size (mm)	ESR (kΩ)	Freq. Tol.	Load Cap. (pF)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● ABS05-32.768KHZ-T	1.6 x 1 x 0.5	90	± 20ppm	12.5	24W8430	3.06
● ABS05-32.768KHZ-9-T	1.6 x 1 x 0.5	90	± 20ppm	9	24W8431	3.06
● ABS06-32.768KHZ-T	2 x 1.2 x 0.6	90	± 20ppm	12.5	52R7999	2.57
● ABS06-32.768KHZ-9-T	2 x 1.2 x 0.6	90	± 20ppm	9	60R3992	2.57
● ABS06-32.768KHZ-9-1-T	2 x 1.2 x 0.6	90	± 10ppm	9	60R3991	3.62
● ABS06-32.768KHZ-1-T	2 x 1.2 x 0.6	90	± 10ppm	12.5	60R3990	3.70
● ABS06L-32.768KHZ-T	2 x 1.2 x 0.38	100	± 20ppm	12.5	24W8432	2.83
● ABS07-32.768KHZ-6-T	3.2 x 1.5 x 0.9	70	± 20ppm	6	24W8433	1.71
● ABS07-32.768KHZ-7-T	3.2 x 1.5 x 0.9	70	± 20ppm	7	14N8750	1.85
● ABS07-32.768KHZ-9-T	3.2 x 1.5 x 0.9	70	± 20ppm	9	14N8751	1.84
● ABS07-32.768KHZ-T	3.2 x 1.5 x 0.9	70	± 20ppm	12.5	14N8749	1.85
● ABS09-32.768KHZ-7-T	4.1 x 1.5 x 0.9	70	± 20ppm	7	14N8753	1.58
● ABS09-32.768KHZ-9-T	4.1 x 1.5 x 0.9	70	± 20ppm	9	14N8754	1.69
● ABS09-32.768KHZ-T	4.1 x 1.5 x 0.9	70	± 20ppm	12.5	14N8752	1.67
● ABS10-32.768KHZ-7-T	4.9 x 1.8 x 1	70	± 20ppm	7	14N8756	1.43
● ABS10-32.768KHZ-9-T	4.9 x 1.8 x 1	70	± 20ppm	9	14N8757	1.35
● ABS10-32.768KHZ-T	4.9 x 1.8 x 1	70	± 20ppm	12.5	14N8755	1.43
● ABS13-32.768KHZ-T	6.9 x 1.4 x 1.3	65	± 20ppm	12.5	13J1803	1.39
● ABS25-32.768KHZ-T	8 x 3.8 x 2.5	50	± 20ppm	12.5	13J1804	0.93
● ABS25-32.768KHZ-1-T	8 x 3.8 x 2.5	50	± 10ppm	12.5	67P3868	1.22
● ABS25-32.768KHZ-6-1-T	8 x 3.8 x 2.5	50	± 10ppm	6	60R3994	1.34
● ABS25-32.768KHZ-6-T	8 x 3.8 x 2.5	50	± 20ppm	6	60R3993	0.94

CYLINDRICAL TUNING FORK CRYSTALS - RADIAL LEAD

Mfg. Part No.	Case Size (d x L)	ESR (kΩ)	Freq. Tol.	Load Cap. (pF)	Stock No.	Price Each 1-24
● AB26TRB-32.768KHZ-T*	2 x 6	35	± 20ppm	12.5	13J1807	0.73
● AB38T-32.768KHZ	3.2 x 8.3	30	± 20ppm	12.5	13J1829	0.30

*Surface mount
(83057)

ABLSG SERIES HC/49US (AT49) SMD LOW PROFILE CRYSTALS

RoHS Compliant Available

ABRACON CORPORATION

Features
- 3rd lead is grounded
- Ideal for EMI sensitive applications
- IR-reflow capable
- Low height reduced to 4.2mm

Specifications
- Operating temperature: -55°C to +125°C
- Frequency stability: ±50ppm max
- Insulation resistance: 500MΩ
- Dimensions: 11.4 x 4.7 x 4.2mm

Mfg. Part No.	Freq. (MHz)	ESR (Ω)	Load Cap. (pF)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● ABLSG-3.579545MHZ-D-2-Y-T	3.579545	180	18	01T1324	0.83
● ABLSG-3.6864MHZ-D-2-Y-T	3.6864	180	18	01T1326	0.83
● ABLSG-4.000MHZ-D-2-Y-T	4	180	18	01T1330	0.83
● ABLSG-4.194304MHZ-D-2-Y-T	4.194304	180	18	01T1332	0.83
● ABLSG-4.433619MHZ-D-2-Y-T	4.433619	180	18	01T1334	0.83
● ABLSG-4.500MHZ-D-2-Y-T	4.5	180	18	01T1336	0.83
● ABLSG-4.9152MHZ-D-2-Y-T	4.9152	180	18	01T1338	0.83
● ABLSG-5.000MHZ-D-2-Y-T	5	120	18	01T1340	0.89
● ABLSG-6.000MHZ-D-2-Y-T	6	100	18	01T1342	0.83
● ABLSG-6.144MHZ-D-2-Y-T	6.144	100	18	01T1344	0.83
● ABLSG-6.7458MHZ-D-2-Y-T	6.7458	100	18	01T1346	0.83

➤ CONTINUED ➤

ABLSG SERIES HC/49US (AT49) SMD LOW PROFILE CRYSTALS (CONT.)

Mfg. Part No.	Freq. (MHz)	ESR (Ω)	Load Cap. (pF)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● ABLSG-7.3728MHZ-D-2-Y-T	7.3728	100	18	01T1348	0.83
● ABLSG-8.000MHZ-D-2-Y-T	8	80	18	01T1350	0.83
● ABLSG-9.216MHZ-D-2-Y-T	9.216	60	18	01T1352	0.89
● ABLSG-9.8304MHZ-D-2-Y-T	9.8304	60	18	01T1354	0.83
● ABLSG-10.000MHZ-D-2-Y-T	10	50	18	01T1278	0.83
● ABLSG-10.240MHZ-D-2-Y-T	10.24	50	18	01T1280	0.83
● ABLSG-11.0592MHZ-D-2-Y-T	11.0592	50	18	01T1282	0.83
● ABLSG-12.000MHZ-D-2-Y-T	12	50	18	01T1284	0.83
● ABLSG-12.288MHZ-D-2-Y-T	12.288	50	18	01T1286	0.83
● ABLSG-13.000MHZ-D-2-Y-T	13	50	18	01T1288	0.83
● ABLSG-13.500MHZ-D-2-Y-T	13.5	50	18	01T1290	0.83
● ABLSG-14.31818MHZ-D-2-Y-T	14.31818	50	18	01T1292	0.83
● ABLSG-14.7456MHZ-D-2-Y-T	14.7456	50	18	01T1294	0.83
● ABLSG-15.000MHZ-D-2-Y-T	15	50	18	01T1296	0.83
● ABLSG-15.360MHZ-D-2-Y-T	15.36	50	18	01T1298	0.83
● ABLSG-16.000MHZ-D-2-Y-T	16	40	18	01T1300	0.89
● ABLSG-16.384MHZ-D-2-Y-T	16.384	40	18	01T1302	0.83
● ABLSG-16.9344MHZ-D-2-Y-T	16.9344	40	18	01T1304	0.83
● ABLSG-18.000MHZ-D-2-Y-T	18	40	18	01T1306	0.83
● ABLSG-18.432MHZ-D-2-Y-T	18.432	40	18	01T1308	0.83
● ABLSG-19.6608MHZ-D-2-Y-T	19.6608	40	18	01T1310	0.83
● ABLSG-20.000MHZ-D-2-Y-T	20	40	18	01T1312	0.83
● ABLSG-24.000MHZ-D-2-Y-T	24	40	18	01T1314	0.83
● ABLSG-24.576MHZ-D-2-Y-F-T	24.576	40	18	01T1316	0.83
● ABLSG-25.000MHZ-D-2-Y-F-T	25	40	18	01T1318	0.83
● ABLSG-27.000MHZ-D-2-Y-F-T	27	40	18	01T1320	0.83
● ABLSG-28.63636MHZ-D-2-Y-F-T	28.63636	40	18	01T1322	0.83
● ABLSG-30.000MHZ-D-2-Y-F-T	30	40	18	01T1328	0.83

(194803)

32.768 KHz REFLOWABLE SMD CRYSTALS

RoHS Compliant Available

CITIZEN

CMJ206T CMR200T

Used as a clock source for communications equipment, AV equipment, OA equipment, measuring instruments and various types of clocks.

KHz RANGE REFLOWABLE SMD CRYSTALS

Mfg. Part No.	ESR (kΩ)	Load Cap. (pF)	Freq. Tol.	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape On Reel Reel Qty: 3000 Stock No.	Tape On Reel Price Each
● CMR200T32.768KDZB-UT	50	6	± 20ppm	60K8158	0.81	59K7624	0.30
● CMR200T32.768KDZY-UT	50	7	± 20ppm	60M5576	0.78	60M5577	0.29
● CMJ206T32.768KDZF-UT	50	12.5	± 20ppm	60K8157	0.95	59K7616	0.33

(83011)

SURFACE MOUNT CRYSTALS

RoHS Compliant Available

FOX

FQ1045A FQ5032B FQ7050B

Features:
- Surface Mount Resin Sealed
- Ultra Low Profile
- Fundamental

FQ1045 SERIES

Mfg. Part No.	Freq. (MHz)	Freq. Tol.	Tape Cut Stock No.	Tape Cut Price Each 1-24
● FQ1045A-3.6864	3.6864	± 30ppm	61T5350	2.07
● FQ1045A-4.000	4	± 30ppm	61T5351	1.35
● FQ1045A-4.9152	4.9152	± 30ppm	61T5352	2.07
● FQ1045A-6.000	6	± 30ppm	61T5353	1.36

➤ CONTINUED ➤

SURFACE MOUNT CRYSTALS (CONT.)

FQ7050 SERIES

Mfg. Part No.	Freq. (MHz)	Freq. Tol.	Tape Cut Stock No.	Tape Cut Price Each 1-24
FQ7050B-7.3728	7.3728	± 30ppm	61T5362	1.44
FQ7050B-8.000	8	± 30ppm	61T5363	1.69
FQ7050B-10.000	10	± 30ppm	61T5360	1.57
FQ7050B-11.0592	11.0592	± 30ppm	61T5361	0.88
FQ5032 SERIES				
FQ5032B-12.000	12	± 30ppm	61T5354	1.61
FQ5032B-16.000	16	± 30ppm	61T5355	1.03
FQ5032B-20.000	20	± 30ppm	61T5356	1.03
FQ5032B-24.000	24	± 30ppm	61T5357	1.49
FQ5032B-24.576	24.576	± 30ppm	61T5358	1.49
FQ5032B-25.000	25	± 30ppm	61T5359	1.03

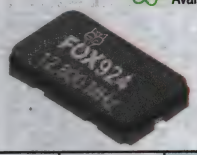
(197175)

HCMOS SMD TCXOs (CRYSTALS)

RoHS Compliant Available

FOX

Features:
- 3.3V Operation
- 1.5mm Height Max
- HCMOS Output



Mfg. Part No.	Freq. (MHz)	Freq. Tol.	Tape Cut Stock No.	Tape Cut Price Each 1-24
FOX924B-10.000	10	± 1.5ppm	61T5324	7.44
FOX924B-12.000	12	± 1.5ppm	61T5325	7.44
FOX924B-12.288	12.288	± 1.5ppm	61T5326	7.44
FOX924B-14.7456	14.7456	± 1.5ppm	61T5327	7.44
FOX924B-16.000	16	± 1.5ppm	61T5328	7.54
FOX924B-19.440	19.44	± 1.5ppm	61T5329	7.05
FOX924B-20.000	20	± 1.5ppm	61T5330	7.44
FOX924B-25.000	25	± 1.5ppm	61T5331	7.54
FOX924B-27.000	27	± 1.5ppm	61T5332	7.69

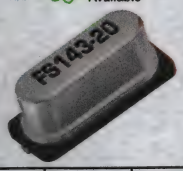
(197374)

RESISTANCE WELD SMD CRYSTALS

RoHS Compliant Available

FOX

Features:
- Model - HC49SDLF
- Fundamental to 40 MHz
- Resistance Weld



Mfg. Part No.	Freq. (MHz)	Freq. Tol.	Load Cap. (pF)	Tape Cut Stock No.	Tape Cut Price Each 1-24
FOXSDLF/036S	3.579545	± 30ppm	18	61T5290	0.64
FOXSDLF/041	4.194304	± 30ppm	12	61T5293	0.64
FOXSDLF/049-20	4.9152	± 30ppm	20	61T5294	0.64
FOXSDLF/060-20	6	± 30ppm	20	61T5295	0.68
FOXSDLF/073-20	7.3728	± 30ppm	20	61T5296	0.64
FOXSDLF/080-20	8	± 30ppm	20	61T5297	0.68
FOXSDLF/098-20/TR	9.8304	± 30ppm	20	61T5299	0.64
FOXSDLF/100-20	10	± 30ppm	20	61T5300	0.68
FOXSDLF/115-20	11.0592	± 30ppm	20	61T5301	0.68
FOXSDLF/120-20	12	± 30ppm	20	61T5302	0.68
FOXSDLF/128-20	12.288	± 30ppm	20	61T5303	0.64
FOXSDLF/143-20	14.31818	± 30ppm	20	61T5304	0.64
FOXSDLF/147-20	14.7456	± 30ppm	20	61T5305	0.64
FOXSDLF/160-20	16	± 30ppm	20	61T5306	0.68
FOXSDLF/184-20	18.432	± 30ppm	20	61T5307	0.64
FOXSDLF/200-20	20	± 30ppm	20	61T5308	0.68
FOXSDLF/221-20	22.1184	± 30ppm	20	61T5309	0.64
FOXSDLF/240F-20	24	± 30ppm	20	61T5310	0.67
FOXSDLF/245F-20	24.576	± 30ppm	20	61T5311	0.64
FOXSDLF/250F-20	25	± 30ppm	20	61T5312	0.68

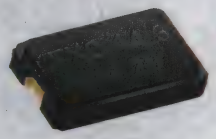
(197376)

QUARTZ GLASS CRYSTAL - 7A SERIES

RoHS Compliant Available

TXC

Features:
- 2 pads 5 x 3.2 mm SMD glass sealed crystal units
- High reliable environmental performance
- Tight tolerance and stability parts are available
- Designed for automatic mounting and reflow soldering
- Reasonable cost and good delivery performance
- The best choice of portable PC, PDA, DSC, and USB interface card
- Contains Pb in sealing glass exempted by RoHS directive



Mfg. Part No.	Freq. (MHz)	Freq. Tol.	Load Cap. (pf)	Stock No.	Price Each 1-9
7A-10.000MAAJ-T	10	± 30ppm	18	84R5647	1.12
7A-12.000MAAJ-T	12	± 30ppm	18	84R5648	1.10
7A-12.288MAAJ-T	12.288	± 30ppm	18	84R5649	1.12
7A-12.288MBBK-T	12.288	± 50ppm	20	46W3063	0.92
7A-13.560MAAJ-T	13.56	± 30ppm	18	84R5650	1.04
7A-14.31818MAAJ-T	14.31818	± 30ppm	18	84R5651	1.04
7A-14.31818MBBK-T	14.31818	± 50ppm	20	46W3064	0.92
7A-14.7456MAAJ-T	14.7456	± 30ppm	18	84R5652	1.12
7A-16.000MAAJ-T	16	± 30ppm	18	84R5653	1.10
7A-16.9344MAAJ-T	16.9344	± 30ppm	18	84R5654	1.04
7A-16.9344MBBK-T	16.9344	± 50ppm	20	46W3065	0.92
7A-18.432MAAJ-T	18.432	± 30ppm	18	84R5655	1.12
7A-20.000MAAJ-T	20	± 30ppm	18	84R5656	1.04
7A-20.000MBBK-T	20	± 50ppm	20	46W3067	0.92
7A-24.000MAAJ-T	24	± 30ppm	18	84R5657	1.12
7A-24.576MAAJ-T	24.576	± 30ppm	18	84R5658	1.04
7A-24.576MBBK-T	24.576	± 50ppm	20	46W3068	0.92
7A-25.000MAAJ-T	25	± 30ppm	18	84R5659	1.10
7A-26.000MAAJ-T	26	± 30ppm	18	52T7190	1.12
7A-27.000MAAJ-T	27	± 30ppm	18	84R5660	1.12
7A-28.63636MAAJ-T	28.63636	± 30ppm	18	84R5661	1.12
7A-28.63636MBBK-T	28.63636	± 50ppm	20	46W3069	0.92
7A-30.000MAAJ-T	30	± 30ppm	18	84R5662	1.04
7A-30.000MBBK-T	30	± 50ppm	20	46W3070	0.92
7A-36.000MAAJ-T	36	± 30ppm	18	84R5663	1.04
7A-36.000MBBK-T	36	± 50ppm	20	46W3071	0.92
7A-48.000MAAJ-T	48	± 30ppm	18	84R5664	1.04
7A-49.152MAAJ-T	49.152	± 30ppm	18	52T7191	1.04
7A-54.000MAAJ-T	54	± 30ppm	18	52T7193	1.04

(189986)

QUARTZ CRYSTAL - 7M SERIES

RoHS Compliant Available

TXC

Features:
- Extremely small SMD type crystal units
- High precision and high frequency stability
- Extremely good for reducing EMI effect
- The best choice of Bluetooth, wireless communication set, DSC, PDA, and mobile phone

Mfg. Part No.	Freq. (MHz)	Freq. Tol.	Load Cap. (pF)	Stock No.	Price Each 1-49
7M-12.000MAAJ-T	12	± 30ppm	18	84R5706	1.50
7M-12.288MAAJ-T	12.288	± 30ppm	18	84R5707	1.46
7M-13.000MAAJ-T	13	± 30ppm	18	84R5708	1.36
7M-13.560MAAE-T	13.56	± 30ppm	12	46W3088	1.26
7M-14.31818MAAJ-T	14.31818	± 30ppm	18	84R5709	1.36
7M-16.000MAAJ-T	16	± 30ppm	18	84R5710	1.50
7M-16.000MAAE-T	16	± 30ppm	12	46W3089	1.26
7M-16.384MAAE-T	16.384	± 30ppm	12	46W3090	1.17
7M-16.384MAAJ-T	16.384	± 30ppm	18	84R5711	1.36
7M-16.384MBBK-T	16.384	± 50ppm	20	46W3091	1.17
7M-16.9344MAAJ-T	16.9344	± 30ppm	18	84R5712	1.36
7M-18.432MAAE-T	18.432	± 30ppm	12	46W3093	1.17
7M-19.200MAAJ-T	19.2	± 30ppm	18	84R5713	1.46
7M-20.000MAAE-T	20	± 30ppm	12	46W3096	1.26
7M-20.000MAAJ-T	20	± 30ppm	18	84R5714	1.36
7M-20.000MBBK-T	20	± 50ppm	20	46W3097	1.17
7M-24.000MAAE-T	24	± 30ppm	12	46W3098	1.17
7M-24.000MAAJ-T	24	± 30ppm	18	84R5715	1.46
7M-24.576MAAE-T	24.576	± 30ppm	12	46W3099	1.17
7M-24.576MAAJ-T	24.576	± 30ppm	18	84R5716	1.36
7M-24.576MBBK-T	24.576	± 50ppm	20	46W3100	1.17
7M-25.000MAAJ-T	25	± 30ppm	18	84R5717	1.46
7M-26.000MAAJ-T	26	± 30ppm	18	84R5718	1.36
7M-26.000MAAE-T	26	± 30ppm	12	46W3101	1.26
7M-27.000MAAE-T	27	± 30ppm	12	46W3102	1.17

CONTINUED

QUARTZ CRYSTAL - 7M SERIES (CONT.)

Mfg. Part No.	Freq. (MHz)	Freq. Tol.	Load Cap. (pF)	Stock No.	Price Each 1-49
7M-27.000MAAJ-T	27	± 30ppm	18	84R5719	1.46
7M-30.000MAAE-T	30	± 30ppm	12	46W3103	1.17
7M-30.000MAAJ-T	30	± 30ppm	18	84R5720	1.36
7M-30.000MBBK-T	30	± 50ppm	20	46W3104	1.17
7M-32.000MAAE-T	32	± 30ppm	12	46W3105	1.26
7M-32.000MAAJ-T	32	± 30ppm	18	84R5721	1.46
7M-36.000MAAJ-T	36	± 30ppm	18	84R5722	1.36
7M-36.000MBBK-T	36	± 50ppm	20	46W3108	1.17
7M-38.400MAAJ-T	38.4	± 30ppm	18	84R5723	1.36
7M-40.000MAAE-T	40	± 30ppm	12	46W3111	1.17
7M-40.000MAAJ-T	40	± 30ppm	18	84R5724	1.36
7M-48.000MAAJ-T	48	± 30ppm	18	84R5725	1.68
7M-48.000MBBK-T	48	± 50ppm	20	46W3112	1.26

(189987)

QUARTZ CRYSTAL - 9C SERIES

RoHS Compliant Available

TXC

Features:
- Surface mount type crystal units
- A great number of standard frequencies
- High frequency pullability and low equivalent series resistance
- Highly mass production capability
- The best choice of PC, STB, LCDM, and Cable Modem

Mfg. Part No.	Freq. (MHz)	Freq. Tol.	Load Cap. (pf)	Stock No.	Price Each 1-9
9C-3.579545MAAJ-T	3.579545	± 30ppm	18	84R5862	0.59
9C-3.6864MAAJ-T	3.6864	± 30ppm	18	84R5863	0.59
9C-4.000MAAJ-T	4	± 30ppm	18	84R5867	0.59
9C-4.096MAAJ-T	4.096	± 30ppm	18	84R5868	0.59
9C-4.096MBBK-T	4.096	± 50ppm	20	46W3147	0.54
9C-4.9152MAAJ-T	4.9152	± 30ppm	18	84R5869	0.59
9C-4.9152MBBK-T	4.9152	± 50ppm	20	46W3148	0.54
9C-5.000MAAJ-T	5	± 30ppm	18	52T7205	0.59
9C-5.0688MAAJ-T	5.0688	± 30ppm	18	52T7207	0.59
9C-6.000MAAJ-T	6	± 30ppm	18	84R5873	0.63
9C-6.144MAAJ-T	6.144	± 30ppm	18	52T7209	0.59
9C-7.3728MAAJ-T	7.3728	± 30ppm	18	84R5876	0.59
9C-7.680MAAJ-T	7.68	± 30ppm	18	84R5877	0.63
9C-7.680MBBK-T	7.68	± 50ppm	20	46W3154	0.54
9C-8.000MAAJ-T	8	± 30ppm	18	84R5878	0.63
9C-8.192MAAE-T	8.192	± 30ppm	12	46W3155	0.55
9C-8.912MAAJ-T	8.912	± 30ppm	18	84R5879	0.59
9C-8.912MBBK-T	8.912	± 50ppm	20	46W3156	0.51
9C-10.000MAAJ-T	10	± 30ppm	18	84R5840	0.59
9C-11.000MAAJ-T	11	± 30ppm	18	52T7201	0.59
9C-11.0592MAAE-T	11.0592	± 30ppm	12	46W3124	0.55
9C-11.0592MAAJ-T	11.0592	± 30ppm	18	84R5841	0.59
9C-11.0592MBBK-T	11.0592	± 50ppm	20	46W3125	0.51
9C-11.2896MAAJ-T	11.2896	± 30ppm	18	84R5842	0.59
9C-12.000MAAJ-T	12	± 30ppm	18	84R5843	0.63
9C-12.288MAAJ-T	12.288	± 30ppm	18	84R5844	0.59
9C-12.288MBBK-T	12.288	± 50ppm	20	46W3126	0.54
9C-13.560MAAJ-T	13.56	± 30ppm	18	84R5845	0.59
9C-14.31818MAAE-T	14.31818	± 30ppm	12	46W3127	0.55
9C-14.31818MAAJ-T	14.31818	± 30ppm	18	84R5846	0.59
9C-14.31818MBBK-T	14.31818	± 50ppm	20	46W3128	0.51
9C-14.7456MAAJ-T	14.7456	± 30ppm	18	84R5847	0.63
9C-14.7456MBBK-T	14.7456	± 50ppm	20	46W3129	0.51
9C-15.360MAAJ-T	15.36	± 30ppm	18	84R5848	0.59
9C-15.360MAAE-T	15.36	± 30ppm	18	46W3130	0.55
9C-15.360MBBK-T	15.36	± 50ppm	20	46W3131	0.54
9C-16.000MAAJ-T	16	± 30ppm	18	84R5849	0.63
9C-16.384MAAJ-T	16.384	± 30ppm	18	84R5850	0.59
9C-16.384MBBK-T	16.384	± 50ppm	20	46W3132	0.51
9C-18.432MAAJ-T	18.432	± 30ppm	18	84R5851	0.59
9C-18.432MBBK-T	18.432	± 50ppm	20	46W3133	0.51
9C-19.200MAAJ-T	19.2	± 30ppm	18	84R5852	0.59
9C-19.200MBBK-T	19.2	± 50ppm	20	46W3134	0.51
9C-19.6608MBBK-T	19.6608	± 50ppm	20	46W3135	0.51
9C-20.000MAAJ-T	20	± 30ppm	18	84R5853	0.63
9C-22.000MAAJ-T	22	± 30ppm	18	84R5854	0.59
9C-22.000MAAE-T	22	± 30ppm	18	46W3136	0.55
9C-22.000MBBK-T	22	± 50ppm	20	46W3137	0.51
9C-22.1184MAAE-T	22.1184	± 30ppm	12	46W3138	0.55

➤ CONTINUED ➤

QUARTZ CRYSTAL - 9C SERIES (CONT.)

Mfg. Part No.	Freq. (MHz)	Freq. Tol.	Load Cap. (pf)	Stock No.	Price Each 1-9
9C-22.1184MAAJ-T	22.1184	± 30ppm	18	84R5855	0.59
9C-22.1184MBBK-T	22.1184	± 50ppm	20	46W3139	0.51
9C-24.000MAAJ-T	24	± 30ppm	18	84R5856	0.63
9C-24.576MAAJ-T	24.576	± 30ppm	18	84R5857	0.59
9C-24.576MBBK-T	24.576	± 50ppm	20	46W3140	0.54
9C-25.000MAAJ-T	25	± 30ppm	18	84R5858	0.63
9C-25.000MAAK-T	25	± 30ppm	20	52T7203	0.59
9C-25.000MBBK-T	25	± 50ppm	20	46W3141	0.51
9C-26.000MAAJ-T	26	± 30ppm	18	84R5859	0.59
9C-27.000MAAJ-T	27	± 30ppm	18	84R5860	0.59
9C-27.000MBBK-T	27	± 50ppm	20	46W3142	0.51
9C-28.63636MAAE-T	28.63636	± 30ppm	12	46W3143	0.55
9C-28.63636MAAJ-T	28.63636	± 30ppm	18	84R5861	0.59
9C-28.63636MBBK-T	28.63636	± 50ppm	20	46W3144	0.51
9C-30.000MAAJ-T	30	± 30ppm	18	84R5864	0.59
9C-35.328MAAE-T	35.328	± 30ppm	12	46W3145	0.55
9C-35.328MAAJ-T	35.328	± 30ppm	18	84R5865	0.59
9C-35.328MBBK-T	35.328	± 50ppm	20	46W3146	0.54
9C-36.000MAAJ-T	36	± 30ppm	18	84R5866	0.63
9C-48.000MAAJ-T	48	± 30ppm	18	84R5870	0.63
9C-48.000MBBK-T	48	± 50ppm	20	46W3149	0.51
9C-50.000MAAJ-T	50	± 30ppm	18	84R5871	0.59
9C-50.000MBBK-T	50	± 50ppm	20	46W3150	0.51
9C-54.000MAAJ-T	54	± 30ppm	18	84R5872	0.76
9C-54.000MBBK-T	54	± 50ppm	20	46W3151	0.63
9C-60.000MAAJ-T	60	± 30ppm	18	84R5874	0.76
9C-60.000MBBK-T	60	± 50ppm	20	46W3152	0.63
9C-64.000MAAJ-T	64	± 30ppm	18	84R5875	0.76

(189988)

QUARTZ SEAM CRYSTAL - 7B SERIES

RoHS Compliant Available

TXC

Features:
- Ultra small SMD type crystal units
- High precision characteristics covering up to wide frequency range
- Higher frequency stability and reliability
- Excellent for reducing EMI effect

Mfg. Part No.	Freq. (MHz)	Freq. Tol.	Load Cap. (pf)	Stock No.	Price Each 1-9
7B-10.000MEEQ-T	10	± 10ppm	10	52T7195	1.55
7B-10.000MAAE-T	10	± 30ppm	12	46W3072	1.01
7B-11.0592MAAJ-T	11.0592	± 30ppm	18	84R5665	1.17
7B-12.000MAAJ-T	12	± 30ppm	18	84R5666	1.17
7B-12.288MAAJ-T	12.288	± 30ppm	18	84R5667	1.17
7B-12.288MBBK-T	12.288	± 50ppm	20	46W3073	1.01
7B-13.000MAAJ-T	13	± 30ppm	18	84R5668	1.25
7B-13.000MBBK-T	13	± 50ppm	20	46W3074	1.01
7B-14.31818MAAJ-T	14.31818	± 30ppm	18	84R5669	1.17
7B-14.31818MBBK-T	14.31818	± 50ppm	20	46W3075	1.01
7B-14.7456MAAJ-T	14.7456	± 30ppm	18	84R5670	1.17
7B-16.000MAAJ-T	16	± 30ppm	18	84R5671	1.25
7B-16.384MAAJ-T	16.384	± 30ppm	18	84R5672	1.25
7B-16.384MBBK-T	16.384	± 50ppm	20	46W3076	1.01
7B-16.9344MAAJ-T	16.9344	± 30ppm	18	84R5673	1.25
7B-18.432MAAJ-T	18.432	± 30ppm	18	84R5674	1.17
7B-18.432MBBK-T	18.432	± 50ppm	20	46W3077	1.01
7B-19.200MAAJ-T	19.2	± 30ppm	18	84R5675	1.17
7B-19.200MAAE-T	19.2	± 30ppm	12	46W3078	1.01
7B-20.000MAAJ-T	20	± 30ppm	18	84R5676	1.17
7B-24.000MAAJ-T	24	± 30ppm	18	84R5677	1.17
7B-24.576MAAJ-T	24.576	± 30ppm	18	84R5678	1.25
7B-24.576MBBK-T	24.576	± 50ppm	20	46W3080	1.01
7B-25.000MAAJ-T	25	± 30ppm	18	84R5679	1.24
7B-26.000MAAJ-T	26	± 30ppm	18	84R5680	1.17
7B-27.000MAAJ-T	27	± 30ppm	18	84R5681	1.17
7B-27.000MBBK-T	27	± 50ppm	20	46W3081	1.01
7B-28.63636MAAJ-T	28.63636	± 30ppm	18	84R5682	1.17
7B-30.000MAAJ-T	30	± 30ppm	18	84R5683	1.17
7B-30.000MBBK-T	30	± 50ppm	20	46W3082	1.01
7B-32.000MAAJ-T	32	± 30ppm	18	84R5684	1.17
7B-32.000MBBK-T	32	± 50ppm	20	46W3083	1.01
7B-36.000MAAJ-T	36	± 30ppm	18	84R5685	1.17
7B-36.000MBBK-T	36	± 50ppm	20	46W3084	1.01

➤ CONTINUED ➤

QUARTZ SEAM CRYSTAL - 7B SERIES (CONT.)

Mfg. Part No.	Freq. (MHz)	Freq. Tol.	Load Cap. (pf)	Stock No.	Price Each 1-9
7B-37.500MEEE-T	37.5	± 10ppm	12	52T7197	1.44
7B-40.000MAAJ-T	40	± 30ppm	18	84R5686	1.17
7B-40.000MAAE-T	40	± 30ppm	12	46W3085	1.09
7B-48.000MAAJ-T	48	± 30ppm	18	84R5687	1.17

(190014)

ST3215SB SERIES SMD TUNING FORK CRYSTALS

RoHS Compliant Available

AVX A KYOCERA GROUP COMPANY

Specifications:
- Operating temperature: -40°C to +85°C
- Frequency stability: ±20 x 10^{-6}
- Frequency temp. stability: ±200 x 10^{-6}
- Dimensions: 3.2 x 1.5 x 0.8mm

Features:
- Small, low profile
- Ceramic package
- ideal for consumer / mobile equipment

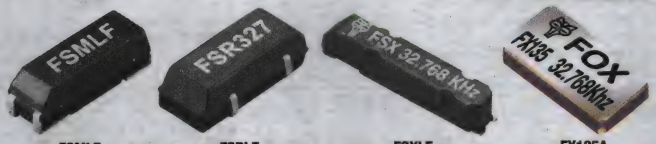
Mfg. Part No.	Freq. (MHz)	Load Cap. (pF)	Tape Cut Stock No.	Tape Cut Price Each 1-9
ST3215SB32768C0HPWBB	32.768	7	29T5955	1.98
ST3215SB32768E0HPWBB	32.768	9	29T5957	1.48
ST3215SB32768H5FPWAA	32.768	12.5	29T5958	2.19
ST3215SB32768H5HPWAA	32.768	12.5	78R4183	1.98

(194822)

SURFACE MOUNT TUNING FORKS

RoHS Compliant Available

FOX



FSMLF FSRLF FSXLF FX135A

Mfg. Part No.	Freq. (MHz)	Freq. Tol.	Load Cap. (pF)	Height (mm)	Tape Cut Stock No.	Tape Cut Price Each 1-24
FSMLF327	32.768	± 20ppm	12.5	3.56	61T5364	1.69
FSRLF327	32.768	± 20ppm	12.5	2.5	61T5365	1.18
FSXLF327	32.768	± 20ppm	12.5	1.4	61T5366	1.37
FX135A-327	32.768	± 20ppm	12.5	0.9	61T5428	2.64

(197176)

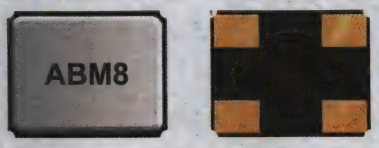
AMB8 SERIES CERAMIC SMD ULTRA MINIATURE CRYSTAL

RoHS Compliant Available

ABRACON CORPORATION

Features
- Low profile suitable for thin equipment
- Ceramic package and metal lid assures high reliability
- Tight tolerance and stability

Applications
- High density applications
- Modems, communication and test equipment
- PMCIA, wireless applications



Mfg. Part No.	Freq. (MHz)	Freq. Tol.	Load Cap. (pF)	Stock No.	Price Each 1-9
ABM8G-12.000MHZ-18-D2Y-T	12	± 20ppm	18	60R3946	1.84
ABM8G-12.000MHZ-B4Y-T	12	± 30ppm	10	60R3945	1.56
ABM8G-12.288MHZ-18-D2Y-T	12.288	± 20ppm	18	60R3948	1.87
ABM8G-12.288MHZ-B4Y-T	12.288	± 30ppm	10	60R3947	1.47
ABM8G-13.000MHZ-18-D2Y-T	13	± 20ppm	18	60R3950	1.74
ABM8G-13.000MHZ-B4Y-T	13	± 30ppm	10	60R3949	1.47
ABM8G-13.560MHZ-18-D2Y-T	13.56	± 20ppm	18	60R3952	1.74
ABM8G-13.560MHZ-B4Y-T	13.56	± 30ppm	10	60R3951	1.47
ABM8G-14.31818MHZ-18-D2Y-T	14.31818	± 20ppm	18	60R3954	1.74
ABM8G-14.31818MHZ-B4Y-T	14.31818	± 30ppm	10	60R3953	1.47
ABM8G-14.7456MHZ-18-D2Y-T	14.7456	± 20ppm	18	60R3956	1.84
ABM8G-14.7456MHZ-B4Y-T	14.7456	± 30ppm	10	60R3955	1.47
ABM8G-16.000MHZ-18-D2Y-T	16	± 20ppm	18	60R3958	1.84
ABM8G-16.000MHZ-B4Y-T	16	± 30ppm	10	60R3957	1.58
ABM8G-16.384MHZ-18-D2Y-T	16.384	± 20ppm	18	60R3960	1.74
ABM8G-16.384MHZ-B4Y-T	16.384	± 30ppm	10	60R3959	1.47
ABM8G-18-.432MHZ-18-D2Y-T	18.432	± 20ppm	18	60R3962	1.87
ABM8G-18.432MHZ-B4Y-T	18.432	± 30ppm	10	60R3961	1.47

➤ CONTINUED ➤

AMB8 SERIES CERAMIC SMD ULTRA MINIATURE CRYSTAL (CONT.)

Mfg. Part No.	Freq. (MHz)	Freq. Tol.	Load Cap. (pF)	Stock No.	Price Each 1-9
ABM8G-19.6608MHZ-18-D2Y-T	19.6608	± 20ppm	18	60R3964	0.65
ABM8G-19.6608MHZ-B4Y-T	19.6608	± 30ppm	10	60R3963	1.47
ABM8G-20.000MHZ-18-D2Y-T	20	± 20ppm	18	60R3966	1.87
ABM8G-20.000MHZ-B4Y-T	20	± 30ppm	10	60R3965	1.47
ABM8G-22.1184MHZ-18-D2Y-T	22.1184	± 20ppm	18	60R3968	1.74
ABM8G-22.1184MHZ-B4Y-T	22.1184	± 30ppm	10	60R3967	1.47
ABM8G-24.000MHZ-18-D2Y-T	24	± 20ppm	18	60R3970	1.84
ABM8G-24.000MHZ-B4Y-T	24	± 30ppm	10	60R3969	1.58
ABM8G-24.576MHZ-18-D2Y-T	24.576	± 20ppm	18	60R3972	1.87
ABM8G-24.576MHZ-B4Y-T	24.576	± 30ppm	10	60R3971	1.47
ABM8G-25.000MHZ-18-D2Y-T	25	± 20ppm	18	60R3974	1.84
ABM8G-25.000MHZ-B4Y-T	25	± 30ppm	10	60R3973	1.58
ABM8G-26.000MHZ-18-D2Y-T	26	± 20ppm	18	60R3976	1.87
ABM8G-26.000MHZ-B4Y-T	26	± 30ppm	10	60R3975	1.47
ABM8G-27.000MHZ-18-D2Y-T	27	± 20ppm	18	60R3978	1.87
ABM8G-27.000MHZ-B4Y-T	27	± 30ppm	10	60R3977	1.47
ABM8G-28.63636MHZ-18-D2Y-T	28.63636	± 20ppm	18	60R3980	1.87
ABM8G-28.63636MHZ-B4Y-T	28.63636	± 30ppm	10	60R3979	1.47
ABM8G-30.000MHZ-18-D2Y-T	30	± 20ppm	18	60R3982	1.74
ABM8G-30.000MHZ-B4Y-T	30	± 30ppm	10	60R3981	1.47
ABM8G-32.000MHZ-B4Y-T	32	± 30ppm	10	60R3983	1.47
ABM8G-33.000MHZ-18-D2Y-T	33	± 20ppm	18	60R3985	1.74
ABM8G-33.000MHZ-B4Y-T	33	± 30ppm	10	60R3984	1.47
ABM8G-40.000MHZ-18-D2Y-T	40	± 20ppm	18	60R3987	1.74
ABM8G-40.000MHZ-B4Y-T	40	± 30ppm	10	60R3986	1.47
ABM8G-48.000MHZ-18-D2Y-T	48	± 20ppm	18	60R3989	1.74
ABM8G-48.000MHZ-B4Y-T	48	± 30ppm	10	60R3988	1.47

(175931)

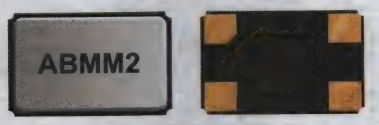
ABMM2 SERIES CERAMIC LOW PROFILE HIGH PRECISION SURFACE MOUNT CRYSTALS

RoHS Compliant Available

ABRACON CORPORATION

Features
- Low in height
- Tight tolerance and stability
- Seam welded ceramic package
- Suitable for solder reflow
- ±50 ppm Frequency Tolerance

Applications
- PCMCIA applications
- Suitable for thin equipment



Mfg. Part No.	Freq. (MHz)	ESR (Ω)	Load Cap. (pF)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape & Reel Reel Qty. 500 Stock No.	Tape & Reel Price Each 1-999
ABMM2-8.000MHZ-E2-T	8	50	18	13J1707	1.47	95J9864	0.56
ABMM2-10.000MHZ-E2-T	10	50	18	13J1693	1.44	95J9850	0.61
ABMM2-25.000MHZ-E2-T	25	50	18	13J1704	1.44	95J9861	0.61

(83073)

ABM3B ULTRA MINIATURE CERAMIC SURFACE MOUNT MICROPROCESSOR CRYSTALS

RoHS Compliant Available

ABRACON CORPORATION

Features
- Suitable for reflow
- Ceramic package and metal lid assures high precision and reliability
- Seam sealing
- ±50 ppm Frequency Tolerance

Applications
- Cellular telephones, pagers
- Communication and test equipment
- High density applications
- PCMCIA and wireless applications

Mfg. Part No.	Freq. (MHz)	ESR (Ω)	Load Cap. (pF)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape & Reel Reel Qty. 500 Stock No.	Tape & Reel Price Each 1-999
ABM3B-20.000MHZ-B2-T	20	50	18	13J1742	1.59	95J9899	0.67
ABM3B-25.000MHZ-B2-T	25	50	18	13J1745	1.64	95J9902	0.70

(83070)

CRYSTALS – CERAMIC SMD

32.768 KHz CERAMIC SMD CRYSTALS

RoHS Compliant Available

CITIZEN

CM415 CM519

Features
- Ultra-miniature size: Ideal for high-density circuit boards
- Environmental and heat resistant

Used as a clock source for communications equipment, AV equipment, OA equipment, cameras, cellular phones, pagers and measuring instruments.

Mfg. Part No.	ESR (kΩ)	Load Cap. (pF)	Freq. Tol.	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape & Reel Reel Qty. 3000 Stock No.	Tape & Reel Price Each 1-2999
● CM315D-32.768KDZF-UT	70	12.5	± 20ppm	60M5579	2.13	59K7839	0.52
● CM415 32.768KDZF-UT	70	12.5	± 20ppm	13J2287	2.80	96J0143	0.69
● CM519 32.768KDZF-UT	70	12.5	± 20ppm	57J2596	1.98	21K4793	0.49

(83012)

FX252B SERIES CERAMIC SMD CRYSTAL

RoHS Compliant Available

FOX

Features:
- Ultra Low Profile
- Fundamental
- Seam Sealed

Mfg. Part No.	Freq. (MHz)	Freq. Tol.	Tape Cut Stock No.	Tape Cut Price Each 1-24
● FX252BS-16.000	16	± 50ppm	61T5429	2.98
● FX252BS-24.000	24	± 50ppm	61T5430	2.98

(197171)

AA SERIES SMD GLASS SEALING CRYSTALS

RoHS Compliant Available

TXC

Features:
- Compact glass sealed SMD crystal units
- Wide operating temperature range
- Superior and reliable performance in harsh environment
- Contain Pb in sealing glass exempted by RoHS directive

Specifications:
- Dimensions: 5.0 x 3.2 x 1.2mm
- Frequency range: 8 to 48MHz
- Overtone: Fundamental
- Operating temperature: -40°C to +125°C

Mfg. Part No.	Frequency (MHz)	Frequency Tol.	Frequency Stability	Load Cap. (pf)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● AA-8.000MALV-T	8	± 30ppm	± 50ppm	8	05W6195	1.19
● AA-8.192MAGV-T	8.192	± 30ppm	± 50ppm	8	05W6196	1.11
● AA-9.84375MALE-T	9.84375	± 30ppm	± 50ppm	12	05W6197	1.11
● AA-10.000MAGY-T	10	± 30ppm	± 50ppm	7	05W6183	1.11
● AA-12.000MAGE-T	12	± 30ppm	± 50ppm	12	05W6184	1.11
● AA-12.288MAGV-T	12.288	± 30ppm	± 50ppm	8	05W6185	1.11
● AA-13.560MAGE-T	13.56	± 30ppm	± 50ppm	12	05W6186	1.11
● AA-14.31818MAGD-T	14.31818	± 30ppm	± 50ppm	11	05W6187	1.11
● AA-16.000MALE-T	16	± 30ppm	± 50ppm	12	05W6188	1.19
● AA-20.000MAGE-T	20	± 30ppm	± 50ppm	12	05W6189	1.19
● AA-25.000MALE-T	25	± 30ppm	± 50ppm	12	05W6190	1.19
● AA-27.000MAGK-T	27	± 30ppm	± 50ppm	20	05W6191	1.11
● AA-28.63636MAGK-T	28.63636	± 30ppm	± 50ppm	20	05W6192	1.11
● AA-37.050MAGV-T	37.05	± 30ppm	± 50ppm	8	05W6193	1.11
● AA-48.000MAGE-T	48	± 30ppm	± 50ppm	12	05W6194	1.11

(207645)

AB SERIES SMD SEAM SEALING CRYSTALS

RoHS Compliant Available

TXC

Features:
- Reliable seam sealed ceramic package
- Wide operating temperature range
- Superior and relaible performance in harsh environments
- Applications: TPMS, ECM, ABS and sensor modules

Specifications:
- Dimensions: 5.0 x 3.2 x 0.9mm
- Frequency range: 9.5 to 40MHz
- Overtone: Fundamental
- Operating temperature: -40°C to +125°C

Mfg. Part No.	Frequency (MHz)	Frequency Tol.	Frequency Stability	Load Cap. (pf)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● AB-10.000MALE-T	10	± 30ppm	± 50ppm	12	05W6198	1.23
● AB-11.0592MAGQ-T	11.0592	± 30ppm	± 50ppm	10	05W6199	1.23

➤ CONTINUED ➤

AB SERIES SMD SEAM SEALING CRYSTALS (CONT.)

Mfg. Part No.	Frequency (MHz)	Frequency Tol.	Frequency Stability	Load Cap. (pf)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● AB-12.000MALE-T	12	± 30ppm	± 50ppm	12	05W6200	1.23
● AB-13.225625MAGE-T	13.225625	± 30ppm	± 50ppm	12	05W6201	1.32
● AB-13.560MAGE-T	13.56	± 30ppm	± 50ppm	12	05W6202	1.23
● AB-13.560MALE-T	13.56	± 30ppm	± 50ppm	12	05W6203	1.23
● AB-14.31818MALE-T	14.31818	± 30ppm	± 50ppm	12	05W6204	1.23
● AB-15.360MAGE-T	15.36	± 30ppm	± 50ppm	12	05W6205	1.23
● AB-16.000MAGE-T	16	± 30ppm	± 50ppm	12	05W6206	1.32
● AB-16.000MALE-T	16	± 30ppm	± 50ppm	12	05W6207	1.32
● AB-18.000MAGH-T	18	± 30ppm	± 50ppm	15	05W6208	1.23
● AB-18.432MAGE-T	18.432	± 30ppm	± 50ppm	12	05W6209	1.23
● AB-19.680MALE-T	19.68	± 30ppm	± 50ppm	12	05W6210	1.23
● AB-20.000MAGE-T	20	± 30ppm	± 50ppm	12	05W6211	1.23
● AB-24.000MAGE-T	24	± 30ppm	± 50ppm	12	05W6212	1.23
● AB-24.576MAGQ-T	24.576	± 30ppm	± 50ppm	10	05W6213	1.23
● AB-25.000MAGE-T	25	± 30ppm	± 50ppm	12	05W6214	1.32
● AB-26.000MAGE-T	26	± 30ppm	± 50ppm	12	05W6215	1.23
● AB-27.000MAGE-T	27	± 30ppm	± 50ppm	12	05W6216	1.23
● AB-37.500MAGE-T	37.5	± 30ppm	± 50ppm	12	05W6217	1.23

(207647)

AM SERIES SMD SEAM SEALING CRYSTALS

RoHS Compliant Available

TXC

Features:
- Reliable seam sealed ceramic package
- Wide operating termperature range
- Superior performance and stringent reliability in hearsh environment
- Ideal for TPMS, ECM, ABS and sensor module applications
- Compact size

Specifications:
- Dimensions: 3.2 x 2.5 x 0.7mm
- Frequency range: 10 to 48MHz
- Overtone: Fundamental
- Operating temperature: -40°C to +85°C

Mfg. Part No.	Frequency (MHz)	Frequency Tol.	Frequency Stability	Load Cap. (pf)	Tape Cut Stock No.	Tape Cut Price Each 1-49
● AM-11.2896MAGQ-T	11.2896	± 30ppm	± 50ppm	10	05W6228	1.67
● AM-12.000MAGE-T	12	± 30ppm	± 50ppm	12	05W6229	1.77
● AM-13.560MAGE-T	13.56	± 30ppm	± 50ppm	12	05W6230	1.67
● AM-14.31818MAGQ-T	14.31818	± 30ppm	± 50ppm	10	05W6231	1.67
● AM-16.000MAGE-T	16	± 30ppm	± 50ppm	12	05W6232	1.80
● AM-16.000MALE-T	16	± 30ppm	± 50ppm	12	05W6233	1.80
● AM-16.9344MAGV-T	16.9344	± 30ppm	± 50ppm	8	05W6234	1.67
● AM-18.080MALV-T	18.08	± 30ppm	± 50ppm	8	05W6235	1.67
● AM-18.432MAGQ-T	18.432	± 30ppm	± 50ppm	10	05W6236	1.67
● AM-20.000MAGE-T	20	± 30ppm	± 50ppm	12	05W6237	1.67
● AM-24.000MAGE-T	24	± 30ppm	± 50ppm	12	05W6238	1.80
● AM-24.576MAGE-T	24.576	± 30ppm	± 50ppm	12	05W6239	1.67
● AM-26.000MAGE-T	26	± 30ppm	± 50ppm	12	05W6240	1.67
● AM-27.000MAGE-T	27	± 30ppm	± 50ppm	12	05W6241	1.67
● AM-28.224MAGQ-T	28.224	± 30ppm	± 50ppm	10	05W6242	1.67
● AM-28.63636MAGK-T	28.63636	± 30ppm	± 50ppm	20	05W6243	1.80
● AM-30.000MAGE-T	30	± 30ppm	± 50ppm	12	05W6244	1.67
● AM-33.333MAGV-T	33.333	± 30ppm	± 50ppm	8	05W6245	1.67
● AM-40.000MAGE-T	40	± 30ppm	± 50ppm	12	05W6246	1.67
● AM-48.000MAGE-T	48	± 30ppm	± 50ppm	12	05W6247	1.67

(207650)

AT SERIES SMD HC-49S METAL CAN TYPE CRYSTALS

RoHS Compliant Available

TXC

Features:
- Surface mount type crystal units
- Wide operating temperature range
- Superior and reliable performance in harsh environment
- Metal Can HC-49S

Specifications:
- Dimensions: 12.5 x 4.8 x 3.8mm
- Frequency range: 1 to 106.25MHz
- Overtone: Fundamental
- Operating temperature: -40°C to +85°C

Mfg. Part No.	Frequency (MHz)	Frequency Tol.	Frequency Stability	Load Cap. (pf)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● AT-4.000MAGE-T	4	± 30ppm	± 50ppm	12	05W6282	0.73
● AT-5.000MAGE-T	5	± 30ppm	± 50ppm	12	05W6284	0.73
● AT-6.000MAGB-T	6	± 30ppm	± 50ppm	8.5	05W6285	0.68
● AT-8.000MAGK-T	8	± 30ppm	± 50ppm	20	05W6286	0.73
● AT-10.000MAGI-T	10	± 30ppm	± 50ppm	16	05W6262	0.68
● AT-11.0592MAGK-T	11.0592	± 30ppm	± 50ppm	20	05W6263	0.68
● AT-11.2896MAGK-T	11.2896	± 30ppm	± 50ppm	20	05W6264	0.68
● AT-12.000MAGK-T	12	± 30ppm	± 50ppm	20	05W6265	0.73

➤ CONTINUED ➤

AT SERIES SMD HC-49S METAL CAN TYPE CRYSTALS (CONT.)

Mfg. Part No.	Frequency (MHz)	Tol.	Stability	Load Cap. (pf)	Tape Cut Stock No.	Price Each 1-9
AT-12.288MAGE-T	12.288	± 30ppm	± 50ppm	12	05W6266	0.68
AT-13.225625MAGE-T	13.225625	± 30ppm	± 50ppm	12	05W6267	0.68
AT-13.560MAGE-T	13.56	± 30ppm	± 50ppm	12	05W6268	0.73
AT-14.31818MAGE-T	14.31818	± 30ppm	± 50ppm	12	05W6269	0.68
AT-16.000MAGE-T	16	± 30ppm	± 50ppm	12	05W6270	0.73
AT-16.9344MAGE-T	16.9344	± 30ppm	± 50ppm	12	05W6271	0.68
AT-18.432MAGQ-T	18.432	± 30ppm	± 50ppm	10	05W6272	0.68
AT-20.000MAGE-T	20	± 30ppm	± 50ppm	12	05W6273	0.73
AT-20.500MAGQ-T	20.5	± 30ppm	± 50ppm	10	05W6274	0.73
AT-24.000MAGE-T	24	± 30ppm	± 50ppm	12	05W6275	0.73
AT-24.576MAGK-T	24.576	± 30ppm	± 50ppm	20	05W6276	0.73
AT-27.000MAGK-T	27	± 30ppm	± 50ppm	20	05W6277	0.68
AT-28.63636MAGE-T	28.63636	± 30ppm	± 50ppm	12	05W6278	0.68
AT-33.8688MAGQ-T	33.8688	± 30ppm	± 50ppm	10	05W6280	0.73
AT-37.050MAGV-T	37.05	± 30ppm	± 50ppm	8	05W6281	0.73
AT-41.600MAGQ-T	41.6	± 30ppm	± 50ppm	10	05W6283	0.68

(207652)

AX SERIES SMD GLASS SEALED CERAMIC CRYSTALS

RoHS Compliant Available

TXC

Features:
- Reliable glass sealed ceramic package
- Wde operating temperature range
- Superior and reliable performance in harsh environment
- Ideal for TPMS, ECM, ABS and sensor module applications

Specifications:
- Dimensions: 8 x 4.5 x 1.5mm
- Frequency range: 8 to 40MHz
- Overtone: Fundamental
- Operating temperature: -40°C to +85°C

Mfg. Part No.	Frequency (MHz)	Tol.	Stability	Load Cap. (pf)	Tape Cut Stock No.	Price Each 1-9
AX-9.84375MAGV-T	9.84375	± 30ppm	± 50ppm	8	05W6332	1.01
AX-10.000MALV-T	10	± 30ppm	± 50ppm	8	05W6320	1.09
AX-12.000MAGV-T	12	± 30ppm	± 50ppm	8	05W6321	1.01
AX-12.288MAGV-T	12.288	± 30ppm	± 50ppm	8	05W6322	1.09
AX-13.560MALE-T	13.56	± 30ppm	± 50ppm	12	05W6323	1.01
AX-16.000MAGV-T	16	± 30ppm	± 50ppm	8	05W6324	1.09
AX-16.9344MAGV-T	16.9344	± 30ppm	± 50ppm	8	05W6325	1.01
AX-20.000MAGE-T	20	± 30ppm	± 50ppm	12	05W6326	1.01
AX-24.576MAGV-T	24.576	± 30ppm	± 50ppm	8	05W6327	1.01
AX-28.224MAGQ-T	28.224	± 30ppm	± 50ppm	10	05W6328	1.01
AX-28.63636MAGV-T	28.63636	± 30ppm	± 50ppm	8	05W6329	1.01

(207657)

CM309S SERIES MHz RANGE PLASTIC SMD CRYSTALS

RoHS Compliant Available

CITIZEN

Features
- High efficiency mounting ideal for high density circuit boards
- Heat-resisting packaged cylinder-type AT-cut crystal
- Reflowable

For use in communications equipment, AV equipment, OA equipment and measuring instruments. Shunt capacitance: 7 pF. Frequency Tolerance ±30 ppm

MHz RANGE PLASTIC SMD CRYSTALS

Mfg. Part No.	Freq. (MHz)	ESR (Ω)	Load Cap. (pF)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape & Reel Reel Qty. 1000 Stock No.	Tape & Reel Price Each 1-999
CM309S7.3728MABJ-UT	7.3728	100	18	60K8246	1.37	59K7833	0.57
CM309S8.000MABJ-UT	8	100	18	60K8247	1.45	59K7835	0.60
CM309S25.000MABJ-UT	25	50	18	60K8234	1.45	59K7811	0.60

(83021)

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(196525)

FPXLF SERIES PLASTIC ENCASED SMD CRYSTALS

RoHS Compliant Available

FOX

Features:
- Stocking Standard
- Plastic Encapsulated

Mfg. Part No.	Freq. (MHz)	Freq. Tol. (ppm)	Load Cap. (pF)	Tape Cut Stock No.	Price Each 1-24
FPXLF0368-20	3.6864	± 50ppm	20	61T5334	1.51
FPXLF0368S	3.6864	± 50ppm	...	61T5335	1.51
FPXLF036S	3.579545	± 50ppm	18	61T5333	1.50
FPXLF040	4	± 50ppm	20	61T5336	1.51
FPXLF049-20	4.9152	± 50ppm	20	61T5337	1.51
FPXLF073-20	7.3728	± 50ppm	20	61T5338	1.51
FPXLF080-20	8	± 50ppm	20	61T5339	1.52
FPXLF100-20	10	± 50ppm	20	61T5340	1.51
FPXLF115-20	11.0592	± 50ppm	20	61T5341	1.51
FPXLF143-20	14.31818	± 50ppm	20	61T5343	1.51
FPXLF147-20	14.7456	± 50ppm	20	61T5344	1.50
FPXLF160-20	16	± 50ppm	20	61T5345	1.51
FPXLF184-20	18.432	± 50ppm	20	61T5346	1.52
FPXLF200-20	20	± 50ppm	20	61T5347	1.52
FPXLF240F-20	24	± 50ppm	20	61T5348	1.42
FPXLF250F-20	25	± 50ppm	20	61T5349	1.51

(197173)

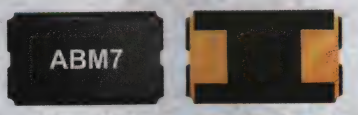
ABM7 SERIES MICROPROCESSOR CRYSTALS

RoHS Compliant Available

ABRACON CORPORATION

Features
- Low in height (1.3mm max)
- Ceramic package assures high reliability
- Small size SMD, suitable for high density applications
- Frequency Tolerance ±50 ppm

Applications
- Computers, modems, communication equipment
- Thin equipment



Mfg. Part No.	Freq. (MHz)	Freq. Tol.	ESR (Ω)	Load Cap. (pF)	Stock No.	Price Each 1-9
ABM7-10.0000MHZ-D2Y-T	10	± 20ppm	60	18	67P3836	1.24
ABM7-11.0592MHZ-D2Y-T	11.0592	± 20ppm	60	18	67P3837	1.26
ABM7-11.2896MHZ-D2Y-T	11.2896	± 20ppm	60	18	67P3838	1.17
ABM7-12.000MHZ-D2Y-T	12	± 20ppm	60	18	67P3839	1.29
ABM7-12.288MHZ-D2Y-T	12.288	± 20ppm	60	18	67P3840	1.26
ABM7-14.31818MHZ-D2Y-T	14.31818	± 20ppm	60	18	67P3841	1.17
ABM7-14.7456MHZ-D2Y-T	14.7456	± 20ppm	60	18	67P3842	1.26
ABM7-16.000MHZ-D2Y-T	16	± 20ppm	50	18	67P3843	1.29
ABM7-18.432MHZ-D2Y-T	18.432	± 20ppm	50	18	67P3844	1.24
ABM7-19.6608MHZ-D2Y-T	19.6608	± 20ppm	50	18	67P3845	1.17
ABM7-20.000MHZ-D2Y-T	20	± 20ppm	50	18	67P3846	1.24
ABM7-22.1184MHZ-D2Y-T	22.1184	± 20ppm	50	18	67P3847	1.26
ABM7-24.000MHZ-D2Y-T	24	± 20ppm	50	18	67P3848	1.29
ABM7-24.576MHZ-D2Y-T	24.576	± 20ppm	50	18	67P3849	1.17
ABM7-25.000MHZ-D2Y-T	25	± 20ppm		18	67P3850	1.27
ABM7-27.000MHZ-D2Y-T	27	± 20ppm	50	18	67P3851	1.24
ABM7-30.000MHZ-D2Y-T	30	± 20ppm	50	18	67P3852	1.26
ABM7-32.000MHZ-D2Y-T	32	± 20ppm	50	18	67P3853	1.17
ABM7-33.000MHZ-D2Y-T	33	± 20ppm	50	18	67P3854	1.17
ABM7-40.000MHZ-D2Y-F-T	40	± 20ppm	50	18	67P3855	1.17
ABM7-48.000MHZ-D2Y-F-T	48	± 20ppm	50	18	67P3856	1.24
ABM7-50.000MHZ-D2Y-F-T	50	± 20ppm	50	18	67P3857	1.67
ABM7-8.000MHZ-D2Y-T	8	± 20ppm	80	18	67P3858	1.29
ABM7-9.8304MHZ-D2Y-T	9.8304	± 20ppm	80	18	67P3859	1.26

(148544)

CRYSTALS – MICROPROCESSOR SMD

ABLS2 SERIES LOW PROFILE SURFACE MOUNT MICROPROCESSOR CRYSTALS

RoHS Compliant Available

ABRACON CORPORATION

Features
- High reliability
- Tight stability and extended temperature
- Reflow capable

Specifications
- Operating temperature: 0°C to +70°C
- Frequency stability: ±50 ppm
- Load capacitance: 18 pF
- Shunt capacitance: 7 pF

Applications
- Wireless applications
- Computers, modems, communications
- Automotive and industrial
- Hi-precision TCXO and clock applications

Mfg. Part No.	Freq. (MHz)	Load Cap. (pF)	Stock No.	Price Each 1-9
● ABLS2-10.000MHZ-D4Y-T	10	18	67P3783	0.71
● ABLS2-11.0592MHZ-D4Y-T	11.0592	18	67P3784	0.71
● ABLS2-12.000MHZ-D4Y-T	12	18	67P3785	0.75
● ABLS2-12.288MHZ-D4Y-T	12.288	18	67P3786	0.71
● ABLS2-13.000MHZ-D4Y-T	13	18	67P3787	0.76
● ABLS2-14.31818MHZ-D4Y-T	14.31818	18	67P3788	0.71
● ABLS2-14.7456MHZ-D4Y-T	14.7456	18	67P3789	0.76
● ABLS2-15.000MHZ-D4Y-T	15	18	67P3790	0.71
● ABLS2-16.000MHZ-D4Y-T	16	18	67P3791	0.76
● ABLS2-16.384MHZ-D4Y-T	16.384	18	67P3792	0.71
● ABLS2-18.432MHZ-D4Y-T	18.432	18	67P3793	0.76
● ABLS2-19.6608MHZ-D4Y-T	19.6608	18	67P3794	0.71
● ABLS2-20.000MHZ-D4Y-T	20	18	67P3795	0.71
● ABLS2-22.1184MHZ-D4Y-T	22.1184	18	67P3796	0.76
● ABLS2-24.000MHZ-D4YF-T	24	18	67P3797	0.78
● ABLS2-24.576MHZ-D4YF-T	24.576	18	67P3798	0.73
● ABLS2-25.000MHZ-D4YF-T	25	18	67P3799	0.77
● ABLS2-26.000MHZ-D4YF-T	26	18	67P3800	0.73
● ABLS2-27.000MHZ-D4YF-T	27	18	67P3801	0.73
● ABLS2-29.4912MHZ-D4YF-T	29.4912	18	67P3802	0.73
● ABLS2-3.579545MHZ-D4Y-T	3.579545	18	67P3803	0.71
● ABLS2-3.6864MHZ-D4Y-T	3.6864	18	67P3804	0.76
● ABLS2-30.000MHZ-D4YF-T	30	18	67P3805	0.73
● ABLS2-32.000MHZ-D4YF-T	32	18	67P3806	0.73
● ABLS2-33.000MHZ-D4YF-T	33	18	67P3807	0.73
● ABLS2-36.000MHZ-D4YF-T	36	18	67P3808	0.73
● ABLS2-4.000MHZ-D4Y-T	4	18	67P3809	0.76
● ABLS2-4.096MHZ-D4Y-T	4.096	18	67P3810	0.71
● ABLS2-4.9152MHZ-D4Y-T	4.9152	18	67P3811	0.71
● ABLS2-40.000MHZ-D4YF-T	40	18	67P3812	3.25
● ABLS2-5.000MHZ-D4Y-T	5	18	67P3813	0.71
● ABLS2-6.000MHZ-D4Y-T	6	18	67P3814	0.75
● ABLS2-6.144MHZ-D4Y-T	6.144	18	67P3815	0.76
● ABLS2-7.3728MHZ-D4Y-T	7.3728	18	67P3816	0.71
● ABLS2-8.000MHZ-D4Y-T	8	18	67P3817	0.75
● ABLS2-8.192MHZ-D4Y-T	8.192	18	67P3818	0.71
● ABLS2-9.8304MHZ-D4Y-T	9.8304	18	67P3819	0.71

(148546)

ABLS3 SERIES HC/49US (AT49) LOW PROFILE SURFACE MOUNT MICROPROCESSOR CRYSTAL

RoHS Compliant Available

ABRACON CORPORATION

Features
- Low in height
- Suitable for thin equipment
- Glass sealed package
- High reliability and high temperature operation
- Dimensions: 11.5 x 4.8 x 2.5 mm

Applications
- Computers, modems, microprocessors
- Automotive and industrial
- Wireless applications

Mfg. Part No.	Frequency (MHz)	Freq. Tol.	Load Cap. (pF)	Tape Cut Stock No.	Tape Cut Price Each 1-24
● ABLS3-4.000MHZ-D4Y-T	4	± 30ppm	18	39T2602	0.76
● ABLS3-6.144MHZ-D4Y-T	6.144	± 30ppm	18	39T2607	0.72
● ABLS3-8.000MHZ-D4Y-T	8	± 30ppm	18	39T2609	0.78
● ABLS3-12.000MHZ-D4Y-T	12	± 30ppm	18	39T2581	0.78
● ABLS3-16.000MHZ-D4Y-T	16	± 30ppm	18	39T2587	0.72
● ABLS3-18.432MHZ-D4Y-T	18.432	± 30ppm	18	39T2589	0.72
● ABLS3-20.000MHZ-D4Y-T	20	± 30ppm	18	39T2591	0.72
● ABLS3-26.000MHZ-D4YF-T	26	± 30ppm	18	39T2596	0.72
● ABLS3-30.000MHZ-D4YF-T	30	± 30ppm	18	39T2601	0.76

(194872)

ABM3 SERIES ULTRA MINIATURE CERAMIC SURFACE MOUNT MICROPROCESSOR CRYSTALS

RoHS Compliant Available

ABRACON CORPORATION

Features
- Low in height
- High precision crystal
- Compact designs suitable for high density applications
- SMD; suitable for solder reflow
- Superior heat-resistant glass sealing
- Load capacitance: 18 pF

Applications
- Computers, modems, communication, and test equipment
- Thin equipment

Mfg. Part No.	Freq. (MHz)	Freq. Tol.	ESR (Ω)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape & Reel Reel Qty. 500 Stock No.	Tape & Reel Price Each 1-999
● ABM3-8.000MHZ-D2Y-T	8	± 20ppm	500	77R1485	1.73	76R7536	0.73
● ABM3-9.8304MHZ-D2Y-T	9.8304	± 20ppm	200	77R1486	1.58	76R7537	0.67
● ABM3-10.0000MHZ-D2Y-T	10	± 20ppm	60	77R1463	1.67	76R7514	0.71
● ABM3-11.0592MHZ-D2Y-T	11.0592	± 20ppm	60	77R1464	1.69	76R7515	0.72
● ABM3-11.2896MHZ-D2Y-T	11.2896	± 20ppm	60	77R1465	1.58	76R7516	0.67
● ABM3-12.000MHZ-D2Y-T	12	± 20ppm		77R1466	1.67	76R7517	0.71
● ABM3-12.288MHZ-D2Y-T	12.288	± 20ppm	60	77R1467	1.58	76R7518	0.67
● ABM3-13.560MHZ-B2-T	13.56	± 20ppm	60	13J1718	1.61	95J9875	0.68
● ABM3-14.31818MHZ-D2Y-T	14.31818	± 20ppm	60	77R1468	1.58	76R7519	0.67
● ABM3-14.7456MHZ-D2Y-T	14.7456	± 20ppm	60	77R1469	1.58	76R7520	0.67
● ABM3-16.000MHZ-B2-T	16	± 20ppm	50	13J1720	1.59	95J9877	0.67
● ABM3-16.000MHZ-D2Y-T	16	± 20ppm	50	77R1470	1.69	76R7521	0.72
● ABM3-18.432MHZ-D2Y-T	18.432	± 20ppm	50	77R1471	1.58	76R7522	0.67
● ABM3-19.6608MHZ-D2Y-T	19.6608	± 20ppm	50	77R1472	1.58	76R7523	0.67
● ABM3-20.000MHZ-D2Y-T	20	± 20ppm	50	77R1473	1.69	76R7524	0.72
● ABM3-22.1184MHZ-D2Y-T	22.1184	± 20ppm	50	77R1474	1.58	76R7525	0.67
● ABM3-24.000MHZ-D2Y-T	24	± 20ppm	50	77R1475	1.67	76R7526	0.71
● ABM3-24.576MHZ-D2Y-T	24.576	± 20ppm	50	77R1476	1.58	76R7527	0.67
● ABM3-25.000MHZ-B2-T	25	± 20ppm	50	13J1725	1.59	95J9882	0.67
● ABM3-25.000MHZ-D2Y-T	25	± 20ppm	50	77R1477	1.67	76R7528	0.71
● ABM3-27.000MHZ-D2Y-T	27	± 20ppm	50	77R1478	1.58	76R7529	0.67
● ABM3-28.6363MHZ-B2-T	28.6363	± 20ppm	50	13J1727	1.50	95J9884	0.64
● ABM3-30.000MHZ-D2Y-T	30	± 20ppm	50	77R1479	1.58	76R7530	0.67
● ABM3-32.000MHZ-D2Y-T	32	± 20ppm	50	77R1480	1.58	76R7531	0.67
● ABM3-33.000MHZ-D2Y-T	33	± 20ppm	50	77R1481	1.58	76R7532	0.67
● ABM3-40.000MHZ-D2Y-F-T	40	± 20ppm	50	77R1482	1.58	76R7533	0.67
● ABM3-48.000MHZ-D2Y-F-T	48	± 20ppm	50	77R1483	1.58	76R7534	0.67
● ABM3-50.000MHZ-D2Y-F-T	50	± 20ppm	50	77R1484	1.58	76R7535	0.67

(83068)

ABLS SERIES LOW PROFILE SURFACE MOUNT MICROPROCESSOR CRYSTALS

RoHS Compliant Available

ABRACON CORPORATION

Features
- High reliability
- Tight stability and extended temperature
- Reflow capable

Applications
- Wireless applications
- Computers, modems, communications
- Automotive and industrial
- Hi-precision TCXO and clock applications

Specifications
- Operating temperature: 0°C to +70°C
- Frequency stability: ±50 ppm
- Load capacitance: 18 pF
- Shunt capacitance: 7 pF

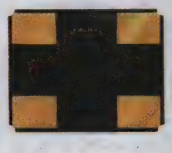
Mfg. Part No.	Freq. (MHz)	ESR (Ω)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape & Reel Reel Qty. 500 Stock No.	Tape & Reel Price Each
● ABLS-3.579545MHZ-B2-T	3.579545	180	13J1667	0.61	95J9823	0.28
● ABLS-4.000MHZ-B2-T	4	180	13J1670	0.60	95J9826	0.28
● ABLS-7.3728MHZ-B2-T	7.3728	100	13J1675	0.60	95J9831	0.20
● ABLS-8.000MHZ-B2-T	8	80	13J1676	0.62	95J9832	0.21
● ABLS-10.000MHZ-B2-T	10	50	13J1652	0.60	95J9808	0.28
● ABLS-11.0592MHZ-B2-T	11.0592	50	13J1653	0.61	95J9809	0.28
● ABLS-12.000MHZ-B2-T	12	50	13J1654	0.62	95J9810	0.29
● ABLS-12.288MHZ-B2-T	12.288	50	13J1655	0.56	95J9811	0.26
● ABLS-14.7456MHZ-B2-T	14.7456	50	13J1657	0.61	95J9813	0.28
● ABLS-16.000MHZ-B2-T	16	40	13J1658	0.60	95J9814	0.21
● ABLS-18.432MHZ-B2-T	18.432	40	13J1659	0.60	95J9815	0.28
● ABLS-22.1184MHZ-B2-T	22.1184	40	13J1662	0.61	95J9818	0.28
● ABLS-24.000MHZ-B2-T	24	40	13J1663	0.60	95J9819	0.28
● ABLS-25.000MHZ-B2F-T	25	40	13J1665	0.62	95J9821	0.21

(83236)

ABM8 ULTRA MINIATURE CERAMIC SURFACE MOUNT MICROPROCESSOR CRYSTALS

RoHS Compliant Available

ABRACON CORPORATION



Features
- Low in height; suitable for thin equipment
- Ceramic package and metal lid assures high reliability
- Tight tolerance and stability available
- High precision crystal, fundamental mode
- Frequency Tolerance ±50 ppm

Applications
- High density applications
- Modems, communication and test equipment
- PMCIA, wireless applications

Mfg. Part No.	Freq. (MHz)	ESR (Ω)	Load Cap. (pF)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape & Reel Reel Qty. 500 Stock No.	Tape & Reel Price Each 1-999
ABM8-16.000MHZ-B2-T	16	100	18	13J1761	2.64	95J9918	0.54
ABM8-20.000MHZ-B2-T	20	80	18	13J1763	2.59	95J9920	0.95
ABM8-24.000MHZ-B2-T	24	80	18	13J1765	2.55	95J9922	0.93
ABM8-25.000MHZ-B2-T	25	80	18	13J1767	2.55	95J9924	0.50

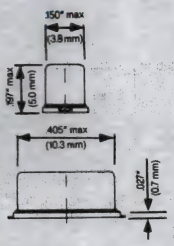
(83071)

LOW PROFILE MICROPROCESSOR CRYSTALS

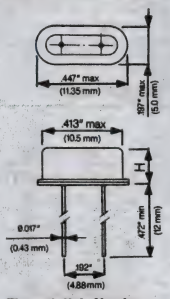
RoHS Compliant Available

RALTRON

Specifications
- Tolerance: ±50 ppm max
- Load capacitance: 18pF
- Stability: ±100 ppm max
- Operating temperature: –20° to +70°C
- TR in type indicates tape and reel



Surface Mount Version



Through Hole Version

SURFACE MOUNT

Mfg. Part No.	Freq. (MHz)	ESR Max. (Ω)	Stock No.	Price Each 1-9	10-99	100-499
AS-14.7456-18SMDT	14.7456	50	96F2759	0.46	0.42	0.37
AS-20.000-18SMDT	20	40	96F2760	0.43	0.39	0.35
THROUGH HOLE						
AS-3.579545-18	3.579545	180	26M8215	0.38	0.35	0.31
AS-3.6864-18	3.6864	150	96B4046	0.41	0.37	0.33
AS-4.000-18	4	130	21M6829	0.41	0.37	0.33
AS-5.000-18	5	100	97H0172	0.38	0.35	0.31
AS-6.000-18	6	80	97H0174	0.34	0.30	0.27
AS-8.000-18	8	60	90B5422	0.41	0.37	0.33
AS-8.192-18	8.192	60	21M6832	0.38	0.35	0.31
AS-10.000-18	10	50	97H0152	0.41	0.37	0.33
AS-11.0592-18	11.0592	50	96F2788	0.41	0.37	0.33
AS-12.000-18	12	50	21M6826	0.41	0.37	0.33
AS-12.288-18	12.288	50	97H0155	0.34	0.30	0.27
AS-16.000-18	16	40	96F2831	0.42	0.38	0.34
AS-20.000-18-FUND	20	40	96F2832	0.41	0.37	0.33
AS-24.000-18-FUND	24	40	96F2833	0.34	0.30	0.27

(4505)

AB SERIES MICROPROCESSOR CRYSTALS

RoHS Compliant Available

ABRACON CORPORATION

Features
- Height (13.5 mm)
- High precision availability
- Resistance welded
- Good for high pullability

Mfg. Part No.	Freq. (MHz)	ESR (Ω)	Freq. Tol.	Load Cap. (pF)	Stock No.	Price Each 1-24
AB-1.8432MHZ-B2	1.8432	750	± 20ppm	18	13J1570	1.46
AB-4.000MHZ-B2	4	100	± 20ppm	18	13J1591	0.57
AB-6.000MHZ-B2	6	40	± 20ppm	18	13J1596	0.57
AB-7.3728MHZ-B2	7.3728	40	± 20ppm	18	13J1597	0.53
AB-10.000MHZ-B2	10	30	± 20ppm	18	13J1571	0.57
AB-12.000MHZ-B2	12	30	± 20ppm	18	13J1573	0.53
AB-14.7456MHZ-B2	14.7456	25	± 20ppm	18	13J1576	0.53
AB-16.000MHZ-B2	16	25	± 20ppm	18	13J1577	0.57

➤CONTINUED➤

AB SERIES MICROPROCESSOR CRYSTALS (CONT.)

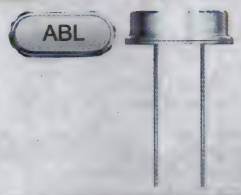
Mfg. Part No.	Freq. (MHz)	ESR (Ω)	Freq. Tol.	Load Cap. (pF)	Stock No.	Price Each 1-24
AB-20.000MHZ-B2	20	25	± 20ppm	18	13J1581	0.57
AB-25.000MHZ-B2F	25	25	± 20ppm	18	13J1585	0.57

(83061)

ABL SERIES MICROPROCESSOR CRYSTALS

RoHS Compliant Available

ABRACON CORPORATION



Features
- High reliability, low cost
- Right stability and extended temperature
- Low profile
- Proven resistance welded metal package

Applications
- Bluetooth and wireless applications
- Computers, modems, communications
- Automotive and industrial
- Hi-precision TCXO and clock applications

Mfg. Part No.	Freq. (MHz)	Freq. Tol.	ESR (Ω)	Load Cap. (pF)	Stock No.	Price Each 1-9
ABL-3.579545MHZ-B2	3.579545	± 20ppm	180	18	13J1639	0.47
ABL-3.6864MHZ-B2	3.6864	± 20ppm	180	18	13J1640	0.47
ABL-4.000MHZ-B2	4	± 20ppm		18	13J1642	0.47
ABL-4.096MHZ-B2	4.096	± 20ppm	180	18	13J1643	0.47
ABL-4.9152MHZ-B2	4.9152	± 20ppm	180	18	13J1644	0.47
ABL-6.000MHZ-B2	6	± 20ppm	100	18	13J1647	0.47
ABL-7.3728MHZ-B2	7.3728	± 20ppm	100	18	13J1648	0.47
ABL-8.000MHZ-B2	8	± 20ppm	80	18	13J1649	0.47
ABL-10.000MHZ-B2	10	± 20ppm	50	18	13J1622	0.47
ABL-11.0592MHZ-B2	11.0592	± 20ppm	50	18	13J1623	0.47
ABL-12.000MHZ-B2	12	± 20ppm	50	18	13J1624	0.47
ABL-14.4756MHZ-B2	14.4756	± 20ppm	50	18	13J1627	0.56
ABL-16.000MHZ-B2	16	± 20ppm	40	18	13J1628	0.47
ABL-16.384MHZ-B2	16.384	± 20ppm	40	18	13J1630	0.44
ABL-18.432MHZ-B2	18.432	± 20ppm	40	18	13J1631	0.44
ABL-19.6608MHZ-B2	19.6608	± 20ppm	40	18	13J1632	0.44
ABL-20.000MHZ-B2	20	± 20ppm	40	18	13J1633	0.48
ABL-22.1184MHZ-B2	22.1184	± 20ppm	40	18	13J1634	0.47
ABL-24.000MHZ-B2	24	± 20ppm	40	18	13J1635	0.47
ABL-25.000MHZ-B2F	25	± 20ppm	40	18	13J1637	0.47
ABL-27.000MHZ-B2F	27	± 20ppm	40	18	13J1638	0.47
ABL-32.000MHZ-B2	32	± 20ppm	40	18	13J1641	0.47
ABL-40.000MHZ-B2	40	± 20ppm	40	18	13J1645	0.47
ABL-48.000MHZ-B2	48	± 20ppm	40	18	13J1646	0.47

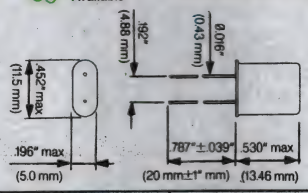
(83065)

STANDARD MICROPROCESSOR CRYSTALS

RoHS Compliant Available

RALTRON

Specifications
- Tolerance: ±50 ppm max.
- Stability: ±100 ppm max.
- Operating temperature: –20° to +70°C.
- Load capacitance: 18 pF. HC49/V packaging.



Mfg. Part No.	Freq. (MHz)	ESR Max. (Ω)	Stock No.	Price Each 1-9	10-99	100-499
A-2.000-18	2	500	21M6819	1.32	1.18	1.06
A-2.4576-18	2.4576	400	21M6820	1.32	1.18	1.06
A-3.579545-18	3.579545	180	96F2798	0.55	0.48	0.44
A-3.6864-18	3.6864	140	96F2799	0.59	0.52	0.47
A-4.000-18	4	80	96F2800	0.60	0.53	0.48
A-4.096-18	4.096	80	18M8538	0.55	0.48	0.44
A-6.000-18	6	50	96F2802	0.55	0.48	0.44
A-6.176-18	6.176	40	97H0009	0.55	0.48	0.44
A-7.3728-18	7.3728	30	96F2794	0.59	0.52	0.47
A-8.000-18	8	30	97F9975	0.58	0.51	0.46
A-10.000-18	10	25	96F2803	0.59	0.52	0.47
A-11.0592-18	11.0592	25	96F2805	0.59	0.52	0.47
A-12.000-18	12	25	18M8536	0.58	0.51	0.46
A-14.31818-18	14.31818	25	21M6816	0.55	0.48	0.44
A-14.7456-18	14.7456	25	96F2809	0.58	0.51	0.46

➤CONTINUED➤

STANDARD MICROPROCESSOR CRYSTALS (CONT.)

Mfg. Part No.	Freq. (MHz)	ESR Max. (Ω)	Stock No.	Price Each 1-9	10-99	100-499
● A-16.000-18	16	25	18M8537	0.58	0.51	0.46
● A-20.000-18-FUND	20	20	96F2812	0.59	0.52	0.47
● A-24.000-18-FUND	24	20	21M6821	0.55	0.48	0.44

(4506)

HC49US SERIES MHz RANGE CRYSTALS

RoHS Compliant Available

CITIZEN

Features
- High performance
- Miniature
- Excellent vibration, shock and environmental resistance

For use in AV equipment, OA equipment, communications equipment and measuring instruments. Shunt capacitance: 7 pF, Frequency Tolerance : ± 30ppm.

MHz RANGE CRYSTALS

Mfg. Part No.	Freq. (MHz)	ESR (Ω)	Load Cap. (pF)	Stock No.	Price Each 1-9	10-49
● HC49US3.6864MABJ-UB	3.6864	200	18	59K8195	0.61	0.54
● HC49US4.000MABJ-UB	4	150	18	59K8197	0.65	0.58
● HC49US4.194304MABJ-UB	4.194304	150	18	59K8199	0.61	0.54
● HC49US4.9152MABJ-UB	4.9152	150	18	59K8200	0.61	0.54
● HC49US5.000MABJ-UB	5	150	18	59K8204	0.65	0.58
● HC49US6.000MABJ-UB	6	100	18	59K8206	0.65	0.58
● HC49US6.144MABJ-UB	6.144	100	18	59K8207	0.65	0.58
● HC49US7.3728MABJ-UB	7.3728	100	18	59K8208	0.61	0.54
● HC49US7.680MABJ-UB	7.68	100	18	59K8209	0.65	0.58
● HC49US8.000MABJ-UB	8	100	18	59K8210	0.64	0.58
● HC49US8.192MABJ-UB	8.192	100	18	59K8211	0.61	0.54
● HC49US9.8304MABJ-UB	9.8304	100	18	59K8212	0.65	0.58
● HC49US10.000MABJ-UB	10	80	18	59K8172	0.65	0.58
● HC49US11.0592MABJ-UB	11.0592	80	18	59K8174	0.65	0.58
● HC49US11.2896MABJ-UB	11.2896	80	18	59K8175	0.61	0.54
● HC49US12.000MABJ-UB	12		18	59K8176	0.65	0.58
● HC49US12.288MABJ-UB	12.288	80	18	59K8177	0.61	0.54
● HC49US13.500MABJ-UB	13.5	80	18	59K8178	0.61	0.54
● HC49US14.31818MABJ-UB	14.31818	50	18	59K8179	0.61	0.54
● HC49US14.7456MBJ-UB	14.7456	50	18	59K8180	0.65	0.58
● HC49US15.000MABJ-UB	15	50	18	59K8181	0.65	0.58
● HC49US15.360MABJ-UB	15.36	50	18	59K8182	0.61	0.54
● HC49US16.000MABJ-UB	16	50	18	59K8183	0.65	0.58
● HC49US16.384MABJ-UB	16.384	50	18	59K8184	0.61	0.54
● HC49US18.432MABJ-UB	18.432	50	18	59K8185	0.61	0.54
● HC49US19.6608MABJ-UB	19.6608	50	18	59K8186	0.61	0.54
● HC49US20.000MABJ-UB	20	50	18	59K8187	0.64	0.58
● HC49US22.1184MABJ-UB	22.1184	50	18	59K8188	0.65	0.58
● HC49US24.000MABJ-UB	24	50	18	59K8189	0.65	0.58
● HC49US24.576MABJ-UB	24.576	50	18	59K8190	0.61	0.54
● HC49US25.000MABJ-UB	25	50	18	59K8191	0.65	0.58
● HC49US27.000MABJ-UB	27	50	18	59K8192	0.61	0.54
● HC49US28.224MABJ-UB	28.224	50	18	59K8193	0.61	0.54
● HC49US32.000MABJ-UB	32	140	18	59K8196	0.61	0.54
● HC49US40.000MABJ-UB	40	100	18	59K8201	0.65	0.58
● HC49US48.000MABJ-UB	48	100	18	59K8202	0.61	0.54
● HC49US50.000MABJ-UB	50	100	18	59K8205	0.61	0.54

(83028)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

CFS SERIES 32.768 KHz CYLINDRICAL CRYSTALS

RoHS Compliant Available

CITIZEN

Features
- Excellent shock resistance
- Low power consumption
- Superior characteristics indigenous to tuning fork-type quartz crystal units

Used as a clock source for communication equipment, AV equipment, OA equipment, measuring instruments and various types of clocks.

KHz CYLINDRICAL CRYSTALS

Mfg. part No.	ESR (kΩ)	Load Cap. (pF)	Shunt Cap. (pF)	Freq. Tol.	Stock No.	Price Each 1-9	10-49
● CFS145 32.768KDZF-UB	40	12.5	1	± 20ppm	59K7602	1.64	1.40
● CFS206 32.768KDZB-UB	35	6	1.35	± 20ppm	59K7603	0.28	0.25
● CFS206-32.768-KDZF-UB	35	12.5	1.35	± 20ppm	53K9029	0.27	0.24

(83013)

XT SERIES QUARTZ CRYSTALS

RoHS Compliant Available

VISHAY

Features:
- Low Profile
- Hermetically Sealed

Specifications:
- Frequency Tolerance: ±50 ppm
- Temperature Stability: ±50 ppm
- Operating temperature: 0°C to +70°C

SERIES RESONANT

Mfg. Part No.	Freq. (MHz)	ESR Max. (Ω)	Stock No.	Price Each 1-9	10-99	100-499
● XT9SNLANA3M579545	3.579545	150	18C1496	0.53	0.44	0.40
● XT9SNLANA4M	4	150	36K3726	0.53	0.44	0.40
● XT9SNLANA8M	8	80	18C1500	0.53	0.44	0.40
● XT9SNLANA10M	10	50	11M1752	0.53	0.44	0.40
● XT9SNLANA11M0592	11.0592	50	16C8138	0.53	0.44	0.40
● XT9SNLANA16M	16	40	16C8140	0.48	0.40	0.36
20 pF PARALLEL LOAD						
● XT9S20ANA3M6864	3.6864	150	18C1484	0.53	0.44	0.40
● XT9S20ANA4M	4	150	18C1488	0.53	0.44	0.40
● XT9S20ANA8M	8	80	18C1490	0.47	0.39	0.36
● XT9S20ANA10M	10	50	18C1475	0.53	0.44	0.40
● XT9S20ANA20M	20	40	18C1482	0.45	0.37	0.34

(49174)

THROUGH HOLE CRYSTALS MODEL HC49SLF

RoHS Compliant Available

FOX

Features:
- Stocking Standard
- Fundamental to 40 MHz
- Resistance Weld

Mfg. Part No.	Freq. (MHz)	Freq. Tol.	Load Cap. (pF)	Tape Cut Stock No.	Price Each 1-24
● FOXSLF/0368-20	3.6864	± 30ppm	20	58T1812	0.62
● FOXSLF/0368S	3.6864	± 30ppm	Series	58T1813	2.47
● FOXSLF/036S	3.579545	± 30ppm	18	58T1811	0.62
● FOXSLF/040	4	± 30ppm	20	58T1814	0.62
● FOXSLF/049-20	4.9152	± 30ppm	20	61T5313	0.58
● FOXSLF049-20	4.9152	± 30ppm	20	61T5323	0.58
● FOXSLF/0496-20	4.096	± 30ppm	20	61T5314	0.58
● FOXSLF/073-20	7.3728	± 30ppm	20	58T1816	0.81
● FOXSLF/080-20	8	± 30ppm	20	58T1818	0.61
● FOXSLF/098-20	9.8304	± 30ppm	20	61T5315	0.62
● FOXSLF/100-20	10	± 30ppm	20	58T1819	0.62
● FOXSLF/111-20	11	± 30ppm	20	61T5316	0.58
● FOXSLF/115-20	11.0592	± 30ppm	20	58T1821	0.62
● FOXSLF/120-20	12	± 30ppm	20	58T1823	0.62
● FOXSLF/128-20	12.288	± 30ppm	20	61T5317	0.58
● FOXSLF/143-20	14.31818	± 30ppm	20	61T5318	0.58
● FOXSLF/147-20	14.7456	± 30ppm	20	58T1824	2.47
● FOXSLF/160-20	16	± 30ppm	20	58T1826	0.62

➤CONTINUED➤

THROUGH HOLE CRYSTALS MODEL HC49SLF (CONT.)

Mfg. Part No.	Freq. (MHz)	Freq. Tol.	Load Cap. (pF)	Tape Cut Stock No.	Tape Cut Price Each 1-24
FOXSLF/184-20	18.432	± 30ppm	20	58T1827	0.81
FOXSLF/196-20	19.6608	± 30ppm	20	61T5319	0.58
FOXSLF/200-20	20	± 30ppm	20	58T1829	0.53
FOXSLF/221-20	22.1184	± 30ppm	20	61T5320	0.62
FOXSLF/240F-20	24	± 30ppm	20	61T5321	0.49
FOXSLF/245F-20	24.576	± 30ppm	20	61T5322	0.58
FOXSLF/250F-20	25	± 30ppm	20	58T1830	0.62

(197174)

RESISTANCE WELD THROUGH HOLE CRYSTALS

RoHS Compliant Available

FOX

Features:
- Model - HC49ULF
- High Frequency Range
- Fundamental to 40 MHz
- Resistance Weld

Mfg. Part No.	Freq. (MHz)	Freq. Tol.	Load Cap. (pF)	Tape Cut Stock No.	Tape Cut Price Each 1-24
FOXLF018S	1.8432	± 30ppm	13	58T1785	1.73
FOXLF024S	2.4576	± 30ppm	32	58T1786	1.77
FOXLF0368-20	3.6864	± 30ppm	20	58T0666	0.70
FOXLF0368S	3.6864	± 30ppm	Series	58T0667	0.70
FOXLF036S	3.579545	± 30ppm	18	58T0665	0.70
FOXLF040	4	± 30ppm	20	58T0668	1.01
FOXLF049	4.9152	± 30ppm	Series	61T5280	0.58
FOXLF060	6	± 30ppm	Series	61T5282	0.54
FOXLF073-20	7.3728	± 30ppm	20	61T5283	0.54
FOXLF080-20	8	± 30ppm	20	58T0670	1.01
FOXLF098-20	9.8304	± 30ppm	20	61T5284	0.54
FOXLF100-20	10	± 30ppm	20	58T0671	0.69
FOXLF115-20	11.0592	± 30ppm	20	58T0673	0.74
FOXLF120-20	12	± 30ppm	20	58T0675	1.01
FOXLF143-20	14.31818	± 30ppm	20	61T5285	0.58
FOXLF147-20	14.7456	± 30ppm	20	61T5286	0.54
FOXLF160-20	16	± 30ppm	20	58T0677	0.69
FOXLF184-20	18.432	± 30ppm	20	61T5287	0.54
FOXLF196-20	19.661	± 30ppm	20	61T5288	0.54
FOXLF200-20	20	± 30ppm	20	58T0678	0.74
FOXLF240F-20	24	± 30ppm	20	61T5289	0.58
FOXLF250F-20	25	± 30ppm	20	58T0679	0.69

(197375)

AS SERIES THROUGH HOLE METAL CAN TYPE CRYSTALS

RoHS Compliant Available

TXC

Specifications:
- Dimensions: 2.5 x 2 x 0.8mm
- Frequency range: 4 to 54MHz
- Overtone: Fundamental
- Operating temperature: -40°C to +85°C

Features:
- Wide operating temperature range
- Superior and reliable performance in harsh environment
- Metal Can HC-49S

Mfg. Part No.	Frequency (MHz)	Frequency Tol.	Frequency Stability	Load Cap. (pf)	Tape Cut Stock No.	Tape Cut Price Each 1-9
AS-3.579545MAHE-B	3.579545	± 30ppm	± 30ppm	12	05W6258	0.66
AS-4.000MAHK-B	4	± 30ppm	± 30ppm	20	05W6259	0.66
AS-4.194304MAHE-B	4.194304	± 30ppm	± 30ppm	12	05W6260	0.66
AS-8.000MAHK-B	8	± 30ppm	± 30ppm	20	05W6261	0.66
AS-10.000MAHI-B	10	± 30ppm	± 30ppm	16	05W6249	0.62
AS-11.2896MAHK-B	11.2896	± 30ppm	± 30ppm	20	05W6250	0.62
AS-13.225625MAHK-B	13.225625	± 30ppm	± 30ppm	20	05W6251	0.62
AS-13.560MAHE-B	13.56	± 30ppm	± 30ppm	12	05W6252	0.66
AS-14.31818MAHI-B	14.31818	± 30ppm	± 30ppm	16	05W6253	0.62
AS-16.000MAHK-B	16	± 30ppm	± 30ppm	20	05W6254	0.66
AS-16.9344MAHH-B	16.9344	± 30ppm	± 30ppm	15	05W6255	0.62
AS-20.500MAHQ-B	20.5	± 30ppm	± 30ppm	10	05W6256	0.62
AS-28.63636MAHE-B	28.63636	± 30ppm	± 30ppm	12	05W6257	0.62

(207651)

QUARTZ CRYSTAL - 9B SERIES

RoHS Compliant Available

TXC

Features
- Resistance welded type crystal units
- A great number of standard frequencies
- Higher frequency pullibility and lower equivalent series resistance

Applications
- TV
- STB
- LCDM
- Cable Modem

Mfg. Part No.	Frequency (MHz)	Frequency Tol.	Frequency Stability	Load Cap. (pf)	Tape Cut Stock No.	Tape Cut Price Each 1-9
9B-4.096MBBK-B	4.096	± 50ppm	± 50ppm	20	46W0575	0.47
9B-7.680MBBK-B	7.68	± 50ppm	± 50ppm	20	46W0581	0.44
9B-12.288MAAE-B	12.288	± 30ppm	± 30ppm	12	46W3113	0.47
9B-12.288MBBK-B	12.288	± 50ppm	± 50ppm	20	46W0562	0.44
9B-14.31818MAAE-B	14.31818	± 30ppm	± 30ppm	12	46W3114	0.47
9B-14.31818MBBK-B	14.31818	± 50ppm	± 50ppm	20	46W0563	0.44
9B-15.360MAAE-B	15.36	± 30ppm	± 30ppm	12	46W3115	0.47
9B-15.360MBBK-B	15.36	± 50ppm	± 50ppm	20	46W0564	0.47
9B-16.384MAAE-B	16.384	± 30ppm	± 30ppm	12	46W3116	0.47
9B-16.384MBBK-B	16.384	± 50ppm	± 50ppm	20	46W0565	0.44
9B-18.432MAAE-B	18.432	± 30ppm	± 30ppm	12	46W3117	0.47
9B-19.200MBBK-B	19.2	± 50ppm	± 50ppm	20	46W0566	0.44
9B-22.000MAAE-B	22	± 30ppm	± 30ppm	12	46W3118	0.47
9B-22.000MBBK-B	22	± 50ppm	± 50ppm	20	46W0567	0.47
9B-22.1184MBBK-B	22.1184	± 50ppm	± 50ppm	20	46W0568	0.44
9B-24.576MBBK-B	24.576	± 50ppm	± 50ppm	20	46W0569	0.44
9B-25.000MAAE-B	25	± 30ppm	± 30ppm	12	46W3119	0.47
9B-25.000MBBJ-B	25	± 50ppm	± 50ppm	18	46W0570	0.51
9B-25.000MBBK-B	25	± 50ppm	± 50ppm	20	46W0571	0.47
9B-26.000MBBK-B	26	± 50ppm	± 50ppm	20	46W0572	0.44
9B-35.328MAAE-B	35.328	± 30ppm	± 30ppm	12	46W3120	0.47
9B-35.328MBBK-B	35.328	± 50ppm	± 50ppm	20	46W0573	0.44
9B-36.000MAAE-B	36	± 30ppm	± 30ppm	12	46W3121	0.47
9B-36.000MBBK-B	36	± 50ppm	± 50ppm	20	46W0574	0.44
9B-48.000MAAE-B	48	± 30ppm	± 30ppm	12	46W3122	0.47
9B-48.000MBBK-B	48	± 50ppm	± 50ppm	20	46W0576	0.47
9B-50.000MAAE-B	50	± 30ppm	± 30ppm	12	46W3123	0.47
9B-50.000MBBK-B	50	± 50ppm	± 50ppm	20	46W0577	0.44
9B-60.000MBBK-B	60	± 50ppm	± 50ppm	20	46W0579	0.59

(209566)

TUNING FORK CRYSTAL - 9HT SERIES

RoHS Compliant Available

TXC

9H T7 CASE STYLE: 6.9 x 1.4 x 1.30mm

Mfg. Part No.	Frequency (MHz)	Frequency Tol.	Load Cap. (pf)	Tape Cut Stock No.	Tape Cut Price Each 1-9
9HT7-32.768KAZF-T	32.768	± 30ppm	12.5	46W3161	0.72
9HT7-32.768KBZF-T	32.768	± 50ppm	12.5	46W3162	0.68
9HT7-32.768KDZF-T	32.768	± 20ppm	12.5	46W3163	1.04
9H T10 CASE STYLE: 3.2 x 1.5 x 0.75mm					
9HT10-32.768KBZF-T	32.768	± 50ppm	12.5	46W3157	1.17

(209567)

AC SERIES SMD CMOS OUTPUT CLOCK CRYSTAL OSCILLATORS

RoHS Compliant Available

TXC

Features:
- Ultra small SMD sealed clock crystal oscillator units
- High precision characteristics covering up to high frequency range
- Designed for automatic mounting and reflow soldering
- Supply voltage range: 1.8V to 3.3V
- High stability low jitter low power consumption

Specifications:
- Dimensions: 5 x 3.2 x 1.2 mm
- Output type: CMOS
- Oscillation mode: Fundamental / 3rd overtone
- Operating temperature: -40°C to +85°C

Mfg. Part No.	Frequency (MHz)	Frequency Stability	Supply Voltage (V)	Load Cap. (pF)	Tape Cut Stock No.	Tape Cut Price Each 1-9
AC-3.6864MBE-T	3.6864	± 50ppm	3.3	30	05W6220	3.85
AC-4.000MAE-T	4	± 50ppm	5	30	05W6222	3.85
AC-13.500MCE-T	13.5	± 50ppm	2.5	30	05W6218	3.85
AC-27.000MBE-T	27	± 50ppm	3.3	30	05W6219	3.85
AC-33.333MBE-T	33.333	± 50ppm	3.3	30	05W6221	3.85
AC-40.000MDE-T	40	± 50ppm	1.8	15	05W6223	4.14
AC-48.000MBE-T	48	± 50ppm	3.3	30	05W6224	3.85
AC-50.000MBE-T	50	± 50ppm	3.3	30	05W6225	3.85
AC-54.000MBE-T	54	± 50ppm	3.3	30	05W6226	3.85

(207648)

ACZ SERIES SMD CMOS OUTPUT CLOCK CRYSTAL OSCILLATORS

RoHS Compliant Available

TXC

Features:
- Ultra small SMD seam sealed clock crystal oscillator units
- High precision characteristic
- Designed for automatic mounting and reflow soldering
- Supply voltage range: 1.8V to 3.3V
- High stability low jitter low power consumption

Specifications:
- Dimensions: 5 x 3.2 x 1.2mm
- Output type: CMOS
- Oscillation mode: Fundamental / 3rd Overtone
- Operating temperature: -40°C to +85°C

Mfg. Part No.	Frequency (MHz)	Frequency Stability	Supply Voltage (V)	Load Cap. (pF)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● ACZ-32.768KBE-T	32.768	± 50ppm	3.3	15	05W6227	3.96

(207649)

AU SERIES SMD CMOS OUTPUT CRYSTAL CLOCK OSCILLATORS

RoHS Compliant Available

TXC

Specifications:
- Dimensions: 3.2 x 2.5 x 1mm
- Frequency range: 1 to 106.25MHz
- Oscillation mode: Fundamental / 3rd overtone
- Operating temperature: -40°C to +85°C

Features:
- Ultra small SMD seam sealed clock crystal oscillator units
- CMOS output type

Mfg. Part No.	Frequency (MHz)	Frequency Stability	Supply Voltage (V)	Load Cap. (pF)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● AU-12.000MBE-T	12	± 50ppm	3.3	30	05W6287	4.38
● AU-12.288MBE-T	12.288	± 50ppm	3.3	30	05W6288	4.38
● AU-13.500MBE-T	13.5	± 50ppm	3.3	30	05W6289	4.38
● AU-14.31818MBE-T	14.31818	± 50ppm	3.3	30	05W6290	4.38
● AU-14.7456MBE-T	14.7456	± 50ppm	3.3	30	05W6291	4.38
● AU-24.000MBE-T	24	± 50ppm	3.3	30	05W6292	4.38
● AU-25.000MBE-T	25	± 50ppm	3.3	30	05W6293	4.38
● AU-26.000MBE-T	26	± 50ppm	3.3	30	05W6294	4.38
● AU-27.000MBE-T	27	± 50ppm	3.3	30	05W6295	4.38
● AU-28.63636MBE-T	28.63636	± 50ppm	3.3	30	05W6296	4.38
● AU-33.000MBE-T	33	± 50ppm	3.3	30	05W6297	4.38
● AU-40.000MDE-T	40	± 50ppm	1.8	15	05W6298	4.38
● AU-48.000MBE-T	48	± 50ppm	3.3	30	05W6299	4.38
● AU-50.000MBE-T	50	± 50ppm	3.3	30	05W6300	4.38
● AU-54.000MBE-T	54	± 50ppm	3.3	30	05W6301	4.38

(207653)

AUZ SERIES SMD CMOS OUTPUT CLOCK CRYSTAL OSCILLATORS

RoHS Compliant Available

TXC

Specifications:
- Dimensions: 3.2 x 2.5 x 1mm
- Frequency range: 32.768MHz
- Oscillation mode: Fundamental / 3rd overtone
- Operating temperature: -40°C to +85°C

Features:
- Ultra small SMD seam sealed clock crystal oscillator units
- CMOS output type

Mfg. Part No.	Frequency (MHz)	Frequency Stability	Supply Voltage (V)	Load Cap. (pF)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● AUZ-32.768KBE-T	32.768	± 50ppm	3.3	30	05W6302	4.20

(207654)

AW SERIES SMD CMOS OUTPUT CLOCK CRYSTAL OSCILLATORS

RoHS Compliant Available

TXC

Specifications:
- Dimensions: 2.5 x 2 x 0.8mm
- Frequency range: 4 to 54MHz
- Overtone: Fundamental
- Operating temperature: -40°C to +85°C

Features:
- Ultra small SMD seam sealed clock crystal oscillator units
- CMOS output type

Mfg. Part No.	Frequency (MHz)	Frequency Stability	Supply Voltage (V)	Load Cap. (pf)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● AW-11.2896MBE-T	11.2896	± 50ppm	3.3	30	05W6317	5.27
● AW-20.000MCE-T	20	± 50ppm	2.5	30	05W6318	4.90
● AW-26.000MBE-T	26	± 50ppm	3.3	30	05W6319	4.90

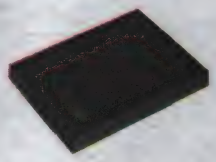
(207656)

TA SERIES SMD CMOS OUTPUT OSCILLATORS

RoHS Compliant Available

TXC

Features:
- Molded in plastic package
- Silicon-based MEMS oscillator
- Frequency range: 1 to 150MHz
- High stability, low power consumption



Specifications:
- Operating temperature: -40°C to +85°C
- Load capacitance: 15 pF
- Frequency stability: ±25ppm
- Supply voltage 3.3V
- Case size: 7.0 x 5.0 x 0.9 mm

Mfg. Part No.	Freq. (MHz)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● TA-1.544MBD-T	1.544	89T1835	1.40
● TA-1.8432MBD-T	1.8432	89T1836	1.40
● TA-3.6864MBD-T	3.6864	89T1872	1.40
● TA-4.000MBD-T	4	89T1884	1.40
● TA-4.096MBD-T	4.096	89T1885	1.40
● TA-6.000MBD-T	6	89T1893	1.40
● TA-7.3728MBD-T	7.3728	89T1900	1.40
● TA-8.000MBD-T	8	89T1906	1.40
● TA-8.192MBD-T	8.192	89T1907	1.40
● TA-10.000MBD-T	10	89T1837	1.40
● TA-11.0592MBD-T	11.0592	89T1840	1.40
● TA-12.000MBD-T	12	89T1841	1.40
● TA-12.200MBD-T	12.2	89T1842	1.40
● TA-12.288MBD-T	12.288	89T1843	1.40
● TA-12.352MBD-T	12.352	89T1844	1.40
● TA-12.500MBD-T	12.5	89T1845	1.51
● TA-13.000MBD-T	13	89T1848	1.40
● TA-13.513MBD-T	13.513	89T1849	1.40
● TA-14.31818MBD-T	14.31818	89T1851	1.40
● TA-14.7456MBD-T	14.7456	89T1852	1.40
● TA-15.000MBD-T	15	89T1853	1.40
● TA-15.8682MBD-T	15.8682	89T1854	1.40
● TA-16.000MBD-T	16	89T1856	1.40
● TA-16.0972MBD-T	16.0972	89T1857	1.40
● TA-16.384MBD-T	16.384	89T1858	1.40
● TA-18.432MBD-T	18.432	89T1859	1.40
● TA-19.200MBD-T	19.2	89T1860	1.40
● TA-19.440MBD-T	19.44	89T1861	1.40
● TA-20.000MBD-T	20	89T1862	1.40
● TA-22.1184MBD-T	22.1184	89T1863	1.51
● TA-22.5792MBD-T	22.5792	89T1864	1.51
● TA-24.000MBD-T	24	89T1865	1.40
● TA-24.576MBD-T	24.576	89T1866	1.40
● TA-25.000625MBD-T	25.000625	89T1868	1.40
● TA-25.000MBD-T	25	89T1867	1.40
● TA-26.000MBD-T	26	89T1869	1.40
● TA-27.000MBD-T	27	89T1870	1.40
● TA-29.4912MBD-T	29.4912	89T1871	1.51
● TA-30.000MBD-T	30	89T1873	1.40
● TA-32.000MBD-T	32	89T1874	1.40
● TA-32.263MBD-T	32.263	89T1875	1.40
● TA-32.350MBD-T	32.35	89T1876	1.40
● TA-32.768MBD-T	32.768	89T1877	1.40
● TA-33.000MBD-T	33	89T1878	1.40
● TA-33.33333MBD-T	33.33333	89T1879	1.40
● TA-35.328MBD-T	35.328	89T1880	1.40
● TA-36.000MBD-T	36	89T1881	1.40
● TA-37.500MBD-T	37.5	89T1882	1.40
● TA-38.400MBD-T	38.4	89T1883	1.40
● TA-40.000MBD-T	40	89T1886	1.40
● TA-44.000MBD-T	44	89T1887	1.40
● TA-48.000MBD-T	48	89T1888	1.51
● TA-49.152MBD-T	49.152	89T1889	1.40
● TA-50.000MBD-T	50	89T1890	1.51
● TA-54.000MBD-T	54	89T1891	1.40
● TA-57.849MBD-T	57.849	89T1892	1.40
● TA-60.000MBD-T	60	89T1894	1.40
● TA-62.500MBD-T	62.5	89T1895	1.51
● TA-64.000MBD-T	64	89T1896	1.40
● TA-65.000MBD-T	65	89T1897	1.40
● TA-66.667MBD-T	66.667	89T1898	1.51
● TA-68.000MBD-T	68	89T1899	1.40
● TA-70.000MBD-T	70	89T1901	1.40
● TA-72.000MBD-T	72	89T1902	1.40

CONTINUED

TA SERIES SMD CMOS OUTPUT OSCILLATORS (CONT.)

Mfg. Part No.	Freq. (MHz)	Tape Cut Stock No.	Price Each 1-9
TA-74.250MBD-T	74.25	89T1903	1.51
TA-75.000MBD-T	75	89T1904	1.40
TA-76.800MBD-T	76.8	89T1905	1.40
TA-80.000MBD-T	80	89T1908	1.40
TA-100.000MBD-T	100	89T1838	1.40
TA-106.250MBD-T	106.25	89T1839	1.40
TA-125.000MBD-T	125	89T1847	1.91
TA-133.330MBD-T	133.33	89T1850	1.91
TA-150.000MBD-T	150	89T1855	1.91

(202129)

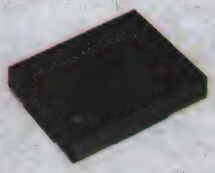
TC SERIES SMD CMOS OUTPUT OSCILLATORS

RoHS Compliant Available

TXC

Features:
- Molded in plastic package
- Silicon-based MEMS oscillator
- Frequency range: 1 to 150MHz
- High stability, low power consumption

Specifications:
- Operating temperature: -40°C to +85°C
- Load capacitance: 15 pF
- Frequency stability: ±25ppm
- Supply voltage 3.3V
- Case size: 3.2 x 2.5 x 0.75 mm



Mfg. Part No.	Freq. (MHz)	Tape Cut Stock No.	Price Each 1-99
TC-1.544MBD-T	1.544	89T1909	1.56
TC-1.8432MBD-T	1.8432	89T1910	1.56
TC-3.6864MBD-T	3.6864	89T1946	1.56
TC-4.000MBD-T	4	89T1958	1.56
TC-4.096MBD-T	4.096	89T1959	1.56
TC-6.000MBD-T	6	89T1967	1.56
TC-7.3728MBD-T	7.3728	89T1974	1.56
TC-8.000MBD-T	8	89T1980	1.56
TC-8.192MBD-T	8.192	89T1981	1.56
TC-10.000MBD-T	10	89T1911	1.56
TC-11.0592MBD-T	11.0592	89T1914	1.56
TC-12.000MBD-T	12	89T1915	1.56
TC-12.200MBD-T	12.2	89T1916	1.56
TC-12.288MBD-T	12.288	89T1917	1.65
TC-12.352MBD-T	12.352	89T1918	1.56
TC-12.500MBD-T	12.5	89T1919	1.56
TC-13.000MBD-T	13	89T1922	1.56
TC-13.513MBD-T	13.513	89T1923	1.56
TC-14.31818MBD-T	14.31818	89T1925	1.56
TC-14.7456MBD-T	14.7456	89T1926	1.56
TC-15.000MBD-T	15	89T1927	1.56
TC-15.8682MBD-T	15.8682	89T1928	1.56
TC-16.000MBD-T	16	89T1930	1.56
TC-16.0972MBD-T	16.0972	89T1931	1.56
TC-16.384MBD-T	16.384	89T1932	1.56
TC-18.432MBD-T	18.432	89T1933	1.68
TC-19.200MBD-T	19.2	89T1934	1.56
TC-19.440MBD-T	19.44	89T1935	1.56
TC-20.000MBD-T	20	89T1936	1.56
TC-22.1184MBD-T	22.1184	89T1937	1.65
TC-22.5792MBD-T	22.5792	89T1938	1.56
TC-24.000MBD-T	24	89T1939	1.56
TC-24.576MBD-T	24.576	89T1940	1.56
TC-25.000625MBD-T	25.000625	89T1942	1.56
TC-25.000MBD-T	25	89T1941	1.56
TC-26.000MBD-T	26	89T1943	1.56
TC-27.000MBD-T	27	89T1944	1.56
TC-29.4912MBD-T	29.4912	89T1945	1.56
TC-30.000MBD-T	30	89T1947	1.56
TC-32.000MBD-T	32	89T1948	1.56
TC-32.263MBD-T	32.263	89T1949	1.56
TC-32.350MBD-T	32.35	89T1950	1.56
TC-32.768MBD-T	32.768	89T1951	1.68
TC-33.000MBD-T	33	89T1952	1.56
TC-33.33333MBD-T	33.33333	89T1953	1.56
TC-35.328MBD-T	35.328	89T1954	1.56
TC-36.000MBD-T	36	89T1955	1.56
TC-37.500MBD-T	37.5	89T1956	1.68

CONTINUED

TC SERIES SMD CMOS OUTPUT OSCILLATORS (CONT.)

Mfg. Part No.	Freq. (MHz)	Tape Cut Stock No.	Price Each 1-99
TC-38.400MBD-T	38.4	89T1957	1.56
TC-40.000MBD-T	40	89T1960	1.56
TC-44.000MBD-T	44	89T1961	1.56
TC-48.000MBD-T	48	89T1962	1.56
TC-49.152MBD-T	49.152	89T1963	1.56
TC-50.000MBD-T	50	89T1964	1.68
TC-54.000MBD-T	54	89T1965	1.56
TC-57.849MBD-T	57.849	89T1966	1.56
TC-60.000MBD-T	60	89T1968	1.56
TC-62.500MBD-T	62.5	89T1969	1.56
TC-64.000MBD-T	64	89T1970	1.56
TC-65.000MBD-T	65	89T1971	1.56
TC-66.667MBD-T	66.667	89T1972	1.56
TC-68.000MBD-T	68	89T1973	1.56
TC-70.000MBD-T	70	89T1975	1.56
TC-72.000MBD-T	72	89T1976	1.56
TC-74.250MBD-T	74.25	89T1977	1.68
TC-75.000MBD-T	75	89T1978	1.56
TC-76.800MBD-T	76.8	89T1979	1.56
TC-80.000MBD-T	80	89T1982	1.56
TC-100.000MBD-T	100	89T1912	1.56
TC-106.250MBD-T	106.25	89T1913	1.56
TC-120.000MBD-T	120	89T1920	1.48
TC-125.000MBD-T	125	89T1921	2.29
TC-133.330MBD-T	133.33	89T1924	2.13
TC-150.000MBD-T	150	89T1929	2.13

(202130)

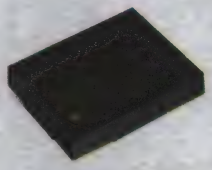
TD SERIES SMD CMOS OUTPUT OSCILLATORS

RoHS Compliant Available

TXC

Features:
- Molded in plastic package
- Silicon-based MEMS oscillator
- Frequency range: 1 to 150MHz
- High stability, low power consumption

Specifications:
- Operating temperature: -40°C to +85°C
- Load capacitance: 15 pF
- Frequency stability: ±25ppm
- Supply voltage 3.3V
- Case size: 2.5 x 2.0 x 0.75 mm



Mfg. Part No.	Freq. (MHz)	Tape Cut Stock No.	Price Each 1-99
TD-1.544MCD-T	1.544	89T1983	1.56
TD-1.8432MCD-T	1.8432	89T1984	1.56
TD-3.6864MCD-T	3.6864	89T2020	1.56
TD-4.000MCD-T	4	89T2032	1.56
TD-4.096MCD-T	4.096	89T2033	1.56
TD-6.000MCD-T	6	89T2041	1.56
TD-7.3728MCD-T	7.3728	89T2048	1.56
TD-8.000MCD-T	8	89T2054	1.56
TD-8.192MCD-T	8.192	89T2055	1.56
TD-10.000MCD-T	10	89T1985	1.56
TD-11.0592MCD-T	11.0592	89T1988	1.56
TD-12.000MCD-T	12	89T1989	1.56
TD-12.200MCD-T	12.2	89T1990	1.56
TD-12.288MCD-T	12.288	89T1991	1.56
TD-12.352MCD-T	12.352	89T1992	1.56
TD-12.500MCD-T	12.5	89T1993	1.56
TD-13.000MCD-T	13	89T1996	1.56
TD-13.513MCD-T	13.513	89T1997	1.56
TD-14.31818MCD-T	14.31818	89T1999	1.56
TD-14.7456MCD-T	14.7456	89T2000	1.56
TD-15.000MCD-T	15	89T2001	1.56
TD-15.8682MCD-T	15.8682	89T2002	1.56
TD-16.000MCD-T	16	89T2004	1.56
TD-16.0972MCD-T	16.0972	89T2005	1.56
TD-16.384MCD-T	16.384	89T2006	1.56
TD-18.432MCD-T	18.432	89T2007	1.56
TD-19.200MCD-T	19.2	89T2008	1.56
TD-19.440MCD-T	19.44	89T2009	1.56
TD-20.000MCD-T	20	89T2010	1.56
TD-22.1184MCD-T	22.1184	89T2011	1.56
TD-22.5792MCD-T	22.5792	89T2012	1.68

CONTINUED

TD SERIES SMD CMOS OUTPUT OSCILLATORS (CONT.)

Mfg. Part No.	Freq. (MHz)	Tape Cut Stock No.	Price Each 1-99
● TD-24.000MCD-T	24	89T2013	1.56
● TD-24.576MCD-T	24.576	89T2014	1.56
● TD-25.000625MCD-T	25.000625	89T2016	1.56
● TD-25.000MCD-T	25	89T2015	1.56
● TD-26.000MCD-T	26	89T2017	1.56
● TD-27.000MCD-T	27	89T2018	1.56
● TD-29.4912MCD-T	29.4912	89T2019	1.56
● TD-30.000MCD-T	30	89T2021	1.56
● TD-32.000MCD-T	32	89T2022	1.56
● TD-32.263MCD-T	32.263	89T2023	1.56
● TD-32.350MCD-T	32.35	89T2024	1.56
● TD-32.768MCD-T	32.768	89T2025	1.56
● TD-33.000MCD-T	33	89T2026	1.56
● TD-33.33333MCD-T	33.33333	89T2027	1.56
● TD-35.328MCD-T	35.328	89T2028	1.56
● TD-36.000MCD-T	36	89T2029	1.56
● TD-37.500MCD-T	37.5	89T2030	1.56
● TD-38.400MCD-T	38.4	89T2031	1.56
● TD-40.000MCD-T	40	89T2034	1.56
● TD-44.000MCD-T	44	89T2035	1.56
● TD-48.000MCD-T	48	89T2036	1.56
● TD-49.152MCD-T	49.152	89T2037	1.56
● TD-50.000MCD-T	50	89T2038	1.56
● TD-54.000MCD-T	54	89T2039	1.56
● TD-57.849MCD-T	57.849	89T2040	1.56
● TD-60.000MCD-T	60	89T2042	1.56
● TD-62.500MCD-T	62.5	89T2043	1.56
● TD-64.000MCD-T	64	89T2044	1.56
● TD-65.000MCD-T	65	89T2045	1.56
● TD-66.667MCD-T	66.667	89T2046	1.56
● TD-68.000MCD-T	68	89T2047	1.56
● TD-70.000MCD-T	70	89T2049	1.56
● TD-72.000MCD-T	72	89T2050	1.56
● TD-74.250MCD-T	74.25	89T2051	1.56
● TD-75.000MCD-T	75	89T2052	1.56
● TD-76.800MCD-T	76.8	89T2053	1.56
● TD-80.000MCD-T	80	89T2056	1.56
● TD-100.000MCD-T	100	89T1986	1.56
● TD-106.250MCD-T	106.25	89T1987	1.56
● TD-133.330MCD-T	133.33	89T1998	2.13
● TD-150.000MCD-T	150	89T2003	2.13

(202131)

AOCJY SERIES OVEN CONTROLLED CRYSTAL OSCILLATORS

RoHS Compliant Available

ABRACON CORPORATION

Features
- Frequency Range SMD: 1.000 to 160.00MHz
- Frequency Range Thru-Hole: 1.000 to 100.00MHz
- Operating Temperature: -40°C to +85°C
- SC-Cut or AT-Cut, High "Q" resonator based design
- Either Sinewave or CMOS RF output
- Tight stability option

Applications
- Cellular Infrastructure
- Radar Systems
- Test & Measurement Equipment
- GPS Tracking with precision hold-over accuracy
- WiMax / WLAN

AOCJY1 SERIES 20.8 x 13.2mm - LEADED

Mfg. Part No.	Frequency (MHz)	Supply Voltage (VDC)	Operating Temp. Range	Stock No.	Price Each 1-9
● AOCJY1-10.000MHZ	10	3.13 to 3.46	-40°C to +75°C	12T1028	83.25
● AOCJY1-10.000MHZ-E-SW	10	3.13 to 3.46	-20°C to +70°C	12T1029	97.96
● AOCJY1A-10.000MHZ	10	4.75 to 5.25	-40°C to +75°C	12T1032	75.21
● AOCJY1A-10.000MHZ-E	10	4.75 to 5.25	-20°C to +70°C	12T1033	97.96
● AOCJY1-100.000MHZ	100	3.13 to 3.46	-40°C to +75°C	12T1030	88.25
● AOCJY1-100.000MHZ-E-SW	100	3.13 to 3.46	-20°C to +70°C	12T1031	97.96
● AOCJY1A-100.000MHZ	100	4.75 to 5.25	-40°C to +75°C	12T1034	83.25
● AOCJY1A-100.000MHZ-E	100	4.75 to 5.25	-20°C to +70°C	12T1035	97.96
AOCJY2 SERIES 21.0 x 21.0mm - LEADED					
● AOCJY2-10.000MHZ	10	3.13 to 3.46	-40°C to +75°C	12T1036	176.42
● AOCJY2-10.000MHZ-E	10	3.13 to 3.46	-20°C to +70°C	12T1037	174.92
● AOCJY2-10.000MHZ-E-SW	10	3.13 to 3.46	-20°C to +70°C	12T1038	174.92
● AOCJY2-10.000MHZ-F	10	3.13 to 3.46	-40°C to +75°C	12T1039	181.58
● AOCJY2A-10.000MHZ	10	4.75 to 5.25	-40°C to +75°C	12T1043	168.82

➤ CONTINUED ➤

AOCJY SERIES OVEN CONTROLLED CRYSTAL OSCILLATORS (CONT.)

AOCJY2 SERIES 21.0 x 21.0mm - LEADED

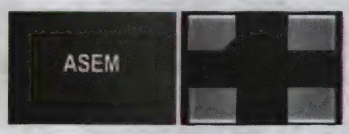
Mfg. Part No.	Frequency (MHz)	Supply Voltage (VDC)	Operating Temp. Range	Stock No.	Price Each 1-9
● AOCJY2A-10.000MHZ-F-SW	10	4.75 to 5.25	-40°C to +75°C	12T1044	189.75
● AOCJY2-100.000MHZ-E	100	3.13 to 3.46	-20°C to +70°C	12T1040	174.92
● AOCJY2-100.000MHZ-E-SW	100	3.13 to 3.46	-20°C to +70°C	12T1041	174.92
● AOCJY2-100.000MHZ-F	100	3.13 to 3.46	-40°C to +75°C	12T1042	181.58
● AOCJY2A-100.000MHZ-E	100	4.75 to 5.25	-20°C to +70°C	12T1045	174.92
● AOCJY2A-100.000MHZ-F-SW	100	4.75 to 5.25	-40°C to +75°C	12T1046	181.58
AOCJY3 SERIES 25.4 x 25.4mm - LEADED					
● AOCJY3-10.000MHZ	10	3.13 to 3.46	-40°C to +75°C	12T1047	168.82
● AOCJY3-10.000MHZ-E-SW	10	3.13 to 3.46	-20°C to +70°C	12T1048	174.92
● AOCJY3-10.000MHZ-F	10	3.13 to 3.46	-40°C to +75°C	12T1049	181.58
● AOCJY3A-10.000MHZ	10	4.75 to 5.25	-40°C to +75°C	12T1052	168.82
● AOCJY3A-10.000MHZ-E	10	4.75 to 5.25	-20°C to +70°C	12T1053	174.92
● AOCJY3A-10.000MHZ-F	10	4.75 to 5.25	-40°C to +75°C	12T1054	181.58
● AOCJY3B-10.000MHZ	10	11.4 to 12.6	-40°C to +75°C	12T1057	168.82
● AOCJY3B-10.000MHZ-E	10	11.4 to 12.6	-20°C to +70°C	12T1058	174.92
● AOCJY3B-10.000MHZ-E-SW	10	11.4 to 12.6	-20°C to +70°C	12T1059	174.92
● AOCJY3B-10.000MHZ-F	10	11.4 to 12.6	-40°C to +75°C	12T1060	181.58
● AOCJY3B-12.800MHZ-E	12.8	11.4 to 12.6	-20°C to +70°C	12T1063	174.92
● AOCJY3-100.000MHZ-E-SW	100	3.13 to 3.46	-20°C to +70°C	12T1050	174.92
● AOCJY3-100.000MHZ-F	100	3.13 to 3.46	-40°C to +75°C	12T1051	181.58
● AOCJY3A-100.000MHZ-E	100	4.75 to 5.25	-20°C to +70°C	12T1055	174.92
● AOCJY3A-100.000MHZ-F	100	4.75 to 5.25	-40°C to +75°C	12T1056	181.58
● AOCJY3B-100.000MHZ-E-SW	100	11.4 to 12.6	-20°C to +70°C	12T1061	174.92
● AOCJY3B-100.000MHZ-F	100	11.4 to 12.6	-40°C to +75°C	12T1062	181.58
AOCJY4 SERIES 36.1 x 27.2mm - LEADED					
● AOCJY4A-10.000MHZ-F-SW	10	4.75 to 5.25	-40°C to +75°C	12T1064	209.52
● AOCJY4A-10.000MHZ-SW	10	4.75 to 5.25	-20°C to +70°C	12T1065	194.81
● AOCJY4B-10.000MHZ-F-SW	10	11.4 to 12.6	-40°C to +75°C	12T1067	218.95
● AOCJY4B-10.000MHZ-SW	10	11.4 to 12.6	-20°C to +70°C	12T1068	168.57
● AOCJY4A-12.800MHZ-F-SW	12.8	4.75 to 5.25	-40°C to +75°C	12T1066	209.52
● AOCJY4B-12.800MHZ-F-SW	12.8	11.4 to 12.6	-40°C to +75°C	12T1069	209.52
AOCJY5 SERIES 36.1 x 27.2mm - LEADED					
● AOCJY5-10.000MHZ	10	11.4 to 12.6	-55°C to +85°C	37T9599	266.79
AOCJY6 SERIES 51 x 41mm - LEADED					
● AOCJY6-10.000MHZ-1	10	11.4 to 12.6	-20°C to +70°C	45W1772	2419.23
● AOCJY6-10.000MHZ-2	10	11.4 to 12.6	-20°C to +70°C	45W1773	1644.45
● AOCJY6-10.000MHZ-5	10	11.4 to 12.6	-20°C to +70°C	45W1774	1021.44
AOCJY7 SERIES 24 x 24mm - LEADED					
● AOCJY7-100.000MHZ	100	11.4 to 12.6	-20°C to +70°C	45W1776	3478.63

(194805)

ASEM SERIES PLASTIC PACKAGE CLOCK OSCILLATOR

RoHS Compliant Available

ABRACON CORPORATION



Features
- Ultra Miniature Pure Silicon™ Clock Oscillator
- MEMS Technology by Discera
- Low Power Consumption <10mA
- Exceptional Stability Over Temp. at 0 - 70°C
- Available in 30kG Shock Resistance Configuration
- Low Cost-Compact QFN Plastic Packaging
- Compact Package design
- Extended Temperature Options Also Available
- **Package Size: 3.2 x 2.5 x 0.85mm**

Applications
- CCD Clock for VTR Camera
- Equipment Connected to PCs
- Low Profile Equipment
- Computers and Peripherals
- Lower Cost Crystal Oscillator Replacement
- Portable Electronics (MP3 Players, Games)
- Consumer Electronics such as TV's, DVR's, etc.
- Vibrant, Shock-Prone & Humid Environments for Industrial Equipment
- Demanding Military & Automotive Electronics

Specifications
- Frequency Range: 1.000 MHz - 150 MHz
- Frequency stability: ±25 ppm, ±30 ppm, ±50 ppm, or ±100 ppm
- Supply voltage: 3 VDC ±0.3V, 1.8-3.3 VDC options available
- Supply Current: 6mA Max. no load, 9mA max. full load
- Rise and fall times: 5ns max.
- Output load: 15 pF max., 10kohms min.
- Operating temperature: 0°C to +70°C with extended options available

Mfg. Part No.	Frequency (MHz)	Frequency Stability	Operating Temp. Range	Stock No.	Price Each 1-9
● ASEM1-7.3728MHZ-LC-T	7.3728	± 50ppm	-40°C to +85°C	14N7977	2.36
● ASEM1-8.000MHZ-LC-T	8	± 50ppm	-40°C to +85°C	14N7978	2.53
● ASEM1-10.000MHZ-LC-T	10	± 50ppm	-40°C to +85°C	14N7955	2.36
● ASEM1-12.000MHZ-LC-T	12	± 50ppm	-40°C to +85°C	14N7958	2.53
● ASEM1-20.000MHZ-LC-T	20	± 50ppm	-40°C to +85°C	14N7962	2.36
● ASEM1-25.000MHZ-LC-T	25	± 50ppm	-40°C to +85°C	14N7965	2.50
● ASEM1-29.4912MHZ-LC-T	29.4912	± 50ppm	-40°C to +85°C	14N7967	2.36
● ASEM1-30.000MHZ-LC-T	30	± 50ppm	-40°C to +85°C	14N7968	2.36
● ASEM1-50.000MHZ-LC-T	50	± 50ppm	-40°C to +85°C	14N7975	2.50

➤ CONTINUED ➤

ASEM SERIES PLASTIC PACKAGE CLOCK OSCILLATOR (CONT.)

Mfg. Part No.	Frequency (MHz)	Frequency Stability	Operating Temp. Range	Stock No.	Price Each 1-9
ASEM1-60.000MHZ-LC-T	60	± 50ppm	-40°C to +85°C	14N7976	2.36
ASEM1-100.000MHZ-LC-T	100	± 50ppm	-40°C to +85°C	14N7956	2.53

(120780)

ASV SERIES CRYSTAL CLOCK OSCILLATORS

RoHS Compliant Available

ABRACON CORPORATION

Features
- Leadless chip carrier, low profile
- Seam welding
- Tri-state Enable/Disable function
- HCMOS and TTL compatible

Applications
- Provide clock signals for microprocessors, PC mainboards, graphic cards
- High output drive capability applications

Specifications
- Operating temperature: -20°C to +70°C
- Frequency stability: ±20 ppm
- Supply voltage: 3.3 Vdc ±10%
- Duty cycle: 40/60 % max. @ ½ V_{dd}
- Rise and fall times: 10ns max. for F < 35 MHz; 5 ns max. for F < 100 MHz; 2.5 ns max. for F ≤ 150 MHz
- Output load: 5TTL or 15 pF

Mfg. Part No.	Freq. (MHz)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape & Reel Reel Qty. 100 Stock No.	Tape & Reel Price Each 1-999
ASV-12.000MHZ-EJ-T	12	13J1953	3.43	95J9987	1.22
ASV-50.000MHZ-EJ-T	50	13J1973	3.38	96J0008	1.21

(83147)

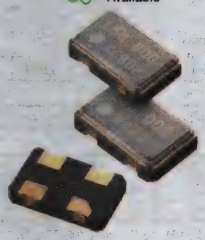
KC SERIES SMD CLOCK OSCILLATORS

RoHS Compliant Available

AVX A KYOCERA GROUP COMPANY

Applications:
- Network Equipment
- Hard Disc Drives
- Wireless LAN

Features:
- Miniature ceramic package
- Highly reliable with seam welding
- CMOS output



1.8V / 2.5V / 3.3V COMPATIBLE

Mfg. Part No.	Frequency (MHz)	Frequency Tolerance	Package/ Case	Tape Cut Stock No.	Tape Cut Price Each 1-9
KC2520B14.3182C10E00	14.3182	± 50ppm	2520	05N0908	4.13
KC2520B24.0000C10E00	24	± 50ppm	2520	05N0910	4.13
KC2520B24.5760C10E00	24.576	± 50ppm	2520	05N0912	4.13
KC2520B25.0000C10E00	25	± 50ppm	2520	05N0914	4.13
KC2520B27.0000C10E00	27	± 50ppm	2520	05N0916	4.13
2.5V & 3.3V COMPATIBLE					
KC2520B7.37280C2GE00	7.3728	± 50ppm	2520	94M5121	5.25
KC2520B25.0000C2GE00	25	± 50ppm	2520	94M5116	5.25
KC2520B27.0000C2GE00	27	± 50ppm	2520	94M5117	5.25
3.3V COMPATIBLE					
KC3225A12.0000C30E00	12	± 50ppm	3225	05N0920	3.86
KC3225A14.3182C30E00	14.3182	± 50ppm	3225	05N0922	3.86
KC3225A24.5760C30E00	24.576	± 50ppm	3225	05N0924	3.86
KC3225A25.0000C30E00	25	± 50ppm	3225	05N0926	3.86
KC3225A40.0000C30E00	40	± 50ppm	3225	05N0930	3.86
KC3225A48.0000C30E00	48	± 50ppm	3225	05N0932	3.86
KC3225A50.0000C30E00	50	± 50ppm	3225	05N0934	3.86
KC7050A75.0000C30E00	75	± 50ppm	7050	05N0954	3.52
KC3225A100.000C30E00	100	± 50ppm	3225	94M5122	5.44
KC5032C100.000C30E00	100	± 50ppm	5032	05N0936	4.94
KC3225A106.250C30E00	106.25	± 50ppm	3225	94M5123	5.44
KC5032C106.250C30E00	106.25	± 50ppm	5032	05N0938	4.94
KC3225A125.000C30E00	125	± 50ppm	3225	94M5124	5.44
KC5032C125.000C30E00	125	± 50ppm	5032	05N0940	4.94
KC7050A125.000C30E00	125	± 50ppm	7050	05N0950	4.94
KC7050A150.000C30E00	150	± 50ppm	7050	05N0952	15.14

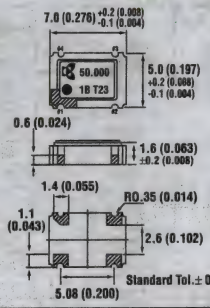
(102902)

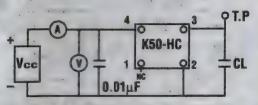
CLOCK OSCILLATORS

RoHS Compliant Available

AVX A KYOCERA GROUP COMPANY

Specifications
- Miniature SMD Ceramic Package Type
- Frequency Range: 12 MHz to 50 MHz
- Frequency Precision: ±100 ppm
- Tristate Output Inhibit
- Supply Voltage: 5 V (±0.5 V)
- Operating Temperature: -10°C to +70°C





CL=50pF (f<50MHz), CL=15pF (f>50MHz) (Inclusive of test JIG and probe capacitance)

Mfg. Part No.	Freq. (MHz)	Stock No.	Price Each 1-9	Price Each 10-49
K50-HC1CSE13.5600MR	13.56	33K9509	5.43	4.77
K50-HC1CSE14.31818MR	14.31818	34K6702	2.61	2.48
K50-HC1CSE16.0000MR	16	34K6704	5.99	5.56
K50-HC1CSE16.3840MR	16.384	34K6705	2.61	2.48
K50-HC1CSE18.4320MR	18.432	34K6706	2.61	2.48
K50-HC1CSE20.0000MR	20	34K6707	5.99	5.56
K50-HC1CSE33.0000MR	33	33K9510	2.61	2.48
K50-HC1CSE40.0000MR	40	34K6716	5.43	4.77
K50-HC1CSE48.0000MR	48	34K6717	5.99	5.56

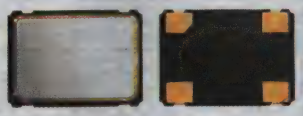
(70263)

CSX-750F SERIES SMD CERAMIC CRYSTAL CLOCK OSCILLATORS

RoHS Compliant Available

CITIZEN

Features
- Ultra miniature
- Low profile
- Low power
- Output enable function
- Reflowable
- Frequency Tolerance: ±100 ppm



For use in communications equipment, AV equipment, OA equipment and measuring instruments.

Mfg. Part No.	Freq. (MHz)	Load Cap. (pF)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape & Reel Reel Qty. 2000 Stock No.	Tape & Reel Price Each 1-1999
CSX750FBC10.000M-UT	10	30	13J2394	3.13	96J0190	1.78
CSX750FCC14.7456M-UT	14.7456	50	13J2424	3.13	96J0205	1.78

(83051)

MEMS LVPECL OSCILLATOR 4MA SERIES

NEW

RoHS Compliant Available

FOX

Features
- MEMS Technology
- 3.3V Supply Voltage
- -40 to +85°C Operating Temperature
- 7x5mm Plastic Package
- Low Phase Jitter (0.6pS RMS Typical - 12kHz to 20MHz)
- LVPECL Output

Mfg. Part No.	Frequency (MHz)	Frequency Stability	Stock No.	Price Each 1-24
4MA100000Z3AACUGI8	100	± 50ppm	95W9502	10.57
4MA125000Z3AACUGI8	125	± 50ppm	95W9504	10.57
4MA148500Z3AACUGI8	148.5	± 50ppm	95W9506	10.57
4MA150000Z3AACUGI8	150	± 50ppm	95W9508	10.57
4MA156250Z3AACUGI8	156.25	± 50ppm	95W9510	10.57
4MA200000Z3AACUGI8	200	± 50ppm	95W9512	10.57

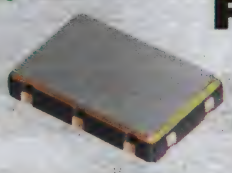
(210372)

HCMOS OSCILLATORS

RoHS Compliant Available

FOX

Features:
- XTREMELY Low Jitter
- XPRESS Delivery
- Frequency Resolution to six decimal places
- Stabilities to ± 20 PPM
- Tri-State Enable / Disable Feature
- Industry Standard Package, Footprint & Pin-Out
- Gold over Nickel Termination Finish
- Serial ID with Comprehensive Traceability



Applications:
- ANY application requiring an oscillator
- SONET
- Ethernet
- Storage Area Network
- Broadband Access
- Microprocessors / DSP / FPGA
- Industrial Controllers
- Test and Measurement Equipment
- Fiber Channel

CONTINUED

HCMOS OSCILLATORS (CONT.)

FXO-HC53 SERIES - 5mm x 3.2mm PACKAGE

Mfg. Part No.	Freq. (MHz)	Freq. Stability	Load Cap. (pF)	Tape Cut Stock No.	Tape Cut Price Each 1-24
● FXO-HC536R-3.6864	3.6864	± 25ppm	15	61T5380	1.85
● FXO-HC536R-4	4	± 25ppm	15	61T5385	1.85
● FXO-HC536R-8	8	± 25ppm	15	61T5393	1.85
● FXO-HC536R-10	10	± 25ppm	15	61T5367	1.85
● FXO-HC536R-12	12	± 25ppm	15	61T5369	1.85
● FXO-HC536R-14.31818	14.31818	± 25ppm	15	61T5371	1.85
● FXO-HC536R-16	16	± 25ppm	15	61T5372	1.85
● FXO-HC536R-16.384	16.384	± 25ppm	15	61T5373	1.85
● FXO-HC536R-20	20	± 25ppm	15	61T5374	1.85
● FXO-HC536R-24	24	± 25ppm	15	61T5376	1.85
● FXO-HC536R-24.576	24.576	± 25ppm	15	61T5377	1.85
● FXO-HC536R-25	25	± 25ppm	15	61T5378	1.99
● FXO-HC536R-27	27	± 25ppm	15	61T5379	1.85
● FXO-HC536R-30	30	± 25ppm	15	61T5381	1.99
● FXO-HC536R-32	32	± 25ppm	15	61T5382	1.85
● FXO-HC536R-33	33	± 25ppm	15	61T5383	1.85
● FXO-HC536R-33.333	33.333	± 25ppm	15	61T5384	1.85
● FXO-HC536R-40	40	± 25ppm	15	61T5386	1.85
● FXO-HC536R-48	48	± 25ppm	15	61T5387	1.85
● FXO-HC536R-50	50	± 25ppm	15	61T5388	1.85
● FXO-HC536R-60	60	± 25ppm	15	61T5389	1.93
● FXO-HC536R-62.5	62.5	± 25ppm	15	61T5390	1.93
● FXO-HC536R-66	66	± 25ppm	15	61T5391	1.93
● FXO-HC536R-75	75	± 25ppm	15	61T5392	2.05
● FXO-HC536R-80	80	± 25ppm	15	61T5394	2.14
● FXO-HC536R-100	100	± 25ppm	15	61T5368	3.04
● FXO-HC536R-125	125	± 25ppm	30	61T5370	3.26
● FXO-HC536R-200	200	± 25ppm	15	61T5375	6.82
FXO-HC73 SERIES - 7mm x 5mm PACKAGE					
● FXO-HC736R-1.000	1	± 25ppm	15	61T5395	1.85
● FXO-HC736R-1.8432	1.8432	± 25ppm	15	61T5396	1.85
● FXO-HC736R-2.048	2.048	± 25ppm	15	61T5405	1.85
● FXO-HC736R-3.6864	3.6864	± 25ppm	15	61T5412	1.85
● FXO-HC736R-4	4	± 25ppm	15	61T5417	1.85
● FXO-HC736R-8	8	± 25ppm	15	61T5426	1.85
● FXO-HC736R-10	10	± 25ppm	15	61T5397	1.85
● FXO-HC736R-12	12	± 25ppm	15	61T5399	1.85
● FXO-HC736R-12.288	12.288	± 25ppm	15	61T5400	1.85
● FXO-HC736R-14.31818	14.31818	± 25ppm	15	61T5402	1.85
● FXO-HC736R-16	16	± 25ppm	15	61T5403	1.85
● FXO-HC736R-16.384	16.384	± 25ppm	15	61T5404	1.85
● FXO-HC736R-20	20	± 25ppm	15	61T5406	1.85
● FXO-HC736R-24	24	± 25ppm	15	61T5408	1.96
● FXO-HC736R-24.576	24.576	± 25ppm	15	61T5409	1.85
● FXO-HC736R-25	25	± 25ppm	15	61T5410	1.85
● FXO-HC736R-27	27	± 25ppm	15	61T5411	1.85
● FXO-HC736R-30	30	± 25ppm	15	61T5413	1.85
● FXO-HC736R-32	32	± 25ppm	15	61T5414	1.85
● FXO-HC736R-33	33	± 25ppm	15	61T5415	1.85
● FXO-HC736R-33.333	33.333	± 25ppm	15	61T5416	1.85
● FXO-HC736R-40	40	± 25ppm	15	61T5418	1.85
● FXO-HC736R-48	48	± 25ppm	15	61T5419	1.85
● FXO-HC736R-50	50	± 25ppm	15	61T5420	1.96
● FXO-HC736R-60	60	± 25ppm	15	61T5421	1.93
● FXO-HC736R-62.5	62.5	± 25ppm	15	61T5422	1.93
● FXO-HC736R-66	66	± 25ppm	15	61T5423	1.93
● FXO-HC736R-66.666	66.666	± 25ppm	15	61T5424	1.93
● FXO-HC736R-75	75	± 25ppm	15	61T5425	2.05
● FXO-HC736R-80	80	± 25ppm	15	61T5427	2.14
● FXO-HC736R-100	100	± 25ppm	15	61T5398	2.83
● FXO-HC736R-125	125	± 25ppm	30	61T5401	3.42
● FXO-HC736R-200	200	± 25ppm	15	61T5407	7.95

(197177)

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(196545)

ASEMPxxx SERIES ULTRA MINIATURE CLOCK OSCILLATORS

RoHS Compliant Available

ABRACON CORPORATION

Features
- Ultra Miniature Pure SiliconTM Clock Oscillator
- High Performance MEMS Technology by Discera
- Low Power Consumption for high speed communication
- Exceptional Stability Over Temp. at -40 to +85°C, ±15ppm
- Extended Automotive Grade Temp. stability at -55 to +125°C, ±25ppm
- Available in 50kG Shock Resistance Configuration upon request
- MIL-STD-883 shock and vibration compliant
- Durable QFN Plastic Compact Packaging
- Standby or Disable Tri-state function
- Low jitter (Period jitter RMS and Phase jitter RMS)
- High power supply noise reduction, -50dBc

Applications
- Storage Area Networks (SATA, SAS, Fiber Channel)
- Passive Optical Networks (EPON, 10G-EPON, GPON, 10G-PON)
- Ethernet (1G, 10GBASE-T,/KR/LR/SR, FCoE
- HD/SD/SDI Video & Surveillance
- PCI Express
- Display port

CMOS OUTPUT TYPE

Mfg. Part No.	Freq. (MHz)	Freq. Tol.	Load Cap. (pF)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape Reel Reel Qty: 1000 Stock No.	Tape Reel Price Each 1-999
● ASEMPC-10.000MHZ-LR-T	10	± 25ppm	15	48T0301	2.95	45T7207	1.24
● ASEMPC-10.000MHZ-Z-T	10	± 50ppm	15	48T0302	4.40	45T7210	1.81
● ASEMPC-12.288MHZ-Z-T	12.288	± 50ppm	15	48T0305	4.40	45T7230	1.81
● ASEMPC-125.000MHZ-LR-T	125	± 25ppm	15	48T0306	4.44	45T7240	1.82
● ASEMPC-24.000MHZ-Z-T	24	± 50ppm	15	48T0317	4.40	45T7288	1.81
● ASEMPC-25.000MHZ-Z-T	25	± 50ppm	15	48T0321	4.40	45T7296	1.81
● ASEMPC-27.000MHZ-LR-T	27	± 25ppm	15	48T0324	2.95	45T7300	1.24
● ASEMPC-48.000MHZ-LR-T	48	± 25ppm	15	48T0326	2.95	45T7335	1.24
● ASEMPC-50.000MHZ-Z-T	50	± 50ppm	15	48T0329	4.40	45T7342	1.81
● ASEMPC-66.666MHZ-LR-T	66.666	± 25ppm	15	48T0331	2.95	45T7359	1.24
● ASEMPC-150.000MHZ-LR-T	150	± 25ppm	15	48T0313	4.44	45T7262	1.82

LVPECL OUTPUT TYPE

Mfg. Part No.	Freq. (MHz)	Freq. Tol.	Load Cap. (pF)	Stock No.	Price Each 1-24
● ASEMPLP-125.000MHZ-LR-T	125	± 25ppm	15	45T7385	7.37
● ASEMPLP-150.000MHZ-LR-T	150	± 25ppm	15	45T7386	7.37
● ASEMPLP-156.250MHZ-LR-T	156.25	± 25ppm	15	45T7387	7.37
● ASEMPLP-212.500MHZ-LR-T	212.5	± 25ppm	15	45T7388	7.37
HCSL OUTPUT TYPE					
● ASEMPHC-100.000MHZ-LR-T	100	± 25ppm	15	45T7383	2.33
LVDS OUTPUT TYPE					
● ASEMPLV-100.000MHZ-LR-T	100	± 25ppm	...	45T7390	7.89
● ASEMPLV-148.500MHZ-LR-T	148.5	± 25ppm	...	45T7391	7.89
● ASEMPLV-156.250MHZ-LR-T	156.25	± 25ppm	...	45T7392	7.89

(197037)

ASVMPxxx SERIES ULTRA MINIATURE CLOCK OSCILLATORS

RoHS Compliant Available

ABRACON CORPORATION

Features:
- Ultra Miniature Pure SiliconTM Clock Oscillator
- High Performance MEMS Technology by Discera
- Low Power Consumption for high speed communication
- Exceptional Stability Over Temp. at -40 to +85°C, ±15ppm
- Extended Automotive Grade Temp. stability at -55 to +125°C, ±25ppm
- MIL-STD-883 shock and vibration compliant
- Durable QFN Plastic Compact Packaging
- Standby or Disable Tri-state function
- Low jitter (Period jitter RMS and Phase jitter RMS)
- High power supply noise reduction, -50dBc

Applications:
- Storage Area Networks (SATA, SAS, Fiber Channel)
- Passive Optical Networks (EPON, 10G-EPON, GPON, 10G-PON)
- Ethernet (1G, 10GBASE-T,/KR/LR/SR, FCoE)
- HD/SD/SDI Video & Surveillance
- PCI Express
- Display port

FIXED - CMOS OUTPUT

Mfg. Part No.	Freq. (MHz)	Freq. Tol.	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape Reel Reel Qty: 1000 Stock No.	Tape Reel Price Each 1-999
● ASVMPC-12.288MHZ-LR-T	12.288	± 25ppm	48T0367	2.95	45T7612	1.24
● ASVMPC-25.000MHZ-LR-T	25	± 25ppm	48T0381	2.95	45T7684	1.24
PROGRAMMABLE - CMOS OUTPUT						
FIXED - LVPECL OUTPUT						
● ASVMPLP-125.000MHZ-LR-T	125	± 25ppm	45T7787	7.60	...	...
● ASVMPLP-150.000MHZ-LR-T	150	± 25ppm	45T7788	7.60	...	...
● ASVMPLP-156.250MHZ-LR-T	156.25	± 25ppm	45T7789	7.60	...	...
● ASVMPLP-212.500MHZ-LR-T	212.5	± 25ppm	45T7790	7.60	...	...
FIXED - LVDS OUTPUT						
● ASVMPLV-100.000MHZ-LR-T	100	± 25ppm	45T7792	8.13	...	...
● ASVMPLV-148.500MHZ-LR-T	148.5	± 25ppm	45T7793	7.60	...	...
● ASVMPLV-156.250MHZ-LR-T	156.25	± 25ppm	45T7794	8.13	...	...
FIXED - HCSL OUTPUT						
● ASVMPHC-100.000MHZ-LR-T	100	± 25ppm	45T7785	2.33	...	...

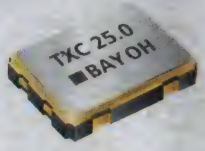
(197684)

CLOCK CRYSTAL OSCILLATORS - 7C SERIES

RoHS Compliant Available

TXC

Features:
- Ultra small SMD seam sealed clock crystal oscillator units
- High precision characteristic covering up to wide frequency range
- Designed for automatic mounting and reflow soldering
- Optionable stand-by function for output: Tri-state output
- High stability, low jitter, low power consumption
- Main application: wireless communication set, PDA and DSC



Specifications:
- Supply Voltage Range: 2.97V to 3.63V (3.3V Typ.)
- Tolerance: ±10%
- Output Type: CMOS
- Output Load: 30pF
- Oscillation Mode: Fundamental / 3rd Overtone
- Frequency Stability: ±50ppm (-10°C to +70°C); ±100ppm (-10°C to +70°C)
- Dimensions: 5.0mm x 3.2mm

FREQUENCY STABILITY: ±50ppm (-10°C to +70°C)

Mfg. Part No.	Freq. (MHz)	Tape Cut Stock No.	Tape Cut Price Each 1-999	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-999
7C-4.000MBB-T	4	84R5699	3.08	...	...	...
7C-6.000MBB-T	6	84R5704	3.08	...	...	...
7C-8.000MBB-T	8	84R5705	3.08	...	...	...
7C-12.000MBB-T	12	84R5688	3.08	...	...	...
7C-14.31818MBB-T	14.31818	84R5689	3.08	...	...	...
7C-16.000MBB-T	16	84R5690	3.08	...	...	...
7C-20.000MBB-T	20	84R5691	3.08	...	...	...
7C-24.000MBB-T	24	84R5692	3.08	...	...	...
7C-24.576MBB-T	24.576	84R5693	3.08	...	...	...
7C-25.000MBB-T	25	84R5694	3.08	...	...	...
7C-26.000MBB-T	26	84R5695	3.08	...	...	...
7C-27.000MBB-T	27	84R5696	3.08	...	...	...
7C-28.63636MBB-T	28.63636	84R5697	3.08	84R5449	1000	1.30
7C-33.3330MBB-T	33.333	84R5698	3.08	...	...	...
7C-40.000MBB-T	40	84R5700	3.08	...	...	...
7C-44.000MBB-T	44	84R5701	3.08	...	...	...
7C-48.000MBB-T	48	84R5702	3.08	...	...	...
7C-50.000MBB-T	50	84R5703	3.26	...	...	...
FREQUENCY STABILITY: ±100ppm (-10°C to +70°C)						
7C-4.000MBC-T	4	29X6480	2.50	54W0453	1000	1.06
7C-6.000MBC-T	6	29X6483	2.50	54W0454	1000	1.06
7C-12.000MBC-T	12	29X6472	2.50	54W0458	1000	1.06
7C-14.31818MBC-T	14.31818	29X6473	2.50	54W0461	1000	1.06
7C-16.000MBC-T	16	29X6474	2.50	54W0467	1000	1.06
7C-20.000MBC-T	20	29X6475	2.50	54W0470	1000	1.06
7C-24.576MBC-T	24.576	29X6476	2.50	54W0475	1000	1.06
7C-25.000MBC-T	25	29X6477	2.50	54W0480	1000	1.06
7C-27.000MBC-T	27	29X6478	2.50	54W0483	1000	1.06
7C-33.3330MBC-T	33.333	29X6479	2.50	54W0488	1000	1.06
7C-44.000MBC-T	44	29X6481	2.50	54W0491	1000	1.06
7C-48.000MBC-T	48	29X6482	2.50	54W0497	1000	1.06

(190016)

CLOCK CRYSTAL OSCILLATORS - 7X SERIES

NEW

RoHS Compliant Available

TXC

Features:
- Ultra small SMD seam sealed clock crystal oscillator units
- For applications in WLAN, Bluetooth, DSC, DSL and other IT product
- Tri-state function available

Specifications:
- Supply Voltage Range: 2.97V to 3.63V (3.3V Typ.)
- Tolerance: ±10%
- Output Type: CMOS
- Output Load: 15pF
- Oscillation Mode: Fundamental / 3rd Overtone
- Frequency Stability: ±50ppm (-10°C to +70°C)
- Dimensions: 3.2mm x 2.5mm

Mfg. Part No.	Freq. (MHz)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-2999
7X-1.8432MBC-T	1.8432	29X6515	2.73	54W0778	3000	1.22
7X-14.31818MBC-T	14.31818	29X6516	2.73	54W0781	3000	1.22
7X-19.200MBC-T	19.2	29X6517	2.73	54W0783	3000	1.22
7X-20.000MBC-T	20	29X6518	2.73	54W0785	3000	1.22
7X-25.000MBC-T	25	29X6519	2.73	54W0789	3000	1.22
7X-30.000MBC-T	30	29X6520	2.73	54W0793	3000	1.22
7X-38.400MBC-T	38.4	29X6521	2.73	54W0795	3000	1.22
7X-48.000MBC-T	48	29X6522	2.73	54W0800	3000	1.22

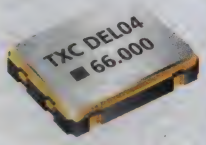
(212179)

CLOCK CRYSTAL OSCILLATORS - 7W SERIES

RoHS Compliant Available

TXC

Features:
- Small SMD seam sealed clock crystal oscillator units
- High precision characteristic covering up to wide frequency range
- Designed for automatic mounting and reflow soldering
- Optionable stand-by function for output: Tri-state output
- High stability, low jitter, low power consumption
- Main application: wireless communication, PC and LCDM



Specifications:
- Supply Voltage Range: 2.97V to 3.63V (3.3V Typ.)
- Tolerance: ±10%
- Output Type: CMOS
- Output Load: 30pF
- Oscillation Mode: Fundamental / 3rd Overtone
- Dimensions: 7mm x 5mm

FREQUENCY STABILITY: ±50ppm (-10°C to +70°C)

Mfg. Part No.	Freq. (MHz)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-999
7W-1.544MBB-T	1.544	84R5726	2.69	...	...	...
7W-1.8432MBB-T	1.8432	84R5727	2.89	...	...	...
7W-3.6864MBB-T	3.6864	84R5746	2.69	...	...	...
7W-4.000MBB-T	4	84R5753	2.69	84R5505	1000	1.14
7W-4.096MBB-T	4.096	84R5754	2.69	...	...	...
7W-6.000MBB-T	6	84R5759	2.85	...	...	...
7W-7.3728MBB-T	7.3728	84R5762	2.69	...	...	...
7W-8.000MBB-T	8	84R5764	2.69	...	...	...
7W-8.192MBB-T	8.192	84R5765	2.69	...	...	...
7W-10.000MBB-T	10	84R5728	2.69	...	...	...
7W-12.000MBB-T	12	84R5731	2.69	...	...	...
7W-12.288MBB-T	12.288	84R5732	2.69	...	...	...
7W-14.31818MBB-T	14.31818	84R5735	2.69	...	...	...
7W-14.7456MBB-T	14.7456	84R5736	2.69	...	...	...
7W-16.000MBB-T	16	84R5738	2.69	...	...	...
7W-16.384MBB-T	16.384	84R5739	2.69	...	...	...
7W-18.432MBB-T	18.432	84R5740	2.69	...	...	...
7W-20.000MBB-T	20	84R5741	2.69	...	...	...
7W-24.000MBB-T	24	84R5742	2.89	...	...	...
7W-24.576MBB-T	24.576	84R5743	2.69	...	...	...
7W-25.000MBB-T	25	84R5744	2.69	...	...	...
7W-27.000MBB-T	27	84R5745	2.69	...	...	...
7W-30.000MBB-T	30	84R5747	2.69	...	...	...
7W-32.000MBB-T	32	84R5748	2.69	...	...	...
7W-32.768MBB-T	32.768	84R5749	2.69	...	...	...
7W-33.3333MBB-T	33.3333	84R5750	2.69	...	...	...
7W-35.328MBB-T	35.328	84R5751	2.69	...	...	...
7W-36.000MBB-T	36	84R5752	2.69	84R5504	1000	1.14
7W-40.000MBB-T	40	84R5755	2.69	...	...	...
7W-48.000MBB-T	48	84R5756	2.69	...	...	...
7W-49.152MBB-T	49.152	84R5757	2.69	...	...	...
7W-50.000MBB-T	50	84R5758	2.89	...	...	...
FREQUENCY STABILITY: ±100ppm (-10°C to +70°C)						
7W-1.544MBC-T	1.544	29X6484	2.31	54W0670	1000	0.98
7W-3.6864MBC-T	3.6864	29X6498	2.31	54W0723	1000	0.98
7W-4.000MBC-T	4	29X6506	2.31	54W0741	1000	0.98
7W-6.000MBC-T	6	29X6509	2.31	54W0760	1000	0.98
7W-7.3728MBC-T	7.3728	29X6511	2.31	54W0766	1000	0.98
7W-8.000MBC-T	8	29X6513	2.31	54W0771	1000	0.98
7W-8.192MBC-T	8.192	29X6514	2.31	54W0774	1000	0.98
7W-10.000MBC-T	10	29X6485	2.31	54W0675	1000	0.98
7W-12.000MBC-T	12	29X6486	2.31	54W0682	1000	0.98
7W-14.31818MBC-T	14.31818	29X6488	2.31	54W0692	1000	0.98
7W-16.000MBC-T	16	29X6490	2.31	54W0700	1000	0.98
7W-16.384MBC-T	16.384	29X6491	2.31	54W0703	1000	0.98
7W-18.432MBC-T	18.432	29X6492	2.31	54W0705	1000	0.98
7W-20.000MBC-T	20	29X6493	2.31	54W0708	1000	0.98
7W-24.000MBC-T	24	29X6494	2.31	54W0712	1000	0.98
7W-24.576MBC-T	24.576	29X6495	2.31	54W0715	1000	0.98
7W-25.000MBC-T	25	29X6496	2.31	54W0718	1000	0.98
7W-27.000MBC-T	27	29X6497	2.31	54W0721	1000	0.98
7W-30.000MBC-T	30	29X6499	2.31	54W0725	1000	0.98
7W-32.000MBC-T	32	29X6500	2.31	54W0728	1000	0.98
7W-32.768MBC-T	32.768	29X6501	2.31	54W0731	1000	0.98
7W-33.000MBC-T	33	29X6502	2.31	54W0732	1000	0.98
7W-33.3333MBC-T	33.3333	29X6503	2.31	54W0735	1000	0.98
7W-35.328MBC-T	35.328	29X6504	2.31	54W0736	1000	0.98
7W-36.000MBC-T	36	29X6505	2.31	54W0739	1000	0.98
7W-49.152MBC-T	49.152	29X6507	2.31	54W0755	1000	0.98

CONTINUED

CLOCK CRYSTAL OSCILLATORS - 7W SERIES (CONT.)

FREQUENCY STABILITY: ±100ppm (-10°C to +70°C)

Mfg. Part No.	Freq. (MHz)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-999
● 7W-50.000MBC-T	50	29X6508	2.31	54W0758	1000	0.98
● 7W-60.000MBC-T	60	29X6510	2.88	54W0762	1000	1.22
● 7W-75.000MBC-T	75	29X6512	2.88	54W0768	1000	1.22
● 7W-133.330MBC-T	133.33	29X6487	5.57	54W0690	1000	2.30
● 7W-150.000MBC-T	150	29X6489	6.15	54W0697	1000	2.53

(190017)

CLOCK CRYSTAL OSCILLATORS - 8W SERIES

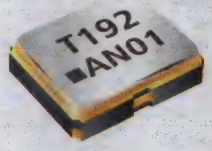
RoHS Compliant Available

TXC

NEW

Features:
- Ultra small SMD seam sealed clock crystal oscillator units
- For applications in WLAN, Bluetooth, DSC, DSL and other IT product
- Tri-state function available

Specifications:
- Supply Voltage Range: 2.97V to 3.63V (3.3V Typ.)
- Tolerance: ±10%
- Output Type: CMOS
- Output Load: 15pF
- Oscillation Mode: Fundamental
- Frequency Stability: ±50ppm (-10°C to +70°C)
- Dimensions: 2.5mm x 2.0mm



Mfg. Part No.	Freq. (MHz)	Tape Cut Stock No.	Tape Cut Price Each 1-9	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-2999
● 8W-12.000MBC-T	12	29X6523	3.43	54W0858	3000	1.38
● 8W-19.200MBC-T	19.2	29X6524	3.43	54W0863	3000	1.38
● 8W-20.000MBC-T	20	29X6525	3.43	54W0865	3000	1.38
● 8W-24.000MBC-T	24	29X6526	3.43	54W0867	3000	1.38
● 8W-24.576MBC-T	24.576	29X6527	3.43	54W0868	3000	1.38
● 8W-26.000MBC-T	26	29X6528	3.43	54W0871	3000	1.38
● 8W-40.000MBC-T	40	29X6529	3.43	54W0875	3000	1.38

(212180)

ACHL SERIES CRYSTAL CLOCK OSCILLATORS

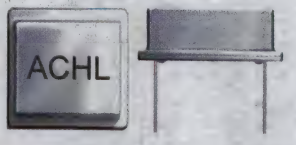
RoHS Compliant Available

ABRACON CORPORATION

Features
- HCMOS and TTL compatible
- Tight symmetry option
- Low voltage

Applications
- Clock signal sources for digital chips and microprocessors
- Low power applications

Specifications
- Operating temperature: -20°C to +70°C
- Frequency stability: ±30 ppm
- Supply voltage: 3.3 Vdc ±10%
- Duty cycle: 40 / 60% max.
- Rise and fall times: 10 ns max.
- Output load: 5TTL or 15 pF



Mfg. Part No.	Freq. (MHz)	Stock No.	Price Each 1-9
● ACHL-4.000MHZ-EK	4	13J1861	2.05
● ACHL-10.000MHZ-EK	10	13J1848	1.91
● ACHL-11.0592MHZ-EK	11.0592	13J1849	1.91
● ACHL-12.000MHZ-EK	12	13J1850	1.91
● ACHL-16.000MHZ-EK	16	13J1852	1.91
● ACHL-20.000MHZ-EK	20	13J1854	2.02
● ACHL-24.576MHZ-EK	24.576	13J1855	1.91
● ACHL-25.000MHZ-EK	25	13J1856	2.05
● ACHL-27.000MHZ-EK	27	13J1857	1.91
● ACHL-32.768MHZ-EK	32.768	13J1860	1.91
● ACHL-40.000MHZ-EK	40	13J1862	2.05
● ACHL-48.000MHZ-EK	48	13J1863	2.05
● ACHL-50.000MHZ-EK	50	13J1864	2.02

(83110)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

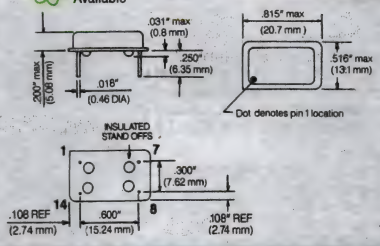
(196560)

TTL-COMPATIBLE CLOCK OSCILLATORS

RoHS Compliant Available

RALTRON

Package: 14-pin DIP. **Output:** "0" level: +0.4 V max, "1" level +2.4 V min. **Load:** 1 to 10 TTL. **Supply voltage:** +5 VDC (± 0.5 VDC). **Tolerance:** ±100 ppm. **Operating temperature:** 0°C to +70°C.



Mfg. Part No.	Freq. (MHz)	Stock No.	Price Each 1-9	10-99	100-499
● C01100-10.000-MHZ	10	18M8561	2.60	2.34	2.11
● C01100-12.000-MHZ	12	21M6835	2.80	2.52	2.27
● C01100-16.000-MHZ	16	21M6837	2.52	2.27	2.04
● C01100-20.000-MHZ	20	96F2822	2.60	2.34	2.11
● C01100-24.000-MHZ	24	21M6838	2.60	2.34	2.11
● C01100-32.000-MHZ	32	21M6839	2.52	2.26	2.04
● C01100-40.000-MHZ	40	96F2825	2.60	2.34	2.11

(4504)

MEMSPEED PRO II PROGRAMMER FOR PURESILICON™ OSCILLATORS

RoHS Compliant Available

ABRACON CORPORATION

Features
- Small dongle interfaces thru USB to PC
- Automatic software upgrades via Internet
- Field programmable dongle for several series
- ASxMB series – 2nd generation MEMS CMOS output
- ASxMPC series – Low Jitter MEMS CMOS output
- ASxMPLP series – Low Jitter MEMS LVPECL output
- ASxMPLV series – Low Jitter MEMS LVDS output
- ASxMPHC series – Low Jitter MEMS HCSL output

Specifications
- Programmer supply voltage: 1.8 to 3.6V
- Programming time: 2 seconds
- Operating system supported: MS Windows (XP, Vista, and Windows 7) 32 or 64 bit compatible
- Programmer size: 2.50" x 1.25" x 0.50"
- Programmer weight: 0.2 lb

The MEMSpeed Pro II programmer allows users to instantly program Abracon MEMS oscillators to a custom frequency in seconds through a Microsoft Windows GUI program on a PC. Abracon MEMSpeed Pro II supports CMOS, LVPECL, LVDS, and HCSL output MEMS oscillators in variety of package sizes. The oscillators can be programmed over their respective frequency range in increments of 100Hz (up to four decimal point resolution). The MEMSpeed Pro II kit includes a programming dongle, USB cable, antistatic tweezers and USBa Windows based PC installation program. The MEMSpeed Pro II is used with device dependent socket adapter cards and the appropriate package devices.

PROGRAMMABLE OSCILLATORS

Mfg. Part No.	Frequency (MHz)	Freq. Stability	No. of Pins	Dim. [LxWxH] (mm)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● ASDMB-BLANK-XY	1MHz to 150MHz	± 10ppm	4	2.5 x 2.0 x 0.8	39T2730	3.50
● ASEMB-BLANK-XY	1MHz to 150MHz	± 10ppm	4	3.5 x 2.5 x 0.85	39T2763	3.30
● ASFLMB-BLANK-XY-T	1MHz to 150MHz	± 10ppm	4	5.0 x 3.2 x 0.85	39T2796	3.18
● ASVMB-BLANK-XY	1MHz to 150MHz	± 10ppm	4	7.0 x 5.0 x 0.85	39T2832	3.18
● ASEMPC-BLANK-XR-T	10MHz to 170MHz	± 50ppm	6	3.2 x 2.5 x 0.85	48T0300	4.87
● ASEMPLP-BLANK-LR-T	10MHz to 425MHz	± 25ppm	6	3.2 x 2.5 x 0.85	48T0333	13.19
● ASFLMPLP-BLANK-XR-T	10MHz to 425MHz	± 25ppm	6	5.0 x 3.2 x 0.85	48T0362	12.25
● ASFLMPLV-BLANK-XR-T	10MHz to 425MHz	± 25ppm	6	5.0 x 3.2 x 0.85	48T0363	12.25
● ASVMPLV-BLANK-XR-T	10MHz to 425MHz	± 25ppm	6	7.0 x 5.0 x 0.85	48T0392	13.08

SOCKET ADAPTER KITS

Mfg. Part No.	Kit Contents	Stock No.	Price Each 1-4
● ASVMPC- ADAPTER-KIT	6-pin 5x3.2mm socket adapter and 5 unprogrammed 5x3.2mm ASFLMPLP LVPECL oscillators with ±25ppm over -40 to +85°C	38T1036	74.70
● ASFLMPC- ADAPTER-KIT	6-pin 3.2x2.5mm socket adapter and 5 unprogrammed 3.2.x2.5mm ASEMPLP LVPECL oscillators with ±25ppm over -40 to +85°C	38T0917	74.70
● ASEMPC- ADAPTER-KIT	6-pin 7x5mm socket adapter and 5 unprogrammed 7x5mm ASVMPLV LVDS oscillators with ±25ppm over -40 to 85°C	38T0772	74.70
● ASVMPLP- ADAPTER-KIT	6-pin 5x3.2mm socket adapter and 5 unprogrammed 5x3.2mm ASFLMPLV LVDS oscillators with ±25ppm over -40 to +85°C	38T1038	74.70
● ASFLMPLP- ADAPTER-KIT	6-pin 3.2x2.5mm socket adapterand 5 unprogrammed 3.2x2.5mm ASEMPLV LVDS oscillators with ±25ppm over -40 to +85°C	38T0919	74.70
● ASEMPLP- ADAPTER-KIT	6-pin 7x5.0mm socket adapter and 5 unprogrammed 7x5mm ASVMPHC HCSL oscillators with ±25ppm over -40 to +85°C	38T0774	74.70
● ASVMPLV- ADAPTER-KIT	6-pin 5x3.2mm socket adapter and 5 unprogrammed 5x3.2mm ASFLMPHC HCSL oscillators with ±25ppm over -40 to +85°C	38T1039	74.70
● ASFLMPLV- ADAPTER-KIT	6-pin 3.2x2.5mm socket adapter and 5 unprogrammed 3.2x2.5mm ASEMPHC HCSL oscillators with ±25ppm over -40 to +85°C	38T0920	74.70

➤ CONTINUED ➤

MEMSPEED PRO II PROGRAMMER FOR PURESILICON™ OSCILLATORS (CONT.)

Mfg. Part No.	Kit Contents	Stock No.	Price Each 1-4
ASEMPLV- ADAPTER-KIT	4-pin 7x5mm socket adapter and 50 unprogrammed 7x5mm ASVM oscillators with ±25ppm over -40 to +85°C	38T0775	74.70
ASVMPHC- ADAPTER-KIT	4-pin 5x3.2mm socket adapter and 50 unprogrammed 5x3.2mm ASFLM oscillators with ±25ppm over -40 to +85°C	38T1037	74.70
ASFLMPHC- ADAPTER-KIT	4-pin 3.2x2.5mm socket adapter and 50 unprogrammed 3.2x2.5mm ASEM oscillators with ±25ppm over -40 to +85°C	38T0918	74.70
ASEMPHC- ADAPTER-KIT	4-pin 2.5x2mm socket adapter and 50 unprogrammed 2.5x2mm ASDM oscillators with ±25ppm over -40 to +85°C	38T0773	74.70
ASVMB-ADAPTER-KIT	4-pin 7x5mm socket adapter and 50 unprogrammed 7x5mm ASVMB oscillators with ±25ppm over -40 to +85°C	38T0958	74.70
ASFLMB- ADAPTER-KIT	4-pin 5x3.2mm socket adapter and 50 unprogrammed 5x3.2mm ASFLMB oscillators with ±25ppm over -40 to +85°C	38T0803	74.70
ASEMB- ADAPTER-KIT	4-pin 3.2x2.5mm socket adapter and 50 unprogrammed 3.2x2.5mm ASEMB oscillators with ±25ppm over -40 to +85°C	38T0694	74.70
ASDMB- ADAPTER-KIT	4-pin 2.5x2mm socket adapter and 50 unprogrammed 2.5x2mm ASDMB oscillators with ±25ppm over -40 to +85	38T0542	79.18

PROGRAMMERS

Mfg. Part No.	Kit Contents	Stock No.	Price Each
MEMSPEED PRO II OSCILLATOR PRO	MEMSPEED II Programmer, USB Cable, Tweezers, Installation USB Flash Drive	38T2651	162.50

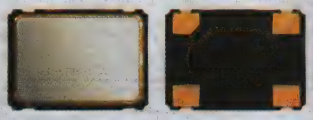
(194918)

PROGRAMMABLE CRYSTAL CLOCK OSCILLATOR

RoHS Compliant Available

CITIZEN

Features:
- Precision PLL technology enables up to 125 MHz high frequency output
- Quick delivery of specific frequency
- Ultra-miniature low profile SMT package
- Ceramic leadless chip carrier with seam-welded metal lid
- Output enable function
- Reflow soldering



Applications:
- Communication equipment
- AV equipment
- OA equipment
- Measuring equipment

Specifications:
- Frequency tolerance: ±100 ppm
- Operating temperature: -20°C - 70°C
- Load capacitance: 15 pF
- Rise and Fall Time: tr, tf: 4 ns

CSX750 PB

Mfg. Part No.	Freq. (MHz)	Supply Voltage (V)	Stock No.	Price Each 1-9
CSX750PBC25.000M-UT	100	3.6	26K2355	5.67
CSX750PBC30.000MB	100	3.6	26K2356	3.00
CSX750PBC32.768M-UT	100	3.6	26K2358	4.26
CSX750PBC40.000M-UT	100	3.6	26K2360	4.26
CSX750PBC45.000M-UT	100	3.6	26K2361	4.26
CSX750PBC50.000M-UT	100	3.6	26K2362	4.26
CSX750PBC64.000M-UB	100	3.6	26K2363	4.73
CSX750 PC				
CSX750PCC12.000M-UB	125	5.5	26K2368	3.47
CSX750PCC25.000M-UB	125	5.5	26K2371	3.94
CSX750PCC30.000M-UT	125	5.5	26K2374	4.26
CSX750PCC40.000M-UT	125	5.5	26K2377	4.73

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(211462)

MHz BAND SURFACE MOUNT CERAMIC RESONATORS

RoHS Compliant Available

AVX A KYOCERA GROUP COMPANY

Features:
- Excellent Frequency Stability
- Low-Profile SMD Package
- Reflow Solderable
- Excellent Solderability (Nickel Barrier + Au Flash Termination)

Applications:
- Car Accessories
- Camcorders
- Digital Cameras
- PDAs and PC Peripherals

Series	PBRC-G	PBRC-H	PBRC-M	PRQC-S
Frequency Range (MHz)	3.58 to 8.00	3.58 to 8.00	3.68 to 8.00	8.00 to 20.00
Tolerance (25°C)	±0.5%	±0.5%	±0.5%	±0.5%
Temp. Stability (-40° to +85°C)	±0.5%	±0.5%	±0.5%	±0.5%
Motorola IC	MC14069UB	MC74HC04	MC14069UB	MC74HCU04

Mfg. Part No.	Oscillation Freq. (MHz)	Freq. Tol.	Internal Cap. @ C1 & C2 (pF)	Tape Cut Stock No.	Price Each 1-9	Price Each 10-99
PBRC-3.58HR	3.58	± 0.5%	30	34K8591	1.57	1.31
PBRC-3.58BR	3.58	± 0.5%	33	78R4176	0.88	0.83
PBRC-3.68BR	3.68	± 0.5%	33	96M0956	0.88	0.83
PBRC-4.00BR	4	± 0.5%	33	96M0957	0.88	0.83
PBRC-4.00HR	4	± 0.5%	30	34K0119	0.81	0.77
PBRC4.19MR50X000	4.19	± 0.5%	15	11N7361	0.95	0.90
PBRC-8.00HR	8	± 0.5%	10	96M0959	0.79	0.66
PBRC8.00MR50X000	8	± 0.5%	15	11N7365	0.84	0.70
PBRC-10.00HR	10	± 0.7%	10	96M0953	1.05	0.88
PBRC10.00MR70X000	10	± 0.1%	10	11N7353	1.15	0.96
PBRC12.00MR70X000	12	± 0.1%	10	11N7355	1.15	0.96
PBRC16.00MR70X000	16	± 0.1%	10	11N7357	1.31	1.09
PBRC-20.00HR	20	± 0.7%	10	96M0955	1.31	1.09
PBRC20.00MR70X000	20	± 0.1%	10	11N7359	1.31	1.09

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HC-49US TERMINAL CRYSTAL RESONATOR

RoHS Compliant Available

multicomp

Specifications
- Frequency Tolerance: ± 30ppm
- Operating Temp. Range: -20°C to +70°C

Mfg. Part No.	Freq. (MHz)	ESR (Ω)	Load Cap. (pF)	Stock No.	Price Each 1-24
MCRS004000F183000RR	4	150	18	56P2848	0.43
MCRS004096F183000RR	4.096	150	18	56P2849	0.40
MCRS006144F183000RR	6.144	100	18	56P2850	0.40
MCRS010000F183000RR	10	80	18	56P2851	0.39
MCRS012000F183000RR	12	80	18	56P2854	0.39
MCRS011059F183000RR	11.0592	80	18	56P2852	0.39
MCRS011289F183000RR	11.2896	80	18	56P2853	0.37
MCRS013500F183000RR	13.5	80	18	56P2856	0.37
MCRS014745F183000RR	14.7456	50	18	56P2857	0.37
MCRS016000F183000RR	16	50	18	56P2859	0.39
MCRS016384F183000RR	16.384	50	18	56P2860	0.37
MCRS020000F183000RR	20	50	18	56P2861	0.39
MCRS025000F183000RR	25	50	18	56P2863	0.39
MCRS027000F183000RR	27	50	18	56P2864	0.39
MCRS029491F183000RR	29.4912	...	18	56P2865	0.42
MCRS032000F183000RR	32	140	18	56P2866	0.43
MCRS040000T183000RR	40	100	18	56P2867	0.40

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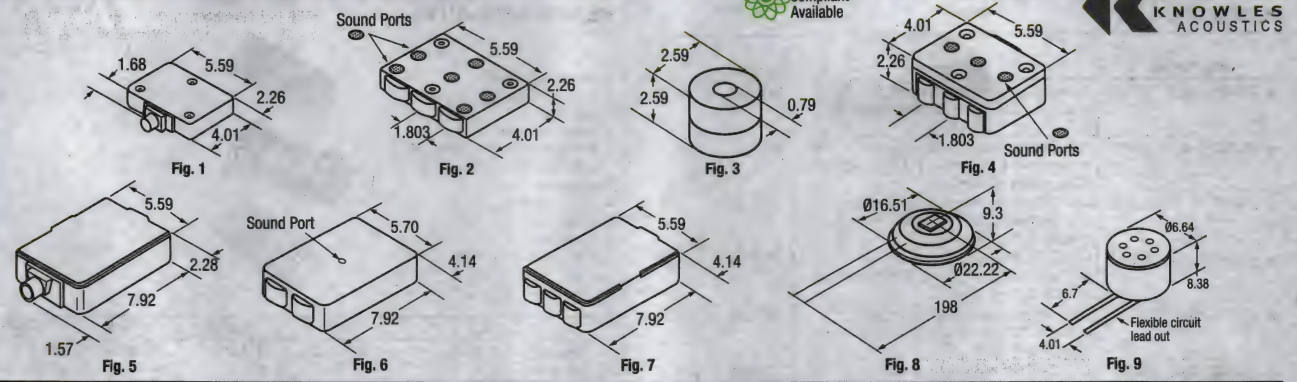
MICROPHONES, MICROPHONE ASSEMBLIES AND SPEAKERS

RoHS Compliant Available

KNOWLES ACOUSTICS



Mfg. Part No.	Fig.	Description	Sensitivity @ 1KHz dB Relative to 1V/1 Pa	Sensitivity @ 1KHz dB Relative to 1V/0.1 Pa	DC Supply Voltage	Current Drain Max. (µA)	Max. Input-Referred Noise Level A-Weighted, 1kHz	Output Impedance @ 1kHz (Ω)	Stock No.	Price Each 1-9
● EA-21842-000	1	Electret Omni-Directional	-39 ± 4	-59 ± 4	0.9 - 10	50	29.0dB SPL	3500	78K8021	21.54
● EA-21842-C36	1	Electret Omni-Directional	...	-59 ± 3	0.9 - 10	50	28.5dB SPL	3500	39M8425	21.71
● EK-23024-C37	1	Electret Omni-Directional	-33 ± 3	-53 ± 2	0.9 - 10	50	26.0dB SPL	4400	24M1770	22.93
● EK-23024-C36	1	Electret Omni-Directional	-33 ± 2	-53 ± 3	0.9 - 10	50	26.0dB SPL	4400	34M3053	24.47
● EK-23132-000	2	Electret Omni-Directional	-33 ± 3	-53 ± 3	0.9 - 10	50	26.0dB SPL	4400	78K8057	23.61
● FG-23329-C05	3	Electret Omni-Directional	-33 ± 3	-53 ± 3	0.9 - 1.6	50	30.0dB SPL	4400	78K8128	39.14
● FG-23329-P07	3	Electret Omni-Directional with 1m Cable Attached	-33 ± 3	-53 ± 3	0.9 - 1.6	50	30.0dB SPL	4400	78K8127	44.56
● WP-23502-000	4	Waterproof Electret Omni-Directional	-34 ± 3	-54 ± 3	0.9 - 10	50	28.0dB SPL	4400	79K0125	34.19
● BL-21785-000	5	Piezo Ceramic	-49 ± 3	-69 ± 3	3.0	160	34.0dB SPL	4000	78K7759	98.76
● BJ-21590-000	6	Magnetic Omni-Directional	-55.5 ± 3	-75.5 ± 3	...	...	...	3900	78K7740	39.72
● BU-21771-000	7	Accelerometer Vibrations Sensing	-45 ± 4.5 *	...	1.5 - 10	50	...	5200	78K7788	58.18
● MR-23151-000	8	Waterproof Magnetic 2 cable wire	-67.5 ± 3	-87.5 ± 3	...	...	30.0dB SPL	300	78K8451	49.30
● MR-23333-000	8	Waterproof Magnetic	...	...	...	...	...	21	78K8453	72.30
● MR-28406	8	2 cable wire	-40 ± 3	...	1.3	50	30.0dB SPL	3500	16M1388	49.13

Mfg. Part No.	Fig.	Nominal DC Resistance (Ω)	Sound Port Location	Nominal Output @ 1kHz Sealed to IEC 318 Coupler (dB SPL)	Distortion Max. %	Distortion @ Hz	Nominal Output Impedance @ 1kHz (Ω)	Stock No.	Price Each 1-9
● CM-28431-000	9	8.5	12C/Face	103	2	300	30	78K7864	21.81

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PIEZO TRANSDUCERS

RoHS Compliant Available

multicomp

Specifications
- Sensitivity: -42±2dB @ 1kHz
- Freq. Range: 100 to 16,000Hz
- Current Rating: 0.5mA Max.
- S/N ratio: ≤ 60dB

OMNI-DIRECTIONAL BACK ELECTRET

Mfg. Part No.	Voltage (V)	Dimm. L x Dia. (mm)	Termination	Stock No.	Price Each 1-99
● MCKPCM-B40H15-40DB-4811	2	1.5 x 4	SMD	25R0596	2.32
● MCKPCM-B40H15P-40DB-4815	2	1.5 x 4	2 Pin	25R0597	2.41
● MCKPCM-B45H22-40DB-4812	2	2.2 x 4.5	SMD	25R0598	2.01
● MCKPCM-B45H22P-40DB-4816	2	5 x 4.5	2 Pin	25R0599	2.09
● MCKPCM-B60H22-40DB-4813	2	2.2 x 6	SMD	25R0600	2.09
● MCKPCM-B60H22P-40DB-4817	2	5.4 x 6	2 Pin	25R0601	2.16
● MCKPCM-B60H27-40DB-4814	2	2.7 x 6	SMD	25R0602	2.09
● MCKPCM-B60H27P-40DB-4818	2	4.2 x 6	2 Pin	25R0603	2.16
OMNI-DIRECTIONAL ELECTRET					
● MCKPCM-40H15-40DB-4797	2	1.5 x 4	SMD	25R0604	2.32
● MCKPCM-40H15P-40DB-4798	2	4.3 x 4	2 Pin	25R0605	2.55
● MCKPCM-45H22-40DB-4799	2	2.2 x 4.5	SMD	25R0606	2.01
● MCKPCM-45H22P-40DB-4800	2	5 x 4.5	2 Pin	25R0607	2.09
● MCKPCM-60H18-40DB-4801	2	1.8 x 6	SMD	25R0608	2.16
● MCKPCM-60H18P-40DB-4802	2	4.6 x 6	2 Pin	25R0609	2.39
● MCKPCM-60H27-40DB-4803	2	2.7 x 6	SMD	25R0610	1.35
● MCKPCM-60H27P-40DB-4804	2	4.2 x 6	2 Pin	25R0611	1.49
● MCKPCM-60H50-40DB-4805	2	4.8 x 6	SMD	25R0613	0.70
● MCKPCM-60H50P-40DB-4806	2	15 x 6	2 Pin	25R0615	0.85
● MCKPCM-97H45-40DB-4810	4.5	4.5 x 9.7	SMD	25R0617	0.66
● MCKPCM-97H45P-40DB-4808	4.5	9.5 x 9.7	2 Pin	25R0618	0.91

➤CONTINUED➤

PIEZO TRANSDUCERS (CONT.)

OMNI-DIRECTIONAL ELECTRET

Mfg. Part No.	Voltage (V)	Dimm. L x Dia. (mm)	Termination	Stock No.	Price Each 1-99
● MCKPCM-97H67-40DB-4809	4.5	6.7 x 9.7	SMD	25R0621	0.70
● MCKPCM-97H67P-40DB-4807	4.5	11.2 x 9.7	2 Pin	25R0622	0.85
UNIDIRECTIONAL ELECTRET					
● MCKPCM-60H50N-47DB-4821	4.5	5 x 6	SMD	25R0614	1.78
● MCKPCM-97H50N-47DB-4822	4.5	5 x 9.7	SMD	25R0619	1.78
Unidirectional Electret					
● MCKPCM-97H50U-47DB-4820	4.5	5 x 9.7	SMD	25R0620	2.30

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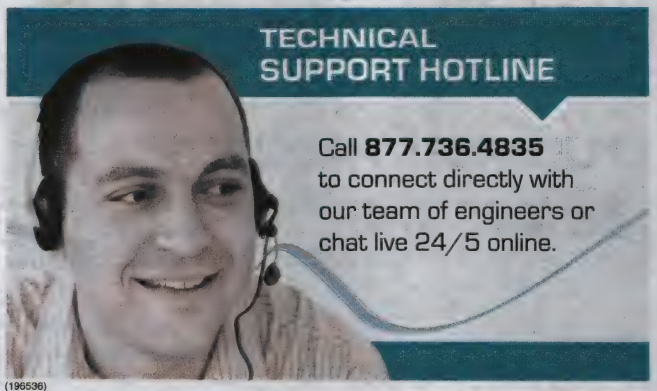

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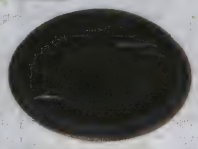
MINIATURE SPEAKER SERIES

RoHS Compliant Available

MALLORY Sonalert® Products

Features:
- Mylar Cone (Water & Fluid Resistant)
- Plastic & Metal frames available
- 8 Ohm; 0.25 Watts
- Compact size; wide frequency response



METAL FRAMES SPEAKERS

Mfg. Part No.	Frequency Range (kHz)	Sound Level (1W 1M)	Size Dia x Hgt (mm)	Stock No.	Price Each 1-9
PSR-13N08A-JQ	1.8 to 7	75	13 x 5	11R2889	1.92
PSR-18N08A-JQ	1.8 to 4	84	18 x 3	11R2890	1.99
PSR-20N08A-JQ	0.9 to 5	80	20 x 3	11R2892	2.14
PSR-28N08A-JQ	0.7 to 8	89	28 x 4.3	11R2896	1.65
PSR-36N08A-JQ	0.55 to 7	89	36 x 4.8	11R2898	2.08
PSR-40N08A05-JQ	0.5 to 5	89	40 x 5	11R2901	1.72
PSR-45N08A-JQ	0.4 to 6	88	45 x 4.8	11R2902	1.78
PSR-57N08A01-IQ	0.6 to 4	92	57 x 7	11R2905	2.13
PLASTIC FRAME SPEAKERS					
PSR-11N08S-JQ**	1.6 to 9.0	75	11 x 4.5	11R2888	1.74
PSR-20F08S-JQ	1.3 to 6	80	20 x 5	11R2891	0.61
PSR-23F08S-JQ	0.9 to 6.5	81	23 x 5	11R2893	0.55
PSR-27N08S01-JQ**	0.75 to 7	84	27 x 5	11R2895	1.62
PSR-29F08S02-JQ	0.8 to 4.5	84	29 x 9	11R2897	0.77
PSR-40F08S02-JQ	0.8 to 5	86	40 x 7.5	11R2899	0.98

➤ CONTINUED ➤

MINIATURE SPEAKER SERIES (CONT.)

PLASTIC FRAME SPEAKERS

Mfg. Part No.	Frequency Range (kHz)	Sound Level (1W 1M)	Size Dia x Hgt (mm)	Stock No.	Price Each 1-9
PSR-50F08S-JQ	0.5 to 5	91	50 x 10.5	11R2903	1.13
PSR-57F08S02-JQ	0.35 to 5	90	57 x 12.5	11R2904	1.20

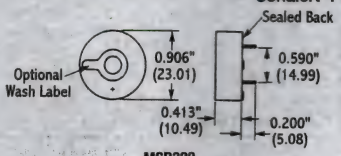
** Magnet inside of plastic frame
(148891)

MINIATURE BOARD MOUNT AUDIBLE ALARMS

RoHS Compliant Available

MALLORY Sonalert® Products

MSR Series Includes Drive Circuitry
- MSR320 Series: 90 dB @ 10 cm @ 12 Vdc
- MSR516 Series: 100 dB @ 10 cm @12 Vdc
- Optional Wash Label Available for all MSR Models ; *go online or call*



MSR320

Mfg. Part No.	Frequency	Options	Input Voltage	Current	Stock No.	Price Each 1-9	Price Each 10-99
MSR320R	3.4 kHz	Continuous	3-20VDC	16 mA	82K6405	5.08	4.81
MSO320R	3.4 kHz	Continuous	3-20VDC	16mA	82K6403	5.96	5.64
MSR516NSR	3.5 kHz	Continuous	5-16VDC	14mA	82K6414	6.48	6.13
MSR516NR	3.9 kHz	Continuous	5-16VDC	14mA	82K6413	6.52	6.17
MSR516NJR	3.9 kHz	Slow Pulse	5-16VDC	12mA	82K6409	7.06	6.68
MSR516NPR	3.9 kHz	Fast Pulse	5-16VDC	12mA	82K6411	7.18	6.79

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MINIATURE ALARMS, BUZZERS & TRANSDUCERS

RoHS Compliant Available

MALLORY Sonalert® Products

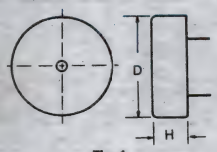

Fig. 1

Fig. 1A

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6

Fig. 7

Indicators have built-in drive circuitry and only require DC voltage.

PC BOARD MOUNT INDICATORS- PIEZOELECTRIC TYPE

Mfg. Part No.	Fig.	Tone	DC Voltage Range	Resonant Frequency Hz ± 500	SPL dB @ 30cm	D x H (mm)	Stock No.	Price Each 1-9	Price Each 10-99
MCP320Q	1	Constant	3-20	3150	74	24.0 x 17.0	89K7935	4.19	3.96
MCP320B2Q	1	Constant	3-20	2500	95	23.0 × 18.0	89K2232	4.21	3.98
PF-21A31PQ	1	Fast Pulse	3-24	3000	85	24.0 × 13.5	89K7944	7.91	7.47
PK-12N40PQ	1	Constant	3-15	4100	83 @ 10cm	13.8 × 7.5	89K2236	3.47	3.28
PK-20A25PQ	1	Constant	3-24	2500	95	23.0 × 18.0	89K7968	4.77	4.52
PK-20A38PQ	1	Constant	3-24	3800	95	23.4 × 18.0	89K7970	4.45	4.21
PK-21A31PQ	1	Constant	3-24	3000	90	24.0 × 14.0	89K7975	5.02	4.75
PK-21N30PQ	1	Constant	1.5-30	3000	80	24.0 × 9.5	86K9290	2.79	2.64
PK-27N26PSQ	1	Constant	3-28	2500	90	30.0 × 10.0	89K7984	4.28	4.05
PK-27N36PSQ	1	Constant	3-28	3500	90	30.0 × 10.0	89K7988	4.03	3.81
PLD-21N30PQ	1A	Constant & Slow Pulse	3-30	3000	80	24.0 × 9.5	89K8005	6.26	5.92

FLANGE MOUNT INDICATORS- PIEZOELECTRIC TYPE

Mfg. Part No.	Fig.	Tone	DC Voltage Range	Resonant Frequency Hz ± 500	SPL dB @ 30cm	D x H (mm)	Stock No.	Price Each 1-9	Price Each 10-99
PK-20A25WQ	2	Constant	3-24	2500	95	23.0 × 18.0	89K7969	4.87	4.61
PK-20A38WQ	2	Constant	3-24	3800	95	23.0 × 18.0	89K7971	4.76	4.51

➤ CONTINUED ➤

MINIATURE ALARMS, BUZZERS & TRANSDUCERS (CONT.)

FLANGE MOUNT INDICATORS- PIEZOELECTRIC TYPE

Mfg. Part No.	Fig.	Tone	DC Voltage Range	Resonant Frequency Hz ± 500	SPL dB @ 30cm	D × H (mm)	Stock No.	Price Each 1-9	Price Each 10-99
● PK-20N38WQ	2	Constant	3-28	3800	85	23.0 × 18.0	89K7973	3.77	3.58
● PK-21N30WQ	2	Constant	1.5-30	3000	80	24.0 x 9.5	89K7976	3.72	3.52
● PK-27N25WQ	2	Constant	3-28	2500	90	30.0 × 16.0	89K7983	3.91	3.70
● PK-27N26WQ	2	Constant	3-28	2500	90	30.0 × 10.0	89K7985	4.03	3.81
● PK-27N35WQ	2	Constant	3-28	3500	90	30.0 × 16.0	89K7987	3.73	3.53
● PK-35N29WQ	2	Constant	3-28	2900	90	42.0 × 16.0	64M1056	4.80	4.54
● PK-35A29WQ	2	Constant	3-24	2900	95	42.0 × 16.0	89K7990	5.59	5.28
● PLD-21N30WQ	2	Constant & Slow Pulse	3-30	3000	80	24.0 × 9.5	89K8006	6.64	6.28
● PL-27N36WQ	2	Slow Pulse	3-28	3500	90	30.0 × 10.0	89K8002	9.74	9.21
● PL-27N26WQ	2	Slow Pulse	3-28	2500	90	30.0 × 10.0	89K7999	6.50	6.15
● PL-27N25WQ	2	Slow Pulse	3-28	2500	90	30.0 × 16.0	89K7997	9.72	9.20
● PS-562Q	5	Slow Warble	5-15	2500 ±350	100 @ 100cm	42.0 × 16.0	48M3867	7.08	6.70

PANEL OR FLANGE MOUNT INDICATORS- PIEZOELECTRIC TYPE

● PF-20A35EWQ	3	Fast Pulse	3-24	3500	95	28.0 x 25.0	89K7942	6.93	6.56
● PFD-20A35EWQ	3	Constant & Fast Pulse	3-24	3500	95	28.0 x 25.0	89K7957	7.47	7.05
● PK-20A35EWQ	3	Constant	3-24	3500	95	28.0 x 25.0	57K6511	4.24	4.01
● PL-20A35EWQ	3	Slow Pulse	3-24	3500	95	28.0 x 25.0	89K7991	6.84	6.47
● PLD-20A35EWQ	3	Constant & Slow Pulse	3-24	3500	95	28.0 x 25.0	89K8004	7.55	7.15

PC BOARD MOUNT INDICATORS & BUZZERS - ELECTROMAGNETIC TYPE

Mfg. Part No.	Fig.	Tone	Voltage Range	Resonant Frequency (Hz)	SPL dB @ 10cm	D × H (mm)	Stock No.	Price Each 1-9	Price Each 10-99
● PB-12N23P-03Q	1	Constant	2 - 5	2300 ±400	85 @ 3VDC	12.0 x 8.0	89K7939	3.39	3.20
● PB-12N23P-05Q	1	Constant	4.5 - 5.5	2300 ±400	85 @ 5VDC	12.0 × 10.0	89K2233	3.19	3.01
● PB-12N23P-12Q	1	Constant	9 - 15	2300 ±400	85 @ 12VDC	12.0 × 10.0	89K2234	3.19	3.01
● PB-1220PQ	1	...	1.25 - 2.5	2048	85 @ 1.5V_{pp}	12.0 x 8.0	47M1090	1.18	1.12
● PB-1622PQ	7	145	10 - 14	2048	85 @ 5V_{pp}	16.0 x 14.0	42P4672	2.19	2.07
● PB-1224PE-05Q	1	...	4.5 - 5.5	2400 ±250	85 @ 5V_{pp}	12.0 x 9.5	48M3856	0.71	0.68

FLANGE MOUNT INDICATORS & BUZZERS - ELECTROMAGNETIC TYPE

Mfg. Part No.	Fig.	Tone	DC Voltage Range	Resonant Frequency (Hz)	SPL dB @ 10cm	D × H (mm)	Stock No.	Price Each 1-9	Price Each 10-99
● PK-16N04WA-06Q	4	Constant	4-8	400 ±100	95 @ 6VDC	16 x 23 Square	42P4718	7.46	7.06
● PK-16N04WA-12Q	4	Constant	8-16	400 ±100	95 @ 12VDC	16 x 23 Square	77M8527	6.46	6.11

PC BOARD MOUNT SELF DRIVE TRANSDUCERS - PIEZOELECTRIC TYPE

Mfg. Part No.	Fig.	Tone	Voltage Rating (Vp-p)	Resonant Frequency Hz ± 500	SPL dB @ 10cm	D × H (mm)	Stock No.	Price Each 1-9	Price Each 10-99
● PT-2735FPLQ	6	...	3 - 28	3500	88	30.0 x 9.0	22M4964	1.90	1.80
● PT-3534FPQ	1A	...	3 - 28	3400	105	39.0 x 16.0	48M3882	2.52	2.38

PC BOARD MOUNT EXTERNAL DRIVE TRANSDUCERS - PIEZOELECTRIC TYPE

Mfg. Part No.	Fig.	Cap. (pF)	Voltage Rating (Vp-p)	Resonant Frequency Hz ± 500	SPL dB @ 10cm	D × H (mm)	Stock No.	Price Each 1-9	Price Each 10-99
● PT-1240PQ	1	17000	5	4100	80	13.8 x 7.8	48M3872	2.55	2.41
● PT-1540PQ	1	14000	5	4000	85	17.0 x 7.0	68K1535	1.12	1.06
● PT-2040PQ	1	25000	5	4000	90	22.0 x 7.0	48M3876	1.09	1.03
● PT-2726PQ	1	30000	5	2500	90	30.0 x 10.0	48M3878	1.88	1.78

FLANGE MOUNT EXTERNAL DRIVE TRANSDUCERS - PIEZOELECTRIC TYPE

Mfg. Part No.	Fig.	Cap. (pF)	Voltage Rating (Vp-p)	Resonant Frequency Hz ± 500	SPL dB @ 10cm	D × H (mm)	Stock No.	Price Each 1-9	Price Each 10-99
● PT-2038WQ	5	25000	5	3800	90	24.0 x 5.0	89M5335	1.08	1.02
● PT-2725WQ	5	30000	5	2500	90	30.0 x 10.0	89M5528	1.53	1.45

(7388)

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(196564)

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Specifications
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- Oper. temp. range: -20°C to +60°C

Mfg. Part No.	Freq. (kHz)	Res. (Ohm)	Cap. (pF)	Dia. (mm)	Stock No.	Price Each 1-249
MCFT-9T-18A1-115	18	1000	3000	9	25R0595	0.41
MCFT-9.9T-7.0A1-93	7	1000	10000	9.9	25R0594	0.63
MCFT-10.5T-9.0A1-116	9	700	9000	10.5	25R0565	0.66
MCFT-12T-9.2A1-117	9.2	500	10000	12	25R0566	0.35
MCFT-15T-4.0A1-121	4	500	34000	15	25R0568	0.84
MCFT-15T-6.0A1-118	6	500	14000	15	25R0570	0.34
MCFT-15G-6.0A1-119*	6	500	14000	15	25R0567	0.34
MCFT-15T-6.0AL-120	6	500	14000	15	25R0569	0.61
MCFT-20T-4.0B1-122	4	500	25000	20	25R0572	0.43
MCFT-20T-4.0A1-95	4	350	25000	20	25R0571	0.51
MCFT-21T-3.3A1-124	3.3	500	30000	21	25R0574	0.46
MCFT-21.5T-5.0AS-123	5	150	80000	21.5	25R0573	0.92
MCFT-25T-3.0A1-125	3	500	50000	25	25R0575	0.75
MCFT-27T-2.5A1-129	2.5	500	50000	27	25R0576	0.80
MCFT-27T-4.0B1-130	4	500	20000	27	25R0577	0.57
MCFT-27T-4.6A1-97	4.6	260	16000	27	25R0578	0.79
MCFT-31G-1.0A1-135*	1	500	60000	31	25R0579	0.75
MCFT-31T-1.3A1-131	1.3	500	60000	31	25R0581	0.75
MCFT-31N-1.6A1-132†	1.6	500	60000	31	25R0580	1.41
MCFT-32G-2.4AS -133	2.4	150	210000	32	25R0582	2.38
MCFT-34.7G-2.9B1-134*	2.9	350	30000	34.7	25R0583	1.47
MCFT-35T-2.9A1-136	2.9	350	26000	35	25R0587	1.22
MCFT-35G-3.2B1-137*	3.2	350	30000	35	25R0585	1.17
MCFT-35G-3.2BL-138*	3.2	500	30000	35	25R0584	1.58
MCFT-35T-2.6A1-99	2.6	300	30000	35	25R0586	0.56
MCFT-36T-2.6A1-139	2.6	350	25000	36	25R0588	1.39
MCFT-39T-2.6B1-140	2.6	800	26000	39	25R0589	1.51
MCFT-41T-1.0A1-141	1	1000	70000	41	25R0591	1.01
MCFT-41G-1.0A1-142*	1	1000	70000	41	25R0590	1.17
MCFT-50T-1.9A1-143	1.9	1000	70000	50	25R0593	1.36
MCFT-50G-3.2A1-144*	3.2	500	26000	50	25R0592	1.41

All Brass cores except * = Stainless steel; †= Alloy.
(176960)

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- Sound Levels up to 95 dB @ 2 ft.
- Terminal Block Termination: Finger Proof Safe Handling Prevents Shock & Shorting Saves Assembly Time & Labor

DC ONLY

Mfg. Part No.	Supply Voltage (V)	Tone Type	Sound Level SPL (dBA)	Stock No.	Price Each 1-9
ZA016LDCT	6 To 16	Continuous	95	92T7447	37.19
ZA016LDDP2	6 To 16	Fast Double Pulse	95	92T7448	63.74
ZA016LDDP3	6 To 16	Slow Double Pulse	95	92T7449	63.74
ZA016LDFP1	6 To 16	Fast Pulse	95	92T7450	60.70
ZA016LDMP1	6 To 16	Medium Pulse	95	92T7451	76.31
ZA016LDSP1	6 To 16	Slow Pulse	95	92T7452	60.70
ZA016MDMP1	6 To 16	Medium Pulse	85	92T7457	60.70
ZA016MDCT	6 To 16	Continuous	85	92T7453	51.80
ZA016MDDP2	6 To 16	Fast Double Pulse	85	92T7454	63.74
ZA016MDDP3	6 To 16	Slow Double Pulse	85	92T7455	63.74
ZA016MDFP1	6 To 16	Fast Pulse	85	92T7456	60.70
ZA016MDSP1	6 To 16	Slow Pulse	85	92T7458	60.70
ZA016SDMP1	6 To 16	Medium Pulse	75	92T7463	57.04
ZA016SDCT	6 To 16	Continuous	75	92T7459	54.36
ZA016SDDP2	6 To 16	Fast Double Pulse	75	92T7460	59.89
ZA016SDDP3	6 To 16	Slow Double Pulse	75	92T7461	59.89
ZA016SDFP1	6 To 16	Fast Pulse	75	92T7462	57.04
ZA016SDSP1	6 To 16	Slow Pulse	75	92T7464	57.04

CONTINUED

ZA SERIES PANEL ALARMS WITH TERMINAL BLOCKS (CONT.)

Mfg. Part No.	Supply Voltage (V)	Tone Type	Sound Level SPL (dBA)	Stock No.	Price Each 1-9
ZA028SDCT	16 To 28	Continuous	75	92T7494	64.43
ZA028SDDP2	16 To 28	Fast Double Pulse	75	92T7495	59.89
ZA028SDDP3	16 To 28	Slow Double Pulse	75	92T7496	59.89
ZA028SDFP1	16 To 28	Fast Pulse	75	92T7497	57.04
ZA028SDMP1	16 To 28	Medium Pulse	75	92T7498	57.04
ZA028SDSP1	16 To 28	Slow Pulse	75	92T7499	59.86
ZA028LDCT	16 To 28	Continuous	95	92T7470	36.32
ZA028LDDP2	16 To 28	Fast Double Pulse	95	92T7471	36.12
ZA028LDDP3	16 To 28	Slow Double Pulse	95	92T7472	43.26
ZA028LDFP1	16 To 28	Fast Pulse	95	92T7473	41.20
ZA028LDMP1	16 To 28	Medium Pulse	95	92T7474	60.70
ZA028LDSP1	16 To 28	Slow Pulse	95	92T7475	76.31
ZA028MDCT	16 To 28	Continuous	85	92T7482	34.87
ZA028MDDP2	16 To 28	Fast Double Pulse	85	92T7483	66.90
ZA028MDDP3	16 To 28	Slow Double Pulse	85	92T7484	63.74
ZA028MDFP1	16 To 28	Fast Pulse	85	92T7485	60.70
ZA028MDMP1	16 To 28	Medium Pulse	85	92T7486	60.70
ZA028MDSP1	16 To 28	Slow Pulse	85	92T7487	60.70
AC OR DC					
ZA028LACT	16 To 28	Continuous	95	92T7465	48.49
ZA028LADP2	16 To 28	Fast Double Pulse	95	92T7466	75.59
ZA028LADP3	16 To 28	Slow Double Pulse	95	92T7467	75.59
ZA028LAFP1	16 To 28	Fast Pulse	95	92T3297	71.99
ZA028LAMP1	16 To 28	Medium Pulse	95	92T7468	71.99
ZA028LASP1	16 To 28	Slow Pulse	95	92T7469	71.99
ZA028MACT	16 To 28	Continuous	85	92T7476	66.22
ZA028MADP2	16 To 28	Fast Double Pulse	85	92T7477	68.72
ZA028MADP3	16 To 28	Slow Double Pulse	85	92T7478	68.72
ZA028MAFP1	16 To 28	Fast Pulse	85	92T7479	65.44
ZA028MAMP1	16 To 28	Medium Pulse	85	92T7480	65.44
ZA028MASP1	16 To 28	Slow Pulse	85	92T7481	65.44
ZA028SACT	16 To 28	Continuous	75	92T7488	42.83
ZA028SADP2	16 To 28	Fast Double Pulse	75	92T7489	77.82
ZA028SADP3	16 To 28	Slow Double Pulse	75	92T7490	77.82
ZA028SAFP1	16 To 28	Fast Pulse	75	92T7491	74.11
ZA028SAMP1	16 To 28	Medium Pulse	75	92T7492	74.11
ZA028SASP1	16 To 28	Slow Pulse	75	92T7493	74.11
ZA048LACT	28 To 48	Continuous	95	92T7500	61.98
ZA048LADP2	28 To 48	Fast Double Pulse	95	92T7501	92.12
ZA048LADP3	28 To 48	Slow Double Pulse	95	92T7502	92.12
ZA048LAFP1	28 To 48	Fast Pulse	95	92T7503	87.73
ZA048LAMP1	28 To 48	Medium Pulse	95	92T7504	87.73
ZA048LASP1	28 To 48	Slow Pulse	95	92T7505	87.73
ZA048MACT	28 To 48	Continuous	85	92T7506	56.32
ZA048MADP2	28 To 48	Fast Double Pulse	85	92T7507	83.71
ZA048MADP3	28 To 48	Slow Double Pulse	85	92T7508	83.71
ZA048MAFP1	28 To 48	Fast Pulse	85	92T7509	79.73
ZA048MAMP1	28 To 48	Medium Pulse	85	92T7510	79.73
ZA048MASP1	28 To 48	Slow Pulse	85	92T7511	79.73
ZA048SACT	28 To 48	Continuous	75	92T7512	63.78
ZA048SADP2	28 To 48	Fast Double Pulse	75	92T7513	83.71
ZA048SADP3	28 To 48	Slow Double Pulse	75	92T7514	83.71
ZA048SAFP1	28 To 48	Fast Pulse	75	92T7515	79.73
ZA048SAMP1	28 To 48	Medium Pulse	75	92T7516	79.73
ZA048SASP1	28 To 48	Slow Pulse	75	92T7517	79.73
ZA120LACT	48 To 120	Continuous	95	92T7518	51.24
ZA120LADP2	48 To 120	Fast Double Pulse	95	92T7519	71.65
ZA120LADP3	48 To 120	Slow Double Pulse	95	92T7520	71.65
ZA120LAFP1	48 To 120	Fast Pulse	95	92T7521	62.72
ZA120LAMP1	48 To 120	Medium Pulse	95	92T7522	71.62
ZA120LASP1	48 To 120	Slow Pulse	95	92T7523	71.62
ZA120MACT	48 To 120	Continuous	85	92T7524	31.92
ZA120MADP2	48 To 120	Fast Double Pulse	85	92T7525	73.92
ZA120MADP3	48 To 120	Slow Double Pulse	85	92T7526	59.84
ZA120MAFP1	48 To 120	Fast Pulse	85	92T7527	70.40
ZA120MAMP1	48 To 120	Medium Pulse	85	92T7528	70.40
ZA120MASP1	48 To 120	Slow Pulse	85	92T7529	70.40
ZA120SACT	48 To 120	Continuous	75	92T7530	59.11
ZA120SADP2	48 To 120	Fast Double Pulse	75	92T7531	83.71
ZA120SADP3	48 To 120	Slow Double Pulse	75	92T7532	83.71
ZA120SAFP1	48 To 120	Fast Pulse	75	92T7533	79.73
ZA120SAMP1	48 To 120	Medium Pulse	75	92T7534	79.73
ZA120SASP1	48 To 120	Slow Pulse	75	92T7535	79.73

(208184)

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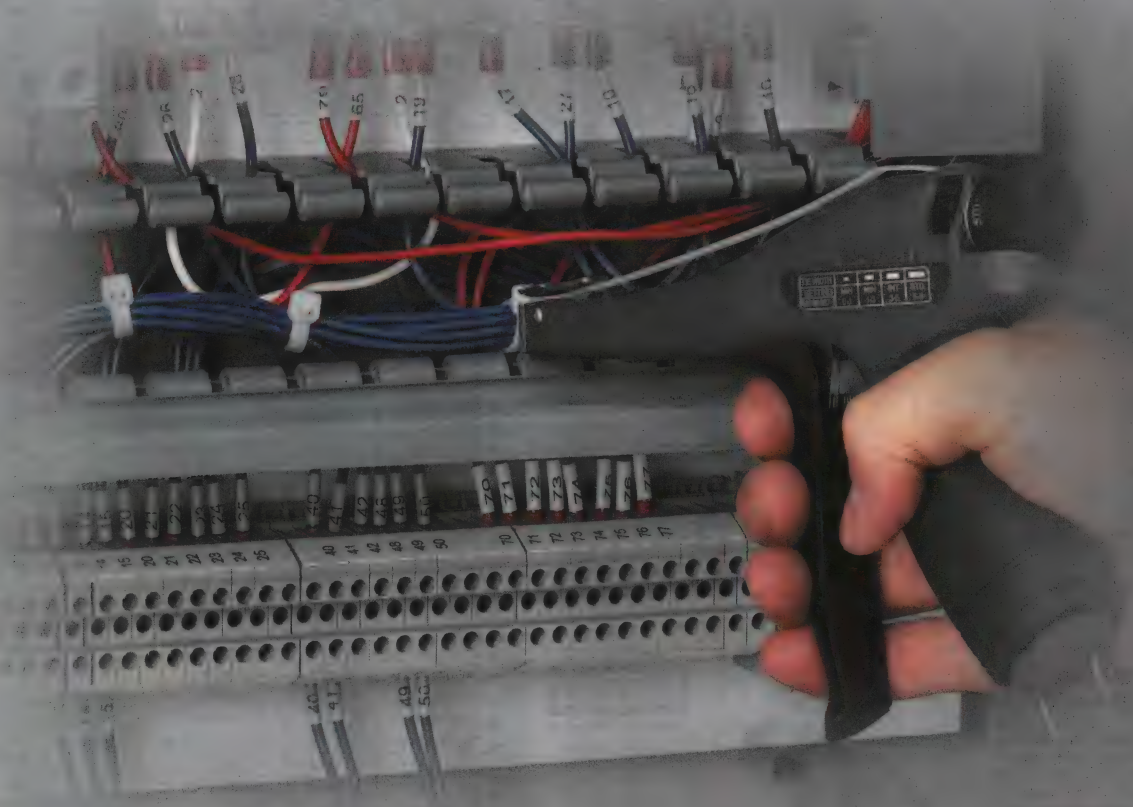

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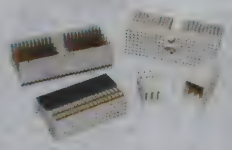
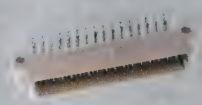

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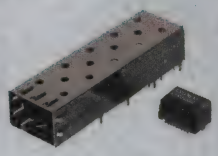
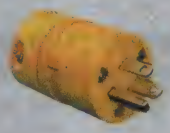
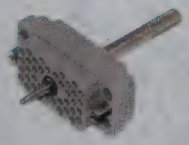


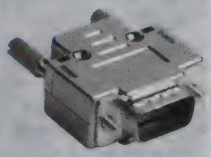
INDUSTRIAL CONNECTORS

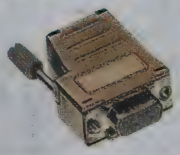
Circular, Rectangular/Rack & Panel, Plug & Socket, Electrical

D-SUB CONNECTORS

Filtered, Combination Layout, Adapters, Standard, High-Density, Contacts, Backshells, D-Sub Hardware



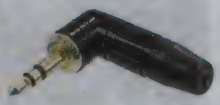


RF-COAX

1.0/2.3, Adapters, AMC, BNC, TNC, C, F, HN, N Jack, MCX, MHV, MMCX, QMA, QN, SHV, SMA, SMB, SMC, SMK, SMP, TRIAX, UHF

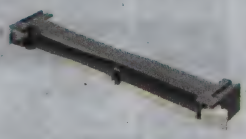
AUDIO-VIDEO

RCA, XLR, DIN, Phono Plugs, Phono Jacks, Speaker, Stereo Phono, Banana Plugs and Jacks



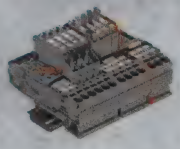
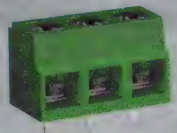
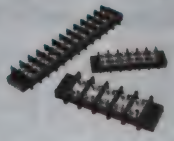
SOCKETS

DIP, SIP, PLCC, PGA, SIMM, DIMM, SOIC, Transistor, Spring Sockets, Memory Card



TERMINAL BLOCKS

Barrier Blocks, Euro Style Blocks, DIN Rail Blocks, Pluggable Blocks

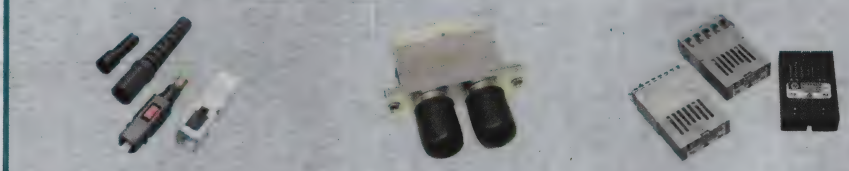




SOLDERLESS TERMINALS

Ring, Fork/Spade, Disconnects, Butt Splices, Compression/ Mechanical Lugs

FIBER OPTICS

Transmitters, Receivers, Transceivers, Adapters, Attenuators, Singlemode, Multimode



MIL-SPEC CONNECTORS & CONTACTS

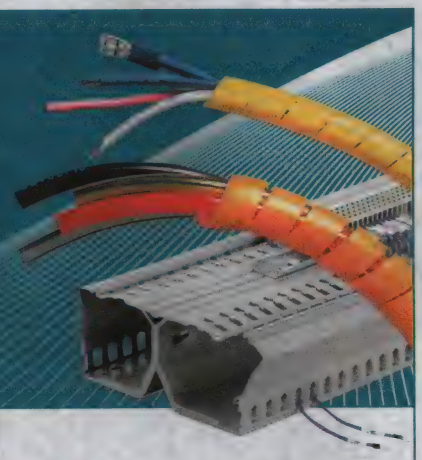
Card Edge, Circular, D-Sub, RF Coax, IC Sockets

WIRE & CABLE ASSEMBLIES

Category 5, RF/Coaxial, FFC/FPC (Flat Flex), Circular/Industrial, Fiber Optic, Computer Cable, Network Cable, Power Cords, Audio/Video, Printer, USB, Category 6, SATA/SAS

Cable Management

Cable ties and clips, wiring duct, cable management tools, heat shrink, fasteners, jumper wire assortments, sleeving, mounts, wire markers and labels.



Over 23,000 products from 20
TOP BRANDS!

AlphaWire BELDEN multicomp PANDUIT

SOCKETS – DIP/SIP

AMP DIPLOMATE® DUAL LEAF (DL) SIP SOCKETS

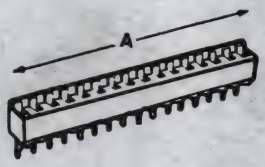
RoHS Compliant Available

TE connectivity

Authorized Distributor

- Low Profile: 0.210″ (5.33) Above PC Board
- Contact Spacing: 0.100″ (2.54)
- Voltage: 250VAC
- Meet EIA RS-415, MIL-S-83734 Specifications
- UL Recognized, CSA Certified

SIP sockets have dual wiping contacts with retention tails. Large target area with tapered lead-in ramps for easy insertion. Accept 0.008″-0.015″ (0.203-0.381) thick x 0.030″ (0.762) maximum wide rectangular leads. Glass-filled thermoplastic housing, rated UL94V-0, with closed bottom design and standoffs. Stackable end-to-end, side-to-side.



BERYLLIUM COPPER/TIN PLATING

Mfg. Part No.	Contacts	Dimension A	Stock No.	Price Each 1-9	10-49	50-99
● 382437-1	3	0.295″ (7.49)	22C6384	1.10	0.97	0.87
● 382438-1	4	0.395″ (10.03)	94B7371	1.15	1.11	1.07
● 643640-1	8	0.795″ (20.19)	50F2203	1.08	1.04	0.99
● 643641-6	9	0.895″ (22.73)	22C5325	2.16	1.95	1.91
● 643642-1	10	0.995″ (25.27)	50F2205	1.33	1.28	1.21
● 643644-1	12	1.195″ (30.35)	50F2207	1.83	1.65	1.63
● 643648-1	16	1.595″ (40.51)	50F2211	1.74	1.59	1.42
● 643652-1	20	1.995″ (50.61)	50F2214	2.14	1.97	1.84
● 643652-3	20	1.995″ (50.61)	50F2248	1.92	1.80	1.73
BERYLLIUM COPPER/GOLD PLATING						
● 1825410-8	8	0.795″ (20.19)	16M2799	0.99	0.90	0.82

(4464)

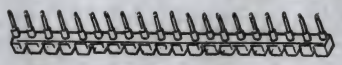
AMP 510 SERIES SIP SOCKET TERMINAL STRIPS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Gold Plated Beryllium Copper Contact
- Brass Sleeve
- Thermoplastic Polyester Housing, Flammability Rated UL94V-0
- Centerline: 0.100″ (2.54mm)
- Stackable/Closed Frame Style



Break into desired lengths.

Mfg. Part No.	Contacts	Sleeve Plating	Stock No.	Price Each 1-24
● 510-AG90D-10	10	Gold	67F1822	4.52
● 1-1571994-0	10	Tin	52K3253	3.69
● 510-AG90D-20	20	Gold	50F1736	6.79
● 2-1571994-0	20	Tin	52K3454	6.72

(4788)

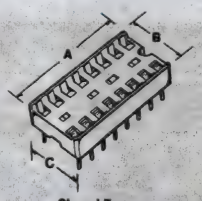
AMP DIPLOMATE® DUAL LEAF (DL) DIP SOCKETS

RoHS Compliant Available

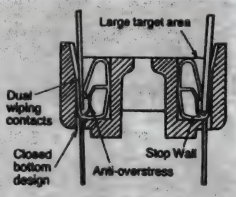
TE connectivity

Authorized Distributor

- Contact Spacing: 0.100″ (2.54)
- Rating: 250VAC
- Dielectric Withstanding Voltage: 1000V_{RMS} Minimum
- Insulation Resistance: 5000MΩ Minimum
- Contact Resistance: 20mΩ Maximum
- Meets EIA RS-415, MIL-S-83734 Specifications
- UL Recognized, CSA Certified



Closed Frame



LADDER FRAME — PHOSPHOR BRONZE/TIN PLATING

Thru-hole mount DIP sockets with closed frame construction. Feature dual wiping contacts with straight solder tail in tin or 30μ″ gold plating over phosphor bronze or copper alloy. Glass-filled thermoplastic housing with lead-in ramps for easy insertion and standoffs for easy board cleaning. Internal anti-over-stress walls prevent contact damage. Closed bottom design inhibits solder wicking and flux contamination and meets EIA 486, Class I. Stackable end-to-end or side-to-side (brickwalling) for high board density packaging. Visual polarization. Designed for automatic machine insertion. Accept 0.008-0.014″ (0.203-0.355) thick IC leads.

Mfg. Part No.	Contacts	Dimensions (Inches) A	B	C	Stock No.	Price Each 1-9	10-24	25-49
● 1-390261-1	6	0.295	0.394	0.300	52K3275	0.21	0.19	0.18
● 1-390261-2	8	0.395	0.394	0.300	52K3276	0.20	0.19	0.14
● 1-390261-3	14	0.695	0.394	0.300	52K3277	0.18	0.17	0.16
● 1-390261-5	18	0.895	0.394	0.300	52K3279	0.30	0.28	0.21
● 1-390261-8	24	1.195	0.394	0.300	52K3281	0.47	0.45	0.33
● 1-390262-1	24	1.195	0.694	0.600	79K2013	0.47	0.44	0.36
● 1-390262-2	28	1.395	0.694	0.600	52K3283	0.33	0.30	0.27
● 1-390262-5	40	1.995	0.694	0.600	52K3284	0.76	0.71	0.57

➤CONTINUED➤

AMP DIPLOMATE® DUAL LEAF (DL) DIP SOCKETS (CONT.)

Mfg. Part No.	Contacts	Dimensions (Inches) A	B	C	Stock No.	Price Each 1-9	10-24	25-49
LADDER FRAME STRAIGHT SOLDER TAIL SOCKET — BERYLLIUM COPPER/GOLD PLATING								
● 1-1825094-3	14	0.695	0.394	0.300	52K3255	2.02	1.83	1.65
● 1-1825094-4	16	0.795	0.394	0.300	52K3256	2.13	1.94	1.82
● 1-1825109-3	40	1.995	0.694	0.600	52K3258	3.88	3.55	3.39
LADDER FRAME STRAIGHT SOLDER TAIL SOCKET — PHOSPHOR BRONZE/TIN PLATING								
● 2-382465-3	20	0.995	0.394	0.300	12H3750	0.79	0.77	0.74
● 2-382467-3	28	1.395	0.694	0.600	12H3751	1.01	0.79	0.68
● 2-382470-3	32	1.595	0.694	0.600	05C0431	1.39	1.22	1.10
LADDER FRAME STRAIGHT SOLDER TAIL SOCKET — PHOSPHOR BRONZE/GOLD PLATING								
● 1825094-6	20	0.995	0.394	0.300	21R5955	1.33	1.21	1.11
● 1825094-7	24	1.195	0.694	0.600	21R5956	2.17	1.98	1.77
● 1825109-2	28	1.395	0.694	0.600	21R5959	2.35	2.25	2.14
● 1825109-3	40	1.995	0.694	0.600	21R5960	3.04	2.86	2.67
LADDER FRAME RETENTION SOLDER TAIL SOCKET — BERYLLIUM COPPER/TIN PLATING								
● 2-641610-1	16	0.795	0.394	0.300	92F5387	0.76	0.69	0.62
● 2-641612-1	20	0.995	0.394	0.300	84F1118	0.77	0.74	0.71
● 2-641615-1	28	1.395	0.694	0.600	90F4692	1.47	1.29	1.16
● 2-641616-1	40	1.995	0.694	0.600	92F5998	1.62	1.48	1.33
LADDER FRAME RETENTION SOLDER TAIL SOCKET — PHOSPHOR BRONZE/TIN PLATING								
● 2-641615-3	28	1.395	0.694	0.600	90F4697	0.77	0.74	0.71
CLOSED FRAME — BERYLLIUM COPPER/GOLD PLATING								
● 1-1825093-1	6	0.295	0.394	0.300	16M2650	0.84	0.78	0.70
● 1-1825093-2	8	0.395	0.394	0.300	52K3254	0.74	0.68	0.62
● 1-1825108-2	28	0.795	0.394	0.300	87K2211	2.06	1.94	1.90
● 1-1825093-6	20	0.995	0.394	0.300	16M2652	2.25	2.07	1.90
● 1-1825108-1	24	1.195	0.694	0.600	16M2653	2.94	2.64	2.39
● 1-1825108-2	28	1.395	0.694	0.600	87K2211	2.06	1.94	1.90
● 1-1825108-2	28	1.395	0.694	0.600	87K2211	2.06	1.94	1.90
● 1-1825108-3	40	1.995	0.694	0.600	16M2654	6.06	5.81	5.05
CLOSED FRAME — PHOSPHOR BRONZE/GOLD PLATING								
● 1825093-1	6	0.295	0.394	0.300	52K3435	0.50	0.43	0.42
● 1825093-2	8	0.395	0.394	0.300	52K3436	0.67	0.63	0.51
● 1825093-3	14	0.695	0.394	0.300	52K3437	0.73	0.68	0.63
● 1825088-3*	14	0.700	0.450	0.300	52K4298	7.72	5.82	5.49
● 1825093-4	16	0.795	0.394	0.300	52K3438	1.36	1.20	1.08
● 1825093-6	20	0.995	0.394	0.300	52K3440	1.11	1.04	1.01
● 1825108-1	24	1.195	0.694	0.600	16M2798	2.04	1.95	1.85
2-640362-4	28	1.395	0.694	0.600	44F7999	2.54	2.31	2.08
● 1825108-3	40	1.995	0.694	0.600	52K3441	2.65	2.50	2.35
CLOSED FRAME RETENTION SOCKET — BERYLLIUM COPPER/TIN PLATING								
● 2-641260-1	8	0.395	0.394	0.300	66F1568	0.47	0.46	0.34
● 2-641609-1	14	0.695	0.394	0.300	92F5996	0.68	0.66	0.62
● 2-641262-1	16	0.795	0.394	0.300	90F4605	0.74	0.67	0.60
● 2-641264-1	20	0.995	0.394	0.300	90F4606	0.84	0.81	0.77
● 2-641933-1	24	1.195	0.394	0.300	90F4691	1.13	1.00	0.91
● 2-641267-1	28	1.395	0.694	0.600	90F4608	1.16	1.11	1.05
● 2-641268-1	40	1.995	0.694	0.600	90F4609	1.82	1.73	1.55
CLOSED FRAME RETENTION SOCKET — PHOSPHOR BRONZE/TIN PLATING								
● 2-641267-3	28	1.395	0.694	0.600	90F4615	0.67	0.60	0.59
CLOSED FRAME RETENTION SOCKET — PHOSPHOR BRONZE/GOLD PLATING								
● 1825373-2	8	0.395	0.394	0.300	50P9485	0.52	0.47	0.42
OPEN FRAME RETENTION SOCKET — BERYLLIUM COPPER/GOLD PLATING								
● 2-382189-1	32	1.595	0.694	0.600	95F1382	0.98	0.87	0.78
OPEN FRAME RETENTION SOCKET — PHOSPHOR BRONZE/GOLD PLATING								
● 1825276-2	32	1.390	0.697	0.600	21R5966	2.47	2.24	2.01

*Right Angle

(4462)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

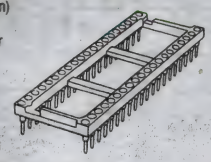
AMP 800 SERIES ECONOMY OPEN INSULATOR DIP SOCKETS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Row-to-Row Spacing: 0.300″ (7.62mm)
- Vertical Mount
- Stamped and Forged Beryllium Copper Contact
- Four-Fingered Mating Contact Type
- Rated: UL 94V-0
- Temperature Range: 125°C
- Insulation Resistance: 5,000 MΩ
- Contact Resistance: 10 mΩ



Gold-plated contacts and tin-lead plated sleeve. UL recognized.

Mfg. Part No.	Contacts	Spacing	Stock No.	Price Each 1-9
4-1571552-3	8	0.300″ (7.62)	52K3641	1.36
814-AG11D-ES-LF	14		16M3443	1.43
816-AG11D-ES-LF	16		16M3445	1.42
4-1571552-6	20		52K3642	1.36
4-1571552-9	28	0.600″ (15.24)	52K3643	2.78
3-1571552-0	32		05M6189	1.68
5-1571552-0	32		52K3716	3.02
5-1571552-2	40		52K3717	2.43

(4715)

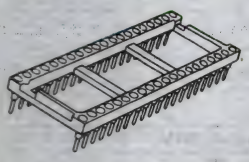
AMP 800 SERIES OPEN INSULATOR DIP SOCKETS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Row-to-Row Spacing: 0.300″ (7.62 mm)
- Thru-Hole Contact Mount
- Vertical Mount
- Centerline: 0.100″ (2.54 mm)
- Stackable/Ladder Frame
- Temperature Range: 125°C
- Insulation Resistance: 500 0MΩ
- Contact Resistance: 10 mΩ



Thermoplastic polyester insulator, rated UL94V-0. 0.125″ (3.18mm) PC termination. UL recognized.

GOLD-PLATED SLEEVE

Mfg. Part No.	Contacts	Spacing	Stock No.	Price Each 1-9
808-AG10D	8	0.300″ (7.62)	67F1800	5.21
814-AG10D	14		67F1801	5.23
816-AG10D	16		67F1802	5.14
818-AG10D	18		67F1803	5.90
820-AG10D	20		67F1804	6.20
824-AG10D	24	0.600″ (15.24)	67F1806	7.89
828-AG10D	28		67F1807	11.32
840-AG10D	40		67F1808	11.13
TIN-LEAD SLEEVE				
808-AG11D-LF	8	0.300″ (7.62)	16M3442	2.12
820-AG11D-LF	20		16M3447	4.47
824-AG11D-LF	24	0.600″ (15.24)	16M3453	6.84
828-AG11D-LF	28		16M3454	8.27
840-AG11D-LF	40		16M3455	8.22

(4755)

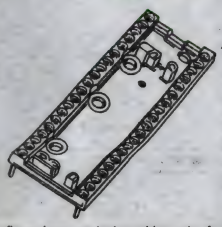
AMP 500 SERIES MACHINED CONTACT SOLID INSULATOR DIP SOCKETS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Row-to-Row Spacing: 0.300″ (7.62 mm)
- Thru-Hole Contact Mount
- Vertical Mount Style
- Centerline: 0.100″ (2.54 mm)
- Stackable/Closed Frame
- Rated: UL 94V-0
- Temperature Range: 125°C
- Insulation Resistance: 5000 MΩ
- Contact Resistance: 10 mΩ



Precision-machined beryllium copper four-finger inner contact provides entry for flat or round lead insertion, plus maximum mechanical and electrical performance. Contact rating: 3A. UL recognized.

PC TERMINATION GOLD CONTACT AND SLEEVE

Mfg. Part No.	Contacts	Spacing	Stock No.	Price Each 1-9
506-AG10D	6	0.300″ (7.62)	94F3959	5.99
508-AG10D	8		14F2700	3.74
514-AG10D	14		14F2701	5.91
516-AG10D	16		14F2702	5.92
516-AG10D-ES	16		72C7787	2.75
518-AG10D	18		14F2703	6.11
532-AG10D	32	0.600″ (15.24)	14F2709	10.06

CONTINUED

AMP 500 SERIES MACHINED CONTACT SOLID INSULATOR DIP SOCKETS (CONT.)

3-LEVEL SOLDERLESS WRAP, GOLD CONTACT AND SLEEVE

Mfg. Part No.	Contacts	Spacing	Stock No.	Price Each 1-9
516-AG10F	16		65F1922	10.08
PC TERMINATION GOLD CONTACT AND TIN/LEAD SLEEVE				
508-AG11D-LF	8	0.300″ (7.62)	03M2482	2.66
2-1571550-3	14		52K3452	5.26
2-1571550-4	16		87K2028	2.71
518-AG11D-LF	18		16M3189	4.19
520-AG11D-LF	20		16M3190	8.17
524-AG11D-LF	24	0.600″ (15.24)	16M3252	5.64
528-AG11D-LF	28		84K8074	6.86
532-AG11D-LF	32		16M4000	6.78
3-1571550-2	40		80K9201	11.04
PC TERMINATION TIN/LEAD CONTACT AND SLEEVE				
506-AG12D-LF	6	0.300″ (7.62)	02M8666	1.29
514-AG12D-LF	14		16M3188	4.41

(4790)

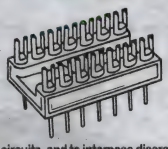
AMP 600 SERIES PLUG ADAPTER ASSEMBLIES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Machined-Pin Molded Adapter
- Gold-Plated 0.018″ (0.457) Diameter Pins
- Machined Printed Circuit and Mounting Terminals
- Thermoplastic Polyester Insulator, Rated UL 94V-0



Used to assemble hybrid and special network circuits, and to interpose discrete components. Type number indicates pin style: **A** = round; **C, D** = slotted.

0.300″ (7.62) ROW SPACING

Mfg. Part No.	Contacts	Stock No.	Price Each 1-9
614-CG1	14	14F2937	13.61
614-DG5	14	14F2945	17.65
616-AG1	16	14F2938	19.49
616-CG1	16	14F2940	10.65
616-DG5	16	14F2946	9.87
UNIVERSAL 0.600″ (15.24) ROW SPACING			
616-CG3	16	56F1246	15.15

(4751)

SINGLE-ROW SOLDER-TAIL STRIP SOCKETS

RoHS Compliant Available

MILL-MAX®

Single-row strip sockets have 0.020″ diameter solder-tail pin receptacles spaced at 0.100″. Four-finger inner clip and precision-machined brass receptacle shells. The body is rated UL94V-0. Current rating: 3 amps. **310 Series** feature 0.125″ tail length; **311 Series** feature 0.170' tail length.

10 µ″ GOLD SHELL PLATING - 30µ″ GOLD INNER CONTACT PLATING

Mfg. Part No.	Contacts	Length	Stock No.	Price Each 1-9	Price Each 10-99
310-13-164-41-001000	64	6.40″	17C4901	15.72	14.17
200 µ″ TIN SHELL PLATING - 30µ″ GOLD INNER CONTACT PLATING					
310-43-120-41-001000	20	2.00″	04M2489	9.49	8.57
310-43-164-41-001000	64	6.40″	04M2491	9.43	8.50
200 µ″ TIN/LEAD (93/7) SHELL PLATING - 30µ″ GOLD INNER CONTACT PLATING					
310-93-164-41-001000	64	6.40″	66F9246	9.43	8.50
311-93-164-41-001000	64	6.40″	17C4915	12.23	8.49

(4732)

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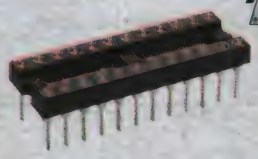
(198545)

SOCKETS – DIP/SIP

LONG SOLDER TAIL DIP SOCKETS FOR MULTILAYER PCB'S - OPEN FRAME

RoHS Compliant Available

MILL-MAX®



- Open frame DIP socket
- Current rating: 3A
- Above PC board height .165″
- High reliable 4 finger contact

DIP sockets with increased solder tail length of 0.170″, allowing application on multilayer PCBs up to 0.139″ thickness.

200 µ″ TIN SHELL PLATING - 30µ″ GOLD INNER CONTACT PLATING

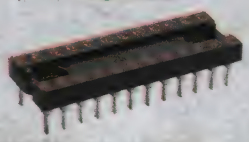
Mfg. Part No.	Contacts	Dimensions (in.) Length	Dimensions (in.) Row Spacing	Stock No.	Price Each 1-9	Price Each 10-99
● 111-43-308-41-001000	8	0.4	0.3	04M0645	1.86	1.29
● 111-43-314-41-001000	14	0.7	0.3	04M0647	2.98	2.07
● 111-43-316-41-001000	16	0.8	0.3	04M0648	3.48	2.41
● 111-43-320-41-001000	20	1.0	0.3	04M0650	4.11	2.85
● 111-43-324-41-001000	24	1.2	0.3	04M0652	4.61	3.20
● 111-43-624-41-001000	24	1.2	0.6	04M0659	4.61	3.20
● 111-43-628-41-001000	28	1.4	0.6	04M0660	5.66	3.93
● 111-43-640-41-001000	40	2.0	0.6	04M0663	8.03	5.57
200 µ″ TIN/LEAD SHELL PLATING - 30µ″ GOLD INNER CONTACT PLATING						
111-93-308-41-001000	8	0.4	0.3	17C2418	1.69	1.18

(115449)

SOLDER TAIL DIP SOCKETS - CLOSED FRAME

RoHS Compliant Available

MILL-MAX®



- Closed frame DIP socket
- Current rating: 3A
- Above PC board height .165″
- High reliable 4 finger contact

Closed frame insulator withstands high mechanical impact. Low profile.

200 µ″ TIN SHELL PLATING - 30µ″ GOLD INNER CONTACT PLATING

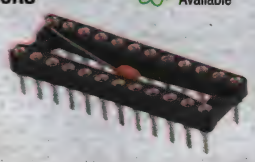
Mfg. Part No.	Contacts	Dimensions (in.) Length	Dimensions (in.) Row Spacing	Stock No.	Price Each 1-9	Price Each 10-99
● 210-43-308-41-001000	8	0.4	0.3	04M1727	1.38	0.96
● 210-43-314-41-001000	14	0.7	0.3	04M1729	2.48	1.73
● 210-43-316-41-001000	16	0.8	0.3	04M1730	2.76	1.92
● 210-43-324-41-001000	24	1.2	0.3	04M1734	4.14	2.88
● 210-43-624-41-001000	24	1.2	0.6	04M1737	4.25	2.96
● 210-43-628-41-001000	28	1.4	0.6	04M1738	4.83	3.37
● 210-43-632-41-001000	32	1.6	0.6	04M1739	5.57	3.87
● 210-43-640-41-001000	40	2.0	0.6	04M1741	6.88	4.79
200 µ″ TIN/LEAD SHELL PLATING - 30µ″ GOLD INNER CONTACT PLATING						
210-93-308-41-001000	8	0.4	0.3	97H2331	1.38	0.96
210-93-314-41-001000	14	0.7	0.3	53H8610	2.30	1.60
210-93-316-41-001000	16	0.8	0.3	17C4680	2.80	1.95

(115454)

DIP SOCKETS WITH INTEGRAL DECOUPLING CAPACITORS

RoHS Compliant Available

MILL-MAX®



Low-profile DIP sockets feature an integral decoupling capacitor; 0.1µF 20%-50V multi-layer ceramic epoxy encapsulated. Hi-rel. 4-finger clip. Contacts plated with 30µ″ gold, 200µ″ tin plating on sleeve. Temperature range: –25°C to +85°C. For product dimensions please visit us online.

Mfg. Part No.	Contacts	Dimensions L× W	Stock No.	Price Each 1-9
110-93-314-41-801000	14	0.7″ × 0.4″	17C2303	4.21
● 110-43-314-41-801000	14	0.7″ × 0.4″	87K7522	4.36
110-93-316-41-801000	16	0.8″ × 0.4″	17C2307	4.30
● 110-43-316-41-801000	16	0.8″ × 0.4″	87K7523	4.90
110-93-318-41-801000	18	0.9″ × 0.4″	17C2311	5.13
110-93-320-41-801000	20	1.0″ × 0.4″	17C2315	4.85
● 110-43-320-41-801000	20	1.0″ × 0.4″	87K7525	5.43
110-93-324-41-801000	24	1.2″ × 0.4″	17C2322	8.09

➤ CONTINUED ➤

DIP SOCKETS WITH INTEGRAL DECOUPLING CAPACITORS (CONT.)

Mfg. Part No.	Contacts	Dimensions L× W	Stock No.	Price Each 1-9
● 110-43-324-41-801000	24	1.2″ × 0.4″	87K7527	5.81
110-93-628-41-801000	28	1.4″ × 0.7″	17C2344	5.86

(53070)

LOW-PROFILE DIP SOCKETS

RoHS Compliant Available

MILL-MAX®

- Current rating: 3A
- Open frame, solder tail
- Accepts: .015-.025″ dia. pins
- Hi-reliable 4-finger contacts

PLATING: SLEEVE, 10µ″ GOLD; CONTACT, 30µ″ GOLD

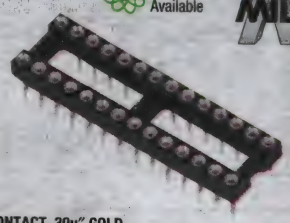
Mfg. Part No.	Contacts	Dimensions L × W (In.)	Stock No.	Price Each 1-9	Price Each 10-49
● 110-13-306-41-001000	6	0.3 x 0.4	17C2221	1.81	1.26
● 110-13-308-41-001000	8	0.4 x 0.4	17C2222	1.77	1.38
● 110-13-314-41-001000	14	0.7 x 0.4	17C2226	2.57	2.14
● 110-13-316-41-001000	16	0.8 x 0.4	17C2229	2.94	2.45
● 110-13-318-41-001000	18	0.9 × 0.4	17C2231	3.35	2.79
● 110-13-320-41-001000	20	1.0 x 0.4	17C2233	3.32	2.75
● 110-13-324-41-001000	24	1.2 x 0.4	17C2237	3.88	3.21
● 110-13-328-41-001000	28	1.4 x 0.4	17C2239	4.53	3.75
● 110-13-624-41-001000	24	1.2 x 0.7	23K7809	3.70	3.06
● 110-13-628-41-001000	28	1.4 x 0.7	53H8348	4.59	3.80
● 110-13-640-41-001000	40	2.0 x 0.7	23K7812	6.35	5.38
PLATING: SLEEVE, 200µ″ TIN-LEAD; CONTACT, 200µ″ TIN-LEAD					
110-99-308-41-001000	8	0.4 x 0.4	17C2371	0.82	0.49
110-99-314-41-001000	14	0.7 x 0.4	17C2373	1.11	0.86
110-99-316-41-001000	16	0.8 x 0.4	17C2374	1.28	0.99
110-99-318-41-001000	18	0.9 x 0.4	93B2929	1.34	1.04
110-99-320-41-001000	20	1.0 x 0.4	17C2375	1.56	1.21
110-99-324-41-001000	24	1.2 x 0.4	17C2376	1.87	1.45
110-99-328-41-001000	28	1.4 x 0.4	17C2377	1.86	1.54
110-99-624-41-001000	24	1.2 x 0.7	17C2383	1.78	1.38
110-99-628-41-001000	28	1.4 x 0.7	17C2384	1.83	1.52
110-99-640-41-001000	40	2.0 x 0.7	17C2387	2.65	2.20
PLATING: SLEEVE, 200µ″ TIN; CONTACT, 200µ″ TIN					
● 110-44-308-41-001000	8	0.4 x 0.4	04M0615	0.82	0.49
● 110-44-314-41-001000	14	0.7 x 0.4	04M0617	1.09	0.85
● 110-44-316-41-001000	16	0.8 x 0.4	04M0618	1.25	0.97
● 110-44-318-41-001000	18	0.9 x 0.4	04M0619	1.42	1.10
● 110-44-320-41-001000	20	1.0 x 0.4	04M0620	1.56	1.21
● 110-44-324-41-001000	24	1.2 x 0.4	04M0622	1.87	1.45
● 110-44-328-41-001000	28	1.4 x 0.4	04M0623	1.81	1.50
● 110-44-628-41-001000	28	1.4 x 0.7	04M0630	1.83	1.52
● 110-44-640-41-001000	40	2.0 x 0.7	04M0633	2.62	2.18
PLATING: SLEEVE, 200µ″ TIN-LEAD; CONTACT, 30µ″ GOLD					
110-93-308-41-001000	8	0.4 x 0.4	17C2295	1.11	0.86
110-93-314-41-001000	14	0.7 x 0.4	17C2301	1.93	1.50
110-93-316-41-001000	16	0.8 x 0.4	17C2305	1.81	1.51
110-93-318-41-001000	18	0.9 x 0.4	17C2308	2.06	1.72
110-93-320-41-001000	20	1.0 x 0.4	17C2312	2.23	1.86
110-93-324-41-001000	24	1.2 x 0.4	17C2319	2.68	2.23
110-93-328-41-001000	28	1.4 x 0.4	17C2323	3.13	2.60
110-93-632-41-001000	32	1.6 x 0.7	17C2345	3.23	2.67
110-93-640-41-001000	40	2.0 x 0.7	17C2351	3.98	3.29
PLATING: SLEEVE, 200µ″ TIN; CONTACT, 30µ″ GOLD					
● 110-43-308-41-001000	8	0.4 x 0.4	04M0550	1.45	1.01
● 110-43-314-41-001000	14	0.7 x 0.4	04M0555	1.91	1.48
● 110-43-316-41-001000	16	0.8 x 0.4	37K7250	1.84	1.53
● 110-43-318-41-001000	18	0.9 x 0.4	04M0560	2.06	1.72
● 110-43-320-41-001000	20	1.0 x 0.4	04M0563	2.29	1.91
● 110-43-324-41-001000	24	1.2 x 0.4	04M0568	2.75	2.29
● 110-43-628-41-001000	28	1.4 x 0.7	04M0586	3.13	2.60
● 110-43-632-41-001000	32	1.6 x 0.7	04M0589	3.04	2.51
● 110-43-640-41-001000	40	2.0 x 0.7	04M0594	4.09	3.38

(4791)

VERY LOW-PROFILE DIP SOCKETS

RoHS Compliant Available

MILL-MAX®



- Open frame DIP socket
- Current rating: 3A
- Above PC board height .122″
- High reliable 4 finger contact

PLATING: SLEEVE, 200μ″ TIN-LEAD; CONTACT, 30μ″ GOLD

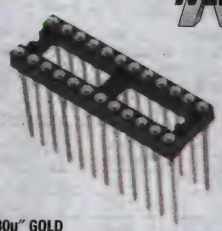
Mfg. Part No.	Contacts	Dimensions (in.) Length	Row Spacing	Stock No.	Price Each 1-9	10-99
115-93-314-41-001000	14	0.7	0.3	17C2574	2.46	1.71
115-93-318-41-001000	18	0.9	0.3	17C2578	2.98	2.07
115-93-328-41-001000	28	1.4	0.3	17C2585	4.75	3.30
PLATING: SLEEVE, 200μ″ GOLD; CONTACT, 30μ″ GOLD						
115-43-314-41-001000	14	0.7	0.3	04M0676	2.67	1.86
115-43-316-41-001000	16	0.8	0.3	04M0677	3.00	2.08
115-43-318-41-001000	18	0.9	0.3	04M0678	3.20	2.22
115-43-320-41-001000	20	1.0	0.3	04M0680	3.42	2.37
115-43-328-41-001000	28	1.4	0.3	04M0684	4.97	3.45

(18142)

THREE-LEVEL WRAPOST DIP SOCKETS

RoHS Compliant Available

MILL-MAX®



- Current rating: 3A
- Open frame
- Wrap post terminals length = 0.510″
- High reliable 4 finger contact

PLATING: SLEEVE, 200μ″ TIN-LEAD; CONTACT, 30μ″ GOLD

Mfg. Part No.	Contacts	Dimensions (in.) Length	Row Spacing	Stock No.	Price Each 1-49	50-99
123-93-308-41-001000	8	0.4	0.3	17C3009	2.15	1.87
123-93-314-41-001000	14	0.7	0.3	17C3011	3.66	3.18
123-93-316-41-001000	16	0.8	0.3	17C3013	4.18	3.63
123-93-320-41-001000	20	1.0	0.3	17C3017	5.47	4.76
123-93-324-41-001000	24	1.2	0.3	17C3021	5.96	5.18
PLATING: SLEEVE, 10μ″ GOLD; CONTACT, 30μ″ GOLD						
123-13-308-41-001000	8	0.4	0.3	17C2941	3.21	2.79
123-13-314-41-001000	14	0.7	0.3	17C2943	5.32	4.62
123-13-316-41-001000	16	0.8	0.3	17C2945	6.24	5.42
123-13-320-41-001000	20	1.0	0.3	17C2949	7.68	6.68
123-13-324-41-001000	24	1.2	0.3	17C2953	8.75	7.60
123-13-624-41-001000	24	1.2	0.6	17C2962	9.26	8.04
123-13-628-41-001000	28	1.4	0.6	17C2964	10.14	8.81
PLATING: SLEEVE, 200μ″ TIN; CONTACT, 30μ″ GOLD						
123-43-308-41-001000	8	0.4	0.3	87K7537	2.52	2.19
123-43-314-41-001000	14	0.7	0.3	87K7538	4.15	3.60
123-43-316-41-001000	16	0.8	0.3	04M0802	4.63	4.02
123-43-320-41-001000	20	1.0	0.3	04M0805	5.21	4.53

(18144)

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(196560)

LOW-PROFILE DIP SOCKETS

RoHS Compliant Available

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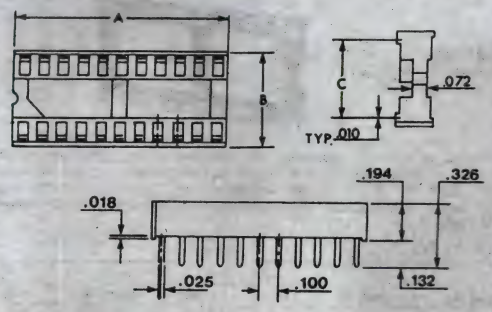


Low-profile DIP sockets feature high reliability contacts with a two-point contacting structure. Phosphor bronze contacts have a tin alloy plating rated at 1A, 250VAC. Contact resistance: 20MΩ maximum. Dielectric withstanding voltage: 500VAC rms for 1 minute. Housing standoffs accommodate board cleaning. Sockets can be stacked on 0.100″ (2.54) centers end-to-end. Visible polarization. Glass-filled polyester housing, rated UL94V-0. Operating temperature: –55°C to +125°C. **Sold in multiples of 5.**

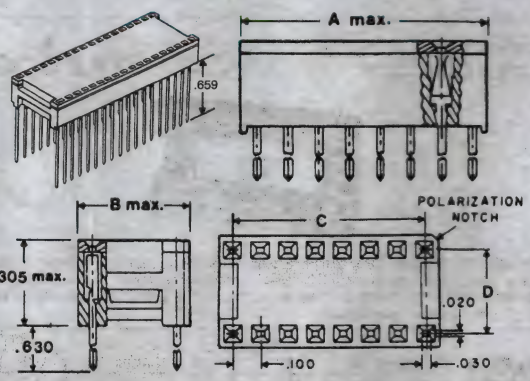
Mfg. Part No.	Contacts	Dimensions A	B	C	Stock No.	Price Each 1-99	100-249
SPC15556	6	0.300″	0.395″	0.300″	82K7829	0.33	0.30
SPC15494	8	0.400″	0.395″	0.300″	82K7786	0.17	0.16
SPC15496	14	0.700″	0.395″	0.300″	82K7787	0.23	0.21
SPC15498	16	0.800″	0.395″	0.300″	82K7788	0.22	0.20
SPC15500	18	0.900″	0.395″	0.300″	82K7789	0.27	0.25
SPC15501	20	1.000″	0.395″	0.300″	82K7790	0.27	0.25
SPC15503	24	1.200″	0.695″	0.600″	82K7791	0.32	0.29
SPC15504	28	1.400″	0.695″	0.600″	82K7792	0.37	0.34
SPC15505	40	2.000″	0.695″	0.600″	82K7793	0.54	0.50
SPC15558	48	2.400″	0.700″	0.600″	82K7831	0.85	0.79

(4571)

DIP SOCKETS

RoHS Compliant Available

multicomp



SP series standard-profile DIP sockets are available with solder or wire-wrap termination. Closed entry insulator design virtually eliminates contact damage. Sockets have mounting holes for fastening to circuit boards. Twin beam edge wipe contacts provide optimum performance, extended life. Contact material: phosphor bronze. Solder pin dimensions: 0.008″ x 0.025″ x 0.125″ long; solderless pin dimensions: 0.025″ square x 0.630″ long. Operating temperature range: –65°C to +125°C.

SP SERIES STANDARD-PROFILE IC SOCKETS

Mfg. Part No.	Contacts	Terminals	Contact Plating	Dimensions (inches) A Max.	B Max.	C	D	Stock No.	Price Each 1-49
SPC22184	14	Wire-Wrap	Gold	0.745	0.395	0.600	0.300	26M8147	8.97
SPC22186	14	Solder	Gold	0.745	0.395	0.600	0.300	26M8149	4.63
SPC22187	14	Solder	Tin	0.745	0.395	0.600	0.300	26M8150	2.73
SPC22188	16	Wire-Wrap	Gold	0.845	0.395	0.700	0.300	26M8151	16.11
SPC22189	16	Wire-Wrap	Tin	0.845	0.395	0.700	0.300	26M8152	5.87
SPC22190	16	Solder	Gold	0.845	0.395	0.700	0.300	26M8153	6.07

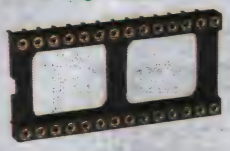
(4585)

SOCKETS – DIP/SIP • SOCKETS – CPU

LOW-PROFILE MACHINED PIN SOLDER-TAIL SOCKETS

RoHS Compliant Available

multicomp



- Glass-Filled Polyester Insulating Body Conforms to UL94V-0

Outer sleeves: brass-over-nickel-over-copper-copper flash, per MIL-G-45204B. Sockets available in tubes for use with automatic insertion equipment. Withstand voltage: 1500V RMS. Working voltage: 10mV to 60V. Operating temperature: –55°C to +125°C. Soldering temperature: 260°C maximum for 5 seconds. Resistance against Freon, Frigen, Akrolone, Alpha-detergent (short treatment only). Able to withstand 1000-cycle insertion.

GOLD SLEEVE PLATING

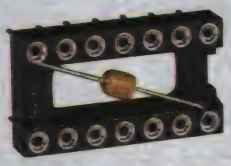
Mfg. Part No.	Contacts	Dimensions Length	Dimensions Width	Stock No.	Price Each 1-49	Price Each 50-99
● SPC15559	6	0.300″	0.400″	82K7832	0.96	0.88
● SPC15511	8	0.400″	0.400″	82K7799	1.22	1.12
● SPC15513	14	0.700″	0.400″	82K7800	1.97	1.81
● SPC15516	16	0.800″	0.400″	82K7801	2.25	2.07
● SPC15518	18	0.900″	0.400″	82K7802	2.52	2.31
● SPC15520	20	1.000″	0.400″	82K7803	2.88	2.64
● SPC15522	24	1.200″	0.700″	82K7804	3.30	3.03
● SPC15523	28	1.400″	0.700″	82K7805	4.00	3.67
● SPC15561	32	1.600″	0.700″	82K7834	4.24	3.88
● SPC15524	40	2.000″	0.700″	82K7806	5.48	5.04
● SPC15534	48	2.400″	0.700″	82K7815	6.22	5.72
TIN SLEEVE PLATING						
● SPC15560	6	0.300″	0.400″	82K7833	0.61	0.56
● SPC15525	8	0.400″	0.400″	82K7807	0.82	0.76
● SPC15526	14	0.700″	0.400″	82K7808	1.44	1.32
● SPC15527	16	0.800″	0.400″	82K7809	1.62	1.49
● SPC15528	18	0.900″	0.400″	82K7810	1.78	1.64
● SPC15529	20	1.000″	0.400″	82K7811	1.98	1.82
● SPC15531	28	1.400″	0.700″	82K7813	2.77	2.54
● SPC15562	32	1.600″	0.700″	82K7835	3.20	2.95
● SPC15533	40	2.000″	0.700″	82K7814	4.04	3.69

(4664)

DIP SOCKETS WITH INTEGRAL DECOUPLING CAPACITOR

RoHS Compliant Available

multicomp



DIP sockets eliminate noise at the source before it can reach the chip—an advantage in high-speed logic and memory applications. Center-to-center pin spacing: 0.100″ (2.54). Integral glass-encapsulated ceramic capacitor: 0.1uF 50VDC. Capacitor leads are connected directly to the ground and voltage pin of socket to an interference fit. Insulator body material: glass-filled polyester, rated UL94V-0.

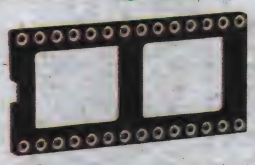
Mfg. Part No.	Contacts	Dimensions Width	Dimensions Length	Stock No.	Price Each 1-49	Price Each 50-99
● SPC15585	14	0.400″	0.700″	82K7856	3.73	3.42
● SPC15586	16	0.400″	0.800″	82K7857	3.99	3.66
● SPC15587	20	0.400″	1.000″	82K7858	4.35	3.99

(4566)

SUPER-FLAT MACHINED PIN LOW-PROFILE DIP SOCKETS

RoHS Compliant Available

multicomp



Open frame design allows better access to printed circuit and improves cooling capacity. Contacts: gold finish **except for mfg. part no. SPC15577**, which is nickel over copper. Outer sleeves: brass-nickel over copper flash finish. Insulator: thermoplastic polyester with 30% glass fiber, self-extinguishing UL 94V-0. Resistance: <10 megohms. Overload voltage: @ 50Hz >1000Vrms. Contact resistance: <10 megohms. Operating temperature: –55°C to +125°C. Mounting height: 0.096″ (2.44) above board.

Mfg. Part No.	Contacts	Dimensions Width	Dimensions Length	Stock No.	Price Each 1-49	Price Each 50-99
● SPC15576	8	0.400″	0.400″	82K7848	2.75	2.53
● SPC15577	14	0.399″	0.700″	82K7849	4.64	4.27

➤ CONTINUED ➤

SUPER-FLAT MACHINED PIN LOW-PROFILE DIP SOCKETS (CONT.)

Mfg. Part No.	Contacts	Dimensions Width	Dimensions Length	Stock No.	Price Each 1-49	Price Each 50-99
● SPC15578	16	0.399″	0.800″	82K7850	5.98	5.50
● SPC15580	18	0.399″	0.900″	82K7851	6.44	5.92
● SPC15581	20	0.399″	1.000″	82K7852	4.73	4.35
● SPC15582	24	0.699″	1.200″	82K7853	6.77	6.22
● SPC15583	28	0.699″	1.400″	82K7854	10.32	9.49
● SPC15584	40	0.699″	2.000″	82K7855	9.23	8.49

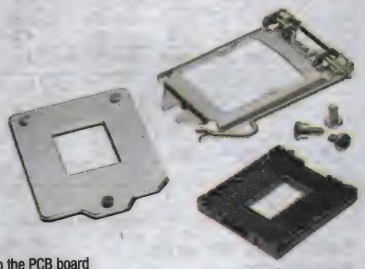
(4572)

LGA 1156 SOCKETS AND HARDWARE

RoHS Compliant Available

TE connectivity

Authorized Distributor



Features

- Contacts: Gold plated copper alloy
- Base housing: High temp thermoplastic UL94V-0
- Cap: Thermoplastic UL94V-0
- ILM load plate and lever: Stainless steel
- ILM frame, ILM screw and shoulder screw: Steel
- ILM Insulator: Polypropylene
- Backplate assembly: Steel, zinc or nickel plated
- Backplate Insulator: Polypropylene
- 1156 contacts with a 0.914mm x 0.914mm grid
- Available with 15 Gold or Gold fl ash contact plating
- Socket housing facilitates efficient soldering to the PCB board
- Socket is supplied with a cap to facilitate vacuum pick and place
- Backplates are available in zinc or nickel plating

Tyco Electronics' surface mount LGA socket was designed for use with Intel's® Core™ i7 LGA 1156 processor. The contacts have solder balls for surface mount onto the PCB, while the top side provides a cantilever beam interface to the package. The integrated lever mechanism (ILM) generates the Z-axis compression load. A robust bolster plate eliminates PCB bowing during compression. The sockets have been validated to Intel Design Guides.

LGA SOCKET

Mfg. Part No.	No. of Positions	Plating	Stock No.	Price Each 1-9
● 2040540-1	1156	15u″ Gold	58R2940	20.17
● 2040540-2	1156	Gold Flash	58R2941	16.99
● 2069965-1	1155	15u″ Gold	59T4399	22.14

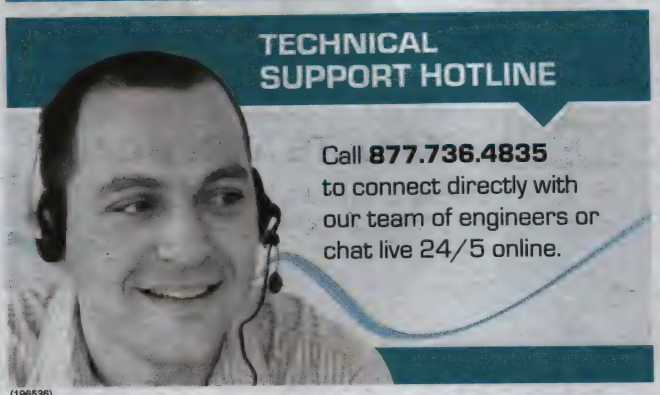
INDEPENDENT LOADING MECHANISM & BACKPLATE KITS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 2069838-1	ILM Cover Assembly, Zinc Plated Backplate, 1 Shoulder Screw, & 2 ILM Screws	58R2948	17.72
● 2069838-3	Zinc Plated Backplate, 1 Shoulder Screw, & 2 ILM Screws	58R2949	11.37
● 2069838-4	ILM Cover Assembly, Nickel Plated Backplate, 1 Shoulder Screw, & 2 ILM Screws	58R2950	18.05
● 2069838-5	Nickel Plated Backplate, 1 Shoulder Screw, & 2 ILM Screws	58R2951	10.91

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 2013882-1	ILM Cover Assembly	58R2935	11.04
● 2013882-2	ILM Cover Assembly w/Screws	58R2936	9.21
● 2013883-2	Backer Plate - Nickel Plating	58R2938	4.61
● 2013884-1	Shoulder Screw	58R2939	1.06
● 2040979-1	ILM Screw	58R2947	0.37

(164510)



(196536)

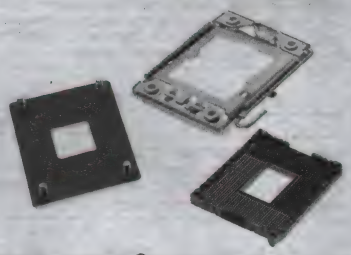
LGA 1366 SOCKETS AND HARDWARE

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features
- Contacts: Gold plated copper alloy
- Base housing: Thermoplastic UL94V-0
- Cap: Thermoplastic UL94V-0
- ILM load plate and lever: Stainless steel
- ILM frame, nut and collar: Steel
- Backplate assembly: Steel
- Insulator: Polypropylene
- 1366 contacts with a 1.016mm x 1.016mm grid
- Socket housing facilitates efficient soldering to the PCB board
- Socket is supplied with a cap to facilitate vacuum pick and place



Tyco Electronics' surface mount LGA socket was designed for use with Intel's® Core™ i7 LGA 1366 processor. The contacts have .64mm diameter solder balls for surface mount onto the PCB, while the top side provides a cantilever beam interface to the package. The integrated lever mechanism (ILM) generates the Z-axis compression load. A robust bolster plate helps eliminate PCB bowing during compression. The sockets are validated to Intel Design Guides.

LGA SOCKET

Mfg. Part No.	No. of Positions	Plating	Stock No.	Price Each 1-9
1981837-2	1366	30u" Gold	58R2934	22.76
1-1981837-2	1366	30u" Gold	58R2932	23.80
1554116-2	1356	15u" Gold	59T4397	20.25

INDEPENDENT LOADING MECHANISM & BACKPLATE KITS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
2040865-1	U Lever ILM Cover Assembly & Desktop Application Back Plate	58R2942	29.79
2040865-2	U Lever ILM Cover Assembly & Server Application Back Plate	58R2943	31.17
2040865-3	Straight Lever ILM Cover Assembly & Desktop Application Back Plate	58R2944	29.99
2040865-4	Straight Lever ILM Cover Assembly & Server Application Back Plate	58R2945	30.12
2040865-9	Short Straight Lever ILM Cover Assembly & Desktop Application Back Plate	58R2946	23.98

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
1-1981374-1	Spare Socket Cap	58R2931	1.73
1939738-1	ILM U Lever Cover Assembly	51R0441	11.78
1-1939738-1	ILM Short Straight Lever Cover Assembly	58R2929	14.85
1-1939738-2	ILM Straight Lever Cover Assembly	58R2930	7.54
1939739-1	Back Plate for Desktop Applications	51R0442	7.10

(163819)

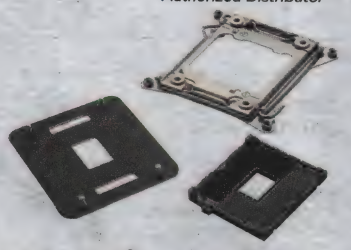
LGA 2011 SOCKETS AND HARDWARE

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features
- Contacts: Gold plated copper alloy
- Base housing: High temp thermoplastic UL94V-0
- Dust cover: Thermoplastic UL94V-0
- ILM load plate and lever: Stainless steel
- Backplate assembly: Steel
- Insulator: Adhesive coated polypropylene
- Socket housing facilitates efficient soldering to the PCB board.
- Socket is supplied with a cap to facilitate vacuum pick and place.



Tyco Electronics' surface mount LGA socket was designed for use with Intel's® Core™ i7 LGA and Xeon 5 LGA 2011 CPU processors. The contacts have solder balls for surface mount onto the PCB. A hex ball array provides for a stronger housing and allows for a smaller area for all 2011 balls. The integrated lever mechanism (ILM) generates the Z-axis compression load. A robust bolster plate helps eliminate PCB bowing during compression. Integrated lever mechanism (ILM) and backplate must be ordered separately.

LGA SOCKET

Mfg. Part No.	No. of Positions	Plating	Stock No.	Price Each 1-9
1554653-1	2011	15u" Gold	59T4398	26.00
1-1554653-1	2011	30u" Gold	59T4396	39.01

INDEPENDENT LOADING MECHANISM & BACKPLATE KITS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
2134439-1	ILM, Narrow Type with Cover Assembly	59T4400	19.78
2134439-2	ILM, Wide Type with Cover Assembly	59T4401	19.78

CONTINUED

LGA 2011 SOCKETS AND HARDWARE (CONT.)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
2134440-1	Back Plate	59T4402	12.94

(197842)

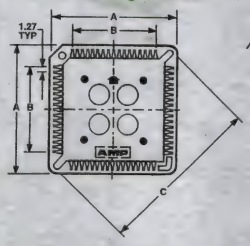
AMP 822473 SERIES THRU-HOLE PLCC SOCKETS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Height Above PC Board: 0.333" (8.45mm)
- Thermoplastic Housing, Flammability Rated UL94V-0
- Phosphor Bronze Contacts
- Contact Mating Area Plating: Tin Lead Over Nickel



Designed to accept tin-plated PLCC packages conforming to JEDEC standards.

Mfg. Part No.	No. of Positions	Dimensions (mm) A	B	C	Stock No.	Price Each 1-9
1-822473-2	28	18.10	7.62	20.70	52K3410	2.07
1-822473-3	32	20.54	10.16	22.65	36K3017	2.88
1-822473-4	44	23.18	12.70	27.50	28K0075	2.76
1-822473-5	52	25.72	15.24	31.50	52K3411	3.49
1-822473-6	68	30.80	20.32	39.00	35K5447	3.97
1-822473-7	84	35.88	25.40	46.15	52K3412	4.19

(59786)

AMP LOW PROFILE, LOW INSERT FORCE SURFACE MOUNT PLCC SOCKETS

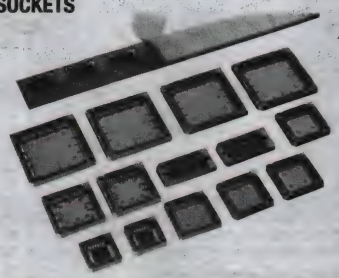
RoHS Compliant Available

TE connectivity

Authorized Distributor

SMD

- Height Above PC Board: 0.181" (4.60)
- Housing Flammability Rating: UL94V-0
- Phosphor Bronze Contacts



Surface mount PLCC sockets accommodate plastic "J" leaded, tin-plated devices made to JEDEC specifications MS-018 (square packages) and MO-052-AE (rectangular packages). UL recognized, CSA certified. *Order tools separately below.*

Mfg. Part No.	Positions	Package	Stock No.	Price Each 1-24
822516-3	20	Square	16M3450	1.25
3-822516-3*	20	Square	42K6878	1.51
822516-2	28	Square	16M3449	0.94
3-822516-2*	28	Square	42K6877	1.52
822516-7	32	Rectangular	56K5288	0.88
3-822516-7*	32	Rectangular	80K4715	1.41
822516-1	44	Square	16M3448	1.26
3-822516-1*	44	Square	24K3835	1.69
822516-4	52	Square	16M3451	2.03
822516-5	68	Square	16M3452	2.01
822516-6	84	Square	06M3574	3.92

* Tape Pack

EXTRACTION TOOLS

Mfr. Part No.	For Positions	For Socket Type	Stock No.	Price Each 1-4
821980-1	32	Rectangular	50F2287	208.32

Mfg. Part No.	Description	Stock No.	Price Each 1-4
822154-1	All-purpose tool	95F2998	3.93

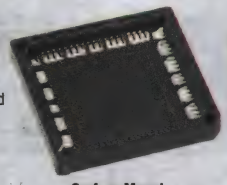
(4594)

PLCC SOCKETS

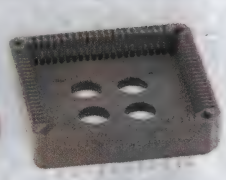
RoHS Compliant Available

multicomp

- Through-hole or surface mount options
- Consistent, uniform high retention contacts
- No solder wicking design
- Hi Temperature PPS insulator
- Standard Hi-temperature insulator : PBT, Glass reinforced
- Contacts : Phosphor bronze
- Maximum operating voltage : 250 VAC
- Maximum current rating : 1 A
- Maximum contact resistance : 30 mΩ initial
- Minimum insulation resistance : 1,000 MΩ
- Dielectric withstanding voltage : 500 VAC for 1 minute



Surface Mount



Through Hole

THROUGH HOLE SOCKETS

Mfg. Part No.	No. of Contacts	Stock No.	Price Each 1-249
● MC-20PLCC	20	76T9108	1.08
● MC-28PLCC	28	76T9110	1.14
● MC-32PLCC	32	76T9112	1.55
● MC-44PLCC	44	76T9114	1.10
● MC-52PLCC	52	76T9116	1.28
● MC-68PLCC	68	76T9118	1.64
● MC-84PLCC	84	76T9120	1.72
SURFACE MOUNT SOCKETS			
● MC-20PLCC-SMT	20	76T9109	0.75
● MC-28PLCC-SMT	28	76T9111	1.15
● MC-32PLCC-SMT	32	76T9113	0.61
● MC-44PLCC-SMT	44	76T9115	0.72
● MC-52PLCC-SMT	52	76T9117	1.67
● MC-68PLCC-SMT	68	76T9119	1.37
● MC-84PLCC-SMT	84	76T9121	2.40

(202077)

DDR3 DIMM SOCKETS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Tyco Electronics DIMM sockets address interconnect requirements across server, communications, and notebook platforms. The product offering is designed around JEDEC industry standards. Sockets are offered with a variety of features designed to meet high speed data applications where peak performance is required. Applications include servers, notebook PCs, and communications equipment. Copper alloy contacts with gold plating on mating area.

MINI DIMM 244 POSITION RIGHT ANGLE SURFACE MOUNT

Mfg. Part No.	No. of Positions	Color	Plating	Stock No.	Price Each 1-24
● 1735438-2	244	Black	30u″ Gold	72R3752	21.60
DDR3 DIMM 240 POSITION VERTICAL SURFACE MOUNT					
● 2040727-1	240	Natural	Gold Flash	72R3765	11.05
● 2040727-4	240	Natural	15u″ Gold	72R3766	10.75
DDR3 DIMM 204 POSITION RIGHT ANGLE SURFACE MOUNT 4.0 mm HEIGHT					
● 2013022-1	204	Black	GoldFlash	72R3760	8.61
● 2013022-2	204	Black	6u″ Gold	72R3761	10.62
DDR3 DIMM 204 POSITION RIGHT ANGLE SURFACE MOUNT 5.2mm HEIGHT					
● 2013289-1	204	Black	Gold Flash	72R3762	10.64
● 2013289-2	204	Black	6u″ Gold	72R3763	6.28

DDR3 DIMM 240 POSITION LOW RESISTANCE VERTICAL THROUGH HOLE

Mfg. Part No.	No. of Positions	Color	Plating	Tail Length (mm)	Stock No.	Price Each 1-24
● 1932000-1	240	Natural	15u″ Gold	2.67	51R0435	3.08
● 1932000-2	240	Natural	15u″ Gold	3.18	51R0436	1.71
● 1932000-3	240	Natural	15u″ Gold	4.00	51R0437	2.83
● 1932000-4	240	Natural	30u″ Gold	2.67	51R0438	3.22
● 1932000-6	240	Natural	30u″ Gold	4.00	51R0440	6.25
DDR3 DIMM 240 POSITION LOW RESISTANCE VERTICAL THROUGH HOLE						
● 1932031-1	240	Natural	Gold Flash	2.67	72R3755	7.83
● 1932031-7	240	Black	Gold Flash	2.67	72R3757	8.64

(163821)

SIM CARD CONNECTORS

RoHS Compliant Available

FCI

S07 SERIES SIM CONNECTORS

SIM Connector range designed to meet interconnection requirements of both full size IC Chip Card or plug in micro SIM Card. Specially equipped with integrated blade switch normally open for detection of full size IC Chip card. One version equipped with convenient card stop, either 6 or 8 data contacts. Low profile from 0.75 mm to 4.5 mm above the PCB. Meets the requirements for the automotive industry.

Mfg. Part No.	Circuits	Description	Stock No.	Price Each 1-9
● 7311S0725A01LF	8	Low Profile	62K7620	1.07

S08 SERIES MINISIM CONNECTORS

Plug in SIM/SAM connector. Open or full cover, opening up to 120°, with or without spring. Locking of the cover by sliding action. Dedicated to both SIM and SAM applications. Visible SMT contact tails and window cover version allow easy electrical testing of the soldered connector.

Mfg. Part No.	Circuits	Spring Loaded	Cover Type	Stock No.	Price Each 1-9
● 7112S0815X19LF	6	No	No Windows	62K7132	1.11
● 7312S0815X01LF	6	Yes	Windows	84K6606	1.03

S16 SERIES SIM CONNECTORS

This connector is designed to meet interconnection requirements plug in microSIM cards. The S16 series is equipped with 6 contacts, Insulator and with or w/o a switch terminal. Features a compact design: only 3.75 mm above board profile. Self cleaning of the contact provided by the motion of the connector cover before locking. Designed for SMT automatic assembly processes. Supplied in tape and reel packaging

Mfg. Part No.	Circuits	Pad Width	Stock No.	Price Each 1-9
● 7111S1615A01LF	6	1.32 mm	06M1919	2.30
● 7111S1615A02LF	6	2.20 mm	62K7130	2.45

S20 SERIES MICROSIM CONNECTORS

This connector is designed to meet interconnection requirements of plug in micro SIM cards. The S20 series is equipped with 6 contacts, hinge and cover. Compact design: only 2.5 mm above board profile Reliable and durable locking/latching mechanism. Correct orientation of the SIM card guaranteed by integral polarizing feature. Self cleaning of the contact provided by the motion of the connector cover before locking. Visible SMT contact tails and "open window" cover allow easy electrical testing of the soldered connector. Designed for SMT automatic assembly processes. Supplied in tape and reel packaging.

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9
● 7111S2015X02LF	6	62K7131	1.44

(134279)

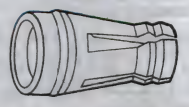
AMP HOLTITE® SOLDERLESS SOCKETS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Zero-Profile Sockets
- Beryllium Copper Contacts
- Board Thickness: 0.030″



Solderless press-fit into the plated through-hole of printed wiring boards. Gold plated 0.000030″ per MIL-P-81728 over nickel per QQ-N-290.

Mfg. Part No.	Lead Size	Stock No.	Price Each 1-24
● 8134-HC-5P2	0.016″- 0.021″	14F2869	0.14
● 8134-HC-6P2	0.020″- 0.030″	23C1656	0.56
● 8134-HC-8P2	0.025″- 0.035″	14F2871	0.49
● 8134-HC-12P2	0.035″- 0.045″	01F8722	0.51

(4723)

AMP MINIATURE SPRING SOCKETS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Copper Contact Sleeve
- Beryllium Copper Spring
- For Mass Production Application
- Hand/Semi-Automatic Insertion Method

SERIES 1

Mfg. Part No.	Pin Dia. Range (mm)	Bottom Design	Spring Finish	Sleeve Finish	Stock No.	Price Each 1-9	Price Each 10-24
● 50935	0.33-0.51	Closed	Gold	Gold Flash	52F4518	0.74	0.69
● 5050935-2	0.33-0.51	Closed	Tin	Tin	42K6955	0.55	0.51
● 2-330808-8	0.33-0.51	Closed	Gold	Gold Flash	93F6981	0.82	0.72
● 2-5330808-7	0.33-0.51	Closed	Tin	Tin	16M2847	0.63	0.59
● 2-332095-1	0.33-0.51	Closed	Gold	Gold Flash	33B6592	0.79	0.74
● 2-5332095-4	0.33-0.51	Closed	Gold	Tin	89M4428	0.76	0.68
● 5-5330808-6	0.33-0.51	Open	Gold	Tin	01M6753	0.93	0.82
● 3-330808-8	0.33-0.51	Knockout	Gold	Gold Flash	95F1398	0.97	0.86
SERIES 2							
● 50863-4	0.36-0.65	Closed	Gold	Gold	33B9497	0.87	0.76
● 5050863-5	0.36-0.65	Closed	Gold	Tin	05M3445	0.64	0.63
● 5050863-8	0.36-0.65	Closed	Tin	Tin	42K6948	0.65	0.62
● 2-5331272-7	0.46-0.53	Closed	Gold	Tin	42K8666	0.66	0.62

➤CONTINUED➤

AMP MINIATURE SPRING SOCKETS (CONT.)

Mfg. Part No.	Pin Dia. Range (mm)	Bottom Design	Spring Finish	Sleeve Finish	Stock No.	Price Each 1-9	Price Each 10-24
SERIES 2							
5050462-8	0.36-0.66	Closed	Gold	Tin	16M3179	0.77	0.73
50462-6	0.36-0.66	Closed	Gold	Gold Flash	33B9437	0.75	0.71
5050462-2	0.36-0.66	Open	Gold	Tin	28M8816	0.73	0.68
3-5331272-5	0.46-0.53	Knockout	Gold	Tin	16M2903	0.52	0.47
SERIES 3							
5050864-6	0.66-0.84	Closed	Tin	Tin	40P9632	0.50	0.49
SERIES 4							
50865	0.86-1.04	Closed	Gold	Gold Flash	88F5362	0.95	0.84
5050865-1	0.86-1.04	Knockout	Gold	Tin	83K8413	0.80	0.70
5050865-3	0.86-1.04	Open	Gold	Tin	16M3559	0.57	0.53
5050865-5	0.86-1.04	Closed	Gold	Tin	83K8411	0.70	0.66
5050865-8	0.86-1.04	Closed	Tin	Tin	42K6951	0.61	0.58
1-332070-4	0.94-1.02	Open	Gold	Gold Flash	33B3241	1.02	0.93
2-5332070-9	0.94-1.02	Open	Gold	Tin	42K8667	0.71	0.65
SERIES 5							
5050871-5	1.07-1.24	Closed	Gold	Tin	42K6953	0.80	0.74
5050871-8	1.07-1.24	Closed	Tin	Tin	42K6954	0.52	0.50
2-5050871-3	1.42-1.65	Closed	Gold	Tin	42K6812	0.81	0.75

(62078)

PC BOARD SOCKETS

RoHS Compliant Available

HARWIN

- Compatible with Ø0.50mm, Ø0.80mm, and Ø1.00mm mating pins
- Suitable for a variety of mating pin lengths.
- Gold contacts inside tin shell
- Four finger gold plated beryllium contact
- Proven history in high end industrial and Mil/Aero applications
- Operating temperature: -55°C to +125°C
- Solderability: 235°C for 5 seconds
- Soldering heat resistance: 260°C for10 seconds
- Durability 0.5mm: 500 operations
- Durability 0.8 and 1.0mm: 1000 operations

Mfg. Part No.	Shell Finish	Contact Depth	Max Pin Length	Mounting Hole (mm)	Mating Pin Size (mm)	Stock No.	Price Each 1-49
PC BOARD SOCKETS FOR 0.5mm PINS							
H3190-01	Tin	2.30 mm	2.40 mm	1.00/1.10	0.46-0.51	55K6332	0.31
H3190-05	Gold	2.30 mm	2.40 mm	1.00/1.10	0.46-0.51	55K6333	0.77
H3191-01	Tin	2.30 mm	4.50 mm	1.00/1.10	0.46-0.51	55K6335	0.89
H3191-05	Gold	2.30 mm	4.50 mm	1.00/1.10	0.46-0.51	55K6336	0.39
H3192-01	Tin	2.30 mm	3.15 mm	1.00/1.10	0.46-0.51	55K6338	0.95
H3192-05	Gold	2.30 mm	3.15 mm	1.00/1.10	0.46-0.51	55K6339	0.71
PC BOARD SOCKETS FOR 1.00mm PINS							
H3161-01	Tin	3.55 mm	4.60 mm	1.91/1.96	0.90-1.05	55K6312	0.60
H3161-05	Gold	3.55 mm	4.60 mm	1.91/1.96	0.90-1.05	09J6894	0.68
H3165-01	Tin	3.55 mm	4.85 mm	1.91/1.96	0.90-1.05	01J2150	0.39
H3165-05	Gold	3.55 mm	4.85 mm	1.91/1.96	0.90-1.05	54K3378	0.62
H3169-01	Tin	3.55 mm	Through Hole	2.19/2.24	0.90-1.05	28K1491	0.82
H3169-05	Gold	3.55 mm	Through Hole	2.19/2.24	0.90-1.05	55K6319	0.61
H3183-01	Tin	3.55 mm	4.54 mm	1.91/2.01	0.90-1.05	26H3483	0.79
H3183-05	Gold	3.55 mm	4.54 mm	1.91/2.01	0.90-1.05	55K6326	0.51
H3185-01	Tin	3.55 mm	Through Hole	2.19/2.29	0.90-1.05	55K6330	0.71
H3185-05	Gold	3.55 mm	Through Hole	2.19/2.29	0.90-1.05	07J7148	0.75

(113076)

PIN RECEPTACLES

RoHS Compliant Available

MILL-MAX

- Precision machined brass shell
- RoHS compliant shell plating: 10μ″ gold over nickel
- Non-RoSH shell plating: 200μ″ tin/lead over nickel
- Beryllium copper multi-finger spring contact: 30μ″ gold over nickel plated

Mfg. Part No.	Fig.	Pin Diameter (in.)	Mtg. Hole (In.)	Length (in.)	Stock No.	Price Each 1-99
0328-0-15-01-34-27-10-0	1	.032-.046	0.079	0.206	21M8859	0.61
0552-1-15-01-11-27-10-0	2	.015-.020	0.040	0.136	20M6729	0.21
0552-1-15-15-11-27-10-0	2	.015-.020	0.040	0.136	19C2507	0.48
0552-2-15-15-11-27-10-0	2	.015-.020	0.040	0.170	06M6719	0.29
0552-2-15-01-11-27-10-0	2	.015-.020	0.040	0.170	31M8392	0.20
0292-0-15-01-06-27-10-0	2	.022-.032	0.071	0.250	87K6614	0.54
0292-0-15-15-06-27-10-0	2	.022-.032	0.071	0.250	84K4627	0.98
0039-2-17-15-30-27-02-0	3	.015-.025	0.055	0.360	86C1741	1.70
0555-0-15-01-30-27-10-0	4	.015-.025	0.053	0.160	23K7801	0.54
0555-0-15-15-30-27-10-0	4	.015-.025	0.053	0.160	87K7521	0.72
0314-0-15-01-34-27-10-0	4	.032-.046	0.087	0.236	35M5117	0.68
0327-0-15-01-34-27-10-0	4	.032-.046	0.075	0.206	26H5985	0.58
0327-0-15-15-34-27-10-0	4	.032-.046	0.075	0.206	86C2226	0.82
0331-0-15-01-18-27-10-0	4	.037-.043	0.071	0.150	98H2181	0.53
0355-0-15-01-02-27-10-0	4	.040-.050	0.102	0.290	07C9234	0.76
0355-0-15-15-02-27-10-0	4	.040-.050	0.102	0.290	86C2345	1.31
0364-0-15-01-13-27-10-0	4	.048-.064	0.100	0.213	23M9630	0.89
0364-0-15-15-13-27-10-0	4	.048-.064	0.100	0.213	84K4787	1.23
0667-0-15-01-30-27-10-0	5	.015-.025	0.057	0.161	23K7802	0.29
0667-0-15-15-30-27-10-0	5	.015-.025	0.057	0.161	31C0958	0.44
0677-0-15-15-30-27-10-0	5	.015-.025	0.051	0.248	84K5054	0.89
0295-0-15-01-06-27-10-0	5	.022-.032	0.063	0.259	21M6428	0.59
0295-0-15-15-06-27-10-0	5	.022-.032	0.063	0.259	86C2022	0.98
0314-0-15-15-34-27-10-0	5	.032-.046	0.087	0.236	06M6717	1.06
0368-0-33-01-13-27-10-0	6	.048-.064	...	0.530	23K7799	1.96
0368-0-33-15-13-27-10-0	7	.025-.037	...	0.530	86C2400	2.62
0300-1-15-15-47-27-10-0	7	.025-.037	0.042	0.110	87K7520	1.00
8210-0-15-15-04-27-04-0	8	.008-.013	0.024/0.027	0.250	82H1581	2.34
8579-1-15-15-11-27-10-0	9	.015-.022	0.040	0.295	63H1720	0.48
8579-0-15-15-11-27-10-0	9	.015-.022	0.040	0.234	63H1709	0.48
0303-0-19-15-16-27-10-0	10	.022-.034	0.067	0.352	18C1748	0.98
0405-0-15-15-34-27-04-0	11	.032-.046	0.084	0.375	88F6300	0.76
0390-0-15-15-08-27-10-0	12	.084-.102	0.144	0.465	86C2483	2.33
0305-0-15-15-47-27-10-0	...	.025-.037	0.059	0.095	27C5734	0.77
0305-1-15-15-47-27-10-0	...	.025-.037	0.059	0.105	39C5331	0.78
8806-0-18-15-47-27-40-0	...	.025-.037	0.059	0.115	66W5358	1.45
0305-2-15-15-47-27-10-0	...	.025-.037	0.059	0.155	86C2079	0.60

(4712)

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(196548)

SOCKETS – SPRING

PRINTED CIRCUIT PINS

RoHS Compliant Available

MILL-MAX®

Precision machined, 20µ″ gold plated brass pins mate with receptacles *ordered separately; go online or call.* Annealed for crimping to wires or swaging to circuit boards. Board thickness: 0.0625″. *For full dimensional information go online or call.*

Fig. 15

PC SWAGE MOUNT PINS

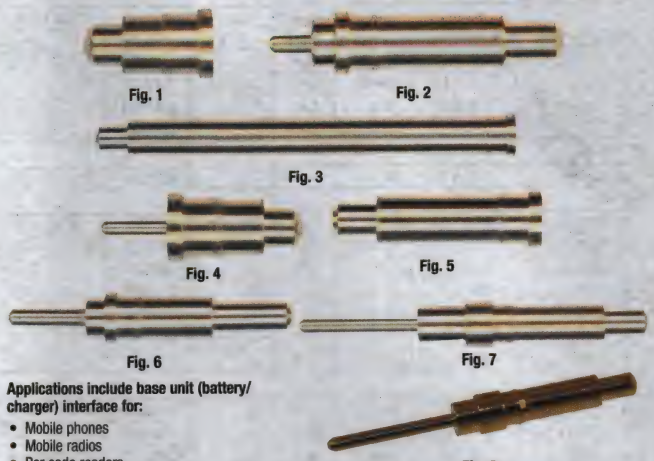
Mfg. Part No.	Fig.	Dia.	Length	Stock No.	Price Each 1-99
● 3117-2-00-21-00-00-08-0	1	.024″	.291″	61H8699	0.41
● 3103-2-00-21-00-00-08-0	2	.040″	.402″	87H9360	0.27
● 3222-2-00-21-00-00-08-0	3	.040″	.252″	88H3168	0.82
PC SOLDER MOUNT PINS					
● 3128-2-00-15-00-00-08-0	4	.020″	.545″	86C5706	0.21
● 9081-0-00-15-00-00-08-0	5	.020″	.295″	96B5833	0.28
PC PRESS FIT MOUNT PINS					
● 3157-0-00-15-00-00-03-0	6	.018″	.190″	97F7177	0.12
● 3603-0-07-21-00-00-08-0	7	.040″	.588″	89K2198	1.55
● 3601-1-07-21-00-00-08-0	8	.080″	.506″	98M0086	1.44
18 GAUGE CRIMP BARREL PINS					
● 0520-0-00-21-00-00-03-0	9	.080″	.740″	86C2825	1.74
16 GAUGE CRIMP BARREL PINS					
● 3609-1-07-21-00-00-08-0	9	.080″	.496″	86C6324	1.74
● 3609-2-07-21-00-00-08-0	9	.080″	.671″	86C6329	1.96
● 3609-3-07-21-00-00-08-0	9	.080″	.796″	86C6334	2.14
WIRE TERMINATION PIN					
● 3139-0-00-21-00-00-08-0	10	.049″	.430″	86C5848	0.71
WIRE TERMINATION PIN					
● 0275-0-01-15-00-00-03-0	11	.020″	.491″	86C1956	0.82
● 8000-0-01-15-00-00-03-0	11	.020″	.417″	92B4562	0.46
20 GAUGE CRIMP PIN RECEPTACLES					
● 0348-0-33-15-34-27-10-0	12	.032-.046″	1.530″	64M7341	1.79
18 GAUGE CRIMP PIN RECEPTACLES					
● 0306-0-19-15-16-27-10-0	13	.022-.034″	.665″	86C2084	1.68
● 0370-0-19-15-07-27-10-0	14	.065-.082″	.690″	86C2405	2.89
WIRE TERMINATION PIN RECEPTACLES					
● 8730-0-19-15-23-27-10-0	15	.045-.065″	.630″	86C7058	2.21

(4713)

SPRING LOADED CONTACTS

RoHS Compliant Available

MILL-MAX®



Applications include base unit (battery/charger) interface for:

- Mobile phones
- Mobile radios
- Bar code readers
- Medical instruments
- Test instruments

Individual precision machined pins feature long 1-million-cycle life, 2A current capacity. Contact diameter: .042″. Gold-plated components. Spring loaded modular strip contacts available online or call .

Mfg. Part No.	Fig.	Height (in)	Travel (in)	Stock No.	Price Each 1-49
● 0900-0-15-20-76-14-11-0	1	0.137	0.039	96H6930	0.71
● 0900-1-15-20-75-14-11-0	1	0.177	0.055	07H9755	0.88
● 0900-2-15-20-75-14-11-0	1	0.197	0.055	07H9759	0.70
● 0900-3-15-20-75-14-11-0	1	0.217	0.055	30K5594	0.67
● 0900-4-15-20-75-14-11-0	1	0.236	0.055	30K5595	0.72
● 0901-0-15-20-75-14-11-0	2	0.241	0.055	94T9334	0.96
● 0905-0-15-20-75-14-11-0	3	0.693	0.055	89T2082	1.54
● 0906-0-15-20-76-14-11-0	4	0.206	0.039	84K5081	0.74
● 0906-1-15-20-75-14-11-0	4	0.177	0.055	84K5083	0.77
● 0906-2-15-20-75-14-11-0	4	0.197	0.055	84K5085	0.78
● 0906-3-15-20-75-14-11-0	4	0.217	0.055	84K5087	0.78
● 0906-4-15-20-75-14-11-0	4	0.236	0.055	84K5089	0.78
● 0907-0-15-20-75-14-11-0	5	0.255	0.055	80K5504	0.86
● 0907-1-15-20-75-14-11-0	5	0.275	0.055	85K8787	0.87
● 0907-2-15-20-75-14-11-0	5	0.295	0.055	85K8788	0.82
● 0907-4-15-20-75-14-11-0	5	0.335	0.055	85K8790	0.84
● 0907-6-15-20-75-14-11-0	5	0.370	0.055	85K8792	0.86
● 0907-8-15-20-75-14-11-0	5	0.410	0.055	85K8794	0.88
● 0907-9-15-20-75-14-11-0	5	0.430	0.055	85K8795	0.89
● 0908-0-15-20-75-14-11-0	...	0.255	0.055	63R0185	0.89
● 0908-1-15-20-75-14-11-0	...	0.275	0.055	63R0187	0.90
● 0908-2-15-20-75-14-11-0	...	0.295	0.055	63R0189	0.91
● 0908-4-15-20-75-14-11-0	...	0.335	0.055	63R0193	0.88
● 0908-7-15-20-75-14-11-0	...	0.390	0.055	63R0198	0.91
● 0908-9-15-20-75-14-11-0	...	0.430	0.055	75T5673	0.98
● 0914-0-15-20-77-14-11-0	6	0.417	0.090	84K5102	1.00
● 0922-0-15-20-75-14-11-0	7	0.575	0.055	84K5105	1.11
● 0928-0-15-20-77-14-11-0	...	0.295	0.080	53R1839	1.22
● 0929-0-15-20-75-14-11-0	9	0.575	0.055	08N5738	1.27
● 0932-0-15-20-77-14-11-0	...	0.472	0.090	51M5044	1.24
● 0933-0-15-20-75-14-11-0	...	0.441	0.055	83R7486	1.29
● 0936-0-15-20-75-14-11-0	...	0.217	0.050	63R0214	0.80
● 0985-0-15-20-71-14-11-0	...	0.350	0.055	44W5178	0.96
● 0967-0-15-20-75-14-11-0	...	0.328	0.050	63R0220	1.39
● 0990-0-50-20-76-14-11-0	...	0.137	0.039	63R0222	0.99

(84780)

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(212562)

LARGE SCALE, HIGH CURRENT SPRING LOADED CONTACTS

RoHS Compliant Available

MILL-MAX®

Fig. 1 Fig. 2 Fig. 3

- Sleeve & Plunger: 20u″ Gold plated copper alloy
- Spring: 10u″ gold plated stainless steel 302
- Current rating: Continuous 9A @ 10° C temperature rise
- Gold plating provides the highest interconnect reliability, corrosion protection and wear resistance.

Mill-Max 0854, 0855 and 0856 large scale, high current spring pins feature thick wall construction and solid plungers for increased durability. In contrast to miniature spring pins, which are typically used on .100″ (2.54 mm) centers, these new offerings are for applications where greater spacing is required due to electrical and mechanical specifications. Inside each spring pin is a gold-plated, stainless steel spring rated for 1,000,000 cycles. These large scale spring pins have a .045″ (1.143 mm) working travel (.090″ [2.286 mm] maximum travel) and exhibit higher spring forces than smaller miniature spring pin connectors.

Mfg. Part No.	Fig.	Termination	Height (in)	Travel (in)	Stock No.	Price Each 1-24
0851-0-15-20-82-14-11-0	...	Solder Mount	0.378	0.090	63R0183	1.34
0854-0-15-20-82-14-11-0	1	Solder Cup	0.599	0.090	48T7437	1.77
0855-0-15-20-82-14-11-0	2	Crimp	0.649	0.090	56T0360	1.92
0856-0-15-20-82-14-11-0	3	PCB Tail	0.503	0.090	65T5388	1.49

(198145)

ULTRA-LOW & LOW PROFILE SPRING LOADED CONTACTS

RoHS Compliant Available

MILL-MAX®

Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5

- Sleeve & Plunger: 20u″ Gold plated copper alloy
- Spring: 10u″ gold plated beryllium copper or stainless steel 302
- Current Rating: 2A continuous, 3A peak
- Gold plating provides the highest interconnect reliability, corrosion protection and wear resistance.

Mill-Max ultra-low and low profile spring pins are a solution for applications where above board height is limited. As packaging requirements for electronics continue to shrink in size, traditional interconnects don't always fit the bill. For board-to-board or device-to-board connections, low profile spring pins are a practical solution. These new low profile options utilize the same technology & internal spring components as standard spring contacts. All three pins are rated for one million cycles and have a current rating of 2 amps continuous use (3 amps maximum.)

Mfg. Part No.	Fig.	Termination	Height (in)	Travel (in)	Stock No.	Price Each 1-49
0921-0-15-20-76-14-11-0	1	Thru-Hole - 0.070 Mounting Hole	0.171	0.039	74T1328	0.90
0921-1-15-20-75-14-11-0	2	Thru-Hole - 0.070 Mounting Hole	0.205	0.055	74T1329	0.91
0926-0-15-20-76-14-11-0	3	Thru-Hole - 0.074 Mounting Hole	0.171	0.039	74T1330	0.86
0926-1-15-20-75-14-11-0	4	Thru-Hole - 0.074 Mounting Hole	0.205	0.055	74T1331	0.93
0965-0-15-20-80-14-11-0	5	Surface Mount	0.100	0.024	74T1332	0.94

(198147)

39xx-0 SERIES CRIMP PINS

NEW

RoHS Compliant Available

MILL-MAX®

- Pin Material: Brass Alloy
- Pin Finish: Gold Over Nickel

These new pins are commercial-off-the-shelf (COTS) equivalents to the popular Mil-Spec M39029 crimp pins. If your application does not require Mil-Spec components but demands the same reliability and form factor, then these pins will fit the bill perfectly.

Mfg. Part No.	Wire Accommodation	Mating Pin Size	Stock No.	Price Each 1-9
3912-0-01-15-00-00-08-0	14-12 AWG	12 AWG	38X5726	1.24
3914-0-01-15-00-00-08-0	16-14 AWG	14 AWG	38X5728	0.92
3916-0-01-15-00-00-08-0	20-16 AWG	16 AWG	38X5729	0.89

➤CONTINUED➤

39xx-0 SERIES CRIMP PINS (CONT.)

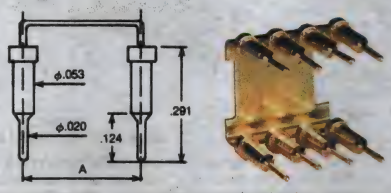
Mfg. Part No.	Wire Accommodation	Mating Pin Size	Stock No.	Price Each 1-9
3920-0-01-15-00-00-08-0	24-20 AWG	20 AWG	38X5730	0.57
3922-0-01-15-00-00-08-0	28-22 AWG	22 AWG	38X5731	0.43

(211634)

SOCKET PIN TERMINALS WITH DISPOSABLE CARRIER ASSEMBLIES

RoHS Compliant Available

multicomp



PTCA series pin terminal carrier assembly sockets are based on the very high specific pressure (VHSP) contact system. Heat-treated, four-finger contacts are gold-plated beryllium copper. Drilling low-profile board enables the contacts to be inserted down the shoulder and leaves 0.030″ (0.762) maximum profile above board. Closed bottom pin protects from wicking and flux contamination. Meets severe environmental requirements of high shock and vibration. Permits maximum air circulation under ICs and eliminates head entrapment under the insulator. Air-cooled. Throw-away metal carrier eases installation.

Mfg. Part No.	Pins	Dimension A	Stock No.	Price Each 1-49	Price Each 50-99
SPC15506	8	0.300″	82K7794	5.80	5.36
SPC15507	14	0.300″	82K7795	8.09	7.50
SPC15508	16	0.300″	82K7796	10.72	9.93
SPC15509	24	0.600″	82K7797	13.94	12.92
SPC15510	40	0.600″	82K7798	20.38	18.89

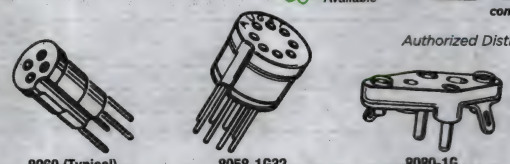
(4573)

AMP TRANSISTOR AND IC SOCKETS

RoHS Compliant Available

TE connectivity

Authorized Distributor



8060 (Typical) 8058-1G32 8080-1G

8060 series has pin circle diameter of 0.100″ (2.54); **8058 series** 0.200″ (5.08) diameter. Teflon® insulator. Two-piece machine socket terminal: gold plated brass outer sleeve and gold plated beryllium copper contacts. **8080-1G series** TO-3 power transistor sockets come with one or two solder lugs. Beryllium copper contacts with electro-tin plating and black phenolic insulator (Ph/ET), or silver plating with green diallyl phthalate insulator (Dp/SL), or 30μ″ gold plating and black phenolic insulator (Ph/GL). All have 0.255″ diameter, except **8058-1G23**, **8058-1G49** and **8058-1G32** which have 0.406″ diameter.

8058, 8060 SERIES MINIATURE SOCKETS—PC TERMINALS

Mfg. Part No.	Contacts	Height	Stock No.	Price Each 1-9
8058-1G23	3	0.290″	65F1648	8.73
8058-1G49	8	0.572″	50F1730	13.94
8058-1G32	8	0.585″	89F606	15.22
8060-1G3	3	0.310″	65F1868	6.58
8060-1G4	4	0.195″	65F1869	7.66
8060-1G5	3	0.350″	65F1860	13.22
8060-1G7	3	0.577″	65F1866	7.81
8060-1G11	3	0.570″	65F1864	9.47

8080-1G SERIES TO-3 POWER TRANSISTOR SOCKETS

Mfg. Part No.	Description	Stock No.	Price Each 1-24
8080-1G1-LF	Ph/ET/2 Lugs	16M2700	20.34
6-1437504-5	Ph/ET/1 Lug	73K4026	30.56
5-6437504-0	Ph/GL/2 Lugs	16M3176	16.76
8080-1G7	DP/SL/1 Lug	65F1874	23.91

(4742)

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(212563)

MEMORY CARD CONNECTORS

N7G24 SERIES FLASH MEMORY HEADERS FOR CFAST CARD

RoHS Compliant Available

3M

- Mate with both CFast™ Type I and Type II cards
- Meets CFA CFast™ specification Rev 1.0
- Extended guide rails enable accurate and easy card insertion
- Single row surface mount solder tails facilitate auto placement and IR soldering
- 2mm standoff available for component clearance underneath header
- Extended guide rails with grounding clips
- Tested to 10,000 mating cycles
- Right or left hand dual-push ejectors or latching retainer available

Header, Latching Retainer, Right Ejector

N7G24 series 3M™ header for the new CFast™ high-performance serial flash memory cards is a 7+17-pin connector consisting of a SATA-compatible 7-pin signal connector and a 17-pin power and control connector. Features extended guide rails to reduce the possibility of misalignment during card installations, and grounding clips that provide additional retention force to the card, helping reduce the possibility of uncontrolled card removal from the connector when ejected. The single-row, surface mount co-planar tails allow for higher yields and simplified inspection. The header is offered in a low profile configuration, or with 2mm standoffs that allow the designer to populate the board underneath an inserted card. Choice of two styles of dual-push ejector as well as a latching retainer that clips onto the header and provides a wire latch for robust retention, ideal for critical applications or applications subject to vibration and shock.

HEADER — 1.27MM PITCH

N7G24 series 3M™ header housing is constructed of high-temperature thermoplastic, beige, flammability rated UL 94V-0. Copper alloy contacts are gold plated on mating end, matte tin on solder tail with a nickel underplated all over. Current rating: 1.5 A per pin. Recommended PCB thickness: 0.066″ (1.65mm). Total arm length: 1.545″ (39.23mm); overall width: 1.91″ (48.5mm). Operating temperature rating: -40°C to 85°C.

Mfg. Part No.	Contact Plating	Standoff	Stock No.	Price Each 1-24
● N7G24-A0B2-RA-00-0HT	15μ″ Gold	None	80R8504	7.49
● N7G24-A0B2-RA-10-0HT	15μ″ Gold	2mm	80R8505	7.92
● N7G24-A0B2-RB-00-0HT	30μ″ Gold	None	80R8506	9.10
● N7G24-A0B2RB-10-0HT	30μ″ Gold	2mm	85R6086	8.67

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-99
● 7G24-B5A6-05	Right Dual Push Card Ejector	80R9090	1.91
● 7G24-B6A6-05	Left Dual Push Card Ejector	80R9091	1.77
● 7E50-C016-00	Latching Retainer	85R6087	3.26

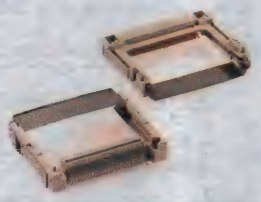
(190010)

COMPACTFLASH™ CARD HEADER

RoHS Compliant Available

3M

- Compatible with both CompactFlash* Type I and Type II cards
- Meets CFA standards
- Polarization options for top or bottom boardmount
- Extended guide rails enable accurate and easy card insertion
- Guide rail ESD clip contacts board ground pads
- Optional 2mm board standoff enables board population
- Single row solder tails with 0.635mm spacing
- 30μin gold plating



31.60mm HEADER—ACCEPTS EJECTOR

Mfg. Part No.	Style	Standoff	Stock No.	Price Each 1-24
● N7E50-M516RB-40-WF	Standard	None	93K6316	6.60
● N7E50-M516RB-50-WF	Standard	2mm	93K6317	6.60
● N7E50-N516RB-50-WF	Inverse	2mm	93K6319	5.95
18.70mm HEADER—EJECTOR NOT ACCEPTED				
● N7E50-Q516RB-50-WF	Standard	2mm	93K6320	6.53

*CompactFlash is a trademark of SanDisk Corp

(84752)

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(212564)

AMP CARD CONNECTORS FOR COMPACT FLASH

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Meets CompactFlash Association Specifications
- Proven PCMCIA contact technology
- Accepts hardware for mechanical mounting
- 50-position Card Connector

CompactFlash headers can accept Type I and/or Type II card thickness. Available in both vertical or right angle mount, and flush or raised mounting heights.

VERTICAL, DOUBLE ROW, 0.050″ CENTERLINES

Mfg. Part No.	Plating	Mounting Type	Height	Card Types	Stock No.	Price Each 1-9	Price Each 10-24
● 5120615-1	Gold	PCB Right Angle Surface Mount	5.2	I only	42K7003	7.26	6.96
● 1734448-1*	Gold	PCB Straight Surface Mount	6.3	I and II	73K1616	6.19	5.85
● 1734450-1*	Gold	PCB Straight Surface Mount	8.5	I and II	16M2769	6.34	4.63
● 1734451-1	Gold	PCB Straight Surface Mount	4.0	I and II	73K1618	6.23	5.46
● 5788667-1	Gold	PCB Right Angle Surface Mount	5.2	I and II	42K7587	7.74	7.42
● 5788643-1	Gold	PCB Straight Surface Mount	14	I and II	53K0566	11.11	10.63
● 146839-3	Gold	PCB Straight Surface Mount	14	I only	16M2716	7.99	7.49

* Accepts snap-on ejector below.

(79975)

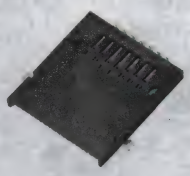
AMP CARD CONNECTORS FOR SD MEMORY

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Voltage rating: 100VAC
- Current rating: 0.5A
- Operating temperature: -25°C to 90°C
- Mating force: 40N
- Un-mating force: 2N



Push/Pull

Push/Push

SD memory cards stores digital files without requiring a computer. Three different connector configuration sizes including: Standard, mini, and micro, available with push/push and push/pull mating.

SD MEMORY CARD CONNECTORS

Mfg. Part No.	Operating Function	Mounting	Polarizing Post Length (mm)	Packaging	Stock No.	Price Each 1-24	Price Each 25-49
● 2041021-3	Push-On/Pull-Off	Top PC Board	25	Tray	35R2925	2.32	2.09
MICRO SD MEMORY CARD CONNECTORS							
● 1871602-1	Push-On/Push-Off	Top PC Board	0.45	Tape & Reel	14P9257	9.61	9.21

(93059)

SIM CONNECTORS

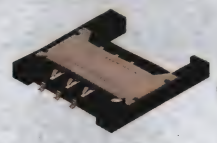
RoHS Compliant Available

GCT Global Connector Technology

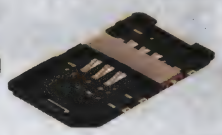
SIM7050

SIM8050

SIM2070



SIM2055



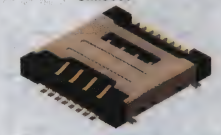
SIM3050

SIM4050
SIM4055

SIM5055

SIM5051

SIM5060



SIM6050

MICRO SIM CONNECTOR

Micro SIM cards have the same contact arrangement as traditional Mini SIM cards, however the reduced card size of 12mm x 15mm shows an 50% space savings in card footprint.

➤ CONTINUED ➤

SIM CONNECTORS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
SIM7050-6-0-00-A	Push Pull 6 Position - 2.40mm Profile	28W5437	1.79	1.43
SIM7050-8-0-00-A	Push Pull 8 Position - 2.40mm Profile	28W5438	2.00	1.60
NANO SIM CONNECTOR				
Nano SIM cards have the same contact arrangement as traditional Mini SIM cards, however the reduced card size of 8.8mm x 12.3mm shows over 3 times space savings in card footprint.				
SIM8050-6-0-14-01-A	Push Pull 6 position - 1.45mm Profile	94W2768	1.60	1.52
PUSH PULL SIM CONNECTOR				
Card guide and stops in housing (inside the slot) prevents card mis-insertion. Reliable low-friction contacts with 50 mOhm contact resistance. High quality 15u" gold plated contacts guarantees minimum 5,000 mating / unmating cycles. Absorption area for automatic pick and place SMT mounting				
SIM2055-6-0-18-00-A	6 position - 1.80mm Profile - Card Stop - 16.30mm Length - Mid Wing Block	69R4871	0.76	0.68
SIM2070-6-1-30-00-A	6 Position - 3.44mm Profile - With Card Detect Switch	93T1229	1.25	1.02
PUSH PUSH SIM CONNECTOR				
Push Push SIM card connectors have a mechanism for easy card insertion & extraction. Built in card detection switch for hot swap and plug & play applications. Anti-fly out brake feature to prevent card fall out during ejection. Shielded metallic case minimizes EMI / EMC pick up. High quality 15u" gold plated contacts guarantees a minimum 5,000 mating / unmating cycles.				
SIM4050-6-1-22-00-A	6 position - 2.20mm Profile - With Swith	69R4874	2.84	2.45
SIM4055-6-1-22-01-A	6 position - 2.20mm Profile - With Swith - With Boss	69R4875	2.84	2.45
HINGED SIM CONNECTOR				
Hinged SIM connectors offer robust hinged slide lock mechanisms to hold the SIM card securely in place. A guided housing for card alignment, preventing card mis-insertion.				
SIM5051-6-0-18-00-A	6 position - 1.85mm Profile	94T2308	0.81	0.78
SIM5055-6-1-25-00-A	6 position - 2.50mm Profile - With Card Detect Switch - Card held in lid	93T1230	1.25	1.22
SIM5060-6-0-26-00-A	6 position - 2.60mm profile - Card held in lid	93T1231	1.01	0.98
SIM5060-8-0-26-01-A	8 position - 2.60mm profile - Card held in lid	93T1232	1.01	0.98
DUAL SIM CONNECTOR				
Dual SIM slots allow plugging of two SIM cards into one connector, saving you PCB space and cutting the cost of PCB placement. This enables applications using two GSM accounts in one device. For example, in the vehicle tracking market the connector allows the option of switching between mobile networks when crossing country borders or when a alternative network offers a price or signal quality advantage. In personal handheld applications the connector permits use of 'work' and 'personal' accounts.				
SIM6050-8-0-30-00-A	Dual - SMT - 2 x 8 pin - 3.00mm Profile - Without Switch - Without Post	99R5290	1.48	1.25

(168913)

MICROSD MEMORY CARD CONNECTOR

RoHS Compliant Available

molex

The microSD standard covers the world's smallest memory card connectors. The Push-Push versions include card extractor features to help provide smooth card insertion and removal. Right angle surface mount MicroSD memory connectors feature ultra small size for space savings.

PUSH-PUSH TYPE MICROSD CARD CONNECTORS

Mfg. Part No.	Detect Switch	Circuits	Stock No.	Price Each 1-9
502570-0893	Yes	8	96M0537	3.61
500873-0806	No	8	64M0543	3.33
502774-0891*	No	8	96M0539	4.04

* Reverse PCB Mounting

(88589)

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Standard modification or customization of electronic enclosures.

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(212568)

SECURE DIGITAL CARD CONNECTOR

RoHS Compliant Available

molex

Right-angle, 2.50 mm (.098") SMT SD memory card headers have push-push ejection, features black glass-filled LCP, UL 94V-0 and copper alloy contacts with selective gold plating. Voltage: 100 VAC. Current: 0.5 A.

SD MEMORY CARD CONNECTORS WITH PUSH PUSH EJECTORS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
500998-0900	Top Mount, Shielded	73K4169	7.16

(88583)

SPD08 SERIES 0.80mm PITCH HIGH-SPEED CARD-EDGE CONNECTORS

RoHS Compliant Available

3M

- Supports flexible stacking height (16-40 mm) mezzanine applications using a riser card
- High-density (0.8 mm pitch), two-row design conserves board space and simplifies trace routing
- Robust contact design is tolerant of misalignment, provides a reliable connection and supports blind mate applications
- Controlled impedance, crosstalk limiting contact design supports speeds up to 15 Gbps
- Embedded ground plane within riser card limits row to row crosstalk and enhances signal integrity
- Supports up to 25 Gbps wire to board applications using 3M™ Twin Axial Cable terminated to the card-edge
- Flexible design supports 20-200 contact positions
- Available with optional latches for robust mechanical stability
- 0.5A current rating per contact
- Supports XAUI, PCI express (Gen 1/2/3), SATA and other application speeds

SPD08 Series high-speed card-edge connectors supports high-speed board-to-board and wire-to-board connections. It has a robust and flexible contact design for reliable connections, and features a flexible stacking height and compact design to conserve board space and provide optimal value to customers. The connector's flexible design handles from 20 up to 200 contact positions and can support up to 15 Gbps board-to-board applications. Additionally, when used in conjunction with the 3M™ Twin Axial Cable, the 3M SPD08 connector supports up to 25 Gbps wire-to-board applications with a reliable, simultaneous ribbon termination.

Mfg. Part No.	Positions	Description	Stock No.	Price Each 1-9	Price Each 10-99
SPD08-080-L-RB-TR	80	with Latch	65T7019	9.31	7.86
SPD08-080-RB-TR	80	w/o Latch	65T7020	8.00	6.75

(196012)

0.100" CARD EDGE CONNECTORS

RoHS Compliant Available

3M

Drilled Mounting Flanges

Without Flanges

- Bifurcated Copper Alloy Contacts for Reliable PC Board Contact
- 30µ" Gold Plating
- Accommodate 26 AWG and 28 AWG Solid and Stranded Cable
- Reliable Metal Cover Clips

Available with or without flanges. UL recognized, CSA certified. *Order strain reliefs separately below.*

WITH DRILLED MOUNTING FLANGES

Mfg. Part No.	Contacts	Stock No.	Price Each 1-24
3461-0000	20	46F4757	7.06
3415-0000	50	46F4761	12.96
WITHOUT MOUNTING FLANGES			
3358-0001	10	46F4764	5.41
3461-0001	20	46F4766	7.47
3462-0001	26	46F4767	8.55
3463-0001	34	46F4768	9.75
3464-0001	40	46F4769	9.99
3415-0001	50	46F4770	13.12
3403-0001	64	46F4772	14.75

CONTINUED

CARD EDGE CONNECTORS

0.100″ CARD EDGE CONNECTORS (CONT.)

WITH SLOTTED MOUNTING FLANGES

Mfg. Part No.	Contacts	Stock No.	Price Each 1-24
● 3461-0002	20	46F4775	7.06
● 3462-0002	26	46F4776	8.55
● 3415-0002	50	46F4779	12.96
STRAIN RELIEFS			
● 3448-54	20	87F3983	3.22
● 3448-55	26	87F3984	8.36
● 3448-58	50	87F3987	4.54

(8396)

CARDCON™ 0.100″ (2.54) and 0.156″ (3.96) DENSITY COMMERCIAL SOLDER CARD EDGE CONNECTORS

CINCH

- Bifurcated semi-bellows type contacts constructed of spring brass-plated with gold over nickel for added reliability.
- Ideal for applications involving vibrations or board irregularities.
- Available less mounting ears or with 0.128″ (3.25) mounting holes.
- UL94V-0 rated glass-filled polyester insulation material, black.
- Operating temperature: –65°C to +105°C.
- Meets applicable performance criteria of MIL-C-21097.
- UL recognized - file E170218 (UL1977) E130965 (UL1863).

Additional 0.100″ (2.54) features:
- DIP solder tails on 0.200″ (5.08) row centers double readout
- Withstanding voltage: 650 VAC rms. Current rating: 3 A
- Accepts 0.062″ (1.59) thick PC boards
- Contact resistance: 10 milliohms maximum. Insulation resistance: 5000 megohms minimum
- Standard contact plating: 10μ″ selective gold over nickel, 50μ″ nickel in contact area, tin on tails

Additional 0.156″ (3.96) features:
- DIP solder tails single readout and double readout on 0.140″ (3.56) row centers or 0.200″ (5.08) row centers
- Solder eyelet, single readout and double readout on 0.200″ (5.08) row centers
- Withstanding voltage: 1800 VAC rms. Current rating: 5 A
- Accepts single or double sided 0.062″ (1.59) thick PC boards
- Contact resistance: 6 milliohms maximum. Insulation resistance: 5000 megohms minimum
- Contact plating: 10μ″ selective gold over 30μ″ nickel in contact area, tin on tails

0.100″ DENSITY CONNECTORS, DIP SOLDER, DOUBLE READOUT, 0.200″ ROW SPACING, LESS MOUNTING EARS

Mfg. Part No.	Positions/Contacts	Stock No.	Price Each 1-24
50-22SN-12	22/44	44F4816	9.68

0.156″ DENSITY CONNECTORS, 0.156″ LONG DIP SOLDER TAILS, DOUBLE READOUT, 0.200″ ROW SPACING, WITH 0.128″ MOUNTING HOLES

Mfg. Part No.	Positions/Contacts	Stock No.	1-9
50-44SN-1	22/44	29F1755	6.33

0.156″ DENSITY CONNECTORS, SOLDER EYELET, DOUBLE READOUT, 0.200″ ROW SPACING, WITH 0.128″ MOUNTING HOLES

Mfg. Part No.	Positions/Contacts	Stock No.	Price 1-9
50-44SN-9	22/44	81F1044	7.78

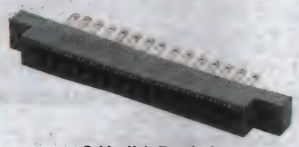
(12929)

307 SERIES DUAL-READOUT 0.128″ (3.25) CARD EDGE RECEPTACLES

RoHS Compliant Available

EDAC INC

PC Tail Terminals



Solder Hole Terminals

Low-profile receptacles feature bifurcated phosphor bronze dual readout contacts. Selective gold over nickel plating in mating area with tin on tails. Solder hole or PC tail contacts. Flush mount, green glass-filled polyester insulator, rated 94V-0. Mounting lugs with 0.128″ diameter holes. Accepts PC boards from 0.054 to 0.070″ (1.37-1.78) thick. Current rating: 5A.

SOLDER HOLE TERMINALS

Mfg. Part No.	Contacts	Dimensions (in.) Connector Length	Dimensions (in.) Card Edge Length	Stock No.	Price Each 1-9	Price Each 10-24
● 307-012-500-202	12	1.842	1.100	95F3098	5.11	4.59
● 307-020-500-202	20	2.466	1.724	95F3099	7.66	6.88
● 307-024-500-202	24	2.778	2.036	95F3100	7.74	6.95
● 307-030-500-202	30	3.246	2.504	95F3101	8.29	7.44
● 307-036-500-202	36	3.714	2.972	95F3102	8.97	8.05
● 307-044-500-202	44	4.338	3.596	95F3103	10.54	9.45
● 307-056-500-202	56	5.274	4.532	95F3105	14.25	12.78

➤CONTINUED➤

307 SERIES DUAL-READOUT 0.128″ (3.25) CARD EDGE RECEPTACLES (CONT.)

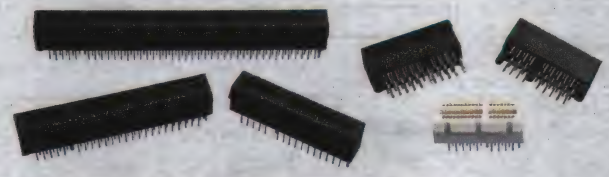
Mfg. Part No.	Contacts	Dimensions (in.) Connector Length	Dimensions (in.) Card Edge Length	Stock No.	Price Each 1-9	Price Each 10-24
● 307-072-500-202	72	6.522	5.780	95F3106	17.79	15.96
● 307-086-500-202	86	7.614	6.872	95F3107	20.70	18.58
PC TAIL TERMINAL						
● 307-012-520-202	12	1.842	1.100	80H9604	4.75	4.27
● 307-020-520-202	20	2.466	1.724	59K0368	7.42	6.66
● 307-024-520-202	24	2.778	2.036	35C1224	7.24	6.49
● 307-036-520-202	36	3.714	2.972	59K0370	8.85	7.94
● 307-044-520-202	44	4.338	3.596	59K0371	10.33	9.27
● 307-056-520-202	56	5.274	4.532	63K7126	13.31	11.95
● 307-072-520-202	72	6.522	5.780	59K0373	17.55	15.75
● 307-086-520-202	86	7.614	6.872	60K7106	20.70	18.58

(8686)

PCI EXPRESS CONNECTORS

RoHS Compliant Available

FCI



- 1, 4, & 16 serial PCI Express links to suit different bandwidth requirements
- Supports 2.36mm thick motherboards
- Through-mount soldertails are offset to form four rows on 2.0mm pitch
- Moulded polarisation key prevents mis-alignment when mating
- A retention clip may be mounted on the add-in card and latched over the ridge of the connector

These 1.0mm pitch, vertical card edge connectors are used to implement the PCI Express™ strategy in ATX or ATX-based desktop PCs and server systems. The connector family offers 1, 4 & 16 high-speed serial PCI Express Lanes. Each serial lane supports 2.5 Gbps data rate (per direction).

SURFACE MOUNT VERTICAL CONNECTORS

Mfg. Part No.	Contacts	Stock No.	Price Each 1-9
● 10061913-101CLF	64	12T3014	3.65
● 10061913-103TLF	164	12T3015	6.04
SURFACE MOUNT STRADDLE CONNECTORS			
● 10025026-10003TLF	164	12T3009	8.04

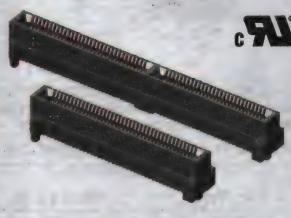
(115906)

0.80mm (0.032″) HSEC8 SERIES HIGH SPEED CARD CONNECTORS

RoHS Compliant Available

samtec

c UL us



Features:
- Board to board applications
- High speed cable and flex applications
- Mates with: 1.6mm thick cards, EEDP, HSC8, HSF8

Specifications:
- Insulator material: Black liquid crystal polymer
- Contact: Berillium Copper
- Plating: Gold over nickel
- Current rating: 3.1A
- Operating temperature: -55°C to +125°C
- Card insertion depth: (3.15mm) .125″

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
● HSEC8-110-01-SM-DV-A	20	11P5080	4.64	4.14
● HSEC8-130-01-SM-DV-A	60	11P5082	5.92	5.29
● HSEC8-150-01-SM-DV-A	100	11P5084	7.75	6.92
● HSEC8-160-01-SM-DV-A	120	11P5085	7.32	6.92

(136054)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

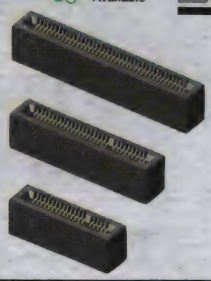
newark.com/custom-panel-meters

(212570)

1.00mm (0.039″) MEC1 SERIES MINI EDGE CARD CONNECTORS

RoHS Compliant Available

samtec



Edge card connectors feature black liquid crystal polymer housing with gold plated beryllium copper contacts. Current rating: 2A @ 80°C, Operating temperature range -55°C to +125°C, Voltage Rating: 300 VAC. Mates with 1.6mm thick cards.

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
MEC1-120-02-S-D-A	40	11P5207	8.10	7.24
MEC1-130-02-S-D-A	60	11P5208	9.08	8.10
MEC1-140-02-S-D-A	80	11P5209	9.97	8.91
MEC1-160-02-S-D-A	120	11P5211	11.00	10.40
MEC1-170-02-S-D-A	140	11P5212	11.76	11.12

(136063)

R600 CARD EDGE CONNECTORS

RoHS Compliant Available

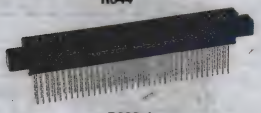
VECTOR ELECTRONICS & TECHNOLOGY, INC

R630

R636-2

R644

R656-1



R636-1

R644-3F

- Designed for 0.062″ Thick PC Boards
- Low Insertion Force
- Mating Contacts Are Gold Over Nickel-Plated for Reliability
- 0.0200″ Pin Row Separation
- Test Voltage: 650VAC
- Rated Current: 3A

Contact resistance drop: 30MV maximum at rated current. Insulation resistance: 5000 megohms at 500VDC. Pin length: 0.25″ (solder tail); 0.65″ (wire-wrap).

Mfg. Part No.	Contacts	Pitch Spacing (in.)	Stock No.	Price Each 1-9
SOLDER TERMINATION				
R630†	30	3.96	38F1108	20.59
R636-2*	72	2.54	81F4778	26.63
R644*	44	3.96	38F487	22.74
R656-1†	56	3.18	10F8212	39.43
R681-3†	100	3.18	87F658	34.02
WIRE WRAP TERMINATION				
R636-1†	72	2.54	38F1143	23.33
R644-3F*	44	3.96	20C2835	14.64

† Center mounting ears; * Flush mounting ears
(9102)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196562)

MEZALOK HIGH RELIABILITY MEZZANINE CONNECTORS FOR VITA 61 STANDARD

TE connectivity

Authorized Distributor

- Housings: LCP plastic, white in color
- Contacts: Gold plated copper alloy, Sn/Pb solder balls
- Operating temperature: -60°C to +125°C
- Mating cycles: 500
- Mating force: 0.30 lb. max. times number of contacts
- Shock and vibration per VITA 47 requirements

Rugged surface mount mezzanine connector incorporating "super-redundant" Mini-Box contact system for an ultra reliable separable interface. Designed for 10mm and 12mm stack heights in both 60 and 114 positions. 114 position is designed to support VITA 61 XMC architecture as rugged alternative to VITA 42 XMC. 60 position designed for custom architecture stacking applications. VITA 42 and VITA 61 are not intermateable, but are footprint and XMC architecture compatible. LCP plastic housings offer superior thermal stability and are low-outgassing. Compliant BGA board attach supports standard surface mount processing and excellent thermal stability.

Mfg. Part No.	Positions	Gender	Height (mm)	Stock No.	Price Each 1-9
60 POSITION					
2102079-1	60	Header	9.15	13T9158	21.49
2102080-1	60	Receptacle	10.00	13T9159	26.91
2102080-3	60	Receptacle	12.00	13T9160	28.90
114 POSITION					
2102060-1	114	Header	9.15	13T9154	34.64
2102061-1	114	Receptacle	10.00	13T9155	45.85
2102061-3	114	Receptacle	12.00	13T9156	45.85

(192064)

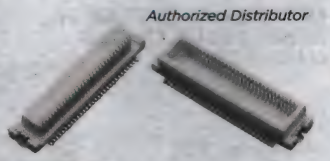
AMP 0.5mm FINE MATE CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Voltage Rating: 50 VAC
- Current Rating: 0.5 A
- Operating Temperature: -30°C to +105°C
- Housing: 6T nylon, high heat resistant resin
- Contacts: Tin plated phosphor bronze
- Ultra fine, 0.5 (0.020) pitch SMT connectors for boardto- board interconnections
- Low profile parallel board stacking heights as low as 1.5 (0.059)
- Horizontal versions available for right angle board-to-board applications
- Surface areas provided to accommodate vacuum nozzles
- Available packaged in tape and reel for automatic placement per EIAJ standards
- Offered with tin or gold plating on mating surfaces
- Solder pegs are included for anti-peeling



0.5mm Fine Mate connectors are economical, surface-mount, fine pitch board-to-board connectors that have been developed to meet the latest needs of the electronic industry for high density packaging. These connectors offer a 0.5 (0.020) contact pitch and parallel board stacking heights ranging from 4.5 (0.177) to 6.0 (0.236). They are ideally suited for applications requiring miniaturization, such as cellular phones, pagers, notebook computers, camcorders and other consumer electronics. These connectors are designed for economical, automatic placement onto SMT printed circuit boards. The plug and cap designs include surface areas to accommodate "pick and place" vacuum nozzles without secondary covers. All products are "tape and reel" packaged, conforming to EIAJ standards.

Mfg. Part No.	Positions	Gender	Height (mm)	Stock No.	Price Each 1-9
1747035-6	50	Plug	4.8	17R5053	6.30
1565357-1	100	Receptacle	1.65	17R4008	13.50

(194458)

AMP 0.8mm FINE STACK CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Voltage Rating: 50 VAC
- Current Rating: 0.5 A
- Operating Temperature: -30°C to +105°C
- Housing: 6T nylon, high heat resistant resin
- Contacts: Tin plated phosphor bronze
- 0.8 [.031] fine pitch SMT connectors for board-to-board interconnections
- Low profile parallel board stacking heights as low as 3.0 [.118]
- Available packaged in tape and reel for automatic placement per EIAJ standards
- Offered with tin or gold plating on mating surfaces
- Solder pegs included for anti-peeling
- Surface areas provided to accommodate vacuum nozzles

0.8mm Fine Stack connectors are economical, surface-mount, fine pitch board-to-board connectors that have been developed to meet the latest needs of the electronic industry for high density packaging. These connectors offer a 0.8 (0.031) contact pitch and parallel board stacking heights ranging from 3.0 (0.118) to 4.5 (0.177). They are ideally suited for applications requiring miniaturization, such as cellular phones, pagers, notebook computers, camcorders and other consumer electronics. These connectors are designed for economical, automatic placement onto SMT printed circuit boards. The plug and cap designs include surface areas to accommodate "pick and place" vacuum nozzles without secondary covers. All products are "tape and reel" packaged, conforming to EIAJ standards.

CONTINUED

PC BOARD STACKING CONNECTORS

AMP 0.8mm FINE STACK CONNECTORS (CONT.)

Mfg. Part No.	Positions	Gender	Height (mm)	Stock No.	Price Each 1-9
● 1-179396-2	12	Plug	3.0	41J2974	1.50
● 1-179397-2	12	Receptacle	3.0	16R9838	3.56

(194446)

AMP 0.50mm FREE HEIGHT (FH) BOARD-TO-BOARD STACKING CONNECTORS FOR COM EXPRESS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Current Rating: 0.5A
- Voltage Rating: 50 VAC
- Dielectric Withstanding Voltage: 200 VAC
- Durability: 30 cycles
- Operating Temperature: -40°C to +85°C

0.5mm Free Height is a two-piece connector system designed for parallel board-to-board stacking applications. The contact system is identical to our popular 0.6mm FH product. The 0.5mm FH product has been chosen by the PICMG COM Express working group as the interface between embedded modules and carrier cards. Stack Height(mm) = Receptacle Height + Plug Height - 4mm

BOARD STACKING HEIGHT COMBINATIONS

Mfg. Part No.	Positions	Gender	Height (mm)	Stock No.	Price Each 1-9
● 3-1827253-6	220	Plug	5	46M2606	19.70
● 3-6318491-6	220	Plug	8	89K2151	22.35
● 3-1827233-6	440	Plug	5	15M8205	49.03
● 3-5353652-6	440	Plug	8	89K2152	37.13
● 3-6318490-6	220	Receptacle	4	18R0735	18.26
● 3-1827231-6	440	Receptacle	4	34M1957	37.08

(134465)

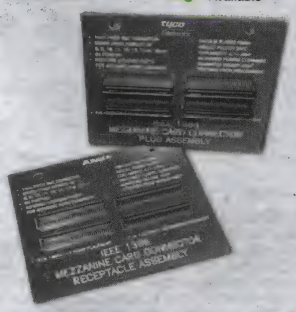
AMP 1.00mm FH (IEEE 1386) PC BOARD TO BOARD STACKING CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Current Rating: 1.0A per contact
- Contact Resistance: 30 milliohms max.
- Durability: tested to 100 mating cycles min.



High density packaging on 1.0 [.039] centerline spacing, available in standard 64-position and optional 84-position sizes, board stacking heights available from 8mm [.315"] to 15mm [.591"]. Tape and reel packaged per EIA standards, increased plastic clearance eliminates stress to solder joints during mating, improved locating posts ensure accurate hand or robotic placement. Contact material-phosphor bronze,housing material-thermoplastic, dual rows. Meets EIA-700 AAAB specifications for IEEE 1386 applications.

BOARD STACKING HEIGHT COMBINATIONS

64 POSITION

Receptacle	Plug	Combined Height (mm)
5120521-1	5120525-1	8mm
5146893-1	5146897-1	8mm
2007009-1	1-120532-1	8mm
2007042-1	1-146897-1	8mm
120521-1	120526-1	9mm
2007009-1	1-120533-1	9mm
2007042-1	1-146898-1	9mm
5120521-1	5120527-1	10mm
5146893-1	5146888-1	10mm
2007009-1	1-120534-1	10mm
2007042-1	1-146888-1	10mm
120603-1	120526-1	11mm
2007009-3	1-120533-1	11mm
2007042-2	1-146898-1	11mm
120603-1	120527-1	12mm
2007009-3	1-120534-1	12mm
2007042-2	1-146888-1	12mm
120523-1	120527-1	13mm
2007009-4	1-120534-1	13mm
2007042-3	1-146888-1	13mm
5120524-1	5120525-1	14mm
2007009-5	1-120533-1	14mm
2007042-4	1-146898-1	14mm
5120524-1	5120527-1	15mm
2007009-5	1-120534-1	15mm
2007042-4	1-146888-1	15mm

➤CONTINUED➤

AMP 1.00mm FH (IEEE 1386) PC BOARD TO BOARD STACKING CONNECTORS (CONT.)

84 POSITION

Receptacle	Plug	Combined Height (mm)
2007009-2	1-120532-2	8mm
2007009-2	1-120534-2	10mm
120521-2	120527-2	10mm
120603-2	120527-2	12mm
120523-2	120527-2	13mm
120524-2	120527-2	15mm

Mfg. Part No.	Positions	Gender	Stock No.	Price Each 1-9
● 5120521-1	64	Receptacle	42K6995	5.65
● 5120523-1	64	Receptacle	42K6996	8.58
● 5120524-1	64	Receptacle	42K6997	4.80
● 5146893-1	64	Receptacle	42K7028	5.65
2007009-1	64	Receptacle	73R4468	12.06
2007009-3	64	Receptacle	73R4469	10.47
2007009-4	64	Receptacle	73R4470	10.47
2007042-1	64	Receptacle	48M4286	12.06
2007042-2	64	Receptacle	65R5002	15.14
2007042-3	64	Receptacle	73R4472	20.91
2007042-4	64	Receptacle	73R4473	21.78
● 5120525-1	64	Plug	42K6998	6.62
● 5120527-1	64	Plug	42K8675	7.42
1-120533-1	64	Plug	16R8138	14.95
1-120534-1	64	Plug	14N2217	12.49
1-146888-1	64	Plug	37M1301	14.95
1-146897-1	64	Plug	16R8275	11.21
● 5120521-2	84	Receptacle	73K1625	7.91
2007009-2	84	Receptacle	58M0049	15.52
1-120532-2	84	Plug	73R4466	12.16
1-120534-2	84	Plug	16R8140	24.29

(79278)

0.5 mm PITCH BOARD-TO-BOARD CONNECTORS

RoHS Compliant Available

AVX INTERCONNECT
A KYOCERA GROUP COMPANY

- Contact Material: Copper alloy
- Insulator Material: Heat resistance plastic
- Operating Temperature Range: -25 to +85°C

Series 5046/5047/5087 are the Super Microleaf connector series, board to board, fine pitch and low-profile connector system that meets the need for high-density circuits in the market, and it is designed especially for portable equipment. The stack height between boards can range from 2.0mm to 7.0mm. ELCO's original design concept of receptacle contact achieves fine click feeling at mating and extremely high reliability in the connection of these super micro sized connectors. Designed for automatic mounting machine, packaged in tape and reel.

5046 SERIES, SMT BOARD-TO-BOARD CONNECTORS

Mfg. Part No.	Positions	Gender	Mated Height (mm)	Stock No.	Price Each 1-9
● 145046030630829+	30	Plug	3.0	96M9263	2.91
● 145046030635829+	30	Plug	3.5	96M9264	2.60
● 145046030645829+	30	Plug	4.5	96M9266	3.37
● 145046060630829+	60	Plug	3.0	96M9275	3.39
● 145046070630829+	70	Plug	3.0	96M9279	4.31
● 145046080630829+	80	Plug	3.0	96M9283	4.90
● 145046080640829+	80	Plug	4.0	96M9285	4.87
● 145046080645829+	80	Plug	4.5	96M9286	3.56
● 145046100630829+	100	Plug	3.0	96M9291	6.02
● 145046100635829+	100	Plug	3.5	96M9292	4.91
● 145046120640829+	120	Plug	4.0	96M9301	5.57
● 245046020600829+	20	Receptacle	...	96M9365	2.36
● 245046050600829+	50	Receptacle	...	96M9368	2.75
● 245046060600829+	60	Receptacle	...	96M9369	3.69
● 245046080600829+	80	Receptacle	...	96M9371	3.56
● 245046100600829+	100	Receptacle	...	96M9373	4.85
● 245046120600829+	120	Receptacle	...	96M9375	4.58
5047 SERIES, SMT BOARD-TO-BOARD CONNECTORS					
● 145047020970856+	20	Plug	7.0	96M9303	2.22
● 145047030970856+	30	Plug	7.0	96M9305	1.48
● 145047060970856+	60	Plug	7.0	96M9311	3.48
● 245047100400856+	100	Receptacle	...	96M9384	1.86
5087 SERIES, SMT BOARD-TO-BOARD CONNECTORS					
● 145087030920829+	30	Plug	2.0	96M9339	3.56
● 145087060925829+	60	Plug	2.5	78M4145	5.79
● 245087020907829+	20	Receptacle	...	96M9400	3.67
● 245087030907829+	30	Receptacle	...	96M9401	4.38

(113835)

MEZZOSTAK™ 0.5MM MEZZANINE CONNECTORS

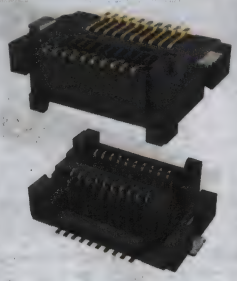
RoHS Compliant Available

FCI

Specifications
- Current Rating: 0.5 amps per line (de-rated)
- Operating Temperature -40 degrees to 125 degrees C
- Durability: 50 mating cycles
- SMT lead co-planarity: 0.08mm max
- Contact Wipe length: 1.0mm min
- Materials: LCP plastic housings and gold plated copper-alloy terminals

Features
- "Mates-to-itself" design reduces part numbers and complexity
- Guidance features ease mating action and PCB assembly
- Robust construction, high un-mating force increase connection security
- Economical high speed performance supported by reports and S-Parameter models
- Footprint compatible with major competitors

Use same part number for both sides of connection.



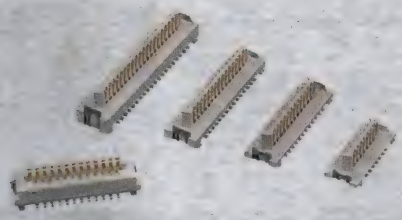
Mfg. Part No.	Positions	Mating Height	Stock No.	Price Each 1-9	Price Each 10-24
10106813-021112LF	20	4 mm	56T4206	1.55	1.36
10106813-031112LF	30	4 mm	56T4208	1.64	1.50
10106813-041112LF	40	4 mm	56T4210	1.96	1.79
10106813-051112LF	50	4 mm	56T4212	2.17	1.98
10106813-061112LF	60	4 mm	56T4214	2.44	2.23
10106813-071112LF	70	4 mm	56T4216	2.72	2.48

(197425)

CONAN® 1.0mm PITCH MEZZANINE SMT CONNECTORS

RoHS Compliant Available

FCI



Rugged connector system well suited for the shock and vibration of portable electronics. Blade-on-beam contacts prevent stubbing when mating and allow peeling for un-mating. Audible "click" signals sure mating engagement. Polarization posts align connector to PCB. Insulators withstand infrared and vapor-phase reflow soldering temperatures. Gold flash over palladium nickel finish in the contact areas provides reliable electrical performance. 0.004" (0.1) lead coplanarity produces high-quality solder joints. Surface mount retainers increase mechanical strength after soldering. Polarized housings prevent mismating. Molded lead-in assists blind mating during final assembly. UL recognized, CSA certified.

Mfg. Part No.	Positions	Description	Mated Height	Pegs	Stock No.	Price Each 1-9	Price Each 10-24
91930-21109LF	9	Receptacle	4.15 mm	Yes	06M2815	2.10	1.98
91930-21111LF	11	Receptacle	4.15 mm	Yes	06M2816	2.39	2.25
91930-21115LF	15	Receptacle	4.15 mm	Yes	06M2817	2.50	2.35
91930-21125LF	25	Receptacle	4.15 mm	Yes	84K7156	3.18	2.92
91930-21141LF	41	Receptacle	4.15 mm	Yes	06M2820	4.43	4.07
91930-21169LF	69	Receptacle	4.15 mm	Yes	84K7158	6.07	5.51
91931-31121LF	21	Receptacle	4.15 mm	Yes	93K5464	3.10	2.85
91931-31131LF	31	Receptacle	4.15 mm	Yes	93K5465	4.96	4.56
91931-31169LF	69	Receptacle	4.15 mm	Yes	43K4513	5.77	5.23
91910-21115LF	15	Header	4.15 mm	Yes	06M2714	2.28	2.14
91910-21141LF	41	Header	4.15 mm	Yes	06M2718	4.07	3.74
91910-21441LF	41	Header	6.00 mm	Yes	06M2743	4.07	3.74
91910-21509LF	9	Header	7.00 mm	Yes	06M2746	2.70	2.48
91910-21515LF	15	Header	7.00 mm	Yes	06M2748	2.28	2.14
91910-21521LF	21	Header	7.00 mm	Yes	06M2749	2.74	2.51
91910-21541LF	41	Header	7.00 mm	Yes	06M2752	4.07	3.74

(8450)

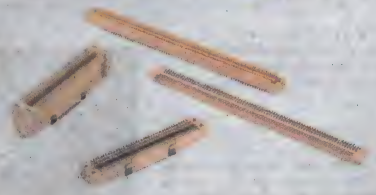
Custom Cable Assembiles to your specs to mate with the complete line of connectors!
Call 1.800.463.9275

(212562)

BERGSTAK® HIGH-DENSITY, 0.8mm PITCH MEZZANINE SMT CONNECTORS

RoHS Compliant Available

FCI



FCI's compact BergStak® 0.8mm pitch connector series offers an extensive range of stack heights and circuit sizes to support a wide range of mezzanine, boardstacking applications. The available stack heights range from 5mm to 16mm in increments of 1mm. Options for wider board spacing can provide clearance for taller board-mounted components or increased air flow for cooling. Connector polarization at the mating interface and ample-lead-in angles produce easy, repeatable mating. All connectors in the BergStak® 0.8 product family feature a robust blade-on-beam contact design at the mating interface and surface-mount termination at the PCB interface. * PCB Stack height = Receptacle height + Plug Height - 3.4mm

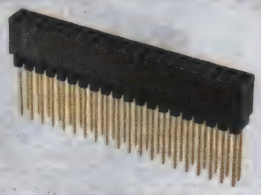
Mfg. Part No.	Positions	Housing Height	Stock No.	Price Each 1-9	Price Each 10-24
0.8mm BOARD-TO-BOARD RECEPTACLES					
61082-061402LF	60	3.70 mm	53K1442	5.36	4.92
61082-081400LF	80	3.70 mm	06M1466	5.34	4.91
61082-081402LF	80	3.70 mm	06M1467	5.80	5.32
61082-101402LF	100	3.70 mm	43K4460	6.54	5.94
61082-121400LF	120	3.70 mm	06M1482	4.42	4.06
61082-121402LF	120	3.70 mm	01M3574	6.60	5.98
61082-042402LF	40	7.70 mm	62K6461	4.40	4.04
61082-082402LF	80	7.70 mm	06M1469	7.10	6.82
61082-102402LF	100	7.70 mm	43K4461	6.34	5.76
61082-142402LF	140	7.70 mm	06M1491	7.66	7.24
0.8mm BOARD-TO-BOARD PLUGS					
61083-081402LF	80	4.70 mm	62K6467	5.36	4.92
61083-141402LF	140	4.70 mm	06M1544	6.80	6.17
61083-082402LF	80	5.70 mm	06M1523	5.45	5.00
61083-102402LF	100	5.70 mm	43K4465	6.46	6.10
61083-044402LF	40	7.70 mm	06M1508	4.39	4.03
61083-084402LF	80	7.70 mm	06M1529	6.66	6.40
61083-084602LF	80	7.70 mm	06M1530	5.43	4.98

(116191)

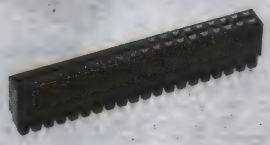
PC/104 BUS CONNECTORS

RoHS Compliant Available

HARWIN



Stackthrough



Non-Stackthrough

- 32+32 way supports and 8-bit system
- 20+20 ways combined with 32+32 ways supports a 16-bit system
- Body material: Thermoplastic
- Contact finish: Gold
- Temperature range: -55°C to 105°C
- Current rating solder tail: 3 A
- Current rating press fit: 2 A

Mfg. Part No.	Contacts	Stock No.	Price Each 1-9
STACKTHROUGH — SOLDER TAIL			
M20-6102045	40	03M3402	5.89
M20-6103245	64	03M3403	8.21
NON-STACKTHROUGH — SOLDER TAIL			
M20-6112045	40	03M3404	5.41
M20-6113245	64	84K7428	7.62
STACKTHROUGH — PRESS-FIT			
M20-6152005	40	55K6973	12.05
M20-6153205	64	84K2984	13.31

(90465)

PC BOARD STACKING CONNECTORS

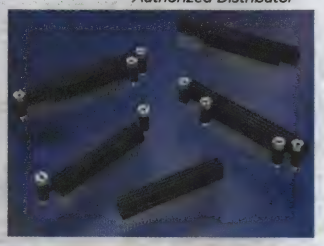
AMPMODU PC/104 CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Press fit design eliminates hand soldering
- Unitized PC/104 connector assembly eliminates two piece (64-pin and 40-pin) configuration
- Integral board spacers with captive hardware
- Flat-rock insertable



PC/104 and **PC/104 Plus** series connectors eliminates need for two pieces and wih optional standoffs, minimizes system assembly time. Nominal resistance: 10 milliohms. Dielectric withstanding voltage: 500VAC for 1 min. at sea level. Temperature: -55°C to 105°C. Housing material: Black thermoplastic, UL 94V-0.

PC/104—0.100″ CENTERLINE

Mfg. Part No.	Connector	Contacts	Standoffs	Pin Length (mm)	Stock No.	Price Each 1-9	Price Each 10-49
● 1375793-2	Stackthrough	104	2	12.27	11H3141	23.21	20.84
● 1375796-3	Stackthrough	102	None	3.02	16M2713	13.89	12.71
● 1375795-1	Stackthrough	102	None	12.27	92C3718	20.43	18.34
● 1375796-4	Stackthrough	104	None	3.02	16M2714	16.72	15.66
● 1375795-2	Stackthrough	104	None	12.27	84C8887	24.09	21.64
PC/104 PLUS — 0.079″ CENTERLINE							
● 1375799-1	Stackthrough	120	None	12.53	81C9684	18.94	17.73

ACCESSORIES

Mfg. Part No.	Connector	Contacts	For Use With	Stock No.	Price per Pkg. 1-24	Price per Pkg. 25-49
● 1445251-1	Organizer	104	PC/104 connector	11H4543	2.23	2.05

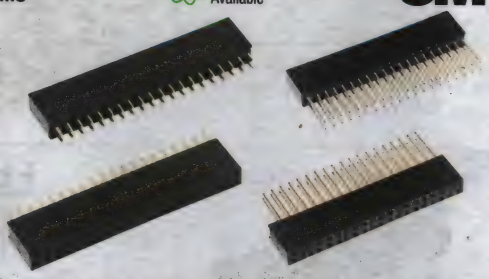
(84546)

CONNECTORS FOR PC/104 EMBEDDED SYSTEMS APPLICATIONS

RoHS Compliant Available

3M

- Standard PC/104 Pin-and-socket connectors
- Rugged and reliable 64- and 40-contact male/female headers
- Simple contact design to accommodate many standoff heights.
- Available in solder tail



Through Hole 3.2mm Tail — Through Hole 12mm Tail

New 3M™ connectors for embedded standards (ATCA and Micro TCA) complement our 2mm Hard Metric, Compact PCI and UHM backplane connector product families, giving us a full portfolio of options for your high-speed, high-performance requirements. This addition includes MicroTCA signal and power connectors, ATCA power connectors, CompactPCI® power connectors, Hard Metric Power connectors, PC/104 connectors, and PC/104 Plus connectors.

Mfg. Part No.	No. of Contacts	Gender	Description	Stock No.	Price Each 1-24
● 4P01-2A02-DA	40	Receptacle	Non-Stack-Thru	52T7353	4.35
● 4P01-2D02-DA	40	Receptacle	Stack-Thru	52T7354	5.46
● 4P02-2A02-DA	64	Receptacle	Non-Stack-Thru	52T7355	6.86
● 4P02-2D02-DA	64	Receptacle	Stack-Thru	52T7356	9.13

(197385)

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Get inspired, collaborate, design, research, ask experts questions.

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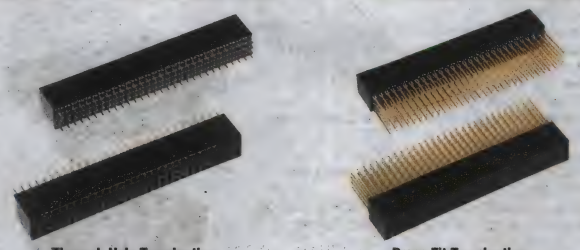
(196546)

CONNECTORS FOR PC/104-PLUS EMBEDDED SYSTEMS APPLICATIONS

RoHS Compliant Available

3M



Through Hole Termination — Press Fit Termination

- Connector for PC/104 applications with support for PCI bus.
- 2 mm pitch connectors for high density applications.
- Available in solder tail.
- Pin-and-socket connectors. Rugged and reliable 120-contact male/female headers
- Simple contact design to accommodate many standoff heights.

New 3M™ connectors for embedded standards (ATCA and Micro TCA) complement our 2mm Hard Metric, Compact PCI and UHM backplane connector product families, giving us a full portfolio of options for your high-speed, high-performance requirements. This addition includes MicroTCA signal and power connectors, ATCA power connectors, CompactPCI® power connectors, Hard Metric Power connectors, PC/104 connectors, and PC/104 Plus connectors.

Mfg. Part No.	No. of Contacts	Gender	Description	Stock No.	Price Each 1-24
● 5P03-2012-DA	120	Receptacle	Through Hole	52T7357	13.66
● 5P03-2021-DA	120	Receptacle	Press Fit	52T7358	17.74

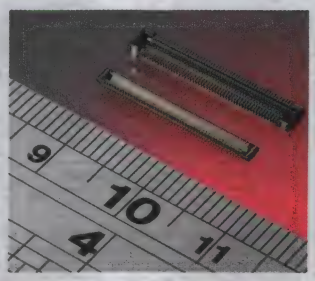
(197386)

0.40mm (0.016″) SLIMSTACK™ SMT BOARD-TO-BOARD CONNECTORS

RoHS Compliant Available

molex

SlimStack™ 0.40mm (.016″) connector family includes stack heights as low as 0.70mm (.026″) and widths as narrow as 2.50mm (.098″). Many SlimStack 0.40mm versions are intermateable and footprint compatible, which enables various stack heights without having to change the PCB pattern. The unique features of these connectors include nickel-barrier plating to prevent solder-flux intrusion, friction locks for secure mating, a two-point contact design version for additional contact reliability, and a high mating-retention version to withstand shock and vibration applications. SlimStack 0.40mm full range of connectors include stack heights from 0.70mm (.028″) to 4.00mm (.157″) and range in size from 12 to 120 circuits.



Mfg. Part No.	Contacts	Gender	Stock No.	Price Each 1-9	Price Each 10-24
503548 & 503552 SERIES - HIGH MATING RETENTION - 0.70mm (0.028″) MATED HEIGHT					
● 503548-0620	6	Receptacle	29T5821	0.70	0.61
● 503548-1220	12	Receptacle	29T5822	0.75	0.65
● 503548-1620	16	Receptacle	99R5668	0.75	0.66
● 503552-0620	6	Plug	29T5823	0.70	0.63
● 503552-1220	12	Plug	29T5824	0.85	0.75
● 503552-1620	16	Plug	99R5670	0.85	0.76
503772 & 503776 SERIES - ANTI-FLUX CLEANPOINT™ CONTACTS - 0.80mm (0.032″) MATED HEIGHT					
● 503772-1010	10	Receptacle	72T0073	0.72	0.63
● 503772-2010	20	Receptacle	72T0074	0.95	0.83
● 503772-3010	30	Receptacle	72T0075	0.81	0.77
● 503772-3410	34	Receptacle	72T0076	1.59	1.40
● 503776-1010	10	Plug	72T0077	0.92	0.81
● 503776-2010	20	Plug	72T0078	1.10	0.97
● 503776-3010	30	Plug	72T0079	1.64	1.45
● 503776-3410	34	Plug	72T0080	1.86	1.64
502426 & 502430 SERIES - SOLDER TABS - 1.00mm (0.039″) MATED HEIGHT					
● 502426-2010	20	Receptacle	56R1275	1.45	1.27
● 502426-2610	26	Receptacle	56R1278	1.72	1.36
● 502426-3210	32	Receptacle	56R1280	1.80	1.46
● 502426-5010	50	Receptacle	46P5457	2.22	2.01
● 502426-6410	64	Receptacle	56R1281	3.19	2.18
● 502426-8010	80	Receptacle	56R1283	2.75	2.20
● 502430-2010	20	Header	56R1285	1.08	0.95
● 502430-2610	26	Header	56R1289	1.07	0.85
● 502430-3210	32	Header	56R1290	1.22	0.97
● 502430-5010	50	Header	46P5460	1.63	1.40
● 502430-6410	64	Header	56R1291	2.14	1.78
● 502430-8010	80	Header	56R1293	2.61	2.13
51338 SERIES - SOLDER TABS, J-LEAD TAILS - 1.50mm (0.059″) MATED HEIGHT					
● 51338-9873	10	Receptacle	88T1966	0.94	0.78
● 51338-2274	22	Receptacle	95M2517	2.83	2.56
● 51338-2474	24	Receptacle	95M2518	1.83	1.72

➤CONTINUED➤

0.40mm (0.016″) SLIMSTACK™ SMT BOARD-TO-BOARD CONNECTORS (CONT.)

51338 SERIES - SOLDER TABS, J-LEAD TAILS - 1.50mm (0.059″) MATED HEIGHT

Mfg. Part No.	Contacts	Gender	Stock No.	Price Each 1-9	Price Each 10-24
51338-2674	26	Receptacle	95M2519	2.92	2.26
51338-0374	30	Receptacle	95M2509	1.94	1.60
51338-3474	34	Receptacle	95M2520	1.20	1.14
51338-0474	40	Receptacle	95M2511	2.04	1.67
51338-4473	44	Receptacle	88T1964	2.04	1.74
51338-5473	54	Receptacle	99R5675	1.60	1.42
51338-6473	64	Receptacle	88T1965	3.56	2.74
51338-0874	80	Receptacle	95M2515	3.69	2.55
51338-0974	90	Receptacle	58R1275	4.13	3.18

(136212)

1.27mm (0.050″) X 1.27mm (0.050″) SEARAY BOARD-TO-BOARD PLUGS AND RECEPTACLES

RoHS Compliant Available

molex

- Current Rating: 1A
- Voltage Rating: 240V AC
- Operating Temperature Range: -55°C to 125°C

45970 SERIES SEARAY PLUGS

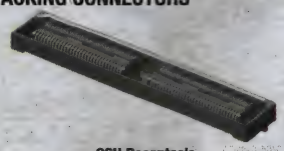
Mfg. Part Nol.	Circuits	Unmated Height (mm)	Rows	Stock No.	Price Each 1-9
45970-4185	320	2.0	8	92P7446	25.71
45970-3115	300	2.0	10	92P7441	20.08
45970-4115	400	2.0	10	92P7445	38.79
45970-4385	320	3.5	8	92P7447	28.51
45970-4715	400	7.0	10	92P7448	19.60
45971 SERIES SEARAY RECEPTACLES					
45971-4185	320	5.0	8	92P7460	26.04
45971-3115	300	5.0	10	92P7455	25.46
45971-4115	400	5.0	10	92P7459	20.79
45971-5115	500	5.0	10	92P7463	36.36
45971-4385	320	6.5	8	92P7461	27.74
46556 SERIES SEARAY SLIM PLUGS					
46556-1145	40	2.0	4	92P7465	11.50
46556-4145	160	2.0	4	92P7471	16.81
46556-1745	40	7.0	4	92P7466	12.76
46556-2745	80	7.0	4	92P7468	11.00
46557 SERIES SEARAY SLIM RECEPTACLES					
46557-1145	40	5.0	4	92P7475	9.88
46557-2145	80	5.0	4	92P7477	12.43
46557-5145	200	5.0	4	92P7483	21.71
46557-2545	80	8.0	4	92P7478	10.33
46557-3545	120	8.0	4	92P7480	12.76
46557-4545	160	8.0	4	92P7482	15.94

(146392)

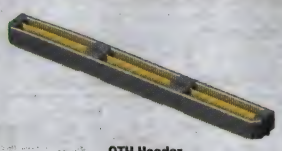
0.50mm (0.020″) QSH AND QTH SERIES HIGH SPEED STACKING CONNECTORS

RoHS Compliant Available

samtec



QSH Receptacle



QTH Header

High speed surface mount headers and receptacles feature black liquid crystal polymer housing with gold plated phosphor bronze contacts. Current rating: 1A @ 30°C, Ground Plane 7.8A @ 30°C. Operating temperature range -55°C to +125°C. Rated 100 mating cycles and 225 VA when mated with 5mm stack height. Supports Hypertransport, XAUI, PCI Express®, SATA, and Infiniband protocols.

Receptacle	Header	Combined Height (mm)
QSH-XXX-01-L-D-A	QTH-XXX-01-L-D-A	5.00mm (0.198″)
QSH-XXX-01-L-D-A	QTH-XXX-02-L-D-A	8.00mm (0.315″)
QSH-XXX-01-L-D-A	QTH-XXX-03-L-D-A	11.00mm (0.433″)
QSH-XXX-01-L-D-A	QTH-XXX-04-L-D-A	16.00mm (0.630″)

➤CONTINUED➤

0.50mm (0.020″) QSH AND QTH SERIES HIGH SPEED STACKING CONNECTORS (CONT.)

QSH SERIES HIGH SPEED RECEPTACLES

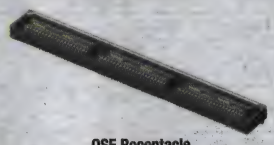
Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
QSH-030-01-L-D-A	60	19M9181	11.00	9.83
QSH-060-01-L-D-A	120	81H3791	10.74	10.15
QSH-090-01-L-D-A	180	11P6087	14.78	13.97
QSH-150-01-L-D-A	300	11P6089	15.22	14.55
QTH SERIES HIGH SPEED HEADERS				
QTH-030-01-L-D-A	60	65K8660	11.48	10.26
QTH-060-01-L-D-A	120	11P6110	10.96	10.36
QTH-090-01-L-D-A	180	64M1417	15.06	14.24
QTH-150-01-L-D-A	300	11P6119	18.16	17.36
QTH-060-02-L-D-A	120	11P6111	11.69	11.04
QTH-090-02-L-D-A	180	11P6112	15.52	14.67
QTH-060-03-L-D-A	120	31M8936	18.08	17.09
QTH-090-04-L-D-A	180	11P6114	17.47	16.70

(136045)

0.80mm (0.032″) QSE AND QTE SERIES HIGH SPEED STACKING CONNECTORS

RoHS Compliant Available

samtec



QSE Receptacle

QTE Header

High speed surface mount headers and receptacles feature black liquid crystal polymer housing with gold plated phosphor bronze contacts. Current rating: 2A @ 80°C Ground Plane 9.5A @ 80°C . Operating temperature range -55°C to +125°C. Rated 100 mating cycles and 225 VA when mated with 5mm stack height QSE. Supports XAUI, PCI Express®, SATA, MGT (Rocket I/O), and Infiniband protocols.

Receptacle	Header	Combined Height (mm)
QSE-XXX-01-L-D-A	QTE-XXX-01-L-D-A	5.00mm (0.198″)
QSE-XXX-01-L-D-A	QTE-XXX-02-L-D-A	8.00mm (0.315″)
QSE-XXX-01-L-D-A	QTE-XXX-03-L-D-A	11.00mm (0.433″)
QSE-XXX-01-L-D-A	QTE-XXX-04-L-D-A	16.00mm (0.630″)

QSE SERIES HIGH SPEED RECEPTACLES

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
QSE-020-01-L-D-A	40	54K4182	7.35	6.57
QSE-060-01-L-D-A	120	80K8259	11.13	10.52
QTE SERIES HIGH SPEED HEADERS				
QTE-020-01-L-D-A	40	54K4181	7.76	6.93
QTE-040-01-L-D-A	80	11P6093	10.96	9.79
QTE-020-02-L-D-A	40	11P6090	7.70	6.88
QTE-060-02-L-D-A	120	11P6097	11.28	10.66
QTE-020-03-L-D-A	40	11P6091	9.68	8.64
QTE-060-03-L-D-A	120	11P6098	13.68	12.93
QTE-060-04-L-D-A	120	11P6099	18.68	17.66

(136042)

AMP EUROCARD TYPE C RIGHT-ANGLE PIN AND VERTICAL RECEPTACLE ASSEMBLIES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- 0.100″ x 0.100″ (2.54 x 2.54) Pin and Receptacle Connector Assemblies
- Meet DIN 41612 (Level II) and IEC 603-2 Requirements
- Type C Vertical Assemblies Feature Solderless, Press-Fit Action Pin®
- Voltage Rating: 250VAC
- Dielectric Rating: 1000VAC
- Temperature Rating: -55°C to +125°C
- UL Recognized, CSA Certified

Type C right-angle pin assemblies feature brass solder posts with or without brass boardlocks. Easily installed with seating tools, *ordered separately*. Flame retardant, grey polyester polarized housings, rated UL94V-0. Intermateable with **type R** assemblies, *ordered separately on page 740.*

TYPE C RIGHT-ANGLE PIN ASSEMBLIES, SOLDER POST - STANDARD DIN SIZE

Mfg. Part No.	DIN Level	Positions	Post Lgth. (Inches)	Length (Inches)	Stock No.	Price Each 1-9
5650945-5	II	64	0.104	3.700	42K7363	3.84
5650951-5	II	64	0.130	3.700	42K7365	4.03
5650473-5†	II	96	0.104	3.700	42K7349	5.37
5650913-5*	II	96	0.104	3.700	42K7358	5.92
5536010-5	II	96	0.104	3.700	42K7263	5.98

➤CONTINUED➤

DIN 41612 CONNECTORS

AMP EUROCARD TYPE C RIGHT-ANGLE PIN AND VERTICAL RECEPTACLE ASSEMBLIES (CONT.)

Mfg. Part No.	DIN Level	Positions	Post Lgth. (Inches)	Length (Inches)	Stock No.	Price Each 1-9
● 5536416-5	II	96	0.104	3.700	42K7275	7.63
● 5650947-5	II	96	0.130	3.700	42K7364	6.00
● 5148116-5	II	96	0.180	3.700	03M3063	5.95
TYPE C RIGHT-ANGLE PIN ASSEMBLIES, SOLDER POST - HALF DIN SIZE						
● 5650478-5	II	48	0.104	2.100	42K7350	3.56
● 5650916-5*	II	48	0.104	2.100	42K7359	3.94
TYPE C RIGHT-ANGLE PIN ASSEMBLIES, SOLDER POST - EXPANDED DIN SIZE						
● 5650906-5	II	120	0.104	4.500	42K7355	7.75
TYPE C RIGHT-ANGLE PIN ASSEMBLIES, ACTION PIN® - EXPANDED DIN SIZE						
● 215605-4	...	96	0.114	3.689	52F5145	14.30
TYPE C VERTICAL RECEPTACLE ASSEMBLIES, SOLDER POST - STANDARD DIN SIZE						
650458-5	II	64	0.098	3.700	34B1319	4.08
● 5650458-5	II	64	0.098	3.700	40P9819	3.88
● 5650956-5	II	64	0.130	3.700	50P9507	3.91
● 5650408-5	II	64	0.180	3.700	73K1684	4.60
● 5535089-5†	II	96	0.098	3.700	73K1663	4.75
● 5535090-5†	II	96	0.130	3.700	73K1665	4.88
● 5535090-4†	II	96	0.130	3.700	73K1664	4.80
● 5535043-5†	II	96	0.180	3.700	73K1660	4.72
● 5535043-4	II	96	0.180	3.700	73K1659	4.80
TYPE C VERTICAL RECEPTACLE ASSEMBLIES, SOLDER POST - HALF DIN SIZE						
● 5535070-5	II	48	0.130	2.100	73K1662	3.96
TYPE C VERTICAL RECEPTACLE ASSEMBLIES, ACTION PIN® - STANDARD DIN SIZE						
● 5535032-4	II	96	0.190	3.700	71K0049	3.86
● 1-148057-5†	II	96	0.512	3.700	33B3154	12.76
TYPE C VERTICAL RECEPTACLE ASSEMBLIES, ACTION PIN® - HALF DIN SIZE						
● 5535034-5	II	48	0.190	2.100	46T9554	3.10

HOUSING FOR CRIMP SNAP IN RECEPTACLE CONTACTS, TYPE C VERTICAL RECEPTACLE - HALF DIN SIZE

Mfg. Part No.	Positions	Length (Inches)	Stock No.	Price Each 1-9
● 926040-2	48	2.142	88F5032	7.65

* With Boardlocks. † Compatible with FUTUREBUS, VMEbus, Intel MULTIBUS (II), NUBUS applications.
(8051)

AMP EUROCARD TYPE R VERTICAL PIN AND RIGHT-ANGLE RECEPTACLE ASSEMBLIES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- 0.100" x 0.100" (2.54 x 2.54) Pin and Receptacle Connector Assemblies
- Meet DIN 41612 (Level II) and IEC 603-2 Requirements
- Voltage Rating: 250VAC
- Dielectric Rating: 1000VAC
- Temperature Rating: -55°C to +125°C
- UL Recognized, CSA Certified

Type R vertical pin assemblies feature brass solder posts or 0.025" (0.64) square phosphor bronze Action Pin® solderless, press-fit posts for PC board thicknesses of 0.093" (2.36) and above. Easily installed with seating tools, *go online or call*. **Type R** right-angle receptacle assemblies feature phosphor bronze solder posts. Flame retardant, gray polyester polarized housings, rated UL94V-0. Intermateable with **type C** assemblies, *go online or call*.

TYPE R VERTICAL PIN ASSEMBLIES, SOLDER POST - STANDARD DIN SIZE

Mfg. Part No.	Positions	Post Lgth.	Length	Stock No.	Price Each 1-9	10-49	50-99
● 5650933-5	64	0.130"	3.740"	42K7361	4.65	4.37	4.08
● 5650908-5	96	0.130"	3.740"	42K7357	4.81	4.61	4.04
● 5650470-5	96	0.180"	3.740"	42K7348	5.94	5.70	5.00
TYPE R VERTICAL PIN ASSEMBLIES, SOLDER POST - HALF DIN SIZE							
● 5650479-5	48	0.130"	2.140"	42K7351	3.40	3.27	2.86
● 5650477-5	48	0.180"	2.140"	19R2956	3.48	3.27	3.05
TYPE R VERTICAL PIN ASSEMBLIES, SOLDER POST - EXPANDED DIN SIZE							
● 5650922-5	150	0.130"	5.352"	73K1687	16.91	15.75	12.66
TYPE R RIGHT-ANGLE RECEPTACLE ASSEMBLY, SOLDER POST - STANDARD DIN SIZE							
● 5650461-4	96	0.110"	3.696"	16M3307	5.20	4.88	4.56
● 5650461-5	96	0.110"	3.696"	71M0792	5.39	5.06	4.72
● 5650462-5	96	0.167"	3.696"	19R2953	10.05	9.62	8.74
● 5650870-4	64	0.110"	3.696"	16M4017	5.33	5.12	4.48
TYPE R RIGHT-ANGLE RECEPTACLE ASSEMBLY, SOLDER POST - HALF DIN SIZE							
● 5650893-5	48	0.110"	2.096"	46T9555	4.95	4.59	4.02
TYPE R RIGHT-ANGLE RECEPTACLE ASSEMBLY, SOLDER POST - EXPANDED DIN SIZE							
● 5650874-5	120	0.110"	4.496"	68K9600	8.03	7.70	6.69

(8052)

DIN 41612 BOARD MOUNT CONNECTORS

RoHS Compliant Available

FCI

Applications:
- Consumer electronics
- Office equipment
- Industrial electronics
- Data
- Private switching
- Telecommunication
- Public switching
- Datacom

FCI's DIN selection proven standard connectors, such as signal solder to board, press-fit and power connectors. Insulator material is polyester thermoplastic UL 94 V0. Contacts are copper alloy with gold over nickel on contact area and matte tin over nickel on termination area. Temperature range : -55° C to +125° C.

TYPE B, RIGHT ANGLE HEADERS

Mfg. Part No.	Din Class	No. of Rows	Contacts	Loading Description	Stock No.	Price Each 1-9
● 86092645113755E1LF	II	2	64	a + b fully loaded	71K0070	4.48
TYPE C, RIGHT ANGLE HEADERS						
● 86093967113765E1LF	I	3	96	a + b + c fully loaded	93K5379	5.22
● 86094647113755ELF	II	3	64	a + c fully loaded	63K0508	2.19
● 86093967113755E1LF	II	3	96	a + b + c fully loaded	93K5378	4.36
● 86093967113755ELF	II	3	96	a + b + c fully loaded	63K0451	4.20
TYPE C, RIGHT ANGLE PRESS FIT HEADERS						
● 86094647194755E1LF	II	3	64	a + c fully loaded	66K0032	7.05
● 86093967194755E1LF	II	3	96	a + b + c fully loaded	63K0456	7.39
TYPE C/2, RIGHT ANGLE HEADERS						
● 86094327313755ELF	II	3	32	a + c fully loaded	06M2294	1.30
● 86093487313755ELF	II	3	48	a + b + c fully loaded	05R9520	2.51
TYPE Q, VERTICAL HEADERS						
● 86092645814755E1LF	II	2	64	a + b fully loaded	63K0381	3.94
TYPE R, VERTICAL HEADERS						
● 86094647814755ELF	II	3	64	a + c fully loaded	05R9525	2.53
● 86093967814755ELF	II	3	96	a + b + c fully loaded	05R9522	3.71
TYPE R, VERTICAL PRESS FIT HEADERS						
● 86093967894755E1LF	II	3	96	a + b + c fully loaded	63K0466	3.80
TYPE R/2, VERTICAL HEADERS						
● 86094327614755ELF	II	3	32	a + c fully loaded	05R9523	2.18
● 86093487614755ELF	II	3	48	a + b + c fully loaded	05R9521	1.80
TYPE C, VERTICAL RECEPTACLES						
● 86093968114755V1LF	II	3	96	a + b + c fully loaded	99K1009	4.28
TYPE C, VERTICAL PRESS FIT RECEPTACLES						
● 86094648194755E3LF	II	3	64	a + c fully loaded	63K0522	4.08
● 86093968194755E3LF	II	3	96	a + b + c fully loaded	63K0473	5.73
TYPE R, RIGHT ANGLE RECEPTACLES						
● 86094648813755V1LF	II	3	64	a + c fully loaded	63K0526	1.96
TYPE R, RIGHT ANGLE PRESS FIT RECEPTACLES						
● 86093968894755E3LF	II	3	96	a + b + c fully loaded	63K0480	9.72
TYPE R/2, RIGHT ANGLE RECEPTACLES						
● 86094328613755E1LF	II	3	32	a + c fully loaded	05R9524	2.97
● 86093488613755E1LF	II	3	48	a + b + c fully loaded	63K0417	4.77

(115842)

DIN 41612 IDC CABLE CONNECTORS WITH COVERS

RoHS Compliant Available

FCI

IDC connectors including covers. Applications include communication, data, instrumentation and medical markets.

STYLE F MEDIUM POWER CONNECTORS

Mfg. Part No.	No. of Rows	Contacts	AWG	Stock No.	Price Each 1-9	10-24
● BPS8B09FLD0C0Z1LF	3	9	30AWG to 28AWG	05R9512	1.73	1.63
● BPS8B09FLD2C0Z1LF	3	9	26AWG to 24AWG	74K4802	3.78	3.47
● BPS8B21FLD0C0Z1LF	3	21	30AWG to 28AWG	05R9513	2.36	2.21
● BPS8B21FLD2C0Z1LF	3	21	26AWG to 24AWG	68K2132	6.66	6.04
● BPS8B96FLD0C0Z1LF	3	96	30AWG to 28AWG	05R9514	8.54	7.75
● BPS8B96FLD2C0Z1LF	3	96	26AWG to 24AWG	05R9515	8.60	7.80

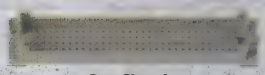
(147152)

har-bus® 64 VME64 EXTENSION CONNECTOR SYSTEM

RoHS Compliant Available

HARTING

Male Right-Angle



Rear Shroud

Crimp Body

har-bus® 64 connectors are in accordance to IEC 61 076-4-113 and are 100% backward-compatible to existing Eurocard systems and connectors. All versions have 160 contacts. The addition of rows z and d provide 35 more signal ground return, +3.3V power, ±48V power and 6-slot geographical addressing pins. Contact spacing: 0.1″ (2.54). Working current: 2A maximum. *Order tooling separately on page 742*

RIGHT-ANGLE PCB SOLDER CONNECTORS

Mfg. Part No.	Gender	Perf. Level	Tail Length	Stock No.	Price Each 1-9	Price Each 10-24
02 01 160 2101	Male	2	2.9mm	79K4439	24.26	21.79
02 01 160 1105*	Male	1	2.9mm	65R4542	72.80	68.73
02 01 160 1106*	Male	1	2.9mm, w/ Clip	86R4527	76.78	72.49
02 04 160 1101	Female	1	2.9mm	79K4437	67.71	63.93

STRAIGHT PCB PRESS-IN CONNECTORS

02 02 160 2201	Female	2	4.5/5mm	79K4440	21.50	19.68
02 02 160 2301	Female	2	17mm	40K1709	26.26	23.59

* 50u″ Gold and SnPb on Termination for Hi-Reliability Applications.

REAR SHROUDS

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
02 44 000 0007	For PC Board 2.8mm Thick	40K1708	5.30	4.98
02 44 000 0001	For PC Board 3.4mm Thick	40K1706	5.30	4.98
02 44 000 0002	For PC Board 4.0mm Thick	40K1707	5.15	4.85

ACCESSORIES

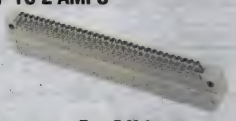
Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
02 05 000 2513	Female Crimp Contact, Performance Level 2, Wire Size: 0.09 - 0.50 Sq. mm (28 - 20AWG)	05R9322	0.75	0.65
02 05 000 1513	Female Crimp Contact, Performance Level 1, Wire Size: 0.09 - 0.50 Sq. mm (28 - 20AWG)	15R3275	0.83	0.72
02 05 000 0003	Crimp Body, Type C, Rows a + b + c + d + e	71P5422	12.36	11.31
02 05 000 0004	Crimp Body, Type C, Rows z + a + b + c + d	51P1496	12.60	11.54
02 05 000 0005	Crimp Body, Type R, Rows a + b + c + d + e	27R1447	12.36	11.31

(8472)

DIN 41612 SIGNAL CONNECTORS UP TO 2 AMPS

RoHS Compliant Available

HARTING



Type B Male

Type 2B Female

- IEC 60 603-2
- Maximum 96 contacts
- Standard and inverse versions
- 2.54mm (0.100″) contact spacing
- Moldings thermoplastic resin, glass fiber filled, UL 94 V-0
- Contacts copper alloy
- Optional snap in clips
- Temperature range -55 C to +125 C
- Performance level 2 = 400 mating cycles
- Current rating 2A (IDC versions 1A)
- Current rating for type M (mixed) up to 40A

Male and female connectors available in many termination styles: straight and right angle solder pins for printed circuits, solder lugs for discrete wiring, press-in for backplanes, wrap posts for automatic wiring, and crimp contacts (ordered separately). 2.54mm (0.100″) contact spacing. *Order housings, contacts, and accessories separately on page 742*

TYPE B - 2 ROW

Mfg. Part No.	Contacts	DIN Style	Termination	Stock No.	Price Each 1-9	Price Each 10-24
09 02 164 6921	64	Male	Right-Angle Solder Pins, 3.0mm	96F2672	4.13	3.88
09 02 064 3214	64	Female	For Straight Crimp Contacts (ordered separately)	40K1714	12.30	11.78
09 02 264 6828	64	Female	For Insulation Displacement	79K4449	14.82	13.57
09 02 264 6824	64	Female	Straight Solder Pins , 2.9mm	93B3021	6.16	5.79
09 02 264 6825	64	Female	Straight Solder Pins, 4.5mm	79K4448	5.68	5.34

TYPE 2B - 2 ROW

09 22 132 6921	32	Male	Right-Angle Solder Pins, 3.0mm	93C6953	3.77	3.54
09 22 232 6825	32	Female	Straight Solder Pins, 4.5mm	14C7573	4.93	4.64

TYPE C - 2 ROW, ROWS A AND C LOADED

09 03 164 6921	64	Male	Right-Angle Solder Pins, 3.0mm	79K4451	3.24	3.05
09 03 264 6821	64	Female	Straight Wrap Posts, 13.0mm	39C9881	6.36	6.09

CONTINUED

DIN 41612 SIGNAL CONNECTORS UP TO 2 AMPS (CONT.)

TYPE C - 2 ROW, ROWS A AND C LOADED

Mfg. Part No.	Contacts	DIN Style	Termination	Stock No.	Price Each 1-9	Price Each 10-24
09 03 264 6824	64	Female	Straight Solder Pins , 2.9mm	13C2731	3.64	3.42
09 03 264 6825	64	Female	Straight Solder Pins, 4.5mm	83F8408	3.24	3.04
09 03 264 6828	64	Female	For Insulation Displacement to Flat Cable	79K4455	12.41	11.37

TYPE C - 3 ROW

09 03 196 6921	96	Male	Right-Angle Solder Pins, 3.0mm	96F2677	4.70	4.42
09 03 196 2921*	96	Male	Right-Angle Solder Pins, 3.0mm	89C0090	6.77	6.48
09 03 196 6922	96	Male	Straight Solder Pins , 3.0mm	96F2679	5.22	4.91
09 03 196 6951	96	Male	Right-Angle Solder Pins with 2 Leading Contacts (0.8 mm at A1 and A32)	93C5401	5.23	4.92
09 03 396 6921	96	Male	Right-Angle Solder Pins, 3.0mm, with Snap-In Clips	83F8407	5.06	4.75
09 03 296 6823	96	Female	Straight Closed Solder Lug	99B2237	19.70	18.03
09 03 096 3214	96	Female	For Straight Crimp Contacts (ordered separately)	40K1722	7.29	6.98
09 03 296 6824	96	Female	Straight Solder Pins , 2.9mm	13C2732	5.26	4.94
09 03 296 6825	96	Female	Straight Solder Pins, 4.5mm	80K6208	3.90	3.67
09 03 496 6825	96	Female	Straight Solder Pins, 4.5mm, with Snap-In Clips	93C5490	6.07	5.81
09 03 296 6850	96	Female	Straight Press-In Pins, 4.5mm	79K4442	3.85	3.62
09 03 296 6851	96	Female	Straight Press-In Pins, 13.2mm	27C1379	8.77	8.40
09 03 296 6861	96	Female	Straight Press-In Pins, 13.2mm, Selectively Gold Plated	93C5458	8.78	8.41
09 03 296 6821	96	Female	Straight Press-In Pins, 13.0mm	96M1877	7.72	7.39

TYPE 2C - 3 ROW

09 23 132 6921	32	Male	Right-Angle Solder Pins, 3.0mm	79K4466	3.60	3.39
09 23 148 6921	48	Male	Right-Angle Solder Pins, 3.0mm	23C1623	3.55	3.34
09 23 048 3214	48	Female	For Straight Crimp Contacts (ordered separately)	22T4982	10.54	10.09
09 23 248 6825	48	Female	Straight Solder Pins, 4.5mm	39C3353	4.47	4.20

TYPE R - 2 ROW, ROWS A AND C LOADED

09 73 164 6903	64	Female	Straight Solder Pins, 4.0mm	96F2642	4.67	4.39
09 73 264 6801	64	Female	Right-Angle Solder Pins, 2.8mm	83F8417	3.63	3.42

TYPE R - 3 ROW

09 73 196 6903	96	Male	Straight Solder Pins, 4.0mm	96F2641	6.66	6.38
09 73 296 6801	96	Female	Right-Angle Solder Pins, 2.8mm	79K4465	5.44	5.11

TYPE 2R - 3 ROW

09 23 048 3217	48	Female	For Straight Crimp Contacts (ordered separately)	24T5874	9.83	9.41

TYPE M - 3 ROWS

09 03 124 6901	24 + 8	Male	Right-Angle Solder Pins, 3.0mm	96F2659	8.23	7.88
09 03 142 6901	42 + 6	Male	Right-Angle Solder Pins, 3.0mm	96F2658	10.59	10.14
09 03 242 6805	42 + 6	Female	Straight Solder Pins, 4.5mm	79K4453	8.83	8.46
09 03 160 6901	60 + 4	Male	Right-Angle Solder Pins, 3.0mm	79K4450	11.67	11.18
09 03 260 6805	60 + 4	Female	Straight Solder Pins, 4.5mm	79K4454	10.16	9.73
09 03 178 6901	78 + 2	Male	Right-Angle Solder Pins, 3.0mm	79K4452	7.01	6.71

TYPE M-FLAT - 3 ROWS

09 03 224 6830	24 + 8	Female	Straight Press-In Pins, 4.5mm	05H7263	10.99	10.52

* Performance level 1

(8484)

DURATOOL AT NEWARK ELEMENT14

For your production and facilities needs, from soldering stations to tool sets & more.

newark.com/duratool

(212563)

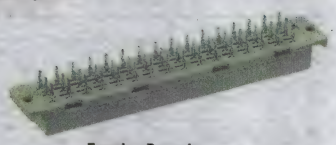
DIN 41612 CONNECTORS

DIN 41612 CONNECTORS UP TO 6 AMPS

RoHS Compliant Available

Male - Right-Angle PCB

Female - Solder



Female - Press-In

- IEC 60 603-2 (and complementary types)
- Maximum 48 contacts
- Board mount angled and straight
- Cable mount crimp and solder lug
- 0.2" (5.08mm) contact spacing
- Moldings: thermoplastic resin, glass fiber filled, UL 94 V-0

- Contacts: copper alloy
- Temperature range -55 C to +125 C
- Performance level 2 = 400 mating cycles
- Current rating 6A
- *Order housings, contacts, and accessories separately*

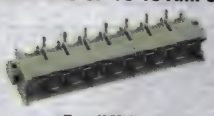
TYPE D - 2 ROWS

Mfr. Part No.	Contacts	DIN Style	Termination	Stock No.	Price Each 1-9
● 09 04 132 6921	32	Male	Right-Angle Solder Pins, 3.0mm	96F2668	5.84
● 09 04 232 6831	32	Female	Straight Solder Pins, 4.5mm	79K4458	11.62
● 09 04 232 6821	32	Female	Straight Wrap Posts, 20.0mm	40K1725	9.81
● 09 04 032 3213	32	Female	For Straight Crimp Contacts (ordered separately)	93C5522	11.50
TYPE E - 3 ROWS					
● 09 05 148 6921	48	Male	Right-Angle Solder Pins, 3.0mm	01C5518	8.83
● 09 05 248 6831	48	Female	Straight Solder Pins, 4.5mm	39C3397	12.38
● 09 05 048 3202	48	Female	For Straight Crimp Contacts (ordered separately)	98B9353	4.28
TYPE F - 3 ROWS					
● 09 06 148 6901	48	Male	Right-Angle Solder Pins, 3.0mm	96F2671	6.77
● 09 06 248 3201	48	Female	For Straight Crimp Contacts (ordered separately)	79K4444	1.95
● 09 06 248 6823	48	Female	Open Solder Lugs	47M1118	14.84
● 09 06 248 6826	48	Female	Angle Solder Pins, 1x1mm	93C5903	21.89
● 09 06 248 6833	48	Female	Low Profile, Straight Solder Pins, 3.7mm	93C5904	8.91
● 09 06 248 6834	48	Female	Low Profile, Straight Solder Pins, 4.5mm	94B7701	8.78
● 09 06 248 6835	48	Female	Straight Solder Pins, 4.5mm	79K4463	9.73
TYPE F - 2 ROWS, ROWS A AND C LOADED					
● 09 06 132 6901	32	Male	Right-Angle Solder Pins, 3.0mm	96M1878	4.68

(8486)

TYPE H DIN 41612 CONNECTORS UP TO 15 AMPS

RoHS Compliant Available



Type H Male

Type H Female

- IEC 60 603-2
- Maximum 15 contacts
- Board mount angled and straight
- Cable mount faston
- Moldings: thermoplastic resin, glass fiber filled, UL 94 V-0

- Contacts: copper alloy
- Temperature range -55 C to +125 C
- Performance level 1 = 500 mating cycles
- Current rating 15A
- *Order housings, and accessories separately online or call*

TYPE H - 2 ROWS

Mfg. Part No.	Contacts	DIN Style	Termination	Stock No.	Price Each 1-9	Price Each 10-24
● 09 06 015 2912	15	Male	Faston 6.3 x 2.5	93C5712	13.77	12.61
● 09 06 115 2911	15	Male	Right-Angle Solder Pin for 0.063"(1.6) PC Board	79K4459	9.91	9.49
● 09 06 115 2932	15	Male	Right-Angle Solder Pins - First Mating Contact Position Z32	79K4460	10.90	10.44
● 09 06 215 2811	15	Female	Faston 6.3 x 2.5 - Cannot Be Used In Shell Housing	99F3628	12.22	11.19
● 09 06 215 2871	15	Female	For Faston 6.3 x 2.5 - May Also Be Used In Shell Housing	93K7627	12.44	11.39
● 09 06 215 2821	15	Female	Straight Solder Pin, 0.157"(4) long for 0.063"(1.6) PC Board	79K4461	12.47	11.93
● 09 06 015 2813	15	Female	Cage Clamp - May Also Be Used In Shell Housing	93C5711	30.40	27.32

➤ CONTINUED ➤

TYPE H DIN 41612 CONNECTORS UP TO 15 AMPS (CONT.)

TYPE H3 - 3 CONTACT

Mfg. Part No.	Contacts	DIN Style	Termination	Stock No.	Price Each 1-9	Price Each 10-24
● 09 06 203 2911	3	Male	Right-Angle Solder Pins with Preleading Middle Contact	51M9270	6.26	5.89
● 09 06 203 2811	3	Female	Straight Solder Pins, 4.0mm	93C5808	7.28	6.97

(8488)

DIN 41612 SHELL HOUSINGS, SHROUDS, CONTACTS AND TOOLING

RoHS Compliant Available

Fully Assembled Housing, Connector, & Brackets

09 99 000 0620

UL recognized, CSA certified.

HOUSINGS AND SHROUDS

Mfr. Part No.	Description	Stock No.	Price Each 1-9
● 09 03 096 0501	Shell Housing C for Female Connectors, Type B, C, D, E, har-bus 64	35C3320	11.72
● 09 02 000 9911	Round Cable Insert C for Shell Housings	50B3878	3.71
● 09 02 000 9902	Left Locking Lever C for Shell Housings	40K1710	1.70
● 09 02 000 9903	Right Locking Lever C for Shell Housings	40K1711	1.70
● 09 06 000 9913	Left Locking Lever B for Shell Housings	94B6266	2.14
● 09 02 000 9919	Left Fixing Bracket C for Male Connectors	40K1712	2.04
● 09 02 000 9920	Right Fixing Bracket C for Male Connectors	40K1713	2.04
● 09 03 000 9969	Pin Shroud for 0.512" Wirewrap Pins	58M1942	3.04

CONTACTS FOR DIN SIGNAL TYPE D, E AND F - 6 AMP
For DIN 41612 power connectors up to 6 amps *ordered separately on this page*

Mfr. Part No.	Description	Stock No.	Price Each 1-9
● 09 06 000 8481	Female Crimp Contact, Performance Level 2, Wire Size: 0.14-0.56 Sq. mm (26-20 AWG)	92B0610	0.63
● 09 06 000 8482	Female Crimp Contact, Performance Level 2, Wire Size: 0.5-1.5 Sq. mm (20-16 AWG)	79K4443	0.64
● 09 06 000 8471	Female Crimp Contact, Performance Level 1, Wire Size: 0.14-0.56 Sq. mm (26-20 AWG)	93C5644	0.62
● 09 06 000 8472	Female Crimp Contact, Performance Level 1, Wire Size: 0.5-1.5 Sq. mm (20-16 AWG)	98B3479	0.60

CONTACTS FOR DIN SIGNAL TYPE M - 2 AMP
For DIN 41612 signal connectors up to 2 amps *ordered separately online or call*

● 09 03 000 6160	Coaxial Contact, Male, Performance Level 2, Solder/Crimp termination	40K1717	11.12
● 09 03 000 6260	Coaxial Contact, Female, Performance Level 2, Solder/Crimp termination	40K1720	14.21
● 09 03 000 6262	Coaxial Contact, Female, Performance Level 2, Right-angle PCB termination	40K1721	11.76

CONTACTS FOR DIN SIGNAL TYPE B, C, 2C. AND 2R - 2 AMP
For DIN 41612 signal connectors up to 2 amps *ordered separately online or call*

● 09 02 000 8484	Female Crimp Contact, Performance Level 2, Wire Size: 0.09-0.5 Sq. mm (28-20 AWG)	99F8723	0.50
● 09 02 000 8474	Female Crimp Contact, Performance Level 1, Wire Size: 0.09-0.5 Sq. mm (28-20 AWG)	22C6558	0.66

TOOLING

Mfr. Part No.	Description	Stock No.	Price Each 1-4
● 09 99 000 0620	Basic Crimp Tool, BC/FC/har-bus 64	65H6718	385.26
● 09 99 000 0191	Service Tool, FC1, FC2 and FC3	93K7626	380.24
● 09 99 000 0621	Crimp Tool Die Set, BC/FC1/har-bus 64	65H6721	267.74
● 09 99 000 0623	Crimp Tool Die Set, FC3	73H0064	267.74
● 09 99 000 0100	Insertion Tool, BC/har-bus 64	70C3602	31.15
● 09 99 000 0088	Insertion Tool, FC1, FC2, and FC3	93C8293	5.93
● 09 99 000 0101	Removal Tool, BC/har-bus 64	93C8295	31.52
09 99 000 0087	Removal Tool, FC1, FC2, and FC3	73C4334	5.54

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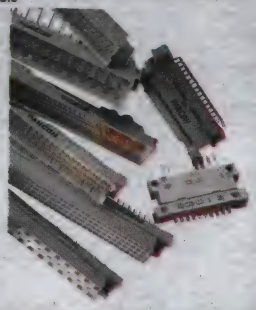
HI-CON™ EUROCARD DIN CONNECTORS

RoHS Compliant Available

PANCON CONNECTORS



Male and female 2- and 3-row connectors permit high-density PC board packaging. Intermateable to DIN 41612, VG95324, BS9525, and IEC 603-2 specifications. Compatible with VMEbus, STEbus, MULTIbus II, CIMbus, and NUbus applications. Glass-filled polyester housings, rated UL94V-0. Current rating: 3-amp max. on board-mounted connectors; 1.5-amp max. on IDC connectors. Operating temperature: –55°C to +125°C. Meet DIN Level III performance unless otherwise indicated. Other performance versions are also available; *go online or call.*

BOARD MOUNTED CONNECTORS
STANDARD, MALE, RIGHT ANGLED

Mfg. Part No.	DIN Type	Contacts	Number of Rows	Pin Style/ Length	Stock No.	Price Each 1-9
100-064-033	B	64	2	WS/0.114″	88K2094	7.82
100-096-033	C	96	3	WS/0.114″	88K2095	10.54
100-096-053	C	96	3	WS/0.114″	88K2096	9.58
100-632-033	B/2	32	2	WS/0.114″	88K1306	5.20
100-964-053	C	64	3	WS/0.114″	88K2099	6.31
STANDARD, MALE, STRAIGHT						
100-964-133	C	64	3	WS/0.157″	88K2100	7.69
STANDARD, FEMALE, STRAIGHT AND ANGLED						
100-096-533	C	96	3	WS/0.114″	88K2098	40.88
STANDARD, FEMALE, STRAIGHT						
100-096-432	C	96	3	WS/0.157″	88K1305	14.19
100-964-452	C	96	3	WS/0.157″	88K2101	9.61
100-096-452	C	64	3	WS/0.157″	88K2097	13.21
MALE HEADERS FOR 120 SERIES IDC FEMALE, RIGHT ANGLED						
120-964-033A	C	64	3	WS/0.114″	83F6905	35.19
MALE HEADERS FOR 120 SERIES IDC FEMALE, STRAIGHT						
120-964-133A	C	64	3	WS/0.114″	36B8145	32.81

CABLE MOUNTED CONNECTORS
STANDARD, FEMALE IDC SOCKETS FOR 0.050″ FLAT CABLE

Mfg. Part No.	DIN Type	Contacts	Number of Rows	Pin Style	Stock No.	Price Each 1-9
120-064-435	B	64	2	IDC	88K2103	17.41
120-964-435	C	64	3	IDC	88K1311	19.11
120-964-435F	C	64	3	IDC	93K7632	23.05
STANDARD, FEMALE, IDC SOCKET FOR 0.033″ FLAT CABLE						
120-096-435F	C	96	3	IDC	93K7631	47.66

ACCESSORIES
STANDARD DIN CONNECTOR HOUSING

Mfg. Part No.	DIN Type	Contacts	Gender	Stock No.	Price Each 1-9
100-000-064	C	64	Female	94F2884	38.20

(8777)

MULTIGIG RT POWER MODULES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Housing: Liquid crystal polymer
- Contacts: Gold plated phosphor bronze

RIGHT ANGLE POWER MODULES

Mfg. Part No.	No. of Positions	Description	Gender	Amps	Stock No.	Price Each 1-9
1-1410271-1	4	L,L,L,L Pin Sequence	Header	20	42K6486	14.60
1-1410271-8	4	S,S,S,S Pin Sequence	Header	20	13T0926	14.99
2-1410271-0	4	M,S,S,M Pin Sequence	Header	20	42K6783	14.16

L (long) = 0.541 [13.75], M (medium) = 0.482 [12.25], S (short) = 0.423 [10.75]

VERTICAL MOUNT POWER MODULES

Mfg. Part No.	No. of Positions	Gender	Amps	Stock No.	Price Each 1-9
1410270-2	4	Receptacle	20	42K6611	14.79

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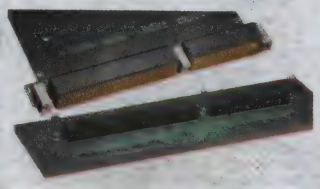
MULTIGIG RT 2-R RUGGEDIZED CONNECTORS FOR VPX APPLICATIONS

TE connectivity

Authorized Distributor



Features

- Quad-redundant contact provides additional level of reliability under extreme vibration
- Compliant to VITA 46 for Open VPX applications
- Impedance-matched construction and low noise footprint supports high speed protocols: Serial RapidIO, PCIe, Ethernet, Fiber Channel, InfiniBand
- Modular, lightweight connector system allowing easy implementation and custom slot configurations
- Robust "pinless" interface resists damage
- Ruggedized guide hardware increases stability of daughtercard to backplane interface
- Supports 20.3mm (0.8″) card slot pitches
- VITA 46 compliance enables upgrade in existing VPX application

Applications

- Ground Defense
- Missile Defense
- Electronic Systems / C4ISR
- Space
- Commercial and Military Aerospace

MULTIGIG RT 2-R is a ruggedized, lightweight, high-speed board-to-board interconnect system, compliant to VITA 46 VPX standards. This connector system features the modularity and flexibility of the MULTIGIG RT 2 connector, with a new quad-redundant backplane contact structure and ruggedized guide hardware designed for high-vibration levels. Black high-temperature thermoplastic housings. High-performance copper alloy contacts are gold-plated over nickel in mating area, tin-lead on pin tails. Mating force: 0.75N (2.7ozf) max. per contact. Operating temperature range: -55° to +105°C. Rugged aluminum or passivated stainless steel hardware; *ordered separately below.*

MULTIGIG RT 2-R RUGGEDIZED VERTICAL RECEPTACLES — BACKPLANE

Mfg. Part No.	No. of Columns	No. of Contacts	No. of Rows	Description	Stock No.	Price Each 1-24	Price Each 25-49
2102735-1	8	72	9 Row	Half Left End	85W3313	36.51	33.24
2102768-1	16	144	9 Row	Center	85W3316	59.21	53.90
2102736-1	16	144	9 Row	Center	85W3314	61.28	55.79
2102737-1	16	144	9 Row	Right End	85W3315	61.28	55.79
MULTIGIG RT 2-R RUGGEDIZED RIGHT-ANGLE PLUGS — DAUGHTERCARD							
2102772-1	8	56	7 Row	Half Left, Single-Ended / Power / Differential Termination	53W3311	86.97	79.17
2102775-1	8	56	7 Row	Half Left, Differential Termination	85W3319	86.97	79.17
2102771-1	16	112	7 Row	Center, Differential Termination	53W3307	159.45	145.15
2102847-1	16	112	7 Row	Center, Single-Ended Termination	53W3313	159.45	145.15
2102773-1	16	112	7 Row	Center, Single-Ended / Power / Differential Termination	85W3317	152.20	138.55
2102774-1	16	112	7 Row	Center, Differential Termination	85W3318	159.45	145.15
2102870-1	16	112	7 Row	Right End, Differential Termination	85W3320	127.08	119.60

KEYED GUIDE PINS, MACHINED, THREADED POST, STAINLESS STEEL

Mfg. Part No.	Description	Stock No.	Price Each 1-99	Price Each 100-999
2000676-1	1.32mm Standoff Height, Threaded 10-32 UNF	85W3302	25.69	20.88
2000676-3	4.2 mm Standoff Height, Threaded 10-32 UNF	85W3303	25.69	20.88
2000676-4	5.7 mm Standoff Height, Threaded 10-32 UNF	85W3304	25.69	20.88
2000676-6	5.7 mm Standoff Height, Threaded 10-32 UNF	85W3305	25.69	20.88
2000676-7	3.4 mm Standoff Height, Threaded M5X.8-6g	85W3306	25.69	20.88
2000676-8	3.4 mm Standoff Height, Threaded M5X.8-6g	85W3307	25.69	20.88
GUIDE MODULE STANDOFFS, RIGHT-ANGLE, ALUMINUM				
2000713-2	45° Keying	85W3308	68.96	56.03
2000713-3	90° Keying	85W3309	68.96	56.03
2000713-4	270° Keying	85W3310	68.96	56.03
2000713-5	315° Keying	85W3311	68.96	56.03
2000713-6	Without Keying	85W3312	68.96	56.03

(209961)

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Take control with quality, affordable Wire-Management Solutions.
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(212564)

BACKPLANE CONNECTORS

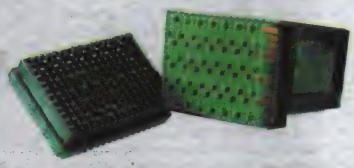
MULTIGIG RT CONNECTORS FOR VITA 41 AND VITA 46 (VPX) STANDARDS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- 10 Gbps performance
- Differential, Single-ended and Power
- Customizable impedance matched printed circuit wafer interface
- Backplane connector system with "pinless" interface
- Superior crosstalk performance
- Optimized footprints for signal integrity and ease of board design
- Utilizes a 0.56 [.022] diameter via for backplane connector for lower cost board fabrication



Tyco Electronics VITA 41 & VITA 46 VPX backplane interconnects provides high speed data rates that traditional VME is not designed for by merging the latest packaging and connector technology with the latest bus and serial technology. The printed circuit based pinless interconnect family is comprised of modular components which can be used in a variety of combinations. VPX dramatically increases bandwidth with fewer pin counts and enables heterogeneous architectures to help preserve existing investments in technology and systems.

3

MULTIGIG RT TIER 2 RECEPTACLES - BACKPLANE

Mfg. Part No.	No. of Contacts	No. of Rows	VITA	No. of Columns	Description	Stock No.	Price Each 1-9	Price Each 10-49
1410135-1	135	9 Row	41	15	Center	29M7746	28.75	25.96
1410140-1	144	9 Row	41/46	16	Center	32M6802	32.88	29.45
1410142-1	144	9 Row	41/46	16	Right End	32M6785	26.46	25.11
1410965-1	80	9 Row	46	16	Center, Columns 9-16 Partially Loaded	55M8573	20.07	18.01
1410966-1	80	9 Row	46	16	Center, Columns 1-8 Partially Loaded	11R8149	21.66	20.90

MULTIGIG RT TIER 2 PLUGS - DAUGHTERCARD

1410147-1	105	7 Row	41	15	Center, Right Angle, Differential Termination	29M7751	85.44	80.42
1410191-3	112	7 Row	46	16	Right End, Single-Ended Termination	58M3374	147.00	138.36
1410968-3	112	7 Row	46	16	Center, Combo Termination	51M2456	95.39	88.18
1410970-3	112	7 Row	46	16	Center, Differential & Single-End Terminations	11R8150	118.79	111.81
1410971-3	56	7 Row	46	8	Half Left End, Differential Termination	51M2471	57.68	54.29
1410972-3	56	7 Row	46	8	Half Left End, Single-Ended Termination	11R8151	57.48	54.10

ACCESSORIES

Mfg. Part No.	Description	Features	Stock No.	Price Each 1-9	Price Each 10-49
● 1-1469491-2	Guide Pin	2.6 mm Standoff Height	72M5852	5.73	5.50
● 1-1469491-3	Guide Pin	4.2 mm Standoff Height	34P2782	5.55	5.33
● 1-1469491-4	Guide Pin	5.7 mm Standoff Height	11R8144	5.63	5.29
● 1-1469492-1	Guide Pin	0° Keying	02M6240	11.28	10.80
● 1-1469492-2	Guide Pin	45° Keying	57P6168	8.54	8.18
● 1-1469492-3	Guide Pin	90° Keying	01P0684	9.40	7.73
● 1-1469492-7	Guide Pin	270° Keying	27M3686	7.72	7.20
● 1-1469492-8	Guide Pin	315° Keying	11M0151	8.17	7.62
● 1-1469492-9	Guide Pin	Without Keying	11M0148	8.44	8.08
● 1410946-1	Cap Screw	...	59M6593	1.16	1.02

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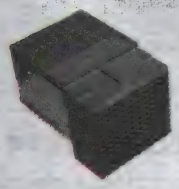
Z-PACK TINMAN BACKPLANE CONNECTORS

RoHS Compliant Available

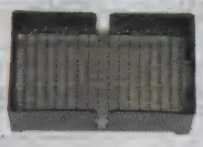
TE connectivity

Authorized Distributor



Receptacle

Header - Open Ended



Header - Double Ended

- High speed: 12.5 Gbps
- High density: 31 pair/cm [80 pairs/in]
- Modular design for maximum design flexibility
- 3, 4, 5 and 6 pair per column versions (5 pair shown)
- 85 ohm versions compatible with IntelR QuickPath Interconnect (QPI) technologies
- Available with and without end walls for pin protection
- Meets industry reliability requirements of Bellcore/Telcordia
- Operating voltage: 250 VAC max.
- Temperature range: -65°C to +90°C

➤CONTINUED➤

Z-PACK TINMAN BACKPLANE CONNECTORS (CONT.)

TE Connectivity's Z-PACK TinMan product is a new high speed, impedance matched connector system with extreme signal density. Available in both 100 ohm and 85 ohm versions, this connector system exists in 3, 4, 5 and 6 pair per column versions for maximum flexibility. Ground contacts positioned within each column of the connector, combined with unique contact lead frame arrangements, enable the Z-PACK TinMan connector to achieve low crosstalk and high through-put performance levels. Reliability is provided with a dual point of contact mating interface and compliant pin interface to the printed circuit board.

RECEPTACLES - RIGHT ANGLE

Mfg. Part No.	No. of Contacts	Description	No. of Pairs	No. of Columns	Stock No.	Price Each 1-99	Price Each 100-249
● 1934228-1	30	9 Row	3	10	08R0934	16.36	15.19
● 1934218-1	40	15 Row	5	8	80P3540	23.68	18.34

VERTICAL HEADERS

Mfg. Part No.	No. of Contacts	Description	No. of Pairs	No. of Columns	Stock No.	Price Each 1-99	Price Each 100-249
● 1934339-1	30	9 Row - Open Ended	3	10	08R0939	9.80	9.44
● 1934305-1	32	12 Row - Open Ended	4	8	80P3545	9.25	6.24
● 1934311-1	40	12 Row - Open Ended	4	10	08R0935	15.77	14.65
● 1934269-1	40	15 Row - Open Ended	5	8	80P3543	11.05	6.68
● 1934331-1	80	15 Row - Open Ended	5	16	80P3547	18.88	17.04
● 1934312-1	40	12 Row - Double Ended	4	10	08R0936	11.93	10.85
● 1934271-1	40	15 Row - Double Ended	5	8	80P3544	11.23	8.70

(146395)

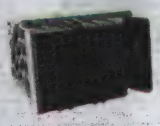
IMPACT BACKPLANE CONNECTOR SYSTEM

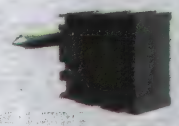
RoHS Compliant Available

TE connectivity

Authorized Distributor

- Signal & Ground contact: Copper alloy
- Housing: Liquid crystal polymer, UL 94V-0
- Contact area plating: 30u" Gold min.
- Solder tail area plating:Tin or Tin/Lead
- PCB thickness: 1.60 mm (.062")
- Temperature range: 55°C to 85°C max.
- Current rating: 0.75 A per pin max.
- Durability: 200 cycles
- Operating voltage: 30 VAC RMS/DC max.
- Mating force: 0.30 N (9.066 lb) max. per pin
- Insulation resistance: 10,000 MΩ min.





The IMPACT backplane connector and cable system from TE pushes the speed and density envelope to meet the growing demands of next-generation telecommunication and data networking equipment; the system is available in 2-6 pair configurations with a complete range of guidance and power-solution options. The IMPACT system is available in two compliant pin design options on both daughter card and backplane connectors. The IMPACT system's mating interface provides in-line staggered, bifurcated contacts that provide 2 points of contact for the long-term reliability performance and built-in, ground-signal sequencing. This reduces the average mating force per connector to improve the mechanical mating performance of the system.

3 PAIR DAUGHTER CARD RECEPTACLE ASSEMBLIES

Mfg. Part No.	No. of Columns	Guide	Stock No.	Price Each 1-9	Price Each 10-49
● 2007703-1	10	Left	48T2088	16.16	15.45
● 2007704-1	10	Right	48T2089	16.16	15.45
● 2007705-1	10	Unguided	48T2090	14.60	13.27
● 2007709-1	16	Left	48T2091	22.22	20.19
● 2007710-1	16	Right	48T2092	22.36	20.19
● 2007711-1	16	Unguided	48T2093	23.53	21.18

4 PAIR DAUGHTER CARD RECEPTACLE ASSEMBLIES

● 2007715-1	10	Left	48T2094	18.90	17.06
● 2007716-1	10	Right	48T2095	20.90	17.06
● 2007717-1	10	Unguided	48T2096	18.17	17.49
● 2007721-1	16	Left	48T2097	29.71	26.97
● 2007722-1	16	Right	48T2098	33.43	26.97
● 2007723-1	16	Unguided	48T2099	29.05	26.38

3 PAIR BACKPLANE HEADER ASSEMBLIES

Mfg. Part No.	No. of Columns	Guide	Wall End	Stock No.	Price Each 1-24	Price Each 25-49
● 2007779-1	10	Left	Right	48T2101	9.42	8.40
● 2007777-1	10	Left	Open	48T2100	9.12	8.14
● 2007783-1	10	Right	Left	48T2103	9.42	8.40
● 2007781-1	10	Right	Open	48T2102	9.32	8.31
● 2007789-1	10	Unguided	Left	48T2105	8.84	7.89
● 2007791-1	10	Unguided	Right	48T2107	8.84	7.89
● 2007790-1	10	Unguided	Dual	48T2106	8.66	7.72
● 2007788-1	10	Unguided	Open	48T2104	8.18	7.30
● 2007795-1	16	Left	Right	48T2109	14.82	13.22
● 2007793-1	16	Left	Open	48T2108	14.52	12.96
● 2007799-1	16	Right	Left	48T2111	14.82	13.22
● 2007797-1	16	Right	Open	48T2110	14.52	12.96
● 2007805-1	16	Unguided	Left	48T2113	14.17	12.65
● 2007807-1	16	Unguided	Right	48T2115	14.17	12.65
● 2007806-1	16	Unguided	Dual	48T2114	15.55	14.07
● 2007804-1	16	Unguided	Open	48T2112	14.30	12.77

➤CONTINUED➤

BACKPLANE CONNECTORS

IMPACT BACKPLANE CONNECTOR SYSTEM (CONT.)

4 PAIR BACKPLANE HEADER ASSEMBLIES

Mfg. Part No.	No. of Columns	Guide	Wall End	Stock No.	Price Each 1-24	Price Each 25-49
2007811-1	10	Left	Right	48T2117	13.51	12.06
2007809-1	10	Left	Open	48T2116	12.15	10.84
2007815-1	10	Right	Left	48T2119	13.51	12.06
2007813-1	10	Right	Open	48T2118	11.94	10.65
2007821-1	10	Unguided	Left	48T2121	11.03	9.84
2007823-1	10	Unguided	Right	48T2123	11.03	9.84
2007822-1	10	Unguided	Dual	48T2122	11.03	9.84
2007820-1	10	Unguided	Open	48T2120	10.84	9.67
2007827-1	16	Left	Right	48T2125	22.04	19.68
2007825-1	16	Left	Open	48T2124	18.24	16.27
2007831-1	16	Right	Left	48T2127	19.69	17.57
2007829-1	16	Right	Open	48T2126	19.34	17.25
2007837-1	16	Unguided	Left	48T2129	17.83	15.91
2007839-1	16	Unguided	Right	48T2131	17.52	15.63
2007838-1	16	Unguided	Dual	48T2130	17.54	15.65
2007836-1	16	Unguided	Open	48T2128	17.46	15.58

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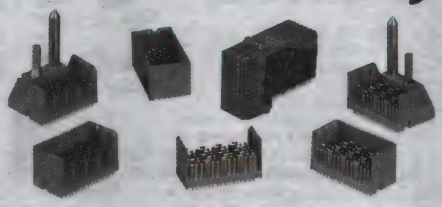
XCEDE® HIGH-PERFORMANCE BACKPLANE CONNECTOR SYSTEM

RoHS Compliant Available

FCI



- Contacts: Performance based plating copper alloy, tin on press-fit tails
- Performance level: Telcordia CO
- Housings: High temperature thermoplastic, UL 94-V0
- Wafer organizer: Stainless steel
- Mating force: 0.65 N maximum per contact
- Unmating force: 0.15 N minimum per contact
- Press-fit insertion force: 35.6 N maximum per tail
- Contact resistance: 10 mΩ max.
- Current rating: 1A Signal; 2A Wide ground; 6A Blade

FCI 's XCede® connector platform is designed for 25 Gb/s performance to provide the headroom to support future high-speed, serial data rate requirements demanded by next-generation equipment in data centers and service provider networks. The use of engineering polymers in a resonance-damping shield enables very low crosstalk across a wide frequency range. XCede connectors also address requirements for higher linear signal density at the interface of backplane and daughter card. Signal connectors can be configured with 2, 4 or 6 differential pairs per column, providing up to 82.4 differential pairs/inch, suiting architectures with multiple front or rear fabric slots and blade systems with cooling straight through the backplane. Complementary guidance and power modules are also included in the product range. A wafer organizer can be used to combine groups of right-angle signal, guidance and power modules as an integrated daughter-card connector.

4 ROW SIGNAL HEADERS - STRAIGHT, PRESS FIT MOUNT

Mfg. Part No.	Differential Pairs Per Column	No. of Columns	Module Type	Stock No.	Price Each 1-9
10113947-00C-20DLF	2	6	2 side walls	45T5183	8.37
10113947-L0C-20DLF	2	6	3 wall including left	45T5007	8.37
10113947-M0C-20DLF	2	6	3 wall including right	45T5023	8.37
10091767-00C-20DLF	4	6	2 side walls	45T3173	13.83
10091767-L0C-20DLF	4	6	3 wall including left	45T2997	13.83
10091767-M0C-20DLF	4	6	3 wall including right	45T3013	13.83
10104997-L0C-20DLF	6	6	3 wall including left	45T4055	20.32
10104997-M0C-20DLF	6	6	3 wall including right	45T4071	20.32
10113949-00E-20DLF	2	8	2 side walls	45T5535	10.88
10113949-L0E-20DLF	2	8	3 wall including left	45T5359	10.88
10113949-M0E-20DLF	2	8	3 wall including right	45T5375	10.88
10091777-00E-20DLF	4	8	2 side walls	45T3525	17.99
10091777-L0E-20DLF	4	8	3 wall including left	45T3349	17.99
10091777-M0E-20DLF	4	8	3 wall including right	45T3365	17.99
10104999-00E-20DLF	6	8	2 side walls	45T4583	22.92
10104999-L0E-20DLF	6	8	3 wall including left	45T4407	22.92
10104999-M0E-20DLF	6	8	3 wall including right	45T4423	22.92

(196213)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures

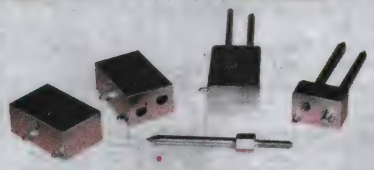
(212568)

AMP GUIDE/KEYING MODULES FOR ADVANCED TCA

RoHS Compliant Available

TE connectivity

Authorized Distributor



AdvancedTCA Guide Modules double as alignment guide and power contact and can be used in a wide variety of applications. For motherboard-to-daughterboard applications the vertical pin and right angle socket are used. For co-planer applications, the right angle guide pins are used with along with the right angle guide sockets. Both Vertical and right angle guide pins are available in short and long sizes to accommodate different connector configurations. Die cast zinc alloy with nickel finish.

Mfg. Part No.	Description	Keying Position	Stock No.	Price Each 1-9	Price Each 10-49
1-1469268-1	Right Angle Female, Keyed, Front Board	1, 1	07R7822	6.31	5.14
3-1469268-7	Right Angle Female, Keyed, Front Board	3, 7	25T0514	3.59	...
4-1469268-2	Right Angle Female, Keyed, Front Board	4, 2	25T0515	4.77	...
9-1469268-9	Right Angle Female, Keyed, Front Board	...	25T0518	7.27	6.98
1469269-2	Vertical Rear Alignment Post, 3.0-4.0mm PCB	...	16R1333	7.62	7.30
1469269-4	Vertical Rear Alignment Post, 4.1-6.0mm PCB	...	47M0180	7.20	6.90
1469269-6	Vertical Rear Alignment Post, 6.1-8.0mm PCB	...	27M3481	11.14	...
1-1469372-1	Right Angle Male, Keyed, Rear Transition	1, 1	36M2647	4.88	4.68
4-1469372-2	Right Angle Male, Keyed, Rear Transition	4, 2	22R2467	3.59	3.35
5-1469372-5	Right Angle Male, Keyed, Rear Transition	5, 5	12P6368	9.98	9.34
6-1469372-8	Right Angle Male, Keyed, Rear Transition	6, 8	25T0516	3.77	3.51
7-1469372-3	Right Angle Male, Keyed, Rear Transition	7, 3	23R2131	4.36	4.23
1-1469373-1	Right Angle Female, Keyed, Front Board	1, 1	24K3837	4.25	4.08
3-1469373-7	Right Angle Female, Keyed, Front Board	3, 7	80K8108	4.63	4.36
4-1469373-2	Right Angle Female, Keyed, Front Board	4, 2	22R2468	3.86	3.49
5-1469373-5	Right Angle Female, Keyed, Front Board	5, 5	12P6383	3.14	2.84
6-1469373-8	Right Angle Female, Keyed, Front Board	6, 8	22R9144	6.03	5.78
7-1469373-3	Right Angle Female, Keyed, Front Board	7, 3	25T0517	4.40	...
1469374-1	Right Angle Female, Rear Transition	...	36M2649	2.26	...
1-1469387-1	Vertical Male, Backplane, Short Pin	1, 1	19K8624	4.90	4.50

(94370)

ELCON ICCON POWER CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Uses high-performance crown contact
- True compliant press-fit and solder tails
- Standard DIP footprint 0.300 x 0.100 and SLIMLINE ICCON connector 0.100 x 0.100
- Insulator rated at 105°C, UL 94V-0
- Meets US, Canadian and European safety regulator requirements

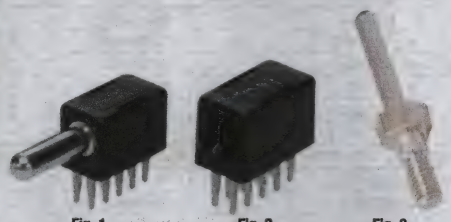


Fig. 1 Fig. 2 Fig. 3

Provide a reliable high current power interconnection with quick connect/disconnect function for space constrained motherboard-daughterboard, cable-board and board-busbar power delivery applications. 35A current rating. Body material: beryllium copper. Body plating: gold over nickel. Contact material: brass. Contact finish: silver.

STANDARD DIP CONNECTORS (0.300 x 0.100″ FOOTPRINT)

Mfg. Part No.	Fig.	Pin Length (in.)	Description	Stock No.	Price Each 1-9
6643283-1	...	0.47	Vertical Pin	24T5045	9.96
6643264-1	...	...	Vertical Socket	79R2173	5.97
SLIMLINE ICCON CONNECTORS (0.100 x 0.100″ FOOTPRINT)					
6643228-1	1	0.47	R/A Solder Pin	43M0226	16.23
6643220-1	2	...	R/A Press-Fit Socket	24T5044	9.20

3.17MM DIAMETER POWER GUIDE PINS

Mfg. Part No.	Fig.	Pin Length (mm)	Screw Length (mm)	Stock No.	Price Each 1-9
1766663-1	3	16	9.35	43M0214	6.75
1766663-2	3	18	9.35	43M0215	6.41

(94379)

BACKPLANE CONNECTORS

AMP UNIVERSAL POWER MODULES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Housing: Natural color PBT UL 94V-0
- Standard Power Contacts: Gold plated Phosphor bronze
- High Power Contacts: Gold plated Copper alloy

RIGHT ANGLE STANDARD POWER UNIVERSAL POWER MODULES

Mfg. Part No.	No. of Positions	Pin Sequence*	Gender	Amps	Stock No.	Price Each 1-9
223961-1	3	L,L,L	Header	10	33B6931	5.55
● 5646954-1	4	L,L,L,L	Header	10	19R2921	7.06
● 5646954-2	4	S,M,L,S	Header	10	19R2922	9.87
● 5646954-3	4	L,S,M,S	Header	10	19R2923	7.94
● 5646954-5	4	M,S,S,M	Header	10	25T0615	8.11
● 5646955-1	5	L,L,L,L,L	Header	10	19R2924	11.82
● 5646955-2	5	M,M,M,M,L	Header	10	19R2925	10.61
● 5646955-3	5	L,M,M,M,M	Header	10	19R2926	12.17
● 5646955-4	5	L,L,L,M,M	Header	10	25T0616	17.02
● 5646956-1	6	L,L,L,L,L,L	Header	10	19R2927	10.28
● 5646956-2	6	L,M,M,M,M,L	Header	10	19R2928	9.45
● 5646956-3	6	L,L,M,M,S,S	Header	10	19R2929	14.48
● 5646957-1	7	L,L,L,L,L,L,L	Header	10	19R2930	9.44
● 5646959-1	9	L,L,L,L,L,L,L,L,L	Header	10	19R2933	10.58
● 5646961-1	11	L,L,L,L,L,L,L,L,L,L,L	Header	10	19R2935	13.49

RIGHT ANGLE HIGH POWER UNIVERSAL POWER MODULES

● 5-5223961-1	3	L,L,L	Header	16	45P6004	6.26
● 120954-1	4	L,L,L,L	Header	16	50M3026	8.09
● 120954-5	4	L,L,M,M	Header	16	01P4436	9.66
● 120955-1	5	L,L,L,L,L	Header	16	17R2787	9.62
● 120956-1	6	L,L,L,L,L,L	Header	16	73P5373	12.91
● 120957-1	7	L,L,L,L,L,L,L	Header	16	03P1791	10.37
● 120957-2	7	L,S,S,L,S,S,L	Header	16	42M0502	10.08
● 120958-1	8	L,L,L,L,L,L,L,L	Header	16	17R2788	10.73
● 120958-2	8	L,M,S,S,S,S,S,S	Header	16	17R2789	13.51

SLIM RIGHT ANGLE UNIVERSAL POWER MODULES

VERTICAL UNIVERSAL POWER MODULES - 15mm STACK HEIGHT

● 1645498-2	4	M,M,M,M	Header	10	25T0593	6.87
● 1645498-4	6	M,M,M,M,M,M	Header	10	25T0595	8.72

*Sequencing reads left-to-right along mating face. L (long) = 0.429 [10.9], M (medium) = 0.366 [9.3], S [short] = 0.302 [7.68]

VERTICAL STANDARD POWER UNIVERSAL POWER MODULES

Mfg. Part No.	No. of Positions	Gender	Amps	Stock No.	Price Each 1-9
223955-2	3	Receptacle	10	33B6928	7.23
● 5223955-2	3	Receptacle	10	42K7109	6.75
● 5223995-1	4	Receptacle	10	42K7114	7.18
● 5223995-2	5	Receptacle	10	19R1926	8.00
● 5223995-3	6	Receptacle	10	19R1927	10.30
● 5223995-4	7	Receptacle	10	19R1928	11.83

VERTICAL HIGH POWER UNIVERSAL POWER MODULES

● 5-5223955-2	3	Receptacle	16	43M0225	6.40
● 120953-1	4	Receptacle	16	43M0203	4.13
● 120953-2	5	Receptacle	16	43M0204	5.26
● 120953-3	6	Receptacle	16	17R2785	6.14
● 120953-4	7	Receptacle	16	42M0501	6.03
● 120953-5	8	Receptacle	16	17R2786	6.29
● 120953-7	10	Receptacle	16	25T0573	6.62

RIGHT ANGLE HIGH POWER UNIVERSAL POWER MODULES

● 120943-1	3	Receptacle	16	58R2811	8.26
● 120943-2	4	Receptacle	16	25T0568	5.43
● 120943-3	5	Receptacle	16	25T0291	8.14
● 120943-4	6	Receptacle	16	67R4491	11.58
● 120943-6	8	Receptacle	16	25T0570	10.96

UN-KEYED GUIDE MODULES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 223956-1	Vertial Guide Pin - M4, 6.2 mm Thread Length	33B6929	4.11
● 223982-1	Vertial Guide Pin - M4, 7.5 mm Thread Length	12H6928	4.75
● 223969-1	Vertial Guide Pin - M4, 12.7 mm Thread Length	85C0641	8.43
● 223969-4	Vertial Guide Pin - 8-32, 12.7 mm Thread Length	15H5686	7.63
● 223969-7	Vertial Guide Pin - M4, 9.2 mm Thread Length	12H6919	14.15
● 5223957-1	Right Angle Guide Module - 4-40	42K7110	2.38
● 5223957-3	Right Angle Guide Module - M3	14R4456	2.48

KEYED GUIDE MODULES

● 1469265-1	Right Angle Guide Pin - 0° Keying	25T0583	3.25
● 1469265-2	Right Angle Guide Pin - 45° Keying	25T0584	3.68
● 1469265-3	Right Angle Guide Pin - 90° Keying	25T0585	3.68

CONTINUED

AMP UNIVERSAL POWER MODULES (CONT.)

KEYED GUIDE MODULES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 1469265-5	Right Angle Guide Pin - 180° Keying	25T0587	3.68
● 1469265-7	Right Angle Guide Pin - 270° Keying	25T0589	2.87
● 1469265-9	Right Angle Guide Pin - Round, No Keying	25T0591	2.79
● 5223986-1	Right Angle Guide Module - 4-40, 0° Keying	96M9122	3.98
● 5120913-1	Right Angle Guide Module - M2.5, 0° Keying	19R1076	3.98
● 5120913-2	Right Angle Guide Module - M2.5, 45° Keying	25T0609	3.98
● 5120913-3	Right Angle Guide Module - M2.5, 90° Keying	19R1077	4.14
● 5120913-4	Right Angle Guide Module - M2.5, 135° Keying	25T0610	3.98
● 5120913-5	Right Angle Guide Module - M2.5, 180° Keying	19R1078	3.98
● 5120913-6	Right Angle Guide Module - M2.5, 225° Keying	19R1079	3.98
● 5120913-7	Right Angle Guide Module - M2.5, 270° Keying	25T0611	3.98
● 5120913-8	Right Angle Guide Module - M2.5, 315° Keying	19R1080	4.03

(94380)

FORTIS ZD NEXT-GEN BACKPLANE CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Contacts: Gold plated copper alloy; Tin/lead on tails
- Housings: High temperature thermoplastic
- Shell shield: Copper alloy, Tin/lead plated
- Shell machined: Nickel plated 6061 Aluminum
- Durability: 500 mating cycles
- Operating temperature: -55°C to +125°C
- Contact engaging & separating force: 3 oz. typical
- 10 and 20 column modules
- 3-pair (9-row) and 2-pair (6-row) modules
- 6U configuration offers 300 differential pairs
- 6 row module enables 0.6" reduced form factor card pitch
- Modularity enables scalability for various card sizes

The Fortis Zd modular backplane connector system combines the highest performance mil/aero and commercial technologies into a user configurable platform. Built to be the most robust and highest performance backplane connector, it allows 12 Gb/s+ data rates. Extreme mechanical and electrical performance for the most demanding applications. A modular design allows for user configurability and modular evolution. The M55302 heritage Mini-Box separable interface provides 4 points of contact on all sides of the pin. Three shell varieties for application versatility, including plastic, shielded and a machined metal shell. 3-Pair and 2-Pair versions available to accommodate multiple slot pitches. Staggered daughtercard pin field supports 2 level maintenance Protected pin field on backplane for reliability and durability.

RIGHT ANGLE CONNECTOR MODULES

Mfg. Part No.	No. of Single Ended Contacts	No. of Rows	No. of Columns	Description	Stock No.	Price Each 1-9	Price Each 10-49
2000890-1	90	9 Row	10	Left	25T0332	74.97	70.56
2000891-1	90	9 Row	10	Center	25T0333	63.84	61.61
2000903-1	180	9 Row	20	Center	25T0337	127.85	123.31
2000892-1	90	9 Row	10	Right	25T0334	68.75	66.35
2102155-1	90	9 Row	10	Full Shroud	25T0339	78.90	74.26
2102159-1	180	9 Row	20	Full Shroud	25T0341	157.79	148.52

VERTICAL CONNECTOR MODULES

● 2000895-1	90	9 Row	10	End	25T0335	61.32	59.11
● 2000896-1	90	9 Row	10	Center	25T0336	59.03	57.13
● 2000905-1	180	9 Row	20	Center	25T0338	105.78	101.61
2102157-1	90	9 Row	10	Full Shroud	25T0340	65.69	61.83
2102161-1	180	9 Row	20	Full Shroud	25T0342	129.59	121.97

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each Each	Price Each 2-4
● 2000713-1	Guide Pin	25T0331	58.65	58.20
● 2000676-2	Guide Module - ESD	25T0330	71.40	67.20
● 2-2000677-0	Guide Module - No ESD	25T0329	157.50	152.25

(192455)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

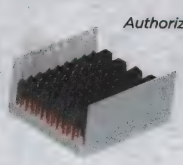
(212570)

AMP Z-PACK HM-ZD CONNECTOR SYSTEM FOR ADVANCED TCA

RoHS Compliant Available

TE connectivity

Authorized Distributor



HM-ZD VERTICAL CONNECTORS

Mfg. Part No.	No. of Pairs	No. of Columns	No. of Positions	Gender	Stock No.	Price Each 1-9	Price Each 10-49
6469025-1	2	10	40	Header	42K7650	10.27	9.83
6469085-1	3	10	60	Header	19R6630	12.65	11.50
6469002-1	4	10	80	Header	42K7649	12.35	11.23
6469002-2*	4	10	80	Header	36M2654	16.54	14.88

* 3.80mm Mating Pin Length

Z-PACK HM-ZD PLUS RIGHT-ANGLE CONNECTORS

2065769-1	2	10	40	Receptacle	78T6431	27.34	24.68
2065883-1	3	10	60	Receptacle	78T6432	27.02	24.23
2065657-1	4	10	80	Receptacle	79R4782	23.41	20.98

HIGH SPEED RIGHT-ANGLE CONNECTORS FOR ADVANCEDTCA ZONE 3 - RTM BOARD

6469048-1	4	10	80	Header	42K7652	39.76	35.90

HIGH SPEED RIGHT-ANGLE CONNECTORS FOR ADVANCEDTCA ZONE 2 & 3 - FRONT BOARD

6469001-1	4	10	80	Receptacle	42K7648	17.71	17.17

POWER CONNECTORS, RIGHT-ANGLE FOR ADVANCEDTCA ZONE 1 - FRONT BOARD

Mfg. Part No.	No. of Positions	Gender	Stock No.	Price Each 1-9	Price Each 10-49
1766500-1	30	Header	36M2650	29.89	24.95
1766501-1	30	Receptacle	36M2651	15.85	14.89

(92297)

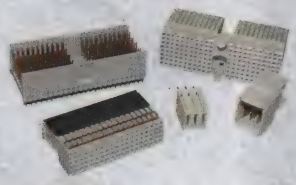
AMP Z-PACK 2MM HM PCB MOUNT CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Contact pitch is 1.5mm within a pair and 3.0mm pair within a column; column to column pitch is 2.5mm
- Card Pitch is less than 0.8 in. for 2 pair headers and 1.0 in. for 4 pair header



Z-PACK HM is a high speed, differential connector system. Feature a highly reliable dual beam contact system with fully encompassing grounds dedicated to each differential pair. The Z-PACK HM footprint is optimized for both routability and system performance with the use of 1.5mm x 2.5mm row column grid, 5 and 8 rows. Available in two versions.

VERTICAL FIXED BOARD PLUG CONNECTORS, ACTION PIN POSTS, SIGNAL

Mfg. Part No.	Conn. Type	Total Contacts	Signal Contacts	Guide	Gender	Number of Rows	Stock No.	Price Each 1-9
5100159-1	C	55	55	End	Header	5	42K6967	3.43
106012-1	C	55	55	None	Header	5	86C7359	15.70
100143-1	A	110	110	Center w/Keying	Header	5	33B3935	8.82
5100143-1	A	110	110	Center w/Keying	Header	5	71M0790	6.86
100141-1	B	125	125	None	Header	5	33B3934	8.21
5100141-1	B	125	125	None	Header	5	19R0880	7.81
5352033-1	B	133	133	None	Header	7	42K7140	7.54
5100668-1	A	154	110	Center w/Keying	Header	5+2	42K6969	8.34

RIGHT ANGLE FREE BOARD PLUG CONNECTORS, ACTION PIN POSTS, SIGNAL

5352406-1	B	95	95	None	Header	5	22R8253	22.17
5106015-1	A	110	110	Center w/Keying	Header	5	42K6988	17.43
5352131-1	B	110	110	None	Header	5	42K7147	19.68
106014-1	B	125	125	None	Header	5	33B4569	26.64

VERTICAL FREE BOARD RECEPTACLE CONNECTORS, ACTION PIN POSTS, SIGNAL

106775-1	C	55	55	None	Receptacle	5	33B4583	7.29
106773-1	A	110	110	Center w/Keying	Receptacle	5	33B4580	16.81
106774-1	B	125	125	None	Receptacle	5	33B4581	22.60

RIGHT ANGLE FREE BOARD RECEPTACLE CONNECTORS, ACTION PIN POSTS, SIGNAL

100161-1	C	55	55	End	Receptacle	5	33B3938	4.80
5352115-1	C	55	55	End	Receptacle	5	42K7145	7.56
5352171-1	B	95	95	None	Receptacle	5	42K7149	12.70
5352068-1	A	110	110	Center w/Keying	Receptacle	5	42K7141	14.43

CONTINUED

AMP Z-PACK 2MM HM PCB MOUNT CONNECTORS (CONT.)

RIGHT ANGLE FREE BOARD RECEPTACLE CONNECTORS, ACTION PIN POSTS, SIGNAL

Mfg. Part No.	Conn. Type	Total Contacts	Signal Contacts	Guide	Gender	Number of Rows	Stock No.	Price Each 1-9
5646489-1	AB	110	110	None	Receptacle	5	42K7336	14.26
5352152-1	B	110	125	None	Receptacle	5	42K7148	9.71
5100145-1	B	125	125	None	Receptacle	5	42K6963	10.10
5352069-1	B	125	125	Center w/Keying	Receptacle	5	42K7143	14.26

VERTICAL FIXED BOARD PLUG CONNECTORS, SIGNAL

5188834-1	A	154	125	None	Header	5	42K7064	11.46
5188835-1	B	154	125	None	Header	5	42K7065	10.27

CODING KEY

Mfg. Part No.	For Use With	Code No.	Stock No.	Price Each 1-9
100525-9	Male Type A, Type D, Type L, and Type M Connectors	1248	10H6025	1.36
3-100525-2	Male Type A, Type D, Type L, and Type M Connectors	1567	33B7176	0.79
5-100525-6	Male Type A, Type D, Type L, and Type M Connectors	3456	33B9238	0.68
6-100525-1	Male Type A, Type D, Type L, and Type M Connectors	3478	34B539	1.01
100526-3	Female Type A, Type D, Type L, and Type M Connectors	4578	33B3939	0.95
100526-9	Female Type A, Type D, Type L, and Type M Connectors	3567	10H6029	0.66
3-100526-2	Female Type A, Type D, Type L, and Type M Connectors	2348	88F5762	0.62
5-100526-6	Female Type A, Type D, Type L, and Type M Connectors	1278	33B9239	0.85

(80532)

PWRBLADE® CONNECTOR SYSTEM

UL CSA TÜV Rheinland

RoHS Compliant Available

FCI

- Housing: Glass-filled high temperature nylon; Color: Black
- Power Contacts: Gold plated Copper Alloy
- Signal Pins: Gold plated Phosphor-bronze
- Signal Contacts: Gold plated Copper Alloy
- Insulation Resistance: Power Contact: 10,000 Mohm; Signal Contact: 500 Mohm
- Withstanding Voltage: Power Contact: 2,500 VDC; Signal contact: 1,000 VDC
- Current Rating: 48A for single powered contact; de-rated to 30A for 10 powered contacts at 30°C temperature rise with zero airflow
- Current Rating: 60A for 10 contacts when tested to UL guidelines.

The PwrBlade® power distribution connector system from FCI includes power and signal contacts to provide power distribution and power control in a single connector. Options for either vertical or right-angle versions of PCB-mount headers and receptacles deliver support for coplanar, backplane or mezzanine connections. The connectors are ideal for robust power connections to embedded AC/DC power supplies or for board-to-board connections in servers, storage enclosures and communications equipment.

PWRBLADE® CONNECTOR SYSTEM HEADERS

Mfg. Part No	Positions	Configuration	Mounting	Stock No.	Price Each 1-9	Price Each 10-24
51721-10002406AALF	30	6 P + 24 S	Right Angle	53K1422	6.57	5.96

PWRBLADE® CONNECTOR SYSTEM RECEPTACLES

51741-10002406CCLF	30	6 P + 24 S	Vertical	62K6113	5.52	5.07
51761-10002406AALF	30	6 P + 24 S	Right Angle	06M1141	6.46	5.93
51866-025LF	33	9 P + 24 S	Right Angle	06M1157	8.30	7.53

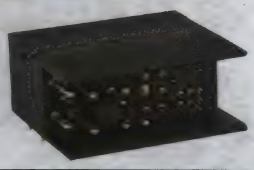
(134274)

POWER CONNECTORS FOR ATCA™ APPLICATIONS

RoHS Compliant Available

3M

- ATCA™ Zone 1 power connector
- Backplane right angle header
- Daughtercard vertical socket
- Compliant to PICMG 3.0 R2.0 (AdvancedTCA™) specification
- High conductivity, precision formed contacts
- Precision formed compliant pin offers excellent retention to ensure a reliable connection



New 3M™ connectors for embedded standards (ATCA and Micro TCA) complement our 2mm Hard Metric, Compact PCI and UHM backplane connector product families, giving us a full portfolio of options for your high-speed, high-performance requirements. This addition includes MicroTCA signal and power connectors, ATCA power connectors, CompactPCI® power connectors, Hard Metric Power connectors, PC/104 connectors, and PC/104 Plus connectors.

Mfg. Part No.	No. of Contacts	Gender	Stock No.	Price Each 1-9
2P01-0200-ES	30	Header	52T7349	53.40
2P02-0200-ES	30	Receptacle	52T7350	31.70

(197380)

BACKPLANE CONNECTORS • PC BOARD HEADERS & SOCKETS

MICROTCA SIGNAL CONNECTORS FOR MICROTCA™ APPLICATIONS

RoHS Compliant Available

3M

- AdvancedMC™ connector for MicroTCA applications
- Press-fit termination
- 0.75 mm pitch
- Available with or without post
- Superior signal integrity

New 3M™ connectors for embedded standards (ATCA and Micro TCA) complement our 2mm Hard Metric, Compact PCI and UHM backplane connector product families, giving us a full portfolio of options for your high-speed, high-performance requirements. This addition includes MicroTCA signal and power connectors, ATCA power connectors, CompactPCI® power connectors, Hard Metric Power connectors, PC/104 connectors, and PC/104 Plus connectors.

Mfg. Part No.	No. of Contacts	Gender	Description	Stock No.	Price Each 1-9
● 1P00-2000-KR	170	Receptacle	Without Alignment Post	52T7345	17.02
● 1P00-2001-KR	170	Receptacle	With Alignment Post	52T7346	17.02

(197382)

POWER CONNECTORS FOR MICROTCA™ APPLICATIONS

RoHS Compliant Available

3M

- Supports PICMG MicroTCA (AdvancedMC™ 1.0) specification
- 24 high power contacts and 72 high density signal contacts
- Backplane and daughtercard versions
- Press-fit termination
- Supports 200 Mating Cycles

New 3M™ connectors for embedded standards (ATCA and Micro TCA) complement our 2mm Hard Metric, Compact PCI and UHM backplane connector product families, giving us a full portfolio of options for your high-speed, high-performance requirements. This addition includes MicroTCA signal and power connectors, ATCA power connectors, CompactPCI® power connectors, Hard Metric Power connectors, PC/104 connectors, and PC/104 Plus connectors.

Mfg. Part No.	No. of Contacts	Description	Stock No.	Price Each 1-9
● 1P01-1110-AS	96	Right Angle Receptacle and Power Header Module	52T7347	22.52
● 1P02-1110-AS	96	Vertical Backplane Header and Power Receptacle Module	52T7348	18.00

(197384)

POWER CONNECTORS FOR COMPACTPCI™ (CPCI) APPLICATIONS

RoHS Compliant Available

3M

- Designed to meet CompactPCI power interface specification PICMG 2.11 for Zone 1 connector
- Combines power and signal – 20 DC power contacts, 3 AC power contacts and 24 signal contacts
- Eurocard form factors
- Provides redundant power and system management
- Backplane and Daughtercard versions

New 3M™ connectors for embedded standards (ATCA and Micro TCA) complement our 2mm Hard Metric, Compact PCI and UHM backplane connector product families, giving us a full portfolio of options for your high-speed, high-performance requirements. This addition includes MicroTCA signal and power connectors, ATCA power connectors, CompactPCI® power connectors, Hard Metric Power connectors, PC/104 connectors, and PC/104 Plus connectors.

Mfg. Part No.	No. of Contacts	Gender	Stock No.	Price Each 1-9
● 3P01-2002-ES	47	Header	52T7351	39.75
● 3P02-2001-ES	47	Receptacle	52T7352	70.50

(197383)

TECHNICAL SUPPORT HOTLINE

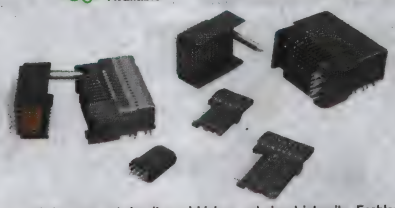
Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

VHDM H-SERIES BACKPLANE CONNECTORS

RoHS Compliant Available

molex



- Housing: Liquid Crystal Polymer, UL 94V-0
- Contact: Gold plated copper alloy, Tin on tails
- PCB Thickness: 1.60mm (.063") typical
- Operating Temperature: -55°C to +85°C

Designed for applications that require very high interconnect density and high-speed signal integrity. Enables an installed base to perform at 6.25 Gbps, enabling system upgrades without costly architecture redesigns. Fully backwards compatible with existing VHDM slots. The signal portion of the VHDM H-Series connector system consists of modules in increments of 10 columns or 25 columns in either 6 rows or 8 rows. Power contacts can handle 10.0A of current per blade, efficiently delivering up to 120.0A per 25.00mm (.984") of board edge with multiple mating levels for hot plug applications. Metal guide pins and key slots eliminate the possibility of plugging a daughter card into the wrong slot.

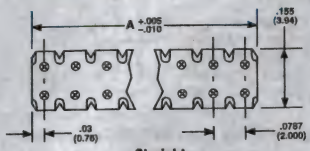
Mfg. Part No.	No. of Contats	Configuration	Stock No.	Price Each 1-9	Price Each 10-24
6 ROW BACKPLANE HEADERS					
● 76761-9001	60	Signal End – Guide Left	22T8815	15.64	14.95
● 76761-8501	150	Signal End – Guide Left	22T8814	28.02	27.08
● 76762-9001	60	Shield End – Guide Right	22T8817	15.69	14.75
● 76762-8501	150	Shield End – Guide Right	22T8816	26.76	25.83
● 76763-9001	60	Open	22T8819	13.51	12.71
● 76763-8501	150	Open	22T8818	24.32	23.09
8 ROW BACKPLANE HEADERS					
● 76135-9001	80	Signal End – Guide Left	22T8809	16.09	15.54
● 76135-8501	200	Signal End – Guide Left	22T8808	30.79	30.54
● 76136-9001	80	Shield End – Guide Right	22T8811	16.09	15.54
● 76136-8501	200	Shield End – Guide Right	22T8810	30.79	30.53
● 76134-9001	80	Open	22T8807	14.30	13.45
● 76134-8501	200	Open	22T8806	29.31	28.20

(192450)

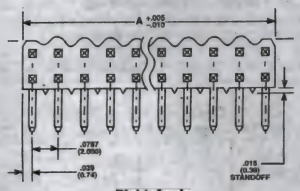
2mm PIN STRIP HEADERS

RoHS Compliant Available

3M



Straight



Right-Angle

- 2 mm x 2 mm Grid Spacing
- IR, Vapor and Wave Solder Compatible
- 0.130" High Copper Alloy Pins
- 0.118" Long Tails

Straight and right-angle, solder tail pin strip headers mate with wire mount and PC board mount sockets; *order separately on pages 749 and 806*. Current rating: 1.5 A. Insulation resistance: > 5 x 10^9 Ω at 250 VDC. Withstanding voltage: 500 VDC at sea level. Temperature range: -55°C to +105°C

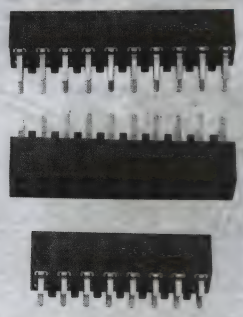
Mfg. Part No.	Contacts	Pin Length	Dim. A	Stock No.	Price Each 1-24	Price Each 25-49
STRAIGHT						
● 151208-8422-RB	8	0.152"	0.295"(7.5)	93K6354	0.89	0.81
● 151210-8322-RB	10	0.130"	0.374"(9.5)	93K6356	0.99	0.90
● 151210-8422-RB	10	0.152"	0.374"(9.5)	93K6357	1.04	0.95
● 151220-8322-RB	20	0.130"	0.768"(19.5)	93K6362	1.75	1.60
● 151220-8422-RB	20	0.152"	0.768"(19.5)	93K6363	1.75	1.60
● 151224-8422-RB	24	0.152"	0.925"(23.5)	93K6365	2.09	1.90
● 151240-8322-RB	40	0.130"	1.556"(39.5)	93K6372	3.32	3.02
● 151240-8422-RB	40	0.152"	1.556"(39.5)	93K6373	3.32	3.02
● 151250-8422-RB	50	0.152"	1.950"(49.5)	93K6379	4.08	3.72
RIGHT-ANGLE						
● 151210-7422-RB	10	0.152"	0.374"(9.5)	93K6355	1.10	1.00
● 151220-7422-RB	20	0.152"	0.768"(19.5)	93K6361	2.06	1.88
● 151250-7422-RB	50	0.152"	1.950"(49.5)	93K6377	4.93	4.49

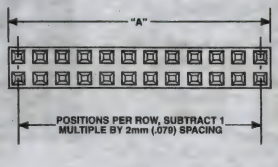
(68568)

PAK20 2mm VERTICAL PC BOARDMOUNT SOCKETS

RoHS Compliant Available

3M





- 2 mm x 2 mm Grid Spacing
- Mate with 2 mm Pin Strip Headers; *Order Separately on page 748*
- High-Temperature Dielectric
- IR, Vapor and Wave Solder Compatible
- 0.100″ Long Tails

Copper alloy contacts. Current rating: 1.5 A. Insulation resistance: > 5 x 10^9 Ω at 250 VDC. Withstanding voltage: 500 VDC at sea level. Temperature range: -55°C to +105°C.

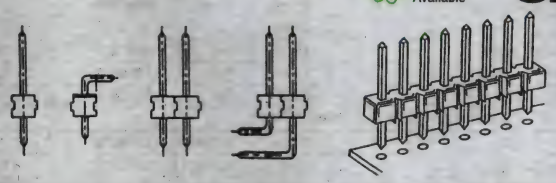
Mfg. Part No.	Contacts	Dim. A	Stock No.	Price Each 1-24	Price Each 25-49
● 150208-6002-RB	8	0.310″ (8.00)	93K6337	1.83	1.67
● 150210-6002-RB	10	0.389″ (10.00)	93K6339	2.20	2.01
● 150220-6002-RB	20	0.782″ (20.00)	93K6342	2.15	1.96
● 150224-6002-RB	24	0.940″ (24.00)	93K6343	2.28	2.08
● 150226-6002-RB	26	1.019″ (26.00)	93K6344	2.81	2.56
● 150240-6002-RB	40	1.570″ (40.00)	93K6348	2.90	2.64
● 150250-6002-RB	50	1.964″ (50.00)	93K6352	3.72	3.39

(68569)

929 SERIES PIN STRIP HEADERS

RoHS Compliant Available

3M



Straight and right-angle one-row or two-row versions; 36 pins per row. Stackable. Solder standoffs facilitate production wave soldering. Copper alloy contacts with 10μ″ 90/10 tin plating on pin and tails. Black, glass-filled polyester insulation. UL recognized.

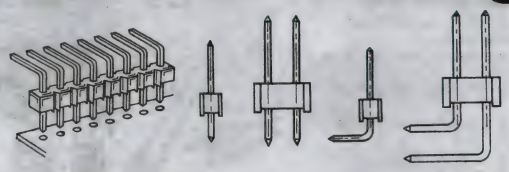
0.100″ STRAIGHT SOLDER TAIL — SINGLE ROW

Mfg. Part No.	Contacts	Length Pin	Length Tail	Stock No.	Price Each 1-9
● 929800-01-36-RK	36	0.093″	0.110″	12M6431	1.51
● 929834-01-36-RK	36	0.235″	0.110″	12M6432	1.26
● 929647-01-36-EU*	36	0.235″	0.110″	12M6409	3.47
● 929400-01-36-RK	36	0.295″	0.130″	12M6405	1.49
● 929647-09-36-EU*	36	0.235″	0.145″	12M6413	2.41
● 929647-02-36-EU*	36	0.235″	0.210″	12M6410	2.61
929834-03-36	36	0.235″	0.410″	44F7503	2.12
● 929834-05-36-RK	36	0.235″	0.610″	96K5584	2.00
● 929700-01-36-RK	36	0.318″	0.110″	12M6422	1.60
● 929700-11-36-RK	36	0.318″	0.125″	12M6424	1.79
● 929700-06-36-RK	36	0.318″	0.710″	12M6423	2.21
0.100 x 0.100″ STRAIGHT SOLDER TAIL — DUAL ROW					
● 929836-01-36-RK	72	0.235″	0.110″	12M6435	2.19
● 929836-09-36-RK	72	0.235″	0.145″	12M6439	2.68
● 929665-09-36-EU*	72	0.235″	0.145″	12M6419	7.30
● 929836-08-36-RK	72	0.235″	0.310″	12M6438	3.18
● 929836-05-36-RK	72	0.235″	0.610″	12M6437	2.90
● 929665-05-36-EU*	72	0.235″	0.610″	12M6417	8.38
● 929710-03-36-RK	72	0.318″	0.410″	12M6426	5.53
0.100″ RIGHT-ANGLE SOLDER TAIL — SINGLE ROW					
● 929835-01-36-RK	36	0.235″	0.110″	12M6434	1.51
0.100 x 0.100″ RIGHT-ANGLE SOLDER TAIL — DUAL ROW					
● 929838-01-36-RK	72	0.235″	0.110″	12M6440	2.44
● 929838-02-36-RK	72	0.235″	0.405″	12M6441	2.99

*10μ″gold plating on pin and tail; +Polarized
(8398)

2300 SERIES PIN STRIP HEADERS

3M



Straight and right-angle headers are available in a one-row version with 40 contacts or two-row version with 80 contacts. End-to-end and side-by-side stackable strips can be broken to any length for prototyping. Solder standoffs make it easy to wash flux residue, reducing rework. 10μ″ gold and gold flash plating on phosphor bronze pins. Black, glass-filled polyester insulation material. 100μ″ tin-lead plating on solder tails. Solder tail length: 0.120″. Current rating: 1A.

STRAIGHT SOLDER TAIL — SINGLE ROW, 40 CONTACTS

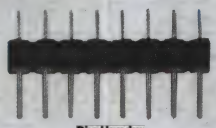
Mfg. Part No.	Contacts	Plating	Pin Length	Stock No.	Price Each 1-9
2340-6111TG	40	10μ″ Gold	0.230″	92F1474	2.06
2340-6211TG	40	10μ″ Gold	0.318″	92F1476	2.01
STRAIGHT SOLDER TAIL — DUAL ROW					
2380-6121TG	80	10μ″ Gold	0.230″	92F1478	3.77
2380-6221TG	80	10μ″ Gold	0.318″	92F1480	3.66
RIGHT-ANGLE SOLDER TAIL — SINGLE ROW					
2340-5111TG	40	10μ″ Gold	0.230″	92F1482	2.01
2340-5211TG	40	10μ″ Gold	0.318″	92F1468	2.17
RIGHT-ANGLE SOLDER TAIL — DUAL ROW					
2380-5121TG	80	10μ″ Gold	0.230″	92F1470	3.67
2380-5221TG	80	Gold Flash	0.318″	92F1473	3.66

(8390)

SINGLE ROW SERIES INTERCONNECTS

RoHS Compliant Available

MILL-MAX®



Pin Header

Socket

- Interconnects Feature Straight Solder Tail
- Accept 0.030″ Diameter and 0.025″ Square Pins
- Current Rating: 4.5A

Mfg. part no. 800-10 pin header features 10μ″ gold pins. **Mfg. part no. 801-43** socket features 200μ″ tin shells, 30μ″ gold contacts/clips. **Mfg. part no. 801-93** socket features 200μ″ tin-lead shells, 30μ″ gold contacts/clips.

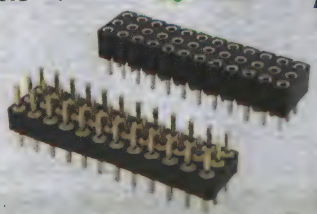
Mfg. Part No.	Contacts	Length	Stock No.	Price Each 1-9
801-93-036-10-012000	36	3.600″	17C6009	7.22
801-93-064-10-002000	64	6.400″	17C6018	12.55
● 800-10-064-10-001000	64	6.400″	16F4815	14.13
● 800-10-064-10-002000	64	6.400″	17C5995	11.46
801-93-050-10-001000	50	5.000″	16F4817	13.51
● 801-43-050-10-001000	50	5.000″	04M4082	24.27

(4819)

804 AND 805 SERIES TRIPLE ROW INTERCONNECTS

RoHS Compliant Available

MILL-MAX®



Type **804** header and **805** receptacle interconnects are ideal for high pin count I/O and board-to-board applications. The triple row pin field allows for signal connections to be more densely packaged. Also, placing and soldering one connector rather than three SIP sockets or a single and double row combination increases assembly efficiency and improves positional accuracy. The **804** & **805** series connectors featuring high temperature thermoplastic insulators compatible with lead free soldering temperature requirements.

Mfg. Part No.	Contacts	Gender	Stock No.	Price Each 1-49
● 804-10-096-10-002000	96	Header	46T9579	12.49
● 805-43-096-10-012000	96	Socket	46T9580	14.13

(196210)

PC BOARD HEADERS & SOCKETS

SLIMSEAL LOW POWER SEALED LIGHTING CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Operating Current : 5 A (18-20 AWG) & 3.5 A (22-24 AWG)
- Maximum operating voltage : 250 VAC/VDC
- Dielectric withstanding voltage : 1500 VAC
- Operating temperature : -40°C to 105°C
- Seal rating : IP67
- Durability : 30 mating cycles
- Housings : UL94V-0 rated high temp thermoplastic
- Contacts : Receptacle: Tin plated Copper alloy; Tab : Tin plated Brass
- Integral Seals : Silicone Rubber
- UL 1977, CSA C22.2 No. 182.3
- Exposure : UL 746C F1 (suitable for outdoor use, wire-to-wire only)

The SlimSeal SSL connectors are low profile, single row connectors developed for indoor and outdoor LED lighting applications. These connectors provide low power, sealed solutions for free hanging, wire-to-wire interconnects and for robust, stable electrical and mechanical wire-to-board connections used in solid state lighting. Connectors are available in 2 through 4 contact positions. Cavities are marked with numbers to provide circuit identification. The housings are made of flame-retardant black thermoplastic, and the contacts are made of copper alloy.

VERTICAL HEADER - SURFACE MOUNT

Mfg. Part No.	No. of Positions	Stock No.	Price Each 1-9
● 2106053-2	2	51R1227	2.26
● 2106053-4	3	51R1228	3.08
● 2106053-6	4	51R1229	2.82
VERTICAL HEADER - THRU HOLE			
● 2106112-2	2	51R1233	2.16
● 2106112-4	3	51R1234	1.64
● 2106112-6	4	51R1235	1.93
RIGHT ANGLE HEADER - SURFACE MOUNT			
● 2106056-2	2	69R7908	2.29
● 2106056-5	3	69R7909	2.29
● 2106056-8	4	69R7910	2.20
RIGHT ANGLE HEADER - THRU HOLE			
● 2106111-2	2	51R1230	1.86
● 2106111-4	3	51R1231	1.84
● 2106111-6	4	51R1232	1.90
FREE HANGING PLUG			
● 2106135-2	2	69R7912	2.67
● 2106135-3	3	51R1236	2.67
● 2106135-4	4	51R1237	2.38
FREE HANGING RECEPTACLE			
● 2106136-2	2	51R1238	2.05
● 2106136-3	3	51R1239	2.13
● 2106136-4	4	51R1240	2.38

CONTACTS

Mfg. Part No.	For Use With	Wire Size	Stock No.	Price Each 1-9
● 2106123-2	Plug Assemblies	20AWG to 18AWG	69R7911	0.37
● 2106124-9	Receptacle Assemblies	20AWG to 18AWG	72R3689	0.45

CABLE ASSEMBLIES

Mfg. Part No.	No. of Positions	Length	For Use With	Stock No.	Price Each 1-9
● 2106378-2	2	101.6 mm	Plug Cable Assembly	72R4613	3.27
● 2106378-3	3	101.6 mm	Plug Cable Assembly	72R4614	3.59
● 2106378-4	4	101.6 mm	Plug Cable Assembly	72R4615	4.13
● 2106391-2	2	101.6 mm	Receptacle Cable Assembly	72R4616	2.96
● 2106391-3	3	101.6 mm	Receptacle Cable Assembly	72R4617	3.62
● 2106391-4	4	101.6 mm	Receptacle Cable Assembly	72R4618	3.57

(163804)

element14 COMMUNITY

Get inspired, collaborate, design, research, ask experts questions.

element14.com

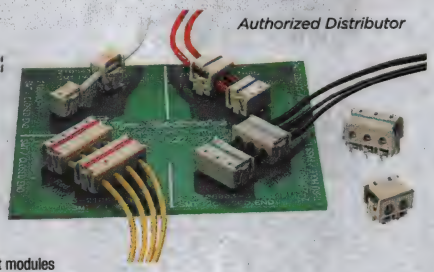
(198545)

IDC SOLID STATE LIGHTING (SSL) CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor



Features

- Available in 1, 2, 3 and 4 positions
- SMT and thru-hole
- Closed end and feed thru
- 18-24 AWG stranded and solid wire
- Dual IDC slots for redundancy
- Wire placement "viewing" window
- Wire gauge color coded
- Tool-less termination

Applications

- LED lighting controls
- General illumination LED fixtures
- Connecting strings of pcb LED light modules
- Non-lighting wire-to-board applications

IDC SSL connectors are insulation displacement (IDC) SMT and thru-hole wire-to-board connectors designed for quick, tool-less termination of discrete wires onto LED printed circuit boards. These connectors use Tyco Electronics proven insulation displacement technology to provide a robust, stable electrical and mechanical power connection to single or multiple printed circuit boards in solid state lighting and non-lighting applications.

CLOSED END IDC SSL CONNECTORS - SURFACE MOUNT

Mfg. Part No.	No. of Positions	AWG	Color	Stock No.	Price Each 1-9
● 2106003-1	1	18AWG	Yellow	78R8822	0.61
● 2106003-2	2	18AWG	Yellow	69R7906	0.72
● 2106003-3	3	18AWG	Yellow	69R7907	0.86
● 2106003-4	4	18AWG	Yellow	78R8823	1.00
● 1-2106003-1	1	20AWG	Blue	78R8800	0.66
● 1-2106003-2	2	20AWG	Blue	69R7896	0.77
● 1-2106003-3	3	20AWG	Blue	69R7897	0.86
● 1-2106003-4	4	20AWG	Blue	78R8801	0.97
● 2-2106003-1	1	22AWG	Green	78R8810	0.66
● 2-2106003-2	2	22AWG	Green	69R7902	0.77
● 2-2106003-3	3	22AWG	Green	69R7903	0.86
● 2-2106003-4	4	22AWG	Green	78R8811	1.00
● 3-2106003-1	1	24AWG	Red	78R8832	0.66
● 3-2106003-2	2	24AWG	Red	69R7917	0.80
● 3-2106003-3	3	24AWG	Red	78R8833	0.86
● 3-2106003-4	4	24AWG	Red	78R8834	1.00
FEED THRU IDC SSL CONNECTORS - SURFACE MOUNT					
● 2106431-1	1	18AWG	Yellow	78R8824	0.59
● 2106431-2	2	18AWG	Yellow	69R7913	0.80
● 2106431-3	3	18AWG	Yellow	69R7914	0.80
● 2106431-4	4	18AWG	Yellow	78R8825	1.00
● 1-2106431-1	1	20AWG	Blue	78R8802	0.59
● 1-2106431-2	2	20AWG	Blue	69R7898	0.80
● 1-2106431-3	3	20AWG	Blue	69R7899	0.86
● 1-2106431-4	4	20AWG	Blue	78R8803	1.00
● 2-2106431-1	1	22AWG	Green	78R8812	0.66
● 2-2106431-2	2	22AWG	Green	69R7904	0.80
● 2-2106431-3	3	22AWG	Green	69R7905	0.86
● 2-2106431-4	4	22AWG	Green	78R8813	1.00
● 3-2106431-1	1	24AWG	Red	78R8835	0.66
● 3-2106431-2	2	24AWG	Red	69R7918	0.80
● 3-2106431-3	3	24AWG	Red	78R8836	0.86
● 3-2106431-4	4	24AWG	Red	78R8837	0.81
CLOSED END IDC SSL CONNECTORS - THROUGH HOLE					
● 2106489-1	1	18AWG	Yellow	78R8826	0.66
● 2106489-2	2	18AWG	Yellow	69R7915	0.80
● 2106489-3	3	18AWG	Yellow	78R8827	0.80
● 2106489-4	4	18AWG	Yellow	78R8828	0.93
● 1-2106489-1	1	20AWG	Blue	78R8804	0.66
● 1-2106489-2	2	20AWG	Blue	69R7900	0.80
● 1-2106489-3	3	20AWG	Blue	78R8805	0.80
● 1-2106489-4	4	20AWG	Blue	78R8806	0.93
● 2-2106489-1	1	22AWG	Green	78R8814	0.66
● 2-2106489-2	2	22AWG	Green	78R8815	0.80
● 2-2106489-3	3	22AWG	Green	78R8816	0.80
● 2-2106489-4	4	22AWG	Green	78R8817	0.91
● 3-2106489-1	1	24AWG	Red	78R8838	0.66
● 3-2106489-2	2	24AWG	Red	78R8839	0.80
● 3-2106489-3	3	24AWG	Red	78R8840	0.80
● 3-2106489-4	4	24AWG	Red	78R8841	0.91
FEED THRU IDC SSL CONNECTORS - THROUGH HOLE					
● 2106751-1	1	18AWG	Yellow	78R8829	0.66
● 2106751-2	2	18AWG	Yellow	69R7916	0.80
● 2106751-3	3	18AWG	Yellow	78R8830	0.80
● 2106751-4	4	18AWG	Yellow	78R8831	0.93

➤CONTINUED➤

IDC SOLID STATE LIGHTING (SSL) CONNECTORS (CONT.)

FEED THRU IDC SSL CONNECTORS - THROUGH HOLE

Mfg. Part No.	No. of Positions	AWG	Color	Stock No.	Price Each 1-9
1-2106751-1	1	20AWG	Blue	78R8807	0.66
1-2106751-2	2	20AWG	Blue	69R7901	0.80
1-2106751-3	3	20AWG	Blue	78R8808	0.80
1-2106751-4	4	20AWG	Blue	78R8809	0.93
2-2106751-1	1	22AWG	Green	78R8818	0.66
2-2106751-2	2	22AWG	Green	78R8819	0.80
2-2106751-3	3	22AWG	Green	78R8820	0.80
2-2106751-4	4	22AWG	Green	78R8821	0.91
3-2106751-1	1	24AWG	Red	78R8842	0.66
3-2106751-2	2	24AWG	Red	78R8843	0.80
3-2106751-3	3	24AWG	Red	78R8844	0.80
3-2106751-4	4	24AWG	Red	78R8845	0.81

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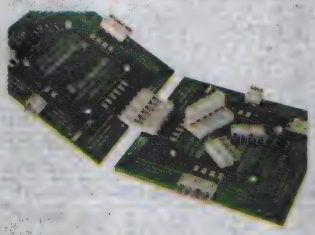
HERMAPHRODITIC BLADE AND RECEPTACLE BOARD-TO-BOARD CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor



Features

- Available in 2, 4, and 6 positions
- Connector mates to itself
- Single part to be stocked and placed onto pcb per position
- Connector mates and unmates horizontally and vertically -3 axis mating
- Connector can be articulated from 90° to 180°
- Tape and reel packed for high speed SMT processes
- Low profile flat surface is compatible with SMT and reflow processing
- Rounded corners to minimize shadowing
- Redundant SMT pads
- Optional 2, 4 and 6 position dust cover available
- Solder pad footprint compatible with Tyco Electronics SMT Poke-In LED connector

The board-to-board Hermaphroditic Blade and Receptacle connector is a new SMT connector and is intended for use with in-line board-to-board applications.

HERMAPHRODITIC SMT BOARD-TO-BOARD CONNECTORS

Mfg. Part No.	No. of Contacts	Color	Width (mm)	Stock No.	Price Each 1-9	Price Each 10-24
1954289-1	2	White	7.90	03P1396	0.87	0.82
1954289-2	4	White	15.90	03P1397	1.50	1.33
1954289-3	6	White	23.90	03P1398	2.01	1.83
MINI HERMAPHRODITIC SMT BOARD-TO-BOARD CONNECTORS						
1971567-1	2	Natural	7.00	24T5021	0.44	0.37
1971567-2	4	Natural	13.00	24T5022	1.08	0.96
1971567-3	6	Natural	19.00	24T5023	1.22	1.08

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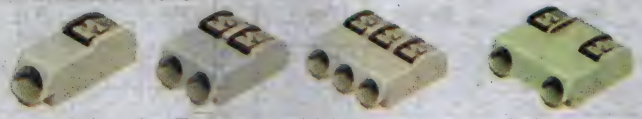
2060 SERIES SURFACE MOUNT TERMINAL STRIPS W ITH PUSH-BUTTONS

RoHS Compliant Available

WAGO



1 pole | 2 poles | 3 poles | 2 poles - 8mm pad spacing

- Surface mount terminal strips with CAGE CLAMP®S connection and pushbuttons
- Direct push-in of solid conductors
- Pushbutton for connection of stranded conductors and for removal of all wire types
- Total height of only 4.5mm helps minimize shadowing in LED applications
- Large flat area for easy pick-n-place
- Wiring ports with balcony design - creates "lead-in" for ease of wiring, even at a slight angle

Mfg. Part No.	No. of Poles	Housing Color	Pad Spacing (mm)	Wire Size	Rating V / A	Stock No.	Price Each 1-24
2060-401/998-404	1	Light Grey	4	24AWG to 18AWG	600 / 9	72T3332	0.51
2060-402/998-404	2	Light Grey	4	24AWG to 18AWG	250 / 9	62T0379	0.69
2060-403/998-404	3	Light Grey	4	24AWG to 18AWG	250 / 9	79T9388	1.02
2060-421/998-404	1	Black	4	24AWG to 18AWG	600 / 9	46W9943	0.47
2060-422/998-404	2	Black	4	24AWG to 18AWG	250 / 9	54W3630	0.63
2060-423/998-404	3	Black	4	24AWG to 18AWG	250 / 9	69W7522	0.93
2060-802/998-404	2	Light Grey	8	24AWG to 18AWG	600 / 9	54W3631	0.76

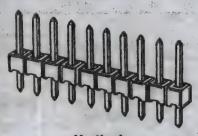
(201249)

AMP BREAKAWAY HEADERS – UNSHROUDED

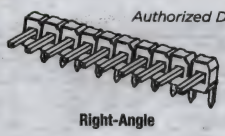
RoHS Compliant Available

TE connectivity

Authorized Distributor



Vertical



Right-Angle

- Full-stick headers break to any size needed
- Unshrouded vertical and right-angle versions available
- 40-positions single row and 80-positions double row configuration
- Copper alloy, drawn wire 0.025" (0.635) square posts
- Choice of 3 platings on contact area: 30µ" gold, 15µ" gold or tin-lead

RIGHT ANGLE MOUNT

All feature a flame-retardant, black thermoplastic housing, 94V-0 rated. All posts feature tin-lead on solder area with nickel underall. Post lengths include 0.230" (5.84) and 0.318" (8.08) for connector mating; 0.110" (2.79), 0.120" (3.05) and 0.125" (3.18) for PC board soldering 3.984" (0.156) long, pitch spacing: 0.100" (2.54 mm)

Mfg. Part No.	No. of Contacts	No. of Rows	Plating	Post Length (mm)	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49	Price Each 50-99
4-103323-1	40	1	Tin	2.79	52K4397	2.90	2.72	2.69	2.57
9-103323-0	40	1	Tin	2.79	16M4082	2.81	2.28	2.17	2.08
9-103329-0	40	1	Tin	3.05	04M7091	2.42	2.33	2.19	2.10
9-103325-0	40	1	15u" Gold	3.05	19R9705	4.84	4.56	4.18	3.99
9-103765-0	40	1	30u" Gold	2.29	02M8721	5.33	4.99	4.90	4.67
9-146305-0	40	1	30u" Gold	2.79	16M3465	5.94	5.24	5.00	4.76
9-103801-0	80	2	30u" Gold	2.29	16M3458	7.58	6.25	5.96	5.66
9-146308-0	80	2	30u" Gold	3.05	16M1173	8.36	7.32	6.97	6.62
VERTICAL MOUNT									
9-146282-0	40	1	Tin	2.29	16M3462	2.46	2.34	2.20	2.10
4-103327-9	40	1	Tin	3.05	81H3969	2.27	2.03	1.67	1.32
9-146278-0	40	1	Tin	3.05	87K2251	2.70	2.39	2.24	2.14
4-103321-8	40	1	Tin	3.18	52K4395	2.54	2.32	2.18	2.09
9-146274-0	40	1	Tin	3.18	16M4088	2.69	2.55	2.34	2.22
9-146280-0	40	1	15u" Gold	3.05	41P0161	3.49	2.94	2.70	2.58
9-146276-0	40	1	15u" Gold	3.18	96M0921	3.15	2.95	2.91	2.78
9-146285-0	40	1	30u" Gold	2.29	16M3463	3.66	3.43	3.35	3.20
9-146281-0	40	1	30u" Gold	3.05	16M3461	3.93	3.83	3.52	3.35
9-146277-0	40	1	30u" Gold	3.18	68K0764	3.70	3.48	3.19	3.05
5-146256-5	10	2	15u" Gold	3.05	96K2484	0.87	0.81	0.78	0.75
4-103328-5	80	2	Tin	3.05	52K4398	2.34	2.15	1.96	1.89
4-103322-2	80	2	Tin	3.18	52K4396	3.20	3.08	2.81	2.69
9-146256-0	80	2	15u" Gold	3.05	87K2250	5.21	4.91	4.50	4.30
9-146261-0	80	2	30u" Gold	2.29	16M3460	7.09	6.40	5.84	5.56
9-146257-0	80	2	30u" Gold	3.05	58K8697	7.82	6.32	5.78	5.50
9-146253-0	80	2	30u" Gold	3.18	68K0769	5.96	5.75	5.53	5.27

(8181)

AMP AMPMODU® SYSTEM 50 HEADERS AND RECEPTACLES

RoHS Compliant Available

TE connectivity

Authorized Distributor

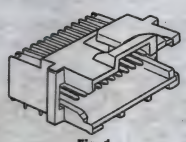


Fig. 1

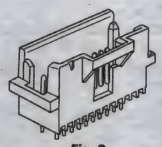


Fig. 2

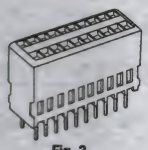


Fig. 3

- Thru-Hole Mount
- Single and Dual Row
- 0.100" (2.54mm) Termination Post Length
- 0.100" (2.54mm) Centerline

Black thermoplastic housing flammability rated UL94V-0. Phosphor bronze contacts plated gold 30µ" in mating area. Tin-lead plating in contact termination area.

SHROUDED HEADERS WITH PC BOARD RETENTION - RIGHT-ANGLE THRU HOLE - FIG. 1

Mfg. Part No.	Positions	Rows	Stock No.	Price Each 1-9
5-104074-8	6	1	40P9471	1.78
6-104074-0	8	1	40P9901	2.60
6-104074-1	12	1	52K3788	2.64
5-104074-3	15	1	52K3692	3.36
5-104074-6	30	1	16M3946	10.11
5-104069-1	20	2	52K3684	4.37
6-104069-2	24	2	52K3785	3.98
5-104069-5	30	2	52K4429	7.06
5-104069-6	40	2	52K4430	12.35
5-104069-7	60	2	16M3944	17.14
5-104069-3	80	2	52K4428	22.35

CONTINUED

PC BOARD HEADERS & SOCKETS

AMP AMPMODU® SYSTEM 50 HEADERS AND RECEPTACLES (CONT.)

SHROUDED HEADERS - VERTICAL THRU HOLE - FIG. 2

Mfg. Part No.	Positions	Rows	Stock No.	Price Each 1-9
● 5-104071-8	6	1	21M6744	1.25
● 5-104071-1	10	1	52K3685	1.92
● 6-104071-1	12	1	52K3787	2.25
● 5-104071-4	20	1	52K3687	3.98
● 5-104071-5	25	1	52K3688	6.46
● 5-104068-1	20	2	52K4422	3.62
● 5-104068-3	30	2	52K4423	5.63
● 5-104068-6	60	2	52K4426	15.49
● 6-104068-8	68	2	52K3784	15.67
● 6-104068-6	80	2	52K4453	13.58
● 6-104068-7	100	2	52K4454	19.68
HEADER - RIGHT-ANGLE THRU HOLE				
● 5-104118-1	50	2	16M3949	11.62
HEADER - VERTICAL THRU HOLE				
● 5-104178-6	10	1	16M3952	2.18
● 6-103916-1	40	2	16M4051	5.78
RECEPTACLES WITH PC RETENTION - RIGHT-ANGLE THRU HOLE				
● 5-103911-5	40	2	16M3938	13.71
VERTICAL RECEPTACLE - THROUGH HOLE - FIG. 3				
● 5-104078-3	10	2	16M3948	2.01
● 5-104078-1	20	2	52K4431	3.68
● 5-104078-2	40	2	52K3694	7.20
● 5-104078-5	50	2	52K3695	8.79
● 5-104078-7	80	2	63K9842	16.38
SHROUDED HEADERS - VERTICAL SURFACE MOUNT				
● 5-104549-2	20	2	52K4435	4.56
● 5-104549-6	40	2	16M3957	7.82
● 5-104549-7	50	2	52K4437	10.22
● 5-104549-9	80	2	52K3698	17.85
VERTICAL RECEPTACLES - SURFACE MOUNT				
● 5-104550-5	40	2	16M3960	8.19
● 5-104550-6	50	2	16M3961	10.40
CABLE-TO-BOARD RECEPTACLES				
● 487544-3	6	1	13H5985	1.24
CABLE-TO-BOARD RECEPTACLES - LATCH STYLE				
● 487545-1	4	1	13H5988	0.97
● 487545-2	5	1	13H5989	1.36
● 487545-5	8	1	31C0055	1.01
● 487545-7	10	1	88F5214	1.20
● 1-487545-7	20	1	93B7249	1.69

(75481)

AMPMODU MOD II HEADERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Vertical and right-angle versions available
- Phosphor Bronze 0.025" (0.635) square post contacts
- Contact areaplating : 30µ" gold, 15µ" gold or tin

All feature a flame-retardant, black thermoplastic housing, 94V-0 rated. Post lengths include 0.318" (8.08) for connector mating; 0.125" (3.18) for PC board soldering, pitch spacing: 0.100" (2.54 mm)

VERTICAL MOUNT SINGLE ROW HEADERS, 15µ" GOLD PLATING

Mfg. Part No.	Contacts	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 87224-1	1	90F4421	0.61	0.57	0.46	0.44
● 87224-2	2	90F4424	0.88	0.77	0.73	0.70
● 87224-3	3	50F752	0.97	0.85	0.77	0.74
● 87224-4	4	90F4429	1.91	1.77	1.73	1.66
● 87224-5	5	90F4554	2.02	1.93	1.83	1.75
● 87224-6	6	90F4557	2.98	2.86	2.50	2.38
● 87224-7	7	90F4558	3.36	3.23	2.96	2.83
● 87224-8	8	90F4560	3.63	3.49	3.20	3.05
● 1-87224-0	10	66F9173	5.11	4.90	4.50	4.30
● 2-87224-0	20	26C0081	8.76	8.39	7.62	7.24
VERTICAL MOUNT SINGLE ROW HEADERS, 30µ" GOLD PLATING						
● 87220-1	1	90F4438	0.80	0.78	0.76	0.73
● 87220-2	2	90F4423	1.71	1.57	1.47	1.41
● 87220-4	4	90F4428	1.94	1.74	1.43	1.13
● 87220-5	5	19R9681	2.82	2.71	2.37	2.26
● 87220-6	6	90F4556	2.98	2.45	2.39	2.33
● 87220-8	8	90F4559	5.23	5.02	4.60	4.40
● 1-87220-0	10	90B6931	5.91	5.69	5.21	4.97
● 2-87220-0	20	17H3113	9.84	9.42	8.56	8.14

➤CONTINUED➤

AMPMODU MOD II HEADERS (CONT.)

RIGHT ANGLE MOUNT SINGLE ROW HEADERS, 15µ" GOLD PLATING

Mfg. Part No.	Contacts	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 87233-2	2	16H8621	1.13	1.03	0.99	0.95
RIGHT ANGLE MOUNT SINGLE ROW HEADERS, 30µ" GOLD PLATING						
● 87232-3	3	16H8620	1.64	1.49	1.40	1.34
VERTICAL MOUNT DOUBLE ROW HEADERS, 15µ" GOLD PLATING						
● 87227-1	2	90F4652	1.71	1.56	1.40	1.34
● 87227-2	4	90F4654	2.14	1.94	1.82	1.74
● 87227-3	6	90F4667	2.11	2.00	1.90	1.82
● 87227-4	8	74M8239	3.77	3.62	3.32	3.18
● 87227-5	10	90F4659	4.28	4.11	3.59	3.43
● 87227-6	12	55M6758	4.10	3.95	3.45	3.29
● 87227-7	14	90F4642	4.48	4.30	4.11	3.93
● 1-87227-0	20	90F4632	6.00	5.75	5.25	5.00
● 1-87227-3	26	90F4636	8.53	7.95	7.36	7.18
● 2-87227-5	50	12H4502	15.66	14.02	11.51	9.11
VERTICAL MOUNT DOUBLE ROW HEADERS, 30µ" GOLD PLATING						
● 1-87215-0	2	90F4651	1.46	1.41	1.26	1.20
● 1-87215-1	4	66H6768	2.23	2.03	1.91	1.82
● 1-87215-2	6	90F4666	2.75	2.64	2.53	2.41
● 87215-1	8	90F4671	3.91	3.75	3.59	3.43
● 87215-2	10	90F4658	4.85	4.55	4.25	4.05
● 87215-3	12	90F4664	5.45	5.12	4.78	4.55
● 87215-5	16	16H8616	6.38	6.12	5.59	5.32
● 87215-7	20	90F4631	8.14	7.59	7.38	7.01
RIGHT ANGLE MOUNT DOUBLE ROW HEADERS, 30µ" GOLD PLATING						
● 86479-3	10	16H8538	3.93	3.77	3.61	3.44
● 86479-1	20	24C0656	7.75	6.97	6.57	6.20
RIGHT ANGLE MOUNT DOUBLE ROW HEADERS, 15µ" GOLD PLATING						
● 87230-4	8	20C7721	2.20	2.03	1.96	1.88
● 1-87230-0	20	52F5513	5.84	5.16	4.91	4.68
SURFACE MOUNT DOUBLE ROW HEADERS, 30µ" GOLD PLATING						
● 5-146130-4	10	72K7733	1.50	1.36	1.23	1.17

(116730)

AMPMODU MOD II SHROUDED HEADERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- 0.100" (2.54mm) Centers
- Vertical and right-angle versions available
- Single and double row configurations
- Insulation resistance: 5,000 megohms minimum initial
- Dielectric withstanding voltage: 750 RMS at sea level
- Operating temperature: -65°C to +105°C
- Current rating: 3 A

The AMPMODU interconnection system provides interconnections with a unique modular concept, utilizing precision formed receptacle contacts and mating posts. The 0.025 [0.64] square interconnection system is rated at 3 A per contact. Housings are black thermoplastic, flame retardant UL94V-0 rated. Contacts are copper alloy with tin, 15u" or 30u" gold on mating area. Headers avaialble with 0.066 [1.68] and 0.150 [3.81] end dimensions.

SINGLE-ROW VERTICAL HEADERS WITH STANDOFFS

Mfg. Part No.	Positions	Plating	Stock No.	Price Each 1-9	10-24
● 5-103080-1	3	Tin	28M4487	1.23	1.11
● 8-102202-4	3	15µ" Gold	87K2249	1.40	1.37
● 5-102202-1	4	15µ" Gold	87K2237	1.50	1.37
● 5-102202-2	5	15µ" Gold	40P9389	1.92	1.75
● 5-102202-4	7	15µ" Gold	40P9390	1.52	...
● 5-102202-5	8	15µ" Gold	40P9391	2.13	2.03
● 5-102202-7	10	15µ" Gold	40P9393	3.09	2.96
● 6-102202-1	14	15µ" Gold	40P9879	2.83	2.66
● 5-103414-1	3	30µ" Gold	87K2239	1.09	1.00
● 5-103414-2	4	30µ" Gold	87K2240	1.49	1.35
● 5-103414-3	5	30µ" Gold	16M3115	2.44	2.20
● 5-103414-5	7	30µ" Gold	04R6573	2.30	1.96
● 5-103414-6	8	30µ" Gold	16M3116	2.44	2.33
● 5-103414-8	10	30µ" Gold	40P9430	2.71	2.55
● 6-103414-0	12	30µ" Gold	40P9893	3.01	2.83
SINGLE-ROW RIGHT ANGLE HEADERS WITH STANDOFFS					
● 8-102203-4	3	15µ" Gold	41P0049	1.74	1.58
● 5-102203-3	6	15µ" Gold	40P9396	1.56	1.49
1-102203-1	14	15µ" Gold	97F8612	4.46	4.02
● 5-103361-1	3	30µ" Gold	79K2824	1.82	1.76
● 5-103361-2	4	30µ" Gold	16M3114	1.76	1.68
● 5-103361-3	5	30µ" Gold	40P9425	1.75	1.57
● 5-103361-4	6	30µ" Gold	40P9426	2.51	2.28
● 5-103361-5	7	30µ" Gold	22R4484	2.42	2.18
● 5-103361-8	10	30µ" Gold	40P9428	2.41	2.15

➤CONTINUED➤

AMPMODU MOD II SHROUDED HEADERS (CONT.)

DOUBLE-ROW VERTICAL HEADERS WITH 0.066″ (1.68) END DIMENSION & DETENT WINDOWS

Mfg. Part No.	Positions	Plating	Stock No.	Price Each 1-9	Price Each 10-24
5-87589-2	12	Tin	19R0782	1.92	1.74
5-102618-1	6	15μ″ Gold	74M8235	1.54	1.47
5-102618-2	8	15μ″ Gold	40P9403	1.71	1.63
5-102618-3	10	15μ″ Gold	40P9404	2.44	2.33
5-102618-4	12	15μ″ Gold	74M8236	2.55	2.40
5-102618-5	14	15μ″ Gold	15P4517	2.61	2.45
5-102618-8	20	15μ″ Gold	10M8815	2.06	2.00
6-102618-0	24	15μ″ Gold	19R3472	3.86	3.64
6-102618-1	26	15μ″ Gold	29M8201	5.64	4.93
7-102618-3	50	15μ″ Gold	23R1616	10.07	9.14
5-103168-1	6	30μ″ Gold	16M3113	1.78	1.69
5-103168-2	8	30μ″ Gold	53M4745	2.00	1.82
5-103168-3	10	30μ″ Gold	87K2238	2.54	2.31
5-103168-4	12	30μ″ Gold	40P9419	2.90	2.73
5-103168-5	14	30μ″ Gold	40P9420	3.43	3.29
5-103168-6	16	30μ″ Gold	40P9421	3.45	3.32
5-103168-8	20	30μ″ Gold	19P7568	4.05	3.80
6-103168-0	24	30μ″ Gold	40P9891	5.13	4.82
6-103168-1	26	30μ″ Gold	53M2991	6.23	5.98
6-103168-8	40	30μ″ Gold	19R3523	8.22	7.68
7-103168-3	50	30μ″ Gold	19R7114	10.85	9.78
DOUBLE-ROW VERTICAL HEADERS WITH 0.150 (3.81) END DIMENSION & DETENT WINDOWS					
5-102619-3	10	15μ″ Gold	40P9406	1.46	1.30
5-102619-8	20	15μ″ Gold	40P9407	3.15	2.96
6-102619-0	24	15μ″ Gold	48M4362	3.40	3.38
6-102619-8	40	15μ″ Gold	19R3482	7.38	6.90
7-102619-3	50	15μ″ Gold	19R7090	9.49	9.08
103169-1	6	30μ″ Gold	50B447	2.16	1.96
5-103169-2	8	30μ″ Gold	18R7762	2.32	2.09
5-103169-6	16	30μ″ Gold	40P9423	2.13	2.06
5-103169-8	20	30μ″ Gold	18R7765	3.91	3.58
DOUBLE-ROW RIGHT-ANGLE HEADERS WITH 0.066″ (1.68) END DIMENSION & DETENT WINDOWS					
5-102617-2	8	15μ″ Gold	44P2694	2.00	1.91
5-102617-3	10	15μ″ Gold	93K6079	2.55	2.45
5-102617-4	12	15μ″ Gold	46P6114	2.73	2.62
5-102617-5	14	15μ″ Gold	40P9402	3.14	2.88
5-103166-1	6	30μ″ Gold	16M3112	1.49	1.42
5-103166-2	8	30μ″ Gold	74M8237	1.98	1.88
5-103166-3	10	30μ″ Gold	74M8238	3.01	2.83
5-103166-4	12	30μ″ Gold	14N3980	2.88	2.70
5-103166-8	20	30μ″ Gold	40P9417	3.90	3.67
6-103166-8	20	30μ″ Gold	93K7737	5.52	...
DOUBLE-ROW RIGHT ANGLE HEADERS WITH 0.150 (3.81) END DIMENSION & DETENT WINDOWS					
102570-3	10	15μ″ Gold	90F4105	1.74	1.56
5-102570-6	16	15μ″ Gold	40P9400	2.83	2.74
5-103167-2	10	30μ″ Gold	56P4976	2.35	2.23
103167-7	20	30μ″ Gold	92F8364	5.20	5.00

(165107)

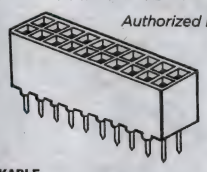
AMPMODU MOD. II AND MOD. IV PC BOARD RECEPTACLES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- 2 Rows
- 0.100″ Centers
- Black Flame-Retardant Housing
- Rated UL94V-0
- UL Recognized, CSA Certified



Vertical mount PC board receptacle assemblies, double row. Phosphor bronze contacts plated 30μ″ gold on contact area, tin on solder area with full nickel underplate.

MOD. II SINGLE ROW, CLOSED TOP ENTRY END STACKABLE

Mfg. Part No.	Positions	Plating	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99	Price Each 100-249
5-534237-1	3	30u″ Gold	39P9514	1.06	1.01	0.96	0.92
5-534237-2	4	30u″ Gold	40P9556	1.14	1.09	1.04	0.99
5-534237-3	5	30u″ Gold	18R9351	1.39	1.23	1.11	1.06
5-534237-4	6	30u″ Gold	62M8851	1.34	1.28	1.22	1.16
5-534237-5	7	30u″ Gold	18R9352	2.16	1.96	1.77	1.68
5-534237-6	8	30u″ Gold	52K3745	2.06	1.96	1.86	1.78
5-534237-8	10	30u″ Gold	52K3746	1.83	1.78	1.71	1.64
6-534237-1	13	30u″ Gold	19R5176	2.15	2.08	2.00	1.91

➤CONTINUED➤

AMPMODU MOD. II AND MOD. IV PC BOARD RECEPTACLES (CONT.)

MOD. II SINGLE ROW, CLOSED TOP ENTRY

Mfg. Part No.	Positions	Plating	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99	Price Each 100-249
5-534206-1	2	30u″ Gold	16M3162	1.11	0.99	0.89	0.85
5-534206-3	6	30u″ Gold	52K3740	1.37	1.31	1.24	1.18
5-534206-4	8	30u″ Gold	52K3741	1.64	1.56	1.48	1.41
5-534206-5	10	30u″ Gold	52K3742	2.73	2.56	2.40	2.28
5-534206-9	18	30u″ Gold	16M3164	2.90	2.56	2.44	2.32
6-534206-0	20	30u″ Gold	52K4455	4.08	3.92	3.43	3.26
6-534206-2	24	30u″ Gold	52K4456	5.49	5.27	4.62	4.39
6-534206-3	26	30u″ Gold	57K9755	4.96	4.66	4.35	4.14
6-534206-4	28	30u″ Gold	52K3793	4.23	4.06	3.55	3.38
6-534206-5	30	30u″ Gold	52K3794	5.39	5.08	4.77	4.54
6-534206-7	34	30u″ Gold	52K4457	5.86	5.33	5.29	5.02
6-534206-9	38	30u″ Gold	16M3397	6.78	6.08	4.99	3.95
7-534206-0	40	30u″ Gold	52K4540	5.52	5.18	4.83	4.60
7-534206-5	50	30u″ Gold	52K4541	7.84	7.52	6.53	6.22
8-534206-2	64	30u″ Gold	52K3940	8.12	7.59	7.07	6.71
MOD. II SINGLE ROW, CLOSED ENTRY - HORIZONTAL							
5535676-5	6	30u″ Gold	52K3776	1.37	1.31	1.24	1.18
MOD. II DOUBLE ROW, CLOSED ENTRY - HORIZONTAL							
5-532956-2	16	30u″ Gold	40P9550	3.95	3.80	3.32	3.16
6-5535512-4	10	30u″ Gold	52K3809	1.42	1.35	1.28	1.22
MOD. IV SINGLE ROW, CLOSED TOP ENTRY, LOW PROFILE							
5-535541-1	3	30u″ Gold	16M3166	1.16	1.02	0.92	0.88
5-535541-2	4	30u″ Gold	16M3167	1.10	0.99	0.81	0.64
5-535541-3	5	30u″ Gold	16M3168	1.28	1.22	1.16	1.11
5-535541-6	8	30u″ Gold	16M1175	1.66	1.57	1.41	1.35
5-535541-8	10	30u″ Gold	52K3751	2.08	1.89	1.70	1.62
6-535541-8	20	30u″ Gold	52K3807	3.40	3.26	2.86	2.72
MOD. IV DUAL ROW, CLOSED TOP ENTRY, LOW PROFILE							
5-534998-4	8	30u″ Gold	52K3748	1.86	1.79	1.72	1.64
5-534998-5	10	30u″ Gold	71K0459	2.40	2.28	2.16	2.06
5-534998-6	12	30u″ Gold	16M3165	2.41	2.19	1.96	1.88
6-534998-7	34	30u″ Gold	52K3804	4.90	4.71	4.12	3.92
5-534998-8	16	30u″ Gold	52K3750	2.95	2.77	2.59	2.46
6-534998-0	20	30u″ Gold	52K3799	4.31	4.14	3.62	3.44
6-534998-3	26	30u″ Gold	52K3801	5.00	4.80	4.20	4.00
7-534998-0	40	30u″ Gold	52K4542	6.54	5.95	5.92	5.63
7-534998-5	50	30u″ Gold	52K3927	8.66	8.28	7.15	6.96
8-534998-0	60	30u″ Gold	52K3941	10.50	10.05	8.68	8.45

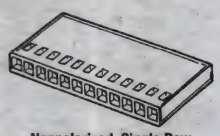
(8082)

AMPMODU MOD. IV WIRE-APPLIED HOUSINGS

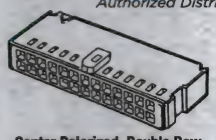
RoHS Compliant Available

TE connectivity

Authorized Distributor



Nonpolarized, Single Row



Center Polarized, Double Row

Single and double row housings of flame-retardant black thermoplastic; 0.100″ (2.54) centers. Accept crimp snap-in contacts, *ordered separately on pages 754-755*. Center polarized versions mate with AMP-LATCH® universal ejection headers; *ordered separately on pages 810-811*.

SINGLE ROW NONPOLARIZED HOUSINGS

Mfg. Part No.	Positions	Width	Stock No.	Price Each 1-9
87499-3	2	0.205″	90F7735	1.34
87499-4*	2	0.205″	90F4903	0.70
87499-5	3	0.305″	90F7736	1.30
87499-6*	3	0.305″	92F8383	0.61
87499-7	4	0.405″	90F7737	0.61
87499-8*	4	0.405″	90F4904	0.48
87499-9	5	0.505″	90F7738	0.51
1-87499-0*	5	0.505″	66F2885	0.44
1-87499-1	6	0.605″	90F7739	1.06
1-87499-2*	6	0.605″	66F3112	0.89
87499-1	7	0.705″	83F4540	0.81
87499-2*	7	0.605″	90F4905	0.77
1-87499-3	8	0.805″	90F7740	1.46
1-87499-4*	8	0.805″	33B3907	1.46
1-87499-5	9	0.905″	90F4895	0.99

➤CONTINUED➤

AMPMODU MOD. IV WIRE-APPLIED HOUSINGS (CONT.)

Mfg. Part No.	Positions	Width	Stock No.	Price Each 1-9
● 1-87499-7	10	1.005″	90F4896	2.52
● 1-87499-8*	10	1.005″	90F4907	1.23
● 1-87499-9	11	1.105″	33B3908	2.75
● 2-87499-1	12	1.205″	90F4897	1.81
● 2-87499-3	13	1.305″	90F4898	1.81
● 2-87499-5	14	1.405″	90F4899	2.08
● 2-87499-7	15	1.505″	33B6803	1.52
● 2-87499-9	16	1.605″	90F4900	1.83
● 3-87499-4*	18	1.805″	33B8142	1.28
● 3-87499-7	20	2.005″	90F4901	2.09
● 5-87499-8*	30	3.005″	33B9382	3.73
SINGLE ROW POLARIZED HOUSINGS WITH DETENT LATCHING				
● 102241-1*	3	0.300″	90F4910	0.58
● 102241-2*	4	0.400″	90F4911	0.64
● 102241-3*	5	0.500″	90F4912	0.64
● 102241-4*	6	0.600″	90F4869	0.78
● 102241-5*	7	0.700″	90F4870	0.80
● 102241-6*	8	0.800″	90F4871	0.78
● 102241-7*	9	0.900″	90F4872	0.86
● 102241-8*	10	1.000″	90F4873	1.03
● 1-102241-0*	12	1.200″	90F4874	0.76
● 1-102241-2*	14	1.400″	90F4875	1.67
SINGLE ROW NONPOLARIZED HOUSINGS FOR LOCKING CLIP CONTACTS				
● 87175-8*	3	0.316″	95F1791	2.61
● 1-87175-2*	5	0.516″	93F7078	1.87
● 1-87175-3	6	0.616″	10H5266	1.98
● 1-87175-4*	6	0.616″	66F1578	2.80
● 1-87175-6*	7	0.716″	10H5268	3.22
● 1-87175-7	8	0.816″	79C4311	1.59
● 1-87175-8*	8	0.816″	10H5269	3.56
● 2-87175-0*	9	0.916″	89C0687	2.48
DOUBLE ROW NONPOLARIZED HOUSINGS				
● 5-87456-0	4	0.200″	90F4123	1.67
● 87456-1*	6	0.300″	90F4941	1.55
● 87456-2	6	0.300″	90F4124	1.98
● 87456-4	8	0.400″	90F4125	1.71
● 87456-6	10	0.500″	90F4126	1.65
● 87456-7*	12	0.600″	90F4944	1.97
● 87456-8	12	0.600″	90F4127	2.16
● 87456-9*	14	0.700″	90F4945	2.03
● 1-87456-0	14	0.700″	90F4128	2.20
● 1-87456-2	16	0.800″	90F4129	1.81
● 1-87456-4	18	0.900″	90F4946	4.23
● 1-87456-6	20	1.000″	90F4947	2.51
● 1-87456-9*	24	1.200″	88F5169	1.88
● 2-87456-0	24	1.200″	90F4948	2.69
● 2-87456-1*	26	1.300″	92F8379	2.99
● 2-87456-2	26	1.300″	90F4949	2.55
● 2-87456-4	28	1.400″	90F4950	2.59
● 2-87456-5*	30	1.500″	33B6798	3.65
● 2-87456-6	30	1.500″	90F4951	3.20
● 2-87456-9*	34	1.700″	88F2843	3.59
● 3-87456-0	34	1.700″	90F4952	3.13
● 3-87456-5*	40	2.000″	33B8140	4.29
● 3-87456-6	40	2.000″	90F4953	3.61
● 3-87456-9*	50	2.500″	66F9147	5.22
● 4-87456-0	50	2.500″	90F4937	4.37
● 5-87456-2	60	3.000″	90F4938	6.37
DOUBLE ROW POLARIZED HOUSINGS WITH DETENT LATCHING				
● 87631-2	6	0.300″	90F4382	1.04
● 87631-4	8	0.400″	90F4383	1.88
● 87631-6	10	0.500″	90F4384	1.45
● 87631-7*	12	0.600″	90F4363	1.40
● 87631-8	12	0.600″	90F4367	1.47
● 1-87631-0	14	0.700″	90F4368	2.40
● 1-87631-2	16	0.800″	90F4369	1.93
● 1-87631-3*	18	0.900″	33B3911	1.37
● 1-87631-5*	20	1.000″	90F4366	1.92
● 1-87631-6	20	1.000″	90F4371	3.96
● 2-87631-0	24	1.200″	90F4372	3.10
● 2-87631-1*	26	1.300″	90F4351	2.92
● 2-87631-9*	34	1.700″	90F4354	3.97
● 3-87631-0	34	1.700″	90F4375	3.16
● 3-87631-5*	40	2.000″	90F4356	3.27

➤CONTINUED➤

AMPMODU MOD. IV WIRE-APPLIED HOUSINGS (CONT.)

Mfg. Part No.	Positions	Width	Stock No.	Price Each 1-9
DOUBLE ROW POLARIZED HOUSINGS WITH DETENT LATCHING				
● 3-87631-6	40	2.000″	90F4358	3.88
● 4-87631-1*	50	2.500″	90F4357	5.70
DOUBLE ROW POLARIZED HOUSINGS WITH DETENT LATCHING & STRAIN RELIEF				
● 87922-4	16	0.800″	90F4765	4.24
● 87733-4	26	1.300″	28C7451	5.65
● 1-87733-1	40	2.000″	90F4755	6.68
DOUBLE ROW CENTER POLARIZED HOUSINGS				
● 102387-1	10	0.680″	90F4757	2.17
● 102387-3	16	0.980″	90F4759	3.04
● 102387-4	20	1.380″	90F4760	3.41
● 102387-5	24	1.180″	90F4535	3.50
● 102387-6	26	1.480″	90F4536	3.59
● 102387-7	30	1.680″	98F6315	3.46
● 102387-8	34	1.880″	90F4537	5.13
● 102387-9	40	2.180″	90F4538	5.12
● 1-102387-1	60	3.180″	90F4540	6.69
● 1-102387-2	64	3.380″	98F6620	7.14
DOUBLE ROW POLARIZED HOUSINGS				
● 87977-1	6	0.300″	34B2495	1.80
● 87977-2	8	0.400″	34B2496	1.97
● 2-87977-9*	8	0.400″	33B6809	3.48
● 87977-5	14	0.700″	19H8418	2.71
DOUBLE ROW POLARIZED HOUSINGS WITH FLANGE				
● 104422-1	16	0.800″	33B4415	1.99
DOUBLE ROW NONPOLARIZED HOUSINGS FOR LOCKING CLIP CONTACTS				
● 87133-7*	6	0.316″	73C9420	3.00
● 87133-2*	10	0.516″	50F748	1.78
● 87133-5	10	0.516″	92F8343	1.32
● 1-87133-1*	12	0.616″	94C0550	3.83
SHORT POINT DOUBLE ROW NONPOLARIZED HOUSINGS				
● 104482-4	10	0.498″	66F6329	1.16
● 104482-5	12	0.598″	66F6330	1.11
● 104482-6	14	0.698″	66F6331	1.12
● 104482-7	16	0.798″	66F6332	1.17
● 104482-9	20	0.998″	66F6334	1.24
● 1-104482-5	34	1.698″	66F6340	0.87
● 1-104482-8	40	1.998″	66F6343	1.53
SHORT POINT DOUBLE ROW CENTER POLARIZED HOUSINGS				
● 104483-9	14	0.698″	66F6354	1.08

* Unmarked

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 87077-1	Keying Plug for 0.645″ High Housings	66F1617	0.40
● 87077-2	Keying Plug for 0.600″ High Housings	50F724	0.22
91084-1	Contact and Keying Plug Extraction Tool	50F746	48.85
● 87710-1	Strain Relief/Pull Tab	91B3642	3.43

(8078)

AMPMODU CRIMP SNAP-IN MOD. IV PIN AND RECEPTACLE CONTACTS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Pin

Receptacle

Crimp hand tools *ordered separately on page 1136*

CRIMP SNAP-IN PINS WITH INSULATION SUPPORT

Mfg. Part No.	Wire Size	Contact Material*	Contact Plating	Hand Tool	Pkg.	Stock No.	Price Each 1-9
● 102107-2	26AWG to 22AWG	PhBz	30u″ Gold	91517-1	Bulk	90F3868	0.74
● 102107-1	26AWG to 22AWG	PhBz	15u″ Gold	91517-1	Bulk	90F3870	0.92
● 102095-2	26AWG to 22AWG	PhBz	15u″ Gold	91517-1	Cut Tape	33B3948	0.48
● 5-102107-3	26AWG to 22AWG	PhBz	Tin	91517-1	Bulk	16M3109	0.42
● 166679-1	26AWG to 22AWG	PhBz	Gold Flash	91517-1	Bulk	50B491	0.63

➤CONTINUED➤

AMPMODU CRIMP SNAP-IN MOD. IV PIN AND RECEPTACLE CONTACTS (CONT.)

STANDARD PRESSURE RECEPTACLE CONTACTS

Mfg. Part No.	Wire Size	Contact Material*	Contact Plating	Hand Tool	Pkg.	Stock No.	Price Each 1-9
6-102316-4	32AWG to 27AWG	CuSn-PhBz	30u" Gold	91541-1	Bulk	52K3778	0.73
5-102316-6	32AWG to 27AWG	CuSn-PhBz	15u" Gold	91541-1	Cut Tape	64M1345	0.30
102917-1	32AWG to 27AWG	BeCu	30u" Gold	91541-1	Cut Tape	85C5016	0.50
102917-2	32AWG to 27AWG	BeCu	30u" Gold	91541-1	Bulk	90F5083	1.05
6-87756-8	26AWG to 22AWG	CuSn-PhBz	30u" Gold	91517-1	Bulk	52K3820	0.45
6-87756-6	26AWG to 22AWG	CuSn-PhBz	15u" Gold	91517-1	Bulk	52K3818	0.28
87756-5	26AWG to 22AWG	CuSn-PhBz	15u" Gold	91517-1	Bulk	18C0247	0.77
87756-6	26AWG to 22AWG	CuSn-PhBz	Tin	91517-1	Cut Tape	90F3571	0.26
87756-7	26AWG to 22AWG	CuSn-PhBz	Tin	91517-1	Bulk	90F5084	0.34
87666-2	26AWG to 22AWG	BeCu	Gold Flash	91517-1	Cut Tape	90F6257	0.60
87667-2	26AWG to 22AWG	BeCu	Gold Flash	91517-1	Bulk	90F7741	0.41
87667-1	26AWG to 22AWG	BeCu	30u" Gold	91517-1	Bulk	95F2327	0.89
87667-5	26AWG to 22AWG	BeCu	15u" Gold	91517-1	Bulk	90F5669	0.45
87666-5	26AWG to 22AWG	BeCu	15u" Gold	91517-1	Cut Tape	34B2492	0.52
87667-3	26AWG to 22AWG	BeCu	Tin	91517-1	Bulk	90F5668	0.44
87666-3	26AWG to 22AWG	BeCu	Tin	91517-1	Cut Tape	90F6256	0.32
280530-1**	26AWG to 22AWG	PhBz	15u" Gold	58654-1	Cut Tape	12H8085	0.34
181270-1	26AWG to 22AWG	PhBz	15u" Gold	58654-1	Bulk	39K1405	1.07
6-87523-8	24AWG to 20AWG	CuSn-PhBz	30u" Gold	91516-1	Cut Tape	40P9917	0.43
6-87523-9	24AWG to 20AWG	CuSn-PhBz	30u" Gold	91516-1	Bulk	52K3816	0.76
2-87523-3	24AWG to 20AWG	CuSn-PhBz	15u" Gold	91516-1	Cut Tape	52K3485	0.40
2-87523-4	24AWG to 20AWG	CuSn-PhBz	15u" Gold	91516-1	Bulk	52K3486	0.75
87523-6	24AWG to 20AWG	CuSn-PhBz	Tin	91516-1	Bulk	90F5670	0.33
87523-5	24AWG to 20AWG	CuSn-PhBz	Tin	91516-1	Cut Tape	90F6258	0.27
85969-8	24AWG to 20AWG	BeCu	30u" Gold	91516-1	Cut Tape	34B2398	0.59
86016-2	24AWG to 20AWG	BeCu	30u" Gold	91516-1	Bulk	90F5675	0.44
86016-1	24AWG to 20AWG	BeCu	30u" Gold	91516-1	Bulk	50F742	1.35
86016-5	24AWG to 20AWG	BeCu	15u" Gold	91516-1	Bulk	90F5674	0.87
85969-9	24AWG to 20AWG	BeCu	Tin	91516-1	Cut Tape	90F5080	0.35
86016-3	24AWG to 20AWG	BeCu	Tin	91516-1	Bulk	90F5673	0.71
INTERMEDIATE PRESSURE RECEPTACLE CONTACTS							
5-103171-4	26AWG to 22AWG	CuSn-PhBz	30u" Gold	91517-1	Cut Tape	52K3681	0.27
5-103171-5	26AWG to 22AWG	CuSn-PhBz	30u" Gold	91517-1	Bulk	52K3682	0.71
5-103171-1	26AWG to 22AWG	CuSn-PhBz	15u" Gold	91517-1	Cut Tape	52K3680	0.27
102548-6	26AWG to 22AWG	BeCu	30u" Gold	91517-1	Bulk	92F1076	0.70
102548-5	26AWG to 22AWG	BeCu	30u" Gold	91517-1	Cut Tape	10H6237	0.51
2-87195-4	24AWG to 20AWG	CuSn-PhBz	15u" Gold	91516-1	Cut Tape	52K3483	0.30
87046-3	24AWG to 20AWG	BeCu	30u" Gold	91516-1	Bulk	90F4132	0.49
87046-1	24AWG to 20AWG	BeCu	15u" Gold	91516-1	Bulk	90F4131	0.76
86492-9	24AWG to 20AWG	BeCu	Tin	91516-1	Cut Tape	90F5055	0.43
87046-4	24AWG to 20AWG	BeCu	Tin	91516-1	Bulk	90F4130	0.77
HIGH PRESSURE RECEPTACLE CONTACTS							
103455-1	32AWG to 27AWG	PhBz	30u" Gold	91541-1	Cut Tape	97B4604	0.53
103455-2	32AWG to 27AWG	PhBz	30u" Gold	91541-1	Bulk	92F1077	1.01
87809-1	26AWG to 22AWG	PhBz	30u" Gold	90417-1	Cut Tape	22C9410	0.48
102128-1	26AWG to 22AWG	PhBz	30u" Gold	90417-1	Bulk	90F4138	0.48
87809-2	26AWG to 22AWG	PhBz	Tin	90417-1	Cut Tape	90F4133	0.24
102128-2	26AWG to 22AWG	PhBz	Tin	90417-1	Bulk	90F4137	0.33
87309-9	24AWG to 20AWG	PhBz	30u" Gold	91516-1	Tape Cut	90F4136	0.50
1-87309-4	24AWG to 20AWG	PhBz	30u" Gold	91516-1	Bulk	90F3791	0.46
87309-8	24AWG to 20AWG	PhBz	Tin	91516-1	Cut Tape	90F4135	0.23
1-87309-3	24AWG to 20AWG	PhBz	Tin	91516-1	Bulk	90F3790	0.31
LOCKING CLIP SPRING CONTACTS							
87191-1	30AWG to 28AWG	PhBz	30u" Gold	90295-1	Bulk	52F5443	0.84
87165-1	26AWG to 22AWG	PhBz	30u" Gold	91533-1	Bulk	93F7006	0.77
5-87165-2	26AWG to 22AWG	PhBz	Tin	91533-1	Bulk	16M3978	0.66
SHORT POINT CRIMP SNAP-IN RECEPTACLE CONTACTS							
1-104481-1	32AWG to 28AWG	Cu Alloy	30u" Gold	91518-1	Cut Tape	52K3247	0.18
1-104481-3	32AWG to 28AWG	Cu Alloy	30u" Gold	91518-1	Bulk	52K3248	0.27
1-104481-2	32AWG to 28AWG	Cu Alloy	15u" Gold	91518-1	Bulk	01M6524	0.30
104480-9	26AWG to 22AWG	Cu Alloy	30u" Gold	91518-1	Pkg. 1000	66F6248	122.00
1-104480-3	26AWG to 22AWG	Cu Alloy	30u" Gold	91518-1	Cut Tape	70M8599	0.22
1-104479-0	24AWG to 20AWG	Cu Alloy	30u" Gold	91551-1	Cut Tape	52K3240	0.20
1-104479-3	24AWG to 20AWG	Cu Alloy	30u" Gold	91551-1	Bulk	52M9778	0.27
104479-7	24AWG to 20AWG	Cu Alloy	30u" Gold	91551-1	Bulk	26R1436	0.32
104479-8	24AWG to 20AWG	Cu Alloy	Tin	91551-1	Cut Tape	52K3413	0.23
1-104479-1	24AWG to 20AWG	Cu Alloy	Tin	91551-1	Bulk	16M2617	0.28

*Contact Material: PhBz = Copper-Tin-Phosphor Bronze, BeCu = Beryllium Copper. ** Mod. II Series Contact
(8079)

AMPMODU LEVEL V IDC CRIMP HOUSINGS AND COVERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Termination of Discrete Wire Sizes 26-22 AWG (0.12 - 0.3mm²)
- Termination of Jacketed Cable and Bonded Ribbon Cable (Conductors Separated)
- Stackable End-to-End and Side-to-Side on 0.125" (3.18) Centers
- Preloaded with Insulation Displacement Receptacle Contacts
- High Conductivity Copper Alloy Contacts are Duplex Plated
- Snap-on Hermaphroditic Cover

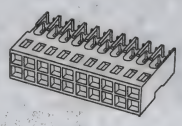


Fig. 1

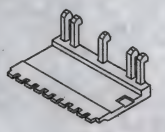


Fig. 2

AMPMODU® Level V IDC connectors provide cost-effective discrete wire connections compatible with today's telecommunication packaging techniques. Designed to mate with 0.025 (0.64) square posts on 0.125 x 0.125 (3.18 x 3.18) centers. Comprised of double-row, black, thermoplastic housings preloaded with MT type insulation displacement receptacle contacts. These phosphor bronze contacts are nickel plated with 30μ" gold in mating area, tin-lead in termination area. For modular flexibility, connectors can be stacked end-to-end or side-to-side, maintaining a 0.125 x 0.125 (3.18 x 3.18) centerline spacing. Standard profile covers, *ordered separately below*, are constructed of black, flame-retardant thermoplastic. Cover simply snaps onto housing after the connector has been terminated. Current rating: 3A. Termination resistance: 12 milliohms (max.) UL recognized, CSA certified.

22-26 AWG HOUSINGS WITH STANDARD CONTACTS — FIG. 1

Mfg. Part No.	Positions	Width (in.)	Stock No.	Price Each 1-9	Price Each 10-49
5-102398-1	6	0.3	16M3110	3.93	3.76
5-102398-2	8	0.4	52K3668	4.46	4.19
5-102398-3	10	0.5	52K3669	5.01	4.81
5-102398-8	20	1.0	52K3671	11.17	10.16
6-102398-1	26	1.3	52K3779	10.16	9.47
6-102398-5	34	1.7	16M3384	15.62	14.19
6-102398-8	40	2.0	52K3780	16.16	14.69
7-102398-8	60	3.0	16M3419	17.77	16.50
8-102398-0	64	3.2	16M3436	35.69	34.45
20-22 AWG HOUSINGS WITH STANDARD CONTACTS — FIG. 1					
5-102448-8	20	1.0	52K3672	9.44	9.18
STANDARD PROFILE COVERS — FIG. 2					
2-102396-3	50	2.5	89C1322	4.83	4.37
LOW PROFILE COVERS — NON POLARIZING					
1-102541-5	34	1.7	96B5380	1.21	1.08
2-102541-3	50	2.5	31C8836	2.49	2.22
BACK COVERS					
102536-1	6	0.3	50M2542	0.51	0.49
102536-5	14	0.7	73C2769	0.82	0.79
403378961	34	1.7	92F8411	0.58	...
405021569	40	2.0	92F6014	2.00	1.91

KEYING PLUG

Mfg. Part No.	Stock No.	Price Each 1-9	Price Each 10-24
86286-1	50F498	0.39	0.37

(75480)

AMPMODU MTE HEADERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Shrouded, Polarized/Latching Header Assemblies
- Single Row 0.100" (2.54) Centers
- Black Thermoplastic Housing
- Rated UL94V-0

Straight or right-angle copper alloy contacts plated 15μ" gold on mating area, tin-lead on termination area, with full nickel underplate.

VERTICAL — SQUARE 0.025"(0.64) POSTS, SHROUDED POLARIZED/LATCHING w/BOARD RETENTION

Mfg. Part No.	Positions	Plating	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99	Price Each 100-249
5-103669-1	2	Tin	40P9439	0.68	0.62	0.56	0.53
5-103669-2	3	Tin	40P9440	1.10	0.98	0.88	0.84
5-103669-3	4	Tin	82K8933	1.00	0.97	0.93	0.89
5-103669-4	5	Tin	40P9441	1.20	1.11	1.01	0.96
5-103669-7	8	Tin	73K0685	1.29	1.23	1.17	1.12
5-103669-9	10	Tin	82K7981	1.46	1.39	1.32	1.26
5-104362-1	2	15u" Gold	87K2243	0.87	0.77	0.69	0.66
5-104362-2	3	15u" Gold	87K2244	1.33	1.18	1.06	1.02
5-104362-3	4	15u" Gold	87K0735	1.29	1.24	1.17	1.11
5-104362-4	5	15u" Gold	87K2245	2.57	2.43	2.30	...
5-104362-5	6	15u" Gold	87K2246	1.98	1.80	1.61	1.54
5-104362-8	9	15u" Gold	16M3128	2.43	2.21	1.99	1.90
6-104362-0	11	15u" Gold	16M3388	2.32	2.11	1.89	1.81
6-104909-5	16	15u" Gold	40P9904	2.58	2.35	2.34	2.23
103908-1	2	30u" Gold	66F3006	0.68	0.63	0.58	0.56
103908-2	3	30u" Gold	52F5866	0.99	0.95	0.90	0.86
103908-3	4	30u" Gold	66F3352	1.12	1.07	1.02	0.98
103908-5	6	30u" Gold	83F4545	1.39	1.33	1.26	1.20

CONTINUED

AMPMODU MTE HEADERS (CONT.)

Mfg. Part No.	Positions	Plating	Stock No.	Price Each 1-9	10-49	50-99	100-249
103908-7	8	30u" Gold	66F3351	1.55	1.54	1.39	1.35
● 5-103908-1	2	30u" Gold	16M4742	1.09	0.97	0.87	0.83
● 5-103908-2	3	30u" Gold	16M4740	1.22	1.17	1.11	1.06
● 5-103908-3	4	30u" Gold	32M7675	1.29	1.23	1.16	1.12
● 5-103908-4	5	30u" Gold	16M4741	1.32	1.26	1.19	1.14
● 5-103908-5	6	30u" Gold	30M0336	0.96	0.91	0.87	0.83
● 5-103908-6	7	30u" Gold	33M7428	1.57	1.50	1.42	1.36
● 5-103908-7	8	30u" Gold	21M8827	1.70	1.62	1.54	1.47
● 5-103908-9	10	30u" Gold	32M7667	2.18	1.98	1.78	1.70
● 6-103908-1	12	30u" Gold	32M7672	2.31	2.20	2.09	1.99
VERTICAL — SQUARE 0.025"(0.64) POSTS, SHROUDED POLARIZED/LATCHING							
103639-3	4	Tin	66F1556	1.07	0.95	0.85	0.82
● 5-103639-1	2	Tin	28M8433	0.74	0.67	0.59	0.57
● 5-103639-2	3	Tin	16M4277	0.94	0.90	0.85	0.81
● 5-103639-3	4	Tin	16M4279	1.16	1.02	0.92	0.88
● 5-103639-4	5	Tin	40P9434	1.15	1.10	1.04	1.00
● 5-103639-9	10	Tin	40P9438	1.14	1.01	0.91	0.87
● 5-104363-1	2	15u" Gold	69K6456	0.80	0.70	0.64	0.61
● 5-104363-2	3	15u" Gold	16M3130	1.13	1.09	1.04	0.99
● 5-104363-3	4	15u" Gold	14M8666	1.24	1.18	1.12	1.07
● 5-104363-4	5	15u" Gold	16M3131	1.35	1.29	1.23	1.17
● 5-104363-5	6	15u" Gold	16M3132	1.54	1.40	1.26	1.20
● 5-104363-6	7	15u" Gold	16M3133	1.50	1.44	1.38	1.32
● 5-104363-7	8	15u" Gold	16M3134	1.60	1.54	1.48	1.42
● 5-104363-9	10	15u" Gold	16M3136	2.08	1.89	...	...
● 6-104363-0	11	15u" Gold	16M3389	2.21	2.01	1.81	1.72
1-103638-3	14	15u" Gold	91B6043	2.06	1.86	1.83	1.75
● 6-104910-5	16	15u" Gold	19R3937	2.26	2.20	2.13	2.04
● 6-104910-9	20	15u" Gold	40P9905	3.00	2.90	2.79	2.66
103735-1	2	30u" Gold	66F1534	1.00	0.88	0.80	0.76
● 5-103735-1	2	30u" Gold	48M4317	0.70	0.67	0.64	0.61
● 5-103735-2	3	30u" Gold	48M4324	1.09	1.04	0.99	0.95
● 5-103735-3	4	30u" Gold	21M8823	1.29	1.24	1.17	1.12
● 5-103735-4	5	30u" Gold	10M8617	1.52	1.38	1.24	1.18
● 5-103735-5	6	30u" Gold	40P9445	1.51	1.43	1.36	1.30
● 5-103735-6	7	30u" Gold	18R7863	1.50	1.42	1.35	1.29
● 5-103735-9	10	30u" Gold	40P9446	2.28	2.17	2.05	1.96
● 6-103735-1	12	30u" Gold	21M8822	2.17	2.07	1.96	1.87
● 6-103735-3	14	30u" Gold	40P9899	2.62	2.46	2.30	2.19
VERTICAL — SQUARE 0.025"(0.64) POSTS, SHROUDED LATCHING w/BOARD RETENTION & ORIENTATION							
● 5-104450-1	2	Tin	16M3137	0.86	0.82	0.78	0.75
● 5-104450-3	4	Tin	16M3139	1.95	1.78	1.60	1.53
● 5-104450-4	5	Tin	16M3140	2.02	1.84	1.65	1.58
● 5-104450-5	6	Tin	16M3141	1.81	1.65	1.48	1.41
VERTICAL — SQUARE 0.025"(0.64) POSTS, POLARIZED/LATCHING, SURFACE MOUNT							
● 5-1375549-2	3	Tin	16M3144	3.11	2.80	2.48	2.22
RIGHT-ANGLE — SQUARE 0.025"(0.64) POSTS w/BOARD RETENTION							
● 5-103673-1	2	15u" Gold	87K2241	0.84	0.73	0.66	0.63
● 5-103673-2	3	15u" Gold	12M6759	1.22	1.07	0.97	0.92
● 5-103673-3	4	15u" Gold	87K2242	1.07	1.02	0.97	0.93
● 5-103673-4	5	15u" Gold	96K3405	1.44	1.31	1.18	1.13
● 5-103673-5	6	15u" Gold	16M3123	1.40	1.24	1.12	1.07
● 5-103673-6	7	15u" Gold	16M3124	2.08	1.86	1.66	1.48
● 5-103673-7	8	15u" Gold	16M3125	1.36	1.30	1.23	1.17
● 5-103673-9	10	15u" Gold	16M3126	1.64	1.56	1.48	1.41
● 6-103673-0	11	15u" Gold	16M3386	1.84	...	...	...
● 6-103673-1	12	15u" Gold	16M3387	2.51	2.42	2.11	2.01
RIGHT ANGLE — SQUARE 0.025"(0.64) POSTS, SHROUDED LATCHING							
● 5-103634-1	2	Tin	40P9431	0.79	0.75	0.60	0.57
● 5-103634-2	3	Tin	08R0767	1.08	0.95	0.86	0.82
● 5-103634-3	4	Tin	54M3238	1.07	1.02	0.97	0.93
● 5-103634-4	5	Tin	40P9432	1.12	1.07	1.02	0.97
● 5-103634-5	6	Tin	18R7850	1.33	1.19	1.16	1.11
● 5-103634-7	8	Tin	31M9107	1.22	1.17	1.11	1.06
● 5-103635-1	2	15u" Gold	16M3117	0.87	0.76	0.69	0.66
● 5-103635-2	3	15u" Gold	99K5359	0.82	0.76	0.73	0.71
● 5-103635-3	4	15u" Gold	03M2485	1.44	1.32	1.18	1.13
● 5-103635-4	5	15u" Gold	16M3118	1.49	1.31	1.18	1.13
● 5-103635-6	7	15u" Gold	16M3120	1.48	1.42	1.35	1.29
● 5-103635-9	10	15u" Gold	16M3122	1.92	1.75	1.57	1.50
● 6-103635-0	11	15u" Gold	16M3385	1.89	1.82	1.74	1.66
● 6-103635-1	12	15u" Gold	31M9132	2.25	2.04	1.83	1.75

➤ CONTINUED ➤

AMPMODU MTE HEADERS (CONT.)

Mfg. Part No.	Positions	Plating	Stock No.	Price Each 1-9	10-49	50-99	100-249
RIGHT ANGLE — SQUARE 0.025"(0.64) POSTS, SHROUDED LATCHING							
103906-4	5	30u" Gold	85C1554	1.38	1.26	1.13	1.08
● 5-104935-5	2	30u" Gold	40P9492	1.42	1.25	1.13	1.08
● 5-104935-3	3	30u" Gold	40P9490	1.26	1.20	1.14	1.09
● 5-104935-1	4	30u" Gold	40P9488	1.37	1.31	1.24	1.18
● 5-104935-6	5	30u" Gold	02M4950	1.30	1.24	1.17	1.12
● 5-104935-7	6	30u" Gold	18R8204	1.79	1.63	1.46	1.39
● 5-104935-2	8	30u" Gold	40P9489	1.50	1.43	1.36	1.30
RIGHT ANGLE — SQUARE 0.025"(0.64) POSTS, SHROUDED LATCHING w/HOLD DOWN							
● 5-103672-2	3	Tin	40P9444	1.13	1.00	0.90	0.86
● 5-103672-3	4	Tin	34P1315	1.08	0.96	0.86	0.83
● 5-103673-8	9	15u" Gold	18R7854	1.71	1.63	1.54	1.47
103904-9	10	30u" Gold	10H6539	1.89	1.72	1.54	1.47
● 5-103904-1	2	30u" Gold	40P9447	1.11	0.99	0.89	0.85
● 5-103904-2	3	30u" Gold	40P9448	1.27	1.13	1.02	0.97
● 5-103904-3	4	30u" Gold	40P9449	1.43	1.27	1.14	1.09
● 5-103904-5	6	30u" Gold	40P9451	1.87	1.78	1.68	1.61
RIGHT ANGLE — SQUARE 0.025"(0.64) POSTS, POLARIZED/LATCHING w/HOLD DOWN							
● 5-104361-1	2	15u" Gold	89M0115	1.31	1.15	1.04	1.00
● 5-104361-2	3	15u" Gold	40P9473	1.70	1.55	1.39	1.33
● 5-104361-3	4	15u" Gold	40P9474	1.03	1.01	0.91	0.82
● 5-104361-5	6	15u" Gold	18R8076	1.58	1.49	1.34	1.28
RIGHT ANGLE — SQUARE 0.025"(0.64) POSTS, POLARIZED/LATCHING, SURFACE MOUNT							
● 5-147324-2	3	Tin	16M3157	6.11	5.51	4.86	4.36
● 5-147324-3	4	Tin	16M3158	6.23	5.62	4.96	4.45
● 5-147278-2	3	15u" Gold	16M3153	4.20	4.04	3.70	3.53

(84203)

AMPMODU MTE RECEPTACLE AND PIN ASSEMBLIES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Plain, Guide Rib, or Polarized/Latching Header Assemblies
- Single Row 0.100" (2.54) Centers
- Black Thermoplastic Housing
- Rated UL94V-0

Unloaded housings accept snap-in wire crimp contacts *order separately, below.*

Mfg. Part No.	No. of Positions	Contact Plating	Pitch Spacing (mm)	Stock No.	Price Each 1-49
RECEPTACLE HOUSING, PLAIN, SINGLE ROW - STRIP FORM - IDC 26-22 AWG					
● 5-103976-1	2	30u" Gold	2.54	18R7981	0.89
RECEPTACLE HOUSING, POLARIZED/LATCHING, SINGLE ROW - STRIP FORM - IDC 26-22 AWG					
● 5-103956-1	2	Tin	2.54	40P9461	0.84
● 5-103956-4	5	Tin	2.54	31P7384	1.43
● 5-103956-5	6	Tin	2.54	40P9462	1.24
● 5-103956-7	8	Tin	2.54	82K7986	2.30
103957-1	2	15u" Gold	2.54	90F5063	0.88
● 5-103957-1	2	15u" Gold	2.54	80K4744	0.78
● 1-103957-4	4	15u" Gold	2.54	52K3232	1.26
● 5-103957-3	4	15u" Gold	2.54	16M3943	0.71
● 1-103957-5	5	15u" Gold	2.54	52K3233	1.10
● 5-103957-4	5	15u" Gold	2.54	40P9463	1.48
● 5-103957-5	6	15u" Gold	2.54	02M2082	1.79
● 5-103957-6	7	15u" Gold	2.54	18R7944	2.22
103957-7	8	15u" Gold	2.54	27C4534	2.60
● 5-103957-7	8	15u" Gold	2.54	10M6026	2.16
103957-8	9	15u" Gold	2.54	22C5900	1.70
● 5-103958-1	2	30u" Gold	2.54	13P0210	0.63
● 5-103958-2	3	30u" Gold	2.54	73K1751	1.22
● 5-103958-3	4	30u" Gold	2.54	87K2349	1.48
● 5-103958-4	5	30u" Gold	2.54	42M3521	1.88
● 5-103958-5	6	30u" Gold	2.54	82K6002	2.08
● 5-103958-7	8	30u" Gold	2.54	40P9465	2.62
PIN HOUSING, SHROUDED, POLARIZED/LATCHING, SINGLE ROW - STRIP FORM - IDC 26-22 AWG					
● 5-103944-1	2	Tin	2.54	16M3941	1.36
● 5-103944-2	3	Tin	2.54	40P9453	1.38
● 5-103944-3	4	Tin	2.54	40P9454	1.62
● 5-103944-4	5	Tin	2.54	40P9455	1.58
● 5-103945-2	3	15u" Gold	2.54	84K9421	1.56
● 5-103945-3	4	15u" Gold	2.54	40P9456	1.68
● 5-103945-4	5	15u" Gold	2.54	40P9457	1.65
● 5-103945-5	6	15u" Gold	2.54	40P9458	2.14
103946-1	2	30u" Gold	2.54	66F2865	2.00
● 5-103946-1	2	30u" Gold	2.54	01N5029	1.39

➤ CONTINUED ➤

AMPMODU MTE RECEPTACLE AND PIN ASSEMBLIES (CONT.)

PIN HOUSING, SHROUDED, POLARIZED/LATCHING, SINGLE ROW - STRIP FORM - IDC 26-22 AWG

Mfg. Part No.	No. of Positions	Contact Plating	Pitch Spacing (mm)	Stock No.	Price Each 1-49
5-103946-2	3	30u" Gold	2.54	69K7097	1.88
5-103946-3	4	30u" Gold	2.54	40P9459	1.76
5-103946-4	5	30u" Gold	2.54	39M4251	1.76

RECEPTACLE HOUSING, PLAIN - SINGLE ROW - WITHOUT CONTACTS

Mfg. Part No.	No. of Positions	Pitch Spacing (mm)	Stock No.	Price Each 1-9
103688-4	5	2.54	92F1177	0.41
RECEPTACLE HOUSING, POLARIZED/LATCHING - SINGLE ROW - WITHOUT CONTACTS				
104257-1	2	2.54	92F1226	0.37
104257-2	3	2.54	92F1227	0.48
104257-3	4	2.54	92F1228	0.54
104257-4	5	2.54	92F1211	0.55
104257-5	6	2.54	95F1891	0.63
104257-7	8	2.54	92F1213	0.76
104257-9	10	2.54	92F1215	1.31
1-104257-1	12	2.54	92F1217	1.38
1-104257-3	14	2.54	94B4725	1.27
1-104257-4	15	2.54	91C5438	1.76
1-104257-5	16	2.54	52F6123	1.86
1-104257-9	20	2.54	52F6368	1.75
RECEPTACLE HOUSING, GUIDE RIBS - SINGLE ROW - WITHOUT CONTACTS				
103648-1	2	2.54	01C2200	1.11
103648-3	4	2.54	27C3421	0.65
103648-4	5	2.54	84C9749	0.99
103648-5	6	2.54	25C6554	1.14
PIN HOUSING, SHROUDED, POLARIZED/LATCHING - SINGLE ROW - WITHOUT CONTACTS				
103653-1	2	2.54	98F9724	0.61
103653-2	3	2.54	92F1218	0.67
103653-3	4	2.54	92F1219	0.85
103653-4	5	2.54	92F1264	0.69
103653-5	6	2.54	92F1265	1.12
103653-7	8	2.54	92F1267	1.31
1-103653-3	14	2.54	91C5441	2.05
PIN HOUSING, GUIDE RIBS - SINGLE ROW - WITHOUT CONTACTS				
104503-2	3	2.54	10H6826	1.58
104503-3	4	2.54	81C9135	1.45
104503-4	5	2.54	55C4551	2.28

SOCKET CONTACTS - SOLD INDIVIDUALLY

Mfg. Part No.	AWG	Contact Finish	Stock No.	Price Each 1-9
1-104480-4	26AWG to 22AWG	Tin	52K3243	0.22
SOCKET CONTACTS - PACKAGE OF 200				
166722-1	26AWG to 22AWG	30u" Gold	88F6425	71.20
SOCKET CONTACTS - PACKAGE OF 1000				
1-104480-5	26AWG to 22AWG	15u" Gold	69K7691	103.63
1-104480-6	26AWG to 22AWG	30u" Gold	69K7692	99.00
PIN CONTACTS - SOLD INDIVIDUALLY				
5-104506-5	32AWG to 28AWG	15u" Gold	40P9476	0.83
1-104505-3	26AWG to 22AWG	30u" Gold	31K8284	0.91
1-104505-1	26AWG to 22AWG	15u" Gold	52K3250	0.82
5-104505-4	26AWG to 22AWG	15u" Gold	73K6469	0.47
5-104505-5	26AWG to 22AWG	15u" Gold	78K6558	0.50
104505-9	26AWG to 22AWG	Tin	52K3415	0.79

TOOLS/ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price 1-4
843477-1	Extraction/lance Reset Tool	52F5154	45.03

(84553)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

AMP MTA 0.100" (2.45) IDC RECEPTACLES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Locking ramp
- 90° cable exit angle
- Phosphor bronze contacts
- Nylon housing, flammability rated UL94V-2
- Voltage rating: 250VAC

Perfect for power supplies and gaming applications. UL recognized, file no. E28476; CSA certified, file no. LR7189.

CLOSED-END WITH LOCK AND WITHOUT POLARIZING TABS, TIN-PLATED

Mfg. Part No.	Circuits	AWG	Stock No.	Price Each 1-9
3-640440-2	2	22 Red	52K4337	0.16
3-640440-3	3		52K4338	0.25
3-640440-4	4		45J3195	0.27
3-640440-5	5		52K4339	0.41
3-640440-6	6		52K4340	0.45
3-640440-7	7		52K4341	0.50
3-640440-8	8		52K4342	0.50
3-640440-9	9		52K3546	1.49
4-640440-0	10		52K4403	0.73
4-640440-1	11		18R4613	1.73
4-640440-2	12		52K4404	0.85
4-640440-3	13		52K3651	2.08
4-640440-4	14		52K3652	2.32
4-640440-5	15		52K3653	1.40
3-640441-2	2	24 White	52K4343	0.18
3-640441-3	3		52K4344	0.24
3-640441-4	4		52K4345	0.19
3-640441-5	5		52K4346	0.44
3-640441-6	6		52K4347	0.46
3-640441-7	7		26K2161	0.48
3-640441-8	8		52K4348	0.56
4-640441-0	10		52K4405	0.75
4-640441-2	12		16M3043	0.89
4-640441-3	13		18R4615	2.15
4-640441-4	14		52K3656	2.10
4-640441-5	15		40P9319	1.45
3-640442-2	2	26 Blue	52K4349	0.18
3-640442-3	3		52K4350	0.29
3-640442-4	4		52K4351	0.36
3-640442-5	5		52K4352	0.41
3-640442-6	6		52K4353	0.43
3-640442-8	8		52K4354	0.61
4-640442-2	12		16M3914	0.75
4-640442-4	14		61M4718	2.10
3-640443-2	2	28 Green	52K4355	0.18
3-640443-3	3		52K4356	0.31
3-640443-4	4		52K4357	0.35
3-640443-5	5		52K4358	0.46
3-640443-6	6		52K4359	0.46
3-640443-7	7		30M2449	0.51
3-640443-8	8		87K2226	0.56
3-640443-9	9		18R0775	1.53
4-640443-0	10		68K0601	0.73
CLOSED-END WITH LOCK AND WITHOUT POLARIZING TABS, 30u" GOLD-PLATED				
3-644042-3	3	22 Red	40P9129	1.05
CLOSED-END WITH LOCK AND POLARIZING TABS, TIN-PLATED				
3-643813-2	2	22 Red	52K3585	0.18
3-643813-4	4		81H0854	0.35
3-643813-5	5		52K4369	0.44
3-643813-6	6		52K3586	1.18
3-643813-7	7		52K4370	0.49
3-643813-8	8		52K4371	0.63
4-643813-0	10		52K4406	0.70
4-643813-2	12		52K4407	0.89
4-643813-5	15		16M3049	1.23

CONTINUED

AMP MTA 0.100″ (2.45) IDC RECEPTACLES (CONT.)

CLOSED-END WITH LOCK AND POLARIZING TABS, TIN-PLATED

Mfg. Part No.	Circuits	AWG	Stock No.	Price Each 1-9
● 3-643814-2	2	24 White	52K4372	0.19
● 3-643814-3	3		52K3587	0.30
● 3-643814-4	4		52K4373	0.38
● 3-643814-5	5		52K4374	0.46
● 3-643814-6	6		52K4375	0.41
● 3-643814-7	7		16M2930	0.53
● 3-643814-8	8		87K2228	0.54
● 4-643814-0	10		87K2236	0.76
● 4-643814-2	12		16M3050	0.75
● 4-643814-5	15		16M3051	1.28
● 3-643815-2	2	26 Blue	16M2931	0.19
● 3-643815-3	3		79K4558	0.21
● 3-643815-4	4		52K4376	0.36
● 3-643815-5	5		52K4377	0.43
● 3-643815-6	6		16M2932	0.44
● 3-643815-8	8		16M2934	0.58
● 4-643815-0	10		12M6388	0.76
● 3-643816-2	2	28 Green	57K1454	0.19
● 3-643816-3	3		16M2935	0.27
● 3-643816-4	4		16M2936	0.35
● 3-643816-5	5		16M2937	0.44
● 3-643816-6	6		52K3588	0.46
● 3-643816-8	8		16M2938	0.55
● 4-643816-2	12		16M3055	0.48
● 4-643814-6	16		40P9326	2.94
FEED-THRU WITH LOCK AND WITHOUT POLARIZING TABS, TIN-PLATED				
● 3-640620-2	2	22 Red	40P9110	0.29
● 3-640620-3	3		40P9111	0.39
● 3-640620-4	4		52K4363	0.36
● 3-640620-5	5		71P5406	0.44
● 3-640620-6	6		17M9098	0.44
● 3-640620-7	7		18R0944	0.51
● 3-640620-8	8		15N4218	0.58
● 4-640620-0	10		18R4864	0.68
● 4-640620-2	12		18R4866	0.75
● 3-640621-2	2	24 White	02P5554	0.28
● 3-640621-4	4		18R0946	0.36
● 3-640621-5	5		18R0947	0.46
● 3-640621-8	8		40P9112	0.58
● 3-640622-2	2	26 Blue	18R0951	0.27
FEED-THRU WITH LOCK AND POLARIZING TABS, TIN-PLATED				
● 3-644540-2	2	22 Red	16M2999	0.27
● 3-644540-3	3		16M3000	0.39
● 3-644540-4	4		87K2232	0.38
● 3-644540-5	5		16M3001	0.41
● 3-644540-6	6		16M3002	0.44
● 3-644540-7	7		16M3003	0.51
● 3-644540-8	8		16M3004	0.58
● 4-644540-2	12		16M3083	0.75
● 3-644563-2	2	24 White	16M3005	0.27
● 3-644563-3	3		16M3006	0.36
● 3-644563-4	4		16M3007	0.32
● 3-644563-5	5		16M3008	0.44
● 3-644563-6	6		16M3009	0.44
● 4-644563-2	12		16M3086	0.78
● 3-644564-2	2	26 Blue	88K1637	0.27
● 3-644564-4	4		14M8506	0.38
● 3-644564-5	5		05M6215	0.46
● 3-644564-6	6		16M3013	0.35
● 3-644565-2	2	28 Green	16M3014	0.26
● 3-644565-4	4		12M6185	0.37
● 3-644565-6	6		12M6184	0.45

(32987)

AMP MTA 0.100″ (2.54) POST HEADERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- PC Board Mount
- Polyester Housing, Flammability Rated UL94V-0
- Tin Plated Contact Mating Area
- Voltage Rating: 250VAC

Perfect for power supplies and gaming applications.

SQUARE POST HEADERS — 0.64″ (0.025) POST SIZE, 0.140″ (3.56) TERMINATION POST

STRAIGHT - FLAT HEADERS

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9
● 640452-2	2	51F1397	0.40
● 640452-3	3	90F4270	0.39
● 640452-4	4	51F1398	0.37
● 640452-5	5	51F1399	0.54
● 640452-6	6	51F1400	0.71
● 640452-7	7	51F1542	0.80
● 640452-8	8	51F1543	0.81
● 640452-9	9	51F1544	0.86
● 1-640452-0	10	51F1582	0.76
RIGHT ANGLE HEADERS			
● 640453-5	5	22C6367	0.65
● 640453-6	6	90F4271	0.66
● 640453-7	7	16H2615	0.76
● 640453-8	8	90F4272	0.86
● 1-640453-2	12	52F6371	1.29
STRAIGHT - POLARIZED HEADERS			
● 640454-2	2	90F4274	0.11
● 640454-3	3	90F4275	0.15
● 640454-4	4	90F4276	0.18
● 640454-5	5	90F4277	0.23
● 640454-6	6	90F4278	0.25
● 640454-7	7	90F4279	0.36
● 640454-8	8	90F4280	0.36
● 640454-9	9	66F1594	0.52
● 1-640454-0	10	90F4281	0.42
● 1-640454-2	12	90F4282	0.77
● 1-640454-3	13	48F1933	0.39
● 1-640454-4	14	10H1613	0.74
STRAIGHT - POLARIZED HEADERS - 30u″ GOLD PLATED			
● 3-641213-8	8	18R1328	1.49
RIGHT ANGLE - POLARIZED HEADERS			
● 640455-2	2	98F1853	0.10
● 640455-4	4	51F3876	0.17
● 640455-5	5	90F4284	0.18
● 640455-6	6	51F3877	0.21
● 640455-8	8	07H9276	0.23
● 1-640455-0	10	34C3611	0.37

STRAIGHT - WITH FRICTION LOCK

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9
● 640456-2	2	90F4250	0.10
● 640456-3	3	90F4251	0.17
● 640456-4	4	90F5641	0.20
● 640456-5	5	90F5643	0.21
● 640456-6	6	90F5645	0.30
● 640456-7	7	90F5629	0.36
● 640456-8	8	90F5631	0.33
● 640456-9	9	25H7940	0.57
● 1-640456-0	10	90F5635	0.37
● 1-640456-1	11	90F5390	0.58
● 1-640456-2	12	90F5392	0.63
● 1-640456-3	13	90F5393	0.83
● 1-640456-4	14	90F5394	0.78
● 1-640456-6	16	90F5397	1.37
● 2-640456-4	24	90F3775	1.71
RIGHT ANGLE - WITH FRICTION LOCK			
● 640457-2	2	90F5638	0.10
● 640457-3	3	90F5640	0.18
● 640457-4	4	90F5642	0.18
● 640457-5	5	90F5644	0.42
● 640457-6	6	90F5628	0.36

CONTINUED

AMP MTA 0.100″ (2.54) POST HEADERS (CONT.)

RIGHT ANGLE - WITH FRICTION LOCK

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9
● 640457-8	8	90F5632	0.45
● 1-640457-0	10	90F5636	0.51
● 1-640457-2	12	51F1545	0.59

SQUARE POST HEADERS — 0.64″ (0.025) POST SIZE, 0.110″ (2.79) TERMINATION POST

NARROW FLAT STRAIGHT HEADERS - WITHOUT RETENTIVE LEGS

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9
● 3-644456-2	2	36K8023	0.21
● 3-644456-3	3	52K3600	0.25
● 3-644456-4	4	87K2231	0.31
● 3-644456-5	5	16M2965	0.39
● 3-644456-6	6	16M2966	0.44
● 3-644456-7	7	16M2967	0.48
● 3-644456-8	8	16M2968	0.50
● 4-644456-1	11	16M3069	0.76
● 4-644456-2	12	16M3070	0.88
● 1-640456-5	15	14C7570	1.14

NARROW FLAT STRAIGHT HEADERS - WITH RETENTIVE LEGS

● 3-644695-2	2	51P3043	0.30
● 3-644695-3	3	18R2262	0.46
● 3-644695-6	6	67M9055	0.64

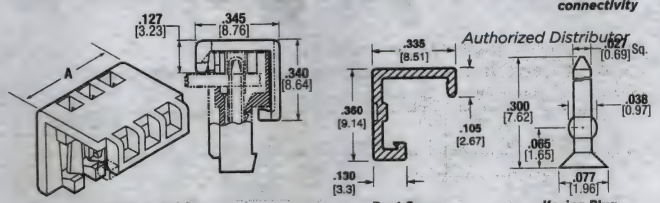
(32989)

AMP MTA 0.100″ (2.54) CONNECTOR ACCESSORIES

RoHS Compliant Available

TE connectivity

Authorized Distributor



Strain Relief Cover — Dust Cover — Keying Plug

- Closed End Cover
- Nylon Housing, Flammability Rated UL94V-2

Removal of contact not necessary when using keying plugs; *order separately below.*

CLOSED-END COVERS

Circuits	Dim. A	Strain Relief Covers Mfg. Part No.	Strain Relief Covers Stock No.	Price Each 1-9	Dust Covers Mfg. Part No.	Dust Covers Stock No.	Price Each 1-9
2	0.2″ (5.08)	● 643075-2	90F4257	0.40	● 640550-2	25C3146	0.10
3	0.3″ (7.62)	● 643075-3	90F4258	0.78	● 640550-3	90F4268	0.20
4	0.4″ (10.16)	● 643075-4	90F4259	0.44	● 640550-4	90F4269	0.15
5	0.5″ (12.70)	● 643075-5	90F4260	0.79	● 640550-5	90F5096	0.23
6	0.6″ (15.24)	● 643075-6	90F4261	0.42	● 640550-6	90F5097	0.24
7	0.7″ (17.78)	● 643075-7	90F4262	0.74	● 640550-7	90F5098	0.31
8	0.8″ (20.32)	● 643075-8	90F4263	0.74	● 640550-8	90F5099	0.33
10	1.0″ (25.40)	● 1-643075-0	90F4264	0.75	● 1-640550-0	90F5101	0.37
12	1.2″ (30.48)	● 1-643075-2	90F4265	0.79	● 1-640550-2	90F5102	0.45
14	1.4″ (35.56)	● 1-643075-4	66F3287	0.44	● 1-640550-4	54H3790	0.38
16	1.6″ (40.64)	● 1-643075-6	66F1589	0.86	...	...	...

FEED-THRU COVERS

3	0.3″ (7.62)	● 643077-3	52F6262	0.42	...	...	...
15	1.5″ (38.10)	● 1-643077-5	50H5536	0.86	...	...	...

KEYING PLUG

Mnf. Part No.	For Use With	Type	Stock No.	Price Each 1-9	Price Each 10-99
● 641994-1	MTA-100 Connectors	Flush	90F4267	0.13	0.12

(32990)

AMP MTA-100 TOOLING

TE connectivity

Authorized Distributor

Mfg. Part No.	Description	Stock No.	Price 1-4
58074-1	Pistol-Grip Hand Tool for Metal and All-Plastic Shell Connectors	50F783	104.74
58246-1	Crimp Die for MTA-100 Receptacles (Use with Tool **Mfg. Part No. 58074-1**, Above)	50F785	225.76
59803-1	MTA-100 T-Handle MaintenanceTool	98F2821	31.07

(32968)

AMP ECONOMY POWER (EP) WIRE-TO-BOARD CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Wire-to-Board Secondary Power Circuit Applications
- Vertical, Through-Hole Headers
- Vertical Headers are End-to-End Stackable to Conserve PCB Space

RECEPTACLE CONTACTS

Mfg. Part No.	AWG	Wire Insulation Diameter	Stock No.	Price Each 1-99	Price Each 100-499	Price Each 500-999
● 1123721-1	18-22	.067- .118	86C8232	0.23	0.15	0.10

RECEPTACLE PLUG HOUSINGS

Mfg. Part No.	Contacts	Dimensions	Stock No.	Price Each 1-9
● 1-1123722-2	2	0.310 (7.86)	07H9595	0.16
● 1-1123722-4	4	0.621 (15.78)	09H1717	0.27
● 1-1123722-5	5	0.777 (19.74)	07H9581	0.32
● 1-1123722-6	6	0.933 (23.70)	09H1738	0.37
● 1-1123722-7	7	1.089 (27.66)	07H9586	0.44
● 1-1123722-8	8	1.245 (31.62)	09H1739	0.40

VERTICAL POST HEADERS

Mfg. Part No.	Contacts	Dimensions	Stock No.	Price Each 1-9
● 1-1123723-2	2	0.310 (7.86)	07H9598	0.41
● 1-1123723-3	3	0.310 (7.86)	07H9577	0.40
● 1-1123723-4	4	0.621 (15.78)	36K3734	0.48
● 1-1123723-5	5	0.777 (19.74)	36K3735	0.76
● 1-1123723-8	8	1.245 (31.62)	36K3738	0.97

VERTICAL POST HEADERS - TUBE PACK

● 1-1318300-2	2	0.310 (7.86)	55M3461	0.45
● 1-1318300-4	4	0.621 (15.78)	27M3953	0.68

VERTICAL POST HEADERS - 0.312 [7.92] CENTERLINE - TUBE PACK

● 1-1318301-2	2	0.465 [11.82]	55M0452	0.47

(80533)

Custom Cable Assembiles to your specs to mate with the complete line of connectors!
Call 1.800.463.9275

(212562)

PC BOARD HEADERS & SOCKETS

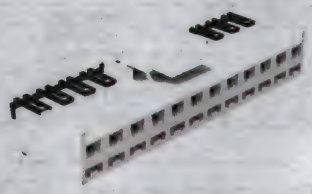
AMP ECONOMY POWER II (EP II) WIRE-TO-BOARD CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- 3.96 mm (0.156") centerline
- Lance-less terminal
- Voltage up to 600 VAC
- Current up to 10 A
- Housing locking latch
- Polarization tabs
- Asymmetrical terminals can only be loaded one way
- Breakaway style Terminal Position Assurance (TPA)
- Probe tip windows for continuity testing
- 2-12 positions for discrete wires AWG 22-18



Economy Power II connectors offer two levels of mechanical and electrical reliability: A true locking latch prevents the plug housing and post header from vibrating apart, while a Terminal Position Assurance (TPA) device ensures a contact is fully seated within a housing and helps eliminate terminal back-out concerns. A visual aid confirms that the contact is home plus it provides easy access to a probe tip for continuity testing. Economy Power II connectors are used with 3.96mm (0.156) Economy Power straight headers *on page 759*

3

RECEPTACLE CONTACTS

Mfg. Part No.	AWG	Contact Plating	Stock No.	Price Each 1-9	Price Each 10-24
● 1744144-1	22AWG to 18AWG	Tin	61T4486	0.21	0.20

3.96mm (0.156") ECONOMY POWER LOW-PROFILE PLUG HOUSINGS

Mfg. Part No.	Positions	Stock No.	Price Each 1-9
● 2132813-2	2	61T4494	0.20
● 2132781-3	3	61T4487	0.23
● 2132781-4	4	61T4488	0.27
● 2132781-5	5	61T4489	0.33
● 2132781-6	6	61T4490	0.40
● 2132781-7	7	61T4491	0.39
● 2132781-8	8	61T4492	0.43
● 2132781-9	9	61T4493	0.52
● 1-2132781-0	10	61T4482	0.59
● 1-2132781-1	11	61T4483	0.70
● 1-2132781-2	12	61T4484	1.02

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
● 1-2132782-2	Terminal Position Assurance (TPA) Device	61T4485	0.72	0.67

(197659)

ECONOMY POWER (EP) 2.5MM PITCH WIRE-TO-BOARD CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features

- 2.5mm (0.098") Centerline Pitch
- 2-20 positions for discrete wires AWG 26-22
- Voltage up to 250 VAC
- Current up to 4.5 A
- Housing locking latch
- Polarization tabs
- Asymmetrical terminals can only be loaded one way
- Low insertion force terminals
- Anti-Fretting contact lubricant

Economy Power 2.5 (EP 2.5) is a new type of single-row crimp connector system. EP 2.5 is comprised of new plug housings, contacts, and headers, based on a 2.5 mm centerline (0.098" pitch), which makes it a very compact solution. The newly designed contact retainers provide Terminal Position Assurance (TPA). The inserted TPA retainers help prevent the contacts from backing out in applications with random vibration and help ensure full contact insertion within the housing.

RECEPTACLE TPA HOUSINGS WITH LATCH & TABS

Mnf. Part No.	No. of Pos.	Stock No.	Price Each 1-9	Price Each 10-24
● 1969442-4	4	27W9953	0.14	0.13
● 1969442-5	5	27W9954	0.17	0.17
● 1969442-6	6	27W9955	0.17	0.17
● 1969442-7	7	27W9956	0.22	0.20
● 1969442-8	8	27W9957	0.22	0.20
● 1969442-9	9	27W9958	0.21	0.20
● 1-1969442-0	10	27W9951	0.23	0.22
SHROUDED HEADERS				
● 2132230-4	4	73R7925	0.27	0.26
● 2132230-5	5	73R7926	0.30	0.27
● 2132230-6	6	73R7927	0.31	0.28
● 2132230-7	7	73R7928	0.39	0.36
● 2132230-8	8	73R7929	0.43	0.40
● 2132230-9	9	73R7930	0.46	0.42
● 1-2132230-0	10	73R7889	0.58	0.53
TERMINAL POSITION ASSURANCE RETAINERS				
● 1969443-4	4	27W9959	0.18	0.17
● 1969443-5	5	27W9960	0.18	0.18
● 1969443-6	6	27W9961	0.16	0.16

➤ CONTINUED ➤

ECONOMY POWER (EP) 2.5MM PITCH WIRE-TO-BOARD CONNECTORS (CONT.)

TERMINAL POSITION ASSURANCE RETAINERS

Mnf. Part No.	No. of Pos.	Stock No.	Price Each 1-9	Price Each 10-24
● 1969443-7	7	27W9962	0.18	0.18
● 1969443-8	8	27W9963	0.23	0.22
● 1969443-9	9	27W9964	0.24	0.23
● 1-1969443-0	10	27W9952	0.21	0.19

CONTACTS

Mfg. Part No.	Gender	AWG	Stock No.	Price Each 1-9	Price Each 10-24
● 2110989-1	Socket	26AWG to 22AWG	73R7914	0.12	0.05

(208608)

AMP MTA 0.156" (3.96) POST HEADERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Contact centerline spacing: 0.156" (3.96 mm)
- Contact mating area plating: Tin, unless otherwise specified
- Vertical PCB mount
- Polyester housing, flammability rated UL94V-0
- Current rating: 7 A
- Voltage rating: 600 VAC

Perfect for PC, gaming, and household appliance applications.

FLAT HEADERS, 0.062" (1.57) PC BOARD THICKNESS, 0.125" (3.18) TERMINATION POST

STRAIGHT - SQUARE POST

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9
● 640383-2	2	90F5382	0.36
● 640383-3	3	51F1733	0.40
● 640383-5	5	50H6806	0.44
STRAIGHT - ROUND POST			
● 640384-4	4	51F1450	0.45
● 640384-8	8	51F1454	0.70
RIGHT ANGLE - SQUARE POST			
● 640385-2	2	51F1557	0.39
● 640385-3	3	51F1558	0.45
● 640385-8	8	51F1562	0.80

HEADERS, 0.093 - 0.125" (2.36 - 3.18) PC BOARD THICKNESS, 0.175" (4.45) TERMINATION POST

FLAT, RIGHT ANGLE - SQUARE POST

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9
● 644751-2	2	34B1177	0.37
FRICTION LOCK, STRAIGHT - SQUARE POST			
● 644752-2	2	34B1184	0.25
● 644752-3	3	34B1185	0.27
● 644752-4	4	34B1186	0.43
● 644752-5	5	34B1187	0.45
● 644752-7	7	34B1188	0.48
● 644752-8	8	34B1189	0.59
● 644752-9	9	78H3300	0.70
● 1-644752-0	10	10H2543	0.71
● 1-644752-2	12	33B3766	0.80
FRICTION LOCK, STRAIGHT - ROUND POST			
● 644753-2	2	34B1190	0.30
● 644753-3	3	34B1191	0.37
● 644753-4	4	34B1192	0.44

FRICTION-LOCK HEADERS, 0.062" (1.57) PC BOARD THICKNESS, 0.125" (3.18) TERMINATION POST

STRAIGHT - SQUARE POST

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9
● 640445-2	2	90F4053	0.19
● 640445-3	3	90F4054	0.21
● 640445-4	4	90F4055	0.24
● 640445-5	5	90F5345	0.32
● 640445-6	6	90F5346	0.44
● 640445-7	7	90F5347	0.45

➤ CONTINUED ➤

AMP MTA 0.156″ (3.96) POST HEADERS (CONT.)

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9
640445-8	8	90F5348	0.53
640445-9	9	90F5349	0.49
1-640445-0	10	90F5350	0.64
1-640445-1	11	90F5351	0.70
1-640445-2	12	90F5352	0.72
1-640445-4	14	90F5619	0.58
STRAIGHT - SQUARE POST, GOLD PLATED			
3-641208-2	2	52K3562	0.96
3-641208-3	3	52K3563	1.45
3-641208-4	4	52K3564	1.69
3-641208-5	5	52K3565	2.17
3-641208-6	6	52K3566	2.32
3-641208-8	8	52K3567	3.09
3-641208-9	9	16M2921	4.00
4-641208-0	10	52K3658	3.90
4-641208-7	17	16M3047	7.67
STRAIGHT - ROUND POST			
640388-2	2	90F5622	0.25
640388-3	3	90F5623	0.27
640388-4	4	90F5624	0.33
640388-5	5	90F5625	0.35
640388-6	6	90F5626	0.45
640388-7	7	90F5627	0.46
640388-8	8	90F5610	0.57
1-640388-0	10	90F5612	0.73
1-640388-2	12	90F5614	0.81
RIGHT ANGLE - FRONT BEND			
640389-2	2	90F5617	0.44
640389-3	3	90F5618	0.60
640389-4	4	90F5601	0.68
640389-6	6	90F5603	1.00
640389-8	8	90F5605	1.38
RIGHT ANGLE - FRONT BEND, GOLD PLATED			
3-641210-2	2	16M2922	1.16
3-641210-4	4	16M2924	1.90
3-641210-5	5	16M2925	2.31

(32995)

AMP MTA 0.156″ (3.96) IDC RECEPTACLES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Stackable/Closed-End Connectors
- Mating Connector Lock
- 90° Cable Exit
- Phosphor Bronze Contacts
- Tin-Plated Contact Mating Area
- Nylon Housing, Flammability Rated UL 94V-2
- Current Rating: 7 A
- Voltage Rating: 600 VAC

Perfect for PC, gaming and household appliance applications. Meets the material requirements of Table 23.1 of UL1410 Standards for Television Receiver and Video Products (wire-to-post connectors only). UL recognized, file no. E28476; CSA certified, file no. LR7189.

CLOSED-END RECEPTACLES WITH LOCK, WITHOUT POLARIZING TABS

Ckts.	Mfg. Part No.	AWG	Stock No.	Price Each 1-9	Mfg. Part No.	AWG	Stock No.	Price Each 1-9
2	3-640426-2	18 Orange	52K3535	0.40	3-640427-2	20 Yellow	52K3539	0.42
3	3-640426-3		52K4331	0.33	3-640427-3		87K2221	0.41
4	3-640426-4		52K4332	0.59	3-640427-4		87K2222	0.50
5	3-640426-5		52K3536	0.61	3-640427-5		87K2223	0.73
6	3-640426-6		52K4333	0.77	3-640427-6		16M2904	0.83
7	3-640426-7		52K3537	0.76	3-640427-7		16M2905	0.84
8	3-640426-8		52K3538	0.96	3-640427-8		16M2906	1.08
9	3-640426-9		87K2220	1.02	3-640427-9		16M2907	1.06
10	4-640426-0		52K3645	1.08	4-640427-0		87K2234	1.35
12	4-640426-2		52K3646	1.43	4-640427-2		16M3040	1.70
2	3-640428-2	22 Red	52K3540	0.38	3-640429-2	24 White	87K2224	0.41
3	3-640428-3		52K4334	0.44	3-640429-3		16M2908	0.42
4	3-640428-4		52K4335	0.39	3-640429-4		87K2225	0.57
5	3-640428-5		52K3541	0.58	3-640429-5		39P8134	0.48
6	3-640428-6		52K4336	0.72	3-640429-6		16M2909	0.70
7	3-640428-7		52K3542	0.85	...		...	...
8	3-640428-8		52K3543	1.08	...		...	...
9	3-640428-9		52K3544	1.04	3-640429-9		18R0738	0.84

➤CONTINUED➤

AMP MTA 0.156″ (3.96) IDC RECEPTACLES (CONT.)

CLOSED-END RECEPTACLES WITH LOCK AND POLARIZING TABS

Ckts.	Mfg. Part No.	AWG	Stock No.	Price Each 1-9	Mfg. Part No.	AWG	Stock No.	Price Each 1-9
2	3-643817-2	18 Orange	52K3589	0.37	3-643818-2	20 Yellow	52K3592	0.36
3	3-643817-3		87K2229	0.45	...		...	...
4	3-643817-4		52K4378	0.51	3-643818-4		16M2940	0.51
5	3-643817-5		97H4009	0.64	3-643818-5		16M2941	0.61
6	3-643817-6		52K4379	0.68	3-643818-6		16M2942	0.68
8	3-643817-8		52K3590	0.80	3-643818-8		57K2754	0.80
9	3-643817-9		52K3591	0.86	3-643818-9		16M2944	0.90
12	4-643817-2		16M3057	1.37	4-643818-2		16M3059	1.42
2	3-643819-2	22 Red	16M2945	0.37	3-643820-2	24 White	16M2949	0.36
4	3-643819-4		52K3593	0.48	3-643820-4		16M2951	0.48
5	3-643819-5		52K3594	0.63	3-643820-5		16M2952	0.32
6	3-643819-6		16M2946	0.68	3-643820-6		16M2953	0.68
8	3-643819-8		52K3595	0.84	3-643820-8		16M2955	0.76
10	4-643819-0		16M3060	0.92	4-643820-0		16M3062	0.87
17	4-643819-7		16M3925	2.34	4-643820-7		16M3927	2.18

CLOSED-END RECEPTACLES WITHOUT LOCK, WITHOUT POLARIZING TABS

2	3-640431-2	18 Orange	40P9103	0.40	3-640433-2	22 Red	52K3545	0.42
3	3-640431-3		09P2472	0.43	3-640433-3		40P9105	0.45
4	3-640431-4		48M6245	0.53	3-640433-4		95M8891	0.51
5	3-640431-5		09P2471	0.61	3-640433-5		54M6289	0.61
6	3-640431-6		88M8333	0.36	3-640433-6		40P9106	0.67
8	3-640431-8		18R0747	0.76	3-640433-8		54M6290	0.76
10	4-640431-0		19P7812	1.03	...		...	...

FEED-THRU RECEPTACLES WITH LOCK, WITHOUT POLARIZING TABS

2	3-640599-2	18 Orange	87K2227	0.42	3-640600-2	20 Yellow	88M9015	0.50
3	3-640599-3		52K4360	0.40	...		...	...
4	3-640599-4		52K4361	0.60	...		...	...
5	3-640599-5		46M4388	0.66	...		...	...
6	3-640599-6		52K3548	0.70	...		...	...
8	3-640599-8		09P2064	0.80	...		...	...
9	3-640599-9		18R0889	0.90	...		...	...
10	4-640599-0		34M2312	0.91	...		...	...
2	3-640601-2	22 Red	16M2919	0.34	...	...	...	...
3	3-640601-3		40P9108	0.49	...		...	...
4	3-640601-4		52K4362	0.54	...		...	...
9	3-640601-6		40P9109	0.66	...		...	...

FEED-THRU RECEPTACLES WITH LOCK AND POLARIZING TABS

2	3-644465-2	18 Orange	16M2970	0.34	3-644466-2	20 Yellow	16M2976	0.36
4	3-644465-4		52K3601	0.57	3-644466-4		16M2978	0.48
6	...		...	...	3-644466-6		16M2980	0.68
4	3-644467-4	22 Red	16M2985	0.38	3-644468-4	24 White	16M2993	0.40
11	4-644467-1		16M3933	0.77	...		...	...

(32992)

AMP MTA-0.156″ TOOLING

TE connectivity

Authorized Distributor

Mfg. Part No.	Description	Stock No.	Price 1-4
58074-1	Pistol Grip Hand Tool for Metal and All-Plastic Shell Connectors *(Order* **Type 58247-1** *Crimp Die Separately Below)*	50F783	104.74
58247-1	Crimp Die for MTA-0.156″ Receptacles (Use with **Type 58074-1** Hand Tool)	50F786	177.19
59804-1	MTA-156 T-Handle Maintenance Tool	50F732	30.94
91512-1	MATE-N-LOCK® Crimp Tool with Die Set for 24-88 AWG	73C0405	718.40
91528-1	Crimp Tool with Die	49H6533	718.40

(32993)

AMP MTA 0.156″ (3.96) CONNECTOR ACCESSORIES

RoHS Compliant Available

TE connectivity

Authorized Distributor

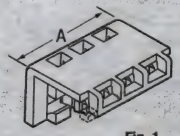


Fig. 1

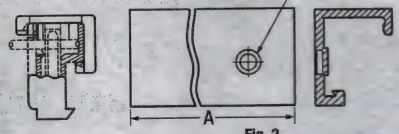


Fig. 2

➤CONTINUED➤

AMP MTA 0.156″ (3.96) CONNECTOR ACCESSORIES (CONT.)

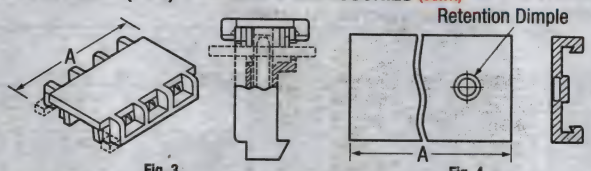


Fig. 3 Fig. 4

Closed-end or feed-thru strain relief covers and dust covers for use with MTA 0.156″ connectors; order separately *on page 761* and *on page 763*.

CLOSED-END STRAIN RELIEF COVERS - FIG. 1

Mfg. Part No.	Circuits	Dim. A in. (mm)	Stock No.	Price Each 1-9	Price Each 10-24
● 643067-2	2	0.312 (7.92)	90F4677	0.44	0.42
● 643067-3	3	0.468 (11.89)	90F4678	0.70	0.63
● 643067-4	4	0.624 (15.85)	90F4679	0.77	0.68
● 643067-5	5	0.780 (19.81)	90F4680	0.74	0.67
● 643067-6	6	0.936 (23.77)	90F4681	0.96	0.85
● 643067-8	8	1.248 (31.70)	90F4039	0.84	0.73
● 643067-9	9	1.404 (35.66)	66F1600	0.86	0.76
● 1-643067-0	10	1.560 (39.62)	66F1580	0.87	0.77
● 1-643067-1	11	1.716 (43.59)	10H2198	0.82	0.74
● 1-643067-2	12	1.872 (47.55)	90F4040	0.90	0.79

CLOSED-END DUST COVERS - FIG. 2
White polyester, rate UL 94V-0. Used for MTA-156 connectors.

● 640551-2	2	0.312 (7.92)	11C0926	0.16	0.14
● 640551-3	3	0.468 (11.89)	90F4044	0.18	0.16
● 640551-4	4	0.624 (15.85)	50H6807	0.21	0.17
● 640551-5	5	0.780 (19.81)	85C3147	0.24	0.22
● 640551-6	6	0.936 (23.77)	90F5372	0.23	0.22
● 640551-8	8	1.248 (31.70)	16H2625	0.37	0.35
● 640551-9	9	1.404 (35.66)	90F5374	0.39	0.37
● 1-640551-0	10	1.560 (39.62)	90F5375	0.34	0.32
● 1-640551-2	12	1.872 (47.55)	90F5376	0.48	0.45

FEED-THRU STRAIN RELIEF COVERS - FIG. 3
White nylon, rated UL 94V-2. Used for MTA-156 connectors.

● 643071-2	2	0.312 (7.92)	13C5694	0.28	0.27
● 643071-3	3	0.468 (11.89)	48F1913	0.41	0.39
● 643071-4	4	0.624 (15.85)	48F1914	0.46	0.38
● 643071-8	8	1.248 (31.70)	07H3147	0.83	0.71
● 1-643071-2	12	1.872 (47.55)	48F1917	0.91	0.80

FEED-THRU DUST COVERS - FIG. 4
White polyester, rate UL 94V-0. Used for MTA-156 connectors.

● 640643-8	8	1.248 (31.70)	51F1480	0.30	0.25

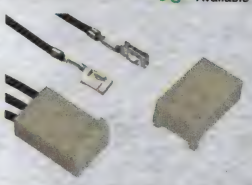
(75513)

AMP CST-100 CRIMP HOUSINGS, CONTACTS AND TOOLING

RoHS Compliant Available

TE connectivity

Authorized Distributor



- Voltage rating: 250 V
- Current: 4 A maximum
- Wire range: 22-26 AWG
- Operating temperature -55°C to +105°C

Low-cost wire-to-board interconnections mate with MTA notched headers that are available; *go online or call*. White nylon housings, rated UL 94V-0, feature locking ramp and polarized tab. Accept phosphor bronze crimp contacts in choice of tin or 15μ″ gold plating; *order separately below*. Not interchangeable with CST-100 II contacts and housings. Mates with all MTA 0.100″ headers except MTA 0.100″ shrouded headers; *order separately on pages 758-759*.

CST-100 CRIMP HOUSINGS -WHITE

Mfg. Part No.	Circuits	Dim. A	Stock No.	Price Each 1-9	Price Each 10-24
● 770602-3	3	0.320″ (8.13)	66F3096	0.15	0.15
● 770602-4	4	0.420″ (10.67)	66F3280	0.23	0.22
● 770602-7	7	0.720″ (18.29)	52F5147	0.42	0.39
● 1-770602-6	16	1.620″ (41.15)	10H3554	0.83	0.81

CST-100 II CRIMP HOUSINGS -WHITE

● 1375820-2	2	0.220″ (5.59)	85C1046	0.13	0.11
● 1375820-3	3	0.320″ (8.13)	85C1047	0.17	0.16
● 1375820-4	4	0.420″ (10.67)	85C1048	0.23	0.20
● 1375820-5	5	0.520″ (13.21)	85C1049	0.29	0.27
● 1375820-6	6	0.620″ (15.75)	85C1050	0.29	0.27
● 1375820-7	7	0.720″ (18.29)	85C1051	0.46	0.44
● 1375820-8	8	0.820″ (20.83)	85C1052	0.37	0.34
● 1-1375820-0	10	1.020″ (25.91)	86C3181	0.49	0.47

➤CONTINUED➤

AMP CST-100 CRIMP HOUSINGS, CONTACTS AND TOOLING (CONT.)

CST-100 II CRIMP HOUSINGS -WHITE

Mfg. Part No.	Circuits	Dim. A	Stock No.	Price Each 1-9	Price Each 10-24
● 1-1375820-2	12	1.220″ (30.99)	86C3182	0.57	0.54
● 1-1375820-4	14	1.420″ (36.07)	86C3183	0.73	0.64

CST-100 & CST-100 II CRIMP CONTACTS

Mfg. Part No.	AWG	Plating	Stock No.	Price Each 1-9	Price Each 10-24
● 770666-1*	26-22	Tin	66F3290	0.12	0.11
● 770666-2*	26-22	Gold	88F4239	0.58	0.55
CST-100 II CRIMP CONTACTS					
● 1445336-1	26-22	Tin	85C1053	0.12	0.10
● 1375819-1*	26-22	Tin	11H3150	0.10	0.07
● 1445336-2	26-22	Gold	85C1054	0.39	0.38

* Strip form, Sold individually

CST-100 II TOOLING

Mfg. Part No.	Description	Stock No.	Price Each 1-4
58517-1	PRO CRIMPER™ II Hand Tool with Die for CST-100 II	48F1943	490.23
354940-1	PRO CRIMPER™ II Hand Tool (Frame/Handle Only) for CST-100 II	96F6512	89.48

(32991)

AMP 2MM COMMON TERMINATION (CT) CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Vertical Post Header — Right-Angle Post Header — Receptacle Housing

Mass termination post headers available in vertical and right-angle configurations. Feature tin-lead plated posts. Receptacle housings accept tin-plated brass crimp contacts; *order separately below*. Housings constructed of 66 nylon, rated UL94V-0. Color: natural. Other contact postions available; *go online or call*

VERTICAL STANDARD TYPE POST HEADERS

Mfg. Part No.	No. of Positions	Stock No.	Price Each 1-9
● 292161-2	2	26K5436	0.26
● 292161-3	3	31K8549	0.45
● 292161-4	4	19K5981	0.40
● 292161-6	6	30K5673	0.45
● 292161-8	8	88K3147	0.75
● 292161-9	9	03M5819	0.61
● 1-292161-0	10	09J3991	0.64
VERTICAL BOX TYPE POST HEADERS			
● 292132-2	2	21K4796	0.33
RIGHT-ANGLE POST HEADERS			
● 292253-2	2	66K6463	0.28
● 292253-3	3	31K8550	0.26
● 292253-4	4	72J8064	0.49
● 292253-5	5	71J0390	0.48
● 292253-7	7	53K4170	0.54
● 1-292253-2	12	26K3317	0.97
PANEL MOUNT HEADERS			
● 292254-2	2	78K5062	0.38

CRIMP RECEPTACLE HOUSINGS

Mfg. Part No.	No. of Positions	Stock No.	Price Each 1-9
● 179228-2	2	98B7803	0.19
● 179228-3	3	94C2919	0.22
● 179228-4	4	01H1299	0.24
● 179228-6	6	12H0057	0.29
● 175778-3	3	87H8301	0.17

IDC RECEPTACLE HOUSINGS

Mfg. Part No.	No. of Positions	Stock No.	Price Each 1-9
● 173977-2	2	92F8369	0.25
● 173977-3	3	52F3025	0.27
● 173977-6	6	98B8694	0.68
● 173977-7	7	89C1411	0.48
● 173977-8	8	93B5407	0.76
● 173977-9	9	23C6450	0.88
● 1-173977-1	11	23C6446	0.95

➤CONTINUED➤

AMP 2MM COMMON TERMINATION (CT) CONNECTORS (CONT.)

IDC RECEPTACLE HOUSINGS

Mfg. Part No.	No. of Positions	Stock No.	Price Each 1-9
1-173977-2	12	23C6447	0.95
1-173977-5	15	04H0798	0.75

CRIMP CONTACTS — 20-26 AWG

Mfg. Part No.	Stock No.	Price Each 1-9
179227-1	94C2924	0.11
170262-1	92F8378	0.13

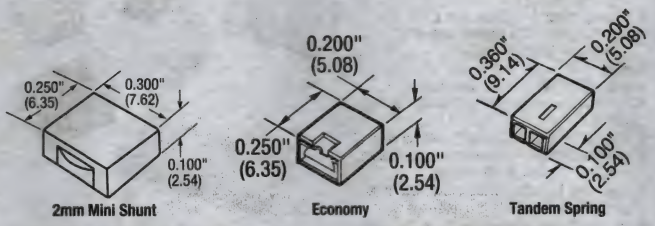
(74249)

AMP 2-POSITION POST SHUNTS

RoHS Compliant Available

TE connectivity

Authorized Distributor



2mm Mini Shunt **Economy** **Tandem Spring**

- Stackable on 0.100″ or 0.200″ Centers
- Current Rating: 3 A Max.
- Dielectric Withstanding Voltage: 1000 VAC Min.
- Black Housing, Rated UL 94V-0
- UL Recognized, CSA Certified

1-piece contact construction with high normal forces. Mate any common pairs of 0.025″ square or round posts, or 0.22″ x 0.026″ formed posts.

ECONOMY — 0.100″ (2.54) CENTERLINE

Mfg. Part No.	Plating	Stock No.	Price Each 1-99
382811-6	15µ″ Gold	91C5937	0.17
382811-8	30µ″ Gold	52F5498	0.10
2-382811-1	Tin	52K3458	0.10
1-382811-6	15µ″ Gold	09H9320	1.07
382811-2	15µ″ Gold	33B8307	0.84
382811-9	15µ″ Gold	93B5496	0.31
DUAL-BEAM — 0.100″ (2.54) CENTERLINE			
390088-2	15µ″ Gold	48F5782	0.69
TANDEM SPRING — FOR 0.175″ SHORT POSTS			
530153-2	30µ″ Gold	90F1808	0.92
4-530153-1	Tin	52K4402	1.02
STANDARD HOUSING — 0.200″ (5.08) CENTERLINE			
531230-2	15µ″ Gold	91C5951	0.69
531230-3	30µ″ Gold	50F2410	1.39
2mm MINI SHUNTS — 0.079″ (2.00) CENTERLINE			
382575-2	15µ″ Gold	85C4987	0.77
HANDLE — 0.100″ (2.54) CENTERLINE			
881545-2	30µ″ Gold	26H2523	0.31
4-881545-2	Tin	78H0229	0.32

(7984)

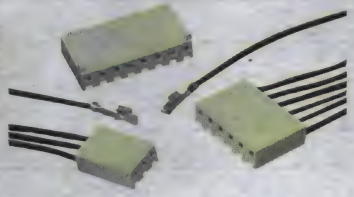
AMP SL-156 HOUSINGS AND CONTACTS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Contact Centerline Spacing: 0.156″ (3.96)
- Crimp Wire Termination
- Mating Connector Lock
- Cable Exit Angle: 180°
- Housing Material/Flammability Rating: Nylon/UL 94V-0



Perfect for gaming and household appliance applications.

HOUSINGS WITH RAMP - NO TABS

Mfg. Part No.	Circuits	Length	Stock No.	Price Each 1-9
640250-1	1	0.308″ (7.82)	48F1934	0.21
640250-2	2	0.308″ (7.82)	90F4295	0.18

CONTINUED

AMP SL-156 HOUSINGS AND CONTACTS (CONT.)

Mfg. Part No.	Circuits	Length	Stock No.	Price Each 1-9
640250-3	3	0.465″ (11.81)	90F4296	0.18
640250-4	4	0.620″ (15.75)	90F4297	0.22
640250-5	5	0.777″ (19.74)	90F4298	0.26
640250-6	6	0.933″ (23.70)	90F4299	0.33
640250-7	7	1.090″ (27.69)	90F4300	0.47
640250-8	8	1.246″ (31.65)	90F4301	0.51
640250-9	9	1.402″ (35.61)	90F4302	0.69
1-640250-0	10	1.558″ (39.57)	90F4303	0.80
1-640250-2	12	1.871″ (47.52)	90F4305	0.84
1-640250-3	13	2.027″ (51.49)	66F3011	0.81
1-640250-4	14	2.183″ (55.45)	99F4127	0.88
1-640250-6	16	2.496″ (63.40)	13C2587	1.18
HOUSINGS WITHOUT RAMP - NO TABS				
640251-1	1	0.308″ (7.82)	90F4308	0.18
640251-3	3	0.465″ (11.81)	90F4310	0.19
640251-5	5	0.777″ (19.74)	90F4312	0.29
640251-6	6	0.933″ (23.70)	90F4313	0.45
640251-8	8	1.246″ (31.65)	90F4315	0.60
640251-9	9	1.402″ (35.61)	90F4316	0.74
1-640251-0	10	1.558″ (39.57)	90F4317	0.67
1-640251-2	12	1.871″ (47.52)	90F4319	0.75
1-640251-3	13	2.027″ (51.49)	90F4320	0.78
HOUSINGS WITHOUT RAMP - WITH POLARIZING TABS				
770849-2	2	0.308″ (7.82)	97B0223	0.17
770849-3	3	0.465″ (11.81)	95B0239	0.21
770849-4	4	0.620″ (15.75)	95B0238	0.21
770849-5	5	0.777″ (19.74)	34B1846	0.31
770849-6	6	0.933″ (23.70)	92B9996	0.39
770849-7	7	1.090″ (27.69)	52F5148	0.40
770849-8	8	1.246″ (31.65)	98B6557	0.49
770849-9	9	1.402″ (35.61)	91C5108	0.61
1-770849-0	10	1.558″ (39.57)	93C9786	0.63
1-770849-1	11	1.715″ (43.56)	10H3565	0.69
1-770849-2	12	1.871″ (47.52)	27C1563	0.74
1-770849-3	13	2.027″ (51.49)	50H7678	0.76
1-770849-6	16	2.496″ (63.40)	10H3567	1.03

CRIMP SOCKET CONTACTS - 6.5 AMP

Mfg. Part No.	Package	Stock No.	Price Each 1-9
3-640706-1	Loose	52K4364	0.38
640706-2	Loose	66F3337	0.33
640252-2	Strip	50B619	0.10
3-640252-1	Strip	35M4434	0.11
3-640707-1	Loose	52K3550	0.39
3-350980-1	Strip	52K4327	0.13
350980-2	Strip	90F3788	0.11
770258-1	Loose	90F3995	0.54
HOODED, DUAL WIPE, CRIMP SOCKET CONTACTS - 10 AMP			
3-770476-1	Strip	52K4382	0.14
3-770522-1	Loose	87K2233	0.36
770522-2	Loose	16H5765	0.58
770476-2	Strip	02E8739	0.41

ACCESSORIES

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9
640254-1	Flush Keying Plug	Loose	90F4065	0.10
641623-1	Flush Keying Plug	Strip	90F4052	0.11

(32996)

INVERTED THRU BOARD CARD EDGE & INVERTED POKE-IN PLATFORM CONNECTORS

RoHS Compliant Available

NEW

TE connectivity

Authorized Distributor

Inverted Thru Board Card Edge **Inverted Poke-In Platform**

The Inverted Card Edge and Poke-In Platform Connectors provide 3.0 mm creep and clearance from all other conductive components on FR4 and metal clad printed circuit boards. The 2 position connectors share the same printed circuit board footprint while offering flexibility in providing either a direct power driver board one piece mating solution or a poke-in wire connection to the underside of the LED array boards. The ITB connectors are surface mounted at the same

CONTINUED

PC BOARD HEADERS & SOCKETS

INVERTED THRU BOARD CARD EDGE & INVERTED POKE-IN PLATFORM CONNECTORS (CONT.)

time as other devices on the PCB eliminating secondary processes. Both the Inverted Poke-in and Inverted Card Edge Connectors are available with an optional cap that provides for a touch safe design once soldered to the printed circuit board.

INVERTED CARD EDGE

Mfg. Part No.	Board Thickness	Stock No.	Price Each 1-9
● 2213188-1	1.0 mm	20X5210	0.85
● 2213188-2	1.6 mm	20X5211	0.81
INVERTED CARD EDGE WITH COVER			
● 2213188-3	1.0 mm	20X5212	1.04
● 2213188-4	1.6 mm	20X5213	1.06
INVERTED POKE-IN			
Mfg. Part No.	**Wire Gauge**	**Stock No.**	**Price Each 1-9**
● 2213189-1	22-18	20X5214	0.78
● 2213189-2	26-24	20X5215	0.79
INVERTED POKE-IN WITH COVER			
● 2213189-3	22-18	20X5216	1.04
● 2213189-4	26-24	20X5217	1.05

(212015)

9159 SERIES SOLID STATE LIGHTING CONNECTORS

RoHS Compliant Available

AVX INTERCONNECT A KYOCERA GROUP COMPANY

The **9159 series** of Board-to-Board interconnect system allows two PCB's to be mated end-to-end creating strips of LED lighting. Designed specifically for the unique Solid State Lighting (SSL) market requiring coplanar (horizontal-to-horizontal) PCB mating with a 5 Amp current rating in the smallest package available. The **horizontal plug and socket single sided SMT connectors** are perfect for both FR4 and metal boards where you need to butt the boards up together to minimize separation. With sizes from 2p-6p, these high reliability connectors boast gold plated beryllium copper receptacle contacts for harsh environments. The **cabled plug** was developed to bring power and signals onto the PCB's while keeping the same board level interface. This allows the designer to build a single PCB with a receptacle on one end and a plug on the other end to minimize cost and inventory. Regardless of where the PCB is used in the system, the cabled plug connector will then create the connection to the outside world. The optional latch can be inserted into the plug housing to assure positive attachment to the PCB in harsh environments without having to change the PCB connector. The **top loading socket** allows complete PCB's to be replaced in the field without having to dissemble the entire strip of boards. The connector has a two part insulator whereby the top of the connector will slide open allowing the plug connector to be pulled out either vertically or at a slight angle. Once the PCB is replaced, the cover is slid back like a Zero Insertion Force (ZIF) connector to the closed position. The PCB layout is identical to the standard horizontal socket to maintain family commonality at the PCB level.

RIGHT ANGLE (HORIZONTAL) PLUG - SURFACE MOUNT

Mfg. Part No.	No. of Positions	Stock No.	Price Each 1-9	Price Each 10-99
● 109159002101116	2	58R3812	1.28	1.07
● 109159003101116	3	58R3813	1.57	1.31
● 109159004101116	4	58R3814	1.65	1.38
● 109159005101116	5	58R3815	1.83	1.53
● 109159006101116	6	58R3816	2.02	1.69
CABLE MOUNT PLUG - SOLDER TERMINATION				
● 119159003101116	3	58R3818	1.62	1.35
● 119159004101116	4	58R3819	1.83	1.53
● 119159005101116	5	58R3820	2.05	1.71
● 119159006101116	6	58R3821	2.15	1.80
RIGHT ANGLE (HORIZONTAL) SOCKET - SURFACE MOUNT				
● 209159002101116	2	58R3822	1.60	1.34
● 209159003101116	3	58R3823	1.96	1.64
● 209159004101116	4	58R3824	2.52	2.11
● 209159005101116	5	58R3825	2.17	1.82
● 209159006101116	6	58R3826	2.29	1.91
TOP LOADING RIGHT ANGLE (HORIZONTAL) SOCKET - SURFACE MOUNT				
● 229159002101116	2	58R3827	1.83	1.53
● 229159003101116	3	58R3828	2.18	1.82
● 229159004101116	4	58R3829	2.52	2.11
● 229159005101116	5	58R3830	2.26	1.89
● 229159006101116	6	58R3831	2.56	2.14

➤CONTINUED➤

9159 SERIES SOLID STATE LIGHTING CONNECTORS (CONT.)

ACCESSORIES

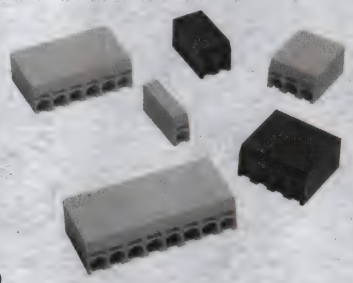
Mfg. Part No.	Description	For Use With	Stock No.	Price Each 1-9
● 589159002000006	Shorting Socket	2 Position PCB Plug	58R3832	1.51
● 609159330301000	Cover	3 Position Cable Plug	52R7548	0.36
● 609159330401000	Cover	4 Position Cable Plug	52R7549	0.36
● 609159330501000	Cover	5 Position Cable Plug	52R7550	0.36
● 609159330601000	Cover	6 Position Cable Plug	52R7551	0.36
● 609159340201000	Latch	2, 4, & 6 Position Cable Plug	52R7552	0.55
● 609159340301000	Latch	3 & 5 Position Cable Plug	52R7553	0.59

(164503)

9276 SERIES DISCRETE WIRE-TO-BOARD POKE-HOME CONNECTORS

RoHS Compliant Available

AVX INTERCONNECT A KYOCERA GROUP COMPANY



Applications
- Connecting discrete wire components directly to the PCB
- Bringing power and signals onto a PCB
- Daisy chaining PCB's together to create a continuous string of boards

Features
- Simple strip, insert and removal design
- SMT RoHS termination to the PCB with minimal footprint
- Accepts 18-24 AWG Solid and Stranded wires
- Expanded size offering to maximize application potential; 1, 2, 3, 4, 6 & 8 positions
- High spring force top contact provides a lance type retention to capture and retain the wire
- Insulator Material: Glass-Filled Nylon 46; UL94V0
- Contact Material: Tin plated Beryllium Copper / Phosphor bronze
- Replacibility: 5 Cycles
- Operating Temperature: -40°C to +125°C
- Current Rating: 6 A per contact
- Voltage Rating: 250 VAC

The new 9276 series connector provides a quick and reliable wire-to-board termination in a sleek 2.5mm pitch SMT package for a broad range of industrial and commercial markets. The 9276 series connectors are terinated by simply stripping the wire and inserting them into the connector making it termination friendly within the factory as well as in the field. Developed for harsh industrial and Solid State Lighting (SSL) applications, the connector was designed with a high spring force Beryllium Copper upper spring contact to accept 18-24 AWG solid or stranded wire to meet multiple applications with a single connector. The dual-contact design enables a maximize current rating of 6 Amps with minimal PCB spaceand provides two solder points for each wire eliminating the need for external anchor tabs. A small insertion/extraction tool allows the wires to easily be replaced up to 5 times.

Mfg. Part No.	No. of Positions	Color	Wire Size (AWG)	Stock No.	Price Each 1-9
● 00 9276 001 021 106	1	White	24AWG to 18AWG	25T0224	1.19
● 00 9276 002 021 106	2	White	24AWG to 18AWG	25T0225	1.51
● 00 9276 003 021 106	3	White	24AWG to 18AWG	25T0226	1.19
● 00 9276 004 021 106	4	White	24AWG to 18AWG	25T0227	2.19
● 00 9276 006 021 106	6	White	24AWG to 18AWG	25T0228	1.80
● 00 9276 008 021 106	8	White	24AWG to 18AWG	25T0229	2.22

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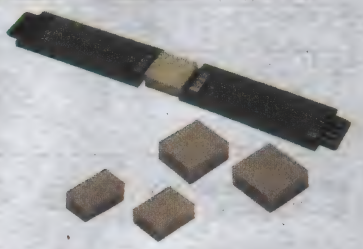
9159 SERIES ONE PIECE CARD EDGE CONNECTORS

RoHS Compliant Available

AVX INTERCONNECT A KYOCERA GROUP COMPANY



The **9159 series** of Board-to-Board interconnect system allows two PCB's to be mated end-to-end creating strips of LED lighting. Designed specifically for the unique Solid State Lighting (SSL) market requiring coplanar (horizontal-to-horizontal) PCB mating. The 1-Piece Card Edge connector was developed to provide a reliable, low cost and simple means of connecting multiple PCB's together. The single stamped contact has dual contact beams to guarantee a high contact force on standard 1.6mm PCB's. These connectors are available in 2 through 5 positions and are on 2.0mm pitch centers to provide a 3 amp continuous rating.

Mfg. Part No.	Positions	Stock No.	Price Each 1-9
● 009159002001106	2	52R6987	1.13
● 009159003001106	3	52R6989	1.38
● 009159004001106	4	52R6991	1.62
● 009159005001106	5	52R6993	2.98

(150948)

9176-400 AND 9176-500 SERIES DISRETE WIRE IDC CONTACTS AND CAPS

AVX INTERCONNECT A KYOCERA GROUP COMPANY

RoHS Compliant Available

Applications
- Connecting discrete wire components directly to the PCB
- Bringing power and signals onto a PCB
- Daisy chaining PCB's together to create a continuous string of boards

Features
- IDC contact provides a gas-tight connection to the PCB for long term reliability
- Tested to automotive levels on shock, vibration and temperature cycling for reliability
- Reduced total applied cost versus solder or crimp processes
- Individual contacts can be located anywhere on the PCB based on specific application
- Wires can be removed and replace up to three times.
- Optional cap provides a positive strain relief even in the harshest conditions.

The new single contact 9176-400 and 9176-500 series of surface mount IDC connectors were developed for connecting individual wires directly to a PCB ranging from 18-24 AWG. This industry proven contact system has been tested to automotive levels of shock, vibration, and temperature cycling to prove their reliability and robustness. The simplicity of inserting a wire into an SMT contact with a small tool or optional retention/termination cap allows connection to a PCB without soldering. In SSL applications specifically, these contacts are used to bring power and signal onto the PCB or to daisy chain multiple boards together.

9176-400 SERIES DISCRETE WIRE IDC CONTACTS
The single 9176-400 series contact and cap accepts 22-24 AWG wires with an insulation diameter ranging from 1.0-1.5mm. These dual beam contacts support a 6A current rating with a large SMT solder base to provide maximum stability on the PCB.

Mfg. Part No.	Wire Size (AWG)	Current Rating (A)	Stock No.	Price Each 1-9
709176001422006	22AWG	6	25T0909	0.65
709176001432006	24AWG	6	25T0910	0.65

9176-500 SERIES DISCRETE WIRE IDC CONTACTS
The single 9176-500 series contact and cap accepts 18-24 AWG wires with an insulation diameter ranging from 1.1-2.1mm. These dual beam contacts support a 10A current rating with a large SMT solder base to provide maximum stability on the PCB.

709176001501006	18AWG	10	25T0911	0.59
709176001511006	20AWG	10	25T0912	0.59
709176001522006	22AWG	10	25T0913	0.54
709176001532006	24AWG	10	25T0915	0.59

ACCESSORY CAPS

Mfg. Part No.	Color	Wire Size (AWG)	For Use With	Stock No.	Price Each 1-9
609176001415100	White	24AWG to 22AWG	9176-400	21T9013	0.36
609176001516100	White	24AWG to 22AWG	9176-500	67R3969	0.38
609176001521100	White	20AWG to 18AWG	9176-500	67R3971	0.38

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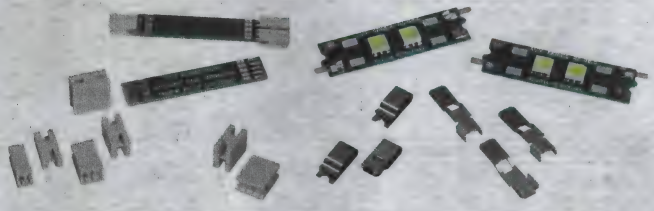
9159 SERIES BOARD-TO-BOARD OPEN-ENDED CARD EDGE CONNECTORS

RoHS Compliant Available

AVX INTERCONNECT A KYOCERA GROUP COMPANY



9159 Series Open Ended Card Edge — 9159 Series Coplanar BTB Contact System

Features
- Miniaturized size, achieves 1mm in length for each number of contacts (4p = 4mm)
- Double ended/double sided contacts for increased pin count density on standard 1.6mm thick PCB
- Economical high force tin-to-tin contact interface
- Central support polarizing/location rib provides proper mating and PCB location
- High current capabilities: 3A 4p/6p and 2.5A 8p/10p
- Voltage Rating: 300 VAC
- Durability: 5 cycles
- Operating temperature range: -40°C to +125°C

9159 series open-ended card edge connectors provide the highest density to reliably connect two in-line PCB's together in a cost-effective assembled solution. The increased pin count allows for more flexibility in mixing and matching power and signal lines. The double sided configuration (separate contacts for both the top and bottom of the PCB) doubles the pin count in a 2mm pitch. Features a white Nylon 46 insulator, rated UL94V-0 and phosphor bronze contacts plated tin over nickel. Ideal for linear LED strip lighting and commercial/industrial co-planar or extended card applications.

Mfg. Part No.	No. of Positions	Length (mm)	Current Rating (A)	Stock No.	Price Each 1-9
009159004061916	4	4	3	85W8861	0.98
009159006061916	6	6	3	85W8862	1.11
009159008061916	8	8	2.5	85W8863	1.24
009159010061916	10	10	2.5	85W8864	1.50

CONTINUED

9159 SERIES BOARD-TO-BOARD OPEN-ENDED CARD EDGE CONNECTORS (CONT.)

9159 SERIES COPLANAR BOARD-TO-BOARD CONTACT SYSTEM
9159 series gold-plated horizontal coplanar board-to-board contact system maximizes lateral PCB alignment and mating tolerances with a proven 2-pc connector solution. Contact height has been minimized to 1.2mm above the PCB to prevent any shadowing effect. No insulator allows contacts to be individually spaced to support any voltage rating with a full 5A current rating. The PCB can be designed with the LED's in the center of the PCB and the contacts on the outer edges. This optimizes the design for functionality and assembly at the best cost possible. Individual contacts can support board-to-board and wire-to-board applications. Copper alloy contacts feature a nickel undercoat — pin contact is plated gold in mating area and tin on tails and socket contact is plated gold over all.

Mfg. Part No.	Contact Gender	Stock No.	Price Each 1-9
709159001401006	Pin	85W8865	0.42
709159001402006	Socket	85W8866	0.42

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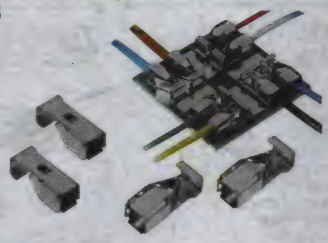
9296 SERIES SINGLE POKE HOME WIRE-TO-BOARD CONTACTS

RoHS Compliant Available

AVX INTERCONNECT A KYOCERA GROUP COMPANY

NEW



9296 series dual-beam box contact surface mounts to a PCB and provides a simple and reliable wire termination without soldering of the wire. The unique contact design integrates several key features within the stamping to facilitate SMT pickup, wire guidance, high force retention and easy wire removal. Combined, these features provide all of the benefits of a full function connector, without the added cost of the insulator and labor. Constructed of copper alloy with tin over nickel plating. Staged current rating is based on wire gauge: 12AWG is 20A, 14AWG is 16A, 16AWG is 14A, 18AWG is 12A and 20AWG is 10A. Voltage rating is based on placement distance. Durability: 5 cycles. Operating temperature range: -40°C to +125°C. **Mfg. part no. 06-9296-7001-01-000** contact opening tool to insert/withdraw wire is ordered separately; *go online or call.*

Mfg. Part No.	Contact Size (mm)	AWG	Stock No.	Price Each 1-9
709296001004006	4	20-12	85W8867	0.88
709296001003006	3	26-18	07X2388	0.72
709296001002006	2	28-24	07X2387	0.48

(212013)

9176 SERIES WIRE TO BOARD STRIP IDC CONNECTORS

RoHS Compliant Available

AVX INTERCONNECT A KYOCERA GROUP COMPANY

Applications
- PCB to PCB individual wire interconnect
- Device to PCB interconnect (LED Modules and LED Strips)

Features
- Small single row IDC
- Rated at 10 amps
- Insulators are end to end stackable for higher pin counts
- Uses simple hand tool for higher volume applications

The 9176 series from AVX offers customers the ability of connecting individual wires to a single row of contacts using IDC technology. Available as a 2 or 3 pin connector it is both low profile and has a small PCB footprint. The connector is SMT assembled to the PCB prior to assembly of the wire. Using a small application tool, the wires are then inserted into the contact slot. This process cuts the insulation and enables the individual conductors of the wire to form a homogeneous joint. The shape of the molding also forms a restraint to the wire when fully inserted in the contact. These connectors are supplied in tape and reel for easy pick and place. The wire options are 18 to 24 AWG stranded wire.

IDC CONNECTORS

Mfg. Part No.	No. of Positions	Color	Wire Size (AWG)	Stock No.	Price Each 1-9
009176002001006	2	Black	18AWG	96M9206	1.28
009176002022006	2	Black	22AWG	96M9208	1.28
009176002032006	2	Black	24AWG	96M9209	1.28
009176002001106	2	White	18AWG	52R7002	1.24
009176002011106	2	White	20AWG	58R3807	0.35
009176002022106	2	White	22AWG	58R3808	1.19
009176002032106	2	White	24AWG	52R7004	2.40
009176003001006	3	Black	18AWG	96M9210	1.51
009176003001106	3	White	18AWG	52R7005	1.26
009176003011106	3	White	20AWG	58R3809	1.51
009176003022106	3	White	22AWG	58R3810	0.44
009176003032106	3	White	24AWG	58R3811	1.17

CONTINUED

PC BOARD HEADERS & SOCKETS

9176 SERIES WIRE TO BOARD STRIP IDC CONNECTORS (CONT.)

ACCESSORY CAPS

Mfg. Part No.	No. of Positions	Color	Wire Size (AWG)	Type	Stock No.	Price Each 1-9
● 609176002016100	2	White	24AWG to 22AWG	Thru Wire	21T9014	0.69
● 609176002021100	2	White	20AWG to 18AWG	Thru Wire	25T0904	0.90
● 609176003016100	3	White	24AWG to 22AWG	Thru Wire	25T0905	0.79
● 609176003021100	3	White	20AWG to 18AWG	Thru Wire	25T0907	0.94
● 609176002016199	2	White	24AWG to 22AWG	Wire Stop	25T0903	0.90
● 609176002021199	2	White	20AWG to 18AWG	Wire Stop	21T9015	0.68
● 609176003016199	3	White	24AWG to 22AWG	Wire Stop	25T0906	0.65
● 609176003021199	3	White	20AWG to 18AWG	Wire Stop	25T0908	0.79

TOOLING

Mfg. Part No.	Description	Stock No.	Price Each 1-9
067000773001000	Universal Hex Bit Tool Handle	66M3312	22.77

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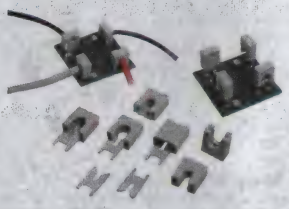
9177-600 SERIES IDC CONTACTS AND CAPS

RoHS Compliant Available

AVX INTERCONNECT
A KYOCERA GROUP COMPANY



Features

- IDC contact provides a "gas tight" wire termination to the PCB to meet harsh industrial environments
- Simple, robust design offers a high performance solution to hand soldering large gauge wires to a PCB
- single contact can handle up to 15A for high current applications with wire replacement up to 3 times
- Accepts 12-18 AWG of stranded wire and can be tested for compliance with solid wire

Applications

- Industrial pumps, motors and driver boards
- Solar and alternative energy products
- Commercial electrical equipment

9177-600 series IDC contact and cap were developed for Plated Through Hole (PTH) termination to the PCB.This addresses the rugged power type boards that have to handle larger wire gauges up to 12 AWG and 15A per contact of current. The PTH option provides robust PCB attachment and high current capabilities to replace older technology connectors or in most cases soldering stripped wires directly to the PCB. Features a phosphor bronze tin over nickel plated contact. White Nylon 46 insulator, rated UL94 V-0. Current rating: 15A, voltage rating: 600VAC. Operating temperature range: -40°C to +125°C.

IDC CONTACTS

Mfg. Part No.	No. of Positions	Accepts Stranded Wire (AWG)	Stock No.	Price Each 1-9
● 709177001691006	1	12	87W8624	0.44
● 709177001601006	1	14	73W9314	0.44
● 709177001612006	1	16	73W9315	0.44

IDC CAPS — FOR WIRE-TO-BOARD CONNECTION, 1-WAY THROUGH WIRE

Mfg. Part No.	No. of Positions	Wire Insulation Dia. (mm)	Stock No.	Price Each 1-9
● 609177001627100	1	2.10 - 2.75	87W8621	0.43
● 609177001635100	1	2.75 - 3.50	87W8622	0.43
● 609177001642100	1	3.50 - 4.25	87W8623	0.43

(210123)

MINITEK 127™ 1.27 mm BOARD-TO-BOARD & WIRE-TO-BOARD CONNECTORS

RoHS Compliant Available

FCI

Minitek 127™ is an extensive modular range of connectors for all types of wire-to-board and board-to-board applications. Intermateable with other common designs. It includes straight, right angle, surface mount, and through hole mount versions and is available in positions up to 100.

VERTICAL UNSHROUDED HEADERS - SURACE MOUNT

Mfg Part No.	Positions	Plating	Stock No.	Price Each 1-9
● 20021121-00004C4LF	4	10u" Gold	58R3185	0.42
● 20021121-00006C4LF	6	10u" Gold	58R3186	0.57
● 20021121-00008C4LF	8	10u" Gold	58R3187	0.75
● 20021121-00010C4LF	10	10u" Gold	58R3188	0.87
● 20021121-00012C4LF	12	10u" Gold	58R3189	0.81
● 20021121-00016C4LF	16	10u" Gold	58R3190	1.07
● 20021121-00020C4LF	20	10u" Gold	58R3191	1.58

➤ CONTINUED ➤

MINITEK 127™ 1.27 mm BOARD-TO-BOARD & WIRE-TO-BOARD CONNECTORS (CONT.)

VERTICAL SHROUDED HEADERS - SURACE MOUNT

Mfg Part No.	Positions	Plating	Stock No.	Price Each 1-9
● 20021221-00006C4LF	6	10u" Gold	58R3192	0.56
● 20021221-00010C4LF	10	10u" Gold	58R3193	0.81
● 20021221-00012C4LF	12	10u" Gold	58R3194	1.03
● 20021221-00016C4LF	16	10u" Gold	58R3195	1.29
● 20021221-00020C4LF	20	10u" Gold	58R3196	1.50

VERTICAL HEADERS - THROUGH HOLE

● 20021111-00006T4LF	6	10u" Gold	82R7562	0.39
● 20021111-00008T4LF	8	10u" Gold	82R7565	0.53
● 20021111-00010T4LF	10	10u" Gold	82R7568	0.65
● 20021111-00012T4LF	12	10u" Gold	82R7571	0.74
● 20021111-00016T4LF	16	10u" Gold	82R7577	0.91
● 20021111-00020T4LF	20	10u" Gold	82R7583	1.14

VERTICAL SHROUDED HEADERS - THROUGH HOLE

● 20021611-00006T4LF	6	10u" Gold	82R9557	1.71
● 20021611-00010T4LF	10	10u" Gold	82R9560	1.96
● 20021611-00012T4LF	12	10u" Gold	82R9563	1.91
● 20021611-00016T4LF	16	10u" Gold	82R9569	2.04
● 20021611-00020T4LF	20	10u" Gold	82R9572	2.21
● 20021611-00026T4LF	26	10u" Gold	82R9575	2.48
● 20021611-00050T4LF	50	10u" Gold	82R9590	4.75

RIGHT ANGLE HEADERS - SURACE MOUNT

● 20021122-00010T4LF	10	10u" Gold	82R8162	1.07
● 20021122-00012T4LF	12	10u" Gold	82R8168	1.28
● 20021122-00016T4LF	16	10u" Gold	82R8180	1.60
● 20021122-00020T4LF	20	10u" Gold	82R8192	1.99

RIGHT ANGLE HEADERS - THROUGH HOLE

● 20021112-00006T4LF	6	10u" Gold	82R7706	0.41
● 20021112-00008T4LF	8	10u" Gold	82R7709	0.55
● 20021112-00010T4LF	10	10u" Gold	82R7712	0.69
● 20021112-00012T4LF	12	10u" Gold	82R7715	0.72
● 20021112-00016T4LF	16	10u" Gold	82R7721	0.96
● 20021112-00020T4LF	20	10u" Gold	82R7728	1.13

RIGHT ANGLE SHROUDED HEADERS - THROUGH HOLE

● 20021612-00006T4LF	6	10u" Gold	82R9602	2.00
● 20021612-00010T4LF	10	10u" Gold	82R9605	2.18
● 20021612-00012T4LF	12	10u" Gold	82R9608	2.25
● 20021612-00016T4LF	16	10u" Gold	82R9614	2.44
● 20021612-00020T4LF	20	10u" Gold	82R9617	2.83
● 20021612-00026T4LF	26	10u" Gold	82R9620	3.71
● 20021612-00050T4LF	50	10u" Gold	82R9635	6.58

VERTICAL RECEPTACLES - SURACE MOUNT

● 20021321-00006C4LF	6	10u" Gold	58R3197	0.67
● 20021321-00008C4LF	8	10u" Gold	58R3198	0.90
● 20021321-00010C4LF	10	10u" Gold	58R3199	1.01
● 20021321-00012C4LF	12	10u" Gold	58R3200	1.21
● 20021321-00016C4LF	16	10u" Gold	58R3201	1.61
● 20021321-00020C4LF	20	10u" Gold	58R3202	1.60

VERTICAL RECEPTACLES - THROUGH HOLE

● 20021311-00010T4LF	10	10u" Gold	82R8648	0.79
● 20021311-00012T4LF	12	10u" Gold	82R8651	0.96
● 20021311-00016T4LF	16	10u" Gold	82R8657	1.28
● 20021311-00020T4LF	20	10u" Gold	82R8663	1.49

WIRE-TO-BOARD RECEPTACLES - IDC/IDT

● 20021444-00006T4LF	6	10u" Gold	82R9305	2.23
● 20021444-00010T4LF	10	10u" Gold	82R9311	2.70
● 20021444-00012T4LF	12	10u" Gold	82R9314	3.15
● 20021444-00016T4LF	16	10u" Gold	82R9320	4.37
● 20021444-00020T4LF	20	10u" Gold	82R9323	4.73
● 20021444-00026T4LF	26	10u" Gold	82R9326	5.37

(164497)

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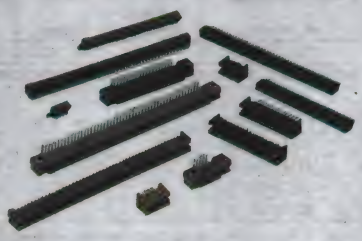
For your production and facilities needs, from soldering stations to tool sets & more.
newark.com/duratool

(212563)

RIB-CAGE™ 1.27mm (0.050″) HIGH DENSITY BOARD-TO-BOARD CONNECTOR SYSTEM

RoHS Compliant Available

FCI



- Housings: Glass-filled thermoplastic, UL94V-0, Color: Black
- Temperature Range: -55°C to +130°C
- Contacts: PCB Receptacles: Beryllium Copper; Pin Headers: Phosphor Bronze
- Contact Plating: 30u″Gold/GXT in Contact area; 100u (2.54um) Tin on tails
- Contact Resistance (LLCR): 20 mohm max initial; 25 mohm max after environmental test
- Current Rating: 1.0 amp DC per contact with all contacts energized (30 deg C Temp. Rise)
- Insulation Resistance: 50,000 Mohm min initial
- Withstanding Voltage: 800 VAC, RMS at 60 Hz
- Contact Durability: 200 mating cycles

Rib-Cage™ connectors optimize reliability in demanding applications. Rib-Cage™ is a versatile family of two-piece, two-row pin-and-socket connectors for right angle and mezzanine connections between printed circuit boards (PCB) or flexible printed circuits (FPC). Exclusive Rib-Cage™ multi-point, gold plated receptacle contacts provide optimal reliability in high vibration and shock-prone applications. High density 1.27mm (0.050″) double row contact grid occupies only 20% of the volume of comparable 2.54mm 0.100″ pitch systems. 6.42mm PCB stack height offers flexibility for mezzanine connection designs. Polarization prevents mis-mating.

PCB HEADERS - VERTICAL SURFACE MOUNT

Mfg. Part No.	Positions	Height (mm)	Stock No.	Price Each 1-9	Price Each 10-24
87407-105LF	10	5.62	06M2385	2.07	1.95
87409-110LF	20	5.74	06M2389	1.72	1.61
87409-115LF	30	5.74	06M2390	2.23	2.09
87409-120LF	40	5.74	06M2392	2.88	2.65
87409-125LF	50	5.74	06M2393	3.73	3.42
87409-140LF	80	5.74	06M2397	6.49	5.89
73547-105LF	10	9.25	75K4790	1.27	1.20
73547-110LF	20	9.25	06M2047	1.51	1.42
73547-115LF	30	9.25	72K3660	3.20	2.93
73547-120LF	40	9.25	65K9784	4.33	3.98
73547-125LF	50	9.25	06M2048	5.82	5.35
73547-130LF	60	9.25	06M2049	4.33	3.97
73547-140LF	80	9.25	75K4791	7.77	7.05
73547-150LF	100	9.25	65K9785	9.90	8.98
PCB RECEPTACLES - VERTICAL SURFACE MOUNT					
87024-610LF	20	4.75	06M2360	2.08	1.95
87024-615LF	30	4.75	06M2363	2.92	2.68
87024-620LF	40	4.75	06M2364	3.32	3.05
87024-625LF	50	4.75	68K9076	4.86	4.46
87024-640LF	80	4.75	06M2366	6.22	5.64

(139045)

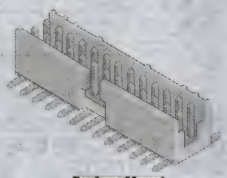
MINITEK™ 2.00mm (0.079″) SHROUDED HEADERS

RoHS Compliant Available

FCI

Double-row 2.00 mm (0.079″) shrouded headers available in thru-hole mount or surface mount versions. Both feature 15 µ″ gold plating on contact area, 150 µ″ tin-lead plating on tail. Other header variations are available; *go online or call.*

Right-Angle



Surface Mount

THRU-HOLE MOUNT — PIN STYLE: 4 mm (0.157″) MATING SIDE, 2.50 mm (0.09″) SOLDER SIDE

Mfg. Part No.	Positions	Plating	Stock No.	Price Each 1-9
98414-G06-06LF	6	30u″ Gold	63K1869	0.72
98414-G06-14LF	14	30u″ Gold	20M3308	1.80
98414-S06-44ULF	44	15u″ Gold	63K1896	3.63
98414-G06-44LF	44	30u″ Gold	20M3321	4.33
98414-S06-50ULF	50	15u″ Gold	63K1897	3.21
SURFACE MOUNT — PIN STYLE: 4 mm (0.157″)				
98424-G52-06LF	6	30u″ Gold	84K7260	1.02
SURFACE MOUNT — PIN STYLE: 4 mm (0.157″) - TAPE AND REEL WITH PICK AND PLACE CAP				
98424-S52-06ALF	6	15u″ Gold	63K1955	1.46
98424-G52-04ALF	4	30u″ Gold	63K1934	1.21
98424-G52-06ALF	6	30u″ Gold	06M2967	1.63
98424-G52-08ALF	8	30u″ Gold	43K4519	0.38
98424-G52-10ALF	10	30u″ Gold	63K1936	1.10
98424-G52-12ALF	12	30u″ Gold	84K7261	0.97
98424-G52-14ALF	14	30u″ Gold	63K1938	1.53
98424-G52-16ALF	16	30u″ Gold	63K1940	1.62
98424-G52-20ALF	20	30u″ Gold	63K1943	1.74

CONTINUED

MINITEK™ 2.00mm (0.079″) SHROUDED HEADERS (CONT.)

THRU-HOLE MOUNT, RIGHT-ANGLE — PIN STYLE: 4 mm (0.157″) MATING SIDE, 2.50 mm (0.09″) SOLDER SIDE

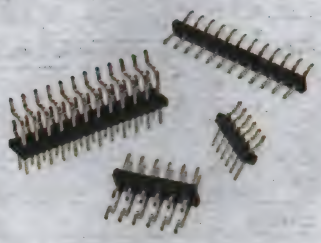
Mfg. Part No.	Positions	Plating	Stock No.	Price Each 1-9
98464-S61-20ULF	20	15u″ Gold	06M3022	3.91

(61076)

MINITEK™ 2.00mm (0.079″) SMT RIGHT ANGLE UNSHROUDED HEADERS

RoHS Compliant Available

FCI



- Housing: High-temperature thermoplastic, Black
- Flammability rating: UL 94 V-0
- Pin: copper alloy
- Current rating: 2 A, 80°C ambient
- Contact resistance: 20 mΩ Max.
- Dielectric withstanding voltage: 650 V
- Voltage rating: 200 V
- Mating cycles (durability): 100
- Operating Temperature Range: -55°C to +125°C

Minitek™ Horizontal SMT Headers enable perpendicular printed circuit board connections on a 2 mm grid using surface mount technology. In a typical application the horizontal SMT header is soldered at the edge of the PCB and mates with any of various different types of receptacles. The components in the Minitek™ system including the SMT horizontal headers are fully intermateable.

MINITEK SMT RIGHT ANGLE HEADER - SINGLE ROW

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-24
10112684-G03-04ULF	4	24T9740	1.29	1.21
10112684-G03-06ULF	6	24T9742	1.78	1.67
10112684-G03-08ULF	8	24T9744	2.06	1.94
10112684-G03-10ULF	10	24T9746	2.38	2.24
10112684-G03-12ULF	12	24T9748	2.58	2.37
10112684-G03-16ULF	16	24T9752	3.09	2.84
10112684-G03-20ULF	20	24T9756	3.59	3.30
MINITEK SMT RIGHT ANGLE HEADER -DOUBLE ROW				
10112690-G03-02LF	4	24T9762	1.24	1.16
10112690-G03-03LF	6	24T9763	1.37	1.29
10112690-G03-05ULF	10	45T4808	2.06	1.94
10112690-G03-06ULF	12	24T9765	2.12	2.00
10112690-G03-08ULF	16	24T9767	2.46	2.26
10112690-G03-10ULF	20	24T9769	2.84	2.61

(197423)

DUBOX™ 2.54mm (0.100″) SHROUDED HEADERS

RoHS Compliant Available

FCI

- Housing: Glass filled thermoplastic polyester
- Flammability Rating: UL 94 V-0
- Contacts: Gold plated Phosphor Bronze
- Current Rating: 3 A continuous
- Insulation Resistance: 1x 105 Mohm min.
- Dielectric Withstanding Voltage: 1000 V rms
- Operating Temperature: -40°C to +125°C

For use with Dubox™ crimp-to-wire housings and are stackable end-to-end. Passive latching, anti-reverse and anti-miss-match when used with Dubox™ crimp-to-wire housings.

DUBOX SINGLE ROW SHROUDED HEADERS - VERTICAL THRU HOLE

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-24
76384-302LF	2	62K8648	0.48	0.44
76384-303LF	3	62K8649	0.61	0.55
76384-304LF	4	62K8650	0.71	0.64
76384-306LF	6	62K8652	0.87	0.82
DUBOX DOUBLE ROW SHROUDED HEADERS - VERTICAL THRU HOLE				
76385-303LF	6	62K8683	1.07	1.00
76385-304LF	8	62K8684	1.27	1.20
76385-305LF	10	62K8685	1.39	1.31
76385-308LF	16	62K8688	1.63	1.54
DUBOX SINGLE ROW SHROUDED HEADERS - RIGHT ANGLE THRU HOLE				
76382-306LF	6	62K8558	1.03	0.97

(134267)

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(212564)

PC BOARD HEADERS & SOCKETS

DUBOX™ 2.54mm (0.100″) CRIMP-TO-WIRE HOUSINGS

RoHS Compliant Available

- Housing: Glass filled thermoplastic polyester; Color: Blue
- Contacts: Gold plated Phosphor Bronze
- Insulation Resistance: 1x 105 Mohm min.
- Dielectric Withstanding Voltage: 1000 V rms
- Operating Temperature: -65°C to +125°C

For use with Dubox™ crimp-to-wire contacts and are stackable end-to-end. Passive latching, anti-reverse and anti-miss-match when used with Dubox™ shrouded headers. Contacts removable for easy repairability.

0.100″ (2.54mm) DUBOX™ CRIMP-TO-WIRE HOUSINGS - SINGLE ROW

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-24
● 65240-002LF	2	62K6545	0.21	0.18
● 65240-004LF	4	62K6547	0.35	0.30
● 65240-006LF	6	62K6549	0.43	0.39

0.100″ (2.54mm) DUBOX™ CRIMP-TO-WIRE HOUSINGS - DOUBLE ROW

● 65239-002LF	4	62K6523	0.38	0.33
● 65239-003LF	6	62K6524	0.45	0.41
● 65239-004LF	8	62K6525	0.54	0.49
● 65239-005LF	10	62K6526	0.71	0.64
● 65239-006LF	12	62K6527	0.80	0.72
● 65239-008LF	16	62K6529	0.89	0.83

CONTACTS

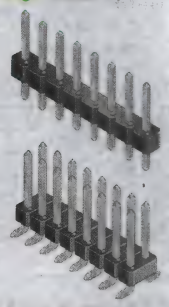
Mfg. Part No.	AWG	Insulation Dia. (mm)	Package	Stock No.	Price Each 1-9	Price Each 10-24
● 76357-301LF	30AWG to 22AWG	0.90 - 1.50	Loose Piece	62K8551	0.27	0.23
● 76347-301LF	30AWG to 22AWG	0.90 - 1.50	Cut Tape	62K8468	0.18	0.17

(134271)

BERGSTIK™ UNSHROUDED VERTICAL SINGLE-ROW AND DOUBLE-ROW HEADERS

SMD

RoHS Compliant Available



Thru-hole and surface mount headers in single-row and double-row configurations. Phosphor-bronze pins are 15μ″ gold-plated in contact area and 150μ″ tin/lead-plated on tail. High-temperature, black thermoplastic housing, flammability rated UL94V-0. Current rating: 3A continuous. Insulation resistance: 5000MΩ min. Dielectric withstanding voltage: 1500V. Post: 0.230″ (5.84). Other versions and sizes are available; *go online or call.*

54101 SERIES, SINGLE-ROW UNSHROUDED HEADERS, VERTICAL THRU-HOLE

Mfg. Part No.	Positions Per Row	Plating	Mating Length	Tail Length	Stock No.	Price Each 1-9	Price Each 10-24
54101-S08-04	4	15u″ Gold	5.84 mm	3.05 mm	22C1650	0.23	0.19
54101-S08-08	8	15u″ Gold	5.84 mm	3.05 mm	22C1658	0.40	0.36
54101-S08-20	20	15u″ Gold	5.84 mm	3.05 mm	22C1682	1.41	1.32

54102 SERIES, DOUBLE-ROW UNSHROUDED HEADERS, VERTICAL THRU-HOLE

54102-S08-02	4	15u″ Gold	5.84 mm	3.05 mm	22C2546	1.60	1.51
54102-S08-04	8	15u″ Gold	5.84 mm	3.05 mm	22C2550	1.81	1.70
54102-S08-18	36	15u″ Gold	5.84 mm	3.05 mm	22C2578	1.19	1.12

67997 SERIES, DOUBLE-ROW UNSHROUDED HEADERS, VERTICAL THRU-HOLE

● 67997-220HLF	20	15u″ Gold	5.84 mm	3.05 mm	86K8610	1.30	1.22

67996 SERIES, DOUBLE-ROW UNSHROUDED HEADERS, VERTICAL THRU-HOLE

● 67996-406HLF	6	Tin	5.84 mm	2.41 mm	20M2191	0.27	0.24
● 67996-472HLF	72	Tin	5.84 mm	2.41 mm	65K9536	1.41	1.33
● 67996-206HLF	6	15u″ Gold	5.84 mm	2.41 mm	33M7808	0.30	0.26
● 67996-210HLF	10	15u″ Gold	5.84 mm	2.41 mm	33M7809	0.61	0.55
● 67996-220HLF	20	15u″ Gold	5.84 mm	2.41 mm	33M7813	0.71	0.66
● 67996-272HLF	72	15u″ Gold	5.84 mm	2.41 mm	78K5719	2.04	1.92
● 67996-102HLF	2	30u″ Gold	5.84 mm	2.41 mm	78M6708	0.30	0.26
● 67996-104HLF	4	30u″ Gold	5.84 mm	2.41 mm	20M2185	0.28	0.24
● 67996-106HLF	6	30u″ Gold	5.84 mm	2.41 mm	20M2186	0.33	0.30
● 67996-110HLF	10	30u″ Gold	5.84 mm	2.41 mm	06M1752	0.53	0.48
● 67996-112HLF	12	30u″ Gold	5.84 mm	2.41 mm	20M2187	0.63	0.57
● 67996-114HLF	14	30u″ Gold	5.84 mm	2.41 mm	30M1973	0.76	0.68
● 67996-116HLF	16	30u″ Gold	5.84 mm	2.41 mm	20M2188	0.88	0.82
● 67996-120HLF	20	30u″ Gold	5.84 mm	2.41 mm	20M2189	0.91	0.86
● 67996-124HLF	24	30u″ Gold	5.84 mm	2.41 mm	30M1975	1.13	1.06
● 67996-126HLF	26	30u″ Gold	5.84 mm	2.41 mm	84K6414	4.92	4.52
● 67996-172HLF	72	30u″ Gold	5.84 mm	2.41 mm	65K9535	2.71	2.49

➤ CONTINUED ➤

BERGSTIK™ UNSHROUDED VERTICAL SINGLE-ROW AND DOUBLE-ROW HEADERS (CONT.)

54201 SERIES, SINGLE-ROW UNSHROUDED HEADERS, VERTICAL SURFACE MOUNT

Mfg. Part No.	Positions Per Row	Plating	Mating Length	Stock No.	Price Each 1-9	Price Each 10-24
54201-S08-05	5	15u″ Gold	5.84 mm	22C3143	1.61	1.52

54202 SERIES, DOUBLE-ROW UNSHROUDED HEADERS, VERTICAL SURFACE MOUNT

54202-S08-04	4	15u″ Gold	5.84 mm	22C3244	0.31	0.28
54202-S08-08	8	15u″ Gold	5.84 mm	22C3248	0.95	0.90
54202-S08-10	10	15u″ Gold	5.84 mm	22C3250	1.30	1.22
54202-S08-14	14	15u″ Gold	5.84 mm	22C3254	1.61	1.52
54202-S08-16	16	15u″ Gold	5.84 mm	22C3256	1.77	1.66
54202-S08-20	20	15u″ Gold	5.84 mm	22C3260	2.12	1.99

77311 SERIES, SERIES, SINGLE-ROW UNSHROUDED HEADERS, VERTICAL THRU-HOLE

Mfg. Part No.	Positions	Plating	Mating Length	Tail Length	Stock No.	Price Each 1-9	Price Each 10-24
● 77311-401-36LF	36	Tin	5.84 mm	2.41 mm	93K5128	1.79	1.68
● 77311-818-36LF	36	15u″ Gold	5.84 mm	3.05 mm	93K5129	1.67	1.57
● 77311-101-16LF	16	30u″ Gold	5.84 mm	2.41 mm	17M4437	0.79	0.75
● 77311-118-08LF	8	30u″ Gold	5.84 mm	3.05 mm	62K8871	0.46	0.42

95278 SERIES, DOUBLE-ROW UNSHROUDED HEADERS, VERTICAL SURFACE MOUNT

Mfg. Part No.	Positions	Plating	Mating Length	Stock No.	Price Each 1-9	Price Each 10-24
● 95278-101A06LF	6	30u″ Gold	5.90 mm	63K1608	1.17	1.03
● 95278-101A10LF	10	30u″ Gold	5.90 mm	84K7236	1.34	1.17
● 95278-101A16LF	16	30u″ Gold	5.90 mm	63K1612	1.33	1.16
● 95278-101A20LF	20	30u″ Gold	5.90 mm	84K7237	1.49	1.40

(61184)

PV™ 2.54mm (0.100″) SHROUDED HEADERS

RoHS Compliant Available

- Housing: Black thermoplastic
- Flammability Rating: UL 94 V-0
- Contacts: Gold plated Phosphor Bronze
- Current Rating: 3 A continuous
- Insulation Resistance: 100000 mohm min.
- Dielectric Withstanding Voltage: 1000 V
- Operating Temperature: -40°C to +95°C

High temperature headers feature high reliability contacts and passive latching system.

PV™ SHROUDED HEADERS - SINGLE ROW

Mfg. Part No.	Positions	Mounting	Stock No.	Price Each 1-9	Price Each 10-24
● 69167-103HLF	3	Vertical	03M2203	0.78	0.70
● 69167-106HLF	6	Vertical	03M2206	0.87	0.82
● 78208-103HLF	3	Right Angle	03M2314	0.54	0.49
● 78208-104HLF	4	Right Angle	03M2315	0.76	0.68

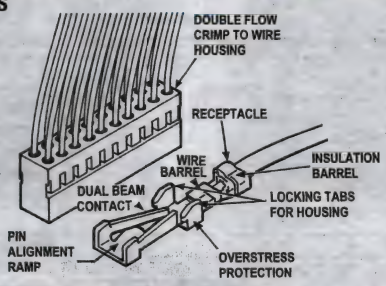
PV™ SHROUDED HEADERS - DOUBLE ROW

● 69168-106HLF	6	Vertical	03M2217	0.97	0.91
● 69168-108HLF	8	Vertical	03M2218	1.26	1.18
● 69168-110HLF	10	Vertical	03M2220	1.52	1.43
● 69168-120HLF	20	Vertical	03M2225	2.05	1.93
● 78207-108HLF	8	Right Angle	03M2303	1.26	1.19
● 78207-110HLF	10	Right Angle	03M2304	0.96	0.90

(134272)

MINITEK™ 2.00mm (0.079″) CRIMP-TO-WIRE HOUSINGS AND CRIMP CONTACTS

RoHS Compliant Available



Minitek™ crimp-to-wire, double-row housings are offered keyed or unkeyed with 2.00 x 2.00 mm (0.079 x 0.079″) centerlines. Contructed of black nylon. Insulation resistance: 1000 Mohms minimum. Withstanding voltage: 650 Vrms. Current rating: 2 A. Operating temperature: -40°C to +105°C. *Order 2mm crimp contacts separately below.* UL recognized, CSA certified.

➤ CONTINUED ➤

MINITEK™ 2.00mm (0.079″) CRIMP-TO-WIRE HOUSINGS AND CRIMP CONTACTS (CONT.)

2.00mm CRIMP HOUSINGS, DOUBLE ROW - WITHOUT POLARIZATION KEYS

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	10-24	25-49
69307-014LF	14	01M3609	0.78	0.73	0.70
2.00mm CRIMP HOUSINGS, DOUBLE ROW - WITH POLARIZING KEYS					
90311-004LF	4	01M4831	0.75	0.71	0.68
90311-006LF	6	01M4832	0.76	0.68	0.61
90311-010LF	10	01M4834	0.80	0.75	0.72
90311-012LF	12	01M4835	0.96	0.91	0.87
90311-016LF	16	09P8387	1.29	1.21	1.16
90311-044LF	44	01M4851	2.08	1.96	1.88
2.00mm CRIMP HOUSINGS, SINGLE ROW - WITH POLARIZING KEYS					
90312-004LF	4	01M4856	0.69	0.65	0.62
90312-008LF	8	01M4860	0.85	0.80	0.77
2.00mm CRIMP HOUSINGS, DOUBLE ROW - WITH ACTIVE LATCH					
10073599-008LF	8	78M3862	0.72	0.68	0.65
10073599-010LF	10	78M3863	0.71	0.64	0.57
10073599-012LF	12	78M3864	0.77	0.72	0.70
10073599-014LF	14	78M3865	0.80	0.75	0.72
10073599-030LF	30	78M3873	1.41	1.33	1.27

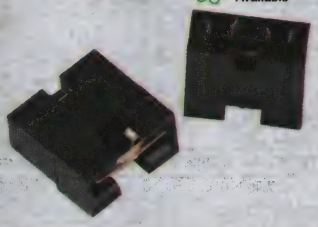
2.00 mm CRIMP CONTACTS — SOLD INDIVIDUALLY

Mfg. Part No.	Plating	Stock No.	Price Each 1-9	10-24	25-49
77138-101LF	20u″ Gold	06M2115	0.28	0.27	0.23

(75629)

MINI-JUMP™ SHUNT JUMPER SYSTEMS

RoHS Compliant Available



- Standard 2-Position for 0.100″ (2.54) Centers
- Mate with 0.025″(0.635) Square and Round Pins
- Contact Resistance: 15 Megohms
- Current Rating: 2.5A Max. Per Contact
- 65474 Series feature Blue Housings; 68786 and 71363 Series feature Black Housings
- UL Recognized, CSA Certified

Economical, stackable jumper systems are applicable for bussing, programming and switch replacement. Low-profile shunts stand 0.200″(5.08) above PC board; high-body shunts stand 0.360″ (9.15) above PC board. Dual-beam, phosphor-bronze contacts.

LOW-PROFILE SHUNTS

Mfg. Part No.	Plating	Stock No.	Price Each 1-9
65474-001	40μ″ Gold	94F7344	0.45
65474-002LF	100μ″ Tin	06M1613	0.24
65474-010	30μ″ Gold	89F4580	0.39
65474-010LF	30μ″ Gold	06M1617	0.33
LOW-PROFILE SHUNTS			
68786-102LF	15μ″ Gold	53K1469	0.19
68786-202	30μ″ Gold	89F4578	0.24
68786-202LF	30μ″ Gold	84K6455	0.23
68786-302LF	100μ″ Tin	06M1818	0.20
HIGH-BODY SHUNTS			
71363-102	15μ″ Gold	97F9685	0.38
71363-102LF	15μ″ Gold	62K7134	0.40
71363-202	30μ″ Gold	97F9686	0.41
71363-302LF	100μ″ Tin	72K3596	0.33

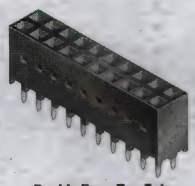
(8419)

DUBOX™ 2.54mm (0.100″) PC BOARD VERTICAL RECEPTACLES

RoHS Compliant Available

- Current Rating: 3A DC Max. per Individual Contact
- Insulation Resistance: 1000MΩ Min.
- Contact Resistance: 15mΩ Max. Initial, 20mΩ Max. after Environmental Tests
- Dielectric Withstanding Voltage: 1000V
- Operating Temperature: -65°C to +125°C
- UL Recognized, CSA Certified

Single Row, Top Entry



Double Row, Top Entry

➤CONTINUED➤

DUBOX™ 2.54mm (0.100″) PC BOARD VERTICAL RECEPTACLES (CONT.)

Vertical receptacles feature phosphor bronze contacts plated with 30μ″ gold in contact area and 100μ″ tin/lead on tails. Blue thermoplastic housing, flammability rated UL94V-0. 2A DC max. per contact for fully energized connector. *For full dimensional information go online or call*

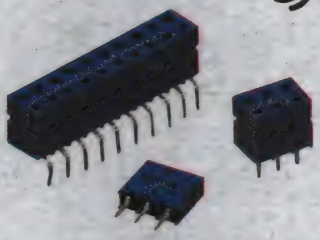
75915 SERIES TOP-ENTRY SINGLE-ROW RECEPTACLES

Mfg. Part No.	Positions	Total No. of Contacts	Stock No.	Price Each 1-9	10-24
75915-306LF	1x6	6	62K8174	0.87	0.82
75915-308LF	1x8	8	62K8176	1.14	1.07
75915-310LF	1x10	10	62K8178	1.38	1.30
75915-312LF	1x12	12	62K8180	1.53	1.44
75915-314LF	1x14	14	62K8182	1.81	1.70
75915-316LF	1x16	16	62K8184	2.06	1.94
75915-320LF	1x20	20	62K8188	2.58	2.42
66951 SERIES TOP-ENTRY SINGLE-ROW RECEPTACLES					
66951-008LF	1x8	8	72K2935	2.04	1.92
87606 SERIES TOP-ENTRY DOUBLE-ROW RECEPTACLES					
87606-308LF	2x8	16	63K0748	2.10	1.97
87606-310LF	2x10	20	63K0751	2.54	2.39
87606-312LF	2x12	24	63K0753	2.85	2.62
87606-316LF	2x16	32	63K0758	4.04	3.71
87606-320LF	2x20	40	66K0113	7.48	6.78
66953 SERIES TOP-ENTRY DOUBLE-ROW RECEPTACLES					
66953-005LF	2x5	10	72K2940	2.34	2.20
66953-007LF	2x7	14	72K2942	3.38	3.10
66953-008LF	2x8	16	06M1696	2.48	2.33
66953-015LF	2x15	30	72K2947	4.73	4.34
66953-017LF	2x17	34	72K2948	5.72	5.19
66953-025LF	2x25	50	72K2952	6.50	5.90

(61270)

DUBOX™ 2.54mm (0.100″) LOW-PROFILE PCB VERTICAL RECEPTACLES

RoHS Compliant Available



- The Dubox™ contact has a pre-stressed, dual beam design to enable low insertion force
- 4-wall contact design for signal protection
- Current Rating: 3A DC Max. Per Indivdual Contact
- Insulation Resistance: 1000MΩ Min.
- Contact Resistance: 15mΩ Max. Initial, 20mΩ Max. After Environmental Tests
- Dielectric Withstanding Voltage: 1000V
- Housing: Glass filled thermoplastic
- Flammability rating: UL 94 V-0
- Mating cycles (durability): 200
- Operating Temperatures: -65°C to +125°C
- UL Recognized, CSA Certified

Vertical receptacles feature phosphor bronze contacts plated with 30μ″ gold in contact area and 100μ″ tin/lead on tails. High-temperature, thermoplastic housing. *For full dimensional information go online or call*

68685 SERIES SINGLE-ROW RECEPTACLES, TOP-ENTRY - VERTICAL THRU HOLE

Mfg. Part No.	Positions	Total No. of Contacts	Color	Length	Stock No.	Price Each 1-9
68685-306LF	1x6	6	Black	0.617″ (15.67)	72K3204	2.35
68685-308LF	1x8	8	Black	0.817″ (20.75)	72K3205	2.53
68685-316LF	1x16	16	Black	1.617″ (41.07)	72K3208	4.38
68685-320LF	1x20	20	Black	2.017″ (51.23)	72K3210	4.86
68683 SERIES DOUBLE-ROW RECEPTACLES, TOP-ENTRY - VERTICAL THRU HOLE						
68683-303LF	2x3	6	Black	0.317″ (8.05)	72K3186	1.61
68683-305LF	2x5	10	Black	0.517″ (13.13)	72K3188	1.35
68683-307LF	2x7	14	Black	0.717″ (18.21)	72K3189	1.92
68683-308LF	2x8	16	Black	0.817″ (20.75)	72K3190	2.08
68683-310LF	2x10	20	Black	1.017″ (25.83)	06M1806	2.67
68683-313LF	2x13	26	Black	1.317″ (33.45)	06M1807	3.50
68683-315LF	2x15	30	Black	1.517″ (38.53)	75K4192	3.83
68683-317LF	2x17	34	Black	1.717″ (43.61)	72K3192	4.54
68683-320LF	2x20	40	Black	2.017″ (51.23)	72K3194	5.57
68683-325LF	2x25	50	Black	2.517″ (63.93)	72K3195	6.10
68683-332LF	2x32	64	Black	3.217″ (81.71)	72K3196	9.50
66953 SERIES DOUBLE-ROW RECEPTACLES, TOP-ENTRY - VERTICAL THRU HOLE						
66953-010LF	2x10	20	Black	1.000″ (25.40)	72K2943	3.55
76341 SERIES SINGLE-ROW RECEPTACLES, TOP-ENTRY - VERTICAL THRU HOLE						
76341-303LF	1x3	3	Blue	0.297″ (7.54)	93K5098	0.75
76341-306LF	1x6	6	Blue	0.597″ (15.16)	93K5101	1.12
76342 SERIES DOUBLE-ROW RECEPTACLES, TOP-ENTRY - VERTICAL THRU HOLE						
76342-304LF	2x4	8	Blue	0.397″ (10.08)	93K5112	1.35
76342-308LF	2x8	16	Blue	0.797″ (20.24)	93K5115	2.71
76342-310LF	2x10	20	Blue	0.997″ (25.32)	93K5117	3.89

➤CONTINUED➤

PC BOARD HEADERS & SOCKETS

DUBOX™ 2.54mm (0.100") LOW-PROFILE PCB VERTICAL RECEPTACLES (CONT.)

89898 SERIES DOUBLE-ROW RECEPTACLES, DUAL-ENTRY - VERTICAL SURFACE MOUNT

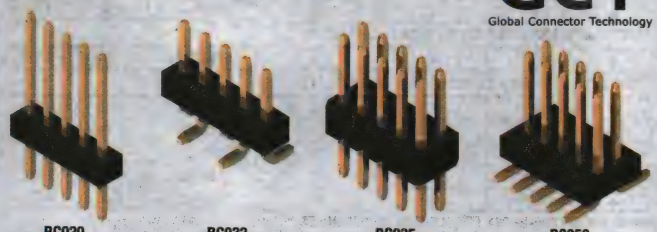
Mfg. Part No.	Positions	Total No. of Contacts	Color	Length	Stock No.	Price Each 1-9
● 89898-302ALF	2x2	4	Gray	0.397" (10.08)	63K1187	0.99
● 89898-306ALF	2x6	12	Gray	1.197" (30.40)	63K1198	1.95
● 89898-308ALF	2x8	16	Gray	1.597" (40.56)	63K1202	2.49

(8411)

1.00mm BOARD-TO-BOARD HEADER CONNECTORS

RoHS Compliant Available

GCT Global Connector Technology



BC020 BC032 BC035 BC050

Specifications:
- Current rating: 1 A
- Contact resistance: 20mΩ Max.
- Insulation resistance: 1000 MΩ Min.
- Dielectric withstanding voltage: 300 VAC
- Operating temperature: -40°C to 105°C
- Contact material: BC020, BC035, BC050: Copper alloy; BC032: Phosphor bronze
- Standard insulator material: Polyester LCP, UL94-V0

BC020 SERIES HEADERS - SINGLE ROW, VERTICAL THROUGH HOLE

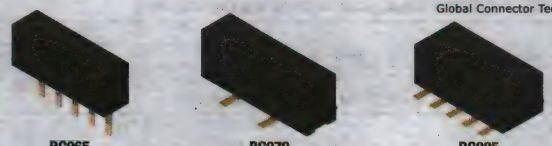
Mfg. Part No.	Positions	Pin Length (mm)	Stock No.	Price Each 1-9	Price Each 10-24
● BC020-04-A-0200-0300-L	4	2.00	67R6860	0.70	0.64
● BC020-05-A-0200-0300-L	5	2.00	67R6862	0.77	0.70
● BC020-06-A-0200-0300-L	6	2.00	67R6864	0.81	0.60
● BC020-07-A-0200-0300-L	7	2.00	67R6866	0.84	0.62
● BC020-08-A-0200-0300-L	8	2.00	67R6868	0.87	0.64
● BC020-09-A-0200-0300-L	9	2.00	67R6870	0.89	0.66
● BC020-10-A-0200-0300-L	10	2.00	67R6872	0.92	0.68
● BC020-04-A-0380-0300-L	4	3.80	67R6861	0.66	0.61
● BC020-05-A-0380-0300-L	5	3.80	67R6863	0.77	0.70
● BC020-06-A-0380-0300-L	6	3.80	67R6865	0.81	0.60
● BC020-07-A-0380-0300-L	7	3.80	67R6867	0.84	0.62
● BC020-08-A-0380-0300-L	8	3.80	67R6869	0.87	0.64
● BC020-09-A-0380-0300-L	9	3.80	67R6871	0.89	0.66
● BC020-10-A-0380-0300-L	10	3.80	67R6873	0.92	0.68
BC032 SERIES HEADERS - SINGLE ROW, VERTICAL SURFACE MOUNT					
● BC032-02-A-2-0200-0200-L	2	2.00	67R6934	0.61	0.56
● BC032-03-A-2-0200-0200-L	3	2.00	67R6936	0.71	0.65
● BC032-04-A-2-0200-0200-L-D	4	2.00	67R6938	0.75	0.56
● BC032-05-A-2-0200-0200-L-D	5	2.00	67R6940	0.81	0.60
● BC032-06-A-2-0200-0200-L-D	6	2.00	67R6942	0.87	0.64
● BC032-07-A-2-0200-0200-L-D	7	2.00	67R6944	0.89	0.66
● BC032-08-A-2-0200-0200-L-D	8	2.00	67R6946	0.92	0.68
● BC032-09-A-2-0200-0200-L-D	9	2.00	67R6948	0.95	0.70
● BC032-10-A-2-0200-0200-L-D	10	2.00	67R6950	0.98	0.72
● BC032-02-A-2-0200-0380-L	2	3.80	67R6935	0.64	0.48
● BC032-03-A-2-0200-0380-L	3	3.80	67R6937	0.66	0.61
● BC032-04-A-2-0200-0380-L-D	4	3.80	67R6939	0.75	0.56
● BC032-05-A-2-0200-0380-L-D	5	3.80	67R6941	0.81	0.60
● BC032-06-A-2-0200-0380-L-D	6	3.80	67R6943	0.87	0.64
● BC032-07-A-2-0200-0380-L-D	7	3.80	67R6945	0.89	0.66
● BC032-08-A-2-0200-0380-L-D	8	3.80	67R6947	0.92	0.68
● BC032-09-A-2-0200-0380-L-D	9	3.80	67R6949	0.95	0.70
● BC032-10-A-2-0200-0380-L-D	10	3.80	67R6951	0.98	0.72
BC035 SERIES HEADERS - DOUBLE ROW, VERTICAL THROUGH HOLE					
● BC035-04-A-0200-0300-L	4	2.00	67R7012	0.66	0.61
● BC035-06-A-0200-0300-L	6	2.00	67R7014	0.75	0.56
● BC035-08-A-0200-0300-L	8	2.00	67R7016	0.81	0.60
● BC035-10-A-0200-0300-L	10	2.00	67R7018	0.87	0.64
● BC035-04-A-0380-0300-L	4	3.80	67R7013	0.71	0.65
● BC035-06-A-0380-0300-L	6	3.80	67R7015	0.75	0.56
● BC035-08-A-0380-0300-L	8	3.80	67R7017	0.81	0.60
● BC035-10-A-0380-0300-L	10	3.80	67R7019	0.87	0.64

(168164)

1.00mm BOARD-TO-BOARD RECEPTACLE CONNECTORS

RoHS Compliant Available

GCT Global Connector Technology



BC065 BC070 BC085

Specifications:
- Current rating: 1 A
- Contact resistance: BC065, BC070: 40mΩ Max.; BC085: 20mΩ Max.
- Insulation resistance: BC065, BC070: 500 MΩ Min.; BC085: 1000 MΩ Min.
- Dielectric withstanding voltage: BC065, BC070: 200 VAC.; BC085: 300 VAC
- Operating temperature: -40°C to 105°C
- Contact material: BC065, BC070: Phosphor bronze; BC085: Copper alloy
- Standard insulator material: Polyester LCP, UL94-V0

BC065 SERIES RECEPTACLES - SINGLE ROW, VERTICAL THROUGH HOLE - 2.10mm PROFILE

Mfg. Part No.	Positions	Stock No.	Price Each 1-9
● BC065-02-A-L-G	2	67R7168	0.63
● BC065-03-A-L-G	3	67R7169	0.68
● BC065-04-A-L-G	4	67R7170	0.82
● BC065-05-A-L-D	5	67R7171	0.44
● BC065-06-A-L-D	6	67R7172	0.52
● BC065-07-A-L-D	7	67R7173	0.61
● BC065-08-A-L-D	8	67R7174	0.70
● BC065-09-A-L-D	9	67R7175	0.78
● BC065-10-A-L-D	10	67R7176	0.87
BC070 SERIES RECEPTACLES - SINGLE ROW, VERTICAL SURFACE MOUNT - 2.10mm PROFILE			
● BC070-02-A-1-L-D	2	67R7207	0.18
● BC070-03-A-1-L-D	3	67R7208	0.27
● BC070-04-A-1-L-D	4	67R7209	0.36
● BC070-05-A-1-L-D	5	67R7210	0.45
● BC070-06-A-1-L-D	6	67R7211	0.54
● BC070-07-A-1-L-D	7	67R7212	0.63
● BC070-08-A-1-L-D	8	67R7213	0.72
● BC070-09-A-1-L-D	9	67R7214	0.81
● BC070-10-A-1-L-D	10	67R7215	0.90
BC085 SERIES RECEPTACLES - DOUBLE ROW, VERTICAL SURFACE MOUNT - 2.25mm PROFILE			
● BC085-06-A-0390-L-D	6	67R7246	0.55
● BC085-08-A-0390-L-D	8	67R7247	0.73
● BC085-10-A-0390-L-D	10	67R7248	0.91

(168170)

M22 SERIES MALE CONNECTORS

RoHS Compliant Available

HARWIN

Straight PC Tail Right-Angle PC Tail Straight SMT

Right-Angle SMT

- Unshrouded
- Body material: Nylon
- Pitch spacing: 2mm
- Contact finish: Gold
- Housings available; *order separately online.*
- Suitable for use with female connectors
- Operating Temperature: -40°C to +105°C
- Current rating: 1 A

SINGLE ROW STRAIGHT PC TAIL

Mfg. Part No.	No. of Contacts	Stock No.	Price Each 1-9
● M22-2510205	2	33K3483	0.30
● M22-2510305	3	37K8782	0.43
● M22-2510405	4	26K1917	0.56
● M22-2510605	6	56K0371	0.89
● M22-2511005	10	98H0416	0.98
● M22-2512005	20	56K0398	1.58
DUAL ROW STRAIGHT PC TAIL			
● M22-2520205	4	56K0414	0.59
● M22-2520305	6	89H8939	0.83
● M22-2520405	8	89H8942	0.82
● M22-2520505	10	56K0418	0.98
● M22-2520605	12	56K0420	1.13

➤CONTINUED➤

M22 SERIES MALE CONNECTORS (CONT.)

DUAL ROW STRAIGHT PC TAIL

Mfg. Part No.	No. of Contacts	Stock No.	Price Each 1-9
M22-2521005	20	56K0426	1.48
M22-2522005	40	56K0445	2.46
SINGLE ROW RIGHT-ANGLE PC TAIL			
M22-2530205	2	56K0461	0.13
M22-2530305	3	43K8563	0.21
M22-2530505	5	56K0466	0.34
M22-2530605	6	56K0468	0.71
M22-2531405	14	56K0483	1.10
M22-2532005	20	56K0495	1.80
DUAL ROW RIGHT-ANGLE PC TAIL			
M22-2540205	4	56K0507	0.29
M22-2540305	6	56K0509	0.67
M22-2540405	8	56K0511	0.52
M22-2540505	10	56K0513	1.08
M22-2540605	12	56K0515	1.07
M22-2541005	20	56K0523	1.79
M22-2541405	28	56K0530	1.93
M22-2542005	40	56K0542	2.74
DUAL ROW STRAIGHT SMT			
M22-5320205	4	56K0691	0.92
M22-5320305	6	56K0696	1.14
M22-5320405	8	81H4316	0.83
M22-5320605	12	13J3323	1.19
M22-5321005	20	37J0146	2.10
SINGLE ROW RIGHT-ANGLE SMT			
M22-5330205	2	56K0824	0.74
M22-5330505	5	56K0827	0.76
M22-5331405	14	56K0836	2.29
DUAL ROW RIGHT-ANGLE SMT			
M22-5430405	8	56K0849	1.29
M22-5431005	20	56K0855	3.35

JUMPER SOCKETS

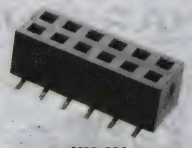
Mfg. Part No.	Color	Contact Finish	Stock No.	Price Each 1-9
M22-1900005	Black	Gold	56K0291	0.71
M22-1900046	Black	Tin	03M3586	0.72
M22-1910005	Blue	Gold	02J7738	0.67
M22-1920005	Red	Gold	56K0294	0.72
M22-1920046	Red	Tin	03M3588	0.67

(90408)

M22 SERIES FEMALE CONNECTORS

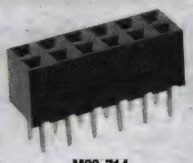
RoHS Compliant Available

HARWIN



M22-634

M22-713



M22-714

- Unshrouded
- Body material: Nylon
- Pitch spacing: 0.08″
- Suitable for use with male connectors; *order separately on pages 770-771*

DUAL ROW VERTICAL SMT — 4.50 mm HEIGHT — PLATING: GOLD POST — TIN TAIL

Mfg. Part No.	Contacts	Stock No.	Price Each 1-9
M22-6340342	6	03M3988	1.30
M22-6340442	8	03M3990	1.71
M22-6340542	10	03M3991	1.81
M22-6340642	12	03M3993	2.09
M22-6341042	20	03M3997	2.74
SINGLE ROW VERTICAL PC TAIL — PLATING: GOLD POST — TIN TAIL			
M22-7130342	3	71K8277	1.07
M22-7130442	4	71K8278	1.16
M22-7130542	5	71K8279	1.60
M22-7130642	6	71K8280	1.22
M22-7131042	10	71K8284	1.97
M22-7131442	14	71K8288	2.72
M22-7132042	20	71K8294	3.26
DUAL ROW VERTICAL PC TAIL — PLATING: GOLD POST — TIN TAIL			
M22-7140342	6	71K8300	1.60
M22-7140442	8	71K8301	1.96

➤CONTINUED➤

M22 SERIES FEMALE CONNECTORS (CONT.)

DUAL ROW VERTICAL PC TAIL — PLATING: GOLD POST — TIN TAIL

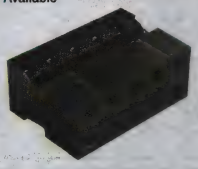
Mfg. Part No.	Contacts	Stock No.	Price Each 1-9
M22-7140542	10	71K8302	1.66
M22-7140642	12	71K8303	1.92
M22-7141042	20	71K8307	3.31
M22-7141442	28	71K8311	4.00
M22-7142042	40	71K8317	5.07

(90457)

M22 SERIES FEMALE CRIMP HOUSINGS

RoHS Compliant Available

HARWIN



- Body material: Nylon 6/6
- Pitch spacing: 0.080″
- Twin-leaf phosphor bronze contacts, rear insertable into housing; *order separately below*
- Suitable to use with male connectors *on pages 770-771*

SIL CRIMP MOULDING

Mfg. Part No.	No. of Contacts	Stock No.	Price Each 1-9	Price Each 10-24
M22-3010200	2	56K0645	0.25	0.23
M22-3010300	3	56K0646	0.33	0.30
M22-3010400	4	56K0647	0.91	0.57
M22-3010500	5	56K0648	0.39	0.36
M22-3010600	6	87H9438	0.82	0.58
M22-3011000	10	56K0651	0.58	0.53
M22-3012000	20	56K0661	0.94	0.86
DIL CRIMP MOULDING				
M22-3020200	4	56K0662	0.36	0.33
M22-3020300	6	56K0663	0.42	0.38
M22-3020400	8	56K0664	0.53	0.49
M22-3020500	10	81H3906	0.59	0.54
M22-3020600	12	03H3162	1.18	0.83
M22-3021000	20	56K0668	1.49	1.16
M22-3022000	40	56K0677	2.10	1.74

CONTACTS

Mfg. Part No.	Wire Size (AWG)	Contact Finish	Stock No.	Price per Pkg. 1-9	Price per Pkg. 10-99
M22-3050042†	30AWG to 24AWG	Gold + Tin	41M1847	8.93	8.17
M22-3050046†	30AWG to 24AWG	Tin	41M1848	27.11	16.85

†Sold in packages of 100

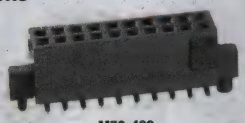
(90403)

ARCHER (M50) SERIES 0.050″ (1.27mm) POLARIZED CONNECTORS

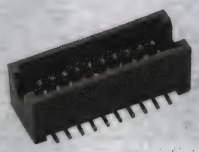
RoHS Compliant Available

HARWIN

ARCHER



M50-430



M50-490

M50-470

M50-480

- Shrouded
- Single polarization to prevent mis-mating
- Body material: Nylon
- Pitch spacing: 0.05″
- Contact finish: Gold

FEMALE—STRAIGHT SMT

Mfg. Part No.	Contacts	Stock No.	Price Each 1-9
M50-4300645	12	56K1823	2.49
M50-4300845	16	56K1825	3.26
M50-4301045	20	56K1827	3.64
M50-4301245	24	56K1829	4.06
M50-4301545	30	56K1832	4.92
M50-4302045	40	56K1837	5.95
M50-4302545	50	56K1842	7.07
M50-4305045	100	56K1867	11.68

➤CONTINUED➤

PC BOARD HEADERS & SOCKETS

ARCHER (M50) SERIES 0.050″ (1.27mm) POLARIZED CONNECTORS (CONT.)

MALE—STRAIGHT SMT

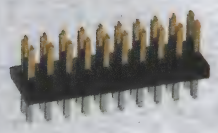
Mfg. Part No.	Contacts	Stock No.	Price Each 1-9
● M50-4900545	10	56K1944	2.53
● M50-4900645	12	56K1945	2.93
● M50-4900845	16	56K1947	3.34
● M50-4901045	20	56K1949	3.94
● M50-4901245	24	56K1951	3.94
● M50-4902045	40	56K1959	7.14
● M50-4902545	50	56K1964	8.12
● M50-4905045	100	65T4185	10.59
MALE—STRAIGHT PC TAIL			
● M50-4700545	10	56K1872	2.51
● M50-4700645	12	56K1873	2.90
● M50-4700845	16	56K1875	3.14
● M50-4701045	20	56K1877	3.91
● M50-4701245	24	56K1879	3.91
● M50-4701545	30	56K1882	5.33
● M50-4702045	40	56K1887	7.53
MALE—RIGHT-ANGLE PC TAIL			
● M50-4800545	10	56K1908	2.48
● M50-4800645	12	56K1909	2.87
● M50-4800845	16	56K1911	3.08
● M50-4801045	20	56K1913	3.85
● M50-4801245	24	56K1915	3.85
● M50-4801545	30	56K1918	5.27
● M50-4802545	50	56K1928	7.96

(90463)

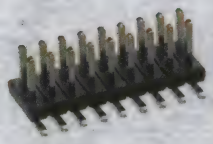
ARCHER M50 SERIES 0.050″ (1.27mm) HEADER CONNECTORS

RoHS Compliant Available

HARWIN ARCHER



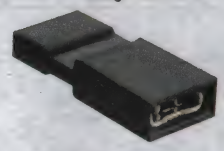
Straight PC Tail



Straight SMT

Right-angle PC Tail

- Number of rows: 2
- Body material: Nylon
- Pitch spacing: 1.27mm
- Contact finish: Gold Post, Tin Tail
- Suitable for use with female connectors
- Operating temperature: -40°C to +105°C
- Current rating: 1 A



Jumper with Handle

Jumper w/o Handle

STRAIGHT PC TAIL

Mfg. Part No.	No. of Contacts	Stock No.	Price Each 1-9
● M50-3500542	10	87K0158	1.60
● M50-3500642	12	03M4121	1.72
● M50-3500842	16	03M4123	1.84
● M50-3501042	20	74K2300	2.16
● M50-3501242	24	03M4125	2.16
● M50-3501542	30	03M4127	2.93
● M50-3505042	100	03M4135	7.14
STRAIGHT SMT			
● M50-3600542	10	84K7720	1.71
● M50-3600842	16	03M4139	2.02
● M50-3601042	20	03M4141	2.37
● M50-3602042	40	03M4145	3.87
● M50-3605042	100	03M4151	7.05
RIGHT-ANGLE PC TAIL			
● M50-3900542	10	03M4153	1.98
● M50-3905042	100	03M4168	9.24

JUMPERS WITH HANDLE

Mfg. Part No.	Color	Stock No.	Price Each 1-9
● M50-2000005	Black	82T3033	0.73
● M50-2020005	Red	82T3034	0.73
● M50-2030005	Blue	82T3035	0.73

➤CONTINUED➤

ARCHER M50 SERIES 0.050″ (1.27mm) HEADER CONNECTORS (CONT.)

JUMPERS WITHOUT HANDLE

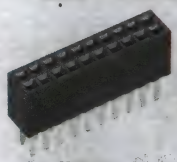
Mfg. Part No.	Color	Stock No.	Price Each 1-9
● M50-1900005	Black	82T3030	0.69
● M50-1920005	Red	82T3031	0.67
● M50-1930005	Blue	82T3032	0.70

(90462)

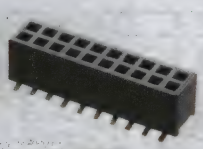
ARCHER M50 SERIES 0.050″ (1.27mm) RECEPTACLE CONNECTORS

RoHS Compliant Available

HARWIN ARCHER



M50-300



M50-312

M50-315

- Right-angle connector has two solder leads for connector rigidity
- Dual entry connector can be used as either top or bottom entry
- Number of rows: 2
- Body material: Nylon
- Pitch spacing: 1.27mm
- Contact finish: Gold
- Operating temperature -40°C to +105°C
- Current rating 1 Amp
- Suitable for use with male connectors; *order separately on this page*

STRAIGHT PC TAIL

Mfg. Part No.	No. of Contacts	Stock No.	Price Each 1-9
● M50-3000545	10	03M4076	1.91
● M50-3000845	16	03M4079	2.29
● M50-3001045	20	03M4081	2.86
● M50-3001245	24	03M4083	3.06
● M50-3001545	30	03M4084	3.26
● M50-3002045	40	03M4085	4.12
● M50-3002545	50	03M4086	4.74
● M50-3005045	100	03M4091	8.36
STRAIGHT SMT—3.6 mm HEIGHT			
● M50-3120545	10	56K1697	2.29
● M50-3121045	20	56K1702	3.64
● M50-3122545	50	56K1717	7.02
● M50-3125045	100	56K1742	11.73
STRAIGHT SMT—2.2 mm HEIGHT, DUAL-ENTRY			
● M50-3150842	16	03M4109	4.56
● M50-3151042	20	83K9692	5.69
● M50-3155042	100	03M4120	13.63

(90461)

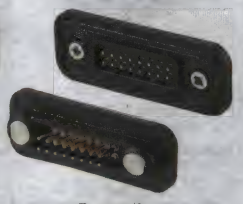
IP68 RATED 2.5MM PITCH HOTSHOE CONNECTORS

RoHS Compliant Available

HARWIN

- Environmental sealed to IP68 at 1.5m for 2 hours
- Available PC tail and solder cup tail suitable for 26AWG cable
- Gold-plated brass contacts
- Current rating: 1A per contact
- Voltage rating: 240VDC
- Durability: 10000 cycles
- Temperature range: -40°C to +100°C
- Recommended panel/ bulkhead thickness: 1.5mm

Plug



Receptacle

HotShoe IP 68 rated 2.5mm pitch connectors are constructed using spring-loaded contacts, maintaining a positive force against the mating connector. Low mating force enables rapid and effortless connection. Rugged and robust, made from highly-durable mold materials and designed to withstand a high level of dust, water and chemical agent ingress to IP 68. Ideal for use in portable equipment where separate battery modules are used and for data transfer docking stations.

PLUGS— DUAL ROW

Mfg. Part No.	No. of Contacts	Tail Type	Stock No.	Price Each 1-9
● M90-7040845	8	PC	53W1134	11.12
● M90-7041245	12	PC	53W1135	12.77
● M90-7041645	16	PC	53W1136	12.74
● M90-7060845	8	Solder Cup	53W1137	11.55
● M90-7061245	12	Solder Cup	72W1032	11.75
● M90-7061645	16	Solder Cup	53W1138	14.06

➤CONTINUED➤

IP68 RATED 2.5MM PITCH HOTSHOE CONNECTORS (CONT.)

RECEPTACLES — DUAL ROW

Mfg. Part No.	No. of Contacts	Tail Type	Stock No.	Price Each 1-9
M90-6040845	8	4mm PC	53W1125	16.87
M90-6041245	12	4mm PC	53W1126	23.43
M90-6041645	16	4mm PC	53W1127	29.96
M90-6050845	8	3mm PC	53W1128	15.16
M90-6051245	12	3mm PC	53W1129	18.29
M90-6051645	16	3mm PC	53W1130	23.13
M90-6060845	8	Solder Cup	53W1131	31.45
M90-6061245	12	Solder Cup	53W1132	41.40
M90-6061645	16	Solder Cup	53W1133	55.50

(209909)

2.00mm (0.079″) DATAMATE L-TEK CONNECTORS

RoHS Compliant Available

HARWIN

Fig. 1

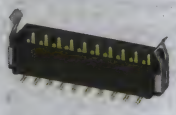


Fig. 2

Fig. 3

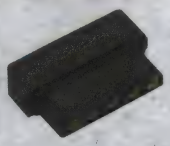
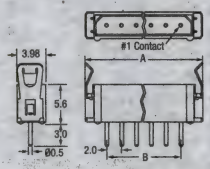


Fig. 4

- Glass-filled Thermoplastic Housings, Rated UL94V-0
- Polarized Moldings
- Durability: 500 operations
- Female Crimp 4-Finger Brass Shell Contacts
- Male Crimp Phosphor Bronze
- Plating: Gold Contact Area, Tin/Lead Tails
- Current: 3.3A Per Contact
- Operating Temperature: -55°C to +125°C
- Ideal for COTS applications, proven history in Mil/Aero applications



High-reliability miniature connectors in vertical or horizontal configurations. Suitable for board-to-board and wire-to-board applications. Unlatched and friction-lock versions also available; *go online or call. Order replacement contacts, strain relief straps and tooling separately on page 775.*

VERTICAL MALE HEADERS, SINGLE ROW, PC TAIL — FIG. 1

Mfg. Part No.	No. of Contacts	Housing	Dimensions (mm) A	Dimensions (mm) B	Stock No.	Price Each 1-9
M80-8820242	2	Latched	7.6	2	69K7348	3.57
M80-8820342	3	Latched	9.6	4	69K7349	3.31
M80-8820442	4	Latched	11.6	6	63K4385	3.39
M80-8820542	5	Latched	13.6	8	71K8730	3.53
M80-8820642	6	Latched	15.6	10	71K8731	3.21
M80-8820742	7	Latched	17.6	12	71K8732	3.75
VERTICAL MALE HEADERS, DOUBLE ROW, SURFACE MOUNT — FIG. 2						
M80-8280442	4	Latched	7.6	2	71K8598	4.16
M80-8280642	6	Latched	9.6	4	71K8599	4.40
M80-8280842	8	Latched	11.6	6	71K8600	4.69
M80-8281042	10	Latched	13.6	8	71K8601	4.93
M80-8281242	12	Latched	15.6	10	71K8602	5.19
M80-8281442	14	Latched	17.6	12	71K8603	5.39
M80-8281842	18	Latched	21.6	16	51R6919	6.71
M80-8282642	26	Latched	29.6	24	51R6920	7.65
HORIZONTAL MALE HEADERS, SINGLE ROW, PC TAIL WITH STRAIN RELIEF STRAPS — FIG.3						
M80-8420242	2	Latched	7.6	2	69K7319	3.87
M80-8420342	3	Latched	9.6	4	69K7320	3.73
M80-8420442	4	Latched	11.6	6	51R6941	3.42
M80-8420542	5	Latched	13.6	8	51R6942	3.14
M80-8420642	6	Latched	15.6	10	51R6943	3.75

EXTRA SMALL BORE FEMALE-CRIMP RECEPTACLES 32-28 AWG — FIG. 4

Mfg. Part No.	No. of Contacts	Dimensions (mm) A	Dimensions (mm) B	Stock No.	Price Each 1-9
M80-7980205	2	7.15	2	94T9177	2.33
M80-7980305	3	9.15	4	94T9178	3.39
M80-7980405	4	11.15	6	94T9179	3.67
M80-7980505	5	13.15	8	94T9180	4.38
M80-7980605	6	15.15	10	94T9181	5.15
M80-7980705	7	17.15	12	94T9182	5.69
M80-7981705	17	37.15	32	94T9183	10.62
SMALL BORE FEMALE-CRIMP RECEPTACLES 28-24 AWG — FIG. 4					
M80-8980205	2	7.15	2	01E9579	2.13
M80-8980405	4	11.15	6	81H1857	3.40
M80-8980505	5	13.15	8	92H6700	4.22
M80-8980605	6	15.15	10	90M0792	4.94
M80-8980705	7	17.15	12	01J0437	5.42

➤CONTINUED➤

2.00mm (0.079″) DATAMATE L-TEK CONNECTORS (CONT.)

LARGE BORE FEMALE-CRIMP RECEPTACLES 22 AWG — FIG. 4

Mfg. Part No.	No. of Contacts	Dimensions (mm) A	Dimensions (mm) B	Stock No.	Price Each 1-9
M80-8990205	2	7.15	2	57J4204	2.16
M80-8990305	3	9.15	4	96H8493	3.15
M80-8990405	4	11.15	6	98H0420	3.36
M80-8990505	5	13.15	8	51R6990	3.40
M80-8990605	6	15.15	10	51R6991	4.15
M80-8990705	7	17.15	12	51R6992	4.44

REPLACEMENT CONTACTS

Mfg. Part No.	Description	AWG	Stock No.	Price Each 1-9
M80-0190005	Extra Small Bore	32AWG to 28AWG	94T9167	1.15
M80-0130005	Small Bore	28AWG to 24AWG	01E9519	1.14
M80-0110005	Large Bore	22AWG	97H4879	1.16

(73491)

2.00mm (0.079″) DATAMATE CONNECTORS

RoHS Compliant Available

HARWIN

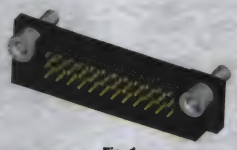
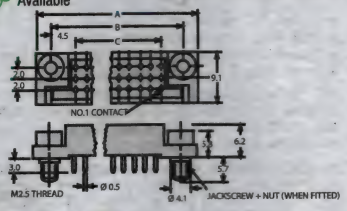


Fig. 1



- Current: 3.3A Per Single Contact
- Glass-Filled Thermoplastic Housing, Rated UL94V-0
- Polarized Molding, Fully Shrouded Contacts
- Female Crimp 4-Finger Brass Shell Contacts
- Male Phosphorous Bronze Contacts
- Plating: Gold Contact Area, Tin/Lead Tails
- Operating Temperature: -55°C to +125°C

Fig. 2

High-reliability miniature connectors in vertical configurations. Jackscrews provide secure mating. Suitable for wire-to-board and board-to-board applications. 36 and 51 position connector available, *go online or call.*

TRIPLE ROW, VERTICAL BOARD MOUNT HEADERS W/ JACKSCREWS — FIG. 1

Mfg. Part No.	No. of Contacts	Dimensions (mm) A	Dimensions (mm) B	Dimensions (mm) C	Stock No.	Price Each 1-9
M80-7002742	27	31.10	25.00	16.00	69K7303	13.68
M80-7003642	36	37.10	31.10	22.00	69K7304	15.04
M80-7005142	51	47.10	41.10	32.00	69K7306	23.51
TRIPLE ROW, SMALL BORE FEMALE-CRIMP RECPT. W/ JACKSCREWS — FIG. 2						
M80-7052705	27	31.10	25.00	16.00	81H1847	14.77
M80-7054505	45	43.10	37.00	28.00	54H1174	17.10
M80-7055105	51	47.10	41.10	32.00	65H5739	31.06

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
M80-0130005	Replacement Female-Crimp Contact, 24-28 AWG	01E9519	1.14
M80-0110005	Replacement Large Bore Female-Crimp Contact, 22 AWG	97H4879	1.16

TOOLING

M22520/2-01	Standard MIL Spec Circular Crimp Tool*	01E9487	494.39
T5747	Positioner for Mfg. Part No. M22520/2-01 Crimp Tool	01E9679	105.01
Z80-280	Insertion/Removal Tool for Male and Female Crimp	28K1493	135.42

*For use with Mfg. Part No. T5747 positioner; *order separately above.*

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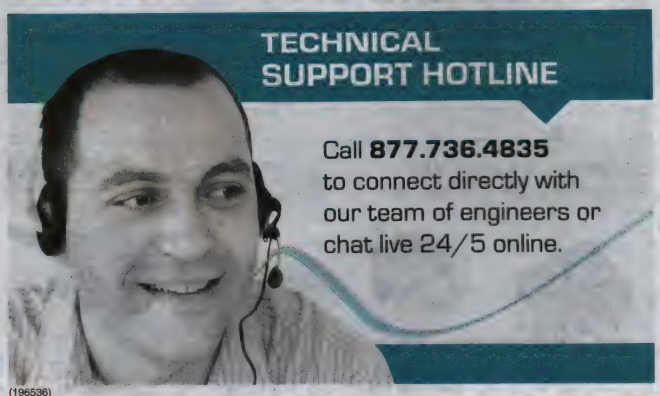

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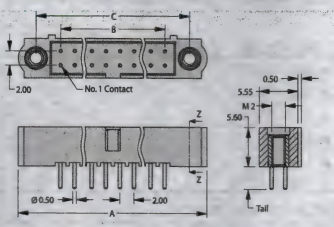
PC BOARD HEADERS & SOCKETS

2.00mm (0.079″) DATAMATE J-TEK CONNECTOR DUAL ROW

RoHS Compliant Available

HARWIN

Fig. 1



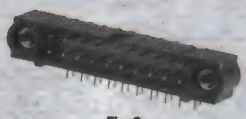


Fig. 2

Fig. 3

Fig. 4

- Current: 3.3A Per Contact
- Glass-Filled Thermoplastic Housings, Rated U:94V-0
- Polarize Molding, Fully Shrouded Contacts
- Female Crimp 4-Finger Brass Shell Contacts
- Male Phosphorous Bronze Contacts
- Plating: Gold Contact Area, Tin/Lead Tails
- Operating Temperature: -55°C to +125°C

High-reliability miniature connector in vertical or horizontal configurations. Suitable for wire-to-board applications. Jackscrew provide secure mating. Order replacement contacts and tooling separately below. Available in wire to wire and board to board configurations also. Other options include: Board mount PCB strain relief, 4.5mm pc tail. Also available w/o jackscrews, *go online or call.*

DUAL ROW VERTICAL THRU-HOLE HEADER WITH JACKSCREWS - FIG. 1

Mfg. Part No.	No. of Contacts	Dimensions (mm) A	B	C	Stock No.	Price Each 1-9
● M80-5000642	3+3	16.00	4.00	11.00	71K8438	6.43
● M80-5000842	4+4	18.00	6.00	13.00	48P5239	8.06
● M80-5001242	6+6	22.00	10.00	17.00	12N8206	7.08
● M80-5002642	13+13	36.00	24.00	31.00	71K8440	7.78
DUAL-ROW RIGHT ANGLE THRU-HOLE HEADER WITH JACKSCREWS - FIG. 2						
● M80-5300842	4+4	18.00	6.00	13.00	08R2470	5.66
● M80-5302642	13+13	36.00	24.00	31.00	71K8485	8.19
DUAL-ROW RIGHT ANGLE THRU-HOLE HEADER WITH JACKSCREWS AND BOARDMOUNTS						
M80-5401022	5+5	20.00	8.00	15.00	16J0568	15.20
DUAL-ROW RIGHT ANGLE SMT HEADER WITH SMT SOLDER HOLD-DOWN TABS - FIG. 3						
● M80-5S20605MQ	3+3	18.00	4.00	11.00	59T4406	15.72
● M80-5S20805MQ	4+4	20.00	6.00	13.00	59T4407	16.00
● M80-5S21005MQ	5+5	22.00	8.00	15.00	59T4408	15.91
● M80-5S21405MQ	7+7	26.00	12.00	19.00	59T4409	16.10
● M80-5S22005MQ	10+10	32.00	18.00	25.00	59T4410	16.30
● M80-5S22605MQ	13+13	38.00	24.00	31.00	59T4411	16.39
DUAL-ROW LARGE BORE FEMALE-CRIMP RECEPTACLES WITH JACKSCREWS - FIG. 4						
● M80-4601205	6+6	22.00	10.00	17.00	60K7895	13.35
● M80-4602042	10+10	30.00	18.00	25.00	71K8413	17.33
DUAL-ROW SMALL BORE FEMALE-CRIMP RECEPTACLES WITH JACKSCREWS - FIG. 4						
● M80-4611005	5+5	20.00	8.00	15.00	84K3114	15.07
● M80-4612005	10+10	30.00	18.00	25.00	54K3170	17.33
● M80-4613405	17+17	44.00	32.00	39.00	84K3117	22.51

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● M80-0130005	Replacement Female-Crimp Contact, 24-28 AWG	01E9519	1.14
● M80-0110005	Replacement Large Bore Female-Crimp Contact, 22 AWG	97H4879	1.16
TOOLING			
M22520/2-01	Standard MIL Spec Circular Crimp Tool*	01E9487	494.39
T5747	Positioner for Mfg. Part No. M22520/2-01 Crimp Tool	01E9679	105.01
Z80-280	Insertion/Removal Tool for Male and Female Crimp Contacts	28K1493	135.42

*For use with Mfg. Part No. T5747 positioner; *order separately above*
(78762)

2.00MM (0.079″) DUAL ROW DATAMATE L-TEK CONNECTORS

RoHS Compliant Available

HARWIN

Fig. 1 - Male Vertical PCB

Fig. 2 - Male Horizontal PCB

Fig. 3 - Male Wire Mount

Fig. 4 - Female Wire Mount

➤CONTINUED➤

2.00MM (0.079″) DUAL ROW DATAMATE L-TEK CONNECTORS (CONT.)

- Glass-filled thermoplastic housings, rated UL94V-0
- Polarized moldings
- Durability: 500 operations
- Female crimp 4-finger brass shell contacts
- Male crimp phosphor bronze contacts
- Plating: gold contact area, tin/lead tails
- Current: 3.3A per contact
- Operating temperature: -55°C to +125°C
- Ideal for COTS applications, proven history in Mil/Aero applications

Fig. 5 - Female PCB Mount

High-reliability miniature connectors in vertical or horizontal configurations. Suitable for board-to-board, board-to-wire and wire-to-wire applications. Choice of locking latch, unlatched or friction latch housing. *Order replacement contacts separately below; strain relief straps and tooling separately on page 775.*

VERTICAL MALE HEADERS - FIG. 1

Mfg. Part No.	No. of Contacts	Housing Type	Stock No.	Price Each 1-9
● M80-8530442	2+2	Locking Latch	63K4391	4.00
● M80-8530642	3+3	Locking Latch	63K4394	4.57
● M80-8530842	4+4	Locking Latch	63K4396	4.45
● M80-8531042	5+5	Locking Latch	69K7337	4.72
● M80-8531242	6+6	Locking Latch	63K4399	5.07
● M80-8531442	7+7	Locking Latch	51R6955	5.14
● M80-8531642	8+8	Locking Latch	63K4403	5.80
● M80-8532042	10+10	Locking Latch	69K7338	6.33
● M80-8532642	13+13	Locking Latch	63K4404	7.05
● M80-8533442	17+17	Locking Latch	63K4406	7.61
● M80-8540442	2+2	Unlatched	51R6959	2.05
● M80-8540642	3+3	Unlatched	51R6960	2.42
● M80-8540842	4+4	Unlatched	97K6395	2.52
● M80-8541042	5+5	Unlatched	97K6396	2.83
● M80-8541242	6+6	Unlatched	97K6397	3.12
● M80-8541442	7+7	Unlatched	97K6398	3.64
● M80-8541842	9+9	Unlatched	85K8605	4.69
● M80-8542042	10+10	Unlatched	97K6400	5.00
● M80-8542642	13+13	Unlatched	51R6961	5.99
● M80-8630442	2+2	Friction Latch	69K7339	3.85
● M80-8630642	3+3	Friction Latch	69K7340	4.66
● M80-8630842	4+4	Friction Latch	69K7341	4.33
● M80-8631042	5+5	Friction Latch	69K7342	4.56
● M80-8631442	7+7	Friction Latch	51R6963	5.22
HORIZONTAL MALE HEADERS - FIG. 2				
● M80-8510442	2+2	Locking Latch	69K7330	5.89
● M80-8510642	3+3	Locking Latch	69K7331	6.16
● M80-8510842	4+4	Locking Latch	69K7332	6.58
● M80-8511042	5+5	Locking Latch	69K7333	6.87
● M80-8511242	6+6	Locking Latch	69K7334	7.18
● M80-8511442	7+7	Locking Latch	51R6950	6.72
● M80-8511642	8+8	Locking Latch	71K8679	7.27
● M80-8511842	9+9	Locking Latch	51R6952	7.67
● M80-8512042	10+10	Locking Latch	69K7335	7.97
● M80-8512642	13+13	Locking Latch	69K7336	8.71
● M80-8513442	17+17	Locking Latch	51R6953	8.91
● M80-8410642	3+3	Unlatched	51R6937	3.54
● M80-8410842	4+4	Unlatched	97K6368	4.34
● M80-8411242	6+6	Unlatched	97K6370	5.07
● M80-8411442	7+7	Unlatched	97K6371	5.39
● M80-8411842	9+9	Unlatched	51R6938	6.05
● M80-8412042	10+10	Unlatched	97K6373	7.87
● M80-8412642	13+13	Unlatched	51R6939	7.90
● M80-8390442	2+2	Friction Latch	51R6922	5.05
● M80-8391042	5+5	Friction Latch	63K2663	5.87
● M80-8391642	8+8	Friction Latch	51R6925	6.60
● M80-8392042	10+10	Friction Latch	69K7317	7.99
● M80-8392642	13+13	Friction Latch	69K7318	8.88
● M80-8393442	17+17	Friction Latch	71K8611	10.11
SMALL BORE MALE-CRIMP CABLE-TO-CABLE CONNECTOR - FIG. 3				
● M80-8120405	2+2	Locking Latch	01E9525	4.69
● M80-8120805	4+4	Locking Latch	01E9526	6.81

EXTRA SMALL BORE FEMALE - CRIMP RECEPTACLES 32-28 AWG - FIG. 4

Mfg. Part No.	No. of Contacts	Stock No.	Price Each 1-9
● M80-7880405	2+2	95T4117	3.90
● M80-7880605	3+3	95T4118	5.64
● M80-7880805	4+4	94T9168	7.18
● M80-7881005	5+5	94T9169	7.93
● M80-7881205	6+6	94T9170	7.85
● M80-7881405	7+7	94T9171	8.81
● M80-7881605	8-8	94T9172	10.11
● M80-7881805	9+9	94T9173	11.31

➤CONTINUED➤

2.00MM (0.079″) DUAL ROW DATAMATE L-TEK CONNECTORS (CONT.)

Mfg. Part No.	No. of Contacts	Stock No.	Price Each 1-9
M80-7882005	10+10	94T9174	12.99
M80-7882605	13+13	94T9175	13.92
M80-7883405	17+17	94T9176	15.53
SMALL BORE FEMALE - CRIMP RECEPTACLES 28-24 AWG - FIG. 4			
M80-8880405	2+2	01E9572	3.45
M80-8880605	3+3	01E9573	5.02
M80-8880805	4+4	01E9574	6.35
M80-8881005	5+5	01E9575	7.60
M80-8881205	6+6	01E9576	8.21
M80-8881405	7+7	87H7844	9.10
M80-8881605	8-8	65H5738	9.01
M80-8881805	9+9	97H2530	9.73
M80-8882005	10+10	01E9577	11.19
M80-8882605	13+13	01E9578	12.46
M80-8883405	17+17	67H8620	15.14
LARGE BORE FEMALE - CRIMP RECEPTACLES 22 AWG - FIG. 4			
M80-8890405	2+2	97H2520	3.40
M80-8890605	3+3	51R6974	3.53
M80-8890805	4+4	81H2096	6.27
M80-8891005	5+5	81H2095	7.59
M80-8891205	6+6	86H3536	8.11
M80-8891405	7+7	83H5859	8.60
M80-8891605	8+8	86H3531	8.70
M80-8891805	9+9	51R6980	9.29
M80-8892005	10+10	51R6981	9.88
M80-8892605	13+13	87H9439	12.31
M80-8893405	17+17	81H1829	15.14
FEMALE - PC BOARD RECEPTACLES - FIG. 5			
M80-8500442	2+2	69K7323	3.26
M80-8500642	3+3	69K7324	4.03

REPLACEMENT CONTACTS

Mfg. Part No.	Description	Wire Size	Stock No.	Price Each 1-9
M80-0190005	Extra Small Bore	32AWG to 28AWG	94T9167	1.15
M80-0130005	Small Bore	28AWG to 24AWG	01E9519	1.14
M80-0110005	Large Bore	22AWG	97H4879	1.16

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DATAMATE TOOLS AND ACCESSORIES

RoHS Compliant Available

HARWIN

Crimp Tool

Positioner

Separator

Insertion/Removal Tool

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
M80-0030006	Strain Relief Straps	01E9518	0.51
TOOLING			
M22520/2-01	Standard MIL Spec Circular Crimp Tool	01E9487	494.39
T5747	Positioner for **Mfg. Part No. M22520/2-01** Crimp Tool	01E9679	105.01
Z80-280	Insertion/Removal Tool for Male and Female Crimp Contacts	28K1493	135.42
T5746	Separator Tool	01E9678	57.32

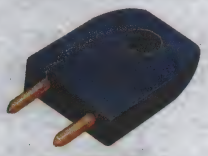
(94394)

1.00mm (0.039″) INSULATED AND UNINSULATED PC BOARD PLUGS

RoHS Compliant Available

HARWIN

Insulated gold-plated brass plugs are color-coded red or black. Non-insulated brass plugs are available with gold or tin plating. Current rating: 10A @ 20°C. *For full dimensional information go online or call*



D3086-99

INSULATED PLUGS

Mfg. Part No.	Color	Pitch (mm)	Stock No.	Price Each 1-9	Price Each 10-99
D3086-99	Red	5.08	01E9242	1.43	1.11
D3086-98	Black	5.08	01E9241	1.43	1.11
D3088-99	Red	10.16	01E9246	1.54	1.19

UNINSULATED PLUGS

Mfg. Part No.	Plating	Pitch (mm)	Stock No.	Price Each 1-9	Price Each 10-99
D3080-05	Gold	5.08	01E9238	0.70	0.44
D3082-46	Tin	10.16	69K7290	6.97	4.33

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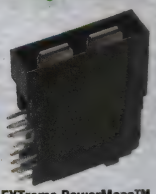
EXTREME POWER HIGH CURRENT PCB CONNECTORS

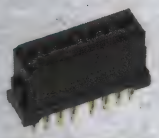
RoHS Compliant Available

molex

EXTreme LPHPower™ 45984, 45985, 46114

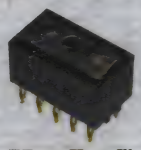


EXTreme PowerMass™ 75561-5000



EXTreme PowerMass™ 75545-5000

EXTreme MicroPower™ 75730-0210



EXTreme ZPower™ 76001-0010

EXTreme Power® family of high-current power interconnect products is comprised of several offerings that cover a wide range of current densities, mating terminations, and configuration choices that give system designers the ability to maximize power without wasting board space.

EXTREME LPHPOWER™ LOW-PROFILE HYBRID POWER CONNECTORS

EXTreme LPHPower™ is a mixed, high-current power and signal connector system designed with power blades parallel to the PC board. Its extremely low-profile 7.50mm (.295″) height enhances system airflow and provides up to 127A per linear inch of board space. Two isolated power blades per housing bay and can be mated in a right-angle, co-planar or vertical orientation. Mates in a traditional two-piece connector system, or as a one-piece receptacle-to-card edge / bus-bar application. Black thermoplastic housing, flammability rated UL94V-0. Copper alloy power contacts and phosphor bronze signal contacts both plated with select gold in contact area, tin on solder tail with nickel under all. Voltage rating: 250V max. Current rating (at 30°C temp. rise): 30A Power/1A Signal max.

Mfg. Part No.	Description	No. of Contacts Power	No. of Contacts Signal	Guide Pockets & Press-Fit Pegs	Stock No.	Price Each 1-9
45985-4422	Right-Angle Header	4	16	Yes	55R9978	12.45
45985-4442	Right-Angle Header	4	24	Yes	55R9984	12.90
45985-6442	Right-Angle Header	6	24	Yes	56R0081	14.34
45985-6462	Right-Angle Header	6	32	Yes	56R0087	17.85
45985-8442	Right-Angle Header	8	24	Yes	56R0177	16.04
45985-8462	Right-Angle Header	8	32	Yes	56R0183	17.23
45985-1422	Right-Angle Header	10	16	Yes	55R9882	17.54
45985-1462	Right-Angle Header	10	32	Yes	55R9894	24.14
45984-4422	Right-Angle Receptacle	4	16	Yes	55R9596	12.36
45984-4122	Right-Angle Receptacle	4	16	No	55R9524	11.03
45984-4442	Right-Angle Receptacle	4	24	Yes	55R9602	15.51
45984-4142	Right-Angle Receptacle	4	24	No	55R9530	13.14
45984-6442	Right-Angle Receptacle	6	24	Yes	55R9696	10.51
45984-6142	Right-Angle Receptacle	6	24	No	55R9625	9.58
45984-6462	Right-Angle Receptacle	6	32	Yes	55R9702	11.50
45984-6162	Right-Angle Receptacle	6	32	No	55R9631	10.13
45984-8442	Right-Angle Receptacle	8	24	Yes	55R9792	16.27
45984-8142	Right-Angle Receptacle	8	24	No	55R9720	15.43
45984-8462	Right-Angle Receptacle	8	32	Yes	55R9798	17.04
45984-8162	Right-Angle Receptacle	8	32	No	55R9726	16.23
45984-1422	Right-Angle Receptacle	10	16	Yes	55R9501	17.78
45984-1122	Right-Angle Receptacle	10	16	No	55R9429	16.45
45984-1462	Right-Angle Receptacle	10	32	Yes	33P6100	20.06

➤CONTINUED➤

PC BOARD HEADERS & SOCKETS

EXTREME POWER HIGH CURRENT PCB CONNECTORS (CONT.)

Mfg. Part No.	Description	No. of Contacts Power	No. of Contacts Signal	Guide Pockets & Press-Fit Pegs	Stock No.	Price Each 1-9
● 45984-1162	Right-Angle Receptacle	10	32	No	55R9441	18.03
● 46114-2121	Vertical Receptacle	2	12	No Guides	56R0353	6.17
● 46114-2161	Vertical Receptacle	2	16	No Guides	56R0355	6.51
● 46114-4160	Vertical Receptacle	4	16	With Guides	56R0370	9.81
● 46114-4161	Vertical Receptacle	4	16	No Guides	56R0371	9.18
● 46114-4240	Vertical Receptacle	4	24	With Guides	56R0374	11.04
● 46114-4241	Vertical Receptacle	4	24	No Guides	56R0375	9.24
● 46114-6240	Vertical Receptacle	6	24	With Guides	56R0390	12.35
● 46114-6241	Vertical Receptacle	6	24	No Guides	56R0391	11.64
● 46114-6320	Vertical Receptacle	6	32	With Guides	56R0394	13.37
● 46114-6321	Vertical Receptacle	6	32	No Guides	56R0395	12.41
● 46114-8240	Vertical Receptacle	8	24	With Guides	56R0406	14.05
● 46114-8241	Vertical Receptacle	8	24	No Guides	56R0407	13.36
● 46114-8320	Vertical Receptacle	8	32	With Guides	56R0409	18.07
● 46114-8321	Vertical Receptacle	8	32	No Guides	56R0410	14.08
● 46114-1016	Vertical Receptacle	10	16	With Guides	56R0306	14.92
● 46114-1017	Vertical Receptacle	10	16	No Guides	56R0307	14.29
● 46114-1032	Vertical Receptacle	10	32	With Guides	56R0314	16.39
● 46114-1033	Vertical Receptacle	10	32	No Guides	56R0315	15.80
● 46114-1225	Vertical Receptacle	12	24	No Guides	56R0327	16.75
● 46114-1425	Vertical Receptacle	14	24	No Guides	56R0343	18.47

EXTREME POWERMASS™ HIGH-CURRENT CONNECTORS

EXTreme PowerMass™ high-current, custom-configurable, board-to-board, modular connector system delivers up to 380A per inch of board space. Press-fit or solder-board termination for easy, reliable board mounting. Durable aligner guides provide blind-mating capabilities. Designed to support power supplies and systems requiring very high-current transfer in challenging and thermal-constrained spaces. LCP housing, flammability rated UL94V-0. Copper alloy contacts, plated with 30µ″ gold in contact area, 150µ″ tin on solder tail and 50µ″ nickel under all.

Mfg. Part No.	Description	No. of Circuits	Mount Type	Rating Amps/ Volts	Stock No.	Price Each 1-9
● 75556-5000	Right-Angle Header	1	Solder	150 / 600	56R8768	8.64
● 75561-5000	Right-Angle Header	2	Solder	80* / 450	56R8779	6.90
● 75542-5000	Vertical Receptacle	1	Press-Fit	150 / 600	56R8745	6.11
● 75545-5000	Vertical Receptacle	2	Press-Fit	80* / 450	56R8747	5.77

*40A per circuit (2 circuits)

EXTREME MICROPOWER™ 4MM (0.157″) PITCH HIGH-CURRENT HEADERS

EXTreme MicroPower™ high-current, right-angle headers can be used in VRM / DC-DC converters or any board-to-board application where power transfer is needed through a non-separable interface in a compact design. Offers high-current density, rated at 16A per blade at 30°C T-rise. Low profile design of 4.17mm (0.164″) off the PCB enhances system airflow. Black, LCP housing, flammability rated UL94V-0. Single inline row of direct solder copper alloy blades, plated with 100µ″ select matte tin over 50µ″ nickel. Voltage: 250V max.

Mfg. Part No.	Description	No. of Circuits	Mount Type	Stock No.	Price Each 1-9
● 75730-0207	Right-Angle Header	7	Solder	56R8942	2.78
● 75730-0210	Right-Angle Header	10	Solder	56R8945	3.67
● 75730-0216	Right-Angle Header	16	Solder	56R8948	5.63

EXTREME ZPOWER™ HIGH-CURRENT CONNECTORS

EXTreme ZPower™ high-current, one-piece ridged board-to-board connectors anchor to the base board with press-fit power pins and screw securely down from the top. Screw-contact interface accepts standard wire-crimp, ring-lug terminals for wire-to-board applications. These 30A and 50A headers not only transfer power between boards, but can double as an effective stand-off. Used in a variety of applications and industries where power connection between parallel boards or bus bars is necessary in a condensed space. Black LCP housing, flammability rated UL94V-0. Copper alloy pins are plated with 30µ″ gold in contact area, 100µ″ matte tin on solder tail and 50µ″ nickel under all. Press-fit PCB thickness: 0.093″ min. Voltage rating: 250V.

Mfg. Part No.	Description	No. of Contacts	Mount Type	Current (A)	Stock No.	Price Each 1-9
● 76001-0006	Vertical Header	6	Press-Fit	30	56R9428	2.97
● 76001-0010	Vertical Header	10	Press-Fit	50	56R9429	3.82

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EXTreme GUARDIAN™ POWER CONNECTOR SYSTEM

RoHS Compliant Available

molex

FEATURES AND BENEFITS

- High-current density per inch supports up to 80.0A per blade
- Redundant contact design handles up to 600V and supports AC or DC high-voltage applications
- Small centerline spacing of 11mm reduces PCB footprint
- Recessed terminals, First-Mate-Last-Break (FMLB) allow hot-swapping of power units and reduce network downtime
- Gold or tin contact plating provides flexibility to suit customer applications
- Gold plating provides low interface resistance
- UL and CSA certifications meet all accredited agency safety requirement and approvals

EXTreme Guardian™ header and cable assemblies, previously named EXTreme Power™ Interconnect (EPIC), features small package sizes with a centerline pitch of 11.00mm. The system supports up to 80.0A per contact, provides good shielding characteristics in EMI-sensitive environments, features hot-plugging capabilities and UL safety features. These header and cable assemblies exceed high-current and reliability demands in top-end server and high-power applications. ***Power harness connector (46818) and crimp receptacle housing (170351) require high power terminals (46819)**

➤CONTINUED➤

EXTreme GUARDIAN™ POWER CONNECTOR SYSTEM (CONT.)

POWER PLUG ASSEMBLY

Mfg. Part No.	Pitch (mm)	# of Rows	# of Contacts	Stock No.	Price 1-24
● 46817-1002	11	1	2	88T1868	7.63
● 46817-1000	11	1	3	05W6071	12.18

POWER HARNESS CONNECTOR

● 46818-0001	11	1	3	05W6066	1.61

CRIMP RECPTACLE HOUSING

● 17035-10002	11	1	2	05W6064	1.45

HIGH POWER TERMINALS

Mfg. Part No.	AWG	Contact Plating	Current (A)	Stock No.	Price Each 1-9
● 46819-0011	10AWG	Gold	60	05W6067	2.01
● 46819-0012	8AWG	Gold	60	05W6068	2.01
● 46819-0013	6AWG	Gold	60	05W6069	2.09

TERMINAL LOCK TPA

Mfg. Part No.	# of Rows	# of Contacts	Stock No.	Price 1-24
● 17035-20002	1	2	05W6065	0.55
● 46821-0001	1	3	05W6070	0.58

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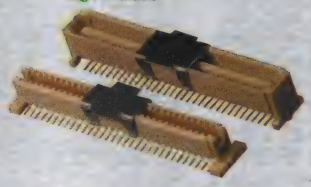
0.039″ (1.00mm) MEZZANINE IEEE 1386 CONNECTORS

RoHS Compliant Available

molex



- 64 circuit with locating pegs
- Meets IEEE 1386 standard
- Current: 1.0A
- Lead-free process compatible

The dual row smt **71436 series** plug and **71439 series** receptacle have been designed in accordance with EIA standards 700 AAAB for 1.0mm two-part connectors for use with parallel printed boards. They feature a leaf style design that protects pins, low insertion force and antiflux design.

71436 SERIES PLUGS

Mfg. Part No.	Circuits	Pegs	Packaging	Stock No.	Price Each 1-4	Price Each 5-9
● 71436-0164	64	Yes	Tube	84C9470	5.04	4.94
● 71436-2164*	64	Yes	Tube	59H4013	6.96	6.40
● 71436-2464*	64	Yes	Cut Tape	59H4016	6.95	5.80
● 71436-2864*	64	No	Cut Tape	25M5179	4.35	4.17

71439 SERIES RECEPTACLES

● 71439-0164*	64	No	Tube	59H4020	6.32	6.19
● 71439-0364*	64	Yes	Tube	59H4021	5.72	4.13
● 71439-0864	64	No	Cut Tape	59H4025	3.83	3.53
● 71439-1164	64	Yes	Tube	97C5312	4.03	3.99
● 71439-2164	64	Yes	Tube	31M8481	5.18	4.69

* With Pick and Place Cap

(69842)

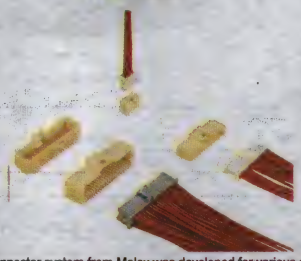
1.00mm (0.039″) PICO-CLASP WIRE-TO-BOARD CONNECTORS

RoHS Compliant Available

molex

UL

- Voltage: 50 V
- Current: 1.0 A max.
- Contact: Tin plated Phosphor Bronze
- Wire Size: 28 to 32 AWG
- Insulation Diameter: 0.08mm (0.031″) max.
- Wire Strip Length: 1.00 to 1.30 mm (0.039 to 0.051″)
- Operating Temperature: -40° to +85° C



The new 1.00mm (.039″) pitch wire-to-board connector system from Molex was developed for various connections in Flat Panel Displays (FPD). The compact, small-circuit size features of this system also make it ideal for other applications such as Notebook PCs and other compact devices. The system is offered in both single and dual row versions. Friction and positive locks are offered for various application needs. Other features include mating guides, solder tabs and footprint compatibility with some competitive versions. Crimp terminals feature box-shaped design that provides 2 points of contact for secure electrical connection. Use with **501330 series** housings.

501334 SERIES CRIMP TERMINALS

Mfg. Part No.	AWG	Packaging	Stock No.	Price Each 1-9
● 501334-0000	32AWG to 28AWG	Reel	08P0702	0.12
● 501334-0100	32AWG to 28AWG	Bag	08P0703	0.13

➤CONTINUED➤

1.00mm (0.039″) PICO-CLASP WIRE-TO-BOARD CONNECTORS (CONT.)

92001 SERIES PRE-TERMINATED LEAD

Mfg. Part No.	Description	Stock No.	Price Each 1-99
92001-1198	Single Ended Pre-Terminated Lead, 300mm	85R5885	1.11

501330 SERIES SINGLE ROW INNER LOCK RECEPTACLE HOUSINGS

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9
501330-0200	2	56R1013	0.50
501330-0300	3	56R1014	0.35
501330-0400	4	56R1015	0.38
501330-0500	5	56R1016	0.35
501330-0600	6	56R1017	0.44
501330-0800	8	56R1019	0.32
501330-0900	9	20M6323	0.45
501330-1000	10	56R1020	0.40
501330-1100	11	56R1021	0.57
501330-1200	12	56R1022	0.57
501330-1300	13	56R1023	0.64
501330-1400	14	56R1024	0.55
501330-1500	15	56R1025	0.61
501331 SERIES SINGLE ROW INNER LOCK STRAIGHT HEADERS			
501331-0207	2	56R1026	0.97
501331-0307	3	56R1027	1.13
501331-0407	4	56R1028	1.18
501331-0507	5	56R1029	1.14
501331-0607	6	56R1030	1.37
501331-0707	7	56R1031	1.38
501331-0807	8	56R1032	1.56
501331-0907	9	56R1033	1.66
501331-1007	10	56R1034	1.67
501331-1107	11	56R1035	1.84
501331-1207	12	56R1036	1.50
501331-1307	13	56R1037	2.03
501331-1407	14	56R1038	2.30
501331-1507	15	56R1039	2.44
501568 SERIES SINNGLE ROW INNER LOCK RIGHT ANGLE HEADERS			
501568-0607	6	07P8656	1.07
501189 SERIES DUAL ROW INNER LOCK RECEPTACLE HOUSINGS			
501189-2010	20	56R0996	0.59
501189-3010	30	56R0997	0.72
501189-4010	40	56R0998	0.74
501190 SERIES SURFACE MOUNT, VERTICAL, DUAL ROW PCB HEADERS			
501190-2017*	20	07P8655	3.13
501190-3027	30	85R5795	2.18
501190-5027	50	56R1006	7.01

*With Pick-and-Place Tape
(134605)

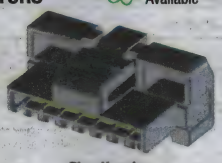
1.25mm (0.049″) CLIK-MATE WIRE-TO-BOARD CONNECTORS

RoHS Compliant Available

molex

Features
- Robust positive inner locks
- Tuning fork style contact design
- Low insertion force
- Reinforced metal solder tabs
- Flat area for pick-and-place

Specifications
- Current: 1.0A
- Voltage: 50V
- Contact resistance; 20 mohms max.
- Insulation Resistance 100 Mohms min.
- Operating Temperature: -25°C to +85°C



Plug Housing

Crimp Contact

502381 SERIES 1.25mm WIRE-TO-BOARD CRIMP TERMINAL

Mfg. Part No.	Wire Size	Stock No.	Price Each 1-9
502381-0000	28AWG to 26AWG	11R0573	0.56

502380 SERIES WIRE-TO-BOARD PLUG HOUSING, SINGLE ROW, POSITIVE LOCK

Mfg. Part No.	Circuits	Gender	Stock No.	Price Each 1-9
502380-0400	4	Plug	11R0569	0.33
502380-0600	6	Plug	11R0570	0.41
502380-0800	8	Plug	11R0571	0.47
502380-1200	12	Plug	11R0572	0.59
502382 SERIES WIRE-TO-BOARD PCB RECEPTACLES, SINGLE ROW, VERTICAL				
502382-0470	4	Receptacle	11R0574	1.26
502382-0670	6	Receptacle	11R0575	1.55

➤ CONTINUED ➤

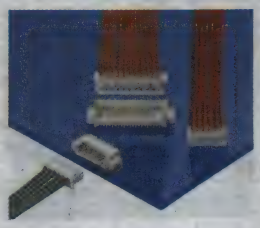
1.25mm (0.049″) CLIK-MATE WIRE-TO-BOARD CONNECTORS (CONT.)

502382 SERIES WIRE-TO-BOARD PCB RECEPTACLES, SINGLE ROW, VERTICAL

Mfg. Part No.	Circuits	Gender	Stock No.	Price Each 1-9
502382-0870	8	Receptacle	11R0576	1.78
502382-1270	12	Receptacle	11R0577	2.30
502386 SERIES WIRE-TO-BOARD PCB RECEPTACLES, SINGLE ROW, RIGHT-ANGLE				
502386-0470	4	Receptacle	11R0578	1.51
502386-0670	6	Receptacle	11R0579	1.82
502386-0870	8	Receptacle	11R0580	2.07
502386-1270	12	Receptacle	11R0581	2.55

(148717)

PICOBLADE 0.049″ (1.25) PITCH WIRE-TO-WIRE AND WIRE-TO-BOARD SYSTEMS



molex

RoHS Compliant Available

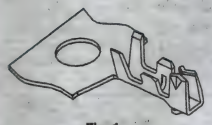


Fig. 1

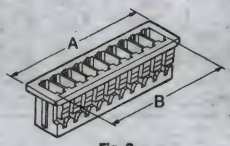


Fig. 2
Wire-To-Wire and Wire-To-Board Receptacles

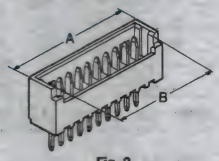


Fig. 3
Wire-To-Board Headers

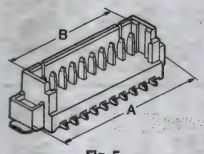


Fig. 5
Wire-To-Board Headers

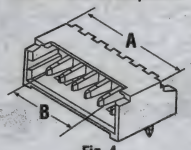


Fig. 4
Wire-To-Board Headers

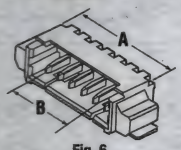


Fig. 6
Wire-To-Board Headers

- Voltage: 125V
- Current: 1.0A (32AWG-0.8A)
- Contact Resistance: 20mΩ Max. Dielectric
- Withstanding Voltage: 250VAC, 1 Min.
- Insulation Resistance: 100mΩ Min.
- Insulation Diameter: 1.00 mm
- Housing: 9/6 Nylon, Rated UL94V-0
- Contact: Tin-Plated Phosphor Bronze
- Operating Temperature: -40°C to +85°C

These wire-to-board housings and headers are the smallest in the industry. They provide flexibility to organize a system to suit all requirements. PC board real estate saved for 10 circuits is 50% over 2.0mm pitch versions. The volume saved is 66%. **51021 series** receptacles mate with **53398, 53261, 53047, 53048 series** headers. New hand crimp tool terminates from a strip; enables building prototypes with ease. Female crimp terminals used with **51021 series** receptacles, constructed of tin-plated phosphor bronze; **sold in packages of 100**.

50079/50058 SERIES CRIMP TERMINALS - SOLD INDIVIDUALLY — FIG. 1

Mfg. Part No.	Wire Range (AWG)	Stock No.	Price Each 1-99
50079-8100	28AWG to 26AWG	85C4807	0.19
50058-8100	32AWG to 28AWG	57H2111	0.29
50079/50058 SERIES CRIMP TERMINALS ON REELS - SOLD INDIVIDUALLY — FIG. 1			
50079-8000	28AWG to 26AWG	77C4977	0.12

51021 SERIES RECEPTACLES — FIG. 2

Mfg. Part No.	Circuits	Dimensions A	Dimensions B	Stock No.	Price Each 1-9
51021-0200	2	0.301″	0.049″	38C9869	0.28
51021-0300	3	0.351″	0.099″	57H2315	0.30
51021-0400	4	0.400″	0.148″	38C9871	0.42
51021-0500	5	0.449″	0.197″	57H2316	0.43
51021-0600	6	0.498″	0.246″	94C5342	0.48
51021-0700	7	0.548″	0.296″	57H2317	0.45
51021-0800	8	0.597″	0.345″	38C9875	0.55
51021-0900	9	0.646″	0.394″	01E9152	0.57
51021-1000	10	0.695″	0.443″	57H2318	0.61
51021-1200	12	0.794″	0.542″	57H2320	0.71
51021-1300	13	0.827″	0.591″	28M9432	0.69
51021-1400	14	0.892″	0.640″	23C9052	0.80
51021-1500	15	0.942″	0.690″	57H2323	0.77
53047 SERIES THRU-HOLE VERTICAL HEADERS — FIG. 3					
53047-0210	2	0.301″	0.049″	57H4701	0.39
53047-0310	3	0.351″	0.099″	38C9899	0.49
53047-0510	5	0.449″	0.197″	38C9901	0.63
53047-0610	6	0.498″	0.246″	57H4706	0.80

➤ CONTINUED ➤

PICOBLADE 0.049″ (1.25) PITCH WIRE-TO-WIRE AND WIRE-TO-BOARD SYSTEMS (CONT.)

53048 SERIES THRU-HOLE RIGHT-ANGLE HEADERS — FIG. 4

Mfg. Part No.	Circuits	Dimensions A	Dimensions B	Stock No.	Price Each 1-9
● 53048-0210	2	0.301″	0.049″	57H4718	0.45
● 53048-0410	4	0.400″	0.148″	57H4721	0.52
● 53048-0610	6	0.498″	0.246″	38C9911	0.74
● 53048-0810	8	0.597″	0.345″	38C9913	1.07
● 53048-1210	12	0.794″	0.542″	71H4145	1.37
53398 SERIES SMT VERTICAL HEADERS — FIG. 5					
● 53398-0271	2	0.301″	0.049″	07P8661	1.10
● 53398-0371	3	0.351″	0.099″	27M1510	1.45
● 53398-0471	4	0.400″	0.148″	93K4255	0.92
● 53398-0571	5	0.449″	0.197″	07P8662	1.71
● 53398-0671	6	0.498″	0.246″	59J0416	1.64
● 53398-0871	8	0.597″	0.345″	50M7237	2.03
● 53398-0971	9	0.646″	0.394″	56R1876	2.04
● 53398-1071	10	0.695″	0.443″	56R1878	1.93
● 53398-1471	14	0.892″	0.640″	07P8663	2.91
53261 SERIES SMT RIGHT-ANGLE HEADERS — FIG. 6					
● 53261-0271	2	0.301″	0.049″	08N1661	1.25
● 53261-0471	4	0.400″	0.148″	05N1159	1.65
● 53261-0571	5	0.449″	0.197″	59J0237	1.55
● 53261-0871	8	0.597″	0.345″	59J0240	1.96
● 53261-1071	10	0.695″	0.443″	56R1838	2.38
● 53261-1571	15	0.942″	0.690″	93K4252	2.98

CRIMP TOOL FOR 0.049″ (1.25) APPLICATIONS

Mfg. Part No.	Description	Stock No.	Price Each 1-4
63819-0300	Ratcheting Crimp Tool for 50058, 50061, 50079, 50080 Series Terminals	12P9132	252.19
63819-0400	Ratcheting Crimp Tool for 50058, 50079, 50125, and 50133 Series Terminals	12P9133	375.00

(8456)

1.25mm WIRE-TO-BOARD SYSTEM

RoHS Compliant Available

FCI

- Housing: Thermoplastic
- Header Contacts: Tin plated copper alloy
- Crimp Terminals: Tin plated phosphor bronze
- Contact Resistance: 20mΩ max.min. (minimum)
- Voltage Rating: 125 VAC/VDC
- Current Rating: 1 A (0.8 A -32 AWG)
- Dielectric Withstand Voltage: 500 VAC/minute
- Crimping housing is polarized to prevent mis-mating with PCB header
- Crimping housing is equipped with friction locks to secure PCB header
- PCB header material (resin) meets halogen free requirement
- Housing meets EU Industry Safety Standard
- UL approved

FCI's 1.25mm pitch wire-to-board connector series consists of terminals, crimp housings and PCB headers in straight and right angle, surface mount and through mount configurations. It is a single row design, available with from 2 to 20 circuits. Unlike many other products for the same applications, FCI's 1.25mm wire-to-board range conforms to the EU Industry Safety Standard, PCB header material meets halogen free requirements and the products can be operated in the temperature range from -40°C to +105°C.

CRIMP HOUSINGS

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-24
● 10114826-00002LF	2	43T7509	0.03	0.03
● 10114826-00003LF	3	43T7510	0.04	0.04
● 10114826-00004LF	4	43T7511	0.06	0.05
● 10114826-00006LF	6	43T7512	0.08	0.07
HEADERS - VERTICAL SURFACE MOUNT				
● 10114828-10102LF	2	43T7514	0.32	0.30
● 10114828-10103LF	3	43T7515	0.37	0.35
● 10114828-10104LF	4	43T7516	0.36	0.34
● 10114828-10106LF	6	43T7517	0.51	0.48
HEADERS - VERTICAL THROUGH HOLE				
● 10114829-10102LF	2	43T7518	0.30	0.28
● 10114829-10103LF	3	43T7519	0.33	0.32
● 10114829-10104LF	4	43T7520	0.36	0.34
● 10114829-10106LF	6	43T7521	0.38	0.36

CRIMP TERMINAL

Mfg. Part No.	AWG	Stock No.	Price Each 1-9	Price Each 10-24
● 10114827-001LF	32AWG to 28AWG	43T7513	0.02	0.02

(195535)

0.049″ (1.25) PITCH WIRE-TO-WIRE CRIMP TERMINAL

RoHS Compliant Available

molex

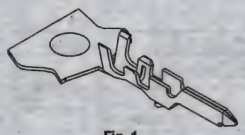


Fig. 1

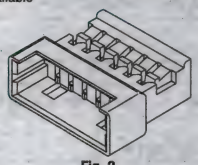


Fig. 2

- Voltage: 125V
- Contact Resistance: 20mΩ max.
- Dielectric Withstanding Voltage: 250V AC/1 min.
- Insulation Resistance: 100 MΩ min.

50125-50133 series are tin-plated, contact material is phosphor bronze. Used with **51047 series**. **51047 series** plug operating temperature -40 to +85°C, housing PBTP, UL 94V-0

50125-50133 SERIES CRIMP TERMINAL MALE FIG. 1

Mfg. Part No.	Wire Range AWG	Strip Length mm	Stock No.	Price Each 1-99
● 50125-8100	28AWG to 26AWG	1.4 to 1.9	57H2138	0.16
● 50133-8100	32AWG to 28AWG	1.4 to 1.9	57H2144	0.18

51047 SERIES PLUG FIG. 2

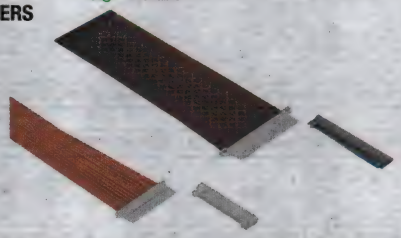
Mfg. Part No.	Circuits	Stock No.	Price Each 1-9
● 51047-0200	2	57H2429	0.22
● 51047-0300	3	57H2430	0.26
● 51047-0400	4	57H2431	0.17
● 51047-0600	6	89C2056	0.23
● 51047-0800	8	28M9434	0.30
● 51047-0900	9	28M9435	0.34
● 51047-1000	10	57H2436	0.31

(78232)

PANELMATE 1.25MM (.049″) WIRE-TO-BOARD CRIMP TERMINALS/HOUSING/HEADERS

RoHS Compliant Available

molex



- Voltage Rating: 125V
- Current Rating: 1A
- Contact Plating: Gold
- Contact Resistance: 20mΩ
- Dielectric Withstanding Voltage: 250 VAC
- Insulation Resistance: 100MΩ

Contact material: phosphor bronze. Wire range: 28 to 30 AWG. Strip length: 1.3 to 1.7mm. Housing material: pbt polyester. Header material: pps polyphenylene sulfide.

WIRE-TO-BOARD CRIMP TERMINALS IN BAGS - (SOLD INDIVIDUALLY)

Mfg. Part. No	Contact Plating	Wire Insulation Diameter (mm)	Stock No.	Price Each 1-99	Price Each 100-499
● 50641-8141	Gold	0.50-0.90	57H2188	0.46	0.29
WIRE-TO-BOARD CRIMP TERMINALS ON REELS - (SOLD INDIVIDUALLY)					
● 50641-8041	Gold	0.50-0.90	57H2187	0.24	0.22

WIRE-TO-BOARD RECEPTACLE HOUSING

Mfg. Part No.	Circuits	Length mm (in.)	Stock No.	Price Each 1-9	Price Each 10-99
● 51146-1400	14	18.72 (0.737)	57H2705	1.36	1.07
RIGHT-ANGLE SURFACE MOUNT HEADERS					
● 53780-0470	4	10.15 (0.400)	56R1897	1.89	1.53
● 53780-0570	5	11.40 (0.449)	56R1898	2.24	1.82
● 53780-1470	14	22.65 (0.892)	59J0624	3.02	2.40

(89592)

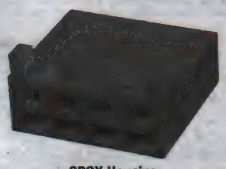
0.156″ (3.96) PITCH SPOX™ CRIMP TERMINAL HEADERS AND HOUSINGS

UL CSA RoHS Compliant Available

molex

- Voltage: 250 V
- Current: 7.0 A max.
- Contact Resistance: 10 mΩ max.
- Dielectric Withstanding Voltage: 1500 VAC/1 min.
- Insulation Resistance: 1000 MΩ min.

Crimp Terminal



SPOX Housing

➤CONTINUED➤

0.156″ (3.96) PITCH SPOX™ CRIMP TERMINAL HEADERS AND HOUSINGS (CONT.)

5194 series features 4-point contact, anti-fishhooking contact design, operating temperature -40 to +105°C. **43061 series** features ramp and ribs provide 180° and side-to-side polarization, operating temperature 0 to +75°C. Spring box terminal design offer 4 points of contact; this interconnect system is recommended for severe environmental and high vibration applications. UL listed, CSA certified.

5194 SERIES SPRING BOX CRIMP TERMINAL—SOLD INDIVIDUALLY

Mfg. Part No.	AWG	Insulation Diameter	Wire Strip Length	Stock No.	Price Each 1-99
08-70-1030	24AWG to 18AWG	1.30-3.20mm	3.0-3.5mm	81C7566	0.29

Mfg. Part No.	Circuits	Length (mm)	Stock No.	Price Each 1-9
5273-NA SERIES VERTICAL HEADER - FRICTION LOCK				
09-65-2038	3	11.12	81C8363	0.68
09-65-2048	4	15.08	54H7257	0.49
09-65-2058	5	19.04	92C2924	1.00
09-65-2068	6	23.00	54H7260	0.78
43061 SERIES HOUSING				
43061-0002	2	9.06	95H7704	0.30
43061-0003	3	13.02	56H9743	0.32
43061-0004	4	16.98	28M9400	0.33
43061-0005	5	20.94	18M8103	0.40
43061-0006	6	24.90	56H9746	0.52
5196-N SERIES HOUSING - FRICTION RAMP				
09-50-1023	2	13.02	54H6793	0.57
5195 SERIES HOUSING - FRICTION RAMP				
09-50-1031	3	13.02	32H7334	0.52
09-50-1061	6	24.90	02E2092	0.81

(78159)

2.00mm (0.079″) DURACLIK WIRE-TO-BOARD SYSTEM SINGLE ROW, POSITIVE LOCK

RoHS Compliant Available

molex

- Current: 3A
- Voltage: 250V
- Contact Resistance: 20 milliohms max.
- Operating Temperature: -40 to +105°C

DuraClik is a new 2.00mm Wire-to-Board connector system for the Automotive market that provides high tolerance to vibration. These connector feature an inner positive lock that provides space saving and prevents lock breakage or half-way locking. Availabe in 2-8 circuits. They include wide solder tabs for secure PCB retention, and polarization features to prevent mis-mating.

Mfg. Part No.	Circuits	Dimensions (mm)	Stock No.	Price Each 1-9
HOUSINGS				
502351-0200	2	8H x 6.1W	08R4872	2.51
502351-0400	4	8H x 10.1W	08R4873	0.43
502351-0600	6	8H x 14W	08R4874	0.60
502351-0800	8	8H x 18W	08R4875	0.54
HEADERS - RIGHT ANGLE				
502352-0200	2	6.4H x 8W	08R4876	1.46
502352-0400	4	6.4H x 12W	08R4877	1.51
502352-0600	6	6.4H x 16W	08R4878	1.81
502352-0800	8	6.4H x 20W	08R4879	2.01
HEADERS - VERTICAL				
560020-0200	2	8H x 10.9W	88W4292	1.28
560020-0300	3	8H x 12.6W	88W4293	1.08
560020-0400	4	8H x 14.6W	66W1078	1.42
560020-0500	5	8H x 16.6W	88W4294	1.09
560020-0600	6	8H x 18.6W	88W4295	1.34
560020-0700	7	8H x 20.6W	88W4296	1.40
560020-0800	8	8H x 22.6W	88W4297	2.08

CRIMP TERMINALS - BULK

Mfg. Part No.	Wire Size	Plating	Stock No.	Price Each 1-9
50372-8100	26AWG to 22AWG	Tin	57H2158	0.18
50212-8100	30AWG to 24AWG	Tin	95C1851	0.27

CRIMP TERMINALS - TAPE CUT

Mfg. Part No.	Wire Size	Plating	Stock No.	Price Each 1-999
50212-8000	30AWG to 24AWG	Tin	94C4125	0.08

(147891)

MICROCLASP™ 2.00mm (0.079″) PITCH WIRE-TO-BOARD CRIMP TERMINALS/HOUSINGS/HEADERS

RoHS Compliant Available

molex

- Internal push-type positive lock on housings provides space savings, latch protection and secure retention
- Housing lance provides secure terminal retention
- Headers have inner positive lock and audible click to confirm mating
- Crimp terminal wire size: 22-28 AWG

51363 series locking tang provides terminal retention to housing, contact phosphor bronze tin-plated, operating temperature -25° to +85°C use with **56134 series**, mates with **series 55917** and **55959** headers. **55917** and **55959 series** contacts are tin-plated brass, locking windows provide secure mating. Operating temperature -25°C to +85°C.

Mfg. Part No.	Circuits	Length	Stock No.	Price Each 1-9
51242 SERIES WIRE-TO-BOARD HOUSING				
51353 SERIES WIRE-TO-BOARD HOUSING				
51353-0800	8	11.40 (0.449″)	58J9302	0.41
51353-1000	10	13.40 (0.528″)	58J9303	0.53
51353-1600	16	19.40 (0.764″)	58J9306	0.67
55917 SERIES WIRE-TO-BOARD VERTICAL HEADERS - THROUGH HOLE				
55917-0810	8	11.40 (0.449″)	59J0948	0.62
55917-2010	20	23.40 (0.921″)	59J0954	1.03
55959 SERIES WIRE-TO-BOARD RIGHT ANGLE HEADERS - THROUGH HOLE				
55959-1630	16	19.40 (0.764″)	59J0971	1.14

56134 SERIES WIRE-TO-BOARD CRIMP TERMINALS

Mfg. Part No.	AWG	Insulation Dia. (mm)	Strip Length mm	Pkg. of	Stock No.	Price Each 1-99
56134-9100	22-28	0.90-1.70	1.60-2.00	100	59J0986	0.12

(80528)

2mm (0.079″) CLIK-MATE WIRE-TO-BOARD CONNECTORS

RoHS Compliant Available

molex

- Current Rating: 3A
- Voltage Rating: 250V
- Operating Temperature Range: -25°C to 85°C

Crimp Terminal

502438 SERIES 2mm WIRE-TO-BOARD CRIMP TERMINAL

Mfg. Part No.	Wire Size (awg)	Stock No.	Price Each 1-9
502438-0100	26AWG to 22AWG	46P4834	0.12

502439 SERIES WIRE-TO-BOARD HOUSING, SINGLE ROW, POSITIVE LOCK

Mfg. Part No.	Circuits	Gender	Stock No.	Price Each 1-9
502439-0400	4	Plug	04R6441	0.28
502439-0600	6	Plug	04R6442	0.35
502439-0800	8	Plug	04R6443	0.46
502439-1200	12	Plug	04R6444	0.47
502439-1400	14	Plug	04R6445	0.54
502443 SERIES WIRE-TO-BOARD PCB RECEPTACLES, SINGLE ROW, VERTICAL				
502443-0670	6	Receptacle	04R6447	1.47
502443-1270	12	Receptacle	04R6449	2.45
502494 SERIES WIRE-TO-BOARD PCB RECEPTACLES, SINGLE ROW, RIGHT-ANGLE				
502494-0470	4	Receptacle	04R6451	1.17
502494-0670	6	Receptacle	04R6452	1.51
502494-0870	8	Receptacle	04R6453	1.79
502494-1270	12	Receptacle	04R6454	2.59
502494-1470	14	Receptacle	04R6455	2.83

(146405)

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(196545)

PC BOARD HEADERS & SOCKETS

2.00mm (0.079″) PITCH MILLI-GRID™ SYSTEM

RoHS Compliant Available

molex

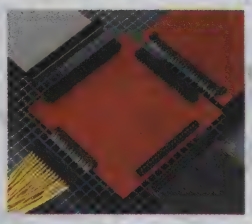


Fig. 1

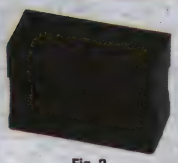


Fig. 2

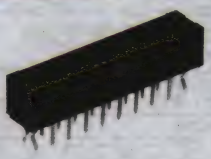


Fig. 3

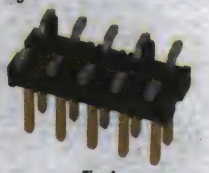


Fig. 4

- Voltage: 125 V
- Current: 1.5 A max.
- Contact Resistance:40 mΩ max.
- Dielectric Withstanding Voltage: 500 V
- Insulation Resistance: 1000 MΩ min.
- Operating Temperature: -40°C to +105°C

High density connectors based on a 2.00 x 2.00 mm grid pattern. The system offers complete design flexibility for wire-to-board, board-to-board and cable-to-board connections.

CRIMP TERMINALS - FIG. 1

Mfg. Part No.	AWG	Contact Plating	Package	Stock No.	Price Each 1-99	Price Each 100-499
● 50394-8100	30AWG to 24AWG	15μ″ Gold	Bulk	57H2161	0.11	0.09
● 50394-8051	30AWG to 24AWG	15μ″ Gold	Cut Tape	57H2159	0.23	0.09
● 50394-8200	30AWG to 24AWG	30μ″ Gold	Bulk	57H2162	0.21	0.14
● 50394-8052	30AWG to 24AWG	30μ″ Gold	Cut Tape	94C2678	0.22	0.12

51110 SERIES CRIMP HOUSINGS (FIG. 2)

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9	Price Each 10-99
● 51110-0850	8	57H2610	0.40	0.28
● 51110-1050	10	38C9879	0.35	0.24
● 51110-2050	20	38C9880	0.70	0.53
51110 SERIES CRIMP HOUSINGS WITH CENTER LATCH				
● 51110-1060	10	89C2702	0.48	0.34
● 51110-1260	12	57H2618	0.49	0.33
51110 SERIES CRIMP HOUSINGS WITH SIDE LATCHES & POLARIZATION KEY				
● 51110-1051	10	57H2614	0.31	0.28
● 51110-1251	12	57H2617	0.46	0.31
● 51110-3051	30	07P8657	0.89	0.70

(8453)

79107 SERIES VERTICAL, DUAL ROW THRU-HOLE RECEPTACLES (FIG. 3)

Mfg. Part No.	Circuits	Contact Material	Stock No.	Price Each 1-24	Price Each 25-49
● 79107-7003	8	Phosphor Bronze	55M3646	1.65	1.56
● 79107-7005	12	Phosphor Bronze	85K7418	2.10	1.71
● 79107-7019	40	Phosphor Bronze	07P8673	4.47	4.08
87568 SERIES DUAL ROW, IDT RECEPTACLES - WITH POLARIZATION AND LOCKING RAMP					
● 87568-1693	16	Copper Alloy	93K7670	2.99	2.72
● 87568-2093	20	Copper Alloy	57R2128	2.66	2.55
● 87568-2493	24	Copper Alloy	07P8688	3.46	2.55
● 87568-2693	26	Copper Alloy	26K5992	3.52	2.82
● 87568-3093	30	Copper Alloy	32M7050	3.43	3.28
● 87568-4093	40	Copper Alloy	07P8691	3.93	3.77
87759 SERIES UNSHROUDED SURFACE MOUNT HEADERS WITH PEGS (FIG. 4)					
● 87759-1050	10	Phosphor Bronze	07P8696	1.49	1.16
87831 SERIES SHROUDED VERTICAL SMC HEADERS, 15u″ GOLD					
● 87831-0620	6	Phosphor Bronze	59J1683	0.97	0.77
● 87831-1220	12	Phosphor Bronze	59J1701	1.41	1.12
● 87831-1420	14	Phosphor Bronze	52M1994	1.48	1.25
● 87831-3020	30	Phosphor Bronze	59J1741	3.46	2.91
87831 SERIES SHROUDED VERTICAL SMC HEADERS - WITH LOCKING WINDOW, 15u″ GOLD					
● 87831-1041	10	Phosphor Bronze	59J1698	1.26	1.00
● 87831-1241	12	Phosphor Bronze	59J1704	1.11	0.97
87832 SERIES SHROUDED SMT HEADERS - WITH LOCATOR, CENTER POLARIZATION, 15u″ GOLD					
● 87832-1420	14	Phosphor Bronze	57J0374	1.87	1.59
● 87832-2620	26	Phosphor Bronze	59J1830	3.14	2.60
87832 SERIES SHROUDED SMT HEADERS - WITH LOCATOR, CENTER POLARIZATION, 30u″ GOLD					
● 87832-1421	14	Phosphor Bronze	56J8949	2.58	2.20

➤CONTINUED➤

2.00mm (0.079″) PITCH MILLI-GRID™ SYSTEM (CONT.)

87833 SERIES SHROUDED RIGHT ANGLE HEADERS, 15u″ GOLD

Mfg. Part No.	Circuits	Contact Material	Stock No.	Price Each 1-24	Price Each 25-49
● 87833-0820	8	Phosphor Bronze	59J1879	1.11	0.88
● 87833-1020	10	Phosphor Bronze	59J1882	1.14	0.91
● 87833-1420	14	Phosphor Bronze	59J1889	1.60	1.23
87833 SERIES SHROUDED RIGHT ANGLE HEADERS - WITH LOCKING WINDOWS					
● 87833-0831	8	Phosphor Bronze	59J1881	1.37	1.08
● 87833-1031	10	Phosphor Bronze	59J1885	1.48	1.17

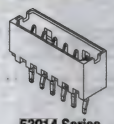
0.079″ (2.00) PITCH MICROBLADE™ WIRE-TO-BOARD CRIMP TERMINAL/ HOUSING AND HEADERS

RoHS Compliant Available

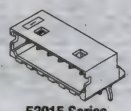
molex

50011 Series

51004 Series



53014 Series



53015 Series

- Voltage: 125 V
- Current: 0.5 to 2.0 A
- Contact Resistance: 20 mΩ max.
- Dielectric Withstanding Voltage: 500 VAC/1 min.
- Wire Range: 24 to 34 AWG
- Contact: Phosphor Bronze Tin-Plated
- Insulation Resistance: 1000 MΩ min.
- Operating Temperature: -20°C to +85°C

50011 series box design provides two points of contact and terminal protection, **51004 series** housing lance provides extra terminal retention, friction lock provides secure mating, **53014-53015 series** locking windows provide secure mating, housing glass-filled 6/6 nylon, UL 94V-0, UL listed, CSA certified

50011 SERIES WIRE-TO-BOARD CRIMP TERMINAL

Mfg. Part No.	AWG	Insulation Dia. (mm)	Stock No.	Price Each 1-9
● 50011-8100	30AWG to 24AWG	1.40	89C1389	0.40

51004 SERIES WIRE-TO-BOARD HOUSING

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9
● 51004-0200	2	57H2236	0.33
● 51004-0400	4	28M9422	0.35
● 51004-0500	5	18M8150	0.54
● 51004-1000	10	28M9424	0.93
● 51004-1200	12	57H2243	0.84
53014 SERIES WIRE-TO-BOARD VERTICAL HEADERS			
● 53014-0210	2	28M9444	0.17
● 53014-0510	5	95H9635	0.50
● 53014-0710	7	95H9637	0.53
● 53014-0810	8	32M7224	0.71
● 53014-0910	9	95H9639	1.07
● 53014-1010	10	95H9640	1.18
● 53014-1110	11	95H9641	1.17
● 53014-1210	12	95H9642	1.43
53015 SERIES WIRE-TO-BOARD RIGHT ANGLE HEADERS			
● 53015-0310	3	28M9447	0.48
● 53015-0510	5	57H4646	0.59
● 53015-0710	7	95H9649	0.92

(78261)

SHERLOCK 2.00mm (0.079″) PITCH WIRE-TO-BOARD HOUSINGS AND HEADERS

RoHS Compliant Available

molex

- Voltage: 125 V
- Current: 2.0 A
- Contact Resistance: 20 mΩ max.
- Dielectric Withstanding Voltage: 500 V
- Insulation Resistance: 1000 MΩ min.

Compact low-profile design for space savings. Polarizing end walls prevent mismating. Five color choices for circuit identification. **35507 series** positive lock latch provides secure mating retention. Housing lance ensures good terminal retention. Mates with **35362** and **35363 series** headers. **35362** and **35363 series** positive locking ribs provide secure mating retention. Four-wall shroud with guide plate protects pins and facilitates mating. Contacts: tin/lead plated. **Type 502-12-8100** contacts available; *go online or call.*

➤CONTINUED➤

SHERLOCK 2.00mm (0.079″) PITCH WIRE-TO-BOARD HOUSINGS AND HEADERS (CONT.)

35507 SERIES WIRE-TO-BOARD HOUSINGS

Mfg. Part No.	Circuits	Length mm (in.)	Stock No.	Price Each 1-9
35507-0200	2	7.20 (0.283)	09H1093	0.19
35507-0300	3	9.20 (0.362)	09H1095	0.21
35507-0400	4	10.30 (0.406)	09H1096	0.33
35507-0500	5	12.30 (0.484)	26H6454	0.14
35507-0600	6	14.30 (0.563)	84C8832	0.34
35507-0800	8	18.30 (0.720)	09H1097	0.33
35507-0900	9	20.30 (0.799)	56H7239	0.32
35507-1000	10	22.30 (0.878)	56H7240	0.37
35507-1200	12	26.30 (1.035)	09H1094	0.36
35362 SERIES WIRE-TO-BOARD HEADERS				
35362-0250	2	7.70 (0.303)	58J8271	0.35
35362-0350	3	9.70 (0.382)	93K7153	0.43
35362-0450	4	10.30 (0.406)	65K4794	0.46
35362-0550	5	12.30 (0.484)	30K7102	0.39
35362-0650	6	14.30 (0.563)	68K1363	0.55
35362-0850	8	18.30 (0.720)	24K6838	0.76
35362-0950	9	20.30 (0.799)	57R9763	0.77
35362-1050	10	22.30 (0.878)	65K0709	0.83
35363 SERIES WIRE-TO-BOARD RIGHT ANGLE HEADERS				
35363-0260	2	7.70 (0.303)	57R9772	0.43
35363-0360	3	9.70 (0.382)	57R9773	0.55
35363-0460	4	10.30 (0.406)	29K8098	0.54
35363-0560	5	12.30 (0.484)	07P8725	0.60
35363-0860	8	18.30 (0.720)	08R2484	0.85

50212 SERIES CRIMP TERMINALS

Mfg. Part No.	AWG	Insulation Dia (mm)	Strip Lenth (mm)	Pkg. of	Stock No.	Price Each 1-9	Price Each 10-99
50212-8100	24-30	1.40	1.3 to 1.8	100	95C1851	0.27	0.22

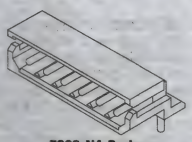
(80521)

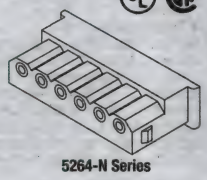
0.098″ (2.50) PITCH SPOX™ WIRE-TO-BOARD CRIMP TERMINAL HEADERS AND HOUSINGS

RoHS Compliant Available

molex

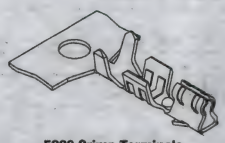
5267-NA Series


5268-NA Series


5264-N Series

- Voltage: 250 V
- Current: 1.5 - 3.0 A
- Contact Resistance: 20 mΩ max.
- Dielectric Withstanding Voltage: 1000 VAC/1 min.
- Insulation Resistance: 1000 mΩ min.

5267-NA series headers feature tin-plated brass contacts; operating temperature 0 to 75°C. **5264-N series** housings are low profile and shrouded; operating temperature -40 to 105 °C. **5263 series** tin-plated phosphor bronze contacts; operating temperature -40 to 105°C.


5263 Crimp Terminals

5267-NA SERIES VERTICAL FULLY SHROUDED HEADERS

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9
22-03-5025	2	55H9326	0.49
22-03-5045	4	95H9578	0.57
22-03-5065	6	18M7988	0.95
5268-NA SERIES RIGHT-ANGLE FULLY SHROUDED HEADERS			
22-05-7045	4	07P8724	0.81
5264-N SERIES SHROUDED CRIMP TERMINAL HOUSINGS			
50-37-5023	2	57H1784	0.29
50-37-5033	3	57H1785	0.34
50-37-5043	4	57H1786	0.44
50-37-5053	5	50H7041	0.48
50-37-5063	6	57H1787	0.53
50-37-5083	8	86C7528	0.72
50-37-5103	10	86C7532	0.79
50-37-5113	11	95H9590	0.93
50-37-5123	12	95H9591	0.84

CONTINUED

0.098″ (2.50) PITCH SPOX™ WIRE-TO-BOARD CRIMP TERMINAL HEADERS AND HOUSINGS (CONT.)

5263 SERIES SPRING BOX CRIMP TERMINALS

Mfg Part No.	AWG	Insulation Diameter	Stock No.	Price Each 1-9
08-70-1039	28AWG to 22AWG	1.90 (.075″) max.	54H5572	0.12
08-70-1040	28AWG to 22AWG	1.90 (.075″) max.	54H5573	0.32
5240 SERIES MALE CRIMP TERMINALS				
08-70-0103	28AWG to 22AWG	1.90 (.075″) max.	83C8043	0.17

CRIMP TOOL FOR 5263 SERIES CRIMP TERMINALS

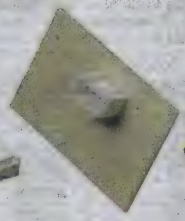
Mfg. Part No.	Description	Stock No.	Price Each 1-4
63811-5200	Prototype and Field Repair Crimp Tool	07M7214	254.37

(78163)

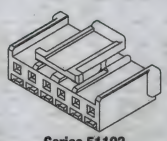
MINI-LOCK™ 2.50mm (0.098″) PITCH WIRE-TO-BOARD CRIMP TERMINALS/HOUSINGS/HEADERS

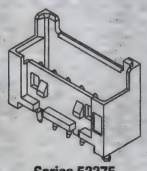
RoHS Compliant Available

molex



Series 50351


Series 51103


Series 53375

Series 53426

- Voltage: 250 V
- Current: 3.0 A
- Wire Range: 22-28 AWG
- Contact Resistance: 20 mΩ max.
- Dielectric Withstanding Voltage: 1000 VAC/1 min.
- Insulation Resistance: 1000 MΩ min.

50351 series has four points of contact. Housing lance provides secure terminal retention. **51103 series** housing mates with **53375** and **53426 series** headers, use with **50351 series** crimp terminals. **53375** and **53426 series** headers contacts tin-plated. Locking ribs and holes accept either positive or friction-locking housings. Shrouded design protects and facilitates mating. Kinked PC tails provide secure PCB retention.

51103 SERIES WIRE-TO-BOARD HOUSINGS WITH POSITIVE LOCK

Mfg. Part No.	Circuits	Length mm (in.)	Stock No.	Price Each 1-9
51103-0200	2	7.20 (0.283)	25H8708	0.17
51103-0300	3	9.70 (0.382)	26H1670	0.22
51103-0400	4	12.20 (0.480)	26H1986	0.27
51103-0600	6	17.20 (0.677)	57H2597	0.35
51103-0800	8	22.20 (0.874)	54H4363	0.49
51103-1000	10	27.20 (1.071)	57H2600	0.47
53375 SERIES WIRE-TO-BOARD HEADERS				
53375-0210	2	7.40 (0.291)	57H5345	0.54
53375-0310	3	9.90 (0.390)	57H5347	0.45
53375-0410	4	12.40 (0.488)	57H5351	0.85
53375-0510	5	14.90 (0.587)	57H5354	0.82
53375-0610	6	17.40 (0.685)	57H5357	0.90
53375-0710	7	19.90 (0.783)	57H5359	0.98
53375-0810	8	22.40 (0.882)	57H5361	1.07
53426 SERIES WIRE-TO-BOARD RIGHT ANGLE HEADERS				
53426-0310	3	9.90 (0.390)	26H1667	0.48
53426-0610	6	17.40 (0.685)	57H5476	1.10
53426-0810	8	22.40 (0.882)	57H5480	1.10

50351 SERIES WIRE-TO-BOARD CRIMP TERMINAL

Mfg. Part No.	AWG	Insulation Dia. (mm)	Package	Stock No.	Price Each 1-9	Price Each 10-99
50351-8000	28AWG to 22AWG	1.15 to 1.8	Cut Tape	26H1675	0.13	0.12
50351-8100	28AWG to 22AWG	1.15 to 1.8	Bulk	02H0384	0.47	0.32

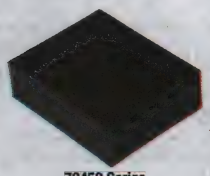
(80519)

PC BOARD HEADERS & SOCKETS

0.100″ (2.54) C-GRID® HIGH-DENSITY DUAL ROW CONNECTORS

RoHS Compliant Available

molex



70450 Series

70280 Series

7859 Series

71308 Series

- Voltage: 250 V
- Current Rating: 3 A
- Contact Resistance: 15 mΩ Max.
- Dielectric Withstanding Voltage: 1500 V
- Insulation Resistance: 1000 MΩ Min.
- Operating Temperature: -40°C to +105°C

70450 SERIES DUAL ROW CRIMP HOUSINGS, VERSION A - NON POLARIZED

Stackable end-to-end and side-to-side on 0.100″ (2.54mm) grid. Use with C-grid SL crimp terminals; *order separately below.* Mate with **70280, 71308, or 71764 series** dual row headers; *order separately below.*

Mfr. Part No.	Circuits	Stock No.	Price Each 1-9
● 22-55-2041	4	56H4204	1.15
● 22-55-2061	6	38C9187	1.30
● 22-55-2081	8	06C1181	1.37
● 22-55-2101	10	38C9188	1.72
● 22-55-2181	18	38C9190	2.08
● 22-55-2121	12	02H0390	1.47
● 22-55-2141	14	56H4214	1.62
● 22-55-2161	16	56H4217	1.62
● 22-55-2201	20	56H4223	1.75
● 22-55-2241	24	18M8007	2.35
● 22-55-2301	30	53H6706	2.39
● 22-55-2341	34	38C9192	1.97
● 2255-2401	40	77C6142	3.30
● 22-55-2501	50	56H4265	2.48
70450 SERIES DUAL ROW CRIMP HOUSINGS, VERSION C - BACK RIBS			
● 22-55-2103	10	74C5823	1.73

POLARIZING KEY FOR CRIMP HOUSINGS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 15-04-0292	Polarizing Key	88C9463	0.40

70280 SERIES DUAL ROW VERTICAL PIN BREAKAWAY HEADERS - 11.10mm (0.437″) LENGTH

Easy breakaway to smaller sizes. Stackable end-to-end and side to side. Drawn 0.025″ (0.635mm) square wire provides 4-sided smooth surface. Standoffs facilitate post solder cleaning. Mate with **70450 series** connector housings; *order separately above* and **7859 series** shunts; *order separately below.*

Mfr. Part No.	Circuits	Plating	Stock No.	Price Each 1-9
● 10-89-7061	6	Tin	01J4517	0.60
● 10-89-7081	8	Tin	01J4520	0.70
● 10897101	10	Tin	01J4522	0.84
● 10-89-7141	14	Tin	01J4528	1.13
● 10-89-7161	16	Tin	01J4531	1.17
● 10-89-7201	20	Tin	01J4536	0.96
● 10-89-7062	6	15u″ Gold	58J8068	0.69
● 10-89-7082	8	15u″ Gold	70K9523	0.63
● 10897102	10	15u″ Gold	01J4523	0.81
● 10-89-7122	12	15u″ Gold	01J4526	1.00
● 10-89-7142	14	15u″ Gold	46M4257	1.43
● 10897162	16	15u″ Gold	01J4532	1.19
● 10897202	20	15u″ Gold	01J4537	1.47
● 10-89-7262	26	15u″ Gold	70K9515	2.65
● 10-89-7302	30	15u″ Gold	01J4549	2.97
● 10897402	40	15u″ Gold	01J4559	2.68
● 10-89-7502	50	15u″ Gold	74K2675	7.41
● 10-89-7802	80	15u″ Gold	52K6317	8.51

70246 SERIES DUAL ROW VERTICAL SHROUDED HEADERS

Mfr. Part No.	Circuits	Plating	Stock No.	Price Each 1-99
● 70246-1001	10	15u″ Gold	56J9979	1.64
● 70246-2601	26	15u″ Gold	08P0705	2.48
● 70246-4001	40	15u″ Gold	08P0707	3.21
70247 SERIES DUAL ROW RIGHT ANGLE SHROUDED HEADERS				
● 70247-1451	14	15u″ Gold	08P0708	2.11

➤ CONTINUED ➤

0.100″ (2.54) C-GRID® HIGH-DENSITY DUAL ROW CONNECTORS (CONT.)

Mfr. Part No.	Circuits	Plating	Stock No.	Price Each 1-99
Headers are vapor phase/IR reflow process compatible and stackable end-to-end. Drawn 0.025″ square wire provides 4-sided smooth interface. Mate with 70450 series housing; order separately above, 7859 series shunts; order separately below, and crimp terminals; order separately *on pages 783-784.*				
● 15-91-2100	10	Tin	06H1106	0.87
● 15-91-2800	80	Tin	18M7945	8.32
● 15-91-0140	14	15u″ Gold	55H2067	1.43
● 15-91-0200	20	15u″ Gold	55H2074	1.93
● 15-91-0800	80	15u″ Gold	18M7944	9.59

7859 SERIES TWO CIRCUIT SHUNT/JUMPERS

Open or closed top to prevent upside-down mating. Stackable end-to-end and side-to-side. Acts as DIP switch by increasing current flow and decreasing resistance. Dual beam copper alloy terminals offer 2 points of contact per pin. Glass-filled polyester housing, rated UL 94V-0. Contact resistance: 15 mΩ (gold). Current rating: 5 A. Mate with any **C-Grids** header.

Mfr. Part No.	Top	Plating	Stock No.	Price Each 1-9
● 15-29-1024	Open	15μ″ Gold	55H0424	0.79
● 15-29-1025	Closed	15μ″ Gold	55H0425	0.62
● 15-29-1026	Closed	150μ″ Tin	55H0426	0.85
● 15-38-1024	Open	150μ″ Tin	55H0628	0.50
90059 SERIES LOW PROFILE MICRO SHUNT				
● 90059-0009	Open	15μ″ Gold	06H1007	0.39

(8407)

3.70mm (0.146") FLEXI-MATE BOARD-TO-BOARD AND WIRE-TO-BOARD CONNECTOR SYSTEM

RoHS Compliant Available

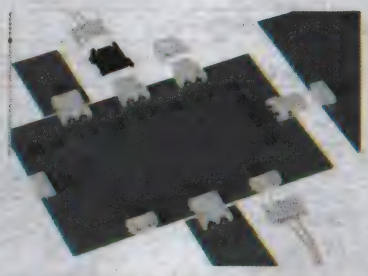
molex

Features

- Board-to-board, wire-to-board and terminator options
- Positive side latches on crimp housing
- Dual-contact wire-to-board and board-to-board terminal design
- Mating guide features on PCB connectors
- Shrouded contacts

Benefits

- Meets needs of LED TVs and lighting equipment that use interconnecting LED panels
- Space savings and easy mating/unmating
- Ensures reliable electrical contact
- Help facilitate mating and provide smooth insertion
- Protects contact area



Designed to meet the backlighting needs of LED TVs and room lighting applications, Molex's new Flexi-Mate family of connectors is the first of its kind on the market to provide a full range of both board-to-board and wire-to-board solutions. Molex's Flexi-Mate system includes board-to-board connectors that are used to snap together small panels containing LED lights and a wire-to-board option to connect the LED boards to the main power board. A terminating connector is also available that is used as a type of shorting device to complete an open-loop signal. The 3.00mm (.118") mated height meets the needs of TV and room lighting units that continue to strive for thinner designs. Other key features include a dual-contact terminal design for secure electrical contact, space-saving positive side locks for wire-to-board connections, and guide features that help facilitate mating and protect terminals during mating and unmating.

CRIMP TERMINALS

Mfg. Part No.	Wire Size	Plating	Stock No.	Price Each 1-9
● 503485-0000	28AWG to 26AWG	Tin	24T5879	0.12

CRIMP HOUSING

Mfg. Part No.	Circuits	Gender	Stock No.	Price Each 1-9
● 503473-0200	2	Plug	24T5877	0.37
RIGHT ANGLE PC BOARD CONNECTORS				
● 503469-0200	2	Plug	99R5661	0.74
● 503471-0200	2	Receptacle	99R5662	0.73
TERMINATOR				
● 503474-0200	2	Receptacle	24T5878	0.56

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0.100″ (2.54) CENTER KK® SYSTEM CRIMP TERMINAL HOUSINGS

RoHS Compliant Available

molex

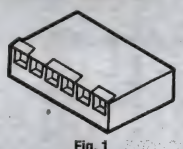


Fig. 1

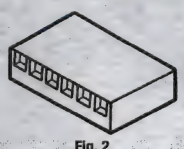


Fig. 2

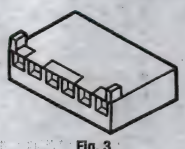


Fig. 3

- Voltage: 250 V
- Current: 2.5 A Max.
- Contact Resistance: 20 mΩ
- Dielectric Withstanding Voltage: 1500 VAC
- Insulation Resistance: 50,000 MΩ
- Nylon Material, Rated UL 94V-0

➤ CONTINUED ➤

0.100″ (2.54) CENTER KK® SYSTEM CRIMP TERMINAL HOUSINGS (CONT.)

Available with or without locking ramp and polarizing ribs. **2695 series** accepts **2759 series** KK® series crimp terminals, **7880 series** accepts **7879 series** crimp terminals, and **6471 series** accepts **4809 series** crimp terminals Mate with 0.100″ (2.54) Center KK® series headers *ordered separately on pages 784-785. Order polarizing key and polarizing peg separately below.* UL recognized, CSA certified.

2695 SERIES TERMINAL HOUSINGS WITH LOCKING RAMP — FIG. 1

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9	Price Each 10-99
22-01-2027	2	33C3219	0.12	0.08
22-01-2037	3	38C9135	0.21	0.13
22-01-2047	4	38C9137	0.20	0.14
22-01-2057	5	55H8906	0.33	0.23
22-01-2067	6	55H8909	0.27	0.19
22-01-2107	10	38C9143	0.70	0.40
22-01-2127	12	35C3818	3.77	2.39
22-01-2147	14	55H8931	0.69	...
2695 SERIES TERMINAL HOUSINGS — FIG. 2				
22-01-2021	2	38C9133	0.11	0.07
22-01-2025	2	26H0649	0.31	0.22
22-01-2031	3	38C9134	0.21	0.15
22-01-2061	6	38C9138	0.35	0.25
22-01-2081	8	38C9140	0.25	0.25
22-01-2101	10	38C9142	0.58	0.40
22-01-2121	12	55H8924	0.38	0.37
2695 SERIES TERMINAL HOUSINGS WITH POLARIZING RIBS AND LOCKING RAMP — FIG. 3				
22-01-3027	2	38C9144	0.15	0.09
22-01-3037	3	38C9145	0.21	0.13
22-01-3047	4	34H3249	0.23	0.16
22-01-3057	5	38C9147	0.29	0.20
22-01-3067	6	35C5333	0.35	0.24
22-01-3077	7	55H8976	0.41	0.29
22-01-3087	8	38C9148	0.46	0.31
22-01-3097	9	94F9699	0.63	0.47
22-01-3107	10	77C6172	0.50	0.38
22-01-3117	11	37B577	0.77	0.72
22-01-3137	13	55H8981	0.53	0.49
22-01-3147	14	28C7145	0.68	0.55
22-01-3157	15	55H8983	0.72	0.70
6471 SERIES TERMINAL HOUSINGS WITH POLARIZING RIBS AND LOCKING RAMP, END TO END STACKABLE				
22-012035	3	76K0741	0.35	0.24
22-01-2045	4	55H8902	0.45	0.31
22-01-2065	6	09WX0295	0.51	0.38
22-01-2085	8	55H8914	0.73	0.54
22-01-2105	10	55H8919	0.72	0.54
7880 SERIES HIGH-PRESSURE TERMINAL HOUSINGS WITH STANDARD RAMP				
10-11-2023	2	54H7660	0.33	0.11
10-11-2033	3	54H7662	0.46	0.15
10-11-2043	4	54H7664	0.50	0.17
10-11-2053	5	36B9101	0.68	0.31
10-11-2063	6	35H6565	0.19	0.19
10-11-2073	7	36B9105	0.94	0.40
10-11-2083	8	13C2635	0.65	0.38
10-11-2103	10	36B9111	0.83	0.48
10-11-2123	12	28M9332	1.24	0.69

ACCESSORIES

Mfg. Part No.	Description	For Connector Housings	Stock No.	Price Each 1-99
15-04-9209	Polarizing Key	2695, 4455, 5051, 6471, 40251 Series	18M7941	0.16

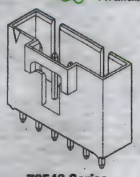
(8406)

0.100″ (2.54) SL™ HEADERS

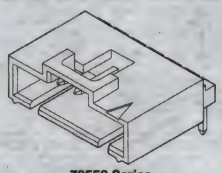
RoHS Compliant Available

molex

- Voltage: 250 V
- Current: 3 A
- Contact resistance: 15 mΩ Max.
- Dielectric Withstanding Voltage: 1500 V
- Insulation Resistance: 1000 MΩ min.
- Contacts: Copper Alloy, 0.025″ Square
- Plating: 15μ″ Gold, 30μ″ Gold, 150μ″ Tin
- Operating Temperature: -40°C to +105°C



70543 Series Vertical



70553 Series Right-Angle

Single-row 0.100″ center wire-to-board vertical and right-angle shrouded locking headers feature locking crown that secures positive latch to header. Polarization slots guide front ribs to prevent pin damage. Mate with **70066 series** crimp housings; *order separately on page 784.*

➤CONTINUED➤

0.100″ (2.54) SL™ HEADERS (CONT.)

70543 SERIES VERTICAL SHROUDED LOCKING HEADERS 150μ″ TIN

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9
70543-0036	2	95H7398	0.57
70543-0037	3	18M8236	0.73
70543-0038	4	59H2665	1.11
70543-0040	6	95H7401	1.03
70543 SERIES VERTICAL SHROUDED LOCKING HEADERS 15μ″ GOLD			
70543-0001	2	59H2645	0.95
70543-0002	3	38C9947	1.03
70543-0003	4	85C0279	1.06
70543-0004	5	59H2646	1.31
70543-0005	6	59H2647	1.32
70543-0006	7	59H2648	1.53
70543-0007	8	59H2649	1.52
70543-0008	9	59H2650	1.61
70543-0009	10	59H2651	2.48
70543-0011	12	91C4597	2.98
70545 SERIES VERTICAL SHROUDED LOCKING HEADER, TRI-PEG, 150μ″ TIN			
70545-0003	4	84C9637	0.88
70545 SERIES VERTICAL SHROUDED LOCKING HEADER, TRI-PEG, 15μ″ GOLD			
70545-0036	2	97C6848	0.67
70545-0037	3	59H2772	1.01
70545-0042	8	73C8930	2.19
70545-0044	10	26H7042	1.61
70551 SERIES RIGHT-ANGLE SHROUDED LOCKING HEADERS 150μ″ TIN			
70551-0001	2	59H2839	1.48
70553 SERIES RIGHT-ANGLE SHROUDED LOCKING HEADER, 150μ″ TIN			
70553-0036	2	90C0113	0.92
70553-0037	3	30H5349	1.05
70553-0038	4	95H7415	0.76
70553-0039	5	95H7416	1.28
70553 SERIES RIGHT-ANGLE SHROUDED LOCKING HEADERS 15μ″ GOLD			
70553-0001	2	59H2870	0.82
70553-0002	3	59H2871	1.09
70553-0003	4	38C9957	1.19
70553-0005	6	59H2873	1.85
70553-0006	7	59H2874	1.86
70553-0007	8	59H2875	3.37
70553-0009	10	59H2877	2.23
70634 SERIES SMT RIGHT-ANGLE SHROUDED LOCKING HEADERS 150μ″ TIN			
15-91-3024	2	55H2234	1.56
15-91-3044	4	65H6703	2.88

(17132)

0.100″ (2.54) PITCH SL™ CRIMP TERMINALS

RoHS Compliant Available

molex

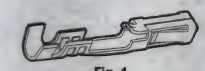


Fig. 1
70058 Series

Fig. 2
71851 Series

Fig. 3
70021 Series

- Voltage: 250V
- Current: 3.0A
- Contact Resistance: 15mΩ Max.
- Insulation Resistance: 1000MΩ Min.
- Operating Temp.: –40°C to +105°C

Dual-beam, fully enclosed female box contact. Dual-tab strain relief. Locking tang secures terminal in housing. **Pricing is individual or per package. Reel pricing is per piece.**

70058 SERIES PITCH CRIMP FEMALE TERMINALS - FIG. 1 (SOLD INDIVIDUALLY)

Mfg. Part No.	AWG	Contact Plating	Stock No.	Price Each 1-99
16-02-0102	24AWG to 22AWG	Tin	55H2482	0.16
16-02-0096	30AWG to 24AWG	Tin	55H2476	0.11
16-02-0103	24AWG to 22AWG	15μ″ Gold	55H2483	0.27
16-02-0097	30AWG to 24AWG	15μ″ Gold	55H2477	0.18
16-02-0104	24AWG to 22AWG	30μ″ Gold	04H0438	0.19
16-02-0098	30AWG to 24AWG	30μ″ Gold	55H2478	0.19
70058 SERIES PITCH CRIMP FEMALE TERMINALS ON REEL - FIG. 1 (SOLD INDIVIDUALLY)				
16-02-0086	24AWG to 22AWG	Tin	97B0029	0.14
16-02-0069	30AWG to 24AWG	Tin	90C0133	0.13
16-02-0087	24AWG to 22AWG	15μ″ Gold	55H2474	0.11
16-02-0082	30AWG to 24AWG	15μ″ Gold	85C2120	0.09
16-02-0088	24AWG to 22AWG	30μ″ Gold	95C0425	0.14
71851 SERIES PITCH CRIMP FEMALE TERMINALS, HIGH-FORCE - FIG. 2 (SOLD INDIVIDUALLY)				
16-02-1110	24AWG to 22AWG	Tin	55H2506	0.22
16-02-1114	24AWG to 22AWG	Tin	55H2510	0.20

➤CONTINUED➤

0.100″ (2.54) PITCH SL™ CRIMP TERMINALS (CONT.)

71851 SERIES PITCH CRIMP FEMALE TERMINALS, HIGH-FORCE - FIG. 2 (SOLD INDIVIDUALLY)

Mfg. Part No.	AWG	Contact Plating	Stock No.	Price Each 1-99
● 16-02-1116	30AWG to 24AWG	Tin	55H2511	0.19
● 16-02-1125	24AWG to 22AWG	15μ″ Gold	55H2519	0.26
● 16-02-1109	30AWG to 24AWG	15μ″ Gold	55H2505	0.27

71851 SERIES PITCH CRIMP FEMALE TERMINALS, HIGH-FORCE, ON REEL - FIG. 2 (SOLD INDIVIDUALLY)

● 16-02-1124	24AWG to 22AWG	15μ″ Gold	88C9405	0.25
● 16-02-0119	30AWG to 24AWG	15μ″ Gold	55H2493	0.46

70021 SERIES PITCH CRIMP MALE TERMINALS - FIG. 3 (SOLD INDIVIDUALLY)
Dual-tab strain relief. Locking tag secures terminal in housing. Mates with **70058** and **71851 series**.

● 16-02-0108	30AWG to 24AWG	Tin	55H2486	0.18
● 16-02-0115	24AWG to 22AWG	15μ″ Gold	55H2492	0.28
● 16-02-0109	30AWG to 24AWG	15μ″ Gold	74C3240	0.34
● 16-02-0078	30AWG to 24AWG	15μ″ Gold	85C2122	0.33
● 16-02-0117	24AWG to 22AWG	30μ″ Gold	92B7913	0.32
● 16-02-0110	30AWG to 24AWG	30μ″ Gold	55H2487	0.28

70058 SERIES PITCH CRIMP FEMALE TERMINALS - FIG. 1 (ON REELS, SOLD INDIVIDUALLY)

Mfg. Part No.	AWG	Contact Plating	Stock No.	Price Each 1-9
● 16020081	24AWG to 22AWG	15μ″ Gold	83C7748	0.29

70021 SERIES PITCH CRIMP MALE TERMINALS ON REEL - FIG. 3 (ON REELS, SOLD INDIVIDUALLY)

● 16-02-0107	24AWG to 22AWG	Tin	08P0700	0.14

EXTRACTION TOOL FOR SL™ CRIMP TERMINALS

Mfg. Part No.	For Use With	Stock No.	Price Each 1-4
11030036	Both male and female terminals	34H3143	16.39

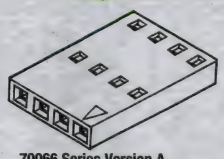
(8476)

0.100″ (2.54) SL™ CRIMP HOUSINGS

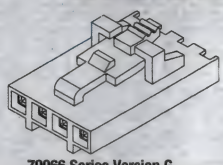
RoHS Compliant Available

molex

- Single-Row 0.100″ Center
- Wire-To-Board Applications
- Alignment Ribs Prevent Contact Damage
- Operating Temperature: -40°C to +105°C



70066 Series Version A



70066 Series Version G

Anti-entanglement ribs prevent wire from catching under lock during harness assembly. Uses **70058 and 71851series** crimp terminals; *order separately. Go online or call.* Mates with **70543** and **70553 series** headers; *order separately. Go online or call*.

70066 SERIES SINGLE-ROW, VERSION A, CRIMP HOUSINGS
End-to-end and side-to-side stackable for single- or dual-row connections. Use with **types 70058** and **71851** crimp terminals. Mates with **types 8624, 42375, 42377, 70280, 71038** and **71764** headers.

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9
● 50-57-9002	2	77C5436	0.51
● 50-57-9003	3	57H1819	0.74
● 50-57-9004	4	57H1820	0.56
● 50-57-9005	5	57H1821	0.41
● 50-57-9006	6	57H1822	0.55
● 50-57-9007	7	57H1823	0.59
● 50-57-9008	8	57H1824	0.62
● 50-57-9009	9	57H1825	0.77
● 50-57-9010	10	57H1826	0.57
● 50-57-9014	14	57H1830	0.78

70066 SERIES SINGLE-ROW, VERSION C, FRONT RIB CRIMP HOUSINGS
Use with **types 70058** and **71851** crimp terminals. Mates with **types 70543, 70544, 70545, 70546, 70553, 70544, 70555** and **70556** headers.

● 50-57-9202	2	57H1847	0.47
● 50-57-9203	3	57H1848	0.71
● 50-57-9204	4	57H1849	0.57
● 50-57-9208	8	57H1852	0.53

70066 SERIES SINGLE-ROW, VERSION G, POSITIVE LATCH CRIMP HOUSINGS
Use with **types 70058** and **71851** crimp terminals. Mates with **types 70018, 70107A/B, 70541, 70543, 70545, 70551, 70553, 70555, 70634** and **74099**

● 50-57-9402	2	38C9863	0.53
● 50-57-9403	3	38C9864	0.42
● 50-57-9404	4	25C5453	0.51
● 50-57-9405	5	98B5365	0.66
● 50-57-9406	6	38C9865	0.59
● 50-57-9407	7	57H1893	0.56
● 50-57-9408	8	38C9866	0.56
● 50-57-9409	9	38C9867	0.63
● 50-57-9410	10	38C9868	0.63
● 50-57-9411	11	58R1199	0.82

➤ CONTINUED ➤

0.100″ (2.54) SL™ CRIMP HOUSINGS (CONT.)

70066 SERIES SINGLE-ROW, VERSION G, POSITIVE LATCH CRIMP HOUSINGS

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9
● 50-57-9412	12	57H1897	0.61
● 50579415	15	89C3259	0.92
● 50-57-9416	16	57H1898	1.00
● 50-57-9420	20	57H1900	1.26

70066 SERIES SINGLE-ROW, VERSION N, POSITIVE LATCH CRIMP HOUSINGS
Use with **types 73838 TPA** and **70058** or **71851** crimp terminals. Mates with **types 70018, 70107A/B, 70541, 70543, 70545, 70551, 70553, 70555, 70634** and **74099**

● 50-57-9702	2	89C1734	0.92

70450 SERIES DOUBLE-ROW, VERSION B, POLARIZED CRIMP HOUSINGS
Use with **types 70058** and **71851** crimp terminals. Mates with **types 70246, 70247, 87256** and **87257**

● 22-55-2242	24	56H4230	1.20
● 22-55-2202	20	56H4224	1.63

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 15-04-0292	Polarizing Key	88C9463	0.40

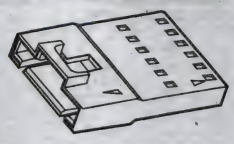
(17133)

0.100″ PITCH SL™ WIRE-TO-WIRE CONNECTORS

RoHS Compliant Available

molex

- Black Glass-Filled Polyester, UL 94V-0
- Operating Temperature: -40° to +105°C



Used primarily for remote interconnections. Locking crown secures positive latch to connector. Polarization slots guide front ribs of mating connector to prevent pin damage. Mates with **series 70066** crimp housings; *order separately on this page.*

70107 SERIES SINGLE-ROW, VERSION A, WITHOUT MOUNTING EARS

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9
● 70107-0001	2	89C1698	0.85
● 70107-0002	3	89C1717	0.79
● 70107-0003	4	89C2447	0.79
● 70107-0004	5	89C1722	0.89
● 70107-0005	6	59H2430	1.22
● 70107-0006	7	59H2431	1.02
● 70107-0007	8	59H2432	1.30
● 70107-0008	9	59H2433	1.34
● 70107-0009	10	59H2434	0.73
● 70107-0011	12	59H2435	1.56

70107 SERIES SINGLE-ROW, VERSION B, WITH MOUNTING EARS

● 70107-0037	3	13H6425	1.21
● 70107-0038	4	97C7233	1.06

(69955)

KK® SYSTEM 0.100″ (2.54) CENTER CRIMP TERMINALS

RoHS Compliant Available

molex

Standard terminals feature patented double cantilever design provides high contact pressure. High pressure terminals feature patented triple cantilever with box shroud ideal for high vibration applications. **2759, 4809 and 7879 Series** brass material or **6459 Series** phosphor bronze material available in tin or gold plating. Contacts accept 22 through 30 AWG wire. 0.062″ insulation diameter. Use **2759 and 6459 Series** contacts with **2695, 5051, and 6745 Series** KK crimp housings; use **7879 Series** contacts with **7880 Series** KK crimp housings ; *order separately on pages 782-783*.

2759 SERIES 0.100″ (2.54) PITCH TERMINALS

Mfg. Part No.	Contact Material	Plating	Package	Stock No.	Price Each 1-9
● 08-50-0113	Brass	15μ″ Tin	Cut Tape	88C0996	0.12
● 08-50-0114	Brass	15μ″ Select Tin	Bulk	34H3328	0.39
● 08-55-0101	Brass	15μ″ Select Gold	Cut Tape	54H5445	0.20
● 08-55-0102	Brass	15μ″ Select Gold	Bulk	54H5446	0.28
● 08-56-0109	Brass	15μ″ Select Gold	Cut Tape	93B1697	0.22
● 08-56-0110	Brass	15μ″ Select Gold	Bulk	88H3600	0.69

41572 SERIES 0.100″ (2.54) PITCH CAT EAR TERMINALS

● 08-65-0804	Phosphor Bronze	Tin	Cut Tape	54H5532	0.12
● 08-65-0805	Phosphor Bronze	Tin	Bulk	54H5533	0.14
● 08-65-0815	Phosphor Bronze	Gold	Cut Tape	24M9890	0.17

➤ CONTINUED ➤

KK® SYSTEM 0.100″ (2.54) CENTER CRIMP TERMINALS (CONT.)

4809 SERIES 0.100″ (2.54) PITCH, ANTI-FISHHOOKING TERMINALS

Mfg. Part No.	Contact Material	Plating	Package	Stock No.	Price Each 1-9
08-50-0031	Brass	Tin	Cut Tape	72C3719	0.09
08-50-0032	Brass	Tin	Bulk	95C1486	0.18
6459 SERIES 0.100″ (2.54) PITCH TERMINALS					
08-52-0123	Phosphor Bronze	15μ″ Select Tin	Bulk	54H5427	0.16
08-52-0101	Phosphor Bronze	15μ″ Select Tin	Cut Tape	40P0993	0.27
08-65-0814	Phosphor Bronze	15μ″ Gold	Bulk	54H5536	0.64
08-65-0813	Phosphor Bronze	15μ″ Select Gold	Cut Tape	10R6571	0.29
08-65-0816	Phosphor Bronze	15μ″ Select Gold	Bulk	67P3951	0.21
7879 SERIES 0.100″ (2.54) PITCH, HIGH PRESSURE TERMINALS					
08-55-0129	Brass	15μ″ Select Gold	Cut Tape	54H5453	0.45

CRIMP AND EXTRACTION TOOLS FOR 0.100″ (2.54) APPLICATIONS

Mfg. Part No.	Description	Pin Diameter	Stock No.	Price Each 1-4
W-HT-1921-P	Prototype Crimp	0.062″ and 0.100″	31F1049	15.52
11-03-0022	Extraction Tool	0.100″	57H7480	12.82

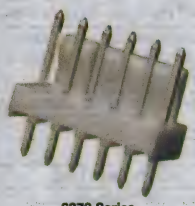
(8490)

KK® SYSTEM 0.100″ (2.54) CENTER HEADERS

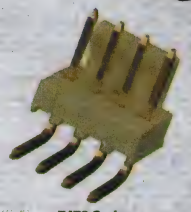
RoHS Compliant Available

molex

4030 Series



6373 Series



7478 Series

- Voltage: 250 V
- Current: 4.0 A
- Contact Resistance: 20 mΩ
- Dielectric Withstanding: 1500 V
- Insulation Resistance: 50,000 MΩ Min.
- Contact: Brass, 0.64mm (0.25″) Square, Tin- and Gold-Plating

4030 series straight square pin flat headers are stackable end-to-end and side-to-side. **6373 series** straight or **7478 series** right angle square pin friction lock header with ramp. All mate with **2695 series** 0.100″ KK® crimp terminal housings; *order separately on pages 782-783*. Individual pieces available; *go online or call*. UL recognized, CSA certified.

4030 SERIES STRAIGHT SQUARE PIN FLAT HEADERS

Mfg. Part No.	Circuits	Contact Plating	Stock No.	Price Each 1-9	Price Each 10-99
22-03-2021	2	Tin	55H9215	0.22	0.16
22-03-2031	3	Tin	26H0648	0.28	0.20
22-03-2041	4	Tin	55H9222	0.22	0.21
22-03-2051	5	Tin	55H9225	0.53	0.40
22-03-2061	6	Tin	55H9231	0.49	0.37
22-03-2081	8	Tin	55H9238	0.94	0.71
22-03-2101	10	Tin	55H9246	0.85	0.65
22-03-2121	12	Tin	55H9255	0.87	0.65
22-10-2021	2	Gold	55H9683	0.53	0.36
22-10-2031	3	Gold	55H9687	0.55	0.41
22-10-2041	4	Gold	71H2019	0.67	0.50
22-10-2061	6	Gold	71H2020	1.40	1.11
4094 SERIES RIGHT-ANGLE HEADERS					
22-05-2041	4	Tin	18C0376	2.89	2.76
22-05-2071	7	Tin	55H9556	0.72	0.54
22-05-2091	9	Tin	55H9558	0.95	0.76
22-12-2101	10	Gold	18M7996	1.80	1.49
6373 SERIES STRAIGHT SQUARE PIN FRICTION-LOCK HEADERS					
22-23-2021	2	Tin	25C3832	0.23	0.16
22-23-2031	3	Tin	30C0862	0.34	0.17
22-23-2041	4	Tin	38C0355	0.41	0.29
22-23-2051	5	Tin	38C9178	0.47	0.32
22-23-2061	6	Tin	27C1933	0.46	0.35
22-23-2071	7	Tin	56H0445	0.51	0.39
22-23-2081	8	Tin	01C7592	0.71	0.54
22-23-2091	9	Tin	56H0450	0.61	0.46
22-23-2101	10	Tin	94C0765	0.67	0.51
22-23-2111	11	Tin	27C9916	0.60	0.47
22-23-2121	12	Tin	56H0456	0.97	0.77
22-23-2161	16	Tin	56H0461	0.94	0.91
22-23-2201	20	Tin	56H0465	1.48	1.41
22-11-2022	2	Gold	55H9825	0.48	0.33
22-11-2032	3	Gold	81C8218	0.82	0.46

➤ CONTINUED ➤

KK® SYSTEM 0.100″ (2.54) CENTER HEADERS (CONT.)

6373 SERIES STRAIGHT SQUARE PIN FRICTION-LOCK HEADERS

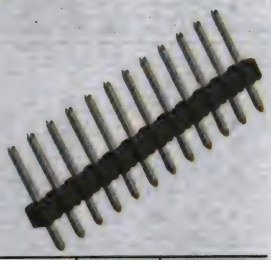
Mfg. Part No.	Circuits	Contact Plating	Stock No.	Price Each 1-9	Price Each 10-99
22-11-2042	4	Gold	38C9163	0.88	0.66
22-11-2052	5	Gold	55H9833	1.14	0.90
22-11-2062	6	Gold	38C9164	1.26	0.99
22-11-2072	7	Gold	55H9837	1.33	1.03
22-11-2082	8	Gold	55H9839	1.63	1.25
22-11-2092	9	Gold	55H9841	1.28	1.05
22-11-2102	10	Gold	55H9844	2.04	1.65
22-11-2112	11	Gold	55H9846	2.06	1.42
22-11-2122	12	Gold	81C8221	2.11	1.46
22-11-2142	14	Gold	03H3058	2.81	2.36
7478 SERIES RIGHT-ANGLE SQUARE PIN FRICTION-LOCK HEADERS					
22-05-3021	2	Tin	55H9580	0.50	0.31
22-05-3031	3	Tin	55H9581	0.58	0.49
22-05-3041	4	Tin	27C1932	0.79	0.59
22-05-3061	6	Tin	55H9584	0.67	0.51
22-05-3071	7	Tin	55H9585	0.97	0.86
22-05-3081	8	Tin	55H9588	1.28	1.02
22-05-3101	10	Tin	38C9159	1.64	1.29
22-05-3121	12	Tin	55H9593	1.25	0.93
22-12-2024	2	Gold	55H9899	0.85	0.59
22-12-2034	3	Gold	55H9901	1.27	1.00
22-12-2044	4	Gold	55H9905	0.94	0.74
22-12-2054	5	Gold	55H9909	1.39	1.13
22-12-2064	6	Gold	02E0039	1.58	1.18
22-12-2074	7	Gold	81C7395	1.57	1.31
22-12-2084	8	Gold	55H9915	2.33	1.89
22-12-2104	10	Gold	55H9919	1.87	1.52
22-12-2164	16	Gold	63M5032	4.31	3.45
6410 SERIES VERTICAL FRICTION-LOCK HEADERS					
22-27-2021	2	Tin	74C1122	0.27	0.17
22-27-2031	3	Tin	13T6895	0.41	0.28
22-27-2041	4	Tin	56H0718	0.44	0.32
22-27-2051	5	Tin	94C5654	0.46	0.34
22-27-2061	6	Tin	56H0719	0.43	0.30
22-27-2071	7	Tin	56H0720	0.67	0.61
22-27-2101	10	Tin	02H6187	0.84	0.63
22-29-2021	2	Gold	91C4367	0.51	0.30
22-29-2031	3	Gold	23H0040	0.79	0.51
7395 SERIES RIGHT-ANGLE SQUARE PIN FRICTION-LOCK HEADERS					
22-05-7058	5	Tin	55H9619	1.35	0.96

(8516)

KK® SYSTEM 0.100″ (2.54) CENTER BREAKAWAY HEADERS

RoHS Compliant Available

molex



- Phosphor Bronze 0.025″ Square Pins
- Pins are Tin-Plated in Solder Area
- Voltage: 250 V
- Current: 4 A
- Contact Resistance: 20 mΩ Max.

Surface mount compatible, single row stick headers are available in straight and right-angle configurations. Dielectric withstanding voltage: 1500V. Insulation resistance: 50,000MΩ min. Temperature range: 0° to +75°C. Mate with **2695 series** KK® series crimp terminal housings; *ordered separately on pages 782-783*. UL recognized, CSA certified.

42375 SERIES STRAIGHT BREAKAWAY HEADERS

Mfg. Part No.	Circuits	Pin Length	Tail Length	Contact Plating	Stock No.	Price Each 1-9	Price Each 10-99
22-28-4020	2	0.240″	0.125″	Tin	91C4627	0.29	0.28
22-28-4030	3	0.240″	0.125″	Tin	56H1960	0.23	0.20
22-28-4060	6	0.240″	0.125″	Tin	94C4038	0.30	0.27
22-28-4080	8	0.240″	0.125″	Tin	56H2000	0.35	0.31
22-28-4160	16	0.240″	0.125″	Tin	56H2065	0.62	0.56
22-28-4360	36	0.240″	0.240″	Tin	56H2242	0.96	0.77
22-28-4022	2	0.295″	0.120″	Tin	94C4035	0.11	0.08
22-28-4032	3	0.295″	0.120″	Tin	56H1962	0.12	0.11
22-28-4361	36	0.320″	0.130″	Tin	56H2243	1.29	0.98
22-28-4023	2	0.240″	0.125″	15u″ Gold	92C2171	0.30	0.27
22-28-4033	3	0.240″	0.125″	15u″ Gold	87K0730	0.35	0.32
22-28-4053	5	0.240″	0.125″	15u″ Gold	56H1978	0.37	0.34
22-28-4063	6	0.240″	0.125″	15u″ Gold	56H1986	0.41	0.37
22-28-4363	36	0.240″	0.125″	15u″ Gold	56H2245	1.49	1.21

➤ CONTINUED ➤

PC BOARD HEADERS & SOCKETS

KK® SYSTEM 0.100″ (2.54) CENTER BREAKAWAY HEADERS (CONT.)

Mfg. Part No.	Circuits	Pin Length	Tail Length	Contact Plating	Stock No.	Price Each 1-9	Price Each 10-99
● 22-28-4364	36	0.320″	0.130″	15u″ Gold	56H2246	1.92	1.58
● 22-28-4036	3	0.240″	0.125″	15u″ Gold	56H1965	0.29	0.25
42377 SERIES RIGHT-ANGLE BREAKAWAY HEADERS							
● 22-28-8020	2	0.244″	0.120″	Tin	32M6606	0.25	0.22
● 22-28-8050	5	0.244″	0.120″	Tin	56H2978	0.44	0.39
● 22-28-8060	6	0.244″	0.120″	Tin	56H2983	0.51	0.44
● 22-28-8360	36	0.244″	0.120″	Tin	56H3121	1.59	1.11
● 22-28-8361	36	0.324″	0.120″	Tin	50H8206	1.62	1.05
● 22-28-8362	36	0.244″	0.120″	15u″ Gold	56H3123	1.90	1.54
● 22-28-8363	36	0.324″	0.120″	15u″ Gold	50H8207	2.02	1.31

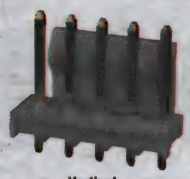
(16727)

0.156″ (3.96) CENTER KK® SOLID HEADERS

RoHS Compliant Available

molex

- End-to-End Stackable
- Voltage: 250 V
- Current: 7.0 A
- Contact Resistance: 6 mΩ max.
- Insulation Resistance: 50K MΩ min.



Vertical

Right-Angle

Passive locking maintains interconnection, ideal for high vibration applications. Left-to-right polarization when mated with **type 41695** 0.156″ crimp housing with polarizing ribs; *order separately online or call.* Housing: polyester, rated UL 94V-0. Contact pins: brass, 0.045″ (1.14). Dielectric withstanding voltage: 1500 V. Operating temperature: 0 to +75°C.

41791 SERIES VERTICAL FRICTION-LOCK HEADERS, WITHOUT PEGS

Mfg. Part No.	Circuits	Contact Plating	Stock No.	Price Each 1-9	Price Each 10-99
● 26-60-4020	2	Tin	56H5828	0.24	0.17
● 26-60-4030	3		56H5832	0.36	0.25
● 26-60-4040	4		56H5836	0.41	0.29
● 26-60-4050	5		07H7418	0.59	0.41
● 26-60-4060	6		17H0966	0.57	0.43
● 26-60-4070	7		56H5845	0.77	0.58
● 26-60-4080	8		56H5848	0.82	0.62
● 26-60-4090	9		56H5851	0.92	0.61
● 26-60-4100	10		56H5855	1.07	0.82
● 26-60-4120	12		56H5858	1.11	0.87
● 26-60-4140	14		01E9925	1.43	1.36
● 26-61-4020	2	Overall Gold	38C9333	0.75	0.56
● 26-61-4030	3		37B1910	0.95	0.75
● 26-61-4050	5		71H2284	1.76	1.35
● 26-61-4060	6		94B4285	1.82	1.39
● 26-61-4080	8		38C9334	2.59	2.18
● 26-61-4120	12		56H6132	3.56	2.45
41792 SERIES RIGHT-ANGLE FRICTION-LOCK HEADERS, WITHOUT PEGS					
● 26-60-5020	2	Tin	56H5866	0.28	0.20
● 26-60-5030	3		56H5869	0.48	0.33
● 26-60-5040	4		56H5872	0.48	0.36
● 26-60-5050	5		56H5875	0.64	0.48
● 26-60-5060	6		56H5877	0.73	0.55
● 26-60-5100	10		56H5887	1.25	1.20
● 26-61-5020	2	Overall Gold	56H6140	1.26	0.99
● 26-61-5030	3		17C1877	1.70	1.38
● 26-61-5040	4		38C9336	2.22	1.81
● 26-61-5050	5		71H2287	2.85	2.39
● 26-61-5120	12		56H6158	5.41	5.20

42491 SERIES VERTICAL FRICTION-LOCK HEADERS, WITHOUT PEGS

Mfg. Part No.	Circuits	Contact Plating	Voided Positions	Stock No.	Price Each 1-9	Price Each 10-99
● 26-64-4020	2	Tin	None	56H6358	0.30	0.21
● 26-64-4030	3		None	73K0507	0.23	0.16

(69845)

Custom Cable Assembiles to your specs to mate with the complete line of connectors!
Call 1.800.463.9275

(212562)

0.156″ (3.96) KK® CRIMP TERMINALS

RoHS Compliant Available

molex

- Voltage: 250 V
- Current: Brass 5.0 A max. Phosphor Bronze 7.0 A max.
- Contact Resistance Series 2478-2578: 20 mΩ max.
- Contact Resistance Series 6838-7258: 6 mΩ max.
- Dielectric Withstanding Voltage: 1500 V
- Insulation Resistance: 50,000 MΩ min.

Patented double cantilever design. Phosphor bronze or brass, in tin or gold plating. Use with **2139** and **41695 series** 0.156″ (3.96) KK® series crimp terminal housings; *go online or call.*

2578 SERIES CRIMP TERMINALS - SOLD INDIVIDUALLY

Mfg. Part No.	Material	AWG	Plating	Insul. Dia.	Stock No.	Price Each 1-99
● 08-50-0108	Brass	26AWG to 22AWG	Tin	0.065″	95C2104	0.16
2478, 2578 SERIES CRIMP TERMINALS - SOLD INDIVIDUALLY						
● 08-52-0072	Phosphor Bronze	24AWG to 18AWG	Tin	0.110″	72K1671	0.11
● 08-65-0115	Phosphor Bronze	24AWG to 18AWG	15μ″ Gold	0.110″	54H5523	0.34
● 08-58-0122	Phosphor Bronze	24AWG to 18AWG	20μ″ Gold	0.110″	54H5501	0.73
● 08-50-0134	Phosphor Bronze	26AWG to 22AWG	Tin	0.065″	54H5375	0.15
● 08-58-0126	Phosphor Bronze	26AWG to 22AWG	20μ″ Gold	0.065″	54H5502	0.66
● 08-56-0106	Brass	24AWG to 18AWG	15μ″ Gold	0.110″	54H5461	0.69
● 08-55-0104	Brass	24AWG to 18AWG	15μ″ Gold	0.110″	54H5447	0.27
● 08-50-0107	Brass	26AWG to 22AWG	Tin	0.065″	74C6796	0.11
● 08-56-0108*	Brass	26AWG to 22AWG	20μ″ Gold	0.065″	54H5463	0.74
2478, 2578 SERIES CRIMP TERMINALS ON REELS - SOLD INDIVIDUALLY						
● 08-58-0121	Phosphor Bronze	24AWG to 22AWG	20μ″ Gold	0.110″	84C9280	1.11
● 08-55-0103	Brass	24AWG to 18AWG	15μ″ Gold	0.110″	01E9145	0.37
● 08-50-0107	Brass	26AWG to 22AWG	Tin	0.065″	74C6796	0.11
2878 SERIES BIFURCATED CRIMP TERMINALS - SOLD INDIVIDUALLY						
● 08-50-0116	Brass	20AWG to 18AWG	Tin	0.110″	54H5368	0.11
4809 SERIES CRIMP TERMINALS - SOLD INDIVIDUALLY						
● 08-56-0115	Brass	30AWG to 22AWG	Gold	0.062″	50M5758	0.50
6838, 7258 SERIES CRIMP TERMINALS - SOLD INDIVIDUALLY						
● 08-52-0113	Phosphor Bronze	20AWG to 18AWG	Tin	0.110″	54H5426	0.17
● 08-52-0125	Phosphor Bronze	26AWG to 22AWG	Tin	0.065″	54H5429	0.16
● 08-50-0189	Brass	20AWG to 18AWG	Tin	0.110″	96C8687	0.16
● 08-50-0185	Brass	26AWG to 22AWG	Tin	0.065″	54H5381	0.12
● 08-58-0189	Phosphor Bronze	20AWG to 18AWG	30u″ Gold	0.110″	97C5045	0.58
● 08-58-0111	Phosphor Bronze	20AWG to 18AWG	Select Gold	0.110″	85C0018	0.69
● 08-65-0122	Phosphor Bronze	26AWG to 22AWG	Select Gold	0.065″	54H5528	0.73
6838, 7258 SERIES CRIMP TERMINALS ON REELS - SOLD INDIVIDUALLY						
● 08-58-0187	Phosphor Bronze	20AWG to 18AWG	30u″ Gold	0.110″	29H4139	0.97
● 08-58-0110	Phosphor Bronze	20AWG to 18AWG	Select Gold	0.110″	54H5497	0.67
45570 SERIES CRIMP TERMINALS - SOLD INDIVIDUALLY						
● 45570-3050	Copper Alloy	20AWG to 18AWG	Tin	0.095″	40P3799	0.21

KK® CRIMP TERMINALS ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
W-HT-1919-P	Prototyping Crimp for 0.093″ and 0.156″ Terminals	31F1048	16.22
11-03-0016	Crimp Terminal Extractor	91B1215	16.56

(8408)

PRE-CRIMPED WIRE LEADS

RoHS Compliant Available

molex

Pre-crimped interconnecting leads with crimped socket to socket, socket to board-in and socket to free end termination. Available in 150mm and 300mm lengths.

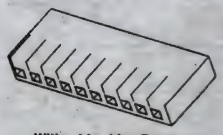
Mfg. Part No.	Description	Length	Stock No.	Price Each 1-49
● 06-66-0012	Crimp Socket to Crimp Socket	152 mm	93K4875	14.61
● 06-66-0013	Crimp Socket to Crimp Socket	304 mm	93K4876	15.23
● 06-66-0015	Crimp Socket to Free End	304 mm	93K4877	8.49

(113751)

0.156″ (3.96) CENTER KK® CRIMP TERMINAL HOUSINGS KK156

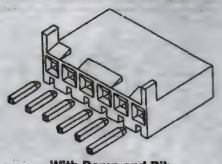
RoHS Compliant Available

molex



Without Locking Ramp

With Locking Ramp



With Ramp and Rib

- Voltage: 250V AC max.
- Current: Phosphor Bronze 7.0A max.; Brass 5.0A max.
- Dielectric Withstanding Voltage: 1500V AC
- Insulation Resistance: 2139 Series 50K Megohms min.; 41695 Series 500K Megohms min.
- Housing: 2139 Series Nylon, UL 94V-2; 41695 Series Polyester, UL 94V-0
- Operating Temperature: 0°C to +75°C

KK® interconnection system PC board connectors. Locking ramp and polarizing rib features available. Insulation Resistance: 2139 Series 50K Megohms min.; 41695 Series 500K Megohms min. Housing: 2139 Series Nylon, UL 94V-2; 41695 Series Polyester, UL 94V-0 . Accepts **2478** and **2578 series** cantilever crimp terminals, *order separately on page 786.* Mates with 0.156″ (3.96) center headers and 0.045″(1.14) staked pins in the board, *order separately on page 786.* UL recognized, CSA certified. *Order polarizing accessories and* **type KK-156** *crimp terminal kit separately below.*

2139 SERIES TERMINAL HOUSINGS WITHOUT LOCKING RAMP

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9	Price Each 10-99
09-50-7021	2	38C8776	0.18	0.11
09-50-7041	4	38C8778	0.29	0.20
09-50-7051	5	38C8779	0.18	0.17
09-50-7061	6	18M7875	0.40	0.28
09-50-7071	7	28M9325	0.47	0.33
09-50-7081	8	38C8781	0.54	0.37
09-50-7091	9	54H6876	0.55	0.30
09-50-7101	10	38C8783	0.35	0.32
09-50-7121	12	38C8784	0.52	0.48
2139 SERIES TERMINAL HOUSINGS WITH LOCKING RAMP				
09-50-3021	2	38C8765	0.14	0.09
09-50-3031	3	38C8766	0.19	0.13
09-50-3041	4	54H6814	0.25	0.17
09-50-3051	5	38C8768	0.32	0.23
09-50-3061	6	38C8769	0.39	0.27
09-50-3071	7	18M7873	0.52	0.36
09-50-3081	8	54H6822	0.45	0.34
09-50-3091	9	77C6154	0.58	0.44
09-50-3101	10	54H6825	0.64	0.48
09-50-3111	11	38C8774	0.71	0.54
09-50-3121	12	54H6828	0.83	0.62
09-50-3141	14	95H7495	0.61	0.35
09-50-3151	15	74C5880	0.54	0.48
09-50-3181	18	95H7496	1.28	1.12
5239 SERIES TERMINAL HOUSINGS WITH LOCKING RAMP				
09-52-4044	4	54H7078	0.83	0.66
09-52-4064	6	92C7818	1.07	0.85
6442 SERIES HOUSINGS WITH LOCKING RAMP				
26-03-4020	2	56H4812	0.16	0.10
26-03-4030	3	96C8689	0.17	0.14
26-03-4041	4	85C2754	0.13	0.13
26-03-4131	13	56H4829	0.95	0.69
41695 SERIES HOUSINGS WITH LOCKING RAMP				
09-50-8021	2	54H6895	0.18	0.16
09-50-8031	3	54H6898	0.13	0.12
09-50-8051		88C9610	0.40	0.28
09-50-8061	6	54H6906	0.25	0.24
09-50-8071	7	38C8793	0.49	0.37
09-50-8091	9	38C8796	0.62	0.47
09-50-8101	10	38C8798	0.84	0.50
09-50-8121	12	18M7877	0.83	0.62
41695 SERIES HOUSINGS WITH LOCKING RAMP AND POLARIZING RIBS				
09-50-8023	2	54H6896	0.12	0.07
09-50-8033	3	01E9140	0.12	0.11
09-50-8043	4	38C8789	0.30	0.21
09-50-8053	5	54H6904	0.43	0.30
09-50-8063	6	54H6907	0.29	0.28
09-50-8073	7	90B7962	0.49	0.37
09-50-8083	8	38C8795	0.59	0.44
09-50-8093	9	38C8797	0.67	0.50

➤CONTINUED➤

0.156″ (3.96) CENTER KK® CRIMP TERMINAL HOUSINGS KK156 (CONT.)

41695 SERIES HOUSINGS WITH LOCKING RAMP AND POLARIZING RIBS

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9	Price Each 10-99
09-50-8103	10	38C8799	0.74	0.56
09-50-8123	12	96B1198	0.81	0.64

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-99
15-04-0219	Polarizing Key for 2139 Series	54H9932	0.20
15-04-0297	Polarizing Key for 41695 Series	88C9597	0.15

(8404)

0.295″ (7.50) PITCH SABRE™ CONNECTOR HOUSINGS

RoHS Compliant Available

molex

TÜV Rheinland

- Patented new integral Terminal Position Assurance (TPA) on mated male and female terminal virtually eliminates terminal backout
- Polarized housing provides proper mating
- Terminals are fully isolated in housing
- Positive latch reduces accidental disengagement from receptacle

Fig. 1 Plug Housing

Fig. 2 Receptacle Housing

- 44441 Series mates with 43680 Series Plugs or 43160 Series headers

Voltage: 600V. Current: 18A. Insulation resistance: 1000 mOhms min. Housing: nylon, UL94V-0. Operating temperature: -40°C to +75°C. **44441 series** for use with **type 43375** terminal order separately; *go online or call.* **43680 series** plug housings for use with **type 43178** terminals order separately; *go online or call.* UL recognized, CSA certified.

SINGLE ROW PLUG HOUSINGS, FIG. 1

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9
43680-2002	2	57H0557	0.78
43680-2003	3	57H0558	0.92
43680-2004	4	57H0559	0.97
43680-2005	5	57H0560	1.14
43680-2006	6	57H0561	1.43
SINGLE ROW RECEPTACLE HOUSINGS, FIG. 2			
44441-2002	2	85C2729	0.79
44441-2003	3	57H1295	0.84
44441-2004	4	06H1124	0.99
44441-2005	5	89C3102	1.09
44441-2006	6	57H1296	1.32

CRIMP TERMINALS

Mfg. Part No.	AWG	Gender	Insulation Diameter Max.	Stock No.	Price Each 1-9
43375-1001	14-18*	Socket	0.180″ (4.57)	57H0130	0.19
43178-1002	18	Pin	0.130″ (3.30)	28H9357	0.18
43178-2002	14-18*	Pin	0.180″ (4.57)	56H9886	0.18

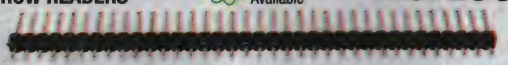
*18 AWG double wire crimp

(75610)

1.27mm (0.050″) PITCH SINGLE ROW HEADERS

RoHS Compliant Available

multicomp



Specifications:
- Current Rating: 1.0A AC/DC
- Voltage Rating: 50V AC/DC
- Contact Resistance: 20m ohm. max.
- Insulation Resistance: 500M ohm. Min. At 100V DC.
- Withstanding Voltage: 500V AC for one minute
- Operating Temperature Range: -25°C to +125°C
- Insulator: PBT (UL94V-0)
- Contacts: Gold plated Copper Alloy

Applications:
- Home Appliances
- Aviation Electronics
- Automobile Electronics
- Computer(PC) Peripherals

VERTICAL THROUGH HOLE SINGLE ROW HEADERS

Mfg. Part No.	No. of Contacts	Stock No.	Price Each 1-249
2206PA-20G-739	20	11N6304	1.59
2206PA-25G-739	25	11N6305	1.46

(119559)

PC BOARD HEADERS & SOCKETS

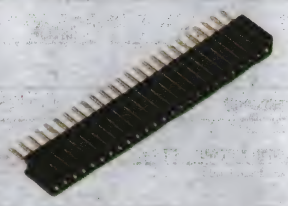
1.27mm (0.050″) PITCH SINGLE ROW RECEPTACLES

RoHS Compliant Available

multicomp

Specifications:
- Current Rating: 1.0A AC/DC
- Voltage Rating: 50V AC/DC
- Contact Resistance: 20m ohm. max.
- Insulation Resistance: 500M ohm. Min. At 100V DC.
- Withstanding Voltage: 500V AC for one minute
- Operating Temperature Range: -25°C to +125°C
- Insulator: PBT (UL94V-0)
- Contacts: Gold plated Phosphor Bronze

Applications:
- Home Appliances
- Aviation Electronics
- Automobile Electronics
- Computer(PC) Peripherals



Mfg. Part No.	No. of Contacts	Stock No.	Price Each 1-249
2206SA-10-46	10	11N6311	0.78
2206SA-20-46	20	11N6312	1.46
2206SA-25-46	25	11N6313	1.51

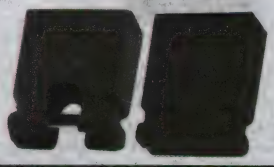
(119560)

SHUNT JUMPERS

RoHS Compliant Available

multicomp

Allows quick connection of circuits on circuit boards, shorting socket jumper for address or code strip line plugs. **Sold in packages of 25.**



Mfg. Part No.	Pitch Spacing (mm)	Style	Height (mm)	Stock No.	Price per Pkg. 1-9
SPC19809	2.54	Open	4.5	84K8571	3.21
SPC19807	2.54	Open	6	84K8569	2.46
SPC19808	2.54	Closed	6.5	84K8570	2.60
SPC19810	2.54	Open	8	84K8572	3.93
SPC19806	2.54	Closed	8.5	84K8568	3.88

SOLD INDIVIDUALLY

Mfg. Part No.	Pitch Spacing (mm)	Style	Height (mm)	Stock No.	Price Each 1-9
SPC20480	2.00	Open	3.5	93K5733	0.41
SPC20479	2.54	Open, With Handle	13.77	93K5732	0.24

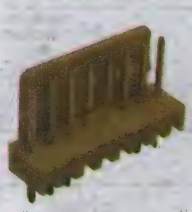
(7862)

2.50mm (0.098″) PITCH WIRE-TO-BOARD CONNECTORS

RoHS Compliant Available

multicomp

Crimp Housing



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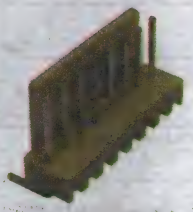


Right Angle Header

- Insulator: Nylon 66, UL94V-0
- Crimp Contacts: Tin plated phosphor bronze
- Header Contacts: Tin plated brass
- Current Rating: 3.0A AC/DC
- Voltage Rating: 250V AC/DC
- Contact Resistance: 20m ohm. max.
- Insulation Resistance: 1000M ohm. min.
- Withstanding Voltage: 1000 VAC for one minute
- Operating Temperature Range: -40°C to +85°C

Crimp Contact

2218TB CRIMP CONTACTS

Mfg. Part No.	AWG	Stock No.	Price Each 1-249	250-499
2318TF	28AWG to 22AWG	87P0360	0.03	0.03

2218HB SERIES CRIMP TERMINAL HOUSINGS

Mfg. Part No.	Circuits	Stock No.	Price Each 1-249	250-499
MC34469	2	87P0352	0.59	0.53
MC34475	6	87P0356	0.07	0.06

CONTINUED

2.50mm (0.098″) PITCH WIRE-TO-BOARD CONNECTORS (CONT.)

2217SB SERIES VERTICAL HEADERS

Mfg. Part No.	Circuits	Stock No.	Price Each 1-249	250-499
MC34605	2	87P0344	0.05	0.04
MC34607	3	87P0345	0.06	0.06
MC34609	4	87P0346	0.11	0.10
MC34383	5	87P0347	0.11	0.10
MC34611	6	87P0348	0.13	0.12
2217RB SERIES RIGHT ANGLE HEADERS				
MC34621	4	87P0338	0.11	0.10
MC34625	8	87P0341	0.19	0.17

(147246)

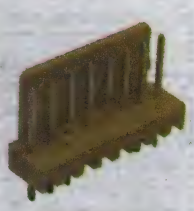
2.54mm (0.100″) PITCH WIRE-TO-BOARD CONNECTORS

RoHS Compliant Available

multicomp

Crimp Housing

Crimp Contact



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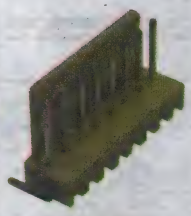

Right Angle Header

- Insulator: Nylon 66, UL94V-0
- Crimp Contacts: Tin plated copper alloy
- Header Contacts: Tin plated brass
- Current Rating: 3.0A AC/DC
- Voltage Rating: 250V AC/DC
- Contact Resistance: 20m ohm. max.
- Insulation Resistance: 1000M ohm. min.
- Withstanding Voltage: 1000 VAC for one minute
- Operating Temperature Range: -25°C to +105°C

2218T CRIMP CONTACTS

Mfg. Part No.	AWG	Stock No.	Price Each 1-249	250-499
2218T	26AWG to 22AWG	46P5397	0.04	0.04

2218H SERIES CRIMP TERMINAL HOUSINGS

Mfg. Part No.	Circuits	Stock No.	Price Each 1-249	250-499
MC34481	2	46P5341	0.04	0.03
MC34483	3	46P5342	0.05	0.05
MC34485	4	46P5343	0.07	0.06
MC34503	5	46P5344	0.09	0.08
MC34487	6	46P5345	0.10	0.09
MC34489	8	46P5346	0.13	0.12
MC34491	10	46P5347	0.16	0.15
2217S SERIES VERTICAL HEADERS				
MC34629	2	46P5349	0.04	0.04
MC34631	3	46P5350	0.06	0.05
MC34633	4	46P5351	0.08	0.07
MC34655	5	46P5352	0.10	0.09
MC34635	6	46P5353	0.11	0.10
MC34637	8	46P5354	0.15	0.14
MC34639	10	46P5355	0.19	0.17
MC34679	12	46P5356	0.22	0.20
2217R SERIES RIGHT ANGLE HEADERS				
MC34641	2	46P5357	0.05	0.05
MC34643	3	46P5358	0.08	0.07
MC34645	4	46P5359	0.11	0.10
MC34647	5	46P5360	0.13	0.12
MC34649	6	46P5361	0.15	0.13

(140934)

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(212563)

2.54mm (0.100″) PITCH SINGLE ROW HEADERS

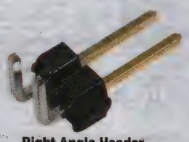
RoHS Compliant Available

multicomp

Applications:
- Home Appliances
- Aviation Electronics
- Automobile Electronics
- Computer(PC) Peripherals

Specifications:
- Current Rating: 3.0A AC/DC
- Voltage Rating: 250V AC/DC
- Contact Resistance: 20m ohm. max.
- Insulation Resistance: 1000M ohm. min.
- Withstanding Voltage: 600V AC for one minute
- Operating Temperature Range: -40°C to +105°C
- Insulator: High Temp Plastic (Nylon 6T UL94V-0)
- Contacts: Gold plated Copper Alloy

Vertical Header



Right Angle Header

VERTICAL THROUGH HOLE SINGLE ROW HEADERS

Mfg. Part No.	No. of Contacts	Stock No.	Price Each 1-249
2211S-02G	2	08N6744	0.03
2211S-03G	3	08N6745	0.04
2211S-04G	4	08N6746	0.05
2211S-05G	5	08N6747	0.06
2211S-06G	6	08N6748	0.08
2211S-08G	8	08N6749	0.10
2211S-10G	10	08N6750	0.12
MC34733	12	08N6751	0.15
MC34735	14	08N6752	0.17
MC34737	18	08N6753	0.22
MC34739	20	08N6754	0.25
MC34743	24	08N6756	0.30
RIGHT ANGLE THROUGH HOLE SINGLE ROW HEADERS			
MC34745	2	08N6731	0.04
MC34747	3	08N6732	0.06
MC34749	4	08N6733	0.08
2211R-05G	5	08N6734	0.11
MC34751	6	08N6735	0.12
MC34753	8	08N6736	0.16
MC34755	10	08N6737	0.20
MC34757	12	08N6738	0.24
MC34763	20	08N6741	0.40
MC34765	24	08N6743	0.48

(119561)

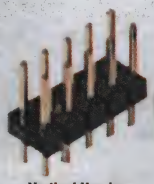
2.54mm (0.100″) PITCH DOUBLE ROW HEADERS

RoHS Compliant Available

multicomp

Specifications:
- Current Rating: 3.0A AC/DC
- Voltage Rating: 250V AC/DC
- Contact Resistance: 20m ohm. max.
- Insulation Resistance: 1000M ohm. min.
- Withstanding Voltage: 600V AC for one minute
- Operating Temperature Range: -40°C to +105°C
- Insulator: High Temp Plastic (Nylon 6T UL94V-0)
- Contacts: Gold plated Copper Alloy

Applications:
- Home Appliances
- Aviation Electronics
- Automobile Electronics
- Computer(PC) Peripherals



Vertical Header

Right Angle Header

VERTICAL THROUGH HOLE DOUBLE ROW HEADERS

Mfg. Part No.	No. of Contacts	Stock No.	Price Each 1-249
2213S-06G	6	08N6789	0.08
2213S-08G	8	08N6790	0.10
2213S-10G	10	08N6791	0.13
2213S-12G	12	08N6792	0.14
2213S-16G	16	08N6793	0.20
2213S-20G	20	08N6794	0.25
2213S-24G	24	08N6796	0.29
RIGHT ANGLE THROUGH HOLE DOUBLE ROW HEADERS			
MC34767	8	08N6782	0.19
MC34769	10	08N6783	0.23
MC34771	12	08N6784	0.29
MC34773	16	08N6785	0.38
MC34775	20	08N6786	0.48
2213R-24G	24	08N6788	0.57

(119562)

2.54mm (0.100″) PITCH SINGLE AND DOUBLE ROW RECEPTACLES

RoHS Compliant Available

multicomp

Specifications:
- Current Rating: 3.0A AC/DC
- Voltage Rating: 250V AC/DC
- Contact Resistance: 20m ohm. max.
- Insulation Resistance: 1000M ohm. min.
- Withstanding Voltage: 600V AC for one minute
- Operating Temperature Range: -40°C to +105°C
- Insulator: PBT (UL94V-0)
- Contacts: Gold plated Phosphor Bronze

Applications:
- Home Appliances
- Aviation Electronics
- Automobile Electronics
- Computer(PC) Peripherals

Single Row Receptacle

Double Row Receptacle

VERTICAL THROUGH HOLE SINGLE ROW RECEPTACLES

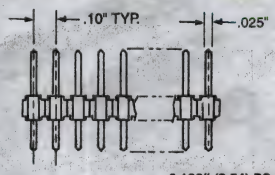
Mfg. Part No.	No. of Contacts	Stock No.	Price Each 1-249
2212S-02SG-85	2	08N6768	0.15
2212S-03SG-85	3	08N6769	0.25
2212S-04SG-85	4	08N6770	0.25
2212S-05SG-85	5	08N6771	0.30
2212S-06SG-85	6	08N6772	0.29
2212S-08SG-85	8	08N6773	0.41
2212S-10SG-85	10	08N6774	0.49
2212S-12SG-85	12	08N6775	0.52
2212S-14SG-85	14	08N6776	0.61
2212S-20SG-85	20	08N6778	0.86
2212S-24SG-85	24	08N6780	1.09
RIGHT ANGLE THROUGH HOLE DOUBLE ROW RECEPTACLES			
2214S-06SG-85	6	08N6805	0.43
2214S-08SG-85	8	08N6806	0.47
2214S-10SG-85	10	08N6807	0.58
2214S-12SG-85	12	08N6808	0.57
2214S-16SG-85	16	08N6809	0.75

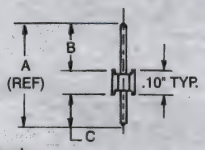
(119563)

SINGLE-ROW STRAIGHT PC BOARD HEADERS

RoHS Compliant Available

multicomp





0.100″ (2.54) PC Board Header

Plating: 1 = Tin over nickel; 2 = Gold on mating end, tin over nickel on solder end. 3 = Gold Plating on Mating End, Full Flash Gold on Solder End. Operating temperature: –25°C to +85°C. **(*) Sold in packages of 5.**

0.100″ (2.54) PC BOARD HEADERS

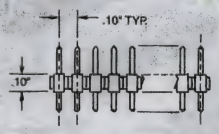
Mfg. Part No.	Positions	Plating	Dimensions A	Dimensions B	Dimensions C	Stock No.	Price Each 1-24	Price Each 25-49
SPC20485	2	1	0.455″	0.235″	0.120″	93K5738	0.10	0.09
SPC20486	3	1	0.455″	0.235″	0.120″	93K5739	0.14	0.12
SPC20488	5	1	0.455″	0.235″	0.120″	93K5741	0.21	0.18
SPC20489	10	1	0.455″	0.235″	0.120″	93K5742	0.45	0.38
SPC20490	40	1	0.455″	0.235″	0.120″	93K5743	1.94	1.65
SPC20481	2	3	0.455″	0.235″	0.120″	93K5734	0.10	0.09
SPC20482	4	3	0.455″	0.235″	0.120″	93K5735	0.14	0.12
SPC20484*	40	3	0.455″	0.235″	0.120″	93K5737	1.84	1.59
0.079″ (2.01) PC BOARD HEADERS								
SPC20491*	40	3	0.320″	0.140″	0.120″	93K5744	2.71	2.32

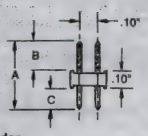
(4627)

DOUBLE-ROW STRAIGHT PC BOARD HEADERS

RoHS Compliant Available

multicomp





0.100″ (2.54) PC Board Header

0.100″ (2.54) PC board headers. Plating: 1 = Tin over nickel; 2 = Gold on mating end, tin over nickel on solder end. 3 = Gold Plating on Mating End, Full Flash Gold on Solder End. Operating temperature: –25°C to +85°C.

➤ CONTINUED ➤

PC BOARD HEADERS & SOCKETS

DOUBLE-ROW STRAIGHT PC BOARD HEADERS (CONT.)

Mfg. Part No.	Positions	Plating	Dimensions A	Dimensions B	Dimensions C	Stock No.	Price Each 1-24	Price Each 25-49
● SPC20498	2	1	0.455″	0.235″	0.120″	93K5751	0.13	0.11
● SPC20500	6	1	0.455″	0.235″	0.120″	93K5753	0.38	0.32
● SPC20502	10	1	0.455″	0.235″	0.120″	93K5755	0.61	0.52
● SPC20503	20	1	0.455″	0.235″	0.120″	93K5756	1.13	0.97
● SPC20504	40	1	0.455″	0.235″	0.120″	93K5757	1.83	1.57
● SPC20493	6	3	0.455″	0.235″	0.120″	93K5746	0.34	0.29
● SPC20494	8	3	0.455″	0.235″	0.120″	93K5747	0.46	0.39
● SPC20495	10	3	0.455″	0.235″	0.120″	93K5748	0.61	0.52
● SPC20497	40	3	0.455″	0.235″	0.120″	93K5750	2.40	2.05

(4628)

WIRELESS MODULE PCB MOUNTING CLIPS

RoHS Compliant Available

multicomp

- Designed for Cinterion wireless module
- PCB mating board thickness: 1.6mm
- Constructed of black PC-940A
- Operating temperature: -40°C to +100°C

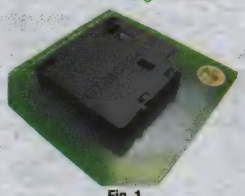


Fig. 1

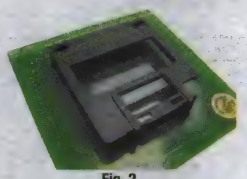


Fig. 2

Mfg. Part No.	Fig.	Dimensions (mm) H x W x D	Stacking Height (mm)	Stock No.	Price Each 1-99	Price Each 100-249	Price Each 250-499	Price Each 500-999
● GT-MC55I-CLIP-F	1	7.2 x 38.0 x 35.8	5.0	04R7574	2.89	2.60	2.36	2.19
● GT-MC75I-CLIP-F	2	6.7 x 37.2 x 38.6	4.0	04R7575	2.85	2.55	2.34	2.15

(147920)

0.80mm (0.032″) CLE SERIES PC BOARD RECEPTACLES

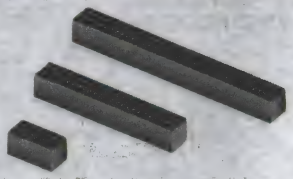
c UL us

RoHS Compliant Available

samtec

Features:
- Tiger beam contact
- Ideal for pass-through applications
- Surface mount
- Mates with: **FTE** and **AW series**

Specifications:
- Current Rating: 0.75 A
- Pitch Spacing: 0.80 mm
- Insulator Material: Black liquid crystal polymer
- Contact: Gold plated Beryllium Copper
- Temperature Range: -55°C to +125°C
- Contact Resistance: 15mΩ max
- Insertion Force: 2.0oz (0.56N)
- Withdrawal Force: 1.2oz (0.33N)
- Max Cycles: 100 with 10μ″ Gold



Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
● CLE-105-01-G-DV	10	11P3688	3.07	2.69
● CLE-106-01-G-DV	12	11P3689	3.40	2.97
● CLE-108-01-G-DV	16	11P3691	3.37	2.95
● CLE-110-01-G-DV	20	11P3693	3.85	3.37
● CLE-115-01-G-DV	30	11P3698	5.78	5.06
● CLE-125-01-G-DV	50	11P3708	7.80	6.96
● CLE-130-01-G-DV	60	11P3713	9.34	8.34
● CLE-140-01-G-DV	80	11P3723	10.64	10.06

(136026)

1.27mm (0.050″) FTSH SERIES MICRO HEADERS

RoHS Compliant Available

samtec

c UL us

Headers feature black liquid crystal polymer housing with phosphor bronze contacts. Plating: tin or gold over 1.27um (50u″) nickel. Current rating: 1.75A @ 80°C ambient. Operating temperature range: -55°C to +125°C. **-L suffix** indicates 0.25μm (10μ″) gold on post, matte tin on tail. **-01 suffix** indicates 3.05mm (0.12″) lead posts. Mates with: **FFSD, FLE series**.

FTSH SERIES MICRO HEADERS - SURFACE MOUNT VERTICAL

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
● FTSH-105-01-L-DV	10	11P4814	2.18	1.91
● FTSH-110-01-L-DV	20	11P4829	3.70	3.24

CONTINUED

1.27mm (0.050″) FTSH SERIES MICRO HEADERS (CONT.)

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
● FTSH-120-01-L-DV	40	11P4858	6.48	5.67
● FTSH-125-01-L-DV	50	11P4871	6.38	5.70
FTSH SERIES MICRO HEADERS - SURFACE MOUNT HORIZONTAL				
● FTSH-105-01-L-DH	10	11P4813	2.65	2.31
● FTSH-110-01-L-DH	20	11P4828	4.37	3.82

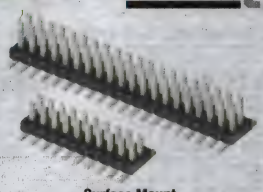
(136025)

1.27mm (0.050″) FTS SERIES BOARD-TO-BOARD HEADERS

RoHS Compliant Available

samtec

Through Hole



Surface Mount

Specifications:
- Insulator: Black liquid crystal polymer
- Contact: Gold plated Phosphor Bronze
- Current Rating: 1.75 A @ 80 °C ambient
- Operating Temperature Range: -55 °C to +125 °C
- –01 = .120 (3,05) Post (Mates with **FFSD series**)
- –03 = .065 (1,65) Post (Mates with **CLP series**)

FTS SERIES BOARD-TO-BOARD - THROUGH HOLE VERTICAL

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
● FTS-105-01-L-D	10	11P4652	2.04	1.78
● FTS-110-01-L-D	20	11P4671	3.49	3.05
● FTS-105-03-L-D	10	11P4654	1.98	1.74
● FTS-115-03-L-D	30	11P4692	5.05	4.42
● FTS-125-03-L-D	50	11P4730	6.91	6.05
FTS SERIES BOARD-TO-BOARD - SURFACE MOUNT VERTICAL				
● FTS-105-01-L-DV	10	11P4653	2.18	1.91
● FTS-110-01-L-DV	20	29K8097	3.80	3.32
● FTS-105-03-L-DV	10	11P4655	2.18	1.91
● FTS-125-03-L-DV	50	11P4731	6.16	5.50

(136018)

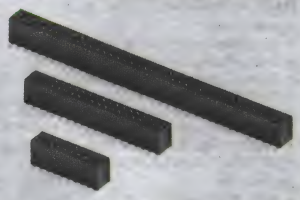
1.27mm (0.050″) FLE SERIES SURFACE MOUNT RECEPTACLES

c UL us

RoHS Compliant Available

samtec

- Dual-row configuration
- Available up to 50 pins per row
- Tiger Beam surface mount contact design
- 10μ″ (0.25μm) gold plating over 50μ″ (1.27μm) nickel
- Contact resistance: 15mΩ max.
- Insertion depth 0.072″ (1.83mm) to 0.172″ (4.37mm) or top pass-through
- Insertion/withdrawal force (single contact): 1.5 oz. (0.42N) avg.
- Normal force: 100 grams (0.98N)
- Cycles: 100+ max.



FLE series dual row 0.05″ micro pitch surface mount sockets are ideal for pass-through applications. Feature black liquid crystal polymer with phosphor bronze contacts. Mates with **FTSH series** micro headers, **FTS, FW** terminal strips and **FFMD** and **FMTP series** cable assemblies; all ordered separately, *go online or call*. Current rating: 1.75A @ 80°C ambient. Operating temperature range -55°C to +125°C. UL recognized.

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
● FLE-105-01-G-DV	10	61J4245	2.47	2.16
● FLE-110-01-G-DV	20	11P4413	3.18	2.78
● FLE-120-01-G-DV	40	11P4422	6.41	5.62
● FLE-125-01-G-DV	50	11P4427	6.43	5.74
● FLE-130-01-G-DV	60	11P4432	7.52	6.71

(136041)

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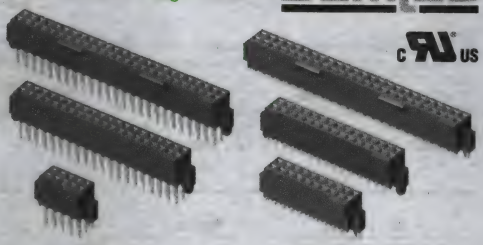
(212564)

1.27mm (0.050″) SFM AND SFML SERIES TIGER EYE RECEPTACLES

RoHS Compliant Available

samtec



Through Hole — Surface Mount

Features:
- High reliability Tiger Eye contacts
- Locking feature increases unmating force
- **SFML series** mates with: **TFML series**

Specifications:
- Insulator Material: Black liquid crystal polymer
- Contact Material: Tiger Eye= Beryllium Copper, Tiger Eye LITE= Phosphor Bronze
- Plating: Gold over nickel
- Current Rating: 2A
- Voltage Rating: 350VAC
- Operating Temperature: -55°C to +125°C
- Contact Resistance: 15mΩ max
- Insertion Depth: (3.05mm) .120″ to (4.06mm) .160″
- Wiping Distance: (0.38mm) .015″
- Insertion Force: 2.5oz (0.69N)
- Max Cycles: 10,000

SFLM SERIES TIGER EYE RECEPTACLES -THROUGH HOLE

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
SFML-110-01-S-D	20	11P6485	7.03	6.15
SFML-115-01-S-D	30	11P6489	7.47	6.67
SFML-120-01-S-D	40	11P6493	9.60	8.57
SFML-125-01-S-D	50	11P6497	10.63	10.05
SFML-145-01-S-D	90	11P6513	16.78	15.86
SFLM SERIES TIGER EYE LITE RECEPTACLES -THROUGH HOLE				
SFML-110-T1-S-D	20	11P6483	5.61	4.91
SFML-120-T1-S-D	40	11P6491	7.96	7.11
SFML-125-T1-S-D	50	11P6495	9.60	8.57
SFML-150-T1-S-D	100	11P6515	14.92	14.10
SFM SERIES TIGER EYE RECEPTACLES - SURFACE MOUNT				
SFM-110-02-S-D	20	39P9494	7.19	6.30
SFM-115-02-S-D	30	73C2453	7.40	6.61
SFM-120-02-S-D	40	39P9495	9.84	8.80
SFM-130-02-S-D	60	39P9497	12.18	11.51
SFM-145-02-S-D	90	39P9499	16.60	15.69
SFLM SERIES TIGER EYE RECEPTACLES - SURFACE MOUNT				
SFML-120-02-S-D	40	11P6494	10.02	8.95

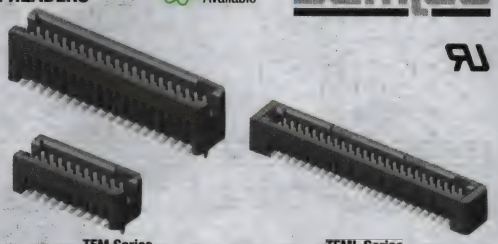
(136049)

1.27mm (0.050″) TFM AND TFML SERIES TIGER EYE HEADERS

RoHS Compliant Available

samtec

- Insulator Material: Black liquid crystal polymer
- Contact: Gold plated Phosphor bronze
- Current Rating: 2A @ 80°C ambient
- Temperature Range: -55° to +105°C
- **TFM series** mates with: **SFM, SFMC, SFSD series**
- **TFML series** mates with: **SFML series**



TFM Series — TFML Series

TFM SERIES HEADERS - THROUGH-HOLE, VERTICAL WITH WELD TABS

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
TFM-105-01-S-D-WT	10	12P0286	3.39	2.96
TFM SERIES HEADERS - SURFACE MOUNT, VERTICAL				
TFM-110-02-S-D	20	39P9500	5.94	5.19
TFM-115-02-S-D	30	39P9501	5.88	5.25
TFM-120-02-S-D	40	39P9502	7.84	7.01
TFM SERIES HEADERS - SURFACE MOUNT, VERTICAL WITH WELD TABS				
TFM-105-02-S-D-WT	10	12P0287	3.79	3.31
TFM-110-02-S-D-WT	20	12P0289	6.74	5.91
TFML SERIES HEADERS - SURFACE MOUNT, VERTICAL				
TFML-110-02-S-D	20	12P0300	6.26	5.48

(136038)

2.00mm (0.079″) MMS SERIES PC BOARD RECEPTACLES

RoHS Compliant Available

samtec

- Insulator Material: Black liquid crystal polymer
- Temperature Range: -55° to +125°C
- Current Rating: 2A
- Contact: Gold plated Phosphor bronze
- Contact Resistance: 10 mΩ max.
- Mates with: **TMM, MMT, TW, TMMH, MTMM, LTMM, ZLTMM, TCMD series**

Vertical Entry

MMS SERIES DOUBLE ROW RECEPTACLES - THROUGH HOLE, VERTICAL

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
MMS-105-01-L-DV	10	11P5312	3.41	2.98
MMS-110-01-L-DV	20	11P5392	3.84	3.37
MMS-115-01-L-DV	30	11P5468	5.55	4.86
MMS-130-01-L-DV	60	11P5668	8.99	8.03
MMS-135-01-L-DV	70	11P5729	10.84	9.69

(136032)

2.00mm (0.079″) SMM SERIES HIGH RELIABILITY RECEPTACLES

RoHS Compliant Available

samtec

Features:
- High reliabilty Tiger Eye contacts
- Mates with: **TMM, TMMH, MTMM, MMT, LTMM, TW, TCMD series**

Single Row — Dual Row

Specifications:
- Insulator Material: Black liquid crystal polymer
- Contact: 30u″ Gold plated Beryllium copper on contact area, matte tin on tail.
- Current Rating: 3A @ 80°C
- Contact Resistance: 10mΩ max
- Insertion Depth: (3.05mm) .120″ to (3.25mm) .128″
- Insertion Force: 2.0oz (0.56N)
- Withdrawal Force: 1.5oz (0.42N)
- Operating Temperature: -55°C to +125°C
- Max Cycles: 100

SMM HIGH RELIABILITY SINGLE ROW RECEPTACLES

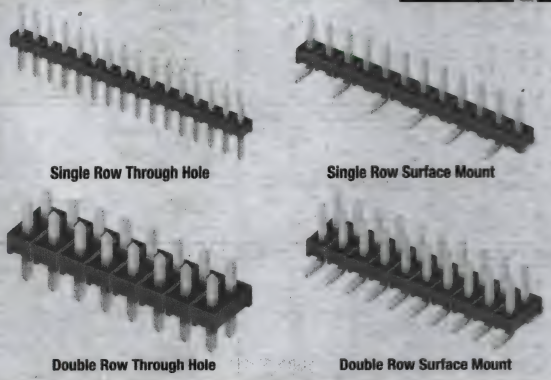
Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
SMM-106-02-S-S	6	11P7139	2.95	2.58
SMM-110-02-S-S	10	11P7146	3.59	3.15
SMM-112-02-S-S	12	11P7149	4.19	3.67
SMM HIGH RELIABILITY DOUBLE ROW RECEPTACLES				
SMM-102-02-S-D	4	60M5718	3.10	2.71
SMM-104-02-S-D	8	56J6729	3.82	3.34
SMM-105-02-S-D	10	11P7136	4.65	4.08
SMM-106-02-S-D	12	11P7138	5.18	4.54
SMM-108-02-S-D	16	11P7142	5.73	5.01
SMM-110-02-S-D	20	93K7469	6.17	5.41

(136050)

2.00mm (0.079″) TMM SERIES HEADERS

RoHS Compliant Available

samtec



Single Row Through Hole — Single Row Surface Mount

Double Row Through Hole — Double Row Surface Mount

Headers feature black liquid crystal polymer housing. Contacts: Phosphor bronze with 0.51μm (20μ″) gold on contact area, gold flash on tail. Operating temperature range: -55°C to +105°C w/ tin, -55°C to +105°C w/ gold. Mates with: **CLT, SQT, SQW, ESQT, TLE, SMM, MMS, TCSD, TLSD series.**

TMM SERIES LOW PROFILE HEADERS - SINGLE ROW, THROUGH HOLE VERTICAL

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
TMM-102-01-G-S	2	12P0631	0.58	0.53
TMM-103-01-G-S	3	12P0643	0.87	0.79

CONTINUED

PC BOARD HEADERS & SOCKETS

2.00mm (0.079″) TMM SERIES HEADERS (CONT.)

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
● TMM-108-01-G-S	8	12P0702	2.09	1.85
● TMM-110-01-G-S	10	12P0726	2.10	1.83
TMM SERIES LOW PROFILE HEADERS - SINGLE ROW, SURFACE MOUNT VERTICAL				
● TMM-102-01-G-S-SM	2	12P0632	0.72	0.65
● TMM-103-01-G-S-SM	3	12P0644	1.04	0.94
● TMM-110-01-G-S-SM	10	12P0727	2.42	2.11
TMM SERIES LOW PROFILE HEADERS - DOUBLE ROW, THROUGH HOLE VERTICAL				
● TMM-102-01-G-D	4	12P0630	1.03	0.93
● TMM-104-01-G-D	8	12P0653	1.73	1.54
● TMM-105-01-G-D	10	12P0665	1.79	1.56
● TMM-106-01-G-D	12	12P0677	2.14	1.88
● TMM-107-01-G-D	14	12P0689	2.40	2.10
● TMM-108-01-G-D	16	12P0700	2.86	2.50
● TMM-110-01-G-D	20	12P0724	2.92	2.56
● TMM-115-01-G-D	30	12P0783	4.37	3.82
● TMM-120-01-G-D	40	12P0841	6.02	5.27
TMM SERIES LOW PROFILE HEADERS - DOUBLE ROW, SURFACE MOUNT VERTICAL				
● TMM-104-01-G-D-SM	8	12P0654	2.08	1.85
● TMM-105-01-G-D-SM	10	12P0666	2.14	1.88
● TMM-106-01-G-D-SM	12	12P0678	2.48	2.17
● TMM-107-01-G-D-SM	14	12P0690	3.00	2.62

(136052)

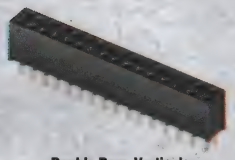
2.00mm (0.079″) SQT SERIES PC BOARD RECEPTACLES

RoHS Compliant Available

samtec

Single Row, Vertical

Single Row, Right Angle



Double Row, Vertical

Double Row, Right Angle

Specifications:
- Insulator: Black liquid crystal polymer
- Contact: Gold plated Phosphor Bronze
- Operating Temperature Range: -55 °C to +125 °C
- Current Resistance: 10 mΩ max
- Mates with: **TMMH, TMM, MTMM, MMT, TW, LTMM, ZLTMM, ESQT, TCMD series**

SQT SERIES RECEPTACLES - SINGLE ROW, VERTICAL

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
● SQT-102-01-L-S	2	11P7240	1.38	1.23
● SQT-104-01-L-S	4	11P7248	1.93	1.71
● SQT-105-01-L-S	5	11P7252	1.78	1.56
● SQT-106-01-L-S	6	11P7256	1.90	1.66
● SQT-110-01-L-S	10	11P7272	2.64	2.31
SQT SERIES RECEPTACLES - SINGLE ROW, RIGHT ANGLE				
● SQT-102-01-L-S-RA	2	11P7241	1.47	1.30
● SQT-110-01-L-S-RA	10	11P7273	3.01	2.64
SQT SERIES RECEPTACLES - DOUBLE ROW, VERTICAL				
● SQT-120-01-L-D	40	11P7309	6.38	5.70
● SQT-125-01-L-D	50	11P7329	7.98	7.13
SQT SERIES RECEPTACLES - DOUBLE ROW, RIGHT ANGLE				
● SQT-104-01-L-D-RA	8	11P7247	2.77	2.42
● SQT-105-01-L-D-RA	10	11P7251	3.34	2.92
● SQT-110-01-L-D-RA	20	11P7271	4.35	3.81
● SQT-115-01-L-D-RA	30	11P7291	6.51	5.69
● SQT-125-01-L-D-RA	50	11P7330	8.75	7.82

(136033)

2.00mm (0.079″) SQW SERIES TIGER BUY RECEPTACLES

RoHS Compliant Available

samtec

The Tiger Buy tuning fork contact system features high mating and unmating retention in a cost effective system. Tiger Buy receptacles feature black liquid crystal polymer housing with gold plated phosphor bronze contacts. Voltage rating: 500 VAC mated with TMM or TMMH, Operating temperature range -55°C to +125°C, Contact resistance: 10 mΩ max, Rated 100 mating cycles. Mates with: **TMMH, TMM, MTMM, MMT, TW, TSH, TCMD series.**

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
● SQW-104-01-L-D	8	11P7411	2.12	1.86
● SQW-106-01-L-D	12	11P7415	2.62	2.29
● SQW-110-01-L-D	20	11P7423	3.22	2.82
● SQW-120-01-L-D	40	11P7443	6.31	5.52
● SQW-125-01-L-D	50	11P7453	6.45	5.76
● SQW-130-01-L-D	60	11P7462	7.49	6.69
● SQW-140-01-L-D	80	11P7477	10.33	9.23
● SQW-150-01-L-D	100	11P7488	11.21	10.02

(136059)

2.54mm (0.100″) BCS SERIES PC BOARD RECEPTACLES

c UL us

RoHS Compliant Available

samtec

- Insulator Material: Black liquid crystal polymer
- Current Rating: 3A @ 80°C (-TE mated with TSM); 4A @ 80°C (-HE mated with TSW-D)
- Voltage Rating: -HE mated with TSW: 450 VAC; -TE mated with TSM: 475 VAC
- Temperature Range: -55° to +125°C
- Contact: Gold plated Phosphor bronze
- Contact Resistance: 10 mΩ
- Mates with: **TSW, MTSW, TSS, ZSS, DW, EW, ZW, HW, TSM, MTLW series**

Top Entry

Horizontal Entry

BCS SERIES PC BOARD RECEPTACLES - TOP ENTRY

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
● BCS-102-L-S-TE	2	88K1015	1.26	1.12
● BCS-104-L-S-TE	4	88K0996	1.91	1.69
● BCS-106-L-S-TE	6	11P3230	1.99	1.74
● BCS-108-L-S-TE	8	11P3242	2.27	1.99
● BCS-110-L-S-TE	10	11P3254	2.33	2.04
● BCS-112-L-S-TE	12	11P3265	2.84	2.48
● BCS-116-L-S-TE	16	11P3287	3.22	2.82
● BCS-120-L-S-TE	20	11P3311	4.00	3.50
● BCS-124-L-S-TE	24	11P3335	4.63	4.05
● BCS-130-L-S-TE	30	11P3369	5.78	5.06
● BCS-132-L-S-TE	32	11P3381	6.16	5.39
● BCS-140-L-S-TE	40	11P3428	6.45	5.76
BCS SERIES PC BOARD RECEPTACLES - HORIZONTAL ENTRY				
● BCS-108-L-S-HE	8	11P3240	2.55	2.23
● BCS-110-L-S-HE	10	11P3252	2.55	2.23

(136022)

2.54mm (0.100″) CES AND SLW SERIES LOW PROFILE RECEPTACLES

c UL us

RoHS Compliant Available

samtec

Single Row

Dual Row

Features:
- Low profile
- Chamfered closed entry (**CES series**)
- Dual leaf folded, closed bottom contact (**CES series**)
- Tiger Buy contacts (**SLW series**)
- **CES series** mates with: **TLW, TSW, MTLW, MTSW, EW, ZW** and **DW series**
- **SLW series** mates with: **TLW, TSW, MTLW, MTSW, EW** and **ZW series**

Specifications:
- Current Rating: **CES series** : 1A; **SLW series** : 3A
- Insulator Material: Black G.F. polyester
- Contacts: Tin (-T) or Gold (-G) plated Phosphor bronze
- Temperature Range: -55°C to +125°C with Gold; -55°C to +105°C with Tin
- Contact Resistance: 10mΩ max

➤ CONTINUED ➤

2.54mm (0.100″) CES AND SLW SERIES LOW PROFILE RECEPTACLES (CONT.)

CES SERIES LOW PROFILE RECEPTACLES - SINGLE ROW, THROUGH HOLE

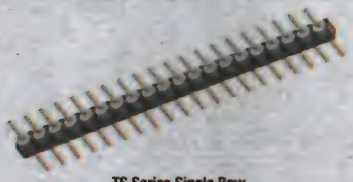
Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
CES-104-01-T-S	4	11P3502	0.76	0.69
CES-106-01-T-S	6	11P3510	1.09	0.99
CES-108-01-T-S	8	11P3518	1.33	1.18
CES-110-01-T-S	10	11P3526	1.60	1.42
CES-112-01-T-S	12	11P3534	1.93	1.71
CES-116-01-T-S	16	11P3550	2.04	1.78
CES-120-01-T-S	20	11P3566	2.61	2.28
CES-130-01-T-S	30	11P3606	3.37	2.95
CES SERIES LOW PROFILE RECEPTACLES - DOUBLE ROW, THROUGH HOLE				
CES-104-01-T-D	8	11P3501	1.14	1.01
CES-106-01-T-D	12	11P3509	1.64	1.46
CES-110-01-T-D	20	11P3525	2.17	1.90
CES-116-01-T-D	32	11P3549	2.95	2.58
CES-120-01-T-D	40	11P3565	3.67	3.22
CES-125-01-T-D	50	11P3585	4.78	4.19
CES-130-01-T-D	60	11P3605	5.72	5.01
CES-140-01-T-D	80	11P3645	5.95	5.31
SLW SERIES LOW PROFILE RECEPTACLES - SINGLE ROW, THROUGH HOLE				
SLW-102-01-G-S	2	11P6845	0.64	0.58
SLW-104-01-G-S	4	11P6857	1.09	0.96
SLW-106-01-G-S	6	11P6869	1.68	1.50
SLW-108-01-G-S	8	11P6881	1.79	1.56
SLW-110-01-G-S	10	11P6893	2.23	1.95
SLW-120-01-G-S	20	11P6952	3.74	3.27
SLW SERIES LOW PROFILE RECEPTACLES - DOUBLE ROW, THROUGH HOLE				
SLW-104-01-G-D	8	11P6856	1.72	1.50
SLW-106-01-G-D	12	11P6868	2.68	2.35
SLW-108-01-G-D	16	11P6880	3.03	2.66

(136024)

2.54mm (0.100″) TS AND TD SERIES TERMINAL STRIPS

RoHS Compliant Available

samtec



TS Series Single Row

TD Series Double Row

Specifications:
- Insulator: Black G.F. polyester
- Contact: 20u″ Gold plated Brass
- Operating Temperature Range: -55 °C to +125 °C
- Current Rating: 1 A
- Mates with: **SS, SD, HSS, SL, SDL, ESS, ESD series**

TS SERIES SINGLE ROW TERMINAL STRIPS

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
TS-102-G-A	2	12P1113	0.78	0.71
TS-104-G-A	4	12P1117	1.42	1.26
TS-106-G-A	6	12P1121	2.14	1.89
TS-107-G-A	7	47M3222	1.90	1.66
TS-108-G-A	8	12P1124	2.17	1.90
TS-110-G-A	10	12P1128	2.83	2.47
TS-120-G-A	20	12P1148	4.60	4.03
TS-125-G-A	25	12P1158	5.76	5.04
TS-130-G-A	30	12P1167	7.13	6.25
TD SERIES DOUBLE ROW TERMINAL STRIPS				
TD-112-G-A	24	12P0248	5.52	4.84
TD-120-G-A	40	12P0264	7.45	6.65

(136031)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures

(212568)

2.54mm (0.100″) BBL AND BBS SERIES SINGLE ROW INTERCONNECT STRIPS

RoHS Compliant Available

samtec

BBS Standard

BBL Low Profile

- Contact Termination: Through hole
- Insulator Material: Black glass filled polyester
- Current Rating: 1A
- Temperature Range: -55° to +125°C
- Terminal: 20u″ Gold plated Phosphor bronze
- Mates with: **SL, SS, HSS, ESS series**

BBS SERIES STANDARD HEADERS

Mfg. Part No.	Positions	Lead Style (mm)	Stock No.	Price Each 1-9	Price Each 10-99
BBS-110-G-A	10	5.33	11P3153	4.11	3.61
BBS-112-G-A	12	5.33	11P3157	4.74	4.15
BBS-116-G-A	16	5.33	11P3165	6.33	5.54
BBS-120-G-A	20	5.33	26K2300	6.42	5.73
BBS-132-G-A	32	5.33	11P3196	9.55	8.54
BBL SERIES LOW PROFILE HEADERS					
BBL-104-G-E	4	1.78	30C2590	1.87	1.64
BBL-106-G-E	6	1.78	11P3028	2.80	2.45
BBL-108-G-E	8	1.78	11P3036	3.30	2.90
BBL-110-G-E	10	1.78	11P3044	4.11	3.61
BBL-112-G-E	12	1.78	11P3052	4.92	4.31
BBL-116-G-E	16	1.78	67K7659	6.56	5.74
BBL-120-G-E	20	1.78	11P3083	6.39	5.71
BBL-132-G-E	32	1.78	11P3131	9.53	8.52
BBL-110-G-F	10	2.16	11P3045	4.30	3.76
BBL-132-G-F	32	2.16	11P3132	9.95	8.88

(136017)

2.54mm (0.100″) IPT1 AND IPS1 SERIES MINI MATE® CONNECTORS

RoHS Compliant Available

samtec

IPS1 Vertical

IPS1 Right Angle

IPT1 Vertical

Mini Mate® connectors feature black liquid crystal polymer housing with phosphor bronze contacts, 30μ″ gold on contact area, matte tin on tail. Current rating: 5.2A @ 20°C, 4.6A @ 40°C, 4.0A @ 60°C, 2.7A @ 95°C; 2x3 cluster powered. Operating temperature range -55°C to +125°C. Voltage rating: 550 VAC. Mated height 11.05mm (0.435″)

IPS1 SERIES MINI MATE® CONNECTORS - VERTICAL

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
IPS1-105-01-S-D	10	11P5087	3.79	3.31
IPS1-110-01-S-D	20	11P5090	4.86	4.25
IPS1 SERIES MINI MATE® CONNECTORS - RIGHT ANGLE				
IPS1-105-01-S-D-RA	10	11P5088	4.12	3.61
IPS1-110-01-S-D-RA	20	11P5091	5.54	4.85
IPT1 SERIES MINI MATE® CONNECTORS - VERTICAL				
IPT1-105-01-S-D	10	11P5102	3.80	3.32
IPT1-110-01-S-D	20	11P5105	4.92	4.31
IPT1 SERIES MINI MATE® CONNECTORS - RIGHT ANGLE				
IPT1-105-01-S-D-RA	10	11P5103	4.24	3.71
IPT1-110-01-S-D-RA	20	11P5106	5.54	4.85
IPT1-115-01-S-D-RA	30	11P5109	7.11	6.23

(136056)

PC BOARD HEADERS & SOCKETS

2.54mm (0.100″) SSA SERIES SINGLE ROW RECEPTACLES

RoHS Compliant Available

samtec

Single row receptacles feature black high temperature PET polyester housing with snap strip and double side-wipe gold plated phosphor bronze contacts. Standoffs allow for easy board cleaning. Current Rating: 1A. Operating temperature range: -55°C to +125°C. Flammability rating: UL 94V-0. Mates with: **TS, HTS, BBS, BBL, BHS, LBS series.**

SSA SERIES SINGLE ROW RECEPTACLES

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
● SSA-102-S-G	2	11P7661	0.67	0.60
● SSA-108-S-G	8	11P7697	1.85	1.62
● SSA-110-S-G	10	11P7709	2.23	1.95
● SSA-116-S-G	16	11P7744	3.04	2.66
● SSA-120-S-G	20	11P7767	3.89	3.41
● SSA-124-S-G	24	11P7790	4.72	4.14
● SSA-132-S-G	32	94B9305	5.30	4.64

(136035)

2.54mm (0.100″) SL AND SDL SERIES LOW PROFILE SOCKET STRIPS

RoHS Compliant Available

samtec

Single Row

Dual Row

Specifications:
- Current Rating: 1A
- Pitch Spacing: 2.54mm
- Insulator Material: Black glass filled polyester
- Contact/Shell Materials: Beryllium Copper/Brass
- Plating: 30u″ Gold on contact area, tin shell
- Operating Temperature: -55°C to +125°C
- Contact Resistance: 10mΩ max
- Insertion Force: 9oz (2.50N)
- Withdrawal Force: 2.5oz (0.70N)

Features:
- Achieve low profile without sacrificing insertion depth
- Choice of four precision screw machined lead styles
- Exceptionally low profile down to 2.11mm (0.083″) off of board
- Mate with BBL or BDL for board stacking spaces down to 3.89mm (0.153″)
- Mates with: **TS, TD, HTS, BBS, BBD, BBL, BDL, BHS series**

SL LOW PROFILE (HOLLOW LEG) - SINGLE ROW, 2.11mm CONTACTS

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
● SL-108-T-10	8	11P6618	2.09	1.83
● SL-132-T-10	32	11P6833	5.78	5.06
SL MICRO-SOCKET (HOLLOW LEG) - SINGLE ROW, 1.58mm CONTACTS				
● SL-104-T-12	4	11P6586	1.63	1.45
● SL-106-T-12	6	11P6603	1.87	1.63
● SL-112-T-12	12	11P6656	3.15	2.76
● SL-114-T-12	14	11P6674	3.84	3.37
● SL-120-T-12	20	11P6728	5.26	4.61
● SL-132-T-12	32	11P6834	7.40	6.48
SDL MICRO-SOCKET (HOLLOW LEG) - DOUBLE ROW, 1.58mm CONTACTS				
● SDL-110-G-12	20	11P6249	5.99	5.35

(136043)

2.54mm (0.100″) SSM SERIES RECEPTACLES

RoHS Compliant Available

samtec

Single Row, Vertical

Double Row, Vertical

Single Row, Horizontal

Surface mount receptacles feature black liquid crystal polymer housing. Contacts: phosphor bronze, 10μ″ (0,25μm) gold on contact area, matte tin on tail. Current rating: 3A @ 80°C (-DV/-SV mated with TSM-DV); 4A @ 80°C (-DH/-SH mated with TSW-D). Operating temperature range: -55°C to +125°C. Mates with: **TSW, MTSW, TST, TSS, ZST, ZSS, DW, EW, ZW, TSM series.**

SSM SERIES RECEPTACLES - SINGLE ROW, VERTICAL

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
● SSM-104-L-SV	4	11P7859	2.00	1.77
● SSM-106-L-SV	6	11P7875	2.08	1.82

➤ CONTINUED ➤

2.54mm (0.100″) SSM SERIES RECEPTACLES (CONT.)

SSM SERIES RECEPTACLES - DOUBLE ROW, VERTICAL

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
● SSM-104-L-DV	8	11P7857	2.76	2.41
● SSM-105-L-DV	10	11P7865	3.23	2.83
● SSM-125-L-DV	50	11P8019	7.65	6.83
SSM SERIES RECEPTACLES - SINGLE ROW, HORIZONTAL				
● SSM-104-L-SH	4	11P7858	1.97	1.73
● SSM-106-L-SH	6	11P7874	2.59	2.26

(136036)

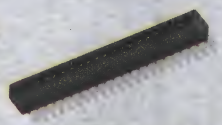
2.54mm (0.100″) SSQ AND SSW SERIES RECEPTACLES

RoHS Compliant Available

samtec

Single Row, Vertical

Single Row, Right Angle



Double Row, Vertical

Double Row, Right Angle

Socket strips feature black liquid crystal polymer housing. Contacts: Phosphor bronze with 0.51um (20u″) Gold on contact, Gold flash on tail . Current rating: 5.5A @ 20°C, 5.0A @ 40°C, 4.0A @ 60°C, 3.0A @ 80°C. Operating temperature range: -55°C to +125°C w/ gold, -55°C to +105°C w/ tin. Mates with: **TSW, MTSW, MTLW, LCW, EW, ZW, TSS, ZSS, TSM, TSSH series.**

Lead Style	Single & Double Row Tail Lengths: Straight	Single & Double Row Tail Lengths: Right Angle
-01	2.64mm (0.104″)	...
-02	4.93mm (0.194″)	2.54mm (0.100″)

SSQ SERIES SQUARE TAIL RECEPTACLES - SINGLE ROW, THROUGH HOLE VERTICAL

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
● SSQ-104-01-G-S	4	11P8192	1.82	1.61
● SSQ-106-01-G-S	6	11P8251	1.94	1.72
● SSQ-108-01-G-S	8	11P8310	2.06	1.80
● SSQ-112-01-G-S	12	11P8424	2.96	2.59
● SSQ-118-01-G-S	18	11P8593	3.91	3.42
● SSQ-120-01-G-S	20	11P8645	4.30	3.77
SSQ SERIES SQUARE TAIL RECEPTACLES - SINGLE ROW, THROUGH HOLE RIGHT-ANGLE				
● SSQ-106-02-G-S-RA	6	11P8258	2.12	1.88
● SSQ-112-02-G-S-RA	12	11P8432	3.50	3.05
● SSQ-114-02-G-S-RA	14	11P8488	3.33	2.91
● SSQ-116-02-G-S-RA	16	11P8546	3.97	3.47
SSQ SERIES SQUARE TAIL RECEPTACLES - DOUBLE ROW, THROUGH HOLE VERTICAL				
● SSQ-107-01-G-D	14	11P8279	3.06	2.68
● SSQ-108-01-G-D	16	11P8309	3.50	3.05
● SSQ-110-01-G-D	20	11P8367	3.70	3.24
● SSQ-120-01-G-D	40	11P8644	7.28	6.38
● SSQ-125-01-G-D	50	11P8776	7.47	6.67
● SSQ-130-01-G-D	60	11P8899	8.64	7.72
SSW SERIES SOLDER TAIL RECEPTACLES - SINGLE ROW, THROUGH HOLE VERTICAL				
● SSW-104-01-G-S	4	11P9373	1.64	1.46
● SSW-116-01-G-S	16	30C1590	3.12	2.73
● SSW-106-02-G-S	6	11P9412	1.82	1.61
● SSW-108-02-G-S	8	11P9445	1.85	1.62
● SSW-112-02-G-S	12	11P9511	2.89	2.52
● SSW-116-02-G-S	16	11P9575	3.15	2.76
● SSW-120-02-G-S	20	11P9637	3.93	3.44
SSW SERIES SOLDER TAIL RECEPTACLES - SINGLE ROW, THROUGH HOLE RIGHT-ANGLE				
● SSW-103-02-G-S-RA	3	11P9364	1.45	1.28
● SSW-104-02-G-S-RA	4	11P9381	1.87	1.66
● SSW-106-02-G-S-RA	6	11P9413	2.00	1.78
● SSW-107-02-G-S-RA	7	11P9430	1.85	1.62
● SSW-108-02-G-S-RA	8	11P9446	2.12	1.85
● SSW-109-02-G-S-RA	9	11P9462	2.29	2.00
● SSW-112-02-G-S-RA	12	11P9512	3.05	2.67
● SSW-113-02-G-S-RA	13	11P9529	3.31	2.89
SSW SERIES SOLDER TAIL RECEPTACLES - DOUBLE ROW, THROUGH HOLE VERTICAL				
● SSW-104-01-G-D	8	11P9372	2.14	1.87
● SSW-106-01-G-D	12	11P9404	2.38	2.08
● SSW-108-01-G-D	16	11P9438	3.17	2.77
● SSW-110-01-G-D	20	11P9470	3.24	2.84

➤ CONTINUED ➤

2.54mm (0.100″) SSQ AND SSW SERIES RECEPTACLES (CONT.)

SSW SERIES SOLDER TAIL RECEPTACLES - DOUBLE ROW, THROUGH HOLE VERTICAL

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
SSW-115-01-G-D	30	58M3429	5.05	4.42
SSW-120-01-G-D	40	50M2393	6.64	5.81
SSW-125-01-G-D	50	11P9714	6.77	6.05
SSW-130-01-G-D	60	58M3430	8.12	7.26
SSW-102-02-G-D	4	11P9345	1.79	1.59
SSW-105-02-G-D	10	11P9394	2.36	2.06
SSW-110-02-G-D	20	11P9476	3.45	3.02
SSW-125-02-G-D	50	11P9719	7.01	6.26
SSW-150-02-G-D	100	12P0067	10.79	9.64
SSW SERIES SOLDER TAIL RECEPTACLES - DOUBLE ROW, THROUGH HOLE RIGHT-ANGLE				
SSW-103-02-G-D-RA	6	11P9362	2.03	1.78
SSW-107-02-G-D-RA	14	11P9428	3.16	2.76
SSW-108-02-G-D-RA	16	11P9444	3.07	2.69
SSW-110-02-G-D-RA	20	11P9477	3.77	3.30
SSW-120-02-G-D-RA	40	11P9636	6.09	5.44
SSW-125-02-G-D-RA	50	11P9720	7.69	6.87
SSW-130-02-G-D-RA	60	11P9801	9.24	8.26

(136044)

2.54mm (0.100″) TLW SERIES LOW PROFILE HEADERS

RoHS Compliant Available

samtec

Single Row

Double Row

These headers provide the ultimate low profile 0.64mm (0.025″) square post board stacking system. The high quality terminals are available with 0.105″ post height for mating with low profile sockets. Features black liquid crystal polymer housing with gold plated phosphor bronze contacts. Current rating: 3A, Operating temperature range -55°C to +125°C.

TLW SERIES LOW PROFILE HEADERS - SINGLE ROW

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
TLW-102-05-G-S	2	12P0374	0.74	0.67
TLW-103-05-G-S	3	12P0382	1.11	1.00
TLW-104-05-G-S	4	12P0389	1.35	1.20
TLW-108-05-G-S	8	12P0421	2.14	1.87
TLW-110-05-G-S	10	12P0437	2.58	2.25
TLW-120-05-G-S	20	12P0513	4.54	3.97
TLW SERIES LOW PROFILE HEADERS - DOUBLE ROW				
TLW-103-05-G-D	6	12P0381	1.66	1.47
TLW-104-05-G-D	8	12P0388	1.76	1.54
TLW-105-05-G-D	10	12P0396	2.20	1.92
TLW-106-05-G-D	12	12P0404	2.63	2.30
TLW-107-05-G-D	14	12P0412	3.07	2.69
TLW-108-05-G-D	16	12P0420	3.10	2.71
TLW-109-05-G-D	18	12P0428	3.36	2.94
TLW-110-05-G-D	20	12P0436	3.73	3.27
TLW-120-05-G-D	40	12P0512	6.24	5.57

(136060)

2.54mm (0.100″) TSW SERIES 0.025″ SQUARE HEADERS

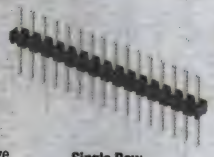
c UL us

RoHS Compliant Available

samtec

Features:
- Mates with: **SSW, SSQ, ESW, ESQ, BCS, BSW, IDSD, IDSS, CES, SLW series**

Specifications:
- Current Rating: 7A
- Insulator Material: Black glass filled polyester
- Contact: Gold plated Phosphor bronze
- Operating Temperature: -55°C to +125°
- Voltage Rating: 550VAC
- -G-: 0.25µm gold on contact area, gold flash on balance
- -L-: 0.25µm gold on contact area, matte tin on tail



Single Row

Dual Row

TSW SERIES 0.025″ SQUARE HEADERS - SINGLE ROW, VERTICAL

Mfg. Part No.	Positions	Pin Length (mm)	Stock No.	Price Each 1-9	Price Each 10-99
TSW-104-07-G-S	4	2.54	12P1387	0.71	0.64
TSW-114-07-G-S	14	2.54	12P2068	2.21	1.96

CONTINUED

2.54mm (0.100″) TSW SERIES 0.025″ SQUARE HEADERS (CONT.)

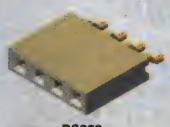
Mfg. Part No.	Positions	Pin Length (mm)	Stock No.	Price Each 1-9	Price Each 10-99
TSW-118-07-G-S	18	2.54	12P2339	2.18	1.91
TSW-120-07-G-S	20	2.54	12P2469	2.51	2.20
TSW SERIES 0.025″ SQUARE HEADERS - DOUBLE ROW, VERTICAL					
TSW-125-05-G-D	50	3.30	12P2769	5.91	5.17
TSW-150-07-L-D	100	2.54	12P4137	6.93	6.06
TSW-150-08-G-D	100	5.08	12P4143	7.03	6.29
TSW-150-08-L-D	100	5.08	12P4147	6.94	6.08
TSW-150-14-L-D	100	2.79	12P4160	7.19	6.30

(136051)

WHITE LITE 2.54mm PITCH BOARD-TO-BOARD CONNECTORS

RoHS Compliant Available

GCT Global Connector Technology



BG300

BG301

BG302

BG303

BG304

BG305

BG306

Specifications:
- Current rating: 3 A
- Contact resistance: 20mΩ Max.
- Insulation resistance: 1000 MΩ Min.
- Dielectric withstanding voltage: 500 VAC
- Operating temperature: -40°C to 105°C
- Contact material: Copper alloy
- Standard insulator material: Polyester LCP, UL94-V0

White Lite connectors are a new range of connectors for SSL LED strip applications. These connectors are available in 2.54mm pitch in both surface mount and through hole. White Lite connectors offer both traditional mating pairs (perfectly aligning centre lines of horizontal mating PCB's) as well as economical one piece U-Shaped connectors (which can be soldered direct to a PCB or plugged into vertical PCB sockets). LCP insulators are natural colored to reduce light absorption not only providing better aesthetics but also a resistance to high process temperatures.

BG300 SERIES RECEPTACLES - SINGLE ROW, RIGHT ANGLE SURFACE MOUNT

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-24
BG300-02-A-L-A	2	82T3345	0.46	0.39
BG300-03-A-L-A	3	82T3346	0.53	0.45
BG300-04-A-L-A	4	82T3347	0.70	0.60
BG300-05-A-L-A	5	82T3348	0.88	0.75
BG300-06-A-L-A	6	82T3349	0.95	0.81
BG301 SERIES HEADERS - SINGLE ROW, RIGHT ANGLE SURFACE MOUNT				
BG301-02-A-0540-L-B	2	82T3350	0.47	0.40
BG301-03-A-0540-L-B	3	82T3351	0.49	0.42
BG301-04-A-0540-L-B	4	82T3352	0.65	0.56
BG301-05-A-0540-L-B	5	82T3353	0.82	0.70
BG301-06-A-0540-L-B	6	82T3354	0.88	0.75
BG302 SERIES RECEPTACLES - SINGLE ROW, RIGHT ANGLE THROUGH HOLE				
BG302-02-A-L-G	2	82T3355	0.33	0.28
BG302-03-A-L-G	3	82T3356	0.38	0.32
BG302-04-A-L-G	4	82T3357	0.50	0.43
BG302-05-A-L-G	5	82T3358	0.63	0.54
BG302-06-A-L-G	6	82T3359	0.68	0.58
BG303 SERIES HEADERS - SINGLE ROW, RIGHT ANGLE THROUGH HOLE				
BG303-02-A-0300-L-G	2	82T3360	0.20	0.17
BG303-03-A-0300-L-G	3	82T3361	0.23	0.20
BG303-04-A-0300-L-G	4	82T3362	0.30	0.26
BG303-05-A-0300-L-G	5	82T3363	0.38	0.32
BG303-06-A-0300-L-G	6	82T3364	0.41	0.35
BG304 SERIES U-SHAPE CONNECTORS - SINGLE INSULATOR - THROUGH HOLE				
BG304-02-A-0500-L-G	2	82T3365	0.23	0.20
BG304-03-A-0500-L-G	3	82T3367	0.27	0.23
BG304-04-A-0500-L-G	4	82T3368	0.35	0.30
BG304-05-A-0500-L-G	5	82T3369	0.44	0.38
BG304-06-A-0500-L-G	6	82T3370	0.48	0.41
BG305 SERIES U-SHAPE CONNECTORS - DUAL INSULATOR - THROUGH HOLE				
BG305-02-A-0500-L-G	2	82T3371	0.26	0.23
BG305-03-A-0500-L-D	3	82T3372	0.30	0.26
BG305-04-A-0500-L-D	4	82T3373	0.40	0.34
BG305-05-A-0500-L-D	5	82T3374	0.50	0.43
BG305-06-A-0500-L-D	6	82T3375	0.54	0.46

CONTINUED

WHITE LITE 2.54mm PITCH BOARD-TO-BOARD CONNECTORS (CONT.)

BG306 SERIES RECEPTACLES - SINGLE ROW - VERTICAL SURFACE MOUNT

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-24
● BG306-02-A-1-0400-L-G	2	07W3654	0.65	0.56
● BG306-03-A-1-0400-L-B	3	07W3655	0.80	0.68
● BG306-04-A-1-0400-L-B	4	07W3656	1.00	0.85
● BG306-05-A-1-0400-L-B	5	07W3657	1.15	0.98
● BG306-06-A-1-0400-L-B	6	07W3658	1.30	1.11

(202046)

0.3MM PITCH FPC CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Housing material: Thermoplastic
- Contacts: Gold plated copper alloy
- Low profile 1.0mm height
- 3.8 mm width narrow connector for space saving
- FPC is securely connected with easy one touch flip lever actuator

FPC ZIF CONNECTORS - SMT RIGHT-ANGLE, STANDARD TYPE - BOTTOM CONTACTS

Mfg. Part No.	Positions	Flip Lock Type	Width (mm)	Stock No.	Price Each 1-9	Price Each 10-24
● 1746237-9	27	Front	10.8	17R5038	0.82	0.77
● 1-1746237-2	33	Front	12.6	16R9564	0.91	0.80
● 1-1746237-3	35	Front	13.2	16R9565	0.89	0.79
FPC ZIF CONNECTORS - SMT RIGHT-ANGLE, NARROW TYPE - BOTTOM CONTACTS						
● 1827827-8	25	Front	8.8	73R7508	2.12	1.93
● 1-1827827-8	45	Front	14.8	73R7497	2.82	2.56
● 1-2013496-0	29	Back	10.5	73R7498	0.89	0.84
● 1-2013496-6	41	Back	14.1	73R7499	1.60	1.45
● 1-2013496-8	45	Back	15.3	73R7500	1.69	1.54
FPC ZIF CONNECTORS - SMT RIGHT-ANGLE, NARROW TYPE - TOP CONTACTS						
● 2013928-8	25	Back	8.8	73R7512	1.35	1.19
● 1-2013928-2	33	Back	11.2	73R7501	1.35	1.19
● 1-2013928-4	37	Back	12.4	73R7502	0.66	0.62
● 1-2013928-6	41	Back	13.6	73R7503	1.54	1.35

(177016)

0.5MM PITCH FPC CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Housing material: High temperature thermoplastic UL94V-0
- Actuator: Thermoplastic, UL94V-0
- Contacts: Gold plated phosphor bronze

FPC ZIF CONNECTORS - SMT RIGHT-ANGLE, FRONT FLIP LOCK - BOTTOM CONTACTS

Mfg. Part No.	Positions	Width (mm)	Stock No.	Price Each 1-9	Price Each 10-24
● 1734592-5	5	7.43	17R4936	0.62	0.58
● 1734592-8	8	9.43	17R4939	0.70	0.66
● 1734592-9	9	9.93	17R4940	0.70	0.66
● 1-1734592-0	10	10.43	16R9527	0.39	0.37
● 1-1734592-1	11	10.93	16R9528	0.73	0.69
● 1-1734592-2	12	11.43	16R9529	0.76	0.72
● 1-1734592-3	13	11.93	16R9530	0.75	0.71
● 1-1734592-4	14	12.43	16R9531	0.75	0.71
● 1-1734592-5	15	12.93	16R9532	0.80	0.76
● 1-1734592-6	16	13.43	16R9533	0.81	0.76
● 1-1734592-7	17	13.93	16R9534	0.83	0.74
● 1-1734592-8	18	14.43	16R9535	0.50	0.47
● 1-1734592-9	19	14.93	16R9536	0.86	0.76
● 2-1734592-0	20	15.43	50P9432	0.88	0.78
● 2-1734592-1	21	15.93	17R7046	0.90	0.80
● 2-1734592-2	22	16.43	17R7047	1.00	0.89
● 2-1734592-3	23	16.93	17R7048	0.98	0.86
● 2-1734592-4	24	17.43	17R7049	0.60	0.57
● 2-1734592-5	25	17.93	17R7050	1.07	0.95

➤CONTINUED➤

0.5MM PITCH FPC CONNECTORS (CONT.)

Mfg. Part No.	Positions	Width (mm)	Stock No.	Price Each 1-9	Price Each 10-24
● 2-1734592-6	26	18.43	17R7051	1.13	1.00
● 2-1734592-7	27	18.93	17R7052	1.07	0.94
● 2-1734592-8	28	19.43	17R7053	4.23	4.06
● 2-1734592-9	29	19.93	17R7054	1.14	1.01
● 3-1734592-0	30	20.43	18R0274	1.09	1.00
● 3-1734592-1	31	20.93	18R0275	1.03	0.91
● 3-1734592-2	32	21.43	18R0276	1.06	0.93
● 3-1734592-3	33	21.93	18R0277	1.23	1.09
● 3-1734592-4	34	22.43	18R0278	1.26	1.10
● 3-1734592-5	35	22.93	18R0279	1.22	1.08
● 3-1734592-7	37	23.93	18R0281	1.25	1.11
● 3-1734592-8	38	24.43	18R0282	1.27	1.13
● 3-1734592-9	39	24.93	18R0283	1.30	1.15
● 4-1734592-0	40	25.43	18R4220	1.34	1.19
● 4-1734592-1	41	25.93	18R4221	1.33	1.17
● 4-1734592-2	42	26.43	18R4222	1.35	1.19
● 4-1734592-3	43	26.93	18R4223	1.36	1.20
● 4-1734592-4	44	27.43	18R4224	1.37	1.21
● 4-1734592-5	45	27.93	18R4225	1.48	1.30
● 4-1734592-6	46	28.43	18R4226	1.50	1.33
● 4-1734592-7	47	28.93	18R4227	1.53	1.35
● 4-1734592-8	48	29.43	18R4228	1.56	1.37
● 4-1734592-9	49	29.93	18R4229	1.58	1.40
FPC ZIF CONNECTORS - SMT RIGHT-ANGLE, FRONT FLIP LOCK - TOP CONTACTS					
● 1734839-5	5	7.93	17R4945	0.63	0.59
● 1734839-6	6	8.43	68K9761	0.39	0.38
● 1734839-7	7	8.93	17R4946	0.69	0.65
● 1734839-8	8	9.43	17R4947	0.87	0.82
● 1734839-9	9	9.93	17R4948	0.76	0.72
● 1-1734839-0	10	10.43	16R9537	0.58	0.51
● 1-1734839-1	11	10.93	16R9538	1.14	1.00
● 1-1734839-2	12	11.43	16R9539	0.67	0.63
● 1-1734839-3	13	11.93	16R9540	1.16	1.03
● 1-1734839-5	15	12.93	16R9542	1.45	1.28
● 1-1734839-6	16	13.43	16R9543	1.64	1.44
● 1-1734839-7	17	13.93	03P1347	1.58	1.39
● 1-1734839-8	18	14.43	16R9544	1.84	1.68
● 1-1734839-9	19	14.93	16R9545	1.85	1.68
● 2-1734839-0	20	15.43	17R7055	1.66	1.50
● 2-1734839-1	21	15.93	17R7056	1.68	1.53
● 2-1734839-2	22	16.43	17R7057	1.87	1.70
● 2-1734839-3	23	16.93	17R7058	1.82	1.65
● 2-1734839-4	24	17.43	17R7059	2.84	2.73
● 2-1734839-5	25	17.93	17R7060	0.94	0.83
● 2-1734839-6	26	18.43	17R7061	2.04	1.85
● 2-1734839-7	27	18.93	17R7062	1.99	1.81
● 2-1734839-8	28	19.43	17R7063	0.59	0.55
● 2-1734839-9	29	19.93	17R7064	2.13	1.94
● 3-1734839-0	30	20.43	18R0284	1.30	1.22
● 3-1734839-1	31	20.93	18R0285	2.21	2.02
● 3-1734839-2	32	21.43	18R0286	2.18	1.98
● 3-1734839-3	33	21.93	18R0287	2.21	2.01
● 3-1734839-4	34	22.43	19P1897	2.33	2.12
● 3-1734839-5	35	22.93	18R0288	2.28	2.08
● 3-1734839-7	37	23.93	18R0290	2.33	2.12
● 3-1734839-8	38	24.43	18R0291	2.37	2.16
● 3-1734839-9	39	24.93	18R0292	2.42	2.20
● 4-1734839-0	40	25.43	50M1535	1.02	0.90
● 4-1734839-1	41	25.93	18R4231	2.48	2.25
● 4-1734839-2	42	26.43	18R4232	2.52	2.29
● 4-1734839-3	43	26.93	18R4233	2.54	2.31
● 4-1734839-4	44	27.43	18R4234	2.55	2.32
● 4-1734839-5	45	27.93	18R4235	2.58	2.35
● 4-1734839-6	46	28.43	18R4236	2.61	2.37
● 4-1734839-7	47	28.93	18R4237	2.63	2.39
● 4-1734839-8	48	29.43	18R4238	2.66	2.42
● 4-1734839-9	49	29.93	18R4239	2.68	2.44
● 5-1734839-0	50	30.43	18R9002	2.70	2.45
FPC ZIF CONNECTORS - SMT VERTICAL, PUSH/PULL LOCK					
● 1734742-6	6	8.70	85R6218	1.02	0.90
● 1734742-7	7	9.20	85R6219	1.07	0.95
● 1734742-8	8	9.70	73R7507	0.74	0.69
● 1-1734742-0	10	10.70	73R7494	1.19	1.05
● 1-1734742-2	12	11.70	73R7495	1.24	1.10

➤CONTINUED➤

0.5MM PITCH FPC CONNECTORS (CONT.)

FPC ZIF CONNECTORS - SMT VERTICAL, PUSH/PULL LOCK

Mfg. Part No.	Positions	Width (mm)	Stock No.	Price Each 1-9	Price Each 10-24
1-1734742-4	14	12.70	73R7496	1.58	1.44
1-1734742-6	16	13.70	21R1777	1.82	1.66
1-1734742-8	18	14.70	21R1778	2.15	1.96
2-1734742-0	20	15.70	21R8513	2.48	2.26
2-1734742-4	24	17.70	21R8514	2.91	2.80
2-1734742-8	28	19.70	73R7510	2.55	2.40
3-1734742-0	30	20.70	22R0950	3.83	3.68
3-1734742-6	36	23.70	73R7514	4.84	4.65
4-1734742-0	40	25.70	22R3051	2.08	1.96

(177025)

1.00MM PITCH FPC CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Housing material: **84952, 84953**: Glass reinforced polyester (LCP), UL94V-0
- Housing material: **1734248**: Thermoplastic, UL94V-0
- Housing material: **84981, 84982**: Glass filled high temperature nylon
- Housing material: **84983, 84984**: Glass filled PBT
- Actuator: 84952, 84953: Glass reinforced nylon
- Actuator: **1734248**: PPS, UL94V-0
- Contacts: **1734248**: Gold plated phosphor bronze
- Contacts: **84952, 84953, 84981, 84982, 84983, 84984**: Tin plated phosphor bronze

FPC ZIF CONNECTORS - SMT RIGHT-ANGLE - FRONT FLIP LOCK - BOTTOM CONTACTS

Mfg. Part No.	Positions	Width (mm)	Stock No.	Price Each 1-9	Price Each 10-24
84952-4	4	11.92	14P9461	0.71	0.65
84952-7	7	14.92	19R9648	1.56	1.42
84952-8	8	15.92	19R9649	0.82	0.74
84952-9	9	16.92	14R7833	1.21	1.07
1-84952-0	10	17.92	17R2306	0.94	0.83
1-84952-1	11	18.92	17R2307	1.49	1.35
1-84952-2	12	19.92	17R2308	1.52	1.38
1-84952-4	14	21.92	17R2310	1.04	0.92
1-84952-5	15	22.92	17R2311	2.32	2.11
1-84952-7	17	24.92	17R2313	2.47	2.25
1-84952-8	18	25.92	17R2314	1.16	1.02
1-84952-9	19	26.92	17R2315	2.56	2.33
2-84952-0	20	27.92	09J5769	0.88	0.83
2-84952-2	22	29.92	17R8715	2.84	2.58
2-84952-3	23	30.92	17R8716	2.92	2.66
2-84952-4	24	31.92	17R8717	1.39	1.23
2-84952-5	25	32.92	17R8718	2.85	2.74
2-84952-6	26	33.92	17R8719	1.76	1.60
2-84952-7	27	34.92	17R8720	2.95	2.83
2-84952-8	28	35.92	17R8721	2.16	2.03
3-84952-0	30	37.92	86H9186	1.61	1.47

FPC ZIF CONNECTORS - SMT RIGHT-ANGLE - FRONT FLIP LOCK - TOP CONTACTS

Mfg. Part No.	Positions	Width (mm)	Stock No.	Price Each 1-9	Price Each 10-24
84953-4	4	11.92	39M5447	0.82	0.73
84953-5	5	12.92	19R9650	0.59	0.56
84953-6	6	13.92	19R9651	0.99	0.87
84953-7	7	14.92	39P8308	1.15	1.02
84953-8	8	15.92	19R9652	0.44	0.41
84953-9	9	16.92	03P1231	1.55	1.36
1-84953-0	10	17.92	17R2316	1.07	0.97
1-84953-1	11	18.92	64K0148	1.49	1.35
1-84953-2	12	19.92	63M0813	1.00	0.88
1-84953-3	13	20.92	17R2317	0.99	0.88
1-84953-5	15	22.92	17R2319	1.13	1.00
1-84953-7	17	24.92	17R2321	2.47	2.25
1-84953-8	18	25.92	17R2322	2.11	1.92
1-84953-9	19	26.92	17R2323	2.56	2.33
2-84953-0	20	27.92	17R8723	1.04	0.98
2-84953-1	21	28.92	17R8724	1.30	1.15
2-84953-2	22	29.92	17R8725	1.51	1.33
2-84953-4	24	31.92	30K5817	1.56	1.42
2-84953-5	25	32.92	17R8727	2.45	2.23
2-84953-6	26	33.92	87H6532	2.41	2.20
2-84953-7	27	34.92	17R8728	2.95	2.83
2-84953-8	28	35.92	17R8729	2.99	2.87

➤ CONTINUED ➤

1.00MM PITCH FPC CONNECTORS (CONT.)

FPC ZIF CONNECTORS - SMT RIGHT-ANGLE - FRONT FLIP LOCK - TOP CONTACTS

Mfg. Part No.	Positions	Width (mm)	Stock No.	Price Each 1-9	Price Each 10-24
2-84953-9	29	36.92	17R8730	3.05	2.93
3-84953-0	30	37.92	18R3063	1.00	0.88

FPC ZIF CONNECTORS - SMT VERTICAL PUSH/PULL LOCK

Mfg. Part No.	Positions	Width (mm)	Stock No.	Price Each 1-9	Price Each 10-24
1734248-3	3	8.60	85R6215	1.26	1.11
1734248-4	4	9.60	21R5399	0.95	0.88
1734248-5	5	10.60	15P0207	1.46	1.29
1734248-6	6	11.60	21R5400	1.28	1.13
1734248-7	7	12.60	85R6216	1.55	1.36
1734248-8	8	13.60	21R5401	0.82	0.77
1734248-9	9	14.60	85R6217	1.26	1.11
1-1734248-0	10	15.60	21R1725	1.60	1.45
1-1734248-1	11	16.60	21R1726	2.42	2.20
1-1734248-2	12	17.60	21R1727	1.94	1.76
1-1734248-3	13	18.60	85R6211	1.64	1.49
1-1734248-4	14	19.60	21R1728	1.76	1.66
1-1734248-5	15	20.60	21R1729	2.14	1.95
1-1734248-6	16	21.60	21R1730	1.97	1.80
1-1734248-7	17	22.60	85R6212	2.00	1.82
1-1734248-8	18	23.60	21R1731	2.24	2.04
1-1734248-9	19	24.60	85R6213	2.07	1.88
2-1734248-0	20	25.60	21R8489	3.02	2.74
2-1734248-1	21	26.60	85R6220	2.17	1.97
2-1734248-2	22	27.60	21R8490	2.80	2.55
2-1734248-4	24	29.60	21R8491	3.03	2.91
2-1734248-5	25	30.60	85R6222	2.80	2.54
2-1734248-6	26	31.60	21R8492	2.86	2.75
2-1734248-7	27	32.60	19P7254	2.90	2.79
2-1734248-8	28	33.60	73R7509	2.61	2.38
2-1734248-9	29	34.60	85R6223	2.66	2.42
3-1734248-0	30	35.60	22R0925	1.83	1.67
4-1734248-0	40	45.60	22R3032	5.91	5.67

FPC/FFC NON-ZIF CONNECTORS - SMT RIGHT-ANGLE - TOP CONTACTS

Mfg. Part No.	Positions	Width (mm)	Stock No.	Price Each 1-9	Price Each 10-24
84981-4	4	7.00	85R6235	0.51	0.49
84981-5	5	8.00	19R9653	0.46	0.44
84981-6	6	9.00	85R6236	0.49	0.46
84981-8	8	11.00	19R9655	0.53	0.50
1-84981-0	10	13.00	17R2324	0.62	0.58
1-84981-1	11	14.00	85R6214	0.57	0.54
1-84981-3	13	16.00	17R2326	0.57	0.54
1-84981-4	14	17.00	17R2327	0.59	0.55
1-84981-5	15	18.00	80K9885	0.60	0.57
1-84981-6	16	19.00	73R7505	0.58	0.54
1-84981-8	18	21.00	17R2328	0.46	0.43
1-84981-9	19	22.00	17R2329	0.75	0.71
2-84981-0	20	23.00	17R8731	0.74	0.70
2-84981-1	21	24.00	85R6224	0.81	0.76
3-84981-0	30	33.00	18R3064	0.80	0.73

FPC/FFC NON-ZIF CONNECTORS - SMT VERTICAL

Mfg. Part No.	Positions	Width (mm)	Stock No.	Price Each 1-9	Price Each 10-24
84982-4	4	6.00	19R9656	0.40	0.37
84982-5	5	7.00	19R9657	0.47	0.45
84982-7	7	9.00	19R9658	0.47	0.45
84982-8	8	10.00	73R7515	0.48	0.45
84982-9	9	11.00	19R9659	0.50	0.47
1-84982-0	10	12.00	17R2330	0.68	0.64
1-84982-5	15	17.00	82K5965	0.54	0.51
1-84982-6	16	18.00	73R7506	0.57	0.54
1-84982-8	18	20.00	17R2334	0.59	0.56
2-84982-0	20	22.00	17R8734	0.70	0.66
2-84982-1	21	23.00	85R6226	1.05	0.93
2-84982-2	22	24.00	85R6227	1.08	0.96
2-84982-3	23	25.00	17R8735	0.70	0.62
2-84982-6	26	28.00	85R6228	0.79	0.75
2-84982-8	28	30.00	73R7511	0.77	0.68
3-84982-0	30	32.00	18R3065	0.81	0.78

FPC/FFC NON-ZIF CONNECTOR - RIGHT-ANGLE THRU-HOLE

Mfg. Part No.	Positions	Width (mm)	Stock No.	Price Each 1-9	Price Each 10-24
2-84983-0	20	22.00	17R8737	1.41	1.28

FPC/FFC NON-ZIF CONNECTORS - VERTICAL THRU- HOLE

Mfg. Part No.	Positions	Width (mm)	Stock No.	Price Each 1-9	Price Each 10-24
84984-4	4	6.00	19R9666	0.72	0.68
84984-6	6	8.00	19R9667	0.76	0.72
84984-8	8	10.00	19R9669	0.80	0.71
1-84984-0	10	12.00	17R2346	0.88	0.78
1-84984-2	12	14.00	17R2348	0.90	0.80
1-84984-3	13	15.00	17R2349	0.86	0.76

➤ CONTINUED ➤

FLAT/FLEX RIBBON CABLE CONNECTORS

1.00MM PITCH FPC CONNECTORS (CONT.)

FPC/FFC NON-ZIF CONNECTORS - VERTICAL THRU- HOLE

Mfg. Part No.	Positions	Width (mm)	Stock No.	Price Each 1-9	Price Each 10-24
● 1-84984-4	14	16.00	17R2350	0.88	0.78
● 1-84984-6	16	18.00	17R2352	0.95	0.84
● 1-84984-9	19	21.00	17R2355	1.08	0.95
● 2-84984-0	20	22.00	17R8747	1.12	0.99
● 2-84984-4	24	26.00	17R8751	1.26	1.12
● 2-84984-5	25	27.00	32M7310	1.30	1.14
● 2-84984-6	26	28.00	17R8752	1.32	1.17
● 3-84984-0	30	32.00	18R3067	1.39	1.27

(177026)

AMP FFC/FPC CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- 2.54mm (0.100) centerline
- Housing material: thermoplastic
- Housing flammability rating: UL 94V-0

FFC HOUSING RECEPTACLES

Mfg. Part No.	Positions	Width (inches)	Stock No.	Price Each 1-9	Price Each 10-49
● 487378-1	2	0.194	33B9079	1.06	0.94
● 487378-3	4	0.394	66F3233	0.73	0.66
● 487378-5	6	0.594	66F1647	0.85	0.76
● 487378-6	7	0.694	23C6964	1.37	1.21
● 487378-7	8	0.794	66F1629	1.23	1.09
● 487378-8	9	0.894	52F5188	0.71	0.66
● 1-487378-5	16	1.594	66F3243	1.40	1.28
FFC HOUSING DUAL ROW RECEPTACLE					
● 1-487223-0	40	2.250	10H0074	5.53	5.05
FFC HOUSING RECEPTACLE WITH LATCH					
● 487526-1	2	0.194	92B6562	0.77	0.70
● 487526-2	3	0.294	99B2088	0.89	0.81
● 487526-3	4	0.394	13H5983	1.17	1.06
● 487526-4	5	0.494	66F3001	1.15	1.12
● 487526-5	6	0.594	97C5084	0.75	0.68
● 487526-7	8	0.794	52F5495	1.03	0.91
● 487526-8	9	0.894	34C6244	0.89	0.78
● 487526-9	10	0.994	66F3107	0.88	0.78
● 1-487526-1	12	1.194	10H0085	1.04	0.92
● 1-487526-9	20	1.994	10H0092	1.81	1.65
FFC HOUSING RECEPTACLE WITH DETENT					
● 88859-9	3	0.320	34C8231	2.46	2.24
● 1-88859-0	4	0.420	66F1638	1.97	1.80
● 88859-1	6	0.620	92C3665	2.05	1.86
FFC PIN HOUSINGS WITH DETENT SLOTS					
● 485893-2	4	0.650	98F8267	2.37	2.15
● 485893-4	6	0.850	95C0681	2.67	2.45
TRIO-MATE CABLE ENTRY CONNECTOR - RIGHT ANGLE					
● 5-520314-4	4	0.593	18R9310	0.66	0.61
● 5-520314-7	7	0.893	18R9311	0.64	0.62
TRIO-MATE CABLE ENTRY CONNECTOR - VERTICAL					
● 5-520315-7	7	0.893	14N5324	0.49	0.45
● 5-520315-8	8	0.993	52K3727	1.02	0.93
● 6-520315-0	10	1.193	35K6006	1.50	1.29
● 6-520315-4	14	1.593	19R5125	0.87	0.77
● 6-520315-6	16	1.793	05R5459	2.13	1.93

FFC CONTACTS

Mfg. Part No.	Pitch Spacing (mm)	Contact Gender	Contact Plating	Stock No.	Price Each 1-99	Price Each 100-499
● 2-487406-2	2.54	Socket	15µ" Gold	42K6809	0.23	0.21
● 2-487406-3	2.54	Socket	30µ" Gold	42K6810	0.51	0.43
● 2-487406-4	2.54	Socket	Gold Flash	42K6811	0.22	0.21
● 86571-2	2.54	Socket	15µ" Gold	66F3224	2.51	2.41
● 1-487547-1	1.27	Socket	30µ" Gold	42K6516	0.19	0.19
● 1-88997-2	2.54	Pin	15µ" Gold	14M7519	0.11	0.07
● 1-86561-0	2.54	Pin	Tin	42K6581	0.56	0.52
● 86561-4	2.54	Pin	30µ" Gold	34B2416	3.55	3.42

➤ CONTINUED ➤

AMP FFC/FPC CONNECTORS (CONT.)

Mfg. Part No.	Pitch Spacing (mm)	Contact Gender	Contact Plating	Stock No.	Price Each 1-99	Price Each 100-499
● 86561-6	2.54	Pin	15µ" Gold	34B2417	0.49	0.47
● 487923-4	1.27	Pin	Tin	42K6929	0.13	0.11

(93040)

0.50 mm PITCH FPC/ FFC CONNECTORS

RoHS Compliant Available

AVX INTERCONNECT
A KYOCERA GROUP COMPANY

Fig. 1

Fig. 2

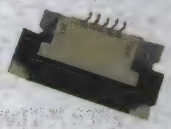


Fig. 3

- Contact Material: Phosphor bronze
- Insulator Material: Heat resistance plastic
- Operating Temperature Range: -40 to +85°C for Series 6212, 6214, 6222, 6223, 6240, 6244, 6269, 6274; -20 to +85°C for Series 6238, 6239, 6298

Series 6212 is a top contact low profile ZIF with a total height of 2.0mm. Series 6212, 6214 and 6274 offer a Slide locking system. Total height is 4.1mm for Series 6214 and 4.4mm for Series 6274. Series 6222 and 6223 are low profile LIF connectors. Series 6222 is bottom contact and Series 6223 is top contact, both have a total height of 1.95mm. Series 6238 offers a Flip-top style locking which opens to a maximum of 135 degrees with a height of 1.1mm. Series 6238 also offers a positive "click" when operating the actuator and is equipped with strain relief metal and FPC guide function to stabilize the position of the FPC. Series 6239 and 6269 are 1.5mm in height and available in 5-30 positions. Series 6240 are 2.0mm in height and available in 6-54 positions. Series 6298 is ultra low profile and offers bottom contacts with a Flip-top style lock and a notch to ensure correct locating into the connector. Series 6298 is specially designed for LCD (Liquid Crystal Display) modules with back-light requirements.

6212 SERIES - ZIF RIGHT ANGLE SMT SLIDE-LOCK TYPE, (FIG. 1)

Mfg. Part No.	Circuits	Contact Plating	Contact Location	Stock No.	Price Each 1-9
● 086212030340800+	30	Tin	Top	96M9243	2.02
6222/6223 SERIES - LIF RIGHT ANGLE SMT, (FIG. 2)					
● 086223010101800+	10	Tin	Top	96M9249	1.67
● 086223030101800+	30	Tin	Top	96M9253	1.08
6239/6269 SERIES - ZIF RIGHT ANGLE SMT FLIP-TOP TYPE, (FIG. 3)					
● 046239010001800+	10	Tin	Bottom	96M9231	2.19
● 046239020001800+	20	Tin	Bottom	96M9233	2.09
● 046239030001800+	30	Tin	Bottom	96M9235	2.61

(105956)

1.00mm (0.039") PITCH FFC-FPC CONNECTORS

RoHS Compliant Available

FCI

FCI's Highly reliable Gas Tight High pressure (GTH) contact with a wide variation of Zero Insertion Force (ZIF) options for FFC & FPC connector solutions. The flipping actuator 0.5mm pitch type faciliitates the secure cable assembly with click actuation for automotive multimedia and I&I applications.

HFW-S SERIES SMT VERTICAL CONNECTORS

Mfg. Part No.	Circuits	Contact Plating	Stock No.	Price Each 1-9	Price Each 10-24
● HFW5S-2STE9LF	5	Tin	82R5815	0.59	0.54
● HFW8S-2STE9LF	8	Tin	82R5821	0.66	0.59
● HFW14S-2STE9LF	14	Tin	82R5797	0.54	0.49
● HFW18S-2STE9LF	18	Tin	82R5805	0.65	0.59
● HFW20S-2STE9LF	20	Tin	82R5807	1.05	0.92
● HFW27S-2STE9LF	27	Tin	82R5811	0.78	0.74
HFW-R SERIES SMT RIGHT ANGLE CONNECTORS - DOWNSIDE CONTACT					
● HFW4R-1STE1LF	4	Tin	62K4617	0.57	0.54
● HFW8R-1STE9LF	8	Tin	82R5819	0.71	0.64
● HFW12R-1STE1LF	12	Tin	94M7473	0.39	0.35
● HFW16R-1STE1LF	16	Tin	62K4611	0.63	0.57
● HFW20R-1STE9LF	20	Tin	82R5806	0.49	0.44
HFW-R SERIES SMT RIGHT ANGLE CONNECTORS - UPSIDE CONTACT					
● HFW4R-2STE1LF	4	Tin	62K4618	0.59	0.53
● HFW6R-2STE1LF	6	Tin	60M2811	0.30	0.26
● HFW8R-2STE9LF	8	Tin	82R5820	0.69	0.62
● HFW14R-2STE9LF	14	Tin	82R5796	0.72	0.65
SFW-S SERIES ZIF SMT VERTICAL CONNECTORS					
● SFW4S-2STE1LF	4	Tin	06M0311	0.72	0.65
● SFW5S-2STE1LF	5	Tin	62K5640	0.69	0.62
● SFW8S-2STE1LF	8	Tin	62K5654	0.88	0.83
● SFW12S-2STE1LF	12	Tin	94M9100	0.70	0.63
● SFW16S-2STE1LF	16	Tin	62K5608	0.95	0.83
● SFW20S-2STE9LF	20	Tin	82R6796	0.95	0.89
● SFW24S-2STE9LF	24	Tin	82R6799	1.30	1.22
● SFW28S-2STE9LF	28	Tin	82R6804	1.40	1.31
● SFW30S-2STE1LF	30	Tin	62K5633	0.97	0.92

➤ CONTINUED ➤

1.00mm (0.039″) PITCH FFC-FPC CONNECTORS (CONT.)

SFW-S SERIES ZIF SMT VERTICAL CONNECTORS - WITH MOUNTING PLATE

Mfg. Part No.	Circuits	Contact Plating	Stock No.	Price Each 1-9	Price Each 10-24
SFW4S-2STME1LF	4	Tin	06M0312	0.84	0.79
SFW10S-2STME1LF	10	Tin	62K5598	0.75	0.71
SFW12S-2STME1LF	12	Tin	68K0395	0.72	0.65
SFW20S-2STME1LF	20	Tin	06M0292	1.18	1.04
SFW-R SERIES ZIF SMT RIGHT ANGLE CONNECTORS - DOWNSIDE CONTACT					
SFW4R-1STE1LF	4	Tin	62K5635	0.87	0.82
SFW5R-1STE1LF	5	Tin	62K5638	0.78	0.71
SFW6R-1STE1LF	6	Tin	06M0314	0.93	0.81
SFW7R-1STE9LF	7	Tin	82R6823	0.77	0.73
SFW10R-1STE1LF	10	Tin	62K5594	0.79	0.74
SFW12R-1STE1LF	12	Tin	62K5599	0.74	0.67
SFW16R-1STE1LF	16	Tin	62K5606	0.96	0.90
SFW18R-1STE1LF	18	Tin	62K5610	0.72	0.68
SFW20R-1STE1LF	20	Tin	62K5613	1.49	1.31
SFW24R-1STE9LF	24	Tin	82R6797	0.94	0.88
SFW27R-1STE9LF	27	Tin	82R6801	0.93	0.88
SFW28R-1STE9LF	28	Tin	82R6802	1.02	0.96
SFW-R SERIES ZIF SMT RIGHT ANGLE CONNECTORS - UPSIDE CONTACT					
SFW4R-2STE1LF	4	Tin	62K5636	0.74	0.67
SFW5R-2STE1LF	5	Tin	62K5639	0.73	0.66
SFW6R-2STE9LF	6	Tin	82R6821	0.88	0.82
SFW7R-2STE9LF	7	Tin	82R6825	0.83	0.78
SFW8R-2STE1LF	8	Tin	62K5649	0.63	0.57
SFW10R-2STE1LF	10	Tin	06M0273	0.76	0.71
SFW12R-2STE1LF	12	Tin	43K4079	1.01	0.88
SFW16R-2STE1LF	16	Tin	62K5607	0.68	0.64
SFW18R-2STE1LF	18	Tin	62K5611	0.94	0.89
SFW24R-2STE9LF	24	Tin	82R6798	1.33	1.25
SFW28R-2STE9LF	28	Tin	82R6803	1.04	0.98
SFW30R-2STE1LF	30	Tin	57K7662	1.32	1.24

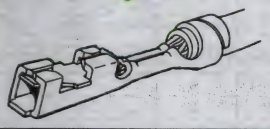
(194804)

MINI-PV™ 2.54mm (0.100″) CRIMP-TO-WIRE CONTACTS

RoHS Compliant Available

FCI

For use with Mini-Latch housings, *order separately on page 813*. Mate with 0.025″ square pins. Available in tin/lead or a variety of gold platings. Current rating: 3A continuous. UL recognized, CSA certified.



Mfg. Part No.	Spring Force	AWG	Plating	Stock No.	Price Each 1-9
47747-000LF	Standard	26AWG to 22AWG	100u″ Tin	84K5741	0.43
48251-000LF		26AWG to 22AWG	15u″ Gold	72K2286	0.33
48235-000LF		26AWG to 22AWG	30u″ Gold	84K5749	0.37
48238-000LF		32AWG to 28AWG	30u″ Gold	72K2285	0.34
47743-000LF		26AWG to 22AWG	40u″ Gold	72K2273	0.67
47715-000LF	High	26AWG to 22AWG	100u″ Tin	62K6036	0.35
48254-000LF		26AWG to 22AWG	15u″ Gold	84K5757	0.33
48234-000LF		26AWG to 22AWG	30u″ Gold	84K5748	0.63
47750-000LF	Ultra-High	26AWG to 22AWG	100u″ Tin	53K1418	0.27
48257-000LF		26AWG to 22AWG	15u″ Gold	68K1816	0.32
48236-000LF		26AWG to 22AWG	30u″ Gold	72K2284	0.34
48239-000LF		32AWG to 28AWG	30u″ Gold	84K5751	0.31
47745-000LF		26AWG to 22AWG	40u″ Gold	72K2274	0.67

(8372)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

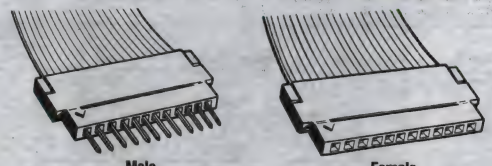
newark.com/custom-panel-meters

(212570)

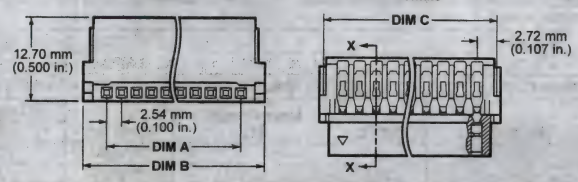
CLINCHER™ FLAT FLEX MALE AND FEMALE CONNECTORS

RoHS Compliant Available

FCI



Male Female



For use with thin film conductive ink circuits whose total combined thickness of conductor and insulation does not exceed 0.006″ (0.152). Simultaneously terminate flat conductor, flat cable or flexible circuitry without cable stripping. Mate with 0.025″ (0.635) square or round pins on 0.100″ (2.54) centers. Dual-metal PV™ contacts provide excellent electrical and mechanical performance. Clinching portion of contact forms gastight crimp to prevent contamination. Cupro-nickel contacts plated with 100μ″ tin/lead finish. Available with 30μ″ gold plating; *go online or call*. Current rating: 2A. Resistance: 15mΩ maximum. Maximum insertion force: 3N per contact. Minimum withdrawal force: 0.30N per contact. Blue polypropylene body, rated UL94V-0. Insulation resistance: 5x10⁴MΩ minimum. Temperature range: −65°C to +105°C. Withstanding voltage: >500Vrms at sea level. UL recognized, CSA certified. **NOTE:** To order parts for conductive ink circuits less than 0.00″ (0.15) total thickness, change first digit after dash in mfg. part no. from **"0"** to **"1"**; for example: **65801-039** would be changed to **65801-139**. Male Clincher™ connectors are available with up to 32 positions; *go online or call*.

FEMALE CLINCHER™ CONNECTORS - TIN PLATED

Mfg. Part No.	Positions	Dimensions A	Dimensions B	Dimensions C	Stock No.	Price Each 1-9
65801-003LF	3	0.200″	0.490″	0.415″	43K4468	0.96
65801-004LF	4	0.300″	0.590″	0.515″	53K1446	0.99
65801-006LF	6	0.500″	0.790″	0.715″	53K1448	1.19
65801-008LF	8	0.700″	0.990″	0.915″	53K1450	1.27
65801-009LF	9	0.800″	1.090″	1.015″	53K1451	1.41
65801-010LF	10	0.900″	1.190″	1.115″	53K1452	1.65
65801-011LF	11	1.000″	1.290″	1.215″	53K1453	1.73
65801-012LF	12	1.100″	1.390″	1.315″	53K1454	1.77
65801-014LF	14	1.300″	1.590″	1.515″	53K1455	2.10
65801-016LF	16	1.500″	1.790″	1.715″	93K4813	2.68
65801-020LF	20	1.900″	2.190″	2.115″	93K4816	3.09
FEMALE CLINCHER™ CONNECTORS - 30u″ GOLD PLATED						
65801-034LF	5	0.400″	0.690″	0.615″	53K1459	1.81
65801-035LF	6	0.500″	0.790″	0.715″	53K1460	2.10
65801-037LF	8	0.700″	0.990″	0.915″	75K3356	2.63
65801-039LF	10	0.900″	1.190″	1.115″	75K3358	3.22
MALE CLINCHER™ CONNECTORS						
66226-005LF	5	0.400″	0.690″	0.615″	75K3537	1.51
66226-006LF	6	0.500″	0.790″	0.715″	65K9470	1.81
66226-009LF	9	0.800″	1.090″	1.015″	75K3539	1.96
66226-010LF	10	0.900″	1.190″	1.115″	65K9472	2.40
66226-012LF	12	1.100″	1.390″	1.315″	65K9474	2.51
66226-013LF	13	1.200″	1.490″	1.415″	75K3540	2.86
66226-014LF	14	1.300″	1.590″	1.515″	75K3541	2.90

(8371)

0.30mm (0.012″) PITCH FFC/FPC CONNECTORS

RoHS Compliant Available

molex

- Current Rating: 0.2A
- Voltage Rating: 50V
- Housing: LP, UL94V-0 rated
- Contacts: Gold plated phosphor bronze
- Operating Temperature Range: -20°C to 85°C

500797 SERIES RIGHT ANGLE, SURFACE MOUNT, EASY-ON BOTTOM CONTACT STYLE RECEPTACLES - 1.05mm HEIGHT

Mfg. Part No.	Circuits	Contact Plating	Stock No.	Price Each 1-9
500797-2594	25	Gold	87P1115	1.95
501628 SERIES RIGHT ANGLE, SURFACE MOUNT, EASY-ON BOTTOM CONTACT STYLE RECEPTACLES - 0.90mm HEIGHT				
501628-2191	21	Gold	87P1119	3.11
501628-3591	35	Gold	87P1120	5.10
501628-4591	45	Gold	87P1121	5.60
502250 SERIES RIGHT ANGLE, SURFACE MOUNT, EASY-ON BACKFLIP DUAL CONTACT STYLE RECEPTACLES - 0.90mm HEIGHT				
502250-2191	21	Gold	87P1129	1.80

➤CONTINUED➤

FLAT/FLEX RIBBON CABLE CONNECTORS

0.30mm (0.012″) PITCH FFC/FPC CONNECTORS (CONT.)

502598 SERIES RIGHT ANGLE, SURFACE MOUNT, EASY-ON BACKFLIP DUAL CONTACT STYLE RECEPTACLES - 1.15mm HEIGHT

Mfg. Part No.	Circuits	Contact Plating	Stock No.	Price Each 1-9
● 502598-2391	23	Gold	59T9929	2.17
● 502598-2591	25	Gold	59T9930	2.36
● 502598-2791	27	Gold	13T9129	2.55
● 502598-3391	33	Gold	59T9931	2.89

54393 SERIES RIGHT ANGLE, SURFACE MOUNT, ZIF, BOTTOM CONTACT STYLE RECEPTACLES - 1.95mm HEIGHT

● 54393-2181	21	Gold	87P1132	2.83
● 54393-3981	39	Gold	63M2909	3.19

0.30mm PITCH PREMO-FLEX™ ETCHED POLYMIDE JUMPERS - SAME SIDE CONTACTS (TYPE A)

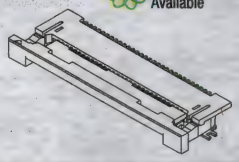
Mfg. Part No.	Circuits	Jumper Length (in.)	Stock No.	Price Each 1-9
15015-0423	23	4	77T2661	2.57
● 15015-0425	25	4	77T2663	2.67
15015-0427	27	4	77T2664	3.08
15015-0433	33	4	77T2665	3.00

(146389)

0.50mm (0.020″) PITCH FFC/FPC CONNECTORS

RoHS Compliant Available

molex



Voltage: 50 V. Current: 0.5 A, Series 51372 0.4A. Contact resistance: Series 51296, 51374, 51441, 54548, 54550: 40 mΩ max; Series 52435, 52437, 52559, 52689, 52745, 52746, 52892, 52893, 54104, 54132: 20 mΩ max. Dielectric withstanding voltage: 250 VAC/1 min. Insulation resistance: 50 MΩ min. Housing: Series 51296, 51374, 51441, 54548, 54550: Glass-filled LCP Liquid Crystal Polymer; Series 52435, 52437, 52559, 52689, 52745, 52746, 52892, 52893, 54104, 54132 4/6 nylon, UL 94V-0 rated. Contacts: Phosphor bronze. Operating temperature: -20°C to +85°C.

54104 SERIES RIGHT ANGLE, SURFACE MOUNT, ZIF, TOP CONTACT STYLE RECEPTACLES

Mfg. Part No.	Circuits	Contact Plating	Stock No.	Price Each 1-9	10-99	100-499
54104 SERIES RIGHT ANGLE, SURFACE MOUNT, ZIF, TOP CONTACT STYLE RECEPTACLES						
● 54104-4096	40	Tin	03M3088	2.85	2.23	1.97
● 54104-5096	50	Tin	79J5734	2.79	1.92	1.73
54132 SERIES RIGHT ANGLE, SURFACE MOUNT, ZIF, BOTTOM CONTACT STYLE RECEPTACLES (FIG. 2)						
● 54132-3097	30	Tin	59J0654	2.01	1.83	1.66
● 54132-4097	40	Tin	07P8585	2.99	2.43	2.33
● 54132-5097	50	Tin	56R1938	3.63	3.04	2.54
54548 SERIES RIGHT ANGLE, SURFACE MOUNT, ZIF, BOTTOM CONTACT STYLE RECEPTACLES						
● 54548-1270	12	Tin	59J0725	2.07	1.62	1.52
501461 SERIES RIGHT ANGLE, SURFACE MOUNT, BOTTOM CONTACT STYLE RECEPTACLES						
● 501461-0401	4	Gold	87P1117	0.98	0.86	0.67
● 501461-0601	6	Gold	87P1118	1.19	0.95	0.78
502790 SERIES RIGHT ANGLE, SURFACE MOUNT, ZIF, DOUBLE BOTTOM CONTACT STYLE RECEPTACLES						
● 502790-3091	30	Gold	58R1262	2.57	2.16	1.79
● 502790-4091	40	Gold	58R1263	2.86	2.40	2.05
● 502790-6491	64	Gold	58R1266	3.91	3.28	2.73
● 502790-8091	80	Gold	58R1267	5.26	4.44	3.68
503480 SERIES BACKFLIP RIGHT ANGLE, SURFACE MOUNT, DUAL CONTACT STYLE RECEPTACLES						
● 503480-0800	8	Gold	76R6890	0.97	0.77	0.71
● 503480-1200	12	Gold	76R6891	1.36	1.07	0.96
● 503480-1600	16	Gold	76R6892	0.66	0.65	0.63
● 503480-2000	20	Gold	76R6893	1.89	1.53	1.40

(89597)

NEW PRODUCTS ADDED DAILY

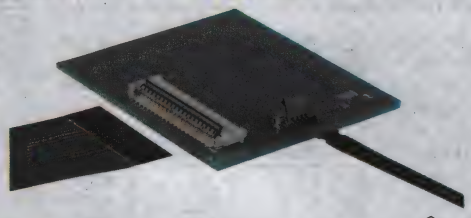
See the newest products, technologies and suppliers on our website.

(196560)

1.00mm (0.039″) PITCH FFC/FPC CONNECTORS

RoHS Compliant Available

molex



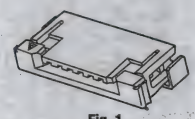


Fig. 1

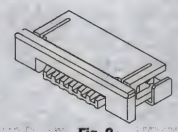


Fig. 2

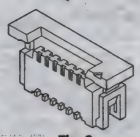


Fig. 3

Voltage and current ratings: Series 52030, 52043, 52089, 52271, 52793, 52806, 52807, 52808, 52852: 50V 0.5A; Series 52103, 52207, 52610, 71226 125 V 1.0 A. Contact resistance: Series 52030, 52043, 52089, 52103, 52270, 52271, 52610, 71226: 20 mΩ max; Series 52793, 52806, 52807, 52808, 52852: 30 mΩ max. Dielectric withstanding voltage: 500 VAC/1 min. Insulation resistance: 100 MΩ min. Housing: Series 52030, 52043, 52089: 9/6 nylon, UL 94V-0; Series 52103, 52207, 52271, 52610: 9/6 nylon, UL 94V-0; Series 52793, 52806, 52807, 52808, 52852: PPS, UL 94V-0; Series 71226 blak nylon, UL 94V-0. Contacts: Phosphor bronze. Operating Temperature: -20°C to +85°C.

52030 SERIES THROUGH HOLE, VERTICAL, ZIF RECEPTACLES

Mfg. Part No.	Circuits	Contact Plating	Stock No.	Price Each 1-9	10-99	100-249
● 52030-3029	30	Tin	58J9369	3.24	2.37	2.18
52043 SERIES THRU-HOLE, RIGHT-ANGLE, ZIF, BOTTOM CONTACT STYLE RECEPTACLES						
● 52043-1019	10	Tin	58J9377	1.42	1.15	0.99
52207 SERIES SURFACE MOUNT, RIGHT ANGLE, ZIF, TOP CONTACT STYLE RECEPTACLES (FIG. 1)						
● 52207-0685	6	Tin	58J9501	0.99	0.79	0.75
● 52207-0885	8	Tin	07P8553	1.29	1.02	0.98
● 52207-1485	14	Tin	07P8554	1.99	1.61	1.48
● 52207-1985	19	Tin	34R5827	2.67	2.50	2.32
● 52207-2085	20	Tin	50M9208	2.62	2.13	1.94
● 52207-2285	22	Tin	58J9513	1.53	1.25	1.08
● 52207-2485	24	Tin	25M4383	2.85	2.59	2.42
● 52207-2685	26	Tin	07P8557	2.99	2.44	2.11
● 52207-3085	30	Tin	58J9519	2.94	2.46	2.05
● 52207-2460	24	Gold	34R5829	3.26	3.05	2.82
52271 SERIES SURFACE MOUNT, RIGHT ANGLE, ZIF, BOTTOM CONTACT STYLE RECEPTACLES (FIG. 2)						
● 52271-0479	4	Tin	58J9527	1.19	0.94	0.72
● 52271-0879	8	Tin	16R3574	0.90	0.84	0.80
● 52271-1679	16	Tin	58J9539	1.84	1.50	1.36
● 52271-2079	20	Tin	58J9543	2.08	1.69	1.53
● 52271-0469	4	Gold	07P8558	1.27	1.01	0.84
52610 SERIES SURFACE MOUNT, VERTICAL, ZIF RECEPTACLES (FIG. 3)						
● 52610-0671	6	Tin	07P8569	1.66	1.34	1.21
● 52610-0871	8	Tin	56R1737	2.05	1.67	1.52
● 52610-1271	12	Tin	58J9769	2.82	2.30	2.08
● 52610-1671	16	Tin	58J9775	2.91	2.43	2.29
● 52610-1871	18	Tin	58J9778	3.23	2.71	2.54
● 52610-2071	20	Tin	58J9781	3.41	2.86	2.70
52808 SERIES SURFACE MOUNT, VERTICAL, NON-ZIF RECEPTACLES						
● 52808-0470	4	Tin	56J6495	0.25	0.22	0.19

(8452)

XF3C SERIES 0.25mm PITCH FPC CONNECTORS

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

- Wide molding wall on the rear bottom of the connector allows greater freedom in board design
- Rated current: 0.2A AC/DC
- Rated voltage: 50V AC/DC
- Withstanding voltage: 250 VAC for 1 minute
- Ambient operating temperature: -30°C to 85°C
- Dual contact, single sided FPC with an applicable thickness of 0.12 mm

XF3C SERIES DUAL-CONTACT ROTARY BACKLOCK ZIF CONNECTORS

Mfg. Part No.	Circuits	Stock No.	Price Each 1-24	25-49
● XF3C-1745-41A	17	40T9619	2.35	2.11
● XF3C-3545-41A	35	40T9620	2.65	2.39
● XF3C-5145-41A	51	40T9621	3.43	3.09

(197985)

F4S SERIES 0.4mm NARROW-PITCH, THIN AND SLIM CONNECTOR FOR BOARD-TO-FPC CONNECTION

RoHS Compliant Available

Panasonic

Socket

Header

- Space-saving (3.6 mm widthwise)
- The small size contributes to the miniaturization of target equipment.
- Highly reliable "TOUGH CONTACT" has strong resistance to adverse environments
- The simple lock structure gives tactile feedback that ensures a superior mating/unmating operation feel.
- Gull-wing type terminals The gull-wing type terminals facilitate automatic mounting inspections.
- Rated current 0.3A/contact (Max. 5 A at total contacts)
- Rated voltage 60V AC/DC
- Ambient temperature: –55°C to +85°C
- Insertion and removal life: 50 times

Mfg. Part No.	Positions	Gender	Mated Height (mm)	Stock No.	Price Each 1-24	Price Each 25-49
AXT530224	30	Socket	1.2	46T5821	2.39	2.24
AXT548124	48	Socket	1.0	11N4330	2.34	2.19
AXT560124	60	Socket	1.0	11N4333	2.73	2.55
AXT580124	80	Socket	1.0	41T2222	3.66	3.43
AXT630224	30	Header	1.2	46T5825	2.32	2.17
AXT648124	48	Header	1.0	11N4352	2.34	2.19
AXT660124	60	Header	1.0	11N4355	2.53	2.38
AXT680124	80	Header	1.0	46T5828	3.66	3.43

(196365)

P4 SERIES 0.4mm NARROW-PITCH CONNECTORS FOR BOARD-TO-BOARD AND BOARD-TO-FPC CONNECTION

RoHS Compliant Available

Panasonic

Socket

Header

- Highly reliable "TOUGH CONTACT" has strong resistance to adverse environments
- Contacts are highly resistant to shock caused by dropping
- Guides are provided to take up any position shift and facilitate insertion.
- Superior mated operation with click feel to indicate that mated is complete.
- Rated current 0.3A/contact (Max. 5 A at total contacts)
- Rated voltage 60V AC/DC
- Ambient temperature: –55°C to +85°C
- Insertion and removal life: 50 times

Mfg. Part No.	Positions	Gender	Mated Height (mm)	Stock No.	Price Each 1-24	Price Each 25-49
AXK734127G	34	Socket	1.5	46T5806	3.76	3.52
AXK740127G	40	Socket	1.5	46T5809	4.29	4.02
AXK734227G	34	Socket	2.0	46T5807	3.76	3.52
AXK740227G	40	Socket	2.0	46T5810	4.29	4.02
AXK732327G	32	Socket	2.5	46T5805	3.64	3.42
AXK736327G	36	Socket	2.5	46T5808	3.89	3.64
AXK834125WG	34	Header	1.5	46T5812	3.22	3.02
AXK840125WG	40	Header	1.5	46T5814	3.64	3.42
AXK832125WG	32	Header	2.5	46T5811	3.07	2.87
AXK836225WG	36	Header	3.0	46T5813	3.36	3.14

(196366)

P4S SERIES 0.4mm NARROW-PITCH CONNECTORS FOR BOARD-TO-BOARD AND BOARD-TO-FPC CONNECTION

RoHS Compliant Available

Panasonic

Socket

Header

➤CONTINUED➤

P4S SERIES 0.4mm NARROW-PITCH CONNECTORS FOR BOARD-TO-BOARD AND BOARD-TO-FPC CONNECTION (CONT.)

- Highly reliable "TOUGH CONTACT" has strong resistance to adverse environments
- Automatic mounting inspection is facilitated by the gull-wing terminal shape which makes mounting verification easy.
- Rated current 0.3A/contact (Max. 5 A at total contacts)
- Rated voltage 60V AC/DC
- Ambient temperature: –55°C to +85°C
- Insertion and removal life: 50 times

Mfg. Part No.	Positions	Gender	Mated Height (mm)	Stock No.	Price Each 1-9	Price Each 10-99
AXT310164	10	Socket	1.5	11N4221	1.07	1.00
AXT316164	16	Socket	1.5	11N4223	2.00	1.88
AXT334164	34	Socket	1.5	11N4241	3.84	3.60
AXT410164	10	Header	1.5	46T5818	1.07	1.00
AXT416164	16	Header	1.5	46T5819	2.12	1.99
AXT434164	34	Header	1.5	46T5820	3.84	3.60

(196367)

XF2 SERIES 0.5mm PITCH FPC CONNECTORS

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

- Patented locking mechanism for improved connection stability
- Rated current: 0.5A
- Rated voltage: 50VDC
- Withstanding voltage: 250 SVAC for 1 minute
- Pitch: 0.5mm
- **XF2M series** — 2mm low-profile, rotary-lock construction with double-sided contacts
- **XF2J series** — compact, 4.15mm low-profile with slide-locking, top-entry ZIF connector
- **XF2L series** — 1.2mm low-profile with slide-locking, side-entry ZIF connector
- **XF2U series** — 0.9mm low-profile, rotary-lock construction with dual contact
- **XF2W series** — 1.1mm low-profile, rotary-lock construction with dual contact
- Tape & Reel packaging

Highly reliable, low-profile **XF2 series** flexible printed circuit (FPC) connectors are ideal for a variety of compact surface mount electronics modules, from cell phones and PDAs, to thermostats and lighting controls. Other sizes in stock; *go online or call*.

XF2M SERIES DUAL-CONTACT ROTARY BACKLOCK ZIF CONNECTORS

Mfg. Part No.	Circuits	Stock No.	Price Each 1-24	Price Each 25-49
XF2M-0615-1A	6	62W4212	0.89	0.80
XF2M-0815-1A	8	62W4213	0.95	0.86
XF2M-1015-1A	10	41M0933	1.36	1.22
XF2M-1415-1A	14	73K5690	1.53	1.38
XF2M-1815-1A	18	03M4577	1.51	1.36
XF2M-2015-1A	20	87K2157	1.68	1.51
XF2M-4015-1A	40	41M0934	2.62	2.36
XF2M-4515-1A	45	05M2035	2.67	2.40
XF2M-5015-1A	50	88K0922	2.86	2.58
XF2M-5515-1AH	55	40T9608	2.83	2.55
XF2M-6015-1AH	60	88M4894	3.13	2.82
XF2J SERIES SINGLE SIDE CONTACT SLIDE-LOCK ZIF CONNECTORS - STANDARD TERMINAL ARRANGEMENT				
XF2J-1424-11A	14	93K6848	1.90	1.71
XF2J-1624-11A	16	05M1977	1.96	1.77
XF2J-2024-11A	20	05M1979	2.66	2.39
XF2J-2424-11A	24	87K0738	2.65	2.39
XF2J-2824-11A	28	05M1982	3.18	2.86
XF2J SERIES SINGLE SIDE CONTACT SLIDE-LOCK ZIF CONNECTORS - REVERSE TERMINAL ARRANGEMENT				
XF2J-1024-12A	10	40T9601	1.45	1.30
XF2J-1224-12A	12	05M1976	1.73	1.56
XF2J-1624-12A	16	40T9602	2.08	1.88
XF2J-1824-12A	18	40T9603	2.13	1.92
XF2J-2424-12A	24	40T9606	2.65	2.39
XF2J-4024-12A	40	40T9607	4.41	3.98
XF2L SERIES UPPER-CONTACT SLIDE-LOCK ZIF CONNECTORS				
XF2L-0425-1A	4	05M1983	0.96	0.87
XF2L-3025-1A	30	05M2007	2.07	1.86
XF2L SERIES LOWER-CONTACT SLIDE-LOCK ZIF CONNECTORS				
XF2L-0835-1A	8	05M1990	1.08	0.98
XF2U SERIES DUAL-CONTACT ROTARY BACKLOCK ZIF CONNECTORS				
XF2U-0815-3A	8	88M4896	1.23	1.11
XF2U-1415-3A	14	88M4898	1.33	1.20
XF2U-2015-3A	20	88M4899	1.60	1.44
XF2U-2415-3A	24	88M4900	1.71	1.54
XF2U-2715-3A	27	88M4901	1.81	1.63

➤CONTINUED➤

FLAT/FLEX RIBBON CABLE CONNECTORS

XF2 SERIES 0.5mm PITCH FPC CONNECTORS (CONT.)

XF2U SERIES DUAL-CONTACT ROTARY BACKLOCK ZIF CONNECTORS

Mfg. Part No.	Circuits	Stock No.	Price Each 1-24	Price Each 25-49
● XF2U-3015-3A	30	88M4902	1.90	1.71
● XF2U-3215-3A	32	88M4903	1.97	1.77
XF2W SERIES DUAL-CONTACT ROTARY BACKLOCK ZIF CONNECTORS				
● XF2W-0415-1A	4	62W4214	0.83	0.75
● XF2W-1015-1A	10	62W4215	0.96	0.87
● XF2W-1415-1A	14	62W4216	1.08	0.97
● XF2W-2015-1A	20	88M4905	1.37	1.23
● XF2W-2415-1A	24	88M4906	1.62	1.46

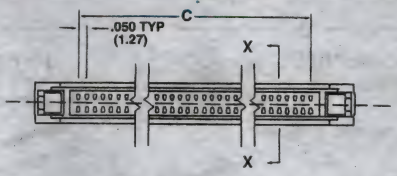
(68178)

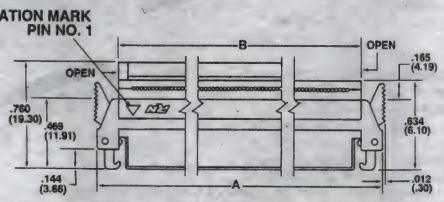
3

PAK-50 P25E SERIES 0.050″ IDC SOCKETS

RoHS Compliant Available

3M





- Latch/Ejector Mechanism for Mating and Unmating
- Can Be Daisy Chained
- Ribbon Contact Design
- Contacts Protected on 3 Sides
- Phosphor Bronze Contacts

Accommodate 30 AWG, 0.025″ centerline cable; *ordered separately on page 1220*. Mate with **P25E series** IDC plugs, *ordered separately on page 806*. Contact resistance: 30MΩ. Current rating: 0.5A. Black, glass-filled nylon body, rated UL94V-0. Temperature range: –55°C to +105°C.

Mfg. Part No.	Contacts	Dimensions A	Dimensions B	Dimensions C	Stock No.	Price Each 1-24	Price Each 25-49
● P25E-040S-EA	40	1.596″	1.202″	0.950″	96K2149	9.82	9.42
● P25E-068S-EA	68	2.596″	2.202″	1.950″	96K2152	12.18	11.69
● P25E-080-S-EA	80	2.596″	2.202″	1.950″	96K2153	12.22	11.73
● P25E-100-S-EA	100	3.096″	2.702″	2.450″	96K2154	13.98	13.42

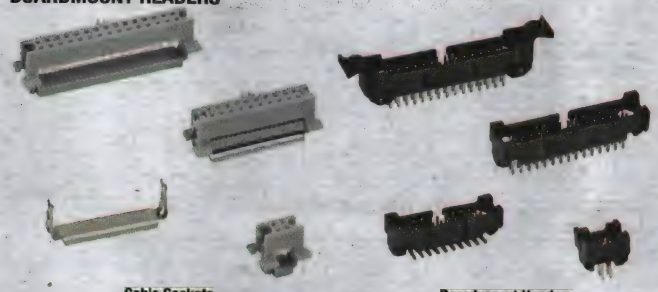
(8779)

451 & 452 SERIES RIBBON CABLE SOCKETS AND BOARDMOUNT HEADERS

NEW

RoHS Compliant Available

3M



Cable Sockets

Boardmount Headers

Features

- Current Rating:
  1.0 A, all lines energized, 30°C temp rise per EIA 364-70
  1.5 A, 6 lines energized, 30°C temp rise per EIA 364-70
  2.5 A, 1 line energized, 30°C temp rise per EIA 364-70
- Voltage Rating: 125V
- Insulation Resistance:> 1 x 10^9 Ohms at 500 VDC
- Withstanding Voltage: 1250VACrms at sea level
- OperatingTemperature: -65°C to +105°C

451 Series Ribbon Cable Wiremount Socket Assemblies and 452 Series Shrouded Boardmount Headers have an extremely small 1.27 mm (0.050″) Pitch. The design enables mass termination and has an innovative header ejector latch mechanism.

RIBBON CABLE SOCKETS

Mfr. Part No.	No. of Contacts	Stock No.	Price Each 1-24
● 45104-000030	4	11X5337	3.32
● 45106-000030	6	11X5339	3.47
● 45108-000030	8	11X5341	3.62

➤CONTINUED➤

451 & 452 SERIES RIBBON CABLE SOCKETS AND BOARDMOUNT HEADERS (CONT.)

Mfr. Part No.	No. of Contacts	Stock No.	Price Each 1-24
● 45108-010030	8	11X5343	3.72
● 45110-000030	10	11X5347	3.77
● 45110-010030	10	11X5349	3.87
● 45112-000030	12	11X5353	3.92
● 45114-000030	14	11X5359	4.07
● 45116-000030	16	11X5365	4.22
● 45120-000030	20	11X5371	4.52
● 45130-000030	30	11X5377	5.27
HEADERS WITHOUT LATCHES			
● 45204-600230	4	11X5391	1.62
● 45206-600230	6	11X5403	1.83
● 45208-600230	8	11X5415	2.05
● 45210-600230	10	11X5427	2.26
● 45212-600230	12	11X5439	2.48
● 45214-600230	14	11X5451	2.69
● 45216-600230	16	11X5463	2.91
● 45220-600230	20	11X5475	3.34
● 45230-600230	30	11X5487	4.41
LATCH/EJECT HEADERS			
● 45204-620230	4	11X5393	3.98
● 45206-620230	6	11X5405	4.20
● 45208-620230	8	11X5417	4.41
● 45210-620230	10	11X5429	4.63
● 45212-620230	12	11X5441	4.84
● 45214-620230	14	11X5453	5.06
● 45216-620230	16	11X5465	5.27
● 45220-620230	20	11X5477	5.70
● 45230-620230	30	11X5489	6.78

STRAIN RELIEFS (FOR CABLE SOCKETS)

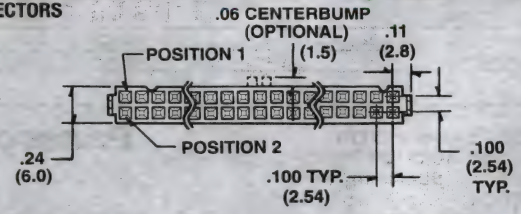
Mfr. Part No.	No. of Positions	Stock No.	Price Each 1-24
● 3448-45104	4	11X5327	1.37
● 3448-45106	6	11X5328	1.37
● 3448-45108	8	11X5329	1.37
● 3448-45110	10	11X5330	1.37
● 3448-45112	12	11X5331	1.37
● 3448-45114	14	11X5332	1.37
● 3448-45116	16	11X5333	1.37
● 3448-45120	20	11X5334	1.37
● 3448-45130	30	11X5335	1.37
CRIMP TOOL LOCATORS			
● 3443-82-04	4	11X5318	271.99
● 3443-82-06	6	11X5319	271.99
● 3443-82-08	8	11X5320	271.99
● 3443-82-10	10	11X5321	271.99
● 3443-82-12	12	11X5322	271.99
● 3443-82-14	14	11X5323	271.99
● 3443-82-16	16	11X5324	271.99
● 3443-82-20	20	11X5325	271.99
● 3443-82-30	30	11X5326	271.99

(212251)

PAK100 0.100″ x 0.100″ WIREMOUNT IDC SOCKET CONNECTORS

RoHS Compliant Available

3M



- Standard 0.100 × 0.100″ Grid Pattern
- Current Rating: 1 A
- Withstanding Voltage: 1000 V_{rms}
- Accommodate 26 and 28 AWG Solid and Stranded Wire
- Reliable IDC Termination
- Mate with 3M 2500, 3000 and 4600 series 0.100″ x 0.100″ headers/plugs

Pre-assembled to reduce assembly cost. Double-recessed cover grooved for alignment. UL recognized, CSA certified.

➤CONTINUED➤

PAK100 0.100″ x 0.100″ WIREMOUNT IDC SOCKET CONNECTORS (CONT.)

IDC CONNECTORS WITH CENTERBUMP

Mfg. Part No.	Contacts	Length (In.)	Stock No.	Price Each 1-24	25-49	50-99	100-199
89110-0101	10	0.68	92F1483	0.57	0.48	0.43	0.41
89114-0101	14	0.88	92F1484	0.76	0.65	0.58	0.55
89116-0101	16	0.98	92F1485	0.76	0.65	0.59	0.55
89120-0101	20	1.18	92F1486	0.88	0.75	0.67	0.63
89124-0101	24	1.38	18C3903	1.13	0.97	0.87	0.81
89126-0101	26	1.48	92F1487	0.85	0.73	0.66	0.61
89130-0101	30	1.68	29C5745	1.30	1.11	1.00	0.93
89134-0101	34	1.88	92F1488	1.02	0.87	0.78	0.73
89136-0101	36	1.98	21K3928	1.36	1.16	1.05	0.98
89140-0101	40	2.18	92F1489	1.37	1.17	1.05	0.99
89150-0101	50	2.68	92F1490	1.43	1.22	1.10	1.03
89160-0101	60	3.18	92F1491	1.67	1.43	1.28	1.20
IDC SOCKET CONNECTORS WITHOUT CENTERBUMP							
89110-0001	10	0.68	91C4369	0.76	0.65	0.59	0.55
89116-0001	16	0.98	66H6823	0.94	0.80	0.72	0.67
89120-0001	20	1.18	50H7127	0.92	0.79	0.71	0.66
89126-0001	26	1.48	91C4375	0.97	0.83	0.74	0.70
89130-0001	30	1.68	78H4105	1.30	1.11	1.00	0.93
89134-0001	34	1.88	78H4106	1.12	0.96	0.86	0.81
89140-0001	40	2.18	94C1701	1.52	1.30	1.17	1.09
89144-0001	44	2.38	21K3934	1.45	1.24	1.11	1.04
89150-0001	50	2.68	78H4107	1.54	1.31	1.18	1.10

STRAIN RELIEF FOR 891 SERIES IDC SOCKETS

Mfg. Part No.	Contacts	Stock No.	Price Each 1-24	25-49	50-99	100-199
3448-89110	10	92F1492	0.21	0.19	0.18	0.17
3448-89114	14	92F1493	0.21	0.20	0.18	0.17
3448-89116	16	92F1494	0.20	0.18	0.17	0.16
3448-89120	20	92F1495	0.21	0.20	0.18	0.17
3448-89126	26	92F1496	0.21	0.20	0.18	0.17
3448-89134	34	69K1042	0.21	0.20	0.18	0.17
3448-89140	40	92F1498	0.21	0.20	0.18	0.17
3448-89150	50	92F1499	0.21	0.20	0.18	0.17
3448-89160	60	92F1500	0.29	0.26	0.24	0.23
PULL TABS FOR IDC SOCKETS						
3490-89140	40-60	92F1504	0.60	0.57	0.53	0.45
3490-89110	10-20	92F1502	0.40	0.37	0.35	0.30

(8449)

D89 SERIES 0.100″ x 0.100″ WIRE MOUNT IDC SOCKETS

RoHS Compliant Available

3M

- For 0.050″ pitch flat ribbon cable, 26 and 28 AWG stranded
- Preassembled for high-efficiency termination
- Double-recessed cover for cable terminating from either side
- Military polarization, with or without centerbump

3M™ **D89 series** wire mount sockets are designed for wire-to-board stacking applications, such as communications networking equipment, medical devices, industrial/factory automation equipment, infotainment/gaming and military systems. Features black, glass-filled polyester housing with 10μ" gold-plated phosphor bronze contacts. Polarization slots provide for quick connections while minimizing misalignments. Plastic strain relief minimizes stress on the socket/cable termination; *ordered separately below.* Mates with 3M™ **D2500 series** low-profile four-wall headers and **D3000 series** latch/ejector four-wall headers; *ordered separately on page 804.* Select 3M™ **3365 series** 0.050″ pitch cable; *ordered separately on page 1219.* Current rating: 1A. Temperature range: -55°C to + 105°C. UL recognized.

MILITARY POLARIZATION — WITHOUT CENTERBUMP

Mfg. Part No.	Positions	Width In. (mm)	Stock No.	Price Each 1-24	25-49
D89110-0031HK	10	0.53 (13.5)	12P7113	0.53	0.46
D89114-0031HK	14	0.73 (18.5)	12P7115	0.68	0.58
D89116-0031HK	16	0.83 (21.1)	12P7117	0.74	0.63
D89120-0031HK	20	1.03 (26.2)	12P7119	0.82	0.70
D89126-0031HK	26	1.33 (33.8)	12P7121	0.89	0.76
D89130-0031HK	30	1.53 (38.9)	12P7123	0.97	0.83
D89134-0031HK	34	1.73 (43.9)	12P7125	0.97	0.83
D89140-0031HK	40	2.03 (51.6)	12P7127	1.10	0.94
D89150-0031HK	50	2.53 (64.3)	12P7129	1.34	1.14

CONTINUED

D89 SERIES 0.100″ x 0.100″ WIRE MOUNT IDC SOCKETS (CONT.)

MILITARY POLARIZATION — WITH CENTERBUMP*

Mfg. Part No.	Positions	Width In. (mm)	Stock No.	Price Each 1-24	25-49
D89110-0131HK	10	0.53 (13.5)	12P7114	0.45	0.39
D89114-0131HK	14	0.73 (18.5)	12P7116	0.67	0.57
D89116-0131HK	16	0.83 (21.1)	12P7118	0.64	0.55
D89120-0131HK	20	1.03 (26.2)	12P7120	0.69	0.59
D89126-0131HK	26	1.33 (33.8)	12P7122	0.88	0.75
D89130-0131HK	30	1.53 (38.9)	12P7124	0.92	0.79
D89134-0131HK	34	1.73 (43.9)	12P7126	1.02	0.87
D89140-0131HK	40	2.03 (51.6)	12P7128	1.15	0.99
D89150-0131HK	50	2.53 (64.3)	12P7130	1.34	1.14

*Centerbump prevents premature latch locking during shipment

STRAIN RELIEFS

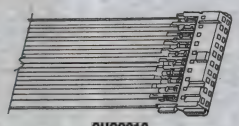
Mfg. Part No.	For No. of Positions	Width In. (mm)	Stock No.	Price Each 1-24	25-49
D3448-89110	10	0.68 (17.3)	12P7100	0.21	0.20
D3448-89116	16	0.98 (24.9)	12P7102	0.21	0.19
D3448-89120	20	1.18 (30.0)	12P7103	0.21	0.19
D3448-89126	26	1.48 (37.6)	12P7104	0.21	0.20
D3448-89130	30	1.68 (42.7)	12P7105	0.30	0.28
D3448-89134	34	1.88 (47.8)	12P7106	0.21	0.20
D3448-89140	40	2.18 (55.4)	12P7107	0.21	0.20
D3448-89150	50	2.68 (68.1)	12P7108	0.21	0.19

(135990)

0.100″ x 0.100″ POLARIZED WIRE MOUNT SOCKETS

RoHS Compliant Available

3M



CHG2010

CHG2016

- 2-Row Socket with Polarized Body
- Mate with 3M Brand Headers and Plugs
- Twin IDC Slots
- Accommodate Discrete Wire or Notched Flat Cable
- Compatible with Military Polarized Body

Wire options: 22 AWG stranded and 24 AWG (KEP version); additional version for 26 AWG and 28 AWG (KCP version). *Order* **CHG series** *pistol-grip activator tool separately; go online or call.* Color: gray. UL 94V-0 rated.

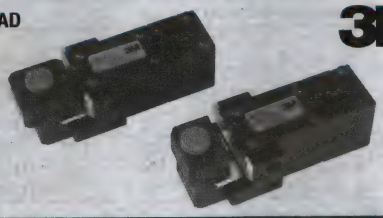
WIREMOUNT SOCKET WITH CENTERBUMP—22-24 AWG

Mfr. Part No.	Contacts	Stock No.	Price Each 1-9
CHG2010J01010KEP	10	48F3035	6.17
CHG-2014-J01010-KEP	14	34H3366	5.46
CHG2016J01010KEP	16	48F3036	5.63
CHG2020J01010KEP	20	48F3037	5.91
CHG-2024-J01010-KEP	24	01C8123	6.69
CHG2026J01010KEP	26	18C3845	16.31
CHG2034J01010KEP	34	48F3038	7.91
CHG2040J01010KEP	40	48F3040	8.37
CHG2050J01010KEP	50	18C3846	9.72
CHG-2064-J01010-KEP	64	70C5500	12.46
WIREMOUNT SOCKET WITH CENTERBUMP—26-28 AWG			
CHG-2010-J01010-KCP	10	65H6820	5.50
CHG-2020-J01010-KCP	20	96B1674	5.59
CHG2026J01010KCP	26	18C3843	7.68
CHG-2040-J01010-KCP	40	20K7860	8.37

(40672)

TYPE CHG ASSEMBLY HEAD

3M



Use to assemble discrete wire to **type CHG** wire mount sockets; *ordered separately on this page.*

Mfg. Part No.	Stock No.	Price Each
3624-42	98F9330	946.69

(68344)

FLAT/FLEX RIBBON CABLE CONNECTORS

D2500 SERIES 0.100″ x 0.100″ LOW-PROFILE FOUR-WALL HEADERS

RoHS Compliant Available

Through-Hole, Vertical | Through-Hole, Right-Angle | Surface Mount

- Space saving low-profile design
- Choice of through-hole vertical or right-angle and surface mount vertical configurations
- Center slot polarization for quick connections while minimizing mis-insertions
- Dual slot polarization offers broader compatibility with other polarization designs
- High temperature housing suitable for "no-lead" soldering

3M™ **D2500 series** low-profile four-wall headers are available in through-hole vertical or right-angle and surface mount vertical designs. All feature a black, high temperature glass-filled polyester (PBT and PCT) housing, flammability rated UL 94V-0. Brass contacts are plated with 10μ" gold in wiping area, 40-120μ" matte tin on solder tails, and underplated with 50-100μ" nickel, . Mates with 3M™ **D89 series** wire mount IDC sockets; *ordered separately on page 803.* Current rating: 2A. Temperature range: -55°C to + 105°C. UL recognized.

THROUGH-HOLE, VERTICAL

Mfg. Part No.	Positions	Width In. (mm)	Stock No.	Price Each 1-24	Price Each 25-49
● D2510-6002-AR	10	0.788 (20.02)	12P7051	1.35	1.16
● D2514-6002-AR	14	0.988 (25.10)	12P7054	1.33	1.14
● D2516-6002-AR	16	1.088 (27.64)	12P7057	1.48	1.27
● D2520-6002-AR	20	1.288 (32.72)	12P7060	1.62	1.39
● D2526-6002-AR	26	1.588 (40.34)	12P7063	1.65	1.42
● D2530-6002-AR	30	1.788 (45.42)	12P7066	2.57	2.20
● D2534-6002-AR	34	1.988 (50.50)	12P7069	2.00	1.72
● D2540-6002-AR	40	2.288 (55.12)	12P7072	2.30	1.98
● D2550-6002-AR	50	2.788 (70.82)	12P7075	2.10	1.80

THROUGH-HOLE, RIGHT-ANGLE

Exposed solder tails are designed to provide ease of cleaning and help reduce repair costs.

Mfg. Part No.	Positions	Width In. (mm)	Stock No.	Price Each 1-24	Price Each 25-49
● D2510-5002-AR	10	0.788 (20.02)	12P7049	1.50	1.29
● D2516-5002-AR	16	1.088 (27.64)	12P7055	1.63	1.40
● D2520-5002-AR	20	1.288 (32.72)	12P7058	1.70	1.45
● D2526-5002-AR	26	1.588 (40.34)	12P7061	1.92	1.65
● D2540-5002-AR	40	2.288 (55.12)	12P7070	2.35	2.01
● D2550-5002-AR	50	2.788 (70.82)	12P7073	2.87	2.46

SURFACE MOUNT, VERTICAL

Mfg. Part No.	Positions	Width In. (mm)	Tape Cut Stock No.	Tape Cut Price Each 1-24	Tape Cut Price Each 25-49
● D2516-6V0C-AR-WE	16	1.088 (27.64)	12P7056	1.76	1.51

(136065)

2mm (0.079″) 158 SERIES IDC RIBBON CABLE SOCKETS

RoHS Compliant Available

- Insulation material: Gray, High temperature glass filled polyester
- Flammability: UL 94V-0
- Contact: Gold plated copper alloy
- Current rating: 1 A
- Insulation resistance: > 100 MOhm at 500 VDC
- Withstanding voltage: 500 VACrms
- Temperature range: -55°C to +105°C

This new line of 2 mm pitch Ribbon Cable to PCB interconnects consists of an IDC style cable mount socket (158 Series) and a shrouded PCB header in multiple configurations (159 Series). 158 Series ribbon cable sockets terminate to 3M **3625 Series** cable and provides a reliable ribbon cable to board interface in a variety of applications. Versions supplied with pre-assembled cover and packaged on 3M's unique "sword pack" enable higher speed termination operations (vs. traditional separated cover termination methods). Available in 8 through 50 positions. Contacts are 30u" gold plated copper alloy. They mate to 159 Series shrouded headers *on this page.*

158 SERIES RIBBON CABLE SOCKETS

Mfg. Part No.	No. of Contacts	Stock No.	Price Each 1-24	Price Each 25-49
● 158208-0120	8	51T4148	2.06	1.75
● 158210-0120	10	51T4149	2.29	1.94
● 158220-0120	20	51T4150	2.59	2.20
● 158226-0120	26	51T4151	2.85	2.42
● 158234-0120	34	51T4152	3.20	2.72
● 158250-0120	50	51T4153	3.92	3.33

158 SERIES STRAIN RELIEFS

Mfg. Part No.	No. of Positions	Stock No.	Price Each 1-24	Price Each 25-49
3448-15808	8	51T4172	0.33	0.30
3448-15810	10	51T4173	0.35	0.32
3448-15820	20	51T4174	0.37	0.34

➤ CONTINUED ➤

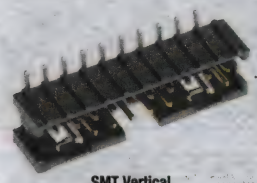
2mm (0.079″) 158 SERIES IDC RIBBON CABLE SOCKETS (CONT.)

Mfg. Part No.	No. of Positions	Stock No.	Price Each 1-24	Price Each 25-49
3448-15826	26	51T4175	0.37	0.34
3448-15834	34	51T4176	0.70	0.64
3448-15850	50	51T4177	0.44	0.40

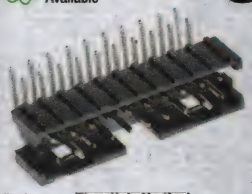
(197708)

2mm (0.079″) 159 SERIES SHROUDED HEADERS

RoHS Compliant Available



SMT Vertical



Thru-Hole Vertical

Thru-Hole Right Angle

- Housing material: Black, High temperature glass filled LCP
- Flammability: UL 94V-0
- Contact: Gold plated copper alloy
- Current rating: 1 A
- Insulation resistance: > 100 MOhm at 500 VDC
- Withstanding voltage: 500 VACrms
- Temperature range: -55°C to +105°C

159 Series Shrouded Boardmount Headers are designed to maximize design flexibility while minimizing the PCB footprint. They are available in vertical or right angle through hole and vertical SMT configurations in 8 through 50 positions. Contacts are 30u" gold plated copper alloy. They mate to the 158 Series ribbon cable sockets; *order separately online or call.*

SHROUDED PCB HEADERS - VERTICAL SURFACE MOUNT

Mfg. Part No.	No. of Contacts	Stock No.	Price Each 1-24	Price Each 25-49
● 159108-2012	8	51T4154	3.00	2.55
● 159110-2012	10	51T4157	3.14	2.66
● 159120-2002	20	51T4160	3.86	3.28
● 159126-2002	26	51T4163	4.27	3.63
● 159134-2002	34	51T4166	4.87	4.13
● 159150-2002	50	51T4169	6.00	5.10

SHROUDED PCB HEADERS - VERTICAL THROUGH HOLE

Mfg. Part No.	No. of Contacts	Stock No.	Price Each 1-24	Price Each 25-49
● 159108-6012	8	51T4156	1.67	1.42
● 159110-6012	10	51T4159	1.80	1.53
● 159120-6002	20	51T4162	2.68	2.28
● 159126-6002	26	51T4165	2.94	2.50
● 159134-6002	34	51T4168	3.53	3.00
● 159150-6002	50	51T4171	4.67	3.97

SHROUDED PCB HEADERS - RIGHT ANGLE THROUGH HOLE

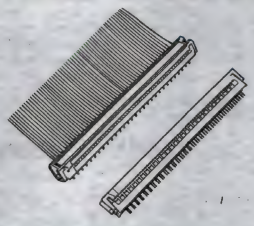
Mfg. Part No.	No. of Contacts	Stock No.	Price Each 1-24	Price Each 25-49
● 159108-5012	8	51T4155	1.89	1.60
● 159110-5012	10	51T4158	2.04	1.73
● 159120-5002	20	51T4161	2.74	2.33
● 159126-5002	26	51T4164	3.16	2.68
● 159134-5002	34	51T4167	3.75	3.18
● 159150-5002	50	51T4170	4.89	4.15

(197709)

PAK 100 7800 SERIES 0.100″ x 0.100″ 2-ROW PC BOARD CONNECTORS

RoHS Compliant Available

- Fits standard 0.100″ x 0.100″ header pin layout
- Uses less board area than 4-row design
- 7.3mm terminated height for applications requiring low profile off the board
- Accommodates 28AWG solid and stranded cable
- Current rating: 1A
- Temperature rating: -55°C to +105°C
- Color : Gray



SOLDER TAIL LENGTH: 2.8 mm

Mfg. Part No.	Contacts	Length (mm)	Stock No.	Price Each 1-24
● 7810-0000PR	10	17.4	84K8125	2.50
● 7820-0000PR	20	30.1	10M8281	2.86
● 7826-0000PR	26	37.7	18M8272	3.33
● 7840-0000PR	40	55.5	18M8278	4.51

➤ CONTINUED ➤

PAK 100 7800 SERIES 0.100″ x 0.100″ 2-ROW PC BOARD CONNECTORS (CONT.)

SOLDER TAIL LENGTH: 3.8 mm

Mfg. Part No.	Contacts	Length (mm)	Stock No.	Price Each 1-24
7820-0006PR	20	30.1	18M8271	2.80
7826-0006PR	26	37.7	18M8273	3.71

(89681)

PAK 100 3000 SERIES WIRE MOUNT SOCKET CONNECTORS

RoHS Compliant Available

- Industry standard IDC socket
- Positive locking metal "J" clips provide high cover retention
- Mates with 3M headers, plugs and pin strips for quick connect/disconnect capability
- Open or closed end covers available
- Accepts flat cable or discrete wire
- Military polarization, with or without centerbump
- Transfer adhesive on covers provides precision alignment between connector and cables resulting in high yield terminations
- Availability of pull tab to facilitate proper unplugging
- Availability of 2 types of strain relief (standard and low profile) to isolate the IDC interface
- Set the standard for MIL spec and IEC standardization

0.100 × 0.100″ (2.54 × 2.54) industry standard IDC polarizing socket connectors are available center-bumped or standard, in sizes 10 to 60 contacts, with open or closed end covers. Both standard socket and center-bumped socket connectors can be used with mating 3M headers and plug connectors. Accommodates flat cable or discrete wires. Wire accommodation: 26 AWG solid or stranded, 28 AWG solid or stranded; *order seperately on pages 1219-1220.* UL recognized, file E68080; CSA certified. *Order clip-on strain reliefs separately below.*

MILITARY POLARIZING SLOTS (OPEN END)

Mfg. Part No.	Contacts	Stock No.	Price Each 1-24	Price Each 25-49
3473-6000	10	46F8392	2.57	2.42
3385-6000	14	87F3897	3.19	3.00
3452-6000	16	46F8354	3.40	3.20
3421-6000	20	46F8438	3.85	3.62
3626-6000	24	87F3890	4.56	4.29
3399-6000	26	46F8318	4.85	4.56
3414-6000	34	46F8439	6.45	6.07
3417-6000	40	46F8440	7.32	6.89
3425-6000	50	90F8811	9.46	8.90
3334-6000	60	87F3899	11.58	10.90
MILITARY POLARIZING (OPEN END) - WITH PLASTIC STRAIN RELIEF				
3385-6014	14	46F8322	3.54	3.33
3421-6020	20	46F8286	4.20	3.96
CENTER-BUMPED POLARIZING (OPEN END)				
3473-6600	10	46F4655	2.64	2.49
3385-6600	14	46F4656	3.11	2.93
3452-6600	16	46F4657	3.49	3.29
3421-6600	20	46F4658	3.80	3.58
3626-6600	24	87F3891	4.50	4.23
3399-6600	26	46F4659	4.91	4.62
3419-6600	30	46F4660	5.62	5.29
3414-6600	34	46F4661	6.45	6.07
3417-6600	40	46F4662	7.48	7.04
3425-6600	50	46F4663	9.34	8.79
3334-6600	60	46F4664	11.44	10.77
CENTER-BUMP & MILITARY POLARIZING (OPEN END) - WITH PLASTIC STRAIN RELIEF				
3473-6610	10	94F8884	3.05	2.87
3399-6626	26	94F8852	5.38	5.06
MILITARY POLARIZING SLOTS (CLOSED END)				
3473-7000	10	46F8305	2.61	2.45
3385-7000	14	90F1459	3.47	3.27
3452-7000	16	90F1461	3.42	3.22
3421-7000	20	90F1463	3.75	3.53
3626-7000	24	90F1454	4.71	4.44
3399-7000	26	46F8368	4.87	4.59
3414-7000	34	90F1464	6.28	5.91
3417-7000	40	90F1466	7.37	6.94
3425-7000	50	46F8395	9.72	9.15
3334-7000	60	90F1469	11.35	10.68
MILITARY POLARIZING (CLOSED END) - WITH PLASTIC STRAIN RELIEF				
3417-7040	40	46F8376	8.37	7.88
CENTER-BUMPED POLARIZING (CLOSED END)				
3473-7600	10	90F1476	2.81	2.64
3385-7600	14	90F1460	3.43	3.23
3452-7600	16	90F1462	3.59	3.38
3421-7600	20	90F1453	3.99	3.76

CONTINUED

PAK 100 3000 SERIES WIRE MOUNT SOCKET CONNECTORS (CONT.)

CENTER-BUMPED POLARIZING (CLOSED END)

Mfg. Part No.	Contacts	Stock No.	Price Each 1-24	Price Each 25-49
3626-7600	24	90F1455	4.49	4.23
3399-7600	26	90F1456	5.11	4.81
3419-7600	30	90F1458	5.92	5.57
3414-7600	34	90F1465	6.56	6.18
3417-7600	40	90F1467	7.71	7.26
3425-7600	50	90F1468	9.84	9.26
3334-7600	60	90F1470	12.02	11.31
CLIP-ON STRAIN RELIEFS FOR IDC SOCKETS				
3448-3010	10	46F4665	0.28	0.26
3448-3014	14	46F4666	0.28	0.26
3448-3016	16	46F4667	0.28	0.26
3448-3020	20	46F4668	0.29	0.26
3448-3024	24	87F3892	0.37	0.34
3448-3026	26	46F4669	0.28	0.26
3448-3030	30	46F4670	0.51	0.47
3448-3034	34	46F4671	0.28	0.26
3448-3040	40	46F4672	0.28	0.26
3448-3050	50	46F4673	0.28	0.26
3448-3060	60	46F4674	0.31	0.28

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24	Price Each 25-49
3435-0	Keying Plug	92F1501	0.25	0.23

PULL TABS

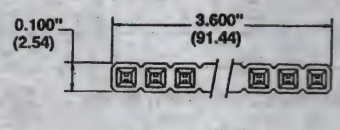
Mfg. Part No.	Length (in.)	Stock No.	Price Each 1-9	Price Each 10-24
3490-1	0.50	48M1292	0.87	0.84
3490-2	1.00	46F8378	0.92	0.88
3490-4	2.00	19M8489	1.06	1.02
3490-5	2.50	46F8419	1.62	1.45

(8508)

929 SERIES BOARD MOUNT SOCKETS

RoHS Compliant Available

- 0.100″ Spacing Between All Contacts
- Single- and Dual-Row
- Tin-Lead Plating or Gold Plating Over Nickel
- Black Polybutylene Terephthalate (PBT) Insulation
- Flammability Rated UL94V-0
- Current Rating: 1A
- Withstanding Voltage: 1500Vrms
- Temperature Range: –40°C to +105°C



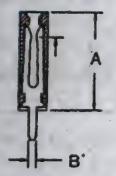


Fig. 1

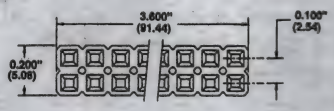
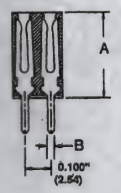


Fig. 2



Mate with standard 0.025″ round or square post headers. UL recognized.

TIN-LEAD PLATED

0.100″ STRAIGHT SOLDER TAIL — SINGLE ROW, 36 CONTACTS

Mfr. Part No.	Fig.	Dimensions A	Dimensions B	Stock No.	Price Each 1-9
929974-01-36-RK	1	0.325″	0.030″	18M8296	2.17
0.100″ STRAIGHT SOLDER TAIL — DUAL ROW, 2 × 36 CONTACTS					
929975-01-36-RK	2	0.325″	0.030″	34P2539	3.69
GOLD PLATED					
0.100″ STRAIGHT SOLDER TAIL — SINGLE ROW, 36 CONTACTS					
929850-01-36-10	1	0.325″	0.030″	46F4434	3.58
0.100″ STRAIGHT SOLDER TAIL — DUAL ROW, 2 × 36 CONTACTS					
929852-01-36-10	2	0.325″	0.030″	46F4437	5.62

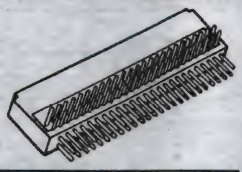
(8399)

FLAT/FLEX RIBBON CABLE CONNECTORS

INTRACONNECTORS

RoHS Compliant Available

3M



Intraconnectors mate 0.1 x 0.1″ (2.54 x 2.54) dual-row connectors or 0.025″ (0.635) square PC pins to test ribbon cable systems.

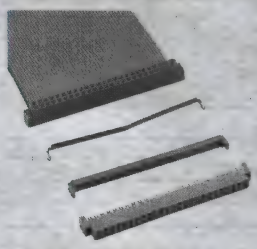
Mfg. Part No.	Contacts	Stock No.	Price Each 1-14
922576-20-I	20	65F198	31.94
● 922576-34-I	34	65F200	35.35
● 922576-40-I	40	65F201	38.77
● 922576-50-I	50	65F202	43.98

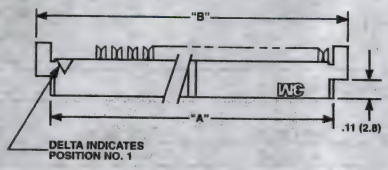
(8351)

PAK20 2mm WIREMOUNT SOCKETS

RoHS Compliant Available

3M





- 2 mm x 2 mm Grid Spacing
- Accommodate 1mm Centerline 28 AWG Stranded Cable
- Low Profile
- Pre-assembled Covers

Copper alloy contacts. Current rating: 1 A. Insulation resistance: > 1 x 10^9 Ω at 500 VDC. Withstanding voltage: 1000 V_{rms} at sea level. Temperature range: -55°C to +105°C. Mate with 2 mm pin strip headers; order separately *on page 748*. Strain relief available; *go online or call*.

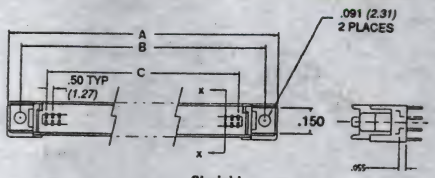
Mfg. Part No.	Contacts	Dim. A	Dim. B	Stock No.	Price Each 1-24	Price Each 25-49
● 152210-0100-GB	10	0.45″ (11.4)	0.59″ (15.0)	24C6857	2.69	2.58
● 152212-0100-GB	12	0.53″ (13.4)	0.67″ (17.0)	31C9512	2.78	2.67
● 152220-0100-GB	20	0.84″ (21.3)	0.99″ (25.1)	31C9513	3.76	3.61
● 152226-0100-GB	26	1.08″ (27.4)	1.22″ (31.0)	31C9514	3.57	3.43
● 152240-0100-GB	40	1.63″ (41.4)	1.77″ (45.0)	92C1417	3.54	3.39
● 152244-0100-GB	44	1.79″ (45.5)	1.93″ (49.0)	97B3527	3.82	3.67
● 152250-0100-GB	50	2.03″ (51.3)	2.17″ (55.0)	31C9515	3.71	3.56

(68570)

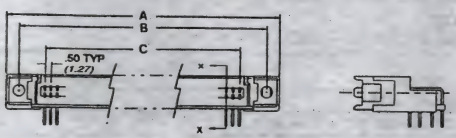
PAK-50 P50E SERIES BOARD MOUNT PLUGS

RoHS Compliant Available

3M



Straight



Right Angle

- Latch/Ejector Mechanism for Mating and Unmating
- Straight or Right-Angle Termination
- Ribbon Contact Design
- Contacts Protected on 3 Sides
- Phosphor Bronze Contacts

Mate to **P25E series** IDC sockets, *ordered separately on page 802*. Contact resistance: 30 MΩ. Current rating: 0.5 A. Black, glass-filled nylon body, rated UL 94V-0. Temperature range: –55°C to +105°C.

STRAIGHT SOLDER MOUNT — 0.118″ (3.0 mm)

Mfg. Part No.	Contacts	Dimensions A	Dimensions B	Dimensions C	Stock No.	Price Each 1-24	Price Each 25-49
● P50E-040P1-S1-EA	40	1.596″	1.400″	0.950″	96K2164	3.66	3.51
● P50E-068P1-S1-EA	68	2.296″	1.902″	1.807″	96K2169	5.42	5.20
● P50E-080P1-S1-EA	80	2.596″	2.400″	1.950″	96K2171	5.64	5.41
● P50E-100P1-S1-EA	100	3.096″	2.900″	2.450″	96K2173	6.93	6.65
RIGHT ANGLE SOLDER MOUNT — 0.118″ (3.0 mm)							
● P50E-034P1-SR1-EA	34	1.446″	1.052″	0.957″	96K2161	4.55	4.37
● P50E-040P1-SR1-EA	40	1.596″	1.400″	0.950″	96K2163	4.46	4.28

➤ CONTINUED ➤

PAK-50 P50E SERIES BOARD MOUNT PLUGS (CONT.)

RIGHT ANGLE SOLDER MOUNT — 0.118″ (3.0 mm)

Mfg. Part No.	Contacts	Dimensions A	Dimensions B	Dimensions C	Stock No.	Price Each 1-24	Price Each 25-49
● P50E-050P1-SR1-EA	50	1.846″	1.452″	1.357″	96K2165	5.05	4.85
● P50E-068P1-SR1-EA	68	2.296″	1.902″	1.807″	96K2168	6.01	5.77
● P50E-080P1-SR1-EA	80	2.596″	2.400″	1.950″	96K2170	6.23	5.98
● P50E-100P1-SR1-EA	100	3.096″	2.900″	2.450″	96K2172	7.82	7.50

(8778)

0.100 x 0.100″ FOUR-WALL SHROUDED LATCH/ EJECTOR HEADERS

RoHS Compliant Available

3M

Straight Pin

Right Angle Pin

- Military (with 3M's 3518 & N3518 polarizing key) and centerbump polarization
- Optional ejector latches
- Mounting holes for securing header to board
- Optional polarizing posts available
- High temperature insulator option suitable for "no lead" soldering operations
- High temperature option suitable for refl ow soldering using "paste in hole" techniques
- Solder tail option

0.100 × 0.100″ (2.54 × 2.54) 4-wall, shrouded housing to protect against pin damage. 0.025″ (0.635) square solder pins plated with 30μ″ gold are 0.112″ (2.84) long to fit 0.062″ (1.57) or 0.094 to 0.125 (2.39 to 3.18) thick boards. UL recognized, CSA certified. *Order ejector latches and polarization keys separately below.*

RIGHT-ANGLE PINS - 0.062 THICK BOARDS, NO LATCH/EJECTOR INSTALLED

Mfg. Part No.	Contacts	Stock No.	Price Each 1-24	Price Each 25-49
3793-5002	10	66F3411	2.23	2.10
● 3314-5002	14	46F4676	2.91	2.74
3408-5002	16	46F4677	3.48	3.28
3428-5002	20	46F4678	4.31	4.06
3429-5002	26	46F4679	5.60	5.27
3440-5002	30	46F4680	4.93	4.64
● 3431-5002	34	46F4681	5.56	5.24
● 3432-5002	40	46F4682	6.94	6.53
● 3433-5002	50	46F4683	8.56	8.06
HIGH TEMP, RIGHT-ANGLE PINS - 0.062 THICK BOARDS, NO LATCH/EJECTOR INSTALLED				
● N3793-5002RB	10	20M8302	1.55	1.46
● N3428-5002RB	20	20M8283	3.01	2.84
● N3627-5002RB	24	69K7223	3.40	3.20
● N3431-5002RB	34	34P5539	3.83	3.60
● N3433-5002RB	50	52M9349	5.97	5.62
HIGH TEMP, RIGHT-ANGLE PINS - 0.062 THICK BOARDS, SHORT ROLL PIN LATCH/EJECTORS				
● N3314-5202RB	14	34P5390	2.47	2.33
● N3408-5202RB	16	34P5442	2.77	2.61
● N3429-5202RB	26	34P5509	4.03	3.80
● N3432-5202RB	40	34P5571	4.85	4.56
● N3433-5202RB	50	34P5604	5.97	5.62
HIGH TEMP, RIGHT-ANGLE PINS - 0.062 THICK BOARDS, LONG ROLL PIN LATCH/EJECTORS				
● N3314-5302RB	14	34P5392	2.32	2.19
● N3408-5302RB	16	13P0049	2.77	2.61
● N3429-5302RB	26	20M8286	4.29	4.04
● N3431-5302RB	34	20M8290	4.42	4.16
● N3432-5302RB	40	34P5573	4.85	4.56
● N3433-5302RB	50	82K8223	5.97	5.62
HIGH TEMP, RIGHT-ANGLE PINS - 0.094 to 0.125 THICK BOARDS, LONG ROLL PIN LATCH/EJECTORS				
● N3428-5303RB	20	34P5480	3.53	3.32
STRAIGHT PINS - 0.062 THICK BOARDS, SHORT ROLL PIN LATCH/EJECTORS				
3429-6202	26	98F224	5.72	5.38
STRAIGHT PINS - 0.062 THICK BOARDS, LONG ROLL PIN LATCH/EJECTORS				
3431-6302	34	94F3320	6.40	6.02
STRAIGHT PINS - 0.094 TO 1.25 THICK BOARDS, LONG ROLL PIN LATCH/EJECTORS				
3429-6303	26	46F8425	6.05	5.69
HIGH TEMP, STRAIGHT PINS - 0.062 THICK BOARDS, NO LATCH/EJECTOR INSTALLED				
● N3793-6002RB	10	79K2362	1.46	1.37
● N3314-6002RB	14	69K7214	2.09	1.97
● N3408-6002RB	16	69K7217	1.93	1.81
● N3428-6002RB	20	69K7218	2.39	2.25
● N3627-6002RB	24	69K7224	3.61	3.40
● N3429-6002RB	26	69K7219	3.88	3.65
● N3440-6002RB	30	19M1401	3.56	3.35

➤ CONTINUED ➤

0.100 x 0.100″ FOUR-WALL SHROUDED LATCH/EJECTOR HEADERS (CONT.)

HIGH TEMP, STRAIGHT PINS - 0.062 THICK BOARDS, NO LATCH/EJECTOR INSTALLED

Mfg. Part No.	Contacts	Stock No.	Price Each 1-24	Price Each 25-49
N3431-6002RB	34	69K7220	3.99	3.76
N3432-6002RB	40	69K7221	4.74	4.46
N3433-6002RB	50	69K7222	5.90	5.55
N3372-6002RB	60	69K7216	6.79	6.39
HIGH TEMP, STRAIGHT PINS - 0.062 THICK BOARDS, SHORT ROLL PIN LATCH/EJECTORS				
N3432-6202RB	40	16M4737	5.16	4.85
HIGH TEMP, STRAIGHT PINS - 0.062 THICK BOARDS, LONG ROLL PIN LATCH/EJECTORS				
N3793-6302RB	10	79K2364	1.42	1.34
N3440-6302RB	30	76M8849	3.94	3.70
N3372-6302RB	60	20M8281	7.42	6.98
N3764-6302RB	64	34P5680	7.53	7.08
HIGH TEMP, STRAIGHT PINS - 0.094 TO 1.25 THICK BOARDS, LONG ROLL PIN LATCH/EJECTORS				
N3793-6303RB	10	20M8303	1.84	1.73
N3314-6303RB	14	78M8920	2.45	2.31
N3429-6303RB	26	20M8289	4.50	4.24
N3431-6303RB	34	20M8292	4.36	4.11
N3432-6303RB	40	20M8294	5.73	5.39
N3433-6303RB	50	20M8297	6.56	6.18

ACCESSORIES

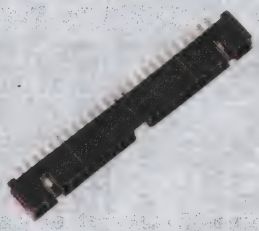
Mfg. Part No.	Description	Stock No.	Price Each 1-99	Price Each 100-499
N3505-30	Ejector Latch, Use Without Strain Relief Grey, PBT, High Temp	20K9799	0.28	0.22
N3505-30B	Ejector Latch, Use Without Strain Relief Black, PPA, High Temp	34P5644	0.28	0.25
N3505-31	Ejector Latch, Use With Strain Relief	28H8658	0.22	0.17
3505-33 (1000 BX)	Snap-in Latch, Nylon, Gray	21K2792	0.20	0.16
3518	Polarizing Key, Gray PBT, Low-Temp Plastic	46F8391	0.17	0.13

(8509)

PAK 100 N2500 SERIES 0.100″ x 0.100″ LOW PROFILE BOX HEADERS

RoHS Compliant Available

Right-Angle Pin



Straight Pin

- Low profile, space saving design
- Center slot polarization prevents mis-insertions and reduces insertion time
- Dual slot polarization means broader compatibility with competitive polarization designs (not 8 or 10 pos.)
- Optional retainer clip for locking sockets in place and increasing connection reliability in vibration-prone environments
- Optional high temperature insulator suitable for "no lead" soldering operations
- High temperature option in through-hole version suitable for "paste in hole" reflow soldering techniques
- Exposed solder tails (on right angle version) provide ease of cleaning and reduced repair costs

Low-profile, space-saving 0.100 × 0.100″ (2.54 × 2.54) headers feature 4-wall, shrouded housing. 0.025″ (0.635) pins have 30µ″ gold plating in wipe area and 60/40 tin-lead on the solder tails. Pins are 0.112″ (2.84) long for 0.062″ (1.57) board. High temperature plastic insulator for vapor phase reflow process. Glass-filled polyester (PCT). UL recognized, CSA certified.

RIGHT-ANGLE PIN

Mfg. Part No.	Contacts	Stock No.	Price Each 1-24	Price Each 25-49
N2510-5002RB	10	18M6807	1.54	1.45
N2516-5002RB	16	19M5057	1.66	1.56
N2520-5002RB	20	19M5058	1.85	1.74
N2526-5002RB	26	19M5061	2.43	2.28
N2534-5002RB	34	19M5063	2.89	2.72
N2540-5002RB	40	19M5065	3.27	3.08
N2550-5002RB	50	19M5066	3.85	3.63
N2560-5002RB	60	19M5068	4.62	4.35
STRAIGHT PIN				
N2510-6002RB	10	18M6808	1.25	1.18
N2514-6002RB	14	19M5056	1.28	1.20
N2516-6002RB	16	18M6809	1.43	1.35
N2520-6002RB	20	18M6810	1.47	1.38
N2524-6002RB	24	19M5060	2.41	2.27
N2526-6002RB	26	18M6811	1.60	1.50
N2530-6002RB	30	19M5062	3.42	3.22

➤ CONTINUED ➤

PAK 100 N2500 SERIES 0.100″ x 0.100″ LOW PROFILE BOX HEADERS (CONT.)

STRAIGHT PIN

Mfg. Part No.	Contacts	Stock No.	Price Each 1-24	Price Each 25-49
N2534-6002RB	34	19M5064	2.12	1.99
N2540-6002RB	40	18M6812	2.50	2.36
N2550-6002RB	50	19M5067	2.79	2.62
N2564-6002RB	64	18M6814	4.47	4.20
N2526-6003RB	26	34P5353	2.47	2.33
VERTICAL SURFACE MOUNT				
N2514-6V0C-RB-WD	14	34P5338	2.28	2.15
N2520-6V0C-RB-WE	20	34P5344	2.61	2.45

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-99
3505-33 (1000 BX)	Snap-in latch, gray, nylon	21K2792	0.20

(8510)

0.100 × 0.100″ WIREMOUNT PLUG CONNECTORS

RoHS Compliant Available

- Shrouded to protect against physical and chemical pin damage
- Open or closed end covers available
- Optional ejector latches
- Accepts flat cable or discrete wire
- Military (with 3518 polarizing key) and centerbump polarization available
- Optional mounting flanges
- Optional metal strain relief
- Beryllium-Copper Contacts
- 30µ″ Gold Plating

Color: gray. Accommodate 26 or 28 AWG solid or stranded flat cable or discrete wire, *order separately; go online or call.* Mates with wire mount sockets and IDC sockets, *order separately; go online or call. Order ejector latches and polarization key separately below.* UL recognized, CSA certified.

WITH SLOTTED MOUNTING FLANGES

Mfg. Part No.	Contacts	Stock No.	Price Each 1-24
4610-6000	10	87F3990	3.28
4614-6000	14	87F3991	4.55
4616-6000	16	87F3992	5.10
4620-6000	20	87F194	5.91
4626-6000	26	87F3994	6.45
4634-6000	34	87F3974	8.35
4640-6000	40	87F3975	9.50
4650-6000	50	87F3976	10.18
4660-6000	60	87F3997	11.32
4664-6000	64	87F3998	12.96
WITHOUT MOUNTING FLANGES			
4610-6001	10	87F3999	3.24
4614-6001	14	87F4000	4.49
4616-6001	16	87F4001	5.10
4620-6001	20	87F4013	5.99
4624-6001	24	87F4003	6.23
4626-6001	26	87F4004	6.45
4630-6001	30	87F4005	7.09
4634-6001	34	87F192	7.99
4640-6001	40	98F5902	9.27
4650-6001	50	87F193	10.05
STRAIN RELIEFS			
3448-4610	10	46F8287	0.65
3448-4614	14	87F4014	1.61
3448-4616	16	87F4015	1.15
3448-4620	20	87F4016	0.96
3448-4624	24	87F4017	1.57
3448-4626	26	87F4018	1.76
3448-4634	34	87F4020	1.07
3448-4640	40	87F4009	1.35
3448-4650	50	87F4010	1.62
3448-4664	64	87F4012	1.99

POLARIZATION KEY

Mfg. Part No.	Description	Stock No.	Price Each 1-99
3518	Gray Glass-Filled Polyester Polarization Key	46F8391	0.17
EJECTOR LATCHES			
3505-16	Short, for Use on Socket without Strain Relief	90F1471	0.17
3505-17	Long, for Use on Socket with Strain Relief	94F3335	0.19

(8397)

FLAT/FLEX RIBBON CABLE CONNECTORS

AMP-LATCH UNIVERSAL INPUT/ OUTPUT PIN CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- 1.27 (.050) centerline ribbon cable
- Phosphor bronze contacts
- Gold (30) over nickel plating

UNIVERSAL I/O PIN CONNECTORS WITHOUT MOUNTING EARS

Mfg. Part No.	Positions	Width (inches)	Stock No.	Price Each 1-9	Price Each 10-49
● 1-111446-4	10	1.072	79K3852	6.69	6.41
● 1-111446-6	16	1.372	88K1642	7.22	6.93
● 1-111446-8	20	1.572	39M5446	6.84	6.63
● 2-111446-0	26	1.872	97M4573	9.53	8.19
● 2-111446-2	34	2.272	42K6780	9.46	9.05
● 2-111446-3	40	2.572	78K7191	10.32	9.88
● 1-111446-7	50	3.072	16R8108	12.57	11.43
UNIVERSAL I/O PIN CONNECTORS WITH MOUNTING EARS					
● 5111448-4	20	1.976	93K4144	10.69	10.24
● 5111448-8	34	2.676	19R0970	9.50	9.09

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 111451-1	Ejector Latch for Receptacles Without Strain Relief	85C4833	0.93
● 111451-3	Ejector Latch for Receptacles With Strain Relief	02E2132	0.97

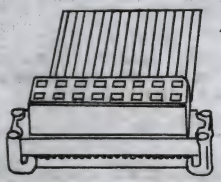
(93046)

AMP-LATCH 2.0mm (0.079″) RIBBON CABLE RECEPTACLES

RoHS Compliant Available

TE connectivity

Authorized Distributor



- Hard Metric 2.0 mm x 2.0 mm (0.079″ x 0.079″) Mating Grid
- Accepts 1.0 mm (0.039″) Pitch Ribbon Cable
- Insulation Displacement (IDC) Contacts of Beryllium Copper
- Operating Temperature: -65°C to +105°C
- UL Recognized, CSA Certified

Feed-thru polarized and non-polarized receptacles. Beryllium copper contacts feature duplex gold-plating on mating end, tin-lead on termination end with all nickel underplating. Thermoplastic housing and termination cover, rated UL 94V-0.

RECEPTACLES WITH POLARIZATION

Mfg. Part No.	Positions	Overall Length	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99	Price Each 100-249
● 1-111623-8	10	0.60″	37K7400	4.00	3.84	3.36	3.20
● 1-111623-9	14	0.76″	16M2619	4.41	4.24	3.71	3.53
● 2-111623-0	16	0.84″	16M2802	5.06	4.85	4.25	4.04
● 2-111623-1	20	0.99″	76K0872	5.06	4.74	4.67	4.46
● 2-111623-7	24	1.15″	16M2807	5.27	4.94	4.80	4.58
● 2-111623-2	26	1.23″	16M2803	5.60	5.38	4.71	4.48
● 2-111623-3	30	1.39″	16M2804	5.67	5.55	4.86	4.62
● 2-111623-4	40	1.79″	16M2805	6.14	5.89	5.12	4.87
● 2-111623-5	44	1.95″	42K6781	6.02	5.78	5.02	4.77
● 2-111623-6	50	2.19″	16M2806	5.50	5.32	5.14	4.89
RECEPTACLES WITHOUT POLARIZATION							
● 2-111626-4	8	0.33″	54M6498	4.23	3.97	3.71	3.53
● 1-111626-7	10	0.41″	16M2620	4.48	4.30	3.76	3.58
● 2-111626-5	16	0.65″	16M2809	6.35	6.09	5.29	5.03
● 1-111626-9	20	0.80″	16M2621	5.55	5.33	4.89	4.67
● 2-111626-2	44	1.75″	42K6782	6.04	5.65	5.26	5.00
● 2-111626-3	50	1.98″	16M2808	6.39	5.98	5.56	5.29

(8000)

AMP-LATCH SYSTEM 50 RIBBON CABLE-TO-BOARD CONNECTORS

RoHS Compliant Available

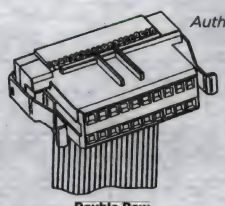
TE connectivity

Authorized Distributor

- Contact Mating Area Plating: Gold/ Nickel over Beryllium Copper
- Contact Termination Area Plating: Tin-Lead
- Thermoplastic Housing, Flammability Rated UL 94V-0

High-density connectors for ribbon cable connections to PC boards. 0.025″ (0.635) centerline spacing. Stainless steel latches. UL recognized.

PADDLEBOARD CONNECTOR



Double Row Receptacle Connector

➤CONTINUED➤

AMP-LATCH SYSTEM 50 RIBBON CABLE-TO-BOARD CONNECTORS (CONT.)

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99	Price Each 100-249
● 1-5111595-1	50	16M2661	11.44	10.95	9.46	9.21
RECEPTACLE CONNECTORS						
● 2-111196-5	10	42K6778	5.91	5.53	5.14	4.89
● 1-111196-8	20	70J9536	7.95	7.44	6.92	6.58
● 2-111196-8	24	42K6779	9.13	8.51	7.89	7.68
● 2-111196-9	26	14M7987	10.55	10.10	9.18	8.72
● 2-111196-2	60	42K6776	14.03	13.33	12.63	11.92
● 1-111196-9	30	42K6482	10.96	10.46	9.97	9.47
● 2-111196-0	40	42K6774	12.44	11.33	10.20	9.63
● 2-111196-1	50	42K6775	14.10	12.82	11.54	10.90
● 1-5111595-1	50	16M2661	11.44	10.95	9.46	9.21
● 3-111196-4	68	10M5729	17.50	16.68	15.85	13.99
● 3-111196-3	80	42K8669	15.85	14.84	13.83	12.20
● 2-111196-4	100	42K6777	16.93	15.85	14.77	13.03

(8001)

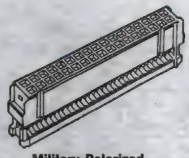
AMP-LATCH NOVO RECEPTACLES

RoHS Compliant Available

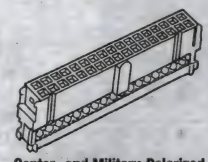
TE connectivity

Authorized Distributor

- 0.100 × 0.100″ Centers
- Accepts 0.050″ Centerline Ribbon Cable
- Accept Wire Size Range 28-26 AWG, Solid or Stranded; *go online or call*
- Dual-Beam Phosphor Bronze Contacts
- Receptacle Consists of Housing and Cover
- Mate with 0.025″ Square or Round Pins
- Current Rating: 1 A per Contact Max.



Military-Polarized



Center- and Military-Polarized

Preloaded insulation displacement contacts. Novo dual mating beam design offers higher forces: mating 12.0 oz. max./unmating 1.5 oz. min. Dual-beam phosphor bronze contacts are duplex-plated with 30μ″ gold on mating end, tin-lead on termination end, with nickel underplate. Accept wire size range 28-26 AWG, solid or stranded; *go online or call.* Constructed of black, UL94V-0 rated thermoplastic. Black, UL94V-0 rated thermoplastic strain reliefs, *ordered separately below.* Available in military-polarized, or center- and military-polarized configurations.

MILITARY POLARIZED RECEPTACLES

Mfg. Part No.	Positions	Plating	Width	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99	Price Each 100-249
● 1658623-1	10	30u″ Gold	0.680″	73K6227	1.57	1.24	1.12	1.07
● 1658623-2	14	30u″ Gold	0.880″	29M7327	1.60	1.56	1.51	1.44
● 1658623-3	16	30u″ Gold	0.980″	73K6228	2.16	1.71	1.54	1.47
● 1658623-4	20	30u″ Gold	1.180″	73K6229	2.15	1.70	1.53	1.46
● 1658623-5	24	30u″ Gold	1.380″	16M2748	2.99	2.87	2.51	2.39
● 1658623-6	26	30u″ Gold	1.480″	73K6230	2.45	2.23	2.00	1.91
● 1658623-7	30	30u″ Gold	1.680″	16M2749	2.98	2.62	2.30	2.18
● 1658623-8	34	30u″ Gold	1.880″	73K6231	2.84	2.77	2.43	2.31
● 1658623-9	40	30u″ Gold	2.180″	73K6232	3.41	3.28	2.87	2.73
● 1-1658623-0	50	30u″ Gold	2.680″	10M7304	4.11	3.95	3.46	3.29
● 1658620-1	10	15u″ Gold	0.680″	73K6212	1.25	1.04	0.93	0.89
● 1658620-2	14	15u″ Gold	0.880″	03M5874	1.61	1.46	1.32	1.26
● 1658620-3	16	15u″ Gold	0.980″	36K3011	1.67	1.53	1.37	1.31
● 1658620-4	20	15u″ Gold	1.180″	16M2745	1.59	1.52	1.44	1.37
● 1658620-5	24	15u″ Gold	1.380″	73K6213	2.70	2.14	1.92	1.83
● 1658620-7	30	15u″ Gold	1.680″	73K6215	2.86	2.75	2.41	2.30
● 1658620-8	34	15u″ Gold	1.880″	70K7625	3.01	2.38	2.14	2.04
● 1658620-9	40	15u″ Gold	2.180″	36K3015	2.75	2.64	2.31	2.20
● 1-1658620-0	50	15u″ Gold	2.680″	73K6204	3.08	2.94	2.81	2.68
● 1-1658620-2	64	15u″ Gold	3.380″	73K6205	3.93	3.78	3.30	3.15
MILITARY & CENTER POLARIZED RECEPTACLES								
● 1658622-1	10	30u″ Gold	0.680″	73K6219	1.28	1.24	1.17	1.12
● 1658622-2	14	30u″ Gold	0.880″	73K6220	1.90	1.80	1.69	1.62
● 1658622-3	16	30u″ Gold	0.980″	73K6221	1.85	1.69	1.58	1.52
● 1658622-4	20	30u″ Gold	1.180″	73K6222	1.46	1.35	1.34	1.28
● 1658622-5	24	30u″ Gold	1.380″	73K6223	2.45	2.23	2.10	2.00
● 1658622-6	26	30u″ Gold	1.480″	73K6224	2.45	2.23	2.10	2.00
● 1658622-7	30	30u″ Gold	1.680″	73K3939	2.88	2.77	2.54	2.43
● 1658622-8	34	30u″ Gold	1.880″	73K6225	2.88	2.77	2.54	2.43
● 1658622-9	40	30u″ Gold	2.180″	73K6226	3.41	3.28	3.00	2.87
● 1-1658622-0	50	30u″ Gold	2.680″	73K6207	4.11	3.95	3.62	3.46
● 1-1658622-1	60	30u″ Gold	3.180″	73K6208	5.25	5.05	4.63	4.41
● 1-1658622-2	64	30u″ Gold	3.380″	73K6209	5.60	5.38	4.93	4.70
● 1658621-1	10	15u″ Gold	0.680″	73K0102	1.31	1.16	1.09	1.04
● 1658621-2	14	15u″ Gold	0.880″	73K6216	2.05	1.62	1.52	1.46
● 1658621-3	16	15u″ Gold	0.980″	82K8012	1.88	1.71	1.60	1.54
● 1658621-4	20	15u″ Gold	1.180″	88K1531	1.95	1.56	1.47	1.40

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AMP-LATCH NOVO RECEPTACLES (CONT.)

MILITARY & CENTER POLARIZED RECEPTACLES

Mfg. Part No.	Positions	Plating	Width	Stock No.	Price Each 1-9	10-49	50-99	100-249
1658621-5	24	15u″ Gold	1.380″	16M2746	2.70	2.14	2.00	1.92
1658621-6	26	15u″ Gold	1.480″	73K6217	2.41	1.93	1.81	1.74
1658621-7	30	15u″ Gold	1.680″	16M2747	3.01	2.38	2.24	2.14
1658621-8	34	15u″ Gold	1.880″	73K6218	2.72	2.15	2.02	1.93
1658621-9	40	15u″ Gold	2.180″	73K3943	2.90	2.38	2.23	2.13
1-1658621-0	50	15u″ Gold	2.680″	73K3940	2.77	2.69	2.60	2.48
1-1658621-1	60	15u″ Gold	3.180″	10M5432	4.29	4.12	3.78	3.61
1-1658621-2	64	15u″ Gold	3.380″	73K6206	4.92	4.42	4.05	3.87

STRAIN RELIEFS

Mfg. Part No.	Positions	Width	Stock No.	Price Each 1-9	10-24	25-49	50-99
499252-5	10	0.680″	90F4184	0.31	0.30	0.26	0.22
499252-9	14	0.880″	90F4185	0.31	0.30	0.26	0.22
499252-8	16	0.980″	90F4186	0.31	0.30	0.26	0.22
499252-2	20	1.180″	90F4187	0.30	0.29	0.25	0.21
1-499252-0	24	1.380″	90F4188	0.42	0.41	0.35	0.30
499252-3	26	1.480″	90F4189	0.36	0.35	0.30	0.25
1-499252-2	30	1.680″	90F4190	0.32	0.31	0.29	0.25
499252-6	34	1.880″	90F4191	0.30	0.23	0.19	0.18
499252-1	40	2.180″	90F5292	0.43	0.40	0.35	0.29
499252-4	50	2.680″	90F5293	0.47	0.45	0.39	0.33
499252-7	60	3.180″	90F4177	0.44	0.36	0.28	0.26
1-499252-3	64	3.380″	90F4178	0.60	0.56	0.50	0.45

PULL TABS

5088450-2	10	0.44″	17M8976	0.21	0.20	0.19	0.17
5088450-3	14	0.64″	34M2151	0.08	...	...	...
5088450-4	16	0.74″	19R0879	0.27	0.26	0.22	0.19
5088450-5	20	0.88″	17M9736	0.29	0.27	0.23	0.20
5088450-7	26	1.18″	47M3561	0.28	0.27	0.23	0.20
5088450-8	34	1.58″	34M2148	0.33	0.32	0.27	0.23
5088450-9	40	1.82″	16M3984	0.36	0.35	0.30	0.26
1-5088450-0	50	2.32″	96K5040	0.44	0.42	0.36	0.31
1-5088450-1	60	2.80″	21M5796	0.45	0.43	0.39	0.34

KEYING PLUG — SOLD IN PACKAGES OF 100

Mfg. Part No.	Description	Stock No.	Price per Pkg. Each	2-4	5-9	10-24
499712-1	Keying Plug	90F4183	10.88	9.97	9.71	9.47

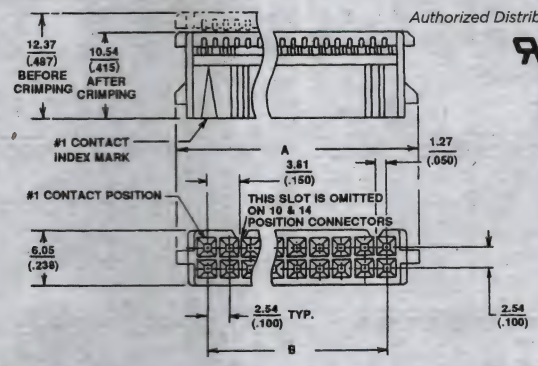
(8166)

AMP-LATCH® 609, 622, AND 636 SERIES RIBBON CABLE CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor



- Beryllium Copper Contacts
- Contact Mating Area Plating: Gold 30μ″ Over Nickel
- Contact Termination Area Plating: Tin-Lead Over Nickel
- Glass-Reinforced Thermoplastic Housing, Flammability Rated UL 94V-0

Designed for mass termination of all types of flat cable to a variety of male headers in PCB applications which require repetitive connection and disconnection. Mechanical side-latched and polarization keyways. Tulip contacts provide up to 4 points of contact per conductor. Available with or without polarization tabs. UL recognized, CSA certified.

609 SERIES MILITARY POLARIZED RECEPTACLES

Mfg. Part No.	Positions	Strain Relief	Color	Dim. A (mm)	Dim. B (mm)	Stock No.	Price Each 1-9	10-49	50-99
2-1658526-2	50	Yes	Blue	67.97	60.95	16M3406	25.71	23.16	20.43

609 SERIES MILITARY & CENTER POLARIZED RECEPTACLES

1658526-4	10	No	Blue	17.17	10.16	73K6210	5.13	4.92	4.71
1658526-8	14	No	Blue	22.25	15.24	80K7436	5.95	5.72	5.24

CONTINUED

AMP-LATCH® 609, 622, AND 636 SERIES RIBBON CABLE CONNECTORS (CONT.)

609 SERIES MILITARY & CENTER POLARIZED RECEPTACLES

Mfg. Part No.	Positions	Strain Relief	Color	Dim. A (mm)	Dim. B (mm)	Stock No.	Price Each 1-9	10-49	50-99
2-1658526-9	16	No	Blue	24.79	17.78	16M2827	5.86	5.61	5.36
1-1658526-2	20	No	Blue	29.87	22.68	16M2632	7.47	7.17	6.87
1-1658526-5	26	No	Blue	37.49	30.48	88K0968	8.40	8.03	7.30
1-1658526-8	34	No	Blue	47.65	40.64	73K6202	10.98	10.70	9.73
2-1658526-3	50	No	Blue	67.97	60.95	52K4067	12.67	11.52	11.24
1658526-5	10	Yes	Blue	17.17	10.16	42K6625	5.45	5.23	5.01
1-1658526-6	26	Yes	Blue	37.49	30.48	16M2633	11.20	10.72	9.75
1-1658526-9	34	Yes	Blue	47.65	40.64	93K1899	13.52	12.30	11.99
2-1658526-4	50	Yes	Blue	67.97	60.95	10M5487	19.61	18.22	16.35

622 SERIES MILITARY & CENTER POLARIZED RECEPTACLES

1658527-3	10	No	Black	17.20	10.16	83K8839	3.20	3.08	2.82
2-1658527-3	20	No	Black	29.90	22.86	93K2859	4.01	3.63	3.34
1658527-4	10	Yes	Black	17.20	10.16	42K6626	2.25	2.19	2.12
2-1658527-2	14	Yes	Black	22.28	15.24	42K6784	2.29	2.09	1.99
1658527-7	16	Yes	Black	24.82	17.78	71M0786	3.77	3.63	3.32
1658527-8	20	Yes	Black	29.90	22.86	73K6211	4.43	4.25	3.90
1-1658527-3	40	Yes	Black	55.30	48.26	73K6203	5.88	5.64	5.39
1-1658527-5	50	Yes	Black	68.00	60.96	57K6661	7.10	6.81	6.22

636 SERIES MILITARY & CENTER POLARIZED RECEPTACLES

1658528-5	26	Yes	Blue	24.82	17.78	87K6882	6.25	6.00	5.50
1-1658528-9	40	Yes	Blue	55.30	48.26	87K6877	4.10	3.76	3.49
1658528-8	50	Yes	Blue	68.00	60.96	87K6883	5.41	4.95	4.77

PULL TABS

Mfg. Part No.	Positions	Width (mm)	Stock No.	Price Each 1-9	10-24	25-49	50-99
5088450-2	10	11.18	17M8976	0.21	0.20	0.19	0.17
5088450-3	14	16.26	34M2151	0.08	...	...	...
5088450-4	16	18.80	19R0879	0.27	0.26	0.22	0.19
5088450-5	20	22.35	17M9736	0.29	0.27	0.23	0.20
5088450-7	26	29.97	47M3561	0.28	0.27	0.23	0.20
5088450-8	34	40.13	34M2148	0.33	0.32	0.27	0.23
5088450-9	40	46.23	16M3984	0.36	0.35	0.30	0.26
1-5088450-0	50	58.93	96K5040	0.44	0.42	0.36	0.31
1-5088450-1	60	71.12	21M5796	0.45	0.43	0.39	0.34

(8355)

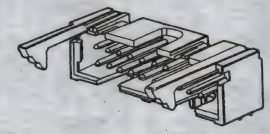
AMP-LATCH® VERTICAL EJECTOR HEADERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Current Rating: 1 A
- Dielectric Strength: >1000 V_{rms}
- Temperature Rating: -55° to +125°C



Vertical ejector design permits end-to-end soldering and uses minimum PC board space. Accommodates 0.062″(1.57) thick PC boards. Straight- or right-angle solder tails available. Mates with female socket transition connectors with or without strain relief. **608** or **609** in mfg. part no. denotes short ejectors for mating connectors without strain relief; **606** or **607** denotes long ejectors for mating connectors with strain relief. Blue glass-filled thermoplastic housing, rated UL 94V-0. Phosphor bronze contacts with 30 μ″ gold over 50 μ″ nickel in contact zone; tin-lead over nickel in termination area.

STRAIGHT VERTICAL MOUNT - LONG EJECTOR LATCH

Mfg. Part No.	Positions	Color	Stock No.	Price Each 1-9
2-1761606-3	10	Blue	42K6794	4.21
2-1761606-5	14	Blue	16M2830	3.28
2-1761606-7	20	Blue	42K6796	3.42
2-1761606-8	24	Blue	16M2831	3.82
2-1761606-9	26	Blue	42K6797	6.28
3-1761606-1	34	Blue	42K8671	6.97
3-1761606-3	40	Blue	42K6866	8.73
1761606-3	10	Black	42K6742	3.93
1761606-5	14	Black	42K6743	4.62
1761606-6	16	Black	42K6744	5.40
1761606-7	20	Black	42K6745	5.25
1-1761606-1	34	Black	42K6503	7.52
1-1761606-3	40	Black	42K6504	8.16
1-1761606-5	50	Black	42K6505	9.72
1-1761606-6	60	Black	73M8539	9.81

STRAIGHT VERTICAL MOUNT - SHORT EJECTOR LATCH

2-1761608-3	10	Blue	42K6800	4.98
2-1761608-7	20	Blue	42K6802	7.07
2-1761608-9	26	Blue	42K6803	4.51

CONTINUED

FLAT/FLEX RIBBON CABLE CONNECTORS

AMP-LATCH® VERTICAL EJECTOR HEADERS (CONT.)

STRAIGHT VERTICAL MOUNT - SHORT EJECTOR LATCH

Mfg. Part No.	Positions	Color	Stock No.	Price Each 1-9
● 3-1761608-0	30	Blue	16M2897	6.61
● 3-1761608-1	34	Blue	16M2898	10.83
● 3-1761608-3	40	Blue	42K6867	8.34
● 1-1761608-1	34	Black	42K6507	7.29
● 1-1761608-3	40	Black	42K6508	8.32
RIGHT-ANGLE MOUNT - LONG EJECTOR LATCH				
● 2-1761607-3	10	Blue	42K6798	5.04
● 3-1761607-3	40	Blue	16M2895	10.00
● 1761607-6	16	Black	42K6748	5.40
RIGHT-ANGLE MOUNT - SHORT EJECTOR LATCH				
● 2-1761609-3	10	Blue	42K6804	3.98
● 2-1761609-5	14	Blue	42K6805	5.49
● 2-1761609-6	16	Blue	42K6806	7.25
● 1761609-3	10	Black	42K6755	4.27

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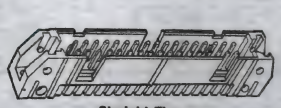
3

AMP-LATCH® EJECTION-STYLE PIN HEADERS

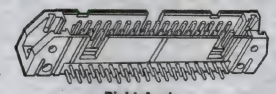
RoHS Compliant Available

TE connectivity

Authorized Distributor



Straight-Thru



Right-Angle

- Dual-Polarized Universal Ejection-Style Pin Headers
- 0.100 × 0.100″ (2.54 mm × 2.54 mm) Centers
- Straight-Thru or Right-Angle 0.025″ (0.64 mm) Square Posts
- 0.240″ (6.10 mm) Mating Post Length

4-sided black thermoplastic housing, rated UL 94V-0. All **mfg. part no. xxxx54-x** have phosphor bronze contacts plated with 30µ″ gold on post/pin mating end, bright tin-lead on termination end. Contacts mate with 0.025″ (0.64) square or round pins with 0.245″ (6.22) maximum and 0.195″ (4.95) minimum lengths. Rated: 1 A. Temperature range: –55°C to +105°C. *Order latches and polarizer separately below.* Mate with MOD IV center polarized double-row housings; *order separately on pages 753-754.* UL recognized, CSA certified.

STRAIGHT-THRU, 4-SIDED 0.025″ SQUARE — 0.110″ LONG POSTS, NO EJECTOR LATCH

Mfg. Part No.	Positions	Plating	Stock No.	Price Each 1-9	10-49	50-99
● 5102154-1	10	30µ″ Gold	42K6977	1.24	1.10	0.99
● 5102154-2	14	30µ″ Gold	16M3182	1.48	1.35	1.21
● 5102154-3	16	30µ″ Gold	93K7976	1.92	1.74	1.56
● 5102154-4	20	30µ″ Gold	42K6978	2.38	2.16	1.94
● 5102154-5	24	30µ″ Gold	19R0893	2.50	2.41	2.11
● 5102154-6	26	30µ″ Gold	42K6979	2.72	2.61	2.29
● 5102154-7	30	30µ″ Gold	19R0894	3.01	2.89	2.77
● 5102154-8	34	30µ″ Gold	42K6980	3.98	3.82	3.50
● 5102154-9	40	30µ″ Gold	42K6981	3.98	3.84	3.36
● 1-5102154-0	50	30µ″ Gold	42K6520	5.73	5.50	4.81
● 1-5102154-2	64	30µ″ Gold	16M2657	6.24	5.98	5.20
● 5102153-1	10	15µ″ Gold	73M8558	1.15	1.11	1.00
● 5102153-2	14	15µ″ Gold	68K9304	1.34	1.28	1.21
● 5102153-3	16	15µ″ Gold	42K6972	1.74	1.66	1.58
● 5102153-4	20	15µ″ Gold	42K6973	2.41	2.19	1.96
● 5102153-6	26	15µ″ Gold	42K6974	2.72	2.61	2.29
● 5102153-9	40	15µ″ Gold	42K6976	4.00	3.84	3.36
STRAIGHT-THRU, 4-SIDED 0.025″ SQUARE — 0.155″ LONG POSTS, NO EJECTOR LATCH						
● 5102156-6	26	30µ″ Gold	40P9639	2.78	2.54	2.48
● 5102156-9	40	30µ″ Gold	19R0904	3.91	3.67	3.43
STRAIGHT-THRU, 4-SIDED 0.025″ SQUARE — 0.110″ LONG POSTS, WITH LONG EJECTOR LATCH						
● 5499206-1	10	30µ″ Gold	42K7198	2.52	2.42	2.17
● 5499206-2	14	30µ″ Gold	72K6550	3.53	3.24	3.15
● 5499206-3	16	30µ″ Gold	72K5873	4.01	3.77	3.52
● 5499206-4	20	30µ″ Gold	42K7199	5.28	5.08	4.44
● 5499206-5	24	30µ″ Gold	19R2335	6.04	5.84	5.11
● 5499206-6	26	30µ″ Gold	42K7200	6.31	6.13	5.33
● 5499206-7	30	30µ″ Gold	88M9926	7.08	6.79	5.90
● 5499206-8	34	30µ″ Gold	42K7201	7.61	7.30	6.34
● 5499206-9	40	30µ″ Gold	40P9726	8.35	8.08	6.98
● 1-5499206-0	50	30µ″ Gold	42K6527	8.81	8.43	7.28
● 1-5499206-1	60	30µ″ Gold	42K6528	11.31	10.44	9.40
● 1-5499206-2	64	30µ″ Gold	88M9923	11.90	11.31	10.71
● 5499922-1	10	15µ″ Gold	42K7212	1.79	1.70	1.61
● 5499922-2	14	15µ″ Gold	87K0563	2.97	2.86	2.50
● 5499922-3	16	15µ″ Gold	42K7213	3.05	2.93	2.57
● 5499922-4	20	15µ″ Gold	42K7214	3.76	3.65	3.20

➤CONTINUED➤

AMP-LATCH® EJECTION-STYLE PIN HEADERS (CONT.)

STRAIGHT-THRU, 4-SIDED 0.025″ SQUARE — 0.110″ LONG POSTS, WITH LONG EJECTOR LATCH

Mfg. Part No.	Positions	Plating	Stock No.	Price Each 1-9	10-49	50-99
● 5499922-5	24	15µ″ Gold	26M8449	4.15	3.99	3.49
● 5499922-6	26	15µ″ Gold	42K7215	4.55	4.36	3.82
● 1-5499922-2	64	15µ″ Gold	17R0741	7.98	7.60	7.23
STRAIGHT-THRU, 4-SIDED 0.025″ SQUARE — 0.155″ LONG POSTS, WITH LONG EJECTOR LATCH						
● 5102321-1	10	30µ″ Gold	42K6985	3.00	2.88	2.76
● 5102321-2	14	30µ″ Gold	23M2307	3.23	3.10	2.71
● 5102321-3	16	30µ″ Gold	42K6986	3.79	3.56	3.32
● 5102321-4	20	30µ″ Gold	42K6987	4.00	3.66	3.57
● 5102321-5	24	30µ″ Gold	19R0916	5.13	4.92	4.31
● 5102321-6	26	30µ″ Gold	19R0917	5.18	5.01	4.84
● 5102321-8	34	30µ″ Gold	51M6932	6.79	6.56	5.70
● 5102321-9	40	30µ″ Gold	13M4789	7.33	6.86	6.38
● 1-5102321-0	50	30µ″ Gold	17R0452	8.71	8.13	7.54
● 1-5102321-2	64	30µ″ Gold	13M4793	10.59	9.87	9.14
● 5499923-1	10	15µ″ Gold	64M1913	3.07	2.88	2.69
● 5499923-3	16	15µ″ Gold	19R2349	2.81	2.70	2.36
● 5499923-4	20	15µ″ Gold	72M6906	3.67	3.53	3.09
● 5499923-6	26	15µ″ Gold	19R2351	4.71	4.49	4.27
● 5499923-8	34	15µ″ Gold	34M2658	5.81	5.44	5.06
● 5499923-9	40	15µ″ Gold	09P9161	5.50	5.28	5.06
● 1-5499923-0	50	15µ″ Gold	20M0795	7.55	7.24	6.29
STRAIGHT-THRU, 4-SIDED 0.025″ SQUARE — 0.110″ LONG POSTS, WITH SHORT EJECTOR LATCH						
● 5499160-1	10	30µ″ Gold	42K7195	2.52	2.29	2.06
● 5499160-3	16	30µ″ Gold	19M8021	3.44	3.25	3.07
● 5499160-4	20	30µ″ Gold	19R2334	5.21	5.08	4.44
● 5499160-8	34	30µ″ Gold	42K7196	6.60	6.33	5.50
● 1-5499160-0	50	30µ″ Gold	51M2716	8.90	8.52	7.36
● 5499160-6	26	30µ″ Gold	73M8563	5.54	5.32	4.66
● 5499910-1	10	15µ″ Gold	42K7204	2.38	2.16	1.95
● 5499910-2	14	15µ″ Gold	42K7205	2.95	2.84	2.48
● 5499910-3	16	15µ″ Gold	42K7206	3.26	3.13	2.74
● 5499910-4	20	15µ″ Gold	02M0900	4.11	3.87	3.61
● 5499910-5	24	15µ″ Gold	42K7207	4.83	4.64	4.06
● 5499910-6	26	15µ″ Gold	42K7208	5.15	4.95	4.33
● 5499910-8	34	15µ″ Gold	19M8028	6.12	5.87	5.11
● 5499910-9	40	15µ″ Gold	42K7209	6.65	6.35	6.05
● 1-5499910-0	50	15µ″ Gold	73M8542	8.37	8.00	6.91
STRAIGHT-THRU, 4-SIDED 0.025″ SQUARE — 0.155″ LONG POSTS, WITH SHORT EJECTOR LATCH						
● 5499374-6	26	30µ″ Gold	51P2896	6.72	5.87	5.10
RIGHT-ANGLE, 4-SIDED 0.025″ SQUARE — 0.110″ LONG POSTS, NO EJECTOR LATCH						
● 5102160-1	10	30µ″ Gold	16M3183	1.93	1.76	1.58
● 5102160-4	20	30µ″ Gold	16M3185	3.07	2.96	2.59
● 5102160-6	26	30µ″ Gold	16M3186	4.02	3.87	3.38
● 5102160-8	34	30µ″ Gold	16M3187	4.64	4.46	4.09
● 1-5102160-0	50	30µ″ Gold	16M2658	6.19	5.94	5.16
● 1-5102160-2	64	30µ″ Gold	16M2659	7.31	7.01	6.09
● 5102159-1	10	15µ″ Gold	42K6982	1.37	1.21	1.09
● 5102159-3	16	15µ″ Gold	50P9378	1.86	1.68	1.65
● 5102159-6	26	15µ″ Gold	42K6984	2.84	2.73	2.39
● 1-5102159-0	50	15µ″ Gold	73M8540	4.31	4.15	3.99
RIGHT-ANGLE, 4-SIDED 0.025″ SQUARE — 0.110″ LONG POSTS, WITH SHORT EJECTOR LATCH						
● 5499345-1	10	30µ″ Gold	04R6646	3.46	3.32	2.91
● 1-5499345-0	50	30µ″ Gold	75M6285	9.75	9.33	8.06
● 5499913-1	10	15µ″ Gold	42K7210	2.52	2.29	2.06
● 5499913-2	14	15µ″ Gold	05R5069	3.14	3.02	2.64
● 5499913-4	20	15µ″ Gold	08P3421	4.83	4.70	4.11
● 5499913-8	34	15µ″ Gold	73M8564	6.03	5.77	5.50
● 5499913-9	40	15µ″ Gold	40P9729	4.10	3.94	3.45
RIGHT-ANGLE, 4-SIDED 0.025″ SQUARE — 0.110″ LONG POSTS, WITH LONG EJECTOR LATCH						
● 5499141-1	10	30µ″ Gold	19R2329	2.52	2.42	2.12
● 5499141-4	20	30µ″ Gold	65K8864	5.40	5.07	4.73
● 5499141-6	26	30µ″ Gold	19R2330	6.12	5.88	5.14
● 5499141-8	34	30µ″ Gold	42K7194	7.25	6.95	6.04
● 5499141-9	40	30µ″ Gold	19R2332	8.58	8.22	7.15
● 1-5499141-0	50	30µ″ Gold	17R0735	9.98	9.55	8.25
● 5499786-1	10	15µ″ Gold	42K7202	2.44	2.23	2.01
● 5499786-2	14	15µ″ Gold	11N7372	3.26	3.14	2.74
● 5499786-4	20	15µ″ Gold	42K7203	4.45	4.27	3.74
● 5499786-5	24	15µ″ Gold	71P5581	6.29	6.05	5.29
● 5499786-6	26	15µ″ Gold	04N9780	5.74	5.51	4.83
● 5499786-8	34	15µ″ Gold	40P9727	6.60	6.33	5.50
● 1-5499786-0	50	15µ″ Gold	48M5371	8.51	7.94	7.36

➤CONTINUED➤

AMP-LATCH® EJECTION-STYLE PIN HEADERS (CONT.)

RIGHT-ANGLE, 4-SIDED 0.025″ SQUARE — 0.155″ LONG POSTS, WITH LONG EJECTOR LATCH

Mfg. Part No.	Positions	Plating	Stock No.	Price Each 1-9	10-49	50-99
5102322-3	16	30μ″ Gold	19R0920	4.38	4.21	3.68

ACCESSORIES FOR EJECTION-STYLE PIN HEADERS

Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-25
102312-1	Latch for Connectors with Recessed Cover	90F5236	0.31	0.30
102312-2	Latch for Connectors with Standard Cover	50F711	0.37	0.35
102185-2	Latch with Pushtabs for Connectors with Standard Cover	91B4313	0.44	0.42
102320-1	Latch for Connectors with Recessed Cover & Strain Relief	90F5237	0.35	0.33

(8170)

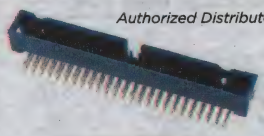
AMP-LATCH® LOW PROFILE PC BOARD BOX HEADERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Vertical



Right Angle

- Current Rating: 1 A
- Dielectric Strength: >1000 V_{rms}
- Temperature Rating: –55° to +125°C
- UL Recognized, CSA Certified

Mates with female socket transition connectors in PC board applications, which require repetitive connection/disconnection. Low profile design maximizes packaging density. Available with straight or right-angle solder tails for use with 0.062″ (1.57 mm) thick PC boards. Fully shrouded to protect 0.102″ (2.59 mm) long, 0.025″ (0.635 mm) square mating pins and assure positive polarization. Center polarization slot mates with center polarization tab on female connectors. Blue glass-filled thermoplastic housing (UL 94V-0). Phosphor bronze contacts with 30 μ″ gold over 50 μ″ nickel in contact zone; tin-lead over nickel in termination area.

VERTICAL PIN HEADERS - CENTER POLARIZATION - BLUE

Mfg. Part No.	Positions	Plating	Width (in.)	Stock No.	Price Each 1-9
2-1761603-1	6	30μ″ Gold	0.600	42K6786	3.57
2-1761603-3	10	30μ″ Gold	0.800	42K6787	3.27
2-1761603-5	14	30μ″ Gold	1.000	42K6788	3.78
2-1761603-6	16	30μ″ Gold	1.100	06M6904	4.05
2-1761603-7	20	30μ″ Gold	1.300	42K6789	4.60
2-1761603-9	26	30μ″ Gold	1.600	42K6790	5.18
3-1761603-1	34	30μ″ Gold	2.000	42K8670	5.99
3-1761603-3	40	30μ″ Gold	2.300	42K6864	7.23
3-1761603-5	50	30μ″ Gold	2.800	42K6865	8.90
VERTICAL PIN HEADERS - CENTER & MILITARY POLARIZATION - BLACK					
RIGHT-ANGLE PIN HEADERS - CENTER POLARIZATION - BLUE					
2-1761605-3	10	30μ″ Gold	0.800	42K6792	5.53
2-1761605-9	26	30μ″ Gold	1.600	16M2829	4.25
3-1761605-5	50	30μ″ Gold	2.800	16M2893	12.85
LOW-PROFILE VERTICAL HEADER - DOUBLE-ROW, 0.100″ PITCH WITH EJECTION LATCHES - NYLON					
2-1761606-6	16	30μ″ Gold	1.100	42K6795	3.22
1761606-9	26	30μ″ Gold	1.600	42K6746	5.88
LOW-PROFILE VERTICAL HEADER - DOUBLE-ROW, 0.100″ PITCH WITH EJECTION LATCHES - THERMOPLASTIC - BLACK					
1761608-3	10	30μ″ Gold	0.800	42K6751	3.97
1761608-6	16	30μ″ Gold	1.100	42K6753	5.09
1761608-7	20	30μ″ Gold	1.300	42K6754	5.62
1761608-9	26	30μ″ Gold	1.600	42K8662	6.52
1-1761608-5	50	30μ″ Gold	2.800	42K6509	9.55
LOW-PROFILE VERTICAL HEADER - DOUBLE-ROW, 0.100″ PITCH WITH EJECTION LATCHES - THERMOPLASTIC - BLUE					
3-1761608-5	50	30μ″ Gold	2.800	16M2899	9.94
LOW-PROFILE RIGHT ANGLE HEADER - DOUBLE-ROW, 0.100″ PITCH WITH EJECTION LATCHES - BLACK					
1761607-3	10	30μ″ Gold	0.800	74K4575	4.14
1761607-9	26	30μ″ Gold	1.600	42K6750	6.60
1-1761607-1	34	30μ″ Gold	2.000	87K0903	7.40
1-1761607-3	40	30μ″ Gold	2.300	50P9937	8.15
1-1761607-5	50	30μ″ Gold	2.800	42K6506	10.05
LOW-PROFILE RIGHT ANGLE HEADER - DOUBLE-ROW, 0.100″ PITCH WITH EJECTION LATCHES - BLACK					
1761609-9	26	30μ″ Gold	1.600	68K9300	6.43
1-1761609-3	40	30μ″ Gold	2.300	42K6510	8.87

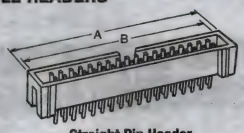
(8364)

AMP-LATCH HIGH-TEMPERATURE, LOW-PROFILE HEADERS

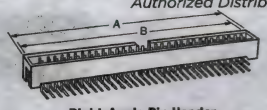
RoHS Compliant Available

TE connectivity

Authorized Distributor



Straight Pin Header



Right-Angle Pin Header

- 0.100 × 0.100″ Centers
- Current Rating: 1 A
- Insulation Resistance: >1 × 109 Ohms @ Sea Level
- Dielectric Strength: >1000 Vrms @ Sea Level
- Temperature Rating: –55°C to +125°C
- UL Recognized, CSA Certified

636 series headers with either 0.38″ (2.90mm) tails. Insulation material: glass-filled high-temperature thermoplastic. Color: black. Flammability rating of UL94V-0. Infrared and vapor phase compatible. Contacts: brass with 15μ″ (min.) gold over 50μ″ (min.) nickel plating.

STRAIGHT PIN HEADERS — 0.38″ (2.90mm) PINS

Mfg. Part No.	Positions	Dimensions A	B	Stock No.	Price Each 1-9
1761681-3	10	0.800″	0.700″	60K7849	1.38
1-1761681-3	40	2.300″	2.200″	60K7845	5.53

(8470)

AMP-LATCH LOW-PROFILE SHROUDED HEADERS

RoHS Compliant Available

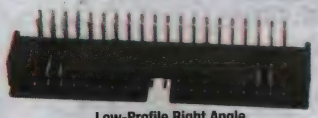
TE connectivity

Authorized Distributor

- 0.100″ (2.54) Centers
- Square 0.025″ (0.635) Drawn Wire Posts
- Vertical and Right-Angle Versions Available
- Single- and Double-Row Configurations

Flame-retardant, black thermoplastic housing, UL94V-0 rated. Copper alloy contacts with 30μ″ or 15μ″ gold plating on mating area, tin-lead on solder area, with entire post underplated with nickel.

Low-Profile Vertical



Low-Profile Right Angle

LOW-PROFILE VERTICAL HEADER - DOUBLE-ROW, 0.100″ PITCH

Mfg. Part No.	Positions	Plating	Width (in.)	Stock No.	Price Each 1-24	25-49	50-99	100-249
5103308-1	10	15μ″ Gold	0.800	74K2109	1.17	0.97	0.93	0.89
5103308-2	14	15μ″ Gold	1.000	73K2063	1.43	1.25	1.18	1.13
5103308-3	16	15μ″ Gold	1.100	02M5355	1.65	1.50	1.35	1.29
1-5103308-3	24	15μ″ Gold	1.500	39M4076	2.56	2.33	2.09	2.00
5103308-6	26	15μ″ Gold	1.600	73K6771	2.35	2.14	1.92	1.83
5103308-7	34	15μ″ Gold	2.000	12M5983	2.71	2.54	2.50	2.39
5103308-8	40	15μ″ Gold	2.300	96K4202	2.52	2.30	2.06	1.97
1-5103308-0	50	15μ″ Gold	2.800	39M4074	3.16	3.04	2.66	2.54
5103309-1	10	30μ″ Gold	0.800	96K2804	1.26	1.04	1.00	0.96
5103309-2	14	30μ″ Gold	1.000	39M4084	1.89	1.72	1.62	1.55
5103309-3	16	30μ″ Gold	1.100	39M4085	2.13	1.93	1.74	1.66
5103309-5	20	30μ″ Gold	1.300	83K8838	2.37	2.02	1.94	1.85
5103309-6	26	30μ″ Gold	1.600	39M4086	2.74	2.64	2.31	2.19
5103309-7	34	30μ″ Gold	2.000	02M6713	3.03	2.92	2.67	2.55
5103309-8	40	30μ″ Gold	2.300	02M6715	4.23	4.06	3.55	3.38
1-5103309-0	50	30μ″ Gold	2.800	16M2660	4.02	3.87	3.38	3.22
LOW-PROFILE RIGHT ANGLE HEADER - DOUBLE-ROW, 0.100″ PITCH								
5103310-1	10	15μ″ Gold	0.800	39M4087	1.44	1.23	1.18	1.13
5103310-2	14	15μ″ Gold	1.000	39M4088	1.60	1.54	1.44	1.38
5103310-3	16	15μ″ Gold	1.100	39M4090	1.99	1.81	1.63	1.55
5103310-5	20	15μ″ Gold	1.300	02M6204	2.34	1.99	1.91	1.82
5103310-6	26	15μ″ Gold	1.600	02M5562	2.74	2.64	2.31	2.20
5103310-7	34	15μ″ Gold	2.000	39M4091	3.47	3.34	3.07	2.92
5103310-8	40	15μ″ Gold	2.300	39M4092	3.78	3.63	3.18	3.02
1-5103310-0	50	15μ″ Gold	2.800	39M4077	4.60	4.41	3.86	3.67
5103311-1	10	30μ″ Gold	0.800	39M4093	1.76	1.51	1.44	1.37
5103311-5	20	30μ″ Gold	1.300	05M3820	3.13	2.76	2.64	2.51
5103311-7	34	30μ″ Gold	2.000	84K9424	4.03	3.87	3.55	3.39
5103311-8	40	30μ″ Gold	2.300	39M4095	4.18	4.06	3.55	3.38
LOW-PROFILE VERTICAL HEADER - DOUBLE-ROW, 0.100″ PITCH - KINKED SOLDER TAILS								
5104338-1	10	15μ″ Gold	0.800	73M8560	2.08	1.97	1.89	1.80
5104338-4	20	15μ″ Gold	1.300	32M6100	2.58	2.20	2.11	2.01
5104338-5	24	15μ″ Gold	1.500	40P9641	3.70	3.48	3.26	3.10

(8180)

FLAT/FLEX RIBBON CABLE CONNECTORS

AMP-LATCH DIP PLUGS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Phosphor Bronze Contacts with Tin Plating
- Centerline, Matrix: 0.100"x 0.100" (2.54 mm x 2.54 mm)
- Thermoplastic Housing, Flammability Rated UL 94V-0 .

Wire-to-board DIP plugs mass terminate ribbon cable on 0.100" × 0.100" (2.54 mm × 2.54 mm) centers. Preassembled housing assembly with cover. Feature straight legs. UL recognized, CSA certified.

DIP PLUGS WITH 0.100" ROW SPACING

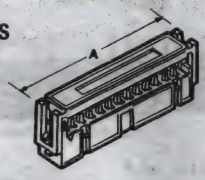
Mfg. Part No.	Positions	Stock No.	Price Each 1-9	10-49	50-99	100-249
● 2-746610-1	10	42K6837	2.06	1.88	1.76	1.68
● 2-746610-2	14	42K6838	2.10	1.91	1.80	1.71
● 1-746610-4	16	42K6572	2.04	1.88	1.86	1.78
● 5746613-3*	16	42K7423	2.51	2.28	2.05	1.96
● 1-746610-6	26	42K6574	2.93	2.32	2.17	2.08
● 1-746610-7	30	17R2059	2.51	2.28	2.14	2.05
● 1-746610-8	34	42K6575	2.79	2.69	2.46	2.36
● 1-746610-9	40	42K6576	2.89	2.78	2.54	2.43
● 2-746610-0	50	42K6836	3.18	3.05	2.81	2.68
DIP PLUGS WITH 0.300" ROW SPACING						
● 746611-7	8	42K7907	2.77	2.68	2.58	2.45
● 746611-6	16	16M3429	2.86	2.75	2.41	2.30

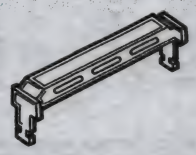
* With cover
(8171)

812 SERIES 0.100 x 0.100" IDC SOCKET CONNECTORS

RoHS Compliant Available

Amphenol Commercial Products





Meets MIL-C-83503/7B specifications. Compatible with **816 series** headers; *ordered separately on this page.* 0.100 x 0.100"(2.54 x 2.54) contact spacing terminates to 0.050" (1.27) flat ribbon cable; *order Amphenol Spectra-Strip® planar-ribbon cable separately on pages 1222-1223.* Center polarization and open-end covers for feed-thru and daisy-chain applications. 1A copper alloy contacts have 30µ" gold-over-nickel plate in contact area, tin on termination end. Glass-filled PBT gray insulation rated UL94V-0. Fit 26 AWG stranded, 28 AWG solid/stranded, 30 AWG solid wire. UL recognized, CSA certified. *Order strain relief and polarizing key separately below.*

Mfr. Part No.	Contacts	Dimension A	Stock No.	Price Each 1-24	25-49
● 842-812-1022-134	10	0.68" (17.3)	88K2197	2.02	1.85
● 842-812-1422-134	14	0.88" (22.4)	88K1485	2.05	1.88
● 842-812-1622-134	16	0.98" (24.9)	88K2198	2.37	2.17
● 842-812-2022-134	20	1.18" (30.0)	59K0539	2.63	2.41
● 842-812-2622-134	26	1.48" (37.6)	10M8505	2.37	2.17
● 842-812-3422-134	34	1.88" (47.8)	88K2199	3.39	3.10
● 842-812-4022-134	40	2.18" (55.4)	88K1487	4.25	3.88
● 842-812-5022-134	50	2.68" (68.1)	88K2200	4.65	4.25
● 842-812-6422-134	64	3.38" (85.9)	88K2201	5.68	5.19

STRAIN RELIEFS

Mfr Part No.	For No. of Positions	Stock No.	Price Each 1-24	25-49
● 842-800-1206-030	10	13C2743	0.62	0.56
● 842-800-1206-031	14	01H9308	0.54	0.49
● 842-800-1206-033	20	46F2698	0.59	0.54
● 842-800-1206-034	26	46F2699	0.54	0.49
● 842-800-1206-035	34	46F2700	0.62	0.56
● 842-800-1206-036	40	46F2701	0.54	0.49
● 842-800-1206-037	50	46F2702	1.64	1.50
● 842-800-1206-039	64	01H9310	0.46	0.42

ACCESSORY

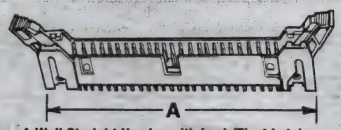
Mfr. Part No.	Description	Stock No.	Price Each 1-24
● 842-800-1211-002	Polarizing Key	58K3377	0.54

(8193)

816 SERIES 0.100 x 0.100" 4-WALL LOCK/ EJECTOR HEADERS

RoHS Compliant Available

Amphenol Commercial Products



4-Wall Straight Header with Lock/Eject Latches

Headers for 0.062" (1.57) PC boards meet MIL-C-83503 specifications. Mate with IDC socket connectors; *order separately on this page.* 1 A phosphor bronze contacts are 30µ" gold-over-nickel plated in contact area, tin solder plated on tails. Glass-filled PBT gray insulation, rated UL 94V-0. 0.100" x 0.100" (2.54 mm x 2.54 mm) contact spacing. Lock/eject latches, *order separately below,* reduce strain on cable and boards when removing mating connectors. UL recognized. CSA certified. Accommodates Amphenol Spectra-Strip® 0.050" (1.27 mm) planar ribbon cable; *order separately on pages 1222-1223.*

4-WALL RIGHT-ANGLE SOLDER TAILS

Mfg. Part No.	Contacts	Dimension A	Stock No.	Price Each 1-24	25-49
● 842-816-5032-035	50	3.26" (82.80)	88K1495	7.32	6.66
4-WALL STRAIGHT SOLDER TAILS					
● 8428161030035	10	1.26" (32.00)	88K1496	2.14	1.94
● 842-816-2030-035	20	1.76" (44.70)	88K2203	4.29	3.89
● 842-816-2630-035	26	2.06" (53.32)	88K1492	5.68	5.17
● 842-816-3430-035	34	2.46" (62.48)	88K1493	4.60	4.19
● 842-816-5030-035	50	3.26" (82.80)	88K2207	6.91	6.29
● 842-816-6430-035	64	3.96" (100.58)	88K2208	10.07	9.17

LOCK/EJECT LATCHES

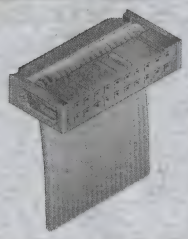
Mfg. Part No.	Description	Size	Stock No.	Price Each 1-24	25-49
842-800-1607-006	Long	0.575" (14.61)	46F2724	0.35	0.32
842-800-1607-005	Short	0.425" (10.80)	46F2726	0.52	0.47

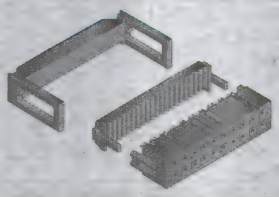
(8194)

QUICKIE™ 2.54mm (0.100") IDC RECEPTACLES

RoHS Compliant Available

FCI





IDC receptacles feature phosphor-bronze contacts plated with 30 µ" gold over nickel. Single-piece design for low-applied cost. Hertz Dot increases contact integrity. Gray thermoplastic housing, flammability rated UL 94V-0. Current rating: 1 A continuous. Insulation resistance: 50,000 MΩ min. Contact resistance: 15 mΩ max. Dielectric withstanding voltage: 1000 V min. Durability: 100 mating cycles.

IDC RECEPTACLES, CENTRAL KEY, WITH STANDARD STRAIN RELIEF

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	10-24
● 71600-006LF	6	62K7135	0.81	0.76
● 71600-008LF	8	53K1475	0.91	0.86
● 71600-010LF	10	62K7136	1.16	1.09
● 71600-016LF	16	62K7138	1.45	1.36
● 71600-020LF	20	62K7139	1.21	1.14
● 71600-024LF	24	62K7140	1.71	1.60
● 71600-026LF	26	62K7141	1.79	1.68
● 71600-034LF	34	62K7143	2.32	2.18
● 71600-040LF	40	62K7144	1.73	1.63
● 71600-050LF	50	62K7145	2.70	2.48
● 71600-060LF	60	57K8359	3.69	3.39
● 71600-064LF	64	62K7146	2.45	2.31
IDC RECEPTACLES, CENTRAL KEY, WITHOUT STRAIN RELIEF				
● 71600-106LF	6	62K7148	0.88	0.82
● 71600-110LF	10	93K5001	0.85	0.80
● 71600-114LF	14	93K5002	1.42	1.33
● 71600-116LF	16	93K5003	1.33	1.25
IDC RECEPTACLES, WITHOUT CENTRAL KEY, WITH STANDARD STRAIN RELIEF				
● 71600-306LF	6	62K7176	1.62	1.52
● 71600-308LF	8	62K7177	1.24	1.16
● 71600-310LF	10	93K5009	1.01	0.95
● 71600-316LF	16	93K5010	1.20	1.13
IDC RECEPTACLES, WITH CENTRAL KEY, WITH LATCHING STRAIN RELIEF				
● 71600-606LF	6	62K7220	0.88	0.82
● 71600-610LF	10	62K7222	0.89	0.84

➤ CONTINUED ➤

QUICKIE™ 2.54mm (0.100″) IDC RECEPTACLES (CONT.)

IDC RECEPTACLES, DUAL ENTRY COVER, DUAL POLARIZATION

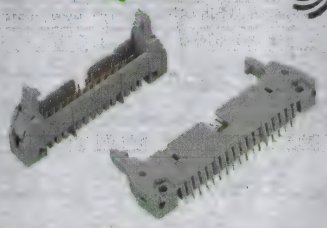
Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-24
66900-110LF	10	62K6680	1.42	1.33
IDC RECEPTACLES, DUAL ENTRY COVER, CENTER KEY AND DUAL POLARIZATION, WITH STRAIN RELIEF				
66900-210LF	10	06M1680	1.88	1.77
66900-214LF	14	06M1681	2.71	2.49
66900-216LF	16	06M1682	3.55	3.26
66900-220LF	20	02M8930	2.75	2.52
66900-226LF	26	84K6376	2.79	2.56
66900-234LF	34	84K6378	3.03	2.78
66900-240LF	40	84K6379	3.43	3.15
66900-250LF	50	84K6381	5.24	4.81
IDC RECEPTACLES, DUAL ENTRY COVER, CENTER KEY AND DUAL POLARIZATION				
66900-310LF	10	62K6682	1.44	1.35

(61283)

QUICKIE™ 2.54mm (0.100″) SHROUDED EJECTOR LATCH HEADERS

RoHS Compliant Available

- Recessed pins assure proper alignment and eliminate damage during mating
- Housing: Glass filled thermoplastic polyester
- Flammability rating: UL 94 V-0
- Operating Temperature Range -65°C to +125°C
- Color: Gray
- Standard latch mates with IDC receptacles with strain reliefs



EJECTOR LATCH HEADERS - VERTICAL THROUGH HOLE

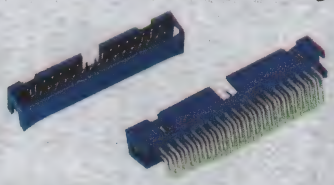
Mfg. Part No.	Positions	Stock No.	Price Each 1-9
71918-106LF	6	43K4475	1.14
71918-108LF	8	62K7319	0.97
71918-110LF	10	62K7320	1.29
71918-114LF	14	62K7322	1.64
71918-116LF	16	62K7323	1.56
71918-120LF	20	62K7326	1.52
71918-140LF	40	62K7334	3.03
71918-144LF	44	62K7336	2.63
71918-150LF	50	62K7338	3.10
71918-160LF	60	62K7340	3.41
EJECTOR LATCH HEADERS - RIGHT ANGLE THROUGH HOLE			
71922-110LF	10	93K5023	1.38
71922-116LF	16	93K5024	2.42
71922-120LF	20	43K4477	1.77
71922-140LF	40	43K4478	2.47

(116489)

QUICKIE™ 2.54mm (0.100″) LOW PROFILE SHROUDED HEADERS

RoHS Compliant Available

- Recessed pins assure proper alignment and eliminate damage during mating
- End windows for latching with IDC receptacle
- Housing: Glass filled, thermoplastic polyester
- Flammability rating: UL 94 V-0
- Pin: Phosphor bronze
- Plating: Gold over nickel
- Operating temperature range: -65°C to +125°C
- Color: Blue



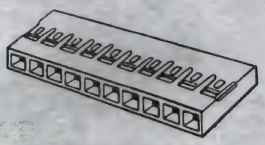
QUICKIE™ LOW PROFILE SHROUDED RIGHT-ANGLE HEADERS

Mfg. Part No.	Positions	Stock No.	Price Each 1-9
75867-131LF	6	62K8087	0.73
75867-107LF	40	62K8079	2.48
QUICKIE™ LOW PROFILE SHROUDED VERTICAL HEADERS			
75869-131LF	6	62K8134	0.71
75869-101LF	10	93K5087	1.77
75869-103LF	16	93K5089	1.38
75869-105LF	26	93K5091	1.71
75869-106LF	34	93K5092	2.28
75869-107LF	40	93K5093	2.56
QUICKIE™ LOW PROFILE SHROUDED VERTICAL HEADERS - SMT			
72454-010LF	10	06M1973	2.29

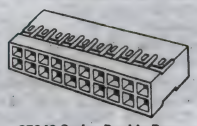
(116493)

MINI-PV™ 2.54mm (0.100″) SINGLE AND DOUBLE ROW MINI-LATCH HOUSINGS

RoHS Compliant Available



65039 Series Single Row



65043 Series Double Row

Discrete crimp-to-wire housings on 0.100″ (2.54) centers. Stackable end-to-end and side-to-side. Accept Mini-PV™ receptacles, range 22-36 AWG and crimp-to-wire male pins 22-32 AWG, *ordered separately*, go online or call. Modified polyphenylene oxide, rated UL94V-1. *Order* **mfg. part no. 65307-001** *polarization plug separately below.* UL recognized, CSA certified.

65039 SERIES SINGLE ROW

Mfg. Part No.	Position	Width	Stock No.	Price Each 1-9
65039-036LF	1	0.100″ (2.54)	75K3004	1.29
65039-035LF	2	0.200″ (5.08)	68K9857	0.61
65039-034LF	3	0.300″ (7.62)	99K0174	0.47
65039-033LF	4	0.400″ (10.16)	84K6247	0.74
65039-032LF	5	0.500″ (12.70)	84K6246	0.78
65039-031LF	6	0.600″ (15.24)	84K6245	0.88
65039-030LF	7	0.700″ (17.78)	84K6244	0.84
65039-029LF	8	0.800″ (20.32)	84K6243	0.95
65039-027LF	10	1.000″ (25.40)	84K6242	1.12
65039-025LF	12	1.200″ (38.10)	84K6240	1.18
65039-021LF	16	1.600″ (40.64)	84K6237	1.70
65043 SERIES DOUBLE ROW				
65043-035LF	4	0.200″ (5.08)	84K6258	0.87
65043-034LF	6	0.300″ (7.62)	84K6257	0.84
65043-033LF	8	0.400″ (10.16)	78K7135	1.07
65043-031LF	12	0.600″ (15.24)	72K2785	0.42
65043-029LF	16	0.800″ (20.32)	84K6254	1.71
65043-027LF	20	1.000″ (25.40)	84K6253	2.42
65043-025LF	24	1.200″ (38.10)	84K6252	2.59
65043-024LF	26	1.300″ (33.02)	84K6251	2.90
65043-022LF	30	1.500″ (38.10)	72K2782	3.09
65043-020LF	34	1.700″ (43.18)	72K2781	2.92
65043-020LF	34	1.700″ (43.18)	72K2781	2.92
65043-017LF	40	2.000″ (50.80)	72K2779	3.16
65043-012LF	50	2.500″ (63.50)	75K3041	3.57
65043-007LF	60	3.000″ (76.20)	72K2777	4.36
65043-001LF	72	3.600″ (91.44)	72K2776	4.49
78211 SERIES SINGLE ROW - POLARIZED				
78211-003LF	3	0.300″ (7.62)	84K6838	0.68
78211-004LF	4	0.400″ (10.16)	84K6839	0.92
78211-005LF	5	0.500″ (12.70)	84K6840	1.05
78211-006LF	6	0.600″ (15.24)	84K6841	1.31
67954 SERIES SINGLE ROW - POLARIZED				
67954-002LF	3	0.373″ (9.47)	84K6411	1.01
65846 SERIES DOUBLE ROW - POLARIZED				
65846-015LF	6	0.300″ (7.62)	84K6282	1.45
65846-016LF	8	0.400″ (10.16)	84K6283	1.49
65846-007LF	14	0.700″ (17.78)	84K6278	2.16
65846-008LF	18	0.900″ (22.86)	84K6279	2.31
65846-006LF	20	1.000″ (25.40)	74K3037	2.54
65846-001LF	24	1.200″ (38.10)	84K6274	2.99
65846-019LF	26	1.300″ (33.02)	84K6285	3.42
65846-002LF	30	1.500″ (38.10)	69K0782	3.19
65846-022LF	34	1.700″ (43.18)	84K6286	3.67
65846-024LF	40	2.000″ (50.80)	84K6287	4.67
65846-005LF	54	2.700″ (68.58)	84K6277	5.86
69176 SERIES DOUBLE ROW - POLARIZED				
69176-006LF	6	0.300″ (7.62)	72K3295	1.36
69176-008LF	8	0.400″ (10.16)	80K4639	1.60
69176-010LF	10	0.500″ (12.70)	84K6490	1.85
69176-014LF	14	0.700″ (17.78)	84K6491	2.38
69176-016LF	16	0.800″ (20.32)	72K3296	2.38
69176-020LF	20	1.000″ (25.40)	74K3055	2.73

POLARIZATION PLUG

For use with Mini-Latch housings. White nylon, rated UL 94V-0. UL recognized.

Mfg. Part No.	Package of	Stock No.	Price Each 1-9
65307-001LF	1	80K4633	0.46

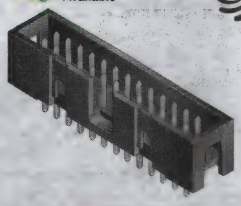
(8416)

FLAT/FLEX RIBBON CABLE CONNECTORS

QUICKIE™ 2.54mm (0.100″) SHROUDED LOW-PROFILE HEADERS

RoHS Compliant Available

FCI



- 0.100″ (2.54 mm) Centers
- Current Rating: 3 A Continuous
- Insulation Resistance: 10,000 MΩMinimum
- Dielectric Withstanding Voltage: 500 V Minimum

Vertical headers feature recessed pins that provide proper alignment and eliminate damage during mating. End windows for latching with IDC receptacle. High-temperature, black thermoplastic housing, flammability rated U L94V-0. Phosphor-bronze contacts plated with 15 µ″ gold in contact area and 150 µ″ tin/lead-plated on tails.

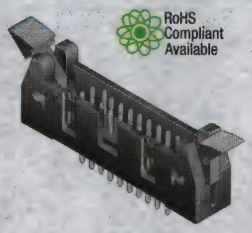
Mfg. Part No.	Positions	Tail Length	Stock No.	Price Each 1-9	Price Each 10-24
● 52601-S10-4LF	10	0.120″ (3.05)	84K5868	1.14	1.07
● 52601-S10-6LF	10	0.150″ (3.81)	84K5869	1.10	1.04
● 52601-S10-8LF	10	Surface Mount	88K2765	2.07	1.94
● 52601-G10-8LF	10	Surface Mount	74K0253	4.37	4.01
● 52601-S14-4LF	14	0.120″ (3.05)	84K5870	1.43	1.35
● 52601-S14-6LF	14	0.150″ (3.81)	62K6177	2.30	2.17
● 52601-S14-8LF	14	Surface Mount	84K5871	1.91	1.80
● 52601-S16-4LF	16	0.120″ (3.05)	84K5872	1.35	1.27
● 52601-S16-6LF	16	0.150″ (3.81)	06M1208	1.25	1.18
● 52601-S20-4LF	20	0.120″ (3.05)	84K5873	1.78	1.67
● 52601-S20-6LF	20	0.150″ (3.81)	84K5874	1.60	1.51
● 52601-S26-4LF	26	0.120″ (3.05)	02M5178	2.20	2.07
● 52601-S30-4LF	30	0.120″ (3.05)	06M1210	2.73	2.51

(61277)

QUICKIE™ 2.54mm (0.100″) SHROUDED EJECTOR-LATCH HEADERS

RoHS Compliant Available

FCI



Shrouded vertical ejector-latch headers feature recessed pins that provide proper alignment and eliminate damage during mating. Phosphor-bronze contacts plated with 15 µ″ gold in contact area and 150 µ″ tin/lead on tails. High-temperature, black thermoplastic housing, flammability rated UL 94V-0. Current rating: 3 A continuous. Insulation resistance: 10,000 MΩ minimum. Dielectric withstanding voltage: 1500 V.

0.100″ SHROUDED HEADERS

Mfg. Part No.	Positions	Tail Length	Stock No.	Price Each 1-9	Price Each 10-24
● 53610-S40-4LF	40	0.120″ (3.05)	65K9344	3.68	3.38
0.100″ STANDARD LATCH SHROUDED HEADERS*					
● 53611-S10-6LF	10	0.150″ (3.81)	06M1217	4.04	3.71
● 53611-S26-6LF	26	0.150″ (3.81)	84K5908	3.96	3.64
● 53611-S34-6LF	34	0.150″ (3.81)	62K6221	6.26	5.68
● 53611-S40-6LF	40	0.150″ (3.81)	62K6223	6.32	5.73
● 53611-S50-4LF	50	0.120″ (3.05)	62K6224	10.64	9.65
● 53611-S50-6LF	50	0.150″ (3.81)	62K6225	7.03	6.38

*Mates with IDC receptacle with strain relief.
(61278)

SEK 18 SERIES FLAT CABLE CONNECTORS

RoHS Compliant Available

HARTING

Features:
- Center polarization
- Strain relief clamp
- Body material: Thermoplastic resin (PBTP)
- Meet IEC 60 603-13

Specifications:
- Gender: Female
- Wire size: 28 AWG
- Work current: 1 A
- Pitch: 2.54mm (0.10″)
- Rated UL 94V-0
- Temperature range: -55°C to +125°C

Mfg. Part No.	Contacts	Width	Stock No.	Price Each 1-9	Price Each 10-24
● 09 18 506 6813	6	0.480″	88K2089	1.54	1.39
● 09 18 510 6813	10	0.681″	88K2090	1.86	1.68
● 09 18 520 6813	20	1.181″	88K2091	2.71	2.44
● 09 18 526 6813	26	1.480″	88K2092	2.97	2.79
● 09 18 534 6813	34	1.881″	88K2093	3.65	3.44
● 09 18 540 6813	40	2.181″	88K1303	4.06	3.82
● 09 18 550 6813	50	2.681″	93K7629	4.63	4.35
● 09 18 564 6813	64	3.381″	88K1304	6.33	5.95

(89815)

LAT-CON™ 0.050 ″ AND 0.100″ CENTERLINE IDC CONNECTORS

RoHS Compliant Available

PANCON CONNECTORS

- Glass-filled polyester housing, flammability rated UL94V-0
- Contact material: copper alloy
- Contact plating: 15µ″ gold over nickel
- Meet MIL-C-83503 specifications
- UL recognized, CSA certified

LATERAL-ENTRY IDC SOCKETS

Lateral entry reduces termination time up to 70%. Designed for 0.050″ center, 28 AWG stranded flat cable. Insulation displacement contact provide gas tight connections. Mate with LAT-CON™ headers; *ordered separately below.* Easily installed with **mfg. part no. MCP5** termination press and **mfg. part no. CPD64F50FM** LAT-CON™ die; *go online or call. Order strain reliefs separately below.*

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9	Price Each 10-24
● 050-010-455	10	88K2069	2.54	2.45
● 050-020-455	20	93K7614	4.57	4.40
● 050-034-455	34	88K2072	5.65	5.44
● 050-050-455	50	88K2073	7.75	7.46
STRAIN RELIEFS FOR LATERAL-ENTRY IDC SOCKETS				
● 050-000-010	10	44F4362	0.76	0.73
● 050-000-050	50	44F4369	0.96	0.92

SHROUDED IDC HEADERS

Fully shrouded headers with 0.114″ straight solder-tail contacts. Short ejector latch for positive socket retention and easy socket unmating. 10-circuit headers (*) have slot for center polarizing. All other header sizes have slot for military keying and center polarizing slot. Mate with LAT-CON™ sockets; *ordered separately above.*

● 050-010-153A*	10	89F2241	4.50	4.33
● 050-016-153A	16	93K7613	5.46	5.26

(8775)

MAS-CON® 0.100″ AND 0.156″ CENTERLINE IDC CONNECTORS

RoHS Compliant Available

PANCON CONNECTORS

- Durable % Nylon Housing, Rated UL 94V-2
- Operating Temperature: –55°C to +105°C
- UL Recognized, CSA Certified, ISO 9001 Certified

For mass termination of discrete wire and notched flat cable. Pre-loaded insulation displacement copper alloy contacts are 200 µ″ tin-plated over nickel. Color-coded ribs for AWG size identification. Dielectric withstanding voltage: 2.0k VAC for 0.100″ CL, 3.0k VAC for 0.156″ CL minimum between adjacent contacts. Available in circuit end or circuit through style. Additional circuit sizes and plating options are also available; *go online or call.* **Sold in package quantities listed in table below.**

0.100″ CENTERLINE

Mfg. Part No.	Circuits	AWG	Pkg. of	Stock No.	Price per Pkg. 1-4	Price per Pkg. 5-9
● CE100F22-2-D	2	22	500	98F3593	54.99	48.51
● CE100F22-3-D	3	22	500	52F2189	79.10	69.80
● CE100F22-3-DB*	3	22	1	93B0535	0.85	0.78
● CE100F22-4-D	4	22	500	48F5008	105.99	93.53
● CE100F22-5-D	5	22	500	52F2193	140.54	124.01
● CE100F22-6-C	6	22	100	67F933	34.48	32.24
● CE100F22-8-CB	8	22	1	25C7533	2.80	2.59
● CE100F24-2-D	2	24	500	48F5009	57.73	50.94
● CE100F24-2-DB*	2	24	1	93B5208	0.71	0.66
● CE100F24-10-C	10	24	100	83F6907	76.89	71.88
0.156″ CENTERLINE						
● CE156F22-4-D	4	22	500	48F5018	235.38	207.69
● CE156F24-4-D	4	24	500	48F5019	232.37	205.03
● CE156F24-12-C	12	24	1	96B7772	1.22	1.13

* Parts are plated with 15µ″ gold.

SNAP ON COVERS FOR END CONNECTORS

Mfg. Part No.	No. of Positions	Stock No.	Price Each 1-9	Price Each 10-24
● EC100F-2	2	27K9986	0.14	0.13
● EC100F-4-D	4	36B6799	0.14	0.13
● EC100F-8-C†	8	94F2769	20.15	18.30
● EC100F-10-C	10	90B8042	0.35	0.32
● EC156F-2-D	2	36B6813	0.12	0.11
● EC156F-3-D	3	36B6819	0.16	0.15

➤CONTINUED➤

MAS-CON® 0.100″ AND 0.156″ CENTERLINE IDC CONNECTORS (CONT.)

Mfg. Part No.	No. of Positions	Stock No.	Price Each 1-9	Price Each 10-24
EC156F-4-D	4	36B6820	0.23	0.22
EC156F-6-C†	6	94F3603	58.31	52.66
EC156F-8-C	8	36B6823	0.57	0.52

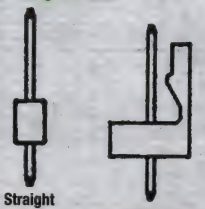
†Sold in packages of 100
(8880)

MAS-CON® 0.100″ AND 0.156″ CENTERLINE MOLDED WAFER HEADERS

RoHS Compliant Available

PANCON CONNECTORS

- Current: 4.0 A for 0.100 CL, 12.5 A for 0.156 CL Maximum Per Pin
- Polyester, Rated UL 94V-0
- Temperature Range: –55°C to +105°C
- UL Recognized, CSA Certified



Straight Flat — Straight Locking

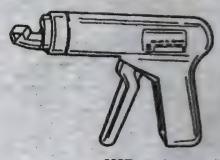
Straight and right angle wafer headers in flat, polarized and locking versions. Formed square copper alloy pin is post plated with 200 μ″ tin over nickel. Breakable to any length and end-to-end stackable. Additional circuit sizes, header styles, and plating options are available; *go online or call.* **Sold in package quantities listed below.**

Mfg. Part No.	Circuits	Width	Pkg. of	Stock No.	Price per Pkg. 1-4	Price per Pkg. 5-9
0.100″ CENTERLINE - SQUARE POST STRAIGHT FLAT HEADERS						
MFSS100-2-D	2	0.200″	500	48F5020	232.65	211.95
MFSS100-4-D	4	0.400″	500	48F5021	179.02	163.10
0.100″ CENTERLINE - SQUARE POST STRAIGHT LOCKING HEADERS						
MLSS100-2-D	2	0.200″	1	36B7005	0.15	0.14
MLSS100-3-D	3	0.300″	500	48F5022	71.73	63.29
MLSS100-4-D	4	0.400″	500	48F5023	99.57	87.86
MLSS100-5-D	5	0.500″	500	48F5024	135.85	119.87
MLSS100-6-C	6	0.600″	100	94F3104	41.80	39.08
MLSS-100-8-C	8	0.800″	100	94F2789	56.00	52.35
MLSS100-10-C	10	1.000″	100	83F6911	67.60	63.19
0.156″ CENTERLINE - SQUARE POST STRAIGHT LOCKING HEADERS						
MLSS156-6-C	6	0.936″	100	94F2791	67.83	63.41

(8881)

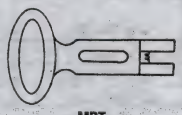
MAS-CON® CONNECTOR INSTALLATION TOOLS

PANCON CONNECTORS



MCT

CTD-100F



MRT

Mfg. part no. MCT manual hand tool for use with interchangeable CTD-xxxx nose sections individually terminates discrete wires into MAS-CON® end connectors. Automatically indexes to next circuit position. *Order* **mfg. part nos. CTD-100F, CTD-156F** *interchangeable nose sections separately below.*

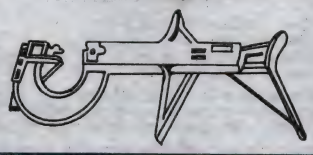
Mfg. Part No.	Description	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10+
MCT	Manual Hand Tool	67F994	254.73	236.93	227.57
CTD-100F	For 0.100″ Connectors	67F992	141.51	131.63	126.43
CTD-156F	For 0.156″ Connectors	67F993	141.51	131.63	126.43
MRT HAND TOOLS					
MRT-xxxF hand tools individually terminate discrete wires into MAS-CON® end and through connectors.					
MRT-100F	For 0.100″ Connectors	67F996	15.01	13.98	13.41
MRT-156F	For 0.156″ Connectors	67F997	15.21	14.14	13.57

(8883)

MMIT SERIES MANUAL INDEX TOOLS

PANCON CONNECTORS

Manually terminates full line of MAS-CON® connectors, both end and through styles, with discrete wire. Easy termination for daisy-chain applications. Portable tool allows for on-site, factory, or remote use. Weighs less than 0.25 lbs.



Mfg. Part No.	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10+
MMIT-100F	95F3536	92.88	86.40	82.99
MMIT-156F	95F3537	94.87	88.25	84.76

(8811)

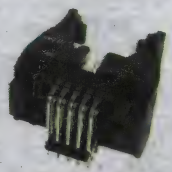
XG4 SERIES 2.54mm PCB AND FLAT CABLE HEADERS

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

XG4A Vertical Thru-Hole

XG4A Right Angle Thru-Hole



XG4A Right Angle Thru-Hole - Two Tier

XG4C Vertical Thru-Hole

XG4C Right Angle Thru-Hole

XG4E IDC Header

- Rated Current: 1.0 A
- Rated Voltage: XG4E: 250 VAC, XG4A & XG4C: 300 VAC
- Contact Resistance: 20 mOhms max
- Dielectric Strength: 500VAC for 1 minute
- Ambient Temperature Range: -55°C to 105°C

Locking Latch

XG4 Series flat cable connectors are available in different variations including a dual port ejector header (XG4A) a space-saving box-type header (XG4C) and IDC cable mount header (XG4E) which can be used for relaying. An endless number of combinations when combined with XG5 Series IDC connectors for discrete wires. Box-type Plugs (XG4C) can be locked using Lock Levers. Conforms to MIL standard MIL-C-83503, UL recognized.

Mfg. Part No.	Circuits	Stock No.	Price Each 1-24	Price Each 25-49
XG4A SERIES MIL HEADERS WITH LONG LOCKS - VERTICAL THROUGH HOLE				
XG4A-1031	10	89C8597	1.23	1.11
XG4A-1431	14	05M2045	1.41	1.27
XG4A-1631	16	05M2046	1.35	1.21
XG4A-2031	20	89C8601	1.61	1.45
XG4A-2631	26	89C8604	1.71	1.54
XG4A-3031	30	89C8605	2.01	1.81
XG4A-3431	34	05M2047	2.24	2.02
XG4A-4031	40	89C8609	2.35	2.11
XG4A-5031	50	88M4960	2.99	2.69
XG4A-6431	64	88M4973	3.63	3.27
XG4A SERIES MIL HEADERS WITH LONG LOCKS - RIGHT ANGLE THROUGH HOLE				
XG4A-1034	10	88M4934	1.15	1.03
XG4A-1434	14	88M4942	1.41	1.27
XG4A-1634	16	89C8599	1.45	1.31
XG4A-2034	20	89C8603	1.50	1.35
XG4A-2634	26	88M4950	1.71	1.54
XG4A-3034	30	89C8606	1.87	1.68
XG4A-3434	34	89C8608	2.09	1.88
XG4A-4034	40	05M2048	2.53	2.27
XG4A-6034	60	88M4967	3.15	2.83
XG4A-6434	64	88M4975	3.63	3.27
XG4A SERIES DUAL TIER HEADERS WITH LONG LOCKS - RIGHT ANGLE THROUGH HOLE				
XG4A-1439-A	28	88M4944	5.47	4.92
XG4A-2039-A	40	88M4948	6.55	5.90
XG4A-2639-A	52	88M4952	8.19	7.37
XG4A-3039-A	60	88M4955	8.74	7.86
XG4A-3439-A	68	88M4957	9.83	8.84
XG4A-4039-A	80	88M4959	10.92	9.83
XG4A-5039-A	100	63P9059	13.10	11.79
XG4C SERIES BOX-TYPE HEADERS - VERTICAL THROUGH HOLE				
XG4C-1031	10	89C8615	1.11	1.00
XG4C-1431	14	05M2050	1.27	1.15
XG4C-1631	16	89C8617	1.31	1.18
XG4C-2031	20	89C8618	1.35	1.21
XG4C-2631	26	89C8620	1.53	1.38
XG4C-3031	30	88M4981	1.68	1.51
XG4C-3431	34	55K4512	1.87	1.69
XG4C-4031	40	89C8622	2.11	1.90
XG4C-5031	50	89C8625	2.51	2.26
XG4C-6031	60	88M4986	2.83	2.55
XG4C-6431	64	88M4990	3.50	3.16

CONTINUED

FLAT/FLEX RIBBON CABLE CONNECTORS

XG4 SERIES 2.54mm PCB AND FLAT CABLE HEADERS (CONT.)

XG4C SERIES BOX-TYPE HEADERS - RIGHT ANGLE THROUGH HOLE

Mfg. Part No.	Circuits	Stock No.	Price Each 1-24	Price Each 25-49
● XG4C-1034	10	05M2049	1.04	0.93
● XG4C-1434	14	88M4980	1.18	1.06
● XG4C-1634	16	05M2051	1.31	1.18
● XG4C-2034	20	89C8619	1.35	1.21
● XG4C-2634	26	89C8621	1.53	1.38
● XG4C-3034	30	88M4982	1.80	1.62
● XG4C-3434	34	88M4983	1.87	1.69
● XG4C-4034	40	89C8623	2.11	1.90
● XG4C-6034	60	88M4987	2.83	2.55
● XG4C-6434	64	89C8627	3.26	2.94

XG4E SERIES IDC HEADERS WITH LONG LOCKS

● XG4E-1031	10	88M4993	4.49	4.04
● XG4E-1431	14	88M4996	4.74	4.26
● XG4E-1631	16	89C8629	5.42	4.89
● XG4E-2031	20	89C8630	5.65	5.08
● XG4E-2631	26	89C8631	6.70	6.03
● XG4E-3031	30	89C8632	7.01	6.31
● XG4E-3431	34	88M5001	6.57	5.92
● XG4E-4031	40	89C8633	7.83	7.05
● XG4E-5031	50	88M5003	7.53	6.78
● XG4E-6031	60	88M5006	7.67	6.90
● XG4E-6431	64	88M5010	8.49	7.64

STRAIN RELIEFS FOR XG4E CONNECTORS

Mfg. Part No.	For No. of Positions	Stock No.	Price Each 1-24	Price Each 25-49
● XG4S-1004	10	88M5043	0.53	0.47
● XG4S-1404	14	88M5044	0.59	0.53
● XG4S-1604	16	89C8654	0.65	0.59
● XG4S-2004	20	88M5045	0.65	0.59
● XG4S-3004	30	88M5047	0.65	0.59
● XG4S-3404	34	88M5048	0.65	0.59
● XG4S-4004	40	89C8655	0.65	0.59
● XG4S-6004	60	88M5049	0.72	0.65
● XG4S-6404	64	88M5050	0.78	0.69

LOCK LEVER FOR XG4C CONNECTORS

Mfg. Part No.	Circuits	Stock No.	Price Each 1-24	Price Each 25-49
● XG4Z-0002	Lock Lever II for XG4C Plugs	89C8666	0.55	0.50

(142260)

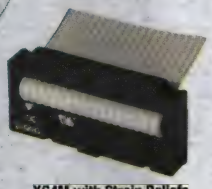
XG4 AND XG5 SERIES 2.54mm FLAT CABLE AND DISCRETE WIRE CONNECTORS

RoHS Compliant Available

OMRON ELECTRONIC COMPONENTS

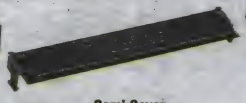
XG4M with Open-End Cover

XG4M with Strain Reliefs & Locks



XG4M with Strain Reliefs

XG5M Discrete Wire Receptacle



Semi Cover

IDC Tool

- Rated Current: XG4M: 1.0 A; XG5M: 3.0 A
- Rated Voltage: XG4M: 250 VAC; XG5M: 300 VAC
- Contact Resistance: 20 mOhms max
- Dielectric Strength: 500VAC for 1 min.; XG5M: 650VAC for 1 min.
- Ambient Temperature Range:XG4M: -55°C to 105°C; XG5M: -55°C to 85°C

XG4 Series flat cable connectors and XG5 Series IDC connectors for discrete wires can be combined into an endless number of combinations. XG5 Series connectors features two-slot IDC construction with insulation barrels offering a high reliability and large-current (3 A) discrete wiring capability. With a simple, unique lock-lever system, these connectors can be locked to XG4C Series box-type Headers. Conforms to UL and CSA standards.

➤CONTINUED➤

XG4 AND XG5 SERIES 2.54mm FLAT CABLE AND DISCRETE WIRE CONNECTORS (CONT.)

XG4M SERIES RECEPTACLES WITH SOCKET LOCKS

Mfg. Part No.	Circuits	Stock No.	Price Each 1-24	Price Each 25-49
● XG4M-1030	10	89C8639	0.95	0.86
● XG4M-1430	14	89C8642	0.96	0.86
● XG4M-1630	16	89C8644	1.15	1.04
● XG4M-2030	20	17M8255	1.30	1.17
● XG4M-2630	26	89C8647	1.54	1.39
● XG4M4030	40	42J8199	1.83	1.64
● XG4M-5030	50	89C8651	2.56	2.30

XG4M SERIES RECEPTACLES WITH SOCKET LOCKS AND STRAIN RELIEF

● XG4M-1030-U	10	89C8640	1.73	1.56
● XG4M-1430-U	14	05M2054	2.03	1.83
● XG4M-1630-U	16	88M5028	2.36	2.12
● XG4M-2030-U	20	89C8646	2.51	2.26
● XG4M-3430-U	34	55K4525	3.57	3.21
● XG4M-4030-U	40	05M2056	4.03	3.63
● XG4M-5030-U	50	05M2057	4.81	4.33
● XG4M-6030-U	60	88M5035	5.57	5.01
● XG4M-6430-U	64	88M5040	6.86	6.17

XG4M SERIES RECEPTACLES WITH STRAIN RELIEF

● XG4M-1030-T	10	88M5025	1.20	1.08
● XG4M-1430-T	14	89C8643	1.37	1.24
● XG4M-1630-T	16	89C8645	1.54	1.39
● XG4M-2030-T	20	37K5416	1.61	1.45
● XG4M-2630-T	26	89C8648	1.92	1.73
● XG4M-3030-T	30	88M5029	2.27	2.04
● XG4M-3430-T	34	88M5031	2.51	2.26
● XG4M-4030-T	40	39C9758	2.45	2.20
● XG4M-5030-T	50	55M8175	3.19	2.88
● XG4M-6030-T	60	88M5034	3.27	2.94
● XG4M-6430-T	64	21K6455	4.05	3.64

XG5M SERIES IDC RECEPTACLES FOR DISCRETE WIRE

● XG5M-1032-N	10	89C8669	3.16	2.84
● XG5M-1632-N	16	88M5063	4.11	3.70
● XG5M-3032-N	30	88M5065	4.69	4.22
● XG5M3432N	34	71M0031	5.64	5.07
● XG5M4032N	40	02M6062	6.70	6.03
● XG5M5032N	50	55M7467	8.80	7.92
● XG5M-6032-N	60	88M5072	8.76	7.89

XG5S SEMI-COVERS FOR XG5M CONNECTORS

Mfg. Part No.	No. of Positions	Stock No.	Price Each 1-24	Price Each 25-49
● XG5S-1701	17	88M5082	0.38	0.34
● XG5S-2501	25	88M5083	0.50	0.45
● XG5S-3001	30	88M5085	0.47	0.42

TOOLING

Mfg. Part No.	Circuits	Stock No.	Price Each 1-24	Price Each 25-49
● XY2B-7006	Simple IDC Tool	89C8813	102.95	95.68

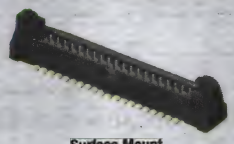
(142263)

2.00mm (0.079″) EHT SERIES EJECTOR HEADERS

RoHS Compliant Available

samtec

Through-Hole Vertical



Surface Mount

- Choice of through-hole vertical or right-angle and surface mount
- Available up to 25 pins per row
- Dual-row configuration
- 30μ″ (0.76μm) gold plating over 50μ″ (1.27μm) nickel
- Ejector latch mechanism

EHT series dual row 2mm ejector headers mate with common 2mm IDC cable assemblies. Feature black liquid crystal polymer housing and phosphor bronze contacts with 30μ″ (0.76μm) gold plating on post, matte tin on tail. Current rating: 3A @ 80°C ambient. Operating temperature range -55°C to +125°C. UL recognized.

EHT EJECTOR HEADERS - THROUGH-HOLE, VERTICAL

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
● EHT-105-01-S-D	10	78M6574	7.20	6.43
● EHT-110-01-S-D	20	11P4265	8.34	7.45
● EHT-120-01-S-D	40	22M4089	12.50	11.82

➤CONTINUED➤

2.00mm (0.079″) EHT SERIES EJECTOR HEADERS (CONT.)

EHT EJECTOR HEADERS - SURFACE MOUNT WITH LOCKING CLIP

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
EHT-105-01-S-D-SM-LC	10	11P4264	9.60	8.57
EHT-110-01-S-D-SM-LC	20	11P4267	11.29	10.09

(136039)

1.27mm (0.050″) EHF SERIES EJECTOR HEADERS

RoHS Compliant Available

samtec

Vertical double row ejector headers feature black liquid crystal polymer housing. Contacts: phosphor bronze, 10µ″ (0,25µm) gold on contact area, matte tin on tail. Current rating: 1.75A @ 80°C ambient. Operating temperature range -55°C to +125°C. Mates with: **FFSD, FFTP series**.

EHF SERIES EJECTOR HEADERS - THROUGH-HOLE VERTICAL

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-99
EHF-105-01-L-D	10	11P4251	4.06	3.55
EHF-120-01-L-D	40	11P4257	7.01	6.13
EHF-125-01-L-D	50	11P4260	7.11	6.35
EHF SERIES EJECTOR HEADERS - RIGHT-ANGLE THROUGH-HOLE				
EHF-105-01-L-D-RA	10	11P4252	5.06	4.43
EHF-110-01-L-D-RA	20	11P4255	5.96	5.22
EHF-120-01-L-D-RA	40	11P4258	7.14	6.38
EHF SERIES EJECTOR HEADERS - SURFACE MOUNT VERTICAL				
EHF-105-01-L-D-SM	10	11P4253	4.69	4.10
EHF-110-01-L-D-SM	20	11P4256	5.70	4.98
EHF-120-01-L-D-SM	40	11P4259	6.82	6.09
EHF-125-01-L-D-SM	50	11P4262	8.52	7.60

(136015)

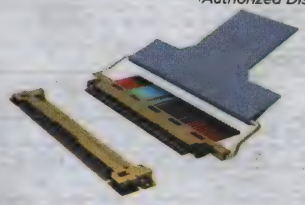
LCEDI (LCD COAXIAL EMBEDDED DISPLAY INTERFACE) CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Ultra-low profile mating configuration
- Compatible and intermateable with I-PEX CABLINE-VS connector series
- Twin leaf contact structure
- Mixed cable use: Micro coax (Twin coax AWG#40 or smaller) and Discrete wire (AWG #32 Teflon or smaller)
- User friendly design that utilizes friction lock mechanism at shell when mated or an optional full lock mechanism with pull bar



LCEDI (LCD Coaxial Embedded Display Interface) connectors are the next generation of connectors designed to provide exceptional electrical performance in both LVDS and embedded DisplayPort (eDP) applications. The LCEDI connectors feature new technology that provides an interconnection between notebook LCD panels and main processor boards using micro coax cable at speeds of 2.7Gbps (or discrete wire AWG 32 teflon or smaller). The ultra-low profile mating configuration offers a user-friendly friction lock mechanism at the shell when mated, or an optional full lock mechanism with pull bar. These LCEDI connectors are licensed by I-PEX CO., LTD. and are fully compatible and intermateable with the I-PEX CABLINE-VS connector series, recently selected by VESA (Video Electronics Standard Association) as the global standard for LED backlight , wide panel (16 x 9) interface.

LCEDI CONNECTORS

Mfg. Part No.	No. of Contacts	Gender	Stock No.	Price Each 1-9
2023344-2	30	Plug	39T3817	3.66
2023344-3	40	Plug	39T3818	3.08
5-2069716-2	30	Receptacle	39T3823	2.21
5-2069716-3	40	Receptacle	39T3824	2.92

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
5-2023347-2	Connector Shell for 30 Position LCEDI Plugs	39T3821	0.63
5-2023347-3	Connector Shell for 40 Position LCEDI Plugs	39T3822	0.53
2023348-2	30 Position Pull Bar	39T3819	0.45
2023348-3	40 Position Pull Bar	39T3820	0.21

(194889)

CFP COMPLIANT 40G AND 100G ETHERNET CONNECTORS

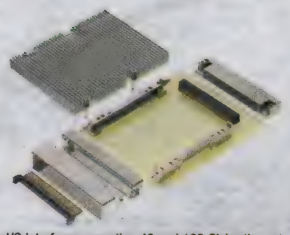
RoHS Compliant Available

TE connectivity

Authorized Distributor

Features

- Electronics high speed 148 position connector, supporting 10Gb/s per channel.
- Plug connector straddle mounts to the Optical Transceiver module
- printed circuit board for conventional processing.
- Receptacle connector is surface mount (SMT) processed to the host board for conventional processing.
- Design supports belly-to-belly port positioning (mounted
- on both sides of host board) for high density.
- Accepts all CFP MSA compliant optical transceivers.
- Provides EMI shielding at the host connector interface and at the bezel opening via integrated EMI gasketing.



The CFP compliant connector is a new ultra high speed pluggable I/O interface supporting 40 and 100 Gb/s ethernet applications. The integrated system provides the mechanical, EMI and thermal performance necessary to meet the demanding requirements of the CFP Multi Source Agreement (MSA) Optical Transceivers and OEM host line cards.

HOST BOARD RECEPTACLE CONNECTOR

Mfg. Part No.	No. of Positions	Plating	Stock No.	Price Each 1-9
2057630-1	148	30u″ Gold	51R0866	42.27

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
2057592-2	Guide Rail (two required)	51R0864	7.50
2057631-1	Receptacle Cover	51R0867	35.00
2057930-1	Backer Plate Assembly	51R0868	12.91

(163820)

XFP CONNECTORS, CAGES, AND CABLE ASSEMBLIES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Network Applications: Fiber Channel, Gigabit Ethernet, InfiniBand
- RoHS/ELV Compliant

CONNECTORS

Mfg. Part No.	Description	Contacts	Stock No.	Price Each 1-9
788862-1	XFP Connector, SMT, 15u″ Gold	30	86H3022	6.72
788862-2	XFP Connector, SMT, 30u″ Gold	30	34M2887	8.76
1367500-1	XFP Connector, SMT, 30u″ Gold w/Contact Surface Treatment, Enhanced Performance	30	21J8484	8.87
1367337-1	X2, XENPAK, XPAK Connector, 15um Gold	70	94C5501	10.02

CAGES

Mfg. Part No.	Description	Mount Style	Stock No.	Price Each 1-9
1489951-1	XFP Cage Assembly 10 Gigabit	Single Sided	10J7268	20.50
1658871-1	XFP Cage Assembly w/Insulating tape	Single Sided	21J9374	20.74

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24
1658294-2	XFP Dust Cap	73M8556	8.55
1542618-2	XFP PCI Heat Sink (4.2mm)	11J0401	9.12
1542656-2	XFP SAN Heat Sink (6.5mm)	10J8817	17.78
1489948-2	XFP Heat Sink Clip	82H1694	2.48

(133676)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

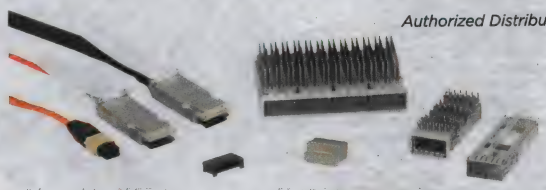
I/O CONNECTORS

QSFP AND QSFP+ CONNECTORS AND CAGES

RoHS Compliant Available

TE connectivity

Authorized Distributor



Features:
- 4x solution featuring TE's 38 position EVERCLEAR connector
- Lightpipe and heatsink options available
- Through-bezel and behind-bezel cage options with proven EMI containment
- Direct attach copper cable for short reach applications
- Quick release latching system
- MPO connectors plug into QSFP parallel optic transceiver modules

Applications:
- Switches, routers, and host bus adapters (HBA's)
- Enterprise storage
- High density, high speed I/O
- Multiple channel interconnects

QSFP (Quad Small Form-factor Pluggable) is a new high-speed pluggable I/O interface. This interconnect system offers four channels, providing three times the density of SFP/SFP+ ports. QSFP and QSFP+ receptacles and cages are designed for data rates up to 14 Gb/s, supporting Fibre Channel, Ethernet, SDH/SONET and INFINIBAND standards. The cage/connector system will accept optical or copper interfaces.

38-POSITION SURFACE MOUNT CONNECTORS

QSFP and QSFP+ receptacles are double-sided (belly-to-belly), 0.8mm pitch surface mount PCB connectors. Both feature 38 copper alloy contacts in a black, liquid crystal polymer (LCP) housing, flammability rated UL94V-0. Designed for high-speed signal integrity, these connectors are part of TE's EVERCLEAR product family, which also includes connectors designed for Mini-SAS/SATA applications.

Mfg. Part No.	Application	Data Rates Up to	Contact Plating	Stock No.	Price Each 1-9
● 1761987-9	Mini SAS	10Gb/s	Gold	08P0623	5.11
● 2110819-1	QSFP+	14Gb/s	Gold	84R9076	5.54

CAGES

Mfg. Part No.	Configuration	Mount Style	Heatsink	Lightpipe	Stock No.	Price Each 1-9
● 1888674-1	1x1	Through-Bezel	None	Customer Applied	07R7333	11.09
● 1888631-2	1x1	Through-Bezel	SAN	None	08P0626	11.59
● 1888781-1	1x1	Behind-Bezel	None	None	08P0628	10.46
● 1888968-1	1x1	Behind-Bezel	PCI	None	08P0630	14.88
● 2057042-2	1x3	Behind-Bezel	SAN	Included	26R9277	71.07

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 1888810-2	QSFP EMI/Dust Cap	08P0629	5.20

(133877)

zQUAD SMALL FORM-FACTOR PLUGGABLE PLUS (zQSFP+) INTERCONNECT SYSTEM

RoHS Compliant Available

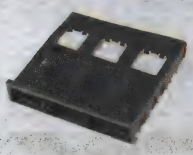
TE connectivity

Authorized Distributor

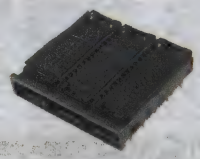
Connector Assembly

1x1 Cage Assembly

1x1 Cage Assembly + Heat Sink



1x3 Cage Assembly



1x3 Cage Assembly + Heat Sink

Features:
- Backwards-compatible with QSFP optical modules and cable assemblies
- Enhanced EMI cage helps provide excellent thermal performance/ EMI protection
- Coupled, narrow-edged, blanked- and formed-contact geometry/ insert molding
- Staggered press-fit pins for belly-to-belly applications

Specifications:
- High-temperature thermoplastic housing
- Nickel silver cage assembly
- Copper alloy EMI springs
- Zinc alloy front flange
- Aluminum heat sink with stainless steel clip
- Mating force: 40N max.
- Durability: 250 cycles min.
- Current rating: 0.5A max. per pin
- Voltage rating: 30VDC max.
- Operating temperature: -20°C to +65°C

Applications:
- Telecommunications: servers, switches, access routers/switches and cellular infrastructure
- Data Center: servers and storage
- Medical: diagnostic equipment
- Networking: network interface, routers, switches and storage
- Test and measurement equipment

zQSFP+ (z-Quad Small Form-factor Pluggable Plus) connector and cage assembly has been designed for applications in the telecommunications, data center and networking markets that require a high-speed, high-density connector. The interconnect offers four channels of high-speed differential signals with data rates ranging from 25Gbps

➤CONTINUED➤

zQUAD SMALL FORM-FACTOR PLUGGABLE PLUS (zQSFP+) INTERCONNECT SYSTEM (CONT.)

up to potentially 40 Gbps, and will support 100 Gbps (4x25 Gbps) Ethernet and 100 Gbps 4X InfiniBand Enhanced Data Rate (EDR) requirements. zQSFP+ 25GBps connector features a black liquid crystal polymer (LCP) housing, flammability rated UL94V-0, with 38 right-angle surface mount gold-plated copper contacts. Alignment posts provide stability for placement of the connector on the host pc board. Standoffs allow easy pc board cleaning after soldering, and the card entry slot accepts 1.0 ±0.1mm-thick integrated circuit card housed in the transceiver. Contact spacing on 0.8mm centerlines. Compatible with QSFP, QSFP+, and Mini-SAS applications.

CONNECTOR ASSEMBLY

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
● 1551920-2	38-Position zQSFP+ Right-Angle Receptacle	07W6607	9.10	8.50

CAGES

Mfg. Part No.	Description	Mount Style	Stock No.	Price Each 1-9	Price Each 10-49
● 1551891-1	zQSFP+ 1x1 Cage Assembly	Behind Bezel	07W6605	13.88	13.19
● 1551892-1	zQSFP+ 1x1 Cage Assembly	Behind Bezel with Heat Sink	07W6606	21.56	20.47
● 2173238-1	zQSFP+ 1x3 Cage Assembly	Behind Bezel	07W6608	18.45	17.52
● 2173239-1	zQSFP+ 1x3 Cage Assembly	Behind Bezel with Heat Sink	07W6609	47.40	44.61

(208472)

SFP AND SFP+ CONNECTORS AND CAGES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Network Applications: Fibre Channel, Ethernet, InfiniBand
- RoHS/ELV Compliant

SFP CAGES/CONNECTOR ASSEMBLIES

Mfg. Part No.	Description	Contacts	Stock No.	Price Each 1-9
● 1658391-1	SFP Cage and Connector Assembly 2x1 Configuration	40	35M5556	15.97
● 1658628-1	SFP Cage and Connector Assembly 2x1 Configuration, Low Profile	40	17R4422	15.97
SFP+ CAGES/CONNECTOR ASSEMBLIES				
● 2007492-5	SFP+ Cage and Connector Assembly 2x1 Configuration	40	58P0684	21.31
SFP CONNECTORS				
● 1367073-1	SFP Connector, Surface Mount, 15µm Gold	20	27C3841	1.75
● 1367073-2	SFP Connector, Surface Mount, 30µm Gold	20	26H2310	2.01
SFP+ CONNECTOR				
● 1888247-2	SFP+ Connector, Surface Mount, 15µm Gold	20	08P0624	2.43

SFP CAGES

Mfg. Part No.	Description	Mount Style	Stock No.	Price Each 1-9
● 6367035-1	SFP Cage (Top), Thru-Hole	Double Sided, Single Sided	16M3410	5.25
● 6367034-1	SFP Cage (Bottom), Thru-Hole	Double Sided, Single Sided	80K5489	5.74
● 1489962-1	SFP Cage (One Piece), SMT or Wave Solder	Single Sided	57J2027	11.75
● 1489779-1	SFP Cage (One Piece), Press-Fit	Single Sided	61H3401	6.07

SFP+ CAGES

Mfg. Part No.	Description	Description	Stock No.	Price Each 1-9
● 2007198-1	SFP+ 1 x 1 Cage, w/EMI Springs	Double Sided, Single Sided	15N6953	6.24
● 2007263-1	SFP+ 1 x 2 Cage, w/EMI Springs	Double Sided, Single Sided	07R7340	8.81
● 2007132-1	SFP+ 1 x 4 Cage, w/EMI Springs	Double Sided, Single Sided	05R5101	13.49
● 2007254-1	SFP+ 1 x 1 Cage, w/EMI Springs & Lightpipe	Double Sided, Single Sided	07R7339	9.61
● 2007262-1	SFP+ 1 x 2 Cage, w/EMI Springs & Lightpipe	Double Sided, Single Sided	35P2782	13.68
● 2007178-1	SFP+ 1 x 4 Cage, w/EMI Springs & Lightpipe	Double Sided, Single Sided	07R7336	19.09
● 2007135-1	SFP+ 1 x 4 Cage, w/Elastomeric Gasket	Double Sided, Single Sided	07R7335	16.06
● 2007093-1	SFP+ 1 x 4 Cage, w/Elastomeric Gasket & Lightpipe	Double Sided, Single Sided	07R7334	22.31
● 2007194-1	SFP+ 1 x 1 Cage for PCI Applications	Double Sided, Single Sided	07R7337	6.47

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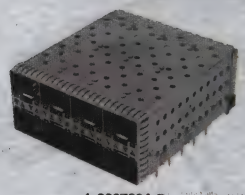
SMALL FORM FACTOR PLUGGABLE (SFP+) CONNECTORS

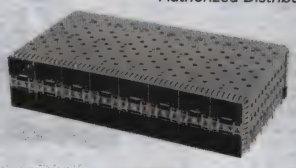
NEW

TE connectivity

Authorized Distributor



1-2007394-5



1-2149490-5

- Support Ethernet, Fiber Channel, and InfiniBand standard applications for up to 16 Gb/s
- Improve thermal performance with enhanced side walls, vertical separators, and latch plate
- Outperform standard SFP+ cages by a 3% reduction in temperature
- Reduce EMI up to 12 dBm within the 10-15 GHz range with augmented latch plate
- Achieve improved electrical connection and product strength with reconfigured gasket retention plate

Introducing an enhanced line of Small Form Factor Pluggable (SFP+) connectors with TE Connectivity's (TE) portfolio of 16 Gb/s connectors designed for the data communications industry. The new SFP+ stacked connectors feature upgrades designed to improve thermal performance and increase electromagnetic interference emission (EMI) containment, enabling communication equipment to operate more efficiently and deliver increased bandwidth.

Mfg. Part No.	Port Configuration	Light Pipes	Stock No.	Price Each 1-24
1-2007492-5	2x1	4	20X5349	15.81
1-2007492-6	2x1	2 Inner	20X5350	23.07
1-2007492-7	2x1	2 Outer	20X5351	23.10
1-2007492-8	2x1	None	20X5352	21.76
1-2007637-5	2x2	4	20X5357	24.29
1-2007637-6	2x2	2 Inner	20X5358	36.86
1-2007637-7	2x2	2 Outer	20X5359	36.91
1-2007637-8	2x2	None	20X5360	34.60
1-2007394-5	2x4	4	20X5345	45.65
1-2007394-6	2x4	2 Inner	20X5346	69.31
1-2007394-7	2x4	2 Outer	20X5347	69.47
1-2007394-8	2x4	None	20X5348	64.63
1-2007562-5	2x6	4	20X5353	105.51
1-2007562-6	2x6	2 Inner	20X5354	100.89
1-2007562-7	2x6	2 Outer	20X5355	100.89
1-2007562-8	2x6	None	20X5356	92.97
2180640-1	2x6	Inner	20X5362	121.15
1-2149490-5	2x8	4	20X5361	138.70

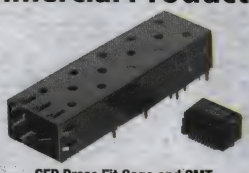
(212395)

SFP/XFP CONNECTORS AND CAGES

RoHS Compliant Available

Amphenol Commercial Products

SFP/XFP series are high speed connectors available in 20 or 30 position connectors and cage combos for mounting to a host PCB. These connectors and cages are similar to Gigabit Converter Interface (GBIC), but are smaller in size and operate at much higher transfer rates. The single port version is rated up to 4.125 Gbps and the stacked (2 x 1) can go up to 8 Gbps. The cages are 1 piece construction with enhanced transceiver mating tabs.



SFP Press Fit Cage and SMT SFP Connector

SFP/XFP CONNECTORS

Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-24
UE75A206000T	SFP SMT Connector, 15u Gold, Tin Tails	39M1691	0.91	0.80
UE75A203000T	SFP SMT Connector, 30u" Gold, Tin Tails	84K8208	1.14	1.00

SFP/SFP+ CONNECTOR CAGES

Mfg. Part No.	Description	Plating	Stock No.	Price Each 1-9	10-24
U77-A1114-100T	1x1 SFP Solder Pin Cage	Bright Tin	39M5503	1.53	1.38
SFP+ CONNECTOR CAGES WITH ELASTOMERIC GASKET					
U77-A241M-2081	1x2 SFP+ Press Fit Cage	Nickel	47R4877	8.00	6.47
U77-A441M-2081	1x4 SFP+ Press Fit Cage	Nickel	47R4879	14.96	12.09
SFP+ CONNECTOR CAGES WITH SPRING FINGER GASKET					
U77-A1613-1001	1x1 SFP+ Solder Pin Cage	Bright Tin	47R4875	1.93	1.56
U77-A461M-2081	1x4 SFP+ Press Fit Cage	Nickel	47R4880	13.56	10.96
SFP+ CONNECTOR CAGES WITH LIGHT PIPES & ELASTOMERIC GASKET					
U77-C641M-2081	1x6 SFP+ Press Fit Cage	Nickel	47R4889	39.23	31.71
SFP+ CONNECTOR CAGES WITH LIGHT PIPES & SPRING FINGER GASKET					
U77-C1619-2001	1x1 SFP+ Press Fit Cage	Nickel	47R4884	9.36	7.56
U77-C461M-2081	1x4 SFP+ Press Fit Cage	Nickel	47R4888	21.91	17.71
U86-D1627-10121	2x1 SFP+ Press Fit Cage	Nickel	47R4893	17.96	14.52

CONTINUED

SFP/XFP CONNECTORS AND CAGES (CONT.)

SFP/XFP DUST COVERS

Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-24
U77-A1110-8000P	SFP Cage Dust Cover	39M5502	0.08	0.07

(68415)

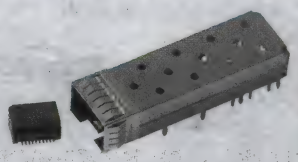
SFP+ CONNECTORS AND CAGES

RoHS Compliant Available

FCI

Specifications:

- Housing: Black thermoplastic, UL94V-0 rated
- Contact: Gold plated phosphor bronze, tin on SMT leads
- Cage: Nickel plated copper alloy
- EMI fingers: Tin plated copper alloy
- Light pipe: Clear polycarbonate
- Light pipe bracket : Stainless steel
- EMI gasket: Conductive elastomeric
- Differential impedance: 100Ω +/- 10Ω @ 70ps rise time (20-80%)
- Connector durability:100 cycles
- Connector mating force: 18N maximum
- Cage: Press fit tail termination; insertion force 40 N per tail
- Operating temperature: -20°C to 85°C



FCI's SFP+ connectors & cages includes a 20 position, 0.8mm contact centerline spaced, SMT terminated card edge connector that is pick-n-place compatible. The EMI metal cages are offered in a single 1x1 configuration and also in 1x2 and 1x4 ganged configurations. The 1x1 and 1x4 cage configurations are also offered with light pipes that allows for displaying network activity via LED's mounted on the system PCB. The edge card connector and cages are designed to meet all signal integrity requirements and EMI requirements as defined by the SFF-8431 and 8461 specifications. Robust EMI fingers are included with each cage port in order to assure a robust and reliable EMI shield & termination when placed through the chassis opening.

CONNECTOR

Mfg. Part No.	Description	Stock No.	Price Each 1-9
10099099-111LF	20 Position SFP+ Connector	74R0442	3.15

CAGES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
10099100-011LF	SFP+ 1x1 Cage with EMI Fingers	74R0443	3.63
10099101-011LF	SFP+ 1x2 Cage with Conductive Elastomeric Gasket	74R0444	16.98
10099102-011LF	SFP+ 1x4 Cage with EMI Fingers	74R0445	8.93
10099103-011LF	SFP+ 1x1 Cage with Light Pipes	74R0446	4.92
10099104-011LF	SFP+ 1x4 Cage with Elastomeric Gasket and Light Pipes	74R0447	13.09

(177399)

QSFP CONNECTORS AND CAGES

RoHS Compliant Available

FCI

Specifications:

- Housing: Black thermoplastic, UL94V-0 rated
- Contact: Gold plated phosphor bronze, tin on SMT leads
- Cage: Nickel plated copper alloy
- EMI fingers: Tin plated copper alloy
- Heat sink: Nickel plated aluminum alloy
- Heat sink mounting clip: Nickel plated copper alloy
- Differential impedance: 100Ω +/- 10Ω @ 70ps rise time (20-80%)
- Connector durability: 100 cycles
- Connector mating force: 40N maximum
- Cage: Press fit tail termination; insertion force 40N per tail
- Operating temperature: -20°C to 85°C

Cable Assembly Specifications:

- Full duplex 4 channel 850nm parallel active optical cable assembly
- Transmission data rate up to 10.3Gbit/s per channel
- Low power consumption of typical 0.8W per end
- Easy to use release mechanism
- Operating case temperature 0°C to +70°C
- 3.3V power supply voltage
- RoHS 6 compliant
- Laser Class 1

FCI's QSFP / QSFP+ connectors & cages includes a 38 position, 0.8mm contact centerline spaced, SMT terminated card edge connector. Also offered is an accompanying single unit (1x1) EMI metal cage that accomodates a heat sink and associated heat sink mounting clip. The edge card connector and cage are designed to meet all signal integrity requirements and EMI requirements as defined by the SFF-8436 specification. Robust EMI fingers on the cage port assure a robust and reliable EMI shield & termination when placed through the chassis opening.

CONNECTOR

Mfg. Part No.	Description	Stock No.	Price Each 1-9
10099113-101LF	38 Position QSFP/QSFP+ Connector	74R0448	5.94

CAGE

Mfg. Part No.	Description	Stock No.	Price Each 1-9
10099114-001LF	QSFP/QSFP+ 1x1 cage with EMI fingers	74R0449	4.04

CONTINUED

I/O CONNECTORS

QSFP CONNECTORS AND CAGES (CONT.)

ACCESSORIES

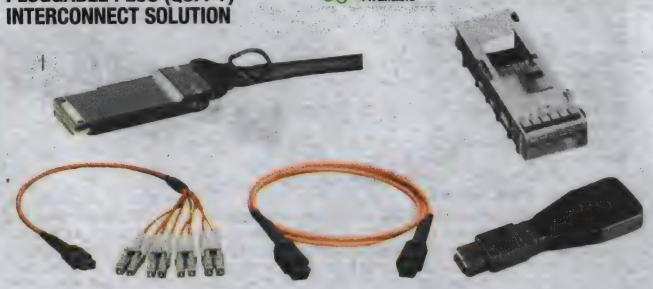
Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 10099115-002LF	QSFP/QSFP+ Cage Heat Sink	74R0450	2.19
● 10099116-001LF	QSFP/QSFP+ Cage Heat Sink Clip	74R0451	9.67

(177398)

QUAD SMALL FORM-FACTOR PLUGGABLE PLUS (QSFP+) INTERCONNECT SOLUTION

RoHS Compliant Available

molex



Quad Small Form-factor Pluggable Plus(QSFP+) solution is designed for high-density applications. QSFP+ has evolved to QSFP+ (meets 10 Gbps data rates) just as SFP+ went from SFP+ to SFP+ for 10 Gbps rates. The original QSFP+ MSA is no longer an appropriate designation for use, as the specifications now resides in the SFF Committee as "INF-8438".

CAGE ASSEMBLIES

Mfg. Part No.	Port Size	Gasket Style	Pins	Stock No.	Price Each 1-4
● 74750-0021	1x1	EMI Spring Finger	Two rear press-fit	09R9229	10.42
● 74750-0023	1x1	EMI Spring Finger	No rear pins	18P5302	12.41
● 74768-0212	1x3	Elastomeric	Two rear press-fit	56R7868	28.62

LIGHT PIPES

Mfg. Part No.	Port Size	Light Pipes	PCB Thickness	Stock No.	Price Each 1-4
● 74768-0404	1x3	Double	1.6 mm	56R7870	9.35

74757 SERIES COPPER PATCH CABLE ASSEMBLIES

Mfg. Part No.	Cable Length (m)	Wire Gauge (AWG)	Stock No.	Price Each 1-9
● 74757-2301	3	28AWG	56R7847	119.96

OPTICAL CABLE ASSEMBLIES MTP JUMPER

Mfg. Part No.	Cable Length (m)	Overfille Lanch Bandwidth, Min. (MHz-km)	Description	Stock No.	Price Each
● 106283-0001	1	Standard	3.1mm, 8 fiber, OFNP	55R8494	122.08
● 106283-0005	5	Standard	3.1mm, 8 fiber, OFNP	55R8498	119.38
● 106283-0010	10	Standard	3.1mm, 8 fiber, OFNP	55R8503	137.56
● 106283-0015	15	Standard	3.1mm, 8 fiber, OFNP	55R8508	169.43
● 106283-0020	20	Standard	3.1mm, 8 fiber, OFNP	55R8513	191.45
● 106283-0025	25	Standard	3.1mm, 8 fiber, OFNP	55R8518	213.49
● 106283-0030	30	Standard	3.1mm, 8 fiber, OFNP	55R8523	543.18
● 106283-1001	1	High	3.1mm, 8 fiber, OFNP	55R8524	125.27
● 106283-1005	5	High	3.1mm, 8 fiber, OFNP	55R8525	158.05
● 106283-1010	10	High	3.1mm, 8 fiber, OFNP	55R8526	175.59
● 106283-1015	15	High	3.1mm, 8 fiber, OFNP	55R8527	257.60
● 106283-1020	20	High	3.1mm, 8 fiber, OFNP	55R8528	571.63
● 106283-1025	25	High	3.1mm, 8 fiber, OFNP	55R8529	284.01
● 106283-1030	30	High	3.1mm, 8 fiber, OFNP	55R8530	320.14

OPTICAL CABLE ASSEMBLIES MTP TO LC BREAKOUT

● 106283-5001	1	Standard	MTP to 4 Duplex LC, 3mm 8 fiber, OFNP	55R8531	242.72
● 106283-5003	5	Standard	MTP to 4 Duplex LC, 3mm 8 fiber, OFNP	55R8533	268.33
● 106283-5101	1	High	MTP to 4 Duplex LC, 3mm 8 fiber, OFNP	55R8536	247.55
● 106283-5103	5	High	MTP to 4 Duplex LC, 3mm 8 fiber, OFNP	55R8538	242.27
● 106283-5201	1	Standard	MTP to 8 Simplex LC, 3mm 8 fiber, OFNP	55R8539	199.51
● 106283-5203	5	Standard	MTP to 8 Simplex LC, 3mm 8 fiber, OFNP	55R8541	200.98
● 106283-5301	1	High	MTP to 8 Simplex LC, 3mm 8 fiber, OFNP	55R8544	203.48
● 106283-5303	5	High	MTP to 8 Simplex LC, 3mm 8 fiber, OFNP	55R8546	262.00

OPTICAL LOOPBACK ASSEMBLY

● 106005-1100	N/A	N/A	MTP Loopback	55R7885	92.86

(164501)

0.80MM (0.31") SFP+ STACKED MULTI-PORT CONNECTORS

RoHS Compliant Available

molex

- Current: 0.5 Amp
- Voltage: 120V AC
- Contact Plating: Gold
- Elastomeric Gasket
- Capable of handling 10 Gbps data rates to meet
- SFP+ industry requirements

The new SFP+ Stacked Multi-Port Connectors are the latest additions to Molex's extensive Stacked SFP connector product line. These high-port-density connectors offer complete integration of the connector within a cage and include optional lightpipes to provide port-status indication to the user. These 25.50mm (1.004") height stacked connectors provide two rows of belly-to-belly vertically stacked SFP+ ports. The SFP+ product line encompasses connectors offered in six port configurations: 2-by-1,2-by-2,2-by-4,2-by-5,2-by-6 and 2-by-8. Superior Electro Magnetic Interference (EMI) protection required for SFP+ speeds is achieved with either an elastomeric gasket.

Mfg. Part No.	Circuits	Port Configuration	Stock No.	Price Each 1-4
● 76090-5001	40	2x1 Tin Tails	39P8118	15.58
● 76091-0001	80	2x2 Tin/Lead Tails	39P8119	54.60
● 76091-5001	80	2x2 Tin Tails	39P8120	28.63

(136960)

IPASS™ I/O SMT RECEPTACLES AND ACCESSORIES

RoHS Compliant Available

molex

iPASS™ system provides flexible speed compatibility for applications ranging from 1.5 to 6.0 Gbps, with capability up to 10 Gbps. Supports SAS, SATA, SFF and external PCI Express. **75586** right angle receptacles have 0.8mm (.031") pitch, feature standoffs for easy PCB cleaning after soldering. **75783** right angle internal receptacles have hood kits that act as disposable pick-and-place caps, align the connector to the hood during robotic placement. Rated 0.5A @ 30V. **74150** complies with PCI SIG specs, supports 2.5 Gps data transfer rate for Gen I and 5.0 Gps for Gen II. Inline SMT leads on 0.64mm pitch. **75581** is an integrated press-fit connector assembly with cage for one-step placement to PCB. .

CONNECTORS

Mfg. Part No.	Description	Contacts	Stock No.	Price Each 1-4	Price Each 5-9
● 75586-0007	PCIe 8x host connector for external applications	68	83K0809	7.01	6.43
● 75586-0009	I/O SMT Wire-To-Board Connector, 30u" Gold	26	18M8260	7.16	6.97
● 75586-0010	I/O SMT Wire-To-Board Connector, 15u" Gold	38	73K5911	6.05	5.52
● 75586-0011	I/O SMT Wire-To-Board Connector, 30u" Gold	38	56R8813	8.57	8.00

SHELL KITS

● 75783-0132	Mini SAS/SATA 4x connector/thru-hole hood kit*	36	18M8261	7.47	6.62
● 75783-0140	Mini SAS/SATA 4x connector/thru-hole hood kit**	36	18M8262	7.51	7.37

*1.27mm PC Tail ** 2.79mm PC tail

CABLES

Mfg. Part No.	Description	Contacts	Lgth. (m)	Stock No.	Price Each 1-4
● 74576-0001	PCIe x1 Cable Assembly	18	1	32M6719	19.11
● 74546-0401	PCIe x4 Cable Assembly	38	1	32M6694	111.07
● 74546-0403	PCIe x4 Cable Assembly	38	3	32M6695	145.23
● 74546-0407	PCIe x4 Cable Assembly	38	7	32M6697	415.26
● 74546-0801	PCIe x8 Cable Assembly	68	1	32M6698	115.38
● 74546-1601	PCIe x16 Cable Assembly	136	1	32M6702	287.57
● 74546-1603	PCIe x16 Cable Assembly	136	3	32M6703	329.32
● 74546-1605	PCIe x16 Cable Assembly	136	5	32M6704	780.11
● 74547-0303	SAS Cable, 2,4,6 universal key	26	3	32M6709	75.91

(88564)

Custom Cable Assembiles to your specs to mate with the complete line of connectors!
Call 1.800.463.9275

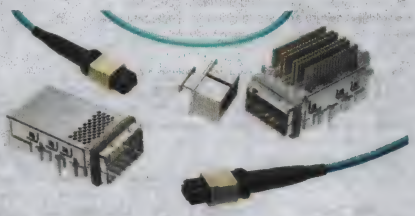
(212562)

CXP PLUGGABLE I/O CONNECTOR ASSEMBLIES AND CABLE ASSEMBLIES

RoHS Compliant Available

TE connectivity

Authorized Distributor



Specifications

- Housing material: Zinc diecast
- Connector housing: Black LCP UL94V-0
- Connector contacts: Gold plated phosphor bronze
- Heatsinks: Aluminum
- Heatsink Clips: Stainless steel
- Lightpipes: Clear Polycarbonate
- EMI Springs: Copper Alloy
- Current rating: 0.5 amps max. per pin
- Mating force: 210N min.
- Unmating force: 42N min.
- Durability: 250 cycles
- Max. PCB insertion force: 25N per pin

Features

- Standard CXP interface complies with InfiniBand CXP 12x QDR and IEEE 100 Gbps Ethernet
- Provides 12 channels of 10 Gbps data rates for 120 Gbps of total bandwidth in one-piece press-fit assembly
- Enhanced Footprint (EF), dual sourced footprint offers reduced cross-talk
- Pre-assembled (one-piece) connector and cage assembly offers one-step placement to the board
- EMI gasketing at bezel opening and EMI springs for plug-to-receptacle containment
- CXP cages accommodate belly-to-belly mounting (can be applied to both sides of the board)
- Offering includes multiple heat-sink, lightpipe and EMI/dust plug options to fit customer applications

ASSEMBLIES

Mfg. Part No.	Contacts	Height (mm)	Cover	Heat Sink	Light Pipes	Stock No.	Price Each 1-9
2149448-1	84	11.88	No	No	No	65T1035	33.02
2149152-1	84	11.88	Yes	No	No	65T1027	30.21
2149157-1	84	14.37	No	Yes	No	65T1028	39.83
2149157-3	84	16.50	No	Yes	No	65T1029	42.46
2149157-5	84	23.50	No	Yes	No	65T1030	45.60
2149159-1	84	16.37	Yes	No	Yes	65T1031	35.48
2149159-3	84	16.37	No	Yes	Yes	65T1032	36.52
2149159-5	84	16.50	No	Yes	Yes	65T1033	43.85
2149159-7	84	23.50	No	Yes	Yes	65T1034	43.18
2149699-1	84	11.55	Yes	No	No	65T1036	35.54
2149701-1	84	11.30	No	No	No	65T1037	34.47
2149731-1	84	11.55	Yes	No	No	65T1038	46.31
2149733-1	84	11.30	No	No	No	65T1039	45.32

CABLE ASSEMBLIES

Mfg. Part No.	Description	Length	Stock No.	Price Each 1-4
2148238-5	24 Fiber 50/125um, MPO to MPO	5 m	65T1025	309.63
2148041-5	24 Fiber 50/125um, MPO to 12 LC Duplex	5 m	65T1023	356.30
2148043-5	24 Fiber 50/125um, 24 fiber MPO to (3) 8 fiber MPO	5 m	65T1024	279.59
2123248-1	24 Fiber Loopback	70 mm	65T1022	131.81

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24
2149126-3	EMI / Dust Cap	65T1026	10.24

(197653)

AMP CONNECTOR AND CABLE ASSEMBLY FOR MINI USB

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Thermoplastic housing, rated UL 94V-0
- Gold over copper alloy contacts
- Temperature rating: -55°C to +85°C

RIGHT ANGLE PC MOUNT SOCKET

Mfg. Part No.	Type	Contacts	Stock No.	Price Each 1-9	10-24	25-49
1734327-1	USB 2.0 Mini A	5	16M2764	1.62	1.36	1.24
1734035-1	USB 2.0 Mini B	5	16M2760	1.45	1.32	1.24
1734035-2	USB 2.0 Mini B	5	16M3869	1.95	1.77	1.65

CABLE ASSEMBLY

Mfg. Part No.	Assembly Type	Stock No.	Price Each 1-24	25-49
1496476-1	USB A Plug-to-Mini USB B Plug	75K1882	4.54	4.09

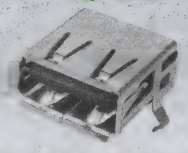
(80553)

AMP CONNECTORS FOR USB

RoHS Compliant Available

TE connectivity

Authorized Distributor



- Thermoplastic housing, rated UL 94V-0
- Gold over copper alloy contacts
- Temperature rating: -55°C to +85°C

4-position, PCB thru-hole receptacles offer plug-and-play capability. Hot pluggable connectors permit attaching or detaching peripherals without powering down or rebooting.

USB RECEPTACLES

Mfg. Part No.	Series	Solder Tail Length	Mounting	Stock No.	Price Each 1-9	10-49	50-99
1734366-1	A	0.110″	Vertical	18M6973	1.32	1.16	1.05
292336-1	A	0.090″	Flag Right Angle	39M4083	5.68	5.46	4.77
292303-1	A	0.112″	Right Angle	53K4093	1.44	1.31	1.17
2041039-1**	A	0.112″	Right Angle	51R0445	6.68	6.41	5.85
292304-1	B	0.119″	Right Angle	41J2935	1.92	1.74	1.57
292304-2*	B	0.119″	Right Angle	21M8707	2.23	2.13	2.02
5787834-1	B	0.119″	Vertical	30K6913	2.48	2.34	2.19
STACKED USB RECEPTACLES							
5787745-1	A	0.112″	Right Angle	40P9861	3.73	3.50	3.26
5787745-2	A	0.090″	Right Angle	33M8367	2.49	2.27	2.03
5787617-1	A	0.112″	Right Angle	53K4503	3.33	3.20	2.80
INDUSTRIAL USB RECEPTACLES							
1903814-1	A	0.112″	Right Angle	56T4884	1.50	1.25	1.00
INDUSTRIAL STACKED USB RECEPTACLES							
1903815-1	A	0.112″	Right Angle	56T4885	1.89	1.61	1.34

* High temperature compatible; ** Locking Type

(61072)

UNIVERSAL SERIAL BUS (USB) 3.0 STANDARD CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Support 5 Gbps data rate for fast sync-n-go, minimizing wait-time
- Backward compatible with USB 2.0 connector
- Minimize connector form factor variations
- Comprehend ease-of-use aspects
- Optimized power efficiency
- Plug and Play capacity
- Shell: Tin plated copper alloy
- Contacts: Gold plated copper alloy; tin on solder tails
- Voltage rating: 100VAC/VDC
- Current rating: 1.8A applied to Vbus pin, GND pins 1, 4, 7; 0.25A applied to pins 2, 3, 5, 6, 8, 9
- Operating temperature rating: -55°C to +105°C

TE's USB 3.0 connector meets all standards of USB-IF. It supports 5 Gbps data rate for fast sync-n-go, a 10X performance increase over USB 2.0. The USB 3.0 connector is backward compatible with USB 2.0 while offering optimized power efficiency by eliminating device polling and reducing active and idle power requirements. It allows for the unit load of 150mA (which is a 50% increase over the minimum unit load of USB 2.0) up to 6 unit loads (which is 900 mA, an 80% increase over USB 2.0 at a registered maximum of 500 mA). This means that USB 3.0 has up to 80% more power based on the configuration of the device.

CABLE MOUNT TYPE A PLUG

Mfg. Part No.	No. of Positions	No. of Ports	Tail Length (mm)	Stock No.	Price Each 1-9
1932266-1	9	1	...	25T0629	5.70
PCB MOUNT TYPE A RECEPTACLES					
1932258-1	9	1	2.3	85R4853	1.22

(190035)

element14 COMMUNITY

Get inspired, collaborate, design, research, ask experts questions.

element14.com

(196546)

I/O CONNECTORS

USB 3.0 CONNECTORS

NEW

RoHS Compliant Available

molex

- Meets High-Durability-Class (5000 mating cycles) requirements of USB 3.0 specifications
- Provides faster data rates of up to 10 times the theoretical speed of USB 2.0 with improved custom power distribution
- Withstands IR reflow temperatures of up to 255°C while maintaining solder-mount compatibility in application processes
- A variety of PCB-mount designs in upright, vertical and right-angle orientation

Mfg. Part No.	Contact Height*	Height**	Circuits (Loaded)	Stock No.	Price Each 1-9
● 48391-0003	6.09mm	8.95mm	9	29X4569	2.19
● 48392-0003	4.06mm	6.92mm	9	29X4570	2.19
● 48394-0003	0.36mm	5.72mm	9	29X4572	2.30
● 48398-0003	2.04mm	6.92mm	9	29X4575	2.19
● 48393-0003	4.00mm	6.86mm	9	29X4571	2.19
● 48405-0003	4.07mm	6.93mm	9	29X4577	1.63
● 48408-0003	N/A	15.00mm	9	29X4579	1.81
● 48395-0003	1.00mm	7.40mm	9	29X4573	2.19
● 48404-0003	N/A	13.85mm	9	29X4576	3.88
● 48406-0003	N/A	15.50mm	18	29X4578	3.88
● 48409-0003	N/A	14.88mm	18	29X4580	3.88
● 48397-0003	1.75mm	7.40mm	9	29X4574	2.19

*Contact Height refers to the distance from soldering plane to mating plane of a mated cable-connector combination;
**Height refers to the distance from top of connector shell (without flange) to PCB.
(212276)

USB 3.0 CONNECTORS

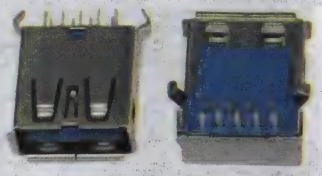
RoHS Compliant Available

FCI

Specifications
- Functional temperature range : -55°C to +85°C
- Operating Current Rating: 1.8A
- Operating Voltage Rating: 30VAC(RMS)
- Insulation resistance: Initial 100mΩ minimum

Applications
- Desktop and laptop
- Digital audio
- High volume storage devices
- Scanners
- Game ports
- High definition A/V equipment
- Control boards

Features & Benefits
- Minimizes user wait-time
- Backward compatible with USB 2.0 connector
- Over 10 times performance increase compared to USB 2.0
- Support 5 Gbps data rate for fast sync-n-go
- High durability : Fully mated condition is confirmed by a definite tactile
- Right angle and vertical styles
- Compliant with physical, electrical & environmental requirements of USB 3.0



Mnf. Part No.	Description	Termination	Stock No.	Price Each 1-9
● 10117835-001LF	USB 3.0 A Receptacle, 30u" minimum gold	Through Hole Right Angle	44W3647	1.14
● 10117835-002LF	USB 3.0 A Receptacle, Gold flash	Through Hole Right Angle	44W3648	0.99
● 10117836-001LF	USB 3.0 A Receptacle, 30u" minimum gold	Through Hole Vertical	44W3649	1.14
● 10117836-002LF	USB 3.0 A Receptacle, Gold flash	Through Hole Vertical	44W3650	0.97

(206876)

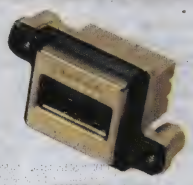
MUSB SERIES HARSH ENVIRONMENT USB CONNECTORS

RoHS Compliant Available

Amphenol Commercial Products

- IP67 sealed in mated and unmated conditions
- Meets military shock and vibration level standards
- No special temination tooling required

Unique and innovative USB connector design provides the ideal solution for data transfer in harsh or demanding environments. These connectors are underwater submersible rather than just water resistant in both mated and unmated conditions. Metal die cast outer shell. Current rating: 1.5 A.



MUSB-A111-30

TYPE A RECEPTACLES

Mfg. Part No.	Contacts	Mounting	Rear Shield	Stock No.	Price Each 1-9	Price Each 10-24
● MUSB-A111-30	4	Right-Angle PCB	Yes	01M6102	10.66	10.00
● MUSB-A211-30	4	PCB with Cable Header	Yes	01M3136	32.39	29.00
● MUSB-A311-30	4	PCB with USB Termination	Yes	01M3137	23.77	21.49
● MUSB-A511-00	4	Straight PCB	No	01M6103	8.42	7.77
TYPE B MINI RECEPTACLES						
● MUSBB15134	4	Right-Angle PCB	Yes	84M8745	11.18	10.21
TYPE A STACKED RECEPTACLES						
● MUSB-C111-30	4	Right-Angle PCB	Yes	01M3138	10.62	9.51
● MUSB-C311-30	4	PCB with USB Termination	Yes	84K9966	18.38	17.94
TYPE B RECEPTACLES						
● MUSB D 11130	4	Right-Angle PCB	Yes	01N5212	9.22	8.40
● MUSBD11131*	4	Right-Angle PCB	Yes	96M0849	11.38	10.52
● MUSB D 51100	4	Straight PCB	No	01N5213	10.03	9.16
TYPE MICRO AB RECEPTACLES						
MUSB-K152-30	5	Right-Angle PCB	Yes	93T1298	11.63	11.15

*With dust cover

DUST COVERS

Mfg. Part No.	For Use With	Stock No.	Price Each 1-9	Price Each 10-49
● MUSB2A111014BP	Type A Jack, Gray	01N5215	1.77	1.47
● MUSB2A111024BP	Type A Jack, Black	14N3745	1.46	1.38
● MUSB2E151005BP	Type Mini AB Jack, Gray	01N5216	1.18	0.98
MUSB-2E151-015BP	Type Mini AB Jack, Black	70R1406	1.33	1.11

(89563)

USB FIELD TV HARSH ENVIRONMENT CONNECTORS

RoHS Compliant Available

Amphenol Pcd

- No hazardous in-field cabling
- Toolless assembly
- IP68 sealed against fluids and dusts when capped or mated
- Shock, vibration and traction resistant
- Improved EMI protection
- Mechanical coding/polarization (2 positions)
- Shell size 15

The USB Field TV series allows the use of standard USB 2.0 connectors. This series utilizes the MIL Circular DTL-38999 Series III Tri-Start thread coupling mechanizm with anti-decoupling device, providing both audible and visual coupling. Fire retardant and low smoke per UL94 V0 and NF F 16101 & 16 102. Mating cycles: 500 minimum. Temperature range: -55° to +85°C. *Order caps and accessories separately below.*

USB FIELD TV PLUGS

Mfg. Part No.	Description	Shell Finish	Stock No.	Price Each 1-9
● USBFTV6N	Plug, 2.0 USB A	Nickel	20J4062	73.12
USBFTV6G	Plug, 2.0 USB A	Olive Drab Cadmium	20J4061	69.31
USB FIELD TV PANEL MOUNT RECEPTACLES Square flange receptacle with 4 mounting holes. **Mfg. Part No. JE15** gasket required.				
● USBFTV21N	Receptacle, 2.0 USB A to 2.0 USB A	Nickel	20J4058	52.82
USBFTV21G	Receptacle, 2.0 USB A to 2.0 USB A	Olive Drab Cadmium	20J4057	54.75
USBFTV2PE1G	Receptacle, 2.0 USB A to 2.0 USB A w/ Backshell	Olive Drab Cadmium	09J5782	116.75
USBFTV22G	Receptacle, 2.0 USB A to PC Board	Olive Drab Cadmium	20J4059	48.97
● USBFTV22N	Receptacle, 2.0 USB A to PC Board	Nickel	20J4060	49.17
USB FIELD TV JAM NUT RECEPTACLES				
● USBFTV71N	Receptacle, 2.0 USB A to 2.0 USB A	Nickel	20J4065	61.30
USBFTV71G	Receptacle, 2.0 USB A to 2.0 USB A	Olive Drab Cadmium	20J4064	58.27
USB FIELD TV CAPS AND ACCESSORIES				
USBFTVC6G	Plug Cap, Lanyard	Olive Drab Cadmium	20J4052	32.62
● USBFTVC2N	Panel Mount Receptacle Cap, Lanyard	Nickel	20J4051	32.39
USBFTVC2G	Panel Mount Receptacle Cap, Lanyard	Olive Drab Cadmium	09J5784	37.72
● USBF21NSCC	Panel Mount Receptacle, 2.0 USB A to 2.0 USB A, with Snap Cap	Nickel	36K2902	47.89
● USBFTVC7N	Jam Nut Receptacle Cap, Lanyard	Nickel	20J4055	44.92

CONTINUED

USB FIELD TV HARSH ENVIRONMENT CONNECTORS (CONT.)

USB FIELD TV CAPS AND ACCESSORIES

Mfg. Part No.	Description	Shell Finish	Stock No.	Price Each 1-9
USBFTVC7G	Jam Nut Receptacle Cap, Lanyard, Green Cadmium	Olive Drab Cadmium	20J4054	47.40
● JE15	Gasket for Panel Mount Receptacle	...	20J3673	2.35
● USBFODE	Insert Removal Device for Plug and Receptacle	...	20J4050	28.99

(113748)

USBB FIELD TV HARSH ENVIRONMENT CONNECTORS

RoHS Compliant Available

Amphenol Pcd

USBBFTV6N USBBFTV21G USBBFTV71G USBBFTV72N

- No hazardous in-field cabling
- Tooless assembly
- IP68 sealed against fluids and dusts when capped or mated
- Shock, vibration and traction resistant
- Improved EMI protection
- Mechanical coding/polarization (2 positions)
- Shell size 15

USBB Field TV series allows the use of standard USB 2.0 connectors in a harsh enviornment. This series utilizes the Mil Circular DTL-38999 Series III Tri-Start thread coupling mechanizm with anti-decoupling device, providing both audible and visual coupling. Fire retardant/ low smoke: UL94 V0 and NF F 16101 & 16 102. Mating cycles: 500 minimum. Temperature range: -40° / +85°C. See USB Field TV series for caps and accessories *on pages 822-823.*

USB-B FIELD TV PLUGS

Mfg. Part No.	Description	Shell Finish	Stock No.	Price Each 1-9
USBBFTV6G	Plug	Olive Drab Cadmium	96M8930	91.41
● USBBFTV6N	Plug	Nickel	96M8931	89.26

USB-B FIELD TV SQUARE FLANGE RECEPTACLES

Square flange receptacle with 4 mounting holes. **Mfg. part no. JE15** gasket required.

USBBFTV21G	USB-B to USB-A	Olive Drab Cadmium	96M8926	67.42
● USBBFTV21N	USB-B to USB-A	Nickel	96M8927	89.61
● USBBF21BSCC	USB-B to USB-A Panel Mount Receptacle with Snap Cap	Black	96M8936	72.70
USBBFTV22G	USB-B to PC Board	Olive Drab Cadmium	96M8928	95.58
● USBBFTV22N	USB-B to PC Board	Nickel	96M8929	88.60

USB-B FIELD TV JAM NUT RECEPTACLES

USBBFTV71G	USB-B to USB-A	Olive Drab Cadmium	96M8932	113.10
USBBFTV72G	USB-B to PC Board	Olive Drab Cadmium	96M8934	111.13

COMPOSITE USB-B 2.0 CORDSET AND CONNECTORS

High-reliability USB 2.0 cordsets with male sealed USB-B composite connector to USB-A cordset with overmolded plug. USB-B male cordsets are overmolded on USB 2.0 cable. USB-B female receptacle cordets have 5 ways connectors and can accept 50mm wires.

Mfg. Part No.	Cable Length (m)	Description	Stock No.	Price Each 1-4
● USBBF6200	2	USB-B Plug to USB-A Cordset	72K7546	21.04
● USBBF7	...	USB-B Jam Nut Receptacle to JWT Connector Cordset	72K7544	19.78
● USBBFC7	...	Cap w/ Metal Chain	93K7841	5.17

(88881)

USB AND IEEE 1394 CONNECTORS 690 / 628 SERIES

RoHS Compliant Available

EDAC INC

Features

- Right angle, vertical, and a unique right angle vertical foot print available
- Available with through-hole or SMT contact designs
- USB products are compatible with asynchronous and isochronous data transfer methods
- Compatible with industry standard plug and play technology
- Communication speed
  - -Up to 1.5 Mbps for standard 1.0 USB
  - -Up to 480 Mbps for standard 2.0 USB
  - -Up to 5 Gbps for 3.0 USB

Meets USB 2.0 specifications. Minimum mating cycles: 1500 per EIA 364-09. Insulator Housing: UL 94V-0 thermoplastic. Contact Material: Phosphor Bronze (USB), Copper Alloy (IEEE1394). Contact Plating: 30u Gold plating on mating area. Current Rating: 1 Amp maximum Voltage Rating: 30 volts AC rms maximum. Shield Housing: Copper alloy.

USB 2.0 CONNECTORS

Mfg. Part No.	Contacts	Description	Stock No.	Price Each 1-9
● 690-004-660-013	4	Single Port Position, Type A, 30u gold, Vertical PCB	59K0509	1.32
● 690-004-621-013	4	Single Port Position, Type A, 30u gold, Right angle PCB (.405" footprint)	73K4059	1.17
● 690-004-660-023	4	Single Port Position, Type B, 30u gold, Vertical PCB	07J7041	1.71

➤CONTINUED➤

USB AND IEEE 1394 CONNECTORS 690 / 628 SERIES (CONT.)

Mfg. Part No.	Contacts	Description	Stock No.	Price Each 1-9
● 690-004-621-023	4	Single Port Position, Type B, 30u gold, Right angle PCB (.405" footprint)	59K0508	1.27
● 690-008-621-013	8	Dual ports, Type A, 30u gold, Right angle PCB (.405" footprint)	59K0511	1.88

CABLE ASSEMBLIES

Mfg. Part No.	Cable Length (m)	Description	Stock No.	Price Each 1-9
● 628-000-943	1.8	USB Type A Male to Type B Male	07J7119	4.81

(79328)

HIGH-SPEED USB RECEPTACLES

RoHS Compliant Available

FCI

- USB 2.0 Certified -- Up to 480 Mbps
- Plug-and-Play
- Hot Pluggable
- Simple, Flexible Design
- Current Rating: 1 A
- Withstanding Voltage: 30 Vrms
- PC Board Thickness: 1.57 mm
- USB Compliant

Style A Style A Double-Stack

Designed to combine all personal computing interface ports into one connector. Handles serial data rates of 1.5 Mbps to 12 Mbps asynchronous and isochronous. Ideal for desktop and laptop PCs, printers, plotters, disk drives, servers, CDs, monitors, televisions, digital cameras, ISDN and PBXs. High-temperature thermoplastic housing, rated UL 94-V-0. Copper alloy shell and contacts. The USB+Power interconnect system was developed by FCI to enable additional power to be delivered to peripheral devices connected using USB 2.0 cable links. The USB+Power connector interface includes four additional contacts for power delivery, each rated at 5A/contact, to supplement the connector's current-carrying capability. For many devices, this eliminates the requirement for a separate power source reducing the number of cables required. For peripherals not requiring the additional current, the USB+Power receptacle will mate with a standard USB

STANDARD USB CONNECTORS

Mfg. Part No.	Style	Description	Stock No.	Price Each 1-9
● 87583-2010BLF*	A	Right-Angle, Surface Mount, Black	31M6798	0.91
● 73725-0010BLF	A	Upright, Side Mount Flag, Thru-Hole, w/Sensor Contact	06M2055	1.08
● 73725-0110BLF	A	Upright, Side Mount Flag, Thru-Hole	53K1476	0.86
● 72309-8014BLF	A	Right-Angle, Double-Stack, Thru-Hole	06M1952	1.35
● 72309-8034BLF	A	Right-Angle, Double-Stack, Thru-Hole, w/Arms	43K4479	1.48
● 61729-0010BLF	B	Right-Angle, Thru-Hole, White	62K6482	0.93
● 61729-1010BLF	B	Right-Angle, Thru-Hole, Black	43K4467	1.09

USB+POWER CONNECTORS

● 55917-501LF	A	Standard A Plus Power Right Angle PCB Receptacle	53K1434	5.97

*With thru-hole mounting claw and sensing pin

(68885)

MICRO-USB CONNECTORS

RoHS Compliant Available

FCI

- Contact: Gold plated copper alloy
- Shield: Stainless steel
- Housing: LCP, Black for B-type, Gray for AB-type; UL94V-0
- Functional temperature range: -55°C to +85°C
- Low level contact resistance: 40 mΩ Max.
- Insulation resistance: Initial 1000 MΩ Min.; After 100 MΩ Min.
- Dielectric withstanding voltage: 100 VAC for 1 minute
- Mating force: 35N Max.
- Un-Mating force: 8N Min.
- Contact Resistance: 40mΩ Max.
- Mating cycles: 10,000 max. rated, 200 cycles per hour

Extremely small high reliability connectors comply with physical, electrical and environmental requirements of Micro-USB standard (USB 2.0). Approximately 60% smaller in size compared to mini-USB connector range. Receptacles available in B and AB type; mid-mount & reverse mounting styles for use in various applications. Plugs used for data transmission, earphone or charging applications. Passive Latching prevents unintentional cable release

Mfg. Part No.	Gender	Style	Description	Stock No.	Price Each 1-9
● 10103592-0001LF	Receptacle	B	Reverse, Thru Hole Grounding	82R7405	0.81
● 10103593-0001LF	Receptacle	B	Standard, Mid Mount	82R7406	0.79
● 10103594-0001LF	Receptacle	B	Standard, Thru Hole Grounding	82R7407	0.77
● 10104110-0001LF	Receptacle	B	Standard, SMT Grounding	82R7424	0.73
● 10104111-0001LF	Receptacle	A/B	Standard, SMT Grounding	82R7425	0.80

(197414)

I/O CONNECTORS

MICRO USB 2.0 CONNECTORS

RoHS Compliant Available

GCT Global Connector Technology

Specifications:
- Plastic housing: Thermoplastic, UL94V-0, black
- Contact plating: 30u" gold in contact area
- Metallic shell: stainless steel
- Voltage rating: Vertical: 30 VDC; Right Angle: 100 VAC
- Current rating: Signal 1A, Power 1.8A
- Operating temperature: -30°C to +85°C
- Contact Resistance: 30mΩ Max
- Insulation resistance: 1000MΩ Min
- Mating force: 35N (3.57Kgf) Max
- Unmating force: 8N (0.82Kgf) Min.
- Durability: 10,000 cycles

Mfg. Part No.	Series	Description	Stock No.	Price Each 1-9	Price Each 10-24
● USB3065-30-00-A	B	Right Angle SMT, Bottom Mount	58T0860	0.57	0.54
● USB3070-30-A	B	Right Angle SMT, Mid Mount	58T0862	0.57	0.54
● USB3075-30-A	B	Right Angle SMT, Bottom Mount with Outer Post	58T0863	0.57	0.54
● USB3076-30-A	B	Right Angle SMT, Bottom Mount with Outer Post, No Mating Entry Lead-Ins	73T7895	0.57	0.54
● USB3080-30-01-A	B	Right Angle SMT, Bottom Mount with Inner Post	58T0864	0.57	0.54
● USB3100-30-A	B	Right Angle SMT, Top Mount	07W3659	0.57	0.54
● USB3135-30-A	B	Right Angle SMT, Top Mount with Outer Post	07W3660	0.57	0.54
● USB3140-30-0170-1-C	B	Vertical SMT with Cap and Outer Post for 0.039" Thick PCBs	72W0922	0.75	0.72
● USB3140-30-0230-1-C	B	Vertical SMT with Cap and Outer Post for 0.062" Thick PCBs	72W0923	0.75	0.72
● USB3130-30-A	B	Vertical Thru Hole with Outer Post for 0.039" Thick PCBs	73T7896	0.75	0.72
USB3131-30-0230-A	B	Vertical Thru Hole with Outer Post for 0.062" Thick PCBs	18X0233	0.75	0.72
● USB3145-30-1-A	B	Vertical Thru Hole with Outer Post for 0.062" Thick PCBs	72W0924	0.75	0.72
● USB3085-30-A	A/B	Right Angle SMT, Bottom Mount	58T0865	0.57	0.54
● USB3090-30-A	A/B	Right Angle SMT, Bottom Mount with Outer Post	58T0866	0.57	0.54
● USB3095-30-A	A/B	Right Angle SMT, Mid Mount	58T0867	0.57	0.54
● USB3105-30-A	A/B	Vertical Thru Hole, with Outer Post for 0.039" Thick PCBs	58T0868	0.75	0.72
USB3106-30-0230-A	A/B	Vertical Thru Hole, with Outer Post for 0.062" Thick PCBs	18X0232	0.75	0.72

(198008)

DURATOOL AT NEWARK ELEMENT14

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newark.com/duratool

(212563)

MICRO USB 3.0 CONNECTORS

RoHS Compliant Available

GCT Global Connector Technology

Specifications:
- Plastic housing: Thermoplastic, UL94V-0, black
- Voltage rating: 30 VAC
- Current rating: 1.5A AC/DC
- Operating temperature: -30°C to +85°C
- Contact Resistance: 30mΩ Max
- Insulation resistance: 1000MΩ Min
- Mating force: 35N (3.57Kgf) Max
- Unmating force: 10N (1.02Kgf) Min.
- Durability: 10,000 cycles

MICRO USB RECEPTACLES

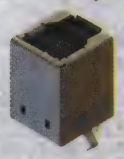
Mfg. Part No.	Series	Description	Stock No.	Price Each 1-9	Price Each 10-24
● USB3110-30-A	B	Right Angle SMT, Bottom Mount, w/ Outer Post	65T5395	1.34	1.28
● USB3115-30-A	B	Right Angle SMT, Bottom Mount	65T5396	1.34	1.28
● USB3120-30-A	A/B	Right Angle SMT, Bottom Mount, w/ Outer Post	65T5397	1.34	1.28
● USB3125-30-A	A/B	Right Angle SMT, Bottom Mount	65T5398	1.34	1.28

(198009)

USB 3.0 CONNECTORS

RoHS Compliant Available

GCT Global Connector Technology



Specifications:
- Plastic housing: Thermoplastic, UL94V-0, blue
- Voltage rating: 30 VAC
- Operating temperature: -55°C to +85°C
- Contact Resistance: 30mΩ Max
- Insulation resistance: 1000MΩ Min
- Mating force: 35N (3.57Kgf) Max
- Unmating force: 10N (1.02Kgf) Min.
- Durability: 5000 cycles

USB 3.0 PLUG

Mfg. Part No.	Series	Description	Stock No.	Price Each 1-9	Price Each 10-24
● USB1065-30-A	A	Right Angle SMT, Top Mount, w/ Outer Shell Stake	65T5391	2.10	2.00

USB 3.0 RECEPTACLES

Mfg. Part No.	Series	Description	Stock No.	Price Each 1-9	Price Each 10-24
● USB1070-30-B	A	Right Angle SMT, Mid Mount	65T5392	1.63	1.55
● USB1075-30-P-B	A	Right Angle Thru Hole, Top Mount, w/ Kinked Shell Stake	65T5393	1.35	1.29
USB1085-30-B	A	Vertical Thru Hole, Top Mount, w/ Kinked Shell Stake	67W3218	1.10	1.05
USB1090-30-B	B	Vertical Thru Hole, Top Mount, w/ Kinked Shell Stake	67W3219	1.30	1.24
USB1100-30-A	A/A	Right Angle Thru Hole, Top Mount, Dual Receptacle	18X2999	2.29	1.87

(198010)

USB ADAPTERS

RoHS Compliant Available

L-com Global Connectivity

CONTINUED

USB ADAPTERS (CONT.)

Flexible USB Adapter

Right Angle USB Adapter, Exit 1

Right Angle USB Adapter, Exit 2

- Solves mismatched USB connector combinations
- Molded construction provides durability
- Gold plated contacts provide reliable connections with repeated mating cycles
- Easily convert existing cables to your needs

These USB adapters provide an economical way for users to solve gender and connector type mismatches among standard USB connectors. They are handy adapters to have on hand to solve mismatched USB connector combinations in the field. Eliminates the need to change cables. They feature a durable, fully-molded design with internal shielding that protects signals from EMI/RFI.

Panel Mount USB A Jack to USB B Jack Coupler

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
UAD010MF	to	88M4828	6.08	5.71
UAD011FM	USB B Plug to USB A Receptacle	97H8152	6.02	5.66
UAD013FF	USB B Receptacle to USB A Receptacle	88M2208	6.16	5.79
UAD014MM	USB A Plug to USB A Plug	88M4830	6.08	5.71
UAD015FF	USB A Receptacle to USB A Receptacle	88M4831	6.02	5.66
UAD016MM	USB B Plug to USB B Plug	88M4832	6.16	5.79
UAD012FF	USB B Receptacle to USB B Receptacle	88M4829	6.16	5.79

FLEXIBLE USB ADAPTER

The flexible USB adapter features vertical and horizontal hinges which allow the adapter to rotate in virtually any direction making it perfect for hard to reach or tight fit applications. This flexible USB adapter is shielded to protect against data corrupting EMI/RFI.

UADFLEX-1	USB A Receptacle to USB A Plug	80R9292	12.81	11.58

RIGHT ANGLE USB ADAPTER

UADAA90 series low profile right angle USB adapters are perfect for tight fit applications. Two exit options are available allowing cables to exit in opposite directions. These robust adapters feature 20 AWG power leads for maximum power transfer and 100% shielding throughout for protection against data corrupting EMI/RFI.

UADAA90-1	USB A Receptacle to USB A Plug	80R9290	6.27	5.67
UADAA90-2	USB A Plug to USB A Receptacle	80R9291	6.35	5.74

PANEL MOUNT USB ADAPTER COUPLER

ECF504-UAB	to	88M3813	8.19	7.70

PANEL MOUNT USB SURGE PROTECTOR

The USB surge protector is a commercial quality device designed to protect a Computer's sensitive USB ports from surges and spikes from attached devices. To ensure USB 2.0 speeds, the device uses ultra-low capacitance diodes to protect the data lines. In addition, a protection device clamps the power lines to safe levels.

AL-ECF504-AB	USB A Receptacle to USB B Receptacle	80R9265	25.99	23.15

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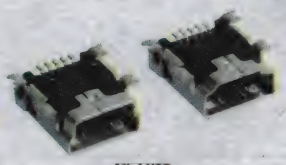
UNIVERSAL SERIAL BUS RECEPTACLES

RoHS Compliant Available

MILL-MAX®

USB



Mini USB

Features:

- USB & Mini USB receptacles for thru-hole & surface mount
- Plug retention tabs
- Kinked locating legs for secure PCB retention
- Fully compatible with USB 1.0 & 2.0 specifications
- Passes 16MHz Signal Attentuation per ASTM-D-4566
- Voltage: 30 VAC rms
- Current: 1 A max. per contact for 30°C temperature rise

Mill-Max now offers USB & Mini USB connectors fully compatible with USB specifications designed for thru-hole or surface mount at the edge of a printed circuit board. Mini USB receptacles are smaller and lighter than existing USB connectors for portable and handheld devices and are fully compliant with current USB 2.0 specifications.

RIGHT ANGLE RECEPTACLES

Mfg. Part No.	Series	Mounting	Stock No.	Price Each 1-9	Price Each 10-99
896-43-004-00-000000	A	Surface Mount	84K7060	2.08	1.77
896-43-004-90-000000	A	Through Hole	84K7061	2.16	1.83
897-43-004-90-000000	B	Through Hole	84K7068	2.13	1.80
896-43-005-00-100001	Mini A	Surface Mount	63R1012	1.54	1.39
897-43-005-00-100001	Mini B	Surface Mount	41P0218	1.45	1.31

STACKED RIGHT ANGLE RECEPTACLES

896-43-008-90-000000	A	Through Hole	84K7062	3.31	2.81

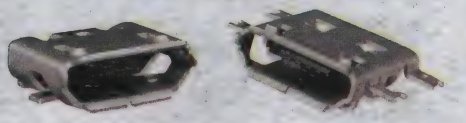
(115447)

0.65MM (0.0256″) PITCH MICRO MINI-USB RECEPTACLES

RoHS Compliant Available

molex

- Voltage: 100V AC(RMS)
- Current: 1 - 1.8 Amps
- 5 Circuits
- Color: Black
- Copper Alloy Material
- Operating temperature: -20°C to +85°C



MINI-B RECEPTACLES

Mfg. Part No.	Description	Plating	Stock No.	Price Each 1-9
47346-0001	Bottom Mount, with 2 Horizontal Side Solder Tabs	Gold	47M0505	1.17
105017-0001	Bottom Mount, with 2 Side Solder Tabs, 2 Hind Solder Tabs	Gold	78R1699	1.01
47491-0001	Mid Mount, with 4 Horizontal Solder Tabs	Gold	40P3748	1.30
47642-0001	Mid-Mount, with 4 Through Hole Side Solder Tabs	Gold	78R2131	0.84

MINI-AB RECEPTACLES

47590-0001	Top Mount, Right Angle	Gold	40P3750	0.86
47654-0001	Mid-Mount, Right Angle, with Extended Solder Tabs	Gold	59P3304	0.86
47589-0001	Bottom Mount, Right Angle	Gold	40P3749	0.84

CABLE ASSEMBLIES - USB A TO MICRO USB B

Mfg. Part No.	Length (m)	Stock No.	Price Each 1-9
68784-0001	1	56P5523	8.68
68784-0003	2.0	84R4630	9.13

(138560)

UNIVERSAL SERIAL BUS (USB) SHIELDED I/O RECEPTACLE

UL CSA RoHS Compliant Available

molex

- Voltage: 30V
- Current: 1.0A
- Contact Resistance: 30mΩ max.
- Dielectric Withstanding Voltage: 750V AC
- Insulation Resistance: 1000 MΩ min.
- Operating Temperature: 0 to +40°C

67643 series type "A" receptacle is single right angle, kinked, with metal shell and back-shield that provides all round EMI/RFI shielding. 4 circuits. Contact phosphor bronze metal shell copper alloy, housing glass fiber-filled polyester, UL 94V-0. UL listed, CSA certified. **67068 series** is similar, but type "B".

TYPE "A" RECEPTACLES

Mfg. Part No.	Description	Housing Color	Plating	Stock No.	Price Each 1-9
89485-8000	Upright, Thru-hole w/o flange	Black	Gold	36K7818	1.39

DUAL STACKED TYPE "A" RECEPTACLES

67298-3091	Thru-hole with 4 Beveled Metal Pins	Black	Gold	12M6068	1.67

TYPE "B" RECEPTACLES

Mfg. Part No.	Housing Color	Plating	Stock No.	Price Each 1-9
67068-8000		Gold	43K5124	1.53
67068-7041	Black	Gold	26M8395	1.46
67068-9000	White	Gold	42K5319	1.53
67068-8011	White	Gold	84K7543	2.53
67068-8001	Black	Gold	44K0355	1.89

USB CABLE ASSEMBLIES

Mfg. Part No.	Description	No. of Positions	Length (ft.)	Stock No.	Price Each 1-9
88732-9200	USB Type A Male to USB Type B Male	4	6.86	01J2381	4.04

(78319)

UNIVERSAL SERIAL BUS CONNECTORS

RoHS Compliant Available

multicomp

- Current Rating: 1.0 Amp AC/DC.
- Voltage Rating: 30V AC/DC
- Contact Resistance: 20 mohm max.
- Insulation Resistance: 1000 Mohm min.
- Dielectric Withstanding Voltage: 750 VAC for one minute
- Insulator: High Temp Plastic, UL94V-0
- Contacts: Gold plated Copper Alloy
- Operating Temperature: -40°C to +105°C

MINI-USB RECEPTACLES

Mfg. Part No.	Series	Mounting	Stock No.	Price Each 1-24	Price Each 25-49
MC32598	AB	Right Angle SMT	46P5312	1.42	1.24
MC32599	B	Right Angle SMT	46P5313	1.51	1.32

USB TYPE A RECEPTACLES

MC32593	A	Right Angle	46P5302	1.15	1.00
MC32595	A	Vertical	46P5303	1.20	1.05
MC32601	A	Right Angle SMT	46P5304	1.32	1.16
MC32602	A	Right Angle SMT Kinked Leg	46P5305	1.42	1.25

CONTINUED

UNIVERSAL SERIAL BUS CONNECTORS (CONT.)

USB TYPE A RECEPTACLES WITHOUT PANEL TABS

Mfg. Part No.	Series	Mounting	Stock No.	Price Each 1-24	Price Each 25-49
● MC32603	A	Right Angle	46P5306	1.17	1.02
● MC32605	A	Right Angle SMT	46P5308	1.36	1.19
● MC32604	A	Right Angle SMT Snap Peg	46P5307	1.29	1.13
USB TYPE B RECEPTACLES					
● MC32596	B	Right Angle	46P5309	1.12	0.98
● MC32597	B	Vertical	46P5310	1.22	1.07
STACKED USB TYPE A RECEPTACLES					
● MC32594	A	Right Angle	46P5311	1.38	1.21

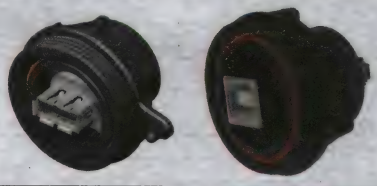
(139392)

SCRU SERIES SEALED USB CONNECTORS

RoHS Compliant Available

samtec

- Sealed USB port
- Meets IP68 requirements for dust and waterproof sealing
- Panel Thickness 0.8mm (0.030") - 5.2mm (0.205")



Mfg. Part No.	USB Type	No. of Contacts	Gender	Connector Mounting	Stock No.	Price Each 1-9	Price Each 10-99
● SCRU-01	A	4	Receptacle	Panel	11P6165	9.71	8.68
● SCRU-02	B	4	Receptacle	Panel	11P6166	9.40	8.40

(136023)

USB AND FIREWIRE (IEEE 1394) ADAPTERS

RoHS Compliant Available

NEUTRIK

Fig. 1

Fig. 2

USB and firewire adapters are ideal for audio networking and integration of digital equipment into audio systems. The USB adapter has a reversible USB gender changer type USB-A and USB-B. The firewire adapter is a feed-thru that has a six pole receptacle at each end. Both adapter styles are built into a universally accepted standard Neutrik "D" series housing.

USB ADAPTERS (REVERSIBLE)

Mfg. Part No.	Fig.	Description	Housing Finish	Stock No.	Price Each 1-9
● NAUSB-W	1	USB-A-USB-B	Nickel	33K4278	8.59
● NAUSB-W-B	1	USB-A-USB-B	Black	14R4611	9.60
FIREWIRE ADAPTERS					
NA1394-6-W	2	6-Pole Firewire Adapter	Nickel	15R4513	12.67
● NA1394-6-W-B	2	6-Pole Firewire Adapter	Black	15R4514	12.89

(84883)

EVERCLEAR MINI MULTI-LANE HIGH SPEED CONNECTORS AND CAGES

RoHS Compliant Available

TE connectivity

Authorized Distributor

Applications:
- High Speed I/O
- Multiple Channels Interconnects
- Switches for Fibre Channel and InfiniBand Standards
- Internal and External SAS and SATA

Features:
- 26 and 36 position receptacles
- Keying options available
- Potential for data rates beyond 10 Gb/s
- High density 0.8mm contact spacing
- SMT PCB attachment for high speed signaling

Tyco Electronics' EVERCLEAR product family is the next generation high speed multi-lane interconnect for internal and external receptacle applications and external cable assemblies. The system is designed to be meet to SFF-8086, 8087 and 8088 standards.

➤ CONTINUED ➤

EVERCLEAR MINI MULTI-LANE HIGH SPEED CONNECTORS AND CAGES (CONT.)

INTERNAL MINI-SAS & SATA CONNECTOR ASSEMBLIES

Mfg. Part No.	Contacts	Plating	Description	Key Type	Stock No.	Price Each 1-9
● 1888174-4	36	30u" Gold	Vertical, 2.8 mm Shell Solder Tail	2	47P0812	8.03
● 1888863-4	36	30u" Gold	Vertical, 2.8 mm Shell Solder Tail	Universal	07R7322	7.75
● 1888019-6	36	30u" Gold	Right Angle, 2.8 mm Shell Solder Tail	2	07R7318	7.82
● 1888861-6	36	30u" Gold	Right Angle, 2.8 mm Shell Solder Tail	Universal	07R7321	10.21
● 1888861-9	36	15u" Gold	Right Angle, 2.0 mm Shell Solder Tail	Universal	33R2374	9.18

EXTERNAL MINI-SAS & SATA CONNECTOR

Mfg. Part No.	Contacts	Plating	Stock No.	Price Each 1-9
● 1761987-7	26	30u" Gold	07R7317	5.00
● 1-1761987-8	38	15u" Gold	51R1224	5.48

EXTERNAL MINI-SAS & SATA CAGES

Mfg. Part No.	Mount Style	Stock No.	Price Each 1-9
● 1888321-1	1 Port Shield	07R7319	8.39

(147425)

MINI SAS HD INTERCONNECTS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Applications:
- Serial Attached SCSI (SAS 2.1)
- Serial data transmission
- HBA (Host Bus Adapter)
- RAID (Redundant Arrays of Inexpensive Disks)
- Workstations
- Rack-mount server
- Servers
- Storage rack
- High performance computer
- Switches

1x1 Receptacle Assembly

1X2 Receptacle Assembly w/ Light Pipe

Features:
- SFF-8644 and SAS 2.1 compliant and capable for SAS 3.0
- Broad band design for 6 and 12Gbps
- Board receptacle assembly provide 1x1(4x), 1x2(8x) and 1x4(16x) configurations
- Pre-assembled, one piece connector and cage assembly offers one-step placement to the board
- Lightpipe option available
- REACH and RoHS compliant
- Improved cable latch design
- Enhanced EMI skirt design
- Scalable 4x and 8x cable plug options
- 26, 28, and 30 AWG bulk cable

TE's Mini SAS HD receptacle assembly is the next-generation SAS high-density high-speed I/O interface. This interface was adopted for the SAS 2.1 standard and proposed for SAS 3.0 standard, and is designed to support 6G and future 12G SAS applications. The assembly is offered in 4x, 8x,and 16x versions. The reduced size of the Mini SAS HD system provides additional space for system designers.

Mfg. Part No.	Contacts	Plating	Description	Stock No.	Price Each 1-9
● 2149027-1	36	30u" Gold	1x1 Receptacle Assembly	79T9379	16.79
● 2149966-1	72	30u" Gold	1x2 Receptacle Assembly	79T9382	30.12
● 2149375-1	144	30u" Gold	1x4 Receptacle Assembly	79T9381	56.22
● 2198484-1	36	30u" Gold	1X1 Receptacle Assembly w/ Light Pipe	79T9385	19.64
● 2198483-1	72	30u" Gold	1x2 Receptacle Assembly w/ Light Pipe	79T9384	32.73
● 2180736-1	144	30u" Gold	1x4 Receptacle Assembly w/ Light Pipe	79T9383	60.72

(202128)

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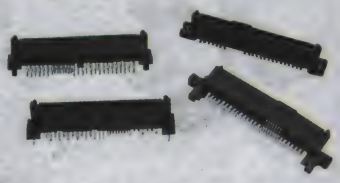
(196562)

SERIAL-ATTACHED SCSI (SAS) CONNECTORS

RoHS Compliant Available

FCI



Features:
- For high-speed serial storage interfaces of up to 6 Gb/s
- 29-position SAS connectors enable SFF-8482 HDD interface
- Provide dual signal ports (7 contacts/port) and 15 contacts for power
- SAS receptacles also accept SATA drives
- Designed to support hot-plugging and blind-mating of HDDs
- Connector retainers provide additional mechanical strength after soldering

Specifications
- Housing: High Temp Thermoplastic, UL 94V-0; Color: Black
- Contact & Retianer Base Material: Copper lloy
- Contact Plating: Gold
- Solder Area & Retainer Finish: Tin
- Contact Resistance: 30 mΩ max.initial; 15 mΩ max. change after test
- Current Rating: 1.5 A per contact
- Voltage Rating: 100 VAC Max
- Durability: 500 cycles
- Mating Force: 50N max.
- Unmating Force: 5N min.

The 29 Position SAS Receptacle and Plug connectors enable high-speed SAS interface up to 6 Gb/s. FCI's SAS product range supports hot plugging, blindmating of HDDs and feature retention clips that provide additional mechanical strength for robust PCB attachment. SAS vertical receptacles are typically used for storage backplane or HDD carrier applications. SAS right angle receptacles address server blade, storage blade, embedded systems, or HDD carrier applications. SAS headers are intended for interposer or port selector assemblies in removable HDD carriers

THROUGH HOLE VERTICAL RECEPTACLES

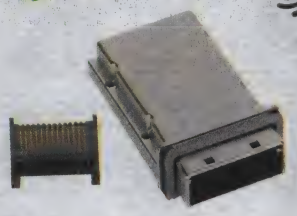
Mfg. Part No.	Description	Remarks*	Stock No.	Price Each 1-9	Price Each 10-24
10018182-001LF	In-Line Footprint with Forklock Retainers, 3.7mm Tails	Meets 6 Gb/s	43K4439	1.56	1.46
10036876-003LF	Thru-Hole Power & Grounds; SMT Signals; Wide Base, Molded Posts and Retainers, Hybrid Termination, 3.7mm Tails	Meets 6 Gb/s	40K1843	9.10	8.25
PRESS FIT VERTICAL RECEPTACLES					
10031077-001LF	In-Line Footprint with Forklock/ Harpoon Retainers, 2.10mm Hold Down Length	Meets 6 Gb/s	43K4441	2.73	2.51
10038064-001LF	Staggered Footprint, Full-Length, Wide Base, Molded Posts	6 Gb/s Capable	82R6877	5.75	5.28
SURFACE MOUNT VERTICAL RECEPTACLES					
10039845-001LF	Port 1 (SATA) Toward PCB, Solder-Tab Retainers	Meets 6 Gb/s	82R6878	6.93	6.28
SURFACE MOUNT RIGHT ANGLE RECEPTACLES					
10036587-001LF	SMT Retainers	6 Gb/s Capable	40P3615	6.06	5.56
SURFACE MOUNT VERTICAL PLUGS					
10041724-001LF	SMT Retainers	6 Gb/s Capable	73K1771	2.80	2.58
SURFACE MOUNT RIGHT ANGLE PLUGS					
10034524-001LF	Port 1 (SATA) Away From PCB, Forklocks Retainers	6 Gb/s Capable	12T2579	2.55	2.34

*Products listed as meeting 6 Gb/s data speeds are per SAS specification T10/1760-D Rev 15. Products deemed capable of meeting 6 Gb/s data speed depend on customer application and design optimization.
(190770)

MINI SAS/SATA CONNECTORS AND CAGES

RoHS Compliant Available

FCI



Features:
- 26 position, 0.8mm centerline
- Pick-and-place compatible
- Robust die cast cages offered in 0 degree and 1 degree mounting styles
- Cages offered in single (1x1) and ganged (1x2) versions
- Compliant EMI gasket to assure cage to chassis shield termination

Specifications:
- Housing: Black thermoplastic, UL94V-0 rated
- Contact: Gold plated phosphor-bronze, tin plating on SMT leads
- Cage: Nickel plated copper alloy
- Differential impedance: 100Ω +/- 10Ω @ 70ps rise time (20-80%)
- Current rating: 0.5 amps maximum per contact
- Connector durability: 250 cycles
- Operating temperature:-40°C to 80°C

FCI's external I/O connectors & cages includes a 26 position, 0.8mm contact centerline spaced, SMT terminated card edge connector along with accompanying single unit (1x1) or 1x2 ganged EMI die cast cages. The edge card connector and cages are designed to meet all signal integrity requirements and EMI requirements as defined by the INCITS T10 SAS 2.0 and 2.1 specifications or the SATA-IO Serial ATA specification. They also conform to the mechanical requirements as described in the Small Form Factor (SFF) 8086 and 8088 documents. Either cage configuration is offered with either a 0 degree or 1 Degree angle mounting style and with or without location pegs. A robust EMI gasket is included with each cage port in order to assure a robust and reliable EMI shield & termination when placed through the chassis opening

CONNECTOR

Mfg. Part No.	Description	Stock No.	Price Each 1-9
10098870-1102LF	26 Position mini-SAS/SATA Connector	74R0437	5.10

CONTINUED

MINI SAS/SATA CONNECTORS AND CAGES (CONT.)

CAGES

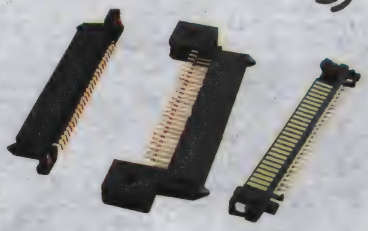
Mfg. Part No.	Configuration	Mount Style	Stock No.	Price Each 1-9
10098871-1102LF	1x1	w/Post, 0 Degree	74R0438	5.88
10098871-1302LF	1x1	w/Post, 1 Degree	74R0439	5.88

(177397)

iVDR CONNECTORS

RoHS Compliant Available

FCI



Features:
- Provide 26 contacts in a single row on 1.27mm pitch
- Surface-mount design is RoHS-compliant and compatible with lead-free soldering temperatures
- Low insertion force for high durability:10,000 mating cycles
- External dimensions match standard 22-position SATA connector
- The right-angle plug provides solder tabs for added retention
- Options for right-angle or vertical receptacle provide capability to install cartridges in either orientation to host board
- The right-angle receptacle features a fixed screw hole at each end while the vertical type features a solder tab retainer at each end

Specifications
- Housing: High Temp Thermoplastic, UL94V-0
- Contacts: Gold plated Copper Alloy
- Insulation Resistance: Initial 1000 Mohm minimum
- Current Rating: 1.5 A AC/DC maximum per contact
- Contact Resistance: Initial 30 mohm maximum
- Voltage Rating: 100 V AC/DC
- Durability: 10,000 cycles
- Temperature Range: 0°C to +65°C

Information Versatile Disk for Removable usage (iVDR) plug and receptacle connectors connect between a host system and an iVDR media cartridge, which may contain a hard disk drive or a solid state device. The iVDR is a new medium that provides the capability of sharing content, including movies, music and programs, over a variety of devices such as information appliances, home servers, video recorders, automobile A/V devices and personal computers. The electrical interface is based on Serial ATA for highspeed data transfer at 1.5 Gb/s. A low-insertion-force, blade-on-beam contact structure provides high durability and is rated for 10,000 mating cycles. The iVDR Consortium, of which FCI is a board member, aims at the standardization of the nextgeneration large capacity data platform that can be sed in applications from audio/visual devices to PC systems. iVDR is also capable of recording copyright-protected high-definition (HD) audio, video or image content. For protection of copyrighted content, SAFIA (Security Architecture for Intelligent Attachment) is used. Such iVDR are called iVDR-Secure.

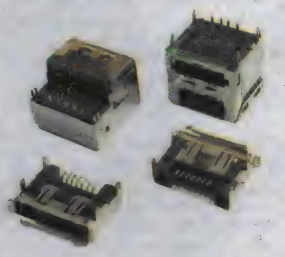
Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
10033998-002LF	SMT Right Angle Receptacle with Screw Holes	25P9438	3.00	2.75
10034273-001LF	SMT Vertical Receptacle with Solder Tab Retainers	25P9439	3.87	3.55

(139079)

eSATA CONNECTORS

RoHS Compliant Available

FCI



Features:
- Compliant with eSATA requirements in Serial ATA Specification
- Up to five times faster than USB2.0 or FireWire 400 external storage solutions
- Supports Gen 1 (1.5Gb/s) and Gen 2 (3Gb/s) data rates
- Provide external data backup and protection at up to 3Gb/s data transfer rate
- High-durability design supports 2500 cycles
- RoHS-compliant and compatible with lead-free processing temperatures
- Available range includes eSATA, eSATA/USB (2-in-1), and eSATA/ USB (2-in-1) + USB combo types

Specifications
- Housing: Glass filled LCP, UL94 V-0,Color: Black
- Contacts: Gold plated Brass
- Insulation Resistance: Initial 1000 Mohm minimum
- Current Rating: 1.5 A per contact
- Contact Resistance: Initial 30 mohm maximum
- Voltage Rating: 12 VAC Max
- Durability: 2500 cycles
- Temperature Range: -40°C to +105°C

eSATA products are aimed at external storage applications that require a single-lane Serial ATA cable connection up to approximately two meters in length. The connectors comply with the Serial ATA Specification issued by the Serial ATA International Organization (SATA-IO). A typical application is the connection between a desktop or mobile PC and an external storage drive, similar to existing USB or 1394 cable connections but at significantly higher data rates. The eSATA connectors support both Gen1 (1.5Gb/s) and Gen2 (3Gb/s) SATA data rates. The available connector range includes individual eSATA connectors, 2-in-1 combination connector designs capable of accepting either an eSATA or a USB cable plug, and stacked configurations that provide a USB port in addition to a 2-in-1 eSATA/USB port.

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
10074141-001LF	eSATA Right Angle, Upright Plug, Through Hole Solder	45P2947	4.25	3.91
10074703-001RLF	eSATA 2-in-1 Right Angle Plug, Through Hole Solder	45P2948	3.66	3.52

(139080)

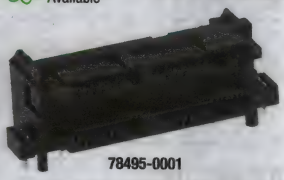
I/O CONNECTORS

MICRO SERIAL ATTACHED SCSI (MICRO SAS) CONNECTORS

RoHS Compliant Available

molex

78395-0001



78495-0001

- Housing: Black glass filled LCP UL94V-0
- Contact: Gold plated copper alloy
- PCB Thickness: 1.00mm (0.039")
- Voltage (max.): 30 V
- Current (max.): 1.5 A DC/AC rms at 60 Hz
- Low level contact resistance (min.): 45 mΩ (initial)
- Dielectric withstanding Voltage: 500 VAC
- Insulation resistance (min.): 1000 MΩ
- Operating temperature: 0 to +55°C

The introduction of 1.8-inch Hard Disk Drives (HDD) and Solid State Drives (SSD) has led to the development of a small form-factor interconnect with the performance headroom to meet requirements of mission-critical enterprise-storage interconnect needs. Molex's Micro Serial Attached SCSI (Micro SAS) connectors are the storage industry's smallest, next-generation high-speed serial I/O solution for 1.8-inch drives, enabling faster data rates up to 6 Gbps while being 100% backward compatibl ewith Molex Micro Serial ATA. Molex's Micro SAS features allow the coexistence of both storage technologies in the same system, opening the door for Micro SATA scalability and is the ideal solution for high-speed, high-bandwidth SAS applications.

RIGHT ANGLE SMT CONNECTOR

Mfg. Part No.	No. of Contacts	Gender	Stock No.	Price Each 1-9
● 78395-0001	25	Receptacle	99R6307	10.53
DUAL-STACKED RIGHT ANGLE THRU HOLE CONNECTOR				
● 78495-0001	50	Receptacle	29T5976	20.29

(194842)

SERIAL-ATA (SATA) CONNECTORS

RoHS Compliant Available

FCI

Applications:

- Notebook PCs
- Server and storage blades
- External storage systems
- HDDs and HDD carriers
- Processor and storage blades
- Mezzanine cards
- Embedded system boards
- Audio/video storage

The SATA connector system is designed for hot plugging and blind mating of HDDs. The 22-position, receptacle and plug connectors enable the implementation of the new high-speed, Serial ATA (SATA) hard disk drive (HDD) interface. The backplane receptacle accepts a SATA drive, but is keyed to block the installation of a Serial-Attached SCSI (SAS) drive. Staggered contact lengths provide sequential mating of contacts to enable hot plugging. Molded guide posts provide angled lead-in to compensate for connector misalignment, allowing self alignment during the mating process.

Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-24
● 10029364-001LF	SATA Port Toward PCB, with Molded Posts and Forklocks, 2.67mm Offset	43K4440	3.35	3.07
● 10034814-001LF	SATA Port Away from PCB, with Molded Posts and Forklocks, 3.75mm Offset	12T3011	5.98	5.43
● 10017660-001LF	SATA Thru-Hole, In-Line, with Forklocks/Harpoon Retainers	12T3008	3.97	3.65

(134282)

ATA SERIAL CONNECTORS

RoHS Compliant Available

molex

PC board ATA hard drive connectors feature 1.27 mm (.050") pitch, 7-contact, single row construction. Rated 1.5 A, 500 VAC withstanding voltage. Housing flammability rating: UL 94V-0.

Mfg. Part No.	Gender	Style	Mount	Stock No.	Price Each 1-9	10-24
● 67489-8005	Receptacle	Vertical	Cable	59J1079	1.13	0.98
● 67926-0011	Receptacle	Right Angle	Cable	63K9266	0.95	0.84
● 67800-5005	Header	Vertical	Surface Mount	63K9264	0.88	0.78
● 67800-8005	Header	Vertical	Thru-Hole	63K9265	1.19	1.03

(88005)

MINI-CLAMP CONNECTORS

RoHS Compliant Available

3M

371 Series Plug — 373 Series Socket — 372 Series PCB Mount Socket

- Reduces wire consumed when used as part of the 3M complete factory automation offering
- Terminate discrete wire in a convenient IDC connector package in less time than conventional hand tools for crimp connectors
- Easy field termination with no special wire preparation - no stripping, no tinning, no special tooling
- Debris-free IDC termination eliminates waste by-products that may contaminate the work environment
- Wire Termination Operation with a general tool "pliers" reduces tooling cost
- Accommodates 20-26 AWG stranded wires with a broad range of wire diameters, color coded cover for easy identification
- Integrated wire retention cover design to retain the wires while terminating to the IDC
- Provides even quality, reduces waste
- Reduces maintenance work by providing higher connection reliability
- Rated 3 Amps
- Mating Latches provide a reliable interconnection in demanding applications
- Compact design saves board space
- High number of mating cycles - 300
- Link Connectors are designed to the CC-Link Partners Association (CLPA) specification

3M™ Mini-Clamp Connectors are designed to provide connection reliability and cost performance in I/O applications commonly found in a wide range of sensor control systems, including Factory Automation and Industrial Controls. 3M Mini-Clamp products use the advantage of 3M's IDC technology which does not require any special tooling or pretreatment of cables, and can be terminated using a standard pair of pliers. Benefits of the Mini-Clamp products include a simple installation process that does not create material debris or waste; a labor saving IDC termination process relative to traditional interconnect alternatives; ease of assembly for system building; and a design that provides for consistent quality and reliability. Features include semi-transparent cover, color-coded covers to provide for the proper wire usage, wire alignment and retention built into the cover. These features provide for proper wire termination along with latches and polarization to allow for proper mating of the connectors. The 3M Mini-Clamp Connectors are part of a serial field bus system solution that is designed to reduce the space of sensor wires in factory automation machines when compared to parallel wiring approaches. The total field installation costs (assembly and wiring) can be reduced when the 3M Mini-Clamp products are used – especially in combination with the 3M Link Connector offering."

371 SERIES MINI-CLAMP II - WIREMOUNT PLUGS - SINGLE ROW

Mfg. Part No.	Circuits	Wire Size	Color	Stock No.	Price Each 1-9	10-24
● 37103-A165-00E MB	3	24AWG to 20AWG	Blue	94M5234	2.49	2.27
● 37103-A206-00E MB	3	24AWG to 20AWG	Gray	94M5235	2.49	2.27
● 37103-B122-00E MB	3	26AWG to 24AWG	Yellow	94M5236	2.37	2.16
● 37104-A165-00E MB	4	24AWG to 20AWG	Blue	94M5237	2.98	2.72
● 37104-A206-00E MB	4	24AWG to 20AWG	Gray	94M5238	2.94	2.68
● 37104-B101-00E MB	4	26AWG to 24AWG	Red	94M5239	2.98	2.72
● 37104-B122-00E MB	4	26AWG to 24AWG	Yellow	94M5240	2.80	2.56
● 37104-B163-00E MB	4	26AWG to 24AWG	Orange	94M5241	2.80	2.56
373 SERIES MINI-CLAMP II - WIREMOUNT SOCKETS - SINGLE ROW						
● 37303-A165-00E MB	3	24AWG to 20AWG	Blue	94M5248	2.68	2.45
● 37303-A206-00E MB	3	24AWG to 20AWG	Gray	94M5249	2.52	2.30
● 37303-B122-00E MB	3	26AWG to 24AWG	Yellow	94M5250	2.80	2.55
● 37304-A165-00E MB	4	24AWG to 20AWG	Blue	94M5252	3.04	2.78
● 37304-B101-00E MB	4	26AWG to 24AWG	Red	94M5254	3.04	2.78

* With optional panel mounting latch.

372 SERIES MINI-CLAMP - BOARDMOUNT SOCKETS - VERTIICAL THRU-HOLE

Mfg. Part No.	Circuits	Keying	Stock No.	Price Each 1-9	10-24
● 37204-62B3-004PL	4	B	94M5245	1.81	1.65

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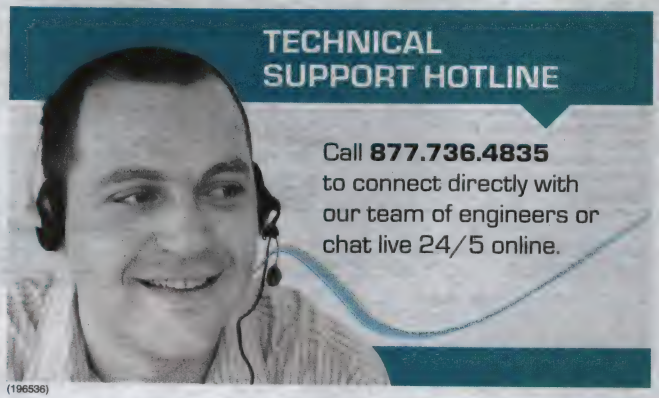
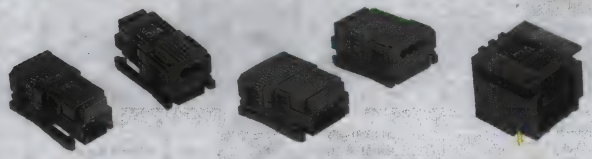


(196536)

2.54mm (0.100) PITCH LINK CONNECTORS

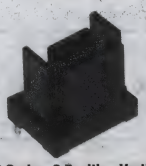
RoHS Compliant Available

3M



381 Series, 2 Position IDC | 381 Series, 4 Position IDC | 382 Series, 2 Position Right Angle

- Hermaphroditic four-point contact mating structures reduces the number of different components required to interconnect and ensures a reliable interconnect
- Easy, labor saving and reliable IDC termination
- T-Tap termination enable mid-cable terminations without special preparation or handling of the cable or wires in order to interconnect fieldbus and power lines at any point
- Easy field termination with no special wire preparation – no stripping, tinning or special tooling, Can terminate with a common pair of pliers
- Design accepts multiple wire diameters of 1.1 to 2.54 mm , conductor sizes of 18 to 22 AWG
- 5 Amp maximum current carrying capability per contact
- Latching mechanism maintains a reliable interconnection in demanding field applications



382 Series, 2 Position Vertical

The 3M™ 38X02 Series Link Connector includes 2 and 4 position wiremount and boardmount products and offers the advantages of insulation displacement contact (IDC) technology while providing a safe and reliable electrical connection. Wiremount connectors accommodate discrete or flat ribbon cable with conductor sizes between 18 and 22 AWG, and requires no more than a pair of pliers to make the termination.

381 SERIES LINK - WIREMOUNT HERMAPHRODITIC CONNECTORS

Mfg. Part No.	Cable Type	Circuits	Color Body/Cover	Wire Size	Stock No.	Price Each 1-9	Price Each 10-24
38102-0018-000 FL	Flat Cable	2	Black/Black	18AWG	73T7899	4.64	4.21
38102-F020-H00 FL	Discrete Wire	2	Gray/Yellow	22AWG	73T7897	4.69	4.26
38102-W022-W00 FL	Discrete Wire	2	White/Pink	20AWG	73T7898	4.69	4.26
38104-0018-000 FL	Flat Cable	4	Black/Black	18AWG	21K3543	4.34	3.94

382 SERIES LINK - BOARDMOUNT CONNECTORS

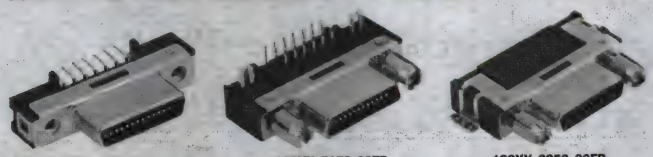
Mfg. Part No.	Circuits	Mounting Style	Stock No.	Price Each 1-9	Price Each 10-24
38202-52S3-000 PL	2	Right Angle	73T7900	4.37	3.96
38202-62S3-000 PL	2	Straight	73T7901	4.06	3.69

(111058)

SHRUNK DELTA RIBBON (SDR) I/O CONNECTORS & CABLE ASSEMBLIES

RoHS Compliant Available

3M



122XX-1150-00FR | 122XX-5150-00FR | 122XX-8250-00FR

3M™ SDR connector is a ribbon contact system with a 0.8mm contact pitch. SDR boardmount connectors are constructed of RoHS compliant high temp plastic bodies, 30µ″ gold contacts, polarized, stamped metal EMI/ESD interface with installed jack sockets and supporting boardmounting hardware. Applications include high density I/O and camera to C/L frame grabber applications meeting the new AIA Industrial Mini Camera Link® standard.

RECEPTACLE CONNECTORS

Mfg. Part No.	Positions	Termination	Stock No.	Price Each 1-4	Price Each 5-9
12226-1150-00FR	26	Straight Thru-Hole	88K3129	9.11	8.16
12226-5150-00FR	26	Right Angle Thru-Hole	88K3130	9.22	8.24
12226-8250-00FR	26	Right Angle SMT	88K3131	11.39	10.19

(88944)

0.050″ MINI D RIBBON WIRE MOUNT PLUGS

RoHS Compliant Available

3M

- Shielded I/O Plugs
- Ribbon-Style Contacts
- Contact Plating: 30µ″ Gold, Rated MIL-G-45204, Type II, Grade C
- Current Rating: 1A
- Withstanding Voltage: 500Vrms
- Color: Black
- UL Recognized, CSA Certified

High-performance insertion/withdrawal cycles. Recommended for termination to twisted pair of flat cable with max conductor OD of 0.027″ ±0.003″; *order separately online or call. Order connector tools separately online or call.* A variety of junction shells are available; *order separately.*

CONTINUED

0.050″ MINI D RIBBON WIRE MOUNT PLUGS (CONT.)

Mfg. Part No.	Contacts	Stock No.	Price Each 1-9
10120-6000EC	20	91F4890	5.51
10126-6000EC	26	52F7593	4.78
10136-6000EC	36	52F7595	5.70
10140-6000EC	40	91F4891	5.55
10150-6000EC	50	52F7594	6.36
10168-6000EC	68	52F7596	7.00

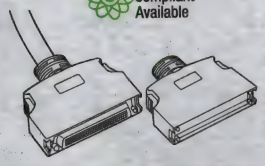
(8461)

MINI DELTA RIBBON (MDR) JUNCTION SHELLS

RoHS Compliant Available

3M

- Plastic Shells Over Metal
- EMI Shield Plates
- Provides EMI/ESD Protection
- Straight Cable Exit
- Squeeze to Release Latches
- Color: Beige



Compatible with **101XX-6000EC** MDR (Mini D Ribbon) plugs; *ordered separately on this page.* Also available in dark gray and medium gray; *go online or call.*

Mfg. Part No.	Positions	Stock No.	Price Each 1-9
10314-3210-000	14	91F4887	4.67
10320-3210-000	20	91F4888	4.99
10326-3210-000	26	52F7597	5.08
10336-3210-000	36	88F2181	3.95
10350-3210-000	50	52F7599	5.95

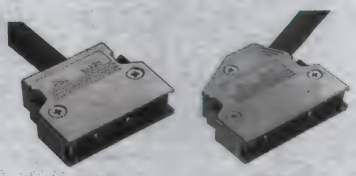
(8462)

MINI D RIBBON (MDR) METAL JUNCTION SHELLS FOR ROUND CABLE

RoHS Compliant Available

3M

- Junction shell for 3M™ Mini D Ribbon (MDR) Plug Connectors
- 60° and straight metal junction shells for round cable
- Rugged two-piece die cast metal shell with 60° and straight round exit (compatible with 101XX-6000 EC plug)
- Reliable metal strain relief clamp provides grounding for cable shield
- Excellent EMI/ESD protection
- Quick release latching mechanism
- Available in 14, 20 (straight only) 26, 36, 40, 50, 68, 80 (60° only) and 100 position.



180° EXIT | 60° EXIT

The new 3M MDR zinc shells are designed to protect the termination between round profile cable and **mfg. part nos 102XX0-6000EC** Series IDC plug connectors *on this page.* The 60° degee exit shell is useful in vertical I/O applications such as cabinets where the cable hangs down and saves space compared to the 90° degree exit. The metal shell provides protection from EMI/RFI and puts less strain on the wire termination.

180° STRAIGHT EXIT JUNCTION SHELLS

Mfg. Part No.	Positions	Stock No.	Price Each 1-9
10314-C200-00	14	75T8478	9.17
10320-C200-00	20	75T8480	9.63
10326-C200-00	26	75T8481	9.82
10336-C200-00	36	75T8483	10.32
10340-C200-00	40	75T8485	11.31
10350-C200-00	50	75T8487	11.87
10368-C200-00	68	75T8489	12.41
103A0-C200-00	100	75T8476	13.30

60° EXIT JUNCTION SHELLS

10314-C500-00	14	75T8479	9.90
10326-C500-00	26	75T8482	10.61
10336-C500-00	36	75T8484	10.64
10340-C500-00	40	75T8486	11.55
10350-C500-00	50	75T8488	12.67
10368-C500-00	68	75T8490	12.84
10380-C500-00	80	75T8491	13.23
103A0-C500-00	100	75T8477	13.73

(202096)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

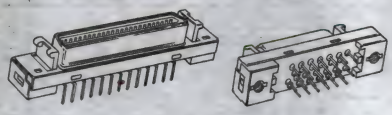
(212570)

I/O CONNECTORS

0.050″ MINI DELTA RIBBON BOARD MOUNT STRAIGHT RECEPTACLES

RoHS Compliant Available

3M



- Board mount, thru-hole, vertical, shielded, I/O receptacles
- Rugged die-cast metal stand
- Ribbon-style ccontacts
- Reliable plugging and unplugging
- 36-position used for IEEE 1284-C interface
- Temperature rating: -55°C to 105°C

Current rating: 1A. Insulation resistance: >5 × 10^8Ω @ 500VDC. Withstanding voltage: 500Vrms for 1 minute. Body: zinc with nickel plating; shroud: steel with nickel plating; insulation: glass-reinforced polyester. Color: black. UL recognized, CSA certified.

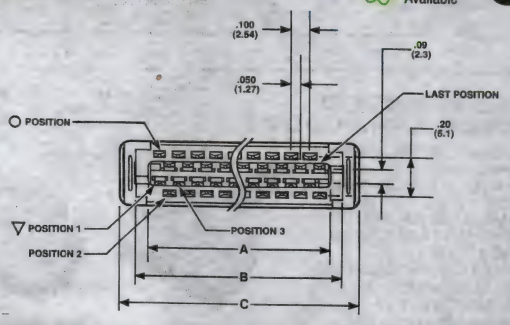
Mfg. Part No.	Contacts	Stock No.	Price Each 1-24
● 10214-6212PC	14	93K6329	4.40
● 10220-6212PC	20	74K4076	4.44
● 10226-6212PC	26	93K6332	4.65
● 10236-6212PC	36	36K2821	4.80
● 10250-6212PC	50	83K0558	5.19
● 10268-6212PC	68	69K7229	6.66
● 10268-6212PC	68	69K7229	6.66
● 10280-6212PC	80	93K6336	9.52
● 102A0-6212PC	100	93K6328	9.76

(8459)

0.050″ MINI DELTA RIBBON, SOLDER PLUG CONNECTORS

RoHS Compliant Available

3M



- Solder Plug Shielded I/O Connectors
- No Special Tooling Required
- Ribbon-Style Contacts
- Reliable Repetitive Plugging/Unplugging

Accept a wide variety of 24-30 AWG discrete wire cable; *order separately on page 1220.* Copper alloy contacts. Current rating: 1A. Insulation resistance: 5 × 10^8Ω @ 500VDC. Withstanding voltage: 500Vrms for 1 minute. Temperature rating: -55°C to +105°C. UL recognized.

Mfg. Part No.	Contacts	Dimensions (Inches) A	B	C	Stock No.	Price Each 1-24	25-49
● 10114-3000PE	14	0.300	0.54	0.72	80K6509	6.06	5.82
● 10120-3000PE	20	0.450	0.69	0.87	69K7225	6.69	6.42
● 10126-3000PE	26	0.600	0.85	1.02	80K6510	7.56	7.25
● 10136-3000PE	36	0.850	1.09	1.27	69K7226	8.02	7.70
● 10140-3000PE	40	0.950	1.19	1.37	80K6511	7.83	7.52
● 10150-3000PE	50	1.200	1.44	1.62	93K6327	8.94	8.58

(68337)

MINI DELTA RIBBON (MDR) JUNCTION SHELLS

RoHS Compliant Available

3M

- 2-Piece Polyester Backshell
- Round Straight Cable Exit
- Reliable Metal Strain Relief
- Quick Release Metal Latches

Compatible with 3M **mfg. part nos. 101XX-3000PE** MDR (Mini D Ribbon) solder plugs; *ordered separately on this page.* Feature durable 2-piece glass reinforced polyester with ground strap. Color: black.

Mfg. Part No.	Positions	Stock No.	Price Each 1-9
● 10314-52F0-008	14	18C3888	6.88
10320-52F0-008	20	50B8703	7.58
10326-52F0-008	26	50B147	7.61
● 10336-52F0-008	36	90B8573	7.69
10350-52F0-008	50	50B8704	8.80

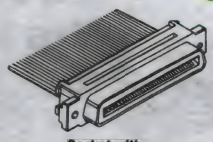
(60670)

D RIBBON WIRE MOUNT SOCKET WITH BAIL MOUNT OPTION

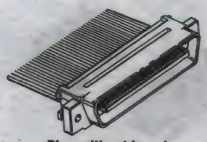
RoHS Compliant Available

3M

- Material: Glass-Reinforced Polyester
- Contact Material: Beryllium Copper
- Contact Plating: 30μ″ Gold
- Current Rating: 1A
- Temperature Rating: –55°C to +105°C



Socket with #4-40 Insert



Plug without Insert

Accommodates 26-30 AWG flat, round or jacketed cable; *ordered separately on page 1220. Order strain reliefs separately below.*

PLASTIC SOCKETS

Mfg. Part No.	Contacts	Length	Stock No.	Price Each 1-24	25-49	50-99	100-199
● 3565-1000*	50	3.27″	46F4812	16.45	15.79	15.12	14.46
● 3565-1002‡	50	3.27″	46F4814	17.89	17.17	16.45	15.73
PLASTIC PLUGS							
● 3564-1000*	50	3.27″	46F4800	16.46	15.80	15.14	14.48
● 3564-1001†	50	3.11″	46F4801	11.09	10.64	10.20	9.75
● 3564-1002‡	50	3.27″	46F4802	19.99	19.18	18.38	17.58

METAL STRAIN RELIEFS

Mfg. Part No.	Contacts	Stock No.	Price Each 1-24	25-49	50-99	100-199
● 3448-63	50	87F3872	5.52	5.06	4.65	4.35

*Without insert; †With bail mount; ‡With #4-40 insert.

(8511)

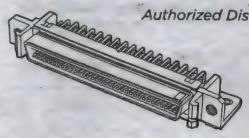
AMP CHAMP 0.050″ SERIES I AND II CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Panel Attachment
- Centerline: 0.050″ (1.27mm)
- PC Board Thickness: 0.062-0.093″ (1.57 - 2.36mm)
- Glass-Filled Nylon Housing, Flammability Rated UL94V-0
- Phosphor Bronze Contacts
- 30μ″ Gold-Plated Contact Mating Area



Wire-to-board receptacles feature double-spring contact design to provide intermateability and conformance to standards. PC board mount right-angle receptacles feature rugged zinc die-cast body.

AMP CHAMP® 0.050″ SERIES II RIGHT-ANGLE RECEPTACLES WITH BOARDLOCKS

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	10-24	25-49
● 2-5178238-1	14	17R7678	10.33	9.88	8.98
● 2-5178238-8	68	05M6041	14.48	13.16	11.85
● 2-5178238-9	100	73K1621	20.66	18.66	17.88
AMP CHAMP® 0.050″ SERIES I RIGHT-ANGLE RECEPTACLES WITH RETENTION LEGS					
● 1734099-4	40	08P0619	3.96	3.72	3.47
● 1734099-6	60	08P0620	6.23	5.98	5.23
● 1734099-7	68	08P0621	4.36	4.10	3.83
● 1-1734099-0	100	73M8537	6.85	6.42	5.98

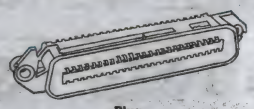
(61075)

AMP 0.085″ CHAMP CONNECTORS

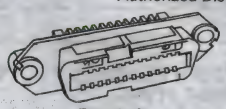
RoHS Compliant Available

TE connectivity

Authorized Distributor



Plug



Receptacle

Insulation displacement connectors terminate unstripped solid and 7-strand wire, multiconductor cable, and ribbon and laminated cable. Accommodate wire with soft insulation types in diameters to 0.045″ (1.14). For cable-to-cable and cable-to-panel connector applications. Requires one bail or screw lock hardware kit per assembly; *order separately go online or call.* UL recognized, CSA certified.

SCREW LOCK PLUGS

Mfg. Part No.	# of Pos.	AWG	Width	Stock No.	Price Each 1-9	10-24
● 552282-1	14	24-26	1.750″	46F1621	5.55	5.36
● 552283-1	24	24-26	2.175″	82F9842	5.43	4.49
● 229974-1	50	24-26	3.280″	46F1630	3.24	3.11
● 552285-1	64	24-26	3.875″	46F1633	5.92	5.55
BAIL LOCK PLUGS						
● 552272-1	24	24-26	2.175″	46F1623	5.40	4.56
● 552274-1	36	24-26	2.685″	46F1627	5.52	5.30

CONTINUED

AMP 0.085″ CHAMP CONNECTORS (CONT.)

BAIL LOCK PLUGS

Mfg. Part No.	# of Pos.	AWG	Width	Stock No.	Price Each 1-9	Price Each 10-24
552032-1	50	24-26	3.280″	25H8295	3.95	3.80
552276-1	64	24-26	3.875″	46F1634	4.02	3.86
THICK FLANGE STYLE RS RECEPTACLES						
552305-1	24	22	2.175″	46F1597	4.10	3.72
552064-1	50	22	3.280″	46F1605	7.18	6.88
552307-1	64	22	3.875″	15H9903	6.82	6.54
552312-1	14	24-26	1.750″	46F1622	5.42	5.20
552314-1	36	24-26	2.685″	46F1628	6.36	6.10
229975-1	50	24-26	3.280″	46F1632	3.20	3.00
552315-1	64	24-26	3.875″	87F6578	6.78	6.49
THIN FLANGE STYLE RP RECEPTACLES						
2-552001-1	50	24-26	3.280″	82F9845	3.81	3.66
2-552277-1	64	24-26	3.875″	87F6579	6.19	5.96
THICK FLANGE RECEPTACLES WITH INTEGRAL LOCKING LATCH						
5553921-1	50	24-26	3.280″	73M8565	6.39	6.12

PC BOARD RECEPTACLES

Mfg. Part No.	Positions	Mounting	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99
5552118-1	50	Vertical	42K8731	8.05	7.70	6.65
5552725-1	50	Right-Angle	42K8735	11.73	10.83	9.35

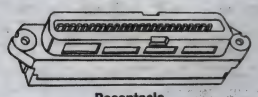
(8030)

AMP 0.085″ CHAMP LATCH LOW PROFILE CONNECTORS

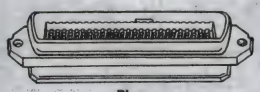
RoHS Compliant Available

TE connectivity

Authorized Distributor



Receptacle



Plug

Low profile. Fit 26 AWG solid, 28 AWG stranded, 28 or 30 AWG solid copper ribbon cable 0.032-0.045″ (0.813-1.14) thick; *order separately, go online or call.*

Mfg. Part No.	Positions	Lock	Connector	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49	Price Each 50-99
554085-1	50	Bail	Plug	90F4997	15.88	14.75	13.23	12.86
553598-1	24	Screw	Plug	90F8349	14.45	13.14	12.82	11.83
553600-1	36	Screw	Plug	90F8350	19.24	17.87	16.03	15.58
553602-1	50	Screw	Plug	90F4998	17.36	16.12	14.47	14.05
553599-1	24	Screw+	Receptacle	90F4991	16.48	14.98	14.61	13.49
553603-1	50	Screw+	Receptacle	90F4981	16.53	15.35	13.78	13.38
554105-1	50	Panel	Plug	90F4982	16.13	14.98	13.44	13.06
554088-1	24	Panel	Receptacle	90F4992	16.48	14.98	14.61	13.49
554090-1	50	Panel	Receptacle	90F4983	16.30	14.82	14.45	13.34

+ Order correct hardware for bail or screw lock separately go online or call.

(8028)

AMP 0.085″ SHIELDED CHAMP LATCH PANEL MOUNT CONNECTORS

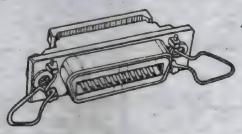
RoHS Compliant Available

TE connectivity

Authorized Distributor

- Panel Attachment
- Mating Connector Screw Lock
- For Ribbon Cable, Centerline Spacing 0.050″ (1.27mm)
- Screw Size: 6-32
- Thermoplastic Housing
- Gold/Nickel Over Copper Alloy Contacts

Interface Bus application per IEEE-488.



Preassembled Connector

PREASSEMBLED CONNECTORS

Mfg. Part No.	Positions	Lock	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49	Price Each 50-99
5554434-1	24	Screw	16M3299	18.02	16.74	15.02	14.59
5554346-2	36	Bail	80K7761	18.34	17.04	15.29	14.86
554902-1*	50	Bail	90F4989	15.00	13.64	13.30	12.28
LOOSE CONNECTOR WITHOUT HARDWARE							
5554349-1	24	···	16M3298	20.24	18.80	16.87	16.39

CONTINUED

AMP 0.085″ SHIELDED CHAMP LATCH PANEL MOUNT CONNECTORS (CONT.)

PCB RIGHT ANGLE RECEPTACLE CONNECTORS

Mfg. Part No.	Positions	Lock	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49	Price Each 50-99
5553811-1	24	Screw	17M9031	14.41	13.10	11.79	11.14
5553813-3	50	Bail	42K8740	11.19	10.63	10.07	9.51

*SCSI applicable but does not have boss feature; †SCSI with **mfg. part no. 554818-2** bail lock hardware kit

HARDWARE KITS FOR LOOSE PIECE SHIELDED CONNECTORS

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99
5553636-2	Metric Screw Lock, Front Panel Mount, Cable-to-Panel	16M3295	8.50	8.20	7.13
5553636-3	Metric Screw Lock, Rear Panel Mount, Cable-to-Panel	16M3296	11.08	10.60	9.16
HARDWARE KITS FOR PREASSEMBLES SHIELD CONNECTORS					
554808-1	Metric Screw Lock, Rear Panel Mount	90F4984	5.23	4.91	4.59

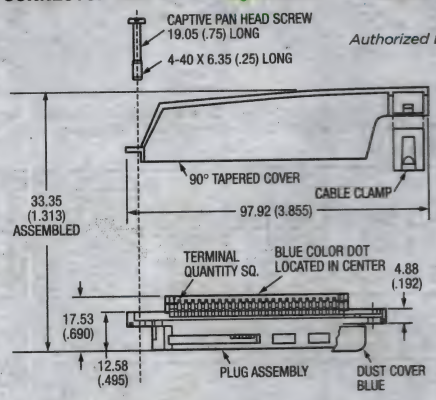
(8029)

AMP CHAMP FIELD INSTALLATION 50-POSITION CONNECTOR KITS

RoHS Compliant Available

TE connectivity

Authorized Distributor



- Connector Kit Includes Connector for Indicated Wire Size and Cover
- Thermoplastic Housings and Accessories

Mfg. Part No.	Description	Stock No	Price Each 1-9	Price Each 10-49
5229912-1	50-Position Cable-to-Cable Plug with Tapered Cover. 24/26 AWG Solid and 24/7 Stranded Wire. Cable Diameter: 0.350-0.425″. Color: Black	16M3250	4.38	4.20
5229912-4	50-Position Cable-to-Cable Plug with Tapered Cover. 24/26 AWG Solid and 24/7 Stranded Wire. Cable Diameter: 0.350-0.425″. Color: Gray	70M8629	5.06	4.62
5229913-1	50-Position Cable-to-Cable Receptacle with Tapered Cover. 24/26 AWG Solid and 24/7 Stranded Wire. Cable Diameter: 0.350-0.425″. Color: Black	16M3251	4.50	4.32
5229913-4	50-Position Cable-to-Cable Receptacle with Tapered Cover. 24/26 AWG Solid and 24/7 Stranded Wire. Cable Diameter: 0.350-0.425″. Color: Gray	67M9267	6.06	5.81
1-5229913-1	Same as **mfg. part no. 5229913-1** Plus Dust Cover	73M8541	4.88	4.68
1-5229912-1	Same as **mfg. part no. 5229912-1** Plus Dust Cover	87K6517	4.83	4.64
6-5229912-1	Same as **mfg. part no. 1-5229912-1** Except Bulk Packed	16M3394	4.36	4.21

(8033)

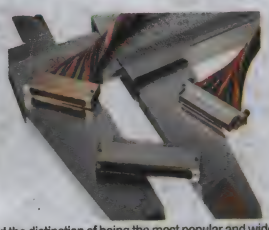
NANONICS DUALOBE RECTANGULAR CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Standard Sizes: 5, 9, 15, 25, 37, and 51
- Temperature Range is -200°C to +200°C
- Current rating: 1A per contact
- Low contact resistance (.003 – .008 ohms)
- 500 mating cycles
- Contacts: Gold plated Berillium Copper
- Plastic Insulators and Shells: 30% glassed filled Liquid Crystal Polymer (LCP).
- Metal Shells: 6061-T6 Aluminum with electroless nickel plating per MIL-C-26074.



NANONICS D-style rectangular connectors have earned the distinction of being the most popular and widely utilized style of Nano connectors. These connectors incorporate the DUALOBE polarization scheme. This polarization scheme negates the need for mating guide pins and does not increase the package size. The DUALOBE series of connectors are available in both machined aluminum and molded plastic shells, both in one and two row connector housings. Single row configurations commonly have standard pin counts from 5 to 51, while the higher density two row configurations have pin counts from 9 to 65. Termination configurations include wire, surface mount, thru-hole, solder cup, "duckbill", and panel mount.

CONTINUED

NANONICS DUALOBE RECTANGULAR CONNECTORS (CONT.)

Mfg. Part No.	Positions	Gender	Description	Stock No.	Price Each 1-4	Price Each 5-9
SSL009L2HN	9	Receptacle	Plastic PCB	08H4027	82.08	77.47
SSM005L2HN	5	Receptacle	Aluminum PCB	81C8806	193.13	182.28
SSM009L2HN	9	Receptacle	Aluminum PCB	08H4132	227.40	214.62
SSM015L2HN	15	Receptacle	Aluminum PCB	08H4189	171.56	161.92
● SSM009PC2DC018N	9	Plug	Cable Plug	08H4155	326.15	307.84
● SSM015PC2DC024N	15	Plug	Cable Plug	39C9645	362.04	341.69
● SSM005SC2DC018N	5	Receptacle	Cable Receptacle	08H4121	218.77	206.48

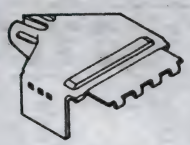
(192422)

AMP CHAMP SHIELDED CABLE CONNECTOR KITS

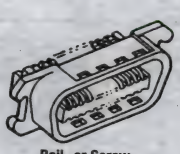
RoHS Compliant Available

TE connectivity

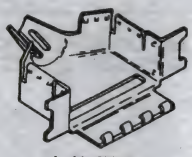
Authorized Distributor



Outside Shield



Bail- or Screw-Lock Assembly



Inside Shield

Kit includes 1 CHAMP® IDC plug (choice of screw- or bail-lock model), 1 outside shield, 1 inside shield. Preloaded contacts available in B-Slot for 24 AWG and 26 AWG solid or 24 AWG 7-strand wire.

SHIELDED PLUG KITS

Mfg. Part No.	Positions	Lock	Slot	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99	Price Each 100-249
● 554948-3	24	Screw	E	91B9627	11.42	10.38	9.34	8.83
● 554954-2	50	Screw	B	90F4154	13.40	12.19	10.97	10.36
● 554950-2	36	Bail	B	90F8364	50.47	47.51	43.05	40.68

SHIELDED CABLE COVER KITS

Include 1 top and 1 bottom cover plus 1 strain relief insert. Requires two 4-40 x 0.265″ long captive pan head screws per kit. Screws and shielded cable inner ferrules available separately; *go online or call.*

Mfg. Part No.	Positions	Cable	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99	Price Each 100-199
● 554944-1	24	0.250-0.500″	90F8355	9.25	8.14	7.03	6.85
● 554945-1	36	0.250-0.500″	90F4139	5.45	5.23	3.89	3.70
● 554946-1	50	0.350-0.500″	90F4140	5.79	5.56	4.87	4.64

(8026)

AMP CHAMP IDC STRAIN RELIEF COVERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Constructed of high-impact strength thermoplastic. **NOTE:** The cable outer diameter (O.D.) range listed below is a guideline. The appropriate strain relief cover depends on cable stiffness, cable packaging and fillers.

90° CABLE ENTRY SNAP-ON STRAIN RELIEF COVERS

Mfg. Part No.	Positions	Cable Outer Diameter	Stock No.	Price Each 1-9
● 552412-1	14	0.185-0.230″	46F1570	4.23
● 552414-1	36	0.305-0.360″	46F1572	1.32
● 1-552011-1	50	0.315-0.415″	90F4068	1.46
● 552011-1	50	0.415-0.465″	46F1575	1.41
● 552731-1	50	0.475-0.540″	87F6569	2.53
● 552496-1	64	0.410-0.475″	46F1576	2.28
● 2-552496-1	64	0.540-0.605″	46F1578	2.35

180° CABLE ENTRY SNAP-ON STRAIN RELIEF COVERS

Mfg. Part No.	Positions	Cable Outer Diameter	Stock No.	Price Each 1-24
● 2-552079-1	14	0.265-0.310″	46F1558	3.71
● 1-552076-1	24	0.280-0.320″	46F1560	3.92
● 2-552076-1	24	0.320-0.380″	46F1561	3.21
● 552073-1	36	0.290-0.360″	46F1562	2.81
● 552073-6	36	0.430-0.500″	46F1564	3.90
● 3-552008-1	50	0.330-0.380″	46F1565	3.78
● 2-552008-1	50	0.380-0.430″	46F1566	3.46
● 552008-1	50	0.430-0.490″	46F1567	3.51
● 4-552008-1	50	0.480-0.550″	46F1568	4.10
● 552082-1	64	0.480-0.540″	46F1569	3.50

➤CONTINUED➤

AMP CHAMP IDC STRAIN RELIEF COVERS (CONT.)

90° ENTRY TAPERED SLIDE-ON STRAIN RELIEF COVER KIT

Mfg. Part No.	Positions	Cable Outer Diameter	Stock No.	Price Each 1-9
● 5552560-5	50	0.425-0.500″	16M3290	1.54
● 5552960-2	50	0.350-0.425″	40P9776	3.69
● 552760-1	50	0.425″ Max.	66F1678	1.75

STRAIN RELIEF COMPONENTS

Mfg. Part No.	Positions	Cable Outer Diameter	Stock No.	Price Each 1-9
● 1-229910-1	50	0.425-0.500″	94B8344	0.51
● 552763-1	50	0.425″ Max.	73C7063	0.54

(75435)

157 SERIES MICRO-PIERCE IDC CONNECTORS

RoHS Compliant Available

Amphenol Commercial Products

157 series specifications same as **57 series** except wire sizes 24 and 26 AWG solid conductor, 26 and 28 AWG stranded conductor. Insulation displacement termination. UL recognized, CSA certified. *Order* **mfg. part no. 356-157** *termination tool kit separately; go online or call.*

Cable-to-Cable

CABLE-TO-CABLE PLUGS: TOP CABLE ENTRY 180°

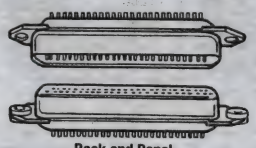
Mfg. Part No.	Contacts	Gender	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99	Price Each 100-249
● 157-32500	50	Male	10M8472	12.05	10.80	9.74	8.99
CABLE-TO-CABLE RECEPTACLES: TOP CABLE ENTRY 180°							
● 157-62500	50	Female	88K2112	13.67	12.24	11.04	10.18
LOW-PROFILE STEEL HOOD CABLE-TO-CABLE 90° CABLE ENTRY							
● 157-72500-3	50	Plug	10M8473	12.82	11.47	10.34	9.55
● 157-82500-3	50	Recept.	93K7634	14.01	12.55	11.31	10.44

(8233)

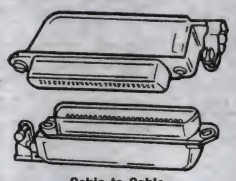
57 SERIES MICRO-RIBBON® SOLDER TERMINATION CONNECTORS

RoHS Compliant Available

Amphenol Commercial Products



Rack and Panel



Cable-to-Cable

57 series ribbon connectors are ideal for modems, multi-plexers, computers and peripherals, medical equipment, PBX devices and scientific instrumentation, telephone equipment, cash registers, vending machines and similar equipment. Rated: 5A per contact, 70 DC. Operating temperature: –55°C to +105°C. Wire sizes: 22 AWG solid, 24 AWG stranded. UL recognized, CSA certified.

RACK AND PANEL TYPE

Mfg. Part No.	Contacts	Description	Stock No.	Price Each 1-24	Price Each 25-99	Price Each 100-249	Price Each 250-499
● 57 10140	14	Male	10M8490	4.60	4.35	4.04	3.63
● 57 20140	14	Female	88K2171	6.22	5.88	5.46	4.92
● 57 10240	24	Male	10M8491	5.13	4.85	4.51	4.05
● 57 20240	24	Female	10M8493	6.00	5.67	5.27	4.73
● 57 10360	36	Male	93K7650	6.36	6.01	5.58	5.02
● 57 20360	36	Female	88K2172	7.64	7.21	6.70	6.02
● 57 10500	50	Male	42F132	6.33	5.98	5.55	4.99
● 57 20500	50	Female	10M8494	7.44	7.03	6.53	5.87
CABLE-TO-PANEL TYPE: TOP CABLE ENTRY							
● 57 30140	14	Male	10M8495	7.51	7.34	6.38	5.99
● 57 40140	14	Female	10M8497	6.14	5.80	5.39	4.85
● 57 30240	24	Male	93K7651	8.99	8.72	7.52	6.51
● 57 40240	24	Female	93K7652	5.75	5.43	5.04	4.53
● 57 30360	36	Male	10M8496	9.89	9.58	8.38	7.87
● 57 40360	36	Female	88K1455	7.42	7.01	6.51	5.85
● 57-30500	50	Male	10M8498	10.03	9.45	8.29	8.01
● 57 40500	50	Female	42F135	7.83	7.56	7.38	6.85

➤CONTINUED➤

57 SERIES MICRO-RIBBON® SOLDER TERMINATION CONNECTORS (CONT.)

CABLE-TO-CABLE TYPE: RUNNING CABLE

Mfg. Part No.	Contacts	Description	Stock No.	Price Each 1-24	25-99	100-249	250-499
57 10500 7	50	Male	10M8492	10.75	10.15	9.44	8.48
57 20500 7	50	Female	88K2173	11.68	11.04	10.26	9.22
CABLE-TO-CABLE TYPE RECEPTACLES							
57-60140	14	Female	88K2174	7.67	7.25	6.73	6.05
57-60240	24	Female	93K7655	9.60	9.07	8.43	7.57
57-60360	36	Female	10M8499	10.61	10.02	9.31	8.37
57-60500	50	Female	93K7656	10.68	10.09	9.37	8.42

(8231)

STAC64 STACKABLE CONNECTION SYSTEM

RoHS Compliant Available

molex

34690 Vertical

34691 Right-Angle

34695 Hybrid Vertical

34696 Hybrid Right-Angle

34729 Black

31372 Hybrid

- Stackable connection system of readily available PCB headers
- Header and receptacle housings molded in standard USCAR color schemes
- No tooling necessary to produce custom multi-bay headers
- Pre-assembled, linear Mylar PC tail alignment strip for right angle headers
- Modular-housing design with standard dovetail features molded into the housings
- Headers can be ganged together to meet growing terminal quantity requirements
- PCB standoffs ensure all terminals are properly aligned into PCB
- Retain header to PCB during assembly and solder processing
- High temperature thermoplastic housing
- Headers feature tin plated copper alloy contacts
- Voltage rating: 500V max
- Operating temperature range: -40° to +100°C

The Stac64 connection system allows OEM and device manufacturers greater design flexibility to support both low-level signal requirements as well as power applications upwards of 30.0A. The standard product line based on the 0.64mm (.025") pitch terminal supporting low-level signal requirements and an additional 10-circuit 'power pocket' version based on 1.50 and 2.80mm (.059 and .110") pitch terminals to support power applications. This Stac64 is a standard product system based on USCAR-2 Class II mechanical and electrical performance characteristics for unsealed connector applications. The connectors mate to existing wire-harness connectors designed to the USCAR/EWCAP industry footprints. 20-circuit connectors are molded in standard USCAR colors for visual polarization and aid to assembly .

STAC64™ VERTICAL HEADERS

Mfg. Part No.	No. of Contacts	Polarization	Color	Stock No.	Price Each 1-9
34690-0080	8	A	Black	92P7407	1.45
34690-0120	12	A	Black	57R9599	1.75
34690-0160	16	A	Black	57R9602	2.26
34690-0200	20	A	Black	57R9605	2.56
STAC64™ RIGHT-ANGLE HEADERS					
34691-0080	8	A	Black	57R9609	1.44
34691-0120	12	A	Black	57R9612	2.06
34691-0160	16	A	Black	57R9615	2.20
34691-0200	20	A	Black	57R9618	2.74
34691-0201	20	B	Gray	57R9619	2.74
34691-0202	20	C	Brown	57R9620	2.97
34691-0203	20	D	Green	57R9621	2.97
STAC64™ RECEPTACLES					
34729-0080	8	A	Black	84R9838	0.69
34729-0120	12	A	Black	84R9839	0.69
34729-0160	16	A	Black	84R9840	0.70
34729-0200	20	A	Black	84R9841	0.99
34729-0201	20	B	Gray	84R9842	0.92
34729-0202	20	C	Brown	84R9843	0.92
34729-0203	20	D	Green	84R9844	0.92
SINGLE BAY HYBRID VERTICAL HEADERS					
34695-0100	10	A	Black	57R9622	3.03
SINGLE BAY HYBRID RIGHT ANGLE HEADERS					
34696-0100	10	A	Black	57R9623	2.72
HYBRID RECEPTACLE HOUSING					
31372-1000	10	A	Black	57R9498	1.59

➤ CONTINUED ➤

STAC64 STACKABLE CONNECTION SYSTEM (CONT.)

0.64mm (0.025") CTX64 CRIMP TERMINALS - FOR 34729 SERIES STANDARD CONNECTORS

Mfg. Part No.	Wire Size (AWG)	Plating	Rated Current/Voltage	Stock No.	Price Each 1-9
34803-0211	22AWG	Tin	7A / 250V	84R9845	0.12
34803-0212	20AWG	Tin	7A / 250V	84R9846	0.12
1.50mm (0.059") MX150 CRIMP TERMINALS - FOR 31372 SERIES HYBRID CONNECTORS					
33012-2003	22AWG	Tin	22A / 250V	15M8276	0.11
33012-2002	20AWG to 18AWG	Tin	22A / 250V	39M4524	0.20

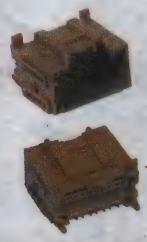
(190046)

STAC64™ HYBRID STACKABLE CONNECTION SYSTEM

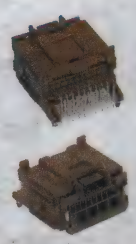
NEW

RoHS Compliant Available

molex



Series 34772, 14-circuit hybrid vertical header



Series 34773, 14-circuit hybrid right-angle header

Series 34969, 14-circuit hybrid female receptacle

Features & Benefits

- Stackable connection system of readily available PCB headers
- The header and receptacle housings are molded in standard USCAR color schemes for additional polarizations
- Pre-assembled, linear Mylar PC tail alignment strip for right angle headers
- Modular-housing design with standard dovetail features molded into the housings
- PCB alignment posts
- PCB standoffs molded into housings
- High temperature thermoplastic housing
- Pre-assembled TPA to receptacle housing shipped as single assembly

The Stac64™ stackable connection system provides single and multi-pocket PCB solutions, offering a diverse range of circuit sizes and greatly reducing time-to-market by completely eliminating custom tooling. Female connectors feature only pressure-activated design in the industry. The Stac64 connection system allows OEM and device manufacturers greater design flexibility to support both low-level signal requirements as well as power applications up to 30.0A. This system allows automotive manufacturers to use header assemblies as stand-alone components, to gang multiple headers together to support a large range of signal and power needs for devices and modules.

Mfg. Part No.	Description	No. of Pos.	Stock No.	Price Each 1-9
34772-0140	Hybrid Vertical Header	14	97W8142	5.98
34773-0140	Hybrid Right Angle Header	14	97W8143	6.94
34969-0140	Hybrid Female Receptacle	14	97W8144	3.68

FEMALE TERMINALS - Sold in cut tape packaging

Mfg. Part No.	Wire Size	No. of Pos.	Stock No.	Price Each 1-9
33012-2003	22AWG	Tin	15M8276	0.11
33012-2002	20AWG to 18AWG	Tin	39M4524	0.20

(211437)

CENTRONICS® PARALLEL CONNECTORS

RoHS Compliant Available

multicomp

Male

Female

Centronics®-type connector offers a fast, economical method to achieve electrical interconnection. A trapezoidal-shape shell provides correct polarity. Shell: nickel-plated steel. Insulator: glass-filled thermoplastic. Insulator resistance: 1000MΩ min. @ 500VDC. UL94V-0. Working voltage: 500VDC. Current rating: 5 amps per contact. Copper alloy contacts with gold plating over nickel. Operating temperature range: –55°C to +105°C.

Mfg. Part No.	Description	Pins	Stock No.	Price Each 1-49	50-99	100-249	250-499
SPC15257	Plug	14	79K4854	12.02	9.84	9.04	8.34
SPC15189	Receptacle	14	79K4792	11.24	9.20	8.45	7.81
SPC15336	Plug	24	79K4928	11.89	9.73	8.94	8.26

➤ CONTINUED ➤

I/O CONNECTORS • MODULAR JACKS & PLUGS

CENTRONICS® PARALLEL CONNECTORS (CONT.)

Mfg. Part No.	Description	Pins	Stock No.	Price Each 1-49	50-99	100-249	250-499
● SPC15302	Receptacle	24	79K4896	13.30	10.88	10.00	9.24
● SPC15407	Plug	36	79K4989	7.09	5.86	5.36	4.92
● SPC15263	Receptacle	36	79K4860	14.24	11.66	10.71	9.90
● SPC15366	Plug	50	79K4952	13.31	10.90	10.01	9.26
● SPC15337	Receptacle	50	79K4929	15.93	13.05	11.99	11.07

(8877)

CLOUDSPLITTER CONNECTOR SYSTEM

NEW

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features & Benefits:

- Cat 5e and DC power in one connection to help standardize your inventory
- SMT Jack accepts standard RJ45 shielded plug in addition to CLOUDSPLITTER plug assembly
- Shielded SMT jack and cable plug
- Cable combines signal and power available in shielded or unshielded configuration
- Pre-terminated cable assemblies in standard lengths
- RoHS/REACH Compliant
- Lead-free reflow solder capable
- Cable is UL444 and CM rated
- Certified to UL 1863

The **CLOUDSPLITTER** connector system is a single cable solution for powered devices that delivers Cat5e performance and up to 250 watts of power over a single cable. The 8 position RJ45 jack is surface mountable and includes integrated LED indicator lights. The jack accepts CLOUDSPLITTER or standard RJ45 shielded plugs and provides DC power at 5A up to 50VDC over two integrated power contacts.

SURFACE MOUNT JACKS

Mnf. Part No.	Description	Stock No.	Price 1-24
● 2178126-1	Modular Jack with power pins	09X1779	7.28
● 2178126-2	Modular Jack without power pins	09X1780	6.92

PLUG KITS

● 2178148-1	Kit, Plug (TE-unshielded cable assemblies)	09X1785	5.98

UNSHIELDED CABLE ASSEMBLIES

Mnf. Part No.	Length (m)	Stock No.	Price 1-9
● 2178127-1	2	09X1781	31.52
● 2178127-2	5	09X1782	55.36
● 2178127-3	10	09X1783	95.22
● 2178127-4	25	09X1784	151.50

TOOLS

Mnf. Part No.	Description	Stock No.	Price Each
2217400-1	CLOUDSPLITTER Crimp Tool	09X1787	933.74
2217299-1	micro MATE-N-LOK Crimp Tool (power contacts)	09X1786	391.66

(211523)

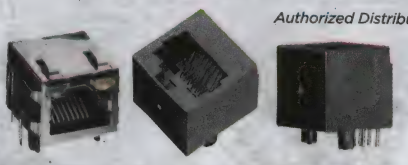
AMP SINGLE MODULAR JACKS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Shielded, grounded with PCB grounds
- Solder contacts
- Sold as 1 each
- Recommended applications: Fast ethernet, 10 Base-T ethernet, 10/100 Base-T ethernet



SHIELDED—CAT-3

Mfg. Part No.	Positions /Contacts	Termination	Features	Ground Options	Stock No.	Price Each 1-9
● 5555154-2	6 / 4	Through Hole Right Angle	RJ14, Low Profile, Panel Stops	PCB	83K0906	1.55
● 5555154-1	6 / 6	Through Hole Right Angle	RJ25, Low Profile, Panel Stops	PCB	42K8757	1.69
● 5555140-1	6 / 6	Through Hole Right Angle	RJ25, Low Profile, Panel Stops	Panel & PCB	42K8747	1.67
● 5557484-1	8 / 8	Through Hole Vertical	RJ45, Panel Stops	Panel & PCB	42K7305	2.92
● 5557969-2	8 / 8	Through Hole Vertical	RJ45, Panel Stops	Panel & PCB	42K7308	3.24
● 5557786-1	8 / 8	Through Hole Right Angle	RJ45	PCB	42K8769	3.64

➤ CONTINUED ➤

AMP SINGLE MODULAR JACKS (CONT.)

Mfg. Part No.	Positions /Contacts	Termination	Features	Ground Options	Stock No.	Price Each 1-9
● 5406298-1	8 / 8	Through Hole Right Angle	RJ45	Panel & PCB	12M6391	3.26
● 2-5338556-1	8 / 8	Through Hole Right Angle	RJ45, Low Profile	Panel & PCB	16M2849	2.54
● 5557791-1	8 / 8	Through Hole Right Angle	RJ48X	Panel & PCB	16M3302	11.26
● 6339160-1	8 / 8	Surface Mount Right Angle	RJ45, Inverted	Without	82K8274	2.53
● 5558070-1	10 / 10	Through Hole Right Angle	RJ45	Panel & PCB	16M3303	3.55
SHIELDED, LOW PROFILE, FACE SHIELD—CAT-3						
● 5556591-1	8 / 8	Through Hole Right Angle	RJ45, Low Profile, Keyed	PCB	42K7303	1.92
● 5555153-1	8 / 8	Through Hole Right Angle	RJ45, Low Profile, Panel Stops	PCB	42K8753	1.70
● 5555140-2	6 / 4	Through Hole Right Angle	RJ14, Low Profile, Panel Stops	Panel & PCB	42K8748	1.58
UNSHIELDED—CAT-3						
● 5558872-1	4 / 4	Through Hole Vertical	RJ22	Without	42K7312	1.28
● 5520257-2	4 / 4	Through Hole Vertical	RJ22, Panel Stops	Without	42K7225	1.35
● 5555980-1	4 / 4	Through Hole Right Angle	RJ22	Without	42K7301	1.48
● 5555165-5	6 / 2	Through Hole Right Angle	RJ11, Low Profile	Without	19R2776	0.97
● 5520250-1	6 / 2	Through Hole Right Angle	RJ11, Panel Stops	Without	42K7222	1.51
● 5520425-2	6 / 4	Through Hole Vertical	RJ14	Without	42K7230	1.65
● 5520258-2	6 / 4	Through Hole Vertical	RJ14, Panel Stops	Without	42K7226	1.41
● 5555165-2	6 / 4	Through Hole Right Angle	RJ14, Low Profile	Without	42K8763	1.26
● 5555163-2	6 / 4	Through Hole Right Angle	RJ14, Low Profile, Panel Stops	Without	42K8760	1.38
● 5520425-3	6 / 6	Through Hole Vertical	RJ25	Without	42K7231	1.81
● 5520258-3	6 / 6	Through Hole Vertical	RJ25, Panel Stops	Without	42K7227	1.45
● 5554990-1	6 / 6	Through Hole Vertical	RJ25, Panel Stops, Keyed	Without	42K8743	1.38
● 5520470-3	6 / 6	Through Hole Right Angle	RJ25	Without	42K7233	2.44
● 5569026-1	6 / 6	Through Hole Right Angle	RJ25, Low Profile	Without	42K7313	1.53
● 5555163-1	6 / 6	Through Hole Right Angle	RJ25, Low Profile, Panel Stops	Without	42K8759	1.43
● 5555003-1	6 / 6	Through Hole Right Angle	RJ25, Panel Stops, Keyed	Without	42K8744	1.35
● 5557314-1	6 / 6	Surface Mount Right Angle	RJ25, Low Profile	Without	42K7304	2.80
● 5556416-1	8 / 8	Through Hole Vertical	RJ45	Without	42K7302	1.34
● 5520259-4	8 / 8	Through Hole Vertical	RJ45, Panel Stops	Without	42K7228	1.24
● 5520260-4	8 / 8	Through Hole Vertical	RJ45, Panel Stops, Keyed	Without	42K7229	1.54
● 5520426-4	8 / 8	Through Hole Right Angle	RJ45	Without	42K7232	1.72
● 5557785-1	8 / 8	Through Hole Right Angle	RJ45	Without	42K8768	2.09
● 5555164-1	8 / 8	Through Hole Right Angle	RJ45, Low Profile	Without	42K8761	1.41
● 5569118-1	8 / 8	Through Hole Right Angle	RJ45, Low Profile, Keyed	Without	19R2820	1.62
● 5555167-1	8 / 8	Through Hole Right Angle	RJ45, Low Profile, Keyed	Without	42K8765	1.41
● 5555162-1	8 / 8	Through Hole Right Angle	RJ45, Low Profile, Panel Stops	Without	42K8758	1.37
● 5555166-1	8 / 8	Through Hole Right Angle	RJ45, Low Profile, Panel Stops, Keyed	Without	42K8764	1.37
● 5520251-4	8 / 8	Through Hole Right Angle	RJ45, Panel Stops	Without	42K7223	1.72
● 5520252-4	8 / 8	Through Hole Right Angle	RJ45, Panel Stops, Keyed	Without	42K7224	1.62
● 5554517-1	8 / 8	Through Hole Right Angle	RJ45, Keyed	Without	42K7297	2.83
● 1-338088-3	8 / 8	Surface Mount Vertical	RJ45	Without	74C6792	1.94

➤ CONTINUED ➤

AMP SINGLE MODULAR JACKS (CONT.)

UNSHIELDED—CAT-3

Mfg. Part No.	Positions /Contacts	Termination	Features	Ground Options	Stock No.	Price Each 1-9
5555764-1	8 / 8	Surface Mount Right Angle	RJ45, Low Profile	Without	42K8766	3.27
5555248-1	8 / 8	Surface Mount Right Angle	RJ45, Low Profile, Panel Stops	Without	46P3270	3.30
5555078-1	8 / 8	Surface Mount Right Angle	RJ45, Low Profile, Panel Stops, Keyed	Without	19R2773	3.04
5558065-1	10 / 10	Through Hole Right Angle	RJ45	Without	39M4458	3.12
COUPLER —CAT-3						
555050-1	6 / 6	One to One	RJ45	...	92F4798	5.94
SHIELDED—CAT-5						
1116503-2	8 / 8	Through Hole Right Angle	RJ45, Low Profile	PCB	16M2706	5.18
1-406541-1	8 / 8	Through Hole Right Angle	RJ45, Inverted	Panel & PCB	67K7510	2.71
6116202-1	8 / 8	Press Fit Vertical	RJ45	PCB	12M6074	4.71
6116418-1	8 / 8	Press Fit Vertical	RJ45	Panel & PCB	42K7640	4.20
SHIELDED—CAT-5e						
5406296-1	8 / 8	Through Hole Right Angle	RJ45, Top/Side Ground	Panel & PCB	40P9713	4.91
5406299-1	8 / 8	Through Hole Right Angle	RJ45, Top/Side Ground	Panel & PCB	32M7821	4.57
5558344-1	8 / 8	Through Hole Right Angle	RJ45, Top/ Bottom Ground	Panel & PCB	42K7310	4.40
UNSHIELDED—CAT-5e						
5558343-1	8 / 8	Through Hole Right Angle	RJ45, Panel Stops	Without	72M6622	4.81

SHIELDED WITH PANEL GROUND—CAT-3, W/LED

Mfg. Part No.	Positions /Contacts	Termination	LED Color	Stock No.	Price Each 1-9
5569564-1	8 / 8	Through Hole Right Angle	w/LED, Pos.1-Green, Pos.2-Yellow	42K7318	7.97
5569564-4	8 / 8	Through Hole Right Angle	w/LED, Pos.1-Green, Pos.2-Green	16M3305	12.08
SHIELDED WITH PANEL GROUND—CAT-5, W/LED					
1-406507-4	8 / 8	Through Hole Right Angle	w/LED, Pos.1-Yellow, Pos.2-Green	16M2656	4.25
2-406549-5	8 / 8	Through Hole Right Angle	w/LED, Pos.1-Green, Pos.2-Green	16M2835	3.24

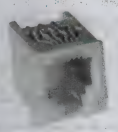
(83016)

FILTERED MODULAR JACKS

RoHS Compliant Available

TE connectivity

Authorized Distributor



RJ11-6L-S
L Series

RJ45-8L-B
L Series

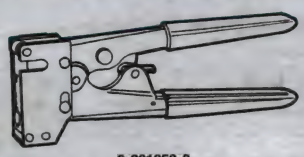
Cost-effective, space-saving solutions to the problems of RFI on signal lines. "Signal Sentry" filtered modular jacks are ideal for telecommunications equipment, computers, terminals and peripherials. Inductive and optional capacitive elements effectively remove common-mode noise from incoming signals and limits unwanted signal line emissions. **N series** jacks offer inductance and optional shielding plus a lower profile for board stacking applications. **L series** jacks, available with or without a shield, are offered with standard ferrite sleeve inductors or higher performance ferrite blocks. Mfg. part nos. with **S suffix** incorporate sleeve ferrites for handling crosstalk problems, while mfg. part nos. with **B suffix** incorporate block ferrites for higher performance. UL recognized, CSA certified.

RJ11 L SERIES FILTERED MODULAR JACKS

Mfg. Part No.	Inductors Ferrite	Shield*	Positions-Contacts	Stock No.	Price Each 1-24	25-49	50-99
RJ11-6L-S	Sleeves	Unshielded	6-6	50F1358	5.30	4.80	4.43
RJ11 N SERIES FILTERED MODULAR JACKS							
RJ11-6N4-B	Block	Shielded 4	6-6	52K3911	5.67	5.32	5.09
RJ11-6N-B	Block	Unshielded	6-6	52K4539	4.28	3.81	3.54
RJ45 N SERIES FILTERED MODULAR JACKS							
RJ45-8N3-B	Block	Shielded 3	8-8	52K3318	4.97	4.67	4.17
RJ45-8N4-B	Block	Shielded 4	8-8	52K3319	5.34	5.07	4.83
RJ45-8N-B	Block	Unshielded	8-8	52K3317	4.91	4.55	4.29
RJ45 Z SERIES FILTERED MODULAR JACKS							
RJ45-8Z4	...	Shielded 4	8-8	52M8580	4.64	4.32	3.96

*Shield: 3 = Panel-, board- and cable-grounded, 4 = Board- and cable-grounded
(75522)

AMP MODULAR PLUG TOOLS



TE connectivity

Authorized Distributor

2-231652-0

Professional production hand tool cuts, strips and terminates cable. Features CERTI-CRIMP® ratchet for proper termination. With interchangeable die sets the tool frame can accommodate all plug sizes. Cushioned handles for comfort. Choice of 3 complete tool assemblies consisting of tool frame and die set. Tool frame and interchangeable die sets *ordered separately below.*

Mfg. Part No.	Description	Stock No.	Price 1-4
2-231652-8	Tool Assembly with 4-, 6-Position Die Set	93F6988	210.00
2-231652-1	Tool Assembly with 8-Position Die Set	98F7051	167.99
3-231652-0	Tool Assembly with Category 5 8-Position Die Set	66F3376	178.65
2-231652-0	Hand Tool Frame Only	98F6804	140.49
853400-3	4-Position Die Set Only	50F887	73.12
853400-8	4-, 6-Position Die Set Only	50F890	72.42
1-853400-0	Category 5 8-Position Die Set Only	66F3374	73.48
3-231652-0	8-Pos. Modular Plug Hand Tool and Die Set	66F3376	178.65

(8293)

AMP CAT 6 MODULAR PLUG TERMINATION TOOLS

Cat 6 termination tools allows for a one-step process for crimping all conductor and integrated shells. Used with the external strain relief clamp or 8-position Cat 3, 5, and 5e modular plugs. Both crimps the strain relief and the modular plug contacts at the same time. *Order replacement die set and insertion tool separately below.*

TE connectivity

Authorized Distributor

Mfg. Part No.	Description	Stock No.	Price Each 1-4
790163-1	Pro-Crimper™ Termination Tool with Die Set	01H9687	433.00

(80552)

AMP GANGED/STACKED MODULAR JACKS

RoHS Compliant Available

- RJ45 Modular Jack
- Right Angle PC Board Thru Hole
- PCB Ground Tabs
- Recommended applications: Fast Ethernet, 10 Base-T Ethernet, 10/100 Base-T Ethernet

TE connectivity

Authorized Distributor

SHIELDED—CAT-5

Mfg. Part No.	No. of Ports	Config.	Positions Per Port	Features	Stock No.	Price 1-9
5558524-1	4	1 x 4	8	Ganged	19R2803	13.51
5569381-1	2	2 x 1	8	Low Profile, Stacked	16M3304	12.01
6368011-3	2	2 x 1	8	Low Profile, Stacked	73M8568	15.44
5569255-1	4	2 x 2	8	Low Profile, Stacked	42K7314	14.29
5569261-1	6	2 x 3	8	Low Profile, Stacked	73K1759	20.95
5569263-1	12	2 x 6	8	Low Profile, Stacked	61M0312	21.11
UNSHIELDED—CAT-4						
5557560-1	2	1 x 2	8	Ganged	16M4013	3.23
5557561-1	3	1 x 3	8	Ganged	19R2785	10.61
5557562-1	4	1 x 4	8	Ganged	42K7306	5.89
5557563-1	5	1 x 5	8	Ganged	19R2786	7.91
5557566-1	8	1 x 8	8	Ganged	42K7307	10.40
SHIELDED—CAT-5, w/LED						
6368011-1	2	2 x 1	8	Low Profile, Stacked	02M1138	23.00

(83054)

AMP CATEGORY 3 AND 5 MODULAR PLUGS

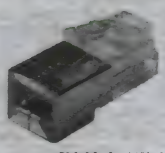
RoHS Compliant Available

TE connectivity

Authorized Distributor

- High-performance
- Insulation displacement termination
- Clear polycarbonate housing, rated UL94V-0
- Tin-Lead plated copper alloy shield
- UL listed, CSA certified
- RoHS compliant

Unshielded



Shielded

True mass termination of jacketed cable with tinsel, solid or stranded conductors. One-piece construction with preloaded, 0.014" (0.36mm) thick phosphor bronze terminals plated gold in localized area and gold flash on remainder, over nickel underplate. Shielded or unshielded plug assemblies meets FCC rules and regulations. Can be inserted into shielded or unshielded jacks; *ordered separately, go online or call*. Terminate on round, metallized polyester shielded cable using standard tools; *ordered separately below.* **Sold individually, except where noted in table below.**

➤CONTINUED➤

AMP CATEGORY 3 AND 5 MODULAR PLUGS (CONT.)

UNSHIELDED PLUGS — CATEGORY 3

Mfg. Part No.	No. of Positions	No. of Contacts	Description	Pkg. of	Stock No.	Price Each 1-9
● 5-641333-2	6	2	Flat Oval Stranded	1	33B9374	0.35
● 5-556384-3	6	4	Flat Oval Solid	1	50F2174	0.64
● 5-641335-3	6	4	Flat Oval Stranded	1	50F940	0.40
● 5-557961-2	8	8	*Small Round Stranded*	1	33B9330	0.65
● 5-554170-3	8	8	Round Stranded, Keyed	1	50F2179	0.77
● 5-557963-3	10	10	Round Stranded	1	97F9578	1.10
LONG BODY UNSHIELDED PLUGS — CATEGORY 3						
● 5-555426-3	6	6	Flat Oval Solid	1	50F856	0.83
● 5-555176-3	6	6	Flat Oval Stranded	1	50F2176	0.96
● 5-555177-3	6	6	Round Stranded	1	50F2177	0.80
LONG BODY SHIELDED PLUGS — CATEGORY 3						
● 5-555174-2	6	6	Flat Oval Stranded	1	66F1677	1.98
● 5-555175-3	6	6	Round Stranded	1	97F9546	2.24
● 5-569542-2	8	8	Flat Oval Stranded	1	33B9366	1.90
UNSHIELDED PLUGS — CATEGORY 5						
● 5-558530-3	8	8	Round Stranded	100	66F6153	72.00
SHIELDED PLUGS — CATEGORY 5						
● 5-569552-2	8	8	Round Stranded	1	33B9372	1.92

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 558211-1	Cable Boot for Use with Modular Plugs, Black	66F6219	0.48
● 569875-1	Cable Boot for Cat 3, 5 and 5e (8 pos.) Modular Plugs, Black	34B485	0.48
● 569875-3	Cable Boot for Cat 3, 5 and 5e (8 pos.) Modular Plugs, Red	34B487	0.47
● 569875-5	Cable Boot for Cat 3, 5 and 5e (8 pos.) Modular Plugs, Blue	34B489	0.50
● 558527-1	Strain Relief for Modular Plugs	34B376	0.76
1-853400-0	8-Pos. Modular Plug Die Set	66F3374	73.48
3-231652-0	8-Pos. Modular Plug Hand Tool and Die Set	66F3376	178.65

(83014)

AMP HIGH-PERFORMANCE CATEGORY 5 JACKS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Black Polysulfone Housing
- Rated UL94V-0
- Current Rating: 1.5A Max. at 25°C
- Voltage Rating: 150VAC Max.
- Operating Temperature: –40°C to +70°C

Unshielded

Eight-position/contact side entry single port or multi-port jacks exceed Category 5 Near End Crosstalk (NEXT) requirements for EIA/TIA TSB 40. Meet FCC Part 68 rules and regulations. Available shielded with PC board or panel grounding or unshielded with or without panel stops. Bright tin-lead plated brass shield. Phosphor bronze terminals plated gold over nickel in contact area, tin-lead over nickel in solder area.

Mfg. Part No.	Ports	Description	Stock No.	Price Each 1-9	Price Each 10-49
● 5558341-1	1	Unshielded without Panel Stops	16M4014	3.12	3.00
● 5558342-1	1		16M4015	3.61	3.47
● 5558344-1	1	Shielded with Panel Ground	42K7310	4.40	4.23

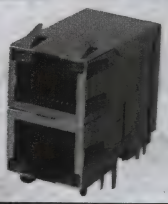
(8085)

RJSAE SERIES STACKED MODULAR JACKS

RoHS Compliant Available

Amphenol Commercial Products

- Reduces component and labor costs by incorporating LED's into the connector
- Meets ethernet CAT 5 performance
- Stackable feature enables more ports with same board space



For superior EMI performance, the option of configuring your connector with a ferrite filter is available. Shield: copper alloy; tin/lead plated. Contacts: phosphor bronze; gold over nickel. Insert: solder reflow process compatible complies with UL94V-0. UL recognized, file no. E135615; CSA certified, file no. 150190. Also available in RJ11 versions; *go online or call.*

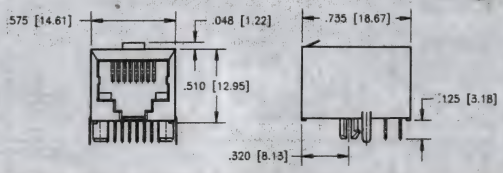
Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-49
● RJSAE-5080-02	RJ45 stacked 1X2 w/o Shield, w/o LED's	01M6413	3.50	3.28
● RJSAE-5380-02	RJ45 stacked 1X2 w shield w/o LED's	84K8187	4.32	3.59
● RJSAE-5381-02	RJ45 stacked 1X2 w shield w LED's, led 1 green, led 2 yellow	84K8190	7.76	6.96
● RJSAE-5384-02	RJ45 stacked 1X2 w shield w LED's, led 1 yellow, led 2 green	01M6446	6.73	6.11

(88412)

FRJA SERIES SHIELDED AND FILTERED MODULAR JACKS

RoHS Compliant Available

Amphenol Commercial Products



Offer low-cost and effective EMC control within standard RJ-11 and RJ-45 connector footprints. EMC control is provided by completely shielded connector and/or with the use of high-resistivity, high-impedance ferrite block. Board layout changes are not required. Copper alloy, tin/lead-plated shield. Features fully enclosed contact body with a flat contact design that has 50µ" gold mating side and tin/lead in the PCB tail. Thermoplastic insert, which complies with UL94V-0. Dimensions: 0.735H x 0.575W x 0.510"D. Contact resistance: 20mΩ maximum. Insulation resistance: 500MΩ minimum. Current rating: 1.5A. Voltage rating: 125VAC. UL recognized, file no. E135615; CSA certified, file no. LR68598-11.

FRJA SERIES MODULAR JACKS

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-49
● FRJAE-408	RJ45 w/o shield w/o filter	84K8143	1.38	1.27
● FRJAE-438	RJ45 w front tab shield w/o filter	84K8145	1.73	1.67
● FRJAE-488	RJ45 w rear tab shield w/o filter	84K8147	1.40	1.38
● FRJAE-448	RJ45 w/o shield w filter	01N5199	1.96	1.84
● FRJAE-418	RJ45 w front tab shield w filter	84K8144	2.42	2.27
● FRJAE-468	RJ45 w rear tab shield w filter	84K8146	2.00	1.70
● FRJAE-666	RJ11 w rear tab shield w filter	12N6289	2.16	2.02

(8345)

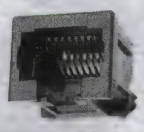
A00 SERIES MODULAR JACKS

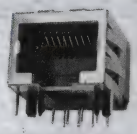
RoHS Compliant Available

EDAC INC

Features:

- RJ 45 Modular Jack
- ISDN standard
- Industry standard footprint and height.
- SMT or through hole versions
- Single, stacked, or ganged configurations
- Available shielded or unshielded





A00 series FCC Compliance: Part 68 SubPart F. Insulator Housing: Black Plastic PBT/Nylon UL94V-0. Contact Material: Phosphor Bronze. Contact Plating: 30u Gold on the mating area. Current rating: 1.5 amps maximum. Voltage Rating: 120 volts AC maximum. Shield Housing: Tin Plated copper alloy. Operating Range: -40°C to +80°C

Mfg. Part No.	Contacts	Description	Stock No.	Price Each 1-9
● A00-108-620-450	8	1x1, 8 contacts, 30u gold, Vertical, Unshielded, CAT 5	07J7063	1.46
● A00-108-622-450	8	1x1, 8 contacts, 30u gold, Vertical, Shielded, CAT 5	60K0776	3.66
● A00-108-660-450	8	1x1, 8 contacts, 30u gold, R/A single row, Unshielded, CAT 5	59K0104	3.85
● A00-108-662-450	8	1x1, 8 contacts, 30u gold, R/A single row, Shielded, CAT 5	59K0105	3.99
● A00-216-662-450	16	1x2, 16 contact, 30u gold, R/A single row, Shielded, CAT 5	59K0107	4.34

(79381)

STANDARD RJ45 MAGNETIC JACKS

RoHS Compliant Available

EDAC INC

Features:

- Integrated Magnetics - Combines network magnetics with RJ 45 modular jack connectors
- Provides signal integrity, DC isolation and protection for PHY chip
- 19/100 or 1000 Base T options - Full IEEE 802.3 compliance
- Integrated Design - Reduces component inventory and process costs
- Spring fingers on shells - Guaranteed advanced EMI/RFI suppression
- Through Hole Right Angle termination unless otherwise indicated.

10/100/1000 BASE T, 8 CORE

Mfg. Part No.	# Ports	# Positions	LED Color Left/Right	Stock No.	Price Each 1-9
● A60-113-200P471	1	12	None / None	77T2746	10.34
● A60-113-233P471	1	12	Green / Green	28W2593	11.13
● A60-113-231N432	1	10	Green / Yellow	77T2747	9.26
● A60-113-235N414	1	10	Green / Green-Yellow Bicolor	77T2748	9.51
● A60-113-271N414	1	10	Green-Orange Bicolor / Yellow	77T2749	10.18
● A60-113-300P432	1	10	None / None	77T2750	7.59
● A60-113-300P492	1	10	None / None	77T2751	7.87
● A60-113-331P411	1	10	Green / Yellow	28W2594	8.75

➤ CONTINUED ➤

STANDARD RJ45 MAGNETIC JACKS (CONT.)

Mfg. Part No.	# Ports	# Positions	LED Color Left/Right	Stock No.	Price Each 1-9
A60-113-331P432	1	10	Green / Yellow	77T2753	8.35
A60-143-300P111	4	10	None / None	77T2763	30.17
A60-263-300P562	12	10	None / None	77T2769	106.83
10/100 BASE T, 4 CORE					
A63-113-213N491	1	8	Yellow / Green	77T2781	5.77
A63-113-231N435	1	8	Green / Yellow	77T2782	5.41
A63-113-300P131	1	8	None / None	28W2596	4.38
A63-113-300P422	1	8	None / None	77T2784	5.33
A63-113-331P422	1	8	Green / Yellow	28W2598	4.85
A63-113-331P431	1	8	Green / Yellow	77T2785	5.77
A63-113-431P412*	1	8	Green / Yellow	77T2786	5.57
A63-113-331P4D2	1	10	Green / Yellow	28W2597	4.85
A63-143-300N161	4	8	None / None	77T2794	15.58
A63-143-313P161	4	8	Yellow / Green	77T2795	16.86
10/100 BASE T, 5 CORE					
A64-113-271P521	1	6	Green-Orange Bicolor / Yellow	28W2599	7.56
A64-113-231N411	1	8	Green / Yellow	77T2799	5.41

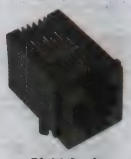
* Through Hole Vertical Termination
(208177)

PC BOARD JACKS

RoHS Compliant Available

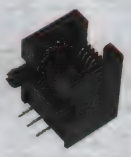
Features

- FCC compliant - Title 47, part 68
- Cat3, Cat5 performance category
- 4, 6, 8 positions, fully or selectively loaded
- Horizontal and vertical entry styles
- Shielded or non-shielded
- Flanged or flangless versions
- Inverted latch options
- Standard or low profile versions
- Snap or diamond mounting pegs options
- Drawn wire contacts
- FCC approved GXT™ plating
- UL recognized and CSA approved



Right Angle

Vertical



Low-Profile

Specifications

- Housing: Glass filled, polyamide or HTN
- Flammability Rating: UL94V-0
- Contacts: Gold plated copper alloy
- Current Rating: 3A continuous
- Insulation Resistance: 500 Mohm minimum
- Dielectric Withstanding Voltage: 1500V minimum
- Operating Temperature Range: -65°C to 125°C

VERTICAL MODULAR JACKS

Mfg. Part No.	Positions	Loaded Contacts	Pegs	Tail Length	Stock No.	Price Each 1-9	Price Each 10-24
61835-0441LF	4	4	Snap	3.18 mm	62K6486	0.50	0.45
69253-001LF	4	4	Diamond	3.18 mm	62K7112	1.13	1.06
90512-001LF	6	6	Snap	3.18 mm	93K5450	0.84	0.79
69254-001LF	6	6	Diamond	3.18 mm	06M1845	1.26	1.19
69254-002LF	6	4	Diamond	3.18 mm	06M1846	1.15	1.08
90598-001LF	8	8	Snap	3.18 mm	93K5452	0.77	0.72
69255-001LF	8	8	Diamond	3.18 mm	06M1850	1.28	1.21
87545-4111LF	6	6	SMT	...	06M2414	1.72	1.61
87547-4111LF	8	8	SMT	...	63K0743	1.68	1.58
VERTICAL MODULAR JACKS - SHIELDED							
94152-088LF	8	8	Snap	3.20 mm	06M2901	1.72	1.61
RIGHT ANGLE MODULAR JACKS - STANDARD PROFILE							
68897-001LF	4	4	Diamond	3.18 mm	06M1819	0.85	0.65
67968-002LF	6	6	Snap	3.50 mm	06M1750	1.06	1.00
68898-001	6	6	Diamond	3.18 mm	89F4576	1.53	1.18
68899-001	8	8	Diamond	3.18 mm	89F4694	1.44	1.16
RIGHT ANGLE MODULAR JACKS - LOW PROFILE							
87180-044LF	4	4	Snap	3.18 mm	93K5399	0.75	0.71
54601-906WPLF	6	6	Snap	3.75 mm	51M7960	0.45	0.41
87180-088	8	8	Snap	3.18 mm	97F9684	1.44	1.16
54602-908LF	8	8	Snap	3.25 mm	51M7962	0.58	0.53
54601-908WPLF	8	8	Snap	3.75 mm	68K8250	0.60	0.54
54602-910LF	10	10	Snap	3.25 mm	51M7963	0.69	0.62

* Inverted
(8424)

CATEGORY 5e & 6 FEED-THRU ADAPTERS

RoHS Compliant Available

L-com Global Connectivity

Shielded Keystone Feed-Thru

Shielded Right Angle Keystone Feed-Thru

Shielded Panel Mount Feed-Thru

- High Performance Ethernet Coupler for panel and wall plate mounting
- RJ45 Female connectors and straight through wiring for network system compatibility
- Fully shielded housing reduces EMI/RFI interference
- EIA/TIA 568A/B compliant insures compatibility and reliability in your application
- Category 5e & 6 performance ratings facilitate high-speed data communication
- Keystone Style Snap in mounting design for compatibility with common wall plates and rack panels
- Panel mount versions includes coupler, mounting frame and 4-40 machine screws

KEYSTONE STYLE FEED-THRU COUPLERS

These couplers utilize two RJ45 (8x8) modular jacks and feature an industry standard Keystone-Mount design. These couplers can fit into a standard keystone style opening as well as typical panels and wall plate openings. Shielded versions feature a stamped metal shell offering maximum protection from EMI/RFI

Mfg. Part No.	Category	Stock No.	Price Each 1-9	Price Each 10-24
TDG1026KS-C5E	5e, Shielded	51M4111	8.30	7.51
TDG1026KS-C6	6, Shielded	53M5589	9.48	8.58

KEYSTONE STYLE RIGHT ANGLE FEED-THRU COUPLERS

An exclusive product design from L-com, the new TDG1026KC series right angle Category 5E couplers offer true 90° connectivity and meet Category 5E standards. These unique right angle keystone couplers were designed to address tight fit applications commonly seen with wall plates and some patch panel designs. These robust right angle Cat 5E couplers fit standard .765" X .585" keystone openings and can be used for myriad voice, video and data applications

TDG1026KC-R5E	5e, Unshielded	80R9288	9.47	8.55
TDG1026KCS-R5E	5e, Shielded	80R9289	12.24	11.06

PANEL MOUNTED FEED-THRU COUPLER KITS

With a solid die-cast metal mounting frame, these unique coupler kits allow panel mounting in virtually any panel thickness. Designed to work with EIA/TIA 568A and B wiring, these couplers offer a reliable method to pass high-speed data communication through a chassis or rack panel. Kits include a snap-in coupler, mounting frame and 4-40 machine screws.

ECF504-SC5E	5e, Shielded	21K6038	11.48	10.36
ECF504-SC6	6, Shielded	52K4586	12.05	10.89

(110605)

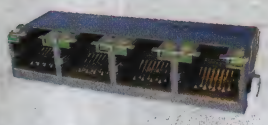
RJE SERIES MODULAR JACKS

RoHS Compliant Available

Amphenol Commercial Products

RJE56

RJE71



RJE72

RJE73

RJE74

RJE56 SERIES - RJ45 PRESS FIT

The RJE56 series is designed for applications where soldering is just not an option. The pressfit contacts and shield tabs have the "Eye of the Needle" design and provide good PCB retention and reliable electrical performance.

Mfg. Part No.	No. of Ports	No. of Positions	No. of Contacts	Shield	LED Left, Right	Stock No.	Price Each 1-9
RJE56-188-0410	1	8	8	None	None	47W2078	1.79
RJE56-188-1410	1	8	8	Full	None	47W2079	2.17

RJE71 SERIES - RIGHT ANGLED, RECESSED, LOW PROFILE

The RJE71 of modular jacks meet category CAT6 performance per EIA-568-C.2. It supports Gigabit Ethernet Protocols and 10G Ethernet over lengths up to 50M. Shielding available for increased EMI performance and LEDs for Link Activity and Network Speed verification.

Mfg. Part No.	No. of Ports	No. of Positions	No. of Contacts	Shield	LED Left, Right	Stock No.	Price Each 1-24
RJE71-188-14A1	1	8	8	Full	GR/YE, GR/YE	47W2080	3.76
RJE71-188-14B1	1	8	8	Full	RD/GR, RD/GR	47W2081	3.76
RJE71-188-1401	1	8	8	Full	Blocked	47W2082	4.84
RJE71-188-1411	1	8	8	Full	YE, GR	47W2083	3.56
RJE71-188-1441	1	8	8	Full	GR, YE	47W2084	3.56
RJE71-188-1451	1	8	8	Full	GR, GR	47W2085	3.56

CONTINUED

RJE SERIES MODULAR JACKS (CONT.)

Mfg. Part No.	No. of Ports	No. of Positions	No. of Contacts	Shield	LED Left, Right	Stock No.	Price Each 1-9

The RJE72 of modular jacks meet category CAT5e performance per EIA-568-C.2. It supports Gigabit Ethernet Protocols. Shielding available for increased EMI performance and LEDs for Link Activity and Network Speed verification.

Mfg. Part No.	No. of Ports	No. of Positions	No. of Contacts	Shield	LED Left, Right	Stock No.	Price Each 1-24
● RJE72-188-14A1	1	8	8	Full	GR/YE, GR/YE	47W2086	3.54
● RJE72-188-14B1	1	8	8	Full	RD/GR, RD/GR	47W2087	3.54
● RJE72-188-1401	1	8	8	Full	Blocked	47W2088	2.84
● RJE72-188-1411	1	8	8	Full	YE, GR	47W2089	5.28
● RJE72-188-1441	1	8	8	Full	GR, YE	47W2090	3.34
● RJE72-188-1451	1	8	8	Full	GR, GR	47W2091	3.34
● RJE72-488-14A1	4	8	8	Full	GR/YE, GR/YE	47W2092	10.58
● RJE72-488-14B1	4	8	8	Full	RD/GR, RD/GR	47W2093	10.58
● RJE72-488-1401	4	8	8	Full	Blocked	47W2094	8.40
● RJE72-488-1411	4	8	8	Full	YE, GR	47W2095	9.78
● RJE72-488-1441	4	8	8	Full	GR, YE	47W2096	9.78
● RJE72-488-1451	4	8	8	Full	GR, GR	47W2097	9.78

RJE73 SERIES - RJ45 LOW PROFILE WITH LEDS

The RJE73 Modular Jack is a low profile RJ45 with LEDs and superior EMI shielding with a small foot print for space sensitive designs and built-in LEDs for link activity and network verification. This product is ideal for LAN applications such as adapter cards and routers.

Mfg. Part No.	No. of Ports	No. of Positions	No. of Contacts	Shield	LED Left, Right	Stock No.	Price Each 1-24
● RJE73-188-00110	1	8	8	Full	YE, GR	47W2098	1.94
● RJE73-188-00140	1	8	8	Full	GR, YE	47W2099	1.94
● RJE73-188-00210	1	8	8	Full	YE, GR	47W2100	1.96
● RJE73-188-00240	1	8	8	Full	GR, YE	47W2101	1.96
● RJE73-188-00310	1	8	8	Full	YE, GR	47W2102	1.98
● RJE73-188-00340	1	8	8	Full	GR, YE	47W2103	1.98
● RJE73-188-004A1	1	8	8	Full	GR/YE, GR/YE	47W2104	2.22
● RJE73-188-004B1	1	8	8	Full	RD/GR, RD/GR	47W2105	2.22
● RJE73-188-00401	1	8	8	Full	Blocked	47W2106	1.72
● RJE73-188-00410	1	8	8	Full	YE, GR	47W2107	2.00
● RJE73-188-00411	1	8	8	Full	YE, GR	47W2108	2.00
● RJE73-188-00440	1	8	8	Full	GR, YE	47W2109	2.00
● RJE73-188-00441	1	8	8	Full	GR, YE	47W2110	2.00
● RJE73-188-00451	1	8	8	Full	GR, GR	47W2111	2.00

RJE74 SERIES - SINGLE PORT

The RJE74 is built to fit your registered jack requirements. It is a vertical 10P10C available with RMK4 keying and superior EMI shielding. Includes optional Mylar cover for automated assembly equipment.

Mfg. Part No.	No. of Ports	No. of Positions	No. of Contacts	Shield	LED Left, Right	Stock No.	Price Each 1-24
● RJE74-1AA-1410-A	1	10	10	Full	None	47W2112	2.17
● RJE74-1AA-1411-A	1	10	10	Full	None	47W2113	1.98
● RJE74-188-1410-A	1	8	8	Full	None	47W2114	2.13
● RJE74-188-1411-A	1	8	8	Full	None	47W2115	1.88

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CATEGORY 5E AND CATEGORY 6 IN-LINE COUPLERS

multicomp

Category 5e Coupler

Category 5e Coupler w/Flange

Category 6 Coupler

Category 6 Coupler w/Flange

Category 5e or Category 6 couplers allow cabling to be extended without compromising signal integrity. Meets Category 5e and Ctegory 6 performance requirements

CATEGORY 5E COUPLERS

Mfg. Part No.	Description	Stock No.	Price Each 1-49	Price Each 50-99
MC8533-5101	Category 5e Coupler	93T1284	8.48	6.97
MC8533-5201	Category 5e Coupler with Panel Mounting Flange	93T1285	8.51	6.97

➤ CONTINUED ➤

CATEGORY 5E AND CATEGORY 6 IN-LINE COUPLERS (CONT.)

CATEGORY 6 COUPLERS

Mfg. Part No.	Description	Stock No.	Price Each 1-49	Price Each 50-99
MC8533-6101	Category 6 Coupler	93T1286	7.95	6.49
MC8533-6201	Category 6 Coupler with Panel Mounting Flange	93T1287	8.96	7.34

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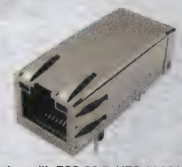
HYPERJACK POE+ MAGNETIC MODULAR JACKS

RoHS Compliant Available

molex



- Integrated magnetics:
  - — Filter common-mode noise to provide signal integrity
  - — Protect PHY chips
  - — Provide DC isolation
  - — Offer low-mode conversion
- Spring fingers offer advanced EMI protection
- Help simplify PCB layouts by reducing components required
- Left and right green LEDs provide port status and activity feedback to user
- Supports Fast Ethernet (10/100) and Gigabit Ethernet applications
- Meets Category 5e performance
- Single-port (1-by-1), 8-position
- Right-angle (side-entry), through-hole solder termination
- Mates with FCC 68.5 / IEC 60603-7 plugs
- Ethernet 10/100/1000 compatible — IEEE 802.3 compliant
- PoE and PoE+ compatible — IEEE 802.3af compliant

HyperJack™ PoE+ (Power over Ethernet Plus) Integrated Connector Module (ICM) provides a cost-effective, plug-and-play, solution for implementing PoE and PoE+ management functions for Power Sourcing Equipment (PSE). This fully-integrated connector incorporates wire-wound components (magnetics) in a standard RJ45 jack. Feature phosphor bronze contacts with 1.27mμ gold plating on mating end over nickel underplating. Stainless steel shielded housing constructed of black, PBT; flammability rated UL94V-0. Current rating per contact: 1.5A max. Voltage rating: 57V max. Operating temperature range: -40° to +80° C. Supports a wide variety of applications including computer, network and telecommunications equipment.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 85759-1001	HyperJack 8-Postion 1x1 PoE Plus PSE Modular Jack with LEDs	78R3035	13.24

(190605)

PDJack™ POE+ INTEGRATED MAGNETIC MODULAR JACKS

RoHS Compliant Available

molex

- PoE integrated circuit included
- Bridge rectifiers to accommodate all Power Sourcing Equipment (PSE) types
- Detection and classification circuitry fully IEEE802.3at compliant
- Robust ESD and EMI (electro-magnetic interference) design
- Efficient thermal design
- Gigabit Ethernet magnetics with common-mode choke
- Connectors are available in Class 0, 1, 2, 3 and 4
- Housing: Nagase-D-Valox 420 SED Black, UL94-0\5V
- Shield: Stainless steel
- Contact: Phosphor Bronze (CuSn8)
- Plating: Contact area —1.27um Gold (Au) over 1.9um Nickel (Ni) Solder tail area —3um Tin (Sn)
- PCB thickness: 1.57mm

PDJack™ with integrated Power Device controller circuitry plus Ethernet connectivity simplifies PoE Plus implementation for any network device, reducing time-to-market, lowering costs and achieving considerable PCB space savings. Based on the RJ45 connector, the magnetic PDJack™ is the first integrated PD (Power Device) Jack in the market to combine a PoE+ PD controller and bridge rectifiers with gigabit magnetics in one connector and provide a complete drop-in, single port solution.

Mfg. Part No.	Class	Power Output Max (W)	Operating Temp °C	Stock No.	Price Each 1-9
● 85791-0020	0	13	0 to 70	44W7688	22.30
● 85791-1020	1	3.84		44W7689	22.30
● 85791-2020	2	6.49		44W7690	21.92
● 85791-3020	3	13		44W7691	22.30
● 85791-4020	4	25.5	0 to 55	44W7692	22.30

(210163)

ULTRA LOW-PROFILE RIGHT-ANGLE MODULAR JACKS

UL CSA RoHS Compliant Available

molex

Flangeless mount jacks are 0.456" (11.58) high. Current: 1.5A. Dielectric withstanding voltage: 1000VACrms 60Hz for one minute. Insulation resistance: 500MΩ min. Durability: 500 mating cycles min. Housing: black glass-filled nylon, rated UL94V-0. Contacts: phosphor bronze. PC board thickness: 0.062" (1.57). UL listed, CSA certified.

Mfg. Part No.	Circuits	Loaded Contacts	Stock No.	Price Each 1-24	Price Each 25-49
● 43202-4101	4	4	30M0005	1.07	1.02
● 43202-6101	6	6	30M0006	0.96	0.92
● 43202-8104	8	8	55R8971	1.08	1.02

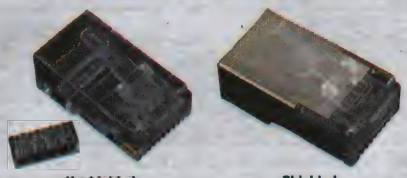
(8466)

CATEGORY 6 MODULAR PLUGS

RoHS Compliant Available

molex

- Meets Category 6 performance
- Dual-row contacts reduce risk of crosstalk between critical pairs
- Load bar provides consistent termination of twisted pairs
- Shielded version available with or without strain relief
- Terminated with industry-standard RJ-45 application tooling



Unshielded Shielded

Phosphor bronze contacts have nickel underplating, 50µ gold contact plating. Plug material: polycarbonate. Max. current: 1.5A. Max. voltage: 150V. Withstanding voltage: 1000VAC. Temperature range: -40° to +85° C. Color: black.

Mfg. Part No.	Description	Stock No.	Price Each 1-24
44915-0001	Unshielded	01J8343	1.35
44915-0011	Shielded, no strain relief	01J8345	2.92

(80493)

CATEGORY 5 MODULAR JACKS

RoHS Compliant Available

molex

- Less than 10mm from the top of the PCB to the top of the modular jack
- Low profile meets compact PCI, Eurocard and common mezzanine card standards
- Exceeds category 5 performance
- Meets gigabit ethernet industry standard

1-Port 4-Port

Phosphor bronze contacts have nickel underplating, 50µ gold contact plating. PCB retention: press-fit plastic peg, snap-in plastic peg. Housing material: glass-filled nylon. Max. current: 1.5A. Max. voltage: 150V. Withstanding voltage: 1000VAC. Temperature range: -40° to +85° C. Color: black.

HIGH SPEED, RIGHT ANGLE, ULTRA LOW PROFILE MODULAR JACKS

Mfg. Part No.	Description	Ports	Stock No.	Price Each 1-24
44661-0002	RJ45 Modular Jack	1	57H1576	4.18
44661-0011	RJ45 Shielded Modular Jack (All tabs)	1	57H1577	5.46
HIGH SPEED, GANGED, RIGHT ANGLE, ULTRA LOW PROFILE MODULAR JACKS				
44560-0014	RJ45 Shielded Modular Jack (All tabs)	4	57H1544	15.22
44560-0024	RJ45 Shielded Modular Jack (Bezel)	4	57H1546	14.07

(80492)

RJ45 CAT 6 WEATHERTIGHT CONNECTORS

RoHS Compliant Available

conxall® Harsh Environment Connectivity Solutions A HEICO Company

- Sealed to IP67 & IP68 NEMA 250 (6P) when mated
- Cat6 connectors available in shielded or unshielded versions as standard
- Feed through or IDC panel terminals for easy field installations
- Field installable design is easy to assemble

Cable Plug Unshielded Jack Shielded Jack

RJ45 FIELD INSTALLABLE CABLE PLUG

Mfg. Part No.	Description	Stock No.	Price Each 1-9
DCC-RJ6B-310	Quick Connect Coupling	79T5854	22.25
DCC-RJ6T-310	Threaded Coupling	79T5857	22.25
DCC-RJ6SB-310	Quick Connect Coupling, Shielded	79T6855	23.95
DCC-RJ6ST-310	Threaded Coupling, Shielded	79T5856	24.27
RJ45 FIELD INSTALLABLE PANEL HOUSING - FEED THROUGH			
DCP-RJ6B-F	Quick Connect Coupling	79T5858	24.26
DCP-RJ6T-F	Threaded Coupling	79T5864	24.26
DCP-RJ6SB-F	Quick Connect Coupling, Shielded	79T5860	26.33
DCP-RJ6ST-F	Threaded Coupling, Shielded	79T5862	26.63
RJ45 FIELD INSTALLABLE PANEL HOUSING - IDC STRAIGHT			
DCP-RJ6B-SD	Quick Connect Coupling	79T5859	28.33
DCP-RJ6T-SD	Threaded Coupling	79T5865	28.33
DCP-RJ6SB-SD	Quick Connect Coupling, Shielded	79T5861	30.22
DCP-RJ6ST-SD	Threaded Coupling, Shielded	79T5863	30.22

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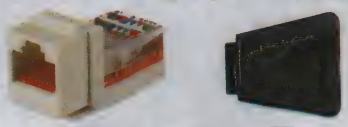
NETKEY® CATEGORY 3, 5e AND 6 JACK MODULES

RoHS Compliant Available

PANDUIT®



NK5E88M CJT

NETKEY® universal keystone mounting modules are compatible with a wide assortment of faceplates, surface mount boxes, and modular patch panels.

CATEGORY 5E 8-POSITION LEAD FRAME UNIVERSAL KEYSTONE JACK MODULE

Mfg. Part No.	Color	Stock No.	Price Each 1-4	Price Each 5-9
NK5E88MBLY	Black	84K3383	7.30	6.94
NK5E88MEIY	Electric Ivory	84K3385	6.91	6.57
NK5E88MIGY	International Gray	84K3387	7.39	7.03
NK5E88MIWY	Off White	84K3388	7.22	6.87
NK5E88MWHY	White	84K3392	7.39	7.03

TOOLING

Mfg. Part No.	Description	Stock No.	Price Each
CJT	Termination Tool for Category 3 and Category 5e Keystone Jack Modules	16C2621	1.53

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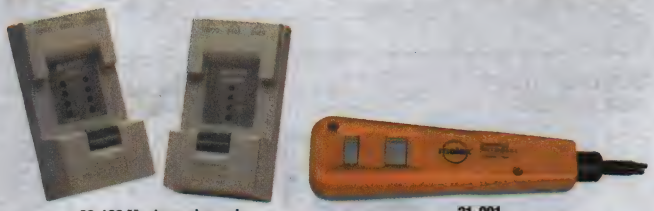
TOOLS, TESTERS AND ACCESSORIES

molex



33-100 Master and remote 31-001

SLT3 SINGLE LINE TESTER

Instant identification of most common voice and data cabling problems including shorts, opens, reversals, and miswires. The master and remote units separate for end-to-end testing of installed cabling. The continuously sequencing LED display immediately alerts you to problems in the cabling system. Both pieces snap and lock together when not in use. When the units are interlocked, the battery is disabled. Designed to fit in a tool box or pocket, and has a convenient ring feature for attaching to a belt or frame. A durable nylon carrying case may be purchased as an optional accessory. Frame adapters are available for testing from the punch down block to the wall plate.

Mfg. Part No.	Description	Stock No.	Price Each
33-100	SLT3 Single-Line Tester	57J2621	122.74

INSTALLATION TOOL

Mfg. part no. 31-001 provides reliable terminations and is compatible with KATT, 110 Style and Krone IDC Connectors. Handle is heavy duty nylon and blade is hardened steel.

31-001	Deluxe IDC Punch-Down Tool	57J4315	93.06

(83108)

CATEGORY 5 MODULAR PLUGS

RoHS Compliant Available

multicomp

High-performance 8-position plugs meet TIA/EIA TSB40-A Category 5 NEXT requirements. Dual-point contact terminates 24-26 AWG stranded and solid conductors. Use to mate PC board mount 8-position modular jacks. Handle speeds up to 100MHz. Designed in shielded and unshielded versions to control EMI/RFI. Current rating: 1.5 amps. Voltage rating: 30VAC/42VDC. Dielectric withstanding: 100Vrms, 1 min. (60Hz). **Sold in packages of 10.**

Mfg. Part No.	No. of Conductors	Description	Stock No.	Price Each 1-9
SPC19845	8	Unshielded, Short Body	84K8606	15.65
SPC19835	8	Shielded, for Round Stranded Cable	84K8596	22.13
SPC19836	10	Shielded, for Round Stranded Cable	84K8597	39.82

(35481)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures

(212568)

MODULAR PLUGS

RoHS Compliant Available

multicomp

Attach to flat stranded wire.

RJ-11 4-CONDUCTOR (HANDSET PLUGS)

Mfg. Part No.	Description	Pkg. Of	Stock No.	Price Each 1-99
● 8588-0173	Flat Stranded	10	52N9463	7.92
RJ-22 4-CONDUCTOR				
● MTP-44U	Flat Stranded	1	14N8137	0.23
RJ-12 6-CONDUCTOR				
● MTP-66U	Flat Stranded	1	14N8140	0.34
RJ-45 8-CONDUCTOR				
● MTP-88-U	Flat Stranded	1	14N8141	0.35
● MTP-88U-S	Flat Solid	1	14N8144	1.18
● MTP-88-U-EMI	Flat Solid, Shielded	1	14N8142	2.40
● MTPR-88-U-EMI	Round Stranded, Shielded	1	14N8146	2.22
● MTPR-88-U-S	Round Solid	1	14N8147	0.86
● MTPR-88-U-S-EMI	Round Solid, Shielded	1	14N8148	2.22
RJ-45 10-CONDUCTOR				
● MTPR-1010-U	Flat Stranded	1	14N8145	1.01

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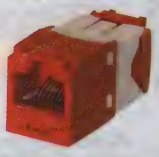
MINI-COM® TX5e™ JACK MODULES

RoHS Compliant Available

PANDUIT®



Giga-TX™ termination style optimizes performance by maintaining cable pair geometry and eliminating conductor untwist. Terminates to 4-pair, 22-26 AWG, 100 ohm, solid or stranded twisted pair copper cable. Universal label is coded for T568A and T568B wiring schemes. Compatible with 6 and 8-position modular plugs. Meets Category 5e ANSI/TIA-EIA-568-C.2 and ISO 11801 Class E standards.

Mfg. Part No.	Description	Stock No.	Price Each 1-4	5-9
● CJ5E88TGBL	Black	58K5152	11.59	11.02
● CJ5E88TGEI	Electric Ivory	64K0851	11.75	11.17
● CJ5E88TGGR	Green	64K0852	11.59	11.02
● CJ5E88TGIW	Off White	64K0854	11.83	11.25
● CJ5E88TGOR	Orange	64K0855	11.59	11.02
● CJ5E88TGRD	Red	64K0856	11.75	11.17
● CJ5E88TGWH	White	64K0858	10.98	10.44

(62880)

EZ-RJ12™ AND EZ-RJ45™ MODULAR CONNECTORS

RoHS Compliant Available

BOMAR by WINCHESTER ELECTRONICS

Fig. 1

Fig. 2

Fig. 3

Fig. 4

- Simplifies installation by allowing the pairs to be inserted through the connector
- No handle liner or bar wire
- Inspection of the correct conductor order is done before crimping
- Conductors are able to be pulled forward so the pairs are very close to the contacts

Mfg. part no. BD45000 crimp tool; *ordered separately below*; crimps and trims the exposed conductors in one operation. The vertical action of the tool makes a uniform and positive crimp.

➤ CONTINUED ➤

EZ-RJ12™ AND EZ-RJ45™ MODULAR CONNECTORS (CONT.)

EZ-RJ12 AND EZ-RJ45 MODULAR CONNECTORS — FIG. 1

Mfg. Part No.	Description	Stock No.	Price Each 1-24	25-49	50-99
● 300566EZ	6P6C EZ-RJ12 Plug	79K9937	1.20	1.08	0.96
● 300568EZ	8P8C EZ-RJ45 Category 5 Plug	79K9939	2.44	2.21	1.96
● 300668EZ	8P8C EZ-RJ45 Category 6 Plug	79K9943	2.66	2.40	2.14
● 300668SEZ	8P8C EZ-RJ45 Category 6 Shielded Plug	05N1483	5.61	5.07	4.51

GRAY CATEGORY 6 BOOT WITH STRAIN RELIEF — FIG. 2

Mfg. Part No.	For Use With	Stock No.	Price Each 1-24
● CXB300EZGY	EZ-RJ45 Category 6 Modular Plugs	18M5734	1.08
CLEAR CATEGORY 6 BOOT WITH STRAIN RELIEF — FIG. 3			
● CXB500EZ	EZ-RJ12/EZ-RJ45 Category 5 Modular Plugs	01N4668	1.24
● CXB600EZ	EZ-RJ12/EZ-RJ45 Category 6 Modular Plugs	19P9065	1.22

CRIMP AND TRIM TOOL — FIG. 4

Mfg. Part No.	For Use With	Stock No.	Price Each 1-4
● BD45000	EZ-RJ12/EZ-RJ45 Category 5 & 6 Modular Plugs	79K5737	97.23

(88067)

MINI-COM® TX6™ PLUS JACK MODULES

RoHS Compliant Available

PANDUIT®

Giga-TX™ termination style optimizes performance by maintaining cable pair geometry and eliminating conductor untwist. Terminates to 4-pair, 22-26 AWG, 100 ohm, solid or stranded twisted pair copper cable. Universal label is coded for T568A and T568B wiring schemes. Compatible with 6 and 8-position modular plugs. Meets Category 6 ANSI/TIA-EIA-568-C.2 and ISO 11801 Class E standards.

Mfg. Part No.	Color	Stock No.	Price Each 1-4	5-9	10-24
● CJ688TGEI	Electric Ivory	64K0864	17.15	16.31	15.40
● CJ688TGGR	Green	64K0865	16.93	16.09	15.20
● CJ688TGIW	Off White	64K0867	17.15	16.31	15.40
● CJ688TGOR	Orange	64K0868	17.15	16.31	15.40
● CJ688TGYL	Yellow	64K0871	16.76	15.93	15.04

(62879)

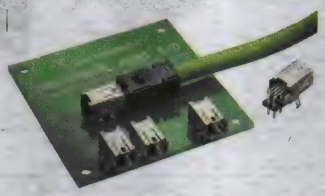
INDUSTRIAL MINI I/O CONNECTOR SYSTEM

RoHS Compliant Available

TE connectivity

Authorized Distributor

- 30V rated
- Current rating: 0.5 A
- 0.635 mm pitch
- Operating temperature: -40°C to 70°C
- Cable diameter: 6.7 mm Max
- Wire size: 22 AWG Max
- Durability: 1500 cycles
- Cable retention force: 98N (10kg)



The Industrial Mini I/O connector system is a small, compact, latching, wire-to-board I/O interface that is suitable for the stringent demands of an industrial device. It is one quarter the size of a conventional RJ45 plug and is designed with two points of contact for increased reliability in high vibration environments. It is polarized with two options available to prevent mis-mating. The unique latching system protects the plug from pull out during high vibration and accidental bumping. The system is most commonly used as an RJ45 replacement with 8 individual circuits that accommodate I/O signals and meets Cat5e requirements when used in an ethernet application.

Mfg. Part No.	Contacts	Gender	Description	Stock No.	Price Each 1-99	100-249
● 1981080-1	8	Header	Type I, SMT	67P4207	3.84	3.00
● 1981386-1	8	Header	Type II SMT	21R7634	3.38	3.02
● 2040537-1	8	Header	Type I, Thru-Hole	08R2355	5.05	4.52
● 1-2040537-1	8	Header	Type II, Thru-Hole	73R7878	1.64	1.52
● 2013595-1	8	Plug	Type I	46P4833	6.23	5.24
● 2040008-1	8	Plug	Type II, Black Latch	73R7913	17.64	15.87
● 2040008-2	8	Plug	Type II, White Latch	45W1731	7.92	7.59

(177042)

HAR-PORT SERVICE INTERFACE FOR ETHERNET & USB

RoHS Compliant Available

HARTING

- Standard panel cut out to fit typical industrial control panels
- Panel cut out to IEC 60945-5
- Very simple assembly with only one M22 nut
- Cat 6 interface up to 10Gigabit speeds
- USB interface options include type A coupler

Harting har-port products address the need for easy to use service port solutions in today's common interfaces – USB & RJ45. har-port is a very small service interface for Ethernet and USB data connections and is mainly designed for IP20 indoor applications. Panel cut out and design fits all typical 22mm industrial control or emergency stop switches and control lamp cutouts. The simple design of the har-port interface makes it suitable for use it in a conference room table, to connect a USB memory stick or keyboard, or data interfaces on medical devices.

har-port USB Couplers

Mfg. Part No.	Description	Stock No.	Price Each 1-9
09 45 452 1901	USB 2.0 A-A Coupler	69W7488	24.67
09 45 452 1902	USB 3.0 A-A Coupler	45W0120	24.39
09454521922	USB 2.0 A-A Panel Mount Coupler w/ Cable Assembly, 1.5M	50T8972	53.41
09 45 452 1912	USB 2.0 B-B Panel Mount Coupler w/ Cable Assembly, 1.5M	45W0123	51.83
har-port RJ45 Couplers			
09454521560	RJ45 Cat. 6 Panel Mount Coupler	50T8971	26.61
09 45 452 1501	RJ45 Cat. 6 Panel Mount Coupler w/ Cable Assembly, 0.2M	45W0113	46.07
09 45 452 1504	RJ45 Cat. 6 Panel Mount Coupler w/ Cable Assembly, 0.5M	45W0114	44.86
09 45 452 1509	RJ45 Cat. 6 Panel Mount Coupler w/ Cable Assembly, 1M	45W0115	49.98
09 45 452 1510	RJ45 Cat. 6 Panel Mount Coupler w/ Cable Assembly, 1.5M	45W0116	49.45
09 45 452 1511	RJ45 Cat. 6 Panel Mount Coupler w/ Cable Assembly, 2M	45W0117	51.74
09 45 452 1513	RJ45 Cat. 6 Panel Mount Coupler w/ Cable Assembly, 3M	45W0118	56.35
09 45 452 1516	RJ45 Cat. 6 Panel Mount Coupler w/ Cable Assembly, 5M	45W0119	65.55
har-port Accessories			
09455020000	Protection Cover, IP 65 / IP 67, Black	50T8973	8.79
09 45 502 0005	Protection Cover, IP 65 / IP 67, Transparent	69W7489	22.09
09455020001	Sealing Cover - Securable	50T8974	12.28
09455020002	Label Holder	50T8975	1.89
09455020003	Label (for label holder 09 45 502 0002)	50T8976	2.51
09455020004	Blanking Cover, IP 65 / 67	50T8977	12.15

(198151)

FIELD ATTACHABLE RJ45 ETHERNET MALE CONNECTORS AND CABLE

RoHS Compliant Available

Brad

Customize IP67 Ethernet cordsets to the specific length you need with RJ-Lnxx® field attachable male RJ-45 connectors and industrial rated category 5 cable. Ideal for use in harsh environments where vibration and contamination from water, oil, and dirt is common. Applications include outdoor telecom, oil exploration, defense, entertainment, display boards, retail and more benefits from this innovative, IP67 sealed design.

ENSAM315

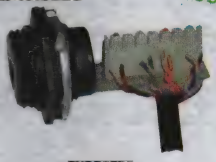
Mfg. Part No.	Description	Stock No.	Price Each 1-9
ENQAM315	Category 5 Field Attachable Male Connector, Stranded Core Cable	15M0233	20.41
ENSAM315	Category 5 Field Attachable Male Connector, Solid Core Wire	19C0436	20.41

(66087)

HARSH ENVIRONMENT RJ45 ETHERNET RECEPTACLES

RoHS Compliant Available

Brad



ENDR2FB5

ENPR1FF5

The RJ-Lnxx™ connector is the first in a series of products in the RJ-Lnxx™ family, designed to bring the benefits of Ethernet connectivity to areas where wet, dirty and electrically noisy conditions exist. Female industrial connectors in 4 different versions. Applications include outdoor telecom, oil exploration, defense, entertainment, display boards, and retail.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
ENDR2FB5	110 Punchdown Receptacle	15M0231	47.03
ENPR1FF5	Direct PCB Mount Receptacle	15M0232	35.67
ENSP1F5	Passthrough to Standard Female Receptacle	15M0234	33.14

CONTINUED

HARSH ENVIRONMENT RJ45 ETHERNET RECEPTACLES (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each 1-9
ENSP1F5C305	Passthrough to 12" Category 5 Cord and Standard RJ-45 Connector	19C0438	39.54
ENSR1FB5	Receptacle with Printed Circuit Board Output	15M0235	31.55
67-0300	IP67 Closure Cap for RJ45 Receptacle	15M3585	16.17

(66089)

IP67 COMMON CORE INDUSTRIAL ETHERNET CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Housing : UV Resistant UL94V-0
- Gasket, Seal : UL94 HBF
- Temperature range : -40°C to +85°C
- Compliant to IEC 61076-3-106 Variant 1
- Tool-less connector
- For use with Cat 5e cable
- IP67 sealing performance
- Meets TIA/EIA 568 Category 5e requirements
- Protective covers available for both the plug and receptacle
- Positive lock coupling ring provides reliable connections in harsh environments

TE Connectivity now offers an IP67 field installable RJ45 connector. Utilizing our already existing "common core" design, the product can be applied in the field without the use of a tool. Designed for use in harsh environments, the connector features a quick-connect bayonet coupling mechanism. Applications include industrial machinery, diagnostic equipment, communications equipment, and industrial printers

COMMOM CORE CONNECTOR KITS

Mfg. Part No.	Desription	No. of Positions	Stock No.	Price Each 1-24
1954656-1	Shielded Plug Kit	4	07R7299	17.96
1954656-2	Shielded Plug Kit	8	07R7300	19.58
1738607-1	Plug Kit, Solid wire	8	61K2640	15.05
1738607-2	Plug Kit, Stranded wire	8	61K2643	13.61
1738607-3	Shielded Plug Kit, Solid wire	8	44P3057	14.87
1738607-4	Shielded Plug Kit, Stranded wire	8	45P2891	14.28
1776900-1	Receptacle Kit	8	86W5787	13.44
1811689-1	Shielded Receptacle Kit	8	07R7296	28.56
1738601-1	Pass-Through Receptacle Kit	8	61K2648	26.36

PROTECTIVE COVERS

Mfg. Part No.	For Use With	Stock No.	Price Each 1-9
1738611-1	Circular Sealed Receptacles	62K2802	13.16
1828740-1	Circular Sealed Plugs	07R7297	5.40

CATEGORY 5e CABLE

Mfg. Part No.	AWG	No. of Pairs	Spool Length (M)	Stock No.	Price Per Spool
1939708-1	26	4	100	07R7298	7.58

(147420)

IP67 METAL SHELL ODVA-COMPLIANT INDUSTRIAL ETHERNET CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Meets TIA/EIA-568 Category 5e requirements
- Housing, Coupling ring, Cable fitting : Chrome plated zinc die cast
- Gasket, Seal : UL94 HB
- UV resistant gasket material
- Positive lock coupling ring
- Polarized for proper mating
- Temperature range : -40°C to +85°C

TE Connectivity now offers an even more rugged connector series that meets the Ethernet/IP RJ45 requirements/standards. The IP67 Metal Shell ODVA-Compliant connector system is designed for use in the harshest environments. The connector features a quick-connect bayonet coupling mechanism per the IEC 61076-3-106 Variant 1. Applications include industrial machinery, diagnostic and communications equipment, industrial printers, outdoor signs, theatrical equipment, live events set up (music concerts or any event requiring the set up of a sound or video stage) or any ethernet application where an IP67 sealed, rugged connector interface is required.

CONNECTOR KITS

Mfg. Part No.	Description	No. of Contacts	Stock No.	Price Each 1-9
2008611-1	Unshielded Plug Kit for stranded wire	8	15R7878	23.70
2008611-2	Unshielded Plug Kit for solid wire	8	15R7879	20.79
2008614-1	Shielded Plug Kit for stranded wire	8	15R7880	30.78
2008614-2	Shielded Plug Kit for solid wire	8	15R7881	23.05
2008615-1	Unshielded Receptacle Kit	8	15R7882	34.40
2008615-2	Shielded Receptacle Kit	8	15R7883	46.93

CONTINUED

IP67 METAL SHELL ODVA-COMPLIANT INDUSTRIAL ETHERNET CONNECTORS (CONT.)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 2008618-1	Protective Cap for Receptacle Kit	15R7884	20.90
● 2058442-1	Protective Cap for Plug Kit	76T5169	23.46

(152524)

AMP CIRCULAR PLASTIC CONNECTORS (CPC) SERIES 45 ETHERNET

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features
- Meets TIA/EIA-56-B.2 Cat 5 requirements
- Positive lock coupling ring
- UV resistant and UL 94V-0 housing material
- Operating temperature: -55°C to 105°C

Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-49
● 1546876-1	Plug Kit, Unshielded, Solid Wire	38M8532	10.71	10.38
● 1546907-1	Plug Kit, Shielded, Solid wire	51M6922	14.65	14.17
● 1546876-2	Plug Kit, Unshielded, Stranded wire	21R4268	9.48	8.75
● 1546907-2	Plug Kit, Shielded, Stranded wire	21R4269	14.34	13.49
● 1546908-1	Receptacle Kit, Shielded, Wire terminated	21R4270	16.37	15.14
● 1546877-1	Receptacle Kit, Wire Terminated, Unshielded	38M8533	21.75	19.65
● 1-1546409-1	Receptacle with PC Board	20M6305	25.52	24.48
● 1-1546410-1	Receptacle with PCB & 12" of cable (10 Base-T)	20M8019	33.01	31.95
● 1-1546411-1	Receptacle with PCB & 12" of cable (568A)	20R9776	26.99	25.06
● 1-1546412-1	Receptacle with PCB & 12" of cable (568B)	08P5233	55.38	53.40
● 1986172-1	Receptacle Kit, Shielded, Pass-Through RJ-45/RJ-45	51M6844	29.66	25.15
● 1776186-1	Receptacle Kit, Pass-Through RJ45/RJ45	38M8534	21.30	20.29
● 1546413-3	RJ-45 Bulkhead pass-through with backside RJ-45 jack	26M8000	27.83	26.46
● 1546414-4	RJ-45 Bulkhead pass-through with 12" of patch cord	85K9338	32.12	30.53
● 1-1546415-1	RJ-11 Bulkhead pass-through with backside RJ-11 jack	45M5767	27.05	26.27
● 1-1546405-1	Direct PCB Mount 8-pin Through-hole Receptacle, Front coupling nut	50M9508	20.13	19.22
● 1546641-1	Threaded-Through Panel Interconnect; M40 thread size	21R4224	122.59	115.38
● 1546574-1	RJ45 Female-to-Female Adapter	57H7377	65.07	61.25

CLOSURE CAPS

Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-24
● 1-1546406-1	Closure Cap for receptacles, IP67 rated	21M7051	16.81	14.85
● 1-1546407-1	Closure Cap for receptacles, IP65 rated	20R9775	8.57	7.86
● 1-1546408-1	Closure Cap for cordsets, IP67 rated	41P0288	16.70	16.22

(93064)

CIRCULAR SEALED USB CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features
- IP 67 sealing performance
- ¼ turn bayonet coupling ring
- Standard A plug and standard B plug
- Through-panel mating receptacles
- Available in both plastic and metal shell configurations
- USB 2.0 compliant

Specifications
- Housing (Plastic) – High temperature thermoplastic, UL94V-0, black
- Housing (Metal) – Chrome Plated Zinc Die Cast Gasket, UL94 HB, UV Resistant Gasket Material
- Contact – Brass, gold plated on contact area, nickel underplated
- Shield – Steel, nickel plated, copper underplated
- Voltage Rating — 30VAC (rms)
- Data Rate – 480Mbits/s

Circular Sealed USB Connectors were developed to support the increasingly wide-spread use of the USB standard industrial applications. The Circular Sealed USB connector provides the popular High Speed USB standard for outdoor factory-floor and harsh environment applications where regular USB connectors do not offer the required level of ruggedness.

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● 1954637-1	Plug Kit, USB Series A	59T0222	14.35
● 1954640-1	Plug Kit, USB Series B	59T0223	13.05

➤CONTINUED➤

CIRCULAR SEALED USB CONNECTORS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● 2058363-1	Plug Kit, USB Series B, Metal Shell	86W5794	35.85
● 1954643-1	Receptacle Kit, Series A to Series A	26R4305	35.34
● 1954646-1	Receptacle Kit, Series B to Series A	25T1021	31.47
● 2058364-1	Receptacle Kit, Series A to Series A, Metal Shell	65R1086	44.58
● 2058365-1	Receptacle Kit, Series B to Series A, Metal Shell	86W5795	97.60

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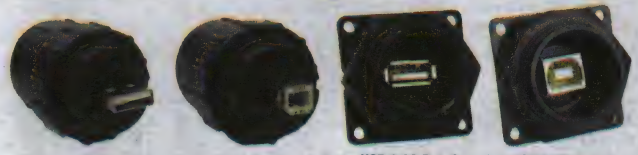
DATA-CON-X SEALED USB TYPE A & B CONNECTORS

RoHS Compliant Available

conxall® Harsh Environment Connectivity Solutions A HEICO Company



USB 2.0A Receptacle | USB 2.0 B Receptacle | USB 2.0A Panel Mount Receptacle | USB 2.0B Panel Mount Receptacle

- Sealed to IP67 and IP68 NEMA 250 (6P) when mated
- Feed-thru termination on the panel for easy field installation
- Field installable design is easy to assemble
- Quick connect bayonet or threaded style interface
- Shell Material: Steel (USB A and B plugs, USB A receptacles), Copper Alloy (USB B receptacles)
- Contact Material: Copper Alloy
- Contact Plating: Gold
- Insulator Material: UL94V-0, white

Current Rating: 1.5A. Voltage Rating: Per USB 2.0 standard. Contact Resistance: 30mΩ max. Insulation Resistance: 1000MΩ min. Dielectric Withstanding Voltage: 500V AC/one minute.

USB FIELD INTALLABLE CABLE PLUGS

Mfg. Part No.	Connector Type	Coupling Type	Outer Cable O.D. Range in (mm)	Stock No.	Price Each 1-4
● DCC-USBAB-150	USB 2.0 A	Quick-Connect	0.134 - 0.17 (3.4 - 4.33)	47W2339	7.23
● DCC-USBAB-180	USB 2.0 A	Quick-Connect	0.171 - 0.208 (4.34 - 5.28)	47W2340	6.83
● DCC-USBAT-150	USB 2.0 A	Threaded	0.134 - 0.17 (3.4 - 4.33)	47W2341	7.53
● DCC-USBAT-180	USB 2.0 A	Threaded	0.171 - 0.208 (4.34 - 5.28)	47W2342	7.53
● DCC-USBBB-150	USB 2.0 B	Quick-Connect	0.134 - 0.17 (3.4 - 4.33)	47W2343	6.83
● DCC-USBBB-180	USB 2.0 B	Quick-Connect	0.171 - 0.208 (4.34 - 5.28)	47W2344	6.83
● DCC-USBBT-150	USB 2.0 B	Threaded	0.134 - 0.17 (3.4 - 4.33)	47W2345	7.53
● DCC-USBBT-180	USB 2.0 B	Threaded	0.171 - 0.208 (4.34 - 5.28)	47W2346	7.53

USB PANEL MOUNT FEED-THRU ADAPTERS

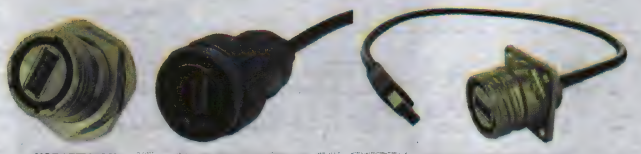
Mfg. Part No.	Convert From	Convert To	Stock No.	Price 1-99
● DCP-USBAB-USBB	USB 2.0 A Receptacle	USB 2.0 B Receptacle	47W2347	11.41
● DCP-USBAT-USBB	USB 2.0 A Receptacle	USB 2.0 B Receptacle	47W2348	11.41
● DCP-USBBB-USBA	USB 2.0 B Receptacle	USB 2.0 A Receptacle	47W2349	11.41
● DCP-USBBT-USBA	USB 2.0 B Receptacle	USB 2.0 A Receptacle	47W2350	10.78

(209441)

USB3F TV SERIES USB-A 3.0 INDUSTRIAL CONNECTORS

NEW

Amphenol Pcd



USB3FTV7AN | USB3FTV6A10G0PEN | USB3FTV2SA03NACR0S

- Sealed against fluids and dusts (IP68)
- Shock, vibration and traction resistant
- No cabling operation in field and no tools required
- Improved EMI protection
- Tri Start Thread coupling mechanism (MIL-DTL-38999 series III type) with anti-decoupling device - Shell size 15
- 2 mechanical coding / polarization possibilities (receptacle insert rotation)
- USB3F TV plug retention in the receptacle: 100 N in the axis
- Mating cycles: 500 minimum

With USB Field, you can insert a standard USB 3.0 cordset into a metallic plug which will protect it from shocks, dust and fluids. No hazardous on-field cabling and grounding! Also available a version including plug + cordset: see next page. This metallic plug is connected into a receptacle, using a Tri Start Thread coupling mechanism (MIL-DTL-38999 series III type) with anti-decoupling device for high vibrations.

CONNECTORS

Mfg. Part No.	Mounting	Gender	Finish	Stock No.	Price Each 1-4
USB3FTV6G	Cable	Plug	Olive Drab Cadmium	27X3811	104.84
USB3FTV6N	Cable	Plug	Nickel	27X3812	102.85
USB3FTV2AG	Flange	Receptacle	Olive Drab Cadmium	27X3797	118.69
USB3FTV2AN	Flange	Receptacle	Nickel	27X3798	115.39
USB3FTV7AG	Panel	Receptacle	Olive Drab Cadmium	27X3813	128.59
USB3FTV7AN	Panel	Receptacle	Nickel	27X3814	125.29

➤CONTINUED➤

USB3F TV SERIES USB-A 3.0 INDUSTRIAL CONNECTORS (CONT.)

PLUGS WITH CORDSETS

Mfg. Part No.	Length	Finish	Cable Type	Stock No.	Price Each 1-4
USB3FTV6A10GCROS	1m	Olive Drab Cadmium	Crossed	27X3805	240.68
USB3FTV6A10GOPEN	1m	Olive Drab Cadmium	Open	27X3806	184.62
USB3FTV6A10GSTR	1m	Olive Drab Cadmium	Straight	27X3807	240.68
USB3FTV6A10NCROS	1m	Nickel	Crossed	27X3808	234.07
USB3FTV6A10NOPEN	1m	Nickel	Open	27X3809	178.05
USB3FTV6A10NSTR	1m	Nickel	Straight	27X3810	234.07
SQUARE FLANGE RECEPTACLES WITH CORDESTS					
USB3FTV2SA03GACROS	300mm	Olive Drab Cadmium	Crossed	27X3799	248.91
USB3FTV2SA03GAOPEN	300mm	Olive Drab Cadmium	Open	27X3800	192.89
USB3FTV2SA03GASTR	300mm	Olive Drab Cadmium	Straight	27X3801	248.91
USB3FTV2SA03NACROS	300mm	Nickel	Crossed	27X3802	242.32
USB3FTV2SA03NAOPEN	300mm	Nickel	Open	27X3803	186.28
USB3FTV2SA03NASTR	300mm	Nickel	Straight	27X3804	242.32
JAM NUT RECEPTACLES WITH CORDESTS					
USB3FTV7SA03GACROS	300mm	Olive Drab Cadmium	Crossed	27X3815	283.09
USB3FTV7SA03GAOPEN	300mm	Olive Drab Cadmium	Open	27X3816	206.05
USB3FTV7SA03GASTR	300mm	Olive Drab Cadmium	Straight	27X3817	262.12
USB3FTV7SA03NACROS	300mm	Nickel	Crossed	27X3818	255.51
USB3FTV7SA03NAOPEN	300mm	Nickel	Open	27X3819	199.46
USB3FTV7SA03NASTR	300mm	Nickel	Straight	27X3820	255.51

(212396)

RJ FIELD (MIL-C-26482) RUGGED HARSH ENVIRONMENT CONNECTORS

RoHS Compliant Available

Amphenol Pcd

- Accommodates a standard RJ45 cordset
- No hazardous in-field cabling
- Toolless assembly
- IP68 sealed against fluids and dusts when capped or mated
- Shock, vibration and traction resistant
- Mechanical coding/polarization (4 positions)
- Shell size 18

RJ Field bayonet connectors utilize the MIL-C-26482 quick ¼ turn bayonet coupling mechanism, providing both audible and visual coupling. The RJStop® system enables the use of RJ45 Ethernet Class D / Cat.5E connection for 10 BaseT, 100 BaseTX or 1000 BaseT networks in harsh environments. Fire retardant and low smoke per UL94 V0 and NF F 16 101 & 16 102. Mating cycles: 500 minimum. Temperature range: -40°C to +85°C. *Order caps and accessories separately.*

RJ FIELD PLUGS

Mfg. Part No.	Description	Shell Finish	Stock No.	Price Each 1-9
● RJF6B	Plug, Plastic Gland	Black	03H9932	42.57
RJF6G	Plug, Plastic Gland	Olive Drab Cadmium	36K2899	41.55
● RJF6N	Plug, Plastic Gland	Nickel	36K2900	44.20
● RJF6MB	Plug, Metal Gland	Black	06H1475	52.62
RJF6MG	Plug, Metal Gland	Olive Drab Cadmium	02E8886	59.47
RJ FIELD PANEL MOUNT RECEPTACLES Mfg. part no. JE18 gasket required.				
● RJF21B	RJ45 to RJ45	Black	03H9929	42.61
RJF21G	RJ45 to RJ45	Olive Drab Cadmium	04H6390	53.47
● RJF21N	RJ45 to RJ45	Nickel	36K2896	50.18
● RJF22B00	RJ45 to Printed Circuit Board	Black	28H8633	35.45
RJF22G00	RJ45 to Printed Circuit Board	Olive Drab Cadmium	93K7826	42.50
● RJF22B03100BTX	RJ45 to 0.3M(11.81") RJ45 Cordset	Black	93K7824	61.46
RJF2PE1G	RJ45 to RJ45, w/Backshell, Plastic Gland	Olive Drab Cadmium	02E8875	64.06
● RJF2PE1N	RJ45 to RJ45, w/Backshell, Plastic Gland	Nickel	20J4004	72.99
● RJF2PEM1B	RJ45 to RJ45, w/Backshell, Metal Gland	Black	20J3999	85.38
RJF2PEM1G	RJ45 to RJ45, w/Backshell, Metal Gland	Olive Drab Cadmium	26H5225	77.05
RJ FIELD TRANSVERSALLY SEALED PANEL MOUNT RECEPTACLES Panel mount receptacle with 4 mounting holes. IP68 rated in umated/uncapped condition.				
RJF2SA1G	RJ45 to RJ45	Olive Drab Cadmium	20J4007	73.21
RJ FIELD JAM NUT RECEPTACLES				
● RJF71B	RJ45 to RJ45	Black	03H9933	66.13
RJF71G	RJ45 to RJ45	Olive Drab Cadmium	95C0003	73.10
● RJF71N	RJ45 to RJ45	Nickel	36K2901	74.02
RJF7PEM1G	RJ45 to RJ45, w/Backshell, Metal Gland	Olive Drab Cadmium	26H3623	97.90

➤CONTINUED➤

RJ FIELD (MIL-C-26482) RUGGED HARSH ENVIRONMENT CONNECTORS (CONT.)

RJ FIELD METAL CAPS AND ACCESSORIES

Mfg. Part No.	Description	Shell Finish	Stock No.	Price Each 1-9
● RJFC6B	Plug Cap, Lanyard	Black	03H9927	35.56
RJFC6G	Plug Cap, Lanyard	Olive Drab Cadmium	36K2890	40.07
● RJFC2B	Panel Mount Receptacle Cap, Lanyard	Black	03H9926	35.82
RJFC2G	Panel Mount Receptacle Cap, Lanyard	Olive Drab Cadmium	04H6398	39.06
● RJFC2N	Panel Mount Receptacle Cap, Lanyard	Nickel	36K2889	34.64
● RJF21NSCC	Self Closing Cap w/ spring inside	Nickel	89J9103	52.56
● RJF21BSCC	Self Closing Cap w/ spring inside	Black	26K2808	49.71
● RJFC7B	Jam Nut Receptacle Cap, Lanyard	Black	03H9928	43.71
RJFC7G	Jam Nut Receptacle Cap, Lanyard	Olive Drab Cadmium	95C0005	48.83
● JE18	Gasket for Panel Mount Receptacle	...	03H9889	1.65
● RJFODE	Insert Removal Device for Plug and Receptacle	...	01H8892	39.69

(73612)

RJ FIELD TV (MIL-DTL-38999 SERIES III) CONNECTORS FOR HARSH ENVIRONMENTS

RoHS Compliant Available

Amphenol Pcd

RJF TV Series — Square Flange Receptacles — Jam Nut Receptacles

- Accommodates a standard RJ45 cordset
- No hazardous in-field cabling
- Toolless assembly
- IP68 sealed against fluids and dusts when capped or mated
- Shock, vibration and traction resistant
- Mechanical coding/polarization (4 positions)
- Improved EMI protection
- Shell size 19

RJ Field TV Ethernet connectors utilize the MIL-DTL-38999 Series III threaded coupling mechanism, with anti-decoupling devise, providing both audible and visual coupling. The RJStop® system enables the use of RJ45 Ethernet Class D / Cat.5e connection for 10 BaseT, 100 BaseTX or 1000 BaseT networks in harsh environments. Fire retardant and low smoke per UL94 V0 and NF F 16 101 & 16 102. Mating cycles: 500 minimum. Temperature range: -40°C to +85°C. *Order caps and accessories separately below.*

RJ FIELD TV PLUGS

Mfg. Part No.	Description	Shell Finish	Stock No.	Price Each 1-9
● RJFTV6N	Plug, Plastic Gland	Nickel	36K2894	57.42
RJFTV6G	Plug, Plastic Gland	Olive Drab Cadmium	02E8890	63.81
● RJFTV6MN	Plug, Metal Gland	Nickel	93K7822	60.36
RJFTV6MG	Plug, Metal Gland	Olive Drab Cadmium	95C0010	66.47
RJ FIELD TV PANEL MOUNT RECEPTACLES Square flange with 4 mounting holes. Mfg. part no. JE19 gasket required.				
● RJFTV21N	RJ45 to RJ45	Nickel	36K2893	57.07
RJFTV21G	RJ45 to RJ45	Olive Drab Cadmium	02E8870	58.21
● RJFTV22N00	RJ45 to Printed Circuit Board	Nickel	20J3985	42.10
RJFTV22G00	RJ45 to Printed Circuit Board	Olive Drab Cadmium	97H3581	43.47
● RJFTV2PE1N	RJ45 to RJ45, w/Backshell, Plastic Gland	Nickel	73K1314	62.36
RJFTV2PE1G	RJ45 to RJ45, w/Backshell, Plastic Gland	Olive Drab Cadmium	39M5593	81.31
● RJFTV2PEM1N	RJ45 to RJ45, w/Backshell, Metal Gland	Nickel	20J3970	83.43
RJFTV2PEM1G	RJ45 to RJ45, w/Backshell, Metal Gland	Olive Drab Cadmium	20J3969	89.90
RJ FIELD TV JAM NUT RECEPTACLES				
● RJFTV71N	RJ45 to RJ45	Nickel	36K2895	67.71
RJFTV71G	RJ45 to RJ45	Olive Drab Cadmium	01H7750	70.34
RJFTV7PEM1G	RJ45 to RJ45, w/Backshell, Plastic Gland	Olive Drab Cadmium	87H6448	96.07

360° EMI SHIELDED BACKSHELLS
Ships complete with connector, backshell, band & heat shrink sleeve.

Mfg. Part No.	Kit Contents	Shell Finish	Stock No.	Price Each 1-9
KIT38081	Plug with RJStops® KIT	Olive Drab Cadmium	20J3858	146.31
KIT38082	Receptacle with Gasket KIT	Olive Drab Cadmium	20J3859	130.65
RJ FIELD TV CAPS AND ACCESSORIES				
● RJFTVC6N	Plug Cap, Lanyard	Nickel	88H2843	44.43
RJFTVC6G	Plug Cap, Lanyard	Olive Drab Cadmium	02E8877	43.35
● RJFTVC2N	Panel Mount Receptacle Cap, Lanyard	Nickel	88H2841	46.18
RJFTVC2G	Panel Mount Receptacle Cap, Lanyard	Olive Drab Cadmium	04H7913	46.95
● RJFTVC7N	Jam Nut Receptacle Cap, Lanyard	Nickel	94H7388	49.49
RJFTVC7G	Jam Nut Receptacle Cap, Lanyard	Olive Drab Cadmium	02E8878	52.65

➤CONTINUED➤

RJ FIELD TV (MIL-DTL-38999 SERIES III) CONNECTORS FOR HARSH ENVIRONMENTS (CONT.)

RJ FIELD TV CAPS AND ACCESSORIES

Mfg. Part No.	Description	Shell Finish	Stock No.	Price Each 1-9
● JE19	Gasket for Panel Mount Receptacle	...	97H3390	3.06
● RJFODE	Insert Removal Device for Plug and Receptacle	...	01H8892	39.69

(80155)

RJ FIELD REVERSE BAYONET ETHERNET CONNECTORS FOR HARSH ENVIRONMENTS

RoHS Compliant Available

Amphenol Pcd

- Black, jam nut, rugged composite shell (Circular)
- No hazardous in-field cabling
- Toolless Assembly
- Seals to IP67 against fluids and dusts
- Shock, vibration and traction resistant
- Accommodates a standard RJ45 cordset

RJ Field reverse bayonet connectors, with the RJStop® system, allow the use of Ethernet Class D/Cat 5e and Class E/Cat 6 connection for 10 BaseT, 100 BaseTX or 1000 BaseT networks in harsh environments. Fire retardant and low smoke per UL94 V0 and NFF 16 101, DIN 5510-2. Mating cycles: 500 minimum. Temperature range: -40°C to +85°C. *Order caps and accessories separately below.*

RJ FIELD REVERSE BAYONET CAT 5E PLUGS & RECEPTACLES

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
● RJFRB6	Reverse Bayonet Plug	93K7819	12.12	11.24
● RJFRB71	Receptacle, RJ45 to RJ45	93K7820	17.36	16.13
● RJFRB71RA	Receptacle, RJ45 to Right Angle RJ45	93K7821	19.23	17.87
RJ FIELD REVERSE BAYONET RECEPTACLE CAPS				
● RJFRBC7	Cat. 5E Receptacle Cap	93K7818	6.57	6.10

(88864)

RJ FIELD 544 ETHERNET CONNECTORS FOR HARSH ENVIRONMENTS

RoHS Compliant Available

Amphenol Pcd

RJF544 Series

RJF5442M1

- Black, panel mount, rugged composite shell (circular)
- Push/pull coupling
- No hazardous in-field cabling
- Toolless Assembly
- IP68 sealed against fluids and dusts when capped or mated
- Shock,vibration and traction resistant
- Accommodates a standard RJ45 cordset

RJ Field 544 connectors, with the RJStop® system, allow the use of Ethernet Class D/ Cat. 5E Connection for 10 BaseT, 100 BaseTX or 1000 BaseT network environments. Fire retardant and low smoke per UL94 V0 and NFF 16 102, DIN 5510-2. Mating cycles: 500 minimum. Temperature range: -40°C to +85°C. *Order caps and accessories separately below.*

RJ FIELD 544 PLUG & RECEPTACLES
Mfg. part no. JE16 gasket required for receptacles.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● RJF5446	Push Pull Plug	03H9931	18.33
● RJF54421	Receptacle, RJ45 to RJ45	03H9930	24.66
● RJF 544 2M1	Receptacle, RJ45 to RJ45, Metallized Insert	04H7940	25.34
● RJF5442200	Receptacle, RJ45 to Printed Circuit Board	36K2897	23.71
● RJF5442203100BTX	Receptacle, RJ45 to 0.3M (11.81") cordset	36K2898	59.42
RJ FIELD 544 CAPS AND ACCESSORIES			
● 54402BM	Plug Cap	04H0434	19.01
● 54402BE	Receptacle Cap	04H0433	19.82

(73613)

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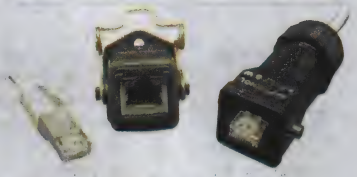
RJ FIELD "EZ" RECTANGULAR ETHERNET CONNECTORS

RoHS Compliant Available

Amphenol Pcd



- Black, square, rugged composite shell
- Quick lever coupling mechanism
- Space saving footprint
- No hazardous in-field cabling
- Toolless Assembly
- IP68 sealed against fluids and dusts when capped or mated
- Shock, vibration and traction resistant
- Accommodates a standard RJ45 cordset

RJ Field "EZ" connectors, with the RJStop® system, allow the use of any Ethernet Class D/ Cat. 5E connection for 10 BaseT, 100 BaseTX or 1000 BaseT network environments. Fire retardant and low smoke per UL94 V0 and NFF 16 102, DIN 5510-2. Mating cycles: 500 minimum. Temperature range: -40°C to +85°C. *Order caps and accessories separately below.*

RJ FIELD "EZ" PLUG, RECEPTACLES & CORDSETS
Mfg. part no. RJFEZJE gasket required for receptacles.

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
● RJFEZ6	Plug, Plastic Gland, RJ45	07J9756	10.76	9.99
● RJFEZ21	Receptacle, RJ45 to RJ45	20J3956	22.14	20.99
RJ FIELD "EZ" CAPS AND ACCESSORIES				
● RJFEZBE	Receptacle Cap, Lanyard	07J9754	8.38	8.16
● RJFEZJE	Gasket for Panel Mount Receptacle	07J9755	0.71	0.66

(80158)

RJ11 FIELD (MIL-C-26482) RUGGED HARSH ENVIRONMENT CONNECTORS

RoHS Compliant Available

Amphenol Pcd

- No hazardous in-field cabling
- Toolless assembly
- IP68 sealed against fluids and dusts when capped or mated
- Shock, vibration and traction resistant
- Mechanical coding/polarization (4 positions)
- Shell size 14

RJ11 Field bayonet connectors utilize the MIL-C-26482 quick ¼ turn bayonet coupling mechanism, providing both audible and visual coupling. The RJStop® enables the use of a standard RJ11/RJ12 phone connection in harsh environments. Fire retardant and low smoke per UL94 V0 and NF F 16 101 & 16 102. Mating cycles: 500 minimum. Temperature range: -40°C to +80°C. *Order caps and accessories separately below.*

RJ11 FIELD PLUGS, PANEL MOUNT & JAM NUT RECEPTACLES
Panel mount receptacles require **mfg. part no. JE14** gasket.

Mfg. Part No.	Description	Shell Finish	Stock No.	Price Each 1-9
● RJ11F6N	Plug, Plastic Gland	Nickel	27M3413	81.08
● RJ11F21N	Panel Mount Receptacle, Metal, RJ11 to RJ11	Nickel	27M3411	66.63
RJ11 FIELD CAPS AND ACCESSORIES				
● RJ11FC2N	Panel Mount Receptacle Cap, Laynard	Nickel	27M3408	60.12
● RJ11FC7N	Jam Nut Receptacle Cap, Laynard	Nickel	27M3410	76.46

(88863)

HARSH ENVIRONMENT 10Gb ETHERNET MICRO CONNECTORS

RoHS Compliant Available

Amphenol Pcd

Push-Pull or Thread Receptacles

Plugs

- Exceed 10Gb/s ethernet following IEEE 802.3an-2006: 10GBase-T
- Miniature: 15mm (0.59") max external diameter
- 4 pairs totally insulated throughout the connector allows minimum cross-talk
- Thread coupling mechanism allows 2000 mating cycles and high vibration resistance
- IP68 sealing mated and unmated receptacles

µCom series connectors are designed to address the latest trends of the industry: miniaturization and high speed, with the highest resistance for use in the harshest environments. Environmental testing is based on MIL-DTL-38999 series III military specifications. Machined and gold plated solder and crimp contacts are designed in accordance to the inner contact of M39029/77-429#16 M39029/76-425#16 38999 contact. Solder contact: 24AWG max. Crimp contact: 26AWG to 24AWG. Dielectric withstanding voltage: 1500Vrms. Temperature range: -55°C to +125°C.

RECEPTACLES — PUSH-PULL OR THREAD

Mfg. Part No.	Contacts	Contact Termination	Shell Plating	Back-shell Type	Stock No.	Price Each 1-4
● UCOM-10G+ RP B	8	Solder	Black Nickel	...	86W6647	89.55
UCOM-10G+ RP G	8	Solder	Olive Drab Cadmium	...	86W6648	87.66
UCOM10G+RPU	8	Solder	Unplated Brass	...	06X2928	67.14
PLUGS						
● UCOM-10G+ PTCBGA	8	Crimp	Black Nickel	Gland	86W6643	194.59
UCOM10G+PTCBB	8	Crimp	Black Nickel	Band	06X2920	151.16
● UCOM-10G+ PTCGGA	8	Crimp	Olive Drab Cadmium	Gland	86W6644	183.57
UCOM10G+PTCGB	8	Crimp	Olive Drab Cadmium	Band	06X2921	145.32

➤ CONTINUED ➤

HARSH ENVIRONMENT 10Gb ETHERNET MICRO CONNECTORS (CONT.)

PLUGS

Mfg. Part No.	Contacts	Contact Termination	Shell Plating	Back-shell Type	Stock No.	Price Each 1-4
UCOM10G+PTCUB	8	Crimp	Unplated Brass	Band	06X2922	131.24
UCOM10G+PTCUGA	8	Crimp	Unplated Brass	Gland	06X2923	138.62
● UCOM-10G+ PTSBGA	8	Solder	Black Nickel	Gland	86W6645	199.13
UCOM10G+PTSBB	8	Solder	Black Nickel	Band	06X2924	155.15
● UCOM-10G+ PTSGGA	8	Solder	Olive Drab Cadmium	Gland	86W6646	188.11
UCOM10G+PTSGB	8	Solder	Olive Drab Cadmium	Band	06X2925	149.31
UCOM10G+PTSUB	8	Solder	Unplated Brass	Band	06X2926	135.17
UCOM10G+PTSUGA	8	Solder	Unplated Brass	Gland	06X2927	142.58
IN-LINE RECEPTACLES						
● UCOM-10G+ LCBGA	8	Crimp	Black Nickel	Gland	86W6639	168.40
UCOM10G+LCBB	8	Crimp	Black Nickel	Band	06X2912	129.05
UCOM-10G+ LCGGA	8	Crimp	Olive Drab Cadmium	Gland	86W6640	159.54
UCOM10G+LCGB	8	Crimp	Olive Drab Cadmium	Band	06X2913	125.12
UCOM10G+LCUB	8	Crimp	Unplated Brass	Band	06X2914	110.22
UCOM10G+LCUGA	8	Crimp	Unplated Brass	Gland	06X2915	116.99
● UCOM-10G+ LSBGA	8	Solder	Black Nickel	Gland	86W6641	144.95
UCOM10G+LSBB	8	Solder	Black Nickel	Band	06X2916	120.54
UCOM-10G+ LSGGA	8	Solder	Olive Drab Cadmium	Gland	86W6642	149.77
UCOM10G+LSGB	8	Solder	Olive Drab Cadmium	Band	06X2917	116.59
UCOM10G+LSUB	8	Solder	Unplated Brass	Band	06X2918	101.68
UCOM10G+LSUGA	8	Solder	Unplated Brass	Gland	06X2919	108.47

(210079)

MRJ HARSH ENVIRONMENT MODULAR JACKS

RoHS Compliant Available

Amphenol Commercial Products

- Cat 5 ethernet performance
- IP67 sealed in mated and unmated conditions
- Meets military shock and vibration levels
- Includes a feature that will not allow an RJ11 to enter
- Will not allow an improperly terminated plug to enter

Unique and innovative RJ connector design provides the ideal solution for network data transfer in harsh and demanding environmental conditions. Metal die cast outer shell. Current rating: 1.5A. Contact tail length: 0.100".

MRJ-5380-01

RIGHT-ANGLE PC BOARD MOUNT JACKS

Mfg. Part No.	No. of Contacts	No. of Ports	No. of LEDs	LED Color	Stock No.	Price Each 1-9	Price Each 10-24
● MRJ-5380-01	8	1	0	...	74K3107	10.40	9.41
● MRJ-5381-01	8	1	2	Green/Yellow	01M3132	10.83	9.88
● MRJ-5385-01	8	1	2	Green/Green	01M3133	14.46	12.95
VERTICAL PC BOARD MOUNT JACKS							
● MRJ-5485-01	8	1	2	Green/Green	01N5209	13.31	11.92
RIGHT ANGLE PC BOARD MOUNTED WITH RJ45 TERMINATION							
● MRJ-5780-01	8	1	0	...	01M3135	16.35	15.38

ACCESSORIES

Mfg. Part No.	For Use With	Stock No.	Price Each 1-9	Price Each 10-24
● MRJ258E11BP	Boot for RJ Plug and Cable	01N5210	3.30	2.76
● MRJ258610BP	Dust Cover for MRJ, Internal Style, Gray	63M9672	1.09	0.96
MRJ-2586-42BP	Dust Cover for Rugged RJ, Black	05W3382	3.00	2.50

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ETHERNET BUCCANEER® CIRCULAR CONNECTORS

RoHS Compliant Available

bulgin a brand of Elektron Technology

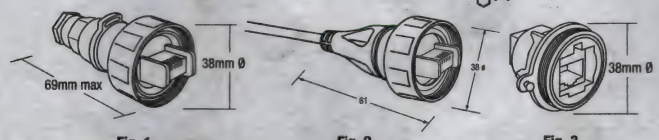

Fig. 1 Fig. 2 Fig. 3

- Dustproof and Waterproof to IP68
- Cat 5E Coupler Maintains Shielding
- Optimized IP68 Sealing Secures and Seals Cable Without Disrupting Signal
- Shroud for RJ45 Provides a Positive Guide For Alignment and Protects Against Damage During Handling
- Cat 5E Compliant With Data Rates Up to 100Mbps

Waterproof Buccaneer® industrial circular connector system offers a secure connection for Ethernet based networks, running up to 100Mbps, using the industry standard RJ45 connector as the base connection. Feature shielded connectors and couplers with S-FTP stranded cable that provides a high level of noise immunity. Patch cords have been independently tested to TIA/EIA Cat 5E levels. Patch Cord Specifications: TIA/EIA rating: Cat 5e, Sheath: PUR Jacket Black, Diameter: 6.1mm, Characteristic Impedance: 100Ω ±15Ω @ 100MHz, Capacitance: 1600pF/km, Operating Temperature: -25°C to +85°C. Wiring configuration 568-B. Mates with panel mounting connector PX0833.

➤CONTINUED➤

ETHERNET BUCCANEER® CIRCULAR CONNECTORS (CONT.)

REWIREABLE FLEX CABLE CONNECTOR — FIG. 1

Supplied with shielded RJ45 plug and sealing glands to suit cable sizes from 3.5 to 8mm diameter. Glass-filled polyamide connector body, UL94V-0 flammability rated. Operating temperature -20°C to +70°C. Mates with panel mounting connectors; *order separately below.*

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
● PX0834/B	For Use With Cable Sizes 3.5 to 8mm Diameter	25H6701	24.69	22.29

PATCHCORDS - IP68 ETHERNET BUCCANEER TO SHIELDED RJ45 - FIG. 2

Mfg. Part No.	Length	Stock No.	Price Each 1-9	Price Each 10-24
● PX0837/2M00	2m	09J1545	35.89	32.33
● PX0837/3M00	3m	09J1546	42.08	37.91
● PX0837/5M00	5m	09J1547	47.94	43.18

PANEL MOUNTING CONNECTOR - FIG. 3

Feature Cat 5E shielded coupler available with or without an earth wire. Provides a sealed connection to the front of panel and a standard RJ45 connection to the rear. Mounts to panel with a single hole fixing. Comes complete with panel sealing gasket and O-ring seal to maintain IP68, EN60529 seal. Glass-filled polyamide connector body, UL94V-0 flammability rated. Operating temperature -20°C to +70°C.

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
● PX0833	Cat 5E Coupler	09H1135	49.81	44.95
● PX0833/E	Cat 5E Coupler with Earth Wire	25H6699	54.89	49.54
FLANGE MOUNTING CONNECTOR				
● PX0870	Cat 5E Coupler	45P3920	43.99	41.90

SEALING CAPS

Maintains the IP rating of unmated connectors.

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-49
● PX0835	Sealing Cap for Flex Connectors	25H6702	3.49	3.09
● PX0733	Sealing Cap for Panel Connectors	48F2467	1.67	1.48

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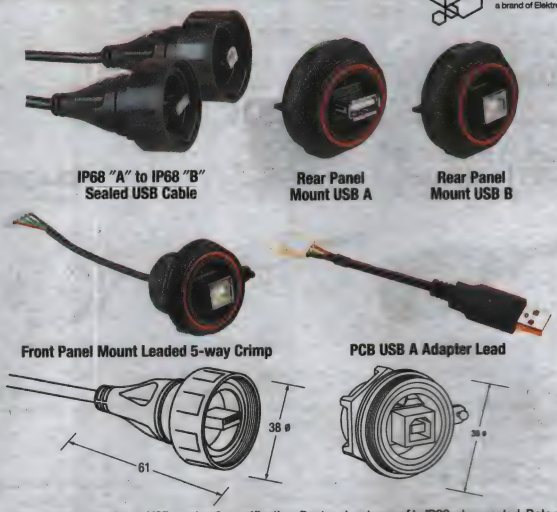
IP68 USB BUCCANEER CONNECTORS

RoHS Compliant Available

bulgin a brand of Elektron Technology



IP68 "A" to IP68 "B" Sealed USB Cable

Rear Panel Mount USB A

Rear Panel Mount USB B

Front Panel Mount Leaded 5-way Crimp

PCB USB A Adapter Lead

Designed to conform to the latest USB version 2 specification. Dust and waterproof to IP68 when mated. Data rates up to 480Mbs. Hot pluggable, standard 4-pole USB interface. Cable connectors feature PVC black cable jacket. Panel Connectors feature single-hole fixing and are front panel sealed to IP68. Opposite connector at rear of adapter. Mounting hole diameter is 27.5mm (plus keyway).

CABLE CONNECTORS - IP68 "A" TYPE USB TO STANDARD "B" TYPE USB

Mfg. Part No.	Length (m)	Stock No.	Price Each 1-9
● PX0840/A/2M00	2	86H3241	13.96
● PX0840/A/3M00	3	09J1550	16.11
● PX0840/A/5M00	5	92H7327	22.39
CABLE CONNECTORS - IP68 "B" TYPE USB TO STANDARD "A" TYPE USB			
● PX0840/B/2M00	2	26M8307	14.00
● PX0840/B/3M00	3	09J1551	17.01
● PX0840/B/5M00	5	92H7329	22.62

FRONT PANEL MOUNT CONNECTORS

Mfg. Part No.	Front Connector Type	Rear Connector Type	Stock No.	Price Each 1-9
● PX0842/A	IP68 "A" type USB	Standard B	86H3159	15.22
● PX0842/B	IP68 "B" type USB	Standard A	86H8971	16.13

➤CONTINUED➤

IP68 USB BUCCANEER CONNECTORS (CONT.)

Mfg. Part No.	Front Connector Type	Rear Connector Type	Stock No.	Price Each 1-9
● PX0843/A	IP68 "A" type USB	Leaded 5-way Crimp	16M5084	17.39
● PX0843/B	IP68 "B" type USB	Leaded 5-way Crimp	06M6157	17.73
REAR PANEL MOUNT CONNECTORS				
● PX0848/A	IP68 "A" type USB	Standard B	02P6289	18.68
● PX0848/B	IP68 "B" type USB	Standard A	02P6290	19.64
● PX0849/A	IP68 "A" type USB	Leaded 5-way Crimp	02P6291	18.91
● PX0845/A	IP68 "A" type USB	Direct mount PCB contact	83K8205	17.45
● PX0845/B	IP68 "B" type USB	Direct mount PCB contact	83K8207	17.68

ADAPTER LEADS - 100mm LEAD LENGTH

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 14193	USB "A" type to 5-way crimp	09J1555	5.21
● 14194	USB "B" type to 5-way crimp	09J1556	5.21
SEALING CAPS			
● PX0835	Cap to fit cable connectors	25H6702	3.49
● PX0733	Cap to fit panel connectors	48F2467	1.67
● PX0852	USB Flash Drive Cover	45P3919	4.33

(80143)

FIREWIRE BUCCANEER SEALING CAPS

RoHS Compliant Available

bulgin a brand of Elektron Technology

- Water and dustproof to IP68 when mated
- 4- and 6-pole versions
- Sealing caps to maintain IP68 rating of unmated connectors

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● PX0485/BK	To fit 4-pole flex	18M2902	2.10
● PX0480/BK	To fit 4-pole panel mount	18M2901	2.23
● PX0733	To fit 6-pole flex	48F2467	1.67
● PX0835	To fit 6-pole panel mount	25H6702	3.49

(85057)

6000 SERIES BUCCANEER® ETHERNET CONNECTORS

RoHS Compliant Available

bulgin a brand of Elektron Technology

PXM6037

PXM6034/B

PXM6033TP

- Push-pull latching system
- 30° twist locking
- Sealed to IP66, IP68 and IP69K rated when mated
- Cat 5e coupler maintains shielding
- Cat 5e compliant with data rates up to 100MHz
- Rewireable flex connector provides ability to field terminate
- Sealed through panel Ethernet prevents water ingress into equipment

PATCH CORD FLEX CONNECTORS

Mate with **mfg. part no. PXP6033TP** type panel mounting connectors. Overmolded patchcords with IP rated connector. Supplied with shielded RJ45 plug. Single end terminated. S-FTP cable construction. PUR jacket cable. Wiring configuration to 568-B. Exceeds EIA/TIA 5e.

Mfg. Part No.	Length (m)	Stock No.	Price Each 1-9	10-24	25-49
● PXP6037/2M00	2	56W4631	34.39	31.55	28.87
● PXP6037/3M00	3	56W4632	41.59	38.16	34.91
● PXP6037/5M00	5	56W4633	62.00	56.88	52.05

RE-WIREABLE FLEX CONNECTORS

Supplied with shielded RJ45 plug to suit cable sizes from 3.5 to 8mm diameter.

Mfg. Part No.	Material	Mates With	Stock No.	Price Each 1-9	10-24	25-49
● PXM6034/B	Thermoplastic	Mfg. Part No. **PXP6033TP**	56W4607	48.43	44.57	40.70
● PXP6034/B	Metal	Mfg. Part No. **PXP6033TP**	56W4630	21.38	19.67	17.96

FRONT PANEL MOUTNING CONNECTOR

Sealed through panel. Cat 5e shielded coupler. Mates with all plastic flex connectors. Standard RJ45 patchcord can be plugged into rear. Single hole fixing. Complete with panel sealing gasket.

Mfg. Part No.	Mates With	Stock No.	Price Each 1-9	10-24	25-49
● PXM6033TP	**PXM6034** type flex connectors	56W4606	39.62	36.45	33.29
● PXP6033TP	**PXP6034** type flex connectors	60W1947	43.29	39.84	36.38

(209600)

6000 SERIES BUCCANEER® USB SEALED CABLE ASSEMBLIES

RoHS Compliant Available

bulgin a brand of Elektron Technology

- Push-pull coupling latching system
- 30° twist locking prevents accidental un-mating
- Sealed to IP66, IP68 and IP69K when mated
- USB version 2.0 performance for low and high speed bus connection, 1.5Mbs to 480Mbs

PXP6040/A

PXP6040/B

Single ended cable assembly mates with all panel mounting connectors. Plug and play capability for hot pluggable, standard 4-pole interface. Shielded system for high noise immunity and EMI protection. Visual mating indication alignment indicator reduces risk of damage during mating. Thermoplastic body.

IP RATED A TYPE USB TO STANDARD B TYPE USB CABLE CONNECTORS

Mfg. Part No.	Length (m)	Stock No.	Price Each 1-9	10-24	25-49
● PXP6040/A/2M00	2	56W4634	19.83	18.33	16.74
● PXP6040/A/3M00	3	56W4635	24.08	22.26	20.33
● PXP6040/A/5M00	5	56W4636	35.28	32.62	29.79
IP RATED B TYPE USB TO STANDARD A TYPE USB CABLE CONNECTORS					
● PXP6040/B/2M00	2	56W4637	20.99	19.40	17.72
● PXP6040/B/3M00	3	56W4638	24.08	22.26	20.33
● PXP6040/B/5M00	5	56W4639	37.03	34.23	31.26

(209908)

MODULAR INDUSTRIAL 8/8 PLUGS AND JACKS

RoHS Compliant Available

molex

- Current: 1.5 A
- Voltage: 125 V
- Withstanding Voltage: 1000 VAC
- Contact Resistance: 20 mΩ max.
- Insulation Resistance: 500 MΩ min.
- Temperature Range: -40°C to +60°C

84700 series modular plugs and jacks rugged construction provides protection to terminals and withstands harsh environments. Meets Category 5e performance for fast ethernet industry standard. Contact phosphor bronze 50 µ" gold plating, housing material PA polyamide (nylon), PBT polyester, TPE thermo plastic elastomer, UL 94V-0

84700 SERIES BULKHEAD RECEPTACLE

Mfg. Part No.	Circuits	Description	Stock No.	Price Each 1-9
● 84700-0001	8	Inline Dual Jack	49H6469	24.30
84700 SERIES WIRE PLUG				
● 84700-0002	8	Wire Plug	95H9877	17.84

84700 SERIES DUST COVER

Mfg. Part No.	For Use With	Color	Stock No.	Price Each 1-9
● 84700-0003	84700 Series Bulkhead Receptacle	Black	95H9878	11.09

(78323)

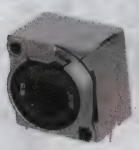
ETHERCON® RJ45 DATA CONNECTORS

RoHS Compliant Available

NEUTRIK

NE8FDV-Y110

NE8MC



NE8FBH-S

NE8FBH-LED

NE8FDY-C6

Rugged RJ45 Ethernet data connectors are designed to prevent breakage of the fragile latch and cover of standard RJ45 connectors. Pinouts provide additional terminal to PC board for better shielding. Diecast shell and chuck-type strain relief on cable end accepts all common RJ45 plugs (not included). Female chassis connectors are based on current NEUTRIK® "A and B" series and "D" series XLR receptacles with secure latching system. CAT 5e version complies with Class D (NE8FAH) or CAT 5E (IDC terminated receptacles) according to TIA/EIA 568B and ISO/EC 11801 standards. Compatible

CONTINUED

ETHERCON® RJ45 DATA CONNECTORS (CONT.)

with 10Base-T and 100Base-TX systems. CAT 6 version compatible with 1000 base-T systems. "D" series panel mount with metal housing and secure latching system. CAT 6 features tool-free termination. Color-coded rings (for receptacles) and boots (for cable carriers) available; *go online or call*.

CABLE CONNECTORS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
NE8MC	Housing with Chuck and Boot	35C0562	4.42
NE8MC-B	Housing in Black Chrome with Chuck and Boot	35C0563	5.00
NE8MC-1-B	Housing in Black with Chuck and Boot	90H9371	4.55
CAT 5E RECEPTACLES			
NE8FDV	"D" Series Housing, Vertical PCB Contacts	94C0899	6.96
NE8FDV-YK	"D" Series Housing, Krone Punchdown Terminals	94C0900	13.19
NE8FDV-Y110	"D" Series Housing, 110 Punchdown Terminals	81C8110	13.46
NE8FDV-Y110B	"D" Series Housing, 110 Punchdown Terminals	77C5731	13.82
NE8FAH	"A" Series Housing, Horizontal PCB Mount, All Plastic	35C0558	5.94
NE8FBH	"B" Series Housing, Horizontal PCB Mount, Nickel Ring	35C0561	6.78
NE8FBH-S	Horizontal PCB "B" Series mount RJ45 receptacle	72K9005	9.16
NE8FAV-Y110	"D" Series Housing, IDC Terminals, 110 Punch Down, with Screws	35C0560	11.74
NE8FDP	Feed-Thru, "D" Series, Nickel, with Screws	61H8745	15.51
NE8FDP-B	Feed-Thru, "D" Series, Black Chrome, with Screws	90H9368	16.81
NE8FDP-B-D	Feed-Thru, "D" Series, Black Chrome, without Screws	05J1913	15.84
CAT 6 RECEPTACLES			
NE8FDY-C6-B	"D" Series, CAT 6, IDC, Black Chrome, without Screws	32M7748	43.84
NE8FDY-C6	"D" Series, CAT 6, IDC, Nickel, without Screws	32M7751	39.54

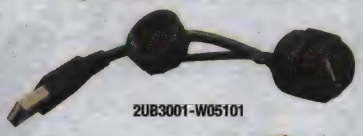
(69209)

WATERPROOF USB CONNECTORS AND CABLE ASSEMBLIES

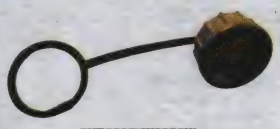
RoHS Compliant Available

multicomp

2UB3001-W05100



2UB3001-W05101



2UB3001-W0000W

Waterproof USB connectors are rated IP67 for use in almost any environment. Most chassis connectors have a matching screw or locking cap to ensure moisture and dust does not damage equipment when leads are not connected

PANEL MOUNT CONNECTORS

Mfg. Part No.	Gender	Stock No.	Price Each 1-99
2UB3001-W05100	Receptacle	20T7281	4.13

CABLE ASSEMBLIES

Mfg. Part No.	Description	Length	Stock No.	Price Each 1-99
2UB3001-W05101	USB 2.0 A Plug to USB A Panel Mount Receptacle	0.1 m	20T7282	5.20
2UB3001-W05102	Micro USB A Plug to USB A Panel Mount Receptacle	0.5 m	20T7283	6.56

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-49
2UB3001-W0000W	Waterproof Cap, IP67	20T7280	1.66

(192445)

WATERPROOF RJ45 CONNECTORS AND CABLE ASSEMBLIES

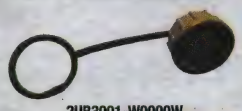
RoHS Compliant Available

multicomp

2TJ3000-W05100

2TJ3003-W05100

2TJ3000-W0510X



2UB3001-W0000W

Waterproof RJ45 connectors are rated IP67 for use in almost any environment. Most chassis connectors have a matching screw or locking cap to ensure moisture and dust does not damage equipment when leads are not connected

➤CONTINUED➤

WATERPROOF RJ45 CONNECTORS AND CABLE ASSEMBLIES (CONT.)

CABLE MOUNT CONNECTORS

Mfg. Part No.	Gender	Stock No.	Price Each 1-99
2TJ3000-W05100	Plug	20T7275	3.13
PANEL MOUNT CONNECTORS			
2TJ3003-W05100	Receptacle	20T7279	6.68

CABLE ASSEMBLIES

Mfg. Part No.	Length (m)	Stock No.	Price Each 1-49
2TJ3000-W05102	0.6	20T7276	7.92
2TJ3000-W05104	10.0	20T7278	20.65

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-49
2UB3001-W0000W	Waterproof Cap, IP67	20T7280	1.66

(192443)

SCRE SERIES SEALED ETHERNET CONNECTORS

RoHS Compliant Available

samtec

- Sealed RJ45 receptacle port
- Connector shell size: 17
- Meets IP68 requirements for dust and waterproof sealing
- Panel Thickness 0.8mm (0.030") - 5.2mm (0.205")
- Cat5e RJ45 rating

Mfg. Part No.	No. of Contacts	Gender	Connector Mounting	Stock No.	Price Each 1-9	Price Each 10-49
SCRE-01	8	Receptacle	Panel	11P6164	16.59	15.68

(136021)

STEADYTEC INDUSTRIAL ETHERNET CONNECTORS

RoHS Compliant Available

Weidmüller

Bayonet V01 Metal Plug

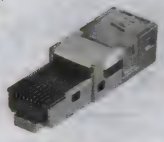
Push Pull V04 Plastic Plug

RockStar V05 Metal Plug

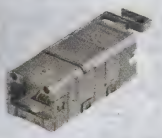
Bayonet V01 Metal Bulkhead Receptacle

Push Pull V04 Plastic Bulkhead Receptacle

RockStar V05 Metal Bulkhead Receptacle

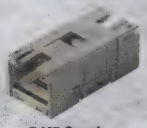


RJ45 Plug



RJ45 Jack

- RJ45 plug-in connector for Gigabit Ethernet
- High cable sheathing diameter range up to 12 mm for some variants
- Suitable for connecting solid & stranded conductors 27-22 AWG
- Modules and couplers have a robust diecast zinc housing (Cat.6)
- Design results in enhanced vibration and shock resistance
- Dirt-resistant housing design with enhanced resistance to oils, greases, acids and alkalis



RJ45 Coupler

STEADYTEC is the future of connection technology in the field of data and signal transmissions. Established by the leading names in this branch of industry, the technology brand STEADYTEC forms the foundation for reliable, application-centric and conforming solutions for offices and harsh industrial conditions. All of the connectors are designed for ease of use and for quick on-site assembly. The gigabit connector for industrial standards with IDC connection technology has been developed to make wiring quick, easy and safe, without the need for any tools. In addition, zinc die-casting makes the connector extra robust and therefore suitable for industrial applications. It is also fitted with a protected locking clip for tough industrial applications.

STEADYTEC RJ45 FIELD INSTALLABLE PLUGS

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-99
1963120000	Bayonet V01 Metal Housing	05P5157	81.42	75.07
1963200000	RockStar V05 Metal Housing	05P5165	62.30	56.82
STEADYTEC RJ45 FIELD INSTALLABLE JACKS				
1963480000	Bayonet V01 Metal Housing	05P5191	60.48	55.16
1963460000	RockStar V05 Metal Housing	05P5189	59.31	54.09
STEADYTEC RJ45 BULKHEAD COUPLERS				
1963470000	Bayonet V01 Metal Housing	05P5190	84.32	76.91
1963490000	Push Pull V04 Plastic Housing	05P5192	43.04	39.26
1963510000	RockStar V05 Metal Housing	05P5194	62.87	57.34

➤CONTINUED➤

STEADYTEC INDUSTRIAL ETHERNET CONNECTORS (CONT.)

STEADYTEC RJ45 CONNECTORS

Mfg. Part No.	Gender	Description	Stock No.	Price Each 1-9	Price Each 10-99
● 1962730000	Plug	RJ45 Field Installable Plug, 22 AWG	55M2112	46.24	42.18
● 1962840000	Coupler	Bulkhead Coupler Insert	55M2118	37.07	33.81

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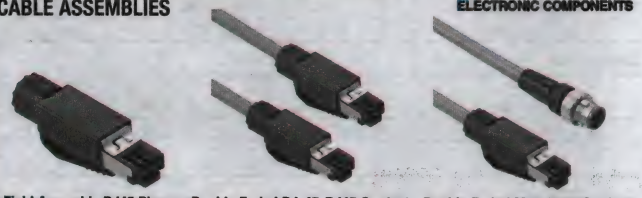
SMARTCLICK INDUSTRIAL ETHERNET CONNECTORS AND CABLE ASSEMBLIES

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS



Field Assembly RJ45 Plug | Double Ended RJ-45-RJ45 Cordset | Double Ended M12-RJ45 Cordset

- Rated current: 2.5 A
- Rated voltage: 30 V
- Contact resistance: 20 mΩ max.
- Insulation resistance: 500 MΩ min.
- Withstand voltage 1,000 VAC for 60 sec
- Ambient operating temperature: -25°C to 70°C
- Ambient storage temperature: -25°C to 70°C
- Degree of protection: M12: IEC IP67, RJ45: IEC IP20
- Tough RJ45 connectors for use outside of panels
- Environment-resistance M12 connectors with IP67 protection
- M12 Smartclick mates with any threaded M12 socket
- Provides 'twist and click' connection with XS5P-T panel socket.
- M12 Smartclick connectors are shielded to protect against EMI.
- Separate RJ45 field assembly connectors for easy wiring on site.

PANEL MOUNT CONNECTORS WITH 0.5m PIGTAILS

Mfg. Part No.	Connector	Mounting	Stock No.	Price Each 1-4
● XS5P-T426-5	Receptacle	Rear Locking Panel Mount	59T9226	48.45
● XS5P-T427-5	Receptacle	Front Locking Panel Mount	40T9744	43.10

RJ45 FIELD ASSEMBLY PLUG

Mfg. Part No.	Contacts	Contact Termination	For Use With	Stock No.	Price Each 1-24
● XS6G-T421-1	4	IDC / IDT	24-22 AWG Stranded & 23-22 AWG Solid Wire	40T9778	43.28

DOUBLE ENDED RJ45 PLUG - RJ45 PLUG CORDSETS

Mfg. Part No.	Cable Length (m)	Stock No.	Price Each 1-24
● XS5W-T421-AMD-K	0.3	40T9756	74.95
● XS5W-T421-BMD-K	0.5	40T9758	75.75
● XS5W-T421-CMD-K	1	40T9761	77.79
● XS5W-T421-GMC-K	5	40T9769	106.76
● XS5W-T421-JMC-K	10	40T9772	150.49
DOUBLE ENDED M12 PLUG - M12 PLUG CORDSETS			
● XS5W-T421-DM2-K	2	40T9765	88.02
● XS5W-T421-GM2-K	5	40T9771	129.62
● XS5W-T421-JM2-K	10	40T9774	197.60

(197538)

GENDER CHANGERS AND ADAPTERS

RoHS Compliant Available

multicomp

DB-9 | DB-15 | DB-25 | Centronics® 36-Pin

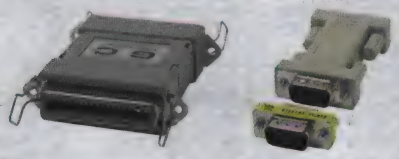
Mfg. Part No.	Description	Stock No.	Price Each 1-4
● SPC19767	DB-9 Male-to-Male	84K8533	6.94
● SPC19768	DB-9 Female-to-Female	84K8534	7.09
● SPC19769	DB-9 Female-to-High Density DB-15 Male	84K8535	7.35
● SPC19765	DB-15 Male-to-Male	84K8531	11.10
● SPC19766	DB-15 Female-to-Female	84K8532	11.10
● SPC19763	High-Density DB-15 Male-to-Male	84K8529	7.87
● SPC19764	High Density DB-15 Female-to-Female	84K8530	7.87
● SPC19759	DB-25 Male-to-Male	84K8525	10.84
● SPC19760	DB-25 Female-to-Female	84K8526	10.84
● SPC19761	DB-25 Female-to-Male	84K8527	10.84
● SPC19758	Centronics® 36-Pin Female-to-Female	84K8524	32.17

(7840)

RS232 GENDER CHANGERS AND PORT PROTECTORS

RoHS Compliant Available

GC ELECTRONICS



STANDARD GENDER CHANGERS

Mfg. Part No.	Description	Stock No.	Price Each Each	Price Each 2-4	Price Each 5-9
● 45-0510-00BU	DB-9, Male/Male	50F6421	3.99	3.91	3.84
● 45-517-BU	DB-9, Male/Male, Low Profile	50F6439	3.45	3.38	3.32
● 45-515-BU	DB-9, Female/Female	28M9415	3.22	3.16	3.11
● 45-518-BU	DB-9, Female/Female, Low Profile	50F6440	3.64	3.56	3.50
● 45-0520-00BU	DB-15, Male/Male	64M1798	5.75	5.63	5.53
● 45-527-BU	DB-15, Male/Male, Low Profile	50F6442	3.89	3.82	3.74
● 45-0560-00BU	High-Density DB-15, Male/Male	64M1800	6.32	6.19	6.09
● 45-525-BU	DB-15, Female/Female	50F6425	6.16	6.03	5.93
● 45-528-BU	DB-15, Female/Female, Low Profile	50F6443	9.95	9.75	9.58
● 45-0500-00BU	DB-25, Male/Male	50F6418	3.95	3.87	3.79
● 45-0507-00BU	DB-25, Male/Male, Low Profile	50F6436	4.37	4.27	4.20
● 45-0505-00BU	DB-25, Female/Female	50F6419	4.17	4.08	4.02
● 45-540-BU	DB-37, Male/Male	50F6429	8.66	8.48	8.34
● 45-543-BU	DB-37, Female/Female	50F6430	7.68	7.53	7.40

PORT PROTECTORS

Mfg. Part No.	Description	Stock No.	Price Each Each	Price Each 2-4	Price Each 5-9
● 45-0516-00BU	DB-9, Male/Female	50F6423	3.48	3.41	3.35
45-562-BU	DB-15, Male/Female, High Density	50F6434	6.80	6.66	6.55
● 45-509-BU	DB-25, Male/Female, Low Profile	50F6438	4.65	4.56	4.48
● 45-0545-00BU	DB-25, Male/Female	64M1799	11.39	11.16	10.97

(7549)

LOW-PROFILE TELCO GENDER CHANGERS

RoHS Compliant Available

multicomp

Low-profile design is ideal when space is a prime consideration in a permanent installation. Fully shielded. Gold-plated over nickel contacts. 0.7" deep at thickest point.

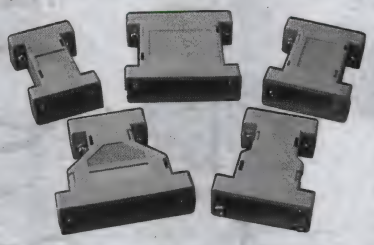
Mfg. Part No.	Description	Stock No.	Price Each 1-99	Price Each 100-249
● SPC15467	DB-9 Male-to-Female	79K5041	4.85	3.88
● SPC19774	DB-9 Female-to-Female	84K8538	7.12	6.43
● SPC19827	DB-9 Male-to-Male	84K8589	6.83	6.15
● SPC15359	DB-15 Male-to-Female	79K4948	5.38	4.31
● SPC19757	DB-15 Male-to-Male	84K8523	7.69	6.94
● SPC19826	DB-15 Female-to-Female	84K8588	11.42	10.30
● SPC15434	DB-25 Male-to-Female	79K5014	6.17	4.95
● SPC19776	DB-25 Female-to-Female	84K8540	12.29	11.07
● SPC19825	DB-25 Male-to-Male	84K8587	11.61	10.48

(18426)

D-SUB GENDER CHANGER COVERS

RoHS Compliant Available

multicomp



Choice of black or gray.

Mfg. Part No.	Description	Color	Stock No.	Price Each 1-99
● SPC14964	DB-9M/F-to-DB-9M/F	Black	80K5384	4.42
● SPC14966	DB-9M/F-to-DB-25M/F	Black	80K5386	5.11

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D-SUB GENDER CHANGER COVERS (CONT.)

Mfg. Part No.	Description	Color	Stock No.	Price Each 1-99
SPC14967	DB-15M/F-to-DB-15M/F	Black	80K5387	4.51
SPC14969	DB-9M/F-to-DB-9M/F	Gray	80K5389	4.40
SPC14970	DB-9M/F-to-DB-15M/F	Gray	80K5390	5.74
SPC14971	DB-9M/F to DB-25M/F	Gray	80K5391	4.85
SPC14972	DB-15M/F to DB-15M/F	Gray	80K5392	4.45
SPC14973	DB-25M/F to DB-25M/F	Gray	80K5393	4.40

(68179)

AT SERIAL PORT ADAPTERS

RoHS Compliant Available

multicomp

Adapters permit use of standard 25-line RS-232 cables by reconfiguring DB-9 AT serial port to 25-pin male DB-25 connector. Eliminate the need for several different cables.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
SPC19828	Modem/Mouse Adapter	84K8590	7.87
SPC19829	AT Connection to Modem DB-9 Female	84K8591	7.87
SPC19830	AT Connection to Serial Printer DB-9 Female to DB-25 Male	84K8592	7.87

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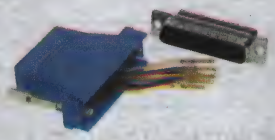
TELEPHONE ADAPTERS FOR DB-9, DB-15, OR DB-25 PORTS

RoHS Compliant Available

multicomp

D-Sub 8 to RJ45



D-Sub 25 to RJ45

Allow the use of low-cost telco (telephone) wire between computer and peripherals. Available in either DB-9, DB-15, or DB-25 connectors on one end and 4-, 6-, or 8-contact telco connectors on the other end. Provide both economy of installation and fast and simple changing of cables when moving equipment. Telco cables and connectors available separately; *go online or call.*

PLASTIC TELCO ADAPTERS WITH EMI/RFI SHIELDING

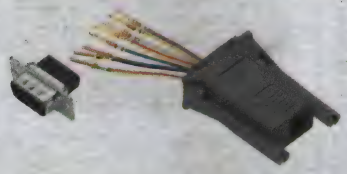
Mfg. Part No.	Description	Color	Stock No.	Price Each 1-49	50-99
SPC19870	DB-9 Female to RJ-45, 8 Conductor	Grey	80K5437	20.53	16.88
PLASTIC TELCO ADAPTERS FOR RJ-11					
SPC19784	DB-9 Male to RJ-11, 4 Conductor	Beige	84K8548	6.69	6.10
SPC19785	DB-9 Female to RJ-11, 4 Conductor	Beige	84K8549	6.37	5.81
PLASTIC TELCO ADAPTERS FOR RJ-12					
SPC19786	DB-9 Male to RJ-12, 6 Conductor	Beige	84K8550	7.05	6.43
SPC19787	DB-9 Female to RJ-12, 6 Conductor	Beige	84K8551	7.05	6.43
SPC19778	DB-25 Male to RJ-12, 6 Conductor	Beige	84K8542	7.25	6.61
PLASTIC TELCO ADAPTERS FOR RJ-45					
SPC19788	DB-9 Male to RJ-45, 8 Conductor	Beige	84K8552	7.78	7.10
SPC19789	DB-9 Female to RJ-45, 8 Conductor	Beige	84K8553	7.63	6.97
SPC19790	DB-15 Male to RJ-45, 8 Conductor	Beige	84K8554	8.63	7.87
SPC19779	DB-25 Male to RJ-45, 8 Conductor	Beige	84K8543	8.41	7.66
SPC15295	DB-25 Female to RJ-45, 8 Conductor	Black	79K4889	5.45	4.37
SPC15464	DB-25 Male to RJ-45, 8 Conductor	Black	79K5038	9.41	7.53
SPC15221	DB-25 Female to RJ-45, 8 Conductor	Blue	79K4820	5.70	4.54
SPC15279	DB-25 Male to RJ-45, 8 Conductor	Blue	79K4876	5.74	4.59
SPC15222	DB-25 Male to RJ-45, 8 Conductor	Red	79K4821	9.11	7.29
SPC15141	DB-25 Male to RJ-45, 8 Conductor	Yellow	79K4754	9.22	7.38

(7817)

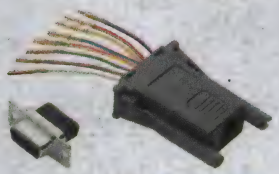
MODULAR ADAPTER KITS

RoHS Compliant Available

L-COM Global Connectivity



DB9 Male to RJ45 Jack



DB9 Female to RJ45 Jack

➤CONTINUED➤

MODULAR ADAPTER KITS (CONT.)

- Adapt modular plugs to D-Sub ports for custom wiring applications
- Molded Dark Gray Plastic for professional looking results
- 50u Gold plated contacts for durability and longevity
- UL94V-0 Rated Plastic for standards compliance

Molded modular to D-Sub adapters gives you an easy way to adapt connection styles. Designed with RJ style jacks and D-Sub connectors, this series offers UL94V-0 protection in a sleek dark gray case with molded knurled thumbscrews.

Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-24
REC098F	DB9 Female to RJ45 Jack	81H5769	9.59	9.01
REC098M	DB9 Male to RJ45 Jack	09J6863	9.35	8.78

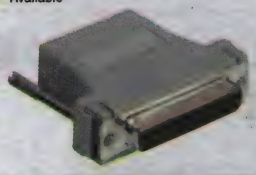
(110606)

TELCO/MODULAR ADAPTERS

RoHS Compliant Available

GC ELECTRONICS

Adapters allow the use of low-cost flexible telco (telephone) wire instead of bulky RS-232 cable. Screw-together hoods with an RS-232 connector on one end and an RJ-11, RJ-12, or RJ-45 telephone jack on the other end. Telco cables and connectors are available separately; *go online or call.*



Mfg. Part No.	Description	Stock No.	Price Each 1-24	25-49	50-99
45-5121	DB-25 M/RJ-11/4	14R4385	2.84	2.48	2.27
45-5122	DB-25 M/RJ-11/6	50F6447	5.42	4.53	4.16
45-5110	DB-9 M/RJ-45/8	64M1810	5.89	4.92	4.52
45-5113	DB-9 F/RJ-45/8	50F6456	5.72	4.78	4.41
45-5117	DB-15 F/RJ-45/8	64M1811	6.26	5.23	4.80
45-5123	DB-25 M/RJ-45/8 & RJ-45K	50F6449	5.84	4.86	4.49
45-5127	DB-25 F/RJ-45/8 & RJ-45K	50F6450	6.06	5.06	4.66

(7452)

AMPLIMITE 0.050″ SERIES III HEADERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Shielded
- Mating Connector Lock
- Full Steel Shell
- Thermoplastic Housing, Flammability Rated UL94V-0
- Phosphor Bronze Contacts

Perfect for network and transmission/switching applications.

Mfg. Part No.	Description	Positions	Stock No.	Price Each 1-9
5787190-7	Without Boardlocks	68	16M3380	15.92
1761028-1	With Boardlocks	26	70K9609	7.74
1761028-3	With Boardlocks	50	67K2704	7.04
1761028-4	With Boardlocks	68	16M2781	9.06
1761028-5	With Boardlocks	100	12R3363	16.28
RIGHT-ANGLE, WITHOUT RAILS, WITH LATCH BLOCKS				
5787394-7	Without Boardlocks, 0.100″ Tails	68	19R3311	7.79
5787082-5	With Boardlocks, 0.100″ Tails	50	24K3662	4.78
5787082-7	With Boardlocks, 0.100″ Tails	68	42K9936	7.34
RIGHT-ANGLE, WITHOUT RAILS AND LATCH BLOCKS				
5787362-7	With Boardlocks, 0.120″ Tails	68	42K7580	14.88
5787169-7	Without Boardlocks, 0.100″ Tails	68	16M3378	7.00
5787169-9	Without Boardlocks, 0.100″ Tails	100	42K7572	16.41
5787170-4	With Boardlocks, 0.100″ Tails	40	53K4167	7.49
5787170-5	With Boardlocks, 0.100″ Tails	50	16M3379	8.03
5787170-7	With Boardlocks, 0.100″ Tails	68	42K7573	7.42
5787170-9	With Boardlocks, 0.100″ Tails	100	42K7574	23.37
RIGHT-ANGLE, WITHOUT RAILS AND LATCH BLOCKS - SHIELDED				
5750823-1	With Boardlocks, 0.100″ Tails	26	40P9852	16.97
RIGHT-ANGLE STACKED, WITH RAILS AND LATCH BLOCKS				
5787656-1	With Boardlocks, 0.120″ Tails	50/50	18M5780	31.17
VERTICAL, WITH RAILS AND LATCH BLOCKS				
5749069-2	0.125″ Tails	26	42K7510	8.94
5749069-5	0.125″ Tails	50	10M8517	10.68
5749069-7	0.125″ Tails	68	42K7511	13.03
VERTICAL, WITHOUT RAILS AND LATCH BLOCKS				
5749070-5	0.125″ Tails	50	42K7512	11.29
5749070-7	0.125″ Tails	68	42K7513	12.69
5749070-9	0.125″ Tails	100	42K7514	20.24

➤CONTINUED➤

D-SUB – PC BOARD MOUNT CONNECTORS

AMPLIMITE 0.050″ SERIES III HEADERS (CONT.)

VERTICAL, WITHOUT RAILS AND LATCH BLOCKS

Mfg. Part No.	Description	Positions	Stock No.	Price Each 1-9
● 5173280-3	0.122″ Solder Posts	50	42K8679	7.13
● 2-5174339-5	0.122″ Solder Posts	68	46M4265	18.91
VERTICAL, WITHOUT RAILS, WITH LATCH BLOCKS				
● 5749721-5	0.125″ Tails	50	42K7534	13.50
● 5749721-7	0.125″ Tails	68	42K7535	10.37
VERTICAL WITH ACTION PINS, WITHOUT RAILS AND LATCH BLOCKS				
● 5786555-7	0.173″ Tails For 0.062-0.093″ Thick Boards	68	42K7564	13.97
VERTICAL WITH ACTION PINS, WITH RAILS AND LATCH BLOCKS				
● 5786554-7	0.173″ Tails For 0.062-0.093″ Thick Boards	68	42K7561	19.96

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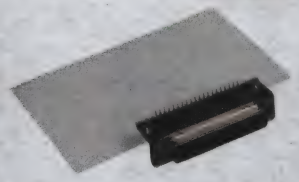
3

AMPLIMITE HD-22 METAL-SHELL RIGHT-ANGLE PC BOARD D-SUB CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor



- Tin-Plated Steel Front Metal Shell
- Black Thermoplastic Housing, Rated UL94V-0
- 0.350″ Footprint
- Boardlock Mounting Hardware
- UL Recognized, CSA Certified

Right-angle PC board D-sub connectors feature phosphor bronze posted contacts finished with gold on mating end, tin-lead on termination end, and nickel underplated overall. Available with threaded inserts or fixed female screwlocks.

FIXED FEMALE SCREWLOCKS WITH BOARDLOCKS

Mfg. Part No.	No. of Contacts	Contact Plating	Gender	Stock No.	Price Each 1-9	10-99	100-249	250-499
● 5749768-1	15	30u″ Gold	Plug	16M3548	6.04	5.31	4.84	4.60
● 1734344-5	15	15u″ Gold	Receptacle	96K3317	4.40	3.66	3.31	3.11
● 5748481-6	26	30u″ Gold	Receptacle	42K7497	7.55	7.24	6.29	5.98
● 5748394-6	62	30u″ Gold	Receptacle	16M4035	13.00	12.56	11.30	10.67
4-40 THREADED INSERTS WITH BOARDLOCKS								
● 5749767-1	15	30u″ Gold	Plug	12M6146	7.41	7.18	6.56	6.25
● 5749769-1	26	30u″ Gold	Plug	16M4040	9.93	8.25	7.60	7.08
● 5749771-1	44	30u″ Gold	Plug	42K7536	12.85	11.75	9.85	8.85
● 5749639-1	62	30u″ Gold	Plug	16M4039	14.42	13.77	13.12	12.39
● 1-1734530-1	15	Gold Flash	Receptacle	73M8538	1.98	1.80	1.69	1.62
● 1734344-1	15	Gold Flash	Receptacle	54M6031	1.53	1.38	1.30	1.25
● 5748482-5	44	30u″ Gold	Receptacle	42K7498	8.73	8.46	7.69	7.30
● 5748394-5	62	30u″ Gold	Receptacle	16M4034	11.30	10.20	9.98	9.43
● 5748483-5	78	30u″ Gold	Receptacle	42K7499	25.99	24.15	23.63	22.16

(8163)

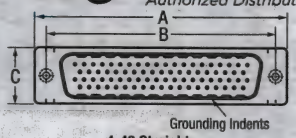
AMPLIMITE HD-22 FRONT METAL-SHELL STRAIGHT POSTED D-SUB I/O CONNECTORS

RoHS Compliant Available

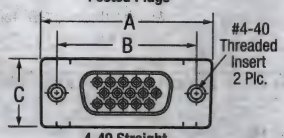
TE connectivity

Authorized Distributor

4-40 Straight Posted Plugs



4-40 Straight Posted Plugs



4-40 Straight Posted Receptacle

- Tin-Plated Steel Front Metal-Shells for EMI/RFI Shielding
- Black Thermoplastic Housing, Rated UL 94V-0
- UL Recognized, CSA Certified

PC boardmount, straight, subminiature D connectors with 4-40 threaded inserts. Brass pin and phosphor bronze socket contacts are 30μ″ gold duplex-plated on the mating end and tin-lead plated on the termination end, with nickel plating underall. PC tail: 0.125″ (3.18).

STRAIGHT POSTED PLUGS - 4-40 INSERTS

Mfg. Part No.	Positions	Dimensions (In Inches) A	B	C	Stock No.	Price Each 1-9
● 5749798-1	15	1.213	0.984	0.494	16M3375	6.15
STRAIGHT POSTED RECEPTACLES - 4-40 INSERTS						
● 5749374-1	15	1.213	0.984	0.494	42K7526	3.81
● 5749030-1	26	1.541	1.312	0.494	84K7584	15.43

➤CONTINUED➤

AMPLIMITE HD-22 FRONT METAL-SHELL STRAIGHT POSTED D-SUB I/O CONNECTORS (CONT.)

STRAIGHT POSTED RECEPTACLES - 4-40 INSERTS

Mfg. Part No.	Positions	Dimensions (In Inches) A	B	C	Stock No.	Price Each 1-9
● 5747786-6	62	2.732	2.500	0.496	16M3355	22.30
● 5748831-1	78	2.635	2.406	0.606	42K7504	33.73
RIGHT ANGLE RECEPTACLES - 4-40 INSERTS						
● 1-1734530-3	15	1.213	0.984	0.492	16M3852	2.52
● 1734530-3	15	1.213	0.984	0.492	16M3874	3.10

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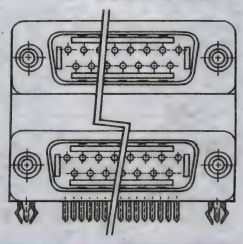
AMPLIMITE HD-20 RIGHT-ANGLE STACKED D-SUB CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor



- Front Metal Shells for EMI/RFI Shielding
- Thermoplastic Housing, Rated UL94V-0
- UL Recognized, CSA Certified

Boardmount, stacked, D-sub connectors in right-angle configuration reduces overall board space consumed by individual PC board connectors. Fully intermateable with other subminiature D connectors. Brass pin and phosphor bronze socket contacts are 30μ″ gold on mating end and tin-lead plated on termination end, with the entire contact underplated nickel. 0.750″ centerline spacing between connectors.

4-40 THREADED INSERTS

Mfg. Part No.	Type	Positions	Stock No.	Price Each 1-9
● 1734285-3	F/F	9-9	16M2763	11.82
● 1-1734285-3	F/F	15-15	16M2634	8.01
● 2-1734285-3	F/F	25-25	73K0555	14.39
FEMALE SCREW LOCKS				
● 1734280-3	M/M	9-9	16M2762	17.89

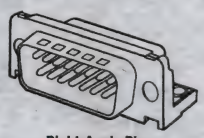
(75607)

AMPLIMITE HD-20 RIGHT ANGLE PC MOUNT D-SUB CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor



Right-Angle Plug

Right-Angle Receptacle

- Thermoplastic Housing, Rated UL94V-0
- Tin-Lead Plating Over Nickel on Termination End

PC board mount connectors available in right-angle or straight versions. Brass pin and phosphor bronze socket contacts are duplex-plated on mating end with **"A"** 30μ″ gold or **"B"** gold flash.

FRONT METAL, TIN-PLATED SHELL — 0.318″ (8.08mm) MOUNT CONNECTORS WITH STANDARD MOUNTING HOLES AND WITHOUT BOARDLOCKS

Mfg. Part No.	Positions	Gender	Plating	Stock No.	Price Each 1-9	10-49
● 5747236-2	15	Plug	A	16M3348	6.48	6.21
● 5747238-2	25	Plug	A	42K7441	3.32	3.22
● 5745781-2	9	Receptacle	A	42K8778	5.28	4.83
● 5745782-2	15	Receptacle	A	16M4028	5.23	5.02
● 5745783-2	25	Receptacle	B	16M4029	7.40	7.11
FRONT METAL, TIN-PLATED SHELL — 0.318″ (8.08mm) MOUNT CONNECTORS WITH THREADED INSERTS AND WITHOUT BOARDLOCKS						
● 5747250-4	9	Plug	A	42K7444	4.47	4.29
● 5747250-3	9	Plug	B	42K7443	3.36	3.15
● 5747236-4	15	Plug	A	42K8787	5.43	5.21
● 5747238-4	25	Plug	A	42K7442	6.16	5.92
● 5747252-4	37	Plug	A	42K8790	15.07	13.70
● 5745781-4	9	Receptacle	A	42K7404	2.56	2.47
● 5745781-3	9	Receptacle	B	42K7403	4.01	3.85
● 5745782-4	15	Receptacle	A	42K7405	4.28	4.11
● 5745783-4	25	Receptacle	A	42K7406	5.12	4.92
● 5745783-3	25	Receptacle	B	42K8781	5.02	4.73
● 5745784-4	37	Receptacle	A	42K8783	7.09	6.80
FRONT METAL, TIN-PLATED SHELL — 0.318″ (8.08mm) MOUNT CONNECTORS WITH FIXED FEMALE SCREWLOCKS AND WITHOUT BOARDLOCKS						
● 5747250-6	9	Plug	A	42K8789	4.45	4.07
● 5747236-6	15	Plug	A	42K8788	8.23	7.88
● 5747238-6	25	Plug	A	16M3349	20.47	18.58

➤CONTINUED➤

AMPLIMITE HD-20 RIGHT ANGLE PC MOUNT D-SUB CONNECTORS (CONT.)

FRONT METAL, TIN-PLATED SHELL — 0.318″ (8.08mm) MOUNT CONNECTORS WITH FIXED FEMALE SCREWLOCKS AND WITHOUT BOARDLOCKS

Mfg. Part No.	Positions	Gender	Plating	Stock No.	Price Each 1-9	Price Each 10-49
5745781-6	9	Receptacle	A	42K8779	5.68	5.45
5745783-6	25	Receptacle	A	42K8782	6.83	6.55
5745783-5	25	Receptacle	B	42K7407	4.50	4.12
5745784-6	37	Receptacle	A	16M3338	12.60	9.99

FRONT METAL, TIN-PLATED SHELL — 0.318″ (8.08mm) MOUNT CONNECTORS WITH STANDARD MOUNTING HOLES AND BOARDLOCKS

5747840-2	9	Plug	A	89K0408	2.69	2.62
5747842-2	25	Plug	A	42K7474	9.10	8.49
5747844-2	9	Receptacle	A	42K7476	3.60	3.47
5747846-2	25	Receptacle	A	42K7483	5.45	5.24

FRONT METAL, TIN-PLATED SHELL — 0.318″ (8.08mm) MOUNT CONNECTORS WITH THREADED INSERTS AND BOARDLOCKS

5747840-4	9	Plug	A	42K7471	3.00	2.88
5747840-3	9	Plug	B	42K7470	2.06	1.87
5747841-4	15	Plug	A	37K7193	4.32	4.15
5747841-3	15	Plug	B	42K8802	5.21	5.00
5747842-4	25	Plug	A	42K7475	5.12	4.97
5747842-3	25	Plug	B	42K8803	3.28	3.20
5747843-4	37	Plug	A	42K8804	6.57	6.15
5747844-4	9	Receptacle	A	24K6954	3.49	3.27
5747844-3	9	Receptacle	B	42K7477	3.81	3.67
5747845-4	15	Receptacle	A	42K7480	5.35	5.14
5747845-3	15	Receptacle	B	42K7479	5.42	5.20
5747846-4	25	Receptacle	A	42K7485	5.38	5.16
5747846-3	25	Receptacle	B	42K7484	6.93	6.70
5747847-4	37	Receptacle	A	42K7487	7.27	6.97

FRONT METAL, TIN-PLATED SHELL — 0.318″ (8.08mm) MOUNT CONNECTORS WITH FIXED FEMALE SCREWLOCKS AND BOARDLOCKS

5747840-6	9	Plug	A	42K7472	4.12	3.96
5747840-5	9	Plug	B	42K8800	2.83	2.72
5747841-6	15	Plug	A	42K7473	4.11	3.87
5747842-6	25	Plug	A	24K3848	6.00	5.77
5747843-6	37	Plug	A	42K8805	14.23	12.94
5747844-6	9	Receptacle	A	24K3845	2.70	2.55
5747844-5	9	Receptacle	A	42K7478	3.69	3.55
5747845-6	15	Receptacle	A	42K7482	6.34	6.08
5747845-5	15	Receptacle	B	42K7481	4.90	4.71
5747846-6	25	Receptacle	A	24K3849	5.44	5.22
5747846-5	25	Receptacle	B	42K7486	4.88	4.69
5747847-6	37	Receptacle	A	42K8806	6.60	6.28

FRONT METAL, TIN-PLATED SHELL — 0.318″ (8.08mm) MOUNT CONNECTORS WITH THREADED INSERTS AND BOARDLOCKS - HIGH TEMP HOUSINGS

5788792-1	9	Plug	A	42K7588	3.70	3.56
5788792-2	9	Plug	B	42K7589	3.34	3.21
5788794-1	25	Plug	A	42K7591	5.71	5.44
5788796-1	9	Receptacle	A	42K7593	3.66	3.52
5788796-3	9	Receptacle	A	42K7595	3.37	3.23

FRONT METAL, TIN-PLATED SHELL — .0.318″ (8.08mm) MOUNT CONNECTORS WITH FIXED FEMALE SCREWLOCKS AND BOARDLOCKS - HIGH TEMP HOUSINGS

5788793-1	9	Plug	A	42K7590	3.65	3.54
5788795-1	25	Plug	A	42K7592	15.34	14.75
5788797-1	9	Receptacle	A	42K7596	2.99	2.74
5788801-1	25	Receptacle	A	42K7601	5.68	5.20

FULL METAL, TIN-PLATED SHELL — 0.454″ (11.53mm) MOUNT CONNECTORS WITH MOUNTING SCREWS WITHOUT BOARDLOCKS

Mfg. Part No.	Positions	Gender	Plating	Stock No.	Price Each 1-9	Price Each 10-49
5745434-8	9	Plug	A	42K7399	13.73	13.05
5745436-3	25	Plug	A	12P8846	22.51	20.32

FULL METAL, TIN-PLATED SHELL — 0.545″ (13.84mm) MOUNT CONNECTORS WITH MOUNTING SCREWS WITHOUT BOARDLOCKS

5745352-4	15	Plug	A	99M1032	19.53	17.63
5745355-4	50	Plug	A	42K7392	33.66	30.40
5745112-2	9	Receptacle	A	83K8900	15.93	14.98
5745114-2	25	Receptacle	A	52M9455	23.25	21.00
5745116-1	50	Receptacle	A	97M4715	34.21	30.88
5745116-2	50	Receptacle	A	42K7379	31.73	28.65

FULL METAL, TIN-PLATED SHELL — 0.545″ (13.84mm) MOUNT CONNECTORS WITH FEMALE SCREWLOCKS WITHOUT BOARDLOCKS

5747197-4	9	Plug	A	13P0584	16.00	14.86
5747497-4	50	Plug	A	42K7466	23.62	21.33
5745536-2	25	Receptacle	A	42K7402	25.53	24.24
5747193-1	50	Receptacle	B	42K7439	27.27	25.89

CONTINUED

AMPLIMITE HD-20 RIGHT ANGLE PC MOUNT D-SUB CONNECTORS (CONT.)

FRONT METAL, TIN-PLATED SHELL — 0.590″ (14.99mm) MOUNT CONNECTORS WITH THREADED INSERTS AND WITHOUT BOARDLOCKS

Mfg. Part No.	Positions	Gender	Plating	Stock No.	Price Each 1-9	Price Each 10-49
5745994-4	25	Plug	A	16M3343	18.27	16.97
5745988-4	9	Receptacle	A	42K7420	16.09	14.62
5745984-4	15	Receptacle	A	42M9873	16.57	15.06

FRONT METAL, TIN-PLATED SHELL — 0.590″ (14.99mm) MOUNT CONNECTORS WITH FEMALE SCREWLOCKS AND BOARDLOCKS

5747832-4	9	Plug	A	42K8792	5.69	5.21
5747833-4	15	Plug	A	42K8793	8.16	7.81
5747834-4	25	Plug	A	42K8794	7.81	7.28
5747836-4	9	Receptacle	A	42K8795	6.00	5.76
5747837-4	15	Receptacle	A	42K8797	5.87	5.75
5747838-4	25	Receptacle	A	42K8799	6.00	5.61

FRONT METAL, TIN-PLATED SHELL — 0.590″ (14.99mm) MOUNT CONNECTORS WITH FEMALE SCREWLOCKS AND BOARDLOCKS

5747836-6	9	Receptacle	A	42K8796	8.18	6.81

AMPLIMITE 2000 FRONT METAL, TIN-PLATED SHELL —0.318″ (8.08mm) MOUNT WITH FIXED FEMALE SCREWLOCKS AND BOARDLOCKS

1734354-1	9	Receptacle	B	16M2768	1.60	1.43
1734354-2	9	Receptacle	B	60M5285	2.39	2.15
1734349-1	25	Receptacle	B	73K1614	1.44	1.33

AMPLIMITE 2000 FRONT METAL, TIN-PLATED SHELL —0.318″ (8.08mm) MOUNT WITH THREADED INSERTS AND BOARDLOCKS

1734348-1	9	Receptacle	B	16M2765	0.81	0.65
1734355-1	15	Receptacle	B	16M3873	4.57	3.80
1734350-1	25	Receptacle	B	16M2766	1.45	1.32

(6036)

AMPLIMITE HD-20 STRAIGHT POSTED D-SUB CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Front Metal Shells for EMI/RFI Shielding
- Thermoplastic Housing
- UL Recognized, CSA Certified

Receptacle

Board mount, straight subminiature D connectors. Brass pin and phosphor bronze socket contacts are duplex plated in **"A"** 30μ″ gold or **"B"** gold flash on the mating end and tin-lead plated on the post tail end with the entire contact underplated nickel. Thermoplastic housing rated UL 94V-0. 0.125″ post tail length is recommended for board thickness of 0.062″ - 0.093″ max. 0.170″ and 0.188″ post tail length is recommended for board thickness of 0.093″ - 0.125″ max.

FULL METAL SHELL STRAIGHT POSTED CONNECTORS - WITH 0.120 (3.05) MOUNTING HOLES

Mfg. Part No.	Positions	Mfg. Part No.	Plating	Post Length	Stock No.	Price Each 1-9	Price Each 10-49
5745182-2*	9	Plug	B	0.125″ (3.18)	42K7382	6.89	6.61
5745410-1	9	Plug	A	0.125″ (3.18)	42K7396	7.85	7.53
5745410-7	9	Plug	A	0.188″ (4.78)	42K7397	11.02	9.93
5745413-1	37	Plug	A	0.125″ (3.18)	16M3328	18.98	17.63
5745414-1	50	Plug	A	0.125″ (3.18)	16M3329	20.53	18.60
5745183-1	9	Receptacle	A	0.125″ (3.18)	42K7383	7.63	7.37
5745189-1	37	Receptacle	A	0.125″ (3.18)	16M3325	15.42	13.58
5745191-1	50	Receptacle	A	0.125″ (3.18)	42K7391	20.47	18.54

FULL METAL SHELL STRAIGHT POSTED CONNECTORS - WITH CLINCH NUTS

749014-1	9	Plug	A	0.125″ (3.18)	16H5355	6.57	...
5747190-2	9	Receptacle	A	0.125″ (3.18)	42K7438	9.10	8.49
5747190-1	9	Receptacle	B	0.125″ (3.18)	42K7437	9.38	8.51
5745886-1	25	Receptacle	A	0.125″ (3.18)	42K7409	14.61	13.17

FRONT METAL SHELL STRAIGHT POSTED CONNECTORS - WITH STANDARD MOUNTING HOLES

5747871-2	9	Plug	A	0.125″ (3.18)	42K7488	5.38	5.16
5747871-4	9	Plug	A	0.170″ (4.32)	46P5107	5.59	5.38
5747872-4	15	Plug	A	0.170″ (4.32)	42K7489	7.26	6.60
5745968-2	25	Plug	A	0.125″ (3.18)	42K7416	9.50	9.22
5745968-4	25	Plug	A	0.170″ (4.32)	42K7417	7.23	6.93
5747375-2	37	Plug	A	0.125″ (3.18)	42K7448	14.35	13.54
5747150-2	9	Receptacle	A	0.125″ (3.18)	42K7434	5.30	5.09
5747150-4	9	Receptacle	A	0.170″ (4.32)	16M3346	6.67	6.40
5747299-2	15	Receptacle	A	0.125″ (3.18)	42K8791	6.14	5.90
5745967-2	25	Receptacle	A	0.125″ (3.18)	42K7413	7.34	7.04
5745967-4	25	Receptacle	A	0.170″ (4.32)	42K7414	8.30	7.95
5747301-2	37	Receptacle	A	0.125″ (3.18)	42K7446	15.90	14.46

FRONT METAL SHELL STRAIGHT POSTED CONNECTORS - WITH 4-40 THREADED INSERTS

5747871-8	9	Plug	A	0.125″ (3.18)	42K8807	5.80	5.57
5747872-8	15	Plug	A	0.125″ (3.18)	83K3130	7.08	6.79
5745968-8	25	Plug	A	0.125″ (3.18)	42K7419	8.24	7.73

CONTINUED

D-SUB – PC BOARD MOUNT CONNECTORS

AMPLIMITE HD-20 STRAIGHT POSTED D-SUB CONNECTORS (CONT.)

FRONT METAL SHELL STRAIGHT POSTED CONNECTORS - WITH 4-40 THREADED INSERTS

Mfg. Part No.	Positions	Mfg. Part No.	Plating	Post Length	Stock No.	Price Each 1-9	Price Each 10-49
● 5745968-7	25	Plug	B	0.125″ (3.18)	42K7418	7.97	7.64
● 5747375-8	37	Plug	A	0.125″ (3.18)	16M3354	17.50	16.26
● 5747150-8	9	Receptacle	A	0.125″ (3.18)	42K8786	5.79	5.56
● 5747150-7	9	Receptacle	B	0.125″ (3.18)	42K7435	4.05	3.90
● 5747150-9	9	Receptacle	B	0.170″ (4.32)	42K7436	5.92	5.55
● 5747299-8	15	Receptacle	A	0.125″ (3.18)	42K7445	5.87	5.34
● 5747299-7	15	Receptacle	B	0.125″ (3.18)	71M0340	6.09	5.72
● 5745967-8	25	Receptacle	A	0.125″ (3.18)	42K7415	9.22	8.83
● 5745967-7	25	Receptacle	B	0.125″ (3.18)	42K8785	7.27	6.97
● 1-5745967-0	25	Receptacle	A	0.170″ (4.32)	42K6535	10.37	9.91
● 5747301-8	37	Receptacle	A	0.125″ (3.18)	16M1980	17.09	15.88
● 5747301-7	37	Receptacle	B *	0.125″ (3.18)	42K7447	14.74	13.40

FRONT METAL SHELL STRAIGHT POSTED CONNECTORS - WITH PCB RETENTION 4-40 THREADED INSERTS

● 2-5748003-0	9	Plug	A	0.125″ (3.18)	42K6828	5.96	5.72
● 2-5747704-0	25	Plug	A	0.125″ (3.18)	42K6822	6.19	5.89
● 2-5747706-0	9	Receptacle	A	0.125″ (3.18)	42K6824	5.63	5.40
● 2-5747707-0	15	Receptacle	A	0.125″ (3.18)	42K6825	5.99	5.63
● 2-5747708-0	25	Receptacle	A	0.125″ (3.18)	42K6826	7.45	7.09

FRONT METAL SHELL STRAIGHT POSTED CONNECTORS - WITH FIXED FEMALE SCREWLOCKS

● 1-5747871-4	9	Plug	A	0.125″ (3.18)	42K8646	6.49	6.23
● 1-5747871-3	9	Plug	B	0.125″ (3.18)	42K6547	5.63	5.41
● 1-5747871-6	9	Plug	A	0.170″ (4.32)	42K6548	5.96	5.72
● 1-5747872-6	15	Plug	A	0.170″ (4.32)	42K6549	7.45	7.14
● 1-5745968-4	25	Plug	A	0.125″ (3.18)	42K6538	8.10	7.83
● 1-5745968-3	25	Plug	B	0.125″ (3.18)	48M6130	7.94	7.62
● 1-5745968-6	25	Plug	A	0.170″ (4.32)	42K6539	9.32	8.91
● 1-5747150-4	9	Receptacle	A	0.125″ (3.18)	42K6541	6.64	6.36
● 1-5747150-3	9	Receptacle	B	0.125″ (3.18)	42K6540	5.56	5.34
● 1-5747150-6	9	Receptacle	A	0.170″ (4.32)	42K6542	6.53	6.27
● 1-5747299-4	15	Receptacle	A	0.125″ (3.18)	42K6543	7.53	7.22
● 1-5747299-6	15	Receptacle	A	0.170″ (4.32)	42K6544	7.31	7.01
● 1-5745967-4	25	Receptacle	A	0.125″ (3.18)	42K6536	4.23	4.06
● 1-5745967-6	25	Receptacle	A	0.170″ (4.32)	42K6537	7.26	7.05
● 1-5747301-4	37	Receptacle	A	0.125″ (3.18)	42K6545	24.28	20.36
● 1-5747301-6	37	Receptacle	A	0.170″ (4.32)	42K6546	20.74	19.47

FRONT METAL SHELL STRAIGHT POSTED CONNECTORS - WITH PCB RETENTION 4-40 SCREWLOCKS

● 5748026-1	15	Plug	A	0.125″ (3.18)	42K7492	10.85	9.99
● 5748027-1	25	Plug	A	0.125″ (3.18)	42K7493	10.35	9.90
● 5787686-1	37	Plug	A	0.125″ (3.18)	30M9517	11.38	10.34
● 5750678-1	9	Receptacle	A	0.125″ (3.18)	42K7545	9.13	8.74
● 5787683-1	15	Receptacle	A	0.125″ (3.18)	42K7583	10.21	9.77
● 5748612-1	25	Receptacle	A	0.125″ (3.18)	40P9845	11.09	10.60
● 5787685-1	37	Receptacle	A	0.125″ (3.18)	42K7584	19.05	17.69

FRONT METAL SHELL, STRAIGHT POSTED CONNECTORS WITH ACTION PIN CONTACTS - WITH THREADED INSERTS

786830-1	9	Plug	A	0.228″ (5.79)	16H5836	20.65	17.32
● 5786830-1	9	Plug	A	0.228″ (5.79)	07R7931	14.65	13.32
749892-1	50	Plug	B	0.228″ (5.79)	34B1753	74.96	62.87
● 5747090-2	9	Receptacle	A	0.228″ (5.79)	42K7430	9.78	9.35
● 5747144-2	50	Receptacle	A	0.228″ (5.79)	19R3060	33.16	29.93

FRONT METAL SHELL, STRAIGHT POSTED CONNECTORS WITH ACTION PIN CONTACTS - WITH FIXED FEMALE SCREWLOCKS

● 5748146-6	25	Plug	A	0.228″ (5.79)	16M3357	20.05	18.11
● 5745928-2	25	Receptacle	A	0.228″ (5.79)	42K7412	17.25	16.15

* Without Grounding Indents
(75436)

AMPLIMITE HD-20 ALL PLASTIC D-SUB CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

All plastic 94V-0 rated thermoplastic PC board mount connectors available in right-angle or straight versions. Brass pin and phosphor bronze socket contacts are duplex-plated on mating end with **"A"** 30μ″ gold or **"B"** gold flash.

STRAIGHT POSTED CONNECTORS - WITH 0.120 (3.05) MOUNTING HOLES, WITH BOARDLOCKS

Mfg. Part No.	Positions	Gender	Plating	PC Tail Length	Stock No.	Price Each 1-9
● 5208006-2	9	Plug	A	0.125″ (3.18)	42K7088	4.08
● 5208006-1	9	Plug	B	0.125″ (3.18)	19R1545	4.24
● 5208007-2	15	Plug	A	0.125″ (3.18)	42K7089	5.73
● 5208008-1	25	Plug	B	0.125″ (3.18)	19R1546	6.31
● 5208009-1	37	Plug	B	0.125″ (3.18)	42K7091	12.03
● 5207826-3	9	Receptacle	B	0.125″ (3.18)	42K7082	4.20

➤ CONTINUED ➤

AMPLIMITE HD-20 ALL PLASTIC D-SUB CONNECTORS (CONT.)

Mfg. Part No.	Positions	Gender	Plating	PC Tail Length	Stock No.	Price Each 1-9
● 5207827-4	15	Receptacle	A	0.125″ (3.18)	19R1544	6.11
● 5207828-4	25	Receptacle	A	0.125″ (3.18)	42K7084	6.12
● 5207829-4	37	Receptacle	A	0.125″ (3.18)	42K7085	12.47

STRAIGHT POSTED CONNECTORS - WITH THREADED INSERTS, WITH BOARDLOCKS

● 5745051-1	9	Plug	B	0.125″ (3.18)	19R2999	4.01
● 5207841-4	9	Receptacle	A	0.125″ (3.18)	42K7087	6.21
● 5207841-3	9	Receptacle	B	0.125″ (3.18)	42K7086	4.82
● 5745057-3	15	Receptacle	B	0.125″ (3.18)	07M8407	10.60
● 5745058-4	25	Receptacle	A	0.125″ (3.18)	06R3645	11.58
● 5745059-4	37	Receptacle	A	0.125″ (3.18)	19R3005	14.76

STRAIGHT POSTED PLUGS CONNECTORS - WITH FIXED FEMALE SCREWLOCKS, WITH BOARDLOCKS

● 5745071-2	9	Plug	A	0.125″ (3.18)	42K7368	6.88
● 5745071-1	9	Plug	B	0.125″ (3.18)	42K7367	6.26
● 5745071-4	9	Plug	A	0.170″ (4.32)	42K7369	6.96
● 5745072-4	15	Plug	A	0.170″ (4.32)	07R7926	10.01
● 5745073-2	25	Plug	A	0.125″ (3.18)	73K1521	8.06
● 5745073-1	25	Plug	B	0.125″ (3.18)	42K7370	6.33
● 5745074-4	37	Plug	A	0.170″ (4.32)	19R3008	15.28
● 5745076-4	9	Receptacle	A	0.125″ (3.18)	42K7373	5.97
● 5745076-3	9	Receptacle	B	0.125″ (3.18)	42K7372	5.25
● 5745076-6	9	Receptacle	A	0.170″ (4.32)	42K8776	6.72
● 5745077-4	15	Receptacle	A	0.125″ (3.18)	42K7374	10.40
● 5745077-6	15	Receptacle	A	0.170″ (4.32)	42K7375	7.49
● 5745078-4	25	Receptacle	A	0.125″ (3.18)	42K7377	10.07
● 5745078-3	25	Receptacle	B	0.125″ (3.18)	42K7376	6.91
● 5745078-6	25	Receptacle	A	0.170″ (4.32)	42K8777	8.05
● 5745079-4	37	Receptacle	A	0.125″ (3.18)	42K7378	18.39
● 5745080-4	50	Receptacle	A	0.125″ (3.18)	34M2655	23.79
● 5745080-6	50	Receptacle	A	0.170″ (4.32)	19R3012	27.09

0.318″ (8.08mm) MOUNT RIGHT ANGLE POSTED CONNECTORS - WITH THREADED INSERTS, WITH BOARDLOCKS

● 5748904-1	15	Plug	A	0.125″ (3.18)	06M4955	11.99
● 5748901-1	25	Receptacle	A	0.125″ (3.18)	42K7506	15.60

0.318″ (8.08mm) MOUNT RIGHT ANGLE POSTED CONNECTORS - WITH FIXED FEMALE SCREWLOCKS, WITH BOARDLOCKS

● 5748979-1	9	Receptacle	A	0.125″ (3.18)	40P9846	9.40

0.318″ (8.08mm) MOUNT RIGHT ANGLE POSTED CONNECTORS - WITH THREADED INSERTS, WITHOUT BOARDLOCKS

● 5748865-3	25	Plug	B		19R3086	9.02
● 5745394-2	9	Receptacle	A	0.125″ (3.18)	42K7393	6.31

0.318″ (8.08mm) MOUNT RIGHT ANGLE POSTED CONNECTORS - WITH FIXED FEMALE SCREWLOCKS, WITHOUT BOARDLOCKS

● 5745395-2	9	Receptacle	A	0.125″ (3.18)	42K7394	6.29
● 5745396-2	15	Receptacle	A	0.125″ (3.18)	42K7395	8.19

0.318″ (8.08mm) MOUNT RIGHT ANGLE POSTED CONNECTORS - WITH 0.125 (3.18) MOUNTING HOLES, WITHOUT BOARDLOCKS

● 5745131-1	9	Receptacle	B	0.125″ (3.18)	42K7380	6.58

0.590″ (14.99mm) MOUNT RIGHT ANGLE POSTED CONNECTORS - WITH THREADED INSERTS, WITHOUT BOARDLOCKS

● 5747467-4	9	Plug	A	0.125″ (3.18)	42K7463	6.79
● 5748873-1	25	Plug	A	0.125″ (3.18)	42K7505	13.52
● 5747459-4	9	Receptacle	A	0.125″ (3.18)	42K7451	7.78
● 5747459-3	9	Receptacle	B	0.125″ (3.18)	30M2123	5.56
● 5747460-3	15	Receptacle	B	0.125″ (3.18)	42K7454	13.75

0.590″ (14.99mm) MOUNT RIGHT ANGLE POSTED CONNECTORS - WITH FIXED FEMALE SCREWLOCKS, WITHOUT BOARDLOCKS

● 5748952-1	15	Plug	A	0.125″ (3.18)	42K7507	22.51
● 5747459-6	9	Receptacle	A	0.125″ (3.18)	42K7453	7.68
● 5747460-5	15	Receptacle	B	0.125″ (3.18)	15P0009	10.12
● 5747461-6	25	Receptacle	A	0.125″ (3.18)	42K7459	12.52
● 5747461-5	25	Receptacle	B	0.125″ (3.18)	42K7458	12.39

0.590″ (14.99mm) MOUNT RIGHT ANGLE POSTED CONNECTORS - WITH 0.125 (3.18) MOUNTING HOLES, WITHOUT BOARDLOCKS

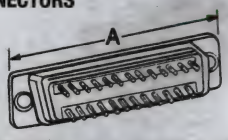
● 5747467-1	9	Plug	B	0.125″ (3.18)	42K7462	6.64
● 5747470-2	37	Plug	A	0.125″ (3.18)	42K7465	15.93
● 5747461-1	25	Receptacle	B	0.125″ (3.18)	42K7455	8.19
● 5206973-1	50	Receptacle	A	0.125″ (3.18)	16M3203	36.84

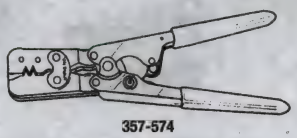
(116690)

17RR SERIES REAR-RELEASE CRIMP D-SUB CONNECTORS

RoHS Compliant Available

Amphenol Commercial Products





357-574

Shrouded contact and crimp protect against shorting or arcing. Meet EIA standard RS232C-RS449. 2-piece, black thermoplastic insulator, rated UL 94V-0. Voltage rating: 500VAC @ 5 amps. Wire types: 20 to 28 AWG. Temperature range: –55°C to +105°C. Shell plating: tin over nickel. Plugs feature grounding indents on front shell. Polarization by "D" shape. *Order stamped and formed contacts and termination tools separately below.*

PLUGS

Mfg. Part No.	Contacts	Dimension A	Stock No.	Price Each 1-9	Price Each 10-49
L777RRE09P	9	1.213" (30.81)	01M2926	0.46	0.36
L777RRA15P	15	1.541" (39.14)	01M2907	0.69	0.61
L777-RR-B25P	25	2.088" (53.04)	88K3064	0.54	0.43
L777RRC37P	37	2.729" (69.32)	01M2916	1.53	1.19
RECEPTACLES					
L177RRE09S	9	1.213" (30.81)	01M0374	0.57	0.56
L177RRA15S	15	1.541" (39.14)	01M0354	0.64	0.57
L177RRB25S	25	2.088" (53.04)	01M0359	0.56	0.45
L177RRC37S	37	2.729" (69.32)	01M0364	1.53	1.19

REMOVABLE STAMPED AND FORMED CONTACTS

Plating: 10μ" gold on mating end: gold flash on termination end. *Go online or call for plating availability.* **Sold in packages of 100.**

Mfg. Part No.	Description	AWG	Stock No.	Price per Pkg. 1-4	Price per Pkg. 5-9
L17RRD1F01100	Female	24AWG to 20AWG	88K3017	10.27	8.96
L17RRD2F01100*	Female	28AWG to 24AWG	01M5721	0.09	0.07
L17RRD2M01100	Male	28AWG to 24AWG	46M5854	15.66	12.62

***Sold individually**

D-SUB TERMINATION TOOLING

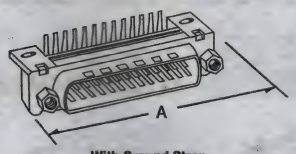
Mfg. Part No.	Description	Stock No.	Price Each
357-574	Hand Crimp Tool	38F928	400.63
356-214/METAL	Removal Tool	38F915	34.34

(8254)

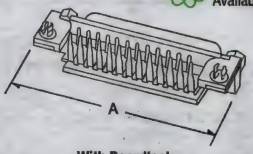
617 SERIES PC BOARD MOUNT RIGHT-ANGLE D-SUB CONNECTORS WITH FRONT METAL SHELL

Amphenol Commercial Products

RoHS Compliant Available



With Ground Strap



With Boardlock

Front tin-plated steel shell helps reduce EMI/RFI emissions. Precision formed copper alloy contacts plated with 30 μ" gold over nickel in engagement area, tin/lead over nickel in end area. **E** in **mfg. part no**. denotes RoHS compliant (contacts are tin over nickel in end area). Current rating: 5 A. Voltage rating: 100 VAC. Glass-filled thermoplastic dielectric, rated UL 94V-0. Plugs feature grounding indents. Front mounting holes are #4-40 threaded. **617-A series** D-Subs have 0.120" (3.05 mm) diameter mounting hole with wrap-around ground strap and 0.318" (8.08 mm) footprint. **617-C series** D-Subs have split arrowhead boardlock and 0.318" (8.08 mm) footprint.

617-A SERIES PLUGS WITH GROUND STRAP

Mfg. Part No.	Contacts	Dim. A	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49	Price Each 50-99
6E17A009PAJ121	9	1.221"	39M3152	3.68	2.86	2.63	2.56
617-A037P-AJ121	37	2.730"	50F1922	3.37	2.63	2.41	2.34
617-A SERIES SOCKETS WITH GROUND STRAP							
6E17A015SAJ120	15	1.539"	04M3289	6.66	5.17	4.76	4.62
617-C SERIES PLUGS WITH BOARDLOCKS							
6E17C009PAJ121	9	1.221"	01M3519	4.52	4.05	3.73	3.35
6E17C015PAJ121	15	1.539"	01M3524	4.42	4.27	3.71	3.33
6E17C025PAJ121	25	2.088"	01M3528	8.67	6.73	6.20	6.02
6E17C037PAJ121	37	2.730"	01M3535	13.16	10.23	9.41	9.14
617-C SERIES SOCKETS WITH BOARDLOCKS							
6E17C009SAJ120	9	1.221"	01M3522	3.83	3.44	3.10	2.78
6E17C015SAJ120	15	1.539"	01M3526	5.71	4.90	4.78	4.34
6E17C025SAJ120	25	2.088"	01M3532	8.55	6.64	6.11	5.93
6E17C037SAJ120	37	2.730"	01M3537	12.37	9.61	8.84	8.59

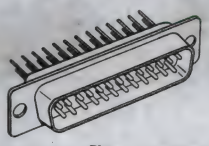
(8196)

BASIC D COMMERCIAL GRADE, METAL SHELL D-SUBS WITH WIRE WRAP TERMINALS

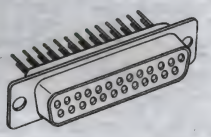
RoHS Compliant Available

CINCH

Plug



Plug



Socket

Machined copper alloy contacts feature gold flash over nickel plating. Zinc-plated steel shell with yellow chromate finish. Two-piece glass-filled polyester insulator material, rated UL94V-0. Operating temperature: –65°C to +125°C. Discrete cable to panel. UL recognized, CSA certified. Available with 0.375" tail length for 2 wraps. Also available with 0.585" tail for 3 wrap tail lengths. *Order D-sub accessories on page 877.*

Mfg. Part No.	Description	Contacts	Stock No.	Price Each 1-24
DEH-9S-F179	Socket	9	11M3002	11.03
DAH-15P-F179	Plug	15	11M2951	12.38
DBH-25P-F179	Plug	25	11M2964	9.92
DBH-25S-F179	Socket	25	11M2967	17.72

SERIES 1 HIGH-RELIABILITY, METAL SHELL D-SUBS WITH SOLDER CUP TERMINALS

Insulator is glass-filled diallyl phthalate, UL94V-0 rated; brass plug contacts or phosphor-bronze socket contacts are 30μ" gold-plated. Also available with 4-40 clinch nut **(suffix E)** or dual float bushings **(suffix Y)** added to the mfg. part no. Tin-plated shells available; *go online or call.*

Mfg. Part No.	Description	Contacts	Stock No.	Price Each 1-9
DEM9P	Plug	9	43F233	9.50
DEM9S	Socket	9	43F234	13.53
DAM15P	Plug	15	43F235	13.78
DAM15S	Socket	15	43F236	19.43
DBM25P	Plug	25	43F238	19.13
DBM25S	Socket	25	43F239	29.87

(10025)

HIGH DENSITY D-SUBMINIATURE CONNECTORS

RoHS Compliant Available

HARTING

- High Density
- Stamped Solder Pins
- Right Angle with Grounding Board Locks
- Copper Alloy Contacts
- Plated Steel Shell
- UL Recognized

HIGH DENSITY D-SUB WITH 4-40 UNC FITTED SCREW LOCKS

Mfg. Part No.	No. of Contacts	Gender	Plating *	Stock No.	Price Each 1-9
09 56 162 5813	15	Plug	S4	44J4584	6.64
09 56 262 5813	26	Plug	S4	44J4604	8.79
09 56 262 7813	26	Plug	PL 3	44J4606	6.98
09 56 152 5613	15	Receptacle	S4	44J4574	4.84
09 56 252 5613	26	Receptacle	S4	44J4594	7.05
09 56 452 5613	62	Receptacle	S4	44J4638	12.76
09 56 152 7613	15	Receptacle	PL 3	44J4576	3.88
09 56 552 7613	78	Receptacle	PL 3	44J4662	21.70
HIGH DENSITY D-SUB WITH 4-40 UNC FLANGE THREAD					
09 56 162 5812	15	Plug	S4	44J4583	6.13
09 56 162 7812	15	Plug	PL 3	96M1879	5.16
09 56 262 7812	26	Plug	PL 3	44J4605	7.47
09 56 362 7812	44	Plug	PL 3	44J4627	12.15
09 56 462 7812	62	Plug	PL 3	44J4649	13.96
09 56 152 5612	15	Receptacle	S4	44J4573	4.75
09 56 352 5612	44	Receptacle	S4	44J4615	11.23
09 56 452 5612	62	Receptacle	S4	44J4637	13.77
09 56 552 5612	78	Receptacle	S4	44J4659	26.95
09 56 152 7612	15	Receptacle	PL 3	44J4575	3.55
09 56 252 7612	26	Receptacle	PL 3	44J4595	6.45
09 56 352 7612	44	Receptacle	PL 3	44J4617	8.89

* Performance level 3, 50 mating cycles, no gas test; S4, plating ≥ 30u" (0.76um) Gold

(114889)

COMPACT D SERIES HIGH DENSITY PC BOARD SOLDER D-SUB CONNECTORS

RoHS Compliant Available

FCI

COMPACT D Series D Subminiature connectors have been developed to answer the increasing need for higher density packaging.

Mfg. Part No.	No. of Contacts	Gender	Tail Length	Hardware	Stock No.	Price Each 1-9	Price Each 10-24
ICD15S13E6GV00LF	15	Receptacle	3.18 mm	4-40 Screwlock	22M0699	2.07	1.95
ICD15S13E6GX00LF	15	Receptacle	3.18 mm	4-40 Insert	62K4729	2.95	2.71

(134264)

D-SUB – PC BOARD MOUNT CONNECTORS

DELTA D SERIES PC BOARD SOLDER D-SUB CONNECTORS

RoHS Compliant Available

FCI

The **DELTA D** series has been developed to meet the current requirements of industry. The **DELTA D** series has angled terminations of different lengths, stamped contacts and is available in 9, 15, 25, and 37 contact arrangements. Meets European standards and US Std (HE 5, DIN 41652 and MIL-DTL 24308).

Mfg. Part No.	No. of Contacts	Tail Length	Hardware	Stock No.	Price Each 1-9	Price Each 10-24
DELTA D STRAIGHT SOLDER PLUGS						
● D09P24A4GV00LF	9	2.90 mm	M3 Insert	62K4113	3.02	2.78
● D25P24A4GV00LF	25	2.90 mm	M3 Insert	91K8241	3.41	3.13
● D37P24A4GV00LF	37	2.90 mm	M3 Insert	91K8650	4.91	4.51
DELTA D STRAIGHT SOLDER RECEPTACLES						
● D09S24A4GV00LF	9	2.90 mm	M3 Insert	62K4177	3.08	2.83
● D15S24A4GV00LF	15	2.90 mm	M3 Insert	62K4283	2.71	2.49
● D25S24A4GV00LF	25	2.90 mm	M3 Insert	62K4386	3.07	2.82
DELTA D RIGHT ANGLE SOLDER PLUGS						
● D09P13A4GX00LF	9	2.90 mm	4-40 Insert	62K4106	2.54	2.34
● D25P13A4GL00LF	25	2.90 mm	M3 Insert	62K4335	3.73	3.43
● D09P33E4GV00LF	9	3.18 mm	4-40 Screwlock	74K5070	2.83	2.60
● D25P33E4GV00LF	25	3.18 mm	4-40 Screwlock	68K3501	3.36	3.09
● D09P33E4GX00LF	9	3.18 mm	4-40 Insert	62K4135	2.83	2.60
● D25P33E4GX00LF	25	3.18 mm	4-40 Insert	62K4356	3.71	3.41
DELTA D RIGHT ANGLE SOLDER RECEPTACLES						
● D09S13A4GL00LF	9	2.90 mm	M3 Insert	62K4169	2.65	2.43
● D25S13A4GL00LF	25	2.90 mm	M3 Insert	62K4381	3.19	2.93
● D09S13A4GV00LF	9	2.90 mm	4-40 Screwlock	62K4170	2.74	2.52
● D09S33E4GV00LF	9	3.18 mm	4-40 Screwlock	62K4199	2.83	2.60
● D09S33E4GX00LF	9	3.18 mm	4-40 Insert	62K4200	2.83	2.60

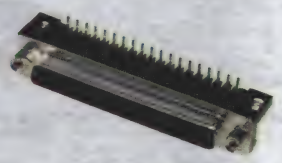
(115561)

RIGHT-ANGLE PC BOARD D-SUB CONNECTORS

RoHS Compliant Available

multicomp

Plug



Receptacle

2-piece, glass-filled thermoplastic housing. Steel shell with tin plating. Brass alloy contacts with gold plating. Current rating: 5 A. Insulator resistance: 1000 MΩ at 500 VDC. 0.318″ setback. Operating temperature range: –55°C to +105°C.

Mfg. Part No.	Description	Pins	Stock No.	Price Each 1-99	Price Each 100-249	Price Each 250-499	Price Each 500-999
● SPC15394	Plug	9	79K4977	5.76	4.62	4.23	3.88
● SPC15383	Receptacle	9	79K4966	3.95	3.31	2.64	2.22
● SPC15271	Plug	15	79K4868	4.55	3.79	3.05	2.53
● SPC15283	Receptacle	15	79K4880	4.21	3.54	2.82	2.38
● SPC15315	Plug	25	79K4909	12.97	10.62	9.76	9.02
● SPC15340	Receptacle	25	79K4932	12.97	10.62	9.76	9.02
● SPC15173	Plug	37	79K4777	18.48	15.12	13.90	12.84
● SPC15174	Receptacle	37	79K4778	18.48	15.12	13.90	12.84

(8872)

element14 COMMUNITY

Get inspired, collaborate, design, research, ask experts questions.

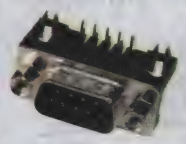
element14.com

(196546)

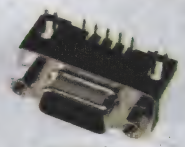
RIGHT-ANGLE SNAP-IN PC BOARD D-SUB CONNECTORS

RoHS Compliant Available

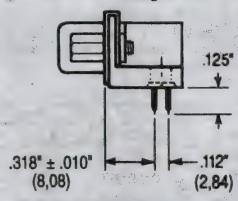
multicomp



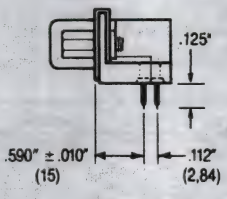
Plug



Receptacle



0.318" Setback



0.590" Setback

Steel shell with tin plating. PBT and glass-fiber reinforced, black insulator. Brass contacts with gold plating. Working voltage: 500 VDC. Dielectric strength: 1000 V for one minute. Current rating: 5 A. Insulation resistance: 1000 MΩ @ 500 VDC. Operating temperature range: –50°C to +105°C.

Mfg. Part No.	Description	Pins	Stock No.	Price Each 1-99	Price Each 100-249	Price Each 250-499
RIGHT-ANGLE SNAP-IN PC BOARD PLUGS, 0.318″ SETBACK						
● SPC15412	Plug	9	79K4994	5.22	4.17	3.84
● SPC15215	Plug	15	79K4816	6.21	5.11	4.68
● SPC15409	Plug	25	79K4991	13.77	11.27	10.35
● SPC15261	Plug	37	79K4858	18.85	15.43	14.18
RIGHT-ANGLE SNAP-IN PC BOARD RECEPTACLES, 0.318″ SETBACK						
● SPC15457	Receptacle	9	79K5032	5.31	4.27	3.89
● SPC15281	Receptacle	15	79K4878	11.16	9.14	8.39
● SPC15348	Receptacle	25	79K4938	13.73	11.24	10.34
● SPC15325	Receptacle	37	79K4917	19.56	16.02	14.73
RIGHT-ANGLE SNAP-IN PC BOARD PLUGS, 0.590″ SETBACK						
● SPC15269	Plug	9	79K4866	6.15	5.05	4.64
● SPC15152	Plug	15	79K4761	10.71	8.77	8.06
● SPC15217	Plug	25	79K4818	15.99	13.08	12.02
● SPC15196	Plug	37	79K4799	24.51	20.06	18.43
RIGHT-ANGLE SNAP-IN PC BOARD RECEPTACLES, 0.590″ SETBACK						
● SPC15282	Receptacle	9	79K4879	6.84	5.49	5.01
● SPC15123	Receptacle	15	79K4740	13.70	11.21	10.30
● SPC15197	Receptacle	25	79K4800	20.75	16.98	15.60
● SPC15126	Receptacle	37	79K4743	30.16	24.68	22.68

(8874)

HD SERIES PC BOARD DIP TYPE D-SUB CONNECTORS

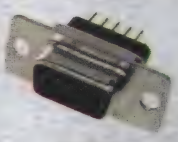
RoHS Compliant Available

multicomp

- Contact Spacing: 0.095 inches; Gold Over Nickel Plated
- Current Rating: 5 A
- Insulator Resistance: 1000 MΩ @ 300 VDC
- Operating Temperature Range: –50°C to +100°C

Glass fiber reinforced housing, rated UL 94V-0. Steel shell with tin plating.

Plug



Receptacle

Mfg. Part No.	Pins	Stock No.	Price Each 1-99	Price Each 100-249	Price Each 250-499
PLUGS					
● SPC15402	15	79K4984	6.06	4.98	4.57
● SPC15353	26	79K4943	12.28	10.05	9.24
● SPC15326	44	79K4918	18.39	15.05	13.83
● SPC15240	62	79K4838	25.75	21.18	19.44
● SPC15386	78	79K4969	34.03	27.98	25.68
RECEPTACLES					
● SPC15408	15	79K4990	4.46	3.55	3.27
● SPC15300	26	79K4894	8.87	7.26	6.67
● SPC15399	44	79K4982	13.16	10.76	9.90
● SPC15169	62	79K4773	19.99	16.35	15.03
● SPC15351	78	79K4941	24.26	19.98	18.31

(8870)

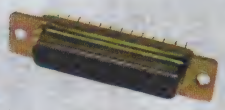
PC BOARD D-SUB CONNECTORS

RoHS Compliant Available

multicomp

Plug

Plug, Back View



Receptacle

Thermoplastic connectors intermate with corresponding contact types. 2-piece, glass-filled housing. Steel shell with tin plating. Brass contacts with gold-over-nickel plating. Current rating: 5 A. Insulation resistance: 1000 MΩ. Dielectric strength: 1kV for one minute. Working voltage: 500 VDC. Operating temperature range: –50°C to +105°C at 500 VDC.

STRAIGHT PC BOARD PLUGS

Mfg. Part No.	Pins	Stock No.	Price Each 1-99	100-249	250-499	500-999
SPC15444	9	79K5021	3.39	2.64	2.38	2.17
SPC15347	15	79K4937	4.68	3.76	3.43	3.15
SPC15426	25	79K5006	5.93	4.87	4.48	4.09
SPC15413	37	79K4995	12.29	10.06	9.26	8.54
SPC15343	50	79K4934	17.37	14.23	13.08	12.09
STRAIGHT PC BOARD RECEPTACLES						
SPC15463	9	79K5037	3.92	3.08	2.75	2.52
SPC15355	15	79K4945	6.36	5.10	4.66	4.25
SPC15439	25	79K5019	10.97	8.97	8.25	7.63
SPC15368	37	79K4954	16.33	13.38	12.30	11.36
SPC15379	50	79K4963	23.12	18.91	17.38	16.07

(8873)

MULTICOMP BRAND HD SERIES RIGHT-ANGLE PC BOARD D-SUB CONNECTORS

RoHS Compliant Available

multicomp

- Insulator Resistance: 1000 MΩ at 500 VDC
- Dielectric Strength: 1 kV for 1 Minute
- Current Rating: 5 A
- Working Voltage: 300 VDC
- Operating Tempature Range: –50°C to +100°C

Receptacle

Plug

Glass fiber reinforced housing. Tin-plated steel shell. Brass contacts with gold flash over nickel plating. For **mfg. part no. SPC15436**, current rating is 2 A and the insulator resistance is 5000 MΩ at 500 VDC.

RECEPTACLES

Mfg. Part No.	Pins	Stock No.	Price Each 1-99	100-249	250-499
SPC15430	15	79K5010	3.45	2.68	2.41
SPC15293	26	79K4888	7.55	6.18	5.69
SPC15324	44	79K4916	11.51	9.41	8.65
SPC15436	78	79K5016	31.92	26.60	21.28
PLUGS					
SPC15254	15	79K4851	4.32	3.91	3.59
SPC15237	26	79K4836	8.68	7.11	6.54
SPC15370	78	79K4955	50.59	46.34	42.48

(8871)

AMPLIMITE HDP-22 HIGH-DENSITY CRIMP SNAP-IN CONTACT CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Tin-Plated Steel Shells
- Thermoplastic Insert
- Rated UL94V-0

Plug with Grounding Indents

Receptacle

Approximately 65% higher density than **HD-20** connectors. Accept high performance, precision-formed **HDP-22** crimp, snap-in contacts, *ordered separately on this page*. Mate with any size 22D subminiature connector dimensionally complying with MIL-C-24308. *Order application tools separately on this page*. UL recognized, CSA certified.

PLUGS WITH GROUNDING INDENTS

Mfg. Part No.	Positions	Width	Stock No.	Price Each 1-9
748364-1	15	1.213″	90F5574	3.35
1658671-1	26	1.541″	42K6694	3.78
1658672-1	44	2.088″	42K6695	5.99
1658673-1	62	2.729″	42K6696	6.18
1658674-1	78	2.635″	42K6697	8.33

➤CONTINUED➤

AMPLIMITE HDP-22 HIGH-DENSITY CRIMP SNAP-IN CONTACT CONNECTORS (CONT.)

RECEPTACLES

Mfg. Part No.	Positions	Width	Stock No.	Price Each 1-9
1658681-1	15	1.213″	42K6702	3.09
1658690-1*	15	1.213″	42K6710	9.34
1658682-1	26	1.541″	42K6703	5.36
1658683-1	44	2.088″	42K6704	10.28
1658684-1	62	2.729″	16M2756	7.13
1658685-1	78	2.635″	76K0887	10.86

* With Clinch Nut

(8162)

AMPLIMITE HDP-22 HIGH-DENSITY CRIMP SNAP-IN CONTACTS

RoHS Compliant Available

TE connectivity

Authorized Distributor

PIN CONTACTS (SOLD INDIVIDUALLY)

Precision-formed, size 22 DF crimp contacts fit **HDP-22** plugs and receptacles. Brass pin contacts and phosphor bronze socket contacts available in gold or gold flash finish on mating end, tin-lead on crimp barrel, with entire contact nickel underplated. 0.040″ insulation dia. max. Wire size: 22-28 AWG. *Order application tools separately on this page.*

Mfg. Part No.	AWG	Insulation Dia.	Finish	Hand Tool	Stock No.	Price Each 1-9
1658670-2	28AWG to 22AWG	0.040″ (1.02)	30u″ Gold	90800-1	42K6690	0.25
1658670-4	28AWG to 22AWG	0.040″ (1.02)	Gold Flash	90800-1	42K6692	0.16
SOCKET CONTACTS (SOLD INDIVIDUALLY)						
1658686-2	28AWG to 22AWG	0.040″ (1.02)	30u″ Gold	90800-1	42K6706	0.23
1658686-4	28AWG to 22AWG	0.040″ (1.02)	Gold Flash	90800-1	42K6708	0.25
SOCKET CONTACTS (ON REELS - SOLD INDIVIDUALLY)						
1658686-1	28AWG to 22AWG	0.040″ (1.02)	30u″ Gold	90800-1	42K6705	0.27
1658686-3	28AWG to 22AWG	0.040″ (1.02)	Gold Flash	90800-1	42K6707	0.21

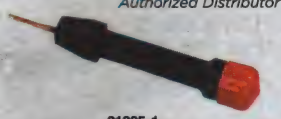
(8165)

AMPLIMITE HDP-22 APPLICATION TOOLS

TE connectivity

Authorized Distributor

90800-1



91285-1

Mfg. Part No.	Description	Stock No.	Price 1-4
90800-1	PRO-CRIMPER™ II Hand Tool, 28-22 AWG	96F9838	327.02
91520-1	CERTI-CRIMP® Hand Tool, 28-22 AWG	16H9490	718.40
91285-1	Insertion/Extraction Tool, HD-20 & HD-22, 28-20 AWG	90F1401	22.92

(8164)

AMPLIMITE HDP-20 CRIMP SNAP-IN CONTACT CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

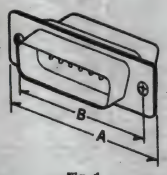


Fig. 1

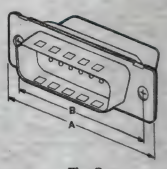


Fig. 2

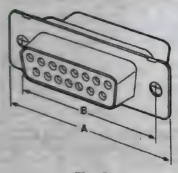


Fig. 3

- Thermosplastic Inserts, Rated UL94V-0
- Accept Size 20DF Pin Contacts

TIN-PLATED PLUGS WITHOUT GROUNDING INDENTS -- FIG. 1

Mfg. Part No.	Positions	Mounting Type	Dimensions A	B	Stock No.	Price Each 1-9
205204-8	9	Standard	1.213″	0.984″	24K0976	2.10
1658642-2	9	Clinch Nut	1.213″	0.984″	42K6671	5.45
205206-8	15	Standard	1.541″	1.312″	42K6842	2.41
207464-7	25	Standard	2.088″	1.852″	42K6843	1.33
205210-7	37	Standard	2.729″	2.500″	85H0047	2.92
1658641-1	50	Standard	2.635″	2.406″	86K8412	6.72
TIN-PLATED PLUGS WITH GROUNDING INDENTS -- FIG. 2						
205204-4	9	Standard	1.213″	0.984″	44F8690	0.95
1658642-1	9	Clinch Nut	1.213″	0.984″	42K6670	6.13

➤CONTINUED➤

D-SUB – CRIMP & POKE CONNECTORS

AMPLIMITE HDP-20 CRIMP SNAP-IN CONTACT CONNECTORS (CONT.)

Mfg. Part No.	Positions	Mounting Type	Dimensions A	Dimensions B	Stock No.	Price Each 1-9
TIN-PLATED PLUGS WITH GROUNDING INDENTS -- FIG. 2						
● 205206-3	15	Standard	1.541″	1.312″	44F8692	1.00
● 5745908-2	15	Clinch Nut	1.541″	1.312″	42K7410	9.22
● 207464-2	25	Standard	2.088″	1.852″	44F8694	1.72
● 5745036-2	25	Cinch Nut	2.088″	1.852″	42K7366	7.92
● 205210-3	37	Standard	2.729″	2.500″	44F8696	2.58
● 745135-4	37	Cinch Nut	2.729″	2.500″	07J2308	9.97
● 1658641-2	50	Standard	2.635″	2.406″	42K6669	5.18
ZINC-PLATED PLUGS WITH GROUNDING INDENTS -- FIG. 2						
● 205204-9	9	Standard	1.213″	0.984″	16M2875	1.70
● 205206-9	15	Standard	1.541″	1.312″	96K2967	2.32
● 5205208-1	25	Standard	2.088″	1.852″	16M3192	2.15
● 205210-8	37	Standard	2.729″	2.500″	16M2877	4.30
● 1658641-3	50	Standard	2.635″	2.406″	16M2751	6.46
TIN-PLATED RECEPTACLES -- FIG. 3						
● 205203-3	9	Standard	1.213″	0.494″	44F8700	0.97
● 1658643-1	9	Clinch Nut	1.213″	0.494″	42K6672	6.60
● 205205-2	15	Standard	1.541″	0.494″	44F8702	1.70
● 1658644-1	15	Cinch Nut	1.541″	1.312″	42K6673	6.57
● 207463-1	25	Standard	2.088″	0.494″	44F8704	1.87
● 207516-5	25	Clinch Nut	2.088″	0.494″	07J2312	5.62
● 205209-2	37	Standard	2.729″	0.494″	44F8706	2.58
● 5207661-3	37	Cinch Nut	2.729″	2.500″	42K7081	7.77
● 1658640-1	50	Standard	2.635″	0.605″	42K6668	5.08
● 5745884-1	50	Cinch Nut	2.635″	0.605″	42K8784	11.87
ZINC-PLATED RECEPTACLES -- FIG. 3						
● 205203-8	9	Standard	1.213″	0.984″	80K4818	2.07
● 205205-7	15	Standard	1.541″	1.312″	79K1811	2.26
● 5205207-1	25	Standard	2.088″	1.852″	16M3191	2.10
● 205209-7	37	Standard	2.729″	2.500″	16M2876	3.10
● 1658640-2	50	Standard	2.635″	2.406″	16M2750	6.31

Steel shells have either tin or zinc plating. Used for discrete wire terminations. UL recognized, file E28476; CSA certified, file R16455. *Order* **HDP-20** *snap-in contacts and tools separately on pages 856-857.*
(8067)

AMPLIMITE HDP-20 SNAP-IN CONTACTS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Use with AMPLIMITE® HDP-20 D-sub connectors and Series 2 CPC circular connectors; *ordered separately on pages 855-856 and 932*. *Order* **HDP-20** *tools separately on page 857.*

Mfg. Part No.	AWG	Insulation Dia.	Plating*	Hand Tool	Stock No.	Price Each 1-9
CRIMP PINS WITH INSULATION SUPPORT 0.40″ (1.02mm) PIN DIAMETER						
● 66507-9	28AWG to 24AWG	0.040″ (1.02)	A	58448-2, 91503-1	50B660	0.27
● 1658540-4	28AWG to 24AWG	0.040″ (1.02)	B	58448-2, 91503-1	42K6634	0.23
● 1658540-5	28AWG to 24AWG	0.040″ (1.02)	B	58448-2, 91503-1	42K6635	0.58
● 1-66507-0†	28AWG to 24AWG	0.040″ (1.02)	C	58448-2, 91503-1	89F317	13.82
● 66682-2	28AWG to 24AWG	0.060″ (1.52)	A	91549-1	90F3568	0.26
● 745254-6	26AWG to 22AWG	0.050″ (1.27)	A	91525-1	98F7180	0.25
● 1658544-2	26AWG to 22AWG	0.050″ (1.27)	B	91525-1	14N2166	0.38
● 66506-4	24AWG to 20AWG	0.060″ (1.52)	C	58448-2, 91503-1	90F3578	0.31
● 66506-9	24AWG to 20AWG	0.060″ (1.52)	A	58448-2, 91503-1	98F7062	0.27
● 1658539-3	24AWG to 20AWG	0.060″ (1.52)	B	58448-2, 91503-1	89K0288	0.32
● 1-66506-0	24AWG to 20AWG	0.060″ (1.52)	C	58448-2, 91503-1	98F9428	0.26
● 1658539-4	24AWG to 20AWG	0.060″ (1.52)	D	58448-2, 91503-1	02M1215	0.41
CRIMP SOCKETS WITH INSULATION SUPPORT 0.40″ (1.02mm) PIN DIAMETER						
● 1658538-2	28AWG to 24AWG	0.040″ (1.02)	B	58448-2, 91503-1	42K6629	0.26
● 66505-4	28AWG to 24AWG	0.040″ (1.02)	C	58448-2, 91503-1	25R6581	0.10
● 1-66505-0†	28AWG to 24AWG	0.040″ (1.02)	C	58448-2, 91503-1	89F318	15.10
● 1658538-3	28AWG to 24AWG	0.040″ (1.02)	D	58448-2, 91503-1	42K6630	0.24
● 1658538-1	28AWG to 24AWG	0.040″ (1.02)	D	58448-2, 91503-1	16M2742	0.59
● 745253-6	26AWG to 22AWG	0.050″ (1.27)	A	91525-1	90F3660	0.25
● 1658543-2	26AWG to 22AWG	0.050″ (1.27)	B	91525-1	88M2876	0.33
● 1658543-1	26AWG to 22AWG	0.050″ (1.27)	B	91525-1	87K7679	0.66
● 745253-3	26AWG to 22AWG	0.050″ (1.27)	C	91525-1	19C0235	0.34
● 66504-9	24AWG to 20AWG	0.060″ (1.52)	A	58448-2, 91503-1	25C1826	0.29
● 1658537-4	24AWG to 20AWG	0.060″ (1.52)	B	58448-2, 91503-1	16M2741	0.47
● 1-66504-0	24AWG to 20AWG	0.060″ (1.52)	C	58448-2, 91503-1	90F5542	0.29
CRIMP PINS WITHOUT INSULATION SUPPORT 0.40″ (1.02mm) PIN DIAMETER						
● 745229-2	22AWG to 18AWG	0.068″ (1.73)	A	91513-1	01H7813	0.58

➤ CONTINUED ➤

AMPLIMITE HDP-20 SNAP-IN CONTACTS (CONT.)

Mfg. Part No.	AWG	Insulation Dia.	Plating*	Hand Tool	Stock No.	Price Each 1-9
CRIMP SOCKETS WITHOUT INSULATION SUPPORT 0.40″ (1.02mm) PIN DIAMETER						
● 205201-7	24AWG to 20AWG	0.068″ (1.73)	C	91548-1	90F7573	0.51
● 745230-2	22AWG to 18AWG	0.068″ (1.73)	A	91513-1	90F3665	0.36
● 745230-4	22AWG to 18AWG	0.068″ (1.73)	A	91513-1	50F603	0.37
● 745230-7	22AWG to 18AWG	0.068″ (1.73)	C	91513-1	88F2302	1.00

†Sold packages of 100

Mfg. Part No.	Post Length+	Plating*	Stock No.	Price Each 1-9
SQUARE POSTED PINS				
● 4-745287-7	0.427″ (10.85)	A	42K6899	0.91
SQUARE POSTED SOCKETS				
● 5-745288-8	0.427″ (10.85)	A	42K6946	0.88

Mfg. Part No.	AWG	Plating*	Stock No.	Price Each 1-9
SOLDER CUP PINS				
● 66570-3	18AWG max.	A	01C1226	0.39
SOLDER CUP SOCKETS				
● 66569-3	18AWG max.	A	54H3464	0.42

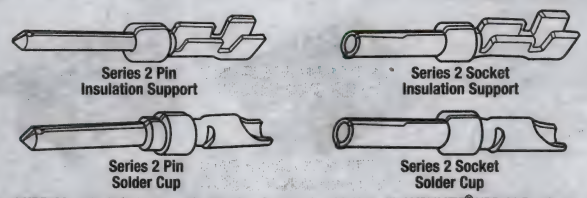
*Contact area termination plating: A = gold flash over nickel with (30µ) gold on contact mating; B = tin over nickel with (30µ) gold on contact mating; C = gold flash over nickel with gold flash on contact mating; D = tin over nickel with gold flash on contact mating; +Length of post extending from rear of HDP-20 metal shell connector
(8069)

AMP SERIES 2 MULTIMATE CONTACTS

RoHS Compliant Available

TE connectivity

Authorized Distributor



Series 2 HDP-20 contacts feature snap-in retention. Contact size: 20. Use with AMPLIMITE® HDP-20 D-sub connectors and Series 2 CPC circular connectors; *ordered separately online or call.*

Mfr. Part No.	AWG	Contact Mating Area Finish	Insulation Diameter (in.)	Stock No.	Price per Pkg. Each
SERIES 2 HDP-20 BRASS PINS — SOLD IN PACKAGES OF 100					
● 66506-8	- Max.	Gold	Solder Cup	96F7924	62.20
● 6-66506-1	24AWG to 20AWG	Gold	0.06	96F7902	24.20
● 1-66506-0*	24AWG to 20AWG	Gold Flash	0.06	98F9428	0.26
SERIES 2 HDP-20 BRASS PINS — ON REEL, SOLD INDIVIDUALLY					
● 66506-9	24AWG to 20AWG	Gold	0.06	98F7062	0.27
● 1658539-1	24AWG to 20AWG	Gold	0.06	42K6631	0.20
● 1658539-2	24AWG to 20AWG	Gold Flash	0.06	42K6632	0.20
● 745254-2	26AWG to 22AWG	Gold	0.05	29C6115	0.12
● 66507-3	28AWG to 24AWG	Gold	0.04	90F3582	0.25
● 1658540-1	28AWG to 24AWG	Gold	0.04	42K6633	0.22
● 66507-4	28AWG to 24AWG	Gold Flash	0.04	90F3583	0.29
SERIES 2 HDP-20 PHOSPHOR BRONZE SOCKETS — SOLD IN PACKAGES OF 100					
● 1-66569-0	18AWG Max.	Gold	Solder Cup	92F5795	86.90
● 7-66504-0	24AWG to 20AWG	Gold	0.06	96F7922	28.00
● 66505-9*	28AWG to 24AWG	Gold	0.04	54H3463	0.24
● 1-66504-0*	24AWG to 20AWG	Gold Flash	0.06	90F5542	0.29
● 1658538-1*	28AWG to 24AWG	Gold Flash	0.04	16M2742	0.59
SERIES 2 HDP-20 PHOSPHOR BRONZE SOCKETS — ON REEL, SOLD INDIVIDUALLY					
● 66504-3	24AWG to 20AWG	Gold	0.06	90F3591	0.19
● 1658537-3	24AWG to 20AWG	Gold	0.06	42K6628	0.23
● 66504-4	24AWG to 20AWG	Gold Flash	0.06	90F3592	0.23
● 1658537-1	24AWG to 20AWG	Gold Flash	0.06	42K6627	0.23
● 745253-2	26AWG to 22AWG	Gold	0.05	24C2166	0.41
● 66505-3	28AWG to 24AWG	Gold	0.04	29C6113	0.26
● 66683-2	28AWG to 24AWG	Gold	0.06	34B1403	0.47

*Sold individually

SERIES 2 HDP-20 KEYING PLUGS — SOLD INDIVIDUALLY

Mfr. Part No.	Description	Stock No.	Price Each 1-9
● 206509-1	Keying Plug	87F6584	0.70

(87978)

AMP MULTIMATE SUBMINIATURE COAXICON PIN AND SOCKET CONTACTS

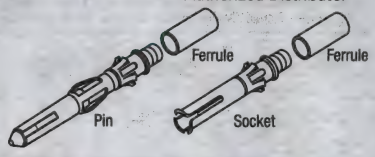
RoHS Compliant Available

TE connectivity

Authorized Distributor

- Brass Outer Shell
- TPX Inner Dielectric
- Stainless Steel Retention Spring

Each pin and socket contact requires a ferrule; *order separately below.* **Contacts and ferrules sold individually.**



COAXICON PIN CONTACTS — SIZE 16, GOLD-OVER-COPPER CENTER CONDUCTOR FINISH

Mfg. Part No.	Description	Cable Size RG/U	Hand Tool	Stock No.	Price Each 1-9
226537-1	Terminates to Coaxial Cable, Shielded Wire	161, 174, 174DB, 179, 179A,179B, 187, 187A, 187DB, 188,188A, 316, Belden 9221, RD-316, AWG 26	69656-3	50F654	9.19

COAXICON SOCKET CONTACTS — GOLD-OVER-NICKEL CENTER CONDUCTOR FINISH

51565-2	Terminates to Coaxial Cable	178, 178A, 178B, 196, 196A, 196DB	69656-2, 69656-9	50F647	11.77
51565-1	Terminates to Coaxial Cable, Shielded Wire	161, 174, 174DB, 179, 179A,179B, 187, 187A, 187DB, 188,188A, 316, Belden 9221, RD-316, AWG 26	69656-3	50F664	9.65
51565-3	Terminates to Twisted Pair	28, 30 (Twisted Pair-Solid), 28 (Twisted Pair, Stranded 0.005 Dia.), 26 (Twisted Pair, Solid or Stranded 0.063 Dia.)	69656, 69656-1, 69656-2	92F6104	18.53

COAXICON FERRULES — BRIGHT TIN-LEAD FINISH

Mfg. Part No.	Description	Hand Tool	Stock No.	Price Each 1-49
1-332056-0	For use with Pin 226537-1, Socket 51565-1	69656, 69656-1	50F696	0.65

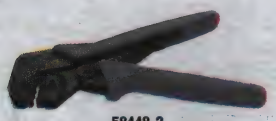
(75628)

AMPLIMITE HDP-20 APPLICATION TOOLS

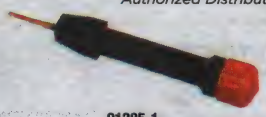
RoHS Compliant Available

TE connectivity

Authorized Distributor



58448-2



91285-1

Mfg. Part No.	Description	Stock No.	Price 1-4
58448-2	PRO-CRIMPER™ II Hand Tool with Die Set, 28-20 AWG	44F8730	327.02
354940-1	PRO-CRIMPER™ II Hand Tool without Die Set	96F6512	89.48
58448-3	PRO-CRIMPER™ II Die Set, 28-20 AWG	34B528	266.77
91503-1	CERTI-CRIMP® Hand Tool, 28-20 AWG	72C5755	701.30
91525-1	CERTI-CRIMP® Hand Tool, 26-22 AWG	81C9673	854.46
91513-1	CERTI-CRIMP® Hand Tool, 22-18 AWG	62H0711	756.71
91067-2	Insertion/Extraction Tool for 20 DM & 20 DF, 24-20 AWG	44F8729	8.13
91285-1	Insertion/Extraction Tool for HD-20 & HD-22, 28-20 AWG	90F1401	22.92

(8070)

AMPLIMITE HDE-20 APPLICATION TOOLS

TE connectivity

Authorized Distributor

91287-1

58074-1

58063-2

Two-piece manual pistol-style hand tool consists of **mfg. part no. 58063-2** rotating modular head assembly and **mfg. part no. 58074-1** pistol-grip hand tool frame, *ordered separately,* to terminate one unstripped wire per cycle and index the connector to the next terminating position. **Mfg. part no. 91287-1** is a T-handle wire insertion tool.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
91287-1	Wire Insertion Tool	50F2043	15.56
58074-1	Pistol-Grip Tool Frame	50F783	104.74
58063-2	Modular Head Assembly	50F663	430.54
91232-1	Extraction Tool	50F618	32.15

➤CONTINUED➤

AMPLIMITE HDE-20 APPLICATION TOOLS (CONT.)

AMPLIMITE® D-SUB CONNECTOR CONVERSION CHART

Shell Size	HDP-20, HDF-20, HDE-20, HDM-20 Positions/Contacts	HDP-22, HD-22 Positions/Contacts
1	9	15
2	15	26
3	25	44
4	37	62
5	50*	78

*Not available in HDE

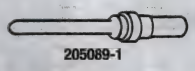
(8025)

AMPLIMITE 109 & 90 SERIES MIL-C-24308 AND MIL-C-39029 QUALIFIED CONTACTS AND TOOLS

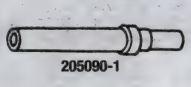
RoHS Compliant Available

TE connectivity

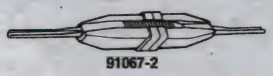
Authorized Distributor



205089-1



205090-1



91067-2

109 SERIES CONTACTS

Size 20 DM screw-machined crimp signal contacts. Copper alloy pin and beryllium copper socket both plated with gold over copper. Pin diameter: 0.040″ (1.02). Wire size: 24-20 AWG. Test current: 7.5A. Use with AMPLIMITE® HDP-20 D-sub connectors and Series 2 CPC circular connectors; *ordered separately online or call.*

Mfg. Part No.	Description	Stock No.	Price per Pkg. 1-9
205089-1	24-20 AWG Crimp Snap Pin Contacts (Individual)	83H4081	0.94
M39029/64-369	24-20 AWG Crimp Snap Pin Contacts (**Pkg. of 1000**)	99F3174	454.00
205090-1	24-20 AWG Crimp Snap Socket Contacts (Individual)	33X1880	0.57

90 SERIES CONTACTS

Size 22 DM screw-machined crimp signal contacts. Copper alloy pin and beryllium copper socket both plated with gold over copper. Pin diameter: 0.030″ (0.76). Wire size: 28-22 AWG. Use with AMPLIMITE® HD-22 D-sub connectors *ordered separately online or call.*

Mfg. Part No.	Description	Stock No.	Price per Pkg. 1-9
204370-2	28-22 AWG Crimp Snap Pin Contacts (**Individual**)	52F4860	0.95
204351-1	28-22 AWG Crimp Snap Socket Contacts (**Individual**)	98F6596	1.48

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
91067-2	Insertion/Extraction Tool, 24-20 AWG	44F8729	8.13
91067-1	Insertion/Extraction Tool, 28-22 AWG	44F8723	11.26
601966-1	Crimp Tool, Mil. Spec. M22520/2-01	89F137	739.70
601966-5	Positioner, Mil. Spec. M22520/2-08	92F8446	135.86

(8179)

AMPLIMITE 109 & 90 SERIES MIL-C-24308 AND MIL-C-39029 QUALIFIED CONNECTORS

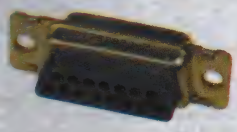
RoHS Compliant Available

TE connectivity

Authorized Distributor

- Mount Front or Rear
- Shell: Zinc Plated per ASTM-B-633
- Insert Approved Per MIL-C-24308
- Stainless Steel Retention Springs

Standard D-sub type connectors for military and ground support, computer peripheral equipment, modems and industrial instrumentation. Contacts not included; *order* **mfg. part no. 205089-1** *pin contacts,* **mfg. part no. 205090-1** *socket contacts, and tools separately online or call.*



109 SERIES PLUGS

Mfg. Part No.	MIL No. M24308/	Positions	Width	Stock No.	Price Each 1-9
1757819-1	4-259	9	1.213″	16M2771	8.15
1757819-2	4-260	15	1.541″	16M2772	9.02
1757819-3	4-261	25	2.088″	16M2773	9.88
1757819-4	4-262	37	2.729″	16M2774	13.18
1757819-5	4-263	50	2.635″	16M2775	16.48

109 SERIES RECEPTACLES

1757820-1	2-281	9	1.213″	16M2776	8.15
1757820-2	2-282	15	1.541″	16M2777	9.02
1757820-3	2-283	25	2.088″	16M2778	9.89
1757820-4	2-284	37	2.729″	16M2779	13.16
1757820-5	2-285	50	2.635″	16M2780	16.29

90 SERIES PLUGS

1757823-1	4-264	15	1.213″	16M3879	10.94
1757823-2	4-265	26	1.541″	72M6599	12.19
1757823-3	4-266	44	2.088″	72M6614	13.64
1757823-4	4-267	62	2.729″	12N4561	19.48
1757823-5	4-268	78	2.635″	25T0305	18.33
1757823-7	4-11	15	1.213″	88K0498	23.00
1757823-8	4-12	26	1.541″	16M3880	39.22
1757823-9	4-13	44	2.088″	16M3881	50.38

➤CONTINUED➤

D-SUB – CRIMP & POKE CONNECTORS

AMPLIMITE 109 & 90 SERIES MIL-C-24308 AND MIL-C-39029 QUALIFIED CONNECTORS (CONT.)

90 SERIES RECEPTACLES

Mfg. Part No.	MIL No. M24308/	Positions	Width	Stock No.	Price Each 1-9
● 1757824-1	2-286	15	1.213″	16M3882	12.32
1757824-2	2-287	26	1.541″	53R1662	12.19
● 1757824-3	2-288	44	2.088″	40P8795	13.41
1757824-4	2-289	62	2.729″	30M0286	18.16
● 1757824-5	2-290	78	2.635″	10P9532	18.33
● 1757824-6	2-291		2.729″	25T0306	24.76
● 1757824-7	2-11	15	1.213″	88K1516	31.92
● 1757824-8	2-12	26	1.541″	16M3883	90.43
● 1757824-9	2-13	44	2.088″	16M3884	63.92

PLUGS WITH CONTACTS

Connector supplied with contacts, p/n 205089-1 packaged in sepaate container.

● 1757819-9	4-4	37	2.729″	83K9412	33.71

(8178)

AMP D-SUB CONNECTOR INSTALLER KITS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Kits include connector housing, backshell with grommets, hardware and 24-20 AWG crimp snap-in or 26-22 AWG IDC contacts.

HDP-20 CRIMP SNAP-IN SHIELDED METAL BACKSHELL KITS

Mfg. Part No.	Position	Connector	Stock No.	Price Each 1-24
● 749805-7	9	Plug	42K7917	14.11
● 749805-8	15	Plug	12M7045	16.24
● 749805-9	25	Plug	42K7918	17.45
● 749806-7	9	Receptacle	42K7919	18.41
● 749806-8	15	Receptacle	12M7040	10.53
● 749806-9	25	Receptacle	42K7920	20.62
HDP-20 CRIMP SNAP-IN UNSHIELDED PLASTIC BACKSHELL KITS				
● 749808-8	9	Plug	42K7922	10.47
● 749808-7	25	Plug	42K7921	14.50
● 749812-7	9	Receptacle	42K7924	12.12
HDE-20 IDC UNSHIELDED PLASTIC BACKSHELL KITS				
● 749809-9	25	Plug	42K7923	14.50

(8003)

MIL-C-24308 METAL SHELL D-SUBS WITH CRIMP AND POKE TERMINALS

CINCH

Intermateable with all D-subs of comparable pin count and complying dimensionally with MIL-C-24308. Brass plug contacts or phosphor-bronze socket contacts; both machined and feature 50µ″ gold over copper plating. Cadmium-plated steel shell with yellow chromate coating. Diallyl phthalate insulator material, per MIL-M-14, Type SDG-F, monoblock construction for improved electrical performance. Discrete cable-to-board; -to-panel; -to-discrete cable. UL recognized.

Mfg. Part No.	Description	Contacts	Stock No.	Price Each 1-4	5-9
M24308/4-1F	Plug	9	45F844	22.12	21.01
M24308/2-1F	Socket	9	45F995	19.79	18.80
M24308/4-2F	Plug	15	45F996	27.75	26.37
M24308/2-2F	Socket	15	45F997	28.40	26.99
M24308/4-3F	Plug	25	45F998	39.27	37.30
M24308/2-3F	Socket	25	45F999	40.02	38.04
M24308/4-4F	Plug	37	45F1001	48.42	45.99

(8741)

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newark.com/duratool

(212563)

SERIES 3 HIGH-RELIABILITY, METAL SHELL D-SUBS WITH CRIMP AND POKE TERMINALS

CINCH

Ideal for high-reliability applications. Brass plug contacts phosphor-bronze socket contacts; both machined and feature 30µ″ gold over nickel plating. Zinc-plated steel shell with yellow chromate coating. UL94V-0 rated glass fiber-filled, diallyl phthalate insulator monoblock construction, for improved electrical performance. Discrete cable-to-board; -to-panel; -to-discrete cable. UL recognized.

Mfg. Part No.	Description	Contacts	Stock No.	Price Each 1-9	10-24
DEMA-9P	Plug	9	45F825	26.41	23.57
DEMA-9S	Socket	9	45F826	26.35	23.51
DAMA-15P	Plug	15	45F827	33.37	29.78
DAMA15S	Socket	15	45F828	34.39	30.71

(8747)

D*U SERIES 0.109″ (2.77) DENSITY D-SUB CONNECTORS

RoHS Compliant Available

CINCH

Commercial grade metal shell connectors intermate with all existing D-subs of comparable pin count. Additional features include withstanding voltage: 1000VAC rms. Operating temperature: –65°C to +105°C. UL94V-0 rated molded glass-filled nylon insulation material. Available with or without crimp and poke contacts plated with gold flash over nickel. Steel shell with zinc plating coated with yellow chromate, except where noted. 0.120″ through-hole mount. Discrete cable to board; to panel; to discrete cable. UL recognized. *Order crimp and poke contacts separately online or call.*

D*U SERIES CONNECTORS WITHOUT CONTACTS

Mfg. Part No.	Description	Contacts	Stock No.	Price Each 1-9	10-24
DEU-9P-F0	Plug	9	57F3208	3.24	2.39
● DEUH-9S-F0	Socket	9	11M3007	3.64	3.50
● DAUH-15P-F0	Plug	15	11M2957	1.62	1.53
● DAUH-15S-F0	Socket	15	11M2959	1.66	1.60
● DBUH-25P-F0	Plug	25	11M2969	1.97	1.91
DBU-25S-F0	Socket	25	57F3213	3.58	2.64
D*U SERIES CONNECTORS WITH CRIMP AND POKE MACHINED CONTACTS					
● DEUH-9P	Plug	9	11M3004	4.05	3.92
● DEUH-9S	Socket	9	11M3006	7.76	7.52
● DAUH-15P	Plug	15	11M2956	5.10	4.93
● DBUH-25P	Plug	25	11M1972	8.76	8.46
DBU-25S	Socket	25	57F3223	26.37	22.89

(8832)

CANNON HIGH-RELIABILITY, MILITARY CRIMP D-SUB CONNECTORS

RoHS Compliant Available

ITT

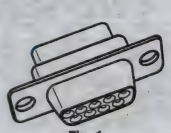


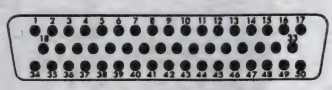
Fig. 1

Fig. 2

A
15
#20

B
25
#20

Shell Size: C
Contact Arrangement: 37
Contact Size: #20



D
50
#20

E
9
#20

Crimp connectors feature removable copper alloy contacts plated with 50µ″ gold per MIL-G-45204 Type II Grade C Class 1 over copper per MIL-C-14550. Steel shell per ASTM A-620 with yellow chromate over zinc finish and 0.120″ (3.15) thru-mount holes. Green insulator per MIL-M-14, type SDG-F. Accommodate wire from 18-30 AWG. Current rating: 20 AWG, 5A. Receptacles include socket contacts, plugs include pin contacts. *To order yellow chromate over cadmium, add* **suffix F** *to end of mfg. part no.*

CRIMP RECEPTACLES — FIG. 1

Mfg. Part No.	Shell Size	Contacts	Stock No.	Price Each 1-4	5-9
M24308/2-1Z	DE	9	93F8873	12.06	10.46
M24308/2-2Z	DA	15	53M2472	12.05	11.05
M24308/2-3Z	DB	25	93F8877	30.88	26.77
M24308/2-4	DC	37	96F3623	32.70	28.34
M24308/2-4F	DC	37	24C0383	29.30	26.89
● M24308/2-35F	DA	15	40M1298	36.14	32.36

➤ CONTINUED ➤

CANNON HIGH-RELIABILITY, MILITARY CRIMP D-SUB CONNECTORS (CONT.)

CRIMP PLUGS — FIG. 2

Mfg. Part No.	Shell Size	Contacts	Stock No.	Price Each 1-4	Price Each 5-9
M24308/4-1F	DE	9	82H7813	8.95	8.21
M24308/4-2Z	DA	15	93F8874	21.16	18.36
M24308/4-4Z	DC	37	96F3624	35.39	30.68
M24308/4-5Z	DD	50	96F3626	51.73	44.85

HIGH RELIABILITY CRIMP CONTACTS

Size 20 pin copper alloy contacts. Plated 50μ″ gold per MIL-G-45204 Type II Grade C Class 1 over copper per MIL-C-14550.

Mfg. Part No.	Gender	AWG	Stock No.	Price Each 1-49	Price Each 50-99
M39029-64-369	Pin	24AWG to 20AWG	01C2726	5.25	4.43

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24
M24308/26-1	Female Screwlock, 4-40, 7.92mm	74K3118	1.38
M24308/26-2Z	Female Screwlock, 4-40, 15.88mm	15M8085	1.58

(8808)

CONTACTS FOR MIL-DTL-24308 CONNECTORS

DEUTSCH

Mfg. Part No.	Gender	Contact Size	AWG	Color Bands	Stock No.	Price Each 1-9
M39029/64-369	Pin	20	24AWG to 20AWG	Orange / Blue / White	61R9130	0.81
M39029/63-368	Socket	20	24AWG to 20AWG	Orange / Blue / Gray	61R9129	1.17

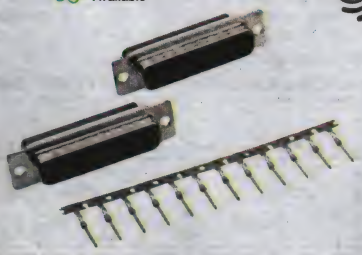
(166295)

8656 SERIES CRIMP D-SUB CONNECTORS

RoHS Compliant Available

FCI

8656 Series D Subminiature connectors feature removable crimp contacts for 24-20 wires. Used in commercial cabling applications like computer equipment. Accepts standard accessories. These connectors are suitable for input/output applications and interconnecting electronic equipment.



D-SUB CONNECTORS - SUPPLIED WITHOUT CONTACTS

Mfg. Part No.	No. of Contacts	Gender	Stock No.	Price Each 1-9	Price Each 10-24
865609PLTXLF	9	Plug	63K0645	0.99	0.93
865615PLTXLF	15	Plug	63K0647	0.73	0.69
865625PLTXLF	25	Plug	63K0649	1.18	1.11
865637PLTXLF	37	Plug	53K1507	0.80	0.75
865650PLTXLF	50	Plug	72K4731	0.82	0.74
865609SLTLF	9	Receptacle	63K0646	0.95	0.89
865615SLTLF	15	Receptacle	63K0648	0.77	0.69
865625SLTLF	25	Receptacle	63K0650	1.17	1.10
865637SLTLF	37	Receptacle	63K0670	0.73	0.65
865650SLTLF	50	Receptacle	72K4732	0.82	0.74

CRIMP CONTACTS

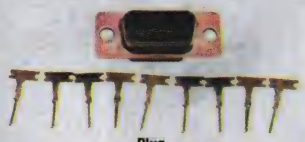
Mfg. Part No.	Gender	AWG	Stock No.	Price Each 1-9	Price Each 10-24
8656352064LF	Pin	24AWG to 20AWG	63K0664	0.07	0.06
8656353064LF	Socket	24AWG to 20AWG	63K0667	0.10	0.09

(134254)

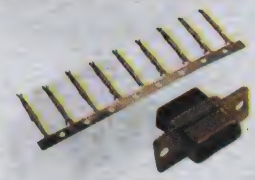
D-SUB CONNECTORS WITH CRIMP-STYLE STAMPED CONTACTS

RoHS Compliant Available

multicomp



Plug



Receptacle

Intermate with all existing comparable style connectors. Steel shell with tin plating. Black, glass-filled thermoplastic insulator. Insulator resistance: 1000MΩ @ 500VAC. Current pin rating: 5A. Crimp-style pin and socket contacts are supplied loose with connector. Contact diameter: 0.040″. Hold up to 20 AWG wire.

GOLD-PLATED (5μ″) CONTACTS

Mfg. Part No.	Description	Pins	Stock No.	Price Each 1-99	Price Each 100-249	Price Each 250-499	Price Each 500-999
SPC15458	Plug	9	79K5033	2.73	2.13	1.93	1.76
SPC15462	Receptacle	9	79K5036	2.73	2.13	1.93	1.76
SPC15350	Plug	15	79K4940	3.72	2.90	2.61	2.40
SPC15308	Receptacle	15	79K4902	3.91	3.07	2.75	2.51
SPC15448	Plug	25	79K5025	4.67	3.73	3.43	3.16
SPC15404	Receptacle	25	79K4986	4.74	3.77	3.47	3.19
SPC15312	Plug	37	79K4906	7.32	5.99	5.52	5.06
SPC15373	Receptacle	37	79K4957	7.43	6.10	5.59	5.13
SPC15262	Plug	50	79K4859	15.61	12.78	11.74	10.85
SPC15311	Receptacle	50	79K4905	17.35	14.20	13.05	12.06
SELECTIVE GOLD-PLATED (5μ″) CONTACTS - NICKEL PLATED CRIMP AREA							
SPC15389	Plug	9	79K4972	4.20	3.16	2.81	2.52
SPC15376	Receptacle	9	79K4960	4.38	3.28	2.92	2.62
SPC15172	Plug	15	79K4776	2.74	2.14	1.91	1.77
SPC15138	Receptacle	15	79K4751	2.80	2.17	1.96	1.79
SPC15272	Plug	25	79K4869	4.01	3.11	2.80	2.55
SPC15209	Receptacle	25	79K4811	2.72	2.32	2.10	1.76
SPC15177	Plug	37	79K4780	5.98	4.91	4.51	4.16
SPC15175	Receptacle	37	79K4779	3.88	3.35	3.00	2.49
SPC15200	Plug	50	79K4802	13.93	11.40	10.48	9.69

(8793)

STANDARD CRIMP-STYLE STAMPED CONTACTS

RoHS Compliant Available

multicomp

Socket

Pin

Crimp contacts for D-subminiature connectors have snap-in pin diameter of 0.040″. Wire size 20 to 24 AWG. Contact material: brass. Plating: brass with 7μ″ gold. **Sold in packages of 100.**

Mfg. Part No.	Description	Stock No.	Price per Pkg. 1-49	Price per Pkg. 50-99
SPC15395	Pin	79K4978	20.20	16.54
SPC15421	Socket	79K5002	23.74	19.45

(8794)

HIGH-DENSITY CRIMP-STYLE STAMPED CONTACTS

RoHS Compliant Available

multicomp

Socket

Pin

Crimp contacts for D-subminiature connectors have a snap-in pin diameter of 0.030″. Wire size 20 to 24 AWG. Contact material: pins are brass; sockets are phosphor bronze. Plating: pins and sockets, gold flash over 3μ″ nickel on entire contact. Additional gold plating on the mating end for lengths of 0.15″ min. on pins, 0.100″ min. on sockets. **Sold in packages of 100.**

Mfg. Part No.	Description	Stock No.	Price per Pkg. 1-49	Price per Pkg. 50-99
SPC15398	Pin	79K4981	16.65	13.63
SPC15384	Socket	79K4967	14.82	12.13

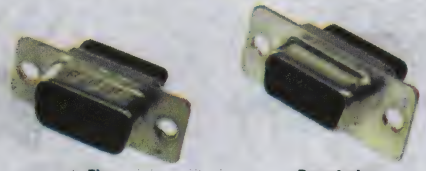
(8795)

3

HIGH-DENSITY CRIMP-TYPE D-SUB CONNECTORS

RoHS Compliant Available

multicomp



Plug Receptacle

Contact spacing as close as 0.95″ in various contact positions. Glass fiber reinforced housing, rated UL94V-0. Steel shell with tin plating. Phosphor bronze contacts are gold-plated over nickel. Wire size: 24 to 20AWG. Operating temperature range: –55°C to +105°C. *Order contacts separately on page 859.*

Mfg. Part No.	Description	Pins	Stock No.	Price Each 1-249	250-499	500-999	1000-4999
● SPC15431	Plug	15	79K5011	2.99	2.24	1.99	1.79
● SPC15367	Receptacle	15	79K4953	3.17	2.38	2.12	1.90
● SPC15255	Plug	26	79K4852	6.68	5.33	4.88	4.47
● SPC15252	Receptacle	26	79K4849	6.67	5.99	5.46	4.98
● SPC15297	Plug	44	79K4891	9.00	7.21	6.60	6.06
● SPC15235	Receptacle	44	79K4834	8.67	7.82	7.12	6.54
● SPC15155	Plug	62	79K4763	11.90	9.73	8.96	8.22
● SPC15244	Receptacle	62	79K4841	5.95	5.36	4.88	4.48
● SPC15213	Plug	78	79K4815	15.84	12.96	11.91	11.01
● SPC15247	Receptacle	78	79K4844	18.61	15.23	14.00	12.94

(6792)

D-SUB CONNECTOR CRIMP TOOL KIT

DURATOOL

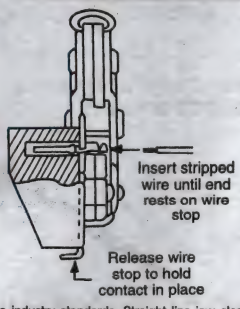
Mfg. part no. 8455-0662 D-Sub kit includes a crimp tool frame and pre-packaged D-subminiature contacts. Ergonomic tool design features a full-cycle mechanism which allows crimps to conform to industry standards. Easy-load positioner provides proper contact orientation. Kit includes crimp tool with positioner, 100 D-subminiature pins, 100 D-subminiature sockets and a foam insert in a durable plastic storage case.

Mfg. Part No.	Stock No.	Price Each 1-4
8455-0662	16N1881	444.28

(8842)

CRIMP TOOL FOR STANDARD D-SUB CONTACTS

DURATOOL



3-STEP CRIMP
1. Insert contact into locator. 2. Close tool carefully until connector is held in place without distorting ears. Insert stripped wire. Squeeze handles. 3. Raise locator and remove contact.

All crimp configurations are fully machined to maintain tolerances to industry standards. Straight-line jaw closure provides consistent crimp. Wide cushion grips provide user-friendly feel. Locator and wire-stop properly orient contacts. Crimps conductor and insulator portions of contacts in one closure. Heat treated for extended use. For open-barrel contacts in 30-20 AWG wire sizes. Rated at 5000 cycles.

Mfg. Part No.	Stock No.	Price Each 1-4
CT-200-DC-01	90N3314	120.42

(8884)

OPEN-BARREL CRIMP TOOLS

DURATOOL

Crimp tools have full cycle ratcheting action for precise termination of open-barrel contacts. **Mfg. part no. 1748** has two crimping nests for AMP® D-Sub sizes 28-24 and 24-20 AWG. **Mfg. part no. 1749** has 3 crimping nests for AMP® Multimate contacts 24-20, 18-16, and 28-24 AWG. A contact support and wire stop are provided. Locator and wire stop are provided. Both tools crimp wire and insulation in a single action.

Mfg. Part No.	Description	For Contacts	AWG	Stock No.	Price Each 1-4
1748	Crimp Tool	AMP® D-Sub (RS-232)	28-20	92N3743	227.91
1749	Crimp Tool	AMP® Multimate	28-16	92N3744	229.40

(18632)

HIGH-DENSITY D-SUB CONNECTOR CRIMP TOOL

DURATOOL

Crimps high-density D-subminiature pin and socket open-barrel contacts. Locator and wire-stop provide proper orientation during crimping. Conductor crimps are B-type. Insulation crimps are oval type, produced in two cavities: A is 22-26 AWG, B is 28-30 AWG. Other crimp tools available; *go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each 1-4	5-9
CTT8424-01	Crimp Tool	92N8961	193.34	156.87

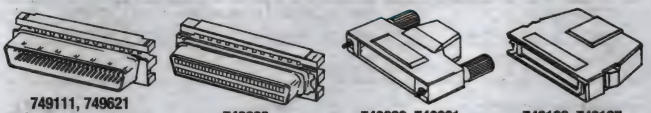
(12829)

AMPLIMITE 0.050″ SERIES I, II, AND III CABLE CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor



749111, 749621 (Covers Assembled) 749699 749080, 749081 749193, 749197

- For Round Jacketed Cable
- Wire Range: 30-28 AWG
- Phosphor Bronze Contacts
- Tin-Lead over Nickel Solder Tail Plating
- Thermoplastic Housing, Flammability Rated UL94V-0

Suitable for transmission/switching applications.

Mfg. Part No.	Positions	Stock No.	Price Each 1-24	25-49	50-99	100-249
SHIELDED CABLE PLUG CONNECTORS WITH STANDARD TERMINATION COVERS (ASSEMBLED)						
● 5749111-1	20	42K7515	10.43	9.08	8.63	8.40
● 1-5749111-0	26	42K6550	11.90	11.31	10.71	10.12
● 5749111-7	80	16M3370	33.67	32.33	30.98	29.95
● 5749111-8	100	42K7518	16.99	16.25	14.17	12.50
SHIELDED CABLE PLUG CONNECTORS WITH STANDARD TERMINATION COVERS (UNASSEMBLED)						
● 5786860-7	68	51P2812	12.35	10.62	10.35	10.10
SHIELDED CABLE PLUG CONNECTORS WITH WIRE LACING TERMINATION COVERS (UNASSEMBLED)						
● 1-5750913-5	50	17R0839	12.59	10.40	9.36	8.84
● 1-5750913-7	68	42K6551	12.17	11.06	9.95	9.40
● 1-5750913-9	100	42K6552	17.91	16.64	14.51	12.80
● 5750913-7	68	42K7549	12.10	11.00	9.90	9.35
SHIELDED CABLE PLUG CONNECTORS WITH STANDARD TERMINATION COVERS (UNASSEMBLED)						
● 5749621-2	26	42K7527	10.07	9.64	8.33	8.11
● 5749621-3	28	55M8408	11.59	10.54	9.49	8.96
● 5749621-4	40	42K7528	10.07	9.64	8.33	8.11
● 5749621-8	80	42K7531	26.94	22.51	20.21	19.54
UNSHIELDED CABLE PLUG CONNECTORS WITH STANDARD TERMINATION COVERS						
● 5786090-7	68	87K2479	3.09	2.97	2.83	2.69
● 5390377-7	68	32M0632	4.76	4.57	4.19	4.00
SLIMLINE PLUG CONNECTORS WITH DUAL TERMINATION COVERS						
● 5750833-1	26	42K7547	18.17	17.01	15.85	13.98
PCB RIGHT ANGLE PLUG CONNECTORS						
● 2-5174225-5	68	45M6172	19.29	17.28	17.24	16.66
SHIELDED CABLE RECEPTACLE CONNECTORS WITH STANDARD TERMINATION COVERS (ASSEMBLED)						
● 5749210-5	50	19R3103	13.76	13.07	12.39	11.70
● 5749210-7	68	42K7521	23.31	22.13	20.94	20.25

➤ CONTINUED ➤

AMPLIMITE 0.050″ SERIES I, II, AND III CABLE CONNECTORS (CONT.)

SHIELDED CABLE RECEPTACLE CONNECTORS WITH STANDARD TERMINATION COVERS (UNASSEMBLED)

Mfg. Part No.	Positions	Stock No.	Price Each 1-24	25-49	50-99	100-249
5749699-7	68	42K7533	13.94	13.25	12.55	11.85
5749699-8	100	33M7276	24.77	23.76	21.34	20.63

BACKSHELL KITS WITH JACKSCREWS

Mfg. Part No.	Positions	Description	Stock No.	Price 1-9
5749080-1	50	Straight Style	16M4038	13.91
5749854-1	100	Straight Style	02M5696	19.52
5749081-1	100	Straight Style	06M3563	21.48
BACKSHELL KITS WITH SPRING LATCHES				
5749190-1	20	Straight Style	04M7215	11.11
749608-2	26	Straight Style	42K7916	10.98
5749192-1	40	Straight Style	25R6580	11.40
5749193-1	50	Straight Style	40P9847	10.44
5749193-2	50	Straight Style	52M2069	7.85
5749889-3	50	Straight Style	39M3665	12.86
5749195-2	68	Straight Style	18M5711	12.88
5749609-1	26	Angled Latches	82K9715	11.00
5749202-2	50	Angled Latches	71M0793	11.88
5749204-2	68	Angled Latches	42M1121	13.75
5749206-1	100	Angled Latches	84M6307	16.81
METAL SHIELDED BACKSHELL KITS WITH JACKSCREWS				
5786152-3	68	Straight Style	40P9860	13.20
PLASTIC SHIELDED BACKSHELL KITS - SLIMLINE				
750850-3	26	Straight Style - 0.280-0.310 Cable Dia.	31C9277	20.90
PLASTIC SHIELDED BACKSHELL KITS WITH MALE JACKSCREWS				
5750752-1	68	Straight Style - 2-56 Thread	78K5012	18.30
5750752-2	68	Straight Style - 4-40 Thread	96M0103	17.42

WIRE LACING COVERS

Mfg. Part No.	Positions	Color	Stock No.	Price Each 1-9
750877-7	68	Black	55C4623	1.67
1-750877-5	50	Gray	11C0946	1.81
1-750877-7	68	Gray	96B3763	2.11
1-750877-9	100	Gray	10H3466	2.65

(40070)

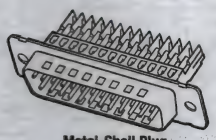
AMPLIMITE HDE-20 IDC CONNECTORS

RoHS Compliant Available

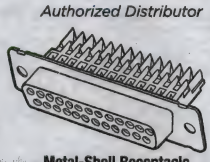
TE connectivity

Authorized Distributor

- Rated UL94V-0
- Tin-Lead Plating on Termination End Over Nickel Underplating



Metal-Shell Plug



Metal-Shell Receptacle

Designed for terminating solid or up to 7-strand discrete wire and jacketed cable. Choice of tin-plated steel shell with thermoplastic insert or complete thermoplastic housing. Pre-loaded insulation displacement phosphor bronze crimp contacts finished with gold on mating end. UL recognized, CSA certified. *Order application tools separately on page 857.*

METAL-SHELL PLUGS WITH GROUNDING INDENTS FOR 30-26 AWG WIRE

Mfg. Part No.	Mating End Plating	Contacts	Width	Stock No.	Price Each 1-9
1-745492-7	30µ″ Gold	9	1.213″	16M2674	6.32
1-745494-7	30µ″ Gold	15	1.541″	42K6570	8.18
1-745496-9	30µ″ Gold	25	2.088″	16M2678	9.83
1-745498-6	30µ″ Gold	37	2.729″	42K6571	12.95
METAL-SHELL RECEPTACLES FOR 30-26 AWG WIRE					
1-745491-6	30µ″ Gold	9	1.213″	16M2673	5.46
1-745495-7	30µ″ Gold	25	2.088″	16M2677	9.91
METAL-SHELL PLUGS WITH GROUNDING INDENTS FOR 26-22 AWG WIRE					
1-745492-8	30µ″ Gold	9	1.213″	42K6565	5.98
2-745492-0	Gold Flash	9	1.213″	14M8347	11.47
1-745494-5	30µ″ Gold	15	1.541″	42K6569	8.05
1-745494-6	Gold Flash	15	1.541″	16M2676	8.35
1-745496-7	30µ″ Gold	25	2.088″	42K8648	11.02
1-745496-8	Gold Flash	25	2.088″	42K8649	11.07
METAL-SHELL RECEPTACLES FOR 26-22 AWG WIRE					
1-745491-7	30µ″ Gold	9	1.213″	42K6561	5.20
1-745491-8	Gold Flash	9	1.213″	42K6562	4.96
1-745493-4	30µ″ Gold	15	1.541″	42K6567	8.33

CONTINUED

AMPLIMITE HDE-20 IDC CONNECTORS (CONT.)

METAL-SHELL RECEPTACLES FOR 26-22 AWG WIRE

Mfg. Part No.	Mating End Plating	Contacts	Width	Stock No.	Price Each 1-9
1-745495-8	30µ″ Gold	25	2.088″	42K8647	10.58
2-745495-0	Gold Flash	25	2.088″	16M2851	18.75
METAL-SHELL PLUGS WITH GROUNDING INDENTS FOR 22-20 AWG WIRE					
1-745492-9	30µ″ Gold	9	1.213″	42K6566	5.69
METAL-SHELL RECEPTACLES FOR 22-20 AWG WIRE					
1-745491-9	30µ″ Gold	9	1.213″	42K6563	7.02
ALL-PLASTIC PLUGS FOR 26-22 AWG WIRE					
745203-9	30µ″ Gold	9	1.213″	16M4074	5.25
745207-7	30µ″ Gold	15	1.541″	02M5649	9.75
745211-7	30µ″ Gold	25	2.088″	16M3426	8.84
ALL-PLASTIC RECEPTACLES FOR 26-22 AWG WIRE					
745201-7	30µ″ Gold	9	1.213″	42K7903	5.78
745201-9	Gold Flash	9	1.213″	42K7904	13.22
745205-7	30µ″ Gold	15	1.541″	42K7905	6.86
745209-7	30µ″ Gold	25	2.088″	16M3425	5.76

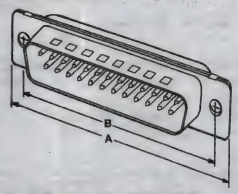
(8161)

AMPLIMITE HDP-20 SOLDER CUP CONNECTORS WITH PRE-LOADED CONTACTS

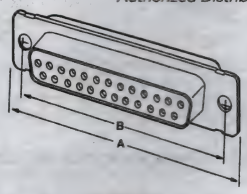
RoHS Compliant Available

TE connectivity

Authorized Distributor



Plug with Grounding Indents



Receptacle

Steel Shell with tin plating. Connector inserts are UL94V-0 rated black thermoplastic. Pre-loaded non-removable solder cup contacts are phosphor bronze with duplex gold flash on mating end; tin on solder cup. Accept 20 AWG or smaller solid or stranded wire. Fit 0.062″ (1.57) thick PC board. UL recognizied file E28476, CSA certified.

TIN PLATED PLUGS WITH GROUNDING INDENTS

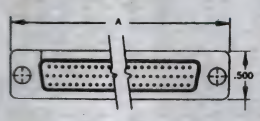
Mfg. Part No.	Contacts	Shell Size	Dimensions A	B	Stock No.	Price Each 1-9	10-24
5-747904-2	9	DE	1.210″	0.984″	52K3762	4.13	3.96
5-747908-2	15	DA	1.544″	1.313″	79K3495	3.58	3.44
5-747912-2	25	DB	2.089″	1.853″	79K3497	5.03	4.83
5-747916-2	37	DC	2.734″	2.502″	79K3499	6.85	6.41
TIN PLATED RECEPTACLES							
5-747905-2	9	DE	1.210″	0.984″	78K6626	4.11	3.46
5-747909-2	15	DA	1.544″	1.313″	79K3496	6.65	6.38
5-747913-2	25	DB	2.089″	1.853″	79K3498	5.66	5.43
5-747917-2	37	DC	2.734″	2.502″	79K3500	10.19	9.75
RECEPTACLES, CLINCH NUT, 4-40 UNC							
5-747905-7	9	DE	1.210″	1.313″	52K3763	7.84	7.30

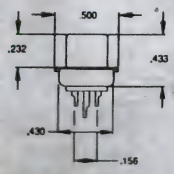
(87535)

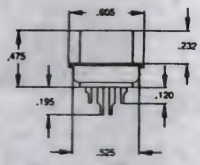
HIGH-DENSITY D-SUB CONNECTORS

RoHS Compliant Available

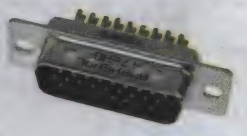
Amphenol Commercial Products







15-62 position connectors have 3 rows, 78 position has 4 rows. **17HD series** cable mount D-Subs with straight solder cup termination. Fixed contacts plated gold flash over nickel in engagement area. Accept 22 AWG wire. Clear hole panel mount. Feature copper alloy contacts with tin/lead over nickel plating on termination end. 0.100″ (2.54) staggered spacing. Current rating: 5A. Voltage rating: 125VAC. Tin-plated steel shell has grounding indents on plugs. Black thermoplastic resin dielectric, rated UL94V-0. Dielectric withstanding voltage: 500VAC. *Order backshells separately online or call.*



CONTINUED

D-SUB – DISCRETE WIRE CONNECTORS

HIGH-DENSITY D-SUB CONNECTORS (CONT.)

17HD SERIES SOLDER CUP PLUGS

Mfg. Part No.	Contacts	Dim. A	Stock No.	Price Each 1-9	10-49	50-99	100-249
● 17EHD015PAA000	15	1.215″	04M1518	2.23	1.92	1.78	1.63
● 17EHD026PAA000	26	1.539″	04M1528	3.24	2.85	2.59	2.22
● 17EHD044PAA000	44	2.088″	31M1400	4.55	4.14	3.79	3.50
● 17EHD078PAA000	78	2.630″	39M2866	5.68	5.12	4.69	4.32
17HD SERIES SOLDER CUP SOCKETS							
● 17EHD015SAA000	15	1.215″	87K2387	1.81	1.64	1.41	1.26
● 17EHD026SAA000	26	1.539″	39M2845	2.71	2.57	2.54	2.34
● 17EHD044SAA000	44	2.088″	39M2855	4.18	3.80	3.48	3.22
● 17EHD062SAA000	62	2.738″	39M2861	4.39	4.15	3.92	3.69
● 17EHD078SAA000	78	2.630″	39M2867	6.22	5.89	5.56	5.22

(8197)

3

17D SERIES D-SUB CONNECTORS

RoHS Compliant Available

Amphenol Commercial Products

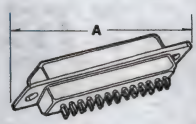


Fig. 1

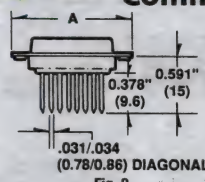


Fig. 2

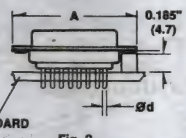


Fig. 3

Rack and panel D-Sub connectors for industrial use. Male and female brass, fixed screw machined contacts, both gold over nickel plated. Solder cup, solderless wire wrap, or straight PC solder mount termination. Yellow chromate plated zinc shell. 2-piece black thermoplastic dielectric insert, rated UL94V-0. 0.122″ (3.10) diameter mounting holes. Voltage rating: 300Vrms to 50Hz. Current rating: 7.5A. Wire: 20 AWG. Operating temperature: –55°C to +105°C. UL recognized E130160.

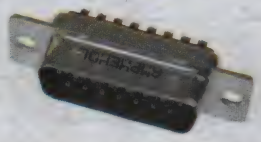
Mfg. Part No.	Contacts	Dim. A (in.)	Stock No.	Price Each 1-9	10-49	50-99	100-249
SOLDER CUP TERMINATION WITH PIN CONTACTS – FIG. 1							
● L717DE09P	9	1.209	88K0572	4.51	4.09	3.74	3.46
● L717DA15P	15	1.535	01M0599	7.44	6.29	5.45	4.87
● L717DB25P	25	2.083	82K7623	9.77	8.93	7.66	6.81
● L717DC37P	37	2.724	01M0735	11.73	11.39	10.59	9.63
● L717DD50P	50	2.630	01M0777	15.16	14.02	12.60	11.75
SOLDER CUP TERMINATION WITH SOCKET CONTACTS – FIG. 1							
● L77DE09S	9	1.209	01M1858	7.81	6.61	5.72	5.11
● L77DA15S	15	1.535	87K2385	9.36	7.92	6.84	6.13
● L77DB25S	25	2.083	01M1729	11.73	10.85	9.72	9.09
● L77DC37S	37	2.724	01M1785	12.95	11.96	10.73	10.26
● L77DD50S	50	2.630	01M1824	20.14	19.56	18.62	17.71
WIRE WRAP TERMINATION WITH PIN CONTACTS (2 WRAPS) – FIG. 2							
● L717DE09PF179	9	1.209	01M0826	5.36	5.05	4.94	4.78
WIRE WRAP TERMINATION WITH SOCKET CONTACTS (2 WRAPS) – FIG. 2							
● L77DE09SF179	9	1.209	01M1870	6.99	6.59	6.40	6.14
● L77DA15SF179	15	1.535	86K8364	8.65	8.17	7.73	7.29
● L77DB25SF179	25	2.083	01M1744	11.79	11.13	10.86	10.51
● L77DC37SF179	37	2.724	01M1794	17.64	16.65	15.76	14.86
STRAIGHT PC TERMINATION WITH PIN CONTACTS, TAIL LENGTH 0.126″ (3.2)/ DIAMETER 0.024″ (0.6) – FIG. 3							
● L717DE09PU	9	1.209	82K9142	4.78	4.49	4.04	3.66
● L717DA15PU	15	1.535	82K9144	4.79	4.52	4.28	4.04
● L717DB25PU	25	2.083	01M0696	7.21	6.78	5.85	5.24
● L717DC37PU	37	2.724	01M0749	9.26	8.75	8.28	7.81
● L717DD50PU	50	2.630	01M0788	12.18	11.27	10.11	9.45
STRAIGHT PC TERMINATION WITH SOCKET CONTACTS, TAIL LENGTH 0.126″ (3.2)/ DIAMETER 0.024″ (0.6) – FIG. 3							
● L77DE09SU	9	1.209	01M1883	5.38	5.07	4.76	4.40
● L77DA15SU	15	1.535	80K9751	6.92	6.33	5.61	5.01
● L77DB25SU	25	2.083	01M1760	8.98	8.88	7.62	6.77
● L77DC37SU	37	2.724	87K2053	11.44	10.80	10.17	9.49
● L77DD50SU	50	2.630	01M1836	14.54	13.69	12.40	11.98

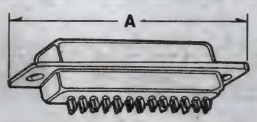
(8190)

17S SERIES D-SUB CONNECTORS

RoHS Compliant Available

Amphenol Commercial Products





Economical rack and panel D-sub connectors feature fixed precision formed, gold over nickel plated copper alloy contacts for commercial use. Solder cup termination. Same specifications as **17D series** D-Subs, *ordered separately on this page.*

PIN CONTACTS

Mfg. Part No.	Contacts	Dim. A (in.)	Stock No.	Price Each 1-9	10-49	50-99	100-249
● G17S0910110EU	9	1.209	96K5470	0.65	0.63	0.51	0.46
● L717SDE09P	9	1.209	01M1411	0.73	0.64	0.59	0.53
● G17S1510110EU	15	1.535	03M8098	0.85	0.69	0.67	0.64
● L717SDA15P	15	1.535	01M1182	0.73	0.66	0.60	0.52
● G17S2510110EU	25	2.083	96K5472	1.48	1.32	1.23	1.15
● L717SDB25P	25	2.083	01M1245	0.93	0.84	0.76	0.67
● G17S3710110EU	37	2.724	03M8101	2.40	1.97	1.83	1.71
● L717SDD50P	50	2.630	01M1371	3.45	2.86	2.39	2.15
SOCKET CONTACTS							
● G17S0900110EU	9	1.209	96K5471	0.82	0.67	0.63	0.62
● L77SDE09S	9	1.209	01M2495	0.87	0.77	0.70	0.63
● G17S1500110EU	15	1.535	03M8097	1.12	0.97	0.88	0.83
● L77SDA15S	15	1.535	01M2263	0.89	0.84	0.75	0.63
● G17S2500110EU	25	2.083	03M8099	1.22	0.92	0.89	0.84
● G17S3700110EU	37	2.724	03M8100	1.72	1.33	1.22	1.18
● G17S5000110EU	50	2.630	96K5468	3.03	2.55	2.36	2.17

(8191)

D SERIES SOLDER CUP D-SUB CONNECTORS

RoHS Compliant Available

FCI

The **D Series** is the standard D-Sub full metal shell version with stamped contacts rated at 200 mating cycles.

D SERIES SOLDER CUP CONNECTORS

Mfg. Part No.	No. of Contacts	Gender	Stock No.	Price Each 1-9	10-24
● DE09P064TXLF	9	Plug	62K4055	1.23	1.15
● DA15P064TXLF	15	Plug	62K3941	1.53	1.44
● DB25P064TXLF	25	Plug	62K4003	1.65	1.55
● DC37P064TXLF	37	Plug	62K4032	1.39	1.31
● DD50P064TXLF	50	Plug	62K4044	1.59	1.49
● DE09S064TLF	9	Receptacle	62K4062	1.25	1.18
● DA15S064TLF	15	Receptacle	62K3944	1.58	1.49
● DB25S064TLF	25	Receptacle	62K4006	1.59	1.50
● DC37S064TLF	37	Receptacle	05M7160	1.33	1.25
● DD50S064TLF	50	Receptacle	05M7163	1.69	1.59
D SERIES SOLDER CUP CONNECTORS WITH SHIELDING TERMINATION FINGERS					
● DE09P064HTXLF	9	Plug	91K6727	1.49	1.40
● DA15P064HTXLF	15	Plug	91K6680	0.85	0.80
● DB25P064HTXLF	25	Plug	91K6693	1.90	1.79
● DC37P064HTXLF	37	Plug	91K6718	1.50	1.41
● DE09S064HTLF	9	Receptacle	91K6728	2.27	2.13
● DA15S064HTLF	15	Receptacle	91K6682	0.90	0.85
● DC37S064HTLF	37	Receptacle	91K6719	1.52	1.43

(115562)

Custom Cable Assembiles to your specs to mate with the complete line of connectors!
Call 1.800.463.9275

(212562)

D SUBMINIATURE CRIMP CONNECTORS WITH STAINLESS STEEL SHELLS

RoHS Compliant Available

ITT

- Maximum current/contact: 40 Amp
- High Strength
- Intermatable to standard D Sub connectors
- Endurance: Continuous exposure to salt spray and corrosive chemicals

ITT identified a solution equipping the D Sub line connectors with stainless steel shells and hardware. The resulting product meets stringent requirements for corrosion resistance using MIL-Spec grade "P" grade stainless steel, while meeting JDEC standards for RoHS compliance.

D SUBMINIATURE CRIMP PLUGS

Mfg. Part No.	Shell Size	Contacts	Stock No.	Price Each 1-4	Price Each 5-9
DEMAM9PF225	DE	9	57R4963	25.73	24.54
DBMAM25PF225	DB	25	73R1620	43.76	41.75
DCMAM37PF225	DC	37	57R4936	51.58	49.06
DDMAM50PF225	DD	50	73R1644	63.18	60.08
D SUBMINIATURE CRIMP RECEPTACLES					
DEMAM9SF225	DE	9	73R1657	25.81	24.61
DAMAM15SF225	DA	15	57R4920	33.42	29.91
DBMAM25SF225	DB	25	73R1622	45.22	43.00
DCMAM37SF225	DC	37	57R4938	56.72	53.93
DDMAM50SF225	DD	50	85R0726	70.98	67.49

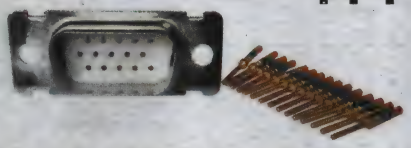
(195494)

HIGH DENSITY D SUB CRIMP CONNECTORS WITH STAINLESS STEEL SHELLS

RoHS Compliant Available

ITT

- Maximum current/contact: 40 Amp
- High Strength
- Intermatable to standard D Sub connectors
- Endurance: Continuous exposure to salt spray and corrosive chemicals



ITT identified a solution equipping the D Sub line connectors with stainless steel shells and hardware. The resulting product meets stringent requirements for corrosion resistance using MIL-Spec grade "P" grade stainless steel, while meeting JDEC standards for RoHS compliance.

D SUBMINIATURE CRIMP PLUGS

Mfg. Part No.	Shell Size	Contacts	Stock No.	Price Each 1-4	Price Each 5-9
DEMAM15PF225	DE	15	72R7007	55.26	49.37
DAMAM26PF225	DA	26	64R6292	59.84	56.91
DBMAM44PF225	DB	44	07R7179	82.87	74.05
DCMAM62PF225	DC	62	08N1464	88.83	84.47
DDMAM78PF225	DD	78	11N7179	107.32	95.89
D SUBMINIATURE CRIMP RECEPTACLES					
DEMAM15SF225	DE	15	57R4961	51.82	46.31
DAMAM26SF225	DA	26	57R4921	66.17	62.92
DBMAM44SF225	DB	44	07R7182	88.86	79.39
DCMAM62SF225	DC	62	08N1466	110.71	98.92
DDMAM78SF225	DD	78	07R7184	107.10	101.49

(195496)

D SUBMINIATURE SOLDER CONNECTORS WITH STAINLESS STEEL SHELLS

RoHS Compliant Available

ITT

- Maximum current/contact: 40 Amp
- High Strength
- Intermatable to standard D Sub connectors
- Endurance: Continuous exposure to salt spray and corrosive chemicals

ITT identified a solution equipping the D Sub line connectors with stainless steel shells and hardware. The resulting product meets stringent requirements for corrosion resistance using MIL-Spec grade "P" grade stainless steel, while meeting JDEC standards for RoHS compliance.

D SUBMINIATURE CRIMP PLUGS

Mfg. Part No.	Shell Size	Contacts	Stock No.	Price Each 1-4	Price Each 5-9
DAMM15PF225	DA	15	73R1607	24.03	22.92
DBMM25PF225	DB	25	73R1627	29.56	28.18

➤ CONTINUED ➤

D SUBMINIATURE SOLDER CONNECTORS WITH STAINLESS STEEL SHELLS (CONT.)

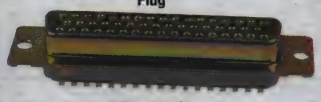
Mfg. Part No.	Shell Size	Contacts	Stock No.	Price Each 1-4	Price Each 5-9
DCMM37PF225	DC	37	63R5791	37.68	35.93
DDMM50PF225	DD	50	73R1652	43.95	41.80
D SUBMINIATURE CRIMP RECEPTACLES					
DAMM15SF225	DA	15	73R1608	23.14	22.07
DBMM25SF225	DB	25	73R1628	30.13	27.00
DCMM37SF225	DC	37	73R1639	39.49	35.38
DDMM50SF225	DD	50	73R1653	45.81	41.05

(195497)

CANNON HIGH-RELIABILITY, MILITARY SOLDER D-SUB CONNECTORS

ITT

Plug



Receptacle

B
25
#20

E
9
#20

A
15
#20

ITT Cannon military, high reliability d-subminiature connectors with fixed solder contacts are qualified to MIL-C-24308. The solder cups accomodate wire sizes up to 20AWG maximum. 5A standard current rating. Shell material is steel with yellow chromate over zinc finish. Copper alloy contacts with gold over nickel plating in mating area, tin on balance (gold over nickel on balance for military version).

COMMERCIAL SOLDER RECEPTACLES

Mfg. Part No.	Shell Size	Contacts	Stock No.	Price Each 1-9	Price Each 10-24
DEM9S	DE	9	23C6731	5.49	5.02
DAM15S	DA	15	12C9602	10.50	9.64
DBM25S	DB	25	13C0763	14.41	13.22
MILITARY SOLDER RECEPTACLES					
M24308/1-1F	DE	9	82H7755	5.58	5.13
COMMERCIAL SOLDER PLUGS					
DEM9P	DE	9	82H6593	4.60	4.21
DAM15P	DA	15	12C9570	8.22	7.54
DBM25P	DB	25	13C0729	11.44	10.50
MILTARY SOLDER PLUGS					
M24308/3-1Z	DE	9	82H7805	4.89	4.49
M24308/3-1F	DE	9	82H7806	5.87	5.39

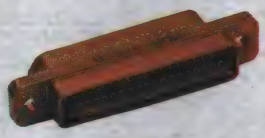
(208182)

CANNON MIL-C-83513 STYLE MICROMINIATURE D CONNECTORS

RoHS Compliant Available

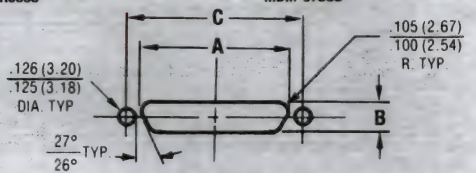
ITT

MDM-9PH0038



MDM-37SSB

- Yellow Chromate Over Cadmium Plating
- Liquid Crystal Polymer Insert



Panel Cut-Out

Microminiature D connectors are designed into places where standard D-subs had typically been used. These Micro-D Metal (MDM) connectors are made of a strong, lightweight aluminum shell with a high-quality liquid crystal polymer insert. Feature a unique twist-pin design that takes 7 light-gauge beryllium copper wires over 3 soft-drawn copper wires welded together to form a small, flexible bird cage. Twist pins are recessed in the insulator to protect the contacts from damage and appear to be slightly off-center. When mating to the socket contact this Posaline design will self-center, elongate, and twist inside the socket contact, providing excellent wiping action and maintaining maximum continuity even under the severest shock and vibration. Contacts are protected against moisture when mated by a silicone

➤ CONTINUED ➤

D-SUB – DISCRETE WIRE CONNECTORS

CANNON MIL-C-83513 STYLE MICROMINIATURE D CONNECTORS (CONT.)

interfacial seal. Plugs and receptacles are available in harness-type style with 18″ rainbow wire or solder-type style. Also available in narrow-profile, right-angle PC board mount versions. *Order jack screw and jack post assemblies separately below.*

HARNESS TYPE CONNECTORS WITH 26 AWG MIL-W-16878/4 WIRE - 18″ LENGTH

Mfg. Part No.	Contacts	Gender	Panel Cut-Out Dimensions A	B	C	Stock No.	Price Each 1-24
MDM-9PH003B	9	Plug	0.401″	0.252″	0.565″	90B4801	45.88
MDM-15PH003B	15	Plug	0.551″	0.252″	0.715″	34C2514	64.53
MDM-25PH003B	25	Plug	0.801″	0.252″	0.965″	29C6623	93.44
MDM-31PH003B	31	Plug	0.951″	0.252″	1.115″	34C2517	129.58
MDM-9SH003B	9	Receptacle	0.401″	0.185″	0.565″	31C2403	50.88
MDM-15SH003B	15	Receptacle	0.551″	0.185″	0.715″	96B2718	68.56
MDM-25SH003B	25	Receptacle	0.801″	0.185″	0.965″	92B0659	103.09
MDM-31SH003B	31	Receptacle	0.951″	0.185″	1.115″	34C2518	165.65
MDM-37SH003B	37	Receptacle	1.101″	0.185″	1.265″	92B3948	144.48
HARNESS TYPE CONNECTORS WITH 26 AWG MIL-W-16878/4 WIRE - 36″ LENGTH							
MDM-9PH006B	9	Plug	0.401″	0.252″	0.565″	20J6230	74.50
● MDM-15PH006B	15	Plug	0.551″	0.252″	0.715″	90B5806	68.21
● MDM-21PH006B	21	Plug	0.701″	0.252″	0.865″	31C9716	106.54
MDM-25PH006B	25	Plug	0.801″	0.252″	0.965″	49H6979	88.41
MDM-31PH006B	31	Plug	0.951″	0.252″	1.115″	63J8324	104.45
MDM-37PH006B	37	Plug	1.101″	0.252″	1.265″	81C8093	175.83
MDM-51PH006B	51	Plug	1.051″	0.295″	1.215″	73C0580	214.39
MDM-9SH006B	9	Receptacle	0.401″	0.185″	0.565″	20J6228	70.78
● MDM-15SH006B	15	Receptacle	0.551″	0.185″	0.715″	90B5809	63.29
MDM-21SH006B	21	Receptacle	0.701″	0.185″	0.865″	02K3063	78.36
MDM-25SH006B	25	Receptacle	0.801″	0.185″	0.965″	70C5502	89.06
MDM-31SH006B	31	Receptacle	0.951″	0.185″	1.115″	02K3280	105.10
MDM-37SH006B	37	Receptacle	1.101″	0.185″	1.265″	02K3415	121.69
HARNESS TYPE CONNECTORS WITH 26 AWG MIL-W-16878/4 WIRE - 72″ LENGTH							
MDM-15PH046B	15	Plug	0.551″	0.252″	0.715″	25K6050	86.00
HARNESS TYPE CONNECTORS WITH 26 AWG MIL-W-16878/4 WIRE - FLOAT MOUNT - 18″ LENGTH							
MDM-9PH003F	9	Plug	0.401″	0.252″	0.565″	02K3607	51.23
● MDM-15PH003F	15	Plug	0.551″	0.252″	0.715″	67C1897	61.87
MDM-31PH003F	31	Plug	0.951″	0.252″	1.115″	02K3215	97.99
MDM-15SH003F	15	Receptacle	0.551″	0.185″	0.715″	02K2931	60.30
HARNESS TYPE CONNECTORS WITH 26 AWG MIL-W-16878/4 WIRE - FLOAT MOUNT - 36″ LENGTH							
MDM-15SH006F	15	Receptacle	0.551″	0.185″	0.715″	02K2947	76.81
MDM-21SH006F	21	Receptacle	0.701″	0.185″	0.865″	02K3064	91.87
HARNESS TYPE CONNECTORS WITH 26 AWG MIL-W-16878/4 WIRE - STANDARD JACKSCREW - 18″ LENGTH							
MDM-15PH003K	15	Plug	0.551″	0.252″	0.715″	23C6610	76.51
MDM-25PH003K	25	Plug	0.801″	0.252″	0.965″	92B0657	85.51
MDM-15SH003K	15	Receptacle	0.551″	0.185″	0.715″	88H2969	70.18
MDM-21SH003K	21	Receptacle	0.701″	0.185″	0.865″	97C4992	81.37
HARNESS TYPE CONNECTORS WITH 26 AWG MIL-W-16878/4 WIRE - STANDARD JACKSCREW - 36″ LENGTH							
MDM-15PH006K	15	Plug	0.551″	0.252″	0.715″	02K2870	89.23
MDM-37SH006K	37	Receptacle	1.101″	0.185″	1.265″	28C7348	134.47
HARNESS TYPE CONNECTORS WITH 26 AWG MIL-W-16878/4 WIRE - LOW PROFILE JACKSCREW - 18″ LENGTH							
MDM-9PH003L	9	Plug	0.401″	0.252″	0.565″	40C2628	52.00
● MDM-15PH003L	15	Plug	0.551″	0.252″	0.715″	02E8920	62.80
MDM-21PH003L	21	Plug	0.701″	0.252″	0.865″	94C0188	75.03
MDM-25PH003L	25	Plug	0.801″	0.252″	0.965″	55C4345	84.75
MDM-37PH003L	37	Plug	1.101″	0.252″	1.265″	83H3450	103.63
MDM-15SH003L	15	Receptacle	0.551″	0.185″	0.715″	89C1991	64.15
HARNESS TYPE CONNECTORS WITH 26 AWG MIL-W-16878/4 WIRE - LOW PROFILE JACKSCREW - 36″ LENGTH							
MDM-15PH006L	15	Plug	0.551″	0.252″	0.715″	87H8672	82.25
HARNESS TYPE CONNECTORS WITH 26 AWG MIL-W-16878/4 WIRE - SLOTTED HEAD JACKSCREW - 18″ LENGTH							
MDM-9PH003M5	9	Plug	0.401″	0.252″	0.565″	02K3610	42.94
HARNESS TYPE CONNECTORS WITH 26 AWG MIL-W-16878/4 WIRE - WITH JACKPOST - 18″ LENGTH							
MDM-9PH003P	9	Plug	0.401″	0.252″	0.565″	05C0133	46.30
MDM-15PH003P	15	Plug	0.551″	0.252″	0.715″	88H2968	56.91
MDM-25PH003P	25	Plug	0.801″	0.252″	0.965″	25C3317	74.77
MDM-9SH003P	9	Receptacle	0.401″	0.185″	0.565″	20C2232	48.21
MDM-15SH003P	15	Receptacle	0.551″	0.185″	0.715″	26H6197	57.67
HARNESS TYPE CONNECTORS WITH 26 AWG MIL-W-16878/4 WIRE - 0.125″ DIA. MOUNTING HOLES - 36″ LENGTH							
MDM-15SH006A	15	Receptacle	0.551″	0.185″	0.715″	42P4215	70.18
SOLDER POT CONNECTORS - 26 AWG MAX.							
MDM-9PSB	9	Plug	0.401″	0.252″	0.565″	28C7534	61.11
● MDM-9PSB-A174*	9	Plug	0.401″	0.252″	0.565″	93H2801	78.10
MDM-15PSB	15	Plug	0.551″	0.252″	0.715″	28C7594	81.26
MDM-25PSB	25	Plug	0.801″	0.252″	0.965″	92B4375	103.94

➤CONTINUED➤

CANNON MIL-C-83513 STYLE MICROMINIATURE D CONNECTORS (CONT.)

SOLDER POT CONNECTORS - 26 AWG MAX.

Mfg. Part No.	Contacts	Gender	Panel Cut-Out Dimensions A	B	C	Stock No.	Price Each 1-24
MDM-37PSB	37	Plug	1.101″	0.252″	1.265″	50B1317	131.49
MDM-9SSB	9	Receptacle	0.401″	0.185″	0.565″	23C9128	69.19
MDM-15SSB	15	Receptacle	0.551″	0.185″	0.715″	23C9117	81.65
MDM-25SSB	25	Receptacle	0.801″	0.185″	0.965″	20C3058	119.63
SOLDER POT CONNECTORS - 26 AWG MAX. - WITH STANDARD JACKSCREW							
MDM-21SSK	21	Receptacle	0.701″	0.185″	0.865″	50H7209	109.44
SOLDER POT CONNECTORS - 26 AWG MAX. - WITH LOW PROFILE JACKSCREW							
MDM-15PSL	15	Plug	0.551″	0.252″	0.715″	02K2903	88.17
SOLDER POT CONNECTORS - 26 AWG MAX. - WITH JACKPOST							
MDM-9PSP	9	Plug	0.401″	0.252″	0.565″	85H1347	69.11

VERTICAL PC BOARD CONNECTORS

MDM -PCB connectors are designed for use with flex circuitry, flat cable and PC or multilayer boards. They use the standard MDM metal shell and provide high density & high reliability in board-to-board, board-to-cable, and cable-to-cable applications. Terminations may be Board Straight (BS) or Condensed Board Right-Angle (CBR). Jackpost mounting for use with locking hardware.Feature 0.050″ center spacing and 0.109″ (+/- 0.015″) PC tail lengths.

MDM-25PBS	25	Plug	0.801″	0.252″	0.965″	81C9190	183.20
VERTICAL PC BOARD CONNECTORS - WITH JACKPOSTS							
MDM-15PBSP	15	Plug	0.551″	0.185″	0.715″	02K2850	144.16
MDM-21PBSP	21	Plug	0.701″	0.252″	0.865″	99F8082	153.29
MDM-31PBSP	31	Plug	0.951″	0.252″	1.115″	72C9792	188.63
MDM-37PBSP	37	Plug	1.101″	0.252″	1.265″	72C9793	249.04
MDM-9SBSP	9	Receptacle	0.401″	0.185″	0.565″	72C9797	141.05
MDM-15SBSP	15	Receptacle	0.551″	0.185″	0.715″	02K2921	148.79
MDM-21SBSP	21	Receptacle	0.701″	0.185″	0.865″	02K3046	164.01
● MDM-31SBSP	31	Receptacle	0.951″	0.185″	1.115″	73C0736	206.50
MDM-51SBSP	51	Receptacle	1.051″	0.295″	1.215″	02K3529	293.53
NARROW-PROFILE RIGHT-ANGLE PC BOARD CONNECTORS - WITH JACKPOSTS							
● MDM-9PCBRP	9	Plug	0.401″	0.252″	0.565″	90B6962	126.20
MDM-15PCBRP	15	Plug	0.551″	0.252″	0.715″	73C1146	127.30
MDM-21PCBRP	21	Plug	0.701″	0.252″	0.865″	28C7043	157.71
MDM-37PCBRP	37	Plug	1.101″	0.252″	1.265″	27C4755	219.57
● MDM-51PCBRP	51	Plug	1.051″	0.295″	1.215″	01E9740	254.87
● MDM-9SCBRP	9	Receptacle	0.401″	0.185″	0.565″	28C7041	125.28
● MDM-9SCBRPA174*	9	Receptacle	0.401″	0.185″	0.565″	48M3257	235.63
● MDM-15SCBRP	15	Receptacle	0.551″	0.185″	0.715″	28C7858	139.48
MDM-25SCBRP	25	Receptacle	0.801″	0.185″	0.965″	38P1878	213.84
● MDM-31SCBRP	31	Receptacle	0.951″	0.185″	1.115″	27C7398	188.82
● MDM-37SCBRP	37	Receptacle	1.101″	0.185″	1.265″	23C8056	197.93
MDM-51SCBRP	51	Receptacle	1.051″	0.295″	1.215″	66H8746	248.24
NARROW-PROFILE RIGHT-ANGLE PC BOARD CONNECTORS - WITH M83513/5-07 JACKPOSTS							
MDM-9PCBRM7	9	Plug	0.401″	0.252″	0.565″	94C0628	126.20
● MDM-15PCBRM7	15	Plug	0.551″	0.252″	0.715″	02K2852	139.90
● MDM-15SCBRM7	15	Receptacle	0.551″	0.185″	0.715″	86H8704	139.48
MDM-25SCBRM7	25	Receptacle	0.801″	0.185″	0.965″	02K3166	179.15

* Electroless Nickel Shell Finish

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
M83513/05-05	Low-Profile,Slotted-Head Jack Screw Assembly — **Pkg. of 2**	34C2524	8.85
M83513/05-07	Jack Post Assembly — **Pkg. of 2**	34C2525	18.12

(68803)

ITT CANNON MILITARY/HIGH-RELIABILITY PC BOARD CONNECTORS

ITT

- Rated Current: 5 A
- Dielectric Withstanding Voltage: 1000 VAC for 1 min.
- Temperature Rating: –55°C to +125°C
- Insulator: Polyester, UL94V-0
- Contacts: Gold plated copper alloy.

Receptacle

Plug

Military/High Reliability D-Subminiature connectors are used in many applications, including aerospace, transportation, communications systems, information systems and test equipment. Compatible with all other D-Subminiature connectors, these connectors feature pc board termination, 5A standard current rating, and are qualified to MIL-C-24308.

Mfg. Part No.	Contacts	Description	Stock No.	Price Each 1-4	5-9
DEMM9SE	9	Receptacle	37P0504	18.42	16.49
DAMM15PE	15	Plug	12C9279	24.62	22.04
DAMM15SE	15	Receptacle	12C9298	26.98	24.15

➤CONTINUED➤

ITT CANNON MILITARY/HIGH-RELIABILITY PC BOARD CONNECTORS (CONT.)

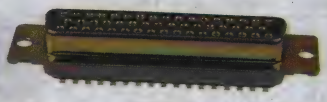
Mfg. Part No.	Contacts	Description	Stock No.	Price Each 1-4	Price Each 5-9
DBMM25PE	25	Plug	13C0287	37.89	33.92
DBMM25SE	25	Receptacle	13C0305	42.42	37.98

(195698)

ITT CANNON MILITARY/HIGH-RELIABILITY SOLDER CUP CONNECTORS

ITT

Plug



Receptacle

- Rated Current: 5 A
- Dielectric Withstanding Voltage: 1000 VAC for 1 min.
- Temperature Rating: –55°C to +125°C
- Insulator: Polyester, UL94V-0
- Contacts: Gold plated copper alloy.

Military/High Reliability D-Subminiature connectors are used in many applications, including aerospace, transportation, communications systems, information systems and test equipment. Compatible with all other D-Subminiature connectors, these connectors feature solder cup termination that accommodates up to 20 AWG max. wire sizes. 5A standard current rating and are qualified to MIL-C-24308.

Mfg. Part No.	Contacts	Description	Stock No.	Price Each 1-4	Price Each 5-9
M24308/1-1Z	9	Receptacle	82H7754	5.25	4.82
DDMM50P	50	Plug	82H6557	32.07	28.66
DDMM50S	50	Receptacle	82H6558	37.31	33.34

(195700)

MIL-DTL-83513 STYLE HIGH RELIABILITY MICROMINIATURE D CONNECTORS

CINCH

Features:
- Several styles of mounting hardware are available
- High-performance Dura-Con twist-pin contact
- Aluminum shell provides extra strength and EMI/RFI shielding capability
- Silicone elastomer compression interfacial seal protects contacts from each other and the metal shell
- Rugged twist pin contacts resistant to shock and vibration
- Ideal for harsh environment such as airborne or space applications

Specifications:
- Insulator material: UL94V-0 rated glass-filled polyester
- Shell material: Aluminum alloy
- Shell plating: Yellow chromate over cadmium
- Operating temperature: -55°C to 135°C
- Current rating: 3A
- Withstanding voltage: 600VAC
- **Suffix B** = No hardware, **F** = Float mount, **K** = Jackscrew, **L** = Low profile jackscrew, **P** = Jackpost

SOLDER CUP

No. of Contacts	PLUGS Mfg. Part No.	PLUGS Stock No.	PLUGS Price Each 1-9	SOCKETS Mfg. Part No.	SOCKETS Stock No.	SOCKETS Price Each 1-9
9	DCDM-9PSB	97J6649	77.12	DCDM-9SSB	97J6650	104.65
9	DCDM-9PSF	83H1975	64.04	DCDM-9SSF	97J6656	80.13
9	DCDM-9PSK	71K2866	70.64	DCDM-9SSK	71K2870	86.73
9	DCDM-9PSL	71K2867	71.16	DCDM-9SSL	71K2871	87.25
9	DCDM-9PSP	71K2868	56.95	DCDM-9SSP	71K2872	73.03
15	DCDM-15PSB	97J6651	61.53	DCDM-15SSB	55K5399	70.37
15	DCDM-15PSF	71K2734	75.48	DCDM-15SSF	96K2334	77.49
15	DCDM-15PSK	71K2735	82.07	DCDM-15SSK	71K2742	84.08
15	DCDM-15PSL	71K2736	82.60	DCDM-15SSL	96K2335	88.80
15	DCDM-15PSP	71K2737	68.38	DCDM-15SSP	96K2336	70.39
25	DCDM-25PSB	55K5402	101.30	DCDM-25SSB	55K5403	73.92
25	DCDM-25PSF	71K2770	94.65	DCDM-25SSF	96K2339	85.53
25	DCDM-25PSK	96K2337	105.04	DCDM-25SSK	71K2789	91.83
25	DCDM-25PSL	96K2338	101.45	DCDM-25SSL	96K2340	92.33
25	DCDM-25PSP	71K2771	87.87	DCDM-25SSP	96K2341	82.43
51	DCDM-51PSB	55K5406	112.50	DCDM-51SSB	97J6655	152.79
51	DCDM-51PSF	96K2343	124.04	DCDM-51SSF	71K2850	159.49
51	DCDM-51PSK	96K2344	130.34	DCDM-51SSK	71K2851	165.79
51	DCDM-51PSL	96K2345	131.24	DCDM-51SSL	71K2852	166.29
51	DCDM-51PSP	96K2346	117.26	DCDM-51SSP	71K2853	152.71
18″ WIRE LEADS — 26AWG MIL-W-16878/4 STRANDED						
9	DCDM-9P6E5-18.0B	81H4423	52.12	DCDM-9S6E5-18.0B	81H4424	80.13
9	DCDM-9P6E5-18.0F	71K2869	73.72	DCDM-9S6E5-18.0F	96K2352	97.16
9	DCDM-9P6E5-18.0K	96K2349	77.66	DCDM-9S6E5-18.0K	85K0602	103.46
9	DCDM-9P6E5-18.0L	96K2350	81.97	DCDM-9S6E5-18.0L	85K0603	103.96
9	DCDM-9P6E5-18.0P	96K2351	63.79	DCDM-9S6E5-18.0P	55K5409	90.38

CONTINUED

MIL-DTL-83513 STYLE HIGH RELIABILITY MICROMINIATURE D CONNECTORS (CONT.)

18″ WIRE LEADS — 26AWG MIL-W-16878/4 STRANDED

No. of Contacts	PLUGS Mfg. Part No.	PLUGS Stock No.	PLUGS Price Each 1-9	SOCKETS Mfg. Part No.	SOCKETS Stock No.	SOCKETS Price Each 1-9
15	DCDM-15P6E5-18.0B	97J6630	91.27	DCDM-15S6E5-18.0B	97J6632	80.13
15	DCDM-15P6E5-18.0F	79K6151	111.88	DCDM-15S6E5-18.0F	71K2743	97.16
15	DCDM-15P6E5-18.0K	79K6152	118.18	DCDM-15S6E5-18.0K	71K2744	107.65
15	DCDM-15P6E5-18.0L	79K6153	123.49	DCDM-15S6E5-18.0L	71K2745	103.96
15	DCDM-15P6E5-18.0P	79K6155	105.10	DCDM-15S6E5-18.0P	71K2746	90.38
25	DCDM-25P6E5-18.0B	97J6638	104.80	DCDM-25S6E5-18.0B	46K5163	117.12
51	DCDM-51P6E5-18.0B	60K5373	186.01	DCDM-51S6E5-18.0B	97J6647	150.35
51	DCDM-51P6E5-18.0F	96K2347	168.99	DCDM-51S6E5-18.0F	71K2854	155.87
51	DCDM-51P6E5-18.0L	63K9890	175.00	DCDM-51S6E5-18.0L	71K2856	162.80
51	DCDM-51P6E5-18.0P	96K2348	163.00	DCDM-51S6E5-18.0P	60K5375	165.07

(90619)

WATERPROOF D-SUBMINIATURE CONNECTORS

RoHS Compliant Available

L-COM Global Connectivity

Panel Mount Plug w/Cover

Cable Mount Receptacle w/Backshell

- Waterproof D-Sub connectors w/backshell kits & panel mount solder connectors with and w/o covers
- IP67 rating provides protection under harsh conditions
- Backshells conform to a variety of cable diameters by adjusting the sealing nut
- Panel mount connectors mount on any panel or enclosure 0.078″ thick or smaller
- Gold plated contacts provide reliable connections with repeated mating cycles
- Color: Black

Panel Mount Receptacle w/Cover

WATERPROOF D-SUBMINIATURE CONNECTOR AND BACKSHELL KIT

This waterproof kit includes solder cup connector, ABS housing, nylon seals, nickel plated brass thumbscrews and rubber sealing gaskets to assure IPC67 compliance. This connector will accommodate wire ranges from 30-20 AWG.

Mfg. Part No.	Gender	Pos.	Density	Stock No.	Price 1-9
WPDB9P-KIT	Plug	9	Standard	90M2149	23.96
WPDB9S-KIT	Receptacle	9	Standard	90M2150	23.96
WPHDB15P-KIT	Plug	15	High	90M2156	17.14
WPHDB15S-KIT	Receptacle	15	High	90M2157	17.14

WATERPROOF PANEL MOUNT D-SUBMINIATURE CONNECTOR KIT WITH COVER

Harsh outdoor or indoor environments can destroy electronic equipment. Standard HD15 connectors are not intended to withstand contaminants such as water and dust. These waterproof kits include solder cup connectors and are available in male or female genders. The connectors will accommodate wire ranges from 30 - 20 AWG. Backshell construction features ABS housings, nylon seals, nickel plated brass thumbscrews, and rubber sealing gaskets to insure IEC IP67 rating.

Mfg. Part No.	Gender	Pos.	Density	Stock No.	Price Each 1-9
WPSDH15P-KIT	Plug	15	High	08R6274	21.68
WPSDH15S-KIT	Receptacle	15	High	08R6276	22.95

WATERPROOF PANEL MOUNT D-SUBMINIATURE CONNECTORS

Harsh outdoor or indoor environments can destroy electronic equipment. Standard D-sub connectors are not intended to withstand contaminants such as water and dust. These waterproof solder cup connectors will accommodate wire ranges from 30-20 AWG. Construction features gold plated brass contacts, nickel plated steel shells, and a silicone insulating ring. Maximum recommended panel thickness is 0.078″.

Mfg. Part No.	Gender	Pos.	Density	Stock No.	Price 1-9
WPSD9P	Plug	9	Standard	18J1624	20.92
WPSD9S	Receptacle	9	Standard	60R3458	20.40

(147936)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

(212570)

D-SUB – DISCRETE WIRE CONNECTORS • D-SUB – FLAT RIBBON CABLE CONNECTORS

SEALED D-SUBMINATURE (IP-67) CONNECTORS

Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company

Specifications

- Current Rating: Standard D-Sub: 5 A; High Density D-Sub: 2 A
- Dielectric withstanding voltage: 1000V AC for 1 minute
- Contact resistance: ≤ 25mΩ
- Insulation resistance: ≥ 500MΩ @ 500 VDC
- Life: ≥ 500 Cycles
- Operating Temperature: -55°C to +85°C

Cable Mount

Panel Mount

Features

- Waterproof D-Sub panel connectors and backshell kits meet IP67 rating.
- Rear mounting panel connectors fit into standard D-Sub holes.
- Gold plated contacts are standard.
- Backshell kits available for cable diameters 0.138 - 0.276 in (3.51- 7.01 mm).
- D-Sub solder cup contacts accepts wire ranges from 22-26 AWG.
- Panel mount connector comes with 2 mounting screws

Connector Cap

CABLE MOUNT CONNECTOR KITS WITH BACKSHELLS

Mfg. Part No.	Gender	Description	No. of Contacts	Stock No.	Price Each 1-9
● DCCDB09F	Receptacle	Standard	9	74T3196	16.81
● DCCDB09M	Plug	Standard	9	74T3197	16.59
● DCCHD15F	Receptacle	High Density	15	74T3198	18.25
● DCCHD15M	Plug	High Density	15	74T3199	18.05
RJ45 FIELD INSTALLABLE PANEL HOUSING - FEED THROUGH					
● DCPDB09FSC1	Receptacle	Standard	9	74T3200	13.36
● DCPDB09MSC1	Plug	Standard	9	74T3201	13.04
● DCPHD15FSC1	Receptacle	High Density	15	74T3202	18.67
● DCPHD15MSC1	Plug	High Density	15	74T3203	15.92

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● DBSCAP	Connector Cap	74T3193	9.01

(202110)

D-SUB CONNECTORS WITH SOLDER POT CONTACTS

RoHS Compliant Available

multicomp

Receptacle

Plug

Back View

- Steel Shell with Tin Plating
- Glass-Filled Thermoplastic Insulator, Rated UL94V-0
- Insulator Resistance: 1000MΩ @ 500VDC
- Working Voltage: 500VDC; High-Density Versions 300VDC
- Current Pin Rating: 5A; High-Density Versions 3A

Designed for applications where space and weight are prime considerations. Connectors intermate with corresponding contact types. Solder pot machined or stamped brass contact pins. Gold- or tin-plated contact finish. Wire size: 24 to 20 AWG. Operating temperature range: –55°C to +105°C. *D-Sub connector punches are available; go online or call.*

GOLD-PLATED SOLDER POT MACHINED CONTACTS

Mfg. Part No.	Description	Pins	Stock No.	Price Each 1-99	100-249	250-499	500-999
● SPC15469	Plug	9	79K5043	3.71	2.89	2.58	2.38
● SPC15477	Receptacle	9	79K5049	4.87	3.79	3.40	3.10
● SPC15449	Plug	15	79K5026	5.39	4.31	3.95	3.64
● SPC15452	Receptacle	15	79K5028	6.31	5.18	4.78	4.42
● SPC15474	Plug	25	79K5046	7.44	6.12	5.63	5.15
● SPC15473	Receptacle	25	79K5045	12.31	10.08	9.28	8.54
● SPC15447	Plug	37	79K5024	13.70	11.23	10.31	9.53
● SPC15420	Receptacle	37	79K5001	17.94	14.68	13.49	12.46
● SPC15318	Plug	50	79K4912	18.33	15.00	13.78	12.74
● SPC15349	Receptacle	50	79K4939	21.59	17.76	16.30	15.03
GOLD-PLATED SOLDER POT STAMPED CONTACTS							
● SPC15435	Plug	9	79K5015	2.63	1.98	1.76	1.58
● SPC15453	Receptacle	9	79K5029	2.82	2.12	1.88	1.69
● SPC15429	Plug	15	79K5009	3.72	2.79	2.48	2.22
● SPC15299	Receptacle	15	79K4893	4.01	3.01	2.68	2.40
● SPC15400	Receptacle	25	79K4983	2.59	2.04	1.82	1.70
● SPC15275	Plug	37	79K4872	4.45	3.46	3.12	2.86
● SPC15306	Receptacle	37	79K4900	4.87	3.87	3.56	3.29
● SPC15268	Plug	50	79K4865	3.75	2.89	2.67	2.59
● SPC15341	Receptacle	50	79K4933	8.60	7.08	6.48	5.98
TIN-PLATED SOLDER END, SOLDER POT STAMPED CONTACTS							
● SPC15391	Plug	9	79K4974	2.24	1.69	1.50	1.35
● SPC15411	Receptacle	9	79K4993	2.32	1.73	1.54	1.38
● SPC15239	Plug	15	79K4837	3.17	2.38	2.11	1.89
● SPC15316	Receptacle	15	79K4910	3.16	2.37	2.11	1.89

➤ CONTINUED ➤

D-SUB CONNECTORS WITH SOLDER POT CONTACTS (CONT.)

TIN-PLATED SOLDER END, SOLDER POT STAMPED CONTACTS

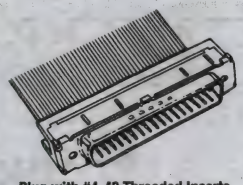
Mfg. Part No.	Description	Pins	Stock No.	Price Each 1-99	100-249	250-499	500-999
● SPC15323	Plug	25	79K4915	2.37	1.83	1.64	1.52
● SPC15276	Receptacle	25	79K4873	2.43	1.89	1.71	1.56
● SPC15230	Plug	37	79K4829	3.28	2.56	2.31	2.11
● SPC15211	Receptacle	37	79K4813	3.35	2.59	2.34	2.15
● SPC15205	Plug	50	79K4807	5.58	4.46	4.10	3.74
● SPC15187	Receptacle	50	79K4790	6.13	4.89	4.49	4.12
GOLD-PLATED HIGH-DENSITY SOLDER POT STAMPED CONTACTS							
● SPC15388	Plug	15	79K4971	3.47	2.60	2.31	2.08
● SPC15307	Receptacle	15	79K4901	3.54	2.65	2.38	2.11
● SPC15397	Plug	26	79K4980	3.94	3.09	2.75	2.51
● SPC15191	Receptacle	26	79K4794	4.30	3.35	3.02	2.76
● SPC15305	Plug	44	79K4899	3.84	3.02	2.74	2.65
● SPC21088	Receptacle	44	10M8339	3.49	2.69	2.46	2.38
● SPC15131	Plug	62	79K4746	3.95	3.09	2.81	2.72

(6796)

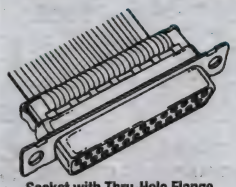
IDC D-SUB CONNECTORS

RoHS Compliant Available

3M



Plug with #4-40 Threaded Inserts



Socket with Thru-Hole Flange

- Insulation Material: Glass-Reinforced Polyester
- Contact Material: Beryllium Copper
- Contact Plating: 30μ" Gold
- Current Rating: 1A
- Temperature Rating: –55°C to +105°C

2-piece, open-cover plugs and sockets are fully compatible with 0.050" spaced flat cable. Accommodates 26 and 28 AWG solid and stranded wire; *ordered separately on page 1220 on page 1219. Order backshells and strain reliefs separately below.*

PLUGS—FLANGE, THRU-HOLE STYLE

Mfg. Part No.	Contacts	Stock No.	Price Each 1-9	10-99	100-249	250-499
● 8215-6000	15	46F4826	6.96	5.89	5.34	5.08
● 8225-6000	25	46F4827	7.81	6.58	5.96	5.69
● 8237-6000	37	46F4828	10.10	8.53	7.72	7.35
PLUGS—#4-40 THREADED INSERTS						
● 8209-6003	9	95F9669	6.20	5.23	4.75	4.52
● 8215-6003	15	95F9670	8.34	7.03	6.38	6.07
● 8225-6003	25	95F9671	8.38	7.07	6.41	6.10
● 8237-6003	37	95F9672	11.03	9.30	8.44	8.03
● 8250-6005	50	46F4829	33.58	28.33	25.70	24.46
SOCKETS—FLANGE, THRU-HOLE STYLE						
● 8309-6000	9	46F4830	5.19	4.38	3.98	3.78
● 8315-6000	15	46F4831	5.99	5.06	4.58	4.37
● 8337-6000	37	46F4833	10.37	8.74	7.92	7.55
SOCKETS—#4-40 THREADED INSERTS						
● 8315-6003	15	95F9674	8.40	7.09	6.43	6.12
● 8337-6003	37	94F7999	10.42	8.79	7.97	7.59
● 8350-6005	50	46F4834	36.04	30.40	27.58	26.25
PLASTIC JUNCTION BACKSHELLS						
● 3485-2100F	9	91B2980	6.43	4.87	4.40	4.02
● 3485-2200F	15	93B4711	8.06	6.12	5.52	5.05
● 3485-2300F	25	46F8311	6.89	5.22	4.72	4.31
● 3485-2400F	37	94F3334	8.35	6.33	5.72	5.23
● 3485-2500F	50	46F8310	4.73	3.59	3.24	2.96
STRAIN RELIEFS						
● 3448-8D09A	9	87F3878	0.48	0.44	0.41	0.38
● 3448-8D15A	15	87F3879	0.96	0.88	0.81	0.76
● 3448-8D25A	25	87F3880	0.60	0.55	0.50	0.47
● 3448-8D37A	37	87F3881	0.55	0.51	0.47	0.44
● 3448-8D50	50	87F3882	1.18	1.08	1.00	0.93

(8513)

AMPLIMITE HDF-20 LOW PROFILE 0.050″ (1.27) FLAT RIBBON CABLE CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Preassembled Thermoplastic Housing and Cover
- Rated UL94V-0

Standard mounting holes; phosphor bronze contacts with gold plating on mating end, tin-lead on termination end over nickel under plating. Tin-plated steel front shell on metal versions. UL recognized, CSA certified. Thermoplastic strain reliefs available; *go online or call.*

METAL-SHELL PLUGS, STANDARD MOUNTING HOLES

Mfg. Part No.	Positions	Gender	Stock No.	Price Each 1-9	10-49	50-99
1658613-4	9	Plug	42K6659	5.31	5.06	4.81
1658613-3	15	Plug	42K6658	8.34	7.98	6.90
1658613-2	25	Plug	42K6657	4.60	4.42	4.17
1658613-1	37	Plug	42K6656	14.40	13.09	11.79
1658612-4	9	Receptacle	42K6655	4.35	4.18	3.66
1658612-3	15	Receptacle	42K6654	3.98	3.82	3.34
1658612-2	25	Receptacle	42K6653	9.60	9.22	7.97
1658612-1	37	Receptacle	42K6652	12.52	11.38	10.25
METAL-SHELL CONNECTORS, THREADED INSERT						
1658608-4	9	Plug	42K6644	8.06	7.73	6.72
1658608-3	15	Plug	42K6643	10.39	9.94	8.59
1658608-2	25	Plug	42K6642	11.62	11.12	9.61
1658608-1	37	Plug	42K6641	10.26	9.82	8.48
1658607-1	50	Plug	42K6660	24.03	21.70	19.49
1658610-4	9	Receptacle	42K6650	8.17	7.81	6.75
1658610-3	15	Receptacle	42K6649	11.13	10.65	9.20
1658610-2	25	Receptacle	42K6648	14.41	13.10	11.79
1658610-1	37	Receptacle	42K6647	13.63	12.39	11.15
1658606-1	50	Receptacle	42K6640	21.24	19.18	17.22
METAL-SHELL CONNECTORS, SELF LOCKING THREADED INSERT						
5746861-4	9	Receptacle	42K7425	9.78	8.86	8.76
ALL-PLASTIC CONNECTORS, STANDARD MOUNTING HOLES						
1658615-4	9	Plug	42K6667	6.06	5.82	5.09
1658615-3	15	Plug	42K6666	7.54	7.20	6.85
1658615-2	25	Plug	42K6665	11.00	10.53	9.09
1658615-1	37	Plug	42K6664	12.74	11.59	10.43
1658614-4	9	Receptacle	42K6663	4.50	4.12	4.04
1658614-3	15	Receptacle	42K6662	7.41	6.74	6.67
1658614-2	25	Receptacle	42K6661	4.97	4.83	4.72
1658614-1	37	Receptacle	42K6660	12.94	10.61	9.16
ALL-PLASTIC CONNECTORS, THREADED INSERT						
1658611-4	9	Plug	42K6651	8.45	7.34	6.38
1658611-3	15	Plug	80P3523	14.93	13.98	13.02
1658611-2	25	Plug	03P1756	14.95	14.12	12.71
1658609-4	9	Receptacle	42K6646	7.63	7.32	6.36
1658609-3	15	Receptacle	21M6525	14.20	12.91	11.62
1658609-2	25	Receptacle	42K6645	10.53	9.81	9.10

CABLE STABILIZERS

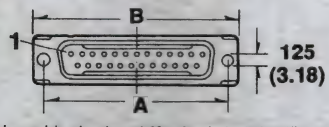
Mfg. Part No.	Positions	Shell Size	Stock No.	Price Each 1-9	10-49	50-99
747275-4	9	1	92F5379	0.41	0.38	0.34
747275-3	15	2	50F685	0.53	0.49	0.39
747275-2	25	3	50F684	0.65	0.63	0.50
747275-1	37	4	97F9018	0.82	0.76	0.61

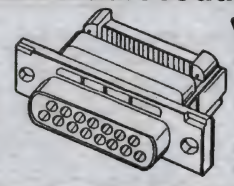
(8177)

841-17D AND G17K SERIES FLAT CABLE IDC CONNECTORS

RoHS Compliant Available

Amphenol Commercial Products





For modern peripheral equipment. Mass terminates to 0.050″ (1.27) flat ribbon cable. Available plastic or metal flange. 1-pc. universal hood. Black glass-filled polycarbonate insulator, rated UL94V-0. Phosphor bronze contacts with gold over nickel plating. Current rating: 1A. Voltage rating: 25VAC (VDE 0100 group A). Operating temperature: –25°C to +105°C. Wire size: solid 26/ stranded 28 AWG. Compatible with MIL-C-24308 and IEC proposal 48B (CO) 118. RS-232 and RS-449 standard. UL recognized E64911.

➤CONTINUED➤

841-17D AND G17K SERIES FLAT CABLE IDC CONNECTORS (CONT.)

PLASTIC FLANGE WITH SOCKET CONTACTS

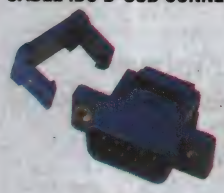
Mfg. Part No.	Contacts	Dimensions A	B	Stock No.	Price Each 1-9	10-24
L17DEFRB09S	9	0.984″	1.212″	99K7764	1.84	1.44
L17DCFRB37S	37	2.500″	2.732″	99K7724	9.63	7.51
METAL FLANGE WITH PIN CONTACTS						
G17K09101001EU	9	0.984″	1.212″	99K7475	2.85	2.23
G17K25101001EU	25	1.852″	2.090″	99K7483	2.50	1.95
METAL FLANGE WITH SOCKET CONTACTS						
L17DEFRA09S	9	0.984″	1.212″	99K7752	2.36	2.11
G17K09001001EU	9	0.984″	1.212″	99K7473	4.54	3.54
G17K15001001EU	15	1.311″	1.543″	99K7477	2.94	2.30
G17K37001001EU	37	2.500″	2.732″	99K7485	7.05	5.50

(8281)

PLASTIC AND METAL RIBBON CABLE IDC D-SUB CONNECTORS

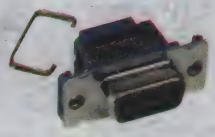
RoHS Compliant Available

multicomp



Plastic Plug

Metal Plug



Metal Receptacle

PLASTIC IDC CONNECTORS

Special contact design allows usage of standard 0.050″ flat ribbon cable while maintaining standard contact centers of 0.050″. Low-profile, fully intermateable connectors are suitable for compact requirements of modern peripheral equipment. Contacts: copper alloy, gold plated over nickel. 1-piece universal hood provides 3 locking varieties: plastic latch for one-hand operation and quick disconnect; screw locking; and metal spring latch locking. Insulation resistance: 1000MΩ at 500 VDC. Contact resistance: 15 mΩ max.. Wire size: 26-28 AWG. Hood accepts straight and right-angle cable entry. Operating temperature range: –55°C to +105°C.

Mfg. Part No.	Description	No. of Pins	Stock No.	Price Each 1-9	10-49	50-99	100-249
SPC15390	Plug	25	79K4973	3.23	2.95	2.71	2.47

METAL IDC CONNECTORS

D-subminiature pin and socket connectors allow highly reliable mass termination of standard 0.050″ pitch round-conductor flat ribbon cable. Gas-tight junction with each conductor at 4 places. Internal transition from standard 0.055″ contact spacing which allows termination of standard 0.050″ ribbon cable; no special cable preparation is required. Contact plating: gold plated-brass. Mating area has duplex plating. Insulator material: blue, glass-filled polyester, rated UL94V-0. 26-28 AWG.. Current rating: 1A per contact. Insulation resistance: 1000MΩ at 500VDC. Contact resistance: 15mΩ max. @ 1ADC. Operating temperature: –55°C to +105°C.

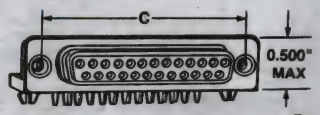
Mfg. Part No.	Description	No. of Pins	Stock No.	Price Each 1-9	10-24	25-49	50-99
SPC15406	Plug	9	79K4988	2.98	2.31	2.13	2.05
SPC15417	Receptacle	9	79K4999	5.79	4.63	4.27	3.89
SPC15289	Plug	15	79K4886	3.07	2.67	2.38	2.15
SPC15296	Receptacle	15	79K4890	3.07	2.67	2.38	2.15
SPC15390	Plug	25	79K4973	3.23	2.95	2.71	2.47
SPC15437	Receptacle	25	79K5017	4.17	3.28	3.02	2.88
SPC15267	Plug	37	79K4864	11.50	9.41	8.66	7.99
SPC15301	Receptacle	37	79K4895	11.32	9.28	8.53	7.87

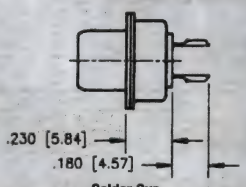
(8876)

FCE17 SERIES FILTERED D-SUB CONNECTORS

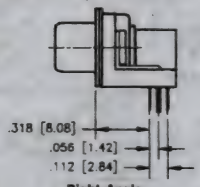
RoHS Compliant Available

Amphenol Commercial Products





Solder Cup



Right-Angle

- Discrete filter (capacitor) provides EMI noise protection and brings assembly into FCC compliance, Docket 20780
- Designed to provide EIA RS-232 and RS-449 compatibility
- Pin and socket styles with solder cup or right-angle PCB termination
- Tin plated high-strength diecast shell with thermoplastic insert, rated UL94V-0
- Phosphor bronze contacts plated with 15μ″ gold on contact area over 100μ″ nickel

➤CONTINUED➤

D-SUB – FILTER CONNECTORS

FCE17 SERIES FILTERED D-SUB CONNECTORS (CONT.)

- 0.120″ diameter through mounting holes in flange
- Current rating: 5A DC max., 2A RF filtering max
- Operating temperature: –40° to +85°C

Intermate with standard non-filtered **17 series** D-Sub *ordered separately on page 862*, and connectors meeting MIL-C-24308. Other connectors are available in a variety of filter capacitance values; *go online or call*. Non-RoHS product available; *go online or call*.

SOLDER CUP TERMINATION PLUGS

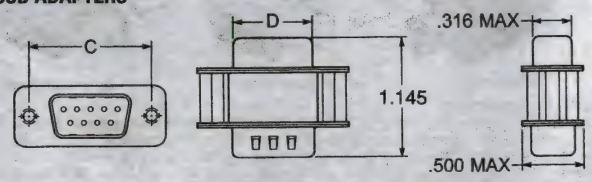
Mfg. Part No.	Contacts	Filter pF	Dim. C	Stock No.	Price Each 1-9	Price Each 10-24
● FCE17-E09PM-240	9	820	0.984″	99K7220	10.44	9.56
● FCE17-A15PM-240	15	820	1.312″	99K5974	18.62	17.06
● FCE17-B25PM-240	25	820	1.852″	99K6390	38.27	35.07
● FCE17-E09PM-290	9	5600	0.984″	99K7223	10.93	10.01
SOLDER CUP TERMINATION RECEPTACLES						
● FCE17-E09SM-240	9	820	0.984″	99K7419	8.31	7.66
● FCE17-A15SM-240	15	820	1.312″	99K6174	16.47	15.09
RIGHT-ANGLE PC BOARD TERMINATION RECEPTACLES WITH BOARDLOCKS						
● FCE17-C37SA-410	37	470	2.500″	99K6864	27.55	25.24

(8224)

FCE17 SERIES FILTERED D-SUB ADAPTERS

RoHS Compliant Available

Amphenol Commercial Products



Pin-socket adapter connector designed to provide EIA RS-232 and RS-449 compatibility. Intermate with standard non-filtered **17 series** D-Subs, *ordered separately on page 862* and connectors meeting MIL-C-24308. High strength tin-plated zinc diecast shell. Thermoplastic insert, rated UL94V-0. Phosphor bronze contacts plated with 15µ″ gold over 100µ″ nickel. 0.120″ diameter through hole flange mounting. Current rating: 5A DC max.; 2A RF filtering max.

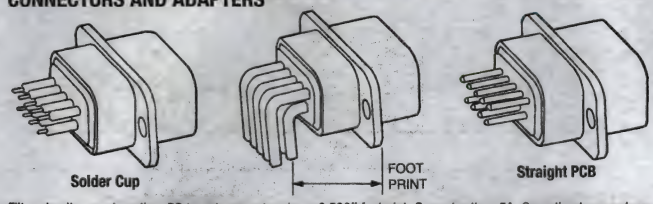
Mfg. Part No.	Size	Filter pF	Dimensions C	Dimensions D	Stock No.	Price Each 1-9	Price Each 10-49
● FCE17E09AD210	9	470	0.984″	0.643″	73K4128	17.53	16.51
● FCE17-B25AD-210	25	470	1.852″	1.511″	99K6213	43.26	39.44
● FCE17-A15AD-290	15	5600	1.312″	0.971″	99K5801	32.39	29.53
● FCE17-C37AD-290	37	5600	2.500″	2.159″	99K6632	46.50	42.40

* Micro-D
(8223)

700 SERIES HIGH-PERFORMANCE EMI FILTERED D-SUB CONNECTORS AND ADAPTERS

RoHS Compliant Available

api technologies corp.



Filter circuits are pi-section. PC board connectors have 0.590″ footprint. Current rating: 5A. Operating temperature: –55°C to +125°C. Contacts: gold plated copper alloy. Shell: tinned aluminum. Insulators meet UL94V-0 flammability test.

SPECIFICATIONS

Filter Type Suffix	Tol. (%)	3dB Cut-off Freq. (MHz)	Diel. With-stand Voltage (VDC)	Insertion Loss (dB) @ Frequency (MHz) 20	50	100	200	500	1000	5000
-001/-011	±20	17	300	...	5	10	18	39	52	45
-003/-013	+100,-0	3.2	300	9	15	25	43	65	70	63
-005/-015	+100,-0	0.8	150	16	31	46	60	75	75	65

SOCKET CONTACTS

Mfg. Part No.	Termination	Pins	Cap. pF	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-24	Price Each 25-49
● 56F706-003	Solder	9	1000	89M3861	56.92	54.37	51.30	48.76
PIN CONTACTS								
● 56F701-013	Solder	9	1000	77M0434	45.14	43.12	40.69	38.66
● 56F701-015	Solder	9	4000	89M3838	44.90	42.88	40.47	38.46
● 56F711-013	Solder	15	1000	88M1610	60.84	58.12	54.84	52.12
● 56F711-015	Solder	15	4000	74K2114	70.45	67.28	63.50	60.33
● 56F712-005	PCB R/A	15	4000	89M3877	68.73	65.65	61.95	58.87
● 56F721-013	Solder	25	1000	89M3905	92.86	88.69	83.70	79.53

➤CONTINUED➤

700 SERIES HIGH-PERFORMANCE EMI FILTERED D-SUB CONNECTORS AND ADAPTERS (CONT.)

PIN CONTACTS

Mfg. Part No.	Termination	Pins	Cap. pF	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-24	Price Each 25-49
● 56F721-015	Solder	25	4000	89M3907	96.93	92.59	87.37	83.02
● 56F726-005	Solder	25	4000	89M3943	120.91	115.49	108.99	103.56
● 56F732-005-LI	Solder	37	4000	89M3957	160.83	153.62	144.97	137.75

PIN-TO-SOCKET ADAPTERS

Mfg. Part No.	Pins	Cap. pF	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-24	Price Each 25-49
● 56F705-003	9	1000	89M3854	49.27	47.01	44.54	42.07
56-705-003	9	1000	44F8276	48.29	46.08	43.66	41.24
● 56F705-005	9	4000	89M3856	43.41	41.43	39.25	37.07
56-705-005	9	4000	44F8277	35.48	33.86	32.07	30.30
● 56F715-001	15	310	89M3887	59.22	56.52	53.54	50.57
● 56F715-003	15	1000	89M3889	60.32	57.56	54.53	51.50
● 56F715-005	15	4000	89M3891	69.27	66.11	62.63	59.15
56-715-005	15	4000	44F8301	76.25	72.76	68.93	65.12
● 56F725-001	25	310	89M3930	84.45	80.59	76.35	72.11
56-725-001	25	310	44F8323	88.50	84.46	80.01	75.57
● 56F725-005	25	4000	89M3933	106.15	101.31	95.98	90.64
56-725-005	25	4000	44F8325	94.05	89.76	85.03	80.31

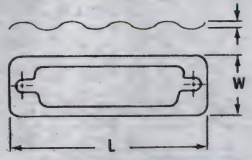
(9140)

EMI FILTERED WAVE-METAL D-SUB GASKETS

RoHS Compliant Available

api technologies corp.

Wave-metal gaskets adjust for irregularities in the mounting surface to maintain electro-magnetic compatibility of D-subminiature connectors by providing improved grounding. Style "A" are front-pin, front-socket or rear-pin mounting. Style "B" are rear-socket mounting. Gaskets are normally 0.030″ thick uncompressed, 0.005″ compressed.



Mfg. Part No.	Pins	Style	L x W	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-24
● 572019-00100-70	9	A	1.213 x 0.600″	51F3658	2.35	2.19	2.08
● 572019-00105-70	9	B	1.213 x 0.600″	51F3659	1.57	1.47	1.39
● 572019-00101-70	15	A	1.541 x 0.600″	51F3660	1.94	1.82	1.72
● 572019-00102-70	25	A	2.088 x 0.600″	51F3662	2.35	2.19	2.08
● 572019-00107-70	25	B	2.088 x 0.600″	51F3663	2.24	2.09	1.98
● 572019-00103-70	37	A	2.729 x 0.600″	51F3664	3.13	2.93	2.77

(9141)

FERRITE FILTERED D-SUB CONNECTORS

RoHS Compliant Available

HARTING®

PCB Right Angle

PCB Vertical

- Insulation: PBT, flame retardant acc. to UL94V-0
- Contact material: Copper alloy
- Contact plating: Performance level 3, as per IEC 60 807-2, IEC 60 512-25-2
- Shell: Tin plated steel
- Mating conditions as per CECC 75 301
- Solder buckets accept 20 AWG
- Vertical & right angle solder pins for P.C.B. holes 1 ± 0.05 mm
- Temperature range: -55°C to +105°C
- Contact resistance: ≤ 15 mΩ
- Insulation resistance: ≥ 1000 MΩ
- Working voltage: 250 VAC max.
- Dielectric withstanding voltage: 500 V AC for 1 minute
- Working current: 7.5 A max.

PCB RIGHT ANGLE FERRITE FILTERED CONNECTORS - 4-40UNC THREAD

Mfg. Part No.	Contacts	Contacts	Stock No.	Price Each 1-9	Price Each 10-24
● 09 64 113 7802	9	Receptacle	86R5717	4.57	4.30
● 09 64 123 7802	9	Plug	86R5720	4.57	4.30
● 09 64 213 7802	15	Receptacle	86R5723	5.94	5.59
● 09 64 223 7802	15	Plug	86R5726	5.94	5.59
● 09 64 313 7802	25	Receptacle	86R5729	6.18	5.81
● 09 64 323 7802	25	Plug	86R5732	5.78	5.43
● 09 64 413 7802	37	Receptacle	86R5734	11.82	11.32
● 09 64 423 7802	37	Plug	86R5736	11.05	10.58
PCB VERTICAL FERRITE FILTERED CONNECTORS					
● 09 64 112 7800	9	Receptacle	86R5716	4.92	4.63
● 09 64 122 7800	9	Plug	86R5719	5.57	5.24
● 09 64 212 7800	15	Receptacle	86R5722	5.98	5.62

➤CONTINUED➤

FERRITE FILTERED D-SUB CONNECTORS (CONT.)

PCB VERTICAL FERRITE FILTERED CONNECTORS

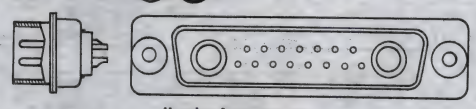
Mfg. Part No.	Contacts	Contacts	Stock No.	Price Each 1-9	Price Each 10-24
09 64 222 7800	15	Plug	86R5725	6.54	6.26
09 64 312 7800	25	Receptacle	86R5728	6.80	6.51
09 64 322 7800	25	Plug	86R5731	8.48	8.12
SOLDER CUP TERMINATION FERRITE FILTERED CONNECTORS					
09 64 111 7800	9	Receptacle	86R5715	3.10	2.91
09 64 121 7800	9	Plug	86R5718	3.04	2.86
09 64 211 7800	15	Receptacle	86R5721	3.96	3.72
09 64 221 7800	15	Plug	86R5724	3.90	3.67
09 64 311 7800	25	Receptacle	86R5727	4.70	4.42
09 64 321 7800	25	Plug	86R5730	4.58	4.30
09 64 411 7800	37	Receptacle	86R5733	8.13	7.78
09 64 421 7800	37	Plug	86R5735	8.73	8.36

(198013)

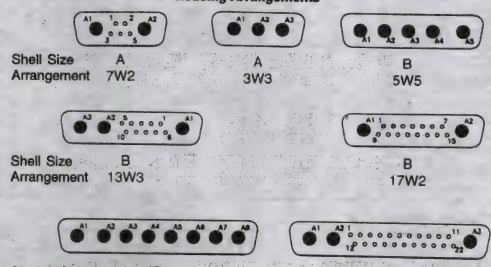
17TW SERIES D-SUB HYBRID CABLE CONNECTORS

RoHS Compliant Available

Amphenol Commercial Products



Housing Arrangements



Combination (hybrid) D-subminiature metal shell cable connectors feature installed, non-removable screw-machine solder cup signal contacts combined with power and coaxial contacts, *order separately on this page*. Tin-plated steel shell. Gold over nickel-plated bronze female signal contacts or brass male signal contacts are fixed in the high-temperature, black thermoplastic insulator. Panel mount 0.122″ diameter holes. Current rating: 7.5 amps with 10 amp peaks. Voltage rating: 300Vrms at 50Hz. Dielectric withstanding voltage: 1000Vrms at 50Hz. Insulation resistance: 5000 megohms at 500VDC. Operating temperature: –55°C to +155°C with peaks up to 180°C. Flame retardant to UL94V-0. Choice of 3 shell sizes and 7 housing arrangements. UL listed, CSA certified.

TINNED PLUGS WITH INDENTS

Mfg. Part No.	Contacts* Signal/Power or Coax	Arrangement	Shell Size	Stock No.	Price Each 1-9	Price Each 10-49
L717TWA7W2P	5/2	7W2	DA	01M1523	5.53	5.31
L717TWA3W3P	0/3	3W3	DA	88K3021	4.44	3.93
L717TWB5W5P	0/5	5W5	DB	01M1562	3.59	2.97
L717TWB13W3P	10/3	13W3	DB	86K8391	9.68	8.20
L717TWB17W2P	15/2	17W2	DB	01M1550	11.02	10.07
L717TWC21WA4P	17/4	21WA4	DC	01M1601	11.96	10.92
L717TWC8W8P	0/8	8W8	DC	87K1007	3.26	2.87
TINNED RECEPTACLES WITHOUT INDENTS						
L77TWA7W2S	5/2	7W2	DA	01M2605	7.71	6.53
L77TWA3W3S	0/3	3W3	DA	01M2584	2.53	2.25
L77TWB5W5S	0/5	5W5	DB	01M2654	2.31	1.81
L77TWB13W3S	10/3	13W3	DB	99K5390	11.42	10.43
L77TWB17W2S	15/2	17W2	DB	01M2637	11.55	10.69
L77TWC21WA4S	17/4	21WA4	DC	01M2694	14.88	13.75
L77TWC8W8S	0/8	8W8	DC	99K5383	2.72	2.18

* Contacts: size 20 signal, size 8 power or coax

(8301)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures

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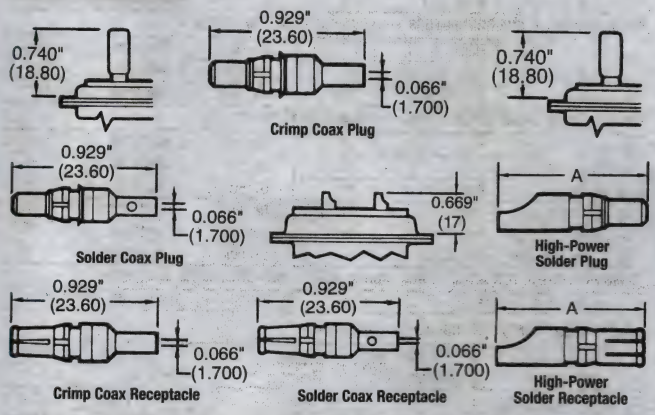
17TW SERIES COAX AND HIGH-POWER REMOVABLE CONTACTS FOR D-SUB CABLE CONNECTORS

RoHS Compliant Available

Amphenol Commercial Products



17TW series coax and high-power contacts (size 8) for use in combination (hybrid) D-subminiature cable connectors, *order separately on this page*. Machined copper alloy female contacts, machined brass male contacts. Both feature gold over nickel plating. Straight coax contacts available crimp or solder. Impedance: 50 ohms. Current rating: 0.5A. Voltage rating: 150Vrms at 50Hz. Frequency range: 0-1GHz. High-power contacts are solder type. Current rating: 10 to 40A. Voltage rating: 300Vrms at 50Hz.

STRAIGHT CRIMP COAX CONTACTS — 50 OHM, RG/U CABLE 179B/316B

Mfg. Part No.	Description	Stock No.	Price Each 1-24	Price Each 25-99	Price Each 100-249	Price Each 250-499
L17DM537401	Plug	99K7787	13.23	11.85	9.90	8.04
L17DM537421	Receptacle	99K7803	12.31	11.39	10.22	9.54
STRAIGHT SOLDER COAX CONTACTS — 50 OHM, RG/U CABLE 179B/316B						
L17DM537405001	Plug	99K7791	11.37	10.52	9.44	8.82

HIGH-POWER SOLDER CONTACTS — PLUGS

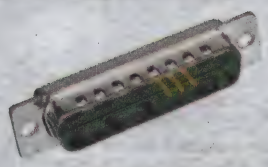
Mfg. Part No.	Dim. A	Amp Rating	Wire Size	Stock No.	Price Each 1-24	Price Each 25-99	Price Each 100-249	Price Each 250-499
L17DM53745-1	0.866″	40	#8	87K6825	3.49	3.13	2.61	2.12
L17DM537457	0.866″	20	#12	99K7832	3.47	2.85	2.60	2.31
L17DM53745-8	0.866″	10	#16	89K7392	3.07	2.75	2.29	1.87
HIGH-POWER SOLDER CONTACTS — RECEPTACLES								
L17DM537441	0.854″	40	#8	99K7817	4.94	4.26	3.56	3.19
L17DM537446	0.854″	20	#12	99K7824	5.36	4.93	4.24	3.82
L17DM53744-7	0.854″	10	#16	89K7393	4.08	3.57	2.97	2.68

(8343)

COMBINATION LAYOUT D-SUBMINIATURE CONNECTORS

RoHS Compliant Available

HARTING®



Plug with Solder Bucket Signal Contacts

Receptacle with Solder Bucket Signal Contacts

HARTING's mixed D-Sub range brings the advantage of an industry standard I/O interconnect product with the possibility to customize for any application. The range is designed around the standard D-Sub shell sizes with the possibility to have a blend of contacts such as signals with coaxial, power, high voltage or pneumatic contacts. Due to its construction, the product is fully shielded and helps reducing the EMI/RFI leakage. All contacts are machined with two different platings. When hot plug-in is required, first mate last break contacts can also be supplied. For connectors to be fitted on a board with SMT components, they can be supplied in an SMC (PiHIR) version which is assembled in the reflow solder process, thus reducing assembly cost.

COMBO LAYOUT D-SUB CONNECTORS - SOLDER BUCKET SIGNAL CONTACTS

Mfg. Part No.	Gender	Contacts Signal/Power	Arrangement	Stock No.	Price Each 1-9
09 69 211 5072	Plug	5/2	DA-7W2	44J6443	7.05
09 69 311 5133	Plug	10/3	DB-13W3	01M9721	9.20
09 69 411 5136	Plug	7/6	DC-13W6	30M6818	10.25
09 69 311 5172	Plug	15/2	DB-17W2	01M9722	11.32
09 69 411 5214	Plug	17/4	DC-21WA4	01M9726	11.70
09 69 201 7072	Receptacle	5/2	DA-7W2	62M1880	7.05
09 69 201 5072	Receptacle	5/2	DA-7W2	01M9715	7.70
09 69 301 5133	Receptacle	10/3	DB-13W3	01M9718	11.29
09 69 401 5136	Receptacle	7/6	DC-13W6	08R5996	13.36

➤CONTINUED➤

D-SUB – COMBO LAYOUT CONNECTORS

COMBINATION LAYOUT D-SUBMINIATURE CONNECTORS (CONT.)

Mfg. Part No.	Gender	Contacts Signal/Power	Arrangement	Stock No.	Price Each 1-9
● 09 69 301 5172	Receptacle	15/2	DB-17W2	01M9719	13.44
● 09 69 401 5214	Receptacle	17/4	DC-21WA4	01M9724	14.11
COMBO LAYOUT D-SUB CONNECTORS - 90° PCB WITH 40A POWER CONTACTS					
● 09 69 200 9049	Plug	5/2	DA-7W2	98K4679	13.94
● 09 69 300 9018	Plug	10/3	DB-13W3	98K4688	17.68
● 09 69 200 9050	Receptacle	5/2	DA-7W2	98K4680	18.07
COMBO LAYOUT D-SUB CONNECTORS - WITHOUT SIGNAL CONTACTS					
● 09 69 210 0033	Plug	0/3	DA-3W3	01M9716	3.14
● 09 69 310 0055	Plug	0/5	DB-5W5	01M9720	4.30
● 09 69 410 0088	Plug	0/8	DC-8W8	44J6493	4.82
● 09 69 200 0033	Receptacle	0/3	DA-3W3	01M9714	3.71
● 09 69 300 0055	Receptacle	0/5	DB-5W5	98K4687	4.28
● 09 69 400 0088	Receptacle	0/8	DC-8W8	01M9723	5.53
COMBO LAYOUT D-SUB CONNECTORS - CODED SHELL - WITHOUT SIGNAL CONTACTS					
● 09 69 110 0022	Plug	0/2	DE-2W2	44J6398	4.14

HIGH CURRENT CONTACTS - SOLDER TERMINATION

Mfg. Part No.	Gender	Current Rating	Stock No.	Price Each 1-9
● 09 69 281 7420	Pin	10 A	30M6777	2.60
● 09 69 281 7421	Pin	20 A	44J6454	2.83
● 09 69 281 7422	Pin	30 A	98K4685	2.83
● 09 69 281 7423	Pin	40 A	44J6456	2.93
● 09 69 181 7420	Socket	10 A	30M6739	3.32
● 09 69 181 7421	Socket	20 A	44J6407	3.53
● 09 69 181 7422	Socket	30 A	98K4677	3.64
● 09 69 181 7423	Socket	40 A	44J6409	3.53
HIGH CURRENT CONTACTS - SOLDER TERMINATION				
● 09 69 281 2550	Pin	2 A DC, ≤3kV	44J6445	6.97
● 09 69 181 2550	Socket	2 A DC, ≤3kV	86H3603	5.06

COAXIAL CONTACTS - CRIMP/SOLDER TERMIANTION

Mfg. Part No.	Gender	For Use With	Stock No.	Price Each 1-9
● 09 69 281 7140	Pin	RG174U, 188AU, 316U	44J6451	6.23
● 09 69 181 7140	Socket	RG174U, 188AU, 316U	44J6404	6.63

(114893)

COOLPOWER® LCC17 SERIES D-SUB CONNECTORS

RoHS Compliant Available

Amphenol Commercial Products

Features

- Fully interchangeable with standard D-sub sizes
- High current CoolBand power contacts for maximum performance
- 3W3 contact arrangements, male and female
- PCB solder tail, solder cup, crimp terminations
- CoolPower® D-sub male and female connectors must be used together.

Specifications

- Housing: High temperature resistant nylon, UL 94V-0, black
- Power contacts: Gold plated copper alloy
- Hardware: Nickel Plated Steel or Brass
- Current rating: Power 55A
- Contact Resistance: Power 0.25 mW max;
- Insulation Resistance: 5000 MW max
- Dielectric Withstanding Voltage: 1500 VDC
- Operating Temperature: -40°C to 105°C
- Durability: 250 mating cycles

CoolPower® connectors are intended for medium and high current applications where cost and space are as critical as performance. CoolPower® D-sub connectors offer the familiar shape and functionality of a combination D-subminature connector with high current, high performance Amphenol CoolBand contact technology. The LCC17 series is intended for use in higher amperage power supply and distribution applications where the current handling capabilities of typical combo D-sub connectors is insufficient.

TINNED PLUGS WITH INDENTS

Mfg. Part No.	Contacts Signal/Power	Arrangement	Termination	Shell Size	Stock No.	Price Each 1-9
● LCC17-A3W3PA-4N0	0/3	DA-3W3	Through Hole Right Angle	DA	76T1365	8.91
● LCC17-A3W3PE-AN0	0/3	DA-3W3	Through Hole Vertical	DA	76T1366	6.48
TINNED RECEPTACLES WITHOUT INDENTS						
● LCC17-A3W3SM-2N0	0/3	DA-3W3	Solder	DA	76T1367	6.80

(201297)

DW SERIES COMBINATION LAYOUT D-SUB CONNECTORS

RoHS Compliant Available

FCI

DW Series combination D-Subminiature connectors feature solder signal contacts. Power contacts not included, ordered separately below. Insulator material thermoplastic, contact material brass.

PLUGS

Mfg. Part No.	Shell Size	Contacts Signal/Power	Arrangement	Stock No.	Price Each 1-9	Price Each 10-24
● DA3V3PA00LF	DA	0/3	3V3	62K3945	1.65	1.55
● DA3W3PA00LF	DA	0/3	3W3	62K3947	1.73	1.62
● DA7W2PA00LF	DA	5/2	7W2	91K6684	6.27	5.76
● DB5W5PA00LF	DB	0/5	5W5	71K2715	2.14	2.01
● DB9W4PA00LF	DB	5/4	9W4	62K4009	14.79	13.69
● DB13W3PA00LF	DB	10/3	13W3	91K6688	5.98	5.43
● DC8W8PA00LF	DC	0/8	8W8	91K6720	3.00	2.76
● DC25W3PA00LF	DC	22/3	25W3	62K4027	11.49	10.64
● DC27W2PA00LF	DC	25/2	27W2	62K4030	9.06	8.21
● DD24W7PA00LF	DD	17/7	24W7	71K2908	8.04	7.29
● DD47W1PA00LF	DD	46/1	47W1	19P9075	18.29	16.93
● DE2V2PA00LF	DE	0/2	2V2	62K4066	2.22	2.08
RECEPTACLES						
● DA3V3SA00LF	DA	0/3	3V3	62K3946	1.73	1.63
● DA3W3SA00LF	DA	0/3	3W3	91K6683	1.96	1.84
● DB5W5SA00LF	DB	0/5	5W5	62K4008	2.30	2.16
● DB9W4SA00LF	DB	5/4	9W4	71K2718	20.66	19.13
● DB17W2SA00LF	DB	15/2	17W2	91K6692	11.46	10.60
● DC8W8SA00LF	DC	0/8	8W8	91K6721	2.62	2.46
● DC25W3SA00LF	DC	22/3	25W3	62K4028	14.88	13.77
● DC27W2SA00LF	DC	25/2	27W2	62K4031	10.95	10.13
● DD24W7SA00LF	DD	17/7	24W7	71K2909	9.77	8.86
● DD36W4SA00LF	DD	32/4	36W4	62K4042	13.56	12.56
● DE2V2SA00LF	DE	0/2	2V2	62K4067	2.43	2.28

POWER CONTACTS - SOLDER CUP

Mfg. Part No.	Gender	AWG	Stock No.	Price Each 1-9	Price Each 10-24
● 8638PPS4005LF	Pin	8AWG	93K5384	3.76	3.45
● 8638PPS2005LF	Pin	12AWG	93K5383	2.73	2.51
● 8638PPS1005LF	Pin	16AWG	63K0579	3.89	3.57
● 8638PSS4005LF	Socket	8AWG	93K5386	3.71	3.41
● 8638PSS2005LF	Socket	12AWG	93K5385	3.89	3.58
● 8638PSS1005LF	Socket	16AWG	63K0593	4.57	4.20
POWER CONTACTS - CRIMP					
● 8638PSC2005LF	Socket	14AWG to 12AWG	63K0588	2.93	2.69
HIGH VOLTAGE CONTACTS - SOLDER CUP					
● 86382000LF	Pin	...	72K4721	6.03	5.53

(115563)

CANNON COMBINATION D-SUB/ COAXIAL CONNECTORS

RoHS Compliant Available

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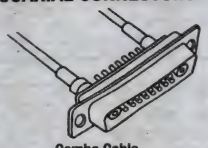
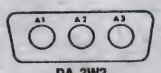
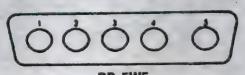


Combo Cable

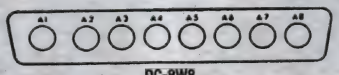


DA-3W3



DB-5W5

DB-13W3



DC-8W8

Integrate signal, 50-ohm coax, high power and high voltage with signal in the same package. Tin-finished steel shells with 94V-0 thermoplastic. Signal contact current rating: 7.5 amps. Meets MIL-PRF-24308 industry specifications. Combo cable connectors require high power or coax contacts *order separately on page 871.*

COMBO CABLE

Mfg. Part No.	Contact Config.	Insert Arrangement	Description	Stock No.	Price Each 1-24
● DAM3W3PK87	1	DA-3W3	Plug	93F8909	4.71
● DBM5W5PK87	2	DB-5W5	Plug	93F8910	3.54
● DBM13W3PK87	4	DB-13W3	Plug	36P8582	16.35
● DBM5W5SA197	2	DB-5W5	Receptacle	93F8905	7.54
● DBM13W3SA197	4	DB-13W3	Receptacle	36P8587	17.27
● DCM8W8SA197	3	DC-8W8	Receptacle	36P9477	9.65

CONTINUED

CANNON COMBINATION D-SUB/COAXIAL CONNECTORS (CONT.)

MIL SPEC SOLDER CUP COMBO CABLE

Mfg. Part No.	Contact Config.	Insert Arrangement	Description	Stock No.	Price Each 1-24
DBMM9W4P	...	DB-9W4	Plug	92B8903	8.22
DBMM9W4S	...	DB-9W4	Receptacle	92B8902	7.66

(8715)

CANNON COMBINATION D-SUB/COAXIAL CONTACTS

RoHS Compliant Available

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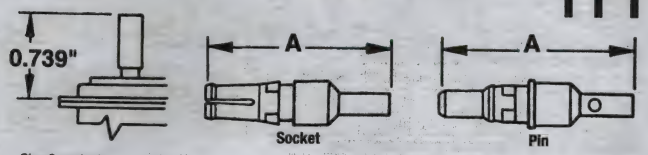

- Size 8 contacts
- Commercial applications
- Contact plating: gold over nickel
- Current rating: 5A
- Temperature range: -55°C to +125°C

50-OHM STRAIGHT SOLDER/SOLDER RG316

Mfg. Part No.	Description	Dim. A	Stock No.	Price Each 1-24	25-99
DM53742-5001	Socket	0.965/0.917"	47M0074	15.00	13.65

75-OHM STRAIGHT CRIMP/CRIMP

Mfg. Part No.	Description	Dim. A	Stock No.	Price Each 1-9	10-24
D1303222	Pin	0.865"	37P2525	3.11	2.85
D130344-1	Socket	0.865"	96H9490	4.95	4.51

75-OHM CRIMP/CRIMP 30µ"

D130322-1	Pin	0.865"	24C1866	5.41	4.92
D130344	Socket	0.865"	24C1867	5.39	4.90

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CANNON COMBINATION D-SUB/HIGH-POWER SOLDER-TYPE CONTACTS

RoHS Compliant Available

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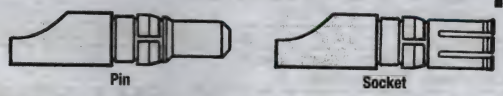


- Size 8 contacts
- Commercial applications
- Contact plating: gold over nickel
- Temperature range: -55°C to +125°C

Overall plug length: 0.866" (22); diameter 0.142" (3.61). Overall receptacle length: 0.856" (21.74).

CONTACTS

Mfg. Part No.	Current (A)	Contact Type	AWG	Stock No.	Price Each 1-49	50-99
DM130340-4*	10	Pin	16	74C0474	4.74	4.03
DM53745-8	10	Pin	16	47M0082	6.34	5.41
DM53744-7	10	Socket	16	47M0079	6.02	5.11
DM53744-24**	10	Socket	16	42J5554	4.45	4.08
DM53744-6	20	Socket	12	47M0078	5.95	5.06

*Crimp contact; **50u" Gold over copper

TOOLS

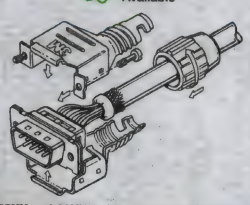
Mfg. Part No.	Description	Stock No.	Price Each 1-4
CET-C6B-2	Extraction Tool for coaxial, high-power and high-voltage contacts	16F022	119.23

(8717)

D-SUB METAL JUNCTION SHELLS FOR EMI/ESD PROTECTION

RoHS Compliant Available

3M



- Provide EMI/ESD Protection
- Grounding Available For Discrete Wire
- Easy Assembly
- Steel Shell With Nickel Plating
- Includes 2 Jack Screws
- Straight Cable Exit

Accommodates 3M **mfg. part nos. 898XX, 899XX, 82XX** and **83XX** D-Sub connectors; *ordered separately on page 866.* Designed for use with 3M **mfg. part nos. 3659** and **3750** round-jacketed flat cable, *order separately on page 1220.*

➤CONTINUED➤

D-SUB METAL JUNCTION SHELLS FOR EMI/ESD PROTECTION (CONT.)

Mfg. Part No.	Type	Stock No.	Price Each 1-99	100-499	500-999	1000+
3357-9209	9	87F3873	4.67	3.53	3.19	2.93
3357-9215	15	87F3874	5.57	4.24	3.83	3.50
3357-9225	25	87F3875	6.81	5.16	4.67	4.27
3357-9237	37	87F3876	14.37	10.89	9.84	8.99

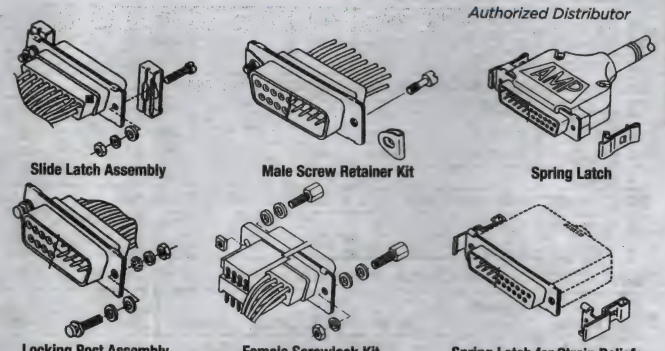
(8512)

AMP AMPLIMITE® D-SUB HARDWARE

RoHS Compliant Available

TE connectivity

Authorized Distributor



Female screwlock kits fit plastic or metal shell connector.

EMI/RFI - BRASS .006" (0.15MM) THICK, BRIGHT TIN-PLATED GASKETS

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	10-24	25-49
5747024-3	9	42K7427	3.08	2.95	2.71
5747025-3	15	42K7428	5.62	5.07	4.60
745777-4	37	16M3428	6.95	5.82	5.32

EMI/RFI - DIE CAST ZINC

5745171-5	9	64K3473	9.08	8.77	8.46
1-5745172-3	15	16M3861	14.94	13.58	12.23
5745173-1	25	16M4021	14.46	12.98	12.28
5745174-1	37	16M4022	11.38	10.74	9.67

GROMMET SET (4 PER SET)

747746-1	9, 15	95F2703	0.93	0.88	0.84

SPRING LATCHES

745255-2	9, 15, 25, 37, 50	44F8760	4.31	4.19	4.05
745779-2	9, 15, 25, 37	44F8751	2.05	1.87	1.68

SCREWLOCK KITS FOR .050 SERIES, STAINLESS STEEL

Mfg. Part No.	Thread Size	Thread Length	Stock No.	Price Each 1-9	10-49	50-99
749087-2	4-40	0.173" (4.39)	92F4858	2.92	2.82	2.47
750831-1	4-40	0.180" (4.57)	08C3742	3.98	3.74	3.49
750644-1	4-40	0.205" (5.21)	66F3093	4.11	3.96	3.46
786585-2	2-56	0.205" (5.21)	99F8999	3.82	3.68	3.22

STAND-OFF BUSHINGS, ALUMINUM

5205933-4	...	...	16M3195	1.62	1.54	1.44

LATCHING BLOCKS, ZINC - SLOT RECESS AND THRU-HOLES

Mfg. Part No.	Positions	Panel Size	Thread Size	Stock No.	Price Each 1-9	10-49	50-99
745245-2	9, 15, 25, 37	Rear	...	50F604	1.52	1.45	1.37
747784-8	9, 15, 25, 37	Rear	...	33R1843	5.10	4.90	4.29

LATCHING BLOCKS, ZINC - THREADED INSERTS

208101-8	9, 15, 25, 37	Front	4-40	90F5297	1.87	1.79	1.69
745403-8	9, 15, 25, 37	Rear	4-40	44F8752	3.31	3.11	2.91

SLIDE LATCH CLIPS - STAINLESS STEEL (SCREWS / WASHERS / NUTS) - STEEL, ZINC-PLATED

5206942-1	...	...	4-40	16M3202	2.49	2.27	2.03

FEMALE SCREWLOCKS - ZINC-PLATED STEEL

Mfg. Part No.	Connector Series	Chromate Finish	Thread Size	Thread Length	Stock No.	Price Each 1-9	10-49
5747223-3	HD/HDF	Clear	2-56	0.560" (14.22)	84K8486	2.94	2.69
5207719-1	HD/HDF	Yellow	4-40	0.560" (14.22)	16M3204	2.11	1.97
5207719-3	HDP/HDF	Clear	4-40	0.560" (14.22)	16M3205	2.08	1.89
5745563-1	Amplimite	Yellow	4-40	0.250" (6.35)	16M4024	2.04	1.99

➤CONTINUED➤

AMP AMPLIMITE® D-SUB HARDWARE (CONT.)

Mfg. Part No.	Connector Series	Chro-mate Finish	Thread Size	Thread Length	Stock No.	Price Each 1-9	10-49
● 5207952-1	HD Plastic	Yellow	4-40	0.250″ (6.35)	68K1801	3.58	3.44
● 5745563-3	HDE	Clear	4-40	0.250″ (6.35)	11M2043	2.63	2.39
● 5205817-1	HDP/HDF	Yellow	4-40	0.312″ (7.92)	45K1514	2.28	2.05
● 5205817-3	HDP/HDF	Clear	4-40	0.312″ (7.92)	60K8282	2.19	2.12
● 5207872-1	HDP/HDF	Yellow	M3	0.312″ (7.92)	16M3206	3.03	2.91
INDIVIDUAL SCREWLOCKS (WASHERS AND NUTS NOT INCLUDED) - ZINC-PLATED STEEL							
● 5747877-3	Amplimite	Clear	4-40	0.158″ (4.01)	16M4033	0.69	0.64
● 5207952-3	HD	Clear	4-40	0.250″ (6.35)	16M3208	3.58	3.44
● 5748558-4	HDP/HDF	Clear	4-40	0.312″ (7.92)	84K0760	1.97	1.82
● 5749765-3	HDP/HDF	Clear	M2	0.312″ (7.92)	16M3374	1.42	1.30
LOCKING POST ASSEMBLY - STEEL, ZINC-PLATED							
● 5206514-1	HD/HDE HDF/HDP	Yellow	4-40	…	57K9751	3.22	3.10
● 5206514-6	HD/HDE HDF/HDP	Yellow	4-40	…	04M8126	3.14	2.97
● 5747242-1	HD/HDE HDF/HDP	Yellow	2-56	…	16M3350	3.02	2.72
MALE SCREW RETAINERS FOR METAL SHELL CONNECTORS - STEEL, ZINC-PLATED							
● 5745136-3	HDE/HDP	Clear	4-40	0.200″ (5.08)	16M3314	3.67	3.53
● 5745136-1	HDE/HDP	Yellow	4-40	0.200″ (5.08)	04M4330	1.75	1.58
● 5205980-1	HDE/HDP	Yellow	4-40	0.220″ (5.60)	45K1515	0.85	0.75
● 5746881-1	HDF	Clear	4-40	…	74K3524	2.24	2.09
MALE SCREW RETAINERS FOR PLASTIC SHELL CONNECTORS - STEEL, ZINC-PLATED							
● 5205980-4	HDE/HDP	Clear	4-40	0.220″ (5.60)	31K8737	1.37	1.21
● 5745647-1	HDE/HDP	Yellow	4-40	…	16M3333	1.74	1.66

SLIDE LATCH CLIPS - STAINLESS STEEL (SCREWS / WASHERS / NUTS) - STEEL, ZINC-PLATED

Mfg. Part No.	Connector Series	Finish	Thread Size	Stock No.	Price Each 1-9	10-49	50-99
● 5745404-1	9	Yellow Chromate	4-40	16M3327	3.64	3.50	3.06
● 5745583-1	15	Clear Chromate	2-56	14M8511	4.76	4.57	4.19
● 5745583-5	15	Yellow Chromate	4-40	58K3487	3.15	2.86	2.42
● 5745583-7	15	Yellow Chromate	4-40	16M3332	7.11	6.41	5.81

(8073)

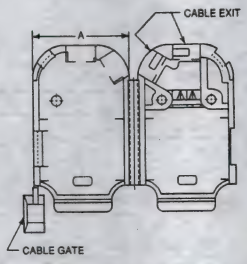
AMPLIMITE HDP-20 AND HDE-20 SERIES QUIK-SNAP BACKSHELL KIT

RoHS Compliant Available

TE connectivity

Authorized Distributor

- All-Plastic Cable Clamp Kit for HDP-20 and HDE-20 Series D-Sub Connectors
- Ideal for Jacketed Cable
- Quick Assembly
- No Special Tools Required



Each kit has cable exit option of 180° or 120°, and includes 1 hinged clamp, 1 cable exit gate plug (used to close unused cable exit), 2 zinc-plated carbon steel screws, 1 stainless steel relief clip and 2 stainless steel retainer clips for metal-shell connector applications.

BACKSHELL KIT WITH RETAINER SCREWS AND CLIPS

Mfg. Part No.	Positions	Dim. A	Stock No.	Price Each 1-9	10-49	50-99	100-249
● 5749914-2	9	0.785″	88K2949	4.98	4.78	4.18	3.98
● 5749915-2	15	1.110″	16M3376	6.54	6.38	5.54	5.27
● 5749626-2	25	1.650″	16M3372	7.78	7.09	6.90	6.56
BACKSHELL KIT WITHOUT RETAINER SCREWS AND CLIPS							
● 5750100-1	9	0.785″	40P9849	5.06	4.75	4.44	4.22

(8068)

AMPLIMITE HDP-20 AND HDE-20 CABLE CLAMPS

RoHS Compliant Available

TE connectivity

Authorized Distributor

For **HDP-20** or **HDE-20 series** metal shell connectors.

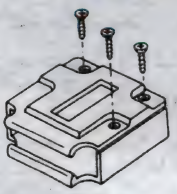


Fig. 1

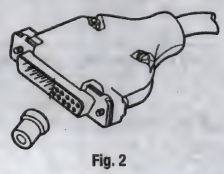


Fig. 2

BOX AND LID STRAIGHT/90° EXIT UNSHIELDED CABLE CLAMPS–FIG. 1
Black thermoplastic housing, gates, zinc-plated steel screws.

➤ CONTINUED ➤

AMPLIMITE HDP-20 AND HDE-20 CABLE CLAMPS (CONT.)

Mfg. Part No.	Positions	Cable O.D.	W x L	Stock No.	Price Each 1-9	10-49	50-99
● 207470-1	15	0.320″	1.078 x 1.700″	44F8741	9.25	8.85	7.64
● 207345-1	25	0.390″	1.620 x 1.700″	44F8742	4.66	4.27	4.15
● 207473-1	37	0.640″*	2.268 x 1.700″	44F8743	7.73	7.05	6.86
● 207476-1	50	0.490″	2.178 x 1.700″	44F8734	8.25	7.92	6.88
BOX AND LID STRAIGHT/90° EXIT UNSHIELDED CABLE CLAMPS WITH MALE SCREW RETAINERS Black thermoplastic housing, gates, zinc-plated steel flat head screws and zinc-plated yellow chromate male screws. Stainless steel retaining clip.							
● 5207908-1	9	0.160″	0.755 x 1.700″	01M5268	5.66	5.44	4.76
● 5207908-7	25	0.390″	1.620 x 1.700″	16M3207	6.17	5.92	5.15
● 1-5207908-0	37	0.640″	2.268 x 1.700″	16M2663	10.38	9.94	8.58
STRAIGHT EXIT DATAPHONE CABLE CLAMPS Black polyester housing. Cable outer diameter with gate 0.260″, 0.340″. Thread size: 4-40. Hardware included.							
● 5745122-2	15	0.400″	1.575 x 1.312″	16M3311	13.70	12.45	11.21
● 5745121-2	25	0.500″	2.115 x 1.421″	16M3310	12.62	11.99	11.36
STRAIGHT/90° EXIT UNSHIELDED CABLE CLAMPS Gray thermoplastic housing. Hardware included.							
● 5206471-1	15	0.350″	1.550 x 1.750″	16M3197	5.50	5.28	4.62
● 5206472-1	25	0.335″	2.090 x 1.750″	16M3198	5.61	5.39	4.71
● 5745134-1	25	0.460″	2.090 x 1.750″	16M3312	5.18	4.97	4.35
● 5745081-1	37	0.675″	2.738 x 1.750″	16M3309	6.05	5.81	5.09
CLAMSHELL STRAIGHT/45° EXIT UNSHIELDED CABLE CLAMPS Black thermoplastic housing. Hardware included.							
● 5205729-1	9	0.256″	0.750 x 1.625″	78K6716	4.35	4.18	3.66
● 5205730-1	15	0.320″	1.073 x 1.625″	79K1810	4.45	4.28	3.74
● 5205718-1	25	0.420″	1.615 x 1.625″	79K5114	4.00	3.84	3.36
● 5205731-1	37	0.490″	2.263 x 1.625″	16M3193	5.78	5.55	4.86
● 5205732-1	50	0.600″	2.168 x 1.625″	16M3194	4.87	4.68	4.29
CLAMSHELL STRAIGHT/45° EXIT UNSHIELDED CABLE CLAMPS - SHORT BODY							
● 5206393-1	15	0.320″	1.073 x 1.250″	51M4706	5.80	5.28	5.26
CLAMSHELL STRAIGHT/45° EXIT UNSHIELDED CABLE CLAMPS WITH MALE SCREW RETAINERS Black thermoplastic housing and gates. Steel, zinc-plated yellow chromate male screws. Stainless steel retaining clip.							
● 5206478-1	9	0.256″	0.750 x 1.625″	16M3199	4.83	4.64	4.06
● 5206478-2	15	0.320″	1.073 x 1.625″	16M3200	3.84	3.70	3.23
● 5206478-3	25	0.420″	1.615 x 1.625″	16M3201	4.96	4.76	4.17
CLAMSHELL STRAIGHT/45° EXIT UNSHIELDED CABLE CLAMPS WITH MALE SCREW RETAINERS - SHORT BODY							
● 1-5206478-2	25	0.420″	1.615 x 1.625″	17R0581	7.22	6.93	6.02
LOW PROFILE 90° EXIT UNSHIELDED CABLE CLAMPS Black thermoplastic housing. Hardware included.							
● 745550-1	9	0.330″	0.550 x 1.290″	92F8460	4.90	4.60	4.30

HDP-20 AND HDE-20 SHIELDED CABLE CLAMPS WITH GROMMETS — FIG. 2
Straight exit RFI/EMI shields allow jacketed cable to be terminated to connector before shield is installed. For greater cable support, *order* **type 747784-3** *jackscrew kit separately below.*

DIE CAST ZINC ALLOY SHIELD CABLE CLAMPS

Mfg. Part No.	Positions	Cable O.D.	W × L	Stock No.	Price Each 1-9	10-99	100-499
● 5748676-1	9	0.185-0.32″	1.215 × 1.91″	87K0249	5.03	4.82	4.02
● 5748676-2	15	0.185-0.32″	1.545 × 1.91″	16M3360	5.35	5.09	4.46
● 5748676-3	25	0.255-0.47″	2.090 × 1.92″	16M3361	8.57	7.71	6.46
● 5748676-4	37	0.255-0.47″	2.738 × 1.92″	16M3362	9.79	9.46	8.17
● 5748676-5	50	0.255-0.47″	2.644 × 1.92″	16M3363	15.69	14.26	12.84
METAL-PLATED PLASTIC SHIELD CABLE CLAMPS							
● 5748677-1	9	0.185-0.32″	1.215 × 1.91″	16M3364	7.47	6.55	5.81
● 5748677-2	15	0.185-0.32″	1.545 × 1.91″	16M3365	10.90	10.20	9.18
● 5748677-3	25	0.255-0.47″	2.090 × 1.92″	16M3366	8.40	8.03	6.94
● 5748677-5	50	0.255-0.47″	2.644 × 1.92″	80K0901	20.15	18.20	16.34
BLACK PLASTIC SHIELD CABLE CLAMPS							
● 5748678-1	9	0.185-0.32″	1.215 × 1.91″	16M3367	5.71	5.23	5.11
● 5748678-2	15	0.185-0.32″	1.545 × 1.91″	14M8868	8.50	8.14	7.02
● 5748678-3	25	0.255-0.47″	2.090 × 1.92″	16M3368	4.77	4.59	4.01
● 5748678-4	37	0.255-0.47″	2.738 × 1.92″	16M3369	7.60	7.28	6.33
STRAIGHT EXIT RFI/EMI METAL-PLATED PLASTIC SHIELDED CABLE CLAMPS							
● 5745854-5	9	0.200″	1.215 x 1.910″	04M6854	8.43	8.14	7.85
● 5745854-3	9	0.250″	1.215 x 1.910″	80K7955	7.46	7.16	6.22
● 5745854-1	9	0.370″	1.215 x 1.910″	16M3342	7.61	7.30	6.34
● 5747099-5	15	0.300″	1.545 x 1.910″	16M3345	10.44	9.99	8.63
● 5747099-3	15	0.375″	1.545 x 1.910″	76K0842	8.77	8.39	7.24
● 5747099-1	15	0.430″	1.545 x 1.910″	16M3344	10.79	10.32	8.92
● 5745833-9	25	0.280″	2.090 x 1.920″	15M8294	7.98	7.66	6.65
● 5745833-7	25	0.350″	2.090 x 1.920″	16M3341	10.53	10.08	8.71
● 5745833-5	25	0.430″	2.090 x 1.920″	16M3340	6.95	6.67	5.80
● 5745833-1	25	0.530″	2.090 x 1.920″	76K0837	10.00	9.42	8.84

➤ CONTINUED ➤

AMPLIMITE HDP-20 AND HDE-20 CABLE CLAMPS (CONT.)

STRAIGHT EXIT RFI/EMI METAL-PLATED PLASTIC SHIELDED CABLE CLAMPS

Mfg. Part No.	Positions	Cable O.D.	W × L	Stock No.	Price Each 1-9	10-99	100-499
5747100-1	37	0.650″	2.738 x 1.920″	50M8567	10.10	9.67	8.35
5747098-1	50	0.750″	2.644 x 1.920″	34P1028	12.41	11.80	11.18

GROMMET SET

Mfg. Part No.	Positions	Description	Stock No.	Price Each 1-9	10-49	50-99
747973-1	25/37	Grommet Set	50F623	1.40	1.28	1.15

STRAIGHT EXIT RFI/EMI DIE CAST SHIELDED CABLE CLAMPS

Mfg. Part No.	Positions	Cable O.D	W × L	Stock No.	1-9	10-49	50-99
5745171-2	9/15	0.200″	1.215 x 1.910″	84K8483	10.72	10.26	8.86
5745171-1	9/15	0.250″	1.215 x 1.910″	16M3315	11.00	10.67	9.22
5745172-3	15/26	0.225″	1.545 x 1.910″	04M7291	12.86	11.69	10.53
5745172-2	15/26	0.300″	1.545 x 1.910″	16M3317	11.51	10.47	9.42
5745172-1	15/26	0.375″	1.545 x 1.910″	16M3316	11.00	10.58	9.53
5745173-5	25/44	0.280″	2.090 x 1.920″	16M3320	15.25	13.86	12.48
5745173-4	25/44	0.350″	2.090 x 1.920″	16M3319	14.85	14.01	12.62
5745173-3	25/44	0.430″	2.090 x 1.920″	58K3490	15.00	13.76	12.39
5745173-2	25/44	0.480″	2.090 x 1.920″	16M3318	10.38	9.36	9.22
5745174-5	37/62	0.350″	2.738 x 1.920″	84K8485	14.49	13.18	11.86
5745174-4	37/62	0.425″	2.738 x 1.920″	16M3322	11.27	10.78	9.31
5748677-4	37/62	0.470″	2.738 x 1.920″	16M4036	11.57	10.52	9.47
5745174-3	37/62	0.500″	2.738 x 1.920″	16M3321	11.62	10.57	9.51
5745174-2	37/62	0.575″	2.738 x 1.920″	31M3595	12.72	12.09	11.46
5745175-5	50/78	0.450″	2.644 x 1.920″	16M3324	14.98	13.62	12.26
5745175-4	50/78	0.525″	2.644 x 1.920″	16M3323	11.13	10.65	9.20
5745175-3	50/78	0.600″	2.644 x 1.920″	58M1740	11.12	10.64	9.19
5745175-2	50/78	0.675″	2.644 x 1.920″	48M4472	9.66	8.88	7.67
5745175-1	50/78	0.750″	2.644 x 1.920″	58K3483	12.39	11.26	10.14

90° EXIT RFI/EMI METAL CABLE SHIELDS

For jacketed cable. Nickel-over-copper plate zinc alloy shield. Stainless steel slide latch.

5745652-3	15	0.300″	2.31 × 1.285″	16M3335	14.48	12.98	12.81
5745652-2	15	0.375″	2.31 × 1.285″	16M4027	18.73	17.40	15.17
5745652-1	15	0.430″	2.31 × 1.285″	16M3334	16.99	15.78	13.76
5745653-5	25	0.280″	2.85 × 1.285″	55M6832	17.81	17.11	16.41
5745653-4	25	0.355″	2.85 × 1.285″	16M3337	18.45	17.73	17.00
5745653-3	25	0.430″	2.85 × 1.285″	16M3336	17.96	17.26	16.56
5745653-2	25	0.480″	2.85 × 1.285″	05R8701	19.26	16.58	14.45

JACKSCREW KIT

Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-49	50-99
747784-3	2-Piece, 4-40 Jackscrew Kit	50F492	2.86	2.75	2.41

(8071)

AMPLIMITE HDP-20, HDP-22 and HDE-20 SHIELDING HARDWARE KITS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Kits contain: connector, inner and outer shield, enclosure, and 2 jack screws. Order contacts and ferrules separately; *go online or call.*

HDP-20 BASIC SHIELDING HARDWARE KITS

Mfg. Part No.	Shell Size	Positions	Connector	Cable Insulation Diameter (inches)	Stock No.	Price Each 1-9	10-24	25-49
1658645-1	DE	9	Plug	0.165 – 0.455	42K6674	2.67	2.43	2.28
5748526-1	DE	9	Plug	0.165 – 0.455	73K3937	10.27	9.83	8.93
1658647-1	DA	15	Plug	0.165 – 0.455	42K6676	4.41	4.24	3.71
5750636-1	DA	15	Plug	0.165 – 0.455	19R3125	7.14	6.86	5.96
1658648-1	DB	25	Plug	0.165 – 0.455	42K6677	5.05	4.85	4.24
1658650-1	DC	37	Plug	0.338 – 0.480	42K6679	8.26	7.92	6.88
1658652-1	DD	50	Plug	0.338 – 0.480	16M3868	14.52	13.20	11.88
1658646-1	DE	9	Socket	0.165 – 0.455	42K6675	1.57	1.43	1.34
5748536-1	DE	9	Socket	0.165 – 0.455	29M8428	18.74	17.41	15.17
5747539-1	DA	15	Socket	0.165 – 0.455	42K7467	3.62	3.48	3.05
1658649-1	DB	25	Socket	0.165 – 0.455	42K6678	4.86	4.68	4.09
1658662-1	DB	25	Socket	0.165 – 0.455	42K6687	8.68	...	...
1658651-1	DC	37	Socket	0.338 – 0.480	42K6680	9.00	8.39	7.78

HDP-20 SHIELDING HARDWARE ENCLOSURE KITS

1658655-1	DE	9	Plug	0.190 – 0.375	42K6682	13.16	11.96	10.77
1658657-1	DA	15	Plug	0.190 – 0.375	42K6684	13.65	12.41	11.17
1658659-1	DB	25	Plug	0.217 – 0.435	42K6686	14.10	12.82	11.54
5747958-1	DC	37	Plug	0.338 – 0.562	42K7490	15.88	14.22	14.15
1658661-1	DD	50	Plug	0.338 – 0.562	16M2754	18.54	17.36	16.17
1658654-1	DE	9	Socket	0.190 – 0.375	42K6681	12.94	11.76	10.59

➤ CONTINUED ➤

AMPLIMITE HDP-20, HDP-22 and HDE-20 SHIELDING HARDWARE KITS (CONT.)

HDP-20 SHIELDING HARDWARE ENCLOSURE KITS

Mfg. Part No.	Shell Size	Positions	Connector	Cable Insulation Diameter (inches)	Stock No.	Price Each 1-9	10-24	25-49
1658656-1	DA	15	Socket	0.190 – 0.375	42K6683	13.41	12.64	11.38
1658658-1	DB	25	Socket	0.217 – 0.435	42K6685	14.51	13.19	11.88
1658660-1	DC	37	Socket	0.338 – 0.562	16M2753	16.76	15.57	13.57
5747959-1	DD	50	Socket	0.338 – 0.562	42K7491	17.59	16.34	14.24

HDP-22 BASIC SHIELDING HARDWARE KITS

1658675-1	DE	15	Plug	0.165 – 0.455	42K6698	3.30	3.10	3.08
1658676-1	DA	26	Plug	0.165 – 0.455	42K6699	10.14	9.19	9.12
1658677-1	DB	44	Plug	0.165 – 0.455	16M2755	10.34	9.87	9.40
5748471-1	DC	62	Plug	0.338 – 0.562	42K7494	12.35	11.85	11.34
5748472-1	DD	78	Plug	0.338 – 0.562	16M3359	8.98	8.25	7.61
5748634-1	DE	15	Socket	0.165 – 0.455	42K7500	3.87	3.34	3.06
1658687-1	DA	26	Socket	0.165 – 0.455	16M2757	10.49	10.04	8.67

HDP-22 SHIELDING HARDWARE ENCLOSURE KITS

1658678-1	DE	15	Plug	0.190 – 0.375	42K6700	11.51	11.14	10.76
1658679-1	DA	26	Plug	0.190 – 0.375	42K6701	14.97	13.61	12.26
1658680-1	DB	44	Plug	0.190 – 0.375	71M0787	16.52	15.02	13.52
1658688-1	DE	15	Socket	0.190 – 0.375	42K6709	14.94	14.19	13.45
5748642-1	DC	62	Socket	0.338 – 0.562	42K7502	20.30	18.33	17.56

HD-20 SHIELDING HARDWARE ENCLOSURE KITS

1571650-4	DE	9	Plug	0.217 – 0.270	52K3424	10.26	9.75	9.24

HDE-20 BASIC SHIELDING HARDWARE KITS

Mfg. Part No.	Shell Size	Positions	Connector	Cable Insulation Diameter (inches)	AWG	Stock No.	Price Each 1-9	10-49
1-747944-5	DE	9	Plug	0.190 – 0.375	26AWG to 22AWG	16M2680	13.35	12.14
1-747946-5	DA	15	Plug	0.190 – 0.375	26AWG to 22AWG	42K8655	25.14	22.70
1-747948-5	DB	25	Plug	0.217 – 0.435	30AWG to 26AWG	42K6578	14.30	12.89
1-747948-6	DB	25	Plug	0.217 – 0.435	26AWG to 22AWG	42K8657	30.03	27.18
1-747943-6	DE	9	Socket	0.190 – 0.375	26AWG to 22AWG	42K8653	11.87	10.79
1-747945-5	DA	15	Socket	0.190 – 0.375	30AWG to 26AWG	42K8654	14.93	13.57

(40671)

AMPLIMITE ALUMINUM FERRULES

RoHS Compliant Available

TE connectivity

Authorized Distributor

For shielded cable clamps, *ordered separately on pages 872-873.*

INNER-CRIMP FERRULES

Mfg. Part No.	Cable Diameter	Stock No.	Price Each Each
7-745129-2	0.350″ (8.90)	42K7663	0.91
7-745129-1	0.430″ (10.92)	42K7662	5.83
7-745129-6	0.525″ (13.34)	42K7665	5.54
7-745129-9	0.240″ (6.10)	42K7666	2.72
7-745129-0	0.240″ (6.10)	42K7661	2.20
6-745129-9	0.365-0.370″ (9.27-9.40)	42K7633	2.41

OUTER-CRIMP FERRULES

3-745130-8	0.240″ (6.10)	42K6871	1.45
3-747579-0	0.246″ (6.25)	69K7743	0.52
4-745130-5	0.280″ (7.11)	16M3095	0.59
3-745130-9	0.350″ (8.90)	42K6872	1.00
4-745130-0	0.365-0.370″ (9.27-9.40)	42K6897	1.78
4-745130-1	0.430″ (10.92)	42K8672	1.40
2-747580-3	0.430″ (10.92)	42K6841	1.36

SPLIT-RING FERRULES

745508-3	0.240″ (6.10)	44F8826	0.26
745508-4	0.280-0.300″ (7.11-7.62)	44F8781	1.81
745508-6	0.370-0.375″ (9.40-9.53)	44F8783	0.28

HDP-20 FERRULES FOR SHIELDING HARDWARE KITS

3-747579-2	0.246-0.324″ (6.25-8.23)	42K6873	0.36
3-747579-4	0.324-0.375″ (8.23-9.53)	42K6874	0.50
2-747579-7	0.375-0.437″ (9.53-11.10)	70M8805	1.43
3-747579-6	0.400-0.460″ (10.16-11.56)	42K6875	0.85
2-747580-1	0.375-0.432″ (9.53-10.97)	05M6497	1.14
2-747580-2	0.480-0.562″ (12.19-14.28)	89M4615	0.70

(8072)

D-SUB – ACCESSORIES

AMPLIMITE D-SUB HARDWARE

RoHS Compliant Available

TE connectivity

Authorized Distributor

Male Screw Retainer Kit — Locking Post Assembly — Female Screwlock Kit

Mfg. Part No.	Description	Finish	Stock No.	Price Each 1-9
● 5746881-1	Male Screw Retainer (HDF-20) Kit*	Yellow	74K3524	2.24
● 5746881-2	Male Screw Retainer (HDF-20) Kit	Yellow	40P9844	1.55
● 748274-2	Male Screw Retainer	Unfinished	93B6165	0.19
● 5745647-1	Male Screw Kit for Plastic Shells	Yellow	16M3333	1.74
● 5207952-1	0.250″ Female Screwlock Kit	Yellow	68K1801	3.58
● 5207952-3	0.250″ Female Screwlock Kit	Clear	16M3208	3.58
● 5205817-1	0.312″ Female Screwlock Kit	Yellow	45K1514	2.28
● 5205817-3	0.312″ Female Screwlock Kit	Clear	60K8282	2.19
● 5207719-1	0.560″ Female Screwlock Kit	Yellow	16M3204	2.11
● 5207719-3	0.560″ Female Screwlock Kit	Clear	16M3205	2.08
● 5207953-2	0.250″ Female Screwlock	Yellow	67K2577	0.43
● 5207953-3	0.250″ Female Screwlock	Clear	43M0194	0.26
● 5205818-2	0.312″ Female Screwlock	Yellow	74M9499	0.56
● 5205818-3	0.312″ Female Screwlock	Clear	10M5731	0.57
● 5206052-3	Saddle Screw	Clear	46M2815	0.53
● 5206514-1	2 Locking Post Assemblies	Yellow	57K9751	3.22
● 5206514-6	2 Locking Post Assemblies	Yellow	04M8126	3.14
● 5748271-1	Screwlock Assembly Kits	Yellow	51M2571	2.87
● 609-003	Jack Socket Assembly	Unfinished	93F8148	7.26
● 609-006-1	Jack Socket Assembly	Unfinished	93F8149	9.04

*2 per pkg.
(69723)

SHIELDED PLASTIC BACKSHELLS FOR D SUB CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Shell material: ABS, Ni plated
- Shell flammability: UL 94V-0
- Jackscrews: 4-40 UNC threaded
- Cable diameter range: 4.0 - 13.0 mm
- Temperature rating: -40°C to +110°C
- Shielding attenuation: >40bB (30MHz - 1GHz)

Straight Entry — 45° Entry

Metallised plastic backshells, for applications requiring an economic, lightweight and durable shell with shielding performance. Supplied complete with jackscrews, these compact shells include a range of cable grommets to suit cable diameters from 4.0 to 13.0mm. Backshells are available in either straight or 45 degree cable entry to suit 9 to 37 way standard density D-Subminiature connectors

STRAIGHT CABLE ENTRY BACKSHELL

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	10-24
● 2198617-9	9	93T1224	7.61	7.30
● 1-2198617-5	15	93T1220	7.68	7.36
● 2-2198617-5	25	93T1222	8.50	8.15
● 3-2198617-7	37	93T1226	9.38	8.98
45° CABLE ENTRY BACKSHELL				
● 2198618-9	9	93T1225	7.88	7.56
● 1-2198618-5	15	93T1221	7.68	7.36
● 2-2198618-5	25	93T1223	8.30	7.96
● 3-2198618-7	37	93T1227	9.38	8.98

(203511)

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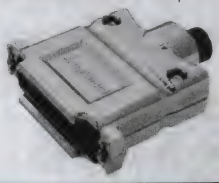
(212564)

17 SERIES D-SUB METAL BACKSHELLS

RoHS Compliant Available

Amphenol Commercial Products

2-piece die-cast zinc backshells (hoods) with clear zinc finish meet FCC docket 20780, shielding out EMI/RFI. PVC inserts accommodate a wide range of braided or foil-shielded cable. All units are jack screw models. Include clear zinc-finished steel mounting hardware.



Mfg. Part No.	Positions Standard	Hi-Density	Stock No.	Price Each 1-9	10-49	50-99	100-249
● 17E165709	9	15	73K2964	8.17	6.76	5.65	5.08
● 17E165715	15	26	01M3401	6.18	5.90	5.38	4.92
● 17E165725	25	44	01M3402	7.15	6.81	6.67	5.96
● 17E165737	37	62	01M3403	9.58	8.80	8.13	7.73
● 17E165750	50	78	84K7422	8.92	8.44	7.14	6.53

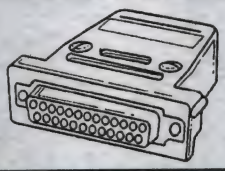
(8256)

17 SERIES METALIZED PLASTIC BACKSHELLS

RoHS Compliant Available

Amphenol Commercial Products

2-piece, jack screw/grommet type shielded backshells fit both standard pin count and high density configurations. ABS polymer housing, PVC insert. Nickel over copper plating for EMI/RFI suppression. Hardware included.



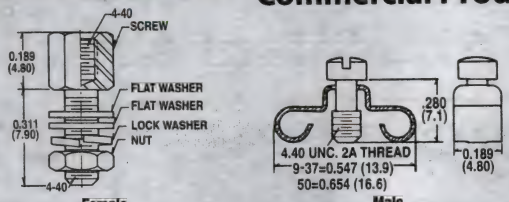
Mfg. Part No.	Fit Positions Standard	Hi-Density	Cable O.D. (in.)	Stock No.	Price Each 1-9	10-49	50-99	100-249
● 17E17242	9	15	0.21-0.32	73K2965	5.14	4.26	3.54	3.20
● 17E17252	15	26	0.21-0.32	01M3405	5.37	4.44	3.70	3.33
● 17E17262	25	44	0.23-0.45	84K7425	6.15	5.10	4.26	3.83
● 17E17272	37	62	0.35-0.65	76K1342	7.68	6.97	6.14	5.50

(8280)

17 SERIES D-SUB LOCK ASSEMBLIES

RoHS Compliant Available

Amphenol Commercial Products



Female — Male

Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-49	50-99	100-249
● L17D20419EX	Male 9-37	31M9657	7.55	6.87	5.36	4.82
● L17D20420EX	Male 50	31M9603	6.34	5.99	5.53	5.01
● L17D204182TX	Female—All	89K7398	6.94	6.47	5.39	4.85

(8257)

D-SUBMINIATURE CONNECTOR HARDWARE

RoHS Compliant Available

FCI

FEMALE SCREWLOCKS

Mfg. Part No.	Length	Kit Contents	Stock No.	Price Each 1-9	10-24	25-49
● 863001018TLF	9.10 mm	1 Screwlock, 2 Compensating Washers, M3 Thread	63K0538	0.36	0.32	0.29
● 863001019TLF	9.10 mm	1 Screwlock, 2 Compensating Washers, UNC 4-40 Thread	63K0539	0.39	0.35	0.31
● 863001TLF	12.90 mm	1 Screwlock, 2 Compensating Washers, 1 Lockwasher, 1 Nut, M3 Thread	63K0536	0.49	0.45	0.40
● 863001061TLF	17.60 mm	1 Screwlock, 2 Compensating Washers, 1 Lockwasher, 1 Nut, M3 Thread	63K0540	0.49	0.44	0.39
● 863001060TLF	12.90 mm	1 Screwlock, 2 Compensating Washers, 1 Lockwasher, 1 Nut, UNC 4-40 Thread	72K4713	0.56	0.51	0.45

➤CONTINUED➤

D-SUBMINIATURE CONNECTOR HARDWARE (CONT.)

MALE SCREWLOCKS

Mfg. Part No.	Length	Kit Contents	Stock No.	Price Each 1-9	10-24	25-49
863005ATLF	8.10 mm	1 Screwlock, 1 Retainer	63K0548	1.34	1.26	1.21

(134338)

D-SUBMINIATURE CONNECTOR BACKSHELLS

RoHS Compliant Available

FCI

Snap together hoods feature black nylon housings and come complete with 4-40 locking screws. Universal plastic hoods with metal strain relief clamps feature self extinguishing UL94V0 thermoplastic housings in either a black or metallized finish. Straight and angle exit metal hoods feature a Zamak (Zinc Alloy) housing and come with 4-40 thumbscrews.

"SNAP TOGETHER" PLASTIC HOODS

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	10-24	25-49
86303637BLF	9	63K0554	1.79	1.68	1.61
86303638BLF	15	63K0555	1.83	1.72	1.65
86303639BLF	25	63K0556	1.98	1.86	1.78
86303640BLF	37	63K0557	2.31	2.17	2.08
86303641BLF	50	63K0558	5.05	4.64	4.43
UNIVERSAL PLASTIC HOODS WITH METAL STRAIN RELIEF CLAMP - BLACK					
863093C09ALF	9	63K0563	2.64	2.48	2.38
863093C37ALF	37	63K0569	2.99	2.74	2.62
UNIVERSAL PLASTIC HOODS WITH METAL STRAIN RELIEF CLAMP - METALLIZED					
863093C09MLF	9	63K0564	4.01	3.68	3.52
863093C15MLF	15	63K0566	6.03	5.54	5.30
STRAIGHT EXIT METAL HOODS WITH TWO CLAMPS - EMI/RFI					
8655MH0911LF	9	63K0606	7.50	6.81	6.44
8655MH1511LF	15	63K0608	8.12	7.37	6.97
8655MH2511LF	25	63K0610	8.97	8.14	7.70
8655MH3711LF	37	63K0612	9.99	9.06	8.57
STRAIGHT EXIT METAL HOODS - EMI/RFI, ECONOMICAL SERIES					
8655MH0901BLF	9	95M3317	3.67	3.37	3.22
8655MH1501BLF	15	95M3318	3.85	3.54	3.38
8655MH2501BLF	25	95M3319	5.49	5.04	4.82
8655MH3701BLF	37	95M3320	5.08	4.67	4.46
ANGLE EXIT METAL HOODS - EMI/RFI, ECONOMICAL SERIES					
8655MHRA0901LF	9	63K0601	5.38	4.94	4.72
8655MHRA1501LF	15	63K0602	6.36	5.84	5.59
8655MHRA2501LF	25	63K0603	6.49	5.96	5.70
8655MHRA3701LF	37	63K0604	6.91	6.27	5.94
8655MHRA5001LF	50	26P0589	8.83	8.01	7.58

(134337)

D-SUBMINIATURE METAL CAPS

RoHS Compliant Available

FCI

Metal caps for D-subminiature connectors. Bright tin plated steel.

Mfg. Part No.	For Use With	Stock No.	Price Each 1-9	10-24	25-49
86553113TLF	9 Position Receptacles	63K0630	1.70	1.60	1.53
86553114TLF	15 Position Receptacles	63K0631	1.78	1.67	1.60
86553115TLF	25 Position Receptacles	63K0632	1.81	1.70	1.63
86553116TLF	37 Position Receptacles	63K0633	1.96	1.84	1.77
86553117TLF	50 Position Receptacles	63K0634	2.21	2.08	1.99
86553148TLF	9 Position Plugs	63K0639	1.69	1.59	1.52
86553149TLF	15 Position Plugs	63K0640	1.79	1.68	1.61
86553150TLF	25 Position Plugs	63K0641	1.70	1.60	1.53
86553151TLF	37 Position Plugs	63K0642	1.94	1.82	1.74
86553152TLF	50 Position Plugs	63K0644	2.21	2.08	1.99

(139038)

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(212563)

D-SUBMINIATURE HOODS AND ACCESSORIES

RoHS Compliant Available

HARTING

09 67 xxx 0333

09 67 xxx 0343

09 67 xxx 0425

09 67 xxx 0443

09 67 xxx 0435

09 67 xxx 0571

09 67 xxx 0442

09 67 xxx 0573

METAL HOODS

Mfg. Part No.	D Sub Shell Size	Cable Entry	Features	Stock No.	Price Each 1-9
09 67 009 0333	DE	45° Side	Knurled Screws	93C7942	8.69
09 67 015 0333	DA	45° Side	Knurled Screws	93C7970	9.64
09 67 025 0333	DB	45° Side	Knurled Screws	93C7999	9.58
09 67 037 0333	DC	45° Side	Knurled Screws	93C8028	12.72
09 67 009 0334	DE	45° Side	Locking Screws	44J6271	11.47
09 67 009 0343	DE	Top	Knurled Screws	93C7943	9.95
09 67 015 0343	DA	Top	Knurled Screws	93C7971	9.82
METALIZED THERMOPLASTIC HOODS					
09 67 009 0425	DE	Top	Knurled Screws	96M1881	11.30
09 67 015 0425	DA	Top	Knurled Screws	93C7975	11.55
09 67 025 0425	DB	Top	Knurled Screws	99F7805	11.67
09 67 037 0425	DC	Top	Knurled Screws	93C8034	12.27
09 67 009 0443	DE	Top	Short Locking Screws	93C7950	8.93
09 67 015 0443	DA	Top	Short Locking Screws	93C7978	9.19
09 67 025 0443	DB	Top	Short Locking Screws	93C8007	8.93
09 67 037 0443	DC	Top	Short Locking Screws	93C8038	10.72
09 67 009 0435	DE	Top & Side	Knurled Screws	93C7948	11.65
09 67 015 0435	DA	Top & Side	Knurled Screws	93C7977	11.08
09 67 025 0435	DB	Top & Side	Knurled Screws	93C8005	11.77
09 67 037 0435	DC	Top & Side	Knurled Screws	93C8036	13.77
09 67 009 0453	DE	Top & Side	For Spring/Side Locks	93C7952	7.48
09 67 015 0453	DA	Top & Side	For Spring/Side Locks	93C7979	7.67
09 67 025 0453	DB	Top & Side	For Spring/Side Locks	96M1883	8.28
09 67 037 0453	DC	Top & Side	For Spring/Side Locks	93C8039	9.52
THERMOPLASTIC HOODS					
09 67 009 0571	DE	45° Side	Knurled Screws	93C7954	5.52
09 67 015 0571	DA	45° Side	Knurled Screws	93C7982	6.05
09 67 025 0571	DB	45° Side	Knurled Screws	93C8010	6.45
09 67 009 0442	DE	Top	Short Locking Screws	93C7949	5.33
09 67 015 0442	DA	Top	Short Locking Screws	93B5170	5.30
09 67 025 0442	DB	Top	Short Locking Screws	93C8006	5.33
09 67 037 0442	DC	Top	Short Locking Screws	93C8037	5.95
THERMOPLASTIC HOODS WITH INTERNAL SHIELDING					
09 67 009 0573	DE	45° Side	Knurled Screws	96M1882	7.62
09 67 015 0573	DA	45° Side	Knurled Screws	93C7983	8.53
09 67 025 0573	DB	45° Side	Knurled Screws	93C8011	8.35

SCREWLOCKS

Mfg. Part No.	Description	Length	Thread	Stock No.	Price Each 1-9
09 67 000 9922	Screwlock	13 mm	4-40 / 4-40	33P4026	1.81
09 67 000 9924	Screwlock	13 mm	4-40 / M3	33P4023	1.83
09 67 000 9973	Screwlock	18 mm	4-40 / 4-40	33P4024	2.04

CONTINUED

D-SUB – ACCESSORIES

D-SUBMINIATURE HOODS AND ACCESSORIES (CONT.)

JACKSCREWS

Mfg. Part No.	Description	Length	Thread	Stock No.	Price Each 1-9
● 09 67 000 9971	Jackscrew	21.9 mm	4-40	9687994	0.75

SPRING LOCKS

Mfg. Part No.	Description	For Use With	Stock No.	Price Each 1-9
● 09 67 000 9907*	Spring Latch	9-50 Position Connectors	93C7907	0.34
● 09 67 001 9971*	Fixed Latch	9-37 Position Connectors	93C7939	0.14
● 09 67 001 9972*	Fixed Latch	50 Position Connectors	93C7940	0.58

* Order 2 per Connector

SLIDELOCKS

● 09 67 001 9973	Locking Bolt	9-50 Position Connectors	93C7941	1.19
● 09 67 000 9914	Slide Lock	9/15 Position DE Size Connectors	93C7911	4.63
● 09 67 000 9915	Slide Lock	15/26 Position DA Size Connectors	93C7912	4.48
● 09 67 000 9916	Slide Lock	25/44 Position DB Size Connectors	93B1338	4.55
● 09 67 000 9917	Slide Lock	37/62 Position DDC Size Connectors	93C7913	5.38
● 09 67 000 9918	Slide Lock	50/78 Position DD Size Connectors	93C7914	5.38

(114890)

CANNON SCREW LOCKS

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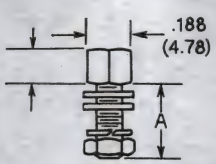

Fig. 1

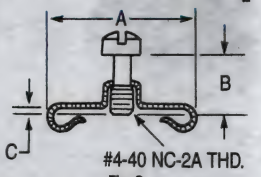

Fig. 2

Male and female screw locks provide positive mating in vibration applications. Hardware is cold rolled steel with yellow chromate over cadmium finish and clip is sheet steel. Kit consists of 1 nut, 3 washers, 1 lock washer, 1 hex nut. 2 kits required per connector.

FEMALE—FIG. 1

Mfg. Part No.	Dimensions A	Dimensions B	Dimensions C	Pkg. of	Stock No.	Price per Pkg. 1-24
D20418-2	0.312″	...	...	1	15N3714	0.71
M24308/26-1F	0.312″	...	...	2	45W5711	1.55
D20418-39	0.625″	...	...	1	42J5275	0.94
M24308/26-2F	0.625″	...	...	1	61H7261	1.26
MALE FOR CONNECTOR SIZE DD50—FIG. 2						
D20420-13	0.656″	0.281″	0.067″	2	45W5710	3.90

(8828)

CANNON UNSHIELDED BACKSHELLS

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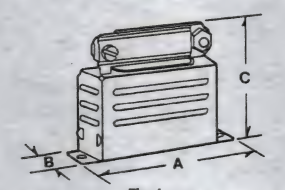


Fig. 1

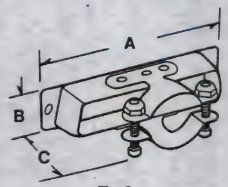


Fig. 2

All unshielded backshells are made of low-carbon steel per ASTM A-620. Yellow chromate over cadmium finish per M85049 specifications.

DEEP STRAIGHT CLAMP — FIG. 1

Mfg. Part No.	No. of Contacts	Dimensions A	Dimensions B	Dimensions C	Stock No.	Price Each 1-49	Price Each 50-99
DE24657	9	1.203″	0.484″	1.250″	93F3708	9.82	8.27
DA24658	15	1.531″	0.484″	1.250″	93F3709	10.32	8.69
DB24659	25	2.078″	0.484″	1.563″	93F3710	10.91	9.19
DC24660	37	2.718″	0.484″	1.563″	93F3711	13.18	11.12
DD24661	50	2.625″	0.593″	1.688″	93F3712	11.39	9.61
ROUND CLAMP — FIG. 2							
DE44994	9	1.208″	0.500″	1.031″	93F3713	10.60	8.93
DA20961	15	1.531″	0.500″	1.031″	93F3714	9.79	8.26
DB20962	25	2.078″	0.500″	1.062″	93F3715	10.40	8.76
DC20963	37	2.718″	0.500″	1.062″	93F3716	10.23	8.62
DD20964	50	2.625″	0.609″	1.062″	93F3717	11.98	10.09

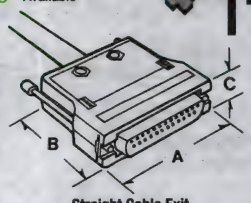
(8691)

CANNON SNAP-TOGETHER SHIELDED BACKSHELLS

RoHS Compliant Available

ITT

Each kit consists of 1 front shell, 1 rear shell, 1 cable clamp and 2 screws. For commercial applications. Material: thermoplastic, UL94V-0 rated. Temperature range: -20°C to +80°C. Snap-together design for quick assembly. Made of ABS polymer with nickel over copper finish. Attenuation: –44dB at 1000MHz. Requires two **mfg. part no. 250-8501-013** thumbscrews; *order separately below.*



Straight Cable Exit

BACKSHELLS — STRAIGHT CABLE EXIT

Mfg. Part No.	Positions	Dimensions A	Dimensions B	Dimensions C	Stock No.	Price Each 1-9	Price Each 10-24
● DE121073-154	9	1.213″	1.417″	0.630″	47M0065	14.59	13.05
● DA121073-150	15	1.539″	1.654″	0.630″	47M0058	18.00	16.09
● DC121073-152	37	2.728″	1.654″	0.630″	51R5878	20.02	17.90
BACKSHELLS — 40° CABLE EXIT							
● DE121073-54	9	1.417″	1.417″	0.630″	47M0066	18.51	16.55

THUMBSCREW

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● 250-8501-013	Brass Thumbscrew	47M0134	1.54

(8692)

CANNON SLIDE LATCH ASSEMBLIES

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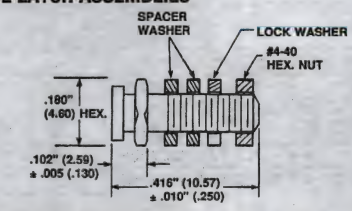


Slide lock post kit consists of 2 posts, 4 space washers, 2 lock washers, and 2 hex nuts. Steel with yellow chromate over 100μ″ cadmium finish. *Order one kit per connector.*

SLIDE LOCK POST KITS

Mfg. Part No.	Material	Stock No.	Price Each 1-49	Price Each 50-99
D53018	Steel	93F3701	0.80	0.68

(8695)

CANNON SPRING LATCH ASSEMBLIES

RoHS Compliant Available

ITT

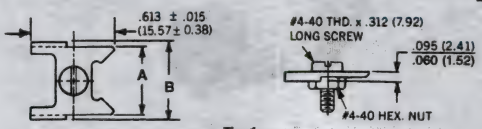


Fig. 1

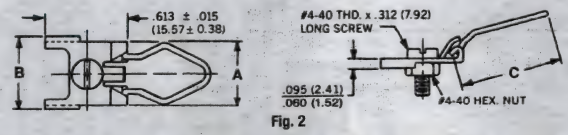


Fig. 2

Kits consist of 1 plate, 1 screw, 1 lock washer and 1 nut. Front panel mounting. *Order 2 kits per connector.*

SPRING LATCH PLATE KITS, FIG. 1

Mfg. Part No.	Shell Size	Dimensions A	Dimensions B	Dimensions C	Stock No.	Price/Pack 1-9
● D110278	DE, DA, DB, DC	0.489″	0.565″	...	35C1702	1.68
● D110280	DD	0.609″	0.673″	...	35C1704	2.30
SPRING LATCH PLATE KITS, PACK OF 2						
● D110280-3	DD	0.609″	0.673″	...	01X2749	5.61
SPRING LATCH KITS, FIG. 2						
● D110277	DE, DA, DB, DC	0.489″	0.565″	0.732″	27C0784	2.29
● D110279	DD	0.609″	0.673″	0.732″	51R6030	3.46

(8696)

CANNON JACKSCREW AND JACKPOST ASSEMBLIES

RoHS Compliant Available

ITT

Stainless steel jackpost kit consists of 2 posts, 2 nuts, and 2 lockwashers. Stainless steel jackscrew kit consists of 2 studs, 2 heads, and 1 tube retaining compound. *Order one kit per connector.*

Jackpost

Jackscrew

Mfg. Part No.	Description	Stock No.	Price Each 1-24	Price Each 25-49
D110551	Jackpost Kit	51R4718	8.43	7.22
D110550	Jackscrew Kit	93F3700	19.22	16.46
2508501004	4-40 Recessed Jackscrew Kit	39P6098	0.38	0.33

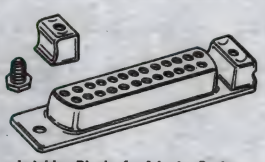
(8697)

D-SUB CONNECTOR ADAPTER SYSTEM

RoHS Compliant Available

CINCH

Hood with Latches


Latching Blocks for Adapter System

Commercial-grade 2-piece, modified phenylene oxide snap-on straight adapter hoods captivate metal shell D-sub connectors, *ordered separately*. Available with latches or with filler ends. Standard cable opening. Latching blocks, *ordered separately below*, are constructed of diecast zinc and include nickel-plated steel SEM screws.

STRAIGHT ADAPTER HOODS WITH LATCHES*

Mfg. Part No.	Positions	Stock No.	Price Each 1-24	Price Each 25-49
SDHH-9BL	9	12M1549	3.68	2.97
SDHH-15BL	15	12M1537	3.30	3.19
SDHH-25BL	25	12M1541	4.52	3.64

* Works with all metal D-subs except FC series and wire-wrap termination.

LATCHING BLOCKS

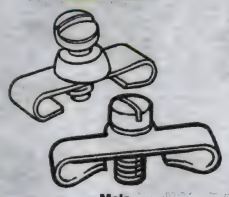
Mfg. Part No.	Panel Thickness	Stock No.	Price Each 1-24	Price Each 25-49
SD-LB-060-080	0.060″ or 0.080″	44F5630	3.78	3.05
SD-LB-125	Up to 0.125″	44F5629	3.68	2.97

(8674)

COMMERCIAL SCREW LOCK ASSEMBLIES

RoHS Compliant Available

CINCH


Male

P = pin. S = socket. (*) = use with junction shell. (**) = use with or without junction shell. All male.

Mfg. Part No.	Usage (For Shell Size)	Stock No.	Price Each 1-49	Price Each 50-99
D20419-40	A,E (P or S); B,C (S only)	11M3134	1.59	1.06
D20419-46	A,E (P or S); B,C (S only)*	03M4751	2.32	1.55
D-20420-0	D Socket	43F232	0.84	0.82
D20420-42	D Socket w/Junction Shell	11M3135	1.98	1.46
D20418-42	E,A,B,C,D (P or S)**	86K8665	1.09	0.65

(8753)

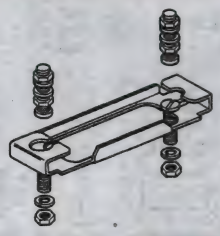
Custom Cable Assembiles to your specs to mate with the complete line of connectors!
Call 1.800.463.9275

(212562)

SLIDING LOCK ASSEMBLIES

CINCH

Assembly consists of lock retainer and two screws. Each lock retainer requires two **mfg. part no. D-53018** lock posts, *ordered separately below.*



SLIDELOCKS

Mfg. Part No.	Shell Size	Contacts	Stock No.	Price Each 1-49	Price Each 50-99
DE-51224-1	E	9	85F8015	3.50	2.58
DB-51221-1	B	25	57F3201	3.69	2.72

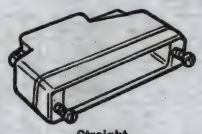
LOCK POSTS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
D-53018	Lock Post (2 required)	57F3200	0.55

(8709)

ALL-PLASTIC STRAIGHT AND RIGHT-ANGLE HOODS

CINCH


Straight

Right-Angle

Mfg. Part No.	Positions	Description	Stock No.	Price Each 1-24	Price Each 25-49
DE-51218-1	9	Straight	45F990	5.72	4.60
DB-51212-1	15	Straight	29F2663	6.18	4.98

(8756)

DUST CAPS

RoHS Compliant Available

CINCH

Polyethylene caps protect connectors from performance-affecting debris. Available in other shell sizes, *go online or call.*

Mfg. Part No.	Positions	Connection	Stock No.	Price Each 1-9	Price Each 10-24
DE60-20	9	Plug	85F8017	0.52	0.50
DE-59-20	9	Socket	85F8016	0.52	0.50
DA-60-20	15	Plug	50F4006	1.29	1.25
DB60-20	25	Plug	85F8012	1.29	1.25
DB59-20	25	Socket	85F8011	0.70	0.68

(8758)

RIGHT-ANGLE AND DEEP STRAIGHT CLAMP JUNCTION SHELLS

RoHS Compliant Available

CINCH

Right-Angle Clamp

Deep Straight Clamp

Low carbon steel shell; zinc with clear chromate finish.

Mfg. Part No.	Positions	Description	Stock No.	Price Each 1-24	Price Each 25-49
DE-19977-30	9	Rt. Angle	80K5260	7.53	6.07
DE-24657-30	9	Straight	11M2997	4.80	4.66
DA-19977-31	15	Rt. Angle	11M2949	7.32	5.91
DA-24658-31	15	Straight	03M4753	4.45	4.30
DB-19977-32	25	Rt. Angle	06M3362	7.51	6.05
DB-24659-32	25	Straight	11M2960	3.75	3.63
DC-24660-33	37	Straight	11M2973	3.43	3.31

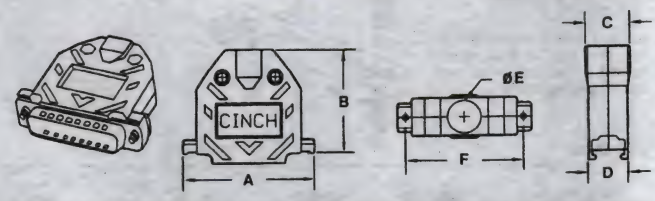
(8757)

D-SUB – ACCESSORIES

TWO-PIECE BACKSHELLS

RoHS Compliant Available

CINCH



Fit both standard and 1.5 density D-sub connectors. **DMH series** diecast zinc cover, PVC inserts, steel, zinc-plated hardware. **DCH series** metallized plastic cover, nickel-over-copper plating, PVC inserts, steel, zinc-plated hardware. **DPH series** black plastic cover, PVC inserts, steel, zinc-plated hardware. Diecast and metallized plastic hoods provide EMI/RFI shielding. Available in 37 contact position. 4th letter in mfg. part no. = shell size.

CABLE DIAMETER RANGES
Shell Size E & A.....0.210″/0.320″
Shell Size B.....0.230″/0.450″
Shell Size C & D.....0.350″/0.650″

EMI/RFI SHIELDED DIECAST BACKSHELLS

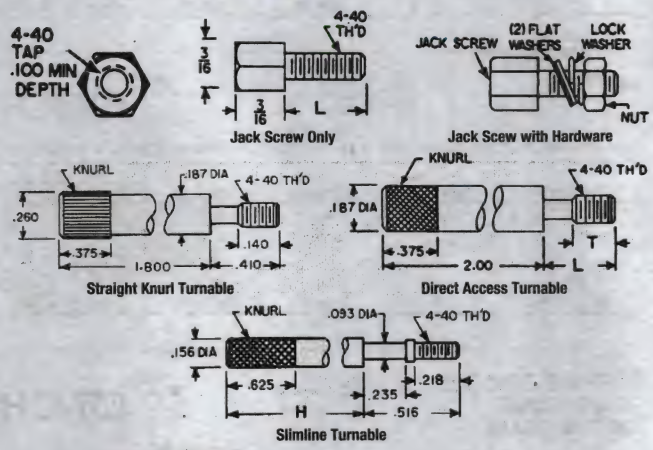
Mfg. Part No.	Positions Std.	Positions 1.5	Dimensions (Inches) B	D	E	F	Stock No.	Price Each 1-9	Price Each 10-24
● DMH-E-003	9	15	1.465	.620	.400	0.984	11M3081	4.77	4.61
● DMH-A-003	15	26	1.600	.620	.400	1.312	11M3078	8.48	7.11
PLASTIC (DPH) AND METALLIZED PLASTIC (DCH) BACKSHELLS									
● DCH-E-003	9	15	1.547	.645	.400	0.984	11M2976	3.42	3.31
● DCH-A-003	15	26	1.516	.645	.400	1.312	10M9883	3.59	3.46
● DPH-E-003	15	26	1.516	.645	.400	1.312	11M3092	2.28	2.22
● DCH-B-003	25	44	1.655	.645	.522	1.857	11M2974	3.59	3.46

(8759)

D-SUB JACK SCREWS

RoHS Compliant Available

KEYSTONE ELECTRONICS CORP.



JACK SCREWS ONLY- NO HARDWARE
D-subminiature connector mounting screw. Per MIL-C-24308/26.

Mfg. Part No.	Thread Length	Finish	Thread Size	Thread Length	Screw Head Depth	Stock No.	Price Each 1-49
● 7228	0.250″	Yellow Iridite	4-40	0.187″	0.100″	59K0514	0.68
● 7230	0.312″	Yellow Iridite	4-40	0.187″	0.100″	59K0516	0.54
● 7232	0.625″	Yellow Iridite	4-40	0.187″	0.100″	59K0519	1.32
● 7228-5	0.250″	Clear Chromate	4-40	0.187″	0.100″	16F1076	0.68
● 7230-5	0.312″	Clear Chromate	4-40	0.187″	0.100″	16F1078	0.51
● 7232-5	0.625″	Clear Chromate	4-40	0.187″	0.100″	16F1080	1.32
JACK SCREWS - WITH HARDWARE							
● 7229	0.250″	Yellow Iridite	4-40	0.187″	0.100″	59K0515	0.88
● 7231	0.312″	Yellow Iridite	4-40	0.187″	0.100″	59K0518	0.71
● 7233	0.625″	Yellow Iridite	4-40	0.187″	0.100″	59K0520	1.52
● 7229-5	0.250″	Clear Chromate	4-40	0.187″	0.100″	16F1077	0.85
● 7231-5	0.312″	Clear Chromate	4-40	0.187″	0.100″	16F1079	0.72
● 7233-5	0.625″	Clear Chromate	4-40	0.187″	0.100″	16F1081	1.55

SEMS JACK SCREWS ONLY- NO HARDWARE
Material: steel, zinc plate and clear chromate, SEMS jacksrews feature captivated helical spring lockwasher, simplifies use, flat washer and nut supplied unassembled.

➤CONTINUED➤

D-SUB JACK SCREWS (CONT.)

Mfg. Part No.	Thread Length	Thread Size	Screw Head Diameter	Screw Head Depth	Stock No.	Price Each 1-49
● 7235	7.3″	4-40	0.187″	0.18700″	17C2045	0.65
● 7237	8.8″	4-40	0.187″	0.18700″	83H8794	0.49
SEMS JACK SCREWS - WITH HARDWARE						
● 7238	8.8″	4-40	0.187″	0.18700″	24C5665	0.73

STRAIGHT KNURL TURNABLE JACK SCREWS - WITH SLOT
Material: Steel, zinc plate & clear chromate. Diameter: 0.187″

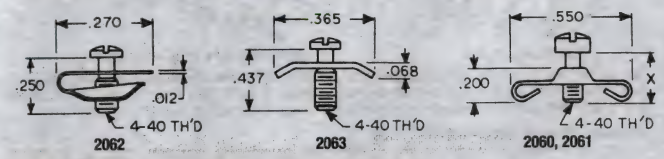
Mfg. Part No.	Dimensions H	T	L	Stock No.	Price Each 1-49
● 2073	1.800″	0.140″	0.410″	50F4698	4.79
DIRECT ACCESS TURNABLE JACK SCREWS - WITH SLOT Material: Steel, black oxide finish. Diameter: 0.187″					
● 2065	2.000″	0.125″	0.250″	50F4694	2.94
● 2067	2.000″	0.250″	0.437″	50F4695	3.04
SLIM LINE TURNABLE JACK SCREWS - WITH SLOT Material: Steel, nickel plated. Diameter: 0.156″					
● 2069	1.250″	0.218″	0.516″	50F4704	3.17
● 2071	1.750″	0.218″	0.516″	50F4706	3.30

(9283)

CONNECTOR MOUNTING HARDWARE

RoHS Compliant Available

KEYSTONE ELECTRONICS CORP.



Standard clips and washers feature steel, zinc plate and gold iridite material.

Mfg. Part No.	Description	Stock No.	Price Each 1-4999
● 2062	"U" Clip	62W4981	0.34
● 2063	Saddle Washer	62W4982	0.38
● 2060	"Bow-Tie" Clip—4-40 x ¼	62W4979	0.42
● 2061	"Bow-Tie" Clip—4-40 x 9/32	62W4980	0.76

(9399)

DELUXE AND ECONOMY D-SUB CONNECTOR COVERS

RoHS Compliant Available

multicomp

Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6 Fig. 7 Fig. 8 Fig. 9 Fig. 10

➤CONTINUED➤

DELUXE AND ECONOMY D-SUB CONNECTOR COVERS (CONT.)

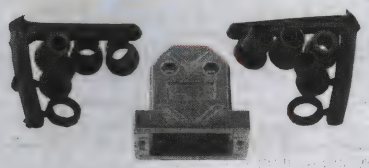


Fig. 11

1-pc. plastic covers fit all standard EIA cable and D-Sub connectors from most manufacturers. Half-moon insert system grips and prevents slippage or twisting of cable. Black polypropylene cover and insert. 1-pc. dual exit plastic cover features slotted thumbscrews and hinged snap-locking design in 25 positions. Black nylon 6/6 cover, UL94V-2 rated, with black zinc-finished steel screw machined thumbscrews. 2-pc. plastic covers feature split-jacket insert system that accepts most cable sizes. Gray or black styrene plastic cover, rated UL94V-0, with zinc-finished steel hardware. Metallized-plastic covers feature nickel-over-copper plating, UL94-HB rated, and PVC insert, UL94V-0 rated. Feature compression insert system that performs effectively with foil or braid shields. Metal covers feature compression insert system that produces a strong mechanical connection with most cable sizes. Straight or right-angle cable exit design. Accommodate standard D-Sub connectors from most manufacturers.

Mfg. Part No.	Positions	Fig.	Stock No.	Price Each 1-99	100-249	250-499
DELUXE 1-PIECE STRAIGHT PLASTIC COVERS						
SPC14980	9	1	80K5394	3.22	2.51	2.26
SPC14982	15	1	80K5395	3.66	2.85	2.57
SPC14985	25	1	80K5396	3.50	2.72	2.45
DELUXE 1-PIECE STRAIGHT PLASTIC COVERS WITH THUMBSCREW						
SPC15472	9	2	79K5044	3.27	2.95	2.65
SPC15396	15	2	79K4979	4.95	4.47	4.03
SPC15451	25	2	79K5027	2.95	2.32	2.08
SPC15317	37	2	79K4911	5.60	4.36	3.91
DELUXE 2-PIECE STRAIGHT PLASTIC COVERS						
SPC15476	9	3	79K5048	1.50	1.13	0.99
SPC15438		3	79K5018	1.50	1.13	0.99
SPC15461	25	3	79K5035	1.57	1.18	1.05
SPC15330	37	3	79K4922	2.71	2.03	1.81
SPC15242	50	3	79K4839	3.24	2.52	2.26
DELUXE 2-PIECE 45° PLASTIC COVERS						
SPC14936	9	4	15R2425	3.17	2.54	2.33
SPC14937	15	4	15R2426	3.52	2.82	2.57
SPC14939	25	4	15R2427	3.77	3.02	2.76
SPC14941	37	4	80K5373	4.50	3.60	3.30
ECONOMY 2-PIECE 45° PLASTIC COVERS						
SPC15226	9	5	79K4825	3.38	2.54	2.26
SPC15204	25	5	79K4806	2.69	2.10	1.89
DELUXE 45° METALLIZED-PLASTIC COVERS						
SPC14995	9	4	80K5405	4.71	3.87	3.58
SPC14997	15	4	80K5407	5.16	4.24	3.92
SPC14998	25	4	80K5408	6.04	4.95	4.59
SPC15001	37	4	80K5410	9.14	7.54	6.90
DELUXE STRAIGHT METALLIZED-PLASTIC COVERS						
SPC14987	9	6	80K5398	4.44	3.63	3.37
SPC14988	15	6	80K5399	4.32	3.54	3.26
SPC14990	25	6	80K5401	5.93	4.86	4.50
SPC14992	37	6	80K5403	8.72	7.19	6.57
SPC14962	50	6	80K5383	7.44	6.09	5.58
ECONOMY STRAIGHT METALLIZED-PLASTIC COVERS						
SPC15425		7	79K5005	2.53	1.91	1.69
SPC15265	15	7	79K4862	2.78	2.08	1.85
SPC15298	25	7	79K4892	2.71	2.03	1.81
SPC15202	37	7	79K4804	2.96	2.30	2.06
SPC15137	50	7	79K4750	4.79	3.72	3.35
DELUXE STRAIGHT METAL COVERS						
SPC15003	9	6	80K5412	5.63	5.08	4.61
SPC15005	15	6	80K5414	6.44	5.28	4.86
SPC15007	25	6	80K5416	6.64	5.48	5.02
SPC15009	37	6	80K5418	9.53	7.85	7.18
SPC15011	50	6	80K5420	9.61	7.86	7.23
ECONOMY STRAIGHT METAL COVERS						
SPC15468	9	8	79K5042	6.57	5.23	4.81
SPC15387	15	8	79K4970	6.78	6.08	5.54
SPC15455	25	8	79K5030	8.82	7.23	6.66
SPC15310	37	8	79K4904	11.72	9.60	8.81
SPC15234	50	8	79K4833	12.93	10.60	9.76
DELUXE RIGHT-ANGLE METAL COVER						
MC45000	25	9	90W1568	7.58	6.24	5.76

➤CONTINUED➤

DELUXE AND ECONOMY D-SUB CONNECTOR COVERS (CONT.)

Mfg. Part No.	Positions	Fig.	Stock No.	Price Each 1-99	100-249	250-499
ECONOMY RIGHT-ANGLE METAL COVER						
SPC15128	15	10	79K4744	9.05	7.41	6.81
SPC15381	25	10	79K4964	10.18	8.34	7.67
METAL ETHERNET COVERS						
SPC14944	15	11	80K5374	9.12	7.52	6.87

(8875)

LOW AND ULTRA LOW PROFILE D-SUB COVERS

RoHS Compliant Available

multicomp

Specifications:
- Cover Material: zinc alloy
- Cover Finish: nickel over copper under-plate

Mfg. Part No.	Description	Stock No.	Price Each 1-49	50-99
SPC20348	Ultra Low-Profile D-Sub Cover, 9-Position	84K8881	11.06	9.12
SPC20349	Ultra Low-Profile D-Sub Cover, 15-Position	84K8882	11.80	9.74
SPC20350	Ultra Low-Profile D-Sub Cover, 25-Position	84K8883	12.60	10.34
SPC20351	Low-Profile D-Sub Cover, 37-Position	84K8884	14.06	11.55
SPC20352	Low-Profile D-Sub Cover, 50-Position	73T7937	21.13	17.37

(88562)

D-SUB CONNECTOR HARDWARE

RoHS Compliant Available

multicomp

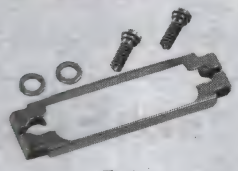


Fig. 1

Fig. 2

Fig. 3

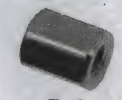


Fig. 4

Fig. 5

Fig. 6

Fig. 7

Fig. 8

Fig. 9

Figure 3 comes with 4 washers and 2 hex nuts.

Mfg. Part No.	Fig.	Description	Stock No.	Price Each 1-99	100-249
SPC15149	1	15-Way Slide Latch	79K4759	2.83	2.20
SPC15165	1	25-Way Slide Latch	79K4769	3.50	2.72
DH-043-9S	...	9-Way Slide Lock Plate Only	24R6052	1.96	1.47
DH-043-15S	...	15-Way Slide Lock Plate Only	24R6051	1.83	1.37
DH-042-25S	...	25-Way Slide Lock Plate Only	24R6050	1.38	1.07
SPC15216	2	Shoulder Screw & Saddle Washer	79K4817	0.73	0.55
SPC15403	3	Hex Locking Screw Set	79K4985	1.74	1.30
SPC15292	3	Hex Locking Screw Thread, Pkg. of 2	79K4887	2.10	1.58
SPC15382	4	Hex Extender, Pkg. of 2	79K4965	1.13	0.85
SPC21090	5	Slide Locking Post with Nut	10M8341	1.61	1.21
SPC21091	5	Slide Locking Post without Nut	10M8342	1.50	1.12
SPC15378	6	Spring Latch Lock	79K4962	3.25	2.53
SPC15162	7	Locking Post, Pkg. of 2	79K4768	3.04	2.28
DH-1-045	7	Locking Post, Pkg. of 2	67R8916	1.32	0.99
SPC15081	8	Male Screwlock Set, Pkg. of 2	80K5430	3.50	2.72
SPC15082	9	Female Screwlock Set, Pkg. of 2	80K5431	4.06	3.16

(18929)

D-SUB – ACCESSORIES

HANDLE THUMBSCREWS

RoHS Compliant Available

multicomp

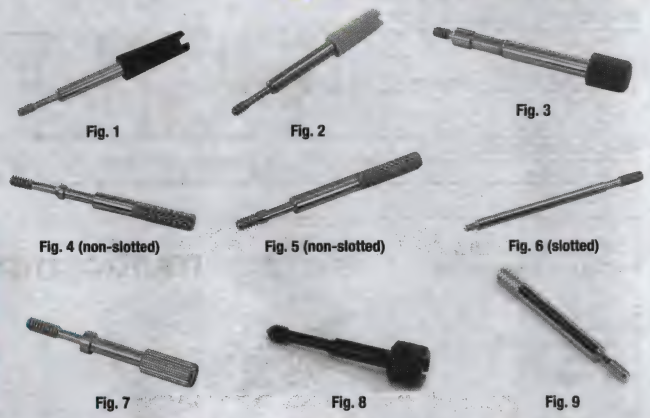


Fig. 1 Fig. 2 Fig. 3

Fig. 4 (non-slotted) Fig. 5 (non-slotted) Fig. 6 (slotted)

Fig. 7 Fig. 8 Fig. 9

Rugged steel construction with nickel or clear zinc plating. Choice of plastic, metal, or machined handle. Threadsize: #4-40 except **mfg. part no. SPC15185** which is M3.5 x 0.6. **Sold in packages of 2.**

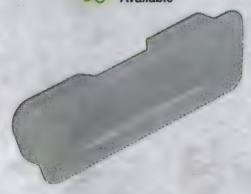
Mfg. Part No.	Fig.	Handle	Length	Stock No.	Price per Pkg. 1-249	Price per Pkg. 250-499
● SPC15245	1	Plastic	2.075″	79K4842	2.03	1.52
● SPC15288	2	Plastic	1.93″	79K4885	1.90	1.43
● SPC15249	3	Plastic	1.95″	79K4846	2.64	1.99
● SPC15199	4	Metal	1.728″	79K4801	1.24	0.93
● SPC15270	5	Metal	1.732″	79K4867	1.36	1.01
● SPC15168	6	Metal	2.843″	79K4772	3.10	2.33
● SPC15335	7	Metal	1.457″	79K4927	2.35	1.77
● SPC15185	8	Metal	1.287″	79K4788	3.26	2.54
● SPC14960	9	Machined	0.800″	80K5381	2.66	2.07
● SPC14961	9	Machined	1.875″	80K5382	2.95	2.29

(8847)

D-SUB CONNECTOR DUST COVERS

RoHS Compliant Available

multicomp



Clear plastic dust covers protect D-sub connectors from harmful debris. Not EMI/RFI rated.

Mfg. Part No.	Description	Stock No.	Price Each 1-49	Price Each 50-99	Price Each 100-249
● SPC15022	9 Position Plug	80K5421	8.13	6.70	6.12
● SPC15023	9 Position Socket	80K5422	8.06	6.65	6.08
● SPC15024	15 Position Plug	80K5423	7.90	6.51	5.95
● SPC15025	15 Position Socket	80K5424	7.68	6.33	5.79
● SPC15026	25 Position Plug	80K5425	7.68	6.33	5.79
● SPC15027	25 Position Socket	80K5426	7.68	6.33	5.79
● SPC15028	37 Position Plug	80K5427	10.14	8.36	7.65
● SPC15029	37 Position Socket	80K5428	10.65	8.78	8.03

(31985)

D-SUB PANEL PUNCHES

DURATOOL

- Accurate Punch-Out Conforms to Plug or Receptacle
- Burr-Free on Panel Front
- Quality-Built Punch/Die Set Can Be Re-Ground to Sharpen
- Punch cuts hole in 22- to 16-gauge steel or aluminum panel material.

15-Pin Punch Shown

D-SUB CONNECTOR PANEL PUNCHES

Mfg. Part No.	Description	Stock No.	Price Each
DSP-9P	9-Pin, RS-449 STD	44N1084	353.60
DSP-15P	15-Pin Connectors	44N1085	356.67

CONTINUED

D-SUB PANEL PUNCHES (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
DSP-25P	25-Pin, RS-232 STD	81N2660	353.60
DSP-37P	37-Pin, RS-449 STD	44N1088	356.67

REPLACEMENT TEMPLATES

Adhesive-backed templates serve as a guide to accurately locate and position punch-out. For use with D-subminiature connector panel punches.

DSP-9-T	9-Pin Template	44N1091	12.58
DSP-25-T	25-Pin Template	37N2210	11.76

(8774)

2-PC. 45° METAL D-SUB CONNECTOR COVERS

RoHS Compliant Available

multicomp

Low-profile, lightweight zinc die-cast D-sub connector covers provide excellent EMI/RFI shielding where space is at a premium. Finished with a durable nickel over copper underplate. Feature fully tapped holes that allow for easy assembly. Accommodate cable outer diameters ranging from 0.157″ to 0.465″. Come complete with 4-40 UNC thumbscrews and two-piece plastic strain relief system.

Mfg. Part No.	Pins	Stock No.	Price Each 1-49
● SPC15087	9	80K5432	9.47
● SPC15088	15	80K5433	9.67
● SPC15089	25	80K5434	11.31
● SPC15090	37	80K5435	14.43

(47374)

D-SUB CONNECTOR KITS

RoHS Compliant Available

multicomp

Crimp Kit Solder Kit

D Subminiature connector kits enable users to perform custom wiring. Crimp kits include pin or socket contacts,connector shell housing, shielded/metalized hood, and mounting hardware. Solder kits include pre-assembled connector shell with solder contacts, shielded/metalized hood, and mounting hardware. Pins and sockets have selective gold-flash plating. The hoods are made of high-quality, chrome-plated plastic.

CRIMP KITS

Mfg. Part No.	No. of Contacts	Gender	Stock No.	Price Each 1-4	Price Each 5+
● MCD8E09MC-KIT	9	Plug	64T2756	3.36	3.08
● MCD8A15MC-KIT	15	Plug	64T2748	3.86	3.54
● MCD8B25MC-KIT	25	Plug	64T2752	4.85	4.48
● MCD8E09FC-KIT	9	Receptacle	64T2754	3.36	3.08
● MCD8A15FC-KIT	15	Receptacle	64T2746	3.78	3.46
● MCD8B25FC-KIT	25	Receptacle	64T2750	4.74	4.38

SOLDER KITS

Mfg. Part No.	No. of Contacts	Gender	Stock No.	Price Each 1-4	Price Each 5+
● MCD8E09MS-KIT	9	Plug	64T2757	2.39	2.21
● MCD8A15MS-KIT	15	Plug	64T2749	2.55	2.36
● MCD8B25MS-KIT	25	Plug	64T2753	2.83	2.62
● MCD8E09FS-KIT	9	Receptacle	64T2755	2.46	2.25
● MCD8A15FS-KIT	15	Receptacle	64T2747	2.55	2.36
● MCD8B25FS-KIT	25	Receptacle	64T2751	2.89	2.67

(201248)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

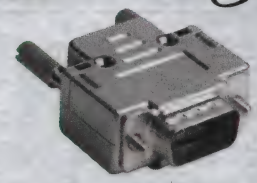
(196560)

D-SUB CONNECTOR KITS

RoHS Compliant Available

A Network Systems Solution UNICOM

Enable user to perform custom wiring. Crimp kits include pins or sockets, D-Sub shell, shielded/metallized hood, and mounting hardware. Solder kits include pre-assembled shell with solder contacts, shielded/metallized hood, and mounting hardware. Pins and sockets plated with 30µ" gold. Hoods made of high-quality, nickel-plated plastic.



CRIMP KITS

Mfg. Part No.	No. of Contacts	Gender	Stock No.	Price Each 1-4	Price Each 5+
DEC-M-KIT	9	Plug	92F6310	4.22	3.85

SOLDER KITS

Mfg. Part No.	No. of Contacts	Gender	Stock No.	Price Each 1-4	Price Each 5+
DE-M-KIT	9	Plug	92F6312	3.27	2.98
DE-F-KIT	9	Receptacle	92F6313	3.59	3.27

(8024)

D-SUB PLASTIC HOODS WITH INTERNAL CABLE CLAMPS

RoHS Compliant Available

COOPER Interconnect

2-piece shielded plastic hoods (backshells). Cable knockouts in place. Straight or right-angle cable outlets made by user. All have standard screws except **mfg. part no. 17-1587-9**, which has long jack screws.

Mfg. Part No.	Positions	Stock No.	Price Each 1-24	Price Each 25-49
17-1587-06	9	38F1800	9.84	9.16
17-1587-9	9	88F2145	25.71	18.42
17-1588-06	15	38F1801	9.82	9.13
17-1589-06	25	38F1802	10.93	10.16
17-1590-06	37	38F1803	15.61	14.53

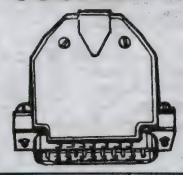
(9011)

D-SUB HOODS WITH INTERNAL CABLE CLAMPS

RoHS Compliant Available

COOPER Interconnect

2-piece hoods are shielded, with cable knock-outs in place. Straight or right-angle cable outlets made by user. All units are jack screw models.



Mfg. Part No.	Positions	Stock No.	Price Each 1-24	Price Each 25-49
17-1724-2	9	90F8721	5.21	4.83
17-1725-2	15	90F8722	7.05	6.56
17-1726-2	25	90F8723	5.21	4.84
17-1727-2	37	90F8724	17.97	16.71

(9010)

AMP INSERTION/ EXTRACTION TOOLS

RoHS Compliant Available

TE connectivity

Authorized Distributor

91067

91285-1

For use with AMPLIMITE® HDP-20 Subminiature D connectors. Tool includes interchangeable tips for insertion and extraction of pins and sockets.

Mfg. Part No.	For Size Contacts, AWG	Stock No.	Price Each 1-4
91067-1	22 DM Contacts, 28-22 AWG	44F8723	11.26
91067-2	20 DM Contacts, 24-20 AWG	44F8729	8.13
91285-1	22 DF Contacts, 28-22 AWG & Size 20 DF Posted Contacts	90F1401	22.92

(8292)

AMP TOOL KITS

TE connectivity

Authorized Distributor

PRO-CRIMPER™ II HAND TOOL TERMINAL KIT

Mfg. part no. 55823-1 PLASTI-GRIP® and PIDG® terminal kit consists of PRO-CRIMPER™ II hand tool and 225 ring and spade terminals in 12-10, 16-14 and 22-16 wire sizes. Packaged in a sturdy storage case.

Mfg. Part No.	Stock No.	Price 1-4
55823-1	92F1358	344.97

PRO-CRIMPER™ II HAND TOOL COAXIAL PREMISE WIRING KIT

Mfg. part no. 58477-1 kit consists of PRO-CRIMPER™ II hand tool assembly with **mfg. part no. 58535-1** die set, 5 each; RG58, RG58 plenum and RG59/62 plenum size plugs, 10 RG59/62 size plugs, 2 jack-to-jack adapters, 2 "T" adapters, and multi-compartment storage case.

Mfg. Part No.	Stock No.	Price 1-4
58477-1	97F9587	533.06

(8294)

AMPSEAL 16 CONNECTOR SYSTEM

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Keyed / polarized, prevents mismating
- Lanceless contacts, no damaged tangs or tangled contacts
- Integral CPA, protects against accidental unlocking
- Sleeved assembly for contact beam protection provides 50 durability cycles
- Attachment feature on pin housing provides connector clip mounting
- Integral TPA provides terminal position assurance with no additional assembly
- Sealing of interface and wires provides for environmental integrity

The AMPSEAL 16 Connector System is targeted for off-road and heavy duty industrial applications. This wire-to-wire and wire-to-device connector line was designed to meet the rigorous demands of an industry that requires the highest standards in performance. This connector family features the HDSF Size 16 Pin and Socket contacts as a terminal system. These contacts are stamped and formed versions of the screw machined MIL-C-39029 contacts. The 2-, 3-, 4-, 6-, 8- and 12-position housings will offer a one-piece assembly for both plug and cap.

SEALED HOUSINGS WITH STANDARD DIAMETER WIRE SEALS - 2.18–3.67 mm²

Mfg. Part No.	No. of Positions	Gender	Color	Stock No.	Price Each 1-49	Price Each 50-99
776427-1	2	Plug	Red	22J0157	2.41	2.16
776427-2	2	Plug	Gray	88M2221	0.85	0.78
776427-3	2	Plug	Yellow	63M0814	0.89	0.81
776429-1	3	Plug	Red	94H8213	1.22	0.98
776429-2	3	Plug	Gray	33K4513	0.93	0.85
776429-3	3	Plug	Yellow	11R8165	0.94	0.85
776487-1	4	Plug	Red	34M4291	1.81	1.63
776487-2	4	Plug	Gray	45P6287	1.67	1.52
776433-1	6	Plug	Red	02J4223	2.54	2.38
776433-2	6	Plug	Gray	71P5408	1.90	1.71
776494-1	8	Plug	Red	19K7986	1.93	1.74
776494-2	8	Plug	Gray	10R1669	2.70	2.34
776437-1	12	Plug	Red	53K8772	4.00	3.40
776437-2	12	Plug	Gray	11R8168	3.20	2.91
776428-1	2	Receptacle	Red	22J0159	1.60	1.45
776428-2	2	Receptacle	Gray	11R8163	1.11	1.01
776428-3	2	Receptacle	Yellow	11R8164	1.33	1.17
776430-1	3	Receptacle	Red	22J0169	1.28	1.17
776430-2	3	Receptacle	Gray	73K1991	1.38	1.16
776430-3	3	Receptacle	Yellow	11R8166	1.38	1.15
776488-1	4	Receptacle	Red	51M4388	1.69	1.53
776488-2	4	Receptacle	Gray	11R8170	1.69	1.53
776434-1	6	Receptacle	Red	53K8774	1.56	1.41
776434-2	6	Receptacle	Gray	11R8167	1.64	1.49
776495-1	8	Receptacle	Red	98H1885	1.56	1.42
776495-2	8	Receptacle	Gray	10R1668	2.43	2.21
776438-1	12	Receptacle	Red	53K8773	2.79	2.53
SEALED HOUSINGS WITH REDUCED DIAMETER WIRE SEALS - 1.30–2.54 mm²						
776522-1	2	Plug	Red	11R8171	0.95	0.87
776523-1	3	Plug	Red	36M2520	0.89	0.81
776524-1	4	Plug	Red	11R8172	1.58	1.52
776531-1	6	Plug	Red	11R8173	1.59	1.46
776532-1	8	Plug	Red	74M9696	2.16	1.96
776533-1	12	Plug	Red	11R8174	3.78	3.52
776534-1	2	Receptacle	Red	11R8175	1.30	1.16
776535-1	3	Receptacle	Red	11R8176	1.08	0.98
776536-1	4	Receptacle	Red	11R8177	1.69	1.53
776537-1	6	Receptacle	Red	11R8178	1.54	1.40
776538-1	8	Receptacle	Red	04P0149	2.05	1.87
776539-1	12	Receptacle	Red	06R3379	3.11	2.83

CONTINUED

PIN & SOCKET CONNECTORS

AMPSEAL 16 CONNECTOR SYSTEM (CONT.)

PIN CONTACTS

Mfg. Part No.	AWG	Insulation Diameter (mm)	Contact Plating	Stock No.	Price Each 1-9	Price Each 10-24
● 638078-1		2.18-3.67	Gold	93C9312	0.56	0.53
● 638078-3		2.18-3.67	Tin	02H0486	0.32	0.30
SOCKET CONTACTS						
● 776492-1		2.18-3.67	Gold	53K7614	0.86	0.81
● 776492-2		2.18-3.67	Tin	78M5516	0.90	0.79

(150949)

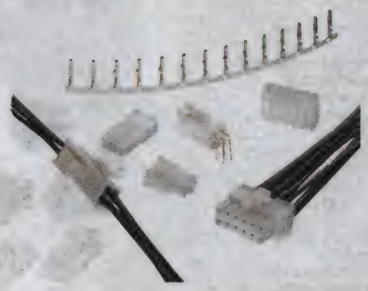
AMP VAL-U-LOK CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Centerline: 0.165″ (4.2mm)
- Voltage rating: 600VAC
- Rated UL 94V-2
- Easy mate and unmate with positive latch design



HEADERS WITHOUT PEGS

Mfg. Part No.	No. of Positions	Mounting	Stock No.	Price Each 1-49
● 1586037-4	4	Vertical Thru-Hole	11H7377	0.38
● 1586037-8	8	Vertical Thru-Hole	11H7379	0.73
● 1-1586037-4	14	Vertical Thru-Hole	09H6592	1.07
● 1-1586037-6	16	Vertical Thru-Hole	09H6593	1.10
● 1-1586037-8	18	Vertical Thru-Hole	09H6594	1.16
● 2-1586037-0	20	Vertical Thru-Hole	12H2853	1.33
● 2-1586037-2	22	Vertical Thru-Hole	12H2854	1.37
● 2-1586037-4	24	Vertical Thru-Hole	12H2855	1.40
● 1586041-8	8	Right Angle Thru-Hole	11H7395	0.62
● 1-1586041-0	10	Right Angle Thru-Hole	09H6610	1.09
● 1-1586041-4	14	Right Angle Thru-Hole	09H6612	0.66
● 1-1586041-6	16	Right Angle Thru-Hole	09H6613	1.32
● 1-1586041-8	18	Right Angle Thru-Hole	09H6614	1.33
● 2-1586041-0	20	Right Angle Thru-Hole	12H2865	1.41
● 2-1586041-2	22	Right Angle Thru-Hole	12H2866	1.43
● 2-1586041-4	24	Right Angle Thru-Hole	12H2867	1.57
HEADERS WITH PEGS				
● 1586039-2	2	Vertical Thru-Hole	11H7384	0.31
● 1586039-6	6	Vertical Thru-Hole	11H7386	0.48
● 2-1586039-4	24	Vertical Thru-Hole	12H2861	1.27
PLUG HOUSING FOR SOCKET CONTACTS - SINGLE ROW				
● 1586105-3	3	Free Hanging	40P8742	0.29
PLUG HOUSING FOR SOCKET CONTACTS - DOUBLE ROW				
● 1586000-2	2	Free Hanging	11H7360	0.13
● 1586000-4	4	Free Hanging	11H7361	0.13
● 1586000-8	8	Free Hanging	11H7363	0.18
● 1-1586000-0	10	Free Hanging	09H6570	0.27
● 1-1586000-4	14	Free Hanging	09H6572	0.19
● 1-1586000-6	16	Free Hanging	09H6573	0.24
● 1-1586000-8	18	Free Hanging	09H6574	0.45
● 2-1586000-0	20	Free Hanging	15H2041	0.41
● 2-1586000-2	22	Free Hanging	15H2042	0.21
● 2-1586000-4	24	Free Hanging	15H2043	0.43
● 794953-4	4	Panel Mount	16H6222	0.13
● 794953-8	8	Panel Mount	16H6224	0.23
● 1-794953-0	10	Panel Mount	10H3820	0.18
● 1-794953-4	14	Panel Mount	10H3822	0.35
● 1-794953-6	16	Panel Mount	10H3823	0.37
● 1-794953-8	18	Panel Mount	10H3824	0.39
● 2-794953-0	20	Panel Mount	12H4317	0.41
● 2-794953-2	22	Panel Mount	12H4318	0.21
● 2-794953-4	24	Panel Mount	12H4319	0.45
RECEPTACLE HOUSING FOR PIN CONTACTS				
● 794954-2	2	Free Hanging	16H6225	0.13
● 794954-4	4	Free Hanging	16H6226	0.14

➤CONTINUED➤

AMP VAL-U-LOK CONNECTORS (CONT.)

RECEPTACLE HOUSING FOR PIN CONTACTS

Mfg. Part No.	No. of Positions	Mounting	Stock No.	Price Each 1-49
● 794954-8	8	Free Hanging	16H6228	0.17
● 1-794954-0	10	Free Hanging	10H3825	0.29
● 1-794954-2	12	Free Hanging	08H1106	0.35
● 1-794954-4	14	Free Hanging	10H3826	0.37
● 1-794954-6	16	Free Hanging	10H3827	0.37
● 1-794954-8	18	Free Hanging	10H3828	0.39
● 2-794954-0	20	Free Hanging	12H4320	0.41
● 2-794954-2	22	Free Hanging	12H4321	0.44
● 2-794954-4	24	Free Hanging	12H4322	0.42

CONTACTS - LOOSE FORM

Mfg. Part No.	AWG	Contact Material	Contact Finish	Gender	Stock No.	Price Each 1-9
● 794958-1	26AWG to 22AWG	Brass	Tin	Socket	19H3777	0.11
● 794958-3	26AWG to 22AWG	Phosphor Bronze	Tin	Socket	16H6235	0.04
● 794958-2	26AWG to 22AWG	Brass	Gold	Socket	16H6234	0.47
● 794956-1	22AWG to 18AWG	Brass	Tin	Socket	08H1111	0.11
● 794956-3	22AWG to 18AWG	Phosphor Bronze	Tin	Socket	16H6230	0.10
● 794956-2	22AWG to 18AWG	Brass	Gold	Socket	41P0047	0.52
● 1586055-1	16AWG	Brass	Tin	Socket	51M8538	0.11
● 794957-1	26AWG to 22AWG	Brass	Tin	Pin	19H3776	0.10
● 794957-3	26AWG to 22AWG	Phosphor Bronze	Tin	Pin	16H6232	0.05
● 794955-1	22AWG to 18AWG	Brass	Tin	Pin	19H3775	0.11
● 794955-3	22AWG to 18AWG	Phosphor Bronze	Tin	Pin	57K8462	0.11
● 794955-2	22AWG to 18AWG	Brass	Gold	Pin	41P0046	0.34
● 1586054-1	16AWG	Brass	Tin	Pin	40P8733	0.08
CONTACTS - STRIP FORM						
● 1586317-1	26AWG to 22AWG	Brass	Tin	Socket	40P8749	0.06
● 1586317-2	26AWG to 22AWG	Brass	Gold	Socket	26K2949	0.61
● 1586315-2		Brass	Gold	Socket	62M9100	0.60
● 1586315-3		Phosphor Bronze	Tin	Socket	40P2673	0.14
● 1586315-4		Phosphor Bronze	Gold	Socket	88M2924	0.68
● 1586316-1	26AWG to 22AWG	Brass	Tin	Pin	40P8746	0.04
● 1586314-3		Phosphor Bronze	Tin	Pin	02M8775	0.14

(84728)

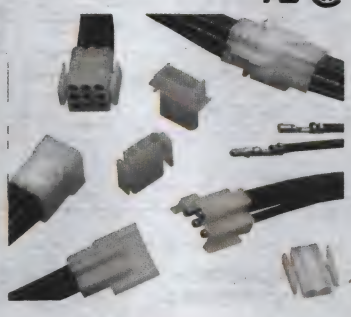
AMP 0.140″ MATE-N-LOK (LARGE INSULATION) CONNECTORS, 0.240″ (6.10) CENTERLINE

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Contacts are on 0.240″ (6.09) centerline spacing
- Polarized, Natural color nylon housings
- Contacts fully protected in housings
- Low insertion/extraction forces
- Dual locking lances provide optimum contact stability
- Extraction tool removes both pins and sockets
- Wire range from 20 to 10 AWG
- Accepts insulation diameters 0.100 (2.54) to 0.180 (4.57)
- Dielectric withstand voltage: 3.0 KVAC between adjacent circuits
- Insulation resistance: 1000 Mohms min. initial between adjacent circuits
- Voltage rating: 600 V AC or DC
- Connector mating: 4.5 lb. max. per circuit
- Connector unmating: 0.8 lb. min. per circuit
- Contact retention : 30 lb. min.
- Durability: 25 cycles, mating and unmating
- Operating temperature: -55°C to +85°C



CAP HOUSINGS

Mfg. Part No.	Circuits	Style	Mounting	Stock No.	Price Each 1-9	Price Each 10-49
● 1-350345-0	2	In-Line	Panel Mount	90F5034	0.65	0.61
● 1-350347-0	3	In-Line	Panel Mount	33B3252	0.52	0.46
● 1-480673-0	9	Matrix	Panel Mount	93F3025	1.41	1.28
PLUG HOUSINGS						
● 1-350344-0	2	In-Line	Panel Mount	69H6306	0.53	0.48
● 1-350346-0	3	In-Line	Panel Mount	33B3251	0.48	0.44
● 1-480672-0	9	Matrix	Panel Mount	81H2538	1.26	1.21
● 1-480585-0	9	Matrix	Free Hanging	90F3965	1.45	1.37

➤CONTINUED➤

AMP 0.140″ MATE-N-LOK (LARGE INSULATION) CONNECTORS, 0.240″ (6.10) CENTERLINE (CONT.)

PIN CONTACTS – SOLD INDIVIDUALLY

Mfg. Part No.	AWG	Insulation Diameter	Stock No.	Price Each 1-9	Price Each 10-24
350391-1	14AWG to 10AWG	0.100-0.180″	90F3971	0.52	0.49
SOCKET CONTACTS – SOLD INDIVIDUALLY					
350388-1	20AWG to 14AWG	0.100-0.180″	50F690	0.47	0.44
350390-1	14AWG to 10AWG	0.100-0.180″	90B7649	0.47	0.43
SOCKET CONTACTS, STRIP FORM – SOLD INDIVIDUALLY					
61626-1	20AWG to 14AWG	0.100-0.180″	90F3957	0.20	0.19

APPLICATION TOOLS

Mfg. Part No.	Description	Stock No.	Price 1-4
318845-1	Contact Extraction Tool	50B8852	155.30

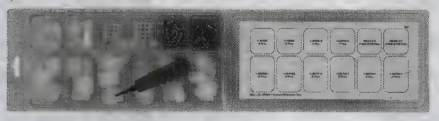
(177060)

AMP MATE-N-LOK® CONNECTORS KITS

RoHS Compliant Available

TE connectivity

Authorized Distributor



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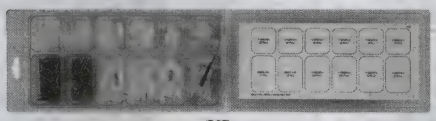

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Selection of pin and socket housings, contacts, and application tooling.

STANDARD MATE-N-LOK® ASSORTMENT

Mfg. Part No.	Connector Kit Contents	Quantity
1-480698-0	2-Position UMNL Plug Housing, Natural	6
1-480699-0	2-Position UMNL Cap Housing, Natural	6
1-480700-0	3-Position UMNL Plug Housing, Natural	5
1-480701-0	3-Position UMNL Cap Housing, Natural	5
1-480704-0	6-Position UMNL Plug Housing, Natural	4
1-480705-0	6-Position UMNL Cap Housing, Natural	4
1-480706-0	9-Position UMNL Plug Housing, Natural	3
1-480707-0	9-Position UMNL Cap Housing, Natural	3
1-480708-0	12-Position UMNL Plug Housing, Natural	1
1-480709-0	12-Position UMNL Cap Housing, Natural	1
350547-1	20-14 AWG Pin Contacts	100
350550-1	20-14 AWG Socket Contacts	100
318851-1	Extraction Tool Assembly	1

Mfg. Part No.	Stock No.	Price Each
625	34C7558	122.96

COMMERCIAL MATE-N-LOK® ASSORTMENT

Mfg. Part No.	Connector Kit Contents	Quantity
1-480273-0	6-Position PM Socket Housing	1
1-480276-0	6-Position PM Pin Housing	1
1-480304-0	3-Position PM Socket Housing	5
1-480305-0	3-Position PM Pin Housing	5
1-480318-0	2-Position FH Socket Housing	5
1-480319-0	2-Position FH Pin Housing	5
1-480349-0	1-Position FH Socket Housing	10
1-480350-0	1-Position FH Pin Housing	10
1-480424-0	4-Position FH Socket Housing	2
1-480426-0	4-Position FH Pin Housing	2
60617-1	20-14 AWG Socket Contacts	100
60618-1	20-14 AWG Pin Contacts	100
465644-1	Extraction Tool	1

Mfg. Part No.	Stock No.	Price Each
615	34C7557	43.70

(69837)

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(196545)

AMP UNIVERSAL MATE-N-LOK® II SOFT-SHELL CONNECTOR HOUSING KITS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Contact Diameter: 0.084″ (2.13mm)
- Centerline, Matrix: 0.250″ (6.35mm)
- Free Hanging Mount
- Packaging Method: Front and Rear Component
- White Nylon Housing, Flammability Rated UL94V-0
- Positive Lock
- Current Rating: 31A
- Voltage: 600VAC

Kits consist of front and rear caps or plugs. Mate with standard Universal MATE-N-LOK® housings and PC board headers and use standard panel cutouts and strain reliefs. Contacts, *ordered separately on pages 883-884*, are on 0.250″ (6.35) centerline spacing. Pins and sockets can be intermixed in the same housing. Housing design provides for complete contact insertion and features 3-point stabilization to control contact alignment and minimize stubbing. UL recognized, CSA certified, VDE approved. *Order application tools separately on page 884.*

PLUG HOUSING KITS

Mfg. Part No.	Circuits	Stock No.	Price Each 1-49
770017-1	2	92F9078	0.73
770018-1	3	92F9079	0.78
770019-1	4	92F9080	0.88
770020-1	6	93F7343	1.11
770021-1	9	92F9081	1.08
770022-1	12	92F9082	1.53
405365529	15	90F3979	1.57
CAP HOUSING KITS			
770024-1	2	92F9083	0.74
770025-1	3	92F9084	0.86
770026-1	4	92F8875	0.94
770027-1	6	92F8876	0.99
770028-1	9	92F8877	1.06
770029-1	12	92F8878	1.25
770030-1	15	92F8879	1.66

(8286)

AMP CONTACTS FOR UNIVERSAL MATE-N-LOK® II CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Split Pin
- Current Rating: 19A
- Voltage: 600VAC
- Wire Range: 20-14 AWG
- Contact Diameter: 0.084″ (2.13mm)
- Stock Thickness: 0.012″ (0.30mm)
- Insulation Diameter: 0.060-0.130″ (1.52-3.30mm)

Available in brass or phosphor bronze with pre-tin finish or plated with gold in mating area and tin-lead in crimp area over nickel underplate. *Order* **mfg. part no. 90300-2** *CERTI-CRIMP® hand tool (***mfg. part no. 90296-2** *for grounding pins),* **mfg. part no. 91002-1** *contact insertion tool,* **mfg. part no. 318851-1** *contact extraction tool, and* **mfg. part no. 58382-1** *latch disengaging tool separately on page 884 or go online or call.*

PIN CONTACTS

Mfg. Part No.	AWG	Ins. Dia. Range	Length	Finish*	Stock No.	Price Each 1-49	Price Each 50-99	Price Each 100-249	Price Each 250-499
770252-1	24-18	0.040-0.100″	1.005″	1	92F8880	0.26	0.24	0.22	0.20
770009-1	24-18	0.040-0.100″	1.005″	1	16H5721	0.15	0.15	0.11	0.09
1-770252-0	24-18	0.040-0.100″	1.005″	2	52K3355	1.23	1.16	1.05	0.96
770250-1	20-14	0.060-0.130″	1.005″	1	92F8882	0.25	0.22	0.20	0.18
1-770250-0	20-14	0.060-0.130″	1.005″	2	52K3354	0.93	0.83	0.75	0.69
770248-1	20-14	0.130-0.200″	0.995″	1	92F8884	0.29	0.27	0.25	0.23
1-770248-0	20-14	0.130-0.200″	0.995″	2	16M2686	1.33	1.23	1.19	1.14
770246-3	12-10	0.200″ max.	1.005″	3	92F8885	0.53	0.43	0.40	0.36
405903444	12-10	0.200″ max.	1.005″	3	34B1821	0.44	0.42	0.36	0.31
1-770246-0	12-10	0.200″ max.	1.005″	4	16M2684	2.61	2.37	2.22	2.13

SOCKET CONTACTS

Mfg. Part No.	AWG	Ins. Dia. Range	Length	Finish*	Stock No.	1-49	50-99	100-249	250-499
770253-3	24-18	0.040-0.100″	0.980″	3	92F8887	0.28	0.25	0.23	0.21
770010-3	24-18	0.040-0.100″	0.980″	3	94C0592	0.19	0.18	0.15	0.14
1-770253-0	24-18	0.040-0.100″	0.980″	4	52K3356	1.36	1.28	1.17	1.08
770251-3	20-14	0.060-0.130″	0.980″	3	92F8888	0.31	0.26	0.24	0.22
1-770251-0	20-14	0.060-0.130″	0.980″	4	87K2216	1.71	1.66	1.61	1.54
770249-3	20-14	0.130-0.200″	0.970″	3	92F8890	0.37	0.30	0.27	0.25
1-770249-0	20-14	0.130-0.200″	0.970″	4	16M2687	2.30	2.09	1.96	1.88
770247-3	12-10	0.200″ max.	0.980″	3	92F8891	0.41	0.36	0.33	0.31

CONTINUED

AMP CONTACTS FOR UNIVERSAL MATE-N-LOK® II CONNECTORS (CONT.)

SOCKET CONTACTS

Mfg. Part No.	AWG	Ins. Dia. Range	Length	Finish*	Stock No.	Price Each 1-49	50-99	100-249	250-499
● 770004-3	12-10	0.200″ max.	0.980″	3	13C1035	0.44	0.42	0.36	0.31
● 1-770247-0	12-10	0.200″ max.	0.980″	4	16M2685	2.40	2.33	2.25	2.16
HIGH CURRENT PIN CONTACTS									
● 193796-1	10	0.200″ max.	1.10″	5	90B4738	2.38	2.32	2.25	2.14
HIGH CURRENT SOCKET CONTACTS									
● 193842-1	14-12	0.130″ max.	1.10″	5	90B2030	5.93	5.69	5.22	4.98
● 193797-1	10	0.200″ max.	1.10″	5	90B4740	3.62	3.28	3.02	2.63
GROUNDING PINS									
● 1-770254-0	20-14	0.060-0.130″	1.105″	2	16M2688	2.29	...	...	...

*Material/Finish: 1 = Brass/Pre-Tin, 2 = Brass/Gold, 3 = Phosphor Bronze/Pre-Tin, 4 = Phosphor Bronze/Gold, 5 = Copper Alloy/Silver

(8287)

3

AMP UNIVERSAL MATE-N-LOK® II TOOLS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Mfg. Part No.	Description	Stock No.	Price 1-4
● 91002-1	Contact Insertion Tool for Small Wire (Insulation Dia. 0.070″ or less)	89F4310	24.13
455830-1	Contact Insertion Tool (30-14 AWG)	46F2045	32.27
1804030-1	Extraction Tool Assembly	03M5513	53.40
90548-1	PRO-CRIMPER™ II Hand Tool (24-18 AWG)	96F9716	287.89
90546-1	PRO-CRIMPER™ II Hand Tool (20-14 AWG)	96F9717	290.92
58530-1	PRO-CRIMPER™ II Hand Tool (12-10 AWG)	93B6459	428.49
91508-1	CERTI-CRIMP® Hand Tool (20-18 AWG)	95C0491	1042.19

(8288)

AMP UNIVERSAL MATE-N-LOK COLOR-CODED CONNECTOR HOUSING

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Current Rating: 19 to 36A max.
- Pitch spacing: 6.35mm (.250 in.)
- Voltage rating: 600 VAC
- Contact diameter: 2.13mm (0.084 in.)
- Housing material: Nylon
- Positive lock

6-Position Plug

3- Position Plug

RECEPTACLES FREE HANGING OR PANEL MOUNTING

Mfg. Part No.	Circuits	Color	Stock No.	Price Each 1-9	10-49
● 1-480699-1	2	Brown	19M0042	0.35	0.29
● 1-480699-2	2	Red	81C9437	0.28	0.26
● 1-480701-1	3	Brown	29C4260	0.38	0.31
● 1-480701-2	3	Red	25C7563	0.29	0.24
● 1-480701-5	3	Green	83H3361	0.43	0.41
● 1-480701-9	3	Black	10H0043	0.23	0.20
● 1-480703-1	4	Brown	10H0047	0.45	0.43
● 1-480703-2	4	Red	25C7562	0.32	0.29
● 1-480705-4	6	Yellow	10H0049	0.38	0.36
● 1-480705-9	6	Black	17R0393	0.38	0.36
● 1-480707-1	9	Brown	10H0052	0.47	0.45
● 1-480707-2	9	Red	10H0053	0.38	0.33
● 1-480711-2	15	Red	85C4928	0.60	0.55
PLUGS FREE HANGING MOUNTING					
● 1-480698-2	2	Red	23C6540	0.31	0.28
● 1-480700-2	3	Red	33M8283	0.37	0.35
● 1-480700-5	3	Green	83H3358	0.46	0.43
● 1-480700-9	3	Black	40P8404	0.23	0.21
● 1-480702-1	4	Brown	10H0044	0.46	0.44
● 1-480702-2	4	Red	10H0045	0.29	0.27
● 480763-2	5	Red	18H2450	0.99	0.86
● 1-480704-9	6	Black	80K7516	0.26	0.23
● 1-480706-1	9	Brown	10H0050	0.54	0.51

(90492)

AMP UNIVERSAL MATE-N-LOK® CONNECTOR HOUSINGS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Contact Diameter: 0.084″ (2.13mm)
- Centerline, Matrix: 0.250 x 0.250″ (6.35 x 6.35mm)
- Free Hanging or Panel Mount
- Nylon Housing, Flammability Rated UL94V-2
- Positive Lock; 1 Circuit: Detent Lock
- Sealable
- Current Rating: 19A
- Voltage: 600VAC

Cap housing requires 2 **mfg. part no. 641778-1** or **mfg. part no. 643182-2** adapters to attach strain relief; *go online or call.* UL recognized, CSA certified, VDE approved under test report 14397-1431-1003.

UL94V-2 RATED NYLON PLUG HOUSINGS, NATURAL COLOR

Mfg. Part No.	Circuits	Stock No.	Price Each 1-49
● 1-350867-0*	1	46F2049	0.13
● 1-480698-0	2	46F2063	0.20
● 1-480700-0	3	46F2065	0.22
● 1-480702-0	4	46F2067	0.18
● 1-480763-0	5	90F4576	0.26
● 640585-1	6	90F4830	0.54
● 1-480704-0	6	90F4571	0.24
● 640585-1	6	90F4830	0.54
● 640586-1	8	90F4836	0.69
● 1-480706-0	9	46F2057	0.27
● 1-480708-0	12	46F2059	0.30
● 1-480710-0	15	46F2061	0.45
UL94V-0 RATED NYLON PLUG HOUSINGS, WHITE COLOR			
● 350865-1*	1	90F4915	0.30
● 350777-1	2	90F4824	0.34
● 350766-1	3	90F4825	0.33
● 350779-1	4	90F4826	0.34
● 350809-1	5	90F4827	0.32
● 640581-1	6	90F4828	0.86
● 350715-1	6	90F4829	0.56
● 640582-1	8	90F4837	0.79
● 350720-1	9	90F4838	0.41
● 350735-1	12	90F4840	0.46
● 350736-1	15	90F4574	0.60
UL94V-2 RATED NYLON CAP HOUSINGS, NATURAL COLOR			
● 770421-1	1	92F8867	0.13
● 1-480699-0	2	46F2064	0.19
● 1-480701-0	3	46F2066	0.23
● 1-480703-0	4	46F2068	0.20
● 1-480764-0	5	87F5291	0.30
● 926307-1	6	92F8868	0.90
● 1-480705-0	6	46F2056	0.26
● 926308-1	8	92F8869	2.15
● 1-480707-0	9	46F2058	0.26
● 1-480709-0	12	46F2060	0.38
● 1-480711-0	15	46F2062	0.51
UL94V-0 RATED NYLON CAP HOUSINGS, WHITE COLOR			
● 350866-1*	1	90F4916	0.25
● 350778-1	2	90F4831	0.52
● 350767-1	3	90F4832	0.39
● 350780-1	4	90F4833	0.44
● 350810-1	5	90F4834	0.39
● 926307-3	6	92F8870	3.23
● 350781-1	6	90F4835	0.46
● 926308-3	8	92F8871	3.32
● 350782-1	9	90F4839	0.52
● 350783-1	12	90F4841	0.67
● 350784-1	15	90F4575	1.06

*Detent lock

KEYING PLUGS

Mfg. Part No.	Description	Stock No.	Price Each 1-49	50-99
● 1-640415-0	For UL94V-0, Nylon Material, White	90F4821	0.34	0.31

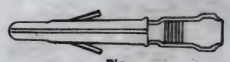
(8322)

AMP CONTACTS FOR UNIVERSAL MATE-N-LOK® CONNECTORS

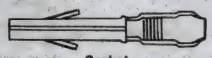
RoHS Compliant Available

TE connectivity

Authorized Distributor



Pin



Socket

- Insulation Diameter: 0.040-0.100" (1.02-2.54mm)
- Contact Diameter: 0.086" (2.18mm)
- Contact Material: Brass
- Contact Termination Area Plating: Pre-Tin
- Voltage: 600VAC
- Current Rating: 19A

Thickness: 0.012" (0.305) except **mfg. part nos. 350689-1** and **350689-2**, which are 0.010" (0.254) thick. Use with **mfg. part no. 90300-2** CERTI-CRIMP® hand tool and **mfg. part no 318851-1** extraction tool; *go online or call.*

PIN CONTACTS

Mfg. Part No.	Wire Size	Contact Material	Contact Finish	Pkg.	Stock No.	Price Each 1-49
770672-1	30AWG to 26AWG	Brass	Tin	Bulk	22C7652	0.22
350690-1	24AWG to 18AWG	Brass	Tin	Bulk	54H4163	0.08
350690-7	24AWG to 18AWG	Brass	Gold*	Bulk	90F3760	0.72
350561-1	24AWG to 18AWG	Brass	Tin	Tape Cut	70C3818	0.11
350561-3	24AWG to 18AWG	Phosphor Bronze	Tin	Tape Cut	70C3819	0.16
350561-7	24AWG to 18AWG	Brass	Gold*	Tape Cut	90F3611	0.51
350561-2	24AWG to 18AWG	Brass	Gold**	Tape Cut	90F3626	0.65
350218-2	20AWG to 14AWG	Brass	Gold*	Tape Cut	90F3617	0.67
350218-7	20AWG to 14AWG	Brass	Gold**	Tape Cut	90F3619	0.44
350547-7	20AWG to 14AWG	Brass	Gold*	Bulk	90F5657	0.55
350547-6	20AWG to 14AWG	Phosphor Bronze	Gold	Bulk	92F8452	0.82
350547-3	20AWG to 14AWG	Phosphor Bronze	Tin	Bulk	90F5659	0.11
350552-1	20AWG to 14AWG	Brass	Tin	Bulk	90F5662	0.10
350552-2	20AWG to 14AWG	Brass	Gold	Bulk	98F7604	0.98
350690-2	24AWG to 18AWG	Brass	Gold**	Bulk	90F3758	0.88
350690-3	24AWG to 18AWG	Phosphor Bronze	Tin	Bulk	90F3762	0.14
350547-1	20AWG to 14AWG	Brass	Tin	Bulk	01C1197	0.10
350218-1	20AWG to 14AWG	Brass	Tin	Tape Cut	58R2751	0.10
350547-2	20AWG to 14AWG	Brass	Gold**	Bulk	90F5655	0.77
350873-1	18AWG to 14AWG	Brass	Tin	Tape Cut	13H1859	0.12
350873-3	18AWG to 14AWG	Phosphor Bronze	Tin	Tape Cut	90F3599	0.12
350918-3	18AWG to 14AWG	Phosphor Bronze	Tin	Bulk	90F4791	0.16
350922-3	12AWG to 10AWG	Phosphor Bronze	Tin	Tape Cut	70C3821	0.21
350922-6	12AWG to 10AWG	Phosphor Bronze	Gold	Tape Cut	90F3630	0.73
640309-3	12AWG to 10AWG	Phosphor Bronze	Tin	Bulk	25C3144	0.31
640309-6	12AWG to 10AWG	Phosphor Bronze	Gold	Bulk	99F4824	1.37
SPLIT PIN CONTACTS						
350706-1	24AWG to 18AWG	Brass	Tin	Bulk	90F4796	0.07
350706-2	24AWG to 18AWG	Brass	Gold**	Bulk	90F4797	0.89
350706-7	24AWG to 18AWG	Brass	Gold*	Bulk	90F4798	0.73
350699-2	24AWG to 18AWG	Brass	Gold	Tape Cut	90F3635	0.70
350699-7	24AWG to 18AWG	Brass	Gold	Tape Cut	48F6981	0.51
350705-1+	20AWG to 14AWG	Brass	Tin	Bulk	90F4799	0.09
350705-2	20AWG to 14AWG	Brass	Gold**	Bulk	90F4800	0.87
350705-7	20AWG to 14AWG	Brass	Gold*	Bulk	90F4801	0.52
350687-7	20AWG to 14AWG	Brass	Gold	Tape Cut	90F3585	0.20
350707-1	20AWG to 14AWG	Brass	Tin	Bulk	90F4802	0.25
SOCKET CONTACTS						
770673-1	30AWG to 26AWG	Brass	Tin	Bulk	90B1044	0.23
350689-1	24AWG to 18AWG	Brass	Tin	Bulk	33B8247	0.10
350689-2	24AWG to 18AWG	Brass	Gold	Bulk	90F3759	0.83
350689-3	24AWG to 18AWG	Phosphor Bronze	Tin	Bulk	90F3763	0.25
403761786	24AWG to 18AWG	Phosphor Bronze	Tin	Tape Cut	90F3613	0.15
350570-7	24AWG to 18AWG	Brass	Gold	Tape Cut	29C1876	0.49
350570-1	24AWG to 18AWG	Brass	Tin	Tape Cut	90F3624	0.10
350851-2	24AWG to 18AWG	Brass	Gold	Tape Cut	90F3625	0.67
350570-2	24AWG to 18AWG	Brass	Gold	Tape Cut	90F3627	0.66
350851-7	24AWG to 18AWG	Brass	Gold	Tape Cut	90F3628	0.39
350689-7	24AWG to 18AWG	Brass	Gold	Bulk	90F3761	0.79
350536-6	20AWG to 14AWG	Phosphor Bronze	Gold	Tape Cut	90F3606	0.53
350536-1	20AWG to 14AWG	Brass	Tin	Tape Cut	90F3616	0.10
350550-3	20AWG to 14AWG	Phosphor Bronze	Tin	Bulk	90F5660	0.16
350536-3	20AWG to 14AWG	Phosphor Bronze	Tin	Tape Cut	58R2753	0.15
350550-6	20AWG to 14AWG	Phosphor Bronze	Gold	Bulk	90F5661	0.96
350550-7	20AWG to 14AWG	Brass	Gold	Bulk	90F5658	0.55
350537-1	20AWG to 14AWG	Brass	Tin	Tape Cut	14C4067	0.10
350537-2	20AWG to 14AWG	Brass	Gold	Tape Cut	90F3609	0.79
350537-7	20AWG to 14AWG	Brass	Gold	Tape Cut	90F3610	0.52
350551-7	20AWG to 14AWG	Brass	Gold	Bulk	90F4787	0.74
350551-2	20AWG to 14AWG	Brass	Gold	Bulk	98F7607	0.99
350550-1	20AWG to 14AWG	Brass	Tin	Bulk	33B8242	0.11

CONTINUED

AMP CONTACTS FOR UNIVERSAL MATE-N-LOK® CONNECTORS (CONT.)

SOCKET CONTACTS

Mfg. Part No.	Wire Size	Contact Material	Contact Finish	Pkg.	Stock No.	Price Each 1-49
350550-2	20AWG to 14AWG	Brass	Gold	Bulk	90F5656	0.75
350551-1	20AWG to 14AWG	Brass	Tin	Bulk	90F5663	0.14
350874-1	18AWG to 14AWG	Brass	Tin	Tape Cut	55R0993	0.19
350919-3	18AWG to 14AWG	Phosphor Bronze	Tin	Bulk	90F4792	0.18
640310-6	12AWG to 10AWG	Phosphor Bronze	Gold	Bulk	90F4795	1.36
ENHANCED CURRENT—SOCKET CONTACT						
1586065-1	12AWG to 10AWG	...	...	Tape Cut	07H9373	0.20

GROUNDING PIN

0.100" longer than standard pin. Not for interrupting current.

Mfg. Part No.	Material/Finish	AWG	Ins. Diameter	Pkg.	Stock No.	Price Each 1-49	Price Each 50-99
350669-1	Brass/Pre-Tin	20-14	0.060-0.130"	Bulk	90F7575	0.16	0.14

*Plated with 0.00003 gold over 0.00005 nickel underplate; **Plated internally with 0.00003 gold; +Insulation range 0.060-0.130 dia.

(8324)

AMP CIRCULAR UNIVERSAL MATE-N-LOK

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Free hanging
- Voltage rating: 600VAC
- Rated UL 94V-2
- Max current rating: 20A
- Positive polarization helps prevent incorrect mating
- Circular design allows the connector to pass through ⅞ in. knock-out holes
- Uses standard universal Mate-N-Lok contacts and application tooling see *on this page*

PLUG HOUSING

Mfg. Part No.	No. of Positions	Stock No.	Price Each 1-24
794911-1	6	19H3774	1.06
RECEPTACLE HOUSING			
794912-1	6	05H4039	1.30

(84729)

AMP UNIVERSAL MATE-N-LOK SEALED

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Voltage rating: 600VAC
- Body material: Silicon rubber
- For use with: Universal Mate-N-Lok connectors

INTERFACE SEAL

Mfg. Part No.	No. of Positions	Stock No.	Price Each 1-49
794269-1	2	48F6896	0.27
794273-1	4	91C5787	0.39
794275-1	6	48F6900	0.65
794277-1	9	48F6902	1.07
794279-1	12	48F6904	1.68
794281-1	15	91C5792	2.00
SEAL PROTECTOR			
794270-1	2	48F6897	0.29
794272-1	3	48F6899	0.45
794274-1	4	25C6885	0.56
794276-1	6	48F6901	0.64
794278-1	9	48F6903	1.29
794280-1	12	48F6905	1.68
KEYING/SEALING PLUG			
770377-1	...	90B7651	0.34

(84732)

PIN & SOCKET CONNECTORS

AMP STRAIN RELIEFS FOR UNIVERSAL MATE-N-LOK CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

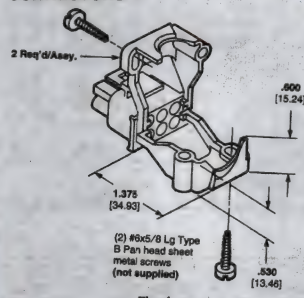


Fig. 1

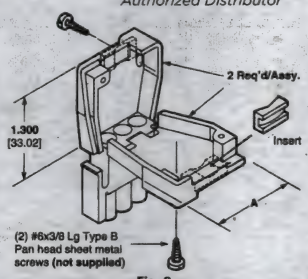


Fig. 2

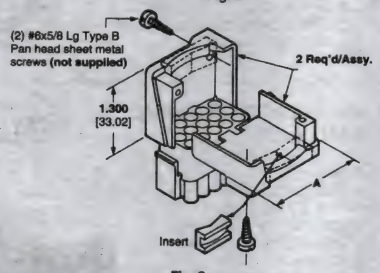


Fig. 3

- Nylon Housing: Natural or White
- Flammability Rating: UL94V-2 or UL94V-0

Strain relief stock number represents half of a strain relief; *order 2 strain reliefs per housing.* Requires 2 type B pan head sheet metal screws, not included.

UL94V-2 RATED NYLON STRAIN RELIEFS, NATURAL

Mfg. Part No.	Fig.	Circuits	Dim. A	Stock No.	Price Each 1-49
● 1-350589-0	1	2	0.960″	90F4822	0.57
● 1-640719-0*	2	2	0.960″	87F5281	0.71
● 1-640719-1	2	2	0.960″	52F2931	0.84
● 1-640720-0*	2	3	1.140″	87F5282	1.41
● 641763-1	2	3	1.140″	87F5283	1.37
● 641775-2	2	4	1.325″	87F5284	1.23
● 643030-2	2	5	1.530″	90F4814	1.06
● 643585-1*	2	6	1.780″	85C1112	0.80
● 1-350590-0	1	6, 9, 12, 15	...	90F4913	0.75
● 1-640721-0*	3	6	1.030″	87F5285	1.16
● 1-640722-0	2	9	1.030″	89F3176	1.06
● 1-640723-0*	3	12	1.280″	87F5287	1.15
● 1-640724-0*	3	15	1.530″	51F3884	1.17
UL94V-0 RATED NYLON STRAIN RELIEFS, WHITE					
● 350811-1	1	2,3,4,5,8	...	90F4823	0.75
● 640713-1*	2	2	0.960″	90F4807	1.21
● 640714-1*	2	3	1.140″	90F4808	1.20
● 641776-1*	2	4	1.325″	90F4811	1.22
● 643030-4	2	5	1.530″	94B1185	1.16
● 643314-2	2	8	2.280″	50B620	1.76
● 350812-1	1	6,9,12,15	...	90F4914	0.69
● 640715-1*	3	6	1.030″	90F4817	1.22
● 640716-1*	3	9	1.030″	90F4818	1.22
● 640717-1*	3	12	1.280″	90F4819	1.61
● 640718-1*	3	15	1.530″	90F4820	1.76

*Cable clamping insert comes attached to strain relief. Use to provide additional adjustment for small wire bundles.
(41072)

AMP UNIVERSAL MATE-N-LOK® TOOLS

TE connectivity

Authorized Distributor

Mfg. Part No.	Description	Stock No.	Price Each 1-4
455830-1	Contact Insertion Tool	46F2045	32.27
1804030-1	Contact Extraction Tool	03M5513	53.40
90548-1	PRO-CRIMPER™ II Hand Tool (24-18 AWG)	96F9716	287.89
90546-1	PRO-CRIMPER™ II Hand Tool (20-14 AWG)	96F9717	290.92
69710-1	CERTI-CRIMP® Hand Tool (12-10 AWG)	89F4270	768.63

(8323)

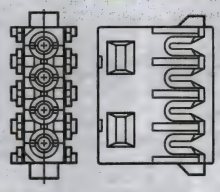
AMP MATE-N-LOK® INSULATION DISPLACEMENT (IDC) CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- No Stripping/Crimping Required
- 4 Circuits, In-Line Style Nylon Housing
- Phosphor Bronze Contacts, Pre-Tin Plating



Order dust covers separately below.

FREE-HANGING IDC CONNECTORS, UL94V-0

Mfg. Part No.	AWG	Color	Stock No.	Price Each 1-9
● 794036-3	22	Red	34B2071	1.45
● 794036-1	18	Orange	34B2069	1.36
FREE-HANGING IDC CONNECTORS, UL94V-2				
● 770156-4	20	Yellow	92F9095	1.12
● 770156-3	18	Orange	90F3972	1.06

DUST COVERS FOR IDC CONNECTORS, UL94V-2

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 770232-1	For Standard Feed-To Wiring, White, Polyester	90F3961	0.24
● 770233-1	For Feed-Thru Wiring, White, Polyester	90F3962	0.33

(75524)

AMP UNIVERSAL MATE-N-LOK PC BOARD VERTICAL PIN AND SOCKET HEADERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

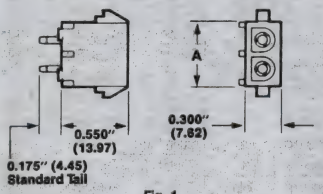


Fig. 1

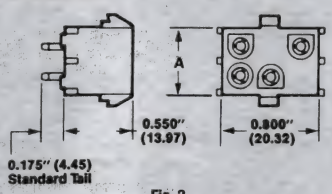


Fig. 2

- Centerline, Matrix: 0.250″ (6.35mm)
- Nylon Housing
- Phosphor Bronze Contacts
- Positive Locking
- Termination Post Length: 0.175″ (4.45mm)
- PCB Thickness: 0.062″ (1.57mm)
- Current Rating: 19A
- Voltage Rating: 600VAC

Mate with plug housings, *ordered separately on page 884.* UL recognized, CSA certified, VDE approved under test report 14397-1431-1003.

PC BOARD VERTICAL PIN HEADERS, UL94V-0 - STANDARD TAIL

Mfg. Part No.	Fig.	Circuits	Plating	Style	Dim. A	Stock No.	Price Each 1-49
● 350786-1	1	2	Tin	In-Line	0.550″	90F4618	0.55
● 350786-3	1	2	Gold	In-Line	0.550″	52K3630	2.32
● 350789-1	1	3	Tin	In-Line	0.800″	90F4620	0.62
● 350792-1	1	4	Tin	In-Line	1.050″	90F4386	0.94
● 640900-1	1	5	Tin	In-Line	1.300″	90F4388	1.36
● 641831-1	1	6	Tin	In-Line	1.550″	90F4390	1.80
● 350711-1	2	6	Tin	Matrix	0.550″	90F4977	1.10
● 350711-4	2	6	Gold	Matrix	0.550″	52K4386	3.82
● 641828-1	1	8	Tin	In-Line	2.050″	90F4392	1.48
● 350712-1	2	9	Tin	Matrix	0.800″	90F4979	1.45
● 350713-1	2	12	Tin	Matrix	1.050″	90F4963	1.62
● 350714-1	2	15	Tin	Matrix	1.300″	90F4964	2.03
PC BOARD VERTICAL PIN HEADERS, UL94V-2 - STANDARD TAIL							
● 350428-1	1	2	Tin	In-Line	0.550″	46F2051	0.30
● 350429-1	1	3	Tin	In-Line	0.800″	46F2052	0.48
● 350429-4	1	3	Gold	In-Line	0.800″	77M7861	2.28
● 350430-1	1	4	Tin	In-Line	1.050″	46F2053	0.48
● 640466-1	1	5	Tin	In-Line	1.300″	89F850	0.76
● 641832-1	1	6	Tin	In-Line	0.550″	90F4389	3.38
● 350431-1	2	6	Tin	Matrix	0.550″	46F2054	0.44
● 350432-1	2	9	Tin	Matrix	0.800″	46F2055	0.91
● 350433-1	2	12	Tin	Matrix	1.050″	46F2043	1.23
● 350433-4	2	12	Gold	Matrix	1.050″	52K3624	8.81
● 350434-1	2	15	Tin	Matrix	1.300″	46F2044	1.16
PC BOARD VERTICAL PIN HEADERS, UL94V-0 - STANDARD TAIL POLARIZED							
● 403727001	1	3	Tin	In-Line	0.800″	90F4342	1.00
● 641968-1	1	4	Tin	In-Line	1.050″	90F4344	1.20
● 643406-1	1	5	Tin	In-Line	1.300″	66F3359	0.87
● 643408-1	1	6	Tin	In-Line	1.550″	90F4345	1.89

➤CONTINUED➤

AMP UNIVERSAL MATE-N-LOK PC BOARD VERTICAL PIN AND SOCKET HEADERS (CONT.)

Mfg. Part No.	Fig.	Circuits	Plating	Style	Dim. A	Stock No.	Price Each 1-49
PC BOARD VERTICAL PIN HEADERS, UL94V-0 - STANDARD TAIL POLARIZED							
641970-1	2	6	Tin	Matrix	0.550″	66F3312	1.14
643410-1	1	8	Tin	In-Line	2.050″	66F3010	2.23
641972-1	2	9	Tin	Matrix	0.800″	34B1063	3.19
PC BOARD VERTICAL PIN HEADERS, UL94V-2 - STANDARD TAIL POLARIZED							
641965-1	1	3	Tin	In-Line	0.800″	90F4340	0.69
643405-1	1	5	Tin	In-Line	1.300″	83H1880	1.51
641967-1	1	4	Tin	In-Line	1.050″	90F4343	0.73
641969-1	2	6	Tin	Matrix	0.550″	90F4158	1.15
643407-1	1	6	Tin	In-Line	1.550″	97H4604	1.50
641971-1	2	9	Tin	Matrix	0.800″	90F4965	0.99
641975-1	2	15	Tin	Matrix	1.300″	67C2672	1.89
PC BOARD VERTICAL PIN HEADERS, UL94V-0 - LONG TAIL							
350787-1	1	2	Tin	In-Line	0.550″	01C7279	0.90
350790-1	1	3	Tin	In-Line	0.800″	90F4972	0.99
350732-1	2	6	Tin	Matrix	0.550″	90F4970	1.45
350737-1	2	12	Tin	Matrix	1.050″	90F5023	1.84
350738-1	2	15	Tin	Matrix	1.300″	90F5009	2.62
PC BOARD VERTICAL PIN HEADERS, UL94V-2 - LONG TAIL							
350583-1	1	3	Tin	In-Line	0.800″	90F4348	0.65
350584-1	1	4	Tin	In-Line	1.050″	90F4974	0.85
350585-1	2	6	Tin	Matrix	0.550″	90F4968	1.04
350586-1	2	9	Tin	Matrix	0.800″	90F5017	1.29
350588-1	2	15	Tin	Matrix	1.300″	90F5025	1.99
PC BOARD VERTICAL PIN HEADERS, UL94V-0 - PRESS FIT							
173925-1	1	3	Tin	In-Line	1.050″	33B5463	9.50
173926-1	1	4	Tin	In-Line	1.250″	52F2877	10.82
PC BOARD VERTICAL SOCKET HEADERS, UL94V-0 - STANDARD TAIL							
350825-1	1	3	Tin	In-Line	0.800″	90F5013	0.67
350825-4	1	3	Gold	In-Line	0.800″	52K3633	2.05
640901-1	1	5	Tin	In-Line	1.300″	92H1939	1.60
350827-1	2	6	Tin	Matrix	0.550″	90F4999	1.04
350828-1	2	9	Tin	Matrix	0.800″	90F5001	1.12
350830-4	2	15	Gold	Matrix	1.300″	16M3037	7.61
PC BOARD VERTICAL SOCKET HEADERS, UL94V-2 - STANDARD TAIL							
350759-4	1	2	Tin	In-Line	0.550″	87F5300	0.42
350760-4	1	3	Tin	In-Line	0.800″	92F8424	0.63
350761-4	1	4	Tin	In-Line	1.050″	92F8425	0.64
350762-4	2	6	Tin	Matrix	0.550″	92F8426	0.86
350763-4	2	9	Tin	Matrix	0.800″	89F4470	1.01
350764-4	2	12	Tin	Matrix	1.050″	87F5279	1.46
PC BOARD VERTICAL SOCKET HEADERS, UL94V-0 - STANDARD TAIL POLARIZED							
643412-1	1	2	Tin	In-Line	0.550″	52F3388	0.96
643416-1	1	4	Tin	In-Line	1.050″	90F4333	1.25
643424-1	2	6	Tin	Matrix	0.550″	90F4159	1.33
643426-1	2	9	Tin	Matrix	0.800″	99F9471	1.47
643426-3	2	9	Gold	Matrix	0.800″	54M3320	4.48
PC BOARD VERTICAL SOCKET HEADERS, UL94V-2 - STANDARD TAIL POLARIZED							
643414-1	1	3	Tin	In-Line	0.800″	90F4332	1.04
PC BOARD VERTICAL SOCKET HEADERS, UL94V-0 - LONG TAIL							
350832-1	1	3	Tin	In-Line	0.800″	90F4335	1.13
350833-1	1	4	Tin	In-Line	1.050″	90F4337	0.66
350833-4	1	4	Gold	In-Line	1.050″	52K3637	3.22

(8321)

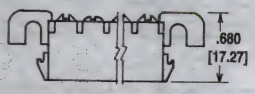
AMP UNIVERSAL MATE-N-LOK® PC BOARD HEADERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- In-Line Style
- Nylon Housing
- Phosphor Bronze Contacts
- Rated UL94V-0



PC BOARD RIGHT-ANGLE PIN HEADERS, UL94V-0

Mfg. Part No.	Circuits	Plating	Stock No.	Price Each 1-49
1-350942-0	2	Tin	94F4611	1.33
3-350942-0	2	Gold	16M2902	2.90
1-350943-0	3	Tin	94F4612	1.40
1-350944-0	4	Tin	94F4613	1.44
640583-1	6	Tin	90F4589	2.60
640584-1	8	Tin	93F7318	2.34
640584-3	8	Gold	52K4459	8.30

CONTINUED

AMP UNIVERSAL MATE-N-LOK® PC BOARD HEADERS (CONT.)

PC BOARD RIGHT-ANGLE SOCKET HEADERS, UL94V-0

Mfg. Part No.	Circuits	Plating	Stock No.	Price Each 1-49
643226-1	2	Tin	66F3040	1.83
643230-1	4	Tin	90F3977	2.71
643234-1	6	Tin	95F2711	3.61

(41071)

AMP MINI-UNIVERSAL MATE-N-LOK 2 CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Nylon Housing, Flammability Rated UL94V-0
- Positive Lock

Mates with Mini Universal Mate-N-Lok headers; *order separately on on page 888*

PLUGS

Mfg. Part No.	Circuits	Style	Stock No.	Price Each 1-49
794184-1	2	Inline	50B642	0.89
794186-1	3	Inline	01C7319	0.83
794188-1	4	Dual Row	77C6084	0.94
794190-1	6	Dual Row	78H0152	0.76
794192-1	8	Dual Row	16H6015	1.15
794196-1	10	Dual Row	16H6016	1.43
794198-1	12	Dual Row	16H6017	1.72
794200-1	12	Matrix	16H6019	1.26
794202-1	14	Dual Row	16H6020	1.73
794206-1	16	Dual Row	73J7739	3.52
794210-1	20	Dual Row	55C4642	2.95
794214-1	24	Dual Row	16H6027	3.11
CAPS				
794185-1	2	Inline	61H7076	1.31
794189-1	4	Dual Row	20J4959	0.85
794191-1	6	Dual Row	16H6014	2.13
794193-1	8	Dual Row	04H0528	1.30
794197-1	10	Dual Row	10C2784	1.79
794199-1	12	Dual Row	16H6018	2.28
794203-1	14	Dual Row	16H6021	1.86
794207-1	16	Dual Row	16H6024	1.70
794211-1	20	Dual Row	16H6026	3.04
794213-1	22	Dual Row	05C4317	3.34
794215-1	24	Dual Row	89C0505	3.65

PIN CONTACTS

Mfg. Part No.	AWG	Contact Plating	Stock No.	Price Each 1-9
794226-1	26AWG to 22AWG	Tin	94B9283	0.25
1-794226-0	26AWG to 22AWG	30u″ Gold	17R2119	0.68
794228-1	22AWG to 18AWG	Tin	93B5759	0.24
1-794228-0	22AWG to 18AWG	30u″ Gold	33M8102	0.68
794230-1	20AWG to 16AWG	Tin	55C4643	0.47
SOCKET CONTACTS				
794225-1	30AWG to 26AWG	30u″ Gold	16H6043	0.25
794227-1	26AWG to 22AWG	Tin	94B9290	0.25
1-794227-0	26AWG to 22AWG	30u″ Gold	09P9081	0.69
794229-1	22AWG to 18AWG	Tin	39C9533	0.25
1-794229-0	22AWG to 18AWG	30u″ Gold	33M8104	0.63
794231-1	20AWG to 16AWG	Tin	55C4644	0.48
1-794231-0	20AWG to 16AWG	30u″ Gold	71P8712	0.66
SOCKET CONTACTS - ON STRIP, SOLD INDIVIDUALLY				
794219-1	26AWG to 22AWG	Tin	16H6034	0.15

TOOLING

Mfg. Part No.	Description	Stock No.	Price Each 1-4
91522-1	CERTI-CRIMP II Straight Hand Tool 22-18 AWG	72C5752	718.40
91529-1	CERTI-CRIMP II Straight Hand Tool 26-22 AWG	73C9972	776.05

(80513)

PIN & SOCKET CONNECTORS

AMP MINI UNIVERSAL MATE-N-LOK PIN AND SOCKET CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

In-Line Plug Dual Row Plug In-Line Cap

- Free Hanging or Panel Mount Cap
- Nylon Housing, Flammability Rated UL94V-0 or UL94V-2
- Positive Lock
- 0.163″ (4.14) Centerline spacing
- Voltage: 600VAC

Compact, free-hanging housings accommodate both pins and sockets; *Order Mini Universal Mate-N-Lok pin and socket contacts separately on page 889.* Mate with Mini Universal Mate-N-Lok vertical PC board pin headers; *order separately on this page.* UL recognized, CSA certified, VDE approved.

FREE-HANGING PLUGS—POSITIVE LOCK UL 94V-0

Mfg. Part No.	Circuits	Style	Stock No.	Price Each 1-9
● 172164-1	1	Inline	08C5181	0.40
● 172165-1	2	Inline	95F1774	0.47
● 172166-1	3	Inline	66F1669	0.56
● 172167-1	4	Dual Row	95F2736	0.59
● 172168-1	6	Dual Row	92F5370	0.80
● 770579-1	8	Dual Row	91B0175	0.49
● 770580-1	10	Dual Row	91B2078	0.53
● 172170-1	12	Matrix	92F8469	0.76
● 770581-1	12	Dual Row	50B8883	0.67
● 770582-1	14	Dual Row	18C3760	1.37
● 172171-1	15	Matrix	66F1659	1.13
● 770583-1	16	Dual Row	18C1805	0.88
● 770585-1	20	Dual Row	94B7035	1.77
● 770586-1	22	Dual Row	18C3744	2.21
● 770587-1	24	Dual Row	91B1102	2.07

FREE HANGING PLUGS—POSITIVE LOCK UL 94V-2

● 172335-1	1	Inline	11H8905	0.26
● 172336-1	2	Inline	69H8555	0.32
● 172340-1	9	Matrix	69H8556	0.41
● 172341-1	12	Matrix	05H9772	0.73

FREE HANGING CAPS—POSITIVE LOCK UL 94V-2

● 172327-1	1	Inline	11H8904	0.23
● 172343-1	2	Inline	99F3365	0.27
● 172344-1	3	Inline	66F3362	0.46

PANEL MOUNT CAPS—DETENT LOCK UL 94V-0

● 172156-1	1	Inline	85C1066	0.23
● 172157-1	2	Inline	92B7880	0.43
● 172233-1	2	Inline	92B9013	0.48
● 172158-1	3	Inline	66F3045	0.49
● 172234-1	3	Inline	98F5140	0.53
● 172159-1	4	Dual Row	25C3122	0.80
● 172160-1	6	Dual Row	25C3123	0.87
● 172161-1	9	Matrix	25C3124	0.79
● 172162-1	12	Matrix	88F3743	0.83
● 172163-1	15	Matrix	90B9682	1.08

PANEL MOUNT CAPS—POSITIVE LOCK UL 94V-2

● 172328-1	2	Inline	66F2987	0.44
● 172329-1	3	Inline	08J4507	0.35
● 172331-1	6	Dual Row	81H5902	0.45
● 172332-1	9	Matrix	66F3037	0.46

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 174670-1	Keying Plug	18C3435	0.26

TOOLING

Mfg. Part No.	Description	Stock No.	Price Each 1-4
91522-1	Certi-Crimp II	72C5752	718.40
189727-1	Extraction Tool	66F6356	35.78

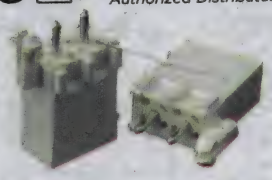
(62372)

AMP MINI UNIVERSAL MATE-N-LOK VERTICAL PC BOARD PIN HEADERS

RoHS Compliant Available

TE connectivity

Authorized Distributor



- Nylon Housing Flammability Rated UL94V-0
- Detent Lock with Drain Hole
- Short Board Lock
- Brass Contact with Tin-Lead Plating
- Matrix Centerline: 0.163″ (3.68)
- Termination Post Length: 0.145″ (3.68)
- Contact Diameter: 0.039″ (0.99)
- PCB Thickness: 0.062″ (1.57)
- Voltage: 600VAC
- Current Rating: 9.5A

Mate with plug housings, listed in table below, using socket contacts; *both ordered separately on pages 888-889.* UL recognized, CSA certified, VDE approved.

MINI UNIVERSAL MATE-N-LOK® VERTICAL PC BOARD PIN HEADERS

Mfg. Part No.	Circuits	Plating	Style	Mates With Plug Type	Stock No.	Price Each 1-49
● 1-770166-0	2	Tin	Inline	172165-1, 794184-1	52K4285	0.71
● 1-770166-1	2	30u″ Gold	Inline	172165-1, 794184-1	52K3348	1.30
● 1-770872-0*	2	Tin	Inline	172165-1, 794184-1	52K4290	0.89
● 1-770872-1*	2	30u″ Gold	Inline	172165-1, 794184-1	52K3363	1.60
● 1-770170-0	3	Tin	Inline	172166-1, 794186-1	52K4286	1.05
● 1-770170-1	3	30u″ Gold	Inline	172166-1, 794186-1	52K3349	2.28
● 1-770873-1*	3	30u″ Gold	Inline	172166-1, 794186-1	40P8435	3.42
● 1-770174-0	4	Tin	Dual-Row	172167-1, 794188-1	52K4287	1.19
● 1-770174-1	4	30u″ Gold	Dual-Row	172167-1, 794188-1	74M8233	1.65
● 1-770874-0*	4	Tin	Dual-Row	172167-1, 794188-1	52K3364	1.34
● 1-770874-1*	4	30u″ Gold	Dual-Row	172167-1, 794188-1	52K3365	2.43
● 1-770178-0	6	Tin	Dual-Row	172168-1, 794190-1	52K4288	1.12
● 1-770178-1	6	30u″ Gold	Dual-Row	172168-1, 794190-1	74M8234	2.68
● 1-770875-0*	6	Tin	Dual-Row	172168-1, 794190-1	52K3366	1.52
● 1-794065-0	8	Tin	Dual-Row	770579-1, 794192-1	52K3392	2.07
● 1-794065-1	8	30u″ Gold	Dual-Row	770579-1, 794192-1	52K3393	4.22
● 1-794073-0*	8	Tin	Dual-Row	770579-1, 794192-1	52K3398	3.07
● 1-770182-1	9	30u″ Gold	Matrix	172169-1, 794194-1	52K3351	5.12
● 1-770743-0	10	Tin	Dual-Row	770580-1, 794781-1	52K3358	2.41
● 1-770858-0*	10	Tin	Dual-Row	770580-1, 794781-1	52K3360	1.86
● 1-770858-1*	10	30u″ Gold	Dual-Row	770580-1, 794781-1	52K3361	5.34
● 1-770621-0*	12	Tin	Dual-Row	770581-1, 794198-1	52K3357	1.80
● 1-794066-1	12	30u″ Gold	Dual-Row	770581-1, 794198-1	14N8858	4.86
● 1-770186-1	12	30u″ Gold	Matrix	172170-1, 794200-1	52K3352	6.07
● 1-794067-0	14	Tin	Dual-Row	770582-1, 794202-1	52K3394	2.53
● 1-770190-0	15	Tin	Matrix	172171-1, 794204-1	40P8433	2.77
● 1-770190-1	15	30u″ Gold	Matrix	172171-1, 794204-1	52K3353	8.33
● 1-794068-0	16	Tin	Dual-Row	770583-1, 794206-1	52K3395	2.82
● 1-794068-1	16	30u″ Gold	Dual-Row	770583-1, 794206-1	22M4253	6.58
● 1-794075-0*	16	Tin	Dual-Row	770583-1, 794206-1	08N7573	3.65
● 1-794069-0	18	Tin	Dual-Row	770584-1, 794208-1	71M1315	3.00
● 1-794070-0	20	Tin	Dual-Row	770585-1, 794210-1	52K3396	3.45
● 1-794070-1	20	30u″ Gold	Dual-Row	770585-1, 794210-1	10N9196	8.03
● 1-794072-0	24	Tin	Dual-Row	770587-1, 794214-1	52K3397	4.46

MINI UNIVERSAL MATE-N-LOK® RIGHT ANGLE PC BOARD PIN HEADERS

● 1-770966-0	2	Tin	Inline	770583-1, 794206-1	52K3373	0.68
● 1-770966-1	2	30u″ Gold	Inline	172165-1, 794184-1	52K3374	2.32
● 1-770967-0	3	Tin	Inline	172166-1, 794186-1	52K3375	1.37
770967-2	3	30u″ Gold	Inline	172166-1, 794186-1	96B3006	4.38
● 1-770968-0	4	Tin	Dual-Row	172167-1, 794188-1	52K3377	1.20
● 1-770968-1	4	30u″ Gold	Dual-Row	172167-1, 794188-1	52K3378	3.08
770968-2	4	30u″ Gold	Dual-Row	172167-1, 794188-1	34B1852	4.30
● 1-770969-0	6	Tin	Dual-Row	172168-1, 794190-1	52K3379	1.67
● 1-770970-0	8	Tin	Dual-Row	770579-1, 794192-1	52K3381	1.92
● 1-770971-0	10	Tin	Dual-Row	770580-1, 794196-1	52K3383	2.87
● 1-770974-0	16	Tin	Dual-Row	770583-1, 794206-1	52K3388	2.91
● 1-770974-1	16	30u″ Gold	Dual-Row	770583-1, 794206-1	52K3389	11.40
● 1-794106-0	20	Tin	Dual-Row	770585-1, 794210-1	52K3399	5.13

* Without Drain Holes
(63505)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

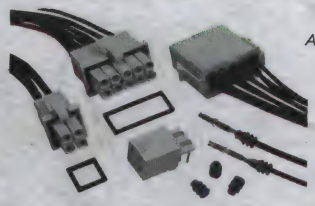
(196535)

AMP MINI-UNIVERSAL MATE-N-LOK SEALED CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor



- Free Hanging or Panel Mount
- Nylon Housing, Flammability Rated UL94V-0
- Positive Lock
- Voltage: 600VAC

Order Mini Universal Mate-N-Lok Sealed pin and socket contacts separately on this page. Mate with Mini Universal Mate-N-Lok vertical PC board pin headers; *order separately on page 888.*

PLUG HOUSING

Mfg. Part No.	Circuits	Layout	Stock No.	Price Each 1-99	Price Each 100-249
794894-1	2	Matrix	88C9871	0.56	0.51
794805-1	4	Dual	02E8755	0.54	0.49
794895-1	6	Dual	22K8735	0.87	0.79
794821-1	8	Dual	87H9496	0.97	0.78
794781-1	10	Dual	16H6218	0.89	0.80

RECEPTACLE (CAP) HOUSING

794896-1	2	In-Line	88C9873	0.65	0.58
794939-1	4	In-Line	07J8141	0.68	0.62
794940-1	6	In-Line	16H6220	0.90	0.81
794941-1	8	In-Line	08J4516	0.81	0.77
794942-1	10	In-Line	08J4517	1.01	0.97

PIN CONTACTS

Mfg. Part No.	Circuits	Plating	Stock No.	Price Each 1-9
770901-1	26AWG to 22AWG	Tin	88C9878	0.13
1-770901-0	26AWG to 22AWG	30u" Gold	52K3369	0.50
1-770903-0	22AWG to 18AWG	30u" Gold	52K3371	0.61

SOCKET CONTACTS

770902-1	26AWG to 22AWG	Tin	94B5350	0.12
1-770902-0	26AWG to 22AWG	30u" Gold	52K3370	0.67
770904-1	22AWG to 18AWG	Tin	91B8940	0.14
1-770904-0	22AWG to 18AWG	30u" Gold	52K3372	0.61

SEALS

Mfg. Part No.	Description	Circuits	Stock No.	Price Each 1-99	Price Each 100-249
794995-1	Single-Cavity Seal	1	81H5760	0.19	0.17
794758-1	Single-Wire Seal	1	02E8759	0.16	0.15
794772-2	Interface Seal	2	88C9876	0.41	0.37
794772-4	Interface Seal	4	02E8763	0.50	0.43
794772-6	Interface Seal	6	08J4515	0.44	0.42
794772-8	Interface Seal	8	87H9503	0.39	0.37
1-794772-0	Interface Seal	10	10H3819	0.39	0.35
1586359-2	Gang Wire Seal	2	02P5650	1.49	1.37
1586359-4	Gang Wire Seal	4	08R0774	2.47	2.25

(80506)

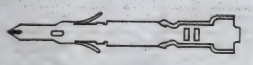
AMP 170 SERIES MINI UNIVERSAL MATE-N-LOK® CONTACTS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Brass Construction
- Contact Diameter: 0.039" (0.99)
- Stock Thickness: 0.010" (0.25)
- Voltage: 600VAC
- Current Rating: 9.5A



For use in Mini-Universal MATE-N-LOK® housings only; *order separately on page 888.*

PINS

Mfg. Part No.	Ins. Dia. Range	AWG	Finish	Stock No.	Price Each 1-9	Price Each 10-24
170359-1	0.047"-0.069"	26AWG to 22AWG	Pre-Tin	70C3810	0.11	0.10
170359-3	0.047"-0.069"	26AWG to 22AWG	Select Gold 30	11H8444	0.60	0.57
170363-3	0.047"-0.069"	26AWG to 22AWG	Select Gold 30	92F8467	0.74	0.70
170364-1	0.059"-0.094"	22AWG to 18AWG	Pre-Tin	50F653	0.14	0.12
170364-3	0.059"-0.094"	22AWG to 18AWG	Select Gold 30	92F8449	0.47	0.43
170360-1	0.059"-0.094"	22AWG to 18AWG	Select Gold 30	41T5370	0.06	0.04
171638-1	0.079"-0.126"	20AWG to 16AWG	Pre-Tin	52F2283	0.11	0.10

SOCKETS

170365-1	0.047"-0.069"	26AWG to 22AWG	Pre-Tin	92F5371	0.14	0.13
170361-3	0.047"-0.069"	26AWG to 22AWG	Select Gold 30	93B8988	0.62	0.59
170365-3	0.047"-0.069"	26AWG to 22AWG	Select Gold 30	92F8458	0.49	0.45

CONTINUED

AMP 170 SERIES MINI UNIVERSAL MATE-N-LOK® CONTACTS (CONT.)

SOCKETS

Mfg. Part No.	Ins. Dia. Range	AWG	Finish	Stock No.	Price Each 1-9	Price Each 10-24
170366-1	0.059"-0.094"	22AWG to 18AWG	Pre-Tin	92F5381	0.14	0.12
170366-3	0.059"-0.094"	22AWG to 18AWG	Select Gold 30	66F1673	0.53	0.47
171637-1	0.079"-0.126"	20AWG to 16AWG	Pre-Tin	26R1438	0.15	0.14
171639-1	0.079"-0.126"	20AWG to 16AWG	Pre-Tin	66F1674	0.10	0.10

(63502)

AMP 770 SERIES MINI UNIVERSAL MATE-N-LOK® CONTACTS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Brass Construction
- Contact Diameter: 0.039" (0.99mm)
- Stock Thickness: 0.008" (0.20mm)
- Voltage: 600VAC
- Current Rating: 9.5A

For use in Mini-Universal MATE-N-LOK® plug and cap housings only; *order separately on page 888.*

PINS

Mfg. Part No.	Ins. Dia. Range	AWG	Finish	Stock No.	Price Each 1-49	Price Each 50-99
794059-1	0.035-0.050"	30AWG to 26AWG	Pre-Tin	85C1115	0.15	0.14
1-794059-0	0.035-0.050"	30AWG to 26AWG	Duplex	14M4382	0.66	0.62
770985-1	0.047-0.069"	26AWG to 22AWG	Duplex	90B6763	0.17	0.15
1-770985-0	0.047-0.069"	26AWG to 22AWG	Pre-Tin	52K3390	0.41	0.37
770987-1	0.059-0.110"	22AWG to 18AWG	Pre-Tin	25C3423	0.22	0.21
1-770987-0	0.133" max.	22AWG to 18AWG	Duplex	65J9675	0.41	0.36

SOCKETS

794058-1	0.035-0.050"	30AWG to 26AWG	Pre-Tin	72H9256	0.13	0.12
1-794058-0	0.035-0.050"	30AWG to 26AWG	Duplex	16M2689	0.63	0.59
770986-1	0.047-0.069"	26AWG to 22AWG	Pre-Tin	90B6764	0.17	0.15
1-770986-0	0.047-0.069"	26AWG to 22AWG	Duplex	52K3391	0.40	0.36
770904-1	0.059-0.094"	22AWG to 18AWG	Pre-Tin	91B8940	0.14	0.14
1-770904-0	0.059-0.094"	22AWG to 18AWG	Duplex	52K3372	0.61	0.58
770988-1	0.059-0.110"	22AWG to 18AWG	Pre-Tin	25C3425	0.17	0.15
1-770988-0	0.133" Max.	22AWG to 18AWG	Duplex	65J9680	0.45	0.40

APPLICATION TOOLS

Mfg. Part No.	Description	Stock No.	Price 1-4
90870-1	PRO-CRIMPER™ II Hand Tool (30-24 AWG)	92F9062	327.02
91529-1	SAHT Hand Tool (26-22 AWG)	73C9972	776.05

(63504)

AMP MR SERIES MINIATURE RECTANGULAR CONNECTOR HOUSINGS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Free or Panel Mount
- Mini Rectangular Connector Line
- Nylon Housing, Flammability Rated UL94V-0
- Positive Lock
- Voltage: 250VAC

Molded-in polarizing feature for proper mating and numbered cavities for easy circuit identification. Use with flexible PVC adapting grommets, *order separately below*, to accommodate various wire bundle sizes and insulation diameters. UL recognized, CSA certified for 250V; 105°C operation.

PIN HOUSINGS

Mfg. Part No.	Circuits	Layout	Stock No.	Price Each 1-49
1-640507-0	2	In-Line	89F2111	0.88
1-640508-0	3	In-Line	89F2112	1.51
1-640509-0	4	Matrix	89F2113	1.20
1-640510-0	6	Matrix	89F2114	1.44
1-640511-0	9	Matrix	89F2115	1.37
1-640512-0	12	Matrix	89F2116	1.67
1-640513-0	15	Matrix	89F2117	1.87
1-640514-0	20	Matrix	89F2104	2.84
1-640515-0	24	Matrix	89F2105	3.00
1-640516-0	36	Matrix	89F2106	3.26

CONTINUED

PIN & SOCKET CONNECTORS

AMP MR SERIES MINIATURE RECTANGULAR CONNECTOR HOUSINGS (CONT.)

SOCKET HOUSINGS

Mfg. Part No.	Circuits	Layout	Stock No.	Price Each 1-49
● 1-640517-0	2	In-Line	89F2107	0.68
● 1-640518-0	3	In-Line	89F2108	1.29
● 1-640519-0	4	Matrix	89F2109	1.21
● 1-640520-0	6	Matrix	89F2110	1.20
● 1-640521-0	9	Matrix	89F2097	1.76
● 1-640522-0	12	Matrix	89F2098	1.65
● 1-640523-0	15	Matrix	89F5049	2.05
● 1-640524-0	20	Matrix	89F2099	3.20
● 1-640525-0	24	Matrix	89F2100	2.90
● 1-640526-0	36	Matrix	89F2101	3.29
PIN HEADERS				
● 640501-1	9	Matrix	89F2129	3.17

1-PIECE CLAMSHELL STRAIN RELIEFS

Mfg. Part No.	Circuits	Inner Dia.	Stock No.	Price Each 1-9
● 350373-1	6	0.374″	92F9097	2.78
● 350374-1	12	0.420″	92F9099	2.14
● 480634-1	20	0.560″	92F9101	2.81
● 350524-1	24	0.560″	92F9102	3.45
● 480594-1	36	0.560″	92F9085	6.43
ADAPTING GROMMETS FOR STRAIN RELIEFS (ABOVE)				
● 2-350377-0	6	0.156″	87K6893	1.68
● 2-350378-1	9, 12, 15	0.218″	87K6894	1.65
● 2-380936-0	20, 24, 36	0.375″	87K6897	1.67
● 2-380935-0	20, 24, 36	0.437″	83K0816	1.78

PIN AND SOCKET CONTACTS
Constructed of 0.008″ thick phosphor bronze. Choice of pre-tin plating or select gold in contact area over nickel on entire contact.

LIVE SPLIT PIN CONTACTS - SOLD INDIVIDUALLY

Mfg. Part No.	AWG	Finish	Stock No.	Price Each 1-49
● 640579-1	26AWG to 24AWG	Tin	50F2666	0.34
● 640579-2	26AWG to 24AWG	Gold	50B8875	0.93
● 350968-2	26AWG to 24AWG	Gold	29C6108	0.58
● 350967-1	26AWG to 18AWG	Tin	70C3822	0.17
● 350967-2	26AWG to 18AWG	Gold	29C6107	0.63
● 640545-1	26AWG to 18AWG	Tin	34B954	0.30
● 640545-2	26AWG to 18AWG	Gold	85T8493	1.06
LIVE SPLIT PIN CONTACTS - SOLD IN PACKAGES OF 100				
● 640545-2	26AWG to 18AWG	Gold	89F2121	79.17
STANDARD SOCKET CONTACTS - SOLD INDIVIDUALLY				
● 794001-1	26AWG to 24AWG	Tin	96F6991	0.27
● 641294-1	26AWG to 18AWG	Tin	70C3855	0.22
● 641294-2	26AWG to 18AWG	Gold	72C7790	0.81
● 641300-1	26AWG to 18AWG	Tin	34B1029	0.29
● 641300-2	26AWG to 18AWG	Gold	50F675	0.77
STANDARD SOCKET CONTACTS - SOLD IN PACKAGES OF 100				
● 794001-1-C	26AWG to 24AWG	Tin	92F6021	32.92
● 794001-2	26AWG to 24AWG	Gold	92F6022	128.35
● 641300-1	26AWG to 18AWG	Tin	89F2096	19.25

APPLICATION TOOLS

Mfg. Part No.	Description	Stock No.	Price Each 1-4
455830-1	Contact Insertion Tool	46F2045	32.27
58514-1	PRO-CRIMPER™ II Hand Tool (26-18AWG)	96F9721	336.87
90871-1	PRO-CRIMPER™ II Hand Tool (20-14AWG)	96F9722	318.87
91526-1	CERTICRIMP II, SAHT MR Hand Tool	03H3301	718.40

(8325)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

(212570)

AMP COMMERCIAL MATE-N-LOK® SOFT-SHELL CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Fully Polarized Nylon Housings, Rated UL94V-2
- Available in Panel Mount, Free-Hanging, and Motor Mount Versions
- UL Recognized, CSA Certified

Precision molded, soft-shell construction offers easy cavity identification. Built-in locking device, contact stabilization, and self-aligning features. *Order pin and socket contacts separately below and application tools separately on page 891.*

PANEL MOUNT PIN (CAP) HOUSINGS

Mfg. Part No.	Circuits	Style	Housing Locking Type	Stock No.	Price Each 1-49
● 1-480305-0	3	In-Line	Detent Lock	82F9866	0.43
● 1-480426-0	4	In-Line	Detent Lock	82F9868	0.52
● 1-480276-0	6	Matrix	Positive Lock	82F9870	0.65
● 1-480277-0	9	Matrix	Positive Lock	82F9872	1.06
● 1-480278-0	12	Matrix	Positive Lock	87F2942	1.07
● 1-480324-0	15	Matrix	Positive Lock	87F2944	1.24
PANEL MOUNT SOCKET (PLUG) HOUSINGS					
● 1-480304-0	3	In-Line	Positive Lock	82F9867	0.44
● 1-480425-0	4	In-Line	Positive Lock	82F9869	0.66
● 1-480273-0	6	Matrix	Positive Lock	82F9871	0.76
● 1-480274-0	9	Matrix	Positive Lock	82F9873	0.91
● 1-480275-0	12	Matrix	Positive Lock	87F2943	0.99
● 1-480323-0	15	Matrix	Positive Lock	87F2945	1.19
FREE-HANGING PIN (CAP) HOUSINGS					
● 1-480350-0	1	In-Line	Detent Lock	87F2954	0.17
● 1-480351-0	1	In-Line	Positive Lock	82F9874	0.20
● 1-480401-0	1	In-Line	Detent Lock	06H1516	1.06
● 1-480319-0	2	In-Line	Detent Lock	82F9876	0.18
● 1-480498-1	2	In-Line	Detent Lock	93B1851	0.87
● 1-480387-0	3	In-Line	Detent Lock	93B1854	1.55
● 794132-1	4	In-Line	Detent Lock	34B2090	1.88
● 1-480340-0	6	Matrix	Positive Lock	82F9878	0.55
● 1-480345-0	8	Matrix	Positive Lock	87F2960	0.70
● 1-480339-0	10	Matrix	Positive Lock	82F9918	0.78
FREE-HANGING SOCKET (PLUG) HOUSINGS					
● 1-480349-0	1	In-Line	Detent Lock	82F9875	0.14
● 1-480318-0	2	In-Line	Detent Lock	82F9877	0.20
● 1-480720-0	2	In-Line	Positive Lock	87F2955	0.54
● 1-480303-0	3	In-Line	Detent Lock	87F2956	0.37
● 1-480721-0	3	In-Line	Positive Lock	87F2957	0.82
● 1-480424-0	4	In-Line	Detent Lock	20C3571	0.34
● 770827-1	4	In-Line	Detent Lock	34B1843	0.40
● 1-480722-0	4	In-Line	Positive Lock	87F2959	0.76
● 1-480283-0	8	Matrix	Positive Lock	87F2948	0.69
● 1-480285-0	10	Matrix	Positive Lock	82F9880	0.91
MOTOR MOUNT PIN (CAP) HOUSINGS					
● 1-480271-0	6	Matrix	Positive Lock	87F2946	0.72
● 1-480284-0	8	Matrix	Positive Lock	87F2947	1.13
● 1-480288-0	12	Matrix	Positive Lock	87F2950	1.16
● 1-480439-0	16	Matrix	Positive Lock	87F2952	1.50
MOTOR MOUNT SOCKET (PLUG) HOUSINGS					
● 1-480270-0	6	Matrix	Positive Lock	82F9879	0.75
● 1-480287-0	12	Matrix	Positive Lock	87F2951	1.01
● 1-480438-0	16	Matrix	Positive Lock	87F2953	1.23

CONTACTS FOR COMMERCIAL MATE-N-LOK® CONNECTORS
Contacts are designed with no sharp projections to impede insertion or damage housings.

PIN CONTACTS - SOLD INDIVIDUALLY

Mfg. Part No.	AWG	Ins. Dia. Range	Contact Material	Contact Plating	Stock No.	Price Each 1-9
● 61174-5	30-22	0.040-0.075″	Brass	Gold	52F4883	2.02
● 60618-1	24-18	0.060-0.100″	Brass	Tin	31C7907	0.18
● 60618-5	24-18	0.060-0.100″	Brass	Gold	90F3982	1.15
● 60620-4	20-14	0.100-0.130″	Phosphor Bronze	Tin	90F4587	0.36
● 60620-5	20-14	0.100-0.130″	Brass	Gold	90F4588	1.73
PIN CONTACTS, ON REELS - SOLD INDIVIDUALLY						
● 350079-1	30-22	0.040-0.075″	Brass	Tin	90F3522	0.18
● 61116-4	24-18	0.060-0.100″	Phosphor Bronze	Tin	90F3535	0.29

➤ CONTINUED ➤

AMP COMMERCIAL MATE-N-LOK® SOFT-SHELL CONNECTORS (CONT.)

PIN CONTACTS - SOLD IN PACKAGES OF 100

Mfg. Part No.	AWG	Ins. Dia. Range	Contact Material	Contact Plating	Stock No.	Price Each 1-9
60620-1	20-14	0.100-0.130″	Brass	Tin	82F9911	11.60

SOCKET CONTACTS - SOLD INDIVIDUALLY

Mfg. Part No.	AWG	Ins. Dia. Range	Contact Material	Contact Plating	Stock No.	Price Each 1-49
61173-1	30-22	0.040-0.075″	Brass	Tin	90F4590	0.26
61173-5	30-22	0.040-0.075″	Brass	Gold	52F4856	2.02
60617-5	24-18	0.060-0.100″	Brass	Gold	90F4593	1.35
60619-5	20-14	0.100-0.130″	Brass	Gold	90F4057	1.31
60619-7	20-14	0.100-0.130″	Phosphor Bronze	Gold	90F4058	2.05
350638-4	18	0.115 max.	Phosphor Bronze	Tin	13H1838	0.58

SOCKET CONTACTS, ON REELS - SOLD INDIVIDUALLY

350078-1	30-22	0.040-0.075″	Brass	Tin	90F3526	0.18

SOCKET CONTACTS (SOLD IN PACKAGES OF 100)

60619-1	20-14	0.100-0.130″	Brass	Tin	82F9912	11.74
60617-1	24-18	0.060-0.100″	Brass	Tin	82F9910	23.00

(8330)

AMP COMMERCIAL MATE-N-LOK® TOOLS

TE connectivity

Authorized Distributor

Mfg. Part No.	Description	Stock No.	Price Each 1-4
455830-1	Contact Insertion Tool	46F2045	32.27
465644-1	Contact Extraction Tool	82F9913	24.08
90574-1	PRO-CRIMPER™ II Hand Tool, 24-18 AWG	96F9718	318.87
90575-1	PRO-CRIMPER™ II Hand Tool, 20-14 AWG	96F9719	312.10
91504-1	CERTI-CRIMP® Hand Tool, 20-14 AWG	73C4440	718.40

(8333)

AMP COMMERCIAL MATE-N-LOK® PC BOARD VERTICAL PIN AND SOCKET HEADERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Duplex Finish Plated with 20μ″ (0.000762) Min. Gold in Mating Area
- Matte Tin-Lead on Solder Tail End over 50μ″ (0.00127) Min. Nickel Underplate on Entire Contact
- 0.175″ Standard Tail Ideal for 0.062″ (1.57) Thick PC Board
- 0.225″ Long Tail Ideal for 0.125″ (3.17) Thick PC Board

Mate with socket housings; *go online or call.*

PC BOARD VERTICAL PIN HEADERS, UL94V-2 NYLON, STANDARD TAIL

Mfg. Part No.	Circuits	Lock Type	Plating	Stock No.	Price Each 1-49
350209-1	2	Detent Lock	Pre-Tin	87F2963	0.63
350539-1	2	Positive Lock	Pre-Tin	87F2962	0.98
1586530-2	2	Positive Lock	Gold	52K3427	2.56
350210-1	3	Detent Lock	Pre-Tin	87F2967	0.81
1586514-2	3	Detent Lock	Gold	40P2611	2.14
350541-1	3	Positive Lock	Pre-Tin	87F2966	1.17
350211-1	4	Detent Lock	Pre-Tin	98F278	0.81
1586627-1	4	Detent Lock	Pre-Tin	73K1613	1.13
794236-1†	4	Positive Lock	Pre-Tin	34B2091	1.12
350543-1	4	Positive Lock	Pre-Tin	89F4469	1.80
1586534-2	4	Positive Lock	Gold	52K3429	3.16
1-380999-0	6	Positive Lock	Pre-Tin	90F4023	1.45
350212-1	8	Positive Lock	Pre-Tin	50F052	1.55

PC BOARD VERTICAL PIN HEADERS, UL94V-2 NYLON, LONG TAIL

350544-1	4	Positive Lock	Pre-Tin	84F1150	2.31

PC BOARD RIGHT ANGLE PIN HEADERS, UL94V-0 NYLON, STANDARD TAIL

643488-1	3	Detent Lock	Pre-Tin	90F3973	1.44
1-641737-1	4	Detent Lock	Pre-Tin	33B3718	2.41

PC BOARD RIGHT ANGLE PIN HEADERS, UL94V-2 NYLON, NATURAL COLOR, STANDARD TAIL

794120-1	2	Detent Lock	Pre-Tin	92B0541	2.62
641737-1	4	Detent Lock	Pre-Tin	90F3974	1.67

➤ CONTINUED ➤

AMP COMMERCIAL MATE-N-LOK® PC BOARD VERTICAL PIN AND SOCKET HEADERS (CONT.)

PC BOARD VERTICAL MOUNT SOCKET HEADERS, UL94V-2, STANDARD TAIL

Mfg. Part No.	Circuits	Lock Type	Plating	Stock No.	Price Each 1-49
350642-1	9	None	Pre-Tin	67C2477	1.39

†UL 94V-0; ‡Surface Mount Compatible

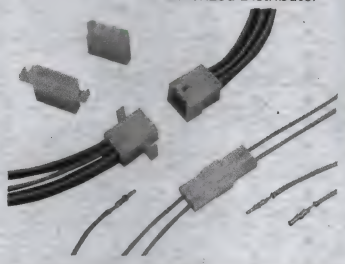
(40773)

AMP 0.062″ (1.57) SOFT-SHELL COMMERCIAL PIN AND SOCKET CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor



- Polarized, Natural Color Nylon Housings, Rated UL94V-2
- Compatible with Other Soft Shell Connectors
- Accepts Wires with Insulation Diameters up to 0.110″ (2.79)
- Wire Range from 30 to 18 AWG
- 0.062″ (1.57) Pin Diameter
- 0.145″ (3.68) Centerline Spacing
- Voltage Rating: 250VAC
- Dielectric Withstanding Voltage: 1.0kVAC
- Durability: 10 Mating Cycles
- Insulation Resistance: 1000 Megohms Minimum Initial

Economical, commercial-grade receptacle and plug connector housings available in 1 circuit, 2 thru 4 in-line circuit, and 4 thru 9 matrix circuit sizes for free-hanging wire-to-wire connection. Feature cavity identification, low contact-mating force, dual-locking lances and detent and positive locking. Pre-tin plated brass contacts, *order separately below,* can be used in either plug or receptacle. UL recognized, CSA certified. *Order application tools separately below.*

FREE-HANGING RECEPTACLES

Mfg. Part No.	Circuits	Style	Stock No.	Price Each 1-49
770277-1	1	In-Line	92F9046	0.10
770342-1	2	In-Line	92F9048	0.23
770343-1	2	In-Line	92B7175	0.32
770333-1	3	In-Line	92F9050	0.15
770274-1	4	In-Line	92F9052	0.42
770442-1	4	Matrix	66F6355	0.19
770356-1	6	Matrix	92F9055	0.19
770429-1	9	Matrix	92F9057	0.26

FREE-HANGING PLUGS

770278-1	1	In-Line	92F9045	0.09
770340-1	2	In-Line	92F9047	0.20
770331-1	3	In-Line	92F9049	0.21
770275-1	4	In-Line	92F9051	0.45
770433-1	4	Matrix	92F9053	0.23
770355-1	6	Matrix	92F9054	0.19
770428-1	9	Matrix	92F9056	0.31

PIN CONTACTS – SOLD IN PACKAGES OF 1000

Mfg. Part No.	AWG	Insulation Diameter	Stock No.	Price Each
794018-1	30AWG to 24AWG	0.060″	92F9058	71.40
794017-1	24AWG to 18AWG	0.050-0.110″	92F9061	42.00

SOCKET CONTACTS – SOLD IN PACKAGES OF 1000

794019-1	30AWG to 24AWG	0.060″	92F9059	43.26
794016-1	24AWG to 18AWG	0.050-0.110″	92F9060	41.82

SOCKET CONTACTS – SOLD INDIVIDUALLY

350628-1	24AWG to 18AWG	0.050-0.110″	72C7783	0.11

APPLICATION TOOLS

Mfg. Part No.	Description	Stock No.	Price 1-4
91002-1	Contact Insertion Tool	89F4310	24.13
90870-1	PRO-CRIMPER™ II Hand Tool with Die Set (30-24 AWG)	92F9062	327.02
90869-1	PRO-CRIMPER™ II Hand Tool with Die Set (24-18 AWG)	99F3575	327.00

(8289)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures

(212568)

PIN & SOCKET CONNECTORS

AMP 0.093″ COMMERCIAL PIN & SOCKET CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Polarized
- Low contact mating force
- Dual locking lances
- Voltage rating: 250VAC
- Rated UL94V-2

PLUG HOUSING

Mfg. Part No.	No. of Pos.	Style	Mounting	Locking Style	Stock No.	Price Each 1-24
● 770068-1	2	In-line	Panel Mount	Detent	89F2706	0.39
● 770069-1	2	In-line	Free Hanging	Detent	89F2711	0.32
● 770425-1	2	In-line	Free Hanging	Positive	34B1834	0.34
● 770078-1	4	In-line	Free Hanging	Detent	89F2720	0.23
● 770842-1	4	Matrix	Free Hanging	Detent	92F9065	0.79
● 770084-1	5	In-line	Free Hanging	Detent	92F9067	0.36
● 770892-1	6	In-line	Free Hanging	Positive	16H5784	0.74
● 770090-1	6	Matrix	Free Hanging	Detent	50F2670	0.26
● 770096-1	9	Matrix	Free Hanging	Detent	89F2721	0.32
● 770102-1	12	Matrix	Free Hanging	Detent	66F2976	0.37

RECEPTACLE HOUSING

● 405264508	1	...	Free Hanging	Detent	89F2716	0.10
● 770066-1	2	In-line	Panel Mount	Detent	89F2702	0.25
● 770065-1	2	In-line	Free Hanging	Detent	89F2717	0.27
● 770424-1	2	In-line	Free Hanging	Positive	34B1833	0.26
● 770076-1	4	In-line	Panel Mount	Detent	97B2328	0.20
● 770075-1	4	In-line	Free Hanging	Detent	89F2718	0.24
● 770843-1	4	Matrix	Free Hanging	Detent	92F9066	0.34
● 770083-1	5	In-line	Free Hanging	Detent	90F4892	0.36
● 770782-1	6	In-line	Free Hanging	Positive	16H5773	2.77
● 770087-1	6	Matrix	Panel Mount	Detent	16H5729	1.15
● 770086-1	6	Matrix	Free Hanging	Detent	66F3000	0.27
● 770093-1	9	Matrix	Panel Mount	Detent	98F4460	0.44
● 770092-1	9	Matrix	Free Hanging	Detent	89F2705	0.28
● 770099-1	12	Matrix	Panel Mount	Detent	91B1683	0.52
● 770098-1	12	Matrix	Free Hanging	Detent	94C5779	0.41

CONTACTS

Mfg. Part No.	Gender	AWG	Contact Finish	Stock No.	Price Each 1-49
● 770145-1	Pin	20AWG to 14AWG	Tin	16H5735	0.07
● 350416-1‡	Pin	20AWG to 14AWG	Tin	25R6577	0.11
● 770147-1	Pin	24AWG to 18AWG	Tin	89F2700	0.11
● 770147-5	Pin	24AWG to 18AWG	Gold	94C1707	0.56
● 770144-1	Socket	20AWG to 14AWG	Tin	91B1678	0.10
● 770146-5	Socket	24AWG to 18AWG	Gold	99F8476	0.64

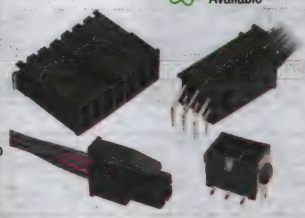
‡ Tape Cut
(84714)

AMP MICRO MATE-N-LOK RECEPTACLES

RoHS Compliant Available

TE connectivity

Authorized Distributor



- 3mm (0.118″) centerline spacing
- Voltage rating: 250VAC
- Current rating: 5A
- Operating temperature: -40°C to 105°C

The Micro MATE-N-LOK 3mm Connector System is a wire-to-wire and wire-to-board connector system with contacts on a 3 mm [.118] centerline. Single- row and dual-row configurations are available.
Crimp, snap-in pin and receptacle contacts are used to terminate 24-20 [0.2-0.6] and 30-26 [0.05- 0.15] AWG wire. Plug and receptacle housings allow wire-to-wire and wire-to-panel configurations. Header assemblies for wire-to-board interconnections include vertical and right-angle components. Recognized under the Component Program of Underwriters Laboratories Inc. File No. E28476.

RECEPTACLE HOUSING—SINGLE ROW

Mfg. Part No.	No. of Contacts	Stock No.	Price Each 1-49
● 1445022-2	2	11H4284	0.24
● 1445022-3	3	03H3077	0.31
● 1445022-4	4	89C1336	0.44
● 1445022-5	5	20H0141	0.47

RECEPTACLE HOUSING—DUAL ROW

● 794617-2	2	50H8372	0.31
● 794617-4	4	16H6131	0.46

➤CONTINUED➤

AMP MICRO MATE-N-LOK RECEPTACLES (CONT.)

RECEPTACLE HOUSING—DUAL ROW

Mfg. Part No.	No. of Contacts	Stock No.	Price Each 1-49
● 794617-6	6	02H5760	0.38
● 794617-8	8	16H6132	0.40
● 1-794617-0	10	10H3656	0.47
● 1-794617-2	12	89C1036	0.56
● 1-794617-4	14	10H3657	0.51
● 1-794617-6	16	35C5270	0.60
● 1-794617-8	18	02H0582	0.81
● 2-794617-0	20	35C5268	0.59
● 2-794617-2	22	02H0579	0.89
● 2-794617-4	24	02H0578	0.83

RECEPTACLE CONTACTS

Mfg. Part No.	Wire Size (AWG)	Contact Finish	Stock No.	Price Each 1-49
● 794611-1	30AWG to 26AWG	Tin	16H6125	0.06
● 1-794611-1	30AWG to 26AWG	15u″ Gold	16M2693	0.12
● 1-794611-2	30AWG to 26AWG	30u″ Gold	16M2694	0.16
● 794610-1	24AWG to 20AWG	Tin	16H6123	0.07
● 1-794610-1	24AWG to 20AWG	15u″ Gold	52K3408	0.11
● 1-794610-2	24AWG to 20AWG	30u″ Gold	52K3409	0.13

RECEPTACLE CONTACTS - ON STRIP, SOLD INDIVIDUALLY

● 794607-1	30AWG to 26AWG	Tin	96K3558	0.03
● 794606-1	24AWG to 20AWG	Tin	43J1315	0.10

APPLICATION TOOLS

Mfg. Part No.	Description	Stock No.	Price 1-4
91502-1	CERTI-CRIMP® II Hand Tool (26-30 AWG)	89C1025	718.40

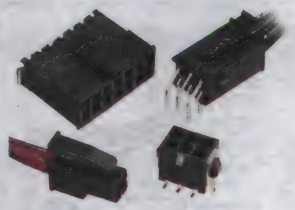
(84670)

AMP MICRO MATE-N-LOK PLUGS AND HEADERS

RoHS Compliant Available

TE connectivity

Authorized Distributor



- 3mm (0.118″) centerline spacing
- Voltage rating: 250VAC
- Current rating: 5A
- Operating temperature: -40°C to 105°C
- Panel mount or free hanging wire-to-wire configurations

The Micro MATE-N-LOK 3mm Connector System is a wire-to-wire and wire-to-board connector system with contacts on a 3 mm [.118] centerline. Single- row and dual-row configurations are available.
Crimp, snap-in pin and receptacle contacts are used to terminate 24-20 [0.2-0.6] and 30-26 [0.05- 0.15] AWG wire. Plug and receptacle housings allow wire-to-wire and wire-to-panel configurations. Header assemblies for wire-to-board interconnections include vertical and right-angle components. Recognized under the Component Program of Underwriters Laboratories Inc. File No. E28476.

PLUG HOUSING—SINGLE ROW

Mfg. Part No.	No. of Contacts	Mounting	Stock No.	Price Each 1-49
● 1445049-3	3	Free Hanging	11H4295	0.27
● 1445049-4	4	Free Hanging	11H4296	0.32
● 1445049-5	5	Free Hanging	11H4297	0.44
● 1445049-6	6	Free Hanging	11H4298	0.52
● 1445048-2	2	Panel Mount	11H4288	0.20
● 1445048-3	3	Panel Mount	11H4289	0.31
● 1445048-5	5	Panel Mount	11H4290	0.37

PLUG HOUSING—DUAL ROW

● 794616-2	2	Free Hanging	19H3709	0.26
● 794616-4	4	Free Hanging	16H6128	0.45
● 794616-6	6	Free Hanging	16H6129	0.48
● 794616-8	8	Free Hanging	16H6130	0.55
● 1-794616-2	12	Free Hanging	10H3652	0.69
● 1-794616-4	14	Free Hanging	10H3653	0.98
● 794615-4	4	Panel Mount	19H3706	0.41
● 794615-6	6	Panel Mount	19H3707	0.43
● 794615-8	8	Panel Mount	19H3708	0.51
● 1-794615-0	10	Panel Mount	10H3646	0.60
● 1-794615-4	14	Panel Mount	10H3648	0.98

APPLICATION TOOLS

Mfg. Part No.	Description	Stock No.	Price 1-4
91502-1	CERTI-CRIMP® II Hand Tool (26-30 AWG)	89C1025	718.40

➤CONTINUED➤

AMP MICRO MATE-N-LOK PLUGS AND HEADERS (CONT.)

PLUG CONTACTS

Mfg. Part No.	Wire Size (AWG)	Contact Finish	Stock No.	Price Each 1-49	Price Each 50-99
1-794613-0	30AWG to 26AWG	Tin	16M2698	0.11	0.09
1-794613-1	30AWG to 26AWG	15µ" Gold	16M2699	0.12	0.10
1-794613-2	30AWG to 26AWG	30µ" Gold	10M9837	0.17	0.15
1-794612-0	24AWG to 20AWG	Tin	16M2695	0.12	0.10
1-794612-1	24AWG to 20AWG	15µ" Gold	16M2696	0.12	0.10
1-794612-2	24AWG to 20AWG	30µ" Gold	16M2697	0.17	0.15
PLUG CONTACTS - ON STRIP, SOLD INDIVIDUALLY					
1-794608-0	24AWG to 20AWG	Tin	39M6105	0.06	0.04
1-794608-2	24AWG to 20AWG	30µ" Gold	55M0190	0.11	...

HEADER—SINGLE ROW

Mfg. Part No.	No. of Contacts	Mounting	Contact Finish	Stock No.	Price Each 1-24	Price Each 25-49
2-1445050-2	2	Through Hole Vertical	Tin	26M8066	0.58	0.55
2-1445084-2	2	Through Hole Vertical	15u" Gold	16M2812	0.81	0.76
2-1445093-3	3	Through Hole Vertical	30u" Gold	17R6028	0.89	0.81
2-1445093-7	7	Through Hole Vertical	30u" Gold	16M2815	1.21	1.09
2-1445098-2	2	Through Hole Right Angle	30u" Gold	17R6058	0.72	0.66
2-1445098-3	3	Through Hole Right Angle	30u" Gold	33M8547	0.91	0.80
2-1445096-2	2	Surface Mount Vertical	30u" Gold	16M2817	1.73	1.58
2-1445096-3	3	Surface Mount Vertical	30u" Gold	16M2818	1.52	1.48
2-1445096-4	4	Surface Mount Vertical	30u" Gold	16M2819	1.69	1.61
2-1445057-2	2	Surface Mount Right Angle	Tin	16M2811	0.95	0.91
2-1445056-3	3	Surface Mount Right Angle	Tin	16M2810	0.89	0.85
2-1445091-4	4	Surface Mount Right Angle	15u" Gold	16M2814	0.99	0.94
HEADER—DUAL ROW						
3-794680-2	2	Through Hole Vertical	Tin	16M3028	0.74	0.69
3-794630-8	8	Through Hole Vertical	Tin	16M3024	1.25	1.20
3-794680-8*	8	Through Hole Vertical	Tin	16M3029	1.89	1.71
3-794632-8	8	Through Hole Vertical	30u" Gold	18R2983	2.39	1.97
4-794636-8	18	Through Hole Vertical	Tin	16M3101	3.98	3.47
3-794618-2	2	Through Hole Right Angle	Tin	73K6354	0.71	0.68
3-794618-4	4	Through Hole Right Angle	Tin	16M3019	0.98	0.94
3-794677-4	4	Through Hole Right Angle	Tin	16M3027	1.48	1.30
3-794618-6	6	Through Hole Right Angle	Tin	16M3020	1.33	1.25
4-794618-2	12	Through Hole Right Angle	Tin	18R6768	2.54	2.29
4-794618-4	14	Through Hole Right Angle	Tin	12M6223	2.73	2.62
3-794637-2	2	Surface Mount Vertical	15u" Gold	16M3026	1.31	1.19
3-794627-4	4	Surface Mount Right Angle	Tin	16M3023	2.54	2.11

* With Boardlock(s)

(84671)

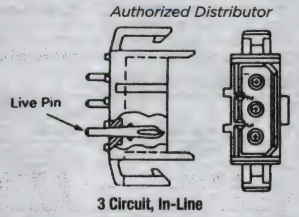
AMP MR SERIES MINIATURE RECTANGULAR PC BOARD PIN HEADERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Permit Cable Connections to Center of Printed Circuit Board
- Brick Red Nylon Housing, Flammability Rated UL94V-0
- Centerline Spacing 0.165"(4.19)
- Solder Tail Diameter 0.040"(1.02)
- Mate with **MR series** socket connectors *on pages 889-*



3 Circuit, In-Line

Phosphor bronze contacts available with tin or duplex finish. Duplex finish is plated with 30µ" (0.762µm) min. gold in mating area, matte tin on solder tail end over 50µ" (1.27µm) min. Nickel underplate on entire contact.

PC BOARD VERTICAL PIN HEADERS WITH TIN-FINISH CONTACTS

Mfg. Part No.	Circuits	Stock No.	Price Each 1-49
640497-1	2	89F2125	0.90
640497-3	2	92F9087	1.71
640498-1	3	89F2126	1.05
640498-3	3	92F9089	1.86
640499-1	4	89F2127	1.88
640500-1	6	89F2128	1.91
640503-1	15	89F5014	5.80
PC BOARD VERTICAL PIN HEADERS WITH GOLD DUPLEX-FINISH CONTACTS			
2-640497-4	2	52K3460	2.55
2-640498-2	3	16M5155	3.91
2-640499-2	4	52K3461	5.03
2-640501-2	9	52K3465	9.48
2-640502-2	12	52K4303	19.76
2-640503-2	15	52K4304	40.26

(8326)

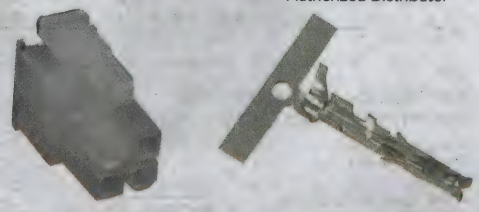
AMP-DUAC® (DUAL-ACTION) RECEPTACLE AND CONTACTS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Nylon Housing
- 0.165" (4.20mm) Centerline
- Positive Lock
- Voltage: 600VAC
- Flammability Rating: UL94V-2, UL94V-0



Ideal for wire-to-board power applications. Dual action (DUAC) female socket contacts provide low insertion force while maintaining high current capacity performance; *ordered separately below.*

RECEPTACLE HOUSING

Mfg. Part No.	Positions	Color	Stock No.	Price Each 1-9
106527-2	2	Natural	19C8544	0.81
794657-2	2	White	89C2593	0.44
794657-4	4	White	61H8160	0.79
106527-6	6	Natural	90B2339	0.67
794657-6	6	White	89C0105	0.71
794657-8	8	White	16H6180	0.60
1-106527-0	10	Natural	09H3043	0.75
1-794657-0	10	White	92C8628	0.80
1-794657-2	12	White	10H3758	0.84
1-794657-6	16	White	89C0249	0.66
2-794657-0	20	White	07H6433	1.03
2-794657-4	24	White	08J4508	1.18

FEMALE SOCKET CONTACTS

Mfg. Part No.	AWG	Ins. Dia. Range (mm)	Contact Plating	Stock No.	Price Each 1-9
106529-2*	18-22	1.50-2.40	Tin	90B2344	0.17
1-106529-2	18-22	1.50-2.40	Tin	25C0762	0.21
1-794141-3	18-22	1.50-2.40	Gold	16M2690	0.70
1-106528-2	22-26	1.20-1.75	Tin	09H3048	0.20

* Tape Cut

(63492)

AMP METRIMATE PIN AND SOCKET CONNECTOR HOUSINGS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Panel Mount
- Centerline: 0.200" (5.08mm)
- Voltage: 600VAC
- Black Glass-Filled Thermoplastic Housing, Flammability Rated UL94V-0

Provides blind mating with up to 0.090" (2.3mm) misalignment in any direction. Plug and receptacle can be front- or rear-panel mounted.

FREE-HANGING & PANEL MOUNT CONNECTORS - SQUARE GRID

Mfg. Part No.	Circuits	Gender	Stock No.	Price Each 1-9
207015-1	4	Plug	66F1671	1.28
207016-1	4	Receptacle	66F1670	1.26
207152-1	6	Plug	92F4838	1.35
207439-1	9	Plug	95F2732	1.59
207440-1	9	Receptacle	66F1672	1.79
207017-1	12	Plug	50F638	2.02
207019-1	36	Plug	92F4835	3.47
207020-1	36	Receptacle	50F639	3.46
FREE-HANGING CONNECTORS - IN-LINE				
207396-1	10	Plug	50F625	2.44
207542-1	16	Plug	12H5389	2.67
HEADER CONNECTORS - SQUARE GRID - VERTICAL				
1-207158-0	6	Header	52K3266	6.83
DRAWER CONNECTORS				
211758-1	12	Plug	92F6632	4.63
211759-1	12	Receptacle	92F6622	4.61
208210-2	19	Plug	92F6620	4.53
208209-2	19	Receptacle	95F2700	4.24
211150-1	25	Plug	93F7309	6.54
211149-1	25	Receptacle	93F7339	5.96

HARDWARE

Mfg. Part No.	Description	Stock No.	Price Each 1-9
213283-2	M4 Screw Kit	90B4747	6.54
208211-4	SAE 6/32 Mounting Screw	93F7324	2.57

CONTINUED

PIN & SOCKET CONNECTORS

AMP METRIMATE PIN AND SOCKET CONNECTOR HOUSINGS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 207601-1	9-position Strain Relief Kit	92F6103	5.65
● 207604-1	36-position Strain Relief Kit	92F8429	7.65

(40874)

AMP TYPE III+ MULTIMATE CRIMP PIN AND SOCKET CONTACTS

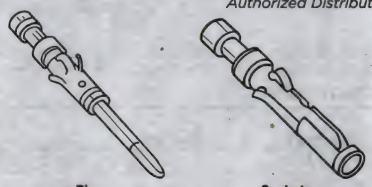
RoHS Compliant Available

TE connectivity

Authorized Distributor

- Brass Signal Contact
- Terminate to Wire
- Insulation Support
- Wire Termination Type: Crimp
- Test Current: 13A
- Stainless Steel Spring

Overall insulation crimp diameter, including crimp barrel, must not exceed 0.125″ (3.18mm). Use **mfg. part no. 90066-7** CERTI-CRIMP® hand tool or **mfg. part no. 58495-1** PRO-CRIMPER™ II hand tool *ordered separately; go online or call.*



Pin Socket

PIN CONTACTS

Mfg. Part No.	Plating	AWG	Insulation Dia. mm (Inches)	Stock No.	Price Each 1-49
● 1-66400-0	Tin	24AWG to 20AWG	2.03-2.54 (0.080-0.100)	52K3336	0.40
● 66400-4	Gold	24AWG to 20AWG	2.03-2.54 (0.080-0.100)	50F585	0.60
● 1-66099-5	Tin	18AWG to 16AWG	2.03-2.54 (0.080-0.100)	43K4721	0.47
● 1-66099-4	Gold	18AWG to 16AWG	2.03-2.54 (0.080-0.100)	72H5065	1.01
● 1-66361-3	Tin	18AWG to 14AWG	2.03-2.54 (0.080-0.100)	52K3334	0.49
SOCKET CONTACTS					
● 1-66109-8	Tin	28AWG to 24AWG	0.89-1.4 (0.035-0.055)	52K3329	1.10
● 1-66399-0	Tin	24AWG to 20AWG	2.03-2.54 (0.080-0.100)	52K3335	0.42
● 66105-4	Gold	24AWG to 20AWG	1.02-2.03 (0.040-0.080)	74C6780	0.79
● 66399-4	Gold	24AWG to 20AWG	2.03-2.54 (0.080-0.100)	93F7351	0.76
● 1-66101-9	Tin	18AWG to 16AWG	2.03-2.54 (0.080-0.100)	52K3322	0.48
● 1-66101-8	Gold	18AWG to 16AWG	2.03-2.54 (0.080-0.100)	72H5066	0.79

*Sold in packages of 1000

POSTED WIRE WRAP PIN CONTACTS

Mfg. Part No.	Plating	Stock No.	Price Each 1-49
● 6-66460-2	Gold	52K3811	1.29
POSTED WIRE WRAP SOCKET CONTACTS			
● 6-66461-3	Tin	52K3815	1.01

(40877)

AMP APPLICATION TOOLS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● 91002-1	Contact Insertion Tool	89F4310	24.13
91515-1	CERTI-CRIMP® (30-20 AWG)	85C3173	718.40
91523-1	CERTI-CRIMP® (24-16 AWG)	85C0748	718.40
91505-1	CERTI-CRIMP® (18-16 AWG)	92C2182	741.95
91522-1	CERTI-CRIMP®2, SAHT Type III	72C5752	718.40
58495-1	PRO-CRIMPER™ II Hand Tool with die (28-16 AWG)	44F8409	219.32

(40970)

AMP V.35 CABLE CONNECTOR KITS

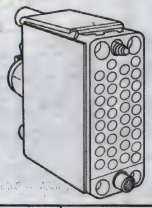
RoHS Compliant Available

TE connectivity

Authorized Distributor

- Panel Mount
- One-Piece Turnable Jackscrew
- Vertical Mount Angle

Plug and receptacle connector kits come partially assembled. Kit includes: housing, 1-piece shield, 1-piece turnable jack screws, strain relief clamp, and mounting screws. Housings are keyed for proper location of jackscrews.



Mfg. Part No.	Cable Range	Description	Stock No.	Price 1-9
213522-1	0.435-0.545″ (11.05-13.83)	Receptacle	66F3345	15.60
● 213300-1	0.435-0.545″ (7.62-11.43)	Plug	66F1611	25.59

(40978)

AMP MULTILOCK CONNECTORS AND CONTACTS

RoHS Compliant Available

TE connectivity

Authorized Distributor

CONTACT RECEPTACLES

Mfg. Part No.	Wire Range (AWG)	Insulation Dia. mm (in)	Contact Material	Stock No.	Price Each 1-9	Price Each 10-24
● 1123343-1	24-20	0.95-1.70 (0.037-0.067)	Copper	04H0563	0.21	0.20
● 173631-1	20-16	2.01-2.59 (0.079-0.102)	Brass	11H9122	0.19	0.14
● 173681-1	22-20	1.80-2.00 (0.071-0.079)	Phosphor Bronze	26C0090	0.12	0.08
● 175265-1	22-18	1.10-1.80 (0.043-0.071)	Copper	85C1211	0.28	0.27

HOUSING PLUGS

Mfg. Part No.	Contacts	Rows	Body Material	Stock No.	Price Each 1-99	Price Each 100-499
● 174045-2	12	2	PBT	97B1681	1.17	0.99
● 174046-2	16	2	PBT	97B1679	1.21	0.85

(88411)

3.96mm (0.156″) PITCH POWER DOUBLE LOCK (PDL) CONNECTOR SYSTEM

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Fully polarized
- Power circuit connectors of compact design
- Uses double lock plate on the wire side to prevent/resist halfway mating of contacts
- Double lock plate compatible with high-count positions of more than 3 rows
- Tab and receptacle contacts resist scraping of contacts at mating/unmating
- Semi-inner locking system that helps prevent/resist disengagement by external pressure
- Both wire-to-wire and wire-to-board applications available from the same series lineup
- Board-mounted headers are compatible with resin coating
- Design complies with a range of safety standards
- The housing lance design helps prevent/resist entanglement of contacts with one another
- Voltage Rating: 300V AC for wire-to-wire applications, 50V AC for wire-to-board applications
- Current Rating: 10A max. using 16 AWG on 2-position connector
- Operating Temperature: -30°C to +105°C

AMP Power Double Lock Connectors are compact enough for use in power circuit application and are ideally suited for wiring in refrigerators, air conditioners, washing machines, gas equipment, copying machines and automatic vending machines. These connectors can be used with or without a double lock plate which helps prevent/resist halfway mating of contacts. Contacts accept 20-16 AWG wire with insulation outer diameter of 2.0-3.1mm. The tab header for board mounting has a locking mechanism and is compatible with resin coating which will not hinder the plug locking function. The solder tail section of the tab contact has kink features while the solder tab secures the header on the board firmly during soldering. Other color options are available for select sizes; *go online or call.*

FREE HANGING PLUG HOUSINGS

Mfg. Part No.	No. of Positions	Color	Stock No.	Price Each 1-9	Price Each 10-24
● 177898-1	2	Natural	11H9845	0.48	0.45
● 177899-1	3	Natural	11H9850	0.49	0.47
● 177901-1	6	Natural	11H9858	0.56	0.52
FREE HANGING CAP HOUSINGS					
● 179463-1	2	Natural	12H0084	0.59	0.55
● 179464-1	3	Natural	17R5487	0.71	0.66
● 179466-1	6	Natural	17R5488	0.78	0.69
PANEL MOUNT CAP HOUSINGS					
● 177906-1	2	Natural	11H9867	0.62	0.58
● 177907-1	3	Natural	11H9871	0.71	0.67
● 177909-1	6	Natural	11H9878	0.97	0.86
PC BOARD MOUNT VERTICAL HEADERS					
● 179838-1	2	Natural	70M9041	0.94	0.83
● 179839-1	3	Natural	17R5496	1.04	0.92
● 179841-1	6	Natural	17R5498	1.87	1.70

CONTACTS

Mfg. Part No.	Gender	AWG	Contact Plating	Stock No.	Price Each 1-9	Price Each 10-24
● 177915-2	Socket	20AWG to 16AWG	Tin	11H9883	0.26	0.24
● 177917-1	Pin	20AWG to 16AWG	Tin	11H9885	0.24	0.22

CONTINUED

3.96mm (0.156") PITCH POWER DOUBLE LOCK (PDL) CONNECTOR SYSTEM (CONT.)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
177918-1	2 Position Double Lock Plate for TPA	14R7933	0.21	0.20
177919-1	3 Position Double Lock Plate for TPA	11H9886	0.16	0.16

(197660)

POWER TRIPLE LOCK PIN AND SOCKET CONNECTOR SYSTEM

RoHS Compliant Available

TE connectivity

Authorized Distributor

Plug Housing | Free-Hanging Receptacle Housing | Panel-Mount Receptacle Housing | TPA Locking Plate

Features

- Audible 'lock' latch provides positive feedback when plug and receptacle are mated
- Ribs surrounding audible 'lock' latch prevent wires from becoming snagged underneath
- Optional Terminal Position Assurance (TPA) locking plate keeps contacts fully seated within housing and provides against contact backout
- Keying/color code prevents mis-mating on the assembly line — Key A Natural
- For wire-to-wire and wire-to-panel applications in choice of:
  Single row: 1x2, 1x3, 1x4 and 1x5
  Dual row: 2x3 and 2x4
  Matrix: 3x3, 3x4 and 3x5

Pin | Socket

- Centerline spacing: 6 mm
- Row-to-row spacing: 8.1 mm
- Voltage rating: 600V AC/DC
- Current rating: up to 20A per line
- Operating temperature: -55°C to 105°C
- UL recognized E28476

Power Triple Lock (PTL) connector system improves connection stability and reliability. Features a reduced size high-performance functional design that includes free-hanging and panel mount receptacles. Plug housings feature an anti-snag locking latch to prevent wires from becoming tangled under the latch. In addition to household appliances, such as refrigerators, dishwashers, washers and dryers, cookware, water heaters, vacuums, garage door openers, the PTL connector system is ideal for products related to heating, ventilation and air conditioning, industrial machinery and lighting, automotive, commercial building, and rail. Other connector sizes, keying/color options and **mfg. part no. 1971789-1** CPA (Connection Position Assurance) lock device are available; *go online or call.*

PLUG HOUSINGS — NATURAL, TEMP. RATING 105°C, RATED UL 94V-0

Mfg. Part No.	No. of Positions	Size Row x Positions	Stock No.	Price Each 1-49
1-1971773-2	2	1 x 2	90W0238	0.26
1-1971773-3	3	1 x 3	90W0239	0.26
1-1971773-4	4	1 x 4	90W0240	0.27
1-1971773-7	5	1 x 5	90W0241	0.27
1-1971776-3	6	2 x 3	90W0246	0.42
1-1971776-4	8	2 x 4	90W0247	0.40
1-1971876-3	9	3 x 3	90W0254	0.35
1-1971876-4	12	3 x 4	90W0255	0.44
1-1971876-7	15	3 x 5	90W0256	0.57
FREE-HANGING RECEPTACLE HOUSINGS — NATURAL, TEMP. RATING 105°C, RATED UL 94V-0				
1-1971771-2	2	1 x 2	90W0230	0.31
1-1971771-3	3	1 x 3	90W0231	0.32
1-1971771-4	4	1 x 4	90W0232	0.32
1-1971771-7	5	1 x 5	90W0233	0.33
1-1971774-3	6	2 x 3	90W0242	0.37
1-1971774-4	8	2 x 4	90W0243	0.38
1-1971874-3	9	3 x 3	90W0248	0.42
1-1971874-4	12	3 x 4	90W0249	0.52
1-1971874-7	15	3 x 5	90W0250	0.64
PANEL-MOUNT RECEPTACLE HOUSINGS — NATURAL, TEMP. RATING 105°C, RATED UL 94V-0				
1-1971772-2	2	1 x 2	90W0234	0.31
1-1971772-3	3	1 x 3	90W0235	0.32
1-1971772-4	4	1 x 4	90W0236	0.32
1-1971772-7	5	1 x 5	90W0237	0.33
1-1971775-3	6	2 x 3	90W0244	0.37
1-1971775-4	8	2 x 4	90W0245	0.38
1-1971875-3	9	3 x 3	90W0251	0.42
1-1971875-4	12	3 x 4	90W0252	0.52
1-1971875-7	15	3 x 5	90W0253	0.64
TPA LOCKING PLATE — BLACK, TEMP. RATING 150°C				
1971777-2	2	1 x 2	90W0257	0.10
1971777-3	3	1 x 3	90W0258	0.10
1971777-4	4	1 x 4	90W0259	0.10

CONTINUED

POWER TRIPLE LOCK PIN AND SOCKET CONNECTOR SYSTEM (CONT.)

TPA LOCKING PLATE — BLACK, TEMP. RATING 150°C

Mfg. Part No.	No. of Positions	Size Row x Positions	Stock No.	Price Each 1-49
1971777-5	5	1 x 5	90W0260	0.10
1971778-3	6	2 x 3	90W0261	0.11
1971778-4	8	2 x 4	90W0262	0.11
1971778-5	10	2 x 5	90W0263	0.13

CRIMP CONTACTS — LANCELESS, TIN-PLATED COPPER ALLOY

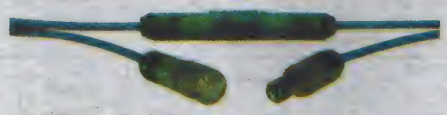
Mfg. Part No.	Gender	AWG	Stock No.	Price Each 1-49
1971780-1	Pin	12	90W0265	0.07
1971782-1	Pin	14	90W0267	0.06
1971784-1	Pin	16-20	90W0269	0.03
1971786-1‡	Pin	22	90W0271	0.04
1971779-1	Socket	12	90W0264	0.07
1971781-1	Socket	14	90W0266	0.06
1971783-1	Socket	16-20	90W0268	0.04
1971785-1	Socket	22	90W0270	0.05

‡Tape Cut
(210132)

MIL-C-26500 48 SERIES WIRE SPLICE CONNECTORS

RoHS Compliant Available

Amphenol Aerospace



- Push-mating/twist-pull unmating
- Uses size 16 standard M39029/31-229 pin and M39029/32-248 socket contacts
- Environmental sealing grommet
- Metal collet retention
- Weight- and space-saving design
- Color coded connector halves — blue or red

Amphenol® **48 series** wire splice connector is an economically priced, lightweight and space-saving connector design that can be used for various applications. The push-mating/twist-pull unmating feature provides a simple solution to many design requirements without sacrificing performance. The metal retention clip is utilize for a single size 16 pin and socket contact; *ordered separately below.*

WIRE SPLICE CONNECTORS

Mfg. Part No.	Description	Color	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-24
48-7190	Plug	Blue	38T8606	9.18	8.78	8.21
48-7190-1	Plug	Red	38T8607	9.06	8.68	8.11
48-7191	Receptacle	Blue	38T8608	8.89	8.51	7.97
48-7191-1	Receptacle	Red	38T8609	8.66	8.30	7.76

CRIMP CONTACTS — GOLD-PLATED COPPER ALLOY

Mfg. Part No.	Description	Size	Stock No.	Price Each 1-4
ZZL-4016-36LD	Pin — M39029/31-229	16	38T3464	3.34
ZZL-4116-36LD	Socket — M39029/32-248	16	38T3465	8.66

(195470)

AT SERIES SEALED CONNECTORS

RoHS Compliant Available

Amphenol SINE SYSTEMS

Amphenol Sine Systems AT Series connectors were designed as a high-performance, cost-effective solution to be used within the Heavy Equipment, Agricultural, Automotive, Military, Alternative Energy and other demanding interconnect architectures. The AT Series connectors contain superior environmental seals, seal retention capabilities and have been developed to be completely compatible with all other existing standard products industry-wide.

CONNECTOR HOUSINGS

Mfg. Part No.	Positions	Gender	Stock No.	Price Each 1-24
AT04-2P	2	Receptacle	14R5586	1.32
AT04-3P	3	Receptacle	14R5587	1.18

CONTINUED

PIN & SOCKET CONNECTORS

AT SERIES SEALED CONNECTORS (CONT.)

Mfg. Part No.	Positions	Gender	Stock No.	Price Each 1-24
● AT04-4P	4	Receptacle	14R5588	1.61
● AT04-6P	6	Receptacle	14R5589	2.27
● AT04-08PA	8	Receptacle	14R5578	2.89
● AT04-12PA	12	Receptacle	14R5582	4.17
● AT06-2S	2	Plug	14R5598	1.17
● AT06-3S	3	Plug	14R5599	1.42
● AT06-4S	4	Plug	14R5600	1.69
● AT06-6S	6	Plug	14R5601	2.45
● AT06-08SA	8	Plug	14R5590	4.41
● AT06-12SA	12	Plug	14R5594	5.21
CONNECTOR HOUSINGS WITH END CAP				
● AT04-2P-EC01	2	Receptacle	34R6575	1.42
● AT04-3P-EC01	3	Receptacle	34R6579	1.63
● AT04-4P-EC01	4	Receptacle	34R6583	2.21
● AT04-6P-EC01	6	Receptacle	34R6587	2.98
● AT04-08PA-EC01	8	Receptacle	34R6543	3.89
● AT04-12PA-EC01	12	Receptacle	34R6559	5.04
● AT06-2S-EC01	2	Plug	34R6623	1.68
● AT06-3S-EC01	3	Plug	34R6627	1.81
● AT06-4S-EC01	4	Plug	34R6631	2.37
● AT06-6S-EC01	6	Plug	34R6635	3.17
● AT06-08SA-EC01	8	Plug	34R6591	5.32
● AT06-12SA-EC01	12	Plug	34R6607	6.23
CONNECTOR HOUSINGS WITH REDUCED DIAMETER SEAL				
● AT04-2P-RD01	2	Receptacle	34R6577	1.13
● AT04-3P-RD01	3	Receptacle	34R6581	1.42
● AT04-4P-RD01	4	Receptacle	34R6585	1.74
● AT04-6P-RD01	6	Receptacle	34R6589	2.38
● AT06-2S-RD01	2	Plug	34R6625	1.32
● AT06-3S-RD01	3	Plug	34R6629	1.65
● AT06-4S-RD01	4	Plug	34R6633	1.91
● AT06-6S-RD01	6	Plug	34R6637	2.63
CONNECTOR HOUSINGS WITH END CAP & REDUCED DIAMETER SEAL				
● AT04-2P-MM01	2	Receptacle	34R6576	1.71
● AT04-3P-MM01	3	Receptacle	34R6580	1.96
● AT04-4P-MM01	4	Receptacle	34R6584	2.35
● AT04-6P-MM01	6	Receptacle	34R6588	3.29
● AT04-08PA-MM01	8	Receptacle	34R6544	4.07
● AT04-12PA-MM01	12	Receptacle	34R6560	5.26
● AT06-2S-MM01	2	Plug	34R6624	1.78
● AT06-3S-MM01	3	Plug	34R6628	2.17
● AT06-4S-MM01	4	Plug	34R6632	2.50
● AT06-6S-MM01	6	Plug	34R6636	3.38
● AT06-08SA-MM01	8	Plug	34R6592	5.53
● AT06-12SA-MM01	12	Plug	34R6608	6.04

CONTACTS

Mfg. Part No.	Contact Type	AWG	Stock No.	Price Each 1-99
● AT60-14-0122	Pin	16AWG to 14AWG	14R5602	0.22
● AT60-16-0122	Pin	18AWG to 16AWG	14R5603	0.22
● AT62-14-0122	Socket	16AWG to 14AWG	14R5607	0.43
● AT62-16-0122	Socket	18AWG to 16AWG	14R5608	0.48

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● AW2P	2P Receptacle Wedge	14R5614	0.14
● AW3P	3P Receptacle Wedge	14R5616	0.13
AW4P	4P Receptacle Wedge	14R5618	0.24
● AW6P	6P Receptacle Wedge	14R5620	0.31
● AW8P	8PA Receptacle Wedge	14R5622	0.36
● AW12P	12PA Receptacle Wedge	14R5612	0.36
● AW2S	2S Plug Wedge	14R5615	0.17
● AW3S	3S Plug Wedge	14R5617	0.17
● AW4S	4S Plug Wedge	14R5619	0.29
● AW6S	6S Plug Wedge	14R5621	0.34
● AW8S	8SA Plug Wedge	14R5623	0.23
● AW12S	12SA Plug Wedge	14R5613	0.36
● A114017	Blank Sealing Plug	14R5624	0.11

(152507)

AT LED SERIES CONNECTORS

NEW **Amphenol** SINESYSTEMS

Features
- Field Serviceable
- Cost-effective
- Quick diagnosis reduces troubleshooting time
- Environmentally-sealed for harsh environments
- Plug and Play - assembled the same as a standard connector

AT Series™ connectors with LED are a high-performance, cost-effective solution specifically designed for heavy duty applications, while still maintaining the strengths of the AT Series™ product line. The connector design incorporates an integral latching system that ensures a definitive electrical and mechanical connection. Connector housings are manufactured with a thermoplastic material that is not only durable, but has excellent UV resistance, dielectric/mechanical properties and environmentally RoHS compliant. The sealing system is comprised of an internal and rear silicone, multi-sealing perimeter against environmental ingress. The LEDs are available in both 12V (grey) and 24V (black). Contacts are derived from quality copper alloy to ensure an electrically-reliable connection. AT Series™ connectors are compatible with other existing standard products industry-wide.

PLUG HOUSINGS*

Mfg. Part No.	No. of Positions	Voltage (V)	Color	Stock No.	Price Each 1-9
AT06-2S-LED1201	2	12	Grey	08X7028	7.21
AT06-2S-LED2401	2	24	Black	08X7030	7.21
PLUG KITS (INCLUDE WEDGELOCK & CONTACTS)					
AT06-2S-LED12K1	2	12	Grey	08X7027	11.33
AT06-2S-LED24K1	2	24	Black	08X7029	11.33

WEDGELOCKS (REQUIRED AT06-2S-LED1201 & AT06-2S-LED2401)

Mfg. Part No.	No. of Positions	Color	Color	Stock No.	Price Each 1-24
AW2S-LED	2	...	Black	08X7031	0.28

CONTACTS

Mfg. Part No.	Gender	Wire Size	Plating	Stock No.	Price Each 1-24
AT60-202-16141	Pin	18-16AWG	Nickel	14R5605	0.48
AT62-201-16141	Socket	18-16AWG	Nickel	14R5610	0.87

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24
AW2S-LED	WEDGELOCK, AT06-2S-LED1201/2401 CONN	08X7031	0.28

*Wedgelock required for both AT06-2S-LED1201 and AT06-2S-LED2401
(211521)

ATM SERIES™ CONNECTORS

NEW **Amphenol** SINESYSTEMS

Features
- Current Capacity: Size 20, 7.5A (max)
- Wire Range: Size 20 contacts will accept wire ranges of 16 thru 22AWG
- Temperature: Operating temperature range: -55°C to +125°C at rated current

ATM Series™ connectors are a high-performance, cost-effective solution specifically designed for smaller AWG applications, while still maintaining the strengths of the AT Series™ product line. The connector design incorporates an integral latching system that ensures a definitive electrical and mechanical connection. Connector housings are manufactured with a thermoplastic material that is not only durable, but has excellent UV resistance, dielectric/mechanical properties and environmentally RoHS compliant. The sealing system is comprised of an internal and rear silicone, multi-sealing perimeter against environmental ingress. Contacts are derived from quality copper alloy to ensure an electrically-reliable connection. ATM Series™ connectors are compatible with other existing standard products industry-wide.

Mfg. Part No.	Gender	No. of Positions	Stock No.	Price Each 1-24
ATM04-2P	Receptacle	2	66W3156	1.39
ATM04-3P	Receptacle	3	66W3157	1.57
ATM04-4P	Receptacle	4	66W3158	1.69
ATM04-6P	Receptacle	6	66W3159	2.11
ATM04-08PA	Receptacle	8	66W3154	2.95
● ATM04-12PA	Receptacle	12	66W3155	4.04
ATM06-2S	Plug	2	66W3162	0.76
ATM06-3S	Plug	3	66W3163	1.08
ATM06-4S	Plug	4	66W3164	1.18
● ATM06-6S	Plug	6	66W3165	1.62
● ATM06-08SA	Plug	8	66W3160	1.82
ATM06-12SA	Plug	12	66W3161	2.85

➤CONTINUED➤

ATM SERIES™ CONNECTORS (CONT.)

WEDGELOCKS (REQUIRED FOR ALL RECEPTACLES)

Mfg. Part No.	Gender	No. of Positions	Stock No.	Price Each 1-24
AWM-2P	Receptacle	2	66W3175	0.11
AWM-2S	Plug	2	66W3176	0.11
AWM-3P	Receptacle	3	66W3177	0.18
AWM-3S	Plug	3	66W3178	0.18
AWM-4P	Receptacle	4	66W3179	0.14
AWM-4S	Plug	4	66W3180	0.14
AWM-6P	Receptacle	6	66W3181	0.18
AWM-6S	Plug	6	66W3182	0.18
● AWM-8P	Receptacle	8	66W3183	0.21
● AWM-8S	Plug	8	66W3184	0.21
AWM-12P	Receptacle	12	66W3173	0.35
AWM-12S	Plug	12	66W3174	0.35

CONTACTS

Mfg. Part No.	Gender	Wire Size	Plating	Stock No.	Price Each 1-99
● AT60-20-0122	Pin	22-16AWG	Nickel	66W3167	0.12
AT60-202-20141	Pin	22-20AWG	Nickel	66W3168	0.28
AT60-202-2031	Pin	22-20AWG	Gold	66W3169	0.42
AT62-20-0122	Socket	22-16AWG	Nickel	66W3170	0.30
AT62-201-20141	Socket	22-20AWG	Nickel	66W3171	0.68
AT62-201-2031	Socket	22-20AWG	Gold	66W3172	0.97

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● AT13-204-2005	SEALING PLUG, SIZE 20, WHITE	66W3166	0.14

(211426)

0.165″ (4.20) MINI-FIT JR.™ PIN AND SOCKET DUAL ROW VERTICAL HEADERS

RoHS Compliant Available

molex

TÜV Rheinland

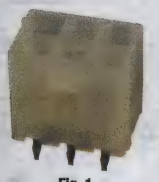


Fig. 1

Fig. 2

- Voltage Rating: 600V
- Current: 9.0A max.
- Contact Resistance: 10 mΩ min.
- Dielectric Withstanding Voltage: 1500VAC
- Insulation Resistance: 1000 mΩ min.
- Operating Temperature: -40°C to +105°C

Mini-Fit Jr.™ series can handle high current applications despite its small size. Positive lock. Audible "clicks" confirm correct contact insertion and correct mating of housing. Contact: brass or phosphor bronze. Mates with **5557 series** dual receptacles; *order separately on pages 897-898.*

5566 SERIES VERTICAL HEADERS WITHOUT DRAIN HOLES, 94V-2 — FIG. 1

Mfg. Part No.	Circuits	Plating	Stock No.	Price Each 1-9
● 39-28-1023	2	Tin	38C9737	0.92
● 39-28-1043	4	Tin	38C9738	0.84
● 39-28-1063	6	Tin	38C9739	1.15
● 39-28-1083	8	Tin	38C9740	1.52
● 39-28-1103	10	Tin	56H8089	1.63
● 39-28-1123	12	Tin	56H8091	1.71
● 39-28-1143	14	Tin	38C9743	2.34
● 39-28-1163	16	Tin	38C9744	2.41
● 39-28-1183	18	Tin	56H8094	2.66
● 39-28-1203	20	Tin	56H8095	2.99
● 39-28-1223	22	Tin	56H8096	2.77
● 39-28-1243	24	Tin	50B8414	3.38
● 39-29-0023	2	Gold	74C5781	1.53
● 39-29-0043	4	Gold	74C1142	1.96
● 39-29-0063	6	Gold	85C1923	2.58
● 39-29-0083	8	Gold	56H8165	3.33
● 39-29-0103	10	Gold	56H8166	4.34
● 39-29-0123	12	Gold	49H7710	5.12
● 39-29-0183	18	Gold	56H8168	6.02
● 39-29-0203	20	Gold	28C7250	7.72

➤CONTINUED➤

0.165″ (4.20) MINI-FIT JR.™ PIN AND SOCKET DUAL ROW VERTICAL HEADERS (CONT.)

5566 SERIES VERTICAL HEADERS WITHOUT DRAIN HOLES, 94V-0 — FIG. 1

Mfg. Part No.	Circuits	Plating	Stock No.	Price Each 1-9
● 39-28-8020	2	Tin	91C5411	1.08
● 39-28-8040	4	Tin	92C1855	1.16
● 39-28-8060	6	Tin	81C8056	1.39
● 39-28-8080	8	Tin	91C5413	1.48
● 39-28-8100	10	Tin	95H7643	1.62
● 39-28-8140	14	Tin	56H8149	2.50
● 39-29-6068	6	Gold	72C3665	2.58
● 39-29-6108	10	Gold	07H6587	4.33
5566 SERIES VERTICAL HEADERS WITH DRAIN HOLES, 94V-2— FIG. 1				
● 39-29-3026	2	Tin	56H8200	0.68
● 39-29-3046	4	Tin	56H8201	0.75
● 39-29-3086	8	Tin	38C9755	1.11
● 39-29-3106	10	Tin	28M9386	1.62
● 39-29-3206	20	Tin	56H8211	2.68
5566 SERIES VERTICAL HEADERS WITH DRAIN HOLES, 94V-0 — FIG. 1				
● 39-31-0020	2	Tin	56H8419	0.69
● 39-31-0028	2	Gold	25H8654	0.94
● 39-31-0048	4	Gold	50H6945	1.62
5566 SERIES VERTICAL HEADERS WITH PEGS, WITHOUT DRAIN HOLES, 94V-2 — FIG. 2				
● 39-29-9043	4	Tin	38C9760	0.85
● 39-29-9063	6	Tin	38C9761	0.93
● 39-29-9103	10	Tin	38C9763	1.45
5566 SERIES VERTICAL HEADERS WITH PEGS, WITHOUT DRAIN HOLES, 94V-0 — FIG. 2				
● 39-29-9027	2	Tin	56H8263	0.72
● 39-29-9047	4	Tin	25M3236	0.89
5566 SERIES VERTICAL HEADERS WITH PEGS, WITH DRAIN HOLES, 94V-2 — FIG. 2				
● 39-29-9022	2	Tin	26H5401	0.60
● 39-29-9162	16	Tin	25M3243	2.11
● 39-29-9202	20	Tin	56H8306	1.71
5566 SERIES VERTICAL HEADERS WITH PEGS, WITH DRAIN HOLES, 94V-0 — FIG. 2				
● 39-28-9028	2	Gold	56H8153	1.23
● 39-28-9068	6	Gold	56H8157	2.65
● 39-28-9108	10	Gold	97C8276	4.04
● 39-28-9248	24	Gold	56H8163	10.27
44206 SERIES VERTICAL HEADERS, 11.90mm (0.469″) LOCKING RAMP, WITH ONE PEG AND DRAIN HOLES, 94V-2				
● 44206-0007	24	Tin	58J9059	0.83

(8514)

0.165″ (4.20) MINI-FIT JR.™ PIN AND SOCKET DUAL ROW HOUSINGS

RoHS Compliant Available

molex

TÜV Rheinland

- Voltage: 600V
- Current: HCS 12.0A max. Standard 9.0A max.
- Contact Resistance: 10 MΩ max.
- Dielectric Withstanding Voltage: 1500V
- Insulation Resistance: 1000 MΩ min.
- Operating Temperature: -40°C to +105°C

Designed for high-current/high-density power and signal applications in wire-to-wire and wire-to-board configurations. Mates with **5566** and **5569 series** dual row headers; *order separateIonline or call.* Receptacles accept **5556** and **44476** series Mini-Fit™ female terminals; plugs accept **5558** and **44478** series Mini-Fit™ male terminals; *both ordered separately; go online or call.*

5557 SERIES RECEPTACLE HOUSINGS — RATED UL94V-2

Mfg. Part No.	No. of Contacts	Stock No.	Price Each 1-9
● 39-01-2020*	2	38C9709	0.31
● 39-01-2040*	4	56H7719	0.35
● 39-01-2060	6	34C7218	0.52
● 39-01-2080	8	38C9716	0.50
● 39-01-2100	10	77C6135	0.53
● 39-01-2120	12	56H7727	0.70
● 39-01-2140	14	77C6121	0.76
● 39-01-2160	16	56H7732	0.87
● 39-01-2180	18	77C6130	0.89
● 39-01-2200	20	56H7737	0.85
● 39-01-2220	22	01H6945	1.32
● 39-01-2240	24	56H7741	1.07
5557 SERIES RECEPTACLE HOUSINGS — RATED UL94V-0			
● 39-01-2025	2	56H7717	0.51
● 39-01-2045	4	56H7721	0.52

➤CONTINUED➤

0.165″ (4.20) MINI-FIT JR.™ PIN AND SOCKET DUAL ROW HOUSINGS (CONT.)

5557 SERIES RECEPTACLE HOUSINGS — RATED UL94V-0

Mfg. Part No.	No. of Contacts	Stock No.	Price Each 1-9
● 39-01-3028	2	56H7747	0.49
● 39-01-2065		38C9715	0.70
● 39-01-2085	8	89C1441	0.73
● 39-01-2105	10	56H7725	0.86
● 39-01-2145	14	18M8063	0.98
● 3901-2165	16	14N5060	1.34
● 39-01-2185	18	18M8065	1.32
● 39-01-2205	20	97C7215	1.49
● 39-01-2225	22	29C9097	1.24
● 39-01-2245	24	56H7742	1.43
5559 SERIES PANEL MOUNT PLUG HOUSINGS, WITH MOUNTING EARS — RATED UL94V-2			
● 39-01-2021	2	56H7716	0.39
● 39-01-2041	4	56H7720	0.44
● 39-01-2061	6	25H7900	0.47
● 3901-2081	8	77C6139	0.64
● 39-01-2121	12	38C9722	0.62
● 39-01-2141	14	38C9725	0.85
● 39-01-2161	16	56H7733	1.01
● 39-01-2181	18	56H7735	0.90
● 39-01-2221	22	01H6944	1.26
● 39-01-2241	24	84C9641	1.30
5559 SERIES PANEL MOUNT PLUG HOUSINGS, WITH MOUNTING EARS — RATED UL94V-0			
● 39-01-2026	2	56H7718	0.54
● 39-01-2046	4	08H1131	0.71
● 39-01-2086	8	56H7724	0.84
● 39-01-2106	10	72C3664	0.89
● 39-01-2126	12	95H7578	0.94
● 39-01-2146	14	28M9379	0.92
● 39-01-2166	16	95H7579	1.15
5559 SERIES FREE-HANGING PLUG HOUSINGS, WITHOUT MOUNTING EARS — RATED UL94V-2			
● 39-01-3023	2	56H7743	0.37
● 39-01-3043	4	56H7749	0.38
● 39-01-3083	8	38C9732	0.59
● 39-01-3123	12	38C9734	0.54
● 39-01-3143	14	38C9735	0.77
5559 SERIES FREE-HANGING PLUG HOUSINGS, WITHOUT MOUNTING EARS — RATED UL94V-0			
● 39-01-3029	2	94C0782	0.57
● 39-01-3089	8	95C0426	0.91

*Not for use with strain relief

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-99
● 15-04-0211	Polarization Key For Receptacle Housings	25H8393	0.29

(8440)

MINI-FIT PLUS HMC (HIGH MATING CYCLE) SERIES CRIMP TERMINALS

RoHS Compliant Available

molex

Terminals used with 5557 Mini-Fit Jr. Receptacles, 30067 Mini-Fit TPA Receptacles, 42474 Mini-Fit MBI Panel Mount Receptacles & 44516 Mini-Fit BMI Panel Mount Slide-N-Lock Receptacles; *go online or call.*

MINI-FIT PLUS HMC FEMALE CRIMP TERMINALS

Mfg. Part No.	AWG	Plating	Stock No.	Price Each 1-9	Price Each 10-99
● 46018-1541	20AWG to 18AWG	Gold	73T8127	0.58	0.44
● 46018-2541	24AWG to 22AWG	Gold	73T8128	0.60	0.45
● 46018-3541	16AWG	Gold	73T8129	0.58	0.52

HAND CRIMP TOOL

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● 63819-0900	Mini-Fit Jr. Crimp Terminals, 24-16 AWG	97M9440	245.45

(198148)

0.165″ (4.20) MINI-FIT™ SINGLE ROW PIN AND SOCKET HOUSINGS

RoHS Compliant Available

molex

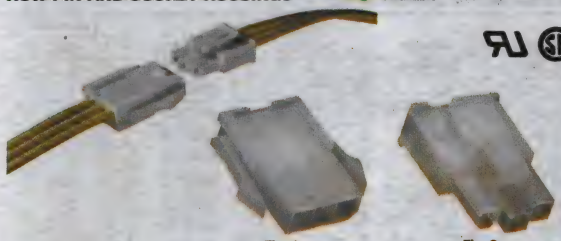


Fig. 1 Fig. 2

- Fully Isolated Terminals to Protect Contacts from Damage
- Uses Standard Mini-Fit™ Series Terminals
- Low Profile to Accommodate Height Constraints (5557 Series)
- Wire-to-Plug for Panel Mount or Free-Hanging Applications (5559 Series)
- Positive Housing Locks to Mate with Mini-Fit, Jr.™ Receptacle (5559 Series)

Designed for high-current/high-density power and signal applications in wire-to-wire and wire-to-board configurations. Volt rating: 600. Contact resistance: 10 milliohms. Operating temperature: 40°C to +105°C. **5557 series** receptacle housings mate with **5559 series** single-row connectors, *ordered separately below*, and **5566** and **5569 series** single-row connectors ordered separately; *go online or call*. Receptacles accept Mini-Fit™ **5556 series** terminals and plugs accept Mini-Fit™ **5558 series** terminals; *both ordered separately on pages 898-899*. UL recognized, CSA certified, TUV approved.

5559 SERIES SINGLE-ROW PANEL MOUNT PLUG HOUSINGS, RATED UL94V-2

Mfg. Part No.	Fig.	Circuits	Stock No.	Price Each 1-9
● 39-01-4032	1	3	03C3747	0.32
5559 SERIES SINGLE-ROW FREE HANGING PLUG HOUSINGS, RATED UL94V-2				
● 39-01-4056	1	5	91B8739	0.54
5559 SERIES SINGLE-ROW FREE HANGING PLUG HOUSINGS, RATED UL94V-0				
● 39-01-4057	1	5	84C8970	0.58
5557 SERIES SINGLE-ROW RECEPTACLE HOUSINGS, RATED UL94V-2				
● 39-01-4030	2	3	01H9079	0.38
● 39-01-4040	2	4	94C0792	0.46
5557 SERIES SINGLE-ROW RECEPTACLE HOUSINGS, RATED UL94V-0				
● 39-01-4031	2	3	56H7764	0.58
● 39-01-4041	2	4	56H7768	0.56

ACCESSORIES

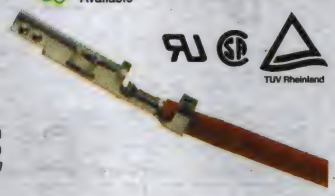
Mfg. Part No.	Description	Stock No.	Price Each 1-99
● 15-04-0211	Polarization Key For Receptacle Housings	25H8393	0.29

(75433)

0.165″ (4.20) MINI-FIT JR.™ CRIMP TERMINALS KIT

RoHS Compliant Available

molex



- Voltage: 600V
- Current: HCS 12.0A max. Standard 9.0A max.
- Contact Resistance: 10mΩ max.
- Dielectric Withstanding Voltage: 1500V
- Insulation Resistance: 1000 MΩ min.
- Operating Temperature: -40 to +105°C

44476-5556 series crimp terminals can be used with **5557 series** housings and **44478-5558 series** crimp terminals can be used with **5559 series** housings; *both ordered separately on pages 897-898*.

HCS 44476, 44478, 44485 SERIES CRIMP TERMINALS

Mfg. Part No.	Form	Wire Size	Material	Plating	Pkg.	Stock No.	Price Each 1-99
● 44476-3112	Socket	16AWG	Copper Alloy	Tin	Bulk	57H1453	0.24
● 44478-3112	Pin	16AWG	Copper Alloy	Tin	Bulk	57H1460	0.28
● 44478-3111	Pin	16AWG	Copper Alloy	Tin	Cut Tape	57H1459	0.36
● 44476-1112	Socket	20AWG to 18AWG	Copper Alloy	Tin	Bulk	57H1450	0.28
● 44478-1112	Pin	20AWG to 18AWG	Copper Alloy	Tin	Bulk	57H1456	0.31
● 44476-1111	Socket	20AWG to 18AWG	Copper Alloy	Tin	Cut Tape	57H1449	0.14
● 44478-1111	Pin	20AWG to 18AWG	Copper Alloy	Tin	Cut Tape	57H1455	0.32
● 44485-1212	Socket	24AWG to 18AWG	Phosphor Bronze	Gold	Bulk	25H8398	0.81
● 44485-1211	Socket	24AWG to 18AWG	Phosphor Bronze	Gold	Cut Tape	73C3488	0.86
STANDARD 5556-5558 SERIES CRIMP TERMINALS							
● 39-00-0078	Socket	16AWG	Brass	Tin	Bulk	01E9725	0.19
● 39-00-0082	Pin	16AWG	Brass	Tin	Bulk	49H7874	0.29
● 39-00-0077	Socket	16AWG	Brass	Tin	Cut Tape	56H7617	0.12
● 39-00-0081	Pin	16AWG	Brass	Tin	Cut Tape	56H7618	0.11
● 39-00-0090	Socket	16AWG	Brass	Gold	Bulk	07H1991	0.66
● 39-00-0089	Socket	16AWG	Brass	Gold	Cut Tape	94C5577	0.37
● 39-00-0080	Socket	16AWG	Phosphor Bronze	Tin	Bulk	32H4721	0.19
● 39-00-0079	Socket	16AWG	Phosphor Bronze	Tin	Cut Tape	02H5653	0.54
● 39-00-0083	Pin	16AWG	Phosphor Bronze	Tin	Cut Tape	56H7619	0.20
● 39-00-0186	Socket	16AWG	Phosphor Bronze	Gold	Bulk	92C9008	0.69

CONTINUED

0.165″ (4.20) MINI-FIT JR.™ CRIMP TERMINALS KIT (CONT.)

STANDARD 5556-5558 SERIES CRIMP TERMINALS

Mfg. Part No.	Form	Wire Size	Material	Plating	Pkg.	Stock No.	Price Each 1-99
39-00-0185	Socket	16AWG	Phosphor Bronze	Gold	Cut Tape	01H9230	0.68
39-00-0039	Socket	24AWG to 18AWG	Brass	Tin	Bulk	04H0439	0.45
39-00-0121	Pin	24AWG to 18AWG	Brass	Tin	Bulk	92C8355	0.12
39-00-0041	Pin	24AWG to 18AWG	Brass*	Tin	Bulk	56H7600	0.38
39-00-0038	Socket	24AWG to 18AWG	Brass	Tin	Cut Tape	90B6898	0.04
39-00-0208	Socket	24AWG to 18AWG	Brass	Tin	Bulk	27M1660	0.19
39-00-0040	Pin	24AWG to 18AWG	Brass	Tin	Cut Tape	88C9490	0.12
39-00-0429	Socket	24AWG to 18AWG	Brass	Gold	Bulk	05N1203	0.63
39-00-0428	Socket	24AWG to 18AWG	Brass	Gold	Cut Tape	63M5037	0.60
39-00-0430	Pin	24AWG to 18AWG	Brass	Gold	Cut Tape	08P0239	0.73
39-00-0060	Socket	24AWG to 18AWG	Phosphor Bronze	Tin	Bulk	13H6353	0.22
39-00-0062	Pin	24AWG to 18AWG	Phosphor Bronze	Tin	Bulk	56H7609	0.22
39-00-0059	Socket	24AWG to 18AWG	Phosphor Bronze	Tin	Cut Tape	02H5650	0.18
39-00-0061	Pin	24AWG to 18AWG	Phosphor Bronze	Tin	Cut Tape	25H7912	0.52
39-00-0214	Socket	24AWG to 18AWG	Phosphor Bronze	Tin/Nickel	Bulk	56H7662	0.15
39-00-0213	Socket	24AWG to 18AWG	Phosphor Bronze	Tin/Nickel	Cut Tape	84C9647	0.31
39-00-0182	Socket	24AWG to 18AWG	Phosphor Bronze	Gold	Bulk	56H7650	0.73
39-00-0220	Pin	24AWG to 18AWG	Phosphor Bronze	Gold	Bulk	81C8276	0.67
39-00-0219	Pin	24AWG to 18AWG	Phosphor Bronze	Gold	Cut Tape	88C1000	0.86
39-00-0047	Socket	28AWG to 22AWG	Brass	Tin	Bulk	56H7603	0.52
39-00-0049	Pin	28AWG to 22AWG	Brass	Tin	Bulk	56H7605	0.18
39-00-0046	Socket	28AWG to 22AWG	Brass	Tin	Cut Tape	56H7602	0.12
39-00-0048	Pin	28AWG to 22AWG	Brass	Tin	Cut Tape	56H7604	0.12
39-00-0066	Socket	28AWG to 22AWG	Phosphor Bronze	Tin	Bulk	26H6016	0.15
39-00-0065	Socket	28AWG to 22AWG	Phosphor Bronze	Tin	Cut Tape	25M3190	0.21
39-00-0184	Socket	28AWG to 22AWG	Phosphor Bronze	Gold	Bulk	58R0322	0.70
39-00-0183	Socket	28AWG to 22AWG	Phosphor Bronze	Gold	Cut Tape	35M3743	0.77
39-00-0221	Pin	28AWG to 22AWG	Phosphor Bronze	Gold	Cut Tape	95C0427	0.84

*Copper plated

MINI-FIT JR.™ TOOLING

Mfg. Part No.	Description	Stock No.	Price Each 1-4
11-03-0044	Extraction Tool for 18-24 AWG Contacts	94F9674	17.58
63819-1000	Crimp Tool for Mini-Fit Jr. Crimp Contacts, 22-28 AWG	12N0977	251.65

MINI-FIT, JR.™ WIRE-TO-WIRE KIT WM-39WW

Contains crimp housing receptacles and plugs in 2 to 16 circuits. Both types are provided in each of the following quantities: five 2-, 4-, 6-, 8-, 10-cir., four 12-cir., three 14-, 16-cir. 100 female and 100 male 18-24 AWG crimp terminals are included. Rated: 600V.

Mfg. Part No.	Stock No.	Price Each 1-4
76650-0017	28M9320	36.76

(10426)

0.165″ (4.20) MINI-FIT BMI™ CONNECTORS

RoHS Compliant Available

molex

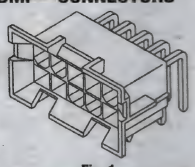


Fig. 1

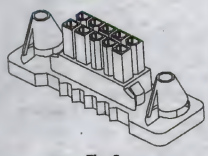


Fig. 2

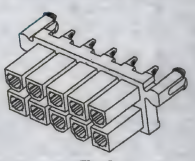
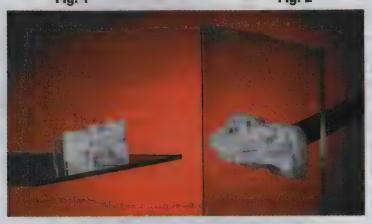


Fig. 3



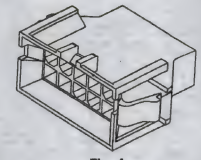


Fig. 4

Voltage: 600V. Dielectric withstanding voltage: 1500V. Current: 9.0A. Contact resistance: 10mΩ max. Insulation resistance: 1000MΩ min. Housing: 6/6 nylon, UL 94V-2 or 94V-0. Contacts: brass. Plating: tin. Operating temperature: -40°C to +105°C.

42474 SERIES DUAL-ROW RECEPTACLES WITH PANEL MOUNTING EARS, UL94V-2 - FIG. 2

Mate with **42440** headers, or **42475 series** plugs, *ordered separately above and below.* For use with **5556 series** terminals, *ordered on pages 898-899.*

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9
15-06-0040	4	55H0188	0.69
15-06-0100	10	38C9001	0.96
15-06-0140	14	38C9003	0.88

➤CONTINUED➤

0.165″ (4.20) MINI-FIT BMI™ CONNECTORS (CONT.)

42385 SERIES VERTICAL DUAL-ROW RECEPTACLE HEADERS, UL94V-2 - FIG. 3

Mate with **42475 series** plugs, *ordered separately below,* or **42440 series** headers, *ordered separately above and below.*

Mfg. Part No.	Circuits	Plating	Stock No.	Price Each 1-9
15-24-7100	10	Tin	38C9013	2.17
15-24-7240	24	Tin	55H0306	4.34
42385 SERIES VERTICAL DUAL-ROW RECEPTACLE HEADERS, UL94V-0 - FIG. 3				
15-24-7103	10	Gold	55H0292	4.68
15-24-7243	24	Gold	55H0309	11.09

42475 SERIES DUAL-ROW PLUGS WITH PANEL MOUNTING EARS, UL94V-2 - FIG. 4

Blind mating plugs feature positive housing locks to mate with Mini-Fit Jr. connectors. Fully isolated terminals protect contacts from damage. Mate with **42385** and **42474 series** receptacles, *ordered separately above*; **5557 series** receptacles, *ordered on pages 897-898*; or **5558 series** terminals, *ordered on pages 898-899.*

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9
15-06-0045	4	38C8998	0.62
15-06-0065	6	38C9000	0.72
15-06-0085	8	55H0195	0.74
15-06-0105	10	55H0197	0.72
15-06-0145	14	15P4419	0.92

ACCESSORIES

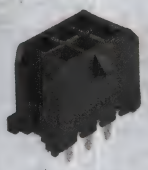
Mfg. Part No.	Description	Stock No.	Price Each 1-99
15-04-0211	Polarization Key For Receptacle Housings	25H8393	0.29

(69860)

0.118″ (3.00) MICRO-FIT 3.0™ VERTICAL HEADERS

RoHS Compliant Available

molex



Kinked PC Tails

Vertical SMT with Solder Tab

Vertical SMT with Solderable Retention Clip

- Dielectric Withstanding Voltage: 1500VAC
- Insulating Resistance: 1000mΩ Min.
- High-Temperature LCP Housing, Rated UL94V-0
- Current: 5A
- Voltage: 250V
- Temperature Rating: –40°C to +105°C

Surface mount or surface mount compatible, 3.0mm center shrouded locking headers are available in vertical and right-angle configurations. Kinked solder tails enhance PC board retention. Contact: brass. Plating: tin or gold. Contact resistance: 10mΩ max. Mate with **43645 series** or **43025 series** receptacles, *ordered separately on page 901.*

43650 SERIES SNGLE ROW VERTICAL SURFACE MOUNT COMPATIBLE HEADERS, KINKED PC TAILS WITH PEGS

Mfg. Part No.	Circuits	Plating	Application*	Stock No.	Price Each 1-9	Price Each 10-99
43650-0215	2	Tin	SMC	57H0305	0.83	0.62
43650-0315	3	Tin	SMC	57H0332	0.99	0.79
43650-0415	4	Tin	SMC	95C1789	0.80	0.63
43650-0515	5	Tin	SMC	57H0384	1.28	1.02
43650-0615	6	Tin	SMC	18M8115	1.74	1.37
43650-0915	9	Tin	SMC	57H0479	1.84	1.66
43650-1015	10	Tin	SMC	57H0498	2.37	2.15
43650-1215	12	Tin	SMC	57H0534	2.72	2.46
43650-0216	2	15μ″ Gold	SMC	19M1087	0.97	0.77
43650-0316	3	15μ″ Gold	SMC	57H0333	1.02	0.81
43650-0416	4	15μ″ Gold	SMC	53H6709	1.29	1.02
43650-0516	5	15μ″ Gold	SMC	18M8113	1.63	1.33
43650-0616	6	15μ″ Gold	SMC	71H3419	1.83	1.50
43650-0716	7	15μ″ Gold	SMC	01J8232	1.93	1.75
43650-0816	8	15μ″ Gold	SMC	57H0460	1.87	1.52
43650-1016	10	15μ″ Gold	SMC	57H0499	2.97	2.70
43650-1216	12	15μ″ Gold	SMC	57H0535	3.42	3.10
43650-0217	2	30μ″ Gold	SMC	57H0307	1.09	0.99
43650-0317	3	30μ″ Gold	SMC	57H0334	1.29	1.17
43650-0417	4	30μ″ Gold	SMC	57H0359	1.72	1.56

43650 SERIES SINGLE ROW VERTICAL SURFACE MOUNT COMPATIBLE HEADERS, STRAIGHT PC TAILS WITH PEGS

43650-0227	2	Tin	SMC	57H0317	0.69	0.63
43650-0427	4	Tin	SMC	57H0369	1.10	1.00
43650-0527	5	Tin	SMC	03H3268	1.24	1.13

43650 SERIES SINGLE ROW, VERTICAL SURFACE MOUNT COMPATIBLE HEADERS, KINKED PC TAILS WITH SOLDERABLE RETENTION CLIP

43650-0218	2	Tin	SMC	57H0308	0.60	0.55
43650-0318	3	Tin	SMC	57H0335	1.09	0.99

➤CONTINUED➤

0.118″ (3.00) MICRO-FIT 3.0™ VERTICAL HEADERS (CONT.)

43650 SERIES SINGLE ROW, VERTICAL SURFACE MOUNT COMPATIBLE HEADERS, KINKED PC TAILS WITH SOLDERABLE RETENTION CLIP

Mfg. Part No.	Circuits	Plating	Application*	Stock No.	Price Each 1-9	Price Each 10-99
43650-0518	5	Tin	SMC	57H0386	1.41	1.28
43650-0618	6	Tin	SMC	57H0412	1.56	1.41
43650-0219	2	15μ″ Gold	SMC	57H0309	1.01	0.92
43650-0319	3	15μ″ Gold	SMC	57H0336	1.18	1.07
43650-0419	4	15μ″ Gold	SMC	57H0361	1.54	1.40
43650-0320	3	30μ″ Gold	SMC	57H0337	1.44	1.31

43650 SERIES SINGLE ROW, VERTICAL SURFACE MOUNT HEADERS WITH SOLDERABLE RETENTION CLIP

43650-0221	2	Tin	SMT	57H0311	1.02	1.00
43650-0422	4	15μ″ Gold	SMT	57H0364	1.34	1.32
43650-0423	4	30μ″ Gold	SMT	57H0365	1.54	1.51

43650 SERIES SINGLE ROW, VERTICAL SURFACE MOUNT HEADERS WITH SOLDER TAB

● 43650-0224	2	Tin	SMT	57H0314	2.52	2.13
● 43650-0524	5	Tin	SMT	57H0392	2.85	2.28
● 43650-0624	6	Tin	SMT	57H0418	3.03	2.55
● 43650-0325	3	15μ″ Gold	SMT	57H0342	2.79	1.88
● 43650-0425	4	15μ″ Gold	SMT	57H0367	2.01	1.93
43650-0525	5	15μ″ Gold	SMT	57H0393	1.54	1.52
● 43650-0625	6	15μ″ Gold	SMT	57H0419	3.09	2.98
43650-0725	7	15μ″ Gold	SMT	57H0444	1.91	1.81
43650-0825	8	15μ″ Gold	SMT	57H0467	2.21	2.10
43650-1025	10	15μ″ Gold	SMT	57H0506	2.27	2.16
43650-0326	3	30μ″ Gold	SMT	57H0343	1.51	1.49

43045 SERIES DUAL ROW, VERTICAL SURFACE MOUNT COMPATIBLE HEADERS, KINKED PC TAILS WITH PEGS

Mfg. Part No.	Circuits	Plating	Application*	Stock No.	Price Each 1-9	Price Each 10-99
● 43045-0212	2	Tin	SMC	56H9438	0.91	0.68
● 43045-0412	4	Tin	SMC	97C4999	1.05	0.83
● 43045-0612	6	Tin	SMC	97C5002	1.66	1.27
● 43045-0812	8	Tin	SMC	89C1127	1.70	1.38
● 43045-1012	10	Tin	SMC	38C9835	1.98	1.61
● 43045-1212	12	Tin	SMC	56H9572	2.48	2.02
● 43045-1412	14	Tin	SMC	53R1246	2.86	2.40
● 43045-1612	16	Tin	SMC	85C2148	1.83	1.51
● 43045-1812	18	Tin	SMC	09H2224	3.23	2.68
● 43045-2212	22	Tin	SMC	97C5009	3.34	2.82
● 43045-2412	24	Tin	SMC	06R1674	3.85	3.79
● 43045-0213	2	15μ″ Gold	SMC	25M3692	0.93	0.74
● 43045-0413	4	15μ″ Gold	SMC	73K3114	1.62	1.28
● 43045-0613	6	15μ″ Gold	SMC	09H1482	1.19	0.99
● 43045-0813	8	15μ″ Gold	SMC	65H7801	2.12	1.72
● 43045-1013	10	15μ″ Gold	SMC	25M3697	2.73	2.22
● 43045-1413	14	15μ″ Gold	SMC	56H9598	4.93	3.01
● 43045-1613	16	15μ″ Gold	SMC	56H9623	2.76	2.32
● 43045-1813	18	15μ″ Gold	SMC	56H9648	3.61	2.98
43045-2013	20	15μ″ Gold	SMC	56H9675	5.61	5.09
43045-2213	22	15μ″ Gold	SMC	56H9701	6.17	5.59
43045-2413	24	15μ″ Gold	SMC	56H9725	6.74	6.11
● 43045-0214	2	30μ″ Gold	SMC	18M8097	0.99	0.88
● 43045-0414	4	30μ″ Gold	SMC	56H9468	1.73	1.41
● 43045-0614	6	30μ″ Gold	SMC	56H9496	2.16	1.76
● 43045-0814	8	30μ″ Gold	SMC	56H9522	2.14	1.78
● 43045-1014	10	30μ″ Gold	SMC	56H9547	3.35	2.80
● 43045-1214	12	30μ″ Gold	SMC	56H9574	2.77	2.32
● 43045-1414	14	30μ″ Gold	SMC	56H9599	1.98	1.67
● 43045-1614	16	30μ″ Gold	SMC	56H9624	3.48	2.93
● 43045-1814	18	30μ″ Gold	SMC	56H9649	7.04	6.04
● 43045-2214	22	30μ″ Gold	SMC	56H9702	8.93	7.93
● 43045-2414	24	30μ″ Gold	SMC	56H9726	9.39	8.29

43045 SERIES DUAL ROW, VERTICAL SURFACE MOUNT COMPATIBLE HEADERS, STRAIGHT PC TAILS WITH PEGS

43045-0427	4	Tin	SMC	56H9480	1.28	1.16
43045-0627	6	Tin	SMC	56H9509	1.62	1.47
43045-0827	8	Tin	SMC	56H9534	1.97	1.78
43045-1027	10	Tin	SMC	56H9560	2.30	2.09
43045-1427	14	Tin	SMC	56H9612	3.59	3.25
43045-1627	16	Tin	SMC	56H9635	3.59	3.26
43045-1827	18	Tin	SMC	56H9662	4.49	4.07
43045-2027	20	Tin	SMC	56H9689	4.99	4.52
43045-2427	24	Tin	SMC	56H9739	5.39	4.88
43045-0428	4	15μ″ Gold	SMC	56H9481	1.46	1.32

CONTINUED

0.118″ (3.00) MICRO-FIT 3.0™ VERTICAL HEADERS (CONT.)

43045 SERIES DUAL ROW, VERTICAL SURFACE MOUNT COMPATIBLE HEADERS, STRAIGHT PC TAILS WITH PEGS

Mfg. Part No.	Circuits	Plating	Application*	Stock No.	Price Each 1-9	Price Each 10-99
43045-1028	10	15μ″ Gold	SMC	56H9561	2.63	2.38
43045-0829	8	30μ″ Gold	SMC	56H9535	2.78	2.52

43045 SERIES DUAL ROW, VERTICAL SURFACE MOUNT COMPATIBLE HEADERS WITH SOLDERABLE RETENTION CLIP

● 43045-0224	2	Tin	SMC	56H9450	0.60	0.54
● 43045-0424	4	Tin	SMC	63M5039	1.77	1.39
● 43045-0624	6	Tin	SMC	56H9506	1.44	1.26
43045-0824	8	Tin	SMC	56H9531	1.85	1.68
43045-1024	10	Tin	SMC	56H9557	2.14	1.94
43045-1224	12	Tin	SMC	56H9584	2.22	2.01
43045-1424	14	Tin	SMC	56H9609	3.28	2.97
43045-1624	16	Tin	SMC	56H9632	3.62	3.29
43045-0225	2	15μ″ Gold	SMC	56H9451	1.01	0.91
43045-0425	4	15μ″ Gold	SMC	56H9478	1.54	1.39
● 43045-0625	6	15μ″ Gold	SMC	56H9507	1.83	1.40
43045-0825	8	15μ″ Gold	SMC	56H9532	2.27	2.06
43045-1025	10	15μ″ Gold	SMC	56H9558	2.64	2.40
43045-1225	12	15μ″ Gold	SMC	56H9585	3.00	2.72
43045-0426	4	30μ″ Gold	SMC	56H9479	1.89	1.71
43045-0626	6	30μ″ Gold	SMC	56H9508	2.35	2.13
43045-0826	8	30μ″ Gold	SMC	56H9533	2.82	2.56
43045-1026	10	30μ″ Gold	SMC	56H9559	3.28	2.98
43045-1226	12	30μ″ Gold	SMC	26H7692	3.74	3.39

43045 SERIES DUAL ROW, VERTICAL SURFACE MOUNT HEADERS WITH SOLDERABLE RETENTION CLIP

43045-0215	2	Tin	SMT	56H9441	0.88	0.87
● 43045-0415	4	Tin	SMT	56H9469	2.42	1.63
43045-0615	6	Tin	SMT	56H9497	1.35	1.33
43045-0815	8	Tin	SMT	56H9523	1.35	1.33
43045-1015	10	Tin	SMT	56H9548	1.71	1.69
43045-1415	14	Tin	SMT	56H9600	1.78	1.75
43045-0816	8	15μ″ Gold	SMT	56H9524	1.55	1.53
43045-1216	12	15μ″ Gold	SMT	56H9576	1.91	1.88
43045-1416	14	15μ″ Gold	SMT	56H9601	2.09	2.06
43045-1217	12	30μ″ Gold	SMT	56H9577	2.61	2.57

43045 SERIES DUAL ROW, VERTICAL SURFACE MOUNT HEADERS WITH SOLDER TAB

● 43045-0218	2	Tin	SMT	28M9399	2.03	1.65
● 43045-0418	4	Tin	SMT	56H9472	3.42	2.77
● 43045-0818	8	Tin	SMT	07C8729	3.02	2.35
● 43045-1418	14	Tin	SMT	56H9603	3.94	2.90
● 43045-1618	16	Tin	SMT	56H9627	4.56	3.83
43045-1818	18	Tin	SMT	56H9653	2.50	2.46
● 43045-2018	20	Tin	SMT	56H9680	6.22	4.96
43045-2418	24	Tin	SMT	56H9730	3.10	3.06
● 43045-0219	2	15μ″ Gold	SMT	56H9445	2.52	1.70
● 43045-0419	4	15μ″ Gold	SMT	25M3694	2.22	2.05
● 43045-0619	6	15μ″ Gold	SMT	56H9501	2.96	2.63
● 43045-0819	8	15μ″ Gold	SMT	56H9527	3.90	3.22
● 43045-1019	10	15μ″ Gold	SMT	56H9552	4.28	3.54
● 43045-1219	12	15μ″ Gold	SMT	56H9579	4.86	3.53
● 43045-1419	14	15μ″ Gold	SMT	56H9604	4.76	3.99
● 43045-1619	16	15μ″ Gold	SMT	02H0529	5.76	4.23
43045-1819	18	15μ″ Gold	SMT	56H9654	2.57	2.53
43045-2019	20	15μ″ Gold	SMT	56H9681	3.89	3.69
43045-2219	22	15μ″ Gold	SMT	56H9707	4.06	3.87
43045-2419	24	15μ″ Gold	SMT	56H9731	4.36	4.16
● 43045-0220	2	30μ″ Gold	SMT	71H3388	2.50	1.90
● 43045-0420	4	30μ″ Gold	SMT	33C4186	2.86	2.41
● 43045-0620	6	30μ″ Gold	SMT	71H3394	3.99	3.35
● 43045-1020	10	30μ″ Gold	SMT	71H3400	4.73	4.07
43045-1620	16	30μ″ Gold	SMT	56H9628	3.17	3.12

*SMT = Surface mount, SMC = Surface mount compatible
(16740)

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(212564)

0.118″ (3.00) MICRO-FIT 3.0™ PLUG HOUSINGS

RoHS Compliant Available

molex

Dual Row, Free Hanging

Dual Row, Panel Mount

43640 SERIES SINGLE-ROW PLUGS, WITH PANEL MOUNT EARS

Integral pull tabs for ease in unmating. Housing: Polyester, UL 94V-0. Mate with **43645 series** receptacles. For use with **43031 series** terminals.

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9
43640-0200	2	57H0260	0.44
43640-0300	3	57H0261	0.51
43640-0400	4	57H0263	0.47
43640-0500	5	57H0265	0.46
43640-0600	6	38C9848	0.59
43640 SERIES SINGLE-ROW PLUGS, FREE HANGING			
43640-0201	2	95C2057	0.44
43640-0301	3	57H0262	0.47
43640-0401	4	57H0264	0.52
43640-0501	5	57H0266	0.46
43640-0601	6	18M8104	0.59

43020 SERIES DUAL-ROW PLUGS, WITH PANEL MOUNT EARS

Fully isolated contacts. Fully polarized to mating receptacle. UL File No. E29179. CSA File No: LR19980. TÜV License No: R95107. Mate with **43025 series** receptacles. Panel Mount and Free Hanging styles. For use with **43031 series** terminals.

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9
43020-0200	2	01H6853	0.42
43020-0400	4	01H6823	0.56
43020-0600	6	56H9382	0.49
43020-0800	8	56H9384	0.67
43020-1000	10	18M8093	0.88
43020-1200	12	38C9812	1.04
43020-1400	14	25M3671	0.88
43020-1600	16	25M3673	1.15
43020-1800	18	25M3675	1.13
43020-2000	20	25M3678	1.26
43020-2400	24	25M3683	1.40
43020 SERIES DUAL-ROW PLUGS, FREE HANGING			
43020-0201	2	56H9380	0.39
43020-0601	6	56H9383	0.49
43020-0801	8	56H9385	0.49
43020-1001	10	95C0735	0.67
43020-1201	12	18M8094	0.91
43020-1401	14	56H9389	0.78
43020-1601	16	56H9391	0.90
43020-2401	24	56H9398	1.35

44242 SERIES DUAL-ROW TEST PLUGS

Test plug can be used for testing single and dual row connectors. For single row use a test plug with twice the number of circuits as the connector being tested.

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9
44242-0001	4	57H1097	48.64
44242-0002	6	57H1098	72.96
44242-0003	8	57H1099	97.27
44242-0004	10	57H1100	121.59
44242-0006	14	57H1102	170.23

(69946)

0.118″ (3.00) MICRO-FIT 3.0™ RECEPTACLE HOUSINGS

RoHS Compliant Available

molex

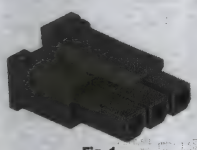


Fig. 1

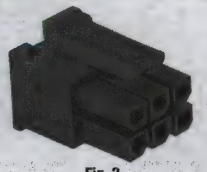


Fig. 2

Designed on a 3.0mm grid for rugged wire-to-wire applications. The positive latch secures the housing to the header. Fully isolated terminal silos reduce arcing potential. Rated UL94V-0. Integral pull tabs for ease in unmating. **43025 series** mates with **43020 series** plugs, *ordered on this page*, and **43045 series** headers, *ordered on pages 899-900 and on pages 901-902*. **43645 series** mates with **43640 series** plugs, *ordered on this page* and **43650 series** headers *on pages 899-900 and on pages 901-902*. Both series for use with **43030 series** terminals, *ordered on pages 902-903*.

➤CONTINUED➤

0.118″ (3.00) MICRO-FIT 3.0™ RECEPTACLE HOUSINGS (CONT.)

43645 SERIES SINGLE ROW RECEPTACLES—FIG. 1

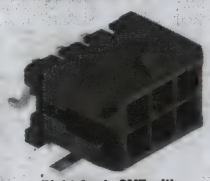
Mfg. Part No.	Circuits	Stock No.	Price Each 1-9	Price Each 10-99
43645-0200	2	57H0284	0.38	0.26
43645-0300	3	57H0285	0.42	0.29
43645-0400	4	57H0286	0.52	0.36
43645-0500	5	57H0287	0.50	0.34
43645-0600	6	38C9852	0.54	0.41
43645-0700	7	57H0289	0.57	0.43
43645-0800	8	61M1997	0.70	0.52
43645-0900	9	25M3806	0.65	0.49
43645-1000	10	21M7173	0.65	0.49
43645-1200	12	57H0292	0.90	0.68
43025 SERIES DUAL ROW RECEPTACLES—FIG. 2				
43025-0200	2	56H9399	0.39	0.27
43025-0400	4	38C9814	0.50	0.35
43025-0600	6	01E8841	0.51	0.39
43025-0800	8	56H9400	0.62	0.47
43025-1000	10	27C6712	0.72	0.54
43025-1200	12	56H9402	0.85	0.64
43025-1400	14	53R1250	1.01	0.81
43025-1600	16	56H9404	1.13	0.89
43025-1800	18	13N3604	0.92	0.73
43025-2000	20	51M8394	1.07	0.85
43025-2200	22	56H9407	1.40	1.11
43025-2400	24	56H9408	1.68	1.37

(16739)

0.118″ (3.00) MICRO-FIT 3.0™ RIGHT ANGLE HEADERS

RoHS Compliant Available

molex



Right Angle SMT with Solder Tab

Right Angle SMT with Solderable Retention Clip

- Dielectric Withstanding Voltage: 1500VAC
- Insulating Resistance: 1000mΩ Min.
- High-Temperature LCP Housing, Rated UL94V-0
- Current: 5A
- Voltage: 250V
- Temperature Rating: –40°C to +105°C

Surface mount or surface mount compatible, 3.0mm center shrouded locking headers are available in vertical and right-angle configurations. Kinked solder tails enhance PC board retention. Contact: brass. Plating: tin or 30μ″ gold. Contact resistance: 10mΩ max. Mate with **43645 series** or **43025 series** receptacles, *ordered separately on this page*.

43650 SERIES SINGLE ROW, RIGHT-ANGLE SURFACE MOUNT COMPATIBLE HEADERS WITH PEGS

Fully polarized to mating receptacle. UL File No: E29179. CSA File No: LR19980. TÜV License No: 43645. Voltage: 250V. Current: 5.0A max. Housing: high-temperature LCP, UL 94V-0. Mate with **43645 series** receptacles. Compatible with PC board snap-in peg locks.

Mfg. Part No.	Circuits	Plating	Application*	Stock No.	Price Each 1-9	Price Each 10-99
43650-0200	2	Tin	SMC	18M8105	0.71	0.56
43650-0300	3	Tin	SMC	57H0320	1.03	0.82
43650-0400	4	Tin	SMC	01E9837	1.50	1.18
43650-0500	5	Tin	SMC	57H0372	1.44	1.16
43650-0700	7	Tin	SMC	57H0424	1.86	1.86
43650-0900	9	Tin	SMC	57H0469	2.22	2.22
43650-1000	10	Tin	SMC	57H0487	2.08	2.08
43650-1200	12	Tin	SMC	57H0523	3.29	3.29
43650-0201	2	15μ″ Gold	SMC	57H0294	1.08	0.86
43650-0401	4	15μ″ Gold	SMC	18M8111	1.56	1.23
43650-0801	8	15μ″ Gold	SMC	57H0449	2.55	2.55
43650-1001	10	15μ″ Gold	SMC	57H0488	2.99	2.99
43650-0302	3	30μ″ Gold	SMC	57H0322	1.57	1.57
43650-0502	5	30μ″ Gold	SMC	57H0374	2.36	2.36
43650 SERIES SINGLE ROW, RIGHT-ANGLE SURFACE MOUNT COMPATIBLE HEADERS WITH PRESS-FIT RETENTION CLIPS						
43650-0203	2	Tin	SMC	57H0296	0.92	0.81
43650-0303	3	Tin	SMC	57H0323	0.87	0.87
43650-0603	6	Tin	SMC	57H0400	1.84	1.84
43650-0204	2	15μ″ Gold	SMC	50H8216	1.18	0.94
43650-0304	3	15μ″ Gold	SMC	57H0324	1.39	1.26
43650-0504	5	15μ″ Gold	SMC	57H0376	2.04	1.85
43650-0604	6	15μ″ Gold	SMC	57H0401	2.26	2.05
43650-0704	7	15μ″ Gold	SMC	57H0428	2.75	2.50

➤CONTINUED➤

0.118″ (3.00) MICRO-FIT 3.0™ RIGHT ANGLE HEADERS (CONT.)

43650 SERIES SINGLE ROW, RIGHT-ANGLE SURFACE MOUNT COMPATIBLE HEADERS WITH PCB RETENTION CLIPS

Mfg. Part No.	Circuits	Plating	Application*	Stock No.	Price Each 1-9	Price Each 10-99
43650-0309	3	Tin	SMT	57H0326	0.93	0.93
43650-0509	5	Tin	SMT	57H0378	1.28	1.28
43650-0609	6	Tin	SMT	57H0403	1.37	1.37
● 43650-0210	2	15μ″ Gold	SMT	57H0300	2.07	2.07
● 43650-0410	4	15μ″ Gold	SMT	57H0353	1.36	1.36
43650-0510	5	15μ″ Gold	SMT	57H0379	1.48	1.48
43650-0610	6	15μ″ Gold	SMT	57H0404	1.40	1.40

43650 SERIES SINGLE ROW, RIGHT-ANGLE SURFACE MOUNT HEADERS WITH SOLDERABLE FITTING NAIL

● 43650-0512	5	Tin	SMT	50H8217	2.49	2.49
43650-0712	7	Tin	SMT	57H0433	1.54	...
43650-0812	8	Tin	SMT	57H0456	1.67	...
43650-0912	9	Tin	SMT	57H0476	1.79	1.77
● 43650-0413	4	15μ″ Gold	SMT	71H3414	2.50	2.50
● 43650-0813	8	15μ″ Gold	SMT	57H0457	1.95	1.95
● 43650-1013	10	15μ″ Gold	SMT	55R9010	2.22	2.22
43650-0214	2	30μ″ Gold	SMT	57H0304	1.00	1.00
● 43650-0414	4	30μ″ Gold	SMT	91C4277	3.62	3.62

43045 SERIES DUAL ROW, RIGHT-ANGLE SURFACE MOUNT COMPATIBLE HEADERS WITH PEGS

Mfg. Part No.	Circuits	Plating	Application*	Pkg. of	Stock No.	Price Each 1-9	Price Each 10-99
● 43045-0200	2	Tin	SMC	1	38C9818	0.98	0.78
● 43045-0400	4	Tin	SMC	1	56H9458	1.43	1.13
● 43045-0600	6	Tin	SMC	1	56H9486	1.81	1.48
● 43045-0800	8	Tin	SMC	1	56H9513	2.15	1.79
● 43045-1200	12	Tin	SMC	1	56H9564	2.75	2.24
● 43045-1400	14	Tin	SMC	1	55R8852	2.60	2.11
● 43045-1600	16	Tin	SMC	1	56H9616	1.77	1.50
● 43045-1800	18	Tin	SMC	1	56H9640	3.74	3.68
● 43045-2000	20	Tin	SMC	1	56H9665	3.89	3.83
● 43045-2400	24	Tin	SMC	1	56H9717	2.53	2.14
43045-0201	2	15μ″ Gold	SMC	1	56H9430	1.10	1.00
● 43045-0401	4	15μ″ Gold	SMC	1	73K3110	1.19	1.07
● 43045-0601	6	15μ″ Gold	SMC	1	56H9487	2.04	1.84
● 43045-0801	8	15μ″ Gold	SMC	1	56H9514	2.57	2.09
● 43045-1001	10	15μ″ Gold	SMC	1	56H9538	2.69	2.43
● 43045-1201	12	15μ″ Gold	SMC	1	56H9565	3.60	3.26
● 43045-1401	14	15μ″ Gold	SMC	1	56H9591	4.87	4.42
● 43045-1601	16	15μ″ Gold	SMC	1	02H5902	5.44	4.93
43045-1801	18	15μ″ Gold	SMC	1	56H9641	6.11	5.54
● 43045-2001	20	15μ″ Gold	SMC	1	56H9666	6.80	6.16
43045-2201	22	15μ″ Gold	SMC	1	56H9694	7.48	6.78
● 43045-2401	24	15μ″ Gold	SMC	1	56H9718	8.15	7.39
● 43045-0202	2	30μ″ Gold	SMC	1	56H9431	1.43	1.08
● 43045-0402	4	30μ″ Gold	SMC	1	56H9460	2.10	1.74
● 43045-0602	6	30μ″ Gold	SMC	1	56H9488	3.05	2.48
● 43045-0802	8	30μ″ Gold	SMC	1	56H9515	2.99	2.51
● 43045-1002	10	30μ″ Gold	SMC	1	56H9539	3.38	2.79
● 43045-1202	12	30μ″ Gold	SMC	1	38C9838	3.75	3.14
● 430451402	14	30μ″ Gold	SMC	1	01J8217	5.54	5.08
● 43045-1602	16	30μ″ Gold	SMC	1	56H9617	6.07	5.10
● 43045-2402	24	30μ″ Gold	SMC	1	01H9953	6.33	5.31

43045 SERIES DUAL ROW, RIGHT-ANGLE SURFACE MOUNT COMPATIBLE HEADERS WITH PRESS-FIT RETENTION CLIPS

43045-0221	2	Tin	SMC	1	56H9447	1.13	1.03
● 43045-0821	8	Tin	SMC	1	56H9528	2.22	1.70
● 43045-1221	12	Tin	SMC	1	56H9581	3.25	2.38
43045-1621	16	Tin	SMC	1	56H9629	5.04	4.57
43045-2021	20	Tin	SMC	1	56H9683	6.25	5.67
43045-0222	2	15μ″ Gold	SMC	1	56H9448	1.25	1.14
● 43045-0422	4	15μ″ Gold	SMC	1	50H8395	2.01	1.63
● 43045-0622	6	15μ″ Gold	SMC	1	56H9504	2.09	1.70
43045-0822	8	15μ″ Gold	SMC	1	56H9529	3.15	2.86
● 43045-1022	10	15μ″ Gold	SMC	1	56H9555	3.66	3.32
43045-1222	12	15μ″ Gold	SMC	1	56H9582	4.17	3.79
43045-1422	14	15μ″ Gold	SMC	1	56H9607	5.62	5.10
43045-2022	20	15μ″ Gold	SMC	1	56H9684	7.77	7.04
43045-0423	4	30μ″ Gold	SMC	1	56H9477	2.36	2.14
43045-0623	6	30μ″ Gold	SMC	1	56H9505	2.94	2.66
43045-0823	8	30μ″ Gold	SMC	1	56H9530	3.55	3.22
43045-1023	10	30μ″ Gold	SMC	1	56H9556	4.56	4.13
43045-1623	16	30μ″ Gold	SMC	1	56H9631	6.85	6.21

➤CONTINUED➤

0.118″ (3.00) MICRO-FIT 3.0™ RIGHT ANGLE HEADERS (CONT.)

43045 SERIES DUAL ROW, RIGHT-ANGLE SURFACE MOUNT HEADERS WITH PRESS-FIT RETENTION CLIPS

Mfg. Part No.	Circuits	Plating	Application*	Pkg. of	Stock No.	Price Each 1-9	Price Each 10-99
43045-0206	2	Tin	SMT	1	56H9432	0.89	0.88
● 43045-0406	4	Tin	SMT	1	56H9461	2.42	1.79
43045-0606	6	Tin	SMT	1	56H9489	1.27	1.25
● 43045-0806	8	Tin	SMT	1	91C4996	2.73	2.49
43045-1006	10	Tin	SMT	1	56H9540	1.68	1.65
43045-1206	12	Tin	SMT	1	56H9566	1.86	1.83
43045-1406	14	Tin	SMT	1	56H9592	2.04	2.01
43045-0207	2	15μ″ Gold	SMT	1	56H9433	1.17	1.15
43045-0607	6	15μ″ Gold	SMT	1	56H9490	1.71	1.68
43045-1007	10	15μ″ Gold	SMT	1	56H9541	2.27	2.24
● 43045-0408	4	30μ″ Gold	SMT	1	56H9463	1.48	1.46

43045 SERIES DUAL ROW, RIGHT-ANGLE SURFACE MOUNT HEADERS WITH SOLDER TAB

● 43045-0209	2	Tin	SMT	1	71H3385	2.14	1.74
● 43045-0409	4	Tin	SMT	1	56H9464	2.77	2.16
● 43045-0809	8	Tin	SMT	1	71H3395	3.68	2.62
● 43045-1209	12	Tin	SMT	1	71H3401	4.13	3.62
● 43045-1409	14	Tin	SMT	1	98K9345	4.86	4.39
● 43045-1609	16	Tin	SMT	1	56H9620	5.38	4.51
● 43045-1809	18	Tin	SMT	1	56H9645	2.96	2.92
● 43045-2009	20	Tin	SMT	1	98K9354	6.40	5.14
● 43045-0410	4	15μ″ Gold	SMT	1	56H9465	3.10	2.70
● 43045-0610	6	15μ″ Gold	SMT	1	56H9493	3.40	3.08
● 43045-0810	8	15μ″ Gold	SMT	1	87K0243	4.14	2.87
● 43045-1011	10	30μ″ Gold	SMT	1	56H9545	5.31	4.08
43045-2011	20	30μ″ Gold	SMT	1	56H9673	5.50	5.25

*SMT = Surface mount, SMC = Surface mount compatible
(194865)

0.118″ (3.00) MICRO-FIT 3.0™ TERMINALS

RoHS Compliant Available

molex

- Voltage: 250V
- Current: 5.0A max.
- Contact Resistance: 10mΩ max.

Designed with 4 points of contact to provide a reliable interface. Phosphor bronze terminals with tin and gold plating. Current: 5A. *Order crimp tools separately below.*

0.118″ MICRO-FIT 3.0™ TERMINALS — SOCKET (FEMALE) TERMINALS

Mfg. Part No.	Plating	Wire Size	Package	Stock No.	Price Each 1-99	Price Each 100-499
● 43030-0007	Tin	24AWG to 20AWG	Bulk	56H9412	0.20	0.11
● 43030-0001	Tin	24AWG to 20AWG	Cut Tape	56H9410	0.15	0.09
● 43030-0010	Tin	30AWG to 26AWG	Bulk	56H9415	0.21	0.12
● 43030-0004	Tin	30AWG to 26AWG	Cut Tape	26H5154	0.10	0.08
● 43030-0008	15μ″ Gold	24AWG to 20AWG	Bulk	56H9413	0.22	0.15
● 43030-0002	15μ″ Gold	24AWG to 20AWG	Cut Tape	23M6428	0.23	0.22
● 43030-0009	30μ″ Gold	24AWG to 20AWG	Bulk	56H9414	0.26	0.17
● 43030-0003	30μ″ Gold	24AWG to 20AWG	Cut Tape	94C2819	0.53	0.33
● 43030-0011	15μ″ Gold	30AWG to 26AWG	Bulk	94C5574	0.13	0.08
● 43030-0005	15μ″ Gold	30AWG to 26AWG	Cut Tape	56H9411	0.12	0.10
● 43030-0012	30μ″ Gold	30AWG to 26AWG	Bulk	56H9416	0.26	0.16
● 43030-0006	30μ″ Gold	30AWG to 26AWG	Cut Tape	07H6678	0.47	0.29

0.118″ MICRO-FIT 3.0™ TERMINALS — PIN (MALE) TERMINALS

● 43031-0007	Tin	24AWG to 20AWG	Bulk	56H9418	0.20	0.11
● 43031-0001	Tin	24AWG to 20AWG	Cut Tape	95C2060	0.32	0.19
● 43031-0010	Tin	30AWG to 26AWG	Bulk	56H9420	0.16	0.16
● 43031-0004	Tin	30AWG to 26AWG	Cut Tape	25M3691	0.27	0.16
● 43031-0008	15μ″ Gold	24AWG to 20AWG	Bulk	96C8691	0.21	0.14
● 43031-0002	15μ″ Gold	24AWG to 20AWG	Cut Tape	90C0762	0.47	0.28
● 43031-0009	30μ″ Gold	24AWG to 20AWG	Bulk	56H9419	0.28	0.19
● 43031-0003	30μ″ Gold	24AWG to 20AWG	Cut Tape	56H9417	0.28	0.20
● 43031-0012	30μ″ Gold	30AWG to 26AWG	Bulk	56H9421	0.27	0.18
● 43031-0006	30μ″ Gold	30AWG to 26AWG	Cut Tape	26H2223	0.23	0.16
● 43031-0011	15μ″ Gold	30AWG to 26AWG	Bulk	92C2957	0.25	0.15
● 43031-0005	15μ″ Gold	30AWG to 26AWG	Cut Tape	90C0515	0.21	0.20

➤CONTINUED➤

0.118″ (3.00) MICRO-FIT 3.0™ TERMINALS (CONT.)

CRIMP AND EXTRACTION TOOLS FOR 0.118″ MICRO-FIT 3.0™ APPLICATIONS

Mfg. Part No.	Description	Stock No.	Price Each 1-4
63819-0000	Ratcheting Crimp Tool	94M4867	310.67
11-03-0043	Extraction Tool	94B5648	17.27

(16741)

0.118″ (3.00) MICRO-FIT BMI™ CONNECTORS

RoHS Compliant Available

molex

- Housing Rated UL94V-0, 5A Current
- Voltage: 250 VAC rms or DC
- Temperature Range: -40°C to +105°C

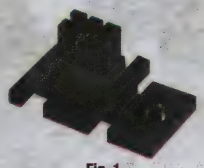


Fig. 1

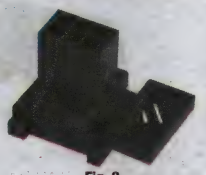


Fig. 2

Micro-Fit 3.0, BMI™ (Blind Mate Interface) features an innovative panel mounting design that securely locks the plugs and receptacles in place in the panel cutout, while allowing for removal. The plugs and headers feature a funnel entry to guide the mating receptacle or receptacle header into place. Micro-Fit 3.0, BMI housings and headers mate exclusively with the BMI components.

44133 SERIES DUAL ROW, PANEL MOUNT RECEPTACLES — FIG. 1

Receptacle floats in panel cutout up to 1.27mm (.050″) in any direction with a 1.57mm (.062″) panel thickness. Can be utilized with BMI board-to-board connectors. For use with **43030 series** terminals.

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9	10-99
44133-0400	4	57H1002	0.57	0.43
44133-0800	8	57H1004	0.71	0.53
44133-1200	12	18M8120	1.05	0.83

44300 SERIES DUAL ROW, PANEL MOUNT PLUGS — FIG. 2

Panel thickness: 1.57mm (.062″). Can be utilized with BMI board-to-board connectors. For use with **43031 series** terminals.

44300-0400	4	18M8128	0.46	0.35
44300-1400	14	57H1196	0.90	0.75

44428 SERIES DUAL ROW, RIGHT ANGLE HEADERS WITH PEGS

Can be utilized with BMI wire-to-wire connectors. 1.57mm (.062″) PCB thickness. Surface mount compatible (SMC). Black, glass filled nylon housings

Mfg. Part No.	Circuits	Plating	Application*	Pkg. of	Stock No.	Price Each 1-499	500-999
44428-0401	4	Tin	SMC	1	57H1228	2.29	1.91
44428-0601	6	Tin	SMC	1	57H1231	2.90	2.42
44428-0801	8	Tin	SMC	1	57H1234	3.54	2.95
44428-1001	10	Tin	SMC	1	57H1237	4.14	3.45
44428-1601	16	Tin	SMC	1	57H1246	5.99	5.00
44428-0402	4	15μ″ Gold	SMC	1	57H1229	2.86	2.39
44428-0602	6	15μ″ Gold	SMC	1	57H1232	3.63	3.02
44428-1002	10	15μ″ Gold	SMC	1	57H1238	5.18	4.32
44428-1202	12	15μ″ Gold	SMC	1	57H1241	5.95	4.96
44428-1602	16	15μ″ Gold	SMC	1	57H1247	7.49	6.25
44428-2403	24	30μ″ Gold	SMC	1	57H1260	14.17	11.81
44432 SERIES DUAL ROW, VERTICAL HEADERS WITH PEGS							
44432-0601	6	Tin	SMC	1	57H1265	2.41	2.01
44432-0801	8	Tin	SMC	1	57H1267	2.92	2.44
44432-1001	10	Tin	SMC	1	57H1270	3.42	2.85
44432-1201	12	Tin	SMC	1	57H1273	3.92	3.27
44432-1601	16	Tin	SMC	1	57H1279	4.95	4.13
44432-2401	24	Tin	SMC	1	57H1291	7.42	6.19
44432-0402	4	15μ″ Gold	SMC	1	57H1263	2.37	1.98
44432-0602	6	15μ″ Gold	SMC	1	01H6919	3.01	2.51
44432-0802	8	15μ″ Gold	SMC	1	57H1268	3.65	3.04
44432-1002	10	15μ″ Gold	SMC	1	55R9192	4.29	3.58
44432-1202	12	15μ″ Gold	SMC	1	57H1274	4.92	4.10
44432-1602	16	15μ″ Gold	SMC	1	57H1280	6.19	5.16
44764 SERIES DUAL ROW, RIGHT ANGLE RECEPTACLES							
44764-0401	4	Tin	SMC	1	57H1589	2.94	2.45
44764-0601	6	Tin	SMC	1	57H1592	3.72	3.10
44764-0801	8	Tin	SMC	1	57H1595	4.54	3.79
44764-1001	10	Tin	SMC	1	57H1598	5.32	4.43
44764-1201	12	Tin	SMC	1	57H1601	6.11	5.09
44764-1601	16	Tin	SMC	1	64K3258	7.33	6.11
44764-0402	4	15μ″ Gold	SMC	1	57H1590	3.68	3.06
44764-1002	10	15μ″ Gold	SMC	1	57H1599	6.65	5.54
44764-1202	12	15μ″ Gold	SMC	1	57H1602	7.64	6.37
44764-0803	8	30μ″ Gold	SMC	1	57H1597	7.16	5.97
44764-1003	10	30μ″ Gold	SMC	1	57H1600	8.37	6.98

➤CONTINUED➤

0.118″ (3.00) MICRO-FIT BMI™ CONNECTORS (CONT.)

44769 SERIES DUAL ROW, VERTICAL RECEPTACLES

Mfg. Part No.	Circuits	Plating	Application*	Pkg. of	Stock No.	Price Each 1-499	500-999
44769-0401	4	Tin	SMC	1	57H1620	2.87	2.39
44769-0601	6	Tin	SMC	1	57H1623	3.64	3.03
44769-0801	8	Tin	SMC	1	57H1626	4.42	3.68
44769-1001	10	Tin	SMC	1	57H1629	5.18	4.31
44769-1601	16	Tin	SMC	1	57H1638	7.48	6.24
44769-0602	6	15μ″ Gold	SMC	1	57H1624	4.55	3.79
44769-0802	8	15μ″ Gold	SMC	1	57H1627	3.30	2.76
44769-1002	10	15μ″ Gold	SMC	1	57H1630	6.49	5.41
44769-1202	12	15μ″ Gold	SMC	1	57H1633	7.43	6.19
44769-1402	14	15μ″ Gold	SMC	1	57H1636	8.41	7.01
44769-1602	16	15μ″ Gold	SMC	1	57H1639	9.35	7.79
44769-1603	16	30μ″ Gold	SMC	1	57H1640	11.78	9.82

44914 SERIES DUAL ROW, STANDARD VERTICAL CPI HEADERS

The Micro-Fit 3.0, CPI (Compliant Pin Interface) and Micro-Fit 3.0, BMI CPI (Blind Mate Version with Compliant Pin Interface) are vertical header product extensions featuring press-fit PC tails. CPI style (Press-Fit) pins require no soldering to the PCB and areused with 2.36mm (.093″) minimum thickness PCB's.

44914-0401	4	Tin	Press-Fit	1	57H1657	2.21	1.84
44914-0801	8	Tin	Press-Fit	1	57H1662	3.41	2.84
44914-1001	10	Tin	Press-Fit	1	57H1665	3.99	3.33
44914-1201	12	Tin	Press-Fit	1	57H1668	4.58	3.82
44914-5803	8	30μ″ Gold	Press-Fit	1	55R9270	5.00	4.17

45280 SERIES DUAL ROW, BLIND MATE VERTICAL CPI HEADERS

45280-1001	10	Tin	Press-Fit	1	57H1740	4.79	3.99

(69945)

MX150L™ SERIES SEALED CONNECTOR SYSTEM

RoHS Compliant Available

molex

- Pre-assembled connector housings, seals, TPA components and mat-seal cap in one piece
- Integral terminal position assurance (TPA) insures that terminal leads lock on connector
- Environmentally sealed to IP67
- Integral locking latch

MX150L™ sealed connector system includes pre-assembled connector housings, seals, terminal position assurance components and mat-seal cap shipped in one piece to reduce labor and application costs. Voltage: 600V. Insulation resistance: 1000 MOhms.

VERTICAL PLUGS

Mfg. Part No.	Circuits	Wire Size (AWG)	Mat Seal Color	Stock No.	Price Each 1-9
19419-0008	2	22-18	Red	01J5258	3.10
19419-0015	10	22-18	Red	01J5262	9.00

VERTICAL RECEPTACLES

Mfg. Part No.	Circuits	Wire Size (AWG)	Mat Seal Color	Stock No.	Price Each 1-9
19418-0007	2	16-14	Blue	01J5238	4.10
19418-0013	10	16-14	Blue	01J5242	7.44
19418-0026	12	22-18	Red	98K6079	14.36

MALE TERMINALS FOR TYPE 19419 PLUGS - SHORT PIN LENGTH

Mfg. Part No.	Wire Size	Insulation Diameter (mm)	Plating	Stock No.	Price Each 1-99
19417-0047	16AWG to 14AWG	2.87-3.53	Pre-tin	58J8196	0.21
19417-0048	22AWG to 18AWG	2.36-2.74	Pre-tin	01J5231	0.25
FEMALE TERMINALS FOR TYPE 19418 RECEPTACLES					
19420-0010	22AWG to 18AWG	2.36-2.74	Pre-tin	01J5265	0.28
FEMALE TERMINALS FOR TYPE 19418 RECEPTACLES - ON REEL, SOLD INDIVIDUALLY					
19420-0002	22AWG to 18AWG	2.36-2.74	Pre-tin	01J5264	0.21

TOOLING

Mfg. Part No.	Description	Stock No.	Price Each 1-4
63813-1500	Terminal Extraction Tool	01J8931	24.02
64016-0035	ServiceGrade™ Hand Crimp Tool	52M2113	62.52

(88942)

PIN & SOCKET CONNECTORS

MX120G™ SEALED CONNECTORS

RoHS Compliant Available

molex

Features & Benefits
- Reduced 3.20mm (mating) pitch design
- Meets IP67 ratings with wide operating temperature range of -40° to +105°C
- High-vibration resistance up to 10G acceleration
- Single-piece construction of the female receptacle comprising a pre-assembled connector housing with matte silicone seal and seal-cap
- Mounted male header comes with a self-guiding slot for easy assembly into the ECU (Engine Control Unit) box

Applications
- Commercial Vehicle
- Industrial Automation
- Medical
- Solid State Lighting

Molex's **MX120G™ Connector system** is a highly compact, sealed, wire-to-wire and wire-to-board family of interconnects that delivers optimal performance especially in wet, high-vibration and wide-operating-temperature conditions. Designed for rugged, harsh environment non-automotive applications; the IP67-rated, **MX120G interconnect system** can be extended to exterior lighting applications that include traffic and overhead street lights; and is a more reliable and less expensive solution to pre-crimped wire-seal alternatives.

Mnf. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-49
● 36792-1201	3.20mm Pitch Sealed Female Connector Assembly, 2 Row, 12 Circuit, Black	44W7572	1.58	1.43
● 36783-1201	3.20mm Pitch Sealed Header Connector Assembly, 2 Row, 12 Circuit, Right Angle, Black	45W1819	1.59	1.44

ACCESSORIES

Mnf. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
● 36799-0001	1.2mm Female Crimp Terminal, 18-16AWG, Grip Code M	45W1820	0.15	0.14
● 36799-0002	1.2mm Female Crimp Terminal, 22-20AWG, Grip Code S	45W1821	0.14	0.13
● 36804-0001	Cavity Plug for Receptacle	45W1822	0.11	0.05

(208879)

SRC SERIES SEALED RECTANGULAR CONNECTORS

RoHS Compliant Available

molex

- Pre-assembled connector housing, seals, rear cover and TPA ship in one piece
- Simple crimp, poke and plug application using standard MX150™ and MX150L™ terminals
- No need to crimp individual wire seals
- Sliding latch with cam action
- Integral Terminal Position Assurance (TPA) with new anti-scooping feature
- Integral, two-way matte seal plus interface seal with improved retention features
- Protective rear conduit interface for female connector
- Connector system retention greater than 200N
- Superior electrical and mechanical performance capabilities
- Unused circuits can be blocked using plastic seal plugs
- *Hand crimp tools purchased separately on page 1136*

The new generation SRC family offers a rugged, sealed, wire-to-panel (bulkhead) and wire-to-wire hybrid connection system designed for high circuit-count applications in harsh environments. The primary location for this system is as the firewall connector, situated between the cab and the engine, but SRC can also replace existing circular connectors in various in-vehicle applications. The SRC system uses proven MX150™ terminals with current ratings up to 18A and MX150L™ terminals with current ratings up to 40A. Flexible standard or mixed power/signal options are available. The MX150 and MX150L terminal systems provide cost savings by eliminating the need to purchase, handle and crimp individual wire seals. This proven terminal technology provides flexibility to increase circuit count and allows for simple field repair and replacement of headers and connectors.

CONNECTORS AND HEADERS

Mfg. Part No.	Gender	No. of Circuits: Control MX150 Terminals	No. of Circuits: Power MX150L Terminals	Stock No.	Price Each 1-9
● 85084-0700	Female	60	6	53W5351	37.49
● 85083-0300	Male	60	6	66W1088	22.88
● 93287-0001	Female	84	0	66W1090	23.52
● 93288-0001	Male	84	0	66W1091	22.34

CONDUIT INTERFACE

Mfg. Part No.	Gender	Cable Exit Direction	Stock No.	Price Each 1-9
● 93286-0020	Female	Right	66W1089	7.95

MX150 TERMINALS - CONTROL

Mfg. Part No.	Gender	Wire Size	Stock No.	Price Each 1-9	Price Each 10-99
● 33012-3002	Socket	20AWG to 18AWG	15M8281	0.39	0.14
● 33012-3001	Socket	16AWG to 14AWG	91M8954	0.09	0.09
● 33000-1003	Pin	22AWG	91M8927	0.13	0.12
● 33000-1002	Pin	20AWG to 16AWG	91M8926	0.22	0.21
● 33000-1001	Pin	14AWG	91M8925	0.13	0.13

MX150L TERMINALS - POWER

● 19434-0001	Socket	12AWG to 10AWG	42M1563	1.17	1.12
● 19434-0002	Socket	8AWG	57R9066	0.92	0.86
● 19431-0001	Pin	12AWG to 10AWG	02N4254	0.79	0.76
● 19431-0016*	Pin	12AWG to 10AWG	02N4257	0.58	0.47
● 19431-0015	Pin	8AWG	57R9064	0.67	0.64

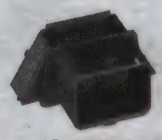
*Bulk Packaging

(210164)

CMC HYBRID CONNECTORS - STANDARD AND POWER VERSIONS

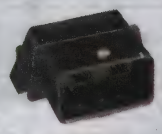
RoHS Compliant Available

molex

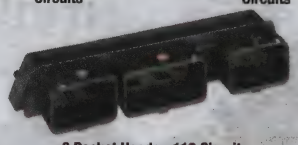


1 Pocket Header, 32 Circuits

2 Pocket Header, 80 Circuits



1 Pocket Header, 48 Circuits



3 Pocket Header, 112 Circuits

Wire Cap

- Housing: Glass filled PBT
- Voltage: 250 VAC
- Current: CP 0.635mm (.025") - 6A max.; CP 1.50mm (.059") - 12A max.
- Contact resistance: 0.635mm (.025") - 8 mΩ max.; 1.50mm (.059") - 4 mΩ max.
- Dielectric withstanding voltage: 1000V AC for 1 minute
- Insulation resistance: 100 Megohms min.
- Operating temperature: -40 to +125°C

48 Circuit Plug, Right Wire Output - Brown

32 Circuit Plug, Right Wire Output - Black

The CMC connector family from Molex is a sealed, high-density connection system developed for the transportation industry. It is designed to perform in high-conductivity applications and in harsh environments. CMC connection systems are used in power train applications including engine-control units (ECU's), compartment applications, gearboxes, electronic parking brakes and suspension controllers, together with body electronics applications in automotive and commercial vehicles. Standard CMC hybrid connectors hold two different terminal sizes, CP 0.635mm (.025") and CP 1.50mm (.059"). Power CMC hybrid connectors hold three different terminal sizes, CP0.635mm (.025"), CP 1.50mm (.059") and CP 2.80mm (.110").

Mfg. Part No.	No. of Contacts	Gender	Description	Stock No.	Price Each 1-9
● 64334-0100	32	Header	1 Pocket CMC Header	29T5827	4.55
● 500762-0481	48	Header	1 Pocket CMC Header	56R0958	8.56
● 502225-0801	80	Header	2 Pocket CMC Header	29T5820	7.89
● 64333-0100	112	Header	3 Pocket CMC Header	29T5826	11.61
● 64319-1218	32	Plug	Grey, Left Wire Output	56R5042	11.02
● 64319-3211	32	Plug	Black, Right Wire Output	56R5045	9.98
● 64320-1319	48	Plug	Brown, Left Wire Output	01P5231	13.48
● 64320-3311	48	Plug	Black, Right Wire Output	25R1932	12.25
● 64320-3319	48	Plug	Brown, Right Wire Output	02P5988	14.46

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 64319-1201	Wire Cap for 32 Contact Plugs	56R5040	0.67
● 64320-1301	Wire Cap for 48 Contact Plugs	56R5050	0.81

(194833)

0.264" (6.71) PITCH, 0.093" (2.36) PIN AND SOCKET CONNECTORS

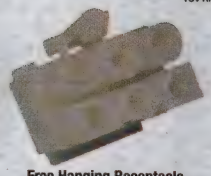
RoHS Compliant Available

molex

TÜV Rheinland

- Voltage: 600V
- Panel Thickness: 0.078" (2.00mm) Max.
- Wire Size: 14-20, 18-22, 22-24, 24-30 AWG
- Dielectric Withstanding Voltage: 5000 V AC rms
- Operating Temperature: -40 to +105°C

Panel Mount Plug



Free Hanging Receptacle

Nylon connector housings are similar to standard **.093 series** except feature positive locks and fully isolated terminals. Polarized housing assures proper mating. Male and female terminals can be used in receptacle and plug housings, *ordered separately on page 906. Order installation tooling separately, go online or call.* UL recognized, CSA certified, TÜV approved.

3191 SERIES 0.093" FREE-HANGING PLUGS 94V-2

Mfg. Part No.	Circuits	Amps Per Circuit	Dimensions (Inches) A	Dimensions (Inches) B	Stock No.	Price Each 1-9
● 19-09-2029	2	12	0.590	0.320	55H2681	0.48
● 19-09-2039	3	11	0.850	0.322	38C9045	0.93
● 19-09-2049	4	9	1.270	0.394	55H2691	0.45
● 19-09-2069	6	9	0.850	0.586	55H2695	1.34
● 19-09-2099	9	9	0.850	0.850	72K1775	0.66
● 19-09-2129	12	9	1.112	0.868	38C9052	0.64
● 19-09-2159	15	9	1.380	0.868	55H2711	0.87

➤ CONTINUED ➤

0.264″ (6.71) PITCH, 0.093″ (2.36) PIN AND SOCKET CONNECTORS (CONT.)

3191 SERIES 0.093″ FREE-HANGING PLUGS 94V-0

Mfg. Part No.	Circuits	Amps Per Circuit	Dimensions (Inches) A	Dimensions (Inches) B	Stock No.	Price Each 1-9
19-09-2016	1	12	0.300	0.300	55H2674	0.31
● 19-09-2026	2	12	0.590	0.320	55H2678	0.65
● 19-09-2036	3	11	0.850	0.322	26H1521	0.58
● 19-09-2046	4	9	1.113	0.322	94H6938	1.06
● 19-09-2066	6	9	0.850	0.586	55H2693	0.88
● 19-09-2096	9	9	0.850	0.850	55H2698	1.71
3191 SERIES 0.093″ PANEL MOUNT PLUGS 94V-2						
● 19-09-2028	2	12	0.590	0.320	55H2680	0.50
● 19-09-2038	3	11	0.850	0.322	55H2685	0.48
● 19-09-2048	4	9	1.113	0.322	38C9046	1.04
● 19-09-2068	6	9	0.850	0.586	55H2694	0.95
● 19-09-2098	9	9	0.850	0.850	38C9049	1.84
● 19-09-2158	15	9	1.380	0.868	38C9053	0.95
3191 SERIES 0.093″ RECEPTACLES 94V-2						
● 19-09-1029	2		0.560	0.300	72K1774	0.53
● 19-09-1039	3	11	0.830	0.300	38C9038	0.49
● 19-09-1049	4	9	1.090	0.300	38C9039	0.50
● 19-09-1099	9	9	0.830	0.830	55H2664	1.97
● 19-09-1129	12	9	1.090	0.830	55H2669	2.13
● 19-09-1159	15	9	1.350	0.830	18M7952	1.00
3191 SERIES 0.093″ RECEPTACLE 94V-0						
● 19-09-1016	1	12	0.300	0.300	55H2647	0.59
● 19-09-1026	2	12	0.590	0.320	20M7076	0.79
● 19-09-1036	3	11	0.850	0.322	55H2653	1.32
● 19-09-1046	4	9	1.090	0.300	55H2657	1.30
● 19-09-1066	6	9	0.827	0.563	90B9623	0.82
● 19-09-1096	9	9	0.830	0.830	94H6935	0.91
● 19-09-1156	15	9	1.350	0.830	55H2672	1.32

(8348)

0.393″ (10.00) PITCH MINI-FIT SR.™ HOUSINGS

RoHS Compliant Available

molex

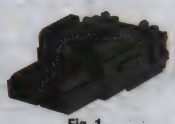


Fig. 1

Fig. 2

- High current
- Fully polarized
- Positive locks
- Low engagement force
- Mandatory terminal position assurance (TPA) DIP
- 42816 series mates with 42818 series plug or 42819/42820 series headers
- 42918 series mate with 42816 series receptacles

Feature polyester housings, rated UL94V-0. Voltage: 600V. Current: 50A max. Insulation resistance: 1000mΩ (min.). Operating temperature: -40°C to +105°C. **42816 series** receptacle housings for use with **type 42815** female terminals; *order separately on this page.* **42818 series** panel mount plug housings for use with **type 42817** male terminals; *order separately on this page.* UL recognized, CSA certified, TUV approved.

42816 SERIES RECEPTACLE HOUSINGS, FIG. 1

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9
● 42816-0212	2	56H9092	1.12
● 42816-0312	3	56H9093	2.00
● 42816-0412	4	56H9094	2.59
● 42816-0512	5	56H9095	2.49
● 42816-0612	6	38C9792	2.66
42818 SERIES PLUG HOUSINGS, PANEL MOUNT, FIG. 2			
● 42818-0212	2	56H9105	1.42
● 42818-0312	3	56H9106	1.56
● 42818-0412	4	38C9795	1.68

(75613)

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(212563)

0.393″ (10.00) PITCH Mini-Fit, Sr.™ TERMINALS

RoHS Compliant Available

molex

Socket

Pin

42815 socket terminals mate with **42816 series** receptacle housings; *order separately on this page.* **42817** pin terminals mate with **42818 series** plug housing; *order separately on this page.* Copper alloy terminals with tin-over-nickel plating, rated UL94V-0. Operating temperature: -40°C to +105°C. *Order crimp and extraction tools separately below.*

10.00mm (0.393″) PITCH Mini-Fit, Sr.™ TERMINALS

Mfg. Part No.	Form	AWG	Dimensions A	Dimensions B	Stock No.	Price Each 1-99
● 42815-0012*	Socket	12AWG to 10AWG	0.232″ (5.90)	0.260″ (6.60)	06H1474	1.89
● 42815-0031	Socket	8AWG	0.236″ (6.00)	0.216″ (5.50)	56H9090	0.69
● 42817-0041	Pin	16AWG to 14AWG	0.234″ (5.94)	0.216″ (5.50)	01J8206	1.92
● 42817-0011	Pin	12AWG to 10AWG	0.232″ (5.90)	0.260″ (6.60)	56H9097	2.87

* Select Gold

CRIMP AND EXTRACTION TOOLS

Mfg. Part No.	Description	Stock No.	Price Each 1-4
63811-3800	Crimp Tool for Wire Size 14 and 16 AWG	59H1443	331.38
63811-1600	Crimp Tool for Wire Size 10 and 12 AWG	23H0415	406.67
63813-0400	Extraction Tool	23H0423	76.38

(75615)

0.062″ (1.57) PIN AND SOCKET CONNECTORS

RoHS Compliant Available

molex

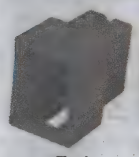


Fig. 1

Fig. 2

Fig. 3

Fig. 4

- Nylon Housing, Rated UL 94V-2
- 0.145″ (3.68mm) Pitch
- Current: 5.0 A Max.
- Voltage: 250V
- Dielectric Withstanding Voltage: 1500 VACrms
- Operating Temperature: -40°C to +105°C

Pin and socket connectors feature friction lock and are panel and PC board mountable. Plugs and receptacles are available in free-hanging or panel mount wire-to-wire configurations. Polarized housings assure proper mating. Recommended panel thickness: 0.060″ (1.52) max. with grid spacing: 0.145″ (3.68). UL recognized E-29179, CSA certified.

0.062″ FREE-HANGING PLUGS - FIG. 1

Mfg. Part No.	Circuits	Amps Per Circuit	Stock No.	Price Each 1-9
● 03-06-2011	1	5	38C8706	0.14
● 03-06-2023	2	5	26C1313	0.24
● 03-06-2032	3	5	26C1308	0.44
● 03-06-2042	4 (1x4)	5	38C8709	0.68
● 03-06-2044	4 (2x2)	5	03H8391	0.62
● 03-06-2061	6	5	38C8712	0.69
● 03-06-2092	9	5	38C8715	0.77
● 03-06-2122	12	5	38C8717	0.65
● 03-06-2152	15	5	38C8719	0.90
0.062″ PANEL MOUNT PLUGS WITH MOUNTING EARS - FIG. 2				
● 03-06-2024	2	5	38C8707	0.16
● 03-06-2033	3	5	85C0030	0.67
● 03-06-2043	4 (2x2)	5	54H5121	0.56
● 03-06-2091	9	5	38C8714	0.64

0.062″ FREE-HANGING RECEPTACLES - FIG. 3

Mfg. Part No.	Circuits	Amps Per Circuit	Stock No.	Price Each 1-9
● 03-06-1023	2	5	26C1314	0.23
● 03-06-1032	3	5	22C5334	0.28
● 03-06-1042	4 (1x4)	5	38C8696	0.52
● 03-06-1044	4 (2x2)	5	54H5100	0.52
● 03-06-1062	6	5	38C8699	0.49
● 03-06-1092	9	5	54H5107	0.53
● 03-06-1122	12	5	38C8702	0.51
● 03-06-1152	15	5	38C8703	0.73

➤CONTINUED➤

0.062″ (1.57) PIN AND SOCKET CONNECTORS (CONT.)

0.062″ PANEL MOUNT RECEPTACLES WITH MOUNTING EARS - FIG. 4

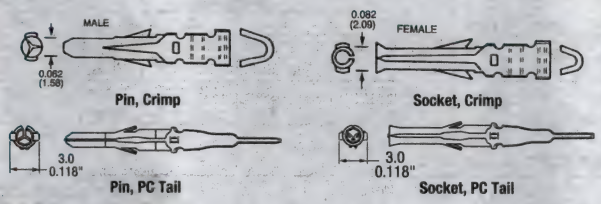
Mfg. Part No.	Circuits	Amps Per Circuit	Stock No.	Price Each 1-9
● 03-06-1022	2	5	54H5094	0.24
● 03-06-1038	3	5	54H5096	0.33
● 03-06-1043	4 (2x2)	5	18M7863	0.81
● 03-06-1061	6	5	38C8698	0.32
● 03-06-1121	12	5	18M7865	0.51
● 03-06-1241	24	5	35C3699	7.81

(8437)

0.062″ (1.57) DIAMETER PIN AND SOCKET TERMINALS AND TOOLS

RoHS Compliant Available

molex



- Current: 5.0A max.
- Contact Resistance: 3.2mΩ max.
- Accommodates 18-30 AWG

For use in 0.062″ (1.57) pin and socket *order separately on pages 905-906*. Base material brass, Phosphor bronze base material available; *go online or call*.

CRIMP TERMINALS - BULK PACKAGING SOLD INDIVIDUALLY

Mfg. Part No.	Gender	Plating	AWG	Insulation Diameter	Stock No.	Price Each 1-99
● 02-06-1132	Socket	Tin	30AWG to 24AWG	0.040-0.090″	85C0027	0.09
● 02-06-5103	Socket	15μ″ Gold	24AWG to 18AWG	0.060-0.120″	54H4950	0.64
● 02-06-5135	Socket	15μ″ Gold	30AWG to 24AWG	0.040-0.090″	85C0024	0.44
● 02-06-2103	Pin	Tin	24AWG to 18AWG	0.060-0.120″	80K7981	0.23
● 02-06-2132	Pin	Tin	30AWG to 24AWG	0.040-0.090″	85C0026	0.12
● 02-06-6135	Pin	15μ″ Gold	30AWG to 24AWG	0.040-0.090″	85C0022	0.45

CRIMP TERMINALS - CUT TAPE SOLD INDIVIDUALLY

Mfg. Part No.	Gender	Plating	AWG	Insulation Diameter	Stock No.	Price Each 1-9
● 02-06-5100	Socket	15μ″ Gold	24AWG to 18AWG	0.060-0.120″	54H4947	0.50
● 02-06-6100	Pin	15μ″ Gold	24AWG to 18AWG	0.060-0.120″	54H4962	0.58

PC TAIL TERMINALS - SOLD INDIVIDUALLY

Mfg. Part No.	Gender	Plating	Stock No.	Price Each 1-99
● 02-06-7103	Socket	Tin	54H4978	0.15
● 02-06-8103	Pin	Tin	54H4981	0.35

0.062″ (1.57) TOOLING

Mfg. Part No.	Description	Stock No.	Price Each 1-4
63811-1000	Service Crimp Tool	85C2464	34.95
11-02-0001	Insertion Tool	57H7461	23.40
1103-0002	Extraction Tool	01H6962	20.05

(8435)

0.062″ (1.57) CONNECTOR DESIGNER KIT MXWM-72

RoHS Compliant Available

molex

- 1-6, 9, 12, 15 & 36 Circuit Plug and Receptacle Connectors with 0.062″ Diameter Pin & Socket Terminals for 24-18 AWG.
- Consists of 288 Pieces, Including Extraction Tool & Premium Crimp Tool.

Molex Part No.	Quantity	Description
02-06-1103-C	100	0.062″ Dia. Crimp Type Female Socket Terminals, 24-18 AWG
02-06-2103-C	100	0.062″ Dia. Crimp Type Male Pin Terminals, 24-18 AWG
03-06-1011	15	1-Circuit Free-hanging Nylon Connector Receptacle

➤CONTINUED➤

0.062″ (1.57) CONNECTOR DESIGNER KIT MXWM-72 (CONT.)

Molex Part No.	Quantity	Description
03-06-1022	5	2-Circuit Panel Mount Nylon Connector Receptacle
03-06-1038	5	3-Circuit Panel Mount Nylon Connector Receptacle
03-06-1041	3	4-Circuit Panel Mount Nylon Connector Receptacle
03-06-1055	4	5-Circuit Panel Mount Nylon Connector Receptacle
03-06-1061	4	6-Circuit Panel Mount Nylon Connector Receptacle
03-06-1091	3	9-Circuit Panel Mount Nylon Connector Receptacle
03-06-1121	2	12-Circuit Panel Mount Nylon Connector Receptacle
03-06-1361	1	36-Circuit Panel Mount Nylon Connector Receptacle
03-06-2011	15	1-Circuit Free-hanging Nylon Connector Plug
03-06-2024	5	2-Circuit Panel Mount Nylon Connector Plug
03-06-2033	5	3-Circuit Panel Mount Nylon Connector Plug
03-06-2041	3	4-Circuit Panel Mount Nylon Connector Plug
03-06-2054	4	5-Circuit Panel Mount Nylon Connector Plug
03-06-2062	4	6-Circuit Panel Mount Nylon Connector Plug
03-06-2091	3	9-Circuit Panel Mount Nylon Connector Plug
03-06-2121	2	12-Circuit Panel Mount Nylon Connector Plug
03-06-2151	1	15-Circuit Panel Mount Nylon Connector Plug
03-06-2361	1	36-Circuit Panel Mount Nylon Connector Plug
03-06-6155	1	15-Circuit Panel Mount Nylon Connector Receptacle
63811-1000	1	Premium Crimping Tool, Crimps 24-14 AWG
W-HT-2023*	1	Extraction Tool

*Tool Provided by Waldom

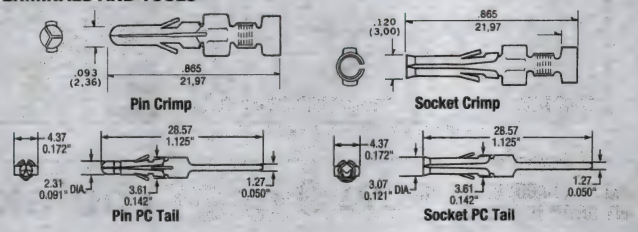
Mfg. Part No.	Stock No.	Price Each 1-4
● 76650-0012	51M3031	127.53

(100237)

0.093″ (2.36) DIAMETER PIN AND SOCKET TERMINALS AND TOOLS

RoHS Compliant Available

molex



- Current: 12.0A max.
- Contact Resistance: 10 mΩ max.
- Dielectric Withstanding Voltage: 1500Vrms for 60 Seconds Min.
- Accommodates 14-30 AWG

For use in standard 0.093″ (2.36) or **3191 series** connectors: *ordered separately on page 907*. Base material brass, phosphor bronze base material available; *go online or call*.

CRIMP TERMINALS — SOLD IN PKG. OF 100

Mfg. Part No.	Gender	Wire Range	Plating	Stock No.	Price per Pkg. 1-9
● 02-09-2118	Pin	22AWG to 18AWG	Tin	35C4915	8.71

CRIMP TERMINALS — SOLD INDIVIDUALLY

Mfg. Part No.	Gender	Wire Range	Plating	Stock No.	Price Each 1-99
● 02-09-1104	Socket	20AWG to 14AWG	Tin	37H7276	0.17
● 02-09-1117*	Socket	22AWG to 18AWG	Tin	72C7861	0.11
● 02-09-1119	Socket	22AWG to 18AWG	Tin	06H1959	0.12
● 02-09-5142	Socket	22AWG to 18AWG	15u″ Gold	54H5059	1.28
● 02-09-1102	Socket	20AWG to 14AWG	Tin	88C9619	0.11
● 02-09-2103	Pin	20AWG to 14AWG	Tin	18J1569	0.13
● 02-09-6106	Pin	20AWG to 14AWG	15u″ Gold	54H5068	1.12
● 02-09-6123	Pin	22AWG to 18AWG	15u″ Gold	54H5071	0.79
● 02-09-6110	Pin	20AWG to 14AWG	50u″ Gold	09J5230	0.99

PC TAIL TERMINALS — SOLD INDIVIDUALLY

Mfg. Part No.	Gender	Detent	Plating	Stock No.	Price Each 1-99
● 02-09-1134	Socket	...	Tin	54H5013	0.26

PC TAIL TERMINALS — SOLD IN PKG. OF 100

Mfg. Part No.	Gender	Detent	Plating	Stock No.	Price per Pkg. 1-4
● 02-09-2133	Pin	Yes	Tin	49H7693	12.00

*Cut Tape

0.093″ (2.36) TOOLING

Mfg. Part No.	Description	Stock No.	Price Each 1-4
63811-1000	Service Crimp Tool	85C2464	34.95
● 11-02-0003	Insertion Tool	22C5186	25.52
11-03-0006	Extraction Tool	89C1668	21.39

(8436)

0.093" (2.36) CONNECTOR DESIGNER KIT MXWM-50

RoHS Compliant Available

molex

1-6, 9, 12 & 15 Circuit Plug and Receptacle Connectors with 0.093" Diameter Pin & Socket Terminals for 22-18 AWG. Consists of 292 Pieces, Including Extraction Tool & Premium CrimpTool.

Molex Part No.	Quantity	Description
02-09-1119-C	100	0.093" Dia. Crimp Type Female Socket Terminals, 22-18 AWG
02-09-2118-C	100	0.093" Dia. Crimp Type Male Pin Terminals, 22-18 AWG
03-09-1011	25	1-Circuit Free-hanging Nylon Connector Receptacle
03-09-1027	5	2-Circuit Panel Mount Nylon Connector Receptacle
03-09-1041	4	4-Circuit Panel Mount Nylon Connector Receptacle
03-09-1054	3	5-Circuit Panel Mount Nylon Connector Receptacle
03-09-1061	1	6-Circuit Panel Mount Nylon Connector Receptacle
03-09-1081	4	3-Circuit Panel Mount Nylon Connector Receptacle
03-09-1091	1	9-Circuit Panel Mount Nylon Connector Receptacle
03-09-1121	1	12-Circuit Panel Mount Nylon Connector Receptacle
03-09-1151	1	15-Circuit Panel Mount Nylon Connector Receptacle
03-09-2011	25	1-Circuit Free-hanging Nylon Connector Plug
03-09-2021	5	2-Circuit Panel Mount Nylon Connector Plug
03-09-2031	4	3-Circuit Panel Mount Nylon Connector Plug
03-09-2041	4	4-Circuit Panel Mount Nylon Connector Plug
03-09-2057	3	5-Circuit Panel Mount Nylon Connector Plug
03-09-2061	1	6-Circuit Panel Mount Nylon Connector Plug
03-09-2091	1	9-Circuit Panel Mount Nylon Connector Plug
03-09-2122	1	12-Circuit Panel Mount Nylon Connector Plug
03-09-2159	1	15-Circuit Panel Mount Nylon Connector Plug
63811-1000	1	Premium Crimping Tool, Crimps 24-14 AWG
W-HT-2054*	1	Extraction Tool

*Tool Manufactured & Provided by Waldom

Mfg. Part No.	Stock No.	Price Each 1-4
76650-0011	51M3030	74.43

(100238)

2.13MM MLX POWER CONNECTOR HEADERS/HOUSINGS

RoHS Compliant Available

molex

- Voltage Rating: 600V
- Contact Resistance: 3.5 mΩ max.
- Dielectric Withstanding Voltage: 2900V
- Insulation Resistance: 1000 MΩ min.
- Housing Material: PA polyamide (Nylon) %

42002 series header contact material is phosphor bronze. Contact plating tin. Operating temperature: -55°C to 100°C.

42002 SERIES POWER CONNECTOR MALE HEADERS

Mfg. Part No.	Circuits	Current Rating	No. of Rows	Stock No.	Price Each 1-9	Price Each 10-99
10-84-4020	2	13.5	1	92C1266	0.55	0.41
42021 SERIES POWER CRIMP HOUSING PLUGS						
50-84-1060	6	11.0	2	57H2029	0.36	0.25
42022 SERIES POWER CRIMP HOUSING RECEPTACLES						
50-84-2060	6	11.0	1	57H2047	0.89	0.66
50-84-2150	15	11.0	3	92C8524	1.32	1.00

42023 AND 42023 SERIES MLX CRIMP TERMINALS

Mfg. Part No.	Gender	Plating	AWG	Insulation Diameter	Stock No.	Price Each 1-99
02-08-1001	Socket	Tin	20AWG to 14AWG	0.060-0.130	73C9386	0.11
36535-0001	Socket	Tin	16AWG to 14AWG	0.201 max.	56H7385	0.12
36536-0001	Pin	Tin	16AWG to 14AWG	0.201 max.	56H7387	0.11
36663-0001	Pin	Tin	12AWG to 10AWG	0.200 max.	58J8299	0.10

(89603)

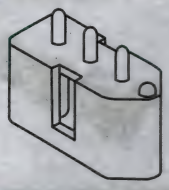
Custom Cable Assembiles to your specs to mate with the complete line of connectors!
Call 1.800.463.9275

(212562)

3099 SERIES 0.198" (5.03) PITCH, 0.093" PIN AND SOCKET SHROUDED MALE PIN HEADERS

RoHS Compliant Available

molex



- Current: 5.0A Max.
- Voltage: 250V
- Dielectric Withstanding Voltage: 1500VACrms
- Contact Resistance: 10mΩ Max.

Polarized housing design provides proper mating. Pre-assembled male and female terminals mate with standard 0.093" receptacles, *ordered separately on pages 904-905 and this page*. Contact material: brass; plating: tin. Operating temperature: -40°C to +105°C.

Mfg. Part No.	Circuits	Stock No.	Price Each 1-9	Price Each 10-99
10-18-1032	3	54H7821	1.50	1.21
10-18-1041	4	54H7829	1.89	1.54
10-18-1061	6	29C8982	1.83	1.49

(69826)

0.198" (5.03) PITCH, 0.093" (2.36) PIN AND SOCKET CONNECTORS

RoHS Compliant Available

molex

- Passive (Friction) Lock
- Panel and PC Mountable
- Voltage: 250V
- Dielectric Withstanding Voltage: 1500VACrms
- Nylon Housing, Rated UL 94V-2
- Operating Temperature: -40°C to +105°C

Fig. 1
Receptacle with Mounting Ears

Fig. 2
Free Hanging Plug

0.093" FREE-HANGING RECEPTACLES

Mfg. Part No.	Circuits	Amps Per Circuit	Stock No.	Price Each 1-9	Price Each 10-99
03-09-1011	1	12	54H5148	0.16	0.12
03-09-1022	2	12	38C8727	0.25	0.18
03-09-1032	3	12	38C8728	0.35	0.24
03-09-1042	4 (1 x 4)	9	11J1831	0.29	0.29
03-09-1049	4 (2 x 2)	9	54H5158	0.52	0.39
03-09-1064	6	9	20C8884	0.52	0.35
03-09-1094	9	9	54H5169	0.46	0.34
03-09-1126	12	7.5	54H5173	0.63	0.47
0.093" PANEL MOUNT RECEPTACLES WITH MOUNTING EARS - FIG. 1					
03-09-1027	2	12	25C7411	0.27	0.18
03-09-1081	3	12	54H5165	0.38	0.26
03-09-1040	4 (2 x 2)	9	54H5156	0.75	0.41
03-09-1061	6	9	38C8733	0.74	0.31
03-09-1091	9	14	54H5166	0.53	0.39
03-09-1125	12	7.5	54H5172	0.64	0.48
3091154	15	9	47M1306	1.08	0.99
0.093" FREE-HANGING PLUGS - FIG. 2					
03-09-2011	1	12	27C3603	0.37	0.12
03-09-2022	2	12	97B2624	0.30	0.20
03-09-2032	3	12	38C8741	0.46	0.23
03-09-2042	4 (1 x 4)	9	38C8744	0.46	0.31
03-09-2049	4 (2 x 2)	9	54H5195	0.82	0.64
03-09-2062	6	9	06C0400	0.62	0.48
03-09-2092	9	9	01C0850	1.06	0.44
03-09-2121	12	7.5	38C8748	1.14	0.79
0.093" PANEL MOUNT PLUGS WITH MOUNTING EARS					
03-09-2021	2	12	34C3363	0.38	0.23
03-09-2031	3	12	54H5189	0.78	0.49
03-09-2041	4	9	38C8743	0.52	0.31
03-09-2040	4 (2 x 2)	9	54H5192	0.86	0.53
03-09-2061	6	9	38C8746	0.74	0.30
03-09-2159	15	9	09WX0180	1.01	0.89

Male and female terminals may be used in plug housings, *ordered separately on page 906*. UL recognized, CSA certified.
(8436)

PIN & SOCKET CONNECTORS

0.125″ (3.18) HCS-125 SERIES CRIMP TERMINALS

RoHS Compliant Available

molex

Pin Socket

Terminals mate with **HCS-125 series** connectors, *sold separately on this page*. Current: 20A max. Contact resistance: 10mΩ max. Operating temperature: -40°C to +105°C. UL listed (file no. E29179), CSA certified (file no. LR19980).

0.125″ (3.18) BRASS TERMINALS

Mfg. Part No.	AWG	Insul. Dia.	Description	Plating	Stock No.	Price Each 1-99	Price Each 100-499
● 18-12-2602	10-14	0.180″	Pin	Tin	55H2644	0.12	0.11
● 18-12-2222	16-18	0.120″	Pin	Tin	55H2641	0.13	0.11
● 18-12-1602	10-14	0.180″	Socket	Tin	55H2635	0.13	0.10
● 18-12-1222	16-18	0.120″	Socket	Tin	55H2632	0.17	0.11

CRIMP TOOL FOR HCS-125 SERIES CRIMP TERMINALS

Mfg. Part No.	Description	Stock No.	Price Each 1-4
638-11-1100	Prototype and Field Repair Crimp Tool	73C1443	385.23

(8395)

HCS-125 SERIES 0.125″ (3.18) PIN AND SOCKET CONNECTORS

RoHS Compliant Available

molex

- Nylon Housing, Rated UL94V-2
- 0.330″ (8.38mm) Pitch
- Current: 20.0A
- Voltage: 600V
- Dielectric Withstanding Voltage: 1500 VACrms
- Operating Temperature: -40°C to +105°C
- Wire Accommodation: 10-18 AWG

Receptacle Plug

HCS-125 series connectors meet the need for a connect system rated at greater than the industry-standard 12.0A per circuit. **HCS-125 series** is an enhanced version of Molex's proven 0.125″ system. Positive locks prevent accidental mismating. Fully isolated terminals for terminal protection. Pull tabs. For use with 0.125″ terminals and crimp tools; *ordered separately on this page*. UL recognized, CSA certified.

42179 SERIES SINGLE-ROW RECEPTACLES

Mfg. Part No.	Circuits	Dim. A	Panel Cutout*	Stock No.	Price Each 1-9
● 03-12-1026	2	0.69″	0.851″	38C8752	0.95
● 03-12-1036	3	1.02″	1.181″	38C8753	0.82
42179 SERIES SINGLE-ROW FREE HANGING PLUGS					
● 03-12-2036	3	1.02″	1.181″	38C8760	0.97
● 03-12-2046	4	1.35″	1.511″	18M7872	1.15
42179 SERIES SINGLE-ROW PANEL MOUNT PLUGS					
● 03-12-2045	4	1.35″	1.511″	38C8761	1.51

*Complete panel cutout = dimension A shown in table x 0.440″ (11.18)

(8347)

565 SERIES WATERPROOF CONNECTORS

RoHS Compliant Available

EDAC INC

Specificatons:
- Insulator Material: PBT (UL94V-0)
- Contact Material: PB / Tin plating
- Wire Housing Seal: Silicone Rubber
- Current Rating: 3 Amperes maximum
- Contact Resistance: 10m maximum
- Insulator Withstanding Voltage: 100 VAC rms at Sea Level
- Insulation Resistance: 1000 megohms minimum at 500 VDC
- Operating Temperature: -40 to +105 Degrees C
- Waterproof Grade 4
- Insulation diameter from .039″ (1.0mm) to .067″ (1.7 mm) can be accommodated using different wire seals and contacts

Features:
- Fully waterproof connector
- Plastic latch provides locking mechanism
- Plug and Receptacle in 2, 3 and 5 contact positions
- Tools available for Contact Installation, Removal, and Crimping
- Able to carry current up to 3A

Mfg. Part No.	No. of Positions	Gender	Insulation Diameter	Stock No.	Price Each 1-9
● 565-002-000-310	2	Plug	1.0mm to 1.3mm	10P9538	4.42
● 565-002-000-311	2	Plug	1.3mm to 1.7mm	78T0437	3.43
● 565-002-000-410	2	Receptacle	1.0mm to 1.3mm	03P3680	3.33
● 565-002-000-411	2	Receptacle	1.3mm to 1.7mm	78T0438	2.77
● 565-003-000-310	3	Plug	1.0mm to 1.3mm	73R7120	5.17
● 565-003-000-410	3	Receptacle	1.0mm to 1.3mm	60M3470	4.17

➤CONTINUED➤

565 SERIES WATERPROOF CONNECTORS (CONT.)

Mfg. Part No.	No. of Positions	Gender	Insulation Diameter	Stock No.	Price Each 1-9
● 565-005-000-310	5	Plug	1.0mm to 1.3mm	96M1634	7.12
● 565-005-000-410	5	Receptacle	1.0mm to 1.3mm	96M1633	6.67

CONTACTS

Mfg. Part No.	Gender	Wire Size	Stock No.	Price Each 1-9
● 565-290-711	Socket	28AWG to 22AWG	96M1636	0.34
● 565-290-721	Pin	28AWG to 22AWG	60M3471	0.34
● 565-290-731	Pin	22AWG to 20AWG	78T0452	0.32
● 565-290-741	Socket	22AWG to 20AWG	78T0453	0.32

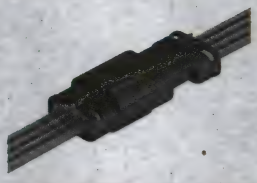
(208193)

566 SERIES WATERPROOF CONNECTORS

RoHS Compliant Available

EDAC INC

Features:
- 2.0mm pitch, Rated Current: 2A Max
- Fully waterproof solution
- Available in wire-to-wire options
- Seals preassembled into housing, no external sealing required
- True Crimp and poke solution
- Available with wire already installed
- Waterproof caps available to cover unused holes
- Wire to board configuration also available



Specifications:
- Insulator Material: PBT (UL94V-0)
- Contact Material: Phosphor Bronze, Tin Plated
- Wire + Housing Seal: Silicon Rubber
- Circuits: 2, 3 and 4 pins
- Pitch: 2.0mm
- Rated Voltage: 250V
- Rated Current: 2A max
- Insulation Resistance: 1000 MΩ minimum per DC 500V
- Contact Resistance: 10 milliohms maximum
- Dielectric Withstanding Voltage: 1000 VAC rms
- Waterproof Grade: IP67
- Wire Seal Insulation Internal Diameter: 1mm to 1.25mm

Mfg. Part No.	No. of Positions	Gender	Stock No.	Price Each 1-9
● 566-002-000-710	2	Plug	78T0454	3.24
● 566-002-000-810	2	Receptacle	78T0456	2.94
● 566-003-000-710	3	Plug	78T0458	4.24
● 566-003-000-810	3	Receptacle	78T0460	3.49
● 566-004-000-710	4	Plug	78T0462	5.26
● 566-004-000-810	4	Receptacle	78T0464	3.93

CONTACTS

Mfg. Part No.	Gender	Wire Size	Stock No.	Price Each 1-9	Price Each 10-24
● 566-290-721	Socket	28AWG to 22AWG	01C7199	0.41	0.37
● 566-290-711	Pin	28AWG to 22AWG	22C7265	0.41	0.37

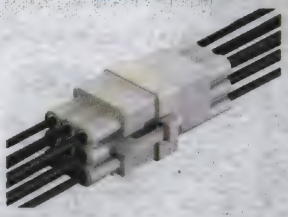
(208192)

567 SERIES WATERPROOF CONNECTORS

RoHS Compliant Available

EDAC INC

Features:
- 5.0 x 5.9mm Pitch
- Rated Current: 8A Max
- Available with wire already installed



Specifications:
- Insulator Material: PBT, UL94V-0
- Contact Material: Brass or Phosphor Bronze, Tin Plated
- Wire + Housing Seal: Silicon Rubber
- Circuits: 1, 2, 3, 4, 6 and 9 pins
- Pitch: 5.0 x 5.9mm
- Rated Voltage: 300V
- Rated Current: 8A max
- Insulation Resistance: 1000 Megohms minimum per DC 500V
- Contact Resistance: 10 milliohms maximum
- Dielectric Withstanding Voltage: 1700 VAC rms
- Operating Range: -40°C to +105°C
- Splashproof Solution Tested to IP52
- Wire Seal Insulation Internal Diameter from ∅0.067″ (1.7mm) to ∅0.122″ (3.1mm) can be accomodated using different wire seals and contacts

Mfg. Part No.	No. of Positions	Gender	Stock No.	Price Each 1-9
● 567-006-000-310	6	Plug	78T0474	1.97
● 567-006-000-410	6	Receptacle	78T0475	1.54

CONTACTS

Mfg. Part No.	Gender	Wire Size	Stock No.	Price Each 1-9
● 570-290-711	Pin	22AWG to 20AWG	22C7613	0.35
● 570-290-721	Socket	22AWG to 20AWG	22C7614	0.35
● 570-290-731	Pin	20AWG to 16AWG	22C7616	0.35
● 570-290-741	Socket	20AWG to 16AWG	22C7618	0.35

➤CONTINUED➤

567 SERIES WATERPROOF CONNECTORS (CONT.)

WIRE SEALS

Mfg. Part No.	Color	Insulation Diameter	Flange	Stock No.	Price Each 1-9
570-260-001	Black	0.67″ to 0.75″	No	22C7609	0.36
570-260-002	Blue	0.079″ to 0.102″	No	22C7611	0.34
570-260-003	Blue	0.083″ to 0.106″	Yes	86H1138	0.36
570-260-004	Brown	0.106″ to 0.122″	Yes	93B4423	0.36

(208191)

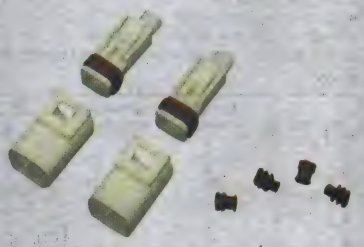
568 SERIES WATERPROOF CONNECTORS

RoHS Compliant Available

EDAC INC

Features:
- Fully waterproof connector
- Plastic latch provides locking mechanism
- Plug and receptacle in 1 contact position
- Tools available for contact installation, removal and crimping
- Wire crimp terminals required

Specifications:
- Insulator material: PBT (UL94V-0)
- Contact material: Brass/tin plating
- Wire housing seal: Silicone rubber
- Carry current: 12A max.
- Contact resistance: 10mΩ max
- Operating temperature: -40°C to 105°C
- Rated voltage: 300V
- IP67 rating



Mfg. Part No.	No. of Contacts	Gender	Stock No.	Price Each 1-9
568-001-000-100	1	Receptacle	93B4422	1.37
568-001-000-200	1	Plug	93B4420	0.73

CONTACTS

Mfg. Part No.	Gender	Wire Size	Stock No.	Price Each 1-9
570-290-711	Pin	22AWG to 20AWG	22C7613	0.35
570-290-721	Socket	22AWG to 20AWG	22C7614	0.35
570-290-731	Pin	20AWG to 16AWG	22C7616	0.35
570-290-741	Socket	20AWG to 16AWG	22C7618	0.35

WIRE SEALS

Mfg. Part No.	Color	Insulation Diameter	Flange	Stock No.	Price Each 1-9
570-260-001	Black	0.67″ to 0.75″	No	22C7609	0.36
570-260-002	Blue	0.079″ to 0.102″	No	22C7611	0.34
570-260-003	Blue	0.083″ to 0.106″	Yes	86H1138	0.36
570-260-004	Brown	0.106″ to 0.122″	Yes	93B4423	0.36

(87087)

570 SERIES WATERPROOF CONNECTORS

RoHS Compliant Available

EDAC INC

Features:
- Fully waterproof connector
- Plastic latch provides locking mechanism and polarity
- 5.8mm contact pacing
- Plug and receptacle in 2 or 3 contact positions
- Board mount style available in 1, 2 or 3 contact positions
- Contact termination options include crimp and P.C. tail
- Tools available for contact installation, removal and crimping
- Wire crimp terminals required

Specifications:
- Insulator material:PBT (UL94V-0)
- Contact material: Brass/tin plating
- Wire housing seal: Silicone rubber
- Carry current: 10A max.
- Contact resistance: 10mΩ max
- Operating temperature: -40°C to 105°C
- Rated voltage: 300V
- Headers for use with PC boards up to (.063″) 1.6mm
- IP67 rating

Mfg. Part No.	No. of Positions	Gender	Stock No.	Price Each 1-9
570-001-000-200	1	Receptacle	73R7121	2.07
570-002-000-100	2	Plug	22C9400	1.64
570-002-000-200	2	Receptacle	22C9397	3.71
570-003-000-100	3	Plug	22C7608	3.87
570-003-000-200	3	Receptacle	22C7607	4.23

PCB HEADERS

570-001-420-101	1	Header	83F7174	1.71
570-002-420-101	2	Header	86H1133	2.21
570-003-420-101	3	Header	83F7180	3.60

➤CONTINUED➤

570 SERIES WATERPROOF CONNECTORS (CONT.)

CONTACTS

Mfg. Part No.	Gender	Wire Size	Stock No.	Price Each 1-9
570-290-711	Pin	22AWG to 20AWG	22C7613	0.35
570-290-721	Socket	22AWG to 20AWG	22C7614	0.35
570-290-731	Pin	20AWG to 16AWG	22C7616	0.35
570-290-741	Socket	20AWG to 16AWG	22C7618	0.35

WIRE SEALS

Mfg. Part No.	Color	Insulation Diameter	Flange	Stock No.	Price Each 1-9
570-260-001	Black	0.67″ to 0.75″	No	22C7609	0.36
570-260-002	Blue	0.079″ to 0.102″	No	22C7611	0.34
570-260-003	Blue	0.083″ to 0.106″	Yes	86H1138	0.36
570-260-004	Brown	0.106″ to 0.122″	Yes	93B4423	0.36

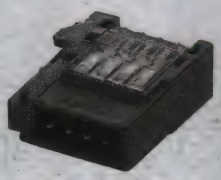
(87090)

XN2 SERIES EASY-WIRE CONNECTORS FOR INDUSTRIAL COMPONENTS WITH E-CON SPECIFICATIONS

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

- Housing: Black PBT resin, UL94V-0
- Base: Transparent PC resin, UL94V-0
- Contacts: Gold plated phosphor bronze
- Terminals: Tin plated phosphor bronze
- Ambient operating temperature : -30°C to 75°C
- Uses industry-proven spring clamps for wiring
- No special tools required for easy wiring



Cable Plug Connector

PCB Socket Connector

- Easy to rewire and repair
- Connector accepts any wire size from 28-20 AWG (0.08 mm² to 0.5 mm²)

CABLE PLUG CONNECTORS

Mfg. Part No.	No. of Contacts	Connector	Stock No.	Price Each 1-24
XN2A-1370	3	Plug	40T9633	6.26
XN2A-1470	4	Plug	40T9634	6.84
XN2A-1570	5	Plug	40T9635	7.78
XN2A-1670	6	Plug	40T9636	9.43
XN2A-1870	8	Plug	40T9637	9.56

CABLE SOCKET CONNECTORS

XN2B-1470	4	Receptacle	40T9638	7.92

SINGLE SOCKET PCB SOCKET CONNECTORS

XN2D-1371	3	Receptacle	40T9639	4.08
XN2D-1471	4	Receptacle	40T9640	4.16
XN2D-1571	5	Receptacle	40T9641	4.74
XN2D-1671	6	Receptacle	40T9642	5.21
XN2D-1871	8	Receptacle	40T9643	6.15

FOUR SOCKET PCB SOCKET CONNECTORS

XN2D-4471	4	Receptacle	40T9644	8.02

(197550)

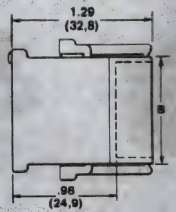
SMS QIKMATE TRIM TRIO™ RECTANGULAR PLASTIC CONNECTORS

RoHS Compliant Available

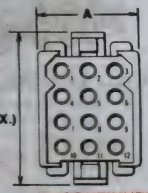
SOURIAU

Esterline Connection Technologies

Plug



Plugs



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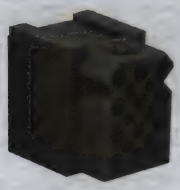
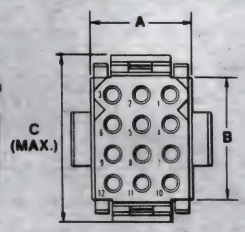
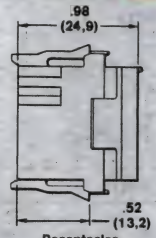
SMS QIKMATE TRIM TRIO™ RECTANGULAR PLASTIC CONNECTORS (CONT.)

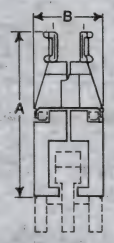


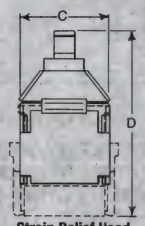
Receptacle





Receptacles





Strain Relief Hood

- Self-mounting, no extra hardware required
- All plastic construction
- Lightweight and economical
- Operating temperature: -55°C to 105°C
- Operating voltage: 250V
- Current rating: 5 to 13A per contact
- Strain relief hood *ordered separately below*

Use with Trim Trio™ contacts; *ordered separately on pages 996-997.*

PLUGS

Mfg. Part No.	Contact Positions	Dimensions A	Dimensions B	Dimensions C (Max.)	Stock No.	Price Each 1-9	Price Each 10-24
● SMS2P-1	2	0.59″ (15.0)	0.33″ (8.4)	0.70″ (17.8)	**16F5779**	1.09	0.96
● SMS3P-1	3	0.73″ (18.5)	0.33″ (8.4)	0.70″ (17.8)	**16F5780**	0.74	0.65
● SMS4P-1	4	0.93″ (23.7)	0.33″ (8.4)	0.70″ (17.8)	**84K9574**	0.94	0.82
● SMS6P-1	6	0.73″ (18.5)	0.53″ (13.5)	0.90″ (22.9)	**16F5781**	0.71	0.63
● SMS12P-1	12	0.73″ (18.5)	0.93″ (23.6)	1.30″ (33.0)	**16F5782**	0.79	0.69
● SMS24P-1	24	0.93″ (23.6)	1.33″ (33.8)	1.70″ (43.2)	**16F5783**	1.35	1.18
RECEPTACLES							
● SMS2R-1	2	0.43″ (10.9)	0.23″ (5.8)	0.60″ (15.2)	**16F5784**	1.09	0.96
● SMS3R-1	3	0.63″ (16.0)	0.23″ (5.8)	0.60″ (15.2)	**16F5785**	1.03	0.90
● SMS4R1	4	0.83″ (21.1)	0.23″ (5.8)	0.60″ (15.2)	**37B7764**	1.00	0.87
● SMS6R-1	6	0.63″ (16.0)	0.43″ (10.9)	0.80″ (20.3)	**16F5786**	1.98	1.73
● SMS12R-1	12	0.63″ (16.0)	0.83″ (21.1)	1.20″ (30.5)	**16F5787**	0.86	0.75
● SMS24R-1	24	0.83″ (21.1)	1.23″ (31.2)	1.60″ (40.6)	**16F5788**	2.08	1.82

STRAIN RELIEF HOODS

Mfg. Part No.	Pos.	Dimensions A	Dimensions B	Dimensions C	Dimensions D (Max.)	Stock No.	Price Each 1-9
● SMS2H-1	2	1.82″ (46.2)	0.66″ (16.7)	0.42″ (10.6)	2.22″ (56.3)	**16F5789**	2.08
● SMS3H-1	3	1.82″ (46.2)	0.76″ (19.3)	0.42″ (10.6)	2.22″ (56.3)	**16F5790**	2.08
● SMS4H-1	4	1.82″ (46.2)	0.96″ (24.3)	0.42″ (10.6)	2.22″ (56.3)	**84K9573**	2.16
● SMS12H-1	12	1.78″ (45.2)	0.76″ (19.3)	1.02″ (25.9)	2.18″ (55.3)	**16F5792**	1.22
● SMS24H-1	24	1.99″ (50.5)	0.96″ (24.3)	1.42″ (36.0)	2.39″ (60.7)	**16F5793**	1.37

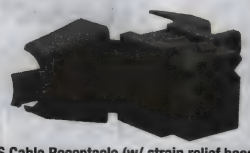
(8500)

SMS QIKMATE TRIM TRIO™ RECTANGULAR CABLE CONNECTORS WITH STRAIN RELIEF

RoHS Compliant Available

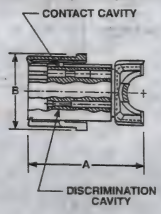
SOURIAU

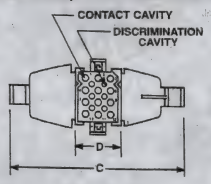
Esterline Connection Technologies

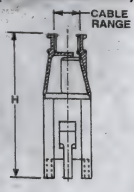


SMS Cable Receptacle (w/ strain relief hood)

SMS Cable Plug (w/ strain relief hood)







Plugs

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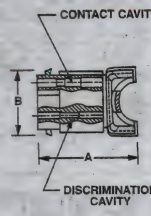
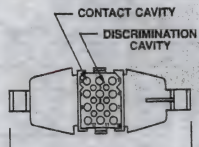
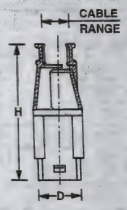
SMS QIKMATE TRIM TRIO™ RECTANGULAR CABLE CONNECTORS WITH STRAIN RELIEF (CONT.)







Receptacles

- Self-mounting, no extra hardware required
- All plastic construction
- Lightweight and economical
- Integrated strain relief for wire management
- Operating temperature: -55°C to 105°C
- Operating voltage: 250V
- Current rating: 5 to 13A per contact

Use with Trim Trio™ contacts; *ordered separately on pages 996-997.*

PLUGS

Mfg. Part No.	Contact Positions	Discrimination Positions	Dimensions (mm) A	Dimensions (mm) B	Dimensions (mm) C	Dimensions (mm) D	Dimensions (mm) H	Stock No.	Price Each 1-9
● SMS3PDH1	3	...	43.0	16.4	69.0	18.6	57.1	**95B8020**	4.43
● SMS4PDH1	4	...	46.1	16.4	74.4	23.7	57.1	**95B8023**	4.80
● SMS6PDH1	6	2	42.5	21.5	72.6	18.6	58.8	**95B8025**	4.87
● SMS9PDH1	9	4	43.7	26.7	75.3	18.6	60.1	**95B8027**	4.77
● SMS12PDH1	12	6	46.0	31.7	72.0	18.6	60.6	**95B8011**	4.65
RECEPTACLES									
● SMS3RDH1	3	...	35.1	9.9	69.0	16.2	49.2	**95B8021**	4.70
● SMS4RDH1	4	...	38.2	9.9	74.4	21.2	49.2	**95B8024**	4.65
● SMS6RDH1	6	2	34.6	15.0	72.6	16.2	50.9	**95B8026**	5.84
● SMS12RDH1	12	6	38.1	25.1	72.0	16.2	52.7	**95B8012**	5.72

(48998)

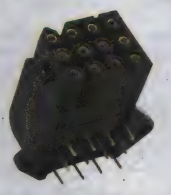
SMS QIKMATE TRIM TRIO™ BOARD MOUNT RECEPTACLES

RoHS Compliant Available

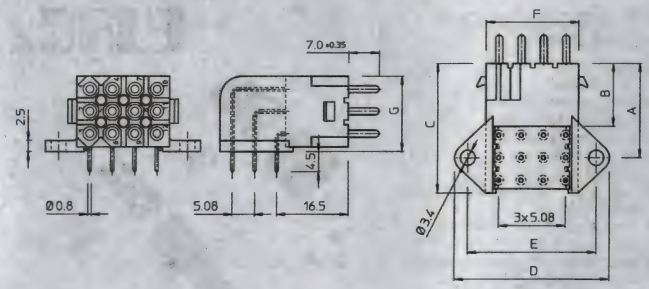
SOURIAU

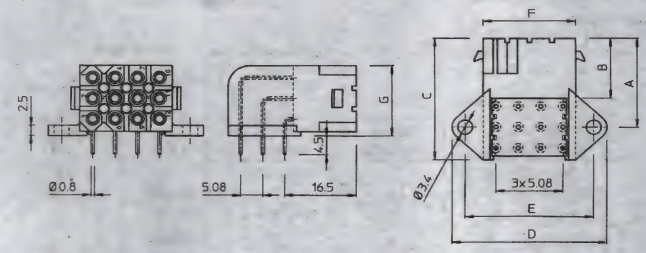
Esterline Connection Technologies

Right Angle w/ Male Contacts



Right Angle w/ Female Contacts





These PC boardmount connectors enable QIKMATE and preassembled TRIM TRIO contacts to be PC board mounted, using conventional solder production techniques. They will then mate and latch with the standard QIKMATE plugs. All boardmount connectors are supplied fully loaded with pin or socket contacts, either in solid machined or stamped and formed contacts. Stamped and formed contact have selective tin plating on the solder tails, thus eliminating flux operations.

➤CONTINUED➤

SMS QIKMATE TRIM TRIO™ BOARD MOUNT RECEPTACLES (CONT.)

RIGHT ANGLE BOARDMOUNT WITH FEMALE CONTACTS

Mfg. Part No.	Pos.	Contact Type	Dimensions (mm) A	B	C	D	E	F	G	Stock No.	Price Each 1-9
SMS3GE5	3	Solid	16.5	14.4	20.5	30.2	24.2	16.2	6.8	74R4521	8.48
SMS3SE5K9	3	Stamped	16.5	14.4	20.5	30.2	24.2	16.2	6.8	06W1532	4.84
SMS6GE5	6	Solid	19	14.4	24.5	35.2	29.2	21.2	11.9	74R4530	14.88
SMS6SE5K9	6	Stamped	19	14.4	24.5	35.2	29.2	21.2	11.9	06W1533	5.29
SMS12GE5	12	Solid	21.6	14.4	29.5	45.4	39.4	31.2	17.2	74R4499	55.51
SMS12SE5K9	12	Stamped	21.6	14.4	29.5	45.4	39.4	31.2	17.2	02P5787	10.04
RIGHT ANGLE BOARDMOUNT WITH MALE CONTACTS											
SMS3GE6	3	Solid	16.5	14.4	20.5	30.2	24.2	16.2	6.8	91H5782	4.77
SMS3SE6K9	3	Stamped	19	14.4	24.5	35.2	29.2	21.2	11.9	75R9567	4.80
SMS6GE6	6	Solid	21.6	14.4	29.5	45.4	39.4	31.2	17.2	71J7780	8.82
SMS6SE6K9	6	Stamped	16.5	14.4	20.5	30.2	24.2	16.2	6.8	06W1534	4.84
SMS12GE6	12	Solid	19	14.4	24.5	35.2	29.2	21.2	11.9	99B6453	16.91
SMS12SE6K9	12	Stamped	21.6	14.4	29.5	45.4	39.4	31.2	17.2	06W1531	9.98

(208158)

4.20mm (0.165″) PITCH PIN AND SOCKET CONNECTORS

RoHS Compliant Available

multicomp

Specifications:
- Current Rating: 9.0A AC/DC
- Voltage Rating: 600V AC/DC
- Contact Resistance: 10m ohm. max.
- Insulation Resistance: 1000M ohm. min.
- Withstanding Voltage: 1500V AC for one minute
- Operating Temperature Range: -40°C to +105°C
- Insulator: High Temperature Plastic (UL94V-2)
- Contacts: Tin plated Phosphor Bronze Or Brass

CRIMP CONTACTS

Mfg. Part No.	Description	AWG	Stock No.	Price Each 1-249
MC343151	Pin	28-22	27T2913	0.05
MC343152	Pin	24-18	27T2914	0.05
MC343153	Pin	16	27T2915	0.05
MC346771	Socket	28-22	27T2916	0.05
MC346772	Socket	24-18	27T2917	0.05
MC346773	Socket	16	27T2918	0.05

DUAL ROW RECEPTACLE HOUSINGS

Mfg. Part No.	No. of Contacts	Stock No.	Price Each 1-249
MC34505	2	02N4580	0.11
MC34507	4	02N4581	0.12
MC34509	6	02N4582	0.17
MC34511	8	02N4583	0.22
MC34513	10	02N4584	0.21
MC34515	12	02N4585	0.27
MC34549	16	02N4587	0.35
MC34891	18	02N4588	0.37
MC34551	20	02N4589	0.25
SINGLE ROW RECEPTACLE HOUSINGS			
MC34905	3	02N4590	0.33
DUAL ROW PLUG HOUSINGS			
MC34517	2	02N4594	0.26
MC34519	4	02N4595	0.33
MC34525	10	02N4598	0.41
SINGLE ROW PLUG HOUSINGS			
MC34911	3	02N4604	0.32
MC34913	4	02N4605	0.39
MC34915	5	02N4606	0.51

(119566)

4.20mm (0.165″) PITCH PCB PIN AND SOCKET CONNECTORS

RoHS Compliant Available

multicomp

Specifications:
- Current Rating: 9.0A AC/DC
- Voltage Rating: 600V AC/DC
- Contact Resistance: 10m ohm. max.
- Insulation Resistance: 1000M ohm. min.
- Withstanding Voltage: 1500V AC for one minute
- Operating Temperature Range: -40°C to +105°C
- Insulator: Nylon 66(UL94V-2)
- Contacts: Tin plated Copper Alloy

Right Angle Receptacle

VERTICAL PCB DOUBLE ROW RECEPTACLES

Mfg. Part No.	No. of Contacts	Stock No.	Price Each 1-249
MC34657	2	02N4681	0.40
MC34659	4	02N4682	0.49
MC34661	6	02N4683	0.58

CONTINUED

4.20mm (0.165″) PITCH PCB PIN AND SOCKET CONNECTORS (CONT.)

Mfg. Part No.	No. of Contacts	Stock No.	Price Each 1-249
MC34667	12	02N4686	0.95
MC34779	20	02N4690	0.99
RIGHT ANGLE PCB DOUBLE ROW RECEPTACLES			
MC34669	4	02N4695	0.64

(119568)

NECTOR S LINE CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- 7.5 mm outer diameter of plug to fit into 8 mm furniture holes
- Connector system available in wire-to-wire configuration
- Outlet and Plug assemblies with two contact positions
- Use widely known MQS contacts
- 6 way distributor with additional switch feature

NECTOR S line connector is designed according the IEC 60320 and UL 1977 standard for lighting industry applications, where size and easy interconnection are key requirements. It is installable in small fixtures into furniture, ceiling, wall and floors. Applicable in power connection and coupling between lamps such as lighting wiring in offices; kitchen, bathroom, shop and household furniture; display cabinets and mountable lighting.

STANDARD COMPONENTS UL STYLE
OUTLET PCB CONNECTOR STRAIGHT VERSION

Mfg. Part No.	Keying	Current (A)	Voltage	Stock No.	Price Each 1-9
293653-1	HV-2	6	125 VAC	27W3599	3.07
293653-2	HV-3	6	125 VAC	27W3600	3.07
293653-3	HV-4	6	125 VAC	27W3601	3.07
293653-4	HV-5	6	125 VAC	27W3602	3.07
293653-5	LV-2	7	42 VDC	27W3603	3.07
OUTLET PCB CONNECTOR STRAIGHT ANGLED VERSION					
293652-1	HV-2	6	125 VAC	27W3594	3.29
293652-2	HV-3	6	125 VAC	27W3595	3.17
293652-3	HV-4	6	125 VAC	27W3596	3.17
293652-4	HV-5	6	125 VAC	27W3597	3.17
293652-5	LV-2	7	42 VDC	27W3598	3.29
PLUG PCB CONNECTOR STRAIGHT VERSION					
293655-1	HV-2	6	125 VAC	27W3609	2.34
293655-2	HV-3	6	125 VAC	27W3610	2.25
293655-3	HV-4	6	125 VAC	27W3611	2.25
293655-4	HV-5	6	125 VAC	27W3612	2.25
293655-5	LV-2	7	42 VDC	27W3613	2.34
PLUG PCB CONNECTOR STRAIGHT ANGLED VERSION					
293654-1	HV-2	6	125 VAC	27W3604	3.14
293654-2	HV-3	6	125 VAC	27W3605	3.14
293654-3	HV-4	6	125 VAC	27W3606	3.14
293654-4	HV-5	6	125 VAC	27W3607	3.14
293654-5	LV-2	7	42 VDC	27W3608	3.26
SPLITTER SERIAL					
293649-1	HV-4 to HV-4 / HV-2	6	125 VAC	27W3588	7.43
293649-2	LV-2 to LV-2 / HV-2	6	125 VAC	27W3589	7.43
SPLITTER PARALLEL					
293650-1	HV-4 to HV-4 / HV-4	6	125 VAC	27W3590	7.00
293650-2	HV-3 to HV-3 / HV-3	6	125 VAC	27W3591	7.06
293650-3	HV-5 to HV-5 / HV-5	6	125 VAC	27W3592	7.00
293650-4	LV-2 to LV-2 / HV-2	7	42 VDC	27W3593	7.48
BRIDGE CONNECTOR					
293647-1	HV-4 / HV-5	6	125 VAC	27W3587	3.37

CABLE ASSEMBLIES UL STYLE
S LINE PLUG TO OUTLET

Mfg. Part No.	Length (ft.)	Cable Type	Keying	Current (A)	Voltage	Stock No.	Price Each 1-24
2181143-1	2	SPT-2	HV-3	6	125 VAC	27W3570	6.97
2181143-4	8	SPT-2	HV-3	6	125 VAC	27W3571	10.20
2181191-1	2	SPT-2	HV-4	6	125 VAC	27W3574	7.00
2181192-1	2	SPT-2	LV-2	7	42 VDC	27W3575	7.00
2181192-4	8	SPT-2	LV-2	7	42 VDC	27W3576	10.09
1-2083073-1	2	SVT	HV-3	6	125 VAC	27W3557	4.76

CONTINUED

NECTOR S LINE CONNECTORS (CONT.)

Mfg. Part No.	Length (ft.)	Cable Type	Keying	Current (A)	Voltage	Stock No.	Price Each 1-24
● 1-2083072-1	2	SVT	HV-4	6	125 VAC	27W3556	5.54
● 2-2083073-1	2	SVT	LV-2	7	42 VDC	27W3566	5.56
S LINE PLUG TO PIGTAIL							
● 2181148-1	2	SPT-2	HV-2	6	125 VAC	27W3572	4.22
● 2181148-4	8	SPT-2	HV-2	6	125 VAC	27W3573	7.55
● 2181193-1	2	SPT-2	HV-3	6	125 VAC	27W3577	4.17
● 2181193-4	8	SPT-2	HV-3	6	125 VAC	27W3578	7.44
● 2181194-1	2	SPT-2	HV-4	6	125 VAC	27W3579	4.17
● 2181195-1	2	SPT-2	LV-2	7	42 VDC	27W3580	4.17
● 2181195-4	8	SPT-2	LV-2	7	42 VDC	27W3581	7.40
● 2-2083074-1	2	SVT	HV-2	6	125 VAC	27W3567	3.90
● 1-2083075-1	2	SVT	HV-3	6	125 VAC	27W3559	3.71
● 1-2083074-1	2	SVT	HV-4	6	125 VAC	27W3558	3.86
● 2-2083075-1	2	SVT	LV-2	7	42 VDC	27W3568	3.45
S LINE OUTLET TO PIGTAIL							
● 2181196-1	2	SPT-2	HV-3	6	125 VAC	27W3582	4.35
● 2181196-4	8	SPT-2	HV-3	6	125 VAC	27W3583	7.60
● 2181197-1	2	SPT-2	HV-4	6	125 VAC	27W3584	4.37
● 2181198-1	2	SPT-2	LV-2	7	42 VDC	27W3585	4.33
● 2181198-4	8	SPT-2	LV-2	7	42 VDC	27W3586	7.55
● 1-2083077-1	2	SVT	HV-3	6	125 VAC	27W3561	4.22
● 1-2083076-1	2	SVT	HV-4	6	125 VAC	27W3560	4.22
● 2-2083077-1	2	SVT	LV-2	7	42 VDC	27W3569	4.22

CABLE ASSEMBLIES UL STYLE

Mfg. Part No.	Description	Length (ft.)	Cable Type	Keying	Current (A)	Voltage	Stock No.	Price Each 1-24
● 1-2083079-1	S Line 6 Way Distributor Pigtail	8	SVT	LV-2 6X	7	42 VDC	27W3562	10.52
● 1-2083081-1	S Line 6 Way Distributor Pigtail (Switchable)	8	SVT	LV-2 6X + HV-2	7	42 VDC	27W3563	11.07
● 1-2083083-1	S Line 6 Way Distributor to Powerplug	8	SVT	HV-3 6X	6	125 VAC	27W3564	16.41
● 1-2083084-1	NS Line 6 Way Distributor to Powerplug	8	SVT	HV-3 6X + HV-2	6	125 VAC	27W3565	17.51

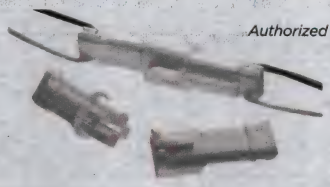
(208178)

LIGHT-N-LOK CONNECTOR HOT-PLUGGABLE LIGHTING DISCONNECT

RoHS Compliant Available

TE connectivity

Authorized Distributor



KEY FEATURES
- Poke-in termination for 18 AWG wire for easy tool-less, field or factory installation
- Integral strain relief prevents wire twist out and pull out
- Designed for hot plugging
- Meets new NEC and CEC requirements

Mfg. Part No.	Circuits	Gender	Stock No.	Price Each 1-9
● 2008144-1	2	Male-Female Assembly	61M2467	0.86
● 2008152-1	3	Male-Female Assembly	61M2470	1.46

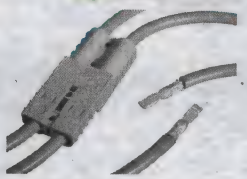
(102912)

AMP POWER SERIES 50 CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor



- Color-coded modular housings
- Genderless housings
- Integral dovetails allow stacking of connectors
- Rugged design

Power Series 50 connectors rated at 50 A, 600 V (AC or DC). Wire size 6, 8, 10-12 AWG. Cold headed contacts. Materials: Housing: Polycarbonate, UL 94V-0 Contacts: Copper with silver plating.

➤CONTINUED➤

AMP POWER SERIES 50 CONNECTORS (CONT.)

CONNECTOR HOUSINGS

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● 647845-3	Housing, Red	16H3163	1.93
● 647845-4	Housing, Gray	16H3164	1.93
● 647845-5	Housing, Blue	16H3165	2.48
● 647845-7	Housing, Black	16H3166	1.57
● 647845-8	Housing, Yellow	16H3167	1.84
CONTACTS			
● 647877-1	Contact, 6 AWG	16H3168	0.88
● 647878-1	Contact, 8 AWG	16H3169	1.40
● 647879-1	Contact, 10-12 AWG	16H3170	0.98
CONNECTOR KIT - HOUSING & 2 CONTACTS			
● 647892-3	Housing & 6 AWG Contact, Red	16H3171	8.09
● 647892-4	Housing & 6 AWG Contact, Grey	16H3172	8.09
● 647892-5	Housing & 6 AWG Contact, Blue	19R6901	8.09
● 647892-8	Housing & 6 AWG Contact, Yellow	19R6903	8.09
● 647893-3	Housing & 10-12 AWG Contact, Red	16H3173	8.09
● 647893-4	Housing & 10-12 AWG Contact, Grey	16H3174	8.09
● 647893-5	Housing & 10-12 AWG Contact, Blue	19H0527	8.09

(80431)

ET POWER CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features
- Right-angle and vertical mounts available
- Low profile right-angle connector ≤ 8 mm above pcb
- 14-10 AWG wire range
- Refer to current v temp rise graphs for current capability
- Coding contacts for sense function
- Positive metal latch retention
- Up to 30 Amps per contact

Specifications
- Housing: Black glassfilled thermoplastic, UL 94V-0 rated
- Latch: Stainless Steel
- Power contacts: Gold plated Copper alloy

Designed for low-profile power distribution units requiring small form factor connector with high current, the ET power connector is a low loss, highly reliable and cost effective solution for cable-to-pcb applications. The connector is available in both a vertical mount and a right-angle mount, which stands at just 8 mm off of the board. A unique feature of the ET power series is integrated coding contacts which allow different electronic functions such as sense and enable to be designed into the PDU electronics with activation on full insertion of the cable connector. Crimp contacts from the industry proven "Standard Power Timer" range for use with 14 , 12, and 10 AWG wire. The cable connector has a positive latching mechanism providing no accidental un-mating even with pull forces up to 100N.

CABLE CONNECTORS

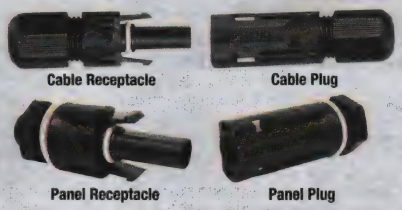
Mfg. Part No.	No. of Contacts	Description	Stock No.	Price Each 1-24	Price Each 25-99
● 1982299-1	2	With Right Coding Key Only	25T0309	1.58	1.43
● 1982299-2	2	With Left Coding Key Only	25T0310	3.00	2.71
● 1982299-4	2	Without Coding Keys	25T0311	1.58	1.47
RIGHT ANGLE PCB HEADERS					
● 1982295-1	2	With Coding Contacts	25T0307	3.37	3.04
● 1982295-2	2	Without Coding Contacts	25T0308	2.88	2.73
VERTICAL PCB HEADERS					
● 2042274-1	2	With Coding Contacts	25T0312	4.53	4.10
● 2042274-2	2	Without Coding Contacts	25T0313	3.92	3.76

(192414)

HELIOS H4 PLUG AND SOCKET SOLAR CONNECTORS

RoHS Compliant Available

Amphenol® Industrial



Specifications
- Rated voltage: 1000V (IEC/CEI), 600V(UL)
- Test voltage: 6kV for 1 minute, 10kV impulse (1.2/50uS)(IEC)
- Typical contact resistance: 0.25 mΩ
- Contacts: Tin plated copper
- Contact system: Machined/cold formed contact with RADSOK® insert
- Insulation material: PC
- Locking mechanism: Snap-lock, special unlock tool required to un-mate per NEC2008
- Cable strain relief: Compression gland with ratcheting gland nut
- Degree of protection: IP68 (1 meter, 1 hour) mated
- Safety class: II (IEC61140)
- Pollution degree: 2 (IEC60664)
- Overvoltage category: III (IEC60664)
- Flame class: UL94-V0
- Ambient temperature range: -40°C to +90°C

Features
- Fully intermateable with industry standard
- Meets all new NEC 2008 requirements
- Quick and easy secure snap lock mating
- Long-term UV and Ozone resistance
- Low contact resistance means low power loss
- Crimp contacts constructed of tin-plated copper
- Cable connectors are UL, TÜV, and CSA approved
- Panel connectors are UL and TÜV dual approval

➤CONTINUED➤

HELIOS H4 PLUG AND SOCKET SOLAR CONNECTORS (CONT.)

The Helios™ H4 Cable connector is the premiere solar connector in the market today. It carries more amps, has a higher IP rating, and is fully intermatable with the industry standard connector. Meets the NEC 2008 standard "as is" no additional components required. The Helios™ H4 Panel connector is designed for applications that use solar inverters and combiner boxes. The panel connector meets NEC 2008 requirements without the need for extra locking collars or locking sleeves.

CABLE CONNECTORS

Mfg. Part No.	AWG	Gender	Current (A)	Stock No.	Price Each 1-9	10-24	25-99
H4CFC2DI	14	Receptacle	32	67R3195	3.48	3.10	2.83
H4CMC2DI	14	Plug	32	67R3196	2.86	2.55	2.33
H4CPC2DI	14	Mated Pair	32	67R3197	6.33	5.65	5.16
H4CFC4DI	12	Receptacle	40	67R3198	3.48	3.10	2.83
H4CMC4DI	12	Plug	40	67R3199	3.08	2.75	2.51
H4CPC4DI	12	Mated Pair	40	67R3200	6.33	5.65	5.16
H4CFC6DI	10	Receptacle	44	67R3192	3.87	3.45	3.15
H4CMC6DI	10	Plug	44	67R3193	2.97	2.65	2.42
H4CPC6DI	10	Mated Pair	44	67R3194	7.09	6.33	5.77

PANEL CONNECTORS

Mfg. Part No.	AWG	Gender	Current (A)	Stock No.	Price Each 1-9	10-24	25-99
H4CFM2DI	14AWG	Receptacle	32	50T8934	3.48	3.10	2.83
H4CMM2DI	14AWG	Plug	32	50T8937	2.86	2.55	2.33
H4CPM2DI	14AWG	Mated Pair	32	50T8940	9.55	8.53	7.78
H4CFM4DI	12AWG	Receptacle	40	50T8935	3.48	3.10	2.83
H4CMM4DI	12AWG	Plug	40	50T8938	2.86	2.55	2.33
H4CPM4DI	12AWG	Mated Pair	40	50T8941	7.70	6.88	6.27
H4CFM6DI	10AWG	Receptacle	44	50T8936	3.59	3.20	2.92
H4CMM6DI	10AWG	Plug	44	50T8939	2.97	2.65	2.42
H4CPM6DI	10AWG	Mated Pair	44	50T8942	8.88	7.93	7.23

TOOLS AND ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
H4YX	Branch Connector - 2 Receptacles, 1 Plug	83T7099	11.47
H4YY	Branch Connector - 2 Plugs, 1 Receptacle	83T7100	11.62
H4TC0000	Crimp Tool (14-10 AWG) - Cable & Panel Connectors	67R3201	136.65
PV-670509-000	Strip Tool (14-10 AWG) - Cable Connectors	67R3202	144.57
H4TS0000	Strip Tool (14-10 AWG) - Cable Connectors	14T3670	63.48
H4TW0002	Wrench/Disconnect/Assembly Tool - Cable Connectors	87T7303	4.87
H4TR0000	Unlocking Ring Tool - Cable Connectors	67R3204	1.25
H4TU0000	Universal Unlocking Tool	14T3671	0.19
H4TK0000	Tool Kit - Strip Tool, Crimp Tool, Wrench Tool and Universal Unlocking Tool	83T7098	661.71

(176240)

SOLAR ELECTRICITY INTERCONNECT SYSTEM

TÜV Rheinland

RoHS Compliant Available

TE connectivity

Authorized Distributor

Female Coupler

Male Coupler

Male to Male T-Branch

Box Receptacle - O-Ring and Metal Nut

Box Receptacle - Flat Seal and Plastic Nut

Female to Male T-Branch

- Simple on-site processing
- Mating safety provided by keyed housings
- Semi-automatic assembly capability possible
- Multiple plugging and unplugging cycles
- Accommodates solar cable with different insulation diameters
- High current carrying capacity
- Wide temperature operating range
- TÜV and UL approved

SOLARLOK connectors deliver a flexible system solution for easy and reliable interconnections from photovoltaic modules to DC/AC converters. The male and female cable couplers are designed for high voltage and high current-carrying capacity in addition to the well established IP 67 sealing requirement in the photovoltaic industry. Mating safety is provided by polarity keyed housings, fully shrouded contacts, reliable high cycle life, and squeeze to release connection system. *Order specially designed solar cable separately online or call.*

SOLARLOK PHOTOVOLTAIC CABLE COUPLERS

Mfg. Part No.	Gender	Keying	Wire Size	Standard	Stock No.	Price Each 1-24	25-49
7-1394461-0	Male	Plus	12AWG	TÜV/UL	84R9791	3.52	3.17
4-1394462-8	Female	Plus	12AWG	TÜV/UL	84R9787	3.90	3.27

CONTINUED

SOLAR ELECTRICITY INTERCONNECT SYSTEM (CONT.)

Mfg. Part No.	Gender	Keying	Wire Size	Standard	Stock No.	Price Each 1-24	25-49
7-1394461-1	Male	Minus	12AWG	TÜV/UL	84R9792	4.03	3.39
4-1394462-9	Female	Minus	12AWG	TÜV/UL	84R9788	3.80	3.19
7-1394461-3	Male	Plus	10AWG	TÜV/UL	84R9794	3.79	3.70
6-1394462-3	Female	Plus	10AWG	TÜV/UL	84R9789	3.79	3.43
7-1394461-4	Male	Minus	10AWG	TÜV/UL	84R9795	3.80	3.19
6-1394462-4	Female	Minus	10AWG	TÜV/UL	84R9790	3.80	3.19
MALE CABLE COUPLER – NOT KEYED – FOR SERIAL INTERCONNECTION							
7-1394461-2	Male	Neutral	12AWG	TÜV/UL	84R9793	3.79	3.19
7-1394461-5	Male	Neutral	10AWG	TÜV/UL	84R9796	4.04	3.39
JUNCTION BOX RECEPTACLES – WITH O-RING AND METAL NUT							
1394738-1	Male	Plus	14AWG	TÜV	21R3776	3.79	3.67
1394738-2	Male	Minus	14AWG	TÜV	21R3777	3.01	2.91
1394738-3	Male	Plus	12AWG	TÜV	26P0728	4.04	3.79
1394738-4	Male	Minus	12AWG	TÜV	26P0729	4.29	4.03
1394738-9	Male	Plus	10AWG	TÜV	21R3778	4.55	4.10
1-1394738-0	Male	Minus	10AWG	TÜV	20R9572	3.79	3.67
2120382-1	Male	Plus	14AWG	UL	64T2334	4.93	4.63
2120382-2	Male	Minus	14AWG	UL	64T2335	5.10	4.90
2120382-3	Male	Plus	12AWG	UL	64T2336	4.93	4.63
2120382-4	Male	Minus	12AWG	UL	64T2337	4.93	4.63
2120382-5	Male	Plus	10AWG	UL	64T2338	4.93	4.63
2120382-6	Male	Minus	10AWG	UL	64T2339	4.93	4.63
JUNCTION BOX RECEPTACLES – WITH FLAT SEAL AND PLASTIC NUT - BLACK							
1740210-1	Male	Plus	14AWG	TÜV	21R5475	4.55	4.10
1740210-2	Male	Minus	14AWG	TÜV	21R5476	4.55	4.10
1740210-3	Male	Plus	12AWG	TÜV	64T2321	4.30	3.87
1740210-4	Male	Minus	12AWG	TÜV	64T2322	4.55	4.10
1740210-5	Male	Plus	10AWG	TÜV	64T2323	4.29	4.12
1740210-6	Male	Minus	10AWG	TÜV	64T2324	4.29	4.12
JUNCTION BOX RECEPTACLES – WITH FLAT SEAL AND PLASTIC NUT - RED							
1740210-7	Male	Plus	14AWG	TÜV	64T2325	4.12	3.95
1740210-9	Male	Plus	12AWG	TÜV	64T2327	4.29	4.12
1-1740210-1	Male	Plus	10AWG	TÜV	64T2319	4.33	3.94
JUNCTION BOX RECEPTACLES – WITH FLAT SEAL AND PLASTIC NUT - BLUE							
1740210-8	Male	Minus	14AWG	TÜV	64T2326	4.12	3.95
1-1740210-0	Male	Minus	12AWG	TÜV	64T2318	4.12	3.95
1-1740210-2	Male	Minus	10AWG	TÜV	64T2320	4.33	3.94

SOLARLOK REPLACEMENT CONTACTS

Mfg. Part No.	Gender	Wire Size (AWG)	Stock No.	Price Each 1-9
1987280-1	Pin	14AWG	64T2329	1.08
1987280-2	Pin	12AWG	64T2330	0.84
1987280-4	Pin	10AWG	64T2331	1.21
1987281-1	Socket	14AWG	64T2332	0.99
1987281-2	Socket	12AWG	34R2220	0.94
1987281-3	Socket	10AWG	40T4481	0.97

SOLARLOK T-BRANCH CONNECTORS

Mfg. Part No.	Description	Keying	Stock No.	Price Each 1-49
1534611-1	Male to Male	Plus	53M0362	10.37
1534611-2	Male to Male	Minus	21R4121	9.16
1740277-1	Female to Male	Plus	53M0363	16.28
1740277-2	Female to Male	Minus	41R3591	16.45

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
2106207-1	NEC/UL Certified Locking Clip	51R0887	0.40
1987423-1	Dust Cover w/Strap for Female Housings	47T4421	0.34
1394739-1	Dust Cover w/Strap for Male Housings	21R3779	0.77
1987419-1	Dust Cover w/o Strap for Male Housings	64T2333	0.55
1-1579004-1	Crimp Tool, w/Vario Crimp Head & Locator for 16-14 AWG Contacts	35R2966	456.66
1-1579004-2	Crimp Tool, w/Vario Crimp Head & Locator for 12-10 AWG Contacts	67K2427	438.75

(106550)

PIN & SOCKET HIGH POWER CONNECTORS

SOLARSPEC™ DC CONNECTORS

RoHS Compliant Available

molex

Panel-Mount Connectors Cable-Mount Connectors

- Housing: Black unfilled PC
- Contact: Silver plated copper alloy
- Voltage (max.): Cable mount: 600 VDC; Panel mount 1000 VDC
- Current (max.): 30 A with 6.00mm² / 10 AWG cable
- Contact resistance: 5 mΩ max.
- Dielectric withstanding voltage: 2200 VDC
- Insulation resistance: 1000 MΩ min.
- Operating Temperature: -40°C to +85°C
- Panel connector IP rating: IP2X (unmated), IP67 (mated)
- Halogen Free
- Glow Wire Compliant

Molex's innovative SolarSpec™ pin (male) and socket (female) DC connectors are rugged and durable, IP67-sealed, SolarSpec™ DC connectors. They feature simple snap-lock mating and an internal locking mechanism for superior safety. Cable connectors are designed for direct connection to solar junction boxes, field installations and PV grid wiring. Panel mount connectors are intended for inverter applications and feature the same mating interface as standard Molex Solar-Spec™ DC connectors. There is no sealing grommet required on the panel side; the retention features in the housing are different and crimp terminals cannot be interchanged between different Molex DC connectors.

SOLARSPEC CABLE CONNECTOR KITS - HOUSING ASSEMBLY WITH CONTACT

Mfg. Part No.	Gender	Wire Size (mm2)	Wire Size (AWG)	Stock No.	Price Each 1-9
● 130244-1202	Pin	4.00 to 6.00	12-10	22T5560	26.11
● 130244-1204	Pin	2.50	14	22T5562	9.80
● 130244-1201	Socket	4.00 to 6.00	12-10	22T5559	25.87
● 130244-1203	Socket	2.50	14	22T5561	9.45
SOLARSPEC CABLE CONNECTOR HOUSINGS - NO CONTACTS					
● 130244-0202	Pin	4.00 to 6.00	12-10	22T5556	5.42
● 130244-0204	Pin	2.50	14	22T5558	5.42
● 130244-0201	Socket	4.00 to 6.00	12-10	22T5555	5.21
● 130244-0203	Socket	2.50	14	22T5557	5.21
SOLARSPEC PANEL MOUNT CONNECTOR HOUSINGS - NO CONTACTS					
● 933010201	Pin	2.50, 4.00 to 6.00	14, 12-10	77T2672	4.80
● 933010101	Socket	2.50, 4.00 to 6.00	14, 12-10	77T2671	4.80

CABLE CONNECTOR CONTACTS

Mfg. Part No.	Gender	Wire Size (mm2)	Wire Size (AWG)	Packaging	Stock No.	Price Each 1-9
● 130196-0315	Pin	2.50		Strip	22T5552	0.61
● 130196-0314	Pin	4.00 to 6.00	12AWG to 10AWG	Strip	22T5551	0.61
● 130196-0313	Pin	2.50	14AWG	Loose Piece	29T5815	0.51
● 130196-0310	Pin	4.00 to 6.00	12AWG to 10AWG	Loose Piece	29T5814	0.67
● 130197-0347	Socket	2.50		Strip	22T5554	0.63
● 130197-0346	Socket	4.00 to 6.00	12AWG to 10AWG	Strip	22T5553	0.63
● 130197-0336	Socket	2.50	14AWG	Loose Piece	29T5817	0.54
● 130197-0325	Socket	4.00 to 6.00	12AWG to 10AWG	Loose Piece	29T5816	0.68
PANEL MOUNT CONNECTOR CONTACTS						
● 933020003	Pin	2.50		Strip	77T2673	0.57
● 933020004	Pin	4.00 to 6.00	12AWG to 10AWG	Strip	77T2674	0.57
● 933030003	Socket	2.50		Strip	77T2675	0.57
● 933030004	Socket	4.00 to 6.00	12AWG to 10AWG	Strip	77T2676	0.57

TOOLING

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● 63823-6400	Hand Crimp Tool	29T5825	316.25
● 130203-1250	Service Tool - Bulk	51T1711	1.07
● 130203-1290	Service Tool - Bagged (4 per pack)	29T5819	6.03

(194840)

TECHNICAL SUPPORT HOTLINE

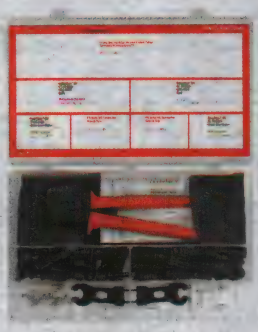
Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

SOLARSPEC CONNECTOR DESIGNER KITS WITH SERVICE TOOLS

molex

Developed to address key applications within the global solar industry, SolarSpec™ products are specifically designed to support efficient, reliable, and flexible solar interconnections. SolarSpec solutions are designed for unique applications and environments that have to meet the many energy and solar design requirements.



Kit no. 76650-0246

Mfg. Part No.	No. of Pieces	Description	Stock No.	Price Each 1-4
76650-0245	42	5 pieces each 14 AWG & 12-10AWG Plug Housings, Receptacle Housings, Pin Contacts, Socket Contacts, & 2 Connector Unlock Tools	76T9105	64.82
76650-0246	83	20 pieces each 12-10AWG Plug Housings, Receptacle Housings, Pin Contacts, Socket Contacts, 2 Connector Unlock Tools, & Premium Crimp Tool	76T9106	553.04
76650-0247	83	20 pieces each 14AWG Plug Housings, Receptacle Housings, Pin Contacts, Socket Contacts, 2 Connector Unlock Tools, & Premium Crimp Tool	76T9107	553.04

(201298)

RADLOK POWER INTERCONNECT PRODUCTS

NEW

Amphenol® Industrial

- Voltage Rating: 1000V
- Current Rating: 70A - 400A
- Tool-Free Mechanical Locking
- High cycle durability (500 mating cycles)
- RoHS compliant
- Available in Black, Red, Orange (custom coloring available)

Tubular Lug Connector Feed-Thru Pin Busbar Pin

Power Interconnect products in today's market often require additional mounting hardware (e.g. washers, clamps, bolts, nuts, etc.) making them prone to costly labor expenses for installation and routine maintenance. Paired with Amphenol's RADLOK™ PIN, the single finger operation lock feature allows end users to connect any power distribution/storage system in a quick and secure manner. The RADLOK™ product line is the answer to industries where a custom, reliable, easy to install, rugged, and cost effective solution is required.

CONNECTOR - TUBULAR LUG

Mfg. Part No.	Description	Current (A)	Cable Size (mm2)	Stock No.	Price Each 1-24
● RL00361-10	Orange	70	10	37X7731	6.20
● RL00571-25	Orange	120	25	37X7734	6.45
● RL00801-35	Orange	150	35	37X7737	7.95
● RL00801-50	Orange	200	50	37X7740	7.95
● RL01001-50	Orange	200	50	37X7743	11.48
● RL01001-70	Orange	250	70	37X7746	11.48
● RL01001-95	Orange	300	95	37X7749	11.48
● RL01201-120	Orange	400	120	37X7752	20.23
● RL00361-10BK	Black	70	10	37X7732	6.20
● RL00571-25BK	Black	120	25	37X7735	6.45
● RL00801-35BK	Black	150	35	37X7738	7.95
● RL00801-50BK	Black	200	50	37X7741	7.95
● RL01001-50BK	Black	200	50	37X7744	11.48
● RL01001-70BK	Black	250	70	37X7747	11.48
● RL01001-95BK	Black	300	95	37X7750	11.48
● RL01201-120BK	Black	400	120	37X7753	20.23
● RL00361-10RE	Red	70	10	37X7733	6.20
● RL00571-25RE	Red	120	25	37X7736	6.45
● RL00801-35RE	Red	150	35	37X7739	7.95
● RL00801-50RE	Red	200	50	37X7742	7.95
● RL01001-50RE	Red	200	50	37X7745	11.48
● RL01001-70RE	Red	250	70	37X7748	11.48
● RL01001-95RE	Red	300	95	37X7751	11.48
● RL01201-120RE	Red	400	120	37X7754	20.23
PIN					
● RL9036-103-F1	Feed-Thru	70	...	37X7756	4.67
● RL9057-103-F1	Feed-Thru	120	...	37X7758	6.13
● RL9080-103-F1	Feed-Thru	200	...	37X7760	7.52

➤CONTINUED➤

RADLOK POWER INTERCONNECT PRODUCTS (CONT.)

PIN

Mfg. Part No.	Description	Current (A)	Cable Size (mm2)	Stock No.	Price Each 1-24
RL9100-103-F1	Feed-Thru	300	...	37X7762	9.93
RL9120-103-F1	Feed-Thru	400	...	37X7764	12.68
RL9036-103	Busbar	70	...	37X7755	1.67
RL9057-103	Busbar	120	...	37X7757	2.26
RL9080-103	Busbar	200	...	37X7759	3.93
RL9100-103	Busbar	300	...	37X7761	5.51
RL9120-103	Busbar	400	...	37X7763	5.87

(212194)

TRU-LOC® RUGGED ENVIRONMENT CONNECTORS

NEW

Amphenol® Industrial

Features:

- 2, 4, or 6 pin connector with 1.5mm RADSOK® featured contacts
- Plug body with secondary latch
- Fluoroelastomer main joint seal and silicone rubber wire seals to support IP67 rating
- Dielectric withstanding voltage is 1600 Vac RMS
- 13 Amp current rating
- Insulation resistance can meet 100 M Ohms
- Matting force less then 70N
- Contact retention between 60–80N
- Operating temperature can meet -40°C to +125°C, 100 cycles, 1 hour per cycle
- Durability is 20 mating cycles

PLUG

RECEPTACLE

The **Tru-Loc connection system** features Amphenol's exclusive RADSOK® contact system. The new Tru-Loc connector series is designed to perform in demanding environments, such as under valve covers on diesel engines and in high vibration sensor applications. Tru-Loc features a molded thermoplastic main plug body with secondary latch and a fluoroelastomer main joint seal that is resistant to many fluids, including diesel fuel.

PLUGS (Plug Body, Locking Collar, and Main Joint Seal)

Mfg. Part No.	No. of Positions	Index	Stock No.	Price Each 1-9
10-838275-000	2	...	54X3854	1.29
10-707003-002	4	...	54X3841	2.09
10-707508-02A	6	A	54X3842	4.03
10-707508-02B	6	B	54X3843	4.03
10-707508-02C	6	C	54X3844	4.03
10-707508-02D	6	D	54X3845	4.03
RECEPTACLES				
10-707516-001	2	...	54X7466	1.21
10-707517-001	4	...	54X3852	1.74
10-707509-00A	6	A	54X3846	1.91
10-707509-00B	6	B	54X3847	1.91
10-707509-00C	6	C	54X3848	1.91
10-707509-00D	6	D	54X3849	1.91

CONTACTS

Mfg. Part No.	Gender	AWG	Stock No.	Price Each 1-35998
10-707515-002	Pin	16	54X3850	0.75
10-838351-002	Socket	16	54X3855	1.19

ACCESSORIES

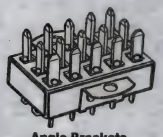
Mfg. Part No.	Description	AWG	Stock No.	Price Each 1-39999
10-838137-00D	Wire Seal	16-14	54X3853	0.15

(212364)

300 SERIES MULTI-DENSITY PLUGS AND SOCKETS

RoHS Compliant Available

CINCH



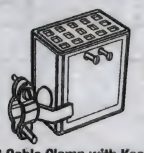
Angle Brackets

Deep Brackets

180° Cable Clamp

Deep Brackets

180° Cable Clamp with Lock



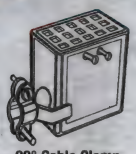
180° Cable Clamp with Keeper

CONTINUED

300 SERIES MULTI-DENSITY PLUGS AND SOCKETS (CONT.)

Angle Brackets

180° Cable Clamp



90° Cable Clamp

300 series multiple density brass plugs and phosphor bronze sockets available with angle brackets, deep brackets for recess mounting, 90° cable clamp or 180° cable clamp with or without lock/keeper. Polarized for interconnecting power and signal carrying circuits in cable-cable and cable-panel applications. Thermoplastic hoods rated UL94V-0. CSA certified. Current: 10A. Withstanding: 730VACrms. Temperature rating: +105°C. For deep brackets, replace **"AB"** suffix with **"DB"**. Other styles and terminations available; *go online or call.*

PLUGS WITH ANGLE BRACKETS (CABLE-TO-PANEL)

Mfg. Part No.	Contacts	Panel Cutout W x L	Stock No.	Price Each 1-9	Price Each 10-24
P-302H-AB	2	0.656″ Dia.	11M5827	1.85	1.77
P-304H-AB	4	0.719 x 0.781″	11M5834	2.20	2.13
SOCKETS WITH ANGLE BRACKETS (CABLE-TO-PANEL)					
S-302H-AB	2	0.656″ Dia.	12M1388	1.92	1.86
S-303H-AB	3	0.453 x 1.016″	12M1392	2.37	2.30
S-304H-AB	4	0.719 x 0.781″	12M1396	2.48	2.38
S-306H-AB	6	0.719 x 1.031″	12M1399	3.22	3.12
PLUGS WITH 180° CABLE CLAMP (CABLE-TO-CABLE)					
P-302H-CCT	2	0.691″ Dia.	02M6069	6.20	5.00
P-303H-CCT	3	0.472 x 1.034″	11M5831	3.90	3.78
P-304H-CCT	4	0.724 x 0.786″	11M5835	4.58	4.43
P-306H-CCT	6	0.724 x 1.036″	11M5839	4.59	4.45
P-312-CCT	12	0.974 x 1.286″	39F286	5.44	5.26
P-315-CCT	15	1.170 x 1.795″	39F287	8.24	7.96
SOCKETS WITH 180° CABLE CLAMP (CABLE-TO-CABLE)					
S-302H-CCT	2	0.691″ Dia.	12M1389	3.64	3.51
S-303H-CCT	3	0.472 x 1.034″	12M1393	3.86	3.75
S-304H-CCT	4	0.724 x 0.786″	05M6485	4.22	4.08
S-306H-CCT	6	0.724 x 1.036″	12M1400	5.05	4.90
S-315-CCT	15	1.170 x 1.795″	39F307	10.93	10.57
S-318-CCT	18	1.170 x 2.107″	39F308	8.82	8.52
PLUGS WITH 180° CABLE CLAMP WITH LOCK (CABLE-TO-CABLE)					
P-303H-CCTL	3	1.034 x 0.472″	11M5832	7.35	7.11
P-304H-CCTL	4	0.786 x 0.724″	11M5836	6.41	6.19
SOCKETS WITH 180° CABLE CLAMP WITH KEEPER (CABLE-TO-CABLE)					
S-302H-CCTK	2	0.691″ Dia.	12M1390	4.75	4.60
S-304H-CCTK	4	0.786 x 0.724″	12M1397	7.36	7.10

(8676)

2400 SERIES MULTIPLE DENSITY SOLDER LUG/ SOLDER EYELET PLUGS AND SOCKETS

RoHS Compliant Available

CINCH

P2406AB

For medium use in cable-to-cable and cable-to-panel applications. Polarized to prevent wrong-way insertion. Brass plug, phosphor bronze socket. Contact plating: cadmium. Plug prongs are 0.250″(6.35) wide, 0.055″(1.40) thick. Black molded phenolic insulation material. Formed metal hood with dielectric liner to prevent shorting. Cable clamps of zinc and clear irridite-plated steel used for strain relief. Current rating: 15A. Withstanding voltage: 1700VAC rms. UL recognized, CSA certified. *To order plugs and sockets with cable clamp at 90° simply change mfg. part no. suffix* **CCT** to **CCE**; to order plugs and sockets with deep brackets for recessed mounting change suffix to **DB**; for plugs and sockets *with shallow bracket for flush mounting change suffix to* **SB**.

PLUGS WITH CABLE CLAMP AT 180°

Mfg. Part No.	Contacts	L	Cable Opening	Stock No.	Price Each 1-9	Price Each 10-24
P-2404H-CCT	4	1.064″	0.438″	11M5814	11.72	11.31
P-2406H-CCT	6	1.500″	0.438″	11M5817	11.99	11.59
P-2408H-CCT	8	1.937″	0.563″	11M5820	12.21	11.79

SOCKETS WITH CABLE CLAMP AT 180°

Mfg. Part No.	Contacts	Stock No.	Price Each 1-24	Price Each 25-49
S-2406H-CCT	6	12M1378	14.49	12.58
S-2408H-CCT	8	12M1381	10.83	10.46

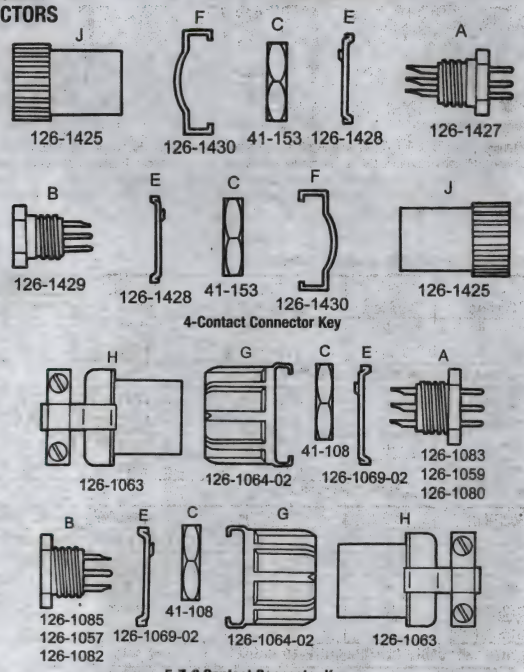
(8744)

PIN & SOCKET HIGH POWER CONNECTORS

126 SERIES MINIATURE HEXAGONAL CONNECTORS

RoHS Compliant Available

COOPER Interconnect



Refer to the enlarged view drawing above to determine the components required. Note the identification letter, then order by the mfg. part no. alongside the desired combination of components and the number of contacts. For example, a male 5 contact connector with rear hood, cable clamp and lock sleeve requires components A, G and H. In the column for male 5 contact assemblies, AGH indicates **mfg. part no. 126-217**, which contains all three components.

4-CONTACT CONNECTOR ASSEMBLIES

Mfg. Part No.	Key	Stock No.	Price Each 1-24	Price Each 25-49
● 126-214-1000	AFJ	87F5331	47.86	43.12
● 126-214	ACE	42FX112	38.89	35.04
● 126-215	BFJ	42FX119	48.61	43.79
● 126-233	BCE	87F5184	44.79	40.35
5-CONTACT CONNECTOR ASSEMBLIES				
● 126-217	AGH	42FX120	24.46	22.05
● 126-216	ACE	42FX113	14.60	13.15
● 126-011	BC	42FX101	9.29	8.37
● 126-223	BGH	42FX121	22.13	19.94
● 126-218	BCE	42FX114	11.59	10.43
7-CONTACT CONNECTOR ASSEMBLIES				
● 126-191	AC	42FX104	9.85	8.87
● 126-195	AGH	42FX122	23.01	20.73
● 126-197	ACE	42FX115	12.52	11.28
● 126-192	BC	42FX105	12.88	11.61
● 126-196	BGH	42FX123	25.58	23.04
● 126-198	BCE	42FX116	12.70	11.45
9-CONTACT CONNECTOR ASSEMBLIES				
● 126-220	AGH	42FX124	22.86	20.59
● 126-219	ACE	42FX117	15.69	14.12
● 126-222	BGH	42FX125	33.68	30.34
● 126-221	BCE	42FX118	17.70	15.95

INDIVIDUAL 5-7-9 CONTACT CONNECTORS

Mfg. Part No.	Description	Key	Stock No.	Price Each 1-24	Price Each 25-49
● 126-1069-02	Clip	E	42FX110	2.24	2.01
● 126-1064-02	Lock Sleeve	G	42FX109	3.65	3.29
● 126-1063	Hood & Cable Clamp	H	42FX108	10.39	9.35

(9060)

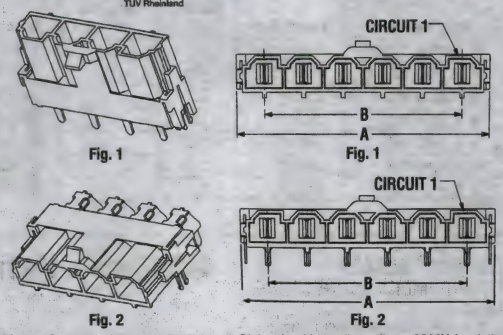
0.393" (10.00) PITCH Mini-Fit, Sr.™ HEADERS

RoHS Compliant Available

molex

TÜV Rheinland

Features:
- High Current
- Fully Polarized
- Positive Locks
- Low Engagement Force
- Wire-to-Board
- Metal Boad Retention Clip
- Surface Mount Compatible



Voltage: 600V. Current: 48A max. Contact resistance: 1.5mΩ (max.). Dielectric withstanding voltage: 2200V. Insulation resistance: 1000 mΩ (min.). Housing: Glass-filled, ⅙ nylon. UL 94V-0. Contact: Copper alloy. Plating: Tin over nickel. Operating temperature: -40°C to +105°C. UL recognized, CSA certified, TUV licensed.

VERTICAL, SINGLE ROW, METAL CLIP MOUNT, SMC — FIG. 1

Mfg. Part No.	Circuits	Dimensions A	Dimensions B	Stock No.	Price Each 1-9
● 42819-4212	4	1.725" (43.82)	1.181" (30.00)	56H9124	3.27
● 42819-6212	6	2.512" (63.82)	1.968" (50.00)	56H9140	4.53
RIGHT-ANGLE, SINGLE ROW, METAL CLIP MOUNT, SMC — FIG. 2					
● 42820-2212	2	0.937" (23.82)	0.393" (10.00)	56H9147	3.45
● 42820-4212	4	1.725" (43.82)	1.181" (30.00)	56H9164	8.85

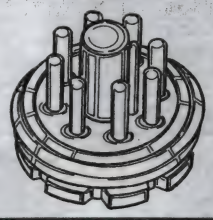
(75614)

COMMERCIAL PLUGS

RoHS Compliant Available

COOPER Interconnect

Black phenolic plugs for use as chassis connectors, with plug-in units or as cable connectors. **Mfg. part nos. 86-CP8** and **86-CP11** have center guide post as shown above; **mfg. part nos. 86-CP4, 5** and **6** are polarized without center guide post. *Order caps separately on this page.*



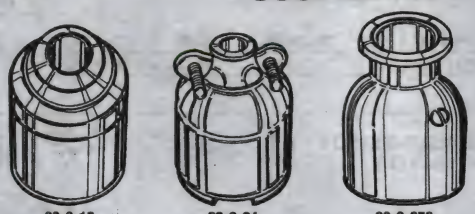
Mfg. Part No.	Contacts	Stock No.	Price Each 1-24	Price Each 25-49
● 86-CP4	4	42F030	12.74	11.48
● 86-CP6	6	42F032	21.94	19.76
● 86-CP8	8	42F034	14.49	13.05
● 86-CP11	11	42F037	15.24	13.73

(9059)

COMMERCIAL PLUG CAPS

RoHS Compliant Available

COOPER Interconnect



86-3-13 86-3-24 86-3-858

Make cable connectors of commercial plugs, *order separately on this page.* **Mfg. part no. 86-3-13** black epoxy finish steel end outlet, 0.438" inter diameter. **Mfg. part no. 86-3-24** black epoxy finish steel cable clamp with 0.375" wire insulator. **Mfg. part no. 86-3-858** thermoplastic end outlet with strain relief, 0.313" inner diameter.

Mfg. Part No.	Description	Stock No.	Price Each 1-24	Price Each 25-49
● 86-3-13	End Outlet	42F017	8.61	6.90
● 86-3-24	Cable Clamp	42F019	19.33	15.48
● 86-3-858	Strain Relief End Outlet	38F1400	11.72	9.39

(9058)

MEGA-FIT® POWER CONNECTORS

NEW

RoHS Compliant Available

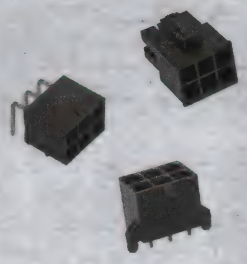
molex

Features & Benefits

- Power-dense design with high-current terminals, tight pitch and row spacing
- Terminal interface has six independent points of contact
- Extended barrel conductor crimp
- Sacrificial contacts - Allow system to be "hot plugged" at 48V/23.0A up to 30 cycles
- Fully isolated header pins and receptacle terminals
- Positive locking housing

Specifications

- 5.7mm Pitch
- Dual Row
- Voltage (max.): 600V
- Current (max.): 23.0A
- Contact Retention to Housing: 30N
- Operating Temperature: -40 to +105°C



Mega-Fit® Power Connectors deliver cutting-edge current density at 23.0A per circuit; terminals provide six independent contact points for long-term reliability in virtually every industry and application. The expanded current-carrying capabilities of up to 23.0A with Mega-Fit® power connectors enables one of the highest current-density options compared to existing mid-range power connectors. The innovative split-box terminal design offers six independent points of contact to provide long-term reliability through secondary current-path redundancy.

RECEPTACLE HOUSING, 94V-0

Mfg. Part No.	Circuits	Dimensions Width (mm)	Stock No.	Price Each 1-9
171692-0102	2	8.35	20X4087	0.76
171692-0104	4	12.05	23X5846	0.72
171692-0106	6	17.75	23X5847	1.09
171692-0108	8	23.45	23X5821	1.15
171692-0110	10	29.15	23X5822	1.44
171692-0112	12	34.85	23X5823	1.73
RECEPTACLE HOUSING, GLOW WIRE, 94V-2				
170001-0102	2	8.35	23X5840	0.91
170001-0104	4	12.05	23X5841	0.98
170001-0106	6	17.75	23X5842	1.39
170001-0108	8	23.45	23X5843	1.48
170001-0110	10	29.15	23X5844	1.95
170001-0112	12	34.85	23X5845	2.31
RIGHT ANGLE HEADERS				
172064-0002	2	8.35	23X5828	2.53
172064-0004	4	12.05	23X5829	3.48
172064-0006	6	17.75	23X5830	5.10
172064-0008	8	23.45	23X5831	6.23
172064-0010	10	29.15	23X5832	7.15
172064-0012	12	34.85	23X5833	9.49
VERTICAL HEADERS				
172065-0002	2	8.35	23X5834	2.46
172065-0004	4	12.05	23X5835	3.19
172065-0006	6	17.75	23X5836	4.57
172065-0008	8	23.45	23X5837	5.68
172065-0010	10	29.15	23X5838	6.43
172065-0012	12	34.85	23X5839	7.44

CRIMP TERMINALS

Mfg. Part No.	Gender	Wire Range AWG	Plating	Tape Cut Stock No.	Tape Cut Price Each 1-9
172063-0311	Socket	16-14	15µ" Gold	23X5824	0.81
172063-0312	Socket	12	15µ" Gold	23X5826	0.82

TOOLING

Mfg. Part No.	Description	Stock No.	Price Each 1-4
63825-7100	Hand Crimp Tool for Mega-Fit® Crimp Terminals	20X4603	450.90

(211616)

3300 SERIES PLUG/SOCKET CONNECTORS

RoHS Compliant Available

molex

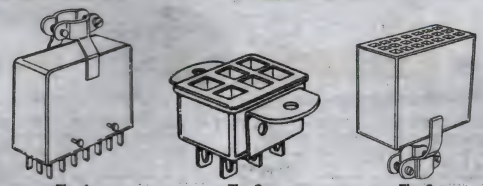


Fig. 1 Fig. 2 Fig. 3

Thermoplastic backshell panel and cable-mount plugs and sockets rated 10A, 750Vrms. Available with latch for connecting cable-mount units. Contacts polarized. UL recognized 250VAC/DC, CSA certified.

CONTINUED

3300 SERIES PLUG/SOCKET CONNECTORS (CONT.)

PLUGS WITH CABLE CLAMP TOP—FIG. 1

Mfg. Part No.	Contacts	Stock No.	Price Each 1-24
38331-5602	2	72K2011	3.05
38331-5604	4	72K2012	3.33
38331-5608	8	72K2013	4.29
SOCKET WITH CABLE CLAMP TOP—FIG. 2			
38330-0502	2	72K2008	3.37
38330-0503	3	72K2009	3.00
38330-0508	8	72K2010	4.99
38330-0512	12	75K1889	5.32
SOCKET WITH CABLE CLAMP TOP WITH LATCH—FIG. 3			
38331-8004	4	72K2015	3.24
38331-8008	8	75K1891	5.85
S-3312-CCT	12	72K0299	15.06

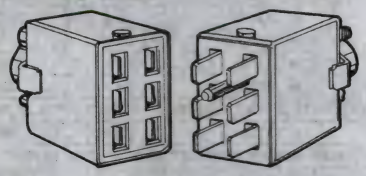
(5226)

5400 SERIES PLUG/SOCKET CONNECTORS

RoHS Compliant Available

molex

5400 series plugs and sockets rated 15A, 1750Vrms. Interchangeable with **2400** or **400 series** type connectors. Applications include traffic control equipment, industrial machinery, heating and cooling equipment, and signal systems. UL recognized, CSA certified. Cable clamp top. *To order side entry cable clamp substitute* **CCE suffix**; *deep bracket substitute* **DB suffix**; *shallow bracket substitute* **SB suffix**.



Mfg. Part No.	Description	Contacts	Stock No.	Price Each 1-24
38541-5404	Plug	4	73K1458	7.77
38541-5410	Plug	10	72K2017	16.63
38541-8404	Socket	4	75K1892	7.24
38541-8406	Socket	6	72K2018	11.14
38541-8410	Socket	10	72K2020	20.90

(5227)

EPOWER SERIES CONNECTORS WITH RADSOK® TECHNOLOGY

Amphenol® Industrial

- Two or three circuit power
- Crimp, lug or bus bar termination
- IP2X on pin and socket
- Environmental IP67 rating
- Two HVIL circuits
- 1000 VDC rating
- 11.1mm RADSOK® technology for 300 to 400A current capability
- Strain relief for jacketed cable incorporated into shell
- Integrated EMI shielding
- Excellent vibration resistance
- All aluminum shell
- Multiple wire size capability: from 50mm² to 95mm²

ePowerconnector series are designed for the demanding requirements of hybrid, electric vehicles and utility trucks electrical systems. The product incorporates the patented RADSOK® technology for higher amperage, lower T-rise, less resistance and mating force. Meantime, it offers a 40% smaller footprint than three EMI shielding cable glands (based on 95mm² conductor size) and easier operation of termination with shielded cable by a washer compressing the shield to the inside surface of the shell. The connector series covers 2, 3, or 4 contacts. One ePower connector can replace three conventional connectors, saving space and cost. ePower 200 connectors operate at 600 VDC with a 200A rating, ePower 400 connectors operate at 800 VDC to 1000 VDC with a 200A to 500A rating.

EPOWER 200 SERIES CONNECTORS

Mfg. Part No.	Gender	No. of Contacts	Mounting	Stock No.	Price Each 1-4
EP223511	Plug	2	Cable	88T7753	142.99
ER22BB11	Receptacle	2	Panel	88T7754	178.88
EP233511	Plug	3	Cable	88T7755	168.06
ER23BB11	Receptacle	3	Panel	88T7756	210.42
EPOWER 400 SERIES CONNECTORS					
EP427011	Plug	2	Cable	88T7757	180.86
ER42BB11	Receptacle	2	Panel	88T7758	223.60
EP437011	Plug	3	Cable	46T9577	212.74
ER43BB11	Receptacle	3	Panel	46T9578	262.50

(196211)

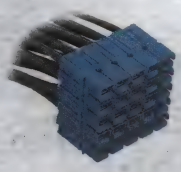
PIN & SOCKET HIGH POWER CONNECTORS

POWERPOLE® SERIES CONNECTOR HOUSINGS

RoHS Compliant Available

APP Anderson Power Products

Features:
- High current capability up to 310 amperes
- Moldular housings have molded-in dovetails for stacking
- UL rated for circuit interruption (hot plugging)
- Genderless design uses APP's flat wiping contact technology
- Multiple colors provide coding to the wire and mating connector
- Durable design allows up to 10,000 mating cycles with silver plated contacts



Blocked Powerpoles

PP15, PP30, PP45, PP75, PP120, PP180

Order replacement housings and contacts below; insertion and crimping tools separately on pages 918-919.

POWERPOLE® HOUSINGS PP15 TO PP45

Mfg. Part No.	Color	Stock No.	Price Each 1-24	Price Each 25-49
● 1327	Red	29C5329	0.43	0.38
● 1327G5	Green	29C5330	0.71	0.63
● 1327G6	Black	29C5331	0.56	0.50
● 1327G7	White	29C5332	0.52	0.46
● 1327G8	Blue	72H5495	0.58	0.52
● 1327G16	Yellow	73K0756	0.62	0.52
PREMATE GROUND POWERPOLE® HOUSINGS PP15 TO PP45				
● 1827G1	Black	79M5197	1.14	1.02
FINGER PROOF POWERPOLE® HOUSINGS PP15 TO PP45				
● 1327FP	Red	09J4107	1.22	1.08
● 1327G5FP	Green	28K5854	1.54	1.38
● 1327G6FP	Black	53H8459	0.85	0.76
● 1327G7FP	White	09J4108	1.63	1.45
● 1327G8FP	Blue	57J4701	1.54	1.38
POWERPOLE® HOUSINGS PP75				
● 5916	Blue	29C5360	2.72	2.42
● 5916G4	Black	29C5361	2.72	2.43
● 5916G5	White	66F6049	2.72	2.41
● 5916G6	Green	93B9362	2.72	2.41
● 5916G7	Red	29C5362	2.77	2.47
POWERPOLE® HOUSINGS PP120				
● 1321	Blue	95M9684	8.61	7.67
● 1321G1	Black	29C5325	8.77	7.82
● 1321G2	White	29C5326	10.57	9.41
● 1321G3	Red	05M6455	8.77	7.82
POWERPOLE® HOUSINGS PP180				
● 1381G1	Black	90B7266	16.66	14.83
● 1381G2	White	26C2157	16.66	14.83
● 1381G3	Red	90B7131	17.96	16.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
● 1399G6	Short Spacer Without Hole For PP15 TO PP45, Red	96B3984	0.96	0.92

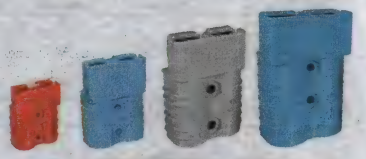
(8888)

SB® SERIES CONNECTORS 50 AMPS UP TO 350 AMPS

RoHS Compliant Available

APP Anderson Power Products

Features:
- High current capability up to 350 amperes per pole
- Silver plated contacts provide durability up to 10,000 mating cycles
- Genderless design uses APP's flat wiping contact technology
- Mechanically keyed, color coded housings prevents accidental mating
- UL rated for circuit interruption (hot plugging)



SB50, SB120, SB175, SB350

SB® SERIES HOUSINGS

Mfg. Part No.	Color	AWG	Stock No.	Price Each 1-9	Price Each 10-24
● 992	Gray	SB50	93B1829	2.35	2.18
● 992G1	Red	SB50	93B6560	5.28	4.91
● 6810G1	Gray	SB120	53H9367	7.88	7.31
● 6810G2	Blue	SB120	09H2043	7.73	7.18
● 6810G3	Red	SB120	28K5987	10.19	9.46
● 940	Gray	SB175	92B6886	12.17	11.30
● 941	Blue	SB175	53H9723	13.36	12.40
● 906	Gray	SB350	01C6899	20.28	18.83

➤ CONTINUED ➤

SB® SERIES CONNECTORS 50 AMPS UP TO 350 AMPS (CONT.)

Mfg. Part No.	Color	AWG	Stock No.	Price Each 1-9	Price Each 10-24
● 912	Blue	SB350	24C8834	27.15	25.20
● 913	Red	SB350	08C3567	27.96	25.96

ACCESSORIES

Mfg. Part No.	Series	Color	Description	Stock No.	Price Each 1-24
● SB50-HDL-RED	SB50	Red	Handle & Hardware	50B832	3.08
● 995G1	SB175, SBE160, SBX175	Gray	Handle & Hardware	29H4260	12.20
● 995G2	SB350, SBE320, SBX350	Gray	Handle & Hardware	93B6740	14.87
134G1	SB 50	Red	Dust Cover	92B8920	8.49
134G2	SB 175	Red	Dust Cover	49H7849	10.54
134G3	SB 350	Red	Dust Cover	93C9792	12.15

(9007)

CONTACTS FOR POWERPOLE® & SB® SERIES CONNECTORS

RoHS Compliant Available

APP Anderson Power Products

Extended Range

Standard Series

PP15/45 Loose Piece

PP15/45 Loose Piece Bulk

Features:
- Silver or tin plated contacts provide durability and minimize resistance
- UL rated for circuit interruption (hot plugging)
- Designed to work with APP premium quality crimp tooling

Order 1 contact for each Powerpole housing and 2 contacts for each SB housing. *Order housings separately on this page and on this page; insertion and crimping tools separately on pages 918-919.*

POWERPOLE® & SB® SERIES INDIVIDUAL CONTACTS

Mfg. Part No.	For Use With	AWG	Stock No.	Price Each 1-24	Price Each 25-49
● 1332	PP15 to PP45	20AWG to 16AWG	29C5339	0.25	0.24
● 1331	PP15 to PP45	16AWG to 12AWG	29C5338	0.28	0.27
● 261G2-LPBK	PP15 to PP45	14AWG to 10AWG	88F3826	0.63	0.61
● 1830G1-LPBK*	PP Ground (1827G1)	14AWG to 10AWG	89M7053	1.00	0.96
● 5915	PP75 & SB50	12AWG to 10AWG	88F4215	1.16	1.11
● 5952	PP75 & SB50	8AWG	91B1601	1.82	1.75
● 5900	PP75 & SB50	6AWG	29C5359	1.01	0.96
● 1319G6	PP120 & SB120	6AWG	29C5323	4.88	4.68
● 1319G4	PP120 & SB120	400kcmil to 16AWG	06M0998	4.80	4.59
1319	PP120 & SB120	2AWG	84F1235	4.60	4.41
● 1323G1	PP120 & SB120	1AWG	71R7247	3.31	3.01
● 1323G2	PP120	0AWG	71R7249	6.07	5.52
● 1384	PP180 & SB175	4AWG	79C4322	3.83	3.67
● 1383	PP180 & SB175	2AWG	50B8973	3.91	3.74
● 1382	PP180 & SB175	0AWG	92B4188	3.91	3.74
● 1328G1	PP180	00AWG	71R7252	10.83	9.85
● 1328G2	PP180	000AWG	71R7254	10.91	9.92
● 907†	SB350	00AWG	92B4189	10.03	9.60
● 908†	SB350	0000AWG	86C8228	35.63	33.43

* First-mate / last-break for mulipurpose ground. † Set of 2 contacts
(194878)

APPLICATION TOOLING

APP Anderson Power Products

111038G2 Insertion/Extraction Tool

1309Gx Crimp Tool

Premium quality crimp tools and accessories thoroughly tested and qualified for use with APP product lines.

Mfg. Part No.	Description	Stock No.	Price Each 1-99
1309G2	Hand Crimp Tool For PP15 to PP30	28C3013	327.05
1309G3	Hand Crimp Tool For PP45	25C6826	327.05
1309G4	Hand Crimp Tool For PP75 and SB50	27C5379	202.21
1309G6	Hand Crimp Tool For PP15/45, 14-10 AWG	80K7223	329.17
1309G8	Hand Crimp Tool For PP15/45, with G2, G3, G6 Die and Locators	08R0830	567.00
PM1000G1	Hand Crimp Tool For SBS75x Auxiliary Contacts, 24-12 AWG	28K2527	1461.60

➤ CONTINUED ➤

APPLICATION TOOLING (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each 1-99
PM1003G1	SBS75x Auxiliary Contact Extraction Tool	72J5331	102.25
111038G2	Insertion/Extraction Tool For PP15 to PP45	84F1243	14.12

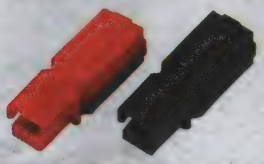
(8887)

MODULAR POWER CONNECTORS 15A - 30A

RoHS Compliant Available

multicomp

- Housings and contacts sold separately



HOUSINGS 15A - 30A

Mfg. Part No.	Color	Stock No.	Price Each 1-249
BMC1S-RED	Red	73M9188	0.69
BMC1S-BLACK	Black	73M9185	0.69

CONTACTS

Mfg. Part No.	Wire Size (AWG)	Current Rating	Stock No.	Price Each 1-249
BMC1AG	20AWG to 16AWG	15 A	73M9180	0.23
BMC2AG	16AWG to 12AWG	30 A	73M9192	0.20

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-249
BMC1S-WI	Mounting Wing, Red	73M9190	0.35

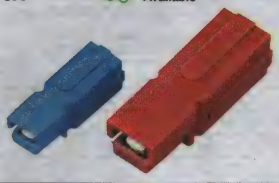
(116513)

MODULAR POWER CONNECTORS 50A - 75A

RoHS Compliant Available

multicomp

- Housings and contacts sold separately



HOUSINGS 50A - 75A

Mfg. Part No.	Color	Stock No.	Price Each 1-99
BMC1M-RED	Red	73M9184	1.66
BMC1M-BLACK	Black	73M9181	1.58

CONTACTS

Mfg. Part No.	Wire Size (AWG)	Current Rating	Voltage Rating	Stock No.	Price Each 1-99
BMC5AG	12AWG to 10AWG	50 A	600 V	73M9197	2.53
BMC8AG	8AWG	60 A	600 V	73M9198	2.57
BMC14AG	6AWG	75 A	600 V	73M9191	2.70

(116518)

873 SERIES LUMI-NUTS™ LUMINAIRE DISCONNECT CONNECTORS

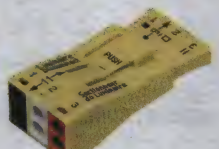
RoHS Compliant Available

WAGO

Features

- Rated 6A/600V
- Line side maximum current capacity = 20A
- Line side connector (male) accepts 18-12 AWG solid wire or 12-16 AWG stranded
- Load side connector (female) accepts 18 AWG solid wire
- Molded in color coding for easy circuit wiring
- 2 conductors per pole facilitates easy daisy chain to additional fixture/ballast
- Compact – fits through ½" knockout
- Mechanical locking latch
- Completely touch-safe (mated or unmated)
- Polyamide 6.6 housing rated UL94V-0
- Keyed connector is 100% protected against mis-mating

2 Pole



3 Pole

Push-wire Connector for luminaire disconnect as required by NEC 410.130(G) and CEC 30-308(4) for non-residential ballasted luminaries. Allows for safe servicing of fixtures & ballasts without exposure to electrical shock.

➤CONTINUED➤

873 SERIES LUMI-NUTS™ LUMINAIRE DISCONNECT CONNECTORS (CONT.)

Mfg. Part No.	Circuits	Application	Stock No.	Price Each 1-24
873-902	2	Luminaire disconnect	64M6548	1.11
873-953	3	Luminaire disconnect, "make first/break last" ground circuit	76R6291	1.48

SOLD BY PACK OF 20

Mfg. Part No.	Circuits	Application	Stock No.	Price 1-24
873-903	3	Luminaire disconnect, switching & dimming	69W6849	27.45

(143697)

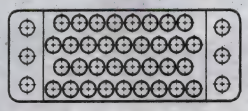
AMP M SERIES STANDARD CONNECTOR HOUSING RECEPTACLES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Phenolic Housing
- Free Hanging or Panel Mount



Housings accept Type II, Type III+, and subminiature COAXICON contacts, *ordered separately; go online or call.*

Mfg. Part No.	Positions	Gender	Stock No.	Price Each 1-9	10-24	25-49
201298-1	14	Receptacle	92F6621	5.70	4.54	4.39
201356-1	20	Plug	52F660	7.70	7.39	6.42
201359-1	26	Plug	90B1916	10.07	9.64	8.32
1-201357-1	34	Plug	52F3066	7.32	7.04	6.66
200838-2	34	Receptacle	50F658	8.86	7.25	6.66
205058-2	50	Plug	99F8717	20.94	18.91	18.12
200277-2	50	Receptacle	50F666	13.63	12.39	11.36

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24	25-49
200389-2	Center Guide Pin	95F2672	4.29	3.90
1-200833-1	Corner Guide Pin	87K2212	3.51	3.08
1-201046-2	Corner Guide Pin; Panel Mount	87K2214	4.48	4.30
202174-5	Center Guide Socket	40P8923	8.17	6.76
200390-9	Center Guide Socket	87K2218	3.88	3.67
1-200835-1	Corner Guide Socket	87K2213	3.50	3.32
201047-2	Corner Guide Socket	50F564	4.25	3.48
1-200874-2	Male 6-32 Jackscew, Double Lead Thread	50M8135	2.44	2.28
200875-7	Female 6-32 Jackscew, Double Lead Thread	10M9820	3.35	2.99
201092-4	Male 6-32 Jackscew, Single Lead Thread	64M2101	2.68	2.18
201089-4	Female 6-32 Jackscew, Single Lead Thread	08P4387	2.66	2.33
203618-1	Male Jackscrew Kit	12H4862	9.89	8.99
200867-1	Long Female Turnable Jackscrew, Double Lead Thread	50F659	4.92	4.72
201413-1	Long Male Turnable Jackscrew, Single Lead Thread	95F2679	3.36	2.74
201827-1	Short-Short Male Turnable Jackscrew, Single Lead Thread	94B3774	6.30	6.05
201828-1	Short-Short Female Turnable Jackscrew, Single Lead Thread	91B6040	5.81	5.58
201922-1	Female Locking Spring	66F3075	2.62	2.52
PIN HOODS				
202119-2	104 Position Pin Hood	52F4861	13.86	12.60
202394-2	50 Position Pin Hood	50F613	11.39	9.72
GROUNDING BLOCKS				
203540-1	14 Position Grounding Block	24C9640	23.03	20.80
202169-1	104 Contact Housings	92F8450	41.37	37.35
202798-1	160 Contact Housings	95F2682	82.40	79.11

(40972)

AMP TYPE III+ MULTIMATE ENHANCED CURRENT CONTACTS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Contact rating: 13A at 30°C T-rise
- Wire range: 14-18 AWG
- Contact type: Signal
- Contact size: 16

Precision formed pin and socket contacts. They are used in **M series, Special M series, G series, Metrimate, Metrimate Drawer**, and **CPC series 1 and 4** connectors. Contacts feature a high normal force which provides a low resistance in critical applications such as dry circuit signal conditions. Stainless steel spring. Crimp wire termination.

SOCKET CONTACTS

Mfg. Part No.	Contact Mating Area Finish	Insulation Diameter (in.)	Contact Material	Stock No.	Price Each 1-49	50-99
1-66360-4	30μ"Gold	0.080 - 0.100	Brass	29K6320	1.19	1.08
1-66601-0	30μ"Gold	0.110 - 0.150	Copper	29K6321	1.08	0.89
1-66601-2	Tin	0.110 - 0.150	Copper	29K6322	0.64	0.57

➤CONTINUED➤

RACK & PANEL CONNECTORS

AMP TYPE III+ MULTIMATE ENHANCED CURRENT CONTACTS (CONT.)

PIN CONTACTS

Mfg. Part No.	Contact Mating Area Finish	Insulation Diameter (in.)	Contact Material	Stock No.	Price Each 1-49	Price Each 50-99
● 1-66602-0	Tin	0.110 - 0.150	Copper	29K6323	0.44	0.40
● 66602-9	30u"Gold	0.110 - 0.150	Copper	29K6324	0.86	0.79
● 1-66361-4	30µ"Gold	0.080 - 0.100	Brass	95H9962	0.88	0.79

(84739)

AMP TYPE III+ MULTIMATE SOLDER PIN AND SOCKET CONTACTS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Copper Alloy Contact Material
- Gold Termination End Plating
- Contact Type: Signal
- Solder-to-WireTermination
- Insulation Support
- Test Current: 13A
- Stainless Steel Spring

Can be used in Multimate contact cavities of all connector housings. Order **mfg. part no. 305183** extraction tool; *go online or call.*

Pin

Socket

PIN CONTACTS

Mfg. Part No.	AWG	Stock No.	Price Each 1-49
● 66182-1	26-20	95F2707	0.82
● 66180-1	18-16	95F2713	0.93

SOCKET CONTACTS

● 66183-1	26-20	50F579	1.06
● 66181-1	18-16	95F2726	1.22

(40974)

QUADRAX CONNECTORS AND CONTACTS

RoHS Compliant Available

TE connectivity

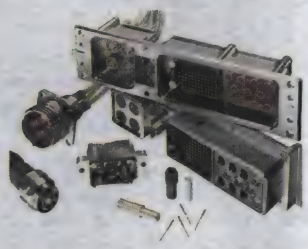
Authorized Distributor

Rectangular Features

- High performance rectangular connector
- Available in 2, 4, and 12 positions
- Designed for use with wire seal boots and rated for use up to 50,000 ft. altitude
- Center jackscrew design for fast, reliable mating
- Aluminum shells are keyed and polarized, and are available with lightweight plastic backshell strain reliefs
- Provides excellent density in a rectangular profile for packaging flexibility.

Circular Features

- Available in various shell sizes: 9 (1Q1), 17 (2Q2), 19 (4Q4) and 25 (8Q8)
- Designed for use with wire seal boots for sealing and optimized alignment
- Front metal-shell design provides a full ground plane
- Lightweight composite rear shell available in size 19 for reduced weight
- Accepts standard backshells



A multi-signal contact system consisting of two differential pairs (matched impedance) used with quadraxial Ethernet and Fiber Channel cables. Available in shell size 8 (keyed); 24 AWG pin and socket contacts, Hex Crimp version as well as pin PCB tail solderable versions. Adaptable to a variety of connectors (ARINC 600, 404, DSubminiature connectors, MIL-DTL-38999 style, etc.) Designed for use in high speed applications such as Gigabit Ethernet, IEEE 802.3Z and Fiber Channel X3T11.2 for use on Commercial Avionics Systems, Aircraft Data Networks, Military Communications and In-Flight Entertainment Systems.

PC TAIL CONTACTS

Mfg. Part No.	Gender	Description	Stock No.	Price Each 1-9
● 1445626-1	Pin	Contact, 5.79mm (0.228") Solder Tail	67K3174	39.45

CRIMP CONTACTS

● 1445692-3	Pin	Contact Kit with Wire Seal Boot	05N1519	51.40
● 1445693-3	Socket	Contact Kit with Wire Seal Boot	74K4357	64.77

RECTANGULAR CONNECTORS

Mfg. Part No.	Positions	Gender	Mounting	Stock No.	Price Each 1-9
1604798-2	12	Receptacle	PCB	31K9281	191.12
● 1604799-5	12	Receptacle	Panel	19P1760	400.27

MIL-DTL-38999 SERIES III STYLE CIRCULAR CONNECTORS

Mfg. Part No.	Positions	Shell Size	Gender	Arrangement	Mounting	Stock No.	Price Each 1-4
● 1877384-7	1	9	Plug	1Q1	Free Hanging	25T0324	829.49
1811184-7	1	9	Receptacle	1Q1	PCB	25T0323	384.19
● 1877775-7	2	17	Plug	2Q2	Free Hanging	25T0327	541.34
● 1877774-7	2	17	Receptacle	2Q2	Wall	25T0325	480.23
● 1811902-7	4	19	Plug	4Q4	Panel	12P9887	485.41
● 1738974-1	4	19	Receptacle	4Q4	PCB	25T0322	540.96
● 1811901-7	4	19	Receptacle	4Q4	Panel	12P9885	401.64

➤CONTINUED➤

QUADRAX CONNECTORS AND CONTACTS (CONT.)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● 1996544-2	12 Position Low Profile Seal Retainer for Rectangular Connectors	25T0328	175.77

(192457)

MOTORMAN HYBRID CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Specifications

- IP65 (water & dust protection)
- 25g (physical shock)
- Electro-magnetic compatibility (EMC protection) in metal enclosure
- 2 x 20A / 600V @ 85°C (20A/600V/6kV2)
- 2 x 20A / 40V @ 85°C
- 1 x Ground (protection earth)
- 1 x Braid
- 5 x 2A / 40V
- 2 x Cat 5e (AWG 22)
- Reflow capable

Features

- Compact size of a traditional rectangular connector and hybrid construction (power, communication, signal)
- Several pre-customized models available for different customer environments
- Robust metal or plastic enclosures for tough industrial applications or economical less critical purposes
- Easy-to-open enclosure
- Space for two 4-pin Ethernet sockets, 5 power sockets, 5 signal sockets and 1 protection earth contact
- Cat 5e communication in heavy environment
- Usage of TE's MCON interconnection system and its stamped contacts

The Motorman hybrid connector integrates communication, signal and power transmission of locally controlled motors within a single compact rectangular connector. In addition, two fast Ethernet sockets enable motors to be networked, providing the benefit of real-time automation. The innovative design and compact size of the Motorman hybrid connector allows for significant space savings in comparison with traditional rectangular industrial connectors. It also helps to keep costs to a minimum by reducing the amount of overall cabling needed as well as shortening cable length.

CONNECTOR HOUSINGS

Mfg. Part No.	Gender	Description	Stock No.	Price Each 1-24
● 1-2120319-1	Receptacle	Receptacle Housing Insert (Plastic)	92T7592	4.06
● 2120320-1	Receptacle	Receptacle Housing Insert (Metal) with PE Contact	92T7598	6.66
● 2120325-1	Plug	Tab Connector (with 2 Commuincation Units)	92T7600	30.68

SIGNAL HOUSING INSERT

● 2120321-1	Receptacle	Signal Housing Insert for MCON 1.2	92T7599	0.90

CIRCULAR COMMUNICATIONS INSERT

● 1103427-2	Socket	Communication Socket Insert	92T7593	14.90

MCON 1.2 CRIMP CONTACTS

Mfg. Part No.	Gender	AWG	Stock No.	Price Each
● 1452653-2	Socket	23AWG to 22AWG	92T7596	0.33
● 1452656-2	Socket	20AWG to 18AWG	17R3233	0.53

MCON 2.8 CRIMP CONTACTS

● 1718475-3	Socket	13AWG to 11AWG	92T7597	0.84

HDP-22 SOCKET CONTACT FOR COMMUNICATIONS INSERT

● 1658686-1	Socket	28AWG to 22AWG	42K6705	0.27

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price 1-24
● 2120337-1	Cable Seal - 13-16mm Diameter Cable	92T7603	5.32
● 2120330-1	Metal Hood with Cover & Screen Clamp	92T7601	27.05
● 2120340-1	Plastic Hood with Cover & Screen Clamp	92T7605	15.70
● 1245276-2	Plastic Side Clip	92T7595	5.43
● 2120339-1	Metal Side Clip	92T7604	7.66
● 1108847-1	Protection Cover	92T7594	7.52
● 2120336-1	Protection Cover Sealing	92T7602	2.43

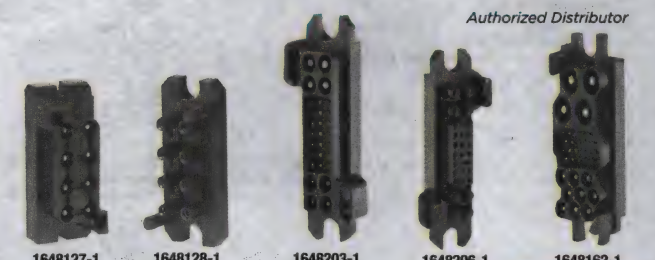
(203557)

ELCON DRAWER SERIES CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor



1648127-1 1648128-1 1648203-1 1648206-1 1648162-1

➤CONTINUED➤

ELCON DRAWER SERIES CONNECTORS (CONT.)

- High performance Crown contacts
- Low millivolt drop, minimal temperature rise
- Float mount for improved gatherability (blind mating)
- True hot pluggability for current interruption under load
- Sequenced mating for power and signal
- Crimp, PCB tail, compliant press-fit and threaded terminations

6648167-1

1648132-1

1648133-1

Tyco Electronics offers a wide selection of blindmateable "drawer" connectors to suit modular equipment designs. Some of the benefits of the power drawer connectors from Tyco Electronics are the robustness of the housing designs and the durability of the contacts. High-end applications such as networking switches and servers want the lowest possible voltage drop across the connector. For these applications the high conductivity screwmachined contacts with either gold or silver plating offer the best performance. The contacts are the core of the ELCON drawer series connectors. For cost sensitive applications the different hybrid drawer connectors offer a wide variety of shapes and sizes aimed at keeping cost minimized and still providing a reliable separable interface. Regardless of the application, Tyco Electronics offers a wide variety of power & signal blind-mateable drawer connectors.

CONNECTOR HOUSINGS

Mfg. Part No.	Positions	Gender	Mount Type	Drawer Style	Current (A)	Stock No.	Price Each 1-9	Price Each 10-49
1648127-1	8	Plug	Fixed	HV8P	35	25T0300	14.43	13.12
1648128-1	8	Receptacle	Float	HV8P	35	25T0301	13.33	12.12
1648203-1	29	Plug	Float or Fixed	Lower	35	08N7477	8.44	8.08
1648206-1	29	Receptacle	Float or Fixed	Lower	35	50M2752	8.47	7.90
1648211-1	32	Plug	Fixed	P10S22	35	25T0303	32.31	29.24
1648212-1	32	Receptacle	Fixed	P10S22	35	25T0304	33.60	30.41
1648162-1	37	Plug	Float	Middle	75	15N6997	8.73	8.44
6648167-1	37	Receptacle	Float	Middle	75	25R6426	12.31	11.11
1648133-1	40	Receptacle	Fixed	Square	200	25T0302	26.66	24.74

CONTACTS - SIZE 20
For use in most drawer connectors

Mfg. Part No.	Gender	Plating	Description	Stock No.	Price Each 1-9	Price Each 10-24
702-92-01109	Socket	Gold	Crimp, Standard	54K2962	1.84	1.68

CONTACTS - SIZE 16
For use in Mini Drawer, Lower Drawer, Top Drawer, and P12S12

6648319-1	Socket	Gold	Crimp, Standard	55M4069	3.88	3.73

CONTACTS - SIZE 12
For use in Mini Drawer, Lower Drawer, 75A, 125A and 200A Middle Drawer; Square Drawer, TOP Drawer & Double Drawer; P3S0 and P4S0, HV8P, P10S0, P10S22

1650153-2	Pin	Gold	Crimp, Standard	30M9504	1.90	1.72
1766193-1	Pin	Silver	Crimp, Standard	29M8411	1.18	1.05
6648318-1	Socket	Gold	Crimp, Standard	73M8569	3.42	3.41
1648384-1	Socket	Gold	Hot-Plug Crimp	73M8555	7.34	7.04

CONTACTS - SIZE 8
For use in 75A and 200A Middle Drawer

1766192-1	Pin	Silver	Crimp, Standard	40P8798	2.01	1.81

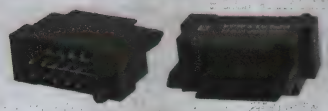
(192420)

DWR SERIES COOLPOWER® SLIM DRAWER CONNECTORS

Amphenol Commercial Products

UL

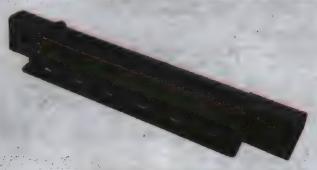
RoHS Compliant Available



DWR-T010P-V233-01

DWR-T010S-V233-01

DWR-T600P-V212-90



DWR-T600S-V212-90

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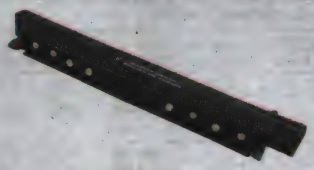
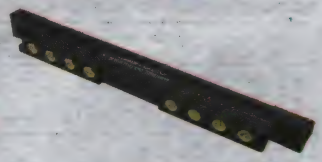
DWR SERIES COOLPOWER® SLIM DRAWER CONNECTORS (CONT.)



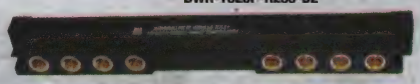
DWR-T818P-V236-90



DWR-T818S-V236-90

- Power, signal and mixed contact combinations up to 8 Power + 24 Signal
- High-current CoolBand contacts for maximum performance
- UL 1977 compliance
- Integrated alignment correction
- PCB orientation features and keying prevent improper mounting/mating

DWR-T820P-R233-B2



DWR-T820S-V233-01

DWR series CoolPower® Slim Drawer connectors combine performance, reliability and design flexibility making them ideal in today's medium to high current applications where cost and space are as critical as performance. This robust blind mating interconnect solution can accommodate a variety of mixed power and signal arrangements. High-temperature thermoplastic housing, rated UL94V-0. High-performance CoolBand size C88 phosphor bronze signal contacts, copper alloy power pins and beryllium copper/tellurium copper sockets in a number of termination and plating options. Current rating: power up to 60A Free Air, Signal 4A. Dielectric withstanding voltage: 2500 VDC. Durability: 250 mating cycles. Operating temperature range: -55°C to 105°C.

PLUGS — VERTICAL

Mfr. Part No.	No. of Contacts Power	No. of Contacts Signal	Tail Type+	Plating Power/Signal	Stock No.	Price Each 1-4
DWR-T600P-V212-90	6	0	Solder Cup	15µ" Gold/ —	86W5759	17.19
DWR-T210P-V216-02	2	10	Solder Cup	200µ" Silver/15µ" Gold	86W5755	10.05
DWR-T200P-V236-93	2	0	PCB Solder	200µ" Silver/ —	86W5753	4.68
DWR-T010P-V233-01	0	10	PCB Solder	— / 30µ" Gold	86W5751	4.94
DWR-T424P-V236-90	4	24	PCB Solder	200µ" Silver/15µ" Gold	86W5757	11.13
DWR-T818P-V236-90	8	18	PCB Solder	200µ" Silver/15µ" Gold	86W5761	10.60
DWR-T818P-V236-91	8	18	PCB Solder	200µ" Silver/15µ" Gold	86W5762	9.57
DWR-T820P-R233-B2*	8	20	PCB Solder	30µ" Gold/30µ" Gold	86W5764	37.42

*Right-Angle with bracket and arrow-head boardlock

RECEPTACLES — VERTICAL

DWR-T600S-V212-90	6	0	Solder Cup	15µ" Gold/ —	86W5760	17.67
DWR-T210S-V216-02	2	10	Solder Cup	200µ" Silver/15µ" Gold	86W5756	10.26
DWR-T200S-V236-92	2	0	PCB Solder	200µ" Silver/ —	86W5754	5.42
DWR-T010S-V233-01	0	10	PCB Solder	— / 30µ" Gold	86W5752	4.41
DWR-T424S-V236-90	4	24	PCB Solder	200µ" Silver/15µ" Gold	86W5758	13.78
DWR-T818S-V236-90	8	18	PCB Solder	200µ" Silver/15µ" Gold	86W5763	21.40
DWR-T820S-V233-01	8	20	PCB Solder	30µ" Gold/30µ" Gold	86W5765	32.66

+Contact termination — Solder Cup: 8 AWG Power, 20 AWG Signal; PCB Solder Tail: 0.15" tail length
(210093)

G20 SERIES ENERGY RAZOR® POWER CONNECTORS

RoHS Compliant Available

Amphenol Commercial Products

Power Plug

- Multiple contact design provides great contact reliability
- Blind-mating capability with guiding pin design
- Venting hole for great thermal performance
- Capability for expansion to 16 power pins and 24 signal pins
- Current rating: power 30A, signal 3A
- Contact resistance: 35mohms max. initial
- Dielectric withstanding voltage: power 2500VDC; signal 1000VDC

Power Receptacle

- Mating force (max.): power 800g; signal 100g
- Unmating force (min.): power 227g; signal 18g
- Contact retention force (min.): power 32N; signal 19N
- Durability: 200 cycles
- Voltage rating: 600VAC
- Operating temperature range: -20°C to +105°C
- UL recognized

G20 series Energy Razor® is an ideal power connector series for power distribution to provide power and signal control in one single connector. These connectors are extensively applied in AC/DC power supplies, power distributionboard or for board-to-board, panel-mount and rack-mount connections in server, storage, and telecommunication equipment. Black thermoplastic housing, rated UL94V-0. Copper alloy signal and power contacts feature selective gold plating in contact area, tin plating in solder area and nickel underplating overall.

➤CONTINUED➤

RACK & PANEL CONNECTORS

G20 SERIES ENERGY RAZOR® POWER CONNECTORS (CONT.)

RIGHT-ANGLE PLUGS — DIP TAIL 3.43MM LONG, PCB SCREW-HOLE MOUNT

Mfr. Part No.	No. of Contacts	Contact Configuration Power	Signal	Power	Power Pin Pitch (mm)	Stock No.	Price Each 1-9	10-24
● G20M203000HR	30	6	24	0	5.08	28W3651	7.86	6.80
● G20M206000HR	28	2	24	2	6.35	28W3652	11.40	9.87
RIGHT-ANGLE RECEPTACLES — DIP TAIL 3.43MM LONG, PCB SCREW-HOLE MOUNT								
● G20F203000HR	30	0	24	6	5.08	28W3649	13.26	11.47
● G20F206000HR	28	2	24	2	6.35	28W3650	15.58	13.48

(209645)

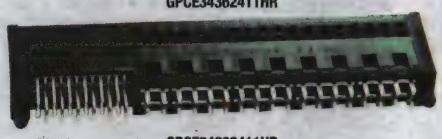
GPCE SERIES ENERGY EDGE® POWER CONNECTORS

Amphenol Commercial Products

RoHS Compliant Available

- Low profile design saves valuable space
- Venting hole design for great thermal performance
- One-piece assembly is cost saving
- Capability for expansion to 56 power pins and 24 signal pins
- Vertical orientation
- Current rating: power 9A, signal 1.5A
- Contact resistance: 25mohms max initial
- Dielectric withstanding voltage: power 1800VDC; signal 500VDC
- Mating force (max.): power 0.98N; signal 0.22N
- Unmating force (min.): power 0.36N; signal 0.06N
- Contact retention force (min.): power 32N; signal 19N
- Durability: 200 cycles
- Voltage rating: power-to-power 100VAC rms; signal-to-signal 12VAC rms
- Operating temperature: 105°C max.
- UL recognized

GPCE34362411HR



GPCE24362411HR

GPCE series Energy Edge® is next generation power solution for power distribution. Power and signal contacts are incorporated into one single connector and is extensively applied in power distribution board or for board-to-board, panel-mount and rack-mount connections in server, storage, and telecommunication equipment. High-temperature thermoplastic housing, rated UL94V-0. High-performance copper alloy signal and power contacts feature selective gold plating in contact area, matte tin plating in solder area and nickel underplating overall.

Mfr. Part No.	No. of Contacts	Contact Configuration Power	Signal	Tail Type/L (mm)	Stock No.	Price Each 1-9	10-24
● GPCE34362411HR	60	56	24	Press-Fit/3.17	28W3648	8.24	7.13
● GPCE24362411HR*	60	56	24	DIP/3.1	28W3647	8.24	7.13

*Orientation key
(209753)

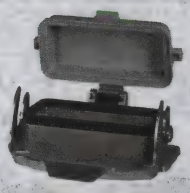
C-146 SERIES RECTANGULAR INDUSTRIAL CONNECTORS

RoHS Compliant Available

Amphenol

Amphenol-Tuchel Electronics GmbH

Single Latch Bulkhead Mount Housing



Single Latch Bulkhead Housing with Spring Cover

Top-Entry Hood

Side-Entry Hood

- Screw Termination
- Voltage Rating: 400V
- Current Rating: 16-22A
- Contact Diameter: 2.5mm for 16-14 AWG

C-146 series connectors can be used for many applications, such as control and power distribution, test and measurement equipment, and machine tools. Constructed of die-cast aluminum and environmentally protected by means of different latch-locking styles, neoprene gaskets, and cable strain relief options. Feature silver-plated brass male contacts and silver-plated tin-bronze female contacts. Compatible and intermateable with other similar style products. Meets NEMA enclosures types 4 and 12. IP65 rated. UL recognized, CSA certified, VDE approved, SEV approved.

➤CONTINUED➤

C-146 SERIES RECTANGULAR INDUSTRIAL CONNECTORS (CONT.)

BULKHEAD MOUNT HOUSINGS (SINGLE CLAMP)

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	10-49
● C146-10F006-000-1	6	16F6765	12.06	10.83
● C146-10F010-001-1	10	16F6773	23.04	21.12
● C146-10F016-001-1	16	16F6767	21.14	19.37
● C146-10F024-001-1	24	16F6789	23.70	21.73
BULKHEAD MOUNT HOUSINGS (DUAL CLAMP)				
● C146-10F016-000-1	16	16F6774	22.81	20.91
● C146-10F024-000-1	24	16F6875	26.62	24.40
BULKHEAD MOUNT HOUSINGS WITH SPRING COVER (SINGLE CLAMP)				
● C146-10F006-003-1	6	16F6768	25.32	23.20
● C146-10F010-003-1	10	16F6769	23.36	21.24
● C146-10F016-003-1	16	16F6770	30.84	28.26
● C146-10F024-003-1	24	16F6791	38.27	35.09
MALE INSERTS (SCREW TERMINATION CONTACTS—CAPTIVE)				
● C146-10A006-102-1	6	16F6867	13.92	12.74
● C146-10A010-102-1	10	16F6868	17.38	15.93
● C146-10A016-102-1	16	16F6869	21.79	19.96
● C146-10A024-102-1	24	16F6775	27.86	25.54
MALE INSERT (ORDER STAMPED CRIMP CONTACTS SEPARATELY)				
● C146 10A064 000 2	64+	34B7853	14.19	13.20
FEMALE INSERTS (SCREW TERMINATION CONTACTS—CAPTIVE)				
● C146-10B006-102-1	6	16F6870	15.37	14.09
● C146-10B010-102-1	10	16F6871	17.24	15.81
● C146-10B016-102-1	16	16F6872	22.00	20.16
● C146-10B024-102-1	24	16F6777	29.10	26.70
FEMALE INSERTS (ORDER STAMPED CRIMP CONTACTS SEPARATELY)				
● C146 10B015 000 2	15+	34B7884	12.56	11.52
● C146 10B025 000 2	25+	34B7906	13.10	12.01
● C146 10B064 000 2	64+	34B7916	19.28	17.68

CRIMP FEMALE CONTACTS (PACK OF 100)

Mfg. Part No.	Wire Size (AWG)	Stock No.	Price Each 1-9	10-24
● VN02 016 0002 1	20AWG to 16AWG	06R3623	54.34	49.82
● VN02 016 0002 2*	20AWG to 16AWG	51R1459	55.34	50.73
● VN02 016 0003 2	26AWG to 20AWG	51R1453	67.93	62.26
CRIMP MALE CONTACTS (PACK OF 100)				
● VN01 016 0002 (1)	20AWG to 16AWG	14T7858	33.97	31.50

*Gold Plated

TOP-ENTRY HOODS (SINGLE CLAMP)

Mfg. Part No.	Contacts	Cable Outlet	Stock No.	Price Each 1-24	25-49
● C146-10G006-601-1	6	PG16	16F6873	11.25	10.11
● C146-10G010-606-1	10	PG16	16F6874	12.74	11.58
● C146-10G016-606-1	16	PG21	16F6754	22.66	20.70
● C146-10G024-606-8*	24	PG21	90B6553	16.83	15.30
SIDE-ENTRY HOODS (SINGLE CLAMP)					
● C146-10G006-501-1	6	PG16	16F6758	10.64	9.56
● C146-10G010-506-1	10	PG16	16F6759	12.39	11.26
● C146-10G016-506-1	16	PG21	16F6761	23.32	21.37
● C146 10G024 506 8*	24	PG21	03H9312	25.05	22.90
SIDE-ENTRY HOODS (DUAL CLAMP) — LOW-PROFILE					
● C146-10G016-500-1	16	PG21	16F6764	22.83	20.87

* High-Profile
(84998)

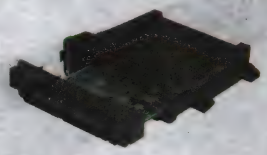
ModICE® MODULAR INTEGRATED CONNECTOR ENCLOSURES

RoHS Compliant Available

CINCH

Features:
- Rugged connector enclosure system
- Interfaces with Cinch SHS, industry standard harness connectors
- Header suited for wave and reflow soldering
- Simple assembly
- 2 size enclosures: SE (small) LE (large)

Specifications:
- Operating temperature: -40°C to +85°C
- IP65, IP66, IP67, IP69K protected



HEADERS - SE

Mfg. Part No.	No. of Contacts	Filter	Stock No.	Price 1-24
● 581-01-18-032	18	No	78K5061	20.34
● 581-01-18-033	18	Yes	02M4774	25.74
● 581-01-30-044	30	No	78K5064	24.81

➤CONTINUED➤

ModICE® MODULAR INTEGRATED CONNECTOR ENCLOSURES (CONT.)

Mfg. Part No.	No. of Contacts	Filter	Stock No.	Price 1-24
581-01-30-046	30	Yes	02M4777	24.79
581-01-48-007	48	Yes	02M4780	40.84
HEADERS - LE				
581-01-30-051	30	Yes	02M4778	28.43
581-01-48-006	48	No	78K5081	35.57
581-01-48-008	48	Yes	02M4781	42.51
581-01-60-005	60	No	78K5084	41.93
581-01-60-006	60	Yes	02M4782	49.41

ENCLOSURES

Mfg. Part No.	Size	No. of Heatsinks	Stock No.	Price 1-24
581-01-30-043	SE	...	76K2679	24.59
581-01-60-031	LE	2	27M1398	41.68

SHS HARNESS CONNECTORS

Mfg. Part No.	Size	No. of Contacts	Stock No.	Price Each 1-24
581-01-18-023	SE	18	56J9657	14.43
581-01-30-029	SE	30	56J9659	15.42
581-01-30-028	LE	30	67K0036	14.92

ACCESSORIES AND TOOLS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
425-00-00-872/PCS	SHS Terminal, Wire Size (AWG): 20-18	97J8472	0.12
425-00-00-873/PCS	SHS Terminal, Wire Size (AWG): 18-16	97J8473	0.13
581-00-00-011	Cavity Seal Plug	56J6810	0.17
581-00-00-021	Spring Plate for use with enclosure with 1 or 2 heat sinks	85K2098	6.18
581-01-18-920	Terminal Removal Tool	02M4775	126.95
599-11-11-612	Tool to open ModICE LE	02M4792	213.19
599-11-11-611	Tool to open ModICE SE	02M4791	209.25
599-11-11-616	Hand Crimp Tool for 425-00-00-873	97J8945	606.57

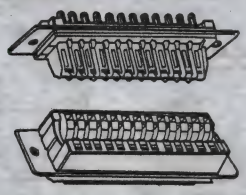
(90827)

26 SERIES® BARRIER POLARIZATION RACK AND PANEL CONNECTORS

RoHS Compliant Available

COOPER Interconnect

High-impact diallyl phthalate dielectrics and molded-in corrosion-resistant mounting plates. Rated 5 amps per contact, 750VDC. Temperature range: –55°C to + 125°C. Barrier polarization feature prevents mismating.



BARRIER POLARIZATION PLUGS

Mfg. Part No.	Contacts	Stock No.	Price Each 1-24	Price Each 25-49
26-182*	8	39FX130	27.93	24.78
26-4100-8P**	8	42FX150	46.79	41.51
26-4100-16P	16	42FX151	52.50	46.58
BARRIER POLARIZATION RECEPTACLES				
26-183*	8	39FX131	26.48	23.50
26-4200-8S**	8	42FX154	28.34	25.14
26-4200-24S	24	42FX156	100.81	89.43
26-4200-32S	32	42FX157	102.81	91.22

*Mounting hole centers: 1.688" (42.88); **1.375" (34.93)

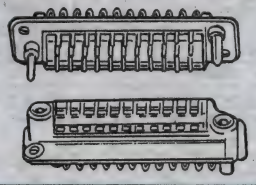
(9015)

26 SERIES® PIN POLARIZATION RACK AND PANEL CONNECTORS

RoHS Compliant Available

COOPER Interconnect

High-impact diallyl phthalate dielectrics and molded-in corrosion-resistant mounting plates. Rated 5 amps per contact, 750VDC. Temperature range: –55°C to +125°C. Feature pins that mate before contacts for sure alignment.



PIN POLARIZATION PLUGS

Mfg. Part No.	Contacts	Stock No.	Price Each 1-9	Price Each 10-24
26-159-16	16	39FX132	66.13	59.92
26-159-24	24	39FX134	89.15	80.77

➤CONTINUED➤

26 SERIES® PIN POLARIZATION RACK AND PANEL CONNECTORS (CONT.)

PIN POLARIZATION RECEPTACLES

Mfg. Part No.	Contacts	Stock No.	Price Each 1-9	Price Each 10-24
26-190-16	16	39FX133	85.24	77.23
26-190-24	24	39FX135	115.64	104.76

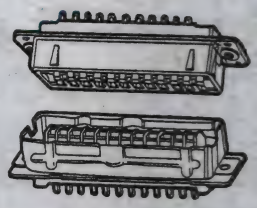
(9017)

26 SERIES® BARRIER POLARIZATION RACK AND PANEL CONNECTORS WITH KEYED SHELLS

COOPER Interconnect

RoHS Compliant Available

High-impact diallyl phthalate dielectrics and molded-in corrosion-resistant mounting plates. Rated 5A per contact, 750VDC. Temperature rating: –55°C to +125°C. Barrier polarization feature prevents mis-mating. Keyed aluminum shells prevent mis-mating of several connectors mounted on same panel.



Mfg. Part No.	Contacts	Shell Keys	Description	Stock No.	Price Each 1-9	Price Each 10-24
26-4201-8S	8	1	Receptacle	42FX186	51.49	42.72

(9016)

516 SERIES RACK AND PANEL CONNECTORS

RoHS Compliant Available

EDAC INC

Fig. 1

Fig. 2

Fig. 3

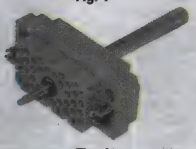


Fig. 4

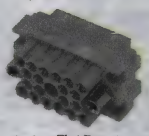


Fig. 5

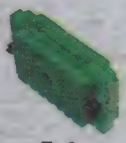


Fig. 6

Designed for cable-to-cable and cable-to-panel applications. Insertable/removable, recessed phosphor bronze contacts, *order separately below*, with gold plating over nickel. Grey polycarbate insulator, except 120-contact versions, which are green diallyl phthalate. Current rating: 8.5A. *Order application tooling separately.*

PLUGS WITH ACTUATING SCREW, NO COVER ASSEMBLED

Mfg. Part No.	Fig.	Contacts	Color	Stock No.	Price Each 1-9	Price Each 10-24
516-020-000-301	1	20	Grey	59K0484	22.59	20.27
516-038-000-301	1	38	Grey	59K0487	16.21	14.54
516-056-000-301	1	56	Grey	59K0492	16.01	14.36
516-090-000-301	1	90	Grey	59K0496	30.77	27.61
516-120-000-101	1	120	Green	59K0498	36.00	32.30
PLUGS WITH ACTUATING SCREW & METAL COVER, SIDE ENTRY						
516-020-000-351	2	20	Grey	59K0485	56.32	50.53
516-056-000-351	2	56	Grey	59K0493	45.88	41.16
516-090-000-351	2	90	Grey	59K0497	62.59	56.15
516-120-000-151	2	120	Green	93B6300	70.13	62.92
PLUGS WITH LOCKING NUT, NO COVER ASSEMBLED						
516-020-000-302	3	20	Grey	95F3171	14.73	13.22
516-038-000-302	3	38	Grey	59K0488	11.29	10.13
516-056-000-302	3	56	Grey	95F3179	11.63	10.43
PLUGS WITH ACTUATING SCREW & PLASTIC COVER, TOP ENTRY STANDARD CABLE CLAMP						
516-090-000-311	-	90	Grey	28C3285	64.64	50.27
RECEPTACLES WITH ACTUATING SCREW, NO COVER ASSEMBLED						
516-038-000-401	4	38	Grey	59K0490	15.78	14.16
516-120-000-201	4	120	Green	95F3188	36.71	32.94
RECEPTACLES WITH LOCKING NUT, NO COVER ASSEMBLED						
516-020-000-402	5	20	Grey	59K0486	11.29	10.13
516-038-000-402	5	38	Grey	59K0491	11.03	9.90
516-056-000-402	5	56	Grey	59K0495	11.29	10.13
516-090-000-402	5	90	Grey	95F3185	13.92	12.49
516-120-000-202	6	120	Green	95F3189	19.53	17.52

➤CONTINUED➤

516 SERIES RACK AND PANEL CONNECTORS (CONT.)

METAL COVERS

Mfg. Part No.	For Use With	Stock No.	Price Each 1-9	Price Each 10-24
● 516-230-520	20-pin Rack and Panel Connector	94B5299	25.81	23.15
● 516-230-538	38-pin Rack and Panel Connector	59K0499	27.41	24.59
● 516-230-556	56-pin Rack and Panel Connector	59K0500	29.47	26.44
● 516-230-590	90-pin Rack and Panel Connector	95F3194	30.77	27.61
● 516-230-512	120-pin Rack and Panel Connector	95F3190	33.92	30.43

CRIMP CONTACTS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 516-290-591	Crimp Contact, 28AWG to 18AWG	21J7598	0.40

RACK AND PANEL CONNECTOR TOOLS

Mfg. Part No.	Description	Stock No.	Price Each
516-280-201	Hand Crimp Tool	95F3212	207.15
516-280-300	Contact Ejection Tool	95F3213	85.98
516-280-400	Crimp Contact Insertion Tool	95F3214	37.98
516-280-500	Polarizing Hardware Round Nut Driver Tool	95F3215	89.80

(8807)

HAN-YELLOCK ® INTERCONNECT SYSTEM

RoHS Compliant Available

HARTING®

Assembled Connector using Side-Entry Hood and Carrier Hood with Slotted Pushbutton

Top-Entry Hood and Carrier Hood with Plain Pushbutton

- 2-Pc. hood with pushbutton locking mechanism
- Simple snap-in functionality
- Insert assembly from mating and termination side
- Contact bridging
- 25 Coding possibilities
- IP67 protected
- Shock- and vibration-proof
- Space-saving compact design
- Reduces material and wiring costs
- Easy assembly

Han- *Yellock®* heavy-duty industrial connectors provides secure transmission of data, signal and power while offering individual configuration options, optimal functionality and elegant, space-saving design. The innovative locking system makes connections and disconnections safe and quick – even under harsh industrial conditions. The locking takes place as the cable and device sides are simply joined together. The self-contained interface consists of a housing, bulkhead mounting, carrier hood with cover, modules, crimp pin contacts, multipliers, and accessories; *all ordered separately below.*

HAN-YELLOCK® 30 HOODS

Two-part powder-coated aluminum hood for easy wiring and testing. Features patented, vibration-resistant internal, latched locking mechanism that makes connections and disconnections safe and quick, even under harsh industrial conditions. Choice of side or top cable entry.

Mfg. Part No.	Cable Entry	Thread Size	Stock No.	Price Each 1-9
● 11 12 300 1500	90°	M20	84R6050	18.13
● 11 12 300 1501	90°	M25	84R6051	19.15
● 11 12 300 1502	90°	M32	84R6052	20.15
● 11 12 300 1400	180°	M20	84R6047	18.13
● 11 12 300 1401	180°	M25	84R6048	19.15
● 11 12 300 1402	180°	M32	84R6049	20.71

HAN-YELLOCK® CARRIER HOODS AND HOUSINGS

Han- *Yellock®* 30 carrier hoods and housings provide placement for three Han- *Yellock®* modules, *ordered separately below.* Constructed of die-cast zinc. Adapter frames, *ordered separately below,* are required when using Han-Modular® modules up to 4mm²; *order separately online or call.*

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 11 12 300 0100	Carrier Hood with Plain Locking Pushbutton	84R6043	21.18
● 11 12 300 0110	Carrier Hood with Slotted Locking Pushbutton	84R6044	22.98
● 11 00 300 0101	Han-Modular® Adapter Frame for Carrier Hoods	84R6027	5.03
● 11 12 300 0301	Housing, Bulkhead Mounting	84R6045	16.55
● 11 12 300 0302	Housing, Bulkhead Mounting with Four Panel Fasteners	84R6046	20.15
● 11 00 300 0301	Han-Modular® Adapter Frame for Housing, Bulkhead Mounting	84R6028	5.03

HAN-YELLOCK® MODULE AND MULTIPLERS

Han- *Yellock®* five-pin modules are snapped and locked into position manually in the hood and housing from the mating or termination side. Module accepts Han- *Yellock®* crimp pin contacts; *ordered separately below.* The potential multiplication moves capabilities from the control cabinet to the connector. Depending on requirements, the five contacts, each with a current carrying capacity of 20A, can be switched to 2, 3, 4 or 5-way links. Switching is via a five-socket multiplier that is snapped in on the mating side. The multiplier can be placed in the connector from either the cable side or the casing side. These assemblies are easily dismantled by using **mfg. part no. 11 99 000 0001** removal tool; *ordered separately below.*

● 11 05 105 3001	Han- *Yellock®* Module	84R6042	4.59
● 11 05 105 2801	Multipler 1:1 — 5 Single Contacts	84R6037	8.00
● 11 05 105 2802	Multipler 2:3 — 2 Bus Bar and 3 Single Contacts	84R6038	8.91
● 11 05 105 2803	Multipler 3:2 — 3 Bus Bar and 2 Single Contacts	84R6039	8.91

➤ CONTINUED ➤

HAN-YELLOCK ® INTERCONNECT SYSTEM (CONT.)

HAN-YELLOCK® MODULE AND MULTIPLERS

Mfg. Part No.	Cable Entry	Thread Size	Stock No.	Price Each 1-9
● 11 05 105 2804	Multipler 4:1 — 4 Bus Bar and 1 Single Contacts		84R6040	8.91
● 11 05 105 2805	Multipler 5:0 — 5 Bus Bar Contacts		84R6041	8.91

HAN-YELLOCK® CRIMP PIN CONTACTS, SILVER-PLATED COPPER ALLOY

Mfg. Part No.	Wire Gauge mm²	Wire Gauge AWG	Stock No.	Price Each 1-9
● 11 05 000 6101	0.14-0.37	26AWG to 22AWG	84R6029	0.80
● 11 05 000 6102	0.50	20AWG	84R6030	0.78
● 11 05 000 6103	0.75	18AWG	84R6031	0.78
● 11 05 000 6104	1.00	18AWG	84R6032	0.78
● 11 05 000 6105	1.50	16AWG	84R6033	0.80
● 11 05 000 6106	2.50	14AWG	84R6034	0.80
● 11 05 000 6107	3.00	12AWG	84R6035	0.78
● 11 05 000 6108	4.00	12AWG	84R6036	0.80

HAN-YELLOCK® ACCESSORIES

Order **mfg. part no. 09 99 000 0021** *Harting service crimp tool separately.* Other crimp tools listed are available; *go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 11 00 000 9501	8-Pc. Coding Pin Set	84R6026	4.87
● 11 99 000 0001	Removal Tool for Han- *Yellock®* Modules and Frames	84R6053	1.03
● 09 99 000 0319	Contact Removal Tool	98B6241	32.15
● 09 99 000 0341	Locator for **Mfg. Part No. 09 99 000 0110** Harting Crimp Tool	84R6023	36.77
● 09 99 000 0342	Locator for **Mfg. Part No. 09 99 000 0001** Buchanan Crimp Tool	84R6024	3.05
● 09 99 000 0343	Locator for **Mfg. Part No. 09 99 000 0021** Harting Service Crimp Tool	84R6025	27.99

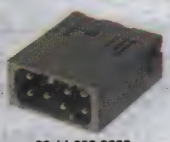
(190005)

HAN-MODULAR CONNECTOR SYSTEM

RoHS Compliant Available

HARTING®

The Han-Modular series is a new system of inserts designed to meet the specific requirements of individual customers. The individual contacts used in this system are all from existing well proven ranges and it is possible to use combinations of 1 to 12 modules depending on the size of the hoods and housings chosen.



09 14 008 2633

09 14 008 2733

HAN-MODULAR FRAMES

Mfg. Part No.	Size	Number of Modules	Stock No.	Price Each 1-9
● 09 14 006 0303	6B	1	97B2519	24.61
09 14 010 0303	10B	3	97B2404	23.88
● 09 14 016 0313	16B	4	57J2071	24.02

HAN AXIAL SCREW MODULE

Mfg. Part No.	No. of Contacts	Description	Stock No.	Price Each 1-9
09 14 002 2601	2	Male insert for 14-8 AWG, 40A	04C8114	23.07
09 14 002 2701	2	Female insert for 14-8 AWG, 40A	97B2410	26.67
● 09 14 002 2646	2	Male insert for 10-8 AWG, 70A	86R4803	25.38
● 09 14 002 2741	2	Female insert for 10-8 AWG, 70A	62M1474	39.62
09 14 002 2653	2	Male insert for 10-7 AWG, 100A	29H1470	56.24
09 14 002 2753	2	Female insert for 10-7 AWG, 100A	29H1473	67.93

HAN C MODULE

09 14 003 3001	3	Male insert for Han C crimp contacts	04C8120	7.98
09 14 003 3101	3	Female insert for Han C crimp contacts	04C8122	7.98
● 09 14 003 2601	3	Male insert, axial screw contacts for 14-8 AWG	52K4950	22.66
● 09 14 003 2701	3	Female insert, axial screw contacts for 14-8 AWG	13M3665	21.57

HAN DD MODULE

● 09 14 012 3001	12	Male insert for Han DD crimp contacts	57J2075	5.45
● 09 14 012 3101	12	Female insert for Han DD crimp contacts	92B6500	5.45
● 09 14 012 2632	12	Male Quick Lock termination module	86R4809	19.77
● 09 14 012 2732	12	Female Quick Lock termination module	86R4810	21.62

HAN E MODULE

09 14 006 3001	6	Male insert for Han E crimp contacts	04C8129	10.33
● 09 14 006 3101	6	Female insert for Han E crimp contacts	04C8130	10.33

HAN EE MODULE

● 09 14 008 2633	8	Male Quick Lock termination module	64R1234	16.29
● 09 14 008 2733	8	Female Quick Lock termination module	64R1235	16.68
09 14 008 3001	8	Male insert for Han EE crimp contacts	57J2079	10.28
09 14 008 3101	8	Female insert for Han EE crimp contacts	04C8132	10.28

➤ CONTINUED ➤

HAN-MODULAR CONNECTOR SYSTEM (CONT.)

HAN ES MODULE

Mfg. Part No.	No. of Contacts	Description	Stock No.	Price Each 1-9
09 14 005 2616	5	Male Cage Clamp module	85C0580	13.90
● 09 14 005 2716	5	Female Cage Clamp module	51M4030	14.31
HAN-MODULAR PNEUMATIC MODULE				
09 14 003 4501	3	For 1.6mm, 3mm, and 4mm I/D tube	04C8124	5.65
HAN HIGH DENSITY MODULE				
09 14 025 3001	25	Male insert for High Density crimp contacts	29H1480	11.36
09 14 025 3101	25	Female insert for High Density crimp contacts	29H1481	11.67

HAN C CONTACTS

Mfg. Part No.	Gender	Wire Size (AWG)	Wire Size (mm²)	Stock No.	Price Each 1-9
09 32 000 6107	Pin	12AWG	4.0	88F1905	3.40
09 32 000 6207	Socket	12AWG	4.0	04C9012	4.98
HAN E, EE, EEE CONTACTS					
09 33 000 6127	Pin	26AWG to 22AWG	0.14 - 0.37	04C9044	1.65
09 33 000 6227	Socket	26AWG to 22AWG	0.14 - 0.37	04C9061	1.79
09 33 000 6121	Pin	20AWG	0.5	97B2411	0.69
09 33 000 6220	Socket	20AWG	0.5	96B4911	0.71
09 33 000 6114	Pin	18AWG	0.75	04C9039	0.69
09 33 000 6105	Pin	18AWG	1.0	50H2672	0.69
09 33 000 6205	Socket	18AWG	1.0	91C6195	0.69
● 09 33 000 6104	Pin	16AWG	1.5	90B9143	0.69
● 09 33 000 6204	Socket	16AWG	1.5	90B8954	0.69
● 09 33 000 6102	Pin	14AWG	2.5	04C9033	0.76
● 09 33 000 6202	Socket	14AWG	2.5	34C3668	0.69
● 09 33 000 6107	Pin	12AWG	4.0	90B8939	0.71
● 09 33 000 6207	Socket	12AWG	4.0	04C9056	0.71

HAN PNEUMATIC CONTACTS WITHOUT SHUT OFF

Mfg. Part No.	For Use With	Contact Gender	Stock No.	Price Each 1-9	Price Each 10-24
09 14 000 6152	3mm I/D tube	Pin	04C8092	7.53	7.21
09 14 000 6252	3mm I/D tube	Socket	04C8098	7.66	7.33
09 14 000 6153	4mm I/D tube	Pin	04C8093	7.38	7.07
09 14 000 6253	4mm I/D tube	Socket	04C8099	7.38	7.07

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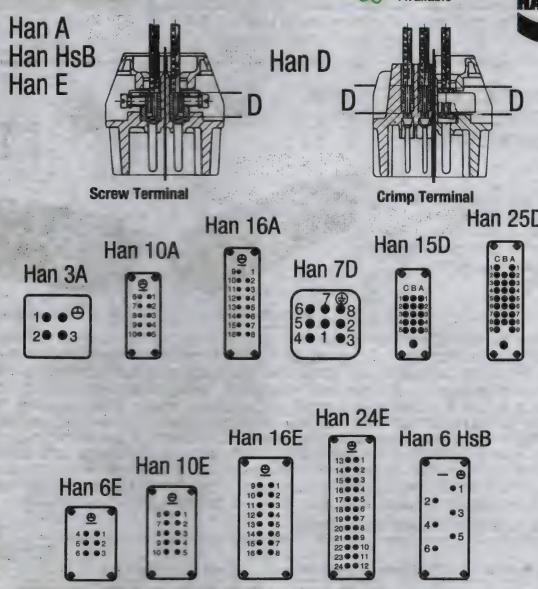
HAN® NEMA 4/12 POWER CONNECTOR INSERTS

RoHS Compliant Available



HAN A INSERTS, 10A/600V UL, SCREW TERMINAL — MALE INSERTS

Mfg. Part No.	Contacts	Hood/Housing Series	Stock No.	Price Each 1-9
● 09 20 003 2611	3	Han 3A	79K0430	11.59
● 09 20 004 2611	4	Han 3A	79K0432	14.16
● 09 20 010 2612	10	Han 10A	79K0434	21.22
● 09 20 016 2612	16	Han 16A	79K0437	23.92

➤CONTINUED➤

HAN® NEMA 4/12 POWER CONNECTOR INSERTS (CONT.)

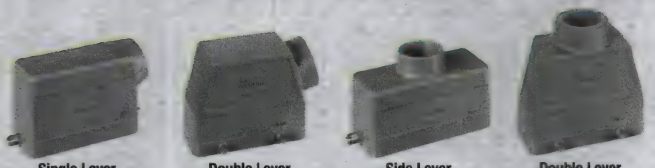
HAN A INSERTS, 10A/600V UL, SCREW TERMINAL — FEMALE INSERTS

Mfg. Part No.	Contacts	Hood/Housing Series	Stock No.	Price Each 1-9
● 09 20 003 2711	3	Han 3A	79K0431	12.76
● 09 20 004 2711	4	Han 3A	79K0433	13.61
● 09 20 010 2812	10	Han 10A	79K0435	23.20
● 09 20 016 2812	16	Han 16A	94B8024	31.58
HAN D INSERTS 10A/600V UL, CRIMP TERMINATION — MALE INSERTS*				
● 09 21 007 3031	7	Han 3A	82K8815	6.77
● 09 36 008 3001		Han 3A	79K0445	10.93
● 09 21 015 3001	15	Han 10A	79K4445	15.49
● 09 21 025 3001	25	Han 16A	79K4446	17.45
HAN D INSERTS 10A/600V UL, CRIMP TERMINATION —FEMALE INSERTS*				
● 09 21 007 3131	7	Han 3A	97H1922	6.90
● 09 36 008 3101	8	Han 3A	79K0446	10.44
● 09 21 015 3101	15	Han 10A	80K6209	15.79
● 09 21 025 3101	25	Han 16A	79K0469	17.45
HAN E INSERTS 16A/600V UL SCREW TERMINAL WITH WIRE PROTECTION — MALE INSERTS				
● 09 33 006 2601	6	Han 6B	79K0476	14.55
● 09 33 010 2601	10	Han 10B	91F9641	18.49
● 09 33 016 2601	16	Han 16B	91F9646	22.00
● 09 33 024 2601	24	Han 24B	91F9651	25.63
HAN E INSERTS 16A/600V UL SCREW TERMINAL WITH WIRE PROTECTION — FEMALE INSERTS				
● 09 33 006 2701	6	Han 6B	91F9636	15.06
● 09 33 010 2701	10	Han 10B	79K0477	19.13
● 09 33 016 2701	16	Han 16B	79K0478	20.45
● 09 33 024 2701	24	Han 24B	91F9652	27.70
HAN HsB INSERTS, 35A/600V UL, SCREW TERMINAL — MALE INSERT				
● 09 31 006 2601	6	Han 16B Housings and Hoods	79K0443	33.75
HAN HsB INSERTS, 35A/600V UL, SCREW TERMINAL — FEMALE INSERT				
● 09 31 006 2701	6	Han 16B Housings and Hoods	79K0444	39.38
HAN K, 80A/600V UL, SCREW TERMINAL — MALE INSERTS				
09 38 006 2601	6	Han 16B	04C9579	91.04
09 38 012 2601	12	Han 24B Housings and Hoods	04C9581	97.62
HAN K, 80A/600V UL, SCREW TERMINAL — FEMALE INSERTS				
09 38 006 2701	6	Han 16B Housings and Hoods	04C9580	121.45
09 38 012 2701	12	Han 24B Housings and Hoods	04C9585	117.98

** Crimp contacts sold seperately.*
(16848)

HAN® NEMA 4/12 POWER CONNECTOR HOODS

RoHS Compliant Available



Single Lever, Side-Entry | Double Lever, Side-Entry | Side Lever, Side-Entry | Double Lever, Top-Entry

Hoods are in accordance with international standard IEC 529 (DIN40050) degree of protection IP 65, which complies in full with NEMA Type 4. Constructed of die-cast aluminum. Protect against windblown dust and rain, splashing water, and hose-directed water. For use in power utility, robotics, chemical plants, machine tool control, injection mold, industrial instrumentation, and conveyor equipment applications. Hoods with single lever mate with single lever.

HAN 3A, SINGLE LEVER

Mfg. Part No.	Entry	Dimensions (mm) Depth	Width	Height	PG	Stock No.	Price Each 1-9
● 09 20 003 1640	Side	28	27	50.5	11	79K0429	13.90
● 09 20 003 1440	Top	28	27	56.5	11	99B6554	8.16
HAN 10A, SINGLE LEVER							
● 09 20 010 1541	Side	63	29.5	61.5	16	97H1930	20.09
● 09 20 010 1440	Top	63	29.5	47	13.5	96B3288	20.55
HAN 16A, SINGLE LEVER							
● 09 20 016 1541	Side	79.5	29.5	61.5	16	51B024	21.60
● 09 20 016 0441	Top	79.5	36	70.5	21	79K0436	30.09
HAN 6B, SINGLE LEVER							
● 09 30 006 1540	Side	60	43	43	13.5	97H1935	16.43
● 09 30 006 1541	Side	60	43	43	16	91F9637	17.96
● 09 30 006 0542	Side	60	43	72	21	97H1933	22.57
● 09 30 006 1440	Top	60	43	40	13.5	79K0439	18.15
● 09 30 006 1441	Top	60	43	40	16	82K6651	18.85
● 09 30 006 0442	Top	60	43	72	21	97H1932	21.93

➤CONTINUED➤

RACK & PANEL CONNECTORS

HAN® NEMA 4/12 POWER CONNECTOR HOODS (CONT.)

HAN 10B, SINGLE LEVER

Mfg. Part No.	Entry	Dimensions (mm) Depth	Width	Height	PG	Stock No.	Price Each 1-9
● 09 30 010 1541	Side	73	43	57	16	97H1939	22.29
● 09 30 010 0542	Side	73	43	72	21	80K9319	33.50
HAN 10B, DOUBLE LEVER							
● 09 30 010 1421	Top	73	43	45	16	97H1938	23.11
● 09 30 010 0522	Side	73	45	72	21	79K0472	28.13
● 09 30 010 1521	Side	73	43	45	16	96B6116	21.18
● 09 30 010 0422	Top	73	45	72	21	91F9644	28.77
HAN 16B, SINGLE LEVER							
● 09 30 016 1540	Side	93.5	43	62.5	21	50B3888	26.34
● 09 30 016 0541	Side	93.5	43	76	29	97H1944	38.95
HAN 16B, DOUBLE LEVER							
● 09 30 016 1520	Side	93.5	43	62.5	21	91F9648	21.04
● 09 30 016 0520	Side	93.5	45	76	21	97H1942	31.13
● 09 30 016 0521	Side	93.5	45	76	29	97H1943	31.82
● 09 30 016 1420	Top	93.5	43	62.5	21	91F9649	23.72
● 09 30 016 0420	Top	93.5	45	76	21	97H1940	33.43
● 09 30 016 0421	Top	93.5	45	76	29	79K0440	32.25
HAN 24B, DOUBLE LEVER							
● 09 30 024 1520	Side	120	43	62.5	21	91F9653	23.62
● 09 30 024 0421	Top	120	45	76	29	79K0442	39.84
● 09 30 024 1421	Top	120	43	55	29	79K0474	26.24
● 09 30 024 0521	Side	120	45	76	29	98B6193	36.35

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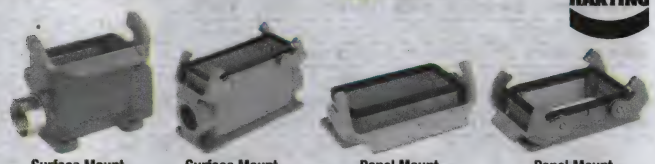
HAN® NEMA 4/12 CONNECTOR HOUSINGS

RoHS Compliant Available

HARTING®



Surface Mount, Single Lever | Surface Mount, Double Lever | Panel Mount, Single Lever | Panel Mount, Double Lever

Housings are in accordance with international standard IEC 529 (DIN40050) degree of protection IP65, which complies in full with NEMA Type 4. Constructed of die-cast aluminum. **Mfg. part no. 0930030302** has a thermoplastic spring cover. Protect against windblown dust and rain, splashing water, and hose directed water. Accept HAN® connector inserts *on page 925*. For use in power utility, robotics, chemical plants, machine tool control, injection mold, industrial instrumentation, and conveyor equipment applications.

SURFACE MOUNT

Mfg. Part No.	Size	Number of Levers	Dimensions (mm) Depth	Width	Height	Thread Size	Stock No.	Price Each 1-9
● 09 20 003 1250	Han 3A	1	58	40	51	PG11	01C6238	20.58
● 09 20 010 0251	Han 10A	1	63.5	50	52	PG16	79K0468	27.27
● 09 20 016 0251	Han 16A	1	80	50	57	PG16	79K9565	31.33
● 09 30 006 1251	Han 6B	1	82	52	51.5	PG16	79K0438	28.01
● 09 30 010 1231	Han 10B	2	94	52	54	PG16	97H1955	42.30
● 09 30 016 1250	Han 16 B	1	94	52	54	PG21	79K0441	50.53
● 09 30 016 1230	Han 16B	2	117	57	56	PG21	97H1958	42.87
● 09 30 024 1230	Han 24B	2	144	57	56	PG21	97H1962	46.83

PANEL MOUNT

Mfg. Part No.	Size	Number of Levers	Dimensions (mm) Depth	Width	Height	Stock No.	Price Each 1-9
● 09 20 003 0301	Han 3A	1	35	40	23	79K0467	10.23
● 09 20 010 0301	Han 10A	1	96	29	26	98B6370	18.83
09 20 010 0321*	Han 10A	1	70	29	26	88F3098	35.39
● 09 20 016 0301	Han 16A	1	96	29	26	97H1951	22.36
● 09 30 006 0301	Han 6B	1	80	43.5	28.5	79K0470	18.81
● 09 30 010 0305	Han 10B	1	93	43.5	28.5	97H1954	27.82
● 09 30 010 0301	Han 10B	2	93	43	28.5	79K0471	25.54
● 09 30 016 0301	Han 16B	2	113	43	28.9	79K0473	26.93
● 09 30 016 0307	Han 16B	1	113	43.4	28.9	04C8662	30.56
● 09 30 016 0318*	Han 16B	1	113	43.4	28.9	04C8665	62.65
● 09 30 024 0301	Han 24B	2	140	43	28.5	91F9655	29.10
● 09 30 032 0301	Han 32B	2	110	90	34	99F6805	50.62
● 09 30 048 0301*	Han 48B	1	148	96	40	04C8888	107.68

* With Cover
(16847)

HAN® D CRIMP CONTACTS

RoHS Compliant Available

HARTING®

Pin | Socket

PIN CRIMP CONTACTS

Mfg. Part No.	AWG	Plating	Stock No.	Price Each 1-9	10-24
● 09 15 000 6106	14AWG	Silver	79K0426	1.33	1.16
● 09 15 000 6101	16AWG	Silver	04C8156	1.33	1.16
● 09 15 000 6102	18AWG	Silver	79K0459	1.33	1.16
● 09 15 000 6103	20AWG	Silver	04C8157	1.33	1.16
● 09 15 000 6107	26AWG to 22AWG	Silver	04C8158	1.57	1.42
09 15 000 6121	16AWG	Gold	94B9219	2.98	2.80
09 15 000 6122	18AWG	Gold	92B4840	2.98	2.80
09 15 000 6124	26AWG to 22AWG	Gold	95B8333	2.98	2.80
SOCKET CRIMP CONTACTS					
● 09 15 000 6206	14AWG	Silver	26C1858	1.33	1.16
● 09 15 000 6201	16AWG	Silver	79K0460	1.33	1.16
● 09 15 000 6202	18AWG	Silver	04C8173	1.33	1.16
● 09 15 000 6203	20AWG	Silver	96B5550	1.33	1.16
● 09 15 000 6207	26AWG to 22AWG	Silver	79K0427	1.60	1.44

(73801)

HAN® CRIMP TOOL AND ACCESSORIES

RoHS Compliant Available

HARTING®

Crimp Tool | Mini Removal Tool | Insertion Tool

Mfg. Part No.	Description	Stock No.	Price Each Each
● 09 99 000 0021	Service Cimping Tool with Locator	79K0525	210.50
09 99 000 0059*	Insertion Tool	96B1799	21.54
09 99 000 0052	Mini Removal Tool	94B4096	15.88
09 33 000 9915	Coding Pin for Han D and Han DD	04C9078	0.78

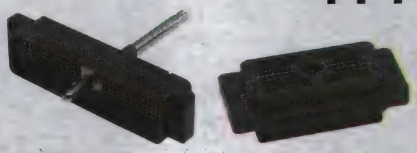
* Insertion tool recommended for wire sizes less than or equal to 18 AWG.
(78631)

CANNON DL/DLM SERIES PLASTIC AND METAL ZERO INSERTION FORCE CONNECTORS

RoHS Compliant Available

ITT

- ZIF Design Enables Rapid Mating with Minimal Contact Wear
- For Cable-to-Cable, Cable-to-Panel, and Panel-to-Panel Interconnections
- Ideal for Multi-Cycle and Circuit Applications



DL Series Plug | DL Series Receptacle

DL series rack and panel connectors feature zero insertion force (ZIF) design to enable long life and rapid mating. Ideal for any application requiring many cycles and circuits, for example, medical, instrumentation and computer use. Glass-filled thermoplastic connector housing, rated UL94V-1, features stainless steel insulator retainer and camshaft. Zero connector engagement force minimizes contact wear as well. Contacts may be hand or machine terminated. Current rating: 5A. Capable of 8 lbs. minimum contact retention, 1200VAC dielectric withstanding voltage. Operating temperature: –55°C to +105°C. 18 to 32 AWG wire range. *Order actuating handle kit for plugs separately* online. *Order crimp contacts and crimp tools separately* online. **DLM series** metal panel mount ZIF (Zero Insertion Force) plugs and receptacles feature a rugged nickel-plated aluminum alloy housing with a glass-filled thermoplastic insulator, rated UP94V-0. Shield-locking mechanism offers uniform mating pressure around the perimeter of the mated connector to create an EMI/RFI shield. Facilitates compliance of equipment to CE EMC directives. Intermateable with the **DL series** plastic versions for backwards/forwards compatibility. Order crimp contacts separately; *go online or call.*

DL SERIES PLASTIC ZIF CONNECTOR HOUSINGS

Mfg. Part No.	Positions	Description	L x W	Stock No.	Price Each 1-2	3+
● DL1-156P	156	Plug	4.26 x 0.98″	51R5884	82.77	78.98
● DL1-156R	156	Receptacle	4.26 x 0.98″	51R5885	19.83	18.48
● DL2-96P	96	Plug	2.59 x 1.10″	51R5889	61.91	59.09
● DL2-96R	96	Receptacle	2.59 x 1.10″	84F693	17.75	15.27
● DL3-60P	60	Plug	2.59 x 0.98″	51R5891	67.94	64.82
● DL3-60R	60	Receptacle	2.59 x 0.98″	84F696	18.55	15.96
DL SERIES RECEPTACLES WITH PC/WIRE WRAP CONTACTS						
● DL1-156RW4*	156	0.61 ″	4.26 x 0.98″	51R5886	261.03	249.08
● DL1-156RW4B+	156	0.61 ″	4.26 x 0.98″	95F1948	261.79	249.82

➤CONTINUED➤

CANNON DL/DLM SERIES PLASTIC AND METAL ZERO INSERTION FORCE CONNECTORS (CONT.)

DL SERIES RECEPTACLES WITH PC/WIRE WRAP CONTACTS

Mfg. Part No.	Positions	Description	L x W	Stock No.	Price Each 1-2	Price Each 3+
DL1-156PW6*	156	0.28″	4.26 x 0.98″	01K5463	362.28	341.46
DL1-156RW-6B+	156	0.28″	4.26 x 0.98″	23C8937	247.21	226.83
DL2-96RW4B+	96	0.61″	2.59 x 1.10″	51R5890	146.92	140.20
110855-0014+	96	0.28″	2.59 x 1.10″	50B9206	164.52	153.40

DLM SERIES METAL ZIF CONNECTOR HOUSINGS

Mfg. Part No.	Positions	Description	L x W	Stock No.	Price Each 1-4	Price Each 5-9
127050-0204	156	Plug	4.26 x 0.98″	01M9860	126.98	120.13

*20μ″ gold; +50μ″ gold
(8788)

CANNON DL/DLM SERIES JUNCTION SHELL KITS

ITT

DL series thermoplastic kits, rated UL94V-0, have stainless steel cable clamps. Knockout plug for alternate cable entry. Includes 4 screws and nuts. **DLM series** 2-pc. die-cast aluminum metal shell kits are nickel plated to facilitate EMI/RFI shielding. Includes: 2 shells, 1 hood, 1 clamp, 1 lock/open indication seal and screws.

DL SERIES KITS

Mfg. Part No.*	For Use On	Mounting	Cable Entry	Stock No.	Price Each 1-9	Price Each 10-24
DL2-J/S	DL2-96	Straight or Right-Angle	0.560″	51R5887	27.18	24.51
DL2-2J/S	DL2-96	Straight or Right-Angle	0.625″	16F3610	75.83	68.36
DL3-3-J/S	DL3-60	Straight or Right-Angle	0.625″	16F3611	77.38	69.76

DLM SERIES KITS

249-4520-000	DL1/DLM1	Straight or Right-Angle	0.705″	35M0780	80.73	72.77

***Prefix DL1** indicates single-piece shell; **prefixes DL2** and **DL3,** 2-piece shells
(8834)

CANNON DL SERIES CRIMP CONTACTS

RoHS Compliant Available

ITT

Loose beryllium copper crimp contacts available in three versions. No insertion tool required. *Order crimp tools separately* online.

20μ″ GOLD PLATING OVER 50μ″ NICKEL

Mfg. Part No.	AWG	Hand Crimp Tool	Stock No.	Price Each 1-49	Price Each 50-99
030-2416-001	32AWG to 28AWG	1	95F1933	0.63	0.53
030-2410-001	22AWG to 20AWG	2	84F698	0.65	0.55
030-2409-001	20AWG to 18AWG	2	84F697	0.65	0.55
030-2415-001*	26AWG to 24AWG+	3	95F1936	0.63	0.53

50μ″ GOLD PLATING OVER 50μ″ NICKEL (PLUG SIDE)

030-2410-003*	26AWG to 24AWG	2	51R5894	0.95	0.80
030-2409-003*	22AWG to 20AWG	2	51R6031	1.28	1.08

FLAT—50μ″ GOLD PLATING OVER 50μ″ NICKEL (RECEPTACLE SIDE)

030-2494-001*	32AWG to 28AWG	1	95F1942	1.18	0.99
030-2492-001*	26AWG to 24AWG	2	51R5898	1.23	1.04

*For low current applications (less than 100 milliamps) manufacturer suggests using 50μ″gold contact on plug side and 50μ″ flat gold contact on receptacle side; + Non-insulation support
(8789)

VEAM VRPC RECTANGULAR PLASTIC CONNECTORS

RoHS Compliant Available

ITT

- Proven contact system
- Sealing flexibility
- Industry compliant fire
- Field polarization and smoke resistant
- Weight reduction
- Space saving
- Mounting flexibility
- Flexible cable support
- Snap in system

Mfg. Part No.	Connector Gender	# of Contacts	Sealing Level	Stock No.	Price Each 1-4
VRPC-03P-20	Receptacle	3	Unsealed	43W6662	1.44
VRPC-03P-67	Receptacle	3	IP67	43W6663	12.77
VRPC-03S-20	Plug	3	Unsealed	43W6664	1.44
VRPC-03S-67	Plug	3	IP67	43W6665	4.08
VRPC-06P-20	Receptacle	6	Unsealed	43W6666	1.86
VRPC-06P-67	Receptacle	6	IP67	43W6667	14.50
VRPC-06S-20	Plug	6	Unsealed	43W6668	1.86
VRPC-06S-67	Plug	6	IP67	43W6669	4.39
VRPC-12P-20	Receptacle	12	Unsealed	43W6670	3.00
VRPC-12P-67	Receptacle	12	IP67	43W6671	13.06
VRPC-12S-20	Plug	12	Unsealed	43W6672	3.02
VRPC-12S-67	Plug	12	IP67	43W6673	4.68

➤CONTINUED➤

VEAM VRPC RECTANGULAR PLASTIC CONNECTORS (CONT.)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
VRPC-CABLE SUPPORT	Cable Support	43W6661	0.58

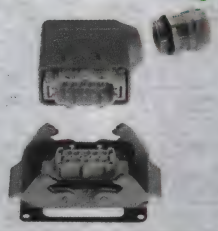
(210228)

HAN® NEMA 4/12 POWER CONNECTOR KITS

RoHS Compliant Available

HARTING®

Features:
- Ready to assemble complete metric connector kit
- Heavy duty screw terminal inserts
- IP65/NEMA 4 rated assemblies
- Hood/housings color: Gray
- Male and female inserts are interchangeable between hood and housings



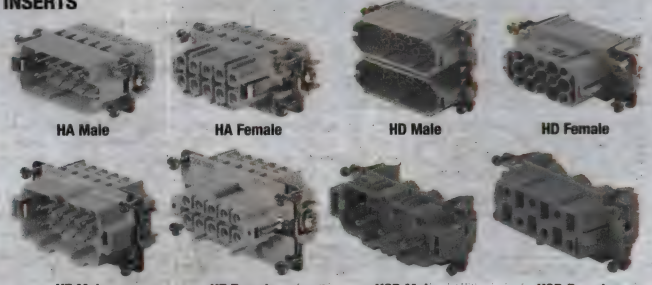
Mfg. Part No.	Kit Contents	Stock No.	Price Each 1-9
10 20 004 0001	Han Kit®-4AGM IP65, 600V per UL, 10A per contact, 4 contacts plus ground with screw terminals. Kit includes die cast top entry hood, die cast bulkhead mounted housing, male and female inserts, cord grip and flange gasket	18C0846	53.21
10 20 003 0003	Han Kit®-3AWM IP65, 600V per UL, 10A per contact, 3 contacts plus ground with screw terminals. Kit includes die cast top entry hood, die cast right angled bulkhead mounted housing, male and female inserts, cord grip and flange gasket	18C1554	55.05
10 20 004 0003	Han Kit®-4AWM IP65, 600V per UL, 10A per contact, 4 contacts plus ground with screw terminals. Kit includes die cast top entry hood, die cast right angled bulkhead mounted housing, male and female inserts, cord grip and flange gasket	18C1557	58.72
10 20 004 0005	Han Kit®-4AWSM IP65, 600V per UL, 10A per contact, 4 contacts plus ground with screw terminals. Kit includes die cast side entry hood, die cast bulkhead mounted housing, male and female inserts, cord grip and flange gasket	29H1626	64.64
10 20 010 0000	Han Kit®-10A IP65, 600V per UL, 16A per contact, 10 contacts plus ground with screw terminals. Kit includes die cast side entry hood, die cast bulkhead mounted housing, male and female inserts, cord grip and flange gasket	18C0847	95.77
10 20 016 0000	Han Kit®-16A IP65, 600V per UL, 16A per contact, 16 contacts plus ground with screw terminals. Kit includes die cast side entry hood, die cast bulkhead mounted housing, male and female inserts, cord grip and flange gasket	18C0848	127.09
10 33 006 0000	Han Kit®-6B IP65, 600V per UL, 16A per contact, 6 contacts plus ground, screw terminals with wire protection. Kit includes die cast side entry hood, die cast bulkhead mounted housing, male and female inserts, cord grip and flange gasket	18C0849	71.69
10 33 010 0000	Han Kit®-10B IP65, 600V per UL, 16A per contact, 10 contacts plus ground, screw terminals with wire protection. Kit includes die cast side entry hood, die cast bulkhead mounted housing, male and female inserts, cord grip and flange gasket	18C0850	90.70
10 33 016 0000	Han Kit®-16B IP65, 600V per UL, 16A per contact, 16 contacts plus ground, screw terminals with wire protection. Kit includes die cast side entry hood, die cast bulkhead mounted housing, male and female inserts, cord grip and flange gasket	18C0851	102.35
10 33 024 0000	Han Kit®-24B IP65, 600V per UL, 16A per contact, 24 contacts plus ground, screw terminals with wire protection. Kit includes die cast side entry hood, die cast bulkhead mounted housing, male and female inserts, cord grip and flange gasket	18C0852	125.57

(91181)

ROCKSTAR® HEAVY DUTY CONNECTOR INSERTS

RoHS Compliant Available

Weidmüller



➤CONTINUED➤

ROCKSTAR® HEAVY DUTY CONNECTOR INSERTS (CONT.)

MixMate Male

MixMate Female

ROCKSTAR HA INSERTS, 600V/22A/20-12 AWG UL, SCREW TERMINALS

Mfg. Part No.	Gender	Contacts	Hood/Housing Series	Stock No.	Price Each 1-9
● 1498200000	Receptacle	3	HA - size 1	10B5832	11.83
● 1498400000	Receptacle	4	HA - size 1	10B5833	10.41
● 1498300000	Plug	4	HA - size 1	88F4024	10.65
● 1650620000	Receptacle	10	HA - size 2	10B7610	12.80
● 1650610000	Plug	10	HA - size 2	10B7609	12.80
● 1650780000	Receptacle	16	HA - size 5	10B7618	18.30
● 1650770000	Plug	16	HA - size 5	10B7617	16.77
ROCKSTAR HE INSERTS, 600V/16A/20-12 AWG UL, SCREW TERMINALS					
● 1200200000	Receptacle	6	HE - size 3	10B5474	11.63
● 1200000000	Plug	6	HE - size 3	10B5473	12.02
● 1204100000	Receptacle	10	HE - size 4	10B5496	11.59
● 1203900000	Plug	10	HE - size 4	10B5495	11.99
● 1207700000	Receptacle	16	HE - size 6	10B5512	14.69
● 1207500000	Plug	16	HE - size 6	10B5511	15.99
● 1211300000	Receptacle	24	HE - size 8	10B5529	19.98
● 1211100000	Plug	24	HE - size 8	10B5528	19.98
ROCKSTAR HSB INSERTS, 600V/16A/20-12 AWG UL, SCREW TERMINALS					
● 1498700000	Plug	6	HSB - size 6	10B5836	28.54
ROCKSTAR MIXMATE INSERTS, 600V/65A/16-8 AWG UL, AXIAL SCREW TERMINALS					
● 1789990000	Plug	4	MixMate - size 3	61K9123	37.45
● 1789980000	Receptacle	4	MixMate - size 3	61K9122	37.45

(110632)

ROCKSTAR® HEAVY DUTY CONNECTOR CONTACTS

RoHS Compliant Available

Weidmüller

MALE PIN CONTACTS - MACHINED

Mfg. Part No.	AWG	Stock No.	Price Each 1-9
● 1601750000	18AWG	90B8700	58.97

FEMALE SOCKET CONTACTS - MACHINED

● 1601760000	18AWG	92B3360	0.64

TOOLING

Mfg. Part No.	Description	Stock No.	Price Each
● 9018490000	Crimp Tool	43K5585	448.35
1866730000	Extraction Tool	21M1715	55.10

(110636)

ROCKSTAR® HEAVY DUTY CONNECTOR BASE AND BULKHEAD HOUSINGS

RoHS Compliant Available

Weidmüller

Bulkhead Housing Single Lever

Bulkhead Housing Double Lever

Base Housing with Cover Single Lever

Base Housing Double Lever

Features:
- IP65 to EN60529
- NEMA 4X class of protection
- Scratch-resistant, corrosion-proof, long-lasting
- Material: Cast aluminium alloy
- Color: Gray
- Clamp lock in different versions of rustproof stainless steel
- All housings are marked with part number
- All bulkhead housings come with affixed gasketss

Applications:
- General mechanical engineering
- Conveying equipment and plant engineering
- Packaging machines
- Lighting and stage equipment
- Fairground rides
- Process engineering
- Transport and traffic engineering

Weidmüller has further developed its IP65 housing. The result is an industrial housing of a new design that also has the properties corrosion resistance and long service life. These new HDC industrial housings even surpass previous stainless steel housings in all respects. All operation elements are made of stainless steel. A high-quality, multistage surface sealing provides safety for years.

ROCKSTAR BULKHEAD HOUSINGS

Mfg. Part No.	Size	Locking Type	Stock No.	Price Each 1-9
● 1497600000	1	Single Lever	10B5827	8.72
● 1664040000	2	Single Lever	10B7816	11.44

CONTINUED

ROCKSTAR® HEAVY DUTY CONNECTOR BASE AND BULKHEAD HOUSINGS (CONT.)

Mfg. Part No.	Size	Locking Type	Stock No.	Price Each 1-9
● 1202100000	3	Single Lever	10B5488	13.16
● 1206100000	4	Single Lever	10B5508	18.80
● 1205000000	4	Double Lever	10B5501	18.80
● 1664920000	5	Single Lever	10B7827	14.27
● 1209700000	6	Single Lever	10B5524	15.46
● 1208600000	6	Double Lever	10B5517	14.69
● 1213900000	8	Single Lever	10B5546	16.87
● 1212400000	8	Double Lever	10B5536	19.34
● 1217800000	10	Double Lever	10B5556	31.37

ROCKSTAR BASE HOUSINGS - SINGLE LEVER

Mfg. Part No.	Size	Entries	Stock No.	Price Each 1-9
● 1652490000	1	1 - PG 11	10B7693	11.57
● 1652980000†	3	1 - PG 16	13C8213	21.16
● 1655680000†	4	2 - PG 16	13C8435	25.42
● 1662720000	8	2 - PG 21	13C8800	22.48
ROCKSTAR BASE HOUSINGS - DOUBLE LEVER				
● 1654370000	4	1 - PG 16	10B7737	22.22
● 1654450000	4	2 - PG 21	13C8329	21.13
● 1656720000	6	1 - PG 21	10B7771	20.08
● 1661510000	8	1 - PG 21	10B7802	24.53

†With cover

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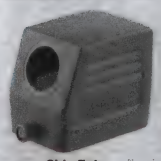
ROCKSTAR® HEAVY DUTY CONNECTOR HOODS

RoHS Compliant Available

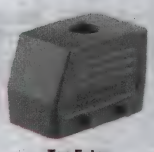
Weidmüller



Side Entry Single Lock

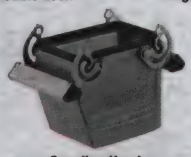
Side Entry Double Lock

Top Entry Single Lock



Top Entry Double Lock

Coupling Hood Single Lever



Coupling Hood Double Lever

Cover

Features:
- IP65 to EN60529
- NEMA 4X class of protection
- Scratch-resistant, corrosion-proof, long-lasting
- Material: Cast aluminium alloy
- Color: Gray
- Clamp lock in different versions of rustproof stainless steel
- All housings are marked with part number

Applications:
- General mechanical engineering
- Conveying equipment and plant engineering
- Packaging machines
- Lighting and stage equipment
- Fairground rides
- Process engineering
- Transport and traffic engineering

Weidmüller has further developed its IP65 housing. The result is an industrial housing of a new design that also has the properties corrosion resistance and long service life. These new HDC industrial housings even surpass previous stainless steel housings in all respects. All operation elements are made of stainless steel. A high-quality, multistage surface sealing provides safety for years.

ROCKSTAR STANDARD HOUSING - SIDE ENTRY HOODS

Mfg. Part No.	Size	Entry Size	No. of Locks	Stock No.	Price Each 1-9
● 1652480000	1	PG 11	1	10B7692	7.65
● 1663810000	2	PG 16	1	10B7813	10.44
● 1670530000	3	PG 13	1	10B7865	10.07
● 1652520000	3	PG 16	1	10B7696	12.58
● 1655210000	4	PG 16	1	13C8394	14.69
● 1654070000	4	PG 16	2	10B7728	14.98
● 1657850000	6	PG 21	1	10B7775	14.88
● 1665670000	7	PG 21	2	13C9042	22.01
● 1662390000	8	PG 21	1	13C8775	14.88
● 1661230000	8	PG 21	2	13C8677	14.69
● 1662410000	8	PG 29	1	13C8776	15.00
● 1661240000	8	PG 29	2	10B7793	14.88
● 1666840000	10	PG 29	2	13C9129	31.04

CONTINUED

ROCKSTAR® HEAVY DUTY CONNECTOR HOODS (CONT.)

ROCKSTAR STANDARD HOUSING - TOP ENTRY HOODS

Mfg. Part No.	Size	Entry Size	No. of Locks	Stock No.	Price Each 1-9
1652470000	1	PG 11	1	10B7691	7.55
1663930000	2	PG 16	1	13C8897	10.31
1652640000	3	PG 16	1	13C8182	12.75
1664810000	5	PG 16	1	10B7825	14.26
1657960000	6	PG 21	1	10B7777	19.45
1661370000	8	PG 21	2	10B7797	16.90
1662550000	8	PG 29	1	13C8787	14.69

ROCKSTAR HIGH HOUSING - TOP ENTRY HOODS

1652680000	3	PG 21	1	13C8186	14.88
1664870000	5	PG 21	1	13C8974	19.39
1656630000	6	PG 21	2	10B7769	19.59

ROCKSTAR COUPLING HOODS - TOP ENTRY

Mfg. Part No.	Size	Entry Size	Locking Type	Stock No.	Price Each 1-9
1653230000	3	PG 21	Single Lever	13C8236	19.59
1657310000	6	PG 21	Double Lever	13C8520	25.67
1661730000	8	PG 29	Double Lever	13C8714	19.78

ROCKSTAR HOUSING/ HOOD COVER

Mfg. Part No.	Size	No. of	Stock No.	Price Each 1-9
1665240000	4	2	10B7829	23.50

(110633)

ROCKSTAR® HEAVY DUTY CONNECTOR KITS

RoHS Compliant Available

Weidmüller

HA Series Kit

HE Series Kit

Features:
- IP65 to EN60529
- NEMA 4X class of protection
- All housings are marked with part number

HDC kits are standardized sets of components for constructing a complete connector. Each kit includes male insert, female insert, hood housing, bulkhead housing, and cable gland.

ROCKSTAR HA CONNECTOR KITS - PLASTIC HOUSINGS AND HARDWARE, TOP ENTRY HOODS

Mfg. Part No.	Hood/Housing Series	Contacts	Entry Size	Lever Type	Stock No.	Price 1-9
1712570000	size 1	3	PG 11	Single	61K7103	28.80
1712600000	size 1	4	PG 11	Single	61K7105	32.57

ROCKSTAR HE CONNECTOR KITS - METAL HOUSINGS AND HARDWARE, TOP ENTRY HOODS

1712660000	size 3	6	PG 16	Single	61K7108	42.71
1712670000	size 4	10	PG 16	Double	61K7109	53.39
1712680000	size 6	16	PG 21	Double	61K7110	58.56
1712690000	size 8	24	PG 21	Double	18K8622	72.36

(110637)

ROCKSTAR® HEAVY DUTY CONNECTOR CABLE GLANDS

RoHS Compliant Available

Weidmüller

Plastic

Brass

Plastic cable glands for industrial applications where class of protection IP68 is called for. Brass cable glands recommended for industrial applications where class of protection of IP54 is called for.

CABLE GLANDS - PLASTIC, IP68

Mfg. Part No.	Size	Clamping Range	Stock No.	Price Each 1-9
1568990000	PG11	5 - 10 mm	10B6285	2.76
1569010000	PG16	10 - 14 mm	61K5267	3.14

➤CONTINUED➤

ROCKSTAR® HEAVY DUTY CONNECTOR CABLE GLANDS (CONT.)

Mfg. Part No.	Size	Clamping Range	Stock No.	Price Each 1-9
1569020000	PG21	13 - 18 mm	61K5268	4.39
1569030000	PG29	18 - 25 mm	11J3849	9.51

CABLE GLANDS - BRASS, IP54

0260700000	PG11	5 - 10 mm	10B9014	2.58
0261400000	PG16	10 - 14 mm	10B9022	3.39
0260900000	PG21	13 - 18 mm	10B9018	4.36
0261000000	PG29	18 - 25 mm	10B9020	6.83

PG/ NPT ADAPTERS - BRASS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
1712360000	PG 16 to 1/2" NPT	10B8625	12.80
1712370000	PG 21 to 3/4" NPT	10B8626	12.39
1712390000	PG 29 to 1" NPT	10B8628	12.55

(110635)

HEAVY DUTY INDUSTRIAL CONNECTOR KITS

RoHS Compliant Available

wieland

Connector kit includes one pin insert, one socket insert, one hood and one housing. Inserts contain one pole for ground. Screw termination. 600V UL/CSA, 500V/16A IEC 61 984.

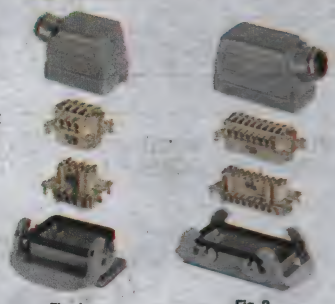


Fig. 1

Fig. 2

Mfg. Part No.	Fig.	Shell Size	No. of Poles	Thread Size	Stock No.	Price Each 1-9	10-24	25-99	100+
99.700.0000.6	1	6	6	M20	66M7525	41.22	38.21	34.77	31.34
99.701.0000.6	1	10	10	M20	66M7526	52.29	48.48	44.12	39.76
99.702.0000.6	2	16	16	M25	58P0514	86.93	80.61	73.35	66.11
99.703.0000.6	2	24	24	M25	08R4384	93.54	86.70	78.91	71.12

(147861)

MAX-M12 HIGH SPEED DATA CONNECTORS

NEW

Amphenol® Industrial

Features:
- HDM 12 Versions Available
  - -Plastic or Metal (for shielding)
  - -90° right angle and straight connector offerings
  - -3, 4, and 5 way circuit patterns
  - -A, B, D & P polarity codes – based on
- IEC 61087-2-101
- Available as stand-alone connectors & cable assemblies (standard and overmolded)
- Terminals capable of being terminated to: 0.8 mm2 (18 AWG) or 0.5 mm2 (20 AWG) conductors as defined by SAE J1128 and 0.75 mm2 and 0.50 mm2 conductors as defined by ISO 6722
- 444 N (100 LBF) pull force on cable
- Backward compatible with IEC 61076-2-101 (M12)
- More resistant to terminal damage
- Extreme environmental testing based on J2839 requirements
  - -High pressure wash down

Amphenol Industrial Products Group introduces the ruggedized M12 high speed data connector, the Max-M12. High speed data transmission connection systems have traditionally been implemented into commercial applications with little regard to high vibration, high temperature and overall harsh environment demands. With the increased implementation of these high speed Datalink connection systems into more heavy duty / harsh environment surroundings, the need for a more robust and ruggedized connection system has surfaced. Based on the IEC 61076-2-101 and SAE J 2839 standards the Max-M12 connection system makes it the perfect solution for the ultra rugged applications that sometimes exist in markets dealing with Heavy Equipment, Rail & Mass Transit, Process Control, Factory Automation, etc.

RIGHT ANGLE PLUGS

Mfg. Part No.	No. of Contacts	Contact Gender	Coding	Backshell Material	Stock No.	Price Each 1-9
HDM12PF05A1RA	5	Socket	A	Plastic	39X7409	17.46
HDM12PF05A1RAM	5	Socket	A	Metal	39X7410	36.92
HDM12PF05B1RA	5	Socket	B	Plastic	39X7413	17.46
HDM12PF05B1RAM	5	Socket	B	Metal	39X7414	36.92
HDM12PF05D1RA	5	Socket	D	Plastic	39X7417	17.46
HDM12PF05D1RAM	5	Socket	D	Metal	39X7418	36.92

➤CONTINUED➤

CIRCULAR CONNECTORS

MAX-M12 HIGH SPEED DATA CONNECTORS (CONT.)

Mfg. Part No.	No. of Contacts	Contact Gender	Coding	Backshell Material	Stock No.	Price Each 1-9
STRAIGHT PLUGS						
HDM12PF05A1ST	5	Socket	A	Plastic	39X7411	16.36
HDM12PF05A1STM	5	Socket	A	Metal	39X7412	24.71
HDM12PF05B1ST	5	Socket	B	Plastic	39X7415	16.36
HDM12PF05B1STM	5	Socket	B	Metal	39X7416	24.71
HDM12PF05D1ST	5	Socket	D	Plastic	39X7419	16.36
HDM12PF05D1STM	5	Socket	D	Metal	39X7420	24.71
RIGHT ANGLE RECEPTACLES						
HDM12RM05A1RA	5	Pin	A	Plastic	39X7421	18.65
HDM12RM05A1RAM	5	Pin	A	Metal	39X7422	35.09
HDM12RM05B1RA	5	Pin	B	Plastic	39X7425	18.65
HDM12RM05B1RAM	5	Pin	B	Metal	39X7426	35.09
HDM12RM05D1RA	5	Pin	D	Plastic	39X7429	18.65
HDM12RM05D1RAM	5	Pin	D	Metal	39X7430	35.09
STRAIGHT RECEPTACLES						
HDM12RM05A1ST	5	Pin	A	Plastic	39X7423	16.11
HDM12RM05A1STM	5	Pin	A	Metal	39X7424	22.67
HDM12RM05B1ST	5	Pin	B	Plastic	39X7427	16.11
HDM12RM05B1STM	5	Pin	B	Metal	39X7428	22.67
HDM12RM05D1ST	5	Pin	D	Plastic	39X7431	16.11
HDM12RM05D1STM	5	Pin	D	Metal	39X7432	22.67

(212187)

M8 AND M12 PANEL MOUNT AND FIELD SERVICEABLE CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

M8 Male Panel Mount Connectors | M8 Female Panel Mount Connectors | M12 Field Servicable Connectors | M12 Male and Female Panel Mount Connectors

The M8/M12 system fills the ongoing needs for sensor connection in Industrial Machinery and Factory Automation. A connection standard for many years, these products also find application outside of their traditional industries where a compact reliable connection system with environmental protection is required. Panel mount and field serviceable products are offered in solder cup termination.

Mfg. Part No.	Connector	No. of Contacts	Stock No.	Price Each 1-24
M8 PANEL MOUNT CONNECTORS				
● 1838838-1	Male	3	70M9939	7.69
● 1838838-2	Male	4	70M9940	8.18
● 1838839-1	Female	3	70M9941	9.66
● 1838839-2	Female	4	70M9942	11.06
M12 FIELD ATTACHABLE CONNECTORS				
● 1838275-1	Male	3	70M9928	8.42
● 1838275-2	Male	4	70M9929	8.89
● 1838275-3	Male	5	70M9930	9.69
● 1838274-1	Female	3	70M9925	11.46
● 1838274-3	Female	5	70M9927	12.78
M12 PANEL MOUNT CONNECTORS				
● 1838893-1	Male	3	70M9946	11.08
● 1838893-2	Male	4	70M9947	9.06
● 1838893-3	Male	5	70M9948	9.23
● 1838891-1	Female	3	70M9943	13.25
● 1838891-2	Female	4	70M9944	12.35
● 1838891-3	Female	5	70M9945	11.93

(105283)

element14 COMMUNITY

Get inspired, collaborate, design, research, ask experts questions.

element14.com

(196545)

NANONICS ENVIRONMENTALLY SEALED CIRCULAR CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Contact resistance: 0.003 - 0.008 Ω
- Current rating: 1A max. per contact
- Dielectric withstanding voltage: 500 Vrms at sea level
- Insulation resistance – 5000 megΩ min. (@ 500 VDC) at room ambient conditions.
- Magnetic permeability: 2 mu max.
- Temperature range: -55°C to +200°C
- Durability: 250 mates/demates

Nanonics environmentally sealed circular offering represents one of the industry's smallest and most reliable connector designs. These connectors are ideally suited for applications where high density and reliability, and reduced size and weight are serious design parameters. Along with these attributes, they also meet the immersion requirements of IP67, more specifically, one meter of water for two hours. Utilizing the same contact system and materials as the Dualobe® rectangular series of connectors, the circular connectors are manufactured to the performance specifications of MIL-DTL-83513.

Mfg. Part No.	Positions	Gender	Description	Stock No.	Price Each 1-4
● QCM019SC2DC006F	19	Receptacle	Quick Disconnect, Flush Mount	08H3446	277.38
● TCM019PC2DC012	19	Plug	Threaded Coupling	08H5086	329.17
● 1589694-2	44	Plug	Threaded Coupling with Backshells	99M0923	349.77

(194808)

CPC SERIES UV RESISTANT SEALED CIRCULAR CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

NEW

The new **Sealed CPC Series connectors** using UL F1-rated resin is ideal for UV resistance in outdoor applications. The UL F1 rating meets industry standards for long-term UV exposure, making the housings suitable for outside applications where parts are subject to frequent or extended periods of exposure to sun light. The new CPC is sealed to IP67 with no additional enclosure needed to protect the mated connector from water exposure, making it easier to install and lowering the cost of installation. The circular configuration requires less space than a rectangular-style connector with an equal number of contacts for an efficient use of space on your equipment.

SERIES 1: SIGNAL

Mnf. Part No.	Gender	No. of Pos.	Shell Size	Mounting Type	Orientation	Stock No.	Price Each 1-24
● 1977876-1	Receptacle	4	11	Panel	Standard	99W2270	11.30
● 1977877-1	Receptacle	4	11	Cable	Standard	99W2271	13.02
● 1977878-1	Plug	4	11	Cable	Standard	99W2272	11.64
● 1977879-1	Receptacle	4	11	Panel	Reverse	99W2273	21.64
● 1977880-1	Receptacle	4	11	Cable	Reverse	99W2274	22.64
● 1977881-1	Plug	4	11	Cable	Reverse	99W2275	18.00
● 1977882-1	Receptacle	9	13	Panel	Standard	99W2276	11.78
● 1977883-1	Receptacle	9	13	Cable	Standard	99W2277	11.06
● 1977884-1	Plug	9	13	Cable	Standard	99W2278	11.52
● 1977885-1	Receptacle	37	23	Panel	Reverse	99W2279	23.78
● 1977886-1	Receptacle	37	23	Cable	Reverse	99W2280	41.42
● 1977887-1	Plug	37	23	Cable	Reverse	99W2281	43.66
SERIES 5: POWER							
● 1977888-1	Receptacle	3	17	Panel	Reverse	99W2282	24.92
● 1977889-1	Plug	3	17	Cable	Reverse	99W2283	28.28
SERIES 6: POWER & SIGNAL (HYBRID)							
● 1977890-1	Receptacle	16	23	Panel	Standard	99W2284	24.04
● 1977891-1	Receptacle	16	23	Cable	Standard	99W2285	24.04
● 1977892-1	Plug	16	23	Cable	Standard	99W2286	24.04

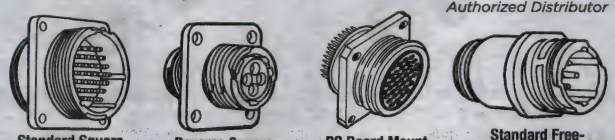
(212532)

AMP SERIES 1 CPC CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor



Standard Square Flange Receptacle | Reverse Square Flange Receptacle | PC Board Mount Receptacle | Standard Free-Hanging Receptacle

CONTINUED

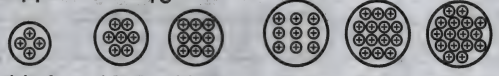
AMP SERIES 1 CPC CONNECTORS (CONT.)

Reverse Free-Hanging Receptacle

Standard Free-Hanging Plug Assembly

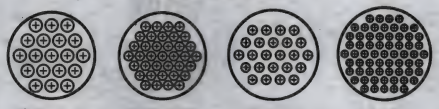
Reverse Free-Hanging Plug Assembly

Shell Size 11 — Shell Size 13 — Shell Size 17



11-4 13-7 13-9 17-9 17-14 17-16

Shell Size 23



23-19 23-37 23-24 23-63

Contact Arrangements

- All Terminate to Wire, Unless Specified
- Black Thermoplastic Housings, Unless Specified
- Use Pin Contacts for Standard Gender Receptacles and Reverse Gender Plugs
- Use Socket Contacts for Reverse Gender Receptacles and Standard Gender Plugs
- No Contacts Needed for Feed-Thru or PC Board Terminating Receptacles

Series 1 lightweight, plastic connectors permit the use of multiple combinations of signal and coaxial circuits in the same housing by accepting Multimate contacts, *order separately online or call.* Ideal for standard density applications. Maximum wire insulation diameter: 0.100″ (2.54) except for arrangement 23-24 which will accept 0.150″ (3.81) diameter. UL recognized, CSA certified. *Order cable clamps, tools and accessories separately online or call.*

SQUARE FLANGE RECEPTACLES WITH MOUNTING HOLES

Mfg. Part No.	Shell Size	Contacts	Gender	Seal	Stock No.	Price Each 1-24	Price Each 25-49
206061-2	11	4	Standard	Peripheral	66F6636	6.35	5.94
206061-1	11	4	Standard	None	44F8387	2.63	2.39
211401-1	13	7	Standard	None	66F3295	5.37	4.69
206705-3	13	9	Standard	Peripheral	48F1669	6.91	5.46
206705-1	13	9	Standard	None	44F8389	3.13	2.72
211767-1	17	9	Standard	None	92F8448	4.86	4.50
206036-4*	17	16	Standard	Peripheral	66F6168	8.53	6.98
206036-1	17	16	Standard	None	44F8391	3.12	2.73
206552-1†	17	16	Standard	None	50F637	67.22	62.24
211771-1*	23	19	Standard	None	66F3349	9.02	7.38
206838-3	23	24	Standard	Peripheral	66F6170	6.82	6.32
206838-1	23	24	Standard	None	46F322	3.78	3.56
206151-3	23	37	Standard	Peripheral	66F6637	5.92	5.26
206151-1	23	37	Standard	None	44F8393	3.76	3.41
211102-1+	11	4	Reverse	None	33B6882	5.79	5.15
206430-3	11	4	Reverse	Peripheral	66F6639	3.36	2.91
206430-1	11	4	Reverse	None	46F313	2.81	2.60
211398-1*	13	7	Reverse	None	98F5749	5.45	4.37
211769-1	17	9	Reverse	None	71C8214	6.26	5.25
206043-4	17	14	Reverse	Peripheral	66F6642	4.49	4.07
211103-1	17	14	Reverse	None	33B6883	8.21	7.75
206043-1	17	14	Reverse	None	46F318	3.12	2.93
211773-1	23	19	Reverse	None	99F3126	5.31	4.82
206306-1	23	37	Reverse	None	46F326	4.34	3.50

*Nylon housing; +Square flange with inserts; †Receptacle for feed-thru

SQUARE FLANGE RECEPTACLES — NO SEAL PC BOARD MOUNT AND TERMINATION

Mfg. Part No.	Shell Size	Contacts	Gender		Stock No.	Price Each 1-9	Price Each 10-49
208283-4	11	4	Reverse	Socket	52K3519	10.82	10.38
208223-9	13	9	Standard	Pin	52K3518	10.50	10.16
1-207303-3	17	16	Standard	Pin	52K3270	17.73	15.89
1-206455-2	23	63	Standard	Pin	52K3259	53.09	49.97

FREE-HANGING RECEPTACLES

Mfg. Part No.	Shell Size	Contacts	Gender	Seal	Stock No.	Price Each 1-24	Price Each 25-49
206153-1	11	4	Standard	None	46F314	2.88	2.72
206705-2	13	9	Standard	None	46F317	2.96	2.60
206705-4	13	9	Standard	Peripheral	66F6167	4.55	4.21
206036-3*	17	16	Standard	None	46F321	3.00	2.73
206838-2‡	23	24	Standard	None	46F323	5.45	4.95
206838-4‡	23	24	Standard	Peripheral	66F6643	8.67	8.00
206151-2	23	37	Standard	None	46F325	4.06	3.69
206430-2	11	4	Reverse	None	46F315	2.77	2.45

CONTINUED

AMP SERIES 1 CPC CONNECTORS (CONT.)

Mfg. Part No.	Shell Size	Contacts	Gender	Seal	Stock No.	Price Each 1-24	Price Each 25-49
206430-4	11	4	Reverse	Peripheral	66F6640	8.58	8.21
206043-3	17	14	Reverse	None	46F319	3.83	3.49
206043-5	17	14	Reverse	Peripheral	66F6171	5.51	4.75
206036-5	17	16	Standard	None	66F6169	6.22	5.02
206306-2	23	37	Reverse	None	46F327	6.47	5.42

*Nylon housing; ‡Round flange

FREE-HANGING PLUG ASSEMBLIES

Mfg. Part No.	Shell Size	Contacts	Gender	Stock No.	Price Each 1-24	Price Each 25-49
206060-1	11	4	Standard	44F8386	3.50	3.04
211399-1	13	7	Standard	92F4843	5.53	4.83
206708-1	13	9	Standard	44F8388	3.76	3.43
211766-1	17	9	Standard	92F8387	6.75	6.10
206037-1	17	16	Standard	44F8390	4.83	3.88
206554-1	17	16	Standard	96B6478	8.20	7.88
211770-2	23	19	Standard	66F3340	7.75	7.04
206837-1**	23	24	Standard	46F324	6.09	4.91
206150-1**	23	37	Standard	44F8392	4.28	3.90
206429-1	11	4	Reverse	46F316	3.79	3.27
211400-1	13	7	Reverse	50F519	6.04	4.86
211768-1	17	9	Reverse	92F4844	6.01	5.33
206044-1	17	14	Reverse	46F320	4.22	3.81
211772-1	23	19	Reverse	92F6110	7.93	7.05
206305-1	23	37	Reverse	46F328	4.17	3.76

**6/6 Nylon GF housing
(8173)

AMP SERIES 1 SEALED CIRCULAR 1-PIECE PLASTIC CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Square Flange Receptacle

Free-Hanging Receptacle

Straight Plug

Series 1 CPC connectors terminate to wire and include a pre-installed bonded peripheral seal. Receptacles feature black thermoplastic housing. Free-hanging plugs have % nylon glass-filled housing. UL recognized, CSA certified, VDE approved. *Order Powerband precision-formed, high-current contacts separately; go online or call.*

Mfg. Part No.	Description	Shell Size	Contacts	Contact Gender	Stock No.	Price Each 1-9	Price Each 10-24
796286-1	Square Flange Receptacle	23	37	Standard	16H6263	20.14	18.59
796190-1	Square Flange Receptacle	23	24	Standard	09C9379	18.45	17.87
796275-1	Square Flange Receptacle	17	16	Standard	16H6259	18.23	17.56
796272-1	Square Flange Receptacle	17	14	Reverse	91C4154	19.77	18.29
788158-2	Square Flange Receptacle	13	9	Standard	24C6178	9.45	9.13
796095-2	Square Flange Receptacle	11	4	Standard	23C9744	8.13	7.85
788154-2	Square Flange Receptacle	11	4	Reverse	94C5447	21.06	19.90
796287-1	Free Hanging Receptacle	23	37	Standard	19H3878	30.52	29.73
796276-1	Free Hanging Receptacle	17	16	Standard	19H3863	21.16	20.30
796273-1	Free Hanging Receptacle	17	14	Reverse	16H6257	22.45	20.47
788159-2	Free Hanging Receptacle	13	9	Standard	24C6179	8.64	8.25
796096-2	Free Hanging Receptacle	11	4	Standard	23C9747	9.52	9.18
788155-2	Free Hanging Receptacle	11	4	Reverse	25C0180	17.37	16.22
796288-1	Straight Plug	23	37	Standard	16H6264	36.11	32.91
796188-1	Straight Plug	23	24	Standard	09C9387	17.55	16.17
796274-1	Straight Plug	17	16	Standard	16H6258	18.33	17.36
796274-2	Straight Plug	17	16	Standard	85C0775	41.51	37.48
796271-1	Straight Plug	17	14	Reverse	16H6256	20.15	19.34
788157-2	Straight Plug	13	9	Standard	24C6176	8.65	8.14
796094-2	Straight Plug	11	4	Standard	23C9719	6.55	6.31
788153-2	Straight Plug	11	4	Reverse	25C0451	13.16	11.33

SEALS

Mfg. Part No.	Description	Stock No.	Price Each 1-24
208337-1	Seal Protector (Insert Pins)	48F1671	5.30
208338-1	Seal Protector (Insert Sockets)	48F1672	5.86
796075-1	Wire Entry Seal Plug	16H6243	0.83
81665-2	Square Flange Receptacle Seal	25C2606	0.95

(84967)

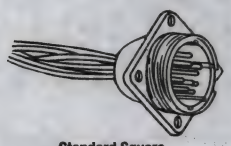
CIRCULAR CONNECTORS

AMP SERIES 2 HIGH-DENSITY CPC CIRCULAR CONNECTORS

RoHS Compliant Available

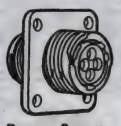
TE connectivity

Authorized Distributor

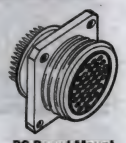


Standard Square Flange Receptacle

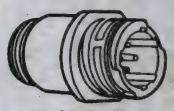
Standard Square Flange Receptacle



Reverse Square Flange Receptacle



PC Board Mount Square Flange Receptacle

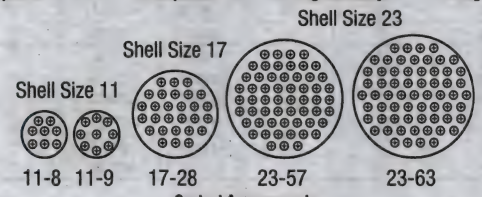


Standard Free-Hanging Receptacle

Reverse Free-Hanging Receptacle

Standard Free-Hanging Plug Assembly

Reverse Free-Hanging Plug Assembly



Contact Arrangements

- All terminate to wire, unless specified
- Receptacles have no seal
- Black thermoplastic housing, unless specified
- Use pin contacts for standard gender receptacles and reverse gender plugs
- Use socket contacts for reverse gender receptacles and standard gender plugs
- No contacts needed for feed-thru or pc board terminating receptacles
- Heat-stabilized and fire-resistant

Designed for normal commercial, unsealed applications such as automotive, aircraft, instrumentation, computer and peripheral equipment. Accepts size 20 DM (screw-machined) and size 20DF (precision-formed) pin and socket contacts with 0.040″ (1.02) pin diameters; *ordered separately on pages 856-857. Order application tools and accessories separately on pages 933-934 and 939.* UL recognized, CSA certified.

SQUARE FLANGE RECEPTACLES WITH MOUNTING HOLES

Mfg. Part No.	Shell Size	Contacts	Gender	Stock No.	Price Each 1-24	Price Each 25-49
● 205841-1	11	8	Standard	46F1119	4.93	4.48
● 206458-1*	11	8	Standard	50B525	62.78	59.09
● 206486-1	11	9	Standard	46F1125	4.85	4.42
● 205840-3	17	28	Standard	46F1128	5.36	4.87
● 206127-1*	17	28	Standard	50F635	79.31	73.34
● 205843-1	23	63	Standard	46F1137	8.22	7.47
● 206433-1	11	8	Reverse	46F1122	4.67	4.25
● 206038-1	17	28	Reverse	46F1131	4.86	4.50
● 206438-1	23	57	Reverse	46F1134	8.22	7.48

*Feed-thru

SQUARE FLANGE RECEPTACLES — PC BOARD MOUNT AND TERMINATION

Mfg. Part No.	Shell Size	Contacts	Gender		Stock No.	Price Each 1-9	Price Each 10-49
● 1-208657-1+	11	8	Reverse	Socket	16M2655	12.08	11.73
● 1-207216-6	17	28	Reverse	Socket	52K3268	17.15	16.28

+Glass-filled nylon housing

FREE-HANGING RECEPTACLES

Mfg. Part No.	Shell Size	Contacts	Gender	Stock No.	Price Each 1-24	Price Each 25-49
● 205841-2	11	8	Standard	46F1120	4.71	4.28
● 206486-2	11	9	Standard	46F1126	4.67	4.25
● 206152-1	17	28	Standard	46F1129	6.41	5.82
● 205843-2	23	63	Standard	46F1138	11.34	10.41
● 206433-2	11	8	Reverse	46F1123	4.25	4.02
● 206038-2	17	28	Reverse	46F1132	6.86	6.25
● 206438-2	23	57	Reverse	46F1135	18.81	16.88

FREE-HANGING PLUG ASSEMBLIES

● 205838-1	11	8	Standard	46F1121	5.76	4.95
● 206485-1	11	9	Standard	46F1127	5.61	4.95
● 205839-3	17	28	Standard	46F1130	6.52	5.75
● 206125-1	17	28	Standard	88F2314	11.99	11.10
● 206126-1†	17	28	Standard	88F2315	15.97	14.52
● 205842-1	23	63	Standard	46F1139	8.41	7.64
● 206434-1	11	8	Reverse	46F1124	5.55	5.04

➤ CONTINUED ➤

AMP SERIES 2 HIGH-DENSITY CPC CIRCULAR CONNECTORS (CONT.)

FREE-HANGING PLUG ASSEMBLIES

Mfg. Part No.	Shell Size	Contacts	Gender	Stock No.	Price Each 1-24	Price Each 25-49
● 206039-1	17	28	Reverse	46F1133	6.43	5.62
● 206437-1	23	57	Reverse	46F1136	8.20	7.73

†Reverse numbering

KEYING PLUGS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 206509-1	Keying Plug	87F6584	0.70

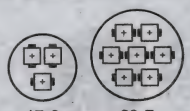
(7977)

AMP SERIES 3 AND 4 POWER-DENSITY CPC CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor



17-3 23-7

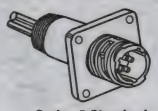
SERIES 3

23-13M 23-16M 23-22M

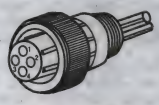
SERIES 4

Contact Arrangements

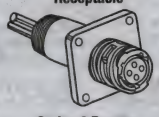
Series 3 Standard Free-Hanging Receptacle



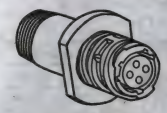
Series 3 Standard Square Flange Receptacle



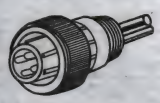
Series 3 Standard Free-Hanging Plug



Series 3 Reverse Square Flange Receptacle



Series 3 Reverse Free-Hanging Receptacle



Series 3 Reverse Free-Hanging Plug

Series 4 Standard Square Flange Receptacle

- All Terminate to Wire, Unless Specified
- Use Pin Contacts for Standard Gender Receptacles and Reverse Gender Plugs
- Use Socket Contacts for Reverse Gender Receptacles and Standard Gender Plugs
- No Contacts Needed for Feed-Thru or PC Board Terminating Receptacles
- Heat-Stabilized and Fire-Resistant

Circular plastic shell plugs and receptacles are designed for normal commercial, unsealed applications such as automotive, aircraft, instrumentation, computer and peripheral equipment. **Series 3** uses Type XII power contacts, which carry up to 35A and accepts 16 to 8 AWG wire. **Series 4** accepts size 16 and XII power contacts to combine signal with power circuit capabilities. UL recognized, CSA certified. *Order contacts, tools, and accessories separately online or call.*

SERIES 3 SQUARE FLANGE RECEPTACLES WITH MOUNTING HOLES

No seal, black thermoplastic housing, except **mfg. part no. 206036-2** which is nylon.

Mfg. Part No.	Shell Size	Contacts	Gender	Stock No.	Price Each 1-24	Price Each 25-49
● 206036-2	17	3	Standard	46F1142	4.29	3.47
● 206137-1	23	7	Standard	46F1148	5.19	4.83
● 206425-1	17	3	Reverse	46F1145	3.97	3.57
● 206227-1	23	7	Reverse	46F1151	4.42	3.98

SERIES 3 FREE-HANGING RECEPTACLES

No seal, black thermoplastic housing.

● 206207-1	17	3	Standard	46F1143	3.39	3.10
● 206137-2	23	7	Standard	46F1149	6.78	6.18
● 206425-2	17	3	Reverse	46F1146	7.64	6.50
● 206227-2	23	7	Reverse	46F1152	4.76	4.41

SERIES 3 FREE-HANGING PLUG ASSEMBLIES

Black thermoplastic housing.

● 206037-2	17	3	Standard	46F1144	4.52	4.25
● 206136-1	23	7	Standard	46F1150	5.06	4.60
● 206426-1	17	3	Reverse	46F1147	6.49	5.78
● 206226-1	23	7	Reverse	46F1153	4.95	4.64

SERIES 4 SQUARE FLANGE RECEPTACLES WITH MOUNTING HOLES

Standard gender, no seal, black thermoplastic housing.

Mfg. Part No.	Shell Size	Contacts	Stock No.	Price Each 1-24	Price Each 25-49
● 211825-1	23	5 Power, 8 Multimate	66F6172	8.92	7.19
● 207486-1	23	4 Power, 12 Multimate	46F1162	6.12	4.99
● 206613-1	23	2 Power, 20 Multimate	46F1165	5.98	4.82

➤ CONTINUED ➤

AMP SERIES 3 AND 4 POWER-DENSITY CPC CONNECTORS (CONT.)

Mfg. Part No.	Shell Size	Contacts	Stock No.	Price Each 1-24	Price Each 25-49
Standard gender, no seal, black thermoplastic housing.					
211825-2	23	5 Power, 8 Multimate	66F6173	6.70	6.49
207486-2	23	4 Power, 12 Multimate	46F1163	7.26	6.62
206613-3	23	2 Power, 20 Multimate	46F1166	7.40	6.06
SERIES 4 FREE-HANGING PLUG ASSEMBLIES					
Standard gender, black thermoplastic housing, except **mfg. part No. 207485-1** which is 6/6 nylon GF.					
211824-1	23	5 Power, 8 Multimate	66F6174	13.24	11.47
207485-1	23	4 Power, 12 Multimate	46F1164	5.69	5.27
206612-1	23	2 Power, 20 Multimate	46F1167	6.39	5.75

(7978)

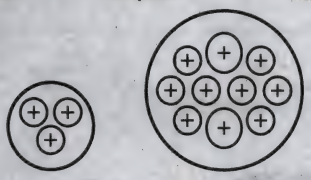
AMP SERIES 5 AND 6 SEALED CPC CIRCULAR CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Square Flange Receptacle — Free-Hanging Receptacle — Free-Hanging Plug



17-3 — 17-10

Contact Arrangements

Series 5 and **6** sealed, CPC connectors terminate to wire. Receptacles feature black thermoplastic housing. Free-hanging plugs have 6/6 nylon glass-filled housing. UL recognized, CSA certified, VDE approved. *Order Powerband precision-formed, high-current contacts separately; go online or call.*

Mfg. Part No.	Description	Shell Size	Contacts	Contact Gender	Stock No.	Price Each 1-24	Price Each 25-49
SERIES 5							
213889-2	Square Flange Receptacle	17	3	Standard	25C2548	7.92	7.20
213890-2	Free Hanging Receptacle	17	3	Standard	12H6347	9.42	9.16
213905-1	Free Hanging Plug	17	3	Standard	25C2549	7.02	6.38
788188-2	Straight Plug	17	3	Reverse	19H3630	44.29	41.69
788189-1*		17	3	Reverse	19H3631	20.60	19.81
788188-1	Straight Plug	17	3	Reverse	92C9221	20.16	18.98
SERIES 6							
213893-2	Square Flange Receptacle	17	10	Standard	07C0889	6.56	6.22
213894-2	Free Hanging Receptacle	17	10	Standard	12H6348	10.13	9.85
213906-1	Free Hanging Plug	17	10	Standard	14C7841	12.74	12.07
796332-1	Straight Plug	23	16	Reverse	19H3882	21.09	18.57
796207-1	Free Hanging Receptacle	23	16	Standard	39C0091	21.08	20.07
796203-1	Straight Plug	23	16	Standard	39C0092	21.18	19.26

* Uses Flange Seal **mfg. part no. 81665-2**, order separately *on page 931*

(76436)

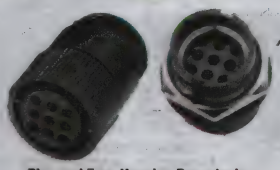
AMP MINIATURE CIRCULAR PLASTIC CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Current rating: 5A maximum
- Operating voltage: 600V maximum
- Dielectric withstanding voltage: 200VAC minimum



Plug and Free-Hanging Receptacle

Miniature Circular Plastic Connectors (CPC) are available in wire-to-wire and wire-to-panel configurations. Choose from plugs and receptacle available in free-hanging or panel mount versions. Available in other contact positions; *go online or call.* Ideal for industrial, instrumental and transportation applications where size, contact density and environmental exposure are primary concerns. Black, thermoplastic 1-pc. housings offer good resistance to a wide range of chemical agents while the IP67 sealing helps prevent ingress of dirt or fluids. Prepositioned ¼ turn coupling ring with positive lock and alignment features. Utilizes Mini-Universal MATE-N-LOK® pre-tin plated, stamped-and-formed crimp contacts designed for up to 50 mating cycles; *order separately below.* Wire gauge: 22-18 AWG. *Order backshell/strain reliefs and application tooling separately below.*

➤CONTINUED➤

AMP MINIATURE CIRCULAR PLASTIC CONNECTORS (CONT.)

PANEL MOUNT RECEPTACLES

Mfg. Part No.	Shell Size	Positions	Insul. Dia. Range (mm)	Stock No.	Price Each 1-24
1445537-3	8	3	1.5-2.39	11H4586	9.27
1445421-3	8	4	1.5-2.39	91C5919	7.52
1445823-3	11	6	1.5-2.39	11H4681	10.25
1445816-3	11	9	1.5-2.39	91C5929	10.68
FREE-HANGING RECEPTACLES					
1445522-1	8	2	0.89-1.5*	11H4569	7.11
1445510-1	8	3	0.89-1.5*	11H4566	8.12
1445829-3	11	5	1.5-2.39	11H4698	7.54
PLUGS					
1445390-3	8	4	1.5-2.39	91C5918	6.11
1445390-1	8	4	0.89-1.5*	11H4557	6.86
1445819-3	11	6	1.5-2.39	11H4669	7.27
1445817-1	11	8	0.89-1.5*	11H4661	6.50
1445807-3	11	9	1.5-2.39	91C5928	4.66

***Mfg. part no. 1604816-1** insertion tip (seal protector) recommended for use when inserting socket contacts within this insulation range; *order separately, go online or call.*

BACKSHELL/STRAIN RELIEFS

Mfg. Part No.	Shell Size	Style	Length (mm)	Stock No.	Price Each 1-24
1445730-1	8	Vertical	23.5	91C5923	3.32
1445856-1	11	Vertical	28	91C5931	3.15
1546746-4	11	Right Angle with Cover	28	21R4253	8.75

CRIMP CONTACTS — PRE-TIN FINISH

Mfg. Part No.	Description	Stock No.	Price Each 1-9
770987-1	Pin	25C3423	0.22
770988-1	Socket	25C3425	0.17

APPLICATION TOOLS

Mfg. Part No.	Description	Stock No.	Price Each 1-4
455830-1	Contact Insertion Tool	46F2045	32.27
189727-1	Contact Extraction Tool	66F6356	35.78

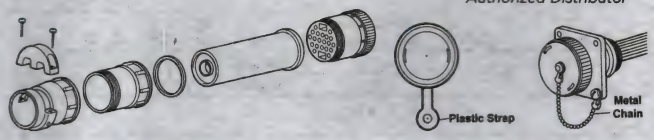
(74252)

AMP SEALING ACCESSORIES FOR CPC CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor



Cable Seal Kit — Sealing Caps

JACKETED CABLE SEAL KIT

Kit includes: peripheral seal, collar, cable seal, backshell extender, clamp saddle.

Mfg. Part No.	Shell Size	Seals Dia. (Inches)	Stock No.	Price Each 1-9
207052-1	23	0.300-0.450	87F4112	18.93
207052-3	23	0.600-0.875	87F4114	22.51
CABLE ENTRY HEAT-SHRINK SEALING BOOTS				
54010-1	11	0.25-0.600	98F5882	12.95
54123-1	13	0.30-0.725	95F1798	13.96
54011-1	17	0.40-0.875	50F516	11.72
54012-1	23	0.55-1.100	96F9689	14.96
54011-3	17	0.400-0.875	15H9801	15.49

CABLE BOOTS AND GRIPS

Mfg. Part No.	Description	Shell	Cable Range (Inches)	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99
207489-1	Cable Boot	11	0.15-0.25	87F4103	3.40	3.18	2.94
207241-1	Cable Boot	17	0.20-0.25	87F4105	5.03	4.53	4.27
207490-1*	Cable Grip	11	0.15-0.25	87F4104	2.95	2.78	2.54
207387-1*	Cable Grip	17	0.20-0.25	87F4106	5.47	5.13	4.63
207387-2*	Cable Grip	17	0.25-0.35	87F4107	5.12	4.87	4.46

*For rigid jacket such as PVC

Mfg. Part No.	Description	Shell Size	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99
213811-1	Coupling Rings for Plugs	11	52F083	1.21	1.17	1.14
213813-1	Coupling Rings for Plugs	13	52F086	1.97	1.81	1.66
213810-1	Coupling Rings for Plugs	17	52F084	1.25	1.19	1.09
213812-1	Coupling Rings for Plugs	23	52F085	2.57	2.05	1.90

➤CONTINUED➤

AMP SEALING ACCESSORIES FOR CPC CONNECTORS (CONT.)

Mfg. Part No.	Description	Shell Size	Stock No.	Price Each 1-24	25-49	50-99
● 207055-1	Backshell Extender	23	87F4100	4.80	4.37	4.01
● 206304-1	Rubber Boots	11	87F4101	10.03	9.10	8.35
● 207299-1	Panel Mounting Flange for Plugs	11	87F4115	6.86	6.23	5.71
● 207299-2	Panel Mounting Flange for Plugs	13	87F4116	5.09	4.74	4.57
● 207299-3	Panel Mounting Flange for Plugs	17	93F2086	6.05	5.74	5.65
● 207299-4	Panel Mounting Flange for Plugs	23	87F4117	3.43	3.23	3.13

SEALING CAPS FOR RECEPTACLES

Mfg. Part No.	Shell Size	CPC Series	Cap Attachment	Stock No.	Price Each 1-24	25-49	50-99
● 208800-1	11	1 and 2	Chain	87F4119	7.25	6.16	5.64
● 211870-2	13	1	Strap	52T7298	5.16	4.78	4.45
● 213485-1	13	1	Chain	66F6175	8.31	7.01	6.43
● 208652-1	17	1, 2 and 3	Chain	87F4108	7.02	6.41	5.91
● 208680-1	23	1, 3 and 4	Chain	87F4110	10.62	8.65	7.70

PERIPHERAL SEALS FOR RECEPTACLES

Mfg. Part No.	Shell Size	Stock No.	Price Each 1-24	25-49
● 206403-1	11	44F8398	0.80	0.73
● 206403-4	13	44F8399	1.23	1.11
● 206403-2	17	44F8400	0.91	0.88
● 206403-3	23	44F8401	1.73	1.40

WIRE ENTRY SEAL KITS

Kits include: silicon wire entry seal and black nylon pressure plate.

Mfg. Part No.	Description	Shell Size	Positions	Insulation Dia. (Inches)	Stock No.	Price 1-9
● 213899-1	Seal Kit for Pins or Sockets+	17	3	0.265-0.265	25C2550	11.78
● 213900-1	Seal Kit for Pins or Sockets+	17	10	0.150-0.265	34C4878	7.51
● 213919-2	Seal Kit for Pins	17	14	0.075-0.125	93B5018	8.38
● 213919-1	Seal Kit for Sockets	17	14	0.075-0.125	12H6351	7.72
● 213920-1	Seal Kit for Sockets	17	15	0.075-0.125	95C1632	18.26

+Requires cable clamp kit **mfg. part no. 213902-1**; *order separately below*

FLANGE SEALS

Mfg. Part No.	Shell	Stock No.	Price Each 1-49	50-99	100-249
● 81665-3	11	25C3640	0.75	0.68	0.62
● 81665-4	13	29C6301	1.99	1.83	1.65
● 81665-5	23	29C6302	0.91	0.82	0.74

CABLE CLAMP KITS

Mfg. Part No.	Shell	Cable Bundle Dia. (Inches)	Stock No.	Price Each 1-49	50-99	100-249
● 213902-3	17	0.703	16M2881	6.17	5.71	4.56
● 213904-3	17	0.453	52K3521	5.98	5.42	5.29

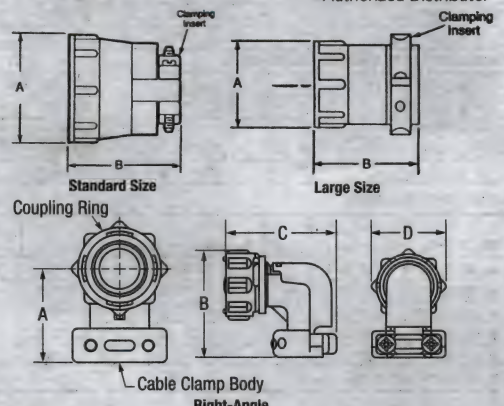
(7996)

AMP CPC CONNECTOR CABLE CLAMPS

RoHS Compliant Available

TE connectivity

Authorized Distributor



- Thermoplastic Housing, Rated UL94V-1
- Heat-Stabilized and Fire-Resistant
- Thread Size: 5/8-24 UNEF-2B
- Right-Angle Thread Size: 15/16-20 UNEF-2B

Prevent excessive strain on cable or wire.

➤CONTINUED➤

AMP CPC CONNECTOR CABLE CLAMPS (CONT.)

STANDARD SIZE CABLE CLAMPS

Mfg. Part No.	Shell Size	Dimensions A	B	Cable O.D.	Screw Length	Stock No.	Price Each 1-24	25-49
● 1-206062-6	11	0.825″	1.250″	0.329″	0.375″	86K8556	3.15	3.04
● 1-206062-4	11	0.825″	1.250″	0.329″	0.500″	87K2215	4.16	3.61
● 206966-7	13	0.950″	1.400″	0.453″	0.500″	73K4032	3.75	3.41
● 206070-8	17	1.125″	1.400″	0.453″	0.500″	84K8505	3.83	3.50
● 1-206070-0*	17	1.125″	1.400″	0.453″	0.500″	69K8297	4.73	4.54
● 206138-8	23	1.600″	1.555″	0.703″	0.625″	76K2522	5.15	3.90
● 1-206138-0*	23	1.600″	1.555″	0.703	0.625″	02M6910	6.93	6.64

LARGE SIZE CABLE CLAMPS

Mfg. Part No.	Shell Size	Dimensions A	B	Cable O.D.	Screw Length	Stock No.	Price Each 1-24	25-49
● 206358-5	11	0.850″	1.450″	0.453″	0.500″	71K0405	4.07	3.66
● 182928-1	11	0.850″	1.450″	0.453″	...	89C2073	6.06	5.79
● 207008-5	13	1.131″	1.655″	0.703″	0.625″	87K2219	5.12	4.30
● 206322-9	17	1.131″	1.655″	0.703″	0.625″	78K6814	3.87	3.50
● 182661-1	17	1.130″	1.650″	0.703″	...	50B503	8.25	7.96
● 206512-5	23	1.600″	1.655″	1.125″	0.625″	82K8949	4.77	4.50
● 207774-3	23	1.600″	1.663″	1.125″	1.000″	52K3515	7.37	6.44

RIGHT-ANGLE CABLE CLAMP

Mfg. Part No.	Shell Size	Dimensions A	B	C	D	Cable O.D. Max.	Stock No.	Price Each 1-24
● 796381-2	17	1.200″	1.80″	1.75″	1.20″	0.453″	52K3936	7.67

*Bulk Packaging

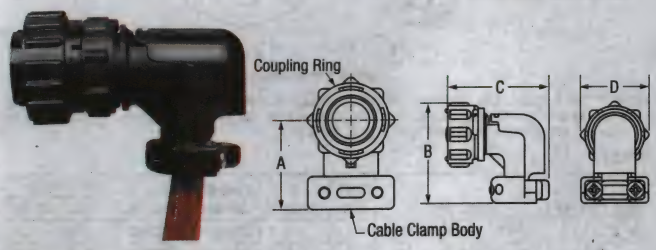
(8175)

AMP RIGHT-ANGLE CABLE CLAMPS WITH COVER FOR CIRCULAR PLASTIC CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor



- Attachable Cover Provides Wire Insulation Protection
- Allows Wires to Be Moved in 360° Radius

Ideal for industrial machinery and instrumentation applications or any AMP® circular plastic connector application where a straight cable clamp is too long. Strain relief body uses a coupling ring to attach to the connector body allowing the harness assembler to position the direction of the wire assembly in a 360° radius. Features an attachable cover that provides wire insulation protection at the rear of the connector body. Constructed of black thermoplastic that's heat-stabilized, fire-resistant, self-extinguishing and rated UL94V-0.

Mfg. Part No.	Shell Size	Dimensions A	B	C	D	Cable O.D. Max.	Stock No.	Price Each 1-24
● 1546347-2	11	0.900″	1.40″	1.36″	0.885″	0.329″	85K8461	8.34
● 1546348-2	13	1.100″	1.66″	1.65″	1.01″	0.453″	16M2721	7.56
● 1546349-2	17	1.200″	1.80″	1.77″	1.20″	0.453″	16M2722	8.49
● 1546350-2	23	1.515″	2.40″	1.97″	1.685″	0.703″	52K3418	7.73

(74253)

AMP MIL-C-5015 CPC (CIRCULAR PLASTIC) CONNECTORS

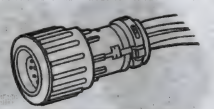
RoHS Compliant Available

TE connectivity

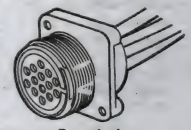
Authorized Distributor

- 14 Positions
- All-Plastic Shell, Size 20
- Reverse or Standard
- Black Polyamide Housing
- UL Recognized, CSA Certified

Order contacts(*) separately on page 936. Order cable clamp for plug separately on this page.



Plug Kit (Shown with Cable Clamp; *Order Separately*)



Receptacle

PLUG KITS WITHOUT CABLE CLAMP — FREE-HANGING

Mfg. Part No.	Gender	Use With*	Stock No.	Price Each 1-24
● 213571-2	Reverse	Pin Contacts	52F5458	14.49
● 213652-1	Standard	Socket Contacts	81C7414	23.94

➤CONTINUED➤

AMP MIL-C-5015 CPC (CIRCULAR PLASTIC) CONNECTORS (CONT.)

SQUARE FLANGE RECEPTACLES — WITH MOUNTING HOLES

Mfg. Part No.	Gender	Use With*	Stock No.	Price Each 1-24
213570-1	Reverse	Socket Contacts	52F5875	17.16
213651-1	Standard	Pin Contacts	81C7396	15.70

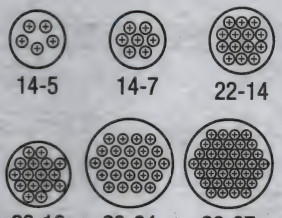
(75624)

AMP SERIES 1 STANDARD-DENSITY METAL SHELL CPC CONNECTORS

RoHS Compliant Available

TE connectivity

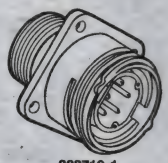
Authorized Distributor



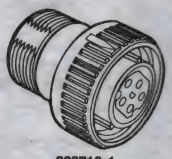
14-5 14-7 22-14 22-16 28-24 28-37

Contact Arrangements

- Shell Thread Size: ⅞ - 20 UNEF-2A
- Wire Insulation Diameter: 0.135" (3.43mm)



208719-1



208718-1

No seal, black thermoplastic housing, flammability rated UL94V-0. Both receptacles and plug assemblies terminate to wire. Use pin contacts for standard gender receptacles and reverse gender plugs. Use socket contacts for reverse gender receptacles and standard gender plugs. UL recognized, CSA certified. *Order contacts and cable clamps separately on pages 936-937 and on page 934.*

SQUARE-FLANGE RECEPTACLES

Mfg. Part No.	Shell Size	Contacts	Gender	Stock No.	Price Each 1-9	10-24	25-49
208719-1	14	5	Standard	87F6186	30.47	26.11	23.94
208715-1	14	7	Standard	87F6189	30.12	27.45	25.16
208489-1	22	16	Standard	87F6181	38.22	35.04	32.34
208459-1	28	24	Standard	87F6169	47.23	46.52	45.82
208471-1	28	37	Standard	87F6171	45.31	43.47	41.63
208721-1	14	5	Reverse	87F6585	34.16	30.34	28.24
208717-1	14	7	Reverse	87F6177	33.21	30.19	27.67
208487-1	22	14	Reverse	87F6179	35.45	31.52	29.61
208473-1	28	37	Reverse	87F6173	42.14	40.56	37.18
FREE-HANGING PLUG ASSEMBLIES							
208718-1	14	5	Standard	87F6185	66.53	63.11	62.59
208714-1	14	7	Standard	87F6188	44.42	44.02	43.38
208488-1	22	16	Standard	87F6180	41.14	39.82	36.84
208457-1	28	24	Standard	87F6182	61.52	59.63	57.85
208470-1	28	37	Standard	87F6170	54.97	51.33	50.07
208720-1	14	5	Reverse	87F6187	46.77	45.28	42.53
208716-1	14	7	Reverse	87F6176	42.30	40.51	38.13
208486-3*	22	14	Reverse	54H2846	58.33	54.05	46.56
208486-1	22	14	Reverse	87F6178	45.39	42.55	40.04
208472-1	28	37	Reverse	87F6172	50.92	48.24	45.83

*With Tetraseals

(6074)

AMP SERIES 2 HIGH-DENSITY METAL SHELL CPC CIRCULAR CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

No seal, black thermoplastic housing, flammability rated UL94V-0. All terminate to wire. Use pin contacts for standard gender receptacles and reverse gender plugs. Use socket contacts for reverse gender receptacles and standard gender plugs. *Order contacts and cable clamps separately on page 932 on page 934.*

SERIES 2

22-28 28-57 28-63

Contact Arrangements

SQUARE FLANGE RECEPTACLES

Mfg. Part No.	Shell Size	Contacts	Gender	Stock No.	Price Each 1-9	10-24
208491-1	22	28	Standard	87F6175	31.83	29.37
208477-1	28	63	Standard	87F6167	40.18	36.28
208493-1	22	28	Reverse	87F6163	27.42	25.20
208475-1	28	57	Reverse	87F6165	45.84	...
FREE-HANGING PLUG ASSEMBLIES						
208490-1	22	28	Standard	87F6174	83.49	79.58
208476-1	28	63	Standard	87F6166	169.98	164.31

CONTINUED

AMP SERIES 2 HIGH-DENSITY METAL SHELL CPC CIRCULAR CONNECTORS (CONT.)

FREE-HANGING PLUG ASSEMBLIES

Mfg. Part No.	Shell Size	Contacts	Gender	Stock No.	Price Each 1-9	10-24
208492-1	22	28	Reverse	87F6162	121.72	116.18
208474-1	28	57	Reverse	87F6164	276.19	236.35

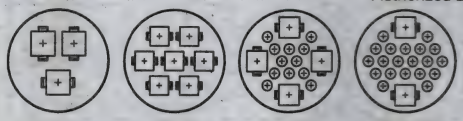
(76437)

AMP SERIES 3 AND SERIES 4 (POWER-DENSITY) METAL SHELL CPC CIRCULAR CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor



22-3 28-7 28-16M 28-22M

Contact Arrangements

No seal, black thermoplastic housing, flammability rated UL94V-0. Both **Series 3** and **Series 4** connectors terminate to wire. Use pin contacts for standard gender receptacles and reverse gender plugs. Use socket contacts for reverse gender receptacles and standard gender plugs. *Order contacts and cable clamps separately on pages 934 and 936-937.*

SERIES 3 CONNECTORS

Mfg. Part No.	Shell Size	Contacts	Description	Gender	Stock No.	Price Each 1-9
208483-1	28	7	Sq.-Flange Recept.	Standard	87F6155	44.50
208485-1	28	7	Sq.-Flange Recept.	Reverse	87F6157	41.55
208482-1	28	7	Free-Hanging Plug	Standard	87F6168	86.45
208484-1	28	7	Free-Hanging Plug	Reverse	87F6156	56.83
208496-1	22	3	Free-Hanging Plug	Reverse	66F6177	57.78
SERIES 4 CONNECTORS						
208479-1	28	4 Power/12 Multimate	Sq.-Flange Recept.	Standard	87F6159	47.47
208478-1	28	4 Power/12 Multimate	Free-Hanging Plug	Standard	87F6158	68.24
208480-1	28	22	Free-Hanging Plug	Standard	98F9188	53.61

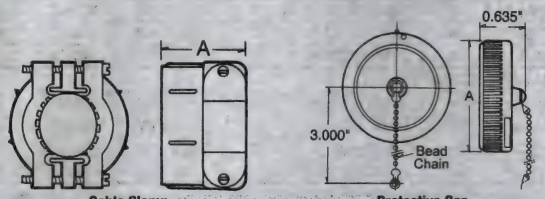
(76438)

AMP METAL SHELL CPC CONNECTOR ACCESSORIES

RoHS Compliant Available

TE connectivity

Authorized Distributor



Cable Clamp Protective Cap

For Series 1, 2, 3 and 4 metal shell CPC connectors. **Mfg. part no. 208945-X** cable clamps prevent excessive strain on cable/wire from being passed along to contacts inside connector housing. Zinc-plated aluminum alloy. Unassembled components include: body, 2 screws, 2 lock washers, 2 straps. Clamps thread directly onto metal shell plugs or receptacles. **Mfg. part nos. 211903-1** and **211904-1** are zinc alloy protective caps with nickel-plated metal bead chains for receptacles only.

CABLE CLAMPS

Mfg. Part No.	Shell Size	Cable O.D. (In.)	Dim. A (In.)	Thread Size	Stock No.	Price Each 1-9	10-24	25-49
208945-5	14	0.312-0.562	0.938	⅞-20	87F6160	15.43	12.64	11.48
208945-7	22	0.500-0.750	0.938	1 3/16-18	87F6161	20.52	19.08	18.80
208945-8	28	0.625-0.938	1.031	1 7/16-18	87F6190	23.87	22.98	22.08

PROTECTIVE CAPS

Mfg. Part No.	Shell Size	Dim. A (In.)	Stock No.	Price Each 1-9	10-24	25-49
211903-1	22	1.75	96F9690	41.63	38.93	38.12
211904-1	28	2.17	50F521	50.17	48.65	47.22

(8075)

CIRCULAR CONNECTORS

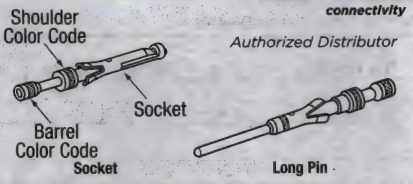
AMP TYPE II MULTIMATE PIN AND SOCKET CONTACTS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Brass Contact Body
- Gold Contact Plating
- Stainless Steel Retention Spring
- 0.062" Pin Diameter
- Long Length
- Color Coded
- Test Current: 13A



Signal contact type. Size: 16. Use with **G series**, CPC, and **M series** connectors; *go online or call.*

PIN CONTACTS

Mfg. Part No.	AWG	Insulation Diameter	Color-Code Barrel/Shoulder	Stock No.	Price Each 1-49
● 201570-1	14	No Insulation	Violet/Blue	12H4716	3.04
● 200336-1	18-16	No Insulation	Blue/Blue	50F668	3.40
● 202507-1	18-16	0.080-0.105"	None	95F2708	2.19
● 201330-1	24-20	0.055-0.088"	Yellow/Red	50F554	2.43
● 201578-1	24-20	0.040-0.062"	Yellow/Red	50F561	2.05
● 201611-1	28-24	0.035-0.055"	Red/Red	50F611	4.36
SOCKET CONTACTS					
● 201568-1	14	No Insulation	Violet/Blue	50F560	4.32
● 200333-1	18-16	No Insulation	Blue/Blue	50F667	4.53
● 202508-1	18-16	0.080-0.106"	None	50F615	3.66
● 201580-1	24-20	0.040-0.062"	Yellow/Red	50F610	1.84
● 201613-1	28-24	0.035-0.055"	Red/Red	03C3743	4.81

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price 1-4
601967-1	Hand Crimp Tool for 28-14 AWG	66F3447	739.70

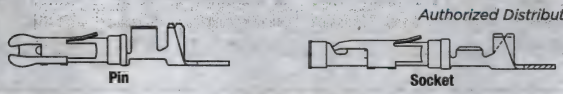
(75626)

AMP TYPE III+ MULTIMATE SIGNAL CRIMP CONTACTS

RoHS Compliant Available

TE connectivity

Authorized Distributor



- Brass Contact Material
- 0.062" Pin Diameter
- Stainless Steel Spring
- Test Current: 13A

TYPE III+ PIN CONTACTS

Mfg. Part No.	Contact Plating	AWG	Contact Size	Insulation Diameter (in.)	Stock No.	Price Each 1-9
213603-1†	Tin	18AWG to 14AWG	16	0.110-0.150	85C1635	0.55
● 164164-2*	Gold	18AWG to 16AWG	16	0.079-0.098	90B5680	1.25
213605-1†	Tin	24AWG to 20AWG	16	0.060-0.120	12H6307	0.42
TYPE III+ SOCKET CONTACTS						
● 66601-2*	Gold	18AWG to 14AWG	16	0.110-0.150	50F599	0.67
● 66601-9*	Tin	18AWG to 14AWG	16	0.110-0.150	52K3922	0.47
● 66565-7*	Tin	24AWG to 20AWG	16	0.060-0.120	52K3914	0.50
● 66565-4*	Gold	24AWG to 20AWG	16	0.060-0.120	92F4852	0.60

†Use with MIL-C-5015 connectors; *Use with CPC and M connectors; *all ordered separately, go online or call*

(75625)

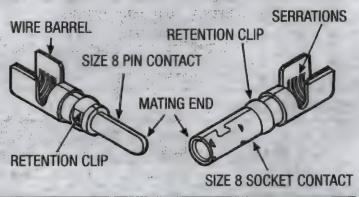
AMP MULTIMATE 0.125 POWERBAND CONTACTS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- 0.125" (3.18mm) Pin Diameter
- Test Current - 50A



Crimp wire termination type size 8 pin and socket contacts. Use with CPC connectors; *go online or call.*

POWERBAND PIN CONTACTS

Mfg. Part No.	Plating in Mating Area	AWG	Stock No.	Price Each 1-24	Price Each 25-49
● 213841-3	Silver	8-10	39C0095	2.61	2.50
● 213841-4	Gold	8-10	20C8957	3.53	3.39
● 213845-3	Silver	12-14	39C0093	3.28	2.99
● 213845-4	Gold	12-14	14C7843	5.00	4.10
POWERBAND SOCKET CONTACTS					
● 213843-3	Silver	8-10	39C0096	6.16	5.93
● 213843-4	Gold	8-10	22C0946	5.20	4.73

CONTINUED

AMP MULTIMATE 0.125 POWERBAND CONTACTS (CONT.)

POWERBAND SOCKET CONTACTS

Mfg. Part No.	Plating in Mating Area	AWG	Stock No.	Price Each 1-24	Price Each 25-49
● 213847-3	Silver	12-14	39C0094	6.18	5.62
● 213847-4	Gold	12-14	24C9547	4.82	4.64

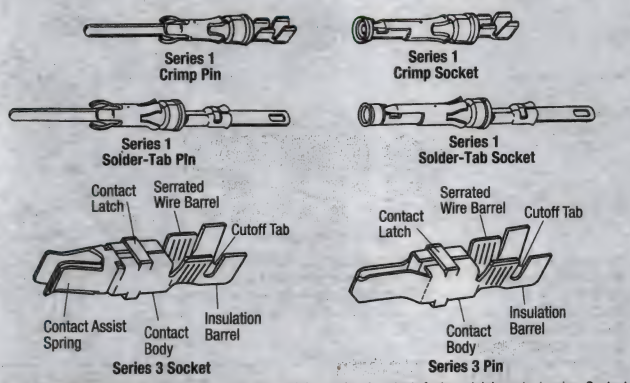
(75627)

AMP SERIES 1 AND 3 MULTIMATE CONTACTS

RoHS Compliant Available

TE connectivity

Authorized Distributor



Series 1 Type III+ precision-formed, crimp and solder-tab brass signal contacts feature stainless steel spring. Contact size: 16. Test current: 13A. Use with CPC circular connectors, **G series** and **M series** connectors. **Series 3 Type XII** copper power contacts for use with CPC circular connectors, **G series** and **M series** connectors. *Order keying plugs separately below.* **Contacts sold individually or in packages of 100.**

SERIES 1 TYPE III+ PINS — SOLD IN PACKAGES OF 100

Mfg. Part No.	AWG	Contact Mating Area Finish	Insulation Diameter (in.)	Stock No.	Price per Pkg. Each
● 1-66361-1*	18AWG to 14AWG	Gold	0.080-0.100	96F7921	72.60
● 1-66103-7	24AWG to 20AWG	Gold	0.040-0.080	96F7935	56.25
● 1-66107-0	26AWG to 24AWG	Gold	0.035-0.055	96F7919	71.90

SERIES 1 TYPE III+ PINS — SOLD INDIVIDUALLY

Mfg. Part No.	AWG	Contact Mating Area Finish	Insulation Diameter (in.)	Stock No.	Price Each 1-49
● 1-66361-2	18AWG to 14AWG	Tin	0.080-0.100	02J8006	0.42
● 1-66361-3	18AWG to 14AWG	Tin	0.080-0.100	52K3334	0.49
● 66602-8	18AWG to 14AWG	Tin	0.110-0.150	52K3923	0.46
● 1-66103-8	24AWG to 20AWG	Tin	0.040-0.080	52K3323	0.38
● 66566-7	24AWG to 20AWG	Tin	0.060-0.120	52K3915	0.37
● 1-66103-9+	24AWG to 20AWG	Tin	0.040-0.080	69K7693	31.00
● 1-66107-1	26AWG to 24AWG	Tin	0.035-0.055	52K3326	0.37
● 202236-5	Solder-Tab	Tin	...	52K3487	0.82
● 202236-6	Solder-Tab	Tin	...	52K3488	1.14
● 202236-7	Solder-Tab	Gold	...	52K3489	1.75
● 66602-2	18AWG to 14AWG	Gold	0.110-0.150	50F601	0.67
● 66361-3	18AWG to 14AWG	Gold	0.080-0.100	92F8438	0.64
● 66361-4	18AWG to 14AWG	Gold	0.080-0.100	54H3462	0.58
● 66099-4	18AWG to 16AWG	Gold	0.080-0.100	54H3458	0.63
● 66099-3	18AWG to 16AWG	Gold	0.080-0.100	50F572	0.66
● 66099-1	18AWG to 16AWG	Gold	0.080-0.100	50F676	0.84
● 66103-1	24AWG to 20AWG	Gold	0.040-0.080	50F575	0.86
● 66103-3	24AWG to 20AWG	Gold	0.040-0.080	25C8076	0.54
● 66103-4	24AWG to 20AWG	Gold	0.040-0.080	34B1378	0.64
● 164163-2	24AWG to 20AWG	Gold	0.045-0.071	93B7078	1.45
● 66566-4	24AWG to 20AWG	Gold	0.060-0.120	92F8436	0.58
● 66400-3	24AWG to 20AWG	Gold	0.080-0.100	95F2696	0.59
● 66593-4	24AWG to 20AWG	Gold	0.040-0.080	52K3918	0.47
● 66107-4	26AWG to 24AWG	Gold	0.035-0.055	17C6384	0.57
● 66406-4	30AWG to 26AWG	Gold	0.014-0.030	34B1387	1.07
● 66429-4	30AWG to 26AWG	Gold	0.040-0.060	52F5226	1.74

+Sold in packages of 100

SERIES 1 TYPE III+ HIGH CURRENT PINS — SOLD INDIVIDUALLY

● 193844-1	14AWG	Silver	...	50B506	6.11

SERIES 1 TYPE VI PINS — SOLD INDIVIDUALLY

● 66589-1	18AWG to 16AWG	Tin	0.080-0.100	50F592	0.29

CONTINUED

AMP SERIES 1 AND 3 MULTIMATE CONTACTS (CONT.)

SERIES 1 TYPE III+ SOCKETS — SOLD IN PACKAGES OF 100

Mfg. Part No.	AWG	Contact Mating Area Finish	Insulation Diameter (in.)	Stock No.	Price per Pkg. Each
1-66360-3	18AWG to 14AWG	Tin	0.080-0.100	69K7696	34.00
66101-4†	18AWG to 16AWG	Gold	0.080-0.100	50B625	0.73
2-66101-0	18AWG to 16AWG	Tin	0.080-0.100	69K7698	40.60
2-66105-0	24AWG to 20AWG	Tin	0.040-0.080	69K7699	34.00
1-66360-1	18AWG to 14AWG	Gold	0.080-0.100	96F7140	107.00
1-66105-8	24AWG to 20AWG	Gold	0.040-0.080	96F7936	89.40
1-66109-6	26AWG to 24AWG	Gold	0.035-0.055	96F7920	78.20

†Sold Individually

SERIES 1 TYPE III+ SOCKETS — SOLD INDIVIDUALLY

Mfg. Part No.	AWG	Contact Mating Area Finish	Insulation Diameter (in.)	Stock No.	Price Each 1-49
1-66360-2	18AWG to 14AWG	Tin	0.080-0.100	02J8001	0.43
66360-3	18AWG to 14AWG	Gold	0.080-0.100	92F8444	0.86
66101-3	18AWG to 16AWG	Gold	0.080-0.100	42K5438	0.70
66101-1	18AWG to 16AWG	Gold	0.080-0.100	50F573	0.99
66360-4	18AWG to 14AWG	Gold	0.080-0.100	54H3461	0.93
1-66105-9	24AWG to 20AWG	Tin	0.040-0.080	52K3325	0.47
66105-1	24AWG to 20AWG	Gold	0.040-0.080	50F576	1.04
66594-4	24AWG to 20AWG	Gold	0.040-0.080	52K3919	0.51
66105-3	24AWG to 20AWG	Gold	0.040-0.080	50F577	0.65
66399-3	24AWG to 20AWG	Gold	0.080-0.100	50F583	0.72
1-66109-7	26AWG to 24AWG	Tin	0.035-0.055	52K3328	0.60
202237-5	Solder-Tab	Tin	...	52K3490	0.90
66601-2	18AWG to 14AWG	Gold	0.110-0.150	50F599	0.67
66565-4	24AWG to 20AWG	Gold	0.060-0.120	92F4852	0.60
66109-4	26AWG to 24AWG	Gold	0.035-0.055	17C6386	0.68
66405-4	30AWG to 26AWG	Gold	0.014-0.030	24C5723	1.20
66428-4	30AWG to 26AWG	Gold	0.040-0.060	07H2675	2.46
202237-7	Solder-Tab	Gold	...	52K3491	1.75

SERIES 1 TYPE III+ GROUNDING PINS— SOLD INDIVIDUALLY

164164-2	18AWG to 16AWG	Gold	0.078-0.098	90B5680	1.25

SERIES 1 TYPE II/III+ HIGH CURRENT SOCKETS — SOLD INDIVIDUALLY

193846-1	14AWG	Silver	...	50B507	11.29

SERIES 1 TYPE II SOCKETS — SOLD INDIVIDUALLY

Mfg. Part No.	AWG	Contact Mating Area Finish	Insulation Diameter (in.)	Stock No.	Price Each 1-49
201328-1	24AWG to 20AWG	Gold	...	50F553	3.59

SERIES 1 TYPE VI SOCKETS — SOLD INDIVIDUALLY

66590-1	18AWG to 16AWG	Tin	0.080-0.100	50F593	0.31

SERIES 3 TYPE XII POWER PINS — SOLD INDIVIDUALLY

Mfg. Part No.	AWG	Contact Mating Area Finish	Insulation Diameter (in.)	Stock No.	Price Each 1-24
66262-2*	16AWG to 12AWG	Gold	0.135-0.160	92F4851	8.02
66255-6	14AWG to 12AWG	Gold	0.135-0.160	70C3858	9.39
66261-2	14AWG to 12AWG	Gold	0.135-0.160	46F1154	6.18
66261-5	14AWG to 12AWG	Tin	0.135-0.160	52K3913	1.86
66253-6	10AWG to 8AWG	Gold	0.190-0.220	29C5873	5.29
66259-2	10AWG to 8AWG	Gold	0.190-0.220	46F1156	4.87
66253-8	10AWG to 8AWG	Silver	0.190-0.220	13C2632	3.01
66259-5	10AWG to 8AWG	Tin	0.190-0.220	52K3912	2.07
193991-4	8AWG	Silver	...	90B3338	8.96

SERIES 3 TYPE XII POWER SOCKETS — SOLD INDIVIDUALLY

66740-6	16AWG to 12AWG	Gold	0.135-0.160	90F7240	8.22
2-66740-1	16AWG to 12AWG	Tin	0.135-0.160	52K3480	3.72
1-66740-1	14AWG to 12AWG	Gold	0.135-0.160	70C3808	10.91
66740-9	14AWG to 12AWG	Silver	0.135-0.160	35C2417	6.15
1-66741-1	10AWG to 8AWG	Gold	0.190-0.220	10H3139	14.70
66741-9	10AWG to 8AWG	Silver	0.190-0.220	29C5874	4.80
66741-6	10AWG	Gold	0.190-0.220	51F3487	9.39
2-66741-1	10AWG	Tin	0.190-0.220	52K3481	4.46
193990-2	8AWG	Gold	...	90B3209	14.93

*Copper grounding contact

SERIES 3 TYPE XII KEYING PLUG — SOLD INDIVIDUALLY

Mfg. Part No.	Description	For Use with	Stock No.	Price Each 1-49
207597-1	Keying Plug	Pin Cavity	52F089	2.39

(8174)

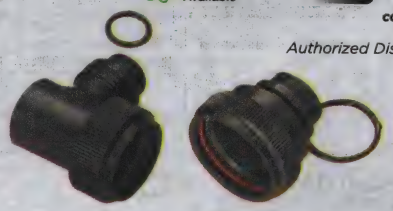
TXR40 SERIES TINEL-LOCK™ ADAPTERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Aluminum alloy housing, per QQ-A-225
- Olive drab cadmium finish
- Straight and 90° angle configurations



90° Angle Straight

Code 40 Tinel-Lock™ adapters are designed to terminate a braided cable shield and a heat-shrinkable lipped boot to MIL-C-38999, Series III and IV, Class C, F, K, and W, D38999/20, /24, /26. /40, /46, /47 circular connectors, and when mated provide a watertight seal meeting MIL-C-85049, Par 3.5.7 requirements. Manufactured from aluminum alloy with olive drab cadmium finish per QQ-P-416, Type II, Class 3 over electroless nickel for corrosion resistance in exposed environments. Features a Tinel-Lock™ ring marked with thermochromic paint that changes color when heated electrically and installation temperature is reached. Also available with high-conductivity electroless nickel finish, per MIL-C-26074, Class 4, Grade B, for optimum screening performance; *go online or call.*

STRAIGHT

Mfg. Part No.	Shell Size	Max. Entry Size (mm)	Thread	Stock No.	Price Each 1-9	Price Each 10-49
TXR40AB00-0804AI	9	6.35	M12 x 1.0	54K2887	125.27	121.48
TXR40AB00-1006AI	11	9.52	M15 x 1.0	54K2888	125.27	121.48
TXR40AB00-1008AI	11	12.7	M15 x 1.0	44M1778	125.27	121.48
TXR40AB00-1206AI	13	9.52	M18 x 1.0	44M1788	129.06	121.48
TXR40AB00-1208AI	13	12.7	M18 x 1.0	29K6717	125.27	105.83
TXR40AB00-1406AI	15	9.52	M2 x 1.0	57J1982	125.27	121.48
TXR40AB00-1410AI	15	15.87	M2 x 1.0	21K4997	125.27	121.48
TXR40AB00-1608AI	17	12.7	M25 x 1.0	54K2897	129.06	121.48
TXR40AB00-1610AI	17	15.87	M25 x 1.0	54K2898	125.27	121.48
TXR40AB00-1612AI	17	19.05	M25 x 1.0	54K2900	125.27	121.48
TXR40AB00-1810AI	19	15.87	M28 x 1.0	54K2902	125.27	121.48
TXR40AB00-1812AI	19	19.05	M28 x 1.0	54K2903	125.27	121.48
TXR40AB00-1814AI	19	22.23	M28 x 1.0	44M1833	125.27	121.48
TXR40AB00-2012AI	21	19.05	M31 x 1.0	44M1846	125.27	121.48
TXR40AB00-2014AI	21	22.23	M31 x 1.0	44M1849	125.27	121.48
TXR40AB00-2016AI	21	25.4	M31 x 1.0	20K7258	125.27	121.48
TXR40AB00-2214AI	23	22.23	M34 x 1.0	54K2910	125.27	121.48
TXR40AB00-2216AI	23	25.4	M34 x 1.0	44M1866	125.27	121.48
TXR40AB00-2218AI	23	28.57	M34 x 1.0	44M1869	125.27	121.48
90° ANGLE						
TXR40AB90-0804AI	9	6.35	M12 x 1.0	74K2731	125.27	121.48
TXR40AB90-1006AI	11	9.52	M15 x 1.0	44M1961	125.27	121.48
TXR40AB90-1208AI	13	12.7	M18 x 1.0	44M1975	125.27	121.48
TXR40AB90-1410AI	15	15.87	M2 x 1.0	44M1986	129.06	121.48

(194809)

RAYCHEM SIDE-ENTRY TINEL-LOCK RING

NEW

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Low profile, buckle-free termination provides smooth outer surface
- 1-piece nickel-titanium alloy construction with interlocking ends
- Uniform recovery force gives termination excellent mechanical and electrical properties
- Withstands temperatures up to 200°C
- Quick and easy installation with resistance heater or heat gun
- Thermochromic paint changes color to indicate when ring has been heated to full recovery
- Low DC connection resistance provides excellent 360° shielding termination
- Easily removable

Side-entry Tinel-Lock ring is a heat-recoverable metal braid terminator, which provides a method of joining a gross cable or harness shield to a connector backshell or other termination device, without prepositioning the ring on the harness. Designed for military and commercial aerospace, military ground systems, military, marine and commercial ships, as well as, offshore marine applications. Can be used for harness-over-braid termination, cable screen termination to the Tinel-Lock adapter, and for harness repair. Ideal for use with 34-36 AWG single layer braid. Connection DC resistance: 1mΩ max. Operating temperature: -65°C to 200°C.

Mfg. Part No.	Supplied Dia. (mm)	Recovered Dia. (mm)	Side Entry Opening (mm)	Pull-Off Force (lbs.)	Stock No.	Price Each 1-4
SETR-04AI	10.08	9.63	6.35	100	01X3287	40.04
SETR-06AI	13.28	12.67	9.53	100	01X3288	40.04
SETR-08AI	16.51	15.75	12.70	100	01X3289	40.04
SETR-10AI	19.86	18.9	15.88	150	01X3290	40.04
SETR-12AI	23.16	22.02	19.05	150	01X3291	42.12
SETR-14AI	26.42	25.1	22.23	150	01X3292	42.12

CONTINUED

CIRCULAR CONNECTORS

RAYCHEM SIDE-ENTRY TINEL-LOCK RING (CONT.)

Mfg. Part No.	Supplied Dia. (mm)	Recovered Dia. (mm)	Side Entry Opening (mm)	Pull-Off Force (lbs.)	Stock No.	Price Each 1-4
● SETR-16AI	29.74	28.22	25.40	150	01X3293	42.12
● SETR-18AI	33.05	31.34	28.58	150	01X3294	42.12

(211391)

AS85049 BAND STRAPS AND ADAPTERS

NEW

TE connectivity

Authorized Distributor

Features

- Band Strap Material: Stainless Steel
- Band Strap Finish: Passivated
- Shrink Boot Accomodation Adapters: Self-Locking Shield Band Termination
- Adapter Material: Aluminum Alloy
- Adapter Finish: Cadmium Plating over Electroless Nickel
- Adapter Color: Olive Drab

BAND STRAPS

Mfr. Part No.	Width (mm)	Width (in)	Length (mm)	Length (in)	Stock No.	Price Each 1-499
M85049/128-1	6.22	0.245	355.6	14.000	29X7517	13.72
M85049/128-3	6.35	0.250	362.1	14.256	29X7518	14.12
M85049/128-7	3.05	0.120	206.38	8.125	29X7519	13.40

ADAPTERS

Mfr. Part No.	Shell Size	Max. Cable Diameter (mm)	Stock No.	Price Each 1-24
M85049/88-11W03	11	7.9	29X7520	52.48
M85049/88-13W02	13	7.9	29X7521	54.31
M85049/88-13W03	13	11.1	29X7522	54.31
M85049/88-15W02	15	11.1	29X7523	56.17
M85049/88-15W03	15	14.3	29X7524	56.17
M85049/88-17W02	17	12.7	29X7525	58.00
M85049/88-17W03	17	15.9	29X7526	58.00
M85049/88-19W02	19	15.9	29X7527	59.80
M85049/88-19W03	19	19.1	29X7528	59.80
M85049/88-21W02	21	15.9	29X7529	61.61
M85049/88-21W03	21	20.6	29X7530	61.61
M85049/88-23W02	23	17.5	29X7531	63.37
M85049/88-23W03	23	23.8	29X7532	63.37
M85049/88-25W02	25	19.1	29X7533	65.21
M85049/88-25W03	25	25.4	29X7534	65.21
M85049/88-9W03	9	6.4	29X7535	52.48

(211972)

SEB SERIES SIDE ENTRY BUSHINGS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- High-temperature resistant silicone, rated to 180°C
- Trim to fit capabilities — fits any size saddle clamp
- Thermally formed to naturally conform to circular wire bundles
- Flexible and fire resistant
- No adhesive layer for easy removal
- Reusable

Pre-coiled side entry reusable silicone bushings are designed to be used in high-temperature applications, such as non-environmentally sealed backshell (saddle clamp) and wire management bundles, where tape or other molded grommets are used. One silicone elastomer bushing strip replaces as much as 6 feet and 40 wraps of traditional silicone tapes. Conforms to MIL standards AMD-DTL-23053/10, MIL-PRF-46846 Type II Class 1, and RT-1140. Operating temperature range: -75°C to +180°C.

Mfg. Part No.	Coiled Dia. (mm)	Uncoiled Dimensions (mm) Length	Width	Thickness	Bundle O.D. Min. (mm)	Stock No.	Price Each 1-9	10-24
● SEB-A	6.9	25.4	10.2	1.5	1.3	32T0840	4.52	4.11
● SEB-B	8.9	50.8	10.2	1.5	1.3	32T0841	6.14	5.47
● SEB-C	12.2	76.2	12.7	1.5	1.3	32T0842	7.69	7.00
● SEB-D	14.0	101.6	15.2	1.5	2.5	32T0843	9.53	8.48
● SEB-E	16.5	152.4	15.2	1.5	7.6	32T0844	13.40	11.88
● SEB-F	21.6	228.6	15.2	1.5	7.6	32T0845	17.56	14.63

(194513)

RAYCHEM SPIN LOCK VARIABLE-ANGLE BACKSHELLS

RoHS Compliant Available

TE connectivity

Authorized Distributor

45° Angle Heat-Shrinkable Molded Boot Version | Straight Saddle Clamp Version | 90° Angle Saddle Clamp Version

- Variable angle — straight, 45° and 90° cable termination using the same part
- Cost-saving design allows use one backshell for multiple applications
- Tinel-Lock™ ring system provides high-performance, low-resistance shield termination
- Choice of strain relief method — saddle clamp or heat-shrink molded boot for a sealed termination
- Constructed from durable aluminum alloy
- Available in two platings — olive drab cadmium or electroless nickel

Raychem Spin Lock variable-angle backshells for MIL Spec circular connectors enable straight, 45°, and 90° braided cable termination using the same part. The backshell's swivelling body rotates around the axis of the cable bundle and locks in position, minimizing stress on the wire bundle and providing more robust strain relief than other termination systems. Choice of saddle clamp version or heat-shrinkable molded boot version for a sealed termination. Manufactured from aluminum alloy in choice of two platings. For corrosion resistance in exposed environments, select olive drab cadmium plating per SAE-AMS-PQ-P-146. Or for optimum screening performance, select high-conductivity electroless nickel plating, per SAE-AMS-26074 Class 3 or 4, Grade A. All versions have the Tinel-Lock™ ring marked with thermochromic paint that changes color when heated electrically and installation temperature is reached. Ideal for military and commercial aerospace, defense, marine, and industrial applications, the Spin Lock backshells are compatible with MIL-C-38999, Series I, II, III and IV and other MIL spec circular connectors.

BACKSHELL WITH SADDLE CLAMP STRAIN RELIEF — OLIVE DRAB CADMIUM PLATED

Mfg. Part No.	Conn. Code †	Shell Size Com'l / MIL	Max. Cable Dia. (mm)	Thread	Stock No.	Price Each 1-4
● SLC40AB-0804A	40	9 / A	5.94	M12 x 1.0	87T7320	77.91
SLC40AB-1006A	40	11 / B	5.94	M15 x 1.0	87T7322	79.61
SLC40AB-1208A	40	13 / C	8.33	M18 x 1.0	87T7324	81.38
SLC40AB-1410A	40	15 / D	11.61	M22 x 1.0	87T7326	81.60
SLC40AB-1612A	40	17 / E	15.6	M25 x 1.0	87T7328	92.67
SLC40AB-1814A	40	19 / F	16.1	M28 x 1.0	87T7330	94.84
SLC40AB-2016A	40	21 / G	17.73	M31 x 1.0	87T7332	97.09
SLC40AB-2218A	40	23 / H	20.9	M34 x 1.0	87T7334	89.58
SLC40AB-2420A	40	25 / J	21.67	M37 x 1.0	87T7336	91.76

BACKSHELL WITH SADDLE CLAMP STRAIN RELIEF — ELECTROLESS NICKEL PLATED

● SLC40AC-0804A	40	9 / A	5.94	M12 x 1.0	87T7337	84.87
● SLC40AC-1006A	40	11 / B	5.94	M15 x 1.0	87T7339	79.64
● SLC40AC-1208A	40	13 / C	8.33	M18 x 1.0	87T7341	108.19
● SLC40AC-1410A	40	15 / D	11.61	M22 x 1.0	87T7343	110.65
● SLC40AC-1612A	40	17 / E	15.6	M25 x 1.0	87T7345	113.21
● SLC40AC-1814A	40	19 / F	16.1	M28 x 1.0	87T7347	94.84
● SLC40AC-2016A	40	21 / G	17.73	M31 x 1.0	87T7349	97.09
● SLC40AC-2218A	40	23 / H	20.9	M34 x 1.0	87T7351	99.44
● SLC40AC-2420A	40	25 / J	21.67	M37 x 1.0	87T7353	101.87

BACKSHELL WITH SADDLE CLAMP STRAIN RELIEF — OLIVE DRAB CADMIUM PLATED

Mfg. Part No.	Conn. Code †	Shell Size Ser I / II	Max. Cable Dia. (mm)	Thread	Stock No.	Price Each 1-4
SLC41AB-0804A	41	9 / 8	5.94	M18 x 1.0	87T7354	77.91
SLC41AB-1006A	41	11 / 10	5.94	M22 x 1.0	87T7356	79.61
SLC41AB-1208A	41	13 / 12	8.33	M25 x 1.0	87T7358	81.38
SLC41AB-1410A	41	15 / 14	11.61	M28 x 1.0	87T7360	90.58
SLC41AB-1612A	41	17 / 16	15.6	M31 x 1.0	87T7362	92.67
SLC41AB-1814A	41	19 / 18	16.1	M34 x 1.0	87T7364	94.84
SLC41AB-2016A	41	21 / 20	17.73	M37 x 1.0	87T7366	97.09
SLC41AB-2218A	41	23 / 22	20.9	M25 x 1.0	87T7368	99.44
SLC41AB-2420A	41	25 / 24	21.67	M25 x 1.0	87T7370	101.87

BACKSHELL WITH SADDLE CLAMP STRAIN RELIEF — ELECTROLESS NICKEL PLATED

● SLC41AC-0804A	41	9 / 8	5.94	M25 x 1.0	87T7371	77.94
● SLC41AC-1006A	41	11 / 10	5.94	M28 x 1.0	87T7373	79.64
● SLC41AC-1208A	41	13 / 12	8.33	M28 x 1.0	87T7375	81.41
● SLC41AC-1410A	41	15 / 14	11.61	M28 x 1.0	87T7377	90.58
● SLC41AC-1612A	41	17 / 16	15.6	M31 x 1.0	87T7379	92.67
● SLC41AC-1814A	41	19 / 18	16.1	M31 x 1.0	87T7381	94.84
● SLC41AC-2016A	41	21 / 20	17.73	M31 x 1.0	87T7383	97.09
● SLC41AC-2218A	41	23 / 22	20.9	M34 x 1.0	87T7385	99.44
● SLC41AC-2420A	41	25 / 24	21.67	M34 x 1.0	87T7387	101.87

BACKSHELL WITH HEAT-SHRINK POLYOLEFIN* BOOT STRAIN RELIEF — OLIVE DRAB CADMIUM

Mfg. Part No.	Conn. Code †	Shell Size Com'l / MIL	Max. Cable Dia. (mm)	Thread	Stock No.	Price Each 1-4
SLM40AB-0804A-3/42-0	40	9 / A	5.94	M25 x 1.0	87T7405	63.67
SLM40AB-1006A-3/42-0	40	11 / B	5.94	M28 x 1.0	87T7407	64.63
SLM40AB-1208A-3/42-0	40	13 / C	8.33	M28 x 1.0	87T7409	65.60

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RAYCHEM SPIN LOCK VARIABLE-ANGLE BACKSHELLS (CONT.)

BACKSHELL WITH HEAT-SHRINK POLYOLEFIN* BOOT STRAIN RELIEF — OLIVE DRAB CADMIUM

Mfg. Part No.	Conn. Code †	Shell Size Com'l / MIL	Max. Cable Dia. (mm)	Thread	Stock No.	Price Each 1-4
SLM40AB-1410A-3/42-0	40	15 / D	11.61	M28 x 1.0	87T7411	74.84
SLM40AB-1612A-3/42-0	40	17 / E	15.6	M31 x 1.0	87T7413	76.02
SLM40AB-1814A-3/42-0	40	19 / F	16.1	M31 x 1.0	87T7415	77.28
SLM40AB-2016A-3/42-0	40	21 / G	17.73	M31 x 1.0	87T7417	77.28
SLM40AB-2218A-3/42-0	40	23 / H	20.9	M34 x 1.0	87T7419	79.90
SLM40AB-2420A-3/42-0	40	25 / J	21.67	M34 x 1.0	87T7421	81.31
BACKSHELL WITH HEAT-SHRINK ELASTOMER BOOT STRAIN RELIEF — OLIVE DRAB CADMIUM						
SLM40AB-0804A-25-0	40	9 / A	5.94	M25 x 1.0	87T7422	63.65
SLM40AB-1006A-25-0	40	11 / B	5.94	M28 x 1.0	87T7424	85.88
SLM40AB-1208A-25-0	40	13 / C	8.33	M28 x 1.0	87T7426	65.57
SLM40AB-1410A-25-0	40	15 / D	11.61	M28 x 1.0	87T7428	67.55
SLM40AB-1612A-25-0	40	17 / E	15.6	M31 x 1.0	87T7430	89.95
SLM40AB-1814A-25-0	40	19 / F	16.1	M31 x 1.0	87T7432	77.28
SLM40AB-2016A-25-0	40	21 / G	17.73	M31 x 1.0	87T7434	77.28
SLM40AB-2218A-25-0	40	23 / H	20.9	M34 x 1.0	87T7436	79.90
SLM40AB-2420A-25-0	40	25 / J	21.67	M34 x 1.0	87T7438	81.31

BACKSHELL WITH HEAT-SHRINK POLYOLEFIN* BOOT STRAIN RELIEF — OLIVE DRAB CADMIUM

Mfg. Part No.	Conn. Code †	Shell Size Ser I / II	Max. Cable Dia. (mm)	Thread	Stock No.	Price Each 1-4
SLM41AB-0804A-3/42-0	41	9 / 8	5.94	M25 x 1.0	87T7439	63.67
SLM41AB-1006A-3/42-0	41	11 / 10	5.94	M28 x 1.0	87T7441	64.63
SLM41AB-1208A-3/42-0	41	13 / 12	8.33	M28 x 1.0	87T7443	65.60
SLM41AB-1410A-3/42-0	41	15 / 14	11.61	M28 x 1.0	87T7445	74.84
SLM41AB-1612A-3/42-0	41	17 / 16	15.6	M31 x 1.0	87T7447	76.02
SLM41AB-1814A-3/42-0	41	19 / 18	16.1	M31 x 1.0	87T7449	77.28
SLM41AB-2016A-3/42-0	41	21 / 20	17.73	M31 x 1.0	87T7451	77.28
SLM41AB-2218A-3/42-0	41	23 / 22	20.9	M34 x 1.0	87T7453	79.90
SLM41AB-2420A-3/42-0	41	25 / 24	21.67	M34 x 1.0	87T7455	81.31
BACKSHELL WITH HEAT-SHRINK ELASTOMER BOOT STRAIN RELIEF — OLIVE DRAB CADMIUM						
SLM41AB-0804A-25-0	41	9 / 8	5.94	M25 x 1.0	87T7456	63.65
SLM41AB-1006A-25-0	41	11 / 10	5.94	M28 x 1.0	87T7458	64.60
SLM41AB-1208A-25-0	41	13 / 12	8.33	M28 x 1.0	87T7460	65.57
SLM41AB-1410A-25-0	41	15 / 14	11.61	M28 x 1.0	87T7462	74.84
SLM41AB-1612A-25-0	41	17 / 16	15.6	M31 x 1.0	87T7464	76.02
SLM41AB-1814A-25-0	41	19 / 18	16.1	M31 x 1.0	87T7466	77.28
SLM41AB-2016A-25-0	41	21 / 20	17.73	M31 x 1.0	87T7468	77.28
SLM41AB-2218A-25-0	41	23 / 22	20.9	M34 x 1.0	87T7470	79.90
SLM41AB-2420A-25-0	41	25 / 24	21.67	M34 x 1.0	87T7472	81.31

†Connector Code: **40** mates to MIL-C-38999, Series III and IV, Class C, F, K, W; **41** mates to MIL-C-38999, Series I and II, Class E, T; *With adhesive coating
(203516)

AMP CPC APPLICATION TOOLS

RoHS Compliant Available

TE connectivity

Authorized Distributor

PRO-CRIMPER™ II Hand Tool

Insertion/Extraction Tool

Mfg. Part No.	Description	Stock No.	Price Each
58495-1	PRO-CRIMPER™ II Hand Tool (28-16 AWG)	44F8409	219.32
58495-2	PRO-CRIMPER™ II Die Set	48F1670	202.01
91515-1	Straight-Action Hand Tool with Die Set (26-24, 24-20 AWG)	85C3173	718.40
91505-1	Straight-Action Hand Tool with Die Set (18-16 AWG)	92C2182	741.95
91523-1	Straight-Action Hand Tool with Die Set (24-20 AWG)	85C0748	718.40
91519-1	Straight-Action Hand Tool with Die Set (18-14 AWG)	89C0342	718.40
91521-1	Straight-Action Hand Tool w/Die Set (Crimp Mfg. Part No. F)	89C0346	718.40
● 91002-1	Contact Insertion Tool	89F4310	24.13
● 305183	Contact Extraction Tool	44F8408	17.36
SERIES 2 APPLICATION TOOLS			
58448-2	PRO-CRIMPER™ II Hand Tool	44F8730	327.02
91503-1	CERTI-CRIMP® Hand Tool (28-24, 24-20 AWG)	72C5755	701.30
91285-1	Insertion/Extraction Tool (28-24 AWG)	90F1401	22.92
● 91067-2	Insertion/Extraction Tool (24-20 AWG)	44F8729	8.13

➤ CONTINUED ➤

AMP CPC APPLICATION TOOLS (CONT.)

SERIES 3 APPLICATION TOOLS

Mfg. Part No.	Description	Stock No.	Price Each
90382-2	CERTI-CRIMP® Hand Tool, (16-12 AWG)	46F1160	2198.70
91019-3	Extraction Tool	46F1159	283.06
● 91124-1	Economy Extraction Tool	46F1158	55.04

(8172)

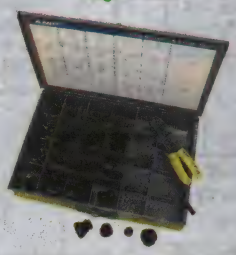
AMP CIRCULAR PLASTIC CONNECTOR KITS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Wide selection of CPC plugs, receptacles, contacts, cable clamps, and application tooling. Choice of 2 kits: Series 1 standard-density and Series 2 high-density.



Mfg. Part No.	446-Piece Series 1 Standard-Density Connector Kit Contents	Quantity
	Shell Size 11/Arrangement 11-4/Sex Standard	
206060-1	Standard 4 Position plug	4
206061-1	Square Flange 4 Position Receptacle	2
206153-0	Free-Hanging 4 Position Receptacle	2
206062-1	Shell Size 11 Cable Clamp	4
	Shell Size 13/Arrangement 13-9/Sex Standard	
206708-1	Standard 9 Position Plug	4
206705-1	Square Flange 9 Position Receptacle	2
206705-2	Free-Hanging 9 Position Receptacle	2
206966-1	Shell Size 13 Cable Clamp	3
	Shell Size 17/Arrangement 17-16/Sex Standard	
206037-1	Standard 16 Position Plug	4
206036-1	Square Flange 16 Position Receptacle	2
206036-3	Free-Hanging 16 Position Receptacle	2
206070-1	Shell Size 17 Cable Clamp	3
	Shell Size 23/Arrangement 23-37/Sex Standard	
206150-1	Standard 37 Position Plug	4
206151-1	Square Flange 37 Position Receptacle	2
206151-2	Free-Hanging 37 Position Receptacle	2
206138-1	Shell Size 23 Cable Clamp	2
66361-1	18-14 AWG Tin-Plated Pin	100
66360-4	18-14 AWG Tin-Plated Socket	100
66103-2	24-20 AWG Tin-Plated Pin	100
66105-2	24-20 AWG Tin-Plated Socket	100
305183	Contact Extraction Tool (20-16 AWG)	1
696202-1	AMP® Service Hand Tool	1

Mfg. Part No.	Description	Stock No.	Price 1-9
● 608030-5	446-Pc. Series 1 Standard Connector Kit	87K6919	586.04

Mfg. Part No.	544-Piece Series 2 High-Density Connector Kit Contents	Quantity
	Shell Size 11/Arrangement 11-8/Sex Standard	
206037-2	Standard 8 Position Plug	4
205841-1	Square Flange 8 Position Receptacle	2
205841-2	Free-Hanging 8 Position Receptacle	2
	Shell Size 11/Arrangement 11-9/Sex Standard	
206485-1	Standard 9 Position Plug	4
206486-1	Square Flange 9 Position Receptacle	2
206486-2	Free-Hanging 9 Position Receptacle	2
206062-1	Shell Size 11 Cable Clamp	5
	Shell Size 17/Arrangement 17-28/Sex Standard	
205839-3	Standard 28 Position Plug	4
205840-3	Square Flange 28 Position Receptacle	2
206152-1	Free-Hanging 28 Position Receptacle	2
206070-1	Shell Size 17 Cable Clamp	3
	Shell Size 23/Arrangement 23-63/Sex Standard	
205842-1	Standard 63 Position Plug	4
205843-1	Square Flange 63 Position Receptacle	2
205843-2	Free-Hanging 63 Position Receptacle	2
206138-1	Shell Size 23 Cable Clamp	2
66507-9	28-24 AWG Gold Flashed Pin	100
66505-9	28-24 AWG Gold Flashed Socket	100
66506-9	24-20 AWG Gold Flashed Pin	100
66504-9	24-20 AWG Gold Flashed Socket	100
206509-1	Keying Plug for Size 20DM, 20DF Contacts	100
91067-2	Contact Insertion/Extraction Tool	1
696202-1	AMP® Service Hand Tool	1

Mfg. Part No.	Description	Stock No.	Price Each
● 608030-6	544-Pc. Series 2 High-Density Connector Kit	87K6920	539.16

(7995)

CIRCULAR CONNECTORS

ORDERING GUIDE FOR 97 SERIES STANDARD CYLINDRICAL, MULTI-PIN, THREADED CONNECTORS

Amphenol® Industrial

97 3101 A 28-21 P W (290)† (639)

Series Number
97 - Like MS, but Amphenol®

Shell Construction
A - Solid Backshell
B - Split Backshell (available in 3106, 3107, 3108 only.)*

Contact
P - Pin
S - Socket

Shell Finish
Leave Blank - For Standard Olive Drab Cadmium Finish
(639) - Clear Cadmium
(621) - Black Zinc Alloy
(689) - Electroless Nickel
(946) - Black Zinc Alloy Finish Plus Solder Contact Less Prefilled Cup (RoHS)

Shell Type
3100 - Wall Receptacle
3101 - Cable Receptacle
3102 - Box Receptacle
3106 - Straight Plug
3107 - Quick-Disconnect Plug
3108 - Angle Plug

Alternate Insert Position
Omit for Standard Position. **W,X,Y,** or **Z** for Alternate Positions, depending on Insert. Alternate Insert Positions are listed in parenthesis under each diagram in the Insert Chart at the beginning of this section.

Deviation
(290) Backshell for use with jacketed cable
Contact your local Newark InOne Sales Office for additional deviations.

Insert Number
(Consists of)

Shell	Configuration
8S, 10SL, 12S, 12†, 14S, 14, 16S, 16, 18, 20, 22, 24, 28, 32, 36	Code Numbers are listed under each diagram in the Insert Chart at the beginning of this section.

Review this example to correctly formulate the part number of your choice. See above explanation for more ordering information.
(† For use with Environmental connectors only;
* Contact your local Newark InOne Sales Office for availability.)

SERVICE RATINGS
Codes are listed in **[BRACKETS]** under each diagram in the Insert Chart.

Service Codes		INST+	A	D	E	B	C
Limiting Operating	DC	250	700	1250	1750	2450	4200
Voltages at Sea Level	AC (rms)	200	500	900	1250	1750	3000
Effective Creepage (nominal)	mm	1.57	3.18	4.75	6.35	7.92	25.40
Mechanical Spacing (nominal)	mm	...	1.57	3.18	4.75	6.35	7.92

*Army-Navy ratings for aircraft use; Transients were not considered in calculating these values; Limiting operating voltages of 50,000 feet (15,240M) altitude are approximately 25% of the sea level values.
- +Normally for low voltages and currents.

WIRE SIZE CODES

16	12	8	4	0

TEST CURRENT VALUES

Contact Size	16	12	8	4	0
Amperes	13	23	46	80	150

97 series medium- to heavy-weight, standard circular connectors feature non-rotating and non-reflective contact design that simplifies soldering and helps lower termination costs. Standard MIL-C-5015 contacts are silver-plated w/ pre-tinned solder cups. Single key/keyway polarization. High-grade aluminum alloy shell components feature strong threaded couplings. Diallyl phthalate inserts provide high arc and insulation resistance under both humidity and thermal stress. Your choice of 5 shell styles, environmental, solid or split shell construction, 128 contact arrangements (from 1 to 52 circuits) and alternate insert positioning. Standard, non-reflective cadmium-plated shell available in 3 finishes. Choose: olive drab chromate finish; shiny, clear cadmium-plated finish; or environmental-resistant black zinc cobalt finish. All shell finishes give the same high conductivity and resistance to corrosion. Operating temp.: –55°C to +125°C. Intermateable and intermountable with all **97 series** and MIL-C-5015 connectors. UL recognized File E115497; CSA certified File LR69183. has a completely equipped Amphenol **MS** assembly center which allows the quick shipment of complete connectors from an extensive component inventory.

HOW TO SELECT A 97 SERIES CIRCULAR CONNECTOR IN 6 EASY STEPS . . .
Once you have determined that a **97 series** circular connector is required, answer the questions in the following 6 steps to help formulate the part number of your choice.

STEP 1 *How many wires are you going to connect and what gauge?*
This will determine what insert to choose from. The Insert Chart *on pages 941-942* illustrate the inserts available.

STEP 2 *What kind of RECEPTACLE do you need?*
Series 3100 (wall mount) front mount through wall material. Threaded backend to attach cable clamp. **Series 3101 (cable mount)** for inline non-mounting applications. **Series 3102 (box or panel mount)** mounts from inside the box. No rear threads for cable clamps. See dimensional information on page

STEP 3 *What kind of PLUG do you need?*
Series 3106 (straight plug) is the standard. For space constraints use **Series 3108 (right angle plug)**. For quick disconnect use **Series 3107**.

STEP 4 *Do you need a Plug with SOLID or SPLIT Back Shell?*
Use solid **'A' class** for sturdy, easy to assemble applications. Use split **' B' class**, for when you need added room to solder or for inspection.See dimensional guide for 'B' class split backshell availability.

STEP 5 *Which connector gets the socket: the receptacle or the plug?*
Rule of thumb: The socket goes where the power is coming from (the hot side). 'S' = socket, 'P' = pin. See "How To Order"

STEP 6 *What kind of finish do you need?*
The standard finish is olive drab cadmium. See "How To Order" for other finishes.

HOW TO BUILD A 97 SERIES CONNECTOR

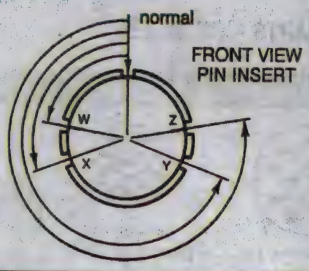
SHELL	+	INSERT ARRANGEMENT	=	CONNECTOR PART NUMBER	
97-3106A-18(850)	+	97-18-1S	=	97-3106A-18-1S	Std OD Cad finish - Non-RoHS
97-3106A-18 (621)(850)	+	97-18-1S	=	97-3106A-18-1S (621)	Black Zinc Alloy finish - Non-RoHS
97-3100A-14S(850)	+	97-14S-2P	=	97-3100A-14S-2P	Std OD Cad finish - Non-RoHS
97-3100A-14S(621)(850)	+	97-14S-2P (431)	=	97-3100A-14S-2P(946)	Black Zinc Alloy finish - Non-RoHS

•(850) designates shell only. No marking •Shell with (621) Black Zinc Alloy finish denotes RoHS for shell only
•Insert with (431) denotes contacts with solderless cups - RoHS •(621)+(431)=(946) RoHS compliant connector

(14230)

Amphenol
Industrial

ALTERNATE INSERT POSITIONS



Codes are listed in **(PARENTHESIS)** under each diagram in the Insert Chart.

Insert	W	X	Y	Z
12S-3, 14S-9, 16S-5, 18-1, 18-22, 20-3, 20-6, 22-2, 22-9, 28-3, 28-6, 28-18	70°	145°	215°	290°
14S-2, 18-10, 36-5	...	120°	240°	...
14S-5	...	110°	...	...
14S-7, 16S-6, 16-10, 18-20, 18-29, 20-17, 20-19, 28-12	90°	180°	270°	...
16S-1, 18-12, 20-15, 20-29, 22-28, 24-2, 24-10	80°	...	...	280°
16S-4, 16-9, 16-11, 16-13, 18-3, 18-4, 20-18, 20-21, 20-23, 20-24, 20-27, 22-1, 22-4 22-5, 22-8, 22-10, 22-11, 22-13, 22-20, 24-9, 24-11, 28-2, 28-5, 32-5, 36-6	35°	110°	250°	325°
16-7, 18-5, 18-9, 18-13, 20-7, 20-8, 20-14, 20-16, 22-12, 22-14, 22-15, 22-16, 22-18, 22-19, 22-34, 24-5, 24-6, 24-7, 24-12, 24-16, 24-20, 24-21, 24-28, 28-1, 28-8, 28-9, 28-10, 28-11, 28-15, 28-16, 28-17, 28-19, 28-20, 28-21, 32-6, 32-13, 36-1, 36-7, 36-8	80°	110°	250°	280°
16S-8, 18-11	...	170°	265°	...
18-8	70°	...	...	290°
20-4, 24-22, 32-17	45°	110°	250°	...
22-22	...	110°	250°	...
22-23	35°	...	250°	...
22-27	80°	...	250°	280°
32-7, 32-8, 36-9, 36-10	80°	125°	235°	280°
36-15	60°	125°	245°	305°

97 SERIES STANDARD CIRCULAR CONNECTORS INSERT CHARTS

1 Contact

12-5-[D]

14S-4 [D]

16-12 [A]

18-16 [C]

18-420
high voltage

2 Contacts

10SL-4 [A]

12S-3 [A] (W-X-Y-Z)

14S-9 [A] (W-X-Y-Z)

16S-4 [D] (W-X-Y-Z)

16-11 [A] (W-X-Y-Z)

16-13 [A] (W-X-Y-Z)

18-3 [D] (W-X-Y-Z)

2 Contacts (Cont.)

20-23 [A] (W-X-Y-Z)

22-1 [D] (W-X-Y-Z)

22-8 [E] (W-X-Y-Z)

22-11 [B] (W-X-Y-Z)

24-9 [A] (W-X-Y-Z)

32-5 [D] (W-X-Y-Z)

3 Contacts

10-SL-3 [A]

14S-1 [A]

14S-7 [A] (W-X-Y)

16S-5 [A] (W-X-Y-Z)

3 Contacts (Cont.)

16S-6 [A] (W-X-Y)

16-10 [A] (W-X-Y)

18-5 [D] (W-X-Y-Z)

18-22 [D] (W-X-Y-Z)

20-3 [D] (W-X-Y-Z)

20-6 [D] (W-X-Y-Z)

20-19 [A] (W-X-Y)

22-2 [D] (W-X-Y-Z)

22-9 [E] (W-X-Y-Z)

28-3 [E] (W-X-Y-Z)

28-6 [D] (W-X-Y-Z)

4 Contacts

12SL-844

14S-2 [Inst] (X-Y)

16-9 [A] (W-X-Y-Z)

18-4 [D] (W-X-Y-Z)

18-10 [A] (X-Y)

20-4 [D] (W-X-Y)

20-24 [A] (W-X-Y-Z)

22-4 [A] (W-X-Y-Z)

4 Contacts (Cont.)

22-10 [E-A] (W-X-Y-Z)

22-22 [A] (X-Y)

24-22 [D] (W-X-Y)

32-17 [D] (W-X-Y)

36-5 [A] (X-Y)

5 Contacts

14S-5 [Inst] [X]

5 Contacts (Cont.)

16S-8 [A] (X-Y)

18-11 [A] (X-Y)

18-20 [A] (W-X-Y)

18-29 [A] (W-X-Y)

20-14 [A] (W-X-Y-Z)

22-12 [D] (W-X-Y-Z)

22-13 [D-A] (W-X-Y-Z)

22-34 [D] (W-X-Y-Z)

5 Contacts (Cont.)

24-12 [A] (W-X-Y-Z)

6 Contacts

14S-6 [Inst]

18-12 [A] (W-Z)

20-8 [Inst] (W-X-Y-Z)

20-17 [A] (W-X-Y)

22-15 [E-A] (W-X-Y-Z)

36-6, 2 #0, 4 #4
[Serv. A] (W-X-Y-Z)

(14232)

97 SERIES STANDARD CIRCULAR CONNECTORS INSERT CHARTS (CONTINUED)

Amphenol Industrial

7 Contacts

16S-1, 7 #16
[Serv. A] (W-Z)

18-9, 5 #16, 2 #12
[Serv. INST] (W-X-Y-Z)

20-15, 7 #12
[Serv. A] (W-Z)

22-26*, 2 #12, 5 #16
1/8"(3.176) Spacing

22-28, 7 #12
[Serv. A] (W-Z)

24-2, 7 #12
[Serv. D] (W-Z)

24-10, 7 #8
[Serv.A] (W-Z)

24-27, 7 #16
[Serv.E] (W-Z)

28-10
3 #12, 2 #8, 2 #4
[Serv. D (G), A (Others)]
(W-X-Y-Z)

8 Contacts

18-8, 1#12, 7 #16
[Serv. A] (W-Z)

20-7, 8 #16,
[Serv. D (ABHG), A (CDEF)] (W-X-Y-Z)

8 Contacts (Cont.)

22-18, 8 #16
[Serv. D (ABHFG), A (Others)] (W-X-Y-Z)

22-23, 8 #12
[Serv. D (H), A (Others)]
(W-Y)

24-6, 8 #12
[Serv. D (AGH), A (Others)] (W-X-Y-Z)

9 Contacts

20-16, 7 #16, 2#12
[Serv. A] (W-X-Y-Z)

20-18, 3 #12, 6 #16
[Serv.A] (W-X-Y-Z)

20-21, 1 #12, 8 #16
[Serv.A] (W-X-Y-Z)

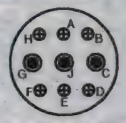
22-16, 3 #12, 6 #16
[Serv. A] (W-X-Y-Z)

22-20, 9 #16
[Serv. A] (W-X-Y-Z)

22-27, 1 #8, 8 #16
[Serv. D (J), A (Others)]
(W-Y-Z)

24-11, 3 #8, 6 #12
[Serv. A] (W-X-Y-Z)

9 Contacts (Cont.)


28-1, 3 #8, 6 #12
[Serv. D (AJE), A (Others)] (W-X-Y-Z

10 Contacts

18-1, 10 #16
[Serv. A (BCFG), INST (Others)] (W-X-Y-Z)

18-19, 10 #16,
[Serv.A] (X-Y)

24-21, 1 #8, 9 #16
[Serv. D] (W-X-Y-Z)

28-19, 4 #12, 6 #16
[Serv. B (HM), D (AB), A (Others)] (W-X-Y-Z)

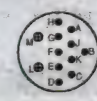
11 Contacts

20-33, 11 #16 [Serv.A]

24-20, 2 #12, 9 #16
[Serv. D] (W-X-Y-Z)

12 Contacts

24-19, 12 #16
1/16" (1.588) Spacing


28-8, 2 #12, 10 #16
[Serv. E (LM), D (B), A (Others)] (W-X-Y-Z)

12 Contacts (Cont.)

28-9, 6 #12, 6 #16
[Serv. D] (W-X-Y-Z)

28-18, 12 #16,
[Serv. C (M), D (GHJKL), A (AB), INST (CDEF)] (W-X-Y-Z)

13 Contacts

20-11, 13 #16
[Serv. INST]

14 Contacts

20-27, 14 #16
[Serv. A] (W-X-Y-Z)

22-19, 14 #16,
[Serv. A] (W-X-Y-Z)

28-2, 2 #12, 12 #16
[Serv. D] (W-X-Y-Z)

28-20, 10 #12, 4 #16
[Serv. A] (W-X-Y-Z)

15 Contacts

28-17, 15 #16
[Serv. B (R), D (MNP), A (Others)] (W-X-Y-Z)

16 Contacts

24-5, 16 #16
[Serv. A] (W-X-Y-Z)

24-7, 2 #12, 14 #16
[Serv. A] (W-X-Y-Z)

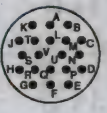
17 Contacts

20-29, 17 #16
[Serv. A] (W-Z)

19 Contacts

22-14, 19 #16
[Serv. A] (W-X-Y-Z)

20 Contacts


28-16, 20 #16
[Serv. A] (W-X-Y-Z)

22 Contacts

28-11, 4 #12, 18 #16
[Serv. A] (W-X-Y-Z)

23 Contacts

32-6, 2 #4, 3 #8
2 #12, 16 #16
[Serv. A] (W-X-Y-Z)

23 Contacts (Cont.)

32-13, 5 #12, 18 #16
[Serv. D] (W-X-Y-Z)

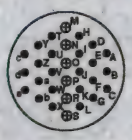
24 Contacts

24-28, 24 #16
[Serv. INST] (W-X-Y-Z)

26 Contacts

28-12, 26 #16
[Serv. A] (W-X-Y)

30 Contacts


32-8, 6 #12, 24 #16
[Serv. A] (W-X-Y-Z)

31 Contacts

36-9, 1 #4, 2 #8
14 #12, 14 #16
[Serv. A] (W-X-Y-Z)

35 Contacts

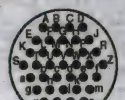
28-15, 35 #16
[Serv. A] (W-X-Y-Z)

32-7, 7 #12, 28 #16
[Serv. INST (ABhj), A (Others)] (W-X-Y-Z)

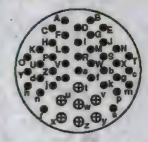
35 Contacts (Cont.)

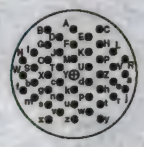
36-15, 35 #16
[Serv. D (m), A (Others)] (W-X-Y-Z)

37 Contacts


28-21, 37 #16
[Serv. A] (W-X-Y-Z)

47 Contacts


36-7, 7 #12, 40 #16
[Serv. A] (W-X-Y-Z)


36-8, 1 #12, 46 #16
[Serv. A] (W-X-Y-Z)

48 Contacts

36-10, 48 #16
[Serv. A] (W-X-Y-Z)

52 Contacts

32-414*, 52 #16
[Serv. A] (W-X-Y-Z)

36-403 , 52 #16
[Serv. A]

** Rotates opposite above illustration. Contact your local Newark InOne Sales Office for additional Information.*

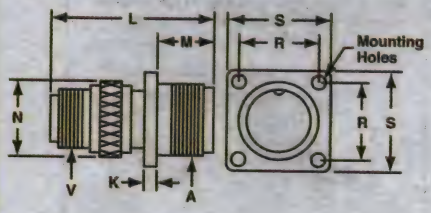
Refer to Product selection, drawings and dimensions on pages 946-950 .
(1422B)

97 SERIES SOLDER TYPE RECEPTACLES

Amphenol® Industrial

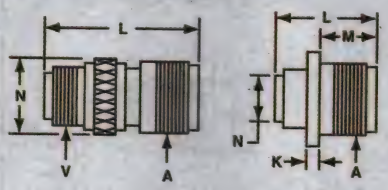
MS3100A wall mount receptacle

Solid shell construction is strong and conserves space. Includes integral polarizing key in front. Back shell is threaded for standard MS/AN fittings.



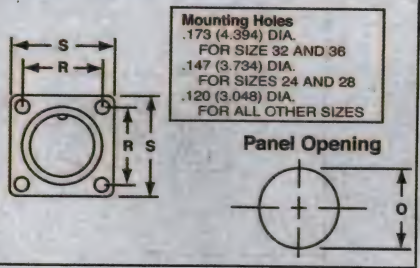
MS3101A cable receptacle

Solid shell construction is strong and conserves space. Includes integral polarizing key in front shell. Machined back shell is threaded for standard MS/AN fittings. Can be unscrewed for inspection or soldering.



MS3102A box receptacle

Solid shell designed for open wiring. Mounts directly on chassis, equipment or panel. Includes internal polarized key in front shell.



3

MS3100A and MS3101A

Connector Size	A Coupling Thread	K Ref.		L Max.		M Ref.		N Ref.		O Ref.		R Ref.		S Ref.		V Fitting Threads
		Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	
8S	1/2-28	5/64	1.98	1-1/4	31.75	9/16	14.27	17/32	13.49	.562	14.27	19/32	15.06	7/8	22.23	1/2-28
10S	5/8-24	5/64	1.98	1-5/16	33.32	9/16	14.27	5/8	15.88	.688	17.48	23/32	18.24	1	25.40	1/2-28
10SL	5/8-24	5/64	1.98	1-9/32	32.53	9/16	14.27	3/4	19.05	.812	20.62	23/32	18.24	1	25.40	5/8-24
12S	3/4-20	5/64	1.98	1-15/32	37.29	9/16	14.27	25/32	19.84	.812	20.62	13/16	20.62	1-3/32	27.76	5/8-24
12	3/4-20	5/64	1.98	1-27/32	46.81	3/4	19.05	25/32	19.84	.812	20.62	13/16	20.62	1-3/32	27.76	5/8-24
14S	7/8-20	5/64	1.98	1-15/32	37.39	9/16	14.27	7/8	22.23	.938	23.83	29/32	23.01	1-3/16	30.15	3/4-20
14	7/8-20	5/64	1.98	1-55/64	47.04	3/4	19.05	7/8	22.23	.938	23.83	29/32	23.01	1-3/16	30.15	3/4-20
16S	1 -20	5/64	1.98	1-15/32	37.39	9/16	14.27	1	25.40	1.062	26.97	31/32	24.59	1-9/32	32.54	7/8-20
16	1 -20	1/8	3.18	1-57/64	47.85	3/4	19.05	1	25.40	1.062	26.97	31/32	24.59	1-9/32	32.54	7/8-20
18	1-1/8-18	1/8	3.18	1-63/64	50.24	3/4	19.05	1-1/8	28.58	1.188	30.18	1-1/16	26.97	1-3/8	34.93	1 -20
20	1-1/4-18	1/8	3.18	1-57/64	47.85	3/4	19.05	1-1/4	31.75	1.312	33.32	1-5/32	29.36	1-1/2	38.10	1-3/16-18
22	1-3/8-18	1/8	3.18	1-63/64	50.24	3/4	19.05	1-3/8	34.93	1.438	36.53	1-1/4	31.75	1-5/8	39.67	1-3/16-18
24	1-1/2-18	1/8	3.18	2-1/4	57.15	13/16	20.62	1-1/2	38.10	1.562	36.67	1-3/8	34.43	1-3/4	44.45	1-7/16-18
28	1-3/4-18	1/8	3.18	2-1/4	57.15	13/16	20.62	1-3/4	44.45	1.812	46.02	1-9/16	39.67	2	50.80	1-7/16-18
32	2 -18	1/8	3.18	2-3/8	60.33	7/8	22.23	2-1/32	51.59	2.062	52.37	1-3/4	44.45	2-1/4	57.15	1-3/4-18
36	2-1/4-16	1/8	3.18	2-3/8	60.33	7/8	22.23	2-1/4	57.15	2.312	58.72	1-15/16	49.20	2-1/2	63.50	2 -18

MS3102A

Connector Size	A Coupling Thread	K Ref.		L Max.		M Ref.		N Ref.		O Ref.		R Ref.		S Ref.	
		Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm
8S	1/2-28	5/64	1.98	55/64	21.82	9/16	14.27	7/16	11.10	.562	14.27	19/32	15.06	7/8	22.23
10S	5/8-24	5/64	1.98	55/64	21.82	9/16	14.27	1/2	12.70	.688	17.48	23/32	18.24	1	25.40
10SL	5/8-24	5/64	1.98	61/64	24.21	35/64	13.87	11/16	17.48	.812	20.62	23/32	18.24	1	25.40
12S	3/4-20	5/64	1.98	31/32	24.61	9/16	14.27	11/16	17.45	.812	20.62	13/16	20.62	1-3/32	27.76
12	3/4-20	5/64	1.98	1-21/64	33.73	3/4	19.05	11/16	17.45	.812	20.62	13/16	20.62	1-3/32	27.76
12SL	3/4-20	5/64	1.98	27/32	21.44	35/64	13.87	11/16	17.45	.938	23.83	13/16	20.62	1-3/32	27.76
14S	7/8-20	5/64	1.98	61/64	24.21	9/16	14.27	3/4	19.05	.938	23.83	29/32	23.01	1-3/16	30.15
14	7/8-20	5/64	1.98	1-11/32	34.14	3/4	19.05	3/4	19.05	.938	23.83	29/32	23.01	1-3/16	30.15
16S	1 -20	5/64	1.98	61/64	24.21	9/16	14.27	7/8	22.23	1.062	26.97	31/32	24.59	1-9/32	32.54
16	1 -20	1/8	3.18	1-3/8	34.92	3/4	19.05	7/8	22.23	1.062	26.97	31/32	24.59	1-9/32	32.54
18	1-1/8-18	1/8	3.18	1-3/8	34.92	3/4	19.05	1	25.40	1.188	30.18	1-1/16	26.97	1-3/8	34.93
20	1-1/4-18	1/8	3.18	1-3/8	34.92	3/4	19.05	1-1/8	28.58	1.312	33.32	1-5/32	29.36	1-1/2	38.10
22	1-3/8-18	1/8	3.18	1-3/8	34.92	3/4	19.05	1-1/4	31.75	1.438	36.53	1-1/4	31.75	1-5/8	41.28
24	1-1/2-18	1/8	3.18	1-3/8	34.92	13/16	20.62	1-3/8	34.93	1.562	39.67	1-3/8	34.93	1-3/4	44.45
28	1-3/4-18	1/8	3.18	1-3/8	34.92	13/16	20.62	1-5/8	41.28	1.812	46.02	1-9/16	39.67	2	50.80
32	2 -18	1/8	3.18	1-15/32	37.31	7/8	22.23	1-29/32	48.41	2.062	52.37	1-3/4	44.45	2-1/4	57.15
36	2-1/4-16	1/8	3.18	1-15/32	37.31	7/8	22.23	2-1/8	53.98	2.312	58.72	1-15/16	49.20	2-1/2	63.50

(212128)

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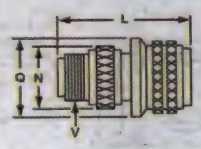
(196564)

97 SERIES SOLDER TYPE PLUGS WITH SOLID SHELLS

Amphenol® Industrial

MS3106A straight plug
Sturdy, simple to assemble. Coupling ring machined from solid aluminum bar stock for high tensile strength. Mates with all types of MS receptacles. Front shell includes polarizing keyway. Back shell is threaded for standard MS/AN fittings.

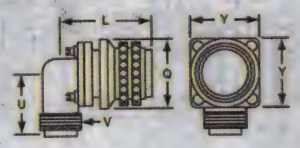


MS3106A

MS3107A quick-disconnect plug
For fast connect/disconnect applications. Front shell has polarizing keyway. Mates with all types of MS receptacles. Back shell is threaded for standard MS/AN fittings

MS3107A

MS3108A angle plug
For use where space in front of panel or wall is at a premium. Swivel ring and plate combination allow cable take off at any angle relative to front shell polarizing key. Back shell is threaded for standard MS/AN fittings.



MS3108A

MS3106A

Connector Size	L Max. Inch	N Ref. Inch	Q Ref. Inch	V Fitting Threads
8S	1-1/4	17/32	3/4	1/2-28
10S	1-5/16	5/8	7/8	1/2-28
10SL	1-3/8	3/4	7/8	5/8-24
12S	1-7/16	25/32	1	5/8-24
12	1-7/8	25/32	1	5/8-24
12SL	1-31/64	7/8	1	3/4-20
14S	1-15/32	7/8	1-1/8	3/4-20
14	1-7/8	7/8	1-1/8	3/4-20
16S	1-15/32	1	1-1/4	7/8-20
16	1-7/8	1	1-1/4	7/8-20
18	1-31/32	1-1/8	1-11/32	1 -20
20	1-7/8	1-1/4	1-15/32	1-3/16-18
22	1-31/32	1-3/8	1-19/32	1-3/16-18
24	2-1/4	1-1/2	1-23/32	1-7/16-18
28	2-1/4	1-3/4	1-31/32	1-7/16-18
32	2-3/8	2-1/32	2-7/32	1-3/4-18
36	2-3/8	2-1/4	2-15/32	2 -18

MS3107A

Connector Size	L Max. Inch	N Ref. Inch	Q Ref. Inch	V Fitting Threads
10S	1-5/16	5/8	7/8	1/2-28
10SL	1-3/8	3/4	7/8	5/8-24
12S	1-7/16	25/32	1	5/8-24
12	1-7/8	25/32	1	5/8-24
14S	1-15/32	7/8	1-1/8	3/4-20
14	1-7/8	7/8	1-1/8	3/4-20
16S	1-15/32	1	1-1/4	7/8-20
16	1-7/8	1	1-1/4	7/8-20
18	1-31/32	1-1/8	1-11/32	1 -20
20	1-7/8	1-1/4	1-15/32	1-3/16-18
22	1-31/32	1-3/8	1-19/32	1-3/16-18
24	2-1/4	1-1/2	1-23/32	1-7/16-18
28	2-1/4	1-3/4	1-31/32	1-7/16-18

MS3108A

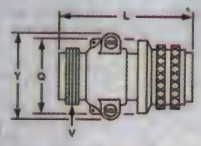
Connector Size	L Max. Inch	N Ref. Inch	Q Ref. Inch	V Fitting Threads	Y Ref. Inch
10S	1-1/4	7/8	7/8	1/2-28	25/32
10SL	1-5/16	7/8	1	5/8-24	1-1/16
12S	1-3/8	1	1	5/8-24	1-1/16
12	1-3/8	1	1	3/4-20	1-1/16
12SL	1-13/64	1	1	5/8-24	1-1/16
14S	1-3/8	1-1/8	1	3/4-20	1-1/16
14	1-13/16	1-1/8	1	3/4-20	1-1/16
16S	1-1/2	1-1/4	1-1/8	7/8-20	1-5/16
16	1-15/16	1-1/4	1-1/8	7/8-20	1-5/16
18	1-15/16	1-11/32	1-1/8	1 -20	1-5/16
20	2-1/16	1-15/32	1-5/16	1-3/16-18	1-5/8
22	2-1/16	1-19/32	1-5/16	1-3/16-18	1-5/8
24	2-15/32	1-23/32	1-1/2	1-7/16-18	2
28	2-15/32	1-31/32	1-1/2	1-7/16-18	2

(212127)

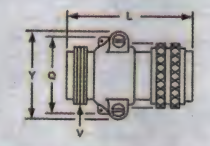
97 SERIES SOLDER TYPE PLUGS WITH SPLIT SHELLS

Amphenol® Industrial

MS3106B straight plug
Used for unusual conduit applications where soldering and inspection is the prime requirement. Back shell is threaded for all standard MS/AN fittings.

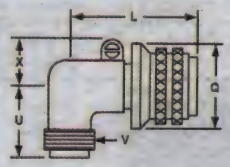


MS3107B quick-disconnect plug
For fast connect/disconnect applications. Front shell has polarizing keyway. Mates with all types of MS receptacles. Back shell is threaded for standard MS/AN fittings

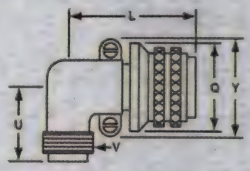


MS3108B angle plug
Lightweight, roomy cavity, split longitudinally for convenient solder or inspection. Front shell is keyed to allow the 90° angle housing to be rotated and locked at any 45° increment.

Sizes 10S thru 14



Sizes 16S thru 40



MS3106B

Connector Size	L Max. Inch	Q Ref. Inch	V Fitting Threads	Y Ref. Inch
14S	1-11/16	1-1/8	3/4-20	1-5/32
16S	1-11/16	1-1/4	7/8-20	1-1/4
18	2-1/16	1-11/32	1 -20	1-41/64
20	2-1/8	1-15/32	1-3/16-18	1-13/16
22	2-1/8	1-19/32	1-3/16-18	1-15/16
24	2-9/32	1-23/32	1-7/16-18	2-1/16
28	2-9/32	1-31/32	1-7/16-18	2-5/16
32	2-5/16	2-7/32	1-3/4-18	2-19/32
36	2-11/32	2-15/32	2 -18	2-27/32

MS3107B

Connector Size	L Max. Inch	Q Ref. Inch	V Fitting Threads	Y Ref. Inch
14S	1-11/16	1-1/8	3/4-20	1-5/32
16S	1-11/16	1-1/4	7/8-20	1-1/4
18	2-1/16	1-11/32	1 -20	1-41/64
20	2-1/8	1-15/32	1-3/16-18	1-13/16
22	2-1/8	1-19/32	1-3/16-18	1-15/16
24	2-9/32	1-23/32	1-7/16-18	2-1/16
28	2-9/32	1-31/32	1-7/16-18	2-5/16

MS3108B

Connector Size	L Ref. Inch	Q Max. Inch	U Ref. Inch	V Fitting Threads	X Ref. Inch
10S	1-3/8	7/8	7/8	1/2-28	...
10SL	1-1/2	7/8	1	5/8-24	...
12S	1-9/16	1	1	5/8-24	1/2
12	1-7/8	1	1	5/8-24	1/2
14S	1-23/32	1-1/8	1-1/16	3/4-20	21/32
14	1-15/16	1-1/8	1-1/16	3/4-20	21/32
16S	1-3/4	1-1/4	1-1/8	7/8-20	1-1/2
16	2-1/8	1-1/4	1-1/8	7/8-20	1-1/2
18	2-5/32	1-11/32	1-3/16	1 -20	1-41/64
20	2-3/8	1-15/32	1-5/16	1-3/16-18	1-13/16
22	2-13/32	1-19/32	1-5/16	1-3/16-18	1-15/16
24	2-5/8	1-23/32	1-7/16	1-7/16-18	2-1/16
28	2-5/8	1-31/32	1-7/16	1-7/16-18	2-5/16
32	2-13/16	2-7/32	1-3/4	1-3/4-18	2-19/32
36	2-27/32	2-15/32	1-15/16	2 -18	2-27/32

(212130)

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(212562)

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(212563)

97 SERIES SOLDER TYPE INSERTS

Amphenol® Industrial

Pin Socket

Meet MIL-C-5015 specifications. Refer to insert arrangement drawings *on page 942. To order assembled* **97 series** *connectors, refer to the complete product listings on pages 947-949*[14132] and [14133] and [14137] and [14131] and [14136] and [14227] and [13926] and [13935] and [13945] and [13946], and [13947].

1 CONTACT

Mfg. Part No.	Shell Size	Insert Arrangement	Contact Size	Contact Gender	Stock No.	Price Each 1-9
97-18-16S	18	18-16	12	Socket	27W8927	11.78
97-18-16P	18	18-16	12	Pin	27W8926	8.34

2 CONTACTS

97-12S-3P	12S	12S-3	16	Pin	77J6565	2.33
97-12S-3S	12S	12S-3	16	Socket	77J6566	2.44
97-14S-9P	14S	14S-9	16	Pin	96F4939	3.68
97-14S-9S	14S	14S-9	16	Socket	96F4940	6.52
97-16S-4S	16S	16S-4	16	Socket	27W8925	5.83
97-16-11P	16	16-11	12	Pin	96F4957	5.85
97-16-11S	16	16-11	12	Socket	27W8924	8.03
97-18-3P	18	18-3	12	Pin	96F4965	11.23
97-18-3S	18	18-3	12	Socket	27W8929	11.76
97-20-23P	20	20-23	8	Pin	96F5023	24.03
97-20-23S	20	20-23	8	Socket	96F5024	29.71
97-22-1P	22	22-1	8	Pin	96F5033	11.72
97-22-8P	22	22-8	12	Pin	96F5041	14.05
97-22-8S	22	22-8	12	Socket	96F5042	32.62
97-32-5S	32	32-5	0	Socket	96F5995	50.82

3 CONTACTS

97-14S-1P	14S	14S-1	16	Pin	96F4927	4.35
97-14S-1S	14S	14S-1	16	Socket	96F4928	4.60
97-14S-7P	14S	14S-7	16	Pin	96F4937	4.35
97-14S-7S	14S	14S-7	16	Socket	96F4938	4.60
97-16-10P	16	16-10	12	Pin	96F4955	11.35
97-16-10S	16	16-10	12	Socket	96F4956	7.93
97-16S-5P	16S	16S-5	16	Pin	96F4945	4.76
97-16S-5S	16S	16S-5	16	Socket	96F4946	5.32
97-18-22P	18	18-22	16	Pin	77J6581	5.21
97-18-22S	18	18-22	16	Socket	96F4990	9.64
97-20-19P	20	20-19	8	Pin	77J6590	12.96
97-20-19S	20	20-19	8	Socket	96F5016	24.42
97-20-3P	20	20-3	12	Pin	96F4993	18.14
97-22-2P	22	22-2	8	Pin	96F5035	14.14
97-22-2S	22	22-2	8	Socket	96F5036	26.82
97-22-9P	22	22-9	12	Pin	96F5043	16.82
97-22-9S	22	22-9	12	Socket	96F5044	30.27
97-28-03P	28	28-3	8	Pin	92C2869	41.75
97-28-3S	28	28-3	8	Socket	96F5115	52.12

4 CONTACTS

97-14S-2P	14S	14S-2	16	Pin	96F4929	4.35
97-14S-2S	14S	14S-2	16	Socket	96F4930	6.52
97-16-9P	16	16-9	2 #12, 2 #16	Pin	96F4953	18.85
97-16-9S	16	16-9	2 #12, 2 #16	Socket	96F4954	24.03
97-18-10P	18	18-10	12	Pin	96F4975	8.69
97-18-10S	18	18-10	12	Socket	96F4976	12.66
97-18-13P	18	18-13	3 #12, 1 #8	Pin	96F4981	27.72
97-18-13S	18	18-13	3 #12, 1 #8	Socket	96F4982	34.95
97-18-4P	18	18-4	16	Pin	96F4967	5.59
97-18-4S	18	18-4	16	Socket	96F4968	6.98
97-20-4P	20	20-4	12	Pin	96F4995	7.23
97-20-4S	20	20-4	12	Socket	96F4996	19.92
97-20-24P	20	20-24	2 #16, 2 #8	Pin	27W8933	41.54
97-22-10P	22	22-10	16	Pin	96F5045	16.82
97-22-10S	22	22-10	16	Socket	96F5046	22.67
97-22-22P	22	22-22	8	Pin	96F5065	19.45
97-22-22S	22	22-22	8	Socket	96F5066	29.34
97-22-4P	22	22-4	2 #12, 2 #8	Pin	96F5037	34.08
97-22-4S	22	22-4	2 #12, 2 #8	Socket	96F5038	43.69
97-24-22P	24	24-22	8	Pin	96F5102	29.90
97-24-22S	24	24-22	8	Socket	96F5103	34.95
97-32-17P	32	32-17	4	Pin	96F6003	88.22
97-32-17S	32	32-17	4	Socket	96F6004	101.11

➤CONTINUED➤

97 SERIES SOLDER TYPE INSERTS (CONT.)

4 CONTACTS

Mfg. Part No.	Shell Size	Insert Arrangement	Contact Size	Contact Gender	Stock No.	Price Each 1-9
97-36-5P	36	36-5	0	Pin	96F6008	164.89
97-36-5S	36	36-5	0	Socket	96F6009	211.60

5 CONTACTS

97-14S-5P	14S	14S-5	16	Pin	96F4933	5.52
97-14S-5S	14S	14S-5	16	Socket	96F4934	6.36
97-16S-8P	16S	16S-8	16	Pin	96F4949	5.46
97-16S-8S	16S	16S-8	16	Socket	96F4950	6.06
97-18-11P	18	18-11	12	Pin	96F4977	8.69
97-18-11S	18	18-11	12	Socket	96F4978	11.67
97-18-20P	18	18-20	16	Pin	96F4987	9.64
97-18-20S	18	18-20	16	Socket	96F4988	11.55
97-20-14P	20	20-14	3 #12, 2 #8	Pin	96F5005	34.82
97-20-14S	20	20-14	3 #12, 2 #8	Socket	77J6588	43.78
97-24-12P	24	24-12	3 #12, 2 #4	Pin	27W8936	56.84

6 CONTACTS

97-14S-6P	14S	14S-6	16	Pin	96F4935	6.36
97-14S-6S	14S	14S-6	16	Socket	96F4936	6.61
97-18-12P	18	18-12	16	Pin	96F4979	7.30
97-18-12S	18	18-12	16	Socket	96F4980	8.69
97-20-17S	20	20-17	5 #12, 1 #16	Socket	96F5012	19.64
97-20-17P	20	20-17	5 #12, 1 #16	Pin	27W8931	11.76
97-20-8S	20	20-8	4 #16, 2 #8	Socket	27W8935	38.53

7 CONTACTS

97-16S-1P	16S	16S-1	16	Pin	05F2060	5.59
97-16S-1S	16S	16S-1	16	Socket	96F4942	7.23
97-18-9P	18	18-9	2 #12, 5 #16	Pin	96F4973	11.90
97-18-9S	18	18-9	2 #12, 5 #16	Socket	27W8930	11.38
97-20-15P	20	20-15	12	Pin	96F5007	9.54
97-20-15S	20	20-15	12	Socket	96F5008	17.05
97-22-28P	22	22-28	12	Pin	96F5073	27.43
97-24-10P	24	24-10	8	Pin	96F5087	69.05
97-24-10S	24	24-10	8	Socket	96F5088	85.52
97-24-27P	24	24-27	16	Pin	96F5106	27.72
97-24-27S	24	24-27	16	Socket	96F5107	30.45
97-24-2P	24	24-2	12	Pin	96F5077	17.35
97-24-2S	24	24-2	12	Socket	96F5078	26.20

8 CONTACTS

97-18-8P	18	18-8	1 #12, 7 #16	Pin	96F4971	11.67
97-18-8S	18	18-8	1 #12, 7 #16	Socket	96F4972	12.66
97-20-7P	20	20-7	16	Pin	96F4999	7.23
97-20-7S	20	20-7	16	Socket	96F5000	10.68
97-22-18P	22	22-18	16	Pin	96F5059	12.78
97-22-18S	22	22-18	16	Socket	96F5060	16.75
97-22-23P	22	22-23	12	Pin	96F5067	18.05
97-22-23S	22	22-23	12	Socket	96F5068	28.69
97-24-6P	24	24-6	12	Pin	96F5081	64.94
97-24-6S	24	24-6	12	Socket	96F5082	82.04

9 CONTACTS

97-20-16P	20	20-16	2 #12, 7 #16	Pin	96F5009	11.67
97-20-16S	20	20-16	2 #12, 7 #16	Socket	96F5010	11.00
97-20-18P	20	20-18	3 #12, 6 #16	Pin	96F5013	14.83
97-20-18S	20	20-18	3 #12, 6 #16	Socket	96F5014	18.55
97-20-21P	20	20-21	1 #12, 8 #16	Pin	96F5019	26.89
97-20-21S	20	20-21	1 #12, 8 #16	Socket	96F5020	30.54
97-22-20P	22	22-20	16	Pin	96F5063	17.35
97-22-20S	22	22-20	16	Socket	96F5064	15.00
97-24-11P	24	24-11	3 #8, 6 #12	Pin	96F5089	43.55
97-24-11S	24	24-11	3 #8, 6 #12	Socket	96F5090	65.61
97-28-1P	28	28-1	3 #8, 6 #12	Pin	96F5110	53.55
97-28-1S	28	28-1	3 #8, 6 #12	Socket	96F5111	67.92

10 CONTACTS

97-18-19P	18	18-19	16	Pin	96F4985	19.48
97-18-19S	18	18-19	16	Socket	96F4986	13.66
97-18-1P	18	18-1	16	Pin	96F4963	9.80
97-18-1S	18	18-1	16	Socket	96F4964	11.18
97-28-19P	28	28-19	4 #12, 6 #16	Pin	96F5138	39.71
97-28-19S	28	28-19	4 #12, 6 #16	Socket	96F5139	59.32

11 CONTACTS

97-20-33P	20	20-33	16	Pin	96F5031	17.28
97-20-33S	20	20-33	16	Socket	96F5032	17.28
97-24-20P	24	24-20	2 #12, 9 #16	Pin	96F5097	22.99
97-24-20S	24	24-20	2 #12, 9 #16	Socket	96F5098	23.68

➤CONTINUED➤

97 SERIES SOLDER TYPE INSERTS (CONT.)

Mfg. Part No.	Shell Size	Insert Arrange-ment	Contact Size	Contact Gender	Stock No.	Price Each 1-9
12 CONTACTS						
97-24-19P	24	24-19	16	Pin	96F5095	74.41
97-24-19S	24	24-19	16	Socket	96F5096	85.61
97-28-18P	28	28-18	16	Pin	96F5136	42.69
97-28-18S	28	28-18	16	Socket	96F5137	35.61
97-28-9P	28	28-9	6 #12, 6 #16	Pin	96F5122	47.01
97-28-9S	28	28-9	6 #12, 6 #16	Socket	96F5123	56.83
13 CONTACTS						
97-20-11P	20	20-11	16	Pin	96F5003	31.58
97-20-11S	20	20-11	16	Socket	96F5004	63.53
14 CONTACTS						
97-20-27P	20	20-27	16	Pin	96F5027	9.20
97-20-27S	20	20-27	16	Socket	96F5028	11.90
97-22-19P	22	22-19	16	Pin	96F5061	15.41
97-22-19S	22	22-19	16	Socket	96F5062	16.17
97-28-20P	28	28-20	10 #12, 4 #16	Pin	96F5140	43.22
97-28-20S	28	28-20	10 #12, 4 #16	Socket	96F5141	43.82
97-28-2P	28	28-2	2 #12, 12 #16	Pin	96F5112	38.88
97-28-2S	28	28-2	2 #12, 12 #16	Socket	96F5113	55.68
15 CONTACTS						
97-28-17P	28	28-17	16	Pin	96F5134	41.42
97-28-17S	28	28-17	16	Socket	96F5135	47.01
16 CONTACTS						
97-24-5P	24	24-5	16	Pin	96F5079	42.76
97-24-5S	24	24-5	16	Socket	96F5080	53.41
97-24-7P	24	24-7	2 #12, 14 #16	Pin	96F5083	38.93
97-24-7S	24	24-7	2 #12, 14 #16	Socket	96F5084	44.77
17 CONTACTS						
97-20-29P	20	20-29	16	Pin	96F5029	13.89
97-20-29S	20	20-29	16	Socket	96F5030	17.47
19 CONTACTS						
97-22-14P	22	22-14	16	Pin	96F5053	13.52
97-22-14S	22	22-14	16	Socket	96F5054	20.61
20 CONTACTS						
97-28-16P	28	28-16	16	Pin	96F5132	30.48
97-28-16S	28	28-16	16	Socket	96F5133	45.35
22 CONTACTS						
97-28-11P	28	28-11	4 #12, 18 #16	Pin	96F5126	42.28
97-28-11S	28	28-11	4 #12, 18 #16	Socket	96F5127	60.48
97-36-1P	36	36-1	4 #12, 18 #16	Pin	77J6700	36.02
97-36-1S	36	36-1	4 #12, 18 #16	Socket	96F6007	74.66
24 CONTACTS						
97-24-28P	24	24-28	16	Pin	96F5108	42.81
97-24-28S	24	24-28	16	Socket	96F5109	52.67
26 CONTACTS						
97-28-12P	28	28-12	16	Pin	96F5128	45.19
97-28-12S	28	28-12	16	Socket	96F5129	60.48
30 CONTACTS						
97-32-8P	32	32-8	16 #12, 24 #16	Pin	96F5999	42.79
97-32-8S	32	32-8	16 #12, 24 #16	Socket	96F6000	44.19
35 CONTACTS						
97-28-15P	28	28-15	16	Pin	96F5130	56.21
97-28-15S	28	28-15	16	Socket	96F5131	71.41
97-32-7P	32	32-7	7 #12, 28 #16	Pin	96F5903	78.13
97-32-7S	32	32-7	7 #12, 28 #16	Socket	05F2072	115.46
97-36-15P	36	36-15	16	Pin	96F5905	73.16
97-36-15S	36	36-15	16	Socket	96F5906	88.38
37 CONTACTS						
97-28-21P	28	28-21	16	Pin	96F5142	29.41
97-28-21S	28	28-21	16	Socket	96F5143	36.64
48 CONTACTS						
97-36-10P	36	36-10	16	Pin	96F6017	77.64
97-36-10S	36	36-10	16	Socket	05F2077	89.70
52 CONTACTS						
97-32-414P	32	32-414	16	Pin	05F2074	136.09
97-32-414S	32	32-414	16	Socket	96F6005	202.20
97-36-403P	36	36-403	16	Pin	96F6019	113.79
97-36-403S	36	36-403	16	Socket	96F6020	217.68

(72952)

MIL-C-5015/97 SERIES 3102A BOX MOUNTING RECEPTACLES

RoHS Compliant Available

Amphenol® Industrial

One-piece aluminum die-cast shell. Integral polarizing key on front shell. Meet MIL-C-5015 specifications. *Refer to additional ordering information, drawings, and dimensions on pages 941-942. Cable clamps and other accessories available on pages 949-950.*

Mfg. Part No.	Shell Size	Insert Arrangement	Contacts	Contact Gender	Stock No.	Price Each 1-24
97-3102A-10SL-4P	10SL	10SL-4	2	Pin	39F3093	16.38
97-3102A-10SL-3P	10SL	10SL-3	3	Pin	39F3092	16.17
● 97-3102A-10SL-3P(621)*	10SL	10SL-3	3	Pin	22H8660	29.64
97-3102A-12S-3P	12S	12S-3	2	Pin	93F1213	9.68
97-3102A-12S-3S	12S	12S-3	2	Socket	93F1193	10.42
97-3102A-12SL-844P	12SL	12SL-844	4	Pin	39F3106	18.76
97-3102A14S-9P	14S	14S-9	2	Pin	07J0118	8.55
97-3102A-14S-9S	14S	14S-9	2	Socket	93F1256	11.44
97-3102A-14S-1P	14S	14S-1	3	Pin	93F1194	12.60
97-3102A-14S-1S	14S	14S-1	3	Socket	93F1182	12.71
97-3102A-14S-7P	14S	14S-7	3	Pin	93F1245	12.60
97-3102A-14S-7S	14S	14S-7	3	Socket	93F1212	10.27
97-3102A-14S-2P	14S	14S-2	4	Pin	93F1187	10.18
97-3102A-14S-2S	14S	14S-2	4	Socket	93F1170	10.83
97-3102A-14S-5P	14S	14S-5	5	Pin	93F1178	11.44
97-3102A-14S-5S	14S	14S-5	5	Socket	93F1167	12.31
97-3102A-14S-6P	14S	14S-6	6	Pin	93F1168	12.31
97-3102A-14S-6S	14S	14S-6	6	Socket	93F1165	12.66
97-3102A-16S-8P	16S	16S-8	5	Pin	93F1196	15.12
97-3102A-16S-8S	16S	16S-8	5	Socket	93F1214	15.66
97-3102A-16S-1P	16S	16S-1	7	Pin	93F1181	15.30
97-3102A-16S-1S	16S	16S-1	7	Socket	93F1173	14.49
97-3102A-16-10S	16	16-10	3	Socket	93F1229	18.45
97-3102A16S-4P	16	16S-4	2	Pin	27W9009	10.17
97-3102A-16S-5P	16S	16S-5	3	Pin	89C0482	9.94
97-3102A-16-11P	16	16-11	2	Pin	04M8189	10.38
97-3102A-18-3S	18	18-3	2	Socket	27W9005	16.14
97-3102A18-5S	18	18-5	3	Socket	27W9013	9.47
97-3102A-18-22S	18	18-22	3	Socket	92F5573	14.46
97-3102A-18-4P	18	18-4	4	Pin	93F1197	17.12
97-3102A-18-4S	18	18-4	4	Socket	92F5587	14.12
97-3102A-18-10P	18	18-10	4	Pin	93F1185	19.28
97-3102A-18-11P	18	18-11	5	Pin	92F5617	15.99
97-3102A-18-11S	18	18-11	5	Socket	92F5592	16.99
97-3102A18-20P	18	18-20	5	Pin	27W9011	13.53
97-3102A-18-20S	18	18-20	5	Socket	27W9004	14.50
97-3102A-18-12P	18	18-12	6	Pin	93F1228	29.96
97-3102A-18-12S	18	18-12	6	Socket	93F1250	19.28
97-3102A-18-9P	18	18-9	7	Pin	23H8191	19.21
97-3102A-18-8S	18	18-8	8	Socket	93F1239	25.79
97-3102A-18-19P	18	18-19	10	Pin	92F5618	23.66
97-3102A-18-19S	18	18-19	10	Socket	93F1226	23.55
97-3102A-18-1P	18	18-1	10	Pin	93F1198	16.84
97-3102A-18-1S	18	18-1	10	Socket	93F1191	18.63
97-3102A20-23S	20	20-23	2	Socket	97J4942	39.58
97-3102A-20-19S	20	20-19	3	Socket	49M0499	28.22
97-3102A-20-3P	20	20-3	3	Pin	22C8519	20.46
97-3102A-20-3S	20	20-3	3	Socket	27W9007	36.82
97-3102A20-4P	20	20-4	4	Pin	07J0126	12.88
97-3102A-20-4S	20	20-4	4	Socket	92F5603	27.52
97-3102A20-17P	20	20-17	6	Pin	27W9015	16.23
97-3102A-20-15S	20	20-15	7	Socket	92F5608	25.87
97-3102A-20-7P	20	20-7	8	Pin	93F1270	21.39
97-3102A-20-7S	20	20-7	8	Socket	93F1222	36.95
97-3102A-20-16P	20	20-16	9	Pin	93F1189	17.88
97-3102A20-18P	20	20-18	9	Pin	27W9017	19.69
97-3102A-20-18S	20	20-18	9	Socket	73C6552	22.43
97-3102A20-33P	20	20-33	11	Pin	27W9020	17.70
97-3102A-20-33S	20	20-33	11	Socket	92F5549	23.05
97-3102A20-11P	20	20-11	13	Pin	27W9014	28.70
97-3102A-20-11S	20	20-11	13	Socket	83H8085	68.27
97-3102A-20-27P	20	20-27	14	Pin	93F1172	26.37
97-3102A-20-27S	20	20-27	14	Socket	93F1186	26.64
97-3102A-20-29P	20	20-29	17	Pin	93F1171	29.53
97-3102A-20-29S	20	20-29	17	Socket	93F1247	29.81

➤CONTINUED➤

MIL-C-5015/97 SERIES 3102A BOX MOUNTING RECEPTACLES (CONT.)

Mfg. Part No.	Shell Size	Insert Arrangement	Contacts	Contact Gender	Stock No.	Price Each 1-24
97-3102A22-1S	22	22-1	2	Socket	27W9021	21.37
97-3102A-22-8P	22	22-8	2	Pin	12M6115	20.08
97-3102A22-2P	22	22-2	3	Pin	79K3847	17.45
97-3102A-22-9P	22	22-9	3	Pin	23H8896	32.29
97-3102A-22-9S	22	22-9	3	Socket	23H8905	58.89
97-3102A22-10P	22	22-10	4	Pin	27W9022	20.99
97-3102A-22-10S	22	22-10	4	Socket	92F5533	30.40
97-3102A22-22P	22	22-22	4	Pin	07J0128	21.91
97-3102A-22-22S	22	22-22	4	Socket	93F1261	34.79
97-3102A-22-18P	22	22-18	8	Pin	81H4174	17.26
97-3102A-2218-S	22	22-18	8	Socket	07C0975	21.11
97-3102A22-23P	22	22-23	8	Pin	07J0129	20.78
97-3102A-22-23S	22	22-23	8	Socket	92F5614	34.01
97-3102A22-20P	22	22-20	9	Pin	07J0127	21.69
97-3102A-22-20S	22	22-20	9	Socket	92F5600	21.20
97-3102A-22-19P	22	22-19	14	Pin	92F5528	21.20
97-3102A-22-19S	22	22-19	14	Socket	93F1263	32.34
97-3102A-22-14P	22	22-14	19	Pin	93F1230	32.34
97-3102A-22-14S	22	22-14	19	Socket	93F1216	28.09
97-3102A24-9S	24	24-9	2	Socket	27W9031	48.55
97-3102A-24-22P	24	24-22	4	Pin	93F1253	38.88
97-3102A24-27S	24	24-27	7	Socket	27W9028	34.43
97-3102A24-2P	24	24-2	7	Pin	27W9024	22.32
97-3102A-24-2S	24	24-2	7	Socket	18K4922	35.87
97-3102A-24-10P	24	24-10	7	Pin	92F5540	77.74
97-3102A-24-10S	24	24-10	7	Socket	92F5564	94.68
97-3102A24-6P	24	24-6	8	Pin	27W9029	74.27
97-3102A24-6S	24	24-6	8	Socket	71J0546	41.84
97-3102A24-11P	24	24-11	9	Pin	27W9023	47.51
97-3102A24-11S	24	24-11	9	Socket	26P0985	74.98
97-3102A24-20S	24	24-20	11	Socket	27W9026	28.12
97-3102A-24-19P	24	24-19	12	Pin	92F5552	83.11
97-3102A-24-19S	24	24-19	12	Socket	92F5594	94.79
97-3102A-24-5P	24	24-5	16	Pin	92F5602	50.71
97-3102A-24-5S	24	24-5	16	Socket	93F1224	84.16
97-3102A-24-7P	24	24-7	16	Pin	93F1211	75.98
97-3102A-24-7S	24	24-7	16	Socket	92F5558	52.79
97-3102A-24-28P	24	24-28	24	Pin	93F1233	72.86
97-3102A-24-28S	24	24-28	24	Socket	93F1234	145.36
97-3102A28-1P	28	28-1	9	Pin	27W9032	62.36
97-3102A28-1S	28	28-1	9	Socket	27W9033	79.60
97-3102A28-19S	28	28-19	10	Socket	27W9034	64.24
97-3102A-28-9P	28	28-9	12	Pin	93C9695	54.54
97-3102A-28-09S	28	28-9	12	Socket	97B4566	64.42
97-3102A28-18P	28	28-18	12	Pin	07J0130	47.11
97-3102A-28-18S	28	28-18	12	Socket	92F5610	53.92
97-3102A-28-2P	28	28-2	14	Pin	92C3363	46.83
97-3102A28-2S	28	28-2	14	Socket	07J0131	58.65
97-3102A-28-20P	28	28-20	14	Pin	92F5554	54.38
97-3102A-28-20S	28	28-20	14	Socket	92F5544	64.05
97-3102A-28-16P	28	28-16	20	Pin	93F1240	55.99
97-3102A-28-16S	28	28-16	20	Socket	93F1243	96.00
97-3102A-28-11P	28	28-11	22	Pin	92F5634	90.75
97-3102A-28-11S	28	28-11	22	Socket	92F5619	72.02
97-3102A-28-12P	28	28-12	26	Pin	92F5593	56.42
97-3102A-28-12S	28	28-12	26	Socket	93F1264	141.34
97-3102A-28-15P	28	28-15	35	Pin	92F5607	67.72
97-3102A-28-15S	28	28-15	35	Socket	93F1272	107.77
97-3102A-28-21P	28	28-21	37	Pin	92F5606	38.86
97-3102A-28-21S	28	28-21	37	Socket	92F5596	45.69
97-3102A-32-414S	32	32-414	52	Socket	94B9800	192.77
97-3102A-32-8S	32	32-8	30	Socket	92C1733	58.57
97-3102A-36-15P	36	36-15	35	Pin	25H7676	88.46
97-3102A36-15S	36	36-15	35	Socket	27W9036	107.39
97-3102A-36-10P	36	36-10	48	Pin	92F5553	97.31
97-3102A-36-10S	36	36-10	48	Socket	92F5526	109.65

***621 suffix** in mfg. part no. denotes black zinc alloy shell finish only
(13942)

MIL-C-5015/97 SERIES 3106A SOLID-SHELL STRAIGHT PLUGS

Amphenol® Industrial

Meet MIL-C-5015 specifications. *Refer to additional ordering information, drawings, and dimensions on pages 941-942. Cable clamps and other accessories available on pages 949-950.*

Mfg. Part No.	Shell Size	Insert Arrangement	Contacts	Contact Gender	Stock No.	Price Each 1-24
97-3106A-10SL-4S	10SL	10SL-4	2	Socket	39F3095	20.53
97-3106A-10SL-4S(004)†	10SL	10SL-4	2	Socket	22H8804	24.60
97-3106A-10SL-3S(639)*	10SL	10SL-3	3	Socket	39F3104	27.29
97-3106A-10SL-3S	10SL	10SL-3	3	Socket	39F3094	10.84
97-3106A-10SL-3S(639)*	10SL	10SL-3	3	Socket	39F3104	27.29
97-3106A-12S-3P	12S	12S-3	2	Pin	93F1184	11.91
97-3106A-12S-3S	12S	12S-3	2	Socket	93F1225	15.79
97-3106A-12SL-844S	12SL	12SL-844	4	Socket	39F3107	31.50
97-3106A-14S-9P	14S	14S-9	2	Pin	93F1248	16.29
97-3106A-14S-9S	14S	14S-9	2	Socket	93F1218	18.44
97-3106A-14S-1P	14S	14S-1	3	Pin	93F1179	13.73
97-3106A-14S-1P(639)*	14S	14S-1	3	Pin	24H1616	15.60
97-3106A-14S-1S	14S	14S-1	3	Socket	93F1200	17.41
97-3106A-14S-7P	14S	14S-7	3	Pin	93F1207	13.73
97-3106A-14S-7S	14S	14S-7	3	Socket	93F1217	17.41
97-3106A-14S-2P	14S	14S-2	4	Pin	93F1160	12.36
97-3106A-14S-2P(639)*	14S	14S-2	4	Pin	93F1269	15.50
97-3106A-14S-2S	14S	14S-2	4	Socket	93F1166	14.77
97-3106A-14S-5P	14S	14S-5	5	Pin	93F1163	15.27
97-3106A-14S-5S	14S	14S-5	5	Socket	93F1169	15.87
97-3106A-14S-6P	14S	14S-6	6	Pin	93F1161	15.87
97-3106A-14S-6S	14S	14S-6	6	Socket	93F1159	14.43
97-3106A-14S-6S(621)	14S	14S-6	6	Socket	27W9039	16.53
97-3106A-16S-4P	16S	16S-4	2	Pin	92F5623	16.60
97-3106A-16S-5P	16S	16S-5	3	Pin	93F1259	20.70
97-3106A16S-5S	16S	16S-5	3	Socket	07J0134	13.23
97-3106A-16S-8P	16S	16S-8	5	Pin	93F1183	19.03
97-3106A-16S-8S	16S	16S-8	5	Socket	93F1176	22.35
97-3106A-16S-1P	16S	16S-1	7	Pin	93F1164	15.87
97-3106A-16S-1S	16S	16S-1	7	Socket	93F1175	17.62
97-3106A-16-10P	16	16-10	3	Pin	92F5627	17.86
97-3106A-16-10S	16	16-10	3	Socket	24H1832	28.86
97-3106A16-9P	16	16-9	4	Pin	07J0132	25.76
97-3106A16-9S	16	16-9	4	Socket	27W9044	23.66
97-3106A-18-16S	18	18-16	1	Socket	24H2334	34.94
97-3106A-18-03P	18	18-3	2	Pin	01C6906	18.14
97-3106A-18-3S	18	18-3	2	Socket	71C8178	19.73
97-3106A18-5S	18	18-5	3	Socket	27W9048	19.36
97-3106A-18-22S	18	18-22	3	Socket	74C6856	17.86
97-3106A-18-10P	18	18-10	4	Pin	92F5626	20.04
97-3106A-18-10S	18	18-10	4	Socket	92F5604	23.60
97-3106A-18-11P	18	18-11	5	Pin	93F1227	24.82
97-3106A-18-11S	18	18-11	5	Socket	93F1232	20.81
97-3106A-18-20P	18	18-20	5	Pin	92F5545	21.01
97-3106A18-20S	18	18-20	5	Socket	27W9045	17.71
97-3106A-18-12P	18	18-12	6	Pin	93F1221	23.38
97-3106A-18-12S	18	18-12	6	Socket	93F1236	24.82
97-3106A18-9P	18	18-9	7	Pin	87P0622	22.00
97-3106A-18-8P	18	18-8	8	Pin	93F1252	34.61
97-3106A-18-19P	18	18-19	10	Pin	93F1204	28.64
97-3106A-18-19S	18	18-19	10	Socket	92F5605	24.53
97-3106A-18-1P	18	18-1	10	Pin	93F1174	20.81
97-3106A18-1P(621)	18	18-1	10	Pin	94B9176	18.66
97-3106A-18-1S	18	18-1	10	Socket	93F1162	20.86
97-3106A-20-23P	20	20-23	2	Pin	94C0535	27.89
97-3106A-20-3P	20	20-3	3	Pin	67C2762	29.50
97-3106A-20-3S	20	20-3	3	Socket	11C1400	38.78
97-3106A20-19S	20	20-19	3	Socket	27W9055	34.71
97-3106A-20-24P	20	20-24	4	Pin	88F1677	47.50
97-3106A20-17P	20	20-17	6	Pin	27W9052	20.71
97-3106A20-17S	20	20-17	6	Socket	27W9053	28.33
97-3106A-20-15P	20	20-15	7	Pin	92F5628	32.94
97-3106A-20-15S	20	20-15	7	Socket	92F5624	37.57
97-3106A-20-7S	20	20-7	8	Socket	20C8731	23.13
97-3106A-20-16P	20	20-16	9	Pin	92F5531	28.79
97-3106A-20-16S	20	20-16	9	Socket	92F5529	30.13

➤ CONTINUED ➤

MIL-C-5015/97 SERIES
3106A SOLID-SHELL STRAIGHT PLUGS (CONT.)

Mfg. Part No.	Shell Size	Insert Arrangement	Contacts	Contact Gender	Stock No.	Price Each 1-24
97-3106A-20-18P	20	20-18	9	Pin	92F5559	31.59
97-3106A-20-18S	20	20-18	9	Socket	92F5580	34.75
97-3106A20-21S	20	20-21	9	Socket	27W9057	39.90
97-3106A-20-33P	20	20-33	11	Pin	92F5622	33.88
97-3106A-20-33S	20	20-33	11	Socket	92F5633	22.35
97-3106A-20-27P	20	20-27	14	Pin	93F1180	27.53
97-3106A-20-27S	20	20-27	14	Socket	93F1190	29.51
97-3106A-20-29P	20	20-29	17	Pin	93F1258	29.20
97-3106A-20-29P(639)*	20	20-29	17	Pin	24H3000	33.12
97-3106A-20-29S	20	20-29	17	Socket	93F1195	32.39
97-3106A-22-8P	22	22-8	2	Pin	12M6114	27.93
97-3106A-22-8S	22	22-8	2	Socket	93B1959	44.77
97-3106A-22-9P	22	22-9	3	Pin	24H3842	62.48
973106A222S	22	22-2	3	Socket	79K3490	38.99
97-3106A-22-10P	22	22-10	4	Pin	92F5611	33.48
97-3106A22-10S	22	22-10	4	Socket	27W9062	36.30
97-3106A-22-22S	22	22-22	4	Socket	92F5560	43.72
97-3106A-22-34P	22	22-34	5	Pin	24H3716	69.54
97-3106A-22-28S	22	22-28	7	Socket	74C6909	48.04
97-3106A-22-18P	22	22-18	8	Pin	81H4173	24.27
97-3106A-22-18S	22	22-18	8	Socket	81H4175	27.68
97-3106A-22-23P	22	22-23	8	Pin	92F5609	34.64
97-3106A-22-23S	22	22-23	8	Socket	92F5547	43.06
97-3106A-22-20P	22	22-20	9	Pin	92F5584	35.81
97-3106A22-20S	22	22-20	9	Socket	27W9064	27.50
97-3106A-22-19P	22	22-19	14	Pin	92F5598	32.14
97-3106A-22-19S	22	22-19	14	Socket	92F5546	32.12
97-3106A-22-14P	22	22-14	19	Pin	93F1219	37.90
97-3106A-22-14S	22	22-14	19	Socket	93F1235	43.02
97-3106A-24-09P	24	24-9	2	Pin	79C3830	50.99
97-3106A24-22S	24	24-22	4	Socket	88F1090	49.99
97-3106A-24-27P	24	24-27	7	Pin	92F5534	49.57
97-3106A24-27S	24	24-27	7	Socket	27W9069	45.97
97-3106A-24-2P	24	24-2	7	Pin	92F5574	38.57
97-3106A-24-2S	24	24-2	7	Socket	85H1149	43.76
97-3106A-24-10P	24	24-10	7	Pin	92F5550	90.23
97-3106A-24-10S	24	24-10	7	Socket	92F5530	107.19
97-3106A24-6P	24	24-6	8	Pin	27W9070	78.42
97-3106A-24-6S	24	24-6	8	Socket	73J6586	49.15
97-3106A-24-11P	24	24-11	9	Pin	92F5565	64.05
97-3106A-24-11S	24	24-11	9	Socket	05F4067	79.07
97-3106A24-20S	24	24-20	11	Socket	27W9067	47.48
97-3106A-24-19P	24	24-19	12	Pin	92F5589	95.59
97-3106A-24-19S	24	24-19	12	Socket	81C9068	90.45
97-3106A-24-5P	24	24-5	16	Pin	11J3943	51.66
97-3106A-24-5S	24	24-5	16	Socket	92F5620	74.16
97-3106A-24-7S	24	24-7	16	Socket	93F1246	65.26
97-3106A-24-28P	24	24-28	24	Pin	93F1202	75.87
97-3106A-24-28S	24	24-28	24	Socket	92F5586	73.38
97-3106A28-1S	28	28-1	9	Socket	27W9071	83.36
97-3106A28-19S	28	28-19	10	Socket	27W9074	72.43
97-3106A28-9P	28	28-9	12	Pin	27W9078	60.74
97-3106A-28-09S	28	28-9	12	Socket	23C8885	69.66
97-3106A-28-18P	28	28-18	12	Pin	93F1271	89.27
97-3106A-28-18S	28	28-18	12	Socket	92F5576	66.87
97-3106A-28-20P	28	28-20	14	Pin	92F5535	67.31
97-3106A28-2S	28	28-2	14	Socket	27W9076	65.06
97-3106A28-17S	28	28-17	15	Socket	27W9072	61.94
97-3106A-28-16P	28	28-16	20	Pin	93F1268	95.96
97-3106A-28-16S	28	28-16	20	Socket	92F5597	69.52
97-3106A-28-11P	28	28-11	22	Pin	92F5527	66.38
97-3106A-28-11S	28	28-11	22	Socket	92F5636	139.40
97-3106A-28-12P	28	28-12	26	Pin	92F5583	69.37
97-3106A-28-12S	28	28-12	26	Socket	92F5588	85.04
97-3106A-28-15P	28	28-15	35	Pin	93F1265	95.73
97-3106A-28-15S	28	28-15	35	Socket	92F5613	96.32
97-3106A-28-21P	28	28-21	37	Pin	92F5585	52.33
97-3106A-28-21S	28	28-21	37	Socket	92F5629	117.34
97-3106A-32-17S	32	32-17	4	Socket	24H4913	169.24
97-3106A-32-08P	32	32-8	30	Pin	73C5534	73.40
97-3106A-32-08S	32	32-8	30	Socket	73C5530	74.74
97-3106A32-7S	32	32-7	35	Socket	27W9079	133.26
97-3106A-32-414P	32	32-414	52	Pin	92F5536	176.79

➤CONTINUED➤

MIL-C-5015/97 SERIES
3106A SOLID-SHELL STRAIGHT PLUGS (CONT.)

Mfg. Part No.	Shell Size	Insert Arrangement	Contacts	Contact Gender	Stock No.	Price Each 1-24
97-3106A-36-15P	36	36-15	35	Pin	06C1266	105.82
97-3106A36-15S	36	36-15	35	Socket	27W9080	122.90
97-3106A-36-10P	36	36-10	48	Pin	92F5541	121.80
97-3106A-36-10S	36	36-10	48	Socket	92F5571	130.91

***639 suffix** in mfg. part no. denotes bright cadmium shell finish only; **+621 suffix** in mfg. part no. denotes black zinc alloy shell finish only; **†004 suffix** in mfg. part no. denotes high temperature insert capable of up to 379°F
(13944)

97 SERIES WATER RESISTANT CABLE CLAMPS

Amphenol® Industrial

Water Resistant cable clamp assembly includes **AN3057** cable clamp, rubber bushing, washer and **AN3055** adapter. To assure best results, the plug must be ordered with deviation (417), which supplies a W washer on the shoulder of the plug shell. If an environmental type MIL-5015 E, F or R Class is required, consult your local Newark in One sales office.

Mfg. Part No.	Connector Size	Dimensions (in.) Width	Dimensions (in.) Length	Max. Cable O.D. (in.)	Stock No.	Price Each 1-24	Price Each 25-49
97-67-12-4	10SL, 12S, 12	0.781	1.531″	0.219	96F4852	22.45	20.21
97-67-14-4	12SL, 14S, 14	0.906	1.531″	0.219	70B2190	24.73	22.26
97-67-14-6	12SL, 14S, 14	0.906	1.594″	0.344	96F4853	24.22	21.80
97-67-16-6	16S, 16	1.062	1.594″	0.344	96F4855	24.36	21.93
97-67-18-6	18	1.188	1.594″	0.344	96F4859	23.49	21.14
97-67-16-8	16S, 16	1.062	1.594″	0.438	96F4856	24.59	22.13
97-67-18-8	18	1.188	1.594″	0.438	96F4860	25.17	22.65
97-67-22-8	20, 22	1.375	1.594″	0.438	96F4863	25.95	23.35
97-67-18-10	18	1.188	1.594″	0.563	96F4857	25.65	23.08
97-67-22-10	20, 22	1.375	1.594″	0.563	96F4861	26.18	23.56
97-67-28-10	24, 28	1.625	1.531″	0.563	96F4864	28.46	25.61
97-67-22-12	20, 22	1.375	1.656″	0.688	96F4862	29.47	26.52
97-67-28-12	24, 28	1.625	1.656″	0.688	96F4865	38.00	34.20
97-67-28-16	24, 28	1.625	1.781″	0.844	96F4866	31.61	28.45
97-67-32-20	32	1.938	1.969″	1.031	96F5892	106.08	95.47
97-67-36-16	36	2.188	1.969″	0.844	97J5925	95.87	85.28

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97 SERIES MS3055 ADAPTERS

RoHS Compliant Available

Amphenol® Industrial

97-3055 Adapter

97-3055-121 Adapter, Type I

97-3055-120 Adapter, Type II

97-3055 ADAPTERS
Used as reducing or extending bushing

Mfg. Part No.	Fits Shell	Conduit Size (in.)	Thread Size	Stock No.	Price Each 1-24	Price Each 25-49
97-3055-12-4	12S, 12	1/4	5/8-24	96F5939	9.90	9.40
97-3055-14-4	14S, 14	1/4	5/8-24	96F4907	8.26	7.83
97-3055-14-6	14S, 14	3/8	3/4-20	88F2569	10.13	9.61
97-3055-16-6	16S, 16	3/8	7/8-20	99F5000	19.00	15.57
97-3055-16-8	16S, 16	1/2	7/8-20	22H8160	14.41	13.68
97-3055-18-6	18	3/8	3/4-20	98F7323	16.92	16.06
97-3055-18-8	18	1/2	7/8-20	22H8182	15.68	14.88
97-3055-22-8	20, 22	1/2	7/8-20	22H8205	9.80	9.30
97-3055-22-10	20, 22	5/8	1-3/16-18	96F4908	9.80	9.30
97-3055-22-12	24, 28	3/4	1-3/16-18	96F4909	8.39	7.96
97-3055-28-10	24, 28	5/8	1-20	96F4910	12.41	11.78
97-3055-28-12	24, 28	3/4	1-3/16-18	96F4911	13.23	12.56
97-3055-28-16	24, 28	1	1-7/16-18	96F4912	14.25	13.53
97-3055-32-16	32	1	1-3/4-18	22H8235	83.07	78.83
97-3055-36-16	36	1	1-7/16-18	96F4913	83.07	78.83

➤CONTINUED➤

97 SERIES MS3055 ADAPTERS (CONT.)

Mfg. Part No.	Fits Shell	Conduit Size (in.)	Thread Size	Stock No.	Price Each 1-24	Price Each 25-49
Used to terminate pipe threads						

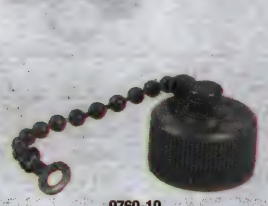
Mfg. Part No.	Fits Shell	Thread Size - Pipe	Thread Size - Connector	Stock No.	Price Each 1-24	Price Each 25-49
97-3055-120-18002	18	1/2 NPT	1-20	88F1100	75.44	71.60
97-3055-120-22002	20, 22	1/2 NPT	1-3/16-18	24C8160	69.13	65.61
97-3055-120-28002	24, 28	1/2 NPT	1-7/16-18	29C1985	72.05	68.38
97-3055-120-28003	24-28	3/4 NPT	1-7/16-18	86H9364	51.53	48.90
97-3055-121 ADAPTER, TYPE I						
Used to terminate pipe threads						
97-3055-121-18002	18	1/2 NPT	1-20	97H3333	62.30	55.28
97-3055-121-22002	20, 22	1/2 NPT	1-3/16-18	90B2507	35.54	33.73
97-3055-121-28002	24, 28	1/2 NPT	1-7/16-18	23H1243	36.79	34.92
97-3055-121-28003	24-28	3/4 NPT	1-7/16-18	23H1244	55.20	52.38

(80522)

3

97 SERIES/MS CONNECTOR CAP AND CHAIN ASSEMBLIES

Amphenol® Industrial



9760-10

9760-10P

Fit **97 series/MS** receptacles and plugs. Provide protection against live circuits and keep out dirt and dust. Olive drab cadmium finish with beaded chain for mounting. Caps for receptacles feature internal threads for use with **MS3100A, MS3101A,** and **MS3102A** receptacles, *go online or call.* Caps for plugs have external threads for use on plugs **MS3106** and **MS3108**, *go online or call.*

Mfg. Part No.	Fits Shell	Stock No.	Price Each 1-24	Price Each 25-49
CAPS FOR RECEPTACLES				
9760-10	10S, 10SL	96F5940	4.39	3.98
9760-12	12, 12S, 12SL	96F5942	4.76	4.31
9760-14	14, 14S	96F5895	4.33	3.92
9760-16	16, 16S	96F5944	5.01	4.55
9760-18	18	96F5891	5.64	5.11
9760-20	20	96F4836	8.17	7.41
9760-22	22	96F4838	8.52	7.73
9760-24	24	96F4840	12.17	11.04
9760-28	28	96F4842	11.74	10.65
9760-32	32	96F4844	24.32	22.06
9760-36	36	96F4846	28.26	25.63
CAPS FOR PLUGS				
9760-10P	10S, 10SL	96F5941	6.28	5.70
9760-12P	12, 12S, 12SL	96F5943	16.52	14.98
9760-14P	14, 14S	96F5890	7.92	7.18
9760-16P	16, 16S	96F5885	9.06	8.21
9760-18P	18	96F4833	11.40	10.34
9760-20P	20	96F4837	20.45	18.55
9760-22P	22	96F4839	21.03	19.05
9760-24P	24	96F4841	33.80	30.66
9760-28P	28	96F4843	15.55	14.10
9760-32P	32	96F4845	53.47	48.50
9760-36P	36	96F4847	38.27	34.71

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97 SERIES/AN3057 CABLE CLAMPS

Amphenol® Industrial

For jacketed cable or wires protected by tubing. 1 resilient washer and 2 fiber washers included. NOTE: **suffix 6** in mfg. part no. indicates step-down clamp which accommodates smaller cable.

Mfg. Part No.	Fits Shell	Stock No.	Price Each 1-24	Price Each 25-49
97-3057-3	8S, 10S	96F4901	10.02	9.14
97-3057-4	10SL, 12S	96F4902	7.57	6.90

➤ CONTINUED ➤

97 SERIES/AN3057 CABLE CLAMPS (CONT.)

Mfg. Part No.	Fits Shell	Stock No.	Price Each 1-24	Price Each 25-49
97-3057-6	14, 14S	96F4904	7.72	7.04
97-3057-8	16, 16S	96F4828	9.16	8.35
97-3057-10	18	96F4914	7.79	7.10
97-3057-10-6	18	96F4892	8.50	7.75
97-3057-12	20, 22	96F4893	8.58	7.82
97-3057-12-6	20, 22	96F4894	8.56	7.80
97-3057-16	24, 28	96F4896	8.63	7.86
97-3057-20	32	96F4898	17.59	16.04
97-3057-24	36	96F4899	18.02	16.43

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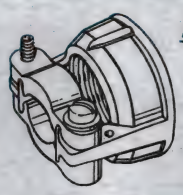
97 SERIES MS3057A CABLE CLAMPS

Amphenol® Industrial



For jacketed cable or wire protected by tubing. Both clamping halves float for maximum strain relief. To order clamp with bushing, add -1 suffix to the mfg. part number. For unjacketed cable or wire, *order* **MS3420** *rubber bushing separately on this page.* Two telescoping bushings supplied with shell sizes 24 and up.

Mfg. Part No.	MIL Spec. Type	Fits Shell Size	Stock No.	Price Each 1-49	Price Each 50-99
97-3057-1004	MS3057-4A	10SL, 12S	96F4915	4.33	4.10
97-3057-1007	MS3057-7A	12SL, 14, 14S	96F4918	4.62	4.38
97-3057-1008	MS3057-8A	16, 16S	96F4870	6.15	5.83
97-3057-1010	MS3057-10A	18	96F4874	5.21	4.93
97-3057-1012	MS3057-12A	20, 22	96F4878	5.21	4.93
97-3057-1016	MS3057-16A	24, 28	96F4882	5.71	5.41
97-3057-1020	MS3057-20A	32	96F4885	11.52	10.91
97-3057-1024	MS3057-24A	36	96F4888	11.52	10.91
CABLE CLAMPS WITH BUSHING					
97-3057-1004-1	MS3057-4A	10SL, 12S	96F4916	6.73	6.38
97-3057-1007-1	MS3057-7A	12SL, 14, 14S	96F4867	6.88	6.52
97-3057-1008-1	MS3057-8A	16, 16S	96F4871	7.21	6.84
97-3057-1010-1	MS3057-10A	18	96F4875	6.13	5.81
97-3057-1012-1	MS3057-12A	20, 22	96F4879	8.55	7.26
97-3057-1016-1	MS3057-16A	24, 28	90F1287	9.60	9.09
97-3057-1020-1	MS3057-20A	32	96F4886	19.86	18.81
97-3057-1024-1	MS3057-24A	36	96F4889	21.24	20.12

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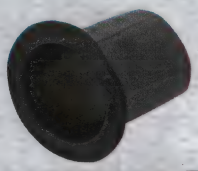
97 SERIES/MS3420 RUBBER BUSHINGS

Amphenol® Industrial



MS3420 rubber bushings are designed for use with **MS3057A** cable clamps, *order separately on this page.* Provide protection for unjacketed wire and cable and act as reducing bushing.

Mfg. Part No.	MIL Spec. Type	Fits Shell Size	Cable O.D. (in.)	Stock No.	Price Each 1-9	Price Each 10-24
97-79-513-3	MS3420-3	10SL	0.130	96F5893	0.91	0.84
97-79-513-4	MS3420-4	12S	0.220	96F5888	1.03	0.95
97-79-513-6	MS3420-6	12SL, 14S	0.312	96F5887	1.06	0.97
97-79-513-8	MS3420-8	16, 16S	0.437	96F5886	0.91	0.84
97-79-513-10	MS3420-10	18	0.562	96F5894	0.91	0.84
97-79-513-12	MS3420-12	20, 22	0.625	96F5889	1.03	0.95
97-79-513-16	MS3420-16	24, 28	0.750	96F5958	1.34	1.24
97-79-513-20	MS3420-20	32	0.937	96F5911	2.16	1.98
97-79-513-24	MS3420-24	36	1.250	96F5900	2.16	1.98

(8335)

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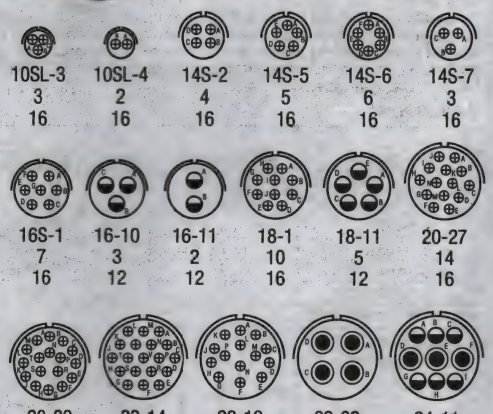
(212564)

MS/STANDARD CYLINDRICAL MIL-C-5015 TYPE CONNECTORS

Amphenol® Industrial



Insert Arrangement	10SL-3	10SL-4	14S-2	14S-5	14S-6	14S-7
Number of Contacts	3	2	4	5	6	3
Contact Size	16	16	16	16	16	16
Insert Arrangement	16S-1	16-10	16-11	18-1	18-11	20-27
Number of Contacts	7	3	2	10	5	14
Contact Size	16	12	12	16	12	16
Insert Arrangement	20-29	22-14	22-19	22-22	24-11	
Number of Contacts	17	19	14	4	3 6	
Contact Size	16	16	16	8	8 12	

Insert Arrangements

- Medium to Heavyweight Cylindrical
- Durable, Field-Proven Design
- Resilient Inserts
- Solder Contacts, Sizes 16-0 Accepting 22-0 AWG
- Operating Voltage: 3000VAC (RMS) Max. at Sea Level

MS/Standard connectors meet the latest performance requirements of MIL-C-5015. Feature threaded couplings and single key/keyway shell polarization, representing maximum simplicity in design. Applications include military ground support equipment, ordnance and shipboard installations. **NOTE:** The MS/Standard connectors are available in 4 Certified Service Classes: "A" Class is a solid shell version for general, nonenvironmental applications; "E/F" Class is an environmental resisting version with strain relief and designed for applications where the connector will be exposed to moisture, vibration and rapid changes in pressure and temperature; and "R" Class is a lightweight environmental resisting version that is shorter in length and lighter in weight than the E/F classes, offering a high degree of reliability under adverse conditions making it recommended for new design applications.

MS3101A SERIES STRAIGHT PLUGS

Mfg. Part No.	Contacts	Insert Arrangements	Stock No.	Price Each 1-24
MS3101A10SL-3P	3	10SL-3	76J0230	32.15
MS3101A10SL-4P	2	10SL-4	76J0231	30.61

MS3106A SERIES STRAIGHT PLUGS

Mfg. Part No.	Contacts	Insert Arrangements	Stock No.	Price Each 1-24
MS3106A10SL-3S	3	10SL-3	93B3279	17.90
MS3106A12S-3S	2	12S-3	09J9070	13.32
MS3106A14S-2P	4	14S-2	03J5439	15.60
MS3106A14S-2S	4	14S-2	54H0145	11.95
MS3106A14S-5S	5	14S-5	54H0147	15.62
MS3106A14S-5P	5	14S-5	54H0146	13.17
MS3106A14S-6S	6	14S-6	54H0148	11.93
MS3106A14S-6P	6	14S-6	03J5440	15.02
MS3106A14S-7P	3	14S-7	11J3357	12.58
MS3106A16S-1P	7	16S-1	03J5441	17.49
MS3106A16S-1S	7	16S-1	54H0150	15.85
MS3106A16S-8P	5	16S-8	09J9072	16.30
MS3106A16-10S	3	16-10	54H0149	18.90
MS3106A18-1S	10	18-1	54H0151	19.51
MS3106A18-1P	10	18-1	03J5442	19.22
MS3106A20-29S	17	20-19	09J9073	24.90
MS3106A22-14P	19	22-14	09J9074	29.44

MS3106E/F SERIES STRAIGHT PLUGS

Mfg. Part No.	Contacts	Insert Arrangements	Stock No.	Price Each 1-24
MS3106E10SL-3S	3	10SL-3	34H5316	19.41
MS3106E10SL-4S	2	10SL-4	34H5317	19.05
MS3106E14S-2S	4	14S-2	34H5320	21.59
MS3106E14S-6S	6	14S-6	34H5322	19.26
MS3106E16S-1P	7	16S-1	34H5324	19.07
MS3106E18-11S	5	18-11	03J5449	29.11
MS3106F10SL-3S	3	10SL-3	85C4063	19.58

➤CONTINUED➤

MS/STANDARD CYLINDRICAL MIL-C-5015 TYPE CONNECTORS (CONT.)

Mfg. Part No.	Contacts	Insert Arrangements	Stock No.	Price Each 1-24
MS3106F10SL-4S	2	10SL-4	85C4064	18.07
MS3106F14S-2P	4	14S-2	85C4045	17.30
MS3106F14S-2S	4	14S-2	85C4046	18.23
MS3106F14S-5P	5	14S-5	85C4047	19.39
MS3106F14S-5S	5	14S-5	85C4048	20.54
MS3106F14S-6P	6	14S-6	85C4049	20.24
MS3106F14S-6S	6	14S-6	85C4050	19.75
MS3106F14S-7P	3	14S-7	85C4051	18.68
MS3106F14S-7S	3	14S-7	85C4052	22.01
MS3106F16S-1P	7	16S-1	85C4055	24.63
MS3106F16S-1S	7	16S-1	85C4056	28.14
MS3106F16-10P	3	16-10	85C4053	26.88
MS3106F16-10S	3	16-10	85C4054	27.89
MS3106F18-1P	10	18-1	85C4057	24.97
MS3106F18-1S	10	18-1	85C4058	25.78
MS3106F20-27P	14	20-27	85C4059	26.54
MS3106F20-27S	14	20-27	85C4060	32.87
MS3106F20-29P	17	20-29	85C4061	28.23
MS3106F20-29S	17	20-29	85C4062	35.53

MS3106R SERIES STRAIGHT PLUGS

Mfg. Part No.	Contacts	Insert Arrangements	Stock No.	Price Each 1-24
MS3106R10SL-3S	3	10SL-3	34H5390	18.94
MS3106R-10SL-4S	3	10SL-4	34H5379	19.96
MS3106R-18-1S	10	18-1	34H5388	30.40

MS3102A SERIES WALL MOUNT RECEPTACLES

Mfg. Part No.	Contacts	Insert Arrangements	Stock No.	Price Each 1-24
MS3102A10SL-4P	2	10SL-4	03J5415	4.49
MS3102A10SL-3P	3	10SL-3	03J5414	4.65
MS3102A14S-2S	4	14S-2	03J5417	9.99
MS3102A14S-5P	5	14S-5	03J5418	7.80
MS3102A14S-5S	5	14S-5	09J9060	9.23
MS3102A14S-6P	6	14S-6	03J5419	7.16
MS3102A14S-6S	6	14S-6	03J5420	8.61
MS3102A16S-1P	7	16S-1	03J5422	9.48
MS3102A16S-1S	7	16S-1	03J5423	12.95
MS3102A18-10P	4	18-10	09J9063	13.53
MS3102A18-11P	5	18-11	09J9064	9.35
MS3102A18-1P	10	18-1	03J5424	10.27
MS3102A18-1S	10	18-1	03J5425	14.04
MS3102A18-8P	8	18-8	09J9066	11.89
MS3102A20-27P	14	20-27	88C9485	13.30
MS3102A20-29S	17	20-29	05H9383	19.83

MS3102E SERIES WALL MOUNT RECEPTACLES

Mfg. Part No.	Contacts	Insert Arrangements	Stock No.	Price Each 1-24
MS3102E10SL-3P	3	10SL-3	34H5256	6.69
MS3102E10SL-3S	3	10SL-3	34H5257	7.65
MS3102E10SL-4P	2	10SL-4	34H5247	6.56
MS3102E14S-2P	4	14S-2	34H5261	7.50
MS3102E14S-2S	4	14S-2	08H0294	8.27
MS3102E14S-5P	5	14S-5	34H5262	7.29
MS3102E14S-6P	6	14S-6	34H5263	7.10
MS3102E14S-6S	6	14S-6	54H0142	9.78
MS3102E-14S-7S	3	14S-7	34H5251	7.65
MS3102E16S-1P	7	16S-1	34H5264	9.29
MS3102E-16S-1S	7	16S-1	34H5253	10.85
MS3102E-16-10P	3	16-10	34H5252	8.78
MS3102E-18-1S	10	18-1	34H5254	13.68
MS3102E18-1P	10	18-7	34H5266	10.78
MS3102E18-11P	5	18-11	34H5267	10.85
MS3102E18-12P	6	18-12	03J5428	10.80
MS3102E20-29P	17	20-29	34H5277	16.58
MS3102E20-29S	17	20-29	76J2206	21.50
MS3102E22-14P	19	22-14	34H5281	17.28
MS3102E22-22P	4	22-22	34H5283	16.94

MS3102R SERIES WALL MOUNT RECEPTACLES

Mfg. Part No.	Contacts	Insert Arrangements	Stock No.	Price Each 1-24
MS3102R10SL-3P	3	10SL-3	85C4043	4.91
MS3102R10SL-4P	2	10SL-4	85C4044	6.20

➤CONTINUED➤

CIRCULAR CONNECTORS

MS/STANDARD CYLINDRICAL MIL-C-5015 TYPE CONNECTORS (CONT.)

Mfg. Part No.	Contacts	Insert Arrangements	Stock No.	Price Each 1-24
MS3102R14S-2P	4	14S-2	85C4025	7.67
MS3102R14S-2S	4	14S-2	85C4026	8.23
MS3102R14S-5P	5	14S-5	85C4027	8.40
MS3102R14S-5S	5	14S-5	85C4028	8.42
MS3102R14S-6P	6	14S-6	85C4029	8.59
MS3102R14S-6S	6	14S-6	85C4030	10.08
MS3102R14S-7P	3	14S-7	85C4031	18.45
MS3102R14S-7S	3	14S-7	85C4032	8.55
MS3102R16-10P	3	16-10	85C4033	9.82
MS3102R16-10S	3	16-10	85C4034	11.38
MS3102R16S-1P	7	16S-1	85C4035	9.84
MS3102R16S-1S	7	16S-1	85C4036	11.44
MS3102R16-11P	2	16-11	34H5294	9.06
MS3102R-18-1P	10	18-1	85C4037	11.91
MS3102R18-1S	10	18-1	85C4038	88.10
MS3102R18-11P	5	18-11	09J9069	13.27
MS3102R20-27P	14	20-27	85C4039	12.70
MS3102R20-27S	14	20-27	85C4040	85.54
MS3102R20-29P	17	20-29	85C4041	16.34
MS3102R20-29S	17	20-29	85C4042	17.49
MS3102R20-29P	17	20-29	85C4041	16.34

(72835)

MS/STANDARD SEALING GASKETS

RoHS Compliant Available

Amphenol® Industrial

Plain flat gasket. Waterproof and pressure sealing features. Flange Mount. Material: Synthetic Rubber. For use with flange mounted receptacles visit Newark

Mfg. Part No.	Shell Size	Stock No.	Price Each 1-24
10-40450-10	10, 10S, 10SL	92B7571	0.68
● 10-40450-12	12, 12S, 12SL	91B5613	0.14
10-040450-014	14, 14S	94B7559	0.20
10-40450-22	22	93B3564	0.53

(80534)

165 SERIES MINIATURE CIRCULAR CONNECTORS

RoHS Compliant Available

Amphenol® Industrial

24 # 20 7.5 Amp | 5 # 20 7.5 Amp | 9 # 20 7.5 Amp | 12 # 20 7.5 Amp | 14 # 16 17 Amp

Miniature connectors are ⅓ the size and weight of standard MIL-C-5015 connectors with the same number of contacts. Quick, positive bayonet coupling. O-ring seals in both plugs and receptacles make connectors pressure proof and water protected when mated and meet MIL-C-5015, Class C pressure specifications. Contacts are copper alloy with gold over nickel plate. Inserts are diallyl phthalate. UL recognized.

Mfg. Part No.	Description	Contacts	Stock No.	Price Each 1-24	25-49
● 165-33	Small Plug	5-#20 Male	38F320	84.28	79.32
● 165-34	Small Plug	5-#20 Female	38F321	70.89	66.72
● 165-35	Small Square Flange Receptacle	5-#20 Male	38F322	59.18	55.70
● 165-36	Small Square Flange Receptacle	5-#20 Female	38F323	73.61	69.28
● 165-13	Small Plug	9-#20 Male	38F304	69.27	65.19
● 165-14	Small Plug	9-#20 Female	38F305	78.31	73.70
● 165-15	Small Square Flange Receptacle	9-#20 Male	38F306	61.10	57.51
● 165-16	Small Square Flange Receptacle	9-#20 Female	38F307	86.90	81.79
● 165-15-1002	Small Cable Receptacle	9-#20 Male	40F010	104.88	98.71
● 165-9	Small Plug	12-#20 Male	38F300	88.76	83.54
● 165-10	Small Plug	12-#20 Female	38F301	106.90	100.61
● 165-11	Small Square Flange Receptacle	12-#20 Male	38F302	78.24	73.64
● 165-12	Small Square Flange Receptacle	12-#20 Female	38F303	99.91	94.04
● 165-29	Large Plug	14-#16 Male	38F316	454.21	427.49
● 165-30	Large Plug	14-#16 Female	38F317	285.76	268.95
● 165-31	Large Square Flange Receptacle	14-#16 Male	38F318	215.28	202.62
● 165-27	Large Square Flange Receptacle	24-#20 Male	38F314	262.24	246.82
● 165-28	Large Square Flange Receptacle	24-#20 Female	38F315	268.69	252.88

(8235)

PRE-EARTH/FMLB CONNECTORS

RoHS Compliant Available

Amphenol® Industrial

- Pre-Earth (Grounded Contact) Design
- First Mate, Last Break Capability
- Class IP67 Protection In Mated Condition
- Conform to European Safety Standards
- Standard Black Zinc Plating
- CE Compliant

DL series Pre-Earth/First Mate Last Break (FMLB) connectors are designed for applications where a protective circuit from the ground contact to the shell is a safety requirement. Offered in straight plug and box mount receptacle styles. Main joint gasket between plug and receptacle shells provides superior moisture sealing. Certified to European safety standards for use in factory automation, machine tool, and process control applications. Meet MIL-C-5015 dimensions and performance where applicable.

Mfg. Part No.	No. of Contacts	Amps	Stock No.	Price Each 1-9	10-24
STRAIGHT PLUGS					
DL3106A10SL-3S	3	13	32C1467	28.61	25.24
DL3106A18-10S	4	23	39C3065	39.36	34.71
DL3106A18-12S	6	13	39C3066	38.58	34.03
● DL3106A20-15S	7	23	39C3067	40.62	35.83
● DL3106A22-22S	4	46	39C3068	48.73	42.99
DL3106A24-10S	7	46	39C3069	80.93	71.38
BOX MOUNT RECEPTACLES					
DL3102A10SL-3P	3	13	32C1456	16.54	14.59
DL3102A18-10P	4	23	32C1457	21.18	18.68
DL3102A20-15P	7	23	32C1459	19.80	17.46
DL3102A22-22P	4	46	32C1460	20.67	18.24
DL3102A24-10P	7	46	32C1461	32.37	28.56

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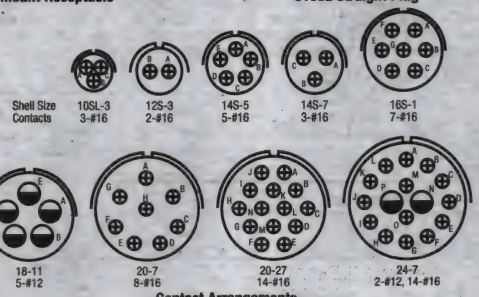
ACA-B SERIES REVERSE BAYONET COUPLING CONNECTORS

Amphenol® Industrial

3102E Box Mount Receptacle | 3106E Straight Plug



Contact Arrangements
Mating Face View of Insert

- Quick positive coupling
- Waterproof
- High shock and vibration capabilities
- No locking required

ACA-B series connectors with reverse bayonet coupling are manufactured in accordance with MIL-C-5015 and VG95234. Designed for commercial and industrial environments requiring a rugged bayonet style connector for heavy duty power and signal applications. Resilient inserts provide high dielectric strength and moisture barrier. Shell: aluminum alloy with cadmium-olive drab finish. Insert: neoprene. Contacts: copper alloy with silver finish. Operating temperature: -55°C to 125°C. Electrical rating: 5A to 500A. Service rating: up to 400VDC. Mating cycles: 500.
ACA3102E-B box mount receptacles are certified "E" Service Class, envrionmental resisting, with grommet seal and strain relief backshell. Receptacle without threads for panel mounting includes four through mounting holes or optional metric holes. **ACA3106E-B** straight plugs are certified "E" Service Class environmental resisting, with grommet seal and strain relief backshell. Plug with cable clamp and telescopic bushing includes grommet and grommet sleeve.

Mfg. Part No.	Shell Size	Contacts	Stock No.	Price Each 1-9	10-24
ACA3102E-B SOLDER PIN CONTACTS					
ACA3102E14S-7PB	14S	3	81H5990	21.58	20.53
ACA3102E14S-5PB	14S	5	81H5982	36.08	34.32
ACA3102E18-11PB	18	5	81H6009	48.48	44.88
ACA3102E16S-1PB	16S	7	81H5998	42.42	39.27
ACA3102E20-7PB	20	8	81H6035	17.38	16.53
ACA3102E20-27PB	20	14	81H6028	63.63	58.91
ACA3102E-B SERIES SOLDER SOCKET CONTACTS					
ACA3102E10SL-3SB	10SL	3	81H5965	33.30	31.68
ACA3102E14S-7SB	14S	3	81H5991	12.21	11.62
ACA3102E14S-5SB	14S	5	81H5984	36.08	34.32
ACA3102E16S-1SB	16S	7	81H6000	38.85	36.96
ACA3102E20-7SB	20	8	81H6036	35.62	32.97

➤CONTINUED➤

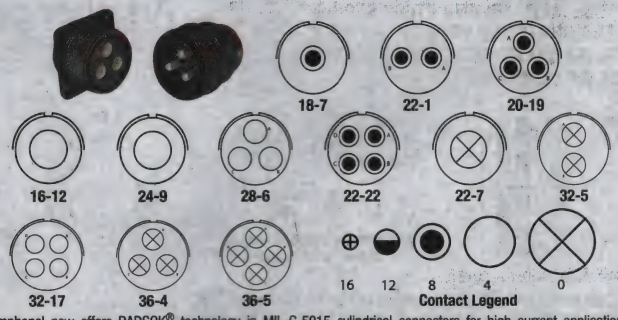
ACA-B SERIES REVERSE BAYONET COUPLING CONNECTORS (CONT.)

Mfg. Part No.	Shell Size	Contacts	Stock No.	Price Each 1-9	Price Each 10-24
ACA3102E-B SERIES SOLDER SOCKET CONTACTS					
ACA3102E20-27SB	20	14	**81H6030**	58.28	55.44
ACA3102E24-7SB	24	16	**81H6053**	40.30	38.34
ACA3106E-B SERIES SOLDER PIN CONTACTS					
ACA3106E14S-5PB	14S	5	**81H6101**	70.77	67.32
ACA3106E14S-7PB	14S	3	**81H6109**	36.10	34.34
ACA3106E16S-1PB	16S	7	**81H6118**	88.80	84.48
ACA3106E20-7PB	20	8	**81H6161**	46.33	44.07
ACA3106E20-27PB	20	14	**81H6150**	99.90	95.04
ACA3106E24-7PB	24	16	**81H6185**	62.50	59.46
ACA3106E-B SERIES SOLDER SOCKET CONTACTS					
ACA3106E14S-7SB	14S	3	**81H6111**	36.93	35.13
ACA3106E14S-5SB	14S	5	**81H6103**	70.77	67.32
ACA3106E18-11SB	18	5	**81H6134**	103.02	95.37
ACA3106E16S-1SB	16S	7	**81H6120**	99.36	92.16
ACA3106E20-7SB	20	8	**81H6162**	37.04	35.24
ACA3106E20-27SB	20	14	**81H6152**	99.90	95.04
ACA3106E-B SERIES AWG CRIMP PIN CONTACTS					
ACA3106E18-11PB(F80)	18	5	**81H6133**	44.00	41.86

(77851)

AMPHE-POWER™ (MIL-C-5015) CONNECTORS WITH RADSOK® TECHNOLOGY

Amphenol® Industrial



Amphenol now offers RADSOK® technology in MIL-C-5015 cylindrical connectors for high current applications. Featuring a flat stamped, hyperbolic twisted contact grid in the socket, a 50% increase in current rating is achieved. See table below. This allows smaller connectors with more power. Amphe-Power 5015 **AC series** are durable, field-proven cylindrical connectors derived from the MIL-C-5015 family and feature a threaded coupling with resilient neoprene inserts and single key/key polarization. Amphe-Power **GT series** are reverse bayonet coupling connectors with an audible, tactile and visual full mating feature. Neoprene inserts and heavy duty, rugged shells. *More information on RADSOK technology available*, go online or call.

Contact Size (AWG)	Standard Current Rating (A)	Amphe-Power Current Rating (A)
8	33	69
4	60	120
0	125	250

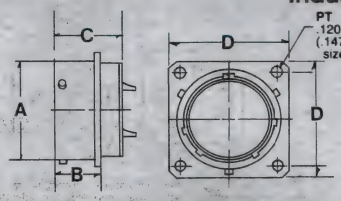
Mfg. Part No.	Shell Size	Insert Arrangement	Contacts	Stock No.	Price Each 1-24
THREADED COUPLING (5015) BOX MOUNT RECEPTACLES					
ACC02E20-19P(025)	20	20-19	3	**46M3781**	27.65
ACC02E22-1P(025)	22	22-1	2	**46M3782**	23.91
ACC02E22-22P(025)	22	22-22	4	**46M3783**	34.58
ACC02E24-9P(025)	24	24-9	2	**46M3785**	24.36
ACC02E28-6P(025)	28	28-6	3	**46M3786**	29.14
ACC02E32-5P(025)	32	32-5	2	**46M3788**	51.42
THREADED COUPLING (5015) STRAIGHT PLUGS					
ACC06E20-19R(025)	20	20-19	3	**46M3793**	49.80
ACC06E22-1R(025)	22	22-1	2	**46M3794**	45.60
ACC06E22-22R(025)	22	22-22	4	**46M3795**	70.20
ACC06E24-9R(025)	24	24-9	2	**46M3797**	65.49
ACC06E28-6R(025)	28	28-6	3	**46M3798**	91.68
ACC06E36-4R(025)	36	36-4	3	**46M3801**	174.00
ACC06E36-5R(025)	36	36-5	4	**46M3802**	199.09
REVERSE BAYONET (GT) BOX MOUNT RECEPTACLES					
GTC03020-19P(025)	20	20-19	3	**46M3805**	48.01
GTC03022-22P(025)	22	22-22	4	**46M3807**	47.82
GTC03036-4P(025)	36	36-4	3	**46M3813**	63.39
REVERSE BAYONET (GT) STRAIGHT PLUGS					
GTC06F20-19S(RDS)(025)	20	20-19	3	**46M3817**	99.14
GTC06F22-22S(RDS)(025)	22	22-22	4	**46M3819**	112.80

(84814)

PT02 SERIES (MS3112) BOX MOUNT RECEPTACLES

Amphenol® Industrial

These environment-resistant miniature receptacles offer the same quality features as **PT00 series** miniature general-duty wall mount receptacles, except these receptacles have box mount design. Meet MIL-C-26482 specifications. *Order general-duty backshells separately. Go online or call.*



Mfg. Part No.	Contacts	Shell Size	Dimensions A	Dimensions B	Dimensions C	Dimensions D	Stock No.	Price Each 1-24
PT02E SERIES — ENVIRONMENTAL-RESISTING MINIATURE RECEPTACLES								
PT02E8-3P	3	8	0.473″	0.493″	0.825″	0.812″	**85C4351**	11.59
PT02E8-3S	3	8	0.473″	0.493″	0.825″	0.812″	**85C4352**	26.46
PT02E8-4P	4	8	0.473″	0.493″	0.825″	0.812″	**95F1727**	12.53
PT02E8-4S	4	8	0.473″	0.493″	0.825″	0.812″	**95F1728**	10.95
PT02E10-6P	6	10	0.590″	0.493″	0.825″	0.938″	**95F1729**	14.92
PT02E10-6S	6	10	0.590″	0.493″	0.825″	0.938″	**95F1730**	16.87
PT02E-10-98S	6	10	0.590″	0.493″	0.825″	0.938″	**35H4700**	11.35
PT02E12-3P	3	12	0.750″	0.493″	0.825″	1.031″	**95F1731**	10.82
PT02E12-3S	3	12	0.750″	0.493″	0.825″	1.031″	**95F1732**	12.14
PT02E12-8P	8	12	0.750″	0.493″	0.825″	1.031″	**54H0163**	15.03
PT02E12-10P	10	12	0.750″	0.493″	0.825″	1.031″	**95F1733**	14.39
PT02E12-10S	10	12	0.750″	0.493″	0.825″	1.031″	**95F1734**	16.12
PT02E14-5P	5	14	0.875″	0.493″	0.825″	1.125″	**95F1735**	19.82
PT02E14-5S	5	14	0.875″	0.493″	0.825″	1.125″	**95F1736**	23.68
PT02E14-12P	12	14	0.875″	0.493″	0.825″	1.125″	**90B2117**	14.33
PT02E14-12S	12	14	0.875″	0.493″	0.825″	1.125″	**54H0164**	26.70
PT02E14-18S	18	14	0.875″	0.493″	0.825″	1.125″	**90B2106**	22.96
PT02E14-19P	19	14	0.875″	0.493″	0.825″	1.125″	**95F1737**	16.95
PT02E-14-19S	19	14	0.875″	0.493″	0.825″	1.125″	**95F1738**	21.77
PT02E16-8P	8	16	1.000″	0.493″	0.825″	1.219″	**95F1739**	25.65
PT02E16-8S	8	16	1.000″	0.493″	0.825″	1.219″	**95F1740**	21.97
PT02E16-26P	26	16	1.000″	0.493″	0.825″	1.219″	**95F1741**	22.30
PT02E16-26S	26	16	1.000″	0.493″	0.825″	1.219″	**95F1742**	33.55
PT02E20-41P	41	20	1.250″	0.650″	1.076″	1.438″	**85C4347**	31.23
PT02E20-41S	41	20	1.250″	0.650″	1.076″	1.438″	**85C4348**	39.90
PT02A SERIES — GENERAL-DUTY MINIATURE RECEPTACLES								
PT02A8-2P	2	8	0.473″	0.493″	0.825″	0.812″	**35H4698**	12.05
PT02A-8-2S	2	8	0.473″	0.493″	0.825″	0.812″	**35H4699**	8.90
PT02A8-3P	3	8	0.473″	0.493″	0.825″	0.812″	**91B8430**	13.49
• PT02A8-4P	4	8	0.473″	0.493″	0.825″	0.812″	**54H0161**	10.25
PT02A8-4S	4	8	0.473″	0.493″	0.825″	0.812″	**54H0162**	11.87
PT02A10-6P	6	10	0.590″	0.493″	0.825″	0.938″	**54H0152**	12.62
PT02A10-6S	6	10	0.590″	0.493″	0.825″	0.938″	**88F2889**	14.37
PT02A-12-3P	3	12	0.750″	0.493″	0.825″	1.031″	**35H4678**	9.66
PT02A-12-10P	10	12	0.750″	0.493″	0.825″	1.031″	**85C4744**	17.46
PT02A12-10S	10	12	0.750″	0.493″	0.825″	1.031″	**97B4228**	17.20
PT02A14-5P	5	14	0.875″	0.493″	0.825″	1.125″	**54H0154**	15.44
PT02A14-5S	5	14	0.875″	0.493″	0.825″	1.125″	**54H0155**	19.52
PT02A14-12P	12	14	0.875″	0.493″	0.825″	1.125″	**54H0499**	12.66
PT02A14-12S	12	14	0.875″	0.493″	0.825″	1.125″	**35H4684**	24.79
PT02A14-15P	15	14	0.875″	0.493″	0.825″	1.125″	**35H4685**	14.57
PT02A14-18P	18	14	0.875″	0.493″	0.825″	1.125″	**35H4687**	29.05
PT02A14-19S	19	14	0.875″	0.493″	0.825″	1.125″	**35H4689**	24.05
PT02A14-19P	19	14	0.875″	0.493″	0.825″	1.125″	**54H0153**	18.95
PT02A16-8P	8	16	1.000″	0.493″	0.825″	1.219″	**54H0156**	16.39
PT02A16-8S	8	16	1.000″	0.493″	0.825″	1.219″	**54H0157**	17.11
PT02A16-26P	26	16	1.000″	0.493″	0.825″	1.219″	**35H4692**	29.42
PT02A20-16P	16	20	1.250″	0.650″	1.076″	1.438″	**54H0158**	34.39
PT02A20-16S	16	20	1.250″	0.650″	1.076″	1.438″	**54H0159**	53.13
PT02A22-55S	55	22	1.375″	0.650″	1.076″	1.562″	**35H4697**	51.86
PT02A22-55P	15	22	1.375″	0.650″	1.076″	1.562″	**54H0160**	49.17

(8206)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

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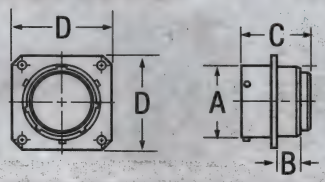
(212568)

CIRCULAR CONNECTORS

PT-SE AND MS/PT-SE (MIL-C-26482) SERIES CRIMP-TYPE BOX MOUNT RECEPTACLES

Amphenol® Industrial



PT-SE and **MS/PT-SE series** crimp-type miniature box mount receptacles provide performance and versatility needed for applications demanding high-reliability and crimp removable contacts. Rear-insertable/front-release crimp contacts are held in position by an MS approved, spring tower retention system. **MS/PT-SE series** is qualified to MIL-C-26482, Series 1 and has all the same design characteristics and quality of the **PT-SE series**. Both series feature corrosion-resistant, electrically conductive cadmium-plated finish with an olive drab chromate after-treatment. Shell components are aluminum. Dependable 5-key/keyway polarization with bayonet lock coupling provides positive mating with no chance of cross-plugging. Spring tension provided by a wave washer in the coupling nut provides maintenance of interfacial seal between mating halves. Both the insert and main joint gasket are molded from resilient neoprene, providing excellent moisture sealing at the gasket and superior electrical isolation of the contact in the insert. Both pins and sockets are machined from a copper alloy and are gold-plated to eliminate contact corrosion and offer an indefinite shelf life. Socket contacts are a closed entry design. Both series feature environmental-resistant, open-wire sealing with nut and grommet for moistureproofing individual wires. **PT-SE** and **MS/PT-SE series** are intermateable and intermountable with all existing miniature cylindrical series connectors, except for the threaded coupling **PC series**; *order separately on page 952.*

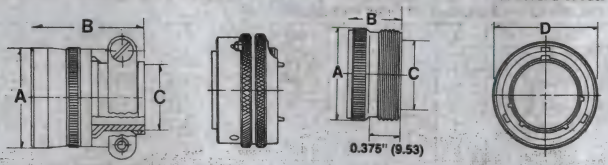
Mfg. Part No.	Contacts	Shell Size	Dimensions A	B	C	D	Stock No.	Price Each 1-9
PT02SE-10-6P	6	10	0.590″	0.312″	1.296″	0.954″	85C4353	32.63
PT02SE-10-6S	6	10	0.590″	0.312″	1.296″	0.954″	85C4354	43.15
PT02SE12-10P	10	12	0.750″	0.312″	1.296″	1.047″	85C4355	33.34
PT02SE12-10S	10	12	0.750″	0.312″	1.296″	1.047″	85C4356	44.11
PT02SE12-3P	3	12	0.750″	0.312″	1.296″	1.047″	85C4357	30.29
PT02SE14-19P	19	14	0.875″	0.312″	1.296″	1.141″	85C4359	38.32
PT02SE16-26P	26	16	1.000″	0.312″	1.296″	1.234″	85C4360	48.51
PT02SE16-26S	26	16	1.000″	0.312″	1.296″	1.234″	85C4361	99.15
PT02SE16-8P	8	16	1.000″	0.312″	1.296″	1.234″	01C8138	59.48
PT02SE16-8S	8	16	1.000″	0.312″	1.296″	1.234″	85C4362	68.02
PT02SE20-16P	16	20	1.250″	0.406″	1.358″	1.453″	54H0169	72.79
PT02SE20-16S	16	20	1.250″	0.406″	1.358″	1.453″	54H0170	89.27

(72833)

PT06A AND PT06W SERIES (MS3116) STRAIGHT PLUGS

RoHS Compliant Available

Amphenol® Industrial



"A" (SR) Plugs

"A" Plugs

These miniature general-duty straight plugs have twice the number of contacts in half the space of a standard connector. Meet MIL-C-26482 specifications. Feature 5-key/keyway polarization with quick positive 3-point bayonet lock coupling system to provide positive mating without cross-plugging. Aluminum shell with corrosion-resistant, electrically conductive cadmium-plated finish with olive drab chromate after-treatment. Pin and socket solder contacts machined from low-loss copper alloy, gold-plated to eliminate corrosion. Socket contacts are closed-entry design. Molded neoprene insert and main joint gasket.

"A" GENERAL-DUTY PLUGS WITHOUT STRAIN RELIEF
Backshell is threaded for conduit attachment of MS3057 cable clamp; *order separately online or call.*

Mfg. Part No.	Contacts	Shell Size	Dimensions A	B	C	D	Stock No.	Price Each 1-24
PT06A8-4P	4	8	0.590″	1.553″	0.297″	0.750″	93F9341	13.44
PT06A-8-4S	4	8	0.590″	1.553″	0.297″	0.750″	35H4741	17.81
PT06A10-6P	6	10	0.717″	1.553″	0.421″	0.859″	93F9343	14.83
PT06A10-6S	6	10	0.717″	1.553″	0.421″	0.859″	93F9344	14.20
PT06A12-3P	3	12	0.834″	1.553″	0.546″	1.031″	93F9345	19.88
PT06A12-3S	3	12	0.834″	1.553″	0.546″	1.031″	92C3689	17.69
PT06A-12-8P	8	12	0.834″	1.553″	0.546″	1.031″	35H4720	21.47
PT06A12-8S	8	12	0.834″	1.553″	0.546″	1.031″	93F9348	24.84
PT06A12-10P	10	12	0.834″	1.553″	0.546″	1.031″	93F9349	17.64
PT06A12-10S	10	12	0.834″	1.553″	0.546″	1.031″	93F9350	23.95
PT06A-14-5P	5	14	0.834″	1.553″	0.546″	1.031″	93F9351	24.24
PT06A14-5S	5	14	0.834″	1.553″	0.546″	1.031″	93F9352	25.40
PT06A14-12P	12	14	0.970″	1.553″	0663″	1.156″	01C1999	21.45
PT06A14-15P	15	14	0.970″	1.553″	0.663″	1.156″	99F6882	22.96
PT06A14-18P	18	14	0.970″	1.553″	0.663″	1.156″	35H4726	22.15
PT06A14-19P	19	14	0.970″	1.553″	0.663″	1.156″	93F9353	22.88
PT06A14-19S	19	14	0.970″	1.553″	0.663″	1.156″	93F9354	27.51
PT06A16-8P	8	16	1.088″	1.553″	0.787″	1.281″	93F9355	25.75
PT06A16-8S	8	16	1.088″	1.553″	0.787″	1.281″	93F9356	30.31
PT06A16-26P	26	16	1.088″	1.553″	0.787″	1.281″	93F9357	28.32
PT06A16-26S	26	16	1.088″	1.553″	0.787″	1.281″	93F9358	46.21

➤CONTINUED➤

PT06A AND PT06W SERIES (MS3116) STRAIGHT PLUGS (CONT.)

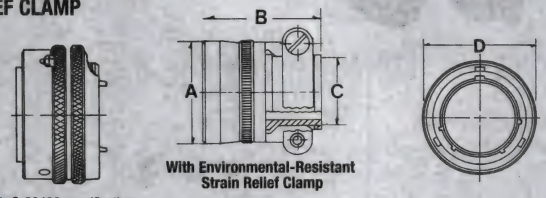
Mfg. Part No.	Contacts	Shell Size	Dimensions A	B	C	D	Stock No.	Price Each 1-24
● PT06A-20-16S	16	20	1.332″	1.553″	1.014″	1.531″	87J9619	49.62
PT06A22-55P	55	22	1.460″	1.656″	1.135″	1.656″	93F9361	62.44
"A" (SR) GENERAL-DUTY PLUGS WITH STRAIN RELIEF Feature strain relief for cable or wire bundle support.								
PT06A8-2S(SR)	2	8	0.550″	1.906″	0.240″	0.750″	35H4738	26.09
PT06A-8-3P(SR)	3	8	0.550″	1.906″	0.240″	0.750″	35H4739	20.12
PT06A8-3S(SR)	3	8	0.550″	1.906″	0.240″	0.750″	13C2693	27.62
PT06A8-4P(SR)	4	8	0.550″	1.906″	0.240″	0.750″	09H1718	24.43
PT06A8-4S(SR)	4	8	0.550″	1.906″	0.240″	0.750″	54H0176	24.72
PT06A10-6P(SR)	6	10	0.675″	1.906″	0.302″	0.859″	35H4716	24.99
PT06A10-6S(SR)	6	10	0.675″	1.906″	0.302″	0.859″	54H0174	30.41
PT06A-12-8P(SR)	8	12	0.803″	1.906″	0.428″	1.013″	25C5580	29.71
PT06A12-3S(SR)	3	12	0.803″	1.906″	0.428″	1.013″	26C2969	26.81
PT06A12-3P(SR)	3	12	0.803″	1.906″	0.428″	1.013″	35H4717	26.46
PT06A-12-4P(SR)	4	12	0.803″	1.906″	0.428″	1.013″	35H4718	31.41
PT06A12-10S(SR)	10	12	0.803″	1.906″	0.428″	1.013″	54H0175	23.08
PT06A12-10P(SR)	10	12	0.803″	1.906″	0.428″	1.013″	90B4295	24.60
● PT06A14-5S(SR)	5	14	0.920″	1.906″	0.552″	1.156″	35H4731	32.92
PT06A-14-12P(SR)	12	14	0.920″	1.906″	0.552″	1.156″	35H4723	25.30
PT06A-14-15P(SR)	15	14	0.920″	1.906″	0.552″	1.156″	35H4725	25.96
● PT06A14-19P(SR)	19	14	0.920″	1.906″	0.552″	1.156″	35H4728	33.93
PT06A-14-19S(SR)	19	14	0.920″	1.906″	0.552″	1.156″	35H4729	40.27

(8207)

PT06E (MS3116) AND PT06P SERIES STRAIGHT PLUGS WITH OR WITHOUT ENVIRONMENT-RESISTANT STRAIN RELIEF CLAMP

RoHS Compliant Available

Amphenol® Industrial



With Environmental-Resistant Strain Relief Clamp

Meet MIL-C-26482 specifications.

PLUGS WITHOUT ENVIRONMENT-RESISTANT STRAIN RELIEF CLAMP
Feature environmental-resisting open wire seal with grommet and nut.

Mfg. Part No.	Contacts	Shell Size	Dimensions A	B	C	D	Stock No.	Price Each 1-4
PT06E8-4S	4	8	0.550″	1.906″	...	0.750″	94C4064	19.28
PT06E-10-6S	6	10	0.675″	1.906″	...	0.859″	35H4744	18.08
PT06E12-10S	10	12	0.813″	1.266″	...	1.013″	77C5139	20.32
PT06E14-18S	18	14	0.930″	1.266″	...	1.156″	25C5795	31.08
PT06E14-19S	19	14	0.930″	1.266″	...	1.156″	35C1189	25.10
PLUGS WITH ENVIRONMENT-RESISTANT STRAIN RELIEF CLAMP								
PT06E8-3P(SR)	3	8	0.550″	1.906″	0.240″	0.750″	85C4377	23.21
PT06E8-3S(SR)	3	8	0.550″	1.906″	0.240″	0.750″	91B8428	29.14
PT06E8-4S(SR)	4	8	0.550″	1.906″	0.240″	0.750″	95F1669	27.70
PT06E12-10S (SR)	4	8	0.550″	1.906″	0.240″	0.750″	50F7849	27.38
PT06E10-6P(SR)	6	10	0.675″	1.906″	0.302″	0.859″	95F1670	21.10
PT06E10-6S(SR)	6	10	0.675″	1.906″	0.302″	0.859″	50F7848	31.60
PT06E12-3P(SR)	3	12	0.803″	1.906″	0.428″	1.031″	95F1671	21.70
PT06E12-3S(SR)	3	12	0.803″	1.906″	0.428″	1.031″	95F1672	22.88
PT06E12-8P(SR)	8	12	0.803″	1.906″	0.428″	1.031″	54H0177	29.10
PT06E12-8S(SR)	8	12	0.803″	1.906″	0.428″	1.031″	54H0178	34.36
PT06E12-10P(SR)	10	12	0.803″	1.906″	0.428″	1.031″	95F1673	23.84
PT06E12-10S (SR)	10	12	0.803″	1.906″	0.428″	1.031″	50F7849	27.38
PT06E14-5P(SR)	5	14	0.920″	1.906″	0.552″	1.156″	95F1674	30.78
PT06E14-5S(SR)	5	14	0.920″	1.906″	0.552″	1.156″	95F1675	30.92
● PT06E-14-5S (476)	5	14	0.920″	1.906″	0.552″	1.156″	09J8984	32.48
PT06E14-12S(SR)	12	14	0.920″	1.906″	0.552″	1.156″	35H4759	26.84
PT06E14-18S(SR)	18	14	0.920″	1.906″	0.552″	1.156″	35H4761	35.35
PT06E14-19P(SR)	19	14	0.920″	1.906″	0.552″	1.156″	95F1676	27.04
PT06E14-19S (SR)	19	14	0.920″	1.906″	0.552″	1.156″	50F7850	31.58
PT06E16-8P(SR)	8	16	1.047″	2.047″	0.615″	1.281″	95F1677	38.92
PT06E16-26P(SR)	26	16	1.047″	2.047″	0.615″	1.281″	95F1679	32.56
PT06E16-26S (SR)	26	16	1.047″	2.047″	0.615″	1.281″	50F7851	38.84
PT06E18-32P(SR)	32	18	1.165″	2.078″	0.740″	1.319″	85C4373	66.08
PT06E20-16P(SR)	16	20	1.290″	2.250″	0.740″	1.531″	54H0179	55.04
PT06E20-16S(SR)	16	20	1.290″	2.250″	0.740″	1.531″	35H4776	58.14

➤CONTINUED➤

PT06E (MS3116) AND PT06P SERIES STRAIGHT PLUGS WITH OR WITHOUT ENVIRONMENT-RESISTANT STRAIN RELIEF CLAMP (CONT.)

PLUGS WITH ENVIRONMENT-RESISTANT STRAIN RELIEF CLAMP

Mfg. Part No.	Contacts	Shell Size	Dimensions A	Dimensions B	Dimensions C	Dimensions D	Stock No.	Price Each 1-4
PT06E22-55P(SR)	55	22	1.418″	2.250″	0.928″	1.656″	85C4376	71.32
PT06E22-55S(SR)	55	22	1.418″	2.250″	0.928″	1.656″	19C1958	87.40

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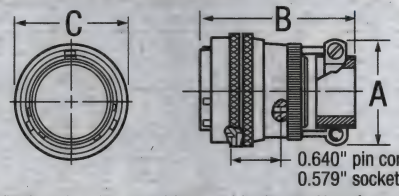
PT-SE, MS/PT-SE (MIL-C-26482) AND PT-SP SERIES CRIMP-TYPE STRAIGHT PLUGS

Amphenol® Industrial



PT-SE and **MS/PT-SE series** crimp-type miniature straight plugs provide performance and versatility needed for applications demanding high reliability and removable crimp contacts. Rear-insertable/front-release crimp contacts are held in position by an MS-approved spring tower retention system. **MS/PT-SE series** is qualified to MIL-C-26482, Series 1 and has all the same design characteristics and quality of the **PT/SE series**. Both series feature a corrosion-resistant, electrically conductive cadmium-plated finish with an olive drab chromate after-treatment. Shell components are aluminum. Dependable 5-key/keyway polarization with bayonet lock coupling provides positive mating with no chance of cross-plugging. Spring tension supplied by a wave washer in the coupling nut provides maintenance of interfacial seal between mating halves. Both the insert and main joint gasket are molded from resilient neoprene providing excellent moisture sealing at the gasket and superior electrical isolation of the contact in the insert. Both pins and sockets are machined from a copper alloy and are gold-plated to eliminate contact corrosion and offer an indefinite shelf life. Socket contacts are a closed-entry design. Both series feature environmental-resistant strain relief clamp and grommet for moistureproofing individual wires while providing added wire bundle support. **PT-SE** and **MS/PT-SE series** are intermateable and intermountable with all existing miniature cylindrical series connectors; *order separately on page 952*, except for the threaded coupling **PC series**.

Mfg. Part No.	Contacts	Shell Size	Dimensions A	Dimensions B	Dimensions C	Stock No.	Price Each 1-24
PT06SE10-6P(SR)	6	10	0.891″	2.413″	0.859″	85C4379	35.26
PT06SE-10-6S (SR)	6	10	0.891″	2.413″	0.859″	85C4380	30.26
PT06SE12-10S(SR)	10	12	1.016″	2.413″	1.031″	85C4382	29.42
PT06SE12-10P(SR)	10	12	1.016″	2.413″	1.031″	85C4381	43.46
PT06SE12-3S(SR)	3	12	1.016″	2.413″	1.031″	85C4384	36.44
PT06SE14-19P(SR)	19	14	1.141″	2.413″	1.156″	85C4385	41.13
PT06SE16-26P(SR)	26	16	1.203″	2.528″	1.281″	85C4386	49.51
PT06SE16-26S(SR)	26	16	1.203″	2.528″	1.281″	85C4387	48.86
PT06SE18-32P(SR)	32	18	1.469″	2.528″	1.391″	85C4389	75.55
PT06SE18-32S(SR)	32	18	1.469″	2.528″	1.391″	85C4390	92.52

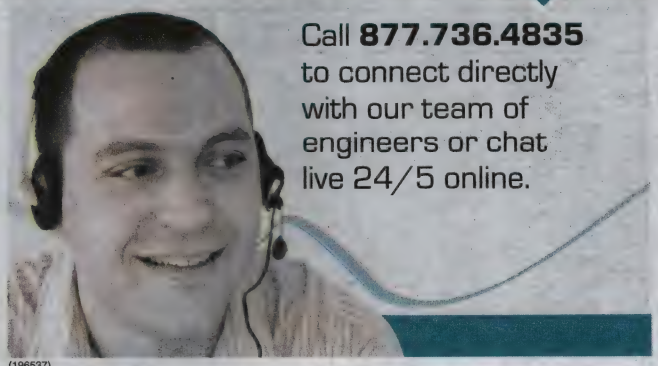
TERMINATION TOOL

Turret heads and other termination tools are available; *go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each
M22520/1-01	Crimp Tool for **PT-SE, SP-SE, PC-SE, MS/PT-SE Series** (MIL-C-26482, Series 1) Connectors	90B3914	639.31

(72834)

TECHNICAL SUPPORT HOTLINE



Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

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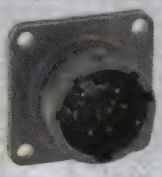
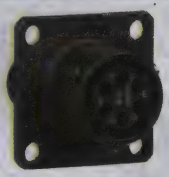
MS/PT PROPRIETARY/MIL-C-26482, SERIES 1 CRIMP TYPE SEALED CONNECTORS

Amphenol® Industrial

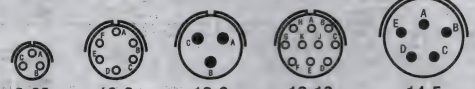


Wall-Mount Receptacle

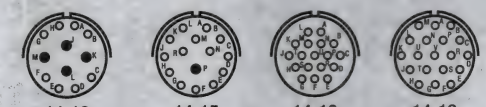


Box-Mount Receptacle

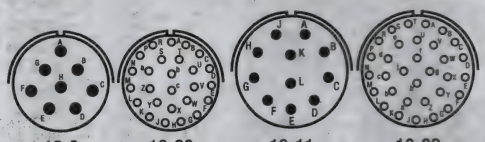
Straight Plug



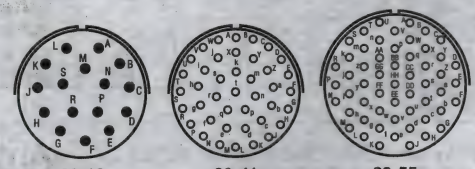
Insert Arrangement	8-33	10-6	12-3	12-10	14-5
No. of Contacts	3	6	3	10	5
Contact Size	20	20	16	20	16



Insert Arrangement	14-12	14-15	14-18	14-19
No. of Contacts	8 4	14 1	18	19
Contact Size	20 16	20 16	20	20



Insert Arrangement	16-8	16-26	18-11	18-32
No. of Contacts	8	26	11	32
Contact Size	16	20	16	20



Insert Arrangement	20-16	20-41	22-55
No. of Contacts	16	41	55
Contact Size	16	20	20

Insert Arrangements

MS/PT-SE Series 1 crimp type, miniature circular connectors are qualified to MIL-C-26482 and have all the same design characteristics and quality of the **PT series**. Feature aluminum shell components and corrosion-resistant, electrically-conductive cadmium plating with olive drab chromate after-treatment. Dependable 5 key/keyway polarization with bayonet lock coupling for postive mating. Spring-tension wave washer in the coupling nut provides maintenance of interfacial seal between mating halves. Molded neoprene insert and main joint gasket provides moisture sealing and electrical isolation of the contact in the insert. Pin and closed-entry socket contacts are machined from copper alloy and gold plated to eliminate corrosion. These crimp contacts are rear insertable/front release and are held in position by an MS approved spring tower retention system.

MS3120F/E SERIES WALL MOUNT RECEPTACLE — CRIMP CONTACTS

Mfg. Part No.	Contacts	Insert Arrangements	Stock No.	Price Each 1-24
MS3120F10-6P	6	10-6	34H5494	38.34
MS3120F10-6S	6	10-6	34H5495	36.80
MS3120F14-19S	19	14-19	34H5498	51.87
MS3120E12-10P	10	12-10	34H5490	39.62

MS3121F SERIES CABLE CONNECTING RECEPTACLE — CRIMP CONTACTS

MS3121F10-6S	6	10-6	34H5501	37.65

MS3122F SERIES BOX MOUNT RECEPTACLES — CRIMP CONTACTS

Mfg. Part No.	Contacts	Insert Arrangements	Stock No.	Price Each 1-24
MS3122E10-6P	6	10-6	85C4109	31.97
MS3122E10-6S	6	10-6	85C4110	38.32
MS3122E12-10P	10	12-10	85C4111	26.68
MS3122E12-10S	10	12-10	85C4112	29.22
MS3122E12-3P	3	12-3	85C4113	31.45
MS3122E12-3S	3	12-3	85C4114	39.32
MS3122E14-5P	5	14-5	34H5510	26.96
MS3122E14-12P	8/#20, 4/#16	14-12	34H5508	32.59
MS3122E14-18P	18	14-18	34H5509	34.19
MS3122E14-19P	19	14-19	85C4115	37.01
MS3122E14-19S	19	14-19	85C4116	36.21
MS3122E16-26P	26	16-26	85C4117	44.06

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MS/PT PROPRIETARY/MIL-C-26482, SERIES 1 CRIMP TYPE SEALED CONNECTORS (CONT.)

Mfg. Part No.	Contacts	Insert Arrangements	Stock No.	Price Each 1-24
MS3122E16-26S	26	16-26	85C4118	43.93
MS3122E16-8P	8	16-8	85C4119	39.14
MS3122E18-32P	32	18-32	85C4121	50.75
MS3122E18-32S	32	18-32	85C4122	83.77
MS3122E20-41P	41	20-41	85C4123	60.87
MS3122E20-41S	41	20-41	85C4124	84.39
MS3122E22-55P	55	22-55	85C4125	70.31
MS3122E22-55S	55	22-55	85C4126	71.45
MS3126F SERIES STRAIGHT PLUGS — CRIMP CONTACTS				
MS3126F10-6P	6	10-6	85C4129	54.32
MS3126F10-6S	6	10-6	85C4130	31.84
MS3126F12-10P	10	12-10	85C4131	36.03
MS3126F12-10S	10	12-10	85C4132	34.65
MS3126F12-3P	3	12-3	85C4133	29.68
MS3126F12-3S	3	12-3	85C4134	38.96
MS3126F14-5S	5	12-5	34H5533	46.08
MS3126F14-12S	8/#20, 4/#16	14-12	34H5528	46.10
MS3126F14-15S	14/#20, 1/#16	14-15	34H5530	52.03
MS3126F-14-18S	18	14-18	34H5531	41.52
MS3126F14-19P	19	14-19	85C4135	46.51
MS3126F14-19S	19	14-19	85C4136	41.54
MS3126F16-26P	26	16-26	85C4137	56.34
MS3126F16-26S	26	16-26	85C4138	54.87
MS3126F16-8P	8	16-8	85C4139	40.17
MS3126F16-8S	8	16-8	85C4140	56.13
MS3126F18-11S	11	18-11	34H5535	72.71
MS3126F18-32P	32	18-32	85C4141	68.91
MS3126F18-32S	32	18-32	85C4142	64.86
MS3126F20-16S	16	20-16	34H5536	87.85
MS3126F20-41P	41	20-41	85C4143	79.76
MS3126F20-41S	41	20-41	85C4144	71.80
MS3126F22-55P	55	22-55	85C4145	78.14
MS3126F22-55S	55	22-55	85C4146	79.24
MS3126F24-61S	61	24-61	34H5538	98.61

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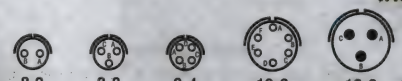
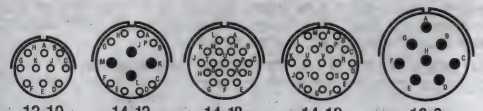
MS/PT PROPRIETARY/MIL-C-26482, SERIES 1 SOLDER TYPE SEALED CONNECTORS

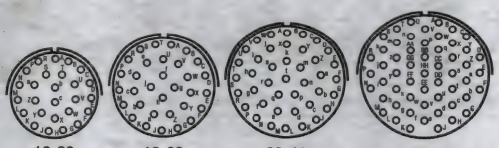
Amphenol® Industrial



Insert Arrangement	8-2	8-3	8-4	10-6	12-3
Number of Contacts	2	3	4	6	3
Contact Size	20	20	20	20	16



Insert Arrangement	12-10	14-12	14-18	14-19	16-8
Number of Contacts	10	8 4	18	19	8
Contact Size	20	20 16	20	20	16



Insert Arrangement	16-26	18-32	20-41	22-55
Number of Contacts	26	32	41	55
Contact Size	20	20	20	20

Insert Arrangements

Solder contact miniature cylindrical connectors meet the most critical application needs. Design versatility combined with high-reliability performance makes these series of miniature cylindrical connectors ideal for environmental sealing or pressurized applications. **MS/PT series** is qualified to MIL-C-26482, Series 1 and has all the outstanding design characteristics and quality of the **PT series** connectors; *order separately on page 953, on page 954 and on pages 954-955.* Features a corrosion-resistant electrically-conductive cadmium plate finish with an olive drab chromate after-treatment. Shell components are aluminum. Dependable 5 key/keyway polarization with bayonet lock coupling provides positive mating with no chance of cross plugging. Spring tension provided by a wave washer in the coupling nut provides maintenance of interfacial seal between mating halves. Both the insert and main joint gasket are molded from resilient neoprene providing excellent moisture sealing at the gasket and superior electrical isolation of the contact in the insert. Both pins and sockets are machined from a copper alloy and are gold-plated to eliminate contact corrosion and offer an indefinite shelf life. Socket contacts are a closed entry design. Intermateable and intermountable with all existing miniature cylindrical series connectors except for the threaded coupling **PC series. NOTE:** The MS/PT miniature

➤ CONTINUED ➤

MS/PT PROPRIETARY/MIL-C-26482, SERIES 1 SOLDER TYPE SEALED CONNECTORS (CONT.)

connectors are available in 2 Certified Service Classes: "E" Class environmental-resistant version supplied with a multiholed grommet and clamping nut for moistureproofing individual open wires, and "F" Class version which is supplied with grommet seal and strain relief clamp.

MS3110F SERIES WALL MOUNT RECEPTACLES — SOLDER CONTACTS
Certified "F" Service Class: environmental-resistant strain relief clamp and grommet for moistureproofing individual wires and providing added wire bundle support.

Mfg. Part No.	Contacts	Insert Arrangments	Stock No.	Price Each 1-24
MS3110F10-6P	6	10-6	34H5418	32.30
MS3110F10-6S	6	10-6	34H5419	33.43

MS3112E SERIES BOX MOUNT RECEPTACLES — SOLDER CONTACTS
Certified "E" Service Class: open-wire sealing, environmental-resisting connectors are supplied with a multihole grommet and clamping nut for moistureproofing individual open wires.

Mfg. Part No.	Contacts	Insert Arrangements	Stock No.	Price Each 1-24
MS3112E8-2P	2	8-2	34H5445	11.09
MS3112E8-3P	3	8-3	85C4083	9.53
MS3112E8-3S	3	8-3	85C4084	12.37
MS3112E8-2S	2	8-2	03J5462	16.01
MS3112E8-4P	4	8-4	85C4085	9.48
MS3112E8-4S	4	8-4	85C4086	15.26
MS3112E10-6P	6	10-6	85C4065	11.30
MS3112E10-6S	6	10-6	85C4066	15.20
MS3112E12-10P	10	12-10	85C4067	12.65
MS3112E12-10S	10	12-10	85C4068	24.16
MS3112E12-3P	3	12-3	85C4069	11.73
MS3112E12-3S	3	12-3	85C4070	14.02
MS3112E14-12P	8/#20, 4/#16	14-12	34H5432	20.27
MS3112E14-18P	18	14-18	34H5435	23.27
MS3112E14-19P	19	14-19	85C4071	18.69
MS3112E14-19S	19	14-19	85C4072	25.34
MS3112E16-26P	26	16-26	85C4073	23.20
MS3112E16-26S	26	16-26	85C4074	43.25
MS3112E16-8P	8	16-8	85C4075	23.29
MS3112E16-8S	8	16-8	85C4076	24.42
MS3112E18-32P	32	18-32	85C4077	37.60
MS3112E18-32S	32	18-32	85C4078	37.88
MS3112E20-41S	41	20-41	85C4080	60.91
MS3112E22-55P	55	22-55	85C4081	40.19
MS3112E22-55S	55	22-55	85C4082	78.67

MS3116E SERIES STRAIGHT PLUGS — SOLDER CONTACTS
Certified "E" Service Class: open-wire sealing, environmental-resisting connectors are supplied with a multihole grommet and clamping nut for moistureproofing individual open wires.

Mfg. Part No.	Contacts	Insert Arrangements	Stock No.	Price Each 1-24
MS3116E8-2S	2	8-2	34H5472	15.52
MS3116E8-3P	3	8-3	34H5473	18.22
MS3116E8-3S	3	8-3	34H5474	19.16
MS3116E8-4P	4	8-4	34H5475	16.25
MS3116E8-4S	4	8-4	34H5476	18.13
MS3116E10-6S	6	10-6	34H5456	21.96
MS3116E12-10S	10	12-10	34H5458	27.27

MS3116F SERIES STRAIGHT PLUGS — SOLDER CONTACTS
Certified "F" Service Class: environmental-resistant strain relief clamp and grommet for moistureproofing individual wires and providing added wire bundle support.

Mfg. Part No.	Contacts	Insert Arrangements	Stock No.	Price Each 1-24
MS3116F8-2S	2	8-2	26H6537	24.34
MS3116F8-3P	3	8-3	85C4105	26.15
MS3116F8-3S	3	8-3	85C4106	22.05
MS3116F8-4P	4	8-4	85C4107	22.22
MS3116F8-4S	4	8-4	85C4108	22.75
MS3116F10-6P	6	10-6	85C4087	26.26
MS3116F10-6S	6	10-6	85C4088	30.09
MS3116F12-10P	10	12-10	85C4089	25.15
MS3116F12-10S	10	12-10	85C4090	25.43
MS3116F12-3P	3	12-3	85C4091	23.59
MS3116F12-3S	3	12-3	85C4092	27.37
MS3116F14-5S	5	14-5	34H5482	30.71
MS3116F14-12P	8/#20, 4/#16	14-12	07H7664	27.91
MS3116F14-12S	8/#20, 4/#16	14-12	34H5478	34.69
MS3116F14-18S	18	14-18	26H1473	44.54
MS3116F14-19P	19	14-19	85C4093	29.94
MS3116F14-19S	19	14-19	85C4094	44.00
MS3116F16-26P	26	16-26	85C4095	40.32
MS3116F16-26S	26	16-26	85C4096	48.00

➤ CONTINUED ➤

MS/PT PROPRIETARY/MIL-C-26482, SERIES 1 SOLDER TYPE SEALED CONNECTORS (CONT.)

Mfg. Part No.	Contacts	Insert Arrangements	Stock No.	Price Each 1-24
MS3116F16-8P	8	16-8	85C4097	33.09
MS3116F16-8S	8	16-8	85C4098	40.09
MS3116F18-32P	32	18-32	85C4099	57.57
MS3116F18-32S	32	18-32	85C4100	64.80
MS3116F20-41P	41	20-41	85C4101	60.39
MS3116F20-41S	41	20-41	85C4102	76.32
MS3116F22-55P	55	22-55	85C4103	85.05
MS3116F22-55S	55	22-55	85C4104	90.38

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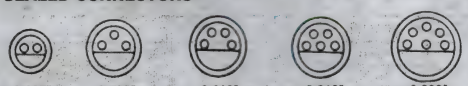
44 SERIES ENVIRONMENTALLY-SEALED CONNECTORS

RoHS Compliant Available

Amphenol
Amphenol-Tuchel Electronics GmbH



0.607" 0.708" 0.819" 0.819" 0.933"

Insert Configurations (Max. Dia. Shown)

Plug

Receptacle

- IP65 Rated (Water-Resistant)
- Dust-Tight, Protected Against Jets From Any Directions

44 series high-performance environmentally-sealed connectors feature a resilient, 1-piece design incorporating crimp Poke-Home® contacts, *ordered separately below*, in six insert configurations. Primary and secondary mating seals and discrete wire seals resist liquids (for 14, 16 and 18 AWG; overall wire insulation diameter: 0.080" to 0.130" [2.03mm to 3.30mm]). Santoprene thermoplastic rubber housing. Ideal for auto/truck, marine, industrial, traffic control, security, and mining ventilation systems. Voltage rating: 250VACrms. Current rating: 8A continuous. Temperature range: –40°C to +125°C. *Order tooling separately below.*

PLUGS

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	10-49	50-99
● 044-103-10002	2	61F1715	2.84	2.60	2.48
● 044-103-10003	3	61F1741	3.45	3.17	3.03
● 044-103-10004	4	61F1726	4.64	4.26	4.05
● 044-103-10005	5	61F1745	4.83	4.38	4.06
● 044-103-10006	6	61F1712	5.01	4.61	4.26

RECEPTACLES

● 044-104-10002-02	2	61F1700	3.56	3.26	3.10
● 044-104-10003-02	3	61F1706	4.19	3.84	3.66
● 044-104-10004-02	4	61F1710	4.36	4.01	3.81
● 044-104-10005-02	5	61F1730	3.63	3.32	3.16
● 044-104-10006-02	6	61F1749	5.06	4.63	4.28

POKE-HOME® CONTACTS — SOLD IN PACKAGES OF 100 AND 1000

Mfg. Part No.	Description	Pkg. of	Stock No.	Price per Pkg. 1-9	10-24	25-49
● 044-100-1414P-100-101	Pin	100	61F1733	58.65	55.85	54.15
● 044-102-1414S-100-101	Socket	100	61F1718	113.21	107.80	104.49
● 44-100-1414P-1000	Pin	1000	38F918	228.62	217.73	211.03

HAND TOOLS

Mfg. Part No.	Description	Stock No.	Price Each
357-588	Full-Cycle Crimp Tool	61F1702	364.35
356-258	Pin/Socket Contact Insertion Tool	61F1703	127.99
356-260	Socket Contact Removal Tool	61F1724	118.07
356-259	Pin Contact Removal Tool	61F1754	119.21

(8349)

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(196546)

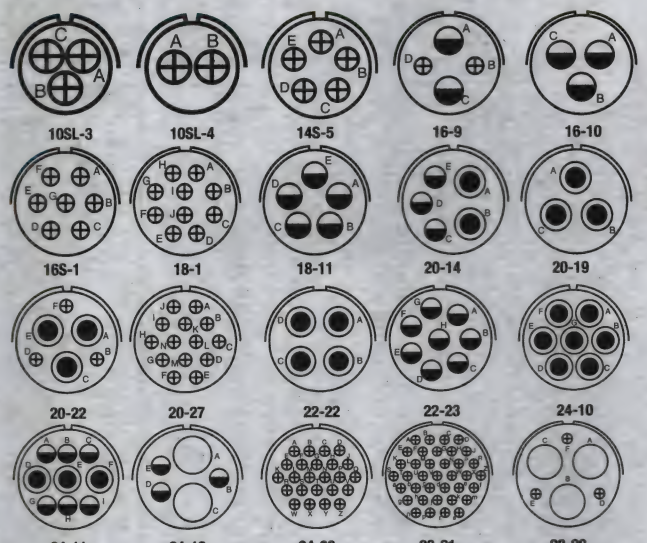
MATRIX MIL-DTL-5015 CIRCULAR CONNECTORS

RoHS Compliant Available

Amphenol
Aerospace

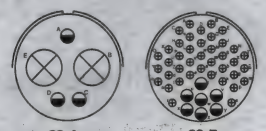
Plug

Receptacle



10SL-3 10SL-4 14S-5 16-9 16-10
16S-1 18-1 18-11 20-14 20-19
20-22 20-27 22-22 22-23 24-10
24-11 24-12 24-28 28-21 28-22

- Olive drab chromate over cadmium over nickel, 175°C/500hr salt spray
- Crimp rear release contacts
- Fluid resistant insert
- 100 mating cycles min.
- Contacts available *on page 967*



32-1 36-7

CABLE MOUNT PLUGS

Mfg. Part No.	Shell Size	Insert Arrangement	Contact Gender	No. of Contacts / Contact Size	Stock No.	Price Each 1-4
MS3456W10SL-3P	10SL	10SL-3	Pin	3#16	29K6372	67.67
● MS3456W10SL-3S	10SL	10SL-3	Socket	3#16	38T2925	39.96
MS3456W10SL-4P	10SL	10SL-4	Pin	2#16	25K8705	67.65
MS3456W10SL-4S	10SL	10SL-4	Socket	2#16	20H0622	56.39
MS3456W14S-5P	14S	14S-5	Pin	5#16	31K4651	95.55
MS3456W14S-5S	14S	14S-5	Socket	5#16	41K8793	61.25
MS3456W16-9P	16	16-9	Pin	2#12, 2#16	48K2917	121.42
MS3456W16-9S	16	16-9	Socket	2#12, 2#16	63K5803	74.22
MS3456W16-10P	16	16-10	Pin	3#12	95C1892	88.42
● MS3456W16-10S	16	16-10	Socket	3#12	38T2934	46.89
MS3456W16S-1P	16S	16S-1	Pin	7#16	76K2781	108.43
MS3456W16S-1S	16S	16S-1	Socket	7#16	25K8711	76.55
MS3456W18-1P	18	18-1	Pin	10#16	25K8719	114.52
MS3456W18-1S	18	18-1	Socket	10#16	25K8721	92.51
MS3456W20-14P	20	20-14	Pin	2#8, 3#12	25K8727	151.63
MS3456W20-14S	20	20-14	Socket	2#8, 3#12	25K8728	99.18
MS3456W20-19P	20	20-19	Pin	3#8	18M6701	152.32
MS3456W20-19S	20	20-19	Socket	3#8	21K5732	128.14
MS3456W20-22P	20	20-22	Pin	3#8, 3#16	10M8773	182.51
● MS3456W20-22S	20	20-22	Socket	3#8, 3#16	38T2941	77.40
MS3456W20-27P	20	20-27	Pin	14#16	31K4659	129.18
● MS3456W20-27S	20	20-27	Socket	14#16	38T2945	73.78
MS3456W22-22P	22	22-22	Pin	4#8	94C0120	159.28
● MS3456W22-22S	22	22-22	Socket	4#8	38T2948	84.54
MS3456W22-23P	22	22-23	Pin	8#12	14N3802	176.36
MS3456W22-23S	22	22-23	Socket	8#12	37J0768	108.32
MS3456W24-10P	24	24-10	Pin	7#8	31K4662	200.48
MS3456W24-10S	24	24-10	Socket	7#8	34H3345	133.13
MS3456W24-11P	24	24-11	Pin	3#8, 6#12	25K8762	185.94
MS3456W24-11S	24	24-11	Socket	3#8, 6#12	25K8763	139.97
MS3456W24-12P	24	24-12	Pin	2#4, 3#12	25K8766	183.91
MS3456W24-12S	24	24-12	Socket	2#4, 3#12	25K8767	143.67

➤CONTINUED➤

MATRIX MIL-DTL-5015 CIRCULAR CONNECTORS (CONT.)

Mfg. Part No.	Shell Size	Insert Arrangement	Contact Gender	No. of Contacts / Contact Size	Stock No.	Price Each 1-4
MS3456W24-28P	24	24-28	Pin	24#16	25K8768	160.28
MS3456W24-28S	24	24-28	Socket	24#16	25K8769	129.95
MS3456W28-21P	28	28-21	Pin	37#16	25K8778	197.22
MS3456W28-22P	28	28-22	Pin	3#4, 3#16	59M6544	241.72
MS3456W28-22S	28	28-22	Socket	3#4, 3#16	25K8783	179.84
MS3456W32-1P	32	32-1	Pin	2#0, 3#12	56K8029	265.55
MS3456W32-1S	32	32-1	Socket	2#0, 3#12	25K8785	235.50
MS3456W36-7P	36	36-7	Pin	7#12, 40#16	25K8805	326.46
MS3456W36-7S	36	36-7	Socket	7#12, 40#16	50M9288	222.13
WALL MOUNT RECEPTACLES						
MS3450W10SL-3S	10SL	10SL-3	Socket	3#16	31K4578	110.32
MS3450W10SL-4S	10SL	10SL-4	Socket	2#16	33K9995	108.36
MS3450W14S-5S	14S	14S-5	Socket	5#16	25K8477	84.34
MS3450W16-9S	16	16-9	Socket	2#12, 2#16	73R7975	112.18
MS3450W16-10S	16	16-10	Socket	3#12	34K0001	130.65
MS3450W16S-1S	16S	16S-1	Socket	7#16	25K8482	100.21
MS3450W18-1S	18	18-1	Socket	10#16	31K4583	107.84
MS3450W18-11S	18	18-11	Socket	5#12	56K9948	111.02
MS3450W20-14S	20	20-14	Socket	2#8, 3#12	25K8485	149.61
MS3450W20-19S	20	20-19	Socket	3#8	62K3741	187.28
MS3450W20-22S	20	20-22	Socket	3#8, 3#16	31K4590	183.97
MS3450W20-27S	20	20-27	Socket	14#16	25K8494	134.02
MS3450W22-22S	22	22-22	Socket	4#8	71K7658	202.32
MS3450W22-23S	22	22-23	Socket	8#12	25K8508	143.41
MS3450W24-10S	24	24-10	Socket	7#8	31K4596	225.84
MS3450W24-11S	24	24-11	Socket	3#8, 6#12	31K4600	202.95
MS3450W24-12S	24	24-12	Socket	2#4, 3#12	31K4602	199.12
MS3450W24-28S	24	24-28	Socket	24#16	31K4611	160.53
MS3450W28-21S	28	28-21	Socket	37#16	48K2874	329.74
MS3450W28-22S	28	28-22	Socket	3#4, 3#16	25K8517	374.59
MS3450W32-1S	32	32-1	Socket	2#0, 3#12	16M1188	357.72
MS3450W36-7S	36	36-7	Socket	7#12, 40#16	01M5482	292.60

(179663)

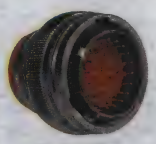
MATRIX® MIL-C-26482 SERIES 2 MINIATURE CIRCULAR CONNECTORS

RoHS Compliant Available

Amphenol Aerospace

Wall Mounting Receptacle with Narrow Flange

Jam Nut Receptacle



Straight Plug

- Medium size rugged aluminum shells
- Available in three fluid-resistant finishes
- Environmentally resistant
- Quick positive 3-point bayonet coupling system
- Visual confirmation of complete coupling
- Eliminates mismating by the use of five key/keyway design
- Insertion/removal of contacts from rear eliminates damage to front that might affect sealing
- Contacts are qualified to SAE AS39029 requirements
- Contact sizes: 20 (24-20AWG), 16 (20-16AWG) and 12 (14-12AWG)
- Grommets constructed of tear-resistant elastomer
- Triple webbed sealing grommet at the rear of connector

Matix® MIL-C-26482, Series 2 miniature circular connectors feature a bayonet coupling with crimp rear insertable, rear releasable pin or socket contacts. Durable aluminum shells with corrosion-resistant olive drab cadmium-plated finish except where noted (*) electroless nickel finish and (+) black, non-conductive anodized finish. Durability: minimum of 500 mating cycles. Recommended operating voltage to 1,000VAC (RMS) at sea level. Operating temperature range: –65°C (–85°F) to 200°C (392°F).

MS3470 WALL MOUNTING RECEPTACLES WITH NARROW FLANGE & PIN CONTACTS

Mfg. Part No. †	Shell Size	Insert Arrangement	No. of Contacts	Contact Size	Stock No.	Price Each 1-4
MS3470W10-6P	10	10-6	6	20	38T2975	30.54
MS3470W12-10P	12	12-10	10	20	38T2976	36.60
MS3470W14-4P	14	14-4	4	12	38T2980	37.15
MS3470W14-12P	14	14-12	12	(4) 16, (8) 20	38T2978	40.18
MS3470W22-55P	22	22-55	55	20	38T2982	79.97
MS3470 WALL MOUNTING RECEPTACLES WITH NARROW FLANGE & SOCKET CONTACTS						
MS3470W8-33S	8	8-33	3	20	60K6623	75.19
MS3470W10-6S	10	10-6	6	20	25K8932	59.50
MS3470W12-3S	12	12-3	3	16	48K2978	61.30
● MS3470L12-3S*	12	12-3	3	16	38T2970	35.69
● MS3470L12-8S*	12	12-8	8	20	38T2971	34.44
MS3470W12-10S	12	12-10	10	20	38T2977	37.13
MS3470W14-4S	14	14-4	4	12	02P2780	76.61
● MS3470L14-4S*	14	14-4	4	12	38T2973	52.10

➤ CONTINUED ➤

MATRIX® MIL-C-26482 SERIES 2 MINIATURE CIRCULAR CONNECTORS (CONT.)

MS3470 WALL MOUNTING RECEPTACLES WITH NARROW FLANGE & SOCKET CONTACTS

Mfg. Part No. †	Shell Size	Insert Arrangement	No. of Contacts	Contact Size	Stock No.	Price Each 1-4
MS3470W14-12S	14	14-12	12	(4) 16, (8) 20	60K6614	78.35
MS3470W14-15S	14	14-15	15	20	60K6616	79.12
MS3470W14-19S	14	14-19	19	20	38T2979	38.68
● MS3470L14-19S*	14	14-19	19	20	38T2972	50.73
MS3470W16-8S	16	16-8	8	20	25K8942	90.63
MS3470W16-26S	16	16-26	26	20	25K8937	97.51
MS3470W18-8S	18	18-8	8	12	31K4714	114.76
MS3470W18-32S	18	18-32	32	20	25K8944	102.70
MS3470W20-41S	20	20-41	41	20	25K8954	123.18
● MS3470L22-41S*	22	22-41	41	20	38T2974	81.36
MS3470W22-55S	22	22-55	55	20	11J6532	141.95
MS3470W24-31S	24	24-31	31	20	60K6620	142.28
MS3474 JAM NUT RECEPTACLES WITH PIN CONTACTS						
MS3474W12-10P	12	12-10	10	20	38T2988	52.27
MS3474W14-5P	14	14-5	5	16	38T2990	47.19
MS3474 JAM NUT RECEPTACLES WITH SOCKET CONTACTS						
MS3474W12-10S	12	12-10	10	20	38T2989	51.36
MS3476 STRAIGHT PLUGS WITH PIN CONTACTS						
MS3476W8-33P	8	8-33	3	20	25K9197	67.83
MS3476W10-6P	10	10-6	6	20	38T3025	36.12
● MS3476L10-6P*	10	10-6	6	20	38T3014	36.77
MS3476W12-3P	12	12-3	3	16	28K6413	60.39
MS3476W12-10P	12	12-10	10	20	38T3027	44.59
MS3476W14-4P	14	14-4	4	12	46P4505	73.62
● MS3476L14-4P*	14	14-4	4	12	38T3018	40.30
MS3476W14-12P	14	14-12	12	(4) 16, (8) 20	31K4907	78.22
MS3476W14-15P	14	14-15	15	20	15M9835	80.79
MS3476W14-19P	14	14-19	19	20	38T3029	48.63
MS3476W14-19PW	14	14-19	19	20	38T3030	49.95
● MS3476A14-19P+	14	14-19	19	20	38T3012	48.68
MS3476W16-8P	16	16-8	8	20	10J5235	86.17
MS3476W16-26P	16	16-26	26	20	25K9164	97.52
MS3476W18-8P	18	18-8	8	12	48K3093	96.11
● MS3476L18-8P*	18	18-8	8	12	38T3021	70.13
MS3476W18-32P	18	18-32	32	20	31K4920	105.15
MS3476W20-16P	20	20-16	16	20	25K9172	93.73
MS3476W20-41P	20	20-41	41	20	25K9182	109.43
MS3476W22-55P	22	22-55	55	20	25K9193	132.15
● MS3476L22-55P*	22	22-55	55	20	38T3022	84.72
MS3476W24-61P	24	24-61	61	20	48K3100	144.44
MS3476 STRAIGHT PLUGS WITH SOCKET CONTACTS						
MS3476W8-33S	8	8-33	3	20	38T3039	30.12
MS3476W10-6S	10	10-6	6	20	38T3026	32.62
● MS3476L10-6S*	10	10-6	6	20	38T3015	31.93
MS3476W12-10S	12	12-10	10	20	38T3028	43.89
● MS3476L12-10S*	12	12-10	10	20	38T3016	43.75
MS3476W14-4S	14	14-4	4	12	38T3032	50.20
MS3476W14-5S	14	14-5	5	16	38T3033	43.91
MS3476W14-19S	14	14-19	19	20	38T3031	47.83
● MS3476A14-19S+	14	14-19	19	20	38T3013	46.97
MS3476W16-26S	16	16-26	26	20	38T3034	58.06
● MS3476L16-26S*	16	16-26	26	20	38T3019	57.48
MS3476W18-8S	18	18-8	8	12	38T3038	67.04
● MS3476W18-32S	18	18-32	32	20	38T3037	64.32
● MS3476L22-55S*	22	22-55	55	20	38T3023	81.80
MS3475 STRAIGHT PLUGS WITH RFI GROUNDING FINGERS & PIN CONTACTS						
MS3475W20-41P	20	20-41	41	20	38T3010	81.48
MS3475 STRAIGHT PLUGS WITH RFI GROUNDING FINGERS & SOCKET CONTACTS						
MS3475W8-33S	8	8-33	3	20	38T3011	49.32
● MS3475L8-33S*	8	8-33	3	20	38T2998	48.68
MS3475W10-6S	10	10-6	6	20	38T2999	34.89
● MS3475L10-6S*	10	10-6	6	20	38T2994	45.19
MS3475W12-3S	12	12-3	3	16	38T3001	49.27
MS3475W12-10S	12	12-10	10	20	38T3000	49.62
● MS3475L12-10S*	12	12-10	10	20	38T2995	46.83
MS3475W14-19S	14	14-19	19	20	38T3006	55.47
● MS3475L20-41S*	20	20-41	41	20	38T2997	73.52

†Shell Finish: All are olive drab cadmium plated except (*) electroless nickel finish; (+) black non-conductive anodized finish

(195489)

CONTACTS FOR MIL-DTL-26482 SERIES II CONNECTORS

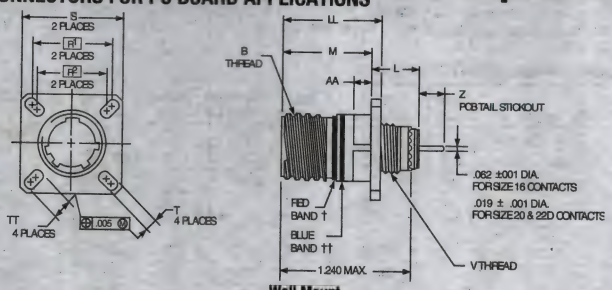
DEUTSCH

Mfg. Part No.	Gender	Contact Size	AWG	Color Bands	Stock No.	Price Each 1-9
M39029/4-110	Pin	20	24AWG to 20AWG	Brown / Brown / Black	61R9109	1.11
M39029/4-112	Pin	16	24AWG to 20AWG	Brown / Brown / Red	61R9111	3.75
M39029/4-111	Pin	16	20AWG to 16AWG	Brown / Brown / Brown	61R9110	1.37
M39029/4-113	Pin	12	14AWG to 12AWG	Brown / Brown / Orange	61R9112	2.61
M39029/5-115	Socket	20	24AWG to 20AWG	Brown / Brown / Green	61R9113	1.24
M39029/5-117	Socket	16	24AWG to 20AWG	Brown / Brown / Violet	61R9115	4.33
M39029/5-116	Socket	16	20AWG to 16AWG	Brown / Brown / Blue	61R9114	2.61
M39029/5-119	Socket	12	20AWG to 16AWG	Brown / Brown / White	61R9117	7.96
M39029/5-118	Socket	12	14AWG to 12AWG	Brown / Brown / Gray	61R9116	2.71

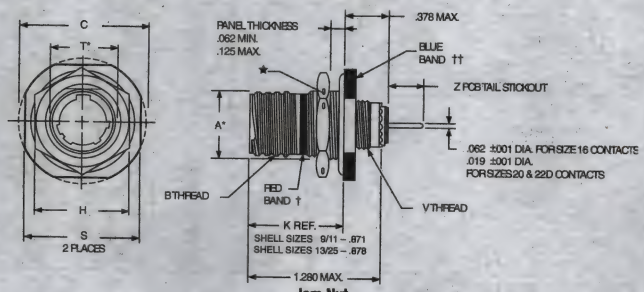
(166294)

MIL-DTL-38999 SERIES III CIRCULAR CONNECTORS FOR PC BOARD APPLICATIONS

Amphenol®



Wall Mount



Jam Nut

- Lightweight, compact, high density and high reliability cylindrical
- Operating voltage to 900VAC (RMS) at sea level
- Environmentally resistant
- Threaded, quick coupling in one complete turn
- Scoop-proof contact protection
- Designed for general duty as well as severe environmental applications
- Olive drab cadmium-plated connector shell
- Red band indicates fully mated; blue band indicates rear release contact retention system

TVP00R WALL MOUNT RECEPTACLES (BACK PANEL MOUNTING)

Shell Size	Part No.	B Thread Class 2A (Plated) 0.1P-0.3L-TS	L Max.	M +.000 –.005	S Max.	V Thread Metric	AA Max. Panel Thickness	Z Size 20 Contacts	Z Size 22D Contacts
9	761-XXX	.6250	.469	.820	.948	M12X1-6g	.234	.228–.178	.242–.181
11	762-XXX	.7500	.469	.820	1.043	M15X1-6g	.234	.228–.178	.242–.181
13	763-XXX	.8750	.469	.820	1.137	M18X1-6g	.234	.228–.178	.242–.181
15	764-XXX	1.0000	.469	.820	1.232	M22X1-6g	.234	.228–.178	.242–.181
17	765-XXX	1.1875	.469	.820	1.323	M25X1-6g	.234	.228–.178	.242–.181
19	766-XXX	1.2500	.469	.820	1.449	M28X1-6g	.234	.228–.178	.242–.181
21	767-XXX	1.3750	.500	.790	1.575	M31X1-6g	.204	.228–.178	.242–.181
23	768-XXX	1.5000	.500	.790	1.701	M34X1-6g	.204	.228–.178	.242–.181
25	769-XXX	1.6250	.500	.790	1.823	M37X1-6g	.204	.228–.178	.242–.181

➤CONTINUED➤

MIL-DTL-38999 SERIES III CIRCULAR CONNECTORS FOR PC BOARD APPLICATIONS (CONT.)

TVP07R JAM NUT RECEPTACLES

Shell Size	Part No.	B Thread Class 2A (Plated) 0.1P-0.3L-TS	L Max.	M +.000 –.005	S Max.	V Thread Metric	AA Max. Panel Thickness	Z Size 20 Contacts	Z Size 22D Contacts
9	781-XXX	.6250	.378	.871	1.062	M12X1-6g	.125	.244–.200	.258–.206
11	782-XXX	.7500	.378	.871	1.250	M15X1-6g	.125	.244–.200	.258–.206
13	783-XXX	.8750	.378	.878	1.375	M18X1-6g	.125	.244–.200	.258–.206
15	784-XXX	1.0000	.378	.878	1.500	M22X1-6g	.125	.244–.200	.258–.206
17	785-XXX	1.1875	.378	.878	1.625	M25X1-6g	.125	.244–.200	.258–.206
19	786-XXX	1.2500	.378	.878	1.812	M28X1-6g	.125	.222–.177	.236–.180
21	787-XXX	1.3750	.378	.878	1.938	M31X1-6g	.125	.222–.177	.236–.180
23	788-XXX	1.5000	.378	.878	2.062	M34X1-6g	.125	.222–.177	.236–.180
25	789-XXX	1.6250	.378	.878	2.188	M37X1-6g	.125	.222–.177	.236–.180

TVP00R WALL MOUNT RECEPTACLES (BACK PANEL MOUNTING)

Mfg. Part No.	Shell Size	Insert Arrangement	No. of Contacts	Contact Gender	Contact Size	Stock No.	Price Each 1-9
88-569761-98P	9	9-98	3	Pin	20	05R0168	69.72
88-569761-35P	9	9-35	6	Pin	22D	92P7238	65.49
88-569762-05P	11	11-5	5	Pin	20	08R2309	78.85
88-569763-35P	13	13-35	22	Pin	22D	30M7587	99.91
88-569764-18P	15	15-18	18	Pin	20	05R0169	122.38
88-569764-19P	15	15-19	19	Pin	20	05R0170	130.84
88-569764-35P	15	15-35	37	Pin	22D	96K1919	123.12
88-569765-26P	17	17-26	26	Pin	20	31K5992	153.13
88-569765-35P	17	17-35	55	Pin	22D	27M1423	166.15
88-569766-32P	19	19-32	32	Pin	20	48K7148	180.97
88-569766-35P	19	19-35	66	Pin	22D	40M7326	193.70
88-569767-41P	21	21-41	41	Pin	20	89M4077	229.91
88-569767-35P	21	21-35	79	Pin	22D	63M9622	208.03
88-569768-55P	23	23-55	55	Pin	20	05R0171	304.42
88-569768-35P	23	23-35	100	Pin	22D	26K1105	254.46
88-569769-61P	25	25-61	61	Pin	20	31K5993	286.49
88-569769-35P	25	25-35	128	Pin	22D	63P8827	316.21
88-569761-98S	9	9-98	3	Socket	20	92P7239	60.40
88-569761-35S	9	9-35	6	Socket	22D	48K7146	75.27
88-569762-35S	11	11-35	13	Socket	22D	74K2049	103.85
88-569763-35S	13	13-35	22	Socket	22D	57K0348	207.29
88-569764-18S	15	15-18	18	Socket	20	92P7240	118.83
88-569764-19S	15	15-19	19	Socket	20	12P4394	123.87
88-569764-35S	15	15-35	37	Socket	22D	48M4152	215.41
88-569765-26S	17	17-26	26	Socket	20	12P4395	155.60
88-569765-35S	17	17-35	55	Socket	22D	48K7147	295.81
88-569766-32S	19	19-32	32	Socket	20	08R2311	177.03
88-569766-35S	19	19-35	66	Socket	22D	48M4153	359.50
88-569767-41S	21	21-41	41	Socket	20	89M4078	212.03
88-569767-35S	21	21-35	79	Socket	22D	48M4154	425.33
88-569768-55S	23	23-55	55	Socket	20	92P7241	295.03
88-569768-35S	23	23-35	100	Socket	22D	48K7149	516.88
88-569769-61S	25	25-61	61	Socket	20	92P7242	284.12
88-569769-35S	25	25-35	128	Socket	22D	48M4155	642.78

TVP07R JAM NUT RECEPTACLES

88-569781-98P	9	9-98	3	Pin	20	96K1920	79.06
88-569781-35P	9	9-35	6	Pin	22D	30M7589	71.38
88-569782-05P	11	11-5	5	Pin	20	51M0704	115.62
88-569782-35P	11	11-35	13	Pin	22D	60K7167	88.49
88-569783-35P	13	13-35	22	Pin	22D	97J4378	108.61
88-569784-18P	15	15-18	18	Pin	20	57K0355	133.39
88-569784-19P	15	15-19	19	Pin	20	96M6825	135.95
88-569784-35P	15	15-35	37	Pin	22D	97J4380	134.80
88-569785-26P	17	17-26	26	Pin	20	74K2051	166.13
88-569785-35P	17	17-35	55	Pin	22D	97J4381	171.58
88-569786-32P	19	19-32	32	Pin	20	05R0173	205.84
88-569786-35P	19	19-35	66	Pin	22D	31M3028	209.30
88-569787-41P	21	21-41	41	Pin	20	46P9619	273.07
88-569787-35P	21	21-35	79	Pin	22D	53M2372	223.27
88-569788-55P	23	23-55	55	Pin	20	85K2248	310.57
88-569788-35P	23	23-35	100	Pin	22D	41P0156	266.30
88-569789-61P	25	25-61	61	Pin	20	05R0174	320.29
88-569789-35P	25	25-35	128	Pin	22D	31K5995	331.23
88-569781-98S	9	9-98	3	Socket	20	07P6199	70.09
88-569781-35S	9	9-35	6	Socket	22D	48K7150	81.54
88-569782-05S	11	11-5	5	Socket	20	22M3477	77.14
88-569782-35S	11	11-35	13	Socket	22D	57K0352	113.25
88-569783-35S	13	13-35	22	Socket	22D	48K7151	204.09
88-569784-18S	15	15-18	18	Socket	20	92P7243	127.83

➤CONTINUED➤

MIL-DTL-38999 SERIES III CIRCULAR CONNECTORS FOR PC BOARD APPLICATIONS (CONT.)

TVP07R JAM NUT RECEPTACLES

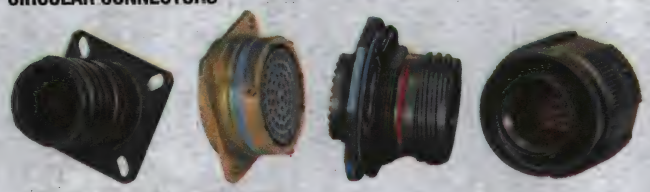
Mfg. Part No.	Shell Size	Insert Arrangement	No. of Contacts	Contact Gender	Contact Size	Stock No.	Price Each 1-9
88-569784-19S	15	15-19	19	Socket	20	89M4079	133.16
88-569784-35S	15	15-35	37	Socket	22D	57K0356	226.43
88-569785-26S	17	17-26	26	Socket	20	02P5688	167.94
88-569785-35S	17	17-35	55	Socket	22D	27M1426	321.60
88-569786-32S	19	19-32	32	Socket	20	48K7152	202.68
88-569786-35S	19	19-35	66	Socket	22D	80K0671	367.55
88-569787-41S	21	21-41	41	Socket	20	46P9620	237.15
88-569787-35S	21	21-35	79	Socket	22D	30M7590	433.29
88-569788-55S	23	23-55	55	Socket	20	02M4846	308.80
88-569788-35S	23	23-35	100	Socket	22D	27M1430	523.98
88-569789-61S	25	25-61	61	Socket	20	92P7244	319.24
88-569789-35S	25	25-35	128	Socket	22D	82K5338	657.78

(149288)

MIL-DTL-38999, SERIES I LJT AND SERIES II JT SUBMINIATURE CIRCULAR CONNECTORS

RoHS Compliant Available

Amphenol Aerospace



Wall Mount Receptacle | Box Mount Receptacle | Jam Nut Receptacle | Straight Plug

- Lightweight, space-saving design
- Quick positive coupling — 3-point bayonet lock system
- Mismating eliminated with dependable 5-key/keyway polarization
- Gold-plated crimp pin or socket contacts
- For environmental applications

MIL-DTL-38999, Series I LJT and Series II JT subminiature circular connectors were developed to meet the needs of the aerospace industry, and provide the impetus for development of MIL-C-38999 specifications, which has been superseded by MIL-DTL-38999. Durable aluminum shells with olive drab cadmium-over-nickel plated finish except where noted (*) cadmium-plated nickel finish. Choice of gold-plated pin or socket crimp contacts installed or *order housings without contacts separately below.*

SERIES I LJT — MS27656 WALL MOUNT RECEPTACLE, BACK PANEL MOUNTING

Mfg. Part No. †	Shell Size	Insert Arrangement	No. of Contacts	Contact Gender	Contact Size	Stock No.	Price Each 1-4
MS27656T15B35P	15	15-35	37	Pin	22D	38T2790	50.27
SERIES I LJT — MS27468 JAM NUT RECEPTACLE							
MS27468T15B35P	15	15-35	37	Pin	22D	38T2704	55.83
SERIES I LJT — MS27467 STRAIGHT PLUG							
MS27467T15B35S	15	15-35	37	Socket	22D	38T2678	61.94
SERIES II JT — MS27497 WALL MOUNT RECEPTACLES, BACK PANEL MOUNTING							
MS27497T10A35P*	10	10-35	13	Pin	22D	38T2762	36.80
MS27497T14B35S	14	14-35	37	Socket	22D	38T2767	64.01
SERIES II JT — MS27508 BOX MOUNT RECEPTACLE, BACK PANEL MOUNTING							
MS27508E16B35P	16	16-35	55	Pin	22D	38T2783	46.83
SERIES II JT — MS27474 JAM NUT RECEPTACLES							
● MS27474T10A35P*	10	10-35	13	Pin	22D	38T2727	63.96
● MS27474T14B35S	14	14-35	37	Socket	22D	38T2731	78.41
SERIES II JT — MS27473 STRAIGHT PLUG							
MS27473E16B35S	16	16-35	55	Socket	22D	38T2717	90.36
SERIES II JT — MS27484 STRAIGHT PLUGS WITH GROUNDING FINGERS							
● MS27484T10A35S*	10	10-35	13	Socket	22D	38T2745	54.56
MS27484T14B35P	14	14-35	37	Pin	22D	38T2751	54.70

SERIES I LJT — MS27656 WALL MOUNT RECEPTACLE HOUSING — NO CONTACTS

Mfg. Part No. †	Shell Size	Insert Arrangement	No. of Positions	For Contact Gender	Stock No.	Price Each 1-4
MS27656T15B35P(LC)	15	15-35	37	Pin	38T2791	37.47
SERIES I LJT — MS27468 JAM NUT RECEPTACLE HOUSING — NO CONTACTS						
MS27468T15B35P(LC)	15	15-35	37	Pin	38T2705	45.44
SERIES I LJT — MS27467 STRAIGHT PLUG HOUSING — NO CONTACTS						
MS27467T15B35S(LC)	15	15-35	37	Socket	38T2679	36.03
SERIES II JT — MS27497 WALL MOUNT RECEPTACLE HOUSINGS — NO CONTACTS						
MS27497T10A35P(LC)*	10	10-35	13	Pin	38T2763	32.79
MS27497T14B35S(LC)	14	14-35	37	Socket	38T2768	38.81
SERIES II JT — MS27508 BOX MOUNT RECEPTACLE HOUSING — NO CONTACTS						
MS27508E16B35P(LC)	16	16-35	55	Pin	38T2784	35.00

➤CONTINUED➤

MIL-DTL-38999, SERIES I LJT AND SERIES II JT SUBMINIATURE CIRCULAR CONNECTORS (CONT.)

SERIES II JT — MS27474 JAM NUT RECEPTACLE HOUSINGS — NO CONTACTS

Mfg. Part No. †	Shell Size	Insert Arrangement	No. of Positions	For Contact Gender	Stock No.	Price Each 1-4
● MS27474T10A35P(LC)*	10	10-35	13	Pin	38T2728	62.02
● MS27474T14B35S(LC)	14	14-35	37	Socket	38T2732	53.04
SERIES II JT — MS27473 STRAIGHT PLUG HOUSING — NO CONTACTS						
MS27473E16B35S(LC)	16	16-35	55	Socket	38T2718	51.46
SERIES II JT — MS27484 STRAIGHT PLUG HOUSINGS WITH GROUNDING FINGERS — NO CONTACTS						
● MS27484T10A35S(LC)*	10	10-35	13	Socket	38T2746	43.78
MS27484T14B35P(LC)	14	14-35	37	Pin	38T2752	57.00

†Shell Finish: All are olive drab cadmium plated nickel base except (*) cadmium plated nickel base
(195493)

MIL-DTL-38999 SERIES III, TV TRI-START CIRCULAR CONNECTORS

RoHS Compliant Available

Amphenol Aerospace

- Threaded coupling
- Quick and complete mating in 360° turn of coupling nut
- Lockwire eliminated
- Crimp termination
- Scoop-proof contact protection minimizes contact damage
- EMI shielding
- Moisture and corrosion resistance

Wall Mount Receptacle | Jam Nut Receptacle | Straight Plug

MIL-DTL-38999 Series III, TV Tri-Start circular connectors offer the highest performance capabilities for both general duty and severe environment applications. Durable aluminum shells with olive drab cadmium-plated finish except where noted (*) stainless steel finish. Choice of gold-plated pin or socket crimp contacts installed or *order housings without contacts separately below.* Operating temperature range: -65°C to +200°C. Operating voltage to 900VAC (RMS) at sea level.

D38999/20W WALL MOUNT RECEPTACLES

Mfg. Part No. †	Shell Size	Insert Arrangement	No. of Contacts	Contact Gender	Contact Size	Stock No.	Price Each 1-4
D38999/20WA35PN	9	9-35	6	Pin	22D	38T1648	38.28
D38999/20WA98PN	9	9-98	3	Pin	20	38T1652	38.55
D38999/20WB5PN	11	11-5	5	Pin	20	38T1664	40.36
D38999/20WB35PA	11	11-35	13	Pin	22D	38T1656	36.02
D38999/20WB35PN	11	11-35	13	Pin	22D	38T1658	35.73
D38999/20WB98PN	11	11-98	6	Pin	20	38T1670	37.39
D38999/20WC35PN	13	13-35	22	Pin	22D	38T1673	40.31
D38999/20WC98PN	13	13-98	10	Pin	20	38T1677	44.59
D38999/20WD19PN	15	15-19	19	Pin	20	38T1683	45.17
D38999/20WD35PN	15	15-35	37	Pin	22D	38T1686	43.60
D38999/20WE26PN	17	17-26	26	Pin	20	38T1693	210.67
D38999/20WE35PN	17	17-35	55	Pin	22D	38T1695	59.72
D38999/20WA35SN	9	9-35	6	Socket	22D	38T1650	74.11
D38999/20WA98SA	9	9-98	3	Socket	20	38T1654	43.83
D38999/20WB5SN	11	11-5	5	Socket	20	38T1667	31.99
D38999/20WB35SN	11	11-35	13	Socket	22D	38T1661	37.64
D38999/20WC35SN	13	13-35	22	Socket	22D	38T1675	41.43
D38999/20WC98SN	13	13-98	10	Socket	20	38T1679	43.12
D38999/20WD35SN	15	15-35	37	Socket	22D	38T1689	53.41
D38999/20WE35SN	17	17-35	55	Socket	22D	38T1697	63.56
D38999/24W JAM NUT RECEPTACLES							
D38999/24WA35PN	9	9-35	6	Pin	22D	38T1759	43.42
D38999/24WA98PN	9	9-98	3	Pin	20	38T1764	43.98
D38999/24WB5PN	11	11-5	5	Pin	20	38T1778	47.91
D38999/24WB35PA	11	11-35	13	Pin	22D	38T1770	41.16
D38999/24WB35PN	11	11-35	13	Pin	22D	38T1772	41.94
D38999/24WB98PN	11	11-98	6	Pin	20	38T1782	43.40
D38999/24WC8PN	13	13-8	8	Pin	20	38T1792	50.19
D38999/24WC35PN	13	13-35	22	Pin	22D	38T1786	43.62
D38999/24WC98PN	13	13-98	10	Pin	20	38T1795	45.30
D38999/24WD19PN	15	15-19	19	Pin	20	38T1801	48.05
D38999/24WD35PN	15	15-35	37	Pin	22D	38T1804	50.66
D38999/24WE35PN	17	17-35	55	Pin	22D	38T1811	57.23
D38999/24WA35SN	9	9-35	6	Socket	22D	38T1761	40.91
D38999/24WA98SA	9	9-98	3	Socket	20	38T1766	33.51
D38999/24WA98SN	9	9-98	3	Socket	20	38T1768	40.26
D38999/24WB5SN	11	11-5	5	Socket	20	38T1780	42.08
D38999/24WB35SN	11	11-35	13	Socket	22D	38T1774	43.27
D38999/24WC35SN	13	13-35	22	Socket	22D	38T1789	53.12
D38999/24WC98SN	13	13-98	10	Socket	20	38T1797	45.14
D38999/24WD35SN	15	15-35	37	Socket	22D	38T1806	50.79
D38999/24WE35SN	17	17-35	55	Socket	22D	38T1813	69.44

➤CONTINUED➤

MIL-DTL-38999 SERIES III, TV TRI-START CIRCULAR CONNECTORS (CONT.)

D38999/26 STRAIGHT PLUGS

Mfg. Part No. †	Shell Size	Insert Arrangement	No. of Contacts	Contact Gender	Contact Size	Stock No.	Price Each 1-4
D38999/26WA35PN	9	9-35	6	Pin	22D	38T2025	39.78
● D38999/26KA98PN*	9	9-98	3	Pin	20	38T1927	81.12
D38999/26WA98PA	9	9-98	3	Pin	20	38T2030	48.15
D38999/26WA98PN	9	9-98	3	Pin	20	38T2032	46.46
D38999/26WB5PN	11	11-5	5	Pin	20	38T2048	66.08
D38999/26WB35PN	11	11-35	13	Pin	22D	38T2038	40.98
D38999/26WC35PN	13	13-35	22	Pin	22D	38T2061	45.96
D38999/26WC98PN	13	13-98	10	Pin	20	38T2068	45.29
D38999/26WD35PN	15	15-35	37	Pin	22D	38T2077	53.76
D38999/26WE35PN	17	17-35	55	Pin	22D	38T2086	64.19
D38999/26WA35SN	9	9-35	6	Socket	22D	38T2027	41.44
● D38999/26KA98SN*	9	9-98	3	Socket	20	38T1929	80.30
D38999/26WA98SN	9	9-98	3	Socket	20	38T2035	38.36
D38999/26WB5SN	11	11-5	5	Socket	20	38T2050	51.25
D38999/26WB35SA	11	11-35	13	Socket	22D	38T2040	44.33
D38999/26WB35SN	11	11-35	13	Socket	22D	38T2044	43.22
D38999/26WB98SN	11	11-98	6	Socket	20	38T2054	60.66
D38999/26WC8SN	13	13-8	8	Socket	20	38T2066	46.18
D38999/26WC35SN	13	13-35	22	Socket	22D	38T2064	44.43
D38999/26WC98SN	13	13-98	10	Socket	20	38T2071	42.37
D38999/26WD19SN	15	15-19	19	Socket	20	38T2074	57.60
D38999/26WD35SN	15	15-35	37	Socket	22D	38T2080	61.79
D38999/26WE26SN	17	17-26	26	Socket	20	38T2085	62.51
D38999/26WE35SN	17	17-35	55	Socket	22D	38T2088	65.58

D38999/20W WALL MOUNT RECEPTACLE HOUSINGS — NO CONTACTS

Mfg. Part No. †	Shell Size	Insert Arrangement	No. of Positions	For Contact Gender	Stock No.	Price Each 1-4
D38999/20WA35PN(LC)	9	9-35	6	Pin	38T1649	32.24
D38999/20WA98PN(LC)	9	9-98	3	Pin	38T1653	33.56
D38999/20WB5PN(LC)	11	11-5	5	Pin	38T1665	35.62
D38999/20WB35PA(LC)	11	11-35	13	Pin	38T1657	30.03
D38999/20WB35PN(LC)	11	11-35	13	Pin	38T1659	29.00
D38999/20WB98PN(LC)	11	11-98	6	Pin	38T1671	36.17
D38999/20WC35PN(LC)	13	13-35		Pin	38T1674	29.43
D38999/20WC98PN(LC)	13	13-98	10	Pin	38T1678	35.36
D38999/20WD19PN(LC)	15	15-35	19	Pin	38T1684	31.83
D38999/20WD35PN(LC)	15	15-35	37	Pin	38T1687	30.75
D38999/20WE26PN(LC)	17	17-26	26	Pin	38T1694	33.87
D38999/20WA35SN(LC)	9	9-35	6	Socket	38T1651	35.74
D38999/20WA98SA(LC)	9	9-98	3	Socket	38T1655	30.24
D38999/20WB5SN(LC)	11	11-5	5	Socket	38T1668	61.85
D38999/20WB35SN(LC)	11	11-35	13	Socket	38T1662	38.64
D38999/20WC35SN(LC)	13	13-35	22	Socket	38T1676	27.32
D38999/20WC98SN(LC)	13	13-98	10	Socket	38T1680	32.81
D38999/20WD35SN(LC)	15	15-35	37	Socket	38T1690	28.08
D38999/20WE35SN(LC)	17	17-35	55	Socket	38T1698	27.82

D38999/24W JAM NUT RECEPTACLE HOUSINGS — NO CONTACTS

D38999/24WA35PN(LC)	9	9-35	6	Pin	38T1760	37.80
D38999/24WA98PN(LC)	9	9-98	3	Pin	38T1765	39.10
D38999/24WB5PN(LC)	11	11-5	5	Pin	38T1779	40.56
D38999/24WB35PA(LC)	11	11-35	13	Pin	38T1771	36.00
D38999/24WB35PN(LC)	11	11-35	13	Pin	38T1773	28.23
D38999/24WB98PN(LC)	11	11-98	6	Pin	38T1783	36.03
D38999/24WC8PN(LC)	13	13-8	8	Pin	38T1793	38.07
D38999/24WC35PN(LC)	13	13-35	22	Pin	38T1787	34.95
D38999/24WC98PN(LC)	13	13-98	10	Pin	38T1796	37.28
D38999/24WD19PN(LC)	15	15-19	19	Pin	38T1802	38.09
D38999/24WD35PN(LC)	15	15-35	37	Pin	38T1805	38.14
D38999/24WE35PN(LC)	17	17-35	55	Pin	38T1812	40.48
D38999/24WA35SN(LC)	9	9-35	6	Socket	38T1762	36.03
D38999/24WA98SA(LC)	9	9-98	3	Socket	38T1767	30.00
D38999/24WA98SN(LC)	9	9-98	3	Socket	38T1769	31.30
D38999/24WB5SN(LC)	11	11-5	5	Socket	38T1781	34.80
D38999/24WB35SN(LC)	11	11-35	13	Socket	38T1775	32.86
D38999/24WC35SN(LC)	13	13-35	22	Socket	38T1790	33.75
D38999/24WC98SN(LC)	13	13-98	10	Socket	38T1798	34.73
D38999/24WD35SN(LC)	15	15-35	37	Socket	38T1807	30.03
D38999/24WE35SN(LC)	17	17-35	55	Socket	38T1814	38.14

D38999/26 STRAIGHT PLUG HOUSINGS — NO CONTACTS

D38999/26WA35PN(LC)	9	9-35	6	Pin	38T2026	34.80
D38999/26WA98PA(LC)	9	9-98	3	Pin	38T2031	44.50
● D38999/26KA98PN(LC)*	9	9-98	3	Pin	38T1928	76.64

➤CONTINUED➤

MIL-DTL-38999 SERIES III, TV TRI-START CIRCULAR CONNECTORS (CONT.)

D38999/26 STRAIGHT PLUG HOUSINGS — NO CONTACTS

Mfg. Part No. †	Shell Size	Insert Arrangement	No. of Positions	For Contact Gender	Stock No.	Price Each 1-4
D38999/26WA98PN(LC)	9	9-98	3	Pin	38T2033	42.17
D38999/26WB5PN(LC)	11	11-5	5	Pin	38T2049	51.34
D38999/26WB35PN(LC)	11	11-35	13	Pin	38T2039	37.28
D38999/26WC35PN(LC)	13	13-35	22	Pin	38T2062	39.60
D38999/26WC98PN(LC)	13	13-98	10	Pin	38T2069	36.89
D38999/26WD35PN(LC)	15	15-35	37	Pin	38T2078	40.18
D38999/26WE26PN(LC)	17	17-26	26	Pin	38T2084	42.12
D38999/26WE35PN(LC)	17	17-35	55	Pin	38T2087	41.28
● D38999/26KA98SN(LC)*	9	9-98	3	Socket	38T1930	71.21
D38999/26WA98SN(LC)	9	9-98	3	Socket	38T2036	35.60
D38999/26WB5SN(LC)	11	11-5	5	Socket	38T2051	33.89
D38999/26WB35SA(LC)	11	11-35	13	Socket	38T2041	34.28
D38999/26WB35SN(LC)	11	11-35	13	Socket	38T2045	34.46
D38999/26WB98SN(LC)	11	11-98	6	Socket	38T2055	42.05
D38999/26WC8SN(LC)	13	13-8	8	Socket	38T2067	38.69
D38999/26WC98SN(LC)	13	13-98	10	Socket	38T2072	35.64
D38999/26WD19SN(LC)	15	15-19	19	Socket	38T2075	38.12
D38999/26WD35SN(LC)	15	15-35	37	Socket	38T2081	36.78
D38999/26WE35SN(LC)	17	17-35	55	Socket	38T2089	36.39

†Shell Finish: All are olive drab cadmium plated except (*) stainless steel finish
(195478)

D38999 QUADRAX TRI-START CIRCULAR CONNECTORS

RoHS Compliant Available

Amphenol Aerospace

TV06 Straight Plug

TV07 Jam Nut Receptacle

TVP00 Wall Mount Receptacle with Quadrax Contact

Features

- **Quadrax Contacts** consist of an outer contact with four strategically spaced inner contacts forming two 100 or 150 Ohm matched impedance differential pairs.
- **Differential Twinax Contacts** consist of an outer contact with two inner contacts spaced to form one 100 or 150 Ohm matched impedance differential pair.
- Recessed pins minimize potential contact damage

Amphenol® **Tri-Start MIL-DTL-38999 Series III Connectors** offer the highest performance capabilities for both general duty and severe environment applications. This series offers more versatility and options than any other interconnection family. Dynamic features for performance and reliability that were needed for military, aerospace and ground vehicle applications were designed into the Series III including rapid coupling via a triple-start thread, shell-to-shell or metal-to-metal bottoming, and improved EMI shielding. Durable aluminum shells with olive drab cadmium-plated finish, except where noted electroless nickel plated finish (*).

***Connectors do not include contacts**; *order quadrax and differential twinax pin and socket contacts separately below.*

TV06 STRAIGHT PLUGS

Mfg. Part No.	No. of Contacts	Shell Size	Insert Arrangement	Contact Gender	Stock No.	Price Each 1-4	Price Each 5-9
● TV06RGQF-9-5P(LC)*	1	9	9-5	Pin	51T4252	515.16	493.70
● TV06RGQF-9-5S(LC)*	1	9	9-5	Socket	51T4253	608.81	583.45
TV06RQW17-52P(LC)	2	17	17-52	Pin	51T4260	328.68	314.99
● TV06RQF17-22P(LC)*	4	17	17-22	Pin	51T4254	523.16	501.36
● TV06RQF17-22S(LC)*	4	17	17-22	Socket	51T4255	426.24	408.48
TV06RQW21-75P(LC)	4	21	21-75	Pin	51T4264	374.72	359.10
TV06RQW21-75S(LC)	4	21	21-75	Socket	51T4265	396.68	380.15
TV06RQW23-6P(LC)	6	23	23-6	Pin	51T4266	398.11	373.34
TV06RQW23-6S(LC)	6	23	23-6	Socket	51T4267	433.54	415.48
TV06RQW-25-8P(LC)	8	25	25-8	Pin	51T4258	578.84	554.72
TV06RQW-25-8S(LC)	8	25	25-8	Socket	51T4259	547.92	525.09
TV06RQW19-31P(LC)	15	19	19-31	Pin	51T4262	471.96	452.30
TV06RQW19-31S(LC)	15	19	19-31	Socket	51T4263	486.99	466.70
TV06RQW19-18P(LC)	18	19	19-18	Pin	51T4261	335.01	314.17
TV06RQW25-17P(LC)	42	25	25-17	Pin	51T4268	629.64	603.41
TV06RQW25-17S(LC)	42	25	25-17	Socket	51T4269	603.80	578.64
TV06RQW-25-7P(LC)	99	25	25-7	Pin	51T4256	419.72	402.23
TV06RQW-25-7S(LC)	99	25	25-7	Socket	51T4257	481.56	461.50

TV07 JAM NUT RECEPTACLES

TV07RGQF-9-5P(LC)*	1	9	9-5	Pin	51T4270	422.96	405.33
TV07RQW21-75P(LC)	4	21	21-75	Pin	51T4274	298.68	286.24
TV07RQW21-75S(LC)	4	21	21-75	Socket	51T4275	361.95	346.87
TV07RQW-25-8P(LC)	8	25	25-8	Pin	51T4272	502.92	481.97
TV07RQW-25-8S(LC)	8	25	25-8	Socket	51T4273	546.27	523.51

➤CONTINUED➤

D38999 QUADRAX TRI-START CIRCULAR CONNECTORS (CONT.)

TV07 JAM NUT RECEPTACLES

Mfg. Part No.	No. of Contacts	Shell Size	Insert Arrangement	Contact Gender	Stock No.	Price Each 1-4	Price Each 5-9
TV07RQW25-17S(LC)	42	25	25-17	Socket	51T4276	551.62	528.64
TV07RQW-25-7P(LC)	99	25	25-7	Pin	51T4271	511.56	490.25

TVP00 BACK PANEL MOUNTED WALL MOUNT RECEPTACLES

Mfg. Part No.	No. of Contacts	Shell Size	Insert Arrangement	Contact Gender	Stock No.	Price Each 1-4	Price Each 5-9
● TVP00RGQF9-5P(LC)*	1	9	9-5	Pin	51T4234	683.76	655.27
● TVP00RGQF9-5S(LC)*	1	9	9-5	Socket	51T4235	438.05	419.80
TVP00RQW17-52S(LC)	2	17	17-52	Socket	51T4242	339.00	324.88
● TVP00RQF-17-22P(LC)*	4	17	17-22	Pin	51T4236	293.64	281.41
● TVP00RQF-17-22S(LC)*	4	17	17-22	Socket	51T4237	374.64	359.03
TVP00RQW-21-75P(LC)	4	21	21-75	Pin	51T4238	349.32	334.77
TVP00RQW-21-75S(LC)	4	21	21-75	Socket	51T4239	313.68	300.61
TVP00RQW23-6P(LC)	6	23	23-6	Pin	51T4246	362.52	347.42
TVP00RQW23-6S(LC)	6	23	23-6	Socket	51T4247	350.04	335.46
TVP00RQW-25-8P(LC)	8	25	25-8	Pin	51T4240	520.97	499.27
TVP00RQW-25-8S(LC)	8	25	25-8	Socket	51T4241	448.13	429.46
TVP00RQW19-31P(LC)	15	19	19-31	Pin	51T4244	355.08	340.29
TVP00RQW19-31S(LC)	15	19	19-31	Socket	51T4245	435.46	417.32
TVP00RQW19-18S(LC)	18	19	19-18	Socket	51T4243	436.68	418.49
TVP00RQW25-17P(LC)	42	25	25-17	Pin	51T4248	545.72	522.98
TVP00RQW25-17S(LC)	42	25	25-17	Socket	51T4249	586.35	561.92
TVP00RQW25-7P(LC)	99	25	25-7	Pin	51T4250	372.60	357.08
TVP00RQW25-7S(LC)	99	25	25-7	Socket	51T4251	458.19	429.69

QUADRAX CONTACTS

Mfg. Part No.	Contact Gender	Contact Size	Wire Size (AWG)	Contact Plating	Stock No.	Price Each 1-4	Price Each 5-9
● 21-033384-061	Pin	8	22	Gold	51T4278	167.86	160.87
● 21-033384-051	Pin	8	24	Gold	51T4277	138.15	132.39
● 21-033470-001	Pin	8	24	Gold	51T4287	153.10	146.89
● 21-033384-071	Pin	8	26	Gold	51T4279	131.62	126.14
● 21-033450-001	Pin	8	26	Gold	51T4285	201.88	193.25
● 21-033385-061	Socket	8	22	Gold	51T4281	178.30	170.87
● 21-033385-051	Socket	8	24	Gold	51T4280	182.45	174.66
● 21-033471-001	Socket	8	24	Gold	51T4288	203.85	195.58
● 21-033385-071	Socket	8	26	Gold	51T4282	358.44	343.51
● 21-033451-001	Socket	8	26	Gold	51T4286	156.84	150.31

DIFFERENTIAL TWINAX CONTACTS

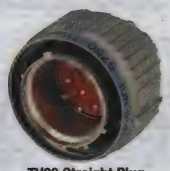
● 21-033387-021	Pin	8	...	Gold	51T4283	151.64	145.16
● 21-033388-021	Socket	8	...	Gold	51T4284	178.28	170.85

(197402)

D38999 TRI-START CIRCULAR CONNECTORS

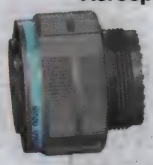
RoHS Compliant Available

Amphenol Aerospace



TV06 Straight Plug

TV07 Jam Nut Receptacle



TV06 Straight Plug

Features

- Recessed pins minimize potential contact damage
- Improved interfacial seal design for Moisture Resistance
- Lockwiring Eliminated
- Quick Coupling
- Also uses standard MIL-DTL-38999 contacts, application tools, insert arrangements

TV07 Jam Nut Receptacle

TV00 Wall Mount Receptacle

Amphenol® **Tri-Start MIL-DTL-38999 Series III Connectors** offer the highest performance capabilities for both general duty and severe environment applications. This series offers more versatility and options than any other interconnection family. Dynamic features for performance and reliability that were needed for military, aerospace and ground vehicle applications were designed into the Series III including rapid coupling via a triple-start thread, shell-to-shell or metal-to-metal bottoming, and improved EMI shielding. Durable aluminum shells with olive drab cadmium-plated finish, except where noted electroless nickel plated finish (*).

TV06 STRAIGHT PLUGS

Mfg. Part No.	No. of Contacts	Shell Size	Insert Arrangement	Contact Gender	Stock No.	Price Each 1-4	Price Each 5-9
● TV06RF9-9P*	9	9	9-9	Pin	50T4084	233.46	218.94
● TV06RF9-9S*	9	9	9-9	Socket	50T4085	231.37	216.98
TV06RW9-9P	9	9	9-9	Pin	50T4102	188.39	176.68
TV06RW9-9S	9	9	9-9	Socket	50T4103	276.07	258.90
● TV06RF11-19P*	19	11	11-19	Pin	50T4068	274.42	257.35

➤CONTINUED➤

D38999 TRI-START CIRCULAR CONNECTORS (CONT.)

Mfg. Part No.	No. of Contacts	Shell Size	Insert Arrangement	Contact Gender	Stock No.	Price Each 1-4	Price Each 5-9
● TV06RF11-19S*	19	11	11-19	Socket	50T4069	280.43	262.99
TV06RW11-19P	19	11	11-19	Pin	50T4086	326.29	306.00
TV06RW11-19S	19	11	11-19	Socket	50T4087	376.89	353.45
● TV06RF13-32P*	32	13	13-32	Pin	50T4070	279.96	262.55
● TV06RF13-32S*	32	13	13-32	Socket	50T4071	309.32	290.08
TV06RW13-32P	32	13	13-32	Pin	50T4088	277.19	259.95
TV06RW13-32S	32	13	13-32	Socket	50T4089	306.61	287.54
● TV06RF15-55P*	55	15	15-55	Pin	50T4072	390.31	366.03
● TV06RF15-55S*	55	15	15-55	Socket	50T4073	434.99	407.93
TV06RW15-55P	55	15	15-55	Pin	50T4090	390.73	366.43
TV06RW15-55S	55	15	15-55	Socket	50T4091	548.82	514.68
● TV06RF17-73P*	73	17	17-73	Pin	50T4074	417.27	391.32
● TV06RF17-73S*	73	17	17-73	Socket	50T4075	489.12	458.69
TV06RW17-73P	73	17	17-73	Pin	50T4092	418.32	392.30
TV06RW17-73S	73	17	17-73	Socket	50T4093	490.16	459.67
● TV06RF19-88P*	88	19	19-88	Pin	50T4076	471.14	441.84
● TV06RF19-88S*	88	19	19-88	Socket	50T4077	458.36	442.56
TV06RW19-88P	88	19	19-88	Pin	50T4094	565.06	529.91
TV06RW19-88S	88	19	19-88	Socket	50T4095	458.15	442.35
● TV06RF21-121P*	121	21	21-121	Pin	50T4078	467.19	451.08
● TV06RF21-121S*	121	21	21-121	Socket	50T4079	1127.58	1088.69
TV06RW21-121P	121	21	21-121	Pin	50T4096	577.68	557.76
TV06RW21-121S	121	21	21-121	Socket	50T4097	573.77	553.98
● TV06RF23-151P*	151	23	23-151	Pin	50T4080	550.84	531.85
● TV06RF23-151S*	151	23	23-151	Socket	50T4081	679.60	656.17
TV06RW23-151P	151	23	23-151	Pin	50T4098	551.71	532.69
TV06RW23-151S	151	23	23-151	Socket	50T4099	1615.86	1560.14
● TV06RF25-187P*	187	25	25-187	Pin	50T4082	636.84	614.88
● TV06RF25-187S*	187	25	25-187	Socket	50T4083	811.93	783.93
TV06RW25-187P	187	25	25-187	Pin	50T4100	638.15	616.14
TV06RW25-187S	187	25	25-187	Socket	50T4101	1943.67	1876.65

TV07 JAM NUT RECEPTACLES

● TV07RF9-9P*	9	9	9-9	Pin	50T4120	234.19	219.62
● TV07RF9-9S*	9	9	9-9	Socket	50T4121	232.10	217.66
TV07RW9-9P	9	9	9-9	Pin	50T4138	230.27	215.95
TV07RW9-9S	9	9	9-9	Socket	50T4139	228.18	213.99
TV07RW11-19P	19	11	11-19	Pin	50T4122	262.77	246.43
TV07RW11-19S	19	11	11-19	Socket	50T4123	387.62	363.51
● TV07RF11-19P*	19	11	11-19	Pin	50T4104	267.99	251.33
● TV07RF11-19S*	19	11	11-19	Socket	50T4105	274.00	256.96
TV07RW13-32P	32	13	13-32	Pin	50T4124	267.68	251.03
TV07RW13-32S	32	13	13-32	Socket	50T4125	297.10	278.62
● TV07RF13-32P*	32	13	13-32	Pin	50T4106	274.89	257.79
● TV07RF13-32S*	32	13	13-32	Socket	50T4107	304.26	285.33
TV07RW15-55P	55	15	15-55	Pin	50T4126	391.10	366.77
TV07RW15-55S	55	15	15-55	Socket	50T4127	435.77	408.66
● TV07RF15-55P*	55	15	15-55	Pin	50T4108	396.32	371.67
● TV07RF15-55S*	55	15	15-55	Socket	50T4109	440.99	413.56
TV07RW17-73P	73	17	17-73	Pin	50T4128	418.32	392.30
TV07RW17-73S	73	17	17-73	Socket	50T4129	490.16	459.67
● TV07RF17-73P*	73	17	17-73	Pin	50T4110	417.27	391.32
● TV07RF17-73S*	73	17	17-73	Socket	50T4111	489.12	458.69
TV07RW19-88P	88	19	19-88	Pin	50T4130	464.14	435.27
TV07RW19-88S	88	19	19-88	Socket	50T4131	452.53	436.93
● TV07RF19-88P*	88	19	19-88	Pin	50T4112	470.93	441.64
● TV07RF19-88S*	88	19	19-88	Socket	50T4113	458.19	442.39
TV07RW21-121P	121	21	21-121	Pin	50T4132	446.23	430.84
TV07RW21-121S	121	21	21-121	Socket	50T4133	552.58	533.53
● TV07RF21-121P*	121	21	21-121	Pin	50T4114	455.58	439.87
● TV07RF21-121S*	121	21	21-121	Socket	50T4115	561.94	542.56
TV07RW23-151P	151	23	23-151	Pin	50T4134	534.40	515.97
TV07RW23-151S	151	23	23-151	Socket	50T4135	663.16	640.29
● TV07RF23-151P*	151	23	23-151	Pin	50T4116	540.62	521.98
● TV07RF23-151S*	151	23	23-151	Socket	50T4117	669.38	646.30
● TV07RF25-187P*	187	25	25-187	Pin	50T4118	625.40	603.84
● TV07RF25-187S*	187	25	25-187	Socket	50T4119	800.49	772.89
TV07RW25-187P	187	25	25-187	Pin	50T4136	619.36	598.00
TV07RW25-187S	187	25	25-187	Socket	50T4137	794.44	767.05

TVP00 BACK PANEL MOUNTED WALL MOUNT RECEPTACLES

● TVP00RF9-9P*	9	9	9-9	Pin	50T4048	231.55	221.65
● TVP00RF9-9S*	9	9	9-9	Socket	50T4049	229.21	219.41
TVP00RW9-9P	9	9	9-9	Pin	50T4066	231.84	221.93
TVP00RW9-9S	9	9	9-9	Socket	50T4067	229.50	219.69
● TVP00RF11-19P*	19	11	11-19	Pin	50T4032	261.49	245.21

➤CONTINUED➤

D38999 TRI-START CIRCULAR CONNECTORS (CONT.)

TVP00 BACK PANEL MOUNTED WALL MOUNT RECEPTACLES

Mfg. Part No.	No. of Contacts	Shell Size	Insert Arrangement	Contact Gender	Stock No.	Price Each 1-4	Price Each 5-9
● TVP00RF11-19S*	19	11	11-19	Socket	50T4033	249.76	234.22
TVP00RW11-19P	19	11	11-19	Pin	50T4050	243.49	228.34
TVP00RW11-19S	19	11	11-19	Socket	50T4051	249.50	233.98
● TVP00RF13-32P*	32	13	13-32	Pin	50T4034	274.44	257.37
● TVP00RF13-32S*	32	13	13-32	Socket	50T4035	280.06	262.64
TVP00RW13-32P	32	13	13-32	Pin	50T4052	250.02	234.47
TVP00RW13-32S	32	13	13-32	Socket	50T4053	279.44	262.06
● TVP00RF15-55P*	55	15	15-55	Pin	50T4036	355.72	333.60
● TVP00RF15-55S*	55	15	15-55	Socket	50T4037	400.40	375.49
TVP00RW15-55P	55	15	15-55	Pin	50T4054	354.78	332.71
TVP00RW15-55S	55	15	15-55	Socket	50T4055	399.46	374.61
● TVP00RF17-73P*	73	17	17-73	Pin	50T4038	376.88	353.44
● TVP00RF17-73S*	73	17	17-73	Socket	50T4039	448.73	420.82
TVP00RW17-73P	73	17	17-73	Pin	50T4056	376.20	352.80
TVP00RW17-73S	73	17	17-73	Socket	50T4057	448.05	420.18
● TVP00RF19-88P*	88	19	19-88	Pin	50T4040	431.59	404.74
● TVP00RF19-88S*	88	19	19-88	Socket	50T4041	511.01	479.22
TVP00RW19-88P	88	19	19-88	Pin	50T4058	430.81	404.01
TVP00RW19-88S	88	19	19-88	Socket	50T4059	510.23	478.49
● TVP00RF21-121P*	121	21	21-121	Pin	50T4042	508.92	477.26
● TVP00RF21-121S*	121	21	21-121	Socket	50T4043	530.05	511.77
TVP00RW21-121P	121	21	21-121	Pin	50T4060	506.99	475.45
TVP00RW21-121S	121	21	21-121	Socket	50T4061	528.44	510.22
● TVP00RF23-151P*	151	23	23-151	Pin	50T4044	510.17	492.58
● TVP00RF23-151S*	151	23	23-151	Socket	50T4045	638.93	616.90
TVP00RW23-151P	151	23	23-151	Pin	50T4062	508.08	490.56
TVP00RW23-151S	151	23	23-151	Socket	50T4063	636.84	614.88
● TVP00RF25-187P*	187	25	25-187	Pin	50T4046	591.17	570.78
● TVP00RF25-187S*	187	25	25-187	Socket	50T4047	766.26	739.83
TVP00RW25-187P	187	25	25-187	Pin	50T4064	589.65	569.31
TVP00RW25-187S	187	25	25-187	Socket	50T4065	1944.23	1877.19

(197407)

RIGHT ANGLE STRAIN RELIEF BACKSHELLS FOR MIL-C-38999 SERIES II CONNECTORS

RoHS Compliant Available

Amphenol Pcd

Nickel

Olive Drab Cadmium

NON SELF LOCKING

Mfg. Part No.	Shell Size	Cable Dia. Max. (mm)	Shell Finish	Stock No.	Price Each 1-4	Price Each 5-9
● M85049/47-8N	8	5.18	Nickel	07P3706	11.12	10.24
M85049/47-8W	8	5.18	Olive Drab Cadmium	04P6309	12.23	11.26
M85049/47-10W	10	7.26	Olive Drab Cadmium	04P6301	12.59	11.59
● M85049/47-12N	7 / 12	10.57	Nickel	07P3699	11.76	10.82
● M85049/47-14N	12 / 14	12.09	Nickel	07P3700	12.10	11.13
M85049/47-14W	12 / 14	12.09	Olive Drab Cadmium	04P6303	13.29	12.23
M85049/47-16W	19 / 16	15.9	Olive Drab Cadmium	04P6304	13.68	12.59
● M85049/47-18N	27 / 18	17.93	Nickel	07P3702	12.77	11.76
M85049/47-20W	37 / 20	21.11	Olive Drab Cadmium	04P6306	14.45	13.30
M85049/47-22W	22	24.28	Olive Drab Cadmium	04P6307	15.28	14.06
● M85049/47-24N	24	27.46	Nickel	07P3705	14.69	13.52

(166280)

PC TAIL CONTACTS FOR MIL-DTL-38999 CONNECTORS

RoHS Compliant Available

Amphenol Aerospace

- For MIL-DTL-38999 Series I (LJT), II (JT) and III (TV) cylindrical connectors
- PC tails
- Gold-plated
- Solder mounting on printed circuit boards

Mfg. Part No.	Gender	Contact Size	Tail Dia.	Stock No.	Price Each 1-4
● 10-407552-055	Pin	22M	0.019	26R3487	1.62
● 10-497640-025	Pin	20	0.019	26R3486	4.53
● 10-497630-055	Pin	16	0.062	38T5161	3.82
● 10-597502-105	Pin	12	0.081	38T5169	3.91
● 10-497623-335	Socket	22D	0.019	38T5159	6.70
● 10-497623-625	Socket	22D	0.019	38T5160	3.11
● 10-497643-025	Socket	20	0.019	26R3488	5.28
● 10-497649-075	Socket	16	0.062	38T5162	3.69
● 10-597503-075	Socket	12	0.081	38T5170	7.87

(195484)

CONTACTS FOR MIL-DTL-38999 CONNECTORS

DEUTSCH

CONTACTS FOR MIL-DTL-38999 SERIES I, II, III AND IV CONNECTORS

Mfg. Part No.	Gender	Contact Size	AWG	Color Bands	Stock No.	Price Each 1-9
M39029/58-360	Pin	22	28AWG to 22AWG	Orange / Blue / Black	61R9126	1.02
M39029/58-363	Pin	20	24AWG to 20AWG	Orange / Blue / Orange	61R9127	0.67
M39029/58-364	Pin	16	20AWG to 16AWG	Orange / Blue / Yellow	61R9128	1.84
M39029/58-365	Pin	12	14AWG to 12AWG	Orange / Blue / Green	60R3926	1.90
CONTACTS FOR MIL-DTL-38999 SERIES I, III, AND IV CONNECTORS						
M39029/56-348	Socket	22	28AWG to 22AWG	Orange / Yellow / Gray	61R9118	1.33
M39029/56-351	Socket	20	24AWG to 20AWG	Orange / Green / Brown	61R9119	1.53
M39029/56-352	Socket	16	20AWG to 16AWG	Orange / Green / Red	61R9120	2.60
M39029/56-353	Socket	12	14AWG to 12AWG	Orange / Green / Orange	61R9121	3.12
CONTACTS FOR MIL-DTL-38999 SERIES II CONNECTORS						
M39029/57-354	Socket	22	28AWG to 22AWG	Orange / Green / Yellow	61R9122	1.29
M39029/57-357	Socket	20	24AWG to 20AWG	Orange / Green / Violet	61R9123	2.20
M39029/57-358	Socket	16	20AWG to 16AWG	Orange / Green / Gray	61R9124	2.98
M39029/57-359	Socket	12	14AWG to 12AWG	Orange / Green / White	61R9125	9.14

(203736)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196562)

2M MICRO-MINIATURE CONNECTORS

Micro-Miniature

The 2M Series product line is designed for interconnect applications requiring high performance and reduced size and weight. This smaller, high density, lightweight connector far exceeds the competition in quality and performance levels. The 2M Series is a superior and versatile connector designed and tested to mil-spec standards, comparable to MIL-DTL-38999. 2M is intermateable with Glenair's Mighty Mouse. The test results are available.

Amphenol Aerospace

2M801 DUAL-START ACME THREADS

Full mating in 1 ½ turns. Plug option for anti-decoupling mechanism. Plugs and receptacles come with either accessory threads or integral backshells. Includes PCB and hermetic receptacles, and 2M801 Dualok plugs. Contact terminations include crimp, PC tail, and solder cup, with others upon request. Custom and filtered configurations are available.

2M801-007 | -16 | NF | 6-7 | P | A

Series	
2M801-007	Integral Backshell for Direct Attachment of Cable Shield and Overmold
2M801-008	Plugs with rear accessory thread
2M801-009	Receptacle with Integral Backshell for Direct Attachment of Cable Shield and Overmold
2M801-010	Receptacle with Accessory Thread

Shell Style	
For Shell Styles 2M801-007, 2M801-008	
-16	Plug with Anti-Decoupling Spring
-26	Self-Locking Plug with Ratchet Mechanism
For Shell Styles 2M803-009, 2M803-010	
-01	In-Line
-02	Square Flange
-07	Jam Nut

Service Class
See Service class/Finish table on next page

Shell Size - Insert Arrg.
See Insert Arrangements on next page

Contact Type	
P	Pin Contacts
S	Socket Contacts

For Hermetic connectors or PC contacts or Solder contacts please contact your Local Newark Sales office.

Alternate Position		
Key Position	A	B
A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°

See rotational views on next page

2M803 1/4 TURN BAYONET COUPLING

¼-turn full mate bayonet coupling. Plugs and receptacles come with either accessory threads or integral backshells. Includes PCB and hermetic receptacles. Contact terminations include crimp, PC tail, and solder cup, with others upon request. Custom and filtered configurations are available.

2M803-001 | -06 | NF | 6-7 | P | N

Series	
2M803-001	Plug with Crimp Contact, Integral Backshell for Direct Attachment of Cable Shield and Overmold
2M803-002	Plug with Crimp Contact, Rear-Accessory Thread
2M803-003	Receptacle with Integral Backshell for Direct Attachment of Cable Shield and Overmold
2M803-004	Receptacle with Rear Accessory Thread

Shell Style	
For Shell Styles 2M803-001, 2M803-002	
-06	Plug
For Shell Styles 2M803-003, 2M803-004	
-07	Jam Nut
-02	Square Flange
-01	In-Line

Service Class
See Service class/Finish table on next page

Shell Size - Insert Arrg.
See Insert Arrangements on next page

Contact Type	
P	Pin Contacts
S	Socket Contacts

For Hermetic connectors or PC contacts or Solder contacts please contact your Local Newark Sales office.

Alternate Position		
Key Position	A	B
N	150°	210°
X	75°	210°
Y	95°	230°
Z	140°	275°

See rotational views on next page

2M804 PUSH-PULL QUICK-DISCONNECT

Push-to-mate, pull-to-unmate connector with EMI spring installed in the receptacle for improved EMI. Includes Plug Panel Mount, PCB, and hermetic receptacles. Contact terminations include crimp, PC tail, and solder cup, with others upon request. Custom and filtered configurations are available.

2M804-001 | -06 | ZNU | 6-7 | P | A

Series	
2M804-001	Plug with Integral Backshell for Direct Attachment of Cable Shield and Overmold
2M804-002	Plug with Accessory Thread
2M804-003	Receptacle with Integral Backshell for Direct Attachment of Cable Shield and Overmold
2M804-004	Receptacle with Accessory Thread

Shell Style	
For Shell Styles 2M804-001, 2M804-002	
-06	Plug
For Shell Styles 2M804-003, 2M804-004	
-00	Jam Nut for Front Panel Mounting
-01	In-Line for Free-Hanging Cable
-07	Jam Nut for Rear Panel Mounting

Service Class
See Service class/Finish table on next page

Shell Size - Insert Arrg.
See Insert Arrangements on next page

Contact Type	
P	Pin Contacts
S	Socket Contacts

For Hermetic connectors or PC contacts or Solder contacts please contact your Local Newark Sales office.

Alternate Position		
Key Position	A	B
Omit	Single Master Key	
A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°

See rotational views on next page

2M805 TRI-START THREADED COUPLING

Offers the best EMI and vibration performance among the 2M connector family. Utilizes Tri-Start thread with 1-turn full mate coupling. EMI ground strap and shell-to-shell bottoming provide superior EMI shielding. Includes PCB and hermetic receptacles. Contact terminations include crimp, PC tail, and solder cup, with others upon request. Custom and filtered configurations are available.

2M805-001 | -16 | C | 15-37 | S | A

Series	
2M805-001	Plug with Integral Backshell for Direct Attachment of Cable Shield and Overmold
2M805-002	Plug with Accessory Thread
2M805-003	Receptacle with Integral Backshell for Direct Attachment of Cable Shield and Overmold
2M805-004	Receptacle with Accessory Thread

Shell Style	
For Shell Styles 2M805-001, 2M805-002	
-16	Plug Connector with Ratcheting Anti-Decoupling Mechanism
For Shell Styles 2M805-003, 2M805-004	
-01	In-Line Receptacle
-02	Square Flange Receptacle
-07	Jam Nut for Rear Panel Mounting Receptacle

Service Class
See Service class/Finish table on next page

Shell Size - Insert Arrg.
See Insert Arrangements on next page

Contact Type	
P	Pin Contacts
S	Socket Contacts

For Hermetic connectors or PC contacts or Solder contacts please contact your Local Newark Sales office.

Alternate Position		
Key Position	A	B
Normal A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°

See rotational views on next page

(212134)

2M MICRO-MINIATURE CONNECTORS (CONTINUED)

Amphenol Aerospace

INSERT ARRANGEMENTS

Insert Arrangements									
Contact Size	Contact Quantity					Insert Arrangement			
	#23	#20	#20HD	#16	#12	2M801	2M803	2M804	2M805
Size #23 Contacts 5 Amp Max.Current 500 VAC #23-#28 AWG	3					5-3	5-3	5-3	NA
	4					6-4	6-4	6-4	8-4
	6					6-6	6-6	6-6	8-6
	7					6-7	6-7	6-7	8-7
	10					7-10	7-10	7-10	9-10
	13					8-13	8-13	8-13	10-13
	19					9-19	9-19	9-19	11-19
	26					10-26	10-26	10-26	12-26
	37					13-37	12-37	12-37	15-37
	55					16-55	14-55	14-55	18-55
	85					17-85	NA	15-85	19-85
	130					21-130	NA	NA	23-130
Size #20HD Contacts 7.5 Amp Max.Current 750 VAC #20-#24 AWG.			3			6-23	6-23	6-23	8-23
			5			7-25	7-25	7-25	9-25
			8			8-28	8-28	8-28	10-28
			10			9-210	9-210	9-210	11-210
			20			13-220	12-220	12-220	15-220
			35			16-235	14-235	14-235	18-235
			41			17-241	NA	NA	19-241
			69			21-269	NA	NA	23-269
Size #16 Contacts 13 Amp Max.Current 1800 VAC #16-#20 AWG				1		6-1	6-1	6-1	8-1
				2		8-2	8-2	8-2	10-2
				4		9-4	9-4	9-4	11-4
				5		10-5	10-5	10-5	12-5
				7		13-7	12-7	12-7	15-7
				12		16-12	14-12	14-12	18-12
				14		17-14	NA	NA	19-14
				22		21-22	NA	NA	23-22
Size #12 Contacts 23 Amp Max.Current 1800 VAC #12-14 AWG					1	7-1	7-1	7-1	9-1
					2	10-2	10-2	10-2	12-2
					2	13-2	12-2	12-2	15-2
					3	13-3	12-3	12-3	15-3
					5	16-5	14-5	14-5	18-5
					7	17-7	NA	NA	19-7
					12	21-12	NA	NA	23-12
Insert Arrangements with Mixed Size (Combo) Layouts*	4	2				8-200	8-200	8-200	10-200
	8	2				9-201	9-201	9-201	11-201
	4			2		9-200	9-200	9-200	11-200
	8			2		10-202	10-202	10-202	12-202
	4				2	10-201	10-201	10-201	12-201
	6				2	13-200	12-200	12-200	15-200
	10				2	13-201	12-201	12-201	15-201
	12				1	10-200	10-200	10-200	12-200

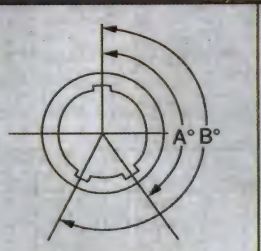
*See www.newark.com for AMP max and VAC.

SERVICE CLASS / FINISHES

Service Class		
CALL OUT	ROHS	FINISH
C		ALUMINUM/BLACK ANODIZE (NON-CONDUCTIVE)
M		ALUMINUM/ELECTROLESS NICKEL
NF		ALUMINUM/CADMIUM WITH OLIVE DRAB CHROMATE
MT		ALUMINUM/NICKEL-PTFE (DURMALON)
Z1		STAINLESS STEEL/PASSIVATED
ZN		ALUMINUM/ZINC-NICKEL W/OLIVE DRAB CHROMATE
ZNU		ALUMINUM/ZINC-NICKEL WITH BLACK CHROMATE

ROTATIONAL VIEWS

Key Rotations



Receptacle View

Plug View

(212135)

CIRCULAR CONNECTORS

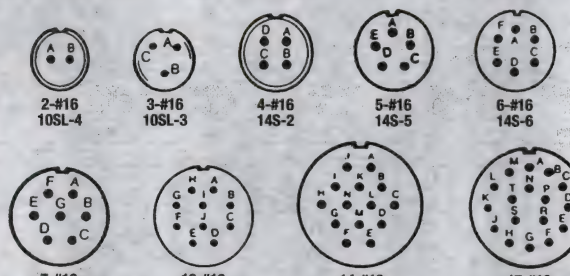
CANNON TYPES MS3106, MS3102, AND MS3101 (MIL-C-5015) CIRCULAR CONNECTORS

ITT

Type MS3106

Type MS3102

Type MS3101



Contact Arrangements
Mating Face View of Pin Insert Shown

MIL-C-5015 circular connectors operate in extreme environmental conditions of high altitude flight. Mfg. part nos. with **prefixes MS3106F** and **MS3101F** feature resilient grommets with internal restrictions in wire cavities that act as individual wire seals. They also include an integral cable clamp that provides strain relief, and mfg. part nos. with **prefix MS3106F** have an O-ring under the coupling nut. Aluminum alloy shells have olive drab chromate coating over cadmium plating. Silver-plated copper alloy socket or pin contacts rated 13A. Tinned solder pot termination. Polychloropene insulators. Temperature range: –55°C to +125°C.

TYPE MS3106 PLUGS WITH SOCKET CONTACTS

Mfg. Part No.	Insert Configuration	Contacts	Stock No.	Price Each 1-9	Price Each 10-24
MS3106F10SL-4S	10SL-4	2	50F2538	58.18	48.39
MS3106F10SL-3S	10SL-3	3	50F2537	60.77	50.55
MS3106F14S-2S	14S-2	4	50F2529	36.23	34.55
MS3106F14S-5S	14S-5	5	16F1741	36.85	35.14
MS3106F14S-6S	14S-6	6	50F2525	54.33	45.19
MS3106F16S-1S	16S-1	7	50F2497	67.40	56.06
MS3106F18-1S	18-1	10	50F2505	44.43	42.25
MS3106F20-27S	20-27	14	50F2514	59.37	56.45
MS3106F20-29S	20-29	17	50F2516	57.68	54.86

TYPE MS3102 BOX MOUNTING RECEPTACLES WITH SOCKET CONTACTS

Mfg. Part No.	Insert Configuration	Contacts	Stock No.	Price Each 1-4	Price Each 5-9
MS3102R10SL-4S	10SL-4	2	50F2546	11.89	11.34
MS3102R10SL-3S	10SL-3	3	50F2545	12.49	11.91
MS3102R14S-2S	14S-2	4	50F2533	22.19	18.46
MS3102R14S-5S	14S-5	5	50F2534	16.24	15.50
MS3102R16S-1S	16S-1	7	50F2501	19.85	18.93
MS3102R18-1S	18-1	10	50F2510	35.88	29.85
MS3102R20-27S	20-27	14	50F2524	52.21	43.42
MS3102R20-29S	20-29	17	50F2522	36.84	35.13

TYPE MS3101 CABLE CONNECTING RECEPTACLES WITH SOCKET CONTACTS

Mfg. Part No.	Insert Configuration	Contacts	Stock No.	Price Each 1-4	Price Each 5-9
MS3101F10SL-3S	10SL-3	3	16F1744	47.36	39.40
MS3101F14S-2S	14S-2	4	16F1745	47.31	39.35
MS3101F14S-5S	14S-5	5	16F1746	47.80	39.76
MS3101F14S-6S	14S-6	6	16F1747	49.89	41.50
MS3101F16S-1S	16S-1	7	16F1748	73.00	60.72
MS3101F18-1S	18-1	10	16F1749	72.09	59.97
MS3101F20-27S	20-27	14	16F1750	86.75	72.15
MS3101F20-29S	20-29	17	16F1751	53.56	50.93

TYPE MS3106 PLUGS WITH PIN CONTACTS

Mfg. Part No.	Insert Configuration	Contacts	Stock No.	Price Each 1-9	Price Each 10-24
MS3106F10SL-4P	10SL-4	2	50F2540	57.65	47.95
MS3106F10SL-3P	10SL-3	3	50F2539	58.10	48.33
MS3106F14S-2P	14S-2	4	50F2527	36.90	35.20
MS3106F14S-5P	14S-5	5	50F2528	35.74	34.08
MS3106F14S-6P	14S-6	6	50F2526	35.67	34.02
MS3106F16S-1P	16S-1	7	50F2498	64.83	53.93
MS3106F18-1P	18-1	10	50F2506	42.88	40.78
MS3106F20-27P	20-27	14	50F2513	76.41	63.56
MS3106F20-29P	20-29	17	50F2515	52.73	50.14

CONTINUED

CANNON TYPES MS3106, MS3102, AND MS3101 (MIL-C-5015) CIRCULAR CONNECTORS (CONT.)

TYPE MS3102 BOX MOUNTING RECEPTACLES WITH PIN CONTACTS

Mfg. Part No.	Insert Configuration	Contacts	Stock No.	Price Each 1-9	Price Each 10-24
MS3102R10SL-4P	10SL-4	2	50F2544	11.53	11.00
MS3102R10SL-3P	10SL-3	3	50F2543	12.62	12.04
MS3102R14S-2P	14S-2	4	50F2535	14.65	13.97
MS3102R14S-5P	14S-5	5	16F1742	14.34	13.68
MS3102R18-1P	18-1	10	50F2509	18.23	17.38

TYPE MS3101 CABLE CONNECTING RECEPTACLES WITH PIN CONTACTS

Mfg. Part No.	Insert Configuration	Contacts	Stock No.	Price Each 1-9	Price Each 10-24
MS3101F10SL-4P	10SL-4	2	16F1752	46.09	38.34
MS3101F10SL-3P	10SL-3	3	16F1753	30.43	29.02
MS3101F14S-2P	14S-2	4	16F1754	48.78	40.58
MS3101F14S-5P	14S-5	5	16F1755	46.59	38.75
MS3101F14S-6P	14S-6	6	16F1756	47.00	39.10
MS3101F16S-1P	16S-1	7	16F1757	69.04	57.43
MS3101F18-1P	18-1	10	16F1758	64.10	53.31
MS3101F20-27P	20-27	14	16F1759	45.85	43.60
MS3101F20-29P	20-29	17	16F1760	50.01	47.56

(8806)

DUST CAPS FOR MIL-DTL-5015 THREADED CIRCULAR CONNECTORS

RoHS Compliant Available

Sunbank
www.sunbankcorp.com

Dust Cap For Plugs

Dust Cap For Receptacles

Designed to be used with MIL-DTL-5015 threaded circular connectors. **MS25042 series** are externally threaded dust caps and are used to protect **MS3106** and **MS3108 series** connectors; *ordered separately on pages 951-952 and this page.* **MS25043 series** are internally threaded and are used to protect **MS3100, MS3101** and **MS3102 series** connectors; *ordered separately on pages 951-952 and this page.* All are made of aluminum alloy and furnished with a sash chain. Available in two platings; olive drab chromate over cadmium and black anodized.

DUST CAPS FOR PLUGS — OLIVE DRAB CHROMATE OVER CADMIUM FINISH

Mfg. Part No.	For Shell Size	Stock No.	Price Each 1-9
MS25042-8D	8	33K4383	19.01
MS25042-10D	10	30H5501	28.24
MS25042-12D	12	30H5502	26.70
MS25042-14D	14	27C5993	28.27
MS25042-16D	16	31C9545	30.03
MS25042-18D	18	12C2302	30.89
MS25042-20D	20	83H3850	31.88
MS25042-22D	22	97B3126	32.82
MS25042-24D	24	26K2285	32.83
MS25042-28D	28	34C3437	34.80
MS25042-32D	32	31C7369	40.24
MS25042-36D	36	88H1564	42.83
MS25042-40D	40	29K8929	50.21

DUST CAPS FOR PLUGS — BLACK ANODIZED FINISH

● MS25042-8DA	8	07H9998	25.64
● MS25042-10DA	10	93B5583	19.07
● MS25042-12DA	12	23C6787	26.70
● MS25042-14DA	14	50B9129	26.36
● MS25042-16DA	16	34C3391	27.64
● MS25042-18DA	18	01C8305	24.96
● MS25042-20DA	20	50B9130	22.83
● MS25042-22DA	22	33K4381	29.76
● MS25042-24DA	24	29K8927	28.97
● MS25042-28DA	28	83H5885	34.80
● MS25042-32DA	32	29K8928	39.04
● MS25042-36DA	36	30K6407	45.40
● MS25042-40DA	40	33K4382	50.21

DUST CAPS FOR RECEPTACLES — OLIVE DRAB CHROMATE OVER CADMIUM FINISH

MS25043-8D	8	91C4279	19.01
MS25043-10D	10	92B7574	21.90
MS25043-12D	12	07J1631	28.73

CONTINUED

DUST CAPS FOR MIL-DTL-5015 THREADED CIRCULAR CONNECTORS (CONT.)

DUST CAPS FOR RECEPTACLES — OLIVE DRAB CHROMATE OVER CADMIUM FINISH

Mfg. Part No.	For Shell Size	Stock No.	Price Each 1-9
MS25043-14D	14	92B7577	25.16
MS25043-16D	16	97B2679	26.22
MS25043-18D	18	23C1795	23.76
MS25043-20D	20	88F4480	30.13
MS25043-22D	22	97B3127	28.84
MS25043-24D	24	50B1326	31.15
MS25043-28D	28	91B3713	34.80
MS25043-32D	32	31C7368	39.04
MS25043-36D	36	88H1563	44.15
MS25043-40D	40	33K4384	52.47
DUST CAPS FOR RECEPTACLES — BLACK ANODIZED FINISH			
● MS25043-8DA	8	33K4386	25.64
● MS25043-10DA	10	90B5035	22.54
● MS25043-12DA	12	93B6851	21.01
● MS25043-16DA	16	92B6689	25.09
● MS25043-18DA	18	96B7300	25.77
● MS25043-20DA	20	50B9131	26.10
● MS25043-22DA	22	96B3667	28.97
● MS25043-24DA	24	24C8817	31.88
● MS25043-28DA	28	07C9404	33.15
● MS25043-32DA	32	96J0362	39.04
● MS25043-36DA	36	29K8930	45.40
● MS25043-40DA	40	33K4385	50.21

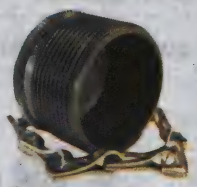
(142265)

DUST CAPS FOR MIL-DTL-5015 THREADED CIRCULAR CONNECTORS

Glenair.

Designed to be used with MIL-DTL-5015 threaded circular connectors. **MS25042 series** are externally threaded dust caps and are used to protect **MS3106** and **MS3108 series** connectors; *ordered separately on pages 951-952 and 966.* **MS25043 series** are internally threaded and are used to protect **MS3100**, **MS3101** and **MS3102 series** connectors; *ordered separately on pages 951-952 and 966.* All are made of aluminum alloy and furnished with a sash chain. Available in two platings; olive drab chromate over cadmium and black anodized.

Dust Cap For Receptacles



Dust Cap For Plugs

DUST CAPS FOR PLUGS — OLIVE DRAB CHROMATE OVER CADMIUM FINISH

Mfg. Part No.	For Shell Size	Stock No.	Price Each 1-9	10-24
MS25042-10D	10	87W7431	18.98	17.07
MS25042-12D	12	87W7433	47.90	43.08
MS25042-14D	14	87W7434	16.73	15.05
MS25042-16D	16	87W7436	20.23	18.19
MS25042-18D	18	87W7438	23.01	20.70
MS25042-20D	20	87W7440	18.57	16.70
MS25042-22D	22	87W7442	56.48	50.80
MS25042-24D	24	87W7444	20.71	18.63
MS25042-28D	28	87W7446	45.15	40.61
MS25042-32D	32	87W7448	98.81	88.88
MS25042-36D	36	87W7450	107.05	96.29
DUST CAPS FOR PLUGS — BLACK ANODIZED FINISH				
MS25042-10DA	10	87W7432	45.97	41.35
MS25042-14DA	14	87W7435	16.73	15.05
MS25042-16DA	16	87W7437	50.67	45.58
MS25042-18DA	18	87W7439	17.00	15.29
MS25042-20DA	20	87W7441	17.54	15.78
MS25042-22DA	22	87W7443	35.95	32.33
MS25042-24DA	24	87W7445	36.78	33.09
MS25042-28DA	28	87W7447	43.02	38.70
MS25042-32DA	32	87W7449	98.81	88.88
MS25042-36DA	36	87W7451	107.05	96.29
DUST CAPS FOR RECEPTACLES —OLIVE DRAB CHROMATE OVER CADMIUM FINISH				
MS25043-8D	8	87W7476	53.89	48.47
MS25043-10D	10	87W7452	12.28	11.04
MS25043-12D	12	87W7454	21.74	19.55
MS25043-14D	14	87W7456	14.43	12.98
MS25043-16D	16	87W7458	11.72	10.54
MS25043-18D	18	87W7460	18.17	16.34
MS25043-20D	20	87W7462	18.49	16.63
MS25043-22D	22	87W7464	16.63	14.96

➤CONTINUED➤

DUST CAPS FOR MIL-DTL-5015 THREADED CIRCULAR CONNECTORS (CONT.)

DUST CAPS FOR RECEPTACLES —OLIVE DRAB CHROMATE OVER CADMIUM FINISH

Mfg. Part No.	For Shell Size	Stock No.	Price Each 1-9	10-24
MS25043-24D	24	87W7466	22.81	20.52
MS25043-28D	28	87W7468	26.29	23.64
MS25043-32D	32	87W7470	32.44	29.18
MS25043-36D	36	87W7472	26.11	23.48
MS25043-40D	40	87W7474	75.40	67.82
DUST CAPS FOR RECEPTACLES — BLACK ANODIZED FINISH				
MS25043-8DA	8	87W7477	48.99	44.07
MS25043-10DA	10	87W7453	15.73	14.15
MS25043-12DA	12	87W7455	17.99	16.18
MS25043-14DA	14	87W7457	16.52	14.86
MS25043-16DA	16	87W7459	17.23	15.50
MS25043-18DA	18	87W7461	17.73	15.95
MS25043-20DA	20	87W7463	17.47	15.71
MS25043-22DA	22	87W7465	18.22	16.39
MS25043-24DA	24	87W7467	31.29	28.15
MS25043-28DA	28	87W7469	33.65	30.26
MS25043-32DA	32	87W7471	60.98	54.85
MS25043-36DA	36	87W7473	119.13	107.16
MS25043-40DA	40	87W7475	124.33	111.83

(84865)

CONTACTS FOR MIL-DTL-5015 RR CONNECTORS

DEUTSCH

Mfg. Part No.	Gender	Contact Size	AWG	Color Bands	Stock No.	Price Each 1-9
M39029/29-212	Pin	16	20AWG to 16AWG	Red / Brown / Red	61R9096	1.72
M39029/29-213	Pin	12	14AWG to 12AWG	Red / Brown / Orange	61R9097	2.20
M39029/30-217	Socket	16S	20AWG to 16AWG	Red / Brown / Violet	61R9098	2.65
M39029/30-218	Socket	16	20AWG to 16AWG	Red / Brown / Gray	61R9099	2.68
M39029/30-219	Socket	12	14AWG to 12AWG	Red / Brown / White	61R9100	1.38

(166300)

RIGHT ANGLE STRAIN RELIEF BACKSHELLS FOR MIL-C-5015 CRIMP, MIL-C-26482 SERIES II, AND MIL-C-83723 SERIES I & II

Amphenol Pcd

RoHS Compliant Available

Black

Nickel

Olive Drab Cadmium

NON SELF LOCKING

Mfg. Part No.	Shell Size	Shell Finish	MIL SPEC	Stock No.	Price Each 1-4	5-9
● M85049/51-1-8N	8	Nickel	M85049/51-1-8N	03P3319	11.50	10.14
M85049/51-1-8W	8	Olive Drab Cadmium	M85049/51-1-8W	03P3320	11.58	10.65
● M85049/51-1-10A	10	Black	M85049/51-1-10A	03P3288	10.76	9.90
● M85049/51-1-10N	10	Nickel	M85049/51-1-10N	03P3289	11.39	10.48
M85049/51-1-10W	10	Olive Drab Cadmium	M85049/51-1-10W	03P3290	12.57	11.88
● M85049/51-1-12A	12	Black	M85049/51-1-12A	03P3291	11.21	10.31
● M85049/51-1-12N	12	Nickel	M85049/51-1-12N	03P3292	11.01	10.13
M85049/51-1-12W	12	Olive Drab Cadmium	M85049/51-1-12W	03P3293	11.72	10.78
● M85049/51-1-14A	14	Black	M85049/51-1-14A	03P3294	11.24	10.34
● M85049/51-1-14N	14	Nickel	M85049/51-1-14N	03P3295	9.99	9.91
M85049/51-1-14W	14	Olive Drab Cadmium	M85049/51-1-14W	03P3296	22.07	20.74
● M85049/51-1-16A	16	Black	M85049/51-1-16A	03P3297	11.48	10.57

➤CONTINUED➤

CIRCULAR CONNECTORS

RIGHT ANGLE STRAIN RELIEF BACKSHELLS FOR MIL-C-5015 CRIMP, MIL-C-26482 SERIES II, AND MIL-C-83723 SERIES I & II (CONT.)

Mfg. Part No.	Shell Size	Shell Finish	MIL SPEC	Stock No.	Price Each 1-4	Price Each 5-9
● M85049/51-1-16N	16	Nickel	M85049/51-1-16N	03P3298	11.48	10.57
M85049/51-1-16W	16	Olive Drab Cadmium	M85049/51-1-16W	03P3299	12.70	11.69
● M85049/51-1-18A	18	Black	M85049/51-1-18A	03P3300	11.76	10.82
● M85049/51-1-18N	18	Nickel	M85049/51-1-18N	03P3301	11.96	11.01
M85049/51-1-18W	18	Olive Drab Cadmium	M85049/51-1-18W	03P3302	13.38	11.77
● M85049/51-1-20A	20	Black	M85049/51-1-20A	03P3303	12.00	11.05
● M85049/51-1-20N	20	Nickel	M85049/51-1-20N	03P3304	12.00	11.05
M85049/51-1-20W	20	Olive Drab Cadmium	M85049/51-1-20W	03P3305	12.82	12.22
● M85049/51-1-22N	22	Nickel	M85049/51-1-22N	03P3307	13.28	12.23
M85049/51-1-22W	22	Olive Drab Cadmium	M85049/51-1-22W	03P3308	14.44	12.72
● M85049/51-1-24N	24	Nickel	M85049/51-1-24N	03P3310	13.13	12.09
M85049/51-1-24W	24	Olive Drab Cadmium	M85049/51-1-24W	03P3311	14.84	14.04
SELF LOCKING						
M85049/51S8W	8	Olive Drab Cadmium	M85049/51S8W	03P3287	18.63	17.15
● M85049/51S10N	10	Nickel	M85049/51S10N	03P3256	17.23	15.85
M85049/51S10W	10	Olive Drab Cadmium	M85049/51S10W	03P3257	18.94	17.43
M85049/51S12W	12	Olive Drab Cadmium	M85049/51S12W	03P3260	19.35	17.81
M85049/51S14W	14	Olive Drab Cadmium	M85049/51S14W	03P3263	19.78	18.20
M85049/51S16W	16	Olive Drab Cadmium	M85049/51S16W	03P3266	20.23	18.62
M85049/51S18W	18	Olive Drab Cadmium	M85049/51S18W	03P3269	20.68	19.04
M85049/51S20W	20	Olive Drab Cadmium	M85049/51S20W	03P3272	21.14	19.45
● M85049/51S24N	24	Nickel	M85049/51S24N	03P3277	21.00	19.33

(133579)

STRAIGHT STRAIN RELIEF BACKSHELLS FOR MIL-C-5015 CRIMP, MIL-C-26482 SERIES II, AND MIL-C-83723 SERIES I & III

Amphenol Pcd

RoHS Compliant Available

Black

Nickel

Olive Drab Cadmium

NON SELF LOCKING

Mfg. Part No.	Shell Size	Shell Finish	MIL SPEC	Stock No.	Price Each 1-4	Price Each 5-9
● M85049/52-1-8A	8	Black	M85049/52-1-8A	03P3408	9.55	8.79
● M85049/52-1-8N	8	Nickel	M85049/52-1-8N	03P3409	9.11	8.65
M85049/52-1-8W	8	Olive Drab Cadmium	M85049/52-1-8W	03P3410	10.17	9.59
● M85049/52-1-10A	10	Black	M85049/52-1-10A	03P3366	9.02	8.30
● M85049/52-1-10N	10	Nickel	M85049/52-1-10N	03P3367	7.64	7.03
M85049/52-1-10W	10	Olive Drab Cadmium	M85049/52-1-10W	03P3368	8.34	7.57
● M85049/52-1-12A	12	Black	M85049/52-1-12A	03P3369	9.75	8.98
● M85049/52-1-12N	12	Nickel	M85049/52-1-12N	03P3370	13.17	9.97
M85049/52-1-12W	12	Olive Drab Cadmium	M85049/52-1-12W	03P3371	9.88	9.08
● M85049/52-1-14A	14	Black	M85049/52-1-14A	03P3372	10.05	9.25
● M85049/52-1-14N	14	Nickel	M85049/52-1-14N	03P3373	10.59	10.04
M85049/52-1-14W	12 / 14	Olive Drab Cadmium	M85049/52-1-14W	03P3374	9.33	8.60
● M85049/52-1-16A	16	Black	M85049/52-1-16A	03P3375	10.34	9.53
● M85049/52-1-16N	16	Nickel	M85049/52-1-16N	03P3376	9.55	8.79
M85049/52-1-16W	16	Olive Drab Cadmium	M85049/52-1-16W	03P3377	10.49	9.65
● M85049/52-1-18A	18	Black	M85049/52-1-18A	03P3378	10.65	9.80
● M85049/52-1-18N	18	Nickel	M85049/52-1-18N	03P3379	9.13	8.40
M85049/52-1-18W	18	Olive Drab Cadmium	M85049/52-1-18W	03P3380	10.05	9.24
● M85049/52-1-20A	20	Black	M85049/52-1-20A	03P3381	11.00	10.12
● M85049/52-1-20N	20	Nickel	M85049/52-1-20N	03P3382	10.45	10.34
M85049/52-1-20W	20	Olive Drab Cadmium	M85049/52-1-20W	03P3383	11.13	10.24
● M85049/52-1-22A	22	Black	M85049/52-1-22A	03P3384	11.46	10.55
● M85049/52-1-22N	22	Nickel	M85049/52-1-22N	03P3385	10.49	9.65
M85049/52-1-22W	22	Olive Drab Cadmium	M85049/52-1-22W	03P3386	10.65	10.12
● M85049/52-1-24A	24	Black	M85049/52-1-24A	03P3387	12.19	11.22
● M85049/52-1-24N	24	Nickel	M85049/52-1-24N	03P3388	10.88	10.01
M85049/52-1-24W	24	Olive Drab Cadmium	M85049/52-1-24W	03P3389	12.57	11.57
● M85049/52-1-28A	28	Black	M85049/52-1-28A	03P3390	16.84	15.50
● M85049/52-1-28N	28	Nickel	M85049/52-1-28N	03P3391	17.14	15.77
M85049/52-1-28W	28	Olive Drab Cadmium	M85049/52-1-28W	03P3392	19.35	17.82
● M85049/52-1-32A	32	Black	M85049/52-1-32A	03P3393	23.26	21.41
● M85049/52-1-32N	32	Nickel	M85049/52-1-32N	03P3394	23.26	21.41
M85049/52-1-32W	32	Olive Drab Cadmium	M85049/52-1-32W	03P3395	26.58	23.51
● M85049/52-1-36N	36	Nickel	M85049/52-1-36N	03P3397	32.12	29.56

➤CONTINUED➤

STRAIGHT STRAIN RELIEF BACKSHELLS FOR MIL-C-5015 CRIMP, MIL-C-26482 SERIES II, AND MIL-C-83723 SERIES I & III (CONT.)

Mfg. Part No.	Shell Size	Shell Finish	MIL SPEC	Stock No.	Price Each 1-4	Price Each 5-9
M85049/52-1-40W	40	Olive Drab Cadmium	M85049/52-1-40W	03P3401	48.82	44.93
M85049/52-1-44W	44	Olive Drab Cadmium	M85049/52-1-44W	03P3404	67.42	62.05
SELF LOCKING						
● M85049/52S8A	8	Black	M85049/52S8A	03P3363	14.42	13.27
● M85049/52S8N	8	Nickel	M85049/52S8N	03P3364	14.68	13.51
M85049/52S8W	8	Olive Drab Cadmium	M85049/52S8W	03P3365	18.98	17.38
● M85049/52S10A	10	Black	M85049/52S10A	03P3321	14.87	13.69
● M85049/52S10N	10	Nickel	M85049/52S10N	03P3322	13.11	13.10
M85049/52S10W	10	Olive Drab Cadmium	M85049/52S10W	03P3323	16.64	15.43
● M85049/52S12N	12	Nickel	M85049/52S12N	03P3325	14.18	13.51
M85049/52S12W	12	Olive Drab Cadmium	M85049/52S12W	03P3326	19.04	16.69
● M85049/52S14A	14	Black	M85049/52S14A	03P3327	15.78	14.52
● M85049/52S14N	14	Nickel	M85049/52S14N	03P3328	15.33	14.10
M85049/52S14W	14	Olive Drab Cadmium	M85049/52S14W	03P3329	18.83	17.86
● M85049/52S16N	16	Nickel	M85049/52S16N	03P3331	16.68	14.50
M85049/52S16W	16	Olive Drab Cadmium	M85049/52S16W	03P3332	18.71	16.90
● M85049/52S18A	18	Black	M85049/52S18A	03P3333	16.77	15.44
● M85049/52S18N	18	Nickel	M85049/52S18N	03P3334	17.67	16.36
M85049/52S18W	18	Olive Drab Cadmium	M85049/52S18W	03P3335	18.45	16.98
● M85049/52S20N	20	Nickel	M85049/52S20N	03P3337	17.27	15.90
M85049/52S20W	20	Olive Drab Cadmium	M85049/52S20W	03P3338	14.69	14.24
● M85049/52S22A	22	Black	M85049/52S22A	03P3339	18.36	16.89
● M85049/52S22N	22	Nickel	M85049/52S22N	03P3340	13.91	13.49
M85049/52S22W	22	Olive Drab Cadmium	M85049/52S22W	03P3341	15.69	15.21
● M85049/52S24N	24	Nickel	M85049/52S24N	03P3343	15.34	14.87
M85049/52S24W	24	Olive Drab Cadmium	M85049/52S24W	03P3344	16.27	15.77
M85049/52S28W	28	Olive Drab Cadmium	M85049/52S28W	03P3347	27.78	25.57
M85049/52S32W	32	Olive Drab Cadmium	M85049/52S32W	03P3350	38.38	35.32

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CANNON MIL-C-38999 CONNECTORS

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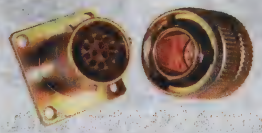
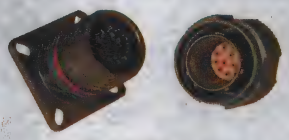
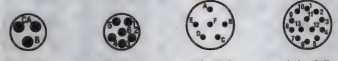


MIL-C-38999 Series I Receptacle and Plug

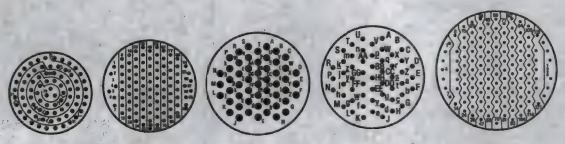


MIL-C-38999 Series III Receptacle and Plug



Series 1	9-98	9-35	11-98	11-35
Series III	A98	A35	B98	B35
Contacts	3-#20	6-#22	6-#20	13-#22

Series 1	13-98	13-35	15-35	17-35	19-35
Series III	C98	C35	D35	E35	F35
Contacts	10-#20	22-#22	37-#22	55-#22	66-#22



Series 1	21-35	23-35	23-53	23-55	25-35
Series III	G35	H35	H53	H55	J35
Contacts	79-#22	100-#22	53-#20	55-#20	128-#22

Contact Arrangements

MIL-C-38999 series connectors offer high-density contact arrangements in a miniature circular shell. Originally designed for the especially demanding requirements of today's high performance military and commercial aircraft, these connectors are finding their way into applications needing extremely reliable interconnections, crimp-style connectors. All connectors include: contacts, a plastic insertion/extraction tool and wire hole fillers.

MIL-C-38999 SERIES I

Features include: total environment sealing, wide operating temperature range, quick mating, three point bayonet coupling, 100% scoop-proof shell design and EMI-RFI shielding. Operating temperature: **Finish B** - Olive drab chromate over cadmium over electroless nickel per QQ-P-416, -65°C to 175°C (-85°F to 347°F). **Finish F** - Electroless nickel per QQ-N-290, -65°C to 200°C (-85°F to 392°F).

➤CONTINUED➤

CANNON MIL-C-38999 CONNECTORS (CONT.)

SERIES I FLANGED RECEPTACLES WITH SOCKET CONTACTS

	B Finish			F Finish		
Contacts	Mfg. Part No.	Stock No.	Price Each 1-24	Mfg. Part No.	Stock No.	Price Each 1-4
22	MS27656T13B35S	91C6867	94.27	MS27656T13F35S	91C3824	91.83
55	MS27656T17B35S	71C9214	106.72	MS27656T17F35S	50B9141	108.53

SERIES I STRAIGHT PLUGS WITH PIN CONTACTS

	B Finish			F Finish		
Contacts	Mfg. Part No.	Stock No.	Price Each 1-4	Mfg. Part No.	Stock No.	Price Each 1-24
13	MS27467T11B35P	81C9584	97.18	MS27467T11F35P	91C6855	113.62
22	MS27467T13B35P	91B1107	283.55	MS27467T13F35P	91C6856	104.47
55	MS27467T17B35P	40C0107	138.63	MS27467T17F35P	90B7909	162.03
66	MS27467T19B35P	35C2716	148.13	MS27467T19F35P	91C6857	173.07
128	MS27467T25B35P	13C3415	167.62	...	...	...

MIL-C-38999 SERIES III

Features include: total environment sealing, wide operating temperature range, quick mating, triple lead threaded, self-locking coupling, 100% scoop-proof shell design and EMI-RFI shielding. Operating temperature: **Finish W** - Olive drab chromate over cadmium over electroless nickel per QQ-P-416, -65°C to 175°C (-85°F to 347°F). **Finish F** - Electroless nickel per QQ-N-290, -65°C to 200°C (-85°F to 392°F). *Inserts provided may be white or pink.*

SERIES III FLANGED RECEPTACLES WITH SOCKET CONTACTS

	W Finish			F Finish		
Contacts	Mfg. Part No.	Stock No.	Price Each 1-4	Mfg. Part No.	Stock No.	Price Each 1-4
6	D38999/20WA35SN	70T3810	39.13	D38999/20FA35SN	70T3633	38.44
13	D38999/20WB35SN	70T3844	45.36	D38999/20FB35SN -	91C6500	88.62
6	D38999/20WB98SN	70T3865	45.57	D38999/20FB98SN	70T3679	44.92
16	...	...	...	D38999/20FC98SN	70T3711	45.05
66	...	...	...	D38999/20FF35SN	70T3763	87.87

SERIES III STRAIGHT PLUGS WITH PIN CONTACTS

	W Finish			F Finish		
Contacts	Mfg. Part No.	Stock No.	Price Each 1-4	Mfg. Part No.	Stock No.	Price Each 1-4
16	D38999/26WC98PN	70T4689	56.33	...	...	...
66	...	...	...	D38999/26FF35PN	70T4547	99.49
100	D38999/26WH35PN -	98B5376	224.21	...	...	...

(72459)

MIL-DTL 38999 SERIES III HERMETIC CONNECTORS

- Hermetically sealed
- Environmentally sealed
- Screw thread
- Fixed solder pin contacts
- EMI protection
- QPL'd to MIL-DTL-38999

DEUTSCH

MIL-DTL-38999 series III hermetic connectors are especially adapted for severe environments (vibrations + temperature + corrosion + fire). Receptacles feature Deutsch developed direct glass-to-metal sealing, nickel or stainless finishes and solder cup terminated type, pin contacts. These receptacles mate with all qualified D38999 series III plugs. Shell material: stainless steel. Insert material: fused vitreous (glass). Operating temperature: -65°C to +200°C. Salt spray resistance: 500h. Vibrations tests: 43G variable at 200°C from 10 to 2000Hz.

D38999/21 BOX MOUNT RECEPTACLES

Mfg. Part No.	Shell Size	Insert Arrangement	No. of Contacts	Contact Size	Shell Finish Code*	Stock No.	Price Each 1-9
D38999/21YA35PN	9	9-35	6	22D	Y	88W4492	123.46
D38999/21YA98PA	9	9-98	3	20	Y	88W4493	123.05
D38999/21YA98PN	9	9-98	3	20	Y	88W4494	124.84
D38999/21YB98PN	11	11-98	6	20	Y	88W4495	124.52
D38999/21NC35PN	13	13-35	22	22D	N	88W4490	152.68
D38999/21YC35PN	13	13-35	22	22D	Y	88W4496	191.77
D38999/21YC98PN	13	13-98	10	20	Y	88W4497	126.61
D38999/21NH35PN	23	23-35	100	22D	N	88W4491	324.51
D38999/23 JAM NUT RECEPTACLES							
D38999/23YA35PN	9	9-35	6	22D	Y	88W4499	162.35
D38999/23YB35PN	11	11-35	13	22D	Y	47W5778	160.50
D38999/23NC35PN	13	13-35	22	22D	N	88W4498	195.93
D38999/23YC35PN	13	13-35	22	22D	Y	88W4500	146.03
D38999/23YD35PN	15	15-35	37	22D	Y	88W4501	241.73
D38999/23YE26PN	17	17-26	26	20	Y	88W4502	214.55
D38999/23YE35PN	17	17-35	55	22D	Y	88W4503	204.28
D38999/23YF35PN	19	19-35	66	22D	Y	88W4504	245.17

➤ CONTINUED ➤

MIL-DTL 38999 SERIES III HERMETIC CONNECTORS (CONT.)

D38999/25 SOLDER MOUNT RECEPTACLES

Mfg. Part No.	Shell Size	Insert Arrangement	No. of Contacts	Contact Size	Shell Finish Code*	Stock No.	Price Each 1-9
D38999/25NA35PN	9	9-35	6	22D	N	88W4505	138.60
D38999/25YA98PN	9	9-98	3	20	Y	88W4507	75.10
D38999/25NB35PN	11	11-35	13	22D	N	88W4506	122.66

*Y = stainless steel; N = stainless steel with a nickel plate
(210099)

ACCESSORIES FOR MIL-C-38999 SERIES I, II, III AND IV CIRCULAR CONNECTORS

Sunbank
www.sunbankcorp.com

Straight Strain Relief Backshell

Right-Angle Strain Relief Backshell

Dust Cap for Series I and II Receptacles

Dust Cap for Series I and II Plugs

Dust Cap for Series III Receptacles

Dust Cap for Series III Plugs

Straight and right-angle metal strain relief backshells available in olive drab chromate over cadmium over nickel finish (1000-hr. salt spray) or electroless nickel finish (fluid-resistant). Metal dust caps for plugs and flanged receptacles feature an olive drab chromate over cadium over nickel finish (1000-hr. salt spray). Meets MIL-C-38999 military specifications. Used with ITT/Cannon MIL-C-38999 connectors, Souriau MIL-C38999 connectors and Amphenol Amphi-Lite Commercial Series III connectors.

STRAIGHT STRAIN RELIEF BACKSHELLS FOR SERIES I AND II CONNECTORS

Mfg. Part No.	Connector Shell Size	Stock No.	Price Each 1-24
M85049/49-2-8W	9	93B3497	11.59
M85049/49-2-8N*	9	50B9195	11.59
M85049/49-2-10W	11	90B6404	12.01
M85049/49-2-10N*	11	92B5657	12.01
M85049/49-2-12W	13	20C6370	12.69
M85049/49-2-12N*	13	93B4910	12.69
M85049/49-2-14W	15	01C8412	12.37
M85049/49-2-14N*	15	93B3582	13.24
M85049/49-2-16W	17	88F3925	13.82
M85049/49-2-16N*	17	25C5210	13.82
M85049/49-2-18W	19	90B6435	14.37
M85049/49-2-18N*	19	23C6912	14.79
M85049/49-2 20W	21	18C5338	14.79
M85049/49-2-20N*	21	88F3545	14.79
M85049/49-2-22W	23	01C6657	15.42
M85049/49-2-22N*	23	93B4905	14.41
M85049/49-2-24W	25	91B2010	16.10
M85049/49-2-24N*	25	50B9194	16.10
RIGHT-ANGLE STRAIN RELIEF BACKSHELLS FOR SERIES I AND II CONNECTORS			
M85049/47W8	9	91C6908	16.93
M85049/47N8*	9	91C6901	17.43
M85049/47W10	11	91C6902	17.53
M85049/47N10*	11	91C6894	16.38
M85049/47W12	13	91C6903	18.48
M85049/47N12*	13	91C6895	19.02
M85049/47W14	15	91C6904	19.05
M85049/47N14*	15	91C6896	18.59
M85049/47W16	17	98B1482	20.17
M85049/47N16*	17	91C6897	20.17
M85049/47W18	19	91C6905	20.99
M85049/47N18*	19	91C6898	20.21
M85049/47W20	21	92B6330	20.17
M85049/47N20*	21	91C6899	20.77
M85049/47W22	23	91C6906	21.66
M85049/47N22*	23	26C9874	21.66

➤ CONTINUED ➤

CIRCULAR CONNECTORS

ACCESSORIES FOR MIL-C-38999 SERIES I, II, III AND IV CIRCULAR CONNECTORS (CONT.)

RIGHT-ANGLE STRAIN RELIEF BACKSHELLS FOR SERIES I AND II CONNECTORS

Mfg. Part No.	Connector Shell Size	Stock No.	Price Each 1-24
M85049/47W24	25	91C6907	21.92
M85049/47N24*	25	91C6900	24.14

*Electroless nickel finish

STRAIGHT STRAIN RELIEF BACKSHELLS FOR SERIES III AND IV CONNECTORS

M85049/38-9W	9	07C9118	13.64
M85049/38-11W	11	90B2893	14.15
M85049/38-13W	13	34C2446	14.92
M85049/38-15W	15	90B2573	15.56
M85049/38-17W	17	97B0134	16.29
M85049-38-19W	19	50B1472	16.93
M85049/38-21W	21	99B1011	17.43
M85049/38-23W	23	90B2964	18.16
M85049/38-25W	25	97B3315	18.94

RIGHT-ANGLE STRAIN RELIEF BACKSHELLS FOR SERIES III AND IV CONNECTORS

M85049/39-9W	9	91C6893	15.92
M85049/39-11W	11	91C6885	15.91
M85049/39-13W	13	91C6886	16.29
M85049/39-15W	15	91C6887	18.16
M85049/39-17W	17	91C6888	17.78
M85049/39-19W	19	91C6889	20.35
M85049/39-21W	21	91C6890	19.57
M85049/39-23W	23	91C6891	21.22
M85049/39-25W	25	91C6892	22.13

DUST CAPS FOR SERIES I FLANGED RECEPTACLES

MS27502B9C	9	04H1990	22.26
MS27502B11C	11	04H1984	24.56
MS27502B13C	13	04H1985	25.29
MS27502B15C	15	95C0141	26.03
MS27502B17C	17	04H1986	25.83
MS27502B19C	19	04H1987	28.17
MS27502B21C	21	93B2850	28.17
MS27502B23C	23	04H1988	29.03
MS27502B25C	25	04H1989	29.89

DUST CAPS FOR SERIES I PLUGS

MS27501B9C	9	04H1983	23.89
MS27501B11C	11	04H1975	24.58
MS27501B13C	13	04H1976	25.26
MS27501B15C	15	04H1977	26.02
MS27501B17C	17	04H1978	28.44
MS27501B21C	21	04H1980	29.33
MS27501B23C	23	04H1981	30.20
MS27501B25C	25	04H1982	30.20

DUST CAPS WITH RING FOR SERIES III FLANGED RECEPTACLES

D38999/33W9R	9	02E8871	22.79
D38999/33W11R	11	04H1634	23.58
D38999/33W13R	13	04H1635	23.78
D38999/33W15R	15	97C5031	24.22
D38999/33W17R	17	04H1636	24.76
D38999/33W19R	19	04H1637	25.09
D38999/33W21R	21	97C5026	25.29
D38999/33W23R	23	04H1638	25.42
D38999/33W25R	25	02H4646	26.70

DUST CAPS WITH RING FOR SERIES III PLUGS

D38999/32W9N	9	04H1633	29.56
D38999/32W11N	11	04H1627	30.01
D38999/32W13N	13	01H7630	30.56
D38999/32W15N	15	04H1628	30.70
D38999/32W17N	17	04H1629	31.15
D38999/32W19N	19	04H1630	31.48
D38999/32W21N	21	95C3235	29.95
D38999/32W23N	23	04H1631	31.82
D38999/32W25N	25	04H1632	33.15

(142262)

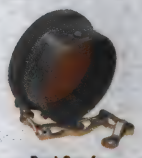
ACCESSORIES FOR MIL-C-38999 SERIES I, II, III AND IV CIRCULAR CONNECTORS

Glenair.

Straight Strain Relief Backshell

Right-Angle Strain Relief Backshell

Dust Cap for Series I and II Receptacles


Dust Cap for Series I and II Plugs

Dust Cap for Series III Receptacles

Dust Cap for Series III Plugs

STRAIGHT STRAIN RELIEF BACKSHELLS FOR SERIES I AND II CONNECTORS

Mfg. Part No.	For Shell Size	Stock No.	Price Each 1-9	Price Each 10-24
M85049/49-2-8W	8 / 9	87W7598	14.40	13.29
M85049/49-2-8N*	8 / 9	87W7597	19.29	17.81
M85049/49-2-10W	10 / 11	87W7582	14.57	13.45
M85049/49-2-10N*	10 / 11	87W7581	13.57	12.52
M85049/49-2-12W	12 / 13	87W7584	15.09	13.93
M85049/49-2-12N*	12 / 13	87W7583	13.97	12.90
M85049/49-2-14W	14 / 15	87W7586	15.32	14.14
M85049/49-2-14N*	14 / 15	87W7585	20.44	18.87
M85049/49-2-16W	16 / 17	87W7588	19.92	18.39
M85049/49-2-16N*	16 / 17	87W7587	17.23	15.90
M85049/49-2-18W	18 / 19	87W7590	17.05	15.74
M85049/49-2-18N*	18 / 19	87W7589	14.86	13.72
M85049/49-2-20W	20 / 21	87W7592	20.62	19.03
M85049/49-2-20N*	20 / 21	87W7591	17.18	15.86
M85049/49-2-22W	22 / 23	87W7594	26.65	24.60
M85049/49-2-22N*	22 / 23	87W7593	15.38	14.20
M85049/49-2-24W	24 / 25	87W7596	27.13	25.04
M85049/49-2-24N*	24 / 25	87W7595	13.25	12.23

RIGHT-ANGLE STRAIN RELIEF BACKSHELLS FOR SERIES I AND II CONNECTORS

M85049/47W8	8 / 9	87W7580	53.79	49.65
M85049/47W10	10 / 11	87W7575	33.38	30.82
M85049/47W14	14 / 15	87W7576	21.60	19.94
M85049/47N14*	14 / 15	87W7573	20.14	18.59
M85049/47W16	16 / 17	87W7577	40.86	37.72
M85049/47W20	20 / 21	87W7578	29.27	27.02
M85049/47W22	22 / 23	87W7579	48.38	44.66
M85049/47N22*	22 / 23	87W7574	65.54	60.50

*Electroless nickel finish

STRAIGHT STRAIN RELIEF BACKSHELLS FOR SERIES III AND IV CONNECTORS

M85049/38-9W	9	87W7561	19.89	18.36
M85049/38-11W	11	87W7553	18.18	16.78
M85049/38-13W	13	87W7554	20.29	18.73
M85049/38-15W	15	87W7555	20.70	19.10
M85049/38-17W	17	87W7556	21.23	19.60
M85049/38-19W	19	87W7557	23.01	21.24
M85049/38-21W	21	87W7558	23.34	21.54
M85049/38-23W	23	87W7559	28.20	26.03
M85049/38-25W	25	87W7560	25.51	23.55

RIGHT-ANGLE SRAIN RELIEF BACKSHELLS FOR SERIES III AND IV CONNECTORS

M85049/39-9W	9	87W7567	54.19	50.03
M85049/39-11W	11	87W7562	52.86	48.79
M85049/39-13W	13	87W7563	54.75	50.54
M85049/39-15W	15	87W7564	38.15	35.22
M85049/39-17W	17	87W7565	24.17	22.31
M85049/39-21W	21	87W7566	101.83	94.00

DUST CAPS FOR SERIES I FLANGED RECEPTACLES

MS27502B9C	9	87W7490	27.30	24.55
MS27502B11C	11	87W7483	26.16	23.53
MS27502B13C	13	87W7484	55.85	50.24
MS27502B15C	15	87W7485	28.61	25.73
MS27502B17C	17	87W7486	31.00	27.88
MS27502B19C	19	87W7487	111.36	100.17

➤CONTINUED➤

ACCESSORIES FOR MIL-C-38999 SERIES I, II, III AND IV CIRCULAR CONNECTORS (CONT.)

DUST CAPS FOR SERIES I FLANGED RECEPTACLES

Mfg. Part No.	For Shell Size	Stock No.	Price Each 1-9	Price Each 10-24
MS27502B23C	23	87W7488	63.56	57.18
MS27502B25C	25	87W7489	66.72	60.01
DUST CAPS FOR SERIES I PLUGS				
MS27501B15C	15	87W7478	36.65	32.97
MS27501B17C	17	87W7479	55.85	50.24
MS27501B23C	23	87W7480	103.12	92.76
MS27501B25C	25	87W7481	107.39	96.60
DUST CAPS WITH RING FOR SERIES III FLANGED RECEPTACLES				
D38999/33W9R	9	87W7430	32.78	29.48
D38999/33W11R	11	87W7419	33.16	29.82
D38999/33W13R	13	87W7421	30.63	27.55
D38999/33W15R	15	87W7423	33.75	30.36
D38999/33W17R	17	87W7424	38.99	35.07
D38999/33W19R	19	87W7425	39.06	35.14
D38999/33W21R	21	87W7426	38.26	34.41
D38999/33W23R	23	87W7427	44.56	40.08
D38999/33W25R	25	87W7428	40.57	36.49
DUST CAPS WITH RING FOR SERIES III PLUGS				
D38999/32W9N	9	87W7418	65.64	59.04
D38999/32W11N	11	87W7410	49.26	44.31
D38999/32W13N	13	87W7411	44.99	40.46
D38999/32W15N	15	87W7412	41.02	36.90
D38999/32W17N	17	87W7413	46.01	41.38
D38999/32W19N	19	87W7414	68.74	61.83
D38999/32W21N	21	87W7415	102.52	92.21
D38999/32W23N	23	87W7416	102.95	92.60
D38999/32W25N	25	87W7417	53.94	48.52

(73913)

STRAIGHT STRAIN RELIEF BACKSHELLS FOR MIL-C-38999 SERIES II CONNECTORS

RoHS Compliant Available

Amphenol Pcd

Nickel

Olive Drab Cadmium

NON SELF LOCKING

Mfg. Part No.	Shell Size	Cable Dia. Max. (mm)	Shell Finish	Stock No.	Price Each 1-4	Price Each 5-9
● M85049/49-2-8N	8	5.18	Nickel	07P3724	8.72	8.34
M85049/49-2-8W	8	5.18	Olive Drab Cadmium	04P6345	9.02	8.29
● M85049/49-2-10N	10	7.26	Nickel	07P3716	8.35	8.01
M85049/49-2-10W	10	7.26	Olive Drab Cadmium	04P6329	8.75	8.15
● M85049/49-2-12N	7 / 12	10.57	Nickel	07P3717	8.65	7.96
M85049/49-2-12W	7 / 12	10.57	Olive Drab Cadmium	04P6331	8.94	8.23
● M85049/49-2-14N	12 / 14	12.09	Nickel	07P3718	8.42	7.75
M85049/49-2-14W	12 / 14	12.09	Olive Drab Cadmium	04P6333	9.70	8.93
● M85049/49-2-16N	19 / 16	15.9	Nickel	07P3719	8.11	7.86
M85049/49-2-16W	19 / 16	15.9	Olive Drab Cadmium	04P6335	9.60	8.83
● M85049/49-2-18N	27 / 18	17.93	Nickel	07P3720	11.15	10.48
M85049/49-2-18W	27 / 18	17.93	Olive Drab Cadmium	04P6337	12.06	11.10
● M85049/49-2-20N	37 / 20	21.11	Nickel	07P3721	11.37	10.46
M85049/49-2-20W	37 / 20	21.11	Olive Drab Cadmium	04P6339	21.06	19.79
● M85049/49-2-22N	22	24.28	Nickel	07P3722	11.66	11.09
M85049/49-2-22W	22	24.28	Olive Drab Cadmium	04P6341	11.04	10.16
● M85049/49-2-24N	24	27.46	Nickel	07P3723	10.06	9.75
M85049/49-2-24W	24	27.46	Olive Drab Cadmium	04P6343	11.88	11.20

(166279)

STRAIGHT STRAIN RELIEF BACKSHELLS FOR MIL-C-38999 SERIES III & IV CONNECTORS

RoHS Compliant Available

Amphenol Pcd

Black

Nickel

Olive Drab Cadmium

NON SELF LOCKING

Mfg. Part No.	Shell Size	Shell Finish	MIL SPEC	Stock No.	Price Each 1-4	Price Each 5-9
● M85049/38-9A	9	Black	M85049/38-9A	03P3198	8.21	7.56
● M85049/38-9N	9	Nickel	M85049/38-9N	03P3199	8.72	8.03
M85049/38-9W	9	Olive Drab Cadmium	M85049/38-9W	03P3200	9.34	9.18
● M85049/38-11A	11	Black	M85049/38-11A	03P3174	10.56	9.42
● M85049/38-11N	11	Nickel	M85049/38-11N	03P3175	7.75	7.03
M85049/38-11W	11	Olive Drab Cadmium	M85049/38-11W	03P3176	8.46	7.79
● M85049/38-13A	13	Black	M85049/38-13A	03P3177	10.57	9.36
● M85049/38-13N	13	Nickel	M85049/38-13N	03P3178	8.60	7.91
M85049/38-13W	13	Olive Drab Cadmium	M85049/38-13W	03P3179	11.18	10.61
● M85049/38-15A	15	Black	M85049/38-15A	03P3180	9.45	8.69
● M85049/38-15N	15	Nickel	M85049/38-15N	03P3181	8.92	8.21
M85049/38-15W	15	Olive Drab Cadmium	M85049/38-15W	03P3182	10.53	9.80
● M85049/38-17A	17	Black	M85049/38-17A	03P3183	11.35	10.03
● M85049/38-17N	17	Nickel	M85049/38-17N	03P3184	12.92	12.42
M85049/38-17W	17	Olive Drab Cadmium	M85049/38-17W	03P3185	11.29	10.76
● M85049/38-19A	19	Black	M85049/38-19A	03P3186	11.28	10.39
● M85049/38-19N	19	Nickel	M85049/38-19N	03P3187	10.39	9.56
M85049/38-19W	19	Olive Drab Cadmium	M85049/38-19W	03P3188	11.44	10.54
● M85049/38-21A	21	Black	M85049/38-21A	03P3189	12.00	11.05
● M85049/38-21N	21	Nickel	M85049/38-21N	03P3190	10.78	9.93
M85049/38-21W	21	Olive Drab Cadmium	M85049/38-21W	03P3191	9.66	8.78
● M85049/38-23A	23	Black	M85049/38-23A	03P3192	11.01	10.48
● M85049/38-23N	23	Nickel	M85049/38-23N	03P3193	26.70	25.21
M85049/38-23W	23	Olive Drab Cadmium	M85049/38-23W	03P3194	13.54	13.48
● M85049/38-25A	25	Black	M85049/38-25A	03P3195	11.33	11.26
● M85049/38-25N	25	Nickel	M85049/38-25N	03P3196	11.75	11.42
M85049/38-25W	25	Olive Drab Cadmium	M85049/38-25W	03P3197	12.69	11.68
SELF LOCKING						
● M85049/38S9N	9	Nickel	M85049/38S9N	03P3172	11.48	10.56
M85049/38S9W	9	Olive Drab Cadmium	M85049/38S9W	03P3173	13.40	12.33
● M85049/38S11A	11	Black	M85049/38S11A	03P3147	13.55	12.70
● M85049/38S11N	11	Nickel	M85049/38S11N	03P3148	13.54	12.42
M85049/38S11W	11	Olive Drab Cadmium	M85049/38S11W	03P3149	13.07	12.03
● M85049/38S13N	13	Nickel	M85049/38S13N	03P3151	13.39	12.32
M85049/38S13W	13	Olive Drab Cadmium	M85049/38S13W	03P3152	14.73	13.56
● M85049/38S15N	15	Nickel	M85049/38S15N	03P3154	14.53	13.39
M85049/38S15W	15	Olive Drab Cadmium	M85049/38S15W	03P3155	44.43	41.75
● M85049/38S17N	17	Nickel	M85049/38S17N	03P3157	13.03	11.98
M85049/38S17W	17	Olive Drab Cadmium	M85049/38S17W	03P3158	15.33	14.56
● M85049/38S19N	19	Nickel	M85049/38S19N	03P3160	14.51	13.36
M85049/38S19W	19	Olive Drab Cadmium	M85049/38S19W	03P3161	15.95	14.68
● M85049/38S21N	21	Nickel	M85049/38S21N	03P3163	15.41	14.18
M85049/38S21W	21	Olive Drab Cadmium	M85049/38S21W	03P3164	20.62	18.67
● M85049/38S23N	23	Nickel	M85049/38S23N	03P3166	16.14	14.86
M85049/38S23W	23	Olive Drab Cadmium	M85049/38S23W	03P3167	17.20	16.26
● M85049/38S25N	25	Nickel	M85049/38S25N	03P3169	17.76	16.36
M85049/38S25W	25	Olive Drab Cadmium	M85049/38S25W	03P3170	18.47	16.68

(133497)

Custom Cable Assembiles to your specs to mate with the complete line of connectors!
Call 1.800.463.9275

(212562)

RIGHT ANGLE STRAIN RELIEF BACKSHELLS FOR MIL-C-38999 SERIES III & IV

RoHS Compliant Available

Amphenol Pcd

Black

Nickel

Olive Drab Cadmium

NON SELF LOCKING

Mfg. Part No.	Shell Size	Shell Finish	MIL SPEC	Stock No.	Price Each 1-4	Price Each 5-9
● M85049/39-9N	9	Nickel	M85049/39-9N	03P3253	11.88	11.73
M85049/39-9W	9	Olive Drab Cadmium	M85049/39-9W	03P3254	13.40	13.07
● M85049/39-11A	11	Black	M85049/39-11A	03P3228	11.50	11.08
● M85049/39-11N	11	Nickel	M85049/39-11N	03P3229	11.50	11.08
M85049/39-11W	11	Olive Drab Cadmium	M85049/39-11W	03P3230	13.23	12.64
● M85049/39-13A	13	Black	M85049/39-13A	03P3231	12.80	11.79
● M85049/39-13N	13	Nickel	M85049/39-13N	03P3232	11.79	11.48
M85049/39-13W	13	Olive Drab Cadmium	M85049/39-13W	03P3233	15.13	13.73
● M85049/39-15A	15	Black	M85049/39-15A	03P3234	15.70	14.88
● M85049/39-15N	15	Nickel	M85049/39-15N	03P3235	12.62	12.24
M85049/39-15W	15	Olive Drab Cadmium	M85049/39-15W	03P3236	15.46	13.73
● M85049/39-17A	17	Black	M85049/39-17A	03P3237	13.92	12.80
● M85049/39-17N	17	Nickel	M85049/39-17N	03P3238	13.56	12.48
M85049/39-17W	17	Olive Drab Cadmium	M85049/39-17W	03P3239	14.15	13.02
● M85049/39-19N	19	Nickel	M85049/39-19N	03P3241	12.67	12.09
M85049/39-19W	19	Olive Drab Cadmium	M85049/39-19W	03P3242	17.09	14.06
● M85049/39-21A	21	Black	M85049/39-21A	03P3243	12.97	12.09
M85049/39-21W	21	Olive Drab Cadmium	M85049/39-21W	03P3245	15.64	14.40
● M85049/39-23N	23	Nickel	M85049/39-23N	03P3247	13.11	13.00
M85049/39-23W	23	Olive Drab Cadmium	M85049/39-23W	03P3248	18.63	15.12
● M85049/39-25A	25	Black	M85049/39-25A	03P3249	14.32	14.20
● M85049/39-25N	25	Nickel	M85049/39-25N	03P3250	18.13	15.70
M85049/39-25W	25	Olive Drab Cadmium	M85049/39-25W	03P3251	17.27	15.89
SELF LOCKING						
● M85049/39S9N	9	Nickel	M85049/39S9N	03P3226	18.29	16.84
M85049/39S9W	9	Olive Drab Cadmium	M85049/39S9W	03P3227	20.11	18.51
● M85049/39S11A	11	Black	M85049/39S11A	03P3201	14.66	14.21
● M85049/39S11N	11	Nickel	M85049/39S11N	03P3202	13.96	13.54
M85049/39S11W	11	Olive Drab Cadmium	M85049/39S11W	03P3203	17.07	16.54
● M85049/39S13N	13	Nickel	M85049/39S13N	03P3205	15.90	15.42
M85049/39S13W	13	Olive Drab Cadmium	M85049/39S13W	03P3206	16.67	16.17
● M85049/39S15N	15	Nickel	M85049/39S15N	03P3208	21.74	18.25
M85049/39S15W	15	Olive Drab Cadmium	M85049/39S15W	03P3209	20.32	19.12
● M85049/39S17N	17	Nickel	M85049/39S17N	03P3211	20.16	18.55
M85049/39S17W	17	Olive Drab Cadmium	M85049/39S17W	03P3212	21.21	19.53
● M85049/39S19N	19	Nickel	M85049/39S19N	03P3214	15.39	14.89
M85049/39S19W	19	Olive Drab Cadmium	M85049/39S19W	03P3215	23.18	21.35
● M85049/39S21N	21	Nickel	M85049/39S21N	03P3217	22.99	20.22
M85049/39S21W	21	Olive Drab Cadmium	M85049/39S21W	03P3218	22.18	20.41
M85049/39S23W	23	Olive Drab Cadmium	M85049/39S23W	03P3221	16.88	16.37
● M85049/39S25A	25	Black	M85049/39S25A	03P3222	16.11	15.62
● M85049/39S25N	25	Nickel	M85049/39S25N	03P3223	55.52	52.44
M85049/39S25W	25	Olive Drab Cadmium	M85049/39S25W	03P3224	25.67	23.63

(133578)

EN2997, MIL-DTL-83723 SEALED, SELF-LOCKING ELECTRICAL ENGINE CIRCULAR CONNECTORS

RoHS Compliant Available

DEUTSCH

Features:

- Stainless steel shell
- Thermo-setting and silicone insert — normal keying position
- Removable, gold-plated crimp contacts
- Self-locking system on all plugs
- Screw threaded coupling is environmentally sealed
- Anti-rotation system on 360° by tightening
- Long-duration salt spray resistance: 500 hours
- Shell-to-shell metal bottoming (plug and receptacle mated)
- Reduced elastomer barriers to use new and old generations of wires
- High temperature class: +200°C or +260°C

Sealed Plug

Sealed Square Flange Receptacle

➤ CONTINUED ➤

EN2997, MIL-DTL-83723 SEALED, SELF-LOCKING ELECTRICAL ENGINE CIRCULAR CONNECTORS (CONT.)

Standards and Quality Approvals:

- EN 2997
- In accordance with MIL-DTL-83723 (MIL-C-83723) Series III
- In accordance with NF-L-54143
- SAE AS39029 (MIL-C-39029)
- EN 3155
- ESC30
- SBAC ESC10
- Boeing BACC63

983 series fine-threaded, sealed electrical circular connectors with secure self-locking feature are ideally suited for aircraft engines, boosters, breaking systems, landing under carriages, APU and pylon applications. Designed for use in harsh environment areas. Sealed straight plugs and square flanged, wall mount receptacles are intermateable and interchangeable with connectors in accordance with MIL-DTL-83723 (MIL-C-83723). Sealed straight plugs with RFI grounding fingers offer electrical continuity between plug and receptacle.

Mfg. Part No.	Shell Size	Insert Arrangement	No. of Contacts	Contact Gender	Contact Size	Stock No.	Price Each 1-9
SEALED STRAIGHT PLUGS — TEMPERATURE CLASS 200°							
● EN2997K60803FN	8	8-3	3	Socket	20	90T0664	112.77
● EN2997K61005FN	10	10-5	5	Socket	20	90T0665	116.59
● EN2997K61203FN	12	12-3	3	Socket	16	90T0666	115.24
● EN2997K61407FN	14	14-7	7	Socket	16	90T0667	113.48
● EN2997K61415FN	14	14-15	15	Socket	20	90T0668	126.76
SEALED STRAIGHT PLUGS — TEMPERATURE CLASS 260° CYCLIC							
● EN2997KE60803FN	8	8-3	3	Socket	20	90T0661	115.80
● EN2997KE61005FN	10	10-5	5	Socket	20	90T0662	126.94
● EN2997KE61212FN	12	12-12	12	Socket	20	90T0663	126.64
SEALED STRAIGHT PLUGS WITH RFI GROUNDING FINGERS — TEMPERATURE CLASS 200°							
● EN2997S60803FN	8	8-3	3	Socket	20	90T0687	120.23
● EN2997S61005FN	10	10-5	5	Socket	20	90T0688	119.79
● EN2997S61203FN	12	12-3	3	Socket	16	90T0689	124.84
● EN2997S61212FN	12	12-12	12	Socket	20	90T0690	115.39
SEALED STRAIGHT PLUGS WITH RFI GROUNDING FINGERS — TEMPERATURE CLASS 260° CYCLIC							
● EN2997SE60803FN	8	8-3	3	Socket	20	90T0675	127.98
● EN2997SE61005FN	10	10-5	5	Socket	20	90T0676	130.41
● EN2997SE61006FN	10	10-6	6	Socket	20	90T0677	117.88
● EN2997SE61203FN	12	12-3	3	Socket	16	90T0678	125.05
● EN2997SE61212FN	12	12-12	12	Socket	20	90T0679	153.20
● EN2997SE61407FN	14	14-7	7	Socket	16	90T0680	144.94
SEALED, SQUARE FLANGE, WALL-MOUNT RECEPTACLES — TEMPERATURE CLASS 200°							
● EN2997S00803MN	8	8-3	3	Pin	20	90T0681	79.55
● EN2997S01005MN	10	10-5	5	Pin	20	90T0682	96.02
● EN2997S01203MN	12	12-3	3	Pin	16	90T0683	99.35
● EN2997S01212MN	12	12-12	12	Pin	20	90T0684	111.52
● EN2997S01407MN	14	14-7	7	Pin	16	90T0685	120.45
● EN2997S01415MN	14	14-15	15	Pin	20	90T0686	120.27
SEALED, SQUARE FLANGE, WALL-MOUNT RECEPTACLES — TEMPERATURE CLASS 260° CYCLIC							
● EN2997SE00803MN	8	8-3	3	Pin	20	90T0669	85.22
● EN2997SE01005MN	10	10-5	5	Pin	20	90T0670	93.37
● EN2997SE01006MN	10	10-6	6	Pin	20	90T0671	92.77
● EN2997SE01203MN	12	12-3	3	Pin	16	90T0672	113.98
● EN2997SE01212MN	12	12-12	12	Pin	20	90T0673	115.62
● EN2997SE01407MN	14	14-7	7	Pin	16	90T0674	133.57

(202151)

MILITARY-GRADE CABLE CLAMPS FOR CIRCULAR CONNECTORS

Sunbank
www.sunbankcorp.com

Straight aluminum alloy cable clamps support cable or wire at the plug or receptacle and prevent twistng and pulling. Anodized in accordance with MIL-A-8625 or suitable hard anodizing process to meet the performance requirements of MIL-DTL-26500 and MIL-DTL-83723. All threads are in accordance with FED-STD-H28. Ideal for use with Class R and F MIL-DTL-83723 circular connectors including Cinch® Omega C48 series/MIL-C-26500 cylindrical connectors; *ordered separately, go online or call.*

MS27291-2

Mfg. Part No.	Shell Size	Cable Dia. (mm)	Stock No.	Price Each 1-49
MS27291-13	8	4.724	55T3325	11.90
MS27291-1	10	6.858	72C9064	11.14
MS27291-2	12	10.160	67C3305	11.20
MS27291-3	14	11.684	75M4799	11.27
MS27291-4	16	15.494	75M4800	11.34
MS27291-5	18	17.526	89M2092	11.40
MS27291-14	20	20.726	29K8931	11.83
MS27291-6	22	23.876	75M4801	11.70
MS27291-15	24	27.076	90T6599	11.97

(203431)

CONTACTS FOR MIL-DTL-26500 CONNECTORS

DEUTSCH

Mfg. Part No.	Gender	Contact Size	AWG	Color Bands	Stock No.	Price Each 1-9
M39029/31-627	Pin	20	24AWG to 20AWG	Blue / Red / Violet	61R9104	2.07
M39029/31-229	Pin	16	20AWG to 16AWG	Red / Red / White	61R9102	1.89
M39029/32-260	Socket	20	24AWG to 20AWG	Red / Blue / Black	61R9108	2.76
M39029/32-248	Socket	16	20AWG to 16AWG	Red / Yellow / Gray	61R9106	5.08

(166296)

CANNON TYPES KPSE AND KPT MIL-C-26482 SERIES 1 MINIATURE SEALED CONNECTORS WITH CRIMP OR SOLDER CONTACTS

ITT

Straight Plug

Box Mount Receptacle

Shell Size 8 **Shell Size 10** **Shell Size 12**

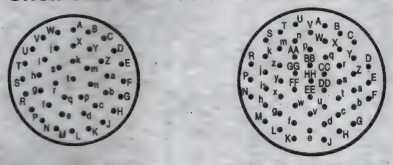
8-3 3-#20 | 8-4 4-#20 | 10-6 6-#20 | 12-3 3-#16 | 12-10 10-#20

(For Solder Contacts Only)

Shell Size 14

14-5 5-#16 | 14-15 14-#20 1-#16 | 14-19 19-#20

Shell Size 20 **Shell Size 22**



20-41 41-#20 | 22-55 55-#20

Contact Arrangements
Mating Face View of Pin Insert

Environmentally sealed plugs and receptacles offer high-density contact arrangements in a miniature circular metal shell. Meet all MIL-C-26482 requirements and are intermateable, intermountable, and interchangeable with all MIL-C-26482 connectors, crimp or solder style. Feature aluminum alloy body with olive drab chromate over cadmium finish. Polycholoroprene insulators. Copper alloy crimp or solder pin and socket contacts with gold plating per MIL-G-45204 Type II. Plugs with pin contacts mate with socket contact receptacles and plugs with socket contacts mate with pin contact receptacles. Quick disconnect bayonet coupling for rapid positive mating and unmating. Moisture sealing is achieved by 4 seals: shell, peripheral, interfacial and wire. 500 cycles minimum mating life. Operating temperature: –55°C to +125°C. *Order crimp tool kit separately below when ordering crimp connectors.* **NOTE**: Shell size 8 layout is only available in solder type.

KPSE STRAIGHT PLUGS WITH CABLE CLAMP (CRIMP CONTACTS)

Mfg. Part No.	No. of Contacts	Shell Size	Stock No.	Price Each 1-4	5-9	10-24
MS3126F12-3P	3*	12	66F8818	62.61	56.41	50.63
MS3126F14-5P	5*	14	66F8819	70.58	63.60	57.07
MS3126F10-6P	6*	10	66F8917	62.92	56.70	50.89
MS3126F12-10P	10*	12	66F8820	47.31	44.99	42.44
MS3126F14-19P	19*	14	66F8821	88.77	79.98	71.78
MS3126F20-41P	41*	20	66F8822	131.72	118.67	106.50

➤CONTINUED➤

CANNON TYPES KPSE AND KPT MIL-C-26482 SERIES 1 MINIATURE SEALED CONNECTORS WITH CRIMP OR SOLDER CONTACTS (CONT.)

Mfg. Part No.	No. of Contacts	Shell Size	Stock No.	Price Each 1-4	5-9	10-24
MS3126F12-3S	3+	12	66F8824	44.37	42.20	39.81
MS3126F14-5S	5+	14	66F8825	90.70	81.72	73.34
MS3126F10-6S	6+	10	66F8826	68.72	61.92	55.57
MS3126F12-10S	10+	12	66F8827	74.92	67.50	60.58
MS3126F14-19S	19+	14	66F8828	113.93	102.66	92.13
MS3126F20-41S	41+	20	66F8829	147.27	132.69	119.08
KPSE BOX MOUNTING RECEPTACLES (CRIMP CONTACTS)						
MS3122E12-3S	3+	12	66F8831	50.26	45.28	40.64
MS3122E14-5S	5+	14	66F8832	53.22	47.96	43.04
MS3122E10-6S	6+	10	66F8833	39.12	37.31	35.32
MS3122E12-10S	10+	12	66F8834	39.89	38.04	36.01
MS3122E14-19S	19+	14	66F8835	49.22	46.81	44.15
MS3122E12-3P	3*	12	66F8929	53.60	48.30	43.34
MS3122E14-5P	5*	14	66F8930	40.85	38.96	36.88
MS3122E10-6P	6*	10	66F8931	51.95	46.81	42.01
MS3122E12-10P	10*	12	66F8932	41.98	39.92	37.66
MS3122E14-19P	19*	14	66F8933	51.84	49.31	46.50

* = Pin contacts + = Socket contacts

KPT STRAIGHT PLUGS WITH CABLE CLAMP (SOLDER CONTACTS)

Mfg. Part No.	No. of Contacts	Shell Size	Stock No.	Price Each 1-4	5-9	10-24
MS3116F8-3P	3*	8	50B1412	40.05	38.19	36.16
MS3116F8-4P	4*	8	93F3374	44.10	41.94	39.56
MS3116F10-6P	6*	10	93F3376	53.37	48.08	43.15
MS3116F12-10P	10*	12	93F3378	42.55	40.47	38.18
MS3116F14-19P	19*	14	93F3380	62.06	59.02	55.67
MS3116F8-3S	3+	8	88F6387	41.70	39.65	37.41
MS3116F8-4S	4+	8	93F3375	72.62	65.43	58.72
MS3116F14-15S	15+	14	16F3634	77.98	70.27	63.06
MS3116F10-6S	6+	10	93F3377	59.48	53.59	48.10
MS3116F12-10S	10+	12	93F3379	70.33	63.36	56.87
MS3116F14-19S	19+	14	93F3381	58.86	55.98	52.81

KPT BOX MOUNTING RECEPTACLES (SOLDER CONTACTS)

Mfg. Part No.	No. of Contacts	Shell Size	Stock No.	Price Each 1-4	5-9	10-24
MS3112E8-4P	4*	8	93F3382	29.51	26.58	23.87
MS3112E12-3P	3*	12	16F3636	23.22	22.14	20.96
MS3112E14-15P	15*	14	16F3637	32.83	31.31	29.63
MS3112E10-6P	6*	10	93F3384	25.51	22.98	20.63
MS3112E12-10P	10*	12	93F3386	26.37	25.14	23.80
MS3112E14-19P	19*	14	93F3388	32.05	30.57	28.94
MS3112E8-4S	4+	8	93F3383	37.34	33.65	30.20
MS3112E12-3S	3+	12	16F3640	27.69	26.41	25.00
MS3112E14-15S	15+	14	16F3641	47.31	42.63	38.25
MS3112E10-6S	6+	10	93F3385	20.01	19.08	18.06
MS3112E12-10S	10+	12	93F3387	28.34	27.02	25.57
MS3112E14-19S	19+	14	93F3389	51.69	46.57	41.80

* = Pin contacts + = Socket contacts
(8822)

CONTACTS FOR MIL-DTL-26482 SERIES I AND II CONNECTORS

DEUTSCH

CONTACTS FOR MIL-DTL-26482 SERIES I CONNECTORS

Mfg. Part No.	Gender	Contact Size	AWG	Color Bands	Stock No.	Price Each 1-9
M39029/31-240	Pin	20	24AWG to 20AWG	Red / Yellow / Black	61R9103	1.71
M39029/31-228	Pin	16	20AWG to 16AWG	Red / Red / Grey	61R9101	2.81
M39029/32-259	Socket	20	24AWG to 20AWG	Red / Green / White	61R9107	2.61
M39029/32-247	Socket	16	20AWG to 16AWG	Red / Yellow / Violet	61R9105	2.98

➤CONTINUED➤

CONTACTS FOR MIL-DTL-26482 SERIES I AND II CONNECTORS (CONT.)

CONTACTS FOR MIL-DTL-26482 SERIES II CONNECTORS

Mfg. Part No.	Gender	Contact Size	AWG	Color Bands	Stock No.	Price Each 1-9
M39029/4-110	Pin	20	24AWG to 20AWG	Brown / Brown / Black	61R9109	1.11
M39029/4-112	Pin	16	24AWG to 20AWG	Brown / Brown / Red	61R9111	3.75
M39029/4-111	Pin	16	20AWG to 16AWG	Brown / Brown / Brown	61R9110	1.37
M39029/4-113	Pin	12	14AWG to 12AWG	Brown / Brown / Orange	61R9112	2.61
M39029/5-115	Socket	20	24AWG to 20AWG	Brown / Brown / Green	61R9113	1.24
M39029/5-117	Socket	16	24AWG to 20AWG	Brown / Brown / Violet	61R9115	4.33
M39029/5-116	Socket	16	20AWG to 16AWG	Brown / Brown / Blue	61R9114	2.61
M39029/5-119	Socket	12	20AWG to 16AWG	Brown / Brown / White	61R9117	7.96
M39029/5-118	Socket	12	14AWG to 12AWG	Brown / Brown / Gray	61R9116	2.71

(203737)

3

DUST CAPS FOR MIL-C-26482 SERIES I AND II CIRCULAR CONNECTORS

RoHS Compliant Available

Sunbank
www.sunbankcorp.com

Dust Cap For Plugs

Dust Cap For Receptacles

Designed to be used with MIL-C-26482 Series I and II circular connectors. **MS3180 series** are used to protect plug **mfg. part no. MS3116** and right-angle 08 style connectors; *ordered separately. Go online or call.* **MS3181*C series** are used to protect **MS3110** and **MS3112 series** receptacles; *ordered separately. Go online or call.* **MS3181*N series** are used to protect **MS3114 series** jam nut receptacles; *ordered separately. Go online or call.* All are made of aluminum alloy and furnished with a sash chain. Available in two platings; olive drab chromate over cadmium and black anodized.

DUST CAPS FOR PLUGS — OLIVE DRAB CHROMATE OVER CADMIUM FINISH

Mfg. Part No.	Fits Shell Size	Stock No.	Price Each 1-9
MS3180-8C	8	98B1524	30.09
MS3180-10C	10	92B7470	31.09
MS3180-12C	12	90B9515	32.94
MS3180-14C	14	93B9709	31.08
MS3180-16C	16	25C8141	32.64
MS3180-18C	18	13C2769	33.96
MS3180-20C	20	91B9529	36.00
MS3180-22C	22	24C5108	37.12
MS3180-24C	24	71C8360	36.02
DUST CAPS FOR PLUGS — BLACK ANODIZED FINISH			
● MS3180-10CA	10	50B1430	31.09
● MS3180-12CA	12	96B5237	32.01
● MS3180-14CA	14	95B7318	32.94
● MS3180-16CA	16	20C8416	33.94
● MS3180-18CA	18	25C1440	34.94
● MS3180-20CA	20	94B5622	36.00
● MS3180-22CA	22	91B5334	37.12
● MS3180-24CA	24	27C5215	22.83
DUST CAPS FOR FLANGED RECEPTACLES — OLIVE DRAB CHROMATE OVER CADMIUM FINISH			
MS3181-8C	8	90B4848	14.63
MS3181-10C	10	96B7237	25.60
MS3181-12C	12	90B4838	24.08
MS3181-14C	14	90B6236	25.63
MS3181-16C	16	91B9669	17.82
MS3181-18C	18	13C2767	19.78
MS3181-20C	20	10C2453	19.51
MS3181-22C	22	40C1712	21.00
MS3181-24C	24	36C8049	21.64
DUST CAPS FOR FLANGED RECEPTACLES — BLACK ANODIZED FINISH			
● MS3181-8CA	8	92B9808	17.04
● MS3181-10CA	10	91B2941	29.10
● MS3181-12CA	12	91B2946	30.29
● MS3181-14CA	14	50B9168	31.77
● MS3181-16CA	16	67C1525	32.15
● MS3181-18CA	18	88F4364	31.75
● MS3181-20CA	20	93B7443	18.85
● MS3181-22CA	22	91B5333	21.00
● MS3181-24CA	24	94B5475	21.64
DUST CAPS FOR JAM NUT RECEPTACLES — OLIVE DRAB CHROMATE OVER CADMIUM FINISH			
MS3181-8N	8	90B7960	19.06
MS3181-10N	10	50B1431	32.82

➤CONTINUED➤

DUST CAPS FOR MIL-C-26482 SERIES I AND II CIRCULAR CONNECTORS (CONT.)

DUST CAPS FOR JAM NUT RECEPTACLES — OLIVE DRAB CHROMATE OVER CADMIUM FINISH

Mfg. Part No.	Fits Shell Size	Stock No.	Price Each 1-9
MS3181-12N	12	50B1432	33.80
MS3181-14N	14	97B1093	32.01
MS3181-16N	16	90B7958	21.44
MS3181-18N	18	92B2877	22.11
MS3181-20N	20	96B5402	22.75
MS3181-22N	22	03H3411	21.93
MS3181-24N	24	29K8988	24.16
DUST CAPS FOR JAM NUT RECEPTACLES — BLACK ANODIZED FINISH			
● MS3181-8NA	8	96B0758	20.39
● MS3181-10NA	10	22C6173	32.45
● MS3181-12NA	12	90B2779	33.42
● MS3181-14NA	14	94B3798	34.86
● MS3181-16NA	16	24C0143	22.94
● MS3181-18NA	18	34C5340	22.11
● MS3181-20NA	20	92C2769	22.75
● MS3181-22NA	22	24C6743	23.46
● MS3181-24NA	24	24C0140	22.54

(142264)

DUST CAPS FOR MIL-C-26482 SERIES I AND II CIRCULAR CONNECTORS

Glenair.

Designed to be used with MIL-C-26482 Series I and II circular connectors. **MS3180 series** are used to protect plug **mfg. part no. MS3116** and right-angle 08 style connectors; *ordered separately. Go online or call.* **MS3181*C series** are used to protect **MS3110** and **MS3112 series** receptacles; *ordered separately. Go online or call.* **MS3181*N series** are used to protect **MS3114 series** jam nut receptacles; *ordered separately. Go online or call.* All are made of aluminum alloy and furnished with a sash chain. Available in two platings; olive drab chromate over cadmium and black anodized.

Dust Cap For Plugs

Dust Cap For Receptacles

DUST CAPS FOR PLUGS — OLIVE DRAB CHROMATE OVER CADMIUM FINISH

Mfg. Part No.	Fits Shell Size	Stock No.	Price Each 1-9	Price Each 10-24
MS3180-8C	8	87W7518	26.82	24.13
MS3180-10C	10	87W7503	25.69	23.11
MS3180-12C	12	87W7505	24.20	21.76
MS3180-14C	14	87W7507	25.85	23.25
MS3180-16C	16	87W7509	29.76	26.77
MS3180-18C	18	87W7511	99.13	89.17
MS3180-20C	20	87W7513	103.67	93.25
DUST CAPS FOR PLUGS — BLACK ANODIZED FINISH				
MS3180-8CA	8	87W7519	85.87	77.24
MS3180-22C	22	87W7515	109.08	98.11
MS3180-10CA	10	87W7504	20.95	18.84
MS3180-12CA	12	87W7506	21.82	19.63
MS3180-14CA	14	87W7508	22.18	19.95
MS3180-16CA	16	87W7510	26.66	23.98
MS3180-18CA	18	87W7512	30.51	27.45
MS3180-20CA	20	87W7514	38.92	35.01
MS3180-22CA	22	87W7516	60.12	54.08
MS3180-24CA	24	87W7517	62.62	56.33
DUST CAPS FOR FLANGED RECEPTACLES — OLIVE DRAB CHROMATE OVER CADMIUM FINISH				
MS3181-8C	8	87W7548	25.74	23.15
MS3181-10C	10	87W7520	19.81	17.82
MS3181-12C	12	87W7524	21.45	19.30
MS3181-14C	14	87W7528	20.57	18.50
MS3181-16C	16	87W7532	28.15	25.32
MS3181-18C	18	87W7536	31.34	28.19
MS3181-20C	20	87W7540	60.20	54.15
MS3181-22C	22	87W7543	41.51	37.34
DUST CAPS FOR FLANGED RECEPTACLES — BLACK ANODIZED FINISH				
MS3181-8CA	8	87W7549	22.61	20.34
MS3181-10CA	10	87W7521	18.03	16.22
MS3181-12CA	12	87W7525	19.31	17.37
MS3181-14CA	14	87W7529	19.81	17.82
MS3181-16CA	16	87W7533	22.16	19.93
MS3181-18CA	18	87W7537	25.87	23.27
MS3181-20CA	20	87W7541	30.41	27.36

➤CONTINUED➤

DUST CAPS FOR MIL-C-26482 SERIES I AND II CIRCULAR CONNECTORS (CONT.)

Mfg. Part No.	Fits Shell Size	Stock No.	Price Each 1-9	Price Each 10-24
DUST CAPS FOR FLANGED RECEPTACLES — BLACK ANODIZED FINISH				
MS3181-22CA	22	87W7544	29.36	26.41
MS3181-24CA	24	87W7546	64.19	57.74
DUST CAPS FOR JAM NUT RECEPTACLES — OLIVE DRAB CHROMATE OVER CADMIUM FINISH				
MS3181-8N	8	87W7550	67.17	60.42
MS3181-10N	10	87W7522	68.14	61.29
MS3181-12N	12	87W7526	47.56	42.78
MS3181-14N	14	87W7530	35.95	32.33
MS3181-16N	16	87W7534	49.54	44.56
MS3181-18N	18	87W7538	40.68	36.59
MS3181-22N	22	87W7545	133.36	119.96
DUST CAPS FOR JAM NUT RECEPTACLES — BLACK ANODIZED FINISH				
MS3181-8NA	8	87W7551	29.26	26.32
MS3181-10NA	10	87W7523	36.25	32.61
MS3181-12NA	12	87W7527	30.41	27.36
MS3181-14NA	14	87W7531	30.40	27.34
MS3181-16NA	16	87W7535	72.75	65.44
MS3181-18NA	18	87W7539	36.82	33.12
MS3181-20NA	20	87W7542	77.99	70.15
MS3181-24NA	24	87W7547	135.03	121.45

(84869)

APD CONNECTOR SERIES (DIN 72585)

RoHS Compliant Available

ITT

1 Circuit Plug

2 Circuit Plug

4 Circuit Plug

1 & 2 Circuit Flange Receptacle

4 Circuit Flange Receptacle

1 & 2 Circuit Jam Nut Receptacle

4 Circuit Jam Nut Receptacle

Code 5, Blue

Code 1, Black

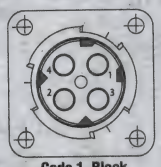
Code 2, Gray

Code 6, Red

Code 3, Green

Code 4, Blue

Code 5, Blue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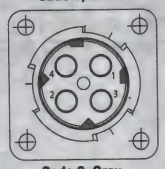
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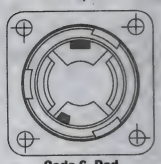
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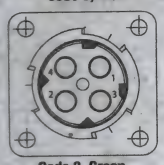
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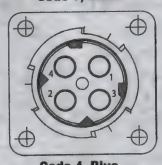
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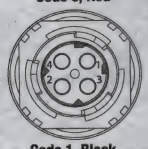
Code 5, Blue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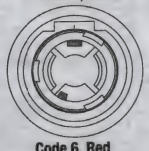

Code 6, Red

Code 4, Blue

➤CONTINUED➤

APD CONNECTOR SERIES (DIN 72585) (CONT.)

- Operating temp: -40°C to 140°C (-40°F to 248°F)
- Sealing: IP69K
- Mating cycles: 50 min
- Approvals: DIN72585

APD connectors are designed to work in the roughest environments. APDs are resistant to brake and transmission fluids along with oils, greases, salt, dirt and mud. Originally made to meet the European DIN 72585 requirements for connectors for heavy duty trucking industry, these connectors are finding their way into industrial equipment. These connectors have many high performance features including, quick mating bayonet coupling, lock wire holes for security and wire seals that are crimped with contacts. **NOTE: Code and color must match in order to mate.**

Mfg. Part No.	Number of Circuits	Color	Code	Current Max. (A)	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99
PLUGS (SOCKET CRIMP CONTACTS)								
121583-0012	1	Blue	5	245	14C4156	13.40	11.84	10.39
121583-0013	1	Red	6	245	14C4157	7.35	7.01	6.63
121583-0003	4	Blue	4	30	72J5995	17.72	15.64	13.73
FLANGE RECEPTACLES (PIN CRIMP CONTACTS)								
121583-0026	2	Black	5	74	31K5779	4.66	4.44	4.21
121583-0007	4	Blue	4	30	03K3784	8.30	7.32	6.43
JAM NUT RECEPTACLES (PIN CRIMP CONTACTS)								
121583-0017	1	Red	6	245	14C4159	9.26	8.17	7.17
121583-0027	2	Black	5	74	28H8462	10.49	9.27	8.13
121583-0009	4	Gray	2	30	52K2548	11.34	10.02	8.79
121583-0011	4	Blue	4	30	01N4935	6.30	6.01	5.69

CONTACTS FOR 1 CIRCUIT CONNECTORS

Mfg. Part No.	Wire Size (AWG)	Gender	Contact Plating	Locator	Extraction Tool	Stock No.	Price Each 1-4
030-8614-000	0	Pin	Silver	...	121586-5192	03K3619	14.03
CONTACTS FOR 4 CIRCUIT CONNECTORS							
031-8717-046	20-16	Pin	Tin	121586-0289	192900-0176	01N4931	0.61
031-8717-047	16-14	Pin	Tin	121586-0290	192900-0176	01N4932	0.76
031-8717-149	20-16	Socket	Tin	121586-0289	192900-0176	53M0130	1.10
031-8717-150	16-14	Socket	Tin	121586-0290	192900-0176	01N4933	0.53

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
075-8503-000	Panel Gasket for All Flanged Receptacles	95B0109	0.39
M85528/2-14A	Nut Plate for All Flanged Receptacles	97B4068	11.82
058-8578-100	Straight Endbell, 4 Circuit, Cable O.D. 0.335"	84H0900	1.74
058-8578-102	Straight Endbell, 4 Circuit, Cable O.D. 0.394"	01C2354	1.94
351-8697-009	Gland Seal, 1 Circuit, Sealing Range 0.330 - 0.394"	64J8591	3.19
217-8516-010	Seal Nut, 1 & 2 Circuit	26H5969	1.63
121583-1000	Cable Sealing Set, Wire Insulation Range 4.2 - 5.8mm	67W3278	7.00
121583-1001	Cable Sealing Set, Wire Insulation Range 5.7 - 7.3mm	67W3279	8.64
121583-1002	Cable Sealing Set, Wire Insulation Range 7.4 - 8.3mm	67W3281	6.74
121583-1003	Cable Sealing Set, Wire Insulation Range 6.8 - 8.3mm	67W3280	8.81
121668-0032	Individual Wire Seal, Wire Insulation Range 1.4 - 2.0mm	82H8011	0.09
121668-0033	Individual Wire Seal, Wire Insulation Range 2.1 - 2.9mm	72J7089	0.09
121668-0034	Wire Filler, White	28H9057	0.09
TOOLS			
192900-0176	Extraction Tool, 4 Circuit, Pin/Socket Contacts	47M0087	42.61

(115565)

CANNON TRIDENT RINGLOCK® PLASTIC-SHELL CIRCULAR CONNECTORS

CE

RoHS Compliant Available

ITT

4-Way

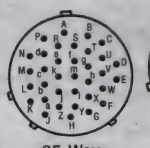
8-Way

12-Way

19-Way

23-Way

28-Way


35-Way

48-Way

Contact Arrangements

➤CONTINUED➤

CANNON TRIDENT RINGLOCK® PLASTIC-SHELL CIRCULAR CONNECTORS (CONT.)

TNM Sealed Plug

TNM Sealed Flanged Receptacle

Trident Ringlock® circular connectors offer economy of plastic body with ruggedness of metal ring coupling. Thermoplastic body, rated UL 94V-0. Nickel-plated copper alloy coupling ring. Accepts standard Trident signal contacts, *ordered separately on this page.* Standard format requires male contact (pin) on plug side. Sealed receptacles come fitted with O-ring seal and when used with sealed cable clamps, *ordered separately on this page*, provide splashproof sealing to IP65. Intermateable and interchangeable with FCI Trim Trio™ circular connectors; *order separately on pages 994-995. Order crimp and extraction tooling separately on this page.*

3

RINGLOCK® STANDARD PLUGS FOR PIN CONTACTS

Mfg. Part No.	Shell/Way	Stock No.	Price Each 1-24	Price Each 25-49
● 192922-1250	10/4	47M0092	11.18	9.61
● 192922-1260	12/8	47M0093	12.74	10.95
● 192922-1270	14/12	93F8977	14.48	12.45
● 192922-1280	16/19	47M0094	15.32	13.16
● 192990-1320	18/23	93F8980	17.21	14.79
● 192990-1340	24/48	47M0119	22.74	19.55

RINGLOCK® STANDARD SEALED RECEPTACLES FOR SOCKET CONTACTS

Mfg. Part No.	Shell/Way	Stock No.	Price Each 1-24	Price Each 25-49
● 192990-1660	10/4	93F9011	10.01	8.61
● 192990-1670	12/8	47M0129	11.60	9.97
● 192990-1680	14/12	93F9013	13.67	11.75
● 192990-1690	16/19	93F9014	14.18	12.19
● 192990-1710	18/23	47M0130	16.07	13.82

TRIDENT NEPTUNE® METAL (TNM) CONNECTORS

TNM series of circular connectors is an extension of the standard Trident Neptune® and Ringlock® connector series but with advantage of RF shielding. **TNM series** connectors feature strong nickel-plated zinc alloy shells with a metal coupling ring for high-reliability and durability. Provide moisture sealing to IP65. When used with the shielded endbell, *order separately below*, the connector system provides complete RF shielding. Meets EMC requirements for cable-to-equipment or cable-to-cable applications. CE compliant. *Order Trident® signal contacts and tooling separately on this page.*

TNM STANDARD PLUGS

Mfg. Part No.	Shell/Way	Stock No.	Price Each 1-24	Price Each 25-49
● 192993-0012	12/8	03H7467	45.71	39.28
● 192993-0013	14/12	66T9583	30.95	29.52

TNM STANDARD FLANGED RECEPTACLES

Mfg. Part No.	Shell/Way	Stock No.	Price Each 1-24	Price Each 25-49
● 192993-0032	12/8	03H7469	41.81	35.94

TNM PLASTIC UNSEALED ENDBELLS

Mfg. Part No.	Shell Size	Stock No.	Price Each 1-24	Price Each 25-49
● 192900-0286	14	95C0631	10.58	9.09
● 192900-0343	16	30C9083	13.53	11.63

(8704)

CANNON TRIDENT RINGLOCK® CIRCULAR CABLE CLAMPS

RoHS Compliant Available

ITT

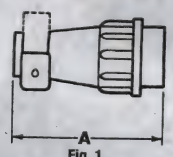


Fig. 1

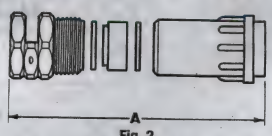


Fig. 2

Standard cable clamps provide strain relief and protection for wires. Fit onto any Trident Ringlock® plug or receptacle sealed connector; *order separately on pages 975-976.* Sealed cable clamps provide strain relief and sealing to IP67 for jacketed cable.

STANDARD CABLE CLAMPS — FIG. 1

Mfg. Part No.	Shell Size	Dimension A	Stock No.	Price Each 1-24	Price Each 25-49
● 192922-1310	10	1.57″ (39.90)	47M0097	6.59	5.62
● 192922-1320	12	1.57″ (40.00)	47M0098	7.65	6.52
● 192922-1330	14	1.81″ (46.00)	47M0099	8.49	7.25
● 192922-1340	16	1.81″ (46.00)	47M0100	9.75	8.33
● 192990-1510	18	1.97″ (50.00)	47M0120	12.93	11.03

➤CONTINUED➤

CANNON TRIDENT RINGLOCK® CIRCULAR CABLE CLAMPS (CONT.)

Mfg. Part No.	Shell Size	Dimension A	Stock No.	Price Each 1-24	Price Each 25-49
● 192922-1350	20	2.17″ (55.00)	47M0101	13.69	11.69
● 192922-1360	22	2.36″ (60.00)	47M0102	14.91	12.72
● 192990-1520	24	2.56″ (65.00)	47M0121	16.71	14.26
SEALED CABLE CLAMPS — FIG. 2					
● 192990-1530	10	2.17″ (55.00)	47M0122	9.71	8.28
● 192990-1540	12	2.28″ (58.00)	93F9038	11.15	9.52
● 192990-1550	14	2.56″ (65.00)	47M0123	12.82	10.94

(8710)

CANNON TRIDENT® SIGNAL CONTACTS

RoHS Compliant Available

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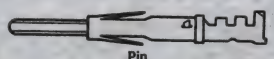
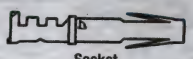


Pin



Socket

Can be used with Trident® series Ringlock® connectors, *order separately.* High performance two-piece stamped and formed design. Current rating: 13 amps/circuit. Available in tin or gold flash over nickel platings. No insulation support for size 14 AWG. *Order crimp and extraction tooling separately.* **Sold in packages of 100.**

TRIDENT® TIN-PLATED PINS

* Without insulation support.

(8712)

Mfg. Part No.	AWG	Insulation Diameter	Stock No.	Price per Pkg. 1-4	Price per Pkg. 5-9
● 192990-0040	22-20	0.046-0.082″	93F9068	31.95	30.30
● 192990-0060	20-16	0.079-0.118″	47M0115	31.95	30.30
● 192990-1240	16-14	*	93F9072	31.95	30.30
TRIDENT® TIN-PLATED SOCKETS					
● 192990-0050	22-20	0.046-0.082″	47M0114	31.95	30.30
● 192990-0070	18-16	0.079-0.118″	93F9071	31.95	30.30
TRIDENT® GOLD-PLATED PINS					
● 192990-0080	26-24	0.035-0.062″	47M0116	45.59	43.23
● 192922-1460	22-20	0.046-0.082″	47M0104	45.59	43.23
● 192990-0100	20-16	0.079-0.118″	93F9078	45.59	43.23
● 192990-1220	16-14	*	93F9080	46.50	44.09
TRIDENT® GOLD-PLATED SOCKETS					
● 192990-0090	26-24	0.035-0.062″	93F9075	46.50	44.09
● 192922-1470	22-20	0.046-0.082″	47M0105	45.59	43.23
● 192990-0110	18-16	0.079-0.118″	93F9079	46.50	44.09
● 192990-1230	16-14	*	47M0117	46.96	44.53

CANNON TRIDENT® CRIMP AND EXTRACTION TOOLING

RoHS Compliant Available

ITT

For crimping or extracting Trident® signal contacts; *order separately on this page.*

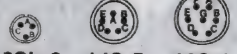
Mfg. Part No.	Description	Stock No.	Price Each 1-4
● 192900-0176	Power Extraction Tool	47M0087	42.61

(8713)

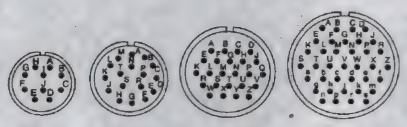
CANNON POSITIVE LOCK ENVIRONMENTALLY-SEALED CA-BAYONET CONNECTORS

RoHS Compliant Available

ITT



Shell Size	10SL-3	14S-5	16S-1
Contacts	3-#16	5-#16	7-#16

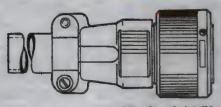


18-1	20-29	24-28	28-21
10-#16	17-#16	24-#16	37-#16

Contact Arrangements
Mating Face View of Pin Insert

➤CONTINUED➤

CANNON POSITIVE LOCK ENVIRONMENTALLY-SEALED CA-BAYONET CONNECTORS (CONT.)



3106 Straight Plug

3102 Box Mount Receptacle

CA-Bayonet MIL-C-5015 style connectors have positive, quick mating 3-point reverse bayonet lock coupling system. Completely sealed to withstand moisture, condensation, vibration, and flash-over. When connector halves are mated, rear sealing grommet and interfacial seal at front create an environmentally sealed assembly. Feature the same shell dimensions, contact layouts, and performance characteristics as the threaded coupling MIL-C-5015 connectors, but do not intermate. Standard plugs mate with box mount receptacles; *order separately below*. Available with pin or socket, solder pot silver-plated copper alloy contacts. Aluminum alloy body with olive drab chromate-over-cadmium finish. Polychloroprene insulator. Standard plugs have integrated cable clamp. Rated up to 13 amps. 500-cycle minimum mating life. Operating temperature: –55°C to +125°C. *Order wire hole fillers separately below.*

STRAIGHT PLUGS WITH SOLDER POT PIN CONTACTS

Mfg. Part No.	Contacts	Stock No.	Price Each 1-4	5-9	10-24
CA3106E10SL-3PB	3	66F9359	46.45	44.18	41.67
CA3106E14S-5PB	5	66F9360	62.77	48.99	44.88
CA3106E16S-1PB	7	66F9361	64.81	61.64	58.14
CA3106E18-1PB	10	66F9362	69.12	53.94	49.42
CA3106E20-29PB	17	66F9363	80.24	76.31	71.98
CA3106E24-28PB	24	66F9364	110.53	86.26	79.02
CA3106E28-21PB	37	66F9365	117.22	91.47	83.81
STRAIGHT PLUGS WITH SOLDER POT SOCKET CONTACTS					
CA3106E10SL-3SB	3	66F9367	49.56	47.13	44.47
CA3106E14S-5SB	5	66F9323	59.55	56.63	53.42
CA3106E16S-1SB	7	66F9324	67.85	52.95	48.51
CA3106E18-1SB	10	66F9325	76.31	59.55	54.56
CA3106E20-29SB	17	66F9326	88.11	68.76	62.99
CA3106E24-28SB	24	66F9327	113.11	88.27	80.87
CA3106E28-21SB	37	66F9328	119.56	113.30	107.05
BOX MOUNT RECEPTACLES WITH SOLDER POT PIN CONTACTS					
CA3102E10SL-3PB05	3	66F9347	23.05	17.99	16.48
CA3102E14S-5PB05	5	66F9331	25.46	24.28	22.99
CA3102E16S-1PB05	7	66F9341	35.43	33.78	31.98
CA3102E18-1PB05	10	66F9332	32.24	25.16	23.05
CA3102E20-29PB05	17	66F9333	42.49	33.16	30.39
CA3102E24-28PB05	24	66F9334	55.06	52.37	49.40
CA3102E28-21PB05	37	66F9335	67.38	64.09	60.45
BOX MOUNT RECEPTACLES WITH SOLDER POT SOCKET CONTACTS					
CA3102E10SL-3SB05	3	66F9330	25.78	24.59	23.28
CA3102E14S-5SB05	5	66F9348	27.93	26.65	25.22
CA3102E16S-1SB05	7	66F9349	36.38	28.39	26.01
CA3102E18-1SB05	10	66F9342	39.26	37.44	35.44
CA3102E20-29SB05	17	66F9343	45.49	43.26	40.81
CA3102E24-28SB05	24	66F9344	62.73	48.96	44.85
CA3102E28-21SB05	37	66F9345	84.73	66.13	60.57

WIRE HOLE FILLERS
Mfg. part no. 225-0017-000 wire hole fillers are used to fill unused cavities and preserve watertight seal.

Mfg. Part No.	Stock No.	Price Each 1-24
225-0017-000	52F2894	0.25

(8821)

DUST CAPS FOR CA SERIES REVERSE BAYONET CIRCULAR CONNECTORS

RoHS Compliant Available

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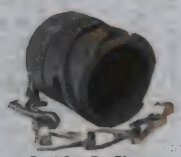


Dust Cap For Plugs

Dust Cap For Receptacles

Designed to be used with CA-Bayonet reverse bayonet connectors; *ordered separately on pages 976-977*. **667-169 series** dust caps are used to protect **CA3106B** and **CA3108B series** plugs. **667-168 series** dust caps are used to protect **CA3100B** and **CA3102B series** receptacles. All are made of aluminum alloy and furnished with a sash chain. Olive drab chromate over cadmium plating. Black anodized plating available; *go online or call*.

DUST CAPS FOR PLUGS

Mfg. Part No.	Fits Shell Size	Stock No.	Price Each 1-9	10-24	25+
CA121004-3	14S	93B4252	50.28	43.03	34.55
CA121004-6	18	39C2925	43.36	37.11	29.79
CA121004-7	20	64T2900	63.01	53.93	43.30
CA121004-8	22	91B0615	65.26	55.85	44.84

CONTINUED

DUST CAPS FOR CA SERIES REVERSE BAYONET CIRCULAR CONNECTORS (CONT.)

Mfg. Part No.	Fits Shell Size	Stock No.	Price Each 1-9	10-24	25+
CA121004-9	24	02E8676	67.36	57.65	46.29
CA121004-10	28	86C7381	114.32	97.84	78.55
DUST CAPS FOR RECEPTACLES					
CA121003-1	10SL	64T2896	25.97	24.77	23.44
CA121003-3	14S	64T2897	39.31	33.64	27.01
CA121003-4	16S	99B6425	50.36	43.10	34.61
CA121003-5	16	98B0360	58.74	50.27	40.37
CA121003-7	20	64T2899	72.92	62.41	50.10
CA121003-9	24	95B1730	48.73	46.34	43.71
CA121003-10	28	39C7114	62.43	53.43	42.90
CA121003-12	36	50B9079	109.68	93.87	75.37

(84875)

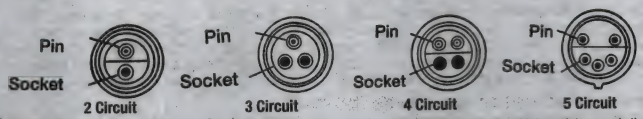
ENVIRONMENTALLY-SEALED SURE-SEAL® AND MINI SURE-SEAL® CIRCULAR CONNECTORS

RoHS Compliant Available

SURE SEAL CONNECTIONS
Manufacturer of high quality environmental connectors & accessories

Environmentally-Sealed and Rated to IP67, DIN 400 50

- **Drench It!** — submersible to shallow depths
- **Freeze It!** — operates in temperatures down to -40°F (-40°C)
- **Scorch It!** — operates in temperatures up to +221°F (+105°C)
- **Gunk It!** — wards off gas, brake fluid, and other chemicals



Both Sure-Seal® and Mini Sure-Seal® consist of a one-piece elastomeric molded body and multiple moisture seals that make these circular connectors ideal for applications where outside contaminants must be excluded. Meet or exceed DOT requirements for shock vibration, temperature cycling, salt-water spray and immersion, petroleum derivatives, and industrial gas. Water submersible, sealed to requirements of IP67 and DIN 400 50. Operating voltage: 400VAC. Current rating: 15A. Wire gauge: 18-20 AWG. Mating life: 50 cycles min. Operating temperature: -40°F to +221°F (-40°C to +105°C). Sure-Seal® current rating: 15 Amps; 14-18 AWG. Mini Sure-Seal® current rating: 8 Amps, 18-20 AWG. *Order tin-plated copper alloy crimp contacts, accessories and tools separately below.* **NOTE:** Insert views (shown above) from mating face of plug.

SURE-SEAL® STRAIGHT PLUGS

Mfg. Part No.	No. of Circuits	Stock No.	Price Each 1-9	10-24
120-1832-000	1	24C4596	7.03	6.34
120-1807-000	2	66F8875	4.83	4.37
120-1808-000	3	66F8876	5.00	4.51
120-1809-000	4	66F8877	5.74	5.17
120-1841-000	5	66F8878	8.66	7.80
120-1869-000	10	99F5330	8.88	8.00
SURE-SEAL® STRAIGHT RECEPTACLES				
120-1833-000	1	50B9078	7.42	6.69
120-1804-000	2	66F8881	4.62	4.15
120-1805-000	3	66F8882	5.13	4.64
120-1806-000	4	66F8883	5.71	5.13
120-1839-000	5	66F8884	8.89	8.01
120-1870-000	10	29C8385	8.79	7.92
MINI SURE-SEAL® PLUGS				
120-8552-100	2	19C0675	6.22	5.60
120-8552-101	3	91B5437	6.22	5.60
120-8552-102	4	94C0945	6.38	5.75
MINI SURE-SEAL® RECEPTACLES				
120-8551-100	2	19C0676	6.00	5.41
120-8551-101	3	91B4910	6.11	5.51
120-8551-102	4	94C0946	6.27	5.66

MINI SURE-SEAL® CONTACTS

Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-24
030-2196-001	Pin Contact, 14-18 AWG	66F8891	0.80	0.74
031-1267-001	Socket Contact, 14-18 AWG	66F8892	1.96	1.80
031-8703-100	9A Socket Contact, 18-20 AWG	19C0677	3.06	2.81
330-8672-100	9A Pin Contact, 18-20AWG	19C0678	1.28	1.18
225-0093-000	Wire Hole Fillers, 14-18 AWG	66F8911	0.18	0.16

CONTINUED

ENVIRONMENTALLY-SEALED SURE-SEAL® AND MINI SURE-SEAL® CIRCULAR CONNECTORS (CONT.)

JACKET SEALING BOOTS

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
● 317-1398-000	For 2 Circuits, 0.208-0.228″ Cable O.D.	66F8887	11.49	10.37
● 317-1397-000	For 3-4 Circuits, 0.220-0.240″ Cable O.D.	66F8888	11.09	9.99
● 317-1399-000	For 3-4 Circuits, 0.345-0.380″ Cable O.D.	66F8889	12.05	10.85
● 317-8657-000	For 5-7 Circuits, 0.283-0.331″ Cable O.D.	66F8890	17.74	15.98
TOOLING				
070306-0000	Insertion Tool, 14-18 AWG	66F8913	399.39	359.37
SSI-CS10	Hand Crimp Tool, 14-18 AWG	32C0296	824.59	738.39
MSS2000	Hand Insertion Tool, 18-20 AWG	73H3185	545.53	490.86

(33371)

3

STANDARD-K® SERIES CIRCULAR CONNECTORS

Straight Plug Socket Contacts

Straight Receptacle (Mating Receptacle) Pin Contacts

WK-4 4 #16

WK-6 6 #16

GK-12 12 #16

Standard-K® quick-disconnect connectors are rugged, reliable, lightweight and economical. Do not require special tooling or wire preparation. Simple, foolproof assembly, using a soldering iron and a screwdriver. Body: aluminum alloy with clear chromate over cadmium. Insulators: diallyl phthalate or fabricated phenolic. Contacts: copper alloy with silver plating. Operating temperature: -67°F to +257°F. Available in a wide range of insert configurations with a mixture of both power and signal contacts; *go online or call.* **NOTE:** Insert views (shown above) from mating face of pin insert.

STRAIGHT PLUGS WITH SOCKET CONTACTS

Mfg. Part No.	Contacts	Stock No.	Price Each 1-9	Price Each 10-24
WK-4-21C-1/2	4	66F9604	165.08	148.83
WK-6-21C-1/2	6	66F9605	168.06	151.51
GK-12-21C-1/2	12	66F9607	374.78	337.87
STRAIGHT RECEPTACLES WITH PIN CONTACTS				
WK-4-22C-1/2	4	66F9612	133.99	120.79
WK-6-22C-1/2	6	66F9614	136.45	123.02

(33370)

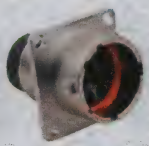
RT360™ INDUSTRIAL CIRCULAR CONNECTORS

RoHS Compliant Available

Amphenol SINESYSTEMS

Straight Plug, Pin

Straight Plug, Socket



Wall Mount Receptacle, Pin

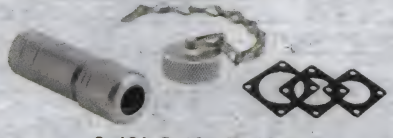
Wall Mount Receptacle, Socket

Jam Nut Receptacle, Pin

Jam Nut Receptacle, Socket

Stamped and Formed Pin

Stamped and Formed Socket



Cord Grip, Dust Cap, Panel Gaskets

Extraction Tool

➤CONTINUED➤

RT360™ INDUSTRIAL CIRCULAR CONNECTORS (CONT.)

- Nickel-plated zinc alloy housings
- Plugs and receptacles accept pin or socket contacts
- Gold flash plated crimp contacts
- Insulation resistance: 5000MΩ min.
- Durability — 500 matings and unmatings
- Vibration resistance per MIL-STD202 method 204
- Thermal shock per MIL-STD202 method 207
- IP67 rated

RT360™ industrial circular connectors are available in five shell sizes and 10 insert arrangements. Designed to be intermateable with other industrial standard connectors, such as the Souriau® TRIM TRIO® UTG and UTP connectors and ITT Industries/Cannon® Trident® series connectors. Feature nickel-plated zinc alloy shells with glass-filled thermoplastic inserts, flammability rated UL94-V0, and a standard NBR interfacial seal. 48-hour salt spray corrosion resistant per MIL-STD 202, method 101. Water protection IP67 per DIN 40050 in mated condition and in combination with sealed backshell. Operating voltage/current: 250V/13A with contact size 16 AWG; 150V/5A with contact size 20 AWG. Operating temperature: -40°C to +105°C. *Order contacts, cord grips, dust caps, panel gaskets, and tooling separately below.*

RT SERIES STRAIGHT CABLE PLUGS

Mfg. Part No.	Shell Size	Insert Arrangement	No. of Positions	For Contact Type	Wire Size	Stock No.	Price Each 1-9
● RT0610-4PNH	10	10-4	4	Pin	16	29T6225	13.61
● RT0W610-6PNH	10	10-6	6	Pin	20	06X4253	12.86
● RT0W612-10PNH	12	12-10	10	Pin	20	19X2380	13.63
● RT0612-8PNH	12	12-8	8	Pin	16	29T6233	13.43
● RT0614-12PNH	14	14-12	12	Pin	16	29T6235	14.66
● RT0W614-19PNH	14	14-19	19	Pin	20	19X2382	14.15
● RT0616-19PNH	16	16-19	19	Pin	16	29T6239	15.23
● RT0W616-26PNH	16	16-26	26	Pin	20	19X2384	15.99
● RT0618-23PNH	18	18-23	23	Pin	16	29T6243	14.85
● RT0W618-32PNH	18	18-32	32	Pin	20	19X2386	14.03
● RT0610-4SNH	10	10-4	4	Socket	16	29T6227	16.58
● RT0W610-6SNH	10	10-6	6	Socket	20	19X2379	15.66
● RT0W612-10SNH	12	12-10	10	Socket	20	19X2381	16.73
● RT0612-8SNH	12	12-8	8	Socket	16	29T6234	17.13
● RT0614-12SNH	14	14-12	12	Socket	16	29T6236	18.15
● RT0W614-19SNH	14	14-19	19	Socket	20	19X2383	17.08
● RT0616-19SNH	16	16-19	19	Socket	16	29T6240	18.88
● RT0W616-26SNH	16	16-26	26	Socket	20	19X2385	17.84
● RT0618-23SNH	18	18-23	23	Socket	16	29T6244	18.87
● RT0W618-32SNH	18	18-32	32	Socket	20	19X2387	18.87
RT SERIES BOX AND WALL MOUNT RECEPTACLES							
● RT0010-4PNH	10	10-4	4	Pin	16	29T6200	12.71
● RT0W010-6PNH	10	10-6	6	Pin	20	19X2369	12.01
● RT0W012-10PNH	12	12-10	10	Pin	20	19X2371	9.11
● RT0012-8PNH	12	12-8	8	Pin	16	29T6206	12.97
● RT0014-12PNH	14	14-12	12	Pin	16	29T6208	10.38
● RT0W014-19PNH	14	14-19	19	Pin	20	19X2373	9.81
● RT0016-19PNH	16	16-19	19	Pin	16	29T6212	11.15
● RT0W016-26PNH	16	16-26	26	Pin	20	19X2375	10.53
● RT0018-23PNH	18	18-23	23	Pin	16	29T6216	11.91
● RT0W018-32PNH	18	18-32	32	Pin	20	19X2377	11.25
● RT0010-4SNH	10	10-4	4	Socket	16	29T6201	12.01
● RT0W010-6SNH	10	10-6	6	Socket	20	19X2370	12.01
● RT0W012-10SNH	12	12-10	10	Socket	20	19X2372	9.11
● RT0012-8SNH	12	12-8	8	Socket	16	29T6207	13.13
● RT0014-12SNH	14	14-12	12	Socket	16	29T6209	9.81
● RT0W014-19SNH	14	14-19	19	Socket	20	19X2374	13.93
● RT0016-19SNH	16	16-19	19	Socket	16	29T6213	11.01
● RT0W016-26SNH	16	16-26	26	Socket	20	19X2376	14.67
● RT0018-23SNH	18	18-23	23	Socket	16	29T6217	11.25
● RT0W018-32SNH	18	18-32	32	Socket	20	19X2378	14.60
RT SERIES JAM NUT RECEPTACLES							
● RT0710-4PNH	10	10-4	4	Pin	16	29T6247	17.12
● RT0W710-6PNH	10	10-6	6	Pin	20	19X2388	16.17
● RT0W712-10PNH	12	12-10	10	Pin	20	19X2389	17.25
● RT0712-8PNH	12	12-8	8	Pin	16	29T6253	17.25
● RT0714-12PNH	14	14-12	12	Pin	16	29T6255	18.22
● RT0W714-19PNH	14	14-19	19	Pin	20	19X2390	16.20
● RT0716-19PNH	16	16-19	19	Pin	16	29T6259	16.95
● RT0W716-26PNH	16	16-26	26	Pin	20	19X2391	16.96
● RT0718-23PNH	18	18-23	23	Pin	16	29T6263	18.37
● RT0W718-32PNH	18	18-32	32	Pin	20	19X2392	18.37
● RT0710-4SNH	10	10-4	4	Socket	16	29T6248	17.12
● RT0710-6SNH	10	10-6	6	Socket	16	29T6250	16.17
● RT0712-10SNH	12	12-10	10	Socket	16	29T6252	17.53
● RT0712-8SNH	12	12-8	8	Socket	16	29T6254	17.25
● RT0714-12SNH	14	14-12	12	Socket	16	29T6256	18.22
● RT0714-19SNH	14	14-19	19	Socket	16	29T6258	17.97
● RT0716-19SNH	16	16-19	19	Socket	16	29T6260	17.94
● RT0716-26SNH	16	16-26	26	Socket	16	29T6262	18.74
● RT0718-23SNH	18	18-23	23	Socket	16	29T6264	18.37

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RT360™ INDUSTRIAL CIRCULAR CONNECTORS (CONT.)

RT SERIES STAMPED AND FORMED CRIMP CONTACTS — GOLD FLASH PLATED

Mfg. Part No.	Size	Gender	Wire Size	Stock No.	Price Each 1-99	Price Each 100-499
SP14M1F	16	Pin	14AWG	29T6267	0.41	0.28
SP16M1F	16	Pin	18AWG to 16AWG	29T6268	0.41	0.28
SP20M1F	16	Pin	22AWG to 20AWG	29T6269	0.42	0.29
SP20W1F	20	Pin	22AWG to 20AWG	29T6270	0.38	0.26
SP24M1F	16	Pin	26AWG to 24AWG	29T6271	0.41	0.28
SS14M1F	16	Socket	14AWG	29T6272	0.41	0.28
SS16M1F	16	Socket	18AWG to 16AWG	29T6273	0.41	0.28
SS20M1F	16	Socket	22AWG to 20AWG	29T6274	0.44	0.30
SS20W1F	20	Socket	22AWG to 20AWG	29T6275	0.38	0.26
SS24M1F	16	Socket	26AWG to 24AWG	29T6276	0.41	0.28

STRAIGHT CORD GRIPS

Mfg. Part No.	Shell Size	Cable Range (mm)	Stock No.	Price Each 1-9	Price Each 10-24
RTOL-10CG-S1	10	3 - 6.5	29T6190	9.35	8.40
RTOL-10CG-S2	10	5 - 8.5	29T6191	9.27	8.32
RTOL-12CG-S1	12	6 - 10.5	29T6192	10.53	9.46
RTOL-12CG-S2	12	8 - 12.5	29T6193	9.95	8.94
RTOL-14CG-S1	14	6 - 10.5	29T6194	10.34	9.29
RTOL-14CG-S2	14	8 - 12.5	29T6195	10.64	9.55
RTOL-16CG-S1	16	9.5 - 14.5	29T6196	11.56	10.38
RTOL-16CG-S2	16	13.5 - 18	29T6197	11.70	10.51
RTOL-18CG-S1	18	9.5 - 14.5	29T6198	11.47	10.30
RTOL-18CG-S2	18	13.5 - 18	29T6199	11.47	10.30

90° CORD GRIPS

RTOB-12CG-S1	12	6 - 10.5	29T6182	11.67	11.02
RTOB-12CG-S2	12	8 - 12.5	29T6183	11.67	11.02
RTOB-14CG-S1	14	6 - 10.5	29T6184	12.93	12.21
RTOB-14CG-S2	14	8 - 12.5	29T6185	12.93	12.21
RTOB-16CG-S1	16	9.5 - 14.5	29T6186	14.67	13.86
RTOB-16CG-S2	16	13.5 - 18	29T6187	14.67	13.86

RECEPTACLE DUST CAPS

Mfg. Part No.	Fits Shell Size	Stock No.	Price Each 1-9	Price Each 10-24
RT010DCG	10	29T6220	10.51	9.44
RT012DCG	12	29T6221	11.13	10.00
RT014DCG	14	29T6222	11.08	9.95
RT016DCG	16	29T6223	10.88	9.77
RT018DCG	18	29T6224	11.45	10.28

PANEL GASKETS

RTFD10B	10	29T6175	0.37	0.28
RTFD12B	12	29T6176	0.41	0.32
RTFD14B	14	29T6177	0.48	0.38
RTFD16B	16	29T6178	0.52	0.40
RTFD18B	18	29T6179	0.58	0.46

CONTACT EXTRACTION TOOLS

Mfg. Part No.	For Use with Size	Stock No.	Price Each 1-9	Price Each 10-24
QXRT16	16 AWG	29T6173	19.29	18.22
QXRT20	20 AWG	29T6174	19.29	18.22
QXRT12	2.5mm	29T6172	21.85	21.17

(194746)

MOTIONGRADE™ CIRCULAR CONNECTORS

RoHS Compliant Available

Amphenol SINE SYSTEMS

IP67

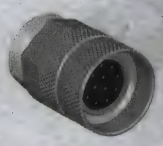


Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6

Fig. 7

Fig. 8

CONTINUED

MOTIONGRADE™ CIRCULAR CONNECTORS (CONT.)

- IP67 protection (in plugged condition)
- Zinc die-cast housing body
- Gold-plated brass crimp contacts
- Plugs, receptacles and extensions accept pin or socket contacts
- Temp. range: -20°C to +130°C

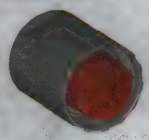


Fig. 9

Fig. 10

MotionGrade™ M23 and M40 connector systems offer such features as the FlexGrip™ backshell system and RockSolid™ contacts. These and other features combined with a simplistic design approach reduce initial procurement and assembly cost, while ensuring compatibility to all other existing standard layouts. Ideally suited for advanced servo drive encoder feedback applications, packaging, robotic, printing, machine tool, medical and automation environments where control signal transmission or power are required in a robust and compact delivery system.

MOTIONGRADE™ M23 A SERIES

Mfg. Part No.	Fig.	Gender	Contacts	Connector Mounting	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99
MA1CAE1200	1	Plug	12	Free Hanging	14R6993	8.44	7.33	6.58
MA1CAP1200	1	Plug	12	Free Hanging	14R6995	8.18	7.34	6.34
MA1CAE1700	1	Plug	17	Free Hanging	14R6994	8.30	7.46	6.44
MA1CAP1700	1	Plug	17	Free Hanging	14R6996	8.30	7.46	6.44
MA1EAE1200	2	Plug	12	Free Hanging	14R6997	11.07	10.46	9.84
MA1EAP1700	2	Plug	17	Free Hanging	14R7000	11.18	10.56	9.94
MA1LAE1200	3	Receptacle	12	Panel	14R7005	8.05	6.69	5.97
MA1LAP1200	3	Receptacle	12	Panel	14R7007	8.42	6.99	6.24
MA1LAE1700	3	Receptacle	17	Panel	14R7006	6.45	5.79	5.00
MA1LAP1700	3	Receptacle	17	Panel	14R7008	6.45	5.79	5.00
MA1JAE1200	5	Extension	12	Free Hanging	14R7001	6.55	5.88	5.08
MA1JAP1200	5	Extension	12	Free Hanging	14R7003	6.55	5.88	5.08
MA1JAE1700	5	Extension	17	Free Hanging	14R7002	6.77	6.08	5.25

MOTIONGRADE™ M23 B SERIES

MB1CKN0600	6	Plug	6	Free Hanging	14R7019	8.87	7.96	6.88
MB1CKN0800	6	Plug	8	Free Hanging	14R7020	8.94	8.03	6.94
MB1CKN0900	6	Plug	9	Free Hanging	14R7021	9.03	8.11	7.00
MB1LLN0600	7	Receptacle	6	Panel	14R7028	6.79	6.10	5.27
MB1LLN0800	7	Receptacle	8	Panel	14R7029	6.92	6.22	5.37
MB1LLN0900	7	Receptacle	9	Panel	14R7030	6.96	6.25	5.39
MB1JJN0600	8	Extension	6	Free Hanging	14R7025	7.92	6.58	5.87
MB1JJN0800	8	Extension	8	Free Hanging	14R7026	7.08	6.36	5.50
MB1JJN0900	8	Extension	9	Free Hanging	14R7027	7.92	6.58	5.87

MOTIONGRADE™ M40 C SERIES

MC1CJN0600	9	Plug	6	Free Hanging	14R7041	13.00	12.28	11.56
MC1LKN0600	10	Receptacle	6	Panel	14R7045	10.71	9.62	8.31

CONTACTS

Mfg. Part No.	Gender	AWG	Type	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99
SC000035	Pin	18AWG	Machined	14R7594	0.49	0.38	0.35
SC000036	Pin	14AWG	Machined	14R7595	0.98	0.76	0.70
SC000040	Pin	14AWG	Machined	14R7597	1.07	0.83	0.76
SC000041	Pin	8AWG	Machined	14R7598	2.44	1.89	1.71
SC000013	Socket	18AWG	RockSolid™	14R7592	0.87	0.68	0.62
SC000044	Socket	18AWG	Slit Machined	14R7599	0.38	0.30	0.28
SC000014	Socket	14AWG	RockSolid™	14R7593	1.74	1.35	1.22
SC000045	Socket	14AWG	Slit Machined	14R7600	1.09	0.84	0.77
SC000039	Socket	8AWG	RockSolid™	14R7596	4.70	3.90	3.48
SC000046	Socket	8AWG	Slit Machined	14R7601	2.62	2.03	1.84

CORD GRIPS

Mfg. Part No.	For Use With	Cable Range (mm)	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99
MA3CG-S1	M23 A	4.5-10.5	14R7013	8.54	7.63	6.77
MA3CG-S2	M23 A	10.5-15	14R7014	7.73	6.42	5.73
MA3CG-S3	M23 A	11-15	14R7015	6.77	6.08	5.25
MB3CG-S1	M23 B	7.5-10.5	14R7034	8.45	7.02	6.26
MB3CG-S2	M23 B	10.5-15	14R7035	7.14	6.41	5.54
MB3CG-S3	M23 B	15-17	14R7036	7.26	6.52	5.63
MC3CG-S1	M40 C	10.5-15	14R7050	9.85	8.85	7.64

STRAIN RELIEFS

Mfg. Part No.	For Use With	Exit Diameter (mm)	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49
MA4FSR-A8.5	M23 A	8.5	14R7018	5.37	4.46	3.98
MA4FSR-A10.5	M23 A	10.5	14R7016	5.44	4.52	4.03
MA4FSR-A12.8	M23 A	12.8	14R7017	5.14	4.27	3.81
MB4FSR-B10.3	M23 B	10.3	14R7037	5.67	4.71	4.20
MB4FSR-B12.5	M23 B	12.5	14R7038	5.67	4.71	4.20
MB4FSR-B14.5	M23 B	14.5	14R7039	5.54	4.61	4.11

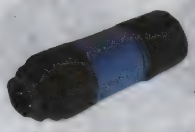
(152505)

CIRCULAR CONNECTORS

ECOMATE CIRCULAR CONNECTORS

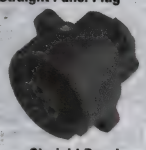
RoHS Compliant Available

Amphenol
Amphenol-Tuchel Electronics GmbH


Straight Cable Plug

Straight Panel Plug

Straight Cable Receptacle


Straight Panel Receptacle

Right-Angle Cable Receptacle

- Strain relief and mounted gasket in one component
- Ergonomically shaped handle for a better grip and safer handling
- Fastening for protective caps on the receptacle housing
- One cable housing for all cable diameters (6mm - 12.2=5mm)

Body material: thermoplastic. Insulation voltage: 250V except for screw termination (400V). Carry current: 16A (screw), 10A (solder), 13A (crimp). *Order protective covers, backshells and cable clamp separately below.*

STRAIGHT PLUGS

Mfg. Part No.	No. of Positions	Mounting	Termination	Contact Plating	Features	Stock No.	Price Each 1-9
● C016 20H003 100 12	3	Cable	Screw	Silver	Clamping Ring	81K1476	8.88
● C016 20H003 110 12	3	Cable	Screw	Silver	Internal Clamp	81K1478	9.60
● C016 20C003 100 12	3	Panel	Screw	Silver	Clamping Ring	81K1461	6.91
● C016 20C003 200 12	3	Panel	Screw	Gold	Clamping Ring	81K1462	13.08
● C016 30H006 100 12	6	Cable	Solder	Silver	Clamping Ring	81K1500	9.74
● C016 30H006 200 12	6	Cable	Solder	Gold	Clamping Ring	81K1504	14.82
● C016 30H006 110 12	6	Cable	Solder	Silver	Internal Clamp	16M5013	10.91
● C016 30H006 210 12	6	Cable	Solder	Gold	Internal Clamp	81K1506	16.48
● C016 30C006 100 12	6	Panel	Solder	Silver	Clamping Ring	81K1485	8.23
● C016 30C006 200 12	6	Panel	Solder	Gold	Clamping Ring	81K1486	16.84
RIGHT-ANGLE PLUGS							
● C016 20K003 100 12	3	Cable	Screw	Silver	Clamping Ring	81K1484	15.80
● C016 30K006 100 12	6	Cable	Solder	Silver	Clamping Ring	81K1508	17.22
STRAIGHT RECEPTACLES							
● C016 20D003 100 12	3	Cable	Screw	Silver	Clamping Ring	81K1464	8.22
● C016 20D003 200 12	3	Cable	Screw	Gold	Clamping Ring	81K1468	15.51
● C016 20D003 110 12	3	Cable	Screw	Silver	Internal Clamp	81K1466	9.37
● C016 20G003 100 12	3	Panel	Screw	Silver	Clamping Ring	81K1473	7.73
● C016 30D006 100 12	6	Cable	Solder	Silver	Clamping Ring	81K1488	11.49
● C016 30D006 110 12	6	Cable	Solder	Silver	Internal Clamp	81K1490	12.64
● C016 30G006 100 12	6	Panel	Solder	Silver	Clamping Ring	81K1497	9.76
● C016 30G006 200 12	6	Panel	Solder	Gold	Clamping Ring	81K1498	14.62
RIGHT-ANGLE RECEPTACLES							
● C016 20F003 100 12	3	Cable	Screw	Silver	Clamping Ring	81K1472	17.46
● C016 30F006 100 12	6	Cable	Solder	Silver	Clamping Ring	81K1496	19.62

PLUGS WITHOUT CONTACTS

Mfg. Part No.	Orientation	No. of Positions	Mounting	Features	Stock No.	Price Each 1-9
● C016 10H006 010 12	Straight	6	Cable	Internal Clamp	81K1448	5.72
● C016 10C006 000 12	Straight	6	Panel	Clamping Ring	81K1425	3.37
● C016 10K006 000 12	Right Angle	6	Cable	Clamping Ring	81K1457	11.42
RECEPTACLES WITHOUT CONTACTS						
● C016 10D006 010 12	Straight	6	Cable	Internal Clamp	81K1432	6.06
● C016 10G006 000 12	Straight	6	Panel	Clamping Ring	81K1441	3.20
● C016 10F006 000 12	Right Angle	6	Cable	Clamping Ring	81K1440	12.39

CONTACTS

Mfg. Part No.	Gender	AWG	Contact Plating	Stock No.	Price Each Each
● VN01 016 0011 1	Pin	26AWG to 20AWG	Silver	51R0296	29.91
● VN01 016 0011 2	Pin	26AWG to 20AWG	Gold	51R0300	89.15
● VN01 016 0004 1	Pin	20AWG to 16AWG	Silver	97B3139	36.94
● VN01 016 0004 2	Pin	20AWG to 16AWG	Gold	51R0304	75.48
● VN02 016 0003 1	Socket	26AWG to 20AWG	Silver	51R1460	49.65
● VN02 016 0003 2	Socket	26AWG to 20AWG	Gold	51R1453	67.93
● VN02 016 0002 1	Socket	20AWG to 16AWG	Silver	06R3623	54.34
● VN02 016 0002 2	Socket	20AWG to 16AWG	Gold	51R1459	55.34

TOOLS

Mfg. Part No.	Description	AWG	Stock No.	Price Each
● TA 0500	Crimp Tool	...	34B9151	210.16
● TA 0000 202	Crimp Tool Die	26AWG to 20AWG	34B9133	255.30
● TA 0000 163	Crimp Tool Die	20AWG to 16AWG	34B9131	258.98
● TA 0002 016 0001	Contact Locator	26AWG to 20AWG	04H0275	40.13

➤CONTINUED➤

ECOMATE CIRCULAR CONNECTORS (CONT.)

Mfg. Part No.	Description	AWG	Stock No.	Price Each
● TA 0002 146 0001	Contact Locator	20AWG to 16AWG	34B9141	40.06
● FG03001461	Contact Removal Tool	...	95B0965	81.68

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● C016 00U000 010 12	Protective Cover for Male Cable Connector	81K1422	6.00
● C016 00U000 000 12	Protective Cover for Male Receptacle	81K1421	5.53
● C016 00V000 010 12	Protective Cover for Female Cable Connector	81K1424	5.20
● C016 00V000 000 12	Protective Cover for Female Receptacle	81K1423	7.60
● C016 G09 041 G10 X	Backshell, Right-Angled with Clamping Ring, Black	81K1419	108.46

(85832)

AT SERIES CIRCULAR CONNECTORS

Amphenol® Industrial

Features

- Made of molded thermoplastic with Neoprene or Silicone Rubber seal.
- Jam nut and square flange mounting styles.
- Quick mating and unmating - reverse bayonet coupling.
- Environmentally sealed - sealed against moisture and contaminants.
- Contact retention system decreases installation costs and increases reliability.
- Heavy-duty industrial connector, economical connector selection.
- The 9 pin black receptacles are in accordance to the interface of the diagonostic connector of J1939/13.

SQUARE FLANGE RECEPTACLE

Mfg. Part No.	# of Contacts	Stock No.	Price Each 1-9	Price Each 10-24
ATC10-3PN	3	67R2369	3.84	3.62
ATC10-5PN	5	67R2370	4.06	3.83
ATC10-9-1939PN	9	67R2371	6.04	5.71
JAM NUT RECEPTACLE				
ATC17-9-1939PN	9	61M3423	6.05	5.72

DUST CAPS

Mfg. Part No.	Shell Size	Lanyard	Stock No.	Price Each 1-9	Price Each 10-24
ATC10-RC3	3	No	67R2364	0.86	0.78
ATC10-RC3C	3	Yes	67R2365	1.31	1.17
ATC10-RC5	* 5	No	67R2366	0.98	0.88
ATC10-RC5C	5	Yes	67R2367	1.40	1.26
ATC10-RC9	9	No	64M6526	1.17	1.05
ATC10-RC9L*	9	Yes	67R2368	1.54	1.38

HEX NUT FOR JAM NUT RECEPTACLE

* Cap with Lanyard for Jam Nut Receptacle. All others are for Square Flange Receptacles

Mfg. Part No.	Shell Size	Stock No.	Price Each 1-9	Price Each 10-24
ALHN-19	9	61M3427	1.80	1.43

(197535)

TERRAPIN SCE2 MINIATURE CIRCULAR PUSH-PULL CONNECTORS

IP68 RoHS Compliant Available

Amphenol Pcd

Rear Panel-Mount Chassis Plug

In-Line Cable Plug

In-Line Cable Receptacle

Latch In-Line Cable Receptacle

TERRAPIN: The Next Generation of SCE Connectors from Amphenol

- Proven in USB 2.0 and Gigabit Ethernet applications
- IP68 sealed when both mated and unmated
- Optional latching mechanism or push-pull
- No separate backshell required
- Full range of accessories available; *go online or call*
- Alternate key positions available; *go online or call*

Intended for harsh environment applications and used extensively in soldier communications, Amphenol Terrapin is a miniature series of circular push-pull connectors. Within a rugged shell design Terrapin offers superior EMC performance and high environmental sealing to IP68. Resilient in severe situations the RoHS compliant black-silver

➤CONTINUED➤

TERRAPIN SCE2 MINIATURE CIRCULAR PUSH-PULL CONNECTORS (CONT.)

plating is both low luster and corrosion resistant. Featuring an optional locking mechanism, multiple shell sizes with up to 37 contacts and suitability for overmolding, Terrapin is an ideal choice for miniature connectors in military and other harsh environment applications.

REAR PANEL-MOUNT CHASSIS PLUGS — PUSH-PULL

Rear panel-mount chassis plugs are available for either PC tail or solder cup termination and mate with both push-pull or latch style cable receptacle; *order separately below.*

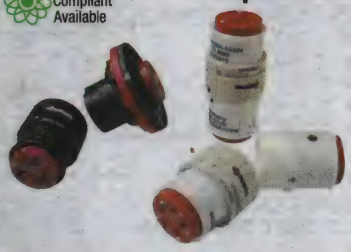
Mfg. Part No.	Shell Size	Insert Arrangement	No. of Socket Contacts	Termination	Stock No.	Price Each 1-9
SCE2-B-76A06-07SN-001	6	6-7	7	Solder PC Tails	65T3249	61.00
SCE2-B-76A07-14SN-001	7	7-14	14	Solder PC Tails	94T4919	59.70
SCE2-B-76A08-19SN-001	8	8-19	19	Solder PC Tails	94T4921	110.77
SCE2-B-76A07-14SN-002	7	7-14	14	Solder Cup	94T4920	61.65
SCE2-B-76A08-19SN-002	8	8-19	19	Solder Cup	94T4922	112.45
IN-LINE CABLE PLUGS — PUSH-PULL						
SCE2-B-06K06-07SN	6	6-7	7	Solder Cup	94T4916	70.49
SCE2-B-06K07-14SN	7	7-14	14	Solder Cup	94T4917	58.53
SCE2-B-06K08-19SN	8	8-19	19	Solder Cup	94T4918	103.60
IN-LINE CABLE RECEPTACLES — PUSH-PULL						
SCE2-B-01K06-07PN	6	6-7	7	Solder Cup	94T4913	81.51
SCE2-B-01K07-14PN	7	7-14	14	Solder Cup	94T4914	77.42
SCE2-B-01K08-19PN	8	8-19	19	Solder Cup	94T4915	128.54
IN-LINE CABLE RECEPTACLES — LATCH						
SCE2-B-L1K06-07PN	6	6-7	7	Solder Cup	94T4910	63.96
SCE2-B-L1K07-14PN	7	7-14	14	Solder Cup	94T4911	60.04
SCE2-B-L1K08-19PN	8	8-19	19	Solder Cup	94T4912	108.94

(194920)

LUMINUS LIGHTING CONNECTORS

RoHS Compliant Available

Amphenol Pcd



- Insulator body: Polyamide 6/6
- Grommet: Silicone rubber
- Contact retainers: Stainless steel
- Temperature: -55 C° to 155 C°
- Accepts standard MIL-C-39029/56-57-58 contacts (not included)

Luminus is a compact, configurable interconnect with an easy, secure coupling mechanism and tough polyamide housing. Luminus is ideal for today's sophisticated commercial, military and industrial vehicle interior environments in which full-spectrum, adjustable, and LED lighting creates a more comfortable or productive atmosphere. Yet the rugged Luminus connector equally withstands the punishment of vehicle exterior and emergency lighting. Its small footprint and aircraft-grade cable-mount accessories allow for fast, efficient assembly.

PLUG (ACCEPTS SOCKET CONTACTS)

Mfg. Part No.	No. of Contacts	Mounting	Contact Size	Body Color	Stock No.	Price Each 1-4	5-9	10-24
SJS716110	1	Cable	16	Red	96M9473	24.29	22.06	18.77
SJS720100	1	Cable	20	Green	96M9474	19.05	18.56	18.09
SJS720110	1	Cable	20	Yellow	96M9475	24.29	22.06	18.77
SJS830250	2	Cable	22	...	68R2594	20.55	18.66	15.88
SJS816100	3	Cable	16	Red	96M9476	24.29	22.06	18.77
SJS816110	3	Cable	16	White	96M9477	24.29	22.06	18.77
SJS816120	3	Cable	16	Blue	96M9478	24.29	22.06	18.77
SJS840310	3	Cable	16	White	68R2597	24.29	22.06	18.77
SJS820100	3	Cable	20	Red	88M9634	24.29	22.06	18.77
SJS820110	3	Cable	20	White	96M9479	24.29	22.06	18.77
SJS820120	3	Cable	20	Blue	88M9635	24.29	22.06	18.77
SJS840410	4	Cable	16	White	68R2603	22.77	20.68	17.60
SJS860510	5	Cable	22	White	68R2605	27.26	25.05	20.98
SJS830100	8	Cable	22	...	11R8529	18.03	16.37	13.93
SJS860910	9	Cable	16 / 22	White	68R2608	23.91	21.72	18.48
RECEPTACLE (ACCEPTS PIN CONTACTS)								
SJS716210	1	Cable	16	Red	96M9482	23.40	21.25	18.08
SJS720200	1	Cable	20	Green	96M9484	18.63	16.92	14.40
SJS720210	1	Cable	20	Yellow	96M9485	23.40	21.25	18.08
SJS830270	2	Cable	22	...	68R2595	17.51	15.95	13.57
SJS816200	3	Cable	16	Red	96M9486	14.80	14.42	14.05
SJS816210	3	Cable	16	White	96M9487	23.40	21.25	18.08
SJS816220	3	Cable	16	Blue	96M9488	23.40	21.25	18.08
SJS840300	3	Cable	16	White	68R2596	20.74	19.61	18.88
SJS820200	3	Cable	20	Red	88M9636	19.11	17.36	14.77
SJS820210	3	Cable	20	White	96M9489	23.40	21.25	18.08
SJS820220	3	Cable	20	Blue	88M9638	18.67	17.87	17.41

CONTINUED

LUMINUS LIGHTING CONNECTORS (CONT.)

RECEPTACLE (ACCEPTS PIN CONTACTS)

Mfg. Part No.	No. of Contacts	Mounting	Contact Size	Body Color	Stock No.	Price Each 1-4	5-9	10-24
SJS840330	3	Panel	16	Black	68R2599	17.70	16.08	13.68
SJS840400	4	Cable	16	White	68R2602	21.01	19.09	16.24
SJS860500	5	Cable	22	White	68R2604	25.05	22.75	19.36
SJS830200	8	Cable	22	...	11R7875	22.89	20.85	17.75
SJS860900	9	Cable	16 / 22	White	68R2607	23.29	21.15	18.00

MOUNTING CRADLE

Mfg. Part No.	Size	Stock No.	Price Each 1-4	5-9	10-24	25-49
SJS445000	Small	68R2589	14.98	13.61	11.60	10.16
SJS991000	Large	68R2609	14.25	12.95	11.03	9.66

(175890)

STANDARD BUCCANEER® SEALED CABLE CONNECTORS

RoHS Compliant Available

bulgin a brand of Elektron Technology

- Sealed to IP68 when mated
- Overall diameter of 38mm
- Housing resistant to dust, oil and salt water
- Leading ground contact for 3 way versions
- Cable acceptance: 6-8mm; 3.5-9mm with alternative glands
- Color: Black

Buccaneer® environmentally sealed cable connectors are specifically designed for harsh applications where water, dust, oil or spray could present a hazard. These robust connectors are dust and waterproof to IP68. Mates with in-line and panel mount Buccaneer® sealed connectors; *order separately online or call.* Screw termination on 2, 3, 4, 6 and 7 way, crimp on 9 way, crimp or solder on 12 and 25 way. Order 12 and 25 way contacts separately; *go online or call*

PLUGS

Mfg. Part No.	Contacts	Current Rating	Stock No.	Price Each 1-24	25-49
PX0736/P	2	10A, 250V	48F2433	13.50	12.12
PX0731/P	3	10A, 250V	48F2438	13.90	12.51
PX0748/P	4	6A, 250V	50B9070	15.92	14.32
PX0739/P	6	3A, 250V	48F2443	15.58	14.01
PX0745/P	7	3A, 250V	92B4506	16.50	14.82
PX0728/P	9	5A, 50V	95B9277	15.18	13.62
PX0794/P	12	5A, 50V	33K3613	16.53	14.66
PX0820/P	25	1A, 50V	01C7958	10.68	9.47

SOCKETS

Mfg. Part No.	Contacts	Current Rating	Stock No.	Price Each 1-24	25-49
PX0736/S	2	10A, 250V	48F2448	15.80	14.19
PX0731/S	3	10A, 250V	48F2453	16.87	15.15
PX0748/S	4	6A, 250V	40C2717	18.03	16.19
PX0739/S	6	3A, 250V	48F2458	20.42	18.36
PX0745/S	7	3A, 250V	65C0035	20.98	18.85
PX0728/S	9	5A, 50V	01C8760	14.98	13.45
PX0820/S	25	1A, 50V	92C5359	10.68	9.47

(41771)

STANDARD BUCCANEER® SEALED IN-LINE CABLE CONNECTORS

RoHS Compliant Available

bulgin a brand of Elektron Technology

- Sealed to IP68 when mated
- Overall diameter: 38mm
- Housing resistant to dust, oil and salt water
- Leading ground contact for 3 way versions
- Cable acceptance: 6-8mm, 3.5-9mm with alternative glands
- Color: Black

In-line environmentally sealed cable connectors are specifically designed for harsh applications where water, dust, oil or spray could present a hazard. Dust and waterproof to IP68. Mate with standard Buccaneer® sealed cable connectors; *order separately on this page.* Screw termination on 2, 3, 4, 6 and 7 way, crimp on 9 way, crimp or solder on 12 and 25 way. Order 12 and 25 way contacts separately; *go online or call*

PLUGS

Mfg. Part No.	Contacts	Current Rating	Stock No.	Price Each 1-24	25-49
PX0737/P	2	10A, 250V	48F2434	14.54	13.06
PX0732/P	3	10A, 250V	48F2439	15.90	14.28

CONTINUED

CIRCULAR CONNECTORS

STANDARD BUCCANEER® SEALED IN-LINE CABLE CONNECTORS (CONT.)

Mfg. Part No.	Contacts	Current Rating	Stock No.	Price Each 1-24	Price Each 25-49
● PX0749/P	4	6A, 250V	92C2482	17.12	15.38
● PX0740/P	6	3A, 250V	48F2444	17.48	15.71
● PX0746/P	7	3A, 250V	92C5338	19.15	17.21

SOCKETS

Mfg. Part No.	Contacts	Current Rating	Stock No.	Price Each 1-24	Price Each 25-49
● PX0737/S	2	10A, 250V	48F2449	17.89	16.07
● PX0732/S	3	10A, 250V	48F2454	18.51	16.62
● PX0749/S	4	6A, 250V	73C0751	20.78	18.69
● PX0740/S	6	3A, 250V	48F2459	21.43	19.25
● PX0746/S	7	3A, 250V	92C5339	23.49	21.11
● PX0729/S	9	5A, 50V	92C2480	17.18	15.43
● PX0821/S	25	1A, 50V	20K7497	10.64	9.44

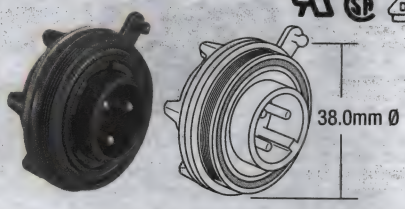
(72426)

STANDARD BUCCANEER® SEALED PANEL CONNECTORS

RoHS Compliant Available

bulgin a brand of Elektron Technology

- Panel mounting connector
- Single hole fixing
- Mounting hole diameter: 35.5mm nom. plus keyway
- Sealed to IP68 when mated
- Overall diameter 38mm
- Housing resistant to dust, oil and salt water
- Leading ground contact for 3 way versions
- Color: Black



Panel mount environmentally sealed connectors are specifically designed for harsh applications where water, dust, oil or spray could present a hazard. Dust and waterproof to IP68. Mate with standard Buccaneer® cable connectors; order separately online or call. Screw termination on 2, 3, 4, 6 and 7 way, crimp on 9 way, crimp or solder on 12 and 25 way. Order 12 way contacts separately; *go online or call*

PLUGS

Mfg. Part No.	Contacts	Current Rating	Stock No.	Price Each 1-24	Price Each 25-49
● PX0735/P	2	10A, 250V	48F2435	9.84	8.84
● PX0730/P	3	10A, 250V	48F2440	11.18	10.04
● PX0738/P	6	3A, 250V	48F2445	13.10	11.76
● PX0744/P	7	3A, 250V	90B5240	13.31	11.96
● PX0727/P	9	5A, 50V	92B5649	11.10	9.97

SOCKETS

● PX0735/S	2	10A, 250V	48F2450	13.13	11.79
● PX0730/S	3	10A, 250V	48F2455	14.19	12.75
● PX0747/S	4	6A, 250V	50B1189	15.41	13.85
● PX0738/S	6	3A, 250V	48F2460	18.51	16.64
● PX0744/S	7	3A, 250V	50B1188	17.87	16.04
● PX0727/S	9	5A, 50V	92B5653	11.10	9.97
● PX0796/S	12	5A, 50V	33K3618	17.08	15.16
● PX0822/S	25	1A, 50V	01C5761	8.04	7.13

(72427)

ACCESSORIES FOR STANDARD BUCCANEER® SEALED CONNECTORS

RoHS Compliant Available

bulgin a brand of Elektron Technology

- Sealing caps maintain IP68 rating of unmated connectors
- Caps double as assembly tool to fit inserts
- Pack of 3 alternative cable glands: 3.5-5mm, 5-7mm and 7-9mm
- Cable support suitable for 5-7mm cable diameters
- In-line cable joiner supplied with 3-way terminal block
- Crimp tool for 9-way contacts

Cable Support — Sealing Caps

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-49
● PX0733	Sealing Cap to Fit Other Types	48F2467	1.67	1.48
● PX0734	Sealing Cap to Fit Other Cable Connectors	36K2024	2.28	2.02
● SA3253	Alternative Cable Glands **-Sold in Pkg. of 3**	48F2471	0.70	0.63
● 12237	Cable Support	48F2478	1.56	1.42
● 13826	Crimp Tool	74C6864	152.24	136.25
14025	9-way Crimp Tool	92C2560	742.38	664.45

➤CONTINUED➤

ACCESSORIES FOR STANDARD BUCCANEER® SEALED CONNECTORS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-49
14025/5AMP	12-way Crimp Tool	92C2562	138.47	126.88
13027	Insertion Tool for 25-way contacts	92C2531	9.94	9.36

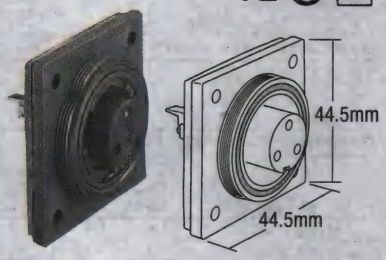
(41772)

STANDARD BUCCANEER® SEALED FLANGE CONNECTORS

RoHS Compliant Available

bulgin a brand of Elektron Technology

- Low-Profile Flange Mounting
- Fixing Holes: 4 x 3.8mm Dia. at 33.3mm Centers
- Sealed to IP68 When Mated
- Screw Termination on 2, 3, 4 and 6 Way, Crimp on 9 Way
- Housing Resistant to Dust, Oil and Salt Water
- Leading Ground Contact for 3 Way Versions
- Color: Black



Flange mount environmentally sealed connectors are specifically designed for harsh applications where water, dust, oil or spray could present a hazard. Dust and waterproof to IP68. UL recognized, CSA certified, VDE approved. Mate with standard Buccaneer® cable connectors; *order separately on page 981 and on pages 981-982.*

PLUGS

Mfg. Part No.	Contacts	Current Rating	Stock No.	Price Each 1-24	Price Each 25-49
● PX0765/P	3	10A, 250V	48F2442	13.56	12.18
● PX0766/P	4	6A, 250V	40C2714	14.60	13.11
● PX0767/P	6	3A, 250V	48F2447	14.35	12.89

SOCKETS

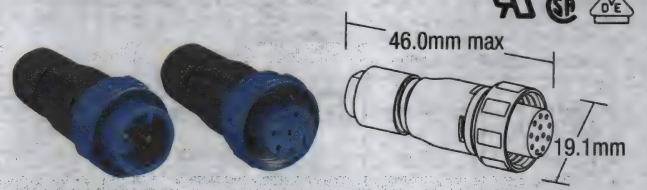
Mfg. Part No.	Contacts	Current Rating	Stock No.	Price Each 1-24	Price Each 25-49
● PX0764/S	2	10A, 250V	48F2452	15.39	13.82
● PX0765/S	3	10A, 250V	48F2457	16.10	14.46
● PX0766/S	4	6A, 250V	40C2715	18.64	16.75
● PX0767/S	6	3A, 250V	48F2462	19.11	17.16
● PX0769/S	9	5A, 150V	40C2716	16.11	14.47

(72420)

400 SERIES BUCCANEER® SEALED CABLE CONNECTORS

RoHS Compliant Available

bulgin a brand of Elektron Technology



- Waterproof and Dustproof to IP68
- Overall Diameter: 19mm
- Accepts Pin and Socket Contacts
- Ratings from 8A, 250V to 1A, 50V
- Cable Sealing Range from 3.0mm to 7.0mm O.D.
- Contact Accommodation: 2, 3 Pole, 20-24 AWG; 4, 6, 8 Pole, 22-26 AWG; 10, 12 Pole, 24-28 AWG
- Flammability Rating: UL94V-0
- Operating Temperature Range: -40° to +80°C

Mates with **mfg. part no. PX0411** flex inline cable connectors and **mfg. part no. PX0412** panel mount connectors; *order separately. Go online or call. Order gold-plated crimp or solder contacts separately. Go online or call. Order cable glands and sealing caps to maintain IP68, and contact insertion tooling separately. Go online or call.* UL recognized, CSA certified, VDE approved.

PLUGS

Mfg. Part No.	Contacts	Current Rating	Cable O.D. (mm)	Stock No.	Price Each 1-24	Price Each 25-99
● PX0410/02P/5560	2	8A	5.5 to 6	92C2433	8.57	7.59
● PX0410/03P/5560	3	8A	5.5 to 6	92C2435	8.34	7.40
● PX0410/04P/4550	4	5A	4.5 to 5	92C2437	8.57	7.59
● PX0410/06P/4550	6	5A	4.5 to 5	92C2439	8.45	7.51
● PX0410/08P/6065	8	5A	6 to 6.5	92C2441	8.57	7.59
● PX0410/10P/6065	10	1A	6 to 6.5	92C2443	8.45	7.49
● PX0410/12P/6065	12	1A	6 to 6.5	92C2445	8.45	7.49

SOCKETS

Mfg. Part No.	Contacts	Current Rating	Cable O.D. (mm)	Stock No.	Price Each 1-24	Price Each 25-99
● PX0410/02S/5560	2	8A	5.5 to 6	92C2434	8.34	7.40
● PX0410/03S/5560	3	8A	5.5 to 6	92C2436	8.34	7.40
● PX0410/04S/4550	4	5A	4.5 to 5	92C2438	8.45	7.49

➤CONTINUED➤

400 SERIES BUCCANEER® SEALED CABLE CONNECTORS (CONT.)

SOCKETS

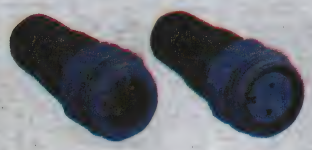
Mfg. Part No.	Contacts	Current Rating	Cable O.D. (mm)	Stock No.	Price Each 1-24	Price Each 25-99
PX0410/06S/4550	6	5A	4.5 to 5	92C2440	8.34	7.40
PX0410/08S/6065	8	5A	6 to 6.5	92C2442	8.57	7.59
PX0410/10S/6065	10	1A	6 to 6.5	92C2444	8.45	7.49
PX0410/12S/6065	12	1A	6 to 6.5	92C2446	8.45	7.49

(72429)

400 SERIES BUCCANEER® SEALED CONNECTORS

RoHS Compliant Available

bulgin a brand of Elektron Technology



- Waterproof and Dustproof to IP68
- Overall Diameter: 19mm
- Accepts Pin and Socket Contacts
- Ratings from 8A, 250V to 1A, 50V
- Cable Sealing Range From 3.0mm to 7.0mm O.D.
- Operating Temperature Range: -40° to +80°C
- Contact Accommodation: 2, 3 Pole, 20-24 AWG; 4, 6, 8 Pole, 22-26 AWG; 10, 12 Pole, 24-28 AWG
- Flammability Rating: UL94V-0

Mates with **mfg. part no. PX0410** cable connectors; *order separately on pages 982-983. Order gold-plated crimp or solder contacts separately on this page. Order cable glands, sealing caps to maintain IP68, and contact insertion tooling separately on this page.* UL recognized, CSA certified, VDE approved.

PLUGS

Mfg. Part No.	Contacts	Current Rating	Cable O.D. (mm)	Stock No.	Price Each 1-24	Price Each 25-99
PX0411/02P/5560	2	8A	5.5 to 6	92C2447	8.34	7.40
PX0411/03P/5560	3	8A	5.5 to 6	92C2449	8.45	7.49
PX0411/04P/4550	4	5A	4.5 to 5	92C2451	7.98	7.08
PX0411/06P/4550	6	5A	4.5 to 5	92C2453	7.98	7.08
PX0411/08P/6065	8	5A	6 to 6.5	92C2455	7.98	7.08
PX0411/10P/6065	10	1A	6 to 6.5	92C2457	7.98	7.08
PX0411/12P/6065	12	1A	6 to 6.5	92C2459	7.98	7.08

SOCKETS

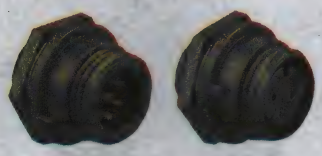
Mfg. Part No.	Contacts	Current Rating	Cable O.D. (mm)	Stock No.	Price Each 1-24	Price Each 25-99
PX0411/02S/5560	2	8A	5.5 to 6	92C2448	8.45	7.49
PX0411/03S/5560	3	8A	5.5 to 6	92C2450	8.45	7.49
PX0411/04S/4550	4	5A	4.5 to 5	92C2452	8.34	7.40
PX0411/06S/4550	6	5A	4.5 to 5	92C2454	8.34	7.40
PX0411/08S/6065	8	5A	6 to 6.5	92C2456	8.45	7.49
PX0411/10S/6065	10	1A	6 to 6.5	92C2458	7.98	7.08

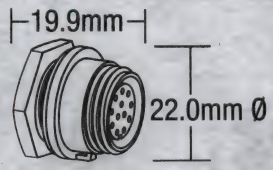
(72430)

400 SERIES BUCCANEER® SEALED PANEL MOUNT CONNECTORS

RoHS Compliant Available

bulgin a brand of Elektron Technology





- Waterproof and Dustproof to IP68
- Overall Diameter: 19mm
- Accepts Pin and Socket Contacts
- Ratings from 8A, 250V to 1A, 50V
- Cable Sealing Range from 3.0mm to 7.0mm O.D.
- Operating Temperature Range: -40° to +80°C
- Contact Accommodation: 2, 3 Pole, 20-24 AWG; 4, 6, 8 Pole, 22-26 AWG; 10, 12 Pole, 24-28 AWG
- Flammability Rating: UL94V-0

Mates with **mfg. Part No. PX0410** cable connectors; *order separately on pages 982-983. Order gold-plated crimp or solder contacts separately on this page. Order cable glands, sealing caps to maintain IP68, and contact insertion tooling separately on this page.* UL recognized, CSA certified, VDE approved.

PLUGS

Mfg. Part No.	Contacts	Current Rating	Cable O.D. (mm)	Stock No.	Price Each 1-24	Price Each 25-99
PX0412/02/P/5560	2	8A	5.5 to 6	92C2461	7.20	6.38
PX0412/03/P/5560	3	8A	5.5 to 6	92C2463	7.20	6.38
PX0412/04/P/4550	4	5A	4.5 to 5	92C2465	6.80	6.03
PX0412/06/P/4550	6	5A	4.5 to 5	92C2467	7.11	6.30
PX0412/08/P/6065	8	5A	6 to 6.5	92C2469	7.20	6.38

➤CONTINUED➤

400 SERIES BUCCANEER® SEALED PANEL MOUNT CONNECTORS (CONT.)

SOCKETS

Mfg. Part No.	Contacts	Current Rating	Cable O.D. (mm)	Stock No.	Price Each 1-24	Price Each 25-99
PX0412/02/S/5560	2	8A	5.5 to 6	92C2462	7.29	6.48
PX0412/03/S/5560	3	8A	5.5 to 6	92C2464	7.20	6.38
PX0412/04/S/4550	4	5A	4.5 to 5	92C2466	7.11	6.30
PX0412/06/S/4550	6	5A	4.5 to 5	92C2468	7.29	6.48
PX0412/08/S/6065	8	5A	6 to 6.5	92C2470	7.11	6.30
PX0412/12/S/6065	12	1A	6 to 6.5	92C2474	7.20	6.38

(72431)

400 SERIES BUCCANEER® CONTACTS

RoHS Compliant Available

bulgin a brand of Elektron Technology

- Choice of Crimp or Solder
- Gold-Plated

CRIMP CONTACTS (SOLD IN PACKAGES OF 10)

Mfg. Part No.	Description	For Use with No. Poles	Stock No.	Price per Pkg. 1-24	Price per Pkg. 25-99
SA3349	8A Socket	2, 3	92C3201	14.76	13.41
SA3350	8A Pin	2, 3	92C3202	10.53	9.57
SA3347	5A Socket	4, 6, 8	92C3197	13.43	12.21
SA3348	5A Pin	4, 6, 8	92C3199	8.54	7.77
SA3179	1A Socket	10, 12	05C0780	9.65	8.76
SA3180	1A Pin	10, 12	05C0782	6.50	5.90

SOLDER CONTACTS (SOLD IN PACKAGES OF 10)

Mfg. Part No.	Description	For Use with No. Poles	Stock No.	Price per Pkg. 1-24	Price per Pkg. 25-99
SA3349/1	8A Socket	2, 3	79C4291	14.40	13.07
SA3350/1	8A Pin	2, 3	79C4288	10.53	9.57
SA3347/1	5A Socket	4, 6, 8	92C3198	13.43	12.21
SA3348/1	5A Pin	4, 6, 8	92C3200	8.45	7.67
SA3179/1	1A Socket	10, 12	81C7287	9.53	8.66
SA3180/1	1A Pin	10, 12	92C2487	6.50	5.90

(72435)

400 SERIES BUCCANEER® ACCESSORIES

RoHS Compliant Available

bulgin a brand of Elektron Technology

- Sealing Caps to Maintain IP68 Rating of Unmated Connectors
- Cable Sealing Gland Packs
- Installation Tools

Mfg. Part No.	Description	Stock No.	Price Each 1-9
PX0481	Sealing Cap for **Mfg. Part No. PX0410** Connectors	92C2477	2.23
PX0480	Sealing Cap for **Mfg. Part No. PX0412** Connectors	92C2475	2.19
PX0484	Sealing Cap for **Mfg. Part No. PX0413** Connectors	34K0671	2.75
PX0482	Gland Pack, 3.0 to 5.0mm O.D. Cable	92C2478	1.66
PX0483	Gland Pack, 5.0 to 7.0mm O.D. Cable	92C2479	1.64
13027	Insertion Tool for 1A Contacts, 24-28 AWG	92C2531	9.94
13027/1	Insertion Tool for 5A Contacts, 22-26 AWG	92C2532	9.82
13027/2	Insertion Tool for 8A Contacts, 20-24 AWG	79C4285	9.94
14025	8-Indent Crimp Tool — For Use with Positioners; *ordered separately below*	92C2560	742.38
14025/1AMP	Positioner for 1A Crimp Tool	92C2561	138.47
14025/5AMP	Positioner for 5A Crimp Tool	92C2562	138.47

(72432)

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(212563)

CIRCULAR CONNECTORS

6000 SERIES BUCCANEER® SEALED FLEX CABLE CONNECTORS

RoHS Compliant Available

bulgin a brand of Elektron Technology

- Mate with in-line flex or panel mount versions
- Push/pull locking ring with 30° twist locking
- Sealed to IP66, IP68 and IP69K when mated
- Pin or socket versions
- Leading earth on 3 pole connectors
- Screw and crimp termination

PXM6010/03P/ST/0507/SN

PXM6010/03S/ST/0507/SN

PXP6010/03P/ST/0507

PXP6010/03S/ST/0507

Metal connectors mate with **mfg. part no. PXM6011** in-line flex cable connectors and **mfg. part no. PXM6012** front panel mounting connectors; *ordered separately on this page.* Plastic connectors mate with **mfg. part no. PXP6011** in-line flex cable connectors and **mfg. part no. PXP6012** front panel mounting connectors; ordered separately *on this page. Order contacts separately on this page.*

METAL

Mfg. Part No.	No. of Contacts/ Positions	Termination	Contact Gender	Contacts Supplied	Stock No.	Price Each 1-9
● PXM6010/02P/ST/0507/SN	2	Screw	Pin	Yes	56W4576	44.33
● PXM6010/02S/ST/0507/SN	2	Screw	Socket	Yes	56W4577	45.38
● PXM6010/03P/ST/0507/SN	3	Screw	Pin	Yes	56W4578	46.06
● PXM6010/03S/ST/0507/SN	3	Screw	Socket	Yes	56W4579	49.38
● PXM6010/08P/CR/0709/SN	8	Crimp	Pin	No	56W4580	37.21
● PXM6010/08S/CR/0709/SN	8	Crimp	Socket	No	56W4581	37.21
● PXM6010/16P/CR/0910/SN	16	Crimp	Pin	No	56W4582	37.21
● PXM6010/16S/CR/0910/SN	16	Crimp	Socket	No	56W4583	37.21
● PXM6010/22P/CR/0910/SN	22	Crimp	Pin	No	56W4584	37.21
● PXM6010/22S/CR/0910/SN	22	Crimp	Socket	No	56W4585	37.21
PLASTIC						
● PXP6010/02P/ST/0507	2	Screw	Pin	Yes	56W4612	12.35
● PXP6010/02S/ST/0507	2	Screw	Socket	Yes	56W4613	12.11
● PXP6010/03P/ST/0507	3	Screw	Pin	Yes	56W4614	13.43
● PXP6010/03S/ST/0507	3	Screw	Socket	Yes	56W4615	13.55
● PXP6010/08P/CR/0709	8	Crimp	Pin	No	56W4616	9.15
● PXP6010/08S/CR/0709	8	Crimp	Socket	No	56W4617	9.15

(209593)

6000 SERIES BUCCANEER® SEALED IN-LINE FLEX CABLE CONNECTORS

RoHS Compliant Available

bulgin a brand of Elektron Technology

- Push/pull latching mechanism
- 30° twist locking
- Sealed to IP66, IP68 and IP69K when mated
- For in-line cable connections
- Pin or socket versions
- Leading earth on 3 pole connectors
- Screw and crimp termination

Metal connectors mate with **mfg. part no. PXM6010** flex cable connectors, plastic connectors mate with **mfg.part no. PXP6010** flex cable connectors; order separately *on this page. Order contacts separately on this page.*

PXM6011/03P/ST/0507/SN

PXM6011/03S/ST/0507/SN

PXP6011/03P/ST/0507

PXP6011/03S/ST/0507

METAL

Mfg. Part No.	No. of Contacts/ Positions	Termination	Contact Gender	Contacts Supplied	Stock No.	Price Each 1-9
● PXM6011/02P/ST/0507/SN	2	Screw	Pin	Yes	56W4586	34.09
● PXM6011/02S/ST/0507/SN	2	Screw	Socket	Yes	56W4587	34.90
● PXM6011/03P/ST/0507/SN	3	Screw	Pin	Yes	56W4588	34.90
● PXM6011/03S/ST/0507/SN	3	Screw	Socket	Yes	56W4589	35.74
● PXM6011/08P/CR/0709/SN	8	Crimp	Pin	No	56W4590	31.47
● PXM6011/08S/CR/0709/SN	8	Crimp	Socket	No	56W4591	31.47
● PXM6011/16P/CR/0910/SN	16	Crimp	Pin	No	56W4592	31.47
● PXM6011/16S/CR/0910/SN	16	Crimp	Socket	No	56W4593	31.47
● PXM6011/22P/CR/0910/SN	22	Crimp	Pin	No	56W4594	31.47
● PXM6011/22S/CR/0910/SN	22	Crimp	Socket	No	56W4595	31.47
PLASTIC						
● PXP6011/02P/ST/0507	2	Screw	Pin	Yes	56W4618	12.79
● PXP6011/02S/ST/0507	2	Screw	Socket	Yes	56W4619	14.48
● PXP6011/03P/ST/0507	3	Screw	Pin	Yes	56W4620	16.22
● PXP6011/03S/ST/0507	3	Screw	Socket	Yes	56W4621	18.18
● PXP6011/08P/CR/0709	8	Crimp	Pin	No	56W4622	9.37
● PXP6011/08S/CR/0709	8	Crimp	Socket	No	56W4623	9.37

(209591)

6000 SERIES BUCCANEER® SEALED PANEL MOUNT CONNECTORS

RoHS Compliant Available

bulgin a brand of Elektron Technology

PXM6012/03P/ST

PXM6012/03S/ST

PXP6012/03P/ST

PXP6012/03S/ST

- Push/pull latching mechanism
- 30° twist locking
- Sealed to IP66, IP68 and IP69K when mated
- Front panel mounting
- Single hole fixing
- Leading earth on 3-pole connectors
- Screw and crimp terminiation

Metal connectors mate with **mfg. part no. PXM6010** flex cable connectors, plastic connectors mate with **mfg.part no. PXP6010** flex cable connectors; *order separately on this page. Order contacts separately on this page.*

METAL

Mfg. Part No.	No. of Contacts/ Positions	Termination	Contact Gender	Contacts Supplied	Stock No.	Price Each 1-9
● PXM6012/02P/ST	2	Screw	Pin	Yes	56W4596	20.49
● PXM6012/02S/ST	2	Screw	Socket	Yes	56W4597	21.37
● PXM6012/03P/ST	3	Screw	Pin	Yes	56W4598	22.62
● PXM6012/03S/ST	3	Screw	Socket	Yes	56W4599	23.52
● PXM6012/08P/CR	8	Crimp	Pin	No	56W4600	20.63
● PXM6012/08S/CR	8	Crimp	Socket	No	56W4601	20.63
● PXM6012/16P/CR	16	Crimp	Pin	No	56W4602	19.49
● PXM6012/16S/CR	16	Crimp	Socket	No	56W4603	19.49
● PXM6012/22P/CR	22	Crimp	Pin	No	56W4604	19.49
● PXM6012/22S/CR	22	Crimp	Socket	No	56W4605	19.49
PLASTIC						
● PXP6012/02P/ST	2	Screw	Pin	Yes	56W4624	10.53
● PXP6012/02S/ST	2	Screw	Socket	Yes	56W4625	11.29
● PXP6012/03P/ST	3	Screw	Pin	Yes	56W4626	12.47
● PXP6012/03S/ST	3	Screw	Socket	Yes	56W4627	12.84
● PXP6012/08P/CR	8	Crimp	Pin	No	56W4628	6.99
● PXP6012/08S/CR	8	Crimp	Socket	No	56W4629	6.99

(209574)

6000 SERIES BUCCANEER® CONTACTS

RoHS Compliant Available

bulgin a brand of Elektron Technology

- Crimp contacts
- Gold plated

For use with **6000 series** Buccaneer connectors; *ordered separately on this page.* **Sold in packages of 10.**

Mfg. Part No.	Contact Rating (A)	Contact Gender	For Use With No. of Poles	Stock No.	Price per Pkg. 1-9
● SA3545/P	16	Pin	2, 3	56W4644	7.83
● SA3545/S	16	Socket	2, 3	56W4645	10.62
● SA3544/P	10	Pin	8	56W4642	7.31
● SA3544/S	10	Socket	8	56W4643	10.54

(209595)

6000 SERIES BUCCANEER® ACCESSORIES

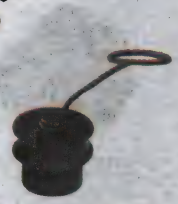
RoHS Compliant Available

bulgin a brand of Elektron Technology

PXM6081

PXM6082

PXM6083


PXP6083

PXP6088

14946/SP

PXM6090

14232/2/SP

- Sealing caps maintain IP rating of unmated connectors
- Cable sealing gland packs
- Installation tools

CONTINUED

6000 SERIES BUCCANEER® ACCESSORIES (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each 1-9
PXM6081	Metal Sealing Cap for **Mfg. Part No. PXM6010** (Flex Connector)	56W4608	17.11
PXM6082	Metal Sealing Cap for **Mfg. Part No. PXM6011** (In-Lin Connector)	56W4609	27.35
PXM6083	Metal Sealing Cap for **Mfg. Part No. PXM6012** (Panel Connector)	56W4610	28.70
PXP6083	Plastic Sealing Cap for **Mfg. Part No. PXP6012** (Panel Connector)	56W4640	4.91
PXP6088	Cable Gland Pack - 4 to 10mm O.D. Cable	56W4641	1.57
PXM6090	Cable Braid Termination Option	56W4611	1.15
14946/SP	Insertion/Extraction Tool (2 & 3-Pole)	56W4648	8.38
14945/SP	Insertion/Extraction Tool (8-Pole)	56W4647	8.38
14232/2/SP	Positioner (2 & 3-Pole)	56W4646	316.26
15021/SP	Positioner (8-Pole)	56W4649	189.46

(209596)

7000 SERIES BUCCANEER® CIRCULAR CONNECTORS

RoHS Compliant Available

NEW

bulgin
a brand of Elektron Technology

METAL FLEX CABLE CONNECTOR

PLASTIC FLEX CABLE CONNECTOR

METAL IN-LINE FLEX CABLE CONNECTOR

PLASTIC IN-LINE FLEX CABLE CONNECTOR

METAL FRONT PANEL MOUNTING CONNECTOR

PLASTIC FRONT PANEL MOUNTING CONNECTOR

FEATURES:

- Less than ¼ Turn locking mechanism
- Positive feedback on locking mechanism
- IP66, IP68 and IP69K when mated
- All metal body version: cast zinc alloy, nickel plated
- All plastic body version: UL94-V0 rated, UV stable, halogen free
- Flex, flexin-line & panel mount body styles, with sealing caps
- Polarisation and visual alignment features
- 2 to 32 poles - up to 25A, 600V rated
- 'Scoop proof' contacts

The **7000 Series Buccaneer®** - circular connectors that combine the ease of use of a quick coupling mechanism with proven environmental sealing for signal and mains power. Designed and independently tested to IP66, IP68 & IP69K standards, they are ideal for applications where ingress of dust and water must be avoided and where ease of connection, space and appearance are important considerations. **For crimp termination contacts sold separately.** *More options available; go online or call.*

METAL CONNECTORS
FLEX CABLE CONNECTOR (with Cable braid termination accessory & Cable gland)

Mfg. Part No.	No. of Pos.	Contact Gender	Cable Entry Size	Stock No.	Price Each 1-9
PXM7010/02P/ST/0507/SN	2	Pin	5-7mm	23X8444	38.99
PXM7010/02P/ST/0709/SN	2	Pin	7-9mm	23X8446	38.99
PXM7010/02P/ST/0911/SN	2	Pin	9-11mm	23X8448	38.99
PXM7010/02P/ST/1113/SN	2	Pin	11-13mm	23X8450	38.99
PXM7010/02P/ST/1315/SN	2	Pin	13-15mm	23X8452	38.99
PXM7010/02S/ST/0507/SN	2	Socket	5-7mm	23X8454	39.88
PXM7010/02S/ST/0709/SN	2	Socket	7-9mm	23X8456	39.88
PXM7010/02S/ST/0911/SN	2	Socket	9-11mm	23X8458	39.88
PXM7010/02S/ST/1113/SN	2	Socket	11-13mm	23X8460	39.88
PXM7010/02S/ST/1315/SN	2	Socket	13-15mm	23X8462	39.88
PXM7010/03P/ST/0507/SN	3	Pin	5-7mm	23X8464	40.50
PXM7010/03P/ST/0709/SN	3	Pin	7-9mm	23X8466	40.50
PXM7010/03P/ST/0911/SN	3	Pin	9-11mm	23X8468	40.50
PXM7010/03P/ST/1113/SN	3	Pin	11-13mm	23X8470	40.50
PXM7010/03P/ST/1315/SN	3	Pin	13-15mm	23X8472	40.50
PXM7010/03S/ST/0507/SN	3	Socket	5-7mm	23X8474	41.39
PXM7010/03S/ST/0709/SN	3	Socket	7-9mm	23X8476	41.39
PXM7010/03S/ST/0911/SN	3	Socket	9-11mm	23X8478	41.39
PXM7010/03S/ST/1113/SN	3	Socket	11-13mm	23X8480	41.39
PXM7010/03S/ST/1315/SN	3	Socket	13-15mm	23X8481	41.39
PXM7010/06P/ST/0507/SN	6	Pin	5-7mm	23X8483	41.58
PXM7010/06P/ST/0709/SN	6	Pin	7-9mm	23X8485	41.58
PXM7010/06P/ST/0911/SN	6	Pin	9-11mm	23X8487	41.58
PXM7010/06P/ST/1113/SN	6	Pin	11-13mm	23X8489	41.58
PXM7010/06P/ST/1315/SN	6	Pin	13-15mm	23X8491	41.58

CONTINUED

7000 SERIES BUCCANEER® CIRCULAR CONNECTORS (CONT.)

Mfg. Part No.	No. of Pos.	Contact Gender	Cable Entry Size	Stock No.	Price Each 1-9
PXM7010/06S/ST/0507/SN	6	Socket	5-7mm	23X8493	42.18
PXM7010/06S/ST/0709/SN	6	Socket	7-9mm	23X8495	42.18
PXM7010/06S/ST/0911/SN	6	Socket	9-11mm	23X8497	42.18
PXM7010/06S/ST/1113/SN	6	Socket	11-13mm	23X8499	42.18
PXM7010/06S/ST/1315/SN	6	Socket	13-15mm	23X8500	42.18
IN-LINE FLEX CABLE CONNECTOR (with Cable braid termination accessory & Cable gland)					
PXM7011/02P/ST/0507/SN	2	Pin	5-7mm	23X8541	31.96
PXM7011/02P/ST/0709/SN	2	Pin	7-9mm	23X8543	31.96
PXM7011/02P/ST/0911/SN	2	Pin	9-11mm	23X8545	31.96
PXM7011/02P/ST/1113/SN	2	Pin	11-13mm	23X8547	31.96
PXM7011/02P/ST/1315/SN	2	Pin	13-15mm	23X8549	31.96
PXM7011/02S/ST/0507/SN	2	Socket	5-7mm	23X8551	32.47
PXM7011/02S/ST/0709/SN	2	Socket	7-9mm	23X8553	32.47
PXM7011/02S/ST/0911/SN	2	Socket	9-11mm	23X8555	32.47
PXM7011/02S/ST/1113/SN	2	Socket	11-13mm	23X8557	32.47
PXM7011/02S/ST/1315/SN	2	Socket	13-15mm	23X8559	32.47
PXM7011/03P/ST/0507/SN	3	Pin	5-7mm	23X8561	33.72
PXM7011/03P/ST/0709/SN	3	Pin	7-9mm	23X8563	33.72
PXM7011/03P/ST/0911/SN	3	Pin	9-11mm	23X8565	33.72
PXM7011/03P/ST/1113/SN	3	Pin	11-13mm	23X8567	33.72
PXM7011/03P/ST/1315/SN	3	Pin	13-15mm	23X8569	33.72
PXM7011/03S/ST/0507/SN	3	Socket	5-7mm	23X8571	34.27
PXM7011/03S/ST/0709/SN	3	Socket	7-9mm	23X8573	34.27
PXM7011/03S/ST/0911/SN	3	Socket	9-11mm	23X8575	34.27
PXM7011/03S/ST/1113/SN	3	Socket	11-13mm	23X8577	34.27
PXM7011/03S/ST/1315/SN	3	Socket	13-15mm	23X8579	34.27
PXM7011/06P/ST/0507/SN	6	Pin	5-7mm	23X8581	34.27
PXM7011/06P/ST/0709/SN	6	Pin	7-9mm	23X8583	34.27
PXM7011/06P/ST/0911/SN	6	Pin	9-11mm	23X8585	34.27
PXM7011/06P/ST/1113/SN	6	Pin	11-13mm	23X8587	34.27
PXM7011/06P/ST/1315/SN	6	Pin	13-15mm	23X8589	34.27
PXM7011/06S/ST/0507/SN	6	Socket	5-7mm	23X8591	34.86
PXM7011/06S/ST/0709/SN	6	Socket	7-9mm	23X8593	34.86
PXM7011/06S/ST/0911/SN	6	Socket	9-11mm	23X8595	34.86
PXM7011/06S/ST/1113/SN	6	Socket	11-13mm	23X8597	34.86
PXM7011/06S/ST/1315/SN	6	Socket	13-15mm	23X8599	34.86
FRONT PANEL MOUNTING CONNECTOR					
PXM7012/02P/ST	2	Pin	...	23X8640	19.54
PXM7012/02S/ST	2	Socket	...	23X8641	20.11
PXM7012/03P/ST	3	Pin	...	23X8642	20.68
PXM7012/03S/ST	3	Socket	...	23X8643	21.25
PXM7012/06P/ST	6	Pin	...	23X8644	22.45
PXM7012/06S/ST	6	Socket	...	23X8645	23.04

PLASTIC CONNECTORS
FLEX CABLE CONNECTOR (with Cable braid termination accessory & Cable gland)

Mfg. Part No.	No. of Pos.	Contact Gender	Cable Entry Size	Stock No.	Price Each 1-9
PXP7010/10P/CR/0507	10	Pin	5-7mm	23X8687	7.95
PXP7010/10P/CR/0709	10	Pin	7-9mm	23X8688	7.95
PXP7010/10P/CR/0911	10	Pin	9-11mm	23X8689	7.95
PXP7010/10P/CR/1113	10	Pin	11-13mm	23X8690	7.95
PXP7010/10P/CR/1315	10	Pin	13-15mm	23X8691	7.95
PXP7010/10S/CR/0507	10	Socket	5-7mm	23X8692	7.95
PXP7010/10S/CR/0709	10	Socket	7-9mm	23X8693	7.95
PXP7010/10S/CR/0911	10	Socket	9-11mm	23X8694	7.95
PXP7010/10S/CR/1113	10	Socket	11-13mm	23X8695	7.95
PXP7010/10S/CR/1315	10	Socket	13-15mm	23X8696	7.95
IN-LINE FLEX CABLE CONNECTOR (with Cable gland)					
PXP7011/10P/CR/0507	10	Pin	5-7mm	23X8737	7.65
PXP7011/10P/CR/0709	10	Pin	7-9mm	23X8738	7.65
PXP7011/10P/CR/0911	10	Pin	9-11mm	23X8739	7.65
PXP7011/10P/CR/1113	10	Pin	11-13mm	23X8740	7.65
PXP7011/10P/CR/1315	10	Pin	13-15mm	23X8741	7.65
PXP7011/10S/CR/0507	10	Socket	5-7mm	23X8742	7.65
PXP7011/10S/CR/0709	10	Socket	7-9mm	23X8743	7.65
PXP7011/10S/CR/0911	10	Socket	9-11mm	23X8744	7.65
PXP7011/10S/CR/1113	10	Socket	11-13mm	23X8745	7.65
PXP7011/10S/CR/1315	10	Socket	13-15mm	23X8746	7.65
FRONT PANEL MOUNTING CONNECTOR					
PXP7012/10P/CR	10	Pin	...	23X8762	6.02
PXP7012/10S/CR	10	Socket	...	23X8763	6.02

CONTINUED

CIRCULAR CONNECTORS

7000 SERIES BUCCANEER® CIRCULAR CONNECTORS (CONT.)

CRIMP CONTACTS

Mfg. Part No.	Contact Gender	Contact Rating (A)	For Use With No. of Poles	Stock No.	Price per Pkg. 1-9
● SA3544/P	Pin	10	10	56W4642	7.31
● SA3544/S	Socket	10	10	56W4643	10.54

TOOLING

Mfg. Part No.	Description	Stock No.	Price Each 1-4
14025	Crimp Tool	92C2560	742.38
● 15021/SP	Positioner - 10 pole	56W4649	189.46
● 14945/SP	Extraction Tool for 10 pole contacts	56W4647	8.38
● 15065/SP	Contact Carrier Removal Tool (For removal of all contact carriers)	23X9815	2.31

METAL CONNECTOR ACCESSORIES
CABLE GLAND PACKS

Mfg. Part No.	Cable Entry Size	Color	Stock No.	Price Each 1-9
● PXM7088/0507	5-7mm	Grey	23X8653	5.76
● PXM7088/0713	7-13mm	White	23X8654	5.76
● PXM7088/1315	13-15mm	Light Grey	23X8655	5.76

SEALING CAPS

Mfg. Part No.	For Use With	Stock No.	Price Each 1-9
● PXM7081	PXM7010 Flex Connector	23X8650	13.02
● PXM7082	PXM7011 Flex In-Line Connector and PXM7012 Panel Connector	23X8651	21.25
● PXM7083	PXM7012 Panel Mounting Connector	23X8652	21.25

CABLE BRAID TERMINATION OPTION

Mfg. Part No.	Descriprion	Stock No.	Price Each 1-9
● PXM7090	For cable braid termination; Supplied with ty-rap	23X8656	1.01

PLASTIC CONNECTOR ACCESSORIES
CABLE GLAND PACKS

Mfg. Part No.	Cable Entry Size	Color	Stock No.	Price Each 1-9
● PXP7088/0507	5-7mm	Grey	23X8768	1.51
● PXP7088/0713	7-13mm	White	23X8769	1.86
● PXP7088/1315	13-15mm	Light Grey	23X8770	1.14

SEALING CAPS

Mfg. Part No.	For Use With	Stock No.	Price Each 1-9
● PXP7081	PXP7010 Flex Connector	23X8766	1.91
● PXP7082	PXP7011 Flex In-Line Connector and PXP7012 Panel Connector	23X8767	2.14

(212471)

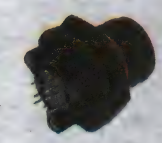
CeeLok FAST-T CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

2102351-1



2102351-2

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2102352-2

2102353-1

2102353-2

- 1 Gbit-ethernet and 10 Gbit-ethernet when used with Cat 5e, Cat 6A or Cat 7 cables
- Crimp snap, 39029-style contacts for easy termination and field repairability
- Backshell integrated in plug body provides low profile, low weight strain relief and EMI protection
- T-shaped pin pattern improves SI through uniform crosstalk cancellation
- Compatible with multiple braid terminations, adaptor styles and seal boots
- Scoop-proof design
- Insert assembly mechanically retained for ≤ 25lb retention force
- Robust coupling ring mechanism
- Size 8 shell saves weight and space
- Insert material: thermoplastic
- Contact material: copper alloy

➤CONTINUED➤

CeeLok FAST-T CONNECTORS (CONT.)

JAM NUT RECEPTACLES — PC TAIL

Mfg. Part No.	Contact Gender	Shell Material	Keying Option	Stock No.	Price Each 1-4	5-9	10-24
● 2102351-1	Pin	Electroless Nickel	N	93T8062	226.66	217.16	211.13
● 2102351-2	Pin	Black Zinc	N	93T8066	239.41	229.37	222.99
2102351-3	Pin	Electroless Nickel	A	46W3239	205.92	199.06	182.59
● 2102351-4	Pin	Black Zinc	A	46W3240	217.50	210.25	192.85
2102351-5	Pin	Electroless Nickel	B	46W3241	205.92	199.06	182.59
2102351-6	Pin	Black Zinc	B	46W3242	217.50	210.25	192.85
RECEPTACLE KITS							
● 2102352-1	Pin	Electroless Nickel	N	93T8070	132.04	126.38	122.87
● 2102352-2	Pin	Black Zinc	N	24W8946	144.50	138.44	134.60
2102352-3	Pin	Electroless Nickel	A	46W3243	141.47	133.16	120.67
2102352-4	Pin	Black Zinc	A	46W3244	148.78	140.04	126.91
2102352-5	Pin	Electroless Nickel	B	46W3245	140.17	131.92	127.80
2102352-6	Pin	Black Zinc	B	46W3246	148.78	140.04	126.91
PLUG KITS							
● 2102353-1	Socket	Electroless Nickel	N	46W3247	182.75	168.08	163.41
● 2102353-2	Socket	Black Zinc	N	46W3248	192.66	184.58	179.45
2102353-3	Socket	Electroless Nickel	A	46W3249	166.02	160.49	147.21
● 2102353-4	Socket	Black Zinc	A	46W3250	186.93	180.70	165.75
2102353-5	Socket	Electroless Nickel	B	46W3251	166.02	160.49	147.21
2102353-6	Socket	Black Zinc	B	46W3252	186.93	180.70	165.75

(209536)

MIL-E-QUAL® CIRCULAR CONNECTORS

IP67 UL CSA RoHS Compliant Available

conxall Harsh Environment Connectivity Solutions A HEICO Company

MADE IN USA

Mil-E-Qual® connectors are the pastic equivalent to the military standard MIL-C-5015 connector series. The rugged super tough, UV resistant, plastic construction makes this connector suited for many different environments. With an IP67 rated construction, when mated, even harsh environments are not a problems for the Mil-E-Qual® connector series. The plastic construction makes this series of connectors a cost effective equivalent to metal versions of this connector. UL recognized, CSA certified.

STRAIGHT CABLE PLUG

Mfg. Part No.	Contacts	Shell Size	Contact Gender	Stock No.	Price Each 1-24
● CXS3106A10SL3S	3	10SL	Socket	73P5084	24.86
● CXS3106A14S6P	6	14S	Pin	73P5085	20.76
● CXS3106A14S6S	6	14S	Socket	73P5086	25.71
● CXS3106A2027P	14	20	Pin	10J0269	29.11
BOX RECEPTACLE					
● CXS3102A10SL3P	3	10SL	Pin	73P5080	7.61
● CXS3102A14S6P	6	14S	Pin	73P5081	9.22
● CXS3102A2027S	14	20	Socket	73C0423	34.86

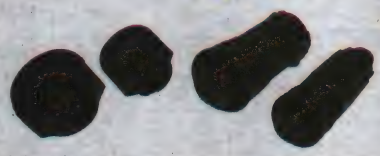
(143208)

MULTI-CON-X® AND MINI-CON-X® HARSH ENVIRONMENT CONNECTORS

RoHS Compliant Available

conxall Harsh Environment Connectivity Solutions A HEICO Company

IP67 UL



MADE IN USA

Watertight connectors designed for industrial, marine, construction and other harsh environment applications. Non-corrosive, high-impact, molded construction minimizes hazards of electrical shock and provides resistance in hostile outdoor environment. Also suited for a wide variety of non-environmental applications such as communication systems, medical, data processing and entertainment devices. Available in cable-end, panel mount, or cable-to-cable connections. Solder cup contacts have gold-over-nickel plating. Mfg. part nos. with **suffix -DC** indicates daisy chain grommet with three I.D.'s: 0.125″, 0.188″ and 0.25″. UL recognized. **NOTE:** When mating two cables, the cable-to-cable connectors need to be used in conjunction with the cable end connectors. For example: **mfg. part no. 5182-2PG-3DC** mates with **mfg. part no. 3182-2SG-3DC.**

MULTI-CON-X® CABLE END CONNECTORS

Mfg. Part No.	Contacts	Description	Stock No.	Price Each 1-24
● 3182-2SG-3DC	2	Socket	89F4153	10.37
● 3182-2PG-3DC	2	Pin	30C2849	9.37
● 3182-3SG-3DC	3	Socket	89F4155	12.26
● 3182-3PG-3DC	3	Pin	89F4156	9.73

➤CONTINUED➤

MULTI-CON-X® AND MINI-CON-X® HARSH ENVIRONMENT CONNECTORS (CONT.)

Mfg. Part No.	Contacts	Description	Stock No.	Price Each 1-24
3282-4SG-3DC	4	Socket	89F4157	11.90
3282-4PG-3DC	4	Pin	89F4158	9.27
3282-5SG-3DC	5	Socket	89F4159	13.08
3282-5PG-3DC	5	Pin	89F4160	9.88
3282-6SG-3DC	6	Socket	89F4161	14.47
3282-6PG-3DC	6	Pin	89F4162	11.11
3282-7SG-3DC	7	Socket	89F4163	15.81
3282-7PG-3DC	7	Pin	89F4164	11.65
3282-8SG-3DC	8	Socket	89F4165	17.08
3282-8PG-3DC	8	Pin	89F4166	12.49
3282-9SG-3DC	9	Socket	89F4167	18.12
3282-9PG-3DC	9	Pin	89F4168	13.25
MULTI-CON-X® PANEL MOUNT SOLDER CUP CONNECTORS				
4182-2SG-300	2	Socket	89F4185	7.51
4182-2PG-300	2	Pin	89F4186	6.08
4182-3SG-300	3	Socket	89F4187	9.53
4182-3PG-300	3	Pin	89F4188	7.99
4282-4SG-300	4	Socket	89F4189	8.54
4282-4PG-300	4	Pin	89F4190	7.04
4282-5SG-300	5	Socket	89F4191	10.01
4282-5PG-300	5	Pin	89F4192	8.01
4282-6SG-300	6	Socket	89F4193	10.97
4282-6PG-300	6	Pin	89F4194	8.72
4282-7SG-300	7	Socket	89F4195	11.73
4282-7PG-300	7	Pin	89F4196	9.02
4282-8SG-300	8	Socket	89F4197	13.66
4282-8PG-300	8	Pin	89F4198	10.43
4282-9SG-300	9	Socket	89F4199	14.92
4282-9PG-300	9	Pin	89F4200	11.03
MULTI-CON-X® CABLE-TO-CABLE CONNECTORS				
5182-2SG-312	2	Socket	93F7237	9.58
5182-2PG-3DC	2	Pin	93F7238	10.98
5182-3SG-3DC	3	Socket	93F7239	14.52
5182-3PG-3DC	3	Pin	93F7240	14.22
5282-4SG-3DC	4	Socket	93F7242	13.00
5282-4PG-3DC	4	Pin	93F7243	11.70
5282-6SG-3DC	6	Socket	93F7246	15.71
5282-6PG-3DC	6	Pin	93F7247	12.92
5282-7SG-3DC	7	Socket	93F7248	20.28
5282-7PG-3DC	7	Pin	93F7249	13.48
MINI-CON-X® CABLE END CONNECTORS				
6282-2SG-3DC	2	Socket	89F4107	7.47
6282-2PG-3DC	2	Pin	89F4108	6.05
6282-3SG-3DC	3	Socket	89F4109	8.94
6282-3PG-3DC	3	Pin	89F4110	7.02
6282-4SG-3DC	4	Socket	89F4111	10.16
6282-4PG-3DC	4	Pin	89F4112	8.04
6282-5SG-3DC	5	Socket	89F4113	11.34
6282-5PG-3DC	5	Pin	89F4114	9.03
6282-6SG-3DC	6	Socket	89F4115	12.95
6282-6PG-3DC	6	Pin	89F4116	9.87
MINI-CON-X® PANEL MOUNT CONNECTORS				
7282-2SG-300	2	Socket	89F4127	5.30
7282-2PG-300	2	Pin	89F4128	4.41
7282-3SG-300	3	Socket	89F4129	6.67
7282-3PG-300	3	Pin	89F4130	5.32
7282-4SG-300	4	Socket	89F4131	7.93
7282-4PG-300	4	Pin	89F4132	6.27
7282-5SG-300	5	Socket	89F4133	9.03
7282-5PG-300	5	Pin	89F4134	7.26
7282-6SG-300	6	Socket	89F4135	10.49
7282-6PG-300	6	Pin	89F4136	7.97
MINI-CON-X® CABLE-TO-CABLE CONNECTORS				
8282-2SG-3DC	2	Socket	93F7222	7.48
8282-2PG-3DC	2	Pin	93F7223	6.65
8282-3SG-3DC	3	Socket	93F7224	8.55
8282-3PG-3DC	3	Pin	93F7225	7.21
8282-4SG-3DC	4	Socket	93F7226	10.29
8282-4PG-3DC	4	Pin	93F7227	8.14
8282-5SG-3DC	5	Socket	93F7228	11.75
8282-5PG-3DC	5	Pin	93F7229	8.96

➤CONTINUED➤

MULTI-CON-X® AND MINI-CON-X® HARSH ENVIRONMENT CONNECTORS (CONT.)

MINI-CON-X® CABLE-TO-CABLE CONNECTORS

Mfg. Part No.	Contacts	Description	Stock No.	Price Each 1-24
8282-6SG-3DC	6	Socket	93F7230	12.44
8282-6PG-3DC	6	Pin	93F7231	9.84

(8680)

HARSH ENVIRONMENT CONNECTOR CAPS

RoHS Compliant Available

conxall® Harsh Environment Connectivity Solutions A HEICO Company

MADE IN USA

One-piece, nonrotational, molded thermoplastic rubber black cap for fastening behind the nut of panel mount connectors. Prevents tampering, contact damage; and provides protection against harsh environments.

Mfg. Part No.	Description	Stock No.	Price Each 1-99
4295	For Multi-Con-X® Connectors	94F7043	1.95
6295	For Mini-Con-X® Connectors	94F7020	1.86
14295	For Maxi-Con-X® Connectors	93F7241	3.25
16295	For Micro-Con-X® Connectors	96F9190	2.18

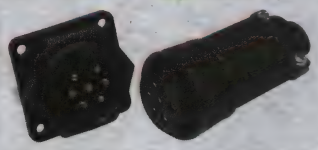
(8681)

MAXI-CON-X® HIGH DENSITY CONNECTORS

IP67 RoHS Compliant Available

conxall® Harsh Environment Connectivity Solutions A HEICO Company

MADE IN USA



Weathertight, high-density nylon-filled connectors have screw-machined solder contacts with gold-over-nickel plating. Flanged panel mount connectors are installed through back of panel and can be fastened by hex nuts, rivets or screws through four molded holes in flange. Mechanical type cable clamp securely grips cable. Rubber gland adds support and offers environmental protection in harsh environments. Cable end connectors include rubber grommet seal to fit up to 0.380" (9.6mm) cable diameter and o-ring; panel mount connectors supplied with hex nut and gasket. **NOTE:** When mating two cables, the cable-to-cable connectors need to be used in conjunction with the cable end connectors. For example: **mfg. part no. 15182-7PG-326** mates with **mfg. part no. 13182-7SG-321**.

MAXI-CON-X® CABLE END CONNECTORS

Mfg. Part No.	Contacts	Contact Gender	Cable O.D. Range (in.)	Stock No.	Price Each 1-24
13182-7SG-321	7	Socket	0.21 - 0.25	89F4207	22.32
13182-7PG-321	7	Pin	0.21 - 0.25	89F4208	15.22
13182-7SG-331	7	Socket	0.31 - 0.38	90B1823	19.59
13182-7PG-331	7	Pin	0.31 - 0.38	90B1821	16.24
13382-10SG-321	10	Socket	0.21 - 0.25	89F4209	24.90
13382-10PG-321	10	Pin	0.21 - 0.25	89F4210	19.35
13382-10SG-331	10	Socket	0.31 - 0.38	93B1797	21.48
13382-10PG-331	10	Pin	0.31 - 0.38	01C7290	16.66
13282-18SG-321	18	Socket	0.21 - 0.25	89F4211	27.40
13282-18PG-321	18	Pin	0.21 - 0.25	89F4212	23.39
13282-18PG-326	18	Pin	0.26 - 0.30	07J1841	18.51
13282-18SG-331	18	Socket	0.31 - 0.38	94C2776	27.34
13282-18PG-331	18	Pin	0.31 - 0.38	67C2881	19.86
MAXI-CON-X® PANEL MOUNT CONNECTORS					
14182-7SG-300	7	Socket	...	89F4220	15.41
14182-7PG-300	7	Pin	...	89F4219	13.54
14382-10SG-300	10	Socket	...	89F4222	15.46
14382-10PG-300	10	Pin	...	89F4221	11.88
14282-18SG-300	18	Socket	...	89F4224	21.13
14282-18PG-300	18	Pin	...	89F4223	14.97
MAXI-CON-X® CABLE-TO-CABLE CONNECTORS					
15182-7PG-326	7	Pin	0.26 - 0.30	93F7232	15.57
15182-7PG-331	7	Pin	0.31 - 0.38	72C9581	16.67
15382-10PG-326	10	Pin	0.26 - 0.30	93F7233	14.16
15382-10PG-331	10	Pin	0.31 - 0.38	08C4804	18.74
15282-18SG-331	18	Socket	0.31 - 0.38	67C2883	30.37
15282-18PG-331	18	Pin	0.31 - 0.38	10J1606	20.99

(8683)

CIRCULAR CONNECTORS

MICRO-CON-X® SUBMINIATURE CONNECTORS

RoHS Compliant Available

conxall® Harsh Environment Connectivity Solutions A HEICO Company

MADE IN USA

IP67

- Up to 7 contacts in a compact, lightweight thermoplastic design
- IP-67 ratng
- Meets NEMA 6P when mated
- Voltage rating: 600V
- Current rating:
  7.5A — 2 or 3 #20 contacts
  6A — 4 #22 contacts
  4A — 5 or 6 #26 contacts
  3.4A — 7 #26 contacts
- Operating temperature range: -40°C to +115°C

Environmentally sealed molded thermoplastic Micro-Con-X® connectors small enough to fit a 0.53" (13.5mm) opening. Construction reduces shock hazards and resists hazardous environmental conditions. Cable end version includes weathertight rubber grommet; panel mount version includes hex nut and rubber gasket. Panel connectors mount 0.43" (10.9mm) round or "D" shaped hole from behind and securely fasten with hex nut on front of panel. Choice of pin or socket copper alloy, gold-over-nickel plated solder or crimp contacts. **NOTE**: When mating two cables, the cable-to-cable connectors need to be used in conjunction with the cable end connectors. For example: **mfg. part no. 18282-2PG-311** mates with **mfg. part no. 16282-2SG-311**.

3

MICRO-CON-X® CABLE END CONNECTORS

Mfg. Part No.	Contacts No. / Size	Contact Gender	Contact Termination	Cable O.D. Range (in.)	Stock No.	Price Each 1-24
● 16282-2PG-311	2 / #20	Pin	Solder	0.09 - 0.14	93F7303	6.62
● 16282-2PG-315	2 / #20	Pin	Solder	0.15 - 0.17	22C7000	6.77
● 16282-2SG-311	2 / #20	Socket	Solder	0.09 - 0.14	93F7302	7.48
● 16282-3PG-311	3 / #20	Pin	Solder	0.09 - 0.14	93F7305	7.70
● 16282-3SG-311	3 / #20	Socket	Solder	0.09 - 0.14	93F7304	9.13
● 16882-4PG-522	4 / #22	Pin	Solder	0.22 - 0.23	48T7402	10.27
● 16882-4SG-522	4 / #22	Socket	Solder	0.22 - 0.23	48T7403	12.62
● 16880-4PG-522	4 / #22	Pin	Crimp	0.22 - 0.23	32T4276	7.50
● 16880-4SG-522	4 / #22	Socket	Crimp	0.22 - 0.23	32T4280	9.37
● 16982-5PG-522	5 / #26	Pin	Solder	0.22 - 0.23	48T7404	11.56
● 16982-5SG-522	5 / #26	Socket	Solder	0.22 - 0.23	48T7405	14.60
● 16980-5PG-522	5 / #26	Pin	Crimp	0.22 - 0.23	32T4284	8.22
● 16980-5SG-522	5 / #26	Socket	Crimp	0.22 - 0.23	32T4288	10.45
● 16982-6PG-522	6 / #26	Pin	Solder	0.22 - 0.23	48T7406	12.89
● 16982-6SG-522	6 / #26	Socket	Solder	0.22 - 0.23	48T7407	16.53
● 16980-6PG-522	6 / #26	Pin	Crimp	0.22 - 0.23	32T4292	8.97
● 16980-6SG-522	6 / #26	Socket	Crimp	0.22 - 0.23	32T4296	11.56
● 16982-7PG-522	7 / #26	Pin	Solder	0.22 - 0.23	48T7408	14.21
● 16982-7SG-522	7 / #26	Socket	Solder	0.22 - 0.23	48T7409	18.49
● 16980-7PG-522	7 / #26	Pin	Crimp	0.22 - 0.23	32T4300	9.70
● 16980-7SG-522	7 / #26	Socket	Crimp	0.22 - 0.23	32T4304	12.62

MICRO-CON-X® PANEL MOUNT CONNECTORS

● 17282-2PG-300	2 / #20	Pin	Solder	...	93F7298	5.16
● 17282-2SG-300	2 / #20	Socket	Solder	...	93F7299	6.04
● 17282-3PG-300	3 / #20	Pin	Solder	...	93F7300	5.73
● 17282-3SG-300	3 / #20	Socket	Solder	...	93F7301	7.67
● 17882-4PG-300	4 / #22	Pin	Solder	...	48T7410	8.85
● 17882-4SG-300	4 / #22	Socket	Solder	...	48T7411	10:84
● 17880-4PG-300	4 / #22	Pin	Crimp	...	32T4327	5.51
● 17880-4SG-300	4 / #22	Socket	Crimp	...	32T4328	7.59
● 17982-5PG-300	5 / #26	Pin	Solder	...	48T7412	10.81
● 17982-5SG-300	5 / #26	Socket	Solder	...	48T7413	12.80
● 17980-5PG-300	5 / #26	Pin	Crimp	...	32T4335	6.29
● 17980-5SG-300	5 / #26	Socket	Crimp	...	32T4336	8.70
● 17982-6PG-300	6 / #26	Pin	Solder	...	48T7414	12.77
● 17982-6SG-300	6 / #26	Socket	Solder	...	48T7415	14.72
● 17980-6PG-300	6 / #26	Pin	Crimp	...	32T4337	7.08
● 17980-6SG-300	6 / #26	Socket	Crimp	...	32T4338	9.79
● 17982-7PG-300	7 / #26	Pin	Solder	...	48T7416	14.69
● 17982-7SG-300	7 / #26	Socket	Solder	...	48T7417	16.68
● 17980-7PG-300	7 / #26	Pin	Crimp	...	32T4339	7.83
● 17980-7SG-300	7 / #26	Socket	Crimp	...	32T4340	10.90

MICRO-CON-X® CABLE-TO-CABLE CONNECTORS

● 18282-2PG-311	2 / #20	Pin	Solder	0.09 - 0.14	93F7219	4.49
● 18282-2SG-311	2 / #20	Socket	Solder	0.09 - 0.14	93F7254	9.57
● 18282-3PG-311	3 / #20	Pin	Solder	0.09 - 0.14	93F7221	7.52
● 18282-3SG-311	3 / #20	Socket	Solder	0.09 - 0.14	93F7220	12.30
● 18882-4PG-522	4 / #22	Pin	Solder	0.22 - 0.23	48T7418	9.64
● 18982-4SG-522	4 / #22	Socket	Solder	0.22 - 0.23	48T7419	10.78
● 18880-4PG-522	4 / #22	Pin	Crimp	0.22 - 0.23	32T4358	7.05
● 18880-4SG-522	4 / #22	Socket	Crimp	0.22 - 0.23	32T4362	9.12
● 18982-5PG-522	5 / #26	Pin	Solder	0.22 - 0.23	48T7420	10.87
● 18982-5SG-522	5 / #26	Socket	Solder	0.22 - 0.23	48T7421	13.70
● 18980-5PG-522	5 / #26	Pin	Crimp	0.22 - 0.23	32T4366	7.74
● 18980-5SG-522	5 / #26	Socket	Crimp	0.22 - 0.23	32T4370	9.82
● 18982-6PG-522	6 / #26	Pin	Solder	0.22 - 0.23	48T7422	12.13
● 18982-6SG-522	6 / #26	Socket	Solder	0.22 - 0.23	48T7423	15.54

➤CONTINUED➤

MICRO-CON-X® SUBMINIATURE CONNECTORS (CONT.)

MICRO-CON-X® CABLE-TO-CABLE CONNECTORS

Mfg. Part No.	Contacts No. / Size	Contact Gender	Contact Termination	Cable O.D. Range (in.)	Stock No.	Price Each 1-24
● 18980-6PG-522	6 / #26	Pin	Crimp	0.22 - 0.23	32T4374	8.43
● 18980-6SG-522	6 / #26	Socket	Crimp	0.22 - 0.23	32T4378	10.87
● 18982-7PG-522	7 / #26	Pin	Solder	0.22 - 0.23	48T7424	13.37
● 18982-7SG-522	7 / #26	Socket	Solder	0.22 - 0.23	48T7425	17.37
● 18980-7PG-522	7 / #26	Pin	Crimp	0.22 - 0.23	32T4382	9.12
● 18980-7SG-522	7 / #26	Socket	Crimp	0.22 - 0.23	32T4386	11.89

(8684)

INDUSTRY STANDARD MINI-MIZER® CONNECTORS

RoHS Compliant Available

conxall® Harsh Environment Connectivity Solutions A HEICO Company

MADE IN USA

600V weathertight connectors for sensor, automotive, robotic, instrumentation and controls applications; comply with UL, CSA, NEMA, ANSI and NFPA standards. Provide moisture-tight connection under 6' water, making them perfect for harsh environments. Black anodized machine aluminum receptacle has epoxy-sealed contacts and mating plug includes metallic coupling ring. Gold-plated screw-machined brass contacts resist corrosion and perform in low current applications. Plugs with socket type contacts available in 3, 6 and 12' lengths; receptacles with pin type contacts are designated by (*) and include 1' leads. 16 AWG standard cable/wire size. UL recognized, CSA certified.

Mfg. Part No.	Contacts	Cable Length (ft)	Description	Stock No.	Price Each 1-24
● 162S72	2	6	Plug	50F2149	34.95
● 162S144	2	12	Plug	50F2150	42.11
● 172P12	2	1*	Receptacle	50F2151	17.80
● 163S72	3	6	Plug	50F2153	40.92
● 163S144	3	12	Plug	50F2154	51.00
● 173P12	3	1*	Receptacle	50F2155	19.54
● 164S72	4	6	Plug	50F2157	45.66
● 164S144	4	12	Plug	50F2158	56.01
● 174P12	4	1*	Receptacle	50F2159	22.86
● 165S72	5	6	Plug	50F2161	53.62
● 165S144	5	12	Plug	50F2162	68.93
● 175P12	5	1*	Receptacle	50F2163	22.73

(8682)

EN2® WEATHERTIGHT CONNECTORS

RoHS Compliant Available

Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company

Fig. 1

Fig. 2

Fig. 3

Fig. 4

- Sealed to IP68 NEMA 250 (6P)
- Available in standard winged or coupling ring
- Copper alloy plated contacts
- Patented grommet and o-ring free design
- Solder, crimp and PC contact options
- Thermoplastic shell

CORD PLUGS, PIN CONTACTS —FIG.1

Mfg. Part No.	No. of Contacts	Contact Size	Stock No.	Price Each 1-9	10-24	25-99
● EN2C2M20DC	2	20	63W2353	4.50	4.20	3.88
● EN2C3M20DC	3	20	63W2369	5.53	5.16	4.76
● EN2C4M22DC	4	22	63W2385	5.80	5.41	4.99
● EN2C5M26DC	5	26	63W2401	6.53	6.10	5.62
● EN2C6M26DC	6	26	63W2417	7.13	6.65	6.14
● EN2C7M26DC	7	26	63W2433	7.72	7.21	6.65

CORD PLUGS, SOCKET CONTACTS —FIG.2

● EN2C2F20DC	2	20	63W2345	5.61	5.24	4.84
● EN2C3F20DC	3	20	63W2361	7.39	6.90	6.37
● EN2C4F22DC	4	22	63W2377	7.99	7.46	6.88
● EN2C5F26DC	5	26	63W2393	9.15	8.54	7.88
● EN2C6F26DC	6	26	63W2409	10.35	9.66	8.91
● EN2C7F26DC	7	26	63W2425	11.61	10.84	10.00

PANEL MOUNT RECEPTACLES, PIN CONTACTS — FIG. 3

● EN2P2M20	2	20	63W2443	3.26	3.04	2.81
● EN2P3M20	3	20	63W2449	3.95	3.69	3.41
● EN2P4M22	4	22	63W2455	4.59	4.28	3.95
● EN2P5M26	5	26	63W2461	5.25	4.90	4.52
● EN2P6M26	6	26	63W2467	5.91	5.52	5.09
● EN2P7M26	7	26	63W2473	6.51	6.08	5.61

➤CONTINUED➤

EN2® WEATHERTIGHT CONNECTORS (CONT.)

PANEL MOUNT RECEPTACLES, SOCKET CONTACTS — FIG. 4

Mfg. Part No.	No. of Contacts	Contact Size	Stock No.	Price Each 1-9	10-24	25-99
EN2P2F20	2	20	63W2441	4.30	4.02	3.71
EN2P3F20	3	20	63W2447	5.43	5.07	4.68
EN2P4F22	4	22	63W2453	6.48	6.05	5.58
EN2P5F26	5	26	63W2459	7.67	7.17	6.61
EN2P6F26	6	26	63W2465	8.82	8.23	7.60
EN2P7F26	7	26	63W2471	9.95	9.29	8.57
PANEL MOUNT RECEPTACLES, PC-TAIL, PIN CONTACTS — FIG. 3						
EN2P2M20P	2	20	63W2445	3.66	3.41	3.15
EN2P3M20P	3	20	63W2451	4.44	4.14	3.82
EN2P4M22P	4	22	63W2457	5.15	4.81	4.44
EN2P5M26P	5	26	63W2463	5.90	5.51	5.08
EN2P6M26P	6	26	63W2469	6.64	6.20	5.72
EN2P7M26P	7	26	63W2475	7.32	6.84	6.31
PANEL MOUNT RECEPTACLES, PC-TAIL, SOCKET CONTACTS — FIG. 4						
EN2P2F20P	2	20	63W2442	4.83	4.51	4.17
EN2P3F20P	3	20	63W2448	6.11	5.71	5.27
EN2P4F22P	4	22	63W2454	7.27	6.79	6.27
EN2P5F26P	5	26	63W2460	8.62	8.05	7.43
EN2P6F26P	6	26	63W2466	9.90	9.24	8.53
EN2P7F26P	7	26	63W2472	11.18	10.44	9.63

(210042)

EN3® MINI WEATHERTIGHT™ CONNECTORS

RoHS Compliant Available

Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company

MADE IN USA

IP66 IP68

Fig. 1

Fig. 2

Fig. 3

Fig. 4

- Easy to assemble
- Cable clamp secures cable up to 0.38″ in diameter
- Boot seals cable diameters between 0.23 and 0.38″
- Brass nut secures cable clamp

Fig. 5

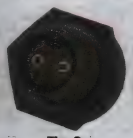


Fig. 6

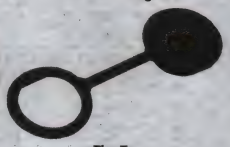


Fig. 7

Ideal for process control, marine electronics, medical instrumentation, geothermal instrumentation, communications, transportation, general industrial electronics. Superior leakage protection. The contact area is double-sealed for excellent moisture and chemical resistance. Thermoplastic rubber body simulates closed entry contact system to prevent probe damage or accidental loss of spring retention due to misaligned or bent pins. Housing rated at UL94V-0 against flammability. Panel connector shell features a positioning keyway to prevent misalignments and a polarizing single "D" design for proper panel mounting and to prevent rotations. Made of thermoplastic polymer glass fiber. Rear boot and connector shell interior are thermoplastic rubber. Contacts are copper-base alloy, gold-plated over nickel underplate. O *rder* **type EN3CAP** *sealing cap separately below.*

CABLE END PLUGS, PIN CONTACTS — FIG. 1

Mfg. Part No.	No. of Contacts	Contact Size	Contact Style	Stock No.	Price Each 1-9	10-24
EN3C2M16CKX	2	16	Crimp	62W4014	6.84	6.24
EN3C2M16X	2	16	Solder	80R9818	5.35	5.35
EN3C2M16KX	2	16	Solder	62W4015	8.28	7.56
EN3C2MCKX	2	20	Crimp	62W4012	6.63	6.05
EN3C2MKX	2	20	Solder	62W4013	8.15	7.44
EN3C3M16CKX	3	16	Crimp	62W4023	8.15	7.44
EN3C3M16KX	3	16	Solder	62W4024	10.56	9.64
EN3C3MCX	3	20	Crimp	62W4021	8.28	7.56
EN3C3MCKX	3	20	Crimp	62W4020	8.63	7.88
EN3C3MX	3	20	Solder	80R9819	5.89	5.89
EN3C3MKX	3	20	Solder	62W4022	9.53	8.70
EN3C4MKX	4	20	Solder	62W4025	10.91	9.96
EN3C5MCX	5	20	Crimp	62W4029	9.07	8.28
EN3C5MCKX	5	20	Crimp	62W4028	11.32	10.34
EN3C5MKX	5	20	Solder	62W4030	13.15	12.01
EN3C6MCKX	6	20	Crimp	62W4033	12.70	11.60
EN3C6MKX	6	20	Solder	62W4034	13.67	12.48
EN3C11M26SX	11	26	Solder*	62W3993	17.63	16.09
EN3C13M26X	13	26	Solder	62W3996	22.71	20.73
EN3C15M26X	15	26	Solder	62W4000	19.99	18.25
EN3C16M26X	16	26	Solder	62W4002	26.78	24.45
EN3C17M26SX	17	26	Solder*	62W4005	28.09	25.65
EN3C17M26X	17	26	Solder	62W4006	28.09	25.65

➤CONTINUED➤

EN3® MINI WEATHERTIGHT™ CONNECTORS (CONT.)

CABLE END PLUGS, SOCKET CONTACTS — FIG. 2

Mfg. Part No.	No. of Contacts	Contact Size	Contact Style	Stock No.	Price Each 1-9	10-24
EN3C2F16CX	2	16	Crimp	62W4010	9.60	8.76
EN3C2F16CKX	2	16	Crimp	62W4009	9.87	9.01
EN3C2F16KX	2	16	Solder	62W4011	10.91	9.96
EN3C2FCKX	2	20	Crimp	62W4007	9.11	8.32
EN3C2FKX	2	20	Solder	62W4008	10.29	9.39
EN3C2FX	2	20	Solder	80R9817	6.21	6.21
EN3C3F16CX	3	16	Crimp	62W4018	12.70	11.60
EN3C3F16CKX	3	16	Crimp	62W4017	10.91	9.96
EN3C3F16KX	3	16	Solder	62W4019	13.46	12.29
EN3C3FKX	3	20	Solder	62W4016	12.98	11.85
EN3C3FX	3	20	Solder	51R1426	16.18	12.14
EN3C4FX	4	20	Solder	80R9822	19.03	14.27
EN3C5FCKX	5	20	Crimp	62W4026	14.70	13.42
EN3C5FKX	5	20	Solder	62W4027	18.15	16.57
EN3C6FCKX	6	20	Crimp	62W4031	16.91	15.44
EN3C6FKX	6	20	Solder	62W4032	20.64	18.84
EN3C6FX	6	20	Solder	80R9827	23.62	17.72
EN3C7FKX	7	20	Solder	62W4035	20.91	19.09
EN3C8FCKX	8	20	Crimp	62W4036	22.71	20.73
EN3C9F26SX	9	26	Solder*	62W4037	26.64	24.32
EN3C9F26X	9	26	Solder	62W4038	21.03	19.20
EN3C11F26SX	11	26	Solder*	62W3991	26.55	24.25
EN3C11F26X	11	26	Solder	62W3992	31.33	28.61
EN3C12F26X	12	26	Solder	62W3994	33.75	30.81
EN3C13F26X	13	26	Solder	62W3995	36.16	33.02
EN3C14F26SX	14	26	Solder*	62W3997	38.71	35.35
EN3C14F26X	14	26	Solder	62W3998	32.04	29.26
EN3C15F26X	15	26	Solder	62W3999	34.07	31.11
EN3C16F26X	16	26	Solder	62W4001	43.41	39.63
EN3C17F26SX	17	26	Solder*	62W4003	45.82	41.84
EN3C17F26X	17	26	Solder	62W4004	45.82	41.84
IN-LINE RECEPTACLES, PIN CONTACTS — FIG. 3						
EN3L2M16CX	2	16	Crimp	62W4045	7.04	6.43
EN3L2M16CKX	2	16	Crimp	62W4044	6.70	6.12
EN3L2M16KX	2	16	Solder	62W4046	8.22	7.50
EN3L3M16CX	3	16	Crimp	62W4056	8.56	7.82
EN3L3M16CKX	3	16	Crimp	62W4055	7.87	7.19
EN3L3M16KX	3	16	Solder	62W4057	9.60	8.76
EN3L3MCX	3	20	Crimp	62W4053	6.47	5.91
EN3L3MCKX	3	20	Crimp	62W4052	8.49	7.75
EN3L3MKX	3	20	Solder	62W4054	9.18	8.38
EN3L4MKX	4	20	Solder	62W4060	10.49	9.58
EN3L5MCX	5	20	Crimp	62W4064	10.29	9.39
EN3L5MKX	5	20	Solder	62W4065	12.01	10.97
EN3L6MCX	6	20	Crimp	62W4070	11.80	10.78
EN3L6MCKX	6	20	Crimp	62W4069	10.91	9.96
EN3L6MKX	6	20	Solder	62W4071	13.25	12.10
EN3L7MCX	7	20	Crimp	62W4073	11.80	10.78
EN3L7MCKX	7	20	Crimp	62W4072	12.08	11.03
EN3L7MKX	7	20	Solder	62W4074	13.46	12.29
EN3L8MCX	8	20	Crimp	62W4076	14.56	13.30
EN3L8MCKX	8	20	Crimp	62W4075	13.46	12.29
EN3L8MKX	8	20	Solder	62W4077	16.22	14.81
IN-LINE RECEPTACLES, SOCKET CONTACTS — FIG. 4						
EN3L2F16CX	2	16	Crimp	62W4042	9.25	8.45
EN3L2F16CKX	2	16	Crimp	62W4041	8.63	7.88
EN3L2F16KX	2	16	Solder	62W4043	10.49	9.58
EN3L2FCKX	2	20	Crimp	62W4040	8.28	7.56
EN3L3F16CKX	3	16	Crimp	62W4050	10.77	9.83
EN3L3F16KX	3	16	Solder	62W4051	13.11	11.97
EN3L3FCX	3	20	Crimp	62W4048	11.32	10.34
EN3L3FCKX	3	20	Crimp	62W4047	10.42	9.52
EN3L3FKX	3	20	Solder	62W4049	12.77	11.66
EN3L4FCKX	4	20	Crimp	62W4058	13.46	12.29
EN3L4FKX	4	20	Solder	62W4059	15.05	13.74
EN3L5FCX	5	20	Crimp	62W4062	15.39	14.05
EN3L5FCKX	5	20	Crimp	62W4061	15.87	14.49
EN3L5FKX	5	20	Solder	62W4063	17.46	15.94
EN3L6FCX	6	20	Crimp	62W4067	17.46	15.94
EN3L6FCKX	6	20	Crimp	62W4066	16.43	15.00
EN3L6FKX	6	20	Solder	62W4068	19.95	18.21

➤CONTINUED➤

CIRCULAR CONNECTORS

EN3® MINI WEATHERTIGHT™ CONNECTORS (CONT.)

PANEL MOUNT RECEPTACLES, PIN CONTACTS — FIG. 5

Mfg. Part No.	No. of Contacts	Contact Size	Contact Style	Stock No.	Price Each 1-9	Price Each 10-24
● EN3P2M16CX	2	16	Crimp	62W4109	6.49	5.93
● EN3P2M16CKX	2	16	Crimp	62W4108	6.63	6.05
● EN3P2M16KX	2	16	Solder	62W4110	7.32	6.68
● EN3P2MCKX	2	20	Crimp	62W4106	6.42	5.86
● EN3P2MKX	2	20	Solder	62W4107	6.90	6.30
● EN3P3M16CKX	3	16	Crimp	62W4119	7.87	7.19
● EN3P3M16KX	3	16	Solder	62W4120	8.91	8.13
● EN3P3MCX	3	20	Crimp	62W4117	6.70	6.12
● EN3P3MCKX	3	20	Crimp	62W4116	6.84	6.24
● EN3P3MKX	3	20	Solder	62W4118	7.46	6.81
● EN3P4MCKX	4	20	Crimp	62W4123	9.04	8.26
● EN3P4MX	4	20	Solder	46T0623	6.26	6.26
● EN3P5MKX	5	20	Solder	62W4129	10.22	9.33
● EN3P6MCKX	6	20	Crimp	62W4133	11.53	10.53
● EN3P6MKX	6	20	Solder	62W4134	12.84	11.72
● EN3P7MCX	7	20	Crimp	62W4136	10.31	9.41
● EN3P7MCKX	7	20	Crimp	62W4135	12.91	11.79
● EN3P7MKX	7	20	Solder	62W4137	14.15	12.92
● EN3P8MCKX	8	20	Crimp	62W4138	12.63	11.53
● EN3P8MKX	8	20	Solder	62W4139	28.64	26.15
● EN3P9M26SX	9	26	Solder*	62W4141	16.01	14.62
● EN3P11M26SX	11	26	Solder*	62W4080	18.70	17.08
● EN3P11M26X	11	26	Solder	62W4081	16.91	15.44
● EN3P12MX	12	20	Solder	62W4083	17.25	15.75
● EN3P12M26X	12	26	Solder	62W4084	19.88	18.15
● EN3P13M26SX	13	26	Solder*	62W4086	21.12	19.28
● EN3P13M26X	13	26	Solder	62W4087	19.12	17.46
● EN3P14MX	14	20	Solder	62W4089	17.25	15.75
● EN3P14M26SX	14	26	Solder*	62W4090	22.57	20.61
● EN3P14M26X	14	26	Solder	62W4091	20.43	18.65
● EN3P15M26SX	15	26	Solder*	62W4093	21.53	19.66
● EN3P15M26X	15	26	Solder	62W4094	16.98	15.50
● EN3P16M26X	16	26	Solder	62W4095	25.19	23.00
● EN3P17M26SX	17	26	Solder*	62W4098	24.02	21.93
● EN3P17M26X	17	26	Solder	62W4099	24.02	21.93
● EN3P18M26SX	18	26	Solder*	62W4100	27.88	25.46

PANEL MOUNT RECEPTACLES, SOCKET CONTACTS — FIG. 6

● EN3P2F16CKX	2	16	Crimp	62W4103	7.80	7.12
● EN3P2F16KX	2	16	Solder	62W4104	9.53	8.70
● EN3P2F16PX	2	16	Solder	62W4105	7.57	6.91
● EN3P2FCKX	2	20	Crimp	62W4101	7.46	6.81
● EN3P2FKX	2	20	Solder	62W4102	8.22	7.50
● EN3P3F16CKX	3	16	Crimp	62W4113	10.91	9.96
● EN3P3F16KX	3	16	Solder	62W4114	10.14	9.26
● EN3P3F16PX	3	16	Solder	62W4115	11.67	10.65
● EN3P3FCKX	3	20	Crimp	62W4111	9.32	8.51
● EN3P3FX	3	20	Solder	73R3759	6.92	6.92
● EN3P3FKX	3	20	Solder	62W4112	10.49	9.58
● EN3P4FCKX	4	20	Crimp	62W4121	11.60	10.59
● EN3P4FX	4	20	Solder	63R1465	8.65	8.65
● EN3P4FKX	4	20	Solder	62W4122	12.63	11.53
● EN3P5FCX	5	20	Crimp	62W4125	13.18	12.04
● EN3P5FCKX	5	20	Crimp	62W4124	13.46	12.29
● EN3P5FX	5	20	Solder	68R4162	10.44	10.44
● EN3P5FKX	5	20	Solder	62W4126	14.70	13.42
● EN3P5FPX	5	20	Solder	62W4127	15.44	14.09
● EN3P6FX	6	20	Crimp	33R2665	8.77	8.77
● EN3P6FCX	6	20	Crimp	62W4131	14.91	13.61
● EN3P6FCKX	6	20	Crimp	62W4130	15.39	14.05
● EN3P6FKX	6	20	Solder	62W4132	17.05	15.57
● EN3P9FX	9	20	Solder	62W4140	17.32	15.82
● EN3P11F26SX	11	26	Solder*	62W4078	29.74	27.16
● EN3P11F26X	11	26	Solder	62W4079	26.91	24.57
● EN3P12F26X	12	26	Solder	62W4082	32.02	29.24
● EN3P13F26X	13	26	Solder	62W4085	31.33	28.61
● EN3P14F26X	14	26	Solder	62W4088	33.54	30.62
● EN3P15F26X	15	26	Solder	62W4092	31.10	28.40
● EN3P17F26SX	17	26	Solder*	62W4096	44.16	40.32
● EN3P17F26X	17	26	Solder	62W4097	40.02	36.54

* Staggered solder cup

Mfg. part no. EN3CAP sealing cap provides an extra-secure seal. Snaps on all Switchcraft® panel mount connectors. Made of thermoplastic polymer glass fiber. In-line and overmolded connector also available; *go online or call.*

➤CONTINUED➤

EN3® MINI WEATHERTIGHT™ CONNECTORS (CONT.)

Mfg. Part No.	Fig.	Stock No.	Price Each 1-9	Price Each 10-24
● EN3CAP	6	66F3136	1.70	1.70

(9133)

EN3® RIGHT ANGLE PC BOARD CONNECTORS

RoHS Compliant Available

Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company

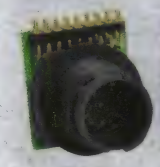


Fig. 1

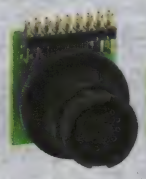


Fig. 2

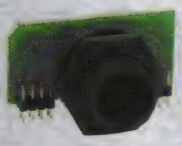


Fig. 3

Fig. 4

- Sealed to IP68 NEMA 250 (6P)
- O-free ring design
- Easily mount to PC boards
- Narrow or wide versions available
- Gold plated contacts
- Thermoplastic shell

NARROW PCB, PIN CONTACTS —FIG.1

Mfg. Part No.	No. of Contacts	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-99
● EN3P2MRAPCBN	2	55W5531	6.24	6.24	6.10
● EN3P3MRAPCBN	3	55W5535	6.65	6.65	6.50
● EN3P4MRAPCBN	4	55W5539	7.25	7.25	7.09
● EN3P5MRAPCBN	5	55W5543	8.14	8.14	7.96
● EN3P6MRAPCBN	6	55W5547	9.29	9.29	9.08
● EN3P7MRAPCBN	7	55W5549	10.01	10.01	9.78
● EN3P8MRAPCBN	8	55W5551	10.71	10.71	10.47
● EN3P9MRAPCBN	9	55W5555	11.44	11.44	11.18
● EN3P10MRAPCBN	10	55W5495	12.16	12.16	11.89
● EN3P11MRAPCBN	11	55W5499	12.88	12.88	12.59
● EN3P12MRAPCBN	12	55W5503	13.60	13.60	13.29
● EN3P13MRAPCBN	13	55W5507	14.31	14.31	13.99
● EN3P14MRAPCBN	14	55W5511	15.03	15.03	14.69
● EN3P15MRAPCBN	15	55W5515	20.99	15.74	15.39
● EN3P16MRAPCBN	16	55W5519	16.47	16.47	16.10
● EN3P17MRAPCBN	17	55W5523	17.19	17.19	16.80
● EN3P18MRAPCBN	18	55W5527	17.91	17.91	17.50

NARROW PCB, SOCKET CONTACTS — FIG. 2

● EN3P2FRAPCBN	2	55W5529	7.19	7.19	7.02
● EN3P3FRAPCBN	3	55W5533	8.34	8.34	8.16
● EN3P4FRAPCBN	4	55W5537	10.46	10.46	10.23
● EN3P5FRAPCBN	5	55W5541	11.40	11.40	11.15
● EN3P6FRAPCBN	6	55W5545	12.77	12.77	12.48
● EN3P9FRAPCBN	9	55W5553	14.18	14.18	13.86
● EN3P10FRAPCBN	10	55W5493	15.59	15.59	15.24
● EN3P11FRAPCBN	11	55W5497	16.91	16.91	16.53
● EN3P12FRAPCBN	12	55W5501	18.23	18.23	17.81
● EN3P13FRAPCBN	13	55W5505	19.54	19.54	19.10
● EN3P14FRAPCBN	14	55W5509	20.86	20.86	20.39
● EN3P15FRAPCBN	15	55W5513	22.06	22.06	21.56
● EN3P16FRAPCBN	16	55W5517	23.31	23.31	22.78
● EN3P17FRAPCBN	17	55W5521	24.54	24.54	23.99
● EN3P18FRAPCBN	18	55W5525	25.77	25.77	25.19

WIDE PCB, PIN CONTACTS — FIG. 3

● EN3P2MRAPCBW	2	55W5532	6.24	6.24	6.10
● EN3P3MRAPCBW	3	55W5536	6.65	6.65	6.50
● EN3P4MRAPCBW	4	55W5540	7.25	7.25	7.09
● EN3P5MRAPCBW	5	55W5544	8.14	8.14	7.96
● EN3P6MRAPCBW	6	55W5548	9.29	9.29	9.08
● EN3P7MRAPCBW	7	55W5550	10.01	10.01	9.78
● EN3P8MRAPCBW	8	55W5552	10.71	10.71	10.47
● EN3P9MRAPCBW	9	55W5556	11.44	11.44	11.18
● EN3P10MRAPCBW	10	55W5496	12.16	12.16	11.89
● EN3P11MRAPCBW	11	55W5500	12.88	12.88	12.59
● EN3P12MRAPCBW	12	55W5504	13.60	13.60	13.29
● EN3P13MRAPCBW	13	55W5508	19.08	14.31	13.99
● EN3P14MRAPCBW	14	55W5512	15.03	15.03	14.69
● EN3P15MRAPCBW	15	55W5516	15.75	15.75	15.40
● EN3P16MRAPCBW	16	55W5520	16.47	16.47	16.10
● EN3P17MRAPCBW	17	55W5524	17.19	17.19	16.80
● EN3P18MRAPCBW	18	55W5528	17.91	17.91	17.50

WIDE PCB, SOCKET CONTACTS — FIG. 4

● EN3P2FRAPCBW	2	55W5530	7.19	7.19	7.02
● EN3P3FRAPCBW	3	55W5534	8.34	8.34	8.16
● EN3P4FRAPCBW	4	55W5538	9.78	9.78	9.56

➤CONTINUED➤

EN3® RIGHT ANGLE PC BOARD CONNECTORS (CONT.)

WIDE PCB, SOCKET CONTACTS — FIG. 4

Mfg. Part No.	No. of Contacts	Stock No.	Price Each 1-9	10-24	25-99
EN3P5FRAPCBW	5	55W5542	11.40	11.40	11.15
EN3P6FRAPCBW	6	55W5546	12.77	12.77	12.48
EN3P9FRAPCBW	9	55W5554	14.18	14.18	13.86
EN3P10FRAPCBW	10	55W5494	15.59	15.59	15.24
EN3P11FRAPCBW	11	55W5498	16.91	16.91	16.53
EN3P12FRAPCBW	12	55W5502	18.23	18.23	17.81
EN3P13FRAPCBW	13	55W5506	19.54	19.54	19.10
EN3P14FRAPCBW	14	55W5510	20.86	20.86	20.39
EN3P15FRAPCBW	15	55W5514	22.06	22.06	21.56
EN3P16FRAPCBW	16	55W5518	23.31	23.31	22.78
EN3P17FRAPCBW	17	55W5522	24.54	24.54	23.99
EN3P18FRAPCBW	18	55W5526	25.77	25.77	25.19

(210033)

MINI-CHANGE® ATTACHABLE CONNECTORS

RoHS Compliant Available

Woodhead

- Make cables the length you want
- Route cable without connector through tight spaces then add field attachable connector.

Mini-Change® connectors enable quick-disconnect wiring on specialty cables and pre-wired control system devices. Meets IEC IP68 enclosure classification. Field-wireable with a screwdriver.

Mfg. Part No.	Connector Type	Positions	Current Rating	Dimensions L x W (in.)	Stock No.	Price Each 1-9
1A3006-34	Plug	3	13A	3.70 x 1.11	15M1977	37.06
1A3000-34	Receptacle	3	13A	3.54 x 1.11	15M1976	37.06
1A5006-34	Plug	5	8A	3.70 x 1.11	15M1978	42.06
1A5000-34	Receptacle	5	8A	3.54 x 1.11	52F6719	42.06

(3009)

C90 SERIES COMMERCIAL MIL-DTL-5015 CIRCULAR CONNECTORS

RoHS Compliant Available

HARWIN

Panel Mount Receptacle with Pin Contacts | Panel Mount Receptacle with Socket Contacts | Cable Plug with Pin Contacts | Cable Plug with Socket Contacts

- Intermateable with MIL-DTL-5015 (MIL-C-5015) connectors
- Full environmental sealing with backshell and sealing gasket — exceeds IP-67
- Zinc and black chromate-plated aluminum alloy shells
- Threaded coupling
- Silver-plated copper alloy pin and socket contacts
- Solder termination

C90 series high-reliability, rugged, circular connectors meet the high performance standards of MIL-DTL-5015 (MIL-C-5015), yet are priced to be cost-effective for commercial and industrial applications. Designed for use in harsh and demanding environments where vibration, moisture and pressure/temperature are extreme. Choice of free-hanging (inline) straight cable plugs and panel mount receptacles with four-hole flange. Free-hanging (inline) cable receptacles, other shell sizes and insert arrangements are available; *go online or call*. Current rating: 13A. Voltage rating: 10SL shells 500VAC/700VDC; 14S shells 200VAC/250VDC. Insulation resistance: 5000Mohm min. Recommended 16-22 AWG wire size. Operating temperature range: -55°C to +125°C.

C90-3102R SERIES PANEL MOUNT RECEPTACLES WITH SEALING GASKET, FOUR HOLE FLANGE

Mfg. Part No.	No. of Contacts	Contact Gender	Insert Arrangement	Thread Size	Stock No.	Price Each 1-9
C90-3102R10SL-4P	2	Pin	10SL-4	5/8 - 24UNEF	27T3909	8.22
C90-3102R10SL-4S	2	Socket	10SL-4	5/8 - 24UNEF	27T3910	7.07
C90-3102R14S-2S	4	Socket	14S-2	7/8 - 20UNEF	27T3914	7.71
C90-3102R14S-6P	6	Pin	14S-6	7/8 - 20UNEF	27T3915	9.26
C90-3102R14S-6S	6	Socket	14S-6	7/8 - 20UNEF	27T3916	9.83
C90-3106F SERIES FREE-HANGING CABLE PLUGS WITH BACKSHELL						
C90-3106F10SL-4P	2	Pin	10SL-4	5/8 - 24UNEF	27T3919	13.37
C90-3106F14S-2P	4	Pin	14S-2	7/8 - 20UNEF	27T3923	13.89
C90-3106F14S-6S	6	Socket	14S-6	7/8 - 20UNEF	27T3926	14.23

(194919)

PUSH-PULL SELF-LATCHING CIRCULAR CONNECTORS

LEMO® The Original Push-Pull Connector

IP50

B Series Cable Plug | B Series Panel Receptacle | S Series Cable Plug | S Series Free Cable Receptacle

- Designed for many indoor applications including medical, broadcast, industrial control, energy, test and measurement
- Security of the Push-Pull self-latching system
- Chrome-plated brass housing
- Gold-plated solder contacts
- PEEK multipole insulator
- Cable connectors include recommended collet for strain relief
- 360° screening for full EMC shielding
- Temperature range: -55°C to +250°C

These circular connectors feature a Push-Pull self-latching connection system that allows the connector to be mated by simply pushing the plug axially into the receptacle.This self-latching system allows for easy and quick mating and unmating. Plus it provides security against vibration, shock or pull on the cable, and facilitates operation in a very limited space. Rated IP50. UL recognized, CE compliant.

B SERIES — STRAIGHT PLUGS WITH CABLE COLLET AND PIN CONTACTS

B series connectors feature standard G keying that prevents errors in connector alignment.

Mfg. Part No.	Contacts	Shell Size	Cable Dia. (mm) Min.	Max.	AWG Max.	Lgth. (mm)	Stock No.	Price Each 1-9	10-24
FGG.00.302.CLAD22	2	00	1.6	2.1	28	28.5	68R6719	38.96	35.91
FGG.00.302.CLAD27	2	00	2.1	2.6	28	28.5	57R5271	36.92	34.04
FGG.00.302.CLAD30	2	00	2.5	3.0	28	28.5	57R5273	39.06	36.02
FGG.0B.302.CLAD31	2	0	2.1	3.0	22	36.0	12R0538	35.22	32.47
FGG.0B.302.CLAD42	2	0	3.1	4.0	22	36.0	12R0542	35.19	32.45
FGG.0B.302.CLAD52	2	0	4.1	5.0	22	36.0	12R0544	36.17	33.35
FGG.0B.302.CLAZ	2	0	...	...	22	36.0	63R3311	31.17	28.48
FGG.1B.302.CLAD52	2	1	4.1	5.0	20	43.0	12R0715	45.06	41.54
FGG.1B.302.CLAD62	2	1	5.1	6.0	20	43.0	12R0717	45.08	41.56
FGG.2B.302.CLAD52	2	2	4.1	5.0	16	50.0	12R0997	69.26	63.85
FGG.2B.302.CLAD62	2	2	5.1	6.0	16	50.0	12R0999	65.26	60.16
FGG.00.303.CLAD22	3	00	1.6	2.1	28	28.5	68R6721	38.70	35.68
FGG.0B.303.CLAD31	3	0	2.1	3.0	22	36.0	12R0562	36.97	34.08
FGG.0B.303.CLAD42	3	0	3.1	4.0	22	36.0	12R0566	35.13	32.38
FGG.0B.303.CLAD52	3	0	4.1	5.0	22	36.0	12R0568	36.84	33.97
FGG.1B.303.CLAD42	3	1	3.1	4.0	20	43.0	12R0731	44.03	40.59
FGG.1B.303.CLAD52	3	1	4.1	5.0	20	43.0	12R0733	46.57	42.93
FGG.1B.303.CLAD62	3	1	5.1	6.0	20	43.0	12R0735	46.57	42.93
FGG.2B.303.CLAD52	3	2	4.1	5.0	18	50.0	12R1011	73.04	67.34
FGG.2B.303.CLAD62	3	2	5.1	6.0	18	50.0	12R1013	72.01	66.39
FGG.00.304.CLAD22	4	00	1.6	2.1	28	28.5	12R0712	45.40	41.85
FGG.00.304.CLAD27	4	00	2.1	2.6	28	28.5	68R6724	42.99	39.64
FGG.0B.304.CLAD31	4	0	2.1	3.0	22	36.0	12R0585	39.06	36.01
FGG.0B.304.CLAD42	4	0	3.1	4.0	22	36.0	12R0589	38.90	35.86
FGG.0B.304.CLAD42Z*	4	0	3.1	4.0	22	36.0	12R0590	31.39	28.93
FGG.0B.304.CLAD52	4	0	4.1	5.0	22	36.0	12R0591	38.48	35.49
FGG.0B.304.CLAD52Z*	4	0	4.1	5.0	22	36.0	12R0592	40.69	37.17
FGG.0B.304.CLAZ	4	0	...	...	22	36.0	12R0595	24.82	23.07
FGG.1B.304.CLAD42	4	1	3.1	4.0	22	43.0	12R0751	47.84	44.10
FGG.1B.304.CLAD52	4	1	4.1	5.0	22	43.0	12R0753	47.84	44.11
FGG.1B.304.CLAD62	4	1	5.1	6.0	22	43.0	12R0755	48.41	44.63
FGG.2B.304.CLAD52	4	2	4.1	5.0	20	50.0	12R1024	70.33	64.84
FGG.2B.304.CLAD62	4	2	5.1	6.0	20	50.0	12R1026	70.24	64.76
FGG.2B.304.CLAD82	4	2	7.1	8.0	20	50.0	12R1030	78.48	71.72
FGG.0B.305.CLAD31	5	0	2.1	3.0	22	36.0	12R0612	39.58	36.50
FGG.0B.305.CLAD42	5	0	3.1	4.0	22	36.0	12R0616	39.55	36.46
FGG.0B.305.CLAD52	5	0	4.1	5.0	22	36.0	12R0618	40.19	37.06
FGG.0B.305.CLAD52Z*	5	0	4.1	5.0	22	36.0	12R0619	31.83	29.33
FGG.1B.305.CLAD42	5	1	3.1	4.0	22	43.0	12R0770	50.21	46.29
FGG.1B.305.CLAD52	5	1	4.1	5.0	22	43.0	12R0772	49.54	45.67
FGG.1B.305.CLAD62	5	1	5.1	6.0	22	43.0	12R0774	50.11	46.19
FGG.2B.305.CLAD62	5	2	5,1	6.0	20	50.0	12R1049	81.22	74.88
FGG.0B.306.CLAD31	6	0	2.1	3.0	28	36.0	68R6707	40.06	36.93
FGG.0B.306.CLAD42	6	0	3.1	4.0	28	36.0	35R4313	42.18	38.89
FGG.0B.306.CLAD52	6	0	4.1	5.0	28	36.0	35R4315	42.21	38.91
FGG.1B.306.CLAD42	6	1	3.1	4.0	22	43.0	12R0788	51.47	47.45
FGG.1B.306.CLAD52	6	1	4.1	5.0	22	43.0	12R0790	50.79	46.81
FGG.1B.306.CLAD52Z*	6	1	4.1	5.0	22	43.0	12R0791	52.71	48.17
FGG.1B.306.CLAD62	6	1	5.1	6.0	22	43.0	12R0792	51.37	47.36
FGG.2B.306.CLAD52	6	2	4.1	5.0	20	50.0	12R1069	79.35	73.15
FGG.2B.306.CLAD62	6	2	5.1	6.0	20	50.0	12R1071	74.77	68.93
FGG.0B.307.CLAD31	7	0	2.1	3.0	28	36.0	12R0638	43.73	40.31
FGG.0B.307.CLAD52	7	0	4.1	5.0	28	36.0	12R0644	45.12	41.45
FGG.1B.307.CLAD42	7	1	3.1	4.0	22	43.0	12R0808	55.53	51.20
FGG.1B.307.CLAD52	7	1	4.1	5.0	22	43.0	12R0809	56.38	51.98
FGG.1B.307.CLAD52Z*	7	1	4.1	5.0	22	43.0	35R4322	54.03	49.65

CONTINUED

PUSH-PULL SELF-LATCHING CIRCULAR CONNECTORS (CONT.)

Mfg. Part No.	Contacts	Shell Size	Cable Dia. (mm) Min.	Cable Dia. (mm) Max.	AWG Max.	Lgth. (mm)	Stock No.	Price Each 1-9	Price Each 10-24
FGG.1B.307.CLAD62	7	1	5.1	6.0	22	43.0	25R7532	55.44	51.10
FGG.1B.308.CLAD42	8	1	3.1	4.0	22	43.0	12R0823	58.23	53.67
FGG.1B.308.CLAD52	8	1	4.1	5.0	22	43.0	12R0825	59.30	54.66
FGG.1B.308.CLAD62	8	1	5.1	6.0	22	43.0	12R0827	59.31	54.67
FGG.2B.308.CLAD52	8	2	4.1	5.0	22	50.0	12R1082	89.72	82.71
FGG.2B.308.CLAD62	8	2	5.1	6.0	22	50.0	63R7647	80.79	74.48
FGG.0B.309.CLAD42	9	0	3.1	4.0	28	36.0	12R0651	48.71	44.90
FGG.1B.310.CLAD42	10	1	3.1	4.0	28	43.0	12R0842	67.31	62.05
FGG.1B.310.CLAD52	10	1	4.1	5.0	28	43.0	12R0844	66.44	61.25
FGG.1B.310.CLAD62	10	1	5.1	6.0	28	43.0	12R0846	67.20	61.96
FGG.2B.310.CLAD52	10	2	4.1	5.0	22	50.0	12R1106	92.70	85.46
FGG.2B.310.CLAD62	10	2	5.1	6.0	22	50.0	12R1108	86.44	79.69
FGG.2B.312.CLAD52	12	2	4.1	5.0	22	50.0	12R1132	97.71	90.08
FGG.2B.312.CLAD62	12	2	5.1	6.0	22	50.0	73R8370	88.00	81.12
FGG.2B.316.CLAD62	16	2	5.1	6.0	22	50.0	12R1162	116.22	107.14

*Features nut for fitting a bend relief; *order bend relief separately, go online or call*

B SERIES — FRONT PANEL MOUNT FIXED RECEPTACLES WITH NUT AND SOCKET CONTACTS

Mfg. Part No.	Contacts	Shell Size	AWG Max.	Lgth. (mm)	Stock No.	Price Each 1-9	Price Each 10-24
EGG.00.302.CLL	2	00	28	15.5	15R8985	24.37	22.48
EGG.0B.302.CLL	2	0	22	20.7	28R2073	25.40	23.41
EGG.1B.302.CLL	2	1	20	23.0	50R7682	32.90	30.34
EGG.2B.302.CLL	2	2	16	26.7	57R5199	49.94	46.04
EGG.00.303.CLL	3	00	28	15.5	25R7481	28.74	26.50
EGG.0B.303.CLL	3	0	22	20.7	12R0303	25.35	23.37
EGG.1B.303.CLL	3	1	20	23.0	12R0308	36.94	34.05
EGG.2B.303.CLL	3	2	18	26.7	57R5200	68.96	63.58
EGG.0B.304.CLL	4	0	22	20.7	12R0304	28.74	26.49
EGG.1B.304.CLL	4	1	22	23.0	57R5198	35.89	33.10
EGG.2B.304.CLL	4	2	20	26.7	64R8534	62.98	58.07
EGG.0B.305.CLL	5	0	22	20.7	12R0305	29.31	27.02
EGG.1B.305.CLL	5	1	22	23.0	64R8529	38.86	35.83
EGG.2B.305.CLL	5	2	20	26.7	12R2891	55.18	50.87
EGG.0B.306.CLL	6	0	28	20.7	68R6342	35.66	32.87
EGG.1B.306.CLL	6	1	22	23.0	64R8530	38.98	35.94
EGG.0B.307.CLL	7	0	28	20.7	12R0307	35.44	32.66
EGG.1B.307.CLL	7	1	22	23.0	64R8531	42.16	38.86
EGG.2B.307.CLL	7	2	20	26.7	73R1746	78.19	72.08
EGG.1B.308.CLL	8	1	22	23.0	64R8532	49.24	45.39
EGG.2B.308.CLL	8	2	22	26.7	12R2892	101.06	93.16
EGG.0B.309.CLL	9	0	28	20.7	25R7480	38.39	35.39
EGG.1B.310.CLL	10	1	28	23.0	15R8986	63.71	58.73
EGG.2B.310.CLL	10	2	22	26.7	64R8535	86.17	79.44
EGG.2B.312.CLL	12	2	22	26.7	50R8656	91.06	83.95
EGG.2B.316.CLL	16	2	22	26.7	60R6891	106.61	98.28

S SERIES — STRAIGHT PLUGS WITH CABLE COLLET AND PIN/SOCKET CONTACTS

S series connectors feature hermaphroditic keying ("half moon" insert).

Mfg. Part No.	Contacts	Shell Size	Cable Dia. (mm) Min.	Cable Dia. (mm) Max.	AWG Max.	Lgth. (mm)	Stock No.	Price Each 1-9	Price Each 10-24
FFA.0S.303.CLAC37	3	0	3.0	3.6	26	34.5	57R5225	38.50	35.17
FFA.0S.304.CLAC32	4	0	2.7	3.1	26	34.5	25R7512	38.73	35.59

S SERIES — FREE RECEPTACLES WITH CABLE COLLET AND PIN/SOCKET CONTACTS

PCA.0S.303.CLLC27	3	0	2.2	2.6	26	33.5	57R6827	34.42	31.45
PCA.0S.304.CLAC32	4	0	2.7	3.1	26	33.5	64R7115	42.05	38.43

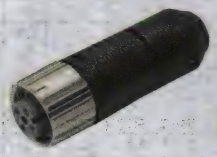
(177427)

SMARTCLICK™ WATERPROOF SENSOR I/O CONNECTORS

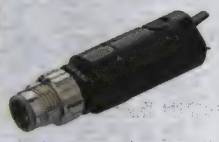
RoHS Compliant Available

OMRON ELECTRONIC COMPONENTS

Straight Solder Plug



Straight Solder Receptacle



Straight IDC Plug

Straight IDC Receptacle

- Rated at 4A / 250VDC
- Maintains compatibility with and degree of protection (IP67) as conventional, screw-type M12 connectors
- Turn ⅛ of a turn to lock (positive click indicates locking)
- Gold-plated brass contacts
- Connector with cable are UL approved
- Temp. range: -25°C to +70°C

➤CONTINUED➤

SMARTCLICK™ WATERPROOF SENSOR I/O CONNECTORS (CONT.)

FIELD ASSEMBLY PLUGS

Mfg. Part No.	Body Style	Contacts	Contact Termination	Cable Dia. (mm)	Stock No.	Price Each 1-4	Price Each 5-9
XS5G-D418	Straight	4	IDC	4 (4 to 5)	99W6457	26.39	23.14
● XS5G-D421	Straight	4	Solder	6 (5 to 6)	15R7367	23.02	20.18
● XS5G-D423	Straight	4	Solder	4 (4 to 5)	15R7369	23.02	20.18
● XS5G-D4S2	Right Angle	4	Screw	6 (5 to 6)	15R7365	23.89	20.95
● XS5G-D4S3	Straight	4	Screw	4 (4 to 5)	15R7366	24.09	21.11

FIELD ASSEMBLY RECEPTACLES

XS5C-D418	Straight	4	IDC	4 (4 to 5)	99W6456	26.39	23.14
● XS5C-D421	Straight	4	Solder	6 (5 to 6)	15R7361	22.79	19.99
● XS5C-D423	Straight	4	Solder	4 (4 to 5)	15R7363	22.79	19.99
● XS5C-D4S2	Right Angle	4	Screw	6 (5 to 6)	15R7359	23.49	20.60
● XS5C-D4S3	Straight	4	Screw	4 (4 to 5)	15R7360	23.68	20.76

PANEL MOUNT CONNECTORS WITH 0.5m PIGTAILS

Mfg. Part No.	Connector	Mounting	Stock No.	Price Each 1-4
● XS5MD4265	Plug	Front Panel Mount	08R3675	32.75
● XS5MD4275	Plug	Rear Panel Mount	08R3676	34.75
● XS5PD4275	Receptacle	Rear Panel Mount	08R3678	36.67

(152517)

INDUSTRIAL M12 CIRCULAR WIREMOUNT CONNECTORS, 3N104 AND 3N304 SERIES

3M

3N104-A000-S08BF

3N304-A000-S08BF

3N104-D000-S08BF

- Compact size; male connector: 45mm / female connector: 40mm
- Solder termination for 24 to 20AWG wire cable compatability
- Body material: thermoplastic
- Contact material: copper
- Contact plating: gold
- IP68 protection

For factory automation applications and other harsh environments these robust connectors are designed to provide IP 68 and EMI protection in compliance with IEC 61076-2-101. The solder cup allows a quick and easy termination to cables ranging from 24 to 20AWG saving time and enabling custom cable assembly lengths. Available in two different codes, A and D. Each code has a different interface that can only be mated with connectors of the same code.

3N304-D000-S08BF

Mfg. Part No.	No. of Contacts	Gender	Contact Gender	Stock No.	Price Each 1-9
3N104-A000-S08BF	4	Plug	Pin	48W2660	13.09
3N304-A000-S08BF	4	Receptacle	Socket	48W2662	11.87
3N104-D000-S08BF	4	Plug	Pin	48W2661	13.45
3N304-D000-S08BF	4	Receptacle	Socket	48W2663	12.23

(209505)

JDX HYBRID MIXED POWER AND SIGNAL WATERPROOF CONNECTORS

IP68 RoHS Compliant Available

SOURIAU

NEW

Esterline Connection Technologies

- Single Connector Solution for simplified cabling
- Waterproof, IP68 (Mated and Unmated)
- Disengages at specified pull force levels for safe quick disconnects
- Robust to withstand Harshest Environments
- 3 Layouts Available for multiple applications
- Audible, Tactile and Visual mating confirmation
- Small footprint, allows access in tight applications
- 360° EMI Shielding

Plug

Receptacle

The **JDX** mixed power and signal connector offers the ability to integrate 2 or 3 power contacts with 6 to 8 signal contacts in one connector housing.

PLUG

Mfg. Part No.	Mounting	Contact Gender	Shell Size	No. of Contacts	Stock No.	Price Each 1-4
● JDXFD2T001MSN	Cable	Pin	2	8 (2 Power / 6 Signal)	94W2484	59.66
● JDXFD2T002MSN	Cable	Pin	2	10 (2 Power / 8 Signal)	94W2485	61.29
● JDXFD2T003MSN	Cable	Pin	2	9 (3 Power / 6 Signal)	94W2486	62.92

➤CONTINUED➤

JDX HYBRID MIXED POWER AND SIGNAL WATERPROOF CONNECTORS (CONT.)

RECEPTACLE

Mfg. Part No.	Mounting	Contact Gender	Shell Size	No. of Contacts	Stock No.	Price Each 1-4
JDXER2T001FSN	Panel	Socket	2	8 (2 Power / 6 Signal)	94W2481	67.81
JDXER2T002FSN	Panel	Socket	2	10 (2 Power / 8 Signal)	94W2482	69.44
JDXER2T003FSN	Panel	Socket	2	9 (3 Power / 6 Signal)	94W2483	71.07

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IP68/69K UTS SERIES PLASTIC SEALED TRIM TRIO™ CIRCULAR CONNECTORS WITH SCREW TERMINATION CONTACTS

RoHS Compliant Available

SOURIAU

Esterline Connection Technologies

Plug — In-Line Receptacle — Jam Nut Receptacle

- No special skills or tools required, only a screwdriver is needed to fit wires to the contacts
- Contacts accept a wide range of wires
- Rapid mating with ⅓ turn with an audible and sensitive "click", minimum 250 mating cycles
- Time saving in field installations, easy to use and assemble
- Extreme sealing performance: IP68/69K Dynamic
- High salt spray resistance
- Male connectors have a grounding contact
- Fully intermateable and interchangeable with the existing similar layout UTS crimp and solder versions

UTS series circular connectors with screw termination contacts combines extreme sealing performance, rapid and secure mating with the ease of wire termination. Requires only a screwdriver to fit wires to the contacts, making it incredibly user friendly and suitable for any field installation. Typical applications for **UTS series** connectors with screw termination contacts are lighting, traffic control, pumps, pool equipment, access control etc. Available for 12-4 and 14-7 layouts with female plugs and a male receptacle.

CABLE PLUG WITH BACKSHELL AND SOCKET CONTACTS

Mfg. Part No.	Shell Size	No. of Contacts	Contact Size	Stock No.	Price Each 1-24
UTS6JC124SSCR	12	4	#16	55M8488	24.96

IN-LINE RECEPTACLE WITH BACKSHELL AND SOCKET CONTACTS

UTS1JC124PSCR	12	4	#16	55M8487	24.96

JAM NUT RECEPTACLES

Mfg. Part No.	Shell Size	No. if Contacts	Contact Gender	Contact Size	Stock No.	Price Each 1-24
UTS7124PSCR	12	4	Pin	#16	55M8489	26.23
UTS7147PSCR	14	7	Pin	#16	14P5099	40.13
UTS7124SSCR	12	4	Socket	#16	75R9639	25.22
UTS7147SSCR	14	7	Socket	#16	75R9643	40.13

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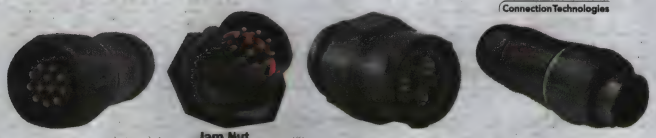
IP68/IP69K UTS SERIES TRIM TRIO™ PLASTIC SEALED CIRCULAR CONNECTORS

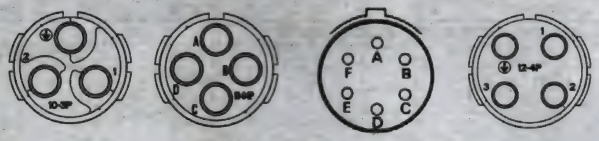
RoHS Compliant Available

SOURIAU

Esterline Connection Technologies



Cable Plug — Jam Nut Receptacle — In-Line Receptacle — Threaded Receptacle



10-3 3-Positions #16 — 10-4 4-Positions #16 — 10-6 6-Positions #20 — 12-4 4-Positions #16

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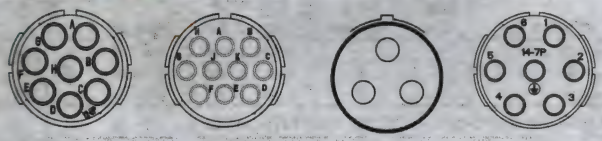
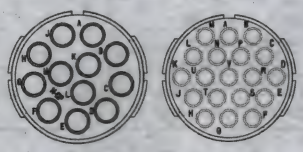
IP68/IP69K UTS SERIES TRIM TRIO™ PLASTIC SEALED CIRCULAR CONNECTORS (CONT.)



12-8 8-Positions #16 — 12-10 10-Positions #20 — 14-3 3-Positions #8 — 14-7 7-Positions #16

- All plastic construction with excellent impact and shock resistance
- Ergonomic design enhances aesthetic appeal
- Secure, reliable bayonet coupling system
- Waterproof sealed to dynamic IP68/IP69K
- Jam nut receptacle simplifies installation
- Operating temperature: -40°C to 105°C
- VDE versions available
- High density contact arrangements available; *go online or call*



14-12 12-Positions #16 — 14-19 19-Positions #20

UTS series IP68/IP69K sealed plastic circular connectors accept Trim Trio™ stamped and formed or machined contacts; *ordered separately online or call.*

CABLE PLUGS WITH BACKSHELL — ORDER CONTACTS SEPARATELY

Mfg. Part No.	Shell Size	No. of Positions	For Contact Type	For Contact Size	Stock No.	Price Each 1-9
UTS6JC103P	10	3	Pin	#16	84K9578	15.22
UTS6JC104P	10	4	Pin	#16	84K9580	15.79
UTS6JC106P	10	6	Pin	#20	84K9582	15.79
UTS6JC124P	12	4	Pin	#16	84K9586	16.05
UTS6JC128P	12	8	Pin	#16	84K9588	16.05
UTS6JC1210P	12	10	Pin	#20	84K9584	16.85
UTS6JC142G1P	14	3	Pin	#8	75R9626	17.07
UTS6JC147P	14	7	Pin	#16	84K9594	17.07
UTS6JC1412P	14	12	Pin	#16	84K9590	18.03
UTS6JC1419P	14	19	Pin	#20	84K9592	17.07
UTS6JC183G1P	18	4	Pin	#8	93T4400	21.19
UTS6JC18X2M3P	18	5	Pin	2 #8, 3 #16	89W1737	21.19
UTS6JC106S	10	6	Socket	#20	84K9583	19.14
UTS6JC124S	12	4	Socket	#16	84K9587	16.05
UTS6JC128S	12	8	Socket	#16	84K9589	16.65
UTS6JC1210S	12	10	Socket	#20	84K9585	18.97
UTS6JC142G1S	14	3	Socket	#8	92R5007	17.07
UTS6JC147S	14	7	Socket	#16	84K9595	17.92
UTS6JC1412S	14	12	Socket	#16	84K9591	17.07
UTS6JC1419S	14	19	Socket	#20	84K9593	19.73
UTS6JC183G1S	18	4	Socket	#8	89W1739	21.19
UTS6JC18X2M3S	18	5	Socket	2 #8, 3 #16	89W1738	21.19

JAM NUT RECEPTACLES — ORDER CONTACTS SEPARATELY

Mfg. Part No.	Shell Size	No. of Positions	For Contact Type	For Contact Size	Stock No.	Price Each 1-9
UTS7106P	10	6	Pin	#20	84K9603	11.19
UTS7128P	12	8	Pin	#16	84K9609	10.91
UTS71412P	14	12	Pin	#16	84K9611	11.65
UTS71419P	14	19	Pin	#20	84K9613	12.23
UTS7103S	10	3	Socket	#16	84K9600	11.19
UTS7104S	10	4	Socket	#16	84K9602	10.66
UTS7106S	10	6	Socket	#20	84K9604	13.42
UTS7128S	12	8	Socket	#16	84K9610	10.91
UTS71210S	12	10	Socket	#20	84K9606	13.51
UTS7JC147S	14	7	Socket	#16	65T9448	14.74
UTS71412S	14	12	Socket	#16	84K9612	12.08
UTS71419S	14	19	Socket	#20	84K9614	14.40

IN-LINE RECEPTACLES — ORDER CONTACTS SEPARATELY

Mfg. Part No.	Shell Size	No. of Positions	For Contact Type	For Contact Size	Stock No.	Price Each 1-9
UTS1JC124P	12	4	Pin	#16	74R4677	19.59
UTS1JC128P	12	8	Pin	#16	06R1696	16.65
UTS1JC1210P	12	10	Pin	#20	50M9658	16.35
UTS1JC142G1P	14	3	Pin	#8	45T0083	17.07
UTS1JC147P	14	7	Pin	#16	74R4682	19.48
UTS1JC1419P	14	19	Pin	#20	06R1697	17.07
UTS1JC103S	10	3	Socket	#16	08P3524	15.98
UTS1JC104S	10	4	Socket	#16	06R1693	15.65
UTS1JC106S	10	6	Socket	#20	08P3458	19.25
UTS1JC124S	12	4	Socket	#16	75R9615	16.85
UTS1JC1210S	12	10	Socket	#20	06R1695	18.62
UTS1JC142G1S	14	3	Socket	#8	32T2062	17.07

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IP68/IP69K UTS SERIES TRIM TRIO™ PLASTIC SEALED CIRCULAR CONNECTORS (CONT.)

Mfg. Part No.	Shell Size	No. of Positions	For Contact Type	For Contact Size	Stock No.	Price Each 1-9
● UTS1JC147S	14	7	Socket	#16	08P3459	17.92
● UTS1JC1412S	14	12	Socket	#16	02P6920	17.71
● UTS1JC1419S	14	19	Socket	#20	15P8204	19.73

NPT THREADED RECEPTACLES — ORDER CONTACTS SEPARATELY

Mfg. Part No.	Shell Size	No. of Positions	For Contact Type	For Contact Size	Stock No.	Price Each 1-9
● UTS7142G1SNPT	14	3	Socket	#8	89W1818	9.27
● UTS7183G1PNPT	18	4	Pin	#8	89W1822	11.43
● UTS7183G1SNPT	18	4	Socket	#8	93T4399	11.43
● UTS718X2M3PNPT	18	5	Pin	2 #8, 3 #16	89W1819	11.43
● UTS718X2M3SNPT	18	5	Socket	2 #8, 3 #16	89W1820	11.43

CONTACTS (MACHINED)

Mfg. Part No.	Gender	AWG	Stock No.	Price Each 1-9
82913600A	Socket	16	24R5421	9.06
82913601A	Pin	16	65T9583	10.80
82913602A	Socket	14	65T9584	15.99
82913603A	Pin	14	65T9585	5.82
82913604A	Socket	12	32T2171	10.10
82913605A	Pin	12	32T2172	10.10
82913606A	Socket	10	29M7424	9.06
82913607A	Pin	10	29M7425	10.80
82913608A	Socket	8	75R9728	9.51
82913609A	Pin	8	92R5014	10.80

DUST CAPS

Mfg. Part No.	For Use With Connector	For Use With Shell Size	Stock No.	Price Each 1-9
● UTS612DCG	Plug	12	84K9597	11.19
● UTS10DCG	Receptacle	10	84K9575	5.99
● UTS12DCG	Receptacle	12	84K9576	6.25
● UTS14DCG	Receptacle	14	84K9577	6.69

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IP68/IP69K UNMATED UTS SERIES HI-SEAL TRIM TRIO™ CIRCULAR CONNECTORS

RoHS Compliant Available

SOURIAU

Esterline Connection Technologies

Fig. 1

Fig. 2

Fig. 3

- Dynamic IP68/69K water protection in mated and unmated conditions
- Compatible with MIL-DTL-26482 connectors
- Gold-plated copper alloy solder contacts (#20)
- Corrosion-proof plastic housing
- Bayonet locking system

CABLE PLUG WITH BACKSHELL

Mfg. Part No.	Fig.	Shell Size	No. of Contacts	Insert Arrangement	Contact Gender	Stock No.	Price Each 1-24	Price Each 25-49
● UTS6JC8E2P	1	8	2	8-2	Pin	75R9630	22.30	19.28
● UTS6JC8E3P	1	8	3	8-3	Pin	75R9632	23.20	20.07
● UTS6JC8E4P	1	8	4	8-4	Pin	14P5007	25.07	21.68
● UTS6JC10E6P	1	10	6	10-6	Pin	14P5001	23.70	20.50
● UTS6JC10E7P	1	10	7	10-7	Pin	75R9620	26.24	22.70
● UTS6JC12E10P	1	12	10	12-10	Pin	14P5003	29.69	25.68
● UTS6JC14E12P	1	14	12	14-12	Pin	40P2317	31.60	27.33
● UTS6JC14E18P	1	14	18	14-18	Pin	75R9624	33.49	28.96
● UTS6JC14E19P	1	14	19	14-19	Pin	14P5005	33.91	29.33
● UTS6JC8E3S	1	8	3	8-3	Socket	75R9633	24.05	20.80
● UTS6JC8E4S	1	8	4	8-4	Socket	14P5008	25.02	21.64
● UTS6JC10E6S	1	10	6	10-6	Socket	14P5002	27.59	23.87
● UTS6JC12E10S	1	12	10	12-10	Socket	14P5004	31.21	27.00
● UTS6JC14E12S	1	14	12	14-12	Socket	75R9623	37.17	32.15
● UTS6JC14E19S	1	14	19	14-19	Socket	14P5006	38.58	33.36

JAM NUT RECEPTACLE

● UTS78E4P	2	8	4	8-4	Pin	14P5015	17.11	15.84
● UTS710E6P	2	10	6	10-6	Pin	14P5009	17.69	16.38

➤ CONTINUED ➤

IP68/IP69K UNMATED UTS SERIES HI-SEAL TRIM TRIO™ CIRCULAR CONNECTORS (CONT.)

JAM NUT RECEPTACLE

Mfg. Part No.	Fig.	Shell Size	No. of Contacts	Insert Arrangement	Contact Gender	Stock No.	Price Each 1-24	Price Each 25-49
● UTS712E10P	2	12	10	12-10	Pin	14P5011	18.63	16.12
● UTS714E19P	2	14	19	14-19	Pin	14P5013	22.78	19.70
● UTS78E4S	2	8	4	8-4	Socket	14P5016	17.69	16.38
● UTS710E6S	2	10	6	10-6	Socket	14P5010	18.68	17.30
● UTS712E8S	2	12	8	12-8	Socket	10R6817	19.17	16.58
● UTS712E10S	2	12	10	12-10	Socket	14P5012	20.73	17.93
● UTS714E19S	2	14	19	14-19	Socket	14P5014	25.91	22.40

SQUARE FLANGE RECEPTACLE

● UTS08E3P	3	8	3	8-3	Pin	09P2201	14.40	13.09
● UTS08E4P	3	8	4	8-4	Pin	14P4999	15.22	14.09
● UTS010E6P	3	10	6	10-6	Pin	14P4993	16.31	15.11
● UTS012E10P	3	12	10	12-10	Pin	14P4995	18.68	17.29
● UTS014E19P	3	14	19	14-19	Pin	14P4997	24.05	20.80
● UTS08E2S	3	8	2	8-2	Socket	09P2200	14.48	13.16
● UTS08E4S	3	8	4	8-4	Socket	14P5000	16.13	14.93
● UTS010E6S	3	10	6	10-6	Socket	14P4994	17.07	15.81
● UTS010E7S	3	10	7	10-7	Socket	09P2196	18.60	17.22
● UTS012E10S	3	12	10	12-10	Socket	14P4996	19.61	16.96
● UTS014E19S	3	14	19	14-19	Socket	14P4998	25.90	22.40

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FULL PLASTIC UTP SERIES TRIM TRIO™ CIRCULAR CONNECTORS

RoHS Compliant Available

SOURIAU

Esterline Connection Technologies

4-Position

8-Position

12-Position

19-Position

28-Position

Trim Trio™ Standard Layouts

- All plastic circular connector with excellent impact and shock resistance
- Lightweight and economical
- Secure and reliable bayonet coupling system
- Operating temperature: -55°C to 125°C
- 250 mating cycles
- Operating voltage: 220V
- Use with Trim Trio™ contacts; *ordered separately on pages 996-997*

CABLE PLUGS FOR PIN CONTACTS

Mfg. Part No.	Positions	Shell Size	Stock No.	Price Each 1-9	Price Each 10-24
● UTP6104P	4	10-4	16F5749	11.22	10.20
● UTP6128P	8	12-8	16F5750	11.61	10.55
● UTP61412P	12	14-12	16F5751	11.69	10.63
● UTP61619P	19	16-19	16F5752	11.73	10.66

CABLE PLUGS FOR SOCKET CONTACTS

● UTP6104S	4	10-4	16F5757	11.36	10.32
● UTP6128S	8	12-8	16F5758	11.61	10.55
● UTP61412S	12	14-12	16F5759	11.13	10.12
● UTP62028S	28	20-28	16F5762	15.44	14.30

WALL-MOUNTING RECEPTACLES FOR PIN CONTACTS

Mfg. Part No.	Positions	Shell Size	Stock No.	Price Each 1-9	Price Each 10-24
● UTP0128P	8	12-8	16F5766	8.41	8.08
● UTP01412P	12	14-12	16F5767	8.59	8.26
● UTP01619P	19	16-19	16F5768	8.92	8.57

WALL-MOUNTING RECEPTACLES FOR SOCKET CONTACTS

● UTP0104S	4	10-4	37B7902	8.49	8.15
● UTP0128S	8	12-8	18C2537	8.83	8.48
● UTP01412S	12	14-12	16F5773	8.75	8.41
● UTP01619S	19	16-19	16F5774	9.37	9.00
● UTP02028S	28	20-28	16F5776	13.77	12.52

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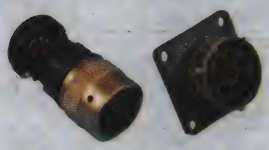
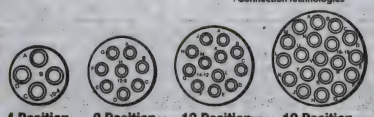
RUGGED PLASTIC UTG SERIES TRIM TRIO™ CIRCULAR CONNECTORS WITH METAL COUPLING RING

RoHS Compliant Available

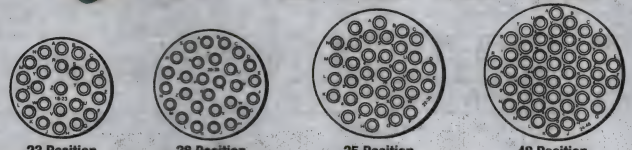
SOURIAU

Esterline Connection Technologies





4 Position 8 Position 12 Position 19 Position



23 Position 28 Position 35 Position 48 Position

- Metal bayonet ring offers durability and strength
- 500 mating cycles
- Environmentally sealed up to IP68
- Operating temperature: -55°C to 125°C
- Operating voltage: 220V
- Use with Trim Trio™ contacts; *ordered separately online or call*

STRAIGHT PLUGS FOR PIN CONTACTS

Mfg. Part No.	Contacts	Shell Size	Stock No.	Price Each 1-9	Price Each 10-24
UTG610-4PN	4	10-4	16F5733	15.46	14.31
UTG612-8PN	8	12-8	16F5734	15.28	14.15
UTG614-12PN	12	14-12	16F5735	15.98	14.79
UTG616-19PN	19	16-19	16F5736	15.97	14.78
UTG618-23PN	23	18-23	16F5737	17.06	15.80
UTG620-28PN	28	20-28	16F5738	19.83	17.15
UTG622-35PN	35	22-35	16F5739	20.73	17.93
UTG624-48PN	48	24-48	16F5740	24.07	20.82

STRAIGHT PLUGS FOR SOCKET CONTACTS

UTG610-4SN	4	10-4	16F5741	15.18	14.06
UTG612-8SN	8	12-8	16F5742	15.28	14.15
UTG614-12SN	12	14-12	16F5743	15.69	14.53
UTG616-19SN	19	16-19	16F5744	15.97	14.78
UTG618-23SN	23	18-23	16F5745	16.45	15.23
UTG620-28SN	28	20-28	16F5746	19.11	16.53
UTG622-35SN	35	22-35	16F5747	20.98	18.14
UTG624-48SN	48	24-48	16F5748	24.36	21.07

WALL-MOUNTING RECEPTACLES FOR PIN CONTACTS

Mfg. Part No.	Contacts	Shell Size	Stock No.	Price Each 1-9	Price Each 10-24
UTG010-4P	4	10-4	16F5717	9.83	9.44
UTG012-8P	8	12-8	16F5718	12.03	10.94
UTG014-12P	12	14-12	16F5719	9.78	9.40
UTG016-19P	19	16-19	16F5720	10.37	9.97
UTG018-23P	23	18-23	16F5721	10.18	9.78
UTG020-28P	28	20-28	16F5722	14.68	13.34
UTG022-35P	35	22-35	16F5723	15.62	14.46
UTG024-48P	48	24-48	16F5724	17.73	16.41

WALL-MOUNTING RECEPTACLES FOR SOCKET CONTACTS

UTG010-4S	4	10-4	16F5725	10.00	9.61
UTG012-8S	8	12-8	16F5726	11.90	10.82
UTG014-12S	12	14-12	16F5727	9.96	9.57
UTG016-19S	19	16-19	16F5728	10.43	10.02
UTG018-23S	23	18-23	16F5729	10.57	10.15
UTG020-28S	28	20-28	16F5730	15.23	13.84
UTG024-48S	48	24-48	16F5732	17.83	16.51

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TRIM TRIO™ STRAIGHT CABLE CLAMPS WITH STRAIN RELIEF

RoHS Compliant Available

SOURIAU

Esterline Connection Technologies

Glass-filled thermoplastic polyester clamps attach to the cable side of the connector to support the cable or wire bundle, providing strain relief and absorbing vibration and shock otherwise transmitted by the cable to the contact.

Strain Relief Backshell

Mfg. Part No.	For Use With Shell Size	Cable Range	Stock No.	Price Each 1-9	Price Each 10-24
UTG10AC	10	3.0 - 8.7	16F5822	7.07	6.80
UTG12AC	12	3.0 - 12.8	16F5823	7.29	7.00
UTG14AC	14	4.0 - 13.8	16F5824	7.68	7.37

CONTINUED

TRIM TRIO™ STRAIGHT CABLE CLAMPS WITH STRAIN RELIEF (CONT.)

Mfg. Part No.	For Use With Shell Size	Cable Range	Stock No.	Price Each 1-9	Price Each 10-24
UTG16AC	16	5.0 - 17.0	16F5825	7.71	7.41
UTG18AC	18	5.0 - 19.0	16F5826	8.39	8.06
UTG20AC	20	5.0 - 21.0	16F5827	9.53	9.16
UTG22AC	22	5.0 - 23.0	16F5828	10.14	9.74
UTG24AC	24	8.0 - 27.0	16F5829	10.65	10.23

(8501)

TRIM TRIO™ STRAIGHT CABLE CLAMPS WITH SEALING GLANDS

RoHS Compliant Available

SOURIAU

Esterline Connection Technologies

Includes a neoprene sealing gland for maximum water protection in sealed applications. Tested to IP68 specifications in mated condition.

Mfg. Part No.	For Use With Shell Size	Cable Range	Stock No.	Price Each 1-9	Price Each 10-24
UTG10PG	10	5x8	16F5830	10.93	9.94
UTG12PG	12	7x10.5x13x16	16F5831	11.36	10.33
UTG14PG	14	7x10.5x13x16	16F5832	12.24	11.13
UTG16PG	16	8x10.5x13x16	16F5833	12.52	11.38
UTG18PG	18	8x10.5x13x16	16F5834	13.19	11.99
UTG20PG	20	11x15x18x22	16F5835	14.77	13.43
UTG22PG	22	11x15x18x22	16F5836	15.54	14.12

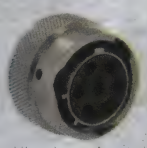
(8502)

FULL METAL UTO SERIES TRIM TRIO™ CIRCULAR CONNECTORS WITH BAYONET COUPLING

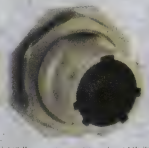
RoHS Compliant Available

SOURIAU

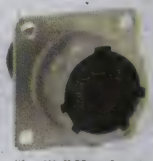
Esterline Connection Technologies



Cable Plug



Jam Nut Receptacle



Wall Mount Receptacle

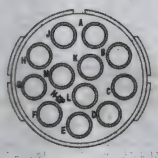
10-4
4-Positions #16

12-4
4-Positions #16

12-8
8-Positions #16

14-3
3-Positions #8

14-7
7-Positions #16



14-12
12-Positions #16

16-19
19-Positions #16

18-23
23-Positions #16

20-28
28-Positions #16

- Metal circular connector with dynamic IP68/IP69K sealing
- Suitable for indoor and outdoor applications
- EMI/RFI shielding capability with appropriate backshell
- 500 mating cycles
- Operating temperature: -40°C to 105°C
- Operating voltage: 250V
- Shielding effectiveness: 95dB at 1MHz
- Use with Trim Trio™ contacts; *ordered separately on pages 996-997*

CABLE PLUGS — ORDER CONTACTS SEPARATELY

Mfg. Part No.	Shell Size	No. of Positions	For Contact Type	For Contact Size	Stock No.	Price Each 1-24
UT06104PH	10	4	Pin	16	84K9699	31.48
UT06124PH	12	4	Pin	16	94T7008	31.20
UT06128PH	12	8	Pin	16	39K4067	32.15
UT06142G1PH	14	3	Pin	8	94T7010	39.48
UT06147PH	14	7	Pin	16	94T7011	31.58

CONTINUED

FULL METAL UT0 SERIES TRIM TRIO™ CIRCULAR CONNECTORS WITH BAYONET COUPLING (CONT.)

Mfg. Part No.	Shell Size	No. of Positions	For Contact Type	For Contact Size	Stock No.	Price Each 1-24
● UT061412PH	14	12	Pin	16	84K9701	32.53
● UT061619PH	16	19	Pin	16	84K9703	41.55
● UT061823PH	18	23	Pin	16	84K9704	34.42
● UT062028PH	20	28	Pin	16	84K9706	44.39
● UT06104SH	10	4	Socket	16	84K9700	39.34
● UT06124SH	12	4	Socket	16	94T7009	31.20
● UT06128SH	12	8	Socket	16	78K7121	40.15
● UT06142G1SH	14	3	Socket	8	92R5010	39.48
● UT06147SH	14	7	Socket	16	94T7012	31.58
● UT061412SH	14	12	Socket	16	84K9702	40.67
● UT061619SH	16	19	Socket	16	80K5243	41.35
● UT061823SH	18	23	Socket	16	84K9705	43.03
JAM NUT RECEPTACLES — ORDER CONTACTS SEPARATELY						
● UT07104PH	10	4	Pin	16	84K9713	37.17
● UT07124PH	12	4	Pin	16	94T7013	30.83
● UT07128PH	12	8	Pin	16	84K9715	38.54
● UT07142G1PH	14	3	Pin	8	94T7015	31.73
● UT07147PH	14	7	Pin	16	94T7017	31.73
● UT071412PH	14	12	Pin	16	84K9717	41.26
● UT07124SH	12	4	Socket	16	94T7014	30.83
● UT07128SH	12	8	Socket	16	84K9716	38.54
● UT07142G1SH	14	3	Socket	8	94T7016	31.73
● UT07147SH	14	7	Socket	16	94T7018	31.73
● UT071412SH	14	12	Socket	16	84K9718	41.26
WALL MOUNT RECEPTACLES — ORDER CONTACTS SEPARATELY						
● UT00104PH	10	4	Pin	16	84K9685	23.42
● UT00124PH	12	4	Pin	16	94T7002	18.76
● UT00128PH	12	8	Pin	16	84K9687	24.61
● UT00142G1PH	14	3	Pin	8	94T7004	19.15
● UT00147PH	14	7	Pin	16	94T7006	19.15
● UT001412PH	14	12	Pin	16	73K3864	25.03
● UT001619PH	16	19	Pin	16	84K9690	27.46
● UT001823PH	18	23	Pin	16	80K0847	26.91
● UT00104SH	10	4	Socket	16	84K9686	23.42
● UT00124SH	12	4	Socket	16	94T7003	18.76
● UT00128SH	12	8	Socket	16	84K9688	23.44
● UT00142G1SH	14	3	Socket	8	94T7005	19.15
● UT00147SH	14	7	Socket	16	94T7007	19.15
● UT001412SH	14	12	Socket	16	84K9689	25.03
● UT001619SH	16	19	Socket	16	84K9691	25.42
● UT001823SH	18	23	Socket	16	84K9692	26.77

(88586)

TRIM TRIO™ UT0 CABLE CLAMPS WITH STRAIN RELIEF

RoHS Compliant Available

SOURIAU

Esterline Connection Technologies

UT024AC

UT018JCL

CABLE CLAMP BACKSHELL WITH STRAIN RELIEF

Nickel-plated metal cable clamp with strain relief attaches to the cable side of the **UT0 series** connector to support the cable or wire bundle, provide strain relief and absorb vibration and shock. Other shell sizes available; *go online or call.*

Mfg. Part No.	For Use With Shell Size	Max. Cable Dia. (mm)	Stock No.	Price Each 1-9	Price Each 10-24
● UT010AC	10	5	83K9230	17.68	16.44
● UT012AC	12	8.2	83K9236	19.55	18.47
● UT014AC	14	10	83K9266	20.26	19.14
● UT016AC	16	13	98K2287	21.78	20.58
● UT018AC	18	16	98K2291	31.40	29.67
● UT020AC	20	16	48K7333	29.92	25.88
● UT022AC	22	19.3	98K2299	34.01	32.13
● UT024AC	24	20.6	98K2303	34.32	32.43

CABLE CLAMPS WITH STRAIN RELIEF NUT — SEALING IP68/69K

Nickel-plated metal short or long cable clamps with strain relief nut for water-protected applications (IP68) are suitable for the **UT0 series** connectors. Other shell sizes available; *go online or call.*

Mfg. Part No.	For Use With Shell Size	Cable Dia. Range (mm)	Version	Length (mm)	Stock No.	Price Each 1-9	Price Each 10-24
● UT010JCS	10	3.0 - 6.0	Short	49.1	98K2279	20.83	19.37
● UT012JCS	12	6.0 - 10.0	Short	49.1	98K2282	21.52	20.33
● UT014JCS	14	6.0 - 10.0	Short	52.1	98K2285	24.31	22.97

➤ CONTINUED ➤

TRIM TRIO™ UT0 CABLE CLAMPS WITH STRAIN RELIEF (CONT.)

Mfg. Part No.	For Use With Shell Size	Cable Dia. Range (mm)	Version	Length (mm)	Stock No.	Price Each 1-9	Price Each 10-24
● UT016JCS	16	9.5 - 14.0	Short	63.1	98K2289	27.06	25.57
● UT020JCS	20	11.5 - 18.0	Short	74.8	98K2297	36.81	34.78
CABLE CLAMPS WITH LARGE STRAIN RELIEF NUT — SEALING IP68/69K							
● UT010JCSL	10	5.0 - 8.0	Short	49.1	07R8923	18.19	16.84
● UT018JCL	18	11.5 - 18.0	Long	82.6	65W6100	44.02	38.07
SHIELDED CLAMPS WITH STRAIN RELIEF NUT — SEALING IP68/69K							
● UT0S12JCS	12	7.0 - 10.5	Short	62.1	98K2207	28.16	26.60
● UT0S14JCS	14	7.0 - 10.5	Short	65.1	98K2209	25.76	24.33
SHIELDED CLAMPS WITH LARGE STRAIN RELIEF NUT — SEALING IP68/69K							
● UT0S10JCSL	10	5.0 - 8.5	Short	60.1	98K2206	25.02	23.63

METAL DUST CAPS FOR RECEPTACLES W/ CHAIN

Mfg. Part No.	For Use With Shell Size	Stock No.	Price Each 1-9	Price Each 10-24
● UT010DCG	10	98K2278	10.45	9.71
● UT014DCG	14	98K2284	12.24	11.38

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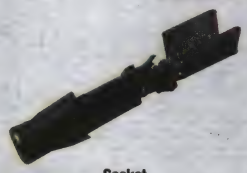
TRIM TRIO™ STAMPED, FORMED AND SELECTIVE-PLATE CONTACTS

RoHS Compliant Available

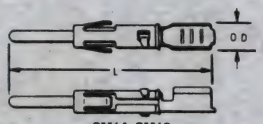
SOURIAU

Esterline Connection Technologies

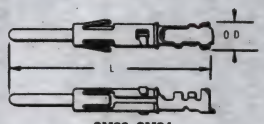
Pin



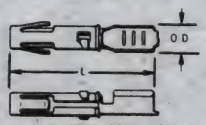
Socket



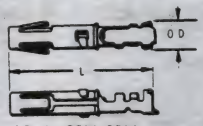
SM14, SM16



SM20, SM24



SC14, SC16



SC20, SC24

- Made from high conductive copper alloy
- Choice of gold, gold flash, or tin over nickel plate finish
- High performance size 16 (0.062" dia. pin)
- Closed entry socket design prevents probe damage
- Low insertion/withdrawal force
- Insulation grip provides vibration support to the wire crimp
- **Sold in packages of 25**

PINS — SOLD IN PACKAGES OF 25

Contact Plating: 0.75m gold min. in contact area, flash on crimp barrel over nickel **(S6 suffix)**; Gold flash all over, over nickel **(D70 suffix)**; Preplated tin all over **(TK6 suffix)**.

Mfg. Part No.	Wire Size	Cable Insulation Accommodation (in.) Max.	Cable Strip Length (in.)	Dimensions (in.) L	Dimensions (in.) O.D.	Stock No.	Price per Pkg. Each
● SM14ML1S6	14AWG	0.125	0.250	1.05	0.130	93K6203	34.88
● SM16ML1S6	18AWG to 16AWG	0.125	0.250	1.05	0.120	93K6206	35.93
● SM20ML1S6	22AWG to 20AWG	0.082	0.156	1.05	0.139	93K6209	35.93
● SM24ML1S6	26AWG to 24AWG	0.062	0.156	1.05	0.128	93K6212	34.88
● SM14ML1D70	14AWG	0.125	0.250	1.05	0.130	93K6202	23.04
● SM16ML1D70	18AWG to 16AWG	0.125	0.250	1.05	0.120	93K6205	22.76
● SM20ML1D70	22AWG to 20AWG	0.082	0.156	1.05	0.139	93K6208	22.76
● SM24ML1D70	26AWG to 24AWG	0.062	0.156	1.05	0.128	93K6211	21.94
PINS — SOLD IN PACKAGES OF 25							
● SM14ML1TK6	14AWG	0.125	0.250	1.05	0.130	93K6204	11.81
● SM16ML1TK6	18AWG to 16AWG	0.125	0.250	1.05	0.120	93K6207	11.68
● SM20ML1TK6	22AWG to 20AWG		0.156			93K6210	11.67
● SM24ML1TK6	26AWG to 24AWG	0.062	0.156	1.05	0.128	93K6213	11.81
SOCKETS — SOLD IN PACKAGES OF 25							
● SC14ML1S6	14AWG	0.125	0.250	0.710	0.130	88K2672	39.38
● SC16ML1S6	18AWG to 16AWG	0.125	0.250	0.710	0.120	88K2675	40.57
● SC20ML1S6	22AWG to 20AWG	0.082	0.156	0.710	0.139	88K2678	40.56
● SC24ML1S6	26AWG to 24AWG	0.062	0.156	0.710	0.128	88K2683	41.17
● SC14ML1D70	14AWG	0.125	0.250	0.250	0.130	88K2671	25.40

➤ CONTINUED ➤

TRIM TRIO™ STAMPED, FORMED AND SELECTIVE-PLATE CONTACTS (CONT.)

SOCKETS — SOLD IN PACKAGES OF 25

Mfg. Part No.	Wire Size	Cable Insulation Accommodation (in.) Max.	Cable Strip Length (in.)	Dimensions (in.) L	Dimensions (in.) O.D.	Stock No.	Price per Pkg. Each
SC16ML1D70	18AWG to 16AWG	0.125	0.250	0.710	0.120	88K2674	25.10
SC20ML1D70	22AWG to 20AWG	0.082	0.156	0.710	0.139	88K2677	25.56
SC24ML1D70	26AWG to 24AWG	0.062	0.156	0.710	0.128	88K2682	25.10
SC14ML1TK6	14AWG	0.125	0.250	0.710	0.130	88K2673	12.38
SC16ML1TK6	18AWG to 16AWG	0.125	0.250	0.710	0.120	88K2676	12.85
SC20ML1TK6	22AWG to 20AWG		0.156			88K2679	13.67
SC24ML1TK6	26AWG to 24AWG	0.062	0.156	0.710	0.128	88K2684	13.00

(8505)

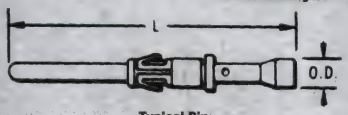
TRIM TRIO™ MACHINED CONTACTS

RoHS Compliant Available

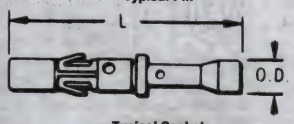
SOURIAU

Esterline Connection Technologies

- Gold plating
- High performance size 16 (0.062″ dia. pin)
- Closed entry socket design prevents probe damage
- Low insertion/withdrawal force
- Insulation grip provides vibration support to the wire crimp



Typical Pin



Typical Socket

PINS — SOLD IN PACKAGES OF 25

Mfg. Part No.	Wire Size (AWG)	Cable Strip Length	Dimensions L	Dimensions O.D.	Stock No.	Price per Pkg. Each	2-3	4-9
RM24M9D28	26-24	0.188″	1.02″	0.101″	88K2668	40.50	36.00	33.30
RM20M12D28	22-20	0.188″	1.02″	0.116″	88K2667	68.97	65.85	62.70
RM16M23D28	20-16	0.281″	1.02″	0.101″	88K2665	67.98	64.89	61.80
SOCKETS — SOLD IN PACKAGES OF 25								
RC24M9D28	26-24	0.188″	0.71″	0.101″	88K2663	80.96	77.28	73.60
RC20M12D28	22-20	0.188″	0.71″	0.116″	88K2662	84.04	80.22	76.40
RC16M23D28	20-16	0.281″	0.71″	0.101″	88K2660	82.49	78.75	74.99

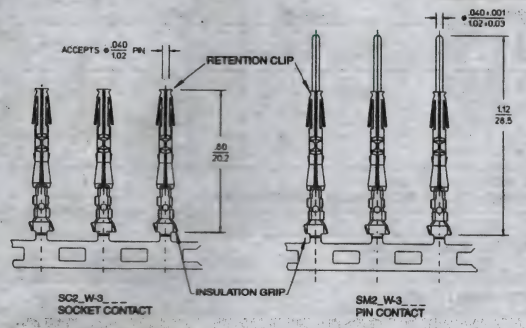
(8506)

STAMPED AND FORMED SEALOK™ CONTACTS

RoHS Compliant Available

SOURIAU

Esterline Connection Technologies



- Used in high density UTOW/UTS connectors
- Closed entry socket design prevents probe damage
- Wire range (AWG): 20-26
- **Sold in packages of 25**

Mfg. Part No.	Description	AWG	Cable Insulation Accommodation Max.	Cable Insulation Accommodation Min.	Stock No.	Price per Pkg. Each
SM20WL3S26	Pin – 30µ″ Gold Over 75µ″ Nickel	22-20	0.082″	0.046″	88K2687	18.43
SM20WL3TK6	Pin – 30µ″ Gold Over 75µ″ Nickel	26-24	0.062″	0.035″	88K2688	23.63
SM24WL3S26	Pin – 20µ″ Tin	22-20	0.082″	0.046″	88K2689	20.67
SC20WL3S25	Socket – 30µ″ Gold Over 75µ″ Nickel	22-20	0.082″	0.046″	88K2680	19.85
SC24WL3S25	Socket – 20µ″ Tin	22-20	0.082″	0.046″	88K2685	19.85
SC24WL3TK6	Socket – 20µ″ Tin	26-24	0.062″	0.035″	88K2686	25.88

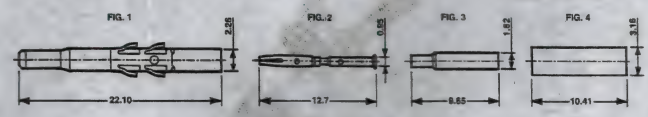
(8503)

TRIM TRIO™ COAXIAL CONTACT KITS

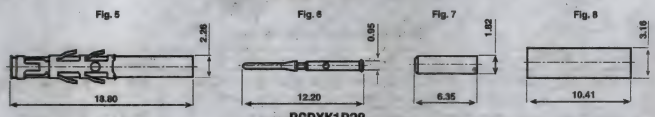
RoHS Compliant Available

SOURIAU

Esterline Connection Technologies



RMDXK-10D28



RCDXK1D28

- Designed for Trim Trio™ connectors with size 16 contacts; *ordered separately on page 994*
- Individually crimped inner and outer conductors
- For use with coaxial and twisted pair cable
- Contact resistance: less than 6milliohms
- Contact retention after five cycles of insertion and extraction: 65N min.
- Cable types: RG161, RG179, RG187, RG174, RG188, RG178, RG196

PIN CONTACT KIT

Mfg. Part No.	Kit Contents	Stock No.	Price Each 1-9
RMDXK-10D28	Fig. 1 Outer Female Contact RMDX602D28, Fig. 2 Inner Female Contact RFD26L1D28, Fig. 3 Hyring RMDXB0553, Fig. 4 Hyring YOC074	16F5702	14.25
SOCKET CONTACT KIT			
RCDXK-1D28	Fig. 5 Outer Female Contact RCDX602D28, Fig. 6 Inner Female Contact RMD26L1D28, Fig. 7 Hyring RCDXB0551, Fig. 8 Hyring YOC074	16F5703	14.42

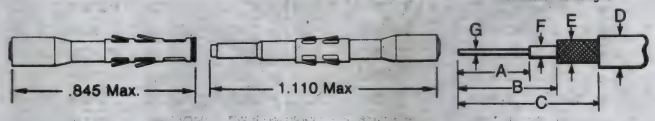
(49000)

TRIM TRIO™ MONOCRIMP™ COAXIAL CONTACTS

RoHS Compliant Available

SOURIAU

Esterline Connection Technologies



- One step cable termination
- High reliability and quick, economical installation
- For use with coaxial and twisted pair cable
- Contact retention after five cycles of insertion and extraction: 65N min.
- Operating temperature: –55°C to +125°C

PIN

Mfg. Part No.	Wire Size (AWG)	RG/U	Cable Strip Length A	Cable Strip Length B	Cable Strip Length C	Stock No.	Price Each 1-9
RMDX60-32D28	28	RG174/U	0.250″	0.300″	0.400″	16F5696	12.13
RMDX60-50D28	30	RG178B/U	0.200″	0.250″	0.350″	16F5698	12.64
SOCKET							
RCDX60-32D28	28	RG174/U	0.250″	0.300″	0.400″	16F5699	14.87
RCDX60-16D28	30	RG178B/U	0.250″	0.300″	0.400″	16F5701	14.90

(8507)

TRIM TRIO™ SQUARE SEALING GASKETS

SOURIAU

Esterline Connection Technologies

Flat square gasket suitable for sealing Trim Trio™ UTP, UTG, UTO, and UTOW series four-hole flange-mount receptacles with the panel; *ordered separately on pages 994-996.*

Mfg. Part No.	Shell Size	Stock No.	Price Each 1-9
UTFD12B	10	84H0067	8.45
UTFD13B	12	83K0334	4.50
UTFD14B.	14	26H3417	4.52
UTFD16B	18	64K0111	4.29
UTFD17B	20	92R5001	4.29

(202669)

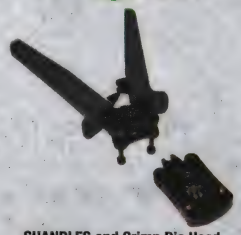
CIRCULAR CONNECTORS • CIRCULAR MINI-DIN CONNECTORS • CIRCULAR DIN CONNECTORS

TRIM TRIO™ CRIMP AND EXTRACTION TOOLING

RoHS Compliant Available

SOURIAU

Esterline Connection Technologies



SHANDLES and Crimp Die Head

Mfg. Part No.	Description	Stock No.	Price Each
SHANDLES	Shandles Crimp Tool Frame/Handle for Use with Trim Trio™ Contacts — *Order Crimp Die Heads Separately Below*	87R0311	112.80
S16RCM16	Shandles Crimp Die Head — For RM/RC Size #16 16M23 Contacts	87R0337	354.94
S16RCM20	Shandles Crimp Die Head — For RM/RC Size #16 20M12, 20M13,24M9, 28M1 Contacts	87R0338	350.58

(8504)

QUICK CONNECT/DISCONNECT PUSH PULL CONNECTORS

RoHS Compliant Available

SOURIAU

Esterline Connection Technologies

- Ergonomical design, fast and easy to use
- Minimal extraction, insertion force
- Mechanically keyed-prevents accidental engagement of wrong connector
- 1000+ mating cycles
- Wire gauges from 30 to 12AWG
- EMI/RFI integrity maintained 65dB to 100MHz
- Contact layout from 2 to 30 contacts

No. of Pos	Cable Plug Solder Contacts Mfg. Part No.	Stock No.	Price Each 1-24	Panel Rcpt. Solder Contacts Mfg. Part No.	Stock No.	Price Each 1-24
4	● JBXFD00G04MSSDPR	31C8546	26.41	● JBXER00G04FSSDPR	31C8511	23.55
SHELL SIZE: 0						
2	● JBXFD0G02MSSDSR	31C8537	23.44	● JBXER0G02FSSDSR	31C8502	19.55
3	● JBXFD0G03MSSDSR	31C8539	24.50	● JBXER0G03FSSDSR	31C8504	21.39
4	● JBXFD0G04MSSDSR	31C8541	26.93	● JBXER0G04FSSDSR	31C8506	23.44
5	● JBXFD0G05MSSDSR	31C8543	28.59	● JBXER0G05FSSDSR	31C8508	26.14
6	● JBXFD0G06MSSDPR	31C8544	28.73	● JBXER0G06FSSDPR	31C8509	28.83
7	● JBXFD0G07MSSDPR	31C8545	30.53	● JBXER0G07FSSDPR	31C8510	31.51
SHELL SIZE: 1						
3	● JBXFD1G03MSSDSR	31C8547	37.39	● JBXER1G03FSSDSR	31C8513	32.56
4	● JBXFD1G04MSSDSR	31C8549	37.82	● JBXER1G04FSSDSR	31C8515	36.56
5	● JBXFD1G05MSSDSR	31C8551	39.71	● JBXER1G05FSSDSR	31C7668	41.17
6	● JBXFD1G06MSSDSR	31C8553	41.57	● JBXER1G06FSSDSR	31C8518	38.69
7	● JBXFD1G07MSSDSR	31C8555	43.44	● JBXER1G07FSSDSR	31C8520	42.68
8	● JBXFD1G08MSSDSR	31C8557	45.33	● JBXER1G08FSSDSR	31C8522	45.53
10	● JBXFD1G10MSSDPR	31C8558	50.01	● JBXER1G10FSSDPR	31C8523	52.15
SHELL SIZE: 2						
3	● JBXFD2G03MSSDSR	31C8560	41.63	● JBXER2G03FSSDSR	31C8525	38.67
5	● JBXFD2G05MSSDSR	31C8562	44.57	● JBXER2G05FSSDSR	31C8527	42.44
7	● JBXFD2G07MSSDSR	31C8564	48.35	● JBXER2G07FSSDSR	31C8529	45.75
10	● JBXFD2G10MSSDSR	31C8566	52.43	● JBXER2G10FSSDSR	31C8531	53.77
16	● JBXFD2G16MSSDSR	31C8568	58.77	● JBXER2G16FSSDSR	31C8533	64.68
19	● JBXFD2G19MSSDSR	31C8570	63.85	● JBXER2G19FSSDSR	31C8535	72.13

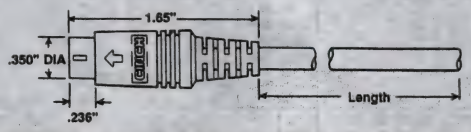
No. of Pos	Cable Plug Crimp Contacts Mfg. Part No.	Stock No.	Price Each 1-24	Panel Rcpt. Solder Contacts Mfg. Part No.	Stock No.	Price Each 1-24
SHELL SIZE: 0						
2	● JBXFD0G02MCSDSR	31C8536	22.60	● JBXER0G02FCSDSR	31C8501	19.45
3	● JBXFD0G03MCSDSR	31C8538	24.00	● JBXER0G03FCSDSR	31C8503	21.43
4	● JBXFD0G04MCSDSR	31C8540	26.79	● JBXER0G04FCSDSR	31C8505	24.35
5	● JBXFD0G05MCSDSR	31C8542	30.04	● JBXER0G05FCSDSR	31C8507	27.25
SHELL SIZE: 1						
3	● JBXFD1G03MCSDSR	27C9217	37.71	● JBXER1G03FCSDSR	31C8512	31.07
4	● JBXFD1G04MCSDSR	31C8548	38.72	● JBXER1G04FCSDSR	31C8514	34.04
5	● JBXFD1G05MCSDSR	31C8550	42.45	● JBXER1G05FCSDSR	31C8516	37.04
6	● JBXFD1G06MCSDSR	31C8552	42.92	● JBXER1G06FCSDSR	31C8517	47.08
8	● JBXFD1G08MCSDSR	31C8556	44.83	● JBXER1G08FCSDSR	31C8521	46.00

SHELL SIZE: 00

(6497)

CIRCULAR MINI DIN PLUG SINGLE-ENDED CABLE ASSEMBLIES

CINCH



Pre-assembled single-ended cable assembly meets FCC requirements for EMI/RFI suppression. Features phosphor bronze contacts with standard plating of gold flash over nickel underplate. Current rating: 1A at 100VAC; 2A at 12VDC. Contact-to-contact resistance: 30mΩ maximum. Insulation resistance: 500MΩ minimum at 500VDC. 0.197″ (5.0) OD black, PVC cable jacket over 28 AWG stranded wire conductors. Nylon plug insulator, rated UL94V-0 with black PVC plug overmold. Molded-in strain relief. Operating temperature: -40°C to +70°C. UL recognized, CSA certified.

Mfg. Part No.	Contacts	Length	Stock No.	Price Each 1-9	Price Each 10-24
MDC-6P05	6	3.28′ (1M)	51F1837	28.10	25.08
MDC-8P05	8	3.28′ (1M)	51F1843	34.77	31.01

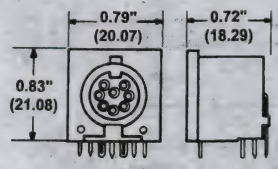
(8742)

AMP SHIELDED CIRCULAR DIN CONNECTORS

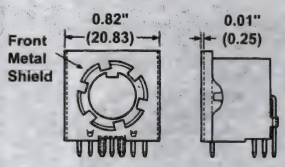
RoHS Compliant Available

TE connectivity

Authorized Distributor

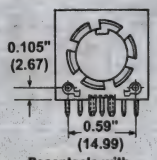


Standard Receptacle (2 Mounting Holes)

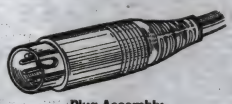


Standard Receptacle with Front Metal Shield

- Nylon Housing, Rated UL94V-0
- 0.063″ Diameter x 0.250″ Deep Mounting Holes
- Tin-Plated Brass Contacts



Receptacle with Front Metal Shield (2 Mounting Holes)



Plug Assembly

PC board receptacles available with or without tin-plated brass front shield. Plugs are interchangeable/intermateable with other DIN standard connectors, and meet or exceed DIN specification 41524 for 5-position and 45322 for 6-position plug. A complete plug assembly requires: one black nylon plug housing with tin-plated brass shield; tin-plated brass ferrule; cord guard; and 50μ″ snap-in contacts; *all ordered separately below.* 100μ″ silver-over-copper plated pin contacts available; *go online or call.* Application tools, including ferrule tool to crimp ferrule to shield, *ordered separately below.* UL recognized, CSA certified.

STANDARD RECEPTACLES — 2 MOUNTING HOLES

Mfg. Part No.	Contacts	Stock No.	Price Each 1-9
● 5211450-1	5	42K7092	5.63
RECEPTACLES — FRONT METAL SHIELD, NO MOUNTING HOLES			
● 5750477-1*	5	42K7544	5.98
● 5212045-1	6	42K7097	5.99
● 5786676-1*	6	12M5838	7.58
● 5212047-1	8	42K7098	5.86

*With front panel grounding fingers

RECEPTACLES — FRONT METAL SHIELD, 2 MOUNTING HOLES			
● 5212034-1	8	42K7095	11.19
PLUG HOUSINGS WITH METAL SHIELD			
● 9-212437-2	8	87K6923	5.14

TIN-PLATED BRASS FERRULES

Mfg. Part No.	Cable Dia. (in.)	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99
● 212435-9	0.250″-0.300″	89F4265	1.16	1.02	0.92

CRIMP, SNAP-IN PIN CONTACTS

Mfg. Part No.	AWG	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49
● 66728-5	28AWG to 22AWG	89F4268	0.90	0.79	0.75

APPLICATION TOOLS

Mfg. Part No.	Description	Stock No.	Price 1-4
● 91002-1	Pin Contact Insertion Hand Tool	89F4310	24.13
69710-1	Ferrule Crimp Hand Tool+	89F4270	768.63

+Interchangeable die sets are available; *go online or call.*

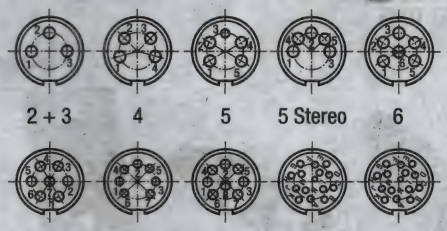
(7993)

C091A SERIES CIRCULAR DIN CONNECTORS

RoHS Compliant Available

Amphenol
Amphenol-Tuchel Electronics GmbH

- Complete EMI Shielding in Fully Mated and Locked Position
- Internal Metal Strain Relief with Half Shell Construction and Snap-in Latching
- UL File Number: E63093, DIN 40-450, Rated IP40



Coupling ring: die-cast, nickel-plated. Backshell: thermoplastic. Current rating: 5 A, except 12 and 14 positions which are 3 A. Voltage rating: 300 V, except 5, 7, 8 (DIN) which are 100V; 12 and 14 positions which are 150 V. Cable outlet: 0.236″ (6 mm) max. Panel thickness for receptacles: 0.140″ (3 mm). Solder termination: 20/26 AWG 0.14 - 0.5mm², 24/26 AWG 12 and 14 position.

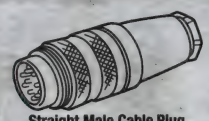
Mfg. Part No.	Contacts	Stock No.	Price Each 1-9	Price Each 10-49
6 mm STRAIGHT MALE CABLE PLUGS				
T3260-001	3 (DIN)	47F020	9.50	8.72
T3300-001	4 (IEC)	47F021	10.15	9.31
T3360-001	5	47F022	9.77	8.94
T3360-010	5 (S DIN)	16F6837	12.02	11.02
T3400-001	6 (DIN)	47F023	10.75	9.87
T3475-001	7	47F024	11.39	10.44
T-3504-001	8 (DIN)	16F6841	10.65	9.78
T3635-001	12	47F025	26.20	24.03
T-3650-001	14	16F6843	22.64	22.05
6 mm STRAIGHT FEMALE CABLE PLUGS				
T3261-001	3 (DIN)	16F6901	11.93	10.93
T-3301-001	4	16F6902	10.66	9.77
T3361-001	5	16F6903	11.51	10.54
T3401-001	6 (DIN)	16F6905	12.01	11.01
T3476-001	7	16F6906	13.31	12.20
T-3505-001	8	16F6908	14.00	12.83
T3636-001	12	16F6909	23.08	21.16
8 mm STRAIGHT MALE CABLE PLUGS				
T3300-002	4 (IEC)	16F6846	12.27	11.24
T3360-002	5	16F6847	12.64	11.35
T3400-002	6 (DIN)	16F6849	13.35	12.24
T3475-002	7	16F6850	13.34	11.98
T3504-002	8	16F6852	13.19	11.85
FRONT-MOUNT MALE RECEPTACLES WITH HEX-NUT				
T 3262 009	3 (DIN)	34B8905	5.07	4.65
T 3302 009	4 (IEC)	34B8928	5.41	4.96
T 3362 009	5	34B8969	5.59	5.11
T 3402 009	6 (DIN)	34B9001	5.55	5.10
T 3477 009	7	34B9033	6.03	5.53
T 3506 009	8 (DIN)	34B9061	6.22	5.70
FRONT-MOUNT FEMALE RECEPTACLES WITH HEX NUT				
T3263-009	3 (DIN)	47F030	5.62	5.15
T3303-009	4 (IEC)	47F031	5.55	5.10
T3363-009	5	47F032	5.59	5.13
T3359-009	5 (S DIN)	16F6818	7.71	7.07
T3403-009	6 (DIN)	47F033	6.33	5.79
T3478-009	7	47F034	6.20	5.69
T-3507-009	8	16F6822	9.87	9.04
T3638-009	12	47F035	18.26	16.74
REAR-MOUNT FEMALE RECEPTACLES WITH HEX NUT				
T3363-109	5	24C5109	5.79	5.04
T3507-109	8 (DIN)	24C5110	11.12	9.99

(8350)

C091D SERIES WATERPROOF CIRCULAR DIN CONNECTORS

RoHS Compliant Available

Amphenol
Amphenol-Tuchel Electronics GmbH

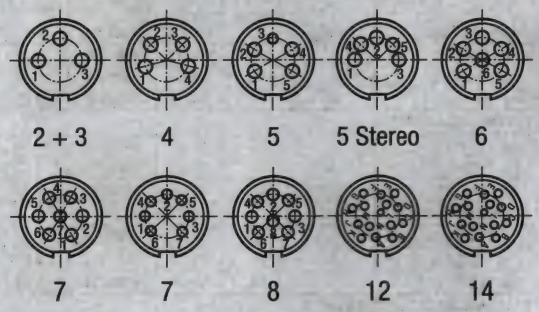


Straight Male Cable Plug

Straight Female Cable Plug

Male Panel Receptacle

Female Panel Receptacle



- IP67 Rated (Waterproof) When Mated
- Dust-Tight
- Solder Termination, Silver-Plated Contacts

All metal for EMI shielding and ruggedness. Feature die-cast brass shells with nickel plating and IEC 130-9 threaded coupling. Current rating: 5A. Voltage rating: 300V except for 5, 7 and 8 DIN position (100V). Cable outlet: 0.236″. Termination: solder, 20/26 AWG wire, 0.14-0.5mm²; 24-26 AWG wire, 12 and 14 positions. Contact plating: silver. Solder area is tin-plated on receptacles. Gold-plated contacts and other sizes and versions available, including plugs for 8mm cable; *go online or call.*

Mfg. Part No.	Contacts	Stock No.	Price Each 1-9	Price Each 10-49
6 mm STRAIGHT MALE CABLE PLUGS				
C091 31H003 100 2	3 (DIN)	34B7588	24.80	22.71
C091 31H004 100 2	4 (IEC)	34B7590	25.02	22.93
C091 31H005 100 2	5 (DIN)	34B7592	22.88	20.99
C091 31H006 100 2	6 (DIN)	34B7594	24.26	22.23
C091 31H007 100 2	7	34B7596	20.63	19.95
C091 31H008 100 2	8 (DIN)	34B7598	26.31	24.11
C091 31H012 200 2*	12	02H4736	29.86	27.37
6 mm STRAIGHT FEMALE CABLE PLUGS				
C091 31D003 100 2	3 (DIN)	34B7558	25.96	23.79
C091 31D005 100 2	5 (DIN)	34B7562	26.19	24.01
C091 31D006 100 2	6 (DIN)	34B7564	25.94	23.77
C091 31D007 100 2	7	34B7566	20.36	19.67
C091 31D008 100 2	8 (DIN)	34B7568	26.60	24.37
8 mm STRAIGHT MALE CABLE PLUG				
C091 31H008 101 2	8 (DIN)	34B7599	23.59	21.44
8 mm STRAIGHT FEMALE CABLE PLUG				
C091 31D008 101 2	8 (DIN)	34B7569	21.88	19.89
FRONT MOUNT MALE PANEL RECEPTACLES				
C091 31W004 100 2	4 (DIN)	34B7646	7.11	6.51
C091 31W006 100 2	6 (DIN)	34B7648	7.92	7.25
FRONT MOUNT FEMALE PANEL RECEPTACLES				
C091 31N003 100 2	3 (DIN)	34B7608	8.31	7.62
C091 31N004 100 2	4	34B7609	9.49	8.67
C091 31N005 100 2	5 (DIN)	34B7610	8.67	7.96
C091 31N006 100 2	6 (DIN)	34B7611	8.87	8.11
C091 31N007 100 2	7	34B7612	8.24	7.58
C091 31N008 100 2	8 (DIN)	34B7613	12.85	11.73
PROTECTIVE CAPS				
C091 00U000 120 2	Male Receptacle	96H7911	9.49	8.26
C091 00V000 120 2	Female Receptacle	10M6148	7.07	6.16

*Gold-plated
(72958)

AUDIO/VIDEO CONNECTORS

7000 SERIES XLR TYPE IN-LINE AND PANEL MOUNT PLUGS AND SOCKETS

RoHS Compliant Available

DEM

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Body material: zinc. Contact material: brass except **mfg. part nos. 700-0300** and **702-0300** which is phosphor bronze. Contact finish: silver.

Mfg. Part No.	Fig.	Contacts	Current Rating (A)	Body Plating	Stock No.	Price Each 1-9	10-49	50-99
IN-LINE CABLE PLUGS								
● 701-0300	1	3	16	Nickel	**69K6176**	6.05	5.83	5.24
● 701-0400	1	4	10	Nickel	**69K6177**	6.27	6.03	5.43
● 701-0500	1	5	7.5	Nickel	**69K6178**	6.45	6.21	5.59
IN-LINE CABLE SOCKETS								
● 700-0300	2	3	16	Nickel	**69K6173**	7.17	6.90	6.21
● 700-0400	2	4	10	Nickel	**69K6174**	7.57	7.29	6.56
● 700-0500	2	5	7.5	Nickel	**69K6175**	7.79	7.50	6.75
PANEL MOUNT PLUGS								
● 703-0300	3	3	16	Nickel	**69K6182**	4.72	4.55	4.10
● 703-0400	3	4	10	Nickel	**69K6183**	4.91	4.72	4.25
● 703-0500	3	5	7.5	Nickel	**69K6184**	5.13	4.93	4.44
PANEL MOUNT CABLE SOCKETS								
● 702-0300	4	3	16	Nickel	**69K6179**	8.26	7.95	7.16
● 702-0400	4	4	10	Nickel	**69K6180**	8.15	7.85	7.06
● 702-0500	4	5	7.5	Nickel	**69K6181**	8.70	8.38	7.53

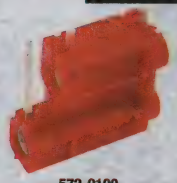
(85873)

4mm AUDIO SOCKETS

RoHS Compliant Available

DEM

551-0100


572-0100

4mm PANEL MOUNT SOCKETS
Available with solder tag or solder bucket connections. Include panel mounting nut. Rated 10A.

Mfg. Part No.	Connection	Color	Stock No.	Price Each 1-9
● 551-0100	Solder	Black	**45M6863**	0.78
● 551-0500	Solder	Red	**45M6865**	0.79
● 563-0100	Solder	Black	**45M6890**	0.82
● 563-0500	Solder	Red	**45M6893**	0.82

4mm 90° PCB SOCKETS
Mount directly onto pc board. Feature grooves in outer housing to provide side stacking alignment. Rated 10A.

Mfg. Part No.	Style	Color	Stock No.	Price Each 1-9
● 571-0100	Single	Black	**45M6896**	2.15
● 571-0200	Single	Blue	**30M0083**	2.18
● 571-0300	Single	Brown	**21M8665**	2.14
● 571-0400	Single	Green	**30M0085**	2.18
● 571-0500	Single	Red	**30M0087**	2.15
● 571-0600	Single	White	**30M0088**	2.14
● 571-0700	Single	Yellow	**30M0090**	2.11
● 572-0100	Double	Black	**45M6897**	4.41

(94537)

convertCON XLR CONNECTORS

RoHS Compliant Available

NEUTRIK

Specifications
- Current rating (per contact): 16A
- Voltage rating: 50V
- Cable O.D.: 3.5 - 8.0 mm

NC3FM-C

➤ CONTINUED ➤

convertCON XLR CONNECTORS (CONT.)

convertCON series is the first unisex XLR cable connector with all the benefits of the XLR **XX series**. No matter if you want to connect a female or male chassis connector, **convertCON** fit's all! The gender is easily selectable without any tool. Simply slide the housing back and forth. No adapter is needed anymore. Connector offers gold contacts and the termination onto the cable is as easy as with Neutrik's well established **XX series**. The new **convertCON** is branded with a unique hologram, which guarantees a genuine and authentic Neutrik product.

Mfg. Part No.	Housing	No. of Contacts	Gender	Stock No.	Price Each 1-9	10-24	25-49
● NC3FM-C	Nickel	3	Plug/Jack	**12N1245**	22.95	20.84	19.30
● NC3FM-C-B	Black	3	Plug/Jack	**11N9547**	25.15	22.84	21.15

(132426)

XLR STYLE AUDIO CONNECTORS

RoHS Compliant Available

NEUTRIK

Fig. 1

Fig. 2

Fig. 3

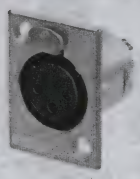


Fig. 4

Fig. 5

Fig. 6

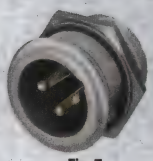


Fig. 7

Fig. 8

Designed for worldwide use in audio, instrumentation, computer, medical, and transportation applications. Amp rating: 3-pin = 16A per contact; 4-pin = 10A per contact; 5-pin = 7.5A per contact; 6-pin = 7.5A per contact. Wire sizes: 16AWG (3- and 4-pin) to 18AWG (5- and 6-pin). Die-cast zinc shells with nickel, sand-blasted finish for low glare, except mfg. part nos. with **"BAG"** and **B** suffix which have black finish that is electrically conductive paint or chromate. Male receptacles have brass contacts, female have beryllium copper. Silver contact plating except mfg. part nos. with **"B" suffix** which are gold plated.

Fig. 9

Fig. 10

X SERIES STRAIGHT CABLE CONNECTORS — SCREWLESS

Mfg. Part No.	Fig.	Contacts	Gender	Housing Finish	Stock No.	Price Each 1-9
● NC3MX	1	3	Male	Nickel	**46F8554**	4.41
● NC3MX-B	1	3	Male	Black	**89F145**	6.65
● NC3MX-BAG	1	3	Male	Black	**95F4116**	5.56
● NC4MX	1	4	Male	Nickel	**89F6044**	6.50
● NC4MX-B	1	4	Male	Black	**89F6050**	8.30
● NC5MX	1	5	Male	Nickel	**89F6045**	8.32
● NC5MX-B	1	5	Male	Black	**89F6051**	10.05
● NC6MX	1	6	Male	Nickel	**89F6046**	8.56
● NC6MX-B	1	6	Male	Black	**89F6052**	10.44
● NC6MSX	1	6	Male	Nickel	**50F2699**	8.07
● NC3FX	2	3	Female	Nickel	**46F8555**	5.07
● NC3FX-B	2	3	Female	Black	**89F153**	7.45
● NC3FX-BAG	2	3	Female	Black	**95F4117**	6.17
● NC4FX	2	4	Female	Nickel	**89F6047**	8.49
● NC4FX-B	2	4	Female	Black	**89F6053**	10.53
● NC5FX	2	5	Female	Nickel	**89F6048**	11.00
● NC5FX-B	2	5	Female	Black	**89F6054**	14.05
● NC6FX	2	6	Female	Nickel	**89F6049**	12.22
● NC6FX-B	2	6	Female	Black	**89F6055**	15.13
● NC6FXS	2	6	Female	Nickel	**50F2700**	11.39

P SERIES RECTANGULAR FLANGED PANEL RECEPTACLES
Female panel punch-out hole is 0.945″ dia;. male panel punch-out hole is 0.768″ dia.

● NC3MP	3	3	Male	Nickel	**46F8557**	5.20
● NC3MP-B	3	3	Male	Black	**89F151**	6.56
● NC4MP	3	4	Male	Nickel	**46F8567**	6.53
● NC4MP-B	3	4	Male	Black	**89F139**	8.61
● NC5MP	3	5	Male	Nickel	**87F6602**	10.34
● NC6MP	3	6	Male	Nickel	**87F6604**	13.52
● NC6MP-B	3	6	Male	Black	**89F143**	16.72
● NC3FP-1	4	3	Female	Nickel	**46F8556**	5.53
● NC3FP-B-1	4	3	Female	Black	**89F152**	6.69
● NC4FP-1	4	4	Female	Nickel	**46F8566**	10.51
● NC4FP-B-1	4	4	Female	Black	**89F140**	12.19

➤ CONTINUED ➤

XLR STYLE AUDIO CONNECTORS (CONT.)

P SERIES RECTANGULAR FLANGED PANEL RECEPTACLES

Mfg. Part No.	Fig.	Contacts	Gender	Housing Finish	Stock No.	Price Each 1-9
NC5FP-1	4	5	Female	Nickel	87F6603	13.96
NC6FP-1	4	6	Female	Nickel	87F6605	20.26

X-HD SERIES STRAIGHT CABLE CONNECTORS — SCREWLESS

X-HD series are all-metal, heavy duty XLR cable connectors for outdoor use. All metal design, dust and water protected according to IP 65. Gold contacts are standard. Female version (-B version has a black shell) is an all metal design and male version has a stainless steel shell (-B version of male has black metal boot only). Mates with **NC3FX-HD** and **NC3FX-HD-B** mate with **NC3MPR-HD**.

NC3MX-HD	5	3	Male	Nickel	27B4318	14.17
NC3FX-HD	6	3	Female	Nickel	27B4280	12.58
NC3FX-HD-B	6	3	Female	Black	27B4281	15.01
NC4FX-HD	6	4	Female	Nickel	27B4332	22.79

P SERIES CIRCULAR FLANGED PANEL RECEPTACLES

Heavy duty chassis connectors for outdoor use. All metal design, Gold contacts standard. IP65 can be achieved in combination with the HD-series cable connectors (NC*FX-HD). This chassis connector can be used perfectly for outdoor and weatherproof applications as well as in a wide range of industrial applications.

NC3MPR-HD	7	3	Male	Nickel	72K8969	17.20

D SERIES SQUARE FLANGED PANEL RECEPTACLES

PC mount versions (**suffix -H** indicates right-angle PC pins with removable inserts.; also available in **-V** with vertical pins). **DL-1** versions are one piece constructions with solder cups. Mount front or rear of panel in 0.940" diameter punch out. **Suffix 1-B** indicates solderless screw terminations and front mountable only.

Mfg. Part No.	Fig.	Contacts	Gender	Mounting	Housing Finish	Stock No.	Price Each 1-9
NC3MD-H-BAG	8	3	Male	Hor. PC Board	Black	89F6036	6.05
NC3MD-L-B-1	8	3	Male	Solder Spring	Black	95F4122	5.84
NC3FD-H	9	3	Female	Hor. PC Board	Nickel	87F6600	6.41
NC3FD-H-BAG	9	3	Female	Hor. PC Board	Black	89F6038	6.08
NC3FD-L	9	3	Female	Solder Spring	Nickel	46F8558	6.70
NC3FD-L-1	9	3	Female	Solder Spring	Nickel	50F2704	4.83
NC3FD-L-B-1	9	3	Female	Solder Spring	Black	95F4123	6.07
NC5FD-L-1	...	5	Female	Solder Cup	Nickel	27B4342	12.99

3-PIN PRE-WIRED AUDIO CONNECTOR ADAPTER

Mfg. Part No.	Fig.	Description	Stock No.	Price Each 1-9
NA3MM	10	3MX Male-to-3MX Male	41M3765	14.27

(9099)

XLR STYLE AUDIO CONNECTORS

RoHS Compliant Available

NEUTRIK

Fig. 1 Fig. 2 Fig. 3 Fig. 4

Fig. 5 Fig. 6 Fig. 7 Fig. 8

Compact, uniquely styled die-cast shell with internal thread that mates with external thread on boot to eliminate thread exposure found on other XLR connectors. Improved chuck type strain relief increases retention force and makes assembly easier and faster. Female connector incorporates new cage type contact with seven independent contact points for lower contact resistance and higher connection integrity. Current rating: 16A per contact. Wire size: 14 AWG. Die-cast zinc shell with nickel finish, except **B** and **BAG suffix** which are black chrome. Male connectors have brass contacts and female have bronze. Male connectors have brass silver-plated contacts, except **B suffix** which are gold-plated. Female connectors have bronze silver-plated contacts, except **B suffix** which are gold-plated. All **XX series** XLR connectors come standard with black (-blk) color-coded ring; *other colors available, go online or call.*

XX SERIES CABLE CONNECTORS

Mfg. Part No.	Fig.	Contacts	Gender	Housing Finish	Stock No.	Price Each 1-9
NC3FXX	1	3	Female	Nickel	98J0231	5.02
NC3FXX-B	1	3	Female	Black	33K3997	7.23
NC3FXX-BAG	1	3	Female	Black	33K3998	5.76
NC4FXX	1	4	Female	Nickel	72K8971	8.47
NC4FXX-B	1	4	Female	Black	72K8972	9.85
NC5FXX	1	5	Female	Nickel	72K8977	10.77
NC5FXX-B	1	5	Female	Black	72K8978	12.65
NC5FXX-BAG	1	5	Female	Black	72K8979	10.85
NC6FXX	1	6	Female	Nickel	72K8983	11.47

➤CONTINUED➤

XLR STYLE AUDIO CONNECTORS (CONT.)

Mfg. Part No.	Fig.	Contacts	Gender	Housing Finish	Stock No.	Price Each 1-9
NC7FXX	1	7	Female	Nickel	72K8995	14.49
NC3MXX	2	3	Male	Nickel	98J0233	4.48
NC3MXX-B	2	3	Male	Black	33K3999	6.67
NC3MXX-BAG	2	3	Male	Black	33K4000	5.45
NC4MXX	2	4	Male	Nickel	72K7606	6.31
NC4MXX-B	2	4	Male	Black	72K8975	7.12
NC4MXX-BAG	2	4	Male	Black	72K8976	6.48
NC5MXX	2	5	Male	Nickel	72K7609	8.06
NC5MXX-B	2	5	Male	Black	72K8981	9.50
NC5MXX-BAG	2	5	Male	Black	72K8982	8.09
NC6MXX	2	6	Male	Nickel	72K8989	8.47
NC7MXX	2	7	Male	Nickel	72K7611	9.48

XX SERIES CABLE CONNECTOR - EMC

The EMC-XLR cable connector is the answer for a noise-safe audio signal connection. 3 pole male / female XLR cable connector with capacitive cable shield - shell connection to avoid RF-interference an LF-noise. 360° shield contact on female connector ensures best possible shielding and chassis contact. EMC connectors can be mated with **DLX series** XLR panel mount connectors.

NC3FXX-EMC	3	3	Female	Nickel	54K6994	18.63
NC3MXX-EMC	2	3	Male	Nickel	54K7007	15.27

DLX SERIES PANEL RECEPTACLES

DLX series features a compact all metal housing with a duplex ground contact, which offers RF protection and shielding. Receptacles can be mated with **XX series** EMC XLR cable connectors.

NC3FD-LX	4	3	Female	Nickel	20M8244	4.93
NC3FD-LX-B	4	3	Female	Black	20M8245	6.30
NC3FD-LX-BAG	4	3	Female	Black	20M8246	4.87
NC3MD-LX	5	3	Male	Nickel	20M8249	4.52
NC3MD-LX-B	5	3	Male	Black	20M8250	5.97
NC3MD-LX-BAG	5	3	Male	Black	20M8251	4.58

RX SERIES RIGHT ANGLE CONNECTORS

RX series is the extra-slim right angle version of the **XX series** cable connectors. Five selectable cable outlet positions are available.

NC3FRX	6	3	Female	Nickel	88K5878	12.12
NC3FRX-B	7	3	Female	Black	88K0906	14.32
NC3MRX	8	3	Male	Nickel	88K5883	12.22
NC3MRX-B	...	3	Male	Black	88K0907	13.12
NC4MRX	8	4	Male	Nickel	88K5891	11.94
NC4FRX	6	4	Female	Nickel	88K5888	14.01
NC5MRX	8	5	Male	Nickel	88K5897	17.31

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XLR, SPEAKON AND POWERCON RECEPTACLE ACCESSORIES

RoHS Compliant Available

NEUTRIK

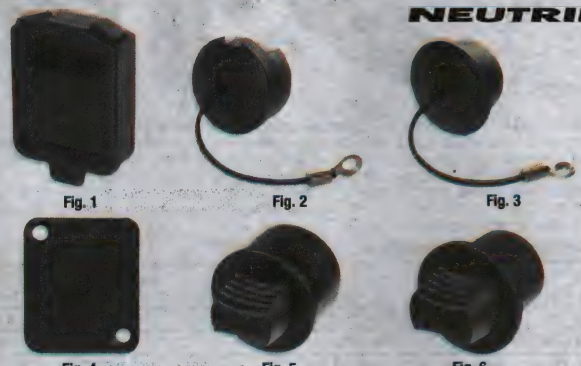

Fig. 1 Fig. 2 Fig. 3

Fig. 4 Fig. 5 Fig. 6

Mfg. Part No.	Fig.	Description	Stock No.	Price Each 1-9	Price Each 10-24
SCDX	1	Hinged Cover For "D" Sized Chassis Connectors, IP54 Protection	41M4249	2.50	2.25
SCF	2	Rubber Sealing Cover For Female "D" Series Receptacles	88K6471	3.42	3.09
SCM	3	Rubber Sealing Cover For Male "D" Series Receptacles	88K6473	3.64	3.29
SCL	3	Rubber Sealing Cover For 2-/4-Pole Speakon and PowerCon Receptacles	88K6472	3.64	3.29
DBA-BL	4	Blank Plate For "D" Series Panel Cutouts	27B4133	1.07	0.96
NDF	5	Dummy Plug For Female Chassis Receptacles	07P8462	0.92	0.83
NDM	6	Dummy Plug For Male Chassis Receptacles	07P8465	0.92	0.83
NDL	6	Dummy Plug For 2-/4-Pole Speakon and PowerCon Chassis Receptacles	07P8464	0.87	0.78

(112539)

AUDIO/VIDEO CONNECTORS

SPEAKON® CONNECTORS

RoHS Compliant Available

NEUTRIK

Fig. 1

Fig. 2

Fig. 3

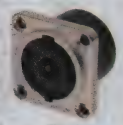
Fig. 4

Fig. 5

Fig. 6

SPEAKON® CONNECTORS

Speakon® connectors are used in professional speaker and amplifier applications. Termination can be either soldered or solderless screw-type terminal compression on cable mount versions; solder or quick disconnect on panel mount versions; and horizontal termination on PC board mount version. Field repairable, no special tools required. Meets IEC65, IEC348 safety standards. *Order coupler **NL4MMX** for linking (extending) cable separately below.*

Mfg. Part No.	Fig.	Mount	Poles	Style	Stock No.	Price Each 1-9
● NL2FX	1	Cable	2	Cable Connector	08X0951	5.65
● NL4FC	2	Cable	4	Cable Connector	51F1805	8.98
● NL8FC	2	Cable	8	Cable Connector	51F1808	17.71
● NL2MP	3	Panel	2	Chassis Connector, D-Series Flange	50B7301	3.45
● NL4MP	3	Panel	4	Chassis Connector, D-Series Flange	51F1806	3.82
● NL4MPR	4	Panel	4	Chassis Connector, Round Flange	51F1807	4.09
● NL8MPR	4	Panel	8	Chassis Connector	51F1809	12.38
● BSL-WR	5	...	...	Drip Boot for **NL4FC**	34C8656	2.17

SPEAKON® LOCKABLE LOUDSPEAKER CONNECTORS / SPEAKON COMBO

Combination of a speakon and an ¼″ jack receptacle, mating with all speakon's and ¼″ phone jacks, compatible to the NL4MD-V regarding PCB layout and panel cutout.

Mfg. Part No.	Fig.	Mount	Style	Stock No.	Price Each 1-9	Price Each 10-24
● NLJ2MD-V	6	Panel	Chassis	10J0738	3.98	3.59

(9101)

SPEAKON® SPX SERIES PROFESSIONAL LOUDSPEAKER AND AMPLIFIER CONNECTORS

RoHS Compliant Available

NEUTRIK

- 3 pieces
- Strain relief accepts a wide variety of cable diameters (6-14mm)
- Handles 50A @ 50% load, 40A rms continuous
- New ergonomic design
- Larger latch and rear boot for easier handling

NL4FX NL4FRX NL4MP-UC

SPX series Speakon® connectors feature a higher current rating for usage with high-powered speakers and amplifiers carrying more than 1000 Watts. Assembly is fast and easy with less parts to handle and a redesigned insert that does not require any special tools. A unique design allows user to take a straight connector and convert it into a right angle, without disconnecting the cable, by using the "quick-change" conversion kit; *order separately below.* PBTP housing is flammability rated UL94-HB. Rated current per brass contact: 40Arms continuous. Rated insulated voltage: 250VAC. Insulation resistance: > 1GΩ. Dielectric strength: 4kV peak. Wiring: screw-type terminals or soldering (complies with IEC 68-2-20). Temperature range: -30°C to +80°C.

4-POLE STRAIGHT CABLE CONNECTORS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● NL4FX	Cable End SpeakOn® 4-Pole SPX	94C0906	6.97
4-POLE RIGHT-ANGLE CABLE CONNECTORS			
● NL4FRX	Right-Angle 4-Pole SpeakOn® SPX	94C0901	9.35
4-POLE CABLE-TO-CABLE ADAPTER			
● NL4MMX	Adapter with Doubling-Locking Side for Extended Cable Runs (Cable to Cable)	94C0911	7.84
SPEAKON® LOCKABLE LOUDSPEAKER CONNECTOR/CHASSIS CONNECTORS			
● NL4MP-UC	SpeakOn® SPX Panel Mount, 40A, 1/4 Faston Termination	34C8808	5.56
● NL4MP-ST	SpeakOn® SPX Panel Mount, 40A, Screw Termination	34C8807	5.49

(72711)

SPEAKON® STX SERIES LOCKABLE LOUDSPEAKER CONNECTORS

RoHS Compliant Available

NEUTRIK

- All-metal housing
- Meets IP54 protection class
- Precise "quick-lock" system
- Easy to assemble
- Mates with all 4-pole Speakon® connectors

NLT4MP NLT4FX-BAG NLT4MX

STX series Speakon® 4-pole lockable connectors are designed for loudspeaker/amplifier applications in harsh environments. Choice of male and female cable- and chassis-style connectors that feature durable, zinc die -cast metal housings available with nickel or black finish. Cable connectors have 1-pc. chuck design with bushing that handles cable O.D. range of 0.35-0.63″ (9-16mm) with a maximum wire gauge of 10 AWG. Female chassis connectors feature solder cups. All are solder wire terminated except **mfg. part no. NLTP4MP** which features flat tabs for Faston® (0.25″ x 0.03″). Chassis connectors feature a 4-hole flange for mounting. Built-in gaskets make these connectors weatherproof to IP54 class protection (when mated together). Rated: 40A rms continuous per contact/250VAC insulation voltage. Quick-lock with latch retention. Temperature range: -30°C to +80°C. Flammability rated: UL94HB.

NICKEL HOUSING

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● NLT4FX	Female Cable Connector	83H8262	15.50
● NLT4MX	Male Cable Connector	87H8608	14.71
● NLT4MP	Male Chassis Connector	96H6104	10.12
BLACK HOUSING			
● NLT4FX-BAG	Female Cable Connector	05J1897	17.17
● NLT4MX-BAG	Male Cable Connector	05J1899	16.56
● NLT4MP-BAG	Male Chassis Connector	05J1898	10.76

(80295)

PHONE PLUGS AND JACKS

RoHS Compliant Available

NEUTRIK

Fig. 1 Fig. 2 Fig. 3 Fig. 4

Fig. 5 Fig. 6 Fig. 7

Fig. 8 Fig. 9 Fig. 10

RIGHT ANGLE AND STRAIGHT ¼″ STANDARD PHONE PLUGS

Standard plugs feature metal die cast shell, one piece plug construction, shielded handle, nickel contacts, solder termination, and chuck strain relief. Cable diameter: 0.30″ (8). Fit all standard jacks.

Mfg. Part No.	Fig.	Cond.	Shell Plating	Stock No.	Price Each 1-9
● NP2C	1	2	Nickel	46F8560	5.68
● NP3C	2	3	Nickel	46F8561	8.15
● NP2C-BAG	1	2	Black	89F149	5.36
● NP3C-BAG	2	3	Black	89F150	8.37
● NP2RX	3	2	Nickel	41M8330	7.54
● NP3RX	4	3	Nickel	34M3331	11.63
1/4″ PROFESSIONAL PHONE PLUG WITH SILENT SWITCH					
● NP2X-AU-SILENT	5	2	Red	98M1700	14.92
● NP2RX-AU-SILENT	6	2	Red	20M8278	18.42
MIL/B-GAUGE-TYPE PHONE PLUGS					
● NP3TB-B	7	3	Black	90F2061	10.57

MIL/B-GAUGE-TYPE PHONE PLUGS

Same construction as standard plugs, *above.* Fits long frame jacks. Weco style 310.

➤CONTINUED➤

PHONE PLUGS AND JACKS (CONT.)

LOCKING PHONE JACKS

Die-cast zinc shells, nickel-plated. Securely lock phone plugs in position. For use in mono or stereo applications. Fits in punchout diameter 0.940". Mate with all ¼" standard phone plugs, *ordered separately.*

Mfg. Part No.	Fig.	Mounting	Stock No.	Price Each 1-9
NJ3FP6C	8	Panel	46F8572	9.35
NJ3FC6	9	Cable	89F6058	11.13

Profi®PROFESSIONAL PHONO RCA PLUG

Ground before signal, gold contacts. Per pair - marked red and black. Retractable sleeve with separate wedge contacts keeps the shell in the front position when engaged providing a direct coaxial electrical connection from the socket via the shell to the cable shield. Easy assembly and soldering (large soldering area, rapid-flow plating. High grade plastic insulation with high creep resistance. Rated current: 16A. Rated voltage: 250VAC. Insulation resistance: <100GΩ. Temperature range: -30°C to +80°C.

Mfg. Part No.	Fig.	Mounting	Stock No.	Price Each 1-9
NF2C-B/2	10	Cable	51F1811	29.55

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PX STYLE ¼" PHONE PLUGS

RoHS Compliant Available

NEUTRIK

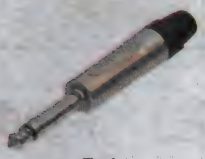


Fig. 1

Fig. 2

Exceptional style ¼" slim plug with proven chuck type strain relief system. Precision machined one-piece contacts with no rivets. Solder termination. The sleek 14.5mm diameter provides high-density jack pitches as close as 15.8mm.

Mfg. Part No.	Fig.	Contacts*	Plug	Barrel	Version	Stock No.	Price Each 1-9
NP2X	1	2(TS)	Nickel	Silver	Mono	97J5940	5.39
NP2X-B	1	2(TS)	Gold	Black	Mono	73J7126	6.35
NP2X-BAG	1	2(TS)	Nickel	Black	Mono	33K4001	5.28
NP3X	2	3(TRS)	Nickel	Silver	Stereo	21K6610	7.93
NP3X-B	2	3(TRS)	Gold	Black	Stereo	33K4002	9.92
NP3X-BAG	2	3(TRS)	Nickel	Black	Stereo	33K4003	8.12

* TS=Tip/Sleeve; TRS=Tip/Ring/Sleeve

(84859)

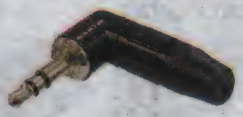
3.5mm RIGHT-ANGLE STEREO PLUGS

RoHS Compliant Available

NEUTRIK

- All Metal Housing
- Slim Design is Space Saving
- Only Available 3.5mm Plug with Chuck Type Strain Relief
- Available in Either Nickel Housing/Silver Plug or Black Housing/Gold Plug

NTP3RC



NTP3RC-B

Mfg. Part No.	Description	Stock No.	Price Each 1-9
NTP3RC	3.5mm Right-Angle Stereo Plug, Nickel	96H7352	5.90
NTP3RC-B	3.5mm Right-Angle Stereo Plug, Black	05J1905	8.39

(80165)

COMMERCIAL ¼" PHONE PLUGS

RoHS Compliant Available

CONNECTORS BY REAN a brand of Neutrik AG

All ¼" commercial plugs are machined brass. Features include larger cable clamp and solder tabs.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
NYS201	Shielded 2-Conductor Phone Plug- Short Handle	66F9797	1.75
NYS 224	Shielded 2-Conductor Phone Plug- Long Handle	34C8811	2.30
NYS 207	Right Angle 2-Conductor ¼" Plug	34C8809	2.05
NYS228	Shielded 3-Conductor Phone Plug	52F7340	3.02
NYS 225	2-Conductor Speaker Plug for Large Diameter Cable	34C8812	2.79

(70155)

COMMERCIAL 3.5MM PHONE PLUGS

RoHS Compliant Available

CONNECTORS BY REAN a brand of Neutrik AG

- 3-pole
- Metal handle and brass contact
- Polyamide insert
- Crimp strain relief
- Knurled handle provides a sure grip

Available with nickel and black plating. Cable clamp is heavy duty to provide superior strain relief. All connectors according to EIA RS-453 / IEC 60603-11.

Mfg. Part No.	Housing/Handle Plating	Contact Plating	Cable O.D. (mm)	Stock No.	Price Each 1-9
NYS231	Nickel	Nickel	4	16C1405	1.64
NYS231G	Nickel	Gold	4	41M8337	2.26
NYS 231B	Black	Nickel	4	99B1471	1.87
NYS231BG	Black	Gold	4	41M3859	2.30
NYS231L	Nickel	Nickel	6	13H6646	1.57

(70156)

PHONO RCA PLUGS

RoHS Compliant Available

CONNECTORS BY REAN a brand of Neutrik AG

Fig. 1

Fig. 2

Heavy-duty phono plugs. All metal, long handle. Cable diameter: **NYS352 series**, 0.28"; **NYS373 series**, 0.117-0.238".

Mfg. Part No.	Fig.	Shell	Contacts	Description	Stock No.	Price Each 1-9
NYS352	1	Nickel	Silver	RCA Phono Plug	66F9795	1.52
NYS352-B	1	Black	Gold	RCA Phono Plug	97H7379	1.46
NYS 352G	1	Nickel	Gold	RCA Phono Plug	27B4485	1.81
NYS373-BLK	2	Black	Gold	RCA Phono Plug with Black Color Coded Ring	05J1925	2.59
NYS373-2	2	Black	Gold	RCA Phono Plug with Red Color Coded Ring	83H0062	2.75
NYS373-9	2	Black	Gold	RCA Phono Plug with White Color Coded Ring	83H0064	2.64
NYS373-Y	2	Black	Gold	RCA Phono Plug with Yellow Color Coded Ring	83H0063	2.59

(70157)

MULTICOMP BRAND AUDIO PHONE PLUGS

RoHS Compliant Available

multicomp

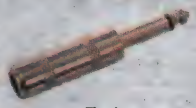


Fig. 1

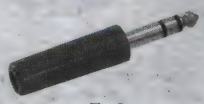


Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6

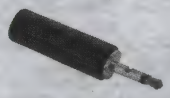


Fig. 7

Mfg. Part No. SPC21391 plug features heavy-duty ground terminals and cable clamp.

Mfg. Part No.	Fig.	Type	Pin Dia. (mm)	Handle	Color	Stock No.	Price Each 1-9	Price Each 10-24
SPC21385	1	Stereo	6.35	Metal	...	11M0580	5.69	4.61
SPC21357	2	Stereo	2.5	Plastic	Black	11M0552	3.79	3.26
SPC15139	2	Stereo	6.3	Plastic	Red	79K4752	2.66	2.08
SPC15332	2	Stereo	6.3	Plastic	Black	79K4924	2.94	2.30
SPC15320	2	Stereo	6.3	Metal	...	79K4914	3.16	2.75
SPC24113	2	Stereo	6.35	Plastic	Black	14N8173	7.67	6.53
SPC21389	3	Stereo	6.35	Metal	...	11M0584	9.88	8.02
SPC21383	1	Mono	6.35	Metal	...	11M0578	4.61	3.74
SPC21384	1	Mono	6.35	Metal	...	11M0579	4.61	3.74
SPC15171	2	Mono	6.35	Plastic	Red	79K4775	2.51	1.96
SPC15274	2	Mono	6.35	Plastic	Black	79K4871	2.64	2.07

CONTINUED

AUDIO/VIDEO CONNECTORS

MULTICOMP BRAND AUDIO PHONE PLUGS (CONT.)

Mfg. Part No.	Fig.	Type	Pin Dia. (mm)	Handle	Color	Stock No.	Price Each 1-9	Price Each 10-24
● SPC15225	2	Mono	6.3	Plastic	Red	79K4824	1.49	1.30
● SPC15352	2	Mono	6.3	Plastic	Black	79K4942	2.59	2.02
● SPC21387	3	Mono	6.35	Metal	...	11M0582	6.92	5.62
● SPC21391	4	Mono	6.35	Metal	...	11M0586	10.61	8.62
● SPC15154	5	Mono	3.5	Plastic	Red	79K4762	3.16	2.36
● SPC15333	5	Mono	3.5	Plastic	Black	79K4925	3.29	2.47
● SPC15229	6	Mono	3.0	Metal	...	79K4828	3.28	2.57
● SPC15224	7	Mono	2.5	Plastic	Black	79K4823	4.64	3.47

(28576)

MULTICOMP BRAND AUDIO PHONE JACKS

RoHS Compliant Available

multicomp

Fig. 1

Fig. 2

Fig. 3

Fig. 4

¼" DIA., PANEL-MOUNT
Enclosed jacks feature silver contacts.

Mfg. Part No.	Fig.	Type	Circuit	Stock No.	Price Each 1-99	Price Each 100-249
● SPC15248	1	Stereo	...	79K4845	2.83	2.19
● SPC21393	2	Stereo	Open	11M0588	3.52	2.86
● SPC21395	2	Stereo	Open	11M0590	5.99	4.86
● SPC24111	3	Stereo	Single Open	14N8171	3.28	2.80
● SPC21397	3	Stereo	Double Open	11M0592	5.42	4.40
● SPC21399	3	Stereo	Double Open	11M0594	5.07	4.11
● SPC24112	4	Stereo	Single Open	14N8172	3.33	2.84
● SPC15181	1	Mono	...	79K4784	2.42	1.89
● SPC21398	3	Mono	Single Open	11M0593	4.72	3.83
● SPC21402	4	Mono	Single Open	11M0597	5.00	4.06
● SPC21403	4	Mono	Double Open	11M0598	5.42	4.40

(164466)

MULTICOMP BRAND AUDIO RCA/PHONO PLUGS AND JACKS

RoHS Compliant Available

multicomp

Fig. 1

Fig. 2

Fig. 3

Mfg. Part No. SPC15358 plug has finger grip and includes 0.062" fiber washer. Mates with **mfg. part no. SPC15284** coaxial jack that has combination clamp and solder termination or **mfg. part no. 340** jack that front mounts into 0.25" diameter hole and includes nut, washer and solder lug. All feature cadmium-plated steel housing and nickel-plated contacts.

Mfg. Part No.	Fig.	Gender	Connector Mounting	Features	Stock No.	Price Each 1-99	Price Each 100-249
● SPC15358	1	Plug	Cable	Shielded Handle	79K4947	2.31	1.80
● SPC15284	2	Jack	Cable	Single Conductor	79K4881	2.39	1.87
● SPC15392	3	Jack	Cable	Front Mount	79K4975	3.42	2.57

(164467)

PHONE CONNECTORS

RoHS Compliant Available

multicomp

Fig. 1

Fig. 2

Mfg. Part No.	Fig.	Gender	Type	Pin Dia. (mm)	Connector Mounting	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-99	Price Each 100-249
● SJ209	1	Jack	Stereo	6.3	Panel	19P1935	1.46	1.32	1.17	0.98
● SJ211	1	Jack	Mono	6.3	Panel	19P1936	1.18	1.07	0.95	0.79
● SP101-1-F-Z	...	Plug	Stereo	6.3	Cable	19P1939	3.52	3.19	2.82	2.36
● SP101H-Z	2	Plug	Stereo	6.3	Cable	19P1940	2.82	2.55	2.26	1.89

➤ CONTINUED ➤

PHONE CONNECTORS (CONT.)

Mfg. Part No.	Fig.	Gender	Type	Pin Dia. (mm)	Connector Mounting	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-99	Price Each 100-249
● SP102-1-F-Z	...	Plug	Mono	6.3	Cable	19P1941	1.67	1.51	1.34	1.12
● SP102H-Z	2	Plug	Mono	6.3	Cable	19P1942	2.26	2.05	1.82	1.52

(136336)

RCA/PHONO CONNECTORS

RoHS Compliant Available

multicomp

- 3.2mm pin diameter
- Solder termination
- **-PG suffix** indicates gold plated pin

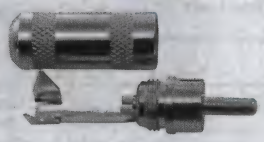


Fig. 1

Fig. 2

Mfg. Part No.	Fig.	Gender	Connector Mounting	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-99	Price Each 100-249
● SP116RC	1	Plug	Cable	19P1944	1.23	1.12	0.99	0.83
● SP116RC-PG	1	Plug	Cable	19P1945	1.87	1.70	1.50	1.26
● SJ214	2	Jack	Panel	19P1937	0.52	0.47	0.42	0.35

(136335)

MULTICOMP BRAND RCA PLUGS AND JACKS

RoHS Compliant Available

multicomp

Fig. 1

Fig. 2

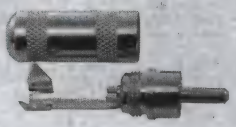


Fig. 3

Quality performance at an economical price. Schematic drawings are available; *go online or call.*

Mfg. Part No.	Fig.	Description	Stock No.	Price Each 1-9	Price Each 10-24
● SPC21378	1	Phono Jack	11M0573	2.43	2.06
● SPC21379	2	Phono Jack, PC Mount, Red Housing	11M0574	3.44	2.95
● SPC21381	3	Phono Plug	11M0576	3.01	2.59
● SPC21382	3	Phono Plug with Larger 0.283" Hole	11M0577	2.99	2.55

(32373)

PC BOARD AUDIO JACKS

RoHS Compliant Available

multicomp

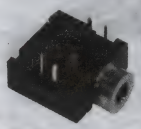


Fig. 1

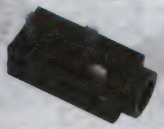


Fig. 2

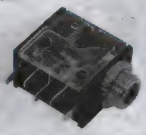


Fig. 3

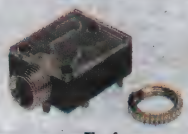


Fig. 4

PC board mount audio jacks provide quality performance at an economical price. Schematic drawings are available; *go online or call.*

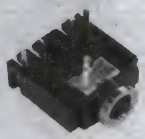


Fig. 5

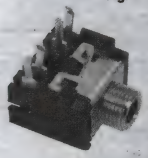


Fig. 6

Mfg. Part No.	Fig.	Type	Pin Size	Features	Stock No.	Price Each 1-9	Price Each 10-24
● SPC21358	1	Stereo	2.5mm	...	11M0553	2.17	1.87
● SPC21360	2	Stereo	2.5mm	...	11M0555	1.88	1.62
● SPC21338	3	Stereo	3.5mm	6mm Threaded	11M0533	2.25	1.93
● SPC21341	3	Stereo	3.5mm	Shuntless, 6mm Threaded	11M0536	2.02	1.74
● SPC21342	3	Stereo	3.5mm	6mm Threaded	11M0537	2.02	1.74
● SPC21344	4	Stereo	3.5mm	Horizontal Mount, Threaded	11M0539	2.17	1.87
● SPC21345	4	Stereo	3.5mm	...	11M0540	2.13	1.65
● SPC24110	5	Stereo	3.5mm	Horizontal Mount, 5 Conductors	14N8170	1.42	1.10
● SPC21348	5	Stereo	3.5mm	...	11M0543	2.19	1.70
● SPC21349	5	Stereo	3.5mm	Shuntless	11M0544	2.20	1.89
● SPC21352	6	Stereo	3.5mm	...	11M0547	2.29	1.97

(32375)

POWER PLUGS AND JACKS

RoHS Compliant Available

multicomp

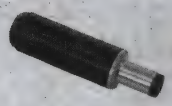


Fig. 1

Fig. 2

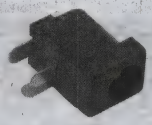


Fig. 3

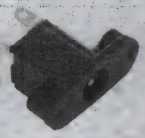


Fig. 4

Fig. 5

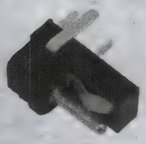


Fig. 6

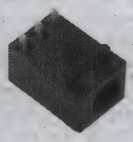


Fig. 7

Schematic drawings are available; *go online or call.*

Mfg. Part No.	Fig.	Description	Stock No.	Price Each 1-9	Price Each 10-24
SPC21361	1	DC Power Plug	11M0556	5.17	4.38
SPC21363	2	2.5mm Power Jack, Solder Type	11M0558	5.09	4.32
SPC21364	3	2mm PC Board Power Jack	11M0559	2.13	1.81
SPC21365	3	2.5mm PC Board Power Jack	11M0560	2.13	1.81
SPC21368	4	2mm Panel Mount Power Jack	11M0563	2.05	1.74
SPC21369	4	2.5mm Panel Mount Power Jack	11M0564	2.05	1.74
SPC21366	5	2mm Panel Mount Power Jack	11M0561	2.05	1.74
SPC21367	5	2.5mm Panel Mount Power Jack	11M0562	2.05	1.74
SPC21372	6	1.65mm PC Board Power Jack	11M0567	1.94	1.65
SPC21373	7	1.30mm PC Board Power Jack	11M0568	2.05	1.74

(32374)

XLR CONNECTORS

RoHS Compliant Available

multicomp

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Mfg. Part No.	Fig.	No. of Contacts	Gender	Conn. Mount.	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-99
SVP556H	1	3	Jack	Cable	19P1967	2.19	1.99	1.76
SVP556H-BK	2	3	Jack	Cable	19P1968	2.46	2.23	1.97
SVP556-TA-L	...	3	Jack	Cable	19P1964	2.89	2.62	2.32
SVP561	3	3	Jack	Panel	19P1972	2.89	2.62	2.32
SVP561N	3	3	Jack	Panel	19P1975	2.08	1.89	1.67
SVP556H-4P	1	4	Jack	Cable	19P1969	2.57	2.33	2.06
SVP556-TA-4P	...	4	Jack	Cable	19P1966	3.39	3.07	2.72
SVP561-4P	3	4	Jack	Panel	19P1974	3.48	3.15	2.80
SVP556H-5P	1	5	Jack	Cable	19P1970	2.44	2.22	1.96
SVP555A	...	3	Plug	Panel	19P1951	2.10	1.90	1.69
SVP555H	4	3	Plug	Cable	19P1955	1.92	1.74	1.55
SVP555H-BK	5	3	Plug	Cable	19P1956	1.77	1.61	1.43
SVP555S-4P	...	4	Plug	Cable	19P1961	2.34	2.12	1.88
SVP555-TA	...	3	Plug	Cable	19P1947	2.93	2.67	2.35
SVP555-TR	...	3	Plug	Panel	19P1949	2.41	2.18	1.93
SVP555H-4P	4	4	Plug	Cable	19P1957	2.12	1.92	1.70
SVP555-TR-4P	...	4	Plug	Panel	19P1950	2.50	2.26	2.01
SVP555H-5P	4	5	Plug	Cable	19P1958	2.00	1.81	1.61

(136337)

MULTICOMP BRAND STEREO XLR TYPE AUDIO CORD PLUGS AND RECEPTACLES

RoHS Compliant Available

multicomp

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6

Industry-standard stereo XLR type audio cord plugs and receptacles are ideal for a variety of applications, including microphones, test equipment, instrumentation and computers. Feature nickel-plated or black finish housing with silver- or gold-plated contacts.

Mfg. Part No.	Fig.	Conductors	Housing Finish	Housing Height	Housing Width	Contacts	Stock No.	Price Each 1-9
MALE XLR TYPE AUDIO CORD PLUGS								
SPC21418	1	3	Nickel	...	...	Silver	11M0613	5.02
SPC21419	1	5	Nickel	...	...	Silver	11M0614	9.87
SPC21420	2	3	Black	...	...	Silver	11M0615	4.91
SPC21446	2	3	Black	...	...	Gold	11M0641	5.70
SPC21421	2	5	Black	...	...	Silver	11M0616	5.60
FEMALE XLR TYPE AUDIO CORD PLUGS								
SPC21422	3	3	Nickel	...	...	Silver	11M0617	5.42
SPC21423	3	5	Nickel	...	...	Silver	11M0618	12.49
SPC21424	4	3	Black	...	...	Silver	11M0619	5.13
MALE XLR TYPE AUDIO RECEPTACLES								
SPC21426	5	3	Nickel	1.43″	0.87″	Silver	11M0621	4.33
SPC21429	5	3	Black	1.43″	0.87″	Silver	11M0624	4.82
FEMALE XLR TYPE AUDIO RECEPTACLES								
SPC21435	6	3	Nickel	1.43″	1.06″	Silver	11M0630	6.76
SPC21438	6	3	Black	1.43″	1.06″	Silver	11M0633	6.40
SPC21436	6	5	Nickel	1.43″	1.06″	Silver	11M0631	13.59
SPC21442	6	3	Black	1.22″	1.02″	Silver	11M0637	6.85
SPC21445	6	3	Black*	1.22″	1.02″	Silver	11M0640	4.05
SPC24106	6	3	Nickel	1.18″	1.00″	Silver	14N8166	2.33

*Thermoplastic

(28575)

DIN PLUGS AND RECEPTACLES

RoHS Compliant Available

Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company

Fig. 1

Fig. 2

Fig. 3

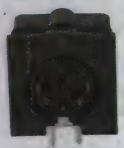


Fig. 4

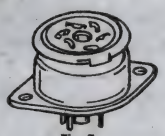


Fig. 5

Fig. 6

CONTINUED

AUDIO/VIDEO CONNECTORS

DIN PLUGS AND RECEPTACLES (CONT.)

DIN CONNECTOR MATING CHART

FEMALE \ MALE	05BL3M	05BL5M	05CL3M	05CL5M	05GM3M	05GM5M	09CL4M	09GM4M	12BL5M	12BL6M	12CL5M	12GM5M
57GB3F	•				•							
57GB5F		•		•		•						
57HA3F	•		•		•							
57PC3F	•		•		•							
57PC5F		•		•		•						
60GB4F								•				
60HA4F							•	•				
61GB5F									•		•	•
61HA5F									•		•	•
61PC5F									•		•	•

Designed for audio circuitry, test equipment, instruments, computers, cameras, control devices, other low-level circuits. Molded phenolic insert with tin-plated socket/pin contacts. Meet DIN specifications; *see DIN connector mating chart above.*

Mfg. Part No.	Description	Stock No.	Price Each 1-9
STRAIGHT CORD PLUGS WITH 30° LOCKRING - FIG. 1			
● 05CL3MX	3 Pins at 180°	89K7638	14.69
● 05CL5MX	5 Pins at 180°	89K7639	17.63
● 09CL4MX	4 Pins at 210°	89K7642	14.91
● 12CL5MX	5 Pins at 240°	89K7649	16.98
STRAIGHT CORD PLUGS WITH SHIELDED BARREL - FIG. 2			
● 05GM3MX	3 Pins at 180°	21M8696	5.70
● 05GM5MX	5 Pins at 180°	89K7640	6.94
● 09GM4MX	4 Pins at 210°	23M4593	9.22
● 12GM5MX	5 Pins at 240°	89K2078	8.72
● 12GM6MX	6 Pins at 240°	97M3724	7.21
STRAIGHT CORD PLUGS WITH EXTENDED BARREL - FIG. 3			
● 05BL3MX	3 Pins at 180°	89K7637	5.63
● 05BL5MX	5 pins at 180°	80K6423	9.47
● 12BL5MX	5 Pins at 240°	89K7648	6.25
● 12BL6MX	6 pins at 240°	80K6419	10.32
● 15BL8MX	8 Pins at 270°	10N1524	7.81
RIGHT ANGLE PLUG WITH UNIQUE 8-POSITION BARREL			
● 05DL5MX	5 Contacts at 180°	83K9556	12.67
STRAIGHT CORD PLUG WITH FLUSH SOCKET INSERT			
● 06AL5FX	5 Contacts at 180°	89K7641	7.81
STRAIGHT CORD FEMALE PLUG WITH LOCK FLANGE 30°			
● 13EL5FX	5 Contacts at 240°	89K7650	14.55
RIGHT ANGLE RECEPTACLES FOR PC BOARD MOUNTING - FIG. 4			
● 57PC5F	5 Contacts at 180°	44F7434	3.00
● 62PC8F	8 Contacts at 270°	14R8575	4.14
RECEPTACLES FOR LOCK RING PLUGS - FIG. 5			
● 57HB3FX	3 Contacts at 180°	89K7667	6.27
● 57HB5FX	5 Contacts at 180°	89K7668	5.06
● 60HA4FX	4 Contacts at 210°	89K7670	6.02
● 61HA5FX	5 Contacts at 240°	89K7672	5.13
RECEPTACLES FOR CHASSIS OR PANEL MOUNTING - FIG. 6			
● 57GB3FX	3 Contacts at 180°	89K7665	4.25
● 57GB5FX	5 Contacts at 180°	89K7666	4.29
● 60GB4FX	4 Contacts at 210°	89K7669	5.31
● 61GB5FX	5 Contacts at 240°	89K7671	3.90
● 62GB8FX	8 Contacts at 270°	20M0455	7.13
RECEPTACLE FOR PC BOARD MOUNTING			
● 62NC8FX	8 Contacts at 270°	89K7673	5.00

(8936)

Q-G® QUICK GROUND AUDIO CONNECTORS

RoHS Compliant Available

Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company

Fig. 1 Fig. 2 Fig. 3 Fig. 4

Used in variety of applications, including microphones, test equipment, instrumentation and computers. 3-pole connectors rated 15A; 4-pole 10A; 5-pole 7.5A. Wire sizes: 12 AWG solid, 14 AWG stranded (3-contact), 14 AWG solid, 16 AWG stranded (4-contact), 16 AWG solid, 18 AWG stranded (5-contact). *See Q-G® mating chart for mating.*

➤ CONTINUED ➤

Q-G® QUICK GROUND AUDIO CONNECTORS (CONT.)

Mfg. Part No.	Fig.	Contacts	Handle Material	Handle Finish	Stock No.	Price Each 1-9
STRAIGHT MALE CORD PLUGS						
● A3M	1	3	Zinc	Nickel	27F068	11.80
● A3MB	1	3	Zinc	Black Chrome	22F1061	17.05
● AA3M*	1	3	Zinc	Nickel	50F1618	10.17
● AAA3MZ	2	3	Zinc	Nickel	14R8565	2.97
● AAA3MPZ	2	3	Plastic	Black Chrome	14R8564	2.69
● A4M	1	4	Zinc	Nickel	27F069	13.39
● A5M	1	5	Zinc	Nickel	39F2275	27.34
● A6M	1	6	Zinc	Nickel	94F1639	15.80
STRAIGHT FEMALE CORD PLUGS						
● A3F	3	3	Zinc	Nickel	27F066	13.05
● A3FBX	3	3	Zinc	Black Chrome	23M4605	19.00
● AA3F*	3	3	Zinc	Nickel	50F1619	10.95
● AAA3FZ	4	3	Zinc	Nickel	14R8563	3.22
● AAA3FPZ	4	3	Plastic	Black Chrome	14R8562	2.93
● A4F	3	4	Zinc	Nickel	27F067	17.10
● A5F	3	5	Zinc	Nickel	39F2274	41.34
● A6F	3	6	Zinc	Nickel	94F341	18.67

*Features "No-Screws" retention system

(9025)

Q-G® QUICK GROUND FEMALE RECEPTACLES

RoHS Compliant Available

Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company

Fig. 1 Fig. 2 Fig. 3

B series can be keyed to ÒDÓ shaped panel hole, or S3519 mounting adapter can be used for non-turning mounting. **C series** flange has three 0.140″ (3.57 mm) diameter holes for #5-40 mounting screws (not supplied). **D series** rectangular flange permits close spacing on crowded panels, has two 0.136″ (3.45mm) diameter countersunk holes for #5-40 flat head mounting screws (not supplied). **E series** is available with quick release inserts. All series can be mounted to panel or chassis and have a satin nickel finish (except for **mfg. part no. D3FBX** which has a black finish).

Mfg. Part No.	Fig.	Contacts	Mounting Hole Dia. (in.)	Stock No.	Price Each 1-9
C SERIES					
● C3F	1	3	0.953	27F059	19.11
● C4F	1	4	0.953	27F063	30.16
● C5F	1	5	0.953	39F2281	25.97
D SERIES					
● D3F	2	3	0.766	27F070	8.96
● D3FBX	2	3	0.766	46M3189	9.40
● D4F	2	4	0.766	27F071	12.28
● D5F	2	5	0.766	39F2282	19.64
● D6F	2	6	0.766	94F1642	21.54
E SERIES					
● E3FSC	3	3	0.945	14R8566	6.37

(9028)

Q-G® QUICK GROUND MALE RECEPTACLES

RoHS Compliant Available

Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company

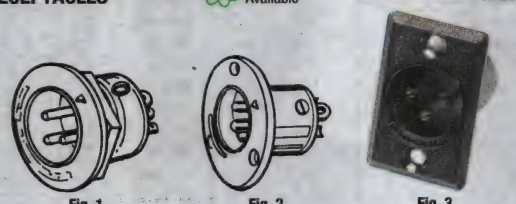


Fig. 1 Fig. 2 Fig. 3

B series can be keyed to ÒDÓ shaped panel hole, or S3519 mounting adapter can be used for non-turning mounting. **C series** flange has three 0.140″ (3.57 mm) diameter holes for #5-40 mounting screws (not supplied). **D series** rectangular flange permits close spacing on crowded panels, has two 0.136″ (3.45mm) diameter countersunk holes for #5-40 flat head mounting screws (not supplied).

Mfg. Part No.	Fig.	Contacts	Mounting Hole Dia. (in.)	Stock No.	Price Each 1-9
B SERIES					
● B3M	1	3	0.812	27F062	13.44
● B4M	1	4	0.812	27F065	22.96

➤ CONTINUED ➤

Q-G® QUICK GROUND MALE RECEPTACLES (CONT.)

C SERIES

Mfg. Part No.	Fig.	Contacts	Mounting Hole Dia. (in.)	Stock No.	Price Each 1-9
C3M	2	3	0.953	27F060	9.20
C4M	2	4	0.953	27F064	9.69
C5M	2	5	0.953	39F2280	36.25
D SERIES					
D3M	3	3	0.766	27F072	6.69
D4M	3	4	0.766	22F1031	7.78
D5M	3	5	0.766	39F2283	13.64

(9027)

TINI Q-G® QUICK GROUND AUDIO CONNECTORS

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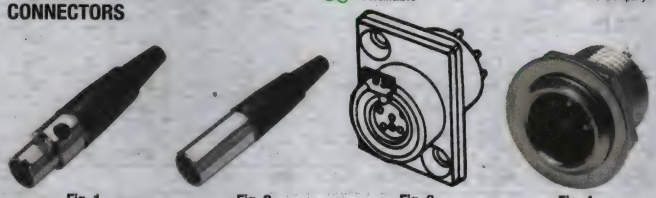

Fig. 1 Fig. 2 Fig. 3 Fig. 4

Mfg. part nos. TA-F are 1.890"L x 0.413" diameter (48.01 x 10.49). **TA-M** are 2.035"L x 0.413" diameter (51.69 x 10.49). **TB-M** are 0.468" (11.89) diameter, front panel mounts 0.422" (10.72) diameter hole. **TY-F** are 0.413" (10.49) diameter, front panel mounts in 0.562" (14.27) diameter hole.

Mfg. Part No.	Fig.	Contacts	Stock No.	Price Each 1-9
STRAIGHT FEMALE CORD PLUGS				
TA3FX	1	3	89K7623	12.26
TA3FLX*	1	3	83K0462	15.54
TA4FX	1	4	89K7626	14.88
TA4FLX*	1	4	84K0729	12.00
TA5FX	1	5	89K7629	13.16
TA5FLX*	1	5	89K7628	22.55
STRAIGHT MALE CORD PLUGS				
TA3MX	2	3	89K7625	12.93
TA3MLX*	2	3	89K7624	13.00
TA4MX	2	4	89K7627	14.10
TA5MX	2	5	89K7630	11.43
TA5MLX	2	5	14R8569	11.34
PANEL-MOUNT FEMALE RECEPTACLES				
TY3F	3	3	38F1229	17.99
TY4F	3	4	38F1230	13.86
PANEL-MOUNT MALE RECEPTACLES				
TB3M	4	3	38F1227	10.51
TB4M	4	4	38F1228	11.29
TB5M	4	5	70B4661	16.93
RIGHT-ANGLE PC/PANEL MOUNT MALE RECEPTACLE				
TRA3M	...	3	96F9603	11.29

*Omits flex relief thus cable up to 0.170" dia. can be used

(9031)

0.25" (6.35) HI-D JAX® ENCLOSED PHONE JACKS

RoHS Compliant Available · Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company · MADE IN USA

Solder Lug

Solder lug terminals for panel/chassis mounting. Unitized molded housing. Threaded metal bushing mount through 0.375" diameter hole on 0.625" centers for panels up to 0.156" thick. Mfg. part nos. with **N prefix** feature molded thermoplastic bushings for insulated mounting. Mfg. part nos. with **M prefix** mate with phone and MIL-standard plugs. *Order mating plugs, listed in table below, separately on page 1009.* PC terminal versions, for panels up to 0.094" thick, are also available; *go online or call.*

Mfg. Part No.	Description	Conductors	Mating Plug	Stock No.	Price Each 1-9
111X	Open Circuit	2	250	89K7643	6.05
N111X	Insulated Bushing	2	250	89K7612	5.56
RN-111PC	Single Open Circuit	2	250	57F3286	2.69
112AX	Single Closed Circuit, Tip Shunt Terminal	2	250	89K7644	2.84
N112AX	Insulated Bushing, Tip Shunt Terminal	2	250	89K7613	7.30
112BX	Double Open Circuit	3	267	89K7645	5.56
RN-112BPC	Double Open Circuit	3	267	57F3288	3.46
N112BX	Insulated Bushing	3	267	89K7614	3.92

CONTINUED

0.25" (6.35) HI-D JAX® ENCLOSED PHONE JACKS (CONT.)

Mfg. Part No.	Description	Conductors	Mating Plug	Stock No.	Price Each 1-9
M112BX	0.25" I.D. Sleeve, Metal Bushing	3	482	10M6113	4.00
MS112BX	0.21" I.D. Sleeve, Metal Bushing	3	480, 484	89K7611	4.49
113BX	Single Closed Circuit	3	267	89K7646	3.91
N113BX	Insulated Bushing, Tip Shunt Terminal	3	267	89K7615	4.50
114BX	Double Closed Circuit	3	267	89K7647	8.21
N114BX	Insulated Bushing, Ring Shunt	3	267	89K7616	4.74

(8952)

MICRO-JAX® SUBMINIATURE PHONE JACK

RoHS Compliant Available · Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company · MADE IN USA

Silver-plated, tempered nickel silver springs. Internally keyed nylon insulation springs and solder lugs to eliminate shorts. Fits 0.190" diameter hole in panels up to 0.093" thick. *Order* **mfg. part nos. 850, 880** *mating plugs separately on page 1009.*

Mfg. Part No.	Stock No.	Price Each 1-9
TR2A	39F578	4.16

(8953)

PC BOARD MINIATURE 0.137" (3.5) JACKS

MADE IN USA · RoHS Compliant Available · Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company

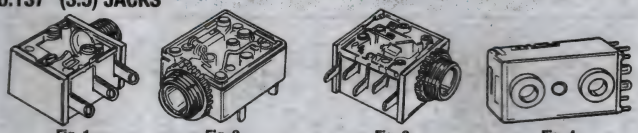

Fig. 1 Fig. 2 Fig. 3 Fig. 4

Mono 2 and stereo 3 conductor jacks for IEC or JIS standard 3.5mm plugs. Mount in 0.062" (1.57) thick PC boards. Vertical jacks are 0.492" (12.5) high max., 0.314" (8.0) centers and mount on 0.334" (8.5) centers. Horizontal jacks are 0.244" (6.2) high max. and mount on 0.480" (12.2) centers. Threaded bushing except **35RAPC4BHN2** non-threaded. **Mfg. part no. 35RAPC7JS** minature 1.37" (3.5) 3-conductor, dual stereo phone jack in a single vertical-mount footprint. Mates with 1.37" (3.5) finger plugs. Board retention pins accommodate PC board 0.050-0.080" (1.27-2.03) thick. Single screw panel mounting hole. Available with EMI/RFI 0.016" (0.41) pre-tinned brass shield. Polymer housing rated UL94V-0. Shunt, tip and ring terminals are 0.016" (0.4) silver-plated brass. Dielectric withstanding voltage: 500VAC. 0.592" (15.04) wide x 1.05" (26.67) high x 0.54" (13.72).

Mfg. Part No.	Fig.	Conductors	Mount	Stock No.	Price Each 1-9
35RAPC2AV	1	2	Vertical	96F9606	1.38
35RAPC4BHN2	...	3	Horizontal	96F9607	1.45
35RAPC4BH3	2	3	Horizontal	96F9608	3.98
35RAPC2BV4	...	3	Vertical	27B9344	2.18
35RAPC4BV4	3	3	Vertical	96F9609	4.38
35RAPC7JS	4	3	Vertical	96F9605	7.09

(9004)

MICRO-D JAX® SUBMINIATURE PHONE JACKS

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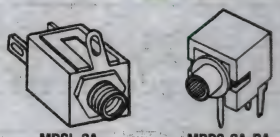

MDSL-2A MDPC-2A-RA

Fully enclosed, shunted 2-conductor jacks 0.313W x 0.344H x 0.500"D. **MDSL-2A** has #10-48 threaded bushing, mounting washer, locknut. Mount 0.315" or 0.350" centers. **MDPC-2A-RA** has right angle PC terminals, 0.345" above board clearance. *Order* **mfg. part no. 850** *mating plug separately on page 1009.*

Mfg. Part No.	Terminals	Stock No.	Price Each 1-9
MDSL-2A	Solder Lug	81F491	3.28
MDPC-2A-RA	Right Angle PCB	81F492	3.63
MDPC-2A	Straight PCB	81F490	3.33

(8940)

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(212564)

AUDIO/VIDEO CONNECTORS

RF PHONO PLUGS AND JACK

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3507 · 3505FX · 3502AAU

Mfg. part no. 3507 2-conductor RF phono plug has nickel-plated brass body and screw-on handle. **3505F** 2-conductor phono jack mounts panels up to 0.172″ (4.37) thick. **3502** plug has a larger cable clamp providing increased strain relief for larger cable. Longer cable clamp for easier plug assembly. Knurled handle provides increased gripping surface for tightening and withdrawal of plug.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 3507	RF Phono Plug	26F718	7.79
● 3505FX	Phono Jack	19M1155	3.38
● 3502AAU	Heavy Duty Phono Plug	83F9080	5.91
● 3502ABAU	Heavy Duty Phono Plug	83F9081	8.06

(8937)

2-CONDUCTOR PHONO JACKS AND PLUGS

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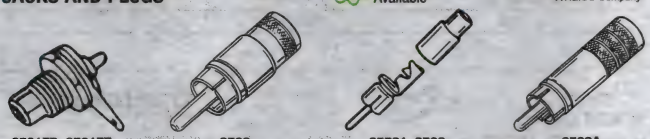

3501FP, 3501FR · 3502 · 35581, 3503 · 3502A

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 330F1X	Phono Plug Connected in Parallel to 2 Phono Jacks; 4″L Gray Shielded Cable	89K7655	18.56
● 3501FPX	Front Mount Chassis Jack	89K7656	2.35
● 3501FRX	Rear Mount Phono Jack	89K7657	2.93
● 3502	1.313″ Long Plug, Shielded Handle/Clamp	39F2159	3.17
● 3502A	1.64″ Long Plug, Shielded Handle/Clamp	96F9615	3.17
● 35581X	1.344″ Long Plug, Red Handle/Clamp	10N6263	2.44
● 3503X	End Cable, Large Heavy-Duty Cable Clamp, Removable Shielded Handle	03M4296	4.44

(8946)

RIGHT-ANGLE PHONO (RCA) PLUGS

MADE IN USA · RoHS Compliant Available · Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company

These plugs feature an easy-to-assemble 3-piece construction: a handle, insulator, and plug assembly. Solid-pin design and large solder terminals make termination fast and easy. The reduced profile makes them perfect for use behind equipment where space is at a premium. Knurl on back of handle provides ergonomic gripping surface to tighten plug. Used in such markets as audio, broadcast studios, audio cable assembly manufacturers, instrumentation and test equipment.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 3502RAAU	Gold-Plated Plug Finger and Nickel-Plated Handle	16C1888	7.59
● 3502RABAU	Gold-Plated Plug Finger and Black Epoxy-Finished Handle	16C1889	8.67

(66573)

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(196562)

LITTEL-JAX® PHONE JACKS

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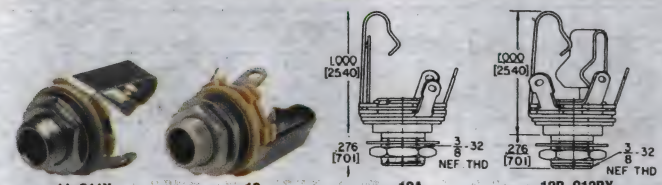


11, C11X · 13 · 12A · 12B, C12BX

Feature notched insulating washers that mechanically interlock springs and solder lugs. "V" bend in tip spring firmly holds mating phone plug, listed in table below; *ordered separately on page 1009*. Mount in single 0.375″ hole in panels up to 0.156″ thick, except **mfg. part no. L-11** in panels up to 0.25″ thick. **C11X** and **C12BX** have locating pin (non-turn device).

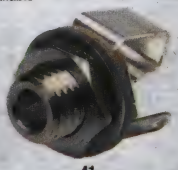
Mfg. Part No.	Con-Ductors	Description	Mating Plug	Stock No.	Price Each 1-9
0.25″ MONO OPEN FRAME JACKS WITH NUT AND WASHER					
● 11	2	Open Circuit	250	39F782	3.02
● 12A	2	Single Closed Circuit, Tip is Shunt	250	39F783	3.06
● 13	2	Single Open, Isolated Make Circuit	250	39F655	7.23
● 13E	2	Isolated Break Circuit	250	39F699	7.91
● L-11	2	Open Circuit, 0.375″L Bushing	250	39F653	4.78
L-12A	2	Tip is Shunt, 0.375″L Bushing	250	39F654	3.71
0.25″ STEREO OPEN FRAME JACKS WITH NUT AND WASHER					
● 12B	3	Double Open Circuit	267	39F665	3.04
● 13B	3	Tip is Shunt	267	39F668	7.20
● 14B	3	Double Closed Circuit	267	39F577	7.42
● L-12B	3	Double Open Circuit, 0.375″L Bushing	267	39F576	3.82
0.206″ OPEN FRAME JACK					
● S-12B	3	0.21″ Inside Dia. Bushing	S267	39F666	6.27
0.25″ MIL-TYPE OPEN FRAME JACKS					
● C11X	2	Mil. No. M641/6-1	440	33M7158	4.49
● C12AX	2	Mil. No. M641/12-1	440	42M9955	5.57
● C12BX	3	Mil. No. M641/6-1, 0.21″ Inside Dia. Bushing	S267	26M8489	6.40

(8950)

TINI-JAX® MINIATURE PHONE JACKS

MADE IN USA · RoHS Compliant Available · Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company

Miniature two-conductor phone jacks are ⅓ the size of "Littel-Jax" jacks, but similar in construction. Mount in 0.25″ diameter hole in panels up to 0.125″ thick. Mate with **mfg. part no. 750** 0.141″ diameter tip plug; *order separately on page 1009*.



41

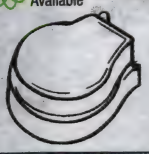
Mfg. Part No.	Stock No.	Price Each 1-9
● 41	39F744	3.02
● 42A	39F745	3.61
● 43A	39F689	5.06

(8951)

SPRING-LOADED PHONE JACK COVERS

MADE IN USA · RoHS Compliant Available · Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company

Seal jack openings when phone plug removed. Protect against dust, moisture. For ⅜-32 threaded bushing phone jacks. Color: **mfg. part no. 515** = black; **512** = bright nickel.



Mfg. Part No.	Stock No.	Price Each 1-9
● 515X	89K7664	19.66
● 512	70B640	21.28

(8943)

LITTEL-PLUG® PHONE PLUGS

MADE IN USA · RoHS Compliant Available · Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company

Fig. 1 Fig. 2 Fig. 3

2- and 3-conductor plugs with, screw or solder terminals. Molded plastic or shielded nickel-plated brass handle. Fit standard 0.25″ (6.35) ID phone jacks. **Mfg. part no. 299** phone plug includes larger cable clamp wings for improved strain relief on large cable. Modified brass, electrotin-plated terminals for easier soldering. *Order mating jacks separately on page 1008.*

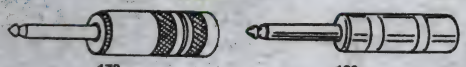
2-CONDUCTOR PLUGS

Mfg. Part No.	Fig.	Mating Jack	Terminals	Stock No.	Price Each 1-9
240*	1	11	Screw	39F760	5.41
250*	1	11	Solder	39F763	6.78
280‡	2	11	Solder	39F764	10.74
3-CONDUCTOR PLUGS					
260*	1	12B	Screw	39F675	18.30
267*	1	12B	Solder	39F771	10.90
290‡	...	12B	Screw	39F766	19.79
297‡	2	12B	Solder	39F767	11.13
299	3	12B	Solder	83F9089	14.86

*Black handle; ‡Shielded handle
(8956)

0.25″ (6.35) COMMERCIAL PHONE PLUGS

MADE IN USA · RoHS Compliant Available · Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company



170 190

2-conductor plug has screw terminals; 3-conductors plug have solder terminals. Fit standard jacks. Shielded nickel-plated brass handle. **Mfg. part no. 188** has a larger cable opening, large cable/clamp and larger solder terminals. *Order* **11 and 12B** *mating jacks separately on page 1008.*

Mfg. Part No.	Terminal	Cable O.D.	Stock No.	Price Each 1-9
170	Screw	0.250″ (6.35)	22F275	11.02
188	Solder	0.450″ (11.43)	83F9090	7.59
190	Solder	0.375″ (9.53)	22F1034	11.02

(8957)

TINI-PLUG® MINIATURE PHONE PLUGS

MADE IN USA · RoHS Compliant Available · Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company

2-conductor 0.141″ (3.58) diameter units have solder terminals. Molded plastic or shielded nickel-plated brass handle. 1.609″ (40.87)L. Cable O.D.: 0.218″ (5.54). Mate with Tini-Jax® jacks; *order jacks separately on page 1008.*

Mfg. Part No.	Handle	Stock No.	Price Each 1-9
750	Black	39F746	8.02
755	Red	39F747	4.83
780	Shielded	39F748	12.71

(8958)

MICRO-PLUG® SUBMINIATURE PHONE PLUGS

MADE IN USA · RoHS Compliant Available · Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company

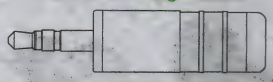
2-conductor units fit cable to 0.125″ (3.18) O.D. 1.106″ (28.09)L x 0.25″ (6.35) O.D., 0.097″ (2.46) diameter sleeve. Screw-on anodized aluminum handle and cable clamp. Mates with **TR-2A** phone jack *ordered separately on page 1007* and **MDSL-2A** phone jack *ordered on page 1007.*

Mfg. Part No.	Handle	Stock No.	Price Each 1-9
850X	Black	22M4132	5.31
880X	Natural	39M6147	5.31

(8959)

3.5mm HEAVY-DUTY STEREO PLUGS

MADE IN USA · RoHS Compliant Available · Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company



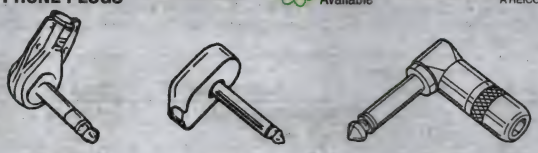
Stereo plugs feature one-piece tip rod and large solder terminal for easy solderability. Heavy-duty cable clamp provides better strain relief for larger cables. Larger design allows for easier plug assembly and more room for solder connections. Large handle with knurled back provides ergonomic gripping surface. Tubular insulator prevents solder joints from contacting handle. Meet Military standards MIL-STD-202F, Method 107G (thermal shock), and Method 201 (vibration).

Mfg. Part No.	Handle	Plug	Stock No.	Price Each 1-9
35HDNN	Nickel	Nickel	83F9085	7.27
35HDNAU	Nickel	Gold	83F9086	8.64
35HDBN	Black	Nickel	83F9087	7.17
35HDBAU	Black	Gold	83F9088	8.42

(35774)

SPACE-SAVING 0.25″ (6.35) PHONE PLUGS

MADE IN USA · RoHS Compliant Available · Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company



228, 238 227 226, 236

2- and 3-conductor 0.25″ (6.35) diameter phone plugs with right-angle or flat handle for applications where conventional plugs would protrude. Solder lug terminals. Available molded black plastic or shielded nickel-plated steel flat handle or screw-on nickel-plated brass knurled right-angle handle. *Order mating jacks separately on page 1008.*

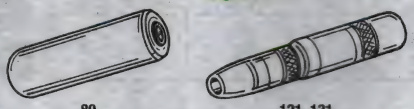
FLAT PLUGS

Mfg. Part No.	Conductors	Mating Jack	Stock No.	Price Each 1-9
227	2	11	22F1042	10.65
228‡	2	11	22F1043	7.07
238X‡	3	12B	03M4293	20.64
S230*	3	S12B2	98F7746	10.86
RIGHT-ANGLE PLUGS, SCREW-ON HANDLE				
226	2	11	93F7717	10.76
236	3	12B	93F7718	13.80

*Plastic handle; ‡Shielded handle
(8960)

EXTENSION-JAX® PHONE JACKS

MADE IN USA · RoHS Compliant Available · Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company



80 121, 131

2- and 3-conductor 0.25″ cable extension phone jacks with black plastic or nickel-plate shielded handles. 0.688″ O.D., 2.156″L except **mfg. part nos. 121** and **131** 0.5″ O.D., 2.5″ L.

Mfg. Part No.	Conductors	Termination	Handle	Mating Plug	Stock No.	Price Each 1-9
80	2	Screw	Black	240	39F670	15.25
120	2	Screw	Shielded	250	39F672	10.89
1230	3	Screw	Shielded	267	39F757	13.12
121	2	Solder	Shielded	280	39F247	24.67
125	2	Screw	Shielded	750	22F248	20.64
131	3	Solder	Shielded	297	39F649	13.37
830	3	Screw	Black	260	22F269	26.83
S-830	3	Screw	Black	480	89F396	30.78
THICK PANEL PHONE JACKS						
These phone jacks mate with standard commercial phone plugs.						
151	2	Solder	...	240, 245, 250, 255, 270, 280	39F651	9.80
152B	3	Solder	...	260, 267, 269, 297	39F652	10.89

(8944)

AUDIO/VIDEO CONNECTORS

IP66-IP68 / NEMA 250 (6P) SEALED POWER JACKS AND PLUGS

MADE IN USA RoHS Compliant Available Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company

Solder Lug Panel
(Shown with JCAP Sealing Cap)

Straight PC

Right-Angle PC

- Rated IP66, IP67, IP68 / NEMA 250 (6P) when mated
- Current rating (carry): 5A
- Available in multiple pin diameters
- Made in U.S.A.

Power Plug

Sealed power jacks and plugs are designed for a variety of applications, including outdoor power supplies where a weather-resistant connection is needs; medical equipment where a waterproof power plug is required and lighting connections where a harsh environment connector is needed to provide a reliable sealed connection.

POWER JACKS

Power jacks feature split center pin shaped to hold mating plug firmly. Right-angle versions offer "kinked" PC terminals for better board retention. Automatic switch over from AC to DC permitted by sleeve shunt spring. Rigid thermoplastic housing and insulators. Copper alloy terminals and bushing with assembled, lubricated O-ring. Hardware supplied. Dielectric withstanding voltage: 500VAC max. To protect jack when not in use, *order* **mfg. part no. JCAP** IP-rated *sealing cap separately below.*

Mfg. Part No.	Center Pin Size [In. (mm)]	Terminal Type	Stock No.	Price Each 1-9
● L712AS	0.10 (2.5)	Straight Solder Lug, Panel	24R2885	6.66
● PCL712AS	0.10 (2.5)	Straight , PC	81R0091	6.37
● L712RAS	0.10 (2.5)	Right-Angle, PC	80R9945	6.77
● L722AS	0.08 (2.0)	Straight Solder Lug, Panel	24R2886	10.64
● PCL722AS	0.08 (2.0)	Straight, PC	81R0092	6.45
● L722RAS	0.08 (2.0)	Right-Angle, PC	80R9946	6.77

SEALING CAP FOR POWER JACKS

Mfg. Part No.	Material	Stock No.	Price Each 1-9
● JCAP	Black Thermoplastic Elastomer	33R2419	1.61

POWER PLUGS

Power plugs feature plated copper alloy hollow center pin available in three diameters. Plated copper alloy locking ring provides security in critical applications. Color-coded plug tip insulator. Sleeve terminal serves as cord clamp. Handle/boot with cable strain relief is made of rigid thermoplastic overmolded with thermoplastic elastomer.

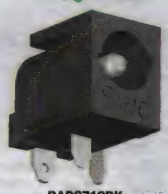
Mfg. Part No.	Center Pin Size [In. (mm)]	Tip Insulator Color	Cable O.D. Range, Nom. (In.)	Stock No.	Price Each 1-9
● 761KS12	0.10 (2.5)	Black	0.125 - 0.150	81R1010	9.02
● 761KS15	0.10 (2.5)	Black	0.150 - 0.175	25R0307	6.99
● 761KS17	0.10 (2.5)	Black	0.175 - 0.200	74R3073	6.82
● S761KS12	0.08 (2.0)	White	0.125 - 0.150	81R0185	6.90
● S761KS15	0.08 (2.0)	White	0.150 - 0.175	25R0311	6.90
● S761KS17	0.08 (2.0)	White	0.175 - 0.200	81R0186	6.90
● 767KS12	0.084 (2.1)	Red	0.125 - 0.150	81R1013	6.90
● 767KS15	0.084 (2.1)	Red	0.150 - 0.175	25R4051	6.90
● 767KS17	0.084 (2.1)	Red	0.175 - 0.200	81R1014	6.89

(190003)

MINIATURE RIGHT-ANGLE POWER JACKS AND PLUGS

RoHS Compliant Available Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company MADE IN USA

- Current rating: 5A
- PC mount terminals: Silver plated copper alloy
- Surface & hybrid mount terminals: Tin plated copper alloy
- Center pin: Nickel plated, copper alloy
- Dielectric withstanding voltage: 250 VAC at 1 minute
- Lifecycle: 5000 min.



RAPC712BK

Miniature right-angle locking power jack and plug system is the perfect solution for PC board-mount applications where a quick-and-secure, space saving board mounting method is required. This system provides additional security by using keyed plugs and slotted jacks to firmly lock the components in place.

POWER JACKS

Mfg. Part No.	Pin Size (in)	Description	Stock No.	Price Each 1-9
● RAPC712BK		Right Angle, PC Mount	03M4244	2.06
● RAPC722BK	0.08	Right Angle, PC Mount	03M4245	2.08
● RASM712BK	0.1	Right Angle, Surface Mount (SMT)	03M4248	2.29
● RASM712X	0.1	Right Angle, Surface Mount (SMT)	65K7795	1.76
● RASM722BK	0.08	Right Angle, Surface Mount (SMT)	03M4249	2.29

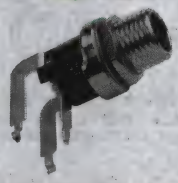
LOCKING PLUGS

● S760BK	0.08	White Tip Insulator	03M4252	4.80
● 760BK	0.1	Black Tip Insulator	03M4301	4.99

(100942)

PC BOARD RIGHT-ANGLE LOCKING POWER JACKS

RoHS Compliant Available Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company MADE IN USA



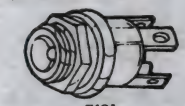
Right-angle locking power jacks for PC board mounting. Three copper alloy pins available in 0.080″ and 0.100″ diameters. Center split pin shaped to hold mating plug firmly. Kinked terminals allow easy, snap-in PC board mounting. Sleeve shunt spring permits automatic switchover from AC to DC. Threaded bushing allows use of both standard and locking power plugs. Choice of standard long bushing (0.219″) or longer bushing (0.319″) to accommodate thicker panel mount applications and plugs with 0.475″ long fingers. Molded plastic housing. Copper alloy mounting bushing, hex nut, spring, and terminals. Contact rating: 5A, 12VDC resistive. Ideal for applications where a locking feature is needed, such as portable computers, cellular phones, DC-powered hand-held instrumentation, and battery chargers.

Mfg. Part No.	Pin Diameter	Bushing Length	Stock No.	Price Each 1-9
● 712RA	0.100″	0.219″	95B7224	4.09
● 722RA	0.080″	0.219″	95B7225	4.21
● L712RA	0.100″	0.319″	95B6213	5.60
● L722RA	0.080″	0.319″	95B6214	5.51

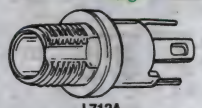
(48479)

MINIATURE POWER JACKS AND PLUGS

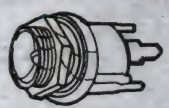
MADE IN USA RoHS Compliant Available Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company



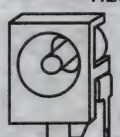
712A



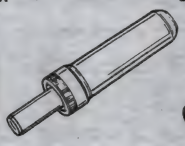
L712A
L722A



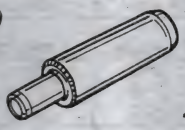
PC722A



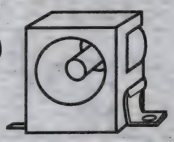
RAPC712



760K, 761K
S760K, S761K



760,765



RASM722

Mating 2-conductor power jacks and plugs suit AC/DC connections. **Mfg. part nos. 712A, L712A, 722A, L722A** mount 0.312″ diameter hole. **PC712A, PC722A, RAPC712, RAPC722** mount PC boards to 0.062″ thick. **740** phone plug with copper alloy contact, straight configuration, and screw termination. Molded right-angle cable assemblies and right-angle power jack for PC mounting available; *go online or call.*

MINIATURE POWER JACKS

Mfg. Part No.	Description	Bushing Lgth. (in.)	Pin Dia. (in.)	Mating Plug	Stock No.	Price Each 1-9
● 712A	Solder Lugs	0.219	0.1	760K, 760, 765	37F2993	3.67
● PC712A	PC Terminals	0.219	0.1	760K, 760, 765	94F345	3.73
● RAPC712X	Rt.-Angle PC Terminals	...	0.1	760K, 760, 765	65K7785	1.63
● L712A	Solder Lugs	0.319	0.01	761K	96F9613	6.47
● 722A	Solder Lugs	0.219	0.08	S760K, S-760, S-765	37F2994	3.67
● PC722A	PC Terminals	0.219	0.08	S760K, S-760, S-765	89F258	3.56
● RAPC722X	Rt.-Angle PC Terminals	...	0.08	S760K, S-760, S-765	65K7786	1.65
● L722A	Solder Lugs	0.319	0.008	S761K	96F9614	6.68
● RASM722X	Rt.-Angle Surface Mount	...	0.050	860	65K7797	1.76
● RAPC732X	PC Terminals	...	0.080	S-760	65K7787	1.74

MINIATURE POWER PLUGS

Mfg. Part No.	Handle	Pin Center Hole Dia.	Pin Center Hole Depth	Mating Jack	Stock No.	Price Each 1-9
● 760	Black	0.10″	0.328″	712A, PC712A, RAPC712	37F2995	4.93
● 765	Red	0.10″	0.328″		37F2996	3.86
● 760K*	Black	0.10″	0.325″	712A, PC712A	96F9610	7.09
● S-760	Black	0.08″	0.328″	722A, PC722A, RAPC722	37F2997	4.93
● S-765	Red	0.08″	0.328″		37F2998	5.35
● S760K*	Black	0.08″	0.325″	722A, PC722A	96F9611	5.68
● 761K*	Black	0.10″	0.425″	L712A	96F9612	7.18
● S761K*	Black	0.08″	0.425″	L722A	96F9616	7.18

***K suffix** in **mfg. part no.** = Locking

HARDWARE

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● P2442	Phenolic Flat Washer	94F8932	0.19
● 2C1072	Spring-Loaded Jack Cover for 712A and 722A	67P3201	8.89

(8942)

91 SERIES MICROPHONE CONNECTORS

COOPER Interconnect

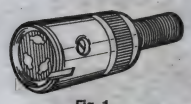


Fig. 1

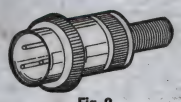


Fig. 2

Fig. 3

91 series 3-, 4- and 6-contact connectors, designed primarily for audio equipment, find extensive use with all types of portable equipment. Cord protector spring ID on 3 contact units = 0.281″ (7.14); on 4 and 6 contact units = 0.385″ (9.78). Connectors feature positive screw-type coupling ring connection and squeeze-type clamp cable grips. Shells are chrome-plated brass, with molded black phenolic dielectric. Voltage rating: 600Vrms. Current ratings: female contacts, 3A; male contacts, 5A. Voltage breakdown: 2000V.

Mfg. Part No.	Fig.	Contacts	Description	Mates With	Stock No.	Price Each 1-24	Price Each 25-49
91MC3M	2	3	Male Plug	91-MC3F, 91-PC3F	39F013	29.30	26.92
91PC3F	3	3	Female Receptacle	91-MC3M	39F014	26.80	24.63
91-MC4F	1	4	Female Jack	91-MC4M	39F015	48.42	44.51
91MC4F1	2	4	Female Plug	91-MC4M1, 91-PC4M	39F1290	50.51	46.43
91MC4M	2	4	Male Plug	91-MC4F, 91-PC4F	39F016	29.34	26.95
91-PC4F	3	4	Female Receptacle	91-MC4M	39F017	25.73	23.66
91-MC6M	2	6	Male Plug	91-PC6F	38F1543	39.94	36.71
91-PC6F	3	6	Female Receptacle	91-MC6M	38F1544	25.96	23.87

(9021)

80 SERIES MICROPHONE CONNECTORS

COOPER Interconnect

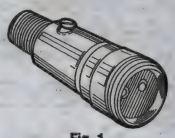


Fig. 1

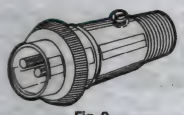


Fig. 2

Fig. 3

80 series single and double contact connectors feature chrome-plated, machine brass shells with threaded coupling and black phenolic dielectric. For shielded cable and one and two conductor cable. Mounting hole of 0.625″ (15.88). Maximum chassis thickness for lock nut type receptacle: 1.344″ (34.14). Cable diameter: up to 0.313″ (7.95). Voltage and current ratings, single contact: male 1250V, 5A; female 1000V, 3A. Double contact: male 600V, 3A; female 600V, 3A. Voltage breakdown: single contact male 4000V, female 3000V. Double contact male 2000V, female 2000V.

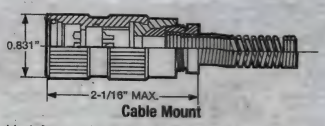
Mfg. Part No.	Fig.	Contacts	Description	Mates With	Stock No.	Price Each 1-24	Price Each 25-49
80MC2F	1	2	Female Jack	80-MC2M	39F009	40.20	36.58
80MC2F1	2	2	Female Plug	80-PC2M, 80-MC2M1	39F1284	32.47	29.55
80MC2M	2	2	Male Plug	80-MC2F, 80-PC-2F	76R0775	25.57	23.71
80PC2F	3	2	Female Receptacle	80-MC2M	39F011	20.10	18.28

(9022)

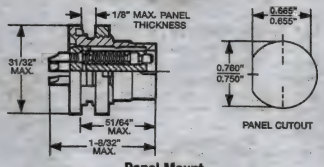
GC SERIES AND U SERIES AUDIO CONNECTORS

RoHS Compliant Available

COOPER Interconnect



Cable Mount



Panel Mount

Ideal for use in communications equipment where the highest reliability is required under the most severe environmental conditions. 5- and 6-contact versions are lightweight and designed to meet MIL-C-55116 specifications. 10-contact versions meet the latest MIL-C-10544 specifications. All feature easy mating using a twist-lock motion. Nonrigid, spring-loaded contacts provide a positive electrical connection with minimum voltage drop. Cable mount version available with solder cup or crimp contacts.

CABLE MOUNT

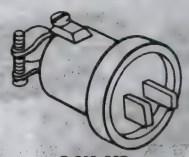
Mfg. Part No.	Connector Style	Contacts	Mating Connector	Stock No.	Price Each 1-24	Price Each 25-49
● U-229/UG1	Male	5 Solder Cup	U-183/UG1	95B3132	24.98	23.15
● GC328	Male	6 Solder Cup	GC329's	95B2077	51.17	47.42
● GC329	Female	6 Crimp	GC283's	90B9937	21.94	20.33
● GC329G2	Female	6 Solder Cup	GC283's	50B8947	34.75	32.20
● U-77/U	Male	10 Solder Cup	GC790/U	95B3133	81.13	68.02
PANEL MOUNT						
● U-183/UG1	Female	5 Solder Cup	U/229/UG1	95B3131	101.61	94.15
● GC283	Male	6 Solder Cup	GC329's	90B2276	29.90	27.70

(48581)

AUDIO CABLE CONNECTORS

CINCH

- Nickel-Plated Brass
- Ideal For Microphone Cable
- Molded Phenolic Insulation


P-202-CCT

S-202-B

Phosphor bronze "knife switch" type socket contacts engage both sides of flat brass plug contacts.

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
P-202-CCT	Plug with Cable Clamps and Knurled Nut	29F507	8.58	8.29
S-202-B	Socket with Threaded Mounting Base	29F512	25.97	22.56

(8677)

VIDEO PATCH CONNECTORS

RoHS Compliant Available

EMERSON. Network Power

Trompeter Connectivity Solutions

WECo Patch Jack

RCA Patch Jack

High-frequency, dual coaxial normal-through video patch jacks available unterminated and terminated. Offers extended bandwidth of DC to 2.25GHz and up with a typical return loss of less than -31db through 1.8GHz, and -29db through 2.25GHz and higher. Low-profile, electroless nickel-plated zinc alloy diecast housing with Teflon® dielectric. Electro-deposited gold-plated beryllium copper actuator and center socket contacts. Features a self-wiping normalizing switch. Voltage rating: 400Vrms.

PATCH JACKS

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
CBJR12	Mini-WECo Patch Jack, 75Ω, Right Angle, PCB	94B8904	53.34	51.50
J3	Standard WECo Patch Jack, 50Ω BNC Interface	99B1817	17.47	16.87
● J3W	Standard WECo Patch Jack, 75Ω BNC Interface	90B6679	18.26	17.63
● J72	Standard Twinax Patch Jack, 3-lug 75Ω TRB Interface	48F2783	36.44	35.18
J13-50	Standard RCA Patch Jack, Self-Terminating, 50Ω BNC Interface	06C2951	115.23	111.26

(49297)

HDMI CONNECTORS & CABLE ASSEMBLIES

RoHS Compliant Available

TE connectivity

Authorized Distributor

Flag Receptacle

Receptacle With Flange

HDMI Cable Assembly

Tyco Electronics' connector incorporating High-Definition Multimedia Interface (HDMI™) technology is an interface for consumer electronics products such as digital television, set-top boxes and DVD players. HDMI's 19 positions and 5 Gbps of bandwidth supports standard, enhanced, or high-definition video, plus multi-channel audio on a single cable. HDMI connectors and cable assemblies replace existing audio and digital cabling in one assembly. Features a friction lock design that provides secure electrical contact and smooth cable insertion/extraction.

PCB MOUNT HDMI CONNECTORS

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● 2007435-1	Flag Orientation Through Hole HMDI Type A	72R3759	7.08
● 1746679-1	Through Hole HMDI Type A- With Flange	80P3368	2.57
● 2013978-2	Surface Mount HMDI Type C - No Flange	25T0631	2.35

CABLE ASSEMBLIES

Mfg. Part No.	Description	Cable Length (m)	Stock No.	Price Each 1-9
● 1770019-1	HDMI Cable Assembly	2	72R3753	24.11

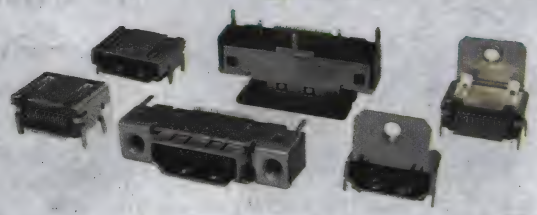
(163818)

DIGITAL VIDEO

HDMI CONNECTORS

RoHS Compliant Available

FCI



Specifications
- Housing: Copper Alloy
- Shell: Copper Alloy
- Contacts: Gold plated Copper Alloy
- Insulation Resistance: Unmated > 100 Mohm; Mated > 10Mohm
- Current Rating: 0.5 A minimum
- Contact Resistance: 30 mohm maximum
- Voltage Rating: 40 VAC maximum
- Durability: 10,000 cycles
- Temperature Range: -55°C to +85°C

Features:
- Choice of partial SMT/PIP or full SMT mounting style
- Metal shell for better EMI Shielding protection, especially for the straight version
- HDMI 1.3a compliance
- Low impedance mismatch
- Straight version features additional grounding pins for enhanced EMI performance
- Backward compatible with DVI

HDMI (High Definition Multimedia Interface) is the ext generation interface replacing the existing DVI connector. It is commonly seen in consumer electronics products, such as digital television, DVD players and set top boxes. HDMI is backwards compatible with DVI and is much smaller and more user-friendly. The connector system supports the transmission of uncompressed video and audio along a single cable at 5Gbs. The right angle version is available with full surface mount (SMT) soler tails and pegs or SMT solder tails and through hole pegs, with or without flange and plating contact options. In addition a straight solder version is available with enhanced EMI shielding performance.

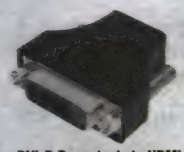
Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
● 10029449-001RLF	Right Angle SMT w/Thru Hole Shell Peg - No Flange	95M0555	1.38	1.22
● 10029449-002RLF	Right Angle SMT w/Thru Hole Shell Peg - With Flange	95M0557	1.38	1.21

(139081)

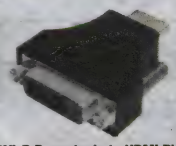
DVI-D TO HDMI ADAPTERS

RoHS Compliant Available

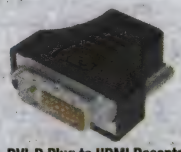
L-com Global Connectivity



DVI-D Receptacle to HDMI Receptacle

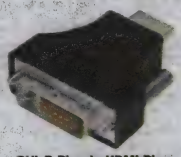


DVI-D Receptacle to HDMI Plug



DVI-D Plug to HDMI Receptacle

- Used to convert DisplayPort to DVI or HDMI interfaces and DVI to HDMI interfaces
- Fully molded connectors for a durable and professional appearance
- DVI to HDMI interface allows backwards compatibility
- Gold plated contact pins to minimize signal loss
- Handy devices for mixed interface environments



DVI-D Plug to HDMI Plug

DVI is the latest digital video interconnect standard established by the DDWG (Digital Display Working Group). This fully molded adapter provides transition from a DVI to HDMI interfaces. Compact in size, this adapter is very useful in dealing with difficult interconnection problems

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
● DVIHDFF	DVI-I Receptacle to HDMI Receptacle	89M9455	11.45	10.35
● DVIHDFM	DVI-I Receptacle to HDMI Plug	89M9456	11.30	10.21
● DVIHDMF	DVI-D Plug to HDMI Receptacle	89M9457	11.69	10.55
● DVIHDMM	DVI-D Plug to HDMI Plug	89M9458	11.45	10.35

(147934)

DISPLAY PORT

RoHS Compliant Available

molex

Next generation HDMI (High Definition Multimedia Interface™) headers provide higher density, greater speed. Fully backward compatible with SLT, DVI. Includes 19-pin wire-to-board surface mount connectors, 0.50mm (.039") pitch/spacing. Orientation: right angle. Gold-plated copper contacts.

Mfg. Part No.	Spacing (mm)	Stock No.	Price Each 1-4
● 47272-0001	0.5	43M0008	5.92

(93045)

MICROCROSS™ DIGITAL VISUAL INTERFACE (DVI) CONNECTOR SYSTEM

RoHS Compliant Available

molex

Microcross™ DVI I/O connectors from Molex offer the standard digital interface for connecting a host device and display device to support high-resolution digital and/or analog video functions. Crossing ground blade design and LFH™ (low force helix) shrouded contacts support over 1.65Gbps per differential pair (for 9.9Gbps over a dual link implementation) and 2.5GHz support for the analog interface. By providing a single high-performance interface, board I/O space is saved and lower system costs are achieved. The interface provides added benefits of a high-cycle life interface for mobile applications and the improved EMI performance needed for high-speed links.

RECEPTACLE HEADERS

Feature glass-filled thermosplastic housing, rated UL94V-0. Copper alloy contacts with gold flash plating. Voltage: 40V. Current: 1.5A. Operating temperature: -20° to +85°C.

Mfg. Part No.	Description	Contact Plating	Stock No.	Price Each 1-9
● 74320-1004	Right Angle Digital/Analog	Gold	59H5473	3.51
● 74320-9010	Right Angle Digital/Analog	30µ" Gold	25M5262	4.96
● 74320-4004	Right Angle Digital	Gold	72K3694	3.78
● 74320-3004	Vertical Digital/Analog	Gold	18C2868	4.31
● 74320-3000	Vertical Digital/Analog	30µ" Gold	22H9965	4.54

ADAPTERS

Adapt to existing systems using VGA, DFP, and P and D video I/O interfaces. Compact size. Voltage: 40V. Current: 1.5A. Operating temperature: -20° to +85°C.

● 88741-8700	DVI Analog Plug-to-VGA Receptacle Adapter	59J1964	9.66

CABLE ASSEMBLIES

Supports up to 1.65Gbps bandwidth per differential pair, fully shielded against RFI/EMI. Provides 4.95Gbps over a single link and 9.96Gbps performance over a dual-link implementation. Voltage: 40V. Current: 1.5A. Operating temperature: -20° to +85°C.

● 88741-8011	DVI 3m Single Link Digital-to-Digital/White	59J1955	65.37

PANEL MOUNT HEX SCREWS

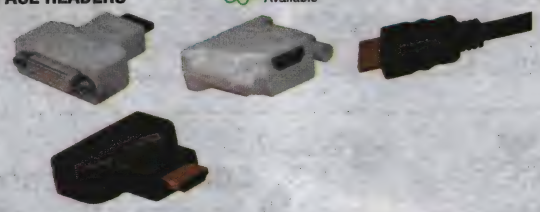
Mfg. Part No.	Description	Stock No.	Price Each 1-99
● 71781-0001	3/16 Hexagon #4-40 Thread Jackpost	59H4438	0.38

(66483)

HDMI MULTIMEDIA INTERFACE HEADERS

RoHS Compliant Available

molex



High Definition Multimedia Interface™ (HDMI™) headers provide an uncompressed digital link between consumer electronics equipment and audio/video monitors. Small, user-friendly interconnect carries up to 5 Gbps of combined video and audio in a single cable. Includes 19-pin wire-to-board surface mount connectors with panel-mounting flange. 0.50mm (.039") pitch/spacing. Orientation: right angle. Current capacity: 0.5A max. Voltage: 40V max. **500524** has gold-plated copper contacts, **47151** has gold-plated brass contacts.

Mfg. Part No.	Spacing (mm)	Stock No.	Price Each 1-4
● 47151-1102	1.0	04R7184	2.88

CABLE ASSEMBLY

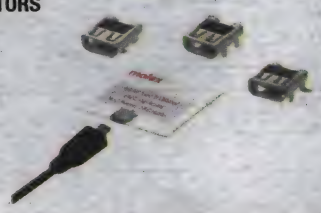
Mfg. Part No.	Descriotion	Length (m)	Stock No.	Price Each 1-4
● 88768-9810	Male HDMI connector to Male HDMI port connector	2	57R2986	11.71

(88573)

MICRO HDMI (HIGH DEFINITION MULTIMEDIA INTERFACE) CONNECTORS

RoHS Compliant Available

molex



Molex's HDMI Micro connector is a 19-pin, 0.40mm (.016") pitch interconnect, in a 6.50mm (.256") by 2.90mm (.114") stainless steel shell. The connector offers all the advantages of the HDMI 1.4 specification and is half the size of the current Mini connector. The miniature footprint and low-profile height offer significant space savings. Molex's HDMI

CONTINUED

MICRO HDMI (HIGH DEFINITION MULTIMEDIA INTERFACE) CONNECTORS (CONT.)

Micro connectors are the industries only I/O solution available to enable surpassed high-definition (HD) consumer demand. The HDMI Micro connector delivers equivalent mechanical strength and electrical characteristics of its larger Mini connector predecessor. Micro HDMI cable assemblies feature a compact overmold at half the size of the HDMI overmold.

MICRO HDMI TYPE D CONNECTORS

Mfg. Part No.	No. of Contacts	Description	Stock No.	Price Each 1-9
46765-0001	19	SMT	74R1081	2.77
46765-1001	19	SMT with Through Hole Shell Tabs	52R4503	2.84
46765-2001	19	Hybrid SMT with Vertical and Horizontal Shell Tabs	52R4502	2.87

HDMI TYPE D TO TYPE A CABLE ASSEMBLIES, CAT 2, AWG 34

Mfg. Part No.	Length (m)	Stock No.	Price Each 1-4	Price Each 5-9
68786-0001	1.0	55R0899	14.10	13.67
68786-0002	1.5	52R3164	13.32	12.10
68786-0003	2.0	84R4631	18.03	17.44

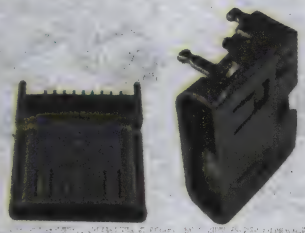
(194911)

MINI HDMI CONNECTORS

RoHS Compliant Available

multicomp

Specifications
- Current rating: 0.5 A
- Insulation resistance: 100 Mohm min unmated; 10Mohm mated
- Dielectric withstanding voltage: between adjacent terminals: 500 VAC unmated; 300VAC mated
- Operating temperature: -25°C to 85°C



MINI HDMI PLUGS - SOLDER TERMINATION

Mfg. Part No.	Description	Stock No.	Price Each 1-99
60S019P-301N-B	Type C with extended PCB	06R5629	1.92
60S019P-301N-B1	Type C	06R5630	1.66
60S019P-301N-B2	Type C Male to Type A Female PCB	06R5631	1.91
MINI HDMI RECEPTACLES - RIGHT ANGLE PCB MOUNT			
60U019S-340N-B1	Notched Through Hole Shell Termination	06R5632	1.67
60U019S-341N-B1	Straight Through Hole Shell Termination	06R5633	1.67
60U019S-342N-B1	SMT Shell Termination	06R5634	1.80

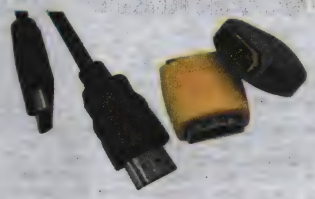
(147264)

HDMI CONNECTORS AND CABLE ASSEMBLIES

RoHS Compliant Available

multicomp

Specifications
- Current Rating: 0.5 A
- Insulation Resistance: 100 MΩ/m
- Voltage Rating: 40 VAC
- Operating Temperature: -25°C to 85°C



PCB MOUNT HDMI-C CONNECTORS

Mfg. Part No.	Description	Stock No.	Price Each 1-99
MC34937	Through Hole R/A with flange	74M7338	1.73
51V019S-33WN-BD	SMT Vertical with flange	74M7342	2.15
PCB MOUNT HDMI-D CONNECTORS			
65U019S-340N-B-FEC	SMT Right Angle	85R5853	2.37
CABLE MOUNT HDMI-D CONNECTORS			
65S019P-321N-B	Solder Type	85R6068	3.77
ADAPTERS			
1901117	HDMI Male to DVI Female	74M6205	7.47
1901116	HDMI Female to DVI Male	74M6204	7.37
1901119	HDMI Female to HDMI Female	74M6207	7.30

HDMI CABLE ASSEMBLIES

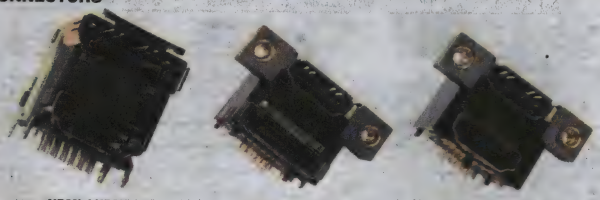
Mfg. Part No.	Length (m)	Stock No.	Price Each 1-9
MC34945	2	74M6165	5.54
MC34947	3	74M6166	19.65
18-94192670	10	74M6167	60.78

(116637)

STACKED HDMI WITH HDMI / E-SATA / DISPLAYPORT CONNECTORS

RoHS Compliant Available

multicomp



HDMI / HDMI — HDMI / E-SATA — DISPLAYPORT / HDMI

Specifications
- Current rating: HDMI: 0.5 A max;Displayport: : 0.5 A max
- Contacts: Gold plated copper alloys
- Operating temperature: -25°C to 85°C

HDMI / HDMI RECEPTACLES

Mfg. Part No.	Description	Stock No.	Price Each 1-99
MCH6BHS	HDMI over HDMI with #4-40 mounting flange	72T0116	6.09
HDMI / E-SATA RECEPTACLES			
MCH6BES	HDMI over E-SATA with #4-40 mounting flange	72T0115	3.66
DISPLAYPORT / HDMI RECEPTACLES			
MCH6BDSB2AN	DisplayPort over HDMI	72T0114	5.49

(202070)

50-OHM OSMP CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Gold-plated beryllium copper contacts
- Temp. range: -65°C to +165°C

STRAIGHT JACK — Fig. 1 — Fig. 2

Mfg. Part No.	Fig.	RG/U	Coaxial Termination	Connector Mounting	Stock No.	Price Each 1-24
1056527-1	1	RG405	Solder	Cable	96M0593	22.40
RIGHT ANGLE JACK						
1056554-1	2	RG405	Solder	Cable	96M0594	32.69

(114899)

50-OHM SMP CONNECTORS

RoHS Compliant Available

Amphenol® RF

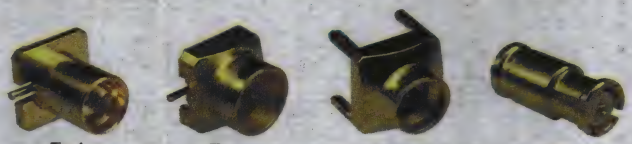


Fig. 1 — Fig. 2 — Fig. 3 — Fig. 4

Fig. 5 — Fig. 6 — Fig. 7

Features:
- Smaller package size
- Higher frequency range
- Compensate for radial and axial misalignment

Specifications:
- Impedance: 50Ω
- Frequency range: DC - 40GHz
- VSWR: <1.50 (0-20GHz)

Designed for use in aerospace, board-to-board interconnect, broadband, instrumentation, Mil/Aero, optical nodes and routers, phased array antennas, and telecommunications. Provide microwave performance through 40GHz and offer a push-on high performance interconnect system. Body plating: gold. Contact finish: gold. Insulator material: PTFE.

STRAIGHT PC BOARD PLUGS

Mfg. Part No.	Fig.	Termination	Features	Stock No.	Price Each 1-9
SMP-MSLD-PCR	1	Rear Mount	Limited Detent	73K9434	12.46
SMP-MSLD-PCS	2	Surface Mount	Limited Detent	80K6927	9.72
SMP-MSSB-PCR	1	Rear Mount	Smooth Bore	73K9436	15.28
SMP-MSSB-PCS	2	Surface Mount	Smooth Bore	80K6928	9.45

➤CONTINUED➤

50-OHM SMP CONNECTORS (CONT.)

Mfg. Part No.	Fig.	Termination	Features	Stock No.	Price Each 1-9
● SMP-MSSB-PCT	3	Through Hole	Smooth Bore	73K9438	14.05
● SMP-MSSB-PCT-1	3	Through Hole	Smooth Bore	73K9439	17.41
STRAIGHT PLUGS					
● SMP-FS-C07	4	Solder	RG405	73K9425	18.66
RIGHT-ANGLE PLUGS					
● SMP-FR-C06	5	Solder	...	73K9424	26.11
● SMP-FR-C07	5	Solder	RG405	63K2481	12.95

IN-SERIES JACK-TO-JACK ADAPTERS

Mfg. Part No.	Fig.	Body Style	Length (mm)	Stock No.	Price Each 1-9	10-24
● SMP-FSBA-645	6	Straight Adapter	6.45	73K9431	16.72	15.38
● SMP-FSBA-990	7	Straight Adapter	9.9	73K9432	17.81	16.10

(87539)

50- AND 75-OHM ZDC SERIES BNC CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- DC - 4GHz frequency range
- Durability: 50 cycles minimum
- Gold-plated phosphor bronze contacts (jacks)
- Gold-plated brass contacts (plugs)
- Operating temperature range: -55°C to +85°C

The connector interfaces are compatible with the requirements of MIL-C-39012 and MIL STD348A, and are therefore intermateable with products manufactured to these specifications. The crimp connectors utilize standard hexagonal crimp tools and die-sets.

RIGHT ANGLE BULKHEAD JACK

Mfg. Part No.	Impedance (Ohms)	RG/U	Connector Mounting	Coaxial Termination	Stock No.	Price Each 1-49	50-99
● 5-1634556-0	50	...	PCB	Solder	78M7243	3.18	2.81
RIGHT ANGLE JACK							
● 1-1634613-0	50	...	PCB	Solder	89K7480	2.86	2.32
● 1-1337542-0	50	...	PCB	Solder	78M7204	2.93	2.45
● 1-1634612-0	50	...	PCB	Solder	78M7210	2.37	2.12
● 1-1337543-0	50	...	PCB	Solder	63K9785	2.15	1.75
● 1-1337494-0	50	...	PCB	Solder	78M7202	3.78	3.17
● 5-1634513-1	50	...	PCB	Solder	60M9860	3.78	3.14
● 1-1478031-0	75	...	PCB	Solder	78M7205	2.86	2.42
● 1-1634622-0	75	...	PCB	Solder	78M7211	2.52	2.11
● 1-1634508-0	75	...	PCB	Solder	78M7209	3.59	2.88
STRAIGHT BULKHEAD JACK							
● 5-1634523-1	50	...	Cable	Crimp	87K0402	1.84	1.18
● 5-1634504-1	50	...	Cable	Crimp	78M7224	4.48	3.75
● 5-1634504-2	75	...	Cable	Solder	78M7225	4.08	3.48
STRAIGHT JACK							
● 5-1634511-2	50	RG58, Essex 621-715	Cable	Crimp	78M7228	2.48	2.10
● 1-1337541-0	50	...	PCB	Solder	78M7203	2.09	1.78
● 5-1634503-1	50	...	PCB	Solder	78M7222	1.26	1.19
● 5-1634506-1	50	...	PCB	Solder	78M7226	1.53	1.44
● 1-1634629-0	75	...	PCB	Solder	78M7213	2.39	2.03
● 5-1634503-3	75	...	PCB	Solder	78M7223	1.87	1.59
● 5-1634506-2	75	...	PCB	Solder	78M7227	1.81	1.60
STRAIGHT PLUG							
● 5-1634500-2	50	RG58	Cable	Crimp	78M7218	1.54	1.37
● 5-1634500-3	50	RG58, Essex 621-715	Cable	Crimp	78M7219	2.05	1.75
● 5-1634500-1	50	RG174	Cable	Crimp	78M7217	2.90	2.50
● 5-1634500-0	50	RG174	Cable	Crimp	78M7216	2.36	2.07
● 5-1634502-2	75	RG59	Cable	Crimp	78M7220	1.79	1.57

➤ CONTINUED ➤

50- AND 75-OHM ZDC SERIES BNC CONNECTORS (CONT.)

RIGHT ANGLE ADAPTER

Mfg. Part No.	Impedance (Ohms)	Convert From	Convert To	Stock No.	Price Each 1-49	50-99
● 5-1634526-1	50	BNC Plug	BNC Jack	78M7235	4.83	4.12
STRAIGHT BULKHEAD ADAPTER						
● 5-1634530-1	50	BNC Jack	BNC Jack	78M7236	2.53	2.23
STRAIGHT ADAPTER						
● 5-1634534-1	50	BNC Jack	BNC Jack	78M7238	1.59	1.40
TEE ADAPTER						
● 5-1634535-1	50	BNC Jack	BNC Jack / Jack	78M7239	5.53	5.30
● 5-1634532-1	50	BNC Plug	BNC Jack / Jack	78M7237	2.81	2.28

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 1-1634816-0	Hexagonal Jam Nut	78M7214	0.65
● 1-1634817-0	Lockwasher	78M7215	0.20

(106862)

AMP 50-OHM BNC PLUGS

RoHS Compliant Available

TE connectivity

Authorized Distributor

1-221265 5225974-5 5414265-3

- Commerical Grade
- Gold/Nickel Plating

SOLDER CLAMP FIELD SERVICEABLE PLUGS— MEETS MIL-C-39012, CATEGORY A SPECS

Mfg. Part No.	RG/U	Stock No.	Price Each 1-9	10-49
● 1-221265-1	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9268, 88241, Hi-Temp. 62A, Times PL-62, Berk-Tek BTDC -59, -62, 302, 71, 71A, 71B	36K3739	31.52	28.46
CRIMP PLUGS				
● 5225974-5	RG59, RG59A, RG59B, RG62, RG62A, RG62B	16M3998	39.18	35.37
● 6-5227079-7	RG141	19R5137	4.20	3.61
TWIST-ON PLUGS Used with solid conductor cable. Not for applications where cable frequently moves or flexes.				
● 5414265-3	58, 58B, 59, 59A, 59B	42K7183	27.80	25.48

(8228)

AMP 50-OHM BNC PLUGS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- MIL-Style is built with teflon dielectric material
- Commerical-Grade connectors have polymethylpetene or polypropylene dielectric material

Bayonet-locking coupling provides highly reliable, quick connect/disconnect coaxial connections and low VSWR. Fully intermateable with comparable BNC UG/U connectors. Crimp versions are MIL-C-39012 Category B Type, many dual crimp versions meet or exceed all requirements in specifications MIL-C-39012, Class II, Category B. *Order hand tools, listed in table below, or order separately online or call.*

STRAIGHT

Mfg. Part No.	RG/U	Description	Crimp Type	Stock No.	Price Each 1-9
● 1-5221128-0	RG58, RG58A, RG58B, RG58C	Commercial-Grade	Hex	42K8640	6.75
● 5221128-1	RG58, RG58A, RG58B, RG58C	Commercial-Grade	Hex	42K8680	4.67
● 1-5221128-1	RG59, RG59A, RG59B, RG62, RG62A, RG62B	Commercial-Grade	Hex	42K8641	5.49
● 2-5221128-1	RG174, RG188, RG316	Commercial-Grade	Hex	42K8663	6.23
● 5221128-2	RG58B, RG59, RG59A, RG59B, RG62, RG62A, RG62B	Commercial-Grade	Hex	16M3209	3.02
● 2-5221128-3	RG179, RG187	Commercial-Grade	Hex	42K8664	4.69
● 2-5221128-7	RG141, Belden 9907, 89907	Commercial-Grade	Hex	16M2837	5.43
● 1-5227079-1	RG59, RG59A, RG59B, RG62, RG62A, RG62B	Commercial-Grade	Dual	16M2669	2.14
● 5227079-5	RG58, RG58A, RG58B, RG58C, RG141	Commercial-Grade	Dual	42K8692	4.10
● 1-5227079-6	RG174, RG188	Commercial-Grade	Dual	42K8643	3.19
● 5227079-7	RG59, RG59A, RG59B, RG62, RG62A, RG62B	Commercial-Grade	Dual	42K8694	5.37

➤ CONTINUED ➤

AMP 50-OHM BNC PLUGS (CONT.)

Mfg. Part No.	RG/U	Description	Crimp Type	Stock No.	Price Each 1-9
6-5227079-8	Belden 89907	Commercial-Grade	Dual	02M5375	18.48
5227079-9	RG58, RG58A, RG58B, RG58C, RG141	Commercial-Grade	Dual	16M3239	3.31
2-5329446-1	RG161, RG179, RG187	MIL Style	Single	16M2842	15.72
2-5329082-1	RG58, RG58A, RG58B, RG58C	MIL Style	Single	16M2839	24.61
2-5329083-1	RG59, RG59A, RG59B, RG62, RG62A, RG62B, RG124, RG140, RG210	MIL Style	Single	16M2840	19.56
2-5329444-1	RG58, RG58A, RG58B, RG58C	MIL Style	Single	42K6819	24.38
2-5329444-2	RG55, RG55A, RG55B, RG223	MIL Style	Single	16M2841	19.09
2-5329445-1	RG59, RG59A, RG59B, RG62, RG62A, RG62B, RG124, RG140, RG210	MIL Style	Single	42K6820	21.28
2-5330058-1	RG174, RG188	MIL Style	Single	16M2844	21.50
2-5330061-1	RG174, RG188	MIL Style	Single	16M3889	21.23
5330876	RG178, RG178A, RG178B, RG196, RG196A	MIL Style	Single	42K7135	16.18
1-5225395-0	Amphenol 21-597	MIL Style	Dual	71K0024	6.28
5225395-1	RG58, RG58A, RG58B, RG58C	MIL Style	Dual	42K7115	6.35
5225395-2	RG55, RG55A, RG55B, RG223	MIL Style	Dual	16M3224	9.23
5225395-3	RG55, RG55A, RG55B, RG223	MIL Style	Dual	16M3225	8.81
5225395-6	RG142, RG142A, RG142B	MIL Style	Dual	42K7116	8.69
5225395-7	RG174, RG188	MIL Style	Dual	42K7117	8.33
5225395-8	RG179, RG187	MIL Style	Dual	42K7118	8.38
5225398-7	RG174, RG188	MIL Style	Dual	42K8689	10.56
5225398-8	RG179, RG187	MIL Style	Dual	16M3230	11.67
5228979-7	RG174, RG188, RG316	MIL Style	Dual	42K7132	3.46
8-331350-0	RG174, RG188	MIL Style	Dual	52K3938	10.31
2-331350-1	RG58, RG58A, RG58B, RG58C	MIL Style	Dual	44F7871	11.67
RIGHT ANGLE					
5413959-1	RG58, Belden 88240	Commercial-Grade	Hex	42K8715	13.21
5413959-3	RG174, RG188, RG316	Commercial-Grade	Hex	42K9932	15.07
5225973-4	RG142, RG142A, RG142B	MIL Style	Dual	42K9927	37.59
5225974-1	RG58, RG58A, RG58B, RG58C	MIL Style	Dual	64K0078	38.44

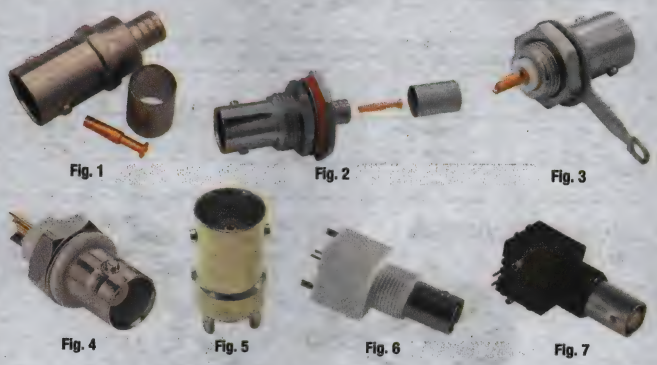
(8230)

AMP 50-OHM BNC JACKS

RoHS Compliant Available

TE connectivity

Authorized Distributor



- MIL-Style dielectric material is teflon
- Commercial-grade dielectric material is polymethylpentene or polypropylene

Bayonet-locking coupling provides reliable, quick-connect/disconnect coaxial connections and low VSWR. Working voltage: 500Vrms. Dielectric withstanding voltage: 1500VAC. Frequency range: single crimp 0-2.5GHz; dual crimp, 0-4GHz. Crimp versions are MIL-C-39012 Category B Type. *Order hand tools separately online.*

STRAIGHT CRIMP JACKS

Mfg. Part No.	Fig.	RG/U	Description	Crimp Type	Stock No.	Price Each 1-9
5225396-2	1	RG59, RG59A, RG59B, RG62, RG62A, RG62B	MIL Style	Dual	16M3226	20.59
5225396-1	1	RG58, RG58A, RG58B, RG58C	MIL Style	Dual	64K0080	11.05
5413779-3	1	RG174, RG188, RG316	Commercial-Grade	Hex	61K2698	5.44
5225396-7	1	RG174, RG188	MIL Style	Dual	16M3227	8.57
2-331351-1	1	RG58, RG58A, RG58B, RG58C	MIL Style	Dual	46F1186	16.13
5228980-5	2	RG58, RG58A, RG58B, RG58C, RG141, RG141A	Commercial-Grade Bulkhead	Dual	16M3248	4.15
5225398-6	2	RG142, RG142A, RG142B	MIL Style Bulkhead	Dual	16M3229	7.16
5225398-1	2	RG58, RG58A, RG58B, RG58C	MIL Style Bulkhead	Dual	72K6837	9.77

CONTINUED

AMP 50-OHM BNC JACKS (CONT.)

Mfg. Part No.	Fig.	RG/U	Description	Crimp Type	Stock No.	Price Each 1-9
1-5225398-5	2	RG316DB	MIL Style Bulkhead	Dual	88M0886	10.75
5413771-3	2	RG174, RG188, RG316	Commercial-Grade Bulkhead	Hex	42K8713	6.77

COMMERCIAL-GRADE BULKHEAD SOLDER JACKS

Accepts 0.059″ diameter wire. *Order* **mfg. part no. 227223-1** *bushing separately below.*

Mfg. Part No.	Fig.	Panel Thickness (mm)	Dielectric Material	Features	Stock No.	Price Each 1-24
227754-1	...	1.17-3.18	Valox	Lockwasher and Jam Nut	89F755	2.36
5227754-3	...	1.17-3.18	Valox	Lockwasher and Jam Nut	16M3243	3.09
5227754-2	...	1.17-3.18	Valox	Lockwasher and Jam Nut	42K7128	2.55
5227169-4	...	1.17-6.35	Teflon	Lockwasher and Jam Nut	42K9928	4.12
5227755-1	3	1.17-3.18	Valox	Solder Terminal and Jam Nut	64R5564	2.42
5227755-2	3	1.17-3.18	Valox	Solder Terminal and Jam Nut	42K7129	2.95
5227755-3	3	1.17-3.18	Valox	Solder Terminal and Jam Nut	10R4894	2.78
5227716-3	3	1.17-3.18	Teflon	Solder Terminal and Jam Nut	06M6169	2.89
5227169-7	3	1.17-6.35	Valox	Solder Terminal and Jam Nut	42K9929	3.02
5227169-8	3	1.17-6.35	Teflon	Solder Terminal and Jam Nut	42K9930	3.65

ISOLATED BULKHEAD SOLDER JACKS

Mfg. Part No.	Fig.	Contact Plating	Dielectric Material	Features	Stock No.	Price Each 1-9
5227726-1	4	Tin	Valox	Lockwasher and Jam Nut	42K7125	3.71
5227726-2	4	Silver	Valox	Lockwasher and Jam Nut	42K7126	2.65
5227726-3	4	Gold	Valox	Lockwasher and Jam Nut	42K7127	4.30
SEALED BULKHEAD SOLDER JACKS						
5227426-1	...	Gold	Polymethylpentene	Commercial Grade	42K7122	10.68

PC BOARD SOLDER JACKS

Mfg. Part No.	Fig.	Body Material	Body Color	Height Above PCB (mm)	Stock No.	Price Each 1-24
5226993-1	6	Valox	White	34.93	10R1467	7.35
5226990-6	7	Valox	Black	15.88	19R1941	3.26

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24
227223-1	Insulating Bushing—0.585″ Diameter	89F915	0.22

(8229)

DECOUPLED BNC JACKS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Built-in chip capacitors filter high-frequency noise to panel ground
- PC board mounting with vertical and standard or low-profile right-angle configurations
- Cable mount bulkhead BNC version available, *go online or call*
- Drop-in replacement for Tyco Electronics standard BNC printed circuit board connectors
- One-piece design and robotic capacity to reduce assembly time
- Standard clip style

PC BOARD / PANEL MOUNT

Mfg. Part No.	Body Style	Impedance (Ω)	Capacitance/ Voltage	Mounting Post Length	Features	Stock No.	Price Each 1-24
5413476-2	Straight	50	9400pF/1500VDC	3.48mm	...	42K7173	5.37
5414651-3	Right Angle	50	7900pF/1500VDC	2.79mm	Low Profile w/ ESD	19R2273	7.74
5413515-2	Right Angle	50	9400pF/1500VDC	4.01mm	Low Profile	42K7174	3.66
5413515-8	Right Angle	50	9400pF/1500VDC	4.70mm	Low Profile	55K3159	4.90

(178408)

RF COAX – MINIATURE

AMP 50-OHM BNC COMMERCIAL PC BOARD/PANEL MOUNT JACKS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Mfg. Part No.	Body Style	Body Material	Contact Plating	Mounting Posts	Mounting Heights	Stock No.	Price Each 1-9
● 5227222-2	Straight	Black Valox	Tin	Yes	1.375″	65K4421	3.80
● 5227222-1	Straight	White Valox	Tin	Yes	1.375″	37K6999	3.27
● 5227222-3	Straight	White Valox	Gold	Yes	1.375″	42K8700	3.02
● 5227671-1	Straight	Metal	Tin	Yes	1.375″	42K7124	4.01
● 5227673-1	Straight	Metal	Gold	Yes	1.375″	42K8702	3.14
● 5227161-6	Right-Angle	Black Valox	Gold	Yes	0.625″	42K8697	3.02
● 5227161-9	Right-Angle	Black Valox	Gold	Yes	0.625″	42K8699	3.71
● 5227161-2	Right-Angle	Black Valox	Tin	Yes	0.625″	16M3240	3.46
● 5226990-3	Right-Angle	White Valox	Gold	No	0.625″	16M3238	2.50
● 5227161-3	Right-Angle	White Valox	Gold	Yes	0.625″	42K8696	3.87
● 5227161-7	Right-Angle	White Valox	Gold	Yes	0.625″	42K8698	3.73
● 5227161-1	Right-Angle	White Valox	Tin	Yes	0.625″	42K8695	3.86
● 5227677-1	Right-Angle	Metal	Gold	Yes	0.625″	42K8704	3.30
● 5227661-1	Right-Angle	Metal	Tin	Yes	0.625″	42K8701	4.53
● 5413879-1	Right-Angle	Metal	Gold	Yes	0.500″	42K8714	5.68

(8236)

AMP 50-OHM BNC ADAPTERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

222165-2

221551-1

5413592-2

Mfg. Part No.	Description	Length (in.)	Stock No.	Price Each 1-9
● 5414105-1	Straight Adapter	1.420	16M4005	12.90
● 5414414-1	Straight Adapter	1.420	42K7186	12.48
● 221551-1	Straight Adapter	1.281	89F2897	9.41
● 330024	Straight Bulkhead Adapter	1.500	44F8965	21.07
● 5228226-1	Straight Bulkhead Adapter	1.420	42K7130	8.63
● 5228226-3	Straight Bulkhead Adapter	1.420	42K7131	6.35
222165-2	Right Angle Adapter	0.890	89F2919	8.86
● 5414666-1	Right Angle Adapter	1.045	16M3270	7.91
329517	Right Angle Adapter	1.045	87F4023	11.31
● 221543-2	T Adapter	1.031	89F2924	30.15
● 5413592-2	T Adapter	1.300	42K7180	8.06
● 221988-1	T Adapter	1.281	89F2918	24.64

(8239)

AMP 50-OHM BNC COMMERCIAL METALLIZED PC BOARD MOUNT JACKS

RoHS Compliant Available

TE connectivity

Authorized Distributor

5227699

5221123-2

Mfg. Part No.	Mounting	Contact Plating	Body Plating	Dielectric	Stock No.	Price Each 1-9	10-24	25-99
● 5227699-1	Vertical	Silver	Nickel	Valox	42K8705	2.29	2.23	2.17
● 5414305-1	Vertical	Silver	Tin	Valox	85K8340	4.48	3.94	3.76
● 5227699-2	Vertical	Gold	Nickel	Valox	42K8706	3.90	3.79	3.55
● 5221123-2	Vertical	Gold	Nickel	Valox	87K1027	4.25	4.08	3.74
● 5222006-1	Vertical	Gold	Nickel	Teflon	42K8686	5.27	4.86	4.34
● 5413631-1	Right-Angle	Silver	Nickel	Polypropylene	42K7182	8.26	7.91	7.22

➤CONTINUED➤

AMP 50-OHM BNC COMMERCIAL METALLIZED PC BOARD MOUNT JACKS (CONT.)

Mfg. Part No.	Mounting	Contact Plating	Body Plating	Dielectric	Stock No.	Price Each 1-9	10-24	25-99
● 5414373-1	Right-Angle	Gold	Zinc	Polymethylpentene	16M4006	3.04	2.78	2.66
● 5413631-2	Right-Angle	Gold	Tin	Teflon	42K8710	7.72	6.88	6.72

(8238)

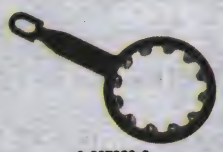
AMP 50-OHM BNC ACCESSORIES

RoHS Compliant Available

TE connectivity

Authorized Distributor

1-329631-2



9-227260-0

330620

Mfg. Part No.	Description	Stock No.	Price Each 1-49	50-99	100-249
● 1-329631-2	Jam Nut for PC Board/Panel Mount Jacks	94F4615	0.23	0.22	0.20
● 9-227260-0	Lockwasher	42K7938	0.41	0.37	0.34
● 1-329632-2	Lockwasher for PC Board/Panel Mount Jacks	94F4616	0.24	0.21	0.20
● 330620	Nylon Insulating Bushing, Outside Dia. 0.687″ (17.45mm)	44F7883	0.71	0.65	0.65

(8327)

AMP 75-OHM RF MINI-BNC CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Commercial-grade 75-ohm Mini-BNC RF connectors offer small size, allow 40% more interconnects in a given area than standard BNC connectors. Coaxial-terminating types have hex crimp.

Mfg. Part No.	Description	Cable Type	Stock No.	Price Each 1-9
● 1274563-1	Straight Plug	AT&T 735A	57J4721	15.86
● 1274563-3	Straight Plug	RG179	57J4723	14.10

(83240)

AMP 75-OHM COMMERCIAL BNC PLUGS

RoHS Compliant Available

TE connectivity

Authorized Distributor

5413588-x

5413589-x

Straight or right-angle 75-ohm commercial-grade BNC plugs. Feature gold-plated center contact and nickel-plated body. Manufactured in accordance with requirements of MIL-C-39012, Class II, Category B. *Order* **mfg. part no. 354940-1** *crimp tool and die sets separately on page 1061.*

Mfg. Part No.	For Use with Cable RG/U	Crimp Type	Stock No.	Price Each 1-24	25-49	50-99
RIGHT-ANGLE						
● 5413588-2	59, 59A, 59B, 140, 210, 62, 62A, 62B, Belden 929, 92009, 9269, 89269	Hex	16M3260	17.85	16.58	14.45
● 5413588-8	179, 179A, 179B, 187, 187A	Hex	16M3261	18.16	17.40	15.62
STRAIGHT						
● 5413589-1	Belden 88241	Hex	16M3262	7.41	7.10	6.17
● 5413589-2	59, 59A, 59B, 140, 210, 62, 62A, 62B, Belden 929, 92009, 9269, 89269	Hex	42K9931	4.19	3.49	3.40
● 5413589-3	Belden 8218	Hex	16M4003	3.96	3.39	3.00
● 5413589-5	AT&T 728, Belden 8281, 9231, JIS 5C-2V	Hex	14M4384	6.72	6.44	5.60

➤CONTINUED➤

AMP 75-OHM COMMERCIAL BNC PLUGS (CONT.)

STRAIGHT

Mfg. Part No.	For Use with Cable RG/U	Crimp Type	Stock No.	Price Each 1-24	25-49	50-99
5413589-8	179, 179A, 179B, 187, 187A, 161, Belden 9221	Hex	16M3263	4.37	3.90	3.69
5413589-9	Belden 8212, 9104, 9112, 9240, 9167, 9259, 9266	Hex	42K7179	4.77	4.09	3.89
1-5413589-0	AT&T 735A	Hex	42K8644	9.55	8.15	7.25
5221185-1	Belden 9248, 8228	Dual	42K8681	3.87	3.46	3.37
5221185-2	59, 59A, 59B, 140, 210, 62, 62A, 62B, Belden 929, 92009, 9269, 89269	Dual	42K8682	3.59	3.08	2.73
5221185-5	Belden 8281, 9141, 9231, WE 724, 728, 3049	Dual	16M3211	4.46	4.09	3.91
5221185-7	6, 6A	Dual	11M0237	15.84	...	...
5221185-8	179, 179A, 179B, 187, 187A, 161, Belden 9221	Dual	42K8683	3.79	3.63	3.44
5221185-9	Belden 8212, 9104, 9112, 9240, 9167, 9259, 9266	Dual	42K8684	3.69	3.45	3.00
1-5221185-8	AT&T 735A	Dual	16M2665	4.35	3.82	3.65

(8329)

AMP 75-OHM COMMERCIAL BNC JACKS

RoHS Compliant Available

TE connectivity

Authorized Distributor

5222092-1 5222117-1 5221221-x

STANDARD JACKS

Mfg. Part No.	RG/U	Crimp Type	Length	Stock No.	Price Each 1-9	10-24
5221221-5	179, 179A, 179B, 187, 187A, 161, Belden 9221	Dual	1.375″	42K9926	6.18	6.06
5413590-3	Belden 8218	Hex	1.450″	16M3264	8.26	...
5221199-2	59, 59A, 59B, 140, 210, 62, 62A, 62B, Belden 9291, 9209, 9269, 89269	Dual	1.200″	16M3212	7.84	7.04
5221221-2	59, 59A, 59B, 140, 210, 62, 62A, 62B, Belden 9291, 9209, 9269, 89269	Dual	1.375″	16M3213	2.35	2.18
5413760-3	Belden 8218	Hex	1.300″	42K8711	4.86	4.17
5413760-8	179,179A,179B, 187,187A	Hex	1.300″	42K8712	6.33	6.06
5413760-9	Belden 9240, 9259, 9266	Hex	1.300″	16M3265	6.88	6.59
5221221-7	Belden 9240, 9259, 9266	Dual	1.375″	01M4993	2.32	2.15
5221199-5	179	Dual	1.200″	42K9925	4.88	4.47
5413590-8	179, 187	Hex	1.375″	65K8917	9.59	9.17

PANEL MOUNT JACK CONNECTORS - SOLDER TERMINATION

Mfg. Part No.	Description	Length (in.)	Stock No.	Price Each 1-9	10-24
5414217-1	Vertical	1.260	42K9933	8.06	7.35

PANEL MOUNT JACK CONNECTORS - PC BOARD TERMINATION

5222092-1	Right-Angle, Zinc Body	1.375	42K8687	6.62	5.80
5415419-1*	Right-Angle, Zinc Body	1.375	86K9631	8.24	7.72
5413194-1	Right-Angle, Valox Body, Low Profile, White	1.375	42K7171	9.20	8.80

*Tin plated center contact

PC BOARD MOUNT JACK CONNECTORS

5222462-1	Press Fit, Vertical	0.810	42K7102	7.17	6.58
5413558-1	Right-Angle	1.098	42K7177	7.32	7.10
5413558-2	Right-Angle	1.098	22R8261	8.53	7.32
5414394-1	Straight Jack	0.655	74K3505	4.15	3.65
5413986-1	Vertical	0.625	46P5426	6.84	6.56

BNC ADAPTERS

5222117-1	Bulkhead Adapter (Jack-Jack)	1.420	42K7100	8.79	6.56

Straight, bulkhead, or panel mount 75-ohm standard BNC jacks. Feature gold-plated center contact and nickel-plated body. *Order* **mfg. part no. 354940-1** *crimp tool and die sets separately on page 1061.*

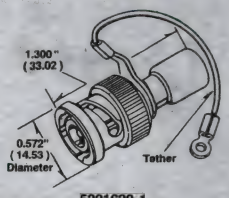
(8328)

AMP BNC COMMERCIAL-GRADE TERMINATOR PLUGS

RoHS Compliant Available

TE connectivity

Authorized Distributor



5221629-1

Feature nickel finish body, gold finish brass center contact and polyethylene dielectric.

Mfg. Part No.	Resistor Specification	Description	Stock No.	Price Each Each
5221629-1	50 Ohm, 1 Watt	With Tether Strap	16M3993	14.57
5221629-4	50 Ohm, 1 Watt	Without Tether Strap	16M3994	13.83
5221629-2	75 Ohm, 1 Watt	With Tether Strap	16M3215	15.39
5221629-5	75 Ohm, 1 Watt	Without Tether Strap	16M3216	9.48

(8320)

AMP PRO-CRIMPER™ HAND TOOL

TE connectivity

Authorized Distributor

354940-1

PRO-CRIMPER™ hand tool frame with interchangeable die set, *ordered separately below.* This versatile and reliable crimping tool requires less hand force to accomplish the correct crimp connection. Easy-grip handles.

HAND TOOLS

Mfg. Part No.	Series	Description	For Use With	Stock No.	Price 1-4
354940-1	PRO-CRIMPER™ III	Frame/Handle Only	Datacom	96F6512	89.48
91388-1	PRO-CRIMPER™ III	w/ Die	4.2mm Contact System	73M8245	379.70
90872-1	PRO-CRIMPER™ II	w/ Die	0.093″ Commercial Pin & Socket Contacts	17C6833	318.87

DIES

220189-3	PRO-CRIMPER™ II	"0" / Military	Tyco 354940-1 PRO-CRIMPER II Hand Tool Frame Assembly	66F3444	290.08
318451-2	PRO-CRIMPER™ II	"0" / Commercial	Tyco 354940-1 PRO-CRIMPER II Hand Tool Frame Assembly	50B549	735.38

(8319)

AMP TWIN BNC CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

5332225-5 5228686-1 5332215

Designed in accordance with MIL-C-39012 to meet stringent requirements of MIL-STD-1553 multiplex data bus. Plating (center contact/body): silver/nickel for **mfg part nos. 332225-5** and **332342**. Accommodates twin conductor cable sizes, indicated below. *Order hand tools separately on page 1061. See Manufacturer & Product Master Index for selection of coaxial cable.*

Mfg. Part No.	Body Style	RG/U	Dielectric	Stock No.	Price Each 1-24
5332225-5	Plug	Belden 9272, 89272, 108, 108A	Polypropylene	16M3254	25.40
5332342	Bulkhead Jack		Teflon®	16M3255	36.80
5228686-1	Right-Angle PCB/ Panel Mount Jack	...	Polymethylpentene	42K8708	10.12

BULKHEAD ADAPTERS

Mfg. Part No.	Convert From	Convert To	Length (in.)	Stock No.	Price Each 1-9
5332215	BNC Jack	BNC Jack	1.406	73K1658	90.10

(8253)

RF COAX – MINIATURE

50- AND 75-OHM BNC ADAPTERS

RoHS Compliant Available

Amphenol Connex

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6

- DC to 11GHz frequency range

STRAIGHT ADAPTERS

Mfg. Part No.	Fig.	Impedance (Ohms)	Convert From	Convert To	Stock No.	Price Each 1-9
● 112445	1	50	BNC Jack	BNC Jack	92H4687	3.57
● 112447	2	50	BNC Plug	BNC Plug	99H4401	5.98
● 112446	1	75	BNC Jack	BNC Receptacle	09J8722	2.49
STRAIGHT BULKHEAD ADAPTERS						
● 112433	3	50	BNC Jack	BNC Jack	99H4391	5.90
● 112437	4	50	BNC Jack	BNC Receptacle	99H4395	5.07
● 112438	4	75	BNC Jack	BNC Jack	99H4396	3.54
● 112440	3	75	BNC Jack	BNC Jack	99H4398	7.18
● 112444**	4	75	BNC Jack	BNC Jack	99H4400	5.60
TEE ADAPTERS						
● 112461*	5	50	BNC Jack	BNC Plug / Jack	92H4684	2.99
● 112459+	6	50	BNC Jack	BNC Plug / Jack	89K6742	7.53
● 112459	5	50	BNC Jack	BNC Plug / Jack	89K6742	7.53

*Die-cast zinc body; +Brass body; **Isolated
(119498)

50- AND 75-OHM BNC JACKS

RoHS Compliant Available

Amphenol Connex

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6

Fig. 7

Fig. 8

Fig. 9

- DC to 11GHz frequency range
- Gold-plated phosphor bronze contacts

STRAIGHT JACKS

Mfg. Part No.	Fig.	Impedance (Ω)	Coaxial Cable Type RG/U	Coaxial Termination	Connector Mounting	Stock No.	Price Each 1-9
● 112513	1	50	RG55, RG142, RG223, RG400	Crimp	Cable	99H4430	3.25
● 112144	1	50	RG58C	Crimp	Cable	99H4286	3.25
● 112160	1	50	RG174, RG188A, RG316	Crimp	Cable	99H4294	3.32
● 112290	2	50	...	Solder	Panel	99H4353	5.17
● 112288-11	3	50	RG174, RG188A, RG316	Crimp	Panel	89K6736	6.15
● 112404	4	50	...	Solder	PCB	99H4363	2.59
● 112536	...	50	...	Solder	PCB	99H4450	3.44
● 112538	4	50	...	Solder	PCB	99H4451	2.39
● 112147	1	75	RG59, RG62, RG140, RG210	Crimp	Cable	99H4289	3.23

➤CONTINUED➤

50- AND 75-OHM BNC JACKS (CONT.)

Mfg. Part No.	Fig.	Impedance (Ω)	Coaxial Cable Type RG/U	Coaxial Termination	Connector Mounting	Stock No.	Price Each 1-9
● 112559	1	75	RG122, RG180, RG195, Belden 1865A, 8218	Crimp	Cable	99H4463	2.56
● 112161	1	75	RG179, RG187, Belden 9221	Crimp	Cable	99H4296	3.39
STRAIGHT BULKHEAD JACKS							
● 112234	5	50	RG174, RG188A, RG316	Crimp	Cable	99H4336	5.17
● 112517	5	50	RG316	Crimp	Cable	99H4435	4.98
● 112580	5	50	RG405	Solder	Cable	99H4476	5.51
● 112424	6	50	...	Solder	Panel	99H4381	2.41
● 112431	7	50	...	Solder	Panel	99H4389	3.66
● 112426	8	50	...	Solder	Panel	99H4385	2.99
● 112432	9	75	...	Solder	Panel	99H4390	3.66
● 112235	5	75	RG179, RG187, Belden 9221	Crimp	Cable	99H4338	5.34
● 112740-13	...	75	...	Surface Mount Straddle	PCB	65R6584	4.80
STRAIGHT BULKHEAD JACKS - REVERSE POLARITY							
● 112505RP	...	50	RG55/U, RG142A/U, RG223/U, RG400/U	Crimp	Cable	99H4425	5.90

(119484)

50- AND 75-OHM BNC PLUGS

RoHS Compliant Available

Amphenol Connex

Fig. 1

Fig. 2

Fig. 3

Fig. 4

- DC to 11GHz frequency range

STRAIGHT PLUGS

Mfg. Part No.	Fig.	Impedance (Ω)	Coaxial Cable Type RG/U	Coaxial Termination	Connector Mounting	Stock No.	Price Each 1-9
● 112562	1	50	RG8, RG8A, RG213, RG393	Crimp	Cable	99H4464	7.33
● 112533	1	50	RG8X , Belden 7808A, LMR-240	Crimp	Cable	99H4448	2.66
● 112514	1	50	RG55, RG142, RG223, RG400	Crimp	Cable	99H4431	2.56
● 112116	1	50	RG58C	Crimp	Cable	99H4267	2.15
● 112116RP*	...	50	RG58, RG141, RG303	Crimp	Cable	89K6720	3.80
● 112132	1	50	RG174, RG188A, RG316	Crimp	Cable	87H5613	2.92
● 112136	...	50	RG174, RG188A, RG316	Crimp	Cable	99H4280	3.25
● 112516	1	50	RG178, RG196	Crimp	Cable	99H4434	3.16
● 112512	1	50	RG316	Crimp	Cable	99H4429	3.16
● 112551	...	50	RG402	Solder	Cable	99H4457	3.75
● 112552	...	50	RG405	Solder	Cable	99H4458	3.75
● 112563	1	50	Belden 9913, LMR-400	Crimp	Cable	99H4465	7.33
● 112597	1	50	Belden 7807A, LMR-200	Crimp	Cable	99H4490	3.09
● 112491-10	1	50	-	Crimp	Cable	86K9692	3.49
● 112722	2	50	-	Crimp	Cable	73R7731	3.97
● 112420	3	50	...	Solder	Panel	99H4379	3.50
● 112508	1	75	RG6	Crimp	Cable	99H4426	2.63
● 112519	1	75	RG6, Belden 9248, 1694A	Crimp	Cable	99H4436	2.73
● 112507	1	75	RG59	Crimp	Cable	08H0102	2.13
● 112119	1	75	RG59, RG62, RG140, RG210	Crimp	Cable	99H4270	2.61
● 112133	1	75	RG179, RG187, Belden 9221	Crimp	Cable	37K6613	2.47
● 112951	1	75	AT&T 734, 734A, Belden 1505A	Crimp	Cable	99H4558	3.49
● 112565	1	75	Belden 1694A	Crimp	Cable	99H4467	2.63

***RP suffix** in mfg. part no. indicates reverse polarity

RIGHT ANGLE PLUGS

● 112601	4	50	RG8X , Belden 7808A, LMR-240	Crimp	Cable	99H4495	7.92
● 112526	4	50	RG55, RG142, RG223, RG400	Crimp	Cable	99H4441	6.31
● 112162	4	50	RG58, RG58A, RG58C, RG141, RG303	Solder	Cable	07H7655	5.65
● 112178	4	50	RG174, RG188A, RG316	Solder	Cable	99H4308	5.86

➤CONTINUED➤

50- AND 75-OHM BNC PLUGS (CONT.)

RIGHT ANGLE PLUGS

Mfg. Part No.	Fig.	Impedance (Ω)	Coaxial Cable Type RG/U	Coaxial Termination	Connector Mounting	Stock No.	Price Each 1-9
112596	4	50	Belden 7810A, 8214, 9913, LMR-400	Crimp	Cable	99H4489	7.61
112179	4	75	RG179, RG187, Belden 9221	Solder	Cable	99H4309	5.76

CRIMP TOOL

Mfg. Part No.	Description	Stock No.	Price Each 1-9
47025	4-Way Indent Crimp Tool for 0.014″ to 0.016″ ID Center Contacts	48W1814	95.85

(119495)

HIGH PERFORMANCE TRUE 75 OHM CRIMP-CRIMP BNC CONNECTORS

RoHS Compliant Available

Amphenol® RF

- True 75 Ohm impedance end to end
- One piece spring alloy body/outer contact
- Strip/Crimp requirements consistent with all major industry providers
- Bayonet coupling provides a positive lock and allows for quick and easy connect/disconnects

Fig. 1

Fig. 2

Mfg. Part No.	Fig.	Description	RG/U	Stock No.	Price Each 1-9
031-80101	1	Straight Plug	RG179, RG187	88K0313	3.83
031-80102	1	Straight Plug	Belden 8218	88K0315	5.50
031-80103	1	Straight Plug	RG59	88K0316	4.28
031-80106	1	Straight Plug	RG174, RG316	88K0321	5.23
031-80107	1	Straight Plug	RG179	88K0322	5.36
031-80108	1	Straight Plug	Belden 8281	88K0323	4.90
031-80109	1	Straight Plug	Belden 1694A	88K0324	5.18
031-80901	2	Right Angle Plug	RG179, RG187	88K0328	17.05

(88659)

50-OHM BNC CABLE CONNECTORS

RoHS Compliant Available

Amphenol® RF

Fig. 1

Fig. 2

Fig. 3 Single Hole Mount

Fig. 4

Fig. 5

Fig. 6

Fig. 7

Fig. 8 Single Hole Mount

Fig. 9

Fig. 10

Lightweight connectors operate to 11GHz and yield low reflection up to 4GHz. **Figs. 1-5** braid clamp types with solder contact. **Fig. 6** Quicktrim® 3-piece crimp type plug assemble with solder or crimp contacts. **Figs. 7** and **8** 3-piece crimp type assemblies with braid crimp ferrule, crimp or solder contact. **Figs. 9-11** 3-piece crimp type assemblies with braid crimp ferrule, crimp or solder contact. **Fig. 12** Quick assembly 3-piece units with spring braid ferrule, solder contact. *Order tool and die sets separately on page 1062.*

STRAIGHT PLUGS (CLAMP)

Mfg. Part No.	Fig.	MIL No.	RG/U	Stock No.	Price Each 1-9
31-2	1	UG-88	58, 141, 142, 400	39F063	7.42
31-202*	1	UG-88C	55, 58, 141, 142, 223, 400	39F1018	5.03
31-12	1	UG-260	59, 62, 71, 140, 210, 302	73K1425	11.23
31-212*	1	UG-260B	59, 62, 71, 140, 210, 302	39F1027	6.00
31-212-1005	1	...	59 (20 GA Center Cond.)	38F1202	5.79
6775	1	UG-959	8, 9, 11, 213, 214	62K3482	24.44

➤CONTINUED➤

50-OHM BNC CABLE CONNECTORS (CONT.)

Mfg. Part No.	Fig.	MIL No.	RG/U	Stock No.	Price Each 1-9
6775-75	...	...	11, B1859, 7731, 8213, 9292	73K1480	34.83
69475	1	...	174, 179, 188, 316	40F6325	7.53
15875	1	...	178, 196	51F3824	15.35
31-3202	1	UG88E/U	55, 142, 223, 400	73K1433	17.66
31-3301	1	M39012/16-0101	55, 142, 223, 400	82K8893	17.03
16300	1	...	122, 180, 195, B1865A, B8218	83F6741	10.95
31-3302	...	M39012/16-0102	62C, 140B, 210	73K1435	35.98
RIGHT-ANGLE PLUG (CLAMP)					
31-204*	...	UG-913	55, 58, 141, 142, 223, 400	39F1020	81.79
8525*	...	...	58, 58A, 58C, 141, 303, LMR 195, B7806A	73K1498	54.48
JACKS (CLAMP)					
31-15	2	UG-261	59, 62, 71, 140, 210, B8241, B8263, B8279, B9209	39F066	12.83
31-5*	2	UG-89	55,142, 223, 400	73K1440	6.57
86425*	...	...	174, 188A, 31, B7805A	73K1499	49.84
BULKHEAD JACKS (CLAMP)					
31-206*	3	UG-909	58, 141, 142, 400	73K1427	7.43
86350	3	...	174, 179, 187, 188, 316	50F1606	14.49
31-207	3	UG-910/U	59, 62, 140, 210, B8241, B8263, B8279, B9209	73K1428	17.94
STRAIGHT PLUGS (QUICKTRIM®)					
31-4541*	4	...	59, 62	38F1574	13.11
STRAIGHT PLUG (CRIMP)					
31-325	5	...	122, 130, 195 B1865A, B8218	51F3825	12.89
31-321*†	5	3-05††	59, 62, 140, 210, 302	39F1446	5.20
31-4321†	5	16-0015+	59, 62, 140, 210, 302	40F6318	6.58
68175†	5	...	59, 140, 210, 302	39F029	4.74
68175-1003	5	...	B9259	50F2443	5.24
68175-1004†	5	...	59, 62, 140, 210, 302	38F1200	5.48
68175-1005†	5	...	59 (20 GA Center Cond.)	38F1201	9.37
31-320*‡	5	3-01, 3-03††	58, 141	39F1438	4.70
31-326‡	5	3-02, 3-04††	55, 142, 223	39F1442	6.23
31-4320‡	5	16-0013+	58, 141	73K1436	5.91
31-4326 (M39012/16-0014)‡	5	16-0014+	55, 142, 223	40F6320	5.43
31-4427‡	5	16-0503+	55, 142, 223, 400	89F2891	11.71
36775‡	5	...	58, 141	39F1072	5.00
36875‡	5	...	55, 142, 223, 400	39F1082	7.50
31-315* **	5	...	174, 188, 316	40F6321	5.17
31-315-1005	5	...	316 Double Braid	93F1473	6.22
31-242* **	5	...	Amphenol 21597 Times AA 6086	51F3836	7.68
31-320-1006	5	...	B9907, B89907	50F2447	5.97
31-321-1000 •	5	...	B8281	40F6322	7.31
31-70238 •	5	...	AT&T 735, 735A, B735A1	19C1698	3.03
31-70237 •	5	...	AT&T 734, 734A, B1505A	19C1697	2.88
31-6006 •	5	...	8X, LMR 240, B7808A	95B8151	10.43
31-351	6	...	58, 141	39F1042	16.45
31-359†	6	...	59, 62, 140, 210, 302	39F1044	28.92
31-371**	6	...	174, 179, 187, 188, 316	51F3837	14.02
31-30220-1**	6	...	58, 58A, 58C, 141, 303, LMR 195, B7806A	18C0403	16.00
31-5705**	...	...	58, 58A, 58C, 141, 303, LMR 195, B7806A	20C4369	30.66
RIGHT-ANGLE PLUGS (CRIMP)					
31-334*	...	...	55, 142, 223, 400	39F1443	27.08
31-6004-RFX	...	...	LMR 400, B9913, B9914	95B8149	7.23
JACKS (CRIMP)					
68150	...	...	59, 62, 140, 210	51F3832	14.04
31-4327‡	7	17-0013+	58, 141	55M2223	10.55
31-317* **	7	...	174, 179, 187, 188, 316	50F1607	10.45

➤CONTINUED➤

50-OHM BNC CABLE CONNECTORS (CONT.)

BULKHEAD JACKS (CRIMP)

Mfg. Part No.	Fig.	MIL No.	RG/U	Stock No.	Price Each 1-9
● 31-342‡	8	3-15, 3-17H	58, 141	39F1441	11.93
● 31-318* **	8	...	174, 188, 316	51F3822	9.22
● 31-245	8	...	179, 187, B9221	51F3909	12.10
STRAIGHT PLUGS (SURETWIST®)					
● 31-5137*	9	...	58, 58B	46F8023	6.66
● 31-5136*	9	...	59, 59A, 62, 62A	46F7815	6.45
STRAIGHT PLUGS (QUICK ASSEMBLY)					
● 31-4700*	10	...	58	73K1438	7.69
● 31-4702*	10	...	59	82K8894	7.54
RIGHT-ANGLE BULKHEAD JACK (PIN)					
● 31-5431-2010	...	...	...	54H2887	7.98

*UL recognized, preferred for new design; **Die set **mfg. part no. 227-1221-9** and tool handle **mfg. part no. 227-944**; ‡Die set **mfg. part no. 227-1221-11** and tool handle **mfg. part no. 227-944**; •Die set **mfg. part no. 227-1221-32** and tool handle **mfg. part no. 227-944**; †Die set **mfg. part no. 227-1221-13** and tool handle **mfg. part no. 227-944**; +M39012 P/N; ††M23329 P/N
(8258)

3

50- AND 75-OHM BNC RECEPTACLES

RoHS Compliant Available

Amphenol® RF

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6

Order tool die sets separately on page 1062.

BULKHEAD RECEPTACLES

Mfg. Part No.	Fig.	Ohms	Description	MIL No.	Stock No.	Price Each 1-9
● 31-10	1	50	Isolated	...	38F1322	3.77
● 31-221	2	50	Thin Panel, Front Mount	UG-1094	39F075	2.39
● 31-2221	2	50	Front Mount	UG-1094A	39F3130	3.20
● 5575	2	50	Front Mount	UG-625	73K1471	4.50
● 31-236	2	50	Front Mount	UG-625B	39F1337	3.05
● 31-10-75	2	75	Front Mount	...	90F8488	7.70
● 31-238	2	50	Pressurized, Front Mount	UG-912	39F1339	25.26
● 31-102	2	50	Pressurized, Front Mount	UG-657	39F073	6.64
● 31-239	2	50	Pressurized, Front Mount	UG-657A/U	73K1431	8.59
● 31-3376+	2	50	Gold-Plated Contacts, Front Mount	21-0001	40F6330	10.16
31-4238+	2	50	Hermetic, Front Mount	24-0002	51F3829	29.61
● 31-10-75RFXG2	2	75	Straight	...	19C3257	2.50
● 31-4890-1	2	50	Straight,Solder Cup	...	90F8467	44.72
● 31-4237	...	50	Straight,Solder Cup	M39012/24-0001	94F155	11.76
● 31-222	...	50	Angle, External Tooth Lock Washer	...	39F1034	62.46
PANEL RECEPTACLES						
● 31-203	3	50	3-56 Tapped Flange, 0.500″ Sq. Mtg. Holes	UG-290A	39F1019	7.66
● 5675	...	50	Angel Panel 4 hole Flange, 0.136″ Diameter	UG-535/U	73K1472	33.57
PANEL RECEPTACLE PC PINS						
● 18225	...	50	0.500″ Sq. Mounting Holes	...	40F6329	21.80
PC BOARD MOUNT RIGHT-ANGLE BULKHEAD RECEPTACLES						
● 31-5431*	4	50	Round Pins	...	73K1441	3.29
● 031-5431-10RFX*	4	50	Fork Pins	...	73K1442	2.25
● 31-5538**	4	50	Round Pins	...	93F1501	3.30
● 31-5538-1010**	4	50	Fork Pins	...	93F7523	3.42
● 031-5538-10RFX**	4	50	Fork Pins	...	73K1443	4.61
● 31-5486*	4	50	Round Pins Low-Profile	...	90F8469	6.30
● 31-5486-1010*	4	50	Round Pins Low-Profile, Fork Pins	...	93F7526	3.84
● 31-5540**	4	50	Round Pins Low-Profile	...	93F1503	8.23
● 31-5640+	5	50	Round Pins	...	93F7524	4.74

➤CONTINUED➤

50- AND 75-OHM BNC RECEPTACLES (CONT.)

PC BOARD MOUNT RIGHT-ANGLE BULKHEAD RECEPTACLES

Mfg. Part No.	Fig.	Ohms	Description	MIL No.	Stock No.	Price Each 1-9
● 31-5640-1010+	5	50	Fork Pins	...	93F7525	5.82
● 31-5637+	5	50	Round Pins Low-Profile	...	02H4683	4.40
PC BOARD MOUNT VERTICAL BULKHEAD RECEPTACLES						
● 31-5493*	...	50	Round Pins	...	93F1500	4.89
● 31-5539**	...	50	Round Pins	...	93F1502	5.16
● 31-5539-1010**	...	50	Fork Pin	...	93F7513	5.51
● 31-5633+	...	50	Round Pin	...	73K1444	4.87
● 31-71059-1010**	...	75	Fork Pin	...	30C1268	6.37
● 31-71045-1010+	...	75	Fork Pin	...	94B3827	5.94
PC BOARD MOUNT RECEPTACLES						
● 31-5329	6	50	Jack/3 Legs 0.040″ Post Terminal, Zinc Body	...	89F2885	6.65

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-24	25-99	100+
● 31-105	Precision Bead-Contact Sub-Assembly	73K1424	20.21	20.01	19.51	19.02

*Isolated, white Valox housing; **Isolated, black Valox housing; +Metal housing
(8277)

50-OHM ARC RUGGEDIZED CONNECTORS

RoHS Compliant Available

Amphenol® RF

82-6489

31-6499

31-6501

31-6509

31-6502

31-6504

- Engineered for harsh conditions
- Available in standard and reverse polarity
- Sealed to IP 67 in unmated and mated conditions
- Frequency range: DC to 6GHz
- Gold plated contacts

31-6506

N COAXIAL CONNECTORS

Mfg. Part No.	Body Style	Cable Type	Termination	Stock No.	Price Each 1-9
● 082-6553	Straight Plug	LMR-400	Crimp	53W7147	33.30
● 82-6489	Right Angle Plug	LMR-400	Crimp	54W0890	37.08
● 82-6517	Straight Jack	LMR-400	Crimp	54W0892	24.04
● 82-6512	Straight Bulkhead Jack	LMR-400	Crimp	54W0891	35.06
TNC COAXIAL CONNECTORS					
● 31-6499	Straight Plug	LMR-200	Crimp	54W0252	23.76
● 31-6501	Right Angle Plug	LMR-200	Crimp	54W0253	28.43
● 31-6505	Straight Jack	LMR-200	Crimp	54W0256	24.04
● 031-6507	Straight Bulkhead Jack	LMR-200	Crimp	53W7127	23.20
● 031-6508*	Straight Bulkhead Jack	LMR-200	Crimp	53W7128	23.20
● 031-6530	Straight Bulkhead Jack	...	SMD	53W7133	31.52
● 031-6509	Right Angle Bulkhead Jack	LMR-200	Crimp	53W7129	33.92
● 031-6510*	Right Angle Bulkhead Jack	LMR-200	Crimp	53W7130	32.00
● 031-6527	Right Angle Bulkhead Jack	...	Thru Hole	53W7131	36.25
● 031-6528*	Right Angle Bulkhead Jack	...	Thru Hole	53W7132	36.25
TNC REVERSE POLARITY COAXIAL CONNECTORS					
● 31-6502	Straight Plug	LMR-200	Crimp	54W0254	24.04
● 31-6504	Right Angle Plug	LMR-200	Crimp	54W0255	28.43
● 31-6506	Straight Jack	LMR-200	Crimp	54W0257	23.20
SMA COAXIAL CONNECTORS					
● 901-10387	Straight Bulkhead Jack	...	SMD	53W7574	25.09
● 901-10385	Right Angle Bulkhead Jack	...	Thru Hole	53W7572	33.45
● 901-10386	Right Angle Bulkhead Jack	...	Thru Hole	53W7573	32.64

*Reverse Polarity

➤CONTINUED➤

50-OHM ARC RUGGEDIZED CONNECTORS (CONT.)

INTER-SERIES ADAPTERS

Mfg. Part No.	Body Style	Cable Type	Termination	Stock No.	Price Each 1-9
APH-NJ-MCXJ	Straight	N Coaxial Jack	MCX Coaxial Receptacle	53W7047	23.29
901-10384	Straight Bulkhead	SMA Coaxial Jack	BNC Coaxial Receptacle	53W7571	23.12

(210078)

50-OHM BNC COAXIAL NETWORKING CONNECTORS

RoHS Compliant Available

Amphenol® RF

Mfg. part no. 31-5800 for Thinnet/Ethernet systems using PVC or plenum cable. **Mfg. part no. 31-5900** for IBM/Arcnet systems using PVC or plenum cable. Each plug features three-piece crimp-crimp termination and is supplied with two ferrules: straight for PVC cable and neck down type for plenum cable. Feature durable astroplate finish and gold-plated contacts that snap in place. **Mfg. part no. CTL-1** hex crimp tool is available; *go online or call.* **Mfg. part no. 31-208-RFX** networking jack-plug-jack T-adapter is also available; *order separately on page 1062.*

Mfg. Part No.	RG-/U	Stock No.	Price Each 1-9
31-5800	58, 58A, 58B, 58C, 141, Plenum 58, Thinnet, Belden 9907, 89907, Comscope 2104K, 2135, 3104	66F9250	2.47
31-5900	59, 62, 59 20GACC, Plenum 59 & 62, Belden 1515A, 8212, 8221, 8241, 8241A, 8241F, 8263, 8279A, 9100, 9209, 9209A, 9240, 9244, 9259, 9274, 9275, 9659, 1426A, 82108, 88241, 89259, 82259, 1506A, AT&T 734A, Comscope 5553, 2020K, 3037V, 2249K	66F9251	2.46
31-71008-1RFX	59	01C1987	*1.90
31-71011	52, 62, 140, 210, Belden 8241, 8263, 8279, 9209	93F1521	21.55

(8300)

75-OHM CRIMP-CRIMP BNC CONNECTORS

RoHS Compliant Available

Amphenol® RF

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Designed for use in telecommunications. Mate with standard 50-ohm BNCs without damage. BNC-T1 provides constant 75-ohm performance with low VSWR DC to 4GHz. BNC-T2 is usable with low reflection DC to 1GHz. For applications above 1GHz, manufacturer recommends BNC-T1. *Order die sets separately online or call.*

STRAIGHT PLUGS

Mfg. Part No.	Fig.	Mounting	Termination	RG/U	Die Set*	Stock No.	Price Each 1-9
31-70000	1	Cable	Crimp	RG6, Belden 9248, 1694A	227-980-3	89F2857	7.32
31-70008	1	Cable	Crimp	RG59, RG62, Belden 8241, 8263, 8279, 9209	227-980-1	89F2858	14.24
31-70013	1	Cable	Crimp	RG179, RG187	227-980-7	89F2863	10.07
31-71003	...	Cable	Twist On	RG59, RG62, RG71, RG140, RG210	...	93F1515	29.79
31-71008	1	Cable	Crimp	RG59, RG62, Belden 8241, 8263, 8279, 9209	CTL-1	90F8483	4.01
31-71008-1000	1	Cable	Crimp	RG59, Belden 1426A, 1505A, 9100, 9278	CTL-1	93F1517	4.50
31-71008-2000	1	Cable	Crimp	RG59, Belden 88241, 82259, 89259	...	93F1518	5.37
31-71013	1	Cable	Crimp	RG179, RG187	CTL-2	90F8485	8.68
31-71032	1	Cable	Crimp	Belden 8281, 88281	CTL-2	93F1526	3.78
31-71033	1	Cable	Crimp	Belden 8281, 88281	CTL-2	93F1527	3.43
31-71035	1	Cable	Crimp	RG59, Belden 82108	...	01F994	7.35
31-71064	1	Cable	Crimp	RG6DB	...	01F996	8.61
31-70008-1000	...	Cable	Crimp	AT&T 734A	...	93F1505	6.77

➤CONTINUED➤

75-OHM CRIMP-CRIMP BNC CONNECTORS (CONT.)

STRAIGHT BULKHEAD JACK

Mfg. Part No.	Fig.	Mounting	Termination	RG/U	Die Set*	Stock No.	Price Each 1-9
31-70018	2	Panel	Solder	RG58, RG59, RG179, RG316	...	89F2868	11.80

STRAIGHT ADAPTER, JACK-JACK

31-70019	3	...	...	...	...	89F2869	10.57

STRAIGHT BULKHEAD ADAPTER, JACK-JACK

31-70020	4	Panel	...		...	89F2870	17.00

*Die sets fit **mfg. part no. 227-944** tool handle *order separately online or call*, except **mfg. part no. CTL** items which contain handle and die set

(8198)

31 SERIES RFX™ 50-OHM AND 75-OHM BNC CONNECTORS

RoHS Compliant Available

Amphenol® RF

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Use with **CTL series** crimp tools; *ordered separately on page 1062.*

STRAIGHT PLUGS

Mfg. Part No.	Fig.	Impedance (Ω)	RG/U	Stock No.	Price Each 1-9	Price Each 10-24
31-2-RFX	1	50	RG58, RG141, RG142, RG400	93F1398	2.18	1.93
31-212-RFX	1	50	RG59, RG62, RG71, RG140, RG210, RG302	93F1403	3.09	2.91
31-5998-RFX	1	50	Belden 9913, LMR-400	95B8144	6.63	6.45
31-5999-RFX	1	50	RG8X , Belden 7808A, LMR-240	95B8145	6.64	6.09
31-242-RFX	2	50	RG179, RG187	93F1414	2.31	2.12
31-315-RFX	2	50	RG174, RG188, RG316	93F1416	1.93	1.62
31-320-RFX	2	50	RG58, RG141	97B2386	1.63	1.39
31-321-RFX	2	50	RG59, RG62, RG140, RG210, RG302	93F1419	3.44	2.23
31-71000-RFX	2	75	RG6, Belden 9248, 1694A	93F1439	3.03	2.78
31-321-10RFX	2	50	Belden 8281, 88281	19C3283	2.48	2.31
31-5558-RFX	2	50	RG6	92B6424	2.71	2.54
31-71008-RFX	2	75	RG59, RG62, Belden 8241, 8263, 8279, 9209	19M4827	1.75	1.71
31-71013-RFX	2	75	RG179, RG187	93F1445	1.93	1.68
68175-5RFX	2	50	RG59	93F1395	3.34	2.18
68175-11RFX	2	50	RG59, RG62, RG142, RG400	93F1396	3.46	2.99
31-4541-RFX	3	50	RG59	93F1429	4.47	4.34
31-5136-RFX	4	50	RG59, RG62, RG140, RG210	93F1431	2.18	1.97
31-5137-RFX	4	50	RG58, RG58A, RG58C, RG141, RG303	93F1432	2.79	2.41
STRAIGHT JACKS						
31-317-RFX	...	50	RG174, RG188A, RG316	30C1216	3.18	2.71
31-71014-RFX	...	75	RG179, RG187, Belden 9221	93F1446	2.08	1.88

(8213)

31 SERIES RFX™ 50-OHM AND 75-OHM BNC BULKHEAD JACKS

RoHS Compliant Available

Amphenol® RF

Use with **CTL series** crimp tools, *order separately on page 1062.*

Mfg. Part No.	RG/U	Impedance (Ω)	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25+
31-245-RFX	RG179, RG187	50	93F1415	3.97	3.70	3.42
31-318-RFX	RG174, RG188, RG316	50	93F1417	3.27	2.97	2.71
31-342-RFX	RG58, RG141, RG142, RG223	50	93F1422	3.20	3.10	2.99
31-343-RFX	RG59, RG62, RG140, RG210	50	93F1423	4.31	3.74	3.47
31-71011-RFX*	RG59, RG62, RG140, RG210	75	93F1443	4.11	3.97	3.79
31-71016-RFX*	RG179, RG187, Belden 9221	75	93F1447	3.41	3.32	3.24

(8214)

RF COAX – MINIATURE

31 SERIES RFX™ BNC PANEL AND BULKHEAD RECEPTACLES

RoHS Compliant Available

Amphenol® RF

Fig. 1

Fig. 2

Fig. 3

Receptacles are front mount bulkhead, except **mfg. part no. 31-203-RFX**, which is front or rear mount panel. All types are 50Ω, except mfg. part nos. with **suffix 75RFX**, which denotes 75Ω.

Mfg. Part No.	Fig.	Stock No.	Price Each 1-9	10-24	25-99	100+
● 31-10-RFX	1	93F7577	2.21	1.89	1.56	1.45
● 31-203-RFX	2	93F1401	2.98	2.71	2.36	2.18
● 31-221-75RFX	3	93F1412	1.96	1.61	1.40	1.30
● 31-221-RFX	3	92B6175	1.76	1.60	1.29	1.11

(8215)

31 SERIES RFX™ BNC PC BOARD RECEPTACLES

RoHS Compliant Available

Amphenol® RF

Feature gold-plated contacts except **mfg. part no. 31-5329-51-RFX** which has silver-plated contacts.

Mfg. Part No.	Impedance	Stock No.	Price Each 1-9	10-24	25-99	100-499
● 31-5329-52RFX	50-Ohm	93F7520	2.40	2.17	1.78	1.71
● 31-5329-51-RFX	50-Ohm	93F7519	1.92	1.81	1.76	1.72
● 31-5329-72RFX	75-Ohm	93F7554	2.11	2.06	2.00	1.96

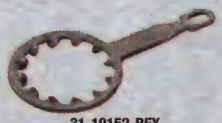
(8219)

31 SERIES RFX™ 50-OHM AND 75-OHM BNC RIGHT-ANGLE PLUGS AND GROUNDING LUG

RoHS Compliant Available

Amphenol® RF

31-71010-RFX


31-10152-RFX

Use with **CTL series** crimp tools, *order separately on page 1062.*

Mfg. Part No.	Impedance (Ω)	RG/U	Stock No.	Price Each 1-9	10-24
● 31-335-RFX	50	RG58A, RG58C, RG141	93F7553	5.77	5.55
● 31-336-RFX	50	RG59, RG62, RG140, RG210	93F1421	4.94	4.75
● 31-71010-RFX	75	RG59, RG62, Belden 8241, 8263, 8279, 9209	73K1447	6.27	5.40

GROUNDING LUG

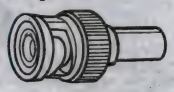
Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-24
● 31-10152-RFX	Nickel-Plated Toothed Grounding Lug, BNC, 75Ω	93F1438	0.48	0.42

(8216)

RFX™ RESISTOR TERMINATED BNC MALE CAPS

RoHS Compliant Available

Amphenol® RF



BNC caps resistor terminated, 5% 1 watt. Impedance available: 50, 75 or 93 ohms. Feature nickel-plated brass body, silver-plated brass male contact. Delrin dielectric material.

Mfg. Part No.	Impedance	Stock No.	Price Each 1-9	10-24	25-99	100+
● 46650-51RFX	50-Ohm	93F1392	2.05	1.87	1.58	1.51
● 46650-75RFX	75-Ohm	93F1393	2.27	2.08	1.92	1.89
● 46650-93RFX	93-Ohm	93F1394	3.44	3.11	2.82	2.54

(8270)

RFX™ BNC ADAPTERS

RoHS Compliant Available

Amphenol® RF

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6

Fig. 7

Mfg. Part No.	Fig.	Description	Stock No.	Price Each 1-9	10-24	25-99
● 31-9-RFX	1	Right-Angle Jack/Plug, 50-Ohm	93F7576	4.26	3.90	3.29
● 31-28-RFX	2	Jack/UHF Plug	73K1432	51.85	47.89	44.23
● 31-208-RFX	3	Jack/Plug/Jack Tee, 50-Ohm	93F1402	5.51	4.57	3.46
● 31-216-RFX	4	Jack/N Plug	59K0375	15.82	13.73	13.38
● 31-217-RFX	5	Plug/N Jack	73K1429	28.72	27.23	24.88
● 31-218-RFX	6	Plug/Plug, 50-Ohm	93F1406	3.50	3.27	2.45
● 31-218-75RFX	6	Plug/Plug, 75-Ohm	93F1407	4.27	4.07	3.99
● 31-219-RFX	7	Jack/Jack, 50-Ohm	93F1408	3.56	3.37	2.59
● 31-220G-RFX	...	Jack/Jack Bulkhead with Gasket, 50-Ohm	93F7596	3.79	3.22	2.51
● 31-220N-RFX	...	Jack/Jack Bulkhead without Gasket, 50-Ohm	93F1409	3.43	3.09	2.36
● 31-220N-75RFX	...	Jack/Jack Bulkhead without Gasket, 75-Ohm	93F1410	3.09	2.83	2.50
● 31-4803-1101	...	Jack/Jack, 50-Ohm	93F1482	14.42	13.32	12.30
● 31-4803-75	...	Jack/Jack, 75-Ohm	50B8959	12.00	11.04	10.55
● 21900	...	Plug/Jack/Jack Tee, 50-Ohm	51F3828	83.14	76.76	69.79

(8218)

RFX™ BNC CONNECTORS

RoHS Compliant Available

Amphenol® RF

Fig. 1

Fig. 2

Fig. 3

50-ohm BNC plugs features miniature bayonet lock units. Crimp-type outer and press fit inner cable attachments. Nickel-plated brass body, gold-plated brass male contacts. Delrin dielectric material. Frequency range: 0-4GHz. Voltage rating 500V peak. Use with **CTL** crimp tools; *order separately on page 1062*.

RFX™ 50-OHM BNC PLUG

Mfg. Part No.	Fig.	RG/U	Stock No.	Price Each 1-9	10-24	25-99	100+
● 36650-3RFX	1	Plenum 58	97B4392	3.40	2.22	1.53	1.43
● 31-5556-RFX	2	RG59	93F1433	3.52	2.35	1.80	1.67

RFX™ 50-OHM BNC JACK

● 36800-RFX	3	58, 141, 142	93F7573	1.53	1.48	1.44	1.19

(8275)

BNC ADAPTERS, CAPS, AND ACCESSORIES

RoHS Compliant Available

Amphenol® RF

Fig. 1

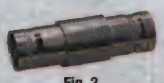


Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6

Fig. 7

Fig. 8

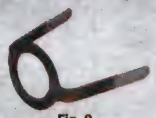


Fig. 9

Fig. 10

Fig. 11

➤ CONTINUED ➤

BNC ADAPTERS, CAPS, AND ACCESSORIES (CONT.)

ADAPTERS

Mfg. Part No.	Fig.	Body Style	Convert From	Convert To	MIL No.	Stock No.	Price Each 1-9
31-218	1	Straight	BNC Plug	BNC Plug	UG-491A	39F1031	16.22
31-219	2	Straight			UG-914	39F1032	5.72
31-70019	2	Straight	BNC Jack	BNC Jack	...	89F2869	10.57
31-9	3	Right Angle	BNC Jack	BNC Plug	UG-306	39F071	14.71
31-209	3	Right Angle	BNC Jack	BNC Plug	UG-306A	39F1071	24.52
31-2208	4	Tee	BNC Plug	BNC Jack / Jack	UG-274B/U	39F1080	18.15
31-70036	4	Tee	BNC Plug	BNC Jack / Jack	UG-274B/U	88F4834	90.32
31-8	4	Tee	BNC Jack	BNC Plug / Jack	UG-274	73K1448	12.04
31-208	4	Tee	BNC Plug	BNC Jack / Jack	UG-274A	39F1024	17.74
47000	5	Straight	BNC Jack	BNC Jack	UG-414	73K1469	32.31
31-220N	6	Straight Bulkhead	BNC Jack	BNC Jack	...	39F1033	7.02
31-220H	6	Straight Bulkhead	BNC Jack	BNC Jack	UG-492A	90F6319	8.28
31-3220	6	Straight Bulkhead	BNC Jack	BNC Jack	UG-492D	73K1434	21.12
31-4803	6	Straight Bulkhead			...	38F757	11.56
31-70020	6	Straight Bulkhead	BNC Jack	BNC Jack	...	89F2870	17.00
31-9-75	...	Right Angle	BNC Jack	BNC Plug	...	01F992	15.06
31-9-75RFX	...	Right Angle	BNC Jack	BNC Plug	...	19C3356	5.28
31-4803-RFX	...	Straight Bulkhead	BNC Jack	BNC Jack	...	19C3313	3.41
31-220N-75	...	Straight Bulkhead	BNC Jack	BNC Jack	...	93F1472	14.47

CAPS

Mfg. Part No.	Fig.	MIL No.	Description	Stock No.	Price Each 1-9
31-6	7	CW-123	Male Cap & Chain	39F1000	4.55
31-6-RFX	7	...	Male Cap & Chain	19C3347	2.08
5275	...		Male Shorting Cap	77B6348	13.37
31-17	7	CW-159	Male Shorting Cap & Chain	73K1426	11.79
46650-51	8	...	50-Ohm, 1 Watt, Resistor Male Cap	73K1466	14.91
46650-75	8	...	75-Ohm, 1 Watt, Resistor Male Cap	73K1467	9.37
35650-51	8	...	50-Ohm, ½Watt, Resistor Male Cap & Chain	73K1454	14.90
4700-51	8	...	50-Ohm, ½Watt, Resistor Male Cap & Chain	73K1468	24.66
35650-75	8	...	75-Ohm, ½Watt, Resistor Male Cap & Chain	73K1455	17.49

ACCESSORIES

31-759	9	...	Shield Ground Lug (IBM 2245373)	39F1035	0.77
31-5652	10	...	Nickel-Plated Hex Nut for PC Board Bulkhead Receptacle	93F7516	0.88
31-5653	11	...	Nickel-Plated Lockwasher for PC Board Bulkhead Receptacle	93F7517	0.82

(8279)

V-BITE® PC EDGE MOUNT BNC COAXIAL CONNECTORS

RoHS Compliant Available

BOMAR by WINCHESTER ELECTRONICS

Fig. 1 Fig. 2 Fig. 3

- Low profile, 0.270″ high FMS
- Anti-rotational
- VSWR 1.15:1
- Patented V-Bite® snaps into PC board
- Surface mount center contact

BNC JACKS WITH TEFLON FOR REFLOW SOLDER

Mfg. Part No.	Fig.	Impedance (Ω)	Contact Material	Contact Finish	Stock No.	Price Each 1-9	Price Each 10-24
361V504ER	1	50	Phosphor Bronze	Gold	80K6280	6.25	5.71
BNC THREADED JACK WITH TEFLON FOR REFLOW SOLDER							
361V504ET	2	50	Phosphor Bronze	Gold	80K0247	6.26	5.73
BNC THREADED JACKS WITH TEFLON INSULATOR/FLANGE							
361V504EFT	3	50	Phosphor Bronze	Gold	80K0246	6.20	5.67

(86003)

75-OHM BNC BROADCAST CONNECTORS FOR BELDEN CABLE

RoHS Compliant Available

BOMAR by WINCHESTER ELECTRONICS

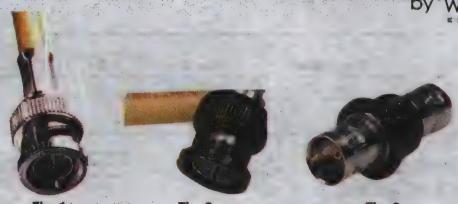


Fig. 1 Fig. 2 Fig. 3

True 75-ohm BNC connectors fit all standard broadcast cables in addition to standard RG cables utilizing standard existing tooling. Made from precision machined brass, these rugged connectors maintain excellent return loss in analog and serial digital applications. Precision matched for each cable.

Mfg. Part No.	Fig.	Body Style	RG Cable Type	Stock No.	Price Each 1-9	Price Each 10-24
SBC1505A	1	Straight Plug	Belden 1505A	83K0829	4.56	4.17
SBC1694A	1	Straight Plug	Belden 1694A	83K0830	4.78	4.37
SBC1855A	1	Straight Plug	Belden 1855A	83K0831	5.01	4.58
SBC7731A	1	Straight Plug	Belden 7731A	83K0832	4.32	3.95
SBC8281	1	Straight Plug	Belden 8281	83K0835	5.45	4.98
HBC1505A*	2	Straight Plug	Belden 1505A	83K0825	3.97	3.77
HBC335R744	3	Straight Bulkhead Adapter	...	83K0828	19.34	17.83

*High definition

CRIMP TOOLS

Mfg. Part No.	For Use With	Die Size	Stock No.	Price Each 1-4
BD17900	Bomar High Definition BNC Connectors	...	79K5729	184.65
BDHD200	Bomar Serial Digital BNC Connectors	0.255″, 0.213″, 0.178″, 0.1″, 0.068″, 0.042″	26M8959	194.52
BDKC6000	Bomar KCC Series Connectors	...	19P8368	99.75

(87999)

FRONT MOUNT BNC BULKHEAD JACKS

RoHS Compliant Available

BOMAR by WINCHESTER ELECTRONICS

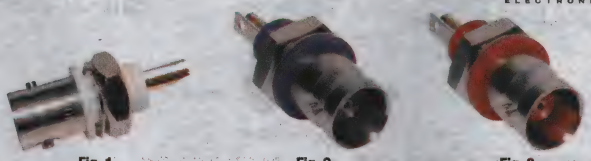


Fig. 1 Fig. 2 Fig. 3

These jacks are held into the panel by a hex-nut and lock washer. All units feature nickel plated, brass bodies, and gold phosphor-bronze contacts.

Mfg. Part No.	Fig.	Body Style	Bushing Color	Features	Stock No.	Price Each 1-24	Price Each 25-49
326R515	1	Straight Bulkhead Jack	White	Isolated	80K0189	5.60	5.10
326R515BL	2	Straight Bulkhead Jack	Blue	Isolated	80K0190	7.35	6.69
326R515RD	3	Straight Bulkhead Jack	Red	Isolated	80K0192	7.93	7.21

(142227)

BNC PC BOARD RIGHT-ANGLE JACKS

RoHS Compliant Available

BOMAR by WINCHESTER ELECTRONICS

Fig. 1 Fig. 2 Fig. 3

50-ohm versions have been approved by most of the U.S. manufacturers of LAN cards, and the 75-ohm is used in high definition video applications which require the use of a true 75-ohm connector. Contact material: phosphor bronze. Contact finish: gold.

STANDARD PROFILE WITH POSTS

Mfg. Part No.	Fig.	Impedance (Ω)	Body Material	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99
364A595	1	50	White Valox	80K0272	3.84	3.49	3.10
364M595	2	50	Nickel/Zinc	80K0312	5.35	4.87	4.32
LO-PROFILE WITH POSTS							
364A595BL	3	50	White Valox	80K0275	3.62	3.29	2.92
364A795BL	3	75	White Valox	80K0288	3.89	3.54	3.14

CONTINUED

BNC PC BOARD RIGHT-ANGLE JACKS (CONT.)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24	25-49	50-99
● 364NT	Jam Nut	80K0327	1.02	0.92	0.82

(68000)

DUAL BNC THREADED RIGHT-ANGLE PC JACKS

RoHS Compliant Available

BOMAR by WINCHESTER ELECTRONICS

Fig. 1

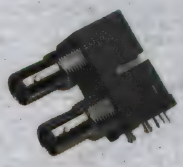


Fig. 2

Contact material: Phosphor bronze. Contact finish: gold.

Mfg. Part No.	Fig.	Impedance (Ω)	Body Material	Stock No.	Price Each 1-24	25-49	50+
● 364A2595	1	50	White Valox	80K0261	9.32	8.71	8.10
● 364M2595	2	50	Metal	80K0305	14.82	13.86	12.88
● 364A2795	1	75	White Valox	80K0265	9.32	8.71	8.10

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24	25-49	50-99	100-249
● 364KNT	Knurled Nut	80K0300	1.15	1.04	0.93	0.84
● 364NT	Jam Nut	80K0327	1.02	0.92	0.82	0.74
BD36400	Hex Wrench for **364KNT**	79K5736	130.00	116.67	...	...

(68001)

50-OHM BNC COAXIAL PLUGS AND ADAPTERS

RoHS Compliant Available

KINGS by WINCHESTER ELECTRONICS

KC-59-557-M06

50-OHM BNC STRAIGHT COAXIAL PLUGS

Mfg. Part No.	Con-tacts	For RG/U Cable	Mil. No M39012/	Stock No.	Price Each 1-499
● 755-129-9	Crimp	RG174, RG179, RG187, RG188	...	88K3075	7.16
● KC-59-284	...	RG174, RG188, RG188A, RG316	...	94F5260	38.16
● KC-59-557-M06	Crimp	RG174, RG179A, RG179B, RG187, RG187A, RG188, RG188A, RG316	...	44F8478	14.81
● 755-120-5	Crimp	RG180	16-0502	98H0159	10.46
● 755-112-9	Crimp	RG142, RG223, RG400	...	65K4942	6.51
● 755-114-9	Crimp	RG58, RG141	...	72J6548	4.85
● 755-122-5	Crimp	RG58, RG141	16-0504	98H0160	8.41
● 755-78-9	Crimp	Boeing BMS13-65 OF, Adams Russell FC14Z	...	92B5111	21.75
50-OHM BNC RIGHT-ANGLE COAXIAL PLUG — MIL-GRADE					
● 756-19-7	Crimp	RG55, RG55A, RG55B, RG142, RG142A, RG142B, RG223, 400	20-0007	20H0172	15.35

BNC WITHIN SERIES ADAPTERS

Mfg. Part No.	Description	Stock No.	Price Each 1-499	500-999
● KC-99-54	Straight Bulkhead Adapter	44F8509	35.24	32.19
● UG-914/U	Straight Adapter	44F8514	14.16	12.92
● 2029-17-9 QD	Straight Adapter	99K5547	8.05	7.35

(8863)

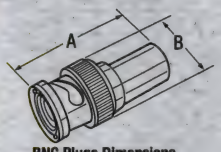
TRUE 75-OHM HDTV BNC CONNECTORS

RoHS Compliant Available

KINGS by WINCHESTER ELECTRONICS

- Voltage Rating: 500VRMS
- Contact Resistance: Center 0.0014-Ohm, Outer 0.002-Ohm
- Insulation Resistance: 5000MΩ
- Flammability Rated: UL94V-0 (Center Conductor Insulator)

BNC Plugs



BNC Plugs Dimensions

2065 series BNC connectors are TRUE 75-ohm connectors designed to terminate the most commonly utilized coaxial cable in the broadcast industry. Meet the industry's stringent HDTV standards and feature a full crimp design. Field installable with ratchet-style crimp tool and die sets; *order separately below.*

75-OHM BNC PLUGS

Mfg. Part No.	For Cable	Dimensions Inches (mm) A	B (Dia.)	Use Die Set	Stock No.	Price Each 1-99
● 2065-2-9	Belden 9259	1.21 (30.7)	0.57 (14.5)	KTH-2261	96B7245	4.35
● 2065-15-9	Belden 8281	1.10 (28.0)	0.57 (14.5)	KTH-2119	63K4285	9.29
● 2065-7-9	RG59	1.21 (30.7)	0.57 (14.5)	KTH-2261	96B1295	7.67
● 2065-10-9	Belden 1694A	1.22 (31.0)	0.57 (14.5)	KTH-2255	94B9461	4.35
● 2065-11-9	Belden 1855A, 1865A	1.22 (31.0)	0.57 (14.5)	KTH-2025	96B1230	4.21
● 2065-28-9	RG179, RG187, Belden 9221	1.21 (30.7)	0.56 (14.5)	KTH-2258	99K5549	9.11

CRIMP HAND TOOL AND DIE SETS

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● KTH-1000	Ratchet-Style Crimp Hand Tool	44F8469	444.31
● KTH-2001	Crimp Die For Use With RG-55, 58, 141, 142, 233	44F8470	220.53
● KTH-2004	Crimp Die For Use With Belden 7731A, 8213	44F8480	226.04
● KTH-2255	Crimp Die For Use With Belden 1694A, 1695A	96B5987	226.04
● KTH-2261	Crimp Die For Use With Belden 1505A, 1506A, 8241, 9209A, 9259	91B7857	217.24

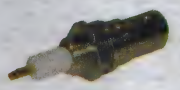
(75877)

RF COAXIAL PANEL JACKS

RoHS Compliant Available

KINGS by WINCHESTER ELECTRONICS

KV-79-15



1704-1

Mfg. Part No.	Coax	Body Style	Stock No.	Price Each 1-499
● KV-79-15	MHV Coaxial	Straight Bulkhead Jack	46F6043	23.95
● 1707-1	SHV Coaxial	Straight Jack	46F6041	26.67
● 1764-1	SHV Coaxial	Straight Bulkhead Jack	98B0082	68.13
● 1704-1	SHV Coaxial	Straight Bulkhead Jack	46F6040	8.77
● 1704-2	SHV Coaxial	Straight Bulkhead Jack	93F6328	28.85
● 1704-3-9	SHV Coaxial	Straight Bulkhead Jack	92C6715	17.61
● 1064-1	10KV High Voltage	Straight Bulkhead Jack	98F9727	23.11

*Mil. No. 39012/04-0002
(164167)

MULTICOMP BRAND CRIMP-ON BNC CONNECTORS

RoHS Compliant Available

multicomp

Fig. 1

Fig. 2

Fig. 3

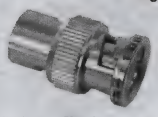


Fig. 4

Fig. 5

Lightweight BNC connectors significantly reduce assembly time for cable connection. **Figs. 1** and **3** are 2-pc. crimp plugs or jacks consisting of the connector and ferrule with a frequency range up to 4Ghz. **Fig. 2** are 3-pc. crimp plugs consisting of the connector, ferrule, and center contact with a frequency range up to 4GHz. **Mfg. part nos. SPC19875** and **SPC19876** has a frequency range up to 3GHz. **Mfg. part no. SPC19880** has a frequency range up to 2GHz and **Fig. 4** are clamp-type plugs with solder contact. **Fig. 5** is a 2-pc. 75-ohm crimp plug with a frequency rating of 0-1GHz. Order **mfg. part no. CTR-8556-01** crimp tool separately; *go online or call.*

➤CONTINUED➤

MULTICOMP BRAND CRIMP-ON BNC CONNECTORS (CONT.)

50-OHM BNC CRIMP PLUGS

Mfg. Part No.	Fig.	RG/U	Jacket O.D. (in.)	Stock No.	Price Each 1-24	Price Each 25-49
SPC20102	1	58*	0.195 - 0.210	82K9782	4.89	4.14
SPC15233	1	58*, 141, 142	0.195 - 0.210	79K4832	4.40	3.42
SPC15346	1	59, 62	0.220 - 0.250	79K4936	9.31	7.45
SPC15193	1	174, 188, 316	0.085 - 0.105	79K4796	3.55	2.76
MC23569	2	316	...	96M8853	2.92	2.34
50-OHM BNC RIGHT ANGLE CRIMP PLUGS						
MC23566	...	58*	...	96M8850	5.48	4.50
MC23574	...	142	...	96M8858	5.16	4.24
50-OHM MIL-TYPE COMMERCIAL BNC PLUGS						
SPC20097	2	58*	0.185 - 0.210	82K9777	4.19	3.54
SPC20098	2	59	0.220 - 0.250	82K9778	3.95	3.35
50-OHM MULTIFUNCTION BNC PLUGS						
SPC20100	2	174	0.085 - 0.105	82K9780	4.19	3.55
50-OHM BNC CRIMP JACKS						
MC23572	...	174	...	96M8856	3.75	3.08
50-OHM BNC CLAMP PLUGS						
SPC4276	4	8	0.395 - 0.415	84N1265	19.70	16.19
1551	4	58*, 58A, 58C, 141, 141A	0.185 - 0.205	92N3397	10.72	8.78
75-OHM BNC CRIMP PLUGS						
SPC20099	2	59	0.220 - 0.250	82K9779	4.26	3.61
MC23597	2	179	...	96M8881	2.92	2.34
SPC20101	2	Belden 8281	0.280 - 0.305	82K9781	3.97	3.36
1553	5	Belden 8281	0.295 - 0.315	92N3399	8.46	6.93
75-OHM BNC CRIMP JACKS						
13-15-1 TSS RG179U	3	RG179	...	26M5810	3.48	3.14

*For RG 58 (0.319") use **mfg. part no. CTD-8572-02** die set or **mfg. part no. 1738** crimping tool
(8801)

TWIST-ON BNC CONNECTORS

RoHS Compliant Available

multicomp

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6

Lightweight BNC plugs and jacks significantly reduce assembly time for cable connection because there is no soldering or special tools required for termination. **Figs. 1-3** are designed for solid wire except for **mfg. part nos. CPFI-88SW-1**, and **CPFI-88SW-2** designed for stranded wire. **Figs. 4-10** are intermateable with all BNC units having a 2-stud bayonet locking coupling mechanism that meets military specifications MIL-C-39012. Frequency rating: 0-4GHz.

Fig. 7

50-OHM BNC TWIST-ON PLUGS

Mfg. Part No.	Fig.	RG/U	Jacket O.D.	Stock No.	Price Each 1-99
MCCX1003*	1	58	0.185 - 0.205"	66W7738	2.08
SPC20103	1	58, 62	0.220 - 0.250"	82K9783	6.03
50-OHM BNC TWIST-ON JACKS					
MCCX1004	2	59, 62	0.220 - 0.250"	66W7739	2.84

50-OHM BULKHEAD JACKS

Mfg. Part No.	Fig.	Jacket O.D.	Stock No.	Price Each 1-24
SPC20096	3	0.277-0.377"	82K9776	2.67
SPC4274**	3	...	84N1263	2.44
SPC15415	4	0.383-0.483"	79K4997	3.91
SPC15466	5	0.328-0.428"	79K5040	14.95
MCCX1001	6	0.328-0.428"	67W2516	3.04

*Commerical grade; **75-ohm; +Dual/isolated

Mfg. Part No.	Fig.	Description	RG/U	Jacket O.D.	Stock No.	Price Each 1-99
SPC15345*	7	BNC Plug	RG-59 & RG-62	0.220-0.250"	79K4935	5.24

(8878)

50-OHM BNC COAXIAL CONNECTORS

RoHS Compliant Available

multicomp

Fig. 1

Fig. 2

Fig. 3

Fig. 4

PLUGS STRAIGHT

Mfg. Part No.	Fig.	Connector Mounting	Coaxial Termination	Contact Plating	RG/U	Stock No.	Price Each 1-49
SPC11222	1	Cable	Solder	Gold	RG58, RG142	34C5623	13.17
SPC11223	1	Cable	Solder	Gold	RG174	34C5624	14.50
13-01-3 58U	1	Cable	Solder	Gold	RG58, Essex 621-715	21M5080	4.01
13-01-3 TGZ RG174U	1	Cable	Solder	Gold	RG174	26M5786	4.17
13-10-1 TSS RG58U	2	Cable	Crimp	Silver	RG58, Essex 621-715	26M5802	3.96
SPC11224	2	Cable	Crimp	Gold	RG58, Essex 621-715	34C5625	9.23
MC23600	2	Cable	Crimp	Gold	RG178	96M8884	2.32
PLUGS RIGHT ANGLE							
JACKS STRAIGHT							
SPC11227	3	Cable	Solder	Gold	RG174, RG188, RG188A, RG316	34C5628	12.78
SPC11228	4	Cable	Solder	Gold	...	34C5629	9.22
JACKS STRAIGHTBULKHEAD							
MC23557	3	Panel	Solder	Gold	...	96M8841	2.58
13-25-12 TGN	4	Panel	Solder	Gold	...	26M5825	3.44
13-25	4	Panel	Solder	Gold	...	26M5822	2.47
13-28	4	Panel	Solder	Gold	...	19M5205	3.59

(68815)

75 -OHM BNC COAXIAL CONNECTORS

RoHS Compliant Available

multicomp

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

PLUGS (GOLD-PLATED BRASS CONTACTS)

Mfg. Part No.	Fig.	Connector Mounting	Coaxial Termination	RG/U	Stock No.	Price Each 1-99
13-01-3 TGN UR70	1	Cable	Solder	UR70	26M5785	3.86
SPC11204	2	Cable	Crimp	RG59	34C5609	8.47
SPC11205	2	Cable	Crimp	RG59	34C5610	8.30
13-10-1 RG59	3	Cable	Crimp	RG59	26M5799	2.82
SPC11209	3	Cable	Crimp	RG6	34C5614	9.22
SPC11210	4	Cable	Crimp	RG179	34C5615	10.25
1553	3	Cable	Crimp	Belden 8281	92N3399	8.46
MC23608	4	Cable	Crimp	Belden 1855A	96M8892	2.83
JACKS (GOLD-PLATED BRASS CONTACTS)						
SPC4274	5	Panel	Solder	...	84N1263	2.44

(164426)

RF COAX – MINIATURE

MEDIUM-HIGH VOLTAGE 5KVDC BNC CONNECTORS

RoHS Compliant Available — multicomp

Fig. 1

Fig. 2

PLUGS (GOLD-PLATED BRASS CONTACTS)

Mfg. Part No.	Fig.	RG/U	Connector Mounting	Coaxial Termination	Insulation	Stock No.	Price Each 1-49
● SPC11220	1	RG59, RG62, RG71, RG140, RG210	Cable	Crimp	PTFE	34C5621	16.81
JACKS (GOLD-PLATED BRASS CONTACTS)							
● SPC11221	2	...	Cable	Solder	PTFE	34C5622	18.99

(164427)

30-PC. UNIVERSAL COAXIAL ADAPTER KIT

RoHS Compliant Available — multicomp

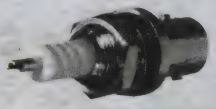
Mfg. part no. 8589-0863 30-piece universal adapter kit allows mix and match of any 2 male or female coaxial fittings. Each connector has a common end and a universal end. Simply choose the 2 common connector ends needed and screw them together with the universal adapter. Kit contains 6 universal adapters, 2 each of the following: BNC male adapters, BNC female adapters, N male adapters, N female adapters, SMA male adapters, SMA female adapters, TNC male adapters, TNC female adapters, UHF male adapters, UHF female adapters, mini-UHF male adapters and mini-UHF female adapters. All parts are silver plated with gold contacts and Teflon® insulation. Features handy zippered storage case.

Mfg. Part No.	Stock No.	Price Each 1-9
● 8589-0863	16N2745	312.44

(8845)

50-OHM BNC CONNECTORS

RoHS Compliant Available — molex



Mfg. Part No.	Body Style	Description	RG/U	Stock No.	Price Each 1-9
● 73100-0105	Right Angle Jack	PCB	...	97C7196	1.67
● 73100-0195	Straight Bulkhead Jack	Solder Pot Contact	...	32M0741	3.03
● 73100-0491	Straight Plug	Cable, Crimp	RG58, Essex 621-715	32M0744	2.54
● 73115-5003	Straight Jack	Bulkhead	...	32M0747	4.53

(90505)

75-OHM BNC CONNECTORS

RoHS Compliant Available — molex

- DC to 4 GHz
- Bayonet lock coupling
- Space saving vertical mating
- Ideal for wireless and GPS application

JACKS

Mfg. Part No.	Body Style	Mounting	Termination	Features	Stock No.	Price Each 1-9
● 73171-1900	Straight	PCB	Solder	...	78H0854	1.47
● 73171-3230	Straight	PCB	Through Hole Vertical	...	74R6904	3.97
● 73171-2630	Straight Blkhd.	Cable	Crimp	...	56R6459	12.33
● 73100-0067	Right Angle	PCB	Solder	Black PBT Body	32M0732	2.98
● 73100-0069	Right Angle	PCB	Solder	White PBT Body	32M0733	2.70

➤ CONTINUED ➤

75-OHM BNC CONNECTORS (CONT.)

Mfg. Part No.	Body Style	Mounting	Termination	Features	Stock No.	Price Each 1-9
● 73171-0700	Right Angle	PCB	Through Hole Right Angle	Low Profile	32M0751	6.12
● 73171-3350	Right Angle Blkhd.	PCB	Through Hole Vertical	Zinc Alloy Body	74R6905	5.38

(90506)

75-OHM BNC BULKHEAD JACKS

RoHS Compliant Available — NEUTRIK

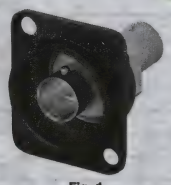


Fig. 1

Fig. 2

FEED-THRU RECESSED BULKHEAD JACKS

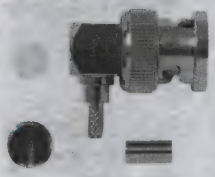
Mfg. Part No.	Fig.	Description	Stock No.	Price Each 1-9
● NBB75DFI*	1	Isolated	27C7968	13.90
● NBB75DFIB*	1	Isolated, Black	27C7969	13.81
● NBB75DFGB*	1	Grounded, Black	27C7972	14.87
FEED-THRU BULKHEAD JACKS				
● NBB75FI	2	Isolated	27C7974	11.55
● NBB75FG	2	Grounded	27C7971	11.10
● NBB75FI-M	2	Isolated, Metal Threads	34C9334	22.38

*Uses same hole cutout size as Neutrik brand "D" series connectors

(65993)

50-OHM BNC COAXIAL CONNECTORS

RoHS Compliant Available — Pomona®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PLUGS

Mfg. Part No.	Body Style	Connector Mounting	Coaxial Termination	RG/U	Stock No.	Price Each
● 5307	Straight	Cable	Solder	RG174, RG179A, RG179B, RG187, RG187A, RG188, RG188A, RG316	94F1517	9.60
● 5285	Straight	Cable	Crimp	RG58, RG58A, RG58C, RG141, RG141A	94F1515	3.10
● 4488	Straight	Cable	Solder	RG58, RG58A, RG58C, RG141, RG141A, RG142, RG142A, RG142B, RG223	44F5330	3.75
● 73043	Straight	Cable	Crimp	RG8, RG9, RG11, RG213, RG214	08R6348	6.80
● 73042	Right Angle	Cable	Crimp	RG174, RG188, RG316	08R6347	7.30
● 73061	Right Angle	Cable	Crimp	RG58, RG141	08R6364	21.30
JACKS						
● 4578	Straight	PCB	Solder	...	46F2207	4.60
● 4788	Right Angle	PCB	Through Hole Vertical	...	46F2206	12.00
● 6717	Right Angle	PCB	Solder	...	61H3198	16.20

TERMINATORS AND CAPS

Mfg. Part No.	Description	Stock No.	Price Each
● 3840-50	Straight Terminator	44F5328	8.30
● 5085	Plug Shorting Cap	50F1473	6.20
● 3839	Jack Dust Cap w/ Chain	77B2417	3.15

(8803)

50-OHM BNC ATTENUATORS AND DIN ADAPTER

RoHS Compliant Available

Pomona®

6257

50-OHM BNC ATTENUATORS

Mfg. Part No.	Description	Stock No.	Price Each
4108-3DB	BNC Attenuator, 3db	10M4325	85.00
4108-6DB	BNC Attenuator, 6db	10M4326	85.00
4108-10DB	BNC Attenuator, 10db	10M4323	85.00
4108-20DB	BNC Attenuator, 20db	10M4324	85.00

7/16 DIN ADAPTER

Mfg. Part No.	Description	Stock No.	Price Each
6257	7/16 DIN Male-to-"N" Female Adapter	02B1781	124.50

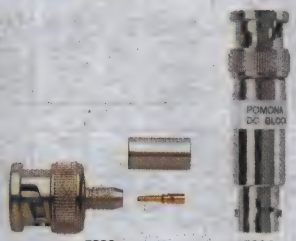
(90521)

75-OHM BNC PLUG AND ADAPTER

RoHS Compliant Available

Pomona®

This BNC plug and adapter is precision machined with tarnish-resistant nickel plating and designed to 75-ohm for broadcast applications.



5286 5297

STRAIGHT CRIMP PLUG

Mfg. Part No.	RG/U	RG/U	Stock No.	Price Each
5286	RG59, RG62, RG71, RG210	75	84F926	4.45

ADAPTER

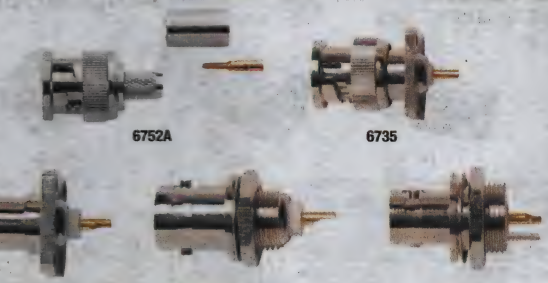
Mfg. Part No.	Convert From	Convert To	Features	Stock No.	Price Each
5297	BNC Plug	BNC Jack	DC-Blocking Series Capacitor	46F2376	36.15

(90519)

BNC VIDEO BROADCAST CONNECTORS

RoHS Compliant Available

Pomona®



6752A 6735

6736 6745 6741

6747 6703A, 6704A 6718

Connectors and adapters for crystal clear digital video signals are designed to minimize Voltage Standing Wave Ratio (VSWR). Made from precision machined high quality brass permitting less signal loss. Center contacts are plated with 20 micro inches of gold for better conductivity.

VIDEO BROADCAST PLUGS

Mfg. Part No.	Impe-dance (Ω)	Mounting	Termi-nation	RG/U	Stock No.	Price Each
6752A	75	Cable	Crimp	RG59, RG59A, RG59B, RG62, RG210	02J8350	4.25
6735	75	Panel	Solder	...	02J8337	4.95

➤CONTINUED➤

BNC VIDEO BROADCAST CONNECTORS (CONT.)

VIDEO BROADCAST JACKS

Mfg. Part No.	Impe-dance (Ω)	Mounting	Termi-nation	RG/U	Stock No.	Price Each
6736	75	Panel	Solder	...	02J8338	4.95
6745	75	Bulkhead	Solder	...	02J8345	4.25
6741*	75	Bulkhead	Solder	...	02J8343	3.05
6747	75	PCB	Solder	...	02J8347	3.15

DUAL OUTPUT VIDEO BROADCAST JACKS

6718	75	PCB	Solder	...	61H3199	18.75

*With Isolated Ground

TERMINATORS

Mfg. Part No.	Description	Impedance (Ω)	Power (W)	Stock No.	Price Each
3840-75	Resistor Terminator Plug	75	1/2	44F5326	15.30

(165079)

BNC CONNECTORS, 75-OHM DIGITAL

RoHS Compliant Available

EMERSON. Network Power

Trompeter Connectivity Solutions

- Voltage Rating: 500VACrms
- Operational Frequency: Up to 6GHz
- Dielectric Withstanding Voltage: 1500VACrms

UPL2000 Series

UPL2000 series high-frequency, true 75-ohm BNC crimp plugs are designed to handle high bit-rate digital video signal transmissions in conjunction with low-loss coaxial cable used in broadcast applications. Deliver long-term field performance at high frequency for error-free transmission of digital signals over the entire bandwidth utilized by HDTV signal transport. Fully enclosed, heat-treated beryllium copper outer conductor spring improves EMI/RFI suppression and reduces signal loss. Black nickel-finished shell with machined PTFE insulator for superior RF electrical performance. Captivated and locking center contact plated with 50μ" gold over nickel over copper over brass. Gold-flash palladium, nickel-plated beryllium copper outer contact.

Mfg. Part No.	RG/U	Stock No.	Price Each 1-9
UPL2000-D1	Belden 1164B,1167B,1263A,1406B,1407B,1417B,1418B,1855A, 1865A,8218, 9170; CommScope 7536,753603,753604,753605,7538;GEPCO BSC809, VDFM809,VFM809,VSM618	88K2022	2.49
UPL2000-D2	Belden 1505A	88K2023	2.60
UPL2000-D4	Belden 1694A,1828A,1829A,9114,9248;CommScope 5765;GEPCO VSD2001	88K2025	2.60
UPL2000-D19	Belden 1855A	54K3548	2.66
UPL2000-D20	Belden 1505F	40K9877	3.58

(49306)

BNC BULKHEAD JACKS

RoHS Compliant Available

EMERSON. Network Power

Trompeter Connectivity Solutions

R/A PCB Bulkhead Jack Bulkhead Jack Adapter

Launch the signal off the PC board in any direction through a bulkhead or motherboard. Reduce board space, cable bend and mating torque forces on the PC board. **Mfg. part no. UBJ27** insulated bulkhead jack features heat-treated beryllium-copper contact with 50μ" gold plating. Simple construction designed for fast and easy assembly. Close tolerances. **Mfg. part no. UCBJ20F** has a straight flange mount with 4 solder legs for torque support. **Mfg. part no. UCBJFF20CP** has a 45° flange mount with compliant pins for solderless installation and screw holes for mounting. **Mfg. part no. UCBBJR229** has right-angle bulkhead mount with four legs and a "D" hole for torque and axial force. **Mfg. part no. UCBJE20-1** has a side-launch card edge mount. Solders to the card edge traces. Reduces space requirements between daughterboards. Designed with solder slots to reduce insertion and return loss compared to solder legs.

BULKHEAD JACKS

Mfg. Part No.	Imp. (Ω)	Description	Stock No.	Price Each 1-9	Price Each 10-24
BJ21	50	BNC Bulkhead Jack, Insulated, Straight, Rear Mount, Solder	90B5861	19.59	18.91
BJ27	50	BNC Bulkhead Jack, Insulated, Straight, Front Mount, Solder	90B9531	12.61	12.17
CBBJR26	50	BNC Bulkhead Jack, Insulated, Right Angle, PCB	90B3904	46.30	44.70
6-0001-1	50	BNC Bulkhead Jack, Right Angle, PCB	67M9078	41.55	40.12
UBJ27	75	BNC Bulkhead Jack, Insulated, Straight, Solder Pot, Front Mount	96B2669	15.07	14.56

➤CONTINUED➤

BNC BULKHEAD JACKS (CONT.)

Mfg. Part No.	Imp. (Ω)	Description	Stock No.	Price Each 1-9	Price Each 10-24
● UCBBJE20-1	75	BNC Bulkhead Jack, PCB, Edge Mount	22C4684	4.08	3.66
● UCBBJE20-3	75	BNC Bulkhead Jack, PCB, Edge Mount	21K5805	5.10	4.93
● UCBJE20-1	75	BNC Bulkhead Jack, PCB, Edge Mount	22C4690	9.11	8.80
BULKHEAD CABLE MOUNT					
● BJ29-5	50	BNC Bulkhead Jack, Wrench Crimp, Straight, Rear Mount for RG-174 cable	96B8543	50.78	49.03
MINI BULKHEAD JACKS					
● 6-0008	75	Mini BNC Bulkhead Jack, Right Angle, Edge Launch	63T7126	8.87	8.56
ADAPTERS					
● BJ28	50	BNC Straight Bulkhead Jack Adapter, Insulated	92B1854	22.39	21.63
● UBJ28	75	BNC Straight Bulkhead Jack Adapter, Insulated	51B1357	21.54	20.81
● UBJ228	75	BNC Straight Bulkhead Jack Adapter, Insulated, Overmold	33C2642	11.96	11.55
● UBJ24I	75	BNC Straight Bulkhead Jack Adapter, Insulated	46P4655	14.21	13.72
● BJ48	50	TNC Straight Bulkhead Jack Adapter	06C1688	31.48	30.40
SPLICE ADAPTERS					
● UCCS-025-026	75	BNC Adapter, In-Line Transition, 734 to 735 Cable	33C2662	16.46	15.89

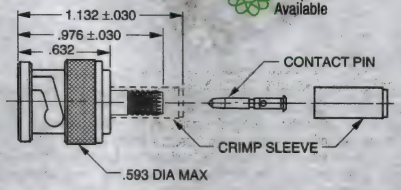
(61570)

75-OHM BNC PLUGS

RoHS Compliant Available

EMERSON. Network Power

Trompeter Connectivity Solutions



Straight crimp plugs feature 50µ″ gold-plated captive center contact pin. Spring-loaded coupling ring utilizes a beryllium-copper crescent washer. Full 0.50″ machined crimp sleeve, 0.300″ support ferrule with radial and axial grooves. **NOTE:** Mfg. part no. suffix (following dash) indicates cable group size.

BNC UPL220 Series

STRAIGHT BNC CABLE PLUGS

Mfg. Part No.	For Cable RG/U	Stock No.	Price Each 1-9	Price Each 10-24
● UPL220-004	RG179, RG187	48F2739	4.70	4.55
● UPL220-009	Belden 8218	48F2742	4.80	4.63
● UPL220-013	RG59	48F2743	4.69	4.54
● UPL220-017	RG6	48F2749	4.75	4.60
● UPL220-025	AT&T 734A	48F2755	4.42	3.97
● UPL220-026	AT&T 735A	48F2756	4.44	3.98
● PL220-003	RG174, RG188, RG316	06C3522	12.29	11.87
MINI BNC PLUGS				
● UPL250-026	Lucent 735A	33C2678	8.38	8.10

ADAPTER

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● UAD258	Mini-BNC Adapter, 75 Ohm, Plug-to-Plug, Inline	33C2639	31.54

(42271)

WRENCH CRIMP BNC PLUGS

RoHS Compliant Available

EMERSON. Network Power

Trompeter Connectivity Solutions

Mfg. Part No.	Impendance (Ω)	For Cable RG/U	Stock No.	Price Each
● PL20-1	50	RG-58	50B8105	29.91
● PL20-2	50	RG-59	06C3507	29.02
● PL20-3	50	RG-223	50B8106	13.64
● PL20-4	50	RG-122	06C3513	31.35
● PL20-5	50	RG-174	50B8107	32.30

CONTINUED

WRENCH CRIMP BNC PLUGS (CONT.)

Mfg. Part No.	Impendance (Ω)	For Cable RG/U	Stock No.	Price Each
● UPL20-2	75	RG-59	06C4440	40.80
● UPL20-5	75	RG-174	90B4196	42.04

(42270)

MIL-C-39012 TWINAXIAL WEATHERPROOF COAXIAL CONNECTORS

RoHS Compliant Available

Amphenol® RF

Fig. 1

Fig. 2

Nonconstant impedance connectors for 78- and 95-ohm twin conductor cable. Improved shielding for use in balanced low level and high sensitivity circuits. 2 non-intermateable constructions available: BNC units (type numbers with **prefix 31**) are polarized contact design (1 male,1 female), 2 stud bayonet coupling, captivated contacts, 0-100Mhz, 100V peak voltage. Others polarized key/keyway construction, threaded coupling, 0-200MHz, 500V peak voltage.

PLUGS

Mfg. Part No.	Fig.	Body Style	Mounting	Termination	RG/U	Stock No.	Price Each 1-9
● 31-2743-11*†	...	Straight	Cable	Solder	RG307A	30C1202	170.21
● 31-224*†	1	Straight	Cable	Solder	RG108A	39F1468	10.08
● 31-2226*†	1	Straight	Panel	Solder	RG108A	46F1168	18.05
JACKS							
● 31-223*†	2	Bulkhead	Panel	Solder	...	39F1470	35.38
● 31-2225*†	...	Dual/Bulkhead	Panel	Solder	...	51F3819	17.27

*Twinaxial Keyed 90°; †For use with **mfg. part no. 227-1417** die set and **mfg. part no. 227-987** tool handle; *order tool handle separately* or **mfg. part no. 227-1414** die set and **mfg. part no. 227-944** tool handle; *order tool handle separately online or call.*

TRIAX WEATHERPROOF TRANSMISSION LINE COAXIAL

For maximum RF shielding, minimum noise radiation; in traxial cable where shielding better than 30dB. Non-constant impedance; accept 75-ohm cable where impedance mismatch not critical.

JACKS

Mfg. Part No.	Body Style	Mounting	Termination	RG/U	Thread	Stock No.	Price Each 1-9
● 34475	Bulkhead	Panel	Solder	...	⅞-20	73K1452	137.38
PLUGS							
● 53175	Straight	Cable	Solder	RG11	⅞-20	39F3337	245.07

(8200)

RFX™ KEYED 90° TWINAX CONNECTORS

RoHS Compliant Available

Amphenol® RF

Fig. 1

Fig. 2

Fig. 3

Used principally in system 3X/400 applications for balanced line high sensitivity circuits. Normally used on 100-ohm twinaxial cable. DC-200MHz with voltage rating of 500V peak. ¾-20 thread.

Mfg. Part No.	Fig.	Description	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-99	Price Each 100+
● 82-5588-RFX	1	Barrel Adapter, Jack-Jack	93F1457	7.73	7.41	7.22	7.11
● 82-5589-RFX	2	Cables to IBM ref. 7362211, Plug	93F1458	6.26	5.75	4.91	4.66
● 82-5590-RFX	3	Front Mount Receptacle	93F1459	10.68	9.70	8.89	8.22

(8272)

TWINAXIAL CONNECTORS AND PHONO ADAPTERS

RoHS Compliant Available

Pomona®

Pomona twinaxial connectors and adapters feature bodies with tarnish resistant nickel plated brass.

4054

TWINAXIAL CONNECTORS

Mfg. Part No.	Description	Stock No.	Price Each
4957	BNC Male Twinaxial Plug to Cable, RG-108U, -108A/U, Belden 9272	44F8848	31.29

PHONO ADAPTERS

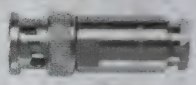
Mfg. Part No.	Description	Stock No.	Price Each
5319	BNC Female to Phono Plug Adapter	46F2379	8.00
4054	BNC Male to 1/4" Audio Phono Jack	44F5329	22.65
1297	BNC Female to Standard 1/4" Two Conductor Phone Plug	10M4164	13.05

(90525)

TRIAXIAL, PANEL MOUNT, AND BULKHEAD CONNECTORS

RoHS Compliant Available

Pomona®



3600

3580

2447

4160

TRIAXIAL CONNECTORS AND ADAPTERS

Pomona triaxial, panel mount, and bulkhead connectors feature bodies with tarnish resistant nickel plated brass.

Mfg. Part No.	Description	Stock No.	Price Each
3600	Triaxial Cable 2 Lug Male	44F5331	62.75
3580	Triaxial Bulkhead 2 Lug Female	44F5327	49.50
5219	Triaxial 3 Lug Bayonet BNC Style Female Bulkhead Mount	87F026	22.35
5056	Triaxial 2 Lug Male Connector to Cable	44F8849	30.30
5218	Triaxial 3 Lug Male Connector to Cable	87F022	39.90
5290	Triaxial 2 Lug Female-to-Female Adapter	46F2375	37.20
5298	Triaxial 2 Lug Female-to-BNC Male Adapter	46F2377	36.75
5299	Triaxial 3 Lug Female-to-BNC Male Adapter	46F2378	7.50
5300	BNC Female-to-Triaxial 3 Lug Male Adapter	46F4502	39.30
PANEL MOUNT AND BULKHEAD CONNECTORS, 50Ω			
2447	BNC Male Panel Mount Connector	30F1432	12.30
2451	BNC Female Panel Mount Receptacle	39F3634	7.40
4979	BNC Male Bulkhead Receptacle	89F370	9.50
4160	BNC Female Bulkhead Connector	39F3628	3.10
4159	BNC Female Bulkhead Receptacle, Hermetically-Sealed	77B2456	22.35
3778	BNC Female Bulkhead Receptacle, Isolated Ground	30F1403	3.85
5148	BNC Female Bulkhead Receptacle, Isolated Ground*	89F362	7.00

* Valox Insulation
(12741)

70/370 SERIES RF TWINAX/ TRIAX CONNECTORS

RoHS Compliant Available

EMERSON. Network Power

Trompeter Connectivity Solutions

TRB Cable Plug

TRB Bulkhead Cable Jack

TRB Bulkhead Jack

TRB Bulkhead PCB Jack

TRB Bulkhead Adapter

TRB Adapter

RFI Cap

70/370 series twinaxial/triaxial connectors are concentrically designed with 2 concentric contacts isolated from each other, the center contact, and the shielding connection. They are used in digital data bus, MIL-STD-1553B (airborne/ground, primary/redundant) base-band circuits, and video pair applications (FLIR). Field serviceable wrench crimp version for quick termination of cables up to 0.250" diameter. Tool crimp version requires hand tools for assembly

➤ CONTINUED ➤

70/370 SERIES RF TWINAX/TRIAX CONNECTORS (CONT.)

("C" in type number). Digits in type number following dash indicate cable/group size. Connectors do not require mechanical alignment for mating. Nominal impedance non-constant. Frequency range: 0-500MHz. Voltage rating: 400V (100V @ 70,000). Insulation resistance: 5000MΩ. Temperature range: -65° to +165°C. Cable retention force (min.) 40 lbs. with 0.200-0.325" O.D. cable.

TRB CABLE PLUGS

Mfg. Part No.	Description	For Cable	Stock No.	Price Each 1-9
PL74-7	Wrench Crimp, Straight, 2-lug	Trompeter TRC-50-2	91B1955	30.42
PL74-9	Wrench Crimp, Straight, 2-lug	Trompeter TWC-78-2	91B8642	29.10
PL74-47	Wrench Crimp, Straight, 2-lug	M17/176-00002	91B3220	29.10
PL75-7	Wrench Crimp, Straight, 3-lug	Trompeter TRC-50-2	48F2789	18.26
PL75-9	Wrench Crimp, Straight, 3-lug	Trompeter TWC-78-2	48F2790	18.26
PL75-29	Wrench Crimp, Straight, 3-lug	Trompeter TWC-78-1	48F2787	22.45
PL75-43	Wrench Crimp, Straight, 3-lug	Microdot 250-4044/250-4045	06C3734	32.46
PL75-45	Wrench Crimp, Straight, 3-lug	M27500-22TE2T14	50B8117	31.86
PL75-47	Wrench Crimp, Straight, 3-lug	M17/176-00002	48F2788	19.60
PL75C-201	Full Crimp, Straight, 3-lug	M17/176-00002	48F2791	20.86
PL75C-204	Full Crimp, Straight, 3-lug	Raychem 10602	48F2786	30.00
PL75C-303	Full Crimp, Straight, 3-lug	Raychem 752BA5314	96B4822	54.30
PL75C-307	Full Crimp, Straight, 3-lug	Trompter TRC-75-1	91B1079	52.71
PLR75C-201	Full Crimp, Right Angle, 3-lug	M17/176-00002	48F2797	121.96
TRT CABLE PLUGS				
PL375-13A	Wrench Crimp, Straight, Threaded	Belden 8232	94B3176	72.28
PL375-7	Wrench Crimp, Straight, Threaded	TRC-50-2, TRC-75-2	50B8114	28.17
TTM CABLE PLUGS				
PL3155-47	Wrench Crimp, Straight, Threaded	M17/176-00002	51B1345	30.91
TRB CABLE JACKS				
CJ70-7	Wrench Crimp, Straight, 3-lug	Trompeter TRC-50-2 & TRC-75-2	51B1341	33.90
CJ70-9	Wrench Crimp, Straight, 3-lug	Trompeter TWC-78-2 & TWC-124-2	93B9017	33.58
CJ70-29	Wrench Crimp, Straight, 3-lug	Trompeter TWC-78-1 & TWC-124-1A	92B7777	30.57
CJ70-47	Wrench Crimp, Straight, 3-lug	M17/176-00002	96B7932	30.57
TRB BULKHEAD CABLE JACKS				
BJ74-29	Wrench Crimp, Straight, 3-lug, Insulated	Trompeter TWC-78-1	96B5781	37.35
BJ74-47	Wrench Crimp, Straight, 3-lug, Insulated	M17/176-00002	92B6151	31.12
BJ79-47	Wrench Crimp, Straight, 3-lug	M17/176-00002	92B5911	34.94

TRB BULKHEAD JACKS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
BJ71	Straight, Rear Mount, Solder Pot	93B0442	20.06
BJ72	Straight, Front Mount, 3-lug, Insulated	48F2772	34.09
BJ75	Straight, Rear Mount, Solder Pot, 3-lug, Insulated	48F2774	32.71
BJ76	Straight, Rear Mount, Solder Pot, 3-lug	48F2775	20.21
BJ76FL	Straight, Rear Mount, Solder Pot, 4-lug	06C1739	30.63
BJ77	Straight, Front Mount, Solder Pot	48F2776	28.52
BJ77HS	Straight, Front Mount, Solder Pot, Hermatically Sealed	06C1741	221.79
BJ77TL	Straight, Front Mount, Solder Pot, 2-lug	50B8091	27.41
BJ770	Straight, Front Mount, Solder Pot, 3-lug	48F2777	21.36
BJ770GL	Straight, Front Mount, Solder Pot, Ground Tab	06C1742	18.22
TRB BULKHEAD PCB JACKS			
CBBJ79	Straight, PCB, 3-lug	48F2779	45.20
CBBJR79	Right Angle, PCB, 3-lug	48F2780	58.81
CBBJR79A	Right Angle, PCB, 3-lug, Tall version	06C1863	58.81
CBBJR79TL	Right Angle, PCB, 2-lug	01C7214	75.24
TRB PCB JACKS			
CBJ70	Straight, PCB, 3-lug	91B5695	51.98
CBJR-70	Right Angle, PCB, 3-lug	91B8457	92.92
TRT BULKHEAD PCB JACKS			
CBBJ379	Straight, PCB, Non-Insulated, Threaded	06C1868	55.45
TPS BULKHEAD JACKS			
BJ50	Straight, Front Mount, Solder Pot, 3-lug, 50Ω	06C1696	10.76

TRB ADAPTERS

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
AD78	3-lug TRB Jack to 3-lug TRB Jack, Straight	91B5771	25.79	24.88
BJ73	TRB Bulkhead Jack to 3-lug TRB Jack, Straight, Insulated	48F2773	34.79	33.59
BJ78	TRB Bulkhead Jack to 3-lug TRB Jack, Straight	48F2778	15.03	13.50
BJ78HS	TRB Bulkhead Jack to 3-lug TRB Jack, Straight, Hermetically Sealed	01C0225	323.43	312.27

➤ CONTINUED ➤

70/370 SERIES RF TWINAX/TRIAX CONNECTORS (CONT.)

TERMINATORS

Mfg. Part No.	Description	Impedance (Ω)	Stock No.	Price Each 1-9	Price Each 10-24
● TNG1-1-0	TRB Termination, No Chain	0	06C4195	28.78	27.78
TNG1-1-78	TRB Jack Termination, No Chain	78	50B8126	35.35	34.14
TNG1-4-78	TRB Jack Termination, 3″ Brass Chain	78	06C4205	53.26	51.42

RFI CAPS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● RFI75-1	TRB Jack RFI Cap with No Chain	06C3975	9.11

TOOLS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
RT1S	BNC/TRB Cable Plug Removal Tool, Straight, 6″	96B9801	34.41
● RTR-1S	BNC/TRB Cable Plug Removal Tool, Right Angle, 6″	06C4037	80.35
● RTR-1L	BNC/TRB Cable Plug Removal Tool, Right Angle, 12″	98B5299	60.05

(41978)

3

150 SERIES RF TWINAX/ TRIAX CONNECTORS

RoHS Compliant Available

EMERSON. Network Power

Trompeter Connectivity Solutions

TRS Cable Plug

1553 Cable Plug

TRS PCB Jack

TRS Bulkhead Jack

TRS Bulkhead Receptacle

Terminator

150 series twinaxial/triaxial connectors are concentrically designed with 2 concentric contacts isolated from each other, the center contact, and the shielding connection. They are used in digital data bus, MIL-STD-1553B (airborne/ground, primary/redundant) base-band circuits, and video pair applications (FLIR). Field serviceable wrench crimp version for quick termination of cables up to 0.250″ diameter. Tool crimp version requires hand tools for assembly (**"C"** in type number). Digits in type number following dash indicate cable/group size. Connectors do not require mechanical alignment for mating. Nominal impedance non-constant. Frequency range: 0-500MHz. Voltage rating: 400V (100V @ 70,000). Insulation resistance: 5000MΩ. Temperature range: -65° to +165°C. Cable retention force (min.) 40 lbs. with 0.200-0.325″ O.D. cable.

TRS CABLE PLUGS

Mfg. Part No.	Description	For Cable	Stock No.	Price Each 1-9
● PL155-29	3-Lug, Wrench Crimp Cable Plug, Twinax	TWC-124-1A, 78-1	96B5742	27.70
● PL155-47	3-Lug, Wrench Crimp Cable Plug, Twinax	M17/176-00002	92B3418	27.90
● PL155AC-201	3-Lug, Tool Crimp Cable Plug, Twinax	M17/176-00002	48F2784	28.32
1553 TWINAX CABLE PLUGS				
● PL3455ACS-201	1553 Twinax, Socket Contact, Use with PL3455AC	M17/176-00002	98B3350	90.14
● PL3455ACP-201	1553 Twinax, Pin Contact, Use with PL3455AC	M17/176-00002	98B3347	93.75
● PL455ACFLS-222	1553 Twinax, Pin Contact, Full Crimp, 3-Lug Bayonet, Straight	Raychem 10613	22C6084	90.78

TRS PCB JACKS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
CBJ157	3 Lug, PC Board	48F2781	41.13
CBJR157	3 Lug, Right-Angle PC Board	48F2782	94.88
TRS BULKHEAD JACKS			
BJ150	3 Lug, Rear Mount, Solder Pot	48F2770	37.74
BJ157	3 Lug, Front Mount, Solder Pot	48F2771	19.94
● BJ157F-2C	Straight, Flange Mount, Solder Pot, 3-lug	06C1511	42.24
TRS PCB BULKHEAD RECEPTACLES			
CBBJ159	3-lug, Straight, Rear Mount, PC Board	06C1865	85.48
RFI CAPS			
● RFI155-2	TRS Jack RFI Cap with 2.5″ Brass Chain	90B4402	10.51
TERMINATORS			
TNGM1-1-78	TRS Jack Termination, 78Ω, No Chain	50B8125	47.07

(176058)

80/380 SERIES RF TWINAX/TRIAX CONNECTORS

RoHS Compliant Available

EMERSON. Network Power

Trompeter Connectivity Solutions

PL80-7

80/380 series twinaxial/triaxial connectors are concentrically designed with 2 concentric contacts isolated from each other, the center contact, and the shielding connection. They are used in digital data bus, MIL-STD-1553B (airborne/ground, primary/redundant) base-band circuits, and video pair applications (FLIR). Connectors do not require mechanical alignment for mating. Nominal impedance non-constant. Frequency range: 0-500MHz. Voltage rating: 500V (125V @ 70,000). Insulation resistance: 5000MΩ. Temperature range: -65° to +165°C. Cable retention force (min.) 65 lbs. with 0.242-0.419″ O.D. cable.

TRC CABLE PLUGS

Mfg. Part No.	Description	For Cable	Stock No.	Price Each 1-9	Price Each 10-24
● PL80-7	Wrench Crimp, Straight, 2-lug	TRC-50-2, 75-2	51B1347	92.89	89.69

TRC ADAPTERS

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
● BJ88	TRC Bulkhead Jack to 2-lug TRC Jack, Straight	92B4873	73.73	71.19

(176057)

AMP 50-OHM AND 75-OHM TNC CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

5227818-1

5225555-2

5225559-2

5221506-2

225551-6

Manufactured in accordance with MIL-C-39012, Class II, Category B. *Order hand tools separately on page 1061.*

50-OHM COMMERCIAL JACKS

Mfg. Part No.	Body Style	Connector Mounting	Length (in.)	Stock No.	Price Each 1-9
● 5227818-1	Straight Bulkhead	PCB	0.835	16M3246	11.54
● 5414168-3	Straight Bulkhead	Cable	1.375	16M3268	4.17
● 5227839-1	Right Angle Bulkhead	PCB	0.820	17M9560	10.40
50-OHM MILITARY JACKS					
● 225551-6	Straight Weatherproof	Cable	1.406	96F7801	40.94
● 5225557-6	Straight Weatherproof	Cable	1.500	16M3232	79.95

50-OHM COMMERCIAL PLUGS

Mfg. Part No.	Body Style	RG/U	Crimp Type	Length (in.)	Stock No.	Price Each 1-9
● 5222506-5	Straight	RG174, RG174A, RG188, RG188A, RG316	Hex	1.230	16M3217	9.37
● 5222506-1	Straight	RG58, RG58A, RG58B, RG58C	Hex	1.230	57K6380	8.35
● 5-225345-6	Straight	RG142, RG142A, RG142B, RG400	Dual	1.343	16M3161	33.31
● 5221506-2	Straight	Belden 8281, 9231	Dual	1.295	10M9832	14.94
50-OHM MILITARY PLUGS						
1-225550-3	Straight	RG393	Dual	1.375	89F2909	35.06
● 5225555-2	Straight Weatherproof	RG58A, RG58C	Dual	1.375	16M3231	24.30
● 5225555-6	Straight Weatherproof	RG142, RG142A, RG142B	Dual	1.375	42K8690	23.86
● 5225559-2	Right Angle Weatherproof	RG58A, RG58C	Dual	1.835	16M3233	45.05
● 5225554-6	Right Angle	RG142, RG142A, RG142B	Dual	2.500	42K7119	67.89

(8242)

50- AND 75-OHM TNC CONNECTORS

RoHS Compliant Available

Amphenol Connex

Fig. 1 Fig. 2 Fig. 3

Fig. 4 Fig. 5 Fig. 6

- DC to 11GHz frequency range
- Temp. range: -65°C to +165°C

STRAIGHT BULKHEAD JACKS

Mfg. Part No.	Fig.	Impedance (Ω)	Coaxial Cable Type RG/U	Coaxial Termination	Connector Mounting	Stock No.	Price Each 1-9
122192	1	50	RG174, RG188A, RG316	Crimp	Cable	86H2651	3.36
STRAIGHT PLUGS							
122408	2	50	RG8X , Belden 7808A, LMR-240	Crimp	Cable	99H4883	3.56
122408RP*	...	50	RG8X , Belden 7808A, LMR-240	Crimp	Cable	99H4884	5.01
122372	2	50	RG55, RG142, RG223, RG400	Crimp	Cable	99H4845	2.56
122108	2	50	RG58	Crimp	Cable	13N5080	2.13
122116	2	50	RG174, RG316, LMR-100	Crimp	Cable	99H4716	3.16
122375	3	50	RG174, RG188A, RG316	Crimp	Cable	99H4849	3.25
122398	4	50	RG214	Crimp	Cable	99H4873	7.67
122410	2	50	Belden 7807A, LMR-200	Crimp	Cable	99H4888	2.61
122393	2	50	Belden 7810A, 8214, 9913, LMR-400	Crimp	Cable	99H4865	7.89
122426	5	75	RG59	Crimp	Cable	99H4908	2.61

*RP suffix in mfg. part no. denotes reverse polarity

RIGHT-ANGLE PLUGS

122140	...	50	RG58, RG58A, RG58C, RG141, RG303	Solder	Cable	99H4733	5.62
122148	...	50	RG174, RG188A, RG316	Solder	Cable	99H4740	5.83

TERMINATOR

Mfg. Part No.	Fig.	Gender	Impedance (Ω)	Stock No.	Price Each 1-9	Price Each 10-24
202117	6	Plug, 1W, 5%	50	99H6105	3.78	3.62

SHORTING CAP

Mfg. Part No.	Fig.	For Gender	Features	Stock No.	Price Each 1-9	Price Each 10-24
202101	...	Jack	With Chain	52M1718	2.09	1.90

(119512)

50-OHM MINIATURE THREADED WEATHERPROOF TNC COAXIAL CONNECTORS

RoHS Compliant Available

Amphenol® RF

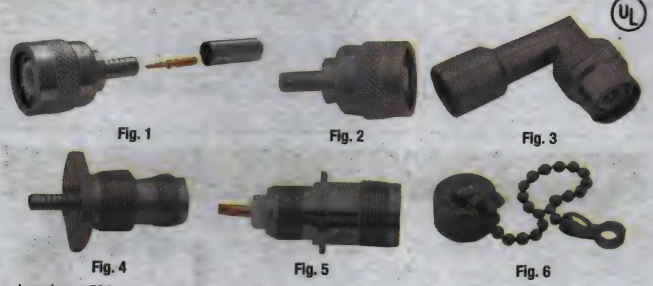


Fig. 1 Fig. 2 Fig. 3

Fig. 4 Fig. 5 Fig. 6

- Impedance: 50Ω
- Frequency range: 0-11GHz

TNC are miniature, threaded weatherproof units with a constant 50 Ω impedance and they operate from 0 - 11 GHz. Ideal for use in cellular and mobile communications, and test and measurement equipment. Also used in airframe, aerospace and radar applications where extreme vibration is a factor. Reverse polarity is a keying system accomplished with a reversed interface which ensures that a reverse polarity TNC does not mate with a standard TNC connector. May

➤CONTINUED➤

50-OHM MINIATURE THREADED WEATHERPROOF TNC COAXIAL CONNECTORS (CONT.)

be used in applications where keying is necessary to eliminate mis-matching from mating with a standard connector. MIL-STD-348 interface ensures high quality and premium performance. Crimp-crimp termination allows easy and quick assembly. *Order tools and die sets separately*, go online or call.

STRAIGHT PLUGS

Mfg. Part No.	Fig.	Termination	RG/U	Stock No.	Price Each 1-9
36825	1	Crimp	RG58, RG141	50F2467	10.89
31-2367	1	Crimp	RG58, RG141	40F6332	5.43
31-2368	1	Crimp	RG59, RG62	51F3798	5.86
31-2373	1	Crimp	RG142, RG223	40F6331	5.40
31-4452	1	Crimp	RG142, RG400	19C3304	10.26
31-2315	1	Crimp	RG174, RG188	73K1430	7.97
31-5677	2	Crimp	RG58, RG58A, RG58C, RG141, RG303	50B791	7.81
RIGHT-ANGLE PLUG					
79075	3	Solder	RG55, RG58, RG141, RG142, RG223, RG400	51F3800	94.23
31-2381	...	Crimp	RG55, RG142, RG223, RG400	19C3274	16.21
STRAIGHT BULKHEAD JACKS					
31-2389	4	Crimp	RG58, RG141	98F625	28.88
31-2318	4	Crimp	RG174, RG188, RG316	77B6687	13.28
FRONT MOUNT STRAIGHT BULKHEAD JACK					
31-2301	5	Solder	RG174, RG188, RG316 Isolated	40F6335	6.70
STRAIGHT 4-HOLE FLANGE MOUNT JACK					
31-2300	...	Solder	...	40F6334	9.75
RIGHT ANGLE PC BOARD MOUNT JACK					
31-5660	...	Solder	...	21K4878	14.05
REVERSE POLARITY STRAIGHT PLUGS					
31-5677-1000	...	Crimp	RG55, RG142, RG223, RG400	29C7030	10.92
31-5679	...	Crimp	Belden 7810A, 8214, 9913, LMR-400	92B7474	10.62
REVERSE POLARITY STRAIGHT JACKS					
31-5678	...	Crimp	RG58, RG58A, RG58C, RG141, RG303	27C3702	14.16
31-5684	...	Crimp	Belden 7810A, 8214, 9913, LMR-400	92B7473	9.75
REVERSE POLARITY STRAIGHT BULKHEAD JACKS					
31-5687	...	Crimp	RG58, RG58A, RG58C, RG141, RG303	50B792	12.93

IN-SERIES ADAPTERS

Mfg. Part No.	Fig.	Body Style	Stock No.	Price Each 1-9
79100	...	Straight Bulkhead Adapter	59K0521	54.48
79125	...	Right Angle Adapter	77B6490	42.35
31-4804	...	Straight Bulkhead Adapter	81F733	25.43
31-4791	...	Straight Adapter	73K1439	45.72
ACCESSORY				
78750	6	Shorting Cap	73K1481	10.04

(8203)

50-OHM RFX™ TNC CONNECTORS

RoHS Compliant Available

Amphenol® RF

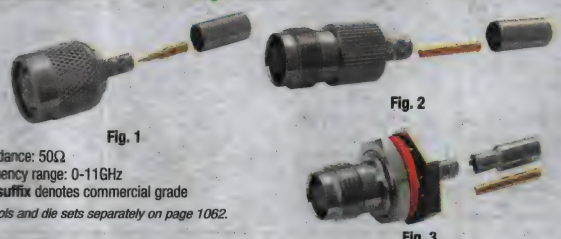


Fig. 1 Fig. 2

Fig. 3

- Impedance: 50Ω
- Frequency range: 0-11GHz
- **RFX suffix** denotes commercial grade

Order tools and die sets separately on page 1062.

STRAIGHT PLUGS

Mfg. Part No.	Fig.	Cable Termination	RG Cable Type	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-99	Price Each 100-499
31-2242-RFX	1	Crimp	RG179, RG187	93F1424	2.45	2.25	2.10	1.94
31-2315-RFX	1	Crimp	RG174, RG188A, RG316	93F1426	1.86	1.72	1.47	1.41
31-2367-RFX	1	Crimp	RG55, RG142A, RG223, RG400	93F1427	1.62	1.46	1.26	1.20
31-2368-RFX	1	Crimp	RG59, RG62	19C3270	1.89	1.82	1.77	1.59
31-6001-RFX	...	Crimp	Belden 7810A, 8214, 9913, LMR-400	95B8146	7.73	7.02	6.44	5.95
79875-RFX	...	Solder	RG58, RG142A	93F1397	3.47	3.28	2.53	2.40
RIGHT-ANGLE PLUG								
31-6002-RFX	...	Solder	Belden 9913, LMR-400	95B8147	5.99	5.48	5.06	4.70

➤CONTINUED➤

50-OHM RFX™ TNC CONNECTORS (CONT.)

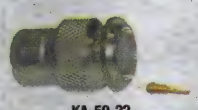
Mfg. Part No.	Fig.	Cable Termination	RG Cable Type	Stock No.	Price Each 1-9	10-24	25-99	100-499
STRAIGHT JACK								
● 31-2374-RFX	2	Crimp	RG58, RG141	19C3272	2.21	2.12	2.03	1.94
STRAIGHT BULKHEAD JACKS								
● 31-2318-RFX	3	Crimp	RG174, RG188A, RG316	19C3269	3.89	3.57	2.80	2.72
● 31-2389-RFX	3	Crimp	RG58, RG58A, RG58C, RG141, RG303	96B4551	4.28	4.06	3.82	3.45
● 31-2301-RFX	...	Solder	...	19C3268	2.39	2.18	1.98	1.93

(8217)

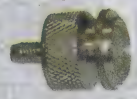
50-OHM TNC SERIES RF MILITARY-GRADE PLUGS

RoHS Compliant Available

KINGS by WINCHESTER ELECTRONICS



KA-59-22



KA-59-230

- K-Grip® crimp sleeve
- Frequency range: 0 - 11GHz
- Voltage rating: 500Vrms
- Temperature range: -65° C to +165° C

TNC straight and right-angle miniature plugs with threaded coupling withstands shock and vibration, ideal for harsh environments. Constructed of brass body with silver finish and feature gold-plated center contact. Applications: airframe, missile, radar and precision electronic equipment industries.

KA-59-296

Mfg. Part No.	Mil. No. M39012/	Contacts	For RG/U Cable	Stock No.	Price Each 1-499
STRAIGHT PLUGS					
● KA-59-22	26-0101	Captive	RG58, RG142, RG223, RG400	90F3269	17.53
● KA-59-230	26-0011	Crimp	RG142, RG223, RG400	90F3270	13.93
● KA-59-287	26-0504	Crimp	RG58, RG58A, RG58C, RG141, RG141A	90F3274	14.50
● KA-59-231	26-0010	Crimp	RG58, RG58A, RG58C, RG141, RG141A	90F3271	10.01
RIGHT-ANGLE PLUGS					
KA-59-296	30-0503	Crimp	RG142, RG400	50F1446	47.41
KA-59-318	...	Crimp	RG9, RG9A, RG9B, RG214, RG225, RG393	17B5355	63.47

(8864)

MULTICOMP BRAND TNC CONNECTORS

RoHS Compliant Available

multicomp

Fig. 1

Fig. 2

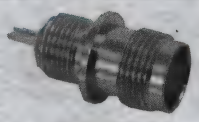


Fig. 3

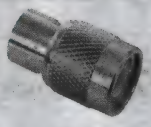


Fig. 4

TNC plugs and jacks have a voltage rating of 500 V RMS and a frequency rating of 0-4GHz. Feature Delrin insulation. Mfg. part nos. with (*) have brass contacts; (+) gold; (†) silver. *Order* **mfg. part no. CTR-8556-01** *crimp tool separately; go online or call.*

Fig. 5

Fig. 6

Mfg. Part No.	Fig.	RG/U	Jacket O.D.	Stock No.	Price Each 1-49	50-99
75-OHM TNC PLUGS						
● 1544+ ++	1	59	0.220-0.250″	92N3390	8.03	6.58
50-OHM TNC CRIMP JACKS						
● SPC4347+	2	58	0.195-0.210″	84N1271	13.63	11.17
TNC CRIMP PLUGS						
● 1539+	1	8	0.395-0415″	92N3385	9.69	7.94
● MC23545	1	58	...	96M8829	1.58	1.42
● 1536‡†	4	58	0.195-0.210″	92N3382	11.33	9.28
● 1537+	1	58	0.195-0.210″	92N3383	8.88	7.28
TNC CRIMP PLUGS - REVERSE POLARITY						
● SPC10036*‡	1	58	...	18C1909	11.71	9.59
TNC BULKHEAD JACKS						
● 1540+	3	...	...	92N3386	9.06	7.42
● 1541+ **	5	58	0.195-0.210″	92N3387	13.99	11.46

CONTINUED

MULTICOMP BRAND TNC CONNECTORS (CONT.)

Mfg. Part No.	Fig.	RG/U	Jacket O.D.	Stock No.	Price Each 1-49	50-99
TNC BULKHEAD CRIMP JACKS - REVERSE POLARITY						
● SPC10040*‡	5	...	...	18C1913	10.68	8.75
50-OHM TNC TWIST-ON PLUGS						
● 1545†	6	58	0.195-0.210″	92N3391	6.72	5.51

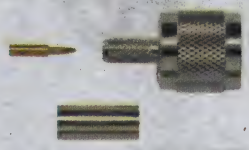
‡Solder; **Rear-Mount Crimp; ++75 Ohm

(18027)

50-OHM TNC CONNECTORS AND ADAPTERS

RoHS Compliant Available

Pomona®



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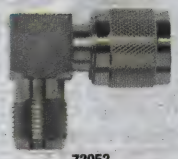


73053

- Plugs have gold-plated brass contacts
- Jacks have gold-plated phosphor bronze contacts

Mfg. Part No.	Connector Mounting	Coaxial Termination	RG/U	Stock No.	Price Each
STRAIGHT PLUGS					
● 73056	Cable	Crimp	RG58, RG141	08R6360	7.00
RIGHT ANGLE PLUGS					
● 73054	Cable	Crimp	RG55, RG142, RG223, RG400	08R6359	7.90

Mfg. Part No.	Body Style	Convert From	Convert To	Stock No.	Price Each
ADAPTERS					
● 73053	Right Angle	TNC Jack	TNC Plug	08R6358	23.70

(147912)

WEATHERPROOF MINIATURE 5-AMP MHV COAXIAL CONNECTORS

RoHS Compliant Available

Amphenol® RF

Fig. 1

Fig. 2

Fig. 3

Fig. 4

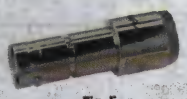


Fig. 5

Fig. 6

Bayonet-lock coupling units for voltage applications to 5000V peak at frequencies 50MHz. All are nonconstant impedance, with male contacts and TFE insulation. Temperature range: –65°C to +165°C. **Mfg. part nos. 27000** and **27025** receptacles rear mount units. Meet MIL-C-39012. *Order tools and die sets separately online or call.*

Mfg. Part No.	Fig.	MIL No.	RG/U	Description	Stock No.	Price Each 1-9
● 28000	1	UG-932	59, 62, 71, 140, 210	Straight Plug	39F1322	13.00
● 29100	1	...	55, 58, 141, 142	Straight Plug	39F3334	12.32
● 27975	1	UG-932A	59, 62, 71, 140, 210	Straight Cable Plug	73K1421	47.30
● 27000	2	UG-931	...	Panel Recept.	73K1420	10.96
● 27025	3	...	...	Bulkhead Recept.	39F3335	44.45
● 10400	3	...	...	Bulkhead Recept.	51F3814	47.57
● 28100	4	...	59, 62, 71, 140, 210	Angle Plug	51F3815	36.90
● 27075	5	UG-1016A/U	59, 62, 71, 140, 210	Straight Jack	51F3816	29.01
● 28175	6	UG-961A/U	59, 62, 140, 210	Panel Jack	73K1422	123.27
● 12650	...	...	...	Adapter (Jack-Jack)	51F3817	100.00

(8248)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

(212570)

AMP SHV CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Voltage: 350V
- Current: 3A
- Operating Temperature: -65° to +200°C

51494-2

Comply with National Bureau of Standards' specifications ND-545 and meet all specifications of the Nuclear Regulatory Commission for NIM standard, high-voltage connectors. Teflon® dielectric. Meet military specification MIL-G-45204. *Order hand tools separately, go online or call.*

DUAL CRIMP PLUGS

Mfg. Part No.	RG/U	Coaxial Termination	Plating: Center Contact/Body	Length (in.)	Stock No.	Price Each 1-9
9-51426-1	58, 58A, 58B, 58C	Crimp	Gold/Nickel	1.452	42K7941	50.76
5051426-2	124, 140, 210, 62, 62A/B, 59, 59A/B, Belden 9291, 9209, 9268	Crimp	Gold/Silver	1.452	42K6956	43.79
5051426-4	58, 58A, 58B, 58C	Crimp	Gold	1.437	16M3980	42.11
5051426-5	59, 59A/B, 62, 62A/B, 124, 140, 210, Belden 9209, Belden 9269, Belden 9291	Crimp	Gold	1.452	42K6957	40.00
BULKHEAD JACKS						
51421-2	...	Solder	Gold/Nickel	1.775	89F3385	50.26
5051494-1	...	Solder	Gold/Nickel	1.857	42K6958	31.18
51494-2	...	Solder	Gold/Nickel	1.857	89F3394	19.75
225059-3	9, 59A, 59B, 62, 62A, 62B, 124, 140, 210	Crimp	Gold/Nickel	...	89F3383	93.28

(8240)

SHV / MHV / 10KV / 20KV HIGH VOLTAGE RF COAXIAL PLUGS

RoHS Compliant Available

KINGS by WINCHESTER ELECTRONICS

1705-14 1705-1, 1705-2

SHV STYLE RF COAXIAL STRAIGHT PLUGS

SHV style plugs outer contact ground connection is maintained through the center contact mating cycle. Center contacts prevent shock hazards when the connectors are unmated. **Mfg. part no. 1705-14** has conventional construction with crimp contacts. **Mfg. part nos. 1705-1** and **1705-2** feature weatherproof K-Grip, Jr. construction with crimp contacts.

Mfg. Part No.	For RG/U Cable	Stock No.	Price Each 1-499	Price Each 500-999
1705-14	59 59A, 59B, 62, 62B, 62C, 71, 71A, 71B, 210	93F4891	28.36	25.86
1705-1	59, 59A, 59B, 62, 62B, 62C, 210	46F6039	19.06	17.37
1705-2	58*, 58A*, 58C, 141, 141A	46F6038	20.02	18.25

MHV STYLE RF COAXIAL STRAIGHT PLUGS

MHV style plugs are a forerunner of the SHV series plug and are designed for the high-voltage applications of BNC connectors. Feature K-Grip Jr. construction with crimp contacts. **Note**: Not intermateable with BNC connectors.

KV59-37	58*, 58A*, 58C, 141, 141A	94B9910	21.97	20.03
KV-59-23	59, 59A, 59B, 62, 62B, 62C, 210	66F3872	19.97	18.21

10KV AND 20KV SERIES HIGH-VOLTAGE RF COAXIAL STRAIGHT PLUGS

Mfg. part nos. 1065-1 QD and **1065-2** are 10KV plugs and **mfg. part no. 1765-1** is a 20KV plug. All feature special high voltage interfaces, non-constant impedance, and K-Grip Jr. construction. Ideally suited for pulse applications. Operating voltage rating: 10kV DC or 20kV DC.

1065-1 QD	RG58, RG58A, RG58C	98F991	16.80	15.32
1065-2	LASL Type C-9Y19503	17B5421	78.69	71.90
1765-1	RG8, RG8A, RG11, RG11A, RG213	17B5453	82.54	75.26
SHV WITHIN SERIES ADAPTER				
1709-3	T Adapter	98F4036	71.79	65.47

*Crimping the center contact is not recommended when crimp contact is indicated

(8865)

50-OHM SSMA SUBMINIATURE COAXIAL PLUG

RoHS Compliant Available

TE connectivity

Authorized Distributor

- For semi-rigid cable
- Gold-plated stainless steel housing
- Gold-plated beryllium copper contact
- TFE fluorocarbon dielectric

Mfg. Part No.	Description	Termination	Mounting	Cable RG/U	Body Length (mm)	Stock No.	Price Each 1-9
1045351-1	Straight Plug	Solder	Cable	405	11.35	10H6834	15.77

(192097)

50-OHM ZDC SERIES SMA CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- DC - 3GHz frequency range
- Durability: 50 cycles minimum

Fig. 1

Fig. 2

RIGHT ANGLE JACK (GOLD/NICKEL/COPPER-PLATED BERYLLIUM COPPER CONTACTS)

Mfg. Part No.	Fig.	Coaxial Termination	Connector Mounting	Stock No.	Price Each 1-49	Price Each 50-99
5-1814400-1	1	Solder	PCB	78M7245	3.40	2.96
STRAIGHT JACK (GOLD-PLATED PHOSPHOR BRONZE CONTACTS)						
5-1814832-1	2	Solder	PCB	78M7270	1.76	1.71

(108533)

50-OHM SMA CABLE CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Fig. 1 Fig. 2 Fig. 3

STRAIGHT JACKS

Mfg. Part No.	Fig.	Connector Mounting	Coaxial Termination	RG/U	Body Length (mm)	Stock No.	Price Each 1-9
6053226-1	...	Cable	Solder	...	13.40	96M0684	23.00
2006-5010-00	...	Panel	Solder	RG405	12.74	24K0965	16.12
1051942-1	...	Panel	Solder	RG174, RG188, RG316	34.93	96M0584	33.19
STRAIGHT BULKHEAD JACK, HEX CRIMP							
447650-3	...	Cable	Crimp	RG174, RG188A, RG316	27.43	93F5658	13.13
STRAIGHT PLUGS							
228635-1	1	Cable	Crimp	RG402	11.35	89F4334	5.87
1050602-1	...	Cable	Crimp	RG402	8.5	10H7000	42.09
1050611-1	...	Cable	Crimp	RG405	8.5	96M0582	15.16
2031 5003 00	...	Cable	Solder	RG188	17.5	88F5713	14.37
1056227-1	1	Cable	Solder	RG402	11.1	10H7212	38.99
1050541-1	1	Cable	Solder	RG402	11.4	85C0583	8.06
1050735-1	1	Cable	Solder	RG405	11.1	10H7007	11.20
2001 5032 00	1	Cable	Solder	RG405	11.1	48F5708	5.76
RIGHT-ANGLE PLUGS							
1051139-1	2	Cable	Solder	RG188	16.9	10H7035	112.15
1408524-1	2	Cable	Crimp	LMR-240	17.55	96M0644	19.88
2037 5100 02	2	Cable	Crimp	RG178, RG196	16.9	07H7989	17.94
1051151-1	3	Cable	Solder	RG402	17.15	07H4213	14.41
2007 5055 00	3	Cable	Solder	RG405	17.15	07H7901	32.04
1052063-1	3	Cable	Solder	RG55, RG58, RG141, RG142, RG223, RG400	16.92	10H7066	22.52

(115843)

50-OHM SMA PANEL CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Fig. 1

Fig. 2

STRAIGHT JACK

Mfg. Part No.	Fig.	Connector Mounting	Coaxial Termination	Body Length (mm)	Stock No.	Price Each 1-9
2052-1215-02	1	Panel	Solder	9.53	49H8301	17.47
1052566-1	1	Panel	Solder	12.1	96M0586	12.29
1052897-1	1	Panel	Solder	12.1	39C5926	16.32
1052527-1	1	Panel	Solder	14	96M0585	32.64
STRAIGHT BULKHEAD JACK						
1053086-1	...	Panel	Solder	15.6	10H7129	140.60
1053111-1	2	Panel	Solder	17	96M0588	10.76

(164442)

RF COAX – SUBMINIATURE

50-OHM SMA PC BOARD CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Fig. 1

Fig. 2

Mfg. Part No.	Fig.	Body Style	Coaxial Termination	Connector Mounting	Body Length (mm)	Stock No.	Price Each 1-99
● 1053354-1	1	Straight	Solder	PCB	9.53	48F5715	10.62
● 6274096-1	1	Straight	Solder	PCB	19.94	96M0688	23.22
● 1053182-1	...	Straight	Solder	PCB	11.5	10H7138	69.74
● 1053392-1	2	Right Angle	Solder	PCB	14.81	96M0589	14.47

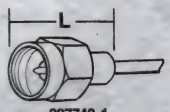
(164443)

AMP SMA COAXIAL PLUGS

RoHS Compliant Available

TE connectivity

Authorized Distributor



227743-1

225532

Features Teflon® dielectric. Qualified to MIL-C-39012. *Order hand tools separately. Go online or call.*

CABLE MOUNT, STRAIGHT

Mfg. Part No.	RG/U	Description	Length (in.)	Stock No.	Price Each 1-9	Price Each 10-49
● 1051654-1	188	Commercial-Grade	1.187	07H7920	10.47	10.01
● 1056456-1	141, 303, 58	Commercial-Grade	0.802	07H8249	10.35	9.90
● 1050721-1	174, 188, 316	Commercial-Grade	0.750	10H7004	31.43	27.51
● 1051655-1	316	Commercial-Grade	1.187	26H3402	12.02	11.08
● 5447647-2	142, 142A, 142B, 400	HEX	1.080	16M3272	6.36	6.10
225532-4	174, 188, 188A, 316	MIL Style	0.950	89F4356	37.38	32.72
● 5447647-3	174, 188A, 316	HEX	...	42K8722	5.00	4.30
225532-3	142, 142A, 142B, 400, Belden 9246	MIL Style	1.030	89F4352	19.85	17.91
● 227743-1	402 Semi-Rigid	...	0.544	89F4331	27.55	24.12
● 2001-5003-02	402 Semi-Rigid	Commercial-Grade	0.440	48F5707	5.87	5.55
● 1050859-1	405 Semi-Rigid	...	0.500	10H7016	11.41	10.92
● 1050770-1	405 Semi Rigid	...	0.437	71M0784	6.68	6.08
CABLE MOUNT, RIGHT ANGLE						
● 1052066-1	188	...	0.666	48F5717	15.88	14.44

(8251)

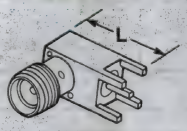
AMP SMA COAXIAL JACKS

RoHS Compliant Available

TE connectivity

Authorized Distributor

221789-1



221790-1

Features Teflon® dielectric. Qualified to MIL-C-39012. *Order hand tools separately. Go online or call.*

PANEL MOUNT, STRAIGHT

Mfg. Part No.	RG/U	Description	Length (in.)	Stock No.	Price Each 1-99	Price Each 100-499
● 1052902-1	...	...	0.500	73M8548	12.92	11.29
● 1052552-1	...	...	0.965	73M8546	6.71	6.35
● 1052523-1	...	...	1.080	48F5711	5.80	5.62
● 1052551-1	...	...	1.080	48F5712	11.29	10.26
PANEL MOUNT, RIGHT ANGLE						
● 1052978-1	...	...	1.210	73M8549	42.64	38.50

PCB MOUNT

Mfg. Part No.	Style	Description	Length (in.)	Stock No.	Price Each 1-9
● 221789-1	Straight	PCB Vertical	0.530	89F4338	11.31
● 2056 0000 00	Straight	PCB Bulkhead, Rear Mount	...	07H8085	11.38
● 221789-3	Vertical	PCB Straight	0.530	12H6649	16.21

➤CONTINUED➤

AMP SMA COAXIAL JACKS (CONT.)

Mfg. Part No.	Style	Description	Length (in.)	Stock No.	Price Each 1-9
● 221790-1	Right-Angle	PCB	0.600	89F2962	21.10
● 1053378-1	Right-Angle	PCB	0.583	48F5716	14.92

(169722)

50-OHM SMA CONNECTORS

RoHS Compliant Available

Amphenol Connex

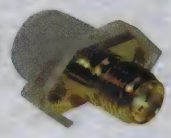


Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6

Fig. 7

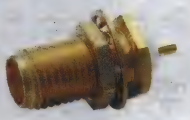


Fig. 8

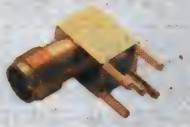


Fig. 9

Fig. 10

Fig. 11

Fig. 12

Fig. 13

Fig. 14

Fig. 15

- DC to 18GHz frequency range

STRAIGHT FLANGED JACKS

Mfg. Part No.	Fig.	Coaxial Cable Type RG/U	Coaxial Termination	Connector Mounting	Stock No.	Price Each 1-9
● 132167	1	...	Solder	Panel	50M0363	17.87
STRAIGHT JACKS						
● 132116	...	RG58, RG58A, RG58C, RG141, RG303	Crimp	Cable	99H5002	6.63
● 132197RP*	...	RG55, RG142A, RG223, RG400	Crimp	Cable	89K6852	7.11
● 132117	...	RG174, RG188A, RG316	Crimp	Cable	99H5005	6.58
● 132198	...	RG316	Crimp	Cable	99H5061	5.63
● 132103RP*	...	RG405	Solder	Cable	89K6822	3.75
● 132279	...	RG178B, RG196A	Crimp	Cable	99H5116	7.75
● 132134	2	...	Solder	PCB	99H5021	4.80
● 132134RP*	2	...	Thru Hole	PCB	99H5022	3.87
● 132146	3	...	Solder	Panel	32H4878	6.77
STRAIGHT BULKHEAD JACKS						
● 132119	4	RG174, RG188A, RG316	Crimp	Cable	99H5010	7.67
● 132119RP*	...	RG174, RG188A, RG316	Crimp	Cable	99H5011	6.67
● 132176RP*	...	RG316	Crimp	Panel	99H5045	9.72
● 132106RP*	...	RG402	Solder	Panel	89K6823	6.48
● 132191RP*	...	RG55, RG142, RG223, RG400	Crimp	Panel	99H5051	14.70
● 132220	...	RG178, RG196	Crimp	Panel	99H5070	7.67
● 132254	...	RG55, RG142A, RG223, RG400	Crimp	Panel	99H5100	14.88
● 132176	...	RG316	Crimp	Panel	99H5044	8.15
● 132286	5	RG178, RG196	Crimp	Panel	99H5123	7.92
● 132284	6	RG174, RG188A, RG316	Crimp	Panel	99H5121	7.92
● 132106	7	...	Solder	Panel	99H4987	7.86
● 132105	8	RG405	Solder	Cable	99H4986	7.86

➤CONTINUED➤

50-OHM SMA CONNECTORS (CONT.)

Mfg. Part No.	Fig.	Coaxial Cable Type RG/U	Coaxial Termination	Connector Mounting	Stock No.	Price Each 1-9
STRAIGHT BULKHEAD JACKS						
132137	...	...	Solder	Panel	99H5027	8.41
132289	...	...	Solder	PCB	99H5125	5.93
RIGHT-ANGLE JACK						
132136	9	...	Thru Hole	PCB	99H5025	5.44
RIGHT-ANGLE BULKHEAD JACK						
132203	...	...	Solder	PCB	99H5064	9.64
STRAIGHT PLUGS						
132113	...	RG58, RG58A, RG58C, RG141, RG303	Crimp	Cable	87H5611	4.11
132113RP*	...	RG58, RG58A, RG58C, RG141, RG303	Crimp	Cable	99H4998	4.92
132195	...	RG55, RG142, RG223, RG400	Crimp	Cable	99H5057	5.34
132114	10	RG174, RG316, RG188	Crimp	Cable	87H5616	4.11
132114RP*	...	RG174, RG188A, RG316	Crimp	Cable	99H5000	7.67
132178	10	RG316	Crimp	Cable	99H5046	3.99
132193	10	RG178, RG196	Crimp	Cable	99H5052	7.54
132178RP*	...	RG316	Crimp	Cable	89K6849	6.64
132231	...	RG8X , Belden 7808A, LMR-240	Crimp	Cable	99H5075	7.76
132101	11	RG405	Solder	Cable	99H4981	4.58
132101RP*	...	RG405	Solder	Cable	89K6820	5.91
132101-10	11	UT-85-LL	Solder	Cable	99H4982	5.29
132102	11	0.141" Semi Rigid	Solder	Cable	66H7627	4.04
132102RP*	...	RG402	Solder	Cable	99H4983	5.91
132193RP*	...	RG178B, RG196A	Crimp	Cable	99H5053	15.08
132100	11	RG402	Solder	Cable	66H7620	2.56
132188	11	RG405	Solder	Cable	99H5049	5.83
132234	...	Belden 7807A, LMR-200	Crimp	Cable	99H5078	5.34
RIGHT-ANGLE PLUGS						
132122	12	RG58A, RG58C, RG141	Crimp	Cable	99H5015	8.59
132123	13	RG174, RG188A, RG316	Crimp	Cable	99H5017	8.59
132173	13	RG178, RG196	Crimp	Cable	99H5041	8.24
132182	13	RG316	Crimp	Cable	99H5048	7.91
132194RP*	...	RG55, RG142, RG223	Crimp	Cable	99H5056	9.20
132182RP*	...	RG316	Crimp	Cable	89K6851	9.02
132239RP*	...	RG8/X, LMR-240	Crimp	Cable	89K6860	15.76
132173RP*	...	RG178B, RG196A	Crimp	Cable	99H5042	15.62
132112	14	0.141" Semi Rigid	Solder	Cable	99H4996	7.67
132111	14	RG405	Solder	Cable	99H4995	7.67
TERMINATOR PLUG						
132360	...	...	...	...	99H5158	2.14

***RP suffix** in mfg. part no. denotes reverse polarity

STRAIGHT ADAPTERS

Mfg. Part No.	Fig.	Convert From	Convert To	Stock No.	Price Each 1-9
132168	15	SMA Plug	SMA Plug	92H4682	6.00
132169	...	SMA Jack	SMA Jack	92H4681	5.11
132170**	...	SMA Jack	SMA Jack	99H5038	7.50

**Straight Bulkhead
(119507)

901 SERIES 50-OHM SMA COAXIAL PLUGS

RoHS Compliant Available

Amphenol® RF

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

50-ohm SMA connectors are semi-precision connectors with electrical performance from 0 to 18GHz. Built in accordance with MIL-C-39012. Applications include base stations, instrumentation, process control, Mil/Aero, telecom and PC/LAN. *Order* **mfg. part no. 227-944** crimp tool separately *on page 1062*. Die sets for crimp tool available *on page 1062*.

➤CONTINUED➤

901 SERIES 50-OHM SMA COAXIAL PLUGS (CONT.)

Mfg. Part No.	Fig.	Termination	RG/U	Stock No.	Price Each 1-9
STRAIGHT CABLE PLUGS					
901-101	...	Crimp	RG55, RG142, RG223, RG400	82K8913	36.63
901-101-15	1	Crimp	RG142B, RG400	83F6687	30.60
901-103	2	Solder	RG55, RG58, RG141, RG142, RG223	39F2950	69.49
901-9201-1A	2	Solder	RG402	50F2434	9.91
901-9201-2A	2	Solder	RG405	93F1311	17.57
901-9501-3	3	Solder	RG174, RG188A, RG316	39F3325	24.07
901-9511-1+	3	Solder	RG55B, RG142B, RG223, RG400	93F1340	9.99
901-9511-1SF+	3	Solder	RG55B, RG142B, RG223, RG400	93F1341	8.58
901-9511-1SFC	3	Crimp	RG55B, RG142B, RG223, RG400	93F7535	17.80
901-9511-2+	3	Solder	RG58, RG58A, RG58C, RG141, RG303	93F7537	24.28
901-9511-3+	3	Solder	RG174, RG178, RG187, RG188, RG316	39F3326	10.97
901-9511-3SF+	3	Crimp	RG174, RG178, RG187, RG188, RG316	93F1342	8.89
901-9601-3	1	Solder	RG174, RG179, RG187, RG188, RG316	39F3327	21.63
901-9723	2	Solder	RG405	50F2433	7.23
901-9723-10	2	Solder	RG405	83F6698	12.36
901-9805-HP	...	Solder	RG405	83F6706	7.75
901-9808	2	Solder	RG402	93F7534	6.95
901-10025-RFX	2	Solder	RG174, RG188, RG316	19C5337	9.40
RIGHT-ANGLE CABLE PLUGS					
901-9521-3	5	Solder	RG174, RG188A, RG316	39F3328	26.57
901-9531-1	5	Solder	RG55, RG142, RG223, RG400	50F2435	15.23
901-9531-1SF	5	Solder	RG55, RG142, RG223, RG400	93F1344	12.44
901-9531-3	5	Solder	RG174, RG188A, RG316	39F3329	13.21
901-9531-3SF	5	Solder	RG174, RG188A, RG316	93F1345	10.58
901-9531-12	5	Solder	RG316DB	93F1346	12.80
901-9531-12SF	5	Solder	RG316DB	93F1347	10.03
901-9874	4	Solder	RG141, RG223	83F6720	8.31
901-9952-RFX	4	Crimp	RG402	19C5348	11.42
901-10028-RFX	5	Crimp	RG316	19C5338	19.21

+Non-captivated solder contact
(8276)

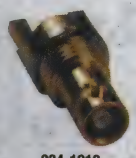
HD-BNC HIGH-DENSITY BNC CONNECTORS AND ADAPTERS

RoHS Compliant Available

Amphenol® RF

HD-BNC Straight Cable Plug

034-1024



034-1018

Smallest BNC in the Industry

- 51% smaller footprint than standard BNC, 39% smaller than Mini-BNC
- Allows four times the density as the standard BNC
- Bayonet positive locking coupling allows for quick and easy connect/disconnect
- True 75Ω impedance for higher performance and reliability
- Fits traditional broadcast cable
- SMPTE compliant — Meets 292M and 424M standards

HD-BNC high-density BNC connectors and adapters are engineered to enhance electrical and mechanical performance. Features the trusted, push-and-turn interface of a standard BNC, providing tactile feedback and a positive lock for quick and guaranteed mating. Uses the same cable prep and termination specifications of standard BNC connectors making their changeover seamless. Brass male contacts and beryllium copper female contacts, both plated with AmorPHous (gold). Nickel-plated beryllium copper outer contacts. Nickel-plated brass bodies and hardware except PCB connectors which are gold plated. Applications include broadcast, digital video (HDTV), telco central office, instrumentation, DS3/DS4, custom cable assemblies, networking routing and switching, military/aerospace, medical equipment, and satellite headends. Voltage rating: 170Vrms. Frequency range: 0 to 6GHz. Dielectric withstanding voltage: 500V. *Order assembly tooling separately below.*

Mfg. Part No.	Description	Stock No.	Price Each 1-9
STRAIGHT CABLE PLUGS			
034-1026	BNC Straight Plug for Belden® 1855A High-Density Cable	25T1742	10.34
034-1025	BNC Straight Plug for Belden® 1505A Standard Cable	25T1741	7.91
034-1017-300	BNC Straight Plug for Belden® 1694A Standard Cable	25T1738	8.06
034-1027	BNC Straight Plug for Belden® 1695 Standard Cable	25T1743	7.91
PCB JACKS			
034-1032	BNC 3-Leg Round Straight PCB Jack	25T1745	4.03
034-1024	BNC 4-Leg Square Straight PCB Jack	25T1740	9.92
034-1018	BNC Edge Launch PCB Jack, 0.062" Thick Board	25T1739	5.94
034-1030	BNC Right-Angle PCB Jack	25T1744	8.19
ADAPTERS			
034-1023	HD BNC Jack-to-Jack-to-Jack Tee Adapter	25T1431	66.15

➤CONTINUED➤

RF COAX – SUBMINIATURE

HD-BNC HIGH-DENSITY BNC CONNECTORS AND ADAPTERS (CONT.)

ASSEMBLY TOOLING

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 227-1490	Spanner Nut Tool	25T1454	48.28
● 227-T2000	Mating Tool #1 for High-Density Cable	25T1453	91.63

(192438)

901 SERIES 50-OHM SMA COAXIAL JACKS

RoHS Compliant Available

Amphenol® RF

Fig. 1

Fig. 2

Fig. 3

50-ohm SMA connectors are semi-precision connectors with electrical performance from 0 to 18GHz. Built in accordance with MIL-C-39012. Applications include base stations, instrumentation, process control, Mil/Aero, telecom and PC/LAN. *Order* **mfg. part no. 227-944** crimp tool separately *on page 1062*. Die sets for crimp tool available *on page 1062*.

CABLE JACKS

Mfg. Part No.	Fig.	Body Style	Termination	RG/U	Stock No.	Price Each 1-9
● 901-9202-2A	...	Straight	Solder	RG405	93F7602	32.45
● 901-9602-3SF	...	Straight	Solder	RG174, RG188A, RG316	93F7605	47.29
● 901-9610-1SF	...	Straight Bulkhead	Solder	RG55, RG142, RG223, RG400	93F1351	28.01
● 901-9610-3	...	Straight Bulkhead	Solder	RG174, RG179, RG187, RG188, RG316	90F8492	19.63
● 901-9610-12SF	...	Straight Bulkhead	Solder	RG316DB	93F1353	20.66

PANEL JACKS

Mfg. Part No.	Fig.	Body Style	Termination	Features	Stock No.	Price Each 1-9
● 901-9211	1	Straight Bulkhead	Solder	Rear Mount, Gold-Plated	90F8493	28.93
● 901-9220	...	Straight Bulkhead	Solder	Front or Rear Mount, Blunt Post Terminal, Gold-Plated	90F8495	14.28
● 901-9220-SF	...	Straight Bulkhead	Solder	Front or Rear Mount, Blunt Post Terminal, Passivated	93F1331	14.33
● 901-9841	...	Straight Bulkhead	Solder	Blunt Post	83F6710	11.70

PC BOARD JACKS

● 901-143	2	Right Angle	Through Hole Vertical	0.155" Legs, Blunt Post	51F3841	20.39
● 901-143-3	...	Right Angle	Through Hole Vertical	Blunt Post	83F6689	28.79
● 901-143-4	...	Right Angle	Through Hole Vertical	Blunt Post	83F6690	27.30
● 901-144	3	Straight	Through Hole Vertical	0.155" Legs, Blunt Post	98F1495	8.92
● 901-144-2	...	Straight	Through Hole Vertical	Blunt Post	83F6692	33.69
● 901-144-4	...	Straight	Through Hole Vertical	...	83F6693	18.61
● 901-10003	...	Straight	Solder	Edge-Mount	19C5328	18.31
● 901-10019B	...	Straight	Solder	Edge-Mount	08N5248	13.98

(176051)

HD-BNC COAXIAL CONNECTORS AND CABLE ASSEMBLIES

RoHS Compliant Available

Amphenol® RF

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6

➤CONTINUED➤

HD-BNC COAXIAL CONNECTORS AND CABLE ASSEMBLIES (CONT.)

Fig. 7

Fig. 8

Fig. 9

Fig. 10

Fig. 11

Fig. 12

- Trusted bayonet style positive lock
- Closed entry interface
- VSWR or return loss: 30dB min at 6GHz (for all straight configurations)
- Recommended minimum pitch of 8mm for cables <5.4mm
- Recommended minimum pitch of 9.6mm for cables >5.4mm
- Assured mating with visual indicator
- Contact material: phosphor bronze (HD-BNC plugs); beryllium copper (HD-BNC jacks)
- Contact plating: gold

50-OHM HD-BNC CABLE PLUGS

Mfg. Part No.	Fig.	Body Style	RG Cable Type	Coaxial Termination	Stock No.	Price Each 1-9
● 034-5008	1	Straight Plug	RG316	Solder	90W0182	8.47
● 034-5011	2	Straight Plug	RG178	Solder	90W0183	8.47
● 034-5026	3	Straight Plug	...	Solder	90W0190	5.28
● 034-5027	4	Straight Plug	...	Solder	90W0191	5.88
● 034-5012	5	Right Angle Plug	RG178	Solder	90W0184	10.46

50-OHM HD-BNC PCB MOUNT JACKS

● 034-5022	6	Straight Jack	...	Thru Hole	90W0186	5.19
● 034-5013	7	Straight Bulkhead Jack	...	Edge Mount	90W0185	10.05
● 034-5023	8	Straight Bulkhead Jack	...	Thru Hole	90W0187	7.32
● 034-5024	9	Right Angle Bulkhead Jack	...	Thru Hole	90W0188	11.40

50-OHM HD-BNC PANEL MOUNT JACKS

● 034-5025	10	Straight Flanged Jack	...	Solder	90W0189	5.08

50-OHM HD-BNC STRAIGHT ADAPTERS

Mfg. Part No.	Fig.	Convert From	Convert To	Stock No.	Price Each 1-9
● APH-HDBNCJ-SMAJ	11	HD BNC Coaxial Jack	SMA Coaxial Receptacle	90W0180	43.05
● APH-HDBNCP-SMAP	12	HD BNC Coaxial Plug	SMA Coaxial Plug	90W0181	32.77

75-OHM HD-BNC STRAIGHT BNC PLUG TO BNC STRAIGHT PLUG CABLE ASSEMBLIES

Mfg. Part No.	Cable Type	Length Inches	Length mm	Stock No.	Price Each 1-9
● 095-850-130-006	Belden 1855A	6	152.4	90W0192	19.81
● 095-850-130-012	Belden 1855A	12	304.8	90W0193	20.75
● 095-850-130-018	Belden 1855A	18	457.2	90W0194	21.69
● 095-850-130-036	Belden 1855A	36	914.4	90W0195	26.43

75-OHM HD-BNC STRAIGHT PLUG TO BNC STRAIGHT CRIMP PLUG CABLE ASSEMBLIES

● 095-850-131-006	Belden 1694A	6	152.4	90W0196	21.69
● 095-850-131-012	Belden 1694A	12	304.8	90W0197	22.64
● 095-850-131-018	Belden 1694A	18	457.2	90W0198	23.58
● 095-850-131-036	Belden 1694A	36	914.4	90W0199	26.60

(210102)

50-OHM BRASS SMA COAXIAL CONNECTORS

RoHS Compliant Available

Amphenol® RF

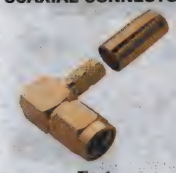


Fig. 1

Fig. 2

Fig. 3

Fig. 4

Brass SMA coaxial connectors are an effective alternative when stainless steel construction is not required. Provides repeatable electrical performance from 0 to 12.4GHz. Meet or exceed MIL-C-39012 requirements. **RFX suffix** designates commercial grade. *Order tools and die sets separately on page 1062.*

STRAIGHT PLUGS

Mfg. Part No.	Fig.	RG/U	Description	Stock No.	Price Each 1-9
● 901-9870	...	58, 141, 89907	Crimp, Gold-Plated	01F2196	4.99
● 901-9916	...	174, 188, 316	Crimp, Gold-Plated	01F2195	5.69
● 901-9871	...	141, 223	Crimp, Gold-Plated	01F2197	7.23
● 901-9876-RFX	...	58	Crimp, Nickel-Plated	01F2200	3.84

➤CONTINUED➤

50-OHM BRASS SMA COAXIAL CONNECTORS (CONT.)

Mfg. Part No.	Fig.	RG/U	Description	Stock No.	Price Each 1-9
901-9877-RFX	...	174, 188, 316	Crimp, Nickel-Plated	01F2201	2.83
901-9867-RFX	...	405, Semi-Rigid 0.085	Solder, Gold-Plated	83F6719	2.86
901-9868-RFX	...	402, Semi-Rigid 0.141	Solder, Gold-Plated	19C5344	3.85
901-9221-1A	...	402, Semi Rigid .141	Solder/Solder,Gold-Plated	93F1332	26.99
RIGHT-ANGLE PLUGS					
901-9873	1	58	Crimp, Gold-Plated	01F2194	10.35
901-9872	1	174, 188, 316	Crimp, Gold-Plated	01F2193	8.28
901-9880-RFX	1	58	Crimp, Nickel-Plated	01F2198	4.82
901-9881-RFX	1	174, 188, 316	Crimp, Nickel-Plated	01F2199	4.79

BULKHEAD JACK RECEPTACLES

Mfg. Part No.	Fig.	Description	Stock No.	Price Each 1-9
901-9875	...	Rear Mount, Solder Cup, Gold-Plated	83F6721	9.27
901-9879-RFX	...	Rear Mount, Solder Cup, Nickel-Plated	83F6724	7.28
901-9889-RFX	...	Rear Mount, Solder Cup, Nickel-Plated	01F2202	4.78
901-9890-RFX	2	Rear Mount, Solder Cup, Nickel-Plated	01F2203	6.35
901-9215	...	Panel Jack, 4-Hole Flange, Gold-Plated	39F3332	28.02
PANEL PLUG RECEPTACLES				
901-9887-RFX	...	4-Hole Panel Mount, Post, Nickel-Plated	01F2205	7.70
901-9893-RFX	...	2-Hole Panel Mount, Solder Cup, Ni Plated	01F2209	5.08
901-9892-RFX	3	4-Hole Panel Mount, Solder Cup, Ni Plated	01F2206	6.04
PC BOARD JACK RECEPTACLES				
901-143-6RFX	4	Right-Angle , 4-Leg, Blunt Post, Gold-Plated	34C8150	4.93
901-9894-RFX	4	Right-Angle , 4-Leg, Blunt Post, Gold-Plated	83F6734	9.89
901-144-8RFX	...	Straight, 4-Leg, Blunt Post, Gold-Plated	34C8151	3.76
901-9895-RFX	...	Straight, 4-Leg, Blunt Post, Gold-Plated	83F6735	4.96

(10945)

CANNON 50-OHM SUBMINIATURE RF COAXIAL SMA CONNECTORS

RoHS Compliant Available

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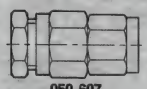
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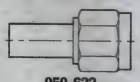
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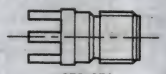
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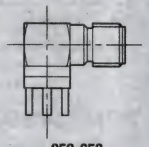
Meet MIL-C-39012 specifications. Frequency range: 0 to 18GHz. Mechanical: captivated or noncaptivated screw-on coupling interface solder contact. Coupling nut size: 0.312" hex. Field repairable. Medium power.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SMA SERIES PLUGS — RG-316 CABLE

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
050-607-3188310	Straight Plug, Clamp, Flexible	90F2518	106.79	87.95
050-622-9188310	Straight Plug, Crimp, Flexible	90F2499	34.13	28.12
050-628-9188310	Right-Angle Plug, Crimp, Flexible	90F2505	24.60	20.26

SMA SERIES JACK RECEPTACLES — PC BOARD MOUNT

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
050-651-0000310	Straight Jack	01F1411	13.14	10.83
050-653-0000310	Right-Angle Jack	95F6334	80.88	66.61

(8718)

50-OHM SMA REVERSE POLARITY CONNECTORS

RoHS Compliant Available

EMERSON. Network Power

Johnson Connectivity Solutions

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

➤CONTINUED➤

50-OHM SMA REVERSE POLARITY CONNECTORS (CONT.)

- Frequency range: 0 - 18GHz depending on connector
- Gold-plated brass contacts (jacks)
- Gold-plated beryllium copper contacts (plugs)
- Brass bodies with gold or nickel plating
- Temp. range: -65°C to +165°C

Reverse polarity connectors employ female contacts in the plug connector and male contacts in the jack connector.

STRAIGHT JACK

Mfg. Part No.	Fig.	RG Cable Type	Coaxial Termination	Connector Mounting	Stock No.	Price Each 1-9	Price Each 10-49
142-4701-201	1	...	Solder	PCB	01C1713	5.75	5.12
STRAIGHT BULKHEAD JACK							
142-4304-401	2	RG188, RG316	Solder	Cable	01C1683	16.07	14.32
142-4307-401	2	RG58, RG141, RG303	Solder	Cable	01C1685	16.72	14.90
142-4701-801	3	...	Solder	PCB	94B4392	6.26	5.58
STRAIGHT PLUG							
142-4403-001	4	RG161, RG174, RG188, RG316	Solder	Cable	01C1689	11.63	10.36
142-4404-001	4	RG188, RG316	Solder	Cable	01C1693	11.25	10.02
142-4407-001	4	RG58, RG141, RG303	Solder	Cable	01C1697	18.72	16.68
RIGHT ANGLE PLUG							
142-4403-101	5	RG161, RG174, RG188, RG316	Solder	Cable	01C1691	17.37	15.48

(110572)

50-OHM HIGH FREQUENCY SMA END LAUNCH CONNECTORS

RoHS Compliant Available

EMERSON. Network Power

Johnson Connectivity Solutions

- Impedance: 50Ω
- Frequency range: 0-26.5GHz
- Temperature range: -65° to +165°C
- Compatible with MIL-STD-348
- RoHS compliant

Body material: brass. Contact material: beryllium copper. Insulator material: teflon. Gold contacts.

Fig. 1

Fig. 2

Fig. 3

Fig. 4

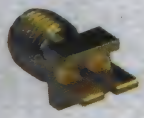


Fig. 5

JACK RECEPTACLE — PC MOUNT, ROUND BODY

Mfg. Part No.	Fig.	Pin Dia. (in.)	Board Thickness (in.)	Leg Thickness (in.)	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99
142-0761-881	1	0.01	...	0.6	41K0124	12.81	11.42	9.32
142-0771-821	1	0.015	...	0.6	41K0126	13.25	11.80	9.64
JACK RECEPTACLE — PC MOUNT, SQUARE BODY								
142-0761-811	2	0.01	...	0.32	41K0118	13.51	12.04	9.83
142-0761-831	2	0.015	...	0.4	41K0120	12.22	10.89	8.89
JACK RECEPTACLE — EDGE MOUNT, ROUND BODY								
142-0761-841	3	0.01	0.062	0.32	41K0121	12.67	11.29	9.21
142-0761-861	3	0.015	0.062	0.4	41K0122	10.36	9.23	7.53
142-0761-891	4	0.01	0.062	0.6	41K0125	12.85	11.45	9.35
142-0771-831	4	0.015	0.062	0.6	41K0127	10.36	9.23	7.53
JACK RECEPTACLE — EDGE MOUNT, SQUARE BODY								
142-0761-851	5	0.01	0.062	0.32	36K2551	12.67	11.29	9.21
142-0761-871	5	0.015	0.062	0.4	41K0123	10.36	9.23	7.53

(85725)

50-OHM SMA COAXIAL PLUG CONNECTORS

RoHS Compliant Available

EMERSON. Network Power

Johnson Connectivity Solutions

Fig. 1

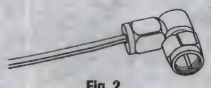


Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6

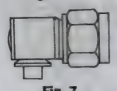


Fig. 7

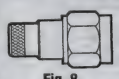


Fig. 8

Flexible cable-mount: frequency response DC to 12.4GHz. Semi-rigid cable-mount: frequency response DC to 26.5GHz except **mfg. part no. 142-0693-101** and **142-0694-101** which are 12.4GHz.

➤CONTINUED➤

50-OHM SMA COAXIAL PLUG CONNECTORS (CONT.)

STRAIGHT PLUGS — CAPTIVATED CONTACT

Mfg. Part No.	Fig.	Coaxial Termination	Contact Plating	RG/U	Stock No.	Price Each 1-9
● 142-0203-011	1	Solder	Gold	RG161, RG174, RG179, RG187, RG188, RG316	93F9173	14.61
● 142-0203-016	1	Solder	Nickel	RG161, RG174, RG179, RG187, RG188, RG316	08B810	13.60
● 142-0207-016	1	Solder	Nickel	RG58, RG141, RG303	08B811	16.60
RIGHT ANGLE PLUGS — CAPTIVATED CONTACT						
● 142-0203-106	2	Solder	Nickel	RG161, RG174, RG179, RG187, RG188, RG316	98F5610	14.72
● 142-0203-101	2	Solder	Gold	RG161, RG174, RG179, RG187, RG188, RG316	81F4463	18.58
● 142-0207-106	2	Solder	Nickel	RG58, RG141, RG303	88F1377	9.79
● 142-0403-101	4	Solder	Gold	RG161, RG174, RG188, RG316	76K1101	8.69
● 142-0404-101	2	Solder	Gold	RG188DS, RG316DS	08B855	10.01
● 142-0439-101	4	Solder	Gold	LMR-200	01C1629	15.57
● 142-0435-101	4	Solder	Gold	LMR-200	01C1625	20.35
STRAIGHT PLUGS — 3PC. SOLDER OR CRIMP CAPTIVATED CONTACT						
● 142-0402-011	3	Solder	Gold	RG178, RG196	83F6831	6.70
● 142-0403-011	3	Solder	Gold	RG161, RG174, RG188, RG316	81F4452	6.52
● 142-0403-016	3	Solder	Nickel	RG161, RG174, RG179, RG187, RG188, RG316	95F9619	7.36
● 142-0407-011	3	Solder	Gold	RG58, RG141, RG303	95F9624	6.86
● 142-0408-011	3	Solder	Gold	RG58, RG141, RG303	95F9625	9.35
● 142-0439-001	3	Solder	Gold	LMR-200	01C1627	17.01
SEMI-RIGID STRAIGHT PLUG — WITH CONTACT, CAPTIVE NUT THIN WALL CONNECTOR INTERFACE						
● 142-0693-006	3	Solder	Gold		67H5851	4.27
SEMI-RIGID STRAIGHT PLUGS — WITHOUT CONTACT, THREAD-ON NUT						
● 142-0694-011	6	Solder	Gold	RG402	51F2970	4.14
● 142-0694-016	6	Solder	Nickel	RG402	81F4461	1.96
SEMI-RIGID STRAIGHT PLUG — WITH CAPTIVATED SOLDERLESS CONTACT, CAPTIVE NUT						
● 142-0693-061	3	Solder	Gold	RG405	91C4669	10.92
● 142-0694-061	3	Solder	Gold	RG405	41K0116	8.69
SEMI-RIGID STRAIGHT PLUG — WITH CONTACT, CAPTIVE NUT						
● 142-0693-001	5	Solder	Gold	RG405	51F2968	6.07
SEMI-RIGID RIGHT ANGLE PLUGS — 1PC. BODY						
● 142-0693-101	7	Solder	Gold	RG405	76K1102	15.31
DUMMY LOAD PLUG						
● 142-0801-861	8	...	Gold	...	72K7360	45.83

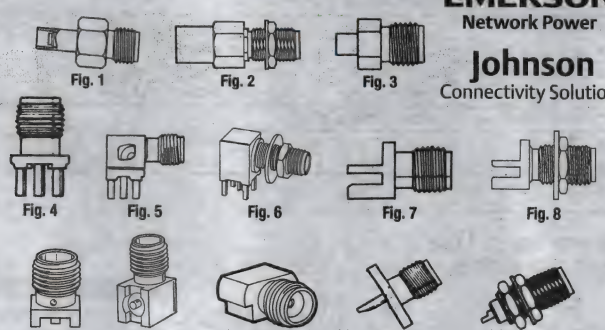
(8815)

50-OHM SMA COAXIAL JACK CONNECTORS

RoHS Compliant Available

EMERSON Network Power

Johnson Connectivity Solutions



Flexible cable-mount: frequency response DC to 12.4GHz. Semi-rigid cable-mount: frequency response DC to 26.5GHz. PC board mount, surface mount, and flange mount: frequency response DC to 18GHz.

STRAIGHT BULKHEAD JACKS — CAPTIVATED CONTACT

Mfg. Part No.	Fig.	Coaxial Termination	Plating	RG Cable Type	Stock No.	Price Each 1-9
● 142-0701-401	13	Solder	Gold	...	50F2714	9.38
● 142-0701-411	13	Solder	Gold	...	50F2715	9.37
● 142-0302-431	2	Solder	Gold	RG178, RG196	83F6834	13.83
● 142-0303-411	2	Solder	Gold	RG161, RG174, RG179, RG187, RG188, RG316	95F9614	9.98
● 142-0303-416	2	Solder	Nickel	RG161, RG174, RG179, RG187, RG188, RG316	95F9615	9.98
● 142-0339-401	2	Solder	Gold	LMR-200	01C1621	12.49
● 142-0593-421	2	Solder	Gold	RG405	91C4673	14.01
● 142-0593-431	2	Solder	Gold	RG405	41K0109	21.84
● 142-0594-431	2	Solder	Gold	RG402	41K0113	17.66

➤CONTINUED➤

50-OHM SMA COAXIAL JACK CONNECTORS (CONT.)

STRAIGHT JACKS — CAPTIVATED CONTACT

Mfg. Part No.	Fig.	Coaxial Termination	Plating	RG Cable Type	Stock No.	Price Each 1-9
● 142-0302-011	1	Solder	Gold	RG178, RG196	83F6833	11.30
● 142-0303-011	1	Solder	Gold	RG161, RG174, RG179, RG187, RG188, RG316	95F9612	6.55
● 142-0307-011	1	Solder	Gold	RG58, RG141, RG303	95F9616	17.54
● 142-0593-001	3	Solder	Gold	RG405	51F2966	9.30
● 142-0594-001	3	Solder	Gold	RG402	51F2967	12.82
REVERSE POLARITY STRAIGHT BULKHEAD JACKS — CAPTIVATED CONTACT						
● 142-4303-401	2	Crimp	Gold	RG161, RG174, RG188, RG316	95B5417	16.07

PC MOUNT JACKS

Mfg. Part No.	Fig.	Body Style	Mounting	Pin Length (in.)	Contact Plating	Stock No.	Price Each 1-9
● 142-0701-231	4	Straight Bulkhead	Thru-Hole	0.110	Gold	08B888	5.77
● 142-0701-201	4	Straight Bulkhead	Thru-Hole	0.155	Gold	98F1467	4.97
● 142-0701-206	4	Straight Bulkhead	Thru-Hole	0.155	Nickel	96F9781	5.97
● 142-0701-211	4	Straight Bulkhead	Thru-Hole	0.281	Gold	50F2711	11.44
● 142-0701-216	4	Straight Bulkhead	Thru-Hole	0.281	Gold	08B887	12.38
● 142-0701-301	5	Right Angle	Thru-Hole	0.2	Gold	76K1104	8.21
142-0701-551	5	Right Angle Bulkhead	Thru-Hole	0.11	Gold	66M8531	13.63
● 142-0701-501	6	Right Angle Bulkhead	Thru-Hole	0.155	Gold	76K1106	11.47
● 142-0711-201	9	Straight	Surface Mount	...	Gold	95F9620	4.83
● 142-0711-301	10	Right Angle	Surface Mount	...	Gold	95F9621	10.34

END LAUNCH JACKS

Mfg. Part No.	Fig.	Body Style	Pin Length (in.)	Contact Type	Stock No.	Price Each 1-9
● 142-0711-821	7	Straight	0.062	Round	16F3627	7.57
● 142-0701-801	7	Straight	0.062	Round	90F2624	5.39
● 142-0701-881	8	Straight	...	Round	08B906	7.31
● 142-0701-871	8	Straight Bulkhead	0.062	Round	91B6105	8.45
● 142-0701-841	7	Straight	0.062	Tab	08B902	7.55
● 142-0701-841	7	Straight	0.042	Tab	08B902	7.55
● 142-0721-881	11	Straight	...	...	01C1648	6.96

FLANGE MOUNT JACKS

Mfg. Part No.	Fig.	Body Style	No. of Holes	Plating	Stock No.	Price Each 1-9	Price Each 10-49
● 142-0701-621	12	Straight	2	Gold	50F2713	10.14	9.03
● 142-0701-631	12	Straight	4	Gold	50F2712	10.69	9.52

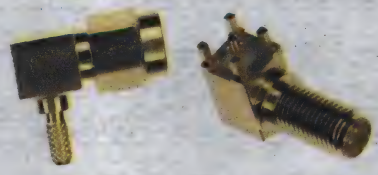
(164261)

50-OHM SMA CONNECTORS

RoHS Compliant Available

molex

- DC to 18 GHz
- Space-saving vertical mating
- Threaded coupling for vibration intensive applications
- Ideal for wireless and GPS applications



73391-0230 73251-2201

CRIMP CABLE CONNECTORS

Mfg. Part No.	Body Style	RG/U	Body Plating	Stock No.	Price Each 1-9
● 73251-0211	Right Angle Plug	RG174, RG179, RG187, RG188, RG316	Passivated	32M0768	26.33
● 73391-0230	Right Angle Plug	RG174, RG179, RG187, RG188, RG316	Gold	56R6544	5.47
● 73251-0930	Straight Bulkhead Jack	RG174, RG188, RG316	Gold	32M0772	5.90

PC BOARD CONNECTORS

Mfg. Part No.	Body Style	Termination	Body Plating	Stock No.	Price Each 1-9
● 73251-1350	Straight Jack	Solder	Gold	32M0774	3.48
● 73251-1150	Straight Jack	Surface Mount Straddle	Gold	32M0773	3.77
● 73391-0060	Straight Jack	Solder	Gold	27C8063	3.39
● 73391-0070	Straight Jack	Solder	Gold	32M0797	3.55
● 73100-0114	Right Angle Jack	Through Hole	Gold	32M0739	6.34
● 73100-0115	Right Angle Jack	Through Hole	Nickel	39M4958	4.67
● 73251-2200	Right Angle Jack	Through Hole	Nickel	56R6514	5.93
● 73251-2201	Right Angle Jack	Through Hole	Gold	25R3800	6.63

➤CONTINUED➤

50-OHM SMA CONNECTORS (CONT.)

ADAPTERS

Mfg. Part No.	Body Style	Convert From	Convert From	Stock No.	Price Each 1-24
73251-0360	Straight Bulkhead	SMA Jack	SMA Jack	32M0770	11.82

(90508)

SMA TERMINATORS AND SHORTING CAPS

RoHS Compliant Available

Pomona®

Pomona SMA terminators and shorting caps are compact and durable, offering excellent electrical performance between DC to 18 GHz.

5088

Mfg. Part No.	Description	Stock No.	Price Each
4286	Male Terminator, 50Ω, 1W	90F2943	51.00
5088	Male Shorting Plug	78B1868	22.35

(90524)

50-OHM SMA JACK RF CONNECTORS

RoHS Compliant Available

Pomona®

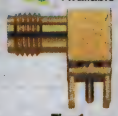


Fig. 1

Fig. 2

Fig. 3

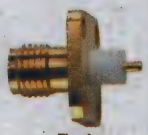


Fig. 4

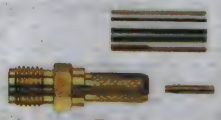


Fig. 5

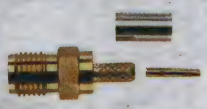


Fig. 6

Fig. 7

Fig. 8

- Bandwidth up to 18 GHz
- Meets MIL-C-39012, IEC 169-15, CECC 22110
- Gold-plated beryllium copper contacts

Mfg. Part No.	Fig.	Body Style	Connector Mounting	Coaxial Termination	RG/U	Stock No.	Price Each
72971	1	Right Angle	PCB	Solder	...	77M7296	4.95
72956	2	Straight Bulkhead	Cable	Crimp	174, 178, 188, 316	77M7282	5.90
72961	3	Straight Flanged	Panel	Crimp	...	77M7286	4.40
72962	4	Straight Flanged	Panel	Crimp	...	77M7287	6.00
72953	5	Straight	Cable	Crimp	RG142, RG400	77M7280	6.20
72954	6	Straight	Cable	Crimp	RG174, RG188, RG316	77M7281	5.80
72963	7	Straight	PCB	Solder	...	77M7288	3.65
72970	8	Straight	PCB	Solder	...	77M7295	5.50

(107914)

50-OHM SMA PLUG RF CONNECTORS

RoHS Compliant Available

Pomona®

Fig. 1

Fig. 2

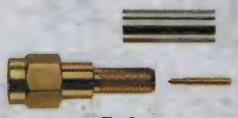


Fig. 3

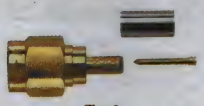


Fig. 4

Fig. 5

Fig. 6

- Bandwidth up to 18 GHz
- Meets MIL-C-39012, IEC 169-15, CECC 22110
- Gold-plated brass contacts

➤CONTINUED➤

50-OHM SMA PLUG RF CONNECTORS (CONT.)

Mfg. Part No.	Fig.	Body Style	Connector Mounting	Coaxial Termination	RG/U	Stock No.	Price Each
72960	1	Right Angle	Cable	Crimp	RG142, RG400	77M7285	6.50
72959	2	Right Angle	Cable	Crimp	141, 174, 188, 316	77M7284	7.70
72943	3	Straight	Cable	Crimp	RG58, Essex 621-715	77M7274	5.20
72945	3	Straight	Cable	Crimp	RG142, RG400	77M7276	5.90
72946	4	Straight	Cable	Crimp	RG174, RG188, RG316	77M7277	4.95
72950*	5	Straight	Cable	Crimp	RG174, RG188, RG316	77M7278	5.80
72975	6	Straight	Cable	Crimp	...	76M8969	21.30

* Reverse polarity

(165111)

50-OHM SMA JACK END CONNECTORS

RoHS Compliant Available

multicomp

Specifications

- Impedance: 50 Ω
- Frequency Range: 0-18 GHz
- Contact Resistance: 3 mΩ
- Insulation Resistance: 5000 MΩ
- Body: Brass - Gold Plated

Gold plated center contact & body with Teflon insulation

Mfg. Part No.	Mounting Type	PCB Thickness (mm)	Stock No.	Price Each 1-49
19-70-TGG	Bulkhead	1.73	42M2864	5.57
19-70-1-TGG	PC Board	1.73	42M2865	4.69
19-70-4-TGG	PC Board	1.22	42M2866	4.63

(116653)

50-OHM SMA PLUG CONNECTORS

RoHS Compliant Available

multicomp

8589-0837

STRAIGHT PLUGS

Mfg. Part No.	Connector Mounting	Coaxial Termination	RG/U	Body Plating	Stock No.	Price Each 1-49
8589-0833	Cable	Crimp	RG58, Essex 621-715	Gold	16N2715	9.98
19-03F-4-TGG	Cable	Crimp	RG58, Essex 621-715	Gold	26M6010	3.86
8589-0865	Cable	Crimp	RG58, RG58A, RG58C, RG141, RG141A	Gold	16N2747	11.91
MC23546	Cable	Crimp	RG142	Gold	96M8830	4.95
SPC20110	Cable	Crimp	RG174	Gold	82K9790	7.75
8589-0832	Cable	Crimp	RG174	Gold	16N2714	13.28
MC23554	Cable	Crimp	RG174	Gold	96M8838	3.96
MC23560	Cable	Crimp	RG316	Gold	96M8844	2.44
8589-0872	Cable	Solder	RG402	Nickel	16N2754	9.11
RIGHT ANGLE PLUGS						
MC23582	Cable	Crimp	RG58, Essex 621-715	Gold	96M8866	5.17
8589-0838	Cable	Crimp	RG58, Essex 621-715	Nickel	16N2720	16.27
MC23561	Cable	Crimp	RG142	Gold	96M8845	5.12
MC23551	Cable	Crimp	RG174	Gold	96M8835	5.26
8589-0837	Cable	Crimp	RG174	Nickel	16N2719	15.09

(8853)

50-OHM SMA JACK CONNECTORS

RoHS Compliant Available

multicomp

8589-0836

8589-0844

8589-0842

STRAIGHT JACKS

Mfg. Part No.	Connector Mounting	Coaxial Termination	RG/U	Body Plating	Stock No.	Price Each 1-49
8589-0835	Cable	Crimp	RG174	Nickel	16N2717	13.99
8589-0836	Cable	Crimp	RG58, Essex 621-715	Nickel	16N2718	15.05
MC23592	Cable	Crimp	RG174, RG188, RG316	Gold	96M8876	4.98
8589-0844	PCB Vertical	Solder	...	Nickel	16N2726	12.20
SPC20113	PCB Vertical	Solder	...	Gold	82K9793	13.91

➤CONTINUED➤

50-OHM SMA JACK CONNECTORS (CONT.)

Mfg. Part No.	Connector Mounting	Coaxial Termination	RG/U	Body Plating	Stock No.	Price Each 1-49
● 19-70-1-TGG	PCB End Launch	Solder	...	Gold	42M2865	4.69
● MC23586	PCB	Solder	...	Gold	96M8870	5.12
STRAIGHT BULKHEAD JACKS						
● 19-46-1-TGG	PCB	Solder	...	Gold	26M6022	4.59
RIGHT ANGLE JACKS						
● 8589-0842	PCB	Solder	...	Nickel	16N2724	22.16
● 8589-0843	PCB	Solder	...	Gold	16N2725	24.86
RIGHT ANGLE BULKHEAD JACKS						
● 19-49-5-TGG	PCB	Solder	...	Gold	26M6024	6.04

(165109)

AMP 50-OHM QMA (SNAP-ON SMA SERIES) CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Positive snap-on interface facilitates assembly
- Excellent RF performance
- Ideal for communications and industrial applications
- Frequency range: DC to 6GHz
- Nickel-plated brass shells and bodies
- Gold-plated beryllium copper contacts (jacks)
- Gold-plated brass contacts (plugs)
- Temp. range: -40°C to +125°C

STRAIGHT JACKS

Mfg. Part No.	RG/U	Coaxial Termination	Connector Mounting	Stock No.	Price Each 1-9
● 1408338-7	RG58, RG141, RG303	Crimp	Cable	96M0631	11.16
● 1408338-1	RG174, RG188, RG316	Crimp	Cable	96M0630	18.76
● 1408341-1	...	Solder	Panel	96M0634	8.83
STRAIGHT PLUGS					
● 1408333-7	RG58, RG141, RG303	Crimp	Cable	96M0628	10.25
● 1408333-1	RG174, RG188, RG316	Crimp	Cable	07J2529	19.01
RIGHT-ANGLE PLUGS					
● 1408336-7	RG58, RG141, RG303	Crimp	Cable	96M0629	15.98
● 1408336-3	RG316	Crimp	Cable	07J2531	28.04

(114896)

50 OHM QMA CONNECTORS

RoHS Compliant Available

Amphenol® RF

Fig. 1 Fig. 2 Fig. 3 Fig. 4

- Operates at the same electrical performance as SMA up to 6GHz
- Snap-on interface for quick and easy installation
- Snap-lock mechanism removes requirement for wrench clearance
- Rotatable 360° after connection for flexibility with installation
- Durability, 100 cycles
- Retention force of interface, 60 N (13.5 lb.) min.
- Temperature range, -40° to +80°C
- Pin contact material gold over brass
- Socket contact material gold over beryllium copper

Fig. 5 Fig. 6

STRAIGHT PLUGS

Mfg. Part No.	Fig.	Cable Term.	RG Cable Type	Stock No.	Price Each 1-9	10-24	25-99
● 930-108P-51S	1	Solder	RG402	09J5617	16.93	15.68	14.04
● 930-115P-51S	1	Crimp	RG316DB	09J5622	16.84	15.60	13.97
● 930-119P-51S	1	Solder	RG405	09J5626	11.52	10.60	9.80
● 930-120P-51S	1	Solder	RG58, Essex 621-715	09J5627	13.86	11.99	10.60
● 930-129P-51S	1	Crimp	RG316	09J5636	13.30	12.15	10.24
RIGHT ANGLE PLUGS							
● 930-103P-51A	2	Solder	RG402	09J5613	13.56	11.36	10.68
● 930-104P-51A	2	Solder	RG405	81H1285	12.93	11.94	11.06
● 930-110P-51A	2	Solder	RG58, Essex 621-715	09J5618	14.78	11.89	10.87
● 930-114P-51A	2	Solder	RG316	09J5621	14.17	13.13	11.76
● 930-118P-51A	2	Crimp	RG174, RG188A, RG316	09J5625	16.93	15.68	14.04

➤CONTINUED➤

50 OHM QMA CONNECTORS (CONT.)

PC MOUNT STRAIGHT JACKS

Mfg. Part No.	Fig.	Mounting	Stock No.	Price Each 1-9	10-24	25-99
● 930-107J-51P	...	Surface Mount	09J5616	9.32	8.34	7.77
● 930-116J-51P	3	Thru Hole	09J5623	11.31	10.25	9.07
PC MOUNT RIGHT ANGLE JACKS						
● 930-111J-51P	...	Surface Mount	09J5619	13.65	12.51	11.04
● 930-128J-51P	...	Thru Hole	09J5635	11.07	10.27	10.00

ADAPTERS

Mfg. Part No.	Fig.	Convert From	Convert To	Stock No.	Price Each 1-9	10-24	25-99
● 930-130A-51S	4	QMA Plug	SMA Plug	09J5637	65.20	60.21	55.61
● 930-101A-51S	4	QMA Plug	SMA Jack	81H1286	59.62	54.49	42.83
● 930-100A-51S	5	QMA Jack	SMA Jack	68H8482	46.98	43.38	40.07
● 930-131A-51S	6	QMA Jack	SMA Plug	09J5638	65.81	59.45	44.59

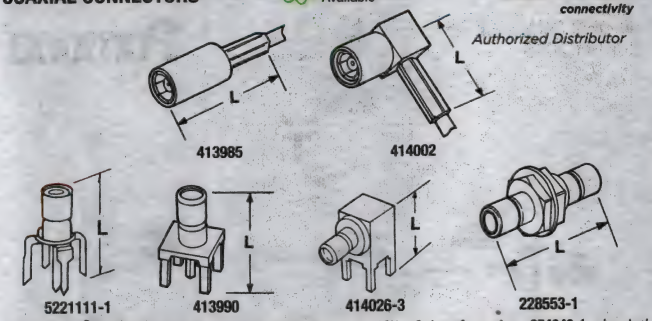
(80541)

50-OHM AMP SMB COAXIAL CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor



Feature Teflon® dielectric. Meet MIL-C-39012 specifications up to 4GHz. *Order* **mfg. part no. 354940-1** *crimp tool separately on page 1061. Order* **mfg. part no. 58046-1** *die set separately; go online or call. See Manufacturer & Product Index for a complete selection of coaxial cable.*

CABLE PLUGS

Mfg. Part No.	Body Style	RG/U	Coaxial Termination	Grade	Length (in.)	Stock No.	Price Each 1-9
● 413985-3	Straight	RG174, RG188, RG316	Crimp	MIL Style	0.830	96F7613	6.70
● 414002-1	Right Angle	RG174, RG188, RG316	Crimp	MIL Style	0.520	96F7619	9.66
● 414002-3	Right Angle	RG174, RG188, RG316	Crimp	MIL Style	0.520	96F7618	9.96
● 5414363-3	Right Angle	RG174, RG188, RG316	Crimp	Consumer	...	42K8718	5.53
● 1060412-1	Right Angle	RG174, RG179, RG187, RG188, RG316	Crimp	Consumer	...	10H7341	33.14
● 414618-2	Straight	RG179, RG187	Crimp	Consumer	0.830	96F7607	13.26
CABLE JACKS							
● 1060442-1	Straight Blkhd.	...	Solder	Commercial	...	10H7343	20.21
PCB JACKS							
● 5221111-1	Straight	...	Solder	Commercial	0.480	42K7099	3.55
● 413990-1	Straight	...	Solder	MIL Style	0.455	96F7646	5.76
● 413990-2	Straight	...	Solder	MIL Style	0.455	96F7644	5.45
414337-1	Right Angle	...	Solder	Consumer	...	92F1590	5.74
● 414026-2	Right Angle+	...	Solder	MIL Style	0.490	96F7641	7.70
● 414026-3	Right Angle+	...	Solder	MIL Style	0.490	96F7640	8.06

*Bulkhead; +With Standoff Pads

ADAPTERS

Mfg. Part No.	Body Style	Convert From	Convert To	Grade	Dim. L (in.)	Stock No.	Price Each 1-9
● 228553-1	Straight Blkhd.	SMB Jack	SMB Jack	MIL Style	0.690	89F3368	10.30
● 1466294-1	Straight Blkhd.	SMB Jack	SMB Jack	Commercial	0.290	11H5659	18.63

(8252)

AMP SMB CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

228215-1 — 5415487-1 — 5414363-4

- Nickel-plated front body
- Tin-plated rear body
- Gold-plated brass contacts
- Quick connect/disconnect coupling style

Mfg. Part No.	Body Style	Coaxial Termination	Connector Mounting	RG/U	Stock No.	Price Each 1-24
75-OHM JACKS						
5221014-1	Right Angle	Solder	PCB	...	64M7443	21.79
50-OHM JACKS						
228215-1	Straight Bkhd	Solder	Panel	...	89F3367	23.81
1060455-1	Straight	Solder	PCB	...	73M8554	5.97
415340-1	Right Angle	Solder	PCB	...	13H4279	9.67
75-OHM PLUGS						
5415487-1	Straight	Crimp	Cable	RG179	19R2299	6.72
414048-6	Right Angle	Crimp	Cable	RG179, RG187	96F7654	71.59
50-OHM PLUGS						
413985-1	Straight	Crimp	Cable	RG174, RG188, RG316	96F7614	7.73
1-413985-1	Straight	Crimp	Cable	RG161, RG179, RG187	96F7611	5.93
413985-6	Straight	Crimp	Cable	RG178, RG196	96F7615	7.18
5414363-4	Right Angle	Crimp	Cable	RG174, RG188, RG316	42K7184	4.27

(112557)

50-OHM SMB AND SMC CONNECTORS

RoHS Compliant Available

Amphenol Connex

Fig. 1 — Fig. 2 — Fig. 3 — Fig. 4 — Fig. 5 — Fig. 6

- DC to 10GHz frequency range
- Gold-plated contacts

Mfg. Part No.	Fig.	Impedance (Ω)	Coaial Cable Type RG/U	Coaxial Termination	Connector Mounting	Stock No.	Price Each 1-9
SMB STRAIGHT PLUGS							
142186	1	50	RG174, RG188A, RG316	Crimp	Cable	99H5270	7.15
142134	2	50	...	Through Hole	PCB	99H5231	5.11
SMB RIGHT-ANGLE PLUG							
142194	3	50	RG174, RG188A, RG316	Crimp	Cable	61H7123	5.13
SMB STRAIGHT JACK							
142189	4	50	RG174/U, RG188A/U, RG316/U	Crimp	Cable	99H5276	4.79
SMB STRAIGHT BULKHEAD JACK							
142210	5	50	...	Through Hole	PCB	61H7122	5.32
SMC STRAIGHT JACK							
152119	6	50	...	Through Hole	PCB	99H5555	3.87

(119510)

50-OHM SMB SUBMINIATURE COAXIAL PLUGS

RoHS Compliant Available

Amphenol® RF

Fig. 1 — Fig. 2 — Fig. 3 — Fig. 4

Mfg. Part No.	Fig.	RG/U	Body Plating	Stock No.	Price Each 1-9	Price Each 10-24
STRAIGHT PLUGS — BRAID CRIMP/SOLDER FEMALE CONTACT						
903-285P-51S	1	RG174, RG188A, RG316	Gold	90F8472	13.88	10.90
903-370P-51S	1	RG174, RG188A, RG316	Nickel	93F1365	7.58	5.96
903-371P-51S	1	RG178, RG316	Nickel	93F1366	16.17	14.76
903-401P-51S	1	RG188, RG316	Gold	93F7544	16.92	13.89
903-579P-51S1	...	RG316DB	Nickel	19C5372	12.60	11.68
STRAIGHT PLUG — RADIAL CRIMP FEMALE CONTACT						
903-536P-71S	2	RG179	Gold	96B7184	75.33	67.23
RIGHT ANGLE PLUGS — BRAID CRIMP/SOLDER FEMALE CONTACT						
903-289P-51A	3	RG316	Gold	90F8473	19.72	16.44
903-289P-51A2	3	RG174, RG179, RG187, RG188, RG316	Gold	01F884	4.07	3.73
903-291P-51A1	3	RG178, RG316	Gold	01F885	7.55	7.06
903-367P-51A	3	RG174, RG188A, RG316	Nickel	93F1361	17.53	16.14
903-367P-51A2	3	RG174, RG188A, RG316	Nickel	66F9591	4.31	4.20
PC BOARD PLUGS - BLUNT POST						
903-410P-53P	4	...	Gold	66F9594	12.58	11.66

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
903-10408-1	Gold Plated Jam Nut	93F1379	1.59	1.39

(8304)

50-OHM SMB SUBMINIATURE COAXIAL JACKS

RoHS Compliant Available

Amphenol® RF

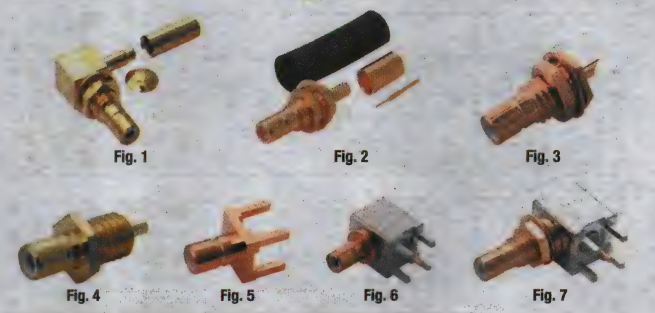


Fig. 1 — Fig. 2 — Fig. 3 — Fig. 4 — Fig. 5 — Fig. 6 — Fig. 7

Mfg. Part No.	Fig.	RG/U	Body Plating	Stock No.	Price Each 1-9	Price Each 10-24
RIGHT-ANGLE BULKHEAD JACK — BRAID CRIMP/SOLDER MALE CONTACT						
903-422J-51A	1	RG174, RG188	Gold	93F1377	25.97	24.21
STRAIGHT BULKHEAD JACK — BRAID CRIMP/SOLDER MALE CONTACT						
903-505J-51S	2	RG174, RG188A, RG316	Nickel	66F9587	9.06	8.42

BULKHEAD JACKS — SOLDER CUP TERMINALS

Mfg. Part No.	Fig.	Body Style	Description	Body Plating	Stock No.	Price Each 1-9	Price Each 10-24
903-305J-51R	3	Straight	Rear Mount	Gold	50F2441	15.21	14.80
903-407J-51R	3	Straight	Rear Mount	Gold	93F1373	36.19	30.82
903-402J-51R	4	Straight	Front Mount	Gold	93F1371	5.78	5.34
903-406J-51R+	4	Straight	Front Mount	Gold	93F1372	6.46	5.19
PC BOARD JACKS — 4 LEG/BLUNT POST TERMINALS							
903-415J-51P	5	Straight	Brass	Gold	50F2442	7.36	6.56
903-499J-51P2	5	Straight	Diecast Zinc	Gold	66F9590	3.69	3.18
903-518J-51P†	...	Straight	End Mount Jack	Gold	19C5360	11.74	10.68
903-373J-51A	6	Right Angle	Leak Tight‡	Tin Lead	51F3920	6.75	6.12
903-413J-51A	7	Right Angle	Bulkhead, Leak Tight‡	Tin Lead	73K1503	14.18	13.50

†Board-to-board interconnect for 0.360″ spacing; +Jam nut and lockwasher *ordered separately; go online or call;* ‡ Gold plated interface and contact.

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
903-10408-1	Gold Plated Jam Nut	93F1379	1.59	1.39

(164465)

RF COAX – SUBMINIATURE

903 SERIES 75-OHM HIGH-DENSITY, SMB COAXIAL PC BOARD JACK RECEPTACLES

RoHS Compliant Available

Amphenol® RF

Fig. 1 Fig. 2

PC board jack receptacles feature 4 leg/blunt post terminals. Gold-plated body and contact. TFE fluorocarbon, red insulator. SMB 75-ohm high-intensity subminiature coaxial connectors conform to the requirements of MIL-C-39012. Feature quick connect/disconnect snap-on mating. Operate to 4GHz with low reflection and are usable to 10GHz. Voltage rating for RG-188U cable: 335V. Dielectric withstanding voltage: 1000Vrms. Temperature range: –65°C to +165°C.

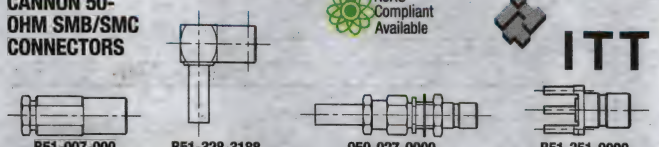
Mfg. Part No.	Fig.	Description	Stock No.	Price Each 1-9
● 903-512J-71P	1	Jack Receptacle	52F6931	10.11
● 903-518J-71P	1	Jack Receptacle	52F6930	13.32
● 903-375J-53P	1	Jack Receptacle	93F1367	9.78
● 903-519J-71P	2	Angle Jack Receptacle	52F6932	17.36
● 903-535P-71A	...	Angle Plug	19C5362	11.02

(8305)

CANNON 50-OHM SMB/SMC CONNECTORS

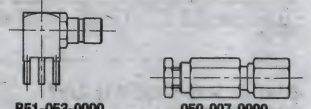
RoHS Compliant Available

ITT



B51-007-000 B51-328-3188 050-027-0000 B51-351-0000

Frequency range: 0 to 12.4GHz. Mechanical: screw-on or snap-on coupling interfaces, solder contact. Size: 50-ohm coupling nut 15/64″ hex, 0.250″ (6.35) diameter, snap-on. Meet MIL-C-39012 specifications.



B51-053-0000 050-007-0000

SNAP-ON CONNECTORS

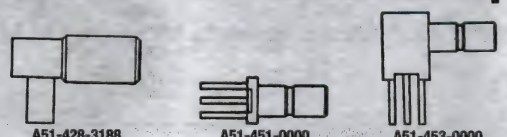
Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-24
● B51-007-0000220	St. Plug, Clamp, Flexible Coax*	90F2529	15.65	12.89
● B51-024-0000220	St. Plug, Crimp, Flexible Coax*	90F2535	7.97	6.57
● B51-328-3188220	R/A Plug, Crimp, Flexible Coax*	90F2539	13.96	11.50
● B51-351-0000220	St. PCB Mount Jack	90F2546	5.53	4.55
● B51-053-0000220	R/A PCB Mount Jack	93F1825	8.83	7.28
SCREW-ON CONNECTORS				
● 050-007-0000220	St. Plug, Clamp, Flexible Coax*	90F2582	26.36	21.70
● 050-024-0000220	St. Plug, Crimp, Flexible Coax*	90F2588	16.49	13.59
● 050-027-0000220	St. Bulkhead Jack, Crimp, Flex. Coax*	90F2590	12.80	10.54
● 050-043-0000220	Bulkhead Jack Receptacle, Rear Mnt.	90F2594	10.70	8.81
● B50-051-0000220	Straight PCB Mount Jack	90F2598	7.70	6.35
● B50-053-0000220	Right Angle PCB Mount Jack	90F2599	7.96	6.56

* RG-316 Cable
(8719)

CANNON 50-OHM SSMB/SSMC MICROMINIATURE SNAP-ON CONNECTORS

RoHS Compliant Available

ITT



A51-428-3188 A51-451-0000 A51-453-0000

- Current Rating: 1.0 Amps DC Maximum
- Voltage Rating, Sea Level: 250Vrms
- Frequency Range: 0 to 12.4GHz
- Impedance: 50 Ohms
- Meet MIL-C-39012 Specifications

Very small (50% of SMB) coaxial connectors suitable for wireless, instrumentation, medical, PCMCIA and antenna applications.

Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-24
● 051-424-3188220	Straight Plug, for Braided Coax	90F2600	15.16	12.48
● A51-428-3188220	Right-Angle Plug, for Braided Coax	92F5401	15.78	13.00
● A51-428-3196220	Right-Angle Plug	92F5402	13.07	10.75
● A51-451-0000220	PC Board Receptacle	90F2609	17.75	15.80
● A51-453-0000220	PC Board Receptacle, Right-Angle	90F2610	19.62	17.53

(8720)

50-OHM AND 75-OHM SMB COAXIAL PLUGS

RoHS Compliant Available

EMERSON. Network Power

Johnson Connectivity Solutions

Fig. 1 Fig. 2 Fig. 3 Fig. 4

Frequency range: DC to 2GHz (75 ohm) or DC to 4GHz (50 ohm). Meets MIL-C-39012 spec requirements.

50-OHM SMB FLEXIBLE CABLE MOUNT CRIMP PLUGS

Mfg. Part No.	Fig.	Body Style	Plating	RG Cable Type	Stock No.	Price Each 1-9
● 131-1403-001	1	Straight	Gold	RG161, RG174, RG179, RG187, RG188, RG316	72K7355	10.07
● 131-1403-016	1	Straight	Nickel	RG161, RG174, RG179, RG187, RG188, RG316	72K7356	6.65
● 131-1403-101	2	Right Angle	Gold	RG161, RG174, RG179, RG187, RG188, RG316	72K7357	8.30
50-OHM SMB FLEXIBLE NON-MAGNETIC CABLE MOUNT CRIMP PLUG						
● 131-9403-001	1	Straight	Gold	RG174, RG179, RG187, RG188, RG316	10J9855	21.51
75-OHM SMB FLEXIBLE CABLE MOUNT CRIMP PLUG						
● 131-8403-101	3	Right Angle	Gold	RG179, RG187	16F3629	15.16

SMB STRAIGHT PLUG DUMMY LOAD

Mfg. Part No.	Fig.	Impedance (Ω)	Plating	RG Cable Type	Stock No.	Price Each 1-9
● 131-3801-811	4	50	Gold	...	08B612	20.54

(8816)

50- AND 75-OHM SMB COAXIAL JACKS

RoHS Compliant Available

EMERSON. Network Power

Johnson Connectivity Solutions

Fig. 1 Fig. 2 Fig. 3 Fig. 4

Frequency range: DC to 2GHz (75 ohm) or DC to 4GHz (50 ohm). Meets MIL-C-39012 spec requirements.

50-OHM SMB PC JACK RECEPTACLES

Mfg. Part No.	Fig.	Body Style	Plating	Description	Stock No.	Price Each 1-9
● 131-3701-201	1	Straight	Gold	0.155″ Leg	96F9763	3.17
● 131-3701-261	1	Straight	Gold	0.155″ Leg	48F5780	2.34
● 131-3701-266	2	Straight	Nickel	0.155″ Leg	48F6114	2.20
● 131-3701-271	1	Straight	Gold	0.095″ Leg	48F5781	2.82
● 131-3701-276	2	Straight	Nickel	0.095″ Leg	48F6116	2.45
● 131-1701-371	...	Right Angle	Gold	0.110″ Leg - Die Cast	96F9761	8.21
● 131-1701-376	...	Right Angle	Nickel	0.110″ Leg - Die Cast	50F2717	5.21
● 131-3701-501	3	Right Angle Bulkhead	Gold	0.083″ Leg	08B597	8.80
● 131-3701-341	3	Right Angle Bulkhead	Gold	0.155″ Leg	97F7154	10.52
● 131-3711-201	4	Straight	Gold	Surface Mount	95F9622	4.52
50-OHM NON-MAGNETIC SMB PC JACK RECEPTACLES						
● 131-9701-201	1	Straight	Gold	0.155″ Leg	92H6981	12.71

(176053)

50-OHM SMB CONNECTORS

RoHS Compliant Available

molex

Mfg. Part No.	Body Style	Description	RG/U	Stock No.	Price Each 1-9
● 73100-0097	Right Angle Jack	Bulkhead, PCB	...	75K6182	5.62
● 73100-0103	Right Angle Jack	PCB	...	32M0738	3.28
● 73100-0207	Straight Jack	PCB	...	96H0640	2.69
● 73100-0248	Straight Plug	Cable, Crimp	RG174, RG188, RG316	32M0743	4.36
● 73100-0257	Right Angle Plug	Cable, Crimp	RG174, RG188, RG316	26H2737	6.73
● 73100-0259	Right Angle Jack	PCB	...	63K2148	5.90

(90512)

50-OHM SMB RF PLUGS

RoHS Compliant Available

Pomona®

Fig. 1

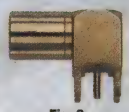


Fig. 2

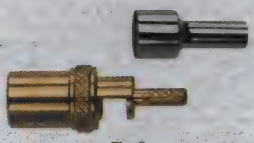


Fig. 3

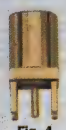


Fig. 4

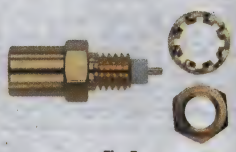


Fig. 5

- Bandwidth up to 4 GHz
- Meets MIL-C-39012, IEC 60169-1Q, BS9210N0007, NFC93650, CECC 22130
- Gold-plated brass contacts

Mfg. Part No.	Fig.	Body Style	Impedance (Ω)	Connector Mounting	Coaxial Termination	RG/U	Stock No.	Price Each
72988	1	Right Angle	50	Cable	Crimp	RG174, RG188, RG316	77M7310	7.40
72997	2	Right Angle	50	PCB	Solder	...	77M7317	7.00
72981	3	Straight	50	Cable	Crimp	RG174, RG188, RG316	77M7304	6.50
72995	4	Straight	50	PCB	Solder	...	77M7315	6.30
72999	5	Straight	50	Panel	Solder	...	77M7319	6.70

(108224)

50-OHM SMB RF JACKS

RoHS Compliant Available

Pomona®

Fig. 1

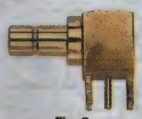


Fig. 2

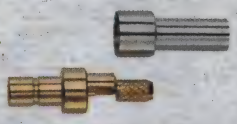


Fig. 3

Fig. 4

- Bandwidth up to 4 GHz
- Meets MIL-C-39012, IEC 60169-1Q, BS9210N0007, NFC93650, CECC 22130
- Gold-plated beryllium copper contacts

Mfg. Part No.	Fig.	Body Style	Impedance (Ω)	Connector Mounting	Coaxial Termination	RG/U	Stock No.	Price Each
72992	1	Right Angle	50	Cable	Crimp	RG174, RG188, RG316	77M7313	8.40
72998	2	Right Angle	50	PCB	Solder	...	77M7318	4.40
72984	3	Straight	50	Cable	Crimp	RG174, RG188, RG316	77M7307	8.20
72996	4	Straight	50	PCB	Solder	...	77M7316	8.10

(164470)

50-OHM SMC SUBMINIATURE COAXIAL CONNECTORS

RoHS Compliant Available

Amphenol® RF

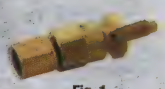


Fig. 1

Fig. 2

SMC subminiature connectors feature screw-on mating and meet or exceed MIL-C-39012 requirements. Voltage rating of 375V peak. Freq. range: 0-4GHz; useable to 10GHz. Temp. range: –65°C to +165°C. Weatherproof.

50-OHM STRAIGHT PLUGS — BRAID CRIMP/SOLDER CONTACT

Mfg. Part No.	Fig.	RG/U	Body Plating	Stock No.	Price Each 1-9	Price Each 10-24
903-284P-52S	1	174, 179, 187, 188, 316	Gold	93F1358	17.48	17.08
50-OHM RIGHT ANGLE PLUGS — BRAID CRIMP/SOLDER CONTACT						
903-288P-52A	2	174, 179, 187, 188, 316	Gold	93F1359	28.52	26.06
50-OHM STRAIGHT BULKHEAD JACKS — BRAID CRIMP/CRIMP ONTACT						
903-408J-52R	...	...	Gold	93F1374	55.92	51.09

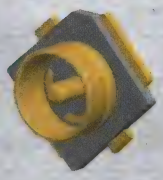
(8306)

50-OHM AMC CONNECTORS

RoHS Compliant Available

Amphenol® RF

- 50 Ω impedance
- Easy snap-snap-on/off mating
- Ultra low-profile (2.5mm mating height)
- Small foot print (3mm x 3mm)
- 100% Compatible with Hirose U.FL series



A-1JB

SURFACE MOUNT PC BOARD CONNECTORS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
A-1JA	PCB Mount Jack	97H8756	0.94
A-1JB	PCB Mount Jack with Ground Pad	05R5547	0.66

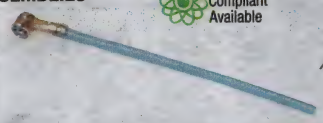
(160712)

SSMT CABLE ASSEMBLIES

RoHS Compliant Available

TE connectivity

Authorized Distributor



SSMT surface mount interconnect system is designed to provide superior electrical and mechanical performance for wireless communication applications. The mated SSMT interface allows 360 degrees of rotation providing maximum PCB design flexibility. It has been designed to provide optimal retention for applications where shock, vibration or cable flexure may be encountered. Force to disengage by cable load (cam-out) exceeds 300 grams.

DOUBLE ENDED RIGHT ANGLE SSMT PLUG CABLE ASSEMBLIES

Mfg. Part No.	Length (mm)	Stock No.	Price Each 1-24
1064523-1	75	96M0617	11.21
1064524-1	100	96M0618	8.44
1064530-1	200	10H7430	13.53
1064533-1	304.8	96M0619	13.37
RIGHT ANGLE SSMT PLUG TO PIGTAIL CABLE ASSEMBLIES			
1064538-1	200	96M0620	5.02

PC BOARD MOUNT STRAIGHT PLUGS

Mfg. Part No.	Contact Material	Connector Type	Contact Plating	Stock No.	Price Each 1-9
1055687-1	Copper	SMB Coaxial	Gold	48F5704	3.05
1055688-1	Copper	SSMT Coaxial	Gold	73M8551	2.73
1658260-1	Phosphor Bronze	SSMT Coaxial	Gold	01P5329	6.05

(116503)

50- AND 75-OHM MCX MICROMINIATURE SNAP-ON CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Frequency range: DC to 6GHz
- Voltage: 335V (VRMS max.)
- Contact current max: 1.5A DC max.
- Mating cycles: 500 min.
- Temp. rating: -65°C to +165°C

MCX microminiature snap-on connectors offer an excellent blend of size, durability and performance for applications in GPS, automotive and wireless communications. 30% smaller than traditional snap-on SMB connectors, these MCX connectors offer greater packaging density and weight reduction. The snap-on interface facilitates assembly, eliminating the need for a threaded connection, and providing full engagement. These MCX connectors are fully mateable with standard MCX connectors and conform to the CECC interface specifications. Available in a broad range of standard configurations for commercial applications.

STRAIGHT JACKS

Mfg. Part No.	Impedance (Ohms)	RG/U	Coaxial Termination	Connector Mounting	Stock No.	Price Each 1-24
1060995-1	50	...	Solder	PCB	96M0612	6.77
1330126-1	50	...	Solder	PCB	17H0871	8.17
6061092-1	50	...	Solder	PCB SMD	42K7637	3.31
STRAIGHT BULKHEAD JACKS						
1060960-1*	50	...	Crimp	Panel	10H7360	10.79

➤CONTINUED➤

50- AND 75-OHM MCX MICROMINIATURE SNAP-ON CONNECTORS (CONT.)

Mfg. Part No.	Impedance (Ohms)	RG/U	Coaxial Termination	Connector Mounting	Stock No.	Price Each 1-24
*Front-mount feed-through						
RIGHT-ANGLE PC BOARD JACKS						
● 1061022-1	50	...	Solder	PCB	96M0613	8.21
● 1061023-1	50	...	Solder	PCB	96M0614	9.42
● 1061027-1	50	...	Solder	PCB	10H7363	11.30
STRAIGHT PLUGS						
● 1060872-1	50	RG174, RG188, RG316	Crimp	Cable	96M0609	19.28
● 1060869-1	50	RG178, RG196	Crimp	Cable	10H7356	23.80
● 1085221-1	50	...	Solder	PCB	96M0622	5.86
● 1408496-1	50	...	Solder	PCB	17R3154	12.17
RIGHT-ANGLE CABLE PLUGS						
● 5837 5002 10	50	RG178, RG196	Solder	Cable	07H8490	15.55
● 1060787-1	50	RG-405 Semi-Rigid	Solder	Cable	10H7353	7.85
● 1362991-1	75	RG179	Crimp	Cable	22J1346	6.26

(114909)

50-OHM MCX / MMCX PLUGS AND JACKS

RoHS Compliant Available

Amphenol Connex

Fig. 1

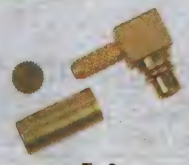


Fig. 2

Fig. 3

- DC to 6GHz frequency range
- Gold-plated contacts

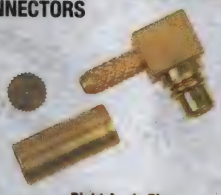
Mfg. Part No.	Fig.	Coaxial Type	Coaxial Cable Type RG/U	Connector Mounting	Coaxial Termination	Stock No.	Price Each 1-9
STRAIGHT PLUGS							
● 262101	...	MMCX	RG174, RG188A, RG316	Cable	Crimp	73H3904	4.51
RIGHT ANGLE PLUGS							
● 252102	1	MCX	RG174, RG188A, RG316	Cable	Crimp	99H6486	7.61
● 262103	2	MMCX	RG174, RG188A, RG316	Cable	Crimp	99H6668	5.74
● 262102	2	MMCX	RG178, RG196	Cable	Crimp	99H6666	5.74
STRAIGHT JACKS							
● 252105	3	MCX	...	PCB	Through-Hole	99H6491	5.25

(119502)

50-OHM NON-MAGNETIC MICROMATE™ (MMCX) COAXIAL CONNECTORS

RoHS Compliant Available

Amphenol® RF



Right Angle Plug

PCB Mount

Lock-snap mechanism allows for 360 degrees rotation enabling flexibility in PCB layouts. MMCX connectors conform to the European CECC 22000 specification. This family of products is a 6 GHz 50 Ω interconnect system.

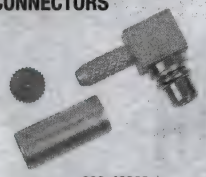
Mfg. Part No.	Body Style	Mounting	RG/U	Stock No.	Price Each 1-9	10-24	25-99
PLUGS							
● 908-NM41200	Straight	Cable	RG178	75M1806	15.66	14.24	13.11
● 908-NM43200	Right Angle	Cable	RG178	75M1811	10.24	9.31	8.54
JACKS							
● 908-NM22106	Straight	PCB	...	48M1547	5.65	5.14	4.47
● 908-NM24100	Right Angle	PCB	...	75M1805	13.51	12.21	11.29

(165056)

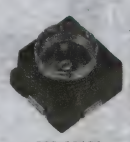
50-OHM MICROMATE™ (MMCX) COAXIAL CONNECTORS

RoHS Compliant Available

Amphenol® RF



908-43200



908-22101

908-41400

Microminiature connectors are designed for high-density, lightweight coaxial applications, such as wireless data, communication, and instrumentation. Feature a low-mated profile to help meet critical height requirements. Positive snap-on mating provides retention through 500 mating cycles. Connectors are compatible with all MMCX designs and accommodate industry-standard coaxial cable. Impedance: 50 ohms. Frequency range: DC-6GHz. Voltage rating: 170Vrms. Dielectric withstanding voltage: 500Vrms.

Mfg. Part No.	RG/U	Stock No.	Price Each 1-9	10-24	25-99
RIGHT-ANGLE CABLE PLUGS					
● 908-43200	RG178, RG196	66F9247	12.91	9.21	8.80
● 908-43300	RG174, RG188, RG316	66F9248	7.10	6.91	6.74
● 908-43400	0.086″ Semi-Rigid	01F2396	13.50	11.89	9.56
● 908-43600	0.047″ Semi-Rigid	01F2397	14.43	13.27	12.30
STRAIGHT CABLE PLUGS					
● 908-41300	RG174, RG188A, RG316	01F2392	8.69	8.43	7.58
● 908-41400	RG405	01F2393	25.73	23.51	21.65
● 908-41500	RG316DB	01F2394	10.18	9.36	8.66
● 908-41600	0.047″ Semi-Rigid	01F2395	21.06	19.45	17.92

Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-24	25-99
EDGE CARD OR VERTICAL MOUNT PLUG					
● 908-21100	Edgecard or Vertical Mount Plug	01F2402	14.26	10.17	9.95
EDGE CARD MOUNT JACKS					
● 908-22100	Edgecard or Vertical Mount Jack	66F9249	12.03	9.46	9.06
STRAIGHT PC BOARD PLUG (THRU-HOLE)					
● 908-21103	Straight PCB Mount Plug - Thru-Hole	01F2403	15.75	14.57	13.48
STRAIGHT PC BOARD JACK (THRU-HOLE)					
● 908-22106	Straight PCB Mount Jack - Thru-Hole	19C5383	13.48	12.14	11.03
PC BOARD MOUNT JACKS					
● 908-22101	Surface Mount Vertical Jack, Single Pack	01F2404	4.44	4.33	4.22
● 908-22101T	Surface Mount Vertical Jack, Tape & Reel	19C5382	3.93	3.70	3.47
● 908-24100	Right-Angle PC Board Jack (Thru-Hole)	01F2405	12.11	11.80	11.50

(17345)

MCX SERIES SUBMINIATURE SNAP-ON 50-OHM CONNECTORS

RoHS Compliant Available

Amphenol® RF

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Straight and right-angle 50-ohm plugs and straight jacks accept a wide assortment of cable. Surface mount connector is also offered. Brass body plated in nickel or gold. Features a PTFE insulator, silicone rubber gasket, seamless copper tubing alloy crimp ferrules, and solder inner terminal. Low-insertion force brass male and beryllium copper female contacts, both plated with 30μ″ gold. Solder-to-body termination. Low-profile design saves valuable PC board space. Quick-connect/disconnect with snap-on mating. Broadband performance with low reflection. Frequency range: 0-6GHz. Voltage rating: 335Vrms. Dielectric withstanding voltage: 1000V. Operating temp. range: -65°C to +165°C.

Mfg. Part No.	Fig.	Body Finish	Termination	RG/U	Stock No.	Price Each 1-9
STRAIGHT PLUG						
● 919-121P-51SX	1	Gold	Solder	RG178, RG196	95B8323	7.15
● 919-120P-51SX	1	Gold	Solder	RG405	95B8322	8.57
● 919-101P-51SX	1	Gold	Solder	RG174, RG188A, RG316	01F812	8.16
RIGHT ANGLE PLUG						
● 919-102P-51AX	2	Gold	Solder	RG405	95B8315	9.89
● 919-104P-51AX	2	Gold	Solder	RG174, RG188A, RG316	01F811	7.37

➤CONTINUED➤

MCX SERIES SUBMINIATURE SNAP-ON 50-OHM CONNECTORS (CONT.)

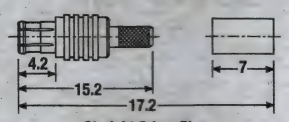
Mfg. Part No.	Fig.	Body Finish	Termination	RG/U	Stock No.	Price Each 1-9
STRAIGHT JACK						
919-107J-51S1X	3	Nickel	Crimp	RG174, RG188A, RG316	95B8319	7.02
919-114J-51SX	3	Gold	Solder	RG405	95B8320	7.36
919-109J-51PX	4	Gold	Solder	...	01F813	4.92
STRAIGHT SURFACE MOUNT JACK						
919-118J-51P	4	Gold	Solder	...	95B8321	6.76

(48887)

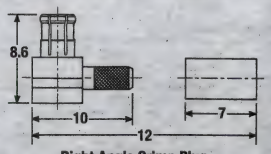
MCX SERIES 75-OHM COAXIAL CONNECTORS

RoHS Compliant Available

Amphenol® RF

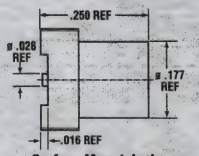


Straight Crimp Plug



Right Angle Crimp Plug

- Broadband Performance with Low Reflection DC to 6 GHz
- Quick Connect/Disconnect Snap-On Mating Reduces Installation Time
- Surface Mount PC Board Allows User to Automatically Place Connectors on Board
- 30% Reduction in Size Over SMB Series Connectors



Surface Mount Jack

Offer reduced size, weight, durability in the telecommunications and networking marketplace, and a performance of up to 6GHz with low reflection. Require less space than the SMB series. By reducing outer diameter by 30% the 75Ω **MCX series** achieves a lower profile and saves valuable board space.

Mfg. Part No.	Description	Cable Size	Stock No.	Price Each 1-9	Price Each 10-24
919-137P-71SX	Straight Crimp Plug	RG 179	36C3029	8.49	7.86
919-136P-71AX	Right Angle Crimp Plug	RG 179	36C3027	9.77	9.04
919-132J-71P	Surface Mount Jack	...	36C3026	10.25	8.65
919-124J-71P	Thru-Hole PC Board Jack	...	36C3025	5.05	4.68

(69838)

50 OHM MMCX PLUGS AND JACKS

RoHS Compliant Available

EMERSON. Network Power

Johnson Connectivity Solutions

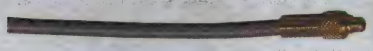


Fig. 1

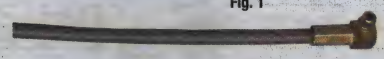


Fig. 2

- Meets MIL-C-39012 requirements
- Impedance: 50Ω
- Frequency range: 0-6GHz
- Working voltage: 170V_{rms} at sea level
- Insulation resistance: 1000MΩ
- Plating: gold
- Engagement/disengagement force: 8lbs max. engagement; 1.4lbs min. disengagement
- Contact retention force: 20lbs min. axial force
- Cable retention: 30lbs
- Durability: 500 cycles min.
- Operating Temperature: -55°C to +155°C

Fig. 3

Fig. 4

50 OHM MMCX CONNECTORS

Mfg. Part No.	Fig.	Description	Cable	Stock No.	Price Each 1-9	Price Each 10-49
135-3403-001	1	Straight Crimp Plug	RG161, RG174, RG188, RG316	01F983	8.98	8.00
135-3404-001	1	Straight Crimp Plug	RG187DS, RG188DS, RG316DS	08B769	7.84	6.99
135-3436-001	1	Straight Crimp Plug	RG178, RG316, RG316DS	01F981	8.89	7.92
135-3403-101	2	Right Angle Crimp Plug	RG161, RG174, RG179, RG187, RG188, RG316	01F980	7.93	7.07
135-3404-101	2	Right Angle Crimp Plug	RG188DS, RG316DS	08B770	8.64	7.70
135-3436-101	2	Right Angle Crimp Plug	RG178, RG316, RG316DS	01F978	11.48	10.23
135-3693-101	2	Right Angle Solder Plug	RG405	83F6818	8.53	7.60
135-3701-201	3	Straight PC Board Jack, 0.115″ Leg	...	01F984	4.65	4.15
135-3711-201	3	Straight PC Board Jack, 0.197″ Leg	...	01C1450	5.94	5.30

CONTINUED

50 OHM MMCX PLUGS AND JACKS (CONT.)

Mfg. Part No.	Fig.	Description	Cable	Stock No.	Price Each 1-9	Price Each 10-49
135-3701-211	3	Straight PC Board Jack, 0.068″ Leg	...	01F985	7.28	6.49
135-3701-301	4	Right Angle PC Board Jack, 0.115″ Leg	...	01F976	9.94	8.85

(10926)

50-OHM AND 75-OHM MCX PLUGS

RoHS Compliant Available

EMERSON. Network Power

Johnson Connectivity Solutions

- 30% smaller than SMB
- Rugged snap-on mounting design
- Captivated contact
- Frequency range: 0-6GHz
- Durability: 500 cycles min.

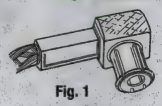


Fig. 1

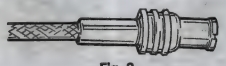


Fig. 2

Fig. 3

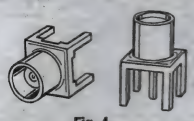


Fig. 4

Mfg. Part No.	Fig.	Body Style	Mounting	Termination	Cable	Stock No.	Price Each 1-9
50-OHM							
133-3403-101	1	Right Angle	Cable	Crimp	RG-316	66F3141	5.29
133-3403-106	1	Right Angle	Cable	Crimp	RG-316	66F3142	4.03
133-3404-106	1	Right Angle	Cable	Solder	RG-188DS, 316DS	08B726	3.85
133-3693-101	1	Right Angle	Cable	Solder	RG405	08B735	9.57
133-3403-001	2	Straight	Cable	Solder	RG-316	66F3139	4.96
133-3801-201	3	Straight	PCB	Solder	...	83F6812	6.06
133-3701-206	4	Straight	PCB	Solder	...	66F3144	4.40
75-OHM							
133-8433-101	1	Right Angle	Cable	Crimp	RG17, RG179	83F6825	6.54
133-8434-101	1	Right Angle	Cable	Solder	RG17, RG179	95B3632	11.77
133-8433-001	2	Straight	Cable	Solder	RG17, RG179	83F6822	13.86

(8823)

50-OHM AND 75-OHM MCX JACKS

RoHS Compliant Available

EMERSON. Network Power

Johnson Connectivity Solutions

Fig. 1

Fig. 2

Fig. 3

- 30% smaller than SMB
- Rugged snap-on mounting design
- Captivated contact
- Frequency range: 0-6GHz
- Durability: 500 cycles min.

Fig. 4

Fig. 5

Fig. 6

Mfg. Part No.	Fig.	Mounting	Contact Plating	Termination	Leg Length (in.)	Stock No.	Price Each 1-9
50-OHM STRAIGHT							
133-3701-201	1	PCB	Gold	Solder	0.155	66F3143	5.24
133-3701-211	1	PCB	Gold	Solder	0.110	66F3145	4.97
133-3701-216	1	PCB	Nickel	Solder	0.110	66F3146	4.54
133-3303-401	3	Cable	Gold	Crimp	...	83F6815	11.01
133-3701-231	6	PCB	Gold	Solder	0.155	66F3149	7.34
133-3701-801	4	PCB End Launch	Gold	Solder	...	66F8117	5.27
50-OHM RIGHT ANGLE							
133-3701-301	2	PCB	Gold	Solder	0.155	66F3151	8.45
133-3701-306	2	PCB	Nickel	Solder	0.155	66F3152	6.41
133-3701-311	2	PCB	Gold	Solder	0.110	66F3153	9.09
133-3701-316	2	PCB	Nickel	Solder	0.110	66F3154	14.83
75-OHM STRAIGHT							
133-8701-201	1	PCB	Gold	Solder	0.155	83F6826	7.13
133-8711-201	5	PCB	Gold	SMT	...	01C1435	6.64
75-OHM RIGHT ANGLE							
133-8701-311	2	PCB	Gold	Solder	0.110	95B3634	10.66

(169728)

RF COAX – MICROMINIATURE • RF COAX – MEDIUM

50-OHM MCX, MMCX AND SMMCX RF CONNECTORS

RoHS Compliant Available

molex

MCX subminiature snap-on connector is 30% smaller than an SMB. MMCX is a microminiature snap-on connector 45% smaller than an SMB. SSMCX connectors are approximately 35% smaller and offer higher performance over MMCX connectors. Operating frequency to 6 GHz.

MCX

Mfg. Part No.	Body Style	Mounting	Termination	Cable Type	Stock No.	Price Each 1-24
● 73366-0300	Straight Plug	Cable	Crimp	RG316	56R6536	3.24
● 73366-0061	Straight Jack	PCB	Through Hole Vertical	...	56R6535	2.21
● 73415-1060	Straight Jack	PCB	Surface Mount Straddle	...	56R6578	4.31
● 73415-1691	Straight Jack	PCB	Surface Mount Vertical	...	56R6587	1.89
MMCX						
● 73415-1251	Straight Plug	Cable	Crimp	RG174, RG187, RG316	82H6060	3.28
● 73415-0961	Straight Jack	PCB	Surface Mount Straddle	...	53R2348	2.36
SMMCX						
● 73415-4680	Straight Plug	Cable	Crimp	1.37mm	12M6446	2.54
● 73413-0060	Right Angle Plug	Cable	Solder	1.32mm	32M0802	6.30
● 73415-4760	Straight Jack	Cable	Crimp	1.37mm	32M0825	3.27
● 73415-4670	Straight Jack	PCB	Surface Mount Straddle	...	32M0824	3.92

(90509)

50-OHM MMCX SERIES CONNECTORS

RoHS Compliant Available

multicomp

Specifications
- Impedance: 50 Ω
- Frequency Range: 6 GHz
- VSWR - Straight:1.2 : 1
- VSWR - RA: 1.3 : 1
- Body: Gold Plated Beryllium Copper
- Center Contact: Gold Plated Beryllium Copper
- Dielectric: Teflon

MMCX series connectors feature low RF leakage and a snap-on coupling.

CRIMP CONNECTORS - FOR FLEXIBLE CABLE

Mfg. Part No.	Description	RG/U	Stock No.	Price Each 1-49
● 37-02L-4-TGG	Right Angle Plug	174	25M2715	5.97
● 37-04M-TGG	Straight Bulkhead Jack	178	25M2721	4.35
PCB CONNECTORS				
● 37-07-1-TGG	Right Angle PCB Jack	...	25M2724	5.33

(116511)

50-OHM ECO SERIES MMCX COAXIAL CONNECTORS

RoHS Compliant Available

RADIALL The next conneXion

- Frequency range: DC to 3GHz
- Snap-on mating
- Compliant to CECC and IEC standards
- Gold-plated brass connector body
- Insulator PTFE / Polypropylene
- Gold-plated beryllium copper female center contact
- Brass outer contact

JACKS

Mfg. Part No.	Body Style	Connector Mounting	Coaxial Termination	Style	Stock No.	Price Each 1-9
● R110A422830	Straight	PCB	Solder	Card Edge	11R6455	2.96
● R110A426000	Straight	PCB	Solder	Through Hole	11R6456	3.68

PLUGS

Mfg. Part No.	Body Style	Connector Mounting	Coaxial Termination	RG/U	Stock No.	Price Each 1-9
● R110A170100	Right Angle	Cable	Crimp	RG178	11R6453	3.25
● R110A172100	Right Angle	Cable	Crimp	RG174, RG316	11R6454	3.25

(148765)

50-OHM N CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

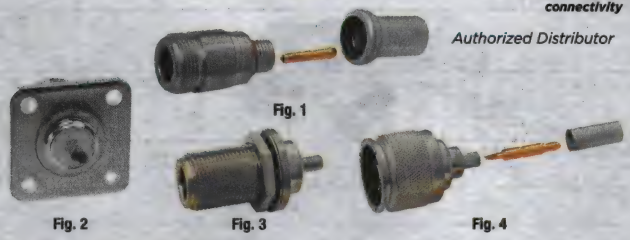


Fig. 1 Fig. 2 Fig. 3 Fig. 4

- Gold-plated beryllium copper contacts

STRAIGHT JACK

Mfg. Part No.	Fig.	RG/U	Coaxial Termination	Connector Mounting	Stock No.	Price Each 1-9
● 1-5225664-2	1	RG58, Essex 621-715	Crimp	Cable	96M0581	18.96
● 1057284-1	2	...	Solder	Panel	96M0601	19.91
STRAIGHT BULKHEAD JACK						
● 1057151-1	...	RG401	Solder	Panel	10H7233	181.84
● 228658-1	3	RG402	Crimp	Panel	91B8049	179.28
RIGHT ANGLE JACK						
● 5225669-2	...	RG213	Crimp	Cable	58M2957	99.13
STRAIGHT PLUG						
● 1-5225661-3	4	55, 223	Crimp	Cable	96M0580	26.52
● 1057243-1	4	RG58, RG141, RG303	Crimp	Cable	96M0599	44.57
● 5225361-4	4	RG142	Crimp	Cable	96M0666	30.04
● 5225699-1	4	RG213	Crimp	Cable	04M4930	42.58
● 1-5225092-1	4	RG393	Crimp	Cable	96M0579	38.52
● 1057094-1	...	RG405	Solder	Cable	01E9234	53.82
● 1057279-1	...	...	Solder	Panel	96M0600	20.55

(112560)

AMP 50-OHM N CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

1-5225661-2 1-5227086-0 5225664-2

Fully intermateable with MIL-C-39012 connectors. *Order hand tools separately on page 1061. See Product Index for complete selection of coaxial cable.*

DUAL CRIMP PLUGS

Mfg. Part No.	RG/U	Contact/ Body Plating	Length (in.)	Stock No.	Price Each 1-24	Price Each 25-49
● 1-5225661-2*	58, 58A, 58B, 58C	Gold/Nickel	1.687	16M2667	23.72	21.40
● 5225361-1*†		Gold/Silver	1.687	16M3221	37.70	35.64
● 5225392-2*†	142B/U, 142/U, 142A/U	Gold/Silver	1.687	16M3223	29.05	25.72
● 1-5227086-0+	8, 8A, 213	Gold/Nickel	1.687	16M2670	21.77	19.66
● 5225661-1*†	9, 9A, 9B, 214	Gold/Nickel	1.859	16M3234	27.21	25.50
● 1-5225554-1*†	RG393	Gold/Silver	2.500	16M3858	125.05	113.58
● 1057088-1*†	402 Semi-Rigid/3.58	Gold/Nickel	0.968	94C2715	26.45	23.79
DUAL CRIMP JACKS						
● 5225664-2*†	8, 8A, 213	Gold/Nickel	1.937	16M3236	39.11	35.30
PANEL MOUNT JACKS						
● 3004 7941 00+	402 Semi-Rigid/3.58	Gold/Gold	1.335	73C2880	123.67	106.07

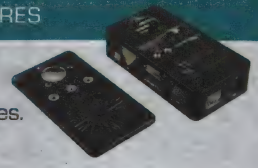
* MIL Style; + Commercial-Grade Style; † Weatherproof

(8243)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures



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50-OHM N CONNECTORS

RoHS Compliant Available

Amphenol Connex

Fig. 1

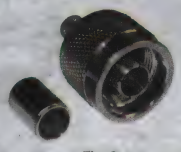


Fig. 2

Fig. 3

Fig. 4

Fig. 5

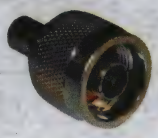


Fig. 6

Fig. 7

- DC to 11GHz frequency range
- Gold-plated phosphor bronze contacts (jacks)
- Gold-plated brass contacts (plugs), except **mfg. part no. 172177** (nickel-plated brass contact)
- Temp. range: -65°C to +165°C

STRAIGHT JACKS

Mfg. Part No.	Fig.	Coaxial Cable Type RG/U	Coaxial Termination	Connector Mounting	Stock No.	Price Each 1-9
172173	...	RG174, RG188A, RG316	Crimp	Panel	99H5770	10.23
172137	...	RG402	Solder	Cable	99H5745	10.60
172117	...	...	Solder	Panel	66H7626	5.53
STRAIGHT BULKHEAD JACK						
172132	1	RG55, RG142, RG223, RG400	Crimp	Cable	99H5742	8.44
STRAIGHT PLUGS						
172202	2	RG6	Crimp	Cable	86H9553	8.48
172102	3	RG8, RG8A, RG213, RG393	Crimp	Cable	97H5808	7.67
172142	3	RG55, RG142, RG223, RG400	Crimp	Cable	99H5748	6.28
172166	3	RG214, RG225	Crimp	Cable	99H5763	10.38
RIGHT-ANGLE PLUG						
172177	4	RG58, RG58A, RG58C, RG141, RG303	Solder	Cable	92C6730	13.95

STRAIGHT ADAPTER

Mfg. Part No.	Fig.	Convert From	Convert To	Stock No.	Price Each 1-9
172123	5	N Jack	N Jack	92H4686	8.19
RIGHT-ANGLE ADAPTER					
172126	...	N Plug	N Jack	99H5739	12.73

TERMINATOR

Mfg. Part No.	Fig.	Gender	Impedance (Ω)	Stock No.	Price Each 1-9	Price Each 10-24
202109-10	6	Plug, 1W, 1%	50	99H6097	7.39	7.07

SHORTING CAPS

Mfg. Part No.	Fig.	Gender	Features	Stock No.	Price Each 1-9	Price Each 10-24
202102	7	Plug	With Chain	99H6089	2.08	1.96
202102-10	...	Plug	No Chain	89K6990	2.61	2.51

(119503)

WEATHERPROOF N COAXIAL PLUGS

RoHS Compliant Available

Amphenol® RF

Threaded coupling devices designed for use up to microwave frequencies. 0-11GHz, VSWR consistently low. Impedance: 50 ohm. Dielectric withstanding: 2500Vrms.

Fig. 1

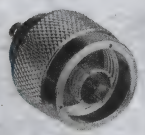


Fig. 2

STRAIGHT PLUGS

Mfg. Part No.	Fig.	Termination	RG/U	MIL No.	Stock No.	Price Each 1-9
82-61 (UG-21B/U)	1	Solder	8, 9, 213, 214	UG-21B/U	59K0528	27.79
82-96 (UG-21C/U)	1	Solder	8, 9, 213, 214, 225	UG-21C/U	59K0532	24.81
82-202 (UG-21D/U)	1	Solder	8, 9, 213, 225	UG-21D/U	59K0523	17.22
82-312 (UG-1185/U	1	Solder	8, 9, 213, 225	UG-1185/U	59K0525	14.70
34025 (UG-536B/U)	1	Solder	89907, 37806A, 141, 58	UG-536B/U	39F1324	11.69
82-202-1006	1	Solder	Belden 9913, LMR400	...	94F661	8.75
82-6034	1	Crimp	174, 188A	...	01F685	10.76
82-340	2	Crimp	8, 9, 213, 225	01B0007	55M2614	12.57

➤CONTINUED➤

WEATHERPROOF N COAXIAL PLUGS (CONT.)

Mfg. Part No.	Fig.	Termination	RG/U	MIL No.	Stock No.	Price Each 1-9
82-340-1052	2	Crimp	Belden 9913, LMR400	...	73K1484	9.83
82-5370	2	Crimp	142, 400	...	51F3794	10.48
82-5375	2	Crimp	89907, B7806A, 141, 58	...	51F3796	7.67
82-332 (01-0008)	2	Crimp	8, 9, 213, 225	01B0008	39F195	20.10
82-4425	2	Crimp	8, 9, 213, 225	01-0501+	82K8900	15.00
82-4426	2	Crimp	8, 9, 213, 225	01-0502+	51F3805	18.23
82-4427	2	Crimp	142, 400	01-0503+	77B6873	32.24
82-6152	2	Crimp	Belden 9258, 8X	...	19C5174	8.30
82-340-1054	2	Crimp	LMR 400	...	73K1485	22.31
82-6313	...	Crimp	59, 162, 140, 210, Belden 8241, 8263, 8279, 9209	...	42J6001	11.80
82-4352	...	Solder	8, 9, 213, 225	M39012/01-0005	19C5139	22.13
49000	...	Solder	8, 58, 141, 225	...	50F1600	26.05
82-6124	...	Solder	401, 0.25" Semi-Rigid	...	19C5170	5.98
RIGHT-ANGLE PLUGS						
82-4440	...	Crimp	8, 9, 213, 225	05-0501+	90F8480	49.17
82-5374	...	Crimp	142, 400	...	50F2454	55.43

+Section of MIL-SPEC 39012

TERMINATORS AND SHORTING CAPS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
82-5722-RFX	Male Cap, Terminated; 50-ohm, 5%, 1W	93F1462	6.36
82-106	Male Cap & Chain	19C5129	20.49
6950	Female Cap & Chain	83C3570	44.21

(5199)

N WEATHERPROOF COAXIAL JACKS

RoHS Compliant Available

Amphenol® RF

Threaded coupling devices designed for use up to microwave frequencies. 0-11GHz, VSWR consistently low. Impedance: 50 ohm. Dielectric withstanding: 2500Vrms.

82-209-1006, 82-63

STRAIGHT JACKS

Mfg. Part No.	MIL No.	Termination	RG/U	Stock No.	Price Each 1-9
82-209-1006	...	Solder	Belden 7810A, 8214, 9913, LMR-400	73K1483	18.92
82-63 (UG-23B/U)	UG-23B/U	Solder	RG8, RG9, RG87A, RG144, RG165, RG213, RG214, RG216, RG225	59K0529	16.10
STRAIGHT BULKHEAD JACKS					
82-5373	...	Crimp	RG55, RG142, RG223, RG400	50F2455	13.00
82-67	...	Solder	RG8, RG9, RG87A, RG144, RG165, RG213, RG214, RG216, RG225	15M4878	130.36
82-811 (UG-680/U)	UG-680/U	Solder	...	39F1128	93.16
4-HOLE FLANGE PANEL JACKS					
82-62	UG-23B/U	Solder	RG8, RG9, RG87A, RG214, RG313, RG225	39F020	21.06
82-5372	...	Crimp	RG59, RG62, RG140, RG210	98F3519	15.59
82-24 (UG-58/U)	UG-58/U	Solder	...	59K0524	17.15
82-97 (UG-58A/U)	UG-58A/U	Solder	...	39F028	11.34
36250	UG-1095A/U	Solder	RG55, RG58, RG141	73K1456	118.65

(164486)

RFX™ TYPE N COAXIAL CONNECTORS

RoHS Compliant Available

Amphenol® RF

Fig. 1

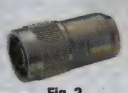


Fig. 2

Fig. 3

Fig. 4

5/8-24 threaded coupling units with 50 ohm impedance. Operate DC-11GHz with voltage rating of 1500V peak. **RFX suffix** designates commercial grade.

Fig. 5

➤CONTINUED➤

RF COAX – MEDIUM

RFX™ TYPE N COAXIAL CONNECTORS (CONT.)

CABLE PLUGS

Mfg. Part No.	Fig.	RG/U	Termination	Stock No.	Price Each 1-9	Price Each 10-24
● 82-4426-11RFX	1	Belden 9880, 89880, Times AA4478, AA4479	Crimp	93F1455	5.90	5.28
● 82-5375-RFX	1	58, 58C, 141, 89907, B7806A	Crimp	93F7583	4.41	3.74
● 82-5380-RFX	1	RG59, RG62, RG140, RG210	Crimp	19C5148	5.55	5.16
● 82-5955-RFX	...	RG402	Solder	19C5153	5.98	5.51
● 82-202-RFX	2	RG8, RG9, RG213, RG225	Solder	93F1454	5.91	5.40
● 34025-RFX	2	RG58, RG58A, RG58C, RG141, RG303	Solder	93F1390	6.47	5.73

CABLE JACKS

● 82-63-RFX	...	RG8, RG213, RG214	Solder	83C5681	7.46	7.20
● 082-5378-RFX	...	RG58, RG58A, RG58C, RG141, RG303	Crimp	19C5147	5.38	5.10
● 82-6093-RFX	...	RG174, RG188A, RG316	Crimp	28H8700	8.50	8.12
● 82-6097-RFX	...	RG402	Solder	19C5164	7.72	7.16
● 82-6099-RFX	3	RG402	Solder	19C5166	8.73	7.93

RFX™ TYPE N PANEL RECEPTACLE (FRONT OR REAR MOUNT)

Mfg. Part No.	Fig.	Description	Stock No.	Price Each 1-9	10-24	25-99	100-499
● 82-97-RFX	3	4-Hole Panel	93F1450	4.99	4.07	3.75	3.49
● 82-6101-RFX	...	4-Hole Flange Panel	19C5168	5.32	4.83	4.41	4.07

RFX™ TYPE N ADAPTERS

Mfg. Part No.	Fig.	Description	Stock No.	Price Each 1-9	10-24	25-99	100-499
● 82-100-RFX	4	Straight, Plug-Plug	93F1451	7.40	7.20	7.05	6.70
● 82-101-RFX	5	Straight, Jack-Jack	93F1452	4.87	4.42	4.05	3.74
● 82-66-RFX	...	Bulkhead, Jack-Jack	31C7129	5.34	4.83	4.45	4.13

RFX™ TYPE N ANGLE ADAPTERS

Mfg. Part No.	Fig.	Description	Stock No.	Price Each 1-9	10-24	25-99	100-499
● 82-64-RFX	...	Right Angle, Jack-Plug	13C3104	12.16	11.18	10.44	9.68

(8274)

N CONNECTORS FOR LMR 100-600 CABLE

RoHS Compliant Available

Amphenol Connex

172135 172219 172148 172263 172129

Connector bodies are nickel-plated, contacts are 30µ" gold-plated and insulators are Teflon®.

Mfg. Part No.	Description	Cable	Stock No.	Price Each 1-9	10-24
● 172135	N Plug	LMR 240 Rev Pol.	92C6726	6.63	6.35
● 172219	N Right-Angle Plug	LMR 240, 8X	92C6744	10.97	9.98
● 172148	N Straight Jack	LMR 240, 8X	92C6727	6.01	5.76
● 172149	N Bulkhead Jack	LMR 240, 8X	92C6728	8.35	7.98
● 172304	N Plug	LMR 300	92C6753	11.64	10.58
● 172102H243	N Plug	LMR 400, B9913	92C6718	7.67	7.36
● 172102H243RP	N Plug	LMR 400 Rev Pol.	92C6719	7.67	7.36
● 172176	N Right-Angle Plug	LMR 400, B9913	92C6729	13.08	11.89
● 172203	N Straight Jack	LMR 400, B9913	92C6732	7.67	7.36
● 172220	N Bulkhead Jack	LMR 400, B9913	92C6745	9.31	8.90
● 172206	N Plug	LMR 600	92C6735	15.63	14.21
● 172263	N Right-Angle Plug	LMR 600	92C6748	23.54	22.42
● 172128	N Plug	LMR 100, 316/U	92C6722	11.18	10.17
● 172180	N Right-Angle Plug	LMR 100, 316/U	92C6731	11.64	10.58
● 172129	N Bulkhead Jack	LMR 100, 316/U	92C6724	8.81	8.42
● 172100	N Plug	LMR 195, 58/U	92C6716	5.06	4.85
● 172100RP	N Plug	LMR 195, 58/U Rev Pol.	92C6717	7.20	6.90
● 172177	N Right-Angle Plug	LMR 195, 58/U	92C6730	13.95	12.69
● 172103	N Straight Jack	LMR 195, 58/U	92C6720	6.22	5.96
● 172214	N Plug	LMR 200	92C6741	14.29	13.00
● 172177	N Right-Angle Plug	LMR 200	92C6730	13.95	12.69

(73113)

V-BITE® PC EDGE MOUNT N COAXIAL JACK

RoHS Compliant Available

BOMAR by WINCHESTER ELECTRONICS

- Low profile, 0.270" high FMS
- Anti-rotational
- VSWR 1.15:1
- Patented V-Bite® snaps into PC board
- Surface mount center contact
- TFE insulator

N TYPE EDGE MOUNT JACK

Mfg. Part No.	Impedance (Ω)	Contact Material	Contact Plating	Features	Stock No.	Price Each 1-9	10-24
● 161V504EFT	50	Brass	Gold	Flanged	27M1255	21.98	20.09

(142224)

50-OHM TYPE N PLUGS

RoHS Compliant Available

EMERSON Network Power

Johnson Connectivity Solutions

- Meet MIL-PRF-39012 performance requirements
- Designs are based on 50Ω system impedance per MIL-STD-348
- Operate at frequencies up to 11GHz min.

Fig. 1

Fig. 2

Fig. 3

Body material: brass. Contact material: brass. Contact finish: gold.

STRAIGHT SOLDER PLUGS — SOLDER CONTACT

Mfg. Part No.	Fig.	Body Plating	RG Cable Type	Stock No.	Price Each 1-9	10-49
● 138-4693-001	1	Gold	RG405	06M3386	43.01	38.32
STRAIGHT SOLDER PLUGS — CAPTIVATED SOLDERLESS CONTACT						
● 138-4694-011	1	Gold	RG402	06M3389	30.38	27.07
STRAIGHT CRIMP PLUGS — SOLDER OR CRIMP CONTACT						
● 138-4403-007	2	Copper/Tin/Zinc	RG161, RG174, RG188, RG316	06M3370	35.64	31.76
● 138-4408-007	2	Copper/Tin/Zinc	RG55, RG142, RG223, RG400	06M3376	53.35	47.53
RIGHT ANGLE CRIMP PLUGS — CAPTIVATED CONTACT						
● 138-4408-107	3	Copper/Tin/Zinc	RG55, RG142, RG223, RG400	06M3377	52.58	46.85

(89362)

50-OHM TYPE N JACKS

RoHS Compliant Available

EMERSON Network Power

Johnson Connectivity Solutions

- Meet MIL-PRF-39012 performance requirements
- Designs are based on 50Ω system impedance per MIL-STD-348
- Operate at frequencies up to 11GHz min.

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Body material: brass. Contact material: beryllium copper. Contact finish: gold.

STRAIGHT SOLDER BULKHEAD JACKS — SOLDER CONTACT

Mfg. Part No.	Fig.	Body Plating	RG Cable Type	Stock No.	Price Each 1-9	10-49
● 138-4596-401	1	Gold	RG401	06M3385	37.01	32.97
● 138-4594-401	1	Gold	RG402	06M3384	36.58	32.59
STRAIGHT CRIMP BULKHEAD JACKS — SOLDER OR CRIMP CONTACT						
● 138-4303-407	2	Copper/Tin/Zinc	RG161, RG174, RG188, RG316	06M3363	43.29	38.57
● 138-4307-407	2	Copper/Tin/Zinc	RG58, RG141, RG303	06M3365	48.68	43.37
● 138-4308-407	2	Copper/Tin/Zinc	RG55, RG142, RG223, RG400	06M3366	45.48	40.52
● 138-4349-407	2	Copper/Tin/Zinc	RG8, LMR-400	06M3369	40.92	36.46

REAR MOUNT BULKHEAD JACKS

Mfg. Part No.	Fig.	Body Plating	Panel Thickness (in.)	Stock No.	Price Each 1-9	10-49	50-99
● 138-4701-407	3	Copper/Tin/Zinc	0.125	06M3392	27.54	24.53	20.03

4-HOLE FLANGE MOUNT JACK — FLUSH DIELECTRIC

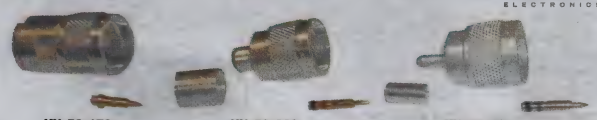
Mfg. Part No.	Fig.	Body Plating	Tail Length (in.)	Stock No.	Price Each 1-9	10-49	50-99
● 138-4701-607	4	Copper/Tin/Zinc	0.250	06M3393	18.84	16.78	13.70

(169725)

N STYLE STRAIGHT COAXIAL RF PLUGS

RoHS Compliant Available

KINGS by WINCHESTER ELECTRONICS



KN-59-176 KN-59-239 KN-59-242

Mfg. Part No.	Cable Type	Gender	Mil. No. 39012/	Stock No.	Price Each 1-499
KN-59-242	RG142, RG223, RG400	Plug	01-0503	90F1974	12.67

ADAPTERS

Mfg. Part No.	Description	Stock No.	Price Each 1-499
UG-201A/U	N Plug to BNC Jack	44F8447	51.29

ACCESSORIES

Mfg. Part No.	Description	Mil. No. 39012/	Stock No.	Price Each 1-499
KN-89-30	Cap and Chain	25-0011	90F1979	8.59

(8866)

MULTICOMP BRAND N CONNECTORS

RoHS Compliant Available

multicomp

Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5

Fig. 6 Fig. 7 Fig. 8

50-ohm N connectors feature Teflon® insulation. Mfg. part nos. with (*) have brass contacts and offer a voltage rating of 500V RMS and a frequency rating of 0-11GHz. Mfg. part nos. with (+) have gold contacts and offer a voltage rating of 1000V RMS and a frequency rating of 0-3GHz.

CRIMP PLUGS

Mfg. Part No.	Fig.	RG/U	Jacket O.D.	Stock No.	Price Each 1-49	Price Each 50-99
SPC4266+	1	8	0.400-0.410″	84N1255	16.89	13.88
SPC4265+	1	58	0.185-0.205″	84N1254	15.19	12.49
11-11-4 UTSS*	1	RG58, Essex 621-715	...	03M5859	7.41	6.69
MC23542	...	142	...	96M8826	6.18	5.08
MC23568	1	213	...	96M8852	7.06	5.80
CRIMP JACKS						
1550+†	...	58	0.185-0.205″	92N3396	20.65	16.97
SPC4346+	3	58	0.185-0.205″	84N1270	14.45	11.83
CLAMP PLUGS						
1548+	4	58	0.185-0.205″	92N3394	20.42	16.78
SPC4277+	5	Belden 9913	0.340-0.350″	84N1266	24.24	19.92
11-01B-17 TSS*	6	UR67	...	25M0281	10.96	9.88
CLAMP JACKS						
SPC4344+	7	Belden 9913	...	84N1268	27.24	22.39
SPC4345+	8	58	0.185-0.205″	84N1269	21.08	17.32
11-02-B-3 TSS*	7	UR67	...	25M0282	9.64	8.72
SOLDER JACKS						
MC23558	2	...	...	96M8842	5.65	4.64

†Female 4-Hole Flange; ‡Solder
(18028)

pro-POWER AT NEWARK ELEMENT14

Take control with quality, affordable Wire-Management Solutions.

newark.com/pro-power

(212564)

50Ω N COAXIAL JACKS AND PLUGS

RoHS Compliant Available

Pomona®

2455 4787 7057 73050 73062 73049

STRAIGHT JACKS

Mfg. Part No.	Mounting	Termination	RG/U	Stock No.	Price Each
2455	Panel	Solder	...	77B2254	8.90
STRAIGHT PLUGS					
4787	Cable	Solder	RG58, RG141, RG142, RG223	77B2729	14.40
7057	Cable	Crimp	RG55, RG142, RG223, RG400	23J7888	10.29
73050	Cable	Crimp	RG58, RG141	08R6355	8.40
73051	Cable	Solder	RG8, RG213	08R6356	29.85
73062	Cable	Solder	RG8, RG9, RG144, RG165, RG213, RG214, RG216, RG225	08R6365	14.70
RIGHT ANGLE PLUGS					
73049	Cable	Crimp	RG55, RG142, RG223	08R6354	9.10

(90520)

HN MEDIUM-SIZE WEATHERPROOF COAXIAL CONNECTORS

RoHS Compliant Available

Amphenol® RF

Fig. 1 Fig. 2 Fig. 3 Fig. 4

Rated 1500V for high-voltage applications. Captivated contacts. ¾-20 threaded coupling. 50Ω impedance.

Fig. 5

Mfg. Part No.	Fig.	MIL No.	Description	RG/U	Stock No.	Price Each 1-9
82-804	1	UG-59B/U	Straight Plug	8,9,87,213,214,225	39F026	57.09
82-816-1000	1	...	Straight Plug	108A	91B2859	172.39
82-92	2	UG-496/U	Panel Receptacle	...	82K8905	43.26
82-805	2	UG-560	Panel Receptacle	...	59K0531	65.55
11050	3	...	Bulkhead Adapter J-J	...	51F3811	133.23
82-856	4	...	Right-Angle Plug	8,9,87A,213,214,225	73K1490	104.03
16750	1	...	Straight Plug	58,141,142	59K0312	234.00

(8202)

50-OHM F CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Fig. 1 Fig. 2 Fig. 3 Fig. 4

CONTINUED

50-OHM F CONNECTORS (CONT.)

F STRAIGHT JACK

Mfg. Part No.	Fig.	RG/U	Coaxial Termination	Connector Mounting	Stock No.	Price Each 1-9
● 5887046-1	1	...	Solder	PCB	77M9223	6.94
F STRAIGHT BULKHEAD JACK						
● 5415712-1	2	RG179	Crimp	Panel	96M0681	61.78
● 6274020-1	...	...	Solder	PCB	96M0687	2.83

F STRAIGHT PLUG

Mfg. Part No.	Fig.	RG/U	Coaxial Termination	Connector Mounting	Stock No.	Price Each 1-24
● 414766-8	3	RG59	Crimp	Cable	96B5212	5.18
F RIGHT ANGLE PLUG						
● 887098-1	...	RG6	Crimp	Cable	85C0948	12.83

RIGHT-ANGLE ADAPTER

Mfg. Part No.	Fig.	Convert From	Convert To	Stock No.	Price Each 1-14
● 5887089-1	4	F Jack	F Plug	40M7815	5.79

(114907)

50- AND 75-OHM ZDC SERIES F CONNECTORS AND ADAPTERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

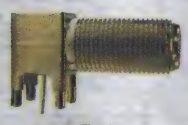


Fig. 1

Fig. 2

Fig. 3

DC - 4GHz frequency range depending on connector
Durability: 50 cycles minimum

RIGHT ANGLE JACK (TIN/COPPER-PLATED PHOSPHOR BRONZE CONTACTS)

Mfg. Part No.	Fig.	Impedance (Ohms)	RG/U	Connector Mounting	Coaxial Termination	Stock No.	Price Each 1-49
● 5-1634540-1	1	75	...	PCB	Solder	78M7241	1.98
STRAIGHT BULKHEAD JACK (TIN-PLATED PHOSPHOR BRONZE CONTACTS)							
● 5-1814823-1	2	75	...	Panel	Solder	78M7266	0.92
STRAIGHT JACK (TIN-PLATED PHOSPHOR BRONZE CONTACTS)							
● 5-1814825-1	3	75	...	PCB	Solder	78M7267	1.98
STRAIGHT PLUG							
● 5-1814821-1	...	75	RG59, RG62, RG140, RG210	Cable	Crimp	78M7259	0.90
● 5-1814821-3	...	75	RG6	Cable	Crimp	78M7260	1.09
● 5-1814822-1	...	75	RG59, RG62, RG140, RG210	Cable	Twist On	78M7262	1.25
● 5-1814822-3	...	75	RG6	Cable	Twist On	78M7263	1.34

RIGHT ANGLE ADAPTER

Mfg. Part No.	Impedance (Ohms)	Convert From	Convert To	Stock No.	Price Each 1-49	50-99
● 5-1634537-1	50	F Jack	F Plug	78M7240	3.22	2.85

(108525)

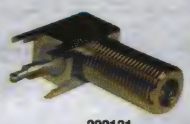
75-OHM F TYPE CONNECTORS

RoHS Compliant Available

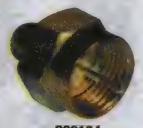
Amphenol Connex

- Gold-plated brass contact
- Frequency: 2.0GHz max.

222113



222131



222154

Mfg. part no. 222113 straight crimp plug, for RG-179 and RG-187 cable, features a nickel-plated brass body. **Mfg. part no. 222131** right-angle PCB jack featureS a bright tin-plated brass body. **Mfg. part no. 222154** terminator plug features a nickel-plated die-cast zinc body.

STRAIGHT PLUG

Mfg. Part No.	Impedance (Ω)	Coaxial Cable Type	Connector Mounting	Coaxial Termination	Stock No.	Price Each 1-9
● 222113	75	RG179, RG187	Cable	Crimp	96H1231	1.31
RIGHT-ANGLE JACK						
● 222131	75	...	PCB	Through Hole Right Angle	99H6281	2.47

STRAIGHT TERMINATOR PLUG

Mfg. Part No.	Impedance (Ω)	Frequency	Stock No.	Price Each 1-9
● 222154	75, 1/8W, 1%	0-3	99H6288	1.72

(119513)

V-BITE® PC EDGE MOUNT F COAXIAL CONNECTORS

RoHS Compliant Available

BOMAR by WINCHESTER ELECTRONICS

- Low profile, 0.270" high FMS
- Anti-rotational
- VSWR 1.15:1
- Patented V-Bite® snaps into PC board
- Surface mount center contact

F TYPE EDGE MOUNT JACKS WITH TEFLON® INSULATOR FOR REFLOW

Mfg. Part No.	Contact Material	Contact Finish	RG Cable Type	Stock No.	Price Each 1-9	10-24
● 861V509ER	Brass	Gold	RG59	80K0628	5.95	5.44
● 861V509ER6	Brass	Gold	RG6, RG59	80K0630	6.52	5.95

(142218)

75-OHM F PC BOARD CONNECTORS

RoHS Compliant Available

BOMAR by WINCHESTER ELECTRONICS

Fig. 1

Fig. 2

Fig. 3

864/866 series are decoupled and shielded. Jacks have 4700pF capacitor integrated into the circuit. Fit into standard PC board footprints. Grounding tab for panel cutout.

Mfg. Part No.	Fig.	Body Style	Stock No.	Price Each 1-9	10-24	25-99
● 864B509	1	Right Angle Jack, Long	80K0634	3.10	2.83	2.62
● 864B509S	2	Right Angle Jack, Short	80K0636	2.39	2.18	2.02
● 866B509	3	Right Angle Plug	80K0640	4.37	3.98	3.70

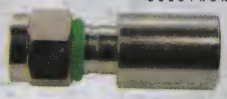
(88065)

BROADCAST GRADE F COMPRESSION CONNECTORS

RoHS Compliant Available

BOMAR by WINCHESTER ELECTRONICS

KCC series are manufactured of precision-machined brass with heavy nickel plating. Corrosion-resistant parts feature nickel-plated, semi-captive contacts. Shielding provides isolation from EMI and RFI interference. Each connector is shipped with six color-coded O-rings.



Mfg. Part No.	Body Style	RG/U	Stock No.	Price Each 1-9	10-24	25-99
● KCC1855F	Straight Plug	59 Mini	19P9292	1.35	1.23	1.15

CRIMP TOOLS

Mfg. Part No.	Description	Stock No.	Price Each 1-4	5+
BDKC6000	Crimp Tool for Bomar KCC Series Connectors	19P8368	99.75	88.08

(142258)

F CONNECTORS AND ADAPTERS

RoHS Compliant Available

Pomona®

6706

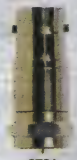
6712

6713

6800

Pomona F connectors and adapters are made from precision machined high quality brass (not die cast), with tarnish resistant nickel plating.

6802



6781

F CONNECTORS — 75Ω

Mfg. Part No.	Description	Stock No.	Price Each Each
● 6706	"F" Bulkhead/Panel Feed-Thru Adapter	61H3188	1.73
F ADAPTERS			
● 6712	"F" Female-to-Male Right Angle Adapter	61H3194	3.70
● 6713	"F" Female-to-Male Push-On Adapter	53H6777	2.80
● 6800	"F" Male-to-Female Right Angle Adapter	02J8356	3.89
● 6802	"F" Female-to-Female Bulkhead Adapter	02J8358	1.65
F BETWEEN SERIES ADAPTERS			
● 6779	BNC Male-to-F Female Adapter	02J8352	4.10
● 6780	BNC Female-to-"F" Female Adapter, 75Ω	02J8353	4.10

CONTINUED

F CONNECTORS AND ADAPTERS (CONT.)

F BETWEEN SERIES ADAPTERS

Mfg. Part No.	Description	Stock No.	Price Each Each
6781	BNC Female-to-"F" Male Adapter, 75Ω	02J8354	4.10
6782	BNC Male-to-"F" Male Adapter, 75Ω	02J8355	4.10

(75868)

MULTICOMP BRAND F CONNECTORS

RoHS Compliant Available

multicomp

Fig. 1

Fig. 2

Fig. 3

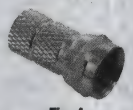


Fig. 4

Fig. 5

Fig. 6

Fig. 7

Crimp-on and twist-on F connectors significantly reduce assembly time for cable connection. Voltage rating: 500V. Frequency rating: 0-4GHz.

CRIMP-ON PLUGS WITH FERRULE

Mfg. Part No.	Fig.	RG/U	Crimp Tool	Stock No.	Price Each 1-249	250-499	500-999
SPC32721*	1	RG59	24-7710	50P9923	1.36	1.02	0.91
SPC15360	1	RG59	...	79K4949	2.39	1.79	1.60
SPC15433	1	RG6	...	79K5013	2.08	1.56	1.39
SPC15360*	1	RG59	CTR-8572-01	79K4949	2.39	1.79	1.60
SPC15212	2	RG59	CT-100-F	79K4814	3.65	2.74	2.43
SPC15129	3	...	...	79K4745	3.04	2.28	2.03
WEATHERPROOF CRIMP-ON PLUGS Mfg. part no. 2765 is gel-filled with an O-ring seal.							
2765-SPC	1	RG6	CTR-8572-01	92N5307	2.27	1.95	1.75
TWIST-ON PLUGS							
SPC15286	4	RG59	...	79K4883	2.16	1.62	1.44
CHASSIS-MOUNT FITTINGS							
CPF-61-AD	5	...	...	84N542	2.93	2.51	2.24
75-OHM PC BOARD MOUNT JACKS Right-angle jacks mfg. part no. SPCF23PC-RA with 33mm extended length.							
SPCF-22FPC	6	...	...	46N7378	4.64	3.62	3.24
SPCF23PC-RA	7	...	...	89N1549	4.55	3.75	3.43

*Commercial Grade
(17758)

MEDIUM-SIZE, WEATHERPROOF C COAXIAL CONNECTORS

RoHS Compliant Available

Amphenol® RF

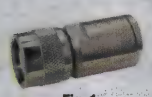


Fig. 1

Fig. 2

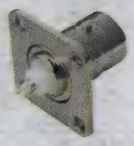


Fig. 3

Standard peak rating of 1500V and low VSWR to 10GHz. **Mfg. part no. 82-532** peak rating of 4000V and good performance to 2GHz. Coupled by two stud bayonet lock, connectors provide constant 50-ohm impedance and may be used with 75-ohm cable below 300MHz. Temperature range: –55°C to +165°C. Hermetically sealed. Meet MIL-C-39012.

Mfg. Part No.	Fig.	MIL No.	Description	RG/U	Stock No.	Price Each 1-9
82-532	1	UG-628B	Straight Plug	8, 9, 87, 213, 214, 225	82K8901	118.00
82-530	1	UG-573A	Straight Plug	8, 9, 87A, 214, 313, 225	73K4060	201.71
82-515	2	UG-634	Bulkhead Receptacle	...	39F1141	123.81
82-504	3	UG-568	Panel Receptacle	...	59K0526	57.09

(8247)

50-OHM ZDC SERIES MINI-UHF CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

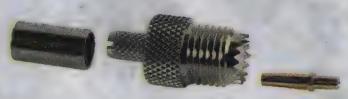


Fig. 1

Fig. 2

- DC - 2GHz frequency range
- Durability: 50 cycles minimum

STRAIGHT JACK (GOLD-PLATED BRASS CONTACTS)

Mfg. Part No.	Fig.	RG/U	Coaxial Termination	Connector Mounting	Stock No.	Price Each 1-49	50-99
5-1814819-1	1	RG58, RG141	Crimp	Cable	78M7257	4.05	3.40
STRAIGHT PLUG (GOLD-PLATED BRASS CONTACTS)							
5-1814818-1	2	RG58, RG141	Crimp	Cable	78M7256	1.41	1.36

(108531)

AMP UHF CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

5226600-1

5226602-1

STANDARD DUAL CRIMP UHF PLUGS

Polypropelene dielectric. *Order hand tools separately on page 1061. See Product Index for a complete selection of coaxial cable.*

Mfg. Part No.	RG/U	Plating Center Contact/Body	Length	Stock No.	Price Each 1-24	25-49	50-99
2-5330830-4	RG58, Essex 621-715	Silver/Nickel	1.317"	16M3890	35.09	31.68	30.35
STANDARD SINGLE CRIMP UHF PLUGS							
5226279-1	58, 58A, 58B, 58C	Tin/Nickel	1.500"	42K7120	11.83	10.51	9.29
226279-2	213, 8, 8A	Tin/Nickel	1.500"	35K5273	66.02	57.20	50.76
MINIATURE DUAL CRIMP UHF JACK							
5226602-1	58, 58A, 58B, 58C	Tin/Nickel	1.185"	16M3237	6.78	...	...

(8241)

50-OHM, 237VRMS MINIATURE UHF COAXIAL CONNECTORS

RoHS Compliant Available

Amphenol® RF

For cellular mobile phone systems, similar applications to 2GHz. Astroplate® finish. Operating temperature: –55°C to +85°C.

81-115N-1000

Mfg. Part No.	Description	Cable RG/U	Stock No.	Price Each 1-9
81-115N-1000	Straight Plug, Crimp-Crimp Pin Contact, Gold Plating, Nickel Body	58, 58A, 58C, 141, 303, LMR 195, Belden 7806A	93F7597	3.24
81-116	Straight Jack, Crimp-Crimp Socket Contact, Tin-Lead, Nickel Body		46F8243	13.38
81-120	Straight Bulkhead Receptacle, Solder Cup	...	90F8454	2.95
81-115BK-1000	Mini Straight Plug, Crimp-Crimp Gold Plating, Nickel Body	58	93F7541	7.06

(8249)

RF COAX – MEDIUM

RFX™ UHF COAXIAL CONNECTORS

RoHS Compliant Available

Amphenol® RF

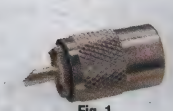


Fig. 1

Fig. 2

Fig. 3

Fig. 4

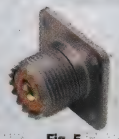


Fig. 5

Fig. 6

General-purpose for DC to 300MHz with voltage rating of 500V peak. *Order tools and die sets separately on page 1062.*

RFX™ UHF CABLE PLUGS—MALE CONTACTS

Mfg. Part No.	Fig.	RG/U	Stock No.	Price Each 1-9	10-24	25-99	100-499
● 83-1SP-15RFX	1	8, 9, 11, 13, 63, 87A, 149	93F1465	2.06	1.86	1.58	1.47
● 83-58DCP-2RFX	...	58, 58A, 58C, 141, 303, LMR 195, Belden 7806A	73K1496	3.57	3.26	3.03	2.87
● 83-58FCP-RFX	2	58, 141	93F1466	5.30	3.60	2.52	2.38
● 83-59	3	8, 9, 87A, 214, 313, 225	39F1061	227.19	201.74	180.06	168.75
● 83-8SP-RFX	...	59	19C5196	3.13	2.83	2.41	2.32

RFX™ REDUCING ADAPTERS
For cable plugs, *order separately above.*

● 83-185-RFX	4	58, 141, 142	93F1468	0.62	0.56	0.49	0.43
● 83-168-RFX	4	59, 62, 71, 140, 210	93F1467	0.58	0.49	0.46	0.42

RFX™ UHF RECEPTACLES

Mfg. Part No.	Fig.	Description	Stock No.	Price Each 1-9	10-24	25-99	100+
● 83-1R-RFX	5	Panel Receptacle, 4 Hole Sq. Flange	73K1494	3.59	3.20	3.02	2.94
● 83-878-RFX	6	Bulkhead Receptacle, Rear Mount	93F1470	5.29	4.81	4.42	4.08

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 83-1AC-RFX	Protective Cap with Chain	82K8906	2.08

(8271)

UHF 500-VOLT, NON-CONSTANT IMPEDANCE COAXIAL CONNECTORS

RoHS Compliant Available

Amphenol® RF

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6

Fig. 7

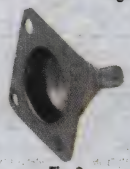


Fig. 8

Fig. 9

Operate to 300MHz. Temperature range: –50°C to +149°C. *Order tools and die sets separately on page 1062.*

Mfg. Prt No.	Fig.	MIL No.	Description	RG/U	Stock No.	Price Each 1-9
● 83-1SP	1	PL-259	Plug, Silver Plate Body	8,9,11,13, 63,87,149	59K0534	4.15
● 83-1SP-1050	1	PL-259	Plug, Astroplate Body	213,214, 216,225	73K1495	4.06
● 83-822 (PL-259)	1	PL-259	Plug, Teflon™ Insulator	8,9,11,13,63, 87,149,213, 214,216,225	59K0538	5.31
● 83-58SP	2	...	Straight Plug, Crimp	58,141	59K0535	22.52
● 83-58FCP	...	...	Straight Plug	58 Quick Assembly	39F1075	30.27
● 83-750 (UG-111/U)	1	UG-111U	Straight Plug	59	59K0536	24.00

➤CONTINUED➤

UHF 500-VOLT, NON-CONSTANT IMPEDANCE COAXIAL CONNECTORS (CONT.)

Mfg. Prt No.	Fig.	MIL No.	Description	RG/U	Stock No.	Price Each 1-9
● 83-878	3	...	Bulkhead Receptacle, Rear Mount	...	82K8912	5.55
● 83-1R (SO-239)	...	SO-239	Panel Receptacle	...	73K1493	3.28
● 83-798 (SO-239A)	...	SO-239A	Panel Receptacle	...	59K0537	6.52
● 83-1J (PL-258)	4	PL-258	Straight Adapter J-J	...	82K8908	12.47
● 83-877	5	...	Straight Adapter P-P	...	82K8911	37.58
● 83-1AP (UG-646/U)	...	UG-646	Angle Adapter J-P	...	73K1492	15.75
● 83-1T (M-358)	6	M-358	Tee Adapter J-P-J	...	82K8909	22.85
● 83-1F (UG-363/U)	7	UG-363	Bulkhead Adapter J-J	...	82K8907	23.52
● 83-168 (UG-176/U)	...	UG-176	Reducing Adapter	59,62,71,140,210	39F041	9.14
● 83-765 (UG-177/U)	8	UG-177	Hood for 83-1R	58,141	39F038	8.74
● 83-1H	8	UG-106/U	Hood, 4-Hole	8,10,11,12, 63,79,115, 149,213,215	83F6739	7.50
● 83-1AC	9	...	Cap and Chain	...	39F042	20.74

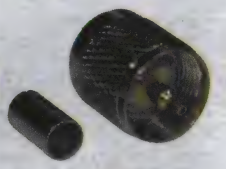
(8201)

50-OHM UHF AND MINI-UHF CONNECTORS

RoHS Compliant Available

Amphenol Connex

182102


182115

182116

182110

182306

182318

- Nickel-plated brass connector body
- Gold-plated contacts, except **mfg. part no. 182311** silver-plated
- Frequency: 2.5GHz max.

UHF STRAIGHT JACKS

Mfg. Part No.	Coaxial Cable Type RG/U	Connector Mounting	Termination Coaxial	Termination Contact	Stock No.	Price Each 1-9
● 182102	RG213, RG393	Cable	Crimp	Solder	99H5868	3.92
● 182115	RG8X , LMR-240	Cable	Crimp	Crimp	99H5880	4.13
● 182116	RG8, RG213, RG393	Cable	Solder	Solder	99H5881	5.94
● 182310	RG55, RG142, RG223	Cable	Crimp	Solder	99H5898	9.99
● 182311	RG214	Cable	Crimp	Crimp	99H5899	6.63
MINI-UHF STRAIGHT PLUGS						
● 182302	RG8X , Belden 7808A, LMR-240	Cable	Crimp	Solder	89K6985	4.58
● 182110	RG58, RG141, RG303, LMR-195	Cable	Crimp	Solder	86H2583	2.49
UHF STRAIGHT JACK						
● 182306	RG58, RG58C, LMR-195	Cable	Crimp	Solder	90H9173	5.83
MINI-UHF STRAIGHT JACK						
● 182113	RG59, RG62, RG140, RG210	Cable	Crimp	Crimp	99H5878	7.67
MINI-UHF STRAIGHT BULKHEAD JACK						
● 182318	RG58, RG58A, RG58C, RG141, RG303	Panel	Crimp	Crimp	99H5903	4.94

(203454)

50-OHM UHF AND MINI-UHF CONNECTORS

RoHS Compliant Available

multicomp

Fig. 1

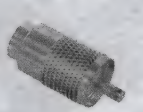


Fig. 2

Fig. 3

Fig. 4

All connectors have a voltage rating of 500Vrms with a frequency rating of 0-2GHz, except **mfg. part no. 1532-1534**, which have a frequency rating of 0-300MHz and **mfg. part no. 1507** which has a voltage rating of 335Vrms. **Mfg. part no. SPC19893** has a frequency rating of 0-500MHz. Feature Delrin insulation except, **mfg. part no. 1532**, which is

➤CONTINUED➤

50-OHM UHF AND MINI-UHF CONNECTORS (CONT.)

Bakelite and **mfg. part nos. 1533, 1534** which are Teflon®. Mfg. part nos. numbers with (*) have brass contacts. Mfg. part nos. with (+) have brass contacts with silver finish except **mfg. part no. 1507**, which have a brass contact with gold finish.

UHF CRIMP PLUGS

Mfg. Part No.	Fig.	RG/U	AWG	Stock No.	Price Each 1-49	Price Each 50-99
1532+	1	RG58, RG58A, RG58C, RG141, LMR-200	20	92N3378	9.23	7.57
1534+	1	RG58, RG58A, RG58C, RG141, LMR-200	20	92N3380	10.97	8.99
SPC23497*	1	RG8X	16	88M1515	9.34	7.65
1533+†	2	RG8, RG8A, RG9, RG9A, RG9B, RG213, RG214	22	92N3379	11.11	9.10
MC23544§	...	RG213	...	96M8828	4.95	4.06
UHF SOLDER JACKS						
SOCKET, UHF BULKHEAD*	...	RG223	...	25M7492	4.09	3.67
MINI-UHF CRIMP PLUGS						
SPC19900*†	3	RG8X	...	83K0874	3.75	3.00
1507*	4	RG58, RG58A, RG58C, RG141, RG141A	20	92N3353	2.74	2.39

†Solder; §Twist-On
(32072)

BNC HIGH DEFINITION BROADCAST CONNECTORS

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

Features
- True 75 Ω performance
- Superior return loss through 4.5 GHz
- Extended BNC head knurl nut design to ease identification and installation
- Excellent holding force exceeding 100 lbs, depending on cable type
- Fast installation compression connectors with 1-piece design
- Polished Nickel Finish

Belden Brilliance® Broadcast High-Definition BNC Connectors designed specifically for Belden Brilliance® Broadcast and Professional A/V coaxial cable; *ordered separately on page 1192.* HD Brilliance Connectors maximize broadcast signal integrity, quality, performance and durability. All Belden HD Brilliance connectors exceed SMPTE return loss standards, providing excellent headroom and true 75 ohm performance.

LOCKING 1-PIECE COMPRESSION — SOLD IN PACKAGES OF 50

Mfg. Part No.	RG Cable Type	Color Band	Stock No.	Price per Pkg. 1-4
1505ABHDL	RG59	Red	52T2613	162.62
1506ABHDL	RG-59 Plenum	Red	52T2616	175.60
1694ABHDL	RG6	Green	52T2618	162.62
1695ABHDL	RG-6 Plenum	Green	52T2621	175.60
179DTBHDL	Belden 179DT	Yellow	52T2623	175.60
1855ABHDL	Belden 1855A	Purple	52T2626	175.60
1-PIECE COMPRESSION — SOLD IN PACKAGES OF 50				
1505ABHD1	RG59	Red	52T2614	127.16
1506ABHD1	RG-59 Plenum	Red	52T2617	137.54
1694ABHD1	RG6	Green	52T2619	127.16
1695ABHD1	RG-6 Plenum	Green	52T2622	137.54
1855ABHD1	Belden 1855A	Purple	52T2627	128.00
3-PIECE CRIMP — SOLD IN PACKAGES OF 50				
1505ABHD3	RG59	Red	52T2615	105.53
1694ABHD3	RG6	Green	52T2620	105.53
179DTBHD3	Belden 179DT	Yellow	52T2625	105.53
1855ABHD3	Belden 1855A	Purple	52T2628	105.53

TOOLS

Mfg. Part No.	Description	Stock No.	Price Each 1-4
BB3PHCT	Crimp Tool for 3-Piece BNC Broadcast Crimp Connectors	75T9081	208.73
BB3PST	Strip Tool for RG-59, RG-6, Belden 179DT, and Belden 1855A cable	75T9082	109.06

(197408)

DB™ DOUBLE BUBBLE COMPRESSION CONNECTORS

BELDEN SENDING ALL THE RIGHT SIGNALS

Features
- BNC, RCA, and F compression connectors
- RG-59, RG-6, plenum, and security (CCTV) sizes
- Patented "double bubble" connection
- True 360° compression technology
- Patented non-blind entry design

DB BNC

DB RCA

➤ CONTINUED ➤

DB™ DOUBLE BUBBLE COMPRESSION CONNECTORS (CONT.)

DB 360 Compression Connection System creates two 360° compression connections (one interior and one exterior) providing a permanent, "double bubble" connection. The Radial Bubble Compression Tool and DB 360 compression connectors work as a complete system to provide a secure, reliable solution to all your custom security installations. Ideal for security cameras and other exposed wiring installations. The unique double bubble connection provides superior protection against moisture migration limiting poor signal quality due to the elements. *Order Belden Brilliance® broadcast coaxial cable on pages 1192-1194.*

BNC CONNECTORS — SOLD IN PACKAGES OF 25

Mfg. Part No.	RG Cable Type	Stock No.	Price per Pkg. 1-4
DB59BNCU-R	RG59	51T9246	59.52
DB59BNCSL-R+	RG59	51T9243	59.52
DB6BNCU-R	RG6	51T9255	59.52
RCA CONNECTORS — SOLD IN PACKAGES OF 25			
DB59RCAU-R	...	51T9250	37.67
DB6RCAU-R	...	51T9259	37.67
F CONNECTORS — SOLD IN PACKAGES OF 25			
DB59U	RG59	50T8983	0.42
DB6U	RG6	50T8959	0.42

+CCTV

TOOLS

Mfg. Part No.	Description	Stock No.	Price 1-4
DBPSAKIT	Double Bubble Kit — Cable Pro Cable PSA59/6 Strip Tool and CPLCRBC-B Compression Tool	50T8945	111.38
CPLCRBC-BR	Compression Tool for Double Bubble BNC, RCA and F Compression Connectors	51T8610	98.01
PSA59/6	Cable Stripper for RG58, RG59, RG6 Cable	52T1897	28.96

(197420)

1.0/2.3 SERIES CONNECTORS

RoHS Compliant Available

Amphenol® RF

Fig. 1

Fig. 2

Features:
- Push-Pull Coupling with Patented Locking Mechanism Allows Quick Installation
- Push-Pull Offers Safe Coupling
- Eliminates Cross-Threading Problems and Field Problems
- Connectors Can Be More Densely Packed, Saving Panel Space

Applications:
- Base Stations, Cable Assemblies, Components (Filters), Datacom, Routers, Switching Equipment, Telecom

The compact design of **1.0/2.3 series** connectors permit dense packing. Ideally suited to applications where space is limited. Threaded coupling provides positive mating and locking. Connectors are 50-ohm units operating from 0-10GHz. *Adapters ordered seperately; go online or call.*

STRAIGHT CABLE PLUGS FOR SEMI-RIGID AND FLEXIBLE CABLE

Mfg. Part No.	Fig.	RG/U	Stock No.	Price Each 1-9
102-799-16	1	RG174, RG188A, RG316	36C2890	16.16
102-799-16DB	1	RG316DB	36C2891	13.02
102-799-48	1	RG8X , Belden 7808A, LMR-240	36C2892	12.38

50-OHM TERMINATOR

Mfg. Part No.	Fig.	Power	Stock No.	Price Each 1-9
102-799-050	2	¼W	36C2887	15.21

BETWEEN SERIES ADAPTERS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
901-10005	SMA Plug to 1.0/2.3 Jack Adapter	30C1341	83.42
901-10008	SMA Jack to 1.0/2.3 Jack Adapter	30C1343	84.66

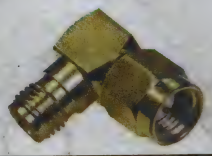
(69829)

50-OHM SMA ADAPTERS

RoHS Compliant Available

TE connectivity

Authorized Distributor



Mfg. Part No.	Body Style	Convert From	Convert To	Freq. Max. (GHz)	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99
2088 0000 02	Right Angle	SMA Plug	SMA Jack	12.4	92C8661	22.55	16.54	15.62
2088 1230 02	Right Angle	SMA Plug	SMA Jack	18.0	88C9627	30.47	29.57	27.51

(165082)

RF COAX – ADAPTERS

AMP SMA COAXIAL ADAPTERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

1054868-1 221643-1 1055047-1

Features Teflon® dielectric. Qualified to MIL-C-39012. *Order hand tools separately. Go online or call.*

Mfg. Part No.	Body Style	Convert From	Convert To	Length (in.)	Stock No.	Price Each 1-24
● 1054868-1	Straight	SMA Jack	SMA Jack	...	92B1873	20.15
● 1053488-1	Straight	SMA Jack	SMA Jack	...	10H7156	19.40
● 1053489-1	Straight	SMA Jack	SMA Jack	...	50B8814	18.00
● 1053514-1	Straight	SMA Jack	SMA Jack	0.875	73M8550	33.39
● 1053635-1	Straight	SMA Plug	SMA Plug	...	50B8815	20.09
● 1053634-1	Straight	SMA Plug	SMA Plug	0.878	10H7161	22.90
● 221643-1	Straight Bulkhead			0.880	89F2960	21.85
● 2084 0000 02	Straight Bulkhead	SMA Jack	SMA Jack	...	17C1708	18.31
● 1054875-1	Straight Bulkhead	SMA Jack	SMA Jack	...	71M0785	55.12
● 1054874-1	Straight Bulkhead	SMA Jack	SMA Jack	0.875	10H7168	53.36
● 1055064-1	Right Angle	SMA Plug	SMA Jack	...	17C6338	28.59
● 1055047-1	Right Angle	SMA Plug	SMA Plug	...	10H7176	35.48

(169724)

BETWEEN SERIES ADAPTERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

448091-2 3680-2242-00 1059928-1 1058077-1

- Provide convenient transitions between popular series coaxial connectors
- Design provides a minimum length with good electrical performance
- Small size, low VSWR, and broad frequency permits a wide range of applications in both measurement and system use

Mfg. Part No.	Convert From	Convert To	Stock No.	Price Each 1-9
● 448091-2*	SMP Plug	SMA Jack	13H4618	40.67
● 3082 2321 00	N Jack	BNC Plug	07H8302	94.11
● 1058651-1	N Jack	SMA Jack	10H7263	96.83
● 3680-2242-00*	N Jack	SMA Jack	37K7341	130.75
● 1058664-1	N Jack	SMA Plug	96M0604	182.55
● 2380 2240 00	SSMT Jack	SMA Jack	79C3884	108.09
● 1059733-1	OSP Jack	SMA Jack	10H7315	96.62
● 1059750-1*	OSP Jack	SMA Jack	96M0606	154.10
● 1059716-1	OSP Plug	SMA Jack	10H7310	56.56
● 1059928-1	OSSP Jack	SMA Jack	10H7321	158.52
● 3080-2240-00	SMA Jack	N Jack	87K2361	108.09
● 2082 2201 00	SMA Jack	SSMA Jack	07H8135	86.81
● 1058077-1	SMB Plug	BNC Jack	96M0602	72.75
● 3180 2242 00*	TNC Jack	SMA Jack	07H8316	74.90

* Flange Mount
(113234)

AMP RF INTER-SERIES ADAPTERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

4585 2240 02 3284 2240 00

- Provide convenient transitions between popular series coaxial connectors
- Design provides a minimum length with good electrical performance
- Small size, low VSWR, and broad frequency permits a wide range of applications in both measurement and system use

➤CONTINUED➤

AMP RF INTER-SERIES ADAPTERS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-49
● 1060498-1	SMB Plug-to-SMA Jack	10H7347	84.32	79.36
● 3282 2241 00	SMA Plug-to-BNC Jack	50B479	47.20	44.75
● 3080 2242 00*	SMA Jack-to-N Jack	94C2642	84.03	79.82
● 1057463-1†	SMA Jack-to-N Jack	97C6564	85.62	82.40
● 3282 2240 00	BNC Plug-to-SMA Jack	24C4956	60.44	58.29
● 4585 2240 02†	OSP Plug-to-SMA Jack	30C1725	35.10	34.16
● 3284 2240 00†	BNC Jack-to-SMA Jack	90B8519	50.14	47.84
● 3082 2240 00	N Plug-to-SMA Jack	92B3152	52.96	51.42

*Flange Mount; †Bulkhead
(80549)

901 SERIES 50-OHM SMA COAXIAL ADAPTERS

RoHS Compliant Available

Amphenol® RF

Fig. 1 Fig. 2 Fig. 3 Fig. 4

50-ohm SMA connectors are semi-precision connectors with electrical performance from 0 to 18GHz. Built in accordance with MIL-C-39012. Applications include base stations, instrumentation, process control, Mil/Aero, telecom and PC/LAN.

Mfg. Part No.	Fig.	Body Style	Convert From	Convert To	Body Plating	Stock No.	Price Each 1-9
● 901-125-11	...	Right Angle	SMA Plug	SMA Jack	Gold	89F2878	54.84
● 901-9219-ASF	...	Right Angle	SMA Plug	SMA Jack	Passivated	93F1330	34.90
● 901-9209A	1	Straight Bulkhead	SMA Jack	SMA Jack	Gold	51F3842	14.61
● 901-9209-ASF	1	Straight Bulkhead	SMA Jack	SMA Jack	Passivated	93F1323	19.16
● 901-9216	2	Straight	SMA Plug	SMA Jack	Gold	50F2436	49.44
● 901-9217	3	Straight	SMA Jack	SMA Jack	Gold	50F2437	61.41
● 901-9217-SF	...	Straight	SMA Jack	SMA Jack	Passivated	93F7608	54.48
● 901-9218	4	Straight	SMA Plug	SMA Plug	Gold	50F2438	67.98
● 901-9218-SF	4	Straight	SMA Plug	SMA Plug	Passivated	93F1329	54.89
● 901-9986-RFX	...	Straight	SMA Jack	SMA Jack	Passivated	19C5352	6.19

(176050)

WEATHERPROOF N COAXIAL ADAPTERS

RoHS Compliant Available

Amphenol® RF

Fig. 1 Fig. 2 Fig. 3

Threaded coupling devices designed for use up to microwave frequencies. 0-11GHz, VSWR consistently low. Impedance: 50 ohm. Dielectric withstanding: 2500Vrms.

Mfg. Part No.	Fig.	Convert From	Convert To	Body Plating	Stock No.	Price Each 1-9
STRAIGHT						
● 82-100 (UG-57B/U)	1			Silver	39F1111	13.58
● 82-101 (UG-29B/U)	2	N Jack	N Jack	Silver	39F1112	17.04
● 82-65 (UG-29A/U)	...	N Jack	N Jack	Nickel	82K8903	16.41
STRAIGHT BULKHEAD						
● 82-66 (UG-30/U)	...			Silver	39F022	24.88
● 91100 (UG-30D/U)	...	N Jack	N Jack	...	82K8914	124.26
RIGHT ANGLE						
● 82-64 (UG-27A/U)	3	N Plug	N Jack	Gold	59K0530	32.79
● 82-213 (UG-27C/U)	...	N Plug	N Jack	Nickel	60K7160	33.36
● 82-98 (UG-27B/U)	3	N Jack	N Plug	...	59K0533	39.23
TEE						
● 82-102 (UG-107B/U	...	N Plug	N Jack / Jack	Nickel	39F078	137.04

(164487)

MIL-C-39012 BETWEEN SERIES ADAPTERS

RoHS Compliant Available

Amphenol® RF

STRAIGHT INTER-SERIES

Mfg. Part No.	Convert From	Convert To	Stock No.	Price Each 1-9
31-28	BNC Jack	UHF Plug	39F074	25.27
79675	BNC Jack	TNC Plug	59K0522	30.04
79025	BNC Plug	TNC Jack	39F1083	40.55
901-164	BNC Plug	SMA Plug	59K0540	72.90
82-5558	BNC Jack	N Plug	83C5680	20.72
31-216	BNC Jack	N Plug	39F1029	16.77
31-217			39F1030	17.50
901-295	N Jack	SMA Jack	90F8462	230.48
901-9720	N Jack	SMA Jack	93F1355	84.54
79825	N Jack	TNC Plug	55M2571	51.45
16075			50F1612	67.76
901-293	SMA Plug	N Jack	51F3790	94.80
901-166	SMA Plug	BNC Jack	98F2748	66.47
901-165	SMA Jack	BNC Plug	98F2747	56.38
901-167	SMA Jack	BNC Jack	51F3813	43.95
901-294	SMA Jack	N Plug	90F8461	96.00
901-280	TNC Jack	SMA Jack	99F3887	102.99
APH-716M-NF	7/16 Plug	N Jack	59K0103	62.89
STRAIGHT INTRA-SERIES				
531-40008	F Jack	F Jack	30C1286	14.55

(164482)

COAXIAL TERMINATORS AND SHORTING CAPS

RoHS Compliant Available

Amphenol Connex

202108

202100

TERMINATORS

Mfg. Part No.	Type	Gender	Impedance (Ω)	Stock No.	Price Each 1-9	Price Each 10-24
202103	Intra Series Coaxial	Plug	50	99H6090	2.61	2.50
202113	Intra Series Coaxial	Plug	50	99H6101	8.15	7.80
202108	Intra Series Coaxial	Plug	93	99H6095	11.07	10.05
202109	Intra Series Coaxial	Plug	50	99H6096	10.18	9.74
132360RP	Intra Series Coaxial	Plug	...	89K6872	5.48	5.27
132361	Intra Series Coaxial	Jack	50	99H5159	6.03	5.79

SHORTING CAPS

Mfg. Part No.	Type	Gender	Features	Stock No.	Price Each 1-9	Price Each 10-24
202100	BNC Coaxial	Plug	With Chain	99H6086	3.11	2.99
202114	BNC Coaxial	Plug	Without Chain	99H6102	2.99	2.72

(176217)

INTRA-SERIES COAXIAL ADAPTERS

RoHS Compliant Available

Amphenol Connex

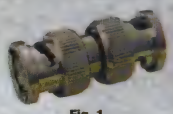


Fig. 1

Fig. 2

Fig. 3

Mfg. Part No.	Fig.	Impedance (Ω)	Body Style	Convert From	Convert To	Stock No.	Price Each 1-9
262129	...	50	Straight	MMCX Jack	MMCX Jack	99H6698	12.67
142244	...	50	Straight	SMB Jack	SMB Jack	99H5324	8.87
142246	...	50	Straight	SMB Plug	SMB Plug	99H5326	10.87
172278	...	50	Straight	N Jack	N Jack	99H5821	13.82
132171	...	50	Straight	SMA Plug	SMA Jack	99H5039	6.91
122350	...	50	Straight	TNC Plug	TNC Plug	99H4830	6.48
172122	2	50	Straight	N Plug	N Plug	99H5735	11.42
252171	...	50	Straight Bulkhead	MCX Jack	MCX Jack	99H6557	10.15
112439	3	50	Straight Bulkhead	BNC Jack	BNC Jack	99H4397	7.18
112443	3	50	Straight Bulkhead	BNC Jack	BNC Jack	99H4399	3.90
122346	...	50	Straight Bulkhead	TNC Jack	TNC Jack	99H4826	7.34
142250	...	50	Straight Bulkhead	SMB Jack	SMB Jack	99H5331	7.42

CONTINUED

INTRA-SERIES COAXIAL ADAPTERS (CONT.)

Mfg. Part No.	Fig.	Impedance (Ω)	Body Style	Convert From	Convert To	Stock No.	Price Each 1-9
132274	...	50	Right Angle	SMA Jack	SMA Jack	99H5113	11.10
172261	...	50	Right Angle	N Plug	N Plug	99H5813	23.59
172370	...	50	Straight	N Jack	N Jack	55W5582	48.67
172371	...	50	Straight Bulkhead	N Jack	N Jack	55W5583	51.91
172369	...	50	Straight	N Plug	N Plug	55W5581	48.67
172372	...	50	Straight	N Plug	N Jack	55W5584	48.67
112455	...		Tee	BNC Jack	BNC Jack / Jack	99H4408	8.09
122354	...	50	Tee	TNC Jack	TNC Jack / Jack	99H4834	12.75
172127	...	50	Tee	N Jack	N Jack / Jack	99H5740	19.69
172125	...	50	Tee	N Jack	N Plug / Jack	99H5738	18.89
172233	...	50	Tee	N Plug	N Jack / Jack	99H5797	55.72
132216	...	50	Tee	SMA Jack	SMA Jack / Jack	13N2706	16.43
132217	...	50	Tee	SMA Jack	SMA Plug / Jack	99H5069	17.05
112448	1	75	Straight	BNC Plug	BNC Plug	99H4402	5.98
122341	...	75	Straight Bulkhead	TNC Jack	TNC Jack	99H4821	12.21
142249-75	...	75	Straight Bulkhead	SMB Jack	SMB Jack	99H5330	13.02
112456	...	75	Tee	BNC Jack	BNC Jack / Jack	99H4409	13.47
132170-10	...	50	Straight Bulkhead	SMA Jack	SMA Jack	16R1631	17.82
132339	...	50	Right Angle	SMA Plug	SMA Plug	99H5147	11.82
272292	...	50	Straight	7/16 Jack	7/16 Plug	55W5587	59.03
272300	...	50	Straight	7/16 Jack	7/16 Jack	55W5588	59.03
272301	...	50	Straight Bulkhead	7/16 Jack	7/16 Jack	55W5589	62.24
272134	...	50	Straight Bulkhead	7/16 Plug	7/16 Plug	99H6746	59.03

(176212)

BETWEEN-SERIES SMA ADAPTERS

RoHS Compliant Available

Amphenol Connex

These between-series adapters are used to join two connectors of different series. Designed to offer the lowest VSWR rating of the two series involved.

Mfg. Part No.	Body Style	Convert From	Convert To	Stock No.	Price Each 1-9	Price Each 10-24
242102	Straight	SMA Plug	BNC Jack	92C7247	7.93	7.59
242103	Straight	SMA Jack	BNC Plug	92C7248	14.67	13.34
242123	Straight	SMA Jack	BNC Jack	92C7271	13.24	12.03
242104	Straight	SMA Plug	BNC Plug	92C7249	18.51	17.02
242181	Straight	SMA Jack	BNC Jack	92C7327	18.51	17.02
242124	Straight	SMA Plug	TNC Jack	92C7272	14.67	13.34
242105	Straight	SMA Jack	TNC Plug	92C7250	8.35	7.98
242106	Straight	SMA Plug	TNC Plug	92C7252	18.51	17.02
242107	Straight	SMA Jack	TNC Jack	92C7253	18.51	17.02
242178	Straight Bulkhead	SMA Jack	TNC Jack	92C7325	18.51	17.02
242144	Straight	SMA Plug	SMB Jack	92C7294	18.51	17.02
242145	Straight	SMA Jack	SMB Plug	92C7295	18.51	17.02
242146	Straight	SMA Plug	SMB Plug	92C7297	18.51	17.02
242147	Straight	SMA Jack	SMB Jack	92C7298	18.51	17.02
242182	Straight Bulkhead	SMA Jack	SMB Jack	92C7328	18.51	17.02
242174	Straight	SMA Plug	SMC Jack	92C7321	18.51	17.02
242175	Straight	SMA Jack	SMC Plug	92C7322	18.51	17.02
242176	Straight	SMA Jack	SMC Jack	92C7323	18.51	17.02
242177	Straight	SMA Plug	SMC Plug	92C7324	18.51	17.02
242112	Straight	SMA Plug	N Jack	92C7259	14.67	13.34
242113	Straight	SMA Jack	N Plug	92C7261	11.75	10.68
242114	Straight	SMA Plug	N Plug	92C7262	14.67	13.34
242115	Straight	SMA Jack	N Jack	92C7263	14.67	13.34
242125	Straight Bulkhead	SMA Jack	N Jack	92C7273	9.02	8.63
242163	Straight	SMA Jack	N Jack	92C7310	14.67	13.34
242109	Straight	SMA Jack	UHF Plug	92C7256	18.51	17.02
242111	Straight	SMA Jack	UHF Jack	92C7258	18.51	17.02
242126	Straight	SMA Plug	MCX Jack	92C7274	18.51	17.02
242127	Straight	SMA Jack	MCX Plug	92C7275	18.35	16.69
242128	Straight	SMA Plug	MCX Plug	92C7276	24.86	22.85
242140	Straight	SMA Plug	MMCX Jack	92C7290	18.51	17.02
242141	Straight	SMA Jack	MMCX Plug	92C7291	18.51	17.02
242142	Straight	SMA Plug	MMCX Plug	92C7292	18.51	17.02
242143	Straight	SMA Jack	MMCX Jack	92C7293	18.51	17.02
242193	Straight Bulkhead	SMA Jack	MMCX Jack	09J8787	18.51	17.02
242189	Straight	SMA Plug	SSMA Jack	99H6426	18.51	17.02
242212	Straight	SMA Plug	AMC Jack	89K7033	18.51	17.02

(73112)

RF COAX – ADAPTERS

REVERSE POLARITY COAXIAL ADAPTERS

RoHS Compliant Available

Amphenol Connex

132169RP

INTRA-SERIES COAXIAL

Mfg. Part No.	Body Style	Convert From*	Convert To*	Stock No.	Price Each 1-9	Price Each 10-24
● 132168RP	Straight	SMA Plug	SMA RP Plug	09J8780	16.18	14.71
● 132169RP	Straight	SMA Jack	SMA RP Jack	99H5036	10.57	10.11
● 132170RP	Straight Bulkhead	SMA Jack	SMA RP Jack	09J8782	15.71	14.29
● 132171RP	Straight	SMA Plug	SMA RP Jack	92C6703	5.70	5.47
● 132171RP-10	Straight	SMA Jack	SMA RP Plug	92C6705	5.70	4.72
● 132171RP-RP	Straight	SMA RP Plug	SMA RP Jack	92C6704	11.82	11.31
● 132172RP	Right Angle	SMA Plug	SMA RP Jack	92C6706	13.06	11.87
● 172212RP	Straight	N Jack	N RP Plug	92C6739	13.21	12.01

BETWEEN INTER-SERIES COAXIAL

These between-series adapters are used to join two connectors of different series. Designed to offer the lowest VSWR rating of the two series involved.

● 242105RP	Straight			92C7251	14.49	14.27
● 242107RP	Straight	SMA Jack	TNC RP Jack	92C7254	18.51	17.02
● 242112RP	Straight	SMA RP Plug	N Jack	92C7260	17.07	15.52
● 242113RP	Straight	N Plug	SMA RP Jack	89K7014	18.51	17.02
● 242133RP	Straight	N Plug	TNC RP Plug	92C7283	18.51	17.02
● 242130RP	Straight	N Plug	TNC RP Jack	92C7279	18.51	17.02
● 242131RP	Straight	N Jack	TNC RP Plug	09J8783	18.51	17.02
● 242132RP	Straight	N Jack	TNC RP Jack	09J8784	18.51	17.02

*RP denotes reverse polarity
(176063)

BETWEEN-SERIES BNC, SMB, TNC, MINI-UHF AND 7/16 ADAPTERS

RoHS Compliant Available

Amphenol Connex

242184

242187

242164

242223

These between-series adapters are used to join two2 connectors of different series. Designed to offer the lowest VSWR rating of the two series involved.

Mfg. Part No.	Body Style	Convert From	Convert From	Stock No.	Price Each 1-4	Price Each 5-9
● 242184	Straight	BNC Plug	SMB Jack	92C7329	18.51	17.02
● 242185	Straight	BNC Jack	SMB Plug	92C7330	9.99	9.55
● 242186	Straight	BNC Jack	SMB Jack	92C7331	18.51	17.02
● 242187	Straight	BNC Plug	SMB Plug	92C7332	18.51	17.02
● 242148	Straight	BNC Plug	TNC Jack	92C7299	18.51	17.02
● 242149	Straight	BNC Jack	TNC Plug	92C7300	9.21	8.81
● 242150	Straight	BNC Jack	TNC Jack	92C7301	18.51	17.02
● 242151	Straight	BNC Plug	TNC Plug	92C7302	18.51	17.02
● 242134	Straight	BNC Plug	UHF Jack	92C7284	18.51	17.02
● 242164	Straight	BNC Jack	UHF Plug	92C7311	11.88	11.36
● 242160	Straight	BNC Plug	F Plug	89K7027	18.12	16.48
● 242154	Straight	BNC Plug	F Jack	92C7305	18.51	17.02
● 242199	Straight	BNC Jack	F Plug	09J8790	13.98	12.71
● 242159	Straight	BNC Jack	F Plug	89K7026	18.51	17.02
● 242204	Straight	BNC Jack	MCX Plug	73J7935	14.67	13.34
● 242206	Straight	BNC Jack	MCX Jack	73J7937	11.98	10.89
● 242223	Straight Bulkhead	SMB Plug	F Jack	89K7039	18.51	17.02
● 242224	Straight Bulkhead	SMB Jack	F Jack	89K7040	18.51	17.02
● 242192	Straight	TNC Jack	U.FL Jack	09J8785	18.51	16.71
● 242153	Straight	Mini UHF Plug	UHF Jack	92C7304	16.36	15.20
● 242266	Straight	7/16 Jack	SMA Plug	55W5586	50.45	49.89

(176072)

BETWEEN-SERIES N ADAPTERS

RoHS Compliant Available

Amphenol Connex

242162

242183

These between-series adapters are used to join two connectors of different series. Designed to offer the lowest VSWR rating of the two series involved.

Mfg. Part No.	Body Style	Convert From	Convert From	Stock No.	Price Each 1-4	Price Each 5-9
● 242166	Straight	N Plug	MMCX Jack	92C7313	24.69	22.70
● 242121	Straight	N Plug	BNC Jack	92C7269	18.51	17.02
● 242101	Straight	N Jack	BNC Plug	92C7246	18.51	17.02
● 242100	Straight	N Jack	BNC Jack	92C7245	18.51	17.02
● 242122	Straight	N Plug	BNC Plug	92C7270	18.51	17.02
● 242130	Straight	N Plug	TNC Jack	92C7278	18.51	17.02
● 242131	Straight	N Jack	TNC Plug	92C7280	14.67	13.34
● 242132	Straight	N Jack	TNC Jack	92C7281	18.51	17.02
● 242133	Straight	N Plug	TNC Plug	92C7282	18.51	17.02
● 242156	Straight	N Plug	F Jack	92C7306	14.67	13.34
● 242152	Straight	N Jack	F Plug	92C7303	18.51	17.02
● 242120	Straight	N Jack	F Jack	92C7268	18.51	17.02
● 242136	Straight	N Jack	7/16 Plug	92C7286	50.45	49.89
● 242137	Straight	N Jack	7/16 Jack	92C7287	50.45	49.89
● 242265	Straight	N Jack	SMA Plug	55W5585	44.36	43.86
● 242162	Straight Bulkhead	N Jack	BNC Jack	92C7309	30.82	28.33
● 242183	Straight Bulkhead	N Jack	SMB Jack	99H6425	18.51	17.02

(176068)

BETWEEN SERIES BNC COAXIAL ADAPTERS

RoHS Compliant Available

BOMAR by WINCHESTER ELECTRONICS

Fig. 1

Fig. 2

Fig. 3

Fig. 4

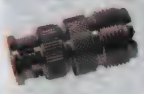


Fig. 5

Fig. 6

Fig. 7

Fig. 8

Fig. 9

Fig. 10

Fig. 11

Solve a variety of connection problems where connectors of different types ordinarily could not be mated together. Each adapter has a different coupling at each end allowing for a wide variety of interconnections. All adapters are constructed of machined brass and are nickel plated.

Mfg. Part No.	Fig.	Convert From	Convert To	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49
● 3315505	1	BNC Plug	TNC Jack	80K0200	8.84	8.15	7.81
● 3325505	2	BNC Jack	TNC Jack	80K0208	24.61	22.71	21.76
● 3316505	3	BNC Plug	Mini UHF Jack	80K0202	17.73	16.36	15.68
● 3307505	4	BNC Plug	UHF Plug	80K0197	28.61	26.39	25.29
● 3317505	5	BNC Plug	UHF Jack	80K0203	15.61	14.40	13.80
● 3327505	6	BNC Jack	UHF Jack	80K0209	22.81	21.05	20.17
● 3318505	7	BNC Plug	F Jack	80K0204	7.21	6.65	6.38
● 3328505	8	BNC Jack	F Jack	80K0210	8.64	7.97	7.63
● 8313505	9	BNC Jack	F Plug	80K0563	8.45	7.80	7.48
● 3309505	10	BNC Plug	SMA Plug	80K0198	30.28	29.40	28.54
● 3319505	11	BNC Plug	SMA Jack	80K0205	12.30	11.35	10.88

(156270)

BETWEEN SERIES TNC COAXIAL ADAPTERS

RoHS Compliant Available

BOMAR by WINCHESTER ELECTRONICS

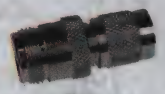


Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

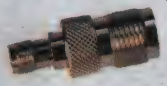


Fig. 6

Solve a variety of connection problems where connectors of different types ordinarily could not be mated together. Each adapter has a different coupling at each end allowing for a wide variety of interconnections. All adapters are constructed of machined brass and are nickel plated.

Mfg. Part No.	Fig.	Convert From	Convert To	Stock No.	Price Each 1-9	10-24	25-49
5311505	1	TNC Plug	N Jack	80K0426	12.95	11.94	11.45
5313505	2	TNC Plug	BNC Jack	80K0427	8.45	7.79	7.47
5316505	3	TNC Plug	Mini UHF Jack	80K0428	16.21	14.96	14.33
5309505	4	TNC Plug	SMA Plug	80K0424	21.42	19.76	18.94
5319505	5	TNC Plug	SMA Jack	80K0430	31.17	30.27	29.36
5329505	6	TNC Jack	SMA Jack	80K0432	54.18	52.61	51.04

(156273)

BETWEEN SERIES SMA COAXIAL ADAPTERS

RoHS Compliant Available

BOMAR by WINCHESTER ELECTRONICS

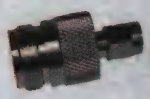


Fig. 1

Fig. 2

Fig. 3

Fig. 4

Solve a variety of connection problems where connectors of different types ordinarily could not be mated together. Each adapter has a different coupling at each end allowing for a wide variety of interconnections. All adapters are constructed of machined brass and are nickel plated.

Mfg. Part No.	Fig.	Convert From	Convert To	Stock No.	Price Each 1-9	10-24	25-49
9311505	1	N Coaxial	SMA Coaxial	80K0760	27.68	26.88	26.08
9313505	2	SMA Plug	BNC Jack	80K0761	17.43	16.08	15.41
9315505	3	SMA Plug	TNC Jack	80K0762	28.96	28.13	27.29
9306505	4	SMA Plug	Mini UHF Plug	80K0758	9.35	8.63	8.27

(156275)

BETWEEN SERIES RCA ADAPTERS

RoHS Compliant Available

BOMAR by WINCHESTER ELECTRONICS

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6

Solve a variety of connection problems where connectors of different types ordinarily could not be mated together. Each adapter has a different coupling at each end allowing for a wide variety of interconnections. All adapters are constructed of machined brass and are nickel plated.

Mfg. Part No.	Fig.	Convert From	Convert To	Stock No.	Price Each 1-24	25-49	50+
R0842	1	RCA Plug	BNC Plug	79K8698	7.69	7.50	6.99
R0843	2	RCA Jack	BNC Plug	79K8699	5.03	4.92	4.58
R0844	3	RCA / Phono	BNC Coaxial	79K8700	6.77	6.63	6.17
R0847	4	RCA Plug	F Plug	79K8701	9.37	9.13	8.51
R0849	5	RCA Plug	F Jack	79K8702	4.91	4.79	4.46
R0851	6	RCA Jack	F Plug	79K8703	5.21	5.08	4.74

(156276)

BETWEEN SERIES UHF COAXIAL ADAPTERS

RoHS Compliant Available

BOMAR by WINCHESTER ELECTRONICS

Fig. 1

Fig. 2

Fig. 3

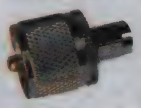


Fig. 4

Solve a variety of connection problems where connectors of different types ordinarily could not be mated together. Each adapter has a different coupling at each end allowing for a wide variety of interconnections. All adapters are constructed of machined brass and are nickel plated.

Mfg. Part No.	Fig.	Convert From	Convert To	Stock No.	Price Each 1-9	10-24	25-49
7311505	1	UHF Plug	N Jack	80K0502	23.28	21.48	20.58
7313505	2	UHF Plug	BNC Jack	80K0504	16.56	15.29	14.64
7316505	3	UHF Plug	Mini UHF Jack	80K0505	21.82	20.14	19.29
7309505	4	UHF Plug	SMA Plug	80K0499	8.74	8.07	7.73

(156277)

BETWEEN SERIES MINI-UHF COAXIAL ADAPTERS

RoHS Compliant Available

BOMAR by WINCHESTER ELECTRONICS

Fig. 1

Fig. 2

Solve a variety of connection problems where connectors of different types ordinarily could not be mated together. Each adapter has a different coupling at each end allowing for a wide variety of interconnections. All adapters are constructed of machined brass and are nickel plated.

Mfg. Part No.	Fig.	Convert From	Convert To	Stock No.	Price Each 1-9	10-24	25-49
6313505	1	Mini UHF Plug	BNC Jack	80K0476	23.20	21.40	20.50
6311505	2	Mini UHF Plug	N Jack	80K0473	21.87	20.18	19.33

(156278)

ADAPTER KITS

RoHS Compliant Available

BOMAR by WINCHESTER ELECTRONICS

Kits are in zippered leather cases and contain enough parts for hundreds of combinations of adapters. Feature machined brass and gold-plated bodies with gold contacts. **Mfg. part no. ADPT1** commercial-grade universal adapter kit containing 30 pieces. **Mfg. part no. ADPT2** broadcast-grade universal adapter kit containing 40 pieces. **Mfg. part no. ADPT3PA** power adapter kit containing 8 pieces. **Mfg. part no. ADPT4RP** antenna universal adapter kit containing 42 pieces.

Mfg. Part No.	Kit Contents	Stock No.	Price Each 1-4
ADPT1	Commercial-Grade Universal Kit — 30-Pcs, 2 Each Plugs & Jacks of BNC, TNC, N, Mini-UHF, UHF, SMA, 6 Universal Adapters	79K5545	243.96
ADPT2	Broadcast-Grade Universal Kit — 40-Pcs, 2 Each Plugs & Jacks BNC, TNC, N, Mini-UHF, UHF, SMA, F, RCA, 8 Universal Adapters	79K5546	412.49
ADPT3PA	Power Adapter Kit — 8-Pcs, 7/16 to N, N to N & 7/16 to 7/16 Adapters	19P8198	409.53
ADPT4RP	Antenna Universal Adapter Kit — 42-Pcs of N, BNC, UHF, TNC, TNC-RT, TNC-RP, SMA, SMA-RP, 8 Universal Adapters, 2 Wrenches	19P8199	412.21

(88002)

CANNON 50-OHM BETWEEN-SERIES AND IN-SERIES ADAPTERS

RoHS Compliant Available

ITT

Meet MIL-C-39012 specifications.

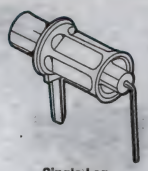
Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-24
BETWEEN-SERIES ADAPTERS				
050-674-6700890	SMA Jack-to-N Plug	90F2548	66.45	59.59
050-675-6705890	N Bulkhead Jack-to-SMA Jack	90F2553	28.37	25.72
IN-SERIES ADAPTERS				
050-674-6324990	SMA Slide-On Plug-to-SMA Jack	95F6353	72.04	64.42

(8721)

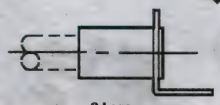
RF COAX – ADAPTERS

CANNON COAXIAL TERMINATORS

ITT



Single Leg



2 Legs

Mfg. Part No.	Description	RG/U	Stock No.	Price Each 1-49	Price Each 50-99
055-939-9019AR6	Single Leg at Front; Single Leg at Rear	178,196	95F6344	1.98	1.74
055-939-9029AR6	Single Leg at Front; Single Leg at Rear	174,179,188	95F6345	3.33	2.97
055-939-9049AR6	2 Legs at Front, Standard	174,179,188,316	95F6347	3.47	3.09
● 055-939-9069AR6	2 Legs at Front, Surface and Vertical Mount	174,179,188,316	95F6349	2.80	2.54

(8722)

50-OHM TYPE N ADAPTERS

RoHS Compliant Available

EMERSON. Network Power

Johnson Connectivity Solutions

Fig. 1

Fig. 2

Fig. 3

- Meet MIL-PRF-39012 performance requirements
- Designs are based on 50Ω system impedance per MIL-STD-348
- Operate at frequencies up to 11GHz min.

Body material: brass. Contact material: beryllium copper. Contact finish: gold.

STRAIGHT

Mfg. Part No.	Fig.	Convert From	Convert To	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99
● 138-4901-807	1	N Jack	N Jack	06M3395	46.01	40.99	33.46
● 138-4901-407	2	N Jack	N Jack	06M3394	52.67	46.92	38.30
● 138-4901-817	3	N Plug	N Plug	06M3396	54.01	48.12	39.28

(169727)

50-OHM BETWEEN-SERIES ADAPTERS

RoHS Compliant Available

EMERSON. Network Power

Johnson Connectivity Solutions

Fig. 1

Fig. 2

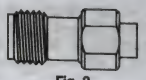


Fig. 3

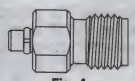


Fig. 4

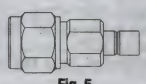


Fig. 5

Fig. 6

Fig. 7

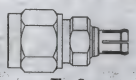


Fig. 8

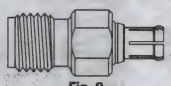


Fig. 9

50Ω adapters feature nickel-plated brass body, brass coupling nut, and gold-plated contact. Working voltage: 500Vrms. Dielectric withstanding voltage: 1500Vrms. Durability: 500 cycles. Operating temperature range: -55°C to +85°C.

Mfg. Part No.	Fig.	Description	Freq. Max (GHz)	VSWR (GHz)	Stock No.	Price Each 1-9
● 134-1019-151	1	SMA Plug-to-MMCX Jack	6	1.05 + 0.05f	83F6800	72.60
● 134-1019-161	2	SMA Plug-to-MMCX Plug	6	1.05 + 0.05f	83F6801	78.65
● 134-1019-171	3	SMA Jack-to-MMCX Jack	6	1.05 + 0.05f	83F6802	66.55
● 134-1019-181	4	SMA Jack-to-MMCX Plug	6	1.05 + 0.05f	83F6803	72.60
● 134-1012-011	5	SMA Plug-to-SMB Jack	4	1.05 + 0.01f	83F6804	69.75
● 134-1012-021	6	SMA Plug-to-SMB Plug	4	1.05 + 0.01f	83F6805	72.60
● 134-1012-041	7	SMA Jack-to-SMB Plug	4	1.05 + 0.01f	83F6807	66.49
● 134-1018-001	...	SMA Plug-to-MCX Jack	6	1.03 + 0.03f	83F6808	66.55
● 134-1018-011	8	SMB Plug-to-MCX Plug	6	1.03 + 0.03f	83F6809	72.60
● 134-1018-021	...	SMA Jack-to-MCX Jack	6	1.03 + 0.03f	83F6810	66.55
● 134-1018-031	9	SMA Jack-to-MCX Plug	6	1.03 + 0.03f	83F6811	70.55
● 142-0901-801	...	SMA Jack-to-SMA Jack	18	1.05 + 0.005f	97F923	20.10
● 142-0901-401	...	SMA Jack-to-SMA Bulkhead Jack	18	1.05 + 0.01f	97F922	28.62
● 142-0901-941	...	SMA Right Angle Jack-to-SMA Plug	18	1.035 + 0.02f	01C1652	26.53
● 142-0901-811	...	SMA Plug-to-SMA Plug	18	1.05 + 0.01f	94F9933	22.89
● 142-0901-821	...	SMA Plug-to-SMA Jack	18	1.05 + 0.005f	08B930	20.88

(33011)

50-OHM RF ADAPTER KIT

RoHS Compliant Available

EMERSON. Network Power

Johnson Connectivity Solutions

Kit Includes:
- A variety of interfaces (SMA, N, BNC)
- 72 adapters (in series, between series)

KIT CONTENTS

Mfg. Part No.	Description	Qty.	Mfg. Part No.	Description	Qty.
142-0901-401	SMA Jack to Bkhd. Jack, Gold Pl.	4	CP-AD515	BNC Plug to RCA Jack	3
142-0901-801	SMA Jack to Jack, Gold Pl.	2	CP-AD555	BNC Jack to Jack	3
142-0901-811	SMA Plug to Plug, Gold Pl.	4	CPA-AD556M	BNC Jack to Bkhd. Jack	2
142-0901-821	SMA Plug to Jack, Gold Pl.	4	CP-AD582	SMA Plug to BNC Plug	3
142-0901-921	RA SMA Jack to Jack, Gold Pl.	2	CP-AD583	SMA Jack to BNC Plug	3
142-0901-931	RA SMA Plug to Plug, Gold Pl.	2	CP-AD800	N Plug to Plug	2
142-0901-941	RA SMA Plug to Jack, Gold Pl.	4	CP-AD356	TNC Jack to Bkhd. Jack	3
142-0901-861	SMA Dummy Load Plug, Gold Pl.	2	CP-AD809	N Plug to BNC Jack	2
CP-AD503	BNC RA BNC Plug to Jack	2	CP-AD810	N Plug to SMA Jack	2
CP-AD505	BNC Jack to Plug to Jack (T)	2	CP-AD817	N Plug to SMA Plug	2
CP-AD506	BNC Jack to Jack to Jack (T)	2	CP-AD818	N Jack to SMA Plug	2
CP-AD507	SMA Jack to BNC Jack	3	CP-AD819	N Jack to SMA Jack	2
CP-AD508	SMA Plug to BNC Jack	3	CP-AD850	N Jack to Jack	2
CP-AD511	BNC Plug to Plug	3	CP-AD851	N Jack to Bkhd. Jack	2

Mfg. Part No.	Description	Stock No.	Price Each Each
● 142-0000-005	50-Ohm RF Adapter Kit	94H8219	476.03

(78141)

RF COAXIAL WITHIN-SERIES ADAPTERS

RoHS Compliant Available

KINGS by WINCHESTER ELECTRONICS

2029-17-9QD

1209-13

1709-12M06

Mfg. Part No.	Description	Mil. No. 39012	Stock No.	Price Each 1-499
● 2029-17-9 QD	BNC Bulkhead Jack-to-Jack, Isolated Ground	...	99K5547	8.05
● UG-492D/U	BNC Hermetically-Sealed	...	44F8515	67.28
● 1209-9	N Plug-to-N Plug	05-00057	50F1451	27.37
● 1209-12	N Bulkhead, Jack-to-Jack, Hermetically-Sealed	04-00030	50F1452	71.44
● 1209-13	N Jack-to-Jack	07-00029	50F1453	20.17
● 1209-19	N Bulkhead, Hermetically-Sealed	04-0001	17B5429	55.07
● UG-27C/U	N Plug-to-Jack	...	44F8439	60.30
● 1709-1	SHV Bulkhead, Plug-to-Plug	...	93F6329	32.75
● KA91-02	TNC Bulkhead, Jack-to-Jack, Hermetically-Sealed, Silver-Plated Contact	...	88F4416	49.37

(8858)

50-OHM BNC COAXIAL ADAPTERS

RoHS Compliant Available

Pomona®

6700

6701

Mfg. Part No.	Body Style	Convert From	Convert To	Stock No.	Price Each
3283	Straight	BNC Jack	BNC Jack	63W2730	5.50
● 3533	Straight	BNC Plug	BNC Plug	30F1414	3.75
● 4119-50	Straight	BNC Plug	BNC Jack	35F1017	42.60
● 3286	Straight	BNC Jack	UHF Plug	39F3635	13.95
● 3287	Straight	UHF Jack	BNC Plug	39F3630	11.95
● 3846	Straight			39F3631	9.50
● 3844	Straight	BNC Jack	TNC Plug	50F1474	18.60
● 3847	Straight	BNC Jack	BNC Jack	89F363	23.10
● 6700	Straight	BNC Plug	BNC Jack / Jack	61H3182	19.95
● 3534	Right Angle	BNC Jack	BNC Plug	39F3629	10.50
● 6701	Right Angle	BNC Plug	BNC Jack / Jack	61H3183	20.85
● 3284	Tee	BNC Jack	BNC Jack / Jack	30F1409	16.20

CONTINUED

50-OHM BNC COAXIAL ADAPTERS (CONT.)

Mfg. Part No.	Body Style	Convert From	Convert To	Stock No.	Price Each
3285	Tee	BNC Plug	BNC Jack / Jack	30F1402	7.30
4896	Tee	BNC Jack	BNC Jack / Plug	46F2208	15.75

(164461)

75-OHM BNC VIDEO BROADCAST ADAPTERS

RoHS Compliant Available

Pomona®

6738 6739 6754 6705

Pomona BNC connectors are precision machined with tarnish resistant nickel plating and designed to 75Ω for your broadcast applications.

6740 6744

Mfg. Part No.	Description	Convert From	Convert To	Stock No.	Price Each
6738	Tee Adapter	BNC Jack	BNC Jack / Jack	02J8340	4.35
6739	Tee Adapter	BNC Plug	BNC Jack / Jack	02J8341	4.35
6754	Tee Adapter	BNC Plug	BNC Jack / Jack	02J8351	4.45
6740	Straight Adapter	BNC Plug	BNC Plug	02J8342	2.50
6737	Straight Adapter	BNC Jack	BNC Jack	02J8339	3.05
6744*	Straight Adapter	BNC Jack	BNC Jack	02J8344	3.70
4119-75	Feed-Thru Terminator	BNC Jack	BNC Plug	46F2212	68.50
6705	Isolated Adapter	BNC Jack	BNC Jack	61H3187	16.95

*Hermetically sealed
(164479)

50-OHM SMA RF ADAPTERS

RoHS Compliant Available

Pomona®

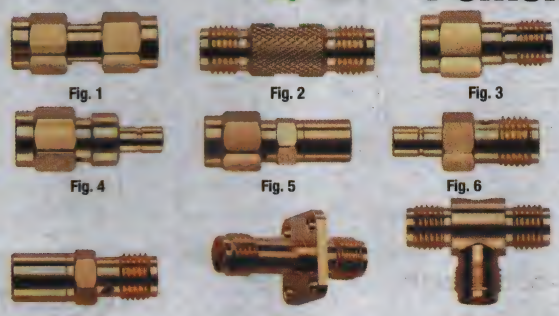


Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6 Fig. 7 Fig. 8 Fig. 9

Fig. 10

- Bandwidth up to 18 GHz
- Meets MIL-C-39012, IEC 169-15, CECC 22110
- Gold-plated brass contacts (plugs)
- Gold-plated beryllium copper contacts (jacks)

Mfg. Part No.	Fig.	Body Style	Convert From	Convert To	Stock No.	Price Each
72964	1	Straight	SMA Plug	SMA Plug	77M7289	7.95
72974	1	Straight	SMA Jack	SMA Plug	77M7298	8.30
72966	2	Straight	SMA Jack	SMA Jack	77M7291	8.95
72967	3	Straight	SMA Jack	SMA RP Jack	77M7292	14.40
72976	4	Straight	SMA Plug	SMB Plug	77M7299	8.60
72977	5	Straight	SMA Plug	SMB Jack	77M7300	8.50
72978	6	Straight	SMA Jack	SMB Plug	77M7301	11.25
72979	7	Straight	SMA Jack	SMB Jack	77M7302	11.25
72973	8	Straight Flanged	SMA Jack	SMA Jack	77M7297	14.40
72968	9	Tee	SMA Jack	SMA Jack / Jack	77M7293	14.40
72969	10	Tee	SMA Jack	SMA Jack / Plug	77M7294	13.80

(164655)

SMA ADAPTERS

RoHS Compliant Available

Pomona®

4296

Pomona SMA adapters are compact and durable, offering excellent electrical performance between DC to 18 GHz.

Mfg. Part No.	Body Style	Convert From	Convert To	Stock No.	Price Each
4282	Right Angle	SMA Plug	SMA Jack	46F2214	12.75
4284	Straight	SMA Jack	SMA Jack	46F2213	10.95
4285	Straight	SMA Jack	SMA Jack	90F2942	18.90
4288	Straight	SMA Plug	BNC Plug	35F1009	12.30
4289	Straight	SMA Jack	BNC Plug	35F1016	10.20
4290	Straight	SMA Plug	BNC Jack	46F2210	10.20
4291	Straight	SMA Jack	BNC Jack	89F365	9.70
4292	Straight	SMA Plug	TNC Plug	98F2925	12.30
4293	Straight	SMA Jack	TNC Plug	77B2516	24.75
4294	Straight	SMA Plug	TNC Jack	94F1533	11.25
4295	Straight	SMA Jack	TNC Jack	70B9318	24.45
4296	Straight	SMA Plug	N Plug	89F366	17.85
4297	Straight	SMA Jack	N Plug	89F367	20.55
4298	Straight	SMA Plug	N Jack	89F368	20.85
4299	Straight	SMA Jack	N Jack	89F369	20.85

(164262)

50-OHM N COAXIAL ADAPTERS

RoHS Compliant Available

Pomona®

4956 73046 73045

Mfg. Part No.	Body Style	Convert From	Convert To	Stock No.	Price Each
3288	Straight	BNC Jack	N Plug	39F3632	12.60
3841	Straight	N Jack	N Jack	44F5332	14.40
3842	Straight	N Plug	N Plug	50F1475	15.15
3535	Straight	BNC Plug	N Plug	89F364	16.20
4956	Straight	N Jack	N Jack	46F2209	30.90
73046	Straight	N Jack	TNC Plug	08R6351	12.60
73047	Straight	N Jack	UHF Plug	08R6352	36.15
73045	Straight Bulkhead	N Jack	N Jack	08R6350	12.00
3843	Right Angle	N Plug	N Jack	77B2419	33.45

(164269)

ADAPTER AND ATTENUATOR KITS

RoHS Compliant Available

Pomona®

Two versatile adapter kits that include all the connections and terminals you will need. **Mfg. part no. 5510** BNC/banana/binding post adapter kit contains one of each: BNC female-to-stacking double banana plug, BNC male-to-stacking double banana plug, BNC male-to-stackable binding posts, BNC female-to-stackable binding posts, BNC female-to-female, BNC male-to-male, and a lightweight foam padded case. **Mfg. part no. 5513** BNC attenuator kit contains five BNC 50Ω attenuators, one each: 3dB, 6dB, 10dB, 14dB and 20dB all packaged in a lightweight foam padded case.

5510

Mfg. Part No.	Description	Stock No.	Price Each
5510	BNC/Banana/Binding Post Adapter Kit	90F2330	62.25
5513	BNC Attenuator Kit	90F2366	373.00

(8932)

RF COAX – ADAPTERS

UNIVERSAL ADAPTER KITS

RoHS Compliant Available

Pomona®

5698

5748

Mfg. part no.5698 kit allows users to make their own adapters combinations, such as SMA to BNC or BNC to double banana plugs. Adapter's ends are joined with coupling nuts. Simply choose your combination. All connectors feature gold plated center contacts and silver plated bodies. Contains 2 each: BNC male, BNC female, TNC male, TNC female, SMA male, SMA female, N male, N female; 4 intermediate couplers, 1 double banana plug, 1 double banana jack. **Mfg. part no. 5748** maxi kit contains 2 each: BNC male, BNC female, TNC male, TNC female, SMA male, SMA female, N male, N female, UHF male, UHF female, mini UHF male, mini UHF female, F male, F female, RCA male, RCA female; 6 intermediate couplers, 1 double banana plug, 1 double banana jack, 1 sampler.

Mfg. Part No.	Description	Stock No.	Price Each
● 5698	Maxi Universal Coaxial RF Connector Adapter Kit, 41-piece	50F841	217.00
● 5748	Universal Coaxial RF Connector Adapter Kit, 22-piece	50F1552	354.00

(8931)

MULTI-RF DIRECT ADAPTER KIT

Pomona®

Consolidated kit includes most frequently used Multi-RF adapters. Precision-machined brass with nickel plating Gold-plated center contacts.

KIT CONTENTS

Mfg. Part No.	Description	Mfg. Part No.	Description
3535	BNC (M) to Type N (F)	4295	SMA (F) to TNC (F)
3288	BNC (F) to Type N (M)	4296	SMA (M) to Type N (F)
3844	TNC (M) to BNC (F)	3283	BNC (F to F)
4288	SMA (M) to BNC (M)	3533	BNC (M to M)
4290	SMA (M) to BNC (F)	3285	BNC (F/M/F) Tee
4289	SMA (F) to BNC (M)	3284	BNC (F/F/F) Tee
4291	SMA (F) to BNC (F)	4940	TNC (F to F)
4298	SMA (M) to Type N (F)	3841	Type N (F to F)
4297	SMA (F) to Type N (M)	3842	Type N (M to M)
4299	SMA (F) to Type N (F)	4282	SMA Right Angle (M to F)
4292	SMA (M) to TNC (M)	4283	SMA (M to M)
4294	SMA (M) to TNC (F)	4284	SMA (F to F)
4293	SMA (F) to TNC (M)	4286	SMA Termination, 50-ohm (M)

Mfg. Part No.	Description	Stock No.	Price Each
72934	SMA Adapter Kit	74K0091	443.00

(88704)

INTRA-SERIES COAXIAL ADAPTERS

RoHS Compliant Available

multicomp

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6

Fig. 7

Fig. 8

Fig. 9

Fig. 10

Fig. 11

Fig. 12

➤CONTINUED➤

INTRA-SERIES COAXIAL ADAPTERS (CONT.)

Fig. 13

Fig. 14

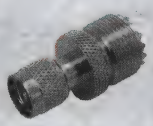


Fig. 15

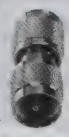


Fig. 16

Fig. 17

Fig. 18

Fig. 20

Fig. 21

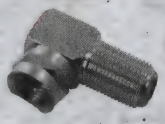


Fig. 22

Fig. 23

Fig. 24

Fig. 25

Mfg. Part No.	Fig.	Body Style	Convert From	Convert To	Length	Stock No.	Price Each 1-24
● SPC20105	1	Straight	BNC Plug	BNC Plug	2.000″	82K9785	7.34
● SPC15328	1	Straight	BNC Plug	BNC Plug	1.285″	79K4920	4.32
● SPC20106	2	Straight	BNC Jack	BNC Jack	1.250″	82K9786	5.11
● SPC15414	2	Straight	BNC Jack	BNC Jack	1.250″	79K4996	5.77
● SPC15405	3	Tee	BNC Plug	BNC Jack / Jack	1.500″	79K4987	4.73
● 1577	4	Right Angle	BNC Plug	BNC Jack	0.945″	92N3401	9.34
● SPC4231	5	Tee	BNC Jack	BNC Jack / Jack	1.276″	84N1561	7.02
● SPC20104	6	Straight	BNC Jack	BNC Jack	1.281″	82K9784	9.50
● SPC15303	7	Straight	N Plug	N Plug	1.563″	79K4897	13.70
● SPC15331	8	Straight	N Jack	N Jack	1.750″	79K4923	12.75
● SPC4259	9	Tee	TNC Plug	TNC Jack / Jack	1.280″	84N1248	19.57
● SPC4269	10	Straight	UHF Jack	UHF Jack	1.105″	84N1258	15.94
● SPC4270	11	Straight	UHF Plug	UHF Plug	1.315″	84N1259	15.72
● SPC4352	12	Tee	UHF Jack	UHF Jack / Jack	1.584″	84N1276	27.59
● SPC15142	13	Tee	UHF Plug	UHF Jack / Jack	1.625″	79K4755	13.58
● SPC15227	14	Right Angle	UHF Plug	UHF Jack	1.125″	79K4826	12.82
● 1509	15	Straight	UHF Plug	UHF Jack	1.260″	92N3355	19.31
● SPC4348	16	Straight	UHF Plug	UHF Plug	0.990″	84N1272	19.57
● SPC4271	17	Straight	Mini UHF Jack	Mini UHF Jack	1.117″	84N1260	15.64
● 1592	18	Straight	F Jack	F Plug	...	92N3416	10.42
● SPC15365	20	Straight	F Jack	F Jack	0.938″	79K4951	2.92
● SPC15253	21	Straight	F Jack	F Jack	1.063″	79K4850	2.62
● SPC15465	22	Right Angle	F Plug	F Jack	1.125″	79K5039	4.09
● SPC15393	23	Straight	F Plug	F Plug	0.750″	79K4976	3.60
● SPC15167	24	Tee	F Jack	F Jack / Jack	1.638″	79K4771	3.58
● SPC15147	25	Straight	UHF Jack	UHF Jack	...	79K4758	4.75

(8813)

INTER-SERIES ADAPTERS

RoHS Compliant Available

multicomp

Fig. 1

Fig. 2

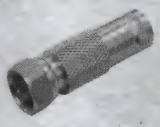


Fig. 3

Fig. 4

Fig. 5

Fig. 6

Fig. 7

Fig. 8

Fig. 9

Fig. 10

Fig. 11

Fig. 12

Mfg. Part No.	Fig.	Body Style	Convert From	Convert To	Length	Stock No.	Price Each 1-24
● SPC20107	1	Straight	BNC Plug	UHF Jack	2.000″	82K9787	5.90
● SPC20108	2	Straight	BNC Plug	F Jack	1.031″	82K9788	13.55

➤CONTINUED➤

INTER-SERIES ADAPTERS (CONT.)

Mfg. Part No.	Fig.	Body Style	Convert From	Convert To	Length	Stock No.	Price Each 1-24
SPC15419	3	Straight	BNC Jack	F Plug	1.375″	79K5000	4.77
SPC15264	4	Straight	BNC Jack	N Jack	0.750″	79K4861	12.59
SPC15334	5	Straight	UHF Jack	N Plug	1.375″	79K4926	12.76
SPC4268	6	Straight	N Plug	BNC Jack	...	84N1257	23.57
SPC15304	7	Straight	N Jack	UHF Plug	1.406″	79K4898	13.27
SPC4349	8	Straight	UHF Jack	BNC Plug	1.217″	84N1273	19.15
1510	8	Straight	UHF Plug	TNC Jack	1.181″	92N3356	15.21
1508	9	Straight	UHF Plug	N Jack	1.181″	92N3354	18.79
SPC4263	10	Straight	TNC Jack	N Jack	1.283″	84N1252	17.77
1542	11	Straight	TNC Jack	N Plug	1.250″	92N3388	21.45
1543	12	Straight	TNC Plug	N Jack	1.300″	92N3389	21.33

(176082)

CAPS AND TERMINATORS

RoHS Compliant Available

multicomp

Fig. 1

Fig. 2

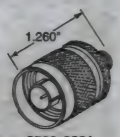
Mfg. Part No.	Fig.	Body Style	Impedance (Ω)	Stock No.	Price Each 1-99
SPC15385	1	Straight Cap w/ Chain	...	79K4968	5.24
SPC15280	2	Straight Terminator	50	79K4877	7.17
MCCX1002	2	Straight Terminator	75	66W7737	3.18
SPC15277	2	Straight Terminator	75	79K4874	5.67

(176189)

50-OHM SMA ADAPTERS

RoHS Compliant Available

multicomp



8589-0861

8589-0858

8589-0860

Mfg. Part No.	Body Style	Convert From	Convert To	Body Plating	Stock No.	Price Each 1-49
INTRA-SERIES						
8589-0848	Straight	SMA Plug	SMA Plug	Nickel	16N2730	17.47
8589-0849	Straight	SMA Plug	SMA Plug	Gold	16N2731	20.26
SPC20111	Straight	SMA Jack	SMA Jack	Nickel	82K9791	11.96
8589-0851	Straight	SMA Plug	SMA Jack	Nickel	16N2733	16.95
8589-0852	Straight	SMA Plug	SMA Jack	Gold	16N2734	25.39
8589-0853	Straight Bulkhead	SMA Jack	SMA Jack	Gold	16N2735	27.71
8589-0846	Right Angle	SMA Jack	SMA Plug	Nickel	16N2728	23.96
8589-0847	Right Angle	SMA Jack	SMA Plug	Gold	16N2729	31.52
INTER-SERIES						
8589-0867	Straight	SMA Plug	N Jack	Nickel	16N2749	21.38
8589-0855	Straight	SMA Plug	BNC Plug	Nickel	16N2737	24.01
SPC20112	Straight	SMA Plug	BNC Jack	Nickel	82K9792	19.52
8589-0858	Straight	SMA Jack	BNC Plug	Nickel	16N2740	19.38
8589-0859	Straight	SMA Jack	BNC Plug	Gold	16N2741	34.74
8589-0860	Straight	SMA Jack	N Jack	Nickel	16N2742	22.46
8589-0861	Straight	SMA Jack	N Plug	Nickel	16N2743	29.10

(164268)

F-TO-BNC BETWEEN-SERIES ADAPTER

- 100% Reliability and Performance
- True 75Ω Design
- Return Loss Attributes
- Industry-Standard Strip Dimensions

EMERSON. Network Power

Trompeter Connectivity Solutions

Mfg. part no. AD1300 F-to-BNC adapter for upgrading a low-performance F connection to a high-frequency BNC connection. Delivers carrier class performance from cable appliances. Ideal for HDTV set-top boxes, cable modems, direct-to-home satellite receivers, DVD players, VoIP telephone and other consumer appliances where signal degradation can affect performance.

➤CONTINUED➤

F-TO-BNC BETWEEN-SERIES ADAPTER (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each 1-9
AD1300	F-to-BNC Between-Series Adapter	06H1718	24.28
UADRMF220	Right-Angle BNC Male-to-Female Adapter	96B2675	19.17

(73841)

RF TWINAX/TRIAX ADAPTERS

EMERSON. Network Power

Trompeter Connectivity Solutions

70 series twinaxial/triaxial connectors are concentrically designed with 2 concentric contacts isolated from each other, the center contact, and the shielding connection. They are used in digital data bus, MIL-STD-1553B (airborne/ground, primary/redundant) base-band circuits, and video pair applications (FLIR). Connectors do not require mechanical alignment for mating. Nominal impedance non-constant. Frequency range: 0-500MHz. Voltage rating: 400V (100V @ 70,000). Insulation resistance: 5000MΩ. Temperature range: -65° to +165°C.

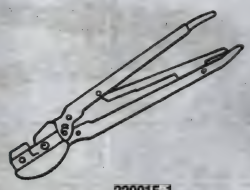
Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
ADBJ20-E1-PL75	Female BNC to Male TNC	51B1333	50.09	48.36
ADBJ20-E1-BJ79	70 Series U/BJ20/ 40	90B5852	67.05	64.73
ADBJ20-E2-PL75	Female BNC/TNC to Male	97B4161	61.37	59.26
BN73	TEE Adapter 3-Lug	91B3440	105.36	101.72

(176056)

AMP RF CONNECTOR TERMINATION TOOLS

TE connectivity

Authorized Distributor



220015-1

58433-2

Mfg. Part No.	Description	Stock No.	Price 1-4
PRO-CRIMPER™ II HAND TOOLS			
58433-1	PRO CRIMPER™ II Hand Tool Assembly with Die Set for Dual-Crimp BNC/TNC, 58, 62, 59 RG/U. (Die-set interchangeable with other die sets, *ordered separately below.*)	97F8524	303.67
58433-2	PRO-CRIMPER™ II Hand Tool Assembly with Die Set for Hex-Crimp BNC/TNC, 58, 62, 59 RG/U. (Die-set interchangeable with other die sets, *ordered separately below.*)	50F1983	258.31
354940-1	PRO-CRIMPER™ II Interchangeable Die Tool Frame (Frame/Handle only; *order die sets separately below*)	96F6512	89.48
DIE SETS FOR Mfg. Part No. 354940-1 PRO-CRIMPER™ II TOOL FRAME (ABOVE)			
58425-1	Die Set for Hex-Crimp 75-Ohm BNC, 62, 59, RG/U	97F8525	443.26
58425-2	Die Set for Hex-Crimp 75-Ohm BNC, 179, 161, 187 RG/U	97F8526	255.44
58436-3	Die Set for Hex-Crimp 50-Ohm BNC/TNC, 174, 179, 180, 195 RG/U	97F8529	155.23
CERTI-CRIMP® HAND TOOLS			
91904-4	For Single-Crimp 50-Ohm BNC, 58, 141, 303 RG/U	67C1663	564.33
1424050-1	For Mil Type Dual-Crimp 50-Ohm BNC, 174, 316, 188, 179, 187 RG/U	67C1648	473.55
220015-1	For Mil Type Dual-Crimp 50-Ohm BNC/TNC/N, 8, 213, 11, 9, 214 RG/U	87F4025	5382.72

(8341)

CRIMP TOOLS WITH DIE-SET

RoHS Compliant Available

Amphenol Connex

47 series coax crimp tools utilize industry-standard crimp die-set dimensions. Die-sets will terminate all popular coaxial cable. Full ratchet crimp action provides a complete crimp before tool releases.

Mfg. Part No.	Description	Hex Crimp Dim. (In.)	Cable Types	Stock No.	Price Each
47-10070	Crimp Tool with Die-Set	0.068, 0.213, 0.255	55, 58, 59, 62, 141, 142, 233, 303, 400, 8X LMR195, 200, 240	67H5860	92.90
47-10150	Crimp Tool with Die-Set	0.068, 0.128, 0.178	174, 188, 316, 179, 187, 180, 195, 178, 196, LMR100	99H7396	92.81

(119514)

RF COAX – APPLICATION TOOLS

ECONOHEX™ CRIMP TOOL AND DIES

Amphenol® RF

Econohex™ Crimp Tool

Die

Mfg. Part No.	Description	Stock No.	Price Each 1-4
227-987	Econohex™ CrimpTool Handle (Without Dies)	90F1652	145.33

DIES FOR ECONOHEX™ CRIMP TOOL

Mfg. Part No.	RG/U	Connector Series	Stock No.	Price Each 1-4
227-1419	55, 58, 59, 62, 140, 141, 142, 142B, 210, 223, 302, 303, 400, Belden 9258, Brand Rex, MG-8X Amphenol 621-6003	Mini-UHF, UHF, BNC, TNC, MHV, SMA	90F1649	106.20
227-1418	122, 161, 174, 179, 180, 187, 188, 195, 316, Amphenol 21-597	BNC, TNC, SMA, Mini-UHF	90F1650	94.77

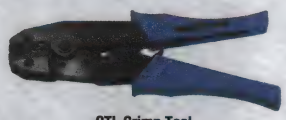
(8261)

CTL SERIES HEX CRIMP TOOLS

RoHS Compliant Available

Amphenol® RF

Commercial crimp tools come complete with tool handle and die set. Allows termination of most popular RG coaxial cables as well as Twinax cable for IBM system 3X/400 networks.



CTL Crimp Tool

Mfg. Part No.	Coaxial Type	Hex Sizes	RG/U	Stock No.	Price Each 1-4
● CTL-1	BNC, TNC	0.068″, 0.213″, 0.255″	RG-55, 58, 59, 62, 140, 141, 142, 210, 223, 303, 400, Plenum 59, 62, Belden 9258, 9259, 9907, 89907	93F1552	69.43
● CTL-2	BNC, TNC	0.178″, 0.324″, 0.068″	RG-6, 174, 179, 187, 188, 316 Plenum 58, Belden 8281	93F1383	69.43
● CTL-3	N	0.100″, 0.429″, 0.213″	RG-8, 11, 55, 58, 141, 142, 149, 213, 214, 223, 225, 303, 393, 400, Ethernet cables	93F1384	69.43
● CTL-5	BNC, TNC, Mini-UHF, N	0.052″, 0.068″, 0.100″, 0.213″, 0.255″	RG-55, 58, 59, 62, 140, 141, 142 210, 223, 303, 400, Plenum 59, 62 Belden 9258, 9259, 9907, 89907	93F7589	71.45
● CTL-6	BNC, TNC	0.052″ Sq., 0.178″, 0.255″, 0.068″	ATT 734A, ATT 735A	93F7590	111.58
● CTL-9	SMA	0.068″, 0.128″, 0.178″	RG-180, 316	91F5098	139.42
● CTL-13	Micromate, SMA, SMB	0.105″, 0.128″, 0151″	RG-174, 178, 188, 196, 316, RD-316	91F5099	173.26
CTL-15	75-Ohm Crimp Plugs	0.042″ Sq., 0.178″, ″0.187″	Belden 734A, 735A, 8218	82C1276	321.32

(8210)

TWINHEX CRIMP TOOL SYSTEM

RoHS Compliant Available

Amphenol® RF

TwinHex Crimp Tool

Dies

Mfg. Part No.	Mil. No.†	Description	Stock No.	Price Each 1-4
● 227-944	/5-01	Tool Frame Only -- For All **227-1221-xx** Die Sets; *Order Separately Below*	57F3110	725.95

DIES FOR TWINHEX CRIMP TOOL SYSTEM

Mfg. Part No.	Mil. No.†	RG/U	For Connector Series	Stock No.	Price Each 1-4
227-1221-3	/5-03	174, 179, 187, 188, 316	BNC, SMA	51F3791	230.68
227-1221-11	/5-11	55, 58, 141, 223, 303, 400	BNC, TNC/MHV, UHF, SMA	57F3111	223.80

➤CONTINUED➤

TWINHEX CRIMP TOOL SYSTEM (CONT.)

Mfg. Part No.	Mil. No.†	RG/U	For Connector Series	Stock No.	Price Each 1-4
227-1221-13	/5-13	59, 62, 71, 140, 210, 302	BNC, TNC/UHF, SMA	57F3112	223.81
227-1221-25	...	8, 9, 11, 87A, 149,165, 213, 214, 216, 225, 393	APC-N, -7, -7S/N, SC	61F1728	213.79

†Tool Military Specification M22520

(8260)

COAX CRIMP TOOL KIT

DURATOOL

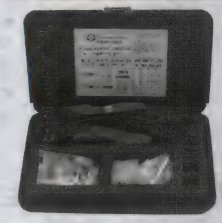
Kit includes 1 rugged interchangeable die tool frame with 2 mounting screws for easy die set change over and the following 4 interlocking die sets: **CTD-8565-02** which crimps the center pin to 0.042″ square or 0.068″ hex and ferrule on small cable to 0.128″, 0.151″, or 0.178″ hex; **CTD-8566-02** die which crimps the center pin to 0.042″ square or 0.068″ hex, RG-58 ferrule to 0.213″ hex and RG-59 ferrule to 0.255″ hex; **CTD-8567-02** die which crimps the center pin to 0.042″ square or 0.068″ hex, RG-59 ferrule to 0.255″ hex and 8281 ferrule to 0.324″ hex; and **CTD-8569-02** die which crimps the center pin to 0.068″, 0.080″, or 0.100″ hex and RG-8 ferrule to 0.429″ hex. Plus a cable stripper to provide 2- and 3-level stripping on RG-58, -59, and -62 coaxial cable and a sturdy storage case. Ideal for R&D facilities.

Mfg. Part No.	Stock No.	Price Each 1-4
CSK-8550	90N3319	424.51

(8740)

COAX CRIMP TOOL KIT

DURATOOL



8455-0663 coax kit features full-cycle mechanism which allows terminations to conform to industry standards. Die sets interlock to align crimp cavities and are easily interchanged with 2 mounting screws. Kit includes crimp tool frame, RG-58 and RG-59 die set, RG-58 and RG-59 die set with mini-center contact crimp, 3-level stripping tool, 10 RG-58 BNC connectors, 100 RG-59 BNC connectors, and a foam insert in a durable plastic case.

Mfr. Part No.	Description	Stock No.	Price Each 1-4
8455-0663	Coax Crimp Kit	16N1882	453.75

(18636)

COAXIAL CRIMP INSTALLATION TOOLS

RoHS Compliant Available

EMERSON Network Power

Trompeter Connectivity Solutions

CD3-21, CT4L

010-0055

RT1L

Mfg. part no. CT5 crimp tool frame accepts **CD3-21** crimp die set for hex sizes 0.255″ and 0.290″; *ordered separately below.* **010-0055** 8-point crimp tool for 75-ohm BNC and TNC plugs with center contact pin. **RT1L** 12″ long BNC and TNC cable plug removal tool.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● CT5	Crimp Tool (Frame Only)	54T7829	115.67
● CJ70C-201	Crimp Tool Jack 3-Lug	06C1997	43.54
● CD3-19	Crimp Die For 75-Ohm, Telco Grade 734 and 735 Cable	96B0918	73.10
● CD3-21	Die Set Hex-Crimp 75-Ohm BNC	95B1826	70.29
010-0055	8-Pt. BNC Plug Center Contact Crimp Tool	95B3620	195.57
010-0098	12-Pt. BNC Plug Center Contact Crimp Tool	98B8746	115.03
RT1L	BNC/TNC Removal Tool	93B6470	35.34
010-0044	Miniature Twinax Positioner	06C4699	226.49
ST1/STC-F	Hand Stripping Tool with Cassette Blades	06C4069	88.77

(49390)

3M™ CRIMPLOK™ CONNECTORS

RoHS Compliant Available

3M

6900 SC Connector — 6901 ST® Connector

Crimplok™ multimode connectors combine the speed of nonadhesive connectors with the performance characteristics of epoxy and hot melt connectors. Designed for indoor use, especially in LANs and premise applications. For direct termination on 250µm coated fiber, 900µm unjacketed, and 2.5 and 3.0mm jacketed cables. Fiber size: 125µm.

Mfg. Part No.	Style	Stock No.	Price Each 1-9
6900	SC MM	16F3622	9.27
6901	ST MM	16F3623	9.37

(9403)

3M™ HOT MELT AND EPOXY FIBER-OPTIC CONNECTORS

RoHS Compliant Available

3M

Compatible with the industry standard SC products and other ST® connector products. Hot-melt, fast-curing adhesive and epoxy styles have zirconia ceramic ferrules and nickel-plated zinc housings. Boots are constructed of nonflammable Estane®. Operating temperature: –40°C to +85°C. *Order couplings separately; go online or call.*

Mfg. Part No.	Style	Fiber Size	Stock No.	Price Each 1-9
ST® CONNECTORS				
6100-W	MM HM	125µm	84F1175	9.30
6100-B	MM HM	125µm	83F8365	9.26
6105-B	MM HM	125µm	50F379	3.69
8106	SM	126µm	50F373	5.18
ST COUPLINGS				
6112	MM	125µm	83F3530	4.81
6113 COUPLING	MM	125µm	83F9133	4.50
8119	SM	126µm	06H1983	4.39
SC CONNECTORS				
6300-W	MM HM	125µm	92F1456	9.38
8300	SM HM	126µm	83F8368	13.37

(9234)

LC2+ METAL FIBER OPTIC CONNECTORS

RoHS Compliant Available

molex

- Housing: Metal
- Latch: Metal
- Ferrule: Zirconia Ceramic
- Durability: Minimum 200 mate/demate cycles
- Operating Temperature: -50°C to +150°C

Molex offers the industry's only metal-housing LC2+ connectors, the ideal high-performance, discrete-fiber solution for use in severe operating environments in industrial, telecom, military and medical applications. LC2+ connectors are the next-generation solution to the highly popular LC connector interface and meet all FOCIS 10 specifications.

Mfg. Part No.	Description	Color	Cable Type	Cable	Stock No.	Price Each 1-9	Price Each 10-99
106397-1604	Straight	Blue	Singlemode	Simplex 2.0	79R2217	42.33	40.81
106397-3010	Straight	White	Multimode	Simplex 2.0	77T2670	38.83	37.45
106397-1664	90°	Blue	Singlemode	Simplex 2.0	77T2666	44.87	43.26
106397-1862	90°	White	Multimode	Simplex 2.0	77T2667	38.83	36.99
106397-2202	Straight	Blue	Singlemode	Bare	77T2668	42.33	40.81
106397-2402	Straight	White	Multimode	Bare	77T2669	38.83	36.99

(202117)

AMP FIBER-OPTIC POLISHING FILM AND SCRIBE TOOL

TE connectivity

Authorized Distributor

Mfg. part no. 228433 8½ x 11″ sheets of polishing film to polish up to 100 connectors. *Order sapphire-tip scribe tool separately below.*

Mfg. Part No.	Description	Stock No.	Price Each Each
228433-7	1µm Polishing Film for FC Connectors	73K3028	2.02
228433-5	0.3µm Polishing Film for ST, SC Connectors	74K3128	2.05
504064-1	Sapphire-Tip Scribe Tool	66F7009	69.41

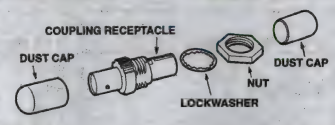
(9381)

AMP ST®-STYLE COUPLING RECEPTACLES

RoHS Compliant Available

TE connectivity

Authorized Distributor



Joins two ST®-style connectors in free-hanging or panel mount applications. Used for singlemode and multimode applications. Includes lockwasher, nut, two dust caps.

Mfg. Part No.	Alignment Sleeve	Application Mode	Stock No.	Price Each 1-9
501381-1	Polymer	Multi	50F3049	2.79
504021-1	Metal	Single/Multi	95F2097	2.78
502750-1	Ceramic	Single/Multi	66F6966	6.57

(9422)

AMP MULTIMODE ST®-STYLE CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Epoxy-type, multimode ST®-style connectors in choice of stainless steel, ceramic or polymer ferrule. Single crimp termination for cable up to 3mm diameter. Keyed bayonet allows quick connect/disconnect. Ceramic and polymer with connector have polymer body and coupling nut with short black boot. Stainless steel with connector has aluminum body, die-cast coupling nut and long black boot. Ceramic with connector has nickel brass body, die-cast coupling nut and bend-limiting black boot. All feature 125µm fiber size.

Mfg. Part No.	Ferrule	Body	Stock No.	Price Each 1-9	10-49	50-99	100-249
5504008-3	Stainless Steel	Stainless Steel	87K6913	12.10	11.00	9.91	9.36
5501380-1	Ceramic	Brass	87K0894	6.67	6.40	5.61	5.33
503571-1	Ceramic	Polymer	66F6963	3.95	3.79	3.32	3.16

(9420)

AMP LIGHTCRIMP PLUS ST-STYLE CONNECTOR KIT

RoHS Compliant Available

TE connectivity

Authorized Distributor

LightCrimp® Plus ST®-style 62.5/12µm multimode connector kit comes with accessories needed to terminate to 250µm coated fiber, 900µm tight, semi-tight buffered fiber or easy strip fiber, and 2-3mm jacketed cable. No epoxy, no polishing — connections take under a minute, making fiber-optic termination easy. Aluminum alloy housing, ceramic ferrule, beige polyolefin elastomer boot, black LDPE protective cover, and black vinyl protective cap.

Mfg. Part No.	Description	Fiber Type	Stock No.	Price Each
5492642-2	LightCrimp® Plus ST®-Style Connector Kit	62.5/125µm	88M3539	16.50

(62070)

DURATOOL AT NEWARK ELEMENT14

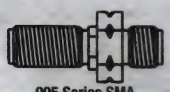
For your production and facilities needs, from soldering stations to tool sets & more.
newark.com/duratool

(212563)

FIBER OPTIC COMPONENTS • TERMINAL BLOCKS – BARRIER

JACK-TO-JACK FEED-THRU BULKHEAD ADAPTERS

RoHS Compliant Available — Amphenol® FIBER OPTIC PRODUCTS


905 Series SMA

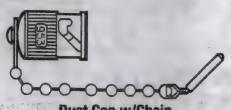
905 Series SMA Flange Mount

905 Series SMA PC Mount

944 Series FC/PC Flange Mount

944 Series FC/PC D-Hole

954 Series SC to SC

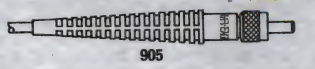

Dust Cap w/Chain

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● 905-120-5000	SMA, D-Hole	39F3696	10.40
● 905-120-5004	SMA, Half-Length	94F8218	8.96
● 905-120-5003	SMA, Inline	94F664	10.71
● 905-117-5000	SMA, Flange, TO-5 Can or Insert	39F3697	20.45
● 905-118-5000	SMA, PC Screw, TO-5 Can or Insert	39F3698	25.07
● 905-138-5002	SMA, Screw/Bulkhead, TO-18/46, SE4352	87F782	22.82
● 905-163	SMA, Dust Cap with Chain	90F9585	12.61
● 944-120-6000*	FC/PC Flange	90F9583	7.63
● 944-125-6002+	FC/PC D-Hole	96F9930	12.01
● 944-125-6003*	FC/PC D-Hole	96F9931	12.01
● 953-120-5000*	ST®, D-Hole	90F9582	6.51
● 953-120-5003*	ST®, Die Cast Body	96F9928	5.47
● 953-122-5003+	ST®, Die Cast Body, Multimode	93F6596	5.48
● 953-1061	ST®, Dust Cap with Chain	90F9586	10.27

*Ceramic alignment sleeve; +Phosphor bronze alignment sleeve
(9199)

905 AND 906 SERIES SMA CONNECTORS

RoHS Compliant Available — Amphenol® FIBER OPTIC PRODUCTS


905

906

Offer complete electrical isolation with no short-circuiting and EMP, RFI/EMI immunity. Buffer diameter: 2.46mm. Crimp ferrule inner diameter: 4.42mm. **905-150 series** and **906-122 series** are stainless steel. **905-400 SMArt series** is ceramic.

Mfg. Part No.	Fiber Hole Dia. (Microns)	Stock No.	Price Each 1-9
● 905-150-5001	128	90F9543	14.62
● 905-150-5002	144	90F9544	13.66
● 905-150-5003	231	90F9545	14.19
● 905-150-5004	436	90F9546	13.66

(9193)

FIBER OPTIC ADAPTERS

RoHS Compliant Available — multicomp

ST Adapter, Panel Mount

ST to SC Adapter, Flange/Snap-In

The fiber adapters are used to bring together two fiber optic connectors. The fiber adapters offer many applications such as telecommunication network, data communication network, Optical CATV and test equipment. Fiber Adapters come in a variety of types which fit a specific connector type such as LC, SC, ST, ST/SC, different body type such as plastic and metal and fiber adapters are available with ceramic sleeve, metal sleeve.

ST ADAPTERS

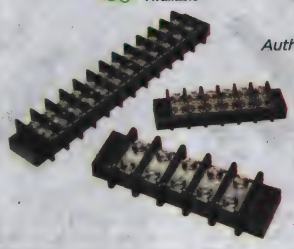
Mfg. Part No.	Bod Material	Adpater Configuration	Sleeve Material	Mounting Type	Stock No.	Price Each 1-24
● SPC22800	Metal	Simplex	Metal	Panel	70M9870	1.85
● SPC22801	Metal	Simplex	Ceramic	Panel	70M9871	2.98
ST to SC ADAPTERS						
● SPC22802	Plastic	Duplex	Metal	Flange/Snap In	70M9872	6.92
● SPC22805	Metal	Duplex	Ceramic	Flange/Snap In	70M9875	9.20

(105255)

AMP BARRIER STRIPS

RoHS Compliant Available — TE connectivity — Authorized Distributor

Barrier Strips are dual rows, 22-12 AWG, current rating: 20 A, screw mounted. Base: flat with end mounting holes. Body Material: thermoplastic, black



0.375 CENTER LINE BARRIER STRIPS

Mfg. Part No.	Positions	Length	Stock No.	Price Each 1-9
● 1546306-2		1.42″ (36.2)	07J5417	0.52
● 1546306-3	3	1.80″ (45.7)	07J5418	1.17
● 1546306-4	4	2.17″ (55.2)	07J5419	1.41
● 1546306-5		2.55″ (64.7)	07J5420	1.98
● 1546306-6	6	2.92″ (74.2)	07J5421	1.70
● 1546306-7	7	3.30″ (83.8)	07J5422	6.34
● 1546306-8	8	3.67″ (93.2)	07J5423	2.37
● 1546306-9	9	4.05″ (103.0)	07J5424	7.01
● 1-1546306-0	10	4.41″ (112.0)	07J5403	3.18
● 1-1546306-2	12	5.16″ (131.0)	07J5405	5.29
● 1-1546306-4	14	5.90″ (150.0)	07J5407	7.74
● 1-1546306-5	15	6.30″ (160.0)	07J5408	8.80
● 1-1546306-6	16	6.65″ (169.0)	07J5409	8.40
● 1-1546306-8	18	7.40″ (188.0)	07J5411	10.88
● 2-1546306-0		8.15″ (207.0)	07J5433	8.87
● 2-1546306-1	21	8.54″ (217.0)	07J5434	8.41
● 2-1546306-4	24	9.65″ (245.0)	07J5437	16.21
● 2-1546306-5	25	10.04″ (255.0)	07J5438	13.67
● 3-1546306-0	30	11.89″ (302.0)	07J5444	13.77
0.563 CENTER LINE BARRIER STRIPS				
● 1546310-2	2	2.13″ (54.0)	07J5425	4.40
● 1546310-4	4	3.25″ (82.6)	07J5427	4.98
● 1546310-6	6	4.38″ (111.2)	07J5429	6.63
● 1546310-8	8	5.50″ (139.8)	07J5431	10.37

(79342)

TRI-BARRIER TERMINAL BLOCKS

RoHS Compliant Available — TE connectivity — Authorized Distributor

4PCV SERIES VERTICAL MOUNT, 0.325″ (8.26) CENTER SPACING
20A @ 150V.14-22 AWG. 4-40 wire clamp screws. 0.5H x 0.6″W (12.70 x 15.24).

Mfg. Part No.	Length	Positions	Stock No.	Price Each 1-9
● 4PCV-08-006	2.27″ (57.66)	8	13H6454	5.64
● 4PCV-10-006	2.93″ (74.30)	10	89C0543	7.43

6PCV SERIES VERTICAL MOUNT, 0.375″ (9.53) CENTER SPACING
25A @ 300V. 12-22 AWG. 6-32 wire clamp screws. 0.6H x 0.7″W (15.24 x 17.78).

Mfg. Part No.	Length	Positions	Stock No.	Price Each 1-9
● 6PCV-02-006	0.811″ (20.60)	2	96B3669	0.91
● 8-1437652-2	1.936″ (49.17)	5	70C4340	2.74
● 6PCV-06-006	1.875″ (47.63)	6	95C0731	4.61
● 6PCV-07-006	2.686″ (68.22)	7	16H1542	5.34
● 6PCV-09-006	3.436″ (87.27)	9	83C7816	4.37
● 5-1437653-1	4.125″ (104.78)	12	81C7819	6.39
● 6PCV-15-006	5.686″ (144.42)	15	68C7076	11.62

8PCV SERIES VERTICAL, 0.4375″ (11.10) CENTER SPACING
30A at 600V UL and CSA. 10-22AWG UL and CSA wire range. 8-32 wire clamp screws. 0.77″H x 0.8″W.

Mfg. Part No.	Length	Positions	Stock No.	Price Each 1-9
● 5-1437657-7	0.947″ (24.05)	2	71C9266	1.14
● 8-1437657-0	1.834″ (46.58)	4	16H6665	2.17
● 8PCV-05-006	2.260″ (57.40)	5	97C6716	3.54
● 8PCV-08-006	3.573″ (90.75)	8	85C0762	8.05

(5196)

SNAPTRACK® SOCKET MOUNTING TRACK SYSTEM

RoHS Compliant Available

TE connectivity

Authorized Distributor

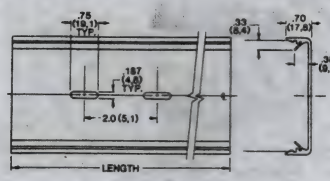


Fig. 1

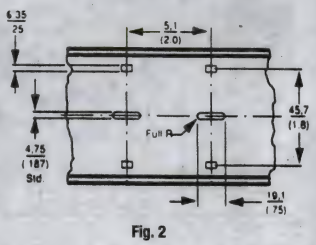


Fig. 2

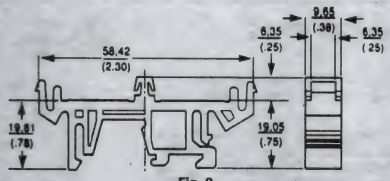


Fig. 3

- Saves 30% Installation Time
- Saves 50% Wiring Time

SNAPTRACK® is a nonconductive, rigid extruded PVC chassis for mounting socket assemblies and custom circuit boards. Mounts panels with rivets, screws or double-faced tape. PC boards snap-in from front and are held securely by integral ribs that absorb shock when PC board is flexed. SNAPTRACK® allows convenient PC board removal for field servicing. Slots on 2" (50.8) centers for fast, easy installation.

SNAPTRACK® MOUNTING TRACK—FIG. 1
3.00" (76.20) WIDE SOCKETS

Mfg. Part No.	Length	Stock No.	Price Each 1-9
TK2-6-AG	6" (152.40)	29F1213	8.92
TK2-48-AG	48" (1.219M)	29F1216	18.06
2.75" (69.85) WIDE SOCKETS			
2TK2-6	6" (152.40)	29F287	5.37
2TK2-12	12" (304.80)	29F288	7.27
2TK2-24	24" (609.60)	29F289	21.54
2TK2-48	48" (1.219M)	29F290	16.59
3.25" (82.60) WIDE SOCKETS			
3TK2-48	48" (1.219M)	70B8900	17.58
2.96" (75.18) WIDE SOCKETS			
4TK2-48	48" (1.219M)	94F5106	17.70
4.00" (101.60) WIDE SOCKETS			
6TK2-6	6" (152.40)	48F2170	2.56
6TK2-48	48" (1.219M)	98F7181	28.62
2.19" (55.63) WIDE SOCKETS			
8TK2-48	48" (1.219M)	81F3753	14.21
3TK2D-48	48" (1.219M)	04F611	18.13

SNAPTRACK® MOUNTING TRACK—FIG. 2

Mfg. Part No.	Length	Stock No.	Price Each 1-4
TK2D-48	48" (1.219M)	04F602	18.60
2.75" (69.85) WIDE SOCKETS			
2TK2D-6	6" (152.40)	04F603	3.71
2TK2D-48	48" (1.219M)	04F607	17.50

RAIL ADAPTER FOR SNAPTRACK®—FIG. 3
Universal mounting foot that adapts SNAPTRACK® to the symmetrical DIN rail, asymmetrical DIN rail and A Series rail.

3.00" (76.20) WIDE SOCKETS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
TKAD	Rail Adapter	50F2979	3.45

Panel mount or use with **type TKAD** SNAPTRACK® rail adapter. *ordered separately,* to mount on DIN rails and A Series track.
(5237)

Custom Cable Assemblies to your specs to mate with the complete line of connectors!
Call 1.800.463.9275
(212562)

OTB-351 SERIES THRU-PANEL TERMINAL BLOCKS

RoHS Compliant Available

BLOCK MASTER BLOCKS™
World Class Terminal Blocks

Features:
- SEMS screws
- Plastic finger-safe cover included
- Suitable for power supplies, industrial controls, motor drives, variable-speed controls

Specifications:
- Spacing: 8.5 mm
- Housing Material: Polycarbonate
- Terminals: Brass w/ Nickel plating
- Operating Temperature: -30 °C to +80 °C
- Wire Size: 12 - 22 AWG
- Rated Voltage: 300 V
- Rated Current: 20 A

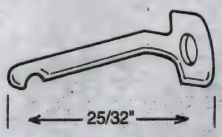
Mfg. Part No.	Positions	Stock No.	Price Each 1-24
OTB-351-02P-C	2	12P6785	8.51
OTB-351-03P-C	3	12P6786	11.29
OTB-351-04P-C	4	12P6787	14.20
OTB-351-06P-C	6	12P6789	21.08

(135964)

140, 140-Y SERIES SCREW TERMINAL BARRIER BLOCKS

RoHS Compliant Available

CINCH



- 0.375" (9.53) Density Terminal Blocks
- Barriers Boost Electrical Ratings And Protect Against Frayed Wire Shorting
- **140 Series** Have Binder Screws, **140-Y Series** Have Y Terminals Installed

Rated at 250V. Temperature range: –55° to +300°F. UL recognized. *Order fanning strips and jumpers separately on page 1066.* Other sizes are available; *go online or call.*

140 SERIES BINDER SCREW TERMINALS — FIT #16 WIRE

Mfg. Part No.	Terminals	Stock No.	Price Each 1-9	Price Each 10-24
2-140	2	28F700	1.41	1.37
3-140	3	28F701	1.55	1.47
4-140	4	28F702	1.60	1.54
5-140	5	28F703	1.94	1.85
6-140	6	28F704	2.36	2.30
7-140	7	28F705	2.62	2.54
8-140	8	28F706	2.99	2.90
9-140	9	28F707	3.40	3.30
10-140	10	28F708	3.59	3.47
11-140	11	28F709	7.83	6.32
12-140	12	28F710	4.63	4.47
14-140	14	28F870	5.65	5.44
15-140	15	28F871	5.68	5.49
16-140	16	28F872	6.21	5.99
18-140	18	28F874	8.24	7.95
20-140	20	28F876	9.18	8.89
24-140	24	29F1002	7.32	7.09
25-140	25	29F1003	9.36	9.03

140-Y SERIES Y TERMINALS — FIT #16 WIRE

Mfg. Part No.	Terminals	Stock No.	Price Each 1-24	Price Each 25-49
2-140-Y	2	29F749	4.02	3.24
4-140-Y	4	29F751	3.70	3.58
5-140-Y	5	29F752	8.11	6.53
6-140-Y	6	29F753	4.47	4.32
10-140-Y	10	29F757	8.44	8.15

(5431)

141 SERIES BINDER SCREW TERMINAL BARRIER BLOCKS

RoHS Compliant Available

CINCH

- Same Features As **140 Series** Except 0.438" (11.12) Screw Terminal Density
- Fits #14 Wire

Order jumpers and fanning strips separately on page 1066. Other sizes are available; *go online or call.*

Mfg. Part No.	Terminals	Stock No.	Price Each 1-9	Price Each 10-24
2-141	2	28F711	1.29	1.25
3-141	3	28F712	1.95	1.89
4-141	4	28F713	2.01	1.95
5-141	5	28F714	2.19	2.12

CONTINUED

TERMINAL BLOCKS – BARRIER

141 SERIES BINDER SCREW TERMINAL BARRIER BLOCKS (CONT.)

Mfg. Part No.	Terminals	Stock No.	Price Each 1-9	Price Each 10-24
● 6-141	6	28F715	2.52	2.45
● 7-141	7	28F716	3.27	3.16
● 8-141	8	28F717	3.27	3.14
● 9-141	9	28F718	3.48	3.37
● 10-141	10	28F719	4.33	4.18
● 11-141	11	28F720	10.31	8.65
● 12-141	12	28F721	6.30	6.10
● 14-141	14	28F879	6.61	6.38
● 15-141	15	28F880	5.52	5.35
● 16-141	16	28F881	6.15	5.95
● 18-141	18	28F883	6.65	6.42
● 20-141	20	28F885	8.50	8.23

(5432)

3

142 SERIES BINDER SCREW TERMINAL BARRIER BLOCKS

RoHS Compliant Available

CINCH

- Same Features as **140 Series** Except 0.563″ (14.30) Screw Terminal Density
- Fits #10 Wire

Order jumpers separately on this page.

Mfg. Part No.	Terminals	Stock No.	Price Each 1-9	Price Each 10-24
● 2-142	2	28F722	1.81	1.76
● 3-142	3	28F723	2.27	2.20
● 4-142	4	28F724	2.77	2.69
● 5-142	5	28F725	3.29	3.16
● 6-142	6	28F726	5.16	4.99
● 7-142	7	28F727	5.22	5.05
● 8-142	8	28F728	5.78	5.58
● 9-142	9	28F729	8.42	8.13
● 10-142	10	28F730	8.62	8.32
● 12-142	12	28F732	9.37	9.06
● 14-142	14	28F887	9.76	9.43
● 16-142	16	28F889	12.09	11.68

(5433)

JUMPERS

RoHS Compliant Available

CINCH

Mfg. Part No. 140J-1 | Mfg. Part Nos. 141J, 95B | Mfg. Part No. 141J-1 | Mfg. Part No. 142J-1 | Mfg. Part No. 142J-2

- Rugged Nickel-Plated Brass

Sold in multiples of 5.

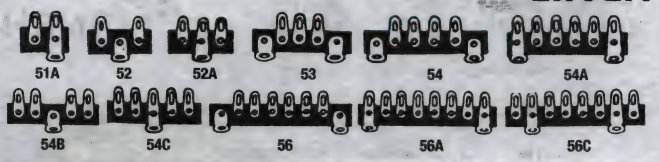
Mfg. Part No.	For Barrier Block Series	Stock No.	Price Each 1-9	Price Each 10-24
● 140J-1	140	28F833	0.31	0.30
● 141J	141	28F790	0.36	0.35
● 141J-1	141	45F779	0.76	0.73
● 95B	142	28F789	0.92	0.90
● 142J-1*	142, 542	28F742	0.45	0.43
● 142J-2	142, 542	28F743	0.45	0.44

* Connects two alternate terminals.

(5472)

LUG-TYPE TERMINAL STRIPS

CINCH



51A | 52 | 52A | 53 | 54 | 54A

54B | 54C | 56 | 56A | 56C

- Cadmium-Plated Steel Lugs With 0.140″ Diameter Mounting Holes
- XPC Insulation Material, Rated UL94 HB
- 0.375″ Density

Color: chocolate brown.

➤ CONTINUED ➤

LUG-TYPE TERMINAL STRIPS (CONT.)

Mfg. Part No.	Description	Mounting Centers	Stock No.	Price Each 1-49	Price Each 50-99
51A	2 Lugs; 1 Ground	...	29F567	1.76	1.18
52	2 Lugs	...	28F651	0.72	0.70
52A	3 Lugs; 1 Ground	...	29F574	0.98	0.94
53	3 Lugs	1.500″	28F652	2.36	1.58
54	4 Lugs	1.875″	28F653	1.27	1.24
54A	6 Lugs; 2 Ground	1.875″	29F585	1.12	1.08
54B	4 Lugs	...	29F586	0.85	0.83
54C	5 Lugs; 1 Ground	...	29F587	0.98	0.95
56	6 Lugs	2.625″	28F655	1.37	1.33
56A	8 Lugs; 2 Ground	2.625″	29F591	1.33	1.29
56C	8 Lugs; 2 Ground	1.875″	29F593	1.28	1.23

(5469)

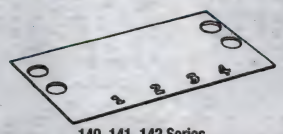
MARKER STRIPS

RoHS Compliant Available

CINCH

- 0.031″ (0.78) Thick Bottom Mount
- 0.125″ (3.18) White Numerals

Used to identify terminal positions and insulate exposed portions of terminals from conductive mounting surfaces. Flame retardant material. UL recognized. **NOTE: suffix** in mfg. part no. indicates series number.



140, 141, 142 Series

Mfg. Part No.	Terminals	Stock No.	Price Each 1-49	Price Each 50-99
● MS-2-140	2	29F804	1.57	1.05
● MS-3-140	3	29F805	0.72	0.69
● MS-4-140	4	29F806	0.76	0.74
● MS-5-140	5	29F807	0.77	0.75
● MS-6-140	6	29F808	0.74	0.72
● MS-7-140	7	29F809	0.89	0.86
● MS-8-140	8	29F810	0.89	0.86
● MS-9-140	9	29F811	0.95	0.92
● MS-10-140	10	29F812	0.96	0.93
● MS-14-140	14	29F816	1.04	1.00
● MS-15-140	15	29F817	1.15	1.12
● MS-16-140	16	29F818	1.18	1.14
● MS-20-140	20	29F822	1.50	1.46
● MS-2-141	2	29F824	0.62	0.60
● MS-3-141	3	29F825	1.66	1.11
● MS-4-141	4	29F826	0.74	0.72
● MS-5-141	5	29F827	0.76	0.73
● MS-6-141	6	29F828	0.78	0.75
● MS-8-141	8	29F830	0.94	0.91
● MS-10-141	10	29F832	0.96	0.93
● MS-12-141	12	29F834	1.06	1.03
● MS-14-141	14	29F836	1.33	1.29
● MS-16-141	16	29F838	1.57	1.50
● MS-18-141	18	29F840	3.46	2.56
● MS-20-141	20	29F842	1.98	1.92
● MS-4-142	4	29F845	0.79	0.76
● MS-6-142	6	29F847	0.76	0.73
● MS-8-142	8	29F849	0.97	0.94
● MS-10-142	10	29F851	1.06	1.03
● MS-12-142	12	29F853	1.33	1.29

(5436)

PC SCREW TERMINAL CONNECTORS

RoHS Compliant Available

KEYSTONE ELECTRONICS CORP.

Fig. 1 | Fig. 2 | Fig. 3 | Fig. 4 | Fig. 5 | Fig. 6

PC board mount. Insert into predrilled or punched holes. Antirotational feature enhances stability. Accept 14-22AWG solid/stranded wire. Rated 15A. 0.032″ (0.813) thick tin-plate brass terminal with nickel-plated brass 6-32 binding head screw. Antiwicking design. For high-density packaging.

Fig. 7 | Fig. 8

➤ CONTINUED ➤

PC SCREW TERMINAL CONNECTORS (CONT.)

COLOR SELECTOR TABLE

Standard screw is brass, nickel plate. For painted color head, add suffix as shown. Painted color head versions available; *go online or call.*

HEAD COLOR	SUFFIX
Red	-2
Black	-3
White	-4
Blue	-5
Green	-6
Yellow	-7
Nickel	None

SNAP-IN AND PC MOUNT

Mfg. Part No.	Description	Mounting Style	Fig.	Stock No.	Price Each 1-99
7690	Unassembled Horizontal	Snap-In	1	62W5215	0.48
7691	Unassembled Vertical	Snap-In	2	51B259	0.44
7693	Captivated Assembled Vertical	Snap-In	2	62W5217	0.58
8190	Unassembled Horizontal	PC Mount	3	62W5244	0.52
8191	Unassembled Vertical	PC Mount	4	51B260	0.45
7701	Captivated Assembled Vertical	PC Mount	4	62W5224	0.64
7697	Unassembled Extended Vertical	PC Mount	5	62W5220	0.53
8189†	Unassembled 45°	PC Mount	6	26C1916	1.12

LOW PROFILE

Mfg. Part No.	Description	Mounting Style	Fig.	Stock No.	Price Each 1-9
8195	Unassembled Vertical	PC Mount	7	96B2701	0.52
7775	Captivated Assembled Vertical	PC Mount	7	62W5235	0.63

30 AMP

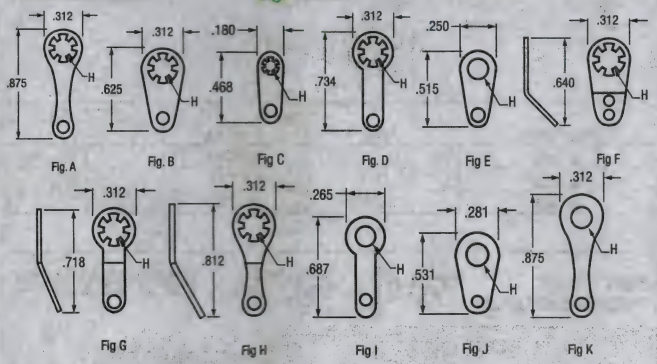
Mfg. Part No.	Description	Mounting Style	Fig.	Stock No.	Price Each 1-9
8197	Unassembled Vertical	Snap-In	8	91B6718	0.63
8199	Captivated Assembled Vertical	Snap-In	8	62W5246	0.82
8196*	Unassembled Vertical HD	Snap-In	8	62W5245	1.10

*Supplied with 10-32 x 3/8" long screw
(9191)

LOCKWASHER & SOLDER TERMINAL LUGS

RoHS Compliant Available

KEYSTONE ELECTRONICS CORP.



- Material: Brass
- Plating: Tin

LOCKWASHER TERMINAL LUGS

Mfg. Part No.	Fig.	"H" DIM	Mounting Hole Diameter	Stud Size	Stock No.	Price Each
903	A	0.120"	0.093	#4	62W5742	0.18
904	A	0.140"	0.093	#6	96B7823	0.18
905	A	0.171"	0.093	#8	62W5743	0.18
908	B	0.120"	0.093	#4	62W5745	0.16
914	B	0.140"	0.093	#6	94F878	0.15
907	C	0.095"	0.078	#2	62W5744	0.28
916	D	0.140"	0.156	#6	94F879	0.15
7311	F	0.120"	0.093	#4	94F875	0.17
7313	F	0.171"	0.093	#8	50B4583	0.17
7315	G	0.140"	0.093	#6	90B5666	0.18
7317	H	0.120"	0.093	#4	62W5733	0.16
7327	H	0.171"	0.078	#8	18C1820	0.16
7319	H	0.171"	0.093	#8	90C0704	0.18

SOLDER TERMINAL LUGS

4004	E	0.136"	0.093	...	62W5668	0.14
7325	I	0.120"	0.078	#4	62W5734	0.16
7327	I	0.171"	0.078	#8	18C1820	0.16
7328	J	0.120"	0.076	#4	11C2031	0.14

➤CONTINUED➤

LOCKWASHER & SOLDER TERMINAL LUGS (CONT.)

SOLDER TERMINAL LUGS

Mfg. Part No.	Fig.	"H" DIM	Mounting Hole Diameter	Stud Size	Stock No.	Price Each
7329	J	0.140"	0.076	#6	98H1340	0.15
7330	J	0.171"	0.076	#8	22C5129	0.15
7333	K	0.171"	0.093	#8	67C0963	0.16

(78633)

DOUBLE ROW, FLAT MOUNT THERMOSET TERMINAL BLOCKS

RoHS Compliant Available

MARATHON SPECIAL PRODUCTS

Molded general-purpose phenolic material.
UL recognized, CSA certified.

410 SERIES MINIATURE 1/4" CENTERS, 300V Class B, 5A, 18-20 AWG

Mfg. Part No.	Terminals	Length	Stock No.	Price Each 1-24
410-GP-6	6	2.000"	65F1120	9.93
410-GP-8	8	2.500"	65F1121	12.43
410-GP-10	10	3.000"	65F1122	14.92
410-GP-12	12	3.500"	65F1123	17.54
410-GP-14	14	4.000"	65F1124	20.31
410-GP-16	16	4.500"	65F1125	23.25
410-GP-18	18	5.000"	65F1126	25.62
410-GP-20	20	5.500"	65F1127	27.35
410-GP-22	22	6.000"	65F1128	37.33

600 SERIES 5-40 SCREWS 3/8" CENTERS, 300V CLASS C, 15A, 12-22 AWG

600-GP-2	2	1.406"	65F1160	2.99
600-GP-4	4	2.156"	65F1162	5.34
600-GP-6	6	2.906"	65F1164	7.89
600-GP-10	10	4.406"	65F1167	10.81
600-GP-12	12	5.156"	65F1168	11.54
600-GP-14	14	5.906"	65F1169	13.69
600-GP-16	16	6.656"	65F1170	15.43
600-GP-20	20	8.156"	65F1172	19.12
600-GP-22	22	8.906"	65F1173	21.17

600A SERIES 6-32 SCREWS 3/8" CENTERS, 300V CLASS C, 15A, 12-22 AWG

600A-GP-2	2	1.406"	87F5185	2.31
600A-GP-4	4	2.156"	87F5239	3.94
600A-GP-6	6	2.906"	87F5240	5.48
600A-GP-8	8	3.656"	87F5241	6.28
600A-GP-10	10	4.406"	87F5242	7.30
600A-GP-12	12	5.156"	87F5243	10.04
600A-GP-14	14	5.906"	87F5244	11.54
600A-GP-16	16	6.656"	87F5249	12.88
600A-GP-20	20	8.156"	87F5250	16.11

601 SERIES 7/16" CENTERS, 300V CLASS C, 20A, 12-22 AWG

601-GP-2	2	1.625"	65F1184	2.59
601-GP-3	3	2.063"	65F1185	3.21
601-GP-4	4	2.500"	65F1186	3.93
601-GP-5	5	2.938"	65F1187	4.93
601-GP-6	6	3.375"	65F1188	5.62
601-GP-7	7	3.813"	65F1189	17.55
601-GP-8	8	4.250"	65F1190	7.77
601-GP-10	10	5.125"	65F1191	8.96
601-GP-12	12	6.000"	65F1192	10.44
601-GP-16	16	7.750"	65F1193	12.50
601-GP-18	18	8.625"	65F1194	15.46
601-GP-20	20	9.500"	65F1195	17.31

602 SERIES 9/16" CENTERS, 300V CLASS C, 30A, 12-14 AWG

602-GP-2	2	2.094"	65F1207	3.55
602-GP-4	4	3.219"	65F1208	6.39
602GP 06	6	4.344"	03C0805	9.06
602-GP-8	8	5.469"	65F1210	11.72
602-GP-10	10	6.594"	65F1211	13.98
602-GP-12	12	7.719"	65F1212	16.37
602-GP-14	14	8.844"	65F1213	19.34
602-GP-16	16	9.969"	65F1214	21.80
602-GP-18	18	11.094"	65F1215	24.39
602-GP-20	20	12.219"	65F1216	26.99

603 SERIES HEAVY-DUTY 11/16" CENTERS, 600V CLASS C, 50A, 10-12 AWG

603-GP-2	2	2.500"	65F1227	7.97
603-GP-4	4	3.875"	65F1228	14.83

➤CONTINUED➤

DOUBLE ROW, FLAT MOUNT THERMOSET TERMINAL BLOCKS (CONT.)

603 SERIES HEAVY-DUTY 11/16″ CENTERS, 600V CLASS C, 50A, 10-12 AWG

Mfg. Part No.	Terminals	Length	Stock No.	Price Each 1-24
● 603-GP-6	6	5.250″	65F1229	21.54
● 603-GP-8	8	6.625″	65F1230	28.33
● 603-GP-10	10	8.000″	65F1231	35.00

604 SERIES HEAVY-DUTY 7/8″ CENTERS, 600V CLASS C, 70A, 4-12 AWG

● 604-GP-2	2	3.156″	44F7839	21.60
● 604-GP-3	3	4.030″	44F7840	25.01
● 604-GP-4	4	4.906″	44F7841	32.54
● 604-GP-6	6	6.656″	44F7843	47.40
● 604-GP-8	8	8.406″	44F7845	61.17

605 SERIES HEAVY-DUTY 1 1/8″ CENTERS, 600V CLASS C, 90A, 2-12 AWG

● 605-GP-3	3	5.125″	44F7835	60.96

670A SERIES CLOSED BACK 3/8″ CENTERS, 150V CLASS C, 15A, 12-22 AWG

Mfg. Part No.	Terminals	Length	Stock No.	Price Each 1-24
● 670A-GP-2	2	1.406″	87F5251	3.14
● 670A-GP-4	4	2.156″	87F5252	5.11
● 670A-GP-6	6	2.906″	87F5253	7.58
● 670A-GP-8	8	3.656″	87F5254	9.41
● 670A-GP-10	10	4.406″	87F5255	11.25
● 670A-GP-12	12	5.156″	87F5245	12.62
● 670A-GP-14	14	5.906″	87F5246	14.32
● 670A-GP-20	20	8.156″	87F5248	20.57

671 SERIES CLOSED BACK 7/16″ CENTERS, 300V CLASS C, 20A, 12-22 AWG

● 671-GP-2	2	1.625″	65F1251	3.45
● 671-GP-4	4	2.500″	65F1252	6.03
● 671-GP-6	6	3.375″	65F1253	8.65
● 671-GP-8	8	4.250″	65F1254	10.82
● 671-GP-10	10	5.125″	65F1255	13.02
● 671-GP-12	12	6.000″	65F1256	15.28
● 671-GP-14	14	6.875″	65F1257	16.90
● 671-GP-16	16	7.750″	65F1258	19.12
● 671-GP-20	20	9.500″	65F1260	23.84

672 SERIES CLOSED BACK 9/16″ CENTERS, 600V CLASS C, 30A, 10-14 AWG

● 672-GP-2	2	2.094″	65F1269	3.44
● 672-GP-4	4	3.220″	65F1270	6.19
● 672-GP-6	6	4.344″	65F1271	9.19
● 672-GP-8	8	5.469″	65F1272	11.30
● 672-GP-10	10	6.594″	65F1273	13.92
● 672-GP-12	12	7.719″	65F1274	16.77
● 672-GP-16	16	9.969″	65F1276	21.93
● 672-GP-20	20	12.219″	65F1278	27.13

670A RZ SERIES CLOSED BACK 3/8″ CENTERS, 300 VOLTS, 20A, 12-22 AWG
Tough, flame-retardant thermoplastic.

● 670A-RZ-08	8	3.66″	95F5881	4.52
● 670A-RZ-20	20	8.16″	95F5887	9.92
● 670A-RZ-24	24	9.66″	95F5889	11.70

(5283)

SINGLE ROW, FLAT AND FEED-THRU MOUNT TERMINAL BLOCKS

RoHS Compliant Available

MARATHON SPECIAL PRODUCTS

UL recognized, CSA certified. **NOTE: Suffix** in mfg. part nos. denote number of terminals.

FLAT MOUNT 410-GP PSB SERIES 0.250″ (6.35) CENTERS, 300V CLASS B, 5 AMP, 20-18 AWG

Mfg. Part No.	Terminals	Length	Stock No.	Price Each 1-9
● 410-GP-04	4	1.250″	90B0955	13.28

FLAT MOUNT 411-GP SERIES 0.250″ (6.35) CENTERS, 300V CLASS B, 5 AMP, 20-18 AWG

● 411-GP-4	4	1.500″	87F5256	16.14
● 411-GP-6	6	2.000″	87F5257	21.82
● 411-GP-8	8	2.500″	87F5258	32.98

599-GP SERIES 0.375″ (9.53) CENTERS, 150V CLASS C, 15 AMP, 22-16 AWG

● 599-GP-2	2	1.406″	65F1140	3.84
● 599-GP-03	3	1.780″	90B1241	4.40
● 599-GP-4	4	2.156″	65F1142	5.18
● 599-GP-6	6	2.906″	65F1144	7.58
● 599-GP-8	8	3.656″	65F1146	21.25
● 599-GP-10	10	4.406″	65F1147	10.27

➤ CONTINUED ➤

SINGLE ROW, FLAT AND FEED-THRU MOUNT TERMINAL BLOCKS (CONT.)

599-GP SERIES 0.375″ (9.53) CENTERS, 150V CLASS C, 15 AMP, 22-16 AWG

Mfg. Part No.	Terminals	Length	Stock No.	Price Each 1-9
● 599-GP-12	12	5.156″	65F1148	30.44
● 599-GP-20	20	8.156″	65F1151	49.11

699-GP SERIES 0.438″ (11.13) CENTERS, 150V CLASS C, 20 AMP, 16-14 AWG

● 699-GP-2	2	1.625″	65F1287	3.66
● 699-GP-4	4	2.500″	65F1288	5.75
● 699-GP-6	6	3.375″	65F1289	20.69
● 699-GP-8	8	4.250″	65F1290	25.46
● 699-GP-12	12	6.000″	65F1292	13.68

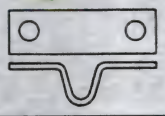
(5256)

J TYPE JUMPERS

RoHS Compliant Available

MARATHON SPECIAL PRODUCTS

For single and double row flat mount thermoset terminal blocks.



Mfg. Part No.	Center Dimension	Stock No.	Price Each 1-9
● J602	9/16″	65F1313	0.47
● J601	7/16″	65F1314	0.34
● J600	3/8″	96B4859	0.34
● J410	1/4″	65F1316	0.27
● 600RJS-2	3/8″	94F4573	3.81
● 600RJS-3	3/8″	94F4574	4.84
● 600RJS-22	3/8″	70B8415	16.23
● J603	11/16″	98F208	0.53

(5285)

GROUNDING LUGS

RoHS Compliant Available

MARATHON SPECIAL PRODUCTS

Tin-plated, high-conductive aluminum. UL recognized, CSA certified.

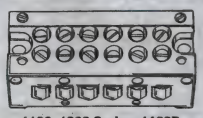
Mfg. Part No.	AWG	Stock No.	Price Each 1-24
● GL02	2-14	52F9783	5.83
● GL20	2/0-14	52F9784	9.63
● GL35	350MCM-6	52F9785	17.27

(5259)

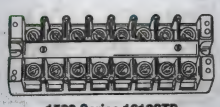
HEAVY-DUTY TERMINAL BLOCKS

RoHS Compliant Available

MARATHON SPECIAL PRODUCTS



1100, 1200 Series, 1103P



1500 Series,1612STD

- General-Purpose Phenolic Molded Base, Rated 150°C
- UL Recognized File No. E62806, CSA Certified File No. LR19766, ISO9001:2000 Certified

1100, 1103P and **1200 series** are deadfront style. **1500 series** are barrier style, available in 4 types denoted by **suffix** in mfg. part nos.: **STD** = standard connector; **DJ** = removable connector with brass insert; **ST** = 10-32 stud; and **SC** = short circuiting bar with brass insert, 4 shorting pins per block.

1103P (4-14 AWG), 1200 (4-18 AWG) SERIES 600 VOLTS, 70 AMPS

Mfg. Part No.	Terminals	Length	Stock No.	Price Each 1-9	Price Each 10-24
● 1103P	3	2.50″	95F5504	28.12	27.56
● 1204	4	2.81″	95F5506	54.04	52.97

1100 SERIES 600 VOLTS, 65 AMPS, 6-18 AWG

Mfg. Part No.	Terminals	Length	Stock No.	Price Each 1-9	Price Each 10-24
● 1104	4	2.50″	95F5509	22.19	21.75
● 1106	6	3.38″	95F5912	30.74	30.13
● 1108	8	4.25″	95F5913	41.38	40.56
● 1112	12	6.00″	95F5914	64.32	63.05

➤ CONTINUED ➤

HEAVY-DUTY TERMINAL BLOCKS (CONT.)

1500 SERIES 600 VOLTS, 10-16 AWG, 0.625″ (15.88) LINE-TO-LINE SPACING, APPROVED FOR 75 AMPS WITH PROPER TERMINATION

Mfg. Part No.	Terminals	Length	Stock No.	Price Each 1-9	Price Each 10-24
1504STD	4	3.25″	95F5903	27.64	27.10
1506STD	6	4.50″	95F5904	33.08	32.42
1508STD	8	5.75″	95F5905	40.92	40.11
1512STD	12	8.25″	95F5906	57.69	56.55
1508ST	8	5.75″	95F5527	105.53	103.44
1512ST	12	8.25″	95F5856	119.14	116.78
1504SC	4	3.25″	95F5861	52.59	51.52
1506SC	6	4.50″	95F5862	64.87	63.59
1612STD	12	9.00″	95F5910	66.32	65.01

(5453)

POWER DISTRIBUTION AND SPLICER BLOCKS

RoHS Compliant Available

MARATHON SPECIAL PRODUCTS

Fig. 1
2-14 AWG

Fig. 2
10-16 AWG

Fig. 3
⅜-14 AWG

Fig. 4
4-14 AWG

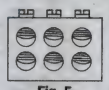


Fig. 5
4-14 AWG

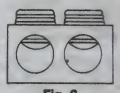


Fig. 6
⅜-14 AWG

Fig. 7
400MCM-6 AWG

Fig. 8
2-14 AWG

Fig. 9
2-14 AWG

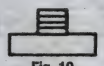


Fig. 10
¼-20 x 3⅝″ Stud

- 600 Volt, 1 Line, 1 Load Opening Per Pole, Except All Power Distribution Blocks
- High-Conduction Tin-Plated Connectors
- UL Recognized, CSA Certified, ISO9001:2000 Certified

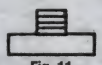


Fig. 11
⅜-16 x 1 3/16″ Stud

141 series power distribution and splicer blocks feature small size, high-impact thermoplastic, rated at 125° C. May be ganged together to form various line lengths. All other types are general-purpose phenolic, rated at 150° C.

POWER DISTRIBUTION BLOCKS, 600 VOLT — FIG. 1

Mfg. Part No.	Connector Line	Connector Load	Poles	Amps/ Pole	Stock No.	Price Each 1-9
1411400*	Fig. 1	Fig. 2	1	115	96F4463	32.50
1412400*	Fig. 1	Fig. 2	2	115	96F4469	51.47
1413400*	Fig. 1	Fig. 2	3	115	96F4475	74.97
1414400*	Fig. 1	Fig. 2	4	115	96F4481	106.37
1421570*	Fig. 3	Fig. 4	1	175	96F4485	37.64
1422570*	Fig. 3	Fig. 4	2	175	96F4490	56.99
1423570*	Fig. 3	Fig. 4	3	175	96F4495	82.11
1402401	Fig. 3	Fig. 5	2	175	01F2289	88.40
1403401	Fig. 3	Fig. 5	3	175	01F2290	102.94
1323570	Fig. 3	Fig. 4	3	175	91C4930	71.07
1433555	Fig. 6	Fig. 5	3	350	01F2293	160.32
1433552	Fig. 7	Fig. 8	3	335	01F2291	92.12
1433553	Fig. 7	Fig. 9	3	335	01F2292	148.57

POWER BLOCKS (SPLICER), 600 VOLT — FIG. 2

Mfg. Part No.	Connector Line	Connector Load	Poles	Amps/ Pole	Stock No.	Price Each 1-9
1411300*	Fig. 1	Fig. 1	1	115	96F4462	14.51
1412300*	Fig. 1	Fig. 1	2	115	96F4468	20.08
1413300*	Fig. 1	Fig. 1	3	115	96F4474	29.61
1414300*	Fig. 1	Fig. 1	4	115	96F4480	40.06
1423552*	Fig. 1	Fig. 1	3	115	96F4493	32.44
1422572*	Fig. 3	Fig. 3	2	175	96F4491	31.18
1423572*	Fig. 3	Fig. 3	3	175	96F4496	41.72

POWER STUD BLOCKS, 600 VOLT — FIG. 3

Mfg. Part No.	Connector Line	Connector Load	Poles	Amps/ Pole	Stock No.	Price Each 1-9
1422122	Fig. 10	Fig. 10	2	200	01F2294	32.88
1432563	Fig. 11	Fig. 11	2	230	01F2295	108.36

*CE compliant EN 45014.

POWER DISTRIBUTION BLOCK COVERS

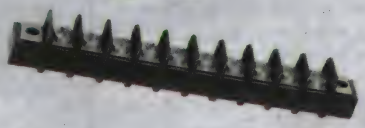
Mfg. Part No.	Series	Poles	Stock No.	Price Each 1-9
CC1413*	141	3	77C5682	6.08
CC1433*	143	3	90B1375	9.27
CH1323*	132	3	91C4926	4.05

(5510)

9.53MM AND 11.13MM HIGH-BARRIER SINGLE-ROW TERMINAL STRIPS

RoHS Compliant Available

molex



- 72 Series: 25 Amp @ 300V, 0.375″ (9.53) Centers
- 63 Series: 25 Amp @ 600V, 0.438″ (11.13) Centers

Fig. 1

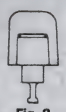


Fig. 2

Fig. 3

Fig. 4

Barrier strips are UL94V-0 glass-filled flexible thermoplastic. Choose from 4 terminal styles: printed circuit bottom-side, insulated solder turret bottom-side, no printed circuit terminals, and insulated quick-connect. Terminals are welded, resulting in no solder joint fatigue caused by twisting the tails. Terminals are tin-lead plated brass with 6-32 x ¼ phillips/slotted screws. 0.66″(16.8)H x 0.63″(16.0)W. UL recognized, CSA certified.

72500 SERIES PRINTED CIRCUIT BOTTOM TERMINALS — FIG. 1

Mfg. Part No.	No. of Positions	Stock No.	Price Each 1-24
38720-6202	2	14F2034	2.19
38720-6203	3	72K2041	3.03
38720-6204	4	72K2042	3.50
38720-6205	5	72K2043	3.55
38720-6206	6	72K2044	4.27
38720-6207	7	72K2045	4.69
38720-6208	8	72K2046	5.53
38720-6210	10	14F2042	5.80
38720-6212	12	72K2048	5.62
38720-6216	16	72K2049	10.48

72200 SERIES INSULATED SOLDER TURRET TERMINALS — FIG. 2

Mfg. Part No.	No. of Positions	Stock No.	Price Each 1-24
38720-3202	2	14F2017	1.95
38720-3203	3	72K2034	2.65
38720-3204	4	72K2035	2.78
38720-3205	5	72K2036	4.41
38720-3206	6	14F2021	4.41
38720-3207	7	73K2503	4.23
38720-3208	8	73K1460	4.85
38720-3210	10	72K2038	7.09
38720-3212	12	72K2040	7.51

72100 SERIES NO PRINTED CIRCUIT BOTTOM TERMINALS — FIG. 3

Mfg. Part No.	No. of Positions	Stock No.	Price Each 1-24
38720-0204	4	73K1459	3.30
38720-0206	6	72K2031	4.15
38720-0208	8	72K2032	4.71
38720-0210	10	14F2008	6.89

72900 SERIES INSULATED QUICK-CONNECT TERMINALS — FIG. 4

Mfg. Part No.	No. of Positions	Stock No.	Price Each 1-24
38721-6703	3	29B7231	3.27
38721-6704	4	72K2050	2.78
38721-6706	6	72K2051	3.79

63500 SERIES PRINTED CIRCUIT BOTTOM TERMINALS — FIG. 1

Mfg. Part No.	No. of Positions	Stock No.	Price Each 1-24
38630-6402	2	72K2021	1.23
38630-6403	3	28M9378	2.06
38630-6404	4	72K2022	1.99
38630-6406	6	26M8378	3.03
38630-6410	10	72K2023	4.93
38630-6412	12	34M0727	5.49

(5225)

76 SERIES 0.375″ (9.53) 20A BARRIER TERMINAL STRIPS

RoHS Compliant Available

molex

- Glass-Filled Thermoplastic Housing, Rated UL94V-0
- Wire Size: 12 to 24 AWG

Double row, closed-back high barrier strips with 0.375″ (9.5) terminal centers. 110°C temperature index. Zinc-chromate-plated steel no. 6-32 x 0.250″ (6.35) phillips/slotted screws. 0.88″ (22.4) wide x 0.63″ (16) high. Voltage rating: UL recognized 300Vrms Class B, 150Vrms class C; CSA certified 300V @ 20A. Withstanding voltage: 10,500Vrms.

Mfg. Part No.	No. of Positions	Length	Stock No.	Price Each 1-24
38760-0102	2	1.41″ (35.8)	73K4055	2.15
38760-0103	3	1.78″ (45.2)	72K2053	2.56
38760-0104	4	2.16″ (54.9)	72K2054	3.04
38760-0105	5	2.53″ (64.3)	72K2055	3.31
38760-0106	6	2.91″ (73.9)	72K2056	3.88

CONTINUED

TERMINAL BLOCKS – BARRIER

76 SERIES 0.375″ (9.53) 20A BARRIER TERMINAL STRIPS (CONT.)

Mfg. Part No.	No. of Positions	Length	Stock No.	Price Each 1-24
● 38760-0107	7	3.28″ (83.3)	30B1805	3.60
● 38760-0108	8	3.66″ (93.1)	72K2057	4.66
● 38760-0110	10	4.41″ (112)	72K2058	4.95
● 38760-0112	12	5.16″ (131)	14F2606	6.60
● 38760-0114	14	5.91″ (150)	72K2059	6.77
● 38760-0116	16	6.66″ (169)	72K2060	7.34
● 38760-0118	18	7.41″ (188)	72K2061	7.66
● 38760-0120	20	8.16″ (207)	72K2062	11.24
● 38760-0122	22	8.91″ (226)	73K6081	9.15
● 38760-0124	24	9.66″ (245)	72K2063	11.03
● 38760-0130	30	11.91″ (303)	72K2064	14.94
BARRIER TERMINAL STRIPS - WITH PAN HEAD SCREWS				
● 38760-0304	4	2.16″ (54.9)	73C0801	2.80

(5183)

77 SERIES 0.375″ (9.5) 20A BARRIER TERMINAL STRIPS

RoHS Compliant Available

molex

Same as **76 series** strips except low-barrier design. CSA certified 150Vrms @ 20A; and withstanding voltage: 7500Vrms. 0.88″ (22.4) wide x 0.44″ (11.2) high. 0.375″ (9.5) terminal centers.

Mfg. Part No.	No. of Positions	Length (mm)	Stock No.	Price Each 1-24
● 38770-0102	2	1.41″ (35.8)	14F2615	2.12
● 38770-0103	3	1.78″ (45.2)	72K2065	2.37
● 38770-0104	4	2.16″ (54.9)	72K2066	3.20
● 38770-0105	5	2.53″ (64.3)	14F2617	2.91
● 38770-0106	6	2.91″ (73.9)	72K2067	4.18
● 38770-0107	7	3.28″ (83.3)	72K2068	4.43
● 38770-0108	8	3.66″ (93.1)	72K2069	4.05
● 38770-0110	10	4.41″ (112)	72K2070	4.93
● 38770-0112	12	5.16″ (131)	14F2621	5.89
● 38770-0113	13	5.53″ (140)	72K2071	7.98
● 38770-0114	14	5.91″ (150)	72K2072	6.72
● 38770-0116	16	6.66″ (169)	14F2624	7.75
● 38770-0118	18	7.41″ (188)	72K2073	6.66
● 38770-0120	20	8.16″ (207)	14F2626	11.19
● 38770-0122	22	8.91″ (226)	14F2627	11.22
● 38770-0124	24	9.66″ (245)	72K2074	18.56
● 38770-0130	30	11.91″ (303)	72K2075	13.57

(5184)

78 SERIES 0.438″ (11.1) 20A BARRIER TERMINAL STRIPS

RoHS Compliant Available

molex

- Glass-Filled Thermoplastic Housing, Rated UL94V-0
- Wire Size: 14 AWG Max.

Double-row, closed-back strips with 0.438″ (11.1) terminal centers. 110°C temperature index. Zinc-chromate-plated steel no. 6-32 x 0.250″ (6.35) phillips/slotted screws. Size: 1.13″ (28.7) wide x 0.55″ (14.2) high. Voltage rating: UL recognized 250Vrms Class B, 300V Class C; CSA certified 300Vrms @ 20A. Withstanding voltage: 7500Vrms.

Mfg. Part No.	No. of Positions	Length (mm)	Stock No.	Price Each 1-24
● 38780-0102	2	1.63″ (41.4)	72K2076	1.91
● 38780-0103	3	2.06″ (52.3)	94F3880	2.60
● 38780-0104	4	2.50″ (63.5)	72K2077	3.37
● 38780-0105	5	2.94″ (74.7)	72K2078	3.84
● 38780-0106	6	3.38″ (85.9)	72K2079	4.56
● 38780-0108	8	4.25″ (108)	14F2634	5.63
● 38780-0110	10	5.13″ (130)	72K2081	6.67
● 38780-0112	12	6.00″ (152)	72K2082	7.66
● 38780-0114	14	6.88″ (175)	72K2083	6.65
● 38780-0116	16	7.75″ (197)	72K2084	7.85
● 38780-0118	18	8.63″ (219)	72K2085	7.85
● 38780-0120	20	9.50″ (241)	72K2086	10.24
● 38780-0124	24	11.25″ (286)	72K2087	12.86

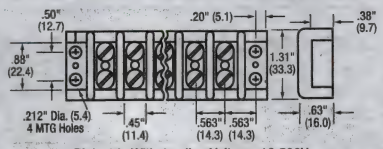
* Optional washers included

(5185)

21 SERIES 0.563″ (14.3) 30A BARRIER TERMINAL STRIPS

RoHS Compliant Available

molex



- General-Purpose Phenolic Housing
- Wire Size: 10 to 18 AWG
- Dielectric Withstanding Voltage: 10,500Vrms
- Temperature Rating: 150°C max.

Closed/Open-bottom strips with 0.563″ (14.3) centers. Zinc-chromate-plated steel no. 8-32 x 0.313″ (7.94) phillips/slotted screws. 1.31″ (33.3) wide x 0.63″ (16) high. UL recognized 300Vrms class B and C; CSA certified 300Vrms @ 30A.

Mfg. Part No.	No. of Positions	Length (mm)	Stock No.	Price Each 1-24
21 SERIES BARRIER TERMINAL STRIPS - CLOSED-BOTTOM				
● 38211-0102	2	2.09″ (53.9)	72K1993	3.06
● 38211-0103	3	2.66″ (67.6)	72K1994	4.72
● 38211-0104	4	3.22″ (81.8)	72K1995	5.79
● 38211-0105	5	3.78″ (96)	72K1996	6.21
● 38211-0106	6	4.34″ (110)	14F2314	7.04
● 38211-0107	7	4.91″ (125)	88F3785	8.26
● 38211-0108	8	5.47″ (139)	72K1997	9.33
● 38211-0110	10	6.59″ (167)	72K1998	10.46
● 38211-0112	12	7.72″ (196)	72K7383	12.46
● 38211-0116	16	9.97″ (110)	72K1999	12.51
21 SERIES BARRIER TERMINAL STRIPS - OPEN-BOTTOM				
● 38210-0103	3	2.66″ (67.6)	72K1989	2.69
● 38210-0105	5	3.78″ (96)	72K1990	6.01
● 38210-0108	8	5.47″ (139)	80K7359	6.95

(5186)

28 SERIES 0.688″ (17.5) 50A BARRIER TERMINAL STRIPS

RoHS Compliant Available

molex

Open back and feed thru strips with 0.688″ (17.5) centers. General-purpose phenolic insulator with UL temperature index 150°C. Nickel-plated brass no. 10-32 x 0.375″ (9.5) phillips/slotted screws. Wire size: no. 6 lugged. 1.81″ (46) wide x 0.75″ (19.1) high. UL recognized 300Vrms Class B and C; CSA certified 600Vrms @ 50A. Withstanding voltage: 10,500Vrms.

Mfg. Part No.	No. of Positions	Length (mm)	Stock No.	Price Each 1-24
● 38280-0102	2	2.50″ (63.5)	72K2000	4.62
● 38280-0103	3	3.19″ (81)	72K2001	7.23
● 38280-0104	4	3.88″ (98.4)	72K2002	9.41
● 38280-0106	6	5.25″ (133)	72K2004	16.24
● 38280-0108	8	6.63″ (168)	72K2005	23.14
● 38280-0110	10	8.00″ (203)	72K2006	21.37
● 38280-0112	12	9.38″ (238)	72K2007	20.14

(5187)

MOLEX TERMINAL BLOCK JUMPERS

RoHS Compliant Available

molex

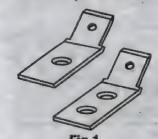


Fig.1

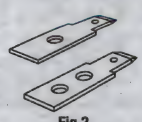


Fig.2

Fig.3

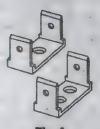


Fig.4

Fig.5

Fig.6

- Nickel-Plated Brass
- **Sold in Multiples of 10**

Mfg. Part No.	Fig.	For Terminal Block Series	Stock No.	Price Each 1-99
● 38002-0084	1	13	29B692	0.45
● 38002-0176	2	14, 76, 77	29B895	0.15
● 38002-0260	3	18	29B1108	0.31
● 38002-0338	4	21	29B1361	0.52
● 38723-6502	5	...	72K2052	0.43

CONTINUED

MOLEX TERMINAL BLOCK JUMPERS (CONT.)

Mfg. Part No.	Fig.	For Terminal Block Series	Stock No.	Price Each 1-99
38002-1335	6	25, 73, 74	2987480	0.14
38002-0333	...	78	72K1975	0.19
38002-0358	...	21	01H9090	0.28

(77852)

52 SERIES FILTERED TERMINAL BLOCKS

RoHS Compliant Available

api technologies corp.

The **52 series** of filtered terminal blocks have been developed for DC power filtering applications. Working voltage: 100VDC. Operating temperature range: –55°C to +105°C. Capacitance: 2,500pF + 100% –0%. Current rating: 20A. Mininum Ins. Loss @ 100MHz: 60. UL 1059 recognized and CSA certified. *For latest mechanical details, go online or call.*

Mfg. Part No.	No. of Positions	Stock No.	Price Each 1-4	5-9	10-24
52F160-002-A	2	78K6481	19.42	18.32	17.22
52F160-003-A	3	15M8103	25.07	23.65	22.23
52F-160-004-A	4	83K9093	29.02	26.91	24.55
52F-160-006-A	6	83K9094	42.33	39.25	35.83

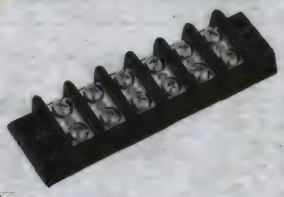
(7448)

9.50mm (0.374″) BARRIER TERMINAL BLOCKS

RoHS Compliant Available

multicomp

- Terminal : Tin plated Brass
- Insulator Body : Black Polyamide 66 (UL94V-0)
- Screw : #6-32, steel, Nickel plated
- Operation Temperatures : -40°C +105 °C
- Rated Current : 20 Amp, 250VAC
- Insulation Withstanding Voltage: 2000 VAC min.
- Insulation resistance : > 5000 MOhm. at 500 VDC
- Wire Range: 22-12 AWG
- Screw Torque : 12 lb-in, screw with washer



BARRIER TERMINAL BLOCKS - WITHOUT WASHERS

Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-24
MC24299	2	14N5628	0.57
MC24300	3	14N5629	1.03
T64 4WAY	4	14N5630	2.04
MC24302	5	14N5631	1.47
MC24303	6	14N5632	2.33
MC24304	8	14N5633	3.29
MC24305	10	14N5634	2.67
T64 12WAY	12	14N5635	4.75
MC24307	16	14N5636	5.26
MC24308	20	14N5637	6.57
BARRIER TERMINAL BLOCKS - WITH WASHERS			
MC24309	2	14N5638	0.93
MC24310	3	14N5639	1.19
MC24311	4	14N5640	1.61
MC24312	5	14N5641	2.00
MC24313	6	14N5642	2.33
MC24315	8	14N5644	3.33
MC24317	10	14N5646	2.83
MC24318	12	14N5647	4.45
MC24321	16	14N5650	5.63
MC24322	18	14N5651	6.32
MC24323	20	14N5652	6.57
MC24324	24	14N5653	7.88
MC24326	30	14N5655	9.71

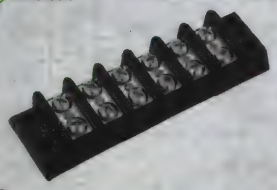
(120725)

11.00mm (0.433″) BARRIER TERMINAL BLOCKS

RoHS Compliant Available

multicomp

- Terminal : Tin plated Brass
- Insulator Body : Black Polyamide 66 (UL94V-0)
- Screw : #6-32, steel, Nickel plated
- Operation Temperatures : -40°C +105 °C
- Rated Current : 25 Amp, 300VAC
- Insulation Withstanding Voltage: 2000 VAC min.
- Insulation resistance : > 5000 MOhm. at 500 VDC
- Wire Range: 22-14 AWG
- Screw Torque : 12 lb-in, screw with washer



BARRIER TERMINAL BLOCKS - WITHOUT WASHERS

Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-249
MC24327	2	14N5656	0.98
MC24328	4	14N5657	1.70
MC24329	5	14N5658	2.25
MC24330	6	14N5659	2.63
MC24331	8	14N5660	2.24
MC24332	10	14N5661	2.80
MC24333	12	14N5662	4.51
BARRIER TERMINAL BLOCKS - WITH WASHERS			
MC24335	2	14N5664	1.04
MC24339	6	14N5668	2.48
MC24340	8	14N5669	2.84
MC24341	10	14N5670	3.55

(120726)

AMP NEMA 900 SERIES TERMINAL BLOCKS

RoHS Compliant Available

TE connectivity

Authorized Distributor

900 series medium duty, gray surface, 0.375″ pitch. Voltage rating: 600 V max. Current rating: 50 A max. Housing: Polyester, UL 94V-0 rated.

Mfg. Part No.	Mount Type	Wire Termination	Wire Size (AWG)	Stock No.	Price Each 1-24
1546143-2	Flat Base	Direct	18AWG to 8AWG	11H7045	6.58
1546234-1	Flat Base	Direct	22AWG to 10AWG	89C1940	2.44
1546235-1	Dovetail Base	Direct	22AWG to 10AWG	04H6720	4.68
1546147-2	Flat Base	Direct	22AWG to 8AWG	97H3230	16.87
1546147-1	Flat Base	Direct	22AWG to 8AWG	93C9491	2.48

END SECTIONS

Mfg. Part No.	Mount Type	Stock No.	Price Each 1-49
1546164-1	Dovetail Base	83C8023	1.59
1546163-1	Flat Base	89C1929	1.21

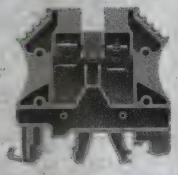
(79373)

SCREW CLAMP TERMINAL BLOCKS AND ACCESSORIES

RoHS Compliant Available

multicomp

Constructed of zinc-plated steel with a rising clamp design that provides maximum vibration-proof installation and corrosion resistance. Tin-lead plated copper current bars for minimum contact resistance. Terminal block material is thermoplastic with temperature resistance to 105°C. Terminals are rated 600V and are used in conjunction with standard DIN rails; *ordered separately online or call. Order end covers, end brackets and jumpers separately below.*



DIN RAIL MOUNT TERMINAL BLOCKS

Mfg. Part No.	Description	Amp (A)	AWG	Thickness (mm)	W (mm)	Ht. (mm)	Stock No.	Price Each 1-9
SPC10564	PEK 2.5 Feed-Thru	26	26-12	6	53.5	52.5	19C7283	1.49
SPC10565	PEK 4 Feed-Thru	34	26-12	6.5	53.5	52.5	19C7284	1.70
SPC10566	PEK 6 Feed-Thru	44	26-8	8	53.5	52.5	19C7285	2.10
SPC10567	PEK 10 Feed-Thru	50	16-8	10	53.5	52.5	19C7286	3.01
SPC10570	Fuse Block*	6.3	20-8	8	58	76	19C7289	11.92
SPC10571	Fuse Block+	6.3	20-8	8	58	76	19C7290	12.08

➤CONTINUED➤

TERMINAL BLOCKS – DIN RAIL

SCREW CLAMP TERMINAL BLOCKS AND ACCESSORIES (CONT.)

Mfg. Part No.	Description	Amp (A)	AWG	Thick-ness (mm)	W (mm)	Ht. (mm)	Stock No.	Price Each 1-9
● SPC11912	Fuse Block**	6.3	26-8	8	63.2	45	83C7600	8.65
● SPC10568	Ground Block 4.0	...	26-10	6	58.5	49	19C7287	6.35

*24VDC; +110VAC; **300V

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● SPC10573	End Cover (Feed-Thru), 1.5mm Thickness	19C7292	0.68
● SPC10572	End Cover (Fuse Disc), 1.5mm Thickness	19C7291	1.34
● SPC11783	End Bracket, 8 AWG	73C4920	2.35
● SPC11889	2-Pole Jumper for **Type SPC10564**	83C7584	1.30
● SPC11890	3-Pole Jumper for **Type SPC10564**	83C7585	2.09
● SPC11891	4-Pole Jumper for **Type SPC10564**	83C7586	3.26
● SPC11892	10-Pole Jumper for **Type SPC10564**	83C7587	6.52
● SPC11893	2-Pole Jumper for **Type SPC10565**	83C7588	2.50
● SPC11896	10-Pole Jumper for **Type SPC10565**	83C7591	14.32
● SPC11898	3-Pole Jumper for **Type SPC10566**	83C7593	3.63

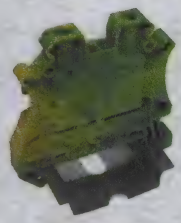
(66779)

3

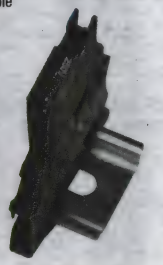
XB SERIES IEC TERMINAL BLOCKS — DIN RAIL MOUNT

RoHS Compliant Available

Terminal Blocks



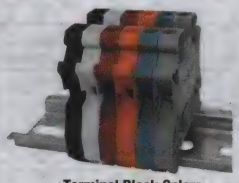
Ground Blocks (Green/Yellow)



Fuse Terminal Block (Black)

Features

- Screw-locking maintenance-free design prevents screws from backing out
- Metal surfaces protected with lead-free, galvanic nickel or tin plating
- Multiple conductors can be connected in same clamping mechanism, saving space
- Front connection design allows easy wiring in tight spaces
- Flexible plug-in bridge system
- cULus recognized, CE compliant



Terminal Block Colors
Black, White, Red, Orange, Blue, Grey
Yellow and Green (not shown)

XB series IEC DIN rail terminal blocks are constructed for long use under demanding conditions. These modular terminal blocks are designed to conserve space, while allowing maximum flexibility and simple installaltion. Select from a full line of **XB series** terminal blocks complete with universal accessories; *all ordered separately below.*

SCREW CONNECTION, SINGLE LEVEL THROUGH-FEED TERMINAL BLOCKS

Mfg. Part No.	Terminal Width (mm)	Color	Wire Size	Stock No.	Price 1-9
● XBUT4	6.2	Grey	26AWG to 10AWG	15N6521	1.94
● XBUT4BK	6.2	Black	26AWG to 10AWG	51M6989	1.97
● XBUT4BU	6.2	Blue	26AWG to 10AWG	47T6251	1.90
● XBUT4GN	6.2	Green	26AWG to 10AWG	51M6995	1.90
● XBUT4OR	6.2	Orange	26AWG to 10AWG	47T6256	1.90
● XBUT4RD	6.2	Red	26AWG to 10AWG	15N6522	1.90
● XBUT4WH	6.2	White	26AWG to 10AWG	47T6257	1.90
● XBUT4YE	6.2	Yellow	26AWG to 10AWG	47T6258	1.90
● XBUT6	8.2	Grey	24AWG to 8AWG	78M5058	2.54
● XBUT6BU	8.2	Blue	24AWG to 8AWG	47T6259	2.40
● XBUT10	10.2	Grey	20AWG to 6AWG	47T6240	3.29
● XBUT10BU	10.2	Blue	20AWG to 6AWG	47T6241	3.33
● XBUT10OR	10.2	Orange	20AWG to 6AWG	47T6242	3.51
● XBUT10RD	10.2	Red	20AWG to 6AWG	47T6243	3.77
● XBUT10YE	10.2	Yellow	20AWG to 6AWG	47T6244	3.51
● XBUT16	12	Grey	16AWG to 4AWG	47T6245	6.45
● XBUT16BU	12	Blue	16AWG to 4AWG	47T6246	6.03
● XBUT35	16	Grey	15AWG to 0AWG	47T6248	9.10
● XBUT35BU	16	Blue	15AWG to 0AWG	47T6249	8.62

SCREW CONNECTION MULTI-CONDUCTOR TERMINAL BLOCK

● XBUT4D22	6.2	Grey	26AWG to 10AWG	47T6252	4.61

SCREW CONNECTION SINGLE-LEVEL GROUND BLOCKS

● XBUT4PE	6.2	Green/Yellow	26AWG to 10AWG	78M5053	7.79
● XBUT6PE	8.2	Green/Yellow	24AWG to 8AWG	47T6263	7.75

➤CONTINUED➤

XB SERIES IEC TERMINAL BLOCKS — DIN RAIL MOUNT (CONT.)

SCREW CONNECTION SINGLE-LEVEL GROUND BLOCKS

Mfg. Part No.	Terminal Width (mm)	Color	Wire Size	Stock No.	Price 1-9
● XBUT16PE	12	Green/Yellow	16AWG to 4AWG	47T6247	9.61
● XBUT35PE	16	Green/Yellow	15AWG to 2AWG	47T6250	14.28

SCREW CONNECTION MULTI-CONDUCTOR GROUND BLOCK

● XBUT4D22PE	6.2	Green/Yellow	26AWG to 10AWG	47T6253	8.06

SCREW CONNECTION FUSE TERMINAL BLOCKS

Mfg. Part No.	Terminal Width (mm)	Fuse Size (mm)	LED	Wire Size	Stock No.	Price Each 1-9	Price Each 10-24
● XBUT4FBE	6.2	5 x 20	...	26AWG to 10AWG	47T6254	7.56	7.37
● XBUT4FBEL250	6.2	5 x 20	110 - 250V, 0.5 - 2.5A	26AWG to 10AWG	47T6255	15.11	14.71
● XBUT6FBN	8.2	6.3 x 32	...	24AWG to 8AWG	47T6260	9.36	9.11
● XBUT6FBNL24	8.2	6.3 x 32	12 - 30V, 1 - 2.5A	24AWG to 8AWG	47T6261	16.49	16.06
● XBUT6FBNL250	8.2	6.3 x 32	110 - 250V, 0.5 - 2.5A	24AWG to 8AWG	47T6262	16.71	16.27

TERMINAL BLOCK ACCESSORIES
END COVER

Mfg. Part No.	Color	Stock No.	Price Each 1-9	Price Each 10-24
● XBACUT10	Grey	47T6222	0.73	0.71

PARTITION PLATE

● XBATUT10	...	47T6233	0.94	0.91

END STOPS

Mfg. Part No.	Style	Stock No.	Price Each 1-9	Price Each 10-24
● XBAES35C	One-Screw Mounted	47T6223	1.94	1.88
● XBAES35T	Three-Screw Mounted	47T6224	1.35	1.31
● XBAES35N	Snap-On	70M8827	1.18	1.15

PLUG-IN BRIDGES

Mfg. Part No.	Terminal Width (mm)	No. of Positions	Stock No.	Price Each 1-9	Price Each 10-24
● XBAFBS26	6.2	2	47T6229	0.68	0.66
● XBAFBS36	6.2	3	75M2303	1.42	1.38
● XBAFBS56	6.2	5	47T6232	2.64	2.58
● XBAFBS106	6.2	10	47T6225	5.28	5.15
● XBAFBS506	6.2	50	47T6231	30.06	29.33
● XBAFBS28	8.2	2	47T6230	0.84	0.82
● XBAFBS210	10.2	2	47T6226	2.21	2.16
● XBAFBS212	12	2	47T6227	2.53	2.47
● XBAFBS216	16	2	47T6228	2.84	2.77

MARKER STRIPS FOR CENTER LABELING — BLANK (SOLD IN STRIPS OF 10)

Mfg. Part No.	Terminal Width (mm)	Color	Stock No.	Price Each 1-9	Price Each 10-24
● XBMZB5	5.2	White	47T6238	0.98	0.95
● XBMZB6	6.2	White	95M8947	0.97	0.94
● XBMZB8	8.2	White	47T6239	0.91	0.88
● XBMZB10	10.2	White	47T6237	0.91	0.88

DIN RAILS

Mfg. Part No.	Size	Style	Stock No.	Price Each 1-9	Price Each 10-24
● XBANS3575P	35 mm x 7.5 mm x 2m	Slotted	59M6340	15.93	15.54
● XBANS3575U	35 mm x 7.5 mm x 2m	Solid	95M3907	15.42	15.03

(197893)

C383 SERIES DISCONNECT FUSE HOLDERS

RoHS Compliant Available

- Finger-safe design per IEC standards
- Easy to adjust position on rail
- Quick change of fuse -- no tools required
- Vented design runs cool
- Lockout/tagout compliance
- Mounts directly on standard TS35 DIN rails
- UL listed, CSA certified, CE compliant

C383 series disconnect fuse holders offer 600V fused circuit protection and subsequently "no load" switching. Compact design is perfect for where positive, safe circuit protection is required and space is at a premium, such as switchboards, panels and control consoles. White molded phenolic housing with silver-plated contacts. **Mfg. part no.**

➤CONTINUED➤

C383 SERIES DISCONNECT FUSE HOLDERS (CONT.)

C383FHCC Class CC model is UL listed and CSA certified for branch circuit protection. **Mfg. part no. C383FHMD** midget model is UL listed and CSA certified for supplementary and high-speed protection. Wire size: 6-14 AWG. Torque: 14.75 lb.-in (1.67 Nm). Fuse size: 0.41 x 1.5". UL/CSA rated: 600VAC/VDC; CSA 25A/UL 30A.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
C383FHCC	1-Pole Fuse Holder for Class CC Fuse	46K4043	18.13

(202388)

LINERGY TR SERIES SCREW TERMINAL BLOCKS

NEW

RoHS Compliant Available

Schneider Electric

Passthrough | Grounding Type | Double Deck | Disconnect (Fused)

- Fast and easy installation
- Multiple connection options
- International standards and RoHS compliance
- Extensive connection and test accessories

Screw technology terminal blocks are components that are well established throughout the world and are suitable for the majority of connection applications, due to their wide range of functions and connection possibilities. **NSYTRV** terminal blocks help ensure quality and operational availability of equipment. In addition to these advantages, they optimize the setup and operation of installations, due to their simplicity and integrated functions. **NOTE:** Disconnect (fused) terminal blocks carry a 6.3x32mm G-fuse cartridge.

TERMINAL BLOCKS

Mfg. Part No.	Connection Function	Color	Wire Size (AWG) Min	Wire Size (AWG) Max	Contacts	Stock No.	Price Each 1-9
NSYTRV22	Passthrough	Grey	26	12	2	06X3306	1.89
NSYTRV22BL	Passthrough	Blue	26	12	2	06X3307	1.89
NSYTRV42	Passthrough	Grey	26	10	2	06X3311	2.02
NSYTRV42BL	Passthrough	Blue	26	10	2	06X3312	2.02
NSYTRV44	Passthrough	Grey	26	10	4	06X3316	6.39
NSYTRV62	Passthrough	Grey	24	8	2	06X3318	2.64
NSYTRV22PE	Grounding Type	Green/Yellow	26	12	2	06X3308	7.10
NSYTRV42PE	Grounding Type	Green/Yellow	26	10	2	06X3313	8.31
NSYTRV44PE	Grounding Type	Green/Yellow	26	12	4	06X3317	25.45
NSYTRV62PE	Grounding Type	Green/Yellow	24	8	2	06X3319	8.66
NSYTRV24D	Double Deck	Grey	26	12	4	06X3309	4.02
NSYTRV24DPE	Double Deck	Green/Yellow	26	12	4	06X3310	29.19
NSYTRV42SF5	Disconnect (Fused)	Black	26	10	2	06X3314	16.23
NSYTRV42SF6	Disconnect (Fused)	Black	26	8	2	06X3315	28.04

ACCESSORIES

Mfg. Part No.	Description	For Use With	Stock No.	Price Each
9080MH212	12 inch mounting track, no holes	Terminal Blocks	85H1222	16.03
NSYSDR200BD	79 inch mounting track, perforated	Terminal Blocks	85W2637	12.71
NSYTRAAB35	End Stop (Clip-on)	NSYTRVxx	06X3321	3.31
NSYTRABPV5	Clip-in Blank Marker Strips	NSYTRV22xx	06X3322	11.50
NSYTRABPV6	Clip-in Blank Marker Strips	NSYTRV42xx	06X3323	9.67
NSYTRABPV8	Clip-in Blank Marker Strips	NSYTRV62xx	06X3324	7.27
NSYTRAC22	End Barrier	NSYTRV22xx, NSYTRV42xx, NSYTRV62xx	06X3326	1.32
NSYTRAC24	End Barrier	NSYTRV44xx	06X3327	2.47
NSYTRACE24	End Barrier	NSYTRV24Dxx	06X3325	2.47
NSYTRAL22	2-Pole Jumpers	NSYTRV22xx	06X3328	1.39
NSYTRAL42	2-Pole Jumpers	NSYTRV42xx	06X3329	1.04
NSYTRAL62	2-Pole Jumpers	NSYTRV62xx	06X3330	2.67
NSYTRAP22	Partition Plate	NSYTRV22xx, NSYTRV42xx, NSYTRV62xx	06X3332	1.84
NSYTRAP24	Partition Plate	NSYTRV44xx	06X3333	1.96
NSYTRAPE24	Partition Plate	NSYTRV24Dxx	06X3331	1.13

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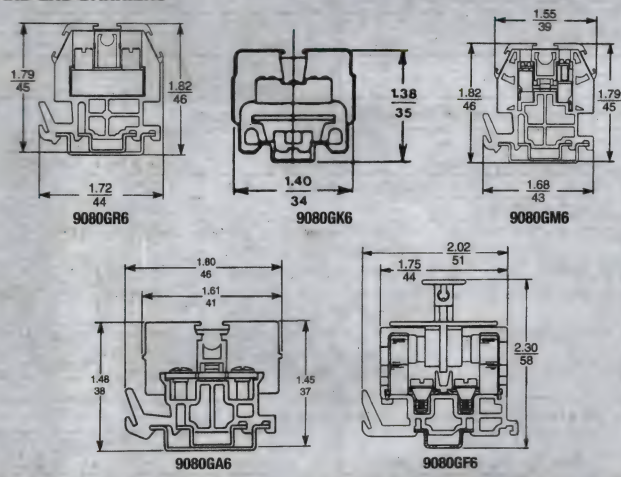
G SERIES NEMA TYPE TERMINAL BLOCKS AND END BARRIERS

RoHS Compliant Available

Schneider Electric



Each section of **G series** terminal blocks requires one end barrier, *ordered separately below*. Terminals and end barriers have molded nylon construction with 125°C maximum service temperature. All blocks mount on **mfg. part no. 9080GH** and 35mm DIN 3 channel except **mfg. part no. 9080GK6** which mounts on **mfg. part no. 9080GH** channel or mounts directly. Maximum voltage: 600V. **Mfg. part no. 9080GF6** features fuse block with beryllium-copper clips and wrap-around fuse puller.**GR, GK** and **GM** available in assorted colors. UL recognized, CSA certified. *Order mounting channel, jumpers and marking accessories; go online or call.*

Mfg. Part No.	Max. Current	Description	Stock No.	Price Each
9080GR6	60A	Solderless box lug, 22 to 8AWG, natural	11R7952	3.68
9080GK6	70A	Solderless box lug, 22 to 10AWG, natural for direct or channel mounting	11R7950	3.60
9080GM6	30A	Mini solderless box lug, 22 to 10AWG (600V), natural	11R7951	2.94
9080GMB6	30A	Mini solderless box lug, 22 to 10AWG (600V), black	97F8491	2.92
9080GMG6	30A	Mini solderless box lug, 22 to 10AWG (600V), green	97F8493	2.92
9080GA6	40A	Flat terminal, 22 to 12AWG, 6-32 x 5/16" screws	11R7947	2.88
9080GF6	30A	Fuse block for 13/32" dia. x 1 1/2" ferrule fuse, 18 to 10AWG (fuse not included); **pkg. of 10**	11R7948	165.20

G SERIES END BARRIERS

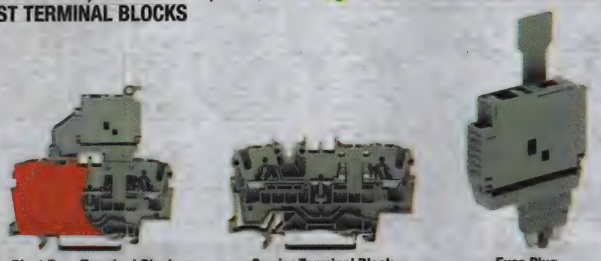
Mfg. Part No.	For Use With	Stock No.	Price Each
9080GK6B	Fits type 9080GK series	50F4243	1.46
9080GM6B	Fits type 9080GM and GR series	96F6541	1.19

(5257)

TOPJOB®S SERIES DIN RAIL MOUNT FUSE, DISCONNECT, & TEST TERMINAL BLOCKS

RoHS Compliant Available

WAGO



Pivot Fuse Terminal Block | Carrier Terminal Block | Fuse Plug

- Terminal block width: 5.2 mm
- 6.2 mm includes end plate for fuse disconnect (pivot style)
- AWG: 22-12 (14 AWG max with ferrule)
- Rated Voltage/Current: Dependent upon fuse or indicator

TOPJOB Series Fuse, Disconnect & Test pluggable rail mounted terminal blocks feature 100 % spring clamp technology and offers many advantages to the user since the function and the wiring are accomplished by two separate parts. This includes no additional cost for assembly and wiring and no risk of accidental contact with live parts during disconnection of fuse plug as it is completely separated from the carrier terminal block. This allows for quick and safe exchange of the fuse away from current carrying parts and allows the fuse plug to be taken away during service and avoids unintentional reclosing of the circuit by another person. Additional features include two touchproof test slots, an optional LED blown fuse indicator, and an option to use shorting link rather than a fuse as a disconnect plug.

➤CONTINUED➤

TOPJOB®S SERIES DIN RAIL MOUNT FUSE, DISCONNECT, & TEST TERMINAL BLOCKS (CONT.)

TOPJOB®S BLADE-TYPE FUSE TERMINAL BLOCKS

Mfg. Part No.	Poles	Stock No.	Price Each 1-24	Price Each 25-99
● 2002-1681	2	60R3753	5.56	5.27
● 2002-1881	4	62R9559	7.26	6.88

TOPJOB®S FULLY ASSEMBLED PIVOT STYLE FUSE TERMINAL BLOCKS

Mfg. Part No.	Poles	Features	Stock No.	Price Each 1-24	Price Each 25-99
● 2002-1611	2	Pivotable Fuse Holder & End Plate	73P7427	6.91	6.54
● 2002-1611/1000-541			73P7429	11.63	10.99
● 2002-1611/1000-542	2	Pivotable Fuse Holder w/ 30-65 V LED Blown Fuse Indication & End Plate	62R9552	11.63	10.99
● 2002-1811	4	Pivotable Fuse Holder & End Plate	62R9554	10.77	10.19
● 2002-1811/1000-541	4	Pivotable Fuse Holder w/ 12-30 V LED Blown Fuse Indication & End Plate	62R9555	16.53	15.63
● 2002-1811/1000-542	4	Pivotable Fuse Holder w/ 30-65 V LED Blown Fuse Indication & End Plate	62R9556	16.72	15.81
● 2002-1811/1000-836	4	Pivotable Fuse Holder w/ 110-250 V LED Blown Fuse Indication & End Plate	62R9557	16.72	15.81

TOPJOB®S CARRIER TERMINAL BLOCKS FOR FUSE PLUGS

Mfg. Part No.	Poles	Stock No.	Price Each 1-24	Price Each 25-99
● 2002-1661	2	62R9553	4.47	4.25
● 2002-1861	4	62R9558	5.40	5.12

TOPJOB®S FUSE PLUGS

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● 2004-0911/1000-541	Pivotable Fuse Holder w/ 12-30 V LED	62R9561	10.92
● 2004-0911/1000-542	Pivotable Fuse Holder w/ 30-65 V LED	62R9562	10.21
● 2004-0911/1000-836	Pivotable Fuse Holder w/ 110-250 V LED	62R9563	10.92

TOPJOB®S TERMINAL BLOCK END PLATES

Mfg. Part No.	Desccription	Color	Stock No.	Price Each 1-24	Price Each 25-99
● 2002-0991	Pivot Fuse Block End Plate - 2 & 4 position	Gray	62R9549	1.22	1.16
● 2002-0992	Pivot Fuse Block End Plate - 2 & 4 position	Orange	62R9550	1.17	1.11
● 2002-1692	Blade-Type Fuse Block End Plate - 2 Position	Orange	97M6770	1.03	0.98

(165065)

285 SERIES POWER CAGE CLAMP® DIN RAIL TERMINAL BLOCKS

RoHS Compliant Available

WAGO

The Power Cage Clamp offers spring pressure, DIN-rail mounted terminal blocks for larger conductors up to ⅝. The Power Cage Clamp offers the same safe, vibration resistant, gas-tight connection as the original CAGE CLAMP®. The many accessories, include push-in jumpers, marking, test plug adapter, and voltage tap for distribution of power.

FEED THROUGH TERMINAL BLOCKS, GRAY

Mfg. Part No.	Poles	Wire Size (AWG)	Rating	Stock No.	Price Each 1-24	Price Each 25-99
● 285-135	2	8AWG to 2AWG	600V/115A	97M6782	11.54	10.91
● 285-150	2	8AWG to 00AWG	600V/150A	97M6784	21.27	20.10
● 285-195	2	4AWG to 0000AWG	600V/200A	28K2204	31.94	30.14

GROUND TERMINAL BLOCKS, GREEN/YELLOW

● 285-137	2	8AWG to 2AWG	...	97M6783	18.42	17.40
● 285-197	2	4AWG to 0000AWG	...	29K1427	47.63	44.93

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24	Price Each 25-99
● 285-450	Jumper for 285 Series, 285-150 & 285-157	97M6788	9.23	8.74
● 285-427	Power Tap for 285-135	97M6786	4.82	4.57
● 285-447	Power Tap for 285-150	97M6787	5.05	4.79
● 285-407	Power Tap for 285-195	29K1433	5.10	4.84

TOOLS

Mfg. Part No.	Description	Stock No.	Price 1-4
● 210-721	Operating Tool w/ Partially insulated shaft	18T1371	9.82

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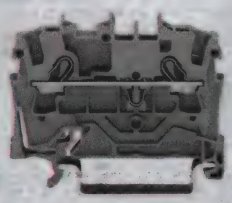
TOPJOB® TERMINAL BLOCKS

RoHS Compliant Available

WAGO



TOPJOB® DIN-rail mount terminal blocks feature CAGE CLAMP® technology that allows insertion, by hand, of a stripped conductor (solid or ferruled stranded) as well as screwdriver actuated wire insertion and removal of all conductor types. Insulation housing: polyamide 6.6 to UL94V-0 (rated 105° C). Current bar is lead-free tin-plated copper alloy. Clamp is stainless steel.

FEED THROUGH TERMINAL BLOCKS, GRAY

Mfg. Part No.	Poles	Wire Size (AWG)	Rating	Stock No.	Price Each 1-24	Price Each 25-99
● 2001-1201	2	22AWG to 14AWG	60015V/A	28K2001	1.42	1.34
● 2001-1301	3	22AWG to 14AWG	60015V/A	28K2003	1.81	1.72
● 2001-1401	4	22AWG to 14AWG	60015V/A	28K2005	2.10	1.99
● 2002-1201	2	22AWG to 12AWG	60020V/A	28K2009	1.71	1.62
● 2002-1301	3	22AWG to 12AWG	60020V/A	28K2012	2.07	1.96
● 2002-1401	4	22AWG to 12AWG	60020V/A	28K2015	2.58	2.45
● 2004-1201	2	20AWG to 10AWG	60030V/A	28K2030	2.13	2.02
● 2004-1301	3	20AWG to 10AWG	60030V/A	28K2032	2.64	2.49
● 2004-1401	4	20AWG to 10AWG	60030V/A	28K2034	3.21	3.04

DISCONNECT TERMINAL BLOCKS, GRAY

● 2002-1671	2	22AWG to 12AWG	60015V/A	97M6769	4.89	4.64

ANGLED FRONT ENTRY TERMINAL BLOCKS

● 2002-6301	3	22AWG to 12AWG	600V/20A	39M3871	2.07	1.96

* No disconnect, Same profile as disconnect terminal blocks

DOUBLE DECK TERMINAL BLOCKS

Mfg. Part No.	Description	AWG	Rating (A)	Stock No.	Price Each 1-24	Price Each 25-99
● 2002-2201	Through/Through	22AWG to 12AWG	600V/20A	28K2018	3.86	3.66
● 2002-2208	4-Conductor, All Common	22AWG to 12AWG	600V/20A	28K2020	7.66	7.25

TRIPLE DECK TERMINAL BLOCKS

● 2002-3201	Through/Through/Through	22AWG to 12AWG	600V/20A	28K2023	6.16	5.83
● 2002-3208	6 Conductor, All Common	22AWG to 12AWG	600V/20A	28K2025	9.95	9.42
● 2002-3217	Gnd/Through/Through	22AWG to 12AWG	600V/20A	28K2026	10.42	9.87

GROUND TERMINAL BLOCKS, GREEN/YELLOW

Mfg. Part No.	Poles	AWG	Stock No.	Price Each 1-24	Price Each 25-99
● 2001-1207	2	22AWG to 14AWG	28K2002	5.81	5.51
● 2001-1307	3	22AWG to 14AWG	28K2004	6.43	6.09
● 2001-1407	4	22AWG to 14AWG	28K2006	6.89	6.52
● 2002-1207	2	22AWG to 12AWG	28K2010	5.73	5.42
● 2002-1307	3	22AWG to 12AWG	28K2013	6.89	6.52
● 2002-1407	4	22AWG to 12AWG	28K2016	7.85	7.43
● 2004-1307	3	20AWG to 10AWG	28K2033	7.33	6.94

LED TERMINAL BLOCKS, RED LED 24VDC/25mA

Mfg. Part No.	Poles	Description	AWG	Stock No.	Price Each 1-24	Price Each 25-99
● 2002-1321/1000-434	3	Single Level	22AWG to 12AWG	97M6766	11.43	10.80

TERMINAL BLOCK END PLATES, ORANGE

Mfg. Part No.	Description	Stock No.	Price Each 1-24	Price Each 25-99
● 2002-1292	Fits 2001-1201 and 2002-1201	28K2011	0.89	0.84
● 2002-1392	Fits 2001-1301 and 2002-1301	28K2014	0.96	0.91
● 2002-1492	Fits 2001-1401 and 2002-1401	28K2017	0.99	0.94
● 2002-1692	Fits 2002-1601 and 2002-1671	97M6770	1.03	0.98
● 2002-2292	Fits 2002 Double Deck	28K2022	0.96	0.91
● 2002-2992	Fits 2002-2951, 2002-2958, and 2002-2971	97M6778	0.93	0.89
● 2002-3292	Fits 2002 Triple Deck	28K2027	1.02	0.97

INSULATED JUMPERS, PUSH-IN, LIGHT GRAY

Mfg. Part No.	Description	Rating (A)	Stock No.	Price Each 1-24	Price Each 25-99
● 2001-402	2-way	18	28K2007	0.61	0.58
● 2001-410	10-way	15	28K2008	4.84	4.60
● 2002-402	2-way	20	28K2028	0.63	0.60
● 2002-410	10-way	18	28K2029	5.29	5.02
● 2004-402	2-way	30	28K2036	0.74	0.70

STAGGERED JUMPERS

● 2002-472	2-way	25	97M6780	0.69	0.65
● 2002-482	12-way	25	97M6781	6.74	6.38

CONTINUED

TOPJOB® TERMINAL BLOCKS (CONT.)

ACCESSORIES

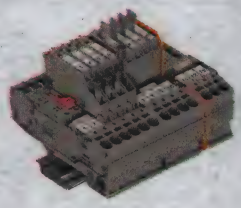
Mfg. Part No.	Description	Stock No.	Price Each 1-4	Price Each 5-9
2009-110	White Marking Strip Roll, 50M	28K2038	237.91	222.15
793-5666	Vertical Terminal Block Marking Strip, 1-50, 5-5.2mm	32M7158	6.26	5.92
793-5607	Vertical Terminal Block Marking Strip, 51-100, 5-5.2mm	32M7160	6.33	5.99
210-720	Screwdriver, 3.5 x 0.5mm	52R7799	5.65	5.27

(84751)

TOPJOB® S 2006 SERIES RAIL MOUNTED TERMINAL BLOCKS

RoHS Compliant Available

- 600 V, 30 A
- For conductors rated AWG 20 to AWG 8
- Terminal block width 7.5 mm



TOPJOB®S DIN 35 rail-mounted terminal blocks with CAGE CLAMP®S technology are the smallest on the market resulting in a space saving of up to 30%. Stripped solid conductors, stranded conductors with ferrules, or ultrasonically "bonded" conductors are easily connected by simply pushing the wire into the wire entry - no tools. Connecting stranded conductors without ferrules or small cross-sectional conductors that cannot be pushed in, is done similar to the original CAGE CLAMP®, using a screwdriver. In all cases, the conductor is removed using a screwdriver, like the original CAGE CLAMP®.

FUSE DISCONNECT TERMINAL BLOCKS WITH PIVOTING FUSE HOLDER

Mfg. Part No.	No. of Poles	Fuse Size Held	LED	LED Voltage AC/DC	Stock No.	Price Each 1-24
2006-1611	2	5mm x 20mm	No	...	62T0296	8.85
2006-1611/1000-541	2	5mm x 20mm	Yes	12-30 V	62T0297	19.23
2006-1611/1000-836	2	5mm x 20mm	Yes	110-250 V	62T0299	19.23
2006-1631	2	1/4" x 1-1/4"	No	...	62T0305	9.59
2006-1631/1000-541	2	1/4" x 1-1/4"	Yes	12-30 V	62T0307	20.00
2006-1631/1000-836	2	1/4" x 1-1/4"	Yes	110-250 V	62T0309	20.00
FUSE TERMINAL BLOCKS FOR AUTOMOTIVE BLADE FUSES ACC. TO DIN 72581-3c/ISO 8820-3						
2006-1681	2	Mini Auto	No	...	62T0319	10.39
2006-1681/1000-413	2	Mini Auto	Yes	24 V	62T0320	19.14

DISCONNECT TERMINAL BLOCKS

Mfg. Part No.	No. of Poles	Color	LED	LED Voltage AC/DC	Stock No.	Price Each 1-24
2006-1671	2	Grey	No	...	24R5368	8.85

ACCESSORIES

Mfg. Part No.	Type	Description	Stock No.	Price Each 1-24
2006-1661	Carrier Terminal Block	2 conductor, 20-8AWG, 7.5mm width	62T0313	8.48
2006-1691	End Plate	For 2 conductor carrier terminal block, grey	24R5370	1.06
2006-1692	End Plate	For 2 conductor carrier terminal block, orange	62T0324	1.06
2006-911	Fuse plug	For 5x20mm fuse	62T0329	5.17
2006-911/1000-541	Fuse plug	For 5x20mm fuse, w/ 12-30V LED indicator	62T0330	16.43
2006-911/1000-836	Fuse plug	For 5x20mm fuse, w/ 110-250V LED indicator	62T0332	16.43
2006-931	Fuse plug	For 1/4" x 1 1/4" fuse	62T0337	5.47
2006-931/1000-541	Fuse plug	For 1/4" x 1 1/4" fuse, w/ 12-30V LED indicator	62T0339	17.14
2006-931/1000-836	Fuse plug	For 1/4" x 1 1/4" fuse, w/ 110-250V LED indicator	62T0341	17.14
2006-991	End Plate	For fuse plug, orange	62T0345	1.11
2006-992	End Plate	For fuse plug, grey	62T0346	1.11

(210096)

280 SERIES DIN RAIL TERMINAL BLOCKS

RoHS Compliant Available

DIN-rail mount terminal blocks feature CAGE CLAMP® spring pressure wiring technology that operates by inserting a screwdriver, inserting a stripped conductor (solid or stranded) and removing the screwdriver. Insulation housing: polyamide 6.6 to UL94V-0 (rated 105° C). Current bar is lead-free tin-plated copper alloy. Clamp is stainless steel.

CONTINUED

280 SERIES DIN RAIL TERMINAL BLOCKS (CONT.)

SINGLE-LEVEL FRONT ENTRY, GRAY

Mfg. Part No.	Poles	Wire Size (AWG)	Rating	Stock No.	Price Each 1-24	Price Each 25-99
0280-0901	2	28AWG to 12AWG	600V/20A	79K2092	2.23	2.12
0280-0681	3	28AWG to 12AWG	600V/20A	79K2086	2.54	2.41
0280-0833	4	28AWG to 12AWG	600V/20A	79K2088	3.30	3.13
0281-0901	2	28AWG to 12AWG	600V/20A	79K2101	2.34	2.22
0281-0681	3	28AWG to 12AWG	600V/20A	79K2100	3.01	2.86
281-652	4	28AWG to 12AWG	600V/20A	28K2183	3.76	3.57
0282-0901	2	20AWG to 10AWG	600V/30A	79K2107	3.60	3.41
0282-0681	3	20AWG to 10AWG	600V/20A	79K2104	5.13	4.86
284-901	2	24AWG to 8AWG	600V/50A	81H5044	4.97	4.72
284-681	3	24AWG to 8AWG	600V/57A	94H6988	8.04	7.61
0283-0901	2	24AWG to 6AWG	600V/65A	79K2112	6.43	6.09
0283-0671	3	24AWG to 6AWG	600V/65A	79K2110	9.32	8.82
0285-0635	2	8AWG to 2AWG	600V/115A	79K2117	11.27	10.65

GROUND TERMINAL BLOCKS, GREEN/YELLOW

Mfg. Part No.	Poles	Wire Size (AWG)	Stock No.	Price Each 1-24	Price Each 25-99
0280-0907	2	28AWG to 12AWG	79K2093	6.90	6.53
0280-0687	3	28AWG to 12AWG	79K2087	7.86	7.44
280-837	4	28AWG to 12AWG	28K2167	10.26	9.72
0281-0907	2	28AWG to 12AWG	79K2102	6.85	6.48
281-687	3	28AWG to 12AWG	29K1197	8.17	7.74
281-657	4	28AWG to 12AWG	29K1173	10.32	9.77
0282-0687	3	24AWG to 10AWG	79K2105	11.63	10.99
284-907	2	24AWG to 8AWG	81H1488	10.90	10.32
284-687	3	24AWG to 8AWG	29K1414	14.16	13.38

END PLATES, 2.5mm WIDE, ORANGE

Mfg. Part No.	Description	Stock No.	Price Each 1-24	Price Each 25-99
280-309	End Plate for 280, 2-Conductor Blocks	28K2158	0.98	0.93
280-326	End Plate for 280, 3-Conductor Blocks	28K2160	1.01	0.95
280-315	End Plate for 280, 4-Conductor Blocks	28K2159	0.99	0.94
281-329	End Plate for 281, 2-Conductor Blocks	28K2174	1.01	0.95
281-326	End Plate for 281, 3-Conductor Blocks	28K2173	1.01	0.95
281-335	End Plate for 281, 4-Conductor Blocks	28K2175	1.02	0.97
282-328	End Plate for 282, 2-Conductor Blocks	28K2188	1.10	1.04
282-339	End Plate for 282, 3-Conductor Blocks	28K2190	1.37	1.29
284-328	End Plate for 284, 2-Conductor Blocks	81H1491	1.13	1.07
284-339	End Plate for 284, 3-Conductor Blocks	29K1385	1.43	1.35
283-328	End Plate for 283, 2-Conductor Blocks	28K2197	1.50	1.42
283-352	End Plate for 283, 3-Conductor Blocks	28K2198	1.68	1.60
END STOP				
249-116	End Stop, Gray	28K2138	1.27	1.20

INSULATED ADJACENT 2-POLE PUSH-IN JUMPERS

Mfg. Part No.	Description	Rating (A)	Stock No.	Price Each 1-24	Price Each 25-99
0280-0402	Jumper for 280 Series	20	79K2085	0.75	0.72
0282-0402	Jumper for 282 Series	30	79K2103	1.10	1.04
284-402	Jumper for 284 Series	50	81H1489	1.68	1.59
0283-0402	Jumper for 283 Series	65	79K2109	2.40	2.28

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24	Price Each 25-99
210-112/VE00-500/PW25-000	DIN Rail, Slotted, 35x7.5mm (2M)	28K2046	6.19	5.86
210-113	DIN Rail, Unslotted, 35x7.5mm (2M)	28K2047	13.70	12.95

(84690)

280 SERIES CAGE CLAMP® FUSE AND DISCONNECT TERMINAL BLOCKS

RoHS Compliant Available

Fig. 1

Fig. 2

CONTINUED

280 SERIES CAGE CLAMP® FUSE AND DISCONNECT TERMINAL BLOCKS (CONT.)

DIN-rail mount fuse/disconnect terminal blocks feature CAGE CLAMP® spring pressure wiring technology that operates by inserting a screwdriver, inserting a stripped conductor (solid or stranded) and removing the screwdriver. Insulation housing: polyamide 6.6 to UL94V-0 (rated 105° C). Current bar is lead-free tin-plated copper alloy. Clamp is stainless steel. Thermal circuit breakers available online.

DISCONNECT/TEST TERMINAL BLOCKS, GRAY (Fig. 1)

Mfg. Part No.	Poles	Wire Size	Rating	Stock No.	Price Each 1-24
● 0280-0870	2	28AWG to 12AWG	60015V/A	79K2090	5.77

FUSE TERMINAL BLOCKS (Fig. 2)

Mfg. Part No.	Description	Wire Size	Rating (A)	Stock No.	Price Each 1-24
● 0281-0611	5 x 20mm Fused Disconnect	28AWG to 12AWG	600V/10A	79K2095	8.79
● 281-611/281-541	5 x 20mm LED Fuse Indication, 15-30VDC	28AWG to 12AWG	600V/10A	04M4720	16.80
● 0281-0611/0281-0418/ RN01-0000	5 x 20mm, Neon Fuse Indication, 110VAC	28AWG to 12AWG	600V/10A	79K2096	16.58
● 0281-0623	1/4" x 1-1/4" Fuse Disconnect	28AWG to 12AWG	600V/10A	79K2097	10.39
● 281-623/281-541	1/4" x 1-1/4" LED Fuse Indication, 15-30VDC	28AWG to 12AWG	600V/10A	04M4721	18.97
● 0281-0623/0281-0418/ RN01-0000	1/4" x 1-1/4" Neon Fuse Indication, 110VAC	28AWG to 12AWG	600V/10A	79K2098	17.95

END PLATES AND PARTITIONS

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● 280-371	End Plate for 280-870	28K2161	1.03
● 280-316	End Plate for 280-626	29K0709	1.02
281-309	End Plate for 281 Blocks	28K2172	1.07
● 282-333	End Plate for 282 Blocks	28K2189	1.10
● 280-335	Partition for 280-826	66H8957	1.02

(84749)

811 SERIES CLASS CC AND 10X38MM FUSE HOLDERS

RoHS Compliant Available

- Class CC and 10x38mm photovoltaic or midget styles
- Available as 1-, 2-, or 3-pole configurations
- With or without LED indication
- Maintenance-free Cage Clamp® connection technology
- IP-20 finger safe / touch safe
- Easy DIN-rail mounting
- Quick and easy fuse replacement
- Wire size: 14-6 AWG solid/stranded
- UL listed, CSA certified

811 series fuse holders feature an intuitive lever actuation of the Cage Clamp® maintenance-free, vibration-proof and corrosion-resistant connection technology to accommodate Class CC, photovoltaic 10x38mm and midget style 10x38mm fuses.

MIDGET (10 X 38MM) FUSE HOLDERS — 30A MAX., SCCR 100KA
Approvals: UL listed E350426, CSA certified C22.2, Class 6225, File 255010, IEC 60269-1, 60947-3

Mfg. Part No.	No. of Poles	LED Indication	Voltage Rating AC / DC	Stock No.	Price Each 1-24	Price Each 25-99
● 811-310	1	No	750 / 1000	62T1628	11.86	11.21
811-320	2	No	750 / 1000	62T1633	24.25	22.87
● 811-330	3	No	750 / 1000	62T1635	35.11	33.12
● 811-311	1	Yes	90 - 600 / 115 - 600	62T1629	17.89	16.91
● 811-321	2	Yes	90 - 600 / 115 - 600	62T1634	34.67	32.70
● 811-331	3	Yes	90 - 600 / 115 - 600	62T1636	51.30	48.54

CLASS CC FUSE HOLDERS— 30A MAX., SCCR 200KA
Approvals: UL listed E350426, CSA certified C22.2, Class 6225, File 255010

● 811-410	1	No	600 / 600	62T1637	13.28	12.56
● 811-420	2	No	600 / 600	62T1640	25.70	24.24
● 811-430	3	No	600 / 600	62T1642	42.62	40.20
● 811-411	1	Yes	90 - 600 / 115 - 600	62T1638	19.45	18.38
● 811-421	2	Yes	90 - 600 / 115 - 600	62T1641	38.16	36.00
● 811-431	3	Yes	90 - 600 / 115 - 600	62T1643	60.06	56.84

PHOTOVOLTAIC (10 X 38MM) FUSE HOLDERS — 30A MAX.
Approvals: UL listed E351154, IEC 60269-1, 60947-3

Mfg. Part No.	No. of Poles	LED Indication	Voltage Rating VDC	Stock No.	Price Each 1-24	Price Each 25-99
● 811-316	1	No	1000	62T1631	11.05	10.46
● 811-317	1	Yes	1000	62T1632	16.35	15.45

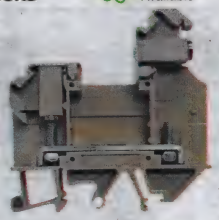
(209905)

ST5, ST6, & ST25 RING LUG TERMINAL BLOCKS

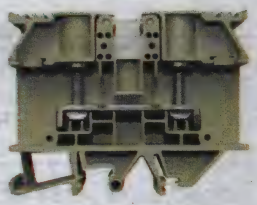
RoHS Compliant Available

Weidmüller

Features
- Touch-safe (Premium line)
- Self-locking nut
- Combi-foot for use with TS 35 and TS 32
- Standard screw or test sleeve
- High Voltage Capacity



ST6



ST25

TERMINAL BLOCKS

Mfg. Part No.	Description	Terminal Type	Stock No.	Price Each 1-9
● C905234600	ST5 N / EN Feed through	Screw	75T5027	7.56
● C905381600	ST5 N / EN Feed through	Sleeve	75T5033	9.11
● C905221600	ST5PN / EN Feed through	Screw	75T5026	7.68
● C905382600	ST5PN / EN Feed through	Sleeve	75T5034	9.59
● C904908601	ST6 / EN Feed through	Screw	75T5023	8.94
● C904908600	ST6 / EN Feed through	Sleeve	75T5022	9.17
● C904909601	ST6 T / EN Test disconnect	Screw	75T5025	10.87
● C904909600	ST6 T / EN Test disconnect	Sleeve	75T5024	11.05
● C905265600	ST25 / EN Feed through	M5 Screw	75T5029	15.05
● C905379600	ST25 / EN Feed through	M5 Sleeve	75T5031	15.25
● C905264600	ST25 / EN Feed through	M6 Screw	75T5028	15.05
● C905380600	ST25 / EN Feed through	M6 Sleeve	75T5032	15.25

ACCESSORIES

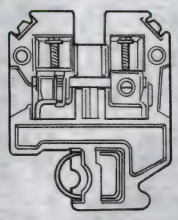
Mfg. Part No.	Description	Stock No.	Price Each 1-9
● C905266600	End Plate for ST25	75T5030	2.02
● C905222600	End Plate for ST5PN	78T0673	1.03
● C012361000	2 Position Jumper for ST25	78T0670	7.52
● C905064600	2 Position Jumper for ST6	78T0671	6.65
● C905067600	10 Position Jumper for ST6	78T0672	21.83
● C905223600	2 Position Jumper for ST5PN	78T0674	9.13
● C905236600	2 Position Jumper for ST5N	78T0675	8.56
● C905239600	10 Position Jumper for ST5N	78T0676	27.06

(198146)

SAK SERIES SCREW CLAMP TERMINAL BLOCKS FOR TS 32 DIN-RAIL

RoHS Compliant Available

Weidmüller



Expanded marking options; ideal for use with PLC circuitry. Vibrationproof clamping system made from corrosion-resistant, zinc-plated steel. Polyamide thermoplastic molding combines UL94V-2 rating with an operating temperature range to 232°F. UL recognized, CSA certified, VDE approved. *Order terminal block accessories separately on page 1078.*

FEED-THRU TERMINAL BLOCKS

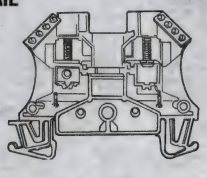
Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-99
● 0279660000+	SAK2.5, 22-12 AWG, 600V/20A	17M8263	2.36	2.13
● 0128360000+	SAK4, 22-10 AWG, 600V/30A	32M7193	3.06	2.76
● 0193260000+	SAK6N, 22-8 AWG, 600V/40A	16F4333	3.54	3.19
FUSE TERMINAL BLOCKS				
● 0474560000+	ASK1, 22-12 AWG, 300V/10A	17M8281	10.44	9.62
● 9503350000+	KDKS1, 22-12 AWG, 300V/10/20A	70M8446	10.87	10.10
GROUND TERMINAL BLOCKS				
● 0354560000+	EK 4, 22-10 AWG	42M2707	9.59	8.84

*5mm wide; +6mm wide or higher
(5269)

W SERIES SCREW CLAMP TERMINAL BLOCKS AND ACCESSORIES FOR TS 35 DIN-RAIL

RoHS Compliant Available

Weidmüller



Pluggable Jumpers

CONTINUED

W SERIES SCREW CLAMP TERMINAL BLOCKS AND ACCESSORIES FOR TS 35 DIN-RAIL (CONT.)

- Reduces Installation Time By 40%

High-density: 0.2" per block for 12 AWG. Jumpers and other current-carrying components are completely insulated for touch-safe operation. Vibrationproof clamping system made from corrosion-resistant zinc-plated steel. Wemid thermoplastic moldings combine temperature range of up to 250°F with the resilience of nylon. UL recognized, CSA certified, VDE approved.

FEED-THRU TERMINAL BLOCKS

Mfg. Part No.	Description	W x L x H (Inches)	Configuration	Wire Size	Voltage	Stock No.	Price Each 1-9
1023700000	WDU 2.5N	0.20 x 1.73 x 1.48	Single	22-12	300	32M7205	1.88
1020000000	WDU 2.5	0.20 x 2.36 x 1.85	Single	22-12	600	32M7199	1.71
1040800000	WDK 2.5N	0.20 x 1.73 x 1.48	Single	24-12	300	32M7207	2.19
1020100000	WDU 4	0.24 x 2.36 x 1.85	Single	22-10	600	90F7911	1.78
1020200000	WDU 6	0.31 x 2.36 x 1.85	Single	20-8	600	32M7201	2.74
1020300000	WDU 10	0.39 x 2.36 x 1.85	Single	16-6	600	32M7202	3.63
1020400000	WDU 16	0.47 x 2.36 x 2.48	Single	14-6	600	32M7203	6.23
1040800000	WDU 2.5N	0.20 x 1.73 x 1.48	Single	22-12	300	32M7207	2.19
1753280000	WDU 1.5/R 3.5	0.14 x 0.96 x 0.98	Single	26-14	300	14C0130	2.38
1021500000	WDK 2.5	0.20 x 2.72 x 2.48	Dual	22-12	600	13P0032	6.36
1041100000	WDK 2.5 (with ZQV Jumpers)	0.20 x 2.72 x 2.48	Dual	22-12	600	13C6661	6.04
1041900000	WDK 4N	0.24 x 2.36 x 2.52	Dual	22-10	300	13C6667	7.07
1041100000	WDU 1.5/R 3.5	0.20 x 2.72 x 2.48	Dual	22-12	600	13C6661	6.04
1041910000	WDK 4NV	0.24 x 2.36 x 2.52	Branch	22-10	600	33M7510	9.93
FUSE TERMINAL BLOCKS							
1011000000	WSI 6	0.31 x 2.36 x 2.36	Single	20-8	600	70M7829	9.46
1012200000	WSI 6 LED	0.31 x 2.36 x 2.76	Single	20-8	600	70M7830	14.93
1014000000	WSI 6/2	0.47 x 2.36 x 2.64	Single	20-8	600	70M7832	10.20
1014100000	WSI 6/2 LED	0.47 x 2.36 x 3.13	Single	20-8	220	10B5191	15.33
1052260000	WSI 6/2 LED	0.47 x 2.36 x 3.11	Single	20-8	300	70M7839	9.96
1014300000	WSI 6/2 LED	0.47 x 2.36 x 3.13	Single	20-8	220	16F4343	15.33
9503350000	KDKS 1	0.31 x 2.89 x 2.19	Feed, Single	22-12	300	70M8446	10.87
GROUND TERMINAL BLOCKS							
1041650000	WDK 2.5N DU-PE	0.20 x 2.36 x 2.44	Single & Ground	22-12	600	32M7209	9.66
1010000000	WPE 2.5	0.20 x 2.36 x 1.85	Single	22-12	...	32M7194	8.62
1016200000	WPE 2.5N	0.20 x 2.13 x 1.48	Single	22-12	...	13P0031	7.81
1010100000	WPE 4	0.24 x 2.36 x 1.85	Single	22-10	...	32M7195	8.89
1010200000	WPE 6	0.31 x 2.36 x 1.85	Single	20-8	...	66F6079	8.41
1010300000	WPE 10	0.39 x 2.36 x 1.85	Single	16-8	...	42M2807	9.41
1010400000	WPE 16	0.47 x 2.36 x 2.48	Single	14-6	...	99F3614	11.71

ACCESSORIES

Mfg. Part No.	Description	Function	Used with	Stock No.	Price Each 1-9
1059000000	WEW 35/1	End Bracket	WDU 2.5N,WDU 2.5, WDU4,WDU6,WDU 10	10B5329	7.11
0382860000	EW 15		WDU 1.5/R 3.5,WDK 1.5/T 3.5	51M9259	1.11
1060000000	WAP WDU 1.5	End Plates	WDU 2.5N	70M7848	1.32
1754190000	WAP WDU 1.5/R 3.5		WDU 1.5/R 3.5,WDK 1.5/T 3.5	14C0134	0.56
1052260000	WQV 6/10	Jumper Links	WDU 6	70M7839	9.96
1052360000	WQV 6/2		WDU 6	70M7840	2.40
1052560000	WQV 10/2		WDU 10	52M0382	2.76
1054760000	WQV 6/3		WDU 6	72M5019	3.79
1054860000	WQV 6/4		WDU 6	70M7845	4.74
1693800000	ZQV 2.5N/2	Jumpers	WDU 2.5N	72M5066	0.90
1693810000	ZQV 2.5N/3		WDU 2.5N	52M0986	1.71
1758250000	ZQV 4N/2		WDK 4N,WDK 4NV	52M0991	1.77
1758260000	ZQV 4N/10		WDK 4N,WDK 4NV	70M8011	8.33
1762620000	ZQV 4N/4		WDK 4N,WDK 4NV	52M0992	3.52
1058800000	WTW	Partition	WDK 2.5N,WDK 2.5 DU-PE, WDK 4N,WDK 4NV,WDK 2.5NV	70M7846	7.23
1609860000	WS White	Marker	WDK 1.5/BLA, WDK 1.5/LD/BL, WDK 1.5/R/BL, WDK 2.5/BLA/R, WDK 1.5/BLZ, WDK 1.5/BLZ/LD, WDK 1.5/BLZ/R, WDK 2.5/BLZ/R	92C1117	68.14

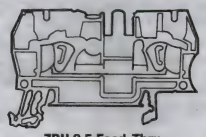
(5267)

Z SERIES TENSION CLAMP TERMINAL BLOCKS FOR TS35 DIN-RAIL

RoHS Compliant Available

Weidmüller

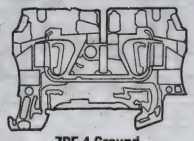
ZDU 1.5 Feed-Thru Terminal Block



ZDU 2.5 Feed-Thru Terminal Block

ZDU 6 Feed-Thru Terminal Block

ZSI 2.5 Fuse Terminal Block



ZPE 4 Ground Terminal Block

Vibrationproof clamping system made from corrosion-resistant stainless steel. Current-carrying components, including jumpers, are completely insulated for touch-safe use. High-density: 0.2" per block for 12 AWG. Ideal for use with PLC circuitry. Wemid thermoplastic moldings, rated UL94V-0, combined with the resilience of nylon. Operating temperature range: up to 250°F. UL listed, CSA certified, VDE approved. *Order terminal block accessories separately on page 1078.*

FEED-THRU TERMINAL BLOCKS

Mfg. Part No.	Description	AWG	Rating	Stock No.	Price Each 1-9	Price Each 10-99
1775480000*	ZDU 1.5**	28-16	300V/10A	32M7220	1.94	1.75
1608510000	ZDU 2.5	26-12	600V/25A	32M7210	2.21	1.99
1632050000*	ZDU 4	26-10	600V/33A	32M7216	2.39	2.15
1608540000‡	ZDU 2.5/3AN	26-12	600V/25A	16F4281	2.71	2.44
1674300000+	ZDK 2.5/1.5	22-12	300V/20A	32M7218	6.23	5.61

SINGLE-LEVEL 5x20 FUSE TERMINAL BLOCKS—26-12 AWG

Mfg. Part No.	Description	Fuse Indicator	Stock No.	Price Each 1-9	Price Each 10-99
1616400000	ZSI 2.5	...	70M8010	9.69	8.92
1616420000	ZSI 2.5 LED	40-60VDC/80-120VAC	16F4286	19.30	17.93

GROUND TERMINAL BLOCKS

Mfg. Part No.	Description	AWG	Stock No.	Price Each 1-9	Price Each 10-99
1608640000	ZPE 2.5	26-12	32M7213	6.67	6.14
1632080000*	ZPE 4	26-10	32M7217	7.67	7.07
1608660000†	ZPE 2.5/4AN	26-12	32M7215	9.69	8.93

*Single-level; +Dual-level; ‡3-Clamp branch; †4-Clamp branch

END COVERS

Mfg. Part No.	Use with Block	Stock No.	Price Each 1-9	Price Each 10-99
1608740000	ZDU/ZPE 2.5	70M8007	1.35	1.21
1632090000	ZDU/ZPE 4	16F4299	1.29	1.16
1608770000	ZDU 2.5/3AN, ZPE 2.5/3AN, ZTR 2.5D	52M0979	1.29	1.16
1608800000	ZDU 2.5/4AN, ZSI 2.5, ZSI 2.5 LED, ZTR 2.5/3AN, ZPE 2.5/4AN	70M8008	1.30	1.17
1674730000	ZDK 2.5/1.5	16F4303	1.80	1.62

PLUGGABLE JUMPERS

Mfg. Part No.	Use with Block	Poles	Stock No.	Price Each 1-9	Price Each 10-99
1608950000	ZDU 4	2	10B6500	1.15	1.04
1609030000	ZDU 4	10	52M0981	7.50	6.91
1608860000	ZDU/ZTR/ZDK 2.5	2	70M8009	0.91	0.82
1608940000	ZDU/ZTR/ZDK 2.5	10	93B8082	6.26	5.76

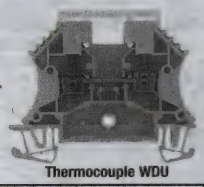
(5272)

THERMOCOUPLE FEED-THRU TERMINAL BLOCK AND END PLATE

RoHS Compliant Available

Weidmüller

For TS 35 DIN rail mounting. Thermocouple (TC) terminal blocks are designed for use in temperature measurement circuits. To provide TC wiring continuity, current bars of terminal are made of same dissimilar metal of TC wire, which increases accuracy of signal. UL listed, CSA certified, VDE approved.



Thermocouple WDU

Mfg. Part No.	Description	Stock No.	Price Each 1-9
102410	5mm Wide Block—WDU 2.5 TC, Type K CH/AL, 22-12 AWG	42M2815	13.66
1050000000	End Plate—WAP/WDU 2.5-10	70M7835	1.30

(69169)

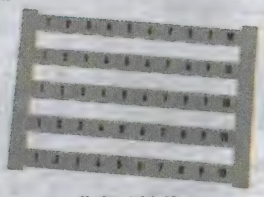
TERMINAL BLOCKS – DIN RAIL

DEKAFIX MARKING TAGS

RoHS Compliant Available

Weidmüller

Use to mark terminal blocks and assemblies. White Dekafix tags are printed with large, black numbers, symbols, or characters. Tension clamp feed-through terminal blocks can hold 1 Dekafix tag on each side of the block, in addition to a center marking area. **W series** terminal blocks can hold 2 Dekafix tags on each side. To select the proper tag, make sure the width of the tag is no greater than the width of the terminal block. Both horizontal and vertical printing are available. Print on all tags is rubproof and oilproof. Other styles and custom printing available; *go online or call.*



Horizontal 1-10

Mfg. Part No.	Pre-Printed Numbers	Width (mm)	Stock No.	Price Each 1-9	Price Each 10-99
CONSECUTIVE HORIZONTAL INCREMENTS OF 50					
● 0473460051	51 to 100		18M3427	5.13	4.63
CONSECUTIVE HORIZONTAL INCREMENTS OF 10					
● 0523060001	1 to 10		17M8282	5.13	4.63
● 0523060011	11 to 20	5	96H7290	5.25	4.74
● 0518960011	11 to 20	6	96H6175	5.13	4.63
CONSECUTIVE VERTICAL INCREMENTS OF 50					
● 0473460001	1 to 50	5	17M8278	5.13	4.63
● 0473560001	1 to 50	5	17M8279	5.13	4.63
● 0468760051	51 to 100		96H6169	5.25	4.74
CONSECUTIVE VERTICAL INCREMENTS OF 10					
● 0460660001	1 to 10	5	18M3425	5.13	4.63
CONSECUTIVE VERTICAL BLANK					
● 0473360000	...	5	83T6387	4.92	4.49

(5273)

MOUNTING RAILS, END BRACKETS AND END PLATES

RoHS Compliant Available

Weidmüller

0514500000

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-99
● 0514500000	TS 35 x 7.5mm Steel Slotted Rail, 2M	13P0027	18.98	17.31
● 0514510000	TS 35 x 7.5mm Steel Slotted Rail, 1M	13P0028	15.02	13.96
● 913917	TS 35 Pre-Cut Slotted Rail, 152.4mm	11B478	4.89	4.41
● 38340	TS 35 x 7.5mm Steel Solid DIN Rail, 2M	99F7722	17.38	16.15
● 1228-0	TS 32 x 15mm Steel Solid Rail, 2M	90F7865	18.03	16.76
● 0687900000	Mounting Foot for TS 35, 50.2L x 14W x 7mm H	51M9266	2.85	2.57
● 0383560000	EW 35 End Bracket for TS 35	70M7817	1.66	1.50
● 0206160000	EWK 1 End Bracket for TS 32	70M7796	1.76	1.59
● 1061200000	WEW 35/2, End Bracket TS 35	70M7849	3.00	2.70
● 9540000000	ZEW 35, End Bracket TS 35	70M8447	1.93	1.74
● 1050000000	WAP 2.5-10 End Plate	70M7835	1.30	1.18
● 1050100000	WAP 16-35 End Plate	70M7836	1.58	1.43

(5244)

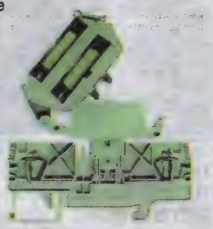
SPRING CLAMP DIN RAIL MOUNT TERMINAL BLOCKS

RoHS Compliant Available

wieland

Feed Thru Terminal Block

Disconnect Terminal Block



Fused Terminal Block

With its fasis WKFN series Wieland Electric offers you a complete range of DIN rail terminal blocks with spring clamp wire termination. The portfolio comprises feed-through and ground blocks with 2, 3 or 4 termination points, two-tier and three-tier blocks, single-tier and two-tier knife-edge disconnect blocks as well as fuse blocks. There are also function blocks with application-specific diode circuits available. fasis WKFN has been designed for use in machine and system engineering as well as for hazardous areas. UL recognized, CSA certified, CE compliant, VDE approved.

FEED THROUGH TERMINALS

Mfg. Part No.	Description	Wire Config.	Width	Wire Size (AWG)	Voltage/ Current	Stock No.	Price Each 1-9
● 56.702.0053.0	WKF 1.5/35	1 in 1 out	4mm	26-14	300V/15A	11K3625	1.69
● 56.702.5053.0	WKF 1.5 D1/2/35	1 in 2 out	4mm	26-14	300V/15A	66M6902	2.03
● 56.702.5153.0	WKF 1.5 D2/2/35	2 in 2 out	4mm	26-14	300V/15A	11K3629	2.52
● 56.703.0055.0	WKFN 2.5//35	1 in 1 out	5mm	22-12	600V/20A	11K3637	1.22

➤CONTINUED➤

SPRING CLAMP DIN RAIL MOUNT TERMINAL BLOCKS (CONT.)

Mfg. Part No.	Description	Wire Config.	Width	Wire Size (AWG)	Voltage/ Current	Stock No.	Price Each 1-9
● 56.703.5055.0	WKFN 2.5 D1/ 2/35	1 in 2 out	5mm	22-12	600V/20A	11K3662	2.12
● 56.703.5155.0	WKFN 2.5 D2/ 2/35	2 in 2 out	5mm	22-12	600V/20A	11K3670	2.76
● 56.704.0055.0	WKFN 4//35	1 in 1 out	6mm	24-10	600V/30A	54M4033	1.46
● 56.704.5055.0	WKFN 4 D1/2/35	1 in 2 out	6mm	24-10	600V/30A	79M5366	3.15
● 56.704.5155.0	WKFN 4 D2/2/35	2 in 2 out	6mm	24-10	600V/30A	66M6904	3.73
● 56.706.0055.0	WKFN 6//35	1 in 1 out	8mm	24-8	600V/50A	79M5377	2.18
● 56.710.0055.0	WKFN 10//35	1 in 1 out	10mm	16-6	600V/60A	09R2837	2.84
GROUND TERMINALS							
● 56.702.9053.0	WKF 1.5/SL/35	1 in 1 out	4mm	26-14	300V	11K3633	6.72
● 56.702.9353.0	WKF 1.5 D1/2/ SL/35	1 in 2 out	4mm	26-14	300V	11K3636	7.56
● 56.702.9153.0	WKF 1.5 D2/2SL//35	2 in 2 out	4mm	26-14	300V	11K3634	8.69
● 56.703.9055.0	WKFN 2.5/SL/35	1 in 1 out	5mm	22-12	600V	11K3686	6.24
● 56.703.9355.0	WKFN 2.5 D1/2/ SL/35	1 in 2 out	5mm	22-12	600V	11K3690	7.11
● 56.703.9155.0	WKFN 2.5 D2/2/ SL/35	2 in 2 out	5mm	22-12	600V	11K3687	8.80
● 56.704.9055.0	WKFN 4/SL/35	1 in 1 out	6mm	24-10	600V	66M6906	6.89
● 56.704.9355.0	WKFN 4 D1/2/ SL/35	1 in 2 out	6mm	24-10	600V	74R8964	8.37
● 56.704.9155.0	WKFN 4 D2/2/ SL/35	2 in 2 out	6mm	24-10	600V	79M5374	9.73
● 56.706.9055.0	WKFN 6/SL/35	1 in 1 out	8mm	24-8	600V	09R2835	8.87
● 56.710.9055.0	WKFN 10/SL/35	1 in 1 out	10mm	16-6	600V	09R2839	9.88
DISCONNECT TERMINALS							
● 56.703.5355.0	WKFN 2.5 TKM/35	1 in 1 out	5mm	24-12	600V/19A	79M5359	6.12
● 56.703.5455.0	WKFN 2.5 TKM 1/2/35	1 in 2 out	5mm	24-12	600V/19A	79M5360	6.54
● 56.703.5555.0	WKFN 2.5 TKM 2/2/35	2 in 2 out	5mm	24-12	600V/19A	79M5361	7.38
● 56.703.6555.0	WKFN 2.5 TKM E1/35	2 level, single disconnect	5mm	24-12	600V/19A	79M5362	7.46
● 56.703.6655.0	WKFN 2.5 TKM E2/35	Isolated dual level disconnect	5mm	24-12	600V/19A	79M5363	18.67

FUSE TERMINALS

Fuse terminals for metric and imperial size fuses. Can be ordered with and without blown fuse indication. Consult factory for additional voltages. When ordering imperial size fuse holder note requirement for spacer plate.

Mfg. Part No.	Description	Indication	Width	Wire Size (AWG)	Voltage/ Current	Stock No.	Price Each 1-9
● 56.704.4055.0	WKFN 4 TKG/35	Base Terminal	6mm	24-10	600V	09R2833	8.99
● Z1.298.1653.0	THSI 1.25" X .25" Fuse Holder	No	...	...	...	10K0949	6.88
● Z1.298.1753.0	THSI 1.25" X .25" Fuse Holder	24 VDC	...	...	...	10K0950	12.66
● Z1.298.1053.0	THSI 5 x 20mm Fuse Holder	No	...	...	...	10K0945	5.22
● Z1.298.1153.0	THSI 5 x 20mm Fuse Holder	24 VDC	...	...	...	10K0946	10.85
● 07.313.1655.0	Spacer for imperial size fuses	...	...	...	...	47X3281	1.83

END PLATES

End plates are used to cover the exposed metal area of the last terminal in a series or when transitioning to other components on the DIN rail assembly.

Mfg. Part No.	Description	Stock No.	Price Each 1-99
07.312.8153.0	WKF 1.5/35 & SL/35	10K1504	0.97
● 07.312.8353.0	WKF 1.5 D1/2/35 & SL/35	10K1506	1.02
● 07.312.8553.0	WKF 1.5 D2/2/35 & SL/35	10K1508	1.08
● 07.312.6755.0	WKFN 2.5/35 & SL/35	10K1492	0.64
● 07.312.6955.0	WKFN 2.5 D1/2/35 & SL/35	10K1494	0.73
● 07.312.7155.0	WKFN 2.5 D2/2/35 & SL/35	10K1496	0.76
● 07.312.9255.0	WKFN 4/35 & SL/35	66M3337	0.71
● 07.312.9455.0	WKFN 4 D1/2/35 & SL/35	79M5162	0.76
● 07.312.9055.0	WKFN 4 D2/2/35 & SL/35	66M3336	0.82
● 07.313.0455.0	WKFN 6/35 & SL/35	09R2820	0.86
● 07.313.0855.0	WKFN 10/35 & SL/35	09R2821	0.95
● 07.312.9055.0	WKFN 4 TKG/35	66M3336	0.82
● 07.312.6955.0	WKFN 2.5 TKM/35	10K1494	0.73
● 07.312.7155.0	WKFN 2.5 TKM 1/2/35	10K1496	0.76
● 07.313.0055.0	WKFN 2.5 TKM 2/2/35	79M5165	1.22
07.312.7755.0	WKFN 2.5 TKM E1/35 & WKFN 2.5 TKM E2/35	10K1502	1.26

JUMPERS

Use jumpers to common 2 or more terminals or for power distribution. Both center channels of the terminal can be used for jumpering. Jumpers can be cut or modified to suite wiring needs.

➤CONTINUED➤

SPRING CLAMP DIN RAIL MOUNT TERMINAL BLOCKS (CONT.)

Mfg. Part No.	Poles	Terminal Width	Stock No.	Price Each 1-24
Z7.268.0227.0	2	4mm	10K1188	0.62
Z7.268.0327.0	3	4mm	10K1189	1.02
Z7.268.0427.0	4	4mm	10K1190	1.52
Z7.268.0527.0	5	4mm	10K1191	2.06
Z7.268.1027.0	10	4mm	10K1192	4.59
Z7.268.2027.0	20	4mm	10K1193	9.22
Z7.280.6227.0	2	5mm	01M9528	1.82
Z7.280.6327.0	3	5mm	52F9828	2.22
Z7.280.6427.0	4	5mm	01M9529	2.58
Z7.280.6527.0	5	5mm	52F9830	2.91
Z7.280.7027.0	10	5mm	52F9835	4.63
Z7.280.8027.0	20	5mm	10K1224	14.10
Z7.261.1227.0	2	6mm	95B7036	1.94
Z7.261.1327.0	3	6mm	95B7037	2.51
Z7.261.1427.0	4	6mm	95B7038	2.70
Z7.261.1527.0	5	6mm	10K1167	2.92
Z7.261.2027.0	10	6mm	11J2964	4.73
Z7.282.5227.0	2	8mm	09R2819	2.39
Z7.282.5527.0	5	8mm	99W1894	5.33
Z7.283.8227.0	2	10mm	10K1247	2.88

TEST ADAPTER (SCREW AND SPRING CLAMP TERMINALS)
Test adapters can be used to perform circuit diagnostic checks or maintenance. Snap individual test adapters together for multi-pole requirements. End plates are required between each adapter for WT 4 terminals.

Mfg. Part No.	Description	Stock No.	Price Each 1-49
Z1.299.9753.0	Test Adapter for 5 & 6mm wide terminals	10K0958	13.19
07.312.6053.0	Endplate (Required for 6mm wide terminals)	10K1491	5.07

DIN MOUNTING RAIL AND END CLAMPS

98.300.0000.0	TS-35x7.5mm Rail Unslotted – Zinc-Plated Steel	02M0786	21.66
98.300.1800.0	TS-35x7.5mm Rail Slotted – Zinc-Plated Steel	38X4578	21.00
98.750.0000.0	TS-35x7.5mm Rail Unslotted – Aluminum	02M0788	25.90
Z5.522.7453.0	End Clamp – Medium-Duty	01M9526	1.30
Z5.522.8553.0	End Clamp – Heavy-Duty	99F5421	3.77
Z5.523.9353.0	Screw less End Clamp	31C9049	1.28

MARKING TAGS (SCREW AND SPRING CLAMP TERMINALS)
Marking tags can be ordered preprinted with a variety of symbols and numbers. Consult factory for specific needs or. Select specific marking tags based on terminal block width.

Mfg. Part No.	Poles	Terminal Width	Stock No.	Price Each 1-9
04.242.5053.0	Blank (10 tags)	5mm	90F7435	0.47
04.845.0153.0	Marked 1 - 10 (10 tags)	5mm	59K9219	0.80
04.242.6053.0	Blank (10 tags)	6mm	94F2721	0.48
04.846.0153.0	Marked 1 - 10 (10 tags)	6mm	59K9221	0.79
04.856.1153.0	Marked 1 - 100 (2500 tags)	6mm	59K9223	194.39
04.242.8053.0	Blank (10 tags)	8mm	51F2871	0.50
04.848.0153.0	Marked 1 - 10 (10 tags)	8mm	40B6584	2.62

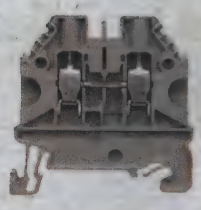
(148502)

WT SERIES DIN RAIL MOUNT IEC SCREW CLAMP TERMINAL BLOCKS

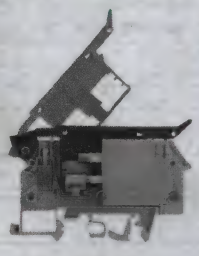
RoHS Compliant Available

wieland

NEW



Feed-Thru Terminal Block



Fuse Terminal Block

Heavy Duty Jumper

Wieland's new WT series features the most advanced push-in jumpering system in the industry. WT/WKN terminals are available for designs requiring up to 335A and 22 AWG to 350 MCM conductors. UL recognized, CSA certified, CE compliant, VDE approved. *Order accessories separately online or call.*

FEED-THRU TERMINAL BLOCKS
Available in colors for circuit identification; go online or call.

Mfg. Part No.	Description	Width	Wire Size	Voltage/ Current	Stock No.	Price 1-9
58.503.0055.0	WT 2.5	5mm	26 - 12 AWG	600V/20A	07X2403	1.03
58.504.0055.0	WT 4	6mm	26 - 10 AWG	600V/30A	46X9378	1.03
58.506.0055.0	WT 6	8mm	24 - 8 AWG	600V/50A	38X4582	1.72
58.510.0055.0	WT 10	10mm	20 - 6 AWG	600V/65A	38X4580	4.13
58.516.0055.0	WT 16	12mm	16 - 4 AWG	600V/85A	46X9389	6.04

CONTINUED

WT SERIES DIN RAIL MOUNT IEC SCREW CLAMP TERMINAL BLOCKS (CONT.)

FEED-THRU TERMINAL BLOCKS - HIGH POWER

Mfg. Part No.	Description	Width	Wire Size	Voltage/ Current	Stock No.	Price 1-9
57.535.0155.0	WKN 35/U	16mm	12 - 2 AWG	600V/150A	81C9346	7.38
57.570.0155.0	WKN 70/U	24mm	6 - 2/0 AWG	600V/170A	24C4593	39.91
57.597.0155.0	WKN 150/U	28mm	2/0 - 350 MCM	600V/335A	49H4585	61.72

GROUNDING TERMINAL BLOCKS

Mfg. Part No.	Description	Width	Wire Size	Voltage	Stock No.	Price 1-9
58.503.9055.0	WT 2,5 PE	5mm	26 - 12 AWG	600V	07X2409	5.58
58.504.9055.0	WT 4 PE	6mm	26 - 10 AWG	600V	46X9383	7.35
58.506.9055.0	WT 6 PE	8mm	24 - 8 AWG	600V	46X9387	8.92
58.510.9055.0	WT 10 PE	10mm	20 - 6 AWG	600V	46X9388	10.61
58.516.9055.0	WT 16 PE	12mm	16 - 4 AWG	600V	46X9390	13.94
58.504.9355.0	WT 4 D1/2 PE, Ground 1 in 2 out	6mm	26 - 10 AWG	300V	46X9386	11.51
58.504.9155.0	WT 4 D2/2 PE, Ground 2 in 2 out	6mm	26 - 10 AWG	300V	46X9384	11.51

BRANCH & DISCONNECT TERMINAL BLOCKS

Mfg. Part No.	Description	Wire Config.	Width	Wire Size (AWG)	Voltage/ Current	Stock No.	Price 1-9
58.504.5055.0	WT 4 DI/2, 3-wire Termination points	1 in 2 out	6mm	26- 10	300V/30A	20X5514	1.03
58.504.5155.0	WT 4D2/2, 4-Wire Termination points	2 in 2 out	6mm	26- 10	300V/30A	46X9380	4.76
58.504.2055.0	WT 4 TKM, Disconnect Terminal	...	6mm	26- 10	300V/16A	46X9379	7.05

DUAL LEVEL TERMINAL BLOCKS

Mfg. Part No.	Description	Width	Wire Size (AWG)	Voltage/ Current	Stock No.	Price 1-9
58.504.7055.0	WT 4 E, Isolated Dual Level	6mm	26- 10	300V/30A	46X9382	5.69
58.504.6955.1	WT 4 E VB, Dual Level Branch	6mm	26- 10	300V/30A	46X9381	7.76
58.504.9255.0	WT 4 E PE, Dual Level Ground	6mm	26- 10	300V	46X9385	23.89
57.403.7055.0	WKN 2,5 E/U, Isolated Dual Level	5mm	22 - 12	600V/25A	24C6632	5.69

FUSE TERMINAL BLOCKS
Fuse terminals for metric and imperial size fuses. Can be ordered with and without blown fuse indication. *Go online or call for additional voltages.*

Mfg. Part No.	Description	Indicating	Width	Wire Size (AWG)	Voltage/ Current	Stock No.	Price 1-24
57.904.6355.0	WK 4 THSI, 6,3 /U, (1.25" x .25")	No	10mm	22 - 10	600V/15A	19C1174	17.80
57.904.6555.0	WK 4 THSI, 6,3 /U, (1.25" x .25")	24 VDC	10mm	22 - 10	600V/15A	02M0386	24.34
57.904.6755.0	WK 4 THSI, 6,3 /U, (1.25" x .25")	110VAC	10mm	22 - 10	600V/15A	73H3442	18.76
57.904.5355.0	WK 4 THSI, 5 x 20mm	No	8mm	22 - 10	600V/6.3A	19C1172	13.86
57.904.5555.0	WK 4 THSI, 5 x 20mm	24 VDC	8mm	22 - 10	600V/6.3A	84K5996	19.97
57.904.5755.0	WK 4 THSI, 5 x 20mm	110VAC	8mm	22 - 10	600V/6.3A	11K4320	17.86

ACCESSORIES
END PLATES
End plates are used to cover the exposed metal area of the last terminal in a series or when transitioning to other components on the DIN rail assembly.

Mfg. Part No.	For Terminal Type	Stock No.	Price 1-9
07.313.2555.0	WT 2.5 - 10, WT 2.5 - 10 PE	07X2410	0.86
07.313.2755.0	WT 16, WT 16 PE	46X9374	1.20
07.313.3355.0	WT 4 E, WT 4 PE	46X9377	0.96
07.312.1755.0	WKN 2,5 E/U	39C2040	1.15
07.313.2955.0	WT D1/2, WT D1/2 PE, WT 4 TKM, Disc. Term.	20X5515	0.83
07.313.3155.0	WT 4 D2/2, WT 4 D2/2	46X9376	1.35

PARTITION PLATES
Partion plates are used to increase the electrical clearance betweenterminal blocks with different potentials or to provide a visual separation between terminal groups.

07.313.2655.0	WT 2,5 - 10	07X2411	1.16
07.313.2855.0	WT 16	46X9375	1.47

SCREWLESS JUMPERS
Use jumpers to common 2 or more terminals or for power distribution. Both center channels of the terminal can be used for jumpering. Jumpers can be cut or modified to suite wiring needs.

CONTINUED

WT SERIES DIN RAIL MOUNT IEC SCREW CLAMP TERMINAL BLOCKS (CONT.)

Mfg. Part No.	Poles	Terminal Width	Stock No.	Price 1-24
● Z7.280.6227.0	2	5	01M9528	1.82
● Z7.280.6327.0	3		52F9828	2.22
● Z7.280.6427.0	4		01M9529	2.58
● Z7.280.6527.0	5		52F9830	2.91
● Z7.280.7027.0	10		52F9835	4.63
● Z7.280.8027.0	20		10K1224	14.10
● Z7.261.1227.0	2	6	95B7036	1.94
Z7.261.1327.0	3		95B7037	2.51
● Z7.261.1427.0	4		95B7038	2.70
● Z7.261.1527.0	5		10K1167	2.92
● Z7.261.2027.0	10		11J2964	4.73
● Z7.282.5227.0	2	8	09R2819	2.39
● Z7.282.5527.0	5		99W1894	5.33
● Z7.283.8227.0	2	10	10K1247	2.88
● Z7.284.4227.0	2	12	10K1256	3.36
● Z7.285.6227.0	2	16	83T1263	2.62

TEST ADAPTERS

Test adapters can be used to perform circuit diagnostic checks or maintenance. Snap individual test adapters together for multi-pole requirements. End plates are required between each adapter for WT 4 terminals.

Mfg. Part No.	Description	Stock No.	Price 1-49
● Z1.299.9753.0	Test Adapter for WT 2.5 & WT 4	10K0958	13.19
07.312.6053.0	End Plate (Required for WT 4 terminals)	10K1491	5.07
DIN MOUNTING RAIL & END CLAMPS			
● 98.300.0000.0	TS-35x7.5mm Rail Unslotted – Zinc-Plated Steel	02M0786	21.66
98.300.1800.0	TS-35x7.5mm Rail Slotted – Zinc-Plated Steel	38X4578	21.00
● 98.750.0000.0	TS-35x7.5mm Rail Unslotted – Aluminum	02M0788	25.90
● Z5.522.7453.0	End Clamp – Medium-Duty	01M9526	1.30
● Z5.522.8553.0	End Clamp – Heavy-Duty	99F5421	3.77
● Z5.523.9353.0	Screwless End Clamp	31C9049	1.28

MARKING TAGS

Marking tags can be ordered preprinted with a variety of symbols and numbers. Consult factory for specific needs or. Select specific marking tags based on terminal block width.

Mfg. Part No.	Type of Marking	Terminal Width	Stock No.	Price 1-9
● 04.242.5053.0	Blank (10 tags)	5mm	90F7435	0.47
● 04.845.0153.0	Marked 1 - 10 (10 tags)		59K9219	0.80
● 04.242.6053.0	Blank (10 tags)	6mm	94F2721	0.48
● 04.846.0153.0	Marked 1 - 10 (10 tags)		59K9221	0.79
● 04.856.1153.0	Marked 1 - 100 (2500 tags)		59K9223	194.39
04.242.8053.0	Blank (10 tags)	8mm	51F2871	0.50
● 04.848.0153.0	Marked 1 - 10 (10 tags)		40B6584	2.62

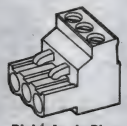
(212132)

EUROSTYLE CAGE CLAMP PLUGGABLE TERMINAL BLOCKS

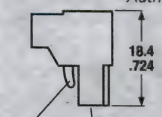
RoHS Compliant Available

TE connectivity

Authorized Distributor

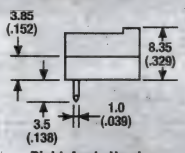


Right-Angle Plug



Right-Angle Plug

Right-Angle Header



Right-Angle Header

Right-angle plug and vertical or right-angle header terminal blocks, available with 5.00mm and 5.08mm centerline. Cage clamp design is ideal for frequent terminations. Green housings. Current rating: 12A max. Voltage rating: 300V. Wire range: 12-30 AWG. Temperature rating: -40°C to 105°C.

0.197″ (5.00mm) RIGHT-ANGLE PLUG - 300 V, 15 A 12-30 AWG

Mfg. Part No.	Positions	Color	Stock No.	Price Each 1-49
● 796640-2	2	Green	34C9471	1.03
● 796640-3	3	Green	34C9472	1.48
● 796640-4	4	Green	34C9473	3.13
● 796640-6	6	Green	35C0966	4.55
● 796640-8	8	Green	35C0967	6.02

CONTINUED

EUROSTYLE CAGE CLAMP PLUGGABLE TERMINAL BLOCKS (CONT.)

0.200″ (5.08mm) RIGHT-ANGLE PLUG - 300 V, 15 A 12-30 AWG

Mfg. Part No.	Positions	Color	Stock No.	Price Each 1-49
● 796634-2	2	Green	34C9465	0.91
● 796634-3	3	Green	35C0958	1.48
● 796634-4	4	Green	34C9466	1.79
● 796634-5	5	Green	35C0959	2.88
● 796634-6	6	Green	35C0960	4.78
● 796634-8	8	Green	35C0961	6.74
0.197″ (5.00mm) RIGHT-ANGLE CLOSED-END HEADERS - 300 V, 15 A				
● 796644-2	2	Green	34C9474	0.66
● 796644-3	3	Green	34C9475	0.85
● 796644-4	4	Green	34C9476	1.48
● 796644-6	6	Green	35C0968	1.73
0.200″ (5.08mm) RIGHT-ANGLE CLOSED-END HEADERS - 300 V, 15 A				
● 796638-2	2	Green	34C9469	1.04
● 796638-3	3	Green	34C9470	1.03
● 796638-4	4	Green	16H6360	1.36
● 1776038-6	6	Green	52K3430	1.82
● 796638-8	8	Green	35C0965	2.89
0.200″ (5.08mm) VERTICAL CLOSED-END HEADERS - 300 V, 15 A				
● 796636-2	2	Green	03H3763	0.57
● 796636-3	3	Green	16H6356	0.78
● 796636-4	4	Green	16H6357	1.28
● 796636-6	6	Green	16H6359	1.61
● 796637-2	2	Black	34C9467	1.16
● 796637-6	6	Black	35C0962	1.27

(69027)

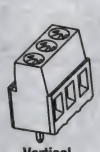
EUROSTYLE CAGE CLAMP TERMINAL BLOCKS

RoHS Compliant Available

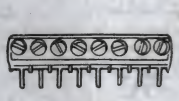
TE connectivity

Authorized Distributor

Vertical



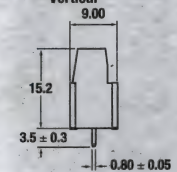
Vertical



90° Angle

45° Angle

45° Angle



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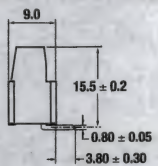
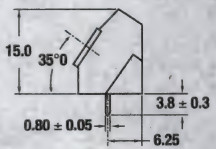


90° Angle



45° Angle

- 5.08mm (0.200″) Centerline
- Wire Range: 12-30 AWG
- Current Rating: 17.5A
- Voltage Rating: 300V
- Temperature Rating: -40°C to 105°C
- UL Recognized, CSA Certified, VDE Approved

Eurostyle cage clamp screw PC board terminal blocks feature black, polyamide 6/6 nylon housing, rated UL94V/0. Contact, cage clamp, and screw are nickel-plated brass.

0.197″ (5.00mm) BOARD MOUNT, SIDE WIRE ENTRY - 300 V, 13.5 A, 16-30 AWG

Mfg. Part No.	Positions	Color	Stock No.	Price Each 1-49
● 282836-2	2	Green	23C9697	0.44
● 282836-3	3	Green	74C5853	0.59
● 282836-4	4	Green	12H8397	0.98
● 282836-6	6	Green	12H8399	1.55
0.200″ (5.08mm) BOARD MOUNT, SIDE WIRE ENTRY - 300 V, 17.5 A, 12-30 AWG				
● 282841-2	2	Green	12H8419	0.65
● 282841-3	3	Green	12H8420	1.52
● 796949-2			34C9478	0.64
● 796949-3	3	Black	34C9479	0.96
● 796949-4	4	Black	34C9480	2.25
● 796949-5	5	Black	34C9481	1.91
● 796949-6	6	Black	34C9482	3.35
● 796949-8	8	Black	35C0969	4.90
● 796949-9	9	Black	34C9483	5.18
● 1-796949-2	12	Black	35C0673	6.56
0.200″ (5.08mm) BOARD MOUNT, SIDE WIRE ENTRY - 300 V, 24 A, 12-30 AWG				
● 282857-2	2	Green	12H8488	1.56

CONTINUED

EUROSTYLE CAGE CLAMP TERMINAL BLOCKS (CONT.)

0.200″ (5.08mm) BOARD MOUNT, 35° WIRE ENTRY - 300 V, 17.5 A, 12-30 AWG

Mfg. Part No.	Positions	Color	Stock No.	Price Each 1-49
1546074-2	2	Black	34C9402	0.78
1546074-3	3	Black	34C9403	1.31
1546074-4	4	Black	34C9404	2.16
1546074-5	5	Black	34C9405	2.35
1546074-6	6	Black	34C9406	4.81
1546074-8	8	Black	35C0684	6.53
1-1546074-0	10	Black	35C0669	7.48
1-1546074-2	12	Black	35C0670	9.11

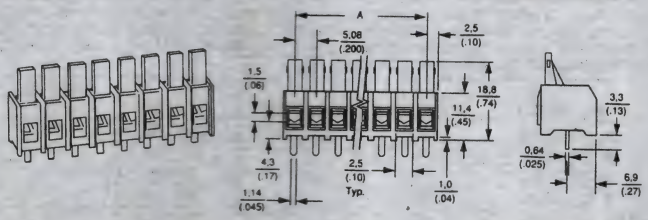
(5232)

2SV SERIES SUBMINIATURE SCREWLESS TERMINAL BLOCKS

RoHS Compliant Available

TE connectivity

Authorized Distributor



2SV series screwless vertical mount terminal blocks are 0.45″H x 0.2″D (11.43 x 13.21). Wire range: 18-24 AWG. 20A, 300V UL recognized; 20A, 150V CSA certified (except 24AWG). Solder terminal connections on 0.2″ (5.08) centers. Handle multiple wires per terminal. Thermoplastic polyester body, flammability classification UL94V-0. Acid-tin plated copper alloy terminals. Standoffs for flux removal.

Mfg. Part No.	Positions	Dim. A	Stock No.	Price Each 1-24
2SV-04	4	0.6″ (15.24)	46F899	2.42
2SV-06	6	1.0″ (25.40)	46F901	4.58
2SV-08	8	1.4″ (35.56)	46F903	10.30

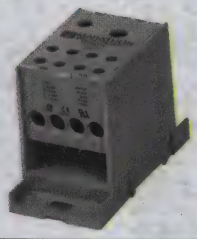
(5233)

IEC ENCLOSED POWER DISTRIBUTION BLOCKS

RoHS Compliant Available

MARATHON SPECIAL PRODUCTS

- 600 Volt, Up To 580A
- Conforms to IP-20 (Finger-Safe)
- Mounts on Panel or 35mm DIN Rail
- UL Recognized, CSA Certified



IEC power blocks feature oversized wire openings to accept stranded wire and multiple wire combinations. European touch-proof design. 35mm DIN or panel mount, with dovetail sides for ganging multiple poles.

ALUMINUM CONNECTORS

Mfg. Part No.	Poles	Line Openings /Pole	Line Wire Range	Load Openings /Pole	Load Wire Range	Amps	Stock No.	Price Each 1-4
EPBAP71*	1	2	250kcmil-6AWG	2	250kcmil-6AWG	510	68R2077	77.56
EPBAD741			400kcmil-6AWG				30K5726	83.59
			2/0-14AWG					
EPBAP74*	1	1	400kcmil-6AWG	8	2-16AWG	335	47T5905	82.78
	1	1	2/0-14AWG					
COPPER CONNECTORS								
EPBCD741	1	1	400kcmil-6AWG	8	2-14AWG	380	30K5730	221.46
	1	1	2/0-14AWG					

*Flat Panel mount only

(84889)

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(196560)

EPB SERIES ENCLOSED POWER DISTRIBUTION BLOCKS

RoHS Compliant Available

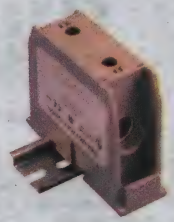
MARATHON SPECIAL PRODUCTS

EPBAD21

EPBxP42

EPBxP45

- 600VAC/DC (UL1953), 1000V (IEC)
- Up to 200A
- Wire range: 3/0 to 14 AWG
- Choice of aluminum or copper connector material
- Flat panel mount or 35mm DIN rail mail versions
- UL listed file no. QPQS.E309401 (UL 1953)
- CSA certified file no. LR19766 (CSA C22-2 No. 158)
- CE compliant (Component IEC 60947-7-1)
- IEC 60529, IP-20



EPBxCD42

EPBxD45

EPB series enclosed power distribution blocks are flexible stranded wire compliant with wire openings to accept stranded wire and multiple wire combinations. Features gray thermoplastic enclosure and base, flammability rated UL94V-0. European IP-20 touch-proof design with dovetail sides for multi-line stack-up.

FLAT PANEL MOUNT — 0.5 X 0.25″ SLOT BASE FOR ¼″ MOUNTING SCREW

Mfg. Part No.	Line Openings per Pole	Line Wire Range AWG	Load Openings per Pole	Load Wire Range AWG	Connector Material	Stock No.	Price Each 1-4
EPBAP42	1	3/0-14	1	3/0-14	Aluminium	48T2679	29.53
EPBCP42	1	3/0-14	1	3/0-14	Copper	48T2681	57.64
EPBAP45	1	3/0-14	4	2-14	Aluminium	47T4542	37.69
EPBCP45	1	3/0-14	4	2-14	Copper	48T2682	80.41
35MM DIN RAIL MOUNT							
EPBAD21	1	2-14	1	2-14	Aluminium	57R3970	25.30
EPBAD42	1	3/0-14	1	3/0-14	Aluminium	48T2678	29.53
EPBCD42	1	3/0-14	1	3/0-14	Copper	48T2680	53.35
EPBAD45	1	3/0-14	4	2-14	Aluminium	86R9145	37.12
EPBCD45	1	3/0-14	4	2-14	Copper	27T5674	80.41

(196511)

985 SERIES HEAVY-DUTY, PRESSURE CONTACT TERMINAL BLOCKS

RoHS Compliant Available

MARATHON SPECIAL PRODUCTS

- Rated 600V, 85A
- Wire Range: 18-4 AWG Copper
- Tubular Terminals
- Screws: Steel, Nickel-Plated

Molded material is commercial grade phenolic (black). UL recognized file no. E47811. CSA certified file no. LR19766. ISO9001:2000 certified.

Mfg. Part No.	Terminals	Length	Stock No.	Price Each 1-9
985-GP-3	3	1.781″	87F5195	14.83
985-GP-6	6	3.656″	87F5197	28.81
985-GP-8	8	4.906″	87F5198	38.33
985-GP-10	10	6.156″	87F5199	47.53
985-GP-12	12	7.406″	87F5205	132.94

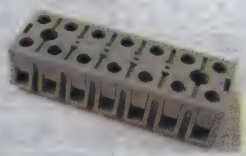
(5475)

0987 SERIES PRESSURE CONTACT TERMINAL BLOCKS

RoHS Compliant Available

MARATHON SPECIAL PRODUCTS

- Rated 600V, 50A
- Wire Range: 24-8 AWG
- Nickel-Plated Steel Screws
- Base, Thermoplastic, 125° C, Flammability – UL 94 V-0
- IP20 Touchproof Protection
- Rated 1000V (CE)



Terminal contacts are copper alloy, nickel-plated. Feed-thru contacts are copper alloy, electro tin-plated. UL recognized file no. E47811, CSA certified file no. LR19766, ISO9001:2000 certified.

Mfg. Part No.	Terminals	Length	Stock No.	Price Each 1-9
0987-RZ-TC-04	4	1.90″	81F3735	17.35
0987-RZ-TC-06	6	2.85″	81F3737	21.87

CONTINUED

TERMINAL BLOCKS – EURO

0987 SERIES PRESSURE CONTACT TERMINAL BLOCKS (CONT.)

Mfg. Part No.	Terminals	Length	Stock No.	Price Each 1-9
● 0987-RZ-TC-08	8	3.80″	81F3739	33.79
● 0987-RZ-TC-10	10	4.75″	81F3741	42.23

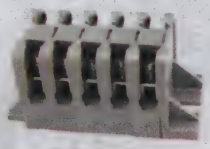
(5476)

6G38 SERIES ⅜″ SECTIONAL TERMINAL BLOCKS

RoHS Compliant Available

MARATHON SPECIAL PRODUCTS

- 600V AC/DC, 40A
- 32 Circuits per foot
- ⅜″ centers
- Wire range: 10-22 AWG stranded; 10-14 AWG solid
- Flat panel mount or 35mm DIN rail mail versions
- Meets IP-20 (IEC 60529) touch protection requirement
- UL recognized file no. XCFR2.E62806
- CSA certified file no. LR19766
- CE compliant



6G38TSKKF

6G38TSKKDIN

6G38 TSSK series sectional terminal blocks are made up of individually molded units with electrically conductive members which, when assembled together, make up the block producing the required number of circuits. Each unit features a Kant Kut tinned-plated copper tubular screw connector and #10-32 nickel-plated steel screw with stainless steel wire protector. Gray thermoplastic insulator base is flammability rated UL 94V-0. Accepts single and multiple wire combinations. Wire termination torque: 16 in.-lbs. Choice of flat mount base for direct mounting to the panel or DIN rail mount that will fit on a standard 35mm DIN rail. *Order accessories separately below.*

⅜″ SECTIONAL TERMINAL BLOCKS

Mfg. Part No.	Mounting Type	Stock No.	Price Each 1-4	Price Each 5-9
● 6G38TSKKF	Flat Panel	30M9627	3.97	3.70
● 6G38TSKKDIN	35mm DIN Rail	33M5171	4.74	4.41

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
J38	Jumper	02C7151	2.49	2.27
● 6G38EF	End Bracket for Flat Panel Mount Block	33M5167	1.88	1.74
● 6G38EDIN	End Bracket for DIN Rail Mount Block	33M5166	2.00	1.85
● MN35-2	Slotted DIN Mounting Rail — 35x7.5mm, 2M Long	02C7178	22.15	21.04
● MSK35	End Bracket for DIN Mount Base	02C7184	2.93	2.71

(196512)

3.5mm BEAU® EUROSTYLE® TERMINAL BLOCKS

RoHS Compliant Available

molex

- 30% density advantage over traditional 5.00mm (0.197″) terminal blocks
- Headers have been designed to withstand surface mount re-flow soldering processes, eliminating the need for secondary wave soldering operations and reducing assembly time
- Rising cage clamp termination provides a gas-tight connection without strand damage or intermittence
- Polarization and keying features prevent mismating.

180° WIRE ENTRY PLUG

Mfg. Part No.	Circuits	Stock No.	Price Each 1-24
● 39500-0002	2	21M3111	0.64
● 39500-0003	3	21M3112	1.79
● 39500-0004	4	21M3113	2.14
● 39500-0006	6	21M3115	3.83
180° WIRE ENTRY PLUG — SCREW RETENTION			
● 39504-0002	2	21M3119	1.24
● 39504-0004	4	21M3121	5.82
● 39504-0006	6	21M3123	2.03
VERTICAL PCB HEADER — CLOSED ENDS			
● 39501-1006	6	20M7105	1.85
VERTICAL PCB HEADER — THREADED RETENTION INSERTS			
● 39505-1002	2	20M7122	1.04
RIGHT-ANGLE PCB HEADER — THREADED RETENTION INSERTS			
● 39506-1004	4	20M7132	2.58
FIXED MOUNT PCB TERMINAL BLOCK			
● 39357-0002	2	72K2104	0.81
● 39357-0004	4	58H9411	1.30

CONTINUED

3.5mm BEAU® EUROSTYLE® TERMINAL BLOCKS (CONT.)

FIXED MOUNT PCB TERMINAL BLOCK

Mfg. Part No.	Circuits	Stock No.	Price Each 1-24
● 39357-0006	6	58H9413	2.19
● 39357-0008	8	58H9415	2.16

(84838)

ESE SERIES 5.08mm PITCH EUROSTYLE® FIXED MOUNT PCB TERMINAL BLOCKS

RoHS Compliant Available

molex

- Polyamide Housing, Rated UL94V-0
- Wire Range: 12 to 26 AWG
- Operating Temperature: –55° to +110°C

Permanent-mount Eurostyle® terminal blocks in 0.200″ (5.08mm) spacing. Tin-plate brass pressure clamps compress wire uniformly. Straight thru terminals. Closed bottom prevents solder wicking. Hot tin dip phosphor bronze contacts. Zinc chromate-plated steel screws. 0.33″(8.38mm) wide footprint. Withstanding: 6500VDC. Contact resistance: <10 milliohms initial. Additional pole positions available; *go online or call.* UL recognized 15A @ 250V/10A @ 300V; CSA certified 15A @ 300V. VDE approved 16A @ 250V.

Mfg. Part No.	No. of Poles	No. of Poles	Stock No.	Price Each 1-24
● 39880-0302	2	Nickel	25M3426	0.61
● 39544-3002	2	Tin	20M7429	0.91
● 39544-3003	3	Tin	20M7430	1.32
● 39544-3004	4	Tin	20M7431	1.84
● 39544-3006	6	Tin	20M7433	2.29
● 39544-3008	8	Tin	20M7435	3.64

(5189)

ESE SERIES 0.200″ (5.08) EUROSTYLE® PLUGGABLE PC BOARD TERMINAL BLOCK PLUGS

RoHS Compliant Available

molex

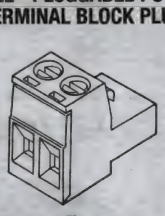


Fig. 1

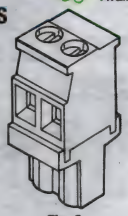


Fig. 2

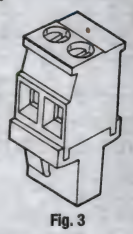


Fig. 3

- Black Polyamide Housing, Rated UL94V-0
- Wire Range: 12-26 AWG

ESE series 0.200″ (5.08mm) Eurostyle® pluggable PC board terminal block plugs for wire-to-PC board applications. Polarized with the industry-standard scalloped design. Tin-plated phosphor bronze contacts. Rising cage, nickel-plated brass pressure clamp compresses wires for a higher-pressure, gastight interface. 2.5mm zinc chromate-plated steel screws. Compatible with convection or vapor-phase soldering. End-to-end stackable. Intermateable with most pluggable 5.08mm terminal block headers. UL recognized Class B commercial 15A at 300V/Class C industrial 10A at 300V, CSA certified 15A at 300V. **87 series** 0.197″ (5.00mm) Eurostyle® pluggable PC board terminal block plugs are also available; *go online or call.*

ESE SERIES 0.200″ (5.08mm) STANDARD PLUGS — FIG. 1

Mfg. Part No.	Poles	Stock No.	Price Each 1-24
● 39530-0002	2	20M7301	1.50
● 39530-0003	3	20M7302	1.68
● 39530-0004	4	20M7303	2.69
ESE SERIES VERTICAL RIGHT-HAND PLUGS — FIG. 2			
● 39533-2002	2	20M7355	1.42
● 39533-2003	3	20M7356	2.21
● 39533-2004	4	20M7357	3.05
● 39533-2005	5	20M7358	3.12
● 39533-2010	10	20M7362	6.67
ESE SERIES 0.200″ (5.08mm) VERTICAL LEFT-HAND PLUGS — FIG. 3			
● 39533-3002	2	20M6126	1.57

(5207)

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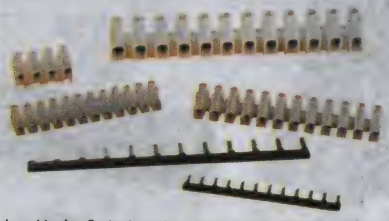
(196545)

2-SCREW TERMINAL STRIPS

RoHS Compliant Available

molex



Closed-back strips can be cut to size. Center-to-center spacing when installed end-to-end. Mounting holes between every circuit. Dead-front construction. Recessed screws, terminals. Captive wire protectors. **C-15 series**0.646H x 0.630"W (16.4 x 16.0) and VDE approved **C-40 series** 0.748H x 0.787"W (19.0 x 20.0) are UL rated 250Vrms commercial equipment/300Vrms general individual. VDE approved **C-60 series** 0.874H x 0.944"W (22.5 x 24.0), UL rated: 600Vrms commercial equipment and general individual.

C-15 SERIES 10 AMPS, 0.315" (8.00) CENTERS — 12 AWG

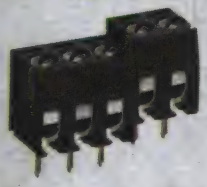
Mfg. Part No.	Poles	Length (mm)	Stock No.	Price Each 1-24
39100-0802	2	0.54" (13.8)	41K8740	0.81
39100-0803	3	0.86" (21.8)	41K0866	1.01
39100-0804	4	1.17" (29.8)	73K0483	1.43
39100-0805	5	1.49" (37.8)	69K7736	1.69
39100-0806	6	1.80" (45.8)	37K5341	2.32
39100-0808	8	2.43" (61.8)	45K1586	3.27
39100-0810	10	3.06" (77.8)	73K0484	3.05
39100-0812	12	3.69" (93.8)	35K5843	3.51
C-40 SERIES 10 AMPS, 0.394" (10.00) CENTERS — 12 AWG				
39100-1002	2	1.04" (26.5)	73K0485	1.00
39100-1003*	3	1.04" (26.5)	73K0486	1.28
39100-1004	4	1.44" (36.5)	73K0487	1.50
39100-1005	5	1.83" (46.5)	68K0473	2.17
39100-1006	6	2.22" (56.5)	37K5338	2.27
39100-1008	8	3.01" (76.5)	73K0488	3.02
39100-1010	10	3.80" (96.5)	73K0489	4.20
39100-1012	12	4.59" (116.5)	68K0483	5.01
C-60 SERIES 25 AMPS, 0.472" (12.00) CENTERS — 8 AWG				
39100-1210	10	4.67" (116)	39K6031	4.48
39100-1212	12	5.51" (140)	69K7503	5.26

*Low profile
(5190)

3.50mm MA SERIES EURO STYLE TERMINAL BLOCKS

RoHS Compliant Available

multicomp



MA series wire-protection clamps provide precise, cost-effective, and compact wiring solutions. The simple clamping mechanism reduces the product cost. The 2 & 3 pole modular designed terminal blocks can be quickly and easily joined together to produce higher pole number assemblies. MA series allow screw connections for conductors up to 12 AWG without soldering. MA series utilize brass contacts for wire connection which allows the product be maintenance free, vibration resistant, and offers outstanding corrosion resistance, and high reliability. When the clamping screw is tightened, it pushes the leaf spring onto the conductor until a secure connection is achieved. The leaf spring prevents the screw from the digging into the conductor and damaging individual conductor stands. MA series terminal blocks meet the approvals of UL, CE and VDE.

3.50mm (0.138") VERTICAL PCB EURO STYLE TERMINAL BLOCKS - cUL - 26-16 AWG

Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-99
MA212-350M02	2	04R6808	0.45
MA212-350M03	3	04R6809	1.03
MA212-350M04	4	04R6810	1.27
MA212-350M05	5	04R6811	1.71
MA212-350M06	6	04R6812	1.71
MA212-350M07	7	04R6813	1.85
MA212-350M08	8	04R6814	2.11
MA212-350M09	9	04R6815	2.56
MA212-350M10	10	04R6816	2.84
MA212-350M14	14	04R6817	2.95
MA212-350M15	15	04R6818	3.40
MA212-350M16	16	04R6819	2.90

(147083)

3.50mm MB SERIES EURO STYLE CAGE CLAMP TERMINAL BLOCKS

RoHS Compliant Available

multicomp

MB Series printed circuit terminal blocks provide highly reliable screw connections on industrial printed circuit boards. MB series variants share a robust moving cage principle with a generously dimensioned insertion space for conductors up to 12 AWG. The flat base of the clamping unit ensures that even the thinnest connection leads can be clamped properly. When the clamping screw is turned, a clamping yoke rises in the component housing until the thread is firmly held between the current bar and clamping yoke. The stable design of the clamping parts allows the creation of gas-tight connections. This mean that the contact conditions can be kept stable over a long time even in aggressive atmospheres. MB series allows the terminal screw to be reliably held in place even in the case of vibrations. At the point of maximum permitted torque, the upper thread-overlap of the yoke opens causing a locking action to be exerted on the screw. MB series terminal blocks meet the approvals of UL, CE and VDE.

3.50mm (0.138") MODULAR PCB EURO STYLE TERMINAL BLOCKS - cUL - 26-16 AWG

Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-99
MB332-350M02	2	04R6863	0.69
MB332-350M03	3	04R6864	1.05
MB332-350M04	4	04R6865	1.39
MB332-350M05	5	04R6866	1.62
MB332-350M06	6	04R6867	2.34
MB332-350M07	7	04R6868	2.73
MB332-350M08	8	04R6869	2.59
MB332-350M09	9	04R6870	2.91
MB332-350M10	10	04R6871	3.24
MB332-350M11	11	04R6872	3.56
MB332-350M12	12	04R6873	3.88

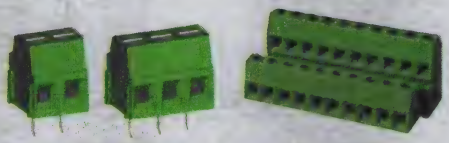
(147084)

3.81mm EB25 & EBW SERIES EURO STYLE CAGE CLAMP TERMINAL BLOCKS

RoHS Compliant Available

multicomp

- Insulator: PA66, rated UL94V-0
- Color: Green
- Contact: Tin plated Bronze
- Operating voltage: 300 VAC max.
- Current rating: 12 A max. per pole
- Operating temperature: -40°C to 105°C
- AWG: 30-16



EBW, MB332 EB25, MB362

3.81mm (0.150") EURO STYLE CAGE CLAMP TERMINAL BLOCKS - SINGLE LEVEL

Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-99
EBW-03-B	3	04R6723	0.80
EBW-04-B	4	04R6724	1.38
EBW-06-B	6	04R6725	1.93
EBW-07-B	7	04R6726	1.87
EBW-08-B	8	04R6727	2.29
EBW-09-B	9	04R6728	2.40
EBW-10-B	10	04R6729	3.26
EBW-12-B	12	04R6730	2.55
3.81mm (0.150") EURO STYLE CAGE CLAMP TERMINAL BLOCKS - STAGGERED DOUBLE LEVEL			
EB25-04-B-L	2	04R6746	1.64
EB25-06-B-L	3	04R6747	1.74
EB25-08-B-L	4	04R6748	2.32
EB25-10-B-L	5	04R6749	2.56
EB25-12-B-L	6	04R6750	2.77
EB25-16-B-L	8	04R6751	3.85
EB25-18-B-L	9	04R6752	4.03
EB25-20-B-L	10	04R6753	4.23
EB25-22-B-L	11	04R6754	4.63
EB25-24-B-L	12	04R6755	4.71

(147097)

TERMINAL BLOCKS – EURO

MA SERIES EURO STYLE TERMINAL BLOCKS

RoHS Compliant Available

multicomp

MA331 | MC24356, MC24360, MA412 | MA522 | MA524

MA series wire-protection clamps provide precise, cost-effective, and compact wiring solutions. The simple clamping mechanism reduces the product cost. The 2 & 3 pole modular designed terminal blocks can be quickly and easily joined together to produce higher pole number assemblies. MA series allow screw connections for conductors up to 12 AWG without soldering. MA series utilize brass contacts for wire connection which allows the product be maintenance free, vibration resistant, and offers outstanding corrosion resistance, and high reliability. When the clamping screw is tightened, it pushes the leaf spring onto the conductor until a secure connection is achieved. The leaf spring prevents the screw from the digging into the conductor and damaging individual conductor stands.

5.00mm (0.197″) VERTICAL PCB EURO STYLE TERMINAL BLOCKS - cUL - 24-14 AWG

Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-249
● MC24355	2	14N5684	0.43
● MA331-500M03	3	04R6820	0.80
● MA331-500M04	4	04R6821	1.09
● MA331-500M05	5	04R6822	1.36
● MA331-500M06	6	04R6823	1.60
● MA331-500M07	7	04R6824	1.76
● MA331-500M08	8	04R6825	2.01
● MA331-500M09	9	04R6826	2.02
● MA331-500M10	10	04R6827	2.09
● MA331-500M11	11	04R6828	2.30
● MA331-500M12	12	04R6829	2.70
5.00mm (0.197″) VERTICAL PCB EURO STYLE TERMINAL BLOCKS - cUL & VDE - 26-12 AWG			
● MC24356	2	14N5685	0.39
● MC24360	3	14N5686	0.56
5.00mm (0.197″) VERTICAL PCB EURO STYLE TERMINAL BLOCKS - cUL & VDE - 22-12 AWG			
● MA522-500M02		04R6830	0.37
● MA522-500M04	4	04R6831	0.90
● MA522-500M05	5	04R6832	0.93
● MA522-500M06	6	04R6833	1.34
● MA522-500M08	8	04R6834	1.79
● MA522-500M09	9	04R6835	1.87
● MA522-500M10	10	04R6836	2.23
● MA522-500M12	12	04R6837	2.07
5.00mm (0.197″) RIGHT ANGLE PCB EURO STYLE TERMINAL BLOCKS - 22-12 AWG			
● MA524-500M02	2	04R6838	0.38
● MA524-500M03	3	04R6839	0.56
● MA524-500M04	4	04R6840	0.69
● MA524-500M06	6	04R6841	1.25
● MA524-500M07	7	04R6842	1.45
● MA524-500M08	8	04R6843	1.66

(120732)

MB SERIES EURO STYLE TERMINAL BLOCKS

RoHS Compliant Available

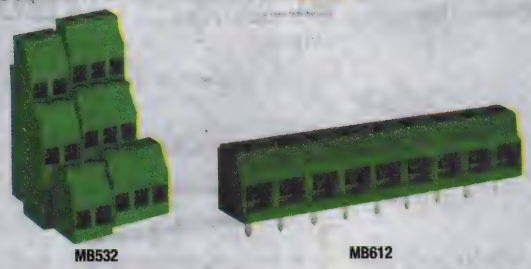
multicomp

MB220 | MB312, MC24361-MC24368 | MC24370-MC24373

EBV2 | MB422 | MB432

CONTINUED

MB SERIES EURO STYLE TERMINAL BLOCKS (CONT.)



MB532 | MB612

MB Series printed circuit terminal blocks provide highly reliable screw connections on industrial printed circuit boards. MB series variants share a robust moving cage principle with a generously dimensioned insertion space for conductors up to 12 AWG. The flat base of the clamping unit ensures that even the thinnest connection leads can be clamped properly. When the clamping screw is turned, a clamping yoke rises in the component housing until the thread is firmly held between the current bar and clamping yoke. The stable design of the clamping parts allows the creation of gas-tight connections. This mean that the contact conditions can be kept stable over a long time even in aggressive atmospheres. MB series allows the terminal screw to be reliably held in place even in the case of vibrations. At the point of maximum permitted torque, the upper thread-overlap of the yoke opens causing a locking action to be exerted on the screw.

5.00mm (0.197″) MODULAR PCB EURO STYLE TERMINAL BLOCKS - 135° ENTRY

Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-249
● MB220-500M02	2	04R6846	0.70
● MB220-500M03	3	04R6847	1.04
● MB220-500M04	4	04R6848	1.15
● MB220-500M05	5	04R6849	1.73
● MB220-500M06	6	04R6850	2.08
● MB220-500M08	8	04R6851	2.77
● MB220-500M10	10	04R6844	3.10
● MB220-500M12	12	04R6845	3.45
5.00mm (0.197″) PCB EURO STYLE TERMINAL BLOCKS - STEEL CLAMP - cUL & VDE - 26-12 AWG			
● MC24361	2	14N5687	0.41
● MC24362	3	14N5688	0.63
5.08mm (0.200″) ONE PIECE PCB EURO STYLE TERMINAL BLOCKS - cUL & VDE - 26-12 AWG			
● MC24363	5	14N5692	1.02
● MC24364	6	14N5693	1.23
● MC24365	8	14N5694	1.41
5.08mm (0.200″) PCB EURO STYLE TERMINAL BLOCKS - STEEL CLAMP - cUL & VDE - 26-12 AWG			
● MC24366	2	14N5695	0.44
● MC24367	3	14N5696	0.62
● MC24368	4	14N5697	0.81
5.00mm (0.197″) PCB EURO STYLE TERMINAL BLOCKS - BRASS CLAMP - cUL & VDE - 26-12 AWG			
● MB312-500M02	2	04R6852	0.54
● MB312-500M03	3	04R6853	0.70
● MB312-500M04	4	04R6854	0.86
● MB312-500M08	8	04R6855	2.59
● MB312-500M12	12	04R6856	3.89
5.08mm (0.200″) PCB EURO STYLE TERMINAL BLOCKS - BRASS CLAMP - cUL & VDE - 26-12 AWG			
● MB312-508M02	2	04R6857	0.70
● MB312-508M03	3	04R6858	0.87
● MB312-508M04	4	04R6859	0.93
● MB312-508M08	8	04R6860	2.59
● MB312-508M10	10	04R6861	3.24
● MB312-508M12	12	04R6862	3.89
5.08mm (0.200″) MODULAR PCB EURO STYLE TERMINAL BLOCKS - 135° ENTRY			
● MC24371	2	14N5700	0.60
● MC24372	3	14N5701	0.83
● MC24373	8	14N5702	1.90
● MC24370	12	14N5699	1.96
5.00mm (0.197″) DOUBLE LEVEL PCB EURO STYLE TERMINAL BLOCKS			
● EBV2-03-C		04R6721	1.49
5.08mm (0.200″) DOUBLE LEVEL PCB EURO STYLE TERMINAL BLOCKS			
● EBV2-02-D	2	04R6720	1.40
● EBV2-03-D	3	04R6722	1.70
5.00mm (0.197″) MODULAR PCB EURO STYLE TERMINAL BLOCKS - cUL - 24-12 AWG			
● MB422-500MA02	2	04R6874	0.51
● MB422-500MA03	3	04R6875	0.78
● MB422-500MA04	4	04R6876	0.96
● MB422-500MA08	8	04R6877	1.92
● MB422-500MA12	12	04R6878	2.47
5.08mm (0.200″) MODULAR PCB EURO STYLE TERMINAL BLOCKS - cUL - 24-12 AWG			
● MB422-508MA02	2	04R6879	0.78
● MB422-508MA03	3	04R6880	1.17
● MB422-508MA04	4	04R6881	1.56
● MB422-508MA05	5	04R6882	1.50
● MB422-508MA06	6	04R6883	1.44

CONTINUED

MB SERIES EURO STYLE TERMINAL BLOCKS (CONT.)

5.08mm (0.200″) MODULAR PCB EURO STYLE TERMINAL BLOCKS - cUL - 24-12 AWG

Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-249
MB422-508MA08	8	04R6884	2.89
MB422-508MA10	10	04R6885	3.62
5.00mm (0.197″) DOUBLE LEVEL PCB EURO STYLE TERMINAL BLOCKS - cUL - 24-12 AWG			
MB432-500MA04	4	04R6886	2.21
MB432-500MA06	6	04R6887	2.75
5.08mm (0.200″) DOUBLE LEVEL PCB EURO STYLE TERMINAL BLOCKS - cUL - 24-12 AWG			
MB432-508MA04	4	04R6888	1.84
MB432-508MA06	6	04R6889	2.36
5.00mm (0.197″) TRIPLE LEVEL PCB EURO STYLE TERMINAL BLOCKS - cUL - 26-16 AWG			
MB532-500MA06	6	04R6890	2.27
MB532-500MA09	9	04R6891	4.28
5.08mm (0.200″) TRIPLE LEVEL PCB EURO STYLE TERMINAL BLOCKS - cUL - 26-16 AWG			
MB532-508MA09	9	04R6892	3.67
5.08mm (0.200″) ONE PIECE PCB EURO STYLE TERMINAL BLOCKS - cUL - 24-14 AWG			
MB612-50802	2	04R6893	0.56
MB612-50803	3	04R6894	0.66
MB612-50804	4	04R6895	0.87
MB612-50805	5	04R6896	0.95
MB612-50806	6	04R6897	1.19
MB612-50807	7	04R6898	2.16
MB612-50808	8	04R6899	2.47
MB612-50809	9	04R6900	2.78
MB612-50810	10	04R6901	2.72
MB612-50811	11	04R6902	2.83
MB612-50812	12	04R6903	3.31

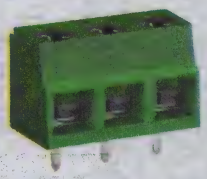
(120735)

5MM PITCH EUROSTYLE PCB TERMINAL BLOCKS

RoHS Compliant Available

multicomp

- Insulator: Polyamide 66
- Color: Green
- Terminal: tin-plated brass
- Cage clamp: nickel-plated brass
- Screw: M3 zinc-plated steel
- Screw torque: 4.5 lb-inch
- Voltage rating: 300VAC
- Current rating: 16A
- Wire range: 26 to 14 AWG
- Operating temperature: -40°C to 105°C



Mfg. Part No.	No. of Poles	Length (mm)	Stock No.	Price Each 1-249
MCTB-61C02	2	10	54T7579	0.67
MCTB-61C03	3	15	54T7580	1.00
MCTB-61C04	4	20	54T7581	1.33
MCTB-61C05	5	25	54T7582	1.66
MCTB-61C06	6	30	54T7583	1.54
MCTB-61C07	7	35	54T7584	1.80
MCTB-61C08	8	40	54T7585	2.21
MCTB-61C09	9	45	54T7586	1.84
MCTB-61C10	10	50	54T7587	2.76
MCTB-61C11	11	55	54T7588	2.25
MCTB-61C12	12	60	54T7589	2.46

(202195)

7.62MM PITCH EUROSTYLE PCB TERMINAL BLOCKS

RoHS Compliant Available

multicomp

- Insulator: Polyamide 66
- Color: Green
- Terminal: tin-plated brass
- Cage clamp: nickel-plated brass
- Screw: M3 nickel-plated steel
- Screw torque: 5.5 lb-inch
- Voltage rating: 300VAC
- Current rating: 30A
- Wire range: 24 to 10 AWG
- Operating temperature: -40°C to 105°C

Mfg. Part No.	No. of Poles	Length (mm)	Stock No.	Price Each 1-249
MCTB-92F02M	2	15.2	54T7592	1.33
MCTB-92F03M	3	22.9	54T7593	1.65

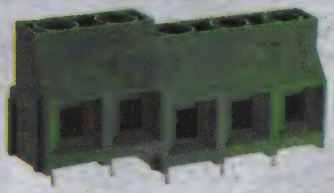
(202219)

9.52MM PITCH EUROSTYLE PCB TERMINAL BLOCKS

RoHS Compliant Available

multicomp

- Insulator: Polyamide 66
- Color: Green
- Terminal: tin-plated brass
- Cage clamp: nickel-plated steel
- Screw: M3 nickel-plated steel
- Screw torque: 9 lb-inch
- Voltage rating: 600VAC
- Current rating: 30A
- Wire range: 24 to 10 AWG
- Operating temperature: -40°C to 105°C



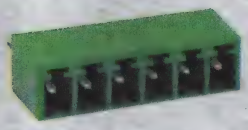
Mfg. Part No.	No. of Poles	Length (mm)	Stock No.	Price Each 1-249
MCTB-91G02M	2	19	54T7590	1.13
MCTB-91G03M	3	28.6	54T7591	1.57

(202220)

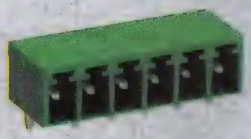
3.5MM PITCH PLUGGABLE TERMINAL BLOCK PCB HEADERS

RoHS Compliant Available

multicomp



Vertical



Right-Angle

- Vertical or right-angle
- Side entry, closed ends
- Pitch: 3 5mm
- Insulator: Polyamide 66
- Color: Green

- Solder pin: 0.8mm tin-plated brass
- Voltage rating: 150VAC
- Current rating: 12A
- PCB hole diameter: 1.3mm
- Operating temperature: -40°C to 105°C

3.5MM PLUGGABLE TERMINAL BLOCK PCB HEADERS - VERTICAL

Mfg. Part No.	No. of Poles	Length (mm)	Stock No.	Price Each 1-249
MCTE-04A02	2	7.6	54T7667	0.60
MCTE-04A03	3	11.1	54T7668	0.96
MCTE-04A04	4	14.6	54T7669	1.19
MCTE-04A05	5	18.1	54T7670	1.60
MCTE-04A06	6	21.6	54T7671	1.60
MCTE-04A07	7	25.1	54T7672	1.38
MCTE-04A08	8	28.6	54T7673	1.98
MCTE-04A09	9	32.1	54T7674	1.77
MCTE-04A10	10	35.6	54T7675	1.97
MCTE-04A11	11	39.1	54T7676	2.17
MCTE-04A12	12	42.6	54T7677	3.57
3.5MM PLUGGABLE TERMINAL BLOCK PCB HEADERS - RIGHT-ANGLE				
MCTE-03A02	2	7.6	54T7641	0.64
MCTE-03A03	3	11.1	54T7642	0.96
MCTE-03A04	4	14.6	54T7643	1.28
MCTE-03A05	5	18.1	54T7644	1.60
MCTE-03A06	6	21.6	54T7645	1.49
MCTE-03A07	7	25.1	54T7646	1.38
MCTE-03A08	8	28.6	54T7647	1.98
MCTE-03A09	9	32.1	54T7648	1.77
MCTE-03A10	10	35.6	54T7649	1.97
MCTE-03A11	11	39.1	54T7650	2.17
MCTE-03A12	12	42.6	54T7651	3.78

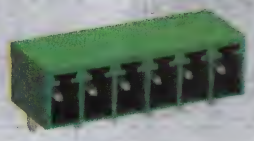
(202203)

3.81MM PITCH PLUGGABLE TERMINAL BLOCK PCB HEADERS

RoHS Compliant Available

multicomp

Vertical



Right-Angle

- Vertical or right-angle
- Side entry, closed ends
- Pitch: 3 5mm
- Insulator: Polyamide 66
- Color: Green

- Solder pin: 0.8mm tin-plated brass
- Voltage rating: 300VAC
- Current rating: 12A
- PCB hole diameter: 1.3mm
- Operating temperature: -40°C to 105°C

CONTINUED

TERMINAL BLOCKS – EURO

3.81MM PITCH PLUGGABLE TERMINAL BLOCK PCB HEADERS (CONT.)

3.81MM PLUGGABLE TERMINAL BLOCK PCB HEADERS - VERTICAL

Mfg. Part No.	No. of Poles	Length (mm)	Stock No.	Price Each 1-249
● MCTE-04B02	2	8.2	54T7678	0.60
● MCTE-04B03	3	12	54T7679	0.90
● MCTE-04B04	4	15.9	54T7680	1.19
● MCTE-04B05	5	19.7	54T7681	1.49
● MCTE-04B06	6	23.5	54T7682	1.49
● MCTE-04B07	7	27.3	54T7683	1.38
● MCTE-04B08	8	31.1	54T7684	1.98
● MCTE-04B09	9	34.9	54T7685	1.77
● MCTE-04B10	10	38.7	54T7686	1.97
● MCTE-04B11	11	42.5	54T7687	2.17
● MCTE-04B12	12	46.3	54T7688	3.57

3.81MM PLUGGABLE TERMINAL BLOCK PCB HEADERS - RIGHT-ANGLE

● MCTE-03B02	2	8.2	54T7652	0.60
● MCTE-03B03	3	12	54T7653	0.90
● MCTE-03B04	4	15.9	54T7654	1.19
● MCTE-03B05	5	19.7	54T7655	1.49
● MCTE-03B06	6	23.5	54T7656	1.60
● MCTE-03B07	7	27.3	54T7657	1.38
● MCTE-03B08	8	31.1	54T7658	1.98
● MCTE-03B09	9	34.9	54T7659	1.77
● MCTE-03B10	10	38.7	54T7660	1.97
● MCTE-03B11	11	42.5	54T7661	2.17
● MCTE-03B12	12	46.3	54T7662	3.57

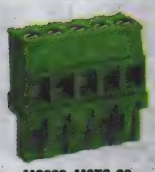
(202204)

5MM, 5.08MM, AND 7.62MM PITCH PLUGGABLE RIGHT-ANGLE TERMINAL BLOCKS

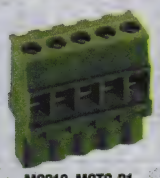
RoHS Compliant Available

multicomp

MC24374-MC24381, MCTC



MC200, MCTC-20



MC210, MCTC-21

MC310

- Pitch: 5mm, 5.08mm or 7.62mm
- Insulator: Polyamide 66
- Color: Green
- Terminal: tin-plated phosphor bronze
- Cage clamp: nickel-plated steel
- Screw: M3 zinc-plated steel
- Screw torque: 7 lb-inch (5mm, 5.08mm); 4.5 lb-inch (7.62mm)
- Voltage rating: 300VAC
- Current rating: 16A (5mm, 5.08mm); 15A (7.62mm)
- Wire range: 24 to 12 AWG (5mm, 5.08mm); 24 to 14 AWG (7.62mm)
- Operating temperature: -40°C to 105°C

5.00mm (0.197″) PLUGGABLE EURO STYLE TERMINAL BLOCKS - 180° ENTRY - 24-12 AWG

Mfg. Part No.	No. of Poles	Length (mm)	Stock No.	Price Each 1-49
● MC24374	2	10	14N5703	0.61
● EBH-03-C	3	15	04R6689	0.80
● MC24376	4	20	14N5705	1.58
● MC24377	5	25	14N5706	2.07
● MC24378	6	30	14N5707	2.45
● MCTC-10C07	7	35	54T7594	2.65
● MCTC-10C08	8	40	54T7595	3.03
● MCTC-10C09	9	45	54T7596	3.16
● MCTC-10C10	10	50	54T7597	3.26
● MCTC-10C11	11	55	54T7598	3.59
● MCTC-10C12	12	60	54T7599	3.86

5.08mm (0.200″) PLUGGABLE EURO STYLE TERMINAL BLOCKS - 180° ENTRY - 24-12 AWG

● MC24379	2	10.16	14N5708	0.97
● MCTC-10C03	3	15.24	14N5709	1.24
● MC24381	4	20.32	14N5710	1.67
● MCTC-10D05	5	25.4	54T7600	2.04
● MCTC-10D06	6	30.5	54T7601	3.77
● MCTC-10D07	7	35.6	54T7602	2.85
● MCTC-10D08	8	40.6	54T7603	3.21
● MCTC-10D09	9	45.7	54T7604	2.94
● MCTC-10D10	10	50.8	54T7605	3.50

CONTINUED

5MM, 5.08MM, AND 7.62MM PITCH PLUGGABLE RIGHT-ANGLE TERMINAL BLOCKS (CONT.)

5.08mm (0.200″) PLUGGABLE EURO STYLE TERMINAL BLOCKS - 180° ENTRY - 24-12 AWG

Mfg. Part No.	No. of Poles	Length (mm)	Stock No.	Price Each 1-49
● MCTC-10D11	11	55.9	54T7606	3.86
● MCTC-10D12	12	61	54T7607	4.15

5.00mm (0.197″) PLUGGABLE EURO STYLE TERMINAL BLOCKS - 90° ENTRY - 24-12 AWG

● MC200-50002	2	10	04R6906	0.94
● MC200-50003	3	15	04R6907	1.30
● MC200-50004	4	20	04R6908	2.62
● MC200-50005	5	25	04R6909	3.27
● MC200-50006	6	30	04R6910	3.26
● MC200-50007	7	35	04R6911	3.80
● MC200-50008	8	40	04R6912	3.73
● MC200-50010	10	50	04R6914	5.43
● MCTC-20C11	11	55	54T7611	4.04
● MC200-50012	12	60	04R6915	6.98

5.08mm (0.200″) PLUGGABLE EURO STYLE TERMINAL BLOCKS - 90° ENTRY - 24-12 AWG

● MC200-50802	2	10.16	04R6916	1.31
● MC200-50803	3	15.24	04R6917	1.73
● MC200-50804	4	20.32	04R6918	2.34
● MC200-50805	5	25.4	04R6919	2.33
● MC200-50806	6	30.48	04R6920	2.60
● MC200-50807	7	35.56	04R6921	2.61
● MC200-50808	8	40.64	04R6922	3.16
● MC200-50809	9	45.72	04R6923	3.35
● MC200-50811	11	55.88	04R6925	4.04
● MC200-50812	12	60.96	04R6926	8.39

5.00mm (0.197″) PLUGGABLE EURO STYLE TERMINAL BLOCKS - 270° ENTRY - 24-12 AWG

● MC210-50002	2	10	04R6927	1.09
● MC210-50003	3	15	04R6928	1.63
● MC210-50004	4	20	04R6929	1.83
● MC210-50005	5	25	04R6930	2.17
● MC210-50006	6	30	04R6931	2.24
● MCTC-21C11	11	55	54T7612	4.04

5.08mm (0.200″) PLUGGABLE EURO STYLE TERMINAL BLOCKS - 270° ENTRY - 24-12 AWG

● MC210-50802	2	10.16	04R6937	1.31
● MC210-50803	3	15.24	04R6938	1.63
● MC210-50804	4	20.32	04R6939	2.18
● MC210-50805	5	25.4	04R6940	2.33
● MC210-50806	6	30.48	04R6941	2.60
● MC210-50807	7	35.56	04R6942	2.81
● MC210-50808	8	40.64	04R6943	3.20
● MCTC-21D09	9	45.72	54T7613	3.35

5.00mm (0.197″) PLUGGABLE EURO STYLE TERMINAL BLOCKS - 180° ENTRY - 24-14 AWG

● MC310-50004	4	20	04R6958	3.00
● MC310-50005	5	25	04R6959	3.75
● MC310-50006	6	30	04R6960	3.87
● MC310-50007	7	35	04R6961	4.45

5.08mm (0.200″) PLUGGABLE EURO STYLE TERMINAL BLOCKS - 180° ENTRY - 24-14 AWG

● MC310-50803	3	15.24	04R6962	2.05
● MC310-50804	4	20.32	04R6963	3.00
● MC310-50805	5	25.4	04R6964	3.75
● MC310-50806	6	30.48	04R6965	3.87
● MC310-50807	7	35.56	04R6966	4.45
● MC310-50810	10	50.8	04R6969	6.81
● MC310-50812	12	60.96	04R6971	8.16

7.62MM PLUGGABLE TERMINAL BLOCKS - RIGHT-ANGLE

● MCTC-10F02	2	13.2	54T7608	1.26
● MCTC-10F04	4	28.5	54T7609	1.95
● MCTC-10F06	6	43.7	54T7610	3.51

(120736)

TECHNICAL SUPPORT HOTLINE

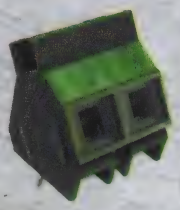
Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

9.52mm MB SERIES EURO STYLE CAGE CLAMP TERMINAL BLOCKS

RoHS Compliant Available

multicomp



- Insulator: PA66, rated UL94V-0
- Color: Green
- Contact: Tin plated brass
- Operating voltage: 300 VAC max.
- Current rating: 30 A max.
- Insulation withstanding voltage: 2000 VAC min.
- Insulation resistance: 2000 Mohms min @ 500 VDC
- Operating temperature: -40°C to 105°C
- AWG: 24-10

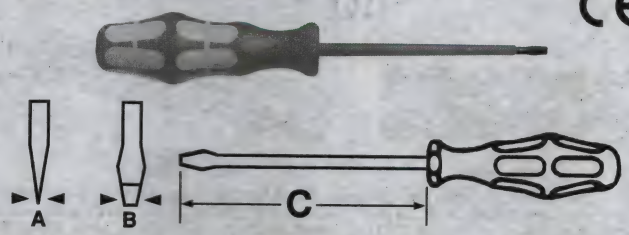
Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-99
MB912-952M02	2	04R6904	1.08
MB912-952M03	3	04R6905	1.32

(147099)

INSULATED SCREWDRIVERS FOR TERMINAL BLOCKS

RoHS Compliant Available

DURATOOL



Insulated screwdrivers are ergonomically designed so that proper tightening torques can be applied on all terminal blocks. Constructed of hardened steel. CE compliant.

Mfg. Part No.	Dimensions (mm) A	B	C	Stock No.	Price Each 1-9
SPC11014	0.4	2.5	80	31C7097	21.33
SPC11015	0.5	3.0	100	31C7098	21.33
SPC11016	0.6	3.5	100	31C7099	18.06

(68727)

804 AND 805 SERIES PCB TERMINAL BLOCKS WITH INTEGRATED PUSHBUTTON

RoHS Compliant Available

WAGO

805 series

804 and **805 series** PCB terminal blocks feature low profile side entry with an integrated pushbutton operator. Solid, ferruled, or prepared conductors can be simply pushed in to terminate. For stranded conductors, first depress the pushbutton to open the spring. For release of any conductor, depress pushbutton. Cage Clamp® 'S' termination technology provides fast, vibration-proof, and reliable connections that are maintenance-free. Staggered pin alignment increases stability on PCB and maximizes creepage/clearance distances for increased voltage ratings. Additional pole configurations available; *go online or call.*

804 SERIES TERMINAL BLOCKS — 5MM PIN SPACING

Mfg. Part No.	Poles	Wire Size (AWG)	Rating	Stock No.	Price Each 1-24	25-99
804-102	2	20AWG to 12AWG	600V / 20A	29K5375	1.17	1.11
804-103	3	20AWG to 12AWG	600V / 20A	29K5376	1.77	1.67
804-104	4	20AWG to 12AWG	600V / 20A	29K5377	2.34	2.21
804-105	5	20AWG to 12AWG	600V / 20A	29K5378	2.79	2.64
804-106	6	20AWG to 12AWG	600V / 20A	29K5379	3.45	3.27
805 SERIES TERMINAL BLOCKS — 3.5MM PIN SPACING						
805-102	2	24AWG to 16AWG	300V / 10A	58R3764	0.81	0.77
805-103	3	24AWG to 16AWG	300V / 10A	58R3765	1.20	1.14
805-104	4	24AWG to 16AWG	300V / 10A	54T8009	1.56	1.48
805-105	5	24AWG to 16AWG	300V / 10A	58R3767	2.04	1.92
805-106	6	24AWG to 16AWG	300V / 10A	54T8010	2.44	2.32

(164500)

2716 AND 2706 SERIES LEVER-OPERATED PCB TERMINAL BLOCKS

RoHS Compliant Available

WAGO

2716-10x 2716-20x 2706-10x 2706-30x

2716 and **2706 series** PCB-mount terminal blocks feature the industry's only lever-operated Cage Clamp® termination design for tool-free, maintenance-free termination of conductors 20-6AWG. Simple and efficient, the integrated lever minimizes operator strain and wiring times while reducing torque exerted on PCB's. **2716 series** configurations include 10mm and 15mm pitches in 2-5 poles without jumper slots. **2706 series** configurations include 7.5mm and 12.5mm pitches in 2-5 poles without jumper slots. Both series contain an integrated test port for easy probe access with direct contact to the current bar for accurate, hands-free troubleshooting. Other pole configurations either with or without jumper slots for commoning are available; *go online or call.*

2716 SERIES 10MM TERMINAL BLOCKS

Mfg. Part No.	Poles	Wire Size (AWG)	Rating	Stock No.	Price Each 1-24	25-99
2716-102	2	16AWG to 6AWG	300V / 55A	10R0353	4.37	4.15
2716-103	3	16AWG to 6AWG	300V / 55A	10R0354	6.23	5.89
2716-104	4	16AWG to 6AWG	300V / 55A	10R0355	8.37	7.93
2716-105	5	16AWG to 6AWG	300V / 55A	10R0356	9.89	9.36
2716 SERIES 15mm TERMINAL BLOCKS						
2716-202	2	16AWG to 6AWG	600V / 65A	08R6507	4.57	4.34
2716-203	3	16AWG to 6AWG	600V / 65A	08R4461	6.85	6.48
2716-204	4	16AWG to 6AWG	600V / 65A	10R0367	8.76	8.29
2716-205	5	16AWG to 6AWG	600V / 65A	10R0368	10.78	10.21
2706 SERIES 7.5MM TERMINAL BLOCKS						
2706-102	2	20AWG to 10AWG	300V / 30A	50T8922	3.13	2.97
2706-103	3	20AWG to 10AWG	300V / 30A	62T0904	4.57	4.33
2706-104	4	20AWG to 10AWG	300V / 30A	62T0905	5.90	5.59
2706-105	5	20AWG to 10AWG	300V / 30A	62T0907	7.38	6.98
2706 SERIES 12.5MM TERMINAL BLOCKS						
2706-302	2	20AWG to 10AWG	600V / 30A	62T0949	3.64	3.45
2706-303	3	20AWG to 10AWG	600V / 30A	62T0950	5.25	4.98
2706-304	4	20AWG to 10AWG	600V / 30A	62T0951	6.71	6.36
2706-305	5	20AWG to 10AWG	600V / 30A	62T0952	8.48	8.03

(148492)

862 SERIES CHASSIS MOUNT TERMINAL BLOCKS

RoHS Compliant Available

WAGO

Chassis-mount terminal strips feature convenient pushbutton-operated CAGE CLAMP® spring pressure wiring technology. Rated 600V/5A, 300V/20A. Accept 20-12 AWG wire. Insulation housing: polyamide 6.6 to UL94V-0 (rated 105° C). 2 conductors per pole. Current bar is lead-free tin-plated copper alloy. Clamp is stainless steel.

CHASSIS MOUNT TERMINAL BLOCKS

Mfg. Part No.	Connection Points	Poles	Stock No.	Price Each 1-24	25-99
862-0552/RN01-0000	8	2	79K2253	1.24	1.17
862-0503	12	3	79K2250	1.82	1.72
862-0504/RN01-0000	16	4	79K2251	2.42	2.29
862-0505	20	5	79K2252	2.91	2.76

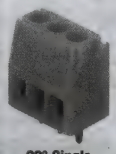
(84747)

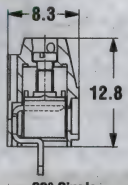
LM SERIES 3.5mm SCREW CLAMP SINGLE-LEVEL AND DOUBLE-LEVEL TERMINAL BLOCKS

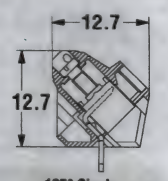
RoHS Compliant Available

Weidmüller

- Low Profile Design
- Small 3.5mm Pitch
- Can Be Dovetailed Together







90° Single 90° Single 135° Single

Features a gastight, vibration-resistant clamping yoke wire termination. Small 3.5mm pitch and low profile make these terminal blocks ideal for high-density applications where space saving is critical. 2- and 3-pole blocks can be dovetailed together to maker higher pole versions. Accepts wire size: 22-14 AWG. UL rated at 300V, 10A. Color: black. Also available in orange; *go online or call.*

CONTINUED

TERMINAL BLOCKS – EURO

LM SERIES 3.5mm SCREW CLAMP SINGLE-LEVEL AND DOUBLE-LEVEL TERMINAL BLOCKS (CONT.)

LM 3.50/90, SINGLE-LEVEL, 90° ORIENTATION

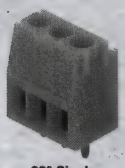
Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-9
● 1699670000	2	10B8363	1.27
● 1699680000	3	17M8360	1.97
● 996772	6	17M8656	3.97
LM 3.50/135, SINGLE-LEVEL, 135° ORIENTATION			
● 1715010000	2	13P0041	1.32
● 1715050000	3	18M9778	1.97

(31978)

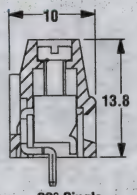
LM SERIES 5.00/5.08mm MULTILEVEL SCREW CLAMP TERMINAL BLOCKS

RoHS Compliant Available — Weidmüller

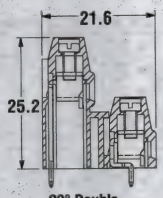
- Single-, Double-, and Triple-Level Blocks
- 90°, 135°, 180° Wire Orientations
- Low-Profile Design



90° Single



90° Single



90° Double

Features a gastight, vibration-resistant clamping yoke wire termination. Low-profile terminal blocks are ideal for applications where space saving is critical. Double- and triple-level blocks for high-density applications. 2- and 3-pole blocks can be dovetailed together to maker higher pole versions. Accepts wire size: 24-12 AWG. UL rated at 300V, 10A. Color: black. Also available in orange; *go online or call.*

LM 5.00/90, SINGLE-LEVEL, 90° ORIENTATION

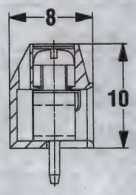
Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-9	10-99
● 1715250000	2	26M8343	1.14	1.03
● 1715260000	3	1088699	1.74	1.58
● 9993320000	6	11B2186	3.36	3.04
LM 5.08/90, SINGLE-LEVEL, 90° ORIENTATION				
● 1716020000	2	27M2953	1.14	1.03
● 1716030000	3	18M3696	1.76	1.60
● 999392	4	14M6881	2.23	2.02
● 999394	6	14M6882	3.45	3.12
● 999396	8	17M8662	4.61	4.18
● 999398	10	11B2252	5.74	5.20
LM2N 5.08/90, DOUBLE-LEVEL, 90° ORIENTATION, OFF-SET LEFT				
● 1769090000	6	34C6859	5.03	4.55

(31979)

PM SERIES 5.08mm LEAF SPRING SCREW CLAMP TERMINAL BLOCKS

RoHS Compliant Available — Weidmüller

- For Commercial Applications
- Can Be Dovetailed Together



Reliable terminal for commercial applications. 2- and 3-pole blocks can be dovetailed together to make up to 16 pole versions. Wire range: 24-14 AWG. UL rated for 300V, 16A. Also available in additional pole positions; *go online or call.*

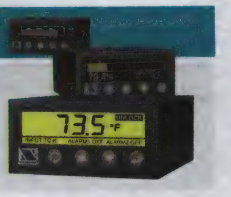
Mfg. Part No.	No. of Poles	Color	Stock No.	Price Each 1-9	10-99
● 1760490000	2	Orange	18M9779	0.68	0.62
● 1760500000	3	Orange	92B0718	0.94	0.85
● 1760510000	2	Black	14C0195	0.68	0.62
● 1760520000	3	Black	26M8349	0.94	0.85

(49777)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

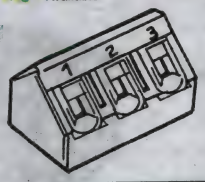


(212570)

MK 8 SERIES 45° SINGLE-LEVEL BLOCKS

RoHS Compliant Available — Weidmüller

Molded multi-position blocks with center spacing 0.200″ (5.08). Pin diameter: 0.051″ (1.30). Pin length: 0.197″ (5.00). Molding material: polyamide 6.6. Strip length: 0.24″ (0.610). UL recognized 50V/15A, 22-12 AWG. CSA certified 150V/10A, 26-14 AWG. VDE approved 60V/16A, 26-16 AWG.

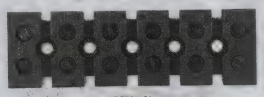


Mfg. Part No.	Poles	Stock No.	Price Each 1-9	10-99
● 0332060000	2	90F9173	1.37	1.24
● 0307860000	3	90F9174	1.94	1.74
● 0307760000	4	17M8265	2.27	2.05
● 0302660000	10	90F9176	5.70	5.13

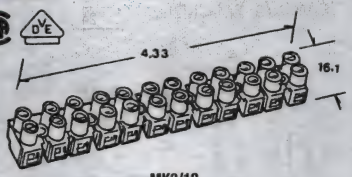
(5249)

MK SERIES DIRECT MOUNT TERMINAL STRIPS

RoHS Compliant Available — Weidmüller



MK6/6 (0620120000)



MK3/12 (24356)

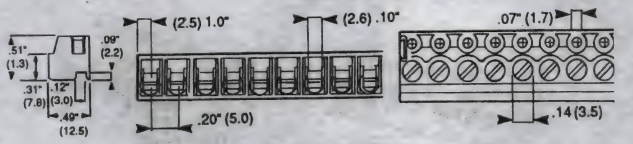
Direct mount terminal strips provide space-saving termination for basic feed-through applications. Use modified box clamp system, where a moving shield plate compresses wire against current bar. Material: polyamide. **Mfg. part no. 24356** ratings: UL recognized 300V/20A, 22-12 AWG; CSA certified 300V/25A, 22-12 AWG. **Mfg. part no. 0620120000** ratings: UL recognized 300V/30A, 22-10 AWG; CSA certified 300V/40A, 22-12 AWG; VDE approved 690V/41A, 6mm².

Mfg. Part No.	Poles	Length	Stock No.	Price Each 1-9
● 24356	12	4.33″ (109.9)	90F7917	10.62
● 0620120000	6	2.95″ (74.90)	70M7824	12.14

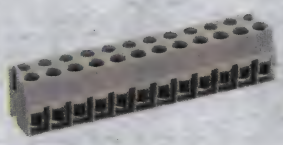
(5246)

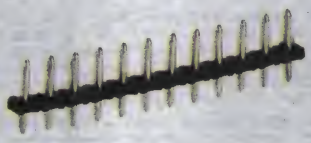
8142 SERIES 2-PC. PC BOARD DISCONNECT TERMINAL BLOCKS

RoHS Compliant Available — wieland



Terminal Block





Solderable connector strip for 0.197″ (5.00) spacing allows connection and disconnection of up to 24 poles to and from printed circuit boards in one simple plugging operation; *go online or call for pole sizes not listed.* Wires connected to flush-mounted strip by screws having wire protection spring. Two connector pins available: 1.3mm diameter above board and 1.0mm diameter below board or 1.3mm diameter above board and 1.3mm diameter below board. 1.0mm pin strips are compatible with either through-hole or reflow solder processes. Tin-plated socket contacts. Pin strips can be field cut to desired length.THR versions are also available: please call for details. 15A, 300V, 12-22 AWG. UL recognized, CSA certified, VDE approved. **NOTE:** Parts listed are unmarked. Marked parts also available; *go online or call.*

8142 SERIES (5.00mm SPACING) — CONNECTOR BLOCKS

Mfg. Part No.	Poles	Stock No.	Price Each 1-9	10-49	50-99
● 25.602.2253.0	2	95F5996	1.75	1.62	1.49
● 25.602.2353.0	3	12M6710	2.35	2.17	1.99
● 25.602.2453.0	4	95F5998	2.93	2.71	2.49
● 25.602.2653.0	6	95F6000	5.04	4.63	3.84
● 25.602.2853.0	8	95F6002	5.25	4.85	4.47
● 25.602.3053.0	10	95F6004	6.38	5.89	5.41
● 25.602.3253.0	12	95F6006	6.99	6.45	5.94
● 25.602.3453.0	14	95F6007	8.86	8.18	7.54

CONTINUED

8142 SERIES 2-PC. PC BOARD DISCONNECT TERMINAL BLOCKS (CONT.)

8142 SERIES (5.00mm SPACING) — PIN STRIPS (1.3/1.0mm PIN DIA.)

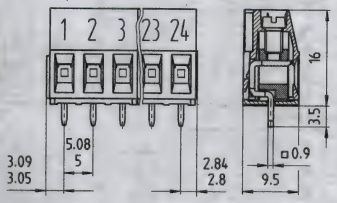
Mfg. Part No.	Poles	Stock No.	Price Each 1-9	10-49	50-99
Z5.530.0425.0	4	59K9210	0.92	0.85	0.78
Z5.530.0625.0	6	59K9211	1.52	1.41	1.30
Z5.530.0825.0	8	59K9212	2.05	1.89	1.74
Z5.530.2425.0	24	59K9213	5.81	5.35	4.94
8142 SERIES (5.00mm SPACING) — PIN STRIPS (1.3/1.3mm PIN DIA.)					
Z5.530.3225.0	2	50F3577	0.52	0.48	0.44
Z5.530.3325.0	3	50F3578	0.80	0.62	0.56
Z5.530.3425.0	4	59K9214	0.92	0.85	0.78
Z5.530.3525.0	5	50F3580	1.13	1.04	0.96
Z5.530.3625.0	6	59K9215	1.50	1.39	1.28
Z5.530.3725.0	7	50F3582	1.77	1.63	1.50
Z5.530.3825.0	8	59K9216	2.07	1.91	1.76
Z5.530.3925.0	9	50F3584	2.18	2.01	1.85
Z5.530.4025.0	10	50F3585	2.49	2.30	2.11
Z5.530.4125.0	11	95F6014	2.91	2.69	2.48
Z5.530.4225.0	12	59K9217	3.29	3.04	2.80
Z5.530.5425.0	24	59K9218	5.74	5.31	4.89

(5208)

5MM AND 5.08MM MODULAR PC BOARD TERMINAL BLOCKS

RoHS Compliant Available

wieland



- 300V, 30A, 12AWG
- 2-24 pole configurations
- Marked or unmarked

All can be interlocked to form different configurations. Fully enclosed parts, nickel-plated brass cage clamps, test point provisions. Field rated a 300V, 20A. Made of polyamide 6.6 UL94V-0 rated material. Available with or without insulating plate, with or without fixing bolt. For versions not listed below; *go online or call*.

8191 SERIES 5.00MM PC BOARD TERMINAL BLOCKS — UNMARKED, NO INSULATING PLATE

Mfg. Part No.	Poles	Length	Stock No.	Price Each 1-9
25.161.0253.0	2	10.85mm	59K9242	1.13
25.161.0353.0	3	15.85mm	60K7102	1.64
25.161.0453.0	4	20.85mm	59K9243	2.21
25.161.0653.0	6	30.85mm	59K9244	3.24
25.161.0853.0	8	40.85mm	40B8658	4.23
25.161.1053.0	10	50.85mm	58K2928	5.29
8291 SERIES 5.08MM PC BOARD TERMINAL BLOCKS — UNMARKED, NO INSULATING PLATE				
25.163.0253.0	2	11.01mm	59K9245	1.13
25.163.0353.0	3	16.09mm	59K9246	1.66
25.163.0453.0	4	21.17mm	59K9247	2.23
25.163.0653.0	6	31.33mm	40B8789	3.09
25.163.0853.0	8	41.49mm	60K7103	4.42
25.163.1053.0	10	51.65mm	59K9248	5.40
25.163.1253.0	12	61.81mm	59K9249	6.35
8291Z SERIES 5.08MM PIN SPACING				
25.163.3253.0	32	11.04mm	59K9250	1.64
25.163.3353.0	33	16.09mm	59K9251	2.45

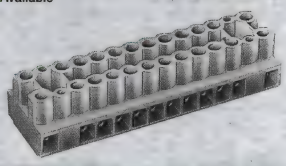
(5236)

COMPACT TERMINAL STRIPS

RoHS Compliant Available

wieland

Extremely compact terminal strips for panel and surface mounting. Polyamide 6 insulating body with nickel-plated connectors, supplied with self-locking screws to prevent loosening of contacts. Phosphor bronze wire guards. Zinc-plated steel clamping screws. Metal parts enclosed or recessed for safety. Rated: 250V, 20A, 22-12 AWG maximum. UL recognized, CSA certified, VDE approved 0110 Gr. C.



Mfg. Part No.	Poles	Length (mm)	Stock No.	Price Each 1-24
29.401.0453.0	4	33.4	31F2437	6.22
29.401.0653.0	6	44.2	02M0115	8.17
29.401.0853.0	8	55.0	31F2439	10.22

CONTINUED

COMPACT TERMINAL STRIPS (CONT.)

Mfg. Part No.	Poles	Length (mm)	Stock No.	Price Each 1-24
29.401.1253.0	12	76.6	31F2440	8.74
29.401.1653.0	16	98.2	02M0116	17.82
29.401.2053.0	20	119.8	02M0117	12.72

(5231)

DIVISIBLE EUROPA STRIPS

RoHS Compliant Available

wieland

- Phosphor bronze wire guard
- Polyamide 6 insulation
- Nickel-plated connectors
- Zinc-plated clamping screws
- Captive screws

Strips feature phosphor bronze wire guard between screw and conductor for protection against damage. Polyamide 6 insulation body is easily cut with a knife or saw. To double voltage performance to 600V from 300V *order spacers separately below*. The **4E/4EDS series** features a flammability protection rating according to standard EN 60335-1, and UL 746 C, 6th edition, section 73 and able to withstand the required 750°C glow wire tests. **6EHDS series** offers a 600V rating without requiring a spacer. Other sizes available; *go online or call*.

4EDS SERIES - 250V, 10A, 22-16 AWG

Mfg. Part No.	Poles	L (mm)	Stock No.	Price Each 1-24
21.305.0257.0	2	14	73T7902	1.10
21.305.0357.0	3	22	73T7903	1.65
21.305.0457.0	4	30	73T7904	2.21
21.305.0557.0	5	38	73T7905	2.66
21.305.0657.0	6	46	73T7906	3.31
21.305.0857.0	8	62	73T7907	4.51
21.305.0957.0	9	70	73T7908	4.95
21.305.1257.0	12	94	73T7910	6.43
6EDS SERIES - 300V,15A, 22-14 AWG				
21.311.0353.0	3	27	01M9994	1.62
21.311.0453.0	4	37	19P1847	2.20
21.311.0553.0	5	47	12M6699	2.71
21.311.0653.0	6	57	01M9996	3.24
21.311.0853.0	8	77	01M9997	4.32
21.311.1053.0	10	97	31F2415	5.50
21.311.1253.0	12	117	01M9998	6.27
10EDS SERIES - 300V, 20A, 22-12 AWG				
21.331.5353.0	3	32	02M0004	2.15
21.331.5453.0	4	44	02M0005	3.36
21.331.5653.0	6	68	02M0006	4.87
21.331.5853.0	8	92	02M0007	6.54
21.331.5953.0	9	104	02M0008	7.15
21.381.6053.0	10	116	02M0009	8.16
16EDS SERIES - 300V, 30A, 22-10 AWG				
21.341.5453.0	4	50	31F2429	7.08
21.341.5653.0	6	77	02M0014	10.46
21.341.6053.0	10	131	02M0016	17.17
21.341.6253.0	12	158	31F2436	19.81
20EDS SERIES - 300V, 65A, 22-6 AWG				
21.341.3453.0	4	55	02M0011	8.27
21.341.3853.0	8	113	30M8005	15.70
21.341.4053.0	10	142	02M0012	19.53
21.341.4253.0	12	171	02M0013	22.54
6EHDS SERIES - 600V, 20A, 22-12 AWG				
21.313.0353.0	3	27	01M9999	1.55
21.313.0453.0	4	37	28M9353	2.07
21.313.0653.0	6	57	02M0001	3.28
21.313.1053.0	10	97	83F7651	5.38
21.313.1253.0	12	117	02M0003	6.27

SPACERS FOR TERMINAL STRIPS

Increase 300V strips to 600V. Comes with 12 poles. Cut to required length.

Mfg. Part No.	For Terminal Strip	Stock No.	Price Each 1-24
07.470.1280	6EDS Series	58K2595	2.32
07.472.1280.0	16EDS Series	59K9232	2.53
07.473.1280.0	20EDS Series	59K9233	2.59

(5229)

TERMINAL BLOCKS – PLUG & SOCKET

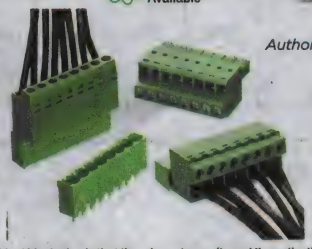
FRONT STYLE PLUGGABLE TERMINAL BLOCKS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Voltage Rating: 300 Volts
- Current Rating: 16 A
- Wire range: 24-14 AWG
- Screw torque: 4.5 in-lbs
- Operating temp: -40° to +105° C
- UL 94V-0
- Zinc plated steel screws



The key feature of the front style terminal block plug is that the wire entry cavity and the activating screw head are on the same plane which is parallel to the plug in direction. These plugs in particular are being released with 5.0mm and 5.08mm centerline spacing and will mate to industry standard vertical and right angle headers.

5.00mm FRONT STYLE PLUGGABLE TERMINAL BLOCKS

Mfg. Part No.	No. of Positions	Stock No.	Price Each 1-9
● 1986300-2	2	78R5919	1.86
● 1986300-3	3	78R5920	2.96
● 1986300-4	4	78R5921	4.07
● 1986300-5	5	78R5922	5.77
● 1986300-6	6	78R5923	6.02
● 1986300-7	7	78R5924	8.11
● 1986300-8	8	78R5925	7.98
● 1986300-9	9	78R5926	10.72
● 1-1986300-0	10	78R5913	12.84
● 1-1986300-1	11	78R5914	13.12
● 1-1986300-2	12	78R5915	14.30
5.08mm FRONT STYLE PLUGGABLE TERMINAL BLOCKS			
● 1986484-2	2	78R5927	2.21
● 1986484-3	3	78R5928	2.38
● 1986484-4	4	78R5929	3.57
● 1986484-5	5	78R5930	6.47
● 1986484-6	6	78R5931	6.23
● 1986484-7	7	78R5932	6.25
● 1986484-8	8	78R5933	10.55
● 1986484-9	9	78R5934	10.72
● 1-1986484-0	10	78R5916	11.90
● 1-1986484-1	11	78R5917	13.12
● 1-1986484-2	12	78R5918	15.48

(178528)

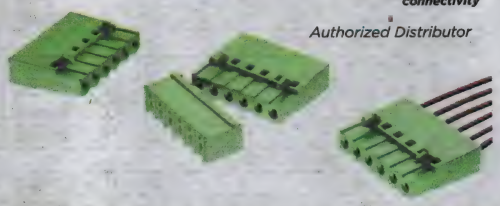
CRIMP STYLE TERMINAL BLOCKS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- 5.08mm pin spacing
- Mates with industry standard open and closed ended headers
- End to end stackable
- UL 15 Amps, 300 Volts



Terminal Block plug that utilizes an insertable crimp snap style contact for wire termination. This 5.08mm plug will mate to standard terminal block PCB headers. Applications include higher volume wire termination requirements are combined with the desire to use a two piece pluggable Eurostyle terminal block. Typically wiring will be done in factory rather than in the field.

CRIMP CONTACTS

Mfg. Part No.	AWG	Contact Plating	Stock No.	Price Each 1-9
● 965902-1	20-17	Silver	73P4803	0.79

TERMINAL BLOCK PLUG HOUSINGS

Mfg. Part No.	Positions	Color	Stock No.	Price Each 1-9
● 1986160-2	2	Green	07R7990	1.39
● 1986160-3	3	Green	07R7991	1.59
● 1986160-4	4	Green	07R7992	1.74
● 1986160-5	5	Green	07R7993	1.67
● 1986160-6	6	Green	07R7994	1.76

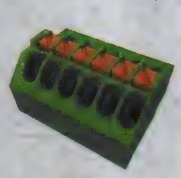
(147437)

3.5MM SPRING TYPE FLUSH MOUNT PLUG W/ HEADERS

RoHS Compliant Available

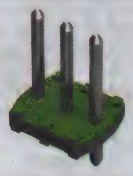
TE connectivity

Authorized Distributor



Pluggable Terminal Blocks

Standard 7mm Post Header



10.6mm Post Mating Header

Benefits

- Screwless design allows for improved performance with superior wire retention in high vibration applications
- Sustainable advantage by quick service or change over
- Flexibility with two headers styles available for various types of system designs
- Automated process capable due to reflow compatible materials
- Customizable material allows for alternative colors upon request
- Quality assured due to 100% visual inspection

Target Markets

- Automation and drives technology
- Control boxes for HVAC and thermostats
- Controls for TV or radio production
- Signal Controls

PLUGGABLE TERMINAL BLOCKS

Mfg. Part No.	Positions	Stock No.	Price Each 1-24
● 1986716-2	2	79T9286	1.17
● 1986716-3	3	79T9287	2.29
● 1986716-4	4	79T9288	3.11
● 1986716-5	5	79T9289	5.75
● 1986716-6	6	79T9290	8.28
● 1986716-7	7	79T9291	8.54
● 1986716-8	8	79T9292	9.76
POST HEADER			
● 1986717-2	2	79T9293	0.27
● 1986717-3	3	79T9294	0.55
● 1986717-4	4	79T9295	0.69
● 1986717-5	5	79T9296	1.67
● 1986717-6	6	79T9297	2.29
● 1986717-7	7	79T9298	2.67
● 1986717-8	8	79T9299	3.06
MATING HEADER			
● 1986718-2	2	79T9300	0.34
● 1986718-3	3	79T9301	0.57
● 1986718-4	4	79T9302	0.75
● 1986718-5	5	79T9303	1.82
● 1986718-6	6	79T9304	2.50
● 1986718-7	7	79T9305	2.91
● 1986718-8	8	79T9306	2.94

(200542)

15MM POWER CONNECTOR TERMINAL BLOCKS

RoHS Compliant Available

TE connectivity

Authorized Distributor

1986713

1986714

1986715

- 15mm pitch spacing
- Polyamide housing
- M5, Nickel plated steel screw
- Tin plated steel clamp
- 20-1 AWG
- Operating voltage rating: 600VDC
- Current rating: 130A for field wiring, 135A for factory wiring
- Operating temperature range: -40°C to 110°C

SOLDERABLE DOUBLE PIN - MODULAR

Mfg. Part No.	No. of Positions	Stock No.	Price Each 1-9
● 1986713-2	2	93T6918	19.12
● 1986713-3	3	93T6919	29.25
SOLDERABLE DOUBLE PIN - MODULAR WITH PEG			
● 1986714-2	2	93T6926	19.12
● 1986714-3	3	93T6927	29.25

CONTINUED

15MM POWER CONNECTOR TERMINAL BLOCKS (CONT.)

SOLDERABLE DOUBLE PIN - MOUNTING FLANGE

Mfg. Part No.	No. of Positions	Stock No.	Price Each 1-9
1986715-2	2	93T6934	19.94
1986715-3	3	93T6935	29.25

(203975)

3.5MM PITCH PLUGGABLE TERMINAL BLOCK HEADERS

RoHS Compliant Available

20020107 20020111 20020130

- 3.5mm Pitch
- Choice of three orientations with or without flange
- Green, thermalplastic resin housing, rated UL94V-0
- Zinc-plated steel screw
- Nickel-plated brass clamp
- Tin-plated copper terminals
- Operating voltage rating: 300VAC
- Current rating: 10A
- Operating temperature range: -40°C to 115°C
- UL recognized

Order coding keys separately on page 1096.

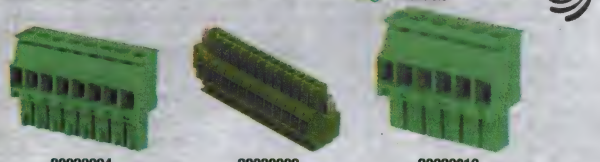
PLUGGAGE HEADERS (SOCKETS) — VERTICAL THRU-HOLE WITHOUT FLANGE

Mfg Part No.	No. of Positions	Stock No.	Price Each 1-9	10-24
20020107-C021A01LF	2	59R8853	0.27	0.23
20020107-C031A01LF	3	59R8854	0.35	0.32
20020107-C041A01LF	4	59R8855	0.46	0.42
20020107-C051A01LF	5	59R8856	0.54	0.49
20020107-C061A01LF	6	59R8857	0.69	0.63
20020107-C071A01LF	7	59R8858	0.75	0.68
20020107-C081A01LF	8	59R8859	0.75	0.71
20020107-C091A01LF	9	59R8860	0.91	0.85
20020107-C101A01LF	10	59R8861	1.01	0.95
PLUGGAGE HEADERS (SOCKETS) — VERTICAL THRU-HOLE WITH FLANGE				
20020108-C021A01LF	2	99R4104	0.66	0.59
20020108-C031A01LF	3	99R4105	0.75	0.68
20020108-C041A01LF	4	99R4106	0.74	0.69
20020108-C061A01LF	6	99R4107	0.90	0.84
20020108-C081A01LF	8	99R4108	1.06	0.99
20020108-C101A01LF	10	99R4109	1.22	1.14
PLUGGAGE HEADERS (SOCKETS) — RIGHT-ANGLE THRU-HOLE WITHOUT FLANGE				
20020110-C021A01LF	2	59R8889	0.28	0.24
20020110-C031A01LF	3	59R8890	0.36	0.33
20020110-C041A01LF	4	59R8891	0.48	0.44
20020110-C051A01LF	5	59R8892	0.60	0.54
20020110-C061A01LF	6	59R8893	0.72	0.65
20020110-C081A01LF	8	59R8895	0.78	0.73
20020110-C091A01LF	9	59R8896	0.88	0.83
20020110-C101A01LF	10	59R8897	0.98	0.92
PLUGGAGE HEADERS (SOCKETS) — RIGHT-ANGLE THRU-HOLE WITH FLANGE				
20020111-C021A01LF	2	99R4140	0.66	0.60
20020111-C031A01LF	3	99R4141	0.76	0.69
20020111-C041A01LF	4	99R4142	0.75	0.70
20020111-C061A01LF	6	99R4143	0.92	0.86
20020111-C081A01LF	8	99R4144	1.08	1.02
20020111-C101A01LF	10	99R4145	1.25	1.18
PLUGGAGE HEADERS (SOCKETS) — 45° ANGLE THRU-HOLE WITHOUT FLANGE				
20020130-C021A01LF	2	99R4164	0.33	0.30
20020130-C031A01LF	3	99R4165	0.50	0.45
20020130-C041A01LF	4	99R4166	0.66	0.60
20020130-C061A01LF	6	99R4167	0.86	0.81
20020130-C081A01LF	8	99R4168	1.15	1.08
20020130-C101A01LF	10	99R4169	1.34	1.26
PLUGGAGE HEADERS (SOCKETS) — 45° ANGLE THRU-HOLE WITH FLANGE				
20020131-C021A01LF	2	99R4188	0.70	0.66
20020131-C031A01LF	3	99R4189	0.84	0.79
20020131-C041A01LF	4	99R4190	0.98	0.93
20020131-C061A01LF	6	99R4191	1.27	1.19
20020131-C081A01LF	8	99R4192	1.46	1.37
20020131-C101A01LF	10	99R4193	1.72	1.62

(190762)

3.5MM PITCH PLUGGABLE TERMINAL BLOCK PLUGS

RoHS Compliant Available



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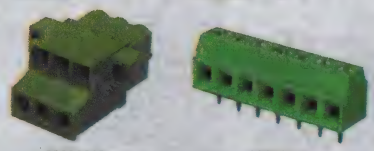

20020012 20020327

- 3.5mm Pitch
- Choice of five orientations with or without flange
- Green, thermalplastic resin housing, rated UL94V-0
- Zinc-plated steel screw
- Nickel-plated brass clamp
- Tin-plated phosphor bronze pluggable plug terminals
- Tin-plated brass fixed terminal block terminals
- Operating voltage rating: 300VAC
- Current rating: 10A
- Operating temperature range: -40°C to 115°C
- UR recognized

PLUGGABLE PLUGS — CONTACT ON UP SIDE WITHOUT FLANGE, 26-16 AWG

Mfg Part No.	No. of Positions	Stock No.	Price Each 1-9	10-24
20020004-C021B01LF	2	59R8781	0.73	0.69
20020004-C031B01LF	3	59R8782	1.07	1.01
20020004-C041B01LF	4	59R8783	1.34	1.26
20020004-C051B01LF	5	59R8784	1.69	1.59
20020004-C061B01LF	6	59R8785	2.00	1.88
20020004-C071B01LF	7	59R8786	2.37	2.22
20020004-C081B01LF	8	59R8787	2.61	2.40
20020004-C091B01LF	9	59R8788	2.94	2.70
20020004-C101B01LF	10	59R8789	3.31	3.04
PLUGGABLE PLUGS — CONTACT ON UP SIDE WITH FLANGE, 26-16 AWG				
20020000-C021B01LF	2	99R3924	0.79	0.74
20020000-C031B01LF	3	99R3925	1.08	1.01
20020000-C041B01LF	4	99R3926	1.28	1.20
20020000-C061B01LF	6	99R3927	1.82	1.71
20020000-C081B01LF	8	99R3928	2.36	2.22
20020000-C101B01LF	10	99R3929	2.85	2.61
PLUGGABLE PLUGS — KEY/HOOK ON ENTRY SIDE WITHOUT FLANGE, 28-16 AWG				
20020008-C021B01LF	2	59R8817	0.75	0.71
20020008-C031B01LF	3	59R8818	1.13	1.06
20020008-C041B01LF	4	59R8819	1.40	1.32
20020008-C051B01LF	5	59R8820	1.75	1.65
20020008-C061B01LF	6	59R8821	2.23	2.10
20020008-C071B01LF	7	59R8822	2.45	2.31
20020008-C081B01LF	8	59R8823	2.95	2.71
20020008-C091B01LF	9	59R8824	3.09	2.84
20020008-C101B01LF	10	59R8825	3.69	3.39
PLUGGABLE PLUGS — KEY/HOOK ON ENTRY SIDE WITH FLANGE, 28-16 AWG				
20020009-C021B01LF	2	99R3972	0.85	0.80
20020009-C031B01LF	3	99R3973	1.18	1.11
20020009-C041B01LF	4	99R3974	1.40	1.32
20020009-C061B01LF	6	99R3975	2.01	1.89
20020009-C081B01LF	8	99R3976	2.56	2.35
20020009-C101B01LF	10	99R3977	3.15	2.89
PLUGGABLE PLUGS — KEY/HOOK ON BACK SIDE WITHOUT FLANGE, 28-16 AWG				
20020010-C021B01LF	2	99R3996	0.75	0.68
20020010-C031B01LF	3	99R3997	0.99	0.93
20020010-C041B01LF	4	99R3998	1.31	1.23
20020010-C061B01LF	6	99R3999	1.84	1.73
20020010-C081B01LF	8	99R4000	2.45	2.30
20020010-C101B01LF	10	99R4001	3.00	2.76
PLUGGABLE PLUGS — KEY/HOOK ON BACK SIDE WITH FLANGE, 28-16 AWG				
20020011-C021B01LF	2	99R4020	0.86	0.81
20020011-C031B01LF	3	99R4021	1.19	1.12
20020011-C041B01LF	4	99R4022	1.42	1.33
20020011-C061B01LF	6	99R4023	2.03	1.91
20020011-C081B01LF	8	99R4024	2.59	2.38
20020011-C101B01LF	10	99R4025	3.19	2.93
PLUGGABLE PLUGS — FRONT SCREW WITHOUT FLANGE, 28-16 AWG				
20020013-C021B01LF	2	99R4068	0.86	0.81
20020013-C031B01LF	3	99R4069	1.29	1.21
20020013-C041B01LF	4	99R4070	1.61	1.51
20020013-C061B01LF	6	99R4071	2.59	2.44
20020013-C081B01LF	8	99R4072	3.15	2.89
20020013-C101B01LF	10	99R4073	3.94	3.62

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TERMINAL BLOCKS – PLUG & SOCKET

3.5MM PITCH PLUGGABLE TERMINAL BLOCK PLUGS (CONT.)

PLUGGABLE PLUGS — FRONT SCREW WITH FLANGE, 28-16 AWG

Mfg Part No.	No. of Positions	Stock No.	Price Each 1-9	Price Each 10-24
● 20020012-C021B01LF	2	99R4044	1.07	1.00
● 20020012-C031B01LF	3	99R4045	1.40	1.32
● 20020012-C041B01LF	4	99R4046	1.80	1.69
● 20020012-C061B01LF	6	99R4047	2.55	2.34
● 20020012-C081B01LF	8	99R4048	3.34	3.07
● 20020012-C101B01LF	10	99R4049	4.13	3.79
FIXED TERMINAL BLOCKS — RIGHT-ANGLE WIRE INLET, 24-16 AWG				
● 20020327-C021B01LF	2	59R8943	0.53	0.48
● 20020327-C031B01LF	3	59R8944	0.81	0.73
● 20020327-C041B01LF	4	59R8945	0.96	0.90
● 20020327-C061B01LF	6	59R8947	1.31	1.23
● 20020327-C091B01LF	9	59R8950	1.97	1.86
● 20020327-C101B01LF	10	59R8951	2.19	2.06

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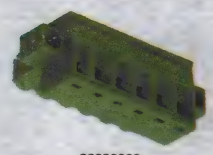
3.81MM PITCH PLUGGABLE TERMINAL BLOCK PLUGS

RoHS Compliant Available



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20020008

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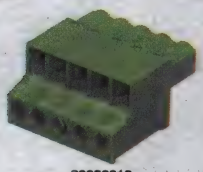


20020013

20020327

- 3.81mm Pitch
- Choice of five orientations with or without flange
- Green, thermalplastic resin housing, rated UL94V-0
- Zinc-plated steel screw
- Nickel-plated brass clamp
- Tin-plated phosphor bronze pluggable plug terminals
- Tin-plated brass fixed terminal block terminals
- Operating voltage rating: 300VAC
- Current rating: 10A
- Operating temperature range: -40°C to 115°C
- UR recognized

PLUGGABLE PLUGS — CONTACT ON UP SIDE WITHOUT FLANGE, 26-16 AWG

Mfg Part No.	No. of Positions	Stock No.	Price Each 1-9	Price Each 10-24
● 20020004-D021B01LF	2	59R8790	0.75	0.70
● 20020004-D031B01LF	3	59R8791	1.04	0.98
● 20020004-D041B01LF	4	59R8792	1.39	1.31
● 20020004-D051B01LF	5	59R8793	1.62	1.52
● 20020004-D061B01LF	6	59R8794	1.94	1.82
● 20020004-D071B01LF	7	59R8795	2.43	2.28
● 20020004-D081B01LF	8	59R8796	2.72	2.50
● 20020004-D101B01LF	10	59R8798	3.40	3.12
PLUGGABLE PLUGS — CONTACT ON UP SIDE WITH FLANGE, 26-16 AWG				
● 20020000-D021B01LF	2	99R3930	0.85	0.80
● 20020000-D031B01LF	3	99R3931	1.10	1.03
● 20020000-D041B01LF	4	99R3932	1.31	1.23
● 20020000-D061B01LF	6	99R3933	1.87	1.75
● 20020000-D081B01LF	8	99R3934	2.42	2.28
● 20020000-D101B01LF	10	99R3935	2.92	2.68
PLUGGABLE PLUGS — KEY/HOOK ON ENTRY SIDE WITHOUT FLANGE, 28-16 AWG				
● 20020008-D021B01LF	2	59R8826	0.76	0.71
● 20020008-D041B01LF	4	59R8828	1.41	1.33
● 20020008-D051B01LF	5	59R8829	1.77	1.66
● 20020008-D061B01LF	6	59R8830	2.28	2.14
● 20020008-D081B01LF	8	59R8832	3.04	2.79
● 20020008-D091B01LF	9	59R8833	3.34	3.07
● 20020008-D101B01LF	10	59R8834	3.72	3.41
PLUGGABLE PLUGS — KEY/HOOK ON ENTRY SIDE WITH FLANGE, 28-16 AWG				
● 20020009-D021B01LF	2	99R3978	0.86	0.81
● 20020009-D031B01LF	3	99R3979	1.18	1.11
● 20020009-D041B01LF	4	99R3980	1.41	1.33
● 20020009-D061B01LF	6	99R3981	2.02	1.90
● 20020009-D081B01LF	8	99R3982	2.58	2.37
● 20020009-D101B01LF	10	99R3983	3.17	2.91

➤CONTINUED➤

3.81MM PITCH PLUGGABLE TERMINAL BLOCK PLUGS (CONT.)

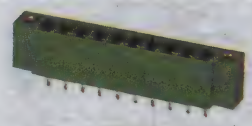
PLUGGABLE PLUGS — KEY/HOOK ON BACK SIDE WITHOUT FLANGE, 28-16 AWG

Mfg Part No.	No. of Positions	Stock No.	Price Each 1-9	Price Each 10-24
● 20020010-D021B01LF	2	99R4002	0.76	0.69
● 20020010-D031B01LF	3	99R4003	1.00	0.94
● 20020010-D041B01LF	4	99R4004	1.43	1.34
● 20020010-D061B01LF	6	99R4005	1.86	1.75
● 20020010-D081B01LF	8	99R4006	2.67	2.51
● 20020010-D101B01LF	10	99R4007	3.22	2.96
PLUGGABLE PLUGS — KEY/HOOK ON BACK SIDE WITH FLANGE, 28-16 AWG				
● 20020011-D021B01LF	2	99R4026	2.48	2.28
● 20020011-D031B01LF	3	99R4027	2.79	2.56
● 20020011-D041B01LF	4	99R4028	3.09	2.84
● 20020011-D061B01LF	6	99R4029	3.70	3.40
● 20020011-D081B01LF	8	99R4030	4.31	3.95
● 20020011-D101B01LF	10	99R4031	4.91	4.51
PLUGGABLE PLUGS — FRONT SCREW WITHOUT FLANGE, 28-16 AWG				
● 20020013-D021B01LF	2	99R4074	0.90	0.85
● 20020013-D031B01LF	3	99R4075	1.27	1.19
● 20020013-D041B01LF	4	99R4076	1.69	1.59
● 20020013-D061B01LF	6	99R4077	2.48	2.28
● 20020013-D081B01LF	8	99R4078	3.30	3.03
● 20020013-D101B01LF	10	99R4079	4.13	3.79
PLUGGABLE PLUGS — FRONT SCREW WITH FLANGE, 28-16 AWG				
● 20020012-D021B01LF	2	99R4050	2.70	2.48
● 20020012-D031B01LF	3	99R4051	3.11	2.86
● 20020012-D041B01LF	4	99R4052	3.53	3.24
● 20020012-D061B01LF	6	99R4053	4.35	4.00
● 20020012-D081B01LF	8	99R4054	5.17	4.75
● 20020012-D101B01LF	10	99R4055	6.00	5.51
FIXED TERMINAL BLOCKS — RIGHT-ANGLE WIRE INLET, 24-16 AWG				
● 20020327-D021B01LF	2	59R8952	0.50	0.45
● 20020327-D031B01LF	3	59R8953	0.79	0.71
● 20020327-D041B01LF	4	59R8954	0.87	0.82
● 20020327-D051B01LF	5	59R8955	1.17	1.10
● 20020327-D081B01LF	8	59R8958	1.62	1.52
● 20020327-D101B01LF	10	59R8960	2.18	2.05

(164507)

3.81MM PITCH PLUGGABLE TERMINAL BLOCK HEADERS

RoHS Compliant Available



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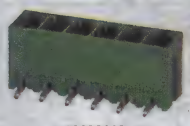

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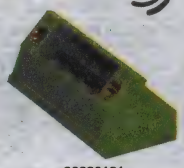

20020131

- 3.81mm Pitch
- Choice of three orientations with or without flange
- Green, thermalplastic resin housing, rated UL94V-0
- Zinc-plated steel screw
- Nickel-plated brass clamp
- Tin-plated copper terminals
- Operating voltage rating: 300VAC
- Current rating: 10A
- Operating temperature range: -40°C to 115°C
- UL recognized

Order coding keys separately on page 1096.

PLUGGAGE HEADERS (SOCKETS) — VERTICAL THRU-HOLE WITHOUT FLANGE

Mfg Part No.	No. of Positions	Stock No.	Price Each 1-9	Price Each 10-24
● 20020107-D021A01LF	2	59R8862	0.26	0.22
● 20020107-D041A01LF	4	59R8864	0.48	0.43
● 20020107-D051A01LF	5	59R8865	0.55	0.50
● 20020107-D061A01LF	6	59R8866	0.71	0.64
● 20020107-D081A01LF	8	59R8868	0.77	0.72
● 20020107-D101A01LF	10	59R8870	1.03	0.97
PLUGGAGE HEADERS (SOCKETS) — VERTICAL THRU-HOLE WITH FLANGE				
● 20020108-D021A01LF	2	99R4110	0.66	0.60
● 20020108-D031A01LF	3	99R4111	0.81	0.73
● 20020108-D041A01LF	4	99R4112	0.74	0.70
● 20020108-D061A01LF	6	99R4113	0.91	0.86
● 20020108-D081A01LF	8	99R4114	1.15	1.09
● 20020108-D101A01LF	10	99R4115	1.24	1.16
PLUGGAGE HEADERS (SOCKETS) — RIGHT-ANGLE THRU-HOLE WITHOUT FLANGE				
● 20020110-D021A01LF	2	59R8898	0.29	0.25
● 20020110-D041A01LF	4	59R8900	0.50	0.45
● 20020110-D051A01LF	5	59R8901	0.58	0.52
● 20020110-D061A01LF	6	59R8902	0.74	0.67

➤CONTINUED➤

3.81MM PITCH PLUGGABLE TERMINAL BLOCK HEADERS (CONT.)

PLUGGAGE HEADERS (SOCKETS) — RIGHT-ANGLE THRU-HOLE WITHOUT FLANGE

Mfg Part No.	No. of Positions	Stock No.	Price Each 1-9	Price Each 10-24
20020110-D081A01LF	8	59R8904	0.80	0.75
20020110-D101A01LF	10	59R8906	1.08	1.01
PLUGGAGE HEADERS (SOCKETS) — RIGHT-ANGLE THRU-HOLE WITH FLANGE				
20020111-D021A01LF	2	99R4146	0.67	0.60
20020111-D031A01LF	3	99R4147	0.77	0.69
20020111-D041A01LF	4	99R4148	0.76	0.71
20020111-D061A01LF	6	99R4149	0.93	0.87
20020111-D081A01LF	8	99R4150	1.10	1.03
20020111-D101A01LF	10	99R4151	1.27	1.20
PLUGGAGE HEADERS (SOCKETS) — 45° ANGLE THRU-HOLE WITHOUT FLANGE				
20020130-D021A01LF	2	99R4170	0.36	0.33
20020130-D031A01LF	3	99R4171	0.54	0.49
20020130-D041A01LF	4	99R4172	0.72	0.65
20020130-D061A01LF	6	99R4173	0.94	0.88
20020130-D081A01LF	8	99R4174	1.34	1.26
20020130-D101A01LF	10	99R4175	1.46	1.37
PLUGGAGE HEADERS (SOCKETS) — 45° ANGLE THRU-HOLE WITH FLANGE				
20020131-D021A01LF	2	99R4194	0.72	0.68
20020131-D031A01LF	3	99R4195	0.88	0.83
20020131-D041A01LF	4	99R4196	1.03	0.97
20020131-D061A01LF	6	99R4197	1.26	1.18
20020131-D081A01LF	8	99R4198	1.55	1.46
20020131-D101A01LF	10	99R4199	1.84	1.73

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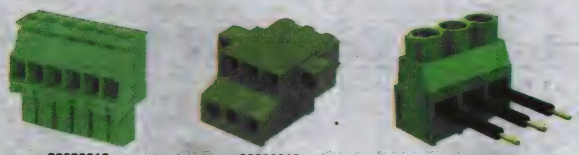
5.08MM PITCH PLUGGABLE TERMINAL BLOCK PLUGS

c UL us RoHS Compliant Available FCI

20020006 20020007 20020009



20020010 20020012 20020316

- 5.08mm Pitch
- Choice of five orientations with or without flange
- Green, thermalplastic resin housing, rated UL94V-0
- Zinc-plated steel screw
- Nickel-plated brass clamp
- Tin-plated phosphor bronze pluggable plug terminals
- Tin-plated brass fixed terminal block terminals
- Operating voltage rating: 300VAC
- Current rating: 12A
- Operating temperature range: -40°C to 115°C
- UR recognized

Order coding keys separately on page 1096.

PLUGGABLE PLUGS — CONTACT ON UP SIDE WITHOUT FLANGE, 24-12 AWG

Mfg Part No.	No. of Positions	Stock No.	Price Each 1-9	Price Each 10-24
20020006-H021B01LF	2	59R8808	0.79	0.74
20020006-H031B01LF	3	59R8809	1.16	1.09
20020006-H041B01LF	4	59R8810	1.45	1.37
20020006-H051B01LF	5	59R8811	1.84	1.73
20020006-H061B01LF	6	59R8812	2.05	1.93
20020006-H081B01LF	8	59R8814	2.68	2.46
20020006-H091B01LF	9	59R8815	3.01	2.77
20020006-H101B01LF	10	59R8816	3.35	3.08
PLUGGABLE PLUGS — CONTACT ON UP SIDE WITH FLANGE, 24-12 AWG				
20020003-H021B01LF	2	99R3954	0.86	0.81
20020003-H031B01LF	3	99R3955	1.17	1.10
20020003-H041B01LF	4	99R3956	1.39	1.31
20020003-H061B01LF	6	99R3957	1.98	1.86
20020003-H081B01LF	8	99R3958	2.52	2.32
20020003-H101B01LF	10	99R3959	3.10	2.85
PLUGGABLE PLUGS — CONTACT ON DOWN SIDE WITHOUT FLANGE, 24-12 AWG				
20020007-H021B01LF	2	99R3966	0.77	0.69
20020007-H031B01LF	3	99R3967	1.04	0.98
20020007-H041B01LF	4	99R3968	1.34	1.26
20020007-H061B01LF	6	99R3969	1.95	1.83

➤ CONTINUED ➤

5.08MM PITCH PLUGGABLE TERMINAL BLOCK PLUGS (CONT.)

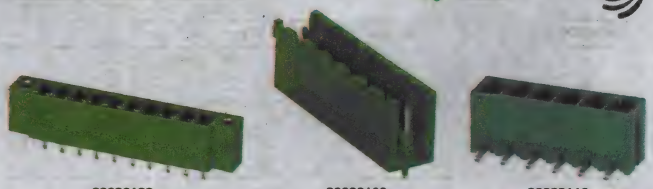
PLUGGABLE PLUGS — CONTACT ON DOWN SIDE WITHOUT FLANGE, 24-12 AWG

Mfg Part No.	No. of Positions	Stock No.	Price Each 1-9	Price Each 10-24
20020007-H081B01LF	8	99R3970	2.54	2.39
20020007-H101B01LF	10	99R3971	3.07	2.82
PLUGGABLE PLUGS — CONTACT ON DOWN SIDE WITH FLANGE, 24-12 AWG				
20020002-H021B01LF	2	99R3942	0.91	0.86
20020002-H031B01LF	3	99R3943	1.17	1.10
20020002-H041B01LF	4	99R3944	1.50	1.41
20020002-H061B01LF	6	99R3945	1.98	1.86
20020002-H081B01LF	8	99R3946	2.71	2.49
20020002-H101B01LF	10	99R3947	3.10	2.85
PLUGGABLE PLUGS — KEY/HOOK ON ENTRY SIDE WITHOUT FLANGE, 24-12 AWG				
20020008-H021B01LF	2	59R8844	0.82	0.78
20020008-H031B01LF	3	59R8845	1.16	1.09
20020008-H041B01LF	4	59R8846	1.45	1.36
20020008-H061B01LF	6	59R8848	2.17	2.04
20020008-H081B01LF	8	59R8850	2.84	2.61
20020008-H091B01LF	9	59R8851	3.43	3.15
PLUGGABLE PLUGS — KEY/HOOK ON ENTRY SIDE WITH FLANGE, 24-12 AWG				
20020009-H021B01LF	2	99R3990	0.90	0.84
20020009-H031B01LF	3	99R3991	1.23	1.16
20020009-H041B01LF	4	99R3992	1.46	1.38
20020009-H061B01LF	6	99R3993	2.09	1.96
20020009-H081B01LF	8	99R3994	2.66	2.44
20020009-H101B01LF	10	99R3995	3.27	3.00
PLUGGABLE PLUGS — KEY/HOOK ON BACK SIDE WITHOUT FLANGE, 24-12 AWG				
20020010-H021B01LF	2	99R4014	0.79	0.74
20020010-H031B01LF	3	99R4015	1.09	1.03
20020010-H041B01LF	4	99R4016	1.37	1.28
20020010-H061B01LF	6	99R4017	2.20	2.07
20020010-H081B01LF	8	99R4018	2.67	2.45
20020010-H101B01LF	10	99R4019	3.59	3.30
PLUGGABLE PLUGS — KEY/HOOK ON BACK SIDE WITH FLANGE, 24-12 AWG				
20020011-H021B01LF	2	99R4038	0.96	0.90
20020011-H031B01LF	3	99R4039	1.32	1.24
20020011-H041B01LF	4	99R4040	1.58	1.48
20020011-H061B01LF	6	99R4041	2.43	2.28
20020011-H081B01LF	8	99R4042	2.88	2.64
20020011-H101B01LF	10	99R4043	3.54	3.26
PLUGGABLE PLUGS — FRONT SCREW WITHOUT FLANGE, 22-12 AWG				
20020013-H021B01LF	2	99R4086	1.02	0.96
20020013-H031B01LF	3	99R4087	1.44	1.35
20020013-H041B01LF	4	99R4088	1.92	1.80
20020013-H061B01LF	6	99R4089	2.81	2.58
20020013-H081B01LF	8	99R4090	3.75	3.44
20020013-H101B01LF	10	99R4091	4.69	4.31
PLUGGABLE PLUGS — FRONT SCREW WITH FLANGE, 22-12 AWG				
20020012-H021B01LF	2	99R4062	1.25	1.17
20020012-H031B01LF	3	99R4063	1.65	1.55
20020012-H041B01LF	4	99R4064	2.13	2.00
20020012-H061B01LF	6	99R4065	3.02	2.77
20020012-H081B01LF	8	99R4066	3.96	3.63
20020012-H101B01LF	10	99R4067	4.89	4.49
FIXED TERMINAL BLOCKS — RIGHT-ANGLE WIRE INLET, 28-12 AWG				
20020316-H021B01LF	2	59R8934	0.60	0.54
20020316-H031B01LF	3	59R8935	0.78	0.74
20020316-H041B01LF	4	59R8936	1.04	0.98
20020316-H051B01LF	5	59R8937	1.23	1.15

(190774)

5.08MM PITCH PLUGGABLE TERMINAL BLOCK HEADERS

c UL us RoHS Compliant Available FCI



20020108 20020106 20020110

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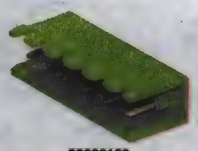
5.08MM PITCH PLUGGABLE TERMINAL BLOCK HEADERS (CONT.)



20020109

20020131

- 5.08mm Pitch
- Choice of three orientations with or without flange or open end
- Green, thermalplastic resin housing, rated UL94V-0
- Zinc-plated steel screw
- Nickel-plated brass clamp
- Tin-plated copper terminals
- Operating voltage rating: 300VAC
- Current rating: 12A
- Operating temperature range: -40°C to 115°C
- UL recognized

Order coding keys separately on page 1096.

3

PLUGGAGE HEADERS (SOCKETS) — VERTICAL THRU-HOLE WITHOUT FLANGE

Mfg Part No.	No. of Positions	Stock No.	Price Each 1-9	Price Each 10-24
● 20020107-H021A01LF	2	59R8880	0.29	0.25
● 20020107-H031A01LF	3	59R8881	0.38	0.34
● 20020107-H041A01LF	4	59R8882	0.50	0.45
● 20020107-H061A01LF	6	59R8884	0.70	0.63
● 20020107-H081A01LF	8	59R8886	0.87	0.82
● 20020107-H091A01LF	9	59R8887	0.98	0.92
PLUGGAGE HEADERS (SOCKETS) — VERTICAL THRU-HOLE WITH FLANGE				
● 20020108-H021A01LF	2	99R4122	0.72	0.65
● 20020108-H031A01LF	3	99R4123	0.72	0.67
● 20020108-H041A01LF	4	99R4124	0.80	0.75
● 20020108-H061A01LF	6	99R4125	1.05	0.99
● 20020108-H081A01LF	8	99R4126	1.15	1.08
● 20020108-H101A01LF	10	99R4127	1.42	1.34
PLUGGAGE HEADERS (SOCKETS) — VERTICAL THRU-HOLE WITH NO END WALL				
● 20020106-H021A01LF	2	99R4098	0.24	0.21
● 20020106-H031A01LF	3	99R4099	0.31	0.28
● 20020106-H041A01LF	4	99R4100	0.45	0.40
● 20020106-H061A01LF	6	99R4101	0.67	0.60
● 20020106-H081A01LF	8	99R4102	0.78	0.73
● 20020106-H101A01LF	10	99R4103	0.97	0.91
PLUGGAGE HEADERS (SOCKETS) — RIGHT-ANGLE THRU-HOLE WITHOUT FLANGE				
● 20020110-H021A01LF	2	59R8916	0.28	0.24
● 20020110-H041A01LF	4	59R8918	0.49	0.44
● 20020110-H061A01LF	6	59R8920	0.72	0.65
● 20020110-H081A01LF	8	59R8922	0.84	0.79
● 20020110-H101A01LF	10	59R8924	1.13	1.06
PLUGGAGE HEADERS (SOCKETS) — RIGHT-ANGLE THRU-HOLE WITH FLANGE				
● 20020111-H021A01LF	2	99R4158	0.73	0.66
● 20020111-H031A01LF	3	99R4159	0.72	0.68
● 20020111-H041A01LF	4	99R4160	0.82	0.77
● 20020111-H061A01LF	6	99R4161	1.00	0.94
● 20020111-H081A01LF	8	99R4162	1.27	1.19
● 20020111-H101A01LF	10	99R4163	1.27	1.19
PLUGGAGE HEADERS (SOCKETS) — RIGHT-ANGLE THRU-HOLE WITH NO END WALL				
● 20020109-H021A01LF	2	99R4134	0.27	0.23
● 20020109-H031A01LF	3	99R4135	0.34	0.31
● 20020109-H041A01LF	4	99R4136	0.43	0.38
● 20020109-H061A01LF	6	99R4137	0.64	0.57
● 20020109-H081A01LF	8	99R4138	0.74	0.70
● 20020109-H101A01LF	10	99R4139	0.92	0.87
PLUGGAGE HEADERS (SOCKETS) — 45° ANGLE THRU-HOLE WITHOUT FLANGE				
● 20020130-H021A01LF	2	99R4182	0.46	0.41
● 20020130-H031A01LF	3	99R4183	0.64	0.57
● 20020130-H041A01LF	4	99R4184	0.74	0.70
● 20020130-H061A01LF	6	99R4185	1.11	1.04
● 20020130-H081A01LF	8	99R4186	1.38	1.30
● 20020130-H101A01LF	10	99R4187	1.72	1.62
PLUGGAGE HEADERS (SOCKETS) — 45° ANGLE THRU-HOLE WITH FLANGE				
● 20020131-H021A01LF	2	99R4206	0.82	0.77
● 20020131-H031A01LF	3	99R4207	1.00	0.95
● 20020131-H041A01LF	4	99R4208	1.19	1.12
● 20020131-H061A01LF	6	99R4209	1.46	1.37
● 20020131-H081A01LF	8	99R4210	1.80	1.69
● 20020131-H101A01LF	10	99R4211	2.15	2.02

(190776)

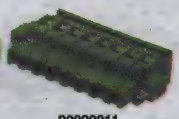
5MM PITCH PLUGGABLE TERMINAL BLOCK PLUGS

RoHS Compliant Available

20020008

20020002

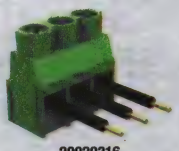
20020006



20020011

- 5mm Pitch
- Choice of five orientations with or without flange
- Green, thermalplastic resin housing, rated UL94V-0
- Zinc-plated steel screw
- Nickel-plated brass clamp
- Tin-plated phosphor bronze pluggable plug terminals
- Tin-plated brass fixed terminal block terminals
- Operating voltage rating: 300VAC
- Current rating: 12A
- Operating temperature range: -40°C to 115°C
- UR recognized

20020013



20020316

Order coding keys separately on page 1096.

PLUGGABLE PLUGS — CONTACT ON UP SIDE WITHOUT FLANGE, 24-12 AWG

Mfg Part No.	No. of Positions	Stock No.	Price Each 1-9	Price Each 10-24
● 20020006-G021B01LF	2	59R8799	0.72	0.68
● 20020006-G031B01LF	3	59R8800	1.08	1.02
● 20020006-G051B01LF	5	59R8802	1.69	1.59
● 20020006-G081B01LF	8	59R8805	2.64	2.43
PLUGGABLE PLUGS — CONTACT ON UP SIDE WITH FLANGE, 24-12 AWG				
● 20020003-G021B01LF	2	99R3948	0.85	0.80
● 20020003-G031B01LF	3	99R3949	1.16	1.09
● 20020003-G041B01LF	4	99R3950	1.38	1.29
● 20020003-G061B01LF	6	99R3951	1.96	1.84
● 20020003-G081B01LF	8	99R3952	2.49	2.29
● 20020003-G101B01LF	10	99R3953	3.06	2.81
PLUGGABLE PLUGS — CONTACT ON DOWN SIDE WITHOUT FLANGE, 24-12 AWG				
● 20020007-G021B01LF	2	99R3960	0.72	0.65
● 20020007-G031B01LF	3	99R3961	0.99	0.93
● 20020007-G041B01LF	4	99R3962	1.25	1.17
● 20020007-G061B01LF	6	99R3963	1.75	1.64
● 20020007-G081B01LF	8	99R3964	2.50	2.35
● 20020007-G101B01LF	10	99R3965	2.85	2.62
PLUGGABLE PLUGS — CONTACT ON DOWN SIDE WITH FLANGE, 24-12 AWG				
● 20020002-G021B01LF	2	99R3936	0.85	0.80
● 20020002-G031B01LF	3	99R3937	1.16	1.09
● 20020002-G041B01LF	4	99R3938	1.38	1.29
● 20020002-G061B01LF	6	99R3939	1.96	1.84
● 20020002-G081B01LF	8	99R3940	2.68	2.46
● 20020002-G101B01LF	10	99R3941	3.06	2.81
PLUGGABLE PLUGS — KEY/HOOK ON ENTRY SIDE WITHOUT FLANGE, 24-12 AWG				
● 20020008-G021B01LF	2	59R8835	0.77	0.73
● 20020008-G041B01LF	4	59R8837	1.44	1.36
● 20020008-G061B01LF	6	59R8839	2.29	2.15
PLUGGABLE PLUGS — KEY/HOOK ON ENTRY SIDE WITH FLANGE, 24-12 AWG				
● 20020009-G021B01LF	2	99R3984	0.89	0.84
● 20020009-G031B01LF	3	99R3985	1.22	1.15
● 20020009-G041B01LF	4	99R3986	1.46	1.37
● 20020009-G061B01LF	6	99R3987	2.08	1.95
● 20020009-G081B01LF	8	99R3988	2.64	2.43
● 20020009-G101B01LF	10	99R3989	3.25	2.99
PLUGGABLE PLUGS — KEY/HOOK ON BACK SIDE WITHOUT FLANGE, 24-12 AWG				
● 20020010-G021B01LF	2	99R4008	0.72	0.67
● 20020010-G031B01LF	3	99R4009	1.07	1.01
● 20020010-G041B01LF	4	99R4010	1.33	1.25
● 20020010-G061B01LF	6	99R4011	2.12	1.99
● 20020010-G081B01LF	8	99R4012	2.61	2.40
● 20020010-G101B01LF	10	99R4013	3.26	3.00
PLUGGABLE PLUGS — KEY/HOOK ON BACK SIDE WITH FLANGE, 24-12 AWG				
● 20020011-G021B01LF	2	99R4032	0.94	0.88
● 20020011-G031B01LF	3	99R4033	1.29	1.22
● 20020011-G041B01LF	4	99R4034	1.54	1.45
● 20020011-G061B01LF	6	99R4035	2.21	2.08
● 20020011-G081B01LF	8	99R4036	2.82	2.59
● 20020011-G101B01LF	10	99R4037	3.47	3.19
PLUGGABLE PLUGS — FRONT SCREW WITHOUT FLANGE, 22-12 AWG				
● 20020013-G021B01LF	2	99R4080	0.99	0.93
● 20020013-G031B01LF	3	99R4081	1.38	1.30

CONTINUED

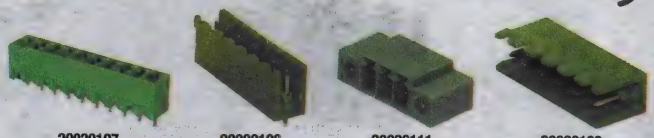
5MM PITCH PLUGGABLE TERMINAL BLOCK PLUGS (CONT.)

Mfg Part No.	No. of Positions	Stock No.	Price Each 1-9	Price Each 10-24
PLUGGABLE PLUGS — FRONT SCREW WITHOUT FLANGE, 22-12 AWG				
20020013-G041B01LF	4	99R4082	1.84	1.73
20020013-G061B01LF	6	99R4083	2.70	2.48
20020013-G081B01LF	8	99R4084	3.87	3.56
20020013-G101B01LF	10	99R4085	4.50	4.13
PLUGGABLE PLUGS — FRONT SCREW WITH FLANGE, 22-12 AWG				
20020012-G021B01LF	2	99R4056	1.21	1.14
20020012-G031B01LF	3	99R4057	1.59	1.50
20020012-G041B01LF	4	99R4058	2.05	1.93
20020012-G061B01LF	6	99R4059	2.91	2.67
20020012-G081B01LF	8	99R4060	3.81	3.50
20020012-G101B01LF	10	99R4061	4.71	4.32
FIXED TERMINAL BLOCKS — RIGHT-ANGLE WIRE INLET, 28-12 AWG				
20020316-G021B01LF	2	59R8925	0.59	0.53
20020316-G031B01LF	3	59R8926	0.72	0.68
20020316-G041B01LF	4	59R8927	0.96	0.91

(164508)

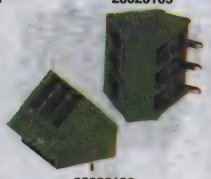
5MM PITCH PLUGGABLE TERMINAL BLOCK HEADERS

RoHS Compliant Available



20020107 20020106 20020111 20020109

- 5mm Pitch
- Choice of three orientations with or without flange or open end
- Green, thermalplastic resin housing, rated UL94V-0
- Zinc-plated steel screw
- Nickel-plated brass clamp
- Tin-plated copper terminals
- Operating voltage rating: 300VAC
- Current rating: 12A
- Operating temperature range: -40°C to 115°C
- UL recognized



20020130

Order coding keys separately on page 1096.

Mfg Part No.	No. of Positions	Stock No.	Price Each 1-9	Price Each 10-24
PLUGGAGE HEADERS (SOCKETS) — VERTICAL THRU-HOLE WITHOUT FLANGE				
20020107-G021A01LF	2	59R8871	0.27	0.23
20020107-G031A01LF	3	59R8872	0.34	0.31
20020107-G041A01LF	4	59R8873	0.46	0.41
20020107-G061A01LF	6	59R8875	0.73	0.66
20020107-G081A01LF	8	59R8877	0.79	0.74
PLUGGAGE HEADERS (SOCKETS) — VERTICAL THRU-HOLE WITH FLANGE				
20020108-G021A01LF	2	99R4116	0.71	0.64
20020108-G031A01LF	3	99R4117	0.71	0.67
20020108-G041A01LF	4	99R4118	0.79	0.75
20020108-G061A01LF	6	99R4119	0.96	0.91
20020108-G081A01LF		99R4120	1.13	1.06
20020108-G101A01LF	10	99R4121	1.30	1.22
PLUGGAGE HEADERS (SOCKETS) — VERTICAL THRU-HOLE WITH NO END WALL				
20020106-G021A01LF	2	99R4092	0.24	0.21
20020106-G031A01LF	3	99R4093	0.38	0.33
20020106-G041A01LF	4	99R4094	0.41	0.37
20020106-G061A01LF	6	99R4095	0.61	0.55
20020106-G081A01LF	8	99R4096	0.71	0.67
20020106-G101A01LF	10	99R4097	0.88	0.83
PLUGGAGE HEADERS (SOCKETS) — RIGHT-ANGLE THRU-HOLE WITHOUT FLANGE				
20020110-G021A01LF	2	59R8907	0.28	0.24
PLUGGAGE HEADERS (SOCKETS) — RIGHT-ANGLE THRU-HOLE WITH FLANGE				
20020111-G021A01LF	2	99R4152	0.72	0.65
20020111-G031A01LF	3	99R4153	0.72	0.68
20020111-G041A01LF	4	99R4154	0.81	0.76
20020111-G061A01LF	6	99R4155	0.98	0.92
20020111-G081A01LF	8	99R4156	1.16	1.09
20020111-G101A01LF	10	99R4157	1.34	1.26
PLUGGAGE HEADERS (SOCKETS) — RIGHT-ANGLE THRU-HOLE WITH NO END WALL				
20020109-G021A01LF	2	99R4128	0.26	0.22
20020109-G031A01LF	3	99R4129	0.36	0.31
20020109-G041A01LF	4	99R4130	0.41	0.37
20020109-G061A01LF	6	99R4131	0.61	0.55

➤CONTINUED➤

5MM PITCH PLUGGABLE TERMINAL BLOCK HEADERS (CONT.)

Mfg Part No.	No. of Positions	Stock No.	Price Each 1-9	Price Each 10-24
PLUGGAGE HEADERS (SOCKETS) — RIGHT-ANGLE THRU-HOLE WITH NO END WALL				
20020109-G081A01LF	8	99R4132	0.71	0.67
20020109-G101A01LF	10	99R4133	0.88	0.83
PLUGGAGE HEADERS (SOCKETS) — 45° ANGLE THRU-HOLE WITHOUT FLANGE				
20020130-G021A01LF	2	99R4176	0.40	0.36
20020130-G031A01LF	3	99R4177	0.59	0.54
20020130-G041A01LF	4	99R4178	0.69	0.65
20020130-G061A01LF	6	99R4179	1.03	0.97
20020130-G081A01LF	8	99R4180	1.29	1.21
20020130-G101A01LF	10	99R4181	1.61	1.51
PLUGGAGE HEADERS (SOCKETS) — 45° ANGLE THRU-HOLE WITH FLANGE				
20020131-G021A01LF	2	99R4200	0.80	0.75
20020131-G031A01LF	3	99R4201	0.97	0.91
20020131-G041A01LF	4	99R4202	1.14	1.07
20020131-G061A01LF	6	99R4203	1.39	1.30
20020131-G081A01LF	8	99R4204	1.71	1.61
20020131-G101A01LF	10	99R4205	2.03	1.91

(190775)

7.62MM PITCH PLUGGABLE TERMINAL BLOCK PLUGS

RoHS Compliant Available

20020516 20020517 20020705

- 7.62mm Pitch
- Choice of two orientations with or without flange
- Green, thermalplastic resin housing, rated UL94V-0
- Zinc-plated steel screw
- Nickel-plated brass clamp
- Tin-plated copper pluggable plug terminals
- Operating voltage rating: 300VAC
- Current rating: 32A
- Operating temperature range: -40°C to 115°C
- UR recognized

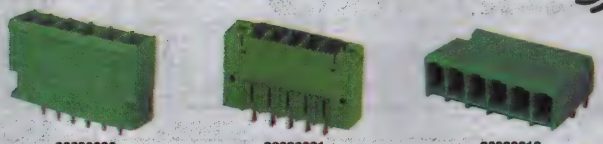
Order coding keys separately on page 1096.

Mfg Part No.	No. of Positions	Stock No.	Price Each 1-9	Price Each 10-24
PLUGGABLE PLUGS — CONTACT ON UP SIDE WITHOUT FLANGE, 24-10 AWG				
20020516-M021B01LF	2	59R8961	2.24	2.11
20020516-M031B01LF	3	59R8962	3.30	3.03
20020516-M041B01LF	4	59R8963	4.09	3.75
PLUGGABLE PLUGS — CONTACT ON DOWN SIDE WITH FLANGE, 24-8 AWG				
20020517-M021B01LF	2	99R4212	2.85	2.61
20020517-M031B01LF	3	99R4213	3.50	3.22
20020517-M041B01LF	4	99R4214	4.18	3.84
FIXED TERMINAL BLOCKS - RIGHT ANGLE WIRE ENTRY, 24-10 AWG				
20020705-M021B01LF	2	59R8970	1.26	1.18

(164509)

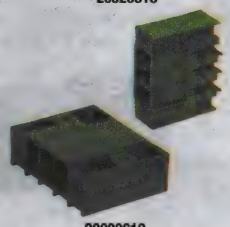
7.62MM PITCH PLUGGABLE TERMINAL BLOCK HEADERS

RoHS Compliant Available



20020620 20020621 20020618

- 7.62mm Pitch
- Choice of two orientations with or without flange
- Green, thermalplastic resin housing, rated UL94V-0
- Zinc-plated steel screw
- Nickel-plated brass clamp
- Tin-plated copper pluggable plug terminals
- Operating voltage rating: 300VAC
- Current rating: 32A
- Operating temperature range: -40°C to 115°C
- UR recognized



20020619

Order coding keys separately on page 1096.

➤CONTINUED➤

7.62MM PITCH PLUGGABLE TERMINAL BLOCK HEADERS (CONT.)

PLUGGAGE HEADERS (SOCKETS) — VERTICAL THRU-HOLE WITHOUT FLANGE

Mfg Part No.	No. of Positions	Stock No.	Price Each 1-9	Price Each 10-24
● 20020620-M021A01LF	2	59R8967	1.01	0.95
PLUGGAGE HEADERS (SOCKETS) — VERTICAL THRU-HOLE WITH FLANGE				
● 20020621-M021A01LF	2	99R4218	1.30	1.22
● 20020621-M031A01LF	3	99R4219	1.70	1.60
● 20020621-M041A01LF	4	99R4220	2.11	1.98
● 20020621-M061A01LF	6	99R4221	2.86	2.63
PLUGGAGE HEADERS (SOCKETS) — RIGHT-ANGLE THRU-HOLE WITHOUT FLANGE				
● 20020618-M021A01LF	2	59R8964	1.11	1.05
● 20020618-M031A01LF	3	59R8965	1.56	1.47
● 20020618-M041A01LF	4	59R8966	2.23	2.10
PLUGGAGE HEADERS (SOCKETS) — RIGHT-ANGLE THRU-HOLE WITH FLANGE				
● 20020619-M021A01LF	2	99R4215	1.38	1.29
● 20020619-M031A01LF	3	99R4216	1.82	1.72
● 20020619-M041A01LF	4	99R4217	2.27	2.14

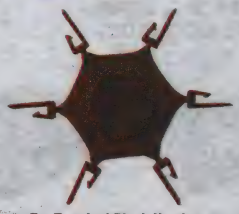
(190777)

CODING KEYS FOR PLUGGABLE TERMINAL BLOCKS

RoHS Compliant Available

FCI

For Terminal Block Plugs



For Terminal Block Headers

Constructed of red thermalplastic resin, flammability rated UL 94 V-0. **NOTE:** Each coding key disc contains six keys. *Order pluggable terminal block plugs and headers (sockets) separately on pages 1091-1096*

Mfg. Part No.	For Use With	Stock No.	Price Each 1-9	Price Each 10-24
● 20020802-002LF	5mm, 5.08mm, 7.5mm and 7.62mm Pitch Terminal Block Plugs	99R4223	0.28	0.24
● 20020802-003LF	5mm and 5.08mm Pitch Terminal Block Plugs with Contact Side Up	99R4224	0.28	0.24
● 20020802-001LF	7.62mm and 10.16mm Pitch Terminal Block Plugs	99R4222	0.28	0.24
● 20020802-005LF	3.5mm and 3.81mm Pitch Terminal Block Headers	99R4226	0.28	0.24
● 20020802-004LF	5mm, 5.08mm, 7.5mm and 7.62mm Pitch Terminal Block Headers	99R4225	0.28	0.24

(190779)

97 SERIES HIGH-POWER TERMINAL BLOCKS

RoHS Compliant Available

molex

- High Temperature
- Thermoplastic Housing, Rated UL94V-0
- Wire Range: 6-18 AWG
- Current: 60A

Rising clamp termination system produces a secure and reliable gastight interface. Designed for 600V applications. The deep wire funnel shrouds the wire and the insulator jacket preventing arcing between adjacent wires.

Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99
● 39970-0103	3	72K2143	8.73	7.81	6.22
● 39970-0104	4	72K2144	10.33	9.23	7.37

(65183)

98 SERIES PLUGGABLE TERMINAL BLOCK SYSTEM

RoHS Compliant Available

molex

Plug

Header

- Black Polyamide Housing, Rated UL94V-0
- Voltage: 300V

- Current: 10A
- Wire Range: 12-24 AWG

CONTINUED

98 SERIES PLUGGABLE TERMINAL BLOCK SYSTEM (CONT.)

Feature 5.08mm pitch terminal block plugs and headers with patent-pending positive latching mechanism. Secures the mating plug to resist vibration and the molded integral construction of the latch offers substantial cost savings over screw lock designs. Polarized to enable proper blind mating. Space-saving, compact design is 69% shorter and 45% more narrow than standard pluggable terminal blocks. Header is high-temperature design and rated for reflow solder ovens. UL recognized.

PLUGS

Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99
● 39980-0302	2	30B3534	1.96	1.74	1.40
● 39980-0304	4	30B3536	2.27	1.92	1.78
● 39980-0306	6	30B3538	4.45	3.94	3.16
● 39980-0308	8	30B3540	3.95	3.33	3.23

HEADERS

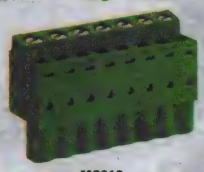
Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99
● 39980-0402	2	30B3557	0.31	0.26	0.24
● 39980-0406	6	30B3561	1.14	0.95	0.89
● 39980-0408	8	30B3563	1.98	1.66	1.32

(65184)

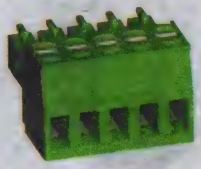
3.81mm MC SERIES EURO STYLE PLUGGABLE TERMINAL BLOCKS

RoHS Compliant Available

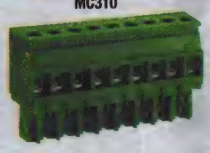
multicomp



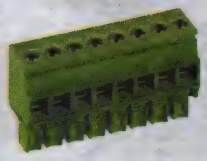
MC310



EBK



MC520



MC560, MCTC-56

The MC series is the plug side of pluggable type terminal blocks. MC series is available in horizontal wire entry to meet multiple design requirements. This series creates applications requiring high reliable interconnection with the flexibility of simplified modifications and installation. MC series allow screw connections for conductors up to 12 AWG without soldering. MC series terminal blocks meet the approvals of UL, CE and VDE.

3.81mm (0.150″) PLUGGABLE EURO STYLE TERMINAL BLOCKS - VERTICAL - 24-14 AWG

Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-49
● MC310-38102	2	04R6947	1.36
● MC310-38103	3	04R6949	3.00
● MC310-38104	4	04R6950	3.19
● MC310-38105	5	04R6951	3.19
● MC310-38106	6	04R6952	4.12
● MC310-38107	7	04R6953	4.73
● MC310-38108	8	04R6954	5.03
● MC310-38110	10	04R6955	6.29
3.81mm (0.150″) PLUGGABLE EURO STYLE TERMINAL BLOCKS - 180° ENTRY - 24-12 AWG			
● EBK-02-B	2	04R6704	0.45
● EBK-03-B	3	04R6705	1.16
● EBK-04-B	4	04R6706	1.55
● EBK-05-B	5	04R6707	1.96
● EBK-06-B	6	04R6708	1.96
● EBK-07-B	7	04R6709	2.28
● EBK-08-B	8	04R6710	2.61
● EBK-09-B	9	04R6711	2.73
● EBK-10-B	10	04R6712	2.57
● EBK-11-B	11	04R6713	2.66
● EBK-12-B	12	04R6714	3.07
● EBK-14-B	14	04R6715	3.58
● EBK-15-B	15	04R6716	3.12
● EBK-16-B	16	04R6717	3.58
3.81mm (0.150″) PLUGGABLE EURO STYLE TERMINAL BLOCKS - 90° ENTRY - 24-16 AWG			
● MC520-38103	3	04R6981	1.98
● MC520-38104	4	04R6982	2.45
● MC520-38105	5	04R6983	3.06
● MC520-38106	6	04R6984	2.93
● MC520-38107	7	04R6985	3.41
● MC520-38108	8	04R6986	3.61
● MC520-38109	9	04R6987	3.78
● MC520-38114	14	04R6992	5.79

CONTINUED

3.81mm MC SERIES EURO STYLE PLUGGABLE TERMINAL BLOCKS (CONT.)

3.81mm (0.150″) PLUGGABLE EURO STYLE TERMINAL BLOCKS - 270° ENTRY - 24-16 AWG

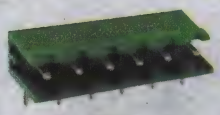
Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-49
MC560-38102	2	04R6995	0.83
MC560-38103	3	04R6996	1.98
MC560-38104	4	04R6997	2.63
MC560-38105	5	04R6998	3.06
MC560-38106	6	04R6999	2.93
MC560-38107	7	04R7000	3.41
MC560-38108	8	04R7001	3.36
MC560-38109	9	04R7002	4.06
MC560-38110	10	04R7003	4.14
MCTC-56B11	11	54T7640	4.55
MC560-38112	12	04R7004	4.96
MC560-38115	15	04R7005	6.20
MC560-38116	16	04R7006	7.08

(147085)

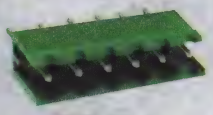
ME SERIES EURO STYLE TERMINAL BLOCKS

RoHS Compliant Available

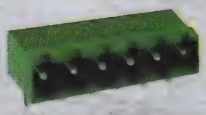
multicomp



ME010



ME020, EBP

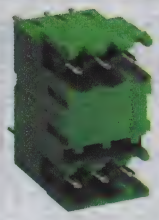


ME030, MC24382, MCTE-03

ME040, MCTE04

MC24391-MC24397

ME120



ME220

The ME series is the header side of pluggable type terminal blocks. ME series headers with vertical and horizontal plug-in direction are available with 2 to 12 positions. ME headers are avaialble with a threaded flange for vibration-resistant connection when mated to plugs with screw flanges. Using a combination of special high temperature resistant plastic and innovative component design, ME series pin-headers and PCB terminal blocks can be incorporated into the automatic printed circuit boards assembly process. ME series also aid the reduction of overall production costs thus improving manufacturing efficiency.

5.00mm (0.197″) RIGHT ANGLE PCB EURO STYLE TERMINAL BLOCKS - OPEN END

Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-249
ME010-50002	2	04R7024	0.64
ME010-50003	3	04R7025	0.90
ME010-50004	4	04R7026	1.19
ME010-50006	6	04R7027	1.92
ME010-50008	8	04R7028	1.98
ME010-50010	10	04R7029	2.47
ME010-50012	12	04R7030	2.37
5.08mm (0.200″) RIGHT ANGLE PCB EURO STYLE TERMINAL BLOCKS - OPEN END			
ME010-50802	2	04R7031	0.40
ME010-50804	4	04R7032	1.28
ME010-50805	5	04R7033	1.24
ME010-50806	6	04R7034	1.60
ME010-50808	8	04R7036	1.70
ME010-50810	10	04R7037	1.97
ME010-50812	12	04R7038	3.57
5.00mm (0.197″) VERTICAL PCB EURO STYLE TERMINAL BLOCKS - OPEN END			
EBP-02-C	2	04R6718	0.51
ME020-50003	3	04R7039	0.90
ME020-50004	4	04R7040	0.99
ME020-50005	5	04R7041	1.24
ME020-50006	6	04R7042	1.49
ME020-50007	7	04R7043	1.73
ME020-50008	8	04R7044	1.58
ME020-50010	10	04R7045	1.97
ME020-50012	12	04R7046	3.84

CONTINUED

ME SERIES EURO STYLE TERMINAL BLOCKS (CONT.)

5.08mm (0.200″) VERTICAL PCB EURO STYLE TERMINAL BLOCKS - OPEN END

Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-249
ME020-50802	2	04R7047	0.60
ME020-50803	3	04R7048	0.75
ME020-50806	6	04R7049	1.49
ME020-50807	7	04R7050	1.73
ME020-50808	8	04R7051	1.58
ME020-50810	10	04R7052	2.09
ME020-50812	12	04R7053	3.92
5.00mm (0.197″) RIGHT ANGLE PCB EURO STYLE TERMINAL BLOCKS - CLOSED END			
MCTE-03C02	2	54T7663	0.60
ME030-50003	3	04R7054	0.96
ME030-50004	4	04R7055	0.99
ME030-50005	5	04R7056	1.24
ME030-50006	6	04R7057	1.49
ME030-50007	7	04R7058	1.73
ME030-50008	8	04R7059	1.58
MCTE-03C09	9	54T7664	1.77
ME030-50010	10	04R7060	1.97
MCTE-03C11	11	54T7665	2.17
ME030-50012	12	04R7061	3.84
5.08mm (0.200″) RIGHT ANGLE PCB EURO STYLE TERMINAL BLOCKS - CLOSED END			
ME030-50802	2	04R7062	0.60
ME030-50803	3	04R7063	0.90
ME030-50804	4	04R7064	1.28
ME030-50805	5	04R7065	1.33
ME030-50806	6	04R7066	1.60
ME030-50807	7	04R7067	1.73
ME030-50808	8	04R7068	1.98
ME030-50809	9	04R7069	2.40
ME030-50810	10	04R7070	1.97
MCTE-03D11	11	54T7666	2.17
ME030-50812	12	04R7071	2.37
5.00mm (0.197″) VERTICAL PCB EURO STYLE TERMINAL BLOCKS - CLOSED END			
ME040-50002	2	04R7072	0.64
ME040-50003	3	04R7073	0.96
ME040-50004	4	04R7074	1.35
ME040-50005	5	04R7075	1.24
ME040-50006	6	04R7076	1.58
ME040-50007	7	04R7077	1.73
ME040-50008	8	04R7078	1.98
ME040-50009	9	04R7079	2.40
MCTE-04C10	10	54T7689	2.12
MCTE-04C11	11	54T7690	2.17
ME040-50012	12	04R7080	2.37
5.08mm (0.200″) VERTICAL PCB EURO STYLE TERMINAL BLOCKS - CLOSED END			
ME040-50802	2	04R7081	0.64
ME040-50803	3	04R7082	0.95
ME040-50805	5	04R7083	1.33
ME040-50806	6	04R7084	1.60
ME040-50807	7	04R7085	1.86
ME040-50808	8	04R7086	1.98
MCTE-04D09	9	54T7691	1.91
ME040-50810	10	04R7087	2.12
ME040-50811	11	04R7088	2.17
ME040-50812	12	04R7089	2.97
5.08mm (0.200″) VERTICAL PCB EURO STYLE TERMINAL BLOCKS - WITH FLANGES			
MC24391	2	14N5720	1.00
MC24392	3	14N5721	1.07
MC24393	4	14N5722	1.28
MC24394	5	14N5723	1.51
MC24397	10	14N5726	2.80
5.00mm (0.197″) VERTICAL DOUBLE LEVEL PCB EURO STYLE TERMINAL BLOCKS - OFFSET			
ME120-500M04	4	04R7090	1.13
ME120-500M06	6	04R7091	1.57
5.08mm (0.200″) VERTICAL DOUBLE LEVEL PCB EURO STYLE TERMINAL BLOCKS - OFFSET			
ME120-508M04	4	04R7092	1.13
ME120-508M06	6	04R7093	1.69
5.00mm (0.197″) VERTICAL DOUBLE LEVEL PCB EURO STYLE TERMINAL BLOCKS			
ME220-500M04	4	04R7094	1.26
ME220-500M06	6	04R7095	1.88
5.08mm (0.200″) VERTICAL DOUBLE LEVEL PCB EURO STYLE TERMINAL BLOCKS			
ME220-508M06	6	04R7096	2.43

CONTINUED

TERMINAL BLOCKS – PLUG & SOCKET

ME SERIES EURO STYLE TERMINAL BLOCKS (CONT.)

7.62mm (0.300") VERTICAL PCB EURO STYLE TERMINAL BLOCKS - CLOSED END

Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-249
● MCTE-04F02	2	54T7692	0.65
● MCTE-04F04	4	54T7693	1.20
● MCTE-04F06	6	54T7694	1.49

(120737)

15 AMP HORIZONTAL TERMINAL BLOCKS, PLUGGABLE CAGE CLAMP

RoHS Compliant Available

multicomp

Specifications:
- Voltage Rating: 250 V
- Spacing: 5.00mm or 5.08mm
- Wire Size: 22-12 AWG
- Insulating polyimide housing, flammability rated UL94V-0

Mate with horizontal or vertical headers, *ordered separately; go online or call.*

5.00 mm SPACING

Mfg. Part No.	Poles	Stock No.	Price Each 1-49
● SPC15597	2	82K7868	2.35
● SPC15598	3	82K7869	3.53
● SPC15599	4	82K7870	5.50
● SPC15600	6	82K7871	8.27
5.08 mm SPACING			
● SPC15603	4	82K7874	5.50
● SPC15604	5	82K7875	6.91
● SPC15605	6	82K7876	8.27
● SPC15606	9	82K7877	12.65
● SPC15607	10	82K7878	13.82
● SPC15608	12	82K7879	17.68

(17929)

2091 AND 2092 SERIES picoMAX® PLUGGABLE CONNECTION SYSTEM

RoHS Compliant Available

WAGO

picoMax® Female Connectors
- Universal connection for all conductor types
- Simple, push-in termination of solid and ferruled conductors
- Ability to wire mated or unmated
- Testing port parallel to conductor entry — tip contact
- Integrated locking tabs prevent accidental disconnection

picoMax® Male Headers
- Horizontal or vertical plug direction via straight or right-angle solder pins
- Integrated locking latch prevents accidental disconnection
- Group female connectors without loss of poles, allowing different functions to be divided within one male header
- Coding pins inserted into header interface prevent mismatting, allowing subsequent coding in panel feed-through applications
- Female connector is almost fully shrouded by male header, providing vibration-resistance up to 20g

picoMAX® Mated

Radically simplified **2091** and **2092 series** picoMax® pluggable connection system shortens the overall current path, shrinks overall connection size while improving connection integrity, removing cost, and improving vibration resistance — up to 20g based on IEC 60068-2-6. Its highly compact design reduces space by up to 30% and requires minimal space when mated. Features light grey glass-fiber reinforced polyphthalamide housing, rated UL94V-0, and tin-plated electrolytic copper solder pins for both wave and reflow soldering. Wire-to-board connections offer high contact reliability in choice of 3.5mm and 5.0mm pin spacing. Also available in 7.5mm pin spacing, wire-to-wire, board-to-wire, and panel feed-through variants and the picoMAX® eCOM "pinstrip pluggable" version; *go online or call.*

2091 SERIES FEMALE CONNECTORS WITH SLIDING RELEASE WEDGE—3.5MM, 300V/10A, 24-14 AWG

Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-24	25-99
● 2091-1102/002-000	2	54W3689	1.32	1.25
● 2091-1103/002-000	3	54W3691	1.71	1.62
● 2091-1104/002-000	4	54W3693	2.12	2.01
● 2091-1106/002-000	6	54W3697	3.22	3.05
2091 SERIES STRAIGHT/VERTICAL HEADERS — 3.5MM, 300V/10A				
● 2091-1402	2	54W3750	0.50	0.48
● 2091-1403	3	54W3752	0.62	0.59
● 2091-1404	4	54W3754	0.74	0.70
● 2091-1406	6	54W3758	1.20	1.14
2091 SERIES RIGHT-ANGLE HEADERS — 3.5MM, 300V/10A				
● 2091-1422	2	54W3762	0.49	0.46
● 2091-1423	3	54W3764	0.62	0.59
● 2091-1424	4	54W3766	0.74	0.70
● 2091-1426	6	54W3770	1.20	1.14
2092 SERIES FEMALE CONNECTORS WITH SLIDING RELEASE WEDGE — 5MM, 300V/15A, 24-12 AWG				
● 2092-1102/002-000	2	54W3791	1.39	1.32
● 2092-1103/002-000	3	54W3793	2.00	1.89

➤ CONTINUED ➤

2091 AND 2092 SERIES picoMAX® PLUGGABLE CONNECTION SYSTEM (CONT.)

2092 SERIES FEMALE CONNECTORS WITH SLIDING RELEASE WEDGE — 5MM, 300V/15A, 24-12 AWG

Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-24	25-99
● 2092-1104/002-000	4	54W3795	2.25	2.13
● 2092-1106/002-000	6	54W3799	3.18	3.01
2092 SERIES STRAIGHT/VERTICAL HEADERS — 5MM, 300V/15A				
● 2092-1402	2	54W3848	0.55	0.52
● 2092-1403	3	54W3850	0.66	0.63
● 2092-1404	4	54W3852	0.81	0.77
● 2092-1406	6	69W7517	1.23	1.17
2092 SERIES RIGHT-ANGLE HEADERS — 5MM, 300V/15A				
● 2092-1422	2	54W3859	0.53	0.50
● 2092-1423	3	54W3861	0.66	0.63
● 2092-1424	4	54W3863	0.81	0.77
● 2092-1426	6	54W3867	1.22	1.16

(209880)

733 SERIES MULTI-CONNECTION SYSTEM MICRO PLUGS AND HEADERS

UL CSA RoHS Compliant Available WAGO

Fig. 1

Fig. 2

733 Series high-density 2.5mm pitch pluggable printed circuit board mount terminal blocks feature CAGE CLAMP® spring pressure wiring technology, 100% protection against mis-mating modular assembly. Rated 250V/4A. Connectors accept 28-20 AWG wire. Insulation housing: polyamide 6.6 to UL94V-0 (rated 105° C). Current bar is lead-free tin-plated copper alloy. Clamp is stainless steel.

FEMALE CONNECTORS, 2.5mm, LIGHT GRAY - FIG. 1

Mfg. Part No.	Poles	Stock No.	Price Each 1-24	25-99
● 0733-0102	2	79K2143	2.36	2.23
● 733-104	4	28K2242	3.83	3.63
● 733-106	6	28K2243	5.44	5.15
● 0733-0108	8	79K2146	6.71	6.35
● 0733-0110	10	79K2147	8.00	7.57
● 0733-0112	12	79K2148	9.40	8.90
STRAIGHT HEADERS, 2.5mm, LIGHT GRAY - FIG. 2				
● 0733-0332	2	79K2149	0.86	0.82
● 0733-0334	4	79K2150	1.55	1.47
● 0733-0336	6	79K2151	2.27	2.14
● 0733-0340	10	79K2153	3.39	3.21
RIGHT ANGLE HEADERS, 2.5mm, LIGHT GRAY				
● 0733-0362	2	79K2155	0.81	0.77
● 0733-0368	8	79K2158	2.68	2.53

(84652)

231 SERIES PLUGS AND HEADERS

UL CSA RoHS Compliant Available WAGO

Female Connector

Straight Header

Pluggable printed circuit board mount terminal blocks feature CAGE CLAMP® spring pressure wiring technology. Rated 600V/5A, 300V/15A. Connectors accept 28-12 AWG wire. Insulation housing: polyamide 6.6 to UL94V-0 (rated 105° C). Current bar is lead-free tin-plated copper alloy. Clamp is stainless steel.

FEMALE CONNECTORS, 5.08mm, ORANGE

Mfg. Part No.	Poles	Stock No.	Price Each 1-24	25-99
● 231-302/026-000	2	28K2081	2.23	2.12
● 231-304/026-000	4	79K2200	4.00	3.79
● 231-306/026-000	6	79K2201	5.95	5.63
● 231-308/026-000	8	79K2202	7.59	7.19
● 231-310/026-000	10	79K2203	9.32	8.82
● 231-312/026-000	12	79K2204	11.14	10.55
● 231-316/026-000	16	79K2205	14.35	13.56

➤ CONTINUED ➤

231 SERIES PLUGS AND HEADERS (CONT.)

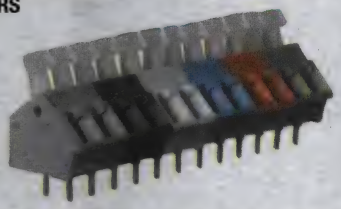
STRAIGHT HEADERS, 5.08mm, ORANGE

Mfg. Part No.	Poles	Stock No.	Price Each 1-24	Price Each 25-99
231-332/001-000	2	79K2208	0.76	0.72
231-334/001-000	4	79K2209	1.43	1.36
231-336/001-000	6	79K2210	2.21	2.08
231-338/001-000	8	79K2211	2.82	2.67
231-340/001-000	10	79K2212	3.49	3.30
231-342/001-000	12	79K2213	4.26	4.03
FEMALE CONNECTORS, 5.00mm, GRAY				
231-102/026-000	2	79K2181	2.29	2.18
231-104/026-000	4	79K2182	4.16	3.94
231-106/026-000	6	79K2183	5.81	5.50
231-108/026-000	8	79K2184	7.86	7.45
231-110/026-000	10	79K2185	9.32	8.82
231-112/026-000	12	79K2186	11.14	10.55
STRAIGHT HEADERS, 5.00mm, GRAY				
231-132/001-000	2	48M6848	0.74	0.70

(84613)

256 SERIES CAGE-CLAMP® PCB TERMINAL BLOCKS WITH OPERATING LEVERS

RoHS Compliant Available



Printed circuit board mount terminal blocks feature convenient lever-operated CAGE CLAMP® spring pressure wiring technology. Rated 600V/5A, 300V/15A. Accept 28-12 AWG wire. Insulation housing: polyamide 6.6 to UL94V-0 (rated 105° C). Current bar is lead-free tin-plated copper alloy. Clamp is stainless steel. Other colors available, *go online or call*.

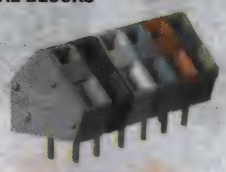
PCB TERMINAL BLOCKS WITH OPERATING LEVERS, 5.00mm, GRAY

Mfg. Part No.	Poles	Stock No.	Price Each 1-24	Price Each 25-99
0256-0402	2	79K2068	1.43	1.36
0256-0403	3	79K2069	2.05	1.94
0256-0404	4	79K2070	2.59	2.45
0256-0405	5	79K2071	3.15	2.99
0256-0406	6	79K2072	3.76	3.57
0256-0408	8	79K2074	4.72	4.48
0256-0424	24	79K2079	13.21	12.48

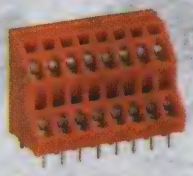
(84648)

236 SERIES SINGLE LEVEL & 736 TWO-LEVEL CAGE CLAMP® PCB TERMINAL BLOCKS

RoHS Compliant Available



236 Series



736 Series

Printed circuit board mount terminal blocks feature CAGE CLAMP® spring pressure wiring technology. **Mfg. part no. 236** is rated 600V/5A, 300V/15A. **Mfg. part no. 736** is rated 300V/10A. Connectors accept 28-12 AWG wire. Insulation housing: polyamide 6.6 to UL94V-0 (rated 105° C). Current bar is lead-free tin-plated copper alloy. Clamp is stainless steel.

236 SERIES SINGLE LEVEL PCB TERMINAL BLOCKS, 5.00mm/5.08mm

Mfg. Part No.	Poles	Stock No.	Price Each 1-24	Price Each 25-99
0236-0402	2	79K2058	1.16	1.10
0236-0403	3	79K2059	1.62	1.54
0236-0404	4	79K2060	2.10	1.99
0236-0406	6	79K2061	2.98	2.82
0236-0412	12	79K2064	5.80	5.49
736 SERIES TWO-LEVEL PCB TERMINAL BLOCKS, 5.00mm				
736-112	12	79K2166	10.21	9.67

(84649)

233 AND 218 SERIES MICRO PCB TERMINAL BLOCKS

RoHS Compliant Available

233 series

218 series

These fine-pitch PCB terminal blocks feature Cage Clamp® spring pressure termination technology and convenient operators for opening the spring. **233 series** features "momentary" lever operation, while the low-profile **218 series** features a "maintained" slide mechanism that allows you to open the springs of multiple poles at once for easier wiring. Both accept 28-20AWG solid or stranded conductors and are rated for 150V /4A. Additional pole configurations available; *go online or call*.

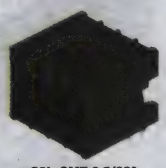
233 SERIES PCB TERMINAL BLOCKS, 2.54mm, WITH OPERATING LEVER, ORANGE

Mfg. Part No.	Poles	Wire Size	Mfg. Part No.	Stock No.	Price Each 1-24	Price Each 25-99
0233-0505	5	28AWG to 20AWG	150V / 4A	79K2051	2.75	2.61
0233-0506	6	28AWG to 20AWG	150V / 4A	79K2052	3.16	3.00
0233-0508	8	28AWG to 20AWG	150V / 4A	79K2053	4.08	3.87
0233-0510	10	28AWG to 20AWG	150V / 4A	79K2054	5.19	4.93
0233-0512	12	28AWG to 20AWG	150V / 4A	79K2055	6.10	5.78
0233-0516	16	28AWG to 20AWG	150V / 4A	79K2056	8.10	7.67
0233-0524	24	28AWG to 20AWG	150V / 4A	79K2057	11.48	10.85
218 SERIES PCB TERMINAL BLOCKS, 2.54MM, SLIDE OPERATOR, GREY						
218-102	2	28AWG to 20AWG	150V / 4A	28K7677	1.48	1.40
218-103	3	28AWG to 20AWG	150V / 4A	28K7678	2.21	2.09
218-104	4	28AWG to 20AWG	150V / 4A	28K7679	2.82	2.67
218-106	6	28AWG to 20AWG	150V / 4A	28K7681	4.22	4.00
218-108	8	28AWG to 20AWG	150V / 4A	28K7682	5.63	5.34
218-110	10	28AWG to 20AWG	150V / 4A	28K7683	7.97	6.52
218-112	12	28AWG to 20AWG	150V / 4A	28K7684	8.17	7.74

(84647)

S2L-SMT SERIES 3.5MM PITCH PCB PLUG-IN PIN HEADERS

RoHS Compliant Available



S2L-SMT 3.5/90°

S2L-SMT 3.5/180°

S2L-SMT series high-temperature-resistant, closed PCB plug-in pin headers in choice of 90° angled or 180° straight orientation. Minimate range 3.5mm pitch is ideal for miniaturization and high-density applications. Tin-plated copper alloy solder pins are suitable for thru-hole reflow and wave soldering. Housing is molded from black, LCP GF material with a flammability rating of UL94V-0. UL 1059 rated for 150V, 10A; CSA C22.2 rated: 50V, 5A; DIN IEC rated: 50V, 10A. UL recognized, CSA certified.

S2L 3.5/90G, ANGLED 90° ORIENTATION, CLOSED-ENDS — 3.2MM PIN LENGTH

Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-9	Price Each 10-99
1794210000	6	61K9233	2.84	2.57
1794220000	8	61K9234	3.62	3.28
1794230000	10	61K9235	4.72	4.26
1794240000	12	61K9236	5.65	5.11
1794250000	14	61K9237	6.84	6.16
1794260000	16	61K9238	7.26	6.57
1794280000	20	61K9240	8.22	7.57
S2L 3.5/180G, STRAIGHT 180° ORIENTATION, CLOSED-ENDS — 3.5MM PIN LENGTH				
1794530000	6	61K9265	2.84	2.57
1794540000	8	61K9266	3.91	3.52
1794550000	10	61K9267	4.54	4.11
1794560000	12	61K9268	5.45	4.93
1794570000	14	61K9269	6.60	5.95
1794580000	16	61K9270	7.52	6.81
1794600000	20	61K9272	9.08	8.22

(190417)

TERMINAL BLOCKS – PLUG & SOCKET

SL-SMT SERIES 3.5MM PITCH PCB PLUG-IN PIN HEADERS

RoHS Compliant Available

Weidmüller

SL-SMT 3.5/90°

SL-SMT 3.5/180°

SL-SMT series high-temperature-resistant, closed PCB plug-in pin headers in choice of 90° angled or 180° straight orientation. Omnimate range 3.5mm pitch is ideal for miniaturization and high-density applications. Tin-plated copper/tin 3.2mm solder pins are suitable for thru-hole reflow and wave soldering. Housing is molded from black, LCP GF material with a flammability rating of UL94V-0. UL 1059 and CSA C22.2 rated: 300V, 10A; DIN IEC rated: 250V, 15A .UL recognized, CSA certified.

SL 3.5/90G, ANGLED 90° ORIENTATION, CLOSED-ENDS

Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-9	Price Each 10-99
● 1841630000	2	21M1030	0.99	0.90
● 1841640000	3	78K6906	1.48	1.34
● 1841650000	4	21M1031	1.99	1.81
● 1841670000	6	21M1033	2.95	2.67
● 1841690000	8	21M1035	4.27	3.84
● 1841710000	10	21M1037	4.94	4.47
SL 3.5/180G, STRAIGHT 180° ORIENTATION, CLOSED-ENDS				
● 1842320000	2	21M1092	1.03	0.93
● 1842330000	3	21M1093	1.48	1.34
● 1842340000	4	21M1094	2.07	1.88
● 1842360000	6	21M1096	2.95	2.67
● 1842380000	8	21M1098	4.10	3.72
● 1836990000	10	21M0809	5.13	4.64

(190419)

SL-SMT SERIES 5.08MM PITCH PCB PLUG-IN PIN HEADERS

RoHS Compliant Available

Weidmüller

SL-SMT 5.08/90°

SL-SMT 5.08/180°

SL-SMT series high-temperature-resistant, closed PCB plug-in pin headers in choice of 90° angled or 180° straight orientation. Omnimate range 5.08mm pitch is ideal for miniaturization and high-density applications. Tin-plated copper/tin 3.2mm solder pins are suitable for thru-hole reflow and wave soldering. Housing is molded from black, LCP GF material with a flammability rating of UL94V-0. UL 1059 and CSA C22.2 rated: 300V, 15A; DIN IEC rated: 400V, 19A. UL recognized, CSA certified.

SL 5.08/90G, ANGLED 90° ORIENTATION, CLOSED-ENDS

Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-9	Price Each 10-99
● 1780180000	2	61K8723	0.83	0.75
● 1780190000	3	61K8724	1.19	1.08
● 1780200000	4	21M0135	1.57	1.42
● 1780220000	6	21M0137	2.47	2.23
● 1780240000	8	21M0139	3.16	2.86
● 1780260000	10	21M0141	3.95	3.58
SL 5.08/180G, STRAIGHT 180° ORIENTATION, CLOSED-ENDS				
● 1838210000	2	21M0838	0.83	0.75
● 1838220000	3	21M0839	1.24	1.12
● 1838230000	4	21M0840	1.63	1.47
● 1838250000	6	21M0842	2.47	2.23
● 1838270000	8	21M0844	3.16	2.86
● 1838290000	10	21M0846	3.95	3.58

(190418)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

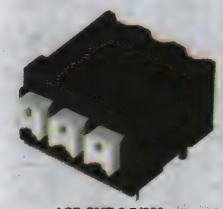
newark.com/custom-enclosures

(212568)

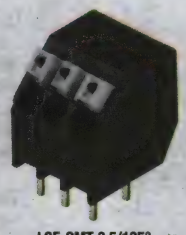
LSF-SMT SERIES 3.5MM PITCH PCB PUSH-IN TERMINAL CONNECTORS

RoHS Compliant Available

Weidmüller



LSF-SMT 3.5/90°



LSF-SMT 3.5/135°

LSF-SMT 3.5/180°

LSF-SMT series push-in direct connection, 3.5mm pitch PCB terminal connectors in choice of 90° angled, 135° angled or 180° straight orientation. Feature spring-action release buttons open the clamping point for small cross-sections such as unprepared, flexible wire conductors and for changing conductors. Tin-plated copper alloy 3.5mm solder pins are suitable for thru-hole reflow and wave soldering. Housing is molded from black, high-temperature insulating LCP GF material that comply with requirements for lead-free soldering processes; flammability rated: UL94V-0. UL 1059 and CSA C22.2 rated: 300V, 10A; DIN IEC rated: 160V, 17.5A. Wire gauge: 24-16 AWG/0.14-1.5mm². UL recognized, CSA certified.

LSF 3.5/90, ANGLED 90° ORIENTATION

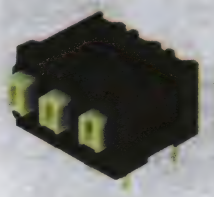
Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-9	Price Each 10-99
● 1824420000	2	21M0663	0.83	0.75
● 1824430000	3	21M0664	1.19	1.08
● 1824440000	4	21M0665	1.58	1.43
● 1824460000	6	21M0667	2.39	2.16
● 1824480000	8	21M0669	3.19	2.89
● 1824500000	10	21M0671	4.14	3.75
LSF 3.5/135, ANGLED 135° ORIENTATION				
● 1885650000	2	21M2089	0.83	0.75
● 1885660000	3	21M2090	1.19	1.08
● 1885670000	4	21M2091	1.65	1.49
● 1885690000	6	21M2093	2.48	2.25
● 1885710000	8	21M2095	3.31	3.00
● 1885730000	10	21M2097	3.98	3.61
LSF 3.5/180, STRAIGHT 180° ORIENTATION				
● 1825640000	2	21M0708	0.83	0.75
● 1825660000	4	21M0710	1.65	1.49
● 1825680000	6	21M0712	2.39	2.16
● 1825700000	8	21M0713	3.19	2.89
● 1825720000	10	21M0715	4.14	3.73

(190420)

LSF-SMT SERIES 5MM PITCH PCB PUSH-IN TERMINAL CONNECTORS

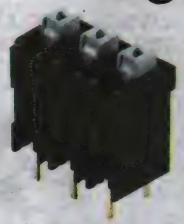
RoHS Compliant Available

Weidmüller



LSF-SMT 5/90°

LSF-SMT 5/135°



LSF-SMT 5/180°

LSF-SMT series push-in direct connection, 5mm pitch PCB terminal connectors in choice of 90° angled, 135° angled or 180° straight orientation. Feature spring-action release buttons open the clamping point for small cross-sections such as unprepared, flexible wire conductors and for changing conductors. Tin-plated copper alloy 3.5mm solder pins are suitable for thru-hole reflow and wave soldering. Housing is molded from black, high-temperature insulating LCP GF material that comply with requirements for lead-free soldering processes; flammability rated: UL94V-0. UL 1059 and CSA C22.2 rated: 300V, 10A; DIN IEC rated: 160V, 17.5A. Wire gauge: 24-16 AWG/0.14-1.5mm². UL recognized, CSA certified.

LSF 5/90, ANGLED 90° ORIENTATION

Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-9	Price Each 10-99
● 1824740000	2	21M0683	0.79	0.72
● 1824750000	3	21M0684	1.23	1.11
● 1824760000	4	21M0685	1.58	1.43
● 1824780000	6	21M0687	2.48	2.24
● 1824800000	8	10M7280	3.32	2.99
LSF 5/135, ANGLED 135° ORIENTATION				
● 1884340000	2	21M1969	0.83	0.75
● 1884370000	3	21M1970	1.19	1.08
● 1884380000	4	21M1971	1.58	1.43

CONTINUED

LSF-SMT SERIES 5MM PITCH PCB PUSH-IN TERMINAL CONNECTORS (CONT.)

LSF 5/135, ANGLED 135° ORIENTATION

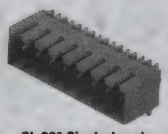
Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-9	Price Each 10-99
1884400000	6	21M1973	2.39	2.16
1884420000	8	21M1975	3.19	2.89
LSF 5/180, STRAIGHT 180° ORIENTATION				
1825960000	2	21M0728	0.83	0.75
1825970000	3	21M0729	1.24	1.12
1825980000	4	21M0730	1.65	1.49
1826000000	6	21M0732	2.48	2.25
1826020000	8	21M0734	3.31	3.00

(190421)

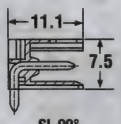
3.5mm PITCH PIN HEADERS

RoHS Compliant Available

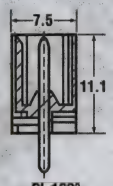
Weidmüller



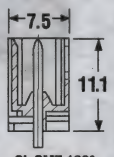
SL 90° Single-Level



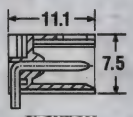
SL 90° Single-Level



SL 180° Single-Level

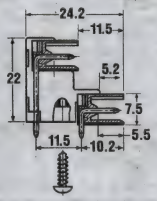


SL SMT 180° Single-Level

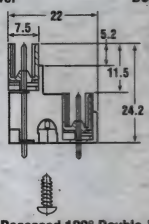


SL SMT 90° Single-Level

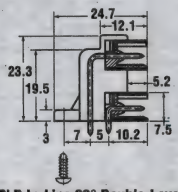
SLD Recessed 90° Double-Level



SLD Recessed 90° Double-Level



SLD Recessed 180° Double-Level



SLD In-Line 90° Double-Level

Small 3.5mm pitch is ideal for miniaturization and high-density applications. Single- and double-level pin headers mate with all 3.5mm socket connectors; *ordered separately on this page.* Offered in standard thru-hole and surface mount compatible versions. **SL** and **SLD series** pin headers are molded from black, PBT material with a V-0 flammability rating. **SL series** surface mount compatible pin headers are molded from halogen-free, high-temperature resistant, black LCP material which is suitable for all SMT soldering processes. Thru-hole reflow technology enables 100% SMT production, double-sided PC boards, and greater tensile strength than standard SMT components. UL rated for 300V, 10A. Available in tape-on-reel or tray packaging; *go online or call.*

SL 3.5/90G, SINGLE-LEVEL, 90° ORIENTATION, CLOSED-END, NONLOCKING

Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-9	Price Each 10-99
1614160000	2	10B6595	0.89	0.81
1615420000	3	10B6607	1.29	1.17
1615430000	4	10B6608	1.78	1.61
1615430000	4	10B6608	1.78	1.61
1614180000	8	35K5136	3.41	3.09
1615470000	10	17M8350	4.43	4.01
SL 3.5/180G, SINGLE-LEVEL, 180° ORIENTATION, CLOSED-END, NONLOCKING				
1614240000	2	36K7719	0.86	0.78
1616020000	3	36K7720	1.34	1.21
1614250000	8	17M8349	3.54	3.21
SL 3.5/180F, SINGLE-LEVEL, 180° ORIENTATION, CLOSED-END WITH FLANGE, LOCKING				
1616180000	6	10B6643	2.68	2.43
SL 3.5/90F, SINGLE-LEVEL, 90° ORIENTATION, CLOSED-END WITH FLANGE, LOCKING				
1615550000	4	92F3992	1.83	1.65
SLD 3.5/90G, DOUBLE-LEVEL IN-LINE, 90° ORIENTATION, CLOSED-END, NONLOCKING				
1634330000	16	36K3774	8.83	8.14

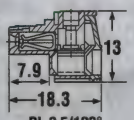
(5263)

3.5mm PITCH SOCKET CONNECTORS

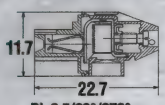
RoHS Compliant Available

Weidmüller

BL 3.5/180°



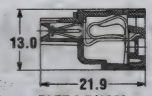
BL 3.5/180°



BL 3.5/90°/270°

- 3 Wire Connection Styles: Screw Clamp, Tension Clamp, and IDC
- Molded from Black PBT Material with V-0 Flammability Rating

BLZF 3.5/180°



BLZF 3.5/180°

Mate with all 3.5mm pin headers; *order separately on this page.* **BL series** socket connectors feature a gastight, vibration-resistant clamping yoke wire termination and are rated for 300V, 10A (28-14AWG) per UL. **BLZF series** socket connectors feature time-saving tension clamp wire termination and is rated for 300V, 10A (26-14AWG) per UL.

BL 3.5, SCREW CLAMP; CLAMPING YOKE, 90° ORIENTATION, NONLOCKING

Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-9
1638790000	3	10B7207	3.77
1638800000	4	10B7208	5.00
BL 3.5, SCREW CLAMP: CLAMPING YOKE, 180° ORIENTATION, NONLOCKING			
1615670000	2	92F3972	2.49
1615680000	3	92F3973	3.87
1615690000	4	92F3974	5.00
1614090000	5	10B6594	6.68
1610180000	6	16F4357	7.49
1615700000	8	16F4358	9.05
1610200000	10	16F4359	10.12
1615730000	12	92F3975	12.01
1615770000	16	92F3977	15.63
BL 3.5, SCREW CLAMP; CLAMPING YOKE, 180° ORIENTATION, LOCKING			
1615780000	2	92F3978	2.65
1615790000	3	92F3979	4.02
1615800000	4	26M8334	5.13
1615820000	6	10B6626	7.92
BLZF 3.5, TENSION CLAMP, 180° ORIENTATION, NONLOCKING			
1690420000	2	13C9322	2.59
1690440000	4	13C9324	5.39

(31977)

3.81mm PITCH SOCKET CONNECTORS

RoHS Compliant Available

Weidmüller

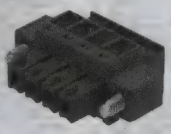
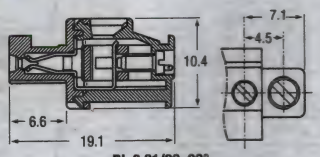


Fig. 1
BL 3.81/90, 90°



BL 3.81/90, 90°

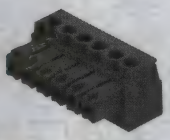
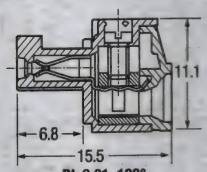


Fig. 2
BL 3.81, 180°



BL 3.81, 180°

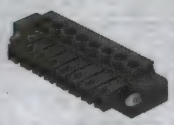
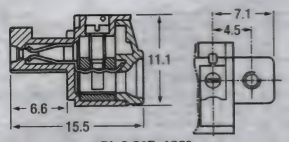


Fig. 3
BL 3.81F, 180°



BL 3.81F, 180°

These 3.81mm pitch sockets complement the comprehensive 3.5mm pitch system and are ideal for high-density applications. Socket blocks, with clamping yoke connection, are available with 90°, 180°, or 270° cable entry angles. UL rated for 300V/8A. Clamping range: 30-16 AWG. Color: Green. Mate with 3.81mm pitch pin headers. Also available in black; *go online or call.*

➤CONTINUED➤

3.81mm PITCH SOCKET CONNECTORS (CONT.)

BL 3.81/90F, SCREW CLAMP: CLAMPING YOKE, 90° ORIENTATION, CLOSED-END WITH FLANGE, LOCKING — FIG. 1

Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-9	Price Each 10-99
● 1798860000	3	94C3202	2.53	2.29
● 1798870000	4	26M8356	3.48	3.13
● 1798890000	6	26M8357	5.03	4.56
● 1798930000	16	27M2959	12.07	11.13
BL 3.81 SCREW CLAMP: CLAMPING YOKE, 180° ORIENTATION, NONLOCKING — FIG. 2				
● 1792860000	2	35K5244	1.61	1.46
● 1792890000	5	17M8373	3.89	3.52
BL 3.81F SCREW CLAMP: CLAMPING YOKE, 180° ORIENTATION, WITH FLANGE, LOCKING — FIG. 3				
● 1793050000	3	94C3159	2.53	2.29
● 1793080000	6	94C3162	5.09	4.61
● 1793090000	8	94C3163	6.75	6.11
● 1793100000	10	26M8353	8.43	7.64
● 1793110000	12	94C3164	9.15	8.43

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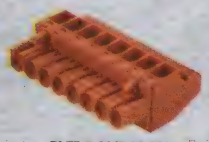
5.00/5.08mm PITCH SOCKET CONNECTORS

RoHS Compliant Available

Weidmüller

BLZP 5.00/5.08 180°



BLZP 5.00/5.08 90°

BLZP 5.00/5.08 270°

BL 5.00/5.08 180°

BLZF 5.00/5.08 180°

BLT 5.00/5.08 180°

5.00mm and 5.08mm pitch nonlocking socket connectors offer free choice of wire connection style: clamping yoke, leaf spring, screw clamp, tension clamp, top-entry and IDC versions. Mate with 5.00 and 5.08mm pin headers; *order separately, go online or call.* **BLZ, BLZF,** and **BLTseries** connectors are molded from black PBT material with a V-0 flammability rating. **BL series** connectors are molded from PA material with a V-2 flammability rating. Locking versions available; *go online or call.*

BLZP 5.00/180, SCREW CLAMP; CLAMPING YOKE, 180° ORIENTATION, NONLOCKING
BLZP series socket connectors feature a gastight, vibration-resistant clamping yoke wire termination. UL rated for 300V, 15A, 26-12 AWG.

Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-9	Price Each 10-99
● 1955560000	3	05P4683	3.18	2.87
● 1955550000	4	05P4682	4.39	3.96
● 1955520000	7	05P4679	6.45	5.94
● 1955510000	8	05P4678	7.37	6.79
BLZP 5.08/180, SCREW CLAMP; CLAMPING YOKE, 180° ORIENTATION, NONLOCKING				
● 1943820000	3	05P4055	3.18	2.88
● 1943830000	4	05P4056	4.23	3.82
● 1943840000	5	05P4057	5.09	4.60
● 1943850000	6	05P4058	6.11	5.53
● 1943870000	8	05P4060	7.37	6.79
● 1943890000	10	05P4062	9.22	8.49
BLZP 5.00/90, SCREW CLAMP; CLAMPING YOKE, 90° ORIENTATION, NONLOCKING				
● 1958590000	8	05P4879	7.64	7.03
BLZP 5.00/270, SCREW CLAMP; CLAMPING YOKE, 270° ORIENTATION, NONLOCKING				
● 1959060000	6	05P4926	6.35	5.72
BLZP 5.08/270, SCREW CLAMP; CLAMPING YOKE, 270° ORIENTATION, NONLOCKING				
● 1949160000	16	05P4482	13.21	12.27

BL 5.00/180, SCREW CLAMP; LEAF SPRING, 180° ORIENTATION, NONLOCKING
BL series socket connectors feature a reliable leaf spring screw clamp wire termination for low-cost commercial applications. UL rated for 300V, 10A, 22-12 AWG.

Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-9	Price Each 10-99
● 1730700000	2	17M8365	1.23	1.11
● 1730710000	3	13C9884	1.85	1.67
● 1730730000	5	26M8346	3.18	2.87
● 1730740000	6	26M8347	3.70	3.33
BL 5.08/180, SCREW CLAMP; LEAF SPRING, 180° ORIENTATION, NONLOCKING				
● 1716470000	2	13C9680	1.23	1.11
● 1716480000	3	13C9681	1.85	1.67
● 1716500000	5	17M9376	3.14	2.83

➤CONTINUED➤

5.00/5.08mm PITCH SOCKET CONNECTORS (CONT.)

BL 5.08/180, SCREW CLAMP; LEAF SPRING, 180° ORIENTATION, NONLOCKING

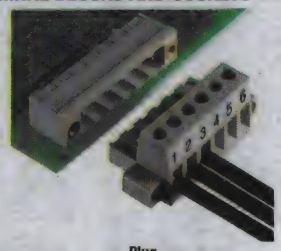
Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-9	Price Each 10-99
● 1716510000	6	26M8344	3.84	3.46
● 1716530000	8	13C9686	5.10	4.60
BLZF 5.08/180, TENSION CLAMP, 180° ORIENTATION, NONLOCKING				
● 1707690000	2	13C9457	2.14	1.93

(5247)

8113 AND 8213 SERIES SCREW CLAMP PLUGGABLE PC BOARD TERMINAL BLOCKS AND SOCKETS

RoHS Compliant Available

wieland



Plug

Vertical Socket

8113 and **8213 series** 2-piece, plug-in terminal strips provide quick-connect and disconnect of PC board wiring. Available in horizontal or vertical configurations. All metal parts are recessed or enclosed in the insulating body to provide circuit protections and dead-front safety. Insulating housings are made of polyamide 6.6 and rated UL94V-0. Captive nickel-plated brass screws are secured against loosening. Contact springs and solder pins are tin-plated bronze. Rated 300V, 15A, 12 AWG. Additional pole configurations (2 to 24 poles), unmarked parts, and 5mm and 5.08mm left-and-right marked vertical plugs are available in both **8113** and **8213 series**; *go online or call.* UL recognized, CSA certified, VDE approved.

8113 SERIES — 5.00mm SPACING
8113 series plugs are black while **8113 series** sockets are available in black (listed in the table below) or gray (select gray by changing last digit in mfg. part no. from **1** to **0**) and have 0.039″ (1.00) square pins for 0.197″ (5.00) spacing.

PLUGS — RIGHT-ANGLE, MARKED

Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99
● 25.320.0253.1	2	59K9259	2.56	2.36	2.17
● 25.320.0353.1	3	59K9260	3.82	3.52	3.24
● 25.320.0453.1	4	59K9261	5.09	4.68	4.31
● 25.320.0553.1	5	59K9262	6.27	5.79	5.33
● 25.320.0653.1	6	59K9263	7.44	6.87	6.32
● 25.320.0753.1	7	59K9264	8.60	7.94	7.31
● 25.320.0853.1	8	59K9265	9.93	9.17	8.43
● 25.320.1053.1	10	59K9266	12.40	11.44	10.53
● 25.320.1253.1	12	59K9267	14.73	13.60	12.52
● 25.320.2053.1	20	59K9269	24.79	22.88	21.06
● 25.320.2453.1	24	87F6748	29.52	27.25	25.08
SOCKETS — VERTICAL, UNMARKED					
● 25.330.3253.1	2	87F6879	0.81	0.75	0.69
● 25.330.3353.1	3	87F6880	1.21	1.12	1.03
● 25.330.3453.1	4	87F6881	1.62	1.49	1.37
● 25.330.3653.1	6	87F6883	2.30	2.12	1.95
● 25.330.3853.1	8	87F6885	3.06	2.83	2.60
● 25.330.4053.1	10	87F6887	3.83	3.53	3.25
● 25.330.4253.1	12	87F6889	4.84	4.47	4.11
SOCKETS — HORIZONTAL, UNMARKED					
● 25.332.3253.1	2	46F3347	0.80	0.74	0.68
● 25.332.3353.1	3	46F3348	1.21	1.12	1.03
● 25.332.3453.1	4	46F3349	1.60	1.47	1.36
● 25.332.3653.1	6	46F3351	2.42	2.23	2.06
● 25.332.3753.1	7	46F3352	2.82	2.60	2.40
● 25.332.3853.1	8	46F3353	3.18	2.94	2.71
● 25.332.4053.1	10	46F3363	4.04	3.72	3.43
● 25.332.4253.1	12	46F3365	4.78	4.41	4.06
● 25.332.5453.1	24	89F167	9.64	8.89	8.19

8213 SERIES — 5.08mm SPACING
8213 series plugs and sockets have all of the features of the **8113 series** except available in gray only and have 0.039″ (1.00) square pins for 0.200″ (5.08) spacing.

PLUGS — RIGHT-ANGLE, MARKED

Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99
● 25.340.0253.0	2	59K9270	2.56	2.36	2.17
● 25.340.0353.0	3	59K9271	3.82	3.52	3.24
● 25.340.0453.0	4	59K9272	5.09	4.68	4.31
● 25.340.0553.0	5	59K9273	6.19	5.72	5.27
● 25.340.0653.0	6	59K9274	7.58	7.01	6.44
● 25.340.0853.0	8	59K9275	10.11	9.33	8.59

➤CONTINUED➤

8113 AND 8213 SERIES SCREW CLAMP PLUGGABLE PC BOARD TERMINAL BLOCKS AND SOCKETS (CONT.)

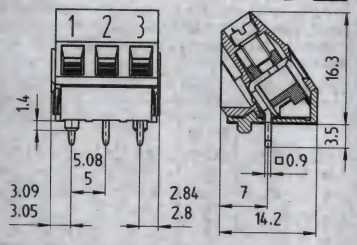
Mfg. Part No.	No. of Poles	Stock No.	Price Each 1-9	10-49	50-99
25.340.1053.0	10	59K9276	12.64	11.66	10.74
25.340.1253.0	12	59K9277	15.14	13.98	12.87
25.340.1653.0	16	59K9278	19.65	18.14	16.70
25.340.2053.0	20	89F6095	25.08	23.15	21.32
PLUGS — RIGHT-ANGLE, UNMARKED					
25.340.3253.0	2	04F1694	2.45	2.26	2.08
25.340.3353.0	3	04F1695	3.44	3.18	2.93
25.340.3653.0	6	04F1698	6.88	6.36	5.85
SOCKETS — VERTICAL, UNMARKED					
25.350.3253.0	2	87F6763	0.80	0.74	0.68
25.350.3353.0	3	87F6764	1.20	1.11	1.02
25.350.3453.0	4	87F6765	1.63	1.50	1.38
25.350.3653.0	6	87F6767	2.30	2.12	1.95
25.350.3853.0	8	87F6769	3.06	2.83	2.60
25.350.4053.0	10	87F6784	3.99	3.67	3.38
25.350.4253.0	12	87F6786	4.84	4.47	4.11
SOCKETS — VERTICAL, BLACK UNMARKED - TAPE ON REEL (SOLD INDIVIDUALLY)					
25.350.3316.0	3	09R2826	1.89	1.74	1.60
25.350.3516.0	5	09R2830	2.70	2.48	2.29
SOCKETS — HORIZONTAL, CLOSED VERSION, UNMARKED					
25.352.3253.0	2	87F6750	0.81	0.75	0.69
25.352.3353.0	3	87F6751	1.20	1.11	1.02
25.352.3453.0	4	87F6752	1.53	1.42	1.30
25.352.3653.0	6	87F6754	2.44	2.25	2.07
25.352.3853.0	8	87F6756	3.23	2.98	2.74
25.352.4053.0	10	87F6758	4.04	3.72	3.43
25.352.4253.0	12	87F6760	4.84	4.47	4.11

(59886)

8135 AND 8235 SERIES 35° ANGLED MODULAR PC BOARD TERMINAL BLOCKS

RoHS Compliant Available

wieland



35° angle wire entry ideal for limited-space applications. Modular 2- and 3-pole units assemble to form any pole configuration. Field wiring rated 300VAC, 20A, 12-22AWG; factory wiring 300VAC, 30A, 12-30AWG. Body is polyamide 6.6 rated UL94V-0. Clamping screws are dichromated steel. Clamping body is nickel plated copper alloy. Color: gray. UL recognized, CSA certified, VDE approved. Also available in 2- to 24-pole configurations, with or without insulating plate, with or without fixing bolt, and in marked or unmarked versions; *go online or call for versions not listed below.*

8135 SERIES (5.00mm PIN SPACING) ANGLED ENTRY MODULAR TERMINAL BLOCK - UNMARKED WITHOUT INSULATING PLATE

Mfg. Part No.	Poles	Length	Stock No.	Price Each 1-24
25.521.0253.0	2	10.85mm	50F3545	1.86
25.521.0353.0	3	15.85mm	50F3546	2.76
8235 SERIES (5.08mm PIN SPACING) ANGLED ENTRY MODULAR TERMINAL BLOCKS - UNMARKED WITHOUT INSULATING PLATE				
25.523.0253.0	2	11.01mm	59K9285	1.88
25.523.0353.0	3	16.09mm	59K9286	2.01

(5230)

WIECON 8142 Z SERIES SNAP-IN PCB CONNECTORS

NEW

RoHS Compliant Available

wieland

Features:
- Ratings: 300V, 1.5A
- Spacing: 5mm
- PCB screw terminal
- Raising cage clamp
- Wire Range: 20-14 AWG
- Wire Strip Length: 6mm
- Screw Size: M3
- Pin Strip Header Pin Diameter: 1.3mm

Snap-In Connector

Pin Strip

CONTINUED

WIECON 8142 Z SERIES SNAP-IN PCB CONNECTORS (CONT.)

The Wieland snap-in connector was designed for wall mount control devices. The snap-in connector portion snaps into the baseplate while the pin strip and PCB stay with the controller housing separating the wiring operation from the installation. Connectors are approved for multiple wires and feature rising cage wire clamp technology. Pin strips are available for either through hole or reflow high-temp solder technologies. Ideally suited for wall mount or panel mount HVAC control system. 300V/1.5A, UL recognized, CSA approved.

Snap-In Connector Blocks

Mfg. Part No.	No. of Positions	Stock No.	Price 1-99
25.613.2256.1	2	45X9595	2.12
25.613.2356.1	3	45X9596	2.83
25.613.2456.1	4	45X9597	3.56
Pin Strip Header (pin dia 1.3mm)			
Z5.530.3225.0	2	50F3577	0.52
Z5.530.3325.0	3	50F3578	0.80
Z5.530.3425.0	4	59K9214	0.92
Z5.530.3525.0	5	50F3580	1.13
Z5.530.3625.0	6	59K9215	1.50
Z5.530.3725.0	7	50F3582	1.77
Z5.530.3825.0	8	59K9216	2.07
Z5.530.3925.0	9	50F3584	2.18
Z5.530.4025.0	10	50F3585	2.49
Z5.530.4125.0	11	95F6014	2.91
Z5.530.4225.0	12	59K9217	3.29

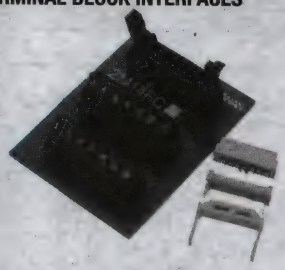
(212131)

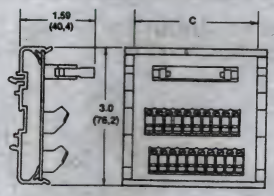
FLAT CABLE CONNECTOR-TO-TERMINAL BLOCK INTERFACES

RoHS Compliant Available

TE connectivity

Authorized Distributor





Feature 4-sided notched sockets to provide correct polarity connections. Rated 1A. System consists of gold over nickel-plated, 94V-0 thermoplastic header; gold over nickel-plated beryllium copper strain relief connector for 26-30 AWG solid, 28 AWG stranded wire range; 12-22 AWG wire range terminal block with 3-48 screws. Fit **2TK** and **2TDK series** SNAPTRACK® systems; *order separately on page 1065.*

Mfg. Part No.	Description	Dim. C	Stock No.	Price Each 1-4
2M10FCL	10-Pin Header	1.50″ (38.10)	16M2857	53.88
1776625-1	16-Pin Header	2.30″ (58.42)	16M2861	74.97
1776630-1	26-Pin Header	3.20″ (81.28)	16M2864	71.86
1776642-1	50-Pin Header	5.50″ (139.70)	16M2868	162.74
1776644-1	60-Pin Header	6.50″ (165.10)	16M2870	327.52

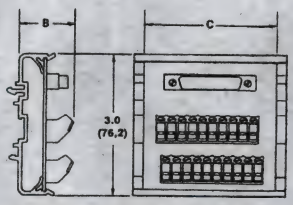
(5194)

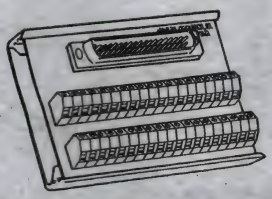
D-SUB CONNECTOR-TO-TERMINAL BLOCK INTERFACES

RoHS Compliant Available

TE connectivity

Authorized Distributor





Metal shielded male connector mates with EMI-RFI cable and screw position with grounding path to connector shell. Connectors gold over nickel-plated brass, with 94V-0 thermoplastic polyester housing and tin-plated shells. Wire range 12-22AWG. Mount **2TK**, and **2TKD series** SNAPTRACK® systems; *order separately on page 1065.*

Mfg. Part No.	Pins	Dimensions B	C	Stock No.	Price Each 1-4
1546693-1	9	1.06″ (26.92)	1.50″ (38.10)	16M2856	40.94
1546694-1	15	1.06″ (26.92)	2.10″ (53.34)	16M2859	70.88
1776606-1	25	1.06″ (26.92)	3.10″ (78.74)	52K3433	68.87
1546695-1	37	1.06″ (26.92)	4.31″ (109.47)	96K3416	86.30
1776613-1	50	1.20″ (30.48)	5.93″ (150.62)	02M6923	198.73

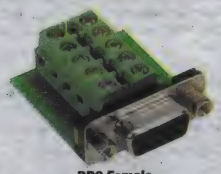
(5193)

TERMINAL BLOCKS – INTERFACE • TERMINALS & SPLICES

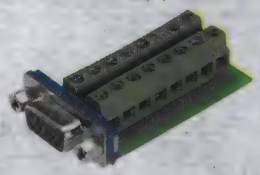
D-SUBMINIATURE CONNECTORS FOR FIELD TERMINATION

RoHS Compliant Available

L-com Global Connectivity



DB9 Female



HD15 Female

- Easily terminate DB9 or SVGA/HD15 female connectors in the field, no crimping or soldering required
- Panel mountable for thicknesses of up to 0.062″
- Terminal block allows for simple, quick wiring changes
- Gold plated contacts provide reliable connections with repeated mating cycles

DB9 FEMALE CONNECTOR FOR FIELD TERMINATION

The DGB9FT field termination female connector provides an easy and convenient way to perform field termination of any DB9 cable. Separate connection points are provided for all 9 positions of the connector. Terminal block design with set screws provides reliable electrical connections utilizing no special tools. The terminal block area is clearly marked making proper termination virtually foolproof. Panel mountable for thickness up to 0.062″.

Mfg. Part No.	Contacts	Stock No.	Price Each 1-9	Price Each 10-24
● DGB9FT	9	88M3724	12.44	11.10

SVGA HD15 FEMALE FOR FIELD TERMINATION

The DGBH15FT field termination female connector provides an easy and convenient way to perform field termination of any SVGA or HD15 cable. Separate connection points are provided for all 15 positions of the connector allowing a DDC compliant termination utilizing pins 9 and 15 as required by the VESA standards. Terminal block design with set screws provides reliable electrical connections utilizing no special tools. The terminal block area is clearly marked making proper termination virtually foolproof. Panel mountable for thickness up to 0.062″.

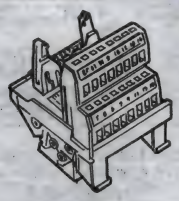
Mfg. Part No.	Contacts	Stock No.	Price Each 1-9	Price Each 10-24
● DGBH15FT	15	88M3723	15.21	13.55

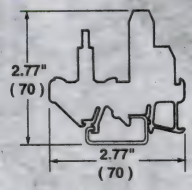
(110602)

RI-IDC RAIL MOUNT IDC TRANSITION MODULES

RoHS Compliant Available

Weidmüller





RI-series modules feature four accessory pads per line for installation of potentiometers, resistors, diodes or DIP switches. *Mount on* **TS 32** *or* **T 35** *rail, ordered separately on page 1078.* Tension clamps available; *go online or call.*

Mfg. Part No.	Pins	Dim. T	Stock No.	Price Each 1-9	Price Each 10-99	Price Each 100-499
914893	20	2.56″ (65)	90F7869	63.37	57.80	48.74
● 914894	26	3.35″ (85)	90F7870	68.65	62.62	52.81
● 914896	34	4.13″ (105)	90F7872	85.38	77.88	65.68
● 914897	40	4.72″ (120)	90F7873	95.19	86.82	73.22
914898	50	5.91″ (150)	90F7874	98.57	89.91	75.83

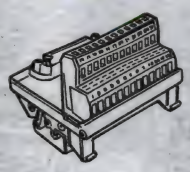
(5243)

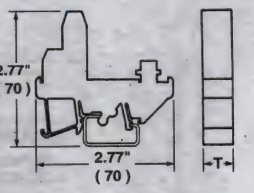
RD SERIES D-SUB TRANSITION MODULES

RoHS Compliant Available

Weidmüller

Designed to make point-to-point connection between discrete wire transition modules and D-sub, card edge, IDC, or DIP connectors. Tension clamps available; *go online or call.*





PLUGS WITH JACK SCREWS

Mfg. Part No.	Pins	Dim. T	Stock No.	Price Each 1-9	Price Each 10-99	Price Each 100-499
910638	9	1.57″(40)	90F7882	53.72	49.00	41.33
910648	25	3.35″ (85)	90F7884	68.65	62.62	52.81
910642	37	4.53″ (115)	90F7885	97.23	88.69	74.80
● 911884	50	5.91″ (150)	17M6719	117.61	107.27	90.47
SOCKETS WITH JACK SCREWS						
910641	9	1.57″ (40)	90F7877	53.72	49.00	41.33
912393	15	2.17″ (55)	90F7878	63.44	57.87	48.80
910645	25	3.35″ (85)	90F7879	70.02	63.87	53.87

CONTINUED

RD SERIES D-SUB TRANSITION MODULES (CONT.)

SOCKETS WITH JACK SCREWS

Mfg. Part No.	Pins	Dim. T	Stock No.	Price Each 1-9	Price Each 10-99	Price Each 100-499
910640	37	4.53″ (115)	90F7880	109.12	99.53	83.94
911886	50	5.91″ (150)	51F1814	120.43	109.84	92.64

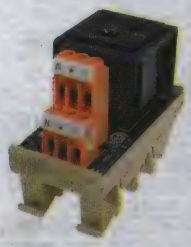
(5242)

DIN RAIL MOUNT MAINTENANCE OUTLET

RoHS Compliant Available

Weidmüller

120VAC, 15A single outlet for mounting on TS35 and TS32 DIN rails. Ideal for use in control cabinets, power computers, test equipment, lights, power tools. Feed AC power to terminal block and tap output from both outlet and terminals for powering other devices.



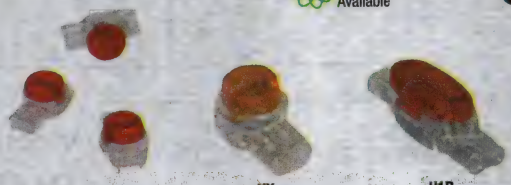
Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-99
● 9915480000	RS Simplex Single Outlet	17M8652	24.67	22.49

(61874)

SCOTCHLOK™ CONNECTORS

RoHS Compliant Available

3M



UR UY U1R

Insulation displacement connectors for communications may be used on standard polyethylene wire insulation and polypropylene insulation of filled cable. Limited only to wire range and port size; wire sizes may be intermixed. Sealed moisture-resistant construction, full wire range capability, increased port sizes. **Sold in package quantities listed below.**

BUTT SPLICING

Mfg. Part No.	No. of Wires	Max. Insul. OD	Cable Type, AWG PIC-Unfilled	Cable Type, AWG PIC-Filled	Pkg. of	Stock No.	Price per Pkg. 1-4
● UR-BOX	2,3	0.066″	19-26	19-26	100	13H6655	18.63
● UR2 (BOX)	2,3	0.082″*	19-26	19-26	100	34C8007	16.60
● UY-BULK	2	0.060″	22-26	22-26	1	00Z1489	0.33
● UY(BX)	2	0.060″	22-26	22-26	100	98M0064	15.32
● UY2(BX)	2	0.082″*	19-26	19-26	1	97B9567	0.29

*Center port: 0.076″ (1.93)

(6407)

SCOTCHLOK™ IDC CONNECTORS

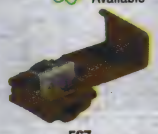
UL CSA RoHS Compliant Available

3M

Features:

- No wire stripping or twisting
- Crimp with slip-joint pliers
- For copper conductors only
- Flame retardant

562



567

Mfg. Part No.	Color	AWG	Pkg. of	Stock No.	Price per Pkg. 1-4
● 562 (BOXED)	Yellow	12-10	100	90F6223	38.62
● 564-BULK*	White	18-14	1	90F6224	0.14
● 567 (BOXED)	Brown	18-14	100	90F6225	55.65
● 314-BOX	Blue	22-14	50	90F2058	49.59
● 316-IR*	Black	22-16	1	29C2269	0.91
● 557-BOX	Red	22-16	100	44F3257	35.48
● 558-BOX	Red	22-16	100	44F3258	37.03
● 560 (BOXED)	Blue	18-16	100	95C2802	22.85
● 560B (BOXED)	Blue	18-16	100	46F4357	20.86

* Not UL listed, CSA certified or flame retardant

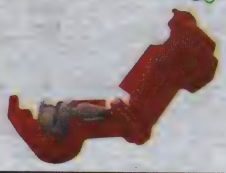
(5497)

SCOTCHLOK™ SELF-STRIPPING T-TAP CONNECTORS

RoHS Compliant Available

3M

- Mates with 0.250″ male tab connectors, *order separately; go online or call*
- **Sold in packages of 50.**



Mfg. Part No.	Color	AWG	Stock No.	Price per Pkg. 1-4	Price per Pkg. 5-9
951X-BOTTLE	Red	22-18	44F3227	17.10	15.67
952X-BOTTLE	Blue	18-14	44F3228	16.68	15.29
953X-BOTTLE	Yellow	12	44F3229	17.91	16.41

(5494)

3M™ HEAT-SHRINK RING TONGUE TERMINALS, FORK TONGUE TERMINALS, BUTT SPLICES AND DISCONNECTS

RoHS Compliant Available

3M

- Corrosion-Resistant
- Improves Mechanical Performance
- Durable Heat-Shrink Tubing Resists Abrasion, Scoring and Cut-Through

Heat-shrink, pre-insulated ring tongue terminals, fork terminals, butt splices and disconnects protect against the most challenging of environments. Versatile and easy to install — just strip wires to appropriate length, insert wire into terminal and crimp, then apply heat with a recommended heat source. **Sold in packages of 25.**

Fork Tongue Terminals

Mfg. Part No.	Wire Size (AWG)	Insulator Color	Stud Size	Pack Qty.	Stock No.	Price per Pkg. 1-4
RING TONGUE TERMINALS						
MH18-6R/LX	22 to 18	Red	#6	25	10M9538	27.52
MH18-8R/LX	22 to 18	Red	#8	25	10M9540	26.22
MH18-10R/LX	22 to 18	Red	#10	25	10M9536	26.22
MH14-6R/LX	16 to 14	Blue	#6	25	10M9531	27.52
MH14-8R/LX	16 to 14	Blue	#8	25	10M9533	26.22
MH14-10R/LX	16 to 14	Blue	#10	25	10M9526	27.52
MH14-14R/SX	16 to 14	Blue	0.25″	25	10M9527	30.03
MH14-38RX	16 to 14	Blue	0.375″	25	10M9528	30.03
MH10-8RX	12 to 10	Yellow	#8	25	10M9523	33.60
MH10-14RX	12 to 10	Yellow	0.25″	25	10M9520	34.69
MH10-38RX	12 to 10	Yellow	0.375″	25	10M9521	33.03
FORK TONGUE TERMINALS						
MH18-6FLX	22 to 18	Red	#6	25	10M9537	27.52
MH18-8FLX	22 to 18	Red	#8	25	10M9539	26.22
MH18-10FLX	22 to 18	Red	#10	25	10M9535	26.22
MH14-6FLX	16 to 14	Blue	#6	25	10M9530	16.46
MH14-8FLX	16 to 14	Blue	#8	25	10M9532	26.39
MH14-10FLX	16 to 14	Blue	#10	25	10M9525	27.52
MH14-14FLX	16 to 14	Blue	0.25″	25	97H4580	17.96
MH10-8FLX	12 to 10	Yellow	#8	25	10M9522	33.03
MH10-10FLX	12 to 10	Yellow	#10	25	10M9517	33.03
MH10-14FLX	12 to 10	Yellow	0.25″	25	10M9519	33.33
BUTT SPLICE CONNECTORS						
MH18BCX	22 to 18	Red	-	25	10M9541	18.08
MH14BCX	16 to 14	Blue	-	25	10M9534	18.08
MH10BCX	12 to 10	Yellow	-	25	10M9524	23.08
MALE DISCONNECTS						
MNHU18-250DMIX	22 to 18	Red	0.25″ x 0.032″	25	84R7833	19.03
MNHU14-250DMIX	16 to 14	Blue	0.25″ x 0.032″	25	10M9544	23.12
MNHU10-250DMIX	12 to 10	Yellow	0.25″ x 0.032″	25	10M9543	28.87
FEMALE DISCONNECTS						
MNHU18-250DFIX	22 to 18	Red	0.25″ x 0.032″	25	10M9545	36.51
MNHU14-250DFIX	16 to 14	Blue	0.25″ x 0.032″	25	66W5833	23.12
MNHU10-250DFIX	12 to 10	Yellow	0.25″ x 0.032″	25	10M9542	45.99

(78552)

pro-**POWER** AT NEWARK ELEMENT14

Take control with quality, affordable Wire-Management Solutions.
newark.com/pro-power

(212564)

3M™ VINYL INSULATED SOLDERLESS TERMINALS

RoHS Compliant Available

3M

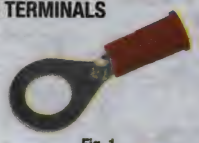


Fig. 1

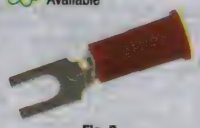


Fig. 2

Fig. 3

Fig. 4

Fig. 5

Mfg. Part No.	Wire Size (AWG)	Insulator Color	Stud Size	Pack Qty.	Stock No.	Price per Pkg. 1-4
SCOTCHLOK™ RING TONGUE TERMINALS — FIG. 1						
MV18-6R/SX	22 to 18	Red	#6	100	66W6140	70.89
MV18-8R/LX	22 to 18	Red	#8	100	66W6142	71.49
MV18-10R/LX	22 to 18	Red	#10	100	66W6135	71.49
MV18-14R/SX	22 to 18	Red	0.25″	100	66W6136	86.37
MV18-38RX	22 to 18	Red	0.375″	100	66W6137	82.30
MV18-516R/SX	22 to 18	Red	0.313″	100	66W6138	86.37
MV14-6R/SX	16 to 14	Blue	#6	100	66W6130	71.49
MV14-8R/LX	16 to 14	Blue	#8	100	66W6132	71.49
MV14-10R/LX	16 to 14	Blue	#10	100	67T2487	68.12
MV14-14R/SX	16 to 14	Blue	0.25″	100	66W6127	87.06
MV14-516R/SX	16 to 14	Blue	0.313″	100	66W6128	87.06
MV10-6RX	12 to 10	Yellow	#6	50	66W6121	45.98
MV10-8RX	12 to 10	Yellow	#8	50	66W6123	46.43
MV10-10RX	12 to 10	Yellow	#10	50	66W6115	46.43
MV10-14R/SX	12 to 10	Yellow	0.25″	50	66W6117	54.94
MV10-38R/SX	12 to 10	Yellow	0.375″	50	66W6118	52.35
MV10-516R/SX	12 to 10	Yellow	0.313″	50	66W6119	51.89
HIGHLAND™ RING TONGUE TERMINALS — FIG. 1						
RV18-6Q	22 to 18	Red	#6	100	94T2837	8.64
RV18-8Q	22 to 18	Red	#8	100	94T2838	8.64
RV18-10Q	22 to 18	Red	#10	100	94T2835	8.64
RV14-6Q	16 to 14	Blue	#6	100	94T2833	8.64
RV14-10Q	16 to 14	Blue	#10	100	94T2830	8.64
RV10-6Q	12 to 10	Yellow	#6	25	94T2829	10.20
RV10-8Q	12 to 10	Yellow	#8	25	94T4865	10.80
RV10-10Q	12 to 10	Yellow	#10	25	94T4861	10.66
RV10-14Q	12 to 10	Yellow	0.25″	25	94T4862	10.80
RV10-38Q	12 to 10	Yellow	0.375″	25	94T4863	10.20
RV10-516Q	12 to 10	Yellow	0.313″	25	94T4864	10.20
SCOTCHLOK™ BLOCK FORK TERMINALS — FIG. 2						
MVU18-6FBX	22 to 18	Red	#6	100	66W6113	28.41
MVU18-8FBX	22 to 18	Red	#8	100	66W6111	27.85
MVU18-10FBX	22 to 18	Red	#10	100	66W6104	28.41
MVU14-6FB/SX	16 to 14	Blue	#6	100	66W6101	29.23
MVU14-8FBX	16 to 14	Blue	#8	100	98F5894	29.23
MVU14-10FBX	16 to 14	Blue	#10	100	66W6095	28.41
MVU10-6FBX	12 to 10	Yellow	#6	50	66W6091	21.72
MVU10-8FBX	12 to 10	Yellow	#8	50	66W6093	21.72
MVU10-10FBX	12 to 10	Yellow	#10	50	66W6088	21.72
HIGHLAND™ BLOCK FORK TERMINALS — FIG. 2						
BFV18-6Q	22 to 18	Red	#6	25	94T2798	8.53
BFV18-8Q	22 to 18	Red	#8	25	94T2799	8.53
BFV18-10Q	22 to 18	Red	#10	25	94T2797	8.64
BFV14-6Q	16 to 14	Blue	#6	25	94T2795	8.53
BFV14-8Q	16 to 14	Blue	#8	25	94T2796	8.53
BFV14-10Q	16 to 14	Blue	#10	25	94T2794	8.64
BFV10-6Q	12 to 10	Yellow	#6	25	94T2793	10.80
BFV10-8Q	12 to 10	Yellow	#8	25	94T4853	10.66
BFV10-10Q	12 to 10	Yellow	#10	25	94T4852	10.80
SCOTCHLOK™ LOCKING FORK TERMINALS — FIG. 3						
MV18-6FLX	22 to 18	Red	#6	100	66W6139	72.84
MV18-8FLX	22 to 18	Red	#8	100	66W6141	69.40
MV18-10FLX	22 to 18	Red	#10	100	66W6134	70.77
MV14-6FLX	16 to 14	Blue	#6	100	66W6129	72.84
MV14-8FLX	16 to 14	Blue	#8	100	66W6131	72.84
MV14-10FLX	16 to 14	Blue	#10	100	66W6125	72.84
MV14-14FLX	16 to 14	Blue	0.25″	100	66W6126	84.48
MV10-6FLX	12 to 10	Yellow	#6	50	66W6120	47.19
MV10-8FLX	12 to 10	Yellow	#8	50	66W6122	49.53

➤CONTINUED➤

3M™ VINYL INSULATED SOLDERLESS TERMINALS (CONT.)

Mfg. Part No.	Wire Size (AWG)	Insulator Color	Stud Size	Pack Qty.	Stock No.	Price per Pkg. 1-4
SCOTCHLOK™ LOCKING FORK TERMINALS — FIG. 3						
MV10-10FLX	12 to 10	Yellow	#10	50	66W6114	49.53
MV10-14FLX	12 to 10	Yellow	0.25″	50	66W6116	56.48
SCOTCHLOK™STANDARD FORK TERMINALS — FIG. 4						
MVU18-6FX	22 to 18	Red	#6	100	66W6110	28.41
MVU18-8FX	22 to 18	Red	#8	100	66W6112	27.07
MVU18-10FX	22 to 18	Red	#10	100	66W6105	28.41
MVU14-6FX	16 to 14	Blue	#6	100	66W6102	28.41
MVU14-8FX	16 to 14	Blue	#8	100	66W6103	31.56
MVU14-10FX	16 to 14	Blue	#10	100	66W6096	28.92
MVU10-6FX	12 to 10	Yellow	#6	50	66W6092	20.43
MVU10-8FX	12 to 10	Yellow	#8	50	66W6094	20.53
MVU10-10FX	12 to 10	Yellow	#10	50	66W6089	20.53
SCOTCHLOK™ BUTT SPLICES — FIG. 5						
MV18BCX	22 to 18	Red	1.02″ x 0.031″	100	66W6143	70.77
MV14BCX	16 to 14	Blue	1.02″ x 0.031″	100	66W6133	70.77
MV10BCX	12 to 10	Yellow	1.2″ x 0.038″	50	66W6124	53.88
HIGHLAND™ BUTT SPLICES — FIG. 5						
● BSV18Q	22 to 18	Red	1″ X 0.03″	25	94T2801	8.53
● BSV14Q	16 to 14	Blue	1″ X 0.03″	25	94T2800	8.64
SCOTCHLOK™ MALE DISCONNECTS						
MVU18-187DMX	22 to 18	Red	0.187″ x 0.02″	100	66W6107	87.97
MVU18-250DMX	22 to 18	Red	0.25″ x 0.032″	100	66W6109	89.50
MVU14-187DMX	16 to 14	Blue	0.187″ x 0.02″	100	66W6098	89.71
MVU14-250DMX	16 to 14	Blue	0.25″ x 0.032″	100	66W6100	86.62
MVU10-250DMX	12 to 10	Yellow	0.25″ x 0.032″	50	66W6090	53.18
SCOTCHLOK™ FEMALE DISCONNECTS						
MVU18-187DFX	22 to 18	Red	0.187″ x 0.02″	100	66W6106	88.25
MVU18-250DFX	22 to 18	Red	0.25″ x 0.032″	100	66W6108	84.09
MVU14-187DFX	16 to 14	Blue	0.187″ x 0.02″	100	66W6097	88.25
MVU14-250DFX	16 to 14	Blue	0.25″ x 0.032″	100	66W6099	77.10
MVI10-250DFX	12 to 10	Yellow	0.25″ x 0.032″	50	66W6087	60.10
HIGHLAND™ FEMALE DISCONNECTS						
FDV18-187Q	22 to 18	Red	0.187″ x 0.02″	25	94T2810	8.16
FDV18-250Q	22 to 18	Red	0.25″ X 0.032″	25	94T2811	8.64
FDV14-187Q	16 to 14	Blue	0.187″ x 0.02″	25	94T2808	8.16
FDV14-250Q	16 to 14	Blue	0.25″ x 0.032″	25	94T2809	8.64

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3M™ NYLON INSULATION GRIP SOLDERLESS TERMINALS

RoHS Compliant Available

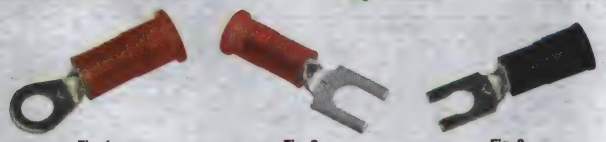


Fig. 1 Fig. 2 Fig. 3

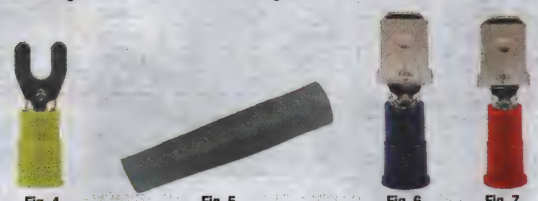


Fig. 4 Fig. 5 Fig. 6 Fig. 7

Mfg. Part No.	Wire Size (AWG)	Insulator Color	Stud Size	Pack Qty.	Stock No.	Price per Pkg. 1-4
RING TONGUE TERMINALS — FIG. 1						
● MNG18-6R/SX	22 to 18	Red	#6	100	66W6345	104.33
● MNG18-8R/LX	22 to 18	Red	#8	100	66W6349	104.33
● MNG18-10R/LX	22 to 18	Red	#10	100	66W6337	104.33
● MNG18-14R/SX	22 to 18	Red	0.25″	100	66W6338	106.55
● MNG18-38RX	22 to 18	Red	0.375″	100	66W6341	106.55
● MNG14-6R/SX	16 to 14	Blue	#6	100	66W6330	104.33
● MNG14-10RX	16 to 14	Blue	#10	100	66W6319	104.33
● MNG14-14R/SX	16 to 14	Blue	0.25″	100	66W6321	108.23
● MNG14-38RX	16 to 14	Blue	0.375″	100	66W6326	111.78
● MNG10-6RX	12 to 10	Yellow	#6	50	66W6311	62.80
● MNG10-8RX	12 to 10	Yellow	#8	50	66W6314	62.80
● MNG10-10RX	12 to 10	Yellow	#10	50	66W6303	62.80

➤ CONTINUED ➤

3M™ NYLON INSULATION GRIP SOLDERLESS TERMINALS (CONT.)

Mfg. Part No.	Wire Size (AWG)	Insulator Color	Stud Size	Pack Qty.	Stock No.	Price per Pkg. 1-4
● MNG10-14R/SX	12 to 10	Yellow	0.25″	50	66W6305	65.30
● MNG10-38R/SX	12 to 10	Yellow	0.375″	50	66W6307	62.28
BLOCK FORK TERMINALS — FIG. 2						
● MNG18-6FB/SX	22 to 18	Red	#6	100	66W6342	104.33
● MNG18-8FBX	22 to 18	Red	#8	100	66W6346	99.41
● MNG18-10FBX	22 to 18	Red	#10	100	66W6334	99.41
● MNG14-6FB/SX	16 to 14	Blue	#6	100	66W6327	99.41
● MNG14-8FBX	16 to 14	Blue	#8	100	66W6331	100.23
● MNG14-10FBX	16 to 14	Blue	#10	100	66W6316	104.33
● MNG10-6FBX	12 to 10	Yellow	#6	50	66W6308	59.84
● MNG10-8FBX	12 to 10	Yellow	#8	50	48W0328	59.84
● MNG10-10FBX	12 to 10	Yellow	#10	50	66W6300	59.84
LOCKING FORK TERMINALS — FIG. 3						
● MNG18-6FLX	22 to 18	Red	#6	100	66W6343	101.94
● MNG18-8FLX	22 to 18	Red	#8	100	66W6347	101.94
● MNG18-10FLX	22 to 18	Red	#10	100	66W6335	101.94
● MNG14-6FLX	16 to 14	Blue	#6	100	66W6328	106.07
● MNG14-8FLX	16 to 14	Blue	#8	100	66W6332	99.92
● MNG14-10FLX	16 to 14	Blue	#10	100	66W6317	101.94
● MNG14-14FLX	16 to 14	Blue	0.25″	100	66W6320	121.71
● MNG10-6FLX	12 to 10	Yellow	#6	50	66W6309	58.41
● MNG10-8FLX	12 to 10	Yellow	#8	50	66W6312	58.41
● MNG10-10FLX	12 to 10	Yellow	#10	50	66W6301	61.30
● MNG10-14FLX	12 to 10	Yellow	0.25″	50	66W6304	66.52
STANDARD FORK TERMINALS — FIG. 4						
● MNG18-6FX	22 to 18	Red	#6	100	66W6344	103.07
● MNG18-8FX	22 to 18	Red	#8	100	66W6348	98.21
● MNG18-10FX	22 to 18	Red	#10	100	66W6336	98.21
● MNG14-6FX	16 to 14	Blue	#6	100	66W6329	99.41
● MNG14-8FX	16 to 14	Blue	#8	100	66W6333	99.41
● MNG14-10FX	16 to 14	Blue	#10	100	66W6318	99.41
● MNG10-6FX	12 to 10	Yellow	#6	50	66W6310	62.80
● MNG10-8FX	12 to 10	Yellow	#8	50	66W6313	59.84
● MNG10-10FX	12 to 10	Yellow	#10	50	66W6302	59.84
BUTT SPLICE CONNECTORS — FIG. 5						
● MNG18BCX	22 to 18	Red	-	100	66W6351	178.66
● MNG14BCX	16 to 14	Blue	-	100	48W0329	178.66
● MNG10BCX	12 to 10	Yellow	-	50	66W6315	106.08
MALE DISCONNECTS — FIG. 6						
● MNG18-250DMX	22 to 18	Red	0.25″ x 0.032″	100	66W6340	111.43
● MNG14-187DMX	16 to 14	Blue	0.187″ x 0.02″	100	66W6323	111.43
● MNG14-250DMX	16 to 14	Blue	0.25″ x 0.032″	100	66W6325	112.39
● MNG10-250DMX	12 to 10	Yellow	0.25″ x 0.032″	50	66W6306	63.77
FEMALE DISCONNECTS — FIG. 7						
● MNG18-250DFX	22 to 18	Red	0.25″ x 0.032″	100	66W6339	95.84
● MNG14-187DFX	16 to 14	Blue	0.187″ x 0.02″	100	66W6322	105.64
● MNG14-250DFX	16 to 14	Blue	0.25″ x 0.032″	100	66W6324	104.70
● MNGI10-250DFX	12 to 10	Yellow	0.25″ x 0.032″	50	66W6299	72.01

(209524)

3M™ FULLY INSULATED NYLON DISCONNECTS

RoHS Compliant Available

Fig. 1 Fig. 2

Mfg. Part No.	Wire Size (AWG)	Insulator Color	Stud Size	Pack Qty.	Stock No.	Price per Pkg. 1-4
MALE DISCONNECTS — FIG. 1						
● MTI18-187Q	22 to 18	Red	0.187″ x 0.032″	25	94T2822	8.64
● MTI18-250Q	22 to 18	Red	0.25″ x 0.032″	25	94T2823	8.64
● MTI14-187Q	16 to 14	Blue	0.187″ x 0.032″	25	94T2820	8.64
MTI14-250Q	16 to 14	Blue	0.25″ x 0.032″	25	94T2821	8.64
● MTI10-250Q	12 to 10	Yellow	0.25″ x 0.032″	25	94T4860	10.80
FEMALE DISCONNECTS — FIG. 2						
FDI18-187Q	22 to 18	Red	0.187″ x 0.02″	25	94T2805	8.64
FDI18-250Q	22 to 18	Red	0.25″ x 0.032″	25	94T2806	8.53
FDI14-187Q	16 to 14	Blue	0.187″ x 0.02″	25	94T2803	8.64

➤ CONTINUED ➤

3M™ FULLY INSULATED NYLON DISCONNECTS (CONT.)

FEMALE DISCONNECTS — FIG. 2

Mfg. Part No.	Wire Size (AWG)	Insulator Color	Stud Size	Pack Qty.	Stock No.	Price per Pkg. 1-4
FDI14-250Q	16 to 14	Blue	0.25″ x 0.032″	25	94T2804	8.53
● FDI10-250Q	12 to 10	Yellow	0.25″ x 0.032″	25	94T2802	10.66

(209525)

3M™ UNINSULATED SOLDERLESS TERMINALS

RoHS Compliant Available

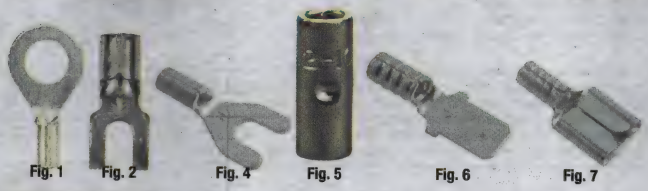


Fig. 1 Fig. 2 Fig. 4 Fig. 5 Fig. 6 Fig. 7

RING TONGUE TERMINALS — FIG. 1

Mfg. Part No.	Wire Size (AWG)	Stud Size	Pack Qty.	Stock No.	Price per Pkg. 1-4
● M18-6R/SX	22 to 18	#6	100	66W6026	44.88
● M18-8R/LX	22 to 18	#8	100	66W6030	42.76
● M18-10R/LX	22 to 18	#10	100	66W6020	44.88
● M18-14R/SX	22 to 18	0.25″	100	66W6021	56.12
● M18-38RX	22 to 18	0.375″	100	66W6022	56.12
● M14-6R/SX	16 to 14	#6	100	66W6012	44.88
● M14-8R/LX	16 to 14	#8	100	66W6016	42.76
● M14-10R/LX	16 to 14	#10	100	66W6007	44.88
● M14-14R/SX	16 to 14	0.25″	100	66W6008	58.96
● M14-38RX	16 to 14	0.375″	100	66W6009	61.88
● M10-8RX	12 to 10	#8	50	66W6003	29.57
● M10-10RX	12 to 10	#10	50	66W5992	31.03
● M10-14R/SX	12 to 10	0.25″	50	66W5994	37.72
● M10-38R/SX	12 to 10	0.375″	50	66W5995	35.94
● M10-516R/SX	12 to 10	0.313″	100	66W5996	75.43
BLOCK FORK TERMINALS — FIG. 2					
● M18-6FBX	22 to 18	#6	100	66W6023	42.76
● M18-8FBX	22 to 18	#8	100	66W6027	42.76
● M18-10FBX	22 to 18	#10	100	66W6017	44.88
● M14-6FB/SX	16 to 14	#6	100	48W0466	42.76
● M14-8FBX	16 to 14	#8	100	66W6013	44.88
● M14-10FBX	16 to 14	#10	100	66W6004	42.76
● M10-6FBX	12 to 10	#6	50	66W5997	29.57
● M10-8FBX	12 to 10	#8	50	66W6000	31.03
● M10-10FBX	12 to 10	#10	50	66W5989	29.57
LOCKING FORK TERMINALS — FIG. 3					
● M18-6FLX	22 to 18	#6	100	66W6024	55.74
● M18-8FLX	22 to 18	#8	100	66W6028	55.74
● M18-10FLX	22 to 18	#10	100	66W6018	55.74
● M14-6FLX	16 to 14	#6	100	66W6010	55.74
● M14-8FLX	16 to 14	#8	100	66W6014	58.50
● M14-10FLX	16 to 14	#10	100	66W6005	58.50
● M14-14FLX	16 to 14	0.25″	100	48W0465	73.49
● M10-8FLX	12 to 10	#8	50	66W6001	32.84
● M10-10FLX	12 to 10	#10	50	66W5990	32.84
● M10-14FLX	12 to 10	0.25″	50	66W5993	43.01
STANDARD FORK TERMINALS — FIG. 4					
● M18-6FX	22 to 18	#6	100	66W6025	44.88
● M18-8FX	22 to 18	#8	100	66W6029	42.76
● M18-10FX	22 to 18	#10	100	66W6019	42.76
● M14-6FX	16 to 14	#6	100	66W6011	52.70
● M14-8FX	16 to 14	#8	100	66W6015	50.15
● M14-10FX	16 to 14	#10	100	66W6006	42.76
● M10-6FX	12 to 10	#6	50	66W5998	29.57
● M10-8FX	12 to 10	#8	50	66W6002	29.57
● M10-10FX	12 to 10	#10	50	66W5991	29.57
BUTT SPLICE CONNECTORS — FIG. 5					
MU18BCX	22 to 18	0.56″ x 0.03″	100	66W5988	64.45
MU14BCX	16 to 14	0.56″ x 0.03″	100	66W5986	52.72
MU10BCX	12 to 10	0.56″ x 0.04″	50	66W5983	45.99
MALE DISCONNECTS — FIG. 6					
● MU18-187DMX	22 to 18	0.187″ x 0.02″	100	14N9038	57.51
● MU18-250DMX	22 to 18	0.25″ x 0.032″	100	50M2772	86.55
● MU14-187DMX	16 to 14	0.187″ x 0.02″	100	50M2770	86.55

➤CONTINUED➤

3M™ UNINSULATED SOLDERLESS TERMINALS (CONT.)

MALE DISCONNECTS — FIG. 6

Mfg. Part No.	Wire Size (AWG)	Stud Size	Pack Qty.	Stock No.	Price per Pkg. 1-4
● MU14-250DMX	16 to 14	0.25″ x 0.032″	100	50M2771	57.51
MU10-250DMX	12 to 10	0.25″ x 0.032″	50	66W5982	35.11
FEMALE DISCONNECTS — FIG. 7					
MU18-187DFX	22 to 18	0.187″ x 0.02″	100	14N8081	73.18
MU18-250DFX	22 to 18	0.25″ x 0.032″	100	66W5987	55.37
MU14-187DFX	16 to 14	0.187″ x 0.02″	100	66W5984	58.11
MU14-250DFX	16 to 14	0.25″ x 0.032″	100	66W5985	58.56
● MI10-250DFX	12 to 10	0.25″ x 0.032″	50	66W5981	44.24

(209459)

SCOTCHLOK™ STK-1 TERMINAL BOX KIT

3M™ Scotchlok™ Terminal Kit is filled with 3M's most frequently purchased low voltage termination products and includes 14 of their most popular terminals.

Kit Contents

No. of Pcs.	Description
1	Scotchlok TH-440 Crimping Tool
1	ScotchCode™ SPD-0-9 Tape Dispenser
100	3M™ 06225 Cable Ties
100	3M 06226 Cable Ties
50	Highland™ RV18-6 Ring Tongue Terminal
50	Highland RV18-8 Ring Tongue Terminal
50	Highland RV14-6 Ring Tongue Terminal
50	Highland RV14-8 Ring Tongue Terminal
50	Highland RV14-10 Ring Tongue Terminal
25	Highland RV10-10 Ring Tongue Terminal
50	Highland BFV14-8 Block Fork Terminals
50	Highland BFV14-10 Block Fork Terminals
50	Highland BFV18-8 Block Fork Terminals
50	Highland BFV18-6 Block Fork Terminals
50	Highland BSV18 Butt Connectors
50	Highland BSV14 Butt Connectors
25	Highland BSV10 Butt Connectors
50	Highland FDV14-250 Female Disconnects

Mfg. Part No.	Description	Stock No.	Price Each
STK-1	Scotchlok™ Terminal Box Kit, Red	96H7677	258.93

(208469)

SCOTCHLOK™ HAND CRIMP TOOLS

TH-440 TH-450 TH-490 E-9Y

Mfg. part no. TH-440 high carbon, heat-treated steel crimping tool that has a unique design that provides a high strength/weight ratio that crimps a broad range of 22-10 AWG terminals and connectors. **Mfg. part no. TH-450 CRIMPING TOOL** cushioned vinyl handles made of 1.40″ (33.5mm) high-strength, heat-treated carbon steel. Features include: wire cutter, insulated and uninsulated terminal crimping stations, 5-position bolt cutter, and a funnel-shaped wire stripper. **Mfg. part no. TR-490** crimps barrel and insulation grip independently on 22-10 AWG (0.35-6.0mm) insulated and non-insulated terminals and connectors: nylon or vinyl insulated, butted or brazed seam. **Mfg. part no. E-9Y** has stepped jaws and a long nose for parrell crimping. Mechanical advantage of 3-to-1. Includes integrated wire cutter. Not to be used for 19+ AWG wire gauge.

➤CONTINUED➤

TERMINALS & SPLICES

SCOTCHLOK™ HAND CRIMP TOOLS (CONT.)

Mfg. Part No.	Stock No.	Price Each
TH-440	90B2401	86.18
TH-450	19C8886	97.30
TR-490	98F6600	307.14
E-9Y	98F5807	27.29

(6387)

0.312″ SERIES FASTON RECEPTACLE CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Ergonomic design provides comfortable, contoured pushing surfaces for mating
- Configured to allow operators to recognize proper position and orientation
- Internal locking feature provides secure terminal retention
- Anti-reverse component to reduce potential for improper terminal assembly
- Housings are made from UL94V-2 and V-0 flammability rated nylon material
- Color coded to help prevent misapplication

An ergonomically designed, single position FASTON connector to insulate Tyco Electronics 0.312″ series FASTON receptacles. These receptacles and connector will mate with 0.312″ series quick connect tabs in a variety of commercial and industrial components. The connector is provided in two material and color options to address application requirements.

RECEPTACLE CONNECTOR HOUSINGS

Mfg. Part No.	Color	Stock No.	Price Each 1-9	Price Each 10-49
● 1969186-1	Black	58R2953	0.27	0.26
● 1969186-2	White	58R2954	0.24	0.23

RECEPTACLE TERMINALS

Mfg. Part No.	Tab Size	AWG	Features	Stock No.	Price Each 1-9
● 61399-1	0.312 x 0.032″	16AWG to 12AWG	Tin Plating	70C3836	0.28
● 63677-1	0.312 x 0.032″	16AWG to 12AWG	Tin Plating, Low Insertion Force	18H8623	0.32
● 63820-1	0.312 x 0.032″	14AWG to 10AWG	Silver Plating	01C2514	0.73

(164511)

COLD-APPLIED SPLICES

RoHS Compliant Available

TE connectivity

Authorized Distributor

Seals Without Heat, Grommets, Greases or Tapes

- One-step crimp termination and environmental protection
- No heating required for easy, safe installation
- Proven flame-resistant, gel-sealing technology
- Immersion-resistant
- Application flexibility
- Reliable electrical performance
- One-piece construction
- Small and lightweight profile

Cold-applied splices are designed to provide wire termination, strain relief, and protective environmental sealing in a single step. Excellent no-mess sealing is achieved with a non-flowing, flame-retardant sealing gel, and because no heat is needed, these splices can be applied in potentially hazardous aerospace and defense applications, such as fueled aircraft. Constructed of a transparent PVDF (polyvinylidene fluoride) insulation sleeve, tin-plated copper crimp splice, color-coded thermoplastic end caps and clear silicone-based sealing gel. Provides an immersion-resistant in-line splice on 1:1 wire from 26 to 12 AWG, nickel-, silver-, and tin-plated conductor, and cross-linked ETFE, TFE, and TKT conductor insulations. Operating temperature range: -65°C to +150°C. Meets requirements of SAE-AMS-DTL-23053/8 for insulation sleeve and the current draft of SAE-AS81824/12 (modified for 150°C) crimp splices. *Order* **mfg. part no. AD-1381** *cold-applied crimp tool; go online or call.*

Mfg. Part No.	AWG	Length In.(mm)	Color Insulator/End Caps	Stock No.	Price Each 1-24	Price Each 25-49
● D-436-36-COLD	26AWG to 20AWG	1.45 (36.8)	Red	25T1062	8.73	7.91
● D-436-37-COLD	18AWG to 16AWG	1.525 (38.7)	Blue	25T1063	9.68	8.79
● D-436-38-COLD	14AWG to 12AWG	1.525 (38.7)	Yellow	25T1064	10.32	9.38

(192358)

COOLSPLICE WIRE CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features:

- Simple push button termination
- Reliable and proven insulation displacement technology
- Left/right side independent terminations
- Available in unsealed and sealed versions
- IP67 rating
- Slim-symmetrical glossy appearance
- Visually controlled termination
- Fits within 10.00mm [.394] diameter hole Electrical
- Current / Voltage Ratings: 2.5A Max.,230 VAC/DC; 5A Max., 50 VAC/120 VDC
- Contact: Tin plated, copper alloy
- Housings and Pushbuttons: UL94-V0 rated plastic
- -40°C to +65°C continuous operating temperature

TE Coolsplice Connectors are designed to connect a pair of discrete wires, or a twin cord cable in line to a pair of discrete wires or twin cord cables. Available in unsealed and sealed, color coded configurations. Factory or field terminations are completed with standard pliers. The TE Coolsplice Connectors eliminates the need to pre-strip the insulation from the wire conductors and provides a visual controlled termination. The push connect buttons provides a more ergonomic wire termination than conventional twist-on wire connectors/nuts. The slim, symmetrical contoured, snag resistant connectors fit through a 10.00mm [0.394] diameter hole or pvc tube.

Mfg. Part No.	Description	AWG	Color	Stock No.	Price Each 1-9
● 293545-1	Coolsplice connector, unsealed	18	Transparent	-999	1.63
● 293545-2	Coolsplice connector, sealed	18	Transparent	41T3431	2.05
● 293545-3	Coolsplice connector, unsealed	22-20	Yellow	93T8251	1.70
● 293545-4	Coolsplice connector, sealed	22-20	Yellow	93T8252	2.03

(196209)

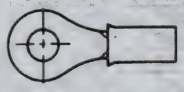
AMP PIDG® INSULATION-RESTRICTING RING TONGUE TERMINALS

UL CSA RoHS Compliant Available

TE connectivity

Authorized Distributor

PIDG® insulation-restricting ring tongue terminals meet MIL-T-7928, Type II, Class 1 and 2 requirements. UL listed, CSA certified for 105°C, 300V.



Mfg. Part No.	AWG	Stud Size	Stock No.	Price Each 1-9
● 51863-2	22	6	66H7086	0.42
● 1-320551-2	22	8	66H6916	0.68
● 52307-1	20	2	15H9220	0.88
● 52273-1	20	4	15H9217	0.63
● 2-36149-4	20	6	66H6922	0.58
● 1-320551-3	20	8	91B8661	0.59
● 2-320573-2	20	⅜	12H3572	1.00
● 2-328975-2	20	½	12H3621	1.84
● 2-36149-5	18	6	66H6923	0.72
● 1-320551-4	18	8	66H6917	0.68
● 2-36153-5	18	10	66H6925	0.63
● 2-328975-3	18	½	12H3622	1.73
● 2-320573-3	18	⅜	12H3573	0.81
● 2-320572-4	18	5/16	12H3570	1.11
● 2-320561-3	16	6	66H6920	0.70
● 1-51864-0	16	8	66H6918	0.66
● 51864-7	16	10	66H7089	0.66
● 2-320563-3	16	¼	90B2035	1.10
● 2-320575-2	16	5/16	12H3575	1.05
● 51864-8	14	6	66H7090	0.74
● 1-51864-1	14	8	66H6919	0.66
● 2-320563-4	14	¼	33C3649	0.73
● 2-320568-2	12	8	66H6921	0.78
● 2-36161-3	12	10	97B3791	0.74
● 2-36161-4	10	10	93B1582	0.94
● 2-320569-6	10	¼	73C0836	1.05
● 2-320576-3	10	5/16	12H3577	1.26

(75870)

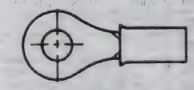
AMP PIDG® RADIATION-RESISTANT RING TONGUE TERMINALS

UL CSA RoHS Compliant Available

TE connectivity

Authorized Distributor

PIDG® radiation-resistant ring tongue terminals meet MIL-T-7928, Type II, Class 1 and 2 requirements. UL listed, CSA certified for 105°C, 300V.



Mfg. Part No.	AWG	Stud Size	W x L (in.)	Insulation Diameter in. (mm)	Stock No.	Price Each 1-99	Price Each 100-499
● 696422-3	22AWG to 16AWG	#6	0.218 x 0.672	0.125 (3.175)	16M3413	0.53	0.50
● 51863	22AWG to 16AWG	#6	0.250 x 0.782	0.125 (3.175)	66H7839	0.23	0.21
● 696422-5	22AWG to 16AWG	#8	0.312 x 0.844	0.125 (3.175)	16M3414	0.76	0.72

CONTINUED

AMP PIDG® RADIATION-RESISTANT RING TONGUE TERMINALS (CONT.)

Mfg. Part No.	AWG	Stud Size	W x L (in.)	Insulation Diameter in. (mm)	Stock No.	Price Each 1-99	Price Each 100-499
696423-3	16AWG to 14AWG	#6	0.250 x 0.703	0.150 (3.960)	16M3415	0.78	0.73
696423-4	16AWG to 14AWG	#6	0.312 x 0.844	0.150 (3.960)	16M3416	0.76	0.68
696423-5	16AWG to 14AWG	#8	0.312 x 0.844	0.150 (3.960)	87K2247	0.40	...
51864-2	16AWG to 14AWG	#10	0.312 x 0.844	0.150 (3.960)	22C9264	0.27	0.24
696424-6	12AWG to 10AWG	#10	0.375 x 1.083	0.230 (5.850)	16M3417	1.00	0.88

(75871)

AMP PIDG® FASTON® RECEPTACLES

RoHS Compliant Available

TE connectivity

Authorized Distributor

PIDG® FASTON® RECEPTACLES

All have dimple with wire stop, except (*): no dimple with wire stop. **Sold in package quantities listed in table below.**

Mfg. Part No.	Fit Tab Width	AWG	Pkg. of	Stock No.	Price per Pkg. Each
8-640903-1	0.250″ x 0.032″	22AWG to 18AWG	100	96F7797	31.85
640903-1	0.250″ x 0.032″	22AWG to 18AWG	1000	97F9933	163.00
8-640905-1	0.250″ x 0.032″	16AWG to 14AWG	100	96F7734	36.00
640905-1	0.250″ x 0.032″	16AWG to 14AWG	1000	97F9934	180.00
8-42844-1	0.250″ x 0.032″	14AWG to 12AWG	100	96F7462	70.51
640907-1	0.250″ x 0.032″	12AWG to 10AWG	1	98F5886	0.38
8-640909-1	0.205″ x 0.020″	22AWG to 18AWG	100	96F7464	24.88
8-640913-1	0.205″ x 0.020″	16AWG to 14AWG	100	96F7466	28.01
8-640911-1	0.205″ x 0.032″	22AWG to 18AWG	100	96F7465	34.85
8-640915-1	0.205″ x 0.032″	16AWG to 14AWG	100	96F7467	41.31
8-640917-1	0.187″ x 0.020″	22AWG to 18AWG	100	96F7206	27.00
640917-1	0.187″ x 0.020″	22AWG to 18AWG	1000	97F9939	158.50
8-640919-1	0.187″ x 0.020″	16AWG to 14AWG	100	96F7735	34.85
640919-1	0.187″ x 0.020″	16AWG to 14AWG	1000	97F9940	208.89
8-61048-1	0.110″ x 0.016″	22AWG to 18AWG	100	96F7469	30.58
8-61060-1	0.110″ x 0.020″	22AWG to 18AWG	100	96F7470	42.10
8-640929-1	0.110″ x 0.020″	16AWG to 14AWG	100	96F7411	25.64
8-640923-1	0.110″ x 0.032″	22AWG to 18AWG	100	96F7409	26.60
8-60894-1	0.110″ x 0.032″	22AWG to 18AWG	100	96F7408	43.29
8-640925-1	0.110″ x 0.032″	22AWG to 18AWG	100	96F7410	39.09
PIDG FASTON TABS (SOLD INDIVIDUALLY)					
696362-1	0.250″ x 0.032″	22AWG to 18AWG	1	07J6689	0.34
696369-1	0.250″ x 0.032″	16AWG to 14AWG	1	07J6690	0.49

(85723)

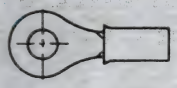
AMP PIDG® RING TONGUE TERMINALS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Closed Barrel
- Regular Wire
- Nylon Insulation with Insulation Support
- Insulation Diameter: 0.082″ (2.08mm)
- Copper with Tin Finish
- Voltage: 300VAC



PIDG® terminals and splices meet MIL-T-7928, Type II, Class 1 and 2 requirements. UL listed, CSA certified for 105°C, 300V. *Order* **mfg. part no. 58433-3** *crimp tool separately on page 1116.* **Sold in package quantities listed in table below.**

PIDG® RING TONGUE TERMINALS

Mfg. Part No.	Wire Size	Stud Size	Dimensions W x L (in.)	Pkg. of	Stock No.	Price per Pkg. 1-49
35273	12AWG to 10AWG	0.25″	0.500 x 1.188	1	66H7072	0.44
323763	12AWG to 10AWG	0.25″	0.500 x 1.277	1	35C1335	0.80
320569	12AWG to 10AWG	0.25″	0.531 x 1.322	1	66H6953	0.37
8-35110-1	12AWG to 10AWG	0.25″	0.531 x 1.322	100	96F7170	76.00
35110	12AWG to 10AWG	0.25″	0.531 x 1.322	500	97F9896	149.50
35345	12AWG to 10AWG	0.25″	0.531 x 1.416	1	66H7074	0.59
8-35111-1	12AWG to 10AWG	0.313″	0.531 x 1.322	100	96F7918	59.76
35111	12AWG to 10AWG	M8	0.531 x 1.322	500	97F9897	159.00
320577	12AWG to 10AWG	0.375″	0.593 x 1.414	1	66H6959	0.66
2-320577-3	12AWG to 10AWG	0.375″	0.593 x 1.414	1	23C1606	0.90
8-35112-1	12AWG to 10AWG	0.375″	0.593 x 1.414	100	96F7302	75.14
35112	12AWG to 10AWG	0.375″	0.593 x 1.414	500	97F9898	175.30
320634	12AWG to 10AWG	#6	0.593 x 1.510	1	66H6964	0.44
35150	12AWG to 10AWG	0.375″	0.750 x 1.594	1	28C0345	1.72
8-35151-2	12AWG to 10AWG	0.5″	0.750 x 1.594	50	96F7303	45.70
35148	12AWG to 10AWG	#4	0.281 x 0.953	1	66H7071	0.92
2-35149-1	12AWG to 10AWG	#6	0.281 x 0.953	1	90F6272	0.66
8-35149-2	12AWG to 10AWG	#6	0.281 x 0.953	50	96F7300	33.05
35149	12AWG to 10AWG	#6	0.281 x 0.953	500	97F9893	132.08
35107	12AWG to 10AWG	#6	0.375 x 1.083	1	66H7070	0.26

➤CONTINUED➤

AMP PIDG® RING TONGUE TERMINALS (CONT.)

Mfg. Part No.	Wire Size	Stud Size	Dimensions W x L (in.)	Pkg. of	Stock No.	Price per Pkg. 1-49
35787	12AWG to 10AWG	#8	0.312 x 1.031	1	66H7079	0.42
8-324915-1	12AWG to 10AWG	#8	0.312 x 1.052	100	96F7711	95.72
320568	12AWG to 10AWG	#8	0.375 x 1.083	1	22C6528	0.31
324915	12AWG to 10AWG	#8	0.375 x 1.083	1	97B1552	0.57
2-35108-1	12AWG to 10AWG	#8	0.375 x 1.083	1	90F6231	0.45
8-35108-1	12AWG to 10AWG	#8	0.375 x 1.083	100	96F7301	47.85
35108	12AWG to 10AWG	#8	0.375 x 1.083	500	97F9894	119.49
324918	12AWG to 10AWG	#10	0.312 x 1.052	1	90B3516	0.38
32883	12AWG to 10AWG	#10	0.343 x 1.046	1	66H7011	0.39
36161	12AWG to 10AWG	#10	0.375 x 1.083	1	20C8725	0.23
8-35109-1	12AWG to 10AWG	#10	0.375 x 1.083	100	96F7153	47.85
35109	12AWG to 10AWG	#10	0.375 x 1.083	500	97F9895	68.50
35364	12AWG to 10AWG	#10	0.375 x 1.172	1	20C9223	0.83
320563	16AWG to 14AWG	0.25″	0.281 x 0.953	1	20C9108	0.31
321045	16AWG to 14AWG	0.25″	0.281 x 0.953	1	25C5699	0.21
8-321045-1	16AWG to 14AWG	0.25″	0.469 x 1.078	100	96F7545	46.10
328976	16AWG to 14AWG	0.5″	0.500 x 1.188	1	50F3232	1.21
34810	16AWG to 14AWG	0.313″	0.500 x 1.188	1	66H7060	0.95
35106	16AWG to 14AWG	#8	0.531 x 1.322	1	27C4797	0.43
330896	16AWG to 14AWG	0.375″	0.531 x 1.416	1	93B1405	0.77
320575	16AWG to 14AWG	0.313″	0.469 x 1.078	1	66H6958	0.56
8-328998-1	16AWG to 14AWG	0.313″	0.469 x 1.078	100	96F7165	60.48
320630	16AWG to 14AWG	#10	0.531 x 1.322	1	66H6962	0.48
35316	16AWG to 14AWG	0.5″	0.531 x 1.416	1	66H7073	1.52
320564	16AWG to 14AWG	0.375″	0.531 x 1.218	1	66H6952	0.53
8-328999-1	16AWG to 14AWG	0.375″	0.531 x 1.218	100	96F7325	58.90
327743	16AWG to 14AWG	0.25″	0.750 x 1.594	1	66H7004	0.51
322724	16AWG to 14AWG	0.75″	0.750 x 1.594	1	13H1201	4.13
34806	16AWG to 14AWG	0.25″	0.750 x 1.594	1	66H7059	0.66
324159	16AWG to 14AWG	#4	0.250 x 0.703	1	66H6996	0.39
8-328996-1	16AWG to 14AWG	#4	0.250 x 0.703	100	96F7539	54.20
34974	16AWG to 14AWG	0.25″	0.281 x 0.953	1	66H7069	0.83
8-320561-1	16AWG to 14AWG	#6	0.250 x 0.703	100	96F7425	44.21
8-320619-1	16AWG to 14AWG	#6	0.250 x 0.703	100	96F7540	39.70
320619	16AWG to 14AWG	#6	0.250 x 0.703	1000	97F9887	108.25
50881	16AWG to 14AWG	#6	0.250 x 0.813	1	91B9599	0.54
320561	16AWG to 14AWG		0.250 x 0.703	1	90B7539	0.22
326882	16AWG to 14AWG	#6	0.312 x 0.813	1	66H7002	0.33
36157	16AWG to 14AWG	#6	0.343 x 0.859	1	33B8286	0.39
51864	16AWG to 14AWG	#6	0.343 x 0.859	1	07C9139	0.23
36158	16AWG to 14AWG	#6	0.343 x 0.859	1	66H7459	0.21
320631	16AWG to 14AWG	#6	0.375 x 1.083	1	66H6963	0.75
53941-1	16AWG to 14AWG	#8	0.312 x 0.813	1	66H7124	0.40
51864-1	16AWG to 14AWG	#8	0.312 x 0.844	1	66H7087	0.27
8-320560-1	16AWG to 14AWG	#8	0.343 x 0.859	100	96F7904	52.92
8-320565-1	16AWG to 14AWG	#8	0.343 x 0.859	100	96F7905	39.00
320565	16AWG to 14AWG	#8	0.343 x 0.859	1000	97F9815	101.00
328849	16AWG to 14AWG	0.5″	0.343 x 1.046	1	66H7012	1.06
53942-1	16AWG to 14AWG	#10	0.312 x 0.813	1	66H7125	0.27
5-51864-1	16AWG to 14AWG	#10	0.312 x 0.844	100	96F7151	54.60
320574	16AWG to 14AWG	#10	0.343 x 0.859	1	66H6957	0.26
8-320574-1	16AWG to 14AWG	#10	0.343 x 0.859	100	96F7543	46.10
8-36160-1	16AWG to 14AWG	#10	0.343 x 0.859	100	96F7326	38.35
36160	16AWG to 14AWG	#10	0.343 x 0.859	1000	97F9889	98.00
31903	16AWG to 14AWG	#10	0.343 x 0.859	1	92C2277	0.38
324533	16AWG to 14AWG	#10	0.469 x 1.078	1	07C1180	0.77
34805	16AWG to 14AWG	#10	0.469 x 1.078	1	01C0158	0.40
320571	22AWG to 16AWG	0.25″	0.469 x 1.078	1	66H6955	0.29
8-31894-1	22AWG to 16AWG	0.25″	0.469 x 1.078	100	96F7149	57.90
31894	22AWG to 16AWG	0.25″	0.469 x 1.078	1000	97F9882	188.80
320572	22AWG to 16AWG	0.313″	0.469 x 1.078	1	66H6956	0.36
8-31895-1	22AWG to 16AWG	0.313″	0.469 x 1.078	100	96F7178	69.13
31895	22AWG to 16AWG	0.313″	0.469 x 1.078	1000	97F9883	360.00
8-320573-1	22AWG to 16AWG	0.375″	0.531 x 1.218	100	96F7327	40.65
8-31897-1	22AWG to 16AWG	0.375″	0.531 x 1.218	100	96F7179	53.59
8-328975-1	22AWG to 16AWG	0.5″	0.713 x 1.293	100	92F1570	133.00
324158	22AWG to 16AWG	#2	0.182 x 0.669	1	66H6995	0.61
320773	22AWG to 16AWG	#2	0.182 x 0.669	1	66H6966	0.49
8-328657-1	22AWG to 16AWG	#2	0.218 x 0.672	100	96F7198	39.20
320882	22AWG to 16AWG	#4	0.182 x 0.669	1	66H6967	0.40
320553	22AWG to 16AWG		0.218 x 0.672	1	66H6950	0.24
8-31880-1	22AWG to 16AWG	#4	0.218 x 0.672	100	96F7177	52.70
31880	22AWG to 16AWG	#4	0.218 x 0.672	1000	97F9878	140.00
323758	22AWG to 16AWG	#4	0.250 x 0.844	1	50F3235	0.48

➤CONTINUED➤

AMP PIDG® RING TONGUE TERMINALS (CONT.)

Mfg. Part No.	Wire Size	Stud Size	Dimensions W x L (in.)	Pkg. of	Stock No.	Price per Pkg. 1-49
330648	22AWG to 16AWG	#4	0.250 x 0.844	1	50F3213	0.69
36149	22AWG to 16AWG	#6	0.218 x 0.672	1	66H7838	0.17
8-36151-1	22AWG to 16AWG	#6	0.218 x 0.672	1	96F7716	38.35
36150	22AWG to 16AWG	#6	0.218 x 0.672	1	96C8825	0.24
36151	22AWG to 16AWG	#6	0.281 x 0.797	1	29C2208	0.20
2-36152-1	22AWG to 16AWG	#6	0.281 x 0.797	1	83H3546	0.19
8-36152-1	22AWG to 16AWG	#6	0.281 x 0.797	100	96F7787	22.90
36152	22AWG to 16AWG	#6	0.281 x 0.797	1000	97F9879	95.00
323008	22AWG to 16AWG	#6	0.312 x 0.844	1	50F3214	0.39
326878	22AWG to 16AWG	#6	0.312 x 0.844	1	50F3215	0.37
320554	22AWG to 16AWG	#8	0.281 x 0.797	1	66H6951	0.26
31886	22AWG to 16AWG	#8	0.281 x 0.797	1	16C1693	0.26
8-31886-1	22AWG to 16AWG	#8	0.281 x 0.797	100	96F7717	51.35
31888	22AWG to 16AWG	#8	0.312 x 0.844	1	55C4255	0.43
320551	22AWG to 16AWG	#8	0.312 x 0.844	1	66H6948	0.21
8-31890-1	22AWG to 16AWG	#8	0.312 x 0.844	100	96F7286	38.80
31890	22AWG to 16AWG	#8	0.312 x 0.844	1000	97F9880	130.00
32835	22AWG to 16AWG	#8	0.344 x 0.876	1	50F3230	0.27
320552	22AWG to 16AWG	#10	0.281 x 0.797	1	66H6949	0.26
31887	22AWG to 16AWG	#10	0.281 x 0.797	1	66H7453	0.21
36153	22AWG to 16AWG	#10	0.312 x 0.844	1	73C2907	0.18
32837	22AWG to 16AWG	#10	0.312 x 0.844	1	29C1874	0.35
8-31887-1	22AWG to 16AWG	#10	0.312 x 0.844	1	96F7903	56.40
8-36154-1	22AWG to 16AWG	#10	0.312 x 0.844	100	96F7335	40.90
36154	22AWG to 16AWG	#10	0.312 x 0.844	1000	97F9881	120.00
32836	22AWG to 16AWG	#10	0.344 x 0.876	1	66H7007	0.71
329636	24AWG to 20AWG	#2	0.160 x 0.589	1	73C0432	0.88
323986	24AWG to 20AWG	#6	0.281 x 0.774	1	93B9592	0.52
323989	24AWG to 20AWG	#8	0.312 x 0.821	1	07C8261	0.61
321013	26AWG to 22AWG	#0	0.140 x 0.525	1	90B6075	0.51
8-323912-1	26AWG to 22AWG	#2	0.140 x 0.525	100	92F1569	55.25
8-323914-1	26AWG to 22AWG	#4	0.203 x 0.646	100	96F7157	57.90
323914	26AWG to 22AWG	#4	0.203 x 0.646	1000	97F9873	199.00
8-323915-1	26AWG to 22AWG	#6	0.250 x 0.740	100	96F7511	44.51
323915	26AWG to 22AWG	#6	0.250 x 0.740	1000	97F9874	180.00
326875	26AWG to 22AWG	#6	0.250 x 0.740	1	66H7001	0.21
8-323916-1	26AWG to 22AWG	#8	0.250 x 0.740	100	96F7164	62.84
8-324075-1	26AWG to 22AWG	#10	0.250 x 0.740	100	96F7513	61.30
52189	26AWG to 24AWG	#4	0.203 x 0.736	1	90B4109	0.82
53073	26AWG to 24AWG	#6	0.250 x 0.792	1	66H7119	0.48

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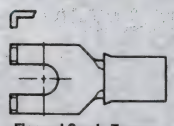
AMP PIDG® SPADE TONGUE TERMINALS

RoHS Compliant Available

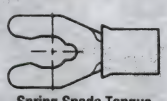
TE connectivity

Authorized Distributor

Spade Tongue



Flanged Spade Tongue



Spring Spade Tongue

- Closed Barrel
- Regular Wire
- Nylon Insulation with Insulation Support
- Copper with Tin Finish
- Voltage: 300VAC

PIDG® terminals and splices meet MIL-T-7928, Type II, Class 1 and 2 requirements. UL listed, CSA certified for 105°C, 300V. *Order* **mfg. part no. 58433-3** *crimp tool separately on page 1116.* **Sold in package quantities listed in table below.**

PIDG® SPADE TONGUE TERMINALS

Mfg. Part No.	AWG	Stud Size	Dimensions W x L (Inches)	Insulation Diameter (Inches)	Pkg. of	Stock No.	Price per Pkg. Each
322985	12-10	#6	0.290 x 0.954	0.230	1	29C1873	0.63
326859		#6	0.312 x 1.095	0.230	1	50F3302	0.83
8-32589-2		#10	0.406 x 1.095	0.230	50	96F7195	41.73
328281	16-14	#6	0.244 x 0.846	0.170	1	66H7006	0.51
8-35559-1		#6	0.297 x 0.753	0.170	100	96F7293	54.20
35559		#6	0.297 x 0.753	0.170	1000	97F9907	140.00
32058		#6	0.385 x 0.908	0.170	1	66H6960	0.24
321233		#8	0.297 x 0.753	0.170	1	66H6969	0.33
8-32059-1		#8	0.385 x 0.908	0.170	100	96F7295	56.40
8-35152-2		#8	0.406 x 1.095	0.250	50	96F7983	47.78
32057		#10	0.385 x 0.908	0.150	1	14C7174	0.42
8-32060-1		#10	0.385 x 0.908	0.170	100	96F7296	50.30

➤CONTINUED➤

AMP PIDG® SPADE TONGUE TERMINALS (CONT.)

Mfg. Part No.	AWG	Stud Size	Dimensions W x L (Inches)	Insulation Diameter (Inches)	Pkg. of	Stock No.	Price per Pkg. Each
8-328394-1	22-16	#2	0.182 x 0.727	0.140	100	96F7889	51.40
328394		#2	0.182 x 0.727	0.140	1000	97F9902	230.00
327717		#4	0.218 x 0.674	0.140	1	66H7003	0.55
8-34541-1		#6	0.250 x 0.846	0.140	100	96F7287	39.00
34541		#6	0.250 x 0.846	0.140	1000	97F9904	110.00
326861		#6	0.297 x 0.753	0.140	1	66H7000	0.21
34080		#6	0.297 x 0.753	0.125	1	66H7032	0.23
32050		#8	0.375 x 0.908	0.125	1	66H6946	0.75
8-32053-1		#8	0.375 x 0.908	0.140	100	96F7289	39.64
32051		#10	0.375 x 0.908	0.125	1	66H6947	0.75
8-32054-1		#10	0.375 x 0.908	0.140	100	96F7290	52.92
321035	26-22	#4	0.203 x 0.627	0.082	1	70C5541	0.57
PIDG® FLANGED SPADE TONGUE TERMINALS							
8-325150-2	12-10	#6	0.296 x 1.017	0.250	50	96F7148	88.95
324587		#6	0.328 x 1.017	0.230	1	87F5527	1.29
8-32510-2		#8	0.416 x 1.017	0.230	50	96F7181	49.80
8-324015-2		#10	0.416 x 1.017	0.250	50	96F7478	37.00
8-320861-1	16-14	#6	0.294 x 0.737	0.170	100	96F7294	41.93
8-320862-1		#8	0.294 x 0.737	0.170	100	96F7528	52.34
33156		#10	0.416 x 0.830	0.170	1	93C9294	0.83
8-320863-1		#10	0.294 x 0.737	0.170	100	96F7297	65.33
8-324608-1	22-16	#2	0.182 x 0.727	0.140	100	96F7475	73.70
8-322777-1		#6	0.250 x 0.737	0.125	100	96F7532	57.00
32561		#6	0.296 x 0.737	0.125	1	66H7456	0.53
8-32562-1		#6	0.296 x 0.737	0.140	100	96F7288	49.85
32562		#6	0.296 x 0.737	0.140	1000	97F9913	197.30
8-32498-1		#8	0.416 x 0.830	0.140	100	96F7180	61.07
324597	26-22	#2	0.182 x 0.649	0.082	1	66H7455	1.01
52369		#4	0.196 x 0.649	0.082	1	66H7104	1.42
51874		#6	0.250 x 0.649	0.082	100	66H7091	0.82
PIDG® SHORT SPRING SPADE TONGUE TERMINALS							
8-52927-1	12-10	#4	0.250 x 0.959	0.250	100	96F7567	55.88
8-52942-1		#8	0.375 x 1.052	0.250	100	96F7558	54.70
7-52935-1	16-14	#6	0.250 x 0.799	0.170	100	96F7571	61.24
52935		#6	0.250 x 0.799	0.170	1000	97F9924	184.61
8-52936-1		#8	0.375 x 0.860	0.170	100	96F7158	61.70
52936		#8	0.375 x 0.860	0.170	1000	97F9925	161.00
7-52937-1		#10	0.406 x 0.908	0.170	100	96F7572	71.69
8-52927-1	22-16	#4	0.203 x 0.799	0.125	100	96F7567	55.88
8-52929-1		#6	0.250 x 0.799	0.125	100	96F7319	59.30
52929		#6	0.250 x 0.799	0.125	1000	97F9921	155.87
8-52930-1		#8	0.375 x 0.860	0.125	100	96F7731	59.30
52930		#8	0.375 x 0.860	0.125	1000	97F9922	250.00
8-52931-1		#10	0.406 x 0.908	0.125	100	96F7569	63.14
PIDG® LONG SPRING SPADE TONGUE TERMINALS							
52433-1	12-10	0.25″	0.437 x 1.289	0.250	1	91B1451	1.24
52430-1		#6	0.312 x 1.131	0.250	1	01H9434	1.12
52431-1		#8	0.375 x 1.174	0.250	1	66H7111	1.13
52432-1		#10	0.375 x 1.219	0.250	1	29C4297	1.24
52420	16-14	#6	0.250 x 0.933	0.150	1	66H7107	0.53
52420-1		#6	0.250 x 0.933	0.170	1	66H7108	1.08
52421		#8	0.281 x 0.979	0.150	1	66H7109	0.48
52422-1		#10	0.343 x 1.005	0.170	1	66H7110	0.58
52409	22-16	#6	0.250 x 0.933	0.125	1	87F5583	0.41
52409-2		#6	0.250 x 0.933	0.140	1	66H7460	0.52

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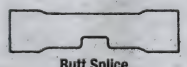
AMP PIDG® SPLICES

RoHS Compliant Available

TE connectivity

Authorized Distributor



Butt Splice

Knife Disconnect

- Closed Barrel
- Regular Wire
- Nylon Insulation with Insulation Support
- Insulation Diameter: 0.082″ (2.08mm)
- Copper with Tin Finish
- Voltage: 300VAC

PIDG® splices meet MIL-T-7928, Type II, Class 1 and 2 requirements. UL listed, CSA certified for 105°C, 300V. *Order* **mfg. part no. 58433-3** *crimp tool separately on page 1116.* **Sold in package quantities listed in table below.**

PIDG® BUTT SPLICES

Mfg. Part No.	AWG	Wire Diameter (Inches)	Pkg. of	Stock No.	Price per Pkg. Each	2-4
320570	12-10	0.220	50	44F7958	51.00	41.50
8-320570-2	12-10	0.220	50	96F7176	67.85	...

➤CONTINUED➤

AMP PIDG® SPLICES (CONT.)

Mfg. Part No.	AWG	Wire Diameter (Inches)	Pkg. of	Stock No.	Price per Pkg. Each	Price per Pkg. 2-4
8-320562-2	16-14	0.150	50	96F7298	43.85	41.95
8-320559-2	22-16	0.125	50	96F7291	53.58	51.80
323975	24-20	0.100	50	87F5649	22.50	21.00
8-323994-2	26-22	0.082	50	96F7413	64.75	62.50

PIDG® KNIFE DISCONNECT SPLICES

Mfg. Part No.	AWG	Length (Inches)	Pkg. of	Stock No.	Price per Pkg. Each
8-32448-1	16AWG to 14AWG	0.878	100	96F7299	86.10
8-32446-1	22AWG to 16AWG	0.878	100	96F7292	88.70
320555	22AWG to 16AWG	0.878	1	82R5432	1.05

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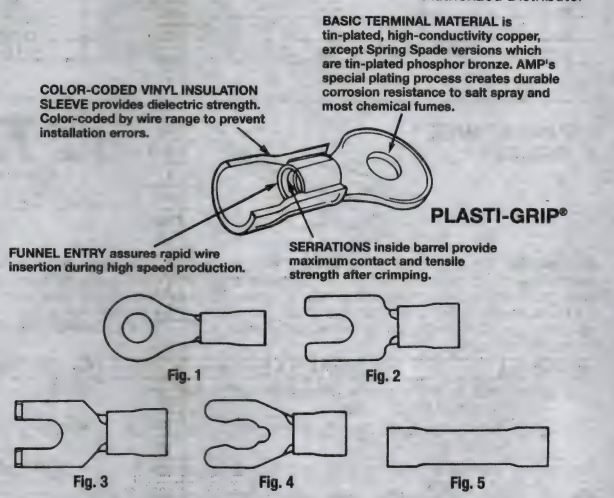
AMP PLASTI-GRIP® TERMINALS AND SPLICES

RoHS Compliant Available

TE connectivity

Authorized Distributor



- Closed Barrel
- Regular Wire
- Vinyl Insulation with Insulation Support
- Copper with Tin Finish
- Voltage: 600VAC
- Temperature Range: 90°C

PLASTI-GRIP® RING TONGUE TERMINALS — FIG. 1

Mfg. Part No.	Wire Size	Stud Size	Dimensions W x L (in.)	Insulation Diameter Inch (mm)	Pkg. of	Stock No.	Price per Pkg. Each
8-34140-1	22AWG to 16AWG	#2	0.218 x 0.684	0.14 (3.55)	100	96F7448	35.84
32944		#4	0.218 x 0.684	0.125 (3.17)	1	66H7015	0.42
34141		#4	0.218 x 0.684	0.140 (3.56)	1	66H7038	0.25
8-34141-1		#4	0.218 x 0.684	0.14 (3.55)	100	96F7450	29.34
34143		#4	0.281 x 0.809	0.14 (3.55)	1	13H1420	0.50
32945		#6	0.218 x 0.684	0.125 (3.17)	1	66H7016	0.26
32947		#6	0.281 x 0.809	0.125 (3.17)	1	66H7017	0.42
32950		#6	0.312 x 0.856	0.125 (3.17)	1	14C3481	0.39
34147		#6	0.281 x 0.809	0.14 (3.55)	1	66H7041	0.26
34144		#6	0.281 x 0.809	0.14 (3.55)	1	71C7600	0.27
8-34142-1		#6	0.218 x 0.684	0.14 (3.55)	100	96F7182	36.21
34142		#6	0.218 x 0.684	0.14 (3.55)	1	66H7039	0.21
8-34144-1		#6	0.281 x 0.809	0.14 (3.55)	100	96F7159	36.21
32948		#8	0.281 x 0.809	0.125 (3.17)	1	66H7018	0.40
32951		#8	0.312 x 0.856	0.125 (3.17)	1	66H7019	0.38
8-34145-1		#8	0.281 x 0.809	0.14 (3.55)	100	96F7183	36.62
8-34148-1		#8	0.218 x 0.684	0.14 (3.55)	100	96F7454	47.90
34149		#10	0.312 x 0.856	0.14 (3.55)	1	66H7043	0.24
34146		#10	0.312 x 0.856	0.14 (3.55)	1	66H7040	0.26
8-34146-1		#10	0.281 x 0.809	0.14 (3.55)	100	96F7184	47.90
8-32952-1		#10	0.312 x 0.856	0.125 (3.17)	100	96F7456	23.00
32953		0.25″	0.469 x 1.090	0.125 (3.17)	1	66H7021	0.50
34150		1/4	0.469 x 1.090	0.14 (3.56)	1	66H7044	0.19
8-34150-1		0.25″	0.469 x 1.090	0.14 (3.55)	100	96F7277	45.15
8-34151-1		0.313″	0.469 x 1.090	0.14 (3.55)	100	96F7459	42.81
8-34152-1		0.375″	0.531 x 1.230	0.14 (3.55)	100	96F7783	45.22

➤CONTINUED➤

AMP PLASTI-GRIP® TERMINALS AND SPLICES (CONT.)

Mfg. Part No.	Wire Size	Stud Size	Dimensions W x L (in.)	Insulation Diameter Inch (mm)	Pkg. of	Stock No.	Price per Pkg. Each
8-34157-1	16AWG to 14AWG	#4	0.250 x 0.715	0.17 (4.32)	100	96F7784	38.43
34159		#6	0.343 x 0.871	0.17 (4.32)	1	66H7048	0.44
8-34158-1		#6	0.469 x 1.090	0.14 (3.55)	100	96F7785	36.40
8-34159-1		#6	0.343 x 0.871	0.17 (4.32)	100	96F7910	47.85
32959		#8	0.343 x 0.871	0.145 (3.68)	1	66H7022	0.44
328527		#8	0.312 x 0.825	0.17 (4.32)	1	66H7008	0.44
8-34160-1		#8	0.343 x 0.871	0.17 (4.32)	100	96F7152	18.80
8-34161-1		#10	0.343 x 0.871	0.17 (4.32)	100	96F7911	32.96
8-32960-1		#10	0.469 x 1.090	0.145 (3.68)	100	96F7669	23.44
34161		#10	0.469 x 1.090	0.193 (4.90)	1	27C8741	0.20
32961		0.25″	0.469 x 1.090	0.145 (3.68)	1	66H7024	0.63
34162		0.25″	0.469 x 1.090	0.17 (4.32)	1	66H7049	0.24
8-34162-1		0.25″	0.469 x 1.090	0.17 (4.32)	100	96F7281	38.22
34164		0.375″	0.531 x 1.248	0.17 (4.32)	1	46F8494	0.30
8-34163-1		0.313″	0.531 x 1.248	0.17 (4.32)	100	96F7671	36.20
34163		5/16	0.531 x 1.248	0.193 (4.90)	1	66H7050	0.30
34168	12AWG to 10AWG	#6	0.375 x 1.098	0.23 (5.84)	1	66H7051	0.36
34852		#6	0.281 x 0.953	0.25 (6.35)	1	66H7062	0.33
34853		#8	0.375 x 1.098	0.2 (6.35)	1	66H7063	0.26
8-34853-1		#8	0.375 x 1.098	0.25 (6.35)	100	96F7798	43.90
34854		#10	0.375 x 1.098	0.23 (5.84)	500	97F9809	102.66
8-34854-1		#10	0.375 x 1.098	0.25 (6.35)	100	96F7917	41.30
8-34855-2		0.25″	0.531 x 1.327	0.25 (6.35)	50	96F7927	55.15
34855		1/4	0.531 x 1.327	0.25 (6.35)	1	66H7458	0.37
55678-1		0.25″	0.400 x 1.373	0.3 (7.62)	1	18H6187	0.47
8-34173-2		0.375″	0.593 x 1.421	0.23 (5.84)	50	96F7913	56.82
8-34856-2		0.313″	0.531 x 1.327	0.25 (6.35)	50	96F7202	58.21
34856		0.313″	0.531 x 1.327	0.25 (6.35)	1	66H7064	0.38
8-34837-2		0.5″	0.750 x 1.594	0.25 (6.35)	50	96F7552	54.00
52045-5	0AWG	0.375″	0.807 x 2.447	0.665 (16.89)	1	15H9186	5.72
52045-1		0.313″	0.807 x 2.447	0.684 (17.37)	1	22C5520	5.72
52041	8AWG	#8	0.478 x 1.586	0.36 (9.14)	100	54H0963	47.38
52263		#10	0.431 x 1.556	0.36 (9.14)	100	66F1520	44.00
52263-1		#10	0.431 x 1.576	0.33 (8.38)	100	66F1517	57.23
52041-1		0.25″	0.478 x 1.586	0.36 (9.14)	100	66F1488	51.00
52041-3		0.25″	.0478 x 1.600	0.33 (8.38)	100	66F1555	71.80
52291-1		0.375″	0.587 x 1.696	0.36 (9.14)	100	52F3362	86.80
52291		0.313″	0.587 x 1.696	0.36 (9.14)	100	52F3363	91.00
52042-2	6AWG	#8	0.500 x 1.869	0.36 (9.14)	100	54H0967	97.27
52265		#10	0.468 x 1.719	0.436 (11.07)	100	54H0978	52.01
52042-4		#10	0.500 x 1.844	0.436 (11.07)	100	54H0968	89.90
52042-1		0.25″	0.500 x 1.844	0.436 (11.07)	100	54H0966	93.52
52042-3		0.25″	0.500 x 1.869	0.36 (9.14)	100	52F4951	94.46
52264-1		0.375″	0.625 x 1.906	0.45 (11.43)	100	92F6096	107.70
52043-2	4AWG	#10	0.546 x 1.948	0.45 (11.43)	100	54H0971	107.00
52043-1		0.25″	0.546 x 1.948	0.515 (13.08)	100	54H0970	129.08
52267-1	2AWG	0.25″	0.675 x 2.071	0.56 (14.22)	1	23C7057	2.03

PLASTI-GRIP® SPADE TONGUE TERMINALS — FIG. 2

Mfg. Part No.	Wire Size	Stud Size	Insulation Diameter Inch (mm)	Pkg. of	Stock No.	Price per Pkg. 1-4
8-320665-1	22AWG to 16AWG	#6	0.14 (3.55)	100	96F7525	42.65
8-34155-1		#8	0.14 (3.55)	100	96F7203	49.83
53241-2		##8	0.14 (3.56)	100	90F6234	0.51
8-34156-1		#10	0.14 (3.55)	100	96F7278	27.15
8-322994-1	16AWG to 14AWG	#6	0.145 (3.68)	100	96F7282	26.07
8-34166-1		#8	0.17 (4.32)	100	96F7283	37.50
8-34167-1		#10	0.17 (4.32)	100	96F7777	47.90
8-34176-1	12AWG to 10AWG	#10	0.23 (5.84)	100	96F7799	40.16

PLASTI-GRIP® FLANGED SPADE TONGUE TERMINAL — FIG. 3

8-322249-1	22AWG to 16AWG	#6	0.14 (3.55)	100	96F7279	40.90
8-324169-1		#8	0.14 (3.55)	100	96F7479	50.40
8-324165-1	16AWG to 14AWG	#6	0.17 (4.32)	100	96F7284	39.92
8-324581-2	12AWG to 10AWG	#6	0.23 (5.84)	50	96F7657	89.00
8-324172-2		#8	0.23 (5.84)	50	96F7658	33.25

PLASTI-GRIP® SPRING SPADE TONGUE TERMINAL — FIG. 4

8-52949-1	22AWG to 16AWG	#6	0.14 (3.55)	100	96F7900	34.20
52463	16AWG to 14AWG	#6	0.17 (4.32)	1	66H7115	0.32
53244-1		#8	0.17 (4.32)	1	52R2479	0.37
8-52961-2	12AWG to 10AWG	#6	0.2 (5.08)	50	96F7676	64.50

➤CONTINUED➤

AMP PLASTI-GRIP® TERMINALS AND SPLICES (CONT.)

PLASTI-GRIP® BUTT SPLICES — FIG. 5

Mfg. Part No.	Wire Size	Dimensions W x L (in.)	Insulution Diameter Inch (mm)	Pkg. of	Stock No.	Price per Pkg. Each
● 8-321026-1	26AWG to 22AWG	0.62	0.08 (2.03)	100	**96F7530**	60.70
● 34067	22AWG to 16AWG	1.065	0.12 (3.05)	1000	**97F9845**	212.00
● 2-34071-1	16AWG to 14AWG	1.065	0.17 (4.32)	1	**33B6595**	0.51
● 8-34204-1		1.065	0.135 x 0.245	100	**96F7486**	57.60
● 2-34072-2	12AWG to 10AWG	1.16	0.23 (5.84)	1	**74C5698**	0.81

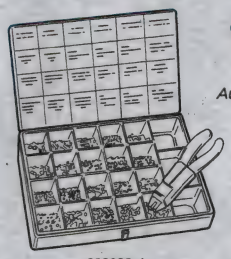
Designed for economical insulated electrical terminations in most commercial and many industrial applications. UL recognized to 600V; CSA certified, LR7 189 to 600V, 90°C maximum. **NOTE**: 22-16 terminals and splices are stamped 22-18 in accordance with MIL-T-7928. *Order* **mfg. part nos. 47386-4**, **169400** and **169404** crimp tools and die sets *separately on page 1116*. **Sold in package quantities listed in tables below**.
(5540)

AMP 500-PC. PIDG® TERMINAL KIT

TE connectivity

Authorized Distributor

Kit contains insulated PIDG® ring and spade terminals, butt splices, and FASTON® receptacles in wire sizes 22-10 AWG. Available with or without SUPER CHAMP® IV crimp tool. Packaged in heavy-duty, metal storage case.



608028-1

Mfg. Part No.	Description	Stock No.	Price Each
608028-1	Kit with Crimp Tool	**87F4077**	342.41
608028-2	Kit without Crimp Tool	**87F4078**	162.07

(5545)

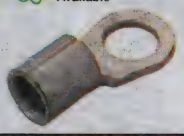
AMP BUDGET RING TONGUE TERMINALS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Terminal Body: Copper Per ASTM-B-152
- Plating: Tin Per MIL-T-10727
- Temperature Rating: 170°C Max.



Mfg. Part No.	AWG	Stud Size	Dimensions (in.) W x L	Stock No.	Price Each 1-9
● 31423	26-22	0	0.140 x 0.329	**29C5847**	0.16
● 31425		2	0.140 x 0.329	**96B9814**	0.15
● 33695		2	0.203 x 0.450	**66H7031**	0.18
● 322771		2	0.140 x 0.419	**01E9222**	0.19
● 31430		6	0.203 x 0.450	**66H6942**	0.15
● 31088	22-16	2	0.218 x 0.499	**66H6932**	0.25
● 320677		2	0.182 x 0.446	**33B8168**	0.24
● 31089		4	0.218 x 0.449	**66H7452**	0.21
● 322418		4	0.250 x 0.621	**13H1190**	0.18
● 31091		6	0.218 x 0.449	**66H6933**	0.24
● 31264		6	0.281 x 0.574	**66H6940**	0.20
● 30691		6	0.312 x 0.621	**90B1963**	0.23
● 30692		8	0.312 x 0.621	**66H6926**	0.20
● 32823		8	0.344 x 0.653	**66H7005**	0.20
● 30693		10	0.312 x 0.621	**05C0277**	0.24
● 30694		12	0.312 x 0.621	**66H6927**	0.19
● 31498		3/8	0.531 x 0.995	**66H6943**	0.29
● 328970		1/2	0.713 x 1.070	**66H7013**	0.62
● 30695	16-14	6	0.343 x 0.636	**66H6928**	0.23
● 322235		8	0.312 x 0.590	**06C0784**	0.23
● 51872-5		10	0.312 x 0.621	**27C1169**	0.24
● 31163		12	0.469 x 0.855	**66H6937**	0.21
● 31164		1/4	0.469 x 0.855	**66H6938**	0.23
● 328971		1/2	0.713 x 1.070	**66H7014**	0.62
● 34892	12-10	6	0.281 x 0.630	**66H7066**	0.33
● 31112		6	0.375 x 0.765	**66H6934**	0.33
● 31113		8	0.375 x 0.765	**67C2334**	0.31
● 34965		1/4	0.500 x 0.865	**66H7068**	0.31
● 52269-1		1/2	0.715 x 1.102	**66H7101**	0.31

(75875)

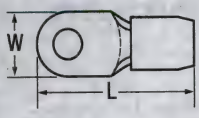
AMP TERMINYL® RING TONGUE TERMINALS

RoHS Compliant Available

TE connectivity

Authorized Distributor

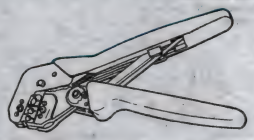
- Insulation Material: Nylon, Rated UL94V-2
- Terminal Body: Copper Per ASTM-B-152
- Plating: Tin Per ASTM-B-545
- Temperature Rating: 105°C Max.
- **Sold in Package Quantities Listed Below**



Mfg. Part No.	AWG	Stud Size	Dimensions W x L	Pkg. of	Stock No.	Price per Pkg. Each
● 53041	8AWG	#8	0.478 x 1.425″	1	**50F3284**	2.11
● 324043		#10	0.431 x 1.402″	100	**54H0874**	109.75
● 324082		0.25″	0.478 x 1.425″	100	**54H0884**	128.02
● 324044		0.313″	0.587 x 1.542″	100	**54H0875**	175.56
● 324046	6AWG	#10	0.468 x 1.575″	100	**54H0877**	250.00
● 324047		0.25″	0.500 x 1.700″	100	**54H0878**	200.00
● 324048		0.313″	0.625 x 1.762″	100	**54H0879**	237.24
● 324050	4AWG	0.25″	0.546 x 1.812″	100	**54H0880**	241.81
● 324052		0.375″	0.679 x 1.878″	100	**54H0882**	332.00
● 324114		0.5″	0.679 x 1.878″	1	**40C1844**	3.91
● 324054	2	0.375″	0.711 x 2.063″	50	**58H5511**	213.95
● 324056	0AWG	0.25″	0.807 x 2.426″	1	**67C0827**	6.40

(75874)

AMP PRO-CRIMPER™ III HAND TOOL



TE connectivity

Authorized Distributor

PRO-CRIMPER™ III tool frame requires less hand force to produce the same connection as comparable tools. With interchangeable die sets it can crimp many different types of connectors. Multiple terminal sizes are accommodated in one die. Has angled head for comfortable hand and wrist position. Ratchet control provides complete crimping cycle. Features emergency ratchet release and extra strong pivot pins for greater durability. Constructed of rugged high-carbon steel with cushioned handles. Various interchangeable die sets for the **PRO-CRIMPER™** tool frame are available; *go online or call*.

Mfg. Part No.	PRO-CRIMPER™ II Tool Frame	Stock No.	Price 1-4
58433-3	With Die Set for Insulated Terminals and Splices, PIDG® and PLASTI-GRIP®, 22-10 AWG	**97F9552**	164.41
58433-2	With Die Set for Hex Crimp 50-Ohm BNC/TNC Coaxial Connectors, 58, 62, 59 RG/U	**50F1983**	258.31
58448-2	With Die Set for D-Sub 20 DF Pin and Socket Contacts, 28-24, 24-20 AWG	**44F8730**	327.02

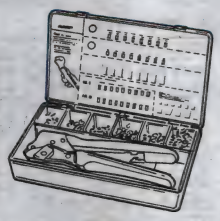
(8291)

AMP TERMINAL KITS

TE connectivity

Authorized Distributor

Mfg. part no. 608029-1 500-piece PLASTI-GRIP® terminal kit contains **mfg. part no. 696126-1** SUPER CHAMP® crimp tool, 225 rings, 200 spades, and 75 butt splices in wire sizes 22-10 AWG. Packaged in heavy-duty metal box. **Mfg. part no. 55823-1** 225-piece PLASTI-GRIP® and PIDG® terminal kit contains PRO-CRIMPER™ II hand tool and 225 ring and spade terminals in wire sizes 12-10, 16-14, and 22-16 AWG. Packaged in sturdy storage box.



55823-1

Mfg. Part No.	Description	Stock No.	Price Each
608029-1	PLASTI-GRIP® Kit with SUPER CHAMP® Crimp Tool	**87F4079**	402.82
55823-1	PLASTI-GRIP® and PIDG® Kit with PRO-CRIMPER™ II Hand Tool	**92F1358**	344.97

(5542)

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(212563)

AMP SOLISTRAND® PARALLEL SPLICES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Body Material: Copper Per ASTM-B-152
- Plating: Tin Per MIL-T-10727

Sold in package quantities listed in table below.

Mfg. Part No.	Wire Size	Length (in.)	Pkg. of	Stock No.	Price per Pkg. Each	Price per Pkg. 2-4
8-34130-1	22AWG to 16AWG	0.301	100	96F7781	51.40	47.85
34137	16AWG to 14AWG	0.301	1	66H7037	0.12	0.11
34138	12AWG to 10AWG	0.343	1	20C4195	0.16	0.13
34318	8AWG	0.375	1	92C3594	0.30	0.27
34320	4AWG	0.531	100	87F5689	66.30	62.22
35187	2AWG	0.640	1	34C7005	1.40	1.25
36946	0AWG	0.734	50	87F5691	81.50	69.90
36909	000AWG	0.749	50	58H5553	304.00	251.25

(75876)

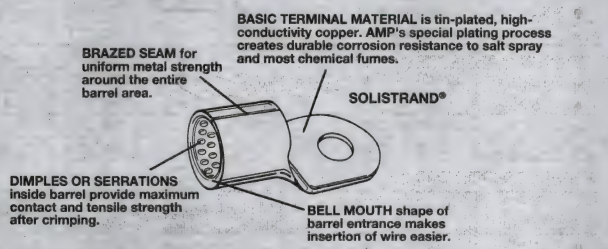
AMP SOLISTRAND® TERMINALS AND SPLICES

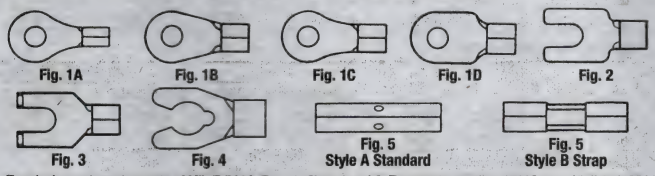
UL CSA

RoHS Compliant Available

TE connectivity

Authorized Distributor





Terminals meet requirements of MIL-T-7928, Type 1, Class 1 and 2. Temperature rating: 170°C max. UL listed; CSA certified LR7189. *Order crimp tools separately below and* **mfg. part no. 49935** *crimp tool separately on page 1116.*

SOLISTRAND® RING TONGUE TERMINALS

Mfg. Part No.	Fig.	AWG	Stud Size	Pkg. of	Stock No.	Price per Pkg. Each
8-34113-1	1A	22AWG to 16AWG	0.25″	100	96F7205	30.77
8-34114-1	1A	22AWG to 16AWG	0.313″	100	96F7350	20.62
8-34115-1	1A	22AWG to 16AWG	0.375″	100	96F7168	18.72
8-329966-1	1A	22AWG to 16AWG	0.5″	100	96F7208	104.00
34103	1A	22AWG to 16AWG	#2	1	66H7033	0.44
322927	1A	22AWG to 16AWG	#2	1	93B5010	0.40
8-34104-1	1A	22AWG to 16AWG	#4	100	96F7167	30.80
323096	1A	22AWG to 16AWG	#4	1	50B8855	0.45
31089	1A	22AWG to 16AWG	#4	1	66H7452	0.21
36467	1A	22AWG to 16AWG	#4	1	87F5920	0.32
8-34105-1	1A	22AWG to 16AWG	#6	100	96F7554	27.75
34107	1A	22AWG to 16AWG	#6	1	66H7034	0.17
34110	1A	22AWG to 16AWG	#6	1	92B5204	0.25
8-34108-1	1A	22AWG to 16AWG	#8	100	96F7460	26.95
34111	1A	22AWG to 16AWG	#8	1	96B9817	0.17
8-34111-1	1A	22AWG to 16AWG	#8	100	96F7169	21.44
8-34109-1	1A	22AWG to 16AWG	#10	100	96F7348	34.10
321896	1A	22AWG to 16AWG	#10	1	95B5496	1.36
8-34112-1	1A	22AWG to 16AWG	#10	100	96F7461	25.11
8-34124-1	1A	16AWG to 14AWG	0.25″	100	96F7780	30.60
35775	1A	16AWG to 14AWG	0.25″	1	50F3270	0.54
8-34125-1	1A	16AWG to 14AWG	0.313″	100	96F7160	19.75
35776	1A	16AWG to 14AWG	0.313″	1	33B8280	0.63
8-34126-1	1A	16AWG to 14AWG	0.375″	100	96F7204	36.19
327732	1A	16AWG to 14AWG	0.375″	1	13H1309	0.93
50981	1A	16AWG to 14AWG	0.5″	1	30C3110	0.49
321165	1A	16AWG to 14AWG	0.5″	1	66H6968	1.05
34119	1A	16AWG to 14AWG	#4	1	50F3269	0.19
8-34120-1	1A	16AWG to 14AWG	#6	100	96F7352	28.10
321684	1A	16AWG to 14AWG	#6	1	38C6831	0.27
34121	1A	16AWG to 14AWG	#6	1	66H7036	0.24
8-34122-1	1A	16AWG to 14AWG	#8	100	96F7354	27.00

CONTINUED

AMP SOLISTRAND® TERMINALS AND SPLICES (CONT.)

Mfg. Part No.	Fig.	AWG	Stud Size	Pkg. of	Stock No.	Price per Pkg. Each
8-34123-1	1A	16AWG to 14AWG	#10	100	96F7356	26.95
320093	1A	16AWG to 14AWG	#10	1	33B8166	0.22
323087	1A	16AWG to 14AWG	#10	1	66H6988	0.43
34567	1A	16AWG to 14AWG	#10	1	66H7058	0.44
321828	1A	14AWG to 12AWG	#10	1	66H6973	0.36
8-33458-2	1A	12AWG to 10AWG	0.25″	50	87F5952	21.09
35772	1A	12AWG to 10AWG	0.25″	1	98F5900	0.24
320764	1A	12AWG to 10AWG	0.625″	100	90B0779	2.39
8-33459-2	1A	12AWG to 10AWG	0.313″	50	87F5953	22.13
8-33220-2	1A	12AWG to 10AWG	0.375″	50	96F7147	38.65
320763	1A	12AWG to 10AWG	0.5″	1	05C0060	2.46
35135	1A	12AWG to 10AWG	0.5″	1	50F3271	0.50
322447	1A	12AWG to 10AWG	#4	1	99F5566	0.34
8-35476-2	1A	12AWG to 10AWG	#6	50	92F1567	25.50
33456	1A	12AWG to 10AWG	#6	1	98F2352	0.34
34892	1A	12AWG to 10AWG	#6	1	66H7066	0.33
8-32994-2	1A	12AWG to 10AWG	#8	50	87F5948	33.27
322454	1A	12AWG to 10AWG	#8	1	08C3675	0.31
31113	1A	12AWG to 10AWG	#8	1	67C2334	0.31
8-33457-1	1A	12AWG to 10AWG	#10	100	96F7342	31.62
322455	1A	12AWG to 10AWG	#10	1	13H1196	0.36
31805	1A	12AWG to 10AWG	#10	1	45C6992	0.80
323680	1A	12AWG to 10AWG	#10	1	50F549	4.22
36809	1A	6AWG	0.625″	1	97C5837	1.92
35668	1A	4AWG	0.5″	1	92B1173	2.24
31428	1A	26AWG to 22AWG	#4	1	93B6909	0.13
321880	1B	0000AWG	0.5″	50	58H5483	388.00
321271	1B	0000AWG	0.313″	50	52F2953	442.50
36932	1B	0000AWG	0.375″	50	58H5557	264.55
321878	1B	0000AWG	0.375″	50	52F2951	264.50
36927	1B	000AWG	0.375″	50	58H5555	249.28
34486	1B	14AWG to 12AWG	0.375″	1	13H1486	1.06
34484	1B	14AWG to 12AWG	#10	1	17C2098	0.40
8-35247-2	1B	8AWG	0.25″	50	96F7786	77.00
33461	1B	8AWG	0.25″	100	87F5960	25.50
8-33462-1	1B	8AWG	0.313″	100	96F7347	104.70
31808	1B	8AWG	0.313″	1	97C7085	0.43
8-33463-1	1B	8AWG	0.375″	100	96F7200	110.83
35664	1B	8AWG	0.5″	1	66H7076	1.49
32996	1B	8AWG	#8	100	87F5958	41.20
324061	1B	8AWG	#8	100	87F5957	58.20
33460	1B	8AWG	#10	100	66F1513	36.06
33465	1B	6AWG	0.25″	100	92F1371	34.00
321598	1B	6AWG	0.25″	1	33B8171	0.48
8-33466-3	1B	6AWG	0.313″	25	96F7201	47.70
8-33467-3	1B	6AWG	0.375″	25	96F7166	41.42
321298	1B	6AWG	#10	1	29C6160	0.62
52197	1B	6AWG	#10	1	66H7095	0.66
8-33469-2	1B	4AWG	0.25″	50	96F7881	121.45
31811	1B	4AWG	0.25″	1	90B6062	0.68
8-33470-2	1B	4AWG	0.313″	50	96F7882	75.09
8-33471-2	1B	4AWG	0.375″	50	96F7778	159.42
31812	1B	4AWG	0.375″	100	54H0827	136.00
33114	1B	4AWG	#10	100	87F5469	102.63
8-33468-3	1B	4AWG	#10	25	92F5908	70.67
31807	1C	8AWG	#10	100	66F7208	36.00
33464	1C	6AWG	#10	100	52F2963	81.40
320138	1C	2AWG	0.25″	50	58H5468	126.50
35184	1C	2AWG	0.375″	50	58H5547	68.85
8-320383-3	1D	2AWG	0.25″	25	96F7803	80.25
321873	1D	00AWG	0.5″	50	52F2948	252.88
321869	1D	00AWG	0.25″	50	52F2950	364.05
322224	1D	00AWG	0.625″	50	50F3225	523.70
321870	1D	00AWG	0.313″	50	58H5477	252.07
8-322870-3	1D	2AWG	0.313″	25	96F7304	67.00
8-36923-3	1D	00AWG	0.375″	25	96F7308	212.86
321600	1D	2AWG	0.375″	50	92F1377	59.25
321871	1D	00AWG	0.375″	50	58H5478	216.54
36925	1D	00AWG	0.5″	1	66H7080	4.01
36915	1D	0AWG	0.25″	50	50F3207	199.17
321866	1D	0AWG	0.25″	50	58H5476	197.10
8-321867-3	1D	0AWG	0.313″	25	96F7305	156.46
321868	1D	0AWG	0.375″	50	92F8474	141.10
8-36917-3	1D	0AWG	0.375″	25	96F7306	102.30

CONTINUED

AMP SOLISTRAND® TERMINALS AND SPLICES (CONT.)

Mfg. Part No.	Fig.	AWG	Stud Size	Pkg. of	Stock No.	Price per Pkg. Each
● 36919	1D	0AWG	0.5″	50	50F3210	141.00
● 35185	1D	2AWG	0.5″	50	58H5548	138.60
● 35183	1D	2AWG	0.313″	50	58H5546	84.75

SOLISTRAND® SPADE TONGUE TERMINALS

Mfg. Part No.	Fig.	AWG	Stud Size	Pkg. of	Stock No.	Price per Pkg. 1-4
● 8-53555-1	2	22AWG to 16AWG	#2	100	96F7986	61.42
● 8-323127-1	2	22AWG to 16AWG	#6	100	96F7193	21.02
● 8-36195-1	2	22AWG to 16AWG	#6	100	96F7987	29.84
● 34118	2	22AWG to 16AWG	#10	1	66H7035	0.18
● 8-322996-1	2	16AWG to 14AWG	#6	1	99F4398	0.43
● 8-322451-2	2	12AWG to 10AWG	#6	50	96F7989	55.62
● 8-32995-1	2	12AWG to 10AWG	#8	100	96F7897	36.22
● 8-35495-2	2	12AWG to 10AWG	#10	50	96F7471	33.13
● 8-320749-1	3	22AWG to 16AWG	#6	100	96F7660	32.20
● 323136	3	22AWG to 16AWG	#6	1	66H6990	0.42
● 52730	3	22AWG to 16AWG	#8	1	66H7118	0.36
● 8-320855-1	3	16AWG to 14AWG	#6	100	96F7526	57.30
● 324578	3	12AWG to 10AWG	#6	1	17H7141	0.41
● 323144	3	12AWG to 10AWG	#10	1	17H7115	0.44
● 53175-1	4	22AWG to 16AWG	#4	1	66H7123	0.42
● 53124-1	4	16AWG to 14AWG	#8	1	66H7120	0.28

SOLISTRAND® BUTT SPLICES

Mfg. Part No.	Fig.	AWG	Style	Pkg. of	Stock No.	Price per Pkg. 1-4
● 8-321198-1	5	26AWG to 22AWG	B	100	96F7161	45.90
● 8-324001-1	5	24AWG to 20AWG	B	100	96F7194	36.00
● 8-31818-1	5	22AWG to 16AWG	A	100	96F7333	47.90
● 8-31819-1	5	16AWG to 14AWG	A	100	96F7517	62.95
● 8-32151-2	5	12AWG to 10AWG	A	50	96F7529	41.10
● 34319	5	6AWG	A	1	01C5561	0.47
● 8-34323-3	5	4AWG	A	25	96F7916	84.79

SOLISTRAND® DOUBLE BARREL TERMINALS

Mfg. Part No.	Fig.	AWG	Body Shape	Pkg. of	Stock No.	Price per Pkg. 1-24
● 329254	...	12AWG to 10AWG	Type 1	1	92F4779	0.39

HAND TOOLS FOR SOLISTRAND® TERMINALS

Mfg. Part No.	Description	Stock No.	Price Each
600850	Bantam Rota-Crimp for 8-1/0 AWG Terminals	98F5870	1210.97
601075	Rota-Crimp for 8-1/0 AWG Terminals	90B9267	1346.57

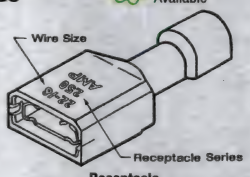
(5563)

AMP ULTRA-FAST FASTON® RECEPTACLES AND TABS

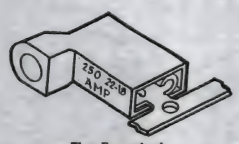
RoHS Compliant Available

TE connectivity

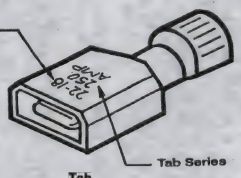
Authorized Distributor



Receptacle



Flag Receptacle



Tab

Completely protected terminal and wire crimp with comparable electromechanical performance to open barrel "F" crimp Faston® terminals. Receptacles, flag receptacles and tabs are preinsulated assemblies featuring housing molded from type 6/6 nylon material with a +125°C UL temperature rating. Faston® receptacles and tabs are recessed sufficiently within the housing to allow its use in 600V applications. Assemblies are color-coded by wire size: Violet–26–22 AWG, Red–22-18 AWG, Blue–16-14 AWG, and Yellow–12-10 AWG. Terminal base material is brass, except for mfg. part nos. with (†) which denotes a phosphor bronze terminal base.

ULTRA-FAST FASTON® RECEPTACLES

Mfg. Part No.	AWG	Mating Tab	Ins. Dia. Max.	Stock No.	Price Each 1-24
● 2-520081-2	22AWG to 18AWG	0.016 x 0.110 or 0.125″	0.120″	90F3875	0.20
● 7-520366-2	26AWG to 22AWG	0.020 x 0.110 or 0.125″	0.100″	90F3874	0.20
● 2-520084-2	22AWG to 18AWG	0.020 x 0.110 or 0.125″	0.120″	90F3876	0.26
● 2-520273-2	22AWG to 18AWG	0.032 x 0.110 or 0.125″	0.120″	90F3877	0.20

➤CONTINUED➤

AMP ULTRA-FAST FASTON® RECEPTACLES AND TABS (CONT.)

Mfg. Part No.	AWG	Mating Tab	Ins. Dia. Max.	Stock No.	Price Each 1-24
● 2-520182-2	22AWG to 18AWG	0.020 x 0.187″	0.135″	90F3878	0.16
● 2-520194-2	22AWG to 18AWG	0.032 x 0.187″	0.135″	90F3879	0.24
● 2-520275-2	22AWG to 18AWG	0.032 x 0.187″	0.230″	90F3729	0.22
● 3-350816-2	16AWG to 14AWG	0.020 x 0.187″	0.160″	93F5817	0.19
● 3-520125-2	16AWG to 14AWG	0.032 x 0.187″	0.160″	90F3731	0.21
● 3-520151-2	16AWG to 14AWG	0.020 x 0.187″	0.260″	90F3732	0.23
● 2-520184-2	22AWG to 18AWG	0.320 x 0.250″	0.135″	90F3733	0.21
● 2-520184-4†	22AWG to 18AWG	0.320 x 0.250″	0.135″	90F3734	0.32
● 2-520264-2	22AWG to 18AWG	0.320 x 0.250″	0.230″	90F3735	0.20
● 3-350820-2	16AWG to 14AWG	0.320 x 0.250″	0.160″	90F3736	0.15
● 3-520117-2†	16AWG to 14AWG	0.320 x 0.250″	0.160″	90F3737	0.28
● 3-520141-2	16AWG to 14AWG	0.320 x 0.250″	0.260″	90F3720	0.20
● 3-520140-2	16AWG to 14AWG	0.320 x 0.250″	0.260″	58R2750	0.33
● 4-520448-2	12AWG to 10AWG	0.320 x 0.250″	0.320″	90F3721	0.27

ULTRA-FAST FASTON® FLAG RECEPTACLES

Mfg. Part No.	AWG	Mating Tab	Ins. Dia. Max.	Stock No.	Price Each 1-49
● 2-520335-2	22AWG to 18AWG	0.020 x 0.187″	0.165″	90F3727	0.33
● 3-520338-2	16AWG to 14AWG	0.020 x 0.187″	0.185″	72C5492	0.49
● 3-520339-2	16AWG to 14AWG	0.020 x 0.187″	0.185″	90F3713	0.29
● 2-520336-2	22AWG to 18AWG	0.032 x 0.187″	0.165″	90F3728	0.50
● 2-520337-2	22AWG to 18AWG	0.032 x 0.187″	0.165″	90F3711	0.29
● 3-520340-2	16AWG to 14AWG	0.032 x 0.187″	0.185″	90F3714	0.49
● 2-520129-2	22AWG to 18AWG	0.032 x 0.250″	0.165″	90F3716	0.26
● 3-520133-2	16AWG to 14AWG	0.032 x 0.250″	0.185″	90F3718	0.27

ULTRA-FAST FASTON® TABS

Mfg. Part No.	AWG	Mating Receptacle	Ins. Dia. Max.	Stock No.	Price Each 1-49
● 2-521105-2	22AWG to 18AWG	0.032 x 0.187″	0.135″	33B6729	0.33
● 4-521098-2	12AWG to 10AWG	0.032 x 0.250″	0.320″	33B8607	0.46

PIDG FASTON® PIGGYBACKS

Mfg. Part No.	AWG	Tab Size	Ins. Dia. Max.	Stock No.	Price Each 1-49
● 160834-2	22AWG to 15AWG	0.032 x 0.250″	0.140″	25C1643	0.71
● 9-160463-2	17AWG to 13AWG	0.032 x 0.250″	0.161″	95F1843	0.79

RECEPTACLE/TAB ADAPTER

● 61765-2	...	0.032 x 0.250″	0.140″	92F5384	0.29

AMPIP POST-INSULATION PODS STRAIGHT STYLE FASTON® UNINSULATED RECEPTACLE HOUSINGS

Mfg. Part No.	No. of Circuits	Tab Fit	Material	Stock No.	Price Each 1-49
● 1-480416-0	1	0.250″ (6.35 mm)	Natural Nylon	66F3297	0.21

HAND TOOLS FOR FASTON® RECEPTACLES AND TABS

Mfg. Part No.	Description	Stock No.	Price 1-4
58078-3	TETRA-CRIMP® Hand Tool Frame	98F6223	531.81
90390-3	Die Set for 0.110″ 22-18 AWG	98F5763	488.14
90391-3	Die Set for 0.110″ 16-14 AWG	50F539	453.79

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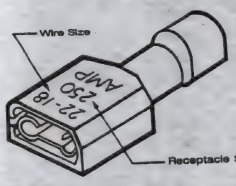
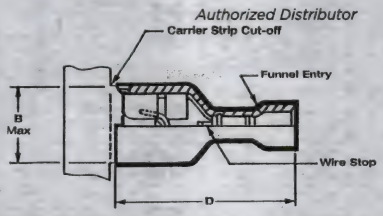
AMP ULTRA-FAST PLUS FASTON® RECEPTACLES AND TABS

RoHS Compliant Available

TE connectivity

Authorized Distributor





Offer all the advantages and conveniences of the standard ultra-fast product plus an insulation crimp. Assemblies are color-coded by wire size: Red–22-19 AWG and Blue–16-14 AWG. Tin-plated, copper alloy terminal with brass terminal base.

RECEPTACLES

Mfg. Part No.	Insulator Color	AWG	Mating Tab (in.)	Dimensions (in.) Width	Dimensions (in.) Height	Stock No.	Price Each 1-49
● 2-520409-2	Red	22AWG to 18AWG	0.020 x 0.187	0.336	0.855	90F3719	0.29
● 2-520411-2	Red	22AWG to 18AWG	0.032 x 0.187	0.336	0.855	25C3126	0.24
● 3-520410-2	Blue	16AWG to 14AWG	0.020 x 0.187	0.336	0.855	90F7568	0.24
● 3-520412-2	Blue	16AWG to 14AWG	0.032 x 0.187	0.336	0.855	25C3128	0.28

➤CONTINUED➤

AMP ULTRA-FAST PLUS FASTON® RECEPTACLES AND TABS (CONT.)

Mfg. Part No.	Insulator Color	AWG	Mating Tab (in.)	Dimensions (in.) Width	Dimensions (in.) Height	Stock No.	Price Each 1-49
2-520407-2	Red	22AWG to 18AWG	0.032 x 0.250	0.409	0.855	90F3752	0.25
3-520408-2	Blue	16AWG to 14AWG	0.032 x 0.250	0.409	0.855	90F3754	0.26

TABS

Mfg. Part No.	Insulator Color	AWG	Tab Size (in.)	Dimensions (in.) Width	Dimensions (in.) Height	Stock No.	Price Each 1-49
2-521360-2	Red	22AWG to 18AWG	0.020 x 0.187	0.488	0.793	15H3057	0.49
2-520103-2	Red	22AWG to 18AWG	0.032 x 0.250	0.487	0.855	90F3723	0.28
2-521192-2	Red	22AWG to 18AWG	0.032 x 0.250	0.522	0.855	93B3602	0.56
3-521191-2	Blue	16AWG to 14AWG	0.032 x 0.250	0.487	0.935	13H0076	0.43

HAND TOOLS FOR ULTRA-FAST PLUS FASTON® RECEPTACLES AND TABS

Mfg. Part No.	Description	Stock No.	Price 1-4
58078-3	TETRA-CRIMP® Hand Tool Frame	98F6223	531.81
58079-3	Die Set for 22-18 AWG	66F1496	819.87
58080-3	Die Set for 16-14 AWG	66F1490	1885.80

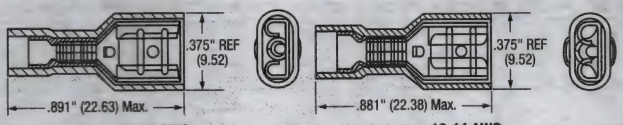
(33075)

AMP FULLY-INSULATED PIDG® FASTON® RECEPTACLES

RoHS Compliant Available

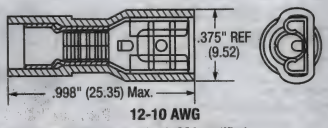
TE connectivity

Authorized Distributor



22-18 AWG

16-14 AWG



12-10 AWG

- Tin-Plated Brass Body
- Full Nylon Insulation Provides Wire Support
- Allows Wire to Bend Without Fraying or Breaking the Conductor
- Mating Tab: 0.250 x 0.032" (6.35 x 0.81)

Applications: power supplies, automotive, motors and instrumentation. UL recognized, CSA certified.

Mfg. Part No.	AWG	Stock No.	Price Each 1-9
696357-1	22-18	91C3763	0.42
696366-1	16-14	91C3764	0.42
696371-1	12-10	91C3765	0.67

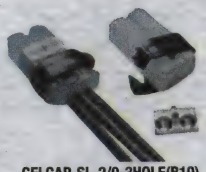
(73117)

GELCAP POWERGEL STUB SPLICE KITS

TE connectivity

Authorized Distributor

GELCAPS



GELCAP-SL-2/0-3HOLE(B10)

- Quickly insulates, seals, and protects
- Water-resistant
- Abrasion and UV resistance
- Compact, corrugated design
- Easy to install and remove
- Accommodates a wide range of cable sizes

GelCap splice cover kits quickly and conveniently insulate, seal, and protect stub splice connections up to 1000V. The PowerGel sealant consists of a silicone-based cross-linked polymer mix that is halogen free and provides physical protection, electrical insulation, an excellent moisture seal over a wide temperature range (-40°C to over 90°C) and is compatible with cable jacket materials. Engineered to handle the harsh environment of motor connections applications, GelCap splice cover kits are equally well suited for many other stub connection applications including outdoor lighting, such as street light connections, over wire nuts for sealing, irrigation systems, and HVAC.

STUB SPLICE KITS

Mfg. Part No.	Kit Contents	Feeder Conductor Wire Size	Stock No.	Price Each 1-4
GELCAP-1(B5)	One Each: Cap and Cap Clamp	16-10 AWG, 1.5-5mm²	87R0871	25.04
GELCAP-2(B5)	Three Each: Cap and Cap Clamp	8-2 AWG, 8-35mm²	87R0872	33.19
GELCAP-3(B5)	Three Each: Cap and Cap Clamp	2-4/0 AWG	87R0873	68.37
GELCAP-4(B5)	Three Each: Cap and Cap Clamp	250-500kc mil	87R0874	121.33

CONTINUED

GELCAP POWERGEL STUB SPLICE KITS (CONT.)

STUB SPLICE AND TAP KIT

Mfg. Part No.	Kit Contents	Feeder Conductor Wire Size	Stock No.	Price Each 1-4
GELCAP-SL-2/0-3HOLE(B10)	One Each: Cap, Cap Clamp, Connector	14-2/0 AWG (Feeder) 14-6 AWG (Tap)	87R0869	26.06

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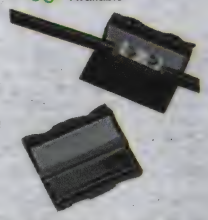
POWERGEL SPLICE AND TAP KITS

RoHS Compliant Available

TE connectivity

Authorized Distributor



- PowerGel quickly seals and insulates
- Water and abrasion resistant
- Protects from moisture ingress, corrosion, and pollution
- Easy one-step, snap-shut installation saves time
- No special tools required
- Easy and safe re-entry
- Splices a wide range of cable

PowerGel sealant splice and tap kits offer a state-of-the-art sealed splice or tap for underground and overhead applications. Each closure configuration offers a fast and simple method for splicing, insulating, and environmentally sealing low-voltage cable splices up to 600V. The PowerGel sealant consists of a silicone-based cross-linked polymer mix. It conforms to and seal surfaces and has elasticity and shape retention for easy handling. The gel and its cover provide physical protection, electrical insulation, and a convenient means of delivering compression. This halogen-free gel provides an excellent moisture seal over a wide temperature range (-40°C to over 90°C) and is compatible with cable jacket materials. Simply install the connector, place the closure around the connector, and snap it closed. No tapes, mastic, tools or mixing are required.

IN-LINE SPLICE KITS — INCLUDES ENCLOSURE AND IN-LINE MECHANICAL CONNECTOR

Mfg. Part No.	Conductor Sizes (AWG) Main	Conductor Sizes (AWG) Tap	Stock No.	Price Each 1-9
GILS-4/0(B18)	2-4/0	...	87R0896	25.14
GILS-4/0(B72)	2-4/0	...	87R0897	18.11
SPLICE AND TAP KITS — INCLUDES ENCLOSURE AND 4-WAY SPLICE TAP CONNECTOR				
GTAP-1(B18)	14-2	14-2	87R0898	27.69
GTAP-1(B72)	14-2	14-2	87R0899	23.83
GTAP-2(B18)	14-2/0	14-2/0	87R0900	33.01
GTAP-2(B72)	14-2/0	14-2/0	87R0901	28.75
SPLICE TAP BOX (H-FRAME ENCLOSURE) ONLY — H-FRAME CONNECTOR NOT INCLUDED				
GHFC-1-90(B10)	6-2	14-8	87R0889	13.44
GHFC-1-90(B100)	6-2	14-8	87R0890	11.91
GHFC-2-90(B10)	2-2/0	14-6	87R0891	18.38
GHFC-2-90(B100)	2-2/0	14-6	87R0892	18.02

(192393)

10-PC. HEAT-SHRINK WIRE CAP ASSORTMENT

c UL us

TE connectivity

Authorized Distributor

- Seals small wire stub slices
- 3:1 Shrink ratio
- 600V
- Provides wire termination with rugged protection against abrasion, vibration and flexing
- Ideal for permanent or temporary splash-resistant applications
- UL recognized

Mfg. part no. CPGI-PD-CAP-ASRT-CL-10 10-Pc. heat-shrink insulation cap assortment includes two each of: ⅛", 3/16", ¼", 3/8", and ½" caps. Use for solid or stranded copper wire only. Operating temperature range: -55° to 110°C (-67° to 230°F).

Mfg. Part No.	Description	Stock No.	Price Each 1-24
CPGI-PD-CAP-ASRT-CL-10	10-Pc. Heat-Shrink Wire Cap Assortment	87R0779	6.31

(192395)

Custom Cable Assembiles to your specs to mate with the complete line of connectors!
Call 1.800.463.9275

(212562)

AMP HAND TOOLS FOR TERMINALS AND SPLICES

TE connectivity

Authorized Distributor

55893-1 59824-1 49935

58433-3 696126-1

Mfg. part no. 58433-3 PRO-CRIMPER™ II hand tool frame, complete with **mfg. part no. 58423-1** interchangeable die set assembly, crimps PIDG® and PLASTI-GRIP® insulated terminals and splices 22-16, 16-14, and 12-10 AWG. Features angled head for comfortable hand and wrist position. Ratchet control provides complete crimping cycle plus emergency ratchet release and extra strong pivot pins for greater durability. Constructed of rugged high-carbon steel with cushioned handles for comfort. Various interchangeable die sets fit into tool frame, including replacement die set **mfg. part no. 58423-1**, *ordered separately below.*

Mfg. part no. 55893-1 hand tool crimps pre-insulated sealed terminals and splices 22-18, 16-14, 12-10 AWG.

Mfg. part no. 49935 CERTI-CRIMP® hand tool with ratchet control provides a complete crimping cycle. Crimps SOLISTRAND® terminals and splices 22-16, 16-14, and 12-10 AWG. Features insulation crimp adjustment, a locator for proper terminal positioning and support, a wire stop, and color coding and/or wire information on the tool head or handles. Designed to exacting dimensions, requires minimum skill to operate, and is repairable. Suited for military, UL and CSA applications.

Mfg. part no. 59824-1 TETRA-CRIMP® hand tool crimps PIDG® and PLASTI-GRIP® insulated terminals and splices 26-22, 22-16, 16-14, and 12-10 AWG. Dies travel in arc-like path. Features multiple color-coded crimping cavities, terminal locator and wire stop, and ratchet control release.

Mfg. part no. 696126-1 SUPER CHAMP® multipurpose hand tool features wire stripper, cutter, and multiple crimping options. Ideal for stripping wire, cutting bolts and crimping insulated terminals and splices 12-10, 16-14, and 22-18 AWG. Constructed of high-carbon, heat-treated steel with PVC cushion grips on handles.

Mfg. Part No.	Description	AWG	Stock No.	Price 1-4
58433-3	PRO-CRIMPER™ II Hand Tool Frame with Die Set	22-10	97F9552	164.41
58423-1	PRO-CRIMPER™ II Die Set for Insulated Terminals and Splices	22-10	66F3273	86.29
55893-1	Crimp Tool	22-10	92F1056	112.30
49935	CERTI-CRIMP® Hand Tool	22-10	50F548	510.93
59824-1	TETRA-CRIMP® Hand Tool	26-10	82F9908	339.97
696126-1	SUPER CHAMP® Multipurpose Hand Tool	22-10	35C2264	51.05
696202-1	SUPER CHAMP® Multipurpose Hand Tool	22-10	22C6015	116.39

(5543)

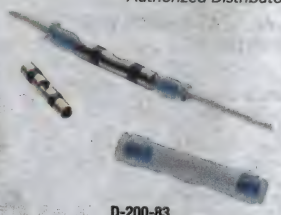
RAYCHEM D-200 SERIES MINISEAL CRIMP SPLICES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Ideal for wire to-wire in-line splicing
- Wire range from 26 to 12 AWG
- Immersion-resistant
- Small and lightweight
- Transparent sleeve offers inspectability
- Provides environmental protection and strain relief
- Designed for easy installation
- Meets SAE-AS81824/1 requirements (modified for 200°C applications)



D-200-83

D-200 series MiniSeal crimp splices were designed to provide an immersion-resistant in-line splice on 1:1 wires with nickel-plated conductors having an insulation rated for at least 135°C. Constructed of a nickel-plated copper alloy crimp splice with two color code rings and a heat-shrinkable, transparent blue, radiation cross-linked modified fluoropiymer insulation sleeve containing two meltable, environment-resistant, light blue thermoplastic fluoro-elastomer sealing rings. Ideal for aerospace and defense applications where performance, reliability and small size is essential. Meets or exceeds SAE-AMS-DTL-23053/13 (insulation sleeve only). Protects and seals RCW and BMS13-60 nickel-plated wires.

Mfg. Part No.	AWG	MIL Spec. Equivalen Size	I.D.* (mm) Min./Max.	Color Code	Stock No.	Price Each 1-24	Price Each 25-49
● D-200-82	26AWG to 20AWG	M81824/1-1	2.16 / 0.64	Red	22T9881	6.11	5.55
● D-200-83	20AWG to 16AWG	M81824/1-2	2.79 / 0.64	Blue	22T9882	6.65	6.04
● D-200-84	16AWG to 12AWG	M81824/1-3	4.32 / 0.64	Yellow	22T9883	7.34	6.67

*I.D.: Min. as received, Max. after unresticted recovery through meltable insert

(193416)

SOLDERSHIELD SPLICE KITS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Ideal for cable-to-cable in-line splicing
- Splices shielded multiconductor cable
- Environment-resistant
- Designed for easy installation
- Controlled soldering process
- 360° shielding eliminates EMI problems
- Transparent sleeves offer inspectability
- Provides strain relief and insulation

SolderShield splice kits are ideal for fabrication/repair/rework while restoring the electrical integrity of the shielded cable having one to four tin-, silver-, or nickel-plated copper conductors and insulations rated for 135°C min. Each kit includes one SolderShield splice consisting of a flux-coated, solder-impregnated copper shield braid encased in a insulation sealing sleeve, plus one, two or four MiniSeal crimp conductor splices with insulation sealing sleeves. **D-150 series** sealing sleeves are constructed of blue transparent, heat-shrinkable modified polyvinylidene fluoride and contain two sealing rings. **D-200 series** sealing sleeves are constructed of blue transparent, heat-shrinkable modified fluoropolymer and contain two sealing rings.

D-150 SERIES KIT WITH TIN-PLATED COPPER ALLOY MINISEAL SPLICE, ONE COLOR CODE RING

Mfg. Part No.	AWG	SolderShield Length (mm)	SolderShield O.D. (mm)	MiniSeal Crimp Splice Color Code	MiniSeal Crimp Splice No. per Kit	Stock No.	Price Each 1-9	Price Each 10-49
D-150-0169	20-16	80.52	4	Blue	1	57J0431	20.10	19.26
D-150-0175	18-16	105.92	5	Blue	2	18K5089	26.96	25.83
D-150-0180	18-16	105.92	6	Blue	4	09M3677	34.03	32.61
D-200 SERIES KIT WITH NICKEL-PLATED COPPER ALLOY MINISEAL SPLICE, TWO COLOR CODE RINGS								
● D-200-0229	20-16	80.52	4	Blue	1	22T9878	20.58	18.58
● D-200-0232	18-16	105.92	5	Blue	2	22T9879	30.60	27.62
● D-200-0238	14-12	108	9.04	Yellow	4	22T9880	48.45	45.61

(192452)

QUIXON QUICK-DISCONNECT TERMINALS

RoHS Compliant Available

molex

Features

- Offers lower insertion force and convenient blind-mating to industry standard tabs
- Flexing beam with standard dimple
- Side-relief cut design
- Flared-barrel entry for easy wire insertion
- Un-insulated, partially or fully insulated versions available

Krimptite™ Uninsulated Terminals

Mfg. Part No.	Insulation Material	Color	Wire Range (AWG)	Accepts Tab Size	Stock No.	Price Each 1-99
● 19273-0007	Uninsulated	...	22AWG to 18AWG	0.25″	48T6591	0.16
● 19273-0008	Uninsulated	...	16AWG to 14AWG	0.25″	48T6592	0.11
InsulKrimp™ Partially Insulated Terminals						
● 19274-0002	PVC (Polyvinyl Chloride)	Red	22AWG to 18AWG	0.25″	48T6596	0.24
● 19274-0005	PVC (Polyvinyl Chloride)	Blue	16AWG to 14AWG	0.25″	48T6599	0.27
InsulKrimp™ Fully Insulated Terminals						
● 19276-0002	Nylon 6.6 (Polyamide 6.6)	Red	22AWG to 18AWG	0.25″	48T6608	0.28
● 19276-0005	Nylon 6.6 (Polyamide 6.6)	Blue	16AWG to 14AWG	0.25″	48T6611	0.30
● 19276-0008	Nylon 6.6 (Polyamide 6.6)	Yellow	12AWG to 10AWG	0.25″	48T6614	0.41
AviKrimp™ Partially Insulated Terminals						
● 19275-0002	Nylon 6.6 (Polyamide 6.6)	Red	22AWG to 18AWG	0.25″	48T6602	0.28
● 19275-0005	Nylon 6.6 (Polyamide 6.6)	Blue	16AWG to 14AWG	0.25″	48T6605	0.28
AviKrimp™ Fully Insulated Terminals						
● 19277-0002	Nylon 6.6 (Polyamide 6.6)	Red	22AWG to 18AWG	0.25″	48T6617	0.47
● 19277-0005	Nylon 6.6 (Polyamide 6.6)	Blue	16AWG to 14AWG	0.25″	48T6620	0.47
● 19277-0008	Nylon 6.6 (Polyamide 6.6)	Yellow	12AWG to 10AWG	0.25″	48T6623	0.69

(198159)

FULLY-INSULATED QUICK-DISCONNECTS

RoHS Compliant Available

molex

AVIKRIMP® — MALE (STANDARD FLARE), ZINC-CHROMATE PLATED COPPER CONTACT, NYLON INSULATED

Avikrimp® fully-insulated male and female quick-disconnects feature a secure metal support sleeve, superior strain relief, and "smooth" edges. Meets the double-crimp requirements of VDE and other DIN specifications. UL listed, CSA certified, TÜV approved.

Mfg. Part No.	Insul. Color	Wire Range (AWG)	Accepts Tab Size	Stock No.	Price Each 1-99
19001-0001	Red	22-18	0.250 × 0.032″	55H2717	0.57
19001-0003	Red	22-18	0.187 × 0.020″	07H4150	0.60
19001-0006	Blue	16-14	0.250 × 0.032″	55H2720	0.50
19001-0007*	Blue	16-14	0.250 × 0.032″	94C7230	0.58
19001-0008	Blue	16-14	0.187 × 0.020″	55H2722	0.52
19001-0010	Yellow	12-10	0.250 × 0.032″	55H2723	0.60
AVIKRIMP® — FEMALE (STANDARD FLARE), TIN-PLATED BRASS CONTACT, NYLON INSULATED					
19002-0001	Red	22-18	0.250 × 0.032″	55H2725	0.51
19002-0002*	Red	22-18	0.250 × 0.032″	55H2726	0.77
19002-0005	Red	22-18	0.187 × 0.020″	55H2728	0.57
19002-0007*	Red	22-18	0.187 × 0.020″	55H2730	0.52
19002-0010*	Red	22-18	0.187 × 0.032″	55H2733	0.48
19002-0013	Red	22-18	0.110 × 0.020″	55H2736	0.58
19002-0025*	Blue	16-14	0.250 × 0.032″	94C7236	0.58
19002-0028**	Blue	16-14	0.187 x 0.020″	22H9962	0.57
19002-0032*	Blue	16-14	0.187 × 0.032″	55H2750	0.52
19606-0006*	Yellow	12-10	0.250 × 0.032″	25M7159	0.90

INSULKRIMP® — FEMALE (STANDARD FLARE), TIN-PLATED BRASS CONTACT, PVC INSULATED

InsulKrimp® fully-insulated quick-disconnects are designed for dense packaging requirements (low profile height). Translucent "see-through" insulator provides for fast inspection. Features funnel entrance for increased crimping rates and wire stop in barrel to prevent insertion of over-stripped wires. UL listed, CSA certified.

Mfg. Part No.	Insul. Color	Wire Range (AWG)	Accepts Tab Size	Stock No.	Price Each 1-99
19003-0001	Salmon	22-18	0.250 × 0.032″	73C7813	0.37
19003-0011	Red	22-18	0.187 × 0.020″	97C6429	0.34
19003-0013*	Red	22-18	0.187 × 0.020″	49H4912	0.34
19003-0026*	Red	22-18	0.110 × 0.020″	94C7248	0.52
19003-0020*	Pink	22-18	0.187 × 0.032″	81H2361	0.56
19003-0040	Blue	16-14	0.250 × 0.032″	75C9701	0.32
19003-0042*	Blue	16-14	0.250 × 0.032″	94C7251	0.30
19003-0050	Blue	16-14	0.187 × 0.020″	88C9510	0.36
19003-0052*	Blue	16-14	0.187 × 0.020″	73J7064	0.51
19003-0064†	Yellow	26-24	0.187 × 0.020″	54H0190	21.94
19003-0067*	Yellow	26-24	0.187 × 0.020″	55H2804	0.54
INSULKRIMP® — MALE COUPLER, ZINC-CHROMATE PLATED COPPER CONTACT, NYLON INSULATED					
19004-0004**	Red	22-18	0.250 × 0.032″	55H2830	0.48
INSULKRIMP® — FEMALE COUPLER, TIN-PLATED BRASS CONTACT, NYLON INSULATED					
19005-0001	Red	22-18	0.250 × 0.032″	73C6317	0.34
19005-0005	Blue	16-14	0.250 × 0.032″	94C7263	0.40
19005-0010	Yellow	12-10	0.250 × 0.032″	72C5241	0.45
19005-0015*	Yellow	12-10	0.250 × 0.032″	94C7265	0.56
19005-0014**	Yellow	12-10	0.250 × 0.032″	63M5030	0.38

KRIMPTITE® — FEMALE, BUTTED SEAM, TIN-PLATED BRASS CONTACT, NONINSULATED

Krimptite®, is noninsulated and features a quality, one-piece design. It is also the most economical style and has the greatest variety of uses where special features are not required.

Mfg. Part No.	Insul. Color	Wire Range (AWG)	Accepts Tab Size	Stock No.	Price Each 1-99
19016-0009	...	22-18	0.250 × 0.032″	94C7280	0.12

*Mylar tape; **Metal strip; †Sold in packages of 100
(5527)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

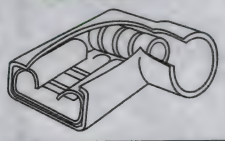
(212570)

FULLY-INSULATED QUICK-DISCONNECT FLAGS

RoHS Compliant Available

molex

- Nylon Insulated
- Right Angle, Space Saving Design
- UL listed, CSA certified



Mfg. Part No.	Color	Wire Range (AWG)	Accepts Tab Size	Stock No.	Price Each 1-99
19007-0001	Red	22-18	0.250 × 0.032″	55H2858	0.50
19007-0004*			0.250 × 0.032″	25H8237	0.57
19007-0009			0.187 × 0.020″	55H2863	0.46
19007-0029			0.187 × 0.020″	55H2881	0.48
19007-0021	Blue	16-14	0.250 × 0.032″	55H2875	0.50
19007-0024*			0.250 × 0.032″	94C7270	0.91
19007-0029			0.187 × 0.020″	55H2881	0.48
19007-0040	Yellow	12-10	0.250 × 0.032″	62M3162	0.56

*Mylar tape
(5529)

VERSAKRIMP™ UNINSULATED BUTT SPLICES

RoHS Compliant Available

molex

Heavy-duty for high vibration applications. Double crimp with metal strain relief. Tough nylon insulation.

Mfg. Part No.	AWG	Inside Dia. (mm)	Outside Dia. (mm)	Max. Length (mm)	Stock No.	Price Each 1-9
19215-0028	12AWG to 10AWG	3.50	5.70	21.00	73C6303	0.34
19215-0034	8AWG	4.20	7.50	21.90	25M1096	4.37

(108599)

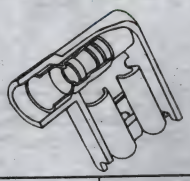
AVIKRIMP® FULLY-INSULATED QUICK-DISCONNECT FLAGS

RoHS Compliant Available

molex

TÜV Rheinland

- TÜV Approved, Meets DIN Specifications
- Provides a Double Crimp with Metal Strain Relief
- Patented



Mfg. Part No.	Color	Wire Range (AWG)	Accepts Tab Size	Stock No.	Price Each 1-9
19006-0001	Red	22-18	0.250 × 0.032″	55H2841	0.59
19006-0003*			0.250 × 0.032″	55H2843	0.76
19006-0005†			0.187 × 0.020″	37C5072	34.56
19002-0014*			0.110 × 0.020″	55H2737	0.54
19002-0016			0.110 × 0.032″	55H2739	0.31
19006-0011	Blue	16-14	0.250 × 0.032″	22H9959	0.58
19002-0029*			0.187 × 0.020″	55H2747	0.56
19006-0015†			0.187 × 0.020″	37C5074	32.50
19006-0019	Yellow	12-10	0.250 × 0.032″	34H3225	1.11
19006-0020*			0.250 × 0.032″	28H8501	1.28

*Mylar tape; **Metal strip; †Sold in packages of 100
(5528)

VERSAKRIMP™ UNINSULATED RING TERMINALS

RoHS Compliant Available

molex

Butted-seam bonded barrel will not open under conditions of stress or wire pull. Ideal for hard to crimp solid and stranded wires.

Mfg. Part No.	Wire Range (AWG)	Stud Size	Max. Width (mm)	Min. Clearance (mm)	Max. Lgth. (mm)	Stock No.	Price Each 1-99
19193-0109	12AWG to 10AWG	#10	9.80	7.70	19.90	55H5147	0.34
19193-0111*	12AWG to 10AWG	#10	9.80	7.70	19.90	25M7046	0.25
19193-0203*	8AWG	#10	9.90	9.40	23.80	25M7061	0.53
19193-0219	6AWG	0.313″	12.30	13.20	30.20	55H5208	0.98
19193-0216	6AWG	0.375″	16.40	13.20	32.20	94C8108	0.48
19193-0275	4AWG	0.25″	12.40	13.40	32.00	94C8131	1.13
19193-0264	4AWG	0.375″	17.30	13.40	34.50	94C8123	0.89
19193-0281†	4AWG	0.5″	22.90	25.30	49.10	25M1028	8.47
19193-0305	2AWG	0.25″	16.40	17.90	40.20	55H5273	2.12
19193-0346	00AWG	0.313″	24.10	19.60	51.30	55H5302	3.87

*Mylar tape; †Sold in packages of 5
(108598)

TERMINALS & SPLICES

3

INSULKRIMP® RING TERMINALS

RoHS Compliant Available

molex

Molded insulation provides funnel entry with PVC insulation.

Mfg. Part No.	Wire Range (AWG)	Color	Stud Size	Max. Width (mm)	Min. Clearance (mm)	Max. Lgth. (mm)	Stock No.	Price Each 1-99
● 19070-0014	22AWG to 18AWG	Red	8	8.20	7.60	22.80	55H3722	0.27
● 19070-0017	22AWG to 18AWG	Red	10	8.20	7.60	22.80	55H3723	0.23
● 19070-0024	22AWG to 18AWG	Red	1/4	12.10	9.80	26.90	55H3727	0.37
● 19070-0092	16AWG to 14AWG	Blue	8	8.20	7.00	22.00	25C5816	0.19
● 19070-0104	16AWG to 14AWG	Blue	10	8.90	7.90	23.40	94C7571	0.28
● 19070-0145	12AWG to 10AWG	Yellow	8	7.40	7.80	26.20	55H3784	0.66
● 19070-0123	12AWG to 10AWG	Yellow	10	9.80	7.70	27.30	55H3775	0.33
● 19070-0125	12AWG to 10AWG	Yellow	10	9.80	7.70	27.30	94C7578	0.39
● 19070-0132	12AWG to 10AWG	Yellow	1/4	13.70	10.00	31.60	55H3779	0.43
● 19070-0153	12AWG to 10AWG	Yellow	3/8	15.20	14.40	34.20	55H3788	0.46
● 19071-0181	8AWG	Red	10	9.90	9.40	23.80	55H3863	1.02
● 19071-0143	8AWG	Red	1/4	12.30	9.40	28.10	84R6767	0.89
● 19071-0223	6AWG	Blue	10	12.30	13.20	30.20	55H3879	1.19

***Sold in packages of 100**
(69853)

AVIKRIMP® RING TERMINALS WITH STRAIN RELIEF

RoHS Compliant Available

molex

Double crimp with metal strain relief. Easy tunnel entry with tough nylon insulation.

Mfg. Part No.	Wire Range (AWG)	Color	Stud Size	Max. Width (mm)	Min. Clearance (mm)	Max. Lgth. (mm)	Stock No.	Price Each 1-99
● 19073-0009	22AWG to 18AWG	Red	5-6	6.00	3.90	18.00	55H3972	0.38
● 19073-0038	22AWG to 18AWG	Red	5-6	6.70	6.10	20.50	55H3989	0.32
● 19073-0040*	22AWG to 18AWG	Red	5-6	6.70	6.10	20.50	55H3991	0.33
● 19073-0042	22AWG to 18AWG	Red	8	6.70	6.10	20.50	55H3992	0.31
● 19073-0017	22AWG to 18AWG	Red	10	7.90	6.90	22.0	55H3977	0.37
● 19073-0024	22AWG to 18AWG	Red	1/4	12.10	9.80	26.90	55H3981	0.42
● 19073-0027	22AWG to 18AWG	Red	5/16	12.10	9.80	26.90	55H3983	0.68
● 19073-0067	16AWG to 14AWG	Blue	5-6	6.60	5.30	22.30	55H4010	0.36
● 19073-0085	16AWG to 14AWG	Blue	8	8.20	7.00	22.30	55H4021	0.35
● 19073-0086*	16AWG to 14AWG	Blue	8	8.20	7.00	22.30	94C7679	0.41
● 19073-0087	16AWG to 14AWG	Blue	10	8.20	7.00	22.30	55H4023	0.38
● 19073-0076	16AWG to 14AWG	Blue	1/4	12.10	9.90	27.40	55H4015	0.41
● 19073-0170	12AWG to 10AWG	Yellow	10	9.80	7.70	27.70	55H4050	0.51
● 19073-0172*	12AWG to 10AWG	Yellow	10	9.80	7.70	27.70	55H4052	0.48
● 19073-0188	12AWG to 10AWG	Yellow	1/4	13.70	10.00	32.00	17P6503	0.76

*Mylar tape; **+Sold in packages of 100**
(69852)

CLOSED-END INSULATED SPLICES

RoHS Compliant Available

molex

Molex Nylon Closed-End Connectors feature 2-piece construction. A translucent nylon-molded insulation is adhered to the metal connector insert. The connector's insert is annealed, Tin-plated, seamless, pure electrolytic, tough pitch Copper. Individual design and performance requirements dictate the use of Copper inserts. These connectors are all rated for a maximum of 600V.

Mfg. Part No.	AWG	Stock No.	Price Each 1-9	Price Each 10-99
● 19160-0012	22AWG to 14AWG	55H4883	0.22	0.16
● 19160-0009	22AWG to 12AWG	25H8131	0.16	0.11
● 19160-0002	16AWG to 10AWG	55H4882	0.21	0.19
TWIST LOCK WIRE CONNECTORS				
● 19160-0039	22AWG to 14AWG	55H4891	0.11	0.04
● 19160-0041	22AWG to 14AWG	55H4893	0.22	0.21

(89569)

601-PC. DELUXE INSULATED SOLDERLESS TERMINAL KIT WMX-100

RoHS Compliant Available

molex

Deluxe terminal kit contains a variety of Molex insulated solderless terminals, including female quick disconnects, butt splices and one hand-held universal crimp tool.

Kit Contents	
No. of Pcs.	Description
25	FEMALE Q.D. AVIKRIMP TAB .250X.032 (22-18)AWG
25	FEMALE Q.D. AVIKRIMP TAB .187X.020 (22-18)AWG
25	FEMALE Q.D. AVIKRIMP TAB .250X.032 (16-14)AWG
25	FEMALE Q.D. AVIKRIMP TAB .187X.020 (16-14)AWG
25	FEMALE Q.D. INSULKRIMP TAB .250X.032 (22-18)AWG
25	FEMALE Q.D. INSULKRIMP TAB .187X.020 (22-18)AWG
25	FEMALE Q.D. INSULKRIMP TAB .250X.032 (16-14)AWG
25	FEMALE Q.D. FLAG AVIKRIMP .250x.032 (22-18)AWG
25	FEMALE Q.D. FLAG AVIKRIMP .187X.020 (22-18)AWG
25	FEMALE Q.D. FLAG AVIKRIMP .250X.032 (16-14)AWG
25	FEMALE Q.D. FLAG INSULKRIMP .250x.032 (22-18)AWG
25	FEMALE Q.D. FLAG INSULKRIMP .250X.032 (16-14)AWG
25	FEMALE Q.D. FLAG INSULKRIMP .187X.020 (16-14)AWG
25	FEMALE Q.D. FLAG INSULKRIMP .250X.032 (12-10)AWG
25	FEMALE Q.D. PIGBACK .250X.032 (22-18)AWG
25	FEMALE Q.D. AVIKRIMP TAB .110X.020 (22-18)AWG
25	FEMALE Q.D. AVIKRIMP TAB .187X.020 (22-18)AWG
25	FEMALE Q.D. AVIKRIMP TAB .250X.032 (16-14)AWG
25	0.156 SNAP PLUG INSULKRIMP (16-14)AWG
25	BUTT SPLICE (22-18)AWG INSULKRIMP
25	STEPDOWN BUTT BLUE/RED STRIPE (22-14)AWG
25	CLOSED-END SPLICE NYLON (22-12)AWG
25	SPADE TONGUE AVIKRIMP #(5-6)STUD (16-14)AWG
25	SPADE TONGUE AVIKRIMP #(5-6)STUD (22-18)AWG
1	UNIVERSAL CRIMP TOOL — (10-22)AWG

Mfg. Part No.	Description	Stock No.	Price 1-4
● 76650-0053	601-Pc. Deluxe Insulated Solderless Terminal Kit	35K5830	137.30

(85055)

RATCHET CONTROL CRIMP HAND TOOLS

RoHS Compliant Available

molex

64001-0100

Mfg. Part No.	For Use With	Stock No.	Price Each 1-4
● 63811-4700	Molex MLX Double Crimp Terminals, 10-12 AWG	10R0128	383.72
64001-4100	Molex Flag InsulKrimp™ Quick Disconnect fully insulated (Standard Flare) terminals, 14-22 AWG.	01J9060	550.06
64001-0100	Molex Avikrimp™ /Insulkrimp ™ Terminals and Splices 10 - 22 AWG, (Rings, Spades, Hooks, Block Spades and Flanged Spades). Also terminates ends of step down butt splice 10-12 to 14 -16 AWG and 14 - 16 to 18 - 22	79C4050	385.39

(75858)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(198562)

PAN-TERM® TERMINALS, DISCONNECTS AND SPLICES

RoHS Compliant Available

PANDUIT®

Fig. 1

Fig. 2

Fig. 3

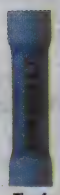


Fig. 4

Fig. 5

Fig. 6

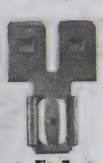


Fig. 7

Fig. 8

Fig. 9

Sold in package quantities indicated in table below. Other Pan-Term® products are available; *go online or call.*

VINYL INSULATED RING TONGUE TERMINALS — UL LISTED, CSA CERTIFIED

Fig.	Wire Size	Stud Size	Color	Mfg. Part No.	Pkg. of	Stock No.	Price per Pkg. 1-2
1	16AWG to 14AWG	#6	Blue	PV14-6R-C	100	76F856	87.37
1	16AWG to 14AWG	#8	Blue	PV14-8R-C	100	76F857	87.37
1	16AWG to 14AWG	#10	Blue	PV14-10R-C	100	76F858	87.37
1	16AWG to 14AWG	0.5″	Blue	PV14-12R-L	50	05H6460	91.47
1	12AWG to 10AWG	#8	Yellow	PV10-8R-L	50	46F1521	53.75
1	12AWG to 10AWG	#10	Yellow	PV10-10R-L	50	46F1517	56.40
1	12AWG to 10AWG	0.25″	Yellow	PV10-14R-L	50	46F1518	68.46
NYLON INSULATED RING TONGUE TERMINALS — UL LISTED, CSA CERTIFIED							
1	22AWG to 18AWG	#6	Red	PN18-6R-C**	100	89F1218	126.53
1	22AWG to 18AWG	#8	Red	PN18-8R-C**	100	89F1219	128.76
1	22AWG to 18AWG	#10	Red	PN18-10R-C**	100	97B2045	128.74
1	16AWG to 14AWG	#6	Blue	PN14-6R-C**	100	89F1220	126.46
1	16AWG to 14AWG	#8	Blue	PN14-8R-C**	100	89F1221	125.63
1	16AWG to 14AWG	#10	Blue	PN14-10R-C**	100	89F1222	127.57
1	18AWG to 14AWG	0.25″	Blue	PN14-14R-C**	100	97B2039	138.93
1	12AWG to 10AWG	#8	Yellow	PN10-8R-L**	50	89F1223	76.94
1	12AWG to 10AWG	#10	Yellow	PN10-10R-L**	50	89F1224	76.94
1	12AWG to 10AWG	0.25″	Yellow	PN10-14R-L**	50	89F1225	76.32

**Meets military specifications MS25036 and MS20659

NON-INSULATED RING TONGUE TERMINALS — UL LISTED, CSA CERTIFIED

2	22AWG to 16AWG	#6	...	P18-6R-C	100	25C1974	50.18
2	22AWG to 16AWG	#8	...	P18-8R-C	100	98B8688	50.71
2	22AWG to 16AWG	#10	...	P18-10R-C	100	25C1975	50.71
2	18AWG to 14AWG	#6	...	P14-6RC	100	50B6633	50.71
2	16AWG to 14AWG	#8	...	P14-8R-C	100	97B0654	53.10
2	16AWG to 14AWG	#10	...	P14-10R-C	100	97B0650	52.55
2	14AWG to 10AWG	#8	...	P10-8R-L	50	07H9663	34.96
2	14AWG to 10AWG	#10	...	P10-10R-L	50	97B0640	37.50
2	14AWG to 10AWG	0.25″	...	P1014RL	50	51B863	43.83
VINYL INSULATED FORK TONGUE TERMINALS — UL LISTED, CSA CERTIFIED							
3	22AWG to 18AWG	#8	Red	PV18-8F-CY	100	02M8923	85.55
3	22AWG to 18AWG	#6	Red	PV18-6F-CY	100	85K8880	87.37
3	22AWG to 18AWG	#10	Red	PV18-10F-CY	100	96K5155	86.46
3	16AWG to 14AWG	#6	Blue	PV14-6F-C	100	76F863	86.46
3	16AWG to 14AWG	#8	Blue	PV14-8F-C	100	76F864	85.06
3	16AWG to 14AWG	#10	Blue	PV14-10F-C	100	76F865	85.55
3	12AWG to 10AWG	#8	Yellow	PV10-8F-L	50	46F1520	51.76
3	12AWG to 10AWG	#10	Yellow	PV10-10F-L	50	89F1299	53.33
3	12AWG to 10AWG	¼	Yellow	PV10-14F-L	50	46F1522	64.26
NYLON INSULATED FORK TONGUE TERMINALS — UL LISTED, CSA CERTIFIED							
3	26AWG to 22AWG	#2	Yellow	PN22-2F-C*	100	95F3579	131.46
3	26AWG to 22AWG	#4	Yellow	PN22-4F-C*	100	98F2923	131.46
3	26AWG to 22AWG	#6	Yellow	PN22-6FC*	100	98F2924	132.61
3	22AWG to 18AWG	#6	Red	PN18-6F-C	100	89F1418	128.67
3	22AWG to 18AWG	#8	Red	PN18-8F-C	100	89F1419	126.53
3	16AWG to 14AWG	#6	Blue	PN14-6F-C	100	89F1420	128.67
3	16AWG to 14AWG	#8	Blue	PN14-8F-C	100	89F1421	126.46
3	16AWG to 14AWG	#10	Blue	PN14-10F-C	100	89F1422	127.57
3	12AWG to 10AWG	#8	Yellow	PN10-8F-L	50	89F1423	76.94
3	12AWG to 10AWG	#10	Yellow	PN10-10F-L	50	89F1424	77.76

➤CONTINUED➤

PAN-TERM® TERMINALS, DISCONNECTS AND SPLICES (CONT.)

VINYL INSULATED BUTT SPLICES — UL LISTED, CSA CERTIFIED

Fig.	Wire Size	Stud Size	Color	Mfg. Part No.	Pkg. of	Stock No.	Price per Pkg. 1-2
4	22AWG to 18AWG	...	Red	BSV18X-LY	50	03M6548	44.07
4	16AWG to 14AWG	...	Blue	BSV14X-L	50	65H8705	44.14
NYLON INSULATED BUTT SPLICES							
5	26AWG to 22AWG	...	Yellow	BSN22-C*	100	94F5620	137.96
5	22AWG to 18AWG	...	Red	BSN18-C	100	89F1237	115.12
5	16AWG to 14AWG	...	Blue	BSN14-C	100	89F1294	117.13
5	12AWG to 10AWG	...	Yellow	BSN10-L	50	89F1295	85.75
FEMALE & PIGGYBACK DISCONNECTS (0.250″ x 0.032″ TAB) — UL LISTED, CSA CERTIFIED							
6	22AWG to 18AWG	0.250″ x 0.032″	Red	DNF18-250-C	100	95F3574	127.43
6	16AWG to 14AWG	0.250″ x 0.032″	Blue	DNF14-250-C	100	94F5658	126.71
FEMALE DISCONNECT ADAPTERS (0.250″ x 0.032″ TAB)							
7	...	0.250″ x 0.032″	...	D-250A-C*		81F4593	98.99
FULLY INSULATED MALE AND FEMALE DISCONNECTS— UL LISTED, CSA CERTIFIED							
8	22AWG to 18AWG	0.11″ x 0.02″	Red	DNF18-111FIB-C	100	94F5660	122.91
8	22AWG to 18AWG	4.7 x 0.5mm	Red	DNF18-188FIB-C	100	97B9874	124.00
8	22AWG to 18AWG	0.25″ x 0.032″	Red	DNF18-250FIB-C	100	81F4596	124.00
8	16AWG to 14AWG	0.187″ x 0.02″	Blue	DNF14-188FIB-C	100	97B9434	124.17
8	16AWG to 14AWG	0.25″ x 0.032″	Blue	DNF14-250FIB-C		81F4597	122.89
8	12AWG to 10AWG	0.25″ x 0.032″	Yellow	DNF10-250FI-L	50	97B0472	75.23
VINYL INSULATED PIN TERMINALS							
9	16AWG to 14AWG	...	Blue	PV14-P47-C*	100	94F3139	146.12
...	12AWG to 10AWG	...	Yellow	PV10-P55-LY*	50	60R6517	107.20

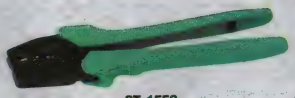
*Not UL listed or CSA certified

(5490)

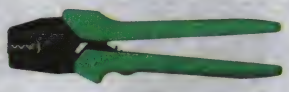
PAN-TERM® TERMINAL CRIMPING TOOLS

PANDUIT®

CT-260



CT-1550



CT-1570

Mfg. part no. CT-260 heavy-duty crimping tool installs insulated and noninsulated terminals, splices, disconnects and wire joints on #10-22 AWG wire. Also cuts wire. Constructed of forged steel with cushioned plastic grip. **Mfg. part no. CT-1550** controlled-cycle, ergonomic tool crimps most insulated Pan-Term® terminals, disconnects, wire joints and splices from #22 to #10 AWG. **Mfg. part no. CT-1570** crimps most noninsulated Pan-Term® terminals, disconnects and splices from #22 to #10 AWG. For the best ergonomic crimping of #10-12 AWG and #14-22 AWG range, *order* **mfg. part no. CT-1551** *separately; go online or call.*

Mfg. Part No.	Stock No.	Price Each Each
CT-260	46F1524	61.59
CT-1550	99F7058	378.51
CT-1570	99F7426	378.51

(5491)

SOLDERLESS TERMINAL KIT

NEW

RoHS Compliant Available

multicomp

Solderless terminal kit contains a variety of insulated solderless terminals, including female quick disconnects, butt splices, closed end connectors, and one hand-held universal crimp tool.

Kit Contents

Type	No. of Pcs.	Description
MC29396	15	Nylon-Fully Insulated Female Disconnects, 0.250x0.032, 22-16AWG, Red
MC29395	15	Nylon-Fully Insulated Female Disconnects, 0.187x0.02, 22-16AWG, Red
MC29398	15	Nylon-Fully Insulated Female Disconnects, 0.250x0.032, 16-14AWG, Blue
MC29397	15	Nylon-Fully Insulated Female Disconnects, 0.187x0.02, 16-14AWG, Blue
MC29390-1	15	Nylon-Fully Insulated Female & Male Disconnects, 0.250x0.032, 22-16AWG, Clear
MC29390-2	15	Nylon-Fully Insulated Female & Male Disconnects, 0.250x0.032, 16-14AWG, Clear
MC29390-3	12	Nylon-Insulated Flag Female Disconnects, 0.250x0.032, 22-18AWG, Red
MC29390-4	12	Nylon-Insulated Flag Female Disconnects, 0.187x0.020, 22-18AWG, Red
MC29390-5	12	Nylon-Insulated Flag Female Disconnects, 0.250x0.032, 16-14AWG, Blue
MC29390-6	15	Vinyl-Insulated Female Disconnects, 0.110x0.020, 22-16AWG, Red

➤CONTINUED➤

SOLDERLESS TERMINAL KIT (CONT.)

Kit Contents		
Type	No. of Pcs.	Description
MC29390-7	15	Vinyl-Insulated Female Disconnects, 0.187x0.020, 22-16AWG, Red
MC29646	15	Vinyl-Insulated Female Disconnects, 0.250x0.032, 16-14AWG, Blue
MC29390-8	15	Vinyl-Insulated Female Disconnects, 0.250x0.032, 12-10AWG, Yellow
MC29374	15	Vinyl-Insulated Butt Splice Connectors, 22-16AWG, Red
MC29390-9	15	Vinyl-Insulated Step Down Butt Splice Connectors, 16-14AWG to 22-18AWG, Blue w/ Red Ring
MC29390-10	15	Closed End Connectors, 22-16AWG, Clear
MC29390-11	15	Nylon-Insulated Spade Terminals, #6, 16-14AWG, Blue
MC29390-12	15	Nylon-Insulated Spade Terminals, #6, 22-16AWG, Red
MC299	1	8-1/4" 6 ways crimping tool w/ wire cutter

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● MCK19	262-Pc. Insulated Solderless Terminal Kit	64W2353	49.18

(211436)

3

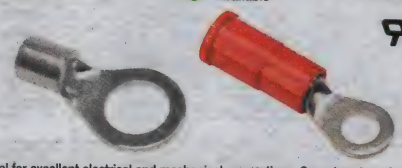
CRS SERIES RING TONGUE TERMINALS

RoHS Compliant Available

multicomp

OSHA

MADE IN USA



Wire guide barrel for excellent electrical and mechanical connections. One-piece burr-free construction for maximum electrical conductivity. Electro-tin plating for maximum corrosion resistance. Constructed of pure electrolytic (ETP) copper, annealed to relieve stress points and provide maximum installed strength. Barrel-to-pad transition designed to minimize flexing and bending. Multiple "V" grooves in barrel give maximum holding power and current flow. Insulation is molded vinyl or nylon. Molded flange for accurate location of crimp tool. Open-end design permits visual inspection of wire location before and after crimping. Made in the U.S.A. UL recognized, CSA certified, OSHA compliant.

STYLE "TO" NONINSULATED BUTTED SEAM BARREL

Mfg. Part No.	AWG	Stud Size	Stock No.	Price Each 1-24
● CRS-TO-1804*	22-18	#4	14T2525	0.13
● CRS-TO-1806*		#6	14T2526	0.13
● CRS-TO-1810*		#10	14T2528	0.13
● CRS-TO-1825*		¼"	14T2530	0.16
● CRS-TO-1406*	16-14	#6	14T2519	0.13
● CRS-TO-1410*		#10	14T2521	0.13
● CRS-TO-1425*		¼"	14T2523	0.16
● CRS-TO-1006*	12-10	#6	14T2512	0.19
● CRS-TO-1010*		#10	14T2514	0.18
● CRS-TO-1025*		¼"	14T2516	0.30
● CRS-TO-1031*		5/16"	14T2518	0.20

STYLE "ZO" NONINSULATED BRAZED SEAM BARREL

● CRS-ZO-1806*	22-18	#6	14T2568	0.19
● CRS-ZO-1808*		#8	14T2569	0.21
● CRS-ZO-1406*	16-14	#6	14T2564	0.21
● CRS-ZO-1408*		#8	14T2565	0.21
● CRS-ZO-1410*		#10	14T2566	0.21
● CRS-ZO-1425*		¼"	14T2567	0.23
● CRS-ZO-1008*	12-10	#8	14T2561	0.34
● CRS-ZO-1010*		#10	14T2562	0.34
● CRS-ZO-1025*		¼"	14T2563	0.34
● CRS-ZO-0810†	8	#10	14T2557	0.66
● CRS-ZO-0825†		¼"	14T2558	0.66
● CRS-ZO-0831†		5/16"	14T2559	0.89
● CRS-ZO-0837†		3/8"	14T2560	0.84
● CRS-ZO-0610†	6	#10	14T2554	0.98
● CRS-ZO-0625†		¼"	14T2555	0.98
● CRS-ZO-0631†		5/16"	14T2556	1.00
● CRS-ZO-0437	4	3/8"	14T2553	1.51

STYLE "TV" VINYL-INSULATED BUTTED SEAM BARREL

Mfg. Part No.	AWG	Stud Size	Insulator Color	Stock No.	Price Each 1-24
CRS-TV-1804+	22-18	#4	Red	14T2548	0.21
CRS-TV-1808+		#8	Red	14T2549	0.22
CRS-TV-1810+		#10	Red	14T2550	0.22
CRS-TV-1825+		¼"	Red	14T2551	0.25
CRS-TV-1406+	16-14	#6	Blue	14T2541	0.21
CRS-TV-1408+		#8	Blue	14T2543	0.22
CRS-TV-1410+		#10	Blue	14T2545	0.22
CRS-TV-1425+		¼"	Blue	14T2547	0.25

➤CONTINUED➤

CRS SERIES RING TONGUE TERMINALS (CONT.)

Mfg. Part No.	AWG	Stud Size	Insulator Color	Stock No.	Price Each 1-24
CRS-TV-1006+	12-10	#6	Yellow	14T2535	0.27
CRS-TV-1008+		#8	Yellow	14T2536	0.27
CRS-TV-1010+		#10	Yellow	14T2537	0.27
CRS-TV-1025+		¼"	Yellow	14T2538	0.32
CRS-TV-1031+		5/16"	Yellow	14T2539	0.32
CRS-TV-1037+		3/8"	Yellow	14T2540	0.33

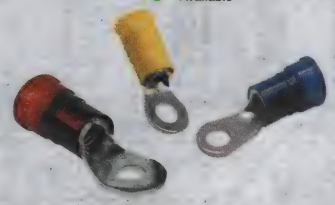
Crimp tool reference: *CTT-8425-01; †CTT-8620-01; +CTT-8440-01; *order separately online.* **‡Sold in pkgs. of 100; ‡‡Sold in pkgs. of 50**

(5557)

RING TONGUE TERMINALS

RoHS Compliant Available

multicomp



Meet UL 486H, UL listed (file E58918), CSA certified (file LR22190M6).

NYLON-INSULATED BRAZED SEAM BARREL

Mfg. Part No.	AWG	Stud Size	Insulator Color	Stock No.	Price Each 1-24
● CRS-ZY-0810	8	#10	Red	14T2575	0.87
● CRS-ZY-0825		¼"	Red	14T2576	0.87
● CRS-ZY-0831		5/16"	Red	14T2577	1.10
● CRS-ZY-0837		3/8"	Red	14T2578	1.04
● CRS-ZY-0850		½"	Red	14T2579	1.26
● CRS-ZY-0610	6	#10	Blue	14T2570	1.70
● CRS-ZY-0625		¼"	Blue	14T2571	1.23
● CRS-ZY-0631		5/16"	Blue	14T2572	1.18
● CRS-ZY-0637		3/8"	Blue	14T2573	1.20
● CRS-ZY-0650		½"	Blue	14T2574	1.49

NYLON-INSULATED "SURE GRIP" BARREL

Mfg. Part No.	AWG	Stud Size	Insulator Color	Stock No.	Price Each 1-24
● CRS-DY-1804*	22-18	#4	Red	14T2507	0.33
● CRS-DY-1806*		#6	Red	14T2508	0.34
● CRS-DY-1808*		#8	Red	14T2509	0.36
● CRS-DY-1810*		#10	Red	14T2510	0.58
● CRS-DY-1825*		¼"	Red	14T2511	0.39
● CRS-DY-1406*	16-14	#6	Blue	14T2504	0.33
● CRS-DY-1408*		#8	Blue	14T2505	0.36
● CRS-DY-1410*		#10	Blue	14T2506	0.60
● CRS-DY-1008*	12-10	#8	Yellow	14T2501	0.44
● CRS-DY-1010*		#10	Yellow	14T2502	0.44
● CRS-DY-1025*		¼"	Yellow	14T2503	0.49

Crimp tool reference: *CTT8440-01; *order separately online.*

(5521)

HIGH-TEMPERATURE SOLDERLESS TERMINALS

RoHS Compliant Available

multicomp

Nickel-plated alloy steel construction. Noninsulated. Temperature rating: 900°F.

HIGH-TEMPERATURE RING TONGUE BUTTED SEAM BARREL

Mfg. Part No.	AWG	Stud Size	Stock No.	Price Each 1-24
● CRS-TO-1806-HT	22-18	#6	14T2527	0.13
● CRS-TO-1810-HT	22-18	#10	14T2529	0.13
● CRS-TO-1406-HT	16-14	#6	14T2520	0.13
● CRS-TO-1410-HT	16-14	#10	14T2522	0.13
● CRS-TO-1425-HT	16-14	#1/4"	14T2524	0.18
● CRS-TO-1006-HT	12-10	#6	14T2513	0.18
● CRS-TO-1010-HT	12-10	#10	14T2515	0.18
● CRS-TO-1025-HT	12-10	#1/4"	14T2517	0.22

➤CONTINUED➤

HIGH-TEMPERATURE SOLDERLESS TERMINALS (CONT.)

HIGH-TEMPERATURE FORK/SPADE TONGUE BUTTED SEAM BARREL

Mfg. Part No.	AWG	Stud Size	Stock No.	Price Each 1-24
CSS-T0-1810-HT	22-18	#10	14T2597	0.12
CSS-T0-1410-HT	16-14	#10	14T2596	0.13
CSS-T0-1010-HT	12-10	#10	14T2595	0.19
HIGH-TEMPERATURE BLOCK FORK/SPADE TONGUE BUTTED SEAM BARREL				
CBS-T0-1806-HT	22-18	#6	14T2228	0.12
CBS-T0-1406-HT	16-14	#6	14T2224	0.12

HIGH-TEMPERATURE FEMALE QUICK-DISCONNECT BUTTER SEAM BARREL

Mfg. Part No.	AWG	Mates with Tab Width x Thickness	Length	Stock No.	Price Each 1-24
CFS-T0-1418-HT	16-14	0.187 x 0.02	0.58″	14T2290	0.13
CFS-T0-1425-HT	16-14	0.25 x 0.032″	0.64″	14T2292	0.15
HIGH-TEMPERATURE FEMALE FLAG QUICK-DISCONNECT BUTTED SEAM BARREL					
CFL-T0-1425-HT	16-14	0.25 x 0.032″	0.51″	14T2270	0.17
HIGH-TEMPERATURE MALE QUICK-DISCONNECT BUTTED SEAM BARREL					
CMS-T0-1425-HT	16-14	0.25 x 0.032″	0.73″	14T2454	0.13

HIGH-TEMPERATURE BUTT SPLICE BUTTED SEAM BARREL

Mfg. Part No.	AWG	Length	I.D.	Stock No.	Price Each 1-24
CCS-T0-1818-HT	22-18	0.56″	0.070″	14T2259	0.13
CCS-T0-1414-HT	16-14	0.56″	0.090″	14T2257	0.13
CCS-T0-1010-HT	12-10	0.56″	0.135″	14T2255	0.22

(5468)

SPADE (FORK) TONGUE TERMINALS

MADE IN USA · RoHS Compliant Available · multicomp · OSHA

Mfg. part nos. CBS-T0 and **CSS-T0** are noninsulated butted seam terminals for use where special characteristics are not required. **Mfg. part no. CBS-Z0** noninsulated brazed seam terminals allow crimp at any location on barrel. Seam is silver brazed and can not open under crimping or operating pressure. **Mfg. part nos. CBS-TV** and **CSS-TV** vinyl insulated terminals with "wire guide" barrel consists of butted seam with flared, rigid PVC sleeve. Flexure occurs over wide area on the wire insulation rather than at juncture. Funnel shaped sleeve guides wire strands into barrel. **Mfg. part no. CBS-ZV** vinyl insulated brazed seam terminals with "wire guide" barrel have same features as **mfg. part no. CBS-TV** terminals plus the advantage of the brazed seam over the butted seam. **Mfg. part nos. CBS-DY** and **CSS-DY** nylon insulated terminals with "sure-grip wire guide" barrel consist of a butted seam with flared seamless brass sleeve covered with a flared injection molded nylon sleeve. Made in the U.S.A. UL recognized, CSA certified, OSHA compliant.

NONINSULATED BUTTED SEAM BLOCK FORK

Mfg. Part No.	AWG	Stud Size	Insulator Color	Stock No.	Price Each 1-24
CBS-T0-1406†	16-14	#6	...	14T2223	0.11
CBS-T0-1408†	16-14	#8	...	14T2225	0.12
CBS-T0-1804†	22-18	#4	...	14T2226	0.11
CBS-T0-1806†	22-18	#6	...	14T2227	0.24
CBS-T0-1808†	22-18	#8	...	14T2229	0.13
NONINSULATED BRAZED SEAM BLOCK FORK					
CBS-Z0-1406*	16-14	#6	...	14T2237	0.19
CBS-Z0-1408*	16-14	#8	...	14T2238	0.19
CBS-Z0-1806*	22-18	#6	...	14T2239	0.20
CBS-Z0-1808*	22-18	#8	...	14T2240	0.21
VINYL INSULATED BUTTED SEAM BLOCK FORK					
CBS-TV-1804*	22-18	#4	Red	14T2233	0.21
CBS-TV-1806*	22-18	#6	Red	14T2234	0.21
CBS-TV-1808*	22-18	#8	Red	14T2235	0.22
CBS-TV-1810*	22-18	#10	Red	14T2236	0.21
CBS-TV-1406*	16-14	#6	Blue	14T2230	0.21
CBS-TV-1408*	16-14	#8	Blue	14T2231	0.21
CBS-TV-1410*	16-14	#10	Blue	14T2232	0.21
NYLON INSULATED BUTTED SEAM BLOCK FORK					
CBS-DY-1804*	22-18	#4	Red	14T2219	0.33
CBS-DY-1806*	22-18	#6	Red	14T2220	0.34
CBS-DY-1808*	22-18	#8	Red	14T2221	0.35
CBS-DY-1810*	22-18	#10	Red	14T2222	0.29
CBS-DY-1406*	16-14	#6	Blue	14T2216	0.34
CBS-DY-1408*	16-14	#8	Blue	14T2217	0.33
CBS-DY-1410*	16-14	#10	Blue	14T2218	0.33

➤CONTINUED➤

SPADE (FORK) TONGUE TERMINALS (CONT.)

NYLON INSULATED BUTTED SEAM BLOCK FORK

Mfg. Part No.	AWG	Stud Size	Insulator Color	Stock No.	Price Each 1-24
CBS-DY-1006*	12-10	#6	Yellow	14T2214	0.43
CBS-DY-1010*	12-10	#10	Yellow	14T2215	0.43
NONINSULATED BUTTED SEAM STANDARD FORK					
VINYL INSULATED BUTTED SEAM STANDARD FORK					
CSS-TV-1806*	22-18	#6	Red	14T2604	0.20
CSS-TV-1808*	22-18	#8	Red	14T2605	0.21
CSS-TV-1810*	22-18	#10	Red	14T2606	0.21
CSS-TV-1406*	16-14	#6	Blue	14T2601	0.19
CSS-TV-1408*	16-14	#8	Blue	14T2602	0.19
CSS-TV-1008*	12-10	#8	Yellow	14T2599	0.27
CSS-TV-1010*	12-10	#10	Yellow	14T2600	0.26
NYLON INSULATED BUTTED SEAM STANDARD FORK WITH INSULATION GRIP					
CSS-DY-1806*	22-18	#6	Red	14T2593	0.31
CSS-DY-1406*	16-14	#6	Blue	14T2592	0.29

Crimp tool reference: *Mfg. part no. CTT-8440-01; †Mfg. part no. CTT-8425-01
(5439)

SNAP-ON LOCKING SPADE/FORK TERMINALS

RoHS Compliant Available · multicomp · OSHA · MADE IN USA

- Multiple "V" Grooves for Maximum Holding Power and Minimum Resistance
- Wire Guide Barrel Eliminates Strand Hangups
- Nonslip Insulation for Ease of Positioning Crimp Tool
- Funneled Insulation Beveled Terminal Mouth for Easy Wire Insertion
- Maximum Corrosion Protection, Installation Strength, Flexing Resistance

Mfg. part no. CLS-TV vinyl-insulated terminals feature a butted seam barrel. *Order* **mfg. part no. CTT-8440-01** *crimp tool separately; go online or call.* Made in the U.S.A. UL recognized, CSA certified, OSHA compliant.

NONINSULATED

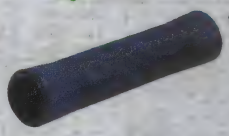
Mfg. Part No.	AWG	Stud Size	Insulator Color	Stock No.	Price Each 1-24
CLS-T0-1806	22AWG to 18AWG	#6	...	14T2401	0.13
VINYL-INSULATED					
CLS-TV-1806	22AWG to 18AWG	#6	Red	14T2409	0.23
CLS-TV-1808	22AWG to 18AWG	#8	Red	14T2410	0.23
CLS-TV-1810	22AWG to 18AWG	#10	Red	14T2411	0.22
CLS-TV-1406	16AWG to 14AWG	#6	Blue	14T2406	0.23
CLS-TV-1408	16AWG to 14AWG	#8	Blue	14T2407	0.23
CLS-TV-1410	16AWG to 14AWG	#10	Blue	14T2408	0.22
CLS-TV-1006	12AWG to 10AWG	#6	Yellow	14T2402	0.33
CLS-TV-1008	12AWG to 10AWG	#8	Yellow	14T2403	0.34
CLS-TV-1010	12AWG to 10AWG	#10	Yellow	14T2404	0.33
CLS-TV-1025	12AWG to 10AWG	0.25″	Yellow	14T2405	0.38

(5440)

BUTT SPLICE TERMINALS

RoHS Compliant Available · multicomp · OSHA · MADE IN USA

Noninsulated



Insulated

Made in the U.S.A. UL recognized (file E58918), CSA certified (file 221906M), OSHA compliant.

NONINSULATED BUTTED SEAM BARREL

Mfg. Part No.	AWG	Insulator Color	Stock No.	Price Each 1-24
CCS-T0-1818*	22AWG to 18AWG	...	14T2258	0.13
CCS-T0-1414*	16AWG to 14AWG	...	14T2256	0.13
CCS-T0-1010*	12AWG to 10AWG	...	14T2254	0.20
NONINSULATED BUTTED SEAM PARALLEL BARREL				
CCP-T0-1818*	22AWG to 18AWG	...	14T2248	0.17
VINYL-INSULATED BUTTED SEAM BARREL				
CCS-TV-1818†	22AWG to 18AWG	Red	14T2262	0.23
CCS-TV-1414†	16AWG to 14AWG	Blue	14T2261	0.25
CCS-TV-1010†	12AWG to 10AWG	Yellow	14T2260	0.28
VINYL-INSULATED SEAMLESS BARREL				
CCS-ZV-1818†	22AWG to 18AWG	Red	14T2266	0.31
CCS-ZV-1414†	16AWG to 14AWG	Blue	14T2265	0.33
CCS-ZV-1010†	12AWG to 10AWG	Yellow	14T2264	0.40

➤CONTINUED➤

BUTT SPLICE TERMINALS (CONT.)

VINYL-INSULATED BRAZED SEAM BARREL

Mfg. Part No.	AWG	Insulator Color	Stock No.	Price Each 1-24
● CCS-ZV-0808†	8AWG	Red	14T2263	1.13
NYLON-INSULATED "SURE-GRIP" BARREL				
● CCS-DY-1818†	22AWG to 18AWG	Red	14T2253	0.69
● CCS-DY-1414†	16AWG to 14AWG	Blue	14T2252	0.70
● CCS-DY-1010†	12AWG to 10AWG	Yellow	14T2251	0.81
NYLON-INSULATED SEAMLESS BARREL				
● CCS-ZY-2218†	22AWG to 18AWG	Red	14T2269	0.33
● CCS-ZY-1614†	16AWG to 14AWG	Blue	14T2268	0.33
● CCS-ZY-1210†	12AWG to 10AWG	Yellow	14T2267	0.45

Crimp tool reference: *CTT-8425-01; †CTT-8440-01; **CTT-8620-01; *order separately online.*
(5561)

3

QUICK-DISCONNECT TERMINALS

MADE IN USA · RoHS Compliant Available · multicomp

Made in the U.S.A. UL listed, CSA certified, except **mfg. part nos. CFS-TO-1412, CFS-TV-1412, CFS-DY-1412** and **CMS-TO-1818.**

STYLE "TO" FEMALE NONINSULATED BUTTED SEAM BARREL

Mfg. Part No.	AWG	Mates with Tab Width x Thickness	Insulator Color	Stock No.	Price Each 1-24
● CFS-TO-1818*	22AWG to 18AWG	0.187″ x 0.02″	...	14T2293	0.14
● CFS-TO-1825*	22AWG to 18AWG	0.25″ x 0.032″	...	14T2294	0.14
● CFS-TO-1418*	16AWG to 14AWG	0.187″ x 0.02″	...	14T2289	0.14
● CFS-TO-1425*	16AWG to 14AWG	0.25″ x 0.032″	...	14T2291	0.14
STYLE "TV" FEMALE VINYL-INSULATED BUTTED SEAM BARREL					
CFS-TV-1818††	22AWG to 18AWG	0.187″ x 0.02″	Red	14T2299	0.22
CFS-TV-1825††	22AWG to 18AWG	0.25″ x 0.032″	Red	14T2300	0.22
CFS-TV-1418††	16AWG to 14AWG	0.187″ x 0.02″	Blue	14T2297	0.21
CFS-TV-1425††	16AWG to 14AWG	0.25″ x 0.032″	Blue	14T2298	0.22
CFS-TV-1025††	12AWG to 10AWG	0.25″ x 0.032″	Yellow	14T2295	0.26
STYLE "DY" FEMALE NYLON-INSULATED "SURE GRIP" BARREL					
● CFS-DY-1818††	22AWG to 18AWG	0.187″ x 0.02″	Red	14T2281	0.33
● CFS-DY-1825††	22AWG to 18AWG	0.25″ x 0.032″	Red	14T2282	0.33
● CFS-DY-1418	16AWG to 14AWG	0.187″ x 0.02″	Blue	14T2279	0.29
● CFS-DY-1425	16AWG to 14AWG	0.25″ x 0.032″	Blue	14T2280	0.34
● CFS-DY-1025	12AWG to 10AWG	0.25″ x 0.032″	Yellow	14T2278	0.34
STYLE "TO" MALE NONINSULATED SLIDE-BUTTED SEAM BARREL					
● CMS-TO-1825	22AWG to 18AWG	0.25″ x 0.032″	...	14T2456	0.13
STYLE "TO" MALE NONINSULATED BUTTED SEAM BARREL					
● CMS-TO-1425	16AWG to 14AWG	0.25″ x 0.032″	...	14T2453	0.11
STYLE "TV" MALE VINYL-INSULATED BUTTED-SEAM BARREL					

Mfg. Part No.	AWG	Mates with Tab Width x Thickness	Insulator Color	Stock No.	Price Each 1-24
CMS-TV-1818††	22AWG to 18AWG	0.187″ x 0.02″	Red	14T2460	0.22
CMS-TV-1825††	22AWG to 18AWG	0.25″ x 0.032″	Red	14T2461	0.22
CMS-TV-1425††	16AWG to 14AWG	0.25″ x 0.032″	Blue	14T2459	0.22
CMS-TV-1418††	16AWG to 14AWG	0.187″ x 0.02″	Blue	14T2458	0.19
CMS-TV-1025††	12AWG to 10AWG	0.25″ x 0.032″	Yellow	14T2457	0.25
STYLE "DY" MALE NYLON-INSULATED "SURE GRIP" BARREL					
● CMS-DY-1025	12AWG to 10AWG	0.25″ x 0.032″	Yellow	14T2446	0.34
● CMS-DY-1425††	16AWG to 14AWG	0.25″ x 0.032″	Blue	14T2447	0.31
STYLE "TF" FEMALE FULLY NYLON-INSULATED BUTTED-SEAM BARREL					
● CFS-TF-1818††	22AWG to 18AWG	0.187″ x 0.02″	Red	14T2286	0.37
● CFS-TF-1825††	22AWG to 18AWG	0.25″ x 0.032″	Red	14T2287	0.36
● CFS-TF-1425††	16AWG to 14AWG	0.25″ x 0.032″	Blue	14T2285	0.37
● CFS-TF-1418	16AWG to 14AWG	0.187″ x 0.02″	Blue	14T2284	0.34
● CFS-TF-1025	12AWG to 10AWG	0.25″ x 0.032″	Yellow	14T2283	0.51
STYLE "DF" FEMALE FULLY NYLON-INSULATED "SURE GRIP" BARREL					
● CFS-DF-1818††	22AWG to 18AWG	0.187″ x 0.02″	Red	14T2276	0.74
● CFS-DF-1825††	22AWG to 18AWG	0.25″ x 0.032″	Red	14T2277	0.71
● CFS-DF-1418††	16AWG to 14AWG	0.187″ x 0.02″	Blue	14T2274	0.49
● CFS-DF-1425††	16AWG to 14AWG	0.25″ x 0.032″	Blue	14T2275	0.49
● CFS-DF-1025††	12AWG to 10AWG	0.25″ x 0.032″	Yellow	14T2273	0.61

➤ CONTINUED ➤

QUICK-DISCONNECT TERMINALS (CONT.)

STYLE "TF" MALE FULLY NYLON-INSULATED BUTTED-SEAM BARREL

Mfg. Part No.	AWG	Mates with Tab Width x Thickness	Insulator Color	Stock No.	Price Each 1-24
● CMS-TF-1818††	22AWG to 18AWG	0.187″ x 0.02″	Red	14T2451	0.40
● CMS-TF-1825††	22AWG to 18AWG	0.25″ x 0.032″	Red	14T2452	0.39
● CMS-TF-1418††	16AWG to 14AWG	0.187″ x 0.02″	Blue	14T2449	0.38
● CMS-TF-1425††	16AWG to 14AWG	0.25″ x 0.032″	Blue	14T2450	0.39
● CMS-TF-1025	12AWG to 10AWG	0.25″ x 0.032″	Yellow	14T2448	0.55
STYLE "DF" MALE FULLY NYLON-INSULATED "SURE GRIP" BARREL					
● CMS-DF-1825††	22AWG to 18AWG	0.25″ x 0.032″	Red	14T2445	0.52
● CMS-DF-1418††	16AWG to 14AWG	0.187″ x 0.02″	Blue	14T2442	0.54
● CMS-DF-1425††	16AWG to 14AWG	0.25″ x 0.032″	Blue	14T2443	0.51
● CMS-DF-1025††	12AWG to 10AWG	0.25″ x 0.032″	Yellow	14T2441	0.67

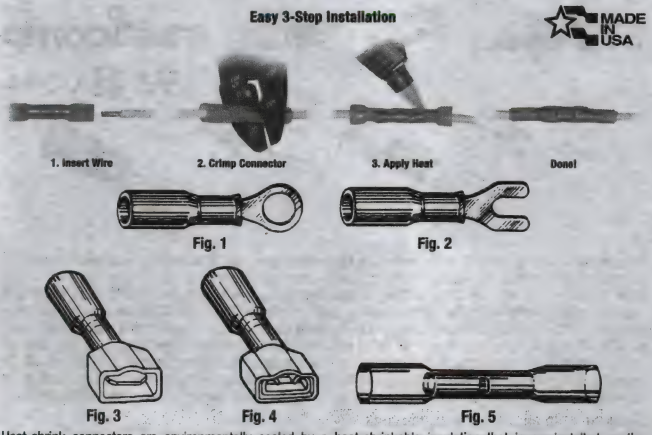
MALE NYLON-INSULATED BULLET-STYLE WITH 0.156″ MATING SNAP DIA.

Mfg. Part No.	AWG	L	I.D.	Barrel Lgth.	Insulator Color	Stock No.	Price Each 1-24
● CBP-DY-1815†	22AWG to 18AWG	0.87″	0.09″	0.19″	Red	14T2207	0.35
● CBP-DY-1415†	16AWG to 14AWG	0.85″	0.07″	0.19″	Blue	14T2206	0.36
MALE VINYL-INSULATED BULLET-STYLE WITH 0.156″ MATING SNAP DIA.							
CBP-TV-1815†	22AWG to 18AWG	0.85″	0.09″	0.19″	Red	14T2209	0.18

Crimp tool reference: *CTT-8425-01; †CTT-8440-01; ††CTR-100-IT
(5503)

HEAT-SHRINK CRIMP CONNECTORS

RoHS Compliant Available · multicomp · MADE IN USA



Heat-shrink connectors are environmentally sealed by a heat-shrinkable insulation that is pre-installed on the component. As the polyolefin tubing shrinks, an adhesive lining seals out contaminants and provides strain relief for the wire connection. These parts are reliable and easy to install. Each connection can be visually inspected through the translucent insulation. The heat-shrink tubing is corrosion and abrasion resistant and is ideal where corrosive fumes or liquid contaminants are present. Heat-shrink crimp connectors are made using seamless butt splices and brazed seam ring and fork tongue terminals. Nylon fully insulated quick-disconnects are butted seam. UL listed file E141071, CSA certified. **Sold in packages of 25 and 100.**

RING TONGUE TERMINALS

Mfg. Part No.	Fig.	AWG	Description	Pkg. of	Stock No.	Price per Pkg. 1-3
● 3949	1	18-20	#6 Stud Size	100	84N967	61.05
● 3950	1	18-20	#8 Stud Size	100	84N968	64.07
● 3951	1	18-20	#10 Stud Size	100	84N969	64.07
● 3953	1	14-16	#8 Stud Size	100	84N971	64.34
● 3964	1	14-16	#10 Stud Size	100	84N982	63.67
● 3965	1	14-16	¼″ Stud Size	100	84N983	70.56
● 3967	1	10-12	#10 Stud Size	100	84N985	80.90
● 3954	1	10-12	⅜″ Stud Size	100	84N972	82.69
● 1665	1	18-20	#6 Stud Size	25	92N3586	20.26
● 1666	1	18-20	#8 Stud Size	25	92N3587	20.70
● 1669	1	14-16	#8 Stud Size	25	92N3590	20.84
● 3977	1	14-16	#10 Stud Size	25	84N995	19.69
● 3979	1	14-16	¼″ Stud Size	25	84N997	21.39
● 3981	1	10-12	#10 Stud Size	25	84N999	25.89
● 1670	1	10-12	⅜″ Stud Size	25	92N3591	26.23
FORK TONGUE TERMINALS						
● 3970	2	22-24	#6 Stud Size	100	84N988	70.95
● 3947	2	14-16	#8 Stud Size	100	84N965	65.55
● 3972	2	10-12	#10 Stud Size	100	84N990	80.96
● 3983	2	22-24	#6 Stud Size	25	84N1001	22.78
● 1672	2	14-16	#8 Stud Size	25	92N3593	21.12
● 3985	2	10-12	#10 Stud Size	25	84N1003	25.97

➤ CONTINUED ➤

HEAT-SHRINK CRIMP CONNECTORS (CONT.)

QUICK-DISCONNECTS

Mfg. Part No.	Fig.	AWG	Description	Pkg. of	Stock No.	Price per Pkg. 1-3
3955*	3	18-20	0.25″ Tab – Male	100	84N973	101.69
3956*	3	14-16	0.25″ Tab – Male	100	84N974	102.52
1674*	3	18-20	0.25″ Tab – Male	25	92N3595	30.68
1675*	3	14-16	0.25″ Tab – Male	25	92N3596	30.94
1676*	3	10-12	0.25″ Tab – Male	25	92N3597	39.31
3958*	4	18-20	0.25″ Tab – Female	100	84N976	99.49
3959*	4	14-16	0.25″ Tab – Female	100	84N977	100.21
3960*	4	10-12	0.25″ Tab – Female	100	84N978	126.06
1677*	4	18-20	0.25″ Tab – Female	25	92N3598	31.51
1678*	4	14-16	0.25″ Tab – Female	25	92N3599	31.78
1679*	4	10-12	0.25″ Tab – Female	25	92N3600	40.15
BUTT SPLICES						
3961	5	18-20	1.5″ Length – Red	100	84N979	75.08
3962	5	14-16	1.5″ Length – Blue	100	84N980	77.15
3963	5	10-12	1.625″ Length – Yellow	100	84N981	108.68
1680	5	18-20	1.5″ Length – Red	25	92N3601	23.87
1681	5	14-16	1.5″ Length – Blue	25	92N3602	24.83
1682	5	10-12	1.625″ Length – Yellow	25	92N3603	34.39

*Not UL listed or CSA certified
(5516)

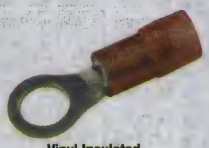
RING TONGUE TERMINALS

RoHS Compliant Available

multicomp

Uninsulated

Nylon Insulated



Vinyl Insulated

- UL file no. E327842

UNINSULATED

Mfg. Part No.	Wire Size	Stud Size	Features	Approval	Pkg. of	Stock No.	Price per Pkg. 1-49
MC29380	26AWG to 22AWG	#2	...	UL, cUL	100	34P2149	5.47
MC29382	26AWG to 22AWG	#4	...	UL, cUL	100	34P2151	5.37
MC29381	26AWG to 22AWG	#6	...	UL, cUL	100	34P2150	6.27
MC29517	22AWG to 16AWG	#6	Brazed Seam	UL, cUL	100	34P2275	5.09
MC29523	22AWG to 16AWG	#6	Butted Seam	...	100	34P2281	5.35
MC29526	22AWG to 16AWG	#6	Butted Seam	UL, cUL	100	34P2284	6.96
MC29513	22AWG to 16AWG	#8	Brazed Seam	UL, cUL	100	34P2271	5.63
MC29524	22AWG to 16AWG	#8	Butted Seam	UL, cUL	100	34P2282	5.38
MC29490	22AWG to 16AWG	#10	Butted Seam	UL, cUL	100	34P2248	6.42
MC29491	22AWG to 16AWG	#10	Butted Seam	...	100	34P2249	6.27
MC29461	22AWG to 16AWG	#6/8/10	Brazed Seam	UL, cUL	100	34P2225	11.14
MC29492	22AWG to 16AWG	0.25″	Butted Seam	UL, cUL	100	34P2250	9.60
MC29520	16AWG to 14AWG	#6	Brazed Seam	UL, cUL	100	34P2278	6.09
MC29493	16AWG to 14AWG	#6	Butted Seam	...	100	34P2251	5.60
MC29527	16AWG to 14AWG	#6	Butted Seam	UL, cUL	100	34P2285	6.96
MC29515	16AWG to 14AWG	#8	Brazed Seam	UL, cUL	100	34P2273	6.35
MC29525	16AWG to 14AWG	#8	Butted Seam	UL, cUL	100	34P2283	6.94
MC29516	16AWG to 14AWG	#10	Brazed Seam	UL, cUL	100	34P2274	6.35
MC29494	16AWG to 14AWG	#10	Butted Seam	...	100	34P2252	6.35
MC29528	16AWG to 14AWG	#10	Butted Seam	UL, cUL	100	34P2286	7.15
MC29462	16AWG to 14AWG	#6/8/10	Brazed Seam	UL, cUL	50	34P2226	5.65
MC29508	16AWG to 14AWG	0.25″	Brazed Seam	UL, cUL	100	34P2266	8.27
MC29495	16AWG to 14AWG	0.25″	Butted Seam	UL, cUL	100	34P2253	9.60
MC29496	16AWG to 14AWG	0.25″	Butted Seam	...	100	34P2254	8.86
MC29498	12AWG to 10AWG	#6	Butted Seam	UL, cUL	50	34P2256	5.25
MC29499	12AWG to 10AWG	#6	Butted Seam	...	50	34P2257	5.05
MC29521	12AWG to 10AWG	#8	Brazed Seam	UL, cUL	50	34P2279	4.83
MC29529	12AWG to 10AWG	#8	Butted Seam	UL, cUL	50	34P2287	5.06
MC29509	12AWG to 10AWG	#10	Brazed Seam	UL, cUL	50	34P2267	5.13
MC29500	12AWG to 10AWG	#10	Butted Seam	UL, cUL	50	34P2258	5.17
MC29501	12AWG to 10AWG	#10	Butted Seam	...	50	34P2259	4.98
MC29463	12AWG to 10AWG	#6/8/10	Brazed Seam	UL, cUL	50	34P2227	7.91
MC29460	12AWG to 10AWG	#6/8/10	Butted Seam	UL, cUL	50	34P2224	7.03
MC29502	12AWG to 10AWG	0.25″	Butted Seam	UL, cUL	50	34P2260	6.15
MC29503	12AWG to 10AWG	0.25″	Butted Seam	...	50	34P2261	6.46
MC29510	12AWG to 10AWG	0.25″	Brazed Seam	UL, cUL	50	34P2268	6.73
MC29504	12AWG to 10AWG	0.313″	Butted Seam	UL, cUL	50	34P2262	6.58
MC29497	12AWG to 10AWG	0.375″	...	UL, cUL	50	34P2255	7.70

CONTINUED

RING TONGUE TERMINALS (CONT.)

Mfg. Part No.	Wire Size	Stud Size	Features	Approval	Pkg. of	Stock No.	Price per Pkg. 1-49
MC29518	8AWG	#10	Brazed Seam	UL, cUL	25	34P2276	3.91
MC29522	8AWG	0.25″	Brazed Seam	UL, cUL	25	34P2280	5.13
MC29512	8AWG	0.313″	Brazed Seam	UL, cUL	25	34P2270	5.13
MC29511	8AWG	0.375″	Brazed Seam	UL, cUL	25	34P2269	7.48
MC29505	6AWG	#10	Brazed Seam	UL, cUL	20	34P2263	8.84
MC29519	6AWG	0.25″	Brazed Seam	UL, cUL	20	34P2277	7.01
MC29506	6AWG	0.313″	Brazed Seam	UL, cUL	20	34P2264	8.84
MC29514	4AWG	0.25″	Brazed Seam	UL, cUL	10	34P2272	4.49
MC29507	4AWG	0.375″	Brazed Seam	UL, cUL	10	34P2265	6.04

NYLON INSULATED

Mfg. Part No.	Wire Size	Stud Size	Features	Approval	Pkg. of	Stock No.	Price per Pkg. 1-49
MC29383	26AWG to 22AWG	#2	Brazed Seam	UL, cUL	100	34P2152	8.28
MC29384	26AWG to 22AWG	#6	Brazed Seam	UL, cUL	100	34P2153	8.39
MC29540	22AWG to 16AWG	#4	Double Crimp	UL, cUL	100	34P2298	9.89
MC29549	22AWG to 16AWG	#6	Double Crimp	UL, cUL	100	34P2306	11.47
MC29545	22AWG to 16AWG	#8	Double Crimp	UL, cUL	100	34P2303	11.62
MC29541	22AWG to 16AWG	#10	Double Crimp	UL, cUL	100	34P2299	11.47
MC29464	22AWG to 16AWG	#6/8/10	Double Crimp	UL, cUL	100	34P2228	21.75
MC29542	22AWG to 16AWG	0.25″	Double Crimp	UL, cUL	100	34P2300	15.34
MC29547	16AWG to 14AWG	#8	Double Crimp	UL, cUL	100	34P2304	14.08
MC29550	16AWG to 14AWG	#10	Double Crimp	UL, cUL	100	34P2307	13.90
MC29465	16AWG to 14AWG	#6/8/10	Double Crimp	UL, cUL	100	34P2229	21.75
MC29548	12AWG to 10AWG	#8	Double Crimp	UL, cUL	50	34P2305	11.28
MC29543	12AWG to 10AWG	#10	Double Crimp	UL, cUL	50	34P2301	12.07
MC29466	12AWG to 10AWG	#6/8/10	Double Crimp	UL, cUL	50	34P2230	11.31
MC29544	12AWG to 10AWG	0.25″	Double Crimp	UL, cUL	50	34P2302	13.81
MC29537	8AWG	#10	Brazed Seam	UL, cUL	25	34P2295	7.94
MC29539	8AWG	0.25″	Brazed Seam	UL, cUL	25	34P2297	7.52
MC29536	8AWG	0.313″	Brazed Seam	UL, cUL	25	34P2294	8.41
MC29534	8AWG	0.375″	Brazed Seam	UL, cUL	25	34P2292	9.00
MC29535	8AWG	0.5″	Brazed Seam	UL, cUL	20	34P2293	9.54
MC29532	6AWG	#10	Brazed Seam	UL, cUL	20	34P2290	9.03
MC29538	6AWG	0.25″	Brazed Seam	UL, cUL	20	34P2296	9.03
MC29533	6AWG	0.313″	Brazed Seam	UL, cUL	20	34P2291	8.44
MC29530	6AWG	0.375″	Brazed Seam	UL, cUL	20	34P2288	9.94
MC29531	6AWG	0.5″	Brazed Seam	UL, cUL	10	34P2289	8.12
VINYL INSULATED							
MC29551	22AWG to 16AWG	#2	Butted Seam	UL, cUL	100	34P2308	6.73
MC29552	22AWG to 16AWG	#4	Butted Seam	UL, cUL	100	34P2309	6.29
MC29568	22AWG to 16AWG	#6	Brazed Seam	UL, cUL	100	34P2325	12.44
MC29574	22AWG to 16AWG	#6	Butted Seam	UL, cUL	100	34P2331	6.79
MC29565	22AWG to 16AWG	#8	Brazed Seam	UL, cUL	100	34P2322	12.44
MC29570	22AWG to 16AWG	#8	Butted Seam	UL, cUL	100	34P2327	5.93
MC29553	22AWG to 16AWG	#10	Butted Seam	UL, cUL	100	34P2310	6.79
MC29467	22AWG to 16AWG	#6/8/10	Butted Seam	UL, cUL	100	34P2231	11.80
MC29554	22AWG to 16AWG	0.25″	Butted Seam	UL, cUL	100	34P2311	9.97
MC29569	16AWG to 14AWG	#6	Brazed Seam	UL, cUL	100	34P2326	12.85
MC29571	16AWG to 14AWG	#6	Butted Seam	UL, cUL	100	34P2328	6.15
MC29575	16AWG to 14AWG	#6	Butted Seam	UL, cUL	100	34P2332	7.75
MC29566	16AWG to 14AWG	#8	Brazed Seam	UL, cUL	100	34P2323	13.16
MC29572	16AWG to 14AWG	#8	Butted Seam	UL, cUL	100	34P2329	6.58
MC29576	16AWG to 14AWG	#8	Butted Seam	UL, cUL	100	34P2333	7.75
MC29567	16AWG to 14AWG	#10	Brazed Seam	UL, cUL	100	34P2324	13.33
MC29573	16AWG to 14AWG	#10	Butted Seam	UL, cUL	100	34P2330	6.58
MC29577	16AWG to 14AWG	#10	Butted Seam	UL, cUL	100	34P2334	7.65
MC29561	16AWG to 14AWG	0.25″	Brazed Seam	UL, cUL	100	34P2318	12.18
MC29555	16AWG to 14AWG	0.25″	Butted Seam	UL, cUL	100	34P2312	10.07
MC29562	12AWG to 10AWG	#6	Brazed Seam	UL, cUL	50	34P2319	8.16
MC29557	12AWG to 10AWG	#6	Butted Seam	UL, cUL	50	34P2314	4.83
MC29578	12AWG to 10AWG	#8	Butted Seam	UL, cUL	50	34P2335	4.83
MC29563	12AWG to 10AWG	#10	Brazed Seam	UL, cUL	50	34P2320	8.73
MC29558	12AWG to 10AWG	#10	Butted Seam	UL, cUL	50	34P2315	6.05
MC29468	12AWG to 10AWG	#6/8/10	Butted Seam	UL, cUL	50	34P2232	12.01
MC29564	12AWG to 10AWG	0.25″	Brazed Seam	UL, cUL	50	34P2321	8.72
MC29559	12AWG to 10AWG	0.25″	Butted Seam	UL, cUL	50	34P2316	7.05
MC29560	12AWG to 10AWG	0.313″	Butted Seam	UL, cUL	50	34P2317	8.88
MC29556	12AWG to 10AWG	0.375″	Butted Seam	UL, cUL	50	34P2313	7.61

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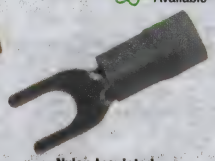
TERMINALS & SPLICES

SPADE/FORK TONGUE TERMINALS

RoHS Compliant Available

multicomp

Uninsulated



Nylon Insulated

Vinyl Insulated

• UL file no. E327842

DIN 46234, UNINSULATED

Mfg. Part No.	Wire Size	Tab Size	Insulator Color	Features	Approval	Pkg. of	Stock No.	Price per Pkg. 1-49
● MC29385	26AWG to 22AWG	#6	...	...	...	100	34P2154	5.79
● MC29386	26AWG to 22AWG	#5	...	...	...	100	34P2155	5.86
INSULATED, NYLON								
● MC29596	22AWG to 16AWG	#4	Red	Double Crimp	UL, cUL	100	34P2353	10.52
● MC29600	22AWG to 16AWG	#6	Red	Double Crimp	UL, cUL	100	34P2357	12.44
● MC29604	22AWG to 16AWG	#6	Red	Double Crimp	UL, cUL	100	34P2361	12.28
● MC29602	22AWG to 16AWG	#8	Red	Double Crimp	UL, cUL	100	34P2359	12.28
● MC29607	22AWG to 16AWG	#8	Red	Butted Seam	UL, cUL	100	34P2364	7.03
● MC29605	22AWG to 16AWG	#10	Red	Double Crimp	UL, cUL	100	34P2362	14.23
● MC29599	16AWG to 14AWG	#6	Blue	Double Crimp	UL, cUL	100	34P2356	13.78
● MC29601	16AWG to 14AWG	#6	Blue	Double Crimp	UL, cUL	100	34P2358	13.05
● MC29603	16AWG to 14AWG	#8	Blue	Double Crimp	UL, cUL	100	34P2360	12.28
● MC29606	16AWG to 14AWG	#10	Blue	Double Crimp	UL, cUL	100	34P2363	14.01
● MC29597	12AWG to 10AWG	#6	Yellow	Double Crimp	UL, cUL	50	34P2354	11.60
● MC29598	12AWG to 10AWG	#10	Yellow	Double Crimp	UL, cUL	50	34P2355	11.73
INSULATED, VINYL								
● MC29608	22AWG to 16AWG	#4	Red	Butted Seam	UL, cUL	100	34P2365	6.88
● MC29610	22AWG to 16AWG	#6	Red	Brazed Seam	UL, cUL	100	34P2367	6.57
● MC29616	22AWG to 16AWG	#6	Red	Butted Seam	UL, cUL	100	34P2373	5.93
● MC29623	22AWG to 16AWG	#6	Red	Butted Seam	UL, cUL	100	34P2380	6.01
● MC29612	22AWG to 16AWG	#8	Red	Brazed Seam	UL, cUL	100	34P2369	7.94
● MC29617	22AWG to 16AWG	#8	Red	Butted Seam	UL, cUL	100	34P2374	6.01
● MC29625	22AWG to 16AWG	#8	Red	Butted Seam	UL, cUL	100	34P2382	5.83
● MC29614	22AWG to 16AWG	#10	Red	Brazed Seam	UL, cUL	100	34P2371	7.42
● MC29618	22AWG to 16AWG	#10	Red	Butted Seam	UL, cUL	100	34P2375	7.17
● MC29627	22AWG to 16AWG	#10	Red	Butted Seam	UL, cUL	100	34P2384	7.07
● MC29611	16AWG to 14AWG	#6	Blue	Brazed Seam	UL, cUL	100	34P2368	7.67
● MC29619	16AWG to 14AWG	#6	Blue	Butted Seam	UL, cUL	100	34P2376	6.19
● MC29624	16AWG to 14AWG	#6	Blue	Butted Seam	UL, cUL	100	34P2381	6.27
● MC29613	16AWG to 14AWG	#8	Blue	Brazed Seam	UL, cUL	100	34P2370	7.84
● MC29620	16AWG to 14AWG	#8	Blue	Butted Seam	UL, cUL	100	34P2377	7.55
● MC29626	16AWG to 14AWG	#8	Blue	Butted Seam	UL, cUL	100	34P2383	7.55
● MC29615	16AWG to 14AWG	#10	Blue	Brazed Seam	UL, cUL	100	34P2372	8.35
● MC29621	16AWG to 14AWG	#10	Blue	Butted Seam	UL, cUL	100	34P2378	8.66
● MC29628	16AWG to 14AWG	#10	Blue	Butted Seam	UL, cUL	100	34P2385	8.66
● MC29622	12AWG to 10AWG	#8	Yellow	Butted Seam	UL, cUL	50	34P2379	7.07
● MC29609	12AWG to 10AWG	#10	Yellow	Butted Seam	UL, cUL	50	34P2366	4.98
UNINSULATED								
● MC29579	22AWG to 16AWG	#4	...	Butted Seam	UL, cUL	100	34P2336	5.35
● MC29586	22AWG to 16AWG	#6	...	Brazed Seam	UL, cUL	100	34P2343	5.40
● MC29587	22AWG to 16AWG	#6	...	Butted Seam	UL, cUL	100	34P2344	5.25
● MC29590	22AWG to 16AWG	#6	...	Butted Seam	...	100	34P2347	5.93
● MC29584	22AWG to 16AWG	#8	...	Brazed Seam	UL, cUL	100	34P2341	5.40
● MC29592	22AWG to 16AWG	#8	...	Butted Seam	UL, cUL	100	34P2349	6.22
● MC29594	22AWG to 16AWG	#10	...	Butted Seam	...	100	34P2351	5.97
● MC29583	16AWG to 14AWG	#6	...	Brazed Seam	UL, cUL	100	34P2340	5.23
● MC29588	16AWG to 14AWG	#6	...	Butted Seam	UL, cUL	100	34P2345	6.22
● MC29591	16AWG to 14AWG	#6	...	Butted Seam	...	100	34P2348	5.93
● MC29585	16AWG to 14AWG	#8	...	Brazed Seam	UL, cUL	100	34P2342	5.37
● MC29593	16AWG to 14AWG	#8	...	Butted Seam	UL, cUL	100	34P2350	6.66
● MC29595	16AWG to 14AWG	#10	...	Butted Seam	...	100	34P2352	5.97
● MC29580	12AWG to 10AWG	#6	...	Butted Seam	UL, cUL	100	34P2337	9.15
● MC29581	12AWG to 10AWG	#10	...	Butted Seam	UL, cUL	50	34P2338	4.90
INSULATED LOCKING, VINYL								
● MC29425	22AWG to 16AWG	#6	Red	Butted Seam	UL, cUL	100	34P2192	7.63
● MC29431	22AWG to 16AWG	#8	Red	Butted Seam	UL, cUL	100	34P2198	7.25
● MC29433	22AWG to 16AWG	#10	Red	Butted Seam	UL, cUL	100	34P2200	8.66
● MC29432	16AWG to 14AWG	#8	Blue	Butted Seam	UL, cUL	100	34P2199	9.56
● MC29426	16AWG to 14AWG	#6	Blue	Butted Seam	UL, cUL	100	34P2193	7.82
● MC29434	16AWG to 14AWG	#10	Blue	Butted Seam	UL, cUL	100	34P2201	10.46
● MC29427	12AWG to 10AWG	#6	Yellow	Butted Seam	UL, cUL	50	34P2194	6.39
● MC29428	12AWG to 10AWG	#8	Yellow	Butted Seam	UL, cUL	50	34P2195	6.43

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SPADE/FORK TONGUE TERMINALS (CONT.)

INSULATED LOCKING, VINYL

Mfg. Part No.	Wire Size	Tab Size	Insulator Color	Features	Approval	Pkg. of	Stock No.	Price per Pkg. 1-49
● MC29429	12AWG to 10AWG	#10	Yellow	Butted Seam	UL, cUL	50	34P2196	6.43
● MC29430	12AWG to 10AWG	0.25"	Yellow	Butted Seam	UL, cUL	50	34P2197	6.43
UNINSULATED LOCKING								
● MC29424	22AWG to 16AWG	#6	...	Butted Seam	UL, cUL	100	34P2191	6.84

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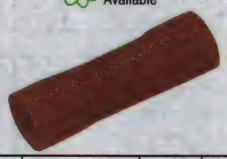
SPLICE TERMINALS

RoHS Compliant Available

multicomp



Mfg. Part No.	AWG	Insulator Material	Contact Plating	Insulator Color	Pkg. of	Stock No.	Price per Pkg. 1-49
● MC29359	22AWG to 16AWG	Uninsulated	Tin	...	100	34P2128	6.05
● MC29360	22AWG to 16AWG	Uninsulated	Nickel	...	100	34P2129	5.51
● MC29361	16AWG to 14AWG	Uninsulated	Tin	...	100	34P2130	6.58
● MC29362	16AWG to 14AWG	Uninsulated	Nickel	...	100	34P2131	6.43
● MC29363	12AWG to 10AWG	Uninsulated	Tin	...	50	34P2132	5.26
● MC29364	12AWG to 10AWG	Uninsulated	Nickel	...	50	34P2133	5.55
● MC29368	22AWG to 16AWG	Uninsulated	Tin	Uninsulated	100	34P2137	12.44
● MC29365	22AWG to 16AWG	Nylon (Polyamide)	Tin	Red	100	34P2134	11.73
● MC29366	16AWG to 14AWG	Nylon (Polyamide)	Tin	Blue	50	34P2135	7.22
● MC29369	16AWG to 14AWG	Nylon (Polyamide)	Tin	Blue	100	34P2138	14.12
● MC29367	12AWG to 10AWG	Nylon (Polyamide)	Tin	Yellow	50	34P2136	11.53
● MC29370	12AWG to 10AWG	Nylon (Polyamide)	Tin	Yellow	50	34P2139	9.78
● MC29371	22AWG to 16AWG	Vinyl	Tin	Red	100	34P2140	6.57
● MC29374	22AWG to 16AWG	Vinyl	Tin	Red	100	34P2143	10.24
● MC29372	16AWG to 14AWG	Vinyl	Tin	Blue	50	34P2141	3.52
● MC29375	16AWG to 14AWG	Vinyl	Tin	Blue	50	34P2144	6.35
● MC29373	12AWG to 10AWG	Vinyl	Tin	Yellow	50	34P2142	5.78
● MC29376	12AWG to 10AWG	Vinyl	Tin	Yellow	50	34P2145	8.62
● MC29377	8AWG	Vinyl	Tin	Red	20	34P2146	13.02
PARALLEL SPLICE							
● MC29477	22AWG to 16AWG	Uninsulated	Tin	...	100	34P2235	5.97
● MC29478	16AWG to 14AWG	Uninsulated	Tin	...	100	34P2236	7.82
● MC29479	12AWG to 10AWG	Uninsulated	Tin	..	100	34P2237	12.94
● MC29486	22AWG to 16AWG	Vinyl	Tin	Red	100	34P2244	12.59
● MC29487	16AWG to 14AWG	Vinyl	Tin	Blue	100	34P2245	12.31
CLOSED END SPLICE							
● MC29378	22AWG to 16AWG	-	Tin	...	50	34P2147	3.59
● MC29379	12AWG to 10AWG	Nylon (Polyamide)	Tin	...	50	34P2148	6.84

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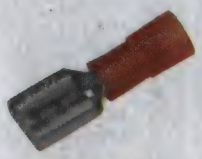
DISCONNECT TERMINALS

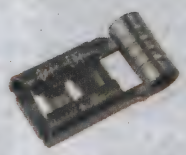
RoHS Compliant Available

multicomp

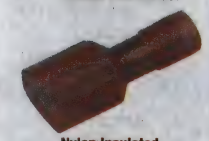


Nylon Insulated Female Disconnect

Vinyl Insulated Female Disconnect



Uninsulated Flag Disconnect



Nylon Insulated Male Disconnect

Nylon Insulated Piggyback Disconnect

Adapter

• UL file no. E327839

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DISCONNECT TERMINALS (CONT.)

FEMALE DISCONNECT, UNINSULATED

Mfg. Part No.	Wire Size	Tab Size	Insulator Color	Double Crimp	Approval	Pkg. of	Stock No.	Price per Pkg. 1-49
MC29400	22AWG to 16AWG	0.187″ x 0.02″	...	No	...	100	34P2168	3.46
MC29401	22AWG to 16AWG	0.25″ x 0.032″	...	No	...	100	34P2169	4.29
MC29402	16AWG to 14AWG	0.11″ x 0.02″	...	No	...	100	34P2170	3.46
MC29403	16AWG to 14AWG	0.187″ x 0.02″	...	No	...	100	34P2171	3.46
MC29404	16AWG to 14AWG	0.187″ x 0.02″	...	No	...	100	34P2172	2.83
MC29405	16AWG to 14AWG	0.25″ x 0.032″	...	No	...	100	34P2173	4.29
FEMALE DISCONNECT, NYLON								
MC29389	26AWG to 22AWG	0.11″ x 0.02″	Violet	No	UL, cUL	100	34P2157	13.65
MC29390	22AWG to 18AWG	0.187″ x 0.02″	Red	No	UL, cUL	100	34P2158	13.01
MC29406	22AWG to 16AWG	0.187″ x 0.02″	Red	Yes	UL, cUL	100	34P2174	11.18
MC29395	22AWG to 16AWG	0.187″ x 0.02″	Red	Yes	UL, cUL	100	34P2163	13.42
MC29391	22AWG to 16AWG	0.25″ x 0.032″	Red	No	UL, cUL	100	34P2159	14.56
MC29396	22AWG to 16AWG	0.25″ x 0.032″	Red	Yes	UL, cUL	100	34P2164	20.48
MC29407	22AWG to 16AWG	0.25″ x 0.032″	Red	Yes	UL, cUL	100	34P2175	12.22
MC29408	16AWG to 14AWG	0.11″ x 0.02″	Blue	Yes	UL, cUL	100	34P2176	11.33
MC29392	16AWG to 14AWG	0.187″ x 0.02″	Blue	No	UL, cUL	100	34P2160	13.18
MC29397	16AWG to 14AWG	0.187″ x 0.02″	Blue	Yes	UL, cUL	100	34P2165	13.97
MC29409	16AWG to 14AWG	0.187″ x 0.02″	Blue	Yes	UL, cUL	100	34P2177	11.57
MC29393	16AWG to 14AWG	0.25″ x 0.032″	Blue	No	UL, cUL	50	34P2161	7.41
MC29398	16AWG to 14AWG	0.25″ x 0.032″	Blue	Yes	UL, cUL	50	34P2166	10.54
MC29410	16AWG to 14AWG	0.25″ x 0.032″	Blue	Yes	UL, cUL	100	34P2178	12.66
MC29394	12AWG to 10AWG	0.25″ x 0.032″	Yellow	No	UL, cUL	50	34P2162	8.32
MC29411	12AWG to 10AWG	0.25″ x 0.032″	Yellow	Yes	UL, cUL	50	34P2179	8.48
FEMALE DISCONNECT, VINYL								
MC29399	22AWG to 16AWG	0.187″ x 0.02″	Red	No	UL, cUL	100	34P2167	9.30
MC29412	22AWG to 16AWG	0.25″ x 0.032″	Red	No	UL, cUL	100	34P2180	6.79
MC29413	16AWG to 14AWG	0.11″ x 0.02″	Blue	No	UL, cUL	100	34P2181	6.15
MC29414	16AWG to 14AWG	0.187″ x 0.02″	Blue	No	UL, cUL	100	34P2182	6.15
MC29415	16AWG to 14AWG	0.25″ x 0.032″	Blue	No	UL, cUL	100	34P2183	6.79
MC29416	12AWG to 10AWG	0.25″ x 0.032″	Yellow	No	UL, cUL	50	34P2184	3.82
FLAG DISCONNECT, UNINSULATED								
MC29417	22AWG to 18AWG	0.25″ x 0.032″	...	No	...	100	34P2185	8.09
MC29418	16AWG to 14AWG	0.25″ x 0.032″	...	No	...	100	34P2186	8.16
MC29419	16AWG to 14AWG	0.25″ x 0.032″	...	No	...	100	34P2187	7.75
MALE DISCONNECT, UNINSULATED								
MC29445	22AWG to 16AWG	0.187″ x 0.02″	...	No	...	100	34P2210	3.36
MC29446	22AWG to 16AWG	0.25″ x 0.032″	...	No	...	100	34P2211	3.64
MC29447	16AWG to 14AWG	0.25″ x 0.032″	...	No	...	100	34P2212	3.91
MALE DISCONNECT, NYLON								
MC29440	22AWG to 16AWG	0.187″ x 0.02″	Red	Yes	UL, cUL	50	34P2205	10.43
MC29441	22AWG to 16AWG	0.25″ x 0.032″	Red	Yes	UL, cUL	50	34P2206	10.61
MC29442	16AWG to 14AWG	0.187″ x 0.02″	Blue	Yes	UL, cUL	50	34P2207	10.43
MC29438	16AWG to 14AWG	0.25″ x 0.032″	Blue	No	UL, cUL	50	34P2203	7.25
MC29443	16AWG to 14AWG	0.25″ x 0.032″	Blue	Yes	UL, cUL	50	34P2208	9.92
MC29449	16AWG to 14AWG	0.25″ x 0.032″	Blue	Yes	UL, cUL	100	34P2213	16.83
MC29439	12AWG to 10AWG	0.25″ x 0.032″	Yellow	No	UL, cUL	25	34P2204	5.40
MC29444	12AWG to 10AWG	0.25″ x 0.032″	Yellow	Yes	UL, cUL	25	34P2209	7.37
MC29450	12AWG to 10AWG	0.25″ x 0.032″	Yellow	Yes	UL, cUL	50	34P2214	12.25
MALE DISCONNECT, VINYL								
MC29451	22AWG to 16AWG	0.187″ x 0.02″	Red	No	UL, cUL	100	34P2215	6.39
MC29436	22AWG to 16AWG	0.25″ x 0.032″	Red	No	UL, cUL	50	34P2202	6.78
MC29452	22AWG to 16AWG	0.25″ x 0.032″	Red	No	UL, cUL	100	34P2216	6.61
MC29453	16AWG to 14AWG	0.187″ x 0.02″	Blue	No	UL, cUL	100	34P2217	5.97
MC29454	16AWG to 14AWG	0.25″ x 0.032″	Blue	No	UL, cUL	100	34P2218	6.61
MC29455	12AWG to 10AWG	0.25″ x 0.032″	Yellow	No	UL, cUL	50	34P2219	3.50
PIGGYBACK DISCONNECT, NYLON								
MC29475	22AWG to 16AWG	0.25″ x 0.032″	Red	Yes	UL, cUL	100	34P2233	21.17
PIGGYBACK DISCONNECT, VINYL								
MC29476	22AWG to 16AWG	0.25″ x 0.032″	Red	No	UL, cUL	100	34P2234	8.87

ADAPTER

Mfg. Part No.	Tab Size	Convert From	Convert To	Pkg. of	Stock No.	Price per Pkg. 1-49	Price per Pkg. 50-99
MC29387	0.25″	Female Disconnect	Male Disconnect x 2	50	34P2156	6.26	5.15
MC29629	0.25″	Female Disconnect	Male Disconnect x 2	100	34P2386	14.12	11.61

(148747)

PIN TERMINALS

RoHS Compliant Available

multicomp

DOUBLE CRIMP

Mfg. Part No.	Wire Size	Insulator Material	Insulator Color	Pkg. of	Stock No.	Price per Pkg. 1-49
MC29480	22AWG to 16AWG	Nylon (Polyamide)	Red	100	34P2238	17.37
MC29481	16AWG to 14AWG	Nylon (Polyamide)	Blue	100	34P2239	20.04
MC29482	12AWG to 10AWG	Nylon (Polyamide)	Yellow	50	34P2240	14.68
BUTTED SEAM, EASY ENTRY						
MC29483	22AWG to 16AWG	Vinyl	Red	100	34P2241	7.38
MC29484	16AWG to 14AWG	Vinyl	Blue	100	34P2242	8.47
MC29485	12AWG to 10AWG	Vinyl	Yellow	50	34P2243	8.47

(148749)

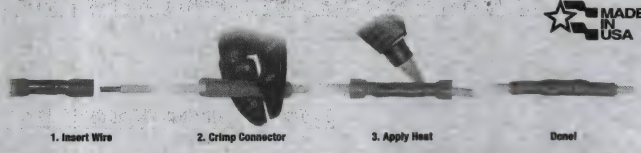
HEAT-SHRINK CRIMP AND SOLDER CONNECTORS

RoHS Compliant Available

DURATOOL

MADE IN USA

Easy 3-Step Installation



Easy to install heat-shrink crimp and solder butt connectors. Available in clear, red, blue and yellow. *Order crimp tools separately below.* Made in the U.S.A. **Sold in packages of 100 and 25.**

AWG	Length	Color	Mfg. Part No.	Pkg. of	Stock No.	Price per Pkg. 1-3
22-24	1.00″	Clear	SPC11948	100	94C6703	149.18
18-20	1.50″	Red	SPC11950		94C6705	120.76
14-16	1.50″	Blue	SPC11952		94C6707	126.30
10-12	1.50″	Yellow	SPC11954		94C6709	150.04
22-24	1.00″	Clear	SPC11947	25	94C6702	39.24
18-20	1.50″	Red	SPC11949		94C6704	30.55
14-16	1.50″	Blue	SPC11951		94C6706	31.93
10-12	1.50″	Yellow	SPC11953		94C6708	37.92

CRIMP TOOLS

Mfg. Part No.	Description	AWG	Stock No.	Price Each 1-4
SPC11945	Multipurpose Crimp Tool for Insulated Terminals	26-10	94C6700	22.22
SPC11946	Ratchet Crimp Tool	24-10	94C6701	202.79

(73822)

HEAT-SHRINK SOLDER CONNECTORS

MADE IN USA

multicomp

Easy Installation

Heat-shrink solder connectors are made with a low temperature solder and require no crimping. Solder connectors provide greater mechanical strength and superior conductivity. UL recognized (file E141071) and CSA certified (file 100774). Made in the U.S.A. **Sold in packages of 25 and 100.**

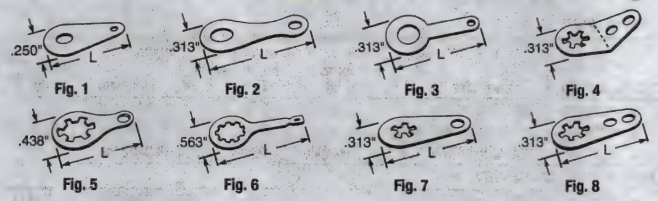
AWG	Description	Mfg. Part No.	Pkg. of	Stock No.	Price per Pkg. 1-9	Price per Pkg. 10-24
22-24	1.00″ Length – Clear	3327	100	92N3604	96.66	82.08
18-20	1.50″ Length – Red	1684		92N3605	108.27	91.94
14-16	1.50″ Length – Blue	1685		92N3606	109.21	92.74
22-24	1.00″ Length – Clear	3974	25	84N992	25.73	22.55
18-20	1.50″ Length – Red	3975		84N993	28.32	24.83
14-16	1.50″ Length – Blue	3976		84N994	28.32	24.83
10-12	1.50″ Length – Yellow	3978		84N996	33.98	29.80

(68539)

MATTE TINNED BRASS SOLDERING LUGS

RoHS Compliant Available

multicomp



Sold in packages of 100.

Mfg. Part No.	Fig.	Screw Size	Length	Stock No.	Price per Pkg. 1-9	Price per Pkg. 10-24
● 11A-120-MT*	1	No. 4	0.531″	50N436	26.36	22.94
● 11A-144-MT*	1	No. 6	0.531″	50N437	29.44	25.63
● SPC11126	2	No. 8	0.875″	32C2103	20.35	17.71
● SPC11131	3	No. 6	0.687″	32C2108	20.08	17.48
● 141-169-MT	3	No. 8	0.812″	50N438	50.94	44.33
● 29-196-MT	3	No. 10	0.796″	50N443	30.56	26.60
● SPC10873	4	No. 6	0.640″	27C0067	19.51	16.98
● SPC11130	4	No. 8	0.640″	32C2107	21.39	18.62
● SPC10879	5	0.250″	0.812″	27C0917	26.46	23.03
● 761-375-MT	6	0.375″	1.156″	50N454	33.44	29.11
● SPC11127	7	No. 6	0.625″	32C2104	20.03	17.44
● SPC11128	7	No. 8	0.625″	32C2105	20.03	17.44
● SPC11129	8	No. 6	0.718″	32C2106	20.87	18.16

*Tinned Copper
(9937)

STA-KON® FEMALE NONINSULATED DISCONNECTS

UL CSA RoHS Compliant Available Thomas&Betts

• UL listed, CSA certified

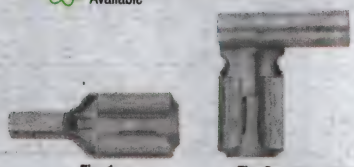


Fig. 1 Fig. 2

Order installation tools separately on page 1128. **Sold in package quantities indicated in table below.**

STRAIGHT — FIG. 1

Mfg. Part No.	Tab Size	AWG	Pkg. of	Stock No.	Price per Pkg. 1-2	Price per Pkg. 3-4
● A18-250	0.250 x 0.032″	22-18	100	33F1305	58.42	56.44
● B14-250	0.250 x 0.032″	16-14	100	33F1309	53.10	51.30
● C10-250F	0.250 x 0.032″	12-10	50	33F1313	52.28	50.51
90° FLAG CONFIGURATION — FIG. 2						
● A18-250A	0.250 x 0.032″	22-18	50	33F1308	32.81	31.69
● B14-250A	0.250 x 0.032″	16-14	50	33F1312	32.44	31.34
● C10-250A	0.250 x 0.032″	12-10	50	33F1314	55.90	53.99

*Tin-plated brass, not UL listed
(5442)

STA-KON® FEMALE INSULATED DISCONNECTS

RoHS Compliant Available Thomas&Betts

UL CSA

Fig. 1 Fig. 2 Fig. 3

• UL listed, CSA certified (except **RB14-110F, RB14-111F, RA18-111F**)

Order installation tools **mfg. part nos. WT145C, WT2000, ERG-2001, ERG-2003, WT1455** *and* **WT112M** *separately online.* **Sold in package quantities indicated in tables below.**

NYLON SELF-INSULATED — FIG. 1

Mfg. Part No.	Tab Size	AWG	Color	Pkg. of	Stock No.	Price per Pkg. 1-2	Price per Pkg. 3-4
● RA18-110F	0.110 x 0.032″	22AWG to 18AWG	Red	100	94F2971	98.35	94.99
● RA18-250F	0.250 x 0.032″	22AWG to 18AWG	Red	100	33F1362	79.91	77.97
● RAD18-183	0.187 x 0.032″	22AWG to 18AWG	Red	100	33F1363	97.23	93.92
● RAD18-182	0.187 x 0.032″	22AWG to 18AWG	Red	100	33F1364	98.31	94.96
● RB14-250F	0.250 x 0.032″	16AWG to 14AWG	Blue	100	33F1368	83.30	81.26
● RBD14-183	0.187 x 0.032″	16AWG to 14AWG	Blue	100	33F1369	108.45	104.77
● RBD14-182	0.187 x 0.020″	16AWG to 14AWG	Blue	100	33F1370	113.62	109.76
● RC10-250F	0.250 x 0.032″	12AWG to 10AWG	Yellow	50	33F1375	74.53	70.33

➤ CONTINUED ➤

STA-KON® FEMALE INSULATED DISCONNECTS (CONT.)

NYLON FULLY-INSULATED — FIG. 2

Mfg. Part No.	Tab Size	AWG	Color	Pkg. of	Stock No.	Price per Pkg. 1-2	Price per Pkg. 3-4
● 18RA-2577	0.250 x 0.032″	22AWG to 18AWG	Red	100	33F1365	82.67	80.65
● RA2573	0.250 x 0.032″	22AWG to 18AWG	Red	1000	31F2726	292.13	283.68
● 18RAD-18377	0.187 x 0.032″	22AWG to 18AWG	Red	100	33F1366	96.71	93.42
● 18RAD-18277	0.187 x 0.020″	22AWG to 18AWG	Red	100	33F1367	96.71	93.42
● 14RB-2577	0.250 x 0.032″	16AWG to 14AWG	Blue	100	33F1371	80.71	78.74
● RB2573	0.250 x 0.032″	16AWG to 14AWG	Blue	1000	31F2727	283.67	275.47
● 14RBD-18377	0.187 x 0.032″	16AWG to 14AWG	Blue	100	33F1372	94.45	91.25
● 14RBD-18277	0.187 x 0.020″	16AWG to 14AWG	Blue	100	33F1373	95.37	92.13
● 10RC-2577	0.250 x 0.032″	12AWG to 10AWG	Yellow	50	33F1376	47.12	45.97
NYLON OPEN TOP INSULATED 90° FLAG — FIG. 3							
● RA18-250A	0.250 x 0.032″	22AWG to 18AWG	Red	50	94F3056	52.96	51.15
● RB14-250A	0.250 x 0.032″	16AWG to 14AWG	Blue	50	94F1660	63.91	61.45
● RB-2577F	0.250 x 0.032″	16AWG to 14AWG	Blue	500	98F4004	178.92	173.15
● RC2577F	0.250 x 0.032″	12AWG to 10AWG	Yellow	500	94F3038	240.84	233.86
● RC10-250A	0.250 x 0.032″	12AWG to 10AWG	Yellow	50	94F1662	78.53	75.51
VINYL SELF INSULATED							
● 14RB-250F	0.250 x 0.032″	16AWG to 14AWG	Blue	100	70B6339	78.22	76.31

(5443)

STA-KON® RING TERMINALS

UL CSA RoHS Compliant Available Thomas&Betts

• UL listed, CSA certified

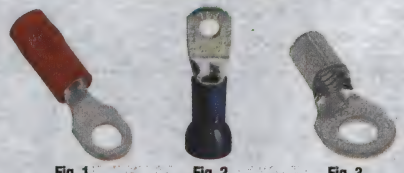


Fig. 1 Fig. 2 Fig. 3

Order installation tools separately online. **Sold in package quantities indicated in table below.**

NYLON-INSULATED

Mfg. Part No.	Fig.	Wire Size	Bolt Size	Color	Pkg. of	Stock No.	Price per Pkg. 1-2	Price per Pkg. 3-4
● RA18-4	1	22AWG to 15AWG	#4	Red	100	65F719	88.94	86.76
● RA18-6	1	22AWG to 16AWG	#6	Red	100	65F720	99.56	93.97
● RA18-8	1	22AWG to 16AWG	#8	Red	100	65F721	101.58	95.85
● RA18-10	1	22AWG to 16AWG	#10	Red	100	94F1658	106.16	102.73
● RA18-14	1	22AWG to 16AWG	0.25″	Red	100	94F9545	108.03	104.35
● RB14-6	1	18AWG to 14AWG	#6	Blue	100	65F722	104.34	98.46
● RB14-8	1	18AWG to 14AWG	#8	Blue	100	65F723	109.46	103.29
● RB14-10	1	18AWG to 14AWG	#10	Blue	100	65F724	112.12	105.80
● RB14-14	1	18AWG to 14AWG	0.25″	Blue	100	70B879	100.33	97.09
● RC10-6	1	12AWG to 10AWG	#6	Yellow	50	94F3058	59.43	57.40
● RC10-8	1	12AWG to 10AWG	#8	Yellow	50	65F725	70.37	66.41
● RC10-10	1	12AWG to 10AWG	#10	Yellow	50	65F726	67.52	63.72
● RC10-14	1	12AWG to 10AWG	#14	Yellow	50	65F727	73.01	68.90
● RC10-38	1	12AWG to 10AWG	0.375″	Yellow	50	94F1653	69.58	65.66
● RD8-10	2	8AWG	#10	Red	1	50B7986	2.95	2.89
● RD8-14	2	8AWG	0.25″	Red	25	94F1077	58.92	57.48
● RE6-10	2	6AWG	#10	Blue	1	96B2019	3.70	3.61
● RE6-14	2	6AWG	0.25″	Blue	20	99F6781	62.94	61.40

NONINSULATED

Mfg. Part No.	Fig.	AWG	Bolt Size #	Pkg. of	Stock No.	Price per Pkg. 1-9
● C10-38	3	12-10	⅜″	1	94F9766	0.69
● D8-14SK	3	9-8-7	¼″	25	94F1657	46.99
● E6-14	3	6-5	¼″	20	94F3050	32.19
● F4-14	3	4-3	¼″	20	94F2965	46.61

(5446)

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(212563)

STA-KON® MALE INSULATED TABS

RoHS Compliant Available

Thomas&Betts

- UL listed, CSA certified

Fig. 1

Fig. 2

Order installation tools separately online. **Sold in package quantities indicated in table below.**

VINYL INSULATED — FIG. 1

Mfg. Part No.	Tab Size	AWG	Color	Pkg. of	Stock No.	Price per Pkg. 1-2	Price per Pkg. 3-4
18RA-250T	0.250 x 0.032″	22-18	Red	100	33F1321	87.61	84.64
14RB-250T	0.250 x 0.032″	16-14	Blue	100	33F1323	78.06	76.14
14RBD187	0.187 x 0.032″	16-14	Blue	1	02C6509	2.32	1.99
10RC-250T	0.250 x 0.032″	12-10	Yellow	50	33F1325	50.83	49.11
NYLON INSULATED — FIG. 2							
18RA-251T	0.250 x 0.032″	22-18	Red	50	33F1322	39.68	38.72
14RB-251T	0.250 x 0.032″	16-14	Blue	50	33F1324	40.95	39.94
10RC-251T	0.250 x 0.032″	12-10	Yellow	25	33F1326	28.92	27.93

(5444)

STA-KON® BUTT SPLICES

RoHS Compliant Available

Thomas&Betts

Fig. 1

Fig. 2

Fig. 3

Sold in package quantities indicated in table below.

NYLON INSULATED — FIG. 1

Mfg. Part No.	AWG	Color	Pkg. of	Stock No.	Price per Pkg. 1-2	Price per Pkg. 3-4
2RA18	22-18	Red	100	46F3621	109.17	103.03
2RB14	16-14	Blue	100	46F3622	107.82	101.75
RBB21	16-14	Blue	1	94F9774	0.30	0.29
2RC10	12-10	Yellow	50	46F3623	79.33	74.86
VINYL INSULATED — FIG. 2						
2RA18X	22-18	Red	100	46F3631	59.08	57.64
2RB14X	16-14	Blue	100	46F3632	58.47	57.04
2RC10X	12-10	Yellow	50	46F3633	40.61	39.61
NONINSULATED — FIG. 3						
2A-18	22-18	...	100	46F3634	46.32	44.75
2B-14	16-14	...	100	46F3635	56.99	54.82
2C-10	12-10	...	50	46F3636	39.14	37.65
2D-8	9-8-7	...	25	46F3627	41.39	39.98
2E-6	6-5	...	20	46F3628	47.20	45.60

(5447)

STA-KON® INSULATED LOCKING FORK TERMINALS

RoHS Compliant Available

Thomas&Betts

- UL listed, CSA certified

Fig. 1

Fig. 2

Fig. 3

Sold in package quantities indicated in table below.

VINYL INSULATION — FIG. 1

Mfg. Part No.	AWG	Bolt Size	Color	Pkg. of	Stock No.	Price per Pkg. 1-2	Price per Pkg. 3-4
18RA-6FL	22AWG to 18AWG	#6	Red	100	33F1331	63.45	61.90
RA2217	22AWG to 16AWG	#6	Red	1000	31F2550	216.47	209.10
18RA-8FL	22AWG to 18AWG	#8	Red	100	33F1332	63.45	61.90
18RA-10FL	22AWG to 18AWG	#10	Red	100	33F1333	66.65	65.02
14RB-6FL	16AWG to 14AWG	#6	Blue	100	33F1334	66.83	65.19
14RB-8FL	16AWG to 14AWG	#8	Blue	100	33F1335	63.61	62.06
14RB-10FL	16AWG to 14AWG	#10	Blue	100	33F1336	63.30	61.75
10RC-6FL	12AWG to 10AWG	#6	Yellow	50	33F1337	44.53	43.44
10RC-8FL	12AWG to 10AWG	#8	Yellow	50	33F1338	42.80	41.74
10RC-10FL	12AWG to 10AWG	#10	Yellow	50	33F1339	41.92	40.89

➤CONTINUED➤

STA-KON® INSULATED LOCKING FORK TERMINALS (CONT.)

EXPANDED VINYL INSULATION — FIG. 2

Mfg. Part No.	AWG	Bolt Size	Color	Pkg. of	Stock No.	Price per Pkg. 1-2	Price per Pkg. 3-4
18RA-6FLX	22AWG to 16AWG	#6	Red	1	77H3179	0.92	0.90
18RA-8FLX	22AWG to 16AWG	#8	Red	1	77H3182	0.86	0.84
NYLON INSULATION — FIG. 3							
RA18-6FL	22AWG to 16AWG	#6	Red	100	94F1069	92.72	90.44
RB14-8FL	18AWG to 14AWG	#8	Blue	100	94F1072	110.89	104.64

(5445)

RING AND FORK SOLDERLESS TERMINALS

RoHS Compliant Available

Thomas&Betts

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Stock thickness indicated in mfg. part no.: **RA** and **RB** denotes 0.03″; **RC** denotes 0.04″. UL listed, CSA certified. *Order installation tools separately online or call.* **Sold in package quantities indicated in table below.**

VINYL-INSULATED RING TERMINALS — FIG. 1

Mfg. Part No.	AWG	Bolt Size	Color	Pkg. of	Stock No.	Price per Pkg. 1-2	Price per Pkg. 3-4
18RA-4	22AWG to 16AWG	#4	Red	100	65F701	67.64	65.34
18RA-6	22AWG to 16AWG	#6	Red	100	65F702	57.32	55.91
RA857	22AWG to 16AWG	#6	Red	1000	31F108	261.26	252.37
18RA-8	22AWG to 16AWG	#8	Red	100	65F703	57.32	55.91
RA867	22AWG to 16AWG	#8	Red	1000	31F109	263.42	254.47
18RA-10	22AWG to 16AWG	#10	Red	100	94F1110	77.28	74.31
RA877	22AWG to 16AWG	#10	Red	1000	70B4685	261.26	252.37
14RB-6	18AWG to 14AWG	#6	Blue	100	65F704	59.71	58.25
14RB-8	18AWG to 14AWG	#8	Blue	100	65F705	77.28	74.31
RB867	18AWG to 14AWG	#8	Blue	1000	31F114	263.42	254.47
14RB-10	18AWG to 14AWG	#10	Blue	100	65F706	77.28	74.31
RB877	18AWG to 14AWG	#10	Blue	1000	31F115	248.12	238.58
10RC-6	12AWG to 10AWG	#6	Yellow	50	94F3068	38.46	37.51
10RC-8	12AWG to 10AWG	#8	Yellow	50	65F707	36.54	35.65
10RC-10	12AWG to 10AWG	#10	Yellow	50	65F708	49.26	47.38
10RC-14	12AWG to 10AWG	0.25″	Yellow	50	65F709	59.71	57.43
VINYL-INSULATED FORK TERMINALS — FIG. 2							
18RA-6F	22AWG to 16AWG	#6	Red	100	65F710	77.28	74.31
RA1167	22AWG to 16AWG	#6	Red	1000	31F129	264.52	255.53
18RA-8F	22AWG to 16AWG	#8	Red	100	65F711	77.28	74.31
RA1147	22AWG to 16AWG	#8	Red	1000	31F130	296.52	286.43
18RA-10F	22AWG to 16AWG	#10	Red	100	65F712	76.91	73.95
14RB-6F	18AWG to 14AWG	#6	Blue	100	65F713	76.16	73.24
14RB-8F	18AWG to 14AWG	#8	Blue	100	65F714	76.16	73.24
14RB-10F	16AWG to 14AWG	#10	Blue	100	65F715	77.28	74.31
10RC-10F	12AWG to 10AWG	#10	Yellow	50	65F716	49.26	47.36
NYLON-INSULATED FORK TERMINALS — FIG. 3							
RA18-6F	22AWG to 16AWG	#6	Red	100	65F728	105.16	99.24
RA1103	22AWG to 16AWG	#6	Red	1000	31F236	312.73	303.69
RA18-8F	22AWG to 16AWG	#8	Red	100	65F729	85.13	80.33
RA18-10F	22AWG to 16AWG	#10	Red	100	65F730	99.11	93.53
RA18-14F	22AWG to 16AWG	0.25″	Red	1	72C8190	1.06	1.02
RB14-6F	18AWG to 14AWG	#6	Blue	100	65F731	106.51	100.51
RB14-8F	18AWG to 14AWG	#8	Blue	100	65F732	110.09	103.89
RB14-10F	18AWG to 16AWG	#10	Blue	100	65F733	105.59	99.65
RC10-8F	12AWG to 10AWG	#8	Yellow	50	65F734	69.54	65.62
RC10-10F	12AWG to 10AWG	#10	Yellow	50	65F735	68.94	65.06
NONINSULATED RING TERMINALS — FIG. 4							
A18-6	22AWG to 16AWG	#6	...	100	65F736	39.10	37.77
A18-8	22AWG to 16AWG	#8	...	100	65F737	39.10	37.77
B14-8	22AWG to 16AWG	#8	...	100	65F740	40.18	38.81
A18-10	22AWG to 16AWG	#10	...	100	65F738	38.53	37.21
B14-10	18AWG to 14AWG	#10	...	100	65F741	34.61	33.77
B14-6	18AWG to 14AWG	#6	...	100	65F739	38.53	37.21
C10-8-SK	12AWG to 10AWG	#8	...	1	65F742	0.58	0.56
C10-10	12AWG to 10AWG	#10	...	50	65F743	24.43	23.83
C10-14	12AWG to 10AWG	0.25″	..	50	65F744	28.79	28.09
C10-38	12AWG to 10AWG	0.375″	..	1	94F9766	0.69	0.67

➤CONTINUED➤

RING AND FORK SOLDERLESS TERMINALS (CONT.)

NONINSULATED FORK TERMINALS — FIG. 5

Mfg. Part No.	AWG	Bolt Size	Color	Pkg. of	Stock No.	Price per Pkg. 1-2	Price per Pkg. 3-4
● A18-6F	22AWG to 16AWG	#6	...	100	65F745	38.53	37.21
● A18-8F	22AWG to 16AWG	#8	...	100	65F746	42.79	41.34
● B14-6F	18AWG to 14AWG	#6	...	100	65F748	36.68	35.43
● B14-8F	18AWG to 14AWG	#8	...	100	65F749	40.57	39.19
● C10-10F	12AWG to 10AWG	#10	..	50	65F752	28.43	27.48
● C10-14F	12AWG to 10AWG	0.25″	..	50	65F753	34.44	33.28

(5455)

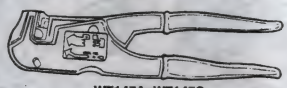
APPLICATION TOOLS AND WIRE STRIPPERS

RoHS Compliant Available

Thomas&Betts

WT2000

WT111M, WT112M



WT145A, WT145C

Plier-style hand tool **mfg. part no. WT2000** accommodates insulated and noninsulated terminals and splices. Used for cutting and stripping wire. Plier-style hand tools **mfg. part no. WT111M** for noninsulated terminals and **mfg. part no. WT112M** for insulated terminals can be used as wire cutter. Ratchet hand tools **mfg. part no. WT145A** for insulated terminals.

Mfg. Part No.	AWG	For Sta-Kon® Terminals	Stock No.	Price 1-4
WT-2000	22-10	A,B,C,AB,PT,RA,RB,RC	34F1259	54.01
● WT111M	22-10	A,B,C,PT	31F265	52.43
● WT112M	22-10	RA,RB,RC	50F839	51.66
WT145A	22-10	RA,RAX,RBC,RC,RAA,RBB,RBC,RCC	94F1102	519.00
WT145C	22-10	RA,RB,RC,RAA,RBB,RCC,RBC	31F266	571.45

(5454)

COLOR-KEYED® COMPRESSION LUGS

RoHS Compliant Available

Thomas&Betts

- UL listed, CSA certified
- **Sold in package quantities listed in table below**

NON-INSULATED LUGS

Mfg. Part No.	Cable Size	Color	Bolt Size	Pkg. of	Stock No.	Price per Pkg. 1-9
● 54130	#8 Stranded or #8 Weld	Red	¼″	1	94F3079	2.92
● 54104	#8 Stranded or #8 Weld	Red	10	50	81F1859	125.41
● 54105	#6 Stranded or #6 Weld	Blue	¼″	50	81F1860	140.93
● 54134	#6 Stranded or #6 Weld	Blue	10	50	94F3019	135.85
● 54106	#4 Stranded or #4 Weld	Gray	¼″	50	81F1861	181.57
● 54107	#2 Stranded or #4 Weld	Brown	¼″	25	81F1862	177.25
● 54108	#1 Stranded or #2 Weld	Green	¼″	20	81F1863	152.21
● 54148	#1 Stranded or #2 Weld	Green	⅜″	1	27C9822	7.98
● 54109	1/0 AWG or #1 Weld	Pink	⅜″	10	81F1864	78.83
● 54110	2/0 AWG or 1/0 Weld	Black	⅜″	10	81F1865	89.37
● 54111	3/0 AWG or 2/0 Weld	Orange	⅜″	10	81F1866	106.58
● 54112	4/0 AWG or 3/0 Weld	Purple	⅜″	10	81F1867	119.85
INSULATED LUGS - ONE HOLE STANDARD-BARREL						
● 54104I	#8 AWG	Red	10	50	82T5346	454.65
● 54105I	#6 AWG	Blue	¼″	50	82T5347	451.57
● 54106I	#4 AWG	Gray	¼″	50	82T5348	514.49
● 54108I	#1 AWG	Green	¼″	20	82T5349	325.44
● 54109I	1/0 AWG	Pink	⅜″	10	82T5350	117.54
● 54110I	2/0 AWG	Black	⅜″	10	82T5351	129.10
● 54111I	3/0 AWG	Orange	⅜″	10	82T5352	145.60
● 54112I	4/0 AWG	Purple	⅜″	10	82T5353	181.43
● 54113I	250 kcmil	Yellow	½″	10	82T5354	196.13
INSULATED LUGS - TWO HOLE STANDARD-BARREL						
● 54204I	#8 AWG	Red	10	50	82T5355	607.62
● 54205I	#6 AWG	Blue	¼″	50	82T5356	709.99
● 54206I	#4 AWG	Gray	¼″	50	82T5357	751.80
● 54208I	#1 AWG	Green	¼″	20	82T5358	401.86
● 54209I	1/0 AWG	Pink	⅜″	10	82T5359	136.41
● 54210I	2/0 AWG	Black	⅜″	10	82T5360	154.88
● 54211I	3/0 AWG	Orange	⅜″	10	82T5361	182.03
● 54212I	4/0 AWG	Purple	⅜″	10	82T5362	203.36
● 54213I	250 kcmil	Yellow	½″	10	82T5363	229.40

(5448)

LUG-IT® MECHANICAL LUGS

RoHS Compliant Available

Thomas&Betts

- UL listed, CSA certified

35301, 35401

Mfg. Part No.	Cable Size	Bolt Size	Pkg. of	Stock No.	Price per Pkg. 1-2	Price per Pkg. 3-4
● 35301	#14 to #6	10	100	81F1856	341.02	332.67
● 35401	#8 to #2	¼″	50	81F1857	226.65	221.10

(5449)

PAN-LUG™ COMPRESSION AND MECHANICAL CONNECTORS

RoHS Compliant Available

PANDUIT®

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

COPPER LUGS FOR COPPER CABLE — Fig.1
Standard barrel 1-hole lug. **Sold in package quantities indicated in table below.**

Mfg. Part No.	AWG Size	Bolt Size	Pkg. of	Stock No.	Price per Pkg. 1-2	Price per Pkg. 3-4	Price per Pkg. 5-9
● LCA6-14-L	6AWG	¼″	50	50F1270	203.03	189.38	181.69
● LCA4-14-L	4-3 Stranded 2 Solid	¼″	50	94F2782	198.52	190.75	185.21
● LCA2-14-Q	2AWG	¼″	25	50F1275	186.55	179.25	174.04
● LCA1/0-38-X	0AWG	⅜″	10	84F1864	84.59	81.27	78.92
● LCA2/0-38-X	00AWG	⅜″	10	84F1865	125.63	117.19	112.44
COPPER LUGS FOR COPPER CABLE — Fig. 2 Standard barrel 2-hole lug with window. **Sold in package quantities indicated in table below.**							
● LCD8-14A-L	8AWG	0.25″	50	66H1622	387.17	361.14	346.50
● LCD4-14A-L	4-3 Stranded 2 Solid	0.25″	1	24C5072	8.74	8.40	8.17
COPPER LUGS FOR COPPER CABLE — Fig. 3 Single-barrel, slotted head set screw. **Sold individually.**							
● CB35-36-CY	14AWG to 6AWG	3/16″	1	72K7838	2.24	2.16	2.09
● CB175-38-QY	4AWG to 000AWG	⅜″	1	72K7834	15.63	14.58	13.99
COPPER LUGS FOR COPPER CABLE — Fig. 4 One-hole straight fixed tongue. **Sold in package quantities indicated in table below.**							
● CX35-36-CY	14AWG to 6AWG	0.187″	100	72K7926	1.94	1.87	1.81
● CX70-14-CY	14AWG to 4AWG	0.25″	100	72K7931	2.92	2.81	2.73
ALUMINUM LUGS FOR ALUMINUM OR COPPER CABLE — Fig. 5 Single-barrel, slotted head set screw and 1-hole fixed tongue. **Sold individually.**							
● LAMA6-14-QY	14AWG to 6AWG	¼″	1	72K8798	1.75	1.68	1.63
● LAMA2-14-QY	2AWG	¼″	1	72K8792	3.07	2.86	2.75
● LAMA1/0-14-QY	14AWG to 0AWG	¼″	1	72K8790	3.27	3.15	3.06
● LAMA2/0-14-QY	14AWG to 00AWG	¼″	1	72K8793	3.68	3.54	3.43

(5504)

MCL30 SERIES TUBULAR LUGS

multicomp

Features
- Uninsulated
- For heavy duty applications : trucks, buses, forklifts, automotive, industrial equipment
- Annealed terminals for easy crimping
- Seamless barrels for secure and accurate crimp
- Made from High Quality Copper : 110 Cu ASTM B152

Mfg. Part No.	Wire Size (AWG)	Stud Size	Current Rating (A)	Stock No.	Price Each 1-49
MCL30-08F	8AWG	0.375″	70	61T8249	4.66
MCL30-06F	6AWG	0.375″	95	61T8248	5.43
MCL30-04F	4AWG	0.375″	125	61T8247	4.55

➤ CONTINUED ➤

MCL30 SERIES TUBULAR LUGS (CONT.)

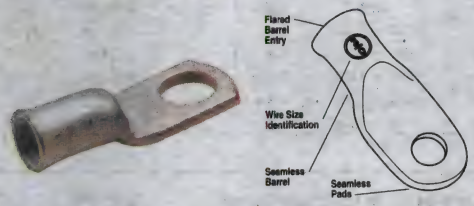
Mfg. Part No.	Wire Size (AWG)	Stud Size	Current Rating (A)	Stock No.	Price Each 1-49
MCL30-02F	2AWG	0.375″	170	61T8246	6.81
MCL30-01F	1AWG	0.375″	170	61T8245	6.81
MCL30-10F	0AWG	0.375″	230	61T8250	8.92
MCL30-20F	00AWG	0.375″	265	61T8251	9.67
MCL30-30F	000AWG	0.375″	310	61T8252	12.96
MCL30-40F	0000AWG	0.375″	360	61T8253	7.54

(197706)

HEAVY-DUTY COPPER RING TERMINALS

RoHS Compliant Available

molex



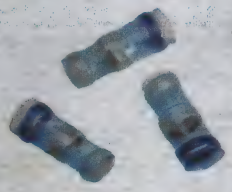
Battery Cable Lugs offer seamless performance connecting cables, electrical appliances and other power mechanisms, for harsh-duty environments. The seamless barrel designed lugs are ideal for heavy-duty 600V+ applications. Wire ranges from 8 AWG to 250 MCM with a variety of stud hole sizes can be crimped with industry standard tooling. The flared barrel entry accommodates easy insertion of stranded wire.

Mfg. Part No.	Wire Range (AWG)	Stud Size	Wire Pad	Stock No.	Pkg. of	Price per Pkg. 1-99
19221-0224	8	1/4	No	58R9323	1	0.79
19221-0226	8	3/8	Yes	58R9324	1	1.17
19221-0228	6	5/16	Yes	37C5151	10	7.45
19221-0492	6	5/16	No	01J5077	1	1.07
19221-0229	6	3/8	Yes	58R9326	1	1.41
19221-0424	6	7/16	No	58R9374	1	0.85
19221-0416	6	1/2	Yes	44W7534	1	2.40
19221-0230	4	1/4	No	58R9327	1	1.21
19221-0231	4	5/16	No	58R9328	1	1.46
19221-0460	4	5/16	Yes	58J8144	1	1.69
19221-0232	4	3/8	No	96C8844	1	1.23
19221-0458	4	3/8	Yes	58R9384	1	1.43
19221-0452	4	7/16	No	01J5075	1	1.29
19221-0454	4	1/2	No	97M6333	1	1.60
19221-0233	2	5/16	No	58R9329	1	1.25
19221-0235	2	3/8	No	58R9330	1	1.47
19221-0236	2	1/2	Yes	65H8576	1	2.63
19221-0418	2	1/4	No	55H6192	1	1.22
19221-0237	1	5/16	No	29M8426	1	1.47
19221-0240	1/0	5/16	No	58R9333	1	1.91
19221-0241	1/0	3/8	No	10R0865	1	1.83
19221-0244	2/0	3/8	No	94C2625	1	2.20
19221-0245	2/0	1/2	No	94C2620	1	2.18
19221-0251	4/0	1/2	No	94C1748	1	4.40

(69848)

FIT®-SLV SERIES SHRINKABLE SOLDERING SLEEVES

AlphaWire
Cables you trust. Service you deserve.



FIT®-SLV series soldering sleeve is a one-piece, shield ground termination system that features a strong, low-cost soldered connection which is completely insulated and encapsulated. Sleeve contains precisely engineered preform of fluxed solder and thermoplastic inserts at each end and when placed over a cable shield and heated, the solder melts and flows, connecting the ground lead and shield. Outer sleeve shrinks and the thermoplastic inserts melt, encapsulating the termination, so that the result is a perfectly soldered, strain-relieve and environmentally protected termination. Available in two different operating temperatures 105°C and 125°C, with the soldering melt temperatures being: 145°C and 180°C. Shrinkage ratio: 3:2 at 175°C.

105°C SERIES

Mfg. Part No.	Min. I.D. (mm)	Length (mm)	Pkg. of	Stock No.	Price per Pkg.
FIT-SLV-12 CL078	3.18	15.88	25	28B5212	69.60
FIT-SLV-12 CL076	3.18	15.88	100	57J2131	240.03

125°C SERIES

FIT-SLV-24 CL076	5.08	15.88	100	66F2461	242.08
FIT-SLV-26 CL076	7.62	19.05	100	66F2463	334.85

(83040)

RAYCHEM MINI SEAL SPLICES

RoHS Compliant Available

TE connectivity
Authorized Distributor

Butt Splice — Stub Splice

- Immersion-resistant
- Insulation and strain relief

Mfg. Part No.	CMA Range	Wire Size	Color	Stock No.	Price Each 1-24	Price Each 25-49
BUTT SPLICES						
D-436-0110	304-1510	26AWG to 20AWG	Red	42M1611	7.94	6.91
D-436-36	304-1510	26AWG to 20AWG	Red	11J1494	2.15	2.02
D-436-37	779-2680	20AWG to 16AWG	Blue	72J8570	2.56	2.34
D-436-38	1900-6755	16AWG to 12AWG	Yellow	64J7544	2.01	1.96
D-436-42	779-2680	24AWG to 22AWG	Blue	57J2230	9.38	8.54
D-436-43	1900-6755	22AWG to 18AWG	Yellow	26K5952	9.82	8.93
D-436-52	779-2680	20AWG to 16AWG	Blue	58K9872	9.00	8.72
D-436-53	1900-6755	18AWG to 12AWG	Yellow	26K3197	7.84	7.26
D-436-83	779-2680	20AWG to 16AWG	Blue	61J4091	4.93	4.48
STUB SPLICES						
D-436-0128	304-1510	26AWG to 20AWG	Red	57J2223	4.17	3.79
D-436-58	779-2680	20AWG to 16AWG	Blue	73J7755	5.68	4.68
D-436-59	1900-6755	18AWG to 12AWG	Yellow	57J2239	5.29	4.95
D-436-60	779-2680	20AWG to 16AWG	Blue	23K7633	10.92	9.86
D-436-61	1900-6755	18AWG to 12AWG	Yellow	22M4681	8.35	7.59

(93125)

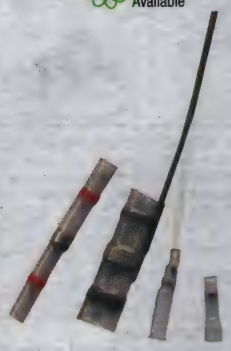
RAYCHEM SOLDERSLEEVE™ SHIELD TERMINATORS

RoHS Compliant Available

TE connectivity
Authorized Distributor

Makes Wire and Cable Termination Easy and Faster Than Conventional Hand Soldering or Crimping

- Heat-shrinkable solder wire termination
- Transparent insulation sleeve provides encapsulation, inspectability, strain relief and insulation
- Preformed fluxed solder provides a controlled soldering process
- One-piece design offers easy installation and lower installation cost
- Available with pre-installed ground lead for easier installation



S01 AND S02 SERIES WIRE-TO-WIRE SHIELD TERMINATORS, SAE-AS83519 (MIL-S-83519)
Designed to make an environment-resistant shield wire-to-wire termination on cable. Transparent, heat-shrinkable insulation sleeve constructed of radiation cross-linked polyvinylidene fluoride. Immersion-resistant. **S01 series** without ground lead meets the performance requirements of SAE-AS83519 (MIL-S-83519/1). **S02 series** with 20 AWG pre-installed ground lead meets the performance requirements of SAE-AS83519 (MIL-S-83519/2) and MIL-W-22759/32-AA-90 (for lead).

Mfg. Part No.	Length/I.D. (Min., In.)	Cable O.D. (In.) Jacket (Max.)/Shield (Min.)	Stock No.	Price Each 1-24
S01-01-R	0.650/0.105	0.075/0.035	09J3986	1.17
S01-02-R	0.650/0.145	0.175/0.055	09J3987	1.03
M83519/1-3 (S01-03-R)	0.650/0.200	0.170/0.085	09J3988	1.04
S01-04-R	0.750/0.255	0.235/0.130	09J3989	2.04
S01-05-R	0.750/0.300	0.275/0.170	09J3990	2.23
S02-04-R	0.750/0.255	0.235/0.130	63J6489	2.88

S063 SERIES WIRE TERMINATORS WITH TIN-PLATED COPPER ALLOY BRAID STRAP
S063 series SolderSleeve™ shield terminators feature a heat-shrinkable, blue transparent, polyvinylidene fluoride sleeve containing a precisely engineered, fluxed solder band that is visible through the sleeve. The band provides solder and flux to terminate the ground lead to the cable shield. Encircling the band is a small, blue temperature indicator ring that melts only when the surfaces to be joined reach the correct soldering temperature. Immersion resistant. Temperature range: -55°C to +150°C. Meets the performance requirements of SAE-AS83519 (MIL-S-83519).

Mfg. Part No.	Length/I.D. (Min., In.)	Cable O.D. (In.) Jacket (Max.)/Shield (Min.)	Stock No.	Price Each 1-24
S063-2-9030	0.650/0.145	0.105/0.055	45J3440	4.09
S063-3-9030	0.650/0.200	0.170/0.085	45J3448	4.20
S063-4-9030	0.750/0.255	0.235/0.130	04M4313	3.90

S200 SERIES HIGH-TEMPERATURE WIRE TERMINATORS, 200°C
S200 series heat-resistant SolderSleeve™ shield terminators are suitable for use in environments up to 200°C offering high workability and superior reliability. Available without or with pre-installed white ground lead. Feature a a heat-shrinkable, blue transparent, modified fluoropolymer sleeve containing a precisely engineered, fluxed solder band that is visible through the sleeve. The band provides solder and flux to terminate the ground lead to the cable shield.

➤CONTINUED➤

RAYCHEM SOLDERSLEEVE™ SHIELD TERMINATORS (CONT.)

Encircling the band is a small, light blue, temperature indicator ring that melts only when the surfaces to be joined reach the correct soldering temperature. Immersion resistant. Temperature range: -65°C to +200°C. Meets the performance requirements of SAE-AS83519 (MIL-S-83519).

Mfg. Part No.	Length/I.D. (Min., In.)	Cable O.D. (In.) Jacket (Max.)/Shield (Min.)	Lead AWG	Stock No.	Price Each 1-24
● S200-3-00	0.650/0.200	0.170/0.085	...	22T9895	4.02
● S200-4-00	0.750/0.255	0.235/0.130	...	22T9900	4.15
PRE-INSTALLED STRANDED SILVER-PLATED COPPER LEAD, WHITE — SAE-AS22759/91-22-9					
● S200-1-W1-22-9	0.650/0.105	0.075/0.035	22	22T9884	7.41
● S200-2-W1-22-9	0.650/0.145	0.105/0.055	22	22T9888	5.16
● S200-3-W1-22-9	0.650/0.200	0.170/0.085	22	22T9892	5.29
● S200-4-W1-22-9	0.750/0.255	0.235/0.130	22	22T9896	5.42
● S200-5-W1-22-9	0.750/0.300	0.275/0.170	22	22T9901	5.68
PRE-INSTALLED STRANDED NICKEL-PLATED COPPER LEAD, WHITE — SAE-AS22759/87					
● S200-1-W2-18-9	0.650/0.105	0.075/0.035	18	22T9885	7.75
● S200-1-W2-20-9	0.650/0.105	0.075/0.035	20	22T9886	7.75
● S200-1-W2-22-9	0.650/0.105	0.075/0.035	22	22T9887	6.91
● S200-2-W2-18-9	0.650/0.145	0.105/0.055	18	22T9889	7.99
● S200-2-W2-20-9	0.650/0.145	0.105/0.055	20	22T9890	7.99
● S200-2-W2-22-9	0.650/0.145	0.105/0.055	22	22T9891	7.99
● S200-3-W2-18-9	0.650/0.200	0.170/0.085	18	22T9893	8.34
● S200-3-W2-22-9	0.650/0.200	0.170/0.085	22	22T9894	8.27
● S200-4-W2-18-9	0.750/0.255	0.235/0.130	18	22T9897	9.42
● S200-4-W2-20-9	0.750/0.255	0.235/0.130	20	22T9898	9.91
● S200-4-W2-22-9	0.750/0.255	0.235/0.130	22	22T9899	9.91
● S200-5-W2-18-9	0.750/0.300	0.275/0.170	18	22T9902	10.28
● S200-5-W2-22-9	0.750/0.300	0.275/0.170	22	22T9903	10.91

CWT-900x SERIES WIRE-TO-WIRE TERMINATORS

Designed to splice bare or tin-plated copper stranded wire rated at least +85°C. Transparent, heat-shrinkable insulation sleeve constructed of radiation cross-linked modified polyolefin. Color-coded, meltable thermoplastic rings. Temperature range: -55°C to +125°C.

Mfg. Part No.	Length/I.D. (Min., In.)	Ring Color	Stock No.	Price Each 1-99
● B-155-9001	1.025/0.065	Transparent (Clear)	42M3292	0.65
● B-155-9002	1.655/0.105	Red	42M3293	0.72
● B-155-9003	1.655/0.180	Blue	42M3294	0.75
● D-1744-01	1.17/0.075	Transparent (Blue)	57J2192	3.06
D-1744-02	1.187/1.110	Transparent (Blue)	83J9018	2.98
D-1744-03	1.165/0.180	Transparent (Blue)	53K6189	3.09

CWT-xx-W122-5 SERIES WIRE TERMINATORS WITH PRE-INSTALLED LEAD

Designed for termination of bare or tin-plated copper shield on cable insulation-rated at least +85°C. Transparent, heat-shrinkable insulation sleeve constructed of radiation cross-linked modified polyolefin. Ground lead constructed of stranded, tin-plated copper polyethylene wire (22 AWG). Temperature range: -55°C to +125°C. Lead color: green

Mfg. Part No.	Length/I.D. (Min., In.)	Stock No.	Price Each 1-49
CWT-3-W122-5	0.965/0.118	09J3980	1.11
● B-155-05-35-22-5	1.154/0.189	42M3289	3.84
● B-155-07-35-22-5	1.280/0.287	42M3290	2.66

CWT-150x SERIES WIRE-TO-PIN TERMINATORS

Designed for termination of wire to the lead of an electrical component or to the terminal (pin) of a connector. Transparent, heat-shrinkable insulation sleeve constructed of radiation cross-linked modified polyolefin. Temperature range: -55°C to +125°C.

Mfg. Part No.	Length/I.D. (Min., In.)	Stock No.	Price Each Each
● B-155-1501	0.630/0.060	82K9319	0.52
CWT-1502	0.630/0.090	09J3978	0.33
CWT-3805-W2	1.655/0.180	33K3586	1.34
● B-155-1503	0.630/0.110	42M3291	1.40

D-18112xx SERIES COAXIAL CABLE TERMINATORS

Designed for termination of coaxial cable to component terminals, contacts, printed circuit boards, and solderless wrap terminals. Transparent polyvinylidene fluoride insulation sleeve provides encapsulation, inspectability, strain relief (eliminates center conductor breakage), and insulation. Temperature range: -55°C to +150°C.

Mfg. Part No.	Length/I.D. (Min., In.)	Stock No.	Price Each 1-24
D-181-1222-90/9	0.850/0.145	26K2514	6.41

(80033)

HIGHLAND™ ELECTRICAL SPRING CONNECTORS

RoHS Compliant Available

3M

- Suitable for either solid or stranded copper conductors
- Voltage rated 300V or 600V max., building wire*
- Voltage rated 1000V max., signs and fixtures
- UL listed, CSA certified

Highland™

HIGHLAND™ CONNECTORS

Highland™ economical, hard-shell wire connectors are used to electrically connect two or more wire ends in a pigtail application and insulate the connection. Color-coded for quick and easy wire-to-connector match. Constructed of a plated steel spring covered by a vinyl outer insulator designed to withstand temperatures up to 221°F (105°C). **Sold in packages of 100.**

Mfg. Part No.	AWG	Color	Max. Voltage*	Stock No.	Price per Pkg. 1-4	5-9
● H-29-BOX	22AWG to 10AWG	Grey	600	81H7420	10.09	9.25
● H-30-BOX	22AWG to 16AWG	Blue	600	95C2303	12.10	11.09
● H-31-BOX	18AWG to 14AWG	Orange	600	95C2304	13.68	12.54
● H-33-BOX	18AWG to 12AWG	Yellow	600	95C2305	15.27	13.99
● H-35-BOX	18AWG to 10AWG	Red	600	95C2306	19.98	18.20

(73235)

PERFORMANCE PLUS WIRE CONNECTORS

RoHS Compliant Available

3M

O/B+BOX R/Y+BOX B/G+BOX TR+BOX 412-BOX

Connects two or more conductor ends in a pigtail application while insulating the connection. Provides maximum protection and a wider wire range. The flexible "mini-skirt" provides protection from "overstrips" and gives more room in tight spaces. The wing design makes them easy to install. The square wire spring has a corrosion resistant coating and grips quickly biting into conductors for a solid, secure connection.

Mfg. Part No.	Color	Wire Range (AWG)	Pkg. of	Stock No.	Price Each 1-4
O/B+BOX	Blue, Orange	22 to 12	100	66F9671	17.39
R/Y+BOX	Red, Yellow	22 to 8	100	66F9672	37.81
B/G+BOX	Blue, Grey	14 to 6	50	66F9673	50.82
● TR+BOX	Tan, Red	22 to 8	100	80H9606	35.84
● T/Y+ BOX	Tan, Yellow	22 to 12	100	45M6001	19.00
● 412-BOX	Tan	22 to 8	100	46M4765	22.61

(85049)

WIRE-NUT WIRE CONNECTORS

RoHS Compliant Available

IDEAL®

Wire-Nut® Wing-Nut®

Wire-Nut® twist-on, square spring pressure-type wire connectors grab and secure wires quickly and consistently. Wing-Nut® connectors feature an extra tight grip and larger wire range combinations. Wings assist in increasing torque levels during termination. Twister® Al/Cu connector features an anti-oxidant gel included inside of the connector for splicing aluminum to copper wires for new applications or retrofits. All models are UL listed, CSA certified. **Sold in package quantities listed below.**

WIRE-NUT® TWIST-ON WIRE CONNECTORS

Mfg. Part No.	Model	Color	Pkg. of	Stock No.	Price per Pkg. 1-4
30-071	71B	Gray	100	35F2450	14.98
30-171	71B	Gray	1000	35F2451	128.04
30-072	72B	Blue	100	59F1111	17.38
30-172	72B	Blue	1000	59F1112	148.23
30-073	73B	Orange	100	35F2452	19.47
30-173	73B	Orange	1000	35F2453	150.97
30-074	74B	Yellow	100	35F2454	21.54
30-076	76B	Red	100	35F2456	32.69
WING-NUT® DEEP-SKIRT WIRE CONNECTORS					
30-451	451	Yellow	100	90F2437	24.81
30-452	452	Red	100	90F2438	32.92
● 30-454	454	Blue	250	88K0182	182.33

(5601)

CLEAR NYLON-INSULATED WIRE JOINTS

RoHS Compliant Available

PANDUIT®

UL listed, CSA certified. **Sold in package quantities listed in table below.**

Mfg. Part No.	AWG	Lgth. (in.)	Pkg. of	Stock No.	Price per Pkg. 1-2	3-4	5-9	10+
JN218-216-C	22-16	0.78	100	89F1425	61.42	57.29	54.98	52.65
JN418-212-C	18-12	0.93	100	89F1426	94.97	88.59	84.98	81.40

(5506)

773 SERIES WALL-NUT™ AND 222 SERIES LEVER-NUT™ WIRE CONNECTORS

RoHS Compliant Available

WAGO®

773 Series:
- Replacement for twist-type wire connectors
- Insert wire instead of twisting
- Built-in test points
- UL94V-0 (rated 105° C)

222 Series:
- Lever-operated Cage Clamp®
- Accepts 28-12 AWG solid & stranded wire
- Compact size
- Built-in test points
- Housing: Polyamide 6.6

773 Series

222 Series

773 SERIES STANDARD WALL-NUTS™

Mfg. Part No.	Poles	AWG	Stock No.	Price Each 1-24	25-99
773-162	2	18AWG to 12AWG	28K2290	0.40	0.38
773-164	4	18AWG to 12AWG	28K2291	0.16	0.16
773-514*	4	18AWG to 12AWG	96M8988	0.33	0.31
773-166	6	18AWG to 12AWG	28K2292	0.23	0.22
773-168	8	18AWG to 12AWG	28K2293	0.28	0.27
773-173	3	14AWG to 10AWG	28K2294	0.46	0.43

222 SERIES LEVER-NUTS™ WITH ORANGE LEVERS

Mfg. Part No.	Poles	AWG	Stock No.	Price Each 1-24	25-99
222-412	2	28AWG to 12AWG	45M7284	0.37	0.35
222-413	3	28AWG to 12AWG	28K2061	0.47	0.44
222-415	5	28AWG to 12AWG	28K2062	0.72	0.68

*High-temperature push-wire connector for applications up to 150°C

(84721)

UNINSULATED SOLDER TERMINALS

RoHS Compliant Available

CAMBION®

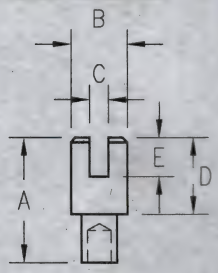


Fig. 1

Fig. 2

Fig. 3

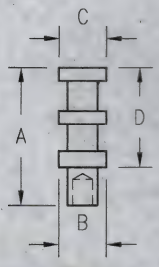


Fig. 4

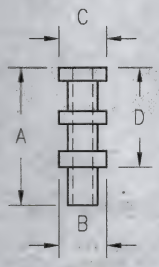


Fig. 5

Fig. 6

Terminal finish is identified by -01 or -05 in the mfg. part no.: -01 = silver plated: -05 = electrosolder. All the below terminals are for board thickness of 0.062″. All terminals are suitable for swage mount—Tooling available on request.

➤CONTINUED➤

UNINSULATED SOLDER TERMINALS (CONT.)

Mfg. Part No.	Fig.	Mntg. Hole Diam.	Dimensions (in.) A	B	C	D	E	Solder Turrets Top	Bot.	Stock No.	Price Each 1-99
140-1385-02-01-00	1	.067″	.250	.094	.044	.156	.093	...	...	97F4831	0.53
140-1018-02-01-00*	2	.052″	.176	.072	.028	.094	.068	...	...	13F2192	0.72
140-1785-02-01-00†		.067″	.250	.094	.032	.156	.093	...	...	40F6032	0.68
140-2089-02-01-00*	3	.052″	.238	.062	.025	.156	.068	...	...	40F6056	0.72
140-1019-02-01-00*		.052″	.238	.072	.028	.156	.068	...	...	13F2190	0.69
160-2085-02-01-00	4	.052″	.176	.062	.040	.094	...	1	...	40F6054	0.47
160-3653-02-01-00		.067″	.240	.094	.062	.156	...	2	...	13F3080	0.59
160-3653-02-05-00		.067″	.240	.094	.062	.156	...	2	...	97F4715	0.52
160-2043-02-01-00		.076″	.268	.094	.050	.186	...	2	...	40F6048	0.58
160-1457-02-01-00		.082″	.296	.125	.075	.187	...	1	...	40F6016	0.65
160-1558-02-01-00		.094″	.328	.125	.093	.219	...	2	...	40F6023	0.61
160-1026-02-01-00		.094″	.342	.125	.094	.237	...	2	...	40F6004	0.68
160-2034-02-01-00		.094″	.390	.156	.109	.281	...	2	...	40F6044	0.77
160-1724-02-01-00		.116″	.468	.188	.142	.359	...	2	...	40F6029	0.84
160-1512-02-01-00†	5	.067″	.240	.125	.093	.156	...	1	...	05C5185	0.71
160-2027-02-01-00†		.076″	.281	.125	.096	.187	...	1	...	40F6043	0.66
160-1797-02-01-00+		.113″	.297	.188	.138	.188	...	1	...	97F4775	0.75
160-2044-02-01-00	6	.076″	.350	.094	.050	.186	.082	2	1	40F6049	0.69
160-2040-02-01-00		.076″	.432	.094	.050	.186	.164	2	2	40F6045	0.80

Thru-Hole= *=0.026″; †=0.043″; +=0.067″; ††=0.078″

(4719)

INSULATED SOLDER TERMINALS, PRESS MOUNT

RoHS Compliant Available

CAMBION®

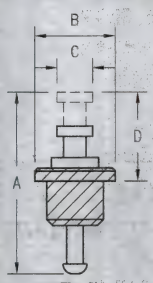


Fig. 2

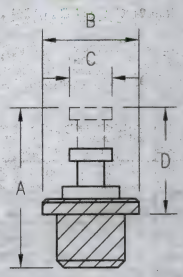


Fig. 1

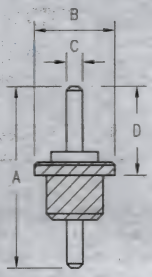


Fig. 3

Insulator: white Teflon®. Terminal plating: electro-solder. Fits up to 0.062″ thick panels. FT = feed through.

Mfg. Part No.	Fig.	Mntg. Hole	Dimensions A	B	C	D	Solder Turret	Stock No.	Price Each 1-99
571-4015-01-01-19	1	0.083″	0.280″	0.125″	0.080″	0.180″	2	05C9775	2.73
571-4016-01-01-19		0.083″	0.350″	0.125″	0.080″	0.250″	2	05C9776	2.77
571-4026-01-01-19		0.136″	0.390″	0.172″	0.080″	0.290″	2	05C9783	2.58
571-4179-01-01-19	2	0.136″	0.350″	0.172″	0.080″	0.165″	1+FT	05C9914	3.16
571-4182-03-01-19		0.136″	0.500″	0.172″	0.080″	0.250″	2+FT	05C9917	3.12
571-4283-01-05-19	3	0.083″	0.343″	0.125″	0.040″	0.165″	FT	97F5788	3.40
571-4176-01-01-19		0.136″	0.515″	0.172″	0.040″	0.250″	FT	05C9905	2.85

(4799)

INSULATED SOLDER TERMINALS, STAND-OFFS

CAMBION®

Diallyl phthalate insulated terminals are blue and plated with electro-solder. Ceramic insulated terminals are plated with silver. Teflon® insulated terminals are white, plated electro-solder. The threaded end of the part is plated cadmium with colored chromate except **mfg. part no. 570-1994-02-01-00** which has nickel plating. Other platings and styles are also available; *go online or call.*

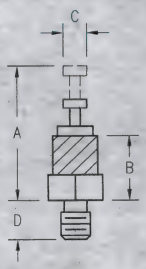


Fig. 1

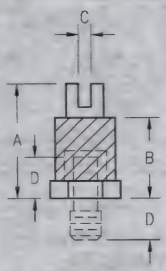


Fig. 2

TURRET TERMINALS — FIG. 1

Mfg. Part No.	Mounting Thread	Hex (in.)	Insulator	Dimensions (in.) A	B	C	D	Stock No.	Price Each 1-49
572-4894-01-05-16*	2-56 Male	.156	Diallyl	.372	.216	.093	.218	40F6237	7.28
572-4870-01-05-16*	2-56 Male	.156	Diallyl	.391	.235	.072	.125	40F6233	6.89
570-1503-01-05-19*	4-40 Male	.156	Teflon	.500	.353	.066	.250	40F6200	9.54
570-1503-01-01-19†	4-40 Male	.156	Teflon	.500	.353	.066	.250	05C9717	7.99

➤CONTINUED➤

INSULATED SOLDER TERMINALS, STAND-OFFS (CONT.)

Mfg. Part No.	Mounting Thread	Hex (in.)	Insulator	Dimensions (in.) A	B	C	D	Stock No.	Price Each 1-49
● 570-2045-01-01-00†	4-40 Male	.250	Ceramic	.545	.326	.093	.250	40F6217	13.50
● 572-4826-01-05-16†	4-40 Female	.250	Diallyl	.594	.375	.093	.156	40F6228	6.05
● 570-3650-01-01-00†	4-40 Female	.250	Ceramic	.624	.405	.093	.125	40F1762	14.08
● 572-4810-01-05-16†	4-40 Male	.250	Diallyl	.719	.375	.140	.219	40F6224	6.78
● 572-4814-01-05-16†	4-40 Female	.250	Diallyl	.719	.375	.140	.156	40F6225	5.97
● 572-4820-01-05-16†	4-40 Female	.250	Diallyl	.938	.594	.140	.219	40F6227	5.85
● 570-1504-01-05-19†	6-32 Male	.250	Teflon	.640	.336	.140	.250	40F6201	10.59
● 570-1511-01-01-19†	6-32 Female	.250	Teflon	.718	.414	.140	.156	73H0894	8.92
● 570-1504-01-01-19†	6-32 Male	.250	Teflon	.640	.336	.140	.250	05C9718	11.73
● 570-1511-01-01-19†	6-32 Female	.250	Teflon	.718	.414	.140	.156	73H0894	8.92
● 570-3648-02-01-00†	6-32 Female	.312	Ceramic	.624	.405	.093	.125	40F1782	14.82
● 570-1994-02-01-00†	6-32 Male	.312	Ceramic	.706	.347	.142	.375	40F6213	14.05
SLOTTED TERMINALS — FIG. 2									
● 572-4862-01-05-16††	4-40 Female	.250	Diallyl	.625	.375	.065	.156	40F6231	6.66

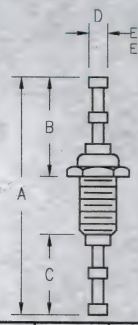
Turret: *=1 †=2 ††=Slot
(4820)

INSULATED SOLDER TERMINALS, FEED-THRU

CAMBION®

RoHS Compliant Available

Teflon® insulated terminals are white and plated with silver. Ceramic terminals are plated with electro-solder.



Mfg. Part No.	Mntg. Thread	Hex (in.)	Turrets Top	Turrets Bot.	Dimensions (in.) A	B	C	D	Stock No.	Price Each 1-49
● 570-2643-01-01-19	4-40	0.156	Pin	Pin	0.590	0.262	0.155	0.029	13F3143	16.46
● 570-2642-01-01-19	6-32	0.188	2	2	0.878	0.368	0.262	0.040	39F3645	15.07
● 570-2641-01-01-19	8-32	0.250	2	2	0.990	0.425	0.315	0.040	13F3141	14.33
● 570-2640-01-01-19	10-32	0.312	2	2	0.990	0.425	0.315	0.062	39F3646	13.91
● 570-1990-01-01-00	1/4-28	0.375	2	2	0.923	0.383	0.290	0.062	97F4430	31.90

(4821)

461 SERIES SHORTING LINKS/PLUGS

RoHS Compliant Available

CAMBION®

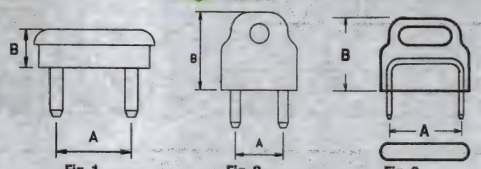


Fig. 1 Fig. 2 Fig. 3

Shorting links/plugs to mate with **450 series** jacks/sockets, 0.040″ diameter, with pitch between 0.200″ and 0.500″. Gold plated. Available insulated (molded polyproplene) in black and red. Additional colors, pitches, platings and non-insulated parts available; *go online or call.*

Mfg. Part No.	Fig.	Mating Pin	Color	Dimension A	B	Stock No.	Price Each 1-99
● 461-2872-01-03-12	1	0.040″	Red	0.200″	0.125″	65F1798	1.33
● 461-2871-01-03-10	2	0.040″	Black	0.200″	0.500″	39F2985	1.20
● 461-2871-01-03-12	2	0.040″	Red	0.200″	0.500″	65F1795	1.09
● 461-2871-02-03-10	2	0.040″	Black	0.250″	0.500″	10F7945	1.23
● 461-3771-01-03-12	3	0.040″	Red	0.400″	0.500″	10F7948	1.65

(4716)

450 & 460 SERIES NONINSULATED JACKS/SOCKETS

RoHS Compliant Available

CAMBION®

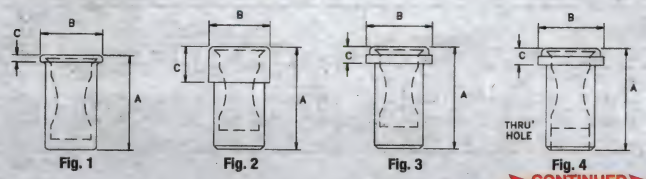


Fig. 1 Fig. 2 Fig. 3 Fig. 4

CONTINUED

450 & 460 SERIES NONINSULATED JACKS/SOCKETS (CONT.)

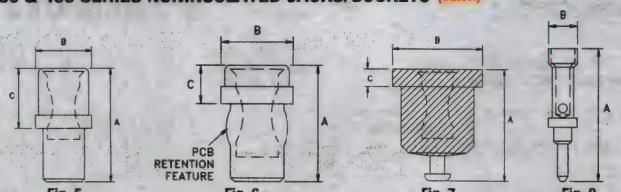


Fig. 5 Fig. 6 Fig. 7 Fig. 8

Board mounting jacks/sockets suited to mating pins from 0.020″ to 0.080″. Plating: -03 in mfg. part no. indicates gold on spring and body; -04 indicates tin on spring and body; -06 indicates gold on spring and tin on body. Additional styles and plating options available; *go online or call.*

Mfg. Part No.	Fig.	Mate Pin	Mounting Hole	Dimensions A	B	C	Stock No.	Price Each 1-99
● 450-3772-01-03-00	1	0.020″	0.052″	0.227″	0.059″	0.015″	39F2922	1.09
● 450-3703-01-03-00	1	0.025″	0.055″	0.158″	0.074″	0.016″	40F6125	1.35
● 450-3230-01-03-00	2	0.025″	0.062″	0.192″	0.080″	0.080″	40F6102	1.38
● 450-3704-01-03-00	1	0.040″	0.076″	0.206″	0.090″	0.018″	40F6303	0.97
● 450-3704-01-06-00	1	0.040″	0.076″	0.206″	0.090″	0.018″	94F3220	1.06
● 450-3388-01-03-00	3	0.040″	0.089″	0.235″	0.125″	0.035″	40F6119	1.25
● 450-3286-01-03-00	4	0.040″	0.089″	0.235″	0.125″	0.035″	39F2912	1.49
● 450-3752-01-03-00	6	0.040″	0.076″	0.220″	0.102″	0.080″	65F1793	1.22
● 450-3366-01-03-00	5	0.040″	0.089″	0.317″	0.125″	0.192″	65F1791	3.23
● 450-3326-01-03-00	1	0.060″	0.102″	0.212″	0.120″	0.018″	10F7941	1.44

450 SERIES INSULATED JACKS/SOCKETS

Teflon® insulated press mount jacks/sockets suited to mating pins from 0.040″ to 0.080″ diameter. Plated gold on spring and body. NOTE: last two digits in mfg. part no. indicate color: 10= black, 12= red. Additional plating, colors and style options available; *go online or call.*

Mfg. Part No.	Fig.	Mate Pin	Mounting Hole	Dimensions A	B	C	Stock No.	Price Each 1-99
● 450-4352-01-03-10	7	0.040″	0.136″	0.390″	0.172″	0.046″	40F6130	4.52
● 450-4352-01-03-12	7	0.040″	0.136″	0.390″	0.172″	0.046″	97F6139	4.46

460 SERIES PATCH CORD ENDS

Male and female patch cord ends to mate with **450 series** jacks/sockets, for crimp or solder attachment to wire 0.025″ to 0.080″ diameter. Plated gold on spring and body (socket), and gold on pin. Additional platings, style options and PC board mount connector pins available; *go online or call.*

Mfg. Part No.	Fig.	Mate Pin	Description	Dimensions A	B	Stock No.	Price Each 1-99
● 460-3308-01-03-00	8	0.040″	Male	0.586″	0.105″	65F1800	1.89

(4797)

SINGLE DOUBLE & TRIPLE TURRET SERIES STANDARDIZED TERMINALS

RoHS Compliant Available

KEYSTONE

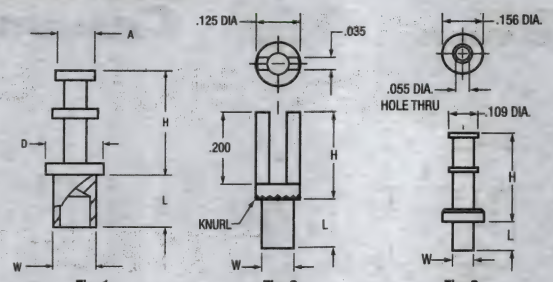


Fig. 1 Fig. 2 Fig. 3

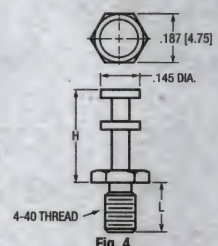


Fig. 4

Material free cutting brass - ASTM-B16, bright tin plated for extended shelf life and excellent solderability. Wide variety of sizes to suit space and wire requirements.

Mfg. Part No.	Fig.	Dimensions (inches) L	Board Thickness (T)	Mtg. Hole Diameter (A)	Pin Length (H)	Pin Diameter (A)	Stock No.	Price Each 1-99
● 1502-3	1	0.141	″0.093 ″″	2.29	0.218	0.093	34H3659	0.32
● 1503-2	1	0.109	″0.062 ″″	2.9	0.36	0.145	97B1063	0.66
● 1503-3	1	0.141	″0.093 ″″	2.9	0.36	0.145	22C6721	0.66
● 1514-2	1	0.109	″0.062 ″″	2.29	0.281	0.109	91B0251	0.51
● 1593-2	1	0.084	″0.062 ″″	1.57	0.156	0.062	93B0953	0.25

CONTINUED

SINGLE DOUBLE & TRIPLE TURRET SERIES STANDARDIZED TERMINALS (CONT.)

FEED THRU TURRET STANDARDIZED TERMINALS

Mfg. Part No.	Fig.	Dimensions (inches) L	Board Thickness (T)	Mtg. Hole Diameter (A)	Pin Length (H)	Pin Diameter (A)	Stock No.	Price Each 1-99
1511-1	2	0.078	"0.032 ""	1.6	0.243	0.125	01H8535	0.61
TUBULAR (HOLLOW) TURRET SERIES								
1582-2	3	0.063	"0.062 ""	1.98	0.328	0.156	96B8219	0.68

TURRET TERMINAL THREADED BASES - FIG. 4

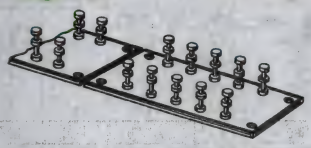
Mfg. Part No.	Thread Size	Dimensions (inches) L	Pin Length	Pin Diameter	Stock No.	Price Each 1-99
1587-2	4-40	0.188"	0.36	0.187"	91B2755	0.84

(78676)

TURRET TERMINAL BOARDS

RoHS Compliant Available

KEYSTONE ELECTRONICS CORP.



Terminals, brass per ASTM-B16 securely riveted and bright electro-tin plated per MIL-T-10727 Type 1. Paper base electrical (PBE), per MIL-P-3115C, natural, 250°F; or glass epoxy (GEE), per MIL-I-24768/27, type G-10, 300°F. Scored terminal boards are 0.094" thick with two 25-terminal rows on 0.375" centers. Standard terminal boards are 0.094" thick with two 5, 12, 19, or 26-terminal rows on 0.375" centers.

SCORED STANDARD TURRET TERMINAL BOARDS

Mfg. Part No.	No. of Terminals	Dimensions (in.) Length	Width	Row Space	Material	Stock No.	Price Each 1-9	10-24
15031*	25	13.125	0.5	...	PBE	59K0302	11.70	10.36
15036	50	13.125	1.5	1.19	PBE	59K0305	20.88	18.50
15236	50	13.125	1.5	1.19	GEE	58K2762	26.77	23.72
15033	50	13.125	2	1.5	PBE	59K0303	23.28	20.62
15233	50	13.125	2	1.5	GEE	59K0306	27.24	24.12
15234	50	13.125	2.5	2	GEE	58K2761	28.00	24.81
15035	50	13.125	3	2.5	PBE	59K0304	24.90	22.05
SCORED MINIATURE TURRET TERMINAL BOARDS								
15222	50	7.8125	1	0.75	GEE	91B3112	21.28	18.85
STANDARD TURRET TERMINAL BOARDS								
15306	10	2.625	1.875	0.75	GEE	59K0307	5.61	4.96
15307	24	5.250	1.875	0.75	GEE	06C0912	11.35	10.05
15308	38	7.875	1.875	0.75	GEE	60K7086	16.61	14.71
15311	10	2.625	1.5	1	GEE	94F4512	5.82	5.16
15312	4	5.250	1.5	1	GEE	64K0485	11.58	10.26
15314	52	10.500	1.5	1	GEE	58K2764	21.67	19.20
15316	10	2.625	2	1.5	GEE	59K0308	6.31	5.59
15317	24	5.250	2	1.5	GEE	58K2765	12.67	11.22
15318	38	7.875	2	1.5	GEE	58K2766	18.70	16.56

* One 25-terminal row.
(9190)

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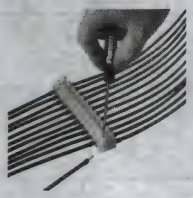
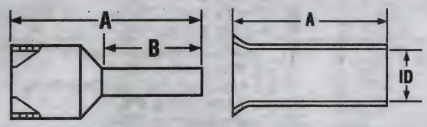
(196546)

INSULATED AND NON-INSULATED DIN FERRULES

RoHS Compliant Available

PANDUIT®





Insulated — Non-Insulated

- Designed with a seamless barrel to contain wire strands for superior terminations
- Eases insertion of wire into terminal block
- Meets DIN standards for wire containment
- Suitable for limited space panel applications
- Multiple pin lengths available for a variety of terminal blocks

Choose from insulated ferrules with single or twin wire end sleeve and non-insulated ferrules in assorted sizes. Terminates stranded wire for insertion into terminal blocks. Provides panel shops, OEMs, electrical distributors, and end users with reliable termination performance. **Sold in package quantities indicated below.** Other DIN sizes and French standard style ferrules are available; *go online or call.*

INSULATED FERRULES WITH SINGLE WIRE END SLEEVE — SOLD IN PACKAGES OF 500

Mfg. Part No.	Color	Wire Size AWG	mm²	Dimensions (In.) A	B	Stock No.	Price per Pkg.
FSD75-6-D	White	22	0.50	0.45	0.24	33C9546	123.41
FSD75-8-D	White	22	0.50	0.53	0.31	33C9547	122.35
FSD76-8-D	Gray	20	0.75	0.55	0.31	33C9551	123.41
FSD77-6-D	Red	18	1	0.49	0.24	33C9554	121.28
FSD77-8-D	Red	18	1	0.57	0.31	03C2811	123.41
FSD77-10-D	Red	18	1	0.65	0.39	33C9552	123.41
FSD78-8-D	Black	16	1.5	0.57	0.31	33C9558	156.01
FSD78-10-D	Black	16	1.5	0.65	0.39	33C9555	173.32
FSD78-12-D	Black	16	1.5	0.73	0.47	29C2351	174.84
FSD80-8-D	Blue	14	2.50	0.59	0.31	33C9562	176.36
FSD80-12-D	Blue	14	2.50	0.75	0.47	33C9560	208.06
FSD81-10-D	Gray	12	4	0.69	0.39	33C9563	208.06
FSD81-12-C*	Gray	12	4	0.79	0.47	33C9564	42.35
FSD82-12-C*	Yellow	10	6	0.79	0.47	33C9566	55.86
INSULATED FERRULES WITH TWIN WIRE END SLEEVE — SOLD IN PACKAGES OF 500							
FTD75-8-D	White	22	0.50	0.59	0.31	33C9622	190.76
FTD77-8-D	Red	18	1	0.59	0.31	33C9626	242.80
FTD78-8-D	Black	16	1.5	0.63	0.31	33C9627	279.83
FTD80-10-TL+	Blue	14	2.5	0.73	0.39	33C9628	192.42

*Sold in packages of 100; +Sold in packages of 250

NON-INSULATED FERRULES — SOLD IN PACKAGES OF 1000

Mfg. Part No.	Wire Size AWG	mm²	Dimensions (In.) A	ID	Stock No.	Price per Pkg.
F73-5-M	24	0.25	0.20	0.03	33C9631	109.01
F75-8-M	22	0.5	0.31	0.04	33C9636	128.65
F77-8-M	18	1	0.31	0.06	33C9645	129.77

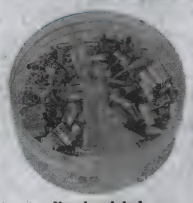
(68660)

FERRULE KITS

RoHS Compliant Available

PANDUIT®

Insulated



Non-Insulated

Contain insulated ferrules with end sleeve or non-insulated ferrules packaged in a plastic storage case.

Mfg. Part No.	Description	Stock No.	Price 1-2
KP-FSD1	#24 - #18 AWG Insulated DIN Ferrule Kit includes: 30-pcs. each of **mfg. part nos. FSD73-6, FSD74-6, FSD75-8, FSD76-8, FSD77-8**	23C8557	120.75
KP-FSD2	#22 - #14 AWG Insulated DIN Ferrule Kit includes: 100-pcs. each of **mfg. part nos. FSD76-8, FSD77-8, FSD78-8** and 50-pcs. each of **mfg. part nos. FSD75-8, FSD80-8**	33C9695	145.70

➤CONTINUED➤

HARDWARE – FERRULES

FERRULE KITS (CONT.)

Mfg. Part No.	Description	Stock No.	Price 1-2
● KP-FSD3	#12 - #6 AWG Insulated DIN Ferrule Kit Includes: 50-pcs. of **mfg. part no. FSD81-10**, 20-pcs. of **mfg. part no. FSD82-12**, and **FSD83-12** 10-pcs. of **mfg. part no. FSD84-12**	33C9696	121.80
● KP-F1	#22 - #14 AWG Non-Insulated Ferrule Kit Includes: 500-pcs. of **mfg. part no. F75-6**, 400-pcs. each of **mfg. part nos. F76-6, F77-6**, 300-pcs. of **mfg. part no. F78-7**, 200-pcs. of **mfg. part no. F80-7**	23C8752	186.58

(68661)

DIN WIRE FERRULE KITS

RoHS Compliant Available

multicomp

Contain assortments of DIN wire ferrules. CE compliant.

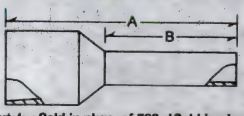
Mfg. Part No.	No. of Pieces	Description	Stock No.	Price Each
● SPC4551	150	30 ea. of **mfg. part nos. 1738, 1739, SPC4505, SPC4508, SPC4512**	84N2085	70.31
● SPC4553	400	50 ea. of **mfg. part nos. SPC4505, SPC4520**; 100 ea. of **mfg. part nos. SPC4508, SPC4512, SPC4516**	84N2087	103.17

(41371)

DIN INSULATED WIRE FERRULES

CE RoHS Compliant Available

multicomp



*Does not conform to DIN 46228 Part 4; **+Sold in pkgs. of 500; †Sold in pkgs. of 100; ‡Sold in pkgs. of 50**
**W color coding refers to the Weidmueller coding system; ++DIN color coding refers to the DIN (Metric) system;
NOTE: For a given wire size in both systems the ferrule will be identical except for the color.

DIN INSULATED WIRE FERRULES W/ WEIDMUELLER COLOR CODE**

Mfg. Part No.	"W" Color Code**	AWG	Size (mm²)	Dimensions (mm) A	Dimensions (mm) B	Stock No.	Price per Pkg. 1-2
● SPC4473+	Orange	20	0.50	11.5	6	84N2007	63.55
● SPC4474+	Orange	20	0.50	13.5	8	84N2008	43.52
● SPC4475+	Orange	20	0.50	15.5	10	84N2009	61.56
● SPC4476+	White	20	0.75	12.0	6	84N2010	66.60
● SPC4477+	White	20	0.75	14.0	8	84N2011	43.52
● SPC4478+	White	20	0.75	16.0	10	84N2012	64.50
● SPC4479+	White	20	0.75	18.0	12	84N2013	63.15
● SPC4480+	Yellow	18	1.00	12.5	6	84N2014	73.29
● SPC4481+	Yellow	18	1.00	14.5	8	84N2015	46.42
● SPC4482+	Yellow	18	1.00	16.5	10	84N2016	71.76
● SPC4483+	Yellow	18	1.00	18.5	12	84N2017	71.76
● SPC4484+	Red	16	1.50	12.5	6	84N2018	102.57
● SPC4485* +	Red	16	1.50	14.5	8	84N2019	63.84
● SPC4486+	Red	16	1.50	16.5	10	84N2020	90.23
● SPC4487+	Red	16	1.50	18.5	12	84N2021	101.49
● SPC4489+	Blue	14	2.50	15.0	8	84N2023	65.90
● SPC4490+	Blue	14	2.50	19.0	12	84N2024	87.93
● SPC4492+	Gray	12	4.00	17.5	10	84N2026	101.11
● SPC4493+	Gray	12	4.00	20.0	12	84N2027	105.51
● SPC4494†	Gray	12	4.00	26.0	18	84N2028	40.99
● SPC4495†	Black	10	6.00	20.0	12	84N2029	28.54
● SPC4496†	Black	10	6.00	25.0	18	84N2030	32.36
● SPC4497†	Ivory	8	10.00	21.0	12	84N2031	48.18
● SPC4498†	Ivory	8	10.00	27.0	18	84N2032	40.00
● SPC4499†	Green	6	16.00	23.0	12	84N2033	38.28
● SPC4501‡	Brown	4	25.00	29.0	16	84N2035	39.33
DIN INSULATED WIRE FERRULES W/ DIN (METRIC) COLOR CODE++							
● SPC4504+	White	20	0.50	11.5	6	84N2038	60.26
● SPC4505+	White	20	0.50	13.5	8	84N2039	43.96
● SPC4506+	White	20	0.50	15.5	10	84N2040	60.26
● SPC4508+	Gray	20	0.75	14.0	8	84N2042	43.96
● SPC4511+	Red	18	1.00	12.5	6	84N2045	72.53
● SPC4513+	Red	18	1.00	16.5	10	84N2047	74.89
● SPC4514+	Red	18	1.00	18.5	12	84N2048	73.29
● SPC4516+	Black	16	1.50	14.5	8	84N2050	107.83
● SPC4517+	Black	16	1.50	16.5	10	84N2051	89.27
● SPC4518+	Black	16	1.50	18.5	12	84N2052	101.49
● SPC4520+	Blue	14	2.50	15.0	8	84N2054	108.75
● SPC4521+	Blue	14	2.50	19.0	12	84N2055	86.09
● SPC4523+	Gray	12	4.00	17.5	10	84N2057	102.18
● SPC4524+	Gray	12	4.00	20.0	12	84N2058	102.18

➤ CONTINUED ➤

DIN INSULATED WIRE FERRULES (CONT.)

DIN INSULATED WIRE FERRULES W/ DIN (METRIC) COLOR CODE++

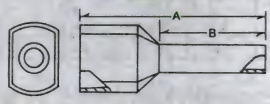
Mfg. Part No.	"W" Color Code**	AWG	Size (mm²)	Dimensions (mm) A	Dimensions (mm) B	Stock No.	Price per Pkg. 1-2
● SPC4526†	Yellow	10	6.00	20.0	12	84N2060	27.95
● SPC4528†	Red	8	10.00	21.0	12	84N2062	47.66
● SPC4530†	Blue	6	16.00	23.0	12	84N2064	38.28
● SPC4531†	Blue	6	16.00	29.0	18	84N2065	58.84

Copper/plastic material. Surface: tin-plated. CE compliant.
(31976)

TWIN-WIRE FERRULES

CE RoHS Compliant Available

multicomp



Copper/plastic material. Surface: tin-plated. CE compliant. **Mfg. part nos. SPC4562-4569** are **sold in pkgs. of 500. Mfg. part nos. SPC11955, SPC4571** and **SPC4572** are **sold in pkgs. of 100.**

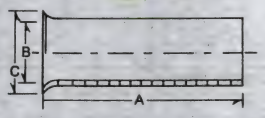
Mfg. Part No.	DIN Color Code*	AWG	Size (mm²)	Dimensions (mm) A	Dimensions (mm) B	Stock No.	Price per Pkg. 1-2
● SPC4562	White	2 x 20	2 x 0.50	15.0	8.0	84N2096	60.31
● SPC4563	Grey	2 x 20	2 x 0.75	15.0	8.0	84N2097	60.94
● SPC4564	Grey	2 x 20	2 x 0.75	17.0	10.0	84N2098	77.73
● SPC4565	Red	2 x 18	2 x 1.00	15.0	8.0	84N2099	72.39
● SPC4566	Red	2 x 18	2 x 1.00	17.0	10.0	84N2100	97.98
● 363X-20K	Black	2 x 16	2 x 1.50	16.0	8.0	84N2101	86.21
● SPC4568	Black	2 x 16	2 x 1.50	20.0	12.0	84N2102	119.79
● SPC4569	Blue	2 x 14	2 x 2.50	18.5	10.0	84N2103	55.78
● SPC11955	Blue	2 x 14	2 x 2.50	21.5	13.0	91C5905	21.15
● SPC4571	Grey	2 x 12	2 x 4.00	23.0	12.0	84N2105	21.74
● SPC4572	Yellow	2 x 10	2 x 6.00	25.0	14.0	84N2106	40.65

*DIN color coding refers to the DIN (Metric) system
(31975)

UNINSULATED WIRE FERRULES

CE RoHS Compliant Available

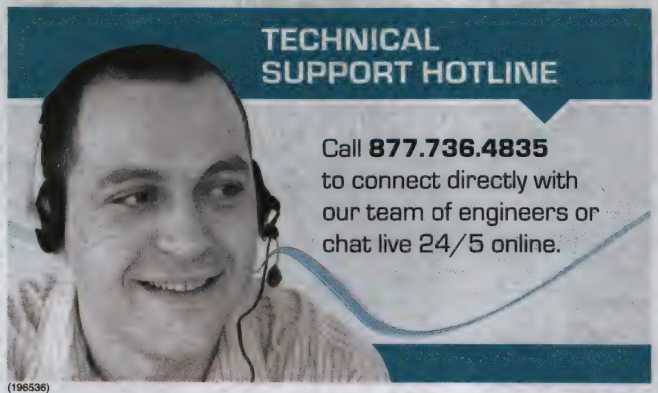
multicomp



Copper/plastic material. Surface: tin-plated. CE compliant. **Sold in pkgs. of 1000.**

Mfg. Part No.	AWG	Size (mm²)	Dimensions (mm) A	Dimensions (mm) B	Dimensions (mm) C	Stock No.	Price per Pkg.
● SPC4535	20	0.50	6	1.0	2.1	84N2069	49.28
● SPC4536*	20	0.50	8	1.0	2.1	84N2070	49.74
● SPC4537	20	0.75	6	1.2	2.3	84N2071	60.26
● SPC4540*	18	1.00	8	1.4	2.5	84N2074	63.15
● SPC4541	18	1.00	10	1.4	2.5	84N2075	63.15
● SPC4542	16	1.50	10	1.7	2.8	84N2076	68.87
● SPC4544	14	2.50	7	2.2	3.4	84N2078	84.09
● SPC4545	14	2.50	10	2.2	3.4	84N2079	84.09
● SPC4546	14	2.50	12	2.2	3.4	84N2080	84.09
● SPC4547	12	4.00	12	2.8	4.0	84N2081	71.76
● SPC4549	10	6.00	12	3.5	4.7	84N2083	161.00

*Does not conform to DIN 46228 Part 1
(31974)



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WIRE FERRULE CRIMP TOOLS

DURATOOL

Mfg. Part No.	Description	Stock No.	Price Each Each
10178	Crimp Tool, Ratchet, Frame and Die for 22-12 AWG Wire Ferrules	90B9535	47.90
10179	Ferrule Crimp Tool, Frame and Die for 10-6 AWG Ferrules	73C0245	47.90

(82537)

STA-KON® INSULATED FERRULES

RoHS Compliant Available

Thomas&Betts

- Use with any feed-through terminal block modules, barrier strip terminals and Euro-style terminal blocks. *Order terminal blocks separately; go online or call.*

Insulated Ferrules

Insulated Ferrules (Old DIN/French)

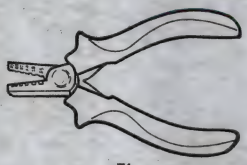
Mfg. Part No.	AWG	Color	Pkg. of	Stock No.	Price per Pkg. 1-2	3-4
F2021	20	White	500	48F2513	101.85	98.38
F2024	18	Gray	500	48F2514	100.87	97.44
F2028	18-17	Red	500	48F2515	100.87	97.44
F2031	16	Black	500	48F2516	129.20	124.82
F2035	14	Blue	500	48F2517	144.57	139.65
OLD DIN AND FRENCH STANDARDS						
F4000	20	Orange	500	48F2518	82.48	80.10
F4001	18	White	500	48F2519	100.87	97.44
F4002	18-17	Yellow	500	48F2520	82.48	80.10
F4003	16	Red	500	48F2521	101.85	98.38
F4020	14	Blue	500	48F2522	82.48	80.10

(40176)

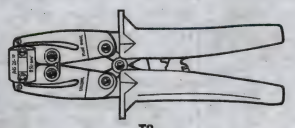
CRIMP TOOLS

RoHS Compliant Available

Thomas&Betts



T1



T3

Mfg. Part No.	Description	Stock No.	Price Each 1-4
T1	Sta-Kon® Crimp Tool for Wire Ferrules #20-14 AWG - Insulated Handle	48F3192	89.23
T3	Sta-Kon® Crimp Tool for Wire Ferrules #26-10 AWG - Insulated Handle	48F3193	286.79

(40177)

AMP PRO-CRIMPER™ III HAND TOOLS AND SDE DIE ASSEMBLIES

TE connectivity

Authorized Distributor

- Exceptional quality and crimp performance at an affordable price
- Compatible with all SDE dies
- Enhanced ergonomics, providing a thinner, more comfortable handle profile
- Precision stamping techniques permit close tolerance controls on critical parts

PRO-CRIMPER™ III TOOLS AND SDE DIES — OPEN BARREL

Mfg. Part No.	Description	Stock No.	Price 1-4
354940-1	PRO-CRIMPER Frame without Dies	96F6512	89.48
58495-1	PRO-CRIMPER Assembly, Multimate III+, 28-16 AWG	44F8409	219.32
58495-2	SDE Die Assembly, Multimate III+, 28-16 AWG	48F1670	202.01
58448-2	PRO-CRIMPER Assembly, AMPLIMITE® 20 DF, 28-20 AWG	44F8730	327.02
58448-3	SDE D Assembly, AMPLIMITE® 20 DF, 28-20 AWG	34B528	266.77
58517-1	PRO-CRIMPER Assembly, CST-100, 26-22 AWG	48F1943	490.23
58583-1	PRO-CRIMPER Assembly, Superseal 1.5 SER, 0.5-1.5mm AWG	94B8551	296.44

CONTINUED

AMP PRO-CRIMPER™ III HAND TOOLS AND SDE DIE ASSEMBLIES (CONT.)

Mfg. Part No.	Description	Stock No.	Price 1-4
90800-1	PRO-CRIMPER Assembly, AMPLIMITE 22 DF, 28-22 AWG	96F9838	327.02
90800-2	SDE Die Assembly, AMPLIMITE 22 DF, 28-22 AWG	93B4744	264.45
90546-1	PRO-CRIMPER Assembly, Univ MNL, 20-14 .<130" AWG	96F9717	290.92
90546-2	SDE Die Assembly, UMNL, 20-14 .<130" AWG	52F6272	240.64
90547-1	PRO-CRIMPER Assembly, Univ MNL, 20-14 .<130" AWG	52F6273	291.67
90548-1	PRO-CRIMPER Assembly, Univ MNL, 24-18 AWG	96F9716	287.89
90759-1	PRO-CRIMPER Assembly, Mini Univ MNL, 22-18 AWG	52F6269	279.66
PRO-CRIMPER™ TOOLS AND SDE DIES — COAX			
318450-1	PRO-CRIMPER Assembly, BNC TNC	95C0090	560.09
318450-2	SDE Die Assembly, BNC TNC	90B9378	436.94
58433-1	PRO-CRIMPER Assembly, RG 58/59 O Commercial	97F8524	303.67
58433-2	PRO-CRIMPER Assembly, RG 58/59 Hex	50F1983	258.31
58436-1	SDE Die Assembly, RG 58/59 Hex	66F1530	149.80
58436-3	SDE Die Assembly, 151/178x068	97F8529	155.23
PRO-CRIMPER™ TOOLS AND SDE DIES — PIDG®			
58433-3	PRO-CRIMPER Assembly, 22-10 AWG	97F9552	164.41
58423-1	SDE Die Assembly, 22-10 AWG	66F3273	86.29
PRO-CRIMPER™ TOOLS AND SDE DIES — SOLISTRAND®			
58546-1	PRO-CRIMPER Assembly SOLISTRAND®, 22-10 AWG	92B1815	276.15
58545-1	SDE Die Assembly SOLISTRAND®, 22-10 AWG	91B2221	196.26

(80507)

AMP HYDRAULIC CRIMP TOOLING

TE connectivity

Authorized Distributor

Hand Compression Tool

Hydraulic Hand Tool

Electric Hydraulic Pump

- Compatible with industry standard tools
- Interchangeable dies, in standard "U" die format
- Standard 10,000 psi rated heads and pumps
- Termination range is from #8 to 4/0 AWG
- Available with high performance AMP crimp profiles

HYDRAULIC HAND TOOLS FOR INTERCHANGEABLE DIES

Mfg. Part No.	Description	Stock No.	Price 1-4
1490413-1	Nest, U-Die, SOLISTRAND #8	09J5771	375.79
1490413-2	Nest, U-Die, SOLISTRAND #6	09J5772	366.98
1490413-3	Nest, U-Die, SOLISTRAND #4	09J5773	345.64
1490413-4	Nest, U-Die, SOLISTRAND #2	09J5774	323.17
1490413-5	Nest, U-Die, SOLISTRAND 1/0	09J5775	337.54
1490413-6	Nest, U-Die, SOLISTRAND 2/0	94H7930	337.54
1490413-7	Nest, U-Die, SOLISTRAND 3/0	09J5776	315.60
1490413-8	Nest, U-Die, SOLISTRAND 4/0	09J5777	315.60
1490414-1	Indenter, U-Die, SOLISTRAND #8	09J5778	354.80
1490414-2	Indenter, U-Die, SOLISTRAND #6-2	09J5779	349.25
1490414-3	Indenter, U-Die, SOLISTRAND 1/0-4/0	94H7935	349.25
59975-1	Hydraulic Hand Tool, SOLIS w/Insr 8-2	52F3432	6670.21

(80509)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

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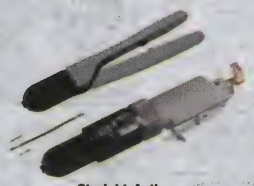
APPLICATION TOOLING

AMP CERTI-CRIMP® II STRAIGHT- AND DOUBLE-ACTION HAND TOOLS

TE connectivity

Authorized Distributor



Straight-Action

Double-Action

Micro Pneumatic Power System

- Lightweight Power Unit - 1.5 lb; Small Size Power Unit - 5.75 Length
- Ratchet control provides complete crimp cycle, helps eliminate partial crimps
- Interchangeable Tool Holders and Crimp Heads

CERTI-CRIMP® II, STRAIGHT-ACTION HAND TOOLS

Mfg. Part No.	Description	Wire Size (AWG)	Stock No.	Price Each 1-4
91500-1	SAHT, UMNL	20-14	72C5746	588.43
91503-1	SAHT, HD20	20-28	72C5755	701.30
91505-1	SAHT, Type III+	...	92C2182	741.95
91506-1	SAHT, UMNL	16-14	73C7873	701.30
91510-1	SAHT, UMNL	24-18	73C4252	718.40
91516-1	SAHT, Mod 4	...	83C8147	730.94
91522-1	SAHT, Mini UMNL	...	72C5752	718.40
91529-1	SAHT, Mini UMNL	...	73C9972	776.05
CERTI-CRIMP® DOUBLE-ACTION HAND TOOLS				
47386	DAHT, PIDG®	22-16	50F541	583.88
47387	DAHT, PIDG®	16-14	50F542	583.88
49935	DAHT, SOLIS	22-10	50F548	510.93
46121	DAHT, PIDG®	26-22	95F5500	900.45
46673	DAHT, STRATOTHERM	22-16	52F4939	795.17
46447	DAHT, STRATOTHERM	22-10	92F4790	504.57

(80490)

AMP WIRE AND CABLE CUTTING AND STRIPPING TOOLS

TE connectivity

Authorized Distributor

Mfg. Part No.	Description	Stock No.	Price 1-4
1116571-1	Diagonal cutters	10H8644	20.48
734185-1	Automatic wire stripper	57H7258	135.73

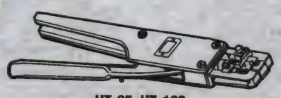
(60550)

HAND TOOLS

RoHS Compliant Available

FCI

Lightweight, rugged hand tools have ratchet-action handle that provides complete crimp cycle. For application on crimp-to-wire PV receptacles and pins.



HT-95, HT-102

Mfg. Part No.	Description	Stock No.	Price Each Each
HT-95	Mini-PV™, 22-32 AWG	89F4985	1299.27
HT-102	Male Pin Contacts, 18-20 AWG	89F4978	1005.72
● HT-151	Minitek Contacts, 30-26 AWG	27C3531	1522.25
● RCY21234	Dubox Contacts, 30-22 AWG	74K4654	1045.24

(8422)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures

(212568)

APPLICATION AND SERVICE GRADE TOOLS

RoHS Compliant Available

molex

Fig. 1

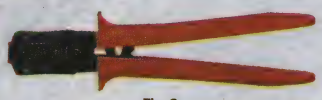


Fig. 2

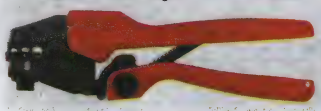


Fig. 3

Fig. 4

Fig. 5

Fig. 6

Fig. 7

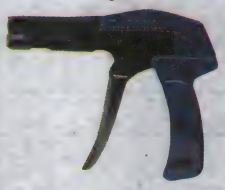


Fig. 9

Fig. 8

Manually powered hand tools intended for low-volume production and field repairs.

HAND CRIMP TOOLS

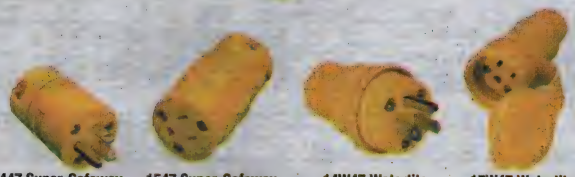
Mfg. Part No.	Fig.	For Use With	Stock No.	Price Each 1-4
19284-0034	1	8-4/0 AWG Eyelet Style Copper Lug Terminals.	58H4684	131.63
● 63811-2600	2	MX150 Blade Male Crimp Terminals, 18-22AWG	59H1436	334.13
● 63811-2400	2	MX150 Blade Male Crimp Terminals, 14-16AWG	59H1433	378.74
63811-6000	2	MX150 Receptacle Female Crimp Terminals, 18-22 AWG	41M1649	334.13
● 63811-5900	2	MX150 Blade Female Crimp Terminals, 14-16AWG	39M4525	388.42
● 63811-5300	...	MX150L Series 10-12AWG Crimp Terminals	34M2819	313.24
63811-4400	2	MX150L Crimp Terminals, 14-22 AWG	59J1033	335.51
● 63811-5400	...	MX150L Crimp Terminals, 8AWG	34M2820	400.77
● 63825-8800	2	SL Crimp Terminals, 24-30 AWG	29X6327	387.59
64001-0200	3	Insulkrimp Quick Disconnect 10-22 AWG	59H1818	376.56
64001-7400	3	10–22 AWG Perma-Seal Ring Tongue, Spade Tongue, Hook Tongue, 3 and 4-Way Terminals. Butt Splices and Step Down Butt Splices.	47M1186	550.00
63811-1000	4	1.57mm (.062″) Diameter, Standard .062″ Pin and Socket	85C2464	34.95
64016-0044	5	Modular Plugs RJ-11, RJ-22 and RJ-45	52M2120	34.04
63811-7800	...	2.00mm (.079″) Pitch Wire-to-Wire Crimp Terminal, 24-28 AWG	88M9327	309.38
63811-8100	...	2.50mm (.098″) Pitch Mini-Lock™ Wire-to-Board Crimp Terminal, 22-28 AWG	73P7452	310.66
63811-8200	...	2.54mm (.100) KK® Crimp Terminals, 22-30 AWG	99M0334	319.05
63819-0500	...	2.00mm (.079″) Pitch Crimp Terminal, 24-30 AWG	01N3706	315.21
● 63819-0900	...	Mini-Fit Jr. Crimp Terminals, 24-16 AWG	97M9440	245.45
WIRE STRIPPER / CRIMPER				
64016-0039	6	10-22 AWG Insulated and Non-Insulated Terminals, Cuts and Strips 10-22 AWG Wire	52M2117	8.97
64016-0040	7	10-30 AWG Stranded Wire	52M2118	15.04
WIRE STRIPPERS				
63817-0000	8	Insulated Wire and Cable	52M2112	79.43
CABLE TIE TOOL				
19294-0002	9	Cable Ties from 2.20mm to 4.80mm (.087″ to .189″) in width and from 18 to 50 lbs.	58H5150	22.54

(97519)

HARSH ENVIRONMENT PLUGS AND CONNECTORS

RoHS Compliant Available

Woodhead



1447 Super-Safeway | 1547 Super-Safeway | 14W47 Watertite | 15W47 Watertite

Rated for harsh environments, these plugs and connectors stand up to the toughest industrial applications. Watertite® devices form an seal that meets the requirements of NEMA 4, 4X and 6; IP 65, 66 and 67 and resist high pressure hose down up to 1000psi. Super-Safeway® devices Designed for rugged industrial and commercial use share some of the advanced design features of their Watertite® counterparts. Their durable rubber housing resists heat, oil, impact, and chemicals. A patented self-centering cord clamp provides superior strain-relief for a range of cable sizes. Safeway® nylon plugs and connectors are Woodhead's economical solution for industrial and commercial applications. UL listed.

Mfg. Part No.	Gender	Rating	NEMA	Stock No.	Price 1-4
SAFEWAY® WIRING DEVICES					
5266	Plug	15A, 125V	5-15P	27C9882	20.91
5269	Receptacle	15A, 125V	5-15R	27C9881	36.19
WATERTITE® WIRING DEVICES					
14W07	Plug	15A, 125V	Non NEMA	06H6460	37.41
15W07	Receptacle	15A, 125V	Non NEMA	06H6599	50.82
14W47	Plug	15A, 125V	5-15P	15M1990	34.79
15W47	Receptacle	15A, 125V	5-15R	15M1992	51.48
24W47	Plug	15A, 125V	L5-15P	92F4890	34.35
25W47	Receptacle	15A, 125V	L5-15R	92F4891	52.23
24W34	Plug	15A, 277V	L7-15P	06H6994	40.45
25W34	Receptacle	15A, 277V	L7-15R	06H7042	62.80
14W33	Plug	20A, 125V	5-20P	92F4921	38.63
15W33	Receptacle	20A, 125V	5-20R	92F4922	56.07
26W47	Plug	20A, 125V	L5-20P	92F4923	53.45
27W47	Receptacle	20A, 125V	L5-20R	92F4924	79.85
26W76	Plug	20A, 480V	L16-20P	25C5326	74.21
27W76	Receptacle	20A, 480V	L16-20R	25C5325	97.94
28W76	Plug	30A, 480V	L16-30P	06H7357	88.42
29W76	Receptacle	30A, 480V	L16-30R	06H7449	148.19
WATERTITE® WIRING DEVICES WITH FLIP COVERPLATES					
60W47DPLX	Receptacle	15A, 125V	5-15R	73C6312	139.96
60W33DPLX	Receptacle	20A, 125V	5-20R	07H0112	149.05
SUPER-SAFEWAY® WIRING DEVICES					
2407	Plug	15A, 125V	Non NEMA Locking	06H7017	25.06
2507	Receptacle	15A, 125V	Non NEMA Locking	06H7052	39.31
1447	Plug	15A, 125V	5-15P	15M1991	20.73
1547	Receptacle	15A, 125V	5-15R	15M1993	36.19
2447	Plug	15A, 125V	L5-15P	92F4913	20.13
2547	Receptacle	15A, 125V	L5-15R	92F4914	32.59
1433	Plug	20A, 125V	5-20P	92F4928	24.64
1533	Receptacle	20A, 125V	5-20R	92F4929	36.77
2647	Plug	20A, 125V	L5-20P	92F4930	30.48
2747	Receptacle	20A, 125V	L5-20R	92F4931	47.75
2808	Plug	30A, 250V	Non NEMA Locking	06H7373	47.55
2908	Receptacle	30A, 250V	Non NEMA Locking	06H7463	96.05

(2798)

VALISE® TWIST-LOCK® PLUGS AND CONNECTORS

RoHS Compliant Available

HUBBELL Wiring Device-Kellems

Valise® Twist-Lock® plugs and connectors feature devices available in traditional black with white cord grips. Yellow with black cord grips are also available; *go online or call*. The removable cord grip inserts offer a simple way of accommodating a wide range of cord diameters, while providing a powerful hold to prevent slippage and strain. One-piece valise-style body offers unique interlocking lugs that secure the body together for strength and security as the device folds to grip the cord, even with rough use. Cord range: **HBL45** and **HBL47 series** = 0.220-0.660″ (5.6-16.8); **HBL23 series** = 0.325-0.720″ (8.26-18.3); **HBL26 series** = 0.590-0.930″ (15.0-23.6). UL listed, CSA certified, CE compliant.

PLUGS

Mfg. Part No.	Rating	NEMA	Stock No.	Price Each 1-4	Price Each 5-9
HBL4723VBK	15A, 125V	L5-15P	91F2344	12.71	11.50
HBL4573VBK	15A, 250V	L6-15P	91F2346	14.12	12.78
HBL2311VBK	20A, 125V	L5-20P	91F2350	15.59	14.11
HBL2321VBK	20A, 250V	L6-20P	91F2352	15.41	13.94

CONTINUED

VALISE® TWIST-LOCK® PLUGS AND CONNECTORS (CONT.)

Mfg. Part No.	Rating	NEMA	Stock No.	Price Each 1-4	Price Each 5-9
HBL2611VBK	30A, 125V	L5-30P	41M3270	22.75	20.59
HBL2621VBK	30A, 250V	L6-30P	91F2358	22.48	20.35
CONNECTORS					
HBL4729VBK	15A, 125V	L5-15R	91F2345	20.33	18.40
HBL4579VBK	15A, 250V	L6-15R	91F2347	20.35	18.41
HBL2313VBK	20A, 125V	L5-20R	91F2351	22.44	20.30
HBL2323VBK	20A, 250V	L6-20R	91F2353	21.45	19.41
HBL2613VBK	30A, 125V	L5-30R	91F2357	45.09	40.80
HBL2623VBK	30A, 250V	L6-30R	91F2359	45.53	41.19
HBL7484V	15A, 250V	ML-3R	14C5694	25.53	23.09

(14838)

TWIST-LOCK® 2-POLE, 3-WIRE GROUNDING DEVICES

RoHS Compliant Available

HUBBELL Wiring Device-Kellems

Mfg. Part No. HBL2311 | Mfg. Part No. HBL2310 | Mfg. Part No. HBL2313

Hubbell Twist-Lock™ plugs, connectors and receptacles are recognized as the industry standard for locking devices because of their long history of durable construction and innovative safety features. Units are wire-ground except **mfg. part nos. HBL9965C** and **HBL7565C**. Accept 0.385-0.780″ (9.78-19.81) diameter cord except **mfg. part nos. HBL4720C, HBL4729C,** and **HBL7565C** which accept 0.296-0.688″ (7.52-17.48); and **mfg. part nos. HBL2411, HBL2421, HBL2431** which accept 0.595-0.895″ diameter cord. All are UL listed, CSA certified, except **mfg. part no. HBL7565C.**

TWIST-LOCK PLUGS

Mfg. Part No.	Rating	NEMA	Stock No.	Price Each 1-4	Price Each 5-9
HBL2311	20A, 125VAC/DC	L5-20P	81F2909	28.26	25.57
HBL2321	20A, 250VAC/DC	L6-20P	81F2906	27.32	24.71
HBL2611	30A, 125VAC/DC	L5-30P	46M3160	42.77	38.69
HBL4720C	15A, 125VAC/DC	L5-15P	32F725	21.93	19.84
HBL9965C	20A, 125/250VAC/DC	...	81F2917	30.02	27.16
HBL2411	20A, 125/250VAC	L14-20P	66F5600	41.14	37.21
HBL2421	20A, 3Ø/250VAC	L15-20P	66F5601	44.72	40.46
HBL2431*	20A, 3Ø/480VAC	L16-20P	52F9729	45.97	41.60
HBL2621	30A, 250VAC/DC	L6-30P	70B4658	42.72	38.65
HBL4570C	15A, 250VAC/DC	L16-15P	70B4151	23.18	20.97
TWIST-LOCK RECEPTACLES					
HBL2310	20A, 125VAC/DC	L5-20R	98F1997	34.78	31.47
HBL2320	20A, 250VAC/DC	L6-20R	50F5629	34.78	31.47
HBL2610	30A, 125VAC/DC	L5-30R	30F1305	49.31	44.61
HBL2420	20A, 3Ø/250VAC	L15-20R	66F5612	48.96	44.29
HBL2620	30A, 250VAC/DC	L6-30R	13C2665	54.95	50.30
TWIST-LOCK CONNECTORS					
HBL2313	20A, 125VAC/DC	L5-20R	81F2910	42.15	38.15
HBL2323	20A, 250VAC/DC	L6-20R	81F2907	42.15	38.15
HBL2613	30A, 125VAC/DC	L5-30R	34F1141	83.52	75.55
HBL4729C	15A, 125VAC/DC	L5-15R	34F1142	38.07	34.45
HBL7565C	10A, 250V/15A, 125VAC/DC	...	34F1144	43.13	39.02
HBL2625	20A, 3Ø/480VAC	L16-20R	66F5603	55.13	49.86
HBL2623	30A, 250VAC/DC	L6-30R	52F9732	84.07	76.06
HBL4579C	15A, 25VAC/DC	L6-15R	46F1296	40.70	36.82
TWIST-LOCK FLANGED INLETS					
HBL2315	20A, 125VAC/DC	L5-20P	70B5694	30.26	27.38
HBL2325	20A, 250VAC/DC	L6-20P	46F1303	30.70	27.78
HBL2615	30A, 125VAC/DC	L5-30P	70B5294	54.03	48.88
TWIST-LOCK FLANGED RECEPTACLES					
HBL2316	20A, 125VAC/DC	L5-20R	46F1295	50.08	45.30
HBL2326	20A, 250VAC/DC	L6-20R	70B4222	51.02	46.16
HBL2626	30A, 250VAC	L6-30R	66F5605	65.31	59.07

*3-pole, 4-wire
(2872)

PLUGS & CONNECTORS – GENERAL PURPOSE

WATERTIGHT WIRING DEVICES

RoHS Compliant Available

- Resists chemicals
- Exclusive triple by-pass sealing system
- Corrosion-resistant nickel plated blades and stainless steel captive assembly screws
- Double insulated elastomeric cover and thermoplastic body for extra safety and water resistance
- Ergonomic industrial grip
- Easy-clean body styling
- Closure cap seals out water and dirt when not in use
- NEMA 4, 4X, 6 and 6P Rated
- IP65, IP66, IP67

Watertight Straight Plug — Watertight Straight Receptacle

WATERTIGHT STRAIGHT BLADE PLUGS AND CONNECTORS

Mfg. Part No.	Rating	NEMA	Stock No.	Price Each 1-4	Price Each 5-9
● 14W47H	15A, 125V AC/DC	5-15P	50T8961	31.01	28.09
● 15W47H	15A, 125V AC/DC	5-15R	50T8962	45.37	41.10
● 14W33H	20A, 125V AC/DC	5-20P	50T8960	35.60	32.25
15W33H	20A, 125V AC/DC	5-20R	37T9643	48.83	44.23

WATERTIGHT LOCKING PLUGS AND CONNECTORS

Mfg. Part No.	Rating	NEMA	Stock No.	Price Each 1-4	Price Each 5-9
● 24W47H	15A, 125V AC/DC	L5-15P	50T8963	31.54	28.58
● 25W47H	15A, 125V AC/DC	L5-15R	50T8964	44.72	40.51
● 26W47H	20A, 125V AC/DC	L5-20P	50T8965	60.54	54.84
● 27W47H	20A, 125V AC/DC	L5-20R	50T8967	86.86	78.68
● 26W48H	20A, 250V AC/DC	L6-20P	50T8966	58.21	52.73
● 27W48H	20A, 250V AC/DC	L6-20R	50T8968	86.86	78.68
28W76H	30A, 480V AC/DC	L16-30P	50T8969	101.23	91.71
● 29W76H	30A, 480V AC/DC	L16-30R	50T8970	171.44	155.30

(198152)

WATERTIGHT SAFETY-SHROUD TWIST-LOCK® SYSTEM

RoHS Compliant Available

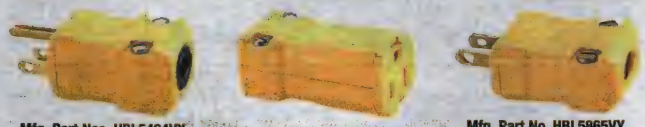
NEMA type 4X rated product line is offered in a complete family consisting of plugs, connector bodies and receptacles. Universal neoprene diaphragm seal accommodates a wide range of cord sizes from #16-3, SJ-#85, S, SO. All screws are Phillips/slotted combination. All models are 20 amps. More ampere and voltage combinations available; *go online or call.*

Mfg. Part No.	Key*	Description	Voltage	Stock No.	Price Each 1-4
● HBL2310SW	R	2-Pole, 3-Wire	125V	52F1614	105.59
● HBL2311SW	MP	2-Pole, 3-Wire	125V	52F1615	85.91
● HBL2313SW	CB	2-Pole, 3-Wire	125V	52F1616	95.74
● HBL2315SW	FI	2-Pole, 3-Wire	125V	52F1617	61.64
● HBL2731SW	MP	3-Pole, 4-Wire	3 ∅ 480VAC	91F2383	137.17

*R = receptacle; MP = male plug; CB = connector body; FI = Flanged Inlet
(2976)

STRAIGHT BLADE NYLON PLUGS AND CONNECTORS

RoHS Compliant Available



Mfg. Part Nos. HBL5464VY, HBL5666VY, HBL5364VY, HBL5965VY — Mfg. Part No. HBL5969VY — Mfg. Part No. HBL5865VY

The Valise® straight blade product line from Hubbell Wiring Device offers the customer a lower profile, yet highly durable line of plugs and connectors. The Valise® product line from Hubbell is available in 15 & 20 Amp as well as Hospital Grade. 3-wire grounding except **mfg. part no. HBL5865VY** which is 2-wire, nonpolarized. UL listed.

PLUGS

Mfg. Part No.	Rating	Cord Diameter	NEMA	Stock No.	Price Each 1-4	Price Each 5-9
● HBL5965VY	15A, 125VAC/DC	0.220-0.660″	5-15P	35B775	13.14	11.88
● HBL5865VY	15A, 125VAC/DC	0.218-0.385″	1-15P	31F1363	11.75	10.63
● HBL5965VBLK	15A, 125VAC/DC	0.220-0.660″	5-15P	66F5607	13.38	12.10
● HBL5364VY	20A, 125VAC/DC	0.460-0.720″	5-20P	35B730	20.43	18.48
● HBL5666VY	15A, 250VAC/DC	0.220-0.660″	6-15P	35B765	16.75	15.14
● HBL5666C	15A, 250VAC/DC	0.230-0.720″	6-15P	46F1294	24.10	21.79

➤ CONTINUED ➤

STRAIGHT BLADE NYLON PLUGS AND CONNECTORS (CONT.)

Mfg. Part No.	Rating	Cord Diameter	NEMA	Stock No.	Price Each 1-4	Price Each 5-9
● HBL5464VY	20A, 250VAC/DC	0.220-0.660″	6-20P	35B742	22.05	19.96
● HBL5466C	20A, 250VAC/DC	0.230-0.720″	6-20P	94F9749	31.62	28.62
● HBL9758VY	20A, 250VAC/DC	0.220-0.660″	2-20P	35B927	26.20	23.70
CONNECTORS						
● HBL5969VY	15A, 125VAC/DC	0.220-0.660″	5-15R	81F2897	25.57	23.14
● HBL5669C	15A, 250VAC/DC	0.230-0.720″	6-15R	94F9751	41.01	37.10

(2860)

STRAIGHT BLADE 3-WIRE GROUND DEVICES

RoHS Compliant Available

- Heavy duty impact-resistant nylon construction
- Powerful cord clamp prevents strain on terminations
- Accepts a wide range of cord diameters
- Mates with all like-rated NEMA devices
- 15A and 20A, 2-pole, 3-wire grounding

Nylon 2-pole ground devices. 0.296-0.688″ (7.52-17.48) diameter cord. **Mfg. part no. HBL5266CA** is an 8-position angle plug. UL listed, CSA certified.

Mfg. Part Nos. HBL5369C, HBL5269C — Mfg. Part Nos. HBL5366C, HBL5266C

PLUGS

Mfg. Part No.	Rating	NEMA	Stock No.	Price Each 1-4	Price Each 5-9
● HBL5266C	15A, 125V AC/DC	5-15P	32F750	19.84	17.95
● HBL5366C	20A, 125V AC/DC	5-20P	35B732	27.08	24.51
● HBL5266CA	15A, 125V AC/DC	5-15P	52F9755	26.02	23.54
CONNECTORS					
● HBL5269C	15A, 125V AC/DC	5-15R	35B701	34.23	30.96
● HBL5369C	20A, 125V AC/DC	5-20R	34F1143	45.53	41.20

(2679)

2-POLE, 3-WIRE STRAIGHT BLADE PLUGS AND RECEPTACLES

RoHS Compliant Available

- Heavy duty, impact-resistant thermoplastic construction
- Plugs accept 0.625-1.187″ diameter cord
- Mates with all like-rated NEMA devices
- 2-pole, 3-wire grounding, 30A and 50A
- UL listed, CSA certified

HBL9331

Mfg. Part No.	Description	Rating	NEMA	Stock No.	Price Each 1-4	Price Each 5-9
● HBL9367	Receptacle, Black RTP	50A, 250V	6-50R	92F511	47.46	42.93
● HBL9368	Plug, Nylon, Angle 4-Position	50A, 250V	6-50P	66F5609	93.35	84.45

(3065)

2-WIRE MIDGET PLUGS/ CONNECTORS/RECEPTACLES

RoHS Compliant Available

HBL7465V — HBL7464V — HBL7468

- Compact locking construction
- Plug and connector accept 0.220-0.385″ diameter cord
- Flange devices have a stainless steel mounting flange and exposed terminals
- Mates with all rated ML-1R NEMA devices
- 2-pole, 2-wire non-grounding, 15A, 125V

Mfg. part nos. HBL7464V and **HBL7465V** fit 0.218″-0.375″ (5.54-9.53) diameter cords. 2-pole, 2-wire. Brass casings with polished nickel finish. 15A, 125VAC/DC. UL listed.

Mfg. Part No.	Description	Stock No.	Price Each 1-4	Price Each 5-9
● HBL7464V	Valise Style Connector	93B4479	18.26	16.53
● HBL7465V	Valise Style Polarized Plug	31F1365	16.67	15.08
● HBL7466*	Flanged Inlet, Exposed Terminals	38F502	24.72	22.37
● HBL7467	Flanged Inlet, Exposed Terminals	70B5226	21.39	19.34
● HBL7468	Flanged Receptacle, NEMA ML-1R	38F503	20.36	18.41

* Non-polarized
(2858)

3-POLE, 3-WIRE DEVICES

RoHS Compliant Available

HUBBELL Wiring Device-Kellems

HBL7567C HBL7555 HBL7556 HBL7485V

10A, 250VAC; 15A, 125VAC or DC. **Mfg. part no. HBL7567C** fits 0.296-0.688″ (7.52-17.48) diameter cord; **mfg. part no. HBL7555** fits 0.296-0.625″ (7.52-15.88); **mfg. part no. HBL7485V** fits 0.300-0.430″ (7.6-10.9).

Mfg. Part No.	Description	Stock No.	Price Each 1-4	Price Each 5-9
HBL7567C	Plug	31F1366	26.40	23.89
HBL7555	Connector	38F510	48.16	43.57
HBL7556	Flanged Inlet	38F511	35.46	32.08
HBL7485V	Plug	52F9743	21.02	19.01

(2877)

STRAIGHT BLADE 2-POLE, 3-WIRE HOSPITAL-GRADE PLUGS AND CONNECTORS

RoHS Compliant Available

HUBBELL Wiring Device-Kellems

Fig. 1 Fig. 2 Fig. 3

- Heavy duty Hospital-grade construction, made from impact-resistant nylon
- Powerful cord clamp prevents strain on terminataions
- Accepts a wide range of cord diameters
- Mates with all like-rated NEMA devices
- 15A and 20A, 2-pole, 3-wire grounding

Accept 12/3SO to 18/3SJ cord. **8100 series** and **8200 series**: 15A, 125VAC/DC. **8300 series**: 20A, 125VAC/DC. UL listed, CSA certified. *Order mating receptacles separately; go online or call.*

8100 SERIES PLUG AND CONNECTOR

Mfg. Part No.	Description	Fig.	NEMA	Stock No.	Price Each 1-4	Price Each 5-9
HBL8115V	Plug	...	5-15P	35B815	15.14	13.24
HBL8119V	Connector	...	5-15R	94F9527	26.66	23.28
8200 SERIES PLUGS AND CONNECTOR						
HBL8215C	Plug	3	5-15P	31F1341	20.57	17.97
HBL8215CAT	Plug	1	5-15P	31F1343	28.63	24.99
HBL8215CT	Plug	3	5-15P	31F1342	27.72	24.21
HBL8219C	Connector	2	5-15R	31F1344	36.57	31.94
8300 SERIES PLUGS AND CONNECTOR						
HBL8315C	Plug	3	5-20P	31F1358	26.89	23.48
HBL8315CT	Plug	3	5-20P	31F1359	33.57	29.31
HBL8319C	Connector	2	5-20R	31F1360	43.55	38.04

(2852)

2-POLE, 3-WIRE HOSPITAL-GRADE DEVICES

RoHS Compliant Available

HUBBELL Wiring Device-Kellems

HBL23014HGB HBL23001HGB

2-pole, 3-wire grounding nonexplosion-proof devices rated 20A, 125V, 60Hz, AC. For nonhazardous areas. Explosion-proof for operating rooms and class 1, division 1, group C atmospheres. UL listed, CSA certified.

Mfg. Part No.	Description	Stock No.	Price Each 1-4	Price Each 5-9
HBL23001HGB	Connector	41M3268	164.05	143.25
HBL23014HGB	Plug	41M3269	169.34	147.87

(2856)

POWERCON® CONNECTORS

RoHS Compliant Available

NEUTRIK

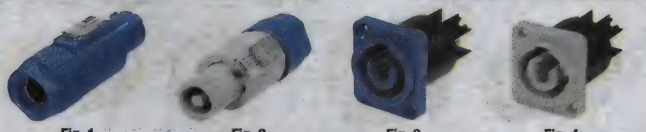


Fig. 1 Fig. 2 Fig. 3 Fig. 4

➤CONTINUED➤

POWERCON® CONNECTORS (CONT.)

Fig. 5 Fig. 6 Fig. 7

Used for AC power connections, Powercon® 20 Amp connectors utilize the same design as Speakon® connectors. Rated: 250V, 20A. Color-coded in A and B versions for power-in or power-out with identifying keyways. Cable O.D. 5-15mm with a maximum wire gauge of 14 AWG. **Mfg. part no. NAC3MPA-1** and **NAC3MPB-1** have quick-disconnect type termination. **Mfg. part no. NAC3FC-HC** Powercon® 32 Amp is an extremely robust and reliable locking single phase AC appliance cable connector for high current capacity. It serves the need of high power distribution systems and supplies for professional audio and lighting equipment and installations. Rated: 250V, 32A. UL and cUL recognized, VDE certified, SEV approved.

POWERCON® 20 AMP

Mfg. Part No.	Fig.	Mounting	Termination	Color	Version	Stock No.	Price Each 1-9
NAC3FCA	1	Cable	Screw	Blue	Power-In	91F3453	10.42
NAC3FCB	2	Cable	Screw	Gray	Power-Out	91F3454	10.55
NAC3MPA-1	3	Panel	Solder	Blue	Power-In	67R9527	5.36
NAC3MPB-1	4	Panel	Solder	Gray	Power-Out	60R3143	5.36
NAC3MM-1	5	Coupler	...	Blue / Gray	Power-In / Power-Out	70R0981	26.61
POWERCON® 32 AMP							
NAC3FC-HC	6	Cable	Screw	Black	...	70M9999	30.01
NAC3MP-HC	7	Panel	Screw	Black	...	75M0467	18.80

(92275)

AC APPLIANCE PLUG MATES

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6 Fig. 7 Fig. 8 Fig. 9 Fig. 10 Fig. 11 Fig. 12 Fig. 13 Fig. 14 Fig. 15 Fig. 16 Fig. 17

Rewireable cord connectors feature cabled entry, screw terminals, 65°C operating temperature (except **mfg. part nos. 4781.0000** and **4784.0000,** which are rated at 120°C). Rated 10A/15A, 250V. UL recognized, CSA certified, VDE approved.

PLUG MATES

Mfg. Part No.	Fig.	Description	Stock No.	Price Each 1-24	Price Each 25-49
4781.0000	1	Straight Entry 1.00mm²	84K0307	5.21	4.61
4781.0100	1	Straight Entry 14AWG	84K0308	5.49	4.85
4784.0000	2	Angled Entry 1.0mm²	84K0311	5.79	5.11
4784.0100	2	Angled Entry 14AWG	84K0312	5.79	5.11
4300.0401	3	Angled Entry 18AWG	89F5331	9.59	8.46
4732.0000	4	Straight Entry 18AWG	84K0302	8.12	7.17
4735.0000	4	Straight Entry 14AWG	84K0304	8.86	7.83
4733.0000	5	Angled Entry 18AWG	84K0303	8.70	7.68
4736.0000	5	Angled Entry 14AWG	84K0305	9.38	8.28
4782.0000	6	Straight Entry 18AWG	84K0309	5.79	5.12
4782.0100	6	Straight Entry 14AWG	84K0310	5.68	5.02
4785.0100	7	Angled Entry 14AWG	84K0314	6.97	6.15
4785.0000	7	Angled Entry 18AWG	84K0313	7.08	6.25

➤CONTINUED➤

PLUGS & CONNECTORS • POWER ENTRY MODULES – INLETS, OUTLETS, INLETS/OUTLETS

AC APPLIANCE PLUG MATES (CONT.)

Mfg. Part No.	Fig.	Description	Stock No.	Price Each 1-24	Price Each 25-49
● 4300.0609	8	Angle Entry 18AWG	91F7170	9.95	8.81
● 4787.1000	9	Straight Entry	91C5945	2.43	2.14
● 4788.4000	10	Straight Entry	91C5946	2.81	2.49
● 4795.0000	11	Straight Entry 14AWG	84K0319	9.31	8.22
● 4796.0000	12	Straight Entry 14AWG	84K0320	10.55	9.33
● 4730.0100	13	Straight Entry Gender Changer Adapter	84K0301	13.83	12.58
● 6009.5195	14	Mounting Cordset for C20F series Inlets	85K8296	29.69	26.61
● 6009.1315	15	Straight Entry 14AWG	84K0325	9.77	8.75
● 4300.0920	***	Straight Entry 18AWG	84K5705	10.17	9.13
● 4789.1200	16	Angle Entry 14AWG	84K0316	11.78	10.40
● 4790.1100	17	Angle Entry 16AWG	84K0317	9.99	8.82
● 4790.1200	17	Angle Entry 14AWG	84K0318	10.18	8.99

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24	Price Each 25-49
● 4700.0006	Cord Retaining Kit, Type F Mates w/4721, 6600 Types	39C5362	4.88	4.66

(7492)

AC POWER INLET RECEPTACLES — IEC 320

RoHS Compliant Available

multicomp

Snap-In Mount

Screw-On Mount

AC power male inlet receptacles available in screw-on panel mounting style or with universal snap-in feature to fit 0.0315″ (0.8) to 0.0787″ (2.0) panel thickness. Choose solder tab terminals or 0.25″ (6.35) quick-disconnect terminals. Maximum rating: 15A/250VAC. Complies with international safety regulations.

Mfg. Part No.	Panel Mounting	Terminals*	Stock No.	Price Each 1-99
● 2138	Snap-In	Solder Tab	92N4141	1.20
● 2139	Snap-In	0.016″ Q.D.	92N4142	1.47
● 2140	Screw-On	Solder Tab	92N4143	1.22
● 2141	Screw-On	0.016″ Q.D.	20M6073	1.26
● SPC4627	Screw-On	SolderTab	84N1428	1.22
● SPC4628	Screw-On	0.187″ Q.D.	84N1429	1.15
● SPC4629	Screw-On	0.25″ Q.D.	20M5791	1.26

*Q.D. = Quick Disconnect
(15926)

AC POWER INLETS

RoHS Compliant Available

Volex

IEC 60320-C14 Inlet (Screw)

IEC 60320-C14 Inlet (Snap-in)

IEC 60320-C20 Inlet (Screw)

AC Power inlets available in multiple IEC 60320 configurations, ratings, and mounting styles. All inlets listed have UL, CSA and VDE approvals. Call to confirm other approval bodies.

IEC 60320-C14 SCREW MOUNT INLET

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● 17252A-0-B1	IEC 60320-C14 screw mount inlet rated at 10/250V and 15A/250V for UL/CSA	45P4893	2.69

V-LOCK POWER INLETS

Mfg. Part No.	Configuration	Mounting	Rating	Fused	Stock No.	Price Each 1-24
● IN-VAC13KI-001	IEC 60320-C13	Snap-in	10A/250V	No	89M4471	1.31
● IN-VAC14KS-001	IEC 60320-C14	Screw	10A/250V	No	46M3013	1.33
● IN-RF2004V-001	IEC 60320-C14	Snap-in	10A/250V	Yes (Fuse Not Included)	46M3011	2.51
● IN-VAC20KS-001	IEC 60320-C20	Screw	16A/250V	No	46M3014	1.47

(6184)

SR SERIES POWER INLET CONNECTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

6ESRM-3

6ESRF-3

6ESRMC2

6ESRFC3

Insulator material is thermoplastic, rated UL-V-2 flame class. Prongs are solid brass, nickel-plated. Terminals are tin-plated brass. Rated 250VAC. UL recognized, CSA certified. VDE and SEV approved. SEMKO approved except **mfg. part nos. 6ESRF-3** and **6ESRFC3."M"** in mfg. part no. indicates pin contacts, **"F"** indicates socket contacts.

Mfg. Part No.	Current (A)	Inlet Type	Mounting	Terminal Type	Stock No.	Price Each 1-24
● 6ESRM-3	15	IEC 60320-1 C-14	Flange	0.250 Male Disconnect	87F1824	2.03
● 6ESRMC2	15	IEC 60320-1 C-14	Snap In	0.187 Male Disconnect	87F1825	2.25
● 6ESRF-3	15	IEC 60320-1 C-13	Flange	0.250 Male Disconnect	87F1822	2.64
● 6ESRFC3	15	IEC 60320-1 C-13	Snap In	0.250 Male Disconnect	87F1823	2.60
● 20ESRM-3	20	IEC 60320-1 C-20	Flange	0.250 Male Disconnect	20T9556	3.11
● 20ESRMC2	20	IEC 60320-1 C-20	Snap In	0.187 Male Disconnect	20T9557	2.96

(7336)

AC POWER OUTLET RECEPTACLES – NEMA 5-15R, 5-20RT-SLOT

RoHS Compliant Available

Qualtek Electronics Corp.

NEMA

Fig. 1

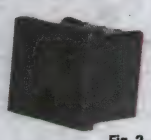


Fig. 2

NEMA 5-20RT-Slot accepts NEMA 5-15P, 25-20P plug styles. AC power snap-in outlet receptacles. Available with quick-disconnect solder terminals or IDC terminals for solid wire. Maximum rating: 15A/125VAC. UL listed, CSA certified.

Mfg. Part No.	Fig.	NEMA	Terminals	Stock No.	Price Each 1-49
● 738W-X2/03	1	5-15R	Q.D./Solder	17B7198	1.12
● 739W-X2/03	2	5-15R	IDC	17B7202	1.10

Q.D. = Quick Disconnect
(16526)

AC POWER OUTLET RECEPTACLES — IEC 320

RoHS Compliant Available

Qualtek Electronics Corp.

Snap-In Mount

Screw Mount

AC power female outlet receptacles available in screw mount style or with universal snap-in feature to fit 0.0315″ (0.8) to 0.0787″ (2.0) panel thickness. Choose solder tab terminals or 0.250″ (6.35) quick-disconnect terminals. Maximum rating: 15A/250VAC. Complies with international safety regulations. UL listed, CSA certified, VDE approved at 10A/250VAC, DEMKO, SETI, NEMKO, SEMKO, and SEV approved.

Mfg. Part No.	Mount	Terminals	Stock No.	Price Each 1-49
● 716W-X2/01	Snap-In	Solder Tab	17B6936	0.89
● 716W-X2/03	Snap-In	0.250″ Q.D.	30C0648	1.08
● 710W-00/01	Screw	Solder Tab	17B6886	0.77
● 710W-00/03	Screw	0.250″ Q.D.	17B6888	0.77

Q.D. = Quick Disconnect
(15930)

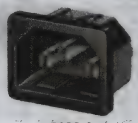
AC POWER LINE APPLIANCE INLETS/OUTLETS

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

V-Lock

6100.3



6100.4

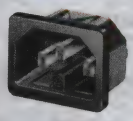
6600.3

6110.3

➤ CONTINUED ➤

AC POWER LINE APPLIANCE INLETS/OUTLETS (CONT.)

Panel-mount inlets are 10A/15A, 250V according to IEC 320. **6100 series** has 70°C operating temperature for "cold" conditions. **6110 series** has 120° operating temperature for "hot" conditions. **Suffix ".21"** corresponds to the version with V-Lock mating cordset. The connector is equipped with a notch intended for use with the latching cordset. The cord latching system prevents against accidental removal of the cordset. Snap-in types for other panel thicknesses, and **6100 series** inlets with medical or standard filters are also available; *go online or call*.



6110.4

6600.4

SCREW-ON MOUNTING

Mfg. Part No.	Terminals	Stock No.	Price Each 1-24	Price Each 25-49
6100.3100	0.138 x 0.032" (3.5 x 08mm) Solder	89F5319	1.48	1.31
6100.3200	0.187 x 0.032" (4.8 x 0.8mm) Quick-Disconnect	84K0326	1.54	1.36
6100.3300	0.250 x 0.032" (6.3 x 0.8mm) Quick-Disconnect	89F5321	1.42	1.25
6100.3200	0.187 x 0.032" (4.8 x 0.8mm) Quick-Disconnect	84K0326	1.54	1.36
6110.3200	0.187 x 0.032" (4.8 x 0.8mm) Quick-Disconnect	89F5306	2.34	2.06
6110.3300	0.250 x 0.032" (6.3 x 0.8mm) Quick-Disconnect	89F5307	2.34	2.06
6600.3100	0.138 x 0.032" (3.5 x 08mm) Solder	90F2632	2.48	2.21
6600.3100.21	0.138 x 0.032" (3.5 x 08mm) Solder	72T0849	2.41	2.15
6600.3200	0.187 x 0.032" (4.8 x 0.8) Quick-Disconnect	84K0329	2.53	2.25
6600.3200.21	0.187 x 0.032" (4.8 x 0.8) Quick-Disconnect	72T0850	2.41	2.15
6600.3300	0.250 x 0.032" (6.3 x 0.8mm) Quick-Disconnect	84K0330	2.48	2.21
6600.3300.21	0.250 x 0.032" (6.3 x 0.8mm) Quick-Disconnect	72T0851	2.41	2.15
SNAP-IN MOUNTING FOR 1.5mm PANELS				
6100.4112	0.138 x 0.032" (3.5 x 08mm) Solder	24B375	1.59	1.41
6100.4115	0.138 x 0.032" (3.5 x 08mm) Solder	89F5322	1.60	1.41
6100.4120	0.138 x 0.032" (3.5 x 08mm) Solder	32C5244	1.57	1.39
6100.4215	0.187 x 0.032" (4.8 x 0.8mm) Quick-Disconnect	89F5323	1.59	1.41
6100.4312	0.250 x 0.032" (6.3 x 0.8mm) Quick-Disconnect	96B1017	1.59	1.41
6100.4315	0.138 x 0.032" (3.5 x 08mm) Solder	89F5324	1.66	1.46
6100.4320	0.250 x 0.032" (6.3 x 0.8mm) Quick-Disconnect	88F6400	1.60	1.42
6100.4325	0.250 x 0.032" (6.3 x 0.8mm) Quick-Disconnect	24B393	1.51	1.33
6100.4330	0.250 x 0.032" (6.3 x 0.8mm) Quick-Disconnect	32C5247	1.57	1.39
6110.4115	0.138 x 0.032" (3.5 x 08mm) Solder	89F5308	2.34	2.06
6110.4215	0.187 x 0.032" (4.8 x 0.8mm) Quick-Disconnect	89F5309	2.52	2.21
6600.4115.21	0.138 x 0.032" (3.5 x 08mm) Solder	72T0852	2.41	2.15
6600.4315	0.250 x 0.032" (6.3 x 0.8mm) Quick-Disconnect	84K0331	2.44	2.17
6600.4315.21	0.250 x 0.032" (6.3 x 0.8mm) Quick-Disconnect	47T1800	2.41	2.15
6600.4320	0.250 x 0.032" (6.3 x 0.8mm) Quick-Disconnect	92B7186	2.39	2.13
6600.4320.21	0.250 x 0.032" (6.3 x 0.8mm) Quick-Disconnect	72T0853	2.41	2.15
6600.4325	0.250 x 0.032" (6.3 x 0.8mm) Quick-Disconnect	24B567	2.42	2.15
6600.4325.21	0.250 x 0.032" (6.3 x 0.8mm) Quick-Disconnect	72T0854	2.41	2.15

(7488)

AC INLETS/OUTLETS

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

Inlet/outlet combinations for panel according to IEC 320, Rated 10A/250V. Panel thickness: 0.8-2mm. **Mfg. part no. 4300.0303** has internal connection between ground terminals. UL recognized, CSA certified, VDE approved.

Mfg. Part No.	Mounting/Terminals	Stock No.	Price Each 1-24	Price Each 25-49
4300.0301	Panel/0.187" x 0.032" Quick-Connect	88K2149	4.15	3.65
4300.0303	Panel/0.187" x 0.032" Quick-Connect	92F3536	4.19	3.70

(7491)

HIGH-CURRENT AC INLETS

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

V-Lock

4798

4793

6163

4798 series high-current AC inlets have a rating of 16A/20A @ 250VAC, and a 70°C operating temperature according to IEC 320. **4798 series** inlets are also available with standard or medical filters; *go online or call*. **4793 series** appliance inlets have a rating of 20A @ 250VAC and a 70°C operating temperature. **Suffix ".21"** corresponds to the version with V-Lock mating cordset. The connector is equipped with a notch intended for use with the latching cordset. The cord latching system prevents against accidental removal of the cordset. UL recognized, CSA certified, VDE approved.

CONTINUED

HIGH-CURRENT AC INLETS (CONT.)

4798 SERIES SCREW-ON PANEL MOUNT

Mfg. Part No.	Terminals	Stock No.	Price Each 1-24	Price Each 25-49
4798.9000	0.250 × 0.032" (6.3 × 0.8) Quick-Connect	84K0321	2.37	2.16
4798.9000.21	0.250 × 0.032" (6.3 × 0.8) Quick-Connect	72T0847	2.45	2.24
4798.9200	0.15 × 0.032" (3.8 × 0.8) Solder	84K0322	2.32	2.12
4798.9200.21	0.15 × 0.032" (3.8 × 0.8) Solder	72T0848	2.45	2.24
4793 SERIES SNAP-IN MOUNT FOR 1.5MM PANELS				
4793.4000	0.250 × 0.032" (6.3 × 0.8) Quick-Connect	88K2163	2.97	2.76
4793.4000.21	0.250 × 0.032" (6.3 × 0.8) Quick-Connect	72T0843	3.04	2.82
4793.4200	0.150 × 0.032" (3.8 × 0.8) Solder	88K1412	2.77	2.57
1601 SERIES SCREW-ON PANEL MOUNT, PCB TERMINALS				
6163.0018	Standard PCB Straight Solder	23M2115	2.70	2.38

(7597)

AC APPLIANCE INLET AND OUTLET

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

4300.0098 Inlet

4721.0000 Outlet

Mfg. part no. 4300.0098 low-current appliance inlet with snap-in mounting from front. Solder terminals for wires are tin-plated copper alloy. Black thermoplastic PBT socket, rated UL 94V-0. Pin temperature: 70°C. Rated: 2.5A, 250VAC. Panel thickness: 0.8-1.2mm. UL recognized, CSA certified, VDE approved, SEV Approved, SEMKO approved. **Mfg. part no. 4721.0000** flanged appliance outlet with screw-on mounting from front. Quick-connect terminals, 6.3 x 0.8mm. Shuttered design features mechanical covers over the L and N contacts that offer protection against electrical shock and dust into the outlet when a plug is not inserted. Black thermoplastic socket and shutters, rated UL 94V-0. Rated: 10A, 250VAC. Pin temperature: 70°C. UL recognized, VDE approved.

Mfg. Part No.	Description	Stock No.	Price Each 1-24
4300.0098	Low-Current, Snap-In Appliance Inlet	04M4738	0.81
4721.0000	Flanged, Screw-On Appliance Outlet, Shuttered	88K2162	4.49

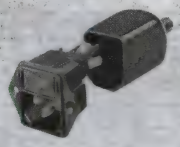
(80122)

APPLIANCE COUPLER ACCESSORIES

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

Insulating cover protects the terminals of appliance couplers against unintentional contact. Constructed of flexible thermoplastic. Easily mounted from the rear to the corresponding appliance couplers. Rated UL 94V-0. Color: black.



Insulating Cover

INSULATING COVERS

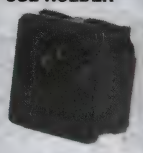
Mfg. Part No.	Suitable for Use with	Stock No.	Price Each 1-24
0859.0047	KEA, KEB I, 6200, 6202, 6205, 6220, 6600, 472X	84K0259	2.08
0859.0048	6100, 6102	84K0260	1.55
0859.0074	KD, 6145	84K0332	5.05
0859.0075	KEB II, KFB II	02C7041	2.97
0859.0077	CD	32C4022	5.61
0859.0109	CG, KG, EF11	88K2088	4.93

(80118)

AC POWER INLET RECEPTACLES WITH FUSE HOLDER — IEC 320

RoHS Compliant Available

Qualtek Electronics Corp.



Snap-In Mount

Screw Mount

AC power male inlet receptacles with a fuse holder for single fuse. Available with snap-in feature or in screw mount style. Choose solder tab terminals or 0.250" (6.35) quick-disconnect terminals. Maximum rating: 10A/250VAC. Complies with international safety regulations. UL listed, CSA certified, VDE approved, SEMKO approved, SEV approved.

Mfg. Part No.	Mount	Terminals	Stock No.	Price Each 1-49
723W-X2/02*	Snap-In	Solder Tab	42M3610	1.85
723W-X2/04*	Snap-In	0.250" Q.D.	17B7019	1.91
719W-00/02	Screw	Solder Tab	17B6977	1.85
719W-00/04	Screw	0.250" Q.D.	17B6979	1.91

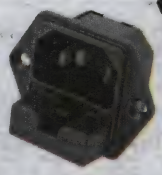
*Universal snap-in feature fits 0.0315" (0.8) to 0.0787" (2.0) panel thickness.
+Fits 0.0590" (1.5) panel thickness.
(15927)

POWER ENTRY MODULES – FUSED

6220 SERIES AC APPLIANCE INLETS WITH 2-POLE FUSEHOLDER

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS



6220 series AC appliance inlets with 2-pole shock-safe fuseholder for 5 x 20mm fuses. Screw-on panel mount version in choice of terminal style: solder, 3.5 x 0.8mm or quick-connect , 4.8 x 0.8mm. Snap-in panel mount version with quick-connect terminals, 4.8 x 0.8mm. All inlets have internal connections. Black thermoplastic housing, rated UL 94V-0. Pin temperature: 70°C. Rated: 250 VAC; 10A. Panel thickness: 8mm max for screw-on units, 1.5mm for snap-in model. Allowable ambient air temperature: -25°C to +70°C. UL recognized, CSA certified, VDE approved, SEMKO approved.

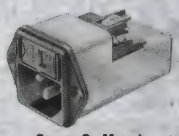
Mfg. Part No.	Panel Mount	Terminals	Stock No.	Price Each 1-24
● 6220.2100	Screw-On	Solder Tab	91B9517	9.78
● 6220.2300	Screw-On	Quick Connect	92B9162	9.78
● 6220.5315	Screw-On	Quick Connect	24B502	9.98

(80126)

KFA SERIES AC INLETS WITH 1-AND 2-POLE FUSEHOLDERS

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS



Screw-On Mount

Snap-in Mount

KFA series are screw-on or snap-in panel-mount appliance inlets with standard line filters and 1- or 2-pole shock-safe fuseholders for 5 x 20mm fuses. All units with a voltage selector have 4.8 x 0.8mm quick-connect terminals; units wihout a voltage selector have 6.3 x 0.8 mm terminals. Allowable ambient air temperatures: -25°C to +85°C. All models feature a black thermoplastic housing, rated UL94V-0. UL recognized, CSA certified, VDE approved. Fuses available on pages 1408-1463.

KFA SERIES INLETS WITH STANDARD LINE FILTER, SCREW-ON MOUNTING

Mfg. Part No.	Current Rating (A)	No. of Poles (Fuseholder)	Stock No.	Price Each
● 4301.5011	1	1	66F6058	30.13
● 4301.5013	4	1	84K0277	28.97
● 4301.5014	6	1	88K1402	30.13
● 4301.5002	2	2	88K2151	30.42
● 4301.5003	4	2	24B001	29.91
● 4301.5004	6	2	84K0276	29.91
KFA SEIES INLETS WITH STANDARD LINE FILTER, SNAP-IN MOUNTING				
● 4301.6011	1	1	84K0280	28.97
● 4301.6013	4	1	84K0281	28.97
● 4301.6014	6	1	84K0282	30.13
● 4301.6001	1	2	84K0278	29.25
● 4301.6003	4	2	28K1364	29.25
● 4301.6004	6	2	84K0279	30.42

FUSE DRAWERS FOR KEA AND KFA SERIES CASINGS

Mfg. Part No.	Features	No. of Poles	Voltage Selector	Stock No.	Price Each 1-24	Price Each 25-49
● 4301.1401	Fingergrip	2	...	50F2871	3.75	3.31
● 4301.1409	Spare Fuse Case, Fingergrip	1	...	99F9959	3.26	2.88
● 4301.1413	Shorting Bar, Fingergrip	2	...	50F2872	5.03	4.43
● 4301.1014.08	Fingergrip	2	100, 120, 220, 240	50F2873	7.33	6.24

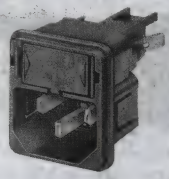
(84611)

KEA SERIES AC INLETS WITH 1- AND 2-POLE FUSEHOLDERS/SWITCHES

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

KEA series units have 0.187 x 0.032" (4.75 x 0.813) quick-connect terminals. Allowable ambient air temperatures: -25°C to 70°C. Standard line filter with leakage rating < 0.5mA (250V/60Hz) . *Cases and fuse drawers ordered separately; go online or call.* UL recognized, CSA certified, VDE approved. Fuses available on pages 1408-1463.



KEA Series without Voltage Selector

KEA SERIES SCREW-ON OR SNAP-IN PANEL MOUNT

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● 4301.0521	Screw-On Casing without Voltage Selector, 1-Pole Fusing, Takes 5 x 20mm Fuse, Fuse Drawer	23B9901	4.08
● 4301.0522	Snap-In Casing (1.5mm panel thickness) without Voltage Selector, 1-Pole Fusing, Takes 5 x 20mm Fuse, Fuse Drawer	50H2367	4.03
● 4301.0501	Screw-On Casing without Voltage Selector, 2-Pole Fusing, Takes 5 x 20mm Fuse, Fuse Drawer	84K0269	5.74

➤CONTINUED➤

KEA SERIES AC INLETS WITH 1- AND 2-POLE FUSEHOLDERS/SWITCHES (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● 4301.0502	Snap-In Casing (1.5mm panel thickness) without Voltage Selector, 2-Pole Fusing, Takes 5 x 20mm Fuse, Fuse Drawer	84K0270	5.74
● 4301.0504	Snap-In Casing (2.5mm panel thickness) without Voltage Selector, 2-Pole Fusing, Takes 5 x 20mm Fuse, Fuse Drawer	84K0271	5.43
● 4301.2041	Screw-On Casing with Voltage Selector, 2-Pole Fusing, Takes 5 x 20mm Fuse, Fuse Drawer	84K0274	7.19
● 4301.2042	Snap-In Casing (1.5mm panel thickness) with Voltage Selector, 2-Pole Fusing, Takes 5 x 20mm Fuse, Fuse Drawer	84K0275	7.19
● 4301.3201	KEA-Print for PCB (1.6mm), Screw-On Casing with, 2-Pole Fusing, Takes 5mm x 20mm Fuse, Fuse Drawer	23B9978	5.97

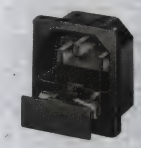
(174553)

AC INLETS WITH FUSEHOLDER, 1- AND 2-POLE

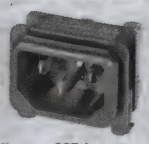
RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

V-Lock

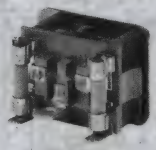


6200



GSF 1

GSF 2 Front



GSF 2 Back

Mfg. part no. 6200 1-pole Class I inlets are screw-on or snap-in front panel mountable and feature shock-safe 5 x 20mm fuseholder with spare fuse compartment. Choice of solder or quick connect terminals. UL recognized, CSA certified, VDE approved. *Fuses available on* [2396] *and on* [69207]. **Suffix ".21"** corresponds to the version with V-Lock mating cordset. The connector is equipped with a notch intended for use with the latching cordset. The cord latching system prevents against accidental removal of the cordset. **6220 series** 2-pole versions are also available; *go online or call.*

4707

6200 SERIES INLETS WITH FUSHOLDER

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● 6200.2100	1-Pole, Screw-On, Front Panel, 3.5 x 0.8mm Solder Terminals	89F5310	4.42
● 6200.2200	1-Pole, Screw-On, Front Panel, 4.8 x 0.8mm Quick Connect Terminals	84K0328	4.43
● 6200.2300	1-Pole, Screw-On, Front Panel, 6.3 x 0.8mm Quick Connect Terminals	89F5312	4.42
● 6200.4115	1-Pole, Snap-In, Front Panel, 3.5 x 0.8mm Solder Terminals	89F5313	4.61
● 6200.4215	1-Pole, Snap-In, Front Panel, 4.8 x 0.8mm Quick Connect Terminals	89F5314	4.70
● 6200.4315	1-Pole, Snap-in, Front Panel, 6.3 x 0.8mm Quick Connect Terminals	89F5315	4.61
GSF SERIES INLETS WITH FUSE CLIPS			
● GSF2.1011.01	1-Pole, Snap-In, Front Panel (1-3mm) 4.8 x 0.8mm Quick Connect Terminals	91F7171	4.17
● GSF2.2011.01	2-Pole, Snap-In, Front Panel (1-3mm) 4.8 x 0.8mm Quick Connect Terminals	93K7578	5.55
● GSF1.1212.31	1-Pole, PCB/Snap Post 1.6mm	88K1106	4.88
● GSF1.2212.31	2-Pole, PCB/Snap Post 1.6mm	92F3541	6.08
4707 SERIES POWER ENTRY MODULES			
● 4707.1000	1-Pole, 6.3 x 0.8mm Quick Connect Terminals	84K0299	16.77
● 4707.2000	2-Pole, 6.3 x 0.8mm Quick Connect Terminals	84K0300	17.72
● 4707.2000.21	2-Pole, 6.3 x 0.8mm Quick Connect Terminals	72T0842	19.74

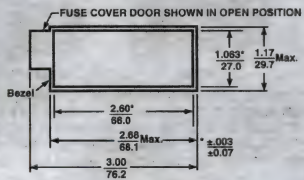
(7489)

CORCOM J SERIES POWER ENTRY MODULES — VOLTAGE SELECTING AND FUSED

RoHS Compliant Available

TE connectivity

Authorized Distributor



Panel Cutout

➤CONTINUED➤

CORCOM J SERIES POWER ENTRY MODULES — VOLTAGE SELECTING AND FUSED (CONT.)

J series power entry modules combine internationally-approved IEC connector, unique 2- or 4-voltage selection card and fusheholder. Compact snap-in design. Rated current: 6A. Operating voltages: 115, 230VAC; 100, 120, 220, 240VAC. All models accept ¼" x 1¼" fuses *(not included)*. **Mfg. part nos. 6J4** and **6J4-2** feature general-purpose RFI filter and available with 2- or 4-voltage selection. UL recognized, CSA certified.

Mfg. Part No.	Filter	Voltage Selection	Operating Voltages (VAC)	H x W x D (in.)	Stock No.	Price Each 1-24	Price Each 25-49
6VJ1	None	4	100, 120, 220, 240	1.17 x 2.68 x 1.52	52K3908	22.47	20.44
6J4	RFI	4	100, 120, 220, 240	1.17 x 2.75 x 1.87	52K4536	36.72	34.49
6J4-2	RFI	2	115, 230	1.17 x 2.75 x 1.87	50F8892	40.09	36.48

(7284)

MULTIFUNCTION AC POWER OUTLET MODULES

RoHS Compliant Available

Qualtek Electronics Corp.

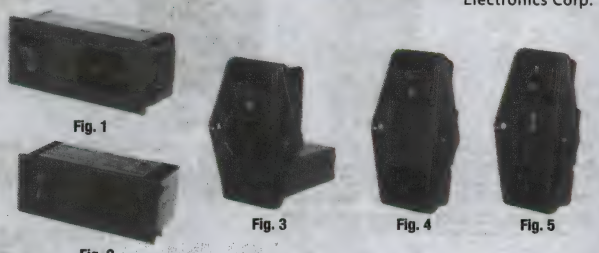


Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5

AC power outlet modules feature an IEC male power inlet, fuse holder, and voltage selector or power switch or both. Snap-in or screw mount styles available. Choose solder tab terminals or 0.250" (6.35) quick-disconnect terminals. Durable plastic or metal housings. Maximum rating: 6A/250VAC. UL listed, CSA certified, VDE approved at 10A/250VAC.

SNAP-IN MOUNT WITH SINGLE FUSE HOLDER

Mfg. Part No.	Fig.	Terminals	Housing++	Power Switch	Voltage Selector	Stock No.	Price Each 1-49
761-18/003*	1	Solder	P	SPST	...	17B7286	12.79
761-18/004*	1	Solder	P	DPST	...	17B7287	17.10
762-18/002*	2	Q.D.	M	SPST	...	17B7289	16.54
762-18/003*	2	Q.D.	M	DPST	...	17B7290	25.53

Q.D. = Quick Disconnect

SCREW MOUNT WITH DOUBLE FUSE HOLDER

763-00/001+	3	Solder	P	DPST	Front	17B7293	13.42
764-00/002	4	Solder	P	DPST	Front	17B7295	15.75
764-00/003	5	Solder	P	DPST	Front	17B7296	17.76

*Panel thickness 0.0394-0.0709" (1.0-1.8); +Fuse holder for 5 x 20mm or 6.3 x 32mm (North American Type); ++Housing: P= Plastic, M= Metal

(16529)

DC11 SERIES POWER ENTRY MODULES

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

- All single elements are already wired
- Qualified for us in equipment according to IEC/EN 60950
- Inrush current 100A, 3-4mS max.

Screw-On Mount Snap-In Mount

Rated voltage: 125/250VAC. Rated current: 10A @ 250VAC (ENEC); 10A @ 125/250VAC (UL, CSA). 4.8 x 0.8mm quick-connect terminals. Appliance-inlet according to IEC/EN 60320-1/C20, Protection Class I. Pin temperature: 70°C (cold condition). Line-switch (rocker switch): 1- or 2-pole, non-illuminated or illuminated according to IEC/EN61058-1. **Suffix ".21"** corresponds to the version with V-Lock mating cordset. The connector is equipped with a notch intended for use with the latching cordset. The cord latching system prevents against accidental removal of the cordset.UL recognized, ENEC 10 approved.

Mfg. Part No.	Line-Switch: Pole	Line-Switch: Non-Illuminated	Line-Switch: Illuminated 125/250VAC, Green	Screw	Snap-In, Panel Thickness	Stock No.	Price Each 1-24
DC11.0001.001	2	✓	...	✓	...	86H3441	10.77
DC11.0001.001.21	2	✓	...	✓	...	72T0835	11.79
DC11.0001.003	1	✓	...	✓	...	86H4240	10.05
DC11.0001.003.21	1	✓	...	✓	...	72T0836	11.76
DC11.0001.203	1	✓	...	...	1.5mm	88K1891	9.97
DC11.0031.001	2	...	✓	✓	...	88K1892	14.05
DC11.0031.201	2	...	✓	...	1.5mm	88K1072	13.54
DC11.0031.201.21	2	...	✓	...	1.5mm	72T0837	15.96

(84661)

6135, 6136 SERIES POWER ENTRY MODULES WITH CIRCUIT BREAKER

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

V-Lock

- **6135 series** C14 inlet
- **6136 series** C20 high-current inlet
- TA35 circuit breaker, non-illuminated or illuminated 1- or 2-pole rocker switch
- Snap-in panel mountable from front side
- Panel thickness 1.5mm
- Thermal overload protection
- Qualified for use in equipment according to IEC/EN 60950
- Rated 250VAC

Fig. 1 Fig. 2 Fig. 3

These IEC appliance inlets are unwired and suitable for appliances with protection class I according to IEC 61140. Black thermoplastic housing rated UL94V-0. Quick connect terminals are 6.3 x 0.8mm. cURus recognized, VDE approved, CE compliant.

Mfg. Part No.	Fig.	Current Rating (A)	Circuit Breaker TA35 Switch	Stock No.	Price 1-9
6135.CBTBF150C0.0210	1	15	2-Pole, Non-illuminated	09R9885	24.75
6135.C324F100C0.0210	2	10	2-Pole, Green Illuminated	09R9886	32.87
6135.C324F150C0.0210	2	15	2-Pole, Green Illuminated	09R9887	33.33
6136.CFTBF150C0.0210	3	15	1-Pole, Non-illuminated	09R9888	20.45
6136.CFTBF200C0.0210	3	20	1-Pole, Non-illuminated	09R9889	20.45

(148477)

CORCOM C SERIES POWER ENTRY MODULES

RoHS Compliant Available

TE connectivity

Authorized Distributor

Snap-In Mount — Unfiltered Snap-In Mount — Filtered Screw-On Flange Mount

C series 2-function power entry modules combine a double-insulated DPST switch and IEC 320 power line connector. Compact size for smaller panel cutout. Terminals allow for easy connection to any wiring scheme. **Mfg. part nos. 15CBS1** and **15CBE1** feature preconnected terminals from line to switch for reducing OEM wiring time. General-purpose filtered models have maximum leakage current, line-to-ground: 0.25mA @ 120VAC, 0.40mA @ 250VAC. Hipot rating (1 minute): 2250VAC line-to-ground; 1450VDC line-to-line. Rated current: 10A @ 120VAC; 10A @ 250VAC. Rated voltage: 120/250VAC. Medical filtered model is designed specifically for health care applications and offers extremely low leakage current to comply with UL544, UL2601 and CSA22.2 health care specifications for use with both patient and non-patient care equipment. All modules are UL recognized, CSA certified, VDE approved.

SNAP-IN MOUNT

Mfg. Part No.	Filter Type	Current (A)	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99	Price Each 100-249
10CS1	None	10	52K4530	7.46	7.02	6.45	5.94
15CS1	None	15	60R5553	8.19	7.46	6.85	6.31
10CBS1	None	10	17R4243	8.68	7.90	7.25	6.69
15CBS1*	None	15	70R1612	8.13	8.07	8.02	7.41
1CFS1	General-Purpose	1	83F5803	24.72	22.45	20.66	18.99
3CFS1	General-Purpose	3	52K3898	22.57	20.97	19.24	17.75
6CFS1	General-Purpose	6	52K4268	20.00	18.62	17.09	15.76
10CFS1	General-Purpose	10	52K4270	23.54	21.87	20.06	18.50
SCREW-ON FLANGE MOUNT							
15CE1	None	15	60R5552	7.68	7.29	6.89	6.36
10CBE1	None	10	52T7142	11.33	10.30	9.27	8.76
15CBE1*	None	15	70R1611	9.42	8.58	7.87	7.26
3CFE1	General-Purpose	3	52K3897	21.47	20.36	19.24	17.75
6CFE1	General-Purpose	6	52K4531	21.03	19.55	17.94	16.54
10CFE1	General-Purpose	10	52K4269	22.61	21.59	20.59	18.99
10CHE1	Medical	10	99M1042	48.04	43.72	40.12	36.99

*Preconnected terminals

(29270)

CORCOM M SERIES POWER ENTRY MODULES

RoHS Compliant Available

TE connectivity

Authorized Distributor

6VM2S, 6VM4S, 5EFM4S, 5EHM4S, 3EZM4S 6VM1S, 5EFM1S, 5EHM1S 6MV1, 6VM2, 6VM4

➤CONTINUED➤

CORCOM M SERIES POWER ENTRY MODULES (CONT.)

M series power entry modules offer many power entry components and filtering choices. The IEC connector provides an internationally accepted power entry termination, which can be used with a variety of line cords. Selectable fuse holder allows use of single or dual European fuses, or a single North American fuse (fuses not included). Optional DPST on/off switch breaks both sides of the line and is labeled with international I/O markings. The voltage selector permits changing transformer primary connections, and is available in 2- or 4-voltage configurations. Select from unfiltered and general-purpose, premium-grade or medical-grade RFI filtered models to fit a specific application need. Wiring for all models is accomplished via 0.110″ terminals. All models feature a screw-on flange style mounting. Rated voltage (max.): 250VAC. UL recognized, CSA certified, VDE approved.

5EFM1, 5EHM4

UNFILTERED MODELS

Mfg. Part No.	Current Rating @ 120 / 250 VAC (A)	Voltage Selector No. of Positions / (V)	Incl. DPST On/Off Switch	H x W x D (in.)	Stock No.	Price Each 1-24
● 6VM1S	6 / 4	1 / Fixed 120/240	Yes	1.14x4.17x1.45	52K4313	22.29
● 6VM2	6 / 6	2 / Selectable 120/240	No	1.45x3.88x1.14	52K3610	25.30
● 6VM2S	6 / 6	2 / Selectable 120/240	Yes	1.14x4.65x1.45	52K3611	31.26
● 6VM4	6 / 6	4 / Selectable 100/120/230/240	No	1.14x3.88x1.45	52K3612	26.67
● 6VM4S	6 / 4	4 / Selectable 100/120/230/240	Yes	1.14x4.65x1.45	52K4381	26.17
GENERAL-PURPOSE RFI FILTER MODELS *						
● 5EFM1	5 / 4	1 / Fixed 120/240	No	1.14x3.39x2.19	52K3475	25.15
● 5EFM1S	5 / 4	1 / Fixed 120/240	Yes	1.14x4.17x2.19	52K4314	27.38
● 5EFM4	5 / 4	4 / Selectable 100/120/230/240	No	1.14x3.88x2.19	52K3476	32.90
● 5EFM4S	5 / 4	4 / Selectable 100/120/230/240	Yes	1.14x4.65x2.19	52K4315	35.93
PREMIUM-GRADE RFI FILTER MODELS ‡						
● 3EZM4S	3 / 2	4 / Selectable 100/120/230/240	Yes	1.14x4.65x1.72	52K4278	122.32
MEDICAL-GRADE RFI FILTER MODELS †						
5EHM1	5 / 4	1 / Fixed 120/240	No	1.14x3.39x2.19	54H4846	28.12
● 5EHM1S	5 / 4	1 / Fixed 120/240	Yes	1.14x4.17x2.19	52K4276	33.27
● 5EHM4	5 / 4	4 / Selectable 100/120/230/240	No	1.14x3.88x2.19	52K3314	31.79
● 5EHM4S	5 / 4	4 / Selectable 100/120/230/240	Yes	1.14x4.65x2.19	52K4277	36.39

*General-purpose filter for susceptibility applications; ‡Premium-grade 2 emissions filter for switching power supply applications where En5502-B level requirements must be met; †Medical-grade filter for very-low leakage UL544, UL2601 and EN60601 health care applications

ACCESSORIES

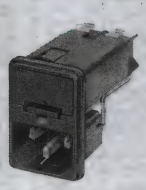
Mfg. Part No.	Description	Stock No.	Price Each 1-24
● MA100	Power Interconnect Assembly	23B4258	3.34
● MA101	Plug Only	50B2146	0.83

(7335)

AC INLET AND 2-POLE FUSEHOLDERS/SWITCHES

RoHS Compliant Available SCHURTER ELECTRONIC COMPONENTS V-Lock

KD series inlets have DPST 70A switch in-rush current. Rated 10A/250V UL recognized, CSA certified, VDE approved. **KEC series** are rated 15A/250V UL recognized, CSA certified, and 10A/250V VDE approved. *Order casings and fuse drawers separately, below. Fuses ordered separately online or call.* Bowden cable also available; *go online or call.*



KEC

KD

KD AND KEC SERIES CASINGS — 4.8 x 0.8MM QUICK CONECT TERMINALS

Mfg. Part No.	Description	Stock No.	Price Each 1-49
● KD14.1101.105	KD Casing with Switch, 2-Pole, 2-4 Position Voltage Selector Fuseholder	99F4710	25.11
● KD14.4101.151	KD Casing with Switch, 2-Pole, 2-4 Position Voltage Selector Fuseholder	50F2846	25.36
● KD14.4101.105	KD Casing with Switch, 2-Pole, 2-4 Positions Voltage Selector Fuseholder	50F2847	24.43
● 4303.0001	KEC Casing with Internal Connections, 2-Pole Fusing	84K0287	7.74
● 4303.0002	KEC Casing with Internal Connections, 2-Pole Fusing	84K0288	7.09
FUSE DRAWERS			
● 4303.2114.01	2-Pole, Takes 5 x 20mm Fuse, 100/120/220/240V	84K0289	4.85
● 4303.2401	Black, 2-Pole, Takes 5mm x 20mm Fuse	50F2848	4.29
● 4303.2403	2-pole, 5 x 20 mm	96F8307	6.80
● 4303.2406	2-Pole, Takes 5 x 20mm Fuse	84K0290	2.43
● 4303.2901	2-pole, 6.3 x 32 mm, w/ Shorting Bar	98F7931	4.29

➤CONTINUED➤

AC INLET AND 2-POLE FUSEHOLDERS/SWITCHES (CONT.)

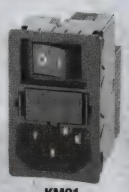
FUSE DRAWERS

Mfg. Part No.	Description	Stock No.	Price Each 1-49
● 4303.2902	Gray, 2-Pole, Takes 6.3 x 32 mm Fuse	84K0291	3.82
● 4303.2904	2-Pole, Takes 6.3 x 32mm Fuse	84K0292	6.55
● 4303.2906	1-Pole, Takes 6.3 x 32mm Fuse	24B181	2.47
● 4303.2912	Gray, 2-Pole with Shorting Bar, Takes 6.3 x 32 mm Fuse	84F815	8.76

(7499)

AC INLETS WITH 1- AND 2-POLE FUSEHOLDERS/SWITCHES

RoHS Compliant Available SCHURTER ELECTRONIC COMPONENTS



KM01

DD11

KM series are power entry modules with integral 1- or 2-pole shock-safe fuseholder for 5 x 20mm fuses and on/off line switch. Snap-in mounting from the equipment front. Allowable ambient air temperatures: -25°C to 70°C. All models feature a black thermoplastic housing, rated UL94V-0. *Cases and fuse drawers ordered separately; go online or call.* UL recognized, CSA certified, VDE approved. *Fuses available online or call.*

KM SERIES INLETS WITH SNAP-IN PANEL MOUNT

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● KM01.1105.11	KM Casing with EMC Shield, Takes 2-Pole Fuse Drawer	84K0220	19.46
● KM01.1205.11	KM Casing with EMC Shield, Takes 1-Pole Fuse Drawer	84K0221	13.22
● KM00.1205.11	KM Casing without EMC Shield, Takes 1-Pole Fuse Drawer	84K0219	11.33
● KM00.1105.11	KM Casing without EMC Shield, Takes 2-Pole Fuse Drawer	18C7021	17.92

DD11 SERIES INLETS WITH LINE SWITCH AND FUSEHOLDER, SCREW-ON PANEL MOUNT

DD11 series power entry modules/IEC appliance inlets for standard and medical applications with high transient loads. Features 1- or 2-pole shock-safe fuseholder and DPST power line switch rated at 10A continuous, 100A inrush current. Choice of red or green illuminated or non-illuminated rocker switch. Black thermoplastic housing with screw-on panel mounting flange, rated UL94V-0. Quick-connect terminals are 4.8 x 0.8mm. In: 8A at Vn: 250V max. 50/60Hz. Dimensions: 65mmH x 27.7mmW x 38.1mmD. UL recognized, ENEC approved. For added safety, *"Extra-Safe" fuse drawers ordered separately; go online or call*

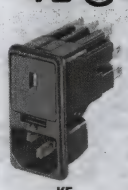
Mfg. Part No.	Description	Stock No.	Price Each 1-9
● DD11.0111.1110	1-Pole Fuseholder, Non-Illuminated Switch	48M7009	10.86
● DD11.0113.1110	1-Pole Fuseholder, Red Illuminated Switch	48M7011	12.50
● DD11.0114.1110	1-Pole Fuseholder, Green Illuminated Switch	48M7013	12.52
● DD11.0121.1110	2-Pole Fuseholder, Non-Illuminated Switch	48M7015	16.53
● DD11.0123.1110	2-Pole Fuseholder, Red Illuminated Switch	48M7017	19.98
● DD11.0124.1110	2-Pole Fuseholder, Green Illuminated Switch	48M7019	19.74

(7502)

AC INLET AND 2-POLE FUSEHOLDERS/SWITCHES

RoHS Compliant Available SCHURTER ELECTRONIC COMPONENTS V-Lock

Mfg. part nos. KE and **KG** inlets offer series-parallel voltage selection. DPST, 70A switch in-rush current. All types have 0.187 x 0.032″ (4.75 x 0.813) quick-connect terminals. **Mfg. part no. KE** is rated 15A/250V UL recognized, 12A/250V CSA certified, 10A/250V VDE approved. **Mfg. part no. KG** is rated 10A/250V UL recognized, CSA certified, VDE approved. Order voltage selectors and fuse-drawers separately. *Fuses available online or call.*



KE

KG

FUSEHOLDERS/SWITCHES

Mfg. Part No.	Mounting	H x W x D (mm)	Stock No.	Price Each 1-24
● KE10.2100.151	Panel	69.5 x 30 x 55	99F7256	20.20
● KE10.2100.105	Panel	55 x 30 x 55	16F1768	20.59
● KE10.6100.105	Panel	55 x 30 x 55	50F2876	18.67
● KG10.6101.151	Panel	97 x 30 x 55	84K0214	28.49
● KG10.6101.105	Panel	82.5 x 30 x 55	84K0213	27.66

VOLTAGE SELECTOR INSERTS

Mfg. Part No.	Voltage Markings	Stock No.	Price Each 1-24
● 4305.0048.01	100, 120, 220, 240	50F2859	8.86
● 4305.0048.03	110, 220	93F9909	8.97
● 4305.0048.05	115, 230	84K0296	8.86
● 4305.0048.10	100, 115, 230	88K2157	8.86
● 4305.0056.05	115, 230	84K0297	8.54

➤CONTINUED➤

AC INLET AND 2-POLE FUSEHOLDERS/SWITCHES (CONT.)

FUSE DRAWERS

Mfg. Part No.	Description	Stock No.	Price Each 1-24
4305.0001	Black, 2-Pole, Takes 5mm x 20mm Fuse	50F2860	6.34
4305.0012	Grey, 2-Pole, Takes 6.3 x 32 mm Fuse	84K0295	6.34
4305.0027	Grey, 2-Pole, Takes 6.3 x 32 mm Fuse	50F2862	7.02

(7501)

FN 390 SERIES FILTERED POWER ENTRY MODULES

RoHS Compliant Available

SCHAFFNER

- For one or two fuses
- Fuses Ø6.3 x 32mm or Ø5 x 20mm
- 2-pole rocker switch
- Voltage selector
- Attenuation performance: high
- Frequency: 50 to 400Hz
- Leakage current: 560 to 797µA
- Rated Current: 1 to 10A
- Voltage: ≤ 250V

Mfg. Part No.	Current (A)	Inductance L1 (mH)	Capacitance Cx (nF)	Capacitance Cy (nF)	Resistance (kΩ)	No. of Fuses	Stock No.	Price Each 1-24
FN393-6-05-11	6	0.45	220	3.3	1000	1	11B3370	40.22
FN394-1-05-11	1	7.5	220	3.3	1000	2	11B3374	39.54
FN394-6-05-11	6	0.45	220	3.3	1000	2	88F1406	36.63

(203552)

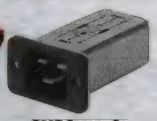
5110, 5120, 5123 AND C20F SERIES AC APPLIANCE INLETS WITH FILTER

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

5110 Screw-On Mount

5120 Snap-In Mount



C20F Screw-On Mount

C20F Snap-In Mount

AC appliance inlets with line filter offer class 1 protection, pin-temperature 70°C (cold condition). **5110 series** AC appliance inlets with standard line filter are screw-on panel mountable from the front-side. **5120 series** AC appliance inlets are available with standard or medical-grade line filter and are snap-in panel mountable from the front-side. **C20F series** screw-on and snap-in AC appliance inlets with line filter mount from front or rear. All models feature quick-connect terminals, 6.3 x 0.8mm. UL recognized, CSA certified, VDE approved, SEMKO approved, SEV approved. *Order* **mfg. part no. 6009.5195** mounting cordset separately for use with **C20F series** inlets; go online or call.

5123 Screw Mount

5110 SERIES SCREW-ON PANEL MOUNT, 23H x 48.4W x 40.9mmD

Mfg. Part No.	Filter Type	Current Rating (A)	Stock No.	Price Each 1-9	Price Each 10-24
5110.0133.1	Standard	1	88K1430	18.31	16.30
5110.0333.1	Standard	3	24B267	18.31	16.30
5110.0633.1	Standard	6	84K0323	19.23	17.12
5110.1033.1	Standard	10	99F3320	19.00	16.91
5110.1533.1	Standard	15	84K0324	19.00	16.93
5120 SERIES SNAP-IN PANEL MOUNT, 24.6H x 32.6w x 54.5mmD					
5120.2000.0	Standard	1	15N4118	9.70	8.81
5120.2001.0	Standard	2	15N4119	9.70	8.81
5120.2003.0	Standard	4	15N4120	9.70	8.81
5120.2007.0	Standard	15	15N4123	10.18	9.25
5120.2300.0	Medical	1	15N4130	9.70	8.81
5120.2301.0	Medical	2	15N4131	9.70	8.81
5120.2303.0	Medical	4	15N4132	9.70	8.81
5120.2306.0	Medical	10	15N4134	9.70	8.81
C20F SERIES SCREW-ON PANEL MOUNT					
C20F.0001	Standard	20	84K0198	34.16	...
C20F SERIES SNAP-IN PANEL MOUNT					
C20F.0011	Standard	20	84K0199	34.16	...
C20F.0012	Medical	20	84K0200	33.15	...
5123 SERIES SNAP-IN PANEL MOUNT, 24.6H x 32.6W x 54.5D mm					
5123.2000.0	Standard	1	47W0426	15.18	13.76
5123.2001.0	Standard	2	47W0427	15.18	13.76
5123.2003.0	Standard	4	47W0428	15.18	13.76
5123.2004.0	Standard	6	47W0429	15.18	13.76
5123.4074.0	Standard	6	47W0438	18.16	16.45
5123.2006.0	Standard	10	47W0430	15.18	13.76
5123.2007.0	Standard	15	47W0431	15.18	13.76

CONTINUED

5110, 5120, 5123 AND C20F SERIES AC APPLIANCE INLETS WITH FILTER (CONT.)

5123 SERIES SNAP-IN PANEL MOUNT, 24.6H x 32.6W x 54.5D mm

Mfg. Part No.	Filter Type	Current Rating (A)	Stock No.	Price Each 1-9	Price Each 10-24
5123.2300.0	Medical	1	47W0432	15.18	13.76
5123.2301.0	Medical	2	47W0433	15.18	13.76
5123.2303.0	Medical	4	47W0434	15.18	13.76
5123.2304.0	Medical	6	47W0435	15.18	13.76
5123.2306.0	Medical	10	47W0436	15.18	13.76
5123.2307.0	Medical	15	47W0437	15.18	13.76
5123 SERIES SCREW PANEL MOUNT, 24.6H x 48.6W x 54.5D mm					
5123.0000.0	Standard	1	47W0412	12.53	11.35
5123.0001.0	Standard	2	47W0413	12.53	11.35
5123.0003.0	Standard	4	47W0414	12.53	11.35
5123.0004.0	Standard	6	47W0415	12.53	11.35
5123.0006.0	Standard	10	47W0416	12.53	11.35
5123.1046.0	Standard	10	47W0425	15.03	13.62
5123.0007.0	Standard	15	47W0417	13.16	11.92
5123.0300.0	Medical	1	47W0418	12.53	11.35
5123.0301.0	Medical	2	47W0419	12.53	11.35
5123.0303.0	Medical	4	47W0420	12.53	11.35
5123.0304.0	Medical	6	47W0421	12.53	11.35
5123.0504.0	Medical	6	47W0424	12.53	11.35
5123.0306.0	Medical	10	47W0422	12.53	11.35
5123.0307.0	Medical	15	47W0423	12.53	11.35

(19257)

5200 AND 5220 SERIES AC INLETS WITH FILTER

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

5200 Screw-On

5200 Snap-In

5220 Screw-On

5220 Snap-In

5200 and **5220 series** AC appliance inlets with line filter offer class I protection, pin-temperature 70°C (cold condition). There are panel mount front side screw-on or snap-in versions. Fuseholders are shocksafe category PC2 according to IEC/EN 60127-6 and for fuses 5 x 20mm. Snap-in panel thickness is 0.8-3mm. **5200 series** features 1-pole fuseholder with spare fuse compartment. **5220 series** features a 2-pole fuseholder. Quick-connect terminals are 6.3 x 0.8mm. Qualified for use in equipment according to IEC/EN 60950.

Mfg. Part No.	Filter Type	Current Rating (A)	Panel Mount	Max. Leakage Current Rating @ 250V/60Hz	Stock No.	Price Each 1-9	Price Each 10-24
5200.0643.1	Standard	4	Snap-In	<0.5mA	88K1437	30.41	27.01
5200.0443.1	Standard	4	Snap-In	<0.5mA	88F5836	28.69	25.48
5200.0623.1	Standard	6	Screw-In	<0.5mA	66F6062	29.84	26.50
5220.0623.1	Standard	6	Screw-In	<0.5mA	24B314	34.53	30.00
5220.0643.1	Standard	6	Snap-In	<0.5mA	24B317	34.36	29.84
5220.1023.1	Standard	10	Screw-In	<0.5mA	26C1973	34.03	29.55
5220.1023.3	Medical	10	Screw-In	<5µA	32C5198	36.83	31.98

(82467)

CORCOM EEA, EEB SERIES POWER LINE FILTERS

RoHS Compliant Available

TE connectivity

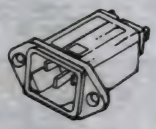
Authorized Distributor

EEB Series

- Compact EMI filter with IEC 60320-1 C14 inlet
- Two element circuit provides extended attenuation
- Extended differential mode performance
- Available in three terminal configurations

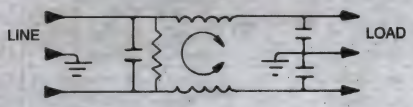
EEA Series

- Compact single stage EMI filter with IEC 60320-1
- C14 inlet
- Two element circuit provides basic attenuation
- Same performance as the EF Series
- Available in three terminal configurations
- Supersedes EF Series



EAH & EBH Series

- Same size as EEA and EEB
- Minimal leakage current suitable for medical applications
- Flange mounted
- Spade terminals



EEA SERIES

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49
1EEA1	1	52K3827	13.75	12.78	11.86
3EEA1	3	52K3828	10.54	9.97	9.14

CONTINUED

POWER ENTRY MODULES – RFI FILTERED

CORCOM EEA, EEB SERIES POWER LINE FILTERS (CONT.)

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-9	10-24	25-49
● 6EEA1	6	52K4462	9.29	8.81	8.32
● 6EEA2	6	23B4446	11.64	10.32	9.68
● 6EEAP	6	52K3829	10.41	9.88	9.32
● 10EEA1	10	52K3288	10.39	9.53	8.99
EEB SERIES					
● 1EEBP	1	23B4328	16.86	15.35	14.08
● 15EEB1	15	17R3675	15.04	13.95	12.81
EAH SERIES					
● 6EAH1	6	52K3831	11.92	10.85	9.96
● 10EAH1	10	52K3832	12.74	11.60	10.64
EBH SERIES					
● 10EBH1	10	52K4463	15.70	14.29	13.11

(7421)

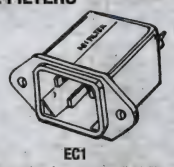
3

CORCOM EC SERIES POWER LINE FILTERS

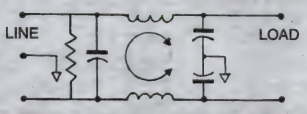
RoHS Compliant Available

TE connectivity

Authorized Distributor



EC1



Provide highest attenuation for any standard filter available in a small package size. Combine high common mode inductance with high differential-mode capacitance and minimal parasitic elements, for effective attenuation of line-to-ground and line-to-line noise across the frequency range. Rated: 120/250VAC, 50/60Hz. UL recognized, CSA certified, VDE approved. All except **mfg. part no. 10EC1** are SEV approved.

Mfg. Part No.	Amps	H x W x D (in.)	Stock No.	Price Each 1-9	10-24	25-49
● 3EC1		0.81 x 1.98 x 2.62	52K3842	22.89	21.16	20.67
● 6EC1		0.81 x 1.98 x 2.62	52K3843	20.82	18.72	17.50
● 10EC1		0.81 x 1.98 x 2.62	52K4253	20.71	19.41	17.92

(7422)

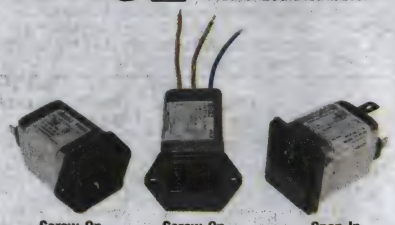
CORCOM GG, GS AND HG SERIES FILTERED IEC POWER ENTRY MODULES WITH METRIC FUSEHOLDER

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Space-saving, compact design
- Horizontal, screw-on flange or snap-in panel mounting
- IEC 320 power cord connector
- RFI filter versions for general-purpose or medical applications
- Single or dual 5 x 20 mm metric fuseholder
- Choice of 0.25" terminals or 5" wire leads for load-side terminations



Screw-On with Terminals | Screw-On with Leads | Snap-In with Terminals

GG, GS series general-purpose and **HG series** medical filtered power entry modules with metric fuseholder takes up the smallest possible panel space. Hipot rating (one min.): line-to-ground 1500VAC; line-to-line 1450VDC. Voltage rating (max.): 250VAC. All models are UL recognized, CSA certified, VDE approved.

GENERAL-PURPOSE FILTER

GG and GS series general-purpose filter versions both offer maximum leakage current, each line to ground @ 120 VAC 60 Hz: 0.25mA; @ 250 VAC 50 Hz: 0.42mA.

Mfg. Part No.	Filter Current (A)*	Mount-ing	Termin-ation	Fuse-holder	Dimensions H x W x D (in.)	Stock No.	Price Each 1-24
● 1EGG1-1	1	Screw-On	Terminals	Single	1.29 x 1.41 x 1.66	93F4599	15.95
● 1EGG1-2	1	Screw-On	Terminals	Dual	1.29 x 1.41 x 1.66	52K3899	20.50
● 3EGG1-1	3	Screw-On	Terminals	Single	1.29 x 1.41 x 1.66	52K3309	14.83
● 3EGG8-1	3	Screw-On	Leads	Single	1.29 x 1.76 x 2.02	52K4271	20.84
● 3EGS1-2	3	Snap-In	Terminals	Dual	1.46 x 1.42 x 2.13	40P9149	16.52
● 6EGG1-1	6	Screw-On	Terminals	Single	1.29 x 1.41 x 1.66	52K4309	15.11
● 6EGG1-2	6	Screw-On	Terminals	Dual	1.29 x 1.41 x 1.66	52K4310	16.40
● 6EGG8-2	6	Screw-On	Leads	Dual	1.29 x 1.76 x 2.02	19R5396	19.92
● 6EGS1-1	6	Snap-In	Terminals	Single	1.46 x 1.42 x 2.13	99M1052	12.76
● 6EGS1-2	6	Snap-In	Terminals	Dual	1.46 x 1.42 x 2.13	99M1053	15.69
● 10EGG1-1	10	Screw-On	Terminals	Single	1.29 x 1.76 x 2.15	73P5069	18.45
● 10EGG1-2	10	Screw-On	Terminals	Dual	1.29 x 1.76 x 2.15	73P5070	16.32
● 10EGG8-1	10	Screw-On	Leads	Single	1.29 x 1.76 x 2.02	73P5071	19.68
● 10EGG8-2	10	Screw-On	Leads	Dual	1.29 x 1.76 x 2.02	73P5072	19.58
● 10EGS1-1	10	Snap-In	Terminals	Single	1.28 x 1.42 x 2.13	73P5073	17.04
● 10EGS1-2	10	Snap-In	Terminals	Dual	1.28 x 1.42 x 2.13	73P5074	17.54

➤CONTINUED➤

CORCOM GG, GS AND HG SERIES FILTERED IEC POWER ENTRY MODULES WITH METRIC FUSEHOLDER (CONT.)

Mfg. Part No.	Filter Current (A)*	Mount-ing	Termin-ation	Fuse-holder	Dimensions H x W x D (in.)	Stock No.	Price Each 1-24
HG series medical filter versions offer reduce the line-to-ground capacitance in order to meet UL 2601 patient care requirements. Maximum leakage current, each line to ground @ 120 VAC 60 Hz: 2μA; @ 250 VAC 50 Hz: 5μA.							
● 1EHG8-2	1	Screw-On	Leads	Dual	1.29 x 1.76 x 2.02	73P5068	25.56
● 3EHG1-2	3	Screw-On	Terminals	Dual	1.29 x 1.41 x 1.66	52K4532	15.29
● 3EHG8-2	3	Screw-On	Leads	Dual	1.29 x 1.76 x 2.02	73P5078	20.76
● 6EHG1-2	6	Screw-On	Terminals	Dual	1.29 x 1.41 x 1.66	52K3900	14.81
● 6EHG8-2	6	Screw-On	Leads	Dual	1.29 x 1.76 x 2.02	73P5079	20.88
● 10EHG1-2	10	Screw-On	Terminals	Dual	1.29 x 1.76 x 2.15	73P5076	19.56
● 10EHG8-2	10	Screw-On	Leads	Dual	1.29 x 1.76 x 2.02	73P5077	21.72
● 10EHGS1-2	10	Snap-In	Terminals	Dual	1.28 x 1.42 x 2.13	73P5075	19.74

*Current rating @ 120VAC and 250VAC

(147852)

CORCOM L AND LA SERIES RFI-FILTERED POWER ENTRY MODULES

RoHS Compliant Available

TE connectivity

Authorized Distributor

L Series | LA Series

L series power entry modules with choice of filtering capacities and four-voltage selector or a DPST on/off switch. **EDL models** have general-purpose RFI filter for controlling line-to-line and line-to-ground noise. **EHL models** have a medical filter to provide susceptibility protection without leakage current associated with line-to-ground capacitors. Designed to allow equipment to meet UL544 for patient and non-patient care equipment. All units are UL recognized, CSA certified, VDE approved.

L SERIES — 120V/240V FIXED VOLTAGE WITH DPST ON/OFF SWITCH

Mfg. Part No.	Amps @120V	Mount-ing	RFI Filter+	Fuse-holder*	Dimensions H x W x D (in.)	Stock No.	Price Each 1-24
● 4EDL1S	4	Screw-On	G.P.	N.A.	2.3 x 1.98 x 2.01	52K3311	40.25
● 6EDL1S	6	Screw-On	G.P.	N.A.	2.3 x 1.98 x 2.01	52K4274	40.85
● 6EDL1SCM	6	Snap-In	G.P.	Metric	2.3 x 1.28 x 2.01	52K4311	38.66
● 6EHL1SM	6	Screw-On	Medical	Metric	2.3 x 1.98 x 2.01	52K4535	42.77
L SERIES — 110/120/220/240V SELECTABLE VOLTAGE — NO SWITCH							
● 6EDL4	6	Screw-On	G.P.	N.A.	2.3 x 1.98 x 2.01	78K5146	39.08
● 6EDL4C	6	Snap-In	G.P.	N.A.	2.3 x 1.28 x 2.01	52K4312	37.10
● 6EDL4CM	6	Snap-In	G.P.	Metric	2.3 x 1.28 x 2.01	52K3474	40.62
● 6EHL4CM	6	Snap-In	Medical	Metric	2.3 x 1.28 x 2.01	99M1054	38.32

LA SERIES — 120V/240V SELECTABLE VOLTAGE

LA series multi-function power entry modules with choice of filtering capabilities. Features IEC power line connector, selectable fusing capabilities, DPST on/off switch and 120/240 voltage selection. **EFLA model** has a general-purpose filter for susceptibility applications while the **EZLA model** has a premium performance filter designed to bring most digital equipment into compliance with VDE 0871, Level B (as well as FCC Part 15J, Class B) conducted emissions limits. Both models are UL recognized, CSA certified, VDE approved.

● 5EFLA2S	5	Screw-On	G.P.	N.A./Metric	2.59 x 1.99 x 3.16	52K3902	94.50
● 3EZLA2S	3	Screw-On	P.P.	N.A./Metric	2.59 x 1.99 x 4.16	52K4533	94.69

+ G.P. = General Purpose, P.P. = Premium Performance *N.A. = North American

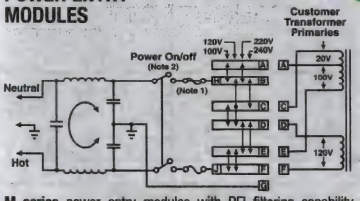
(7323)

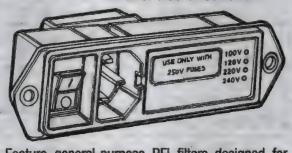
CORCOM M SERIES POWER ENTRY MODULES

RoHS Compliant Available

TE connectivity

Authorized Distributor





M series power entry modules with RFI filtering capability. Feature general-purpose RFI filters designed for susceptibility applications, providing RFI control of line-to-ground noise. Have IEC connector, selectable fuse. 5A rating at 120V. **S suffix** in type number denotes DPST on/off switch; **4** indicates 4V selector. UL recognized, CSA certified, VDE approved.

Mfg. Part No.	H x W x D	Stock No.	Price Each 1-24	25-49	50-99
● 5EFM1	1.14 x 3.39 x 2.19"	52K3475	25.15	24.41	23.66
● 5EFM1S	1.14 x 4.17 x 2.19"	52K4314	27.38	27.17	26.93
● 5EFM4	1.14 x 3.88 x 2.19"	52K3476	32.90	29.94	27.47
● 5EFM4S	1.14 x 4.65 x 2.19"	52K4315	35.93	33.73	31.53

(7962)

POWER ENTRY MODULES – RFI FILTERED/FUSED, RFI FILTERED/SWITCHED

FN9260 SERIES FUSED IEC INLET FILTERED POWER ENTRY MODULES

RoHS Compliant Available

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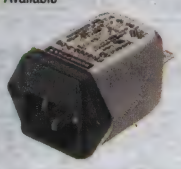


General-purpose, compact IEC inlet filtered power entry modules with one or two 5 x 20mm fuse holders to meet requirements of IEC 950. Current rating to 10A. Operating voltage: 250VAC. **Suffix B** in mfg. part nos. denotes low-leakage version for medical applications. UL recognized, CSA certified, VDE approved.

STANDARD VERSIONS

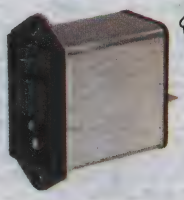
Mfg. Part No.	Current (A)	L (mH)	Cx (µF)	Cy (nF)	Fuses Held	Stock No	Price Each 1-24
FN9260-1-06	1	5.3	0.1	2.2	2	52F9092	18.04
FN9260-2-06	2	2.7	0.1	2.2	2	52F9093	16.95
FN9260-4-06	4	1	0.1	2.2	2	52F9094	15.58
FN9260-6-06	6	0.3	0.1	2.2	2	52F9095	15.45
FN261-2-06	2	2.7	0.1	2.2	1	11B2985	18.79
FN261-6-06	6	0.3	0.1	2.2	1	11B2986	18.06
FN261-10-06	10	0.2	0.1	2.2	1	60K9699	18.06
MEDICAL VERSION (W/O Y-CAPACITOR)							
FN9260B-2-06	2	2.7	0.1	...	2	32M0930	16.95
FN9260B-4-06	4	1	0.1	...	2	52F9098	17.14
FN9260B-6-06	6	0.3	0.1	...	2	89M5174	15.57

(7848)

DD12 SERIES POWER ENTRY MODULES WITH LINE FILTER

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS



- Ultra-compact design
- Aluminum case provides good shielding
- All single elements are already wired
- Fuse drawer meets requirements of medical standard IEC/EN 60601-1
- The fuseholder is accessible from the equipment front
- Designed for standard and medical applications
- Qualified for use in equipment according IEC/EN 60950

DD12 series panel-mount power entry modules with line filters provide four functions: Appliance inlet protection class I, Line switch 2-pole, fuseholder for fuse links 5 X20 mm 1-or 2-pole, line filter in standard and medical version. Quick connect terminals 6.3 x 0.8 mm. Ideal for low profile designs and applications with high transient loads. Voltage rating 250VAC. *For added safety "Extra-Safe" fuse drawers ordered separately online or call.*

SCREW-ON FRONT SIDE MOUNTING

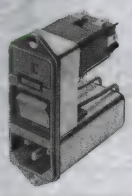
Mfg. Part No.	Rated Current (A)	Filter-Type	Fuseholder	Line Switch	Stock No.	Price Each 1-9
DD12.1111.111	1	Standard Version	1-pole	2-pole	48M7021	29.34
DD12.2111.111	2	Standard Version	1-pole	2-pole	48M7024	29.34
DD12.4111.111	4	Standard Version	1-pole	2-pole	48M7027	30.51
DD12.6111.111	6	Standard Version	1-pole	2-pole	48M7030	30.22
DD12.8111.111	8	Standard Version	1-pole	2-pole	48M7034	30.51
DD12.9111.111	10	Standard Version	1-pole	2-pole	48M7037	30.67
DD12.1121.111	1	Standard Version	2-pole	2-pole	48M7022	29.88
DD12.2121.111	2	Standard Version	2-pole	2-pole	48M7025	29.88
DD12.4121.111	4	Standard Version	2-pole	2-pole	48M7028	29.88
DD12.6121.111	6	Standard Version	2-pole	2-pole	48M7031	31.08
DD12.8121.111	8	Standard Version	2-pole	2-pole	48M7035	29.88
DD12.9121.111	10	Standard Version	2-pole	2-pole	48M7038	30.78
DD12.1321.111	1	Medical Version (M5)	2-pole	2-pole	48M7023	33.59
DD12.2321.111	2	Medical Version (M5)	2-pole	2-pole	48M7026	33.59
DD12.4321.111	4	Medical Version (M5)	2-pole	2-pole	48M7029	34.93
DD12.6321.111	6	Medical Version (M5)	2-pole	2-pole	48M7033	34.93
DD12.8321.111	8	Medical Version (M5)	2-pole	2-pole	48M7036	33.59
DD12.9321.111	10	Medical Version (M5)	2-pole	2-pole	48M7039	33.59

(142339)

CD SERIES CASING WITH FILTER

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS



Five Functions:

- 1.) Appliance inlet
- 2.) Line switch
- 3.) Line filter
- 4.) With or without voltage selector
- 5.) Fuse holder with interchangeable fuse drawer for 5x20 or 6.3x32mm fuses; *ordered separately below*
- 4.8 x 0.8mm quick connect terminals
- Qualified for use in equipment according to IEC/EN 60950

All single elements are already wired and the fuse drawer can be removed by hand. The fuses themselves can be accessed from the equipment front. **CD series** is available with or without a voltage selector. For added safety "Extra-Safe" fuse drawers are available; *go online or call.* "Extra-Safe" fuse drawers satisfy international standards for medical equipment and can only be removed with the aid of a tool.

➤CONTINUED➤

CD SERIES CASING WITH FILTER (CONT.)

Mfg. Part No.	Current Rating (A)	Filter Type	Max. Leakage Current Rating @ 250V/60Hz	Stock No.	Price Each 1-9	Price Each 10-24
CD14.1101.151	1	Standard	<0.5mA	88K1043	57.92	49.17
CD24.4101.151	2	Standard	<0.5mA	23B4506	60.94	51.73
CD34.1101.151	4	Standard	...	23B4515	57.92	49.17
CD34.4101.151	4	Standard	<0.5mA	88K1044	63.38	53.80
CD44.1101.151	6	Standard	<0.5mA	88K1877	60.53	51.40
CDA4.4101.151	2	Medical	<5µA	88K1042	65.62	55.70

FUSEHOLDERS

Mfg. Part No.	Description	Stock No.	Price Each 1-49
4303.2114.01	2-Pole, Takes 5 x 20mm Fuse, 100/120/220/240V	84K0289	4.85
4303.2401	Black, 2-Pole, Takes 5mm x 20mm Fuse	50F2848	4.29
4303.2403	2-pole, 5 x 20 mm	96F8307	6.80
4303.2406	2-Pole, Takes 5 x 20mm Fuse	84K0290	2.43
4303.2901	2-pole, 6.3 x 32 mm, w/ Shorting Bar	98F7931	4.29
4303.2902	Gray, 2-Pole, Takes 6.3 x 32 mm Fuse	84K0291	3.82
4303.2904	2-Pole, Takes 6.3 x 32mm Fuse	84K0292	6.55
4303.2906	1-Pole, Takes 6.3 x 32mm Fuse	24B181	2.47
4303.2912	Gray, 2-Pole with Shorting Bar, Takes 6.3 x 32 mm Fuse	84F815	8.76

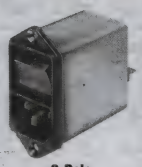
(82470)

DC12 AND KFB SERIES LINE FILTERS WITH AC INLET AND ON/OFF LINE SWITCH

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

1-Pole



2-Pole

Quick-connect terminals are 6.3 x 0.8mm. U_n: 250V max. 50/60Hz. Dimensions: 1-pole is 31.2H x 44W x 60mmD, 2-pole is 59H x 30W x 59mmD. **Suffix ".21"** corresponds to the version with V-Lock mating cordset. The connector is equipped with a notch intended for use with the latching cordset. The cord latching system prevents against accidental removal of the cordset. UL recognized, CSA certified, VDE approved.

STANDARD FILTER

Mfg. Part No.	No. of Poles	Current Rating (A)	Max. Leakage Current (@250V/50Hz)	Stock No.	Price Each 1-9	Price Each 10-24
DC12.1102.003	1	1	<0.5mA	84K0201	38.16	33.91
DC12.3102.003	1	4	<0.5mA	84K0202	38.16	33.91
DC12.4102.003	1	6	<0.5mA	84K0204	39.69	35.27
DC12.5102.003	1	10	<0.5mA	84K0205	42.18	37.48
DC12.5102.003.21	1	10	<0.5mA	72T0839	44.62	39.64
DC12.1102.001	2	1	<0.5mA	86H4263	40.03	35.56
DC12.3102.001	2	4	<0.5mA	86H4271	40.03	35.56
DC12.4102.001	2	6	<0.5mA	84K0203	40.03	35.56
DC12.5102.001	2	10	<0.5mA	86H4278	42.54	37.80
DC12.5102.001.21	2	10	<0.5mA	72T0838	46.80	41.58
4302.5311	2	1	<0.5mA	84K0284	45.07	41.42
4302.5312	2	2	<0.5mA	91F6412	46.87	43.08
4302.5313	2	4	<0.5mA	91F6413	46.87	43.08
4302.5314	2	6	<0.5mA	88K1406	46.87	43.08
4302.5315	2	10	<0.5mA	84K0285	51.86	47.66
MEDICAL (M5) FILTER						
4302.5339	2	10	<5µA	84K0286	45.07	41.42
DC12.5202.001	2	10	<5µA	84K0206	43.50	38.65
DC12.5202.001.21	2	10	<5µA	72T0840	46.80	41.58

(19260)

THERMAL CIRCUIT BREAKER WITH AC INLET & RFI FILTER

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

- Actuation: rocker
- Rocker color: white w/ embossed I/O
- AC inlet according to IEC 60320/C14
- Current/voltage: 5-15A/250VAC
- Short-circuit capacity: 10 x 1n/300A
- Mounting/terminals: screw mount/quick connect

UL and cUL recognized, VDE approved. Other ratings also available; *go online or call.*

Mfg. Part No.	No. of Poles	Current (A)	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49	Price Each 50+
5-ABTWF050C0-511	1	5	88K2166	42.38	38.02	33.87	32.12
5-ABTWF150C0-811	1	15	95B8164	43.02	38.58	34.37	32.59
5-ABDWF060C0-511	2	6	88K1415	47.50	42.60	37.95	35.99

➤CONTINUED➤

POWER ENTRY MODULES – RFI FILTERED/SWITCHED, RFI FILTERED/FUSED/SWITCHED

THERMAL CIRCUIT BREAKER WITH AC INLET & RFI FILTER (CONT.)

Mfg. Part No.	No. of Poles	Current (A)	Stock No.	Price Each 1-9	10-24	25-49	50+
● 5-ABDWF100C0-731	2	10	88K2165	47.50	42.60	37.95	35.99
● 5-ABDWF150C0-811	2	15	32C5152	47.74	42.81	38.14	36.18
● 5-ABDWF150C0-831	2	15	88K1416	47.50	42.60	37.95	35.99
● 5-ABDWF100C0-731	2	10	88K2165	47.50	42.60	37.95	35.99

(69038)

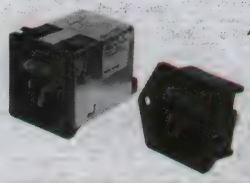
CORCOM CU SERIESCOMPACT 1U HEIGHT SWITCHED POWER ENTRY MODULES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Compact 1U (1¾") design
- 3A - 15A**
- Filtered and unfiltered versions
- SPST switch
- Shrouded quick-connect terminals
- Various mounting styles
- Lower power dissipation
- Higher system efficiency
- Lower cooling demand
- UL recognized, CSA certified, VDE approved**



CUFS1 Filtered Snap-In, CUE1 / CUBE1 Unfiltered Flanged Screw-On

CU series switched filtered and unfiltered inlet power entry modules are ideal for providing power entry for equipment designed for popular 1U (1¾") height equipment racks. The filtered versions provide complete EMI shielding, shrouded quick-connect terminals and basic filtering for up to 15A applications. The 15A unfiltered inlet snap-in versions are available in different configurations to fit a wide variety of panel cut-outs and thicknesses, and are offered with preconnected terminals from the socket to the switch. All models feature a common IEC 60320-1 C-14 power inlet for international compatibility. Maximum leakage current, each line to ground (filtered models only): 0.25mA @120VAC 60Hz and 0.40mA @ 250VAC 50Hz. Hipot rating (one minute): 1500VAC line-to-ground and 1450VDC line-to-line. Operating frequency: 50/60Hz. Rated voltage : 250VAC. Operating voltage : 120/250VAC. Terminal push-on force : 15 lb./67N (max). Applications include: rack-mounted equipment, telecom, consumer electronics, power supplies, routers, PCs, TVs, lighting, imaging equipment, set-top boxes and others operations with limited panel space. Other current ratings and mounting styles are available; *go online or call.*

CUFS1— FILTERED, SNAP-IN MOUNT, 1.34H x 1.2W x 1.8"D, PANEL THICKNESS: 0.025" - 0.082"

Mfg. Part No.	Current Rating (A)	Stock No.	Price Each 1-24
● 3CUFS1	3	60R5633	25.79
● 6CUFS1	6	60R5692	24.50
● 10CUFS1	10	60R5515	24.56
● 15CUFS1	15	60R5559	27.10

CUFE1— FILTERED, FLANGED SCREW-ON MOUNT, 1.34H x 1.73W x 1.75"D

● 3CUFE1	3	60R5631	23.99
● 6CUFE1	6	60R5690	24.46
● 10CUFE1	10	60R5513	24.03
● 15CUFE1	15	60R5557	26.95

UNFILTERED — 15A CURRENT RATING

Mfg. Part No.	Mounting Style	Dimensions H x W x D (In.)	Panel Thickness (In.)	Stock No.	Price Each 1-24
● 15CUE1	Flanged Screw-On	1.34 x 1.73 x 0.96	...	60R5556	9.03
● 15CUBE1*	Flanged Screw-On	1.34 x 1.73 x 0.96	...	60R5554	9.38
● 15CUS1	Snap-In	1.34 x 1.2 x 0.97	0.025 - 0.082	60R5560	8.28
● 15CUBS1*	Snap-In	1.34 x 1.2 x 0.97	0.025 - 0.082	60R5555	9.50
● 15CU15S1	1.5mm Side Snap-In	1.34 x 1.2 x 0.97	0.047 - 0.059	60R5564	8.28
● 15CU15BS1*	1.5mm Side Snap-In	1.34 x 1.2 x 0.97	0.047 - 0.059	60R5563	9.38

*Preconnected terminals
(165064)

CORCOM P SERIES CHAMELEON ADAPTABLE POWER ENTRY MODULES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Snap-in or horizontal, screw-on flange panel mounting
- IEC power line connector
- **S models** — filtering for general-purpose applications
- **H models** — filtering for medical applications
- **DC models** — filtering for DC appluications
- Filter current — 3A, 6A or 10A
- Optional DPST on/off switch
- Single or dual fuseholder models
- Both North American and European fusing capabilities
- Unshielded and shielded version

P series power entry modules offer fuller flexibility of design in a compact, modular package that will fit any standard panel cutout, using adapters. Available with current ratings of 3, 6 or 10 amps, with or without DPST on/off switch, with dual or single fuseholders: two ¼" x 1¼" or 5 x 20mm fuses and choice of no shield, filter shield or complete shield versions. Terminal tabs: 0.187 x 0.032" (4.8 x 0.81mm). UL recognized, CSA certified, VDE approved.

S MODELS — GENERAL PURPOSE FILTER

S models offer protection for general-purpose applications where line-to-ground and line-to-line noise must be controlled. **PS prefix** in mfg. part nos. are snap-in panel mountable; **PE prefix** are horizontal, screw-on flange mountable. Units with filters are designed to meet low leakage requirements of VDE portable equipment. Available in current ratings of 3, 6 and 10 amps. All units feature a DPST on/off switch except for **mfg. part no. PS000SS3B** which has no switch. Voltage rating: 250VAC.

➤ CONTINUED ➤

CORCOM P SERIES CHAMELEON ADAPTABLE POWER ENTRY MODULES (CONT.)

Mfg. Part No.	Filter Current (A)	Voltage	Fuse-holder	Shield	Stock No.	Price Each 1-24
● PS000SS3B*	3	Single	Single	Complete	91F6454	21.68
● PS0S0SS3B	3	Single	Single	Complete	10M5477	25.05
● PE0S0SS30+	3	Single	Single	None	48M6831	21.81
● PS0S0DS3B	3	Single	Dual	Complete	99M1039	25.48
● PS0SXSS3A	3	Single	Single	Filter	54K4052	25.40
● PS0SXDS3B	3	Dual**	Dual	Complete	99M1038	24.08
● PS0SXSS30	3	Dual**	Single	None	74K0608	19.51
● PS0S0SS6A	6	Single	Single	Filter	91F6459	24.96
● PS0S0DS60	6	Single	Dual	None	23B4296	21.74
● PE0S0SS60+	6	Single	Single	None	62K2984	24.37
● PE0SSSS60+	6	Dual++	Single	None	99M1037	23.55
● PS0S0DS6A	6	Single	Dual	Filter	93B2263	26.81
● PS0SXDS6A	6	Dual**	Dual	Filter	79K2688	25.03
● PS0SXSS60	6	Dual**	Single	None	54K4027	21.42
● PS0SXSS6A	6	Dual**	Single	Filter	76K0569	24.52
● PS0S0DSXB	10	Single	Dual	Complete	78K5150	28.37
● PS0S0SSXA	10	Single	Single	Filter	23M2585	26.22
● PS0S0SSXB	10	Single	Single	Complete	64K3338	24.53
● PS0S0S000	No Filter	Single	Single	None	73K1755	15.35
● PS0S0D000	No Filter	Single	Dual	None	56K5282	15.97
● PS0SXS000	No Filter	Dual**	Single	None	69K7492	14.82

*No switch; +Horizontal, screw-on flange mounting; **For dual primary transformer applications; ++For jumper-type applicaitions associated with switching mode power supplies

H MODELS — MEDICAL FILTER

H models provide susceptibility protection without leakage current associated with line-to-ground capacitors and are designed to allow equipment to meet UL 544 for patient care and non-patient care equipment. These modules have a DPST on/off switch and are snap-in for easy panel mounting. Voltage rating: 250VAC.

● PS0S0DH3B	3	Single	Dual	Complete	54K3666	24.52
● PS0S0DHX0	10	Single	Dual	None	02M6264	22.19

B MODELS — INTERCONNECT BLOCK

B models have an interconnection block that connects the voltage selection terminals of an unfiltered Chameleon module with a switch and an IEC connector to reduce external wiring. These modules have a DPST on/off switch and are snap-in for easy panel mounting. Voltage rating: 250VAC.

● PS0S0DBX0	10	Single	Dual	None	93B6649	17.16
● PS0S0SBX0	10	Single	Single	None	73K6487	18.36

DC FILTERED MODELS

The DC version of the **P series** power entry module features a general-purpose filter specifically for DC applications up to 80VDC. Designed to address the increasing demand for filtering on central office equipment and customer premises equipment. Also used with routers, desktop servers and multiplexers, aggregators, concentrators, etc. These modules have no switch and snap-in for easy panel mounting. UL recognized, CSA certified, TUV approved.

Mfg. Part No.	DC Filter Current (A)	Voltage	Fuse-holder	Shield	Stock No.	Price Each 1-24
● PS000DD3D	3	Single	Dual	Complete	35C4847	26.44
● PS000DD6D	6	Single	Dual	Complete	35C4848	25.42
● PS000DDXD	10	Single	Dual	Complete	35C4846	26.08

THREE-CONDUCTOR POWER LINE CORD

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● GA400	Power Line Cord — Black, 1250W, 7.5' (2.29M) Long	15F2481	11.88

(7375)

MEDIUM PERFORMANCE P SERIES POWER ENTRY MODULES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Dual stage electrical setup
- High attenuation at higher frequencies
- Compact design
- Snap-in or flange mounting
- Standard IEC 60321-1 C14 power inlet
- Optional DPST switch
- Single or dual North American or Metric fusing capabilities
- UL Recognized, CSA Certified and VDE Approved

TE Connectivity has expanded the Corcom **P Series** power entry modules to include a new medium performance filter option. The medium **P Series** modules feature better performance than the standard filter option in a smaller size than the high performance filter. Filters are available in 3, 6 or 10A ratings. Modules are available in either snap-in or flange mount versions with a choice of horizontal or vertical mounting ears. The medium performance **P Series** modules are available with either single or dual fuses and may be configured with an optional DPST switch. The medium performance **P Series** modules are suitable for applications with increased attenuation requirements in higher frequencies where a smaller size is desirable.

Mfg. Part No.	Mounting Style	Switch	Fuse	Filter Current (A)	Stock No.	Price Each 1-4
● PE000SM3E	Ears (Horizontal)	...	Single	3	07W3889	34.32
● PE000DM6E	Ears (Horizontal)	...	Dual	6	07W3888	38.12

➤ CONTINUED ➤

MEDIUM PERFORMANCE P SERIES POWER ENTRY MODULES (CONT.)

Mfg. Part No.	Mounting Style	Switch	Fuse	Filter Current (A)	Stock No.	Price Each 1-4
PE0S0SMXE	Ears (Horizontal)	DPST	Single	10	07W3887	38.70
PE0S0DM6E	Ears (Horizontal)	DPST	Dual	6	07W3886	38.12
PM000SMXE	Ears (Vertical)	...	Single	10	07W3892	27.53
PM000DM6E	Ears (Vertical)	...	Dual	6	07W3891	35.69
PM0S0DM6E	Ears (Vertical)	DPST	Dual	6	07W3890	35.69
PS000SM6E	Snap-in	...	Single	6	07W3896	34.20
PS000DMXE	Snap-in	...	Dual	10	07W3895	34.76
PS0S0SM3E	Snap-in	DPST	Single	3	07W3894	36.22
PS0S0DM6E	Snap-in	DPST	Dual	6	07W3893	37.10

(209432)

FUSED INLET FILTERS WITH VOLTAGE SELECTOR

RoHS Compliant Available

SCHAFFNER

FN 389

Flexible package combines an IEC 320 inlet, dual fuse holders, DPST switch or voltage selector, with moderate and higher performance filter. **Mfg. part no. FN372-6-22** has a 4-position voltage selector. Units supplied with U.S. style 3 AG fuse holders. The fuse holder is for metric 5 × 20mm applications. **B** in mfg. part no. indicates low-leakage medical version. Depth is 2.2″ (57mm) for moderate performance for **mfg. part nos. FN372**, and **FN388**. **Mfg. part no. FN389** is 2.6″ (66.5) deep. UL recognized, CSA certified, VDE approved, SEV approved.

Mfg. Part No.	I (A)	L (mH)	Cx (µF)	Cy (pF)	Fuse Size	Stock No.	Price Each 1-24	25-49
FN372-6-22	6	0.2	0.047	2200	6.3mm x 32mm	37K6071	34.42	29.61
FN382-4-22	4	0.3	0.047	2200	6.3mm x 32mm	37K6072	34.95	31.83
FN388-4-22	4	0.3	0.047	2200	6.3mm x 32mm	93B3205	36.65	33.37
FN388-6-22	6	0.2	0.047	2200	6.3mm x 32mm	37K6073	36.03	32.81
FN389B-6-21	6	0.5	0.047	...	5mm x 20mm	36K4143	39.66	36.11
FN389B-6-22	6	0.5	0.047	...	6.3mm x 32mm	37K6074	39.27	35.76

(7472)

KMF SERIES LINE FILTER

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

Standard features include AC power inlet, 1- or 2-pole on/off switch, 4.8 x 0.8mm quick connect terminals, and EMC shield. It accepts one or two 5 x 20mm fuses and is shock safe according to EN/IEC 60127-6, PC2. A simple 28.8 x 47.9mm (1.14″ x 1.88″) cutout is needed. 4.8 x 0.8mm quick connect terminals. UL recognized, VDE approved. Fuse drawers ordered separately. Fuses available online or call.

FILTER WITH 1-POLE FUSE HOLDER

Mfg. Part No.	Current Rating (A)	Filter Type	Max. Leakage Current (@ 250V/50Hz)	Stock No.	Price Each 1-9
KMF1.1211.11	1	Standard	<0.5mA	24C7801	28.23
KMF1.1221.11	2	Standard	<0.5mA	24C2059	28.44
KMF1.1261.11	6	Standard	<0.5mA	84K0218	28.23
KMF1.1291.11	10	Medical	<0.5mA	24C7808	27.97
FILTER WITH 2-POLE FUSE HOLDER					
KMF1.1121.11	2	Standard	<0.5mA	84K0215	31.34
KMF1.1161.11	6	Standard	<0.5mA	84K0216	30.66
KMF1.1191.11	10	Standard	<0.5mA	84K0217	31.34
KMF1.1123.11	2	Medical	<5µA	24C7794	35.31
KMF1.1193.11	10	Medical	<5µA	24C7800	35.31

FUSE DRAWERS

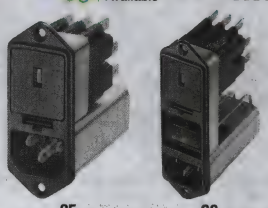
Mfg. Part No.	Filter Type	No. of Poles	Stock No.	Price Each 1-24
4301.1401	Standard	2	50F2871	3.75
4301.1403	Medical	2	96F8302	3.83
4301.1405	Standard	1	84K0272	2.27
4301.1407	Medical	1	84K0273	2.27

(69025)

CE AND CG SERIES LINE FILTERS

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS



CE CG

CE and **CG series** line filters have AC connector and interchangeable fuse drawers for ¼ x 1¼″ or 5 x 20mm fuses. Available with single- or double-pole shock-safe fuse holder and series parallel voltage selection, *order seperately*. Quick-connect terminals are 4.8 x 0.8mm. **CG series** (DPST) have 35A in-rush current; dimensions: 97H x 30W x 69mmD. **CE series** dimensions: 69.5H x 30W x 69mmD. UL recognized, CSA certified, VDE approved.

Mfg. Part No.	Filter	Max. Leakage Current Rating @ 250V/50Hz	Stock No.	Price Each 1-9	10-24
CE20.6100.151	2A Standard	<0.5mA	88K1046	59.73	55.02
CE30.6100.151	4A Standard	<0.5mA	88K1047	59.73	55.02
CE60.6100.151	10A Standard	<0.5mA	88K1048	59.73	55.02
CEL0.6100.151	10A Medical	<5µA	84K0194	63.70	58.67
CG10.6101.151	1A Standard	<0.5mA	91F6400	94.31	83.99
CG30.6101.151	4A Standard	<0.5mA	88K1050	95.22	84.80
CG40.6101.151	6A Standard	<0.5mA	92F7983	93.62	83.37
CG60.6101.151	10A Standard	<0.5mA	18C6116	95.22	84.80
CGC0.6101.151	4A Medical	<5µA	84K0195	98.59	87.81
CGE0.6101.151	6A Medical	<5µA	88K1049	98.59	87.81
CGL0.6101.151	10A Medical	<5µA	88K1879	101.55	90.44

4-POSITION VOLTAGE SELECTOR

Mfg. Part No.	Markings	Stock No.	Price Each 1-24	25-49
4305.0048.01	100, 120, 220, 240	50F2859	8.86	8.17

FUSE DRAWERS

Mfg. Part No.	Color	Mounting	Stock No.	Price Each 1-24	25-49
4305.0001	Black	2-Pole, 5 x 20mm	50F2860	6.34	5.67
4305.0012	Gray	2-Pole, 1/4 x 1-1/4″	84K0295	6.34	5.67
4305.0021	Black	1-Pole, 5 x 20mm	88K1408	7.70	6.88
4305.0027	Gray	1-Pole, 1/4 x 1-1/4″	50F2862	7.02	...

(19262)

MIDGET 3-POLE / 3-WIRE NON-GROUNDING LOCKING PLUGS, CONNECTORS, & RECEPTACLES

RoHS Compliant Available

HUBBELL Wiring Device-Kellems

HBL7485 HBL7484 HBL7486 HBL7487

Mfg. part nos. HBL7484, HBL7485 fit cord diameter 0.281-0.421″ (7.14-10.69). 15A, 125VAC/DC. Phenolic blade holder, nylon cord grip. Cord grip finish is black oxidized. NEMA receptacle ML-3R. UL listed.

Mfg. Part No.	Description	Stock No.	Price Each 1-4	5-9
HBL7485	Plug	38F504	21.47	19.42
HBL7484	Connector	38F505	29.12	26.35
HBL7486	Flanged Inlet	38F506	27.83	25.17
HBL7487	Flanged Receptacle	38F507	33.33	30.15

(2874)

2-POLE, 3-WIRE GROUNDING STRAIGHT BLADE DEVICES

RoHS Compliant Available

HUBBELL Wiring Device-Kellems

HBL5278C HBL5279, HBL5279C HBL5240

Flanged inlets and outlets are excellent solutions to bring power in or out of panels and enclosures. 15A, 125VAC or DC. 2-pole, 3-wire. Receptacle 5-15R. Plug 5-15P.

Mfg. Part No.	Description	Stock No.	Price Each 1-4	5-9
HBL5278C	Inlet, Nylon Casing	46F1292	23.51	21.27
HBL5279C	Flanged Receptacle	70B1743	32.41	29.33
HBL5240	Inlet	81F2898	32.87	29.73

(2870)

PLUGS & CONNECTORS – GROUNDING • RECEPTACLES – ELECTRICAL

MIDGET TWIST-LOCK™ DEVICES

RoHS Compliant Available

HBL7593 HBL7594 HBL7595 HBL7596

15A, 125VAC or DC. NEMA receptacle ML-2R. Plug ML-2P. UL listed. *For plug or connector with insulation displacement terminal, add* **suffix V** *to mfg. part no.*

Mfg. Part No.	Description	Stock No.	Price Each 1-4	Price Each 5-9
● HBL7593	Connector	32F742	28.44	25.73
● HBL7594	Plug	32F743	21.93	19.84
● HBL7595	Flanged Inlet	38F523	25.00	22.62
● HBL7596	Flanged Receptacle	38F524	30.14	27.59

(2876)

3-WIRE TWIST-LOCK DEVICES

RoHS Compliant Available

- Heavy duty panel-mount design for demanding applications
- Impact-resistant nylon construction, back wire only

HBL3326C HBL3325C

Brass casings have polished nickel finish. Receptacle fits standard single gang plates. UL listed for replacement use.

Mfg. Part No.	Description	Stock No.	Price Each 1-4	Price Each 5-9
20A, 125VAC, 3-POLE, 3-WIRE, NON-GROUNDING				
● HBL3325C	Nylon Flanged Inlet	44F1500	37.01	33.48
20A, 3 PHASE 250VAC, 3-POLE, 4 WIRE GROUNDING				
● HBL2425	Flanged Inlet	52F9728	42.67	38.60
30A, 125VAC, 2-POLE, 3 WIRE GROUNDING				
● HBL2616	Flanged Receptacle	52M9858	64.24	58.11
30A, 3 PHASE 250VAC, 3-POLE, 4 WIRE GROUNDING				
● HBL2726	Flanged Receptacle	14C5069	74.78	67.64

(2866)

STRAIGHT BLADE HOSPITAL-GRADE RECEPTACLES

RoHS Compliant Available

Hubbell "Hospital Grade" receptacles are designed to withstand the severe conditions and abuse that is unique to the hospital environment. Mate with **8200** and **8300 series** hospital-grade plugs. 2-pole, 3-wire grounding. **8200 series**: 15A, 125V. **8300 series**: 20A, 125V. UL listed.

Mfg. Part No.	Color	NEMA	Stock No.	Price Each 1-4	Price Each 5-9
8200 SERIES HOSPITAL GRADE RECEPTACLES					
● HBL8200	Brown	5-15R	31F1336	37.70	34.15
● HBL8200GY	Grey	5-15R	35B819	35.57	32.22
8200 SERIES HOSPITAL GRADE RECEPTACLES - SLENDER/COMPACT					
● HBL8200HI	Ivory	5-15R	35B823	30.00	27.17
● HBL8200HW	White	5-15R	35B827	30.00	27.17
8300 SERIES HOSPITAL GRADE RECEPTACLES					
● HBL8300I	Ivory	5-20R	35B861	37.41	32.67
8300 SERIES HOSPITAL GRADE RECEPTACLES - SLENDER/COMPACT					
● HBL8300HI	Ivory	5-20R	35B858	33.01	29.90
● HBL8300HG	Grey	5-20R	35B857	33.01	29.90
● HBL8300HW	White	5-20R	35B860	34.33	31.10
● HBL8300HRED	Red	5-20R	35B859	33.01	29.90
8300 SERIES HOSPITAL GRADE RECEPTACLES - TAMPER RESISTANT					
● HBL8300SGWA	White	5-20R	79C4399	69.00	61.50
● HBL8300SGRA	Red	5-20R	88H7590	69.00	61.50
● HBL8300SGIA	Ivory	5-20R	88H7589	69.00	61.50

(2854)

2-POLE, 3 WIRE STRAIGHT BLADE RECEPTACLES

RoHS Compliant Available

Fig. 1 Fig. 2 Fig. 3 Fig. 4

Mfg. part no, HBL5262 3-wire isolated ground. Nylon except **mfg. part nos. HBL5256** and **HBL5258** which are phenolic. **Mfg. part no.HBL5242** is side wire; **mfg. part nos. HBL5252, HBL5462,** and **HBL5662** are side and back wire models. Imact-resistant, except for Fig. 3, which are phenolic. Fig. 1 devices are back and side wire, except **Mfg. part no, HBL5242**, side wire only. UL listed, CSA certified.

Mfg. Part No.	Fig.	Rating	NEMA	Stock No.	Price Each 1-4	Price Each 5-9
● HBL5242	1	15A/125VAC/DC	5-15R	32F701	11.68	10.69
● HBL5252	1	15A/125VAC/DC	5-15R	32F749	16.69	15.28
● HBL5262	1	15A/125VAC/DC	5-15R	34F1154	27.32	23.85
● HBL5662	1	15A/250VAC/DC	6-15R	44F1496	32.18	29.46
● HBL5362	1	20A/125VAC/DC	5-20R	35B721	30.76	28.16
● HBL5261	2	15A/125VAC/DC	5-15R	44F1499	24.41	22.34
● HBL5258	3	15A/125VAC/DC	5-15R	30F1300	14.62	13.39
● HBL5256	3	15A/125VAC/DC	5-15R	32F746	30.14	27.59
● HBL5284	4	15A/125VAC/DC	5-15R	30F1303	19.20	17.57

(2881)

USB CHARGER RECEPTACLES

RoHS Compliant Available

Features
- Two USB ports 3 Amp, 5VDC, Type A, 2.0
- Tamper-Resistant (TR) decorator duplex
- Green LED indicator to show USB power available
- Impact and chemical resistant
- Back and side wire for solid or stranded wire
- Flush fit design

Specifications
- Electrical ratings: 125VAC, USB 3 Amp, 5VDC
- Input voltage: 125VAC, 60Hz
- Circuit feed-through 20 Amp, 125 Volt
- #10-14 AWG gauge wire terminals
- Dielectric withstand: 2000V
- Operating temperature: maximum continuous 75°C; minimum -40°C (without impact)
- Meets UL94 for 5V flammability rating
- Complies with battery charging specification USB BC1.2
- Compatible with USB 1.1/2.0/3.0 devices
- Complies with Part 15 of the FCC rules
- cULus listed to UL498 and UL1310

Hubbell's **USB Charger Receptacles** provide both USB and electrical power in a standard single gang electrical opening. Designed to provide more charging options for personal electronics, the USB ports are capable of charging two tablets simultaneously. The tamper-resistant Style Line® decorator outlets provide additional power for appliance use. Ideal for use in renovation and replacement of existing receptacles to add capacity for USB charging. Especially suited for use in universities, dormitories, hotels, hospitals, medical labs, restaurants, airports, classrooms and homes. Perfect for new construction.

Mfg. Part No.	Current (A)	Color	Stock No.	Price Each 1-4
USB15X2I	15	Ivory	47W9281	40.02
USB15X2W	15	White	47W4056	40.02
USB15X2XGY	15	Grey	47W9280	40.40
USB20X2I	20	Ivory	47W9283	44.25
USB20X2W	20	White	47W4059	44.25
USB20X2GY	20	Grey	47W9282	42.55
HOSPITAL GRADE				
● USB8200GY	15	Grey	88W3573	46.25
● USB8200I	15	Ivory	88W3574	46.25
● USB8200R	15	Red	88W3575	46.25
● USB8200W	15	White	88W3576	46.25
● USB8300GY	20	Grey	88W3577	49.95
● USB8300I	20	Ivory	88W3578	49.95
● USB8300R	20	Red	88W3579	49.95
● USB8300W	20	White	88W3580	49.95

(209528)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

HUBBELL USB CHARGER 4 PORT OUTLET

NEW

Wiring Device-Kellems

FEATURES

- Four USB ports 5 Amp, 5V DC, type A, class 2.0
- Switch activated port door; when opened delivers power, when closed shuts off power
- Green LED indicator to show USB power available
- Heavy duty stainless steel USB ports; rated for 10,000 cord insertions and removals
- Solid or stranded wire use:
  - Hot + Neutral: back wire compression clamp
  - Ground: back or side wire

SPECIFICATIONS

- USB 5 Amp, 5V DC
- Input voltage: 125V AC, 60Hz
- Zero no load power consumption when not-in-use
- Circuit feed-through 20 Amp, 125 Volt
- #14-10 AWG gauge wire terminals
- Dielectric withstand: 1500V AC for 1 minute
- Operating temperature: -40° to 75°C (without impact)
- Meets UL94 for 5V flammability rating

Hubbell's USB 4 Port Charger provides USB power in a standard single gang electrical opening. Designed to provide maximum charging for personal electronics, the USB ports are capable of delivering a total of 5 amps to multiple electronics simultaneously. The outlet features a USB port door, which when opened enables power, when closed all power is switched off. This eliminates all current flow for a "zero" no load draw. Buildings looking to provide 100% green efficiency in power delivery will maximize LEED and energy design.

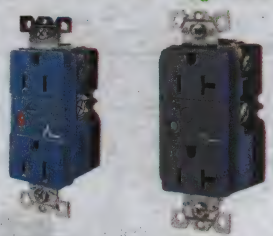
Mfg. Part No.	Description	Stock No.	Price Each 1-24
USB4W	White	17X2670	45.15
USB4	Brown	49X0286	45.15
USB4BK	Black	49X0287	45.15
USB4GY	Grey	49X0288	45.15
USB4I	Ivory	49X0289	45.15
USB4LA	Almond	49X0290	45.15

(212157)

SURGE SUPPRESSION DUPLEX RECEPTACLES

RoHS Compliant Available

Wiring Device-Kellems



HBL5262SA HBL5362SA

Feature indicator light and alarm. 210 joules/13000A per mode. UL listed, 15A versions are CSA certified.

SURGE SUPPRESSION RECEPTACLES WITH LIGHT & ALARM

Mfg. Part No.	Color	Rating	NEMA	Stock No.	Price Each 1-4
HBL5262SA	Blue	15A/125V	5-15R	87F1052	88.00
• HBL5362SA	Blue	20A/125V	5-20R	49H6339	117.03
• HBL5362WSA	White	20A/125V	5-20R	66W0846	117.03
ISOLATED GROUND SURGE SUPPRESSION RECEPTACLES WITH LIGHT & ALARM					
• IG5362SA	Blue	20A/125V	5-20R	88H8298	126.96
HOSPITAL GRADE SURGE SUPPRESSION RECEPTACLES WITH LIGHT & ALARM					
• HBL8362ISA	Ivory	20A/125V	5-20R	88H7592	118.41
• HBL8362RSA	Red	20A/125V	5-20R	88H7593	118.41
HBL8362SA	Blue	20A/125V	5-20R	66W0847	118.41
• HBL8362WSA	White	20A/125V	5-20R	88H7594	118.41

(15245)

ISOLATED GROUNDING RECEPTACLES

RoHS Compliant Available

Wiring Device-Kellems

IG2610 IG15CR IG20CR

Hubbell Isolated Grounding Devices provide a safe, clean and noise free ground by isolating the ground contacts from the mounting strap. The isolated ground circuit is completed by running a dedicated insulated ground wire from the system ground buss to the green grounding screw on the device itself. Orange nylon, flush receptacles wire isolated ground. All are 125 volts.

➤CONTINUED➤

ISOLATED GROUNDING RECEPTACLES (CONT.)

Mfg. Part No.	Amps	NEMA	Stock No.	Price Each 1-4	Price Each 5-9
• IG2610	30	L5-30R	34F1158	56.24	50.87
• IG15CR	15	5-15R	16M8980	11.18	9.97
• IG20CR	20	5-20R	16M8988	12.61	11.25

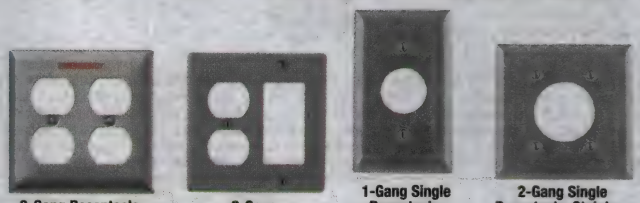
(2685)

NYLON & STAINLESS STEEL WALL PLATES

RoHS Compliant Available

Wiring Device-Kellems

1-Gang Toggle, Grey | 2-Gang Toggle, Ivory | 1-Gang Style Line Decorator, Red | 2-Gang Style Line Decorator, White | 1-Gang Receptacle, Stainless Steel



2-Gang Receptacle, Stainless Steel Marked | 2-Gang Combination, Grey | 1-Gang Single Receptacle, Stainless Steel | 2-Gang Single Receptacle, Stainless Steel

- Virtually unbreakable nylon or heavy duty stainless steel
- Curved corners blend into any interior
- Reinforcement ribs for stiffness
- Smooth wallplate for easy cleaning

TOGGLE SWITCH FACEPLATES

Mfg. Part No.	Description	Material	Color	Stock No.	Price Each 1-4
• NP1GY	1-Gang	Nylon (Polyamide)	Grey	17M6911	0.83
• NP1I	1-Gang	Nylon (Polyamide)	Ivory	17M6912	0.79
• NP1R	1-Gang	Nylon (Polyamide)	Red	17M6915	0.79
• NP1W	1-Gang	Nylon (Polyamide)	White	17M6916	0.79
• SS1	1-Gang	Stainless Steel	...	17M2858	2.13
• NP2GY	2-Gang	Nylon (Polyamide)	Grey	17M7020	1.66
• NP2I	2-Gang	Nylon (Polyamide)	Ivory	17M7021	1.57
• NP2R	2-Gang	Nylon (Polyamide)	Red	17M7024	1.57
• NP2W	2-Gang	Nylon (Polyamide)	White	17M7025	1.57
• SS2	2-Gang	Stainless Steel	...	17M2876	8.07
STYLE LINE® DECORATOR FACEPLATES					
• NP26	1-Gang	Nylon (Polyamide)	Brown	17M7060	2.14
• NP26GY	1-Gang	Nylon (Polyamide)	Grey	17M7063	2.14
• NP26I	1-Gang	Nylon (Polyamide)	Ivory	17M7064	2.14
• NP26R	1-Gang	Nylon (Polyamide)	Red	17M7067	2.14
• NP26W	1-Gang	Nylon (Polyamide)	White	17M7068	2.31
• NP26BK	1-Gang	Nylon (Polyamide)	Black	17M7062	1.99
• NP26LA	1-Gang	Nylon (Polyamide)	Almond	17M7065	1.99
• SS26	1-Gang	Stainless Steel	...	17M2888	3.52
• NP262GY	2-Gang	Nylon (Polyamide)	Grey	17M7072	5.27
• NP262I	2-Gang	Nylon (Polyamide)	Ivory	17M7073	5.27
• NP262R	2-Gang	Nylon (Polyamide)	Red	17M7076	5.27
• NP262W	2-Gang	Nylon (Polyamide)	White	17M7077	5.27
• SS262	2-Gang	Stainless Steel	...	17M2889	10.08
RECEPTACLE FACEPLATES					
• NP8GY	1-Gang	Nylon (Polyamide)	Grey	17M7214	0.99
• NP8I	1-Gang	Nylon (Polyamide)	Ivory	17M7215	1.04
• NP8R	1-Gang	Nylon (Polyamide)	Red	17M7218	1.04
• NP8W	1-Gang	Nylon (Polyamide)	White	17M7219	1.04
• SS8	1-Gang	Metal	...	17M2931	3.01
• NP82GY	2-Gang	Nylon (Polyamide)	Grey	17M7223	2.08
• NP82I	2-Gang	Nylon (Polyamide)	Ivory	17M7224	2.08
• NP82R	2-Gang	Nylon (Polyamide)	Red	17M7227	2.08
• NP82W	2-Gang	Nylon (Polyamide)	White	17M7228	2.08
• SS82	2-Gang	Stainless Steel	...	17M2934	11.56
RECEPTACLE FACEPLATES - EMERGENCY MARKED					
• SS8MEV	1-Gang	Stainless Steel	...	17M2932	40.28
SS82MEV	2-Gang	Stainless Steel	...	17M2935	53.05

➤CONTINUED➤

NYLON & STAINLESS STEEL WALL PLATES (CONT.)

COMBINATION FACEPLATES

Mfg. Part No.	Description	Material	Color	Stock No.	Price Each 1-4
● NP826GY	2-Gang	Nylon (Polyamide)	Grey	**17M7232**	4.94
● NP826I	2-Gang	Nylon (Polyamide)	Ivory	**17M7233**	4.94
● NP826W	2-Gang	Nylon (Polyamide)	White	**17M7236**	4.94
SINGLE RECEPTACLE FACEPLATES - 1.40″ DIAMETER HOLE					
SS7L	1-Gang	Stainless Steel	...	**89T8131**	2.85
SINGLE RECEPTACLE FACEPLATES - 2.15″ DIAMETER HOLE					
● SS723	1-Gang	Stainless Steel	...	**17M2918**	4.91
● SS703	2-Gang	Stainless Steel	...	**17M2914**	8.36

(202097)

3

DIN RAIL UTILITY BOXES

- Pre-wired in-cabinet convenience power receptacle
- Mounts to existing DIN rail. Vertical or horizontal mounting
- Wide variety of device options
- Optional 5A corcuit breaker
- Movable setscrew design terminal block

DRUBGFI15AC

Offers a labor-saving way to provide utility power to any control cabinet. All gray housing, faceplate and receptacle that blend well in control cabinet applications. Standard duplex (15A and 20A), ground fault circuit interrupting or isolated ground versions. Dual snap design allows all Hubbell DIN rail utility boxes to be mounted vertically or horizontally. **H** in type number indicates terminal block positioned for easy wiring in the horizontal position. Spring-loaded DIN rail snaps provide secure fastening to any 35mm DIN rail. Terminal blocks feature a set screw design for easy wiring. Removable inserts allow for the relocation of the terminal block on any of the DIN rail utility boxes. UL recognized, CSA certified.

Mfg. Part No.	Description	Rating	Stock No.	Price Each 1-4
DRUBGFI15	GFCI Ground Fault	15A, 125V	**67H5734**	95.58
DRUBGFI15AC	GFCI w/Downstream GFCI Connections	15A, 125V	**81H6609**	119.14
DRUB15	Duplex Receptacle	15A, 125V	**57H7336**	55.42
DRUB15CB5	Vertical Mount w/ 5A Circuit Breaker	15A, 125V	**29H5021**	72.39
DRUB20	Duplex Receptacle	20A, 125V	**81H6615**	60.36

(73464)

DIN RAIL OUTLET BOXES

RoHS Compliant Available

- Power input blocks have CAGE CLAMP® technology , include pre-marking for safe wiring
- Mounts to existing DIN rail in cabinet
- Single part number for easy ordering and reduced inventory
- Eliminates drilling extra holes
- Ground pin on top to avoid accidental shorting of hot and neutral pins
- Built-in test point for easy troubleshooting
- Wire size: 28-12 AWG

51017543

OUTLETS

Mfg. Part No.	Description	Volts	Stock No.	Price Each 1-24
51017543	Duplex Outlet	120V/A	**28K2210**	51.66
51018351	Ground Fault Circuit Interrupt Outlet	120V/A	**28K2212**	76.39
8002-025/K050-613/000-5400	Duplex Outlet	125V/A	**28K2209**	67.43

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● 210-113	DIN Rail, Unslotted, 35x7.5mm (2M)	**28K2047**	13.70
● 249-116	End Stop, Gray	**28K2138**	1.27

(84754)

DRAC DIN RAIL AC RECEPTACLE BOXES

- Easy to wire
- Panel mountable
- Easily snaps onto 35mm DIN-rail
- 15A or 20A versions
- Available with ground fault current interrupt (GFCI) or standard duplex outlets
- Option for visual indication of power included with GFCI
- NEMA rated enclosure with UL94V-0 flammability rating
- Cover material: PBT/polycarbonate blend
- Base material: Polyamide % 30% GF
- UL508A and cULus approved
- Accepts 20-10 AWG solid or stranded wire

6720005423

DIN-Rail receptacles are enclosed 15A and 20A power outlets that provide a convenient power source for portable computers or test devices for in-the-panel troubleshooting.

➤ CONTINUED ➤

DRAC DIN RAIL AC RECEPTACLE BOXES (CONT.)

OUTLETS

Mfg. Part No.	Description	Volts	Stock No.	Price Each 1-9
6720005421	Duplex Outlet	125V/A	**08R2332**	28.31
6720005422	Duplex GFCI Outlet	125V/A	**08R2333**	58.45
6720005420	Duplex Outlet	125V/A	**08R2331**	36.95
6720005423	Duplex GFCI Outlet	125V/A	**08R2334**	66.52

(147806)

PASSIVE INFRARED WALL SWITCHES

RoHS Compliant Available

- Passive infrared technology
- Manual adjustment time delay: WS1277 - 20sec. to 30min; WS120/WS277 - 30sec. to 30min
- Photocell (WS1277I)
- Dual level switching from one or two circuits (WS1277W2)
- Nylon wallplate included (except WS1277W2)

WS120W

Mfg. Part No.	Sensing Range Max (sq. ft.)	Features	Color	Stock No.	Price Each 1-4
WS120I	900	1 Button, 120VAC	Ivory	**35B2336**	72.99
WS120W	900	1 Button, 120VAC	White	**35B2337**	68.86
WS277I	900	1 Button, 277VAC	Ivory	**35B2339**	68.86
WS277W	900	1 Button, 277VAC	White	**35B2340**	68.86
● WS1277W2*	1000	2 Button, 120/277VAC	White	**35B2338**	126.55
● WS1277I	1200	1 Button, 120/277VAC	Ivory	**72C5932**	80.89

ACCESSORIES

Mfg. Part No.	Description	For Use With	Stock No.	Price Each 1-4
● WSAP	2-Gang Adapter Plate	WS1277W2	**89H1862**	7.28

* Nylon wall plate not included

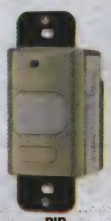
(164248)

H-MOSS® WALL SWITCHES WITH ADAPTIVE TECHNOLOGY

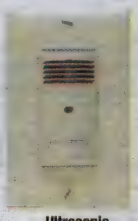
RoHS Compliant Available

- Adaptive technology
- All digital sensing technology
- Dual 120/277VAC operation
- Auto or manual "On" operating modes
- No minimum load requirements
- Hard lens
- Zero arc point switching
- Built-in photocell w/manual super saver mode for daylight harvesting
- Two relays for two level switching or dual load control

Ultrasonic and PIR



PIR



Ultrasonic

ULTRASONIC AND PASSIVE INFRARED

50/60Hz, 1000 sq. ft. coverage with photocell, 800W Incandescent, 1000W Fluorescent at 120VAC, 1800W Fluorescent at 277VAC

Mfg. Part No.	No. of Circuits	Features	Color	Stock No.	Price Each 1-4
AD1277BK1	1	1 Button for manual/auto control	Black	**84M8856**	203.84
AD1277GY1	1	1 Button for manual/auto control	Gray	**84M8860**	203.84
AD1277I1	1	1 Button for manual/auto control	Ivory	**84M8864**	203.84
AD1277LA1	1	1 Button for manual/auto control	Light Almond	**84M8868**	203.84
AD1277W1	1	1 Button for manual/auto control	White	**77M9317**	213.01
AD1277I1N	1	Auto control w/no button	Ivory	**84M8865**	203.84
AD1277W1N	1	Auto control w/no button	White	**84M8872**	203.84
AD1277BK2	2	2 Buttons for manual/auto control	Black	**84M8858**	209.30
AD1277GY2	2	2 Buttons for manual/auto control	Gray	**84M8862**	209.30
AD1277I2	2	2 Buttons for manual/auto control	Ivory	**84M8866**	209.30
AD1277W2	2	2 Buttons for manual/auto control	White	**84M8873**	209.30
AD1277I2N	2	Auto control w/no button	Ivory	**84M8867**	209.30
AD1277W2N	2	Auto control w/no button	White	**84M8874**	209.30

➤ CONTINUED ➤

H-MOSS® WALL SWITCHES WITH ADAPTIVE TECHNOLOGY (CONT.)

Mfg. Part No.	No. of Circuits	Features	Color	Stock No.	Price Each 1-4
50/60Hz, 1000 sq. ft. coverage with photocell, 800W Incandescent, 1000W Fluorescent at 120VAC, 1800W Fluorescent at 277VAC					
AP1277BK1	1	1 Button for manual/auto control	Black	84M8889	120.71
AP1277GY1	1	1 Button for manual/auto control	Gray	84M8893	126.14
AP1277I1	1	1 Button for manual/auto control	Ivory	84M8897	120.71
AP1277LA1	1	1 Button for manual/auto control	Light Almond	84M8901	120.71
AP1277W1	1	1 Button for manual/auto control	White	84M8905	120.71
AP1277GY1N	1	Auto control w/no button	Gray	84M8894	120.71
AP1277I1N	1	Auto control w/no button	Ivory	84M8898	120.71
AP1277W1N	1	Auto control w/no button	White	84M8906	120.71
AP1277GY2	2	2 Buttons for manual/auto control	Gray	84M8895	127.52
AP1277I2	2	2 Buttons for manual/auto control	Ivory	84M8899	127.52
AP1277LA2	2	2 Buttons for manual/auto control	Light Almond	84M8903	127.52
AP1277W2	2	2 Buttons for manual/auto control	White	84M8907	127.52
AP1277I2N	2	Auto control w/no button	Ivory	84M8900	127.52
AP1277W2N	2	Auto control w/no button	White	84M8908	127.52

ULTRASONIC

50/60Hz, 400 sq. ft. coverage with photocell, 800W Incandescent, 1000W Fluorescent at 120VAC, 1800W Fluorescent at 277VAC

Mfg. Part No.	No. of Circuits	Features	Color	Stock No.	Price Each 1-4
AU1277I1	1	1 Button for manual/auto control	Ivory	84M8917	156.86
AU1277W1	1	1 Button for manual/auto control	White	84M8925	163.92
AU1277BK1N	1	Auto control w/no button	Black	84M8910	156.86
AU1277GY1N	1	Auto control w/no button	Gray	84M8914	156.86
AU1277I1N	1	Auto control w/no button	Ivory	84M8918	156.86
AU1277W1N	1	Auto control w/no button	White	84M8926	156.86
AU1277I2	2	2 Buttons for manual/auto control	Ivory	84M8919	163.12
AU1277W2	2	2 Buttons for manual/auto control	White	84M8927	163.12
AU1277I2N	2	Auto control w/no button	Ivory	84M8920	163.12
AU1277W2N	2	Auto control w/no button	White	84M8928	163.12

(164247)

H-MOSS® WALL SWITCH SENSORS

RoHS Compliant Available

HUBBELL Wiring Device-Kellems

- Adaptive technology - "Install and forget" operation
- Passive infrared technology
- Dual 120/277VAC operation
- Heavy duty relay
- Audible alarm before sensor turns light off
- Built in photocell for daylight harvesting
- Nylon wallplate included

PASSIVE INFRARED WALL SWITCH SENSORS

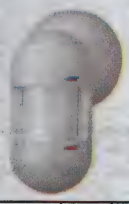
Mfg. Part No.	Sensing Range Max (sq. ft.)	Color	Features	Stock No.	Price Each 1-4
AT1277I	1200	Ivory	1 button, 1800W Incandescent	88H5770	126.54
AT1277W	1200	White	1 button, 1800W Incandescent	88H5771	126.54
ATP1277GY	1200	Gray	1 button, 800W Incandescent	88H5764	87.48
ATP1277I	1200	Ivory	1 button, 800W Incandescent	86H5889	92.73
ATP1277W	1200	White	1 button, 800W Incandescent	88H5765	87.48

(164257)

H-MOSS® WALL OR CEILING MOUNT SENSORS

HUBBELL Wiring Device-Kellems

- Adaptive technology - "Install and forget" operation
- Swivel mounting bracket included for wall or ceiling mounting
- All digital sensing technology
- Photocell for daylight harvesting and relay interface with auxiliary systems such as HVAC (WRP and HBRB models)
- 24VDC, 33mA



ULTRASONIC AND PASSIVE INFRARED

Mfg. Part No.	Sensing Range Max (sq. ft.)	Features	Color	Stock No.	Price Each 1-4
ATD1600W	1600	...	White	14C4564	233.02
ATD1600WRP	1600	Photocell and Isolated Relay	White	14C4565	280.77

CONTINUED

H-MOSS® WALL OR CEILING MOUNT SENSORS (CONT.)

PASSIVE INFRARED

Mfg. Part No.	Sensing Range Max (sq. ft.)	Features	Color	Stock No.	Price Each 1-4
ATP1600W	1600	...	White	14C4574	162.74
ATP1600WRP	1600	Photocell and Isolated Relay	White	14C4575	206.28
ATP120HB	120ft	...	White	14C4570	162.64
ATP120HBRP	120ft	Photocell and Isolated Relay	White	14C4571	206.28

(164256)

H-MOSS® CEILING SENSORS WITH ADAPTIVE TECHNOLOGY

HUBBELL Wiring Device-Kellems

Ultrasonic and PIR

Ultrasonic

Control Unit

- Adaptive technology- "Install and forget" operation
- All digital sensing technology
- Photocell for daylight harvesting and relay to interface with auxiliary systems such as HVAC (CRP models)
- Non-volatile memory-learned and adjusted settings retained after power outage
- 24VDC, 33mA
- 32kHz (ATD/ATU500C and CRP - 400kHz)
- Mounting base included with sensor

ULTRASONIC AND PASSIVE INFRARED

Mfg. Part No.	Sensing Range Max (sq. ft.)	Features	Color	Stock No.	Price Each 1-4
ATD500CRP	500	Photocell and Isolated Relay	White	14C4569	223.47
ATD2000CRP	2000	Photocell and Isolated Relay	White	14C4567	278.86
ATD1000CRP	1000	Photocell and Isolated Relay	White	14C4563	252.12
ATD500C	500	...	White	14C4568	160.44
ATD2000C	2000	...	White	14C4566	227.29
ATD1000C	1000	...	White	14C4562	198.64
PASSIVE INFRARED					
ATP600CRP	450	Photocell and Isolated Relay	White	14C4577	171.52
ATP1500CRP	1500	Photocell and Isolated Relay	White	14C4573	171.52
ATP600C	450	...	White	14C4576	123.58
ATP1500C	1500	...	White	14C4572	129.14
ULTRASONIC					
ATU500CRP	500	Photocell and Isolated Relay	White	14C4583	192.91
ATU2000CRP	2000	Photocell and Isolated Relay	White	14C4581	269.31
ATU1000CRP	1000	Photocell and Isolated Relay	White	14C4579	242.57
ATU500C	500	...	White	14C4582	149.65
ATU2000C	2000	...	White	14C4580	212.01
ATU1000C	1000	...	White	14C4578	180.50

ACCESSORIES

Mfg. Part No.	Description	For Use With	Stock No.	Price Each 1-4
AAR	ADD-A-RELAY	CU series control units and Hubbell ATD, ATU and ATP series ceiling and wall mount sensors	34B9696	40.74
CU300A	CONTROL UNIT; 120/277VAC, 50/60Hz	ATD, ATU and ATP series ceiling sensors and wall mount sensors	84M9097	51.12
CU300AU	UNIVERSAL CONTROL UNIT; 120-277VAC, 50/60 Hz	ATD, ATU and ATP series ceiling sensors and wall mount sensors	51R5971	55.12

(164249)

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(196545)

H-MOSS® LINE VOLTAGE CEILING SENSORS DUAL TECHNOLOGY

HUBBELL Wiring Device-Kellems

- Sensitivity: Fully adjustable up to 100%
- Time delay: 30sec. to 30min
- Ultrasonic output: 32kHz
- Passive infrared excellent for long range major motion detection

Ultrasonic

PIR

ULTRASONIC AND PASSIVE INFRARED

Mfg. Part No.	Sensing Range Max (sq. ft.)	Color	Supply Voltage	Detection Angle	Stock No.	Price Each 1-4
LVDT2000R120	2000	White	120VAC	360°	51R5978	234.78
LVDT2000R277	2000	White	277VAC	360°	51R5979	234.78
PASSIVE INFRARED						
LVPR1500R	1500	White	120-347VAC	360°	51R5980	123.13
LVPR1500RP*	1500	White	24VDC	360°	51R5981	142.06
ULTRASONIC						
LVUS1500R120	1500	White	120VAC	360°	51R5982	151.52
LVUS1500R277	1500	White	277VAC	360°	51R5983	151.52
LVUS2000R120	2000	White	120VAC	360°	51R5984	179.91
LVUS2000R277	2000	White	277VAC	360°	51R5985	188.01

ACCESSORIES

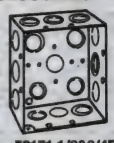
Mfg. Part No.	Description	Stock No.	Price Each 1-4
DHCM	DAYLIGHT HARVESTING CONTROL MODULE	51R5972	323.98
DHIP	DAYLIGHT HARVESTING INDOOR PHOTOCELL	51R5973	323.98
DHOP	DAYLIGHT HARVESTING OUTDOOR PHOTOCELL	51R5974	323.98
HMHB21U	PASSIVE INFRARED SENSOR1 SPST Output; 120-347VAC	51R5976	80.18
HMHB22U	PASSIVE INFRARED SENSOR2 SPST Output; 120-347VAC	51R5977	91.21
HMHBSA	MOUNTING EXTENSION ADAPTOR	51R5975	8.64

* Must be used with CU300A control unit; *order seperately online or call.*
(164252)

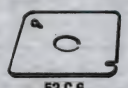
SQUARE OUTLET/SWITCH BOXES AND ACCESSORIES

Thomas&Betts

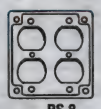
52151 1/2&3/4 EW



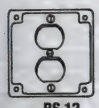
52171 1/2&3/4E



52 C 6



RS 8



RS 12

4"-SQ. OUTLET BOX
1½" deep, with conduit knockouts. 21.0 cubic inch capacity.

Mfg. Part No.	Knockouts: Ea. Side Conduit	Ea. End Conduit	Bottom Conduit	Stock No.	Price Each 1-9
521511234EW	2—1/2" 1—3/4"	2—1/2" 1—3/4"	3—1/2" 2—3/4"	48F3978	4.63

4"-SQ. OUTLET BOX
2-1/8" deep, with conduit knockouts. 30.3 cubic inch capacity.

52171 1/2&3/4E	2—1/2" 1—1/2" & ¾"E	2—1/2" 1—1/2" & ¾"E	3—1/2" 2—1/2" & ¾"E	48F3979	7.96

4"-SQ. COVERS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
52 C 6	Flat, with ½" Knockout	48F3983	3.10

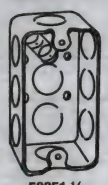
4"-SQ. DEVICE COVERS
1/2" deep. 5.0 cubic inch capacity.

RS 8	For Two Duplex, Flush Receptacles	48F3986	8.32
RS 12	For One Duplex, Flush Receptacle	48F3987	6.50

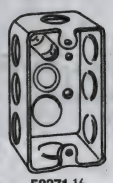
(40774)

OUTLET BOXES AND ACCESSORIES

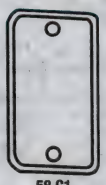
Thomas&Betts



58351 ½



58371 ½



58 C1

58 C7

4 x 2⅛" OUTLET BOX
1½" deep, with conduit knockouts. 10.3 cubic inch capacity.

Mfg. Part No.	Knockouts: Ea. Side Conduit	Ea. End Conduit	Bottom Conduit	Stock No.	Price Each 1-9
58351 1/2	3—1/2"	1—1/2"	2—1/2"	48F3980	11.42

4 x 2-1/8" OUTLET BOX
2-1/8" deep, with conduit knockouts. 14.5 cubic inch capacity.

58371 1/2	3—1/2"	1—1/2"	2—1/2"	48F3981	8.96

4 x 2⅛" OUTLET BOX COVERS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
58 C 1	Blank	48F3990	1.15
58 C 7	For Duplex Flush Receptacle	48F3992	1.23

(41270)

FLEXIBLE NONMETALLIC ELECTRICAL CONNECTORS

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

- Liquid-tight
- Nonmetallic
- cUL listed
- 125°C

These black, nonmetallic, flexible electrical connectors match Alpha's black, electrical PVC flexible tubing; *order separately on* [6364].

Right-Angle

Straight

Mfg. Part No.	Configuration	Trade Sizes	Thread Size	Stock No.	Price Each 1-4
● SLC3/8 BK080	Straight	0.375" (9.53)	½ NPT	06M3854	5.71
● SLC1/2 BK080	Straight	0.500" (12.70)	½ NPT	86K8704	5.96
● SLC3/4 BK080	Straight	0.750" (19.05)	¾ NPT	86K8705	7.85
● RLC3/8 BK080	Right-Angle	0.375" (9.53)	½ NPT	85K9575	6.21
● RLC1 BK076	Right-Angle	1.00" (25.40)	1 NPT	28B6275	17.88

(6365)

AMP FLEXIBLE CONDUIT CONNECTORS

RoHS Compliant Available

TE connectivity
Authorized Distributor

Straight-Thru

Right-Angle

Screw directly onto ⅜" (9.53) flexible conduit. Accept steel or aluminum conduit. No tools, screws, bushings, or locknuts required for installation. Snap into knockout hole in panel or box. Provides low profile on both sides of mounting surface. Rated 125°C max. Fully grounded. UL listed, CSA certified.

Mfg. Part No.	Connector Type	Stock No.	Price Each 1-9
● 207370-1	Straight-Thru	92F4839	1.72
● 207508-1*	Right-Angle	66F3452	3.17

*Not CSA certified
(62470)

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(196563)

POLYTUFF® STRAIGHT LIQUIDTIGHT FITTINGS

RoHS Compliant Available

HUBBELL Wiring Device-Kellems

- Corrosion resistant
- Neoprene O-ring seal at hub or enclosure
- Removable ferrule aids installation and secures conduit against pullout

Type 4X, 12 and 13. UL listed, CSA certified.

Mfg. Part No.	Trade Size	Stock No.	Price Each 1-49
P050NGYA	1/2" (16)	93F6907	4.33
P075NGYA	3/4" (21)	93F6908	6.50
P100NBKA	1" (26)	51M8960	9.64
P125NGY	1.25" (33)	98F6426	21.28

(80242)

SWIVELLOCK® MULTI-POSITION LIQUIDTIGHT CONNECTORS

RoHS Compliant Available

HUBBELL Wiring Device-Kellems

- Allow straight feed of wires
- Swivel to any position from straight to 90°
- One fitting for all applications
- Made from corosion-resistant nylon
- Available in black or gray for use with non-metallic conduit or flexible tubing

Non-metallic nylon in black for use with PolyTuff™ tubing found online. NEMA type 4, 4X, 12, 13. UL listed, CSA certified.

SWIVELLOCK® CONNECTORS

Mfg. Part No.	Trade Size	Length	Color	Stock No.	Price Each 1-9
PS0509NBK	0.50" (12.70)	3.268" (83.01)	Black	93F6878	9.18
PS0509NGY	0.50" (12.70)	3.268" (83.01)	Gray	93F6876	7.04
PS0759NBK	0.75" (19.05)	3.659" (92.93)	Black	93F6879	13.45
PS0759NGY	0.75" (19.05)	3.659" (92.93)	Gray	93F6877	10.20

(2688)

DELUXE STRAIGHT MALE THREAD LIQUIDTIGHT CORD GRIPS

RoHS Compliant Available

HUBBELL Wiring Device-Kellems

- Corrosion-resistant stainless steel mesh
- Multi-weave grip controls ard-of-bend and prevents cable pullout
- Neoprene bushing makes a watertight seal around cable
- Aluminum NPT fitting

Suitable for indoor or outdoor use. UL listed, CSA certified.

LIQUIDTIGHT CORD GRIPS

Mfg. Part No.	N.P.T. Hub Size	Cord Diameter	Stock No.	Price Each 1-9
07401008	0.500"	0.375-0.500"	93F6895	70.72
07401010	0.500"	0.500-0.625"	51M9268	71.47
07401018	0.750"	0.625-0.750"	46M3186	77.94

(2690)

STRAIGHT MALE CORD CONNECTORS

RoHS Compliant Available

HUBBELL Wiring Device-Kellems

- Available machined aluminum or corrosion-resistant nylon
- For nylon, add CR suffix to mfg. part number
- Color-coded Gotcha® ring offers liquidtight performance and pull-out protection

SHC1010

SHC1032

UL listed, CSA certified. *Other sizes available; go online or call.*

MACHINED ALUMINUM STRAIGHT MALE CORD CONNECTORS

Mfg. Part No.	N.P.T. Hub Size	Color Code	Cord Diameter	Form Size	Stock No.	Price Each 1-4
SHC1010	0.375"	Black	0.250-0.312"	1	89F5180	8.12
SHC1011	0.375"	White	0.310-0.380"	1	89F3036	8.12
SHC1015	0.500"	Red	0.187-0.250"	1	89F5183	8.67
SHC1016	0.500"	Black	0.250-0.312"	1	89F5184	8.67
SHC1017	0.500"	White	0.312-0.375"	1	89F2808	8.45
SHC1018	0.500"	Blue	0.380-0.440"	1	89F5185	8.45
SHC1022	0.500"	White	0.250-0.375"	2	89F5186	8.67
SHC1023	0.500"	Blue	0.375-0.500"	2	89F5187	8.57
SHC1024	0.500"	Brown	0.500-0.625"	2	89F2812	8.67
SHC1032	0.750"	White	0.250-0.375"	2	31F1322	8.77
SHC1037	0.750"	Yellow	0.630-0.750"	3	52F9759	11.21
SHC1038	0.750"	Orchid	0.750-0.880"	3	93F6913	11.58
NYLON STRAIGHT MALE CORD CONNECTORS						
SHC1021CR	0.500"	Red	0.190-0.250"	2	93F6900	8.77
SHC1022CR	0.500"	White	0.250-0.980"	2	33F1829	8.99

CONTINUED

STRAIGHT MALE CORD CONNECTORS (CONT.)

NYLON STRAIGHT MALE CORD CONNECTORS

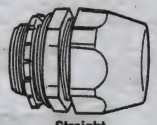
Mfg. Part No.	N.P.T. Hub Size	Color Code	Cord Diameter	Form Size	Stock No.	Price Each 1-4
SHC1023CR	0.500"	Blue	0.380-0.500"	2	33F1832	8.77
SHC1035CR	0.750"	Blue	0.380-0.500"	3	93F7724	9.52
SHC1037CR	0.750"	Yellow	0.630-0.750"	3	93F6902	9.78

(2689)

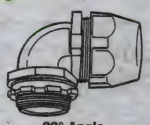
THE BULLET™ LIQUIDTIGHT NONMETALLIC CONNECTORS

RoHS Compliant Available

Thomas&Betts



Straight



90° Angle

NEMA

Corrosion-resistant industrial fittings for conduit install fast and easy with high pullout resistance. Straight or 90°-angle versions. Include locknut, captivated sealing O-ring. Tapered ferrule fits variety of conduit diameters and field cuts. Ideal for type B nonmetallic liquidtight conduit and flexible nonmetallic tubing. UL listed, CSA certified. Meet NEMA 4, NEMA 6 standards.

STRAIGHT LIQUIDTIGHT CONNECTORS

Mfg. Part No.	Conduit Size	Knockout Size	Stock No.	Price Each 1-9
LT38P	0.375" (9.53)	0.500" (12.70)	93F7730	4.89
LT50P	0.500" (12.70)	0.500" (12.70)	93F7731	7.49
LT75P	0.750" (19.05)	0.750" (19.05)	93F7732	8.65
LT100P	1.000" (25.40)	1.000" (25.40)	93F7733	11.06
LT125P	1.250" (31.75)	1.250" (31.75)	93F7734	16.56
LT150P	1.500" (38.10)	1.500" (38.10)	93F7741	19.72
90° ANGLE LIQUIDTIGHT CONNECTORS				
LT938P	0.375" (9.53)	0.500" (12.70)	93F7743	8.96
LT950P	0.500" (12.70)	0.500" (12.70)	93F7744	8.14
LT975P	0.750" (19.50)	0.750" (19.50)	93F7745	7.40
LT9100P	1.000" (25.40)	1.000" (25.40)	93F7746	22.20

(6368)

LIQUIDTIGHT, FLEXIBLE CONDUIT FITTINGS

RoHS Compliant Available

Thomas&Betts

Straight

45° Angle

90° Angle

One-piece metal units snap in. Neoprene seal ring eliminates locknut. Straight, 45° angle, or 90° angle versions. Nylon-insulated throat. Tapered hub threads. Temperature range: –34°C to +105°C. UL listed, CSA certified.

Mfg. Part No.	Description	Hub and Conduit Size	Stock No.	Price Each 1-9
5332	Straight	0.50" (12.70)	94F3076	4.17
5333	Straight	0.75" (19.05)	94F3077	6.20
5334-TB	Straight	1.00" (25.40)	90F2620	9.06
5341	45° Angle	0.50" (12.70)*	90F6111	8.05
5342+	45° Angle	0.50" (12.70)*	94F3047	179.79
5352	90° Angle	0.50" (12.70)	94F3078	7.61

*Conduit size: 0.375" (9.53); +Sold in packages of 25

(6369)

TWO-SCREW CONNECTORS

RoHS Compliant Available

Thomas&Betts

Mfg. part no. 3301-TB is a steel connector for armored cable and flexible metal conduit. All others are metal connectors with threaded saddle for nonmetallic sheath cable and flexible cord. UL listed, CSA certified.

Mfg. Part No.	Cable Opening Max.	Cable Opening Min.	Knockout Size	Package Qty.	Stock No.	Price per Pkg. 1-9	Price per Pkg. 10-24
3301-TB	0.656"	0.390"	0.500"	100	94F1114	187.47	180.93
3302-TB	0.656"	0.250"	0.500"	Each	90F2618	2.65	2.42
3303-TB	0.820"	0.530"	0.750"	50	90F2619	172.09	166.08
3304	0.070"	0.690"	1.000"	25	94F1116	103.23	97.83
3305	1.385"	0.850"	1.250"	Each	90F2849	11.84	10.77

(6366)

CONDUIT – CONNECTORS • CONDUIT – FLEXIBLE

POLYTUFF® I LIQUIDTIGHT CONDUIT

RoHS Compliant Available

HUBBELL Wiring Device-Kellems

- POLYTUFF® conduit features rigid PVC core bonded to flexible PVC jacket
- Replaces metallic conduit. Cuts clean, no burrs to trim
- Direct burial rated

UL listed, CSA certified. **Sold in 100' spools.**

Mfg. Part No.	Trade Size	Stock No.	Price per Spool 1-4
● G1050	1/2"	41M3263	74.97
● G1075	3/4"	41M3264	106.44

(80247)

XTRAFLEX COMMERCIAL-GRADE TYPE B SYSTEMS CONDUIT

RoHS Compliant Available

Thomas&Betts

Xtraflex™ black nonmetallic, liquidtight fittings. UL listed, CSA certified. Other colors available; *go online or call.* **Sold in 100' spools.**

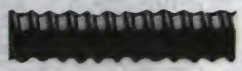
Mfg. Part No.	Size	Stock No.	Price per Spool 1-2	3-4
● LTC050	0.500" (12.70)	90F2852	143.46	140.16
● LTC100	1.000" (25.40)	48F2940	252.81	230.11

(6367)

XTRAFLEX CORRUGATED FLEXIBLE NONMETALLIC TUBING

RoHS Compliant Available

Thomas&Betts



Xtraflex™ corrugated tubing offers maximum flexibility in tight applications and fast, easy installation. Smooth inner diameter permits easy wire pulling. Color: black. UL recognized, CSA certified. **Sold in 100' spools.**

Mfg Part No.	Size	Stock No.	Price per Spool 1-2	3-4
● EFC038	0.375" (9.53)	90F2857	120.88	116.78
● EFC050	0.500" (12.70)	90F2840	115.27	111.70
● EFC075	0.750" (19.05)	90F2841	205.46	199.09
● EFC100	1.000" (25.40)	90F2842	311.65	301.98
● EFC150*	1.500" (38.10)	93F7749	288.47	279.53
● EFC200*	2.000" (50.80)	93F7735	415.86	403.83

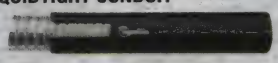
*Sold in spools of 50'

(40271)

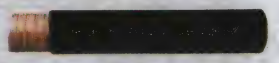
LIQUATITE® SHIELD-FLEX™ EMI/RFI SHIELDED, FLEXIBLE, LIQUIDTIGHT CONDUIT

RoHS Compliant Available

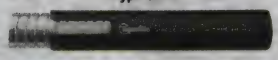
electri-flex



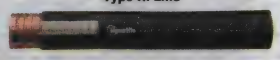
Type SLA



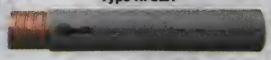
Type HFEMS



Type HFSLA



Type EMCS



Type EMS

Type HFEMCS

Features:
- **Type SLA™** PVC jacket
- **Type HFSLA™** Halogen-free, low-smoke, low-flame spread PU jacket
- Steel inner core
- Tinned copper braid shield
- Standard color: black
- Working temperature: -20°C to 60°C

Types SLA™ and **HFSLA™** conduit are identical to standard UL listed liquidtight flexible steel conduit but augmented with a tinned copper shielding braid located over the inner steel core and under its protective jacket. The braid offers a minimum of 90% coverage. **Type SLA™** conduit features a protective, black PVC jacket that resists oils, acids, alkaline and UV light. The halogen-free version, **type HFSLA™** conduit has a specially-formulated polyurethane jacket that offers excellent flame retardancy, low-smoke characteristics and virtually eliminates the release of acidic gases found in PVC products, making it ideal for field installations where safety concerns exist regarding a material's reaction in a fire situation. Both conduit types accept standard metallic liquidtight fittings resulting in a sealed, waterproof raceway when assembled. Additional sizes are available; *go online or call.*

TYPE SLA™ EMI/RFI SHIELDED CONDUIT

Mfg. Part No.	Trade Size (In.)	Spool Size (Ft.)	Stock No.	Price per Spool 1-4
● 78907	3/8	50	61T8094	226.20
● 78917	1/2	50	61T8098	328.49
● 78927	3/4	50	61T8102	426.66
● 78937	1	50	48T5279	638.82
● 78942	1 1/4	50	48T5280	900.90
● 78952	1 1/2	50	48T5282	1076.40
● 78962	2	50	48T5284	1591.20

➤CONTINUED➤

LIQUATITE® SHIELD-FLEX™ EMI/RFI SHIELDED, FLEXIBLE, LIQUIDTIGHT CONDUIT (CONT.)

TYPE HFSLA™ HALOGEN-FREE EMI/RFI SHIELDED CONDUIT

Mfg. Part No.	Trade Size (In.)	Spool Size (Ft.)	Stock No.	Price per Spool 1-4
● 789017	3/8	50	48T5266	349.01
● 789127	1/2	50	61T8096	463.91
● 789227	3/4	50	61T8100	625.86
● 789327	1	50	48T5277	936.96
● 789428	1 1/4	50	48T5281	1321.26

Features:
- **Type EMS™** PVC jacket
- **Type HFEMS™** Halogen-free, low-smoke, low-flame spread PU jacket
- Standard color: grey (**Type EMS™**), black (**Type HFEMS™**)
- Fully interlocked bronze inner core
- Working temperature: -55°C to 105°C

Types EMS™ and **HFEMS™** liquidtight flexible shielded conduit have an inner core that is made from a fully interlocked bronze strip. **Type EMS™** conduit features a protective, grey PVC jacket that resists oils, acids, alkaline and UV light. The halogen-free version, **type HFEMS™** conduit has a specially-formulated black polyurethane jacket that offers excellent flame retardancy, low-smoke characteristics and virtually eliminates the release of acidic gases found in PVC products, making it ideal for field installations where safety concerns exist regarding a material's reaction in a fire situation. Both conduit types accept standard metallic liquidtight fittings resulting in a sealed, waterproof raceway when assembled. Additional sizes are available; *go online or call.*

TYPE EMS™ EMI/RFI SHIELDED CONDUIT

Mfg. Part No.	Trade Size (In.)	Spool Size (Ft.)	Stock No.	Price per Spool 1-4
● 78807	3/8	50	61T8082	370.80
● 78817	1/2	50	61T8084	453.32
● 78827	3/4	50	48T5254	644.90
● 78837	1	50	48T5256	961.31
● 78872	2 1/2	25	48T5260	1097.06

TYPE HFEMS™ HALOGEN-FREE EMI/RFI SHIELDED CONDUIT

● 78207	3/8	50	61T8066	401.70
● 78217	1/2	50	61T8068	491.51
● 78227	3/4	50	48T5232	671.58
● 78237	1	50	48T5234	1009.32
● 78252	1 1/2	50	48T5236	1603.68

Features:
- **Type EMCS™** PVC jacket
- **Type HFEMCS™** Halogen-free, low-smoke, low-flame spread PU jacket
- Standard color: black
- Fully interlocked bronze inner core
- Working temperature: -55°C to 105°C

Type EMCS™ liquidtight flexible shielded conduit is a hybrid of **types SLA™** and **EMS™** conduit; *ordered separately above.* It utilizes the same fully interlocked bronze strip inner core and protective, black PVC jacket as **type EMS™** conduit, but gets further screening protection from a tinned copper braid as found in **type SLA™** conduit. The braid offers a minimum of 90% coverage. The halogen-free version, **type HFEMCS™** conduit has a specially-formulated polyurethane jacket that offers excellent flame retardancy, low-smoke characteristics and virtually eliminates the release of acidic gases found in PVC products, making it ideal for field installations where safety concerns exist regarding a material's reaction in a fire situation. Both conduit types accept standard metallic liquidtight fittings resulting in a sealed, waterproof raceway when assembled. Additional sizes are available; *go online or call.*

TYPE EMCS™ EMI/RFI SHIELDED CONDUIT

Mfg. Part No.	Trade Size (In.)	Spool Size (Ft.)	Stock No.	Price per Spool 1-4
● 78707	3/8	50	61T8074	452.96
● 78717	1/2	50	61T8076	581.40
● 78727	3/4	50	48T5243	819.28
● 78737	1	50	48T5245	1160.52
● 78742	1 1/4	50	61T8079	1570.92
● 78752	1 1/2	50	48T5247	2058.84
● 78762	2	50	61T8080	2600.72

TYPE HFEMCS™ HALOGEN-FREE EMI/RFI SHIELDED CONDUIT

● 86007	3/8	50	61T8116	580.32
● 86107	1/2	50	61T8118	775.51
● 86207	3/4	50	48T5327	1051.44
● 86307	1	50	48T5329	1489.02

(197899)

LIQUATITE® CORRLOK® SYSTEM NYLON CONDUIT

RoHS Compliant Available

electri-flex

Type CL Standard-Weight Conduit Features:
- Fitting pull-out: 150 lbs. (½" and larger)
- Material: halogen-free Nylon 6
- Standard color: black
- Working temperature: -40°C to 105°C intermitting to 150°C

Type CL conduit provides the best mechanical strength and protection of the Corrlok® conduits. It is UL recognized as component file #E174249 600V, 105°C, vertical flame, liquidtight, UV and impact tested. **Type CL** conduit is to be used with the Corrlok® connectors; *ordered separately go online.* Additional conduit sizes are available; *go online or call.*

Mfg. Part No.	Trade Size (In.)	External Dia. (mm)	Spool Size (Ft.)	Stock No.	Price per Spool 1-4
● 79087	3/8	15.8	50	62T1579	49.88
● 79187	1/2	21	50	62T1583	68.65
● 79287	3/4	28.5	50	56T4462	94.01
● 79381	1	34.5	50	56T4463	122.18

➤CONTINUED➤

LIQUATITE® CORRLOK® SYSTEM NYLON CONDUIT (CONT.)

Mfg. Part No.	Trade Size (In.)	External Dia. (mm)	Spool Size (Ft.)	Stock No.	Price per Spool 1-4
79481	1 1/4	42.5	50	48T5292	235.30
79581	1 1/2	2.145	50	61T8113	296.84

Type CLFR Low Fire Hazard Conduit Features:
- Fitting pull-out: 150 lbs. (½" and larger)
- Material: halogen-free Nylon 6, UL94V-0
- Standard color: black
- Working temperature: -40°C to 105°C

Type CLFR conduit is a new addition to the Corrlok® System family of conduits. It is made from a specially modified nylon material with excellent self-extinguishing characteristics and minimal smoke and toxic gas generation. Tests include: UL 947 Vertical Burn, Flame Spread Index ASTM E 162, Smoke Generation ASTM E 662, Toxic Gas Generation, and Bombardier SMP 800-C. **Type CLFR** conduit is an excellent choice for confined inhabited areas, such as, public transit/rail vehicles, subway stations, tunnels, etc. **Type CLFR** conduit is to be used with Corrlok® connectors; *ordered separately, go online.* Additional conduit sizes are available; *go online or call.*

Mfg. Part No.	Trade Size (In.)	External Dia. (mm)	Spool Size (Ft.)	Stock No.	Price per Spool 1-4
85003	3/8	15.8	50	62T1654	80.20
85013	1/2	21	50	56T4636	106.70
85023	3/4	28.5	50	62T1657	157.14
85031	1	34.5	50	75T9221	192.06

Type CLL Lightweight Conduit Features:
- Fitting pull-out: 40 lbs. (½" and larger)
- Material: halogen-free Nylon 6
- Standard color: black
- Working temperature: -40°C to 105°C

Type CLL conduit provides many of the same qualities of type CL conduit but with improved flexibility. It is UL recognized as component file #E174249 600V, 105°C, vertical flame, liquidtight, UV and impact tested. **Type CLL** conduit is to be used with the Corrlok® connectors; *ordered separately go online.* Additional conduit sizes are available; *go online or call.*

Mfg. Part No.	Trade Size (In.)	External Dia. (mm)	Spool Size (Ft.)	Stock No.	Price per Spool 1-4
790818	3/8	15.8	50	62T1577	47.01
791818	1/2	21	50	62T1581	61.40
792818	3/4	28.5	50	56T4460	81.55
793816	1	34.5	50	56T4464	93.22
794816	1 1/4	42.5	50	48T5293	171.95
795816	1 1/2	54.5	50	61T8114	211.77

Type CLR Conduit for Robotics Features:
- Fitting pull-out: 65 lbs.
- Material: halogen-free Nylon 12
- Standard color: black
- Working temperature: -50°C to 95°C intermitting to 150°C

Type CLR conduit is very lightweight and extremely flexible. It is ideally suited for robotic equipment. This conduit is intended for applications requiring continuous, repeated flexible motion, such as, power track and cable carrier installations. **Type CLR** conduit is to be used with the Corrlok® connectors; *ordered separately go online.* Additional conduit sizes are available; *go online or call.*

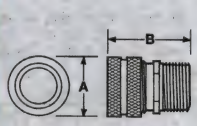
Mfg. Part No.	Trade Size (In.)	External Dia. (mm)	Spool Size (Ft.)	Stock No.	Price per Spool 1-4
790812	3/8	15.8	50	62T1576	74.03
791812	1/2	21	50	62T1580	95.06
792812	3/4	28.5	50	62T1584	143.56
793819	1	34.5	50	56T4465	170.72

(197895)

CORD GRIPS

RoHS Compliant Available

Amphenol® Industrial



DB series cord grips provide strain relief for flexible cord and cable. Ideal for internal uses, as well as conduit hub and panel-board mounting into threaded bodies or with locknuts. Suitable for use in hazardous locations per National Electric Code Class I, Div. 2; Class II, Div. 1 and 2; Class III, Div. 1 and 2. UL listed, CSA certified.

SMALL STRAIGHT BODY, MALE THREAD
Small, straight aluminum body, male thread, compression nut with washer, and single-hole, oil-resistant grommet.

Mfg. Part No.	Conduit Hub Size	Panel Hole Size	Cord Dia. Range	Dimensions A	Dimensions B	Stock No.	Price Each 1-24	Price Each 25-49
DB-414	3/8"	11/16"	0.187-0.250"	0.88"	1.53"	33C0681	7.46	6.97
DB-4	3/8"	11/16"	0.375-0.437"	0.88"	1.53"	33C0680	7.46	6.97
DB-314	1/2"	7/8"	0.187-0.250"	0.88"	1.53"	33C0677	7.35	6.87
DB-3516	1/2"	7/8"	0.250-0.312"	0.88"	1.53"	33C0679	7.35	6.87
DB-338	1/2"	7/8"	0.312-0.375"	0.88"	1.53"	33C0678	7.35	6.87
DB-3	1/2"	7/8"	0.375-0.437"	0.88"	1.53"	33C0676	7.35	6.87
DB-7	1/2"	7/8"	0.125-0.250"	1.13"	1.84"	33C0683	9.10	8.51
DB-9716	1/2"	7/8"	0.312-0.437"	1.13"	1.84"	33C0690	9.16	8.57
DB-8	1/2"	7/8"	0.250-0.375"	1.13"	1.84"	33C0685	9.10	8.51
DB-9	1/2"	7/8"	0.375-0.500"	1.13"	1.84"	33C0687	9.10	8.51
DB-10	1/2"	7/8"	0.500-0.625"*	1.13"	1.84"	33C0672	9.10	8.51
DB-934	1/2"	7/8"	0.687-0.750"*	1.25"	2.06"	33C0688	17.13	16.02
DB-6	3/4"	1 1/8"	0.500-0.625"	1.13"	1.84"	33C0682	9.53	8.91
DB-14	1"	1 3/8"	0.875-1.00"*	1.63"	2.69"	33C0675	19.51	18.24

➤ CONTINUED ➤

CORD GRIPS (CONT.)

Mfg. Part No.	Conduit Hub Size	Panel Hole Size	Cord Dia. Range	Dimensions A	Dimensions B	Stock No.	Price Each 1-24	Price Each 25-49
Ferrous alloy body, aluminum compression nut with washer and single-hole, oil-resistant grommet.								
DB-790	1/2"	7/8"	0.125-0.250"	1.13"	...	33C0684	16.10	15.05

(68745)

MINIATURE CORD CONNECTORS

RoHS Compliant Available

- Allow termination of flexible cord and control cables
- Provide strain relief with a liquidtight seal
- Keep out dust, moisture, and other contaminants

Constructed of polyamide. Meet UL94V-0. UL listed, CSA certified, VDE approved. Locking nuts not included; *go online or call.*

NPT VERSIONS

Mfg. Part No.	Hub Size	Cord Range	Color	Stock No.	Price Each 1-9
SEC38GA	3/8" NPT	0.20-0.32"	Gray	91F2298	2.83
SEC38BA	3/8" NPT	0.20-0.32"	Black	01J4480	2.83
SEC50GA	1/2" NPT	0.24-0.47"	Gray	91F2300	3.46
SEC50BA	1/2" NPT	0.24-0.47"	Black	95H6628	3.58
SEC75BA	3/4" NPT	0.47-0.71"	Black	01J4481	5.44
SEC75GA	3/4" NPT	0.47-0.71"	Gray	81H1656	5.38
SEC100GA	1" NPT	0.67-0.98"	Gray	01J4479	8.95
PG VERSIONS					
SECP7GA	PG7	0.18-0.26"	Gray	91F2306	2.68
SECP7BA	PG7	0.18-0.26"	Black	01J0321	2.68
SECP9GA	PG9	0.20-0.32"	Gray	01J4477	2.71
SECP9BA	PG9	0.20-0.32"	Black	01J4476	2.71
SECP11GA	PG11	0.22-0.39"	Gray	95H6643	3.36
SECP13GA	PG13.5	0.24-0.47"	Gray	96H8935	3.40
SECP16GA	PG16	0.32-0.55"	Gray	91F2314	3.61
METRIC VERSIONS					
SECM20G	20mm	0.17-0.45"	Gray	01J4462	3.40

NON-METALLIC LOCKNUTS — SOLD IN PACKAGES OF 100

Mfg. Part No.	For Use With	Stock No.	Price per Pkg. 1-4
LNP7BPK100	SECP7GA and SECP7BA	02M8475	29.75

(14828)

DUSTIGHT STRAIN RELIEF GRIPS

RoHS Compliant Available

- Galvanized steel, single weave mesh
- Aluminum NPT fittings
- Neoprene gasket seals keep out dust
- Includes zinc-plated steel locknut

UL listed, CSA certified.

DUSTIGHT STRAIN RELIEF GRIPS

Mfg. Part No.	Cable Diameter	Thread Size NPT	Mesh Length @ Nom. Dia.	Stock No.	Price Each 1-4
073031202	0.43-0.54"	0.50"	4.75"	41M6578	22.96
073031204	0.73-0.97"	1.00"	7.00"	41M6580	30.08

(14831)

BUS DROP SUPPORT GRIPS

RoHS Compliant Available

- Galvanized steel mesh
- Single-weave, wide range construction
- Single eye
- Supports flexible or bus drop cable runs

Used to hold the weight of electrical cable as it hangs in vertical, sloping, or horizontal position. Also absorb additional strain from flexure, vibration, expansion, and contraction. UL listed, CSA certified.

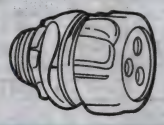
Mfg. Part No.	Cable Diameter	Approx. Breaking Strength	Length Eyelet	Length Mesh	Stock No.	Price Each 1-4
073041278	0.43-0.56"	550 lbs.	6.00"	4.75"	41M6581	25.80
073041279	0.56-0.73"	1000 lbs.	7.00"	6.00"	41M6582	30.24

(14829)

MULTIHOLE CORD GRIPS

RoHS Compliant Available

Thomas&Betts



Provides strain relief and liquidtight protection for multiple cables in one fitting. UL listed, CSA certified.

Mfg. Part No.	Hub Size	No. of Holes	Cord Dia.	Stock No.	Price Each 1-9	10-24	25-49
● 2520-2	½″	2	0.220″	16F1153	17.58	16.91	16.28
● 2531-3	¾″	3	0.260″	16F1156	19.95	19.19	18.47
● 2540-4	1″	4	0.220″	16F1161	21.20	20.38	19.64

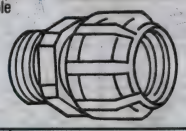
(6479)

3

NYLON CORD GRIP CONNECTORS

RoHS Compliant Available

Thomas&Betts



Wider range means one connector can cover twice the cable range of others. New reduced size and smaller footprint. Weather-stabilized nylon. Operating temperature: -34°C to +105°C. UL94V-2. UL listed, CSA certified.

Mfg. Part No.	Hub Size	Throat Dia.	Cord Range	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 2920NM	0.5″	0.55″	0.125-0.375″	94F9786	11.72	10.50	9.48	8.58
● 2921NM	0.5″	0.55″	0.310-0.560″	48F2927	11.72	10.50	9.48	8.58
● 2922NM	0.5″	0.55″	0.500-0.750″	48F2928	11.50	10.31	9.30	8.42
● 2930NM	0.75″	0.79″	0.125-0.375″	48F2929	12.63	11.31	10.21	9.24
● 2931NM	0.75″	0.79″	0.310-0.560″	48F2930	12.63	11.31	10.21	9.24
● 2932NM	0.75″	0.79″	0.500-0.750″	48F2931	12.63	11.31	10.21	9.24
● 2940NM	1″	0.98″	0.310-0.560″	48F2932	17.81	15.96	14.40	13.03
● 2941NM	1″	0.98″	0.500-0.750″	48F2933	16.96	15.20	13.72	12.41
● 2942NM	1″	0.98″	0.700-0.950″	48F2934	17.81	15.96	14.40	13.03

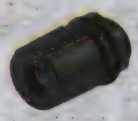
(39573)

CORD CONNECTORS WITH AND WITHOUT SPIRAL

RoHS Compliant Available

HUBBELL Wiring Device-Kellems

Nylon Connector with Spiral



Nylon Connector without Spiral

Liquidtight without spiral

Liquidtight with spiral

- Maximum strain relief
- Nylon spiral provides arc of bend control for cord protection
- One-piece nylon connector body with tapered interior
- Neoprene bushing creates fully liquidtight seal

MINIATURE NYLON CORD CONNECTORS WITH SPIRAL, GRAY - SOLD INDIVIDUALLY

Mfg. Part No.	Hub	Cord Dia. (in.)	Gray Stock No.	Price Each 1-4
● HJ1014G	3/8″ NPT	0.21-0.28	89F3028	4.55
● HJ1015G	3/8″ NPT	0.28-0.34	89F3029	4.55
● HJ1038G	1/2″ NPT	0.13-0.19	89F2829	9.06
● HJ1041GPK25	1/2″ NPT	0.31-0.38	93F6911	9.19
● HJ1042GPK25	1/2″ NPT	0.38-0.44	93F6912	8.95

MINIATURE NYLON CORD CONNECTORS WITH SPIRAL, BLACK - SOLD INDIVIDUALLY

Mfg. Part No.	Hub	Cord Dia. (in.)	Black Stock No.	Price Each 1-4
● HJ1011B	1/4″ NPT	0.14-0.20	35B1042	4.55
● HJ1012B	1/4″ NPT	0.20-0.27	35B1043	4.63
● HJ1014B	3/8″ NPT	0.21-0.28	35B1045	4.55
● HJ1015B	3/8″ NPT	0.28-0.34	92B6515	4.55
● HJ1040B	1/2″ NPT	0.25-0.31	35B1049	9.06

MINIATURE NYLON CORD CONNECTORS WITH SPIRAL, GRAY - SOLD IN PKGS. OF 25

Mfg. Part No.	Hub	Cord Dia. (in.)	Gray Stock No.	Price per Pkg. 1-4
● HJ1011GPK25	1/4″ NPT	0.14-0.20	97C9224	111.76
● HJ1012GPK25	1/4″ NPT	0.20-0.27	97C9225	112.74

MINIATURE NYLON CORD CONNECTORS WITHOUT SPIRAL, GRAY - SOLD INDIVIDUALLY
Prevents friction with patented GOTCHA® ring. Threaded hexagon-shaped lock nut.

➤ CONTINUED ➤

CORD CONNECTORS WITH AND WITHOUT SPIRAL (CONT.)

Mfg. Part No.	Hub	Cord Dia. (in.)	Gray Stock No.	Price Each 1-4
● HJ1057G	1/2″ NPT	0.19-0.25	89F2841	8.42
● HJ1058G	1/2″ NPT	0.25-0.31	89F2842	8.42
● HJ1060G	1/2″ NPT	0.38-0.44	93F6910	8.42

MINIATURE NYLON CORD CONNECTORS WITHOUT SPIRAL, BLACK - SOLD INDIVIDUALLY

Mfg. Part No.	Hub	Cord Dia. (in.)	Black Stock No.	Price Each 1-4
● HJ1001B	1/4″ NPT	0.08-0.14	35B1035	4.32
● HJ1002B	1/4″ NPT	0.14-0.20	35B1036	4.21
● HJ1003B	1/4″ NPT	0.20-0.27	35B1037	4.32
● HJ1004B	3/8″ NPT	0.15-0.21	35B1038	4.26
● HJ1005B	3/8″ NPT	0.21-0.28	35B1040	4.21
● HJ1006B	3/8″ NPT	0.28-0.34	88F5042	4.21
● HJ1056B	1/2″ NPT	0.13-0.19	35B1053	8.52
● HJ1057B	1/2″ NPT	0.19-0.25	98F4956	8.52
● HJ1058B	1/2″ NPT	0.25-0.31	35B1054	8.64
● HJ1059B	1/2″ NPT	0.31-0.38	35B1055	8.42
● HJ1060B	1/2″ NPT	0.38-0.44	88F1027	8.64

MINIATURE NYLON CORD CONNECTORS WITHOUT SPIRAL, GRAY - SOLD IN PKGS. OF 25

Mfg. Part No.	Hub	Cord Dia. (in.)	Gray Stock No.	Price per Pkg. 1-4
● HJ1002GPK25	1/4″ NPT	0.14-0.20	97C9222	103.39
● HJ1003GPK25	1/4″ NPT	0.20-0.27	97C9223	103.39
● HJ1005GPK25	3/8″ NPT	0.21-0.28	29C0199	103.39
● HJ1006GPK25	3/8″ NPT	0.28-0.34	12C0382	104.29
● HJ1059GPK25	1/2″ NPT	0.31-0.38	12C0384	207.60

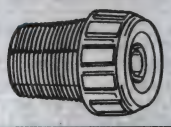
(73835)

LIQUIDTIGHT STRAIN RELIEF CONNECTORS

NEC

RoHS Compliant Available

Thomas&Betts



Flexible cord and power cable connectors are suitable for hazardous location use in Class I, Div. 2; Class II, Div. 1 and 2; and Class III, Div. 1 and 2, where general-purpose equipment is specifically permitted per NEC section 500-2 (a). Hub size: 0.50″ (12.70). UL listed, CSA certified.

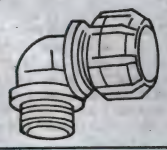
Mfg. Part No.	Cable Size Min.-Max.	Throat Diameter	Package Qty.	Stock No.	Per Pkg. 1-2	3-4
● 2520	0.125-0.250″	0.563″	25	90F2621	204.88	197.01
● 2521	0.250-0.375″	0.563″	25	90F2622	171.43	163.32
● 2522	0.375-0.500″	0.563″	1	90F2623	12.09	10.83
● 2523	0.450-0.560″	0.563″	1	90F2864	12.09	10.83
● 2525*	0.625-0.750″	0.625″	1	90F2865	13.64	12.22

*Remove sufficient outer covering of cable to permit conductors to pass through connector body.
(6370)

NONMETALLIC LIQUIDTIGHT STRAIN RELIEF CONNECTORS

RoHS Compliant Available

Thomas&Betts



Weather-stabilized nylon. 90° elbow, new reduced size and smaller footprint. Operating temperature: -34°C to +105°C. Rated UL94V-2. UL listed, CSA certified.

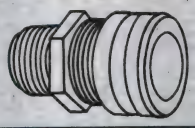
Mfg. Part No.	Hub Size	Throat Dia.	Cord Range	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 4960NM	0.50″	0.55″	0.125-0.375″	48F2935	20.62	18.44	16.77	15.10
● 4961NM	0.50″	0.55″	0.310-0.560″	48F2936	20.62	18.44	16.77	15.10

(39572)

ALUMINUM LIQUIDTIGHT STRAIN RELIEF CONNECTORS

RoHS Compliant Available

Thomas&Betts



Body and gland nut are aluminum. UL listed, CSA certified.

Mfg. Part No.	Hub Size	Throat Dia.	Cord Range	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 2920AL	0.50″	0.563″	0.125-0.375″	94F9785	15.01	13.60	12.28	11.06
● 2922AL	0.50″	0.563″	0.500-0.750″	48F2941	15.01	13.60	12.28	11.06
● 2930AL	0.75″	0.813″	0.125-0.375″	48F2942	18.67	16.75	15.15	13.71
● 2931AL	0.75″	0.813″	0.310-0.560″	98F4128	18.90	16.96	15.34	13.88

➤ CONTINUED ➤

ALUMINUM LIQUIDTIGHT STRAIN RELIEF CONNECTORS (CONT.)

Mfg. Part No.	Hub Size	Throat Dia.	Cord Range	Stock No.	Price Each 1-9	10-24	25-49	50-99
2932AL	0.75″	0.813″	0.500-0.750″	48F2943	16.68	15.11	13.64	12.29
2942AL	1.00″	0.969″	0.700-0.950″	48F2945	22.80	20.60	18.68	16.76

(39571)

WOODHEAD® MAX-LOC® PLUS SHIELDED CORD-GRIP ASSEMBLIES

RoHS Compliant Available

molex

NEW

IP67 IP68

Assembled View

Component Assembly View Shown with Shielded Cable

- Electroless nickel-plated aluminum housing and shielding ring provide EMI/RFI protection
- Unique grip-body internal cut-away design provides a clear center pass-through, simple assembly and field serviceability
- Tapered shielding ring provides a robust, reliable connection, low contact resistance and cable grounding
- Internal wedge-shaped HNBR grommet provides liquid and dust sealing, cable retention to withstand 50-lbs (222.4N) pull force and a stable connection in rugged applications
- Two external mounting holes simplify installation via a single-side connection
- Strong, lightweight aluminum die-cast, nickel-plated threaded assembly designed for ease of use
- Compression nut provides cable retention to withstand 50-lbs. (222.4N) pull force
- Sealed O-ring, IP67 and IP69K rated, seals out moisture and dust contamination; meets SAE industry standards and harsh-environment application requirements
- Accommodates 1, 1/0, 2/0, 3/0 AWG shielded cable providing design flexibility and installed cost savings
- IP67 and IP68 immersion rated
- UV resistant
- Meets UL94V-0 flammability rating
- Operating temperature: -40° to +150°C

Reduce disruptive EMI and RFI with Woodhead® MAX-LOC® Plus shielded cord-grip assemblies, featuring a simplified installation design ideal for high-frequency switched-mode power supply (SMPS) applications. These robust assemblies allow OEM's and end-user's to connect high-power electrical cables directly to an application via an exterior mounting enclosure, simplifying the installation process for high-volume, cost-sensitive programs.

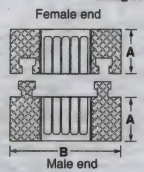
Mfg. Part No.	Cable AWG	Cable Dia. Range (mm)	Stock No.	Price Each 1-9	10-24
130199-0030	1	11.10 to 14.27	08X1016	63.06	61.61
130199-0020	1/0	12.70 to 15.88	08X1015	63.06	61.61
130199-0025	2/0	14.27 to 17.45	07W7964	63.06	61.61
130199-0080	3/0	14.86 to 18.03	08X1017	63.06	61.61

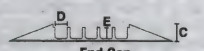
(211431)

TRUKTRAK™ AND TREDTRAK™ CABLE PROTECTION SYSTEMS

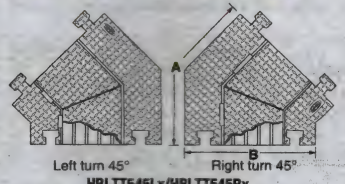
RoHS Compliant Available

HUBBELL Wiring Device-Kellems

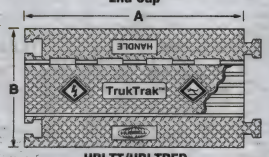




End Cap



HBLTT545Lx/HBLTT545Rx



HBLTT/HBLTRED

TrukTrak™ system is designed to protect cables and cords from heavy trucks and fork lifts in industrial environments. Available as 5-channel (**mfg. part nos. HBLTT5**) and will protect cables up to 1.25″ (31.75) in diameter. Dimension B: 20.0″. TredTrak™ system is designed to support pedestrian and light vehicle traffic in public, institutional, and commercial applications. 5-channel system will protect cable diameters up to 1.28″ (32.5). Dimension B: 17.5″. Both TrukTrak™ and TredTrak™ systems comply with 1996 NEC® requirements for installing electrical cables and cords at carnivals, amusement parks, convention centers, and similar public areas. **Suffix EC** denotes that the unit is an end cap and is sold as a set (male and female). **Suffix R** denotes unit that angles to the right. **Suffix L** denotes unit that angles to the left. All products are safety blue base with high-visibility yellow cover.

TREDTRACK™

Mfg. Part No.	Dimensions A	C	D	E	Stock No.	Price Each 1-4
HBLTRED5B	36.0″	1.95″	1.30″	1.30″	41M3266	366.45

(14629)

CORD REELS

RoHS Compliant Available

HUBBELL Wiring Device-Kellems

HBLC25163C

HBL45123GF20

HBL16FLR

- Economical commercial reels with 25' cord
- Durable metallic housing with industrial quality devices
- Easy mounting swivel base
- 2-foot molded on power supply cord with straight-blade 15A plug included

Industrial Cord Reels provide a highly durable wire management solution for the manufacturing facility floor. Now available in 15 & 20 Amp with GFI protection as well as Fluorescent, Incandescent & LED hand lamp options.

Mfg. Part No.	Description	Amps	Cable Type	Stock No.	Price Each 1-4
HBLC25163	Reel only, no lamp	10	16/3 SJT	35B311	187.63
HBL50162FL	Cord Reel with Fluorescent Hand Lamp	0.3	16/2 SJT	52F9753	876.57
HBL50162LED	Cord Reel With LED Hand Lamp	0.17	12/3 SJEO	47W3958	730.98
HBL50163IN	Cord Reel with Incandescent Hand Lamp	0.8	16/3 SJT	52F9754	836.31
HBL45123GF20	Cord Reel With Ground Fault Module	20	12/3 SJEO	83T3374	1036.02
HBL45123R220	Cord Reel With Portable Outlet Box	20	12/3 SJEO	47W3957	1071.36

ACCESSORIES

Mfg. Part No.	Description	Amps	Watts	Volts AC	Stock No.	Price Each 1-4
HBL16INR	Replacement incandescent hand lamp	0.8	100	125	47W3955	59.63
HBL16FLR	Replacement fluorescent hand lamp	0.3	13	120	47W3954	98.77
HBL16LEDR	Replacement LED hand lamp	0.17	5	120	47W3956	167.32

(80235)

TROUBLE LIGHTS

Woodhead

INDUSTRIAL DUTY FLUORESCENT HAND LAMPS

Safety Yellow® fluorescent hand lamps are ideal for task lighting applications. Offer bright, diffuse illumination from 900-3150 lumens and still remain cool to touch. On/Off switch in handle, ballast on cord, lamp type PL13/41.

Fig. 1

Fig. 2

Mfg. Part No.	Fig.	Max. Lamp Power (W)	Cord Type	Cord Length (ft.)	Stock No.	Price Each 1-4
1083-3	1	13	SJTOOW	25	50B2738	189.64

COMMERCIAL DUTY FLUORESCENT HAND LAMPS

Industrial gray fluorescent hand lamps provide maximum economy and worker safety for commercial duty environments. On/Off switch on handle, elastomer grip on handle.

WT6F-25	2	26	SJTW	25	20J9227	89.00

(88897)

Custom Cable Assembiles to your specs to mate with the complete line of connectors!
Call 1.800.463.9275

(212562)

COMPUTER CABLE ASSEMBLIES

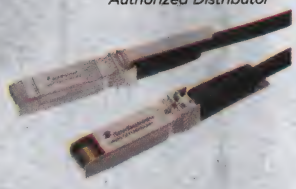
SFP+ CABLE ASSEMBLIES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- SFP+ active cable assemblies support data rates of 500 Mhz to 10 Gb/s
- Broadband — will work at all frequencies up to and including 8.5 Gb/s Fibre Channel and 10 Gb/s Ethernet
- Low cost solution for short reach applications (1-5 meters)
- Pull tab latch release accommodates belly-to-belly application
- Cable braid crimp and EMI skirt suppress EMI radiation
- Uses Madison Cable high speed TurboTwin copper cable
- SFF-8431 compliant



SFP+ HIGH SPEED COPPER CABLE ASSEMBLIES

SFP+ direct-attached copper cable assemblies are high-speed, cost-effective alternative to fiber optics in 10Gb Ethernet, 8Gb Fibre Channel and InfiniBand applications. Supports serial data rates up to 10Gbps. Features pull-to-release retractable pin latch, low-power consumption, and enhanced EMI suppression. Surface mount 38-position PCB paddle card connector with 30µ gold-plated contact pads and tin-plated zinc die-cast backshell. Shielded twinaxial cable with flexible PVC jacket is UL recognized, CSA certified. Choice of wire gauge and cable length. Assemblies are MSA SFF-8431 compliant for signal integrity performance.

Mfg. Part No.	AWG	Length (m)	Stock No.	Price Each 1-24
● 2127934-1	24AWG	0.5	84R9094	41.41
● 2127934-2	24AWG	1	84R9095	50.80
● 2127934-3	24AWG	2	84R9096	57.74
● 2127934-4	24AWG	3	84R9097	59.51
● 2127934-5	24AWG	4	84R9098	70.83
● 2127934-6	24AWG	5	84R9099	79.14
● 2127934-7	24AWG	6	84R9100	81.16
● 2127934-8	24AWG	7	84R9101	109.54
● 2127933-1	26AWG	0.5	84R9087	43.38
● 2127933-2	26AWG	1	84R9088	46.18
● 2127933-3	26AWG	2	84R9089	51.74
● 2127933-4	26AWG	3	84R9090	60.91
● 2127933-5	26AWG	4	84R9091	63.00
● 2127933-6	26AWG	5	84R9092	68.72
● 2127933-7	26AWG	6	84R9093	85.08
● 2127932-1	28AWG	0.5	84R9081	42.42
● 2127932-2	28AWG	1	84R9082	47.93
● 2127932-3	28AWG	2	84R9083	53.86
● 2127932-4	28AWG	3	84R9084	56.51
● 2127932-5	28AWG	4	84R9085	62.11
● 2127932-6	28AWG	5	84R9086	67.83
● 2127931-1	30AWG	0.5	84R9077	44.62
● 2127931-2	30AWG	1	84R9078	47.66
● 2127931-3	30AWG	2	84R9079	47.18
● 2127931-4	30AWG	3	84R9080	56.60

(141918)

6A22 SERIES ACTIVE OPTICAL CABLES (AOC) FOR QSFP+ APPLICATIONS

RoHS Compliant Available

3M

- 660mW power consumption
- QSFP+ / SFF 8436 Compliant
- 4 Channel x 10.3125Gbps
- Reliable 850nm VCSEL @ 10-15 BER
- Low Loss Bend Insensitive Fiber
- Serial I2C Interface
- Ruggedized Integrated Optics
- Broadest range of standard Assembly lengths

QSFP+ active optical cable assemblies provide high-speed transmission over 100 meters of multimode fiber for high-performance computing and other ultra high-throughput networking environments. QSFP+ AOC assemblies transmit four parallel channels each operating at 10 Gbps and are designed to meet SFF-8436 standards, which is compatible with Infiniband QDR and 10G Ethernet standards.

ACTIVE OPTICAL CABLE PLENUM ASSEMBLIES

Mfg. Part No.	Length (m)	Stock No.	Price Each 1-9	Price Each 10-24
● 6A22-A0421-002.0-0	2	75T8792	296.91	286.00
● 6A22-A0421-003.0-0	3	75T8793	296.91	286.00
● 6A22-A0421-004.0-0	4	75T8794	296.91	286.00
● 6A22-A0421-005.0-0	5	75T8795	284.12	273.68
● 6A22-A0421-006.0-0	6	75T8796	296.91	286.00
● 6A22-A0421-007.0-0	7	75T8797	284.12	273.68
● 6A22-A0421-008.0-0	8	75T8798	296.91	286.00
● 6A22-A0421-009.0-0	9	75T8799	284.12	273.68
● 6A22-A0421-010.0-0	10	75T8800	284.12	273.68
● 6A22-A0421-011.0-0	11	75T8801	312.53	301.04
● 6A22-A0421-012.0-0	12	75T8802	312.53	301.04

➤ CONTINUED ➤

6A22 SERIES ACTIVE OPTICAL CABLES (AOC) FOR QSFP+ APPLICATIONS (CONT.)

Mfg. Part No.	Length (m)	Stock No.	Price Each 1-9	Price Each 10-24
● 6A22-A0421-013.0-0	13	75T8803	312.53	301.04
● 6A22-A0421-014.0-0	14	75T8804	312.53	301.04
● 6A22-A0421-015.0-0	15	75T8805	326.59	314.59
● 6A22-A0421-020.0-0	20	75T8810	312.53	301.04
● 6A22-A0421-021.0-0	21	75T8811	343.78	331.15
● 6A22-A0421-022.0-1	22	75T8812	343.78	331.15
● 6A22-A0421-023.0-0	23	75T8813	343.78	331.15
● 6A22-A0421-024.0-0	24	75T8814	343.78	331.15
● 6A22-A0421-025.0-0	25	75T8815	343.78	331.15
● 6A22-A0421-026.0-0	26	75T8816	343.78	331.15
● 6A22-A0421-027.0-0	27	75T8817	343.78	331.15
● 6A22-A0421-028.0-0	28	75T8818	343.78	331.15
● 6A22-A0421-029.0-0	29	75T8819	343.78	331.15
● 6A22-A0421-030.0-0	30	75T8820	343.78	331.15

(202094)

MINI SERIAL ATTACHED SCSI (miniSAS) CABLE ASSEMBLIES

RoHS Compliant Available

3M

8F36 Series 8F68 Series 8N36 Series

- Multiple lengths available
- Metal latch designed to ensure retention
- Two levels of EMLB for hot plugging

8M26 Series

8F36 SERIES miniSAS CABLE ASSEMBLIES

8F36 Series High Routability Internal miniSAS cable assemblies utilize 3M's ultra-low-profile, high speed, high signal density 3M™ Twin Axial Cable SL8800 Series. The cable assemblies are unjacketed, extremely thin and very flexible and are ideal for space-constrained systems such as along the sides of cabinets and through narrow openings between fans or heat sinks. Sharp turns are easy to navigate, it can even be folded in multiple locations with minimal loss or performance impact and will still pass SAS 2.1 performance requirements.

Mfg. Part No.	Description	Lgth. (m.)	Stock No.	Price Each 1-9	Price Each 10-24
● 8F36-AAA305-0.50	4-Lane, Backplane-to-Controller Pin-Out	0.5	25T0230	16.39	15.14
● 8F36-AAC105-0.50	4-Lane, Backplane-to-Controller Pin-Out, No Sidebands	0.5	25T0231	15.57	14.38

8F68 SERIES miniSAS CABLE ASSEMBLIES

8F68 Series High Routability Internal miniSAS cable assemblies utilize 3M's ultra-low-profile, high speed, high signal density 3M™ Twin Axial Cable SL8800 Series to create a flexible, foldable, high-performance solution. The 8F68 series miniSAS cable assembly supports SAS 1.0, 2.0 and 2.1 applications while exceeding SAS 2.1 requirements up to 1 meter. The 8F68 Series cable assembly supports 8 channels (8x) vs. the 8F36 series which support 4 channels (4x). The cable construction is thin and lower profile than other similar AWG twin axial cables. This allows for dense routing and flexible routing options within a chassis. Further, the 3M Twin Axial cable used is foldable and allows for extremely tight bend radii.

Mfg. Part No.	Description	Lgth. (m.)	Stock No.	Price Each 1-9	Price Each 10-24
● 8F68-AAG105-0.20	4-Lane,With Sidebands	0.2	79T5866	32.08	29.63
● 8F68-AAG105-0.50	4-Lane,With Sidebands	0.5	79T5867	33.49	30.94
● 8F68-AAG105-0.80	4-Lane,With Sidebands	0.8	79T5868	34.91	32.25
● 8F68-AAG105-1.00	4-Lane,With Sidebands	1.0	79T5869	35.88	33.15

8M26 SERIES miniSAS CABLE ASSEMBLIES

8M26 Series miniSAS cable assemblies are capable of 6 Gbps per channel data rate. Features zinc diecast backshells with blue nylon pulltabs for easier unmating. 26 conductor signal cables feature solid tin plated solid conductors and drain wire with a foam polyethylene dielectric, Mylar shielding, and a Non-PVC jacket material. Multiple key options available, tested to SAS Specification, SAS-2. Current rating: Per Contact: 0.5 A, Insulation resistance: 103 MΩ minimum, Withstanding voltage: 300 VDC min. for 1 minute, Operating temperature: -20°C to +75°C.

Mfg. Part No.	Length (m.)	Stock No.	Price Each 1-9	Price Each 10-24
● 8M26-AA0401-0.50	0.5	14P5153	67.71	62.54
● 8M26-AA0401-1.00	1.0	14P5154	84.96	78.48

8N36 SERIES miniSAS CABLE ASSEMBLIES

8N36 Series miniSAS cable assemblies are capable of 3 Gbps per channel data rate. Features black high temperature thermoplastic backshells rated UL 94V-0. 36 Conductor signal cables feature 30 AWG twin axial cable with solid tin plated solid conductors and drain wire with a foam polyethylene dielectric, Mylar shielding, and a Non-PVC jacket material with a nylon braid. Current rating: Per Contact: 0.5 A, Insulation resistance: 103 MΩ minimum, Withstanding voltage: 300 VDC min. for 1 minute, Operating temperature: -20°C to +80°C.

➤ CONTINUED ➤

MINI SERIAL ATTACHED SCSI (miniSAS) CABLE ASSEMBLIES (CONT.)

Mfg. Part No.	Description	Lgth. (m.)	Stock No.	Price Each 1-9	Price Each 10-24
8N36-AA0105-1.00	Backplane-to-Controller Pin-Out	1.0	14P5155	36.01	33.26
8N36-AA0205-1.00	Controller-to-Controller Pin-Out	1.0	14P5156	36.01	33.26

(136137)

3M™ HIGH ROUTABILITY INTERNAL SATA 3.0 COMPATIBLE CABLE ASSEMBLIES

RoHS Compliant Available

3M

- Supports SATA 1.0/2.0/3.0 Applications
- Exceeds SATA 3.0 requirement up to 1 meter
- Internal cable construction is thin and lower profile than other similar AWG twin axial cables
- Allows for dense routing and flexible routing options within a chassis
- Foldable - Allows for extremely tight bend radii
- Minimal performance impact of folding, and enables unique packaging configurations
- Saves time and cost during assembly

SATA TWINAX RIBBON CABLE ASSEMBLIES - STRAIGHT TO STRAIGHT WITH LATCH

Mfg. Part No.	No. of Positions	Length (m)	Stock No.	Price Each 1-24
5602-44-0142A-500	7	0.5	79T5871	4.95
5602-44-0142A-600	7	0.6	79T5872	4.79
5602-44-0142A-700	7	0.7	79T5873	4.98
5602-44-0142A-800	7	0.8	79T5874	5.17
5602-44-0142A-900	7	0.9	79T5875	5.38
5602-44-0142A-000	7	1.0	79T5870	5.57

(202134)

SATA CABLE ASSEMBLIES

RoHS Compliant Available

L-com Global Connectivity

Straight / Straight — Straight / Right Angle — Latching Straight / Straight

- Meets SATA application requirements
- Latching versions used to provide secure latching Serial ATA connections
- Tight pitch 7 position connectors save space compared to larger parallel ATA connectors
- Supports transfer rates of up to 3Gbps depending on the peripherals used
- Straight connectors for standard plug in

Latching Straight / Right Angle

SATA CABLE ASSEMBLIES

Serial ATA cables are replacing wide Parallel ATA ribbon cables in many applications. The Serial ATA cable is smaller, more flexible, and therefore easier to route inside a chassis. With the trend toward miniaturization, these characteristics are beneficial in many product designs. The cables feature two shielded 26 AWG pairs in a PVC jacket, gold plated contacts, and two straight polarized seven position connectors.

Mfg. Part No.	Length (m)	Description	Stock No.	Price Each 1-9	Price Each 10-24
CASATA-05M	0.5	Straight / Straight	89M7560	5.33	4.83
CASATA-1M	1.0	Straight / Straight	89M7561	6.22	5.63
CASATAR-05M	0.5	Straight / Right Angle	89M7562	5.93	5.36

LATCHING SATA CABLE ASSEMBLIES

L-com's latching Serial ATA cable assemblies provide a secure connection every time. Serial ATA cables are replacing wide Parallel ATA ribbon cables in many applications. The Serial ATA cable is smaller, more flexible and therefore easier to route inside a chassis. With the trend toward miniaturization, these characteristics are beneficial in many product designs. The cables feature two shielded 26 AWG pairs in a PVC jacket, gold plated contacts and two straight polarized seven position connectors.

Mfg. Part No.	Length (in.)	Description	Stock No.	Price Each 1-9	Price Each 10-24
CASATAL-8	8.0	Straight / Straight	08R6209	4.71	4.25
CASATAL-12	12.0	Straight / Straight	08R6204	4.94	4.48
CASATAL-16	16.0	Straight / Straight	08R6205	5.24	4.74
CASATAL-18	18.0	Straight / Straight	08R6206	5.33	4.83
CASATAL-36	36.0	Straight / Straight	08R6208	6.22	5.63
CASATARL-8	8.0	Straight / Right Angle	08R6215	5.27	4.77
CASATARL-12	12.0	Straight / Right Angle	08R6210	5.51	4.98
CASATARL-16	16.0	Straight / Right Angle	08R6211	5.81	5.26
CASATARL-18	18.0	Straight / Right Angle	08R6212	5.93	5.36
CASATARL-24	24.0	Straight / Right Angle	08R6213	6.05	5.47
CASATARL-36	36.0	Straight / Right Angle	08R6214	6.78	6.13

(147925)

PCIe EXTENDER ASSEMBLIES

RoHS Compliant Available

3M

Features

- PCIe 2.0 and 3.0
- X4, x8 and x16
- Extender and jumper
- High bandwidth
- Flexible replacement for rigid riser cards
- Up to 8 Gbps and beyond
- Highly-routable, foldable, flexible

The **PCI Express Extender Assemblies and PCI Express Jumper Assemblies for PCI Express 2.0 and 3.0** provide the latest in high-speed solutions to meet demanding system performance and packaging challenges. These assemblies are one-to-one direct extenders, including power and low-speed signals that are part of the PCI Express specification. The assembly plugs into a PCIe card slot and provides another slot at the opposite end. The assemblies can be folded to provide unique and specific geometries, maximizing the use of space and reducing obstruction to airflow. These mechanical benefits are provided along with the extremely low loss and excellent signal integrity benefits of the award winning 3M™ High-Routability Twin Axial Cable. If your applications uses a mother board that needs to link to another PCB via PCIe, and that PCB has PCIe connectors instead of edge fingers, then the PCIe Jumper Assemblies may fit your need. The jumper assemblies provide all of the speed and flexibility of the original 3M Extender Assemblies, but for card-to-card applications.

Mfg. Part No.	Description	Length (mm)	Contact Positions	Stock No.	Price Each 1-4
8KJ1-0727-0250	PCIe x4 Extender	250	64	44W6107	88.87
8KJ1-0727-0500	PCIe x4 Extender	500	64	44W6108	91.05
8KH2-0723-0250	PCIe x8 Extender	250	98	44W6105	91.02
8KH2-0723-0500	PCIe x8 Extender	500	98	44W6106	98.83
8KC3-0726-0250	PCIe x16 Extender	250	164	44W6103	105.24
8KC3-0726-0500	PCIe x16 Extender	500	164	44W6104	103.16
8KH3-0734-0250	PCIe x8 Jumper	250	98	90W0225	94.45

(206306)

0.80 mm DIGITAL CAMERA CABLE, POWER OVER CAMERALINK COMPATIBLE

RoHS Compliant Available

3M

1MD26-X560-00C-X00 — 1SD26-3120-00C-X00

- Carries power in addition to signal to enable use in base configuration Power over Camera Link® (PoCL) applications
- Connects to I/O ports on both PoCL camera and PoCL framegrabber
- Both straight and right angle cable exit available
- 3 shielded quads and 6 unshielded twisted pairs
- Entire cable bundle shielded with foil and braid for additional signal protection
- Rugged ribbon type contact for reliable, repeatable connectivity
- Thumbscrew retention
- EMI shielded end-to-end for reduced emissions

Base configuration PoCL Cables mate to industry standard SDR 26 position PoCL camera connections, and enable machine vision cameras to be powered through the data cable, rather than via a separate power cable. This in turn allows smaller camera designs, as an onboard power supply is no longer required, and also allows the elimination of a separate power cable.

0.80 mm DIGITAL CAMERA CABLE, MDR PLUG TO SDR PLUG - STANDARD

Mfg. Part No.	Length (m)	Color	Stock No.	Price Each 1-4
1MD26-3560-00C-300	3	Grey	59R8754	188.39
1MD26-3560-00C-500	5	Grey	59R8755	200.38
1MD26-3560-00C-A00	10	Grey	59R8752	242.73
0.80 mm DIGITAL CAMERA CABLE, MDR PLUG TO SDR PLUG - FLEXIBLE				
1MD26-R560-00C-200	2	Black	59R8749	189.28
1MD26-R560-00C-300	3	Black	59R8750	200.10
1MD26-R560-00C-500	5	Black	59R8751	216.68
0.80 mm DIGITAL CAMERA CABLE, SDR PLUG TO SDR PLUG - STANDARD				
1SD26-3120-00C-200	2	Grey	59R8757	114.00
1SD26-3120-00C-300	3	Grey	59R8758	137.73
1SD26-3120-00C-500	5	Grey	59R8759	158.69
1SD26-3120-00C-A00	10	Grey	59R8756	213.86

(164505)

COMPUTER CABLE ASSEMBLIES

MINI DELTA RIBBON (MDR) CAMERA LINK CABLE ASSEMBLY

RoHS Compliant Available

3M

- Support new Industrial CAMERA LINK STANDARD for camera to frame grabber communications
- High Speed Digital Data Transmission System
- Voltage Rating: 30V
- Current Rating: 1A
- Conductor Size: 28 AWG Stranded
- Withstanding Voltage: 350 Vrms for 1 minute
- Wiping Area: 30 micro" [0.76 um] Min. Gold
- Temperature Rating: -20°C to +75°C
- Capable of mating with all 3M MDR boardmount receptacles

Insulation resistance 1 x 10^8 ohms at 100 Vdc. Individually shielded twisted pairs. Characteristic impedance 100±10 ohms. Color: parchment/beige. Overmold option: polyvinyl chloride. Rugged MDR ribbon type contact. Rugged thumbscrew retention.

Mfg. Part No.	Number of Positions	Cable Length	Stock No.	Price Each 1-4
● 14T26-SZLB-100-0LC	26	1	19M8470	98.05
● 14T26-SZLB-200-0LC	26	2	19M8471	111.82
● 14T26-SZLB-300-0LC	26	3	19M8472	126.01
● 14T26-SZLB-500-0LC	26	5	26M8323	155.16
● 14T26-SZLB-A00-0LC	26	10	20M7060	226.52

0.050" MINI D RIBBON (MDR) CONNECTORS, BOARDMOUNT SOCKETS FULLY SHIELDED

Copper alloy contact material. Current rating 1A. Temperature rating -55°C to 105°C. Withstanding Voltage 500Vrms @ sea level. Insulation resistance 5 x 10^8 ohms @ 500 Vdc. Glass filled polyester insulation material. Dual row.

Mfg. Part No	Contacts	Description	Stock No.	Price Each 1-24
● 10226-2200PE	26	Surface Mount, Vertical Receptacle	14M7492	8.39
● 10226-1A10PE	26	Surface Mount, Right Angle Receptacle	88K1647	5.60
● 10226-6212PC	26	Through Hole Vertical Receptacle	93K6332	4.65

0.050" I/O MOUNTING HARDWARE JACKSOCKETS

Mfg. Part No.	Length (mm)	Stock No.	Price Each 1-24
● 3342-1	8.3	19M8486	1.63
● 3341-31	14.0	36C2625	2.33
● 3341-32	20.3.0	90H0288	3.56

(77898)

D-SUBMINIATURE CABLE ASSEMBLIES

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

Fig.1

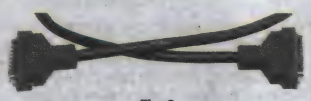


Fig. 2

Designed for long life and reliable performance in input/output and keyboard interface applications. Shielded cables have connector shells soldered to cable shield for positive ground path. Point-to-point wiring. 37-position has point-to-point wiring with shield to connector shell and pin number 1. UL recognized.

Mfg. Part No.	Fig.	Gender	Length ft.	Length m	Stock No.	Price Each 1-4	5-9	10+
9-POSITION 2464 300V, 80°; NEC CM FOIL SHIELD								
● 49902A 060S2	1	M/M	25	7.6	46F7215	242.43	232.62	224.21
● 49905A 060S2	1	M/F	5	1.5	46F7216	177.87	170.67	164.50
● 49906A 060S2	1	M/F	10	3.0	46F7217	194.94	187.05	180.29
15-POSITION 2464 300V, 80°C; NEC CM FOIL + 90% BRAID								
● 49745A 060S2	1	M/F	5	1.5	87K2696	223.29	214.26	206.51
● 49746A 060S2	1	M/F	10	3.0	87K2697	253.32	243.07	234.29
● 49747A 060S2	1	M/F	25	7.6	46F7233	336.56	322.94	311.27
25-POSITION 2464 300V, 80°C; NEC CM FOIL SHIELD								
● 49673A 060S2	2	M/F	5	1.5	87K1266	235.23	225.71	217.55
37-POSITION 2464 300V, 80°C; NEC CM FOIL + 65% BRAID								
● 49955A 060S2	2	M/F	5	1.5	87K6220	347.83	333.76	321.69
● 49956A 060S2	2	M/F	10	3.0	46F7290	423.41	406.28	391.59
50-POSITION 2464 300V, 80°C; NEC CL2X DUOFOIL + 90% BRAID								
● 49765A 060S2	2	M/F	5	1.5	46F7297	464.30	445.51	429.41

(7417)

MOLDED D-SUBMINIATURE CABLE ASSEMBLIES

RoHS Compliant Available

L-COM Global Connectivity

Premium Deluxe Economy

- All lines wired straight through for extending serial devices
- Gold plated contacts provide reliable connections with repeated mating cycles
- Hex nuts on female connectors are removable to expose 4-40 thumbscrews.
- Color: Light Gray

PREMIUM MOLDED D-SUBMINIATURE CABLE ASSEMBLIES

The CS2N Series of D-Sub cable assemblies is L-com's top of the line D-Sub cabling offering. These cable assemblies utilize 26 AWG stranded conductors with double shielding (copper braid plus aluminum mylar foil) and a flexible PVC jacket. Ideal for any electrically noisy environment where fans, motors or switches are nearby. Backshells are fully molded and have a unique stamped steel internal enclosure that provides the ultimate in shielding performance. Mounting is done via rugged 4-40 thumbscrews that are easy to grip without the need for a screwdriver.

Mfg. Part No.	Description	Length (ft.)	Stock No.	Price Each 1-9	10-24
● CS2N9MM-10	D Sub 9 Position Plug to D Sub 9 Position Plug	10	88M3703	32.25	28.75
● CS2N9MF-5	D Sub 9 Position Plug to D Sub 9 Position Receptacle	5	65J9216	26.12	23.27
● CS2N9MF-25	D Sub 9 Position Plug to D Sub 9 Position Receptacle	25	18M1653	51.18	45.61
● CS2N25MF-10	D Sub 25 Position Plug to D Sub 25 Position Receptacle	10	88K0502	42.50	37.89
● CS2H15MM-5	HD-15 Plug to HD-15 Plug	5	88M8465	34.22	30.50
● CS2H15MF-5	HD-15 Plug to HD-15 Receptacle	5	88M3697	34.22	30.50
● CS2H15MF-10	HD-15 Plug to HD-15 Receptacle	10	53M0225	41.65	37.13
● CS2H15MF-25	HD-15 Plug to HD-15 Receptacle	25	88M3696	63.31	56.42

DELUXE MOLDED D-SUBMINIATURE CABLE ASSEMBLIES

The **CSMNB Series** of black D-sub cable assemblies offers solid performance at economical prices. These assemblies are fully shielded throughout the entire cable to prevent against data corrupting EMI/RFI. Molded backshells provide superior strain relief while robust 26 AWG conductors are wired straight through for ease of compatibility. Metal thumbscrews insure fast and easy connections. Standard lengths range from 2.5 ft to 50 ft and custom lengths and pinouts are available with modest minimum requirements.

Mfg. Part No.	Description	Length (ft.)	Stock No.	Price Each 1-9	10-24
● CSMNB9MF-2.5	D Sub 9 Position Plug to D Sub 9 Position Receptacle	2.5	08R6236	8.78	7.94
● CSMNB9MF-5	D Sub 9 Position Plug to D Sub 9 Position Receptacle	5	08R6237	10.25	9.26
● CSMNB9MF-10	D Sub 9 Position Plug to D Sub 9 Position Receptacle	10	08R6234	13.51	12.22
● CSMNB9MF-15	D Sub 9 Position Plug to D Sub 9 Position Receptacle	15	08R6235	16.51	14.93
● CSMNB9MM-2.5	D Sub 9 Position Plug to D Sub 9 Position Plug	2.5	08R6240	8.78	7.94
● CSMNB9MM-5	D Sub 9 Position Plug to D Sub 9 Position Plug	5	08R6241	10.37	9.38
● CSMNB9MM-10	D Sub 9 Position Plug to D Sub 9 Position Plug	10	08R6238	13.34	12.06
● CSMNB9MM-15	D Sub 9 Position Plug to D Sub 9 Position Plug	15	08R6239	16.10	14.55
● CSMNB15MF-2.5	D Sub 15 Position Plug to D Sub 15 Position Receptacle	2.5	08R6218	15.88	14.15
● CSMNB15MF-5	D Sub 15 Position Plug to D Sub 15 Position Receptacle	5	08R6220	18.47	16.45
● CSMNB15MF-10	D Sub 15 Position Plug to D Sub 15 Position Receptacle	10	08R6216	22.52	20.06
● CSMNB15MF-15	D Sub 15 Position Plug to D Sub 15 Position Receptacle	15	08R6217	26.29	23.44
● CSMNB15MF-25	D Sub 15 Position Plug to D Sub 15 Position Receptacle	25	08R6219	35.45	31.59
● CSMNB15MM-2.5	D Sub 15 Position Plug to D Sub 15 Position Plug	2.5	08R6223	16.08	14.34
● CSMNB15MM-5	D Sub 15 Position Plug to D Sub 15 Position Plug	5	08R6225	18.23	16.24
● CSMNB15MM-10	D Sub 15 Position Plug to D Sub 15 Position Plug	10	08R6221	22.80	20.32
● CSMNB15MM-15	D Sub 15 Position Plug to D Sub 15 Position Plug	15	08R6222	26.57	23.69
● CSMNB15MM-25	D Sub 15 Position Plug to D Sub 15 Position Plug	25	08R6224	35.07	31.25
● CSMNB25MF-2.5	D Sub 25 Position Plug to D Sub 25 Position Receptacle	2.5	08R6228	14.47	12.89
● CSMNB25MF-5	D Sub 25 Position Plug to D Sub 25 Position Receptacle	5	08R6229	16.59	14.78
● CSMNB25MF-10	D Sub 25 Position Plug to D Sub 25 Position Receptacle	10	08R6226	22.51	20.06
● CSMNB25MF-15	D Sub 25 Position Plug to D Sub 25 Position Receptacle	15	08R6227	26.57	23.69
● CSMNB25MM-2.5	D Sub 25 Position Plug to D Sub 25 Position Plug	2.5	08R6232	14.65	13.05

CONTINUED

MOLDED D-SUBMINIATURE CABLE ASSEMBLIES (CONT.)

Mfg. Part No.	Description	Length (ft.)	Stock No.	Price Each 1-9	Price Each 10-24
CSMNB25MM-5	D Sub 25 Position Plug to D Sub 25 Position Plug	5	08R6233	16.80	14.97
CSMNB25MM-10	D Sub 25 Position Plug to D Sub 25 Position Plug	10	08R6230	22.51	20.06
CSMNB25MM-15	D Sub 25 Position Plug to D Sub 25 Position Plug	15	08R6231	25.32	22.57

ECONOMY MOLDED D-SUBMINIATURE CABLE ASSEMBLIES

The **CSM Series** of D-Sub cable assemblies offer solid performance at economical prices. These cable assemblies utilize 26 AWG stranded conductors with foil shielding and a flexible PVC jacket flexibility and performance. Backshells are fully molded for reliability in environments where flexing is an issue. Mating hardware is 4-40 machine screws.

Mfg. Part No.	Description	Length (ft.)	Stock No.	Price Each 1-9	Price Each 10-24
CSM9MF-10	D Sub 9 Position Plug to D Sub 9 Position Receptacle	10	54M3351	11.71	10.58
CSM9MF-25	D Sub 9 Position Plug to D Sub 9 Position Receptacle	25	88M3685	18.44	16.67
CSM25MM-10	D Sub 25 Position Plug to D Sub 25 Position Plug	10	71K0031	18.90	16.85
CSM25MF-25	D Sub 25 Position Plug to D Sub 25 Position Receptacle	25	08J0612	35.42	31.57

(110594)

KEYBOARD EXTENSION AND DATA CABLE

RoHS Compliant Available

multicomp

Use this cable to extend a computer keyboard farther than the connected cable will allow. It is designed for DIN 5 pin and Mini DIN 6 pin connector. Also, these cables can be used to connect DIN 5 or Mini DIN 6 port to switchbox.

Mfg. Part No.	Description	Length	Stock No.	Price Each 1-4
DIN 5 PIN				
SPC20022	DIN 5 M/M	6′	83K3753	4.27
MINI DIN 6 PIN				
SPC20031	Mini DIN 6 M/F	6′	83K3762	2.86
SPC20030	Mini DIN 6 M/F	12′	83K3761	7.59
SPC20033	Mini DIN 6 M/M	6′	83K3764	2.92
SPC20032	Mini DIN 6 M/M	10′	83K3763	3.48

(63180)

AT-XT MODEM CABLE ASSEMBLIES

RoHS Compliant Available

multicomp

Connect an external modem to your DB9 series port with this cable.

Mfg. Part No.	Length	Description	Stock No.	Price Each 1-24
SPC20038	6′	AT-XT Pin Modem Cable, DB25M-DB9F Hayes Modem Cable	83K3769	7.76
SPC20037	10′	AT-XT Pin Modem Cable, DB25M-DB9F Hayes Modem Cable	83K3768	10.21

(63181)

SERIAL DB9 DATA CABLE ASSEMBLIES

RoHS Compliant Available

multicomp

Serial Cable for communicating between two devices with DB9 Serial Ports. Platinum Contacts.

Mfg Part No.	Description	Length	Stock No.	Price Each 1-24
SPC19942	Female/Female	6′	83K3687	4.48
SPC19941	Female/Female	10′	83K3686	9.59
SPC19944	Male/Female	6′	83K3689	7.70
SPC19943	Male/Female	10′	83K3688	9.58
SPC20040	Male/Male	6′	83K3771	4.54

CONTINUED

SERIAL DB9 DATA CABLE ASSEMBLIES (CONT.)

Mfg Part No.	Description	Length	Stock No.	Price Each 1-24
SPC20039	Male/Male	10′	83K3770	10.14
SPC20036	DB9 Female/Male	25′	83K3767	19.11

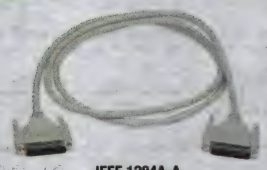
(63176)

HIGH SPEED IEEE 1284 PRINTER CABLE ASSEMBLIES

RoHS Compliant Available

multicomp

IEEE 1284A-B



IEEE 1284A-A

The cable IEEE-1284 standard parallel cable used to communicate between the computer and many different parallel devices. It is especially designed to be used with most laser printers, inkjet printers and multifunction machines. With two identified connectors in the standard labeled A (DB 25 pin), B (Centronics 36 pin). **Mfg. Part No. SPC10448 and SPC20027** uses a DB25 Male to Micro Centronics 36 Male pin setup.

Mfg. Part No.	Description	Length	Stock No.	Price Each 1-24
IEEE 1284A-B PRINTER CABLE				
SPC20029	18T/P DB25-Centronics®36 M/M	6′	83K3760	15.59
SPC20026	18T/P DB25-Centronics®36 M/M	10′	83K3757	22.95
SPC20028	18T/P DB25-Centronics®36 M/M	25′	83K3759	43.42
IEEE 1284A-A PRINTER CABLE				
SPC19939	18 T/P DB25 M/M	6′	83K3684	16.08
SPC19937	18 T/P DB25 M/M	10′	83K3682	23.17
SPC19938	18 T/P DB25 M/F	6′	83K3683	16.08

(63171)

IBM® STANDARD PARALLEL PRINTER CABLE ASSEMBLIES

RoHS Compliant Available

multicomp

Allow for basic communication between the computer and the printer. DB25/M - C36M.

Mfg. Part No.	Length	Stock No.	Price Each 1-24
SPC20025	6′	83K3756	12.52
SPC20024	10′	83K3755	17.68

(63170)

DB25 CONDUCTOR DATA CABLE ASSEMBLIES

RoHS Compliant Available

multicomp

Can be used to connect female DB25 port to a switchbox. Can be used to also extend the distance between female and male DB25 parts.

Mfg. Part No.	Description	Length	Stock No.	Price 1-24
SPC19935	DB25 M/M	6′	83K3680	13.05
SPC19929	DB25 M/M	10′	83K3675	17.80
SPC19932	DB25 M/M	25′	83K3677	27.61
SPC19934	DB25 M/F	6′	83K3679	12.93
SPC19928	DB25 M/F	10′	83K3674	18.04
SPC19931	DB25 M/F	25′	83K3676	28.78
SPC19933	DB25 F/F	6′	83K3678	13.54
SPC19927	DB25 F/F	10′	83K3673	18.45

(63173)

POWER SUPPLY "Y" CABLE ASSEMBLY

RoHS Compliant Available

multicomp

For use when adding additional disk drives. 4-pin Molex®-type male to 2 female connectors.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● SPC19801	Power Supply "Y" Cable Assembly	84K8563	5.45

(7624)

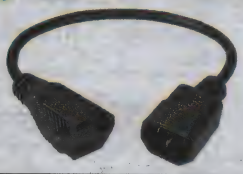
3

COMPUTER AC AND EXTENSION CORDS

RoHS Compliant Available

multicomp

These power adapter cords connect the monitor to the auxiliary receptacle on the rear of the computer's power supply.



Mfg Part No.	Description	Stock No.	Price Each
POWER ADAPTER CORDS			
● SPC19905	Shrouded IEC 320 Plug to NEMA 5-15R, 1′	83K3653	4.54
● SPC19907	Shrouded IEC 320 Plug to NEMA 5-15R, 6′	83K3655	10.81
● SPC19906	Shrouded IEC 320 Plug to NEMA 5-15R, 12′	83K3654	13.49
POWER REPLACEMENT CABLES			
● SPC19911	Male NEMA 5-15P to IEC 320 Jack, 1′	83K3659	5.12
● SPC19913	Male NEMA 5-15P to IEC 320 Jack, 6′	83K3661	9.78
● SPC19912	Male NEMA 5-15P to IEC 320 Jack, 12′	83K3660	15.05
COMPUTER EXTENSION POWER CORDS			
● SPC19908	Shrouded IEC 320 Plug to IEC 320 Jack, 1′	83K3656	3.87
● SPC19910	Shrouded IEC 320 Plug to IEC 320 Jack, 6′	83K3658	9.78
● SPC19909	Shrouded IEC 320 Plug to IEC 320 Jack, 12′	83K3657	15.05

(7632)

HIGH RELIABILITY USB 2.0 CORDSETS

RoHS Compliant Available

Amphenol Pcd

High-reliability USB 2.0 cordsets with USB type A plug overmolded on each end. Constructed of one 28 AWG, 90-ohm characteristic impedance data pair and two 24 AWG power conductors SFTP round patch cable. Jacketed in black UV resistant polyurethane that is halogen-free, flame-retardant and highly-flexible. Designed for fixed or portable applications in industrial and harsh environments.

Mfg. Part No.	Length (Ft./M)	Stock No.	Price Each 1-24
● USB2AA100PUHFFR	3.28/1	40M9941	79.12
● USB2AA200PUHFFR	6.56/2	40M9942	91.40
● USB2AA500PUHFFR	16.4/5	40M9943	105.41

(91182)

WATERPROOF USB TO STANDARD USB CABLE ASSEMBLIES

RoHS Compliant Available

L-com Global Connectivity

Waterproof A Plug to Standard B Plug

Waterproof Panel Mount A Receptacle to Standard A Plug

Waterproof Panel Mount B Receptacle to Standard A Plug

- Waterproof USB connectors to standard USB connectors, revision 2.0 compliant
- Threaded couplings and O-ring seals provide IP67 rating insuring protection against water and dust
- 30 micro inch gold contact plating provides reliable connections with repeated mating cycles.
- Rugged molded backshells insure durability

These waterproof cables can prevent costly repairs sometimes necessary when contaminants such as water and dust destroy standard USB connectors. Featuring a waterproof USB connector and a standard USB connector, these hard-to-find cables are IP67 rated.

Waterproof Panel Mount A Receptacle w/Lead Wires

➤ CONTINUED ➤

WATERPROOF USB TO STANDARD USB CABLE ASSEMBLIES (CONT.)

Mfg. Part No.	Length (m)	Stock No.	Price Each 1-9	Price Each 10-24
WATERPROOF USB A PLUG TO STANDARD USB B PLUG CABLE ASSEMBLIES				
● WPUSBAB-2M	2.0	90M2163	26.32	24.73
WATERPROOF PANEL MOUNT USB A RECEPTACLE TO STANDARD USB A PLUG CABLE ASSEMBLIES				
● WPUSBAX-05M	0.5	90M2166	23.39	21.97
● WPUSBAX-1M	1.0	08R6277	24.31	22.83
● WPUSBAX-2M	2.0	90M2167	25.35	23.82
● WPUSBAX-3M	3.0	08R6278	26.17	24.58
● WPUSBAX-5M	5.0	88M8921	29.41	27.63
WATERPROOF PANEL MOUNT USB B RECEPTACLE TO STANDARD USB A PLUG CABLE ASSEMBLIES				
● WPUSBBA-05M	0.5	90M2168	23.37	21.95
● WPUSBBA-5M	5.0	90M2170	27.72	26.04

WATERPROOF PANEL MOUNT USB A RECEPTACLE WITH LEAD WIRES

Mfg. Part No.	Lead Length (in.)	Stock No.	Price Each 1-9	Price Each 10-24
● WPUSBAF	10	90M2165	23.59	21.03

(147929)

USB PANEL MOUNT CABLE ASSEMBLIES

RoHS Compliant Available

L-com Global Connectivity

- Allows USB cables to be passed through panels or enclosures
- USB A panel mount receptacle to 5 position 2.54mm header receptacle connector or USB A plug
- 30 micro inch gold plated contacts provide reliable connections with repeated mating cycles
- Each assembly includes two 4-40 x 3/8″ Philips pan head mounting screws.
- Mounting hardware included

USB A Panel Receptacle to 5 Pos. Header Receptacle

USB B Panel Receptacle to 5 Pos. Header Receptacle

USB A Panel Receptacle to USB A Plug

USB A Panel Receptacle to USB B Plug

USB A PANEL MOUNT RECEPTACLE TO 5 POSITION HEADER RECEPTACLE CABLE ASSEMBLIES

Designed to make "board-to-box" USB connections a cinch, this light, flexible USB cable uses a pre-installed 5 pin female housing to a molded flange-mount USB type A female. Cable is double shielded for maximum EMI resistance and the power conductors are 26 AWG to make the overall cable more flexible. Each assembly includes two 4-40 x 3/8″ Philips pan head mounting screws.

Mfg. Part No.	Length (m)	Stock No.	Price Each 1-9	Price Each 10-24
● UPMA5-03M	0.3	08R6264	8.96	8.09
● UPMA5-05M	0.5	80R9300	9.13	8.24
● UPMA5-1M	1.0	08R6265	9.37	8.47
● UPMA5-3M	3.0	80R9301	10.81	9.77
USB B PANEL MOUNT RECEPTACLE TO 5 POSITION HEADER RECEPTACLE CABLE ASSEMBLIES				
● UPMB5-05M	0.5	80R9302	9.31	8.42
● UPMB5-1M	1.0	80R9303	9.46	8.54
● UPMB5-2M	2.0	80R9304	10.67	9.64
● UPMB5-3M	3.0	80R9305	11.04	9.97

USB A PANEL MOUNT RECEPTACLE TO USB A PLUG CABLE ASSEMBLIES

These USB 2.0 panel mount cables are perfect for use inside a box or enclosure. The USB Type A female side is flange-style panel mountable with an alternative, smaller body compared to the popular ECF504 series. This makes it a nice fit in applications with limited space. The molded panel mountable USB construction is rugged and robust, using 20 AWG power conductors and a 28 AWG twisted pair all under a double shield for maximum EMI resistance. Each assembly includes two 4-40 x 3/8″ Philips pan head mounting screws.

● UPMAA-05M	0.5	09P2408	10.34	9.33
● UPMAA-2M	2.0	09P2407	12.17	10.99
● UPMAA-5M	5.0	08R6263	15.84	14.30
USB A PANEL MOUNT RECEPTACLE TO USB B PLUG CABLE ASSEMBLIES				
● UPMAB-03M	0.3	80R9293	10.32	9.31
● UPMAB-05M	0.5	80R9294	10.55	9.54
● UPMAB-1M	1.0	80R9295	11.15	10.08
● UPMAB-2M	2.0	80R9296	12.40	11.20
● UPMAB-3M	3.0	80R9297	13.63	12.32
● UPMAB-4M	4.0	80R9298	14.06	12.71
● UPMAB-5M	5.0	80R9299	15.24	13.77

(147928)

USB (UNIVERSAL SERIAL BUS) CABLE ASSEMBLIES AND CONNECTORS

RoHS Compliant Available

multicomp

USB Type B and A

Fig. 1
USB Type A

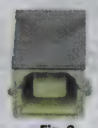


Fig. 2
USB Type B

Provide flexibility to personal computers, notebook computers, and most peripheral devices, such as ones using serial, parallel, keyboard, mice, or game ports. Feature "Plug-and-Play" instant PC expansion, "Hot-Swapping" capabilities - (PC automatically detects the peripheral and configures the necessary software). Permit transfer rates up to 12MB/sec. and support up to 127 devices. Allow data flow both ways between the computer and the peripheral. Meet PC98/PC99 requirements.

Mfg. Part No.	Fig.	Description	Stock No.	Price Each 1-49
SPC4798*	...	USB Cable A to B (1 Meter)	50N151	14.87
SPC4799*	...	USB Cable A to B (2 Meter)	50N152	18.60
SPC4800*	...	USB Cable A to B (3 Meter)	50N153	17.50
SPC4801*	...	USB Cable A to B (4 Meter)	50N154	43.35
SPC4802	1	USB4200A-S (B)	50N155	2.93
SPC4933	1	USB4200A-S (W)	50N156	2.93
SPC4936	2	USB4200B-S (B)	50N159	3.21
SPC4937	2	USB4200B-S (W)	50N160	3.71

* 1 Meter = 3.8'
(39579)

HIGH SPEED USB CABLES

RoHS Compliant Available

multicomp

Features:
- USB 2.0
- High Speed Connection Up To 480 Mbps
- Up to 40 Times Faster Than USB v1.1
- Designed For Low, Full and Hi-speed USB Transmissions For Optimal Performance
- UL Recognized, CSA certified
- PVC Platinum Gray Jacket

USB TYPE A MALE to USB MINI TYPE B MALE CABLES

4 Pin Male to 5 Pin Male, Host to Device Connection.Used to Connect Most Devices Without Attached Cables to a Computer System or a Hub

Mfg. Part No.	Length	Stock No.	Price Each 1-24
SPC20060	3	83K3789	2.07

USB TYPE A MALE to FEMALE CABLES

4 Pin Male to 4 Pin Female Host to Host Connection. Used to Extend The Length of a Cable or Connector That is Directly Attached to a Device.

SPC20062	6	83K3791	2.75
SPC20061	10	83K3790	8.44

USB TYPE A MALE to USB TYPE B MALE CABLES

4 pin to 4 pin, Host to Device Connection. Used to Connect Most Sevices Without Attached Cables to a Computer System or a Hub

SPC20065	3	83K3794	2.40
SPC20066	6	83K3795	2.75
SPC20063	10	83K3792	10.92
SPC20064	15	83K3793	12.96

(88531)

AMP AMPLIMITE® D-SUBMINIATURE CONNECTOR CABLE ASSEMBLIES

RoHS Compliant Available

TE connectivity

Authorized Distributor

Single-Ended, Male

Female-to-Female

Male-to-Female

- Black Thermoplastic Housing and Cover, Rated UL94V-0
- Phosphor Bronze Contacts

Available with D-subminiature plugs and receptacles (RS-232), in single-ended or double-ended configurations. Flat ribbon cable has 28 AWG tinned copper, 7/36 stranded conductors on 0.050" (1.27) centers. 6" length. UL recognized, CSA certified.

➤ CONTINUED ➤

AMP AMPLIMITE® D-SUBMINIATURE CONNECTOR CABLE ASSEMBLIES (CONT.)

Mfg. Part No.	Contacts	Stock No.	Price Each 1-9	10-24	25-49
D-SUBMINIATURE PLUG, SINGLE-ENDED – MALE					
NE2125-06-ROHS	25	05M6801	36.29	31.73	29.01
D-SUBMINIATURE RECEPTACLE, SINGLE-ENDED – FEMALE					
NE2337-06-ROHS	37	05M6810	68.98	60.30	55.14
D-SUBMINIATURE RECEPTACLE-TO-RECEPTACLE – FEMALE-TO-FEMALE					
NE2425-06-ROHS	25	05M6812	49.37	43.16	39.47
NE2437-06-ROHS	37	05M6813	67.04	58.61	53.59
D-SUBMINIATURE PLUG-TO-RECEPTACLE – MALE-TO-FEMALE					
NE2509-06-ROHS	9	05M6814	39.68	34.68	31.72
NE2515-06-ROHS	15	05M6815	44.67	39.06	35.71
NE2525-06-ROHS	25	05M6817	50.72	44.34	40.55
NE2537-06-ROHS	37	05M6818	70.54	61.66	56.38

(8106)

AMP AMP-LATCH® IDC NOVO SOCKET CONNECTOR CABLE ASSEMBLIES

RoHS Compliant Available

TE connectivity

Authorized Distributor

Socket Connector, Single-Ended

Socket Connector-to-Socket Connector

- Black Thermoplastic Housing and Recessed Cover, Rated UL94V-0
- Gold-Plated Phosphor Bronze Contacts on 0.100" x 0.100" Centers

Available with Novo socket connector, single-ended or Novo socket connector-to-Novo socket connector configuration. Flat ribbon cable has 28 AWG tinned copper, 7/36 stranded conductors on 0.050" (1.27) centers. UL recognized, CSA certified.

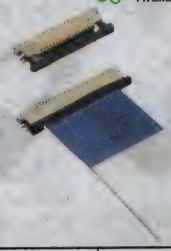
Mfg. Part No.	Contacts	Length	Stock No.	Price Each 1-9	10-24	25-49
SOCKET CONNECTOR, SINGLE-ENDED						
NE1410-36-ROHS	10	36"	05M6760	24.50	21.67	19.62
NE1414-36-ROHS	14	36"	05M6761	20.00	17.69	16.01
NE1420-36-ROHS	20	36"	05M6763	23.05	20.38	18.45
NE1426-36-ROHS	26	36"	05M6764	25.54	22.59	20.45
NE1434-36-ROHS	34	36"	05M6765	27.61	24.42	22.11
NE1440-36-ROHS	40	36"	05M6766	32.41	28.65	25.94
NE1460-36-ROHS	60	36"	05M6768	40.16	35.52	32.16
SOCKET CONNECTOR-TO-SOCKET CONNECTOR						
NE1610-06-ROHS	10	6"	05M6776	21.62	19.12	17.31
NE1610-18-ROHS	10	18"	05M6777	23.55	20.83	18.85
NE1614-06-ROHS	14	6"	05M6778	19.62	17.35	15.71
NE1614-18-ROHS	14	18"	05M6779	23.66	20.93	18.95
NE1616-06-ROHS	16	6"	05M6780	23.95	21.18	19.17
NE1616-18-ROHS	16	18"	05M6781	21.96	19.41	17.57
NE1620-18-ROHS	20	18"	05M6782	25.81	22.81	20.65
NE1626-06-ROHS	26	6"	05M6783	26.54	23.47	21.25
NE1626-18-ROHS	26	18"	05M6784	27.96	24.73	22.39
NE1634-06-ROHS	34	6"	05M6785	25.50	22.56	20.42
NE1634-18-ROHS	34	18"	05M6786	28.11	24.86	22.49

(8097)

1.00 MM CENTER FFC JUMPER CABLE

RoHS Compliant Available

molex



- Flat flex cable
- 1mm pitch spacing
- Type "A" backer

Mfg. Part No.	Circuits	Length (in.)	Stock No.	Price Each 1-49
21039-0249	10	3	58R9966	1.49
21039-0271	12	3	55H7299	2.33
21039-0309	14	1	55H7336	5.19
21039-0441	26	12	28M9355	9.56

➤ CONTINUED ➤

FLAT RIBBON/FLEX RIBBON CABLE ASSEMBLIES • VIDEO CABLE ASSEMBLIES

1.00 MM CENTER FFC JUMPER CABLE (CONT.)

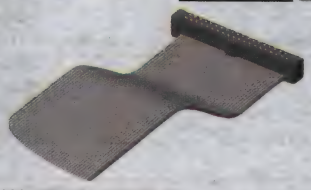
Mfg. Part No.	Circuits	Length (in.)	Stock No.	Price Each 1-49
● 21020-0105	10	6	55H6551	3.04
● 21020-0435	40	6	20M7087	6.78

(80527)

1.27mm (0.050") FFSD SERIES IDC CABLE ASSEMBLIES

RoHS Compliant Available

samtec



Socket cable assemblies feature PBT housing with 10u" gold plated beryllium copper contacts. Wire size: 30 AWG. Current rating: 0.5A. Operating temperature range: -40°C to +105°C. Mates with: FTS, FTSH, EHF, SHF, ESHF. **-N suffix** indicates notch polarization.

FFSD SERIES DOUBLE ENDED SOCKET-TO-SOCKET CABLE ASSEMBLIES

Mfg. Part No.	No. of Contacts	Length (in.)	Stock No.	Price Each 1-9	10-49	50-99
● FFSD-05-D-06.00-01-N	10	6	83K0581	11.43	10.79	9.88
● FFSD-10-D-06.00-01-N	20	6	61M0093	13.75	13.00	11.91
● FFSD-20-D-06.00-01-N	40	6	32M7035	19.74	18.66	17.08
● FFSD-25-D-06.00-01-N	50	6	11P4356	16.84	16.10	15.85
● FFSD-05-D-12.00-01-N	10	12	11P4342	12.23	11.56	10.58
● FFSD-10-D-12.00-01-N	20	12	11P4347	14.95	14.14	12.94
● FFSD-20-D-12.00-01-N	40	12	79M7223	15.86	15.15	14.91
● FFSD-25-D-12.00-01-N	50	12	11P4357	18.21	17.41	17.14

(136008)

HIGH-DEFINITION HDMI CABLE ASSEMBLIES

RoHS Compliant Available

BELDEN
SENDING ALL THE RIGHT SIGNALS

- Superior, uncompressed digital video and audio quality for home theater multimedia set-ups
- Supports standard, enhanced, or high-definition video and multi-channel digital audio
- Performance-tested to the highest resolution format — 1080 lines
- UL recognized for residential and commercial installations, including in-wall use

These HDMI cable assemblies deliver a reliable high-definition multimedia interface between any compatible digital audio/video source and a compatible digital audio and/or video monitor. Constructed of 26 AWG shielded twisted pair HDMI cable with black PVC jacket and strain-relief boot overmolded on 19-pin male connector at each end. Applications include connecting HDMI sources like broadband/cable set-top boxes, digital video recorders, DVD players, HD-DVD and Blu-ray players to displays like plasma screens, digital light projection (DLP) projectors, liquid-crystal displays (LCDs) and liquid crystal on silicon (LCOS) or digital image light amplification (D-ILA) devices, among others. All cable assemblies are 1080p (Category 2, version 1.3b) compliant except **mfg. part no. HD2007 010B5** which is 1080i (Category 1, version 1.3b) compliant.

Mfg. Part No.	Length Meters	Length Feet	Stock No.	Price Each 1-4
● HD2002 010B5	2	6.56	77M1861	33.17
● HD2004 010B5	4	13.12	77M1863	53.54

(105965)

SVGA MONITOR CABLES

RoHS Compliant Available

multicomp

SVGA Extension Cable

SVGA Replacement Cable

This cable is constructed with mini coaxial conductors to ensure a low loss of signal in the high resolution and high interference environments. It has pin 9 removed for compatibility with older IBM systems.

SVGA VIDEO EXTENSION CABLES

Mfg. Part No.	Length (ft)	Stock No.	Price Each
● SPC20050	6	83K3780	19.02
● SPC20045	10	83K3775	27.34
● SPC20047	15	83K3777	37.78
● SPC20048	25	83K3778	55.84
● SPC20049	50	83K3779	77.82

CONTINUED

SVGA MONITOR CABLES (CONT.)

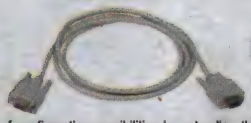
Mfg. Part No.	Length (ft)	Stock No.	Price Each
● SPC20051	75	83K3781	144.20
● SPC20046	100	83K3776	140.83
SVGA VIDEO REPLACEMENT CABLES			
● SPC20057	6	83K3787	19.04
● SPC20052	10	83K3782	27.57
● SPC20054	15	83K3784	38.19
● SPC20055	25	83K3785	54.75
● SPC20056	50	83K3786	78.70
● SPC20058	75	83K3788	142.14
● SPC20053	100	83K3783	147.87

(88542)

VGA SIGNAL CABLE ASSEMBLIES

RoHS Compliant Available

multicomp



Male/female cable broaden range of configuration possibilities by extending the distance between computer and monitor. Male/male cables can be used to connect computer to a video splitter of manual switchbox.

Mfg. Part No.	Description	Length	Stock No.	Price Each 1-24
● SPC20068	HDDB15 M/F Thumbscrews, Hex Nut	6'	83K3797	10.24
● SPC20067	HDDB15 M/F Thumbscrews, Hex Nut	10'	83K3796	14.93
● SPC20070	High Density DB15 M/M High Density	6'	83K3799	9.52
● SPC20069	High Density DB15 M/M High Density	10'	83K3798	12.14

(63177)

RGB VIDEO TO SVGA CABLE ASSEMBLIES

RoHS Compliant Available

multicomp

RGB to SVGA Video Cables with Ferrite Core, BNC Male to HD15 Male connection.

Mfg. Part No.	Length	Stock No.	Price Each 1-24
● SPC20035	6'	83K3766	29.49
● SPC20034	10'	83K3765	38.88

(63179)

DIGITAL VIDEO INTERFACE CABLE ASSEMBLIES

RoHS Compliant Available

multicomp

Digital Video Interface (DVI) is the new and upcoming standard for video on computers and LCD monitors. DVI has two sections of specifications, analog and digital. Available in Analog, Single Link or Dual Link.

Analog SVGA to DVI Adapter is used to connect a VGA video card to a flat panel display. Available in 6 and 10 foot lengths.

Mfg. Part. No	Description	Cable Length	Stock No.	Price Each 1-24
● SPC19915	Analog SVGA to DVI Adapter, DVI Analog Male - HD15 Male	6ft	83K3663	17.43
● SPC19914	Analog SVGA to DVI Adapter, DVI Analog Male - HD15 Male	10ft	83K3662	22.48
Dual link, Digital Video Interface Cable that transmits both single and dual DVI signals to one or two DVI Monitors. Available in 6 and 10 foot lengths.				
● SPC19950	Digital Video Interface (DVI-D), Dual Link, Cable M/M	6ft	83K3693	19.94
● SPC19949	Digital Video Interface (DVI-D), Dual Link, Cable M/M	10ft	83K3692	27.57
Single Link Digital Video Cables that transmits digital video signals between DVI output and DVI Monitor. Available in 6 and 10 foot lengths.				
● SPC19948	Digital Video Interface (DVI-D), Single Link, Cable M/M	6ft	83K3691	16.84
● SPC19947	Digital Video Interface (DVI-D), Single Link, Cable M/M	10ft	83K3690	23.10

(82330)

CATV/MATV CABLE ASSEMBLIES

RoHS Compliant Available

multicomp

Fig. 1

Fig. 3

Feature molded stress relief boot at each end.

Mfg. Part No.	Fig.	Description	Cable Length (ft.)	Stock No.	Price Each 1-99
SPC15231	1	F Plug-to-F Plug, RG59/U	3	79K4830	11.21
SPC15309	1	F Plug-to-F Plug, RG59/U	6	79K4903	11.01
SPC15314	3	RCA Plug-to-RCA Plug, RG59/U	3	79K4908	5.03
SPC15228	3	RCA Plug-to-RCA Plug, RG59/U	6	79K4827	10.46

(33375)

HIGH PERFORMANCE TEST CABLE ASSEMBLIES

NEW

RoHS Compliant Available

EMERSON. Network Power

Semflex Connectivity Solutions

Features:
- Precision stainless steel connectors
- Low loss PTFE tape Dielectric
- Triple shielded for >-90dB leakage at 18GHz
- Impedance: 50Ω

Applications:
- Test Equipment
- High temperature (+200° C)
- Low temperature(-65°C)

Emerson Network Power Connectivity Solutions offers the Semflex DKT test cable assembly series. This line incorporates high performance cable with equally high performance connectors with good performance up to 26GHz. These assemblies feature low loss triple shielded cable with a standard FEP Teflon® or optional stainless steel inter-linked armor tubing. The triple shielded construction of these cables give outstanding shielding effectiveness of greater than -90dB at 18GHz. These assemblies use precision stainless steel connectors with molded strain relief boots and are designed to meet both MIL-C-39012 and MIL-STD-348a. These cables feature low loss and good VSWR.

Mfg. Part No.	Cable Length	Connector Type A	Connector Type B	Stock No.	Price Each 1-9	10-24
2121-DKF-0012	12″	SMA Straight Plug	SMA Straight Plug	97W6768	109.50	106.30
2122-DKF-0012	12″	SMA Straight Plug	SMA Right Angle Plug	97W6774	130.99	127.17
2151-DKF-0012	12″	SMA Straight Plug	N Straight Plug	97W6779	141.31	137.18
5151-DKF-0012	12″	N Straight Plug	N Straight Plug	97W6783	147.70	143.39
5152-DKF-0012	12″	N Straight Plug	N Right Angle Plug	97W6788	163.12	158.35
2121-DKF-0018	18″	SMA Straight Plug	SMA Straight Plug	97W6769	115.41	112.04
5151-DKF-0018	18″	N Straight Plug	N Straight Plug	97W6784	153.38	148.90
2121-DKF-0024	24″	SMA Straight Plug	SMA Straight Plug	97W6770	116.11	112.72
2122-DKF-0024	24″	SMA Straight Plug	SMA Right Angle Plug	97W6775	142.32	138.16
2151-DKF-0024	24″	SMA Straight Plug	N Straight Plug	97W6780	152.64	148.18
5151-DKF-0024	24″	N Straight Plug	N Straight Plug	97W6785	159.03	154.39
5152-DKF-0024	24″	N Straight Plug	N Right Angle Plug	97W6789	174.45	169.35
2121-DKF-0048	48″	SMA Straight Plug	SMA Straight Plug	97W6772	138.76	134.71
2122-DKF-0048	48″	SMA Straight Plug	SMA Right Angle Plug	97W6777	164.98	160.16
2151-DKF-0048	48″	SMA Straight Plug	N Straight Plug	97W6782	175.28	170.16
5151-DKF-0048	48″	N Straight Plug	N Straight Plug	97W6787	181.69	176.39
5152-DKF-0048	48″	N Straight Plug	N Right Angle Plug	97W6791	197.09	191.34
2121-DKF-0036	36″	SMA Straight Plug	SMA Straight Plug	97W6771	127.44	123.72
2122-DKF-0036	36″	SMA Straight Plug	SMA Right Angle Plug	97W6776	153.65	149.16
2151-DKF-0036	36″	SMA Straight Plug	N Straight Plug	97W6781	163.95	159.17
5151-DKF-0036	36″	N Straight Plug	N Straight Plug	97W6786	170.36	165.39
5152-DKF-0036	36″	N Straight Plug	N Right Angle Plug	97W6790	185.78	180.35
2121-DKF-0060	60″	SMA Straight Plug	SMA Straight Plug	97W6773	150.09	145.71
2122-DKF-0060	60″	SMA Straight Plug	SMA Right Angle Plug	97W6778	176.30	171.15
2122-DKF-0012	12″	SMA Straight Plug	SMA Right Angle Plug	97W6774	130.99	127.17
2151-DKF-0012	12″	SMA Straight Plug	N Straight Plug	97W6779	141.31	137.18
5151-DKF-0012	12″	N Straight Plug	N Straight Plug	97W6783	147.70	143.39
5152-DKF-0012	12″	N Straight Plug	N Right Angle Plug	97W6788	163.12	158.35
2121-DKF-0018	18″	SMA Straight Plug	SMA Straight Plug	97W6769	115.41	112.04
5151-DKF-0018	18″	N Straight Plug	N Straight Plug	97W6784	153.38	148.90
2121-DKF-0024	24″	SMA Straight Plug	SMA Straight Plug	97W6770	116.11	112.72
2122-DKF-0024	24″	SMA Straight Plug	SMA Right Angle Plug	97W6775	142.32	138.16
2151-DKF-0024	24″	SMA Straight Plug	N Straight Plug	97W6780	152.64	148.18
5151-DKF-0024	24″	N Straight Plug	N Straight Plug	97W6785	159.03	154.39
5152-DKF-0024	24″	N Straight Plug	N Right Angle Plug	97W6789	174.45	169.35

CONTINUED

HIGH PERFORMANCE TEST CABLE ASSEMBLIES (CONT.)

Mfg. Part No.	Cable Length	Connector Type A	Connector Type B	Stock No.	Price Each 1-9	10-24
2121-DKF-0048	48″	SMA Straight Plug	SMA Straight Plug	97W6772	138.76	134.71
2122-DKF-0048	48″	SMA Straight Plug	SMA Right Angle Plug	97W6777	164.98	160.16
2151-DKF-0048	48″	SMA Straight Plug	N Straight Plug	97W6782	175.28	170.16
5151-DKF-0048	48″	N Straight Plug	N Straight Plug	97W6787	181.69	176.39
5152-DKF-0048	48″	N Straight Plug	N Right Angle Plug	97W6791	197.09	191.34
2121-DKF-0036	36″	SMA Straight Plug	SMA Straight Plug	97W6771	127.44	123.72
2122-DKF-0036	36″	SMA Straight Plug	SMA Right Angle Plug	97W6776	153.65	149.16
2151-DKF-0036	36″	SMA Straight Plug	N Straight Plug	97W6781	163.95	159.17
5151-DKF-0036	36″	N Straight Plug	N Straight Plug	97W6786	170.36	165.39
5152-DKF-0036	36″	N Straight Plug	N Right Angle Plug	97W6790	185.78	180.35
2121-DKF-0060	60″	SMA Straight Plug	SMA Straight Plug	97W6773	150.09	145.71
2122-DKF-0060	60″	SMA Straight Plug	SMA Right Angle Plug	97W6778	176.30	171.15

(211660)

RF COAXIAL N-N STRAIGHT PLUG CABLE ASSEMBLIES

RoHS Compliant Available

Amphenol Connex

N STRAIGHT PLUG TO N STRAIGHT PLUG

Mfg. Part No.	Cable	Length	Stock No.	Price Each 1-9
175101-07-06.00	RG142	6″	61T6126	46.12
175101-07-12.00	RG142	12″	61T6127	43.57
175101-07-18.00	RG142	18″	61T6128	51.55
175101-07-24.00	RG142	24″	61T6129	44.92
175101-07-36.00	RG142	36″	61T6130	47.46
175101-07-48.00	RG142	48″	61T6131	60.72
175101-10-06.00	LMR-400	6″	61T6132	28.65
175101-10-12.00	LMR-400	12″	61T6133	31.88
175101-10-24.00	LMR-400	24″	61T6134	31.93
175101-10-36.00	LMR-400	36″	61T6135	31.96
175101-10-48.00	LMR-400	48″	61T6136	40.56
175101-10-72.00	LMR-400	72″	93T6888	49.86
175101-19-06.00	RG58	6″	93T6889	18.31
175101-19-12.00	RG58	12″	93T6890	20.44
175101-19-24.00	RG58	24″	93T6891	23.24
175101-19-36.00	RG58	36″	93T6892	26.63
175101-19-48.00	RG58	48″	93T6893	31.04
175101-21-06.00	LMR-195	6″	93T6894	24.31
175101-21-12.00	LMR-195	12″	93T6895	27.04
175101-21-24.00	LMR-195	24″	93T6896	29.90
175101-21-36.00	LMR-195	36″	93T6897	33.57
175101-21-48.00	LMR-195	48″	93T6898	37.97
175101-22-06.00	LMR-240	6″	93T6899	26.38
175101-22-12.00	LMR-240	12″	93T6900	29.18
175101-22-24.00	LMR-240	24″	93T6901	32.48
175101-22-36.00	LMR-240	36″	93T6902	36.69
175101-22-48.00	LMR-240	48″	89T8448	44.97
175101-R1-03.00	0.085″ Semi Rigid	3″	93T6864	35.95
175101-R1-04.00	0.085″ Semi Rigid	4″	93T6865	36.87
175101-R1-05.00	0.085″ Semi Rigid	5″	93T6866	37.79
175101-R1-06.00	0.085″ Semi Rigid	6″	93T6867	38.71
175101-R1-07.00	0.085″ Semi Rigid	7″	93T6868	39.63
175101-R1-08.00	0.085″ Semi Rigid	8″	93T6869	39.63
175101-R1-09.00	0.085″ Semi Rigid	9″	93T6870	45.18
175101-R1-10.00	0.085″ Semi Rigid	10″	93T6871	46.18
175101-R1-11.00	0.085″ Semi Rigid	11″	93T6872	47.20
175101-R1-12.00	0.085″ Semi Rigid	12″	93T6873	40.52
175101-R1-18.00	0.085″ Semi Rigid	18″	93T6874	43.27

CONTINUED

RF/COAX CABLE ASSEMBLIES

RF COAXIAL N-N STRAIGHT PLUG CABLE ASSEMBLIES (CONT.)

Mfg. Part No.	Cable	Length	Stock No.	Price Each 1-9
● 175101-R1-24.00	0.085″ Semi Rigid	24″	93T6875	46.53
● 175101-R2-03.00	0.141″ Semi Rigid	3″	93T6876	36.59
● 175101-R2-04.00	0.141″ Semi Rigid	4″	93T6877	27.82
● 175101-R2-05.00	0.141″ Semi Rigid	5″	93T6878	38.69
● 175101-R2-06.00	0.141″ Semi Rigid	6″	93T6879	39.35
● 175101-R2-07.00	0.141″ Semi Rigid	7″	93T6880	43.91
● 175101-R2-08.00	0.141″ Semi Rigid	8″	93T6881	44.91
● 175101-R2-09.00	0.141″ Semi Rigid	9″	93T6882	45.89
● 175101-R2-10.00	0.141″ Semi Rigid	10″	93T6883	42.06
● 175101-R2-11.00	0.141″ Semi Rigid	11″	93T6884	47.91
● 175101-R2-12.00	0.141″ Semi Rigid	12″	93T6885	41.10
● 175101-R2-18.00	0.141″ Semi Rigid	18″	93T6886	43.85
● 175101-R2-24.00	0.141″ Semi Rigid	24″	93T6887	47.13

(207643)

3

SMA IN-SERIES FIXED LENGTH COAXIAL CABLE ASSEMBLIES

RoHS Compliant Available

Amphenol Connex

SMA STRAIGHT PLUG TO SMA STRAIGHT PLUG

Mfg. Part No.	Cable	Length	Stock No.	Price Each 1-9	Price Each 10-24
● 135101-01-06.00	RG316	6″	14R7738	14.82	13.47
● 135101-01-12.00	RG316	12″	14R7739	15.19	14.11
● 135101-01-24.00	RG316	24″	14R7740	17.25	16.02
● 135101-01-36.00	RG316	36″	14R7741	19.29	17.91
● 135101-02-06.00	RG174	6″	14R7742	14.47	13.15
● 135101-02-12.00	RG174	12″	14R7743	15.20	13.82
● 135101-02-24.00	RG174	24″	14R7744	15.87	14.74
● 135101-02-36.00	RG174	36″	14R7745	17.25	16.02
● 135101-03-06.00	RG316	6″	14R7746	15.69	14.57
● 135101-03-12.00	RG316	12″	14R7747	17.85	16.57
● 135101-03-24.00	RG316	24″	14R7748	19.39	18.62
● 135101-03-36.00	RG316	36″	14R7749	23.19	22.26
● 135101-04-06.00	RG58	6″	14R7750	14.47	13.15
● 135101-04-12.00	RG58	12″	14R7751	15.23	13.85
● 135101-04-24.00	RG58	24″	14R7752	15.98	14.83
● 135101-04-36.00	RG58	36″	14R7753	17.36	16.11
● 135101-04-48.00	RG58	48″	14R7754	18.79	17.45
● 135101-R1-03.00	0.085″ Semi Rigid	3″	83R7864	19.36	17.98
● 135101-R1-06.00	0.085″ Semi Rigid	6″	83R7867	19.48	18.33
● 135101-R1-12.00	0.085″ Semi Rigid	12″	83R7873	23.67	22.72
● 135101-R1-18.00	0.085″ Semi Rigid	18″	83R7874	27.38	26.28
● 135101-R1-24.00	0.085″ Semi Rigid	24″	83R7875	30.97	29.74
● 135101-R2-03.00	0.141″ Semi Rigid	3″	83R7876	18.57	17.83
● 135101-R2-06.00	0.141″ Semi Rigid	6″	83R7879	20.28	19.47
● 135101-R2-12.00	0.141″ Semi Rigid	12″	83R7885	24.31	23.33
● 135101-R2-18.00	0.141″ Semi Rigid	18″	83R7886	28.27	27.14
● 135101-R2-24.00	0.141″ Semi Rigid	24″	83R7887	34.37	31.02
SMA RIGHT ANGLE PLUG TO SMA STRAIGHT PLUG					
● 135103-01-06.00	RG316	6″	14R7755	16.50	15.32
● 135103-01-12.00	RG316	12″	14R7756	17.51	16.26
● 135103-01-24.00	RG316	24″	14R7757	19.57	18.17
● 135103-01-36.00	RG316	36″	14R7758	18.87	18.11
● 135103-02-06.00	RG174	6″	14R7759	16.13	14.98
● 135103-02-12.00	RG174	12″	14R7760	16.84	15.63

➤CONTINUED➤

SMA IN-SERIES FIXED LENGTH COAXIAL CABLE ASSEMBLIES (CONT.)

Mfg. Part No.	Cable	Length	Stock No.	Price Each 1-9	Price Each 10-24
SMA RIGHT ANGLE PLUG TO SMA STRAIGHT PLUG					
● 135103-03-06.00	RG316	6″	14R7763	18.14	16.84
● 135103-03-12.00	RG316	12″	14R7764	17.73	17.02
● 135103-03-36.00	RG316	36″	14R7766	25.33	24.32
● 135103-04-12.00	RG58	12″	14R7768	16.37	15.20
● 135103-04-24.00	RG58	24″	14R7769	17.80	16.53
● 135103-04-48.00	RG58	48″	14R7771	18.03	17.30
SMA RIGHT ANGLE PLUG TO SMA RIGHT ANGLE PLUG					
● 135104-01-06.00	RG316	6″	14R7772	18.82	17.47
● 135104-01-12.00	RG316	12″	14R7773	20.33	19.40
● 135104-01-24.00	RG316	24″	14R7774	19.12	18.35
● 135104-02-06.00	RG174	6″	14R7776	18.48	17.16
● 135104-02-12.00	RG174	12″	14R7777	19.18	17.81
● 135104-02-24.00	RG174	24″	14R7778	17.93	17.22
● 135104-02-36.00	RG174	36″	14R7779	19.12	18.35
● 135104-03-36.00	RG316	36″	14R7783	32.22	30.77
● 135104-04-06.00	RG58	6″	14R7784	17.49	16.24
● 135104-04-12.00	RG58	12″	14R7785	18.17	16.86
SMA BULKHEAD JACK TO SMA STRAIGHT PLUG					
● 135110-01-06.00	RG316	6″	14R7789	16.60	15.41
● 135110-01-12.00	RG316	12″	14R7790	17.54	16.28
● 135110-01-36.00	RG316	36″	14R7792	18.62	17.87
● 135110-02-06.00	RG174	6″	14R7793	16.26	15.10
● 135110-02-12.00	RG174	12″	14R7794	16.99	15.78
● 135110-02-24.00	RG174	24″	14R7795	18.35	17.03
● 135110-02-36.00	RG174	36″	14R7796	19.70	18.29
● 135110-03-06.00	RG316	6″	14R7797	19.55	18.65
● 135110-03-24.00	RG316	24″	14R7799	21.58	20.71
● 135110-04-12.00	RG58	12″	14R7802	17.85	16.57
● 135110-04-24.00	RG58	24″	14R7803	19.16	17.78
● 135110-04-48.00	RG58	48″	14R7805	19.05	18.29
SMA BULKHEAD JACK TO SMA RIGHT ANGLE PLUG					
● 135111-01-06.00	RG316	6″	14R7806	18.59	17.85
● 135111-01-24.00	RG316	24″	14R7808	21.73	20.87
● 135111-02-12.00	RG174	12″	14R7811	19.60	18.81
● 135111-02-36.00	RG174	36″	14R7813	22.37	21.48
● 135111-03-06.00	RG316-DS	6″	14R7814	20.76	19.93
● 135111-03-12.00	RG316-DS	12″	14R7815	22.92	22.00
● 135111-04-06.00	RG58	6″	14R7818	17.82	17.11
● 135111-04-48.00	RG58	48″	14R7822	22.87	21.96

(152401)

BNC TO SMA FIXED LENGTH COAXIAL CABLE ASSEMBLIES

RoHS Compliant Available

Amphenol Connex

BNC STRAIGHT PLUG TO SMA STRAIGHT PLUG

Mfg. Part No.	Cable	Length	Stock No.	Price Each 1-9	Price Each 10-24
● 245101-01-06.00	RG316	6″	99R5531	15.19	14.11
● 245101-01-12.00	RG316	12″	99R5532	16.26	15.10
● 245101-01-24.00	RG316	24″	99R5533	18.66	17.32
● 245101-01-36.00	RG316	36″	99R5534	14.23	12.70
● 245101-04-06.00	RG58	6″	99R5535	13.84	12.58
● 245101-04-12.00	RG58	12″	99R5536	14.63	13.30
● 245101-04-24.00	RG58	24″	99R5537	15.77	14.64
● 245101-04-36.00	RG58	36″	99R5538	17.31	16.07
● 245101-07-06.00	RG142	6″	99R5540	18.53	17.20
● 245101-07-12.00	RG142	12″	99R5541	20.39	19.58
● 245101-07-24.00	RG142	24″	99R5542	29.04	27.88
● 245101-07-36.00	RG142	36″	99R5543	35.47	30.52

(194515)

BNC IN-SERIES FIXED LENGTH COAXIAL CABLE ASSEMBLIES

RoHS Compliant Available

Amphenol Connex

➤CONTINUED➤

BNC IN-SERIES FIXED LENGTH COAXIAL CABLE ASSEMBLIES (CONT.)

BNC STRAIGHT PLUG TO BNC STRAIGHT PLUG

Mfg. Part No.	Cable	Length	Stock No.	Price Each 1-9	Price Each 10-24
115101-06-06.00	Belden 8218	6″	25T0732	9.60	8.80
115101-06-12.00	Belden 8218	12″	25T0733	9.07	8.30
115101-06-24.00	Belden 8218	24″	25T0734	15.27	14.18
115101-06-36.00	Belden 8218	36″	25T0735	17.28	16.04
115101-19-06.00	RG58	6″	25T0736	7.56	6.88
115101-19-12.00	RG58	12″	25T0737	7.78	7.07
115101-19-24.00	RG58	24″	25T0738	8.84	8.09
115101-19-36.00	RG58	36″	25T0739	8.88	8.08
115101-20-06.00	RG59	6″	25T0740	8.20	7.51
115101-20-12.00	RG59	12″	25T0741	8.13	7.39
115101-20-24.00	RG59	24″	25T0742	9.04	8.28
115101-20-36.00	RG59	36″	25T0743	8.38	7.62
115101-07-12.00	RG142	12″	86W5658	19.13	17.77
115101-07-24.00	RG142	24″	86W5659	26.08	23.55
115101-07-36.00	RG142	36″	86W5660	50.23	45.61
115101-07-48.00	RG142	48″	86W5661	58.08	52.74
115101-02-06.00	RG174	6″	86W5649	14.00	12.73
115101-02-12.00	RG174	12″	86W5650	14.34	13.04
115101-02-18.00	RG174	18″	86W5651	14.65	13.32
115101-02-24.00	RG174	24″	86W5652	14.96	13.61
115101-05-06.00	RG179	6″	86W5653	11.70	10.64
115101-05-12.00	RG179	12″	86W5654	11.70	10.64
115101-05-18.00	RG179	18″	86W5655	14.44	13.13
115101-05-24.00	RG179	24″	86W5656	17.35	15.76
115101-05-36.00	RG179	36″	86W5657	20.35	18.48
115101-30-06.00	LMR-100	6″	86W5667	14.46	13.15
115101-30-12.00	LMR-100	12″	86W5668	15.24	13.86
115101-30-18.00	LMR-100	18″	86W5669	15.28	14.19
115101-30-24.00	LMR-100	24″	86W5670	16.04	14.90
115101-30-36.00	LMR-100	36″	86W5671	17.52	16.27
115101-22-06.00	LMR-240	6″	86W5662	19.05	17.30
115101-22-12.00	LMR-240	12″	86W5663	16.16	15.01
115101-22-24.00	LMR-240	24″	86W5664	18.09	16.81
115101-22-36.00	LMR-240	36″	86W5665	17.63	15.92
115101-22-48.00	LMR-240	48″	86W5666	27.48	24.95

(194514)

MCX IN-SERIES FIXED LENGTH COAXIAL CABLE ASSEMBLIES

RoHS Compliant Available

Amphenol Connex

MCX STRAIGHT PLUG TO MCX STRAIGHT PLUG

Mfg. Part No.	Cable	Length	Stock No.	Price Each 1-4	Price Each 5-9
255101-05-06.00	RG179	6″	99R5547	22.92	22.00
255101-05-12.00	RG179	12″	99R5548	23.81	22.85
255101-05-24.00	RG179	24″	99R5549	17.97	17.11
255101-05-36.00	RG179	36″	99R5550	27.38	26.28
255101-08-06.00	RG178	6″	99R5551	16.11	14.95
255101-08-12.00	RG178	12″	99R5552	17.07	15.85
255101-08-24.00	RG178	24″	99R5553	19.21	17.83
255101-08-36.00	RG178	36″	99R5554	18.41	17.68
MCX STRAIGHT PLUG TO MCX RIGHT ANGLE PLUG					
255103-01-06.00	RG316	6″	99R5555	16.73	15.53
255103-01-12.00	RG316	12″	99R5556	17.72	16.45
255103-01-24.00	RG316	24″	99R5557	17.46	16.76
255103-01-36.00	RG316	36″	99R5558	19.23	18.46
MCX RIGHT ANGLE PLUG TO MCX RIGHT ANGLE PLUG					
255104-01-06.00	RG316	6″	99R5559	18.19	16.89
255104-01-12.00	RG316	12″	99R5560	19.23	17.86
255104-01-24.00	RG316	24″	99R5561	18.75	18.00
255104-01-36.00	RG316	36″	99R5562	20.51	19.69
255104-03-06.00	RG316-DS	6″	99R5563	19.29	17.91
255104-03-12.00	RG316-DS	12″	99R5564	18.69	17.94
255104-03-24.00	RG316-DS	24″	99R5565	23.26	22.33
255104-03-36.00	RG316-DS	36″	99R5566	26.10	25.06
255104-08-06.00	RG178	6″	99R5567	19.44	18.05
255104-08-12.00	RG178	12″	99R5568	17.84	17.13
255104-08-24.00	RG178	24″	99R5569	19.69	18.90
255104-08-36.00	RG178	36″	99R5570	21.35	20.49
MCX STRAIGHT PLUG TO MCX BULKHEAD JACK					
255110-01-06.00	RG316	6″	99R5571	16.76	15.56
255110-01-12.00	RG316	12″	99R5572	17.88	16.60

➤ CONTINUED ➤

MCX IN-SERIES FIXED LENGTH COAXIAL CABLE ASSEMBLIES (CONT.)

MCX STRAIGHT PLUG TO MCX BULKHEAD JACK

Mfg. Part No.	Cable	Length	Stock No.	Price Each 1-4	Price Each 5-9
255110-01-24.00	RG316	24″	99R5573	19.34	17.95
255110-01-36.00	RG316	36″	99R5574	18.71	17.96

(194512)

AMC TO MCX FIXED LENGTH COAXIAL CABLE ASSEMBLIES

RoHS Compliant Available

Amphenol Connex

Amphenol Connex AMC Between Series Cable Assemblies utilize Amphenol Microcoaxial style connectors on miniature cable types. Due to their small size, AMC assemblies are perfect for applications where space is limited. AMC cable assemblies have a 50 ohm impedance; with a frequency range of DC up to 6 GHz. These assemblies feature a snap on interface and assembly length is dimensioned in millimeters. Standard lengths are 50, 100, 150, 200, 250, and 300 millimeters, custom lengths may also be available. Heat shrink representation may vary.

AMC Right Angle Plug To MCX Bulkhead Jack

AMC RIGHT ANGLE PLUG TO MCX BULKHEAD JACK

Mfg. Part No.	Cable	Length (mm)	Stock No.	Price Each 1-9	Price Each 10-24
336503-12-0050	1.13mm	50	57T9550	20.64	16.63
336503-12-0100	1.13mm	100	57T9551	20.96	16.87
336503-12-0150	1.13mm	150	57T9552	21.29	17.15
336503-12-0200	1.13mm	200	57T9553	19.84	13.69
336503-12-0250	1.13mm	250	57T9554	20.09	13.86
336503-12-0300	1.13mm	300	57T9555	22.23	17.88

(197388)

AMC TO SMA FIXED LENGTH COAXIAL CABLE ASSEMBLIES

RoHS Compliant Available

Amphenol Connex

Amphenol Connex AMC Between Series Cable Assemblies utilize Amphenol Microcoaxial style connectors on miniature cable types. Due to their small size, AMC assemblies are perfect for applications where space is limited. AMC cable assemblies have a 50 ohm impedance; with a frequency range of DC up to 6 GHz. These assemblies feature a snap on interface and assembly length is dimensioned in millimeters. Standard lengths are 50, 100, 150, 200, 250, and 300 millimeters, custom lengths may also be available. Heat shrink representation may vary.

AMC Right Angle Plug To SMA Bulkhead Jack

AMC RIGHT ANGLE PLUG TO SMA BULKHEAD JACK

Mfg. Part No.	Cable	Length (mm)	Stock No.	Price Each 1-4	Price Each 5-9
336303-12-0050	1.13mm	50	57T9526	19.73	18.94
336303-12-0100	1.13mm	100	57T9527	19.89	19.10
336303-12-0150	1.13mm	150	57T9528	20.10	19.29
336303-12-0200	1.13mm	200	57T9529	20.28	19.47
336303-12-0250	1.13mm	250	57T9530	20.48	19.66
336303-12-0300	1.13mm	300	57T9531	20.64	19.82
AMC RIGHT ANGLE PLUG TO IP67 SMA BULKHEAD JACK					
336309-12-0050	1.13mm	50	57T9538	20.36	16.19
336309-12-0100	1.13mm	100	57T9539	18.39	13.22
336309-12-0150	1.13mm	150	57T9540	17.64	16.93
336309-12-0200	1.13mm	200	57T9541	17.82	17.11
336309-12-0250	1.13mm	250	57T9542	18.00	17.28
336309-12-0300	1.13mm	300	57T9543	18.18	17.46

(197389)

Custom Cable Assembiles to your specs to mate with the complete line of connectors!
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(212562)

RF/COAX CABLE ASSEMBLIES

AMC TO RP-SMA FIXED LENGTH COAXIAL CABLE ASSEMBLIES

RoHS Compliant Available

Amphenol Connex

Amphenol Connex AMC Between Series Cable Assemblies utilize Amphenol Microcoaxial style connectors on miniature cable types. Due to their small size, AMC assemblies are perfect for applications where space is limited. AMC cable assemblies have a 50 ohm impedance; with a frequency range of DC up to 6 GHz. These assemblies feature a snap on interface and assembly length is dimensioned in millimeters. Standard lengths are 50, 100, 150, 200, 250, and 300 millimeters, custom lengths may also be available. Heat shrink representation may vary.

AMC RIGHT ANGLE PLUG TO REVERSE POLARITY SMA (RP-SMA) BULKHEAD JACK

Mfg. Part No.	Cable	Length (mm)	Stock No.	Price Each 1-4	Price Each 5-9
● 336306-12-0050	1.13mm	50	57T9532	20.16	19.36
● 336306-12-0100	1.13mm	100	57T9533	20.35	19.53
● 336306-12-0150	1.13mm	150	57T9534	20.53	19.71
● 336306-12-0200	1.13mm	200	57T9535	25.63	20.63
● 336306-12-0250	1.13mm	250	57T9536	20.89	20.06
● 336306-12-0300	1.13mm	300	57T9537	21.07	20.23
AMC RIGHT ANGLE PLUG TO IP67 REVERSE POLARITY SMA (RP-SMA) BULKHEAD JACK					
● 336312-12-0050	1.13mm	50	57T9544	17.27	16.58
● 336312-12-0100	1.13mm	100	57T9545	21.59	17.38
● 336312-12-0150	1.13mm	150	57T9546	17.64	16.93
● 336312-12-0200	1.13mm	200	57T9547	17.82	17.11
● 336312-12-0250	1.13mm	250	57T9548	18.00	17.28
● 336312-12-0300	1.13mm	300	57T9549	18.18	17.46

(197390)

AMC TO TNC FIXED LENGTH COAXIAL CABLE ASSEMBLIES

RoHS Compliant Available

Amphenol Connex

Amphenol Connex AMC Between Series Cable Assemblies utilize Amphenol Microcoaxial style connectors on miniature cable types. Due to their small size, AMC assemblies are perfect for applications where space is limited. AMC cable assemblies have a 50 ohm impedance; with a frequency range of DC up to 6 GHz. These assemblies feature a snap on interface and assembly length is dimensioned in millimeters. Standard lengths are 50, 100, 150, 200, 250, and 300 millimeters, custom lengths may also be available. Heat shrink representation may vary.

AMC RIGHT ANGLE PLUG TO TNC BULKHEAD JACK

Mfg. Part No.	Cable	Length (mm)	Stock No.	Price Each 1-4	Price Each 5-9
● 336203-12-0050	1.13mm	50	57T9502	20.32	19.51
● 336203-12-0100	1.13mm	100	57T9503	20.51	19.69
● 336203-12-0150	1.13mm	150	57T9504	20.69	19.86
● 336203-12-0200	1.13mm	200	57T9505	20.94	20.10
● 336203-12-0250	1.13mm	250	57T9506	21.14	19.09
● 336203-12-0300	1.13mm	300	57T9507	21.35	20.49
AMC RIGHT ANGLE PLUG TO IP67 TNC BULKHEAD JACK					
● 336209-12-0050	1.13mm	50	57T9514	27.11	26.02
● 336209-12-0100	1.13mm	100	57T9515	27.33	26.24
● 336209-12-0150	1.13mm	150	57T9516	27.52	26.42
● 336209-12-0200	1.13mm	200	57T9517	27.70	26.59
● 336209-12-0250	1.13mm	250	57T9518	27.92	26.81
● 336209-12-0300	1.13mm	300	57T9519	28.11	26.98

(197391)

AMC TO RP-TNC FIXED LENGTH COAXIAL CABLE ASSEMBLIES

RoHS Compliant Available

Amphenol Connex

Amphenol Connex AMC Between Series Cable Assemblies utilize Amphenol Microcoaxial style connectors on miniature cable types. Due to their small size, AMC assemblies are perfect for applications where space is limited. AMC cable assemblies have a 50 ohm impedance; with a frequency range of DC up to 6 GHz. These assemblies feature a snap on interface and assembly length is dimensioned in millimeters. Standard lengths are 50, 100, 150, 200, 250, and 300 millimeters, custom lengths may also be available. Heat shrink representation may vary.

AMC RIGHT ANGLE PLUG TO REVERSE POLARITY TNC (RP-TNC) BULKHEAD JACK

Mfg. Part No.	Cable	Length (mm)	Stock No.	Price Each 1-4	Price Each 5-9
● 336206-12-0050	1.13mm	50	57T9508	21.60	20.73
● 336206-12-0100	1.13mm	100	57T9509	21.78	20.91
● 336206-12-0150	1.13mm	150	57T9510	22.03	21.15
● 336206-12-0200	1.13mm	200	57T9511	22.21	21.32
● 336206-12-0250	1.13mm	250	57T9512	22.42	21.52
● 336206-12-0300	1.13mm	300	57T9513	22.62	21.72

CONTINUED

AMC TO RP-TNC FIXED LENGTH COAXIAL CABLE ASSEMBLIES (CONT.)

AMC RIGHT ANGLE PLUG TO IP67 REVERSE POLARITY TNC (RP-TNC) BULKHEAD JACK

Mfg. Part No.	Cable	Length (mm)	Stock No.	Price Each 1-4	Price Each 5-9
● 336212-12-0050	1.13mm	50	57T9520	25.44	24.43
● 336212-12-0100	1.13mm	100	57T9521	25.67	24.65
● 336212-12-0150	1.13mm	150	57T9522	25.83	24.80
● 336212-12-0200	1.13mm	200	57T9523	26.01	24.97
● 336212-12-0250	1.13mm	250	57T9524	26.22	25.17
● 336212-12-0300	1.13mm	300	57T9525	26.40	25.34

(197392)

FIXED LENGTH COAX CABLE ASSEMBLIES

RoHS Compliant Available

JOHNSON

MMCX STRAIGHT PLUG TO MMCX STRAIGHT PLUG

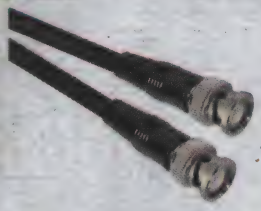
Mfg. Part No.	Cable Type	Length (in.)	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-99
● 415-0066-024	RG178	24	41K0566	28.05	21.04	17.74
MMCX STRAIGHT PLUG TO STRAIGHT SMA BULKHEAD JACK						
● 415-0070-006	RG178	6	41K0578	27.69	20.77	17.51
● 415-0071-006	RG316	6	41K0583	16.67	12.50	10.54
SMA STRAIGHT PLUG TO SMA STRAIGHT PLUG						
● 415-0025-006	RG178	6	22H5643	23.33	17.49	14.76
● 415-0025-012	RG178	12	22H5644	23.09	17.32	14.60
● 415-0025-024	RG178	24	22H5646	25.64	19.23	16.22
● 415-0025-036	RG178	36	22H5647	31.58	23.68	19.96
● 415-0029-006	RG316	6	22H5667	15.51	11.64	9.81
● 415-0029-012	RG316	12	22H5668	16.77	12.58	10.60
● 415-0029-024	RG316	24	22H5670	17.23	12.93	10.90
● 415-0029-036	RG316	36	22H5671	19.86	14.90	12.56
● 415-0033-006	RG316	6	22H5690	16.81	12.62	10.64
● 415-0033-036	RG316	36	22H5694	21.58	16.19	13.64
● 415-0038-036	RG58	36	22H5721	20.13	15.10	12.73
SMA STRAIGHT PLUG TO SMA STRAIGHT PLUG ON HAND FORMABLE MICROWAVE CABLE						
● 415-0081-004	...	4	84K8048	55.08	41.31	34.89
● 415-0081-008	...	8	84K8050	59.82	44.87	37.89
● 415-0082-012	...	12	84K8055	64.56	48.42	40.89
SMA STRAIGHT PLUG TO SMA STRAIGHT BULKHEAD JACK						
● 415-0031-006	RG316	6	22H5679	17.85	13.39	11.29
● 415-0031-012	RG316	12	22H5680	19.97	14.97	12.63
SMA STRAIGHT PLUG TO SMA RIGHT ANGLE PLUG						
● 415-0030-012	RG316	12	76K1123	25.83	19.38	16.34
● 415-0034-006	RG316	6	76K1131	21.59	16.20	13.66
SMB STRAIGHT PLUG TO SMB STRAIGHT PLUG						
● 415-0003-006	RG316	6	22H5511	28.55	21.41	18.05
● 415-0003-012	RG316	12	22H5512	29.67	22.25	18.76
● 415-0003-024	RG316	24	22H5514	31.17	23.39	19.71
SMB RIGHT ANGLE PLUG TO SMB RIGHT ANGLE PLUG						
● 415-0001-024	RG178	24	22H5502	30.24	22.68	19.12
BNC STRAIGHT PLUG TO BNC STRAIGHT PLUG — WITH HEAT SHRINK						
● 415-0056-012	Belden 8218	12	22H5809	12.58	9.44	7.96
● 415-0056-024	Belden 8218	24	22H5810	13.06	9.80	8.26
● 415-0056-036	Belden 8218	36	22H5811	14.31	10.73	9.04
SMA STRAIGHT PLUG TO BNC STRAIGHT PLUG						
● 415-0028-006	RG316	6	22H5661	16.31	12.23	10.31
● 415-0028-012	RG316	12	22H5662	18.37	13.78	11.62
● 415-0028-036	RG316	36	22H5665	19.46	14.60	12.31
● 415-0037-024	RG316	24	22H5715	17.46	13.10	11.04
● 415-0037-036	RG58	-	22H5716	18.55	13.92	11.74

(84953)

COAXIAL CABLE ASSEMBLIES

RoHS Compliant Available

L-com Global Connectivity



- 50 Ohm RF (Radio Frequency) transmission
- Gold plated contacts reduce insertion loss
- RG58C/U stranded center conductor enhances flexibility
- Crimp style attachment and molded strain relief result in a highly durable assembly

L-com's coaxial cable assemblies feature molded strain reliefs for maximum durability. In addition L-com's BNC connectors feature gold plated center contacts for minimal attenuation and nickel plated bodies for enhanced corrosion resistance.

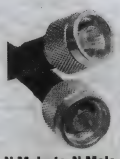
Mfg. Part No.	Length (ft.)	Stock No.	Price Each 1-9	Price Each 10-24
CC58C-12	12	11R7899	16.37	14.59

(110598)

RF COAXIAL CABLE ASSEMBLIES

RoHS Compliant Available

multicomp



N Male-to-N Male

SMA Male-to-SMA Male

SMA Male-to-SMA R/A Male

SMA R/A Male-to-SMA R/A Male

TNC Male-to-TNC Male

RF connectors paired with coaxial cable produce quality performance at an economical price. Meet MIL-I-45208 quality specifications. 100% electrically tested. Termination: crimp/crimp.

Mfg. Part No.	Cable	Length	Stock No.	Price Each 1-24
N MALE-TO-N MALE				
SPC20585	RG-8A/U	24″	04M7766	65.77
SPC20586	RG-8A/U	36″	04M7767	82.70
SPC20587	RG-8A/U	60″	04M7768	109.08
SPC20588	RG-8A/U	72″	04M7769	128.57
SPC20592	RG-58A/U	36″	04M7773	41.34
SPC20593	RG-58A/U	48″	04M7774	41.36
N MALE-TO-N FEMALE				
SPC20615	RG-58C/U	12″	04M7796	36.13
SPC20616	RG-58C/U	36″	04M7797	39.73
SMA MALE-TO-SMA MALE				
SPC20619	RG-55B/U	12″	04M7800	35.32
SPC20622	RG-55B/U	48″	04M7803	63.95
SPC20626	RG-58A/U	12″	04M7807	17.08
SPC20627	RG-58A/U	24″	04M7808	19.11
SPC20628	RG-58A/U	36″	04M7809	35.45
SPC20629	RG-58A/U	60″	04M7810	38.12
SPC20630	RG-58A/U	72″	04M7811	39.05
SPC20635	RG-58C/U	72″	04M7816	42.97
SMA MALE-TO-SMA RIGHT-ANGLE MALE				
SPC20637	RG-58A/U	24″	04M7818	37.45
SMA MALE-TO-SMA FEMALE				
SPC20642	RG-58A/U	48″	04M7823	31.56
SPC20644	RG-58C/U	12″	04M7825	27.17
TNC MALE-TO-TNC MALE				
SPC20651	RG-55B/U	12″	04M7832	40.84
SPC20654	RG-55B/U	72″	04M7835	74.63
SPC20655	RG-58A/U	24″	04M7836	39.28
SPC20656	RG-58C/U	12″	04M7837	36.33
SPC20658	RG-62A/U	24″	04M7839	44.00
SPC20660	RG-62A/U	60″	04M7841	51.46

(47171)

LC/LC FIBER OPTIC PATCH CORDS

RoHS Compliant Available

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Simplex

Duplex

LC to LC fiber optic patch cords. Great for high bandwidth connections at high speeds over medium distances. Cross connections between walls and computers, patch panels and equipment, or between two pieces of equipment. 62.5/125 microns core/cladding fiber diameter. Corning glass material. Additional lengths available; *go online or call.*

Mfg. Part No.	Cable Length (m)	Fiber Diameter	Stock No.	Price Each 1-24
SPC22854	3	62.5µm / 125µm	70M9308	23.54
LC/LC MULTIMODE DUPLEX FIBER OPTIC PATCH CORDS				
SPC22970	1	50µm / 125µm	70M9423	19.94
SPC22971	2	50µm / 125µm	70M9424	20.06
SPC22980	30	50µm / 125µm	70M9433	53.26
SPC19960	1	62.5µm / 125µm	83K3701	48.35
SPC19982	3	62.5µm / 125µm	83K3717	22.74
SPC19990	5	62.5µm / 125µm	83K3725	29.85
SPC19955	10	62.5µm / 125µm	83K3696	39.35

LC/LC MULTIMODE SIMPLEX FIBER OPTIC PATCH CORDS

(105257)

ST/LC FIBER OPTIC PATCH CORDS

RoHS Compliant Available

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ST to LC fiber optic patch cords. Great for high bandwidth connections at high speeds over medium distances. Cross connections between walls and computers, patch panels and equipment, or between two pieces of equipment. 62.5/125 microns core/cladding fiber diameter. Corning glass material. Additional lengths available; *go online or call.*

Duplex

ST/LC SINGLEMODE DUPLEX FIBER OPTIC PATCH CORDS

Mfg. Part No.	Cable Length (m)	Fiber Diameter	Stock No.	Price Each 1-24
SPC23043	1	9µm / 125µm	70M9493	33.41
ST/LC MULTIMODE DUPLEX FIBER OPTIC PATCH CORDS				
SPC19979	2	62.5µm / 125µm	83K3714	27.35

(108779)

SC/LC FIBER OPTIC PATCH CORDS

RoHS Compliant Available

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Simplex

Duplex

SC to LC fiber optic patch cords. Great for high bandwidth connections at high speeds over medium distances. Cross connections between walls and computers, patch panels and equipment, or between two pieces of equipment. 62.5/125 microns core/cladding fiber diameter. Corning glass material. Additional lengths available; *go online or call.*

SC/LC SINGLEMODE SIMPLEX FIBER OPTIC PATCH CORDS

Mfg. Part No.	Cable Length (m)	Fiber Diameter	Stock No.	Price Each 1-24
SC/LC MULTIMODE DUPLEX FIBER OPTIC PATCH CORDS				
SPC19984	3	62.5µm / 125µm	83K3719	21.90
SPC19992	5	62.5µm / 125µm	83K3727	24.72

(108775)

FIBER OPTIC CABLE ASSEMBLIES • CAT. 5/5E/6 CABLE ASSEMBLIES

ST/SC FIBER OPTIC PATCH CORDS

RoHS Compliant Available

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Simplex Duplex

ST to SC fiber optic patch cords. Great for high bandwidth connections at high speeds over medium distances. Cross connections between walls and computers, patch panels and equipment, or between two pieces of equipment. 62.5/125 microns core/cladding fiber diameter. Corning glass material. Additional lengths available; *go online or call.*

ST/SC SINGLEMODE SIMPLEX FIBER OPTIC PATCH CORDS

Mfg. Part No.	Cable Length (m)	Fiber Diameter	Stock No.	Price Each 1-24
● SPC22872	1	9µm / 125µm	70M9325	14.98
ST/SC MULTIMODE SIMPLEX FIBER OPTIC PATCH CORDS				
● SPC22867	1	62.5µm / 125µm	70M9320	13.54
● SPC22868	2	62.5µm / 125µm	70M9321	13.06
ST/SC MULTIMODE DUPLEX FIBER OPTIC PATCH CORDS				
● SPC23005	3	50µm / 125µm	70M9455	29.90
● SPC19980	2	62.5µm / 125µm	83K3715	24.40

(106782)

ST/ST FIBER OPTIC PATCH CORDS

RoHS Compliant Available

multicomp

Simplex Duplex

ST to ST fiber optic patch cords. Great for high bandwidth connections at high speeds over medium distances. Cross connections between walls and computers, patch panels and equipment, or between two pieces of equipment. 62.5/125 microns core/cladding fiber diameter. Corning glass material. Additional lengths available; *go online or call.*

ST/ST SINGLEMODE SIMPLEX FIBER OPTIC PATCH CORDS

Mfg. Part No.	Cable Length (m)	Fiber Diameter	Stock No.	Price Each 1-24
● SPC22887	1	9µm / 125µm	70M9340	13.71
ST/ST MULTIMODE SIMPLEX FIBER OPTIC PATCH CORDS				
● SPC22877	1	50µm / 125µm	70M9330	13.06
● SPC22879	3	50µm / 125µm	70M9332	14.86
● SPC22882	1	62.5µm / 125µm	70M9335	13.24
● SPC22883	2	62.5µm / 125µm	70M9336	14.54
● SPC22884	3	62.5µm / 125µm	70M9337	10.30
● SPC22885	5	62.5µm / 125µm	70M9338	18.51
● SPC22886	10	62.5µm / 125µm	70M9339	29.16
ST/ST MULTIMODE DUPLEX FIBER OPTIC PATCH CORDS				
● SPC19973	1	62.5µm / 125µm	83K3709	21.26
● SPC19981	2	62.5µm / 125µm	83K3716	22.92
● SPC19989	3	62.5µm / 125µm	83K3724	24.69
● SPC23063	30	62.5µm / 125µm	70M9513	75.26

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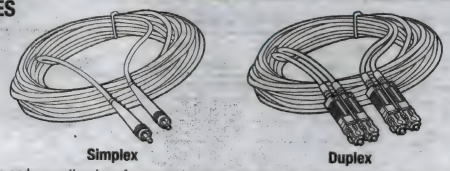
FIBER-OPTIC SIMPLEX AND DUPLEX PATCH CORD CABLE ASSEMBLIES

RoHS Compliant Available

Amphenol® FIBER OPTIC PRODUCTS



Simplex Duplex

Consistent quality and exceptional performance in every cable assembly for central office and other locations. Multimode and singlemode available in 900µm buffer, 2mm and 3mm jacket types. Duplex clips make for easy installation. Operating temperature: –40°C to +85°C. Custom cable assemblies with different connector types are available; *go online or call.*

➤ CONTINUED ➤

FIBER-OPTIC SIMPLEX AND DUPLEX PATCH CORD CABLE ASSEMBLIES (CONT.)

MULTIMODE SIMPLEX ST® PATCH CORDS

Mfg. Part No.	Fiber (Core/Clad)	Length m	Length Feet	Stock No.	Price Each 1-4
● 943-31255-10001	62.5/125	1	3.28	17M5534	22.66
● 943-31255-10002	62.5/125	2	6.56	17M5535	24.13
● 943-31255-10003	62.5/125	3	9.84	33C9285	29.43
● 943-31255-10005	62.5/125	5	16.40	18M9806	26.68
● 943-31255-10007	62.5/125	7	22.96	17M5536	33.99
● 943-31255-10010	62.5/125	10	32.80	17M5537	42.07
● 943-31255-10015	62.5/125	15	49.20	36C3057	88.39
● 943-31255-10020	62.5/125	20	65.60	17M5538	52.80
● 943-31255-10025	62.5/125	25	82.00	36C3059	68.07
● 943-31255-10030	62.5/125	30	98.40	17M5539	61.05
SINGLEMODE SIMPLEX SC PATCH CORDS					
● 942-31066-10003	9/125	3	9.84	36C3032	46.81
● 942-31066-10005	9/125	5	16.40	50F5329	96.25
● 942-31066-10006	9/125	6	19.68	36C3034	60.01
● 942-31066-10007	9/125	7	22.96	36C3035	66.17
● 942-31066-10010	9/125	10	32.80	91B6629	31.63
● 942-31066-10015	9/125	15	49.20	36C3038	103.13
● 942-31066-10020	9/125	20	65.60	36C3039	46.34
● 942-31066-10025	9/125	25	82.00	36C3040	87.18
● 942-31066-10030	9/125	30	98.40	50F5342	137.50
MULTIMODE DUPLEX ST® PATCH CORDS					
● 943-32255-10001	62.5/125	1	3.28	90F9509	41.67
● 943-32255-10002	62.5/125	2	6.56	17M5540	34.38
● 943-32255-10003	62.5/125	3	9.84	17M5541	49.59
● 943-32255-10005	62.5/125	5	16.40	90F9510	49.92
● 943-32255-10007	62.5/125	7	22.96	17M5542	60.42
● 943-32255-10010	62.5/125	10	32.80	17M5543	73.98
● 943-32255-10015	62.5/125	15	49.20	17M5544	70.54
● 943-32255-10020	62.5/125	20	65.60	17M5545	95.57
● 943-32255-10025	62.5/125	25	82.00	36C3069	109.10
● 943-32255-10030	62.5/125	30	98.40	17M5546	101.48
SINGLEMODE DUPLEX SC PATCH CORDS					
● 942-325EE-10001	9/125	1	3.28	95F4778	59.46
● 942-325EE-10002	9/125	2	6.56	36C3041	61.49
● 942-325EE-10003	9/125	3	9.84	17M5532	66.28
● 942-325EE-10007	9/125	7	22.96	17M5533	109.89
● 942-325EE-10010	9/125	10	32.80	95F4780	44.31
● 942-325EE-10015	9/125	15	49.20	36C3048	146.85
● 942-325EE-10020	9/125	20	65.60	36C3049	98.01
● 942-325EE-10025	9/125	25	82.00	36C3050	186.45
SINGLEMODE SIMPLEX LC PATCH CORDS					
● 942-610CC-10003	9/125	3	9.84	19C2379	68.34
● 942-610CC-10005	9/125	5	16.40	19C2380	72.47
● 942-610CC-10010	9/125	10	32.80	19C2381	82.78
● 942-610CC-10015	9/125	15	49.20	19C2382	93.09
● 942-610CC-10020	9/125	20	65.60	19C2383	103.40

(9219)

HIGH RELIABILITY HARSH ENVIRONMENT SHIELDED CAT 5e ETHERNET CABLE AND CORDSETS

RoHS Compliant Available

Amphenol Pcd

High-reliability Cat 5e Ethernet cordsets with RJ45 plug overmolded on each end. Constructed of a 4 pair, 24 AWG, 100 ohm SFTP round patch cable, designed to ISO/IEC 11801 Category 5e requirements. Cable contains 4 twisted pairs, tinned copper conductors, aluminum Mylar inner and tinner copper braid outer sheilds with Kevlar reinforcement strands. Jacketed in black UV-resistant polyurethane that is halogen-free, flame-retardant and highly flexable. Outer diameter: 0.28" (7.1mm) nom. Voltage rating: 230VMS. Impedance: 100+/-15 ohms, 1-100MHz. Temperature: -25°C to +70°C. For cable without RJ45 plug ends-bulk reels, please use Tyco RJ45 plug **5-569532-2**; *ordered separately online or call.*

CORDSETS WITH RJ45 PLUG OVERMOLDED ON EACH END

Mfg. Part No.	Length (Ft./M)	Stock No.	Price Each Each
● RJFSFTP5E0076	2.5/0.76	07J9743	68.15
● RJFSFTP5E0152	5/1.52	07J9744	78.06
● RJFSFTP5E0305	10/3.05	07J9745	95.17
● RJFSFTP5E0457	15/4.57	07J9746	110.91
● RJFSFTP5E0762	25/7.62	07J9747	138.64

➤ CONTINUED ➤

HIGH RELIABILITY HARSH ENVIRONMENT SHIELDED CAT 5e ETHERNET CABLE AND CORDSETS (CONT.)

BULK CABLE REELS WITHOUT OVERMOLDED PLUGS

Mfg. Part No.	Length (Ft./M)	Stock No.	Price Each Each
190-038045-00	328/100	20J4296	1013.63

(80157)

CATEGORY 5e PATCH CORDS

RoHS Compliant Available

L-com Global Connectivity

Blue Black White

Designed for today's high-density patch panels, these unique Category 5e molded patch cables feature an easy to depress "shark fin" snagless molded boot that makes connecting your cables easier. The clear boot also allows the color of each cable to be easily identified up to each port for easy cable identification. Each cable is tested for Category 5e performance to ensure you get maximum speed out of your network.

Mfg. Part No.	Color	Length (ft.)	Stock No.	Price Each 1-9	10-24
TRD815BL-7	Blue	7	88M4754	6.30	5.67
TRD815BL-25	Blue	25	88M4750	14.70	13.23
TRD815BLK-14	Black	14	88M4755	9.45	8.50
TRD815BLK-25	Black	25	65M7225	14.70	13.23
TRD815WHT-25	White	25	88M4779	14.70	13.23

(110592)

CATEGORY 5e DOUBLE SHIELDED PATCH CORDS

RoHS Compliant Available

L-com Global Connectivity

- Category 5E Double Shielded RJ45 LSZH Patch Cables for Industrial Environments
- Foil plus Braid Shielding for maximum EMI/RFI protection
- 24 AWG Solid conductors for termination to IDC blocks where required
- Exceeds EIA568 Category 5E requirements for high speed networks

For maximum protection against EMI/RFI interference, L-com's Double Shielded Patch cables are the right choice. With two layers of shielding (Foil plus Braid), data is protected from stray EMI/RFI fields. This series features 24AWG solid conductors allowing easy termination to IDC connectors. The rugged LSZH jacket is extra durable for harsh industrial environments.

Mfg. Part No.	Length (ft.)	Stock No.	Price Each 1-9	10-24
TRD855SIG-1	1	65H8297	15.03	13.99
TRD855SIG-3	3	74M9838	20.04	18.65
TRD855SIG-10	10	61H7694	35.08	32.67

(110593)

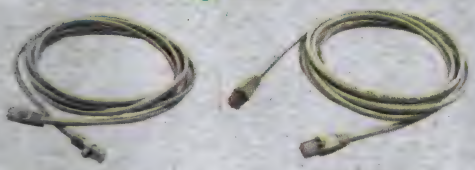
CATEGORY 5e AND 6 PATCH CORDS

UL CSA RoHS Compliant Available

molex

COMMON CHARACTERISTICS:

- Constructed of 4-pair 24AWG cable
- Assembled with modular RJ-45 plugs and color matched, anti-snag strain relief boots
- PVC jacket



Category 5e Category 6

CATEGORY 5e PATCH CORDS

Performance tested to 350MHz, the patch cord supports 10BaseT, 100BaseT, ATM, 1000BaseT, and emerging applications that may operate at extended frequencies.

Mfg. Part No.	Cable Length (m)	Color	Stock No.	Price Each 1-24	25-49
PCD-01040-0C	0.5	Red	77T2678	5.80	5.28
PCD-01040-0E	0.5	Grey	72T3067	6.12	5.58
PCD-01040-0H	0.5	Blue	77T2679	5.80	5.28
PCD-01040-0K	0.5	Yellow	77T2680	5.80	5.28
PCD-01041-0C	1	Red	77T2681	6.68	6.09
PCD-01041-0E	1	Grey	77T2682	6.68	6.09
PCD-01041-0H	1	Blue	77T2683	6.68	6.09
PCD-01041-0K	1	Yellow	77T2684	5.91	5.39
PCD-01047-0C	1.5	Red	77T2700	7.09	6.46
PCD-01047-0E	1.5	Grey	77T2701	7.09	6.46
PCD-01047-0H	1.5	Blue	77T2702	7.50	6.84
PCD-01047-0K	1.5	Yellow	77T2703	6.24	5.69
PCD-01042-0C	2	Red	77T2685	7.83	7.15
PCD-01042-0E	2	Grey	77T2686	7.32	6.68

CONTINUED

CATEGORY 5e AND 6 PATCH CORDS (CONT.)

Mfg. Part No.	Cable Length (m)	Color	Stock No.	Price Each 1-24	25-49
PCD-01042-0H	2	Blue	77T2687	7.83	7.15
PCD-01042-0K	2	Yellow	77T2688	6.47	5.90
PCD-01043-0C	3	Red	77T2689	8.65	7.88
PCD-01043-0E	3	Grey	77T2690	9.26	8.43
PCD-01043-0H	3	Blue	77T2691	8.65	7.88
PCD-01043-0K	3	Yellow	77T2692	7.25	6.62
PCD-01044-0C	5	Red	77T2693	12.68	11.56
PCD-01044-0E	5	Grey	77T2694	12.68	11.56
PCD-01044-0H	5	Blue	77T2695	12.68	11.56
PCD-01044-0K	5	Yellow	77T2696	8.50	7.75
PCD-01045-0C	7	Red	77T2697	15.56	14.18
PCD-01045-0E	7	Grey	77T2698	15.56	14.18
PCD-01045-0H	7	Blue	76T9177	15.56	14.18
PCD-01045-0K	7	Yellow	77T2699	15.56	14.18
CATEGORY 6 PATCH CORDS					
PCD-02040-0H	0.5	Blue	77T2704	12.78	11.63
PCD-02047-0C	1.5	Red	77T2713	15.11	13.76
PCD-02043-0C	3	Red	77T2705	21.99	20.02
PCD-02043-0H	3	Blue	77T2706	17.17	15.64
PCD-02044-0E	5	Grey	77T2707	24.01	21.87
PCD-02044-0H	5	Blue	77T2708	23.70	21.58
PCD-02045-0C	7	Red	77T2709	28.23	25.71
PCD-02045-0E	7	Grey	77T2710	29.92	27.25
PCD-02045-0H	7	Blue	77T2711	29.92	27.25
PCD-02045-0K	7	Yellow	77T2712	22.85	20.81

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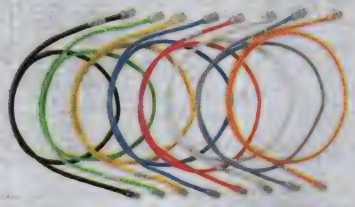
TX5e™ CATEGORY 5e PATCH CORDS

RoHS Compliant Available

PANDUIT®



These 8-conductor modular plug-to-modular plug patch cords exceed TIA/EIA-568-B.2 Category 5e and ISO11801 Class D standards and FCC Part 68 and IEC 60603-7 specifications. Constructed of Cat. 5e, 24 AWG UTP stranded cable and a Pan-Plug® modular plug on each end for superior performance. Plug contacts are plated with 50 microinches of gold for improved durability. Features patented tangle-free latch to prevent snags and provide easy release, saving time on frequent moves, adds and changes. Choice of a variety of lengths and colors to meet individual requirements. Additional lengths and colors available; *go online or call.*

Mfg. Part No.	Length (ft.)	Color	Stock No.	Price 1-2	3-4
UTPCH1Y	1	Off White	84K3929	5.55	5.32
UTPCH2Y	2	Off White	84K4002	6.57	6.29
UTPCH3Y	3	Off White	84K4041	7.04	6.75
UTPCH4Y	4	Off White	84K4050	7.54	7.23
UTPCH5Y	5	Off White	84K4065	7.73	7.39
UTPCH6Y	6	Off White	84K4079	8.15	7.80
UTPCH7GRY	7	Green	84K4084	8.74	8.37
UTPCH8Y	8	Off White	84K4102	8.62	8.26
UTPCH10Y	10	Off White	84K3943	10.19	9.76
UTPCH14Y	14	Off White	84K3963	11.96	11.47
UTPCH14ORY	14	Orange	84K3960	12.12	11.62
UTPCH16BUY	16	Blue	84K3972	12.24	11.72
UTPCH20Y	20	Off White	84K4016	14.73	14.11
UTPCH25BUY	25	Blue	84K4020	16.21	15.53
UTPCH25GRY	25	Green	84K4021	16.21	15.53
UTPCH25YLY	25	Yellow	84K4027	17.34	16.62

(83446)

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(212563)

CAT. 5/5E/6 CABLE ASSEMBLIES

CATEGORY 6 PATCH CORDS

RoHS Compliant Available

multicomp

- Booted (snagless) and non-booted versions — in 8 lengths and 5 popular colors
- 8-position RJ-45 module plug at each end — 50µ" gold-plated copper alloy contacts
- Category 6 component-rated, high-performance patch cable — 4 unshielded twisted pairs (UTP), 24 AWG, PVC jacket
- Cable speeds up to 550MHz
- Verified to EIA/TIA-568-B.2-1

Fig.1 Snagless Booted

Fig. 2 Non-Booted

SNAGLESS, BOOTED CATEGORY 6 PATCH CORDS — FIG. 1
Features snagless boots to prevent cable kinks and bent pins when removing from patch panels.

Mfg. Part No.	Color	Length (Ft.)	Stock No.	Price Each 1-24
● SPC23203	Black	1	66M8224	2.76
● SPC23208		3	66M8229	3.79
● SPC23213		5	66M8234	5.18
● SPC23218		7	66M8239	6.41
● SPC23204	Blue	1	66M8225	2.80
● SPC23209		3	66M8230	3.79
● SPC23214		5	66M8235	5.11
● SPC23224		10	66M8245	8.56
● SPC23212	Yellow	3	66M8233	3.79
● SPC23222		7	66M8243	6.33
● SPC23227		10	66M8248	8.27

ECONOMICAL, NON-BOOTED CATEGORY 6 PATCH CORDS — FIG. 2

● SPC23163	Black	1	66M8184	2.50
● SPC23168		3	66M8189	3.36
● SPC23173		5	66M8194	4.87
● SPC23193		20	66M8214	12.97
● SPC23198		25	66M8219	17.70
● SPC23164	Blue	1	66M8185	2.71
● SPC23169		3	66M8190	3.61
● SPC23174		5	66M8195	4.87
● SPC23179		7	66M8200	6.22
● SPC23184		10	66M8205	8.19
● SPC23194		20	66M8215	12.97
● SPC23199		25	66M8220	16.80

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COLOR-CODED STRAIN RELIEF BOOTS

RoHS Compliant Available

multicomp

Slide-on and snap-on boots accept 4-pair Category 5E UTP cable and RJ-45 connectors. Slide-on boot is used for pre-connector termination. Snap-on boot is used for post-connector termination. **Sold in packages of 10.**

SLIDE-ON BOOT

Mfg. Part No.	Color	Stock No.	Price per Pkg. 1-49
● SPC14911	Black	80K5353	5.97
● SPC14912	Yellow	80K5354	6.16
● SPC14913	Green	80K5355	5.85
● SPC14914	Blue	80K5356	6.06
● SPC14915	Red	80K5357	5.85
● SPC14916	White	80K5358	6.05
● SPC14917	Gray	80K5359	5.97

SNAP-ON BOOT

● SPC14918	Black	80K5360	9.73
● SPC14919	Yellow	80K5361	9.73
● SPC14921	Blue	80K5363	9.73
● SPC14924	Gray	80K5366	9.73

(35482)

CATEGORY 5e ENHANCED PATCH CORDS

RoHS Compliant Available

multicomp

- Booted (snagless) and non-booted versions — in 8 lengths and 7 popular colors
- 8-position RJ-45 module plug at each end — 15µ" gold-plated copper alloy contacts
- Category 5e LAN cable — 4 unshielded twisted pairs (UTP), 24 AWG, PVC jacket
- Cable speeds up to 350MHz
- Verified to EIA/TIA-568-B.2

Fig.1 Snagless Booted

Fig. 2 Non-Booted

SNAGLESS, BOOTED CATEGORY 5e UTP PATCH CORDS — FIG. 1
Features snagless boots to prevent cable kinks and bent pins when removing from patch panels.

➤ CONTINUED ➤

CATEGORY 5e ENHANCED PATCH CORDS (CONT.)

Mfg. Part No.	Lgth. (Ft.)	Color	Stock No.	Price Each 1-24	Mfg. Part No.	Lgth. (Ft.)	Color	Stock No.	Price Each 1-24
● SPC21956	1	Black	21M5869	1.37	● SPC21960	3	Black	21M5874	3.32
● SPC21957		Blue	21M5870	1.37	● SPC21961		Blue	21M5875	3.25
...		...	...	...	● SPC21993		Green	21M6501	3.27
...		...	...	...	● SPC21962		Red	21M5877	3.37
...		...	...	...	● SPC21963		Yellow	21M5898	3.27
● SPC21959		White	21M5873	1.28	● SPC21901		White	21M5657	3.37
● SPC21900	5	Black	21M5656	4.33	● SPC21964	7	Black	21M5908	5.00
● SPC21899		Blue	21M5650	2.54	...		...	...	...
● SPC21994		Green	21M6502	4.65	● SPC21966		Green	21M6001	5.24
● SPC21995		Red	21M6503	4.22	● SPC21967		Red	21M6018	5.28
● SPC21996		Yellow	21M6504	4.38	● SPC21968		Yellow	21M6019	4.69
...		...	...	...	● SPC21969		White	21M6021	5.00
● SPC21970	10	Black	21M6022	3.14	● SPC21976	14	Black	21M6030	8.93
● SPC21971		Blue	21M6025	6.58	...		...	...	...
● SPC21972		Green	21M6026	7.26	● SPC21978		Green	21M6034	8.90
● SPC21973		Red	21M6027	7.26	● SPC21979		Red	21M6035	8.74
● SPC21974		Yellow	21M6028	6.49	...		...	...	...
● SPC21982	25	Black	21M6038	13.79	● SPC21988	50	Black	21M6284	24.16
● SPC21983		Blue	21M6040	14.07	● SPC21989		Blue	21M6497	24.16
● SPC21984		Green	21M6155	14.23	● SPC21990		Green	21M6498	23.85
● SPC21985		Red	21M6156	15.80	...		...	...	...
● SPC21986		Yellow	21M6234	14.07	● SPC21991		Yellow	21M6499	23.85
● SPC21987		White	21M6246	14.06	● SPC21992		White	21M6500	23.95

ECONOMICAL, NON-BOOTED CATEGORY 5e UTP PATCH CORDS — FIG. 2

Mfg. Part No.	Lgth. (Ft.)	Color	Stock No.	Price Each 1-24	Mfg. Part No.	Lgth. (Ft.)	Color	Stock No.	Price Each 1-24
...	...	...	...	...	● SPC21911	3	Orange	21M5670	12.07
...	...	...	...	...	● SPC21939	14	Orange	21M5714	19.71

(41170)

MOLDED AND BOOTED PATCH CABLES

NEW

RoHS Compliant Available

ARTESYN EMBEDDED TECHNOLOGIES

AIM-Cambridge Connectivity Solutions

- RJ-45 Plug, Gold plated on contacts
- PVC Hood
- Cat5E Cable: UTP, 24 AWG, 4 twisted pairs, stranded bare copper, UL ETL EIA/TIA-568B verified category 5e
- CAT6 Cable: UTP, 24 AWG, 4 twisted pairs with PE divider, stranded bare copper, UL ETL EIA/TIA-568A verified category 6

CAT5E

CAT6

CAT 5E PATCH CABLE

Mfg. Part Np.	Color	Length (ft)	Stock No.	Price Each 1-9
● 73-7791-3	Black	3	66K9299	1.91
● 73-7791-5	Black	5	66K9300	2.28
● 73-7791-7	Black	7	66K9302	2.86
● 73-7792-3	Blue	3	66K9307	1.91
● 73-7792-5	Blue	5	66K9308	2.28
● 73-7792-10	Blue	10	66K9303	3.65
● 73-7792-14	Blue	14	66K9305	4.84
● 73-7790-1	Grey	1	54M8036	1.24
● 73-7790-3	Grey	3	66K9291	1.91
● 73-7790-5	Grey	5	66K9292	2.28
● 73-7790-10	Grey	10	66K9287	3.65
● 73-7790-25	Grey	25	66K9290	8.13

CAT 6 PATCH CABLE

● 73-8891-1	Black	1	54M8069	1.65
● 73-8891-3	Black	3	66K9357	2.15
● 73-8891-5	Black	5	66K9358	2.58
● 73-8891-7	Black	7	66K9360	3.19
● 73-8890-1	Grey	1	54M8068	1.65
● 73-8890-3	Grey	3	66K9349	2.15
● 73-8890-5	Grey	5	66K9350	2.77
● 73-8890-7	Grey	7	66K9352	3.43

(211424)

HA-VIS SMART PATCH CABLES - IP20 CATEGORY 6

RoHS Compliant Available

HARTING

Smart Patch Cable

Smart Patch Cable Detector

- Easy and fast illuminated detection of patch cables
- Capable for Multiport applications
- Transmission performance in accordance with Cat. 6 ISO/IEC 11 801

- Compact and space saving plug by dual boot design
- Good shielding against EMC influence
- Flame retardant and halogen-free

This RJ45 patch cable comes with illuminated RJ45 Ethernet plugs. The plugs are easy to identify from each other over distances up to 100 meters. Each RJ45 connector has an integrated LED which is illuminated by the detector even of the connectors are not plugged in and has no influence on data transmissions.

HA-VIS SMART PATCH CABLES

Mfg. Part No.	Length (m)	Stock No.	Price Each 1-9
09 47 474 7201	1	86R5605	19.67
09 47 474 7203	2	86R5606	22.66
09 47 474 7206	5	86R5607	42.00
09 47 474 7208	7	86R5608	50.93
09 47 474 7211	10	86R5609	67.95

HA-VIS SMART PATCH CABLE DETECTOR

Mfg. Part No.	Description	Stock No.	Price Each 1-9
09 47 900 0001	Smart Patch Cable Detector	86R5664	57.33

(198144)

HIGH RELIABILITY CAT 6 AND CAT 6A ETHERNET CABLE & CORDSETS

RoHS Compliant Available

Amphenol Pcd

NEW

CAT 6

CAT 6A

These 4 pairs, 26 AWG, 100 Ohm SFTP round patch cables are designed to the ISO / IEC 11801 Category 6 and 6A requirements. The cable contains 4 twisted pairs individually shielded, cabled, double shielded with kevlar reinforcement strands, jacketed in black UV resistant Polyurethane HFFR. Designed for fixed or portable applications in harsh environments. Cable also available separately; see below.

CATEGORY 6

Mfg. Part No.	Length (m)	Length (ft)	Stock No.	Price Each 1-4
RJFSFTP60075	0.75	2.46	08X2390	53.49
RJFSFTP60100	1	3.28	08X2391	56.18
RJFSFTP60150	1.5	4.92	08X2392	61.99
RJFSFTP60200	2	6.56	08X2393	67.78
RJFSFTP60250	2.5	8.2	08X2394	73.59
RJFSFTP60300	3	9.84	08X2395	79.38
RJFSFTP60350	3.5	11.48	08X2396	85.18
RJFSFTP60400	4	13.12	08X2397	90.96
RJFSFTP60450	4.5	14.76	08X2398	96.78
RJFSFTP60500	5	16.4	08X2399	102.59
RJFSFTP60600	6	19.68	08X2400	114.18
RJFSFTP60700	7	22.96	08X2401	125.78
RJFSFTP60800	8	26.24	08X2402	137.38
RJFSFTP60900	9	29.52	08X2403	148.96
RJFSFTP61000	10	32.8	08X2404	160.90
RJFSFTP61500	15	49.2	08X2405	229.55
RJFSFTP62000	20	65.6	08X2406	299.52
RJFSFTP62500	25	82	08X2407	361.45
RJFSFTP63000	30	98.4	08X2408	423.32
RJFSFTP63500	35	114.8	08X2409	485.25
RJFSFTP64000	40	131.2	08X2410	547.19
RJFSFTP64500	45	147.6	08X2411	609.09
RJFSFTP65000	50	164	08X2412	671.08
RJFSFTP66000	60	196.8	08X2413	826.69

CONTINUED

HIGH RELIABILITY CAT 6 AND CAT 6A ETHERNET CABLE & CORDSETS (CONT.)

CATEGORY 6A

Mfg. Part No.	Length (m)	Length (ft)	Stock No.	Price Each 1-4
RJFSFTP6A0075	0.75	2.46	08X2366	59.50
RJFSFTP6A0100	1	3.28	08X2367	61.90
RJFSFTP6A0150	1.5	4.92	08X2368	68.44
RJFSFTP6A0200	2	6.56	08X2369	74.78
RJFSFTP6A0250	2.5	8.2	08X2370	81.25
RJFSFTP6A0300	3	9.84	08X2371	87.67
RJFSFTP6A0350	3.5	11.48	08X2372	94.12
RJFSFTP6A0400	4	13.12	08X2373	100.55
RJFSFTP6A0450	4.5	14.76	08X2374	107.01
RJFSFTP6A0500	5	16.4	08X2375	113.47
RJFSFTP6A0600	6	19.68	08X2376	126.36
RJFSFTP6A0700	7	22.96	08X2377	139.23
RJFSFTP6A0800	8	26.24	08X2378	152.09
RJFSFTP6A0900	9	29.52	08X2379	164.97
RJFSFTP6A1000	10	32.8	08X2380	178.22
RJFSFTP6A1500	15	49.2	08X2381	252.38
RJFSFTP6A2000	20	65.6	08X2382	329.31
RJFSFTP6A2500	25	82	08X2383	397.54
RJFSFTP6A3000	30	98.4	08X2384	465.72
RJFSFTP6A3500	35	114.8	08X2385	533.85
RJFSFTP6A4000	40	131.2	08X2386	602.12
RJFSFTP6A4500	45	147.6	08X2387	670.28
RJFSFTP6A5000	50	164	08X2388	738.52
RJFSFTP6A6000	60	196.8	08X2389	874.92

CATEGORY 6 CABLE

Mfg. Part No.	Length (m)	Length (ft)	Stock No.	Price Each 1-4
19103117900	100	328	08X0969	1070.19
19103117901	300	984	08X0970	3087.08

CATEGORY 6A CABLE

19103119000	100	328	08X0971	1084.65
19103119001	300	984	08X0972	3253.95

(211425)

DATATUFF IP20 RJ45 INDUSTRIAL ETHERNET CORD SETS

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

NEW

- UL 1863 Listed communication circuit accessory
- UL 1277 Listed, Type TC 600V cable
- UL 444 CMR/CMX outdoor
- Foil and braid shield for excellent EMI/RFI noise immunity
- Bonded-Pair technology for robust electrical performance
- Oil Res II and sunlight-resistant TPE Jacket
- C(UL) CMG, IEEE 1202 & FT4 flame rating
- MSHA mining approved
- UL 1581 -40°C cold bend
- UL rated to 90°C
- RoHS compliant, CE approved

Belden's **DataTuff** TC cord sets with TC Listed industrial Ethernet cable* address a long-standing challenge—the ability to easily route industrial Ethernet cables in the most demanding heavy-industrial environments using existing 600V cable trays. In addition, the new cord sets are shielded to provide maximum performance in high-noise areas.

UNSHIELDED WITH SOLID CONDUCTORS

Mfg. Part No.	Category	Length (m)	Stock No.	Price Each 1-4
E501001 010S1	5e	1	51T9397	6.86
E501002 010S1	5e	2	51T9398	7.40
E601001 010S1	6	1	51T9445	7.47
E601002 010S1	6	2	51T9446	9.21

SHIELDED WITH SOLID CONDUCTORS

E505001 010S1	5e	1	51T9421	21.48
E505002 010S1	5e	2	51T9422	23.32
E605001 010S1	6	1	27X1645	28.46
E605002 010S1	6	2	27X1646	31.02

RUGGEDIZED PLUG KITS

Mfg. Part No.	Category	Stock No.	Price Each 1-4
R301601 000S1	DataTuff® Industrial Ethernet Ruggedized Plug Kit T568A Cat 6A AWG 22-24 UTP/STP IP20	27X1647	24.35
R301602 000S1	DataTuff® Industrial Ethernet Ruggedized Plug Kit T568B Cat 6A AWG 22-24 UTP/STP IP20	46W2566	24.35

(212277)

INSTRUMENTATION CABLE ASSEMBLIES • INDUSTRIAL CORD SETS

IEEE-488 GPIB CABLE ASSEMBLIES

RoHS Compliant Available

L-com Global Connectivity

- Cable meets IEEE-488 standards for connecting peripherals where EMI is an issue
- 30 microinch gold contact plating provides reliable connections with repeated mating cycles
- Custom stamped steel internal enclosure provides 100% shielding and a robust strain relief
- Molded backshells provide durability and increased strength at cable entry point

L-com IEEE-488 cable assemblies use double shielded cable that is adequate for many applications. Featuring all-molded connector ends which contribute to a long life expectancy and are impervious to breakage at the point where the cable enters the connector housing. A unique stamped steel internal enclosure provides 100% shielding and a robust strain relief. The CMB Cable Series meets all standards of the IEEE-488 interface, conforms with normal mounting procedures and is directly compatible with HP, AMP, and Amphenol.

Mfg. Part No.	Length (m.)	Stock No.	Price Each 1-9	Price Each 10-24
● CMB24-05M	0.5	91C5996	80.19	75.31
● CMB24-1M	1	91C6001	85.91	80.68
● CMB24-2M	2	31M9775	96.61	90.73
● CMB243M	3	96H8297	103.48	97.19

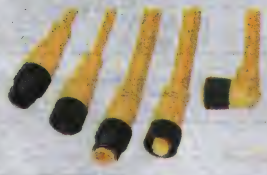
(110595)

SINGLE KEYWAY MICRO-CHANGE® MOLDED AND ATTACHABLE CONNECTORS

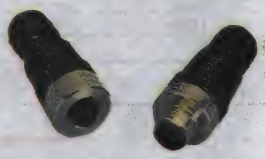
UL CSA RoHS Compliant Available Brad®

Straight Male Receptacle

Straight Female Receptacle



Single-Ended Cordsets



Field Attachable

- Current Rating, 4A
- Designed for 12mm and 18mm sensor applications
- Field attachable
- IP68; NEMA 6 watertight rating

Used with 12 and 18mm tubular proximity sensors, tubular photoelectric sensors, and modular controls. Mechanically-keyed mating parts eliminate mismating. Diameter, 0.57″ and length, 1.84″. Rated 4A, 300V. Oil-resistant, PVC jacketed cable. UL listed, CSA certified. Meets NEMA enclosure Type 6 and IEC enclosure IP68.

SINGLE KEYWAY CONNECTORS (DC) CORDSETS WITH MOLDED CONNECTOR AND PIGTAIL

Mfg. Part No.	Connector	Poles	Cable Length	Stock No.	Price Each 1-4
● 803000A09M050	Female-Straight	3	16.40′	15M4874	20.82
● 803001A09M050	Female-90°	3	16.40′	15M4875	21.53
● 804006A09M050	Male-Straight	4	16.40′	15M4877	23.90
● 804000A09M050	Female-Straight	4	16.40′	96F4295	24.95
● 804001A09M050	Female-90°	4	16.40′	15M4876	24.63
● 805006A09M050	Male-Straight	5	16.40′	14B2876	28.49
● 805000A09M050	Female-Straight	5	16.40′	31M6787	28.17
● 805001A09M050	Female-90°	5	16.40′	31M6788	28.17

STRAIGHT RECEPTACLES WITH 12″ WIRE LEADS

Mfg. Part No.	Connector	Poles	Cable Length	Stock No.	Price Each 1-4
● 8R3006A18A120	Male	3	...	14B2707	21.07
● 8R4006A18A120	Male	4	...	15M4870	23.73
● 8R4A00A18A120	Female	4	...	15M4869	18.04
● 8R5006A18A120	Male	5	...	15M4872	26.41
● 8R5A00A18A120	Female	5	...	15M4871	20.33

ATTACHABLE CONNECTORS

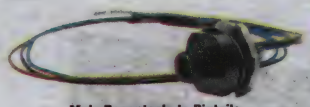
Route cable through tight places where molded-on connectors won't fit. Replace damaged molded connectors quickly. Micro Change® enables quick-disconnect wiring on specialty cable and pre-wired control system devices. Current rating: 4A. Meets IEC enclosure IP68 classification. Field wireable with a screwdriver.

Mfg. Part No.	Connector	Poles	Cable Fitting	Stock No.	Price Each 1-9
● 8A4006-32	Male	4	PG9	15M4864	33.18
● 8A4000-32	Female	4	PG9	31M6776	36.52
● 8A4007-31	Male (90°)	4	PG7	31M6777	31.21
● 8A4001-31	Female (90°)	4	PG7	15M4863	32.11
● 8A5006-31	Male	5	PG7	15M4866	33.52
● 8A5000-31	Female	5	PG7	15M4865	33.52
● 8A5007-31	Male (90°)	5	PG7	15M4867	33.32
● 8A5001-31	Female (90°)	5	PG7	83F1938	32.94

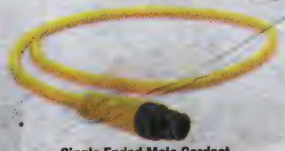
(2958)

MICROBOSS™ CABLE ASSEMBLIES

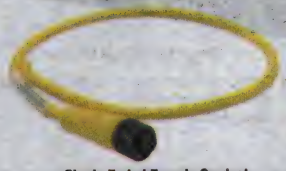
Amphenol SINE SYSTEMS



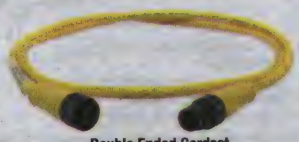
Male Receptacle to Pigtails



Single Ended Male Cordset



Single Ended Female Cordset



Double Ended Cordset

Amphenol Sine Systems factory automation solutions offers cable assemblies for use in all robotic and material handling systems, such as: conveyors, sorting, automated storage and retrieval, packaging, overhead transport, palletizing and any other options imaginable. The microBOSS™ M12 system is offered in 3, 4, and 5 pin configurations that deliver signal to a wide variety of devices, utilizing both UL AWM-style 2661 and CSA AWM I/II A/B cable. Characteristics: 22AWG, 4A, 300V.

MALE RECEPTACLES WITH PIGTAILS

Mfg. Part No.	No. of Pins	Length (m)	Stock No.	Price Each 1-4
● MC31PW03E1	3	0.33	44W3613	17.32
● MC41PW03E1	4	0.33	44W3626	19.10
● MC51PW03E1	5	0.33	44W3635	20.21
SINGLE ENDED CORDSET, MALE STRAIGHT				
● MC37AC05M020	3	2	44W3618	19.78
● MC37AC05M030	3	3	44W3619	20.78
● MC37AC05M050	3	5	44W3620	22.78
● MC37AC05M100	3	10	44W3621	27.78
● MC47AC05M020	4	2	44W3630	22.05
● MC47AC05M030	4	3	44W3631	21.94
● MC47AC05M050	4	5	44W3632	24.60
● MC47AC05M100	4	10	91T5978	31.26
● MC57AC05M020	5	2	44W3640	22.51
● MC57AC05M030	5	3	44W3641	24.05
● MC57AC05M050	5	5	44W3642	27.11
● MC57AC05M100	5	10	44W3643	36.86
SINGLE ENDED CORDSET, FEMALE STRAIGHT				
● MC34AC05M020	3	2	44W3614	19.92
● MC34AC05M030	3	3	44W3615	20.92
● MC34AC05M050	3	5	44W3616	24.51
● MC34AC05M100	3	10	44W3617	27.91
● MC44AC05M020	4	2	44W3627	20.76
● MC44AC05M030	4	3	44W3628	22.09
● MC44AC05M050	4	5	44W3629	24.76
● MC44AC05M100	4	10	91T5984	33.31
● MC54AC05M020	5	2	44W3636	22.83
● MC54AC05M030	5	3	44W3637	24.36
● MC54AC05M050	5	5	44W3638	27.42
● MC54AC05M100	5	10	44W3639	35.08
DOUBLE ENDED CORDSET, FEMALE STRAIGHT TO MALE STRAIGHT				
● MC37A4AC05M020	3	2	44W3622	21.85
● MC37A4AC05M030	3	3	44W3623	22.85
● MC37A4AC05M050	3	5	44W3624	24.85
● MC37A4AC05M100	3	10	44W3625	29.84
● MC47A4AC05M020	4	2	44W3633	24.47
● MC47A4AC05M030	4	3	44W3634	24.20
● MC47A4AC05M050	4	5	26T3845	26.87
● MC47A4AC05M100	4	10	91T5982	33.53
● MC57A4AC05M020	5	2	44W3644	26.57
● MC57A4AC05M030	5	3	44W3645	26.60
● MC57A4AC05M050	5	5	72T0738	29.66
● MC57A4AC05M100	5	10	26W7401	37.32

(208188)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

NANO-CHANGE® CONNECTORS

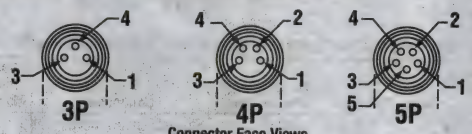
RoHS Compliant Available

Brad

Molded Straight Male

Field Attachable Straight Female

- 4 AMPS at 60VAC/75VDC
- Standard M8 sensor connector
- Connector dimensions (inches): Molded Straight Male .39D x 1.46L, Field Attachable Straight Female .457D x 1.772



Connector Face Views

Smallest family of multipin connectors designed for fast, error-free wiring in all types of industrial settings. Threaded couplings meet NEMA 6 & IP67 ratings for water resistance. Cordsets are 12' long and have a molded connector on one end and stripped wire leads on the other. Receptacles mount in a ½" knockout and have 12" stripped wire leads. Field attachable connectors have solder terminals and are used to repair cordsets in the field. 90° versions are available; *go online or call.*

CORDSETS WITH MOLDED CONNECTOR AND PIGTAIL

Mfg. Part No.	Description	Poles	Stock No.	Price Each 1-4	Price Each 5+
403006A10M040	Male, Straight	3	31M6592	19.86	18.78
403000A10M040	Female, Straight	3	14B1384	19.60	18.53
404006A10M040	Male, Straight	4	31M6593	23.96	22.65
404000A10M040	Female, Straight	4	32M1451	23.64	22.36
405006A10M040	Male, Straight	5	15M2441	29.85	28.22
405000A10M040	Female, Straight	5	15M2440	30.19	28.55
RECEPTACLES WITH 12" WIRE LEADS					
4R3P06A27C300	Male	3	53M5081	10.73	10.14
4R3P00A27C300	Female	3	53M5080	13.83	13.09
4R4P06A27C300	Male	4	53M5082	11.24	10.62
4R4P00A27C300	Female	4	14B1367	14.94	14.13
4R5P06A27C300	Male	5	53M5084	12.91	12.21
4R5P00A27C300	Female	5	53M5083	17.00	16.07
FIELD ATTACHABLE CONNECTORS					
N04FA03124	Female, Straight	4	14B952	29.25	26.44
N04MA03124	Male, Straight	4	31M5736	32.33	29.23

(62180)

MINI-CHANGE® MOLDED CONNECTORS

RoHS Compliant Available

Brad

- Current rating, 8A-13A
- Connector size (inches): Straight Female Plug .56D x 4.46L, 90° Female Plug .56D x 3.53L x 1.56W, Straight Male Plug .70D x 4.50L and 90° Male Plug .70D x 3.53L x 1.60W
- For 12mm and 18mm proximity sensors

Used with: 18mm and 30mm tubular proximity sensors, limit switches, rectangular proximity and photoelectric sensors, and solenoids. Applications include: sensors on conveyors, hydraulic valves, packing equipment, and material handling equipment. Quad-Beam® contact maintains constant pressure on the male pin to ensure optimum conductivity. High-performance, long-lasting gold over palladium-nickel plating on contact. An epoxy-coated coupling nut provides up to 500 hours of corrosion resistance and an anti-vibration guard. Plugs are straight or 90° and can be lighted. Rated 7-13A, 600V. Rated NEMA 6P. UL recognized, CSA certified.

CORDSET WITH MOLDED CONNECTOR AND PIGTAIL
6' CABLE LENGTH

Mfg. Part No.	Current Rating	Connector Type	Poles	Stock No.	Price Each 1-4
103002A01F060	13A	Male	3	18C1945	26.81
103000A01F060	13A	Female	3	15M1984	26.81
103001A01F060	13A	Female-90°	3	15M1985	27.15
104002A01F060	10A	Male	4	31M6367	32.49
104000A01F060	13A	Female	4	31M6364	35.04
104001A01F060	13A	Female-90°	4	31M6366	35.04
105002A01F060	8A	Male	5	18C1949	40.74
105000A01F060	8A	Female	5	18C3206	40.04
105001A01F060	8A	Female-90°	5	15M1988	40.04
208000A01F060	7A	Female	8	15M1997	81.78
15' CABLE LENGTH					
103002A01F150	13A	Male	3	18C1946	37.84
103000A01F150	13A	Female	3	18C3200	38.50
103001A01F150	13A	Female-90°	3	18C3202	38.28
104002A01F150	10A	Male	4	31M6368	51.02
104000A01F150	10A	Female	4	31M6365	52.49

➤CONTINUED➤

MINI-CHANGE® MOLDED CONNECTORS (CONT.)

15' CABLE LENGTH

Mfg. Part No.	Current Rating	Connector Type	Poles	Stock No.	Price Each 1-4
105002A01F150	8A	Male	5	18C1950	61.51
105000A01F150	8A	Female	5	18C3207	61.51
105001A01F150	8A	Female-90°	5	15M1989	62.21

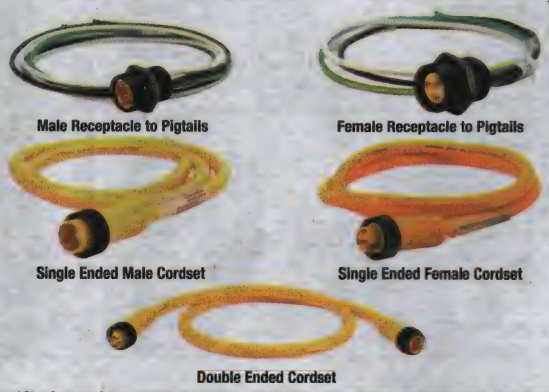
RECEPTACLE WITH 12' WIRE LENGTHS

Mfg. Part No.	Current Rating	Receptacle Type	Poles	Stock No.	Price Each 1-4
1R3006A20A120	13A	Male-Straight	3	15M1980	16.03
1R3007A20A120	13A	Male-90°	3	18C3192	20.57
1R3004A20A120	13A	Female	3	15M1979	21.85
1R4006A20A120	10A	Male-Straight	4	15M1981	18.37
1R4004A20A120	10A	Female	4	18C1943	23.20
1R5006A20A120	8A	Male-Straight	5	18C3197	20.95
1R5004A20A120	8A	Female	5	15M1982	26.18
2R8006A20A120	7A	Male	8	15M1996	42.71

(2956)

MINIBOSS™ CABLE ASSEMBLIES

Amphenol SINESYSTEMS



Male Receptacle to Pigtails

Female Receptacle to Pigtails

Single Ended Male Cordset

Single Ended Female Cordset

Double Ended Cordset

Amphenol Sine Systems factory automation solutions offers cable assemblies for use in all robotic and material handling systems, such as: conveyors, sorting, automated storage and retrieval, packaging, overhead transport, palletizing and any other options imaginable. The miniBOSS™ system is offered in 2, 3, 4, 5 and 6 position configurations. This system allows for cost-effective power and signal distribution, utilizing UL STOOW/CSA Type ST cable, as well as High Flex TPE jacketed UL Listed TC-ER cable. Characteristics: 16AWG, 600V, up to 13A.

MALE RECEPTACLES WITH PIGTAILS

Mfg. Part No.	No. of Pins	Length (ft)	Stock No.	Price Each 1-9
MN31PW02E1	3	1	44W3552	12.69
MN41PW02E1	4	1	44W3572	14.24
MN51PW02E1	5	1	44W3592	15.77
FEMALE RECEPTACLES WITH PIGTAILS				
MN32PW02E1	3	1	44W3553	13.97
MN42PW02E1	4	1	44W3573	15.93
MN52PW02E1	5	1	44W3593	17.14
SINGLE ENDED CORDSET, MALE STRAIGHT				
MN33AC01E6	3	6	44W3559	20.36
MN33AC01E12	3	12	44W3554	26.02
MN33AC01E15	3	15	44W3555	28.85
MN33AC01E20	3	20	44W3556	33.57
MN33AC01E25	3	25	44W3557	38.29
MN33AC01E30	3	30	44W3558	40.32
MN43AC01E6	4	6	44W3579	17.14
MN43AC01E12	4	12	44W3574	29.44
MN43AC01E15	4	15	44W3575	33.00
MN43AC01E20	4	20	44W3576	38.92
MN43AC01E25	4	25	44W3577	42.03
MN43AC01E30	4	30	44W3578	47.58
MN53AC01E6	5	6	44W3599	27.44
MN53AC01E12	5	12	44W3594	34.92
MN53AC01E15	5	15	44W3595	39.43
MN53AC01E20	5	20	44W3596	44.01
MN53AC01E25	5	25	44W3597	51.06
MN53AC01E30	5	30	44W3598	58.11
SINGLE ENDED CORDSET, FEMALE STRAIGHT				
MN34AC01E6	3	6	44W3571	21.19
MN34AC01E12	3	12	44W3566	26.85
MN34AC01E15	3	15	44W3567	29.68

➤CONTINUED➤

INDUSTRIAL CORD SETS

MINIBOSS™ CABLE ASSEMBLIES (CONT.)

SINGLE ENDED CORDSET, FEMALE STRAIGHT

Mfg. Part No.	No. of Pins	Length (ft)	Stock No.	Price Each 1-9
● MN34AC01E20	3	20	44W3568	34.40
● MN34AC01E25	3	25	44W3569	39.12
● MN34AC01E30	3	30	44W3570	41.10
● MN44AC01E6	4	6	44W3591	23.40
● MN44AC01E12	4	12	44W3586	30.50
● MN44AC01E15	4	15	44W3587	34.05
● MN44AC01E20	4	20	44W3588	39.97
● MN44AC01E25	4	25	44W3589	43.02
● MN44AC01E30	4	30	44W3590	48.57
● MN54AC01E6	5	6	44W3611	27.06
● MN54AC01E12	5	12	44W3606	36.08
● MN54AC01E15	5	15	44W3607	40.34
● MN54AC01E20	5	20	44W3608	45.11
● MN54AC01E25	5	25	44W3609	52.16
● MN54AC01E30	5	30	44W3610	59.21

DOUBLE ENDED CORDSET, FEMALE STRAIGHT TO MALE STRAIGHT

● MN33A4AC01E6	3	6	44W3565	24.62
● MN33A4AC01E12	3	12	44W3560	28.68
● MN33A4AC01E15	3	15	44W3561	31.51
● MN33A4AC01E20	3	20	44W3562	36.23
● MN33A4AC01E25	3	25	44W3563	38.39
● MN33A4AC01E30	3	30	44W3564	42.81
● MN43A4AC01E6	4	6	44W3585	25.75
● MN43A4AC01E12	4	12	44W3580	32.85
● MN43A4AC01E15	4	15	44W3581	36.40
● MN43A4AC01E20	4	20	44W3582	39.68
● MN43A4AC01E25	4	25	44W3583	45.23
● MN43A4AC01E30	4	30	44W3584	50.78
● MN53A4AC01E6	5	6	44W3605	30.08
● MN53A4AC01E12	5	12	44W3600	41.46
● MN53A4AC01E15	5	15	44W3601	40.89
● MN53A4AC01E20	5	20	44W3602	47.94
● MN53A4AC01E25	5	25	44W3603	54.99
● MN53A4AC01E30	5	30	44W3604	62.04

(208190)

DUAL KEYWAY MICRO-CHANGE® MOLDED CONNECTORS

RoHS Compliant Available

Brad

Male & Female Connectors

Male

Female

- Current Rating, 4A
- Designed for 12mm and 18mm sensor applications
- IP68; NEMA 6P water-tight rating

Used with 12 and 18mm tubular proximity sensors, tubular photoelectric sensors, and modular controls. Mechanically-keyed mating parts eliminate mismating. Diameter, 0.57″ and length, 1.84″. Rated 4A, 300V. Oil-resistant, PVC jacketed cable. UL listed, CSA certified. Meets NEMA enclosure Type 6 and IEC enclosure IP68.

DUAL KEYWAY CONNECTORS (AC) CORDSETS WITH MOLDED CONNECTOR AND PIGTAIL

Mfg. Part No.	Connector	Poles	Cable Length	Stock No.	Price Each 1-4
● 702006D02F060	Male-Straight	2	6.00′	39C1969	20.45
● 702000D02F120	Female-Straight	2	12.00′	53M5334	27.90
● 703006D02F060	Male-Straight	3	6.00′	15M4349	23.27
● 703000D02F120	Female-Straight	3	12.00′	96F4277	30.26
● 703001D02F120	Female- 90°	3	12.00′	96F4279	30.26
● 704000D02F120	Female-Straight	4	12.00′	53M5335	37.59
● 705000D02F120	Female-Straight	5	12.00′	14B2617	47.73

STRAIGHT RECEPTACLES WITH 12″ WIRE LEADS

Mfg. Part No.	Connector	Poles	Cable Length	Stock No.	Price Each
● 7R3006A19A120	Male	3	...	14B2400	19.61
● 7R3A00A19A120	Female	3	...	15M4344	15.61
● 7R5006A19A120	Male	5	...	17M8459	25.62

(60420)

M12 EUROFAST CORDSETS

RoHS Compliant Available

TURCK works Industrial Automation

- Standard plug body
- Nickel plated brass coupling nut
- T barb fitting
- NEMA 6P/IP68 rated

EUROFAST CORDSETS, STANDARD BODY PLUG TO STANDARD BODY PLUG

Mfg. Part No.	No. of Wires	Length (m)	Connector	Cable Jacket Material	Stock No.	Price Each
● RK 4.4T-2-RS 4.4T	4	2	Straight Female/Straight Male	PVC	41M4053	36.20
● RK 4.5T-2-RS 4.5T	5	2	Straight Female/Straight Male	PVC	99M0766	38.00

EUROFAST CORDSETS, STANDARD BODY PLUG TO PIGTAIL

● RK 4T-5	3	5	Straight Female	PVC	99M0770	27.10
● RK 4.4T-2	4	2	Straight Female	PVC	41M4052	21.20
● RK 4.4T-5	4	5	Straight Female	PVC	41M4058	33.60
● RK 4.5T-2	5	2	Straight Female	PVC	61M4492	22.40
● RK 4.5T-5	5	5	Straight Female	PVC	99M0767	36.00
● RS 4.5T-2	5	2	Straight Male	PVC	99M0778	22.40

(93070)

M12 EUROFAST RECEPTACLES

RoHS Compliant Available

TURCK works Industrial Automation

- Male or female receptacle
- NEMA 1,3, 4, 6P and IEC IP68 protection
- 4-wire or 8-wire termination
- Current rating: 4A (4-wire); 2A (8-wire)

FS

FK

MALE

Mfg. Part No.	Mount	Application	Length (m)	Stock No.	Price Each
● FS 4-0.5	Front	Mate with 3-wire Cordset	0.5	99M0758	11.10
● FS 4.4-0.3	Front	Mate with 4-wire Cordset	0.3	41M3248	11.30
● FS 4.4-0.5	Front	Mate with 4-wire Cordset	0.5	66M8074	11.30
● FS 4.5-0.5	Front	Mate with 5-wire Cordset	0.5	99M0757	12.50
● FS 8-0.5	Front	Mate with 8-wire Cordset	0.5	41M3249	16.20
● FSFD 4.5-0.5	Rear	Mate with 5-wire Cordset	0.5	54M9958	17.70

FEMALE

● FK 4.4-0.3	Front	Mate with 4-wire Cordset	0.3	41M3230	11.30
● FK 4.4-0.5	Front	Mate with 4-wire Cordset	0.5	66M8049	11.30
● FK 4.5-0.5	Front	Mate with 5-wire Cordset	0.5	99M0751	12.50
● FK 8-0.5	Front	Mate with 8-wire Cordset	0.5	41M3231	16.20
● FKFD 4.5-0.5	Rear	Mate with 5-wire Cordset	0.5	99M0754	17.70

(93071)

FIELD WIREABLE CONNECTORS

RoHS Compliant Available

TURCK works Industrial Automation

Minifast

Picofast

Eurofast

- Field wireable
- Standard keyway
- Straight housing style
- Eurofast series offers IEC IP 67 protection

MALE

Mfg. Part No.	No. of Pins	Series	Cable Range	Stock No.	Price Each
● BS 4131-0/9	3	Minifast	6-8 mm	41M2264	31.20
● BS 5131-0	3	Picofast	3-5 mm	41M2266	20.60
● BS 5141-0	4	Picofast	3-5 mm	41M2267	20.60
BS 8141-0/LABEL*	4	Eurofast	4-6 mm	99M0746	22.40
● BS 8141-0/PG9	4	Eurofast	4-8 mm	41M2268	24.23
● BS 8141-0/PG9/LABEL*	4	Eurofast	6-8 mm	99M0747	22.40
● BS 8151-0/PG9	5	Eurofast	6-8 mm	55M3352	32.49

➤ CONTINUED ➤

FIELD WIREABLE CONNECTORS (CONT.)

FEMALE

Mfg. Part No.	No. of Pins	Series	Cable Range	Stock No.	Price Each
B 4131-0/9	3	Minifast	6-8 mm	41M2013	31.20
B 4151-0/9	5	Minifast	6-8 mm	41M2014	34.60
B 5131-0	3	Picofast	3-5 mm	41M2015	20.60
B 5141-0	4	Picofast	3-5 mm	41M2016	20.60
B 8141-0	4	Eurofast	4-8 mm	99M0742	19.40
B 8141-0/PG9	4	Eurofast	4-8 mm	41M2017	19.40
B 8151-0/PG9/LABEL*	5	Eurofast	4-8 mm	15R0465	28.60

(93072)

XS3 SERIES ROUND WATER-RESISTANT M8 CABLE ASSEMBLIES

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

- Water-resistive, compact connector meets IP67 requirements.
- Ideal for a wide variety of FA and OA applications.

SINGLE ENDED CABLE PLUG ASSEMBLIES WITH SOCKET CONTACTS - PUR CABLE

Mfg. Part No.	Cable Length (m)	No. of Positions	Connector Orientation	Stock No.	Price Each 1-4
XS3F-M8PUR3S5M	5	3	Straight	34R9519	30.15
XS3F-M8PUR4S5M	5	4	Straight	34R9527	31.96
SINGLE ENDED CABLE PLUG ASSEMBLIES WITH SOCKET CONTACTS - PVC CABLE					
XS3F-M8PVC3S5M	5	3	Straight	34R9532	30.36
XS3F-M8PVC4S5M	5	4	Straight	34R9534	30.36

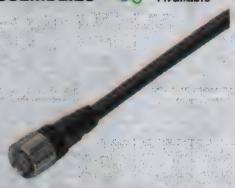
(197848)

XS2 SERIES ROUND WATER-RESISTANT M12 CABLE ASSEMBLIES

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

- Compact FA connectors satisfy IP67 requirements and ensure a 94V-0 fire retardant rating.
- A wide array of assemblies makes a wiring system more modular, simplifies maintenance, and reduces downtime.



SINGLE ENDED CABLE PLUG ASSEMBLIES WITH SOCKET CONTACTS - PUR CABLE

Mfg. Part No.	Cable Length (m)	No. of Positions	Connector Orientation	Stock No.	Price Each 1-4
XS2F-M12PUR3S2M	2	3	Straight	34R9451	30.63
XS2F-M12PUR3S5M	5	3	Straight	34R9452	36.23
XS2F-M12PUR4S2M	2	4	Straight	34R9457	32.00
XS2F-M12PUR4S5M	5	4	Straight	34R9458	42.93
XS2F-M12PUR4S10M	10	4	Straight	34R9456	57.45
XS2F-M12PUR5S5M	5	5	Straight	34R9462	42.64
XS2F-M12PUR4A2M	2	4	Angled	34R9454	33.92
XS2F-M12PUR4A5M	5	4	Angled	34R9455	42.93
XS2F-M12PUR4A10M	10	4	Angled	34R9453	57.45
SINGLE ENDED CABLE PLUG ASSEMBLIES WITH SOCKET CONTACTS - PVC CABLE					
XS2F-M12PVC3S2M	2	3	Straight	34R9470	29.09
XS2F-M12PVC3S5M	5	3	Straight	34R9471	34.41
XS2F-M12PVC4S2M	2	4	Straight	34R9479	32.21
XS2F-M12PVC4S5M	5	4	Straight	34R9480	40.78
XS2F-M12PVC4S10M	10	4	Straight	34R9478	54.59
XS2F-M12PVC5S5M	5	5	Straight	34R9484	40.50
XS2F-M12PVC4A2M	2	4	Angled	34R9474	30.39
XS2F-M12PVC4A5M	5	4	Angled	34R9476	38.47
XS2F-M12PVC4A10M	10	4	Angled	34R9472	57.87

(197847)

pro-POWER AT NEWARK ELEMENT14

Take control with quality, affordable Wire-Management Solutions.
newark.com/pro-power

(212564)

XS2 & XS3 ROUND CABLE ASSEMBLIES WITH STAINLESS STEEL NUTS

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

XS2F SERIES FEATURES:
- M12 Connector
- Degree of protection: IP69K
- Specifications: 3 A, 125 VDC
- Fire-retardant Robot: -25°C to 70°C, Heat Resistant: -25° to +105°C
- 6mm Outer Diameter, 20AWG

XS3F SERIES FEATURES:
- M8 Connector
- Degree of protection: IP67 (IEC529)
- Specifications: 1 A, 125 VDC, -25°C to 70°C
- 4mm Outer Diameter

XS2F SERIES - M12 SINGLE ENDED RECEPTACLE CABLE ASSEMBLY WITH SUS316L LOCK

Mfg. Part No.	No. of Pins	Gender	Connector Orientation	Length (m)	Cable Type	Stock No.	Price Each 1-4
XS2F-E421-D80-E	4	Socket	Straight	2	Heat-resistant	43W9801	72.35
XS2F-E421-G80-E	4	Socket	Straight	5	Heat-resistant	43W9803	112.50
XS2F-E421-J80-E	4	Socket	Straight	10	Heat-resistant	43W9805	220.62
XS2F-E421-K80-E	4	Socket	Straight	15	Heat-resistant	43W9806	308.86
XS2F-E421-L80-E	4	Socket	Straight	20	Heat-resistant	43W9807	352.98
XS2F-E422-D80-E	4	Socket	Right Angle	2	Heat-resistant	43W9808	72.55
XS2F-E422-G80-E	4	Socket	Right Angle	5	Heat-resistant	43W9810	111.90
XS2F-E422-J80-E	4	Socket	Right Angle	10	Heat-resistant	43W9812	239.68
XS2F-E421-D80-F	4	Socket	Straight	2	Fire-Retardant Robot	43W9802	45.09
XS2F-E421-G80-F	4	Socket	Straight	5	Fire-Retardant Robot	43W9804	55.46
XS2F-E422-D80-F	4	Socket	Right Angle	2	Fire-Retardant Robot	43W9809	42.93
XS2F-E422-G80-F	4	Socket	Right Angle	5	Fire-Retardant Robot	43W9811	56.25
XS3F SERIES - M8 SINGLE ENDED RECEPTACLE CABLE ASSEMBLY WITH SUS316L LOCK							
XS3F-E421-402-A	4	Socket	Straight	2	Standard	43W9813	42.86
XS3F-E421-405-A	4	Socket	Straight	5	Standard	43W9814	59.22
XS3F-E421-410-A	4	Socket	Straight	10	Standard	43W9815	74.10
XS3F-E422-402-A	4	Socket	Right Angle	2	Standard	43W9816	45.86
XS3F-E422-405-A	4	Socket	Right Angle	5	Standard	43W9817	56.67
XS3F-E422-410-A	4	Socket	Right Angle	10	Standard	43W9818	74.10

(208198)

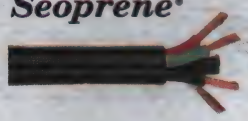
SEOPRENE® PORTABLE OUTDOOR FLEXIBLE POWER CABLE

RoHS Compliant Available

CCI Coleman Cable Inc.

Seoprene®

- Types SEOOW and SJEOOW portable cord
- Lightweight — easy -to-handle
- Excellent flexibility and toughness
- Abrasion-, ozone-, sunlight-, chemical- and oil-resistance
- Water-resistant with high-dielectric insulation — approved for submersion in water
- Flame-resistance — MSHA approved for mining applications
- Recyclable
- UL listed, CSA certified



Flexible and tough Seoprene® thermoplastic elastomer jacket. Water- and mold-resistant non-wicking, lightweight polypropylene fillers. Stranded bare copper conductors are color coded for easy identification. Meets Federal and Military specifications JC-580B. Temperature range: -50° to 105°C. Jacket color: black. **Sold in 250 ft. spools.** 500 ft. and 1000 ft. spools also available; *go online or call.*

SEOPRENE® TYPE SEOOW PORTABLE CORD — 600V

Mfg. Part No.	No. of Conductors	AWG (Stranding)	Nom. O.D. (in.)	Current Rating (A)	Stock No.	Price per Spool
222250408	2	(16 x 30AWG)	0.345	10	62M3372	142.21
222260408	2	(26 x 30AWG)	0.37	13	62M3373	153.94
223250408	3	(16 x 30AWG)	0.365	10	62M3374	168.84
223260408	3	(26 x 30AWG)	0.39	13	62M3375	185.87
223276408	3	(41 x 30AWG)	0.525	18	62M3376	378.83
223286408	3	(65 x 30AWG)	0.595	25	62M3377	416.23
223296408	3	(104 x 30AWG)	0.655	30	62M3378	634.39
224286408	4	(65 x 30AWG)	0.645	20	62M3381	493.64
224296408	4	(104 x 30AWG)	0.705	25	62M3382	757.90
224200408	4	(96 x 28AWG)	0.783	35	62M3379	1296.66
SEOPRENE® TYPE SJEOOW PORTABLE CORD — 300V						
232250408	2	(16 x 30AWG)	0.285	10	62M3383	143.76
232270408	2	(41 x 30AWG)	0.345	18	62M3385	193.57
233250408	3	(16 x 30AWG)	0.31	10	62M3386	160.32
233260408	3	(26 x 30AWG)	0.335	13	62M3387	167.02
233270408	3	(41 x 30AWG)	0.365	18	62M3388	249.57
233280408	3	(65 x 30AWG)	0.435	25	62M3389	357.53
234250408	4	(16 x 30AWG)	0.335	7	62M3390	167.95

(103023)

POWER CORDS

POLAR/SOLAR PLUS® OUTDOOR EXTENSION CORDS

RoHS Compliant Available

CCI Coleman Cable Inc.

OSHA

- Lightweight and flexible to -67°F
- Lighted end shows power is on
- Oil-, chemical- and abrasion-resistant
- Meets OSHA standards for outdoor use
- UL listed, CSA certified
- Made in the U.S.A.

Polar/Solar Plus® outdoor extension cords feature clear PVC NEMA 5-15P plug and neon power indicator light in the clear NEMA 5-15R female receptacle lights when power is on. 3-conductor, type SJEOW cord rated hard usage per National Electrical Code. Its rugged T*Prene insulation provides superior resistance to abrasion, ozone, oil, grease and chemicals. Plus, the TPE outer jacket is flame retardant and water resistant. Temperature rating: -55° to +90°C.

Mfg. Part No.	AWG	Stranding	Current Rating (A) @ 125V	Jacket Color	Length (Ft.)	Stock No.	Price Each
● 012880002	16AWG	26 x 30AWG	13	Yellow	50	62M3345	37.47
● 014880002	14AWG	41 x 30AWG	15	Yellow	50	62M3347	85.45
● 016880002	12AWG	65 x 30AWG	15	Yellow	50	62M3349	76.28
● 016890002	12AWG	65 x 30AWG	15	Yellow	100	62M3350	134.96

(103020)

VINYL OUTDOOR EXTENSION POWER CORDS

RoHS Compliant Available

OSHA

CCI Coleman Cable Inc.

- Meets OSHA standards for outdoor use
- UL listed, CSA certified

023098803 024098804 025890002

These all-purpose, 3-conductor type SJTW power cord sets feature NEMA 5-15P plug and NEMA 5-15R female receptacle. The 16 and 14 gauge cords have molded PVC end. The 12 gauge cords feature clear PVC ends with a neon power indicator lamp in the female receptacle that lights when power is on. PVC jacket resists moisture, abrasion and exposure to sunlight. Rated hard usage per National Electrical Code. Temperature rating: -20° to +60°C.

Mfg. Part No.	AWG	Stranding	Current Rating (A) @ 125V	Jacket Color	Length (Ft.)	Stock No.	Price Each
023048803	16AWG	26 x 30AWG	13	Orange	10	46T6999	10.13
● 023088803	16AWG	26 x 30AWG	13	Orange	50	62M3351	28.61
● 023098803	16AWG	26 x 30AWG	10	Orange	100	62M3352	47.20
● 024088804	14AWG	41 x 30AWG	15	Red	50	62M3353	49.19
● 024098804	14AWG	41 x 30AWG	13	Red	100	62M3354	74.38
025880002	12AWG	65 x 30AWG	15	Yellow	50	62M3363	66.36
● 025890002	12AWG	65 x 30AWG	15	Yellow	100	62M3364	112.41

(103021)

3-CONDUCTOR POWER SUPPLY CORDS

NEMA

RoHS Compliant Available

multicomp

- Rated 60° C, 125V
- Jacket Stripped: ⅝ inch.
- NEMA 5-15P to ROJ except **Mfg. Part No. SPC13311** which uses a IEC-320-C13 Right Angle Connection

UNSHIELDED PVC JACKETED, EUROPEAN COLOR CODING

Mfg. Part No.	Current @ 125 V	AWG	Color	Length	Cord	Stock No.	Price Each
● SPC13246	10A	18AWG	Grey	6 ft	SJT	11J3526	11.76
● SPC13272	...	18AWG	Black	6.6 ft	SVT	11J3552	7.52
● SPC13274	10A	18AWG	Black	6.6 ft	SJT	11J3554	8.00
● SPC13311	10A	18AWG	Black	6.6 ft	SJT	11J3578	10.79
● SPC13285	13A	18AWG	Black	9 ft	SJ	11J3560	17.81
● SPC13273	10A	18AWG	Black	9.8 ft	SVT	11J3553	10.91
● SPC13276	10A	18AWG	Black	9.8 ft	SJT	11J3555	11.38
● SPC13278	13A	16AWG	Black	6.6 ft	SJT	11J3556	11.52
● SPC13284	13A	16AWG	Black	9.8 ft	SJT	11J3559	13.88
● SPC13280	15A	14AWG	Black	6.6 ft	SJT	11J3557	11.43
● SPC13282	15A	14AWG	Black	9.8 ft	SJT	11J3558	15.87

➤ CONTINUED ➤

3-CONDUCTOR POWER SUPPLY CORDS (CONT.)

UNSHIELDED PVC JACKETED, NORTH AMERICAN COLOR CODING

Mfg. Part No.	Current @ 125 V	AWG	Color	Length	Cord	Stock No.	Price Each
● SPC13250	10A	18AWG	Black	6 ft	SJ	11J3530	13.81
● SPC13255	10A	18AWG	Black	6 ft	SJT	11J3535	8.23
● SPC13257	10A	18AWG	Grey	6 ft	SVT	11J3537	7.89
● SPC13244	10A	18AWG	Grey	6 ft	SVT	11J3524	7.90
● SPC13254	10A	18AWG	Black	8 ft	SJT	11J3534	13.67
● SPC13256	10A	18AWG	Black	8 ft	SVT	11J3536	9.56
● SPC13266	10A	18AWG	Black	8 ft	SJT	11J3546	13.03
● SPC13245	10A	18AWG	Grey	8 ft	SVT	11J3525	8.66
● SPC13247	10A	18AWG	Grey	8 ft	SJT	11J3527	12.50
● SPC13248	15A	18AWG	Black	12 ft	SJ	11J3528	15.02
● SPC13253	10A	18AWG	Black	20 ft	SJT	11J3533	17.80
● SPC13259	13A	16AWG	Black	9 ft	SJ	11J3539	13.57
● SPC13252	13A	16AWG	Black	9.8 ft	SJT	11J3532	13.03
● SPC13251	13A	16AWG	Grey	20 ft	SJT	11J3531	14.49
● SPC13260	15A	14AWG	Black	9 ft	SJ	11J3540	15.38

(65574)

3-CONDUCTOR DETACHABLE POWER SUPPLY CORDS

RoHS Compliant Available

multicomp

NEMA

- Rated 60° C, 125V
- Meets NEMA Enclosure Types 5-15P, 5-15R. and 6-15P,
- Molding Grounding Connector IEC 320 C-13, C-14
- Color: Black

Foil-shielded and unshielded PVC jacketed cords.

UNSHIELDED, PVC JACKETED - NORTH AMERICAN COLOR CODING

Mfg. Part No.	Current @ 125 V	AWG	Length	Connector End A	Connector End B	Cord	Stock No.	Price Each
● SPC13263	10A	18AWG	3 ft	5-15P	C-13	SVT	11J3543	7.04
● SPC13264	10A	18AWG	6 ft	5-15P	C-13	SVT	11J3544	20.15
● SPC13265	10A	18AWG	6.6 ft	6-15P	C-13	SVT	11J3545	10.26
● SPC13261	10A	18AWG	7.5 ft	5-15P	C-13	SVT	11J3541	10.26
● SPC13258	10A	18AWG	...	5-15P	C-5	SPT-2	11J3538	9.45
● SPC13262	13A	16AWG	7.5 ft	5-15P	C-13	SJT	11J3542	10.24
● SPC13271	13A	16AWG	10 ft	5-15P	5-15R	SJ	11J3551	19.69
UNSHIELDED, PVC JACKETED - EUROPEAN COLOR CODING								
● SPC13310	10A	18AWG	1.5 ft	5-15P	C-13	SVT	11J3577	5.94
● SPC13312	10A	18AWG	3.25 ft	C-13	C-14	SJT	11J3579	7.91
● SPC13287	10A	18AWG	6.6 ft	5-15P	C-13	SJT	11J3562	9.59
● SPC13315	10A	18AWG	6.6 ft	5-15P	C-13 *	SJT	11J4776	11.54
● SPC13286	10A	18AWG	7.5 ft	5-15P	C-13	SVT	11J3561	9.46
● SPC13288	10A	18AWG	9.8 ft	5-15P	C-13	SJT	11J3563	12.87
● SPC13313	13A	16AWG	3.25 ft	C-13	C-14	SJT	11J3580	9.79
● SPC13289	13A	16AWG	6.6 ft	5-15P	C-13	SJT	11J3564	12.46
● SPC13291	13A	16AWG	9.8 ft	5-15P	C-13	SJT	11J3565	13.09
● SPC13304	13A	16AWG	9.8 ft	5-15P	C-13	SJT	11J3573	9.65
● SPC13292	15A	14AWG	6.6 ft	5-15P	C-13	SJT	11J3566	13.11
● SPC13294	15A	14AWG	9.8 ft	5-15P	C-13	SJT	11J3567	17.74
FOIL-SHIELDED, PVC JACKETED - EUROPEAN COLOR CODING								
● SPC13296	10A	18AWG	6.6 ft	5-15P	C-13	SVT	11J3568	9.49
● SPC13298	10A	18AWG	6.6 ft	5-15P	C-13	SJT	11J3570	9.69
● SPC13297	10A	18AWG	9.8 ft	5-15P	C-13	SVT	11J3569	12.39
● SPC13300	10A	18AWG	9.8 ft	5-15P	C-13	SJT	11J3571	12.78
● SPC13305	15A	14AWG	6.6 ft	5-15P	C-13	SJT	11J3574	10.49

* Right Angle
(65576)

HOSPITAL-GRADE POWER SUPPLY CORDS

RoHS Compliant Available

multicomp

- Rated 60° C, 125V
- Meets NEMA Enclosure Type 5-15P
- NEMA 5-15P to IEC-320-C13

North American color coding.

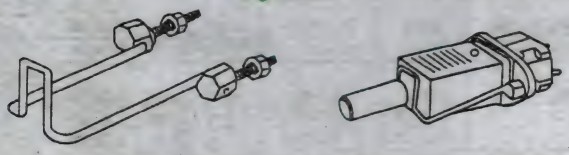
Mfg. Part No.	Current @ 125 V	AWG	Color	Length (ft)	Cord	Stock No.	Price Each
● SPC13270	...	18AWG	Black	8	SJT	11J3550	18.71
● SPC13269	13A	16AWG	Black	8	SJT	11J3549	13.77
● SPC13268	13A	16AWG	Gray	15	SJT	11J3548	14.20

(65578)

SAFETY RETAINER CLIP

RoHS Compliant Available

multicomp



Use in conjunction with **mfg. part nos. 2160** and **2161** AC power plug assemblies, *ordered separately online or call*, to help prevent accidental removal of the power cord from screw mount IEC-C14 power inlet or IEC-C13 power outlet. Stainless steel clip comes with 2 each: threaded post, threaded nut, and washer.

Mfg. Part No.	Description	Stock No.	Price Each 1-24
SPC4633	Safety Retainer Clip	20M5792	6.63

(32070)

AC POWER CORD PLUG ASSEMBLIES

RoHS Compliant Available

Qualtek Electronics Corp.

Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5

AC power male and female rewireable plug connectors with straight and 90° angle cable entry. Feature screw terminals. Easily converts a power cord into a detachable power cord set. Maximum rating: 10A/250VAC. UL listed, CSA certified, VDE, DEMKO, SETI, BSI, IMQ, NEMKO, SEMKO, and SEV approved.

IEC POWER CORD PLUGS

Mfg. Part No.	Fig.	Description	Entry	Stock No.	Price Each 1-49
704-00/00	1	AC Plug Assembly (Female)	Straight	17B6858	6.53
712-00/00	2	AC Plug Assembly (Male)	Straight	50B6852	10.83
709-00/00	3	Outlet/Female	Straight	42M3609	6.60
705-00/00	4	Outlet/Female	Angled	17B6859	8.80
711-00/00	5	Inlet/Male	Angled	17B6894	9.92

ACCESSORY

Mfg. Part No.	Description	Stock No.	Price Each 1-24
730-00/00	IEC Safety Retainer Clip Kit	09C9658	4.41

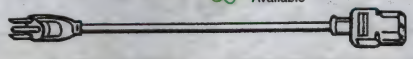
(16527)

AC LINE CORD

RoHS Compliant Available

Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company

MADE IN USA



7.50' (190.5) long, black SVT vinyl jacket AC line cord. 1250W, 10A, 125V. 18 AWG (41x34). Meets NEMA 5-15. UL listed, CSA certified.

Mfg. Part No.	Stock No.	Price Each 1-9
P2392X	94M5783	17.69

(8939)

V-LOCK POWER CORDS, INLETS AND DISTRIBUTION UNIT

RoHS Compliant Available

Volex

C13 Positive-Locking Connector

IEC 60320-C14 Inlet (Screw)

IEC 60320-C14 Inlet (Snap-In)

IEC 60320-C14 Inlet (PCB)

➤CONTINUED➤

V-LOCK POWER CORDS, INLETS AND DISTRIBUTION UNIT (CONT.)

- Innovative lock-release button secures positive-locking connector to mating inlet for a reliable connection
- Rated: 10A, 250V, 50/60 Hz
- NEMA5-15P, IEC-320-C13, -C14 and -C-19

V-Lock positive-locking power products include power cords, mating power inlets and a power distribution unit all suitable for networking and computer servers, lighting and entertainment equipment, switch and router applications. Color: black. UL listed, CSA certified, VDE approved, BSI approved. Order AC Inlets separately below.

IEC 60320-C20 Inlet (Screw)

V-LOCK POWER CORD AND INLET KITS

V-Lock kits include: one V-Lock power cord (selected from table below) and one **mfg. part no. IN-VAC14KS-001** V-Lock screw-in power inlet.

Mfg. Part No.	(A)	Plug	Connector	Cable Type	Lgth. (m)	Stock No.	Price Each 1-24
VL-0124-05-150K	10	NEMA 5-15P	IEC 320 C13	SJT	1.5	46M3022	4.05
VL-0124-02-150K	10	NEMA 5-15P	IEC 320 C13	SVT	1.5	46M3016	3.75
VL-0136-14-200K	15	NEMA 5-15P	IEC 320 C19	SJT	2	46M3028	6.41

V-LOCK POWER CORDS

V-Lock power cords have a positive-locking feature with release button to secure the connector with its mating power inlet. Available in various IEC standard configurations listed in table below.

Mfg. Part No.	(A)	Plug	Connector	Cable Type	Lgth. (M)	Stock No.	Price Each 1-24
VL-0124-05-150	10	NEMA 5-15P	IEC 320 C13	SJT	1.5	46M3021	3.44
VL-0124-02-150	10	NEMA 5-15P	IEC 320 C13	SVT	1.5	46M3015	4.90
VL-0124-05-200	10	NEMA 5-15P	IEC 320 C13	SJT	2	46M3023	3.92
VL-0124-02-300	10	NEMA 5-15P	IEC 320 C13	SVT	3	46M3019	5.74
VL-2300-21-150	10	IEC 320 C14	IEC 320 C13	HO5VV-F 3G/0.75mm^2	1.5	46M3071	3.89
VL-2300-11-200	13	IEC 320 C14	IEC 320 C13	SJT	2	46M3069	10.05

V-LOCK POWER DISTRIBUTION UNIT INPUT POWER CORDS

V-Lock power input cords are for use with the V-Lock power distribution unit.

Mfg. Part No.	(A)	Plug	Connector	Cable Type	Lgth. (m)	Stock No.	Price Each 1-24
VL-1036-24-200	16	European Schuko	IEC 320 C19	HO5VV-F 3G/1.5mm^2	2	46M3035	5.25
VL-0136-14-200	15	North America 3-Wire	IEC 320 C19	SJT	2	46M3027	9.46
VL-2636-33-200	16	Chinese 3-Wire	IEC 320 C19	RVV 3/1.5mm^2	2	54M5538	5.51

IEC POWER INLETS

AC Power inlets available in multiple IEC 60320 configurations, ratings, and mounting styles. All inlets listed have UL, CSA and VDE approvals. Call to confirm other approval bodies.

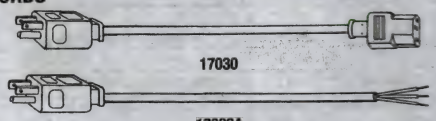
Mfg. Part No.	Configuration	Mounting	Rating	Fused	Stock No.	Price Each 1-24
17252A-0-B1	IEC 60320-C14	Screw	10A/250V & 15A/250V	No	45P4893	2.69
IN-VAC20KS-001	IEC 60320-C20	Screw	16A/250V	No	46M3014	1.47
V-LOCK POWER INLETS						
IN-VAC13KI-001	IEC 60320-C13	Snap-in	10A/250V	No	89M4471	1.31
IN-VAC14KS-001	IEC 60320-C14	Screw	10A/250V	No	46M3013	1.33
IN-RF2004V-001	IEC 60320-C14	Snap-in	10A/250V	Yes (Fuse Not Included)	46M3011	2.51
IN-SS7B1T7-001	IEC 60320-C14	PCB	10A/250V	No	46M3012	1.76

(94387)

MEDICORD™ HOSPITAL-GRADE (GREEN DOT) POWER SUPPLY CORDS

RoHS Compliant Available

Volex



17030

17022A

- Rated 60°C; 125V, UL Listed, North American Color Coding
- NEMA 5-15P Molded PVC Clear Hospital-Grade Plugs

8' SJT TYPE CORD

Mfg. Part No.	AWG (Stranding)	Nom. O.D. Ref.	Rating	Stock No.	Price Each 1-24
17030*	18 (41 x 34)	0.315"	1250W/10A	96K5631	10.54
17031*	18 (41 x 34)	0.315"	1250W/10A	99K5542	11.54
9.84' SJT TYPE V-LOCK CORDS					
VL-0824-05-300†	18 (41 x 34)	...	125V/10A	61T7205	12.07
VL-0824-11-300†	16 (65 x 34)	...	125V/13A	88T2626	14.81
VL-0836-14-300†	14 (...)	...	125V/15A	88T2627	20.34
10' SJT TYPE CORD					
17022A†	18 (41 x 34)	0.315"	1250W/10A	93K2524	11.28
17020A	18 (41 x 34)	0.315"	1250W/10A	93K2522	9.43

➤CONTINUED➤

POWER CORDS

MEDICORD™ HOSPITAL-GRADE (GREEN DOT) POWER SUPPLY CORDS (CONT.)

15′ SJT TYPE CORD

Mfg. Part No.	AWG (Stranding)	Nom. O.D. Ref.	Rating	Stock No.	Price Each 1-24
● 17966	16 (65 x 34)	0.475″	1625W/13A	93K2678	21.42
● 17967 8†	14(...)	...	125V/15A	88T2629	27.27
20′ SJT TYPE CORD					
● 17968 8†	18 (41 x 34)	...	125V/10A	88T2630	19.87
● 17969 8†	16 (65 x 34)	...	125V/13A	88T2631	27.03
● 17970 8†	16 (65 x 34)	...	125V/13A	88T2632	34.70

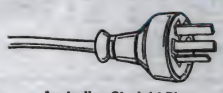
*CSA certified; †Gray cord
(6185)

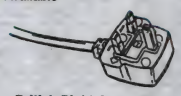
3

INTERNATIONAL POWER CORDS

RoHS Compliant Available

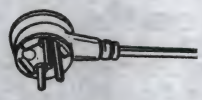
Volex


Australian Straight Plug


British Right Angle Plug

European Schuko Straight Plug

European Schuko Right Angle Plug


Israeli Right Angle

Italian Straight Plug

South African Right Angle

ARGENTINIAN CORD WITH 3-CONDUCTOR STRAIGHT PLUG
Specifications: IRAM. Operating voltage: 250VAC. PVC outer body and jacket.

Mfg. Part No.	Rating	End Finish	Length	Color	Stock No.	Price Each 1-24
● 2145H	10A/250V	IEC 60320 C13	2.5 m	Black	09J0690	8.26
ARGENTINIAN CORD WITH 2-CONDUCTOR STRAIGHT PLUG						
● 2154H	2.5A/250V	IEC 60320 C7	1.8 m	Black	81K8093	3.49

AUSTRALIAN CORD WITH 3-CONDUCTOR STRAIGHT PLUG
Specifications: AS 3112-1981, NZ SS 198-1967. 250VAC. Insulation resistance: >10MΩ. Cable retention: >130N. PVC outer body. Brass terminals..

Mfg. Part No.	Rating	End Finish	Length	Color	Stock No.	Price Each 1-24
● 2106H	10A/250V	IEC 60320 C13	2.5 m	Black	93F2461	8.62
AUSTRALIAN CORD WITH 2-CONDUCTOR STRAIGHT PLUG						
● 2155H	2.5A/250V	IEC 60320 C7	1.8 m	Black	81K8094	4.04

BRITISH 3-CONDUCTOR RIGHT-ANGLE PLUG
Specification: BS1363A. Operating voltage: 250VAC. Insulation resistance >10MΩ. Cable retention: 0.5mm² – 1.00mm² >30N, 1.25mm² – 1.5mm² > 60N. Outside body: PVC. Terminals: solid brass. Fuses sold separately, *go online or call.*

Mfg. Part No.	Rating	End Finish	Length	Color	Stock No.	Price Each 1-24
● 17962	3A/250V	IEC 60320 C13	2.5 m	Black	93K2677	10.16
● 17964	10A/250V	IEC 60320 C13	2.5 m	Black	04M6745	10.82
● 2103H	10A/250V	Stripped End Leads	2.5 m	Black	93K3130	9.10
● 2104H*	10A/250V	IEC 60320 C13	2.5 m	Black	98K6485	9.88
BRAZILIAN CORD WITH 3-CONDUCTOR STRAIGHT PLUG						
● 2153H	10A/250V	IEC 60320 C13	2.5 m	Black	81K8092	8.25

CONTINENTAL EUROPEAN SCHUKO/DOUBLE EARTH CORD WITH 3-CONDUCTOR STRAIGHT PLUG
Specifications: CEE7 sheet VII. 250V. Insulation resistance: >10MΩ. Cable retention: >60N. PVC outer body. Brass-nickel plate terminals.

Mfg. Part No.	Rating	End Finish	Length	Color	Stock No.	Price Each 1-24
● 17850 326	10A/250V	IEC 60320 C13	2.0 m	Gray	44F1841	7.05
● 17850 10	10A/250V	IEC 60320 C13	2.0 m	Black	25C0779	7.26
● 2111H	10A/250V	IEC 60320 C13	2.5 m	Black	99K5551	3.90
● 2112H	10A/250V	Right Angle C13	2.5 m	Black	93K3145	8.77
CONTINENTAL EUROPEAN SCHUKO/DOUBLE EARTH CORD WITH 3-CONDUCTOR RIGHT-ANGLE PLUG						
● 2125H	10A/250V	IEC 60320 C13	2.5 m	Gray	98K6502	6.33
● 2122H	16A/250V	IEC 60320 C19	2.5 m	Black	93K3155	11.77

➤ CONTINUED ➤

INTERNATIONAL POWER CORDS (CONT.)

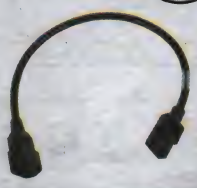
Mfg. Part No.	Rating	End Finish	Length	Color	Stock No.	Price Each 1-24
Specifications: S.I.32. 250VAC. Insulation resistance: >10MΩ. PVC outer body. Brass terminals.						
Mfg. Part No.	**Rating**	**End Finish**	**Length**	**Color**	**Stock No.**	**Price Each 1-24**
● 2115H	10A/250V	IEC 60320 C13	2.5 m	Black	93K3150	8.57
● 2160H	2.5A/250V	IEC 60320 C19	1.8 m	Black	81K8100	3.48
ITALIAN CORD WITH 3-CONDUCTOR STRAIGHT PLUG						
Specifications: Operating voltage: 250VAC. PVC outer body. Brass terminals.						
Mfg. Part No.	**Rating**	**End Finish**	**Length**	**Color**	**Stock No.**	**Price Each 1-24**
● 2114H	10A/250V	IEC 60320 C13	2.5 m	Black	96K5649	5.94
JAPANESE CORD WITH 3-CONDUCTOR STRAIGHT PLUG						
Specifications: Operating voltage: 125VAC. PVC outer body. Brass terminals.						
Mfg. Part No.	**Rating**	**End Finish**	**Length**	**Color**	**Stock No.**	**Price Each 1-24**
● 2133H	12A/125V	IEC 60320 C13	2.3 m	Black	16F1112	6.62
SOUTH AFRICAN CORD WITH 3-CONDUCTOR RIGHT-ANGLE PLUG						
Specifications: BS 546A, SABS 164-1980, IS 1293-1967. 250VAC. Insulation resistance >10MΩ. Cable retention: >8kg. PVC outer body. Nickel-plate brass terminals.						
Mfg. Part No.	**Rating**	**End Finish**	**Length**	**Color**	**Stock No.**	**Price Each 1-24**
● 2131H	16A/250V	IEC 60320 C13	2.5 m	Black	93F2464	10.76
KOREAN CORD WITH 3-CONDUCTOR STRAIGHT PLUG						
● 2147H 10 C3	10A/250V	IEC 60320 C13	2.5 m	Black	24T9815	8.21
NORTH AMERICAN CORD WITH 3-CONDUCTOR STRAIGHT PLUG						
● 1725010B1	10A/250V	IEC 60320 C13	2.3 m	Black	98K6011	4.50
NORTH AMERICAN CORD WITH 2-CONDUCTOR STRAIGHT PLUG						
● 2166H	2.5A/125V	IEC 60320 C7	1.8 m	Black	81K8109	2.86
TAIWANESE CORD WITH 3-CONDUCTOR STRAIGHT PLUG						
● 2146H 10 C3	10A/125V	IEC 60320 C13	2.5 m	Black	24T9814	9.16
TAIWANESE CORD WITH 2-CONDUCTOR STRAIGHT PLUG						
● 2164H	2.5A/125V	IEC 60320 C7	1.8 m	Black	81K8104	3.67

*13A Fuse
(6091)

UNIVERSAL JUMPER CORD

Volex

Specifications:
- Ratings: 10A, 250V
- Temperature: 75°C
- Color Code:
  Live - Brown
  Neutral - Blue
  Ground - Green/Yellow
- Cord: SVT 18/ 3 + H05VVF3x0.75



Mfg. Part No.	Construction	Length	Stock No.	Price Each 1-24
2170H	IEC 60320 C14 to C13	0.6 m	63W4900	3.29
2171H	IEC 60320 C14 to C13	1.0 m	63W4901	4.02
2172H	IEC 60320 C14 to C13	1.5 m	63W4902	4.90
2173H	IEC 60320 C14 to C13	2.0 m	63W4903	5.61

(6095)

3-CONDUCTOR LAPTOP POWER CORD

NEMA

RoHS Compliant Available

Volex

Laptop cord designed as replacement for Dell, HP, IBM and other laptop computers.

Mfg. Part No.	Length	Approvals	Rating	Stock No.	Price Each 1-24	Price Each 25-49
● 17035	3 ft	UL/CSA	2.5A/125V	01N3869	3.17	2.96
● 17036	6 ft	UL/CSA	2.5A/125V	98K6007	5.20	4.98
● 17037	10 ft	UL/CSA	2.5A/125V	92C3571	7.45	7.21
● VC-1034-21-180	6 ft	Australia	2.5A/250V	24T9523	8.46	8.14
● VC-1434-21-180	6 ft	European	2.5A/250V	24T9524	8.74	8.40
● VC-1734-21-180	6 ft	Italian	2.5A/250V	24T9525	7.40	7.08
● VC-2034-21-180	6 ft	UK	2.5A/250V	24T9526	5.52	5.28

(61085)

3-CONDUCTOR POWER SUPPLY CORDS

RoHS Compliant Available

Volex

- Molded PVC Grounding Connector, IEC 320-C-13
- Rated 60°C, 125V, with NEMA 5-15P Plug and IEC 60320-C13 Connector
- International Color Coding, UL Listed, CSA Certified

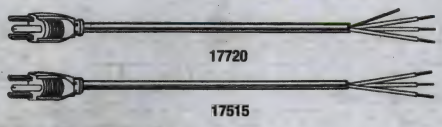
FOIL SHIELDED, PVC JACKETED, SJT CORD

Mfg. Part No.	AWG (Stranding)	L	Rating	Plug	Conn.	Stock No.	Price Each 1-24
17600	18 (42 × 34)	6′7″	1250W/10A	5-15P	C-13	93K2603	5.80
17601	18 (42 × 34)	9′10″	1250W/10A	5-15P	C-13	37F3334	9.99
17602	16 (65 × 34)	6′7″	1625W/13A	5-15P	C-13	93K2604	10.12
17603	16 (65 × 34)	9′10″	1625W/13A	5-15P	C-13	93K2605	13.13
17604	14 (41 × 30)	6′7″	1875W/15A	5-15P	C-13	93K2606	9.67
17605	14 (41 × 30)	9′10″	1875W/15A	5-15P	C-13	93K2607	18.84
FOIL SHIELDED, PVC JACKETED, SVT CORD							
17725*	18 (42 × 34)	6′7″	1250W/10A	5-15P	C-13	96K5647	4.28
17742	18 (42 × 34)	6′7″	1250W/10A	5-15P	C-13	37F3331	5.62
17743	18 (42 × 34)	9′10″	1250W/10A	5-15P	C-13	93K2650	9.27
FOIL AND BRAID SHIELDED, PVC JACKETED, SVT CORD							
17660	18 (42 × 34)	6′7″	1250W/10A	5-15P	C-13	93K2643	11.37
17661	18 (42 × 34)	9′10″	1250W/10A	5-15P	C-13	93K2644	14.77
UNSHIELDED, PVC JACKETED, SJT CORD							
17500†	18 (42 × 34)	6′7″	1250W/10A	5-15P	C-13	37F3339	2.69
17501†	18 (42 × 34)	9′10″	1250W/10A	5-15P	C-13	98K6026	6.58
17502†	16 (65 × 34)	6′7″	1625W/13A	5-15P	C-13	96K5635	6.64
17255†	16 (65 × 34)	7′6″	1625W/13A	5-15P	C-13	04M4701	10.07
17503†	16 (65 × 34)	9′10″	1625W/13A	5-15P	C-13	93K2582	11.94
17504†	14 (41 × 30)	6′7″	1875W/15A	5-15P	C-13	96K5636	8.42
17505†	14 (41 × 30)	9′10″	1875W/15A	5-15P	C-13	96K5637	16.91
17758†	18 (42 × 34)	6′7″	1250W/10A	5-15P	C-13	44F1829	6.99
17001A	16 (26 × 30)	36″	1625W/13A	5-15P	C-13	93K2520	5.35
17041A	16 (26 × 30)	24″	1625W/13A	5-15P	C-13	99K5543	4.54
UNSHIELDED, PVC JACKETED, SVT CORD							
17249†	18 (42 × 34)	5′10″	1250W/10A	5-15P	C-13	49C9150	4.32
17251†	18 (42 × 34)	7′6″	1250W/10A	5-15P	C-13	93K2554	4.60
17757†	18 (42 × 34)	7′6″	1250W/10A	5-15P	C-13	96K5648	5.03
17000A	18 (42 × 34)	36″	1250W/10A	5-15P	C-13	98K6006	4.11
17002A	18 (42 × 34)	18″	1250W/10A	5-15P	C-13	99K5541	3.30

*Passes VW-1 vertical wire flame test; †North American color coding, rated 105°C
(6216)

3-CONDUCTOR POWER SUPPLY CORDS

RoHS Compliant Available



Volex

- NEMA 5-15P Molded Vinyl Grounding Plug
- Rated 60°C; 125V, European Color Coding, UL listed, CSA certified

FOIL SHIELDED, PVC JACKETED

Mfg. Part No.	AWG (Stranding)	Nom O.D. Ref.	L	Rating	Plug	Cord	Stock No.	Price Each 1-24
17613	18 (42 × 34)	0.340″	9′10″	1250W/10A	5-15P	SJT	93K2611	9.34
17614	16 (65 × 34)	0.365″	6′7″	1625W/13A	5-15P	SJT	93K2612	8.55
17615	16 (65 × 34)	0.365″	9′10″	1625W/13A	5-15P	SJT	93K2613	11.90
17616	14 (41 × 30)	0.402″	6′7″	1875W/15A	5-15P	SJT	93K2614	12.88
17617	14 (41 × 30)	0.402″	9′10″	1875W/15A	5-15P	SJT	93K2637	16.87
17720	18 (42 × 34)	0.270″	6′7″	1250W/10A	5-15P	SVT	93K2645	6.13
FOIL AND BRAID SHIELDED, PVC JACKETED								
17650	18 (42 × 34)	0.307″	6′7″	1250W/10A	5-15P	SVT	93K2642	9.40
17651	18 (42 × 34)	0.307″	9′10″	1250W/10A	5-15P	SVT	96K5646	13.43
UNSHIELDED, PVC JACKETED								
17512	18 (42 × 34)	0.315″	6′7″	1250W/10A	5-15P	SJT	93K2588	5.67
17748	18 (42 × 34)	0.315″	6′7″	1250W/10A	5-15P	SJT	93K2653	5.88
17513	18 (42 × 34)	0.315″	9′10″	1250W/10A	5-15P	SJT	96K5639	7.92
17405	18 (16 × 30)	0.315″	6′	1250W/10A	5-15P	SJT	99K5544	3.95
17407	18 (16 × 30)	0.315″	8′	1250W/10A	5-15P	SJT	93K2567	6.68
17514	16 (65 × 34)	0.340″	6′7″	1625W/13A	5-15P	SJT	96K5640	7.81
17515	16 (65 × 34)	0.340″	9′10″	1625W/13A	5-15P	SJT	37F3300	10.92
17276	16 (26 × 30)	0.340″	20′	1625W/13A	5-15P	SJT	93K2563	20.94
17516	14 (41 × 30)	0.380″	6′7″	1875W/15A	5-15P	SJT	93K2590	10.77
17517	14 (41 × 30)	0.380″	9′10″	1875W/15A	5-15P	SJT	93K2591	15.69

➤CONTINUED➤

3-CONDUCTOR POWER SUPPLY CORDS (CONT.)

UNSHIELDED, PVC JACKETED

Mfg. Part No.	AWG (Stranding)	Nom O.D. Ref.	L	Rating	Plug	Cord	Stock No.	Price Each 1-24
17534	18 (42 × 34)	0.246″	6′7″	1250W/10A	5-15P	SVT	93K2598	5.14
17535	18 (42 × 34)	0.246″	9′10″	1250W/10A	5-15P	SVT	93K2599	7.13
17237	18 (42 × 34)	0.246″	6′	1250W/10A	5-15P	SVT	98K6010	4.63
17747	18 (42 × 34)	0.246″	6′7″	1250W/10A	5-15P	SVT	44F1833	5.21
17239	18 (42 × 34)	0.246″	8′	1250W/10A	5-15P	SVT	93K2553	6.15
TYPE SV AND SJ RUBBER AND SJO NEOPRENE JACKETED								
17238	18 (42 × 34)	0.246″	8′	1250/10	5-15P	SV	36F1038	7.20
17406	18 (16 × 30)	0.315″	6′	1250/10	5-15P	SJ	93K2566	7.51
17408	18 (16 × 30)	0.315″	8′	1250/10	5-15P	SJ	36F857	9.08
17409	18 (16 × 30)	0.315″	8′	1250/10	5-15P	SJO	93K2568	5.35
17412	18 (16 × 30)	0.315″	12′	1250/10	5-15P	SJ	96K5632	14.12
17419	16 (26 × 30)	0.340″	9′	1625/13	5-15P	SJ	96K5633	14.41
17422	16 (26 × 30)	0.340″	12′	1625/13	5-15P	SJ	96K5634	18.04
17425	16 (26 × 30)	0.340″	15′	1625/13	5-15P	SJ	93K2569	24.09
17629	14 (41 × 30)	0.380″	9′	1875/15	5-15P	SJ	96K5645	17.59
17635	14 (41 × 30)	0.380″	15′	1875/15	5-15P	SJ	98K6028	31.20

(6222)

3-CONDUCTOR POWER SUPPLY CORDS

RoHS Compliant Available

Volex

- NEMA 5-15P Molded PVC Grounding Plug PH-290B, PH-185, or PH-173
- Rated 60°C; 125V, North American Color Coding, UL Listed, CSA Certified

TYPE SVT AND SJT PVC JACKETED

Mfg. Part No.	AWG (Stranding)	Nom. O.D.	L	Rating	Plug	Cord	Stock No.	Price Each 1-24
17237	18 (42 × 34)	0.246″	6′	1250/10	290B	SVT	98K6010	4.63
17239	18 (42 × 34)	0.246″	8′	1250/10	290B	SVT	93K2553	6.15
17405	18 (16 × 30)	0.315″	6′	1250/10	290B	SJT	99K5544	3.95
17407	18 (16 × 30)	0.315″	8′	1250/10	290B	SJT	93K2567	6.68
17276	16 (26 × 30)	0.340″	20′	1625/13	185	SJT	93K2563	20.94
TYPE SV AND SJ RUBBER AND SJO NEOPRENE JACKETED								
17238	18 (42 × 34)	0.246″	8′	1250/10	290B	SV	36F1038	7.20
17406	18 (16 × 30)	0.315″	6′	1250/10	185	SJ	93K2566	7.51
17408	18 (16 × 30)	0.315″	8′	1250/10	185	SJ	36F857	9.08
17409	18 (16 × 30)	0.315″	8′	1250/10	185	SJO	93K2568	5.35
17412	18 (16 × 30)	0.315″	12′	1250/10	185	SJ	96K5632	14.12
17419	16 (26 × 30)	0.340″	9′	1625/13	185	SJ	96K5633	14.41
17422	16 (26 × 30)	0.340″	12′	1625/13	185	SJ	96K5634	18.04
17425	16 (26 × 30)	0.340″	15′	1625/13	185	SJ	93K2569	24.09
17629	14 (41 × 30)	0.380″	9′	1875/15	173	SJ	96K5645	17.59
17635	14 (41 × 30)	0.380″	15′	1875/15	173	SJ	98K6028	31.20

(6223)

POWER SUPPLY CORDS WITH CONNECTOR

RoHS Compliant Available

Volex

- Rated 60°C; 125V, Molded Vinyl Grounding Connector, IEC-320-C-13
- International Color Coding, UL Listed, CSA Certified

FOIL SHIELDED, PVC JACKETED

Mfg. Part No.	AWG (Stranding)	Nom. O.D. Ref.	L	Rating	Recep.	Cord	Stock No.	Price Each 1-24
17749	18 (42 × 34)	0.270″	6′7″	1250W/10A	C13	SVT	37F3303	5.79
17750	18 (42 × 34)	0.270″	9′10″	1250W/10A	C13	SVT	37F3304	7.60
17619	18 (42 × 34)	0.340″	9′10″	1250W/10A	C13	SJT	93K2638	8.63
17620	16 (65 × 34)	0.365″	6′7″	1625W/13A	C13	SJT	93K2639	8.21
17621	16 (65 × 34)	0.365″	9′10″	1625W/13A	C13	SJT	93K2640	11.25
UNSHIELDED, PVC JACKETED								
17518	18 (42 × 34)	0.315″	6′7″	1250W/10A	C13	SJT	96K5641	5.74
17519	18 (42 × 34)	0.315″	9′10″	1250W/10A	C13	SJT	93K2592	7.82
17520	16 (65 × 34)	0.340″	6′7″	1625W/10A	C13	SJT	93K2593	7.82
17521	16 (65 × 34)	0.340″	9′10″	1625W/10A	C13	SJT	93K2594	10.68
17254	18 (42 × 34)	0.246″	7′6″	1250W/10A	C13	SVT	93K2555	5.73

➤CONTINUED➤

POWER CORDS

POWER SUPPLY CORDS WITH CONNECTOR (CONT.)

Mfg. Part No.	AWG (Stranding)	Nom. O.D. Ref.	L	Rating	Recep.	Cord	Stock No.	Price Each 1-24
Unshielded 3-conductor power supply cord passes a double-molded CEE-22 connector test specifically. Molded PVC plug and connector								
Mfg. Part No.	AWG (Stranding)	Nom. O.D.	L	Rating	Recep.	Cord	Stock No.	Price Each 1-24
● 2120H	3 x 1.00	...	8'2"	2500W/10A	C13	H05VV-F	93K3154	6.94

(6225)

DETACHABLE POWER SUPPLY CORDS

RoHS Compliant Available

- 3 Conductor Unshielded PVC Jacketed
- NEMA 6-15P Molded PVC Grounding Plug
- Molded PVC Grounding Connector, IEC 320-C13
- UL Recognized, CSA Certified

Mfg. Part No.	AWG (Stranding)	Nom. O.D.	Length	Rating	Cord	Stock No.	Price Each 1-24
● 17566	18 (42 x 34)	0.246"	6'7"	2500W/10A	SVT	96K5642	6.55
● 17567 10 C3	18 (42 x 34)	0.246"	9'10"	2500W/10A	SVT	93K2602	8.83
● 17568	18 (42 x 34)	0.315"	6'7"	2500W/10A	SJT	96K5643	7.14
● 17569	18 (42 x 34)	0.315"	9'10"	2500W/10A	SJT	96K5644	7.15

(6228)

POWER SUPPLY CORDS WITH RIGHT-ANGLE CONNECTOR

RoHS Compliant Available

- Rated 60°C; 125V; Dual-Rated at 10A-250V
- International Color Coding, UL Listed, CSA Certified

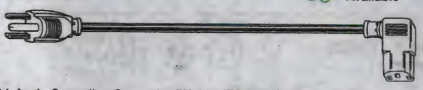
UNSHIELDED, PVC JACKETED, SJT CORD

Mfg. Part No.	AWG (Stranding)	Nom. O.D.	Length	Rating	Recep.	Stock No.	Price Each 1-24
● 17536	18 (42 × 34)	0.315"	6'7"	1250W/10A	C13	93K2600	5.80
● 17537	18 (42 × 34)	0.315"	9'10"	1250W/10A	C13	93K2601	8.09
● 17539	16 (65 × 34)	0.340"	9'10"	1625W/13A	C13	37F3328	10.69
FOIL SHIELDED, PVC JACKETED, SVT CORD							
● 17751	18 (42 × 34)	0.270"	6'7"	1250W/10A	C13	93K2654	5.77

(6226)

RIGHT-ANGLE, FOIL SHIELDED POWER SUPPLY CORDS

RoHS Compliant Available



- Molded PVC Right-Angle Grounding Connector PH-390 IEC 320-C-13
- NEMA 5-15P Molded Vinyl Grounding Plug, PVC Jacketed

Mfg. Part No.	AWG (Stranding)	L	Rating	Plug	Conn.	Cord	Stock No.	Price Each 1-24
● 17606	18 (41 x 34)	6'7"	1250W/10A	5-15P	C13	SJT	37F3347	7.87
● 17607	18 (41 x 34)	9'10"	1250W/10A	5-15P	C13	SJT	93K2608	9.89
● 17608	16 (65 x 34)	6'7"	1625W/13A	5-15P	C13	SJT	93K2609	9.52
● 17609	16 (65 x 34)	9'10"	1625W/13A	5-15P	C13	SJT	93K2610	13.14
● 17745	18 (41 x 34)	6'7"	1250W/10A	5-15P	C13	SVT	93K2651	7.22
● 17746	18 (41 x 34)	9'10"	1250W/10A	5-15P	C13	SVT	93K2652	9.37
RIGHT ANGLE, UNSHIELDED, PVC JACKETED								
● 17506	18 (41 x 34)	6'7"	1250W/10A	5-15P	C13	SJT	96K5638	6.90
● 17507	18 (41 x 34)	9'10"	1250W/10A	5-15P	C13	SJT	93K2585	8.73
● 17508	16 (65 x 34)	6'7"	1625W/13A	5-15P	C13	SJT	93K2586	6.58
● 17509	16 (65 x 34)	9'10"	1625W/13A	5-15P	C13	SJT	93K2587	11.74

(6143)

3-CONDUCTOR SJ POWER SUPPLY CORD

RoHS Compliant Available

- NEMA 5-15P molded PVC ground plug
- NEMA 5-15R molded PVC ground connector
- Smooth black PVC jacket
- North American color coding
- UL listed, CSA certified

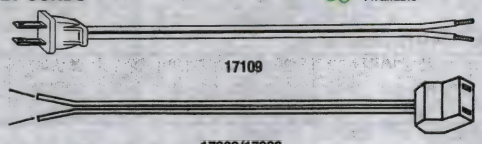
Special use cord for equipment with built-in receptacle with blades and grounding pin for cord attachment.

Mfg. Part No.	AWG	Nom. O.D. (in.)	Length (ft.)	Rating	Stock No.	Price Each 1-24
● 17461	16 x 3	0.34	10	1625W/13A	45P4168	18.95

(6145)

2-CONDUCTOR POWER SUPPLY CORDS

RoHS Compliant Available



- Rated 60°C; 125V, UL listed, CSA certified

TYPE SPT-1 PARALLEL CORDS, MOLDED PVC POLARIZED PLUG
Conductors split 1", stripped and twisted 5/8". Rating: 1250W/10A. NEMA 1-15P.

Mfg. Part No.	AWG (Stranding)	O.D. (in.)	Length (m)	Stock No.	Price Each 1-24
● 17109 1	18 (42 x 34)	0.110 x 0.207	2.74	93K2547	3.85
● 17109 9	18 (42 x 34)	0.110 x 0.207	2.74	93K2548	3.85

TYPE SPT-1 COOLING FAN CORDS, MOLDED PVC CONNECTOR
Rating: 250W/1A. Color: Black. UL recognized.

Mfg. Part No.	AWG (Stranding)	O.D. (in.)	Length (m)	Stock No.	Price Each 1-24
● 17902	18 (42 x 34)	0.110 x 0.207	0.60	93K2674	2.32
● 17906	18 (42 x 34)	0.110 x 0.207	1.80	93K2675	3.30

(6183)

NORTH AMERICAN JUMPER CORDS

RoHS Compliant Available

- Molded PVC Grounding Plug, IEC-320-C-14
- Molded PVC Grounding Connector, IEC-320-C-13

FOIL SHIELDED -- RATED 60°C, 125V*

Mfg. Part No.	AWG (Stranding)	Length	Rating	Plug	Conn.	Cord	Stock No.	Price Each 1-24
● 17625	16 (65 x 34)	1.0 m	1625W/13A	C13	C14	SJT	93K2641	5.85
● 17753	18 (41 x 34)	1.0 m	1250W/10A	C13	C14	SVT	93K2655	4.67
UNSHIELDED -- RATED 60°C, 125V*								
● 17524	18 (41 x 34)	1.0 m	1250W/10A	C13	C14	SJT	93K2595	4.62
● 17525	16 (65 x 34)	1.0 m	1625W/13A	C13	C14	SJT	93K2596	4.94

*Dual-rated at 10A-250V.
(6146)

"Y" POWER SUPPLY CORDS

RoHS Compliant Available

- Y-Cords Replaces 2 Standard Power Cords
- 2 Molded PVC Grounding Connectors AEC 250A
- Rated 60°C, Cord Type: SJT, Color: Black, UL listed, CSA certified

IEC 320 C14 PLUG AND TWO IEC 320 C13 CONNECTORS

Mfg. Part No.	AWG (Stranding)	Length	Rating	Stock No.	Price Each 1-24
● 17268A	18 (41x34)	6' (2' Legs)	10A/125V	93K2556	10.82
● 17269A	18 (41x34)	10' (2' Legs)	10A/125V	93K2557	13.68
● 17270A	16 (65x34)	6' (2' Legs)	13A/250V	93K2558	11.41
● 17271A	16 (65x34)	10' (2' Legs)	13A/250V	93K2559	17.42
NEMA 5-15P PLUG AND TWO IEC 320 C13 CONNECTORS					
● 17272A	18 (41x34)	6' (2' Legs)	10A/125V	93K2560	10.58
● 17273A	18 (41x34)	10' (2' Legs)	10A/125V	04M4702	10.06
● 17274A	16 (65x34)	6' (2' Legs)	13A/250V	93K2561	13.60
● 17275A	16 (65x34)	10' (2' Legs)	13A/250V	93K2562	12.57

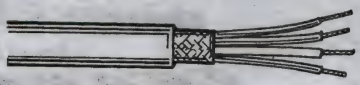
(31471)

MULTICONDUCTOR BRAID SHIELDED CABLE WITH PVC JACKET

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

- -20°C to 80°C, 200V
- Stranded tinned copper conductor
- Color-coded PVC insulation with clear PVC jacket
- Braided tinned copper shield
- Insulation thickness 0.010"



28 AWG, 7 x 36 STRANDED

No. of Cond.	Nom. O.D. (in.)	Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
2	0.115	1120 CL005	27M2950	358.06	1120 CL001	02F9784	1474.71
3	0.120	1121 CL005	02F9785	417.58	1121 CL001	02F9787	1739.52
4	0.130	1122 CL005	02F9788	527.01	...	...	...

(6133)

MULTICONDUCTOR BRAID SHIELDED MICROPHONE CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

- Braided or spiral wrapped tinned copper shield
- Polyethylene insulation
- Clear polyester wrap (multiconductor only)
- Slate PVC jacket
- Operating temperature: -20°C to 60°C

Stranded tinned copper conductor except for **mfg. part no. 1702** that has 3 strands of tinned copper and 4 strands of tinned copperweld.

100′ SPOOLS

Mfg. Part No.	No. of Cond.	AWG (Standing)	Volt. Rtng.	Nom. O.D. (In.)	Stock No.	Price per Spool
1702 SL005*†	1	26 (7 x 34)	1000	0.10	88K1348	201.90
1703 SL005†	1	24 (10 x 34)	3500	0.15	02F8793	106.08
1705 SL005*†	1	24 (10 x 34)	1000	0.11	02F8799	170.28
1706 SL005†	1	20 (26 x 34)	4000	0.18	02F8802	284.26
1709 SL005*+	2	24 (10 x 34)	1000	0.19	02F8805	272.91
1710 SL005+	2	22 (19 x 34)	1000	0.24	02F8808	178.98
1712 SL005+	2	20 (26 x 34)	600	0.22	02F8974	269.04

1000′ SPOOLS

Mfg. Part No.	No. of Cond.	AWG (Standing)	Volt. Rtng.	Nom. O.D. (In.)	Stock No.	Price per Spool
1702 SL001*†	1	26 (7 x 34)	1000	0.10	02F8792	643.63
1703 SL001†	1	24 (10 x 34)	3500	0.15	02F8795	692.77
1705 SL001*†	1	24 (10 x 34)	1000	0.11	02F8801	789.29
1706 SL001†	1	20 (26 x 34)	4000	0.18	02F8804	1319.45
1709 SL001*+	2	24 (10 x 34)	1000	0.19	02F8807	1289.80
1710 SL001+	2	22 (19 x 34)	1000	0.24	85K9623	972.73
1712 SL001+	2	20 (26 x 34)	600	0.22	02F8976	1248.91

*Spiral wrapped shield; +All low impedance microphones; †All high performance microphones

(6132)

BRILLIANCE® CMR RATED AUDIO SNAKE CABLE

RoHS Compliant Available

BELDEN — SENDING ALL THE RIGHT SIGNALS

Brilliance®

1814R

Brilliance® snake cable specially designed for the broadcast industry and used to connect multiple audio channels in low-level (microphone) and high-level (line) componentry. Typical applications include console board equipment for recording studios, radio and TV stations, post-production facilities and sound system installations. Pairs are individually shielded and jacketed. Jacketed pairs are individually numbered and color coded. Tinned-copper, polyolefin insulated pairs, color-coded red and black. Each pair individually shielded with bonded Beldfoil® aluminum-polyester shield. Overall black PVC jacket with nylon ripcord. Nominal capacitance: 31pF/ft. Nominal impedance: 50Ω. **Sold in 500′ and 1000′ spools.**

24 AWG (7x32) TINNED COPPER CONDUCTOR, SHIELDED

No. of Pairs	Nom. O.D. (mm)	Mfg. Part No.	500′ Spool Stock No.	500′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
4	8.788	1408R 010500	19C1648	974.17	1408R 0101000	19C1647	1948.33
6	10.465	...	...	...	1409R 0101000	19C1649	2750.36
8	11.328	1410R 010500	20M4368	1885.19	1410R 0101000	06M3871	3770.37
16	15.799	1412R 010500	19C1656	3493.22	1412R 0101000	19C1655	6986.44
24	20.345	1414R 010500	29M7211	5072.02	1414R 0101000	29M7210	10144.03

CONTINUED

BRILLIANCE® CMR RATED AUDIO SNAKE CABLE (CONT.)

22 AWG (7x30) TINNED COPPER CONDUCTOR, SHIELDED

No. of Pairs	Nom. O.D. (mm)	Mfg. Part No.	500′ Spool Stock No.	500′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
2	8.382	1814R 010500	19C3071	603.51	1814R 0101000	87K1158	1123.30
4	9.754	1815R 010500	87K1160	1018.17	1815R 0101000	87K1159	2188.11
6	11.735	1816R 010500	87K1161	1680.44	1816R 0101000	29M7220	3360.88
8	12.776	1817R 010500	90B5730	2173.40	1817R 0101000	87K1162	4346.80
12	16.205	...	...	...	1818R 0101000	29M7221	5845.67
16	19.71	1819R 010500	19C3079	3978.14	1819R 0101000	96B6457	7956.27
32	27.229	...	...	...	1823R 0101000	29M7226	16858.68

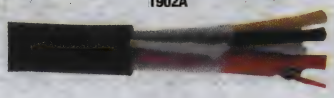
(66298)

BRILLIANCE® FLEXNAKE™ AUDIO SNAKE CABLE

RoHS Compliant Available

BELDEN — SENDING ALL THE RIGHT SIGNALS

1902A



Brilliance®

1904A

New super-flexible multiple-pair audio snake cable has a long flex life and exhibits an extremely low level of microphone triboelectric noise. Features exclusive "French Braid Double Shield" (U.S. Patent Number 5,303,630), for unsurpassed flexibility and excellent EMI/RFI shielding capabilities. Ultra-flexibile FlexNake™ cable lays absolutely flat with no kinking. Bare copper, polyolefin insulated twisted pairs, color coded red and black. Each pair individually shielded with bare- copper double-serve "French Braid". Individual pairs with numbered and color coded PVC jackets. Overall black PVC jacket. Nominal impedance: 60Ω. Nominal capacitance: 26.0pF/ft.

24 AWG (41x40) BARE COPPER, SHIELDED

Mfg. Part No.	No. of Pairs	Nom. O.D. (in.)	250′ Spool Stock No.	250′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
1902A	2	0.33	15B2204	755.28	87K1178	1510.55	15B2203	3021.10
1904A	4	0.372	15B2207	953.88	15B2208	1907.76	15B2206	3815.52
1906A	6	0.449	15B2210	1431.28	15B2211	2862.55	06M3901	5725.09
1908A	8	0.482	15B2213	1889.29	15B2214	3778.58	15B2212	7557.16
1912A	12	0.602	15B2217	2744.13	15B2218	5644.99	15B2216	10976.51
1916A	16	0.683	15B2229	3269.06	15B2230	6724.86	15B2228	13449.72
1924A	24	0.825	...	...	15B2233	9734.20	...	...
1924A	24	0.825	...	...	15B2233	9734.20	...	...
1932A	32	0.968	15B2235	6748.95	...	...	...	...

(66292)

AES/EBU DIGITAL AUDIO CABLE

RoHS Compliant Available

BELDEN — SENDING ALL THE RIGHT SIGNALS

Digital audio cable meets the latest AES/EBU standards for digital audio applications and provide unsurpassed performance for traditional analog audio applications. This cable utilizes Datalene® premium grade high-density insulation for exceptional crush resistance and less susceptibility to damage from cable pulling or flexing.

22 AWG (7 x 30)

Mfg. Part No.	No. of Pairs	Nom. O.D. (in.)	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
1696A*‡	1	0.234	04F6709	573.67	04F6710	1144.23

* High-free version; ‡ 90% TC

(83207)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

AUDIO/VIDEO/SPEAKER CABLE

AUDIO/VIDEO COMPOSITE CABLE

RoHS Compliant Available

BELDEN — SENDING ALL THE RIGHT SIGNALS

9265

9165

9262

Ideal for audio and video combination applications, external drive signals, tallies, intercom and switching. Composite cable features Z-Fold™, Beldfoil® and tinned copper braid shielding to significantly reduce both internal and external interference. All wire is 22/22 AWG with 7x30 stranding except **Mfg. part no 9262**, 20 AWG with 7x28 stranding and 22 AWG with 7x30 stranding. Coax has polyethelene insulation, regular conductors, PVC. Durable PVC outer jacket for outdoor applications. UL recognized.

ELECTRONIC NEWS GATHERING (ENG) CAMERA CABLE — RG-59/U, NOM. O.D. 0.242″ x 0.470″

Mfg. Part No.	Nom. Imp. (Ohms)	No. of Cond.	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 9265†	35	2 Cond., 1 Pair	...	...	**87K1863**	667.09	**03F2164**	1330.03
	75	1 Coax						
ELECTRONIC NEWS GATHERING (ENG) AND CLOSED CIRCUIT TV (CCTV) CABLE — RG-59/U, NOM. O.D. 0.290 x 0.561″								
● 9165††	35	7 Cond., 3 Pairs	...	...	**87K6353**	1503.46	**03F3435**	3006.92
	75	1 Coax						
REMOTE CONTROL AND VIDEO CABLE, NOM. O.D. 0.460″								
● 9262††	...	12 Cond	**04F8951**	964.88	...	...	**04F8953**	7932.92
	75	1 Coax						

†NEC Type CL2 ††NEC Type CL2X
(9922)

TWO-CONDUCTOR AUDIO SPEAKER CABLE

RoHS Compliant Available

BELDEN — SENDING ALL THE RIGHT SIGNALS

9718 Parallel Zip

9497 Cabled

PARALLEL ZIP CONSTRUCTION

This parallel zip constructed speaker cable features two high-conductivity copper conductors, one tinned, one bare. **Mfg. part. nos. 8782** and **8649** have a chrome PVC outer jacket; **mfg. part nos. 9708** and **9718** a clear transparent outer jacket.

AWG (Strand-ing)	Nom. O.D. (in.)	Mfg. Part No.	500′ Spool Stock No	500′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No	1000′ Spool Price per Spool
24 (7x32)	.058 x .116	...	...	...	● 8782 060U1000	**87K6340**	160.38
20 (7x28)	.073 x .146	...	...	...	● 8649 0601000	**87K1785**	312.27
18 (16x30)	.11 x .22	● 9708 368U500	**02F4112**	236.15	● 9708 368U1000	**02F4113**	472.29
12 (65x30)	.185 x .37	● 9718 368500	**04F8982**	952.20	...	...	...
CABLED, OPEN TWISTED CONSTRUCTION							
22 (7x30)	.105	...	...	...	● 9151 009U1000	**04F5194**	285.97
18 (7x26)	.18	...	...	...	● 8460 063U1000	**02F5267**	565.20
16 (19x29)	.21	...	...	...	● 8470 063U1000	**02F5269**	676.43
16 (19x29)	.21	...	...	...	● 9497 0001000	**04F8955**	665.71

(6158)

BRILLIANCE® PROFESSIONAL MUSIC/MICROPHONE CABLE

RoHS Compliant Available

BELDEN — SENDING ALL THE RIGHT SIGNALS

Brilliance®

8412

8427

8422

1804A

Designed for flexibility, service and reliable signal transmission at audio frequencies. Shielded multiconductor cable is used in low impedance applications. Rubber jacketed cable is recommended for abrasion and impact resistance offering extra limpness so cable lies flat. Hypalon® jacketed cable are recommended for outside use, cold weather applications. Sun-, oil-, and-ozone resistant. PVC jacketed cable is recommended for lower capacitance, lower loss, and is lighter weight, smaller in diameter and ozone- and oil-resistant. **Mfg. part nos. 8408, 8412, 8418, 8424-27** tinned copper conductors, rubber insulated, rayon and tinned copper braid shields. **Sold in spool sizes indicated in table below.** 1000′ spools are also available; *go online or call.*

No. of Cond.	AWG (Stranding)	Jacket	Nom. Cap. (pF/ft.)	Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	Mfg. Part No.	500′ Spool Stock No.	500′ Spool Price per Spool
2	20 (26 x 34)	Rubber	30.00	● 8412 010100	**87K6280**	172.52	● 8412 010U500	**02F3992**	753.51
4	20 (26 x 34)	Rubber	27.00	● 8424 010100	**02F3998**	301.61	● 8424 010500	**87K7176**	1399.23
5	20 (26 x 34)	Rubber	30.00	● 8425 010100	**02F4003**	496.50	...	...	...
6	20 (26 x 34)	Rubber	30.00	● 8426 010100	**02F4005**	562.13	...	...	...
7	20 (26 x 34)	Rubber	30.00	● 8427 010100	**02F4007**	635.23	...	...	...
8	20 (26 x 34)	Rubber	30.00	● 8418 010100	**02F4012**	787.97	...	...	...
2	16 (65 x 34)	Hypalon®	30.00	...	...	...	● 8408 001500	**02F6171**	2235.73
4	28 (19 x 40)	PVC	40.00	1804A J5C100	**04F6697**	191.84	1804A J5C500	**04F6698**	897.53
2	24 (19 x 36)		30.00	...	...	...	● 9452 010U500	**03F1661**	342.54
2	22 (16 x 34)		18.00	...	...	...	● 8422 060500	**15B3318**	659.91

(6156)

SPEAKER WIRE

RoHS Compliant Available

General Cable

CAROL BRAND

Applications:
- Hi-Fi and Stereo Speaker Wire
- Lamps, Radios, Juke Boxes

One bare-copper and one tinned-copper stranded conductor with color-coded PVC insulation. Two conductors are parallel. Color: clear.

C1356-C1363

UL WIRES MISCELLANEOUS 90 VOLTS

AWG (Stranding)	500′ Spool Mfg. Part No.	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
22 (7x30)	● C1362-18-90	**04F8456**	87.76	● C1362-21-90	**04F8458**	140.45
18 (16x30)	● C1357-18-90	**10M5145**	154.90	● C1357-21-90	**10M5146**	374.58
UL RECOGNIZED 300 VOLTS SPT-1						
24 (7x32)	...	...	...	● C1356-21-90	**04F8434**	111.33
16 (26x30)	● C1358-18-90	**04F8435**	238.10	C1358-21-90	**04F8437**	364.61
12 (65x30)	C1363.38.90	**90B5854**	662.82	● C1363-41-90	**04F8623**	1274.66

(6299)

element14 COMMUNITY

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element14.com

(196545)

ALPHA WIRE INDUSTRIAL SERIES

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

HIGH-PERFORMANCE, SYMMETRICAL DESIGN FLEX MOTOR SUPPLY CABLE

Features:
- Reduced cable cost
- Small outer diameter
- Supra-Shield® superior shielding
- Flexibility and ease of handling over conventional motor cable
- Round geometrical shape to facilitate environmental seal
- Jacket durability
- Oil, abrasion and sunlight resistance
- Suitable for direct burial

Specifications:
- Bend Radius 10X Static, 15X Dynamic
- UL Standard 1277, Type TC-ER, 90°C, 600 Volt
- UL Exposed Run (-ER)
- UL Standard 1063, Type MTW, 90°C, 600 Volt
- UL Direct Burial
- UL Sunlight Resistant
- UL 1581 Vertical Tray Flame Test
- UL WTTC
- CSA AWM I A/B II A/B FT 4
- CSA FT4 Flame Test
- Oil res I
- UL listed, CSA certified, CE compliant

Applications:
- Servo Motor, AC Drives
- Variable Frequency Drive
- Medical, Robotic,
- Packaging, Conveying
- Machine Tool, Welding
- Fluid Movement, Waste Water
- UL compliant to NEC Article 336.10 (7) for exposed runs exiting the cable tray
- Suitable for use in Class 1, Division 2 locations per NEC Article 501

High-performance, symmetrical design flex motor supply cable features four finely stranded bare copper conductors, PVC/nylon insulation, and specially-formulated, oil-resistant black PVC jacket. Aluminum/polyester/aluminum shield plus overall tinned copper braid (70% coverage) and four symmetrical stranded tinned copper drain wires. Voltage rating: 600V UL Type TC-ER, MTW. Operating temperature: -5°C to 90°C (flexing), -20°C to 90°C (stationary). This flexible motor supply cable complements Series V high-performance variable frequency drive (VFD) cable; *order separately*. FIT®-321 and FIT®-600 heat-shrink tubing is recommended; *order separately on* [6506], and [6405] .

Mfg. Part No.	AWG	Stranding	Nom. O.D. (In.)	100′ Spool Stock No.	100′ Spool Price per Spool
5660 BK005	16	26 x 30AWG	0.381	34P0670	317.52
5663 BK199	10	105 x 30AWG	0.579	34P0673	650.72
5664 BK199*	8	168 x 30AWG	0.760	13T0651	9.48
5665 BK199*	6	266 x 30AWG	0.901	13T0652	13.62

***Sold in bulk; priced per foot**
(136924)

ALPHA WIRE INDUSTRIAL SERIES

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

SERIES V HIGH-PERFORMANCE, LARGE AWG VARIABLE FREQUENCY DRIVE (VFD) CABLE

Features:
- Three stranded tinned-copper conductors
- Dual spiral copper tape shield
- Stranded bare copper ground wires
- Specially-formulated, cross-linked polyethylene (XLPE) insulation
- Oil- and corona-resistance
- Low capacitance for improved signal transmission
- Voltage rating: 600V/1000V
- Operating temperature range: -40°C to 90°C
- Suitable for direct burial

Applications:
- UL Exposed Run (-ER) compliant to NEC section 336.10 (7)
- Multi-axis control systems
- Automotive assembly equipment
- Robotics
- Machine tools
- Stationary track/tray
- Conveyor systems
- Factory equipment interconnects

Specifications:
- UL Standard 1277, Type TC-ER, 90°C, 600V
- UL Exposed Run (-ER)
- UL Direct Burial
- UL Sunlight Resistant
- UL Type XHHW-2
- UL 1000V Flexible Motor Supply Cable
- UL 1581 and CSA FT-4 Vertical Tray
- CSA AWM I/II A/B XHHW-2 Singles
- IEEE 1202/383 Vertical Tray
- CE-LVD: 73/68/EEC Amend. 93/68/EEC
- MSHA

Series V symmetrical design, 3-conductor variable frequency drive (VFD) cable, in large AWG conductor sizes, is ideal for interconnection of VFD systems and motors for extended duty-cycle performance requirements. Feature bare copper ground wires placed in the interstices of the conductors, resulting in uniform conductor-to-ground capacitance and impedance. This unique arrangement minimizes the probability of motor damage from common mode current flow. Plus the dual layer copper tape shield provides 100% shielding with low shield impedance. Suitable in Class I and II: Division 2 hazardous locations where the round outer jacket provides a good seal with glands and grommets where IP67 requirements must be met. Color: black. **Priced per foot minimum order 100′.**

Mfg. Part No.	AWG	Stranding	Nom. Dia. (In.)	Max. Current (A)	Stock No.	Price per Foot
V16001 BK199	1	133 x 22AWG	1.197	150	13T8755	25.27
V16000 BK199	0	133 x 21AWG	1.294	170	13T8754	31.24
V16020 BK199	00	133 x 20AWG	1.399	195	13T8756	36.84
V16030 BK199	000	133 x 19AWG	1.517	225	13T8757	43.46
V16040 BK199	0000	133 x 18AWG	1.653	260	13T8758	56.32

(106001)

ALPHA WIRE INDUSTRIAL SERIES

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

SERIES SF FLEXIBLE SERVO CABLE

- Two configuratuions: Power or Composite for power and control
- High flexibility — 10x bend radius
- UL sunlight resistant
- UL oil resistant I/II
- Suitable for use in Class I, Div. 2 locations per Article 501 of NEC
- UL listed, CSA certified

Series SF flexible servo cable provides the same high performance as Series S cable, but offers enchanced flexibility in flexing applications that require continuous movement. Features tinned copper conductors, PVC/nylon insulation, aluminum/polyester foil shield with tinned copper braid, and an orangeTPE (thermoplastic elastomer) outer jacket. Operating temperature range: -25°C to +90°C (static), -5°C to +90°C (dynamic). Rated UL TC-ER (600V), UL WTTC (1000V), CSA AWM I/II A/B FT4. **Sold in 100′ spools.**

POWER — FOUR CONDUCTORS FOR POWER/GROUND

Mfg. Part No.	No. of Conductors	AWG	Stranding	Nom. Dia. (In.)	Stock No.	Price per Spool
SF61108CY OR005	4	8	168 x 30AWG	0.785	90R0567	724.48
SF61110CY OR005	4	10	105 x 30AWG	0.605	90R0570	482.00
SF61112CY OR005	4	12	65 x 30AWG	0.506	90R0573	385.47
SF61114CY OR005	4	14	41 x 30AWG	0.440	90R0576	323.92
SF61116CY OR005	4	16	26 x 30AWG	0.406	90R0579	269.37
SF61118CY OR005	4	18	19 x 30AWG	0.382	90R0582	246.14

COMPOSITE
Four conductors for power/ground plus two individually shielded pairs for brake or temperature control.

SF61224CY OR005	4 + 2 Prs.	8	26 x 30AWG / 168 x 30AWG	0.943	90R0597	812.74
SF61223CY OR005	4 + 2 Prs.	10	26 x 30AWG / 105 x 30AWG	0.757	90R0594	626.97
SF61222CY OR005	4 + 2 Prs.	12	26 x 30AWG / 65 x 30AWG	0.674	90R0591	534.08
SF61221CY OR005	4 + 2 Prs.	14	19 x 30AWG / 41 x 30AWG	0.62	90R0588	455.13
SF61220CY OR005	4 + 2 Prs.	16	19 x 30AWG / 26 x 30AWG	0.590	90R0585	423.10

(194862)

DEVICENET™ INDUSTRIAL AUTOMATION SHIELDED PAIRED CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

- Fully compliant with ODVA thick and thin specifications
- Allows use of device level diagnostics
- Reduced installation costs compared with traditional "home run" wiring practices
- Complies with Allen-Bradley part nos. 1485 CPI-A and 1485 CPI-C
- High data rates: supports 500kbps @ 100m and 125kbps @ 500m
- Superior quality to improve system reliability
- UL listed

6452

DeviceNet™ thick or thin cable provides reliability and performance with the integration of power and data functionality in a single rugged cable that meets ODVA specifications. Features stranded tinned copper power and data conductors, individual foil shield plus 65% tinned copper braid overall, power conductor is PVC insulated, data conductor is FPE insulated, and slate sunlight- and oil-resistant PVC jacket. Operating temperature: 0°C to 80°C (static), -20°C to +75°C (dynamic). Rated: 300V Class 2. **Sold in spools sizes indicated in table below.**

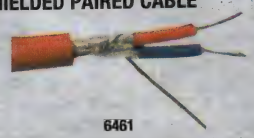
Mfg. Part No.	ODVA Specs.	No. of Pairs	Jacket O.D. (In.)	AWG (Stranding)	Spool Size (Ft.)	Stock No.	Price per Spool
6451 SL005	Thick	2	0.48	Power: 15 (19x0.0135) Data: 18 (19x30)	100	34P0696	279.44
6451 SL002		2	0.48		500	34P0695	1109.72
6451 SL001		2	0.48		1000	34P0694	1992.72
6452 SL005	Thin	2	0.28	Power: 22 (19x34) Data: 24 (19x36)	100	34P0699	140.11
6452 SL002		2	0.28		500	34P0698	563.49
6452 SL001		2	0.28		1000	34P0697	1011.80

DeviceNet™ is a trademark of Open DeviceNet Vendor Association, Inc.
(136936)

FIELDBUS AND PROFIBUS INDUSTRIAL AUTOMATION SHIELDED PAIRED CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.



6461

6463

- Suitable for use in Class 1 Division 2 locations per NEC Article 502
- Complies with IEC 61158 standard
- Superior quality to improve system reliability
- UL listed, CSA certified

Fieldbus and PROFIBUS industrial automation cable meet the ruggedness, performance and quality requirements of Type A, Type B and High Speed Fieldbus and PROFIBUS DP application environments. **Sold in spools sizes indicated in table below.**

FIELDBUS
Fieldbus cable features stranded tinned copper conductors, foil shield, and orange sunlight-resistant PVC jacket. Types A and B have polyolefin insulation and High-Speed has foam high-density polyethylene (HDPE) insulation. Operating temperature: -30°C to +105°C except for **mfg. part no. 6461** which is -40°C to +75°C. Industry approvals: UL:PLTC, CM, ITC; CSA: CM.

CONTINUED

AUTOMATION & PROCESS CONTROL CABLE

FIELDBUS AND PROFIBUS INDUSTRIAL AUTOMATION SHIELDED PAIRED CABLE (CONT.)

Mfg. Part No.	Type	No. of Prs.	AWG (Stranding)	Jacket O.D. (In.)	Imped. (Ω)	Spool Size (Ft.)	Stock No.	Price per Spool
● 6459 OR005	A	1	18 (7 x 26AWG)	0.253	100	100	34P0719	68.57
● 6459 OR002	A	1	18 (7 x 26AWG)	0.253	100	500	34P0718	308.75
● 6459 OR001	A	1	18 (7 x 26AWG)	0.253	100	1000	34P0717	494.58
● 6460 OR005	B	1	22 (7 x 0.24mm)	0.196	100	100	34P0722	53.09
● 6460 OR002	B	1	22 (7 x 0.24mm)	0.196	100	500	34P0721	239.20
● 6460 OR001	B	1	22 (7 x 0.24mm)	0.196	100	1000	34P0720	383.22
● 6461 OR005	Hi-Speed	1	22 (7 x 30AWG)	0.351	150	100	34P0725	99.13
● 6461 OR002	Hi-Speed	1	22 (7 x 30AWG)	0.351	150	500	34P0724	446.52
● 6461 OR001	Hi-Speed	1	22 (7 x 30AWG)	0.351	150	1000	34P0723	715.28

PROFIBUS

PROFIBUS cable features solid (**mfg. part no. 6462**) or stranded (**mfg. part no. 6463**) tinned copper conductors, foil shield plus 65% tinned copper braid shield, foam high-density polyethylene (HDPE) insulation, and purple sunlight-resistant PVC jacket. Operating temperature: 30°C to 75°C. Industry approvals: UL: PLTC, CMG; CSA: CMG FT4. UL listed, UL recognized, CSA certified, CE compliant.

● 6462 VI005	DP	1	22 (Solid)	0.315	150	100	34P0728	129.20
● 6462 VI002	DP	1	22 (Solid)	0.315	150	500	34P0727	582.39
● 6462 VI001	DP	1	22 (Solid)	0.315	150	1000	34P0726	932.78
● 6463 VI005	DP	1	22 (7 x 30AWG)	0.315	150	100	34P0731	149.24
● 6463 VI002	DP	1	22 (7 x 30AWG)	0.315	150	500	34P0730	672.53
● 6463 VI001	DP	1	22 (7 x 30AWG)	0.315	150	1000	34P0729	1077.29

(136940)

INDUSTRIAL TWINAX SHIELDED CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

- Foil/braid shield for maximum signal integrity and run length
- Excellent electrical characteristics
- May be installed in the same tray or conduit as 600V power cable
- Suitable for use with Allen-Bradley Data Highway networks
- Superior quality to improve system reliability
- UL listed

Industrial twinax cable provides a robust physical media for the transmission of PLC/DCS signals that meet the needs of real-time, high-throughput industrial applications. Features 18 AWG 7x26 stranded tinned copper conductors, foil shield plus 55% tinned copper braid shield, and blue UL sunlight-resistant PVC jacket. Nominal impedance: 78Ω. Rated: 600V. Operating temperature: -40°C to +75°C. Industry approvals: UL: TC PLTC CMG, ITC; CSA: CMG FT4. **Sold in spools sizes indicated in table below.**

Mfg. Part No.	No. of Pairs	AWG (Stranding)	Jacket O.D. (In.)	Spool Size (Ft.)	Stock No.	Price per Spool
● 6450 BL005	1	18 (7 x 26AWG)	0.324	100	34P0693	179.50
● 6450 BL002	1	18 (7 x 26AWG)	0.324	500	34P0692	793.64
● 6450 BL001	1	18 (7 x 26AWG)	0.324	1000	34P0691	1295.54

(136939)

RS-485 INDUSTRIAL AUTOMATION SHIELDED PAIRED CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

- UL type PLTC and CM listed
- Sunlight- and oil-resistant
- Suitable for use in Class 1 Division 2 locations per NEC Article 501
- Superior quality to improve system reliability
- UL listed

6457

Alpha Wire RS-485 cable brings proven data transmission protocol to the factory floor in a rugged design. Reduces electrical noise sensitivity to keep reliability and performance at world-class levels. Features 22 AWG 7x30 stranded tinned copper conductors, foil shield plus 65% tinned copper braid shield, foam high-density polyethylene (HDPE) insulation and black UL sunlight-resistant and oil-resistant PVC jacket. Voltage rating: 300V. Operating temperature: -20°C to 60°C. Industry approvals: UL: CM PLTC; CSA: CM FT1. **Sold in spools sizes indicated in table below.**

Mfg. Part No.	No. of Pairs	Nom. O.D. (In.)	100′ Spool		500′ Spool		1000′ Spool	
			Stock No.	Price per Spool	Stock No.	Price per Spool	Stock No.	Price per Spool
● 6453	1	0.284	34P0702	100.90	34P0701	440.89	34P0700	710.71
● 6454	1	0.300	34P0705	109.95	34P0704	484.00	34P0703	780.13
● 6455	2	0.408	08P3224	199.10	34P0707	861.37	34P0706	1412.92
● 6456	4	0.414	34P0710	224.06	34P0709	986.30	34P0708	1617.82
● 6457	4	0.448	34P0713	255.43	34P0712	1110.58	34P0711	1821.61

(136935)

DATABUS® ISA/SP-50 FOUNDATION FIELDBUS OR PROFIBUS PAIRED CABLE

RoHS Compliant Available

BELDEN — SENDING ALL THE RIGHT SIGNALS

Mfg. part no. 3079A DataBus® ISA/SP-50 PROFIBUS paired cable features solid bare copper conductors, flame-retardant foam polyethylene insulation, Beldfoil® aluminum foil/polyester tape shield (100%) plus a tinned copper braid shield (65%), and a chrome-color PVC outer jacket. Fitted impedance: 150 ohms. Nominal mutual capacitance @ 1KHz: 8.5pF/ft. Rated: 300V, +75°C, NEC/CEC(UL): PLTC,CMG/CMG.

DATABUS® ISA/SP-50 PROFIBUS PAIRED CABLE

Mfg. Part No.	AWG	Nom. O.D. (In.)	1000′ Spool	
			Stock No.	Price per Spool
● 3079A 0601000	22	0.315	88K2136	1625.34

DATABUS® ISA/SP-50 FOUNDATION FIELDBUS OR PROFIBUS PAIRED CABLE

Mfg. part no. 3076F DataBus® ISA/SP-50 FOUNDATION Fieldbus or PROFIBUS paired cable features 7x26 stranded tinned copper conductors, polyolefin insulation, Beldfoil® aluminum foil/polyester tape shield (100%) with tinned copper drain wire, and a orange-color PVC outer jacket. Unaveraged impedance: 100 ohms. Nom. mutual capacitance @ 1KHz: 24.0pF/ft. Rated: 300V, +105°C, NEC/CEC(UL): PLTC,CMG,ITC/CM.

Mfg. Part No.	AWG	Nom. O.D. (In.)	250′ Spool		500′ Spool		1000′ Spool	
			Stock No.	Price per Spool	Stock No.	Price per Spool	Stock No.	Price per Spool
● 3076F	18	0.292	32M6858	246.10	32M6859	472.29	30H1660	868.46

(6192)

DEVICEBUS® PAIRED CABLE FOR ODVA DEVICENET™

RoHS Compliant Available

BELDEN — SENDING ALL THE RIGHT SIGNALS

All cable features tinned copper conductors, PVC insulation (Power — red/black), foam polyethylene insulation (Data — blue/white) and individual aluminum foil/polyester tape shield plus tinned copper braid. Voltage rating: 300V. Nom. impedance: 120Ω. Nom. capacitance: 12. 0pF/Ft. Meter marks on jacket aids users in installation. *Go online or call for the high-flex version.*

3082A

Mfg. Part No.	Construction (Stranding)	Jacket	Nom. O.D. (In.)	500′ Spool		1000′ Spool	
				Stock No.	Price per Spool	Stock No.	Price per Spool
3082A*	Thick 1 Pr. 15 AWG (19×28) 1 Pr. 18 AWG (19×30)	Sunlight- and Oil-Resistant Gray PVC	0.480	88K1371	1769.53	66F7790	3539.07

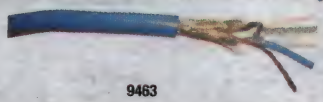
*Allen-Bradley P/N 1485 CPI-A; +Allen-Bradley P/N 1485 CPI-C

(6190)

INDUSTRIAL TWINAXIAL CABLE FOR PLCs AND DCSs

RoHS Compliant Available

BELDEN — SENDING ALL THE RIGHT SIGNALS



9463

Industrial twinaxial cable is suitable for programmable logic control systems (PLCs) and distributed control systems (DCSs). Features two 20 AWG (7 x 28) stranded tinned-copper conductors and aluminum foil-polyester tape/braid shield. Nominal impedance: 78-ohm.

Insul. & Nom. Core O.D.	Nom. Cap.	Mfg. Part No.	500′ Spool		Mfg. Part No.	1000′ Spool	
			Stock No.	Price per Spool		Stock No.	Price per Spool
Poly-ethylene Clear, Blue 0.150″	19.7	● 9463 J22U500	70B5512	494.78	● 9463 J22U1000	03F5678	989.56

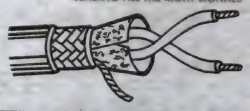
(6188)

RS-485 EIA INDUSTRIAL CABLE — PLTC/CM

RoHS Compliant Available

BELDEN — SENDING ALL THE RIGHT SIGNALS

Tinned copper 22 AWG (7×30) conductors, twisted pairs, Datalene® insulation, 100% overall Beldfoil® shield plus 90% tinned copper braid, 22 AWG (7×30) stranded tinned copper drain wire and black UV-resistant PVC jacket. Nom. imped.: 120Ω. Nom. cap.: 11.0pF/ft* 36.1pF/m*; 20.0pF/ft.** 65.6pF/m**. **Mfg. part nos. 3105A** and **3107A** are DMX512 Type.



No. of Pairs	Nom. O.D. (In.)	Mfg. Part No.	500′ Spool		Mfg. Part No.	1000′ Spool	
			Stock No.	Price per Spool		Stock No.	Price per Spool
1	0.284	● 3105A 010500	88K2138	619.26	● 3105A 0101000	66F7739	1238.51
1.5	0.300	● 3106A 010500	88K2140	683.79	● 3106A 0101000	88K2139	1367.57
2	0.356	...	...	...	● 3107A 0101000	32M6860	2472.17

*Capacitance between conductors; **Capacitance between one conductor and other conductors connected to shield

(6193)

VARIABLE FREQUENCY DRIVE (VFD) CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

- Stranded tinned copper conductors
- Cross-linked polyethylene insulation
- Sunlight- and oil-resistant black PVC outer jacket
- UL voltage rated: 1000V
- UL temperature rated: 90°C wet/dry

29502

29512

Extremely flexible motor supply cable suitable for AC motor drive and variable frequency drive (VFD) applications. **Sold in spool quantities indicated in tables below.**

FOUR-CONDUCTOR VFD CABLE

Four-conductor VFD cable features three circuit conductors plus one full-size ground and an overall Beldfoil® aluminum foil/polyester tape shield with tinned copper braid and tinned copper drain wire. Max. operating voltage: UL 1000 Vrms (Flexible Motor Supply Cable), 600 Vrms (NEC Type TC-ER per NEC article 336); 1000 Vrms (CSA AWM I/II A/B).

Mfg. Part No.	AWG	Nom. O.D. (in.)	Stranding	100′ Spool		500′ Spool		1000′ Spool	
				Stock No.	Price per Spool	Stock No.	Price per Spool	Stock No.	Price per Spool
29500	16	0.490	26 x 30	18M5588	331.70	83F8563	1442.05	83F8562	2884.09
29501	14	0.560	41 x 30	18M5589	428.96	83F8565	1865.12	88K1364	3730.23
29502	12	0.600	65 x 30	18M5590	541.30	83F8567	2353.50	83F8566	4706.99
29503	10	0.670	105 x 30	18M5591	679.10	83F8568	2952.42	19C3214	5904.84
29504	8	0.910	7 x 19 x 29	...	...	83F8569	4988.63	09C9356	9977.26

FIVE- CONDUCTOR COMPOSITE VFD CABLE

Five-conductor composite VFD cable features one twisted pair (signal) with Beldfoil® aluminum foil/polyester tape shield and stranded tinned copper drain wire, plus three multiconductors (VDF) with Duofoil® aluminum foil/polyester tape/aluminum foil shield plus tinned copper braid and a PVC insulated stranded tinned copper ground wire. Max. operating voltage: UL 1000 Vrms (Flexible Motor Supply Cable), 1000 Vrms (NEC Type TC-ER per NEC article 336); 1000 Vrms (CSA AWM I/II A/B).

Mfg. Part No.	AWG Signal, VFD	Nom. O.D. (in.)	Stranding Signal, VFD	100′ Spool		500′ Spool		1000′ Spool	
				Stock No.	Price per Spool	Stock No.	Price per Spool	Stock No.	Price per Spool
29511	16, 14	0.820	26 x 30, 41 x 30	40M4220	575.87	40M4221	2503.75	30M7205	5007.49
29512	16, 12	0.895	26 x 30, 65 x 30	40M4222	702.26	40M4223	3053.19	30M7206	6106.39

(33077)

10GX CATEGORY 6A TWISTED PAIRED LAN CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

- Available in riser and plenum versions
- Choice of bonded- and nonbonded-pair construction
- RoundFleX H-web design separates pairs and maintains stability, improving ANEXT, NEXT and impedance performance
- Small 0.295″ diameter minimized for compactness of installations
- Guaranteed electrical performance that goes well beyond Category 6A
- Strong signal strength due to improved noise attenuation
- Maximized bandwidth and signal-to-noise margin for mission-critical applications
- Reduced Alien Crosstalk and less susceptibility to noise due to improved balance/symmetry on Bonded-Pair products
- Truly backward compatible with Cat 6 and Cat 5e components
- Matching tip and ring color code for ease of installation

10GX® paired cable is designed to meet the needs of demanding networking arenas that require both high-density connections and superb mechanical and electrical performance. Ideal for use in horizontal cable installations in data centers, high-speed Local Area Networks (LANs), server farms, storage area networks (SANs), network access nodes (NANs), campus backbones, metropolitan area networks (MANs) and short-distance backbone connections. This unshielded cable consists of four bonded- or nonbonded-pairs of 23 AWG solid copper conductors. Bonded-pairs feature a patented design in which the individual conductors are securely bonded along their longitudinal axis to guarantee uniform spacing within each twisted pair to maintain consistently high electrical performance. Meets Category 6A requirements as per TIA/EIA-568-B.2-10-2008, and ISO/IEC 11801 Ed.2 Draft Amd 2 Class EA. Exceeds Cat 6 requirements per ANSI/TIA/EIA-568-B. Exceeds Cat 5e requirements per ANSI/TIA/EIA-568-A.5 or ANSI/TIA/EIA-568-B. Available in assorted popular colors. **Sold in 1000′ spools.**

BONDED-PAIR, RISER (CMR), POLYOLEFIN INSULATION, PVC JACKET

Mfg. Part No.	Jacket Color	Spool Size (Ft.)	Stock No.	Price per Spool
10GX32 0041000	Yellow	1000	04R6486	698.23
10GX32 61000	Blue	1000	04R6487	698.23
10GX32 0081000	Grey	1000	04R6488	698.23
10GX32 91000	White	1000	04R6489	698.23

BONDED-PAIR, PLENUM (CMP), FEP INSULATION, LOW-SMOKE PVC JACKET

10GX33 0081000	Grey	1000	04R6492	1459.78

NONBONDED-PAIR, RISER (CMR), POLYOLEFIN INSULATION, PVC JACKET

10GX12 0021000	Red	1000	04R6465	646.16
10GX12 0031000	Orange	1000	04R6466	646.16
10GX12 0041000	Yellow	1000	04R6467	646.16
10GX12 0051000	Green	1000	04R6469	646.16
10GX12 0061000	Blue	1000	04R6470	646.16
10GX12 81000	Grey	1000	04R6473	646.16
10GX12 0091000	White	1000	04R6474	646.16
10GX12 0101000	Black	1000	04R6463	646.16

➤CONTINUED➤

10GX CATEGORY 6A TWISTED PAIRED LAN CABLE (CONT.)

NONBONDED-PAIR, PLENUM (CMP), FEP INSULATION, LOW-SMOKE PVC JACKET

Mfg. Part No.	Jacket Color	Spool Size (Ft.)	Stock No.	Price per Spool
10GX13 D151000	Blue	1000	04R6476	1362.90
10GX13 0071000	Purple	1000	04R6483	1362.90

(146408)

DATATUFF CATEGORY 5e AND 6 ETHERNET CABLE FOR INDUSTRIAL NETWORKS

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

- 4-Pairs
- Twisted-pair construction
- Patented bonded-pair technology
- High performance
- Heavy-duty, industrial-grade jackets

For peak network efficiency and reliability, DataTuff® Category 5e and 6 Ethernet cable is made for tough industrial environments. Category 5e and enhanced Category 5e cable feature twisted- or bonded-pairs. Category 6 and enhanced Category 6 cable have bonded-pairs. Bonded-pair construction features a patented technology that affixes the conductors of the cable pairs along their longitudinal axes preventing gaps and keeping the conductor-to-conductor spacing uniformed, thereby offering excellent and consistently reliable electrical performance even after the cable has been subjected to the bending, pulling and twisting inherent in the installation process. Choice of solid or stranded bare copper conductors (unless otherwise noted), shielded or unshielded construction. Heavy-duty industrial-grade jackets are UV sunlight- and oil-resistant. FEP jackets are also gas-resistant. TPE (thermoplastic elastomer) jackets are also weldsplatter-resistant. Outer jacket color: black (unless otherwise noted). **Sold in spool sizes indicated in table below.**

CAT 5e — 24 AWG, 4 TWISTED-PAIRS

Mfg. Part No.	Stranding	Shield	Insul.	Outer Jacket	Nom. O.D. (In.)	Spool Size (Ft.)	Stock No.	Price per Spool
7918A 0101000	Solid	None	Polyolefin	PVC	0.23	1000	30H4360	391.68
7919A 0101000	Solid	Beldfoil®		PVC	0.265	1000	30H4362	800.82
7919A 0061000	Solid	Beldfoil®		PVC**	0.265	1000	58K7996	800.82

CAT 5e — 24 AWG, 4 BONDED-PAIRS

7939A 0101000	7 x 32AWG	Beldfoil®	Polyolefin	PVC	0.315	1000	76M8744	1063.78
7939A 1NH1000	7 x 32AWG	Beldfoil®		PVC++	0.315	1000	47P0563	1063.78
7938A B59500	7 x 32AWG•	Beldfoil® & TC Braid		TPE†	0.35	500	58R2677	1420.68

ENHANCED CAT 5e — 24 AWG, 4 BONDED-PAIRS

7921A 0101000	Solid	Beldfoil® & TC Braid	Polyolefin	PVC	0.33	1000	30H4364	1456.49
7921A 0061000	Solid	Beldfoil® & TC Braid		PVC **	0.33	1000	58K7997	1456.49
7923A 0101000	Solid	None		PVC	0.207	1000	87K1517	548.93
7924A 0101000	7 x 32AWG‡	None		PVC	0.242	1000	87K1519	827.12
7928A 0101000*	Solid	None	FEP	FEP	0.187	1000	30H4370	2027.39
7929A 0101000	Solid	Beldfoil®	Polyolefin	PVC	0.265	1000	90H0105	955.31
7929A 0061000	Solid	Beldfoil®	Polyolefin	PVC**	0.265	1000	58K7998	955.31

ENHANCED CAT 6 — 23 AWG, BONDED-PAIRS

7927A 0101000±	Solid	None	Polyolefin	PVC	0.251x 0.339	1000	87K1520	1170.87

*Plenum; ±Patented E-Spline center member; •Copper alloy conductors; ‡Tinned copper conductors; †Inner and outer jackets; **Light blue outer jacket; ++Teal outer jacket

(65970)

DATATWIST 1200 CATEGORY 5e TWISTED PAIRED LAN CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

- Available in riser and plenum versions
- Excellent mechanical and electrical performance for Cat 5e networks
- Minimized skew for parallel transmission protocols
- High-flexibility design eases cable installation and dressing
- Small diameter minimized for compactness of installations
- Descending distance marking for cable length reduces waste
- Matching tip and ring color code for ease of installation

DataTwist® 1200 cable is intended to be used for horizontal cable installations of high-speed Local Area Networks (LANs), such as Gigabit Ethernet, for transmission speeds up to 1.2 Gb/s in systems with a bandwidth of 160 MHz. Ideal for supporting up to 1000BaseT, this cable was designed to exceed current standards, providing built-in margin and optimizing network performance. This unshielded cable consists of four twisted pairs of 24 AWG solid-copper conductors with a round flexible core construction. These insulated conductors are matched on all four pairs, which provides extremely stable electrical performance. Meets or exceeds the Category 5e requirements per ANSI/TIA/EIA-568-A.5 or TIA/EIA-568-B.2, has excellent PSNEXT and PSACR characteristics, and is easy to install. Available in assorted popular colors. **Sold in box or spool sizes indicated in table below.**

1212 SERIES, RISER (CMR), POLYOLEFIN INSULATION, PVC JACKET

Mfg. Part No.	Jacket Color	Nom. O.D. (In.)	Spool Size (Ft.)	Stock No.	Price per Spool
1212 003U1000	Orange	0.186	1000*	04R6496	255.35
1212 004U1000	Yellow	0.186	1000*	04R6497	255.35
1212 005U1000	Green	0.186	1000*	39P9092	255.35

➤CONTINUED➤

DATATWIST 1200 CATEGORY 5e TWISTED PAIRED LAN CABLE (CONT.)

Mfg. Part No.	Jacket Color	Nom. O.D. (In.)	Spool Size (Ft.)	Stock No.	Price per Spool
● 1212 008U1000	Grey	0.186	1000*	45P4948	255.35
● 1212 010U1000	Black	0.186	1000*	04R6503	255.35
● 1212 006U1000	Blue	0.186	1000*	04R6498	255.35
● 1212 009U1000	White	0.186	1000*	04R6501	255.35
● 1212 0061000	Blue	0.186	1000**	04R6499	255.35
● 1212 0091000	White	0.186	1000**	04R6502	255.35
● 1212 0062500	Blue	0.186	2500***	05R6103	638.37
1213 SERIES, PLENUM (CMP), POLYOLEFIN/ FEP DUAL INSULATION, LOW-SMOKE PVC JACKET					
● 1213 003U1000	Orange	0.188	1000*	04R6507	475.93
● 1213 004U1000	Yellow	0.188	1000*	04R6508	475.93
● 1213 005U1000	Green	0.188	1000*	04R6509	475.93
● 1213 007U1000	Purple	0.188	1000*	04R6510	475.93
● 1213 008U1000	Grey	0.188	1000*	04R6511	475.93
● 1213 010U1000	Black	0.188	1000*	04R6515	475.93
● 1213 012U1000	Pink	0.188	1000*	04R6516	475.93
● 1213 D15U1000	Blue	0.188	1000*	04R6504	475.93
● 1213 009U1000	White	0.188	1000*	04R6512	475.93
● 1213 D151000	Blue	0.188	1000**	04R6505	475.93

*TrapEZ box packaging for ease of installation; **11-3/4N Spool; ***14N Spool
(146407)

DATATWIST 2400 CATEGORY 6 TWISTED PAIRED LAN CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

- Available in riser and plenum versions
- Exceed TIA/EIA requirements for Category 6 Installations
- Provide for transmission speeds up to 2.4Gb/s
- Increased bandwidth and signal-to-noise margin
- Optimized balance of transmission performance for simultaneous parallel transmission protocols
- Small diameter for higher density installations
- Descending distance marking for cable length reduces waste
- Matching tip and ring color code for ease of installation

DataTwist® 2400 paired cable is intended to be used for horizontal cable installations of high-speed Local Area Networks (LANs) for transmission speeds up to 2.4 Gb/s. This unshielded cable consists of four twisted pairs of 23 AWG solid copper conductors with a round flexible core construction. The patented design features a central tape to provide pair separation, and matched conductors on all four pairs, which provide for extremely stable electrical performance. Meets or exceeds Category 6 requirements per TIA/EIA-568-B.2-1. Exceeds Category 5e requirements per ANSI/TIA/EIA-568-A.5 or TIA/EIA-568-B.2. Exceeds the Category 5 requirements per ANSI/TIA/EIA-568-A, CSA T529-95 and ISO/IEC 11801-1995. Exceeds the Category 5 requirements per NEMA Standard WC 63.1-1996. Exceeds the Category 5 requirements of ICEA S-90-661-1997. Available in assorted popular colors. **Sold in spool sizes indicated in table below.**

2412 SERIES, RISER (CMR), POLYOLEFIN INSULATION, PVC JACKET

Mfg. Part No.	Jacket Color	Nom. O.D. (In.)	Spool Size (Ft.)	Stock No.	Price per Spool
● 2412 003A1000	Orange	0.214	1000*	05R6193	331.47
● 2412 004A1000	Yellow	0.214	1000*	05R6194	331.47
● 2412 005A1000	Green	0.214	1000*	05R6197	331.47
● 2412 006A1000	Blue	0.225	1000*	05R6199	331.47
● 2412 007A1000	Purple	0.214	1000*	05R6201	331.47
● 2412 008A1000	Grey	0.214	1000*	05R6202	331.47
● 2412 009A1000	Grey	0.214	1000*	05R6203	331.47
● 2412 010A1000	Black	0.214	1000*	05R6206	331.47
● 2412 0041000	Yellow	0.214	1000**	05R6195	331.47
● 2412 0051000	Green	0.214	1000**	05R6198	331.47
● 2412 0061000	Blue	0.214	1000**	63P9083	331.47
● 2412 0081000	Grey	0.214	1000**	04R7475	331.47
● 2412 0091000	Grey	0.214	1000**	05R6204	331.47
● 2412 0101000	Black	0.214	1000**	08P5001	331.47
● 2412 0062500	Blue	0.214	2500+	05R6200	828.67
2413 SERIES, PLENUM (CMP), LOW-SMOKE FEP INSULATION, LOW-SMOKE PVC JACKET					
● 2413 002A1000	Red	0.21	1000*	05R6209	644.43
● 2413 004A1000	Yellow	0.21	1000*	05R6212	644.43
● 2413 005A1000	Green	0.21	1000*	05R6215	644.43
● 2413 008A1000	Grey	0.21	1000*	05R6219	644.43
● 2413 010A1000	Black	0.21	1000*	05R6224	644.43
● 2413 D15A1000	Blue	0.21	1000*	05R6207	644.43
● 2413 0051000	Green	0.21	1000**	05R6216	644.43
● 2413 0081000	Grey	0.21	1000**	05R6220	644.43
● 2413 0091000	White	0.21	1000**	05R6222	644.43
● 2413 0101000	Black	0.21	1000**	05R6225	644.43

➤CONTINUED➤

DATATWIST 2400 CATEGORY 6 TWISTED PAIRED LAN CABLE (CONT.)

2413 SERIES, PLENUM (CMP), LOW-SMOKE FEP INSULATION, LOW-SMOKE PVC JACKET

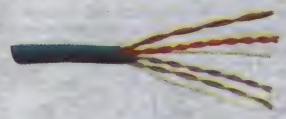
Mfg. Part No.	Jacket Color	Nom. O.D. (In.)	Spool Size (Ft.)	Stock No.	Price per Spool
● 2413 D151000	Blue	0.21	1000**	40P3602	644.43
● 2413 0092500	White	0.21	2500+	05R6223	1611.07

*Spool-in-Box packaging for ease of installation; **11-3/4N Spool; +14N Spool
(147117)

DATATWIST 350 CATEGORY 5e+ TWISTED PAIRED DATA CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS



Tested to 350MHz, DataTwist® 350 cable has been Category 5E since its introduction in 1993. Applications include multimedia (video, data and voice). Min. PS-ACR 17.1dB/m @ 100MHz. Min. PS-Next 35.3dB @ 100MHz. Nominal capacitance: 15pF/ft. CSA certified. For easier installation, the DataTwist® 350 cable stripping tool **mfg. part no. 1797A** is now available; *go online or call.*

NON-PLENUM VERSION, UNSHIELDED

Polyolefin insulated. Four twisted pairs (singles adjoined). Ripcord. Low-loss PVC jacket. Temp. range: –20°C to 80°C. Nom. diameter: 0.200″. NEC Type CM. Flame test: UL 1581 vertical tray, CSA FT4. Available in other colors; *go online or call.* **Sold in 1000′ spools.**

24 AWG, 8 CONDUCTORS, 4 PAIRS, SOLID STRANDING, UNSHIELDED

Mfg. Part No.	Jacket Color	Nom. O.D. (mm)	Stock No.	Price per Spool 1-4	5-9	10+
● 1700A 004U1000‡	Yellow	5.08	20M4386	292.03	280.21	270.08
● 1700A 006U1000‡	Blue	5.08	20M4387	292.03	280.21	270.08
● 1700A F2VU1000‡	Grey	5.08	05F1490	292.03	280.21	270.08
● 1700A 002U1000‡	Red	5.08	15B1955	292.03	280.21	270.08
● 1700A 003U1000‡	Orange	5.08	15B1956	292.03	280.21	270.08
● 1700A 0101000	Black	5.08	29C5612	292.03	280.21	270.08
● 1700A 0051000	Green	5.08	15B1960	292.03	280.21	270.08
● 1700A 0061000	Blue	5.08	15B1961	292.03	280.21	270.08

PLENUM VERSION, UNSHIELDED

24 AWG solid bare copper conductors. FEP insulated. Four twisted pairs (singles adjoined). Ripcord. Low-loss flexible Flamarrest® jacket. Temp. range: 0°C to 75°C. Nom. diameter: 0.195″. NEC Type CMP. Flame test: UL 910 steiner tunnel, CSA FT4/FT6. **1701LC series** DataTwist® limited combustible cable has Teflon® jacket, Type CMP50 and does not have a rip cord. Available in other colors; *go online or call*. **Sold in 1000′ spools.**

Mfg. Part No.	Jacket Color	Nom. O.D. (mm)	Stock No.	Price per Spool 1-4	5-9	10+
● 1701A 0051000†	Green	4.953	05F1495	545.82	523.73	504.80
● 1701A D151000†	Blue	4.953	05F1497	545.82	523.73	504.80
● 1701LC 006U1000‡	Blue	4.75	30H1288	1105.82	1061.08	1022.72
● 1701LC 0061000	Blue	4.75	30H1289	1105.82	1061.08	1022.72
● 1701LC 009U1000‡	White	4.75	30H1290	1105.82	1061.08	1022.72

†Crate reel put-up; ‡UnReel® put-up
(9917)

DATATWIST 350 COLOR CATEGORY 5e PATCH CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

DataTwist® 350 color patch cable is 24 AWG (7 x 32) stranded tinned copper, polyolefin insulated, 100-ohm, unshielded, 4 twisted pairs, each with adjoined singles and a low-loss PVC jacket. RJ-45 compatible. UL/NEC and CSA C (UL) rated Type CM. Meets UL 1581 vertical tray test. Meets ISO/IEC 11801 standards. Meets TIA/EIA 568A standards. Available in 7 colors. Nominal O.D.: 0.220″ (5.59). **Sold in spools of 1000′.**

Mfg. Part No.	Color	Stock No.	Price per Spool
● 1752A 0021000	Red	20M6054	456.90
● 1752A 0031000	Orange	52F6008	456.90
● 1752A 0041000	Yellow	52F6009	456.90
● 1752A 0051000	Green	20M4394	456.90
● 1752A 0061000	Lt. Blue	52F6011	456.90
● 1752A F2V1000	Gray	52F6006	456.90

(6525)

NEW PRODUCTS ADDED DAILY

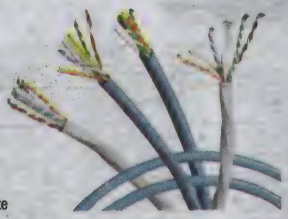
See the newest products, technologies and suppliers on our website.

(196560)

DATATWIST 4800 CATEGORY 6 TWISTED PAIRED LAN CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS



- Available in riser, plenum and low-smoke zero halogen versions
- Choice of bonded- and nonbonded-pair construction
- Central spline design separates pairs and maintains stable pair position, to improve NEXT and impedance performance
- Stable pair position provides built-in resilience to installation stresses
- Improved attenuation provides stronger signal power
- Maximized bandwidth and signal-to-noise margin for mission-critical applications
- Larger 23 AWG conductors are ideal for PoE and PoE+ applications
- Descending distance marking for cable length reduces waste
- Matching tip and ring color code for ease of installation

DataTwist® 4800 unshielded twisted paired LAN cable is intended to be used for horizontal cable installations of high speed Local Area Networks (LANs) for transmission speeds up to 4.8 Gb/s. This enhanced Category 6 cable provides significant headroom and delivers robust data transmission performance for today's and the future's most demanding applications. This unshielded cable consists of four twisted bonded- or nonbonded-pairs of 23 AWG solid copper conductors. A unique central spline separates and holds the twisted pairs firmly in position, at a uniform distance from each other, resulting in very stable transmission and improved Power Sum Crosstalk performance. The bonded-pairs feature a patented design in which the individual conductors are securely bonded along their longitudinal axis to guarantee uniform spacing within each twisted pair to maintain consistently high electrical performance. Meets Category 6 requirements per TIA/EIA-568-B.2-1, ISO/IEC 11801 ed 2.1 (2008) Class E. Riser: ITS/ETL Certified as CMR, and listed as NEC Type CMR per UL Standard 444. Plenum: ITS/ETL Certified as CMP, and listed as NEC Type CMP per UL Standard 444. Low smoke zero halogen: ISO/IEC 332-1, 754-2 and 1034-2. Available in assorted popular colors. **Sold in spool sizes indicated in table below.**

Mfg. Part No.	Color	Nom. O.D. (In.)	Spool Size (Ft.)	Stock No.	Price per Spool
BONDED-PAIR, RISER (CMR) — POLYOLEFIN INSULATION, PVC JACKET					
7851A 006A1000	Blue	0.277 x 0.315	1000*	72C6933	592.36
7851A 0021000	Red	0.277 x 0.315	1000	91C3769	592.36
7851A 0061000	Blue	0.277 x 0.315	1000	39C9835	592.36
BONDED-PAIR, PLENUM (CMP) — FEP INSULATION, LOW-SMOKE PVC JACKET					
7852A 004A1000	Yellow	0.218 x 0.29	1000*	11K8627	1306.50
7852A D15A1000	Blue	0.218 x 0.29	1000*	30M7508	1306.50
7852A D151000	Blue	0.218 x 0.29	1000	30M7509	1306.50
7852A 0091000	White	0.218 x 0.29	1000	30M7510	1306.50
BONDED-PAIR— POLYOLEFIN INSULATION, LOW-SMOKE ZERO HALOGEN POLYMER ALLOY JACKET					
7851NH E4XA1000	Grey	0.241 x 0.329	1000*	11K8622	680.41
NONBONDED-PAIR, RISER (CMR) — POLYOLEFIN INSULATION, PVC JACKET					
4812 006A1000	Blue	0.245	1000*	05R6432	553.26
4812 009A1000	White	0.245	1000*	05R6435	553.26
4812 0021000	Red	0.245	1000	05R6430	553.26
4812 0051000	Green	0.245	1000	05R6431	553.26
4812 0061000	Blue	0.245	1000	63P9069	553.26
4812 0091000	White	0.245	1000	05R6436	553.26
NONBONDED-PAIR, PLENUM (CMP) — FEP-OVER-POLYOLEFIN DUAL INSULATION, LOW-SMOKE PVC JACKET					
4813 D15A1000	Blue	0.24	1000*	05R6437	1282.45
4813 D151000	Blue	0.24	1000	40P3604	1282.45

*Spool-in-Box packaging for ease of installation
(72657)

50-OHM TRANSMISSION COMPUTER COAXIAL CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

8216

All cable features polyethylene insulation except **mfg. part nos. 8214, 9258, 9311** and **9907** which are foam polyethylene.

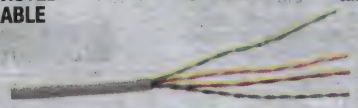
Mfg. Part No.	RG/U	AWG (Strand)	Braid Shield +	Nom. O.D. (in.)	Nom. Cap. (pF/ft.)	500′ Spool Stock No	500′ Spool Price per Spool	1000′ Spool Stock No	1000′ Spool Price per Spool
8216†	174/U	26 (7x34)	90% TC	.110	30.8	02F4120	226.55	87K1552	453.09
8240†	58/U	20 (Solid)	95% TC	.193	28.5	02F4194	247.65	87K6238	495.30
9907†	58/U	20 (19x32)	93% TC	.185	25.4	03F6819	367.72	03F6820	735.43
8259†	58/U	20 (19x33)	95% TC	.192	30.8	02F4203	264.78	87K6239	525.92
8262‡**	58C/U	20 (19x33)	95% TC	.195	30.8	87K1570	347.91	02F4118	692.35
8237†	8/U	13 (7x21)	97% BC	.405	28.5	87K1562	743.90	87K7166	1588.32
8267‡**	213/U	13 (7x21)	97% BC	.405	30.8	03F1336	1007.99	03F1337	2006.11

†Polyvinyl chloride (PVC) jacket; ‡Polyvinyl chloride non-contaminating jacket; **Meets MIL-C-17G specifications; +Braid Shield: TC = tinned-copper, TC* = tinned-copper plus Duobond® II shield, BC = bare copper, 2SCC = double silver-plated copper
(60272)

DATATWIST® CATEGORY 5e UNSHIELDED TWISTED PAIRED DATA CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS



- Passes Category 5E Specifications
- Application Include 10 BaseT, 100 BaseT and ATM
- Meets/Exceeds IEEE 802.3 10 Base T Ethernet
- Meets/Exceeds TIA/EIA 568-B.2 Commercial Building Wiring Standard
- Compatible with Standard RJ45, RJ12, and RJ11 Jacks
- CSA PCCFT1, FT4 and FT6 Rated
- Min. PS-ACR 11dB/100m 100MHz
- Min. PS-Next 32.3dB 100MHz

DataTwist® Category 5e unshielded data cable features four nonbonded twisted pair, 24 AWG solid bare copper conductors. Nominal capacitance: 15.000Pf/ft. Nominal impedance: 100 ohms. CSA certified PCC and FT1. NEC Type CM rated. **Sold in 1000′ spools.**

Mfg. Part No.	Nom. O.D.	Jacket Material/Color	Insulation	Stock No.	Price per Spool
24 AWG, NON-PLENUM					
1583A 0061000	0.19″	PVC/Light Blue	Polyolefin	20M4372	213.31
1583B T301000	0.19″	DataBrite® PVC/Neon Pink	Polyolefin	04F8659	251.89
24 AWG PLENUM VERSION					
1585A D151000	0.19″	Flamarrest®*/Blue	Polyolefin/FEP+	04F8038	390.29
1585A 008U1000	0.19″	Flamarrest®*/Grey	Polyolefin/FEP+	20M4375	390.29
1585A 0091000	0.19″	Flamarrest®*/White	Polyolefin/FEP+	20M4378	390.29
1585A 0101000	0.19″	Flamarrest®*/Black	Polyolefin/FEP+	20M4376	390.29
1585A 8771000	0.19″	Flamarrest®*/Natural	Polyolefin/FEP+	20M4377	390.29
1585LC 0091000	0.184″	FEP/White	FEP	30H1237	889.57

*Flamarrest® low-smoke PVC; +Flame-retardant polyolefin/fluorinated ethylene propylene
(6069)

CATEGORY 5 PATCH CORD CABLE

RoHS Compliant Available

pro-POWER

Constructed of stranded 24 AWG wire, 4 pair, twisted. Low attenuation and near-end crosstalk for 100MHz applications. ETL verified and EIA/TIA compliant. Impedance: 100 ±15 ohms. Wire jacket made of PVC, rated 75°C. 5.5mm O.D. **Sold in spools of 500′.**

Mfg. Part No.	Color	Stock No.	Price per Spool 1-4
SPC19837	Black	84K8598	226.98
SPC19838	Blue	84K8599	223.61
SPC19839	Green	84K8600	222.65
SPC19840	Orange	84K8601	213.06
SPC19841	Red	84K8602	220.73
SPC19842	Yellow	84K8603	220.73
SPC19843	White	84K8604	213.06
SPC19844	Gray	84K8605	225.53

(35479)

CONTROLNET™ INDUSTRIAL AUTOMATION COAXIAL CABLE

RoHS Compliant Available

AlphaWire Cables you trust. Service you deserve.

- Foil/braid/foil/braid shielding for maximum signal integrity and run length
- Fully tested to meet the requirements of the ControlNet physical layer specification
- Superior quality to improve system reliability
- UL listed, CSA certified

ControlNet™ cable is low-loss RG-6/U type coax designed to meet the high-speed, time-critical requirements necessary for the operation of modern ControlNet factory-floor automation systems. Feature 18 AWG solid copper-plated steel conductor, foam polyethylene insulation and black sunlight-resistant PVC jacket. Operating temperature: -30°C to 75°C. Industry approvals: UL: CL2R CMR; CSA: CMG FT4. **Sold in spools sizes indicated in table below.**

Mfg. Part No.	RG/U	AWG	Jacket O.D. (In.)	Imped. (Ohms)	Spool Size (Ft.)	Stock No.	Price per Spool
6458 BK005	RG6	18	0.298	75	100	34P0716	93.35
6458 BK002	RG6	18	0.298	75	500	34P0715	332.30
6458 BK001	RG6	18	0.298	75	1000	34P0714	640.55

ControlNet™ is a trademark of ControlNet International, LTD
(136934)

Custom Cable Assemblies to your specs to mate with the complete line of connectors!
Call 1.800.463.9275
(212562)

COAX CABLE

COAXIAL CABLE

Alpha coaxial cable is available in a wide variety of impedance grade and RG types. Most are used in voice, video and data applications. UL listed. **Sold in 100′ and 1000′ spools.** 500′ spools are also available; *go online or call.*

UL

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

RG/U	Inner Conductor AWG	Inner Conductor Mat.†	Inner Conductor Stranding	Jacket Mat.†	Jacket O.D. (in.)	Imped. Ω	Cap. pF/ft	Shield†	Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
55B/U	20	SC	Solid	PE	0.201	53.5	28.8	Double TC Braid	● 9055B BK005	02F9822	291.35	● 9055B BK001	92F6962	1727.77
58A/U	20	TC	19 x 0.0071	V	0.195	50	30.8	TC Braid	● 9058A BK005*	06M4020	76.36	● 9058A BK001	92F6963	408.15
58A/U	20	TC	19 x 0.0071	V	0.195	50	30.8	TC Braid	● 9058AC BK005*	06H1062	79.99	● 9058AC BK021	28B8798	440.02
58C/U	20	TC	19 x 0.0071	NCV	0.195	50	30.8	TC Braid	● 9058C BK005	86K9100	150.45	● 9058C BK001	03F3307	608.01
59/U	22	CW	Solid	V	0.242	73	21.4	C Braid	● 9059C BK005*	28B8808	79.87	● 9059C BK021	88K1504	412.61
59B/U	23	CW	Solid	NCV	0.242	75	20.5	C Braid	● 9059B BK005	86K7955	176.66	● 9059B BK001	92F6972	707.02
62A/U	22	CW	Solid	NCV	0.242	93	13.2	C Braid	● 9062A BK005	02F9838	75.03	● 9062A BK021	03F3310	362.38
217/U	10	C	Solid	NCV	0.545	50	30.8	Double C Braid	● 9217 BK005	02F9853	968.34	● 9217 BK001	02F9855	5699.64
Twinaxial	22	TC	19 x 34	PVC	0.329	150	8.8	A/P/A	● 9823 BK005	06M4032	100.26	● 9823 BK001	92F7522	745.25

† C = Bare Copper; TC = Tinned Copper; SC = Silver Coated Copper; CW = Copper Coated Steel; A/P/A = Aluminum/Polyester/Aluminum; PE = Solid Polyethylene; V = Polyvinyl Chloride type 1; NCV = Non-Contaminating Polyvinyl Chloride type 2; all mfg. part nos. are MIL-C-17D except **mfg. part no. 9823** and the ones with (*) which are JAN-C-17A
(10023)

75-OHM ANALOG BROADCAST COAXIAL CABLE

RoHS Compliant Available

BELDEN
SENDING ALL THE RIGHT SIGNALS

9221

RG/U	AWG (Stranding)	Nom. O.D. (in.)	Nom. Cap. (pF/ft.)	Braid	Insulation	Jacket**	Mfg. Part No.	500′ Spool Stock No.	500′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
Mini	30 (7 x 38)	0.97	17.3	89% TC	Foam PE	PVC	● 9221 010U500	03F2625	309.59	...	...	...
59/U	23 (Solid)	0.242	20.4	95% BC	PE	PVC	● 8241 010U500	87K1564	228.45	● 8241 010U1000	02F4187	443.23
59/U	23 (Solid)	0.242	20.5	95% BC	PE	PVCNC	...	...	...	● 8263 010U1000	87K1571	842.51
59/U	22 (7 x 30)	0.241	17.3	95% BC	Foam PE	PVC	● 9259 010U500*	03F1348	288.05	● 9259 010U1000*	03F1349	576.09
59/U	22 (Solid)	0.242	19.4	85% BC	PE	PVC	...	...	...	● 9244 010U1000	03F2162	515.03
59/U	20 (Solid)	0.24	17.3	95% BC	Foam PE	PVC	● 9274 010500	87K1866	310.89	...	...	...
6/U	18 (Solid)	0.288	16.8	98% 2BC	Foam PE	PVC	...	...	...	● 9290-1000-10	87K1868	1346.64
6/U	18 (Solid)	0.27	16.2	61% TC	Foam PE	PVC	● 9248 010U500	04F3325	305.87	● 9248 010U1000	04F3326	611.73
11/U	14 (Solid)	0.405	16.1	61% TC	Foam PE	PVC	...	...	...	● 9292 0101000	87K1869	1119.49

*For CATV applications; **PVC: polyvinyl chloride, PE: polyethylene, PVCNC: polyvinyl chloride non-contaminating
(60177)

BRILLIANCE® 3GHz, 75-OHM PRECISION VIDEO COAXIAL CABLE FOR DIGITAL AND ANALOG APPLICATIONS

Brilliance®

RoHS Compliant Available

BELDEN
SENDING ALL THE RIGHT SIGNALS

1505A

1694A

1855A

7731A

1865A

RG/U	AWG (Stranding)	Shield Foil	Shield Braid*	Nom. O.D. (in.)	Cap. (pF/ft.)	Jacket†	Insulation‡	Mfg. Part No.	500′ Spool Stock No.	500′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
59	23 (Solid)	Duofoil®	95% TC	0.159	16.5	PVC	Foam PE	● 1855A 010500	87K1173	279.92	● 1855A 0101000	83F6768	521.00
59	23 (7 x 32)	...	96% TC	0.220	20.5	PE	PE	● 8279 010500	87K1577	453.52	● 8279 0101000	02F5652	907.04
59	22 (7 x 29)	...	98% 2TC	0.304	20.5	PVC	PE	...	...	...	● 8281F J5C1000	04F6352	1726.37
59	20 (Solid)	Duofoil®	95% TC	0.234	16.3	PVC	Foam PE	● 1505A 010500	87K6203	292.29	● 1505A 0101000	04F4525	584.57
59	20 (Solid)	...	98% 2TC	0.305	20.5	PE	PE	● 8281 010500	02F4219	706.80	● 8281 0101000	02F6099	1413.59
6	18 (Solid)	Duofoil®	95% TC	0.275	16.2	PVC	Foam PE	● 1694A 010500	04F6730	358.81	● 1694A 0101000	04F6727	717.61
6	19 (7 x 27)	...	99% 2TC	0.276	16.2	PVC	Foam PE	...	...	...	● 1694F B591000	10M8769	1068.63
11	0.064 (Solid)	Duofoil®	95% TC	0.400	16.0	PVC	Foam PE	● 7731A 010500	83F6771	885.33	● 7731A 0101000	83F6770	1770.66

*Braid: TC= Tinned Copper; †Jacket: PVC= Polyvinyl Chloride, PE= Polyethylene, FA= Flamearrest®, PVDF= Fluorocopolymer; ‡Insulation: PE= Polyethylene, FEP= Fluorinated Ethylene Propylene
(60178)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

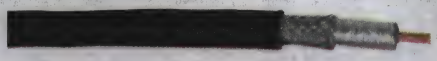
(196538)

BRILLIANCE® LOW LOSS VHF-UHF 50-OHM COAXIAL CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS Brilliance®

AWG (Stranding): 10 (Solid). Both are RG-8/U. Coaxial computer cable. 50-ohm transmission.



10 AWG, SOLID STRANDING

Mfg. Part No.	Nom. O.D. (in.)	Nom. Cap. (pF/ft.)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
9913#	0.405	24.60	87K7406	177.07	03F3938	745.81	03F3939	1491.61
9913F7+	0.405	24.60	18C0623	198.33	19C5531	833.95	...	...

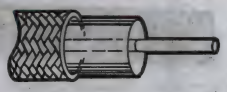
*UL recognized; ‡NEC CL2; +high-flex stranded conductor; #plenum version available; *go online or call*
(6214)

CONFORMABLE COAXIAL CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

1-conductor, conformable coaxial cable is an alternative to semirigid and flexible coax for black box applications involving internal, head-end wiring of electronic equipment, delay lines, and high-frequency microwave applications. All have TFE Teflon® core insulation and copper-tin composite shield. 100% shield coverage. **Suffix J** in mfg. part no. number indicates black PVC jacket. **Suffix A** in mfg. part no. number indicates unjacketed. **Sold in 100′ spools.**



50Ω MICROWAVE CABLE

Mfg. Part No.	RG/U / MIL	AWG (Strand)	Nom. O.D. (in.)	Nom. Cap.	100′ Spool Stock No.	100′ Spool Price per Spool
1671J 010100	405/U	24 (Solid)	0.127	29.500	83F6761	636.38
1671A TIN100	405/U	24 (Solid)	0.085	29.500	99F6456	587.49
1673J 010100	402/U	19 (Solid)	0.178	29.300	87K1142	611.87
1673A TIN100	402/U	19 (Solid)	0.138	29.300	87K1141	570.89

(60273)

BROADBAND CATV/MATV CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

9116

1189A

1530A

9104

Sold in 1000′ spools. Also available in 500ft/ spools; *go online or call.*

6 SERIES, 18 AWG SOLID, 75 OHMS IMPEDANCE — RG 6/U

Mfg. Part No.	Nom. O.D. (mm)	Nom. Cap. (pF/ft.)	Insulation†	Shielding	Jacket††	1000′ Spool Stock No.	1000′ Spool Price per Spool
9116 0101000	6.858	16.2	PVC (Polyvinyl Chloride)	Duobond II®	PVC (Polyvinyl Chloride)	87K6352	141.69
9118 0101000	6.985	16.2	PVC (Polyvinyl Chloride)	Duobond III®	PVC (Polyvinyl Chloride)	15B3783	170.93
1189A 0101000	7.468	16.2	PVC (Polyvinyl Chloride)	Duobond IV®	PVC (Polyvinyl Chloride)	05F1782	198.78
1530A 0101000	6.858	16.2	PVC (Polyvinyl Chloride)	Duobond II®	PVC (Polyvinyl Chloride)	87K1134	162.62
1530A 010U1000	6.858	16.2	PVC (Polyvinyl Chloride)	Duobond II®	PVC (Polyvinyl Chloride)	87K1132	162.62
59 SERIES, 20 AWG SOLID, 75 OHMS IMPEDANCE — RG 59/U							
9100 010U1000++	6.02	16.2	PVC (Polyvinyl Chloride)	Duobond II®	PVC (Polyvinyl Chloride)	03F2158	109.48
9104 010U1000	6.02	16.2	PVC (Polyvinyl Chloride)	Duobond II®	PVC (Polyvinyl Chloride)	93B1047	126.64
9275 010U1000++	6.02	16.2	PVC (Polyvinyl Chloride)	Duofoil®	PVC (Polyvinyl Chloride)	87K1867	152.76

*Riser Rated; +Plenum Rated; ++Also Rated for MATV; †FEP: Fluorinated Ethylene Propylene
(60473)

SERIES 6 DIRECT BROADCAST SATELLITE (DBS) COAXIAL CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

1829A

Direct broadcast satellite (DBS) cable is sweep-tested to 3GHz and meets all requirements for the new frequency spectrum allocated to DBS. All feature solid, bare copper-covered steel conductors except **mfg. part nos. 7915A** and **7916A** that are bare copper and **mfg. art no. 1840A** that is bare copper with anticorrosion treatment. All feature gas-injected foam polyethylene insulation and Duobond® II shield with aluminum braid except **mfg. part no. 7915A** that has a Duobond Plus® shield with aluminum braid and **mfg. part no. 7916A** that has a Duobond® IV shield with two aluminum braids. All feature PVC jackets except **mfg. part no. 1843A** that is polyethylene. Nominal impedance: 75±3Ω. Nominal velocity of propagation: 83%. Nominal capacitance: 16.2pF/ft. All pass flame test UL-1685. **Sold in spool quantities indicated in table below.**

Mfg. Part No.	No. of Conductors	Nom. O.D. (mm)	Jacket Color	Spool Size (ft.)	Stock No.	Price per Spool
1829A 010U1000	1	6.858	Black	1000	95B5034	141.69
7915A 010U500	1	6.985	Black	500	30H4357	119.72
7915A 010U1000	1	6.985	Black	1000	87K1515	228.88
7916A 009U500	1	7.569	White	500	30H4358	107.26
7916A 010U1000	1	7.569	Black	1000	91C3816	214.52
1840A 010500	2*	6.934 x 17.856	Black	500	30H1361	174.73
1843A 0101000	2*	6.934 x 19.05	Black	1000	15B2082	337.53

*Plus 0.045″ copper-covered steel static ground
(51787)

HIGH-TEMPERATURE MIL-C-17 SHIELDED COAXIAL CABLE — 200° TFE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

VW-1

AWG (strand): **mfg. part no. 83242**: 18 (solid), **mfg. part no. 83284** and **83269**: 26 (7 x 0.0067) and all others are 30 (7 x 38). All are 50 ohms except **mfg. part no. 83267** and **83264** which are 75 ohms. **Mfg. part nos 83242, 83269,** and **83265** have a 96% shield; all others have a 95% shield.

Mfg. Part No.	Nom. O.D. (in.)	Nom. Cap. (pF/ft.)	RG/U	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool
83284	0.098	29.00	RG-316/U†	02F5771	200.23	02F5772	918.37
83269	0.108	29.20	RG-188A/U††	87K6277	247.34	87K1717	1147.60
83265*	0.071	29.00	RG-178B/U	87K6276	132.85	02F5781	623.84
83267	0.105	19.50	RG-187A/U†	87K7171	282.86	...	...
83264	0.1	19.50	RG-179††	87K2764	199.51	87K1714	859.21

*M17/169-00001; †MIL-C-17D; ††MIL-C-17GQPL; Passes VW-1 Vertical Wire Flame Test
(6220)

LOW TRIBOELECTRIC NOISE SHIELDED COAXIAL CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

Mfg. part no. 9223 RG-58/U coaxial cable features conductive polyethylene/polyethylene insulation and polyvinyl chloride jacket. Nominal impedance: 50-ohm. **NOTE**: Not recommended for RF use.

Mfg. Part No.	AWG (Strand)	Nom. O.D. (in.)	Nom. Cap. (pF/ft.)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
9223	22 (7x30)	0.195	37	03F2136	150.81	03F2137	574.71	03F2138	1051.98

(6219)

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(212563)

COAX CABLE

LOW-LOSS 50-OHM WIRELESS RF TRANSMISSION COAXIAL CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

Transmission cable is designed for applications in radio, cellular telecom, TV, satellite, microwave and other 2-way communications systems. Ideal for indoor, outdoor and aerial applications. Feature solid bare-copper conductor except **mfg. part no. 7810A** which si solid bare copper-covered aluminum. All have foam high-density polyethylene insulation except **mfg. part no. 7805** which is solid polyethylene. All have Duobond II® shielding plus a tinned-copper braid except **mfg. part nos. 7805** and **7805R** which have a Beldfoil® shield plus tinned copper braid and **mfg. part nos. 7806A, 7806R** and **7807A** which have a Duofoil® shield plus tinned copper braid. Mfg. part nos. with an **A suffix** have a black polyethylene jacket. **Mfg. part no. 7805** and those with an **R suffix** have a black PVC jacket except **mfg. part no. 7805R** which is gray. **Sold in spools of 500′ and 1000′.**

RG-174, SERIES TYPE RF100, 25 AWG*, 24.5 AWG+
100′ spools are available for **mfg. part nos. 7805** and **7805R**; *go online or call.*

Mfg. Part No.	Nom. O.D. (in.)	Nom. Cap. (pF/ft.)	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 7805*	0.110	31.2	**27C2164**	319.10	**27C2163**	638.20
● 7805R+	0.110	26.2	**27C2167**	366.85	**27C2166**	733.70
RG-58, SERIES TYPE RF195, 19 AWG						
● 7806A	0.195	24.3	**95B5117**	408.72	**87K1502**	817.43
● 7806R	0.195	24.3	**87K7164**	449.20	**87K6234**	836.08

➤ CONTINUED ➤

LOW-LOSS 50-OHM WIRELESS RF TRANSMISSION COAXIAL CABLE (CONT.)

RG-58, SERIES TYPE RF200, 17 AWG

Mfg. Part No.	Nom. O.D. (in.)	Nom. Cap. (pF/ft.)	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 7807A	0.195	23.5	**95B5119**	411.74	**95B5118**	823.48
RG-8, SERIES TYPE RF400, 10 AWG						
● 7810A	0.405	23.0	**95B5125**	762.16	**95B5124**	1524.31

(51788)

MIL-C-17G QPL 50-OHM SHIELDED COAXIAL CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

84316 series RG-316/U coaxial cable features 0.02″ silver-plated copper-covered steel conductor with TFE Teflon® insulation, silver-plated copper braid shield, and brown FEP (fluorinated ethylene propylene) jacket. Meets M17/113-RG316 military specifications. UL flame test: UL1685 UL loading, VW-1. Nom. inductance: 0.067 µH/ft. Operating voltage (military spec.): 900VRMS. Operating temperature range: -70°C To +200°C. **Available in spool sizes listed in table below.**

Mfg. Part No.	AWG (Stranding)	Nom. O.D. (in.)	Nom. Cap. (pF/ft.)	Spool Size (Ft.)	Stock No.	Price per Spool
● 84316 001100	26 (7x34)	0.098	29	100	**87K1762**	256.13
● 84316 001500				500	**03F7183**	1162.65
● 84316 0011000				1000	**94B7722**	2164.01

(164089)

PLENUM COAXIAL CABLE — 75°C

UL

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

For computer, instrumentation and broadcast. All are solid one conductor except **mfg. part no 82259,** which is 7x30 stranded. All are NEC Article 800, Type CMP and CSA PCC FT4/FT6 Rated. Flamarrest® jacket. Color: natural. UL listed.

82907

Mfg. Part No.	RG/U	AWG	Nom. O.D.	Nom. Imp. (Ohms)	Nom. Cap. (pF/ft.)	Insulation	Shielding	Application	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 82248 877U1000	6/U	18	0.226″	75	16.5	Foam FEP	Aluminum Foil-Polyester Tape-Aluminum Foil/Braid Shield	Analog Video	**87K1557**	2119.60
● 82907 8771000	58/U	20‡	0.160″	50	25.4	Foam FEP	Bonded Aluminum Foil-Polyester Tape-Aluminum Foil/Braid Shield	Computers, Instrumentation, Trunk	**04F8662**	1215.16
● 82240 877U1000	58/U	20	0.159″	53	27.5	FEP	Braid	Transmission, Computer	**04F6116**	1750.25
● 82241 877U1000	59/U	23	0.192″	75	19.5	FEP	Braid	Analog Video	**04F6118**	2082.86
● 82262 877U1000	62/U	22	0.204″	93	12.5	Foam FEP	Braid	Computers, Instrumentation	**04F6121**	1902.31
● 82259 877U1000	59/U	22	0.193″	75	17.3	Foam FEP	Braid	Analog Video	**87K1558**	2309.55

‡Stranding is 19x32
(6173)

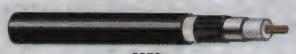
PRO VIDEO COAX BROADCAST CABLE

RoHS Compliant Available

WEST PENN WIRE

UL

Cable Features:
- Overall shielded 100% Bifoil
- 95% tinned copper braid
- Nominal Capacitance conductor to shield: 16.2pf/ft.
- Nominal Impedance: 75Ω
- **Sold in 1000′ spools**



6350

Mfg. part no. 6350, gas injected PE Dielectric-.180″. Meets 300V requirements as specified in Section 800 and 725 NEC. UL listed NEC type CMR as defined in Article 800. **Mfg. part no. 256350**, foam FEP Dielectric-.170″. Complies with UL910 Test and is UL listed NEC type CMP.

Mfg. Part No.	Description	Conductors	AWG	Stock No.	Price per Spool
● 6350	RG6 Precision Video, PVC	Solid	18	**30K6540**	643.17
● 256350	RG6 Precision Video, Plenum	Solid	18	**30K6539**	1378.22

(84943)

TWINAXIAL COMPUTER CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

9463

9207

Feature 20AWG (7x28) stranded conductors with 100% shield.

Mfg. Part No.	Nom. O.D. (in.)	Ohms	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 9463*•‡	0.243	78	**03F5677**	121.64	**70B5512**	494.78	**03F5678**	989.56
● 9207•‡	0.330	100	**03F2145**	172.35	**03F2146**	724.87	**03F2147**	1449.74

*UL recognized; •NEC CM; ‡NEC CL2
(6221)

PLENUM COMPUTER, INSTRUMENTATION AND BROADCAST CABLE — 200° C

UL

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

88240

89907

All feature solid conductor except **mfg. part no. 89259,** which is 7 x 30 stranded and **mfg. part no. 89907** (thinnet, 10 base 2), which is 19 x 32 stranded. Plenum-rated NEC type CMP except **mfg. part no. 89907** which is NEC type CL2P.

Fluorinated ethylene propylene (FEP) jacket except **mfg. part no. 89907** which has a fluorocopolymer jacket. UL listed. **Sold in 500′ and 1000′ spools.** Also available in 100′ spools; *go online or call.*

RG/U	AWG	Nom. O.D.	Imped. (Ohms)	Cap. (pF/ft.)	Insulation	Shield	Mfg. Part No.	500′ Spool Stock No.	500′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
58/U	20	0.160″	50	25.400	Foam FEP	Bonded Aluminum Foil-Polyester Tape-Aluminum Foil/Braid	● 89907 E4X500	**03F6795**	712.50	● 89907 E4X1000	**03F6796**	1425.01
58/U	20	0.159″	53.5	26.400	FEP	Braid	● 88240 010500	**87K1813**	1207.28	● 88240 0101000	**02F6058**	2247.08
59/U	22	0.193″	75	17.300	Foam FEP		● 89259 010500	**87K1833**	1942.10	● 89259 0101000	**04F5209**	3884.20

(6049)

T1/DS-1 CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

T1/DS-1cable has been designed to meet today's applications in the central office. Suitable for use inside central office buildings or in controlled environment vaults (CEVs), where temperature and humidity are maintained within a relatively constant range. Features 22 AWG solid tinned copper conductors with overall Beldfoil® shield. Insulated with solid polyolefin for the base and Datalene® foam for the outer layer to enhance electricals and allow for RJ-45 type connections. **Sold in spools of 1000′.**

Mfg. Part No.	No. of Pairs	Nom. O.D. (In.)	Nom. Cap. (pF/ft.)	Stock No.	Price per Spool
7837A 0601000	1	0.202	14.50	87K6235	304.83
7838A 0601000	2	0.360	14.50	87K1505	553.04

(66284)

VIDEO TRIAX CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

8233

Used to interconnect video cameras to related equipment. Also suitable for digital camera triax applications. Isolated shields allow the triax to provide multiple functions over one cable through multiplexing techniques. RG-11 types have lower losses for longer runs, while RG-59 types are smaller and generally more flexible. All feature two bare copper braided shields. **Sold in 500′ spools.** Also available in 1000′ spools; *go online or call.*

*High-flex version; +Plenum rated

Mfg. Part No.	RG/U	AWG (Stranding)	Shield Coverage	Nom. O.D. (in.)	500′ Spool Stock No.	500′ Spool Price per Spool
1859A-500-10+	11	15 (19x27)	95%	0.406	19C6346	4397.06
8233 010500	11	14 (Solid)	95%	0.475	87K1560	1125.46

(58772)

VIDEOFLEX® BUNDLED SNAKE CABLE

UL CSA RoHS Compliant Available

Brilliance®

BELDEN SENDING ALL THE RIGHT SIGNALS

7787A

7790A

75Ω multi-channel audio/video snake cable is a bundled versions of **mfg.part nos 1505A** and **1855A** Brilliance® video cable, specifically designed for precision digital applications. Ideal for serial digital video, component video (RGB), analog or digital unbalance mode audio (AES/EBU), computer CAD/CAM, high-end computer graphics and animation, live television broadcast, and field and mobile television. Features high-density polyethylene insulation, Duofoil®-plus tinned-copper braid shield with 100% coverage, and high-flex PVC jacket. Solid stranding. Each coax individually color-coded. Solid-copper conductor. UL listed, CSA certified. *Additional bundled cable available; go online or call.* **Sold in spools of 500′ and 1000′.**

23 AWG, MINI - 1855A BUNDLED, 16.50pF/ft. NOM. CAP.

Mfg. Part No.	No. of Cond.	No. of Coax.	Nom. O.D. (in.)	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
7787A	3	3	0.432	90B6958	1521.97	90B6975	3043.94
7788A	4	4	0.481	...	...	90B6985	3471.94
7789A	5	5	0.539	02M0635	2282.31	87K1500	4564.61
7790A	6	6	0.597	95B5104	2869.81	95B5103	5739.63
7792A	12	12	0.825	95B5106	5544.74	95B5105	11089.48

20 AWG RG-59 - 1505A BUNDLED, 16.30pF/ft. NOM. CAP.

Mfg. Part No.	No. of Cond.	No. of Coax.	Nom. O.D. (in.)	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
7794A	3	3	0.631	95B5108	2228.76	95B5107	4457.52
7795A	4	4	0.706	...	...	95B5109	4994.00
7796A	5	5	0.79	95B5112	3394.00	87K1501	6788.01
7798A	10	10	1.166	95B5114	6522.02	95B5113	13044.03

(52177)

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(212564)

INDIVIDUALLY SHIELDED PAIRED LOW CAPACITANCE COMPUTER CABLE FOR EIA RS-422 APPLICATIONS

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

Applications:
- AES/EBU
- Digital Audio Cables
- Multi-pair Snake Cables

Tinned copper conductors, Beldfoil® aluminum-polyester shield and a stranded tinned copper drain wire. Overall chrome PVC jacket. Datalene® insulated. 300V, 60°C. UL recognized 2493; NEC Type CM. Capacitance: 12.5pF/ft.

24AWG (7 × 32) STRANDED CONDUCTORS

Mfg. Part No.	No. of Pairs	Nom. O.D. (in.)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
9729	2	0.317	87K7384	148.33	87K7385	624.02	03F2945	1248.03

(6088)

LOW-CAPACITANCE, MULTICONDUCTOR OVERALL FOIL/BRAID SHIELDED COMPUTER CABLE FOR EIA RS-232 AND RS-423 APPLICATIONS

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

Tinned copper, Datalene® insulated, multi-conductor cable with overall Beldfoil® aluminum-polyester plus 65% tinned copper braid shield. 24 AWG stranded tinned copper drain wire. Chrome PVC jacket. Rated 30V, 80°C. UL recognized. Datalene® insulation features low dielectric constant and a dissipation factor for high-speed, low-distortion data handling. 24AWG stranded conductors (7 x 32) 1919, NEC Type CM. Capacitance pF/ft.: 12.

Mfg. Part No.	No. of Cond.	Nom. O.D. (in.)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
9927	4	0.23	87K7431	122.45	87K7432	514.94	03F4187	1029.87
9932	7	0.265	87K7441	184.53	03F4195	776.00	...	...
9934	9	0.3	87K7444	225.61	87K7445	949.08	03F4074	1898.16
9938	37	0.515	87K7447	968.75	...	...	...	...

(6031)

LOW-CAPACITANCE PAIRED SHIELDED COMPUTER CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

Ideally suited for EIA RS-232 and RS-485 applications. Feature twisted paired tinned copper stranded conductors, Datalene® insulated, except **mfg. part no. 9842** which is polyethylene, Beldfoil® aluminum-polyester shield and overall tinned copper braid shield with a stranded tinned copper drain wire. Chrome PVC jacket. Rated: 30V, 80°C. UL recognized 2919.

24 AWG STRANDED CONDUCTORS (7 x 32), UL TYPE 2919, NEC TYPE CM — 12.5PF/FT. CAPACITANCE

Mfg. Part No.	No. of Pairs	Nom. O.D.	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
8102	2	0.270″	87K1525	163.89	03F4111	689.32	03F4112	1283.01
9842+	2	0.340″	04F3310	184.39	87K1929	775.39	04F3312	1550.78
8103	3	0.279″	03F4113	199.75	87K1526	840.35	03F4115	1680.70
8104	4	0.302″	87K1527	241.82	87K1529	946.52	87K1528	2034.14
8107	7	0.341″	87K1530	458.25	03F4126	1927.66	03F4127	3855.31

+For EIA RS-485 applications only, nom. capacitance 12.8pF/Ft

(6034)

LOW-CAPACITANCE, INDIVIDUALLY SHIELDED PAIRED COMPUTER CABLE FOR RS-232 AND RS-422

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

24 AWG (7 × 32) stranded tinned copper conductors, twisted pairs. Each pair individually shielded with Beldfoil® alum.-polyester shield and stranded tinned copper drain wire. Overall Beldfoil® alum.-polyester shield, 65% tinned-copper braid shield. Chrome PVC jacket 12.5pF/Ft. 60°C. UL recognized 2493. All NEC Type CM. Capacitance is 12.5pF/Ft.

24 AWG, 7 x 32 STRANDING

Mfg. Part No.	No. of Pairs	Nom. O.D. (in.)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
8162	2	0.343	87K1540	256.91	87K1541	1080.99	03F4017	2161.99
8163	3	0.359	87K1542	336.26	03F4019	1414.80	03F4020	2829.59
8164	4	0.388	87K2707	411.92	03F4022	1732.60	87K1543	3465.19

(6085)

COMPUTER CABLE

MULTICONDUCTOR OVERALL FOIL/ BRAID SHIELDED COMPUTER CABLE FOR EIA RS-232 APPLICATIONS

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

Tinned copper, SR-PVC insulated, multiconductor cable with overall Beldfoil® aluminum-polyester plus 65% tinned copper braid shield. Chrome PVC jacket. Rated 300V, 80°C. UL recognized 2464; CSA PCC FT4; NEC Type CM.

24 AWG STRANDED CONDUCTORS (7 × 32) — CAP. 35pF/ft.

Mfg. Part No.	No. of Cond.	Nom. O.D.	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 9609	4	0.200″	03F4045	140.50	03F4046	591.06	03F4047	1182.11
22 AWG STRANDED CONDUCTORS (7 × 30) — MFG. PART NOS. 9939-9941, CAP. 37pF/ft.; MFG. PART NOS. 9942-9946, CAP. 35pF/ft.								
● 9939	3	0.202″	03F4027	101.38	87K7449	426.28	87K7448	852.55
● 9940	4	0.215″	87K2854	122.54	03F4031	515.46	03F4032	1030.91
● 9941	5	0.230″	03F4033	146.85	03F4034	617.70	87K7450	1149.71
● 9942	6	0.245″	87K7451	163.87	03F4037	689.32	03F4038	1283.01
● 9944	8	0.260″	87K7452	210.18	03F4043	883.95	03F4044	1767.89
● 9945	9	0.280″	03F4197	238.42	03F4198	1002.71	03F4199	2005.42
● 9946	10	0.300″	87K7453	267.43	03F4201	1124.94	03F4202	2249.87

(6067)

MULTICONDUCTOR SHIELDED AUDIO AND INSTRUMENTATION PVC JACKET CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

9770

Tinned copper stranded, non-paired conductors. Polyvinyl chloride jacket. Polyethylene insulated except: **mfg. part no. 9770** polypropylene and paper wrap, and **mfg. part no. 9418** S-R PVC insulated. Beldfoil® aluminum-polyester shield with stranded tinned copper drain wire. NEC Type CM. UL recognized except **mfg. part no. 9770**. Other spool sizes available, *go online or call.*

Mfg. Part No.	No. of Cond.	AWG (Stranding)	Nom. O.D.	Cap pF/ft.	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 9770	3	22 (7×30)	.145″	32	02F5317	355.09	87K7391	710.17
● 8771*	3	22 (7×30)	.199″	23	88K2222	309.24	02F4258	618.48
● 8772*	3	20 (7×28)	.218″	27	02F4259	387.18	87K7275	774.35
● 8770*	3	18 (16×30)	.246″	24	02F4254	449.80	88K2221	899.60
● 9418†	4	18 (19×30)	.245″	70	87K7336	580.42	87K7335	1160.83
● 8618††	3	16 (19×29)	.327″	26	06M4011	879.19	02F6172	1636.41

*UL recognized 2093; 300V, 60°C; UL recognized 2464; 300V, 80°C. ††UL recognized 2107; 600V, 60°C.
(6065)

MULTICONDUCTOR SHIELDED SOUND, BROADCAST, AUDIO, INSTRUMENTATION, AND COMPUTER CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

9533

For EIA RS-232 applications. Tinned copper stranded conductors cabled, S-R PVC insulated. Beldfoil® aluminum-polyester shield with stranded tinned copper drain wire. Chrome PVC jacket. UL recognized 2464; 300V, 80°C. CSA certified PCC FT4; NEC Type CM.

24 AWG STRANDED CONDUCTORS (7 × 32) — CAPACITANCE 33pF/ft.

Mfg. Part No.	No. of Cond.	Nom. O.D. (in.)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 9533	3	0.162	87K2835	59.84	87K7362	251.55	03F1629	503.09
● 9534	4	0.184	03F1630	64.62	03F1631	271.87	29M7290	543.74
● 9536	6	0.209	87K2836	97.97	03F1637	412.35	03F1638	824.70
● 9538	8	0.224	87K7365	120.86	87K7364	508.62	03F1644	1017.24
24 AWG STRANDED CONDUCTORS (7 x 32) — CAPACITANCE 30pF/ft.								
● 9539	9	0.244	03F1645	128.20	03F1646	539.07	03F1647	1078.14
● 9541	15	0.284	03F1651	190.62	03F1652	801.95	03F1653	1492.64

(6066)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures

(212568)

MULTICONDUCTOR UNSHIELDED AUDIO, CONTROL, AND INSTRUMENTATION CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

8443

Spooled, stranded tinned copper cable for EIA RS-232 applications. PVC insulated, chrome PVC jacket. NEC Type CM except **mfg. part nos. 8621-23, 8627, 8628, 9620-22,** and **9721** which pass VW-1 vertical wire flame test. Working voltage: 600V, 80°C. **Mfg. part no. 8446** contains four 22 AWG (7x30) and two 18 AWG (16x30) conductors.

Mfg. Part No.	No. of Cond.	O.D. (in.)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
AWG: 22 (7 x 30)								
● 8442	2	0.17	...	...	87K2769	165.22	87K7178	330.43
● 8443**	3	0.172	88K2210	55.71	02F4075	234.25	87K7179	468.49
● 8444**	4	0.185	87K2772	66.49	02F4079	279.66	87K2771	559.31
● 8446**	6	0.236	87K7180	142.00	87K6282	597.37	02F4087	1194.74
● 9430**	7	0.214	...	...	87K7341	427.40	87K7340	854.80
● 8456**	10	0.264	87K7182	146.69	02F4304	616.84	02F4305	1233.67
● 8457**	12	0.272	87K7183	162.40	02F4307	682.66	02F4308	1365.32
● 8458**	15	0.315	87K7184	257.20	02F4298	1081.43	87K1768	2162.85
● 9431**	20	0.345	...	...	87K7342	1498.79	...	...
● 9433**	40	0.455	87K7344	823.43	...	...	...	...
AWG: 20 (7 x 20)								
● 9444*	4	0.217	02F5323	88.20	87K2833	370.92	02F5325	741.83
● 9445*	5	0.239	02F5326	111.38	02F5327	468.32	87K7345	936.63
● 9457*	12	0.338	02F5332	311.73	02F5333	1311.34	02F5334	2622.68
AWG: 18 (19 x 30)								
● 8465	5	0.282	87K2773	136.48	02F5276	574.19	02F6134	1148.38
● 8469	9	0.364	02F5282	238.09	02F6136	1001.41	02F5285	2002.83
● 8466	12	0.412	02F4225	311.91	02F6100	1311.95	88K0153	2623.90
● 8468	15	0.5	87K2774	433.91	02F4230	1825.15	...	...
AWG: 16 (19 x 29)								
● 9620	5	0.411	02F5345	305.40	87K7380	1284.88	...	...
● 8621	7	0.458	87K7260	406.68	02F4235	1711.41	...	...
● 9721	8	0.445	87K7383	487.36	...	..	...	...
● 9621	9	0.533	87K7381	608.32	...	...	...	...
● 8622	12	0.627	02F4237	924.86	...	...	...	...
● 8623	15	0.694	03F1555	1336.22	...	...	...	...
● 9622	25	0.879	02F5350	1927.03	...	...	...	...
AWG: 14 (19 x 27)								
● 8627	4	0.49	02F5342	427.95	...	...	...	...
● 8628	7	0.623	87K1783	738.94	...	...	...	...

*UL recognized 2464; 300V, 80°C; **UL recognized 2576; 150V, 80°C
(6045)

PAIRED BELDFOIL® SHIELDED RS-232 COMPUTER CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

9502

9515

Feature twisted paired tinned copper conductors, PVC insulation and overall Beldfoil® aluminum polyester shield with tinned copper drain wire. Chrome PVC jacket.

24 AWG (7x32) STRANDED CONDUCTORS – UL RECOGNIZED 2464 300V, 80° C. NEC TYPE CM.

Mfg. Part No.	No. of Pairs	Nom. O.D.	Cap. pF/ft	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 9501	1	0.156″	40	02F4859	46.35	02F4860	194.98	87K7354	389.95
● 9502	2	0.222″	30	02F4862	76.85	02F4863	323.25	02F4864	646.51
● 9503	3	0.232″	30	87K7357	99.38	87K7356	417.80	02F4867	835.59
● 9504	4	0.265″	30	87K7358	122.38	02F4869	514.68	02F4870	1029.35
● 9506	6	0.289″	30	87K7359	193.56	02F4875	814.23	02F6119	1628.45
● 9508	8	0.324″	30	87K7360	231.06	02F4881	972.09	02F6121	1944.18
● 9509	9	0.334″	30	02F4883	257.08	02F4884	1081.25	02F6122	2162.50
● 9515	15	0.417″	30	02F4933	432.38	02F6124	1818.84	02F6125	3637.68

(57681)

PAIRED OVERALL FOIL/ BRAID-SHIELDED COMPUTER CABLE FOR EIA RS-232

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

8334

8325

Suitable for CAD/CAM applications. Stranded tinned copper conductors, S-R PVC insulated twisted pairs with overall Beldfoil® aluminum-polyester shield plus 65% tinned copper braid shield. Chrome PVC jacket. 300V, 80°C. UL recognized 2464, CSA certified Type T2. NEC Type CM. Also available in 1000′ spools.

24 AWG STRANDED CONDUCTORS (7 x 32) 2464 T2 NEC TYPE CM

Mfg. Part No.	No. of Pairs	Nom. O.D.	Cap. pF/ft.	100′ Spool Stock No.	100′ Spool Price per Spool
8332 060100	2	0.250″	30	03F4103	126.85
8333 060100	3	0.265″	30	87K1725	169.99
8334 060100	4	0.288″	30	87K1729	192.76
8335 060100	5	0.295″	30	87K1730	217.81
8336 060100	6	0.310″	30	03F3972	242.64
8340 060100	10	0.385″	30	03F3978	374.12
8342 060100	12-1/2*	0.405″	30	03F3981	438.71

22 AWG STRANDED CONDUCTORS (7 x 30) 2464 T2 NEC TYPE CM

Mfg. Part No.	No. of Pairs	Nom. O.D.	Cap pF/ft.	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool
8302	2	0.260″	40	89K0066	170.13	87K1639	715.53
8303	3	0.270″	35	03F3951	188.75	03F3952	793.90
8304	4	0.320″	35	87K1680	239.23	87K1681	1006.00
8305	5	0.322″	35	87K1704	286.11	03F3955	1120.08
8306	6	0.348″	35	03F3957	308.08	03F3958	1295.51
8308	8	0.384″	35	03F3963	393.30	03F3964	1654.49
8312	12-1/2*	0.455″	35	03F4091	562.03	87K1709	2364.05
8318	18	0.535″	35	87K1710	945.10	03F4098	3975.11
8325	25	0.620″	35	...	...	03F4101	6272.47

*12 pair plus 1 single
(6032)

PAIRED, LOW-CAPACITANCE BELDFOIL® SHIELDED COMPUTER CABLE FOR EIA RS-232 AND RS-422 APPLICATIONS

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

9684

Low capacitance cable for EIA RS-232 applications. Tinned copper conductors, polyethylene insulated twisted pairs. Overall Beldfoil® aluminum-polyester shield. Stranded tinned copper drain wire. Chrome PVC jacket. Nominal impedance 100 ohms. *12 pairs + 1 single. UL recognized 2919, 30V, 80°C. NEC type CM; PCC FT, 1, 15.5pF/ft. capacitance. UL recognized 2464, 300V, 80°C, NEC type CM.

24 AWG (7x32) STRANDED CONDUCTORS

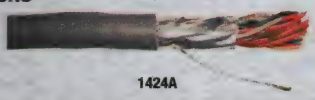
No. of Pairs	Nom. O.D (in.)	Mfg. Part No.	500′ Spool Stock No.	500′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
4	0.31	9681 060500	04F5159	740.70	9681 0601000	06M4028	1481.40
12.5*	0.46	9684-500-60	04F5177	1755.78	9684 0601000	87K1915	3511.56

*Composite cable
(6017)

PAIRED, LOW-CAPACITANCE BELDFOIL® SHIELDED COMPUTER CABLE FOR EIA RS-232 AND EIA RS-422 APPLICATIONS

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS



1424A

Tinned copper conductors, Datalene® insulated, twisted pairs. Overall Beldfoil® aluminum-polyester shield. Stranded tinned copper drain wire. Chrome PVC jacket. Nominal impedance 100 ohms. UL recognized 2919, 30V, 80°C; NEC type CM; CSA PCC FT.1, 18.95pF/ft. capacitance. **Sold in 1000′ spools.** Also available in 500′ spools; *go online or call.*

24 AWG (7x32) STRANDED CONDUCTORS

Mfg. Part No.	No. of Pairs	Nom. O.D. (in.)	Spool Size (ft.)	Stock No.	Price per Spool
1419A 0601000	2	0.248	1000	04F9506	568.66
1420A 0601000	3	0.261	1000	04F9510	868.98
1421A 0601000	4	0.28	1000	04F9511	924.86

➤CONTINUED➤

PAIRED, LOW-CAPACITANCE BELDFOIL® SHIELDED COMPUTER CABLE FOR EIA RS-232 AND EIA RS-422 APPLICATIONS (CONT.)

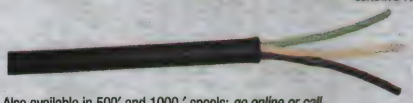
Mfg. Part No.	No. of Pairs	Nom. O.D. (in.)	Spool Size (ft.)	Stock No.	Price per Spool
1423A 0601000	6	0.319	1000	04F9513	1236.26
1424A 0601000	12.5*	0.418	1000	04F9514	2362.15

*12 pairs plus 1 single
(6018)

3- AND 4-CONDUCTOR PORTABLE CORDAGE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS



Sold in 100′ spools. Also available in 500′ and 1000′ spools; *go online or call.*

UNSHIELDED SV-3-CONDUCTOR BLACK RUBBER JACKET 300V, RATED 60°C

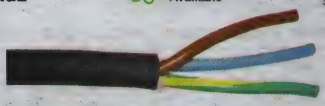
Mfg. Part No.	AWG (Stranding)	Nom. O.D.	Insul-ation	100′ Spool Stock No.	100′ Spool Price per Spool
8453 010100	18 (41x34)	0.256″	EPDM	02F4063	293.93
UNSHIELDED 4-CONDUCTOR, BLACK RUBBER JACKET, 300V, RATED 60°C; UL RECOGNIZED 4097					
8454 010100	18 (41x34)	0.265″	EPDM	02F4065	276.15

(6123)

3-CONDUCTOR PORTABLE CORDAGE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS



Unshielded bare copper. Belflex™ jacket and PVC insulation. Typical applications include motor control and in-plant power distribution. International color coding. Passes VW-1 vertical wire flame test. UL listed, CSA certified. **Sold in 250′ spools.**

SJTOW-A3-CONDUCTOR BLACK PVC MATTE JACKET, RATED 105°C

Mfg. Part No.	AWG (Stranding)	Nom O.D. (in.)	250′ Spool Stock No.	250′ Spool Price per Spool
19509 B59250	18 (42x34)	0.36	92F2194	408.11
19510 B59250	16 (65x34)	0.34	87K6206	556.72
19511 B59250	14 (41x30)	0.38	92F2196	600.66

(31472)

BARE COPPER 2- AND 3-CONDUCTOR PORTABLE CORDAGE

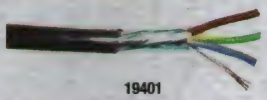
RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

19227

19129

19352



19401

SVT-2-CONDUCTOR BLACK PVC JACKET 300V, RATED 60°C

Mfg. Part No.	AWG (Stranding)	Nom. O.D.	Insul-ation	250′ Spool Stock No.	250′ Spool Price per Spool
19140 010250	18 (41x34)	0.243″	PVC	37F3068	262.57
SJO-2-CONDUCTOR BLACK NEOPRENE JACKET 300V, RATED 60°C					
19227 010250	18 (16x30)	0.290″	EPDM	87K1188	402.01
19228 010250	16 (26x30)	0.315″	Rubber	36F985	522.12
SJT-3-CONDUCTOR BLACK PVC JACKET 300V, RATED 60°C					
19348 010250	18 (41x34)	0.328″	PVC	36F1167	415.33
19352 010250	18 (41x34)	0.328″	PVC	37F3077	404.56
19362 010250*	18 (41x34)	0.340″	PVC	37F3080	623.93
19349 010250	16 (65x34)	0.340″	PVC	87K1190	511.65
19353 010250	16 (65x34)	0.353″	PVC	37F3078	489.85
19354 010250	14 (41x30)	0.380″	PVC	37F3079	608.83
19364 010250*	14 (41x30)	0.402″	PVC	37F3082	759.60
SVT-3-CONDUCTOR BLACK PVC JACKET 300V, RATED 60°C					
19350 008250	18 (41x34)	0.253″*	PVC	36F1172	346.35
19401 010250*	18 (41x34)	0.270″	PVC	87K1192	477.27
19402 010250	18 (41x34)	0.253″	PVC	87K1193	338.05
SJ-3-CONDUCTOR BLACK RUBBER JACKET 300V, RATED 60°C					
19129 010250	18 (16x30)	0.315″	EPDM	36F1372	432.11
19130 010250	16 (26x30)	0.340″	EPDM	36F1373	544.52

➤CONTINUED➤

BARE COPPER 2- AND 3-CONDUCTOR PORTABLE CORDAGE (CONT.)

SJ-3-CONDUCTOR BLACK RUBBER JACKET 300V, RATED 60°C

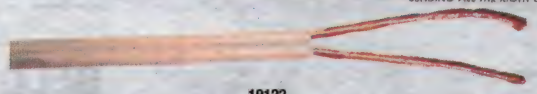
Mfg. Part No.	AWG (Stranding)	Nom. O.D.	Insul-ation	250′ Spool Stock No.	250′ Spool Price per Spool
● 19125 010250	18 (41x34)	0.315″	EPDM	37F3071	467.54
● 8479 010250	14 (41x30)	0.380″	EPDM	02F5661	681.84
SJO-3-CONDUCTOR BLACK NEOPRENE JACKET 300V, RATED 60°C					
● 19229 010250	18 (16x30)	0.315″	EPDM	87K6205	498.11
● 19230 010250	16 (26x30)	0.340″	EPDM	87K1189	656.41
SO-3-CONDUCTOR BLACK NEOPRENE JACKET 600V, RATED 60°C SO also available in 4-cond.; *go online or call.*					
● 19209 010250	18 (41x34)	0.380″	EPDM	36F1369	759.65
● 19208 010250	16 (65x34)	0.400″	EPDM	36F1370	907.82
● 19207 010250	14 (41x30)	0.538″	EPDM	36F1371	1452.51
S-3-CONDUCTOR BLACK RUBBER JACKET 600V, RATED 60°C					
● 19106 010250	12 (65x30)	0.640″	EPDM	87K1179	1641.08
● 19105 010250	10 (105x30)	0.681″	EPDM	37F3074	2254.97

*Beldfoil® 100% shield coverage
(6122)

LAMP AND HEATER CORDS

RoHS Compliant Available

BELDEN
SENDING ALL THE RIGHT SIGNALS



19122

All feature bare copper conductors.

UNSHIELDED, UNJACKETED SPT-1 2-CONDUCTOR PVC PARALLEL LAMP CORD, 300V, RATED 60°C

Mfg. Part No.	AWG (Stranding)	Nom. O.D.	Color	250′ Spool Stock No.	250′ Spool Price per Spool
● 19122 001250	18 (42 x 34)	0.110″ x .207″	Brown	37F3061	202.72
● 19122 010250	18 (42 x 34)	0.110″ x .207″	Black	87K6204	202.72
UNSHIELDED, UNJACKETED SPT-2 2-CONDUCTOR PVC PARALLEL LAMP CORD, 300V, RATED 60°C					
● 19126 010250	16 (65 x 34)	0.155″ x .299″	Black	36F1820	283.03

(6124)

600-VOLT PORTABLE CORDS

RoHS Compliant Available

General Cable

CAROL. BRAND

Applications:
- Portable Tools and Equipment
- Portable Appliances
- Small Motors and Associated Machinery

Type SOOW, 600-volt black Carolprene® jacketed portable cords. Temperature range: –40°C to +90°C. UL listed, CSA certified. **Sold in spools of 250′.** 1000′ spool available on special order; *go online or call.*

Mfg. Part No.	AWG	No. of Cond.	Stranding	Nom. O.D.	250′ Spool Stock No.	250′ Spool Price per Spool
● 02768-85-01	14	4	41/30	0.575″	04F3892	460.37
● 02762.35T.01	14	3	41/30	0.530″	82R6853	355.13
● 02726-85-01	12	4	65/30	0.650″	04F3894	462.19
● 02724-85-01	12	2	65/30	0.570″	04F3869	330.61
● 02727.35T.01	10	4	104/30	0.715″	05F1247	584.72
● 02727.85.01	10	4	104/30	0.715″	96B7751	589.25
● 02728-85-01	10	3	104/30	0.660″	99F6783	660.89
● 02767.85.01	10	2	104/30	0.620″	93B8611	461.54

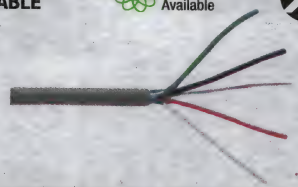
(73839)

80°C MULTICONDUCTOR FOIL SHIELDED CABLE

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

VW-1



Stranded tinned copper conductors. Color-coded PVC insulation. Aluminum/polyester tape, foil shield facing outward. Tinned copper drain wire. Slate PVC jacket. UL type CM, AWM 2576, CSA CMG FT4. 0.010″ insulation thickness. Temp. range: –20°C to +80°C - AWM, 75°C - CM, 60°C - CMG. Passes UL VW-1 vertical flame test. Jacket thickness: 0.032″.

22 AWG, 7 x 30 STRANDED, UL 2576

No. of Cond.	O.D. (in.)	Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	Mfg. Part No.	500′ Spool Stock No.	500′ Spool Price per Spool
2	0.17	● 1292C SL005	03F6182	121.46	● 1292C SL002	03F6183	259.88
3	0.18	● 1293C SL005	27M2951	166.69	● 1293C SL002	85K9591	452.22

➤ CONTINUED ➤

80°C MULTICONDUCTOR FOIL SHIELDED CABLE (CONT.)

No. of Cond.	O.D. (in.)	Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	Mfg. Part No.	500′ Spool Stock No.	500′ Spool Price per Spool
4	0.19	● 1294C SL005	86K6709	187.02	● 1294C SL002	88K1336	464.50
5	0.20	● 1295C SL005	03F6188	192.62	● 1295C SL002	03F6189	482.53
6	0.22	● 1296C SL005	88K1337	203.45	● 1296C SL002	03F6191	547.26
7	0.22	● 1297C SL005	88K1338	208.42	● 1297C SL002	03F6194	598.26
8	0.23	● 1298C SL005	88K2108	229.06	● 1298C SL002	03F6196	695.64
9	0.25	● 1299C SL005	86K8997	231.97	● 1299C SL002	03F6198	780.40
10	0.27	● 1299/10C SL005	86K6710	264.41	● 1299/10C SL002	03F6200	838.78
12	0.28	● 1299/12C SL005	85K9592	317.18	● 1299/12C SL002	85K9593	1004.92
15	0.30	● 1299/15C SL005	85K9594	496.35	● 1299/15C SL002	03F6205	1627.77
20	0.33	● 1299/20C SL005	03F6206	707.79	● 1299/20C SL002	88K1339	2245.07
25	0.37	● 1299/25C SL005	03F6208	843.97	● 1299/25C SL002	03F6209	2676.90
24 AWG, 7 x 32 STRANDED, UL 2576							
2	0.16	● 1212C SL005	03F6144	119.35	● 1212C SL002	03F6145	256.83
3	0.16	● 1213C SL005	86K6706	155.12	● 1213C SL002	03F6147	338.66
4	0.17	● 1214C SL005	86K6707	164.67	● 1214C SL002	03F6149	357.65
5	0.19	● 1215C SL005	03F6150	183.89	● 1215C SL002	03F6151	645.05
6	0.20	● 1216C SL005	85K9584	191.39	● 1216C SL002	03F6153	482.58
7	0.20	● 1217C SL005	03F6154	198.07	● 1217C SL002	03F6155	517.72
8	0.21	● 1218C SL005	85K9585	203.45	● 1218C SL002	03F6157	576.40
9	0.23	● 1219C SL005	03F6158	220.59	● 1219C SL002	03F6159	620.25
10	0.24	● 1219/10C SL005	86K8995	236.03	● 1219/10C SL002	03F6161	663.69
12	0.25	● 1219/12C SL005	03F6162	278.65	● 1219/12C SL002	03F6163	872.35
15	0.27	● 1219/15C SL005	03F6165	353.29	● 1219/15C SL002	03F6166	1102.87
20	0.30	● 1219/20C SL005	03F6167	525.18	● 1219/20C SL002	85K9586	1667.09
25	0.33	● 1219/25C SL005	03F6169	637.29	● 1219/25C SL002	03F6170	2021.19

(6104)

ALPHA WIRE INDUSTRIAL SERIES

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

SERIES M HIGH PERFORMANCE STATIONARY CONTROL CABLE

Features:
- Cable extending from cable tray for an unlimited distance — UL Types PLTC or TC
- Improved cable life
- Reduced cable cost
- Superior resistance to oil and abrasion
- Jacket durability

Applications:
- Extended runs exiting the cable tray —UL compliant to NEC Section 336.10 (7)
- Stationary track/cable tray
- Factory equipment interconnects
- Robotics
- Machine tools
- Automotive assembly equipment
- Conveyor systems
- Control panels

Series M is the ultimate cable solution for stationary/cable tray and some minimal flexing applications. Insulation color code: **RW** in mfg. part no. number indicates red insulated conductors with alphanumeric printing, neutral conductor is white with red stripe and ground wire is green/yellow; **LW** in mfg. part no. number indicates blue insulated conductors with alphanumeric printing, neutral conductor is white with blue stripe and ground wire is green/yellow. Oil-resistant PVC slate jacket. Operating temperature: -5°C to 90°C (dynamic), -25°C to 90°C (static). UL Type TC-ER, 600 volt, CSA AWM I/II A/B 600V FT4, UL WTTC. **Sold per foot.**

16 AWG (26 x 30 BC) RED INSULATION, UNSHIELDED

Mfg. Part No.	No. of Cond.	Nom. O.D. (In.)	Stock No.	Price per Foot
● M16112RW SL199	12	0.557	85C2636	4.89
● M16117RW SL199	17	0.644	85C2638	7.09
● M16119RW SL199	19	0.644	85C2640	6.87
● M16122RW SL199	22	0.707	85C2642	15.04
● M16125RW SL199	25	0.761	85C2644	12.81
● M16133RW SL199	33	0.857	85C2646	13.50
● M16142RW SL199	42	0.950	85C2648	22.56
● M16149RW SL199	49	1.005	85C2650	18.80
● M16165RW SL199	65	1.122	85C2652	26.55
16 AWG (26 x 30 BC) BLUE INSULATION, UNSHIELDED				
● M16112LW SL199	12	0.557	85C2635	5.36
● M16117LW SL199	17	0.644	85C2637	8.93
● M16119LW SL199	19	0.644	85C2639	7.99
● M16122LW SL199	22	0.707	85C2641	8.37
● M16125LW SL199	25	0.761	85C2643	9.72
● M16133LW SL199	33	0.857	85C2645	12.75
● M16142LW SL199	42	0.950	85C2647	17.53
● M16149LW SL199	49	1.005	85C2649	19.99
● M16165LW SL199	65	1.122	85C2651	26.55

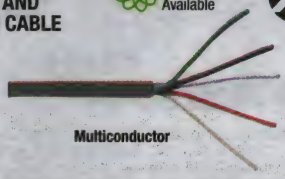
(57776)

FOIL-SHIELDED PLENUM-RATED MULTIPAIR AND MULTICONDUCTOR CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

- UL Type CL2P
- Plenum Applications without Conduit
- Passes Steiner Tunnel Test
- CSA CMP FT6



Plenum-rated PVC cable has stranded bare copper conductors. Shielding is constructed of aluminum/polyester foil. Drain wire is stranded tinned copper. Maximum operating temperature: -5°C to +75°C. Rated 150 or 300 volts. Applications include remote control and intercom systems, burglar alarms, cash registers, and other low-voltage systems. UL listed. **Sold in 500′ and 1000′ spools**

MULTIPAIR PLENUM-RATED CABLE

Mfg. Part No.	No. of Prs.	O.D. (mm)	AWG	Stranding	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
58412	2	4.699	22	7 x 30AWG	92F7520	711.15	04F6047	1297.85
58413	3	5.004	22	7 x 30AWG	28B8157	806.67	92F7516	1472.37
58415	5	6.071	22	7 x 30AWG	...	...	04F6048	2156.91
58416	6	6.629	22	7 x 30AWG	28B8158	1562.13	92F7518	2851.01
58419	9	7.899	22	7 x 30AWG	05F1758	2367.81	92F7519	4321.83
58420/19	19	10.617	22	7 x 30AWG	...	...	04F6049	7486.34

MULTICONDUCTOR PLENUM-RATED CABLE

Mfg. Part No.	No. of Cond.	O.D. (mm)	AWG	Stranding	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
58401	2	3.048	24	7 x 32AWG	04F5109	340.02	04F5110	606.24
57003	3	3.048	24	7 x 32AWG	28B7981	239.92	...	...
57004	4	3.327	24	7 x 32AWG	28B7983	299.29	28B7982	506.41
57006	6	3.912	24	7 x 32AWG	13C2189	471.45	13C2188	824.85
57008	8	4.242	24	7 x 32AWG	85K9873	621.76	28B7986	1033.79
57015	15	5.512	24	7 x 32AWG	28B7992	1431.21	28B7991	2380.15
58110/25	25	6.655	24	7 x 32AWG	...	...	04F5112	3818.42
58411	2	3.200	22	7 x 30AWG	04F5113	453.26	04F5114	808.37
58113	3	3.378	22	7 x 30AWG	05F1867	495.64	04F5608	732.60
58114	4	3.683	22	7 x 30AWG	92F9392	550.99	04F5115	1000.14
58116	6	4.369	22	7 x 30AWG	04F5116	760.37	04F5117	1380.31
58117	7	4.369	22	7 x 30AWG	28B8154	884.86	04F5609	1553.95
58118	8	4.750	22	7 x 30AWG	04F5118	980.12	04F5119	1778.98
58119	9	5.105	22	7 x 30AWG	92F9393	1061.86	04F5610	1927.04
58120	10	5.537	22	7 x 30AWG	04F5120	1157.54	04F5121	2100.79
58120/12	12	5.715	22	7 x 30AWG	...	...	04F5611	2086.65
58120/15	15	6.223	22	7 x 30AWG	92F9394	1610.32	04F5122	2665.16
58120/25	25	7.976	22	7 x 30AWG	04F5123	2459.40	04F5124	4065.91
58421	2	3.505	20	7 x 0.307mm	87F4251	501.36	87F4252	893.55
58124	4	4.064	20	7 x 0.307mm	04F5125	740.29	04F5126	1343.39
58126	6	4.851	20	7 x 0.307mm	04F5127	1030.71	04F5128	1870.73
58431	2	4.115	18	7 x 0.386mm	04F5129	670.84	04F5130	1217.69
58133	3	4.369	18	7 x 0.386mm	28B8155	926.98	04F5612	1683.14
58134	4	4.801	18	7 x 0.386mm	04F5131	1063.16	04F5132	1929.86
58136	6	5.766	18	7 x 0.386mm	04F5133	1659.12	04F5134	3011.68
58142	2	4.724	16	7 x 0.488mm	...	...	04F5613	1666.09
58144	4	5,537	16	7 x 0.488mm	28B8156	1547.83	04F5614	2810.23

(6128)

MANHATTAN™ RETRACTILE COMMUNICATIONS CORDS

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

- UL AWM Style 2464

Unshielded multiconductor retactile communication cords consist of stranded 21x36 23 AWG tinned copper conductors, color-coded polypropylene insulation with an overall, black PVC jacket. Features a lead at each end. Rated: 300V, 1A. Operating temperature: -20°C to +80°C.

LENGTH — 1 FT. (0.3M) RETRACTED, 5 FT. (1.5M) EXTENDED, 12 IN. (0.304MM) LEADS

Mfg. Part No.	No. of Conductors	Jacket O.D. (in.) — (mm)	Stock No.	Price Each 1-4
702R BK032	2	0.190 — 4.83	28B8623	45.70
703R BK032	3	0.200 — 5.08	28B8637	44.43
704R BK032	4	0.220 — 5.59	28B8658	55.48
705R BK032	5	0.230 — 5.84	28B8672	66.06
706R BK032	6	0.230 — 5.84	28B8715	82.70
707R BK032	7	0.250 — 6.35	28B8719	88.13

CONTINUED

MANHATTAN™ RETRACTILE COMMUNICATIONS CORDS (CONT.)

LENGTH — 2 FT. (0.61M) RETRACTED, 10 FT. (3M) EXTENDED, 6 IN. (0.152MM) LEADS

Mfg. Part No.	No. of Conductors	Jacket O.D. (in.) — (mm)	Stock No.	Price Each 1-4
702/2R BK032	2	0.180 — 4.57	28B8622	62.90
703/2R BK032	3	0.190 — 4.83	28B8635	73.19
704/2R BK032	4	0.200 — 5.08	28B8656	85.09
705/2R BK032	5	0.215 — 5.46	28B8669	94.81
706/2R BK032	6	0.230 — 5.84	28B8712	104.46
707/2R BK032	7	0.230 — 5.84	28B8716	116.96

(195395)

MILITARY-GRADE BRAIDED SHIELD MULTICONDUCTOR CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

Stranded tinned-copper insulated conductors meet MIL-W-16878 Type C specifications. Features color-coded PVC insulation, braided tinned-copper shield, 90% coverage, and slate PVC jacket. Typical applications include electronic equipment interconnection, remote control of sensitive recording instruments and controls, and telemetry data. Rated 1000V, –55°C to +105°C. Also available in 16 AWG; *go online or call.*

18 AWG, 19 x 30 STRANDING, INSULATION THICKNESS 0.016″

No. of Cond.	Nom. O.D. (in.)	Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
5	0.303	3405 SL005	85K9790	1340.14	3405 SL001	02F8143	5428.09
8	0.364	3408 SL005	02F9770	1840.90	3408 SL001	02F9771	7455.71
10	0.429	3410 SL005	02F8144	2446.70	3410 SL001	02F8145	9915.81
12	0.442	3412 SL005	02F9772	2839.13	3412 SL001	02F9773	11505.04

(6106)

MULTIPAIR FOIL-SHIELDED CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

22 AWG solid tinned copper conductors with color-coded PVC insulation. Shield is aluminum/polyester tape with foil facing inward. Stranded tinned copper drain wire. Voltage rating: 300V. Temperature range: –20°C to +80°C-AWM (75°C - CM, 60°C - CMG). Slate PVC jacket. Passes UL VW-1 flame test. UL listed Type CM, UL recognized AWM Style 2464, CSA certified CMG FT4. **Sold in 500′ and 1000′ spools.** Also available in 100′ spools; *go online or call.*

No. of Prs.	O.D. (in.)	Mfg. Part No.	500′ Spool Stock No.	500′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
2	0.24	5902C SL002	04F3357	302.66	5902C SL001	04F3358	538.31
4	0.27	5905C SL002	04F3360	436.47	5905C SL001	04F3361	798.00
6	0.33	5906C SL002	04F3363	795.77	5906C SL001	04F3364	1458.89
9	0.39	5909C SL002	04F3366	1291.67	5909C SL001	04F3367	1804.05
15	0.47	5909/15C SL002	85K9912	2331.62	5909/15C SL001	06M3973	4197.01
19	0.51	5909/19C SL002	04F3372	2452.11	5909/19C SL001	04F3373	4429.78

(9920)

MULTIPAIR FOIL-SHIELDED CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

Feature stranded tinned copper conductors, color-coded PVC insulation, aluminum/polyester foil shield and slate PVC jacket. Stranded tinned copper drain wire facilitates ground termination. Insulation thickness: 0.016″ (18 AWG), 0.010″ (22 and 24 AWG). Operating temperature: –20° to +80C° - AWM, 75°C - CM, 60°C - CMG. UL type CM, UL recognized AWM 2464, 2576, CSA CMG FT4. UL listed, CSA certified.

300 VOLT, 80°C, 24 AWG, 7 x 32 STRANDED, UL 2464, TYPE CM

No. of Prs.	O.D. (in.)	Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	Mfg. Part No.	500′ Spool Stock No.	500′ Spool Price per Spool
1	0.16	5471C SL005	03F6275	55.78	5471C SL002	03F6276	170.38
2	0.21	5472C SL005	03F6277	67.66	5472C SL002	03F6278	232.05
3	0.22	5473C SL005	03F6279	86.84	5473C SL002	03F6280	297.93
4	0.24	5474C SL005	03F6281	111.33	5474C SL002	27M3016	391.18
5	0.27	5475C SL005	88K1449	135.02	5475C SL002	03F6284	462.73
6	0.29	5476C SL005	03F6285	180.28	5476C SL002	03F6286	614.20
7	0.29	5477C SL005	85K9860	216.77	5477C SL002	03F6288	750.15
8	0.31	5478C SL005	88K2170	261.94	5478C SL002	03F6290	902.42
9	0.34	5479C SL005	03F6291	260.95	5479C SL002	03F6292	996.34

CONTINUED

DATA/COMMUNICATION, CONTROL & INSTRUMENTATION CABLE

MULTIPAIR FOIL-SHIELDED CABLE (CONT.)

No. of Prs.	O.D. (in.)	Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	Mfg. Part No.	500′ Spool Stock No.	500′ Spool Price per Spool
10	0.37	● 5480C SL005	03F6293	295.06	● 5480C SL002	03F6294	1013.67
15	0.42	● 5480/15C SL005	03F6295	466.39	● 5480/15C SL002	85K9861	1608.45
19	0.45	● 5480/19C SL005	03F6297	754.23	● 5480/19C SL002	03F6298	2445.50
25	0.53	● 5480/25C SL005	03F6299	851.93	● 5480/25C SL002	03F6300	2910.44
50	0.70	● 5480/50C SL005	03F6301	2474.96	● 5480/50C SL002	03F6302	8803.17
150 VOLT, 80°C, 22 AWG, 7 x 30 STRANDED, UL 2576, TYPE CM							
1	0.17	● 2211C SL005	03F6220	74.28	● 2211C SL002	85K9679	261.03
2	0.23	● 2212C SL005	85K9680	137.00	● 2212C SL002	85K9681	434.42
3	0.25	● 2213C SL005	85K9682	173.25	● 2213C SL002	85K9683	540.33
4	0.27	● 2214C SL005	85K9684	186.50	● 2214C SL002	03F6227	654.20
5	0.29	● 2215C SL005	27M2960	218.54	● 2215C SL002	03F6229	767.29
6	0.32	● 2216C SL005	03F6231	273.11	● 2216C SL002	85K9685	947.02
9	0.37	● 2219C SL005	03F6233	397.00	● 2219C SL002	03F6234	1367.05
12	0.42	● 2219/12C SL005	85K9686	514.97	● 2219/12C SL002	03F6238	1810.25
19	0.49	● 2219/19C SL005	86K7063	844.63	● 2219/19C SL002	03F6242	2947.13
23	0.55	● 2219/23C SL005	03F6243	1069.49	● 2219/23C SL002	03F6244	3759.12
27	0.59	● 2219/27C SL005	03F6245	1266.18	● 2219/27C SL002	03F6246	4454.32
300 VOLT, 80°C, 18 AWG, 16 x 30 STRANDED, UL 2464, TYPE CM							
1	0.23	● 2241C SL005	03F6251	141.14	● 2241C SL002	88K2123	471.66
2	0.33	● 2242C SL005	03F6253	226.87	● 2242C SL002	85K9687	786.93
3	0.36	● 2243C SL005	88K2124	310.96	● 2243C SL002	03F6256	1078.33
4	0.40	● 2244C SL005	03F6257	385.00	● 2244C SL002	03F6258	1353.82
5	0.45	● 2245C SL005	03F6259	480.32	● 2245C SL002	03F6260	1783.37
6	0.49	● 2246C SL005	03F6261	609.25	● 2246C SL002	03F6262	2139.84
8	0.54	● 2248C SL005	85K9688	718.12	● 2248C SL002	03F6264	2522.38
9	0.59	● 2249C SL005	03F6265	847.31	● 2249C SL002	03F6266	3075.03
12	0.65	● 2249/12C SL005	27M2961	1472.88	● 2249/12C SL002	03F6268	2821.41
19	0.79	● 2249/19C SL005	03F6271	1820.48	● 2249/19C SL002	03F6272	6401.09

(6105)

MULTIPAIR INDIVIDUALLY FOIL-SHIELDED CABLE

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

Feature stranded tinned copper conductors with color-coded polypropylene insulation. Individual pairs are shielded with aluminum/mylar tape, foil facing inward. Stranded tinned copper drain wire. Slate PVC jacket. Rated: 300V. Temperature range: –20°C to +60°C - AWM, CMG; 75°C - CM. UL listed Type CMG, CM. UL 2493. CSA CMG FT4. Passes UL VW-1 flame test. 500′ spools are also available; *go online or call.*

22 AWG 7 x 30 STRANDED — UL TYPE CMG - 300V

No. of Pairs	O.D. (in.)	Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
3	0.30	● 6010C SL005	02F9033	121.46	● 6010C SL001	02F9034	782.12
6	0.38	● 6012C SL005	02F9035	230.77	● 6012C SL001	02F9036	1563.17
9	0.44	● 6014C SL005	02F9037	597.30	● 6014C SL001	02F9039	3240.48
11	0.48	● 6016C SL005	06M3976	680.93	● 6016C SL001	02F9042	3541.67
12	0.48	● 6017C SL005	03F2636	901.28	● 6017C SL001	03F2637	4404.21
15	0.57	● 6018C SL005*	02F9043	935.57	● 6018C SL001	02F9045	5249.31
17	0.59	● 6019C SL005*	03F3423	1267.05	● 6019C SL001	28B8215	8141.50
19	0.59	● 6020C SL005*	02F9046	1248.56	● 6020C SL005	02F9048	6831.44
27	0.70	● 6022C SL005*	02F9049	2286.32	● 6022C SL005	02F9051	10954.44

*UL Type CM

20 AWG 7 x 28 STRANDED — UL TYPE CM, CMG - 300V

2	0.33	● 6032C SL005	03F5679	155.85	● 6032C SL001	03F5681	924.76
3	0.35	● 6033C SL005	03F2638	180.95	● 6033C SL001	03F2639	1157.61
6	0.45	● 6036C SL005	03F2640	457.92	● 6036C SL001	03F2641	2263.59
9	0.56	● 6039C SL005	03F2642	783.91	● 6039C SL001	03F2643	4031.71
12	0.62	● 6042C SL005	03F2646	1039.29	● 6042C SL001	03F2647	5011.40
18 AWG 16 x 30 STRANDED — UL TYPE CM, CMG - 300V							
3	0.41	● 6023C SL005	02F7954	303.60	● 6023C SL001	39C3078	1933.82
6	0.56	● 6024C SL005	02F7957	610.62	● 6024C SL001	02F7959	3266.82
9	0.65	● 6025C SL005	85K9919	973.38	● 6025C SL001	02F7962	5430.60

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MULTIPAIR FOIL/BRAID-SHIELDED CABLE

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

Feature stranded tinned copper conductors, color-coded SR-PVC insulation, aluminum-polyester foil/ tinned-copper braided shield and slate PVC jacket. Jacket thickness: 0.032″. Rating: 300V. Operating temperature: –20°C to +80°C - AWM, 75°C - CM, 60°C - CMG. UL listed type CM, UL recognized AWM style 2464, CSA certified CMG FT4.

24 AWG, 7 x 32 STRANDED, 0.010″ INSULATION THICKNESS, 65% BRAID COVERAGE

No. of Pairs	Nom. O.D. (in.)	Mfg. Part No.	500′ Spool Stock No.	500′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
2	0.234	● 6362 SL002	66F8370	404.59	● 6362 SL001	66F8369	710.99
3	0.246	● 6363 SL002	06M3979	576.51	● 6363 SL001	66F8371	1013.14
4	0.265	● 6364 SL002	66F8374	639.56	● 6364 SL001	66F8373	1123.90
5	0.286	● 6365 SL002	66F8376	735.81	● 6365 SL001	66F8375	1292.89
6	0.308	● 6366 SL002	66F8378	821.33	● 6366 SL001	66F8377	1443.09
7	0.308	● 6367 SL002	66F8380	986.93	● 6367 SL001	66F8379	1734.19
10	0.379	● 6368 SL002	66F8382	1280.45	● 6368 SL001	66F8381	2250.02
12.5	0.389	● 6369 SL002	66F8384	1539.78	● 6369 SL001	66F8383	2705.65
15	0.421	● 6370 SL002	66F8386	3141.89	● 6370 SL001	66F8385	5522.00
18	0.451	● 6371 SL002	66F8388	4589.45	● 6371 SL001	66F8387	8066.30
25	0.523	● 6372 SL002	66F8390	5649.03	● 6372 SL001	66F8389	9928.50
22 AWG, 7 x 30 STRANDED, 0.010″ INSULATION THICKNESS, 65% BRAID COVERAGE							
2	0.254	● 6373 SL002	66F8392	540.63	● 6373 SL001	66F8391	949.96
3	0.267	● 6374 SL002	66F8394	655.51	● 6374 SL001	66F8393	1151.80
4	0.288	● 6375 SL002	66F8396	798.86	● 6375 SL001	66F8395	1403.66
5	0.312	● 6376 SL002	66F8398	718.67	● 6376 SL001	66F8397	1262.27
6	0.337	● 6377 SL002	66F8400	1019.09	● 6377 SL001	66F8399	1791.09
7	0.337	● 6378 SL002	66F8402	1150.73	● 6378 SL001	66F8401	2022.39
8	0.363	● 6379 SL002	66F8404	1312.62	● 6379 SL001	66F8403	2306.70
10	0.418	● 6380 SL002	66F8406	1542.69	● 6380 SL001	66F8405	2710.99
12	0.430	● 6381 SL002	66F8408	1905.99	● 6381 SL001	66F8407	3349.49
15	0.467	● 6382 SL002	66F8410	2675.36	● 6382 SL001	66F8409	4701.61
18	0.500	● 6383 SL002	66F8412	3354.03	● 6383 SL001	66F8411	5894.67
25	0.595	● 6384 SL002	66F8414	5295.57	● 6384 SL001	66F8413	9306.67

LOW CAPACITANCE CABLE — 28 AWG, 7 x 36 STRANDED, 90% BRAID COVERAGE

Nominal capacitance (CDR to CDR): 15.5pF/ft. Insulation: color-coded polyethylene. Jacket thickness: 0.035″. Voltage rating: 30V (AWM), 300V (CM). Operating temperature: –20°C to + 60°C - CMH, AWM 2960; 75°C - CM, CL2; 80°C - AWM 2919. UL listed type CL2, CM, UL listed AWM style 2960, 2919; CSA certified CMH FT1.

No. of Pairs	Nom. O.D. (in.)	Mfg. Part No.	500′ Spool Stock No.	500′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
2	0.211	● 6390 SL002	66F8491	540.63	● 6390 SL001	66F8490	949.96
3	0.220	● 6391 SL002	66F8493	735.81	● 6391 SL001	66F8492	1292.89
4	0.235	● 6392 SL002	66F8495	814.90	● 6392 SL001	28B8343	1431.85
5	0.252	● 6393 SL002	66F8497	959.85	● 6393 SL001	66F8496	1686.92
7	0.269	● 6394 SL002	66F8499	1199.34	● 6394 SL001	66F8498	2107.67
9	0.305	● 6395 SL002	66F8501	1641.42	● 6395 SL001	66F8500	2884.45
12	0.335	● 6396 SL002	66F8503	2341.75	● 6396 SL001	66F8502	4115.43
13	0.341	● 6397 SL002	66F8505	2675.36	● 6397 SL001	66F8504	4701.61
18	0.383	● 6398 SL002	66F8507	3883.52	● 6398 SL001	66F8506	6825.14
31	0.470	● 6400 SL002	66F8511	8909.73	● 6400 SL001	66F8510	15659.22
LOW CAPACITANCE CABLE — 24 AWG, 7 x 32 STRANDED, 65% BRAID COVERAGE							
2	0.280	● 6401 SL002	66F8513	810.69	● 6401 SL001	66F8512	1424.59
3	0.294	● 6402 SL002	66F8515	1024.42	● 6402 SL001	66F8514	1800.38
4	0.318	● 6403 SL002	66F8517	1175.39	● 6403 SL001	66F8516	2065.61
5	0.345	● 6404 SL002	66F8519	1342.48	● 6404 SL001	66F8518	2359.32
6	0.373	● 6405 SL002	66F8521	1552.00	● 6405 SL001	66F8520	2727.37
7	0.373	● 6406 SL002	66F8523	1725.63	● 6406 SL001	66F8522	3032.91
9	0.430	● 6407 SL002	66F8534	2067.16	● 6407 SL001	66F8533	3633.04
10	0.463	● 6408 SL002	66F8536	2412.51	● 6408 SL001	66F8535	4239.17
12	0.478	● 6409 SL002	66F8538	3863.06	● 6409 SL001	66F8537	6789.29
18	0.580*	● 6410 SL002	66F8540	6673.05	● 6410 SL001	66F8539	11727.92
25	0.671*	● 6411 SL002	66F8542	7236.54	● 6411 SL001	66F8541	12718.36

*0.047″ jacket thickness

LOW CAPACITANCE CABLE — 24 AWG, 7 x 32 STRANDED, 90% BRAID COVERAGE

Nominal capacitance (CDR to CDR): 12.8pF/ft. Insulation: color-coded polyethylene. Jacket thickness: 0.035″. Operating temperature: –20°C to +80°C - AWM, 75°C - CM, 60°C - CMH. UL listed type CM, UL listed AWM style 2919; CSA certified CMH FT1.

1	0.208	● 6412 SL002	66F8483	525.19	● 6412 SL001	66F8482	922.92
2	0.280	● 6413 SL002	66F8485	670.05	● 6413 SL001	66F8484	1177.39
3	0.294	● 6414 SL002	66F8487	895.20	● 6414 SL001	66F8486	1573.16
4	0.318	● 6415 SL002	66F8489	1278.83	● 6415 SL001	66F8488	2247.02

(6201)

DATA/COMMUNICATION, CONTROL & INSTRUMENTATION CABLE

PAIRED FOIL-SHIELDED DATA CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

Single Pair — Four-Pair

Applications:
- Audio pulse or RF signal transmission
- Computer or electronic peripheral interconnectors in areas of high noise interference
- Banking systems

This paired data cable features stranded tinned copper conductors, aluminum/polyester foil shield, color-coded high-density polyethylene insulation, except **mfg. part nos. 2463C, 2466C, 2467C** and **1243/2C** which have polypropylene insulation, and slate PVC jacket. All have stranded tinned copper drain wire with each pair except **mfg. part nos. 2463C** and **2466C** which have a common drain wire. Ideal for use with FIT®-221 heat-shrink tubing; *ordered separately, go online or call.*

SINGLE PAIR SHIELDED, 600V, 60°C, UL AWM 2106

AWG	Stran-ding	O.D. (in.)	Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
16	19 x .0117	.31	2471 SL005	04F3377	147.59	2471 SL001	04F3378	954.60
14	19x27	.34	2472 SL005	85K9697	201.83	2472 SL001	04F3381	1292.13
12	19x25	.41	2473 SL005	04F3382	441.40	2473 SL001	04F3384	1959.89
TWO PAIRS INDIVIDUALLY SHIELDED, 300V, 75°C, UL TYPE CMG, CSA CMG FT4								
22	7x30	.17	2466C SL005	04F3396	77.82	2466C SL001	69H8883	415.60
FOUR PAIRS INDIVIDUALLY SHIELDED, 300V, 75°C, UL TYPE CMG, CSA CMG FT4								
22	7x30	.23	2463C SL005	04F3394	289.87	2463C SL001	04F3395	1854.65
20	7x28	.34	2467C SL005	04F3398	504.45	2467C SL001	04F3399	3274.49
TWO PAIRS INDIVIDUALLY AND OVERALL SHIELDED, 300V, 75°C, UL AWM 2717, CSA CMG FT4								
22	7x30	.245	1243/2C SL005	92F9175	186.37	1243/2C SL001	05F1901	1177.39

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MULTICONDUCTOR BRAID SHIELDED CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

Stranded or solid tinned copper conductors. Color-coded PVC insulation. Passes UL VW-1 vertical flame test. Slate (gray) PVC jacket UL Type CM, CSA CMG FT4. **Sold in 100′ and 1000′ spools.** 500′ spools are also available; *go online or call.*

22 AWG, 7x30 STRANDED, TYPE CM +75°C; AWM +80°C 300V, 0.016″ INSUL. THICKNESS, UL 2095

No. of Cond.	Nom. O.D. (in.)	Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
2	0.19	1736C SL005	02F7794	169.18	1736C SL001	92F6782	919.63
3	0.20	1737C SL005	86K6723	198.50	1737C SL001	02F7799	869.33
4	0.21	1738C SL005	88K1349	284.26	1738C SL001	02F8181	1696.70
20 AWG, 7x28 STRANDED, TYPE CM +75°C; AWM +80°C 300V, 0.016″ INSUL. THICKNESS, UL 2095							
2	0.20	1741C SL005	02F7800	309.40	1741C SL001	02F7802	1847.00
3	0.22	1742C SL005	02F7803	362.34	1742C SL001	24C9069	2202.55
18 AWG, 16x30 STRANDED, TYPE CM +75°C; AWM +80°C 300V, 0.016″ INSUL.THICKNESS, UL 2095							
2	0.22	1746C SL005	02F7806	437.81	1746C SL001	02F7808	2660.32
3	0.24	1747C SL005	27M2956	677.26	1747C SL001	02F7811	4118.81
16 AWG, 19x0.0117 STRANDED, TYPE CM +75°C; AWM +80°C 300V, 0.016″ INSUL. THICK, UL 2095							
2	0.25	1748C SL005	02F7812	632.45	1748C SL001	13C1979	3847.39
22 AWG, SOLID, 80°C 300V, 0.020″ INSUL. THICKNESS, SOLID DRAIN WIRE UNDER BRAID, UL 2095							
2	0.20	...	...	...	1775C SL001	92F9665	998.02
14 AWG, 41 x 30 STRANDED, 80°C 450V, 0.020″ INSULATION THICKNESS							
2	0.30	1750 SL005	02F7815	784.76	1750 SL001	02F7817	4773.21
3	0.32	1751 SL005	27M2957	1202.66	1751 SL001	02F8851	5286.79

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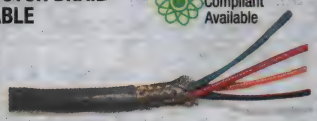
MULTICONDUCTOR BRAID SHIELDED CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.



600V, 105°C, stranded tinned copper conductor. Braided tinned copper shield. Insulation thickness: 0.010″. Color-coded PVC insulation with with clear polyester wrap. Slate (gray) PVC jacket . Meets MIL-W-16878/1 Type B (28 AWG), MIL-DTL-16878/17 Type B/N (24 to 16 AWG). **Sold in 100′ and 1000′ spools.** 500′ spools are also available; *go online or call*

28 AWG, 7 x 36 STRANDED

No. of Cond.	Nom. O.D. (in.)	Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
2	0.12	3302 SL005	02F8123	412.95	3302 SL001	02F8124	2465.34
3	0.12	3303 SL005	02F8125	578.60	3303 SL001	02F8126	3292.62
4	0.13	3304 SL005	02F8127	705.65	3304 SL001	02F8128	4015.89
6	0.16	3306 SL005	86K9061	961.99	3306 SL001	02F8130	5479.26
8	0.17	3308 SL005	88K2141	1094.55	3308 SL001	02F8132	6238.11
10	0.20	3310 SL005	02F8133	1325.41	3310 SL001	02F8134	7922.00
26 AWG, 7 x 34 STRANDED							
2	0.14	3201 SL005	92F9340	291.02	3201 SL001	92F6889	1553.95
3	0.15	3202 SL005	92F9342	364.39	3202 SL001	92F6890	1732.94
24 AWG, 19 x 36 STRANDED							
1	0.09	3210 SL005	02F8090	197.44	3210 SL001	02F8092	1225.54
2	0.16	3211 SL005	88K1378	227.94	3211 SL001	02F8095	1206.47
3	0.17	3212 SL005	02F8096	283.90	3212 SL001	02F8098	1517.34
4	0.18	3213 SL005	86K9059	333.32	3213 SL001	02F8955	1755.99
22 AWG, 19 x 34 STRANDED							
1	0.10	3220 SL005	86K9060	140.65	3220 SL001	02F8101	741.02
2	0.17	3221 SL005	85K9789	180.48	3221 SL001	02F8104	955.47
3	0.18	3222 SL005	88K1379	224.96	3222 SL001	02F8107	1192.50
4	0.20	3223 SL005	13C3559	259.53	3223 SL001	92F6892	1377.68
20 AWG, 19 x 32 STRANDED							
1	0.11	3230 SL005	86K7266	137.80	3230 SL001	02F8110	712.26
2	0.19	3231 SL005	86K7267	208.26	3231 SL001	02F8958	1134.57
3	0.21	3232 SL005	02F8111	260.04	3232 SL001	02F8113	1377.68
18 AWG, 19 x 30 STRANDED							
1	0.12	3240 SL005	78M7422	300.98	3240 SL001	02F8116	1334.38
2	0.22	3241 SL005	02F8117	521.41	3241 SL001	02F8119	1520.82
3	0.23	3242 SL005	27M2967	621.70	3242 SL001	02F8122	1894.48
4	0.26	3243 SL005	92F9345	513.79	3243 SL001	92F6896	2681.15
16 AWG, 19 x 29 STRANDED							
1	0.14	3245 SL005	86K7268	273.56	3245 SL001	02F8961	1461.01
2	0.24	3246 SL005	27M2968	350.42	3246 SL001	02F8964	1861.14
3	0.25	3247 SL005	27M2969	470.15	3247 SL001	02F8967	2527.65
4	0.28	3248 SL005	92F6900	591.51	3248 SL001	92F6898	3167.80

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MULTICONDUCTOR BRAID SHIELDED CABLE WITH PTFE JACKET

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

- 200°C, 600V
- Stranded silver-plated copper conductors
- Color-coded PTFE insulation
- Braided silver-plated copper shield, 90% coverage
- MIL-W-16878/4 (Type E)

WRAPPED WHITE PTFE TAPE JACKET — 16 AWG, 19 x 29 STRANDED CONDUCTORS

No. of Cond.	Nom. O.D. (in.)	Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
1	0.12	2826 WH005	06M3904	1866.68	2826 WH001	02F7762	4664.23
WRAPPED WHITE PTFE TAPE JACKET — 18 AWG, 19 x 30 STRANDED CONDUCTORS							
2	0.19	2829/2 WH005	02F7774	2273.39	2829/2 WH001	02F7775	7806.44
WRAPPED WHITE PTFE TAPE JACKET — 20 AWG, 19 x 32 STRANDED CONDUCTORS							
1	0.10	2827 WH005	86K9016	1336.41	2827 WH001	02F7769	4258.13
2	0.16	2827/2 WH005	06M3905	1642.07	2827/2 WH001	02F7771	5636.70
3	0.17	2827/3 WH005	85K9699	2113.33	2827/3 WH001	03F1328	7257.28
4	0.19	2827/4 WH005	03F1329	2564.84	2827/4 WH001	03F1330	8806.84
6	0.22	2827/6 WH005	92F6958	3736.33	2827/6 WH001	28B6701	12829.56
WRAPPED WHITE PTFE TAPE JACKET — 22 AWG, 19 x 34 STRANDED CONDUCTORS							
1	0.09	2824 WH005	02F7763	759.48	2824 WH001	02F7764	2607.20
2	0.15	2824/2 WH005	86K9015	1385.40	2824/2 WH001	86K7191	4756.09

CONTINUED

DATA/COMMUNICATION, CONTROL & INSTRUMENTATION CABLE

MULTICONDUCTOR BRAID SHIELDED CABLE WITH PTFE JACKET (CONT.)

WRAPPED WHITE PTFE TAPE JACKET — 22 AWG, 19 x 34 STRANDED CONDUCTORS

No. of Cond.	Nom. O.D. (in.)	Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
3	0.15	● 2824/3 WH005	03F1323	1795.64	● 2824/3 WH001	03F1324	6165.24
4	0.17	● 2824/4 WH005	03F1325	2138.77	● 2824/4 WH001	03F1326	7345.10
EXTRUDED WHITE FEP PTFE JACKET, 0.009″ INSUL. THICK. — 20 AWG, 19 x 32 STRANDED COND.							
2	0.16	● 2837/2 WH005	06M3908	1796.99	● 2837/2 WH001	02F7791	6168.91
3	0.17	● 2837/3 WH005	02F7792	2098.59	● 2837/3 WH001	02F7793	7207.26
EXTRUDED WHITE FEP PTFE JACKET, 0.009″ INSUL. THICK. — 22 AWG, 19 x 34 STRANDED COND.							
1	0.09	● 2834 WH005	02F7782	1401.63	● 2834 WH001	02F7783	3957.69
2	0.14	● 2834/2 WH005	86K7192	1326.80	● 2834/2 WH001	02F7785	4554.56
3	0.15	● 2834/3 WH005	02F7786	1655.89	● 2834/3 WH001	02F7787	5685.35
EXTRUDED WHITE FEP PTFE JACKET, 0.010″ INSUL. THICK. — 24 AWG, 19 x 36 STRANDED COND.							
1	0.09	● 2831 WH005	06M3906	1403.92	● 2831 WH001	02F7777	3346.06
2	0.13	● 2831/2 WH005	06M3907	1316.94	● 2831/2 WH001	02F7779	4521.76
3	0.14	● 2831/3 WH005	02F7780	1505.83	● 2831/3 WH001	02F7781	5169.25

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MULTICONDUCTOR BRAIDED SHIELD COMMUNICATION AND CONTROL CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

- Meets MIL-DTL-16878/1 Type B military specifications
- Irradiated PVC insulation resists shrink-back, melting or charring during production line soldering

Multiconductor communication and control cable is ideal for crowded circuit boards where terminals must be soldered. Features stranded tinned copper conductors, color-coded irradiated PVC insulation, clear polyester wrap, braided tinned copper shield and white PVC jacket. Operating temperature: -55°C to 105°C. Voltage rating: 600V.

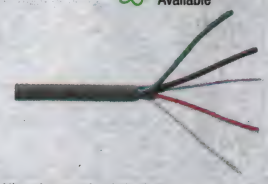
Mfg. Part No.	No. of Conductors	AWG (Stranding)	Nom. O.D. (in.)	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 7622 WH001	2	(7 x 32AWG)	0.16	92F6885	1677.02
● 7623 WH001	3	(7 x 32AWG)	0.17	92F6886	2180.35
● 7624 WH001	4	(7 x 32AWG)	0.18	92F6887	2900.74

(136525)

MULTICONDUCTOR FOIL SHIELDED CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.



Conductor is made of stranded tinned copper. Insulation is color coded polyethylene. Shield is aluminum/polyester tape, foil facing outward; 100% coverage. Stranded tinned copper drain wire. Slate PVC jacket for except **mfg. part nos. 2411C, 2421C** which are black and **2412C, 2422C** which are natiural. UL Type CMG, AWM 2092, 2093, 2094. Rated 300V. Temperature range: –20°C to +60°C - AWM, 75°C - CMG. UL listed. **Mfg. part nos. 2460C** and **2461C** are color coded polypropylene insulated. Stranded or solid tinned copper conductor. Stranded tinned copper drain wire. UL Type CM. Rated 300V. Temperature range: –20°C to +60°C - CMG, 75°C-CM. CSA CMG FT4. **Sold in 100′ and 1000′ spools.** Also available in 500′ spools; *go online or call.*

22 AWG 7 x 30 STRANDED

No. of Cond.	O.D. (in.)	Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
2	0.17	● 2402C SL005	06M3903	70.44	● 2402C SL001	02F8154	450.34
2	0.14	● 2461C SL005	03F1320	64.70	● 2461C SL021	85K9695	362.94
3	0.18	● 2403C SL005	85K9691	63.31	● 2403C SL021	85K9690	406.12
4	0.19	● 2404C SL005	85K9692	95.13	● 2404C SL001	85K9693	608.26
20 AWG 7 x 28 STRANDED							
2	0.18	● 2411C SL005	03F1311	67.28	● 2411C SL021	03F1313	452.94
2	0.18	● 2412C SL005	86K9013	72.67	● 2412C SL001	02F8163	474.66
3	0.20	● 2413C SL005	02F8164	76.64	● 2413C SL021	85K9694	494.19
4	0.21	● 2414C SL005	86K9014	108.35	● 2414C SL001	02F8169	690.92
18 AWG 16 x 30 STRANDED							
2	0.20	● 2421C SL005	89K8108	77.61	● 2421C SL021	03F1316	499.94
2	0.20	● 2422C SL005	02F8170	114.38	● 2422C SL001	02F8172	731.15
3	0.21	● 2423C SL005	02F8173	102.85	● 2423C SL021	02F8175	694.61
4	0.24	● 2424C SL005	02F8176	154.13	● 2424C SL001	02F8178	986.67
16 AWG 19 x 0.0117 STRANDED							
2	0.23	● 2432C SL005	02F9013	125.13	● 2432C SL001	02F9015	797.92
3	0.24	● 2433C SL005	86K7190	176.93	● 2433C SL001	02F9018	1133.49
22 AWG SOLID							
2	0.13	● 2460C SL005	03F1317	79.87	● 2460C SL001	03F1319	318.42

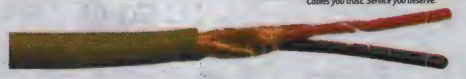
(6151)

MULTICONDUCTOR SPIRAL SHIELDED CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

- Slate PVC jacket
- 80°C 300V UL 2095 (1 conductor UL 1108)
- Spiral shielded cable offers maximum flexibility



Stranded tinned copper conductors with color-coded PVC insulation. UL recognized. **Sold in 100′ and 1000′ spools.** 500′ spools are also available; *go online or call.*

22 AWG, 7 x 30 STRANDED CONDUCTORS

No. of Cond.	Nom. O.D. (in.)	Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
1	0.11	● 2254/1 SL005	06M3902	160.78	● 2254/1 SL001	03F1298	502.87
2	0.18	● 2254 SL005	02F7819	106.62	● 2254 SL001	02F7821	628.04
3	0.19	● 2254/3 SL005	02F7822	308.92	● 2254/3 SL001	02F7824	1428.86
4	0.206	● 2254/4 SL005	03F1299	523.25	● 2254/4 SL001	03F1301	2417.46
6	0.24	● 2254/6 SL005	78M7417	773.26	● 2254/6 SL001	03F1304	3574.80
20 AWG, 10 x 30 STRANDED CONDUCTORS							
1	0.12	● 2256/1 SL005	02F7825	177.14	● 2256/1 SL001	02F7827	724.37
2	0.19	● 2256 SL005	27M2962	209.51	● 2256 SL001	02F7830	700.04
3	0.20	● 2256/3 SL005	02F7831	355.36	● 2256/3 SL001	02F7832	1531.38
4	0.22	● 2256/4 SL005	96B0797	725.53	● 2256/4 SL001	04F3433	3354.83
6	0.26	● 2256/6 SL005	04F3434	1004.24	● 2256/6 SL001	04F3436	4646.36
18 AWG, 16 x 30 STRANDED CONDUCTORS							
1	0.13	● 2258/1 SL005	04F3437	212.83	● 2258/1 SL001	04F3439	837.07
2	0.21	● 2258 SL005	02F7833	238.52	● 2258 SL001	02F7835	976.02
3	0.23	● 2258/3 SL005	27M2963	334.45	● 2258/3 SL001	02F7838	1517.34
4	0.25	● 2258/4 SL005	85K9689	410.79	● 2258/4 SL001	03F1307	1864.05
16 AWG, 26 x 30 STRANDED CONDUCTORS							
2	0.24	● 2260 SL005	03F1308	302.24	● 2260 SL001	03F1310	1339.51
3	0.25	● 2260/3 SL005	04F3440	960.28	● 2260/3 SL001	04F3442	4442.08

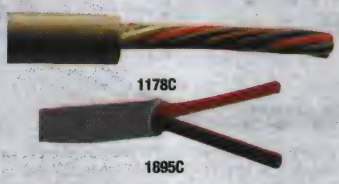
(6140)

MULTICONDUCTOR UNSHIELDED CABLE — 300 VOLT

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

- Color-coded PVC insulation, 0.010″ (0.254) thick
- Slate PVC jacket, 0.032″ (0.813) thick
- Passes UL VW-1 flame test
- -20°C to 80°C - AWM, 75°C - CM, 60°C - CMG
- UL Type CM, AWM 2576, 2509 CSA CMG FT4
- UL listed, CSA certified



Sold in 100′ and 1000′ spools. 500′ spools are also available; *go online or call.*

UL TYPE CM 22 AWG, 7 x 30 STRANDED CONDUCTORS — UL 2576

No. of Cond.	Nom. O.D. (in.)	Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
2	.164	● 1172C SL005	86K8993	40.65	● 1172C SL001	02F8726	198.44
3	.172	● 1173C SL005	85K9582	53.10	● 1173C SL001	02F8729	268.91
4	.185	● 1174C SL005	02F8730	60.92	● 1174C SL001	02F8732	337.58
5	.200	● 1175C SL005	85K9583	71.14	● 1175C SL001	02F8735	425.48
6	.215	● 1176C SL005	86K8994	77.82	● 1176C SL001	02F8738	511.22
7	.215	● 1177C SL005	02F8739	87.88	● 1177C SL001	28B6501	581.89
8	.230	● 1178C SL005	02F8742	104.92	● 1178C SL001	89K8036	648.87
9	.246	● 1179C SL005	02F8745	106.21	● 1179C SL001	02F8747	679.49
10	.264	● 1180C SL005	02F8748	122.52	● 1180C SL001	28B6502	796.68
12	.272	● 1181C SL005	02F8751	178.78	● 1181C SL001	02F8753	1122.77
15	.294	● 1181/15C SL005	02F8754	246.50	● 1181/15C SL001	02F8756	1347.12
20	.326	● 1181/20C SL005	02F8757	367.22	● 1181/20C SL001	02F8759	1860.42
25	.364	● 1181/25C SL005	02F8760	427.50	● 1181/25C SL001	28B6503	2468.13
30	.385	● 1181/30C SL005	02F8762	709.96	● 1181/30C SL001	28B6504	3229.32
40	.429	● 1181/40C SL005	02F8968	931.52	● 1181/40C SL001	02F8970	4412.61
50	.478*	● 1181/50C SL005	02F8971	1164.86	● 1181/50C SL001	02F8972	5723.94
60	.520*	● 1181/60C SL005	88K1309	1251.57	● 1181/60C SL001	28B6507	7993.34

*0.035″ jacket thickness

UL TYPE CM 20 AWG, 7 x 28 STRANDED CONDUCTORS — UL 2509

Insulation thickness: 0.016″ (0.41) and jacket thickness: 0.020″ (0.51).

2	.180	● 1895C SL005	86K9010	48.37	● 1895C SL001	02F9065	314.27
3	.191	● 1896C SL005	02F9066	65.73	● 1896C SL001	02F9068	410.91
4	.209	● 1896/4C SL005	02F9069	75.96	● 1896/4C SL001	88K2120	455.06
5	.230	● 1896/5C SL005	04F3486	102.12	● 1896/5C SL001	04F3488	603.68
6	.251	● 1896/6C SL005	04F3489	112.94	● 1896/6C SL001	04F3491	714.38
7	.251	● 1896/7C SL005	04F3492	127.97	● 1896/7C SL001	04F3494	802.98
8	.273	● 1896/8C SL005	04F3495	185.24	● 1896/8C SL001	04F3497	1177.28

➤CONTINUED➤

MULTICONDUCTOR UNSHIELDED CABLE — 300 VOLT (CONT.)

UL TYPE CM 20 AWG, 7 x 28 STRANDED CONDUCTORS — UL 2509

No. of Cond.	Nom. O.D. (In.)	Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
9	.301**	1896/9C SL005	04F3498	174.99	1896/9C SL001	04F3500	1092.22
10	.320	1896/10C SL005	88K2119	196.90	1896/10C SL001	04F3503	1295.68
12	.331	1896/12C SL005	85K9675	248.30	1896/12C SL001	04F3506	1430.82
15	.382+	1896/15C SL005	04F3507	327.42	1896/15C SL001	04F3509	1890.28

**0.023″ jacket thickness; +0.030″ jacket thickness

UL TYPE CM 18 AWG, 16 x 30 STRANDED CONDUCTORS — UL 2509

Insulation thickness: 0.016″ (0.41) and jacket thickness: 0.020″ (0.51).

No. of Cond.	Nom. O.D. (In.)	Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
2	.198	1897C SL005	02F9072	63.48	1897C SL001	02F9074	397.56
3	.210	1898C SL005	02F9075	88.00	1898C SL001	02F9077	554.30
4	.231	1898/4C SL005	02F9078	109.60	1898/4C SL001	02F9080	692.30
5	.254	1898/5C SL005	04F3510	143.68	1898/5C SL001	04F3512	885.11
6	.278	1898/6C SL005	04F3513	183.34	1898/6C SL001	85K9676	1145.79
7	.278	1898/7C SL005	88K1352	177.26	1898/7C SL001	04F3518	1139.23
8	.313++	1898/8C SL005	04F3519	254.86	1898/8C SL001	04F3521	1622.85
9	.337++	1898/9C SL005	88K1353	300.94	1898/9C SL001	04F3524	1734.62
10	.366++	1898/10C SL005	04F3525	358.20	1898/10C SL001	04F3527	2278.47
12	.378++	1898/12C SL005	04F3528	376.01	1898/12C SL001	04F3530	2183.44
15	.423†	1898/15C SL005	04F3531	504.23	1898/15C SL001	04F3533	3072.78
19	.455†	1898/19C SL005	04F3534	623.40	1898/19C SL001	04F3536	3856.94
25	.544††	1898/25C SL005	04F3537	889.74	1898/25C SL001	04F3539	5516.24

++0.025″ jacket thickness; †0.030″ jacket thickness; ††0.035″ jacket thickness

UL TYPE CM 16 AWG, 19 x 0.0117 STRANDED CONDUCTORS — UL 2509

Insulation thickness: 0.016″ (0.41) and jacket thickness: 0.020″ (0.51).

2	.222	1899C SL005	88K1354	98.14	1899C SL001	02F9083	660.05
3	.236	1899/3C SL005	04F3540	243.10	1899/3C SL001	04F3542	1520.22
4	.260	1899/4C SL005	85K9677	378.31	1899/4C SL001	04F3545	2451.26

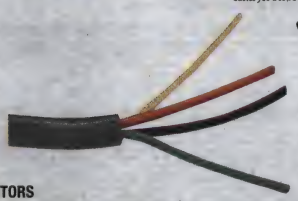
(9896)

MULTICONDUCTOR UNSHIELDED CABLE — 600 VOLT

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

- UL 2463
- -20°C to 80°C
- Passes UL VW-1 flame test
- UL recognized



Features stranded tinned copper conductors, PVC insulation, clear polyester wrap and slate PVC jacket. **Sold in 100′ and 1000′ spools.** 500′ spools are also available; *go online or call.*

16 AWG, 19 x 0.0117 STRANDED CONDUCTORS

No. Cond.	Nom. O.D. (in.)	Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
4	0.395	1064 SL005	04F3444	206.51	1064 SL001	04F3446	1517.73
5	0.430	1065 SL005	04F3447	296.47	1065 SL001	04F3449	2094.31
7	0.468	1067 SL005	27M2949	433.17	1067 SL001	04F3452	3051.11
9	0.577	1069 SL005	85K9580	609.25	1069 SL001	04F3455	4332.62
12	0.640	1072 SL005	04F3456	797.34	1072 SL001	04F3458	5550.57
15	0.695	1075 SL005	04F3459	1226.69	1075 SL001	04F3461	8744.92
19	0.749	1079 SL005	04F3462	1525.08	1079 SL001	04F3464	9486.05
25	0.907	1085 SL005	04F3465	1914.74	1085 SL001	04F3467	12315.81

14 AWG, 19 x 0.0147 STRANDED CONDUCTORS

4	0.503	1274 SL005	88K1335	346.80	1274 SL001	04F3470	2376.09
5	0.584	1275 SL005	04F3471	558.29	1275 SL001	88F2220	3555.19
7	0.635	1277 SL005	04F3474	710.70	1277 SL001	04F3476	4733.98
9	0.744	1279 SL005	04F3477	1084.69	1279 SL001	04F3479	7519.31
12	0.867	1282 SL005	04F3480	1468.46	1282 SL001	04F3482	8848.93

(6141)

MULTICONDUCTOR, FOIL/ BRAID-SHIELDED CABLE

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

Applications: EIA RS232C interface, CAD/CAM. Stranded tinned copper conductors. Aluminum/polyester foil/65% tinned copper braid shield. Color-coded SR-PVC insulation. Slate PVC jacket. Voltage rating: 300V. Operating temperature: –20°C to +80°C - AWM, 75°C - CM, 60°C - CMG. UL listed type CM, UL recognized AWM style 2464; CSA certified CMG FT4. **Sold in 500′ and 1000′ spools.** 100′ spools are also available; *go online or call.*

24 AWG, 7 x 32 STRANDED, 0.010″ INSULATION THICKNESS, 0.032″ JACKET THICKNESS

No. of Cond.	Nom. O.D. (In.)	Mfg. Part No.	500′ Spool Stock No.	500′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
3	.185	6327 SL002	66F8614	383.61	6327 SL001	66F8613	658.56
4	.196	6328 SL002	85K9920	453.01	6328 SL001	66F8615	791.41
5	.209	6329 SL002	66F8618	543.64	6329 SL001	66F8617	949.96
6	.223	6330 SL002	66F8620	708.33	6330 SL001	66F8619	1237.86
7	.223	6331 SL002	66F8605	836.77	6331 SL001	66F8604	1462.77
8	.236	6332 SL002	66F8607	932.03	6332 SL001	66F8606	1629.06
9	.250	6333 SL002	66F8609	1157.41	6333 SL001	66F8608	2022.79
10	.266	6334 SL002	66F8611	1445.81	6334 SL001	66F8610	2527.16
15	.292	6335 SL002	66F8595	1982.48	6335 SL001	66F8612	3464.71
25	.354	6336 SL002	66F8597	3362.46	6336 SL001	66F8596	5876.94
37	.398	6337 SL002	66F8599	5680.42	6337 SL001	66F8598	9928.50
50	.449	6338 SL002	66F8601	7100.04	6338 SL001	66F8600	12409.93

22 AWG, 7 x 30 STRANDED, 0.010″ INSULATION THICKNESS, 0.032″JACKET THICKNESS

3	.198	6339 SL002	66F8603	323.40	6339 SL001	66F8602	555.17
4	.211	6340 SL002	66F8587	395.05	6340 SL001	66F8586	690.05
5	.226	6341 SL002	66F8589	476.74	6341 SL001	66F8588	818.66
6	.241	6342 SL002	66F8591	563.19	6342 SL001	66F8590	984.17
7	.241	6343 SL002	66F8593	659.15	6343 SL001	66F8592	1151.80
8	.256	6344 SL002	66F8577	708.33	6344 SL001	66F8594	1237.86
9	.272	6345 SL002	66F8579	803.30	6345 SL001	66F8578	1403.66
10	.290	6346 SL002	66F8581	884.35	6346 SL001	66F8580	1545.44
15	.320	6347 SL002	66F8583	1256.60	6347 SL001	66F8582	2195.76
25	.390	6348 SL002	66F8585	2119.88	6348 SL001	66F8584	3705.04
37	.440	6349 SL002	66F8574	6390.48	6349 SL001	66F8573	11169.26
50	.540*	6350 SL002	66F8576	7384.10	6350 SL001	66F8575	12906.09

*0.053″ jacket thickness

24 AWG, 7 x 32 STRANDED, 0.016″ INSULATION THICKNESS, 0.035″ JACKET THICKNESS

Nominal capacitance (CDR to CDR); 12pF/ft. Insulation: color coded foam polyethylene. Operating voltage: 300V(CM), 30V (AWM). UL listed type CM, UL recognized AWM style 2919; CSA certified CMH FTI.

No. of Cond.	Nom. O.D. (In.)	Mfg. Part No.	500′ Spool Stock No.	500′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
3	.217	6351 SL002	66F8348	348.97	6351 SL001	66F8347	609.53
4	.231	6352 SL002	66F8350	414.62	6352 SL001	66F8349	724.54
5	.248	6353 SL002	66F8352	538.30	6353 SL001	66F8351	940.37
6	.265	6354 SL002	66F8354	608.94	6354 SL001	66F8353	1063.53
7	.265	6355 SL002	66F8356	642.32	6355 SL001	66F8355	1122.25
8	.282	6356 SL002	66F8358	675.19	6356 SL001	66F8357	1180.00
9	.300	6357 SL002	66F8360	793.63	6357 SL001	66F8359	1386.99
10	.320	6358 SL002	66F8362	810.27	6358 SL001	66F8361	1416.07
15	.353	6359 SL002	66F8364	1283.53	6359 SL001	66F8363	2243.04
25	.432	6360 SL002	66F8366	2084.00	6360 SL001	66F8365	3642.14
37	.514+	6361 SL002	66F8368	3671.73	6361 SL001	66F8367	6417.47

+0.048″ jacket thickness

(6199)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

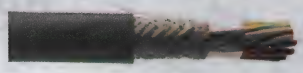
(212570)

DATA/COMMUNICATION, CONTROL & INSTRUMENTATION CABLE

XTRA-GUARD® 1 MULTICONDUCTOR SUPRA-SHIELD® CABLE — 300V

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.



VW-1

Ultraviolet Light

EMI Noise

Extreme Performance in Critical, High-Technology Electronic Signal Applications

EXTREME PERFORMANCE BENEFITS:
- Unique premium-grade PVC insulation and jacket provides easier routing of cable in tight spaces
- Fast, easy stripping of insulation and jacket to reduce installation and connectorization time and cost
- Light-duty resistance to most oils per UL Oil Res and Class 43
- Resistance to ambient temperatures up to 105°C (221°F)
- Ultraviolet stabilized, all colors
- Extreme performance against EMI/RFI with Supra-Shield® high-performance shielding system

XTRA-GUARD® 1 APPLICATIONS:
- EIA RS 232C Interface (24, 22 AWG)
- High-technology applications in controlled environments
- Point-of-sale equipment
- Computer peripherals
- Industrial process controls

XTRA-GUARD® 1 SPECIFICATIONS:
- UL AWM Style 2464 overall; UL AWM Style 10002 conductors
- CSA CMG FT4
- Passes UL VW-1 and CSA FT4 Flame Tests
- UL listed, CSA certified, CE compliant

Stranded tinned copper conductors and color-coded premium PVC insulation. Supra-Shield® aluminum/polyester/aluminum foil shielding with stranded tinned copper drain wire plus 70% overall tinned-copper braid. Voltage rating: 300V. Operating temperature: -30°C to 105°C CM and CMG, -30°C to 80°C AWM 2464. Slate premium PVC jacket; other colors available; *go online or call.* FIT®-221 and FIT®-321 irradiated polyolefin heat-shrink tubing is recommended; *order separately on [6504], and [6506].* **Sold in spool sizes indicated in table below.**

24 AWG 7 x 32 STRANDING, 0.010″ INSULATION THICKNESS

Mfg. Part No.	No. of Cond.	O.D. (mm)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 5112C	2	4.572	...	...	88K1432	1755.09	13C2043	2684.99
● 5113C	3	4.826	13C2044	474.30	...	...	96F9085	3085.34
● 5114C	4	5.080	92F7630	501.64	92F7439	2250.38	88K1433	3227.13
● 5116C	6	5.842	90B6027	600.16	98F4390	2587.85	92F7440	4081.46
● 5118C	8	6.096	92F7443	685.84	92F7442	3073.83	92F7441	4610.82
● 5120C	10	6.858	92F7446	772.86	85K9822	3495.69	92F7444	5088.88
● 5120/15C	15	7.620	27M2986	1043.36	92F7448	4852.10	92F7447	7249.15
● 5120/25C	25	9.144	90B7208	1604.98	92F7453	7220.25	96F9088	10869.50
● 5120/30C	30	9.652	27M2987	1951.36	...	...	13C2045	13031.93
● 5120/40C	40	10.668	85K9821	2699.94	...	...	13C2047	18843.60
● 5120/50C	50	11.684	88K1434	3256.67	13C2048	22590.53	...	...
22 AWG 7 x 30 STRANDING, 0.010″ INSULATION THICKNESS								
● 5102C	2	5.080	88K1428	437.87	92F7419	1872.90	92F7418	3032.17
● 5103C	3	5.080	85K9814	452.59	...	...	92F7420	3133.36
● 5104C	4	5.512	86K9067	480.34	92F7423	2225.88	92F7422	3384.23
● 5108C	8	6.604	88K1429	749.60	92F7427	3371.64	92F7426	4929.56
● 5110C	10	7.620	27M2985	877.72	85K9817	3958.26	92F7494	5936.88
● 5110/15C	15	8.382	92F7431	1272.04	92F7430	5706.29	92F7429	8501.08
● 5110/25C	25	10.160	92F7437	1963.50	92F7436	8828.23	92F7435	13198.20
● 5110/30C	30	10.668	13C2035	2144.44	...	...	13C2034	15253.01
● 5110/40C	40	11.684	96F9084	3182.40	...	...	13C2036	21483.54
● 5110/50C	50	12.954	13C2038	3875.50	13C2037	26087.77	...	...
● 5110/60C	60	14.986	13C2040	4294.60	...	...	13C2039	29004.57
● 5110/70C	70	16.002	85K9816	5200.56	...	...	13C2041	35447.49
20 AWG 7 x 28 STRANDING, 0.016″ INSULATION THICKNESS								
● 5152C	2	6.096	03F6303	485.12	88K1436	2189.14	92F7459	3181.58
● 5153C	3	6.350	85K9824	536.54	03F6306	2480.71	92F7460	3731.32
● 5154C	4	6.858	03F6307	606.70	03F6308	2706.27	92F7461	4126.33
● 5156C	6	7.874	85K9825	813.23	03F6310	3774.08	92F7463	5618.05
● 5158C	8	8.382	03F6374	924.02	85K9826	4173.70	92F7464	6203.82
● 5160C	10	9.652	03F6376	1150.66	03F6359	5175.13	03F6377	7684.34
● 5160/20C	20	11.938	03F6366	2087.12	85K9827	9431.50	13C2060	13871.25
● 5160/25C	25	13.208	03F6368	2619.98	03F6369	11786.67	13C2061	17468.61
● 5160/30C	30	13.970	03F6370	3032.76	03F6371	13646.34	13C2062	20297.67
● 5160/40C	40	16.764	03F6372	4394.88	03F6373	19757.47	13C2063	29341.01
● 5160/50C	50	18.288	03F6360	5267.48	03F6361	23689.17	13C2064	35108.72
● 5160/60C	60	19.558	03F6362	6257.40	03F6363	28143.78	13C2065	41953.08
18 AWG 16 x 30 STRANDING, 0.016″ INSULATION THICKNESS								
● 5162C	2	6.350	03F6351	628.22	03F6352	2824.78	92F7472	4010.97
● 5162/1C*	2	6.350	85K9828	606.24	...	...	13C2066	4010.97
● 5163C	3	6.858	27M2988	741.64	03F6354	3293.88	03F6355	5044.03
● 5164C	4	7.366	03F6356	822.84	03F6357	3700.46	92F7473	5499.71
● 5166C	6	8.636	27M2989	1071.62	27M2990	4971.44	98F8775	7551.09
● 5168C	8	9.144	03F6381	1354.26	03F6382	6074.14	13C2070	9072.49
● 5170C	10	10.414	03F6383	1755.12	03F6384	7288.92	92F7475	11945.26
● 5170/15C	15	11.684	03F6385	2239.72	03F6386	10075.97	03F6387	15166.82
● 5170/20C	20	12.954	03F6388	2819.58	03F6389	12680.16	13C2071	19025.31

➤ CONTINUED ➤

XTRA-GUARD® 1 MULTICONDUCTOR SUPRA-SHIELD® CABLE — 300V (CONT.)

16 AWG 19 x 0.0117 STRANDING, 0.016″ INSULATION THICKNESS

Mfg. Part No.	No. of Cond.	O.D. (mm)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 5172C	2	7.112	89K8197	723.37	03F6332	3237.14	03F6333	5099.44
● 5172/1C*	2	7.112	26M8382	749.60	...	...	13C2074	5099.44
● 5173C	3	7.366	03F6334	929.42	03F6335	4169.20	13C2078	6132.51
● 5173/1C*	3	7.366	13C2077	929.42	27M2991	4169.20	13C2076	6132.51
● 5174C	4	8.128	03F6336	1027.04	03F6337	4604.42	03F6338	6988.26
● 5176C	6	9.398	03F6323	1420.14	03F6324	6310.98	92F7476	9662.86
● 5178C	8	10.160	27M2992	1867.62	03F6326	8394.75	13C2079	12643.31
● 5180C	10	11.684	03F6327	2278.06	03F6328	10242.31	13C2083	15277.48

*Conductors color-coded per international standards: brown, blue, green/yellow
(6103)

XTRA-GUARD® 1 MULTICONDUCTOR, FOIL-SHIELDED CABLE — 300V

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

VW-1

Ultraviolet Light

EMI Noise

Extreme Performance in Critical, High-Technology Electronic Signal Applications

EXTREME PERFORMANCE BENEFITS:
- Unique premium-grade PVC insulation and jacket provides easier routing of cable in tight spaces
- Fast, easy stripping of insulation and jacket to reduce installation and connectorization time and cost
- Resistance to most oils per UL Oil Res and Class 43
- Resistance to ambient temperatures up to 105°C (221°F)
- Ultraviolet stabilized, all colors

XTRA-GUARD® 1 APPLICATIONS:
- EIA RS 232C Interface (24, 22 AWG)
- High-technology applications in controlled environments
- Medical electronics
- Point-of-sale equipment
- Computer peripherals
- Industrial process controls

XTRA-GUARD® 1 SPECIFICATIONS:
- UL Type CM, AWM Style 2464 overall; UL AWM Style 10002 conductors
- CSA CMG FT4
- Passes UL VW-1 and CSA FT4 Flame Tests
- UL listed, CSA certified, CE compliant

Stranded tinned copper conductors and color-coded premium PVC insulation. Aluminum/polyester shield, with foil facing in plus stranded tin-copper drain wire equal in size to conductors. Voltage rating: 300V. Operating temperature: -30°C to 105°C CM and CMG, -30°C to 80°C AWM 2464. Slate premium PVC jacket; other colors available; *go online or call.* FIT®-221 and FIT®-321 irradiated polyolefin heat-shrink tubing is recommended; *order separately online or call.* **Sold in spool sizes indicated in table below.**

24 AWG, 7 x 32 STRANDING, 0.010″ INSULATION THICKNESS

Mfg. Part No.	No. of Cond.	O.D. (mm)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 5092C	2	4.064	03F2661	277.74	88K1426	1138.75	28B6983	1855.41
● 5093C	3	4.318	86K7367	298.42	03F2664	1372.88	28B6985	1902.63
● 5094C	4	4.572	86K7368	300.07	03F2666	1372.88	92F9385	2078.11
● 5096C	6	5.08	86K9066	381.09	03F2668	1641.12	92F7413	2641.66
● 5098C	8	5.588	27M2983	425.03	03F2670	1936.62	92F7414	2997.52
● 5100C	10	6.35	03F2671	513.26	03F2672	2205.51	92F7415	3432.21
● 5100/15C	15	6.858	03F2673	754.60	03F2674	3379.52	96F9188	5116.97
● 5100/20C	20	7.62	03F2675	1012.36	03F2676	4539.42	92F7416	6810.43
● 5100/25C	25	8.53	03F2677	1241.34	03F2678	5528.67	92F7417	8446.74
● 5100/30C	30	8.99	03F2679	1510.42	03F2680	6793.67	03F2681	10187.15
● 5100/40C	40	10.01	88K1427	2065.95	03F2683	9621.29	...	...
● 5100/50C	50	11	...	...	03F2685	11771.52	28B6994	17757.37
● 5100/60C	60	11.938	03F2686	3052.03	03F2687	14219.82	28B6995	21329.73
● 5100/70C	70	12.83	03F2688	3642.02	03F2689	16374.64	03F2690	24383.74
22 AWG, 7 x 30 STRANDING, 0.010″ INSULATION THICKNESS								
● 5192C	2	4.37	03F2697	260.40	03F2698	1124.37	92F7401	1769.84
● 5193C	3	4.57	03F2699	309.35	03F2700	1329.27	03F2701	2078.11
● 5194C	4	4.9	86K7369	352.32	03F2703	1563.54	92F7402	2562.22
● 5196C	6	5.66	86K9068	413.12	03F2705	1910.27	03F2706	2910.49
● 5198C	8	6.07	03F2707	526.12	03F2708	2183.57	92F7403	3578.57
● 5199/10C	10	6.91	03F2709	553.96	03F2710	2637.98	92F7404	3938.40
● 5199/15C	15	7.874	88K2168	813.73	03F2712	3648.32	03F2713	5737.92
● 5199/20C	20	8.51	03F2714	1176.68	03F2715	5277.32	92F7405	7480.77
● 5199/25C	25	9.45	85K9829	1369.86	03F2717	6257.92	92F7406	9659.97
● 5199/30C	30	9.98	03F2718	1724.00	03F2719	7757.10	28B7063	11558.90
● 5199/40C	40	11.13	03F2720	2444.12	03F2721	10975.05	03F2722	16592.89
● 5199/50C	50	12.24	03F2723	3014.40	03F2724	13545.45	28B7064	18626.67
● 5199/60C	60	13.26	03F2725	3623.66	03F2726	16281.00	28B7065	24323.80
20 AWG, 7 x 28 STRANDING, 0.016″ INSULATION THICKNESS								
● 5462C	2	5.334	86K9070	279.89	03F2737	1302.92	03F2738	2035.33
● 5463C	3	5.588	03F2739	381.29	03F2740	1563.54	98F085	2562.22
● 5464C	4	6.096	03F2741	373.32	03F2742	1729.98	03F2743	2652.40

➤ CONTINUED ➤

XTRA-GUARD® 1 MULTICONDUCTOR, FOIL-SHIELDED CABLE — 300V (CONT.)

20 AWG, 7 x 28 STRANDING, 0.016″ INSULATION THICKNESS

Mfg. Part No.	No. of Cond.	O.D. (mm)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
5466C	6	7.112	03F2744	491.44	03F2745	2183.57	70B2388	3491.38
5468C	8	7.874	03F2746	541.22	03F2747	2549.76	98F4836	3847.22
5470C	10	8.89	03F2748	698.40	03F2749	3184.64	98F084	4966.22
5470/15C	15	10.16	27M3015	1003.10	03F2751	4595.60	03F2752	7072.66
5470/20C	20	11.176	03F2753	1425.76	03F2754	6351.00	92F7479	9702.77
5470/25C	25	12.446	03F2755	1857.22	03F2756	8350.31	28B7629	12562.33
5470/30C	30	13.208	03F2757	2204.22	03F2758	9906.88	28B7630	14830.11
5470/40C	40	16.002	03F2759	3250.74	85K9859	14685.15	28B7631	21991.23

18 AWG, 16 x 30 STRANDING, 0.016″ INSULATION THICKNESS

Mfg. Part No.	No. of Cond.	O.D. (mm)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
5382C	2	5.842	03F2773	440.54	03F2774	1827.47	05F1940	2994.44
5382/1C*	2	5.842	85K9842	430.34	27M3000	1827.47	28B7323	2994.44
5383C	3	6.096	03F2775	457.88	03F2776	2047.97	03F2777	3094.37
5383/1C*	3	6.096	85K9843	441.86	28B7327	2047.97	28B7326	3094.37
5384C	4	6.604	27M3001	534.08	85K9844	2228.84	92F7467	3632.38
5386C	6	7.874	27M3002	723.28	03F2781	3152.60	92F7468	4921.70
5388C	8	8.636	03F2782	933.60	03F2783	4091.71	92F7469	6353.56
5390C	10	9.906	03F2784	1088.96	03F2785	4681.44	92F7470	7410.53
5390/15C	15	11.176	93K4266	1437.47	03F2787	6695.72	92F7477	9357.57
5390/20C	20	12.446	03F2788	1983.28	03F2789	8829.98	92F7478	13499.16
5390/25C	25	14.986	03F2790	2542.56	03F2791	11438.64	28B7332	17298.71
5390/30C	30	15.748	...	...	03F2793	13939.28	28B7334	21137.18

16 AWG, 19 x 0.0117 STRANDING, 0.016″ INSULATION THICKNESS

Mfg. Part No.	No. of Cond.	O.D. (mm)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
5362C	2	6.35	85K9840	441.86	03F2807	2047.97	98F5064	3094.37
5362/1C*	2	6.35	26M8385	457.88	27M2998	2047.97	28B7299	3094.37
5363C	3	6.858	03F2808	585.18	03F2809	2599.96	92F7495	3979.74
5363/1C*	3	6.858	28B7304	585.18	28B7303	2599.96	28B7302	3979.74
5364C	4	7.366	03F2810	670.96	03F2811	2924.10	92F7465	4565.31
5366C	6	8.89	88K2169	988.08	03F2813	4331.87	92F7466	6722.87
5368C	8	9.652	03F2814	1275.30	03F2815	5704.37	28B7305	8677.92
5370C	10	11.176	03F2816	1711.16	03F2817	7698.17	28B7314	11587.70
5370/15C	15	12.446	27M2999	2221.56	03F2819	9975.46	28B7307	15120.87
5370/20C	20	14.986	...	...	03F2821	13648.65	28B7308	20357.96

*Conductors color-coded per international standards: brown, blue, green/yellow
(6110)

XTRA-GUARD® 1 MULTICONDUCTOR SUPRA-SHIELD® CABLE — 600V

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

Extreme Performance in Critical, High-Technology Electronic Signal Applications

Ultraviolet Light

EMI Noise

EXTREME PERFORMANCE BENEFITS:
- Provides easier routing of cable in tight spaces
- Fast, easy stripping of insulation and jacket to reduce installation and connectorization time and cost
- Resistance to most oils per UL Oil Res and Class 43
- Resistance to ambient temperatures up to 105°C (221°F)
- Ultraviolet stabilized, all colors
- Extreme performance against EMI/RFI with Supra-Shield® high-performance shielding system

XTRA-GUARD® 1 APPLICATIONS:
- EIA RS 232C Interface (22 AWG)
- High technology applications in controlled environments
- Point-of-sale equipment
- Computer peripherals
- Industrial process controls

XTRA-GUARD® 1 SPECIFICATIONS:
- UL Type MTW
- UL AWM Style 2501 overall; UL AWM Style 1015 conductors
- CSA AWM I A/B II A/B FT4 overall; CSA TEW conductors
- Passes UL VW-1 and CSA FT4 Flame Tests
- UL listed, CSA certified, CE compliant

Stranded tinned copper conductors and color-coded premium PVC insulation. Supra-Shield® aluminum/polyester/aluminum foil shielding with stranded tinned copper drain wire plus 70% overall tinned-copper braid. Voltage rating: 600V. Operating temperature: -30°C to 105°C AWM, -30°C to 90°C MTW. Slate premium PVC jacket; other colors available; *go online or call.* FIT®-221 and FIT®-321 irradiated polyolefin heat-shrink tubing is recommended; *order separately online or call.* **Sold in spool sizes indicated in table below.**

22 AWG, 7 x 30 STRANDING, 0.032″ INSULATION THICKNESS

Mfg. Part No.	No. of Cond.	O.D. (mm)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
5504	4	9.906	02F9161	777.78	02F9162	3630.03	13C2151	5842.11
5507	7	11.176	02F9165	1087.38	02F9166	5088.88	13C2152	8205.31
5509/12	12	13.97	03F3295	1681.63	98B1663	7872.54	13C2153	12739.00

20 AWG, 10 x 30 STRANDING, 0.032″ INSULATION THICKNESS

Mfg. Part No.	No. of Cond.	O.D. (mm)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
5514	4	10.414	85K9864	872.98	02F9177	4001.12	98B1659	6531.67
5517	7	11.938	02F9181	1301.27	02F9182	6070.66	97B2276	9736.36
5519	9	13.462	27M3023	1575.70	02F9184	7365.59	13C2154	11942.63
5519/19	19	17.272	03F3297	2779.12	02F9189	12404.18	13C2155	21374.77

➤ CONTINUED ➤

XTRA-GUARD® 1 MULTICONDUCTOR SUPRA-SHIELD® CABLE — 600V (CONT.)

18 AWG, 16 x 30 STRANDING, 0.032″ INSULATION THICKNESS

Mfg. Part No.	No. of Cond.	O.D. (mm)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
5522	2	9.652	85K9865	648.85	...	...	13C2156	4834.64
5523	3	10.160	85K9866	939.41	...	...	13C2157	6975.65
5524	4	10.922	02F9192	1162.85	02F9193	5444.10	13C2159	8808.31
5525	5	11.684	02F9194	1364.79	02F9195	6388.23	13C2160	10397.97
5527	7	12.446	88K1451	1742.60	02F9197	7931.21	13C2161	13124.66
5529	9	14.224	...	...	02F9199	9776.33	13C2162	15816.17
5529/12	12	15.748	02F9200	2503.25	02F9201	11719.85	13C2163	18979.20
5529/15	15	17.272	02F9202	3013.25	02F9203	14096.30	13C2164	22841.73

16 AWG, 19 x 0.0117 STRANDING, 0.032″ INSULATION THICKNESS

Mfg. Part No.	No. of Cond.	O.D. (mm)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
5532	2	10.160	85K9868	804.47	...	...	13C2165	6056.09
5533	3	10.668	13C2167	1145.50	...	...	13C2166	8808.31
5534	4	11.684	02F9208	1455.49	02F9209	6788.31	13C2168	11192.62
5535	5	12.446	02F9210	1702.93	02F9211	7960.28	13C2169	12906.81
5537	7	13.462	02F9212	2152.77	02F9213	10071.60	13C2170	16252.70
5539	9	15.494	02F9214	2661.62	02F9215	12438.94	13C2171	20186.68
5539/12	12	17.272	03F3298	3241.79	02F9216	15166.82	13C2172	24535.70
5539/15	15	19.558	02F9217	3851.65	02F9218	18026.66	13C2173	29131.08
5539/19	19	20.828	27M3024	4628.75	02F9220	21672.57	13C2174	35097.34

14 AWG, 41 x 30 STRANDING, 0.032″ INSULATION THICKNESS

Mfg. Part No.	No. of Cond.	O.D. (mm)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
5542	2	10.922	13C2176	1020.68	29M7249	4755.25	13C2175	7646.04
5543	3	11.684	22C4866	1471.50	05F1868	6877.23	13C2177	11251.99
5544	4	12.446	02F9225	1857.06	02F9226	8676.93	13C2178	14069.58
5547	7	14.732	27M3025	2825.57	02F9228	13227.99	13C2179	19253.32
5549	9	17.018	02F9229	3498.28	02F9230	16361.90	13C2180	26436.70
5549/12	12	19.812	02F9232	4285.03	02F9233	20062.97	...	...
5549/15	15	21.336	02F9234	5181.74	02F9235	24251.13	13C2181	38918.92

(6109)

XTRA-GUARD® 1 MULTICONDUCTOR, UNSHIELDED CABLE — 300V

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

Extreme Performance in Critical, High-Technology Electronic Signal Applications

Ultraviolet Light

EXTREME PERFORMANCE BENEFITS:
- Unique premium-grade PVC insulation and jacket provides easier routing of cable in tight spaces
- Fast, easy stripping of insulation and jacket to reduce installation and connectorization time and cost
- Resistance to most oils per UL Oil Res and Class 43
- Resistance to ambient temperatures up to 105°C (221°F)
- Ultraviolet stabilized, all colors

XTRA-GUARD® 1 APPLICATIONS:
- High-technology applications in controlled environments
- Medical electronics
- Point-of-sale equipment
- Computer peripherals
- Industrial process controls

XTRA-GUARD® 1 SPECIFICATIONS:
- UL Type CM, AWM Style 2464 overall; UL AWM Style 10002 conductors (24, 22, 20 AWG); UL AWM Style 1569 conductors (18, 16 AWG)
- CSA CMG FT4
- Passes UL VW-1 and CSA FT4 Flame Tests
- UL listed, CSA certified, CE compliant

Stranded tinned copper conductors and color-coded premium PVC insulation. Voltage rating: 300V. Operating temperature: -30°C to 105°C CM and CMG, -30°C to 80°C AWM 2464. Slate premium PVC jacket; other colors available; *go online or call.* FIT®-221 and FIT®-321irradiated polyolefin heat-shrink tubing is recommended; *order separately online or call.* **Sold in spool sizes indicated in table below.**

24 AWG 7 x 32 STRANDING, 0.010″ INSULATION THICKNESS

Mfg. Part No.	No. of Cond.	O.D. (mm)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
5012C	2	4.064	02F9240	201.40	02F9241	929.20	92F7489	1259.49
5013C	3	4.064	85K9800	230.35	27M2973	1042.93	...	...
5014C	4	4.572	27M2974	238.40	02F9245	1086.67	92F9383	1651.19
5016C	6	5.080	85K9801	316.46	02F9247	1464.04	98F4347	2157.73
5018C	8	5.588	02F9248	374.67	88K2745	1694.63	92F7490	2550.04
5020C	10	6.096	02F9250	391.27	02F9251	1947.38	02F9252	2814.40
5020/15C	15	6.858	02F8858	650.82	02F8859	2981.35	...	...
5020/20C	20	7.620	02F8860	900.93	02F8861	4221.99	92F7491	6139.30
5020/25C	25	8.382	88K1420	1115.81	02F8863	5209.15	92F7492	7734.76

22 AWG 7 x 30 STRANDING, 0.010″ INSULATION THICKNESS

Mfg. Part No.	No. of Cond.	O.D. (mm)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
5002C	2	4.318	02F8880	194.20	02F8881	885.44	92F7485	1305.91
5003C	3	4.572	88K2167	229.25	88K1418	1065.08	92F7486	1566.89
5004C	4	4.826	85K9797	290.55	...	...	02F8886	1912.26
5006C	6	5.588	88K1419	332.61	19H9947	1512.96	92F7487	2200.32
5008C	8	6.096	02F8889	433.67	02F8890	1991.69	28B6901	2861.16

➤ CONTINUED ➤

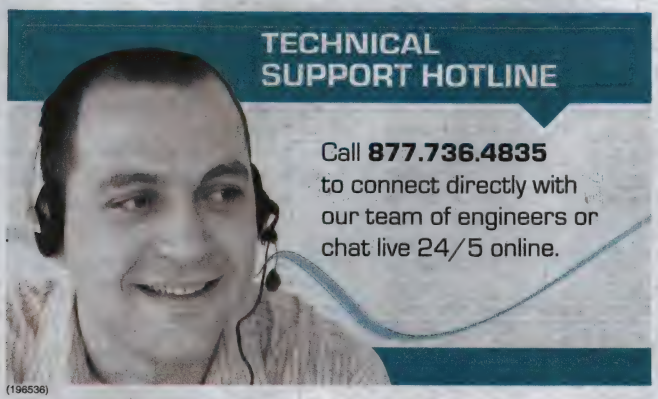
DATA/COMMUNICATION, CONTROL & INSTRUMENTATION CABLE

XTRA-GUARD® 1 MULTICONDUCTOR, UNSHIELDED CABLE — 300V (CONT.)

22 AWG 7 x 30 STRANDING, 0.010″ INSULATION THICKNESS

Mfg. Part No.	No. of Cond.	O.D. (mm)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 5010C	10	6.858	86K7364	488.51	02F8892	2195.70	92F7488	3385.44
● 5010/15C	15	7.620	85K9798	748.27	02F8894	3497.90	02F8895	5171.42
● 5010/20C	20	8.382	02F8896	1075.65	02F8898	5040.60	...	...
● 5010/25C	25	9.398	27M2971	1287.85	02F8900	6020.28	92F7496	8927.51
● 5010/50C	50	12.192	02F8905	2838.53	02F8906	13291.07	...	...
20 AWG 7 x 28 STRANDING, 0.016″ INSULATION THICKNESS								
● 5052C	2	5.334	27M2977	223.44	88K1422	994.74	92F7498	1520.92
● 5053C	3	5.588	86K7365	276.23	...	...	92F7499	1739.85
● 5054C	4	6.096	85K9806	328.41	02F8925	1494.23	28B6951	2131.36
● 5056C	6	7.112	85K9807	443.07	85K9808	2036.09	28B6952	2903.84
● 5058C	8	7.620	02F8927	511.05	02F8928	2381.87	92F7500	3517.92
● 5060C	10	8.890	02F8929	591.76	02F8930	2767.73	04F2479	4089.14
● 5060/15C	15	9.906	85K9809	976.24	02F8932	4569.17	28B6954	6765.89
● 5060/20C	20	11.176	88K1423	1353.61	02F8934	6334.97	28B6955	9179.01
● 5060/25C	25	12.446	02F8935	1654.13	02F8936	7747.76	28B6955	9179.01
● 5060/30C	30	13.208	02F8937	2043.51	02F8938	9580.03	28B6956	14060.14
● 5060/40C	40	15.748	02F8939	3066.79	02F8940	14361.23	28B6957	20874.77
● 5060/50C	50	17.272	27M2978	3774.79	02F8942	17681.24	28B6958	25838.78
18 AWG 16 x 30 STRANDING, 0.016″ INSULATION THICKNESS								
● 5062C	2	5.842	86K7366	273.74	85K9811	1334.16	92F7502	1979.71
● 5062/1C*	2	5.842	78M7424	285.95	85K9810	1334.16	28B6963	1979.71
● 5063C	3	6.096	02F9103	363.81	27M2980	1684.93	92F7503	2414.79
● 5063/1C*	3	6.096	10M6424	370.18	27M2979	1684.93	96F9140	2414.79
● 5064C	4	6.604	02F9105	431.32	02F9106	2010.70	92F7504	2943.68
● 5066C	6	7.874	02F9107	672.28	02F9108	3138.73	92F7505	4525.40
● 5068C	8	8.382	88K1424	806.44	02F9110	3763.12	92F7506	5463.81
● 5070C	10	9.652	02F9111	953.50	02F9112	4413.62	92F7493	6608.92
● 5070/15C	15	10.922	85K9813	1437.47	02F9114	6732.91	...	...
● 5070/20C	20	12.192	02F9115	1838.19	02F9116	8575.97	92F7507	12744.41
● 5070/25C	25	13.716	02F9117	2419.12	02F9118	11335.85	28B6965	16314.85
● 5070/30C	30	15.748	02F9119	2950.84	02F9120	13823.43	28B6966	20087.99
● 5070/40C	40	17.526	02F9121	4135.34	02F9122	19366.37	28B6967	28236.72
● 5070/50C	50	19.304	98F4333	5122.40	02F9124	24010.76	28B6968	35065.18
● 5070/60C	60	22.352	02F9125	6470.70	02F9126	30322.73	28B6969	43980.70
16 AWG 19 x 0.0117 STRANDING, 0.016″ INSULATION THICKNESS								
● 5072C	2	6.350	02F9135	370.18	02F9136	1684.93	92F7508	2414.79
● 5072/1C*	2	6.350	88K1425	363.81	28B6971	1684.93	28B6970	2414.79
● 5073C	3	6.604	02F9137	483.01	02F9138	2259.10	92F7509	3285.16
● 5073/1C*	3	6.604	28B6975	491.46	06M3939	2259.10	28B6973	3285.16
● 5074C	4	7.366	02F9139	605.54	02F9140	2813.97	92F7510	4197.58
● 5076C	6	8.636	27M2982	862.06	03F3294	4035.71	92F7511	5932.99
● 5078C	8	9.398	02F9142	1158.81	02F9143	5410.85	92F7497	7804.60
● 5080C	10	10.922	02F9144	1595.36	02F9145	7467.88	92F7512	10871.80
● 5080/15C	15	12.446	02F9146	1986.13	02F9147	9275.58	92F7513	13770.76
● 5080/20C	20	13.970	02F9148	2844.53	02F9149	13315.45	28B6977	19537.80
● 5080/25C	25	16.764	02F9150	3562.57	02F9151	16697.78	28B6978	24392.23
● 5080/30C	30	17.526	02F9152	4225.89	02F9153	19791.45	28B6979	28701.63
● 5080/40C	40	19.812	02F9154	6190.87	02F9155	29016.46	28B6980	42462.36
● 5080/50C	50	23.368	02F9156	7668.40	02F9157	35944.41	28B6981	52423.87

*Conductors color-coded per international standards: brown, blue, green/yellow
(6102)



(196536)

XTRA-GUARD® 1 MULTIPAIR SUPRA-SHIELD® CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

Ultraviolet Light EMI Noise

Extreme Performance in Critical, High-Technology Electronic Signal Applications

EXTREME PERFORMANCE BENEFITS:

- Unique premium-grade PVC insulation and jacket provides easier routing of cable in tight spaces
- Fast, easy stripping of insulation and jacket to reduce installation and connectorization time and cost
- Resistance to most oils per UL Oil Res andClass 43
- Resistance to ambient temperatures up to 105°C (221°F)
- Ultraviolet stabilized, all colors
- Extreme performance against EMI/RFI with Supra-Shield® high-performance shielding system

XTRA-GUARD® 1 APPLICATIONS:

- EIA RS 232C Interface (24, 22 AWG)
- High-technology applications in controlled environments
- Point-of-sale equipment
- Computer peripherals
- Industrial process controls

XTRA-GUARD® 1 SPECIFICATIONS:

- UL AWM Style 2464 overall; UL AWM Style 10002 conductors (24, 22 AWG); UL AWM Style 1569 conductors (20, 18 AWG)
- CSA CMG FT4
- Passes UL VW-1 and CSA FT4 Flame Tests
- UL listed, CSA certified, CE compliant

Stranded tinned copper conductors and color-coded premium PVC insulation. Supra-Shield® aluminum/polyester/aluminum foil shielding with stranded tinned copper drain wire plus 70% overall tinned-copper braid. Voltage rating: 300V. Operating temperature: -30°C to 105°C CM and CMG, -30°C to 80°C AWM 2464. Slate premium PVC jacket; other colors available; *go online or call.* FIT®-221 and FIT®-321 irradiated polyolefin heat-shrink tubing is recommended; *order separately online or call.* **Sold in spool sizes indicated in table below.**

24 AWG, 7 x 32 STRANDING, 0.010″ INSULATION THICKNESS

Mfg. Part No.	No. of Pairs	O.D. (In.)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 5271C	1	0.18	02F8054	387.60	02F8055	1745.39	85K9833	2639.48
● 5272C	2	0.24	02F8056	502.57	02F8057	2201.37	92F7407	3421.38
● 5274C	4	0.27	02F8060	745.81	02F8061	3476.38	92F7409	5002.63
● 5276C	6	0.31	85K9834	939.72	02F8065	4379.42	92F7410	6482.11
● 5279/15C	15	0.43	85K9835	1942.12	02F8071	8997.50	98F4964	13466.47
22 AWG, 7 x 30 STRANDING, 0.010″ INSULATION THICKNESS								
● 5121C	1	0.20	02F8082	421.75	02F8083	1791.38	92F7454	2886.00
● 5122C	2	0.26	02F8084	520.60	02F8085	2426.64	92F7455	3520.95
● 5123C	3	0.27	02F8086	701.21	02F8087	3261.84	92F7456	4744.93
● 5124C	4	0.30	02F8088	807.73	02F8089	3747.93	92F7457	5578.55
● 5126C	6	0.34	02F7848	1095.05	02F7849	5099.49	13C2051	7391.07
● 5129C	9	0.40	02F7850	1461.88	03F3270	6809.08	92F7458	10057.08
● 5129/15C	15	0.48	02F7853	2328.86	02F7854	10856.92	13C2053	15861.48
● 5129/27C	27	0.65	88K1435	4131.71	02F7858	19265.89	13C2055	28349.68

(6106)

XTRA-GUARD® 1 MULTIPAIR, FOIL-SHIELDED CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

Ultraviolet Light EMI Noise

Extreme Performance in Critical, High-Technology Electronic Signal Applications

EXTREME PERFORMANCE BENEFITS:

- Unique premium-grade PVC insulation and jacket provides easier routing of cable in tight spaces
- Fast, easy stripping of insulation and jacket to reduce installation and connectorization time and cost
- Resistance to most oils per UL Oil Res and Class 43
- Ultraviolet stabilized, all colors
- Resistance to ambient temperatures up to 105°C (221°F)

XTRA-GUARD® 1 APPLICATIONS:

- EIA RS 232C Interface (24, 22 AWG)
- High technology applications in controlled environments
- Medical electronics
- Point-of-sale equipment
- Computer peripherals
- Industrial process controls

XTRA-GUARD® 1 SPECIFICATIONS:

- UL AWM Style 2464 overall; UL AWM Style 10002 conductors (24, 22 AWG); UL AWM Style 1569 conductors (20, 18 AWG)
- CSA CMG FT4
- Passes UL VW-1 and CSA FT4 Flame Tests
- UL listed, CSA certified, CE compliant

Stranded tinned copper conductors and color-coded premium PVC insulation. Aluminum/polyester foil shield facing in with stranded tinned copper drain wire. Voltage rating: 300V. Operating temperature: -30°C to 105°C. CM and CMG, -30°C to 80°C AWM 2464. Slate premium PVC jacket; other colors available; *go online or call.* FIT®-221 and FIT®-321 irradiated polyolefin heat-shrink tubing is recommended; *order separately online.* **Sold in spool sizes indicated in table below.**

24 AWG, 7 x 32 STRANDING, 0.010″ INSULATION THICKNESS

Mfg. Part No.	No. of Pairs	O.D. (mm)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 5491C	1	4.064	85K9863	204.82	03F2833	1124.37	13C2143	1781.90
● 5492C	2	5.588	03F2834	332.50	03F2835	1485.98	98F8074	2303.87
● 5493C	3	5.842	03F2836	409.43	03F2837	1865.85	13C2144	2771.70
● 5494C	4	6.350	03F2838	490.85	03F2839	2095.44	...	...
● 5495C	5	6.858	73C9602	552.00	03F2841	2505.50	13C2145	3824.70

➤ CONTINUED ➤

XTRA-GUARD® 1 MULTIPAIR, FOIL-SHIELDED CABLE (CONT.)

Mfg. Part No.	No. of Pairs	O.D. (mm)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
5496C	6	7.366	27M3021	525.14	03F2843	2993.15	98F8996	4652.10
5499C	9	8.636	03F2844	958.71	03F2845	4437.62	13C2150	6645.92
5499/11C	11	9.144	03F2846	1145.63	03F2847	5289.70	13C2146	7941.43
5499/15C	15	10.414	27M3022	1179.50	03F2849	7007.37	13C2147	10220.90
5499/19C	19	10.922	03F2850	1914.08	03F2851	8923.05	13C2148	13162.46
5499/27C	27	13.208	03F2852	2649.04	03F2853	12335.44	13C2149	18232.98
22 AWG, 7 x 30 STRANDING, 0.010″ INSULATION THICKNESS								
5481C	1	4.318	27M3017	209.70	03F2861	1194.23	92F7471	1823.96
5482C	2	6.096	27M3018	289.38	03F2863	1563.54	03F2864	2518.79
5483C	3	6.350	88K1450	336.61	03F2866	1936.62	92F7480	2946.71
5484C	4	6.858	03F2867	507.71	03F2868	2298.41	98F6281	3517.92
5485C	5	7.620	03F2869	577.79	03F2870	2637.98	03F2871	4003.87
5486C	6	8.128	03F2872	705.26	85K9862	3162.98	92F7483	4888.60
5489C	9	9.398	03F2874	1082.73	03F2875	5012.75	03F3266	7204.70
5489/11C	11	10.160	27M3019	1019.07	03F2877	5987.02	13C2141	9027.98
20 AWG, 7 x 28 STRANDING, 0.016″ INSULATION THICKNESS								
5452C	2	7.620	88F3954	396.11	22C7751	1708.13	13C2136	2695.75
5453C	3	8.128	03F2890	545.81	03F2891	2456.93	03F2892	3782.02
5456C	6	10.668	88K1448	720.05	03F3434	4279.99	93B0524	6342.43
5459C	9	12.446	03F2894	1375.86	03F2895	6376.34	13C2139	9538.32
5459/12C	12	13.970	03F2896	1786.51	03F2897	8319.39	13C2137	12349.41
5459/19C	19	17.526	03F2900	2926.23	03F2901	13643.41	13C2138	20178.51

(6107)

XTRA-GUARD® CONTINUOUS FLEX CONTROL CABLE — SHIELDED

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

Extreme Performance in Single Axis, High-to-Severe Duty, Continuous Rolling or Bending Flexing Environments Up to 14 Million Flex Life Cycles

EXTREME PERFORMANCE BENEFITS:
- Flexible PVC insulation and jacket with overall cable design for installation in C-track or extreme flexing applications up to 14 million flex life cycles
- Outstanding service life in heavy-duty, high-speed cable track applications
- Unique premium-grade PVC insulation and jacket provides easier routing of cable in tight spaces
- Outstanding oil, solvent, chemical and fuel resistance
- Perfectly round geometry helps provide a liquid-tight installation per IP-67 or NEMA 6
- Superior performance against EMI/RFI

Flexing | Oils, Solvents, Chemicals, Fuels | EMI Noise | Abrasion

XTRA-GUARD® CONTINUOUS FLEX CONTROL CABLE APPLICATIONS:
- Where continuous flexing is required
- Robotics
- Installation in Cable Track
- Data Processing Equipment
- Assembly Lines
- Automation Equipment
- Material Handling Equipment

XTRA-GUARD® CONTINUOUS FLEX CONTROL CABLE SPECIFICATIONS:
- Bend radius: 8X cable diameter (static and dynamic)
- UL AWM Style 2587
- CSA AWM I/II A/B FT1
- Jacket meets VDE 0472, Section 803 Oil Test
- Passes MIL-C-13777G Flex Life Test
- CE LVD 73/23/EEC modified by Directive CD 93/68/EEC
- UL recognized, CSA certified, CE compliant

Super-finely stranded bare copper conductors, lubricated PVC insulation, tinned copper braid shield (85% coverage) and black, oil-resistant PVC jacket. Voltage rating: 600V. Operating temperature: -5°C to 90°C (flexing), -40°C to 90°C (stationary) . FIT®-FLEX and FIT®-650 heat-shrink tubing is recommended; *order separately online or call.* Other wire gauge sizes are available, including 12, 10, 8, 6, 4 and 2 AWG; *go online or call.* **Sold in spool sizes indicated in table below.**

20 AWG, 63 x 38 STRANDING, 0.022″ INSULATION THICKNESS

Mfg. Part No.	No. of Cond.	Nom. O.D. (In.)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
85003CY	3	0.35	91F2595	557.56	91F2594	2052.09	91F2593	3062.84
85004CY	4	0.38	91F2601	749.72	91F2600	2759.35	91F2599	4118.43
85005CY	5	0.41	91F2607	813.71	91F2606	2994.86	91F2605	4469.94
85007CY	7	0.48	91F2613	880.24	91F2612	3239.73	91F2611	4835.43
85010CY	10	0.55	91F2616	1095.94	91F2615	4033.62	91F2614	6020.30
85012CY	12	0.56	91F2622	1240.45	91F2621	4565.50	91F2620	6814.19
85018CY	18	0.66	91F2626	1657.08	91F2628	6343.07	91F2627	9467.27
18 AWG, 105 x 38 STRANDING, 0.022″ INSULATION THICKNESS								
85803CY	3	0.38	85K9950	574.80	91F2700	1983.99	91F2699	2961.17
85804CY	4	0.41	91F2704	812.31	91F2706	2989.71	91F2705	4462.23
85805CY	5	0.45	91F2710	914.29	91F2712	3364.97	91F2711	5022.37
85807CY	7	0.53	91F2716	986.31	91F2718	3630.18	91F2717	5418.17
85812CY	12	0.63	06M4010	1407.55	91F2723	5180.54	91F2722	7732.13
85818CY	18	0.73	91F2733	1898.28	91F2732	7265.81	91F2731	10844.48

CONTINUED

XTRA-GUARD® CONTINUOUS FLEX CONTROL CABLE — SHIELDED (CONT.)

16 AWG, 168 x 38 STRANDING, 0.022″ INSULATION THICKNESS

Mfg. Part No.	No. of Cond.	Nom. O.D. (In.)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
85603CY	3	0.42	91F2653	601.34	91F2655	2213.23	91F2654	3303.34
85604CY	4	0.46	91F2659	841.74	91F2661	3098.02	91F2660	4623.91
85605CY	5	0.50	91F2665	829.31	91F2667	3174.53	91F2666	4738.09
85607CY	7	0.60	...	...	91F2673	4012.37	91F2672	5988.60
85612CY	12	0.70	91F2677	1608.59	91F2679	5920.39	91F2678	8836.40
85618CY	18	0.81	91F2683	2205.34	91F2685	8441.68	91F2684	12599.55
14 AWG, 266 x 38 STRANDING, 0.022″ INSULATION THICKNESS								
85404CY	4	0.53	91F2641	972.73	91F2643	3580.14	91F2642	5343.49
85407CY	7	0.68	91F2647	1354.26	91F2649	4984.37	91F2648	7439.37

(89680)

XTRA-GUARD® CONTINUOUS FLEX CONTROL CABLE — UNSHIELDED

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

Extreme Performance in Single Axis, High-to-Severe Duty, Continuous Rolling or Bending Flexing Environments Up to 14 Million Flex Life Cycles

EXTREME PERFORMANCE BENEFITS:
- Flexible PVC insulation and jacket with overall cable design for installation in C-track or extreme flexing applications up to 14 million flex-life cycles
- Outstanding service life in heavy-duty, high-speed cable track applications
- Unique premium-grade PVC insulation and jacket provides easier routing of cable in tight spaces
- Outstanding oil, solvent, chemical and fuel resistance
- Perfectly round geometry helps provide a liquid-tight installation per IP-67 or NEMA 6

Flexing | Abrasion | Oils, Solvents, Chemicals, Fuels

XTRA-GUARD® CONTINUOUS FLEX CONTROL CABLE APPLICATIONS:
- Where continuous flexing is required
- Robotics
- Installation in Cable Track
- Data Processing Equipment
- Assembly Lines
- Automation Equipment
- Material Handling Equipment

XTRA-GUARD® CONTINUOUS FLEX CONTROL CABLE SPECIFICATIONS:
- Bend radius: 8X cable diameter (static and dynamic)
- UL AWM Style 2587
- CSA AWM I A/B II A/B FT1
- Jacket meets VDE 0472, Section 803 Oil Test
- Passes MIL-C-13777G Flex Life Test
- CE LVD 73/23/EEC modified by Directive CD 93/68/EEC
- UL recognized, CSA certified, CE compliant

Super-finely stranded bare copper conductors, lubricated PVC insulation and black, oil-resistant PVC jacket. Voltage rating: 600V. Operating temperature: -5°C to 90°C (flexing), -40°C to 90°C (stationary) . FIT®-FLEX and FIT®-650 heat-shrink tubing is recommended; *order separately online or call.* Other wire gauge sizes are available, including 12, 10, 8, 6, 4 and 2 AWG; *go online or call.* **Sold in spool sizes indicated in table below.**

20 AWG, 63 x 38 STRANDING, 0.022″ INSULATION THICKNESS

Mfg. Part No.	No. of Cond.	Nom. O.D. (In.)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
85003	3	0.27	91F2592	333.72	91F2591	1207.13	91F2590	1801.67
85004	4	0.30	91F2598	448.73	91F2597	1623.15	91F2596	2422.61
85005	5	0.32	91F2604	487.04	91F2603	1761.68	91F2602	2629.39
85007	7	0.39	91F2610	517.79	91F2609	1905.74	91F2608	2844.36
85012	12	0.46	06M4008	729.69	91F2618	2685.59	91F2617	4008.36
85018	18	0.55	91F2623	974.98	91F2625	3731.23	91F2624	5569.00
85025	25	0.69	06M4009	1335.28	91F2631	5110.85	91F2630	7628.13
85034	34	0.75	91F2635	1720.48	91F2637	6585.40	91F2636	9828.95
18 AWG, 105 x 38 STRANDING, 0.022″ INSULATION THICKNESS								
85803	3	0.30	91F2695	330.76	91F2697	1265.49	91F2696	1888.81
85804	4	0.33	91F2701	477.83	91F2703	1758.64	91F2702	2624.86
85805	5	0.36	91F2707	517.14	91F2709	1979.39	91F2708	2954.33
85807	7	0.44	91F2713	580.20	91F2715	2135.40	91F2714	3187.16
85812	12	0.52	91F2721	827.99	91F2720	3047.37	91F2719	4548.31
85815	15	0.58	91F2727	1054.56	91F2726	3881.39	91F2725	5793.09
85818	18	0.61	88K1498	1190.60	91F2729	4274.02	91F2728	6379.11
85825	25	0.77	85K9951	1660.21	91F2735	5959.56	91F2734	8894.85
85834	34	0.83	91F2742	2014.05	91F2741	7709.11	91F2740	11506.14
16 AWG, 168 x 38 STRANDING, 0.022″ INSULATION THICKNESS								
85603	3	0.33	91F2650	375.85	91F2652	1383.27	91F2651	2064.58
85604	4	0.36	91F2656	526.10	...	...	...	...
85605	5	0.40	91F2662	539.08	91F2664	1984.07	91F2663	2961.31
85607	7	0.48	91F2668	681.36	91F2670	2507.73	...	...
85612	12	0.57	91F2674	1005.37	91F2676	3700.25	91F2675	5522.75
85618	18	0.67	91F2680	1378.43	91F2682	5276.07	91F2681	7874.72
82625	25	0.86	91F2686	1932.41	91F2688	7396.22	91F2687	11039.16
85634	34	0.94	91F2692	2509.17	91F2694	9604.89	91F2693	14335.67

CONTINUED

DATA/COMMUNICATION, CONTROL & INSTRUMENTATION CABLE

XTRA-GUARD® CONTINUOUS FLEX CONTROL CABLE — UNSHIELDED (CONT.)

14 AWG, 266 x 38 STRANDING, 0.022″ INSULATION THICKNESS

Mfg. Part No.	No. of Cond.	Nom. O.D. (In.)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 85404	4	0.42	91F2638	607.96	91F2640	2237.59	91F2639	3339.69
● 85407	7	0.58	91F2644	846.41	91F2646	3115.23	91F2645	4649.61

(17528)

XTRA-GUARD® CONTINUOUS FLEX, MULTICONDUCTOR DATA CABLE — SHIELDED

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

Extreme Performance in Single Axis, High-Flex Duty, Continuous Rolling or Bending Flexing Environments Up to 6 Million Flex Life Cycles

Flexing · Oils, Solvents, Chemicals, Fuels · Ultraviolet Light · EMI Noise

EXTREME PERFORMANCE BENEFITS:
- Flexible PVC insulation and jacket with overall cable design for installation in C-track or high flexing applications up to 6 million flex life cycles
- Unique premium-grade PVC insulation and jacket provides easier routing of cable in tight spaces
- Outstanding oil, solvent, chemical and fuel resistance
- Perfectly round geometry helps provide a liquid-tight installation per IP-67 or NEMA 6
- Superior performance against EMI/RFI

XTRA-GUARD® CONTINUOUS FLEX, MULTICONDUCTOR DATA CABLE SPECIFICATIONS:
- Bend radius: 8X cable diameter (static and dynamic)
- UL Type CM, UL AWM Style 2661
- CSA AWM I A/B II A/B FT4, CSA Type CMG
- CE LVD 73/23/EEC modified by Directive CD 93/68/EEC
- UL listed, CSA certified, CE compliant

XTRA-GUARD® CONTINUOUS FLEX, MULTICONDUCTOR DATA CABLE APPLICATIONS:
- Industrial electronic processing equipment
- DataComm connections
- Connecting sensors and actuators to controllers
- Sensor and I/O interconnects

Super finely stranded tinned copper conductors, lubricated semi-rigid PVC insulation and slate, oil-resistant PVC jacket. Foil shield with 90% tinned copper serve and 7 x 34 stranded tinned copper drain wire. Voltage rating: 300V. Operating temperature: +5°C to 105°C (flexing), -10°C to 105°C (stationary). FIT®-FLEX and FIT®-650 heat-shrink tubing is recommended; *order separately online or call.* Also available in an unshielded version; *go online or call.* **Sold in spool sizes indicated in table below.**

28 AWG (0,09 mm²), 7 x 36 STRANDING, 0.010″ INSULATION THICKNESS

Mfg. Part No.	No. of Cond.	Nom. O. D. (In.)	100′ Spool Stock No.	100′ Spool Price Per Spool	500′ Spool Stock No.	500′ Spool Price Per Spool	1000′ Spool Stock No.	1000′ Spool Price Per Spool
● 86002CY	2	0.17	95B5157	149.99	95B5156	567.14	95B5155	846.46
● 86003CY	3	0.18	86K9098	190.36	95B5159	675.49	95B5158	1008.18
● 86004CY	4	0.19	88K2214	210.90	95B5162	757.18	95B5161	1130.12
● 86005CY	5	0.20	88K1499	260.29	95B5165	882.91	95B5164	1317.79
● 86007CY	7	0.22	95B5169	281.30	...	...	95B5167	1607.21
● 86012CY	12	0.28	95B5172	486.10	95B5171	1758.27	95B5170	2624.29
● 86018CY	18	0.28	88K2215	752.80	95B5174	2702.43	95B5173	4033.48
● 86025CY	25	0.33	86K7951	860.38	95B5177	3088.42	95B5176	4609.56
26 AWG (0,14 mm²), 7 x 34 STRANDING, 0.010″ INSULATION THICKNESS								
● 86102CY	2	0.18	95B5181	173.79	95B5180	628.60	95B5179	938.19
● 86103CY	3	0.19	95B5184	197.49	95B5183	743.04	95B5182	1108.99
● 86104CY	4	0.20	95B5187	224.76	95B5186	849.80	95B5185	1268.34
● 86105CY	5	0.21	86K7952	289.24	95B5189	981.21	95B5188	1464.51
● 86107CY	7	0.24	88K2216	354.04	95B5192	1222.02	95B5191	1823.91
● 86112CY	12	0.30	95B5196	537.21	95B5195	1977.15	95B5194	2950.96
● 86118CY	18	0.30	95B5199	756.24	95B5198	2894.67	95B5197	4320.39
● 86125CY	25	0.36	95B5202	832.53	95B5201	3186.90	95B5200	4756.56
24 AWG (0,20 mm²), 10 x 34 STRANDING, 0.010″ INSULATION THICKNESS								
● 86202CY	2	0.19	85K9952	189.53	95B5204	642.93	95B5203	959.60
● 86203CY	3	0.20	86K9099	226.18	95B5207	780.69	95B5206	1165.23
● 86204CY	4	0.21	88K2217	260.59	95B5210	899.50	95B5209	1342.54
● 86205CY	5	0.23	88K2218	302.56	95B5213	1026.43	95B5212	1531.97
● 86207CY	7	0.25	86K7953	436.25	95B5216	1479.91	95B5215	2208.81
● 86212CY	12	0.33	95B5220	595.31	95B5219	2191.05	95B5218	3270.21
● 86218CY	18	0.33	95B5223	781.94	95B5222	2993.64	95B5221	4468.12
● 86225CY	25	0.40	95B5226	568.92	95B5225	2177.67	95B5224	3250.24
22 AWG (0,38mm²), 19 x 34 STRANDING, 0.010″ INSULATION THICKNESS								
● 86302CY	2	0.21	95B5229	184.50	95B5228	697.67	95B5227	1041.29
● 86303CY	3	0.22	95B5232	226.74	95B5231	857.32	95B5230	1279.58
● 86304CY	4	0.23	88K2219	282.70	95B5234	1002.49	95B5233	1496.26
● 86305CY	5	0.25	06M4012	342.51	95B5237	1161.89	95B5236	1734.14
● 86307CY	7	0.28	95B5241	453.91	85K9953	1707.90	95B5239	2450.52
● 86312CY	12	0.37	95B5244	666.36	95B5243	2452.50	95B5242	3660.44
● 86318CY	18	0.37	95B5247	880.19	95B5246	3369.32	95B5245	5028.85
● 86325CY	25	0.45	95B5250	1080.19	95B5249	3975.70	95B5248	5933.89

(51873)

XTRA-GUARD® CONTINUOUS FLEX, MULTIPAIR DATA CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

Extreme Performance in Single Axis, High-Flex Duty, Continuous Rolling or Bending Flexing Environments Up to 6 Million Flex Life Cycles

Flexing · Oils, Solvents, Chemicals, Fuels · Ultraviolet Light · EMI Noise

EXTREME PERFORMANCE BENEFITS:
- Flexible PVC insulation and jacket with overall cable design for installation in C-track or high flexing applications up to 6 million flex life cycles
- Unique premium-grade PVC insulation and jacket provides easier routing of cable in tight spaces
- Outstanding oil, solvent, chemical and fuel resistance
- Perfectly round geometry helps provide a liquid-tight installation per IP-67 or NEMA 6
- Superior performance against EMI/RFI

XTRA-GUARD® CONTINUOUS FLEX, MULTIPAIR DATA CABLE SPECIFICATIONS:
- Bend radius: 10X cable diameter (static); 15X cable diameter (dynamic)
- UL Type CM, UL AWM Style 2661
- CSA AWM I A/B II A/B FT4, CSA Type CMG
- CE LVD 73/23/EEC modified by Directive CD 93/68/EEC
- UL listed, CSA certified, CE compliant

XTRA-GUARD® CONTINUOUS FLEX, MULTIPAIR DATA CABLE APPLICATIONS:
- Industrial electronic processing equipment
- DataComm connections
- Automation networking
- PLC, microprocessor and computer interconnects
- Connecting sensors and actuators to controllers

Super finely stranded tinned copper conductors, lubricated semi-rigid PVC insulation and slate, oil-resistant PVC jacket. Foil shield with 85% tinned copper braid and 7/34 stranded tinned copper drain wire. Voltage rating: 300V. Operating temperature: +5°C to 105°C (flexing), -10°C to 105°C (stationary). FIT®-FLEX and FIT®-650 heat-shrink tubing is recommended; *order separately online or call.* **Sold in spool sizes indicated in table below.**

28 AWG (0,09mm²), 7 x 36 STRANDING, 0.010″ INSULATION THICKNESS

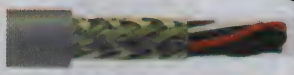
Mfg. Part No.	No. of Pairs	Nom. O.D. (In.)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 86401CY	1	0.19	85K9954	180.22	95B5252	645.47	95B5251	1063.05
● 86402CY	2	0.23	95B5256	220.28	95B5255	788.99	95B5254	1299.42
● 86403CY	3	0.24	95B5259	251.01	95B5258	898.98	95B5257	1480.55
● 86404CY	4	0.26	95B5262	287.29	95B5261	1011.29	95B5260	1665.55
● 86405CY	5	0.27	95B5265	329.02	95B5264	1178.38	95B5263	1940.70
● 86406CY	6	0.29	95B5268	361.55	95B5267	1294.91	95B5266	2132.62
● 86408CY	8	0.33	95B5271	408.15	95B5270	1436.60	95B5269	2366.00
● 86410CY	10	0.37	95B5274	527.26	95B5273	1963.96	95B5272	3234.51
● 86414CY	14	0.38	95B5277	576.88	95B5276	2148.78	95B5275	3538.91
26 AWG (0,14mm²), 7 x 34 STRANDING, 0.010″ INSULATION THICKNESS								
● 86501CY	1	0.19	95B5280	209.80	95B5279	738.44	95B5278	1216.19
● 86502CY	2	0.24	95B5283	257.21	95B5282	910.02	95B5281	1498.76
● 86503CY	3	0.25	85K9955	291.17	95B5285	1042.80	95B5284	1717.44
● 86504CY	4	0.27	85K9956	338.35	95B5288	1191.00	95B5287	1961.50
● 86505CY	5	0.29	95B5292	367.28	95B5291	1367.52	95B5290	2252.22
● 86506CY	6	0.31	95B5295	420.64	95B5294	1506.57	95B5293	2481.20
● 86508CY	8	0.36	95B5298	514.24	95B5297	1841.76	95B5296	3033.26
● 86510CY	10	0.39	95B5301	640.85	95B5300	2386.94	95B5299	3931.13
● 86514CY	14	0.43	95B5304	779.44	95B5303	2903.12	95B5302	4781.26
24 AWG (0,20mm²), 10 x 34 STRANDING, 0.010″ INSULATION THICKNESS								
● 86601CY	1	0.20	95B5307	204.70	95B5306	733.10	95B5305	1207.38
● 86602CY	2	0.26	95B5310	273.07	95B5309	978.02	95B5308	1610.77
● 86603CY	3	0.27	06M4013	367.04	95B5312	1314.61	95B5311	2165.05
● 86604CY	4	0.29	88K1500	373.46	95B5315	1314.61	95B5314	2165.05
● 86605CY	5	0.31	85K9957	407.68	95B5318	1460.11	95B5317	2404.71
● 86606CY	6	0.34	95B5322	467.94	95B5321	1675.90	95B5320	2760.12
● 86608CY	8	0.39	95B5325	552.68	95B5324	1979.48	95B5323	3260.07
● 86610CY	10	0.43	95B5328	693.82	95B5327	2584.39	95B5326	4256.34
● 86614CY	14	0.46	95B5331	750.81	95B5330	2796.81	95B5329	4606.16
22 AWG (0,38mm²), 19 x 34 STRANDING, 0.010″ INSULATION THICKNESS								
● 86701CY	1	0.22	95B5334	232.05	95B5333	816.76	95B5332	1345.14
● 86702CY	2	0.29	95B5337	309.66	95B5336	1108.99	95B5335	1826.44
● 86703CY	3	0.30	85K9958	365.48	95B5339	1286.42	95B5338	2118.67
● 86704CY	4	0.32	95B5343	407.55	95B5342	1499.66	95B5341	2469.83
● 86705CY	5	0.35	95B5346	465.67	95B5345	1734.56	95B5344	2856.71
● 86706CY	6	0.38	95B5349	546.53	95B5348	1957.42	95B5347	3223.72
● 86708CY	8	0.44	95B5352	669.53	95B5351	2397.99	95B5350	3949.33
● 86710CY	10	0.50	95B5355	799.80	95B5354	2978.94	95B5353	4906.10
● 86714CY	14	0.53	95B5358	864.09	95B5357	3218.62	95B5356	5300.86

(51889)

XTRA-GUARD® STANDARD FLEX CABLE — SHIELDED

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.



Extreme Performance in Single Axis, Light-to-Moderate Duty, Flexing Environments Up to 1 Million Flex Life Cycles

Flexing · Oils, Solvents, Chemicals, Fuels · EMI Noise · Abrasion

EXTREME PERFORMANCE BENEFITS:
- Flexible PVC insulation and jacket with overall cable design for installation in C-track or simple flexing applications up to one million flex life cycles
- Unique premium-grade PVC insulation and jacket provides easier routing of cable in tight spaces
- Outstanding oil, solvent, chemical and fuel resistance
- Perfectly round geometry helps provide a liquid-tight installation per IP-67 or NEMA 6
- Superior performance against EMI/RFI

XTRA-GUARD® STANDARD FLEX CABLE APPLICATIONS:
- Where increased flexing is required
- Machine tools
- CNC machine centers
- Data processing equipment
- Automation equipment
- Material handling equipment

XTRA-GUARD® STANDARD FLEX CABLE SPECIFICATIONS:
- Bend radius: 8X cable diameter (static and dynamic)
- UL AWM Style 2587
- CSA AWM I A/B II A/B FT1
- Jacket meets VDE 0472, Section 803 Oil Test
- CE LVD 73/23/EEC modified by Directive CD 93/68/EEC
- UL recognized, CSA certified, CE compliant

Finely stranded bare copper conductors, lubricated PVC insulation, tinned-copper braid shield (85% coverage) and slate, oil-resistant PVC jacket. Voltage rating: 600V. Operating temperature: -5°C to 90°C (flexing), -40°C to 90°C (stationary). FIT®-FLEX and FIT®-650 heat-shrink tubing is recommended; *order separately online or call.* Other wire gauge sizes are available, including 12, 10, 8, 6, 4 and 2 AWG; *go online or call.* **Sold in spool sizes indicated in table below.**

20 AWG, 10 x 30 STRANDING, 0.022″ INSULATION THICKNESS

Mfg.Part No.	No. of Cond.	Nom. O.D. (in.)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
65003CY	3	0.34	91F2415	273.53	91F2414	964.84	91F2413	1392.07
65007CY	7	0.41	89K8242	485.88	91F2426	1713.89	91F2425	2472.79
65012CY	12	0.52	06M3987	879.87	91F2435	3141.72	91F2434	4532.83
18 AWG, 16 x 30 STRANDING, 0.022″ INSULATION THICKNESS								
65803CY	3	0.36	91F2543	262.25	91F2542	920.29	91F2544	1327.78
65804CY	4	0.38	91F2549	308.90	91F2548	1083.98	91F2550	1563.97
65805CY	5	0.41	91F2555	414.12	91F2554	1453.29	91F2556	2096.81
65807CY	7	0.44	91F2561	458.74	91F2560	1618.19	91F2562	2334.70
65812CY	12	0.57	91F2571	812.96	91F2570	2902.85	91F2569	4188.20
65818CY	18	0.67	91F2577	1091.61	91F2576	4053.10	91F2575	5847.78
16 AWG, 26 x 30 STRANDING, 0.022″ INSULATION THICKNESS								
65603CY	3	0.39	91F2492	314.70	91F2491	1104.34	91F2493	1593.34
65604CY	4	0.42	91F2498	373.64	28B8506	1317.98	91F2499	1901.56
65605CY	5	0.45	06M3991	478.30	91F2503	1707.84	91F2505	2464.05
65607CY	7	0.48	91F2510	551.02	91F2509	1967.46	91F2511	2838.62
65612CY	12	0.64	06M3992	985.46	91F2518	3518.77	91F2520	5076.85
65618CY	18	0.77	91F2525	1455.38	91F2524	5404.23	91F2526	7797.15
14 AWG, 41 x 30 STRANDING, 0.022″ INSULATION THICKNESS								
65403CY	3	0.44	91F2454	362.91	91F2453	1273.54	91F2452	1837.46
65404CY	4	0.49	91F2460	495.82	91F2459	1739.92	91F2458	2510.32
65405CY	5	0.54	91F2465	567.04	91F2464	2024.72	91F2466	2921.24
65407CY	7	0.58	91F2471	671.14	91F2470	2396.47	91F2472	3457.61

(89684)

element14 COMMUNITY

Get inspired, collaborate, design, research, ask experts questions.

element14.com

(196546)

XTRA-GUARD® STANDARD FLEX CABLE — UNSHIELDED

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

Extreme Performance in Single Axis, Light-to-Moderate Duty, Flexing Environments Up to 1 Million Flex Life Cycles

Flexing · Abrasion · Oils, Solvents, Chemicals, Fuels

EXTREME PERFORMANCE BENEFITS:
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- Unique premium-grade PVC insulation and jacket provides easier routing of cable in tight spaces
- Outstanding oil, solvent, chemical and fuel resistance
- Perfectly round geometry helps provide a liquid-tight installation per IP-67 or NEMA 6

XTRA-GUARD® STANDARD FLEX CABLE APPLICATIONS:
- Where increased flexing is required
- Machine tools
- CNC machine centers
- Data processing equipment
- Automation equipment
- Material handling equipment

XTRA-GUARD® STANDARD FLEX CABLE SPECIFICATIONS:
- Bend radius: 8X cable diameter (static and dynamic)
- UL AWM Style 2587
- CSA AWM I A/B II A/B FT1
- Jacket meets VDE 0472, Section 803 Oil Test
- CE LVD 73/23/EEC modified by Directive CD 93/68/EEC
- UL recognized, CSA certified, CE compliant

Finely stranded bare copper conductors, lubricated PVC insulation and slate, oil-resistant PVC jacket. Voltage rating: 600V. Operating temperature: -5°C to 90°C (flexing), -40°C to 90°C (stationary). FIT®-FLEX and FIT®-650 heat-shrink tubing is recommended; *order separately online or call.* Other wire gauge sizes are available, including 12, 10, 8, 6, 4 and 2 AWG; *go online or call.* **Sold in spool sizes indicated in table below.**

20 AWG, 10 x 30 STRANDING, 0.022″ INSULATION THICKNESS

Mfg.Part No.	No. of Cond.	Nom. O.D. (in.)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
65002	2	0.24	86K7571	106.44	91F2408	397.29	91F2407	563.35
65003	3	0.25	91F2412	129.89	91F2411	488.35	91F2410	696.04
65004	4	0.27	91F2418	156.51	91F2417	581.13	91F2416	838.44
65005	5	0.31	91F2421	221.93	85K9922	796.91	2888377	1143.39
65007	7	0.33	91F2424	230.79	91F2423	856.95	...	...
65009	9	0.42	91F2430	334.95	91F2429	1181.51	91F2428	1704.68
65012	12	0.43	91F2433	445.32	91F2432	1570.85	91F2431	2266.42
65018	18	0.53	91F2439	640.53	91F2438	2378.25	91F2437	3431.30
65025	25	0.62	91F2442	948.48	91F2441	3386.72	91F2440	4886.32
18 AWG, 16 x 30 STRANDING, 0.022″ INSULATION THICKNESS								
65802	2	0.26	91F2537	100.87	91F2536	381.14	91F2538	540.41
65803	3	0.27	85K9926	130.41	91F2539	490.30	...	...
65804	4	0.30	91F2546	153.71	91F2545	570.51	91F2547	823.13
65805	5	0.33	91F2552	205.88	91F2551	764.90	91F2553	1103.58
65807	7	0.35	91F2558	229.37	91F2557	851.69	91F2559	1228.79
65809	9	0.45	91F2564	318.25	91F2563	1167.99	91F2565	1685.14
65812	12	0.47	85K9927	411.44	91F2566	1527.83	91F2568	2204.31
65818	18	0.57	91F2574	574.39	91F2573	2133.22	...	...
65825	25	0.67	89K8243	859.78	91F2579	3193.11	91F2578	4606.97
65834	34	0.77	29M7257	1159.55	91F2585	4305.84	91F2584	6212.41
65841	41	0.84	91F2589	1363.57	91F2588	5063.40	91F2587	7305.39
16 AWG, 26 x 30 STRANDING, 0.022″ INSULATION THICKNESS								
65602	2	0.28	06M3990	122.40	91F2485	456.96	...	...
65603	3	0.30	88K1463	156.51	91F2488	581.24	91F2490	838.60
65604	4	0.33	91F2495	186.92	85K9924	697.54	91F2496	1000.82
65605	5	0.36	91F2501	244.95	91F2500	898.85	29M7255	1296.88
65607	7	0.39	91F2507	278.81	91F2506	1035.51	91F2508	1412.45
65609	9	0.51	91F2513	427.78	91F2512	1501.15	91F2514	2165.82
65612	12	0.54	91F2516	518.67	91F2515	1852.01	91F2517	2672.02
65618	18	0.63	85K9925	766.06	91F2521	2844.35	91F2523	4103.76
65625	25	0.76	91F2528	1114.71	91F2527	4139.32	91F2529	5972.15
65641	41	0.96	28B8543	1735.85	91F2533	6446.54	91F2535	9300.97
14 AWG, 41 x 30 STRANDING, 0.022″ INSULATION THICKNESS								
65402	2	0.33	85K9923	166.32	91F2447	583.71	91F2446	842.16
65403	3	0.35	91F2451	213.48	91F2450	749.15	91F2449	1080.86
65404	4	0.40	91F2457	275.61	91F2456	1023.47	91F2455	1476.66
65405	5	0.44	06M3988	320.75	91F2461	1191.01	91F2463	1718.38
65407	7	0.48	91F2468	384.23	91F2467	1409.69	91F2469	2033.89
65409	9	0.61	91F2474	544.53	91F2473	2022.48	91F2475	2917.98
65412	12	0.67	91F2477	700.92	91F2476	2502.72	91F2478	3610.90
65418	18	0.78	91F2480	1139.88	91F2479	4070.20	91F2481	5872.43
65425	25	0.95	91F2483	1538.70	91F2482	5713.71	91F2484	8243.67

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DATA/COMMUNICATION, CONTROL & INSTRUMENTATION CABLE

XTRA-GUARD® TORSIONAL FLEX MULTICONDUCTOR SHIELDED CABLE

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

Extreme Performance in Multi-Axis, Torsional Flexing Applications Up to 360° From Neutral Position

EXTREME PERFORMANCE BENEFITS:
- Flexible TPES insulation and extra rugged polyurethane jacket with overall cable design for installation in twisting and random robotic flexing applications +/-360° per meter
- Outstanding service life in heavy-duty, high-speed torsional applications
- High oil, solvent, chemical and fuel resistance
- Perfectly round geometry helps provide a liquid-tight installation per IP-67 or NEMA 6
- Superior performance against EMI/RF

Flexing · Oils, Solvents, Chemicals, Fuels · Abrasion · EMI Noise

XTRA-GUARD® TORSIONAL FLEX MULTICONDUCTOR SHIELDED CABLE APPLICATIONS:
- Twisting and random robotic flexing applications
- Power supply to welding, painting and articulating robots
- Automation networking
- Connecting sensors and actuators to controllers

XTRA-GUARD® TORSIONAL FLEX MULTICONDUCTOR SHIELDED CABLE SPECIFICATIONS:
- UL AWM 20234
- CSA AWM I A/B II A/B FT1
- CE LVD 73/23/EEC modified by Directive CD 93/68/EEC
- UL recognized, CSA certified, CE compliant

Stranded bare copper conductors and TPES (thermoplastic elastomer) insulation. Tinned copper spiral shield provides 90% coverage. Black, oil-resistant polyurethane jacket. Minimum bend radius: 10X O.D. (static), 15X O.D. (dynamic). Maximum twisting: ±360° per meter. Voltage rating: 600V. Operating temperature: -10°C to 80°C (flexing), -30°C to 80°C (stationary). FIT®-FLEX and FIT®-650 heat-shrink tubing is recommended; *order separately online or call.* **Sold per foot.**

24 AWG (0,23mm²), 7 x 32 STRANDING, 0.016″ INSULATION THICKNESS

Mfg. Part No.	No. of Cond.	Nom. O.D. (In.)	Stock No.	Price per Foot
● 87003CY BK199	3	0.246	95B7233	3.15
● 87004CY BK199	4	0.261	95B7235	3.50
● 87005CY BK199	5	0.278	95B7237	3.73
● 87007CY BK199	7	0.313	95B7239	4.47
22 AWG (0,38mm²), 19 x 34 STRANDING, 0.016″ INSULATION THICKNESS				
● 87103CY BK199	3	0.263	95B7241	3.69
● 87104CY BK199	4	0.280	95B7243	3.98
● 87105CY BK199	5	0.300	95B7245	4.50
● 87107CY BK199	7	0.340	95B7247	5.39
20 AWG (0,62mm²), 19 x 32 STRANDING, 0.016″ INSULATION THICKNESS				
● 87203CY BK199	3	0.281	95B7249	4.01
● 87204CY BK199	4	0.300	95B7251	4.57
● 87205CY BK199	5	0.321	95B7253	4.96
● 87207CY BK199	7	0.366	95B7255	6.13
18 AWG (0,96mm²), 19 x 30 STRANDING, 0.016″ INSULATION THICKNESS				
● 87303CY BK199	3	0.302	95B7257	5.66
● 87304CY BK199	4	0.324	95B7259	5.11
● 87305CY BK199	5	0.348	95B7261	5.81
● 87307CY BK199	7	0.399	95B7263	7.44
16 AWG (1,32mm²), 19 x 0.0117 STRANDING, 0.016″ INSULATION THICKNESS				
● 87403CY BK199	3	0.321	95B7265	5.10
● 87404CY BK199	4	0.346	95B7267	5.87
● 87405CY BK199	5	0.373	95B7269	6.67
● 87407CY BK199	7	0.429	95B7271	8.63
14 AWG (2,07mm²), 19 x 0.0147 STRANDING, 0.027″ INSULATION THICKNESS				
● 87503CY BK199	3	0.401	95B7273	7.13
● 87504CY BK199	4	0.436	95B7275	8.70
● 87505CY BK199	5	0.474	95B7277	9.82
● 87507CY BK199	7	0.554	95B7279	12.60
12 AWG (3,29mm²), 19 x 0.0185 STRANDING, 0.027″ INSULATION THICKNESS				
● 87603CY BK199	3	0.463	95B7281	9.44
● 87604CY BK199	4	0.502	95B7283	11.29
● 87605CY BK199	5	0.545	95B7285	13.16
● 87607CY BK199	7	0.637	95B7287	16.26
10 AWG (5,22mm²), 37 x 0.0167 STRANDING, 0.030″ INSULATION THICKNESS				
● 87703CY BK199	3	0.527	95B7289	12.03
● 87704CY BK199	4	0.574	95B7291	14.95
● 87705CY BK199	5	0.646	95B7293	17.91
● 87707CY BK199	7	0.756	95B7295	23.91

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XTRA-GUARD® TORSIONAL FLEX MULTICONDUCTOR UNSHIELDED CABLE

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

Extreme Performance in Multi-Axis, Torsional Flexing Applications Up to 360° From Neutral Position

EXTREME PERFORMANCE BENEFITS:
- Flexible TPES insulation and extra rugged polyurethane jacket with overall cable design for installation in twisting and random robotic flexing applications +/-360° per meter
- Outstanding service life in heavy-duty, high-speed torsional applications
- High extreme oil, solvent, chemical and fuel resistance
- Perfectly round geometry helps provide a liquid-tight installation per IP-67 or NEMA 6

Flexing · Abrasion · Oils, Solvents, Chemicals, Fuels

XTRA-GUARD® TORSIONAL FLEX MULTICONDUCTOR UNSHIELDED CABLE APPLICATIONS:
- Twisting and random robotic flexing applications
- Power supply to welding, painting and articulating robots
- Automation networking
- Connecting sensors and actuators to controllers

XTRA-GUARD® TORSIONAL FLEX MULTICONDUCTOR UNSHIELDED CABLE SPECIFICATIONS:
- UL AWM 20234
- CSA AWM I A/B II A/B FT1
- CE LVDD 73/23/EEC modified by Directive CD 93/68/EEC
- UL recognized, CSA certified, CE compliant

Stranded bare copper conductors,TPES (thermoplastic elastomer) insulation and black, oil-resistant polyurethane jacket. Minimum bend radius: 10X O.D. (static), 15X O.D. (dynamic). Maximum twisting: ±360°C per meter.Voltage rating: 600V. Operating temperature: -10°C to 80°C (flexing), -30°C to 80°C (stationary). FIT®-FLEX and FIT®-650 heat-shrink tubing is recommended; *order separately online or call.* **Sold per foot.**

24 AWG (0,23mm²), 7 x 32 STRANDING, 0.016″ INSULATION THICKNESS

Mfg. Part No.	No. of Cond.	Nom. O.D. (In.)	Stock No.	Price per Foot
● 87003 BK199	3	0.227	95B7232	2.69
● 87004 BK199	4	0.242	95B7234	2.91
● 87005 BK199	5	0.259	95B7236	3.19
● 87007 BK199	7	0.294	95B7238	3.84
22 AWG (0,38mm²), 19 x 34 STRANDING, 0.016″ INSULATION THICKNESS				
● 87103 BK199	3	0.244	95B7240	3.01
● 87104 BK199	4	0.261	95B7242	3.31
● 87105 BK199	5	0.281	95B7244	3.87
● 87107 BK199	7	0.321	95B7246	4.52
20 AWG (0,62mm²), 19 x 32 STRANDING, 0.016″ INSULATION THICKNESS				
● 87203 BK199	3	0.262	95B7248	3.37
● 87204 BK199	4	0.281	95B7250	3.81
● 87205 BK199	5	0.302	95B7252	4.11
● 87207 BK199	7	0.347	95B7254	5.10
18 AWG (0,96mm²), 19 x 30 STRANDING, 0.016″ INSULATION THICKNESS				
● 87303 BK199	3	0.283	95B7256	3.83
● 87304 BK199	4	0.305	95B7258	4.38
● 87305 BK199	5	0.329	95B7260	4.84
● 87307 BK199	7	0.380	95B7262	6.22
16 AWG (1,32mm²), 19 x 0.0117 STRANDING, 0.016″ INSULATION THICKNESS				
● 87403 BK199	3	0.302	95B7264	4.25
● 87405 BK199	5	0.354	95B7268	5.58
● 87407 BK199	7	0.410	95B7270	7.19
14 AWG (2,07mm²), 19 x 0.0147 STRANDING, 0.027″ INSULATION THICKNESS				
● 87503 BK199	3	0.382	95B7272	5.95
● 87504 BK199	4	0.417	95B7274	7.24
● 87505 BK199	5	0.455	95B7276	8.18
● 87507 BK199	7	0.535	95B7278	10.50
12 AWG (3,29mm²), 19 x 0.0185 STRANDING, 0.027″ INSULATION THICKNESS				
● 87603 BK199	3	0.444	95B7280	7.85
● 87604 BK199	4	0.483	95B7282	9.39
● 87605 BK199	5	0.526	95B7284	10.96
● 87607 BK199	7	0.618	95B7286	13.46
10 AWG (5,22mm²), 37 x 0.0167 STRANDING, 0.030″ INSULATION THICKNESS				
● 87703 BK199	3	0.508	95B7288	10.04
● 87704 BK199	4	0.555	95B7290	12.45
● 87705 BK199	5	0.627	95B7292	14.78
● 87707 BK199	7	0.737	95B7294	19.83

(51792)

DATA/COMMUNICATION, CONTROL & INSTRUMENTATION CABLE

XTRA-GUARD® INDUSTRIAL ETHERNET CAT 5e UNSHIELDED AND SHIELDED MULTIPAIR CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

Supra-Shield® Foil Shield + Braid

Rugged Connectivity for Industrial Networking

- Wide temperature range:-50° to +105°C (PP insulated) and +125°C (FEP insulated)
- Unshielded, foil shielded, or Supra-Shield® foil + braid for best EMI protection
- Extra tough, abrasion-rersistant TPE jacket is flexible and routable
- Sunlight, fluid, and abrasion resistant
- Meets ANSI/TIA-568-C.2 Cat 5e requirements
- Supports data rates up to Gigabit Ethernet
- UL Type CMR
- Passes UL 1666 Riser and CSA FT-4 flame test
- Suitable for use in NFPA 79 applications

Abrasion · Low Temperature · EMI Noise · Oils, Solvents, Chemicals, Fuels · High Temperature

Xtra-Guard® Industrial Ethernet multipaired cable is designed for uncompromising performance to keep networks running anywhere. This Category 5e cable combines the advanced technology of Ethernet communications with the durability and temperature range of an Xtra-Guard® 4 jacket. The result is a flexible and routable Ethernet cable that provides rugged, reliable performance in the most extreme environments. Choice of unshielded, foil shield or Supra-Shield® foil + braid for exceptional EMI resistance. Features two or four twisted pair 24 AWG solid or stranded bare copper conductors, PP (polypropylene) or FEP insulation, and an abrasion-resistant thermoplastic elastomer jacket. Color: black. **Sold in 500′ and 1000′ spools.**

Mfg. Part No.	No. of Pairs	Strand-ing	Insul-ation*	O.D. (in.)	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
UNSHIELDED								
75020	2	7x32	PP	0.29	94T8633	564.01	94T8632	940.01
76020	4	7x32	PP	0.29	94T8650	595.01	94T2492	991.67
75010	2	Solid	PP	0.28	94T8627	553.28	94T8626	922.11
76010	4	Solid	PP	0.28	94T8645	576.52	94T8644	960.87
75000	2	Solid	FEP	0.28	94T8621	615.40	94T8620	1025.65
76000	4	Solid	FEP	0.28	94T8639	727.76	94T8638	1212.93
FOIL SHIELDED								
75021	2	7x32	PP	0.33	94T8635	626.05	94T8634	1043.40
76021	4	7x32	PP	0.33	94T7073	820.10	94T7033	1366.84
75011	2	Solid	PP	0.32	94T8629	609.28	94T8628	1015.47
76011	4	Solid	PP	0.32	94T8647	786.61	94T8646	1311.01
75001	2	Solid	FEP	0.32	94T8623	866.05	94T8622	1443.41
76001	4	Solid	FEP	0.32	94T8641	1144.09	94T8640	1906.81
SUPRA-SHIELD® FOIL SHIELDED + BRAID								
75022	2	7x32	PP	0.345	94T8637	1001.66	94T8636	1669.42
76022	4	7x32	PP	0.345	94T7072	1299.20	94T2494	2165.33
75012	2	Solid	PP	0.345	94T8631	974.85	94T8630	1624.75
76012	4	Solid	PP	0.345	94T8649	1262.12	94T8648	2103.52
75002	2	Solid	FEP	0.345	94T8625	1385.67	94T8624	2309.45
76002	4	Solid	FEP	0.345	94T8643	1845.39	94T8642	3075.64

*PP (polypropylene: -50° to +105°C, UL riser rated at 75°C; FEP: -50° to +125°C, UL riser rated at 105°C
(203724)

BRILLIANCE® CM RATED AUDIO MULTI-PAIR INDIVIDUALLY SHIELDED CABLE

RoHS Compliant Available

BELDEN — SENDING ALL THE RIGHT SIGNALS — Brilliance®

8777

Tinned copper 22AWG, 7x30 stranded conductors. Twisted pairs, individually Beldfoil® shielded with a Z-Fold™ for greater interference elimination and overall chrome PVC jacket. Polypropylene insulation. Nominal capacitance between conductors: 30pF/ft. 30V, 80°C. UL recognized, CSA certified and NEC type CM rated.

Mfg. Part No.	No. of Pairs	Nom. O.D. (in.)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
8777	3	0.273	02F5624	142.52	87K7281	599.36	02F6152	1198.72
8778	6	0.362	87K7282	283.40	02F6153	1192.23	87K1808	2219.07

(6161)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

EcoFlex™ SUPRA-SHIELD® FOIL+BRAID SHIELDED MULTICONDUCTOR CONTROL CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

eco Gen™ From AlphaWire

EcoFlex™ Cable — Smaller, Lighter, Tougher, Recyclable, Flexible

VW-1

Features

- Eco-friendly, non-halogenated and 100% recyclable
- Compact for moderate flex applications
- Rated for more than 1 million flex cycles
- Easier routing and handling
- Up to 32% smaller diameter than PVC, PE and XLPE
- Up to 55% lighter than PVC, PE and XLPE
- Handles temperature extreme to -40°C
- Up to 91% lower outgassing compared to PVC
- Supra-Shield® provides excellent EMI protection

Specifications

- Recyclable mPPE thermoplastic insulation and jacket
- Stranded tinned-copper conductors
- Supra-Shield® — halogen-free aluminum mylar foil plus a tinned-copper braid
- Bend radius: 6x static, 8x flexing
- Voltage rating: 600V
- Temperature range: -40°C to 105°C static; -5°C to 105°C flexing
- Jacket thickness: 20-16 AWG 0.035″ (0.89mm), 14-10 AWG 0.032″ (0.81mm)
- Jacket color: Slate
- UL AWM 21819 (600V, 105°C)
- UL AWM 21492 (300V, 80°C)
- CSA AWM I/II A/B FT1
- Suitable for NFPA 79 applications
- Passes UL VW-1 flame test
- IEC 60332-2 flame behavior
- UL recognized, CSA certified, CE compliant
- RoHS, REACH, WEEE compliant

EcoFlex™ Supra-Shield® foil+braid shielded multiconductor control cable combines better performance with a minimum environmental impact. Contains no halogens, phthalates,or heavy metals enabling it to meet RoHS, REACH, and WEEE requirements for the elimination of hazardous substances and recyclability. Low 1.03 specific gravity of mPPE (Modified Polyphenylene Ether) is 25% to 40% lower than other insulation materials and along with the reduced wall thickness, the low specific gravity yields significant weight savings of up to 55%. Superior dielectric properties of mPPE make a reduced wall thickness possible, while maintaining the same electrical properties as a thicker PVC. **Sold in 100′ and 1000′ spools.**

No.of Cond.	O.D. (mm)	100′ Spool Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	1000′ Spool Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
28 AWG (0.09mm²), 7x36 (7x0.13mm²) STRANDING, 0.010″ (0.25mm) INSULATION THICKNESS							
2	4.42	79261 SL005	55W4988	334.44	79261 SL001	55W4987	2011.01
3	4.55	79262 SL005	55W4990	443.22	79262 SL001	55W4989	2614.30
26 AWG (0.14mm²), 7x34 (7x0.16mm²) STRANDING, 0.010″ (0.25mm) INSULATION THICKNESS							
2	4.62	79256 SL005	55W4978	351.17	79256 SL001	55W4977	2071.34
3	4.78	79257 SL005	55W4980	456.52	79257 SL001	55W4979	2692.74
4	5.03	79258 SL005	55W4982	566.07	79258 SL001	55W4981	3338.98
6	5.61	79259 SL005	55W4984	820.80	79259 SL001	55W4983	4841.53
8	6.3	79260 SL005	55W4986	1067.05	79260 SL001	55W4985	6293.99
24 AWG (0.24mm²), 19x36 (19x0.13mm²) STRANDING, 0.010″ (0.25mm) INSULATION THICKNESS							
2	4.93	79250 SL005	55W4966	361.70	79250 SL001	55W4965	2133.48
3	5.11	79251 SL005	55W4968	470.21	79251 SL001	55W4967	2773.52
4	5.41	79252 SL005	55W4970	583.05	79252 SL001	55W4969	3439.15
6	6.07	79253 SL005	55W4972	845.43	79253 SL001	55W4971	4986.77
8	6.86	79254 SL005	55W4974	1099.06	79254 SL001	55W4973	6482.81
10	7.34	79255 SL005	55W4976	1230.95	79255 SL001	55W4975	7260.74
22 AWG (0.38mm²), 19x34 (19x0.16mm²) STRANDING, 0.010″ (0.25mm) INSULATION THICKNESS							
2	5.28	79244 SL005	55W4954	453.01	79244 SL001	55W4953	2882.68
3	5.49	79245 SL005	55W4956	517.23	79245 SL001	55W4955	3050.05
4	5.84	79246 SL005	55W4958	730.24	79246 SL001	55W4957	4646.87
6	6.6	79247 SL005	55W4960	949.31	79247 SL001	55W4959	6273.29
8	7.52	79248 SL005	55W4962	1234.11	79248 SL001	55W4961	8155.27
10	8.08	79249 SL005	55W4964	1406.49	79249 SL001	55W4963	9133.93
20 AWG (0.51mm²), 10x30 (10x0.25mm²) STRANDING, 0.010″ (0.25mm) INSULATION THICKNESS							
2	5.49	79201 SL005	47W9143	517.67	79201 SL001	47W9142	4298.43
3	5.72	79202 SL005	47W9145	569.43	79202 SL001	47W9144	4728.27
4	6.07	79203 SL005	47W9147	802.64	79203 SL001	47W9146	5201.10
5	6.5	79204 SL005	47W9149	1026.95	79204 SL001	47W9148	5698.93
7	6.91	79205 SL005	47W9151	1221.76	79205 SL001	47W9150	7739.16
9	8.33	79206 SL005	47W9153	1479.40	79206 SL001	47W9152	9468.56
12	8.51	79207 SL005	47W9155	1832.35	79207 SL001	47W9154	11888.51
18	9.7	79208 SL005	47W9157	2372.07	79208 SL001	47W9156	15474.12
18 AWG (0.81mm²), 16x30 (16x0.25mm²) STRANDING, 0.010″ (0.25mm) INSULATION THICKNESS							
2	6.15	79210 SL005	47W9159	596.57	79210 SL001	47W9158	3829.09
3	6.43	79211 SL005	47W9161	863.73	79211 SL001	47W9160	5541.77
4	6.86	79212 SL005	47W9163	1091.79	79212 SL001	47W9162	6977.85
5	7.37	79213 SL005	47W9165	1281.38	79213 SL001	47W9164	8255.94
7	7.9	79214 SL005	47W9167	1602.21	79214 SL001	47W9166	10418.34
9	9.6	79215 SL005	47W9169	1964.29	79215 SL001	47W9168	12591.84
12	9.83	79216 SL005	47W9171	2350.27	79216 SL001	47W9170	15104.89
18	11.3	79217 SL005	47W9173	3026.64	79217 SL001	47W9172	18795.85
16 AWG (1.32mm²), 26x30 (26x0.25mm²) STRANDING, 0.011″ (0.28mm) INSULATION THICKNESS							
2	6.81	79218 SL005	47W9175	739.65	79218 SL001	47W9174	4794.65
3	7.14	79219 SL005	47W9177	1075.50	79219 SL001	47W9176	6972.43

CONTINUED

DATA/COMMUNICATION, CONTROL & INSTRUMENTATION CABLE

EcoFlex™ SUPRA-SHIELD® FOIL+BRAID SHIELDED MULTICONDUCTOR CONTROL CABLE (CONT.)

16 AWG (1.32mm²), 26x30 (26x0.25mm²) STRANDING, 0.011″ (0.28mm) INSULATION THICKNESS

No.of Cond.	O.D. (mm)	100′ Spool Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	1000′ Spool Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
4	7.67	● 79220 SL005	47W9179	1366.55	● 79220 SL001	47W9178	8888.00
5	8.28	● 79221 SL005	47W9181	1598.86	● 79221 SL001	47W9180	10248.80
7	8.92	● 79222 SL005	47W9183	2021.23	● 79222 SL001	47W9182	12871.31
9	10.97	● 79223 SL005	47W9185	2498.97	● 79223 SL001	47W9184	16053.06
12	11.25	● 79224 SL005	47W9187	3043.68	● 79224 SL001	47W9186	19552.14
14 AWG (2.08mm²), 41x30 (41x0.25mm²) STRANDING, 0.011″ (0.28mm) INSULATION THICKNESS							
2	7.62	● 79225 SL005	47W9189	958.30	● 79225 SL001	47W9188	6057.14
3	8	● 79226 SL005	47W9191	1381.56	● 79226 SL001	47W9190	8929.07
4	8.66	● 79227 SL005	47W9193	1743.56	● 79227 SL001	47W9192	11153.50
5	9.37	● 79228 SL005	47W9195	1917.92	● 79228 SL001	47W9194	12268.85
7	10.11	● 79229 SL005	47W9197	2653.30	● 79229 SL001	47W9196	15351.53
9	12.52	● 79230 SL005	47W9199	3284.50	● 79230 SL001	47W9198	21084.91
12	12.88	● 79231 SL005	47W9201	4023.17	● 79231 SL001	47W9200	25792.00
12 AWG (3.29mm²), 65x30 (65x0.25mm²) STRANDING, 0.012″ (0.30mm) INSULATION THICKNESS							
3	9.14	● 79232 SL005	47W9203	1817.33	● 79232 SL001	47W9202	11596.17
4	9.93	● 79233 SL005	47W9205	2300.60	● 79233 SL001	47W9204	14638.79
5	10.82	● 79234 SL005	47W9207	2759.08	● 79234 SL001	47W9206	17549.11
7	11.73	● 79235 SL005	47W9209	3912.52	● 79235 SL001	47W9208	25213.18
10 AWG (5.32mm²), 105x30 (105x0.25mm²) STRANDING, 0.012″ (0.30mm) INSULATION THICKNESS							
3	10.64	● 79236 SL005	47W9211	2359.11	● 79236 SL001	47W9210	15053.27
4	11.61	● 79237 SL005	47W9213	2986.47	● 79237 SL001	47W9212	19002.96

(208448)

COMBINATION SHIELDED PAIRED AUDIO, COMMUNICATION AND INSTRUMENTAION CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

Mfg. part no. 8434 25 AWG stranded (7x33) polyethylene insulated pairs have three tinned copper and four copper-covered steel strands in each conductor. The red/black pair is shielded with Beldfoil® aluminum-polyester shield and has a 25 AWG stranded tinned copper drain wire. Both pairs are overall 100% Beldfoil® shielded under a chrome PVC jacket. Pairs are cabled on common axis to reduce diameter. Nominal outer diameter: 0.165″ (4.191mm). Capacitance between conductors: 25pF/ft (82pF/m). Max. operating voltage: 400V. Operating temperature range: -20°C To +80°C.

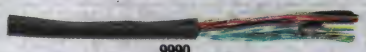
Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool	1000′ Crate Reel Stock No.	1000′ Crate Reel Price per Reel
● 8434	02F5307	125.39	02F5309	1055.48	15B3322	1055.48

(192396)

INDIVIDUALLY SHIELDED PAIRED AUDIO, CONTROL, INSTRUMENTATION AND COMPUTER CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS



9990

Capacitance for **mfg. part nos. 9991-9992** is 25pF/Ft. Capacitance for **mfg. part nos. 8774, 9768, 9873-9875, 9773** and **9774** is 30pF/ft. Polyethylene insulation except **mfg. part nos. 8774** and **9768**, polypropylene. PVC jacket. Individual aluminum foil-polyester tape shielding. Nominal impedance: 50Ω except **mfg. part nos. 9990-9992**, 60Ω.

24AWG STRANDED CONDUCTORS (7 × 32) UL RECOGNIZED 2919, 80°C; NEC TYPE CM, SHIELDED

Mfg. Part No.	No. of Pairs	Nom. O.D. (In.)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 9990	3	0.255	...	...	04F5166	719.25	04F5167	1438.50
● 9991	6	0.330	04F5168	305.94	87K7510	1286.95	04F5170	2573.90
● 9992	9	0.383	04F5171	451.85	04F5172	1900.50	04F5173	3800.99
22AWG STRANDED CONDUCTORS (7 × 30) UL RECOGNIZED 2919, 30°C; NEC TYPE CM, SHIELDED								
● 8774	9	0.417	87K7276	598.19	02F6155	2341.43	02F6156	5031.88
● 9768	12	0.464	02F5688	809.57	02F5690	3405.16	02F5691	6810.32
20AWG STRANDED CONDUCTORS (7 × 28) UL RECOGNIZED 2919, 80°C; NEC TYPE CM, SHIELDED								
● 9873	3	0.341	87K7396	206.81	87K7398	809.51	87K7397	1739.69
● 9874	6	0.445	02F5698	441.92	02F6175	1858.72	02F5700	3717.43
● 9875	9	0.555	02F5701	650.47	02F5702	2736.17	02F5703	5472.34
18AWG STRANDED CONDUCTORS (16 × 30) UL RECOGNIZED 2919, 30°C; NEC TYPE CM, SHIELDED								
● 9773	3	0.404	02F5713	231.74	02F5714	974.60	87K6363	1949.20
● 9774	6	0.560	02F5716	594.81	02F6182	2501.76	02F5718	5003.51

(6086)

EcoFlex™ BRAID SHIELDED MULTICONDUCTOR CONTROL CABLE

RoHS Compliant Available

AlphaWire Cables you trust. Service you deserve.

eco gen™ From AlphaWire

VW-1

EcoFlex™ Cable — Smaller, Lighter, Tougher, Recyclable, Flexible

Features
- Eco-friendly, non-halogenated and 100% recyclable
- Compact for moderate flex applications
- Rated for more than 1 million flex cycles
- Easier routing and handling
- Up to 32% smaller diameter than PVC, PE and XLPE
- Up to 55% lighter than PVC, PE and XLPE
- Handles temperature extreme to -40°C
- Up to 91% lower outgassing compared to PVC

Specifications
- Recyclable mPPE thermoplastic insulation and jacket
- Stranded tinned-copper conductors
- Tinned-copper braided shield for EMI protection
- Bend radius: 6x static, 8x flexing
- Voltage rating: 600V
- Temperature range: -40°C to 105°C static; -5°C to 105°C flexing
- Jacket thickness: 20-16 AWG 0.035″ (0.89mm), 14-10 AWG 0.032″ (0.81mm)
- Jacket color: Slate
- UL AWM 21819 (600V, 105°C)
- UL AWM 21492 (300V, 80°C)
- CSA AWM I/II A/B FT1
- Suitable for NFPA 79 applications
- Passes UL VW-1 flame test
- IEC 60332-2 flame behavior
- UL recognized, CSA certified, CE compliant
- RoHS, REACH, WEEE compliant

EcoFlex™ braid shielded multiconductor control cable combines better performance with a minimum environmental impact. Contains no halogens, phthalates,or heavy metals enabling it to meet RoHS, REACH, and WEEE requirements for the elimination of hazardous substances and recyclability. Low 1.03 specific gravity of mPPE (Modified Polyphenylene Ether) is 25% to 40% lower than other insulation materials and along with the reduced wall thickness, the low specific gravity yields significant weight savings of up to 55%. Superior dielectric properties of mPPE make a reduced wall thickness possible, while maintaining the same electrical properties as a thicker PVC. **Sold in 100′ and 1000′ spools.**

20 AWG (0.51mm²), 10x30 (10x0.25mm²) STRANDING, 0.010″ (0.25mm) INSULATION THICKNESS

No.of Cond.	O.D. (mm)	100′ Spool Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	1000′ Spool Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
2	5.33	● 79101 SL005	47W9089	491.78	● 79101 SL001	47W9088	4083.51
3	5.56	● 79102 SL005	47W9091	540.96	● 79102 SL001	47W9090	4491.86
4	5.92	● 79103 SL005	47W9093	762.50	● 79103 SL001	47W9092	4941.05
5	6.35	● 79104 SL005	47W9095	975.61	● 79104 SL001	47W9094	5413.98
7	6.76	● 79105 SL005	47W9097	1160.66	● 79105 SL001	47W9096	7352.21
9	8.15	● 79106 SL005	47W9099	1405.42	● 79106 SL001	47W9098	8995.13
12	8.36	● 79107 SL005	47W9101	1740.74	● 79107 SL001	47W9100	11294.09
18	9.55	● 79108 SL005	47W9103	2253.47	● 79108 SL001	47W9102	14700.42
18 AWG (0.81mm²), 16x30 (16x0.25mm²) STRANDING, 0.010″ (0.25mm) INSULATION THICKNESS							
2	5.99	● 79109 SL005	47W9105	566.75	● 79109 SL001	47W9104	3637.64
3	6.27	● 79110 SL005	47W9107	820.55	● 79110 SL001	47W9106	5264.68
4	6.71	● 79111 SL005	47W9109	1037.21	● 79111 SL001	47W9108	6628.95
5	7.21	● 79112 SL005	47W9111	1217.31	● 79112 SL001	47W9110	7843.14
7	7.75	● 79113 SL005	47W9113	1522.10	● 79113 SL001	47W9112	9897.42
9	9.45	● 79114 SL005	47W9115	1866.09	● 79114 SL001	47W9114	11962.24
12	9.68	● 79115 SL005	47W9117	2232.76	● 79115 SL001	47W9116	14349.65
16 AWG (1.32mm²), 26x30 (26x0.25mm²) STRANDING, 0.011″ (0.28mm) INSULATION THICKNESS							
2	6.65	● 79116 SL005	47W9119	702.67	● 79116 SL001	47W9118	4554.93
3	6.98	● 79117 SL005	47W9121	1021.73	● 79117 SL001	47W9120	6623.81
4	10.06	● 79118 SL005	47W9123	1298.23	● 79118 SL001	47W9122	8443.60
5	8.13	● 79119 SL005	47W9125	1518.93	● 79119 SL001	47W9124	9736.36
7	8.76	● 79120 SL005	47W9127	1920.17	● 79120 SL001	47W9126	12227.75
14 AWG (2.08mm²), 41x30 (41x0.25mm²) STRANDING, 0.011″ (0.28mm) INSULATION THICKNESS							
2	7.47	● 79121 SL005	47W9129	910.39	● 79121 SL001	47W9128	5754.28
3	7.85	● 79122 SL005	47W9131	1312.49	● 79122 SL001	47W9130	8482.61
4	8.51	● 79123 SL005	47W9133	1656.39	● 79123 SL001	47W9132	10595.82
5	9.22	● 79124 SL005	47W9135	1822.03	● 79124 SL001	47W9134	11655.40
7	9.96	● 79125 SL005	47W9137	2520.64	● 79125 SL001	47W9136	14583.94
12 AWG (3.29mm²), 65x30 (65x0.25mm²) STRANDING, 0.012″ (0.30mm) INSULATION THICKNESS							
3	8.99	● 79126 SL005	47W9139	1730.78	● 79126 SL001	47W9138	11043.98
4	9.8	● 79127 SL005	47W9141	2191.06	● 79127 SL001	47W9140	13941.70

(208447)

Custom Cable Assemblies to your specs to mate with the complete line of connectors!
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(212562)

DATA/COMMUNICATION, CONTROL & INSTRUMENTATION CABLE

EcoFlex™ UNSHIELDED MULTICONDUCTOR CONTROL CABLE

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

eco gen™ From AlphaWire

EcoFlex™ Cable — Smaller, Lighter, Tougher, Recyclable, Flexible

Features
- Eco-friendly, non-halogenated and 100% recyclable
- Compact for moderate flex applications
- Rated for more than 1 million flex cycles
- Easier routing and handling
- Up to 32% smaller diameter than PVC, PE and XLPE
- Up to 55% lighter than PVC, PE and XLPE
- Handles temperature extreme to -40°C
- Up to 91% lower outgassing compared to PVC

Specifications
- Recyclable mPPE thermoplastic insulation and jacket
- Stranded tinned-copper conductors
- Bend radius: 5x static and flexing
- Voltage rating: 600V
- Temperature range: -40°C to 105°C static; -5°C to 105°C flexing
- Jacket thickness: 20-16 AWG 0.035″ (0.89mm), 14-10 AWG 0.032″ (0.81mm)
- Jacket color: Slate
- UL AWM 21819 (600V, 105°C)
- UL AWM 21492 (300V, 80°C)
- CSA AWM I/II A/B FT1
- Suitable for NFPA 79 applications
- Passes UL VW-1 flame test
- IEC 60332-2 flame behavior
- UL recognized, CSA certified, CE compliant
- RoHS, REACH, WEEE compliant

EcoFlex™ unshielded multiconductor control cable combines better performance with a minimum environmental impact. Contains no halogens, phthalates, or heavy metals enabling it to meet RoHS, REACH, and WEEE requirements for the elimination of hazardous substances and recyclability. Low 1.03 specific gravity of mPPE (Modified Polyphenylene Ether) is 25% to 40% lower than other insulation materials and along with the reduced wall thickness, the low specific gravity yields significant weight savings of up to 55%. Superior dielectric properties of mPPE make a reduced wall thickness possible, while maintaining the same electrical properties as a thicker PVC. **Sold in 100′ and 1000′ spools.**

28 AWG (0.09mm²), 7x36 (7x0.13mm²) STRANDING, 0.010″ (0.25mm) INSULATION THICKNESS

No.of Cond.	O.D. (mm)	100′ Spool Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	1000′ Spool Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
2	3.61	79061 SL005	55W4950	200.72	79061 SL001	55W4949	1084.24
3	3.73	79062 SL005	55W4952	260.93	79062 SL001	55W4951	1409.50
26 AWG (0.14mm²), 7x34 (7x0.16mm²) STRANDING, 0.010″ (0.25mm) INSULATION THICKNESS							
2	3.81	79056 SL005	55W4940	206.73	79056 SL001	55W4939	1116.76
3	3.96	79057 SL005	55W4942	268.75	79057 SL001	55W4941	1451.78
4	4.22	79058 SL005	55W4944	341.68	79058 SL001	55W4943	1803.43
6	4.8	79059 SL005	55W4946	486.90	79059 SL001	55W4945	2614.97
8	5.49	79060 SL005	55W4948	632.96	79060 SL001	55W4947	3399.46
24 AWG (0.24mm²), 19x36 (19x0.13mm²) STRANDING, 0.010″ (0.25mm) INSULATION THICKNESS							
2	4.11	79050 SL005	55W4928	215.54	79050 SL001	55W4927	1150.27
3	4.29	79051 SL005	55W4930	276.81	79051 SL001	55W4929	1495.34
4	4.6	79052 SL005	55W4932	351.92	79052 SL001	55W4931	1857.53
6	5.26	79053 SL005	55W4934	501.50	79053 SL001	55W4933	2693.42
8	6.05	79054 SL005	55W4936	651.95	79054 SL001	55W4935	3501.44
10	6.53	79055 SL005	55W4938	847.53	79055 SL001	55W4937	4551.88
22 AWG (0.38mm²), 19x34 (19x0.16mm²) STRANDING, 0.010″ (0.25mm) INSULATION THICKNESS							
2	4.47	79044 SL005	55W4916	309.36	79044 SL001	55W4914	1590.14
3	4.67	79045 SL005	55W4918	402.16	79045 SL001	55W4917	2067.17
4	5.03	79046 SL005	55W4920	471.63	79046 SL001	55W4919	2447.78
6	5.79	79047 SL005	55W4922	580.09	79047 SL001	55W4921	3434.52
8	6.71	79048 SL005	55W4924	714.35	79048 SL001	55W4923	4185.34
10	7.26	79049 SL005	55W4926	1066.82	79049 SL001	55W4925	5536.86
20 AWG (0.51mm²), 10x30 (10x0.25mm²) STRANDING, 0.010″ (0.25mm) INSULATION THICKNESS							
2	4.67	79001 SL005	47W9011	337.17	79001 SL001	47W9010	1855.50
3	4.9	79002 SL005	47W9013	421.47	79002 SL001	47W9012	2319.38
4	5.26	79003 SL005	47W9015	531.33	79003 SL001	47W9014	2818.46
5	5.69	79004 SL005	47W9017	697.38	79004 SL001	47W9016	4002.02
7	6.1	79005 SL005	47W9019	894.07	79005 SL001	47W9018	4446.69
9	7.52	79006 SL005	47W9021	995.16	79006 SL001	47W9020	5477.39
12	7.7	79007 SL005	47W9023	1333.64	79007 SL001	47W9022	7354.54
18	8.86	79008 SL005	47W9025	1787.24	79008 SL001	47W9024	11736.19
18 AWG (0.81mm²), 16x30 (16x0.25mm²) STRANDING, 0.010″ (0.25mm) INSULATION THICKNESS							
2	5.28	79010 SL005	47W9027	410.93	79010 SL001	47W9026	2081.61
3	5.56	79011 SL005	47W9029	573.64	79011 SL001	47W9028	3076.01
4	5.99	79012 SL005	47W9031	719.85	79012 SL001	47W9030	3940.45
5	6.5	79013 SL005	47W9033	843.57	79013 SL001	47W9032	4629.17
7	7.04	79014 SL005	47W9035	1158.96	79014 SL001	47W9034	6229.90
9	8.74	79015 SL005	47W9037	1405.70	79015 SL001	47W9036	7775.93
12	8.97	79016 SL005	47W9039	1566.51	79016 SL001	47W9038	9649.23
18	10.44	79017 SL005	47W9041	2504.16	79017 SL001	47W9040	13659.42
16 AWG (1.32mm²), 26x30 (26x0.25mm²) STRANDING, 0.011″ (0.28mm) INSULATION THICKNESS							
2	5.99	79019 SL005	47W9043	757.58	79019 SL001	47W9042	4136.01
3	6.32	79020 SL005	47W9045	833.34	79020 SL001	47W9044	4549.62
4	6.86	79021 SL005	47W9047	916.68	79021 SL001	47W9046	5004.58
5	7.47	79022 SL005	47W9049	1085.05	79022 SL001	47W9048	5973.59
7	8.1	79023 SL005	47W9051	1503.41	79023 SL001	47W9050	8329.12
9	10.16	79024 SL005	47W9053	1872.65	79024 SL001	47W9052	10236.52

➤ CONTINUED ➤

EcoFlex™ UNSHIELDED MULTICONDUCTOR CONTROL CABLE (CONT.)

16 AWG (1.32mm²), 26x30 (26x0.25mm²) STRANDING, 0.011″ (0.28mm) INSULATION THICKNESS

No.of Cond.	O.D. (mm)	100′ Spool Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	1000′ Spool Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
12	10.44	79025 SL005	47W9055	2415.70	79025 SL001	47W9054	13230.15
18	12.22	79026 SL005	47W9057	4080.76	79026 SL001	47W9056	22550.16
14 AWG (2.08mm²), 41x30 (41x0.25mm²) STRANDING, 0.011″ (0.28mm) INSULATION THICKNESS							
2	6.76	79028 SL005	47W9059	657.94	79028 SL001	47W9058	3545.49
3	7.14	79029 SL005	47W9061	950.13	79029 SL001	47W9060	5148.70
4	7.8	79030 SL005	47W9063	1202.80	79030 SL001	47W9062	6499.63
5	8.51	79031 SL005	47W9065	1444.58	79031 SL001	47W9064	7803.07
7	9.25	79032 SL005	47W9067	2048.49	79032 SL001	47W9066	11210.83
9	11.66	79033 SL005	47W9069	2568.86	79033 SL001	47W9068	13977.90
12	12.01	79034 SL005	47W9071	3323.64	79034 SL001	47W9070	18198.33
18	14.12	79035 SL005	47W9073	5375.25	79035 SL001	47W9072	29128.70
12 AWG (3.29mm²), 65x30 (65x0.25mm²) STRANDING, 0.012″ (0.30mm) INSULATION THICKNESS							
3	8.28	79037 SL005	47W9075	1235.18	79037 SL001	47W9074	6693.32
4	9.09	79038 SL005	47W9077	1563.65	79038 SL001	47W9076	8449.52
5	9.96	79039 SL005	47W9079	1877.97	79039 SL001	47W9078	10144.00
7	10.87	79040 SL005	47W9081	2663.04	79040 SL001	47W9080	14574.09
10 AWG (5.32mm²), 105x30 (105x0.25mm²) STRANDING, 0.012″ (0.30mm) INSULATION THICKNESS							
3	9.65	79041 SL005	47W9083	1605.72	79041 SL001	47W9082	8701.31
4	10.74	79042 SL005	47W9085	2032.73	79042 SL001	47W9084	10984.38
5	11.81	79043 SL005	47W9087	2441.34	79043 SL001	47W9086	13187.19

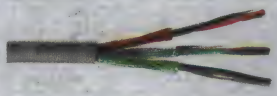
(208446)

INDIVIDUALLY SHIELDED PAIRED AUDIO, CONTROL, INSTRUMENTATION AND COMPUTER CABLE

RoHS Compliant Available

BELDEN
SENDING ALL THE RIGHT SIGNALS

8723



8777

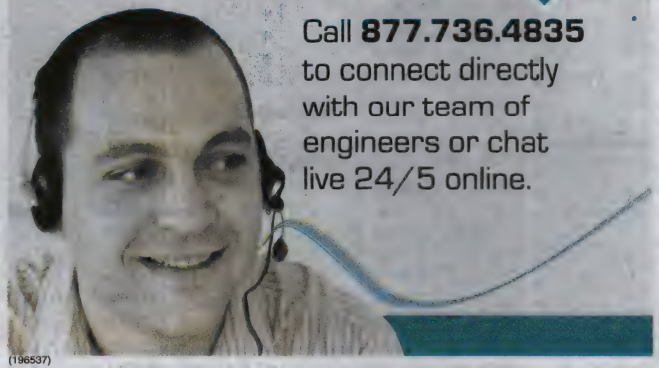
Polyproylene insulation. **Mfg. part no. 8777** tinned copper conductors, twisted pairs. Each pair individually shielded with Beldfoil® aluminum-polyester shield and stranded tinned copper drain wire. Overall chrome PVC jacket. 30V, 80°C. UL recognized 2919; NEC Type CM. **Mfg. part no. 8723** tinned copper conductors. Black and red under Beldfoil® aluminum-polyester shield, green and white under Beldfoil® aluminum-polyester shield. Stranded tinned common drain wire. Chrome PVC jacket. Pairs cabled on common axis to reduce diameter. 60°C. NEC Type CM. Capacitance for **mfg. part no. 8777** is 30pF/Ft.; for **mfg. part no. 8723** is 35pF/Ft.

22AWG (7 × 30) STRANDED CONDUCTORS

Mfg. Part No.	No. of Pairs	Nom. O.D. (In.)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
8723	2	0.168	87K2827	64.98	02F5311	273.43	87K2826	546.86
8777	3	0.273	02F5624	142.52	87K7281	599.36	02F6152	1198.72
8778	6	0.362	87K7282	283.40	02F6153	1192.23	87K1808	2219.07

(6087)

TECHNICAL SUPPORT HOTLINE



Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196537)

DATA/COMMUNICATION, CONTROL & INSTRUMENTATION CABLE

EcoCable® SUPRA-SHIELD® FOIL+BRAID SHIELDED MULTICONDUCTOR CONTROL CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

eco gen™ From AlphaWire

EcoCable® — Smaller, Lighter, Tougher, 100% Recyclable

Features

- Eco-friendly, non-halogenated and recyclable
- Up to 47% smaller diameter than PVC, PE and XLPE
- Up to 65% lighter than PVC, PE and XLPE
- Handles temperature extreme to -50°C
- Up to 87% lower outgassing compared to PVC
- Supra-Shield® provides excellent EMI protection

Specifications

- Recyclable mPPE thermoplastic insulation and jacket
- Stranded tinned-copper conductors
- Supra-Shield® — halogen-free aluminum mylar foil plus a tinned-copper braid
- Bend radius: 6x
- Voltage rating: 600V
- Temperature range: -50°C to 105°C
- Jacket thickness: 0.032″ (0.81mm)
- Jacket color: Slate
- UL AWM 21510 (600V, 105°C)
- CSA AWM I/II A/B FT1
- Suitable for NFPA 79 applications
- Passes UL VW-1 flame test
- IEC 60332-2 flame behavior
- UL recognized, CSA certified, CE compliant
- RoHS, REACH, WEEE compliant

EcoCable® Supra-Shield® foil+braid shielded multiconductor control cable combines better performance with a minimum environmental impact. Contains no halogens, phthalates,or heavy metals enabling it to meet RoHS, REACH, and WEEE requirements for the elimination of hazardous substances and recyclability. Low 1.03 specific gravity of mPPE (Modified Polyphenylene Ether) is 25% to 40% lower than other insulation materials and along with the reduced wall thickness, the low specific gravity yields significant weight savings of up to 65%. Superior dielectric properties of mPPE make a reduced wall thickness possible, while maintaining the same electrical properties as a thicker PVC. **Sold in 100′ and 1000′ spools.**

No.of Cond.	O.D. (mm)	100′ Spool Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	1000′ Spool Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
24 AWG (0.28mm²), 7x32 (7x0.2mm²) STRANDING, 0.010″ (0.25mm) INSULATION THICKNESS							
4	5.16	● 77201 SL005	47W8935	553.90	● 77201 SL001	47W8934	3267.20
7	5.82	● 77202 SL005	47W8937	955.28	● 77202 SL001	47W8936	5408.54
12	7.09	● 77203 SL005	47W8939	1281.99	● 77203 SL001	47W8938	7639.42
22 AWG (0.35mm²), 7x30 (7x0.25mm²) STRANDING, 0.010″ (0.25mm) INSULATION THICKNESS							
4	5.51	● 77204 SL005	47W8941	693.73	● 77204 SL001	47W8940	4414.53
7	6.27	● 77205 SL005	47W8943	969.90	● 77205 SL001	47W8942	6199.73
12	7.72	● 77206 SL005	47W8945	1499.91	● 77206 SL001	47W8944	9606.96
20 AWG (0.56mm²), 7x28 (7x0.32mm²) STRANDING, 0.010″ (0.25mm) INSULATION THICKNESS							
4	6.02	● 77207 SL005	47W8947	762.50	● 77207 SL001	47W8946	4941.05
5	6.45	● 77208 SL005	47W8949	975.61	● 77208 SL001	47W8948	5413.98
7	6.88	● 77209 SL005	47W8951	1160.66	● 77209 SL001	47W8950	7352.21
9	7.82	● 77210 SL005	47W8953	1405.42	● 77210 SL001	47W8952	8995.13
12	8.56	● 77211 SL005	47W8955	1740.74	● 77211 SL001	47W8954	11294.09
19	9.8	● 77212 SL005	47W8957	2478.81	● 77212 SL001	47W8956	16170.46
18 AWG (0.81mm²), 16x30 (16x0.25mm²) STRANDING, 0.010″ (0.25mm) INSULATION THICKNESS							
2	5.84	● 77213 SL005	47W8959	566.75	● 77213 SL001	47W8958	3637.64
3	6.12	● 77214 SL005	47W8961	820.55	● 77214 SL001	47W8960	5264.68
4	6.55	● 77215 SL005	47W8963	1037.21	● 77215 SL001	47W8962	6628.95
5	7.06	● 77216 SL005	47W8965	1217.31	● 77216 SL001	47W8964	7843.14
7	7.59	● 77217 SL005	47W8967	1522.10	● 77217 SL001	47W8966	9897.42
9	8.66	● 77218 SL005	47W8969	1866.09	● 77218 SL001	47W8968	11962.24
12	9.5	● 77219 SL005	47W8971	2232.76	● 77219 SL001	47W8970	14349.65
15	10.29	● 77220 SL005	47W8973	2687.66	● 77220 SL001	47W8972	17264.11
19	10.97	● 77221 SL005	47W8975	3162.84	● 77221 SL001	47W8974	19641.67
16 AWG (1.32mm²), 19x0.0117 (19x0.297mm²) STRANDING, 0.010″ (0.25mm) INSUL. THICKNESS							
2	6.45	● 77222 SL005	47W8977	702.67	● 77222 SL001	47W8976	4554.93
3	6.76	● 77223 SL005	47W8979	1021.73	● 77223 SL001	47W8978	6623.81
4	7.29	● 77224 SL005	47W8981	1298.23	● 77224 SL001	47W8980	8443.60
5	7.9	● 77225 SL005	47W8983	1518.93	● 77225 SL001	47W8982	9736.36
7	8.51	● 77226 SL005	47W8985	1920.17	● 77226 SL001	47W8984	12227.75
9	9.78	● 77227 SL005	47W8987	2374.03	● 77227 SL001	47W8986	15250.41
12	10.77	● 77228 SL005	47W8989	2891.49	● 77228 SL001	47W8988	18574.53
15	11.71	● 77229 SL005	47W8991	3435.45	● 77229 SL001	47W8990	22115.73
19	12.5	● 77230 SL005	47W8993	4128.57	● 77230 SL001	47W8992	26545.65
14 AWG (2.08mm²), 41x30 (41x0.25mm²) STRANDING, 0.011″ (0.28mm) INSULATION THICKNESS							
2	7.32	● 77231 SL005	47W8995	910.39	● 77231 SL001	47W8994	5754.28
3	7.7	● 77232 SL005	47W8997	1312.49	● 77232 SL001	47W8996	8482.61
4	8.36	● 77233 SL005	47W8999	1656.39	● 77233 SL001	47W8998	10595.82
7	9.8	● 77234 SL005	47W9001	2520.64	● 77234 SL001	47W9000	14583.94
9	11.35	● 77235 SL005	47W9003	3120.28	● 77235 SL001	47W9002	20030.67
12	12.57	● 77236 SL005	47W9005	3822.01	● 77236 SL001	47W9004	24502.40
15	13.69	● 77237 SL005	47W9007	4621.82	● 77237 SL001	47W9006	29375.95
25	17.22	● 77238 SL005	47W9009	7866.95	● 77238 SL001	47W9008	44151.25

(208445)

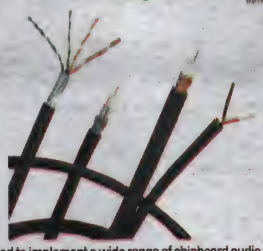
LOW-SMOKE, ZERO-HALOGEN (LSZH) SHIPBOARD AUDIO/VIDEO CABLE

RoHS Compliant Available

BELDEN — BENDING ALL THE RIGHT SIGNALS

Brilliance®

- Delivers high-end A/V quality
- American Bureau of Shipping (ABS) approval for use in demanding marine applications
- Ideal for private yachts and commerical ships
- Fast, easy installation — no special installing techniques or equipment required
- Exclusive 10-year manufacturer's warranty



LSZH series shipboard A/V cable is designed to implement a wide range of shipboard audio, video, multimedia, security, networking and control applications. All types feature copper conductors, black, low-smoke, zero-halogen (LSZH) jackets, and are fully-compliant with industry and global environmental standards including IEEE 45 and applicable sections of IEC 60092-376 for low-smoke and zero-halogen. **Sold in 1000′ spools.**

BRILLIANCE® AUDIO, CONTROL AND INSTRUMENTATION MULTICONDUCTOR PAIRED CABLE

Single- and multi-pair cable features tinned-copper conductors and Beldfoil® shielding — **mfg. part no. 9451SB** has 100% overall shield and **mfg. part nos. 8723SB** and **8777SB** have individually shielded pairs. **Mfg. part no. 1502SB** multimedia control cable has Beldfoil® shielded data pair and unshielded power pair.

Mfg. Part No.	No. of Pairs	AWG (Stranding)	Nom. O.D. (mm)	Stock No.	Price per Spool
● 9451SB 0101000	1	(7 x 30AWG)	4.064	66K6060	400.50
● 8723SB 0101000	2	(7 x 30AWG)	4.978	66K6057	706.19
● 8777SB 0101000	3	(7 x 30AWG)	6.934	66K6058	1073.82
● 1502SB 0101000	2	22 (7 x 30) Data 18 (16 x 30) Power	6.477	30M7012	797.88

AES/EBU DIGITAL AUDIO CABLE

Tinned-copper conductors, twisted pair with 100% overall Beldfoil® shield.

● 1350SB 0101000	1	(7 x 32AWG)	4.547	18M1295	552.39

HIGH-STRAND SPEAKER CABLE

Ideal for unshielded audio and control applications that demand high-flex and high-purity, this cable features tinned-copper conductors.

Mfg. Part No.	No. of Cond.	AWG (Stranding)	Nom. O.D. (mm)	Stock No.	Price per Spool
● 1314SB 0101000	2	(41 x 30AWG)	7.620	30M6944	603.43
● 1315SB 0101000	4	(41 x 30AWG)	8.611	30M6945	1132.12

BRILLIANCE® COAXIAL CABLE

Mfg. part no. 9116SB broadband CATV 75-ohm coax features copper-covered steel conductor and Duobond® II shield with aluminum braid. **Mfg. part nos. 1694SB** and **7731SB** low-loss, 75-ohm precision video coax for analog and digital applications feature bare copper conductor and Duofoil® shield with tinned-copper braid.

Mfg. Part No.	RG/U	AWG (Stranding)	Nom. O.D. (mm)	Stock No.	Price per Spool
● 9116SB 0101000	Series 6	(Solid)	6.960	66K6059	379.05
● 1694SB 0101000	RG6	(Solid)	6.960	66K6049	823.48
● 7731SB 0101000	RG11	(Solid)	10.160	30M7503	2022.20

DATATWIST® CAT 5e AND 6 TWISTED NONBONDED-PAIRED CABLE

Mfg. part no. 1300SB features bare-copper conductors with overall Beldfoil® shield and is rated TIA/EIA-568-B.2, Category 5e ScTP and RJ-45 compatible. **Mfg. part no. 1319SB** features unshielded bare-copper conductors with central rod filler and is rated TIA/EIA-568-B.2.1, Category 6 UTP.

Mfg. Part No.	No. of Pairs	AWG (Stranding)	Nom. O.D. (mm)	Stock No.	Price per Spool
● 1300SB 0101000	4	(Solid)	6.604	66K6046	640.45
● 1319SB 0101000	4	(Solid)	7.391	30M6949	726.95

(90493)

element14 COMMUNITY

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(196547)

EcoCable® FOIL SHIELDED MULTICONDUCTOR CONTROL CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

eco Gen™ From AlphaWire

EcoCable® — Smaller, Lighter, Tougher, 100% Recyclable

Features

- Eco-friendly, non-halogenated and recyclable
- Up to 47% smaller diameter than PVC, PE and XLPE
- Up to 65% lighter than PVC, PE and XLPE
- Handles temperature extreme to -50°C
- Up to 87% lower outgassing compared to PVC

Specifications

- Recyclable mPPE thermoplastic insulation and jacket
- Stranded tinned-copper conductors
- Halogen-free aluminum mylar foil shield for EMI protection
- Bend radius: 6x
- Voltage rating: 600V
- Temperature range: -50°C to 105°C
- Jacket thickness: 0.032″ (0.81mm)
- Jacket color: Slate
- UL AWM 21510 (600V, 105°C)
- CSA AWM I/IIABFT1
- Suitable for NFPA 79 applications
- Passes UL VW-1 flame test
- IEC 60332-2 flame behavior
- UL recognized, CSA certified, CE compliant
- RoHS, REACH, WEEE compliant

EcoCable® foil shielded multiconductor control cable combines better performance with a minimum environmental impact. Contains no halogens, phthalates,or heavy metals enabling it to meet RoHS, REACH, and WEEE requirements for the elimination of hazardous substances and recyclability. Low 1.03 specific gravity of mPPE (Modified Polyphenylene Ether) is 25% to 40% lower than other insulation materials and along with the reduced wall thickness, the low specific gravity yields significant weight savings of up to 65%. Superior dielectric properties of mPPE make a reduced wall thickness possible, while maintaining the same electrical properties as a thicker PVC. **Sold in 100′ and 1000′ spools.**

24 AWG (0.28mm²), 7x32 (7x0.2mm²) STRANDING, 0.010″ (0.25mm) INSULATION THICKNESS

No.of Cond.	O.D. (mm)	100′ Spool Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	1000′ Spool Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
2	6.48	77102 SL005	47W8845	194.67	77102 SL001	47W8844	1253.23
3	4.06	77103 SL005	47W8847	275.48	77103 SL001	47W8846	1804.64
4	4.24	77104 SL005	47W8849	325.16	77104 SL001	47W8848	2093.38
5	4.55	77105 SL005	47W8851	377.19	77105 SL001	47W8850	2428.33
7	4.88	77106 SL005	47W8853	535.96	77106 SL001	47W8852	3531.06
9	5.21	77107 SL005	47W8855	632.44	77107 SL001	47W8854	4166.67
12	5.92	77101 SL005	47W8843	727.31	77101 SL001	47W8842	4791.65
22 AWG (0.35mm²), 7x30 (7x0.25mm²) STRANDING, 0.010″ (0.25mm) INSULATION THICKNESS							
2	4.37	77109 SL005	47W8859	273.05	77109 SL001	47W8858	1542.95
3	4.57	77110 SL005	47W8861	341.82	77110 SL001	47W8860	2236.87
4	4.9	77111 SL005	47W8863	415.05	77111 SL001	47W8862	2603.81
5	5.28	77112 SL005	47W8865	477.91	77112 SL001	47W8864	2833.26
7	5.66	77113 SL005	47W8867	551.76	77113 SL001	47W8866	4750.08
9	6.48	77114 SL005	47W8869	702.24	77114 SL001	47W8868	4856.64
12	7.11	77108 SL005	47W8857	850.95	77108 SL001	47W8856	5606.23
20 AWG (0.56mm²), 7x28 (7x0.32mm²) STRANDING, 0.010″ (0.25mm) INSULATION THICKNESS							
3	5	77116 SL005	47W8873	400.59	77116 SL001	47W8872	2408.75
4	5.41	77117 SL005	47W8875	510.81	77117 SL001	47W8874	3421.72
5	5.84	77118 SL005	47W8877	561.22	77118 SL001	47W8876	3366.88
7	6.27	77119 SL005	47W8879	635.36	77119 SL001	47W8878	4415.13
9	7.21	77120 SL005	47W8881	810.92	77120 SL001	47W8880	5421.46
12	7.95	77115 SL005	47W8871	1229.77	77115 SL001	47W8870	7855.27
18 AWG (0.81mm²), 16x30 (16x0.25mm²) STRANDING, 0.010″ (0.25mm) INSULATION THICKNESS							
2	5.23	77124 SL005	47W8889	364.04	77124 SL001	47W8888	2305.91
3	5.51	77126 SL005	47W8893	524.59	77126 SL001	47W8892	3443.80
4	5.94	77127 SL005	47W8895	627.00	77127 SL001	47W8894	4101.83
5	6.45	77128 SL005	47W8897	735.68	77128 SL001	47W8896	4840.31
7	6.98	77129 SL005	47W8899	1003.20	77129 SL001	47W8898	7412.67
9	8.05	77130 SL005	47W8901	1220.56	77130 SL001	47W8900	8668.82
12	8.89	77121 SL005	47W8883	1434.63	77121 SL001	47W8882	9991.77
15	9.68	77122 SL005	47W8885	1956.24	77122 SL001	47W8884	12069.39
19	10.36	77123 SL005	47W8887	2390.96	77123 SL001	47W8886	17329.37
25	12.04	77125 SL005	47W8891	3093.20	77125 SL001	47W8890	19179.66
16 AWG (1.32mm²), 19x0.0117 (19x0.297mm²) STRANDING, 0.010″ (0.25mm) INSUL. THICKNESS							
2	5.84	77133 SL005	47W8907	496.04	77133 SL001	47W8906	3324.80
3	6.15	77134 SL005	47W8909	708.77	77134 SL001	47W8908	4617.25
4	6.68	77135 SL005	47W8911	888.01	77135 SL001	47W8910	6088.43
5	7.29	77136 SL005	47W8913	936.32	77136 SL001	47W8912	6374.86
7	7.9	77137 SL005	47W8915	1304.16	77137 SL001	47W8914	8915.54
9	9.17	77138 SL005	47W8917	1621.84	77138 SL001	47W8916	11036.43
12	10.16	77131 SL005	47W8903	2090.00	77131 SL001	47W8902	13962.01
15	11.1	77132 SL005	47W8905	2558.16	77132 SL001	47W8904	16512.57
14 AWG (2.08mm²), 41x30 (41x0.25mm²) STRANDING, 0.011″ (0.28mm) INSULATION THICKNESS							
2	6.71	77141 SL005	47W8923	609.46	77141 SL001	47W8922	4470.77
3	7.09	77142 SL005	47W8925	873.97	77142 SL001	47W8924	6196.82
4	7.75	77143 SL005	47W8927	1028.28	77143 SL001	47W8926	7629.73
5	8.46	77144 SL005	47W8929	1237.28	77144 SL001	47W8928	8830.25
7	9.19	77145 SL005	47W8931	1755.60	77145 SL001	47W8930	13245.38
9	10.74	77146 SL005	47W8933	2352.61	77146 SL001	47W8932	15680.28

➤ CONTINUED ➤

EcoCable® FOIL SHIELDED MULTICONDUCTOR CONTROL CABLE (CONT.)

14 AWG (2.08mm²), 41x30 (41x0.25mm²) STRANDING, 0.011″ (0.28mm) INSULATION THICKNESS

No.of Cond.	O.D. (mm)	100′ Spool Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	1000′ Spool Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
12	11.96	77139 SL005	47W8919	3199.10	77139 SL001	47W8918	20376.49
15	13.08	77140 SL005	47W8921	3784.00	77140 SL001	47W8920	23400.17

(208444)

EcoCable® UNSHIELDED MULTICONDUCTOR CONTROL CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

eco Gen™ From AlphaWire

EcoCable® — Smaller, Lighter, Tougher, 100% Recyclable

Features

- Eco-friendly, non-halogenated and recyclable
- Up to 47% smaller diameter than PVC, PE and XLPE
- Up to 65% lighter than PVC, PE and XLPE
- Handles temperature extreme to -50°C
- Up to 87% lower outgassing compared to PVC

Specifications

- Recyclable mPPE thermoplastic insulation and jacket
- Stranded tinned-copper conductors
- Bend radius: 6x
- Voltage rating: 600V
- Temperature range: -50°C to 105°C
- Jacket thickness: 0.032″ (0.81mm)
- Jacket color: Slate
- UL AWM 21510 (600V, 105°C)
- CSA AWM I/II A/B FT1
- Suitable for NFPA 79 applications
- Passes UL VW-1 flame test
- IEC 60332-2 flame behavior
- UL recognized, CSA certified, CE compliant
- RoHS, REACH, WEEE compliant

EcoCable® unshielded multiconductor control cable combines better performance with a minimum environmental impact. Contains no halogens, phthalates,or heavy metals enabling it to meet RoHS, REACH, and WEEE requirements for the elimination of hazardous substances and recyclability. Low 1.03 specific gravity of mPPE (Modified Polyphenylene Ether) is 25% to 40% lower than other insulation materials and along with the reduced wall thickness, the low specific gravity yields significant weight savings of up to 65%. Superior dielectric properties of mPPE make a reduced wall thickness possible, while maintaining the same electrical properties as a thicker PVC. **Sold in 100′ and 1000′ spools.**

24 AWG (0.28mm²), 7x32 (7x0.2mm²) STRANDING, 0.010″ (0.25mm) INSULATION THICKNESS

No.of Cond.	O.D. (mm)	100′ Spool Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	1000′ Spool Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
2	3.96	77001 SL005	47W8751	211.29	77001 SL001	47W8750	1035.10
4	4.44	77002 SL005	47W8753	328.57	77002 SL001	47W8752	1764.65
5	4.78	77003 SL005	47W8755	381.15	77003 SL001	47W8754	2046.99
7	5.11	77004 SL005	47W8757	571.71	77004 SL001	47W8756	3070.49
9	5.82	77005 SL005	47W8759	674.61	77005 SL001	47W8758	3623.18
19	7.32	77006 SL005	47W8761	1288.77	77006 SL001	47W8760	7284.97
22 AWG (0.35mm²), 7x30 (7x0.25mm²) STRANDING, 0.010″ (0.25mm) INSULATION THICKNESS							
2	4.27	77007 SL005	47W8763	288.83	77007 SL001	47W8762	1510.63
4	4.8	77008 SL005	47W8765	471.63	77008 SL001	47W8764	2447.78
5	5.18	77009 SL005	47W8767	533.32	77009 SL001	47W8766	2802.48
7	5.56	77010 SL005	47W8769	595.51	77010 SL001	47W8768	3863.23
9	6.38	77011 SL005	47W8771	761.74	77011 SL001	47W8770	4088.92
19	8.08	77012 SL005	47W8773	1610.97	77012 SL001	47W8772	8723.93
20 AWG (0.56mm²), 7x28 (7x0.32mm²) STRANDING, 0.010″ (0.25mm) INSULATION THICKNESS							
3	4.9	77013 SL005	47W8775	400.39	77013 SL001	47W8774	2203.41
4	5.31	77014 SL005	47W8777	504.77	77014 SL001	47W8776	2677.54
9	7.11	77015 SL005	47W8779	900.40	77015 SL001	47W8778	4955.73
12	7.85	77016 SL005	47W8781	1206.64	77016 SL001	47W8780	6654.11
15	8.53	77017 SL005	47W8783	1487.07	77017 SL001	47W8782	8085.31
19	9.09	77018 SL005	47W8785	1953.25	77018 SL001	47W8784	10595.73
25	10.57	77019 SL005	47W8787	2577.99	77019 SL001	47W8786	14105.58
18 AWG (0.81mm²), 16x30 (16x0.25mm²) STRANDING, 0.010″ (0.25mm) INSULATION THICKNESS							
2	5.13	77020 SL005	47W8789	390.39	77020 SL001	47W8788	1977.54
3	5.41	77021 SL005	47W8791	544.97	77021 SL001	47W8790	2922.21
4	5.84	77022 SL005	47W8793	683.85	77022 SL001	47W8792	3743.43
5	6.35	77023 SL005	47W8795	801.40	77023 SL001	47W8794	4397.71
7	6.88	77024 SL005	47W8797	1101.01	77024 SL001	47W8796	5918.40
9	7.95	77025 SL005	47W8799	1335.41	77025 SL001	47W8798	7387.13
12	8.79	77026 SL005	47W8801	1488.19	77026 SL001	47W8800	9166.76
15	9.58	77027 SL005	47W8803	2116.55	77027 SL001	47W8802	11478.47
19	10.26	77028 SL005	47W8805	2616.85	77028 SL001	47W8804	14274.09
25	11.94	77029 SL005	47W8807	3381.59	77029 SL001	47W8806	18430.40
16 AWG (1.32mm²), 19x0.0117 (19x0.297mm²) STRANDING, 0.010″ (0.25mm) INSUL. THICKNESS							
4	6.58	77030 SL005	47W8809	870.85	77030 SL001	47W8808	4754.35
5	7.19	77031 SL005	47W8811	1030.80	77031 SL001	47W8810	5674.90
7	7.8	77032 SL005	47W8813	1428.25	77032 SL001	47W8812	7912.67
9	9.07	77033 SL005	47W8815	1779.02	77033 SL001	47W8814	9724.69
12	10.06	77034 SL005	47W8817	2294.91	77034 SL001	47W8816	12568.65
15	11	77035 SL005	47W8819	2835.22	77035 SL001	47W8818	15397.56
19	11.79	77036 SL005	47W8821	4264.39	77036 SL001	47W8820	23564.93
25	13.77	77037 SL005	47W8823	4799.21	77037 SL001	47W8822	26104.07

➤ CONTINUED ➤

DATA/COMMUNICATION, CONTROL & INSTRUMENTATION CABLE

EcoCable® UNSHIELDED MULTICONDUCTOR CONTROL CABLE (CONT.)

14 AWG (2.08mm²), 41x30 (41x0.25mm²) STRANDING, 0.011″ (0.28mm) INSULATION THICKNESS

No.of Cond.	O.D. (mm)	100′ Spool			1000′ Spool		
		Mfg. Part No.	Stock No.	Price per Spool	Mfg. Part No.	Stock No.	Price per Spool
2	6.6	● 77038 SL005	47W8825	625.04	● 77038 SL001	47W8824	3368.21
3	6.98	● 77039 SL005	47W8827	902.63	● 77039 SL001	47W8826	4891.28
4	7.65	● 77040 SL005	47W8829	1142.66	● 77040 SL001	47W8828	6174.64
5	8.36	● 77041 SL005	47W8831	1372.35	● 77041 SL001	47W8830	7412.92
7	9.09	● 77042 SL005	47W8833	1946.06	● 77042 SL001	47W8832	10650.30
9	10.64	● 77043 SL005	47W8835	2440.42	● 77043 SL001	47W8834	13279.00
12	11.86	● 77044 SL005	47W8837	3157.46	● 77044 SL001	47W8836	17288.40
15	12.98	● 77045 SL005	47W8839	3928.07	● 77045 SL001	47W8838	21286.37
25	16.36	● 77046 SL005	47W8841	6645.35	● 77046 SL001	47W8840	36382.58

(208440)

3

MULTICONDUCTOR BRAID-SHIELDED COMMUNICATION AND INSTRUMENTATION CABLE—MIL-W-16878D TYPE B CONDUCTORS

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

VW-1

9966 9963

Stranded tinned copper conductors, PVC insulated. Clear nylon jacket, tinned copper braid shield. White PVC jacket. Nominal nylon thickness 0.003″, except **mfg. part nos. 9951** and **9952,** which are 0.004″ thick. Working voltage: 600V; 105°C. Passes VW-1 Vertical Wire Flame Test.

Mfg. Part No.	No. of Cond.	AWG (Strand-ing)	Nom. O.D.	100′ Spool		500′ Spool		1000′ Spool	
				Stock No.	Price per Spool	Stock No.	Price per Spool	Stock No.	Price per Spool
● 9951	1	16 (19×29)	0.143″	...	...	...	...	87K7457	2026.53
● 9966	2	22 (19×34)	0.176″	87K2855	170.98	87K7465	719.42	02F5383	1438.85
● 9952	2	16 (19×29)	0.250″	87K7458	308.08	02F5388	1295.95	02F5389	2591.89
● 9963	3	20 (19×32)	0.210″	87K6379	252.31	02F5410	1060.93	02F5411	2121.85

(6029)

MULTICONDUCTOR SHIELDED PLENUM AUDIO, CONTROL AND INSTRUMENTATION CABLE

UL CSA RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

83552

Control and instrumentation cable features tinned copper conductors, Teflon® insulation, 0.007″ thickness. Beldfoil® aluminum-polyester shield with 85% tinned copper braid shield overall. Red Teflon® jacket. Use in air plenum non-conduit. 200°C, UL listed, NEC article 800, type CMP, CSA certified.

22 AWG, 7 x 30 STRANDING

No. of Cond.	Nom. O.D.	Mfg. Part No.	500′ Spool		Mfg. Part No.	1000′ Spool	
			Stock No.	Price per Spool		Stock No.	Price per Spool
2	0.141″	● 83552 002500	87K1740	2002.48	● 83552 0021000	87K1739	4004.95
3	0.148″	● 83553 002500	04F5043	2177.90	● 83553 0021000	04F5044	4355.80
4	0.159″	● 83554 002500	04F5045	2491.38	● 83554 0021000	04F5046	4982.75
6	0.183″	● 83556 002500	87K1742	3148.09	● 83556 0021000	04F5049	6296.17
9	0.209″	● 83559 002500	04F5051	4322.76	● 83559-1000-2	04F5052	8645.51
20 AWG, 7 x 28 STRANDING							
2	0.187″	● 83602 002500	04F3207	1814.43	● 83602 0021000	87K1745	3628.85
4	0.178″	● 83604 002500	87K1746	2984.60	● 83602 0021000	87K1745	3628.85
6	0.207″	● 83606 002500	06M4007	4211.26	● 83606 0021000	04F3214	8422.51
18 AWG, 19 x 30 STRANDING							
2	0.175″	● 83652 002500	04F5069	2935.21	● 83652 0021000	04F5070	5870.41
3	0.184″	● 83653 002500	87K1749	3379.39	● 83653 0021000	04F5073	6758.77
4	0.199″	● 83654 002500	04F5022	3994.75	● 83654 0021000	87K1750	7989.49
6	0.234″	● 83656 002500	04F5025	4485.72	● 83656 0021000	04F5026	8971.44
12	0.308″	● 83662 002500	04F5031	8303.92	● 83662 0021000	04F5032	16607.83

(6052)

MULTICONDUCTOR SHIELDED PLENUM CONTROL CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

4 tinned copper conductors. Teflon insulation, 0.007″ thickness. 100% Beldfoil shield overall. Red transparent Teflon jacket, 0.015″ thickness. 200°C, UL Subject 13 Non-conduit. NEC Article 800, Type CMP. Nominal O. D.: 0.185″.

18 AWG; 19 x 30 STRANDING

Mfg. Part No.	100′ Spool		500′ Spool		1000′ Spool	
	Stock No.	Price per Spool	Stock No.	Price per Spool	Stock No.	Price per Spool
● 89418	03F2967	584.55	03F2968	2528.40	03F2969	5056.79

(6172)

NEW GENERATION® SHIELDED TWISTED PAIRED (STP) PLENUM-RATED CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

- Low capacitance: 34 pF/Ft. nom. between conductors
- Small outer diameter for easy routing through tight openings and better space use
- Highly-flexible, low-smoke Flammarest® PVC insulation and jacket for easier installation

Plenum-rated, individually shielded two and three twisted paired cable are ideal for commercial sound and audio applications such as intercoms and PA systems. Also used for instrumentation and control equipment, security systems, power-limited control systems and access control devices. 22 AWG stranded (7x30) tinned copper conductors with a common 24 AWG stranded tinned copper drain wire. Individually Beldfoil® aluminum/polyester foil shielded pairs for 100% coverage. Voltage rating: 300V. Temperature rating: +75°C max. Jacket color: white. Rated: UL NEC: CMP/CEC:CMP FT6.

Mfg. Part No.	No. of Pairs	Nom. O.D. (mm)	Stock No.	Spool Size (ft.)	Price Per Spool
● 1325A 009500	2	4.013	38M9831	500	210.89
● 1325A 0091000	2	4.013	38M9830	1000	421.78
● 1326A 009500	3	4.826	38M9833	500	527.48

(90616)

PAIRED UNSHIELDED AUDIO, CONTROL AND INSTRUMENTATION CABLE

UL RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

Tinned copper conductors, PVC insulated, twisted pairs. Unshielded chrome PVC jacket. UL recognized; NEC Type CM. Working voltage: 300V unless otherwise noted.

8205

22 AWG SOLID CONDUCTORS UL RECOGNIZED 2576, NEC TYPE MP/CM;*NEC CMG

Mfg. Part No.	No. of Pairs	Nom. O.D. (in.)	Nom. Cap. (pF/ft.)	100′ Spool		500′ Spool		1000′ Spool	
				Stock No.	Price per Spool	Stock No.	Price per Spool	Stock No.	Price per Spool
● 8740*	1	0.156	30	...	...	02F4122+	157.69	87K7270+	315.38
+Unreel packaging									
20 AWG (7 x 28) STRANDED CONDUCTORS *UL RECOGNIZED 2464, NEC TYPE CMG									
● 8205	1	0.18	24.5	02F4294	51.35	02F4295	212.10	88K1481	424.20
18 AWG (16 x 30) STRANDED CONDUCTORS *UL RECOGNIZED 2464, NEC TYPE CMG									
● 9740	1	0.21	25.5	...	...	87K7387	274.30	03F1598	548.59
18 AWG (7 x 26) STRANDED CONDUCTORS NEC TYPE CMG									
● 8461	1	0.234	22	87K1769	67.80	87K6284	285.28	02F5272	570.56
16 AWG (19 x 29) STRANDED CONDUCTORS UL RECOGNIZED 2598, NEC TYPE CMG									
● 8471	1	0.274	33	...	...	02F5273	508.88	02F5274	1017.76

(6035)

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(212563)

PAIRED, INDIVIDUALLY SHIELDED PLENUM CABLE FOR AUDIO, CONTROL, AND INSTRUMENTATION

Tinned copper, twisted pairs, individually shielded with Beldfoil® aluminum-polyester shield. 24 AWG stranded tinned copper drain wire. **Mfg. part no. 89182** is foamed FEP insulated, **mfg. part no. 82723** is Halar insulated, and **mfg. part nos. 88723** and **87723** are FEP insulated. Pairs cabled on a common axis to reduce diameter. NEC type CMP, CEC type CMP.

89182

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

22 AWG; 7 x 30 STRANDING

No. of Pairs	Nom. O.D.	Nom. Cap. (pF/ft.)	Jacket Color and Material	Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	Mfg. Part No.	500′ Spool Stock No.	500′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
1	0.307″	8.80	Black FEP	● 89182 010100*	04F5204	668.18	● 89182 010500*	04F5205	2835.73	● 89182 0101000*	04F5206	5671.46
2	0.148″	43.00	Natural Flamarrest®	...	...	...	● 82723 877U500	04F6174	685.26	● 82723 877U1000	04F6175	1370.51
2	0.148″	35.00	Red FEP	● 88723 002100	02F6077	259.88	● 88723 002500	02F6078	1123.90	● 88723 0021000	87K1819	2247.79
2	0.148″	35.00	Red PVDF	...	...	...	● 87723 002500	04F8045	944.84	...	...	...

*AWG stranded tinned copper drain wire
(60277)

PLENUM-RATED OVERALL SHIELDED PAIRED CABLE FOR AUDIO, CONTROL, INSTRUMENTATION AND COMPUTER EIA RS232 APPLICATIONS

NEC

FEP insulated, stranded tinned copper conductors, twisted pairs, Beldfoil® aluminum-polyester overall shield. 24 AWG stranded tinned copper drain wire. NEC Article 800, Type CMP and CSA certified. PCC FT4/FT6.

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

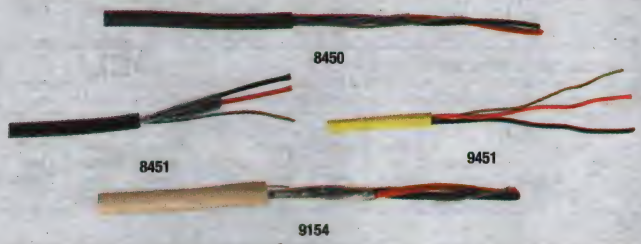
No. of Pairs	AWG (Stranding)	Nom. O.D. (in.)	Jacket Color and Material	Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	Mfg. Part No.	500′ Spool Stock No.	500′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
1	24 (7 X 32)	0.106	Red FEP	● 88641 002100	87K6341	255.49	● 88641 002500	87K1818	1104.96	● 88641 0021000	03F2960	2209.91
1	22 (7 X 30)	0.116	Red FEP	● 88761 002100	03F2961	205.46	● 88761 002500	03F2962	888.45	● 88761 0021000	03F2963	1776.89
1	18 (19 X 30)	0.154	Natural Flamarrest®	...	...	...	● 82760 877U500	04F6097	728.07	● 82760 877U1000	04F6098	1456.15
1	18 (19 X 30)	0.150	Red FEP	● 88760 002100	02F6071	213.87	● 88760 002500	02F6072	925.29	● 88760 0021000	02F6073	1722.22

(60276)

SINGLE PAIR BELDFOIL® SHIELDED AUDIO, CONTROL AND INSTRUMENTATION CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS



Feature tinned copper conductors, overall Beldfoil® shield, PVC outer jacket and tinned copper drain wire. **Mfg. part nos. 9451, 9461, 9460** feature jacket and shield bonded together for automatic stripping. **Mfg. part nos. 8450, 8451** have paper wraps. **Sold in 500′ and 1000′ spools.** Also available in 100′ spools; *go online or call.*

Mfg. Part No.	AWG Stranding	Nom. O.D. (In.)	Volt	Insulation††	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 1508A	24 (7 x 32)	0.131	300	PE	87K1124	209.51	...	...
● 8641•*	24 (7 x 32)	0.168	300	PE	87K7262	205.79	87K7261	411.57
● 8450	22 Solid	0.118	200	PP	...	...	87K7181	337.70
● 8451*	22 (7 x 30)	0.138	300	PP	02F4055	134.51	87K6283	266.25
● 9451*	22 (7 x 30)	0.135	300	PP	87K7347	137.11	87K7346	252.45
● 8761•*	22 (7 x 30)	0.175	300	PE	02F4247	269.02	87K7272	538.03
● 9462*	22 (7 x 30)	0.186	300	PVC	02F5369	303.45	87K7353	564.79
● 1266A	22 (7 x 30)	0.145	300	PP	...	...	05F1851	265.56
● 8762•*	20 (7 x 28)	0.204	300	PE	87K6339	340.99	87K7273	681.97
● 9154†*	20 (7 x 28)	0.198	300	PVC	03F1669	350.68	03F1670	701.35
● 8760•*	18 (16 x 30)	0.222	300	PE	87K6338	319.36	87K2828	638.72
● 9460•*	18 (16 x 30)	0.230	300	PE	03F1671	484.66	03F1672	902.09
● 8719□*	16 (19 x 29)	0.313	600	PE	87K7267	578.60	02F5340	1157.20
● 8720□**	14 (19 x 27)	0.355	600	PE	06M4015	745.12	02F6140	1490.23
● 8718□**	12 (19 x 25)	0.400	600	PE	02F5338	1242.40	...	...

•UL recognized 2092; □UL recognized 20253; †UL recognized 2464; *NEC Type CM; **NEC Type CL2;
††Insulation: PE = polyethylene, PP = polypropylene, PVC = polyvinyl chloride
(6038)

SINGLE PAIR OVERALL BRAID SHIELDED AUDIO, CONTROL AND INSTRUMENTATION CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

8441

Tinned copper 22 AWG (7 x 30) stranded conductors, PVC insulated twisted pair with tinned copper braid shield, 86% coverage, tinned copper drain wire and black PVC jacket. Nominal impedance: 45 ohm. Capacitance: 49pF/ft. Rated: AWM 2095; 300V, 80°C., NEC Type CM.

Mfg. Part No.	Nom. O.D. (In.)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 8441	0.210	87K2768	134.58	87K6281	559.23	87K7177	1101.32

(6009)

SINGLE PAIR SPIRAL-SHIELDED AUDIO, CONTROL, AND INSTRUMENTATION CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

Tinned copper conductors, PVC insulated, PVC jacket. Tinned copper spiral-wrapped shield. **Sold in 500′ and 1000′ spools.**

22AWG (7 x 30) STRANDED CONDUCTORS, UL RECOGNIZED 2095; 300V, 80°C. NEC TYPE CM

Nom. O.D. (In.)	Cap. pF/ft.	Mfg. Part No.	500′ Spool Stock No.	500′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
0.18	40	● 8737 060U500	87K7269	407.07	● 8740 060U1000	87K7270	315.38
20 AWG (7 x 28) STRANDED CONDUCTORS, UL RECOGNIZED 2095; 300V, 80°C. NEC TYPE CM							
0.199	47	● 8759 060U500	02F4168	490.81	● 8759 060U1000	02F4169	913.52

(6039)

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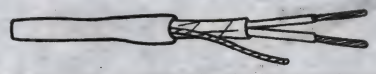
(212564)

FIRE/SECURITY CABLE • FLAT CABLE

SHIELDED MULTICONDUCTOR COMMUNICATION AND CONTROL CABLE

RoHS Compliant Available · General Cable · CAROL-BRAND



Applications include: broadcast and sound systems, computers, industrial equipment control, recording studios, and sound stages. Stranded tinned copper conductors with overall foil shield and stranded tinned copper drain wire. Chrome gray PVC jacket. Rated: 60°C; 300V.

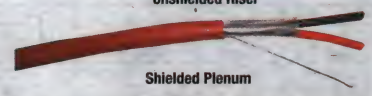
Mfg. Part No.	No. of Cond.	AWG	Stranding	1000′ Reel Stock. No	1000′ Reel Price per Reel
● C2538	2	14	19/.0147	03M4454	1382.71

(74208)

FIRE ALARM CABLE

UL · RoHS Compliant Available · BELDEN SENDING ALL THE RIGHT SIGNALS

Unshielded Riser



Shielded Plenum

New Generation® fire alarm cable protects against system failures. Ideally suited for high-reliability applications such as fire and security alarm systems, signal, and monitor/detection. Solid bare copper conductors, PVC insulation, red PVC jacket with ripcord, sequential footage marked. UL Type FPLR, NEC article 760, 75°C, California State Fire Marshall approved. UL listed. **Sold in spools of 1000′.**

UNSHIELDED RISER CABLE

Mfg. Part No.	No. of Cond.	AWG	Nom. O.D. (in.)	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 5120UL 0021000	2	14	0.213	87K1278	277.15
● 5320UL 0021000	2	18	0.151	83F7013	116.43
● 5322UL 0021000	4	18	0.176	87K1315	221.79
OVERALL SHIELDED RISER CABLE—BELDFOIL SHIELD APPLIED OVERALL WITH DRAIN WIRE					
● 5120FL 0021000	2	14	0.217	83F7042	323.34
● 5220FL 0021000	2	16	0.178	83F7015	221.79
● 5320FL 0021000	2	18	0.155	83F7016	144.46

UNSHIELDED PLENUM CABLE

Solid bare copper conductors. Flamarrest insulation, red Flammarrest jacket with ripcord, sequential footage marked. UL Type FPLP, NEC Article 760, 75°C, California State Fire Marshall approved. **Sold in spools of 1000′.**

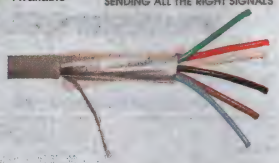
● 6120UL 0021000	2	14	0.205	19C4253	307.25
PLENUM OVERALL SHIELDED CABLE—BELDFOIL SHIELD APPLIED OVERALL WITH DRAIN WIRE					
● 6120FL 0021000	2	14	0.212	19C4244	349.46
● 6220FL 0021000	2	16	0.181	87K1427	262.96
● 6320FL 0021000	2	18	0.158	83F7018	184.77

(39576)

NEW GENERATION® SOUND, SPEAKER AND SECURITY/ ALARM CABLE

UL · RoHS Compliant Available · BELDEN SENDING ALL THE RIGHT SIGNALS

New Generation® unshielded and shielded riser and plenum rated cable provides dependability in your security and alarm systems. Applications include: background music, nurse call, security systems, intercom/PA systems, sound/audio, power limited controls. **Suffix -U** in mfg. part number indicates shrink wrap Belcoil® packaging.



UNSHIELDED AND SHIELDED RISER CABLE 5504FE

Unshielded and shielded riser cable CMR/CMG FT4 rated, NEC Article 800 except where noted with (*) CMR FPLR and CL3R dual rated, NEC Articles 725 and 760. Gray PVC jacket with rip cord. Sequential footage marked every two feet.

UNSHIELDED RISER CABLE

Mfg. Part No.	AWG	Strand-ing	No. of Cond.	Nom. O.D. (mm)	Nom. Cap. (pF/ ft.)	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 5100UE*	14	19 x 26AWG	2	5.944	31	06M3941	184.77	06M3940	369.53
● 5100UE-U*	14	19 x 26AWG	2	5.944	31	...	...	19C3645	369.53
● 5200UE	16	19 x 29AWG	2	4.674	33	19C3715	114.79	83F7019	229.58
● 5200UE-U	16	19 x 29AWG	2	4.674	33	19C3714	114.79	87K1284	229.58
● 5300UE	18	7 x 26AWG	2	4.089	30	87K6222	75.43	83F7020	150.86
● 5300UE-U	18	7 x 26AWG	2	4.013	30	19C3807	75.43	19C3804	150.86
OVERALL BELDFOIL® TAPE SHIELDED RISER CABLE — WITH DRAIN WIRE									
● 5200FE	16	19 x 29AWG	2	4.775	76	19C3712	135.38	83F7032	251.97
● 5300FE	18	7 x 26AWG	2	4.115	65	19C3802	92.21	83F7025	184.42
● 5300FE-U	18	7 x 26AWG	2	4.191	65	19C0238	92.21	19C3801	171.63
● 5301FE	18	7 x 26AWG	3	4.343	62	19C3836	130.10	83F7033	260.20
● 5301FE-U	18	7 x 26AWG	3	4.445	62	19C3835	121.08	19C3834	260.20
● 5302FE	18	7 x 26AWG	4	4.775	38	19C3842	141.60	83F7041	283.21

➤ CONTINUED ➤

NEW GENERATION® SOUND, SPEAKER AND SECURITY/ALARM CABLE (CONT.)

OVERALL BELDFOIL® TAPE SHIELDED RISER CABLE — WITH DRAIN WIRE

Mfg. Part No.	AWG	Strand-ing	No. of Cond.	Nom. O.D. (mm)	Nom. Cap. (pF/ ft.)	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 5304FE	18	7 x 26AWG	6	5.690	38	19C3873	199.82	19C3872	399.63
● 5304FE-U	18	7 x 26AWG	6	5.842	38	19C3871	199.82	...	...
● 5400FE	20	7 x 28AWG	2	3.683	56	19C3991	79.84	83F7045	159.68
● 5400FE-U	20	7 x 28AWG	2	3.683	56	87K1327	79.84	19C3989	159.68
● 5500FE	22	7 x 30AWG	2	3.200	46	01C8205	53.63	96B9557	107.26
● 5500FE-U	22	7 x 30AWG	2	3.302	46	19C4046	53.63	19C4045	99.82
● 5502FE	22	7 x 30AWG	4	3.683	31	19C4058	75.78	83F7038	151.55
● 5502FE-U	22	7 x 30AWG	4	3.835	31	19C4057	75.78	19C4056	151.55
● 5504FE	22	7 x 30AWG	6	4.369	31	...	...	19C4070	223.87
● 5504FE-U	22	7 x 30AWG	6	4.547	31	94B2037	111.94	19C4069	223.87

* Black jacket

UNSHIELDED AND SHIELDED PLENUM CABLE

Unshielded and shielded plenum cable features stranded bare copper conductors, Flamarrest® thermoplastic insulation and natural Flamarrest® thermoplastic jacket with ripcord. CMP FT6 rated, NEC Article 800. Sequential footage marked every two feet.

UNSHIELDED PLENUM CABLE

Mfg. Part No.	AWG	Strand-ing	No. of Cond.	Nom. O.D. (mm)	Nom. Cap. (pF/ ft.)	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 6200UE	16	19 x 29AWG	2	4.572	33	19C4286	118.18	87K1425	253.97
● 6301UE-U	18	7 x 26AWG	3	4.267	30	...	...	19C4385	240.47
● 6302UE	18	7 x 26AWG	4	4.724	30	19C4399	140.57	83F7030	281.13
● 6502UE	22	7 x 30AWG	4	3.632	25	19C4576	69.29	83F7036	138.58
OVERALL BELDFOIL® TAPE SHIELDED PLENUM CABLE — WITH DRAIN WIRE									
● 6200FE	16	19 x 29AWG	2	4.674	81.5	19C4283	153.54	50B9014	307.08
● 6300FE	18	7 x 26AWG	2	4.115	70	96B5588	101.81	83F7026	203.63
● 6301FE	18	7 x 26AWG	3	4.369	70	...	...	83F7044	252.94
● 6302FE	18	7 x 26AWG	4	4.775	42	19C4395	152.59	06M3977	305.18
● 6400FE	20	7 x 28AWG	2	3.683	56	...	...	19C4509	195.32
● 6502FE	22	7 x 30AWG	4	3.810	33	19C4570	77.77	83F7040	155.53
● 6504FE	22	7 x 30AWG	6	4.521	33	18C2586	111.50	04C5267	223.00

UNSHIELDED MULTICONDUCTOR CM RATED CABLE

Ideal for residential, light commercial and institutional applications. Stranded bare copper conductors, polypropylene insulation and beige PVC jacket. NEC CM/CEC CM FT1, NEC Article 800. Sequential footage marked every two feet.

Mfg. Part No.	AWG	Strand-ing	No. of Cond.	Nom. O.D. (mm)	Nom. Cap. (pF/ ft.)	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 5500UG	22	7 x 30AWG	2	2.896	20	...	...	73H4959	72.32

(39577)

3811 SERIES 0.050″ 26AWG COLOR-CODED FLAT CABLE – STRANDED, PVC

c UL us · RoHS Compliant Available · 3M

- 0.050″ centers permit mass termination to a broad line of IDC connectors
- 26 AWG wire allows for higher power levels
- Stranded wire provides flexibility and extended product life
- Zippable for branching or discrete termination
- Color coded for wire identification

Rainbow PVC insulation with 10-color repeat (Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White, Black) and clear carrier. Features 26 AWG, 7x34 stranded tinned-copper conductors. Impedance: 95Ω unbalanced. Insulation resistance: >1×109Ω/10′ (3m). Voltage rating: USA 300V; Canada 150V; EU <50V. Temperature rating: USA -20°C to +105°;C Canada -20°C to +80°C. Flammability rating: USA VW-1; Canada FT1. Available in additional widths (number of conductors); *go online or call.* **Sold in 100′ spools.**

Mfg. Part No.	No. of Conductors	Width (mm)	Stock No.	Price per Spool 1-4
● 3811/09	9	11.43	23C7917	43.07
● 3811/50 (100′)	50	63.50	03F6787	253.31

(202186)

CUSTOM ELECTRONIC ENCLOSURES

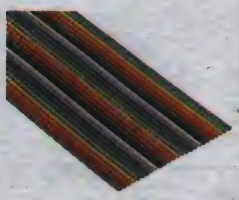
Standard modification or customization of electronic enclosures.

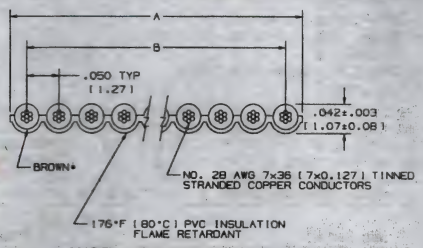
newark.com/custom-enclosures

(212568)

3302 SERIES 0.050″ 28 AWG COLOR-CODED FLAT CABLE – STRANDED, PVC

RoHS Compliant Available





- Easily Zippable Flat Cable
- 10-Color Repeat to Aid Wire Identification
- Stranded Tinned Copper Conductors
- 80°C Flame-Retardant PVC Insulation
- Voltage Rating: 300V
- Insulation Resistance: 1×10^9 Ohms/10′ (3)

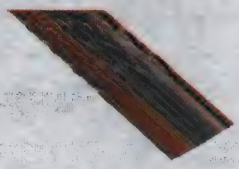
UL recognized, file no. E42769, style 2776; CSA certified. **Sold in 100′ spools.**

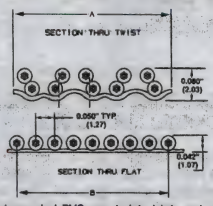
Mfg. Part No.	No. of Conductors	Dimensions A	Dimensions B	Stock No.	Price per Spool 1-4	Price per Spool 5-9
3302/09	9	0.450″	0.400″	03F5915	39.18	36.34
3302/10	10	0.500″	0.450″	03F5916	42.24	39.18
3302/14	14	0.700″	0.650″	03F5917	57.47	53.30
3302/16	16	0.800″	0.750″	03F5918	65.68	60.92
3302/20	20	1.000″	0.950″	03F5919	83.04	77.02
3302/25	25	1.250″	1.200″	84F1535	102.63	95.19
3302/26	26	1.300″	1.250″	03F5920	105.52	97.86
3302/34	34	1.700″	1.650″	03F5921	137.97	127.96
3302/40	40	2.000″	1.950″	03F5923	162.32	150.55
3302/50	50	2.500″	2.450″	03F5924	207.32	192.28
3302/60	60	3.000″	2.950″	03F5925	243.48	225.82
3302/64	64	3.200″	3.150″	50F3097	265.36	246.11

(8517)

1700 SERIES 0.050″ TWISTED PAIR FLAT CABLE — 28 AWG STRANDED

VW-1 RoHS Compliant Available





- Designed for mass termination
- Voltage Rating: 300V
- Temperature Rating: –20°C to +80°C
- Passes VW-1 Vertical Wire Flame Test

28 AWG 7×36 (7×0.127) stranded copper conductors, insulated with color-coded PVC, are twisted into pairs and laminated to a clear PVC film to form a planar cable. 18″ twisted pair sections are alternated with 2″ parallel sections where the conductors can be mass-terminated to a broad line of insulation displacement connectors. Polyvinyl chloride insulator. UL recognized, file no. E42769, style 20462. **Sold in 100′ spools.**

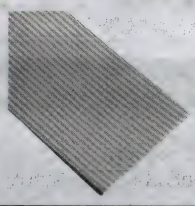
Mfg. Part No.	No. of Conductors	Dimensions A	Dimensions B	Stock No.	Price per Spool 1-4	Price per Spool 5-9
1700/10	10	0.50″	0.450″	87F4351	36.24	34.30
1700/14	14	0.70″	0.650″	87F4352	50.72	48.01
1700/16	16	0.80″	0.750″	87F4353	57.31	54.24
1700/20	20	1.00″	0.950″	87F4354	71.65	67.81
1700/26	26	1.30″	1.250″	87F4355	94.21	89.16
1700/34	34	1.70″	1.650″	87F4356	120.41	113.96
1700/40	40	2.00″	1.950″	87F4344	144.72	136.97
1700/50	50	2.50″	2.450″	55M7917	177.06	167.58
1700/64	64	3.20″	3.150″	87F4347	226.63	214.49

(8518)

3355 SERIES 0.050″ ROUND CONDUCTOR, STRANDED, 28 AWG, TPE FLAT CABLE

RoHS Compliant Available

- 28 AWG wire on 0.050″ wire spacing permits mass termination to IDC connectors
- Zippable for branching or discrete termination



Gray thermoplastic elastomer (TPE) insulation provides excellent transmission properties at an economically price. Round 28 AWG, 7x36 stranded tinned-copper conductors. Impedance: 117Ω unbalanced. Insulation resistance: $>1\times10^{10}$Ω/10′ (3m). Voltage rating: 300V. Temperature rating: -40°C to +105°C. Flammability rated: USA, UL horizontal. UL file no. E42769, style no. 20297. UL recognized. **Sold in 100′ spools.**

Mfg. Part No.	No. of Conductors	Width (in.)	Stock No.	Price per Spool 1-4
3355/10	10	0.50	65R4927	53.56
3355/14	14	0.70	62R1111	71.57
3355/15	15	0.75	62R1112	76.68
3355/16	16	0.80	62R1113	86.66

➤CONTINUED➤

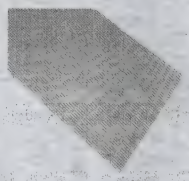
3355 SERIES 0.050″ ROUND CONDUCTOR, STRANDED, 28 AWG, TPE FLAT CABLE (CONT.)

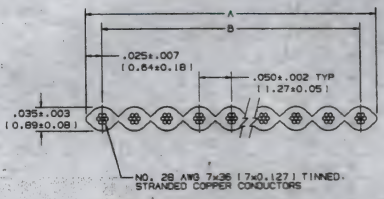
Mfg. Part No.	No. of Conductors	Width (in.)	Stock No.	Price per Spool 1-4
3355/20	20	1.00	65R4996	105.91
3355/25	25	1.25	65R4997	133.52
3355/26	26	1.30	65R4998	138.86
3355/30	30	1.50	62R1115	160.22
3355/34	34	1.70	62R1116	173.76
3355/40	40	2.00	62R1120	213.63
3355/50	50	2.50	62R1121	267.05
3355/60	60	3.00	62R1124	320.46
3355/64	64	3.20	62R1125	327.09

(90591)

3365 SERIES 0.050″ ROUND CONDUCTOR, STRANDED, 28 AWG, PVC FLAT CABLE

RoHS Compliant Available





- Easily Zippable
- Stranded Tinned Copper Conductors
- 105°C Flame-Retardant PVC Insulation — Gray
- Voltage Rating: 300V
- Insulation Resistance: $>1\times10^{10}$ Ohms/10′ (3)

28 AWG wire on 0.050″ centers permits mass termination to a broad line of IDC connectors. Recommended for termination to 3M™ Mini Delta Ribbon (MDR) plugs; *ordered separately on [68337]*. UL recognized, file no. E42769. **Sold in 100′ spools.**

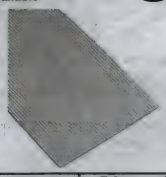
Mfg. Part No.	No. of Conductors	Dimensions (in.) A	Dimensions (in.) B	Stock No.	Price per Spool 1-4	Price per Spool 5+
3365/09	9	0.450	0.400	81H9423	21.10	19.82
3365/10	10	0.500	0.450	19M8487	23.45	22.01
3365/14	14	0.700	0.650	03F5906	26.26	24.65
3365/15	15	0.750	0.700	50F3092	28.14	26.41
3365/16	16	0.800	0.750	03F5907	30.89	28.99
3365/20	20	1.000	0.950	03F5908	38.61	36.23
3365/24	24	1.200	1.150	50F3093	45.02	42.26
3365/25	25	1.250	1.200	03F6789	46.90	44.02
3365/26	26	1.300	1.250	03F5909	50.19	47.09
3365/30	30	1.500	1.450	98F4402	56.92	53.42
3365/34	34	1.700	1.650	03F5910	65.61	61.59
3365/37	37	1.850	1.800	03F5911	70.20	65.89
3365/40	40	2.000	1.950	03F5912	77.19	72.45
3365/50	50	2.500	2.450	19M8488	95.41	89.55
3365/60	60	3.000	2.950	03F5914	111.27	104.43
3365/64	64	3.200	3.150	94F8850	120.25	112.85

(8520)

3625 SERIES ROUND CONDUCTOR FLAT CABLE

VW-1 RoHS Compliant Available

- 28 AWG stranded conductors on 1mm wire spacing
- Stranded wire provides flexibility and extended product life
- Zippable for branching or discrete termination



Gray PVC insulation. Insulation resistance: $>1\times10^{10}$ Ohms/10′ (3m). Voltage rating: 300V. Temperature rating: -20°C to +105°C. Flammability rated: USA, VW-1/Canada, FT1. Designed for mass termination to metric connectors. **Sold in 30m and 100m spools.**

Mfg. Part No.	No. of Conductors	Width (mm)	Spool Size (m)	Stock No.	Price per Spool 1-4
3625/12	12	12.00	30	69K6470	36.00
3625/20	20	20.00	100	69K6471	158.40
3625/20	20	20.00	30	69K6472	58.99
3625/26	26	26.00	100	69K6473	205.89
3625/26	26	26.00	30	69K6474	76.71
3625/44	44	44.00	30	69K6476	126.84
3625/50	50	50.00	30	69K6478	145.41

(85856)

FLAT CABLE

3659 SERIES 0.050″ ROUND, SHIELDED/ JACKETED FLAT CABLE

UL NEC RoHS Compliant Available 3M

- Round construction permits easier routing
- 28 AWG 7×36 stranded wire on 0.050″ pitch permits mass termination of IDC connectors
- Primary flat cable is zippable for branching or discrete terminations
- Dual shielding provides 35db average shielding effectiveness
- PVC insulation provides excellent flexibility
- UL listed, UR recognized

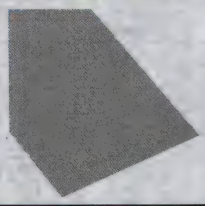
3659 series cable features a round, black PVC outer jacket over gray PVC insulated flat cable that is folded, wrapped with an aluminum/polyester film foil and enclosed in a round, 90% tinned-copper braid for EMI/ESD protection. Continuous split/bonded, tinned copper conductors allow for mass termination to IDC connectors. Folded construction permits mass termination every 2.4″ (61). Meets external wiring requirements of National Electrical Code, Article 725 (CL2). UL file no. E118773, Power Limited Circuit Cable CL2 (or AWM) Style 20267. Temperature rating: –20°C to +105°C. **Sold in 100′ spools.**

Mfg. Part No.	No. of Conductors	Outer Dia. (in.)	Flat Width (in.)	Stock No.	Price per Spool 1-4	Price per Spool 5+
● 3659/09	9	0.30	0.400	03F5940	132.66	122.26
● 3659/10	10	0.30	0.450	03F5941	124.27	114.53
● 3659/15	15	0.31	0.700	03F5942	139.48	128.55
● 3659/16	16	0.31	0.750	66F6113	147.52	135.97
● 3659/20	20	0.34	0.950	03F5943	150.35	138.58
● 3659/25	25	0.37	1.200	03F5945	166.78	153.71
● 3659/26	26	0.37	1.250	03F5946	171.97	158.49
● 3659/34	34	0.41	1.650	03F5947	192.46	177.37
● 3659/37	37	0.43	1.800	03F5949	209.43	193.01
● 3659/40	40	0.43	1.950	03F5950	210.23	193.75
● 3659/50	50	0.48	2.450	03F5951	250.53	230.91
● 3659/60	60	0.51	2.950	03F5952	299.46	276.00

(8521)

3749 SERIES 0.025″ (0.64), ROUND CONDUCTOR, SOLID, 30 AWG TPE FLAT CABLE

RoHS Compliant Available 3M



- Close spacing permits higher signal density
- Conductors with TPE insulation have resistance $>1\times10^{10}$ ohms/10′
- Voltage rating: 150V
- Impedance: 85 ohms
- Temperature rating: +105°C

UL recognized. **Sold in 100′ spools.**

Mfg. Part No.	No. of Conductors	Width (in.)	Stock No.	Price per Spool 1-4	Price per Spool 5-9	Price per Spool 10+
● 3749/20	20	0.500	95F2942	61.84	54.04	46.81
● 3749/40	40	1.000	62R1217	123.49	107.91	93.49
● 3749/50	50	1.250	95F2945	147.69	129.05	111.80
● 3749/68	68	1.700	19M8494	200.61	175.30	151.86
● 3749/80	80	2.000	19M8495	246.65	215.53	186.71

(8519)

3750 SERIES TWISTED PAIR SHIELDED DISCRETE ROUND CABLE

UL RoHS Compliant Available 3M

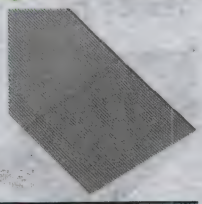
3750 series cable comprises 26 AWG 7x4″ (7x 0.160) tinned stranded copper wire, which can be terminated to a broad line of IDC connectors and carry higher power levels in long I/O harnesses. The twisted pairs reduce crosstalk for balanced drive applications or can be used as discrete wires for unbalanced drive applications. Dual shields consisting of 90% tinned copper braid and aluminized polyester wrap provide excellent EMI/ESD protection and aid in the compliance of FCC requirements. Voltage rating: 300V. Temperature rating: –20°C to +80°C. UL listed, file no. E118772, style 2464. **Sold in 100′ spools.**

Mfg. Part No.	No. of Conductors (Pairs)	Diameter (In.)	Stock No.	Price per Spool 1-4	Price per Spool 5-9
● 3750/10 (100′)	10 (5)	0.26	87F4332	127.42	118.63
● 3750/26 (100′)	26 (13)	0.37	87F4334	291.64	271.53

(8433)

3756 SERIES 0.025″ ROUND CONDUCTOR, STRANDED, 30 AWG, TPE FLAT CABLE

RoHS Compliant Available 3M



- 0.025″ wire spacing increases signal density
- Designed for flexibility and mass termination to IDC connectors
- Meets SCSI-3 characteristic impedance requirements

Gray thermoplastic elastomer (TPE) insulation provides excellent transmission properties. Round 30 AWG, 7x38 stranded tinned-copper conductors. Insulation resistance: $>1\times10^{10}\Omega/10'$ (3m). Impedance: 82Ω unbalanced/138Ω balanced. Voltage rating: 150V. Temperature rating: -40°C to +105°C. Flammability rated: USA, VW-1; Canada, FT1. UL file no. E42769, style no. 20297. UL recognized. Other sizes available; *go online or call.* **Sold in 100′ spools.**

Mfg. Part No.	No. of Conductors	Width (in.)	Stock No.	Price per Spool 1-4
● 3756/40	40	1.00	62R1237	123.91
● 3756/50	50	1.25	62R1238	152.55

(90601)

3758 SERIES 0.050″ ROUND, JACKETED FLAT CABLE

UL NEC c RoHS Compliant Available 3M

- Round construction permits easier routing
- 26 AWG 7×34 stranded wire on 0.050″ centers permits mass termination of IDC connectors
- Primary flat cable is zippable for branching or discrete terminations
- PVC insulation provides excellent flexibility
- UL listed, UR recognized

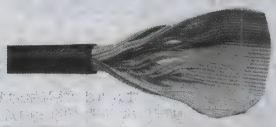
3758 series cable features a round, black PVC outer jacket over gray PVC insulated flat cable. Continuous split/bonded wires allow for mass termination to a broad line of IDC connectors. Folded construction permits mass termination every 2.4″ (61). Meets external wiring requirements of National Electrical Code, Article 725 (CL2). UL file no. E118773, Power Limited Circuit Cable CL2 (or AWM) Style 20267). Temperature rating: –20°C to +80°C. **Sold in 275′ spools.** Splice-free spools are available; *go online or call.*

Mfg. Part No.	No. of Conductors	Outer Dia. (in.)	Flat Width (in.)	Stock No.	Price per Spool 1-4	Price per Spool 5-9
● 3758/09	9	0.26	0.40	75M2322	109.90	104.51
● 3758/24	24	0.33	1.15	75M2334	284.98	270.99
● 3758/40	40	0.39	1.95	75M2344	397.04	377.55
● 3758/50	50	0.44	2.45	75M2346	485.03	461.23
● 3758/60	60	0.47	2.95	75M2348	495.25	470.94

(105743)

3759 SERIES 0.050″ ROUND, JACKETED FLAT CABLE

UL NEC c RoHS Compliant Available 3M



- Round construction permits easier routing
- 28 AWG 7×36 stranded wire on 0.050″ centers permits mass termination of IDC connectors
- Primary flat cable is zippable for branching or discrete terminations
- PVC insulation provides excellent flexibility
- UL listed, UR recognized

3759 series cable features a round, black PVC outer jacket over gray PVC insulated flat cable. Continuous split/bonded, tinned copper conductors allow for mass termination to IDC connectors. Folded construction permits mass termination every 2.4″ (61). Meets external wiring requirements of National Electrical Code, Article 725 (CL2). UL file no. E118773, Power Limited Circuit Cable CL2 (or AWM) Style 20267). Temperature rating: –20°C to +80°C. **Sold in 100′ spools.**

Mfg. Part No.	No. of Conductors	Outer Dia. (in.)	Flat Width (in.)	Stock No.	Price per Spool 1-4	Price per Spool 5-9
● 3759/14	14	0.27	0.65	92F8530	120.78	104.83
● 3759/20	20	0.30	0.95	18C3949	148.75	129.10
● 3759/26	26	0.33	1.25	95F7317	169.93	147.48
● 3759/30	30	0.37	1.45	22C6080	174.69	151.62
● 3759/34	34	0.37	1.65	98F6947	175.99	152.74
● 3759/37	37	0.38	1.80	94F8897	200.14	173.71
● 3759/40	40	0.39	1.95	95F7319	198.41	172.21
● 3759/50	50	0.46	2.45	04F8891	202.85	176.06
● 3759/60	60	0.47	2.95	95F7320	258.81	224.63
● 3759/64	64	0.50	3.15	18C3918	338.82	307.52

(8441)

CUSTOM PANEL METERS

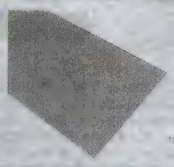
Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

(212570)

3801 SERIES ROUND CONDUCTOR FLAT CABLE

RoHS Compliant Available



- 26 AWG wire allows for higher power levels
- 7x34 stranded tinned copper round conductors
- 0.050″ wire spacing permits mass IDC termination
- Zippable for branching or discrete termination

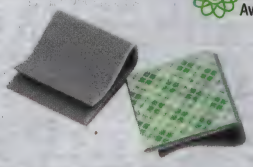
Gray PVC insulation. Insulation resistance: >1×10^{10} Ohms/10′ (3m). Voltage rating: 300V. Temperature rating: -20°C to +105°C. Flamability rated: USA, VW-1/Canada, FT1. UL file no. E42769, style no. 2651. UL recognized. **Sold in 100′ spools.**

Mfg. Part No.	No. of Conductors	Width (in.)	Stock No.	Price per Spool 1-4
3801/10 (100 FT)	10	0.500	68K1972	35.12
3801/20 (100 FT)	20	1.000	68K1973	71.04
3801/26 (100 FT)	26	1.300	68K1974	92.35
3801/34 (100 FT)	34	1.700	68K1975	119.03
3801/40	40	2.000	68K1976	140.04
3801/50 (100 FT)	50	2.500	68K1977	173.55
3801/64 (100 FT)	64	3.200	68K1978	214.41

(85851)

CABLE CLIPS

RoHS Compliant Available



3484-1000

3535-0000

FLAT RIBBON CABLE CLIP

Mfg. part no. 3484-1000 cable clip organizes cable routing by clamping and retaining up to six layers of flat cable. Constructed of gray PVC with urethane foam tape backing. Flammability rating: UL94V-0. Maximum operating temperature: 65°C. **Sold in packages of 100.**

Mfg. Part No.	Description	Stock No.	Price per Package 1-4	5-9
3484-1000	Flat Ribbon Cable Clip	94F1485	19.83	17.29

DRAIN WIRE SPRING CLIP

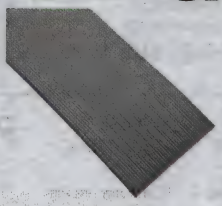
Mfg. part no. 3535-0000 drain wire spring clips are used to attach a drain wire to the shield of a round cable. The drain wire can then be routed to a metal cabinet or through the connector body to the inside of the cabinet. One size spring clip fits all sizes of cable; 9—64 conductor, while providing the same force for each cable diameter. Constructed of stainless steel. **Sold individually.**

Mfg Part No.	Description	Stock No.	Price Each 1-4	5-9
3535-0000	Drain Wire Spring Clip	94F7959	0.91	0.80

(8523)

HF319 SERIES HIGH FLEX LIFE HALOGEN-FREE RIBBON CABLE

RoHS Compliant Available



Features:

- Low Smoke Zero Halogen (LSZH) polyolefin insulation
- Flex life of 25 million cycles at 3/4 inch radius
- 19 strands of high-strength silver-plated copper provide exceptionally long flex life
- 28 AWG stranded wire on 0.050″ wire spacing permits mass termination to 0.100″ IDC connectors
- Zippable for branching or discrete termination
- Voltage rating: 300V (USA), 150V (Canada)
- Operating temperature range: -40°C to 105°C
- Color: dark grey

Applications:

- Internal (inside-the-box) confined space applications requiring multiple, repetitive movements
- Automated consumer products, such as vending machines
- Industrial production equipment with moving parts / robotics
- Transportation applications such as train, automotive, mass transit
- Military / Aerospace
- General electronics applications where safety or environmental policies limit halogen content

HF319 series High Flex Life ribbon cable constructed of 28 AWG 19×40 stranded highly-flexible silver-plated copper conductors and a low smoke zero halogen polyolefin (PO) insulation that meets proposed regulatory requirements and safety guidelines IEC 61034-2:2005 (low smoke) and NF X 70-100-2:2006 (low toxicity of combustion gases), reducing the risk to firefighters, and reducing the soot and corrosion damage to nearby equipment. **Sold in 100′ and 300′ spools.**

Mfg. Part No.	No. of Conductors	Width (in.)	Spool Size (Ft.)	Stock No.	Price per Spool 1-24
HF319/06	6	0.3	300	62W5761	579.75
HF319/06SF*	6	0.3	300	62W5762	616.13
HF319/10	10	0.5	300	62W5763	929.09
HF319/16	16	0.8	300	62W5764	1486.54
HF319/16SF*	16	0.8	300	62W5765	1643.01
HF319/20	20	1.0	300	62W5766	1858.17
HF319/20SF*	20	1.0	100	62W5767	717.19
HF319/24	24	1.2	100	62W5768	782.39
HF319/30	30	1.5	100	62W5769	978.00

➤ CONTINUED ➤

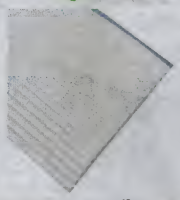
HF319 SERIES HIGH FLEX LIFE HALOGEN-FREE RIBBON CABLE (CONT.)

Mfg. Part No.	No. of Conductors	Width (in.)	Spool Size (Ft.)	Stock No.	Price per Spool 1-24
HF319/34	34	1.7	300	62W5770	3158.89
HF319/40	40	2.0	100	62W5771	1303.97
HF319/50	50	2.5	100	62W5772	1629.97

*Splice-free version
(209277)

HF365 SERIES ROUND CONDUCTOR FLAT CABLE

RoHS Compliant Available



- Low smoke zero halogen (LSZH) insulation
- Low smoke (IEC 61034-2:2005) and low toxicity of combustion gases
- 28 AWG 7x36 stranded tinned copper wire on 0.050″ centers permits mass termination to broad line of IDC connectors
- Zippable for branching or discrete terminations
- Operating temperature range: -40°C to 10°C

Light gray halogen-free polyolefin insulation (jacket). Insulation resistance: >1×10^{10} Ohms/10′ (3m). Impedance: 100 ohms unbalanced/168 ohms balanced. Voltage rating: 300V. Flammability rated: UL horizontal. UL file no. E42769, style no. 21682. UL recognized. **NOTE:** Mfg. part nos. with **SF suffix** are splice free; **NS suffix** have no stripe. **Sold in 100′ or 300′ spools.**

Mfg. Part No.	No. of Conductors	Width (mm)	Spool Lgth (Ft.)	Stock No.	Price per Spool 1-4
HF365/04	4	5.08	100	99R8431	19.84
HF365/04SF	4	5.08	100	99R8432	22.11
HF365/06	6	7.62	100	99R8433	24.90
HF365/06SF	6	7.62	100	99R8434	31.13
HF365/08	8	10.16	100	99R8435	33.73
HF365/08SF	8	10.16	100	99R8436	37.09
HF365/09	9	11.43	100	99R8437	34.36
HF365/09SF	9	11.43	100	99R8438	40.09
HF365/10	10	12.7	100	99R8439	36.94
HF365/10	10	12.7	300	99R8440	108.54
HF365/10SF	10	12.7	100	99R8441	43.07
HF365/11	11	13.97	100	99R8442	41.77
HF365/11SF	11	13.97	100	99R8443	43.34
HF365/12	12	15.24	100	99R8444	41.97
HF365/12SF	12	15.24	100	99R8445	46.18
HF365/14	14	17.78	100	99R8446	49.84
HF365/14	14	17.78	300	99R8447	132.17
HF365/14NS	14	17.78	300	99R8448	138.78
HF365/14SF	14	17.78	100	99R8449	54.82
HF365/14SF	14	17.78	300	99R8450	145.39
HF365/15	15	19.05	100	99R8451	49.53
HF365/15SF	15	19.05	100	99R8452	54.51
HF365/16	16	20.32	100	99R8453	55.24
HF365/16	16	20.32	300	99R8454	153.11
HF365/16SF	16	20.32	100	99R8455	60.76
HF365/18	18	22.88	100	99R8456	60.59
HF365/18SF	18	22.88	100	99R8457	62.86
HF365/20	20	25.4	100	99R8458	65.95
HF365/20	20	25.4	300	99R8459	182.80
HF365/20SF	20	25.4	100	99R8460	72.57
HF365/24	24	30.48	100	99R8461	79.50
HF365/24	24	30.48	300	99R8462	210.87
HF365/24SF	24	30.48	100	99R8463	88.25
HF365/25	25	31.75	100	99R8464	78.24
HF365/25SF	25	31.75	100	99R8465	92.05
HF365/26	26	33.02	100	99R8466	81.45
HF365/26	26	33.02	300	99R8467	228.98
HF365/26SF	26	33.02	100	99R8468	90.41
HF365/30	30	38.1	100	99R8469	99.69
HF365/30SF	30	38.1	100	99R8470	109.10
HF365/34	34	43.18	100	99R8471	106.65
HF365/34SF	34	43.18	100	99R8472	125.39
HF365/36	36	45.72	100	99R8473	118.04
HF365/36SF	36	45.72	100	99R8474	132.80
HF365/37	37	46.99	100	99R8475	116.09
HF365/37SF	37	46.99	100	99R8476	130.62
HF365/40	40	50.8	100	99R8477	125.48
HF365/40SF	40	50.8	100	99R8478	141.18
HF365/44	44	50.8	100	99R8479	138.08
HF365/44SF	44	50.8	100	99R8480	156.73
HF365/50	50	63.5	100	99R8481	164.10
HF365/50	50	63.5	300	99R8482	441.53

➤ CONTINUED ➤

FLAT CABLE

HF365 SERIES ROUND CONDUCTOR FLAT CABLE (CONT.)

Mfg. Part No.	No. of Conductors	Width (mm)	Spool Lgth (Ft.)	Stock No.	Price per Spool 1-4
● HF365/50SF	50	63.5	100	99R8483	186.28
● HF365/60	60	76.2	100	99R8484	188.16
● HF365/60SF	60	76.2	100	99R8485	216.39
● HF365/64	64	81.28	100	99R8486	200.67
● HF365/64SF	64	81.28	100	99R8487	232.76

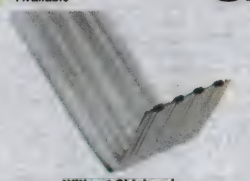
(192102)

SL8800 SERIES TWIN-AXIAL FLAT RIBBON CABLE

RoHS Compliant Available

3M

With Sideband



Without Sideband

Flat, Fast, Flexible, Foldable

- Ultra-low-profile design makes it more routable, space-efficient and easier to terminate
- Extremely thin — only 0.88mm thick
- Easily bent and folded with little to no impact on electrical performance
- Up to 25Gbps
- Four 100 Ohm differential pairs, two drain wires
- Bi-directional SAS channels with or without sideband
- 30 AWG copper conductors — silver or tin plated
- 0.79mm within-pair pitch
- Solid polyolefin insulation

SL8800 series 3M™ flat, high-speed, high signal density, four-pair twin axial ribbon cable is ideally suited for high data-rate internal cabling applications, such as, paddle card terminated cable assemblies, servers, storage systems, network switches and routers, and high-performance computing. The unique ribbon structure is comprised of four pairs of silver- or tin-plated 30 AWG solid copper conductors, with two 32 AWG 7x40 stranded tin-plated copper outside drain wires. Cable with sideband have an additional four 30 AWG solid tin-plated copper conductors.The longitudinal shielded construction provides resonance-free attenuation up to 20 GHz and can support transmission speeds from 1 Gbps to 25 Gbps and beyond. Rated UL AWM 21008 (150V, 80°C), file number E42769. **Sold in 500′ spools.**

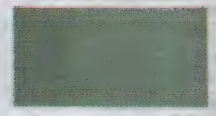
Mfg. Part No.	Conductor Plating	Sideband	Attenuation (@ 5GHz)	Stock No.	Price per Spool 1-49	50+
● SL8801/12-10DA5-00	Silver	Yes	3db/m	67W3203	765.64	711.25
● SL8801/12-111A5-00	Tin	Yes	4db/m	32T8738	603.79	560.90
● SL8802/08-20DN5-00	Silver	No	3db/m	75T8249	880.55	739.66
● SL8802/08-211N5-00	Tin	No	4db/m	32T8740	433.38	402.60

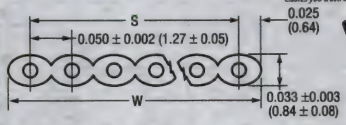
(194759)

3580 SERIES 0.050″ CENTER FLAT RIBBON CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.





VW-1

- Ideal for use with insulation displacement connectors

Combining economy with reliable performance, this flat cable is designed for PC board-to-PC board interconnections where space is a premium; flexible interconnects within computer and business machine cabinets and areas where flexibility is needed, such as drawer-enclosed electronic circuitry. 28 AWG, 7 x 36 stranded tinned copper conductors. Slate PVC insulation has red stripe on leading edge. Rated: 105°C, 300V. Capacitance: 14pF/ft. nominal at 1MHz. Impedance: 105 ohm nominal. Resists acids, alkalis, oil, moisture, solvents, ozone, and fungus. Passes VW-1 flame test (UL listed internal only). UL recognized style 2651. **Sold in spools of 100′.**

Mfg. Part No.	No. of Cond.	Nom. Width (Dim. W)	Span (Dim. S)	100′ Spool Stock No.	Price per Spool
● 3580/9 SL005	9	0.45″(11.43)	0.40″(10.16)	37F3715	62.49
● 3580/10 SL005	10	0.50″(12.70)	0.45″(11.43)	86K9063	67.59
● 3580/14 SL005	14	0.70″(17.78)	0.65″(16.51)	02F7839	102.39
● 3580/15 SL005	15	0.75″(19.05)	0.70″(17.78)	37F3716	109.35
● 3580/16 SL005	16	0.80″(20.32)	0.75″(19.05)	86K7317	125.02
● 3580/20 SL005	20	1.00″(25.40)	0.95″(24.13)	02F7841	154.90
● 3580/24 SL005	24	1.20″(30.48)	1.15″(29.21)	37F3717	185.53
● 3580/25 SL005	25	1.25″(31.75)	1.20″(30.48)	85K9791	196.92
● 3580/26 SL005	26	1.30″(33.02)	1.25″(31.75)	85K9792	203.97
● 3580/34 SL005	34	1.70″(43.18)	1.65″(41.91)	02F7843	274.22
● 3580/37 SL005	37	1.85″(46.99)	1.80″(45.72)	86K7318	302.90
● 3580/40 SL005	40	2.00″(50.80)	1.95″(49.53)	02F7844	327.23
● 3580/50 SL005	50	2.50″(63.50)	2.45″(62.23)	86K9064	407.01
● 3580/64 SL005	64	3.20″(81.28)	3.15″(80.01)	37F3720	520.70

(6231)

3585 SERIES SHIELDED ROUND-TO-FLAT CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

0.050″ (1.27) center cable for routing in cramped spaces where flat cable is required and round shape is more workable. Jacketed cable features a dual shield of aluminum/polyester tape and a 90% coverage of tinned copper braid shield. Blends mass termination and ease of installation flexibility of round cable. Dual shield meets FCC regulations for EMI/RFI suppression. 28 AWG, 7 x 36 stranded conductor; 0.75″ (19.05) termination area occurs every 1.5″ (38.10). PVC insulation and black PVC jacket. Rated 300V - AWM, 150V - CL2. Temperature rating: –20°C to +105°C. Capacitance: 24pF/ft. nominal at 1MHz. Impedance: 70 ohms nominal. UL AWM Style 20381, UL Type CL2. UL recognized. **Sold in spools of 100′.**

28 AWG, 7 x 36 STRANDED, INSULATION THICKNESS 0.01″

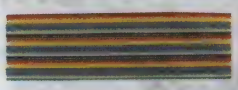
Mfg. Part No.	No. of Cond.	Nom. Dia. (In.)	Nom. Width (Dim. W - In.)	100′ Spool Stock No.	Price per Spool
● 3585/26 BK005	26	0.35	1.65	04F6000	690.61
● 3585/40 BK005	40	0.40	1.95	04F6001	1028.32
● 3585/50 BK005	50	0.46	2.45	85K9796	1315.84

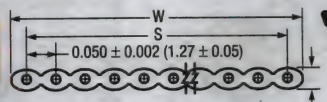
(6234)

3583 SERIES 0.050″ CENTER THERMALLY-BONDED COLOR-CODED FLAT CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.





VW-1

0.035 ± 0.003
(0.88 ± 0.07)

- Ideal for use with insulation displacement connectors

Designed for termination flexibility. Applications: PC board-to-PC board interconnections where space is a premium; flexible interconnects within computer and business machine cabinets; flexible connections such as a drawer-enclosed electronic circuitry. 28 AWG, 7 x 36 stranded tinned copper conductors. 0.010″ (0.254) nominal wall PVC insulation. Color code: brown, red, orange, yellow, green, blue, violet, slate, white, and black (colors repeat). Rated 105°C 300V. Capacitance: 14pF/ft. nominal at 1MHz. Impedance: 98 ohms nominal. Resists acids, alkalis, oil, moisture, solvents, ozone, and fungus. Maximum thickness: 0.035″ (0.889). Passes VW-1 flame test. UL recognized style 20932. **Sold in spools of 100′.**

Mfg. Part No.	No. of Cond.	Nom. Width (Dim. W)	Span (Dim. S)	100′ Spool Stock No.	Price per Spool
● 3583/9 MC005	9	0.45″(11.43)	0.40″(10.16)	86K9065	150.41
● 3583/10 MC005	10	0.50″(12.70)	0.45″(11.43)	03F2279	157.94
● 3583/14 MC005	14	0.70″(17.78)	0.65″(16.51)	03F2280	232.84
● 3583/15 MC005	15	0.75″(19.05)	0.70″(17.78)	85K9793	249.03
● 3583/16 MC005	16	0.80″(20.32)	0.75″(19.05)	03F2281	283.21
● 3583/20 MC005	20	1.00″(25.40)	0.95″(24.13)	86K7319	353.75
● 3583/24 MC005	24	1.20″(30.48)	1.15″(29.21)	85K9794	434.78
● 3583/25 MC005	25	1.25″(31.75)	1.20″(30.48)	86K7320	449.15
● 3583/26 MC005	26	1.30″(33.02)	1.25″(31.75)	03F2283	466.70
● 3583/34 MC005	34	1.70″(43.18)	1.65″(41.91)	03F2284	634.80
● 3583/37 MC005	37	1.85″(46.99)	1.80″(45.72)	85K9795	690.64
● 3583/40 MC005	40	2.00″(50.80)	1.95″(49.53)	89K8194	753.44
● 3583/50 MC005	50	2.50″(63.50)	2.45″(62.23)	03F2286	932.35
● 3583/60 MC005	60	3.00″(76.20)	2.95″(74.93)	03F2287	1131.72
● 3583/64 MC005	64	3.20″(81.28)	3.15″(80.01)	37F3726	1207.03

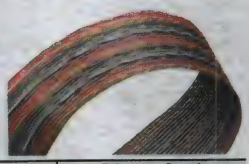
(6233)

132 SERIES TWIST 'N' FLAT® PLANAR CABLE

RoHS Compliant Available

Amphenol SPECTRA-STRIP

- 0.050″ (1.27) Conductor Spacing



For mass termination to IDC connectors. Double-contoured flat sections enable termination from either side. Twisted pair centers: 0.100″ (2.54) nominal; conductor centers in flats: 0.050″ (1.27). Color-coded PVC insulation. Cable thickness: 0.042″ (1.07) flat section. Voltage rating: 300V. Current rating: 1A. Temperature rating: 80°C. Impedance: 100Ω. Conductors: 28 AWG, 7/36 stranded tinned copper. UL recognized, style 2697. CSA certified. **Sold in spools of 100′.**

Mfg. Part No.	No. of Pairs	Width (in.)	Stock No.	Price per Spool 1-4	5-9
● 132-2801-010	5	0.526	78K6392	50.06	46.49
● 132-2801-026	13	1.326	78K6393	121.38	112.71
● 132-2801-040	20	2.026	78K6394	171.60	159.34
● 132-2801-050	25	2.526	78K6395	231.14	214.63
● 132-2801-064	32	3.226	78K6396	293.67	272.69

(8263)

135 SERIES 3C® COLOR-CODED PLANAR CABLE

RoHS Compliant Available

Amphenol SPECTRA-STRIP

For digital and analog signal transmission. Voltage rating: 300V. Current rating: 1A. Temperature rating: 105°C. Impedance: 105Ω. Conductors: 28 AWG, 7/36 strand, tinned copper. UL recognized. **Sold in spools of 100′.**

Mfg. Part No.	No. of Cond.	Width (in.)	Stock No.	Price per Spool 1-4	Price per Spool 5-9
135-2801-010	10	0.505	78K6397	59.40	54.48
135-2801-020	20	1.005	78K6398	98.82	90.62
135-2801-026	26	1.305	78K6399	111.95	102.68
135-2801-034	34	1.705	78K6400	148.72	136.40
135-2801-040	40	2.005	78K6401	177.60	162.88
135-2801-050	50	2.505	78K6402	212.30	194.69

(8211)

159-2801 SERIES ROUND 'N' FLAT™ CABLE

RoHS Compliant Available

Amphenol SPECTRA-STRIP

Jacketed shielded cable combines round cable with mass termination capabilities of flat cable. ¾″ flat IDC termination. 0.050″ (1.27) conductor spacing. Voltage rating: 300V. Impedance: 75Ω. Temperature rating: –20°C to +105°C. UL recognized. **Sold in spools of 100′.**

Mfg. Part No.	No. of Cond.	Width (in.)	Ref. Dia. (in.)	Stock No.	Price per Spool 1-4	Price per Spool 5-9
159-2801-026	26	1.3	0.360	78K6404	201.96	185.84
159-2801-034	34	1.7	0.400	78K6405	223.80	205.94
159-2801-040	40	2.0	0.430	78K6406	241.82	222.53
159-2801-050	50	2.5	0.480	78K6407	274.74	252.82

(8265)

159-2832 SERIES ROUND TWIST 'N' FLAT™ CABLE

RoHS Compliant Available

Amphenol SPECTRA-STRIP

Jacketed, shielded cable combines round cable and mass termination capabilities of flat cable. 2½″ flat IDC termination. 0.050″(1.27) conductor spacing. Voltage rating: 300V. Impedance: 70Ω. Temperature rating: –20°C to +105°C. UL recognized. **Sold in spools of 100′.**

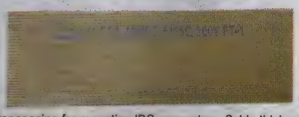
Mfg. Part No.	Pairs	Width (in.)	Ref. Dia. (in.)	Stock No.	Price per Spool 1-4	Price per Spool 5+
159-2832-026	13	1.326	0.410	78K6410	286.41	256.58
159-2832-040	20	2.026	0.480	78K6412	378.97	339.50
159-2832-050	25	2.526	0.520	78K6413	429.95	385.17
159-2832-064	32	3.226	0.570	78K6145	617.57	553.24

(8266)

191-2801 SERIES SPECTRA-ZIP® PLANAR CABLE

RoHS Compliant Available

Amphenol SPECTRA-STRIP



Precise 0.050″ (1.27) conductor spacing for mounting IDC connectors. Cable thickness: 0.035″(0.89). Insulation: Gray PVC, flame retardant VW-1. Voltage rating: 300V. Current rating: 1A. Temperature rating: 105°C. Impedance: 105Ω. Conductors: 28 AWG, 7/36 stranded tinned copper. UL recognized, style 2651. CSA certified. 105°C, 300V. **Sold in spools of 100′.**

Mfg. Part No.	No. of Cond.	Width (in.)	Stock No.	Price per Spool 1-4	Price per Spool 5-9
191-2801-116	16	0.8	78K6414	41.79	38.82
191-2801-120	20	1	78K6415	51.66	47.99
191-2801-125	25	1.25	78K6416	54.82	50.93
191-2801-126	26	1.3	78K6417	56.35	52.35
191-2801-134	34	1.7	78K6418	71.60	66.52
191-2801-140	40	2	78K6419	85.67	79.59
191-2801-150	50	2.5	78K6420	104.09	96.69
191-2801-164	64	3.2	78K6421	131.71	122.35

(8264)

191-2811 SERIES SPECTRA-FLEX™ HIGH FLEX LIFE FLAT CABLE

RoHS Compliant Available

Amphenol SPECTRA-STRIP

Designed for applications that require repeated flexing without circuit interruption including printers, plotters, robotics. Flex life of >100 million cycles (rolling flex test, 5½″ stroke with 1″ bend radius. 28AWG 19 x 40 silver plated copper alloy conductor. Insulation: blue PVC, flame resistant VW-1, with one red edge. Thickness 0.035″ ±0.003″. Pitch spacing: 0.050″. Voltage rating: 300V. Temperature rating: 105°C. UL recognized, style 2651. **Sold in 100′ spools.**

Mfg. Part No.	No. of Cond.	Width (in.)	Stock No.	Price per Spool 1-4	Price per Spool 5+
191-2811-010	10	0.500	35B4800	197.08	164.25
191-2811-016	16	0.800	35B4802	262.01	223.58
191-2811-020	20	1.000	35B4803	315.86	269.54
191-2811-040	40	2.000	35B4809	556.03	534.83
191-2811-050	50	2.500	34M4139	634.29	612.17

(90477)

HIGH-VOLTAGE SILICONE WIRE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

For use in military, industrial, electronic, and commercial applications where flexibility and high voltage are necessary. Meets UL VW-1 requirements. Silver-plated copper conductor insulated with a specially formulated silicone-based material. Temperature range: 200°C max. Jacket color: white. **Sold in 100′ and 1000′ spools.**

Mfg. Part No.	AWG (Stranding)	Voltage (kV)	Nom. O.D. (in.)	100′ Spool Stock No.	100′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
39X2205	22 (7 x 30)	5	0.070	27M1335	152.10	18C5289	1179.46
39X2215	22 (7 x 30)	15	0.110	18C5290	188.48	18C5292	1461.12
39X2220	22 (7 x 30)	20	0.130	19M8498	212.24	18C5295	1702.80
39X2015	20 (19 x 32)	15	0.120	27M1333	229.14	18C5280	1776.91
39X2020	20 (19 x 32)	20	0.150	19M8497	246.20	18C5283	1943.83
39X2025	20 (19 x 32)	25	0.166	27M1334	255.88	18C5286	1950.34
39X1825	18 (19 x 30)	25	0.160	19M8496	276.80	18C5277	2260.06
39X1620	16 (41 x 32)	20	0.164	27M1331	438.03	18C5265	3575.69
39X1635	16 (19 x 29)	35	0.269	18C5266	714.96	18C5268	5661.25
39X1645	16 (41 x 32)	45	0.306	18C5269	807.74	18C5271	6263.78
39X1660	16 (26 x 30)	60	0.384	27M1332	1163.62	18C5274	9023.66
39X1460	14 (19 x 27)	60	0.385	18C5260	1290.16	18C5262	10004.06
39X1260	12 (19 x 25)	60	0.445	18C5257	1659.58	...	...

(60278)

MGT SERIES HIGH-TEMPERATURE LEAD WIRE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

Feature nickel-coated copper conductor insulated with mica/glass composite and treated glass braid overall. Rated: 600V. Temperature range: UL 450°C; 538°C continuous. Offers excellent thermal stability. Ideal for use in heat treating furnaces, kilns, food service equipment, and with other high-temperature requirements. UL Style 5107, CSA AWM I A/B. Jacket color: tan. UL recognized, CSA certified. **Sold in 100′ and 500′ spools.**

Mfg. Part No.	AWG (Stranding)	Nom. O.D. (in.)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool
3111816	18 (16x30)	0.111	19M8482	316.87	04F9547	1129.14
3111626	16 (26x30)	0.124	27M1327	406.69	04F9549	1465.24
3111441	14 (41x30)	0.138	27M1326	536.17	04F9551	1968.37
3111265	12 (65x30)	0.157	04F9552	716.56	04F9553	2770.07
3111000	10 (105x30)	0.206	04F9554	1045.16	04F9555	4056.46
3118133	8 (133x29)	0.260	04F9556	1842.17	04F9557	5664.01

(6240)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

HIGH TEMPERATURE/HIGH VOLTAGE WIRE • HOOK-UP WIRE

NEMA WC27500 TYPE RC AND SAE-AS22759/11 MULTICONDUCTOR CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

Feature silver-plated copper conductors with PTFE insulation, silver-plated copper braided shield, 85% coverage, and extruded PTPE jacket. Temperature range: -55°C to +200°C. Rated: 600V. Ideal for primary use in aircraft and ground support equipment; also general electrical and electronic applications. **Sold in 100′ spools.**

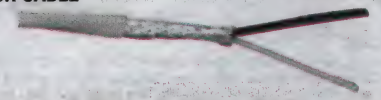
Mfg. Part No.	No. of Cond.	AWG (Stranding)	Nom. O.D. (in.)	Military Spec.	100′ Spool Stock No.	100′ Spool Price per Spool
● 24RC2S06 NA005	2	24 (19 x 36)	0.124	M27500-24RC2S06	19M8481	334.82
● 24RC3S06	3	24 (19 x 36)	0.130	M27500-24RC3S06	91F7333	417.17
● 24RC4S06 NA005	4	24 (19 x 36)	0.142	M27500-24RC4S06	91F7334	505.53
● 22RC2S06 NA005	2	22 (19 x 34)	0.136	M27500-22RC2S06	91F7329	359.95
● 22RC3S06 NA005	3	22 (19 x 34)	0.143	M27500-22RC3S06	91F7330	403.61
● 20RC2S06 NA005	2	20 (19 x 32)	0.154	M27500-20RC2S06	27M1292	420.94
● 18RC2S06 NA005	2	18 (19 x 30)	0.180	M27500-18RC2S06	91F7335	486.71

(16032)

NEMA WC27500 TYPE TE AND SAE-AS22759/16 MULTICONDUCTOR CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.



Feature stranded tinned copper conductors with braided tinned-copper shield, 85% coverage, and ETFE insulation and jacket . Temperature range: –55°C to +150°C. Rated: 600V. **Sold in 100′ spools.**

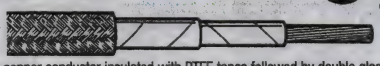
Mfg. Part No.	No. of Cond.	AWG (Stranding)	Nom. O.D. (in.)	Mil. Spec. M27500-	100′ Spool Stock No.	100′ Spool Price per Spool
● 275002201	1	22 (19x34)	0.088	22TE1T14	19M8449	125.91
● 275002202	2	22 (19x34)	0.146	22TE2T14	04F6509	230.89
● 275002203	3	22 (19x34)	0.154	22TE3T14	04F6505	302.72
● 275002002	2	20 (19x32)	0.162	20TE2T14	04F6491	257.77
● 275001802	2	18 (19x30)	0.182	18TE2T14	04F6497	333.02

(6268)

TGGT SERIES HIGH-TEMPERATURE LEAD WIRE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.



Feature nickel-plated copper conductor insulated with PTFE tapes followed by double glass serves and treated glass braid overall. Rated: 600V. Temperature range: 250°C continuous. Built to withstand repeated flexing and severe mechanical abuse. Moisture resistant and chemically inert. UL: Style 5196, CSA: AWM IA/B. Jacket color: tan. UL recognized, CSA certified. **Sold in 100′ and 500′ spools.** Also available in 1000′ spools; *go online or call.*

Mfg. Part No.	AWG (Stranding)	Nom. O.D. (in.)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool
● 3131816	18 (16 x 30)	0.109	03F7295	270.02	03F7296	872.06
● 3131626	16 (26 x 30)	0.122	27M1329	299.74	03F7298	1029.05
● 3131441	14 (41 x 30)	0.136	03F7299	390.02	03F7300	1266.32
● 3131265	12 (65 x 30)	0.155	03F7301	531.66	03F7302	1745.36
● 3131000	10 (105 x 30)	0.180	27M1328	681.88	03F7304	2348.95
● 3138133	8 (133 x 29)	0.232	03F7305	1128.48	03F7306	3704.71

(6238)

element14 COMMUNITY

Get inspired, collaborate, design, research, ask experts questions.

element14.com

(196546)

HIGH-VOLTAGE, HIGH-TEMPERATURE, CORONA-RESISTANT ELECTRONIC WIRE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

Braidless silicone wire offers superior chemical, corona radiation and ozone resistance. Specially formulated abrasion-resistant extruded silicone rubber insulation, UL Style 3239. Fully-annealed, stranded tinned-copper conductor per ASTM B-33. Temperature rating: 150°C. Recommended for stoves, heaters, furnaces, dryers, motors, therapeutic devices, electric signs, lighting fixtures, power supplies, radar installations, Xenon flash tubes and special electronic devices where high temperatures are incurred. Color: white; black may be available by special order, *go online or call.* **Sold in 100′ and 1000′ spools.**

DC Voltage	Nom. O.D. (mm)	Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
22 AWG, 7 x 30 STRANDING							
10000	2.79	● 392240 WH005	19M8504	300.96	● 392240 WH001	03F1010	863.63
15000	3.05	● 392245 WH005	03F1037	269.60	● 392245 WH001	03F1038	918.60
20000	3.327	● 392250 BK005*	27M1338	281.36	● 392250 WH001	91B7198	970.25
25000	3.912	● 392262 WH005	90B7997	290.50	...	...	...
30000	4.597	● 392275 WH005	03F1052	319.25	...	...	...
40000	5.69	● 392297 WH005	03F1059	408.43	...	...	...
20 AWG, 10 x 30 STRANDING							
10000	2.97	● 392040 WH005	03F1062	277.21	● 392040 WH001	03F1063	918.20
15000	3.23	● 392045 WH005	03F1064	289.43	● 392045 WH001	03F1065	1048.04
20000	3.48	● 392050 WH005	03F1084	307.66	● 392050 WH001	03F1085	1208.31
25000	4.09	● 392062 WH005	93B6344	348.53	...	...	...
30000	4.75	● 392075 WH005	03F1088	405.53	● 392075 WH001	03F1089	1895.97
18 AWG, 16 x 30 STRANDING							
15000	3.48	● 391845 WH005	19M8503	402.33	● 391845 WH001	03F1093	1086.13
25000	4.34	● 391862 WH005	03F1094	372.66	● 391862 WH001	03F1095	1362.04
40000	6.12	● 391897 WH005	03F1096	467.05	● 391897 WH001	03F1097	2484.40
16 AWG, 26 x 30 STRANDING							
10000	3.556	● 391640 WH005	19M8271	438.58	● 391640 WH001	98B7853	1250.69
15000	3.81	● 391645 WH005	19M8500	461.35	● 391645 WH001	03F1099	1317.06
25000	4.67	● 391662 WH005	19M8501	504.00	● 391662 WH001	03F1101	1756.59
40000	6.45	● 391697 WH005	19M8502	595.77	● 391697 WH001	03F1103	2767.36
14 AWG, 30 x 41 STRANDING							
15000	4.17	● 391445 WH005	03F1104	433.35	● 391445 WH001	03F1105	1562.33
25000	5.03	● 391462 WH005	03F1106	508.93	● 391462 WH001	03F1107	1981.17
40000	6.81	● 391497 WH005	03F2526	762.49	● 391497 WH001	03F2527	2943.22
12 AWG, 30 x 65 STRANDING							
15000	4.65	● 391245 WH005	03F2528	503.25	● 391245 WH001	03F2529	1962.51
40000	7.29	● 391297 WH005	03F2530	814.89	● 391297 WH001	03F2531	3313.49
10 AWG, 105 x 30 STRANDING							
15000	5.28	● 391045 WH005	03F2532	797.65	...	...	...
40000	7.92	● 391097 WH005	11C1925	927.69	● 391097 WH001	03F2535	4127.84
8 AWG, 133 x 29 STRANDING, NOT UL RECOGNIZED							
15000	6.58	● 390845 WH005	27M1336	939.05	...	...	...
40000	9.22	● 390897 WH005	90B5515	1328.38	...	...	...

*Black

(89414)

HOOK-UP WIRE KITS

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

- Stranded tinned copper conductor
- PVC insulation
- Passes UL VW-1 flame test
- UL recognized, CSA certified

Alpha's hook-up wire kits feature a unique, convenient wire dispensing system. Kits include five 100′ spools of hook-up wire, suitable for military or UL/CSA applications, packaged in a unique, portable dispenser rack. This system keeps hook-up wire neat, clean and conveniently available. Dispenser rack can be mounted on a bench or wall or used as a tote for portability. Dispenser rack holds standard Alpha hook-up wire spools when refills are required.

KIT CONTENTS:
Five 100′ spools of stranded hook-up wire in colors: white, black, red, green and blue, one dispenser rack and one cut-and-strip tool.

Mfg. Part No.	AWG	Voltage Rating	Ratings	Stock No.	Price Each
● HUKIT10 NC032	22	1000	MIL-W-76B Type MW, -40° to +80°C	86K1578	245.76
● HUKIT20 NC032	22	300	UL 1007/1569, CSA TR64, -40° to +105°C	86K1579	242.79
● HUKIT30 NC032	24	1000	MIL-W-76B Type MW, -40° to +80°C	85K9573	247.04
● HUKIT40 NC032	24	300	UL 1007/1569, CSA TR64, -40° to +105°C	86K1580	247.04

(6461)

ECOWIRE™ ECO-FRIENDLY HOOK-UP WIRE

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

EcoWire™ — better performance, better for the environment

- Eco-friendly, non-halogenated and recyclable
- Durable mPPE (Modified Polyphenylene Ether) jacket — lighter, tougher than PVC
- Small diameter
- Superior abrasion resistance
- Stranded or solid tinned copper conductor
- Meets VW-1 UL 1581 flammability rating
- Meets UL AWM 11028 approval
- Meets CSA AWM I A/B FT-1 approval
- Meets WEEE requirements
- REACH compliant
- UL recognized
- Stocked in 11 colors

EcoWire™ hook-up wire contains no halogens, phthalates, or heavy metals enabling it to meet RoHS, REACH, and WEEE requirements for the elimination of hazardous substances and recyclability. The superior dielectric properties of mPPE (modified polyphenylene ether) jacket makes possible a reduced wall thickness while maintaining the same electrical properties as PVC. The result is diameters up to 45% smaller than equivalent wire. Along with the reduced wall thickness, the low 1.03 specific gravity yields significant weight savings of up to 40%. Although thinner and lighter in weight, EcoWire™ is tougher than PVC-based wire because it offers 10x better abrasion and pinch resistance. Perfect for a broad range of hook-up wire applications, EcoWire™ is also being used in the automotive and consumer electrics industries. Meets UL1581 requirements for operation up to 105°C end-use temperature rating. Voltage rating: 600V. Other AWG sizes and stranding options available; *go online or call.* **Sold in 100′ spools.** Also available in 5000′ and 25,000′ spool lengths; *go online or call.*

Mfg. Part No.	Wire Gauge	Stranding	Nom. O.D. (in.)	White Stock No.	Black Stock No.	Red Stock No.	Green Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Slate Stock No.	Violet Stock No.	Yellow/Green Stock No.	100′ Spool Price per Spool
6715	18	16 x 30AWG	0.067	58R1638	58R1621	58R1633	58R1627	58R1640	58R1623	58R1625	58R1631	58R1635	58R1637	58R1629	65.55
6715S	18	Solid	0.059	58R1660	58R1642	58R1654	58R1648	58R1662	58R1644	58R1646	58R1652	58R1656	58R1658	58R1650	65.55
6716	16	26 x 30AWG	0.081	58R1682	58R1664	58R1676	58R1670	58R1684	58R1666	58R1668	58R1674	58R1678	58R1680	58R1672	87.00
6717	14	41 x 30AWG	0.096	58R1703	58R1686	58R1697	58R1692	58R1705	58R1688	58R1690	58R1696	58R1699	58R1701	58R1694	128.55
6717S	14	Solid	0.086	58R1725	58R1707	58R1719	58R1713	58R1727	58R1709	58R1711	58R1717	58R1721	58R1723	58R1715	130.80

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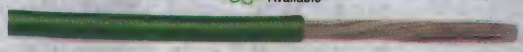
ECOWIRE™ PLUS ECO-FRIENDLY HOOK-UP WIRE

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.



EcoWire™ Plus — better performance, better fluid resistance, better for the environment

- Eco-friendly, non-halogenated and recyclable
- Excellent resistance to hazardous fluids such as oils, chemicals, solvents, and fuels
- Durable mPPE (Modified Polyphenylene Ether) jacket — lighter, tougher than PVC and XLPE
- Superior abrasion resistance
- Up to 45% smaller diameter than PVC and XLPE
- Up to 40% lighter than PVC and XLPE
- Stranded bare copper conductor
- ISO 6722 Ultra Thin Wall
- ISO 6722 Thin Wall
- CE compliant
- REACH compliant
- Stocked in 9 colors

EcoWire™ Plus hook-up wire contains no halogens, phthalates, or heavy metals enabling it to meet RoHS, REACH, and WEEE requirements for the elimination of hazardous substances and recyclability. Designed for industrial applications with exposure to oils and other hazardous fluids, EcoWire™ Plus offers all the environmental benefits and abrasion resistance characteristics of standard EcoWire™. Meeting the fluid resistance of ISO 6722 for thin-wall and ultra-thin wall wire, EcoWire™ Plus is an ideal thinwall replacement for XLPE insulated wire. With up to 45% smaller diameter to save space and make routing easier, EcoWire™ Plus withstands oils, fuels, solvents, and other hazardous liquids. Voltage rating: 300V. ISO 6722 Voltage rating: 60V. **Sold in 100′ spools.** Also available in 1000′ spools; *go online or call.*

Mfg. Part No.	Wire Gauge	Stranding	Nom. O.D. (mm)	White Stock No.	Black Stock No.	Red Stock No.	Green Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Green/Yellow Stock No.	100′ Spool Price per Spool
6820	28	7 x 36AWG	0.79	61T4289	61T4275	61T4287	61T4281	61T4291	61T4277	61T4279	61T4285	61T4283	28.11
6821	26	7 x 34AWG	0.89	61T5087	61T4293	61T5085	61T5079	61T5089	61T4295	61T4296	61T5083	61T5081	30.80
6822	24	7 x 32AWG	1.02	61T5105	61T5091	61T5103	61T5097	61T5107	61T5093	61T5095	61T5101	61T5099	34.77
6823	22	7 x 30AWG	1.17	61T5123	61T5109	61T5121	61T5115	61T5125	61T5111	61T5113	61T5119	61T5117	41.47
6824	20	7 x 28AWG	1.37	61T5141	61T5127	61T5139	61T5133	61T5143	61T5129	61T5131	61T5137	61T5135	50.31
6825	18	19 x 0.23mm	1.57	61T5159	61T5145	61T5157	61T5151	61T5161	61T5147	61T5149	61T5155	61T5153	66.78
6826	17	19 x 30AWG	1.68	61T5177	61T5163	61T5175	61T5169	61T5179	61T5165	61T5167	61T5173	61T5171	75.82
6827	16	19 x 29AWG	1.96	61T5195	61T5181	61T5193	61T5187	61T5197	61T5183	61T5185	61T5191	61T5189	86.47
6828	15	19 x 28AWG	2.11	61T5213	61T5199	61T5211	61T5205	61T5215	61T5201	61T5203	61T5209	61T5207	108.71
6829	14	19 x 27AWG	2.41	61T5231	61T5217	61T5229	61T5223	61T5233	61T5219	61T5221	61T5227	61T5225	133.25
6830	12	19 x 25AWG	3.05	61T5249	61T5235	61T5247	61T5241	61T5251	61T5237	61T5239	61T5245	61T5243	204.81
6831	10	19 x 23AWG	3.73	61T5267	61T5253	61T5265	61T5259	61T5269	61T5255	61T5257	61T5263	61T5261	325.47

(197378)

ETFE INSULATED WIRE WRAP HOOK-UP WIRE

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

- Solid silver-plated copper conductor
- High-resistance to cut-through and abrasion
- 150°C (105°C UL), UL 1422, UL1423, UL 1516, UL 1523
- Passes UL VW-1 flame test
- UL recognized

Wire wrapping is an automatic or semiautomatic termination method generally used in large-scale wiring of computer backpanels. ETFE (ethylene tetrafluoroethylene) wire wrap wire is manufactured with silver-plated copper conductors. ETFE exhibits high abrasion, heat and cut-through resistance. **Sold in 100′ and 1000′ spools.** Other colors available; *go online or call.*

Mfg. Part No.	AWG	Nom. O.D. (in.)	100′ Spool White Stock No.	100′ Spool Green Stock No.	100′ Spool Black Stock No.	100′ Spool Red Stock No.	100′ Spool Price per Spool	1000′ Spool White Stock No.	1000′ Spool Green Stock No.	1000′ Spool Black Stock No.	1000′ Spool Red Stock No.	1000′ Spool Price per Spool
1805	30	0.020	86K6724	02F6274	02F6272	06M3880	196.50	02F6281	02F6284	02F6282	02F6283	1034.01
1806	28	0.024	86K9005	02F6294	02F6292	02F6293	219.23	02F6301	89K8059	02F6302	02F6303	1153.94
1807	26	0.027	02F6311	85K9633	85K9632	06M3885	223.96	02F6321	02F6324	85K9634	02F6323	1241.27
1808	24	0.030	89K8061	02F6334	02F6332	86K6726	256.88	02F6341	02F6344	02F6342	02F6343	1398.76

(6346)

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(196563)

HOOK-UP WIRE

IRRADIATED PVC INSULATION HOOK-UP WIRE — MIL-DTL-16878/1 (TYPE B)

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

- Stranded tinned copper conductor
- Insulation thickness: 0.010″ (0.254)
- 150V, 80°C UL AWM Style 1429 and CSA AWM I A/B FT1, 600V, 105°C MIL.
- Rated: 600V, 105°C
- UL recognized, CSA certified
- Other colors available; *go online or call*

100′ SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D. (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	100′ Spool Price per Spool 1-4
● 7053	26	7 x 34AWG	0.991	03F2180	92F9471	03F2181	86K9091	92F9481	85K9930	92F9469	92F9474	92F9477	92F9479	45.89
● 7054	24	7 x 32AWG	1.118	03F2184	92F9484	03F2185	92F9488	92F9491	92F9486	85K9933	92F9487	85K9931	92F9490	50.66
● 7054/19	24	19 x 36AWG	1.143	03F2194	03F2197	03F2195	88K2185	03F2198	92F9496	92F9493	92F9498	92F9500	92F9501	60.47
● 7055	22	7 x 30AWG	1.27	03F2202	86K7577	03F2203	02F6493	28B8680	92F9505	28B8677	92F9507	28B8678	85K9936	59.16
● 7055/19	22	19 x 34AWG	1.321	03F2207	92F9515	27M3031	92F9166	92F9526	92F9517	92F9513	88K2186	85K9937	92F9522	64.39
● 7056	20	7 x 28AWG	1.473	86K7579	03F2217	03F2215	78M7427	03F2218	92F9528	86K7580	88K2188	03F2220	28B8689	73.17
● 7056/19	20	19 x 32AWG	1.524	27M3033	85K9943	27M3032	92F9535	85K9941	29M6561	92F9530	86K7581	28B8694	92F9536	84.47
● 7057	18	7 x 26AWG	1.727	86K7582	...	85K9945	92F9541	28B8704	28B8696	85K9944	92F9540	28B8701	28B8703	102.26
● 7057/19	18	19 x 30AWG	1.778	86K9096	88K2190	88K2189	03F2239	...	86K7583	92F9542	92F9546	26M8400	92F9548	123.93
● 7058/19	16	19 x 0.0117	1.93	85K9946	03F2247	03F2246	86K9097	85K9947	92F9552	26M8401	88K1466	28B8710	28B8711	129.93

1000′ SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D. (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	1000′ Spool Price per Spool 1-2
● 7053	26	7 x 34AWG	0.991	03F2182	92F9165	86K7573	85K9929	92F9482	86K7572	86K9092	27M3028	85K9928	92F9480	195.77
● 7054	24	7 x 32AWG	1.118	03F2187	92F9485	03F2188	92F9489	86K7575	26C1161	86K7574	11J0041	85K9934	28B8675	220.99
● 7054/19	24	19 x 36AWG	1.143	03F2199	92F9495	03F2200	86K9093	92F6749	85K9935	86K7576	92F9499	03F2201	28B8676	235.93
● 7055	22	7 x 30AWG	1.27	59M7958	92F9504	03F2205	02F6503	92F9512	92F9506	92F9502	92F9508	92F9509	86K7578	243.14
● 7055/19	22	19 x 34AWG	1.321	03F2209	92F9516	88K2187	86K9095	03F2212	85K9938	92F9514	92F9520	92F9521	85K9939	250.14
● 7056	20	7 x 28AWG	1.473	03F2221	28B8685	03F2222	29M6560	28B8690	26M8397	28B8684	29M6559	28B8687	28B8688	275.79
● 7056/19	20	19 x 32AWG	1.524	03F2225	85K9942	03F2226	03F2227	92F9538	85K9940	26M8398	28B8692	26M8399	03F2228	327.02
● 7057	18	7 x 26AWG	1.727	03F2231	28B8698	03F2232	03F2233	27M3036	27M3034	27M3035	28B8699	28B8700	28B8702	432.92
● 7057/19	18	19 x 30AWG	1.778	03F2241	92F9544	88K2191	05F1954	92F9550	92F7547	88K1465	27M3037	28B8705	03F2243	449.53
● 7058/19	16	19 x 0.0117	1.93	85K9948	03F2251	03F2249	03F2250	92F6753	03F2253	27M3039	92F6754	27M3038	...	559.33

(6348)

MIL-DTL-22759/11 PTFE INSULATED HOOK-UP WIRE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

Ideal where smoke emission, overload stability and/or flammability may be a problem. Feature stranded silver-plated copper conductor insulated with PTFE (polytetrafluoroethylene). Temperature range: -55°C to +200°C. Rated: 600V. Available in colors listed in table below. **Sold in 100′ and 1000′ spools.**

Mfg. Part No.	AWG (Stranding)	Nom. O.D. (in.)	100′ Spool White Stock No.	100′ Spool Green Stock No.	100′ Spool Black Stock No.	100′ Spool Red Stock No.	100′ Spool Price per Spool	1000′ Spool White Stock No.	1000′ Spool Green Stock No.	1000′ Spool Black Stock No.	1000′ Spool Red Stock No.	1000′ Spool Price per Spool
● AT241936	24(19 x 36)	0.043	27M0418	...	96B9103	91B9442	74.46	91B9377	34C4499	34C9522	91B9373	417.99
● AT221934	22 (19 x 34)	0.049	27M0416	64M0219	27M0414	27M0415	88.31	27M0417	...	96B4371	34C9524	506.70
● AT201932	20 (19 x 32)	0.058	93B5570	91B2956	27M0412	91B2948	131.27	27M0413	...	89C3466	34C9523	745.07

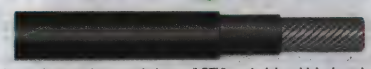
(73462)

PHOTOVOLTAIC WIRE FOR SOLAR ENERGY APPLICATIONS

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

- Sunlight-, ozone-, and UV-resistant
- Moisture-resistant
- Meets UL Subject 4703 Type PV regulatory and industry requirements for photovoltaic application
- UL VW-1 flammability rated
- REACH compliant
- UL listed (**PV, PVT series**)
- TÜV approved (**PVT series** only)



Photovoltaic wire is designed for the harsh environments of solar energy applications — the hot and cold of climate extremes, ozone and UV radiation, moisture and direct burial. Available in two versions: **PV series** photovoltaic wire meets UL 4703 PV wire requirements, CSA 2W90 and features a cross-linked polyethylene insulation with a PVC jacket; **PVT series** UL /TÜV photovoltaic wire meets UL 4703 PV wire and TÜV 2 PFG 1169 requirements and is made with low-smoke, zero-halogen (LSZH) materials which do not emit toxic gases when burned. Both versions feature a stranded tinned copper conductor that comes in a wire range from 14 AWG to 2 AWG. Operating temperature range: -40°C to +90°C. Voltage rating: 1000V. Jacket color: black. **Sold in 100′ , 500′ and 1000′ spools. SPM series** solar multiconductor cable is also available; *go online or call.*

PV SERIES — MEETS UL 4703 PV, CSA RW90 WIRE REQUIREMENTS; FLAMMABILITY RATED UL VW-1

Mfg. Part No.	AWG	Stranding	Nom. O.D. (in.)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● PV1430	14	41 x 30AWG	0.267	60R1291	67.52	60R1290	265.71	50R7245	420.05
● PV1230	12	65 x 30AWG	0.286	60R1289	85.46	60R1288	350.79	60R1287	515.48
● PV1030	10	105 x 30AWG	0.311	60R1286	120.26	60R1285	491.27	60R1284	649.72
● PV0630	6	266 x 30AWG	0.433	60R1280	300.43	60R1279	920.22	60R1278	1335.69
● PV0430	4	420 x 30AWG	0.491	60R1277	434.80	60R1276	1355.11	60R1275	1966.93
● PV0230	2	665 x 30AWG	0.558	60R1274	624.89	60R1273	1947.58	60R1272	2826.89
PVT SERIES — MEETS UL 4703 PV WIRE/TÜV 2 PFG 1169 REQUIREMENTS; FLAMMABILITY RATED: IEC 60332-1, IEC 60754-1, IEC 60754-2, IEC 61034-2, UL VW-1									
● PVT1430	14	50 x 30AWG	0.228	60R1271	94.66	60R1270	382.33	50R7246	417.18
● PVT1228	12	56 x 28AWG	0.248	60R1269	127.04	60R1268	385.74	60R1267	559.89
● PVT1028	10	84 x 28AWG	0.268	60R1266	179.45	60R1265	549.67	60R1264	797.84
● PVT0826	8	78 x 26AWG	0.357	60R1263	321.12	60R1262	983.62	60R1261	1427.72
● PVT0626	6	128 x 26AWG	0.412	60R1260	459.66	60R1259	1832.42	60R1258	2043.59
● PVT0426	4	199 x 26AWG	0.463	60R1257	665.25	60R1256	2073.32	60R1255	3009.40
● PVT0226	2	279 x 26AWG	0.518	60R1254	956.08	60R1253	2979.80	60R1252	4325.14

(164643)

PTFE INSULATION HOOK-UP WIRE

- Solid or stranded silver-plated copper conductor
- Extruded PTFE insulation
- Applications: harnessing, medical electronics, power supply lead wire, appliance wiring
- Passes UL VW-1 flame test
- Other colors available; *go online or call*

VW-1

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

NEMA HP3 STRANDED 0.006″ (0.152) INSULATION THICKNESS 200°C 250V
100′ SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D. (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	100′ Spool Price per Spool
2840/7	32	7 x 40AWG	0.559	89K8111	02F9445	89K8109	89K8110	96K4984	88K2127	02F9448	02F9449	02F9450	86K7193	62.77
2841/7	30	7 x 38AWG	0.61	89K8113	02F9465	02F9463	02F9464	02F9466	02F9467	02F9468	86K7195	02F9470	02F9471	64.91
2842/7	28	7 x 36AWG	0.686	02F9482	02F9485	86K9022	89K8115	02F9486	02F9487	86K7200	02F9489	02F9490	02F9491	64.44
2842/19	28	19 x 40AWG	0.686	06M3911	89K8114	86K9020	86K7199	02F9506	02F9507	02F9508	02F9509	86K7198	86K9021	99.93
2843/7	26	7 x 34AWG	0.787	02F9522	86K7205	02F9523	89K8124	89K8125	02F9527	02F9528	02F9529	02F9530	02F9531	69.68
2843/19	26	19 x 38AWG	0.787	86K9023	02F9545	02F9543	02F9544	88K2130	02F9547	02F9548	89K8119	89K8118	88K2129	99.38
2844/7	24	7 x 32AWG	0.914	89K8128	86K9025	02F9563	86K7206	02F9566	86K9024	02F9568	02F9569	02F9570	02F9571	77.72
2844/19	24	19 x 36AWG	0.914	02F9582	85K9724	02F9583	02F9584	02F9586	02F9587	02F9588	02F9589	02F9590	02F9591	91.40
2845/7	22	7 x 30AWG	1.067	02F9602	86K9028	86K7207	86K9029	86K7208	06M3918	02F9608	02F9609	85K9732	02F9611	90.52
2845/19	22	19 x 34AWG	1.067+	06M3917	86K9026	02F9623	88K2132	86K9027	02F9627	02F9628	02F9629	88K2131	02F9631	109.40

1000′ SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D. (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	1000′ Spool Price per Spool
2840/7	32	7 x 40AWG	0.559	02F9452	02F9455	02F9453	02F9454	02F9456	02F9457	85K9700	02F9459	02F9460	02F9461	370.30
2841/7	30	7 x 38AWG	0.61	02F9472	02F9475	02F9473	02F9474	02F9476	02F9477	02F9478	02F9479	06M3910	02F9481	385.26
2842/7	28	7 x 36AWG	0.686	02F9492	02F9495	02F9493	02F9494	85K9715	06M3912	85K9712	85K9714	85K9713	89K8116	392.27
2842/19	28	19 x 40AWG	0.686	96K2361	02F9515	02F9513	02F9514	02F9516	02F9517	85K9709	85K9711	85K9710	02F9521	602.91
2843/7	26	7 x 34AWG	0.787	02F9532	02F9535	02F9533	02F9534	02F9536	02F9537	02F9538	85K9722	89K8126	85K9723	449.43
2843/19	26	19 x 38AWG	0.787	89K8123	02F9555	02F9553	02F9554	85K9721	89K8120	89K8121	85K9719	89K8122	85K9720	599.03
2844/7	24	7 x 32AWG	0.914	85K9729	02F9575	02F9573	02F9574	02F9576	89K8129	85K9726	85K9727	02F9580	85K9728	466.50
2844/19	24	19 x 36AWG	0.914	02F9592	06M3916	02F9593	02F9594	02F9596	89K8127	02F9598	02F9599	85K9725	02F9601	557.92
2845/7	22	7 x 30AWG	1.067	02F9612	02F9615	02F9613	85K9734	02F9616	02F9617	02F9618	85K9733	02F9620	85K9735	551.57
2845/19	22	19 x 34AWG	1.067+	02F9632	02F9635	85K9730	02F9634	02F9636	02F9637	02F9638	85K9731	02F9640	02F9641	642.60

+0.005″ insulation thickness

SOLID CONDUCTOR 0.006″ (0.152) INSULATION THICKNESS 200°C 250V
100′ SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D. (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	100′ Spool Price per Spool
2841/1	30	Solid	0.559	85K9701	86K9018	86K9017	86K9019	86K7194	02F9367	02F9368	02F9389	02F9370	89K8112	79.62
2842/1	28	Solid	0.635	02F9382	27M2964	02F9383	02F9384	02F9386	02F9387	02F9388	06M3914	02F9390	86K7196	86.60
2843/1	26	Solid	0.711	86K7201	89K8117	86K7202	88K2128	02F9406	02F9407	86K7203	06M3914	06M3913	02F9411	91.95

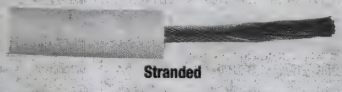
1000′ SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D. (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	1000′ Spool Price per Spool
2841/1	30	Solid	0.559	02F9372	02F9375	02F9377	02F9374	85K9704	02F9377	06M3909	27M2965	85K9702	85K9703	486.40
2842/1	28	Solid	0.635	02F9392	85K9706	02F9393	86K7197	29M6224	85K9705	29M6223	06M3915	85K9707	85K9708	530.98
2843/1	26	Solid	0.711	02F9412	02F9415	02F9413	88K1362	85K9718	02F9417	86K7204	06M3915	85K9716	85K9717	562.25

(60373)

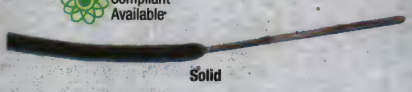
PTFE INSULATION HOOK-UP WIRE

- Solid or stranded silver-plated copper conductor
- Extruded PTFE insulation
- Meets UL AWM Style 1213
- Other colors available; *go online or call*



Stranded

RoHS Compliant Available



Solid

AlphaWire
Cables you trust. Service you deserve.

NEMA HP3 STRANDED 0.010″ (0.254) INSULATION THICKNESS 200°C 600V
100′ SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	100′ Spool Price per Spool
5851	30	7 x 38AWG	0.813	86K9072	02F7449	02F7447	02F7448	02F7450	02F7451	02F7452	02F7453	02F7454	02F7455	61.19
5852	28	7 x 36AWG	0.889	02F7484	89K8200	02F7485	02F7486	86K7469	02F7489	85K9879	02F7491	02F7492	89K8201	62.31
5853	26	7 x 34AWG	0.991	02F7522	89K8202	02F7523	02F7524	02F7526	02F7527	86K9073	86K9074	92F9396	02F7531	67.01
5854	24	19 x 36AWG	1.118	86K7473	86K7472	02F7561	86K9077	86K9079	02F7565	89K8207	89K8208	86K9076	86K9078	88.32
5854/7	24	7 x 32AWG	1.118	88K2175	02F7173	02F7171	06M3950	02F7174	02F7175	02F7176	02F7177	86K9080	02F7179	72.10
5855	22	19 x 34AWG	1.27	86K7476	88K2177	86K9083	86K7475	02F7602	02F7603	06M3951	06M3952	86K9084	02F7607	88.13
5855/7	22	7 x 30AWG	1.27	86K9085	02F7202	88K2179	02F7201	02F7203	02F7204	89K8211	02F7206	78M7425	02F7208	105.38
5856	20	19 x 32AWG	1.473	85K9897	02F7639	86K9086	86K7479	86K7480	89K8213	85K9895	85K9896	...	02F7645	125.59
5856/7	20	7 x 28AWG	1.473	02F7219	96K4537	86K7481	89K8214	02F7223	02F7224	02F7225	85K9898	02F7227	02F7228	117.73
5857	18	19 x 30AWG	1.753	89K8218	86K7483	86K9088	86K7484	85K9900	88K2180	86K7482	89K8216	89K8215	89K8217	179.29
5858	16	19 x 29AWG	2.032**	02F7712	89K8221	85K9901	02F7714	86K9089	89K8220	85K9902	02F7719	06M3958	02F7721	218.62

1000′ SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	1000′ Spool Price per Spool
5851	30	7 x 38AWG	0.813	02F7465	02F7468	02F7466	02F7467	89K8199	06M3946	85K9876	85K9878	85K9877	89K8198	378.01
5852	28	7 x 36AWG	0.889	02F7503	02F7506	85K9880	02F7505	86K7470	02F7508	02F7509	85K9882	85K9881	02F7512	377.84
5853	26	7 x 34AWG	0.991	85K9887	86K7471	02F7542	02F7543	02F7545	85K9883	85K9884	89K8203	85K9885	85K9886	399.20
5854	24	19 x 36AWG	1.118	86K7474	02F7582	02F7580	02F7581	02F7583	02F7584	02F7585	96K2363	02F7587	02F7588	528.47
5854/7	24	7 x 32AWG	1.118	86K9082	88K2176	02F7181	86K9081	02F7184	02F7185	02F7186	02F7187	02F7188	85K9892	437.30
5855	22	19 x 34AWG	1.27	89K8210	86K7477	88K1457	02F7619	02F7621	89K8209	06M3953	02F7624	88K2178	02F7626	537.31
5855/7	22	7 x 30AWG	1.27	86K7478	02F7212	02F7210	02F7211	02F7213	02F7214	85K9893	85K9894	02F7217	89K8212	630.31

CONTINUED

HOOK-UP WIRE

PTFE INSULATION HOOK-UP WIRE (CONT.)

1000' SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	100' Spool Price per Spool
● 5856	20	19 x 32AWG	1.473	86K9087	06M3955	02F7656	02F7657	02F7659	02F7660	02F7661	02F7662	02F7663	02F7664	766.06
● 5856/7	20	7 x 28AWG	1.473	02F7230	06M3956	02F7231	02F7232	85K9899	02F7235	02F7236	02F7237	02F7238	06M3957	691.58
● 5857	18	19 x 30AWG	1.753	96K2364	02F7696	89K8219	02F7695	02F7697	02F7698	02F7699	02F7700	02F7701	02F7702	1122.60
● 5858	16	19 x 29AWG	2.032**	89K8222	02F7734	02F7732	02F7733	02F7735	02F7736	02F7737	02F7738	02F7739	02F7740	1337.11

NEMA HP3 STRANDED 0.015" (0.37) INSULATION THICKNESS 200°C 1000V MIL 300V UL, UL AWM STYLE 1180

100' SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	100' Spool Price per Spool
● 5874	24	19 x 36AWG	1.372	89K8224	85K9906	86K7485	02F7242	02F7244	02F7245	02F7246	86K7486	02F7248	02F7249	106.20
● 5875	22	19 x 34AWG	1.524+	89K8230	89K8229	89K8228	06M3963	85K9907	02F7265	02F7266	88K2181	06M3962	86K7487	120.54
● 5877	18	19 x 30AWG	2.007	02F7289	86K7489	06M3970	06M3971	02F7293	86K9090	02F7295	85K9909	89K8237	02F7298	215.34

1000' SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	1000' Spool Price per Spool
● 5874	24	19 x 36AWG	1.372	89K8227	02F7253	89K8225	02F7252	02F7254	02F7255	02F7256	89K8226	02F7258	02F7259	636.09
● 5875	22	19 x 34AWG	1.524+	02F7270	02F7273	02F7271	02F7272	02F7274	86K7488	06M3964	02F7277	06M3965	02F7279	722.86
● 5877	18	19 x 30AWG	2.007	02F7308	02F7311	66H8634	02F7310	02F7312	85K9910	02F7314	02F7324	85K9911	02F7326	1267.58

SOLID CONDUCTOR 0.010" (0.254) INSULATION THICKNESS 200°C 600V, UL AWM STYLE 1213

100' SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	100' Spool Price per Spool
● 2853/1	26	Solid	0.914	06M3921	89K8130	06M3919	02F9644	02F9646	02F9647	...	89K8131	02F9650	02F9651	86.01
● 2854/1	24	Solid	1.016	25C1495	86K9032	86K9030	78M7421	89K8134	89K8133	86K9031	88K2133	06M3926	02F9671	103.95
● 2855/1	22	Solid	1.143	02F9682	06M3931	85K9738	89K8138	85K9740	85K9739	89K8137	02F9689	02F9690	02F9691	119.06

1000' SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	1000' Spool Price per Spool
● 2853/1	26	Solid	0.914	06M3925	02F9655	02F9653	02F9654	89K8132	85K9736	...	06M3923	06M3922	06M3924	510.97
● 2854/1	24	Solid	1.016	02F9672	02F9675	02F9673	02F9674	89K8136	06M3928	85K9737	89K8135	06M3929	06M3930	649.48
● 2855/1	22	Solid	1.143	88K1363	02F9695	02F9693	02F9694	85K9742	02F9697	89K8139	89K8141	89K8140	85K9741	731.52

**0.012" insulation thickness; +0.014" insulation thickness
(6347)

PVC INSULATION HOOK-UP WIRE

- Stranded tinned copper conductor
- Insulation thickness:0.016" (0.406)
- Passes VW-1 flame test
- 80°C UL AWM Style 1007, 90°C CSA TR-64, 105°C UL AWM Style 1569
- Rated: 300V, 80°C
- UL recognized, CSA certified
- Other colors available; *go online or call*

VW-1 RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

100' SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D. (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	100' Spool Price per Spool
● 3047	30	7 x 38AWG	1.118	28B6704	92F9285	92F9283	92F9288	92F9936	92F9929	92F9926	73C7413	92F9932	92F9934	32.41
● 3048	28	7 x 36AWG	1.194	92F9302	92F9293	92F9290	92F9298	92F9304	92F9295	92F9292	92F9296	92F9300	92F9301	29.14
● 3049	26	7 x 34AWG	1.295	92F7620	92F9309	92F9306	92F9315	92F9316	92F9311	92F9307	92F9313	92F9942	92F9944	31.44
● 3050	24	7 x 32AWG	1.422	86K7235	02F8185	02F8183	02F8184	02F8186	02F8187	02F8188	02F8189	86K7234	02F8191	32.22
● 3051	22	7 x 30AWG	1.58	02F8220	02F8223	86K9034	86K7241	02F8224	02F8225	86K9035	02F8227	86K7240	86K9036	35.59
● 3053	20	10 x 30AWG	1.753	86K9040	02F8261	02F8259	02F8260	02F8262	02F8263	02F8264	86K7244	02F8266	89K8161	43.93
● 3055	18	16 x 30AWG	2.007	85K9756	02F8299	02F8297	02F8298	86K7250	86K9045	85K9753	02F8303	02F8304	85K9754	51.42
● 3057	16	26 x 30AWG	2.337	02F8334	02F8337	02F8335	02F8336	02F8338	02F8339	02F8340	02F8341	02F8342	02F8343	73.07

1000' SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D. (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	1000' Spool Price per Spool
● 3047	30	7 x 38AWG	1.118	92F9289	92F9928	92F9284	92F9931	92F9937	92F9286	92F9927	92F9287	92F9933	92F9935	144.77
● 3048	28	7 x 36AWG	1.194	92F9303	92F9294	92F9291	92F9299	92F9305	92F9939	92F9938	92F9297	92F9940	92F9941	131.25
● 3049	26	7 x 34AWG	1.295	92F7621	92F9310	92F6730	92F6731	92F9317	92F9312	92F9308	92F9314	92F9943	92F9945	131.24
● 3050	24	7 x 32AWG	1.422	89K8151	02F8204	02F8202	02F8203	86K7236	89K8144	02F8207	02F8208	86K9033	89K8145	132.85
● 3051	22	7 x 30AWG	1.58	86K9037	02F8242	02F8240	85K9748	02F8243	02F8244	89K8156	02F8246	02F8247	02F8248	143.90
● 3053	20	10 x 30AWG	1.753	02F8277	86K9041	02F8278	02F8279	86K7246	02F8282	02F8283	89K8166	89K8165	02F8286	184.96
● 3055	18	16 x 30AWG	2.01	86K9047	02F8318	86K7251	02F8317	85K9759	86K9046	86K7252	02F8322	86K7253	02F8324	216.56
● 3057	16	26 x 30AWG	2.337	85K9769	02F8356	02F8354	02F8355	02F8357	89K8175	86K7256	02F8360	85K9761	85K9762	328.88

(60074)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196538)

PVC INSULATION HOOK-UP WIRE

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

- Stranded tinned copper conductor
- Insulation thickness: 0.032″ (0.812)
- Stocked in 10 colors
- 105°C UL AWM Style 1015, CSA TEW-105
- UL MTW
- Rated: 600V, 105°C
- UL recognized, CSA certified
- Other colors available; *go online or call*

100′ SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D. (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	100′ Spool Price per Spool
3070*	24	7 x 32AWG	2.235	92F9994	92F9985	92F9983	92F9329	92F9995	92F9987	92F9984	89K8184	06M3934	92F9992	36.58
3071	22	7 x 30AWG	2.388	02F8372	85K9771	86K7258	89K8187	02F8376	02F8377	02F8378	02F8379	02F8380	02F8381	38.97
3073	20	10 x 30AWG	2.565	86K7260	02F8396	02F8394	85K9776	86K7261	02F8398	02F8399	02F8400	89K8190	02F8402	48.40
3075	18	16 x 30AWG	2.819	02F8414	86K9057	86K7264	02F8416	02F8418	86K9056	02F8420	02F8421	02F8422	02F8423	66.49
3077	16	26 x 30AWG	3.15	96K2362	02F8437	02F8435	86K7265	02F8438	89K8191	02F8440	02F8441	02F8442	02F8443	84.70
3079	14	41 x 30AWG	3.51	89K8192	02F8457	02F8455	02F8456	02F8458	02F8459	02F8460	02F8461	85K9781	06M3935	112.81
3080	12	65 x 30AWG	3.988	86K9058	92F9334	92F7627	92F9336	94C1773	83C5794	92C3080	07H4284	89C2406	...	222.45

1000′ SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D. (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	1000′ Spool Price per Spool
3070*	24	7 x 32AWG	2.235	92F9331	92F9986	92F9326	89K8185	89K8186	92F9328	86K9051	86K9052	89K8183	86K9053	166.26
3071	22	7 x 30AWG	2.388	85K9775	02F8386	86K9054	85K9773	89K8189	89K8188	86K7259	85K9772	02F8391	85K9774	176.23
3073	20	10 x 30AWG	2.565	02F8403	02F8406	02F8404	02F8405	02F8407	02F8408	86K7262	02F8410	02F8411	86K7263	222.26
3075	18	16 x 30AWG	2.819	02F8424	02F8427	02F8425	02F8426	02F8428	02F8429	85K9777	02F8431	02F8432	02F8433	294.57
3077	16	26 x 30AWG	3.15	85K9780	02F8447	02F8445	02F8446	02F8448	02F8449	02F8450	02F8451	02F8452	85K9779	425.30
3079	14	41 x 30AWG	3.505	02F8464	85K9782	02F8465	02F8466	02F8468	02F8469	02F8470	85K9784	85K9783	85K9785	506.25
3080	12	65 x 30AWG	3.988	04F9041	92F9335	92F6737	92F9337	85K9788	10J9938	85K9786	85K9787	...	...	1139.79

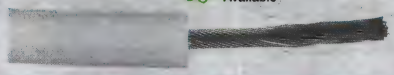
*Not UL MTW
(60075)

PVC INSULATION HOOK-UP WIRE — MIL-DTL-16878/1

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

- Stranded tinned copper conductor
- insulation thickness: 0.010″ (0.254)
- Rated: 600V, 105°C
- Other colors available; *go online or call*



100′ SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D. (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	100′ Spool Price per Spool
1850	32	7 x 40AWG	0.737	02F7408	02F7411	89K8062	85K9635	02F7412	02F7413	...	...	...	...	72.99
1851*	30	7 x 38AWG	0.813	88K2115	02F6945	02F6943	02F6944	02F6946	02F6947	...	...	...	...	61.39
1852*	28	7 x 36AWG	0.889	88K2116	02F6983	02F6981	02F6982	02F6984	02F6985	02F6986	02F6987	02F6988	02F6989	35.67
1853*	26	7 x 34AWG	0.991	02F7018	89K8067	02F7019	02F7020	06M3891	02F7023	86K6728	06M3888	06M3887	06M3889	35.67
1854*	24	7 x 32AWG	1.118	02F7056	02F7059	02F7057	02F7058	02F7060	02F7061	02F7062	02F7063	02F7064	02F7065	36.31
1854/19	24	19 x 36AWG	1.143	02F8534	02F8537	02F8535	02F8536	02F8538	02F8539	02F8540	02F8541	02F8542	02F8543	58.70
1855	22	7 x 30AWG	1.27	02F7094	02F7097	89K8080	02F7096	02F7098	02F7099	02F7100	02F7101	02F7102	02F7103	38.94
1855/19	22	19 x 34AWG	1.321	02F8572	89K8082	02F8573	02F8574	06M3896	02F8577	02F8578	02F8579	02F8580	02F8581	76.90
1856*	20	7 x 28AWG	1.473	02F7132	89K8089	02F7133	10M5340	02F7136	02F7137	02F7138	02F7139	02F7140	02F7141	49.07
1856/19	20	19 x 32AWG	1.524	86K9007	02F8613	02F8611	02F8612	02F8614	02F8615	02F8616	02F8617	02F8618	86K6738	76.01
1857	18	7 x 26AWG	1.727	02F7327	02F7330	02F7328	02F7329	02F7331	02F7332	02F7333	02F7334	02F7335	02F7336	57.97
1857/19	18	19 x 30AWG	1.778	02F8648	86K9008	02F8649	02F8650	02F8652	02F8653	86K6742	02F8655	02F8656	02F8657	109.63
1858/19	16	19 x 29AWG	1.93	85K9666	02F7368	02F7366	02F7367	02F7369	02F7370	02F7371	02F7372	88K2118	02F7374	74.03
1859/19	14	19 x 27AWG	2.311	02F8686	86K6745	02F8687	02F8688	02F8690	02F8691	02F8692	02F8693	89K8104	02F8695	149.05

1000′ SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D. (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	1000′ Spool Price per Spool
1850	32	7 x 40AWG	0.737	02F7427	02F7430	02F7428	02F7429	89K8063	86K6727	...	...	...	...	242.19
1851*	30	7 x 38AWG	0.813	02F6961	02F6964	02F6962	02F6963	89K8064	02F6966	...	...	...	...	187.02
1852*	28	7 x 36AWG	0.889	85K9639	02F7002	02F7000	02F7001	02F7003	85K9636	89K8065	85K9638	85K9637	89K8066	142.12
1853*	26	7 x 34AWG	0.991	02F7037	02F7040	89K8068	02F7039	02F7041	02F7042	02F7043	06M3892	02F7045	86K6729	153.24
1854*	24	7 x 32AWG	1.118	85K9641	02F7078	02F7076	02F7077	02F7079	02F7080	86K6731	86K6733	86K6732	02F7084	146.42
1854/19	24	19 x 36AWG	1.143	85K9644	02F8556	02F8554	02F8555	02F8557	02F8558	02F8559	85K9643	85K9642	02F8562	175.83
1855	22	7 x 30AWG	1.27	02F7113	02F7116	02F7114	02F7115	02F7117	02F7118	02F7119	02F7120	02F7121	02F7122	156.93
1855/19	22	19 x 34AWG	1.32	89K8086	89K8084	06M3898	85K9647	89K8087	85K9646	02F8597	89K8085	02F8599	85K9648	173.44
1856*	20	7 x 28AWG	1.473	02F7151	02F7154	86K6737	02F7153	02F7155	85K9654	02F7157	02F7158	89K8090	02F7160	187.26
1856/19	20	19 x 32AWG	1.524	02F8629	86K6739	02F8630	86K6740	06M3899	02F8634	02F8635	02F8636	87K1174	02F8638	220.52
1857	18	7 x 26AWG	1.727	86K6741	02F7349	85K9659	02F7348	02F7350	02F7351	02F7352	02F7353	02F7354	02F7355	292.72
1857/19	18	19 x 30AWG	1.78	89K8098	02F8670	02F8554	86K6744	02F8671	02F8672	02F8673	02F8674	86K6743	02F8676	309.50
1858/19	16	19 x 29AWG	1.93	02F7384	02F7387	02F7385	02F7386	89K8103	86K9009	89K8101	85K9667	02F7392	89K8102	368.89
1859/19	14	19 x 27AWG	2.311	02F8705	02F8708	89K8105	02F8707	02F8709	85K9671	02F8711	85K9673	85K9672	85K9674	423.29

*Also meets MIL-W-76 Type LW
(60073)

HOOK-UP WIRE

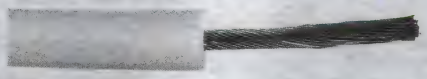
PVC INSULATION HOOK-UP WIRE — MIL-W-76B TYPE MW

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

- Solid or stranded tinned copper conductor
- Stocked in 10 colors

Order MIL-W-76B Type MW PVC insulation hook-up wire and additional PVC insulation hook-up wire separately; go online or call.



MIL-W-76B TYPE MW STRANDED 0.016″ (0.406) INSULATION 80°C 1000V — 100′ SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D. (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	100′ Spool Price per Spool
● 1550	24	7 x 32AWG	1.422	02F6667	86K8998	02F6668	02F6669	86K8999	02F6672	88K2110	02F6674	02F6675	02F6676	35.25
● 1551	22	7 x 30AWG	1.575	86K9002	02F6708	86K6714	86K9001	02F6709	85K9595	89K8044	02F6712	02F6713	02F6714	38.69
● 1553	20	10 x 30AWG	1.753	60K7087	02F6746	02F6744	02F6745	02F6747	02F6748	02F6749	02F6750	02F6751	02F6752	45.19
● 1555	18	16 x 30AWG	2.007	02F6781	02F6784	02F6782	02F6783	86K9003	02F6786	02F6787	02F6788	02F6789	85K9600	56.97
● 1557	16	26 x 30AWG	2.34	02F6819	02F6822	02F6820	02F6821	02F6823	02F6824	02F6825	02F6826	02F6827	02F6828	82.50
● 1559	14	41 x 30AWG	2.692	02F6840	02F6843	89K8047	02F6842	02F6844	86K6717	02F6846	06M3875	06M3874	02F6849	122.00
● 1560	12	65 x 30AWG	3.175	02F6860	02F6863	86K6718	02F6862	02F6864	02F6865	02F6866	02F6867	02F6868	85K9607	206.87
● 1561	22	Solid	1.448	86K9004	89K8049	02F6881	02F6882	02F6884	02F6885	02F6886	02F6887	02F6888	89K8050	34.49
● 1563	20	Solid	1.626	02F6900	02F6903	02F6901	02F6902	02F6904	02F6905	86K6722	02F6907	02F6908	...	40.06
● 1565	18	Solid	1.829	02F6921	85K9619	02F6922	02F6923	89K8056	02F6926	...	06M3876	02F6929	...	85.75

MIL-W-76B TYPE MW STRANDED 0.016″ (0.406) INSULATION 80°C 1000V — 1000′ SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D. (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	1000′ Spool Price per Spool
● 1550	24	7 x 32AWG	1.422	02F6686	02F6689	02F6687	02F6688	02F6690	89K8041	89K8042	02F6693	86K6712	86K6713	140.99
● 1551	22	7 x 30AWG	1.58	02F6724	02F6727	85K9596	02F6726	02F6728	02F6729	02F6730	02F6731	02F6732	02F6733	165.57
● 1553	20	10 x 30AWG	1.75	85K9599	02F6765	02F6763	02F6764	02F6766	02F6767	02F6768	02F6769	85K9597	86K6715	187.06
● 1555	18	16 x 30AWG	2.01	02F6800	86K6716	02F6801	02F6802	02F6804	02F6805	02F6806	85K9602	85K9601	02F6809	264.35
● 1557	16	26 x 30AWG	2.34	02F6829	02F6832	02F6830	02F6831	02F6833	02F6834	02F6835	02F6836	02F6837	02F6838	397.80
● 1559	14	41 x 30AWG	2.692	...	02F6853	02F6851	02F6852	89K8048	02F6855	02F6856	02F6857	02F6858	02F6859	686.12
● 1560	12	65 x 30AWG	3.175	85K9613	02F6873	02F6871	02F6872	85K9614	85K9608	85K9609	85K9611	85K9610	85K9612	1217.00
● 1561	22	Solid	1.448	02F6890	02F6893	02F6891	02F6892	02F6894	02F6895	02F6896	02F6897	86K6719	86K6720	156.73
● 1563	20	Solid	1.626	02F6911	85K9616	02F6912	02F6913	85K9618	86K6721	85K9615	85K9617	89K8055	...	197.67
● 1565	18	Solid	1.829	85K9621	02F6934	02F6932	02F6933	02F6935	88K1343	...	89K8057	85K9620	...	350.20

(23726)

PVDF WIRE-WRAP HOOK-UP WIRE

VW-1

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

- 125°C (105°C UL)
- Solid, silver-plated copper conductor
- High-resistance to cut-through and abrasion
- UL AWM Styles 1422 and 1423
- Passes UL VW-1 flame test
- UL recognized
- Other colors available ; *go online or call*

PVDF wire wrap wire is manufactured with silver-plated copper conductors that retain their mechanical and electrical integrity even after subject to the high forces of the wire wrapping process. PVDF jacket exhibits high abrasion, shear and cut-through resistance. **Sold in 1000′ spools.**

AWG	Nom. O.D. (in.)	White Mfg. Part No.	White Stock No.	Green Mfg. Part No.	Green Stock No.	Black Mfg. Part No.	Black Stock No.	Red Mfg. Part No.	Red Stock No.	1000′ Spool Price per Spool
30	0.019	● 5951 WH001	02F9777	● 5951 GR001	70B3046	● 5951 BK001	89K8239	● 5951 RD001	70B8595	389.45
28	0.024	● 5952 WH001	03F2165	● 5952 GR001	06M3975	● 5952 BK001	86K7490	● 5952 RD001	92F9411	458.69
26	0.027	● 5953 WH001	03F2170	● 5953 GR001	03F2173	● 5953 BK001	03F2171	● 5953 RD001	03F2172	465.62
24	0.030	● 5954 WH001	03F2178	● 5954 GR001	92F6716	● 5954 BK001	92F6715	● 5954 RD001	03F2179	622.61

(6345)

SOLID CONDUCTOR PVC INSULATED HOOK-UP WIRE

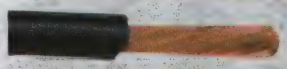
VW-1

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

- Color-coded PVC insulation
- Solid tinned copper conductor
- Passes UL VW-1 flame test
- UL recognized, CSA certified

Ideal for R&D and MRO applications. Voltage: 300V. Insulation thickness: 0.016″. UL AWM styles 1007 (–40°C to +80°C) and 1569 (–40°C to +105°C), CSA TR-64 (–40°C to +90°C). Other colors available; *go online or call.*



100′ SPOOLS

Mfg. Part No.	AWG	Nom. O.D. (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	100′ Spool Price per Spool
● 3050/1	24	1.321	91F3784	91F3774	91F3768	91F3778	89K8152	91F3770	91F3772	91F3776	91F3780	91F3782	26.28
● 3051/1	22	1.45	91F3824	86K9038	91F3808	86K9039	91F3826	91F3810	91F3812	91F3816	91F3820	91F3822	29.90
● 3053/1	20	1.626	89K8169	91F3794	91F3788	86K7247	91F3806	91F3790	91F3792	91F3796	91F3800	91F3802	35.15
● 3055/1	18	1.829	91F3509	91F3499	86K7254	91F3503	85K9760	91F3495	91F3497	91F3501	91F3505	91F3507	42.95

1000′ SPOOLS

Mfg. Part No.	AWG	Nom. O.D. (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	1000′ Spool Price per Spool
● 3050/1	24	1.321	91F3785	91F3775	86K7237	85K9747	89K8155	86K7238	86K7239	91F3777	89K8153	89K8154	108.91
● 3051/1	22	1.448	86K7243	91F3815	91F3809	88K1365	91F3827	86K7242	85K9749	91F3817	89K8160	91F3823	113.73
● 3053/1	20	1.626	86K7248	91F3795	91F3789	91F3799	86K9044	91F3791	86K9043	85K9752	89K8170	89K8171	146.96
● 3055/1	18	1.829	91F3510	91F3500	91F3494	91F3504	91F3512	91F3496	86K7255	88K2135	89K8172	89K8173	171.13
● 3057/1	16	2.108	91F3530	91F3520	91F3514	91F3524	86K9050	89K8177	89K8178	89K8180	89K8179	...	250.93

(18826)

GreenChoice™ PPO HOOK-UP WIRE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

Belden® PPO UL AWM Hook-Up Wire

- Zero Halogen Polyphenylene Oxide (PPO)
- Non-Pollutant/Non-Toxic
- Recyclable/Waste Reducer
- 0.012″ (0.3mm) Insulation Thickness
- Stranded Tinned Copper
- Voltage Rating: 600V
- -40°C to +105°C
- UL AWM Style 11028
- VW-1 UL 1581
- REACH Compliant
- CE Compliant
- CA Prop 65 Compliant

PPO Hook-Up Wire merits use of Belden's GreenChoice™ product rating. PPO Wire does not release the environmental pollutants characteristic of PVC-insulated wire. This fully recyclable product also meets or exceeds the electrical and thermal characteristics of PVC wire, while being smaller, lighter and more durable.

100′ SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D. (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	Green / Yellow Stock No.	Price per Spool
39128	28	7 x 36AWG	0.991	52T2866	52T2861	52T2868	52T2855	52T2859	52T2870	52T2853	52T2857	...	52T2863	...	31.66
39126	26	7 x 34AWG	1.092	52T2847	52T2841	52T2849	52T2835	52T2839	52T2851	52T2833	52T2837	52T2845	52T2843	...	33.76
39124	24	7 x 32AWG	1.22	52T2827	52T2821	52T2829	52T2815	52T2819	52T2831	52T2813	52T2817	52T2825	52T2823	...	38.06
39122	22	7 x 30AWG	1.35	52T2807	52T2801	52T2809	52T2796	...	52T2811	52T2794	52T2798	52T2805	52T2803	...	41.94
39120	20	10 x 30AWG	1.55	52T2788	52T2782	52T2790	52T2776	52T2780	52T2792	52T2774	52T2778	52T2786	52T2784	...	53.86
39118	18	16 x 30AWG	1.753	52T2768	52T2762	52T2770	52T2756	52T2760	52T2772	52T2754	52T2758	52T2766	52T2764	...	53.86
39116	16	26 x 30AWG	2.11	52T2746	52T2740	52T2748	52T2734	52T2738	52T2750	52T2732	52T2736	52T2744	52T2742	52T2752	87.72
39114	14	41 x 30AWG	2.464	52T2724	52T2718	52T2726	52T2712	52T2716	52T2728	52T2710	52T2714	52T2722	52T2720	52T2730	126.66
39112	12	65 x 30AWG	2.82	52T2702	52T2674	52T2704	52T2690	52T2694	52T2706	52T2688	52T2692	52T2700	52T2698	52T2708	201.51
39110	10	105 x 30AWG	3.66	52T2680	52T2696	52T2682	52T2668	52T2672	52T2684	52T2666	52T2670	52T2678	52T2676	52T2686	308.81
1000′ SPOOL															
39128	28	7 x 36AWG	0.991	52T2867	52T2862	52T2869	52T2856	52T2860	52T2871	52T2854	52T2858	52T2865	52T2864	...	218.50
39126	26	7 x 34AWG	1.092	52T2848	52T2842	52T2850	52T2836	52T2840	52T2852	52T2834	52T2838	52T2846	52T2844	...	232.69
39124	24	7 x 32AWG	1.22	52T2828	52T2822	52T2830	52T2816	52T2820	52T2832	52T2814	52T2818	52T2826	52T2824	...	264.18
39122	22	7 x 30AWG	1.35	52T2808	52T2802	52T2810	52T2797	52T2800	52T2812	52T2795	52T2799	52T2806	52T2804	...	295.32
39120	20	10 x 30AWG	1.55	52T2789	52T2783	52T2791	52T2777	52T2781	52T2793	52T2775	52T2779	52T2787	52T2785	...	381.82
39118	18	16 x 30AWG	1.753	52T2769	52T2763	52T2771	52T2757	52T2761	52T2773	52T2755	52T2759	52T2767	52T2765	...	381.82
39116	16	26 x 30AWG	2.11	52T2747	52T2741	52T2749	52T2735	52T2739	52T2751	52T2733	52T2737	52T2745	52T2743	52T2753	719.68
39114	14	41 x 30AWG	2.464	52T2725	52T2719	52T2727	52T2713	52T2717	52T2729	52T2711	52T2715	52T2723	52T2721	52T2731	1029.35
39112	12	65 x 30AWG	2.82	52T2703	52T2697	52T2705	52T2691	52T2695	52T2707	52T2689	52T2693	52T2701	52T2699	52T2709	1369.47
39110	10	105 x 30AWG	3.66	52T2681	52T2675	52T2683	52T2669	52T2673	52T2685	52T2667	52T2671	52T2679	52T2677	52T2687	2133.44
5000′ SPOOL															
39128	28	7 x 36AWG	0.991	54T8634	54T8631	54T8635	54T8628	54T8630	54T8636	54T8627	54T8629	54T8633	54T8632	...	873.65
39126	26	7 x 34AWG	1.092	54T8624	54T8621	54T8625	54T8618	54T8620	54T8626	54T8617	54T8619	54T8623	54T8622	...	931.61
39124	24	7 x 32AWG	1.22	54T8614	54T8611	54T8615	54T8608	54T8610	54T8616	54T8607	54T8609	54T8613	54T8612	...	1055.30
39122	22	7 x 30AWG	1.35	54T8604	54T8601	54T8605	54T8598	54T8600	54T8606	54T8597	54T8599	54T8603	54T8602	...	1187.65
39120	20	10 x 30AWG	1.55	54T8594	54T8591	54T8595	54T8588	54T8590	54T8596	54T8587	54T8589	54T8593	54T8592	...	1572.57
39118	18	16 x 30AWG	1.753	54T8584	54T8581	54T8585	54T8578	54T8580	54T8586	54T8577	54T8579	54T8583	54T8582	...	1572.57
39116	16	26 x 30AWG	2.11	54T8573	54T8570	54T8574	54T8567	54T8569	54T8575	54T8566	54T8568	54T8572	54T8571	54T8576	2972.14
39114	14	41 x 30AWG	2.464	54T8562	54T8559	54T8563	54T8556	54T8558	54T8564	54T8555	54T8557	54T8561	54T8560	54T8565	4692.63
39112	12	65 x 30AWG	2.82	54T8551	54T8548	54T8552	54T8545	54T8547	54T8553	54T8544	54T8546	54T8550	54T8549	54T8554	6161.40
39110	10	105 x 30AWG	3.66	54T8540	54T8537	54T8541	54T8534	54T8536	54T8542	54T8533	54T8535	54T8539	54T8538	54T8543	9614.48

(197379)

HIGH-TEMPERATURE PTFE INSULATED HOOK-UP WIRE — PASSES VW-1 VERTICAL WIRE FLAME TEST

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

All high-temperature hook-up wire listed in the table below feature an extruded PTFE (polytetrafluoroethylene) insulated silver-plated copper conductor. Other sizes and colors available; *go online or call.*

UL STYLE 1180 300V, 200°C TYPE EE - MIL-W-16878/5 PTFE - 1000V, 200°C; PASSES VW-1 VERTICAL WIRE FLAME TEST–INSULATION THICKNESS: 0.015″

100′ SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D. (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	Price per Spool
83026	22	19 x 34AWG	1.499	02F5838	87K1647	87K1646	87K2747	87K2749	06M4006	87K2746	87K2748	87K6263	02F5836	67.68
83027	20	19 x 32AWG	1.727	02F5860	87K6264	02F5861	02F5853	87K2750	02F5857	02F5852	02F5854	87K1652	02F5858	83.68
83028	20	7 x 28AWG	1.727	87K1665	87K1664	87K2751	02F5878	87K1663	87K6265	02F5877	87K1662	...	...	72.27
83030	16	19 x 29AWG	2.235	02F5424	02F5420	02F5425	02F5417	87K2756	02F5421	87K2754	87K2755	87K1674	87K2757	122.92

UL STYLE 1371 600V, 105°C TYPE E - MIL-W-16878/4 PTFE - 600V, 200°C; PASSES VW-1 VERTICAL WIRE FLAME TEST
Mfg. part no. 83009 insulation thickness: 0.011″.

100′ SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D. (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	Price per Spool
83009	18	19 x 30AWG	1.727	87K2740	87K2739	02F4825	87K6258	87K1625	02F4821	87K2738	87K1624	87K6259	87K1643	90.14

UL STYLE 1213 105°C TYPE E - MIL-W-1687E/4 PTFE - 600V, 200°C; PASSES VW-1 VERTICAL WIRE FLAME TEST
Mfg. part nos. 83001-83008 have an insulation thickness of 0.010″. All are UL recognized.

100′ SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D. (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	Price per Spool
83001	28	7 x 36AWG	0.889	87K6247	02F4702	87K6243	87K7167	87K6245	87K2714	02F4698	87K6244	87K6246	02F4704	37.68
83002	26	7 x 34AWG	0.94	87K2715	88K2193	02F4727	02F4719	02F4721	02F4723	02F4718	02F4720	02F4725	02F4724	40.50
83004	24	7 x 32AWG	1.092	87K2723	88K2194	87K2719	87K2720	87K2721	87K6251	02F4769	87K6250	87K2722	02F4775	42.93
83006	22	19 x 34AWG	1.270	87K2730	87K2728	02F5552	87K6253	02F5546	87K6255	87K2727	87K6254	87K2729	02F5549	59.57
83007	20	19 x 32AWG	1.422	02F5580	02F5576	02F5581	02F5573	02F5575	87K2732	87K2731	02F5574	02F5579	02F5578	71.35
83008	20	7 x 28AWG	1.473	87K2737	87K2736	87K2734	02F5598	87K1618	87K6257	02F5597	87K2735	...	...	64.84

➤CONTINUED➤

HIGH-TEMPERATURE PTFE INSULATED HOOK-UP WIRE — PASSES VW-1 VERTICAL WIRE FLAME TEST (CONT.)

1000′ SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D. (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	Price per Spool
● 83002	26	7 x 34AWG	0.94	02F4738	87K1600	87K2716	87K1597	87K1599	87K1601	87K1596	87K1598	87K1602	02F4736	343.06
● 83005	22	7 x 30AWG	1.27	02F4814	02F4810	87K1609	87K1610	02F4809	02F4811	02F4806	02F4808	02F4813	87K1611	463.13

UL STYLE 1371 105°C TYPE ET - MIL-W-1687E/6 PTFE - 250V, 200°C; PASSES VW-1 VERTICAL WIRE FLAME TEST

Mfg. part no. 83043 has an insulation thickness of 0.006″. UL recognized.

100′ SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D. (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	Price per Spool
● 83043	30	7 x 38AWG	0.61	02F5935	87K2758	02F5936	87K6269	...	...	...	...	...	...	36.77

(6114)

3

HOOK-UP WIRE DISPENSER KITS

VW-1 · RoHS Compliant Available · BELDEN SENDING ALL THE RIGHT SIGNALS

Ideal for R&D labs, engineers and technicians. Choose kits containing five 100′ spools or eight 25′ spools of popular hook-up wire — each spool contains a different color. Unshielded tinned copper conductor with PVC insulation. Spools come in portable dispenser rack, convenient for field work, for workbench or wall mount use. Passes VW-1 vertical wire flame test.

9531

Mfg. Part No.	AWG (Stranding)	Nom. O.D.	Colors	Stock No.	Price Each
KITS OF FIVE 100-FT. SPOOLS					
● 9531	22 (7x30)	0.064″	Red, White, Lt. Blue, Green, Black	87K2834	191.83
● 8825	20 (7x28)	0.058″	Red, White, Yellow, Green, Black	36F182	249.03
KITS OF EIGHT 25-FT. SPOOLS					
● 8824	20 (10x30)	0.070″	Brown, White Black, Orange, Green, Red, Lt. Blue, Yellow	36F181	172.50
● 8816	18 (16x30)	0.080″	Brown, White, Black, Orange, Green, Red, Lt. Blue, Yellow	87K7286	181.57

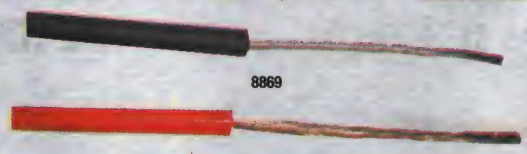
Custom create a hook-up wire kit. Select Belden hook-up wire, in five 100′ spools or eight 25′ spools, choose the colors needed and assemble on **mfg. part no. 8800** dispenser rack; *ordered separately below.* **NOTE:** hook-up wire not included.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● 8800	Hook-Up Wire Dispenser Rack **Only**	20M4466	26.82

(6157)

HIGH-VOLTAGE TEST LEAD WIRE

RoHS Compliant Available · BELDEN SENDING ALL THE RIGHT SIGNALS



8869

9867, 8866

These high-voltage leads feature conductive polyethylene (Korona-Guard) over the stranded tinned copper conductor to provide uniform distribution of voltage stresses, polyethylene insulation, and black or red PVC outer jacket.

AWG (Stranding)	Color	Working KV	Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	Mfg. Part No.	500′ Spool Stock No.	500′ Spool Price per Spool
22 (7x30)	Black	17	● 8869 010100	02F5621	67.87	● 8869 010500	89K8249	247.83
20 (7x28)	Red	30	...	...	...	● 9867 002500	90B3566	414.17
18 (16x30)	Red	40	● 8866 002100	02F5685	146.59	● 8866 002500	87K7287	609.31

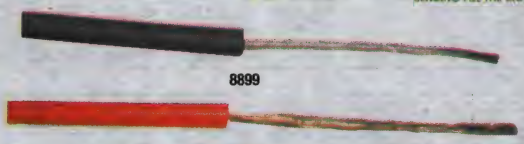
(192104)

Custom Cable Assemblies to your specs to mate with the complete line of connectors!
Call 1.800.463.9275

(212562)

TEST PROD WIRE

RoHS Compliant Available · BELDEN SENDING ALL THE RIGHT SIGNALS



8899

9899

Stranded tinned-copper conductors, separator wrapping, red or black rubber insulated. **Mfg. part nos. 8898** and **8899** AWG 18 (65x36). **Mfg. part no. 9899** is PVC insulated, AWG 18 (65x36) and UL recognized. Working voltages listed in table below are AC rms values. **Mfg. part no. 8890** is miniature wire, AWG 24 (45x40).

Color	O.D. (In.)	Work. V	Mfg. Part No.	100′ Spool Stock No.	100′ Spool Price per Spool	Mfg. Part No.	500′ Spool Stock No.	500′ Spool Price per Spool
Red	.229	10000	● 8898 002100*	02F3950	141.19	● 8898 002500*	87K7290	581.54
Blk.	.229	10000	● 8898 010100*	87K7288	141.19	● 8898 010500*	87K7289	581.54
Red	.144	5000	● 8899 002100*	02F3961	102.97	● 8899 002U500*	87K6343	378.70
Blk.	.144	5000	● 8899 010100*	02F3967	102.97	● 8899 010U500*	02F3972	378.70
Red	.144	5000	...	...	...	● 8897 002U500	02F4210	564.33
Red	.144	5000	● 9899 002100	04F3319	90.73	● 9899 002500	04F3321	371.44
Blk.	.144	5000	● 9899 010100	04F3320	90.73	● 9899 010500	87K6364	371.44
Red	.066	1000	● 8890 002100*	02F3979	69.34	● 8890 002500*	87K6342	296.44
Blk.	.066	1000	● 8890 010100*	02F3976	69.34	● 8890 010500*	02F3978	296.44

***Mfg. part no. 8899** available in 10′, 25′ and 1000′ spools; **mfg. part no. 8890** and **mfg. part no. 8898** available in 25′ spools; *go online or call.*

(6163)

INSULATED LEAD WIRE

RoHS Compliant Available · BELDEN SENDING ALL THE RIGHT SIGNALS

HIGH-TEMPERATURE EPDM INSULATED LEAD WIRE

EPDM (ethylene-propylene diene elastomer) insulation offers excellent flexibility at high and low temperatures (150°C to –60°C), good dielectric strength, abrasion/cut-through resistance, mechanical properties and ozone resistance. Unshielded, 1-conductor EPDM wire is recommended for Class 130(B), 155(F) and some 180(H) systems. Recommended max. baking cycles: 350°F/177°C (24 hrs.), 375°F/190°C (4 hrs.). **Sold in 500′ spools.** *Also available in* **1000′ spools** and other colors; *go online or call.*

EPDM INSULATION, 0.045″ THICK — UL STYLE 3374 600V, 150°C; CSA TYPE CL1254 600V, 125°C

Mfg. Part No.	AWG (Stranding)	Nom. O.D. (In.)	500′ Spool Black Stock No.	500′ Spool Price per Spool
● 37118 010500	18 (16x30)	0.142	87K1250	174.47
● 37116 010500	16 (26x30)	0.155	87K1247	216.95
● 37114 010500	14 (41x30)	0.170	04F6376	301.63
● 37112 010500	12 (65x30)	0.190	87K1245	424.46
● 37110 010500	10 (65x28)	0.240	87K1244	602.65

XL-DUR™ INSULATED LEAD WIRE

XL-DUR™ insulation is a chemically cross-linked polyethylene that offers excellent thermal aging characteristics, moisture and solvent resistance. It has good abrasion and ozone resistance. Resists deformation when subjected to momentary high temperatures during assembly processes. Recommended for Class 130(B) as motor leads. Maximum baking cycles: 300°F/149°C (24 hrs.), 325°F/163°C(12 hrs.), 350°F/177°C(8 hrs.). **Sold in 500′ spools.** *Also available in* **1000′ spools** and other colors; *go online or call.*

XL-DUR INSULATION, 0.030″ THICK — UL STYLE 3173 600V, 125°C; CSA TYPE CL1251 600V, 125°C

Mfg. Part No.	AWG (Stranding)	Nom. O.D. (In.)	500′ Spool Black Stock No.	500′ Spool Price per Spool
● 35620 010500	20 (10 x 30)	0.102	05F1903	91.95
● 35618 010500	18 (16 x 30)	0.109	87K1232	117.38
● 35616 010500	16 (26 30)	0.123	87K1231	156.31
● 35614 010500	14 (41 x 30)	0.138	03F7456	233.21
● 35612 010500	12 (65 x 30)	0.153	87K6211	357.42

➤ CONTINUED ➤

INSULATED LEAD WIRE (CONT.)

DUPONT HYPALON™ INSULATED LEAD WIRE

DuPont Hypalon™ insulation has excellent heat resistance, color stability and electrical properties. It offers good oil, ozone and abrasion resistance. Recommended for Class 130(B) as motor leads. Maximum baking cycles: 300°F/149°C (24 hrs.), 325°F/163°C(12 hrs.). Passes VW-1 vertical wire flame test. **Sold in 500′ spools.** *Also available in* **1000′ spools** and other colors; *go online or call.*

HYPALON INSULATION, 0.045″ THICK — UL STYLE 3191 600V, 105°C; CSA TYPE CL1053 600V, 105°C

Mfg. Part No.	AWG (Stranding)	Nom. O.D. (In.)	500′ Spool Black Stock No.	500′ Spool Price per Spool
● 34418 010500	18 (16x30)	0.142	04F6392	206.83
● 34414 010500	14 (41x30)	0.170	05F1836	304.14
● 34410 010500	10 (65x28)	0.209	88F1838	580.77

(9923)

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(212563)

PHOTOVOLTAIC WIRE FOR "GREEN" SOLAR POWER APPLICATIONS

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

- Meets UL Type PV (Photovoltaic) UL 4703 requirements
- 14 AWG and larger also meets UL Type USE-2, RHW-2; CSA Type RW90 requirements
- Sunlight- and flame-resistant
- UL VW-1 flammability rated
- UL listed, CSA approved, CE compliant

Photovoltaic wire is suitable for interconnection wiring of grounded and ungrounded photovoltaic power systems as described in Section 690.31(A) of the 2008 NEC (National Electric Code). Features a soft annealed tinned copper stranded conductor insulated with XLPE (cross linked polyethylene) and a sun-resistant, non-integrally PVC jacket. Available in a wire range from 18 AWG to 8 AWG. Operating temperature range: -40°C to +90°C. Maximum operating voltage: 600 or 1000 VRMS (UL PV) or 1000 VRMS (CSA RW 90). Jacket color: black. **Sold in 1000′ and 5000′ spools.**

AWG (Stranding)	Nom. O.D. (mm)	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool	Mfg. Part No.	5000′ Spool Stock No.	5000′ Spool Price per Spool
18(16x30)	5.461	● 38218 0101000	59R0156	317.63	● 38218 0105000	59R0157	1620.15
16(26x30)	5.766	● 38216 0101000	59R0154	380.95	● 38216 0105000	59R0155	1942.79
12(65x30)	6.477	● 38212 0101000	59R0150	569.69	● 38212 0105000	59R0151	2903.81
10(105x30)	7.315	● 38210 0101000	59R0086	771.58	● 38210 0105000	59R0087	3856.17
8(133x29)	9.246	● 38208 0101000	59R0084	1208.24	● 38208 0105000	59R0085	6161.40

(164672)

3

PVC INSULATED HOOK-UP WIRE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

All hook-up wire listed in the table below features a PVC insulated tinned copper conductor. Other sizes and colors are available; *go online or call.*

UL STYLE 1061 300V, 80°C; CSA TYPE AWM — INSULATION THICKNESS 0.010″

Semi-rigid PVC insulation. Solid conductors are suitable for wire wrap applications.

100′ SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D. (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	Price per Spool
● 9977	28	Solid	0.838	02F5490	02F5487	02F5491	02F5484	...	...	...	...	...	...	23.12
● 9986	28	7 x 36AWG	0.889	87K7507	...	03F1976	87K2881	...	...	...	03F1971	...	...	29.15
● 9976	26	Solid	0.914	87K2859	...	87K6382	87K6383	...	...	...	...	...	...	20.02
● 9985	26	7 x 34AWG	0.991	87K2880	87K6400	02M5452	03F1989	87K2878	03F1997	03F1988	87K2877	87K2879	...	31.21
● 9975	24	Solid	1.016	...	...	87K6380	02F5524	...	...	...	...	...	...	22.04
● 9984	24	7 x 32AWG	1.118	03F2015	03F2012	03F2016	03F2009	87K2876	03F2017	...	03F2010	...	...	33.17
● 9982	20	7 x 28AWG	1.473	87K2870	03F2052	03F2056	03F2049	03F2051	87K6398	...	...	...	...	49.52
● 9981	18	19 x 30AWG	1.676	87K6395	20M4496	03F2076	87K2866	03F2071	03F2077	87K7492	87K6394	...	03F2073	52.72
● 9980	16	19 x 28AWG	1.981	03F2095	...	87K7485	87K6392	...	03F2097	...	...	...	...	68.18

TYPE B MIL-W-16878/1-PVC 600V, 105°C — INSULATION THICKNESS 0.010″

Ideal for internal wiring of meters, panels and electical or electronic equipment.

100′ SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D. (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	Price per Spool
● 8504	24	7 x 32AWG	1.118	02F4575	87K6305	87K7213	87K7215	87K6304	87K6306	87K6303	02F4569	02F4574	...	36.84
● 8503	22	7 x 30AWG	1.27	87K6301	87K6299	87K2788	87K2789	87K2790	87K7209	02F4529	87K6298	02F4536	87K6300	40.85
● 8502	20	7 x 28AWG	1.473	87K7202	87K2785	02F4505	87K2782	87K2784	87K7201	87K2781	87K2783	02F4503	87K6293	53.60
● 8501	18	7 x 26AWG	1.727	87K2779	87K6291	88K2211	87K6289	87K6290	87K2778	02F4458	87K7198	...	...	58.50

1000′ SPOOL

● 8504	24	7 x 32AWG	1.118	87K7221	02F4590	87K2793	87K6307	87K7219	87K7220	87K7217	02F4588	02F4593	02F4592	230.27

TYPE MW MIL-W-76C-PVC 1000V, 80°C

Medium-wall, extruded PVC insulation is flame and ozone resistant and inert to most chemicals, oils and solvents. Ideal for internal wiring of electrical and electronic equipment. Insulation thickness 0.017″ except **mfg. part no. 8520**, 0.018″; **mfg. part no. 8521**, 0.019″; and **mfg. part no. 8527**, 0.021″.

100′ SPOOL

Mfg. Part No.	AWG	Stranding	Nom. O.D. (mm)	White Stock No.	Green Stock No.	Black Stock No.	Red Stock No.	Yellow Stock No.	Blue Stock No.	Brown Stock No.	Orange Stock No.	Gray Stock No.	Violet Stock No.	Price per Spool
● 8530	22	Solid	1.499	87K2821	02F4946	87K2820	02F4943	02F4945	02F4947	...	02F4944	...	...	36.65
● 8524	22	7 x 30AWG	1.626	02F5121	02F5117	02F5122	87K2811	96K4538	02F5118	02F5113	02F5115	02F5120	87K2812	40.35
● 8529	20	Solid	1.676	87K2818	...	02F5089	...	...	...	...	...	...	...	43.29
● 8523	20	10 x 30AWG	1.778	02F5177	02F5173	02F5178	02F5170	02F5172	02F5174	87K2808	02F5171	02F5176	02F5175	49.50
● 8522	18	16 x 30AWG	2.032	87K6313	02F5219	02F5225	02F5217	02F5219	02F5221	88K2212	87K7238	87K7245	87K2806	51.64
● 8527	12	65 x 30AWG	3.251	87K6321	87K7251	02F5060	02F5052	...	02F5056	...	02F5053	...	...	175.37

1000′ SPOOL

● 8522	18	16 x 30AWG	2.032	87K7246	02F5242	87K7240	87K2807	87K7242	87K7243	87K7239	02F5240	...	87K7244	369.53

(60674)

HOOK-UP WIRE

PVC INSULATED HOOK-UP WIRE — PASSES VW-1 VERTICAL WIRE FLAME TEST

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

All hook-up wire listed in the table below features a PVC insulated tinned copper conductor. Other sizes and colors are available; *go online or call.*

Rated –10°C to + 105°C, 300V. Rated 600V peak for electronic circuits, and internal wiring of electronic and electrical equipment. (**) 5000′ spools available.

DUAL RATED UL STYLE 1007 300V, 80°C AND 1569 300V, 105°C; CSA TYPE TR-64, 90°C AND CSA TYPE TRSR-64, 105°C; PASSES VW-1 VERTICAL WIRE FLAME TEST— INSULATION THICKNESS 0.16″

Mfg. Part No.	AWG (Stranding)	Nom. O.D. (In.)	100′ Spool White Stock No.	100′ Spool Green Stock No.	100′ Spool Black Stock No.	100′ Spool Red Stock No.	100′ Spool Price per Spool	1000′ Spool White Stock No.	1000′ Spool Green Stock No.	1000′ Spool Black Stock No.	1000′ Spool Red Stock No.	1000′ Spool Price per Spool
● 9926	26 (7 x 32)	0.051	...	...	03F1808	03F1801	31.20	03F1817	03F1814	87K2853	03F1811	196.71
● 9921	22 (7 x 30)	0.062	03F1847	03F1844	87K2846	03F1841	38.83	03F1857	87K7423	03F1858	03F1851	257.77
● 9918**	18 (16 x 30)	0.079	03F1887	87K6366	03F1888	87K2842	53.96	87K7414	87K7413	03F1898	87K7411	376.97

UL STYLE 1015 600V, 105°C; CSA TYPE TEW; PASSES VW-1 VERTICAL WIRE FLAME TEST — INSULATION THICKNESS 0.031″
Rated –10°C to + 105°C, 600V. Rated 2500V peak for electronic circuits, and internal wiring of electronics and electrical equipment. (**) 5000′ spools available.

● 8918**	18 (16 x 39)	0.110	87K7299	02F4367	88K1503	87K7298	67.84	02F4376	87K7303	87K7300	87K7302	465.20

(6218)

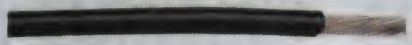
3

PVC INSULATED HOOK-UP WIRE

RoHS Compliant Available

General Cable

CAROL BRAND



- Choice of 300V or 600V rated wire
- Fully annealed tinned copper stranded conductor, per ASTM B-33
- Premium-grade color-coded PVC insulation
- Temperature range: -20°C to +105°C
- Stocked in 10 colors
- Meets UL VW-1 Vertical Wire Flame Test
- UL recognized, CSA certified

Premium-grade PVC insulated hook-up wire is perfect for internal wiring of electrical and electronic equipment, such as panels and meter and point-to-point wiring. Solid conductor available; *go online or call.* **Sold in 100′ spools.**

300V RATED — UL 1007 (80°C), UL 1569 (105°C), CSA TR-64 (90°C)

Mfg. Part No.	AWG	Stranding	Nom. O.D. (In.)	Black Stock No.	White Stock No.	Red Stock No.	Orange Stock No.	Yellow Stock No.	Green Stock No.	Blue Stock No.	Brown Stock No.	Gray Stock No.	Violet Stock No.	100′ Spool Price per Spool
● C2015A	24	7 x 32AWG	0.056	78R8014	78R8015	87R1401	78R8016	78R8017	78R8018	...	...	78R8020	78R8021	22.82
● C2016A	22	7 x 30AWG	0.062	78R8022	78R8023	63R6724	78R8024	78R8025	78R8026	78R8027	78R8028	78R8029	78R8030	24.27
● C2040A	20	10 x 30AWG	0.07	78R8031	78R8032	78R8033	...	78R8035	78R8036	78R8037	78R8038	...	...	28.25
● C2064A	18	16 x 30AWG	0.08	78R8041	78R8042	78R8043	78R8044	78R8045	78R8046	78R8047	78R8048	78R8049	78R8050	31.42
● C2065A	16	26 x 30AWG	0.092	78R8051	78R8052	78R8053	78R8054	78R8055	78R8056	78R8057	78R8058	78R8059	78R8060	38.46
600V RATED — UL 1015 (105°C), CSA TEW														
● C2102A	20	10 x 30AWG	0.102	78R8061	78R8062	78R8063	78R8064	78R8065	78R8066	78R8067	78R8068	78R8069	78R8070	29.28
● C2103A	18	16 x 30AWG	0.112	64R5091	64R5093	78R8071	78R8072	78R8073	78R8074	78R8075	78R8076	...	78R8078	32.44
● C2104A	16	26 x 30AWG	0.124	78R8079	78R8080	78R8081	...	...	78R8084	78R8085	78R8086	...	...	40.51
● C2105A	14	41 x 30AWG	0.141	78R8089	78R8090	64R5137	78R8091	78R8092	78R8093	78R8094	78R8095	78R8096	...	47.74

(190013)

UL STYLE 1007 / 1569, PVC INSULATED HOOK-UP WIRE

RoHS Compliant Available

pro-POWER

- Passes VW-1 and FT1 flame resistance test
- Meets CSA C(RU) TR-64
- Complies with CA Proposition 65
- Operating temperature -40°C to 105°C
- Rated voltage 300VRMS

Mfg. Part No.	AWG	Stranding	Nom. O.D. (in.)	Color	500′ Spool Stock No.	500′ Spool Price per Spool
● PPWH1626-BK	16	26 x 30AWG	0.092	Black	67T2117	194.08
● PPWH1626-RD	16	26 x 30AWG	0.092	Red	67T2118	194.08
● PPWH1626-WH	16	26 x 30AWG	0.092	White	67T2119	194.08
● PPWH1801-BK	18	Solid	0.072	Black	67T2116	100.98
● PPWH1816-BK	18	16 x 30AWG	0.079	Black	67T2112	130.03
● PPWH1816-RD	18	16 x 30AWG	0.079	Red	67T2114	130.03
● PPWH1816-WH	18	16 x 30AWG	0.079	White	67T2115	130.03
● PPWH2001-RD	20	Solid	0.064	Red	67T2111	85.19
● PPWH2010-BL	20	10 x 30AWG	0.069	Blue	67T2107	113.19
● PPWH2010-RD	20	10 x 30AWG	0.069	Red	67T2108	109.73
● PPWH2201-BK	22	Solid	0.057	Black	67T2103	70.45
● PPWH2201-RD	22	Solid	0.057	Red	67T2104	70.45
● PPWH2207-BK	22	7 x 30AWG	0.062	Black	67T2099	86.42
● PPWH2207-BL	22	7 x 30AWG	0.062	Blue	67T2100	90.70
● PPWH2207-RD	22	7 x 30AWG	0.062	Red	67T2101	86.42
● PPWH2207-WH	22	7 x 30AWG	0.062	White	67T2102	86.42
● PPWH2401-BK	24	Solid	0.052	Black	67T2097	64.26
● PPWH2401-RD	24	Solid	0.052	Red	67T2098	64.26
● PPWH2407-BK	24	7 x 32AWG	0.056	Black	67T2092	78.40
● PPWH2407-BL	24	7 x 32AWG	0.056	Blue	67T2093	78.40
● PPWH2407-GR	24	7 x 32AWG	0.056	Green	67T2094	78.40
● PPWH2407-RD	24	7 x 32AWG	0.056	Red	67T2095	78.40
● PPWH2407-WH	24	7 x 32AWG	0.056	White	67T2096	78.40
● PPWH2607-BK	26	7 x 34AWG	0.051	Black	67T2089	77.46
● PPWH2607-RD	26	7 x 34AWG	0.051	Red	67T2090	77.46
● PPWH2607-WH	26	7 x 34AWG	0.051	White	67T2091	77.46

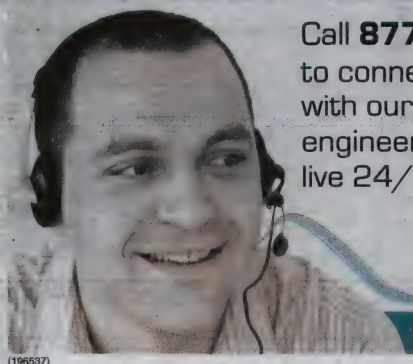
➤ CONTINUED ➤

UL STYLE 1007 / 1569, PVC INSULATED HOOK-UP WIRE (CONT.)

Mfg. Part No.	AWG	Stranding	Nom. O.D. (in.)	Color	500′ Spool Stock No.	500′ Spool Price per Spool
● PPWH2807-BK	28	7 x 36AWG	0.047	Black	67T2085	74.80
● PPWH2807-BL	28	7 x 36AWG	0.047	Blue	67T2086	74.80
● PPWH2807-RD	28	7 x 36AWG	0.047	Red	67T2087	74.80
● PPWH2807-WH	28	7 x 36AWG	0.047	White	67T2088	74.80

(198158)

TECHNICAL SUPPORT HOTLINE



Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196537)

UL STYLE 1015, PVC INSULATED HOOK-UP WIRE

RoHS Compliant Available

pro-POWER

- Meets UL MTW
- Meets CSA C(RU) TEW
- Complies with CA Proposition 65
- Operating temperature -20°C to 105°C
- Rated voltage 600VRMS

Mfg. Part No.	AWG	Stranding	Nom. O.D. (in.)	Color	500' Spool Stock No.	500' Spool Price per Spool
PPWJ1265-BK	12	65 x 30AWG	0.157	Black	67T2135	660.80
PPWJ1441-BK	14	41 x 30AWG	0.138	Black	67T2132	298.76
PPWJ1441-RD	14	41 x 30AWG	0.138	Red	67T2133	298.76
PPWJ1441-WH	14	41 x 30AWG	0.138	White	67T2134	298.76
PPWJ1626-BK	16	26 x 30AWG	0.124	Black	67T2129	250.99
PPWJ1626-RD	16	26 x 30AWG	0.124	Red	67T2130	250.99
PPWJ1626-WH	16	26 x 30AWG	0.124	White	67T2131	250.99
PPWJ1816-BK	18	16 x 30AWG	0.111	Black	67T2126	173.85
PPWJ1816-RD	18	16 x 30AWG	0.111	Red	67T2127	173.85
PPWJ1816-WH	18	16 x 30AWG	0.111	White	67T2128	173.85
PPWJ2010-BK	20	10 x 30AWG	0.101	Black	67T2123	131.18
PPWJ2010-RD	20	10 x 30AWG	0.101	Red	67T2124	131.18
PPWJ2010-WH	20	10 x 30AWG	0.101	White	67T2125	131.18
PPWJ2207-BK	22	7 x 30AWG	0.094	Black	67T2120	103.99
PPWJ2207-RD	22	7 x 30AWG	0.094	Red	67T2121	103.99
PPWJ2207-WH	22	7 x 30AWG	0.094	White	67T2122	103.99

(198156)

MIL-W-16878E/1, PVC INSULATED HOOK-UP WIRE

RoHS Compliant Available

pro-POWER

- Meets MIL-W-16878E/1
- Complies with CA Proposition 65
- Operating temperature -55°C to 105°C
- Rated voltage 600VRMS

Mfg. Part No.	AWG	Stranding	Nom. O.D. (in.)	Color	500' Spool Stock No.	500' Spool Price per Spool
PPWN1807-RD	18	7 x 26AWG	0.068	Red	67T2083	172.76
PPWN1807-WH	18	7 x 26AWG	0.068	White	67T2084	172.76
PPWN2007-BK*	20	7 x 28AWG	0.058	Black	67T2079	112.46
PPWN2007-RD*	20	7 x 28AWG	0.058	Red	67T2080	112.46
PPWN2007-WH*	20	7 x 28AWG	0.058	White	67T2081	112.46
PPWN2207-BK*	22	7 x 30AWG	0.05	Black	67T2070	93.10
PPWN2207-RD*	22	7 x 30AWG	0.05	Red	67T2072	93.10
PPWN2207-WH*	22	7 x 30AWG	0.05	White	67T2073	93.10
PPWN2219-BK	22	19 x 34AWG	0.052	Black	67T2074	106.48
PPWN2219-BL	22	19 x 34AWG	0.052	Blue	67T2075	102.34
PPWN2219-GR	22	19 x 34AWG	0.052	Green	67T2076	102.34
PPWN2219-RD	22	19 x 34AWG	0.052	Red	67T2077	102.34
PPWN2219-WH	22	19 x 34AWG	0.052	White	67T2078	106.48
PPWN2407-BK*	24	7 x 32AWG	0.044	Black	67T2062	86.42
PPWN2407-BL*	24	7 x 32AWG	0.044	Blue	67T2063	86.42
PPWN2407-RD*	24	7 x 32AWG	0.044	Red	67T2064	86.42
PPWN2407-WH*	24	7 x 32AWG	0.044	White	67T2065	86.42
PPWN2419-BK	24	19 x 36AWG	0.045	Black	67T2066	103.78
PPWN2419-RD	24	19 x 36AWG	0.045	Red	67T2067	103.78
PPWN2419-WH	24	19 x 36AWG	0.045	White	67T2068	103.78
PPWN2419-YL	24	19 x 36AWG	0.045	Yellow	67T2069	103.78
PPWN2607-BK*	26	7 x 34AWG	0.039	Black	67T2058	92.02
PPWN2607-BL*	26	7 x 34AWG	0.039	Blue	67T2059	92.02
PPWN2607-RD*	26	7 x 34AWG	0.039	Red	67T2060	92.02
PPWN2607-WH*	26	7 x 34AWG	0.039	White	67T2061	92.02

*Also meets MIL-W-76B Type LW

(198157)

UL STYLE 1061, PVC INSULATED SEMI-RIGID HOOK-UP WIRE

RoHS Compliant Available

pro-POWER

- Passes VW-1 and FT1 flame resistance test
- Meets CSA C(RU) AWM I A/B FT1
- Complies with CA Proposition 65
- Operating temperature -10°C to 80°C
- Rated voltage 300VRMS

Mfg. Part No.	AWG	Stranding	Nom. O.D. (in.)	Color	500' Spool Stock No.	500' Spool Price per Spool
PPWS1807-BK	18	7 x 26AWG	0.068	Black	67T2143	165.94
PPWS2007-RD	20	7 x 28AWG	0.058	Red	67T2142	118.69
PPWS2207-BK	22	7 x 30AWG	0.05	Black	67T2139	100.07
PPWS2207-RD	22	7 x 30AWG	0.05	Red	67T2140	100.07
PPWS2207-WH	22	7 x 30AWG	0.05	White	67T2141	100.07
PPWS2407-BK	24	7 x 32AWG	0.044	Black	67T2136	93.91
PPWS2407-RD	24	7 x 32AWG	0.044	Red	67T2137	93.91
PPWS2407-WH	24	7 x 32AWG	0.044	White	67T2138	93.91

(198158)

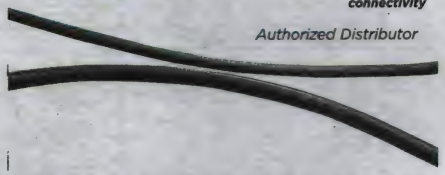
SOLAR CABLE

RoHS Compliant Available

TE connectivity

Authorized Distributor

- USE-2 wire for solar home-runs
- Electron beam cross-linked
- Halogen-free, flame-retardant, low-toxicity
- Approved for outdoor use
- UV resistant
- Abrasion resistant
- Resistance to water, ozone, fluids, salt, general weathering
- Very low smoke emissions
- UL approved 854, Subject 4703



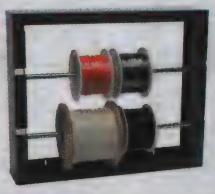
As part of Tyco Electronics' SOLARLOK photovoltaic interconnection system this solar cable is designed to meet the harsh environmental conditions typical in the wiring of photovoltaic installations, such as, between solar panels and roof tiles and between solar panels and AC/DC inverters. Stranded, tin-plated copper conductor and electron beam cross-linked halogen-free polyolefin jacket offers excellent flexibility and stripping performance. Operating temperature range: -40°C to +90°C. Voltage rating: 600V. UL listed. *Order SOLARLOK photovoltaic connectors separately online.*

Mfg. Part No.	AWG	Nom. O.D. (In.)	Jacket Color	Spool Size (Ft.)	Stock No.	Price per Spool Each
1986165-2	12	0.19	Black	500	78M6683	336.34
1986164-2	10	0.21	Black	500	78M6682	500.00

(106835)

WIRE SPOOL RACKS

DURATOOL



Heavy-duty wire spool racks offer a convenient way of storing and dispensing wire. Prime cold-rolled steel ⅝″ diameter rods with interlocking construction accommodate wire spools up to 10″ in diameter. Finish: gray baked enamel. For use in stockrooms, maintenance, and other industrial applications. Made in the U.S.A.

Mfg. Part No.	Description	H x W x D	Stock No.	Price Each 1-4
8537-0689	2-Row Rack Dispenser	17 x 26 x 6″	16N2312	155.33
8537-0690	4-Row Rack Dispenser	37 x 26 x 6″	16N2313	195.37

(20025)

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(196546)

HOOK-UP WIRE • TRAY CABLE

WH SERIES STRANDED AND WHS SERIES SOLID HOOK-UP WIRE

OSHA VW-1 RoHS Compliant Available

NTE ELECTRONICS, INC.

- Tinned copper conductor — choice of stranded or solid
- PVC insulated
- Rated 300V, 90°C
- UL style 1007; CSA TR-64/1569
- Passes UL VW-1.S vertical flame test
- OSHA acceptable

3

Ideal applications include internal wiring of electrical and electronic equipment, panels, meters, computers, business machines, appliances, control panels, and point-to-point wiring where 300V is required. Additional colors are available, *go online or call.* **Sold in 25′ and 100′ spools.**

WH SERIES STRANDED — 25′ SPOOL

Mfg. Part No.	AWG	Nom. O.D. (In.)	Black Stock No.	Red Stock No.	Orange Stock No.	Yellow Stock No.	Green Stock No.	Blue Stock No.	Violet Stock No.	White Stock No.	25′ Spool Price per Spool
● WH18	18	0.077	33C7293	33C7298	33C7301	33C7303	33C7305	33C7307	33C7309	33C7313	7.82
● WH20	20	0.077	33C7315	33C7319	33C7321	33C7323	33C7325	33C7327	...	33C7333	6.19
● WH22	22	0.077	33C7335	33C7339	33C7342	33C7344	33C7347	33C7350	33C7353	33C7357	4.50
● WH24	24	0.056	33C7360	33C7364	...	...	...	...	...	33C7382	4.29
● WH26	26	0.061	33C7385	33C7389	33C7391	33C7393	33C7395	33C7397	...	33C7403	4.06

WH SERIES STRANDED — 100′ SPOOL

Mfg. Part No.	AWG	Nom. O.D. (In.)	Black Stock No.	Red Stock No.	Orange Stock No.	Yellow Stock No.	Green Stock No.	Blue Stock No.	Violet Stock No.	White Stock No.	100′ Spool Price per Spool
● WH18	18	0.077	33C7292	33C7297	33C7300	33C7302	33C7304	33C7306	33C7308	33C7312	20.23
● WH20	20	0.077	33C7314	33C7318	33C7320	33C7322	33C7324	33C7326	...	33C7332	15.21
● WH22	22	0.077	33C7334	33C7338	33C7341	33C7343	25P9319	33C7348	33C7352	33C7356	11.93
● WH24	24	0.056	33C7358	33C7363	33C7366	33C7368	33C7370	33C7372	...	33C7381	11.03
● WH26	26	0.061	33C7384	33C7388	...	33C7392	33C7394	33C7396	33C7398	33C7402	10.38

WHS SERIES SOLID — 25′ SPOOL

Mfg. Part No.	AWG	Nom. O.D. (In.)	Black Stock No.	Red Stock No.	25′ Spool Price per Spool
● WHS18	18	0.072	33C7189	33C7193	6.68
● WHS20	20	0.064	33C7209	33C7213	5.57
● WHS22	22	0.057	33C7229	33C7233	4.62
● WHS24	24	0.052	33C7249	33C7253	4.35
● WHS26	26	0.047	33C7272	33C7276	4.32

WHS SERIES SOLID — 100′ SPOOL

Mfg. Part No.	AWG	Nom. O.D. (In.)	Black Stock No.	Red Stock No.	100′ Spool Price per Spool
● WHS20	20	0.064	33C7208	...	16.02
● WHS22	22	0.057	33C7228	33C7232	13.27
● WHS24	24	0.052	33C7248	...	10.81

(119480)

MULTIPAIR FOIL-SHIELDED POWER-LIMITED TRAY CABLE

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

Ideal for instrumentation systems applications. Stranded tinned copper conductors with aluminum/polyester foil shield and stranded tinned copper drain wire. PVC insulation, black and red pairs, numbered. Slate PVC jacket. Rating: 300V (CM), -20°C to +60°C (CMG). Operating temperature: –20°C to +105°C. UL listed type CM/PLTC, CSA certified CMG FT4.

22 AWG, 7 x 30 STRANDED, 0.043″ JACKET THICKNESS

No. of Pairs	Nom. O.D. (in.)	Mfg. Part No.	500′ Spool Stock No.	500′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
2	0.267*	● 6417 SL002	66F8314	353.02	● 6417 SL001	66F8313	667.10
3	0.291	● 6418 SL002	66F8316	435.06	● 6418 SL001	66F8315	836.58
4	0.315	● 6419 SL002	66F8318	579.42	● 6419 SL001	06M3981	1114.40
6	0.370	● 6420 SL002	66F8320	898.29	● 6420 SL001	66F8319	1727.23
22 AWG, 7 x 30 STRANDED, 0.053″JACKET THICKNESS							
9	0.447	● 6421 SL002	66F8322	1380.39	● 6421 SL001	66F8321	2655.47
11	0.480	● 6422 SL002	66F8324	1612.55	● 6422 SL001	66F8323	3102.30
15	0.545	● 6423 SL002	66F8326	2069.48	● 6423 SL001	66F8325	3981.00

➤CONTINUED➤

MULTIPAIR FOIL-SHIELDED POWER-LIMITED TRAY CABLE (CONT.)

22 AWG, 7 x 30 STRANDED, 0.063″JACKET THICKNESS

No. of Pairs	Nom. O.D. (in.)	Mfg. Part No.	500′ Spool Stock No.	500′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
19	0.593	● 6424 SL002	66F8328	2609.90	● 6424 SL001	66F8327	5021.00
27	0.698	● 6425 SL002	66F8330	3706.89	● 6425 SL001	66F8329	7131.76
51	0.914**	● 6426 SL002	66F8332	6726.48	● 6426 SL001	66F8331	12942.42
18 AWG, 19 x 30 STRANDED, 0.043″ JACKET THICKNESS							
2	0.362	● 6427 SL002	85K9921	768.08	● 6427 SL001	66F8333	1477.21
18 AWG, 19 x 30 STRANDED, 0.053″ JACKET THICKNESS							
3	0.403	● 6428 SL002	66F8336	1221.09	● 6428 SL001	66F8335	2349.54
4	0.438	● 6429 SL002	66F8338	1465.19	● 6429 SL001	66F8337	2818.75
6	0.518	● 6430 SL002	66F8340	2224.05	● 6430 SL001	66F8339	4278.72
18 AWG,19 x 30 STRANDED, 0.063″JACKET THICKNESS							
9	0.622	● 6431 SL002	66F8342	3303.69	● 6431 SL001	66F8341	6356.14
11	0.671	● 6432 SL002	66F8344	4049.32	● 6432 SL001	66F8343	7790.80
15	0.751	● 6433 SL002	66F8346	5006.96	● 6433 SL001	66F8345	9633.34

*0.038″ jacket thickness; **0.075″ jacket thickness

(6200)

600V INSTRUMENTATION TRAY CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

These 600V tray cable feature PVC-nylon insulation, Beldfoil® aluminum foil/polyester tape shield (100% coverage) and industrial-grade sunlight- and oil-resistant black PVC jacket.

TWISTED PAIRS — TINNED COPPER CONDUCTORS, BLACK/RED

AWG (Stranding)	Nom. O.D. (In.)	Mfg. Part No.	500′ Spool Stock No.	500′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
18 (19x30)	0.275	● 9341 010500	03F6026	814.32	● 9341 0101000	03F6027	1628.63
TWISTED PAIRS WITH GROUND — BARE COPPER CONDUCTORS, BLACK/WHITE/GREEN GROUND Exposed run (ER) rated per NEC Article 336.							
18 (7x26)	0.340	...	...	...	● 3088AE 0101000	68K7427	458.11
16 (7x24)	0.390	...	...	...	● 3090AE 0101000	05M3169	661.73
TWISTED TRIADS — BARE COPPER CONDUCTORS, BLACK/RED/BLUE							
18 (7x26)	0.282	● 1121A 010500	20M4361	340.55	● 1121A 0101000	66F7743	681.11

(6197)

HIGH-TEMPERATURE CONTROL AND INSTRUMENTATION CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

Silver-plated copper conductors, cabled and color coded. Extruded PTFE insulated, with white PTFE tape wrapped jacket. Working voltage: 600V. Meets MIL-W-16878/4 (Type E) specifications where noted. UL recognized.

26 AWG (7x34) STRANDED CONDUCTORS MIL-SPEC MIL-W-16878/4 (TYPE E)

Mfg. Part No.	No. of Cond.	Nom. O.D. (mm)	Nom. Cap.* (pF/ft.)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 83332E	3	3.099	18.8	...	...	...	...	12K0083	3127.15
● 83347E	4	3.327	18.5	...	...	12K0101	2939.88	12K0100	5879.76

24 AWG (19x36) STRANDED CONDUCTORS COMPLIES WITH MIL-W-16878/4 (TYPE E) EXCEPT STRANDING

Mfg. Part No.	No. of Cond..	Nom. O.D. (mm)	Nom. Cap.* (pF/ft.)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 83318E	2	3.251	26.5	...	...	87K1720	2263.28	12K0071	4526.55
● 83348E	4	3.708	21.9	...	...	12K0104	3687.67	12K0103	7375.34

20 AWG (19x32) STRANDED CONDUCTORS MIL-SPEC MIL-W-16878/4 (TYPE E) EXCEPT STRANDING

Mfg. Part No.	No. of Cond.	Nom. O.D. (mm)	Nom. Cap.* (pF/ft.)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 83306E	1	2.515	...	...	...	...	...	12K0063	4253.21
● 83335E	3	4.242	31.7	...	...	12K0092	4275.61	12K0091	8551.22

18 AWG (19x30) STRANDED CONDUCTORS COMPLIES WITH MIL-W-16878/4 (TYPE E) EXCEPT STRANDING

Mfg. Part No.	No. of Cond.	Nom. O.D. (mm)	Nom. Cap.* (pF/ft.)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 83307E	1	2.769	...	...	...	...	...	12K0064	4659.59

16 AWG (19x29) STRANDED CONDUCTORS COMPLIES WITH MIL-W-16878/4 (TYPE E) EXCEPT STRANDING

Mfg. Part No.	No. of Cond.	Nom. O.D. (mm)	Nom. Cap.* (pF/ft.)	100′ Spool Stock No.	100′ Spool Price per Spool	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 83337E	3	5.156	30.7	87K1728	1058.90	...	...	12K0097	10588.99

*Capacitance between conductors

(78998)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

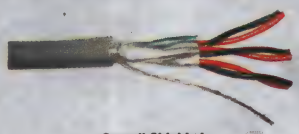
newark.com/custom-enclosures

(212568)

PAIRED SHIELDED PLTC AND ITC — UL SUBJECT 13 AND 2250

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS



Overall Shielded

Individually Shielded

Tinned copper stranded conductors, PVC insulated pairs, except **mfg. part nos. 9328-9332, 9368, 9369 and 9388** which are twisted pairs. All with Beldfoil® shield and tinned copper drain wire. Chrome sun-resistant PVC jacket. Multi-pairs are numbered at one-inch intervals; conductor pairs are color-coded black and red. Meets UL Subject 13 (NEC Article 725 Type CL3) for use as tray cable; 300V, 105°C. NEC Article 800 Type CM for use as communication cable. Meets CSA, PCC and FAS90.

OVERALL SHIELDED-AWG (STRANDING) 22 (7x30)

No. of Pairs	Nom. O.D. (in.)	Mfg. Part No.	500′ Spool Stock No.	500′ Spool Price per Spool	Mfg. Part No.	1000′ Spool Stock No.	1000′ Spool Price per Spool
2	0.31	● 9512 060500	87K1897	477.40	● 9512 0601000	03F6101	954.79
3	0.324	● 9513 060500	03F6103	603.00	● 9513 0601000	87K1898	1205.99
4	0.351	● 9514 060500	87K1899	805.06	● 9514 0601000	03F6107	1610.12
OVERALL SHIELDED-AWG (STRANDING) 18 (19x30)							
2	0.368	● 9552 060500	02F4329	1029.18	● 9552 0601000	02F6112	1915.58
3	0.411	● 9553 060500	87K1902	1512.72	● 9553-1000-60	03F6131	3025.43
4	0.447	● 9554 060500	03F6133	1827.92	● 9554-1000-60	03F6134	3655.84
INDIVIDUALLY SHIELDED-AWG (STRANDING) 22 (7x30)							
2	0.323	● 9328 060500	03F5987	606.20	● 9328 0601000	87K1870	1212.39
3	0.341	...	...	...	● 9329 0601000	03F5991	1558.56
6	0.457	● 9331 060500	03F5996	1565.65	● 9331 0601000	03F5997	3131.30
9	0.53	● 9332 060500	03F5999	2382.30	● 9332 0601000	03F6000	4764.60
INDIVIDUALLY SHIELDED-AWG (STRANDING) 18 (19x30)							
2	0.378	● 9368 060500	87K1872	1289.89	...	...	...
4	0.461	● 9388 060500	87K1874	2136.38	● 9388 0601000	87K1873	4272.76

(6041)

PLTC AND ITC — UL SUBJECT 13 AND 2250 CABLE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

9407

Stranded tinned copper conductors, PVC insulated, and chrome PVC jacket except **mfg. part nos. 1030A** and **1031A** which are black PVC. All are single pair or single triad. Cable can be used in raceways, supported by messenger wire, outdoor applications and direct burial. Industrial, automotive and process control cable. Can be installed in wet or dry locations. Shielded cable is recommended for RF applications requiring crosstalk-free, balanced operation. Tri-rated cable meets UL subject 13 and 2250, 300V, 150°C, 300V 80°C article 725 NEC, Class 2 and 3 req. Passes UL 1581 vertical wire flame test. All NEC type CMG.

UNSHIELDED SINGLE PAIR

Mfg. Part No.	AWG (Stranding)	Nom. O.D.	500′ Spool Stock No.	500′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 9407	22 (7 x 30)	0.198″	03F6034	229.06	03F6035	458.11
● 9409	18 (19 x 30)	0.230″	87K1880	394.44	87K6356	788.88
● 1035A	16 (7 x 24)	0.254″	...	...	04F6149	498.24
● 9411	14 (42 x 30)	0.322″	87K1881	813.88	03F6047	1627.76
UNSHIELDED SINGLE TRIAD						
● 9491	22 (7 x 30)	0.207″	03F6070	288.22	03F6071	576.44
OVERALL SHIELDED SINGLE PAIR						
● 9322	22 (7 x 30)	0.201″	03F6052	284.85	03F6053	569.69
● 9320	20 (19 x 32)	0.217″	03F6055	396.87	03F6056	793.73
● 9318	18 (19 x 30)	0.233″	03F6058	505.34	87K2832	1010.67
● 9316	16 (19 x 29)	0.256″	87K6354	592.36	03F6062	1184.71
● 1030A	16 (7 x 24)	0.257″	...	...	10J5369	486.71
OVERALL SHIELDED SINGLE TRIAD						
● 9463	22 (7 x 30)	0.243″	70B5512	494.78	03F5678	989.56
● 1031A	16 (7 x 24)	0.271″	...	...	41M1475	775.91

(60175)

pro-POWER AT NEWARK ELEMENT14

Take control with quality, affordable Wire-Management Solutions.

newark.com/pro-power

(212564)

UNINSULATED WIRE

BELDSOL MAGNET WIRE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

Beldsol is a dual insulated magnet wire, combining excellent dielectric characteristics of polyurethane with the toughness and solvent resistance of a nylon overcoat. Rated by IEEE tests for 270°F usage and is solderable without insulation removal at 750°F. Single bare copper conductor, solid stranding. Meets J-W-1177/9 military specification, rated: Class 130, Type SUN, Single. **Sold in approximate spool lengths listed in table below.**

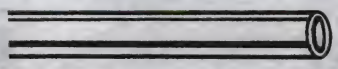
Mfg. Part No.	AWG	Approx. Spool Length (ft.)	Stock No.	Price per Spool
● 8049	18	100	36F1312	48.97
● 8050	20	160	36F1313	48.24
● 8051	22	254	36F1314	48.37
● 8052	24	404	36F1315	49.27
● 8053	26	645	36F1316	50.41
● 8054	28	1020	77M9199	52.23
● 8055	30	1615	36F1318	57.30
● 8056	32	2515	36F1319	62.65
● 8057	34	4060	36F1320	65.66
● 8058	36	6400	06M4000	73.90

(6170)

BUS BAR WIRE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS



One conductor, unshielded, uninsulated, unjacketed. Solid tinned copper. Made in accordance with specification QQ-W-343-F. **Sold in 100′ and 1000′ spools.**

Mfg. Part No.	AWG	Nom. O.D.	Circular Mil Area	100′ Spool		1000′ Spool	
				Stock No.	Price per Spool	Stock No.	Price per Spool
● 8025	30	0.0101″	102	02F5288	24.48	06M3999	102.25
● 8024	28	0.0126″	164	60K7159	24.88	...	...
● 8024	28	0.0126″	164	60K7159	24.88	02F5291	111.24
● 8024	28	0.0126″	164	60K7158	25.21	...	...
● 8023	26	0.0159″	262	60K7158	25.21	02F5293	127.68
● 8022	24	0.0206″	424	...	...	60K7157	135.29
● 8022	24	0.0206″	424	87K2703	26.06	60K7157	135.29
● 8021	22	0.0255″	650	60K7156	26.70	...	...
● 8021	22	0.0255″	650	60K7156	26.70	02F5297	175.60
● 8020	20	0.0321″	1030	...	...	02F5299	238.23
● 8019	18	0.0402″	1616	60K7155	43.31	...	...
● 8019	18	0.0402″	1616	60K7155	43.31	02F5301	333.72
● 8013	16	0.050″	2621	02F5302	61.77	87K2701	517.62
● 8011	12	0.0824″	6790	02F5306	137.18	...	...

(6168)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

(212570)

HIGH-TEMPERATURE MAGNET WIRE

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

Dual polyester film coated magnet wire, rated 180°C. Exceptional ability to resist chemical solvents and abuse in intricate windings. Meets J-W-1177/14 specifications. **Sold in spool sizes indicated in table below.**

Mfg. Part No.	AWG	Spool Size	Stock No.	Price per Spool
● 8073	14	80′	87K2704	75.87
● 8074	16	126′	87K2705	79.14
● 8075	18	199′	36F769	81.02
● 8076	20	315′	36F770	81.95
● 8077	22	501′	36F771	82.18
● 8078	24	793′	87K2706	85.38
● 8079	26	1260′	36F773	89.68
● 8080	28	1990′	36F774	95.34
● 8081	30	3140′	36F775	109.41
● 8083	34	7860′	36F777	136.03
● 8085	38	19300′	36F779	198.73

(6169)

SHIELDING/BONDING BRAID

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

Tinned copper braided wire provides approximately 90% shield coverage when applied over recommended diameter. Conforms to QQ-B-575B specifications. (*) Flat width. **Sold in 50′ and 250′ spools.**

Mfg. Part No.	Tubular I.D.	AWG	Strand-ing	Circular Mil Area	50′ Spool		250′ Spool	
					Stock No.	Price per Spool	Stock No.	Price per Spool
● 8660	0.12500″	14.3	96x34	3800	02F4314	82.65	02F4315	390.47
● 8668	0.17188″	13.3	120x34	4800	02F4320	105.57	02F4321	464.86
● 8663	0.21875″	11.9	168x34	6700	02F4324	135.42	88K2220	598.32
● 8661	0.20313″	11.3	192x34	7600	02F4316	124.46	87K7263	581.85
● 8669	0.50000″	8.9	336x34	13,300	87K7264	253.70	02F4323	1166.33
● 8662	0.78125″	6.6	576x34	22,900	87K6335	353.93	02F4319	1678.93

(6165)

CAROLPRENE® 600V, CLASS K ARC WELDING CABLE

RoHS Compliant Available

General Cable

CAROL. BRAND

OSHA

- Secondary Voltage Resistance Welding Leads
- Power Supply Applications Not Exceeding 600VAC

Features single 30 AWG fully annealed stranded bare copper conductor insulated in a Carolprene® jacket. Temperature range: –40°C to +90°C. Color: black. **Sold in 250′ spools.** Also available in 500′ spools; *go online or call.*

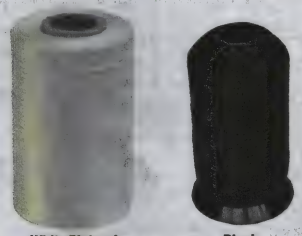
Mfg. Part No.	AWG	Nom. O.D.	250′ Spool	
			Stock No.	Price per Spool
● 01773-35-01	2/0	0.620″	05F1453	1799.90
● 01774-35-01	1/0	0.565″	05F1450	1523.11
● 01776-35-01	2	0.470″	05F1400	498.27
● 01777-35-01	4	0.400″	05F1397	628.69

(6296)

MILITARY-GRADE TWISTED NYLON LACING TAPE/CORD — MIL-T-713 TYPE P

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.



White/Natural — Black

Twisted nylon lacing tape/cord manufactured from high-tenacity, continuous filament yarn. Ideal for use in bundling military or commercial wire harnesses. Nylon has excellent tensile strength and resists acids, abrasion, flame and fungus. Temperature range -55°C to +121°C. **Sold in spools sizes indicated in table below.**

Mfg. Part No.	Color	Finish	Tensile Strength (lbs.)	Nom. Dia. (in.)	Spool Size (Yds.)	Stock No.	Price per Spool
807013W WH032	White/Natural	Wax	70	0.040	500	19M8535	82.58
807013B BK032	Black	Wax	70	0.040	500	19M8534	83.78
804814W WH032	White/Natural	Wax	48	0.025	750	19M8527	83.38
803215W WH032	White/Natural	Wax	32	0.023	1100	37F2223	83.38
803215B BK032	Black	Wax	32	0.023	1100	37F2224	83.38

(6285)

SPIRAL WRAP TUBING

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

SW Series spiral wrap tubing is designed to provide a professional finish to harness installations by eliminating exposed wire and cable. All materials maintain flexibility when bent around sharp edges or corners. Unlimited breakouts and tap off connections may be made through spiral openings. Polyethylene operating temperature: -66°C to +88°C. Nylon operating temperature: -40°C to +121°C. PTFE operating temperature: –268° to +260°C.

Mfg. Part No.	Description	Dia. (in.)	Spool Size (ft.)	Stock No.	Price per Spool
SW1 NA008	Clear Polyethylene	⅛	25	28B6297	16.57
SW2 NA008	Clear Polyethylene	¼	25	04F8683	11.04
SW5 CL008	Clear Polyethylene	¾	25	86K4561	30.89
SW 6 25CLR	Clear Polyethylene	1	25	86K4562	72.19
SW11 WH008	Fire-Resistant Polyethylene	¼	25	05F1610	28.37
SW12 WH008	Fire-Resistant Polyethylene	⅜	25	05F1612	49.71
SW13 WH008	Fire-Resistant Polyethylene	½	25	06M3857	60.77
SW14 WH008	Fire-Resistant Polyethylene	¾	25	86K8706	104.26
SW11 WH005	Fire-Resistant Polyethylene	¼	100	06M3855	93.70
SW12 WH005	Fire-Resistant Polyethylene	⅜	100	05F1611	165.55
SW13 WH005	Fire-Resistant Polyethylene	½	100	06M3856	202.24
SW20 NA008	Nylon	⅛	25	05F1616	16.60
SW22 NA008	Nylon	⅜	25	89K8011	63.77
SW23 NA008	Nylon	½	25	89K8013	82.21
SW44-3/4-25	Nylon	¾	25	85K9578	42.10
SW25 NA008	Nylon	1	25	86K4564	246.96
SW21 NA005	Nylon	¼	100	85K9576	95.98
SW22 NA005	Nylon	⅜	100	86K4563	213.52
SW23 NA005	Nylon	½	100	89K8012	276.65
SW30 NA008	PTFE	⅛	25	05F1625	162.17
SW32 NA008	PTFE	⅜	25	86K8707	452.73
SW41 BK008	UV-Resistant Black Polyethylene	¼	25	86K8708	13.02
SW42 BK008	UV-Resistant Black Polyethylene	⅜	100	86K8710	18.58
SW45 BK008	UV-Resistant Black Polyethylene	1	25	86K4565	93.87
SW41 BK005	UV-Resistant Black Polyethylene	¼	100	05F1630	43.60

(6396)

FLEXIBLE NONMETALLIC ELECTRICAL TUBING

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

- Smooth inside to facilitate easy wire pulling and installation
- UL recognized, CSA certified (except for ¼ size)

This flexible, nonmetallic electrical tubing is UL rated: 70°C; CSA rated: -18°C to 50°C. Use with Alpha's black, flexible, nonmetallic electrical connectors to provide liquid-tight integrity; *order separately online or call.* Color: black. **Sold in 100′ spools**

➤CONTINUED➤

FLEXIBLE NONMETALLIC ELECTRICAL TUBING (CONT.)

Mfg. Part No.	Maximum I.D.	Minimum O.D.	Stock No.	Price per Spool
FNT1/4 BK005	0.405″ (10.29)	0.560″ (14.22)	93K7560	169.33
FNT3/8 BK005	0.504″ (12.80)	0.690″ (17.53)	03F7391	179.90
FNT1/2 BK005	0.642″ (16.31)	0.820″ (20.83)	03F7393	219.54

(6364)

SLIT CORRUGATED LOOM TUBING

RoHS Compliant Available

PANDUIT®

Available in polyethylene or heat stabilized nylon. Tubing is slit and can easily be slipped around an existing wire bundle to provide abrasion protection. Reduces the risk of damage to wiring circuits. Other colors and sizes available; *go online or call.* **Sold in spools of varying lengths indicated in table below.**

POLYETHYLENE

Mfg. Part No.	Inside Dia. (in.)	Color	Spool Size (Ft.)	Stock No.	Price per Spool
CLT25F-C20	0.28	Black	100	96F4118	51.10
CLT35F-C20	0.35	Black	100	96F4119	68.86
CLT38F-C20	0.42	Black	100	96F4120	60.34
CLT50F-C20	0.51	Black	100	96F4121	63.98
CLT62F-C20	0.65	Black	100	96F4122	88.81
CLT75F-C20	0.76	Black	100	96F4123	106.70
CLT75F-C3	0.76	Orange	100	65H8940	122.73
CLT75F-C4	0.76	Yellow	100	08H0131	124.88
CLT100F-C20	0.92	Black	100	96F4124	137.67
CLT100F-C3	0.92	Orange	100	94B5433	136.46
CLT125F-L20	1.29	Black	50	70C3706	84.96
CLT150F-D20	1.48	Black	500	83F7266	717.84

HEAT-STABILIZED NYLON

Mfg. Part No.	Inside Dia. (in.)	Color	Spool Size (Ft.)	Stock No.	Price per Spool
CLT25N-C630	0.28	Black	100	96F4125	82.87
CLT35N-C630	0.35	Black	100	96F4126	84.54
CLT38N-C630	0.42	Black	100	96F4127	91.70
CLT50N-C630	0.51	Black	100	96F4128	111.47
CLT75N-C630	0.76	Black	100	96F4130	178.56
CLT100N-C630	0.92	Black	100	96F4131	278.80
CLT125N-L630	1.29	Black	50	83F7265	167.09

(6460)

CORRUGATED LOOM TUBING FITTINGS

RoHS Compliant Available

PANDUIT®

- Virtually eliminates taping
- Easy to assemble
- Locking latch design
- Durable polypropylene shell
- Works with most popular sizes of corrugated loom tubing
- Color: Black
- **Sold in packages of 25**

Mfg. Part No.	Branch Dia. x Trunk Dia. (in.)	Stock No.	Price per Pkg.
CF382538F-Q	0.38 x 0.25	33C4109	30.49
CF502550F-Q	0.50 x 0.25	33C4111	31.74
CF753875F-Q	0.75 x 0.38	33C4114	35.74

(68797)

PAN-WRAP SPLIT HARNESS WRAP AND INSTALLATION TOOLS

RoHS Compliant Available

PANDUIT®

- Unique engineered slot pattern
- Provides for easy wire or cable breakouts
- One size accommodates a wide range of bundle diameters

Pan-Wrap™ split harness wrap is easily installed using Panduit's patented installation tool with 180° opening for fast loading of maximum bundle diameters to speed installation; *order separately below.*

Mfg. Part No.	Nom. Bundle Dia. (in.)	Min. Bundle Diameter‡ (in.)	Max. Bundle Diameter (in.)	Color	Reel of (ft.)	Stock No.	Price per Reel
PW38F-TL	0.38	0.25	0.43	Natural	250	17T6887	307.33
PW50F-T	0.50	0.43	0.55	Natural	200	66H3687	320.55
PW75F-C	0.75	0.55	0.81	Natural	100	66H3688	222.07
PW100F-C	1.00	0.81	1.13	Natural	100	89J9131	413.15
PW38F-TL20	0.38	0.25	0.43	Black	250	64R8353	338.07

➤CONTINUED➤

CABLE & WIRE MANAGEMENT PRODUCTS

PAN-WRAP SPLIT HARNESS WRAP AND INSTALLATION TOOLS (CONT.)

Mfg. Part No.	Nom. Bundle Dia. (in.)	Min. Bundle Diameter‡ (in.)	Max. Bundle Diameter (in.)	Color	Reel of (ft.)	Stock No.	Price per Reel
● PW50F-T20	0.50	0.43	0.55	Black	200	03H3282	346.01
● PW75F-C20	0.75	0.55	0.81	Black	100	57H7136	249.61
● PW100F-C20	1.00	0.81	1.13	Black	100	20K2300	396.22

‡Diameter can be further reduced with the use of cable ties

INSTALLATION TOOLS — WHITE ABS

Mfg. Part No.	For Use With	Bundle Dia. Max. (In.)	Stock No.	Price Each
PWT38	**Mfg. Part No. PW38F** 3/8″ Pan-Wrap™	0.43	64R5653	10.53
● PWT50	**Mfg. Part No. PW50F** 1/2″ Pan-Wrap™	0.55	04H0467	11.12
● PWT75	**Mfg. Part No. PW75F** 3/4″ Pan-Wrap™	0.81	32H7230	11.30
● PWT100	**Mfg. Part No. PW100F** 1″ Pan-Wrap™	1.11	08J3440	12.93

(79576)

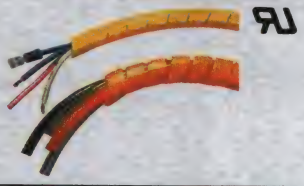
3

SPIRAL CABLE WRAPPING

RoHS Compliant Available

PANDUIT®

Reusable spiral wrapping for protecting and organizing multiple cables. Each package includes an installation tool. Allows breakouts of single/multiple wires and rerouting of replacement wires. Color-coded wire bundles. Organizes wires for communication and computer equipment. UL recognized. **Sold in spools of varying lengths indicated in table below.**



POLYETHYLENE — NATURAL

Mfg. Part No.	Bundle	Spool Size (Ft.)	Stock No.	Price per Spool
● T12F-C	1/16″-1/2″	100	84F1838	69.08
● T25F-C	3/16″-2″	100	78F548	76.66
● T38F-C	5/16″-3″	100	84F1841	140.02
● T50F-C	3/8″-4″	100	84F599	208.98
● T62F-C	1/2″-4 1/2″	100	84F1846	264.69
● T75F-C	5/8″-5″	100	84F1847	257.64
● T100F-C	7/8″-6″	100	84F1848	343.86
WEATHER-RESISTANT POLYETHYLENE — BLACK				
● T12F-C0	1/16″-1/2″	100	84F1839	82.96
● T25F-C0	3/16″-2″	100	78F498	117.40
● T38F-C0	5/16″-3″	100	84F1842	200.66
● T50F-C0	3/8″-4″	100	84F1844	303.04
● T75F-C0	5/8″-5″	100	84F2047	375.62
● T100F-C0	7/8″-6″	100	84F1849	431.10
FLAME-RETARDANT POLYETHYLENE — WHITE (UL V-0)				
● T12FR-CY	1/16″-1/2″	100	96F4101	97.10
● T25FR-CY	3/16″-2″	100	96F4102	131.22
NYLON — NATURAL				
● T25N-C	3/16″-2″	100	78F546	185.60
● T38N-C	5/16″-3″	100	66H4738	371.75
● T50N-C	3/8″-4″	100	66H4783	634.66
● T62N-C	1/2″-4 1/2″	100	66H4789	891.74
● T75N-C	5/8″-5″	100	66H4946	1109.96
TFE — NATURAL				
● T12T-C	1/16″-1/2″	100	84F1840	707.19
● T19T-C	1/8″-1″	100	66H4718	957.98
● T25T-L	3/16″-2″	50	78F499	563.99
● T50T-Q	3/8″-4″	25	94F2880	673.01
● T75T-X	5/8″-5″	10	66H4949	492.50
● T100T-X	7/8″-6″	10	52F1455	726.28

(6459)

CONTINUOUS GROMMET EDGING

RoHS Compliant Available

pro-POWER

Solid grommet edging is designed for straight and gently curving runs. Flexible to fit holes of any size or shape. Color: natural. **Sold in rolls of 100′.**

Mfg. Part No.	Panel Thickness	Material	Stock No.	Price Each 1-4
● CGP-1	Up to 0.036″	Polyethylene	23N3658	32.40
● CGP-2	0.037-0.071″	Polyethylene	23N3659	35.75
● CGP-3	0.106-0.164″	Polyethylene	23N3660	55.96
● CGP-4	0.165-0.187″	Polyethylene	23N3661	53.00
● CGP-5	0.188-0.250″	Polyethylene	23N3662	71.69
● 2577	Up to 0.036″	Nylon	92N4792	61.14
● 2578	0.037-0.071″	Nylon	92N4793	70.41
● 2579	0.072-0.105″	Nylon	92N4794	82.95

(6411)

CONTINUED

FLEXIBLE SLIT-LOOM TUBING

RoHS Compliant Available

pro-POWER

Slit-loom tubing is the perfect wire harness protective covering. Features an easy-opening seam for quick wire insertion and removal. Offers excellent resistance to fluids and abrasion while providing a uniform, tailored appearance. Made of durable polyethylene or nylon. Bulk quantities, other colors and sizes are available; *go online or call.* **Sold in spool sizes indicated in table below.**

BLACK POLYETHYLENE — RATED –40°F TO 200°F

Mfg. Part No.	Nom. I.D. (in)	Spool of (Ft.)	Stock No.	Price per Spool
● 1435	0.25	100	92N3675	52.87
● 1436	0.375	100	92N3676	53.06
● 1437	0.5	100	92N3677	65.76
● 1438	0.625	50	92N3678	54.04
● 1439	0.75	50	92N3679	65.04
● 1440	1	50	92N3680	90.30
BLACK HEAT-STABILIZED NYLON — RATED –40°F TO –300°F				
● 1441	0.25	100	92N3681	56.64
● 1442	0.375	100	92N3682	63.15
● 1443	0.5	100	92N3683	83.98
● 1444	0.625	50	92N3684	59.90
● 1445	0.75	50	92N3685	67.06
● 1446	1	50	92N3686	104.82
GRAY FLAME-RETARDANT POLYETHYLENE — RATED –40°F TO 200°F				
1429	0.25	100	92N3669	64.75
1430	0.375	100	92N3670	69.34
1431	0.5	100	92N3671	89.65
1432	0.625	50	92N3672	61.33
● 1433	0.75	50	92N3673	83.20
1434	1	50	92N3674	116.01

(12834)

PROTECTIVE HARNESS WRAP

RoHS Compliant Available

pro-POWER

- Easy to Apply and Remove
- Reusable and Flexible
- Strong and Versatile
- Retains Elasticity

For temporary or permanent wire harness application where abrasion protection is required. Useful for harnesses which carry wiring around sharp corners. Leads can be brought out at any point to make a "tailor-made," tight-fitting harness. Color: natural. **Sold in coils of 100′.**

Mfg. Part No.	O.D.	Bundle Range	Material	Stock No.	Per 100′ Coil Each
● HWN-02	1/8″	1/16-1/2″	Nylon	23N3648	74.15
● HWN-03	3/16″	1/8-1″	Nylon	23N3649	104.82
● HWN-04	1/4″	3/16-1 1/2″	Nylon	23N3650	145.30
● HWN-06	3/8″	5/16-2″	Nylon	23N3651	303.10
● HWN-08	1/2″	3/4-4″	Nylon	23N3652	459.07
● HWP-02-P	1/8″	1/16-1/2″	Polyethylene	50N4758	52.45
● HWP-03-P	3/16″	1/8-1″	Polyethylene	50N4759	59.67
● HWP-04-P	1/4″	3/16-1 1/2″	Polyethylene	50N4760	134.36
● HWP-06-P	3/8″	5/16-2″	Polyethylene	50N4761	81.98
● HWP-08-P	1/2″	3/4-4″	Polyethylene	50N4762	85.51

(6442)

TECHNICAL SUPPORT HOTLINE

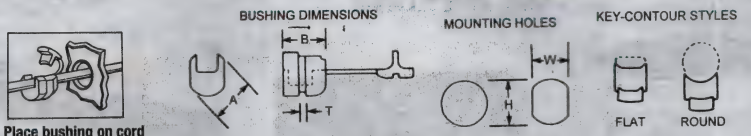
Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

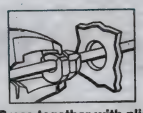
CORD STRAIN RELIEF BUSHINGS

RoHS Compliant Available

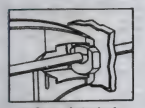
pro-POWER



1. Place bushing on cord



2. Press together with pliers



3. Snap into hole

One-piece nylon-construction bushings withstand temperatures to 221°F. Easily installed with specially designed pincers or ordinary pliers. Eliminates strain that tears cords loose from contacts or connections. Color: black. UL recognized, CSA certified. Made in the U.S.A. **Sold in packages of 100.**

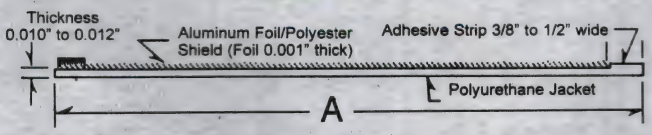
Mfg. Part No.	Cords Accommodated: Wires	Cords Accommodated: Cord Type	Approx. Wire Size	Max. Thick. Dim. T	Max. Panel Dia. H	Dim. W	Key Contour	Dimensions A	Dimensions B	Stock No.	Price per Pkg. 1-9
SRR-05	2 #18	SP-1, SPT-1	0.156 x 0.187″	0.062″	0.375″	0.330″	Round	0.391″	0.410″	46N7803	10.29
SRF-10	2 #18 2 #18	SP-1, SPT-1, XT	0.12 x 0.22″ 0.09 x 0.18″	0.062″	0.437″	0.390″	Flat	0.484″	0.410″	46N7804	12.30
SRF-15	2 #18 3 #18	SPT-2, HPN SPT-1	0.12 x 0.30″	0.062″	0.500″	0.465″	Flat	0.578″	0.406″	46N7801	14.30
SRF-30	2 #18 3 #18 2 #16	SP-2, SPT-2, HPN SPT-1 SP-2, SPT-2, HPN	0.12 x 0.30″ 0.15 x 0.28″ 0.16 x 0.30″	0.100″	0.500″	0.465″	Flat	0.578″	0.406″	46N7805	14.30
SRF-40	3 #18 2 #16 3 #16	SPT-2 SPT-2 HPN	0.12 x 0.30″ 0.16 x 0.30″ 0.16 x 0.37″	0.125″	0.562″	0.530″	Flat	0.625″	0.609″	46N7806	18.41
SRF-50	2 #18 3 #18 2 #16 3 #16 3 #16	SPT-3 SPT-3 SPT-3 SPT-1 SPT-3	0.19 x 0.35″ 0.19 x 0.39″ 0.20 x 0.37″ 0.12 x 0.30″ 0.16 x 0.41″	0.125″	0.730″	0.560″	Flat	0.750″	0.670″	46N7807	20.78
SRR-10	2 #18 2 #18 3 #18 2 #16	HPD SV, SVT SV, SVT HPD	0.270″ 0.250″ 0.250″ 0.290″	0.100″ 0.100″ 0.100″ 0.100″	0.500″ 0.500″ 0.515″ 0.515″	0.450″	Round	0.578″	0.438″	46N7808	29.57
MP6P34 325/360	2 #18 3 #18 2 #16 3 #16	SJ, SJT, SJO SJ, SJT, SJO SJT SJT	0.300″ 0.300″ 0.325″ 0.325″	0.125″	0.625″	0.550″	Round	0.703″	0.580″	46N7809	10.12
SRRRA-60*	2 #18 3 #18	SV, SVT SV, SVT	0.250″ 0.265″	0.100″	0.500″	0.450″	Round	0.560″	0.687″	46N7802	19.83

*Right-angle
(6412)

WRAP-A-SHIELD TUBING

RoHS Compliant Available

pro-POWER



Wraparound EMI/RFI shielding in sizes that allow coverage up to 2″ round and 3″ flat. Ideal shielding for longer lengths, diameters from ¼″ to 3″, and for flat cable applications. Allows stacking of flat cable and shielding as a multilayer package. Adhesive strip closure allows for a custom fit. Attachable braid strap provides for soldering of drain wire. Polyurethane jacket with aluminum foil/polyester shield. Simply cut to length needed, attach drain wire, wrap around cable, and close the adhesive strip. **Sold in 10′ lengths.**

Mfg. Part No.	Dim. to Cover: Max. Round	Dim. to Cover: Max. Flat	Dim. A	Stock No.	Price Each 1-9
SPC5092	½″	0.78″	25/16″	50N167	192.96
SPC5094	2″	3.14″	7⅜″	50N169	325.13

(34082)

SILICONE RUBBER-COATED FIBERGLASS SLEEVING

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

UL VW-1

Closely woven, braided fiberglass uniformly coated with silicone rubber. Superior flexibility is unaffected by weather. Easy-to-handle sleeving cuts cleanly and will not fray. UL standard 1441. Operating temperature: –70°C to +200°C. Passes UL VW-1 Flame Test. Color: natural. UL listed. **Sold in spools of 100′.**

Mfg. Part No.	Inside Diameter Min. (in.)	100′ Spool: Stock No.	100′ Spool: Price per Spool
PIF2003/8 NA005	0.375	05F1950	518.64
PIF2002 NA005	0.258	04F9110	303.26
PIF2004 NA005	0.204	05F1787	230.40
PIF2009 NA005	0.114	04F9111	157.50

(6362)

FLAME-RETARDANT, EXPANDABLE BRAIDED POLYESTER SLEEVING

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

- Lightweight, flexible routing
- High abrasion and cut-through resistance
- Rot-free, fungus-proof applications
- Passes UL VW-1 flame test
- UL recognized

UL VW-1

GRP-120 series flame-retardant braided polyester sleeving features an open weave that allows for a greater range of diameter expansion, providing ease of installation and gripping action over a wide range of shapes and sizes. Ideal for protecting wire bundles, harnesses, pneumatic hoses, hydraulic lines, cable, and highly polished or threaded machine parts. To prevent fraying of sleeving ends simply cut/seal with a hot knife. If flame resistance is not required, select general-purpose **GRP-110 series** expandable braided polyester sleeving; *order separately, go online or call.* If non-fraying sleeving is desired, select general-purpose **GRP-110NF series** or flame-retardant **GRP-120NF series** non-fraying, expandable braid sleeving; *order separately, go online or call.*

Mfg. Part No.	I.D. (in.) Min.	I.D. (in.) Max.	Nom. Wall Thick. (in.)	Color	Spool Size (ft.)	Stock No.	Price per Spool
G1201/8 BK005	0.093	0.250	0.025	Black	100	04F8663	76.35
G1201/8 WH005	0.093	0.250	0.025	White	100	04F8666	77.10
G1201/4 WH005	0.125	0.375	0.025	White	100	04F8667	110.46
G1201/2 WH005	0.250	0.750	0.025	White	100	04F8668	194.22
G1203/4 WH005	0.500	1.250	0.025	White	100	04F8669	294.06
G12011/4 BK007	0.750	1.750	0.025	Black	50	27M4044	195.60
G12013/4 BK007	1.250	2.750	0.025	Black	50	04F8665	301.40

(6394)

element14 COMMUNITY

Get inspired, collaborate, design, research, ask experts questions.

element14.com

(196545)

ELECTRICAL SLEEVING

TINNED COPPER BRAID

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

FLAT BRAID
- **Woven Tinned Copper**
- **Combines High Current Carrying Capacity and Flexibility**
- **Suitable for Grounding and Bonding Strap Applications**

TUBULAR BRAID
- **Woven Tinned Copper**
- **Each Strand Meets ASTM-B-33**

OVAL BRAID
- **Round Construction**
- **Braid Coverage 95% Minimum**

The shielding of electronic interconnect cables can play a critical role in overall system performance. System configuration, type of signals transmitted and proximity to noise generating sources all must be considered. These factors plus the type of interference, whether electromagnetic (EMI), electrostatic (ESI) or radio frequency (RFI), will determine the necessity and type of shielding required. Alpha's copper braid conforms to FCC socket 20780 governing EMI and RFI shielding. **Sold in spools of 100′.**

TINNED COPPER TUBULAR BRAID

Mfg. Part No.	Nom. I.D. (In.)	AWG Equiv.	Circular Mil Area	Cond. Current Max. (A)	100′ Spool Stock No.	100′ Spool Price per Spool
● 2162 SV005	0.062	19AWG	1200	11	86K9012	169.53
● 2163 SV005	0.078	18AWG	1800	16	92F7331	196.49
● 2164 SV005	0.109	16AWG	2400	19	02F7919	257.18
● 2166 SV005	0.125	15AWG	3000	25	89K8106	271.74
● 2168 SV005	0.171	14AWG	4200	32	02F7921	345.29
● 2170 SV005	0.203	11AWG	7630	46	02F7922	473.99
● 2171 SV005	0.250	10AWG	9600	53	89K8107	569.83
● 2171/1 SV005	0.281	9AWG	12060	60	03F2632	652.19
● 2172 SV005	0.375	10AWG	9600	53	02F7923	644.22
● 2173 SV005	0.437	6AWG	24120	90	29M7232	1062.14
● 2174 SV005	0.500	9AWG	13200	62	85K9678	883.00
● 2175/1 SV005	0.656	1AWG	77180	190	03F2635	2496.69
● 2176 SV005	0.781	7AWG	21600	88	02F7925	1194.23
TINNED COPPER OVAL BRAID						
● 2132 SV005	0.063	19AWG	1192	11	02F9791	104.13
● 2138 SV005	0.172	14AWG	4770	32	86K9011	264.66
● 2142 SV005	0.250	12AWG	6678	41	02F9794	340.39
● 2144 SV005	0.375	11AWG	7632	46	02F9795	384.25
● 2146 SV005	0.500	9AWG	13356	62	04F9483	700.83
● 2148 SV005	0.625	8AWG	14264	64	04F9484	762.62
● 2150 SV005	0.688	7AWG	19080	81	04F9485	940.65
● 2152 SV005	0.781	7AWG	20988	85	04F9486	1027.05

TINNED COPPER FLAT BRAID
Sold in spools of 100′ or 1000′.

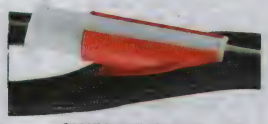
Mfg. Part No.	Flat Width (In.)	AWG Equiv.	Circular Mil Area	100′ Spool Stock No.	100′ Spool Price per Spool	1000′ Spool Stock No.	1000′ Spool Price per Spool
● 1221	0.025	27AWG	200	02F7885	105.44	02F7886	790.36
● 1222	0.032	24AWG	400	02F7887	110.17	02F7888	845.67
● 1223	0.047	22AWG	600	89K8037	136.64	02F7891	902.43
● 1224	0.094	19AWG	1200	86K8996	133.63	02F7893	1059.72
● 1229	0.125	18AWG	1800	02F7894	149.53	85K9587	1183.74
● 1230	0.187	15AWG	3000	86K6708	165.55	02F7897	1317.42
● 1231	0.250	14AWG	4200	02F7898	220.94	02F7900	1837.73
● 1232	0.385	12AWG	7200	02F7901	353.47	02F7903	3029.29
● 1233/2	0.500	10AWG	9600	89K8038	447.14	02F7906	3906.01
● 1233	0.625	10AWG	9600	02F7907	473.33	02F7909	4126.29
● 1234	0.750	7AWG	20800	02F7910	1037.65	02F7912	9493.31
● 1235	1.000	7AWG	20800	89K8039	1110.00	02F7915	10183.28
● 1239	1.375	5AWG	33700	85K9588	1257.71	02F9054	11589.60
● 1240	1.500	3AWG	53064	02F9055	1761.94	...	...
● 1241	1.750	2/0AWG	125424	03F3292	3523.49	...	...
● 1242	2.000	3/0AWG	154368	02F9056	4421.69	...	...
● 1242/4	3.000	4/0AWG	225000	02F9057	8529.00	...	...

(6462)

GRP-130 SERIES FIT® FLEXIBLE, SEMI-RIGID WRAPPABLE SLEEVING

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.



G130T Installation Tool

- Flexible, semi-rigid 10-mil PET braid
- Fast, easy wrap-around installation
- More flexible than spiral wrap or split convoluted tubing
- Bends tightly without distorting or opening
- 25% edge overlap to accommodate connectors and splices
- Good abrasion, chemical, and UV resistance
- Halogen free
- Cuts cleanly with hot knife
- Temperature range: -70° to +125°C
- Choice of black, black with white tracer or orange

GRP-130 series FIT® woven, wrappable sleeving is the perfect choice for a wide variety of bundling applications without the need for additional fasteners. Approval rated: UL 94V-0, CSA 5836 01 FT2. *Order* **mfg. part no. GRP-130T** *tool for fast, easy installation, separately below.* **Sold in spools sizes indicated in table below.**

BLACK

Mfg. Part No.	Size (mm)	Use Tool	Spool Size (M)	Stock No.	Price per Spool
● G1301/8 BK007	3.175	GRP-130T-1/4	15.24	90R8679	42.49
● G1301/8 BK004	3.175	GRP-130T-1/4	60.96	90R8678	126.27
● G1301/4 BK007	6.35	GRP-130T-1/4	15.24	90R8675	76.22
● G1301/4 BK004	6.35	GRP-130T-1/4	60.96	90R8674	218.96
● G1303/8 BK007	9.525	GRP-130T-1/2	15.24	90R8697	106.38
● G1303/8 BK005	9.525	GRP-130T-1/2	30.5	90R8696	156.95
● G1301/2 BK007	12.7	GRP-130T-1/2	15.24	90R8671	123.84
● G1301/2 BK005	12.7	GRP-130T-1/2	30.5	90R8670	180.86
● G1303/4 BK007	19.05	GRP-130T-3/4	15.24	90R8693	138.10
● G1303/4 BK005	19.05	GRP-130T-3/4	30.5	90R8692	259.83
● G1301IN BK007	25.4	GRP-130T-1IN	15.24	90R8683	186.01
● G1301IN BK005	25.4	GRP-130T-1IN	30.5	90R8682	283.79
● G13011/4 BK008	31.75	GRP-130T-114	7.62	90R8688	107.40
● G13011/2 BK008	38.1	GRP-130T-114	7.62	90R8686	142.83
● G1302IN BK008	50.8	GRP-130T-114	7.62	90R8690	189.97
BLACK WITH WHITE TRACER					
● G130NF18 BK007	3.175	GRP-130T-1/4	15.24	90R8659	75.75
● G130NF18 BK004	3.175	GRP-130T-1/4	60.96	90R8658	226.31
● G130NF14 BK007	6.35	GRP-130T-1/4	15.24	90R8657	109.92
● G130NF14 BK004	6.35	GRP-130T-1/4	60.96	90R8656	328.45
● G130NF38 BK007	9.525	GRP-130T-1/2	15.24	90R8664	150.77
● G130NF38 BK005	9.525	GRP-130T-1/2	30.5	90R8663	283.70
● G130NF12 BK007	12.7	GRP-130T-1/2	15.24	90R8655	171.91
● G130NF12 BK005	12.7	GRP-130T-1/2	30.5	90R8654	323.45
● G130NF34 BK007	19.05	GRP-130T-3/4	15.24	90R8662	200.09
● G130NF34 BK005	19.05	GRP-130T-3/4	30.5	90R8661	305.29
● G130NF1IN BK007	25.4	GRP-130T-1IN	15.24	90R8651	214.10
● G130NF1IN BK005	25.4	GRP-130T-1IN	30.5	90R8650	391.83
● G130NF114 BK008	31.75	GRP-130T-114	7.62	90R8653	146.67
● G130NF112 BK008	38.1	GRP-130T-114	7.62	90R8652	181.78
● G130NF2IN BK008	50.8	GRP-130T-114	7.62	90R8660	219.48
ORANGE					
● G1301/8 OR007	3.175	GRP-130T-1/4	15.24	90R8681	42.49
● G1301/8 OR004	3.175	GRP-130T-1/4	60.96	90R8680	122.12
● G1301/4 OR007	6.35	GRP-130T-1/4	15.24	90R8677	76.22
● G1301/4 OR004	6.35	GRP-130T-1/4	60.96	90R8676	226.40
● G1303/8 OR007	9.525	GRP-130T-1/2	15.24	90R8699	102.88
● G1303/8 OR005	9.525	GRP-130T-1/2	30.5	90R8698	156.95
● G1301/2 OR007	12.7	GRP-130T-1/2	15.24	90R8673	123.84
● G1301/2 OR005	12.7	GRP-130T-1/2	30.5	90R8672	180.86
● G1303/4 OR007	19.05	GRP-130T-3/4	15.24	90R8695	138.10
● G1303/4 OR005	19.05	GRP-130T-3/4	30.5	90R8694	259.83
● G1301IN OR007	25.4	GRP-130T-1IN	15.24	90R8685	186.01
● G1301IN OR005	25.4	GRP-130T-1IN	30.5	90R8684	283.79
● G13011/4 OR008	31.75	GRP-130T-114	7.62	90R8689	107.40
● G13011/2 OR008	38.1	GRP-130T-114	7.62	90R8687	142.83
● G1302IN OR008	50.8	GRP-130T-114	7.62	90R8691	189.97

INSTALLATION TOOLS

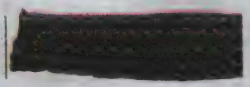
Mfg. Part No.	For Use With	Stock No.	Price Each
● G130T1/4 OR032	⅛″ and ¼″ GRP-130 Wrappable Sleeving	90R8666	5.85
● G130T1/2 OR032	⅜″ and ½″ GRP-130 Wrappable Sleeving	90R8665	6.66
● G130T3/4 OR032	¾″ GRP-130 Wrappable Sleeving	90R8669	8.05
● G130T1IN OR032	1″ GRP-130 Wrappable Sleeving	90R8667	8.83
● G130T114 OR032	1¼″, 1½″ and 2″ GRP-130 Wrappable Sleeving	90R8668	10.64

(190799)

GRP-160 SERIES FIT® ADVANCED PROTECTION EXPANDABLE SLEEVING

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.



- Tough 20-mil nylon polyamide monofilament braid
- Extreme abrasion resistance yet flexible and durability
- Cuts cleanly with hot knife
- Resists fuels, solvents, salt water, chemicals and UV rays
- Halogen free
- Expandable to 150%
- Temperature range: -45° to +150°C
- Color: Black

GRP-160 series FIT® woven expandable sleeving is an economical, easy-to-use choice for advanced abrasion and cut-through protection. **Sold in spools sizes indicated in table below.**

Mfg. Part No.	Size (mm)	Expansion Range (In.)	Spool Size (M)	Stock No.	Price per Spool
G1601/4 BK007	6.35	0.25 - 0.5	15.24	90R8703	104.58
G1601/4 BK003	6.35	0.25 - 0.5	76.2	90R8702	376.22
G1601/2 BK007	12.7	0.5 - 1	15.24	90R8701	154.99
G1601/2 BK003	12.7	0.5 - 1	76.2	90R8700	506.01
G1603/4 BK007	19.05	0.75 - 1.25	15.24	90R8713	180.85
G1603/4 BK003	19.05	0.75 - 1.25	76.2	90R8712	547.87
G1601IN BK007	25.4	1 - 1.5	15.24	90R8705	205.45
G1601IN BK003	25.4	1 - 1.5	76.2	90R8704	620.03
G16011/4 BK008	31.75	1.25 - 2	7.62	90R8707	103.30
G16011/4 BK005	31.75	1.25 - 2	30.5	90R8706	309.60
G16013/4 BK008	44.45	1.75 - 2.75	7.62	90R8709	125.50
G16013/4 BK005	44.45	1.75 - 2.75	30.5	90R8708	407.49
G16021/4 BK008	57.15	2.25 - 3	7.62	90R8711	144.08
G16021/4 BK005	57.15	2.25 - 3	30.5	90R8710	501.54

(190878)

GRP-170 SERIES FIT® ADVANCED CHEMICAL RESISTANCE EXPANDABLE SLEEVING

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

- Durable 8-mil polyphenylene sulfide (PSS) monofilament braid
- Resists acids, bases, solvents, fuels, and UV rays
- High abrasion resistance
- Halogen free
- Flame resistant — rated UL94V-0
- Ultra-lightweight
- Cuts cleanly with hot knife
- Expandable to 150%
- Temperature range: -70° to +200°C
- Color: Black

GRP-170 series FIT® woven, advanced chemical resistance expandable sleeving is extremely lightweight yet impervious to virtually all chemicals. **Sold in spools sizes indicated in table below.**

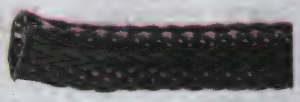
Mfg. Part No.	Size (mm)	Expansion Range (In.)	Spool Size (M)	Stock No.	Price per Spool
G1701/8 BK005	3.175	0.094 - 0.25	30.5	90R8717	163.61
G1701/8 BK002	3.175	0.094 - 0.25	152.4	90R8716	680.84
G1701/4 BK005	6.35	0.125 - 0.375	30.5	90R8466	280.58
G1701/4 BK002	6.35	0.125 - 0.375	152.4	90R8715	1050.91
G1701/2 BK005	12.7	0.25 - 0.75	30.5	90R8469	325.97
G1701/2 BK002	12.7	0.25 - 0.75	152.4	90R8714	1569.48
G1703/4 BK007	19.05	0.5 - 1.25	15.24	90R8723	190.93
G1703/4 BK003	19.05	0.5 - 1.25	76.2	90R8722	799.69
G17011/4 BK007	31.75	0.75 - 1.75	15.24	90R8719	272.03
G17011/4 BK003	31.75	0.75 - 1.75	76.2	90R8718	1139.41
G17013/4 BK007	44.45	1.25 - 2.5	15.24	90R8721	323.21
G17013/4 BK003	44.45	1.25 - 2.5	76.2	90R8720	1368.15

(190879)

GRP-180 SERIES FIT® MAXIMUM PERFORMANCE EXPANDABLE SLEEVING

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.



- Rugged flat 20-mil nylon filament braid
- Superior coverage and abrasion resistance
- Resists fuels, solvents, chemical, salt water and UV rays
- Smooth inner wall prevents internal abrasion damage
- Cuts cleanly with hot knife
- Temperature range: -60° to +150°C
- Color: Black

GRP-180 series FIT® woven, maximum performance expandable sleeving offers superior abrasion resistance, a wide operating temperature range, and easy installation for industrial, solar, and high-abrasion applications. **Sold in spools sizes indicated in table below.**

Mfg. Part No.	Size (mm)	Expansion Range (In.)	Spool Size (M)	Stock No.	Price per Spool
G1801/2 BK007	12.7	0.375 - 0.625	15.24	90R8725	167.75
G1801/2 BK003	12.7	0.375 - 0.625	76.2	90R8724	574.46
G1803/4 BK007	19.05	0.625 - 1	15.24	90R8735	193.16
G1803/4 BK003	19.05	0.625 - 1	76.2	90R8734	681.52
G1801IN BK007	25.4	0.875 - 1.25	15.24	90R8727	232.81
G1801IN BK003	25.4	0.875 - 1.25	76.2	90R8726	809.62
G18011/4 BK008	31.75	1 - 1.5	7.62	90R8729	128.60
G18011/4 BK005	31.75	1 - 1.5	30.5	90R8728	389.50
G18013/4 BK008	44.45	1.5 - 2	7.62	90R8731	152.86

CONTINUED

GRP-180 SERIES FIT® MAXIMUM PERFORMANCE EXPANDABLE SLEEVING (CONT.)

Mfg. Part No.	Size (mm)	Expansion Range (In.)	Spool Size (M)	Stock No.	Price per Spool
G18013/4 BK005	44.45	1.5 - 2	30.5	90R8730	501.54
G1802IN BK008	50.8	1.75 - 2.5	7.62	90R8733	182.31
G1802IN BK005	50.8	1.75 - 2.5	30.5	90R8732	620.21

(190881)

DID YOU KNOW?

We also carry

WIRE & CABLE

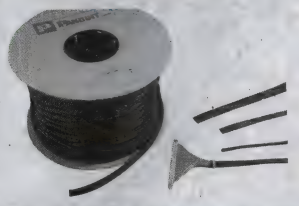
See pages 1185 – 1238.

(212503)

BRAIDED EXPANDABLE SLEEVING

RoHS Compliant Available

PANDUIT®



- Provides continuous abrasion protection for wire, cable and tubing
- Lightweight, yet durable protection
- Highly-flexible open weave will not trap heat or humidity
- Allows for use with irregular shapes

Braided expandable sleeving woven from flexible, weather-resistant black PET (polyethylene terephthalate) material. Ideal for applications up to 125°C (257°F). UL recognized, CSA certified.

STANDARD BRAIDED EXPANDABLE SLEEVING

Mfg. Part No.	Cable Bundle Dia. Min. - Max. (in.)	Nominal Inner Dia. (in.)	Spool Size (ft.)	Stock No.	Price per Spool
SE12P-TR0	0.094 - 0.250	0.125	200	97B2970	165.44
SE25P-TR0	0.125 - 0.375	0.250	200	33C1006	218.36
SE38P-TR0	0.188 - 0.500	0.375	200	50B6640	310.23
SE50P-CR0	0.250 - 0.750	0.500	100	50B6641	208.42
SE50P-DR0	0.250 - 0.750	0.500	500	34H2779	792.35
SE75P-CR0	0.500 - 1.250	0.750	100	91B3959	258.59
SE125P-LR0	0.750 - 1.500	1.250	50	33C4166	158.28

FLAME-RETARDANT BRAIDED EXPANDABLE SLEEVING

Flame-retardant PET (polyethylene terephthalate) braided expandable sleeving is self-extinguishing, flammability meets UL 1441 VW-1. Weather-resistant black with white tracer to identify flame retardant materials. Ideal for applications up to 125°C (257°F). UL recognized, CSA certified.

SE25PFR-TR0	0.125 - 0.375	0.250	200	98F7524	306.62
SE38PFR-TR0	0.188 - 0.625	0.380	200	98B5398	413.94
SE50PFR-CR0	0.250 - 0.750	0.500	100	05C3464	289.22

(68796)

FRAY-RESISTANT BRAIDED EXPANDABLE SLEEVING

RoHS Compliant Available

PANDUIT®

- Resists fraying when cut with scissors
- Provides continuous abrasion protection resistance for wires, cable and tubing
- Highly-flexible open weave will not trap heat or humidity
- For indoor use only

Woven of fray-resistant, black polyethylene terephthalate. Temperature range: 70°C to 125°C (94°F to 257°F). UL recognized, CSA certified.

Mfg. Part No.	Nominal Inner Dia. (in.)	Cable Bundle Diameter (in.) Min	Cable Bundle Diameter (in.) Max.	Spool Length (ft.)*	Stock No.	Price per Spool 1-2
SE12PSC-TR0	0.125	0.125	0.250	200	39M3231	429.40
SE50PSC-CR0	0.500	0.250	0.750	100	39M3236	325.29
SE75PSC-CR0	0.750	0.625	1.000	100	39M3237	370.86
SE125PSC-LR0	1.250	1.000	1.500	50	39M3232	187.40

***NOTE:** Spool may contain splices

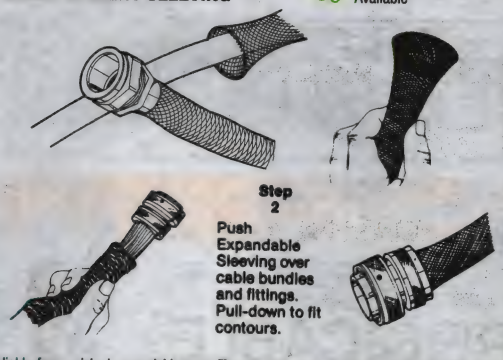
(90840)

ELECTRICAL SLEEVING

EXPANDABLE MONOFILAMENT SLEEVING

RoHS Compliant Available

pro-POWER



Highly fray resistant expandable monofilament sleeving in both standard polyester and flame-retardant polyester constructions. Both materials provide outstanding flexible abrasion protection and bundling characteristics. Both are also extremely durable and are unaffected by most chemical environments and common solvents. The high level of fray resistance allows cutting without using a hot knife, and manual or normal shop handling without fraying problems. Both have highest levels of flexibility and full 3:1 expansion ratios. Standard operating temperature: –70°C to +125°C. Flame-retardant version meets UL VW-1 specifications. UL recognized. **Sold in spool lengths indicated.**

BLACK STANDARD SLEEVING

Mfg. Part No.	Size	Expanded Size	Spool Size (Ft.)	Stock No.	Price per Spool
● SPC12212	⅛″	¼″	100	06H1236	31.13
● SPC12213	¼″	7/16″	100	06H1237	40.33
● SPC12214	⅜″	½″	100	06H1238	63.54
● SPC12215	½″	¾″	100	06H1239	73.09
● SPC12216	¾″	1¼″	50	06H1240	60.32
● SPC12217	1¼″	1¾″	50	06H1241	62.76
● SPC12219	2″	3½″	25	06H1243	74.67
BLACK FLAME-RETARDANT SLEEVING — WHITE TRACER					
SPC12221	⅛″	¼″	100	06H1245	41.77
SPC12222	¼″	7/16″	100	06H1246	62.79
SPC12223	⅜″	½″	100	06H1247	80.42
SPC12224	½″	¾″	100	06H1248	105.13
SPC12225	¾″	1¼″	50	06H1249	74.29
SPC12226	1¼″	1¾″	50	06H1250	99.55

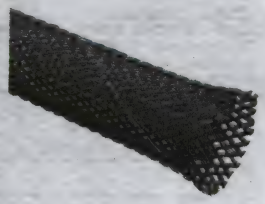
(74117)

HALAR® EXPANDABLE BRAIDED SLEEVING

VW-1

RoHS Compliant Available

pro-POWER



- High abrasion and cut resistance
- Chemically inert
- Cuts easily with hot knife
- Halogen-free, low outgassing, approved for plenum applications
- Flammability rating: UL94 V-0, FAR 25.853, UL VW-1, FMVSS 302
- Radiation resistant
- Operating temperature: –103°F to 320°F
- Ideal in corrosive environments

Halar® self-extinguishing, expandable sleeving is used where flammability, high-temperature endurance and low outgassing are primary concerns. Braided from 11 mil filaments of Halar® (ethylene chlorotriflouroethylene [ECTFE] copolymer). Because of its low flame spread and smoke generation properties, Halar® has received UL 910 (NFPA 262) plenum listing, UL flame resistance rating of VW-1 and meets automotive industry requirements of FM VSS 302. Resists a wide range of corrosive chemicals and organic solvents, including strong acids, chlorine and aqueous caustics. Color: black with white tracer. **Sold in spool sizes listed in table below.**

Mfg. Part No.	Nominal Size (inches)	Size Range (inches)	Spool Size (M)	Stock No.	Price per Spool
● SPC14307	⅛	0.094-0.250	30.5	72J8440	92.91
● SPC14308	¼	0.125-0.438	30.5	72J8441	128.31
● SPC14309	⅜	0.188-0.625	30.5	72J8442	295.57
● SPC14310	½	0.250-0.750	30.5	72J8443	346.37
● SPC14311	¾	0.500-1.250	15.24	72J8444	250.83

(83657)

NEW PRODUCTS ADDED DAILY

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(196560)

HI-TEMP RESIN COATED FIBERGLASS SLEEVING

RoHS Compliant Available

pro-POWER

Features

- Resin coated, heavy weight, braided fiberglass
- Protects to 1200°F
- Minimal dusting when cut and handled
- Cut and abrasion resistant
- Easy to install - cuts with scissors
- Asbestos free
- Resists gasoline and engine chemicals
- Color: black

Hi-Temp, resin coated sleeving is an extremely high temperature resistant sleeve commonly used as thermal protection for wires, cables and hoses that are subjected to continuous and extreme high temperature environments, such as engine manifolds and exhaust systems. It installs easily over a variety of applications to either deflect or retain heat in environments up to 1200°F.

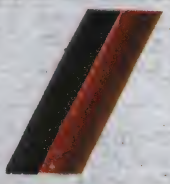
Mfg. Part No.	Nominal Size (Inches)	Maximum Dia. (Inches)	Wall Thickness (Inches)	Spool Size (M)	Stock No.	Price per Spool
● SPC14520	0.25	12.7	1.092	30.48	26K1791	75.60
● SPC14521	0.375	0.625	0.043	30.5	26K1792	128.52
● SPC14522	0.5	0.75	0.046	30.5	26K1793	189.00
● SPC14523	0.625	0.875	0.046	15.24	26K1794	106.25
● SPC14524	0.75	1.125	0.046	15.24	26K1795	119.05

(84567)

SILICONE JACKETED FIBERGLASS SLEEVING

RoHS Compliant Available

pro-POWER



Features

- Stable to 500°F
- Continuous operating temperature: 428°F (220°C)
- Contains radiant heat to prevent damage to nearby components
- Cut- and Abrasion-resistant
- Halogen and asbestos free
- Resists gasoline and engine chemicals
- Available in red or black
- Wall thickness: 0.08″

The thick, high temperature fiberglass sleeve is jacketed with a non-permeable, heavy silicone coating that is flexible enough to follow tight radius curves, resists all automotive chemicals and solvents, and provides a substantial level of abrasion and puncture protection. Completely non-conductive, will not melt, delaminate, become brittle or support combustion under normal conditions, and provides a professional level solution to thermal protection needs in any application.

Mfg. Part No.	Nominal Size (Inches)	Color	Spool Size (M)	Stock No.	Price per Spool
● SPC14540	0.375	Black	15.24	26K1811	173.76
● SPC14541	0.375	Red	15.24	26K1812	175.07
● SPC14542	0.500	Black	15.24	26K1813	172.08
● SPC14543	0.500	Red	15.24	26K1814	176.21
● SPC14544	0.625	Black	15.24	26K1815	290.39
● SPC14545	0.625	Red	15.24	26K1816	290.39
● SPC14546	0.750	Black	15.24	26K1817	313.26
● SPC14547	0.750	Red	15.24	26K1818	305.92
● SPC14548	0.875	Black	7.62	26K1819	171.58
● SPC14549	0.875	Red	7.62	26K1820	171.58
● SPC14550	1.00	Black	7.62	26K1821	209.04
● SPC14551	1.00	Red	7.62	26K1822	209.04
● SPC14552	1.50	Black	7.62	26K1823	217.50
● SPC14553	1.50	Red	7.62	26K1824	217.50
● SPC14554	2.00	Black	7.62	26K1825	297.95
● SPC14555	2.00	Red	7.62	26K1826	297.95
● SPC14556	2.375	Black	7.62	26K1827	359.90
● SPC14557	2.375	Red	7.62	26K1828	359.90
● SPC14558	2.875	Black	7.62	26K1829	442.50
● SPC14559	2.875	Red	7.62	26K1830	442.50

(84559)

BRAIDED FIBERGLASS ELECTRICAL SLEEVING

RoHS Compliant Available

pro-POWER

- Class 240C Insulation
- Heat Annealed
- UL Recognized (File E92997)

Tightly braided fiberglass sleeving designed as Class 240C insulation that is heat annealed to remove organic impurities, improve handling and reduce end fraying. Compatible with varnishes, epoxies and bonding agents where maximum reinforcement between the glass and encapsulant is needed. Can be used as primary and secondary insulation for motor leads, small appliances, brush assemblies, electric resistance heating elements, and similar low voltage applications. Ideal for abrasion and cut-through protection over insulated leads. Operating temperature: –76°F (-60°C) to +1200°F (649°C). **Sold in spools of 100′.**

NATURAL COLOR, HEAT-TREATED SLEEVING

Mfg. Part No.	Size	Nom. I.D.	Nom. Wall Thickness	100′ Spool Stock No.	100′ Spool Price per Spool
● SPC4913	24 AWG	0.020″	0.005″	50N080	26.56
● SPC4914	22 AWG	0.025″	0.005″	50N081	26.75

CONTINUED

BRAIDED FIBERGLASS ELECTRICAL SLEEVING (CONT.)

Mfg. Part No.	Size	Nom. I.D.	Nom. Wall Thickness	100′ Spool Stock No.	100′ Spool Price per Spool
SPC4916	18 AWG	0.040″	0.011″	50N083	27.41
SPC4917	16 AWG	0.051″	0.011″	50N084	27.26
SPC4918	14 AWG	0.064″	0.011″	50N085	28.63
SPC4919	12 AWG	0.081″	0.011″	50N086	30.57
SPC4920	10 AWG	0.102″	0.011″	50N087	31.61
SPC4921	8 AWG	0.129″	0.011″	50N088	35.81
SPC4922	6 AWG	0.162″	0.013″	50N089	39.81
SPC4923	4 AWG	0.204″	0.016″	50N090	47.93
SPC4924	2 AWG	0.258″	0.016″	50N091	59.18
SPC4925	0 AWG	0.325″	0.016″	50N092	76.34
SPC4926	3/8″	0.375″	0.016″	50N093	108.14
SPC4927	7/16″	0.438″	0.018″	50N094	141.34
SPC4928	1/2″	0.500″	0.018″	50N095	181.60
SPC4929	5/8″	0.625″	0.018″	50N096	221.03
SPC4930	3/4″	0.750″	0.018″	50N097	267.23
SPC4932	1″	1.000″	0.018″	50N099	382.94

TAN DYED, HEAT-TREATED SLEEVING

The addition of a tan-colored, high-temperature resin dye affords additional fray resistance and firmness required for cutting and installation.

GSX-S24-1100-NAT	24 AWG	0.022″	0.012″	04F4470	28.69
GSX-S22-1100-NAT	22 AWG	0.027″	0.012″	04F4471	28.59
GSX-S20-1100-NAT	20 AWG	0.034″	0.012″	04F4472	28.78
GSX-S18-1100-NAT	18 AWG	0.042″	0.012″	04F4473	29.34
GSX-S16-1100-NAT	16 AWG	0.053″	0.013″	04F4474	29.44
GSX-S14-1100-NAT	14 AWG	0.066″	0.015″	04F4475	29.32
GSX-S12-1100-NAT	12 AWG	0.085″	0.015″	04F4476	32.90
GSX-S10-1100-NAT	10 AWG	0.106″	0.015″	04F4477	35.09
GSX-S08-1100-NAT	8 AWG	0.133″	0.015″	04F4478	38.34
GSX-S06-1100-NAT	6 AWG	0.166″	0.015″	04F4479	44.06
GSX-S04-1100-NAT	4 AWG	0.208″	0.015″	04F4480	51.76
GSX-S02-1100-NAT	2 AWG	0.263″	0.018″	04F4481	65.22
GSX-S00-1100-NAT	0 AWG	0.330″	0.018″	04F4482	82.22
GSX-024-1100-NAT	3/8″	0.375″	0.022″	04F4483	119.54
GSX-028-1100-NAT	7/16″	0.438″	0.022″	04F4484	161.91
GSX-032-1100-NAT	1/2″	0.500″	0.022″	04F4485	204.09
GSX-040-1100-NAT	5/8″	0.625″	0.022″	04F4486	250.26
GSX-048-1100-NAT	3/4″	0.750″	0.022″	04F4487	288.86
GSX-064-1100-NAT	1″	1.000″	0.022″	04F4489	429.79

(6350)

EXPANDABLE SLEEVING

RoHS Compliant Available

pro-POWER

- Available in standard and flame-retardant grades
- Resists gasoline and engine chemicals
- Cut and abrasion resistant
- Standard operating temperature: –70°C to +125°C
- Melting temperature: 250°C
- Meets UL VW-1 specifications
- MIL-202, FAR 25, FMVSS 302, FR-1 approved
- UL recognized

Standard Grade — Flame-Retardant Grade

STANDARD-GRADE SLEEVING — BLACK POLYETHYLENE TEREPTHALATE (PET)

Mfg. Part No.	Size (In.)	Min. Dia. (In.)	Expanded Size (In.)	Spool Size (Ft.)	Stock No.	Price per Spool
8465-0228	1/8	0.093	0.125	100	52N9768	45.76
8465-0229	1/4	0.125	0.438	100	52N9769	53.38
8465-0230	3/8	0.187	0.625	100	52N9770	64.06
8465-0231	1/2	0.250	0.750	100	52N9771	106.77
8465-0232	3/4	0.500	1.250	50	52N9772	74.80
8465-0233	1 1/4	0.750	1.750	50	52N9773	98.60
8465-0234	1 1/2	0.750	2.000	50	52N9774	115.60
8465-0235	1 3/4	1.250	2.750	25	52N9775	80.54
8465-0236	2	1.500	3.500	25	52N9776	114.54
8465-0237	2 1/2	1.750	4.500	25	52N9777	124.65

FLAME-RETARDANT SLEEVING — BLACK POLYETHYLENE TEREPTHALATE (PET) WITH ORGANIC FLAME-INHIBITOR, WHITE CRISS-CROSS THREADED TRACER

SPC20176	1/8	0.093	0.125	100	87K0914	60.16
SPC20177	1/4	0.125	0.438	100	87K0915	90.24
SPC20178	1/2	0.250	0.750	100	87K0916	157.92
SPC20179	3/4	0.500	1.250	50	87K0917	109.07
SPC20180	1 1/4	0.750	1.750	50	87K0918	148.91
SPC20182	2	1.500	3.500	25	87K0920	152.81

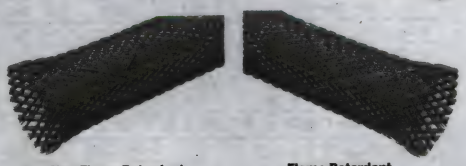
(6341)

FRAY-RESISTANT EXPANDABLE SLEEVING

RoHS Compliant Available

pro-POWER

- Resists Fraying When Cut With Scissors.
- Increased Braid Density for Fuller Coverage.
- High Abrasion Resistance.
- Temperature Range: -75°C to +125°C
- Melting Temperature: 230°C
- UL Recognized (file E107055)
- CSA Certified (file LR66145-1).
- Available in Standard and Flame-Retardant Grades



Non Flame Retardant — Flame Retardant

STANDARD SLEEVING

Mfg. Part No.	Size	Expansion Min.	Expansion Max.	Spool Size	Stock No.	Price per Spool
SPC5146	1/8″	1/8″	1/4″	100′	50N469	46.40
SPC5147	1/4″	5/32″	7/16″	100′	50N470	56.98
SPC5148	3/8″	3/16″	5/8″	100′	50N471	83.03
SPC5149	1/2″	1/4″	3/4″	100′	50N472	104.40
SPC5150	3/4″	5/8″	1″	50′	50N473	62.48
SPC5151	1″	3/4″	1 3/16″	50′	50N474	71.00
SPC5152	1 1/4″	1″	1 1/2″	50′	50N475	92.70
SPC5153	1 1/2″	1 1/4″	2″	50′	50N476	110.76

FLAME-RETARDANT SLEEVING

SPC20168	1/8″	1/8″	1/4″	100′	87K0905	73.06
SPC20169	1/4″	5/32″	7/16″	100′	87K0906	101.16
SPC20170	3/8″	3/16″	5/8″	100′	87K0907	148.15
SPC20171	1/2″	1/4″	3/4″	100′	87K0908	176.64
SPC20172	3/4″	5/8″	1″	50′	87K0909	113.16
SPC20173	1″	3/4″	1 3/16″	50′	87K0910	134.60
SPC20175	1 1/2″	1 1/4″	2″	50′	87K0913	220.45

(34081)

HOOK AND LOOP SLEEVING

RoHS Compliant Available

pro-POWER

Lightweight, expandable, braided monofilament sleeving with hook and loop fastening system is designed to allow easy wrap bundling and protection for wire, cable, hoses, and tubes. Monofilaments are constructed from durable P.E.T. providing continuous protection against abrasion, fungus, and rotting in addition to being unaffected by most chemical environments, and solvents. Temperature rating: –75°C to +125°C. Melt temperature: +250°C. **Sold in 25′ spools.**

Mfg. Part No.	Nominal I.D. (in.)	25′ Spool Stock No.	25′ Spool Price per Spool
8465-0238	1/2	52N9778	175.05
8465-0239	3/4	52N9779	197.53
8465-0240	1 1/4	52N9780	263.58
8465-0241	2	52N9781	288.00

(6342)

RAYCHEM VERSAFLEX EXPANDABLE, BRAIDED, POLYESTER SLEEVING

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Excellent abrasion and cut-through resistance
- Lightweight
- Flexible, even at low temperatures
- Expands and contracts easily for a perfect fit
- Fungus-proof
- Not affected by most chemicals and solvents
- Cuts easily with hot knife

Raychem™ Versaflex™ expandable, braided polyester sleeving is suited for the mechanical protection of wire harnesses and hoses, and all other applications where the highest level of flexibility and abrasion/cut-through resistance is required. Versaflex™ sleeving serves as an economical means for wire bundling that will not trap heat or moisture, expanding easily to fit over irregular shapes, then contracting to conform to substrates. Available in a flame retardant (FR) version which meets the UL VW-1 flammability requirement. Operating temperature: -50°C to 150°C. **Sold only in spool sizes listed in table below.**

STANDARD VERSION — BLACK

Mfg. Part No.	Size (In.)	Size Range (In.)	Spool Size (M)	Stock No.	Price per Meter
VERSAFLEX-1/8-0-SP	1/8	0.094-0.252	300	84R9305	0.35
VERSAFLEX-1/4-0-SP	1/4	0.125-0.375	300	84R9298	0.56

CONTINUED

RAYCHEM VERSAFLEX EXPANDABLE, BRAIDED, POLYESTER SLEEVING (CONT.)

Mfg. Part No.	Size (In.)	Size Range (In.)	Spool Size (M)	Stock No.	Price per Meter
● VERSAFLEX-3/8-0-SP	⅜	0.185-0.630	150	84R9323	0.77
● VERSAFLEX-1/2-0-SP	½	0.252-0.748	150	84R9297	0.95
● VERSAFLEX-3/4-0-SP	¾	0.512-1.260	75	84R9317	1.91
● VERSAFLEX-1-1/4-0-SP	1¼	0.748-1.772	75	84R9309	2.08
FLAME-RETARDANT VERSION, UL E306976 VW-1, 125°C — BLACK WITH WHITE X TRACER					
● VERSAFLEX-FR-1/8-09-SP	⅛	0.094-0.252	300	84R9336	1.35
● VERSAFLEX-FR-1/4-09-SP	¼	0.125-0.375	300	84R9331	0.65
● VERSAFLEX-FR-3/8-09-SP	⅜	0.185-0.630	150	84R9354	0.81
● VERSAFLEX-FR-1/2-09-SP	½	0.252-0.748	150	84R9327	1.26
● VERSAFLEX-FR-3/4-09-SP	¾	0.512-1.260	75	84R9349	2.60
● VERSAFLEX-FR-1-1/4-09-SP	1¼	0.748-1.772	75	84R9343	3.37

(177404)

AMP COLD-SHRINK PLASTIC WRAP

RoHS Compliant Available

TE connectivity

Authorized Distributor

Forms water-tight skin for long-term protection, even during prolonged immersion in water, with no heat or open flame. Tape amalgamates– "welds" itself into homogeneous mass– but does not transfer adhesive. Excellent electrical properties, water, ozone, and corrosion resistance. Thickness: 0.02″ (0.508). Color: Black.

Mfg. Part No.	Width (In.)	Roll Length (Ft.)	Stock No.	Price per Roll 1-9	10-24	25-49
● 605262-1	1	10	95F1130	13.59	13.03	12.46
● 605980-1	0.75	30	95F1131	18.53	16.92	15.74
● 605980-2	1	30	95F1132	20.78	19.13	18.79

(5459)

FP-301 SERIES (2:1) SHRINK RATIO, MULTIPURPOSE, FLEXIBLE, POLYOLEFIN HEAT-SHRINK TUBING

MADE IN USA

RoHS Compliant Available

3M

FP-301 series flexible heat-shrink tubing offers an excellent balance of physical, electrical and chemical properties for protecting a wide variety of electronic, electrical and mechanical applications, such as: cable splices, wire marking, harness covering, strain relief and component packaging. Rated for -55° to +135°C (+275°F) and 600V continuous operation. Self-extinguish flammability meets UL224 All-Tubing Flame Test requirements (except clear). Shrink ratio: 2:1. Specifications: UL39100, CSA LR 38227 and Military MIL-DTL-23053/5 Class 1 (opaque), Class 2 (clear). **NOTE:** stock numbers in table below are for black color tubing only. Colors: black and clear tubing available in all sizes listed in table below; white, red, yellow, blue and green color tubing is available in selected sizes and assortment packs; *go online or call.* **Sold in spool sizes listed below and in packages of 4′ long and 6″ long pieces.**

Mfg. Part No.	Size (In.)	Supplied I.D. (In.)	Recovered I.D. (Max.) (In.)	Spools Stock No. Black	Spools Spool Size (Ft.)	Spools Price per Spool	4′ Long Pieces Stock No. Black	4′ Long Pieces Pieces Per Pkg.	4′ Long Pieces Total Ft.	4′ Long Pieces Price per Pkg.	6″ Long Pieces Stock No. Black	6″ Long Pieces Pieces Per Pkg.	6″ Long Pieces Total Ft.	6″ Long Pieces Price per Pkg.
● FP-301 3/64″	3/64	0.046	0.023	95F7486	100	38.10	48W4255	25	100	24.75	27W3130	10	5	3.20
● FP-301 1/16″	1/16	0.063	0.031	95F7488	100	29.49	48W4117	25	100	25.65	27W3038	10	5	3.25
● FP-301 3/32″	3/32	0.093	0.046	95F7494	100	30.87	48W4223	25	100	28.55	27W3111	10	5	3.43
● FP-301 1/8″	⅛	0.125	0.062	97M6850	100	32.68	48W4163	25	100	30.33	27W3077	10	5	3.66
● FP-301 3/16″	3/16	0.187	0.093	95F7506	100	39.29	48W4201	25	100	36.64	27W3098	10	5	4.15
● FP-301 1/4″	¼	0.250	0.125	95F7512	100	47.54	95F7437	12	48	27.05	27W3064	10	5	4.77
● FP-301 3/8″	⅜	0.375	0.187	95F7518	100	53.19	97M6874	12	48	30.03	27W3142	10	5	5.18
● FP-301 1/2″	½	0.500	0.250	95F7524	100	58.88	95F7451	12	48	32.16	27W3051	10	5	6.18
● FP-301 3/4″	¾	0.750	0.375	95F7530	50	41.03	95F7458	12	48	43.67	27W3124	10	5	8.82
● FP-301 1″	1	1.000	0.500	96H9782	50	76.44	48W4098	5	20	22.42	27W3025	10	5	12.35
● FP-301 1.5″	1½	1.500	0.752	08N5618	50	220.23	48W4087	5	20	40.43	24W5223	3	1.5	6.18
● FP-301 2″	2	2.000	1.000	95F7544	50	231.37	48W4184	5	20	56.56	...	...	...	...
● FP-301 3″	3	3.000	1.500	...	...	...	48W4194	2	8	45.57	...	...	...	...
● FP-301 4″	4	4.000	2.000	...	...	...	48W4279	2	8	58.55	...	...	...	...

(78503)

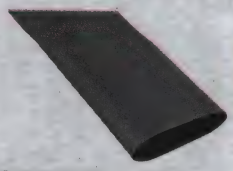
EPS-200 SERIES (2:1) SHRINK RATIO, ADHESIVE-LINED, FLEXIBLE, POLYOLEFIN HEAT-SHRINK TUBING

MADE IN USA

RoHS Compliant Available

3M

EPS-200 series tubing features one step environmental protection of electronic, electrical, automotive, and marine wiring. As the flame retardant, flexible polyolefin outer wall shrinks to a skin-tight fit; the hot melt adhesive is pushed into voids and crevices. Upon cooling the adhesive solidifies and bonds to form a permanent moisture-proof barrier. 2:1 shrink ratio. Jacket meets UL 224 all tubing flame test. –55°C to +110°C continuous operating temperature. Meets MIL-DTL-23053/4 Class 2 specifications. Black only. UL recognized. **Sold in packages of 4′ long and 6″ long pieces.**



Size (In.)	Supplied I.D. (In.)	Recovered I.D. (Max.) (In.)	Mfg. Part No.	4′ Long Pieces No. of Pieces Per Pkg.	4′ Long Pieces Total Ft.	4′ Long Pieces Stock No.	4′ Long Pieces Price per Pkg.	Mfg. Part No.	6″ Long Pieces No. of Pieces Per Pkg.	6″ Long Pieces Total Ft.	6″ Long Pieces Stock No.	6″ Long Pieces Price per Pkg.
⅛	0.125	0.063	● EPS200-1/8-48″-BLACK-25 PCS	25	100	48W4743	91.88	● EPS200-1/8-6″-BLACK-10 PCPKS	10	5	27W0115	7.56
3/16	0.187	0.093	● EPS200-3/16-48″-BLACK-12PCS	12	48	95F7654	66.60	● EPS200-3/16-6″-BLACK-10 PCPKS	10	5	27W0118	8.82
¼	0.250	0.125	● EPS200-1/4-48″-BLACK-12PCS	12	48	95F7655	83.34	● EPS200-1/4-6″-BLACK-10 PCPKS	10	5	27W0112	10.59
⅜	0.375	0.187	● EPS200-3/8-48″-BLACK-12PCS	12	48	95F7656	93.05	● EPS200-3/8-6″-BLACK-10 PCPKS	10	5	27W0124	12.38
½	0.500	0.250	● EPS200-1/2-48″-BLACK-12PCS	12	48	95F7657	106.16	● EPS200-1/2-6″-BLACK-10 PCPKS	10	5	27W0109	15.12
¾	0.750	0.375	● EPS200-3/4-48″-BLACK-5 PCS	5	20	48W4747	44.25	● EPS200-3/4-6″-BLACK-10 PCPKS	10	5	27W0121	16.66
1	1.000	0.500	● EPS200-1-48″-BLACK-5 PCS	5	20	48W4741	65.04	● EPS200-1-6″-BLACK-10 PCPKS	10	5	27W2924	26.45

➤CONTINUED➤

EPS-200 SERIES (2:1) SHRINK RATIO, ADHESIVE-LINED, FLEXIBLE, POLYOLEFIN HEAT-SHRINK TUBING (CONT.)

Size (In.)	Supplied I.D. (In.)	Recovered I.D. (Max.) (In.)	4′ Long Pieces: Mfg. Part No.	No. of Pieces Per Pkg.	Total Ft.	Stock No.	Price per Pkg.	6″ Long Pieces: Mfg. Part No.	No. of Pieces Per Pkg.	Total Ft.	Stock No.	Price per Pkg.
1½	1.500	0.752	● EPS200-1 1/2-48″-BLACK-5 PCS	5	20	48W4740	111.88	● EPS200-1 1/2-6″-BLACK-3 PCPKS	3	1.5	48W4408	15.54
2	2.000	1.000	● EPS200-2-48″-BLACK-2 PCS	2	8	48W4745	72.10	...	...	...	...	...

(6382)

EPS-300 SERIES (3:1) SHRINK RATIO, ADHESIVE-LINED, FLEXIBLE, POLYOLEFIN HEAT-SHRINK TUBING

MADE IN USA · RoHS Compliant Available · 3M

Meltable inner wall of **EPS-300 series** tubing forms a moistureproof barrier, making it the product of choice for outdoor, automotive, or marine applications. 3:1 shrink ratio helps to seal uneven surfaces such as connectors and components. Jacket meets UL 224 all tubing flame test, –55°C to +110°C continuous operating temperature, meets MIL-DTL-23053/4 Class 3. Black only. UL recognized. **Sold in packages of 4′ long and 6″ long pieces.**

Size (In.)	Supplied I.D. (In.)	Recovered I.D. (Max.) (In.)	4′ Long Pieces: Mfg. Part No.	No. of Pieces Per Pkg.	Total Ft.	Stock No.	Price per Pkg.	6″ Long Pieces: Mfg. Part No.	No. of Pieces Per Pkg.	Total Ft.	Stock No.	Price per Pkg.
⅛	0.125	0.040	● EPS300-1/8-48″-BLACK-25 PCS	25	100	48W4759	188.07	● EPS300-1/8-6″-BLACK-10-10PCPK	10	5	47W9746	18.82
3/16	0.187	0.062	● EPS300-3/16-48″-BLACK-12PCS	12	48	95F7671	95.04	● EPS300-3/16-6″-BLACK-10 PCPKS	10	5	27W2954	15.10
¼	0.250	0.080	● EPS300-1/4-48″-BLACK-12PCS	12	48	95F7672	121.44	● EPS300-1/4-6″-BLACK-10 PCPKS	10	5	27W2947	18.11
⅜	0.375	0.120	● EPS300-3/8-48″-BLACK-12PCS	12	48	97M6838	137.53	● EPS300-3/8-6″-BLACK-10 PCPKS	10	5	27W2966	22.64
½	0.500	0.160	● EPS300-1/2-48″-BLACK-12PCS	12	48	95F7674	163.52	● EPS300-1/2-6″-BLACK-10 PCPKS	10	5	27W2941	25.88
¾	0.750	0.250	● EPS300-3/4-48″-BLACK-5 PCS	5	20	48W4765	83.57	● EPS300-3/4-6″-BLACK-10 PCPKS	10	5	27W2960	29.92
1	1.000	0.320	● EPS300-1-48″-BLACK-5 PCS	5	20	48W4752	120.12	● EPS300-1-6″-BLACK-10 PCPKS	10	5	27W2934	44.90
1½	1.500	0.510	● EPS300-1 1/2-48″-BLACK-5 PCS	5	20	48W4749	191.21	● EPS300-1 1/2-6″-BLACK-3 PCPKS	3	1.5	48W4405	25.67

(6388)

EPS-400 SERIES (4:1) SHRINK RATIO, ADHESIVE-LINED, SEMI-RIGID POLYOLEFIN HEAT-SHRINK TUBING

MADE IN USA · RoHS Compliant Available · 3M

EPS-400 series tubing provides one step environmental protection in the same way as **EPS-300 series**, *order separately on this page*, but a thicker meltable inner wall makes it ideal for sealing multiple wire bundles. 4:1 shrink ratio helps seal uneven surfaces such as in-line components. Heavy outer wall provides tough mechanical protection. –55°C to +110°C continuous operating temperature. Black only. UL recognized. **Sold in packages of 4′ long and 6″ long pieces.**

Size (In.)	Supplied I.D. (In.)	Recovered I.D. (Max.) (In.)	4′ Long Pieces: Mfg. Part No.	No. of Pieces Per Pkg.	Total Ft.	Stock No.	Price per Pkg.	6″ Long Pieces: Mfg. Part No.	No. of Pieces Per Pkg.	Total Ft.	Stock No.	Price per Pkg.
0.300	0.300	0.060	● EPS400-.300-48″-BLACK-12PCS	12	48	95F7685	153.90	● EPS400-.300-6″-BLACK-10 PCPKS	10	5	27W2969	18.89
0.350	0.350	0.080	● EPS400-.350-48″-BLACK-12PCS	12	48	95F7686	163.36	● EPS400-.350-6″-BLACK-10 PCPKS	10	5	27W2972	20.81
0.450	0.450	0.105	● EPS400-.450-48″-BLACK-12PCS	12	48	95F7687	16.83	● EPS400-.450-6″-BLACK-10 PCPKS	10	5	27W2975	25.99
0.700	0.700	0.175	● EPS400-.700-48″-BLACK-5 PCS	5	20	48W4773	100.28	● EPS400-.700-6″-BLACK-10 PCPKS	10	5	27W2978	34.37

(6389)

MFP SERIES (2:1) SHRINK RATIO, SPECIAL-PURPOSE, MODIFIED POLYVINYLIDENE FLUORIDE (PVDF) HEAT-SHRINK TUBING

MADE IN USA · RoHS Compliant Available · 3M

MFP series heat-shrink tubing is ideal for extremes in temperature or environment. A cross-linked, thin-walled, heat-shrinkable tubing offering a high degree of mechanical strength and high-temperature resistance. Modified polyvinylidene fluoride makes it resistant to corrosive, flame-retardant, semi-rigid and highly-resistant to most industrial fuels, chemicals and solvents, as well as mechanically tough for cut-through and abrasion resistance with a high 900V/mil dielectric strength. Rated for continuous operation from –55°C to +175°C. Rigidity and transparency make this shrink tubing a good choice for strain relief and identification. Shrink ratio: 2:1. UL recognized E-39100, VW-1, E-69751; CSA certified LR 38227, OFT; meets MIL-DTL-23053/8,DTL-23053/18, Class 1 specifications. Color: clear. **Sold in packages of 4′ long and 6″ long pieces.**

Size (In.)	Supplied I.D. (In.)	Recovered I.D. (Max.) (In.)	4′ Long Pieces: Mfg. Part. No.	No. of Pieces Per Pkg.	Total Ft.	Stock No.	Price per Pkg.	6″ Long Pieces: Mfg. Part No.	No. of Pieces Per Pkg.	Total Ft.	Stock No.	Price per Pkg.
1/16	0.063	0.031	MFP-1/16-48″-CLEAR-25 PCS	25	100	48W4283	100.80	● MFP-1/16″-CLEAR-10 PCPKS	10	5	27W3165	7.17
⅛	0.125	0.062	MFP-1/8-48″-CLEAR-25 PCS	25	100	48W4290	115.86	MFP-1/8″-CLEAR-10 PCPKS	10	5	27W3177	8.25
3/16	0.187	0.093	● MFP-3/16-48″-CLEAR-12 PCS	12	48	86W7352	7.23	MFP-3/16″-CLEAR-10 PCPKS	10	5	27W3181	11.12
¼	0.250	0.125	● MFP-1/4-48″-CLEAR-12PCS	12	48	97H4150	140.10	● MFP-1/4″-CLEAR-10 PCPKS	10	5	27W3173	14.31
½	0.500	0.250	MFP-1/2-48″-CLEAR-5 PCS	5	20	48W4287	84.57	MFP-1/2″-CLEAR-10 PCPKS	10	5	27W3169	25.03
¾	0.752	0.375	MFP-3/4-48″-CLEAR-5 PCS	5	20	48W4296	154.96	MFP-3/4″-CLEAR-10 PCPKS	10	5	27W3188	47.32

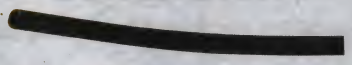
(6390)

HEAT-SHRINK TUBING

MW SERIES (2.5:1) SHRINK RATIO, ADHESIVE-LINED, SEMI-RIGID, POLYOLEFIN HEAT-SHRINK TUBING

MADE IN USA · RoHS Compliant Available · 3M

Encapsulates and seals in one step in the same way as **EPS-200 series** tubing. Semi-rigid outerwall gives superior abrasion and cut-through resistance. 2.5:1 shrink ratio. –55°C to +110°C continuous operating temperature. Meets MIL-DTL-23053/4 Class 1 specifications. Black only. UL recognized. **Sold in packages of 4′ long and 6″ long pieces.**



Size (In.)	Supplied I.D. (In.)	Recovered I.D. (Max.) (In.)	Mfg. Part No.	4′ Long Pieces: No. of Pieces Per Pkg.	Total Ft.	Stock No.	Price per Pkg.	Mfg. Part. No.	6″ Long Pieces: No. of Pieces Per Pkg.	Total Ft.	Stock No.	Price per Pkg.
1/8	0.125	0.023	● MW-1/8-48″-BLACK-25 PCS	25	100	48W4786	116.74	● MW-1/8-6″-BLACK-10 PCPKS	10	5	27W3215	10.53
3/16	0.187	0.060	● MW-3/16-48″-BLACK-12PCS	12	48	97H8165	90.72	● MW-3/16-6″-BLACK-10 PCPKS	10	5	27W3218	12.30
1/4	0.250	0.080	● MW-1/4-48″-BLACK-12PCS	12	48	97H8163	9.95	● MW-1/4-6″-BLACK-10 PCPKS	10	5	27W3212	14.74
3/8	0.375	0.135	● MW-3/8-48″-BLACK-12PCS	12	48	97H8167	127.98	● MW-3/8-6″-BLACK-10 PCPKS	10	5	27W3224	17.41
1/2	0.500	0.195	● MW-1/2-48″-BLACK-12PCS	12	48	97H8162	144.18	● MW-1/2-6″-BLACK-10 PCPKS	10	5	27W3209	19.89
3/4	0.752	0.313	● MW-3/4-48″-BLACK-5 PCS	5	20	48W4791	74.85	● MW-3/4-6″-BLACK-10 PCPKS	10	5	27W3221	23.21
1	1.000	0.400	● MW-1-48″-BLACK-5 PCS	5	20	48W4782	90.27	● MW-1-6″-BLACK-10 PCPKS	10	5	27W3206	34.82

(6383)

FP-301VW SERIES (2:1) SHRINK RATIO, FLAME-RESISTANT, FLEXIBLE, POLYOLEFIN HEAT-SHRINK TUBING

MADE IN USA · RoHS Compliant Available · 3M

FP-301VW series offers the same physical, electrical, and chemical properties as **FP-301 series** tubing, *order separately*, with the addition of superior flame resistance. Ideal as fire resistant coverings of components and flammable wire assemblies. Meets MIL-DTL-23053/5 Class 3 requirements. Rated for continuous operations from -55°C/-67°F to 135°C/275°F and withstands elevated temperatures to 300°C/572°F for short periods of time. Shrink ratio: 2:1. Minimum shrink temperature is 100°C/212°F. Black only. Selected sizes of **FP-301VW series** tubing also available in assortment packs, *order separately; go online or call.* **Sold in packages of 4′ long and 6″ long pieces.**

Size (In.)	Supplied I.D. (In.)	Recovered I.D. (Max.) (In.)	Mfg. Part No.	4′ Long Pieces: No. of Pieces Per Pkg.	Total Ft.	Stock No.	Price per Pkg.	Mfg. Part No.	6″ Long Pieces: No. of Pieces Per Pkg.	Total Ft.	Stock No.	Price per Pkg.
3/64	0.046	0.023	● FPVW-3/64-48″-BLACK-25 PCS	25	100	48W4081	24.65	...	...	...	...	...
1/16	0.063	0.031	● FPVW-1/16-48″-BLACK-25 PCS	25	100	48W4062	26.32	...	...	...	...	...
3/32	0.093	0.046	● FPVW-3/32-48″-BLACK-25 PCS	25	100	48W4076	28.48	...	...	...	...	...
1/8	0.125	0.062	● FPVW-1/8-48″-BLACK-25 PCS	25	100	48W4068	31.67	...	...	...	...	...
3/16	0.187	0.093	● FPVW-3/16-48″-BLACK-25 PCS	25	100	48W4073	38.36	...	...	...	...	...
1/4	0.250	0.125	● FPVW-1/4-48″-BLACK	12	48	95F7578	28.60	...	...	...	...	...
3/8	0.375	0.187	● FPVW-3/8-48″-BLACK	12	48	95F7579	31.52	...	...	...	...	...
1/2	0.500	0.250	● FPVW-1/2-48″-BLACK	12	48	95F7580	33.99	...	...	...	...	...
3/4	0.750	0.375	● FPVW-3/4-48″-BLACK	12	48	95F7581	45.65	...	...	...	...	...
1 1/2	1.500	0.752	● FPVW-1 1/2-48″-BLACK-5 PCS	5	20	48W4059	27.97	...	...	...	...	...
2	2.000	1.000	● FPVW-2-48″-BLACK-5 PCS	5	20	48W4070	58.97	● FP-301VW 2″ BL 6″ PC	4	2	97M6871	14.44
3	3.000	1.500	● FPVW-3-48″-BLACK-2 PCS	2	8	48W4072	47.64	● FP-301VW 3″ BL 6″ PC	3	1.5	98M0916	14.44
4	4.000	2.000	● FPVW-4-48″-BLACK-2 PCS	2	8	48W4086	58.99	...	...	...	...	...

(6392)

FIT®-221 MULTIPURPOSE IRRADIATED POLYOLEFIN HEAT-SHRINK TUBING

RoHS Compliant Available · AlphaWire — Cables you trust. Service you deserve.

FIT®-221 is an irradiated flexible, flame-retardant polyolefin tubing. Use for harnessing, wire bundling, strain reliefs, or any application where components must be insulated or packaged. Operating temp.: –55°C to +135°C (125°C UL/CSA), 2:1 shrinkage ratio @ 121°C. Meets AMS-DTL-23053/5, Class 1, 2. UL recognized standard 224, CSA certified standard 198 (except Clear color tubing). Colors: black and clear; also available in white, red, yellow, blue, or green; *go online or call.* **Sold in packages of 4′ and 6″ lengths and spooled lengths indicated in table below.** Additional spooled lengths and other cut pieces are available; *go online or call.*

FIT-221 STANDARD PACKAGES — 4′ LENGTHS

Mfg. Part No.	Min. Supp. I.D.	Max. Rec. I.D.	Nom. Rec. Wall	4′ Lengths: Total Footage	Black: Stock No.	Clear: Stock No.	Price per Pkg.
● FIT-221-3/64	0.046″	0.023″	0.016″	100′	88K1094	37F7019	28.76
● FIT-221-1/16	0.063″	0.031″	0.017″	100′	89K7912	...	29.77
● FIT-221-3/32	0.093″	0.046″	0.020″	100′	37F7024	37F7014	33.21
● FIT-221-1/8	0.125″	0.062″	0.020″	100′	85K9551	37F7011	35.72
● FIT-221-3/16	0.187″	0.093″	0.020″	100′	85K9543	85K9554	48.06

➤CONTINUED➤

FIT®-221 MULTIPURPOSE IRRADIATED POLYOLEFIN HEAT-SHRINK TUBING (CONT.)

Mfg. Part No.	Min. Supp. I.D.	Max. Rec. I.D.	Nom. Rec. Wall	4′ Lengths: Total Footage	Black: Stock No.	Clear: Stock No.	Price per Pkg.
● FIT-221-1/4	0.250″	0.125″	0.025″	100′	89K7913	85K9550	53.87
● FIT-221-3/8	0.375″	0.187″	0.025″	100′	89K7919	37F7017	60.70
● FIT-221-1/2	0.500″	0.250″	0.025″	20′	85K9548	37F7015	13.91
● FIT-221-3/4	0.750″	0.375″	0.030″	20′	37F7030	37F7018	18.42
● FIT-221-1	1.000″	0.500″	0.035″	20′	88K1934	88K1093	28.46
● FIT-221-1-1/2	1.500″	0.750″	0.040″	20′	37F7032	89K7911	56.14
● FIT-221-2	2.000″	1.000″	0.045″	20′	85K9552	85K9553	88.00
● FIT-221-3	3.000″	1.500″	0.050″	8′	37F7034	81F5725	71.69
● FIT-221-4	4.000″	2.000″	0.055″	8′	37F7035	85K9557	114.40

FIT-221B BULK PACKAGES — 4′ LENGTHS

Mfg. Part No.	Min. Supp. I.D.	Max. Rec. I.D.	Nom. Rec. Wall	4′ Lengths: No. of Pieces	Total Footage	Black: Stock No.	Price per Pkg.
● FIT-221B-1/16 BK100	0.063″	0.031″	0.017″	250 x 4	1000′	25H8463	279.27
● FIT-221B-1/8 BK100	0.125″	0.062″	0.020″	250 x 4	1000′	28B5267	333.87
● FIT-221B-3/16 BK100	0.187″	0.093″	0.020″	250 x 4	1000′	13C1295	419.99
● FIT-221B-1/4 BK100	0.250″	0.125″	0.025″	250 x 4	1000′	48F7032	506.92

➤CONTINUED➤

FIT®-221 MULTIPURPOSE IRRADIATED POLYOLEFIN HEAT-SHRINK TUBING (CONT.)

FIT-221 STANDARD PACKAGES — 6″ LENGTHS

Mfg. Part No.	Min. Supp. I.D.	Max. Rec. I.D.	Nom. Rec. Wall	No. of 6″ Cut Pieces	Black Stock No.	Clear Stock No.	Price per Pkg.
FIT-221-3/64	0.046″	0.023″	0.016″	40	85K9556	37F6980	18.81
FIT-221-1/16	0.063″	0.031″	0.017″	36	37F6990	37F6981	18.81
FIT-221-3/32	0.093″	0.046″	0.020″	32	37F6991	37F6982	19.04
FIT-221-1/8	0.125″	0.062″	0.020″	28	89K7914	89K7915	18.81
FIT-221-3/16	0.187″	0.093″	0.020″	24	86K1446	06M3839	21.15
FIT-221-1/4	0.250″	0.125″	0.025″	20	06M3833	37F6985	18.81
FIT-221-3/8	0.375″	0.187″	0.025″	16	88K1089	89K7920	18.81
FIT-221-1/2	0.500″	0.250″	0.025″	14	37F6996	86K8692	20.90
FIT-221-3/4	0.750″	0.375″	0.030″	12	88K1088	86K8693	21.15
FIT-221-1	1.000″	0.500″	0.035″	8	85K9534	37F6963	19.04
FIT-221-1-1/2	1.500″	0.750″	0.040″	5	37F6999	86K8689	21.29
FIT-221-2	2.000″	1.000″	0.045″	3	37F7000	37F6965	19.04
FIT-221-3	3.000″	1.500″	0.050″	2	86K8690	85K9535	21.15

FIT-221 SPOOLS

Mfg. Part No.	Min. Supp. I.D.	Max. Rec. I.D.	Nom. Rec. Wall	Color	Spool Size	Stock No.	Price per Spool
FIT-221-1/16 BK001	0.063″	0.031″	0.017″	Black	1000′	99F7273	271.70
FIT-221-3/8 BK007	0.375″	0.187″	0.025″	Black	50′	92F7561	59.86
FIT-221-1/2 BK016	0.500″	0.250″	0.025″	Black	150′	93B4293	104.72
FIT-221-3/32 CL002	0.093″	0.046″	0.020″	Clear	500′	92F7117	150.27
FIT-221-1/8 CL005	0.125″	0.062″	0.020″	Clear	100′	92F7564	67.84
FIT-221-1/4 CL005	0.250″	0.125″	0.03″	Clear	50′	92F7555	95.85
FIT-221-1/2 CL016	0.500″	0.250″	0.025″	Clear	150′	92F7126	108.52
FIT-221-3/4 CL007	0.750″	0.375″	0.025″	Clear	100′	98B0354	90.01

(6504)

FIT®-221 IRRADIATED POLYOLEFIN (2:1) HEAT-SHRINK TUBING IN PRE-CUT 1″ PIECES

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

FIT®-221 irradiated polyolefin heat-shrink tubing conveniently cut in one inch pieces. Applications include strain reliefs and electrical insulation. Shrink ratio: 2:1. Color: black. UL recognized, CSA certified. **Sold in packages of 1000 one inch pieces.**

Mfg. Part No.	Min. Supplied I.D.	Max. Recovered I.D.	Stock No.	Price per Pkg.
FIT-221-3/16 BK147	3⁄16″	0.093″	48F7042	125.05
FIT-221-1/4 BK147	1⁄4″	0.125″	48F7043	153.77
FIT-221-3/8 BK147	3⁄8″	0.187″	48F7044	171.84

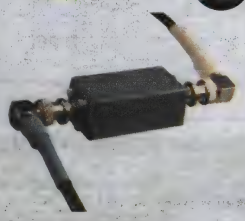
(47074)

FIT®-221V LOW SHRINK TEMPERATURE, FLAME-RETARDANT, IRRADIATED POLYOLEFIN HEAT-SHRINK TUBING

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

VW-1



FIT®-221V is radiation cross-linked polyolefin heat shrinkable tubing. Passes VW-1 vertical wire flame test. For electrical insulation, harness bundling, and cable jacketing. Shrink ratio: 2:1 at 90°C. Operating temperature: –55°C to +135°C (125°C UL and CSA). Color: black. Meets AMS-DTL-23053/5, Class 1, 3. UL recognized standard 224 and CSA certified standard 198. Also available in white, red, yellow, blue, or green; *go online or call.* **Sold in packages of 4′ (1.219m) and 6″ (152.4mm) lengths.**

Mfg. Part No.	Min. Supp. I.D. (in.)	Max. Rec. I.D. (in.)	Nom. Rec. Wall (in.)	4′ Lgths. Total	Black Stock No.	Price per Pkg.	6″ Lgths. Total	Black Stock No.	Price per Pkg.
FIT-221V-3/64	0.046	0.023	0.016	100′	37F7036	29.81	20′	37F7003	19.35
FIT-221V-1/16	0.063	0.031	0.017	100′	85K9558	30.26	18′	89K7922	19.12
FIT-221V-3/32	0.093	0.046	0.020	100′	29M6900	34.19	16′	37F7005	19.35
FIT-221V-1/8	0.125	0.062	0.020	100′	37F7039	36.68	14′	06M3840	19.12
FIT-221V-3/16	0.187	0.093	0.020	100′	37F7040	44.41	12′	89K7923	18.43
FIT-221V-1/4	0.250	0.125	0.025	100′	37F7041	56.10	10′	37F7008	19.12
FIT-221V-3/8	0.375	0.187	0.025	100′	85K9562	62.40	8′	37F7009	19.35

➤CONTINUED➤

FIT®-221V LOW SHRINK TEMPERATURE, FLAME-RETARDANT, IRRADIATED POLYOLEFIN HEAT-SHRINK TUBING (CONT.)

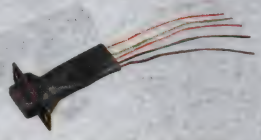
Mfg. Part No.	Min. Supp. I.D. (in.)	Max. Rec. I.D. (in.)	Nom. Rec. Wall (in.)	4′ Lgths. Total	Black Stock No.	Price per Pkg.	6″ Lgths. Total	Black Stock No.	Price per Pkg.
FIT-221V-1/2	0.500	0.250	0.025	20′	37F7043	13.93	7′	37F7010	19.35
FIT-221V-3/4	0.750	0.375	0.030	20′	37F7044	18.89	6′	06M3834	18.43
FIT-221V-1	1.000	0.500	0.035	20′	37F7045	26.73	4′	28B5314	18.43
FIT-221V-1-1/2	1.500	0.750	0.040	20′	17C1428	58.16	2.5′	37F6939	18.43
FIT-221V-2	2.000	1.000	0.045	20′	37F7047	82.15	1.5′	37F6940	18.43

(6503)

FIT®-300 SURFACE IRRADIATED/ DUAL EXTRUDED POLYOLEFIN HEAT-SHRINK TUBING

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.



FIT®-300 heat-shrink tubing features a tough, thick outer wall that shrinks and an inner wall that melts and seals. Halogen-free dual-wall semi-rigid crosslinked polyolefin. Operating temperature -55°C to 135°C (UL 125C). Shrinkage ratio: 2.5:1. Ideally used for component encapsulation, end cap transitions, connector strain relief. Meets AMS-DTL-23053/4, Class 1. UL recognized standard 224. **Sold in packages of 4′ (1.219m) or 6″ (152.4mm) lengths.**

Mfg. Part No.	Min. Supp. I.D.	Max. Rec. I.D.	Nom. Rec. Wall	4′ Lgth. Tot.	Black Stock No.	Price per Pkg.	6″ Lgth. Tot.	Black Stock No.	Price per Pkg.
FIT-300-1/8	0.125″	0.023″	0.038″	100′	37F7063	316.60	7′	86K8694	32.59
FIT-300-3/16	0.187″	0.060″	0.043″	100′	85K9568	329.05	6′	37F6957	32.33
FIT-300-1/4	0.250″	0.080″	0.047″	100′	37F7065	480.83	5′	86K1454	27.13
FIT-300-3/10	0.300″	0.050″	0.100″	100′	37F7069	1061.51	2′	37F6962	32.16
FIT-300-3/8	0.375″	0.135″	0.050″	100′	37F7066	517.86	4′	86K8695	32.12
FIT-300-1/2	0.500″	0.195″	0.055″	20′	88K1097	108.67	3′	86K1453	32.12
FIT-300-3/4	0.750″	0.313″	0.065″	20′	37F7068	195.61	2′	37F6961	31.85

(6505)

FIT®-321 MEDIUM-WALL, ADHESIVE-LINED, IRRADIATED (3:1) POLYOLEFIN HEAT-SHRINK TUBING

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

FIT®-321 offers 3:1 shrink ratio at 110°C. Meets AMS-DTL-23053/4, Class 3. UL recognized standard 224, CSA certified standard 198. Meltable encapsulating adhesive inner wall. Water resistant. Excellent bonding to substrates. Flexible flame-retardant outer wall. Uses include: replacement of potting/molding compounds; strain relief for electrical connections; cable-to-connector transitions. **Sold in packages of 4′ (1.219m) or 6″ (152.4mm) lengths.**

Mfg. Part No.	Min. Supp. I.D.	Max. Rec. I.D.	Nom. Rec. Wall	4′ Lgth. Tot.	Black Stock No.	Price per Pkg.	6″ Lgth. Tot.	Black Stock No.	Price per Pkg.
FIT-321-1/8	0.125″	0.024″	0.037″	100′	37F7050	361.41	14′	37F6943	86.91
FIT-321-1/4	0.252″	0.073″	0.047″	100′	37F7051	536.51	10′	89K7905	86.08
FIT-321-1/2	0.500″	0.157″	0.071″	20′	37F7052	144.92	7′	85K9537	97.50
FIT-321-1	0.945″	0.315″	0.098″	20′	85K9536	289.55	4′	89K7904	87.34
FIT-321-1-1/2	1.575″	0.512″	0.098″	20′	37F7054	431.76	2.5′	89K7928	86.08

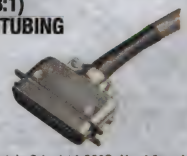
(6506)

FIT®-321V, LOW SHRINK TEMPERATURE, FLAME-RETARDANT IRRADIATED (3:1) POLYOLEFIN HEAT-SHRINK TUBING

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

VW-1



FIT®-321V has a shrink ratio of approximately 3 to 1 at 90°C. Used for wire harnesses, wire splices, insulation of terminals, and cable protection/repair. Operating temperature: -55°C to 135°C (125°C UL, CSA). UL Standard 224, CSA Standard 198, passes UL VW-1 Flame Test. Colors: black and white. Other colors available; *go online or call.*

Mfg. Part No.	Sup. I.D. Min. (In.)	Rec. I.D. Max. (In.)	Rec. Wall Nom. (In.)	Color	Spool Size (Ft.)	Stock No.	Price per Spool
FIT-321V-3/32 BK002	0.060	0.020	0.020	Black	500	83F7727	237.84
FIT-321V-1/8 BK002	0.120	0.040	0.024	Black	500	83F7729	256.62
FIT-321V-1/8 WH002	0.120	0.040	0.024	White	500	83F7730	248.18
FIT-321V-1/4 BK003	0.240	0.080	0.028	Black	250	83F7731	160.93
FIT-321V-1/4 WH003	0.240	0.080	0.028	White	250	83F7732	160.93
FIT-321V-3/8 BK004	0.360	0.120	0.031	Black	200	83F7733	143.75
FIT-321V-3/8 WH004	0.360	0.120	0.031	White	200	83F7734	139.02

➤CONTINUED➤

HEAT-SHRINK TUBING

FIT®-321V, LOW SHRINK TEMPERATURE, FLAME-RETARDANT IRRADIATED (3:1) POLYOLEFIN HEAT-SHRINK TUBING (CONT.)

Mfg. Part No.	Sup. I.D. Min. (in.)	Rec. I.D. Max. (in.)	Rec. Wall Nom. (in.)	Color	Spool Size (Ft.)	Stock No.	Price per Spool
● FIT-321V-1/2 BK016	0.472	0.160	0.033	Black	150	**83F7735**	120.60
● FIT-321V-1/2 WH016	0.472	0.160	0.033	White	150	**83F7736**	121.60
● FIT321V-3/4 BK003	0.720	0.240	0.039	Black	250	**83F7737**	270.19
● FIT-321V-3/4 WH003	0.720	0.240	0.039	White	250	**83F7738**	270.19
● FIT-321V-1IN BK003	0.945	0.315	0.048	Black	250	**85K9572**	416.92
● FIT-321V-1IN WH003	0.945	0.315	0.048	White	250	**85K9538**	406.55

(34172)

FIT®-600 HIGHLY-FLEXIBLE IRRADIATED ELASTOMER HEAT-SHRINK TUBING

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

FIT®-600 heat-shrink tubing is a highly flexible irradiated elastomer tubing with outstanding abrasion resistance properties. For outdoor use as a cable jacketing and harness material where maximum abrasion protection is required. Shrinkage ratio: appoximately 2 to 1 at 130°C. Does not contain polychloroprene/neoprene, but meets physical properties of AMS-DTL-23053/1, Class 1 and 2. Operating temperature: –75°C to +121°C. Color: black. **Sold in spools of 25′.**

Mfg. Part No.	Min. Supp. I.D. (in.)	Max. Rec. I.D. (in.)	Nom. Wall Thick. (in.)	Stock No.	Price per Spool
● FIT-600-1/4 BK008	0.250	0.143	0.035	**06M3846**	161.47
● FIT600-3/8 BK008	0.375	0.211	0.040	**96K2357**	206.25
● FIT-600-1/2 BK008	0.500	0.286	0.048	**06M3845**	226.97
● FIT-600-5/8 BK008	0.625	0.357	0.052	**85K9570**	248.96
● FIT-600-3/4 BK008	0.750	0.428	0.057	**97F8072**	266.78
● FIT-600-1IN BK008	1.000	0.570	0.070	**97F8073**	314.81
● FIT-600-2IN BK008	2.000	1.140	0.110	**97F8074**	724.62

(6405)

FIT®-621 HIGH SHRINK-RATIO, HEAVY-WALL, ADHESIVE-LINED, IRRADIATED POLYOLEFIN HEAT-SHRINK TUBING

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

FIT®-621 tubing has a shrink ratio approximately 5.6:1 at 121°C. Length is 6″. Moisture protection guaranteed. Suitable for indoor/outdoor applications, direct burial, large-to-small connector-to-cable protection, corrosion protection of metal parts, and underground utility splice protection. Heavy-duty abrasion resistance and UV resistance. Color: black. **Sold in packages of 3.**

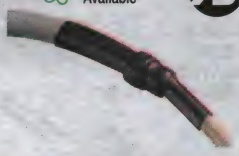
Mfg. Part No.	Supplied I.D. (in.)	Recovered I.D. (in.)	Stock No.	Price per Pkg.
● FIT-621-5/8 BK072	0.600	0.150	**88K2723**	113.59
● FIT -621-1-1/4 BK072	1.250	0.220	**86K8696**	129.03
● FIT-621-2-1/2 BK072	2.500	0.500	**50F7675**	140.76
● FIT-621-3 BK072	3.000	0.748	**89K7929**	208.42

(6470)

FIT®-650 CHEMICAL- AND TEMPERATURE-RESISTANT FLUOROELASTOMER HEAT-SHRINK TUBING

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.



FIT® 650 series flexible fluoroelastomer heat-shrink tubing is ideal for extreme temperatures -40° to +200°C and for chemical resistance. Applications include chemical production, military electronics/aircraft and hostile environments that require flexibility. Shrinkage ratio: 2:1 at 130°C min. Color: Black. **Sold in 100′ spools.**

Mfg. Part No.	Min. Supplied I.D. (in.)	Max. Rec. I.D. (in.)	Nom. Rec. Wall (in.)	Stock No.	Price per Spool
● FIT-650-3/16 BK005	0.187	0.093	0.889	**28B5932**	1488.95
● F6503/8 BK005	0.375	0.187	0.889	**28B5934**	1403.76
● FIT-650-3/4 BK005	0.752	0.375	1.066	**28B5933**	3135.81

(83033)

FIT®-CLEAR TRANSPARENT, HIGHLY FLAME-RETARDANT, HEAT-SHRINK TUBING

RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

- "Crystal Clear" even after application — perfect for visual inspection and identification
- Ideal in applications where flame retardancy is critical
- Resistant to heat, chemicals, mechanical-abrasion and cut-through
- Low recovery temperature (150°C) saves installation time and protects underlying substrate from excessive heat
- Passes UL VW-1 Flame Test
- UL recognized

FIT® -CLEAR series polyvinylidene fluoride (PVDF) based, transparent heat-shrink tubing offers a 2-to-1shrink ratio at the low shrink temperature of 150°C. Passes UL VW-1 flame retardancy test, meets UL Standard 224 and meets or exceeds the requirements of AMS-DTL-23053/18, Class 1. Applications include automotive wiring, jacketing for resistors, capacitors, fuses and other components, high-temperature, caustic and chemical environments, wire markers, and wire insulation and component stress relief. Just right for use with **XTRA•GUARD® 4** and **XTRA•GUARD® 5** cable; *ordered separately online.* Operating temperature: -55° to +175°C (150°C UL). Color: clear. **Sold in spool sizes indicated in table below.**

Mfg. Part No.	Min. Supplied I.D. (in.)	Max. Rec. I.D. (in.)	Nom. Rec. Wall (in.)	Stock No.	Spool Size (ft.)	Price per Spool
● FIT-CLEAR-3/64	0.046	0.023	0.010	**42M5280**	100	171.19
● FIT-CLEAR-1/16	0.063	0.031	0.010	**42M5270**	100	186.33
● FIT-CLEAR-3/32	0.093	0.046	0.010	**42M5278**	100	218.43
● FIT-CLEAR-1/8	0.125	0.062	0.010	**42M5273**	100	238.35
● FIT-CLEAR-3/16	0.187	0.093	0.010	**42M5277**	100	358.43
● FIT-CLEAR-1/4	0.250	0.125	0.012	**55M4406**	100	466.44
● FIT-CLEAR-3/8	0.375	0.187	0.012	**42M5281**	100	592.86
● FIT-CLEAR-1/2	0.500	0.25	0.012	**42M5271**	50	456.25
● FIT-CLEAR-3/4	0.752	0.375	0.017	**42M5279**	50	543.02
● FIT-CLEAR-1	1.000	0.5	0.019	**42M5274**	50	882.16
● FIT-CLEAR-1-1/2	1.496	0.752	0.020	**42M5275**	50	1130.65

(97263)

FIT®-FLEX HIGHLY-FLEXIBLE IRRADIATED SILICONE RUBBER HEAT-SHRINK TUBING

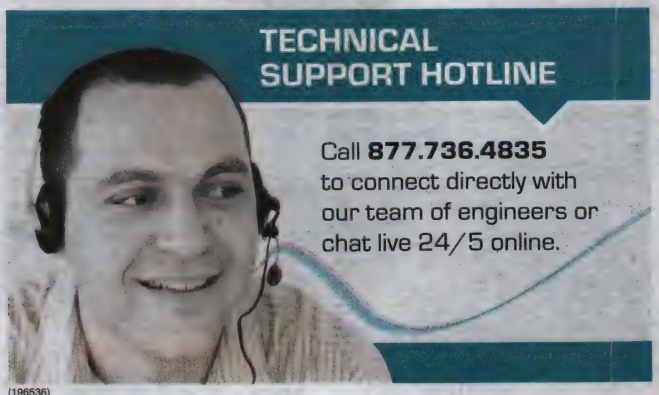
RoHS Compliant Available

AlphaWire — Cables you trust. Service you deserve.

FIT®-Flex provides strain relief, terminal insulation, cable jacketing, and wire harnessing protection in applications where flexibility and durability are mandatory. Durable in wide range of temperature extremes. Flame retardant. Passes UL VW-1 flame test. Resists extreme heat shock. Outstanding thermal insulator. Suitable sheathing for fiber-optic bundles. Other applications include: electrical appliances, medical equipment, robotic, and other moving equipment. Provides outstanding strain relief and thermal insulation. Conforms to peculiar shapes and sizes. UL Standard 224. Shrink ratio: 1.7 to 1. Operating temperature: –50°C to +200°C (90°C UL). Color: slate. **Sold in spools of 25′.** Also available in 100′ spools; *go online or call.*

Mfg. Part No.	Supplied I.D. Min. (in.)	Recovered I.D. Max. (in.)	Recovered Wall Thickness Nom. (in.)	Stock No.	Price per Spool
● FIT-FLEX-2 SL008	0.165	0.071	0.055	**05F1638**	293.12
● FIT-FLEX-3 SL008	0.263	0.114	0.055	**05F1639**	387.91
● FIT-FLEX-5 SL008	0.394	0.173	0.055	**89K7901**	576.67
● FITFLEX6 SL008	0.512	0.244	0.055	**89K7902**	651.00
● FITFLEX12 SL008	0.984	0.492	0.079	**05F1643**	1103.38
● FITFLEX20 SL008	1.378	0.748	0.079	**05F1644**	1934.42

(9934)



(196536)

FPS SERIES (2:1) SHRINK RATIO, GENERAL-PURPOSE, FLEXIBLE POLYOLEFIN HEAT-SHRINK TUBING

RoHS Compliant Available

pro-POWER

FPS series general-purpose, flexible polyolefin heat-shrink tubing is fungus/chemical-, split-, and cold flow-resistant. Mechanically-tough and easily marked. Ideal for use as electrical insulation over cable splices and termination, lightweight harness covering and wire bundling. Shrink ratio: 2:1. Minimum shrink temperature: 100°C. Operating temperature range: –55°C to +135°C. Color: black. Meets MIL-I-23053/5, Class 1, Class 2 and AMS 3636, AMS 3637 requirements. **Sold in spools and in bags of 4′ and 6″ lengths.**

Mfg. Part No.	Size	Recom. Useable ID Range	Recovered Nom. Wall Thickness	Spool Size	Stock No.	Price per Spool	4′ Lengths				6″ Lengths			
							Lengths Per Bag	Total Ft.	Stock No.	Price per Bag	Lengths Per Bag	Total Ft.	Stock No.	Price per Bag
FPS-003	3/64″	0.023 to 0.046″	0.016″	100′	84N583	41.03	25	100′	03F3522	45.45	...	...	...	...
FPS-004	1/16″	0.031 to 0.063″	0.017″	100′	84N584	44.24	25	100′	03F3524	52.11	36	18′	03F3714	11.53
FPS-006	3/32″	0.046 to 0.093″	0.020″	100′	84N585	45.65	25	100′	03F3527	55.30	32	16′	03F3717	11.39
FPS-008	1/8″	0.062 to 0.125″	0.020″	100′	84N586	52.60	25	100′	03F3530	58.39	28	14′	03F3722	10.12
FPS-012	3/16″	0.093 to 0.187″	0.020″	100′	84N587	56.62	25	100′	03F3533	63.32	24	12′	03F3727	9.99
FPS-016	1/4″	0.125 to 0.250″	0.025″	100′	84N588	67.08	25	100′	03F3537	79.56	20	10′	03F3733	9.93
FPS-024	3/8″	0.187 to 0.375″	0.025″	100′	84N589	72.13	25	100′	03F3540	82.00	16	8′	03F3739	8.92
FPS-032	1/2″	0.250 to 0.500″	0.025″	100′	84N590	81.87	5	20′	03F3543	27.17	14	7′	03F3745	9.65
FPS-048	3/4″	0.375 to 0.750″	0.030″	50′	84N591	51.04	5	20′	03F3546	31.19	12	6′	03F3750	10.63
FPS-064	1″	0.500 to 1.000″	0.035″	50′	84N592	70.83	5	20′	03F3549	41.43	8	4′	03F3753	9.76
FPS-096	1 1/2″	0.750 to 1.500″	0.040″	50′	84N593	138.48	5	20′	03F3520	56.85	...	...	...	...
FPS-128	2″	1.000 to 2.000″	0.045″	50′	84N594	184.20	5	20′	03F3518	101.56	...	...	...	...

(6306)

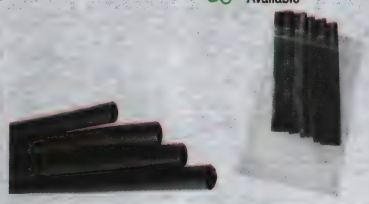
HIGH-TEMPERATURE, CROSS-LINKED FLUOROELASTOMER HEAT-SHRINK TUBING

RoHS Compliant Available

pro-POWER

MADE IN USA

- 2:1 shrink ratio
- Outstanding high-temperature performance
- Superior retsistance to highly corrosive chemicals, fuels, lubricants, acids and solvents
- Highly impact, abrasion and cut-through resistant
- Very flexible
- Easily marked



High-temperature, cross-linked fluoroelastomer heat-shrink tubing has an operating temperature range of -55°C to 200°C (-67°F to 392°F). Minimum shrink temperature: 175°C (347°F). Ideal for protecting wiring and component covers in aircraft and aerospace applications. For use in hydraulic fluid transport mechanisms, automotive and chemical processing applications up to 200°C. Meets SAE-AMS-DTL-23053/13 and MIL-R-46846, Type III, Class 1 military specifications. Color: black. **Sold in packages of five 6″ or 48″ long pieces.**

Size (In.)	Inside Diameter (In.)		Recovered Nom. Wall Thickness (In.)	Package of Five 6″ Lengths			Package of Five 48″ Lengths		
	Supplied (Min.)	Recovered (Max.)		Mfg. Part No.	Stock No.	Price per Pkg.	Mfg. Part No.	Stock No.	Price per Pkg.
1/8	0.125	0.062	0.030	MC36404	32T5266	13.42	MC36405	32T5267	102.75
3/16	0.187	0.093	0.035	MC36406	32T5268	14.08	MC36407	32T5269	106.80
1/4	0.250	0.125	0.035	MC36408	32T5270	14.13	MC36409	32T5271	116.85
3/8	0.375	0.187	0.035	MC36410	32T5272	16.05	MC36411	32T5273	122.45
1/2	0.500	0.250	0.035	MC36412	32T5274	17.90	MC36413	32T5275	141.03
5/8	0.625	0.312	0.042	MC36414	32T5276	21.78	MC36415	32T5277	169.90
3/4	0.750	0.375	0.042	MC36416	32T5278	25.65	MC36417	32T5279	202.05
1	1.00	0.500	0.049	MC36418	32T5280	37.05	MC36419	32T5281	286.30

(194801)

MIL-DTL-23053/5 SPECIFIED POLYOLEFIN HEAT-SHRINK TUBING

RoHS Compliant Available

pro-POWER

- Meets military specification MIL-DTL-23053/5
- 2:1 shrink ratio
- Minimum shrink temperature at 70°C
- Choice of 7 colors: black, clear, white, yellow, red, green, blue
- Choice of 100′, 50′ spools and bags of 4′ and 6″ lengths

Pro-Power® Mil.-Spec. polyolefin heat-shrink tubing is used as electrical insulation over cable splices and termination, lightweight harness covering and wire bundling. Operating temperature range: –55°C to +135°C. **Sold in spool sizes indicated in table below and in bags of 4′ and 6″ lengths.** Select sizes also available in 500′ spools; *go online or call.*

Size (In.)	Color	Expanded Inner Dia. (In.)	Recovered Inner Dia. (In.)	Spools				4′ Lengths					6″ Lengths				
				Mfg. Part No.	Spool Size (Ft.)	Stock No.	Price per Spool	Mfg. Part No.	Lengths Per Bag	Total Footage	Stock No.	Price per Bag	Mfg. Part No.	Lengths Per Bag	Total Footage	Stock No.	Price per Bag
3/64	Black	0.047	0.024	PP1638	100	46M2360	18.29	PP1650	25	100	46M2372	29.43	PP1662	40	20	46M2384	5.20
1/16	Black	0.063	0.031	PP1639	100	46M2361	10.53	PP1651	25	100	46M2373	27.05	PP1663	36	18	46M2385	5.44
3/32	Black	0.094	0.047	PP1640	100	46M2362	22.72	PP1652	25	100	46M2374	31.74	PP1664	32	16	46M2386	5.83
1/8	Black	0.125	0.063	PP1641	100	46M2363	26.78	PP1653	25	100	46M2375	36.59	PP1665	28	14	46M2387	3.64
3/16	Black	0.188	0.094	PP1642	100	46M2364	31.33	PP1654	25	100	46M2376	47.00	PP1666	24	12	46M2388	4.01
1/4	Black	0.25	0.125	PP1643	100	46M2365	42.48	PP1655	25	100	46M2377	35.90	PP1667	20	10	46M2389	4.10
3/8	Black	0.375	0.188	PP1644	100	46M2366	47.49	PP1656	25	100	46M2378	62.37	PP1668	16	8	46M2390	1.91
1/2	Black	0.5	0.25	PP1645	100	08P3924	61.04	PP1657	5	20	46M2379	8.02	PP1669	14	7	46M2391	2.99
3/4	Black	0.75	0.375	...	...	...	...	PP1658	5	20	46M2380	34.35	PP1670	12	6	46M2392	4.90
1	Black	1	0.5	PP1647	50	46M2369	109.25	PP1659	5	20	46M2381	50.61	PP1671	8	4	46M2393	4.18
1 1/2	Black	1.5	0.752	PP1648	50	46M2370	203.38	PP1660	5	20	46M2382	102.28	PP1672	5	2.5	46M2394	6.07
2	Black	2	1	PP1649	50	46M2371	253.08	PP1661	5	20	46M2383	142.26	PP1673	3	1.5	46M2395	12.32
3/64	Clear	0.047	0.024	PP1674	100	46M2396	16.61	PP1686	25	100	46M2408	40.67	PP1698	40	20	46M2420	4.37
1/16	Clear	0.063	0.031	PP1675	100	46M2397	18.07	PP1687	25	100	46M2409	27.16	PP1699	36	18	46M2421	4.65
3/32	Clear	0.094	0.047	PP1676	100	46M2398	22.19	PP1688	25	100	46M2410	30.23	PP1700	32	16	46M2422	5.50
1/8	Clear	0.125	0.063	PP1677	100	46M2399	14.58	PP1689	25	100	46M2411	35.77	PP1701	28	14	46M2423	5.74
3/16	Clear	0.188	0.094	PP1678	100	46M2400	32.08	PP1690	25	100	46M2412	25.82	...	...	...	...	...
3/8	Clear	0.375	0.188	...	...	...	...	PP1692	25	100	46M2414	57.26	PP1704	16	8	46M2426	5.76
1/2	Clear	0.5	0.25	PP1681	100	40P2056	64.66	PP1693	5	20	46M2415	18.48	PP1705	14	7	46M2427	7.48

CONTINUED

HEAT-SHRINK TUBING

MIL-DTL-23053/5 SPECIFIED POLYOLEFIN HEAT-SHRINK TUBING (CONT.)

Size (In.)	Color	Expanded Inner Dia. (In.)	Recovered Inner Dia. (In.)	Spools				4′ Lengths					6″ Lengths				
				Mfg. Part No.	Spool Size (Ft.)	Stock No.	Price per Spool	Mfg. Part No.	Lengths Per Bag	Total Footage	Stock No.	Price per Bag	Mfg. Part No.	Lengths Per Bag	Total Footage	Stock No.	Price per Bag
¾	Clear	0.75	0.375	● PP1682	50	46M2404	44.64	● PP1694	5	20	46M2416	21.20	● PP1706	12	6	46M2428	8.48
1	Clear	1	0.5	● PP1683	50	46M2405	107.31	● PP1695	5	20	46M2417	52.55	● PP1707	8	4	46M2429	12.10
1½	Clear	1.5	0.752	● PP1684	50	46M2406	220.11	● PP1696	5	20	46M2418	105.62	...	...	...	...	...
⅛	White	0.125	0.063	● PP2245	100	34P0777	25.79	● PP2246	25	100	34P0778	54.27	● PP2247	28	14	34P0779	6.05
3/16	White	0.188	0.094	● PP2248	100	34P0780	31.83	● PP2249	25	100	34P0781	42.97	● PP2250	24	12	34P0782	5.50
¼	White	0.25	0.125	● PP2251	100	34P0783	42.11	● PP2252	25	100	34P0784	54.74	● PP2253	20	10	34P0785	6.20
½	White	0.5	0.25	● PP2257	100	34P0789	37.76	● PP2258	5	20	34P0790	10.80	● PP2259	14	7	34P0791	7.09
¼	Yellow	0.25	0.125	● PP2287	100	34P0819	4.06	● PP2288	25	100	34P0820	30.90	● PP2289	20	10	34P0821	5.83
½	Yellow	0.5	0.25	● PP2293	100	34P0825	37.98	● PP2294	5	20	34P0826	7.26	● PP2295	14	7	34P0827	6.65
1	Yellow	1	0.5	● PP2299	50	34P0831	67.48	● PP2300	5	20	34P0832	52.63	● PP2301	8	4	34P0833	6.87
1/16	Red	0.063	0.031	● PP2311	100	34P0843	26.18	● PP2312	25	100	34P0844	41.53	● PP2313	36	18	34P0845	4.97
⅛	Red	0.125	0.063	● PP2317	100	34P0849	25.71	● PP2318	25	100	34P0850	34.24	● PP2319	28	14	34P0851	5.50
3/16	Red	0.188	0.094	● PP2320	100	34P0852	19.90	● PP2321	25	100	34P0853	45.23	● PP2322	24	12	34P0854	6.05
¼	Red	0.25	0.125	● PP2323	100	34P0855	41.16	● PP2324	25	100	34P0856	51.22	● PP2325	20	10	34P0857	6.38
⅜	Red	0.375	0.188	● PP2326	100	34P0858	25.70	● PP2327	25	100	34P0859	61.62	● PP2328	16	8	34P0860	5.50
½	Red	0.5	0.25	● PP2329	100	34P0861	68.40	● PP2330	5	20	34P0862	18.70	● PP2331	14	7	34P0863	7.59
¾	Red	0.75	0.375	● PP2332	50	34P0864	52.65	● PP2333	5	20	34P0865	36.71	● PP2334	12	6	34P0866	15.18
1	Red	1	0.5	● PP2335	50	34P0867	71.03	● PP2336	5	20	34P0868	50.97	● PP2337	8	4	34P0869	12.43
1/16	Green	0.063	0.031	● PP2347	100	34P0879	16.59	● PP2348	25	100	34P0880	41.53	● PP2349	36	18	34P0881	7.59
⅛	Green	0.125	0.063	● PP2353	100	34P0885	36.72	● PP2354	25	100	34P0886	23.01	● PP2355	28	14	34P0887	5.50
½	Green	0.5	0.25	● PP2365	100	34P0897	38.52	● PP2366	5	20	34P0898	19.91	● PP2367	14	7	34P0899	10.91
1	Green	1	0.5	● PP2371	50	34P0903	103.02	● PP2372	5	20	34P0904	31.49	● PP2373	8	4	34P0905	19.10
⅛	Blue	0.125	0.063	● PP2389	100	34P0921	14.00	● PP2390	25	100	34P0922	51.71	● PP2391	28	14	34P0923	5.50
3/16	Blue	0.188	0.094	● PP2392	100	34P0924	31.67	● PP2393	25	100	34P0925	69.19	● PP2394	24	12	34P0926	8.52
¼	Blue	0.25	0.125	● PP2395	100	34P0927	37.88	● PP2396	25	100	34P0928	51.06	● PP2397	20	10	34P0930	6.05
½	Blue	0.5	0.25	● PP2401	100	34P0934	64.80	● PP2402	5	20	34P0935	14.49	● PP2403	14	7	34P0936	10.91
¾	Blue	0.75	0.375	● PP2404	50	34P0937	79.60	● PP2405	5	20	34P0938	36.97	● PP2406	12	6	34P0939	14.70
1	Blue	1	0.5	● PP2407	50	34P0940	65.10	● PP2408	5	20	34P0941	29.62	● PP2409	8	4	34P0942	6.87

(115433)

(2:1) SHRINK RATIO, LAYFLAT PVC HEAT-SHRINK TUBING

RoHS Compliant Available

pro-POWER

Layflat PVC heat-shrink tubing is a thin-wall material offering good electrical and mechanical characteristics. When exposed to heat in excess of 275°F for a few seconds, the specially-formulated polyvinyl chloride material shrinks rapidly and uniformly to conform to the shape of the object being covered. Applications include insulating and jacketing of batteries, capacitors and similar objects; protective covering of precision machine parts and cutting tools; wire and cable identification; industrial equipment; toys, sporting goods, electronics, medical and consumer products. Operating temperature: +85°C to –20°C. Shrink ratio: 2:1. A heat gun can be used for shrinking in most applications; *order separately online or call.* Wall thickness: 0.004″. Meets flammability requirements of UL VW-1 and MIL-I-631 specifications. Color: white. UL listed. **Sold in 100′ spools.**

1693

Mfg. Part No.	Size	Flat Width	I.D.	O.D.	Stock No.	Price per Spool
● 1693	7/16″	0.728″	0.430″	0.438″	92N3687	41.41
● 1695	¾″	1.220″	0.742″	0.750″	92N3689	46.01
● 1697	1″	1.654″	0.992″	1.000″	92N3691	48.40
● 1698	1⅛″	1.850″	1.117″	1.125″	92N3692	53.33
● 1699	1¼″	2.047″	1.242″	1.250″	92N3693	58.99
● 1700	1⅜″	2.244″	1.367″	1.375″	92N3694	76.69
● 1701	1½″	2.441″	1.492″	1.500″	92N3695	82.03
● 1702	1¾″	2.835″	1.742″	1.750″	92N3696	85.22

(13544)

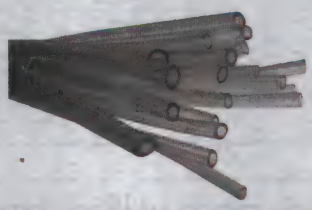
FOOD-GRADE, NONTOXIC, ACRYLATED OLEFIN HEAT-SHRINK TUBING

RoHS Compliant Available

pro-POWER

MADE IN USA

- Meets USFDA Reg. C.F.R. 177.1330 requirements
- 2:1 shrink ratio
- Low shrink temperature: 121°C (250°F)
- High flexibility
- Resistant to many chemicals, oils, sunlight, moisture and fungus
- Color: clear



Nontoxic, food-grade acrylated olefin heat-shrink tubing is constructed from premium-grade, virgin polymers making it ideal for applications involving contact with food and beverages. Provides smooth, tight-fitting insulation. Tensile strength: 2500psi. Dielectric strength: 1800vpm. Operating temperature range: -55°C to 121°C. Color: clear. Made in the U.S.A. **Sold in spool sizes indicated in table below.**

Size (In.)	Inside Diameter (In.)		Rec. Nom. Wall Thick (In.)	25′ Spools		100′ Spools		
	Supplied (Min.)	Recovered (Max.)		Mfg. Part No.	Stock No.	Price per Spool	Mfg. Part No.	Stock No.	Price per Spool
¼	0.250	0.125	0.025	● 3521	84N548	20.81	● 3533	84N560	72.64

(32671)

(4:1) HIGH SHRINK RATIO, SEMI-RIGID, PTFE HEAT-SHRINK TUBING

RoHS Compliant Available

pro-POWER

PTFE (polytetrafluoroethylene) heat-shrink tubing, upon application of heat in excess of 350°C (662°F), shrinks and conforms to the geometry of the part being covered. Stiffness, combined with chemical inertness, makes it an excellent strain relief for high-temperature electrical connections within contaminated environments. Tubing will become completely clear when it reaches the gel state and will completely recover to its specified size provided a slow cooling process is allowed. Shrink temperature: 662°F/350°C. Continuous operating temperature range: –100°F to +500°F (–73°C to +260°C). Overheating will damage the tubing, so do not heat above 700°F/327°C. Meets AMS-DTL-23053/12 Class 5, ASTM D2902-Type I, and AMS 3584 specifications. Offers good abrasion resistance and excellent fungus, chemical, oil, solvent and acid resistance. Color: natural. **Sold in packages of 4′ and 6″ lengths.**

Size	Minimum Expanded Inside Dia.	Maximum Recovered Inside Dia.	Recovered Nom. Wall Thickness	4′ Lengths					6″ Lengths				
				Mfg. Part No.	No. of 4′ Pcs. Per Bag	Total Footage	Stock No.	Price per Pkg.	Mfg. Part No.	No of 6″ Pcs. Per Bag	Total Footage	Stock No.	Price per Pkg.
5/64″	0.078″	0.025″	0.009″	● 8416-0887	25	100′	16N2363	366.56	● 3494	25	12.5	92N6012	92.80
⅛″	0.125″	0.037″	0.010″	● 8416-0888	25	100′	16N2364	404.13	● 3495	25	12.5	92N6013	82.33
3/16″	0.188″	0.050″	0.012″	● 8416-0889	25	100′	16N2365	497.16	● 3496	25	12.5	92N6014	82.80
¼″	0.250″	0.063″	0.012″	● 8416-0890	25	100′	16N2366	522.90	● 3497	25	12.5	92N6015	83.98
5/16″	0.313″	0.078″	0.012″	● 8416-0891	25	100′	16N2367	638.32	● 3498	25	12.5	92N6016	48.89
½″	0.500″	0.144″	0.015″	● 8416-0894	25	100′	16N2370	986.69	● 3501	10	5.0	92N6019	61.98
⅝″	0.625″	0.178″	0.015″	● 8416-0895	8	32′	16N2371	425.70	● 3502	10	5.0	92N6020	85.88

➤CONTINUED➤

(4:1) HIGH SHRINK RATIO, SEMI-RIGID, PTFE HEAT-SHRINK TUBING (CONT.)

Size	Minimum Expanded Inside Dia.	Maximum Recovered Inside Dia.	Recovered Nom. Wall Thickness	4′ Lengths					6″ Lengths				
				Mfg. Part No.	No. of 4′ Pcs. Per Bag	Total Footage	Stock No.	Price per Pkg.	Mfg. Part No.	No of 6″ Pcs. Per Bag	Total Footage	Stock No.	Price per Pkg.
1″	1.000″	0.278″	0.015″	● 8416-0898	8	32′	16N2374	662.81	● 3505	5	2.5	92N6023	64.81
1¼″	1.250″	0.347″	0.015″	● 8416-0899	5	20′	16N2375	956.03	● 3506	5	2.5	92N6024	96.30

(6331)

FPF SERIES (2:1) SHRINK RATIO, FLAME-RETARDANT, FLEXIBLE POLYOLEFIN HEAT-SHRINK TUBING

RoHS Compliant Available

pro-POWER

Offering same electrical, physical, and chemical qualities as the **FPS series,** the **FPF series** features superior flame resistance properties. For fire-resistant component coverings and flammable wire assemblies, as well as lightweight wire harness covering, wire marking, and wire bundling. Meets MIL-I-23053/5, Class 3 requirement. UL recognized VW-1, and CSA certified at 600V @ 125°C. Color: black. UL recognized (file E52331), CSA certified (file LR382278M). **Sold in bags of 4′ and 6″ lengths.**

Size	I.D. Range	Recovered Wall Thickness	4′ Lengths					6″ Lengths				
			Mfg. Part No.	Lengths Per Bag	Total Footage	Stock No.	Price per Pkg.	Mfg. Part No.	Lengths Per Bag	Total Footage	Stock No.	Price per Pkg.
3/64″	.023 to .046″	0.016″	● FPF-003-4025-BLK	25	100′	90N7263	55.60	● FPF-003-6040-BLK	40	20′	90N7275	15.70
1/16″	.031 to .063″	0.017″	● FPF-004-4025-BLK	25	100′	90N7264	56.30	...	...	...	...	...
3/32″	.046 to .093″	0.020″	● FPF-006-4025-BLK	25	100′	90N7265	58.25	● FPF-006-6032-BLK	32	16′	90N7277	11.22
1/8″	.062 to .125″	0.020″	● FPF-008-4025-BLK	25	100′	90N7266	59.52	● FPF-008-6028-BLK	28	14′	90N7278	11.11
3/16″	.093 to .187″	0.020″	● FPF-012-4025-BLK	25	100′	90N7267	65.95	● FPF-012-6024-BLK	24	12′	90N7279	10.21
1/4″	.125 to .250″	0.025″	● FPF-016-4025-BLK	25	100′	90N7268	79.89	● FPF-016-6020-BLK	20	10′	90N7280	10.66
3/8″	.187 to .375″	0.025″	● FPF-024-4025-BLK	25	100′	90N7269	96.10	● FPF-024-6016-BLK	16	8′	90N7281	9.43
1/2″	.250 to .500″	0.025″	● FPF-032-4005-BLK	5	20′	90N7270	21.39	● FPF-032-6014-BLK	14	7′	90N7282	9.42
3/4″	.375 to .750″	0.030″	● FPF-048-4005-BLK	5	20′	90N7271	31.54	...	...	...	...	...
1″	.500 to 1.00″	0.035″	● FPF-064-4005-BLK	5	20′	90N7272	52.31	...	...	...	...	...
1½″	.750 to 1.50″	0.040″	● FPF-096-4005-BLK	5	20′	90N7273	93.94	● FPF-096-6005-BLK	5	2.5′	90N7285	11.22

(6356)

KYS SERIES (2:1) SHRINK RATIO, THIN-WALL PVDF HEAT-SHRINK TUBING

RoHS Compliant Available

pro-POWER

Heat-shrink tubing made from semi-rigid, flame-retardant polyvinylidene fluoride (PVDF) meets MIL-I-23053/8, AMS3632 requirements. Thin wall and continuous operating temp. of +175°C. Operating temp. range: –55°C to +175°C. Min. shrink temp.: 175°C (347°F). For VW-1 dielectric strength 900 V/mil. Color: clear. UL recognized. **Sold in boxes of 4′ and 6″ lengths.**

Size	Recommended Useable ID Range	Recovered Nom. Wall Thickness	4′ Lengths					6″ Lengths				
			Mfg. Part No.	Lengths Per Box	Total Footage	Stock No.	Price per Pkg.	Mfg. Part No.	Lengths Per Box	Total Footage	Stock No.	Price per Pkg.
3/64″	0.023-0.046″	0.010″ (0.254)	● KYS-003-4025-CLR	25	100	37N1555	149.55	...	...	...	...	...
1/16″	0.031-0.063″	0.010″ (0.254)	● KYS-004-4025-CLR	25	100	37N1556	157.60	● KYS-004-6028-CLR	28	14	37N166	22.63
3/32″	0.046-0.093″	0.010″ (0.254)	● KYS-006-4025-CLR	25	100	37N1557	175.17	● KYS-006-6024-CLR	24	12	37N167	21.62
1/8″	0.062-0.125″	0.010″ (0.254)	● KYS-008-4025-CLR	25	100	37N1558	184.94	● KYS-008-6020-CLR	20	10	37N168	19.74
3/16″	0.093-0.187″	0.010″ (0.254)	● KYS-012-4025-CLR	25	100	37N1559	285.82	● KYS-012-6016-CLR	16	8	37N169	24.42
1/4″	0.125-0.250″	0.012″ (0.305)	● KYS-016-4025-CLR	25	100	37N1560	349.49	● KYS-016-6012-CLR	12	6	37N170	22.90
1/2″	0.250-0.500″	0.012″ (0.305)	● KYS-032-4005-CLR	5	20	37N1562	125.54	...	...	...	...	...

(6303)

LTP SERIES (2:1) SHRINK RATIO, LOW-TEMPERATURE, VERY FLEXIBLE POLYOLEFIN HEAT-SHRINK TUBING

RoHS Compliant Available

pro-POWER

Features extra flexibility and a lower minimum shrink temperature (100°C vs. 121°C) to minimize heat exposure and possible damage to sensitive substrate materials or components. Same electrical, physical, and chemical qualities as the **FPS series.** Meets MIL-R-46846, Type V and AMS 3587, AMS 3588 requirements. Color: black. UL recognized (file E52331), CSA certified (file LR382278M). **Sold in bags of 4′ and 6″ lengths.**

Size	I.D. Range	Recovered Wall Thickness	4′ Lengths					6″ Lengths				
			Mfg. Part No.	Lengths Per Bag	Total Footage	Stock No.	Price per Pkg.	Mfg. Part No.	Lengths Per Bag	Total Footage	Stock No.	Price per Pkg.
3/64″	.023 to .046″	0.016″	● LTP-003-4025-BLK	25	100′	50N235	63.12	...	...	...	...	...
1/16″	.031 to .063″	0.017″	...	...	...	...	...	● LTP-004-6036-BLK	36	18′	50N248	13.07
1/8″	.062 to .125″	0.020″	● LTP-008-4025-BLK	25	100′	50N238	69.60	● LTP-008-6028-BLK	28	14′	50N250	12.21
3/16″	.093 to .187″	0.023″	● LTP-012-4025-BLK	25	100′	50N239	82.92	● LTP-012-6024-BLK	24	12′	50N251	12.00
1/4″	.125 to .250″	0.028″	● LTP-016-4025-BLK	25	100′	50N240	96.49	...	...	...	...	...
3/8″	.187 to .375″	0.028″	...	...	...	...	...	● LTP-024-6016-BLK	16	8′	50N253	10.44
3/4″	.375 to .750″	0.033″	● LTP-048-4005-BLK	5	20′	50N243	32.80	...	...	...	...	...
1″	.500 to 1.00″	0.035″	● LTP-064-4005-BLK	5	20′	50N244	48.49	...	...	...	...	...

(6357)

PHD SERIES (2:1) SHRINK RATIO, ADHESIVE-LINED POLYOLEFIN HEAT-SHRINK TUBING

RoHS Compliant Available

pro-POWER

PHD series heat-shrink tubing is made of thin-walled, flame-retardant polyolefin. Features one-step, environmental protection for electronic, electrical, automotive, and marine wire splices, harness breakouts and strain reliefs. As tubing shrinks to skin-tight fit, melted adhesive covers substrate and solidifies to form permanent waterproof barrier. Has –55°C to +110°C operating range, 121°C (250°F) minimum shrink temperature, and –1 to +5% longitudinal change. Meets MIL-I-23053/4, Class 2 requirement. Color: black. UL recognized. **Sold in packages of 4′ and 6″ lengths.**

Size	Inside Diameter		Recovered Nom. Wall Thickness		4′ Lengths					6″ Lengths				
	Minimum Supplied	Maximum Recovered	Total Wall	Meltable Wall	Mfg. Part No.	Lengths Per Pkg.	Total Footage	Stock No.	Price per Pkg.	Mfg. Part No.	Lengths Per Pkg.	Total Footage	Stock No.	Price per Pkg.
1/8″	0.125″	0.063″	0.027″	0.004″	● PHD-008-4025-BLK	25	100′	11C1375	196.76	...	...	...	...	...
3/16″	0.187″	0.093″	0.027″	0.004″	● PHD-012-4025-BLK	25	100′	90N6884	216.17	● PHD-012-6024-BLK	24	12′	90N6891	36.04
1/4″	0.250″	0.125″	0.030″	0.005″	● PHD-016-4025-BLK	25	100′	90N6885	270.44	● PHD-016-6020-BLK	20	10′	90N6892	28.67
3/8″	0.375″	0.187″	0.031″	0.005″	● PHD-024-4025-BLK	25	100′	90N6886	290.28	● PHD-024-6016-BLK	16	8′	90N6893	25.08
1/2″	0.500″	0.250″	0.032″	0.006″	● PHD-032-4005-BLK	5	20′	90N6887	66.36	● PHD-032-6014-BLK	14	7′	90N6894	24.84

➤CONTINUED➤

HEAT-SHRINK TUBING

PHD SERIES (2:1) SHRINK RATIO, ADHESIVE-LINED POLYOLEFIN HEAT-SHRINK TUBING (CONT.)

	Inside Diameter		Recovered Nom. Wall Thickness		4′ Lengths					6″ Lengths				
Size	Minimum Supplied	Maximum Recovered	Total Wall	Meltable Wall	Mfg. Part No.	Lengths Per Pkg.	Total Footage	Stock No.	Price per Pkg.	Mfg. Part No.	Lengths Per Pkg.	Total Footage	Stock No.	Price per Pkg.
¾″	0.750″	0.375″	0.037″	0.006″	● PHD-048-4005-BLK	5	20′	90N6888	88.66	● PHD-048-6012-BLK	12	6′	90N6895	24.46
1″	1.000″	0.500″	0.046″	0.008″	● PHD-064-4005-BLK	5	20′	90N6889	127.75	● PHD-064-6008-BLK	8	4′	90N6896	27.91
1½″	1.500″	0.750″	0.049″	0.008″	● PHD-096-4005-BLK	5	20′	90N6890	223.54	...	...	...	...	...
2″	2.000″	1.000″	0.060″	0.015″	● PHD-128-4002-BLK	2	8′	50N664	153.70	● PHD-128-6002-BLK	2	1′	50N665	23.96

(6353)

PHS SERIES (3:1) HIGH SHRINK RATIO, ADHESIVE-LINED POLYOLEFIN HEAT-SHRINK TUBING

RoHS Compliant Available

pro-POWER

PHS series thin wall heat-shrink tubing offers the advantages of integral, multiple-wall construction. Flame-retardant, flexible polyolefin, lined with an internal layer of thermoplastic adhesive. Heat-shrinkable outer wall is radiation cross-linked, while the adhesive maintains high flow and excellent adhesion. Protects electronic components, wire splices, wire bundles, and harness breakouts. Rapidly shrinks to a skin-tight fit, forcing the melted adhesive to flow and cover the substrate. Upon cooling the adhesive solidifies, forming a permanent, non-drying, flexible and waterproof barrier. Minimum shrink temperature is 121°C (250°F). Specifications: Physical: Tensile strength of 2100 PSI, ultimate elongation of 5%, longitudinal change of –5%, secant modulus of 14,000 PSI. Electrical: dielectric strength of 700 V/mil, volume resistivity of 10^{12} ohm-cm. Chemical: corrosion-resistant, non-nutrient fungus-resistant, 0.3% water absorption. Excellent fluid resistance properties. Operating temperature range: –55° to +110°C with max. temp. (short period) of 250°C. Meets requirements of MIL-I-23053/4, Class 3 specifications. Color: black. UL recognized (file E165738). **Sold in packages of 4′ and 6″ lengths.**

	Inside Diameter		Recovered Nom. Wall Thickness			4′ Lengths					6″ Lengths			
Size	Minimum Supplied	Maximum Recovered	Total Wall	Meltable Wall	Mfg. Part No.	Lengths Per Bag	Total Footage	Stock No.	Price per Pkg.	Mfg. Part No.	Lengths Per Bag	Total Footage	Stock No.	Price per Pkg.
⅛″	0.125″	0.040″	0.040″	0.020″	...	...	...	...	...	● PHS-008-6028-BLK	28	14′	66N9252	24.30
3/16″	0.187″	0.062″	0.040″	0.020″	● PHS-012-4025-BLK	25	100′	87N1370	201.11	● PHS-012-6024-BLK	24	12′	87N1377	24.30
¼″	0.250″	0.080″	0.040″	0.020″	● PHS-016-4025-BLK	25	100′	87N1371	250.68	● PHS-016-6020-BLK	20	10′	87N1378	25.25
⅜″	0.375″	0.120″	0.055″	0.025″	● PHS-024-4025-BLK	25	100′	87N1372	289.73	● PHS-024-6016-BLK	16	8′	87N1379	22.34
½″	0.500″	0.160″	0.070″	0.030″	● PHS-032-4005-BLK	5	20′	87N1373	67.86	● PHS-032-6014-BLK	14	7′	87N1380	23.16
¾″	0.750″	0.250″	0.085″	0.035″	● PHS-048-4005-BLK	5	20′	87N1374	91.73	● PHS-048-6012-BLK	12	6′	87N1381	27.24
1″	1.000″	0.320″	0.100″	0.040″	● PHS-064-4005-BLK	5	20′	87N1375	135.61	...	...	...	...	...
1½″	1.500″	0.510″	0.100″	0.040″	● PHS-096-4005-BLK	5	20′	87N1376	263.08	● PHS-096-6005-BLK	5	2.5′	87N1383	33.49

(6354)

PVHR SERIES IRRADIATED PVC HEAT-SHRINK TUBING

MADE IN USA · VW-1 · RoHS Compliant Available

pro-POWER

- 2:1 shrink ratio
- High flexibility
- Flame retardant
- Highly abrasion and cut-through resistance
- Chemical resistant
- Made from premium-grade, virgin polymers
- Meets MIL-I-23053/2 Class 1 specifications

PVHR series irradiated PVC heat-shrink tubing is ideally used for electrical insulation, protection, strain relief, jacketing and bundling. Features outstanding 3000psi tensile strength and 1083vpm dielectric strength. Shrinks quickly at 100°C (212°F). Operating temperature range: -20°C to 105°C. Meets UL Subject 224-VW-1, CSA OFT rated for 600V, ASTM D 3150 requirements. Color: black. Made in the U.S.A. **Sold in spool sizes indicated in table below.**

	Inside Diameter (In.)										
Size (In.)	Supplied (Min.)	Recovered (Max.)	Recovered Nom.Wall Thickness (In.)	Mfg. Part No.	Spool Size	Stock No.	Price per Spool	Mfg. Part No.	Spool Size	Stock No.	Price per Spool
1/16	0.063	0.032	0.020	● PVHR-004-1100-BLK	100′	04F6451	33.92	● PVHR-004-1025-BLK	25′	04F6453	13.03
3/32	0.093	0.046	0.025	● PVHR-006-1100-BLK	100′	04F6455	35.95	● PVHR-006-1025-BLK	25′	04F6457	13.36
⅛	0.125	0.063	0.025	● PVHR-008-1100-BLK	100′	04F6459	37.72	● PVHR-008-1025-BLK	25′	04F6461	14.32
3/16	0.187	0.093	0.025	● PVHR-012-1100-BLK	100′	04F6463	41.22	● PVHR-012-1025-BLK	25′	04F6465	15.51
¼	0.250	0.125	0.025	● PVHR-016-1100-BLK	100′	04F6467	42.68	● PVHR-016-1025-BLK	25′	04F6469	17.20
⅜	0.375	0.187	0.028	● PVHR-024-1100-BLK	100′	04F6471	40.73	● PVHR-024-1025-BLK	25′	17M7536	18.17
½	0.500	0.250	0.028	● PVHR-032-1100-BLK	100′	04F6475	52.09	● PVHR-032-1025-BLK	25′	04F6477	19.69
1½	1.500	0.750	0.043	...	...	...	...	● PVHR-096-1025	25′	04F6488	44.17

(6277)

PVS SERIES FLEXIBLE, FLAME-RETARDANT, PVC HEAT-SHRINK TUBING

MADE IN USA · VW-1 · RoHS Compliant Available

pro-POWER

- 2:1 shrink ratio
- Low shrink temperature: 100°C (212°F)
- Highly flame retardant
- Flexible and abrasion resistant
- Resists many chemicals, oils, chlorine, moisture, salt-water and fungus
- Outstanding resistance to UV light
- Superior 3000psi tensile strength — 30% stronger than polyolefin
- Sizes up to large 4″ diameter

PVS series flexible, flame-retardant PVC heat-shrink tubing is constructed from premium-grade virgin polymers specifically engineered for total compatibility with all PVC insulated and jacketed wire and cable. Ideal for electrical insulation and strain relief of wire harnesses, terminals and wire splices.Offers protection, indoors and out, from UV light, fading, harsh chemicals, dirt, fungus, moisture, abrasion and splintering. Operating temperature range: -20C° to 105°C. Dielectric strength: 1083vpm. Meets UL Subject 224 VW-1, CSA OFT rated for 600V, ASTM D 3150, SAE-AMS-DTL-23053/2 Class 2 specifications. Color: black. *Also available in crystal clear; go online or call.* Made in the U.S.A. UL recognized, CSA certified. **Sold in spool sizes indicated in table below.**

	Inside Diameter (In.)										
Size (In.)	Supplied (Min.)	Recovered (Max.)	Recovered Nom. Wall Thickness (In.)	Mfg. Part No.	Spool Size (Ft.)	Stock No.	Price per Spool	Mfg. Part No.	Spool Size (Ft.)	Stock No.	Price per Spool
1/16	0.063	0.032	0.020	● PVS-004-1100-BLK	100	03F3453	32.09	● PVS-004-1025-BLK	25	03F3455	11.42
3/32	0.093	0.046	0.025	● PVS-006-1100-BLK	100	03F3457	34.37	● PVS-006-1025-BLK	25	16M0046	11.55
⅛	0.125	0.063	0.025	● PVS-008-1100-BLK	100	03F3462	25.78	● PVS-008-1025-BLK	25	03F3464	11.64
3/16	0.187	0.093	0.025	● PVS-012-1100-BLK	100	03F3467	35.24	● PVS-012-1025-BLK	25	03F3469	12.58
½	0.500	0.250	0.028	● PVS-032-1100\BLK	100	03F3482	40.27	● PVS-032-1025-BLK	25	03F3485	17.42
¾	0.750	0.375	0.033	● PVS-048-1100-BLK	100	03F3487	57.80	● PVS-048-1025-BLK	25	03F3489	20.02

➤CONTINUED➤

PVS SERIES FLEXIBLE, FLAME-RETARDANT, PVC HEAT-SHRINK TUBING (CONT.)

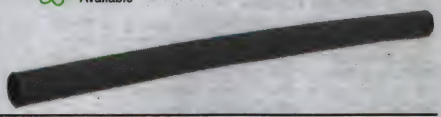
Size (In.)	Inside Diameter (In.) Supplied (Min.)	Inside Diameter (In.) Recovered (Max.)	Recovered Nom. Wall Thickness (In.)	Mfg. Part No.	Spool Size (Ft.)	Stock No.	Price per Spool	Mfg. Part No.	Spool Size (Ft.)	Stock No.	Price per Spool
1½	1.500	0.750	0.043	MC36396	100	32T5258	132.92	MC36397	25	32T5259	58.64
2	2.000	1.000	0.048	MC36398	100	32T5260	169.51	MC36399	25	32T5261	68.14
3	3.000	1.500	0.068	MC36400	50	32T5262	131.67	MC36401	25	32T5263	96.65
4	4.000	2.000	0.073	MC36402	50	32T5264	239.60	MC36403	25	32T5265	127.52

(6355)

SHS SERIES (4:1) HIGH SHRINK RATIO, SEMI-RIGID, ADHESIVE-LINED POLYOLEFIN HEAT-SHRINK TUBING

RoHS Compliant Available

pro-POWER



SHS series medium-wall, semi-rigid, flame-retardant, flexible polyolefin with an internal layer of thermoplastic adhesive. High-flow adhesive forms a permanent, non-drying, flexible and waterproof barrier. Min. shrink temp.: 121°C. Op. temp. range: –55°C (–67°F) to 110°C (230°F). Color: black. UL recognized. **Sold in packages of 4′ and 6″ lengths.**

Size	Expanded Inside Dia. (Min.)	Recovered Inside Dia. (Max.)	Recovered Melt Wall (Nom.)	Recovered Nom. Wall Thickness	4′ Lengths Mfg. Part No.	4′ Lengths Lengths per Pkg.	4′ Lengths Total Footage	4′ Lengths Stock No.	4′ Lengths Price per Pkg.	6″ Lengths Mfg. Part No.	6″ Lengths Lengths per Pkg.	6″ Lengths Total Footage	6″ Lengths Stock No.	6″ Lengths Price per Pkg.
0.300″	0.300″	0.060″	0.033″	0.028″	...	...	...	...	...	SHS-300-6022-BLK	22	11′	66N9254	35.80
0.350″	0.350″	0.080″	0.038″	0.033″	...	...	...	...	...	SHS-350-6020-BLK	20	10′	66N9255	39.03
0.450″	0.400″	0.105″	0.043″	0.053″	SHS-450-4012-BLK	12	48′	66N9260	330.01	...	...	...	...	...
0.700″	0.700″	0.175″	0.060″	0.055″	SHS-700-4005-BLK	5	20′	66N9261	198.16	SHS-700-6012-BLK	12	6′	66N9257	45.16

(6320)

SRM SERIES (2.5:1) SHRINK RATIO, SEMI-RIGID, MULTIPLE WALL POLYOLEFIN HEAT-SHRINK TUBING

RoHS Compliant Available

pro-POWER

Co-extruded and selectively cross-linked to provide meltable inner wall enabling contact between underlying surfaces. For installations that may require rework, retrofit or repair in the field. **SRM series** offers the advantage of easy removability. Ideal for one-strip approach to jacketing, encapsulating, and environmental sealing of splices, terminations, and components. Capable of 2.5:1 shrink ratio, +1 to –10% longitudinal change, –55°C to +110°C operating temperature, and has +135°C (275°F) minimum shrink temperature. Meets MIL-I-23053/4, Class 1 and AMS 3634 requirements. Color: black. UL recognized (file E165738). **Sold in bags of 4′ and 6″ lengths.**

Size	Minimum Expanded Inside Dia.	Maximum Recover Inside Dia.	Rec. Nom. Wall Thick	Meltable Nom. Wall	4′ Lengths Mfg. Part No.	4′ Lengths Lengths Per Bag	4′ Lengths Total Footage	4′ Lengths Stock No.	4′ Lengths Price per Pkg.	6″ Lengths Mfg. Part No.	6″ Lengths Lengths Per Bag	6″ Lengths Total Footage	6″ Lengths Stock No.	6″ Lengths Price per Pkg.
3/16″	0.187″	0.060″	0.043″	0.025″	SRM-012-4025-BLK	25	100	37N333	332.90	SRM-012-6012-BLK	12	6	37N1819	24.83
3/8″	0.375″	0.135″	0.050″	0.030″	...	...	...	...	...	SRM-024-6008-BLK	8	4	37N1822	19.66
1/2″	0.500″	0.195″	0.055″	0.035″	SRM-032-4005-BLK	5	20	37N337	102.01	...	...	...	...	...
3/4″	0.750″	0.313″	0.065″	0.040″	SRM-048-4005-BLK	5	20	37N338	176.51	...	...	...	...	...
1″	1.00″	0.400″	0.075″	0.040″	SRM-064-4005-BLK	5	20	37N339	227.72	...	...	...	...	...

(6352)

SST SERIES (1.67:1) SHRINK RATIO FEP HEAT-SHRINK TUBING

RoHS Compliant Available

pro-POWER

Chemical and thermal characteristics of FEP (fluorinated ethylene propylene), an outstanding electrical insulator that offers resistance to many chemicals except molten alkali metals and fluorine. Has the ability to partially shrink at 150°F with complete recovery at 350°F. Use on soldering joints, parts, components, fittings of plastic, metal, and wood. Meets AMS-DTL-23053/11 2 and ASTM D2902 specifications. Operating temperature range: –75°C to +200°C. Color: clear. **Sold in bags of 2′ and 6″ lengths.**

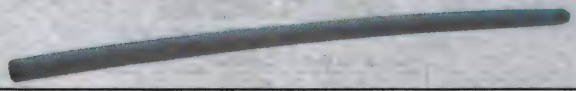
Size	Recommended Useable ID Range	Recovered Nom. Wall Thickness	2′ Lengths Mfg. Part No.	2′ Lengths No. of 2′ Pcs. Per Bag	2′ Lengths Total Footage	2′ Lengths Stock No.	2′ Lengths Price per Pkg.	6″ Lengths Mfg. Part No.	6″ Lengths No. of 6″ Pcs. Per Bag	6″ Lengths Total Footage	6″ Lengths Stock No.	6″ Lengths Price per Pkg.
3/32″	0.056-0.093″	0.008″	SST-006-2050-CLR	50	100	37N295	376.74	SST-006-6025-CLR	25	12.5	92N5995	60.28
1/8″	0.075-0.125″	0.010″	SST-008-2050-CLR	50	100	37N296	130.21	SST-008-6025-CLR	25	12.5	92N5996	53.58
3/16″	0.115-0.188″	0.010″	SST-012-2025-CLR	25	50	37N297	178.33	SST-012-6025-CLR	25	12.5	92N5997	53.58
1/4″	0.150-0.250″	0.010″	SST-016-2025-CLR	25	50	37N298	160.91	SST-016-6025-CLR	25	12.5	92N5998	48.65
3/8″	0.225-0.375″	0.012″	SST-024-2010-CLR	10	20	37N299	58.72	SST-024-6010-CLR	10	5.0	92N5999	30.01
1/2″	0.300-0.500″	0.015″	SST-032-2010-CLR	10	20	37N300	141.86	SST-032-6010-CLR	10	5.0	92N6000	44.26
3/4″	0.450-0.750″	0.020″	SST-048-2005-CLR	5	10	37N301	117.71	SST-048-6010-CLR	10	5.0	92N6001	75.13
1″	0.600-1.000″	0.025″	SST-064-2005-CLR	5	10	37N302	200.48	SST-064-6010-CLR	10	5.0	92N6002	119.11
1½″	0.900-1.500″	0.030″	SST-096-2001-CLR	1	2	37N303	54.72	SST-096-6005-CLR	5	2.5	92N6003	80.15

(6300)

TTS SERIES (2:1) SHRINK RATIO, THIN WALL, PTFE HEAT-SHRINK TUBING

RoHS Compliant Available

pro-POWER



TTS series heat-shrink tubing constructed of PTFE (polytetrafluoroethylene), an outstanding electrical insulator that offers resistance to many chemicals except molten alkali metals and fluorine. Shrink temperature: 327°C (625°F). Operating temperature range: –75°C to +250°C. Meets AMS-DTL-23053/12 Class 3, ASTM D2902 Type I, and AMS 3585 specifications. Color: natural. **Sold in packages of 2′ and 6″ lengths.**

AWG	Recommended Useable ID Range	Recovered Nom. Wall Thickness	2′ Lengths Mfg. Part No.	2′ Lengths No. of 2′ Pcs. Per Bag	2′ Lengths Total Footage	2′ Lengths Stock No.	2′ Lengths Price per Pkg.	6″ Lengths Mfg. Part No.	6″ Lengths No. of 6″ Pcs. Per Bag	6″ Lengths Total Footage	6″ Lengths Stock No.	6″ Lengths Price per Pkg.
16	0.061-0.093″	0.012″	TTS-S16-2050-NAT	50	100	37N1632	314.39	TTS-S16-6016-NAT	16	8	81N2701	26.73
14	0.072-0.120″	0.012″	TTS-S14-2050-NAT	50	100	37N1633	319.34	TTS-S14-6014-NAT	14	7	81N2702	24.54

CONTINUED

TTS SERIES (2:1) SHRINK RATIO, THIN WALL, PTFE HEAT-SHRINK TUBING (CONT.)

AWG	Recommended Useable ID Range	Recovered Nom. Wall Thickness	2′ Lengths					6″ Lengths				
			Mfg. Part No.	No. of 2′ Pcs. Per Bag	Total Footage	Stock No.	Price per Pkg.	Mfg. Part No.	No. of 6″ Pcs. Per Bag	Total Footage	Stock No.	Price per Pkg.
12	0.089-0.150″	0.012″	● TTS-S12-2025-NAT	25	50	37N1634	181.27	● TTS-S12-6014-NAT	14	7	81N2703	27.05
10	0.112-0.191″	0.012″	● TTS-S10-2025-NAT	25	50	37N1635	214.97	● TTS-S10-6012-NAT	12	6	81N2704	27.51
8	0.141-0.240″	0.015″	● TTS-S08-2025-NAT	25	50	37N1636	346.78	● TTS-S08-6010-NAT	10	5	81N2705	37.67

(6301)

RAYCHEM ATUM SERIES HIGH-EXPANSION RATIO 3:1, ADHESIVE-LINED HEAT-SHRINK TUBING

RoHS Compliant Available

TE connectivity

Authorized Distributor

ATUM series heat-shrink tubing is radiation-crosslinked and adhesive-lined to provide environmental sealing in a wide variety of electrical applications such as sealing connector backshells and cable breakouts and to repair damaged cable. Tubing and adhesive remain flexible, so the moisture-seal withstands bending. High-expansion ratio (3:1) makes it possible to repair cable without removing connectors. Full recovery temperature: 125°C. Operating temperature range: -55°C to 110°C. Meets military AMS-DTL-23053/4, Class 3 specifications. UL recognized at 110°C, 600V. Color: black. **Sold in 4 ft lengths.**

Mfg. Part No.	Size Dia. * (mm)	Expanded I.D. (mm)	Recovered I.D. (mm)	Recovered Nom. Wall Thickness (mm)	Stock No.	Price per Foot
● ATUM-3/1-0-STK	3	3	1	1	09J3922	1.76
● ATUM-6/2-0-STK	6	6	2	1	09J3924	2.76
● ATUM-9/3-0-STK	9	9	3	1.4	09J3925	2.65
● ATUM-12/4-0-STK	12	12	4	1.778	09J3919	2.68
● ATUM-19/6-0-STK	19	19	6	2.25	09J3920	6.25
● ATUM-24/8-0-STK	24	24	8	2.54	09J3921	9.39
● ATUM-40/13-0-STK	40	40	13	2.54	09J3923	12.55

*ID as supplied/ID fully recovered

(79621)

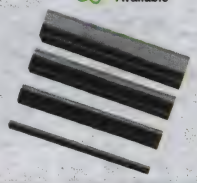
RAYCHEM BSTS AND SST SERIES HEAT-SHRINK TUBING

RoHS Compliant Available

TE connectivity

Authorized Distributor

- 3:1 shrink ratio
- Min. shrink temperature: 90°C [195°F]
- Min. full recovery temperature: 121°C [257°]
- Operating temperature: -55°C to 110°C



BSTS SERIES HEAVY-DUTY TUBING

Mfg. Part No.	Inside Dia. Min. Expanded (mm)	Inside Dia. Max. Recovered (mm)	Recovered Wall Thickness Nom. (mm)	Strip Lgth.	Stock No.	Price per Strip 1-24
● BSTS-03X4	7.62	2.54	1.778	4′	42M1305	8.12
● BSTS-04X4	10.16	3.81	1.778	4′	42M1306	21.71
● BSTS-07X4	19.05	5.59	2.41	4′	22J0740	10.82
● BSTS-15X4	38.10	12.7	3.556	4′	37J0154	11.15
● BSTS-17X4	43.18	12.7	3.556	4′	42M1307	14.08
SST SERIES DUAL-WALL TUBING						
● SST-48-07/226	19.05	5.588	2.41	4′	42M1311	15.57
● SST-48-20/226	50.80	19.1	4.064	4′	42M1313	74.28

(93124)

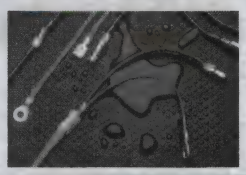
RAYCHEM DURASEAL HEAT-SHRINKABLE, ENVIRONMENTALLY-SEALED, NYLON-INSULATED CRIMP SPLICES

RoHS Compliant Available

TE connectivity

Authorized Distributor

Heat-shrinkable crimp splices completely insulate and protect electrical connections from water, condensation, salt and corrosion. Provides strain relief and protects against wire pull-out and vibration in rugged environments. Easy-to-install, 1-pc. construction. Pre-installed nylon heat-shrink tubing is adhesive-lined for added protection against abrasions and cuts. Shrink ratio: 2:1. Operating temperture range: -55°C to 125°C. Ideal for wire-to-wire splicing in marine electronics, fleet maintenance, commercial wiring, and automotive/truck wiring maintenance applications. UL listed.



Mfg. Part No.	Color	AWG	Length/Dia. (In.)	Stock No.	Price Each 1-49
● D-406-0001	Red	22AWG to 18AWG	1.25/0.145	09J4057	0.44
● D-406-0002	Blue	16AWG to 14AWG	1.25/0.180	09J4058	0.40
● D-406-0003	Yellow	12AWG to 10AWG	1.50/0.250	09J4059	0.90

(80042)

RAYCHEM DWP-125 HEAT-SHRINK TUBING KIT #3

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Adhesive-lining helps seal out moisture
- 3:1 shrink ratio
- Min. full recovery temperature: 125°C
- Operating temperature: -40°C to 110°C
- UL recognized, CSA certified @ 125°C, 600V

Flexible **DWP-125** adhesive-lined, medium-wall, flame-retardant polyolefin heat-shrink tubing is a versatile, environmentally friendly choice for many commercial applications that require mechanical protection and sealing against moisture and chemical ingress. As it shrinks, the inner adhesive liner melts and flows to seal and encapsulate components or splices contained within.

Mfg. part no. DWP-125-KIT3 is comprised of 111 pieces of heat-shrink tubing in 6″ pre-cut lengths packaged in a durable, six section plastic storage box with hinged lid. Assortment consists of: 25 ⅛″ I.D. pieces (15 black, 5 white, 5 red), 25 3/16″ I.D. pieces (15 black, 5 white, 5 red), 24 ¼″ I.D. pieces (20 black, 4 red), 10 ½″ I.D. pieces (7 black 3 red), five ¾″ I.D. pieces (3 black, 2 red), and three 1″ I.D. black pieces. Also included are 19 pieces of clear Thermofit® **ES1000** adhesive-lined, medium-wall, semi-rigid polyolefin heat-shrink tubing (4:1 shrink ratio) consisting of six pieces of No. 1, five pieces each of No. 2 and No. 3 and three pieces of No. 4 Thermofit® **ES1000** tubing, which is used for environmental sealing and electrical insulation of wire splices, terminations and components. *Order refills for* **DWP-125** *tubing separately below.*

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● DWP-125-KIT3	111-Pc. Heat-Shrink Tubing Kit #3	42M3162	95.06

DWP-125 HEAT-SHRINK TUBING REFILLS FOR KIT #3 (ABOVE)

Mfg. Part No.	Expanded I.D. (In.)	No. of 6″ Pcs. per Refill	Fits AWG Size	Colors	Stock No.	Price Each
● DWP-125-1/8-KIT3-REFILL	⅛	25	20-16	15 Black, 5 White, 5 Red	42M3166	12.90
● DWP-125-3/16-KIT3-REFILL	3/16	25	14-10	15 Black, 5 White, 5 Red	42M3167	15.63
● DWP-125-1/4-KIT3-REFILL	¼	24	12-10	20 Black, 4 Red	42M3165	12.90
● DWP-125-1/2-KIT3-REFILL	½	10	6-3	7 Black, 3 Red	42M3164	17.20
● DWP-125-3/4-KIT3-REFILL	¾	5	2-1/0	3 Black, 2 Red	42M3168	12.90
● DWP-125-1-KIT3-REFILL	1	3	2/0-4/0	3 Black	42M3163	13.50

(93123)

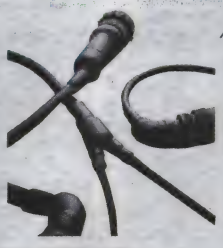
RAYCHEM MOLDED HEAT-SHRINK BOOTS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Ideal for use with circular connectors to provide connector/cable strain relief. Also used with Raychem adapters to provide strain relief and mechanical protection for harness systems using circular connectors. Molded of fluid-resistant elastomer or flexible or semi-rigid polyolefin. Available uncoated or with precoating adhesive for added sealing protection. Color: black.



202D2xx STYLE STRAIGHT, WITH LIP, HEAT-SHRINK BOOTS

Mfg. Part No.	Expanded I.D. (mm)	Recovered I.D. (mm)	Length (mm)	Stock No.	Price Each 1-49	Price Each 50-99
● 202D921-4/42-0 †	19.3	2.1	60.2	73K0578	20.89	18.39
● 202D211-4/42-0 †	22.4	6.4	105.9	73K2235	19.84	17.31
● 202D211-4/86-0 †	22.4	6.4	105.9	26K1346	20.46	17.85
● 202D221-4-0 ††	25.7	7.4	121.2	24K0728	18.04	16.82
● 202D221-4/42-0 †	25.7	7.4	121.2	35M5596	18.61	15.27
● 202D232-4-0 ††	29.5	8.4	138.7	44M8313	17.40	16.21
● 202D232-4/86-0 †	29.5	8.4	138.7	26K1349	20.27	18.21
● 202D242-4-0 ††	34	9.7	159.5	04M7214	21.76	19.79
● 202D253-4-0 ††	37.3	10.4	177.8	44M8442	20.48	19.63
● 202D253-4/42-0 †	37.3	10.4	177.8	57J3440	26.84	25.29

CONTINUED

RAYCHEM MOLDED HEAT-SHRINK BOOTS (CONT.)

202D1xx STYLE STRAIGHT, WITH LIPS, HEAT-SHRINK BOOTS

Mfg. Part No.	Expanded I.D. (mm)	Recovered I.D. (mm)	Length (mm)	Stock No.	Price Each 1-49	Price Each 50-99
202D121-4/42-0 †	23.3	5.6	38.1	48J6312	16.40	13.20
202D142-4/42-0 †	31	7.2	66.8	30K6964	18.20	17.59
202K STYLE STRAIGHT, WITH LIPS, HEAT-SHRINK BOOTS						
202K121-25-0 *	24	5.6	38	35K5554	15.07	13.97
202K121-25/86-0 ±	24	5.6	38	60K0383	14.43	13.75
202K121-25/225-0 ±	24	5.6	38	59J7281	15.64	14.90
202K132-25-0 *	30	5.9	55	21K6225	14.25	12.11
202K132-25/225-0 ±	30	14.2	55	72J7408	14.00	13.34
202K142-25-0 *	31	7.1	67	64K0092	18.12	16.32
202K142-25/225-0 ±	31	7.1	67	64K3314	26.86	20.54
202K153-25-0 *	36	8.4	80	25M1474	11.49	10.44
202K153-25/225-0 ±	36	8.4	80	21K5208	27.02	20.65
222K STYLE RIGHT-ANGLE,WITH LIP, HEAT-SHRINK BOOTS						
222K121-25-0 *	24	0.41	25	39K3975	16.49	13.35
222K121-25/225-0 ±	24	0.41	25	59J7280	17.72	16.24
222K132-25-0 *	30	5.9	32	45M0573	29.11	22.26
222K132-25/225-0 ±	30	5.9	32	43K4844	22.30	20.61
222K142-25-0 *	31	7.1	39	45M0587	21.31	19.70
222K142-25/225-0 ±	31	7.1	39	21J9348	31.42	26.02
222K152-4/42-0 †	36	0.88	46	30K5344	18.15	17.20
"T"-TRANSITION HEAT-SHRINK BOOT						
Equal size outlets provide strain relief and mechanical protection at "T"-junctions in cable harness assemblies.						
301A011-4/42-0 †	6.6	3.6	29.7	16M1641	20.89	19.15
"Y"-SLIMLINE-TRANSITION HEAT-SHRINK BOOT						
Equal size outlets provide strain relief and mechanical protection at "Y"-junctions in cable harness assemblies.						
381A301-71/42-0 †	19.8	6.6	40.64	36K3055	22.17	20.33
"Y" TRANSITION HEAT-SHRINK BOOT						
Equal size outlets provide strain relief and mechanical protection at "Y"-junctions in cable harness assemblies.						
382A012-25-0 *	13.2	3.3	23.9	77J6861	19.04	15.84
382A012-25/225-0 ±	13.2	3.3	41.7	30M0313	22.02	21.35
382A012-3-0 ++	13.2	3.3	41.7	26K3297	17.65	16.77
382A023-25-0 *	26.9	6.1	81.3	82K7768	25.97	25.31
382A023-3-0 ++	26.9	6.1	81.3	26K3295	24.71	23.96
382A023-3/42-0 +	26.9	6.1	53.34	28M8423	29.26	27.28
382A034-4/86-0 †	38.6	12.4	78.74	36M2147	65.19	59.74
"1-TO-3 CABLES" TRANSITION HEAT-SHRINK BOOT						
462A023-25-0 *	26.9	6.9	93.2	56J6783	46.04	35.21
SHRINKHOOP CABLE CLAMP HEAT-SHRINK GROMMETS						
Ultra high ratio heat-shrinkable strain-relief grommet that can be placed over the cable assembly after the connector pinning operation is completed. Constructed from black polyolefin.						
URHR-1	25	2	13	21K6643	23.64	21.66
URHR-5	51	5.1	19	21K6659	11.99	10.90

†Flexible polyolefin with adhesive coating; ††Flexible polyolefin; +Semi-rigid polyolefin with adhesive coating; ++Semi-rigid polyolefin; *Fluid-resistant elastomer; ±Fluid-resistant elastomer with adhesive coating
(94530)

RAYCHEM HIGH-TEMPERATURE HEAT-SHRINKABLE SEALING SLEEVES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Low profile, lightweight but tough
- Robust fluid and temperature resistance
- Sealing material is pre-installed in sleeve for moisture sealing and corrosion protection
- Protects against abrasion and chaffing
- 2:1 shrink ratio

High-temperature fluoropolymer sealing sleeves provide a robust, lightweight cover which shrinks to environmentally seal in-line connections, compression joints, terminals, and other substrates used in the aerospace, defense, and marine industries. Available in a variety of diameters and lengths for numerous uses, including cable jacket repair. Molded of black, heat-shrinkable, radiation cross-linked modified fluoropolymer with a light blue, meltable sealing insert made of environmentally-resistant, modified thermoplastic fluoroelastomer. Meets FAR Part 25 appendix F of the FAA standards. Rated for continuous use from -65° to +200°C with excursions to 260°C for up to 500 hours. Provides electrical insulation up to 200V/mil of thickness and volume resistivity to 10E11 ohm-cm. No need for oven curing equipment; a heat gun, rated at 2200W or greater, is recommended for application.

Mfg. Part No.	Size (in.)	Length (in.)	Length (mm)	I.D. (mm)	Stock No.	Price Each Each	Price Each 2-4
RT-555-3/8-2.75-A260-0	⅜	2.75	69.9	8.3	77R3459	7.43	6.44
RT-555-3/8-4.75-A260-0	⅜	4.75	120.7	8.4	77R3460	9.20	7.97
RT-555-1/2-2.75-A260-0	½	2.75	69.9	11.43	77R3455	8.79	7.62

CONTINUED

RAYCHEM HIGH-TEMPERATURE HEAT-SHRINKABLE SEALING SLEEVES (CONT.)

Mfg. Part No.	Size (in.)	Length (in.)	Length (mm)	I.D. (mm)	Stock No.	Price Each Each	Price Each 2-4
RT-555-1/2-5.75-A260-0	½	5.75	146.1	11.43	77R3456	12.80	11.09
RT-555-3/4-3.00-A260-0	¾	3.00	76.2	17.78	77R3457	11.22	9.73
RT-555-3/4-6.75-A260-0	¾	6.75	171.5	17.78	77R3458	17.51	15.18
RT-555-1.0-3.75-A260-0	1	3.75	95.3	22.8	77R3453	16.46	14.27
RT-555-1.0-6.75-A260-0	1	6.75	171.5	22.8	77R3454	24.30	21.06

(178500)

RAYCHEM C-WRAP SIDE ENTRY HEAT-SHRINKABLE REPAIR SLEEVES

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features

- 150°C rated
- Easy-to-install — saves time, manpower, cost
- Side-entry for easy access to damaged wire
- Color-coded for proper sizing of each application
- Long-term performance provides a permanent repair
- Low-profile — small diameter, short length
- Wrap-around design eliminates de-pinning of connector for repair
- Prevents galvanic corrosion on center conductor
- Environmental- and immersion-resistant
- Meets fluid and sealing requirements in SAE-AS81824
- Length: outer sleeve 19.05mm, inner adhesive 21.59mm

Applications

- Used as a side-entry repair kit
- Aerospace
- Defense
- Marine

C-Wrap side-entry repair sleeves are designed to repair and seal a damaged wire jacket that has been chafed or has a radial crack or cut on the insulation. C-Wrap repair sleeves consist of two pieces: the outer heat-shrinkable radiation cross-linked modified fluropolymer insulation sleeve and a meltable modified thermoplastic fluroelastomer adhesive inner layer. The side-entry and low-profile construction offers easy access to repair and seal a damaged wire jacket. Ideal for use on insulations rated at 135°C or higher. Temperature range: -65°C to +150°C.

Mfg. Part No.	Color	C-Wrap I.D. (mm) Sleeve	C-Wrap I.D. (mm) Adhesive	For Cond./Wire Sz. AWG	For Cond./Wire Sz. O.D. (mm)*	Stock No.	Price Each 1-9	Price Each 10-49
D-150-C-11	Green	2.29	1.11	26-24	0.8-1.1	05W4481	8.17	7.83
D-150-C-12	Red	2.74	1.68	22-20	1.1-1.5	05W4813	9.53	9.12
D-150-C-13	Blue	3.43	2.13	18-16	1.5-2.3	05W4814	11.10	10.63
D-150-C-14	Yellow	4.8	3.34	14-12	2.3-2.8	05W4815	11.47	10.79

*NOTE: If O.D. of wire is out of range in table above, use next size of C-Wrap repair sleeve up or down
(208428)

RAYCHEM MICRO MOLDED HEAT-SHRINKABLE SHAPES (BOOTS)

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Small size, lightweight
- Supplied in expanded form
- Fluid and temperature resistant
- Environmental sealing against moisture and dirt ingression
- Provides protection against mechanical abuse at cable connector interface
- 2:1 shrink ratio

Micro Molded heat-shrinkable shapes (boots) are ideal for use with micro circular connectors to provide connector/cable strain relief. Molded of heat-shrinkable, semi-rigid, elastomer, designed to offer excellent performance in harsh environments. Ideal for use in military and commercial vehicles where high temperatures and long term exposure to hot fluids is expected. On application of heat, boots shrink to a predetermined size and shape, providing a tough, protective covering for the components over which they are installed. Color: black.

Mfg. Part No.	Shape	Supplied I.D. (mm)	Recov. I.D. (mm)	Recovered Length (mm)	Stock No.	Price Each 1-24	Price Each 25-49
204W201-25-0	Straight	10	1.5	20	77R3517	8.60	7.25
203W301-25-0	Straight	10	2.2	29	77R3516	14.80	12.24
202K111-25-01-0	Straight	17	3	29	77R3514	16.07	13.03
202A111-25-G07-0	Straight	17	2.2	25	73R3711	15.33	12.66
224W201-25-0	90° Angle	11	1.6	13.0 x 11.5	77R3520	9.40	8.84
223W601-25-0	90° Angle	10	2	12.5 x 11.5	77R3519	7.86	7.62

(178499)

Custom Cable Assembiles to your specs to mate with the complete line of connectors!
Call 1.800.463.9275
(212562)

HEAT-SHRINK TUBING

RAYCHEM NT-MIL SERIES FLEXIBLE MODIFIED ELASTOMERIC HEAT-SHRINK TUBING

RoHS Compliant Available

TE connectivity

Authorized Distributor

NT-MIL series modified elastomeric heat-shrink tubing offers outstanding resistance to abrasion and physical abuse while providing flexibility and strain relief needed in many harnessing and wire bundling applications in military and aerospace industries. Meets stringent requirements of AMS-DTL-23053/1, Classes 1and 2. Remains flexible at low temperatures without cracking. Withstands heat shock at 200°C without dripping, flowing or cracking. Resistant to common fluids and solvents. Shrink ratio: 1.75:1. Full recovery temperature: 135°C. Continuous operating range: -70°C to 121°C. Color: black. **Sold in spool sizes indicated in table below.**

Mfg. Part No.	Size Dia. (In.)	Expanded I.D. (In.)	Recovered I.D. (In.)	Spool Size (Ft.)	Stock No.	Price per Foot 1-749
● NT-MIL-1/4-0-SP	0.250	0.250	0.142	300	09J3936	1.32
● NT-MIL-3/8-0-SP	0.375	0.375	0.213	300	09J3938	1.67

(79601)

RAYCHEM RNF-100 FLEXIBLE HEAT-SHRINK TUBING

UL CSA RoHS Compliant Available

TE connectivity

Authorized Distributor

- Highly flame retardant
- Flexible to conform to irregular shapes
- Excellent durability
- Chemical resistant

RNF-100 series general-purpose polyolefin heat-shrink tubing is designed to provide superior mechanical- (abrasion, cut-through and strain relief), thermal- and fluid-resistance performance in demanding environments. Ideal for wire bundling, light-duty harnesses and wire identification. Black tubing is flame-retardant and meets AMS-DTL-23053/5, Class 1 military requirements. Clear tubing meets AMS-DTL-23053/5, Class 2 military requirements. Shrink ratio: 2:1. Minimum shrink temperature: 95°C. Continuous operating temperature range: -55°C to 135°C. UL recognized, CSA certified at 125°, 600V. **Sold in 4 ft. (1.22m) lengths and in mini or regular spool sizes indicated in tables below.**

RNF-100 SERIES — 4 FT. (1.22M) LENGTHS

Mfg. Part No.	Color	Supplied I.D. Min. (mm)	Recovered I.D. Max. (mm)	Recovered Nom. Wall Thickness (mm)	Stock No.	Price per Foot
● RNF-100-3/64-BK-STK	Black	1.2	0.6	0.4	09J3960	0.33
● RNF-100-1/16-BK-STK	Black	1.6	0.8	0.43	09J3951	0.34
● RNF-100-3/32-BK-STK	Black	2.4	1.2	0.51	09J3958	0.37
● RNF-100-1/8-BK-STK	Black	3.2	1.6	0.51	09J3954	0.37
● RNF-100-3/16-BK-STK	Black	4.8	2.4	0.51	09J3957	0.44
● RNF-100-1/4-BK-STK	Black	6.4	3.2	0.64	09J3953	0.58
● RNF-100-3/8-BK-STK	Black	9.5	4.8	0.64	09J3961	0.63
● RNF-100-1/2-BK-STK	Black	12.7	6.4	0.64	09J3952	0.76
● RNF-100-1/2-CL-SP	Clear	12.7	6.4	0.64	61J0695	1.04
● RNF-100-3/4-BK-STK	Black	19.1	9.5	0.76	09J3959	4.53
● RNF-100-1-BK-STK	Black	25.4	12.7	0.89	09J3949	1.59
● RNF-100-1-1/2-BK-STK	Black	38.1	19.1	1.02	09J3950	3.50
● RNF-100-2-BK-STK	Black	50.8	25.4	1.14	09J3955	4.12
● RNF-100-3-BK-STK	Black	76.2	38.1	1.27	09J3956	10.23
● RNF-100-4-BK-STK	Black	101.6	50.8	1.4	09J3962	52.63

RNF-100 SERIES — MINI SPOOLS

Mfg. Part No.	Color	Supplied I.D. Min. (mm)	Recovered I.D. Max. (mm)	Recovered Nom. Wall Thickness (mm)	Spool Size (Ft.)	Stock No.	Price per Spool
● RNF-100-MINI-SPL-3/64-BK	Black	1.2	0.6	0.4	100	09J3947	22.67
● RNF-100-MINI-SPL-1/16-BK	Black	1.6	0.8	0.43	75	09J3940	22.68
● RNF-100-MINI-SPL-3/32-BK	Black	2.4	1.2	0.51	65	09J3945	22.94
● RNF-100-MINI-SPL-1/8-BK	Black	3.2	1.6	0.51	60	09J3943	23.08
● RNF-100-MINI-SPL-3/16-BK	Black	4.8	2.4	0.51	50	09J3944	22.67
● RNF-100-MINI-SPL-1/4-BK	Black	6.4	3.2	0.64	40	09J3942	23.08
● RNF-100-MINI-SPL-3/8-BK	Black	9.5	4.8	0.64	35	09J3948	22.94
● RNF-100-MINI-SPL-1/2-BK	Black	12.7	6.4	0.64	30	09J3941	22.94
● RNF-100-MINI-SPL-3/4-BK	Black	19.1	9.5	0.76	25	09J3946	22.94
● RNF-100-MINI-SPL-1-BK	Black	25.4	12.7	0.89	15	09J3939	23.72

RNF-100 SERIES — REGULAR SIZE SPOOLS

● RNF-100-3/16-BK-SP	Black	4.8	2.4	0.51	1000	95M9371	350.00
● RNF-100-1-1/2-CL-SP	Clear	38.1	19.1	1.02	125	95M9367	282.44

(79616)

RAYCHEM RT-780 TYPE 1 NBCCS HEAT-SHRINK TUBING

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features:

- Tyco Electronics materials have been hardened to withstand the damaging effect of NBC contamination and decontamination
- Maximum use of fluoropolymers that do not absorb contaminants and facilitate rapid removal with decontaminants
- Survivable after live agent exposure to HD, VX and TGD at interior and exterior exposure levels
- Chemical agent tested – desorption and hazard contact area data available for NBC survivability modeling

Specifications:

- Tested to SCX-15112 and SCX-15111 for survivability in a variety of the harshest vehicle fluids at elevated temperatures
- Tested to the Army Materiel Requirements for NBCCS in accordance with Test Operation Procedures for TOP 8-2-510, NBC Contamination Survivability
- Creates compliance of chassis and engine compartment electrical harnesses in accordance with the Army Regulation 70-75 "Survivability of Army Personnel & Materiel"

The RT-780 Type 1 tubing is part of Tyco Electronics Raychem integrated 780 system for harnessing applications requiring Nuclear Biological and Chemical contamination survivability (NBCCS). This system consists of Raychem heat-shrinkable tubing, molded parts, wire, adhesives, adapters, and other components necessary to build harnesses from one connector side to the other. These components in each system are specifically designed for application environments they may be exposed to. Examples of these environmental elements may include common vehicular or aerospace fluids, extreme high or low temperatures, or mechanical abuse during installation, operation, and storage.

Mfg. Part No.	Supplied Diameter (mm)	Recovered Diameter (mm)	Wall Thickness (mm)	Stock No.	Price Each 1-2
● RT-780-3/8-3-SP	9.5	4.74	0.51	54T7787	2644.64
● RT-780-1/2-3-SP	12.7	6.35	0.56	54T7785	2086.29
● RT-780-5/8-3-SP	15.875	7.93	0.66	54T7788	2202.57
● RT-780-3/4-3-SP	19.1	9.5	0.813	54T7786	1216.28
● RT-780-1-3-SP	25.4	12.7	0.991	54T7789	1714.94
● RT-780-1-1/4-3-SP	31.75	15.87	1.01	54T7791	2360.07
● RT-780-1-1/2-3-SP	38	19.1	1.143	54T7790	2842.29

(197846)

RAYCHEM RMW SERIES MEDIUM-WALL, ADHESIVE-LINED POLYOLEFIN HEAT-SHRINK TUBING

RoHS Compliant Available

NEW

TE connectivity

Authorized Distributor

- Medium-wall provides reliable electrical insulation
- Withstands mechanical abuse for increased product reliability
- Resistant to impact and abrasion
- Resistant to chemicals and moisture
- Provides a moisture-proof seal preventing corrosion of underlying components
- Adhesive liner seals to most common insulation materials and metals
- Easy to install with torch or heat gun
- UV resistant

RMW series rugged, medium-wall, adhesive-lined polyolefin heat-shrink tubing is specifically designed foruse in a broad range of low-voltage applications. insulating, protecting and sealing electrical connections and joints in low-voltage cable. Tough and semi- flexible, makes it suited for the insulation and protection of cable joints in low voltage electrical systems as well as cable repair. Typical applications include power distribution, trucks and buses, heavy equipment, rail cars, shipyards, and underground wells. High shrink ratio of 3:1 to cover uneven substrates. Minimum shrink temperature: 110°C. Minimum full recovery temperature: 125°C. Operating temperature range: -40°C to 110°C. Color: Black. **Sold in 4' lengths.**

Mfg. Part No.	Size	Expanded I.D. (In.)	Recovered I.D. (In.)	Stock No.	Price Each
● RMW-10/3-1200/ADH-0	10/3	0.394	0.118	97W1381	7.92
● RMW-16/5-1200/ADH-0	16/5	0.63	0.197	97W1384	9.03
● RMW-25/8-1200/ADH-0	25/8	0.984	0.315	97W1387	9.53
● RMW-35/12-1200/ADH-0	35/12	1.378	0.472	97W1388	12.36
● RMW-50/16-1200/ADH-0	50/16	1.968	0.63	97W1389	16.19
● RMW-63/19-1200/ADH-0	63/19	2.48	0.748	97W1390	27.09
● RMW-75/22-1200/ADH-0	75/22	2.953	0.866	97W1391	32.01
● RMW-85/25-1200/ADH-0	85/25	3.346	0.984	97W1392	38.76
● RMW-95/29-1200/ADH-0	95/29	3.74	1.142	97W1393	45.51
● RMW-115/34-1200/ADH-0	115/34	4.527	1.339	97W1382	59.07
● RMW-140/42-1200/ADH-0	140/42	5.512	1.654	97W1383	68.34
● RMW-160/50-1200/ADH-0	160/50	6.3	1.968	97W1385	77.73
● RMW-180/60-1200/ADH-0	180/60	7.087	2.362	97W1386	87.12

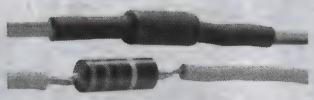
(210797)

RAYCHEM TAT-125 SERIES FLEXIBLE, ADHESIVE-LINED POLYOLEFIN HEAT-SHRINK TUBING

RoHS Compliant Available

TE connectivity

Authorized Distributor



TAT-125 series heat-shrink tubing is adhesive-lined, flexible and thin-walled making it suitable for electrical insulation and moisture sealing in a wide variety of applications. Tubing and adhesive remain flexible, so the moisture-seal withstands bending. Shrink ratio: 2:1. Full recovery temperature: 121°C. Operating temperature range: -55°C to 110°C. Meets military AMS-DTL-23053/4, Class 2 specifications. UL recognized. Color: black. **Sold in 4 ft lengths.**

Mfg. Part No.	Size Dia. (in.)	Expanded I.D. (in.)	Recovered I.D. (in.)	Stock No.	Price per Foot
TAT-125-1/8-0-STK	0.125	0.125	0.063	09J3996	1.13
TAT-125-3/16-0-STK	0.188	0.187	0.093	09J3997	1.40
TAT-125-1/4-0-STK	0.250	0.250	0.125	09J3995	1.86
TAT-125-3/8-0-STK	0.375	0.375	0.187	09J3999	2.04
TAT-125-1/2-0-STK	0.500	0.500	0.250	09J3994	2.55
TAT-125-3/4-0-STK	0.750	0.750	0.375	09J3998	3.37
TAT-125-1-0-STK	1.000	1.000	0.500	62K3470	4.54
TAT-125-1-1/2-0-STK	1.500	1.500	0.752	09J3993	9.23

(79633)

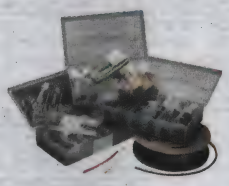
RAYCHEM VERSAFIT HIGHLY FLAME-RETARDANT, LOW-RECOVERY TEMPERATURE HEAT-SHRINK TUBING AND KITS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- 2:1 Shrink ratio
- Min. shrink temperature: 70°C (158°F)
- Min. full recovery temperature: 90°C (194°F)
- Operating temperature: -55°C to 135°C



Versafit™ series heat-shrink tubing is ideal for a variety of functions in commercial and military applications, such as insulating and protecting in-line components and wire bundles for very flexible harnesses. Constructed from a crosslinked polyolefin to provide high flame-retardance (VW-1), excellent flexibility and a low shrink temperature. Meets military AMS-DTL-23053/5, Classes 1, 3 specifications. UL recognized, CSA certified at 125°C, 600V, with VW-1 flammability rating. Color: black. **Sold in mini and regular spool sizes indicated in table below.**

MINI SPOOLS

Mfg. Part No.	Size Dia. (in.)	Exp. I.D. (in.)	Rec. I.D. (in.)	Color	Spool Size (ft.)	Stock No.	Price per Spool 1-2
VERSAFIT-MINI-SPL-3/64-BK	0.047	0.064	0.024	Black	100	09J4055	24.13
VERSAFIT-MINI-SPL-1/16-BK	0.063	0.073	0.031	Black	75	09J4048	23.84
VERSAFIT-MINI-SPL-3/32-BK	0.094	0.110	0.046	Black	65	09J4053	23.84
VERSAFIT-MINI-SPL-1/8-BK	0.125	0.125	0.063	Black	60	09J4051	23.84
VERSAFIT-MINI-SPL-3/16-BK	0.188	0.205	0.094	Black	50	09J4052	23.84
VERSAFIT-MINI-SPL-1/4-BK	0.25	0.28	0.126	Black	40	09J4050	23.84
VERSAFIT-MINI-SPL-3/8-BK	0.375	0.400	0.189	Black	35	09J4056	22.98
VERSAFIT-MINI-SPL-1/2-BK	0.5	0.540	0.252	Black	30	09J4049	23.84
VERSAFIT-MINI-SPL-3/4-BK	0.75	0.805	0.374	Black	25	09J4054	22.98
VERSAFIT-MINI-SPL-1-BK	1	1.055	0.500	Black	15	09J4047	24.79
REGULAR SIZE SPOOLS							
VERSAFIT-3/32-0-SP	0.094	0.110	0.046	Black	500	13T9892	130.87
VERSAFIT-3/16-0-SP	0.188	0.205	0.093	Black	500	54T8696	102.41

VERSAFIT™ TUBING KITS AND REFILLS — BLACK

Mfg. part no. VERSAFIT-KIT-1-0 126-pc. kit includes: 30 3/16", 28 1/4", 24 3/8", 20 1/2", 14 3/4" and 10 1" pre-cut 6" pieces of black tubing neatly packaged in a durable six section plastic storage box. *Order refills for tubing kits separately below.*

Mfg. Part No.	Size Dia. (in.)	Expanded I.D. (in.)	Recovered I.D. (in.)	No. of 6" Pcs.	Stock No.	Price Per Kit 1-2
VERSAFIT-KIT-1-0	Assorted Sizes (Expanded I.D.)			126	09J4002	71.03

Mfg. part no. VERSAFIT-KIT-4-0 18-pc. economy kit includes: three pieces each of 3/16", 1/4", 3/8", 1/2", 3/4" and 1" black tubing in 6" pre-cut pieces packaged in a reclosable plastic bag. **Mfg. part no. VERSAFIT-KIT-6-0** 12-pc. economy kit includes: three pieces each of 3/64", 1/16", 3/32" and 1/8" black tubing in 6" pre-cut pieces packaged in a reclosable plastic bag. *Order refills for tubing kits separately below.*

VERSAFIT-KIT-6-0	Assorted Sizes (Expanded I.D.)			12	09J4045	9.32
VERSAFIT-3/16-KT1-REFILL	0.188	0.135	0.062	30	03M2618	8.88
VERSAFIT-1-KT1-REFILL	...	1.055	0.500	10	03M2612	10.16

VERSAFIT™ TUBING KITS AND REFILLS — ASSORTED COLORS

Mfg. part no. VERSAFIT-KIT-2-COLOR 133-pc. kit includes: 35 3/32", 28 1/8", 21 each of 3/16" and 1/4", 14 each of 3/8" and 1/2" pre-cut 6" pieces of color tubing neatly packaged in a durable six section plastic storage box. *Order refills for tubing kits separately below.*

➤ CONTINUED ➤

RAYCHEM VERSAFIT HIGHLY FLAME-RETARDANT, LOW-RECOVERY TEMPERATURE HEAT-SHRINK TUBING AND KITS (CONT.)

Mfg. Part No.	Size Dia. (in.)	Expanded I.D. (in.)	Recovered I.D. (in.)	No. of 6" Pcs.	Stock No.	Price per Kit 1-2
VERSAFIT-KIT-2-COLOR	Assorted Sizes (Expanded I.D.)			133	09J4010	64.00
VERSAFIT-3/32-KT2-REFILL	0.094	0.11	0.046	35	03M2620	9.24
VERSAFIT-1/8-KT2-REFILL	0.125	0.135	0.062	28	03M2617	8.88
VERSAFIT-3/16-KT2-REFILL	0.188	0.205	0.093	21	03M2619	8.88
VERSAFIT-1/4-KT2-REFILL	0.25	0.28	0.125	21	03M2616	8.46
VERSAFIT-3/8-KT2-REFILL	0.375	0.4	0.187	14	03M2623	8.88

(79960)

FP-301VW SERIES (2:1) SHRINK RATIO POLYOLEFIN HEAT-SHRINK TUBING KITS

RoHS Compliant Available

3M

- General-purpose, flexible polyolefin
- Variety of popular tubing sizes
- Choice of all-black or multi-colors assortments
- Packaged in a plastic storage case

The all-black tubing kit contains 102 pieces of 6" tubing lengths, in six sizes ranging from 3/16" to 1". *Order replacement tubing packs separately on this page.*

Mfg. Part No.	Description	Stock No.	Price Each
FP-301 KIT BLACK	All-Black Heat-Shrink Tubing Kit	16P8446	85.61

The assorted color kit contains over 66 feet — a total of 133 pieces of 6" lengths in six diameters and seven colors: black, red, white, yellow, blue, green, and clear. Includes: five of each color in 3/32" (2.36) size, four of each color in 1/8" (3.18) size, three of each color in 3/16" (4.75) size, three of each color in 1/4" (6.35) size, two of each color in 3/8" (9.53) size, and two of each color in 1/2" (12.70) size. *Order replacement tubing packs separately on this page.*

FP-301 KIT ASSORTED	Assorted Color Heat-Shrink Tubing Kit	66F9674	85.61

(6473)

(3:1) SHRINK RATIO HEAT-SHRINK TUBING KIT

RoHS Compliant Available

3M

Mfg. part no. EPS 300 (3:1) shrink ratio tubing kit is an assortment of adhesive-lined, flexible polyolefin heat-shrinking tubing that comes in red and black. Includes product and installation information on storage case cover. Kit contains: 42-pieces; all pieces are 6" lengths; 12 each of 1/2" diameter red and black, 6 each of 3/4" diameter red and black, and 3 each of 1" diameter red and black. *Order replacement tubing packs; go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each
EPS-300	Heat-Shrink Tubing Kit	04P7495	160.00

(79072)

FP-301 AND FP-301VW SERIES HEAT-SHRINK TUBING ASSORTMENT PACKS

RoHS Compliant Available

3M

FP-301 series general-purpose and **FP-301VW series** flame-resistant tubing "size" assortment packs are 6" pieces, in black only. **FP-301 series** general-purpose tubing "color" assortment packs are 6" pieces, 7 colors per pack: black, clear, white, red, yellow, blue, and green.

FP-301A SERIES GENERAL-PURPOSE TUBING — SIZE AND COLOR ASSORTMENT PACKS

Mfg. Part No.	Size	Assortment Type	Description	Total Footage	Stock No.	Price per Pkg. Each
FP-301-1/8-ASSORT	1/8"	Color	4 Pieces Per Color	14'	97M6861	13.06
FP-301-1/4-ASSORT	1/4"	Color	3 Pieces Per Color	10.5'	97M6860	13.06
FP-301-3/8-ASSORT	3/8"	Color	2 Pieces Per Color	7'	97M6862	13.22
FP-301-1/2-ASSORT	1/2"	Color	2 Pieces Per Color	7'	06N3240	13.22

FP-301VW SERIES FLAME-RESISTANT TUBING — SIZE ASSORTMENT PACKS, ALL BLACK

(6393)

HEAT-SHRINK TUBING KITS

8420 SERIES COLD-SHRINK CONNECTOR INSULATORS

RoHS Compliant Available

3M

- Simple installation, requires no tools
- No torches or heat required
- Seals tight, retains its resiliency and pressure
- Good thermal stability
- Water-resistant — meets water seal requirements of ANSIC 119.1
- No mastic or tape required to seal
- Resists fungus, acids, alkalies and ozone
- For indoor and out applications — direct burial or submersible

Cold-Shrink connector insulators are ideal for insulation and environmental sealing of electrical connections indoors and out. Offers excellent abrasion resistance and toughness. Insulators are open-ended, tubular, EPDM rubber sleeves that are factory expanded and assembled onto a removable plastic core. After the tube is positioned for installation over an inline connection, coupling or terminal lug, etc., the core is removed allowing the tube to shrink and form a water-resistant seal. Unwind the core to install. No tools are required. Color: black. Other sizes also available; *go online or call.*

Mfg. Part No.	AWG	Cable Dia. Range (In.)	Relaxed Tube Length (In.)	Stock No.	Price Each 1-9
SLV-3	6-4	0.31 - 0.56	3	61M2634	15.31
● 8423-6P	6-4	0.31 - 0.56	6	18C5502	23.84
● 8424-8P	10-1/0	0.1 - 0.82	8	22C8577	30.28
● 8425-8	2-1/0	0.4 - 0.82	8	93B4059	26.46

(65686)

HEAT-SHRINK TUBING KIT

RoHS Compliant Available

3M

FP-301-Color Assortment heat-shrink tubing kit offers a versatile assortment of flexible polyolefin heat shrink tubing. This 133 piece kit include seven colors, black, red, white, blue, green, yellow and clear, with expanded diameters. 3/32, 1/8, 3/16, 1/4, 3/8, and 1/2". Six inch refill packs are also available; *go online or call.*

Mfg. Part No.	Description	Stock No.	Each
● FP-301 KIT ASSORTED	Heat-Shrink Tubing Kit	66F9674	85.61

(77662)

NST SERIES (2:1) SHRINK RATIO, THICK-WALL, NEOPRENE HEAT-SHRINK TUBING

3M

NST series neoprene thick-wall heat-shrink tubing provides superior cut-through and abrasion resistance. Excellent resistance to oils too. Maintains flexibility at low temperature. Rated for continuous operation from -70°C (-94°F) to 121°C (250°F). Recommended for applications requiring a tough, highly-flexible covering to operate in severe environmental conditions. Oil resistance properties make tubing ideal for auto, military and construction equipment industries. It is particularly useful for fabrication and repair of flexible harnesses and wire bundles and for covering hydraulic couplings. Meets millitary specifications: MIL-R-46846, Type 1, Class 1; MIL-DTL-23053/1, Class 1,2; AMS-3623. Color: black. **Sold in spool sizes indicated in table below.**

Mfg. Part No.	Size (In.)	Expanded ID (In., Min.)	Recovered ID (In., Max.)	Spool Size (Ft.)	Stock No.	Price per Spool Each
NST 1/4	1/4	0.250	0.125	200	11J5724	415.03
NST 3/8"	3/8	0.375	0.187	100	95F7712	224.98
NST-1/2-BLACK	1/2	0.500	0.250	100	05J1789	264.18
NST-5/8-BLACK	5/8	0.625	0.312	100	05J1790	294.26
NST 3/4"	3/4	0.750	0.275	100	95F7714	338.77
NST-1-BLACK	1	1.000	0.500	50	05J1788	508.44

(79144)

DURATOOL AT NEWARK ELEMENT14

For your production and facilities needs, from soldering stations to tool sets & more.
newark.com/duratool

(212563)

FIT-221® GENERAL-PURPOSE, IRRADIATED POLYOLEFIN HEAT-SHRINK TUBING ASSORTMENTS

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

FIT-KIT-221C

FIT-KIT-221BK

FIT-221C MULTI-COLOR ASSORTMENT KIT

Mfg. part no. FIT-221C multi-color assortment kit for use in research and development labs, engineering development and maintenance departments; contains 102 6" long pieces of FIT®-221 heat-shrink tubing in 6 popular sizes and colors indicated in table below. Operating temperature: -55°C to 135. Dielectric strength: 500V/mil.

Size	Black Quantity	Red Quantity	White Quantity	Yellow Quantity	Green Quantity	Clear Quantity
3/32"	4	4	4	4	4	4
1/8"	3	3	3	3	3	3
3/16"	3	3	3	3	3	3
1/4"	3	3	3	3	3	3
3/8"	2	2	2	2	2	2
1/2"	2	2	2	2	2	2

Mfg. Part No.	Description	Stock No.	Price Each
● FIT-KIT-221C	102-Pc. Multi-Color FIT®-221 Shrink Tubing Assortment Kit	88K1932	95.30

FIT-221BK ALL-BLACK ASSORTMENT KIT

Mfg. part no. FIT-221BK all-black assortment kit provides engineers and technicians with a complete assortment of FIT®-221 heat-shrink tubing; contains 80 6" long pieces of black tubing in six sizes indicated in table below. Operating temperature: -55°C to 135. Dielectric strength: 500V/mil.

Size	Black — Quantity	Size	Black — Quantity
3/16"	25	1/2"	10
1/4"	20	3/4"	6
3/8"	15	1"	4

Mfg. Part No.	Description	Stock No.	Price Each
● FIT-KIT-221BK	80-Pc. All-Black FIT®-221 Shrink Tubing Assortment Kit	88K1931	81.54

FIT-221-MS ALL-BLACK ASSORTMENT PACKS

Mfg. part no. FIT-221-MS-1 BK032 assortment of FIT®-221 heat-shrink tubing contains 30 6" lengths of black tubing, six pieces of each sizes: 3/64", 1/16" 3/32" 1/8" and 3/16". **Mfg. part no. FIT-221-MS-2 BK032** assortment of FIT®-221 heat-shrink tubing contains 16 6" lengths of black tubing, four pieces of each sizes: 1/4", 3/8" 1/2" 1/8" and 3/4".

Mfg. Part No.	Description	Stock No.	Price Each
● FIT-221-MS-1 BK032	30-Pc. All-Black FIT®-221 Shrink Tubing Assortment Pack	28B5271	26.48
● FIT-221-MS-2 BK032	16-Pc. Multicolor FIT®-221 Shrink Tubing Assortment Pack	70B5743	48.88

(73249)

FIT® HEAT-SHRINK TUBING VARIETY PACK WITH MINIGUN

RoHS Compliant Available

AlphaWire
Cables you trust. Service you deserve.

Choose FIT MGKIT 1 FIT® Heat-Shrink Tubing Variety Pack with MiniGun for:

- A convenient variety pack of Alpha Wire's FIT® -221 general-purpose irradiated polyolefin heat-shrinkable tubing (consisting of 60 6" long cut pieces in 5 sizes and 6 colors)
- Alpha's smallest heat gun, FIT® MiniGun, with a nozzle temperature to 1000°F, 6' cord, rated 120V, 350W, 3A, UL listed
- Convenience in the field or in the shop
- Cost-effective solution for electrical and electronics technicians

These completely portable and extremely compact kits include all necessary materials to satisfy strain relief, splicing, connecting, identification, environmental protection and cable repair applications. Select the variety pack needed, with or without the FIT® MiniGun, or *order additional MiniGuns separately below.*

FIT®-221 HEAT-SHRINK TUBING VARIETY PACKS CONSISTS OF: 60 — 6" LENGTHS, 2:1 SHRINK RATIO

Size	Black	White	Red	Blue	Yellow	Green
1/8"	4	3	2	2	2	1
3/16"	4	3	2	2	2	1
1/4"	4	3	2	2	2	1
3/8"	3	2	1	1	1	1
1/2"	3	2	1	1	1	1

Mfg. Part No.	Description	Stock No.	Price Each 1-2
FITMGKIT1 NC032	FIT® Heat-Shrink Tubing Variety Pack with MiniGun	19C1492	112.16
● FIT-221-R MC213	FIT® Heat-Shrink Tubing Variety Pack without MiniGun	26C1082	38.06
FITMG1 NC032	FIT® MiniGun (Only)	10J9218	59.48

(73250)

175-PC. PVC HEAT-SHRINK TUBING ASSORTMENT

RoHS Compliant Available

pro-POWER

VW-1

MADE IN USA

- All black PVC tubing cut into 6″ lengths
- Mix of five popular diameter sizes: 3⁄32″, 1⁄8″, 3⁄16″, 1⁄4″, and 3⁄8″
- 2:1 shrink ratio
- Highly flame retardant
- Low shrink temperature
- Highly flexible
- Abrasion resistant
- Resists many chemicals, oils, UV light, fungus, moisture and salt-water

175-pc. assortment of all-purpose PVC heat-shrink tubing in the most popular diameter sizes used for electrical insulation, protection, strain relief, jacketing, and wire bundling. Packed in a rugged, transparent container that sits upright on shelves, workbenches and tabletops for easy accessibility. Ideal for engineers, R&D labs, shop floor and maintenance departments. Meets UL Subject VW-1, SAE-AMS-DTL-23053/2 Class 2 specifications. UL recognized, CSA approved.

Mfg. Part No.	Inside Diameter (In.) Size Before Shrinking	Inside Diameter (In.) Size After Shrinking	Wall Thickness After Shrinking (In.)	Stock No.	Price Each
MC36420	3⁄32	3⁄64	0.025	32T5257	19.04
	1⁄8	1⁄16	0.025		
	3⁄16	3⁄32	0.025		
	1⁄4	1⁄8	0.025		
	3⁄8	3⁄16	0.028		

(194799)

PULL-PAK® HEAT-SHRINK TUBING DISPENSER

RoHS Compliant Available

pro-POWER

VW-1

MADE IN USA

Pull-Pak® Dispenser with Five Mini Spools

Mini Spools

The Easy Way To Select the Exact Length of Tubing Needed

- All black PVC tubing on five mini spools
- In popular diameter sizes: 100 ft of 1⁄16″, and 25 ft each of 1⁄8″, 3⁄16″, 1⁄4″, and 3⁄8″
- Tubing will not unravel or pull back
- 2:1 shrink ratio
- Highly flame retardant
- Low shrink temperature
- Highly flexible
- Abrasion and chemical resistant
- Dispenser mounts easily to wall or workbench
- Refill mini spools available

Five mini spools of all-purpose PVC heat-shrink tubing conveniently packaged in an easy-to-use Pull-Pak® dispenser. Contains the most popular diameter sizes used for electrical insulation, protection, strain relief, jacketing, and wire bundling. Ideal for engineers, R&D labs, shop floor and maintenance departments. Meets UL Subject 224 VW-1, SAE-AMS-DTL-23053/2 Class 2 specifications. UL recognized, CSA approved. *Order replacement mini spool refills separately below.*

PULL-PAK® DISPENSER FILLED WITH FIVE MINI SPOOLS OF PVC HEAT-SHRINK TUBING

Mfg. Part No.	Inside Diameter (In.) Size Before Shrinking	Inside Diameter (In.) Size After Shrinking	Wall Thickness After Shrinking (In.)	Spool Size (Ft.)	Stock No.	Price Each
MC36421	1⁄16	1⁄32	0.020	100	32T5256	121.85
	1⁄8	1⁄16	0.025	25		
	3⁄16	3⁄32	0.025	25		
	1⁄4	1⁄8	0.025	25		
	3⁄8	3⁄16	0.028	25		

REPLACEMENT MINI SPOOL REFILLS OF PVC HEAT-SHRINK TUBING

Mfg. Part No.	Inside Diameter (In.) Size Before Shrinking	Inside Diameter (In.) Size After Shrinking	Wall Thickness After Shrinking (In.)	Spool Size (Ft.)	Stock No.	Price per Spool Each
PVS-004-1100-BLK	1⁄16	1⁄32	0.020	100	03F3453	32.09
PVS-008-1025-BLK	1⁄8	1⁄16	0.025	25	03F3464	11.64
PVS-012-1025-BLK	3⁄16	3⁄32	0.025	25	03F3469	12.58
PVS-016-1025-BLK	1⁄4	1⁄8	0.025	25	03F3475	12.85
PVS-024-1025-BLK	3⁄8	3⁄16	0.028	25	03F3480	14.79

(194800)

POLYOLEFIN HEAT-SHRINK TUBING IN BOX DISPENSER

RoHS Compliant Available

pro-POWER

- Convenient box dispenser
- 2:1 shrink ratio
- Minimum shrink temperature at 70°C
- Choice of black or natural

Pro-Power® polyolefin heat-shrink tubing packaged in a convenient box dispenser. Used as electrical insulation over cable splices and termination, lightweight harness covering and wire bundling. Meets military specification MIL-DTL-23053/5. Operating temperature range: -55° to +135°C.

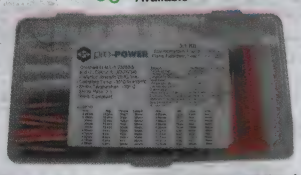
Mfg. Part No.	Size (in.)	Max. Expanded I.D. (in.)	Max. Recovered I.D. (in.)	Color	Total Footage per Box	Stock No.	Price per Box
CB11456	1⁄16	0.063	0.031	Black	65.6	04N9734	9.52
CB11457	3⁄32	0.094	0.047	Black	49.2	04N9735	8.88
CB11458	1⁄8	0.125	0.063	Black	49.2	04N9736	11.32
CB11459	3⁄16	0.188	0.094	Black	39.35	04N9737	11.30
CB11460	1⁄4	0.25	0.125	Black	39.35	04N9738	7.69
CB11461	3⁄8	0.375	0.188	Black	26.25	04N9739	8.64
CB11462	1⁄2	0.5	0.25	Black	26.25	04N9740	9.10
CB11463	3⁄4	0.75	0.375	Black	16.4	04N9741	15.60
CB11464	1	1	0.5	Black	16.4	04N9742	20.25
CB11468	3⁄16	0.188	0.094	Natural	39.35	04N9746	11.80
CB11469	1⁄4	0.25	0.125	Natural	39.35	04N9747	13.87

(115432)

POLYOLEFIN HEAT-SHRINK TUBING KITS

RoHS Compliant Available

pro-POWER



- Choose between 2:1 or 3:1 shrink ratios
- Nominal diameters: 1⁄8″, 3⁄16″, 3⁄8″, and 1⁄2″
- Lengths: 2″ and 2 3⁄4″
- Colors: black, blue, yellow, red and white

Pro-Power adhesive-lined polyolefin heat-shrink tubing kits are the perfect solution for the all-around wiring professional. Each kit contains 180 pieces of tubing in a number of different sizes and assorted colors to accommodate almost any heat-shrink tubing situation. UL recognized, CSA certified.

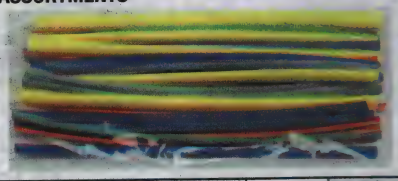
Mfg. Part No.	Description	Stock No.	Price Each
PP2220	180-Pc. Heat-Shrink Tubing Kit — 2:1 Shrink Ratio	54M5897	35.76
PP2221	180-Pc. Heat-Shrink Tubing Kit — 3:1 Shrink Ratio	54M5898	72.24

(105246)

FPA SERIES (2:1) SHRINK RATIO GENERAL-PURPOSE FLEXIBLE POLYOLEFIN HEAT-SHRINK TUBING ASSORTMENTS

RoHS Compliant Available

pro-POWER



Sold in 6″ lengths.

Mfg. Part No.	Tubing Size	Colors	Lengths Per Pkg.	Stock No.	Price per Pkg.
FPA-003-6030-AST	3⁄64-3⁄16″	Asst Colors	30	37N1182	20.22
FPA-016-6016-AST	1⁄4-3⁄4″	Asst Colors	16	37N1183	16.22

(6278)

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(212564)

HEAT-SHRINK TUBING KITS • INSULATING TUBING

HEAT-SHRINK TUBING KITS

pro-POWER

Kits contain a wide assortment of heat-shrink tubing, listed in the table below, enabling the engineer to choose the best kind for each application before putting a prototype into production. The basic kit contains 88 pieces of tubing, each 6″ (150) long. The advanced kit contains 174 pieces of tubing, each 3″ (75) long. Both kits are packaged in a sectioned, high-impact polystyrene storage box with "Quick-Scan" chart identifying contents.

KIT CONTENTS

Mfg. Part No.	Description	Basic Kit Pcs.	Advanced Kit Pcs.
PVS	Flexible Polyvinylchloride 105 Shrink Tubing	18	18
FPS	Flexible Polyolefin Shrink Tubing	18	18
FPF	Flexible Polyolefin Flame-Retardant Shrink Tubing	18	18
KYS	Polyvinylidene Fluoride (PVDF) Shrink Tubing	15	16
PHD	Multiple Wall Polyolefin Shrink Tubing with Thermoplastic Adhesive Liner	9	10
SRM	Semi-Rigid, Multiple Wall Polyolefin Shrink Tubing	10	10
LTP	Flexible Polyolefin, Low-Temp. Shrink Tubing	...	18
PHS	Flexible, Multi-Wall, Adhesive-Lined, High-Ratio Shrink Tubing	...	10
PVHR	Irradiated PVC 105 Shrink Tubing	...	18
TTS	TFE Shrink Tubing	...	12
SST	TFE Super-Shrink Tubing	...	14
TFM	TFE with FEP Inner-Melt Tubing	...	12

Mfg. Part No.	Description	Stock No.	Price per Kit 1-99
SPC10858	Basic Kit	27C7809	117.32
SPC10857	Advanced Kit	27C7803	271.43

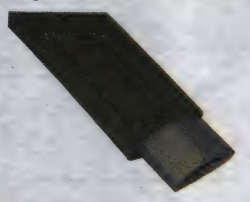
(6360)

SHRINK-A-SHIELD TUBING KIT

RoHS Compliant Available

pro-POWER

Heat-shrink tubing with EMI/RFI shielding. 2:1 shrink ratio polyolefin with conductive cloth liner combines an efficient shield with a shrink-fit jacket. Ideal for shielding wire or cable, adding additional shielding, or repairing shielding that has been stripped back for wire termination. Meets MIL-I-25053/5, Class 1 specifications. Passes VW-1 vertical wire flame test. Dielectric strength: 300 volts/mil. Attenuation averages 85dB from 1MHz to 1GHz. Temperature range: -40°F to +250°F. Kit includes 1′ of shielding tubing and 3′ of 24 AWG grounding wire.



Mfg. Part No.	Size	Recom. Useable I.D. Range	Recovered Nom. Wall Thickness	Stock No.	Price per Kit 1-4
● SPC5086	3/16″	0.093 - 0.187″	0.020″	50N161	12.57
● SPC5087	1/4″	0.125 - 0.250″	0.025″	50N162	18.39
● SPC5088	3/8″	0.188 - 0.375″	0.025″	50N163	23.66
● SPC5089	1/2″	0.250 - 0.500″	0.025″	50N164	28.23
● SPC5090	3/4″	0.375 - 0.750″	0.030″	50N165	41.10
● SPC5091	1″	0.500 - 1.000″	0.035″	50N166	50.35

(34083)

PVI SERIES PVC INSULATING TUBING

RoHS Compliant Available

pro-POWER

MADE IN USA

- Superior high dielectric strength: 870vpm
- Tensile strength: 2780psi
- Flexible
- Rugged and abrasion resistance
- Environmental and UV stability
- Resistant to many chemicals, oils, acids, corrosives, heat and fungus
- Made of premium-grade, virgin polymers

PVI series all-purpose flexible PVC tubing for electrical insulation, ground strap and chafing protection, bundling and protecting wire harnesses. Operating temperature range: -20°C to 105°C. UL Subject 224 VW-1, CSA OFT. Size #24 through #1 UL rated for 300V; Sizes 5/16 through 2″ UL rated for 600V. Meets AMS 3631, ASTM D922 requirements. MIL-I-631 D Grade C QPL approved. Colors: black or clear. Made in the U.S.A. **Sold in spool sizes indicated in table below.**

Mfg. Part No.	AWG or Size	Inside Diameter (In.) Max.	Inside Diameter (In.) Min.	Nom. Wall Thickness (In.)	Spool Size (Ft.)	Black Stock No.	Black Price per Spool Each	Clear Stock No.	Clear Price per Spool Each
● PVI-S22-1100	22	0.032	0.025	0.012	100	03F3581	11.11	03F3583	11.11
● PVI-S20-1100	20	0.039	0.032	0.016	100	03F3587	11.11	03F3589	11.11
● PVI-S19-1100	19	0.044	0.036	0.016	100	03F3709	11.11	...	...
● PVI-S18-1100	18	0.049	0.040	0.016	100	03F3592	11.43	03F3594	11.43

➤ CONTINUED ➤

PVI SERIES PVC INSULATING TUBING (CONT.)

Mfg. Part No.	AWG or Size	Inside Diameter (In.) Max.	Inside Diameter (In.) Min.	Nom. Wall Thickness (In.)	Spool Size (Ft.)	Black Stock No.	Black Price per Spool Each	Clear Stock No.	Clear Price per Spool Each
● PVI-S16-1100	16	0.061	0.051	0.016	100	03F3597	11.43	03F3599	11.43
● PVI-S15-1100	15	0.066	0.057	0.016	100	03F3699	11.43	03F3701	11.43
● PVI-S14-1100	14	0.072	0.064	0.016	100	03F3602	11.43	03F3604	11.43
● PVI-S13-1100	13	0.080	0.072	0.016	100	03F3694	11.68	03F3696	11.68
● PVI-S12-1100	12	0.089	0.081	0.016	100	03F3607	11.99	03F3609	11.99
● PVI-S11-1100	11	0.101	0.091	0.016	100	03F3688	13.84	03F3690	13.84
● PVI-S10-1100	10	0.112	0.102	0.016	100	03F3612	13.53	...	...
● PVI-S09-1100	9	0.124	0.114	0.020	100	03F3683	13.84	...	...
● PVI-S08-1100	8	0.141	0.129	0.020	100	03F3617	14.13	03F3619	14.13
● PVI-S06-1100	6	0.178	0.162	0.020	100	03F3622	14.45	...	...
● PVI-S03-1100	3	0.249	0.229	0.020	100	03F3759	15.31	03F3761	15.31
● PVI-S02-1100	2	0.278	0.258	0.020	100	03F3632	16.32	03F3634	16.32
● PVI-S01-1100	1	0.311	0.289	0.020	100	03F3764	17.03	...	...
● PVI-S00-1100	0	0.347	0.325	0.025	100	03F3642	20.29	...	...
● PVI-028-1100	7/16″	0.462	0.438	0.025	100	03F3768	26.08	...	...
● PVI-032-1100	1/2″	0.524	0.500	0.025	100	03F3652	28.20	...	...
● PVI-040-1100	5/8″	0.655	0.625	0.030	100	03F3657	32.39	...	...
● PVI-048-1050	3/4″	0.786	0.750	0.035	50	03F3661	31.82	...	...

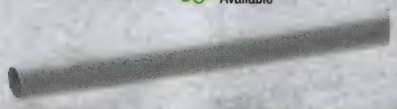
(9931)

PTFE INSULATING TUBING

MADE IN USA

RoHS Compliant Available

pro-POWER



Non-toxic, chemically inert tubing offers superior insulating and highly stable electrical properties. Features excellent electrical resistance and translucent clarity. Withstands wicking, moisture absorption, and contamination. Continuous operating temperature: –230°C to +260°C. UL 94V-0 flammability rating. **TTI series** is used for miniaturized and compact installations. **TSI series** is used where extra-dielectric or mechanical strength is needed. Made in the U.S.A. **Sold in 100 spools.**

AMS-3655 TTI SERIES THIN-WALL PTFE TUBING

Mfg. Part No.	AWG Size	Inside Diameter Nominal	Inside Diameter Max.	Inside Diameter Min.	Wall Thickness Min.	Wall Thickness Max.	100′ Spool Stock No.	100′ Spool Price per Spool
● TTI-S28-1100-NAT	28	0.015″	0.018″	0.013″	0.007″	0.011″	37N489	60.13
● TTI-S26-1100-NAT	26	0.018″	0.021″	0.016″	0.007″	0.011″	37N490	62.90
● TTI-S24-1100-NAT	24	0.023″	0.027″	0.020″	0.007″	0.013″	37N491	193.69
● TTI-S22-1100-NAT	22	0.028″	0.032″	0.026″	0.007″	0.013″	37N492	203.99
● TTI-S20-1100-NAT	20	0.035″	0.038″	0.032″	0.009″	0.015″	37N493	225.32
● TTI-S18-1100-NAT	18	0.043″	0.046″	0.040″	0.009″	0.015″	37N494	104.68
● TTI-S16-1100-NAT	16	0.055″	0.058″	0.051″	0.009″	0.015″	37N495	128.37
● TTI-S14-1100-NAT	14	0.068″	0.072″	0.064″	0.009″	0.015″	37N496	178.91
● TTI-S12-1100-NAT	12	0.085″	0.091″	0.081″	0.009″	0.015″	37N481	305.53
● TTI-S10-1100-NAT	10	0.106″	0.112″	0.102″	0.009″	0.015″	37N482	332.35
● TTI-S08-1100-NAT	8	0.134″	0.139″	0.129″	0.012″	0.018″	37N483	336.59
● TTI-S06-1100-NAT	6	0.168″	0.174″	0.162″	0.012″	0.018″	37N484	451.40

AMS-3653B TSI SERIES STANDARD WALL PTFE TUBING

● TSI-S24-1100-NAT	24	0.023″	0.026″	0.020″	0.010″	0.014″	37N1580	163.77
● TSI-S22-1100-NAT	22	0.028″	0.032″	0.026″	0.010″	0.014″	37N1581	88.31
● TSI-S20-1100-NAT	20	0.035″	0.038″	0.032″	0.013″	0.019″	37N1582	191.30
● TSI-S18-1100-NAT	18	0.043″	0.046″	0.040″	0.013″	0.109″	37N1584	49.99
● TSI-S16-1100-NAT	16	0.055″	0.058″	0.051″	0.013″	0.019″	37N1586	180.73
● TSI-S14-1100-NAT	14	0.068″	0.072″	0.064″	0.013″	0.019″	37N1588	213.80
● TSI-S12-1100-NAT	12	0.065″	0.091″	0.081″	0.013″	0.019″	37N1590	226.81
● TSI-S10-1100-NAT	10	0.106″	0.112″	0.102″	0.013″	0.019″	37N1592	318.18
● TSI-S08-1100-NAT	8	0.134″	0.139″	0.129″	0.016″	0.024″	37N1594	400.69
● TSI-S06-1100-NAT	6	0.168″	0.174″	0.162″	0.016″	0.024″	37N1596	402.41
● TSI-S04-1100-NAT	4	0.211″	0.218″	0.204″	0.016″	0.024″	37N1598	598.54

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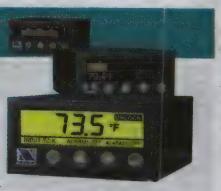
CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters



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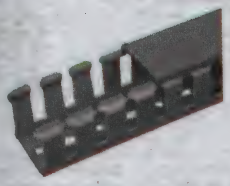
PANDUCT® TYPE NNC HALOGEN-FREE METRIC WIRING DUCT

RoHS Compliant Available

PANDUIT®



- Made of halogen-free modified polyphenylene oxide (mPPO) material and verified with IEC 60754-2 test method (test on gases evolved during combustion of electric cabling)
- UL recognized continuous-use temperature: 203°F (95°C)
- UL94 Flammability Rating of V-0
- Conforms with NFPA 79-2002 section 14.3.1 requirement for flame-retardant material
- Provided with DIN 43 659 mounting holes
- **Sold duct base and cover packaged together in 2 meter lengths***

TYPE NNC WIRING DUCT BASE AND COVER (METRIC)

Mfg. Part No.	Nominal Width In. (mm)	Nominal Height In. (mm)	Stock No.	Price per Pkg.*
NNC25X25LG2	1 (25)	1 (25)	20K2048	29.77
NNC25X37LG2	1 (25)	1.5 (37)	20K2050	35.81
NNC25X50LG2	1 (25)	2 (50)	83H3410	41.75
NNC25X75LG2	1 (25)	3 (75)	20K2052	62.90
NNC37X37LG2	1.5 (37)	1.5 (37)	08J2413	46.98
NNC37X50LG2	1.5 (37)	2 (50)	08J2414	56.40
NNC37X75LG2	1.5 (37)	3 (75)	08J2415	68.46
NNC50X50LG2	2 (50)	2 (50)	83H3413	57.63
NNC50X75LG2	2 (50)	3 (75)	01J3488	77.81
NNC50X100LG2	2 (50)	4 (100)	20K2054	97.66
NNC75X75LG2	3 (75)	3 (75)	08J2416	92.28
NNC100X50LG2	4 (100)	2 (50)	08J2412	93.66
NNC100X75LG2	4 (100)	3 (75)	20K2046	112.12
NNC100X100LG2	4 (100)	4 (100)	20K2044	130.43

REPLACEMENT COVERS — SOLD IN 2 METER LENGTHS

Mfg. Part No.	Nominal Width In. (mm)	Nominal Height In. (mm)	Stock No.	Price Each 1-17
NC25LG2	1 (25)	...	20K1895	10.90
NC37LG2	1.5 (37)	...	20K1902	13.35
NC50LG2	2 (50)	...	20K1916	15.13
NC75LG2	3 (75)	...	20K1948	23.33
NC100LG2	4 (100)	...	20K1893	23.82

DIVIDER WALL (SOLID) — SOLD IN 2 METER LENGTHS

NNC50DWH2	...	2 (50)	64K1632	15.88
NNC75DWH2	...	3 (75)	64K1633	25.61

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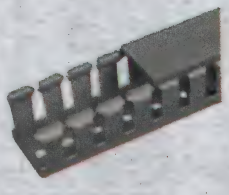
PANDUCT® TYPE TNC LOW-SMOKE, HALOGEN-FREE SLOTTED WALL WIRING DUCT

RoHS Compliant Available

PANDUIT®



- Low-smoke, halogen-free material meets the regulatory requirements of the mass transit industry and other regulated environments
- UL recognized continuous-use temperature: +221°F (+105°C); shipping, handling, and installation to -94°F (-70°C)
- Flammability rating of UL94 V-0
- Rail standard compliance/rating: NFPA 130, DIN 5510-2, BSS 7239, NF F 16 101, NF F 16 102, EN UNI 11925-2
- Provided with DIN 43 659 mounting holes
- Metric sizing and finger progression
- Duct and cover packaged together in 2 meter lengths
- Replacement covers and divider walls available
- Non-slip cover liner ensures cover does not slide during shipment, vibration, or when in vertical orientation
- Score lines allow for easy breakouts

TYPE TNC WIRING DUCT BASE AND COVER (METRIC) — SOLD IN 2 METER LENGTHS

Mfg. Part No.	Width In. (mm)	Height In. (mm)	Stock No.	Price Each 1-17
TNC25X37LG2	1 (25)	1.5 (37)	89T6868	37.91
TNC25X75LG2	1 (25)	3 (72.4)	89T6869	82.14
TNC37X37LG2	1.5 (37)	1.5 (37)	89T6871	64.47
TNC37X75LG2	1.5 (37)	3 (75)	89T6872	74.27
TNC50X50LG2	2 (50)	2 (50)	89T6875	65.37
TNC75X75LG2	3 (75)	3 (75)	89T6878	125.11
TNC100X50LG2	4 (100)	2 (50)	89T6865	122.32
TNC100X75LG2	4 (100)	3 (75)	89T6866	121.63

REPLACEMENT COVERS — SOLD IN 2 METER LENGTHS

TNC25LG2	1 (25)	...	89T6867	12.85
TNC37LG2	1.5 (37)	...	89T6870	18.09
TNC50LG2	2 (50)	...	89T6874	20.10
TNC75LG2	3 (75)	...	89T6877	26.05
TNC100LG2	4 (100)	...	89T6864	32.32

CONTINUED

PANDUCT® TYPE TNC LOW-SMOKE, HALOGEN-FREE SLOTTED WALL WIRING DUCT (CONT.)

DIVIDER WALL (SOLID) — SOLD IN 2 METER LENGTHS

Mfg. Part No.	Width In. (mm)	Height In. (mm)	Stock No.	Price Each 1-17
TNC50D2	...	2 (50)	89T6873	17.23
TNC75D2	...	3 (75)	89T6876	27.78

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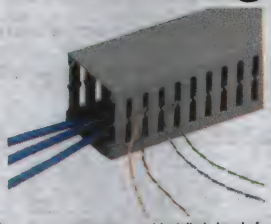
PANDUCT TYPE F NARROW SLOTTED WIRING DUCT

RoHS Compliant Available

PANDUIT®



- Narrow-finger design provides proper spacing for use with high-density terminal blocks
- Panduit® exclusive rounded edges will not cut hands or abrade wiring insulation
- Double scoreline saves installation time, and ultimately lowers installed cost
- Nonslip cover, *ordered separately*, will not slide when installed on duct base
- Flush cover design holds more wires than traditional duct designs
- Specially formulated lead-free PVC eliminates health concerns associated with PVC that contains lead
- Restricted slot design reduces installation time, providing low installation cost to the end user

Panduct® Type F wiring duct features smooth rounded edges to protect wires and installer's hands from abrasion. Narrow-finger design and more slots allow greater wiring flexibility for newer, compact terminal blocks. Ideal for use in control panels and communications closets. Flammability rating of 94V-0. Color: light gray. *Order nonslip covers separately online or call.* UL recognized, CSA certified, CE compliant. **Duct priced per foot. Sold in packages of four 6' lengths.** Additional sizes and a full line of accessories are available; *go online or call*.

Mfg. Part No.	Width (mm)	Height (mm)	Stock No.	Price per Foot 1-24
F.5X.5LG6N	17.5	15.2	19K4253	5.12
F.5X1LG6N	17.5	26.9	19K4254	6.08
F.75X.75LG6N	23.6	20.9	19K4255	6.20
F.75X1.5LG6N	23.6	39.9	19K4256	7.97
F1X1LG6N	32	28.4	19K4262	6.75
F1X1.5LG6N	32	41.1	19K4261	8.88
F1X2LG6N	32	53.8	19K4263	8.75
F1X3LG6N	32	79.2	19K4264	11.41
F1.5X1LG6N	44.5	28.4	19K4258	7.51
F1.5X1.5LG6N	44.5	41.1	19K4257	8.96
F1.5X2LG6N	44.5	53.8	19K4259	9.74
F1.5X3LG6N	44.5	79.2	19K4260	12.46
F2X1.5LG6N	57.2	41.1	19K4265	7.22
F2X2LG6N	57.2	53.8	19K4266	9.42
F2X3LG6N	57.2	79.2	19K4267	12.35
F2X4LG6N	57.2	104.1	19K4268	15.17
F3X2LG6N	82.6	53.8	19K4269	11.99
F3X3LG6N	82.6	79.2	19K4270	14.31
F3X4LG6N	82.6	104.1	19K4271	17.78
F4X3LG6N	108	79.2	19K4272	15.90

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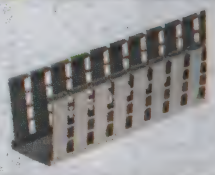
PANDUCT® PANELMAX™ TYPE-G EMI SHIELDED SLOTTED WIRING DUCT

RoHS Compliant Available

PANDUIT®



- Up to 20dB noise reduction
- 90% noise voltage reduction (up to 6 inches air space)
- Lead-free PVC with metallic foil finish
- UL recognized continuous use temperature: 50°C (122°F)
- 6 foot length

Panduct® PanelMax™ Type G EMI shielded wiring duct routes, separates, and shields sensitive wiring from noise emission. Use with **mfg. part no. C2LG6** Type C duct cover and PanelMax™ Noise Shield; *order separately on pages 1264-1265.* Mounting holes make it easy to install with 10-32 x ½" screws (not included). Color: light gray. **Priced per foot. Duct base sold in packages of 6' lengths.**

Mfg. Part No.	Width In. (mm)	Height In. (mm)	Pkg. Qty. (Ft.)	Stock No.	Price per Foot
G2X2LG6EMI	2 (50.8)	2 (2)	6	34T1581	22.57
G2X3LG6EMI	2 (50.8)	3 (3)	6	34T1582	25.85
G2X4LG6EMI	2 (50.8)	4 (4)	6	34T1583	30.45

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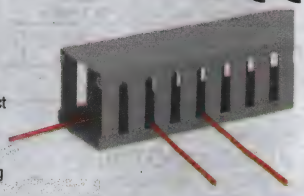
RACEWAYS

PANDUCT TYPE G — WIDE SLOTTED WIRING DUCT

RoHS Compliant Available

PANDUIT®



- Wide-finger design provides greater rigidity and larger slot width
- Panduit® exclusive rounded edges will not cut hands or abrade wiring insulation
- Double scoreline saves installation time and ultimately lowers installed cost
- Nonslip cover, *ordered separately*, will not slide when installed on duct base
- Flush cover design holds more wires than traditional duct designs
- Specially formulated lead-free PVC eliminates health concerns associated with PVC that contains lead
- Restricted slot design reduces installation time, providing low installation cost to the end user

Panduit® Type G wide slotted wiring duct features smooth, rounded edges to protect wires and installer's hands from abrasion. Flammability rating of 94V-0. Color: light gray. *Order nonslip duct covers separately online or call.* UL recognized, CSA certified, CE compliant. **Duct priced per foot. Sold in packages of four 6′ lengths.** Additional sizes, colors, and a full line of accessories are available; *go online or call.*

For the full line of NEMA enclosures, see the **Enclosures, Boxes and Racks** section.

Mfg. Part No.	Width (mm)	Height (mm)	Stock No.	Price per Foot 1-24
● G.5X.5LG6N	17.5	15.2	19K4185	5.72
● G.75X.75LG6N	23.6	20.8	19K4186	6.80
● G.75X1LG6N	23.6	26.9	19K4188	7.31
● G.75X1.5LG6N	23.6	39.9	19K4187	8.74
● G1X1LG6N	32	28.4	19K4196	7.34
● G1X1.5LG6N	32	41.1	19K4195	9.74
● G1X2LG6N	32	53.8	19K4197	9.59
● G1X3LG6N	32	79.2	19K4198	12.51
● G1.5X1.5LG6N	44.5	41.1	19K4190	9.83
● G1.5X1LG6N	44.5	28.4	19K4191	8.31
● G1.5X2LG6N	44.5	53.8	19K4192	10.89
● G1.5X3LG6N	44.5	79.2	19K4193	13.66
● G2X1.5LG6N	57.2	41.1	19K4200	10.68
● G2X2LG6N	57.2	53.8	19K4201	10.33
● G2X3LG6N	57.2	79.2	19K4202	13.54
● G2X4LG6N	57.2	104.1	19K4203	16.32
● G3X1LG6N	82.6	28.4	19K4204	7.38
● G3X2LG6N	82.6	53.8	19K4205	13.15
● G3X3LG6N	82.6	79.2	19K4206	15.70
● G3X4LG6N	82.6	104.1	19K4207	19.88
● G4X4LG6N	108	104.1	19K4210	21.01

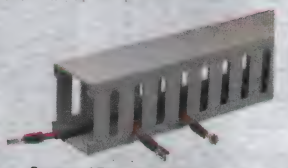
(13161)

NONSLIP COVERS FOR PANDUCT® TYPES F AND G WIRING DUCT

RoHS Compliant Available

PANDUIT®

Covers for use with Panduct® wiring duct protect wires, improve aesthetics and provides greater wire capacity. The nonslip design snaps onto the duct to conceal the wiring. Easy cover removal makes changes to wiring quick and simple. Constructed of lead-free PVC. Colors: light gray or white. Additional sizes and colors are available; *go online or call. Order wiring duct separately online or call.* **NOTE: Priced per foot. Sold in packages of four 6′ lengths (total of 24′).**



Cover and Duct Base Sold Separately

Mfg. Part No.	For Duct Width (mm)	Color	Stock No.	Price per Foot 1-24
● C.5LG6N	17.5	Light Gray	19K4316	1.95
● C.75LG6N	23.8	Light Grey	19K4317	2.14
● C1LG6N	31.8	Light Gray	19K4320	2.17
● C1WH6N	31.8	White	19K4321	2.17
● C1.5LG6N	44.5	Light Gray	19K4318	2.72
● C2LG6N	57.2	Light Gray	19K4322	3.29
● C3LG6N	82.6	Light Gray	19K4324	5.04
● C4LG6N	108	Light gray	19K4326	6.15

(6491)

element14 COMMUNITY

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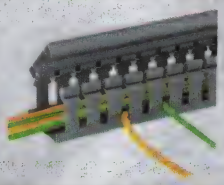
PANDUCT TYPE H — HINGED COVER SLOTTED WALL WIRING DUCT/RACEWAY

RoHS Compliant Available

PANDUIT®



- Unique hinged cover design reduces time spent on maintenance or reinstallation of wire
- Slotted duct and hinged cover come attached and packaged together
- Mounting holes provided
- UL94V-0 flammability rating
- Continuous use temperature rating: 50°C (122°F)

Panduct® Type H dual-sided hinged cover, slotted wall wiring duct/raceway is perfect to route and protect wire and cable in electrical control panels and data communications applications. The unique push-on hinged cover is simple to install and remove, and once installed can be opened from either side of the duct making access to wiring fast and easy. Material: lead-free PVC. Color: light gray. Slot width: 0.31″. UL recognized, CE compliant. **Priced per foot. Sold in packages of eight 3′ lengths or four 6′ lengths for a total of 24′.**

Mfg. Part No.	Nominal W x H (in.)	Actual W x H (in.)	Stock No.	Price per Foot 1-24
3 FT. LENGTHS — DUCT BASE WITH HINGED COVER				
● HC1.5X2LG3M	1.5 x 2	1.75 x 1.98	42M0686	16.78
● HC2X2LG3M	2 x 2	2.17 x 1.98	42M0690	12.35
6 FT. LENGTHS — DUCT BASE WITH HINGED COVER				
● HC1.5X2LG6M	1.5 x 2	1.75 x 1.98	42M0687	13.45
● HC1.5X3LG6M	1.5 x 3	1.75 x 3.06	42M0689	11.83
● HC2X2LG6M	2 x 2	2.17 x 1.98	42M0691	13.83
● HC2X3LG6M	2 x 3	2.17 x 3.06	42M0693	12.87
● HC2X4LG6M	2 x 4	2.17 x 4.10	42M0695	19.96
● HC3X3LG6M	3 x 3	3.25 x 3.06	42M0697	15.67

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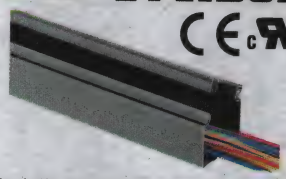
PANDUCT TYPE HS — HINGED COVER SOLID WALL WIRING DUCT/RACEWAY

RoHS Compliant Available

PANDUIT®



- Unique hinged cover design reduces time spent on maintenance or reinstallation of wire
- Solid wall duct and hinged cover come attached and packaged together
- Supplied without mounting holes
- UL94V-0 flammability rating
- Continuous use temperature rating: 50°C (122°F)

Panduct® Type HS dual-sided hinged cover, solid wall wiring duct/raceway is ideal to route, protect and conceal data, voice, video, fiber-optic and power cabling. The unique push-on hinged cover is simple to install and remove, and once installed can be opened from either side of the duct making access to wiring fast and easy. Material: lead-free PVC. Color: light gray. UL recognized, CE compliant. **Priced per foot. Sold in packages of eight 3′ lengths or four 6′ lengths for a total of 24′.**

Mfg. Part No.	Nominal W x H (in.)	Actual W x H (in.)	Stock No.	Price per Foot 1-17
3 FT. LENGTHS — DUCT BASE WITH HINGED COVER				
● HSC1.5X2LG3MNM	1.5 x 2	1.75 x 1.98	42M0702	12.04
● HSC1.5X3LG3MNM	1.5 x 3	1.75 x 3.06	42M0704	41.03
● HSC2X2LG3MNM	2 x 2	2.17 x 1.98	42M0706	16.49
● HSC2X3LG3MNM	2 x 3	2.17 x 3.06	42M0708	13.93
● HSC2X4LG3MNM	2 x 4	2.17 x 4.10	42M0710	15.42
● HSC3X3LG3MNM	3 x 3	3.25 x 3.06	42M0712	16.51
● HSC3X4LG3MNM	3 x 4	3.25 x 4.10	42M0714	56.49
● HSC4X4LG3MNM	4 x 4	4.25 x 4.10	42M0716	62.94
6 FT. LENGTHS — DUCT BASE WITH HINGED COVER				
● HSC1.5X2LG6MNM	1.5 x 2	1.75 x 1.98	42M0703	13.34
● HSC1.5X3LG6MNM	1.5 x 3	1.75 x 3.06	42M0705	11.47
● HSC2X2LG6MNM	2 x 2	2.17 x 1.98	42M0707	13.76
● HSC2X3LG6MNM	2 x 3	2.17 x 3.06	42M0709	11.72
● HSC3X3LG6MNM	3 x 3	3.25 x 3.06	42M0713	14.69
● HSC3X4LG6MNM	3 x 4	3.25 x 4.10	42M0715	99.72

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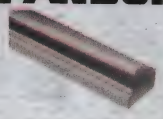
PAN-WAY TYPE LD — HINGED COVER SURFACE RACEWAY

RoHS Compliant Available

PANDUIT®



- Hinged cover design allows cable to be laid-in instead of pulled through
- Factory-applied adhesive backing speeds installation
- Terminates using surface mount outlet box solutions or Mini-Com® surface mount boxes

Pan-Way® Type LD low-voltage, single-channel surface raceway is designed to route, protect and conceal data, voice and video cabling. Features a one-piece hinged cover design. Suited for low-voltage cabling (under 48V) and can be used with the PAN-NET™ networking cabling system for Category 5 UTP, ScTP, coax and fiber-optic cabling applications. Color: electric ivory. Other colors and sizes available; *go online or call. Order raceway fittings separately; go online or call.* **Priced per foot. Sold in packages of four 6′ lengths.**

➤ CONTINUED ➤

PAN-WAY TYPE LD — HINGED COVER SURFACE RACEWAY (CONT.)

Mfg. Part No.	Width (mm)	Height (mm)	Stock No.	Price per Foot 1-24
LD3EI6N-A	19.6	11.7	19K4338	5.26
LD5EI6N-A	25.8	14.8	78H3415	5.94

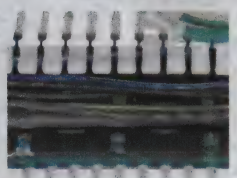
(13447)

PANDUCT® PANELMAX™ NOISE SHIELD

RoHS Compliant Available

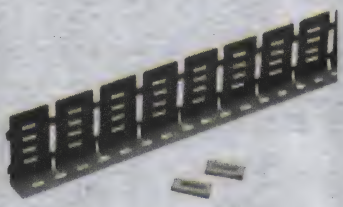
PANDUIT®

Bonding Clip and Cable Tie Slots Integrated into Shield



Noise Shield Installed Inside Duct

- Metal noise barrier installs easily inside wiring duct — choice of three height
- Reduces EMI noise coupling between noise emitting and sensitive cabling
- Provides up to 20dB noise reduction (equivalent up to 6" of air spacing)
- Bonding clips maintain electrical continuity and reliable system performance
- Perforated and pre-scored sections speed installation — just snap off to easily cut to length
- Vertical wall slots allow wires to cross the barrier providing greater design flexibility
- Horizontal cable tie slots allow cable bundles to be held in place using cable ties



PanelMax™ Noise Shield with Bonding Clips

Panduct® PanelMax™ noise shield separates motor drive cable and sensitive communication/signal cable within industrial control panels to reduce electromagnetic interference (EMI) while saving valuable space. Designed to install easily within Panduct® 2", 3", or 4"H wiring duct or when mounted directly to metal panel surface, delivering greater design flexibility to satisfy a wide range of applications. Zinc-plated steel surface in contact areas with sub-panel and bonding clip provides continuity and is corrosion resistant. Durable black powder coated vertical surface for smooth edges. Meets UL 508/508A requirements as a barrier between conductors. Each kit includes two 3-foot noise shield sections, bonding clips, and anti-oxidizing paste.

Mfg. Part No.	Description	Stock No.	Price per Kit
SD2EMI	PanelMax™ EMI Noise Shield Kit — 2" Height x 3-Ft Length	34T2834	120.91
SD3EMI	PanelMax™ EMI Noise Shield Kit — 3" Height x 3-Ft Length	84R8445	139.04
SD4EMI	PanelMax™ EMI Noise Shield Kit — 4"-Height x 3-Ft Length	34T2837	154.41

(194882)

PANDUCT PANELMAX DIN RAIL WIRING DUCT

RoHS Compliant Available

PANDUIT®

- Space-saving design allows for 30%+ smaller enclosure footprint
- DIN rail and DIN component compatible — including 35 or 15mm rails
- Integrated DIN rail fastening slots for up to 50% faster duct and rail installation and reduced labor costs
- Hinged and flexible cover remains attached for easier maintenance and upgrades
- Slotted platform and sidewalls provide optimal wire management and aesthetics
- Channel pass through slots shorten the wiring path between components on the same DIN rail
- Lead-free PVC construction meets UL94 flammability rating

PanelMax™ DIN Rail Wiring Duct (Shown in Application with DIN Rail and Components — not included)

Panduct® PanelMax™ DIN rail wiring duct is an innovative wire management solution that maximizes space utilization within industrial enclosures for flexibility in panel layout and reduced material and installation costs. The unique design raises components from the panel surface for easier access and faster terminations. DIN rail wiring duct is compatible with common DIN rail and DIN mount components to satisfy a wide range of applications. Three DIN rail wiring duct sizes accommodate user supplied DIN rail and a variety of DIN mount components for application flexibility. Comes complete with wiring duct base, covers and DIN rail fasteners. Replacement parts and accessories ordered separately below. Color: light gray. Also available in white; *go online or call*. UL recognized, CE compliant. **Priced per foot. Duct base and replacement cover sold in packages of 6' lengths.**

DIN RAIL WIRING DUCT BASE WITH COVERS AND DIN RAIL FASTENERS INCLUDED — 6 FT. LENGTHS

Mfg. Part No.	Width (in.)	Height (in.)	Pkg. Qty. (Ft.)	Stock No.	Price per Foot
DRD22LG6	6.25	2.15	6	17T4946	21.50
DRD33LG6	7.25	3.16	6	08R2541	38.35
DRD44LG6	8.25	4.16	6	26R1826	50.05

DIN RAIL WIRING DUCT REPLACEMENT COVER

Mfg. Part No.	Description	Pkg. Qty. (Ft.)	Stock No.	Price per Pkg.
DRDC2LG6	2" DIN Rail Wiring Duct Replacement Cover	6	75R7875	2.82

CONTINUED

PANDUCT PANELMAX DIN RAIL WIRING DUCT (CONT.)

ACCESSORIES

Wire retainers support wiring when cover is opened or removed, easing wire installation and future wire additions.

Mfg. Part No.	Description	Stock No.	Price Each
DRDWR2-X	2" Wire Retainer	72T0013	3.34
DRDWR4-X	4" Wire Retainer	17T4945	4.64

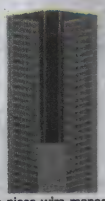
(166564)

PANDUCT PANELMAX CORNER WIRING DUCT

RoHS Compliant Available

PANDUIT®

- Space-saving one-piece construction
- Angled four-sided channel design fits in unused space in vertical corner of enclosures
- Single channel with co-extruded flexible hinges for fast installation
- Integrated mounting feature allows divider wall to snap onto base and create two channels
- Lead-free PVC meets UL94V-0 flammability rating



Panduct® PanelMax™ corner wiring duct is an innovative one-piece wire management product that makes more efficient use of space inside enclosures, speeds installation, and reduces control panel assembly costs. PanelMax™ corner wiring duct is used in the vertical corners of medium to large electrical control panels (with both side and back panels) to route, conceal, and protect electrical wiring. Color: light gray. Also available in white. Compatible with Panduct® 3" and 4"H wiring duct and uses standard 2"W Panduct® wiring duct cover, all ordered separately; *go online or call*. UL recognized, CSA certified, CE compliant. **Priced per foot. Duct base and divider wall sold in packages of 6' lengths.**

CORNER WIRING DUCT BASES — 6 FT. LENGTHS

Mfg. Part No.	Width (in.)	Height (in.)	Pkg. Qty. (Ft.)	Stock No.	Price per Foot
CWD3LG6	4.4	3.57	6	03M7454	35.85
CWD4LG6	5.33	4.58	6	03M7456	41.91

ACCESSORIES

For applications that require wire separation, slotted divider wall simply snaps onto duct base to create two separate channels. Can be used with **mfg. part nos. CWD3LG6** or **CWD4LG6** duct bases; *ordered separately above*. **Mfg. part no. D4H6** solid duct divider wall is also available *; go online or call*.

Mfg. Part No.	Description	Pkg. Qty. (Ft.)	Stock No.	Price per Foot
SD4H6	4"H Slotted Duct Divider Wall	6	66H3971	6.64

L-bracket with quick-mount clip supports PanelMax™ corner wiring duct mounting to a flat surface. Accepts fastener size #10-32 x 1/4 (M4 x 32) not included. **Mfg. part nos. CDCLP3** and **CDCLP4** quick-mount clips *ordered separately; go online or call*.

Mfg. Part No.	Description	Stock No.	Price Each 1-17
CDLB3	Corner Wiring Duct L-Bracket for **CWD3LG6** Duct Base	71P9190	10.60
CDLB4	Corner Wiring Duct L-Bracket for **CWD4LG6** Duct Base	71P9191	10.74

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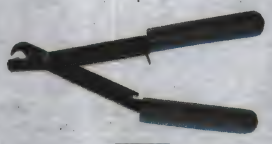
WIRING DUCT INSTALLATION TOOLS

PANDUIT®



DNT-100

DCT

DFCT

Mfg. part no. DNT-100 notches types F, G and H wiring duct down to base and scoreline for "T" and corner junctions. Spring-action handle allows one-hand operation. **Mfg. part no. DCT** is a duct cutting tool for all types of wiring duct and covers. **Mfg. part no. DFCT** is a duct finger cutting tool for removing duct fingers from existing installations. All steel construction.

Mfg. Part No.	Description	Stock No.	Price Each
DNT-100	Wiring Duct Notching Tool	81F4605	203.93
DCT	Wiring Duct Cutting Tool	92F483	163.73
DFCT	Wiring Duct Finger Cutting Tool	14C8099	137.84

(13260)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

ACRYLIC ADHESIVE FOAM TAPE

RoHS Compliant Available

PANDUIT®

2-sided polyethylene foam tape for mounting duct to control panels without screws. Reduces transmission of vibration, joins uneven surfaces, cushions gaskets, and attaches a variety of materials. Recommended for high temperature (180°F) and UV light applications. UL recognized. 72 yard length.

Mfg. Part No.	Width	Stock No.	Price Each
● P32W2A2-50-72	0.50″	89F1384	106.51
● P32W2A2-75-72	0.75″	89F1385	138.56
● P32W2A2-100-72	1.00″	44F1478	171.17

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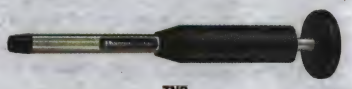
3

NYLON RIVETS AND INSTALLATION TOOL

RoHS Compliant Available

PANDUIT®

NR1-C



TNR

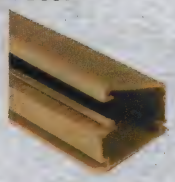
Mfg. part no. NR1-C nylon rivets are easily installed in all ducts with **mfg. part no.TNR** installation tool. Installation tool constructed of lightweight aluminum and acetal. **Rivets sold in packages of 100.**

Mfg. Part No.	Description	Stock No.	Price per Pkg.
● NR1-C	Nylon Rivets	81F4601	23.79
TNR	Rivet Installation Tool	81F4606	254.92

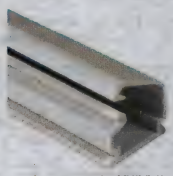
(6493)

ADHESIVE-BACKED SURFACE MOUNT RACEWAY DUCT

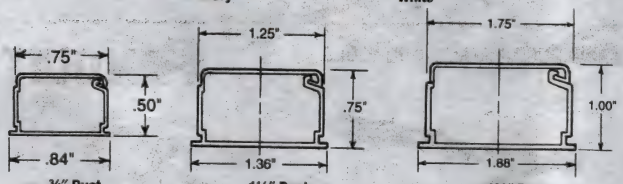
pro-POWER



Ivory



White



¾″ Duct 1¼″ Duct 1¾″ Duct

Surface mount raceway is a one-piece latching duct designed to contain, route, and protect wire and cable when it can't be run within a wall. Designed with a special flexible hinge, this raceway duct allows numerous openings without creating stress, cracking or discoloration. The self-locking, hidden positive latch allows for quick re-entry and secure installation of wire and cable. Constructed from durable PVC, rated UL 94V-0. Adhesive backing is 1/16″ thick urethane foam tape which features good high-temperature and solvent resistance. Raceway duct is paintable with a latex-based paint to fit any office or home decor. Choice of ivory or white. **Sold in packages of 24′ in four 6′ lengths.**

Ivory		White			Price per Pkg.
Mfg. Part No.	Stock No.	Mfg. Part No.	Stock No.	Dimensions	1-199
8443-0485	08X6018	8443-0446	08X6015	¾″ x ½″ x 6′	3.16
8443-0486	08X6019	...	...	1¼″ x ¾″ x 6′	4.63
8443-0487	08X6020	...	...	1¾″ x 1″ x 6′	6.83

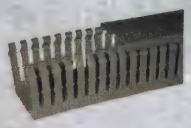
(6485)

WIRING DUCTS AND COVERS

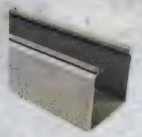
MADE IN USA

pro-POWER

Slotted-Wall



High-Density Slotted-Wall



Solid-Wall

CONTINUED

WIRING DUCTS AND COVERS (CONT.)

SLOTTED-WALL WIRING DUCTS

Slotted-wall design enables numerous wire breakouts. Double-scored breakaway duct fingers make larger breakouts easy. Restricted opening design prevents unintended removal of wires. High-impact PVC material. Color: gray. Flammability rated UL94V-0. UL recognized, CSA certified. Made in the U.S.A. *Order duct covers separately below.* **Sold in packages of 24′ in four 6′ lengths.**

Mfg. Part No.	Nominal W x H (in.)	Stock No.	Price per Pkg. 1-199
WDLT-0404-72	1 x 1	08X5994	4.05
WDLT-0406-72	1 x 1.5	08X5995	5.47
WDLT-0408-72	1 x 2	08X5996	5.60
WDLT-0604-72	1.5 x 1	08X5998	4.42
WDLT-0606-72	1.5 x 1.5	08X5999	5.52
WDLT-0608-72	1.5 x 2	08X6000	6.02
WDLT-0612-72	1.5 x 3	08X6001	9.74
WDLT-0808-72	2 x 2	08X6003	6.10
WDLT-0812-72	2 x 3	08X6004	10.05
WDLT-1204-72	3 x 1	08X6005	5.93
WDLT-1208-72	3 x 2	08X6006	8.00
WDLT-1212-72	3 x 3	08X6007	10.67

HIGH-DENSITY SLOTTED-WALL WIRING DUCTS

High-density slotted-wall ducts come with narrow fingers, equaling a 2-to-1 ratio compared to standard slotted wiring ducts. The narrow fingers reduce fanning of the wires to the terminal blocks for a neater appearance and to accommodate more compact designs and components in control panels, communications closets, and other applications. Made with a versatile mounting hole pattern which lines up with DIN 35 rail; the mounting hole rows are also consistent with standard slotted wiring duct, so the two ducts can easily be interchanged. Double-scored breakaway duct fingers make larger breakouts easy. Restricted opening design prevents unintended removal of wires. Color: gray. Flammability rated UL94V-0. UL recognized, CSA certified. Made in the U.S.A. *Order duct covers separately below.* **Sold in packages of 24′ in four 6′ lengths.**

Mfg. Part No.	Nominal W x H (in.)	Stock No.	Price per Pkg. 1-199
DHD-1X1	1 x 1	08X5705	4.29
DHD-1X1.5	1 x 1.5	08X5706	6.47
DHD-1X2	1 x 2	08X5707	6.56
DHD-1X3	1 x 3	08X5708	8.21
DHD-1.5X1.5	1.5 x 1.5	08X5702	6.45
DHD-1.5X2	1.5 x 2	08X5703	6.87
DHD-1.5X3	1.5 x 3	08X5704	11.04
DHD-2X2	2 x 2	08X5709	7.09

SOLID-WALL WIRING DUCT

Solid-wall design ducts for straight wire runs where no breakouts are required. Color: gray. Flammability rated UL94V-0. UL recognized, CSA certified. Made in the U.S.A. **Sold in packages of 24′ in four 6′ lengths.**

Mfg. Part No.	Nominal W x H (in.)	Stock No.	Price per Pkg. 1-199
WDWT-0303-72	0.75 x 0.75	08X6012	3.82

UNIVERSAL WIRING DUCT COVERS

Designed for used with slotted- and high-density slotted- wiring ducts, *ordered separately above.* Versatile snap-on design with nonslip liner. Made of high-impact PVC material. Color: gray. Flammability rated UL94V-0. UL recognized, CSA certified. Made in the U.S.A. **Sold in packages of 24′ in four 6′ lengths.**

Mfg. Part No.	For Duct Width (in.)	Stock No.	Price per Pkg. 1-199
WDCT-04-72	1	08X5989	1.45
WDCT-06-72	1.5	08X5990	2.22
WDCT-08-72	2	08X5991	2.37
WDCT-12-72	3	08X5992	3.00

(6374)

300 SERIES PVC DUCT AND FITTINGS

WIREMOLD Shape Electronics Division

- One-piece latching design
- Rugged PVC construction
- Adhesive backing for easy and fast installation
- Smooth texture ivory finish

300

317

300 series™ nonmetallic PVC duct conceals electrical cords and low voltage wiring. Full compliment of fittings to facilitate virtually any installation; *order separately below.* Ivory finish blends with almost any decor or can be painted with latex paint to blend into the wall surface. ***Duct sold in cartons of 100′, priced per foot.**

Mfg. Part No.	Description	Dimensions H x W (mm)	Stock No.	Price per Foot 1-99
300*	Latching Duct	8.9 x 12.7	07J8045	1.56

FITTINGS

Mfg. Part No.	Description	Stock No.	Price Each
306	Coupling — For Joining Duct Strips	07J8046	1.41
317	Internal Elbow — For Right-Angle Turns Around Internal Corners	07J8048	2.29
318	External Elbow — For Right-Angle Turns Around External Corners	07J8049	2.29

(79389)

ECLIPSE PN03, PN05 AND PN10 SERIES NONMETALLIC RACEWAY SYSTEMS

WIREMOLD Shape Electronics Division

Eclipse™ PN03, PN05 and **PN10 series** workstation nonmetallic raceway is a single compartment system for power or communications wiring. Ideal for use in classrooms, offices, and hotel applications, or anywhere a small, low profile raceway is needed. Durable, flexible, co-extruded hinge allows for repeated openings and closings while maintaining product integrity and aesthetics. Adhesive backing allow base to be pressed onto surface for easy and fast installation. Color: ivory. Full compliment of fittings, *ordered separately below*, to facilitate virtually any installation . UL listed. ***One-piece raceway sold in cartons of 32', priced per foot.**

PN03 SERIES NONMETALLIC RACEWAY SYSTEM

Mfg. Part No.	Description	Dimensions H x W (mm)	Stock No.	Price per Foot 1-31
PN03L08V*	Eclipse™ PN03 Series 1-Pc. Nonmetallic Raceway	12.7 x 20.6	07J8010	3.54

PN03 SERIES FITTINGS

Mfg. Part No.	Description	Stock No.	Price Each
PN03F11V	90° Flat Elbow — For Right Angle Turns on Same Surface, 25mm Bend Radius	07J8005	3.27
PN03F15V	Tee — For Branches at Right Angles on the Same Surface, 25mm Bend Radius	07J8006	4.54
PN03F17V	Internal Elbow — For Right Angle Turns Around Internal Corners, 25mm Bend Radius	07J8007	3.52
PN03F18V	External Elbow — For Right Angle Turns Around External Corners	07J8008	3.00
PN03F20V	Blank End Fitting — For Closing Open End of Raceway	07J8009	3.27
PN03F06V	Cover Clip — For Covering Joint of Two Pieces of Raceway	07J8004	2.56

PN05 SERIES NONMETALLIC RACEWAY SYSTEM

Mfg. Part No.	Description	Dimensions H x W (mm)	Stock No.	Price per Foot 1-31
PN05L08V*	Eclipse™ PN05 Series 1-Pc. Nonmetallic Raceway	15.9 x 29	07J8019	3.67

PN05 SERIES FITTINGS

Mfg. Part No.	Description	Stock No.	Price Each
PN05F11V	90° Flat Elbow — For Right Angle Turns on Same Surface, 25mm Bend Radius	07J8013	3.61
PN05F15V	Tee — For Branches at Right Angles on the Same Surface, 25mm Bend Radius	07J8014	4.79
PN05F17V	Internal Elbow — For Right Angle Turns Around Internal Corners, 25mm Bend Radius	07J8015	3.71
PN05F18V	External Elbow — For Right Angle Turns Around External Corners	07J8016	3.40
PN05F20V	Blank End Fitting — For Closing Open End of Raceway	07J8017	3.71
PN05F86V	Drop Ceiling Connector — For Dropping Cable From Ceiling into Raceway+	07J8018	9.01
PN05F06V	Cover Clip — For Covering Joint of Two Pieces of Raceway	07J8012	3.03

PN10 SERIES NONMETALLIC RACEWAY SYSTEM

Mfg. Part No.	Description	Dimensions H x W (mm)	Stock No.	Price per Foot 1-31
PN10L08V*	Eclipse™ PN10 Series 1-Pc. Nonmetallic Raceway	20.6 x 43	07J8029	5.37

PN10 SERIES FITTINGS

Mfg. Part No.	Description	Stock No.	Price Each
PN10F11V	90° Flat Elbow — For Right Angle Turns on Same Surface, 25mm Bend Radius	07J8022	4.10
PN10F15V	Tee — For Branches at Right Angles on the Same Surface, 25mm Bend Radius	07J8023	5.76
PN10F18V	External Elbow — For Right Angle Turns Around External Corners	07J8025	3.49
PN10F20V	Blank End Fitting — For Closing Open End of Raceway	07J8026	3.81
PN10F86V	Drop Ceiling Connector — For Dropping Cable From Ceiling into Raceway+	07J8028	5.69

➤ CONTINUED ➤

ECLIPSE PN03, PN05 AND PN10 SERIES NONMETALLIC RACEWAY SYSTEMS (CONT.)

PN10 SERIES FITTINGS

Mfg. Part No.	Description	Dimensions H x W (mm)	Stock No.	Price per Foot 1-31
PN10F21V	Entrance End Fitting — For Feeding Raceway with 1/2" and 3/4" Trade Size Conduit or Armored Cable‡		07J8027	8.88
PN10F06V	Cover Clip — For Covering Joint of Two Pieces of Raceway		07J8021	6.03

***Sold in cartons of 32', priced per foot**; +Includes reducer adapter for use with **PN03 series** raceway; ‡Includes reducer adapter for use with **PN03** and **PN05 series** raceways

DEVICE AND DATA BOXES FOR PN03, PN05 AND PN10 SERIES RACEWAY SYSTEMS

Mfg. Part No.	Description	Stock No.	Price Each
PSB1V	1-Gang Power Box — Accepts Standard NEMA Faceplates, Twist-Outs on All Four Sides for Raceway	07J8039	13.77
PSB2V	2-Gang Device Box — Accepts Standard NEMA Faceplates, Twist-Outs on All Four Sides for Raceway	07J8040	20.87
PDB1CMV	Small Data Box — Surface Mount, Accepts One Front Loaded Downward Facing Device	07J8001	6.83
PDB2CMV	Large Data Box — Surface Mount, Accepts Two Front Loaded Downward Facing Devices	07J8002	10.50

(79411)

3

CABLE MOUNTS AND WIRING ACCESSORIES FOR USE WITHOUT CABLE TIES

RoHS Compliant Available

PANDUIT®

- **Mfg. part no. ARC.68** (Fig. 1) Adjustable Releasable Clamp Provides a Fast, Convenient Method of Securing Bundles
- **Mfg. part no. ACC** (Fig. 2) Cord Clip Easily Snap Bundles Into or Out of the Clips; Available in 3 Sizes to Hold Cords, Tubing, Cable or Wire Bundles
- **Mfg. part no. BECP** (Fig. 3) Offer Beveled Entry for Easy Snapping; Available in Adhesive-Backed and Pushback Styles
- **Mfg. part no. AMC** (Fig. 4) Holds a Single Cable; Can Be Mounted on Any Flat, Smooth Surface
- **Mfg. part no. LC** (Fig. 5) Latching Clip Retains and Supports Wire; Offers a Quickly-Installed Mount with a Locked Cover for Withstanding Vibration
- **Mfg. part no. MACC** (Fig. 6) Metal Adhesive Cord Clip can be Opened and Closed without Damage to the Clip
- **Mfg. part no. AJC** (Fig. 7) Low-Profile "J" Clips Retain Cords, Wires or Tubing; Flexible Design for Easy Insertion but Secure Performance
- **Mfg. part no. PMCC** (Fig. 8) Push-Mount Cord Clip Snaps Easily into Pre-Drilled Hole in Panels up to .105" Thick; Integral Mounting Device and Winged Design Holds Mount in Place
- **Mfg. part no. CCS** (Fig. 9) Fixed Diameter Cable Clamps are Constructed of Durable Nylon.
- **Mfg. part no. CCH** (Fig. 9) Clamps are Heavy-Duty Nylon

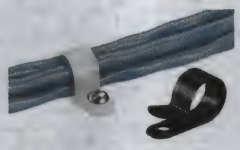


Fig. 9

UL recognized. **Sold in package quantities indicated in table below.**

Mfg. Part No.	Fig.	Max. Bundle Diameter	W x L	Mounting	Pkg. of	Stock No.	Price per Pkg. 1-2
ARC.68-A-Q14	1	0.68"	1.00 x 1.00"	Adhesive-Backed	25	89F2515	47.57
ARC.68-A-C14	1	0.68"	1.00 x 1.00"	Adhesive-Backed	100	76F869	99.40
ACC19-A-C	2	0.19"	0.75 x 0.62"	Adhesive-Backed	100	94F1495	73.85
ACC38-A-C	2	0.38"	1.00 x 1.00"	Adhesive-Backed	100	76F868	79.18
ACC38-A-M	2	0.38"	1.00 x 1.00"	Adhesive-Backed	1000	89F1912	529.74
ACC62-A-C	2	0.62"	1.12 x 1.24"	Adhesive-Backed	100	94F5618	107.89

➤ CONTINUED ➤

WIRE & CABLE ACCESSORIES

CABLE MOUNTS AND WIRING ACCESSORIES FOR USE WITHOUT CABLE TIES (CONT.)

Mfg. Part No.	Fig.	Max. Bundle Diameter	W x L	Mounting	Pkg. of	Stock No.	Price per Pkg. 1-2
● BECP75H25-L	3*	0.75″	0.73 x 1.46″	Push (¼″ Hole)	50	84F1964	72.67
● AMC25-AT-C10	4	0.28″	1.00 x 0.79″	Adhesive-Backed	100	84F1434	41.34
● LC3-A-C8	5	0.20″	0.75 x 0.75″	Adhesive-Backed	100	84F1435	48.60
● LC5-A-C8	5	0.36″	1.00 x 1.00″	Adhesive-Backed	100	94F3099	62.48
● LC10-A-L8	5	0.93″	1.51 x 1.00″	Adhesive-Backed	50	94F3098	35.37
● MACC25-A-C	6	0.25″	0.54 x 0.77″	Adhesive-Backed	100	84F1436	61.60
● MACC62-A-C	6	0.62″	0.78 x 1.18″	Adhesive-Backed	100	84F1437	99.56
● AJC12-A-C	7	0.12″	1.00 x 0.86″	Adhesive-Backed	100	89F2516	38.82
● AJC19-A-C	7	0.19″	1.25 x 0.87″	Adhesive-Backed	100	84F1438	40.60
● AJC25-A-C	7	0.25″	1.50 x 0.97″	Adhesive-Backed	100	94F1496	46.52
● PMCC38H25-C	8	0.38″	0.50″ Wide	Push (¼″ Hole)	100	84F1408	61.07
● CCS12-S8-C	9	0.12″	0.37″ Wide	#8 Screw	100	89F4459	12.17
● CCS19-S8-C	9	0.19″	0.37″ Wide	#8 Screw	100	84F1414	12.23
● CCH25-S10-C	9	0.25″	0.50″ Wide	#10 Screw	100	89F4460	18.24
● CCH38-S10-C	9	0.38″	0.50″ Wide	#10 Screw	100	84F1415	20.19
● CCH50-S10-C	9	0.50″	0.50″ Wide	#10 Screw	100	89F4461	21.05
● CCH75-S10-C	9	0.75″	0.50″ Wide	#10 Screw	100	84F1416	28.75

*For panel thickness 0.075″ max.
(6423)

CABLE MOUNTS AND WIRING ACCESSORIES FOR USE WITHOUT CABLE TIES

RoHS Compliant Available

PANDUIT®

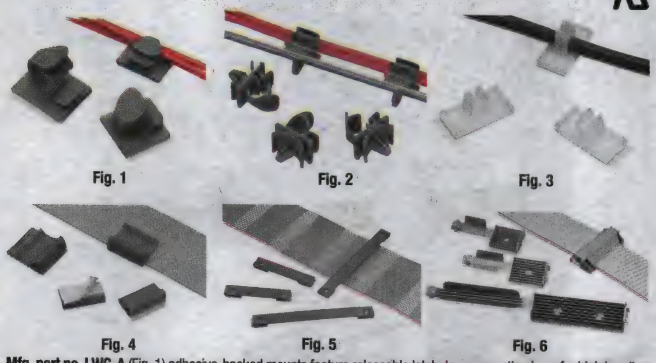


Fig. 1 Fig. 2 Fig. 3

Fig. 4 Fig. 5 Fig. 6

Mfg. part no. LWC-A (Fig. 1) adhesive-backed mounts feature releasable latch, large mounting base for high bonding strength. **Mfg. part no LWC-H25** (Fig. 2) push-in mounts snap into 0.250″ hole. **Mfg. part no. VCC** (Fig. 3) top-loading vertical cord clip features funnel-entry design. **Mfg. part nos. FCC** (Fig. 4) and **FCM** (Fig. 6) clips accommodate flat cable for a maximum stack height of 0.17″. **Mfg. part no. LPFCM** (Fig. 5) low-profile mount offers cable containment and identification for stack heights up to 0.105″. **Sold in package quantities indicated below.**

Mfg. Part No.	Fig.	Bundle Dia.	W x L	Mounting	Pkg. of	Stock No.	Price per Pkg. 1-2
● LWC25-A-C	1	0.25″	0.88 x 100″	Adhesive-Backed	100	95F5101	65.21
● LWC38A-C	1	0.37″	1.00 x 1.00″	Adhesive-Backed	100	95F5103	71.33
● LWC50-A-L	1	0.50″	1.00 x 1.26″	Adhesive-Backed	50	95F5105	57.70
● LWC75-A-L	1	0.75″	1.24 x 1.48″	Adhesive-Backed	50	91F7317	149.05
● LWC100-A-L	1	1.00″	1.97 x 2.21″	Adhesive-Backed	50	91F7318	142.02
● LWC38-H25-C	2	0.38″	0.58 x 0.94″	Push (¼″ Hole)	100	91F7321	58.28
● VCC25-A-C	3	0.25″	0.50 x 1.00″	Adhesive-Backed	100	95F5111	53.31
FLAT CABLE MOUNTS							
● FCC5-A-C8	4	Any Width	0.56 x 1.00″	Adhesive-Backed	100	89F2517	42.03
● FCC-A-C8	4	Any Width	1.00 x 1.09″	Adhesive-Backed	100	81F4613	45.80
● FCC-A-D8	4	Any Width	1.00 x 1.09″	Adhesive-Backed	500	89F1914	161.89
● LPFCM14-A-C14	5	1.44″ Wide	0.50 x 2.56″	Adhesive-Backed	100	84F1427	98.30
● LPFCM22-A-C14	5	2.19″ Wide	0.50 x 3.31″	Adhesive-Backed	100	84F1428	100.40
● LPFCM34-A-C14	5	3.44″ Wide	0.50 x 4.56″	Adhesive-Backed	100	84F1429	104.04
● FCM1-A-C14	6	1.00″ Wide	1.05 x 1.21″	Adhesive-Backed	100	81F4611	126.79
● FCM1.2-A-C14	6	1.20″ Wide	1.00 x 1.37″	Adhesive-Backed	100	84F1417	132.95
● FCM2-A-C14	6	2.05″ Wide	1.00 x 2.22″	Adhesive-Backed	100	78F628	141.82
● FCM2-A-T14	6	2.05″ Wide	1.00 x 2.22″	Adhesive-Backed	200	89F1916	261.46
● FCM3.25-A-L14	6	3.38″ Wide	1.00 x 3.38″	Adhesive-Backed	50	89F4458	110.97
● FCM3.25-A-T14	6	3.38″ Wide	1.00 x 3.38″	Adhesive-Backed	200	89F1904	373.98

(13738)

HARNESS BOARD ACCESSORIES

PANDUIT®

- For Fast Routing and Forming of Wires in Harness Fabrication
- Holds Wires Off the Harness Board at a Uniform Height
- Easy Application of Cable Ties

RER

ER

MFG PART NO. RER — REPLACEABLE ELASTIC RETAINERS
As wires are individually inserted, the bundle is formed. When harness is complete, it can be snapped out. Three sizes available for ½″, ¾″, and 1¼″ bundles. Mounts with #6 screws. Constructed from Nylon 6.6. Colors: black and white. **Sold in packages of 10.**

Mfg. Part No.	Max. Bundle Dia.	Stock No.	Price per Pkg. 1-2
RER.5-S6-X	½″ (12.7mm)	94F3146	80.80
RER.75-S6-X	¾″ (19.0mm)	70B5888	91.78
RER1.25-S6-X	1¼″ (31.8mm)	94F3147	97.68

MFG PART NO. ER — ELASTIC RETAINERS
Forms wire bundles as wires are inserted, completed bundles then snap out. Two sizes available for ½″ and 1¼″ bundles. Mounts with #4 screws. Constructed from Nylon 6.6 and ABS. Color: black. **Sold in packages of 10.**

Mfg. Part No.	Max. Bundle Dia.	Stock No.	Price per Pkg. 1-2
ER.5-E4-X	½″ (12.7mm)	01C0809	179.17
ER1.25-E4-X	1¼″ (31.8mm)	88F3055	18.18

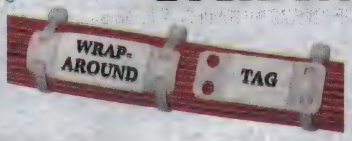
(60870)

NYLON MARKING PLATES

RoHS Compliant Available

PANDUIT®

White nylon marking plates are used with miniature, intermediate and standard size nylon cable ties, *ordered separately on page 1273*, for permanent or temporary identification. Can be used vertical or horizontal as a wrap, tag, or flag. Mark with Panduit marking pens *ordered separately; go online or call.* **Sold in packages of 100 and 1000.**



Mfg. Part No.	H x W	Pkg. of	Stock No.	Price per Pkg. 1-2
● MP150-C	0.75 x 1.50″	100	84F1913	88.86
● MP175-C	0.75 x 1.75″	100	94F2796	90.66
● MP-200-C	0.75 x 2.00″	100	94F3108	78.61
● MP250-C	0.75 x 2.50″	100	94F3109	97.06
● MP350-C	0.75 x 3.50″	100	98F029	98.53
● MP-250M	0.75 x 2.50″	1000	94F2797	757.77

(6426)

SELF-LAMINATING FIBER-OPTIC CABLE MARKER WRITE-ON TAGS

RoHS Compliant Available

PANDUIT®

- Durable, rigid vinyl for marking fiber optic cable in indoor/outdoor environments
- Clear overlaminate protects legend and handwritten data
- Highly visible yellow and black tag
- Installs easily with cable ties

Mfg. part no. PST-FO self-laminating cable marker write-on tags are made tough for marking fiber-optic cable in manhole and indoor/outdoor environments. Can be installed, vertical or horizontal, as a wrap, tag, or flag with Panduit® intermediate nylon cable ties; *order separately on page 1273 on page 1275.* Can also be used with 0.33″ and 0.5″ width Panduit® Tak-Ty® hook and loop cable ties in a 90° flag application; *order separately on page 1275.* Simply write on tags in areas provided using Panduit marking pens; *order separately.* **Sold in packages of 5 tags.**

Mfg. Part No.	Size W x H (in.)	Legend	Pkg. of	Stock No.	Price per Pkg. 1-2
● PST-FO	3½ x 2	CAUTION: FIBER OPTIC CABLE TYPE COUNT	5	77R3017	14.25

(178497)

Custom Cable Assemblies to your specs to mate with the complete line of connectors!
Call 1.800.463.9275
(212562)

IP66-NYLON CABLE GLANDS

RoHS Compliant Available

pro-POWER

- Maximum panel thickness 0.138″
- Operating temperature -20°C to +100°C

A range of Nylon 66 compression glands complete with lock nut and soft nylon washer. Designed for use with circular PVC and rubber cable the gland provides a waterproof entry and strain relief to IP66. Available in black or white.

Mfg. Part No.	Color	Metric Thread Sz.	Cable Dia. Max. (in.)	Mting Thread Lgth (in.)	Stock No.	Price Each 1-99
241/69/79B	Black	M13	0.276	0.315	08WX5745	1.64
241/69/79W	White	M13	0.276	0.315	08WX5746	1.62
250/96/92B	Black	M16	0.276	0.393	08WX5749	1.68
249/97/93B	Black	M20	0.276	0.393	08WX5747	1.46
252/97/93B	Black	M20	0.531	0.433	08WX5753	1.90

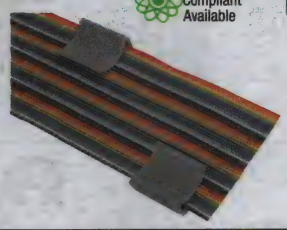
(102909)

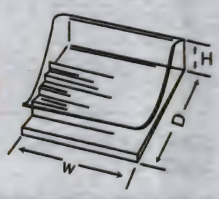
RIBBON CABLE CLAMPS

RoHS Compliant Available

pro-POWER

- Gray PVC
- Self-adhesive
- **Sold in packages of 100**





Mfg. Part No.	Dimensions (in.) H	W	D	Stock No.	Price per Pkg. 1-49
FC-15	0.39	0.59	0.98	24M2009	11.88
FC-20	0.39	0.79	0.98	24M2010	14.25
FC-25	0.39	0.98	0.98	24M2011	16.48

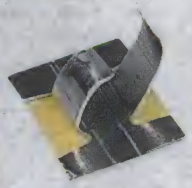
(116544)

SELF-ADHESIVE ALUMINUM CABLE CLIPS

RoHS Compliant Available

pro-POWER

ALACA



ALACO

ALACH

- Fast, easy installation
- Durable aluminum construction
- Self-adhesive polyethylene foam pad base with acrylic adhesive
- Operating temperature range: -10°C to +90°C

Self-adhesive aluminum cable clips are quick and easy to apply. To fix, remove liner from adhesive backing and position into place; insert cable and bend over aluminum tabs to secure. Cable clip buckle is easily formed and cinched for a perfect fit. All feature a natural aluminum finish except **mfg. part no. ALACH-01** cable clip hook which has a white gloss coating. **Sold in package quantities listed in table below.**

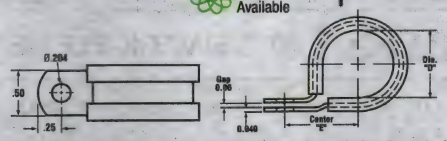
Mfg. Part No.	Description	Size (mm) W	L	H	Pkg. of	Stock No.	Price per Pkg. 1-49
ALACA-01	Ribbon Cable Clip, 12.9mm	12.9	9.8	6.3	100	35R0527	11.43
ALACA-03	Ribbon Cable Clip, 25.6mm	25.6	9.8	7.6	100	35R0529	11.98
ALACA-04	Ribbon Cable Clip, 33mm	33	9.8	9.8	100	35R0530	12.59
ALACO-01-L10	Cable Clip, 6mm	10.6	160	9.4	250	35R0537	18.98
ALACO-02-L10	Cable Clip, 9.5mm	17.2	190	14.9	250	35R0538	66.52
ALACH-01	Cable Clip Hook, 17mm	25.4	69.8	...	100	35R0536	29.48

(102908)

CUSHIONED CABLE CLAMPS

RoHS Compliant Available

pro-POWER



Cushioned clamps are used in many industries to route and protect tubes, pipes, wire bundles and cables. Neoprene is a general usage cushion with excellent weather and ozone resistance and medium oil resistance. Temperature range: –40°F to +250°F. Silicone rubber can be used in applications requiring moderate temperature silicone elastomer. It has superior ozone and weather resistance and an operating temperature of –65°F to +450°F. **Sold in packages of 100.**

➤CONTINUED➤

CUSHIONED CABLE CLAMPS (CONT.)

NEOPRENE-CUSHIONED, GALVANIZED STEEL CABLE CLAMPS (BLACK)

Mfg. Part No.	Diameter "D"	Center "E"	Stock No.	Price per Pkg. 1-4
SPC11152	0.31″	0.571″	34C1955	104.91
SPC11153	0.38″	0.603″	34C1956	101.19
SPC11154	0.44″	0.634″	34C1957	104.91
SPC11155	0.50″	0.665″	34C1958	111.20
SPC11156	0.63″	0.770″	34C1959	113.29
SPC11157	0.75″	0.832″	34C1960	116.31
SPC11158	1.00″	0.957″	34C1961	118.42

SILICONE RUBBER CUSHIONED, STAINLESS STEEL CABLE CLAMPS (RED)

Mfg. Part No.	Dia. D	Center E	Stock No.	Price per Pkg. 1-4
SPC11144	0.25″	0.540″	34C1947	90.86
SPC11145	0.31″	0.571″	34C1948	90.86
SPC11146	0.38″	0.603″	34C1949	99.12
SPC11147	0.44″	0.634″	34C1950	111.20
SPC11148	0.50″	0.665″	34C1951	107.38
SPC11149	0.63″	0.770″	34C1952	117.71
SPC11150	0.75″	0.832″	34C1953	134.28
SPC11151	1.00″	0.957″	34C1954	167.85

(6435)

FLAT CABLE MOUNTS AND CLIPS

RoHS Compliant Available

pro-POWER

Fig. 1

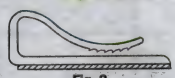


Fig. 2

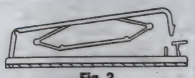


Fig. 3

For securing single or multiple layers of flat wire and cable. **Mfg. part nos. CFCC, FCC,** and **8408** use aggressive foam tape adhesive for securement. **Mfg. part no. LFCC** simply holds multiple flat cables together. **Mfg. part no. CFCC** is made from Noryl, color: white; **mfg. part no. FCC** from PVC, color: black; and **mfg. part nos. 8408** and **LFCC** from nylon, color: natural. **Sold in packages of 100.**

Mfg. Part No.	Fig.	Clamp Width	Max. Cable Width	Style	Stock No.	Price per Pkg. Each
LFCC-5	1	3″	2.5″	Loop Clip	81N2610	31.72
CFCC-2	2	1.06″	0.88″	Adhesive C Clip	23N3682	48.53
CFCC-1	2	0.56″	0.40″	Adhesive C Clip	23N3681	39.39
8408-0412	3	1.75″	1.20″	Adhesive Clip	16N975	142.27
8408-0413	3	3″	2.5″	Adhesive Clip	16N976	169.14

(6432)

PLASTIC CABLE CLAMPS

RoHS Compliant Available

pro-POWER

NCC series same as **ECC series** but nylon with temperature range –40°F to +185°F. Mount with #8 screw. Color: natural. **Sold in packages of 100.**

Mfg. Part No.	Holding Dia. (in.)	Width (in.)	Pkg. of	Stock No.	Price per Pkg. 1-2
NCC-2	0.13	0.38	100	32N1284	10.23
NCC-3	0.19	0.38	100	32N1285	11.54
NCC-4	0.25	0.38	100	32N1286	11.45
NCC-5	0.31	0.38	100	32N1287	12.13
NCC-6	0.38	0.38	100	32N1288	12.81
NCC-8	0.50	0.38	100	32N1290	13.81
NCC-10	0.56	0.50	100	32N1292	28.53
NCC-12	0.75	0.50	100	32N1294	33.34
NCC-16	1.00	0.50	100	32N1296	38.61

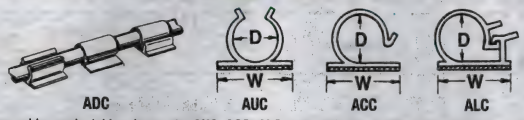
(6430)

WIRE & CABLE ACCESSORIES • WIRE & CABLE TIES

ADHESIVE-BACKED CABLE CLIPS AND CLAMPS

RoHS Compliant Available

pro-POWER



For securing cable, cords, tubing, hose, etc. **AUC, ACC, ALC,** and **ADC series** clips and clamps are constructed of durable, gray PVC. **8408 series** is made from natural-colored nylon. All versions feature an aggressive adhesive backing that easily mounts to any clean, regular surface. **Sold in packages of 100.**

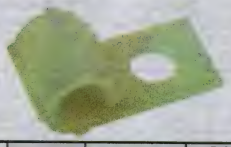
Mfg. Part No.	Cable Dia. D	Clamp Width W	Clamp Length	Style	Stock No.	Price per Pkg. 1-4
● AUC-1	0.125″	0.750″	0.750″	U-Clamp	16N1049	58.98
● AUC-2	0.250″	0.750″	0.750″	U-Clamp	16N1050	64.67
● AUC-3	0.375″	0.750″	0.750″	U-Clamp	16N1051	75.75
● AUC-4	0.500″	1.000″	1.000″	U-Clamp	16N1052	82.34
● ACC-1	0.125″	0.750″	0.750″	C-Clamp	16N1054	60.12
● ACC-2	0.250″	0.750″	0.750″	C-Clamp	16N1055	67.95
● ACC-3	0.375″	0.750″	0.750″	C-Clamp	16N1056	74.89
● ACC-4	0.500″	1.000″	1.000″	C-Clamp	16N1057	88.32
● ALC-2	0.250″	0.750″	0.750″	Locking	32N689	75.58
● ALC-4	0.500″	1.000″	1.000″	Locking	32N684	91.36
● ALC-6	0.750″	1.000″	1.000″	Locking	32N682	130.89
● ADC-2	0.500″	0.750″	0.750″	Locking	81N2603	36.06
● 8408-0402	0.31-0.41″	0.400″	1.000″	Adjustable	16N965	73.93
● 8408-0403	0.47-0.56″	0.400″	1.250″	Adjustable	16N966	95.23
● 8408-0404	0.58-0.75″	0.500″	1.500″	Adjustable	16N967	130.48
● 8408-0405	0.885-1″	0.500″	2.000″	Adjustable	16N968	140.70

(6440)

WIRE HARNESS CLIPS

RoHS Compliant Available

pro-POWER



Easily facilitates the bundling of wire and cable. Wires snap in and out of nylon clip, no need to unfasten screw. Mounts easily with #10 screw. Color: natural. **Sold in packages of 100.**

Mfg. Part No.	I.D. (in.)	Width (in.)	Pkg. of	Stock No.	Price per Pkg. 1-4
● EHC-4	0.25	0.4	100	37N2118	31.03
● EHC-8	0.5	0.4	100	37N2119	51.39
● 2601	0.75	0.5	100	92N4816	42.99
● 2602	1	0.5	100	92N4817	45.32

(6433)

DURA-TY CABLE TIES

RoHS Compliant Available

PANDUIT®

- Allows customized cut-to-size tie length
- Separate head with double stainless steel locking barb
- Constructed of weather-resistant acetal
- Excellent UV, chemical and moisture resistance
- High-tensile strength and high-impact resistance

Dura-Ty™ cable ties are used to secure and route cable in tough outdoor power and communication applications. Acetal material provides excellent weatherability, UV resistance, strength, and durability for a long service life. Dura-Ty™ cable ties (strapping) is available in two cross sections and comes packaged in cut-to-size reels for application flexibility. Heavy-cross section features a robust head design that allows the tie to be tightened over a wide range of angles for a safe and reliable installation, and incorporates a textured strap surface that improves gripping ability. Extra-heavy cross section meets Telcordia TR-TSY-000789 guidelines for lashed cable supports and is also available in pre-cut lengths for fast installation. Color: black

DURA-TY™ PRE-CUT CABLE TIES — EXTRA-HEAVY CROSS SECTION ONLY

Mfg. Part No.	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Min. Loop Tensile Strength (lbs.)	Pkg. of	Stock No.	Price per Pkg. 1-2
● DT4EH-L0	13.5	12.7	98	250	50	28C7873	100.96
● DT8EH-Q0	27.0	12.7	203	250	25	04H7333	97.97

(73912)

CONTOUR-TY CABLE TIES

RoHS Compliant Available

PANDUIT®

- Low-profile head avoids snags by reducing overall bundle size
- Designed with outside teeth and smooth round edges to protect cable jacket
- Parallel-entry limits exposure to sharp edges and protects workers arms and hands
- Fully enclosed head for consistent strength

Contour-Ty® cable ties are constructed of durable Nylon 6.6. Color: natural. Also available in black, weather-resistant nylon; *go online or call.* UL listed, UL recognized.

Mfg. Part No.	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Min. Loop Tensile Strength (lbs.)	Pkg. of	Stock No.	Price per Pkg. 1-2
● CBR1M-M	104	2.5	25	18	1000	04H6871	40.86
● CBR2M-M	183	2.5	51	18	1000	04H6873	62.61
● CBR3I-M	264	3.6	76	40	1000	04H6875	171.27
● CBR3S-M	274	4.8	76	50	1000	04H6876	218.87
● CBR4S-M	356	4.8	102	50	1000	04H6879	244.30
● CBR2HS-D	203	6.4	51	85	500	04H6872	192.70

(73908)

DOME-TOP BARB-TY CABLE TIES

RoHS Compliant Available

PANDUIT®

- Dome-top head features unique patented design with round, smooth edges
- Stainless steel locking barb provides consistent performance and reliability
- Infinitely adjustable for tight bundles throughout its entire bundle range
- High strength and low thread force

Dome-Top® Barb Ty cable ties are constructed of durable Nylon 6.6. Color: natural. UL listed, UL recognized.

Mfg. Part No.	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Min. Loop Tensile Strength (lbs.)	Pkg. of	Stock No.	Price per Pkg. 1-2
● BT1M-C	102	2.4	23	18	100	96F9934	15.49
● BT1M-M	102	2.4	23	18	1000	96F9935	45.00
● BT1.5M-C	160	2.4	38	18	100	16F5111	20.78
● BT1.5M-M	160	2.4	38	18	1000	16F5130	75.42
● BT2M-C	201	2.4	51	18	100	16F5112	21.78
● BT2M-M	201	2.4	51	18	1000	16F5131	67.40
● BT4M-C	361	2.4	102	18	100	16F5113	31.65
● BT4M-M	361	2.4	102	18	1000	16F5133	124.51
● BT1.5I-C	155	3.6	38	40	100	96F9936	17.86
● BT1.5I-M	155	3.6	38	40	1000	96F9937	70.21
● BT2I-C	203	3.6	51	40	100	96F9938	26.48
● BT2I-M	203	3.6	51	40	1000	96F9939	89.75
● BT3I-C	287	3.6	76	40	100	96F9940	33.29
● BT3I-M	287	3.6	76	40	1000	96F9941	191.09
● BT4I-C	363	3.6	102	40	100	96F9942	47.19
● BT4I-M	363	3.6	102	40	1000	96F9943	298.74
● BT2S-C	203	4.7	51	50	100	96F9944	22.57
● BT2S-M	203	4.7	51	50	1000	96F9945	92.80
● BT3S-C	305	4.7	76	50	100	96F9946	46.01
● BT3S-M	305	4.7	76	50	1000	96F9947	246.60
● BT4S-C	384	4.7	102	50	100	96F9948	52.23
● BT4S-M	384	4.7	102	50	1000	96F9949	280.43
● BT3LH-L	300	7	76	120	50	16F5122	39.85
● BT5LH-C	460	7	127	120	100	16F5145	83.05

(12537)

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(212563)

DOME-TOP® BARB TY CLAMP TIES

RoHS Compliant Available

PANDUIT®

- Used to secure a bundle of wires to another surface such as a control panel, communication rack, wall or ceiling
- Allows for bundling before or after screwing clamp in place
- Stainless steel locking barb provides consistent performance and reliability

Dome-Top® Barb Ty clamp cable ties are constructed of durable Nylon 6.6. Color: natural. Also available in weather-resistant and heat-stablized black nylon; *go online or call.* UL listed, UL recognized.

Mfg. Part No.	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Min. Loop Tensile Strength (lbs.)	Screw Size	Pkg. of	Stock No.	Price per Pkg. 1-2
BC1.5I-S8-M	168	3.6	38	40	#8	1000	65H8632	288.85
BC2S-S10-D	216	4.7	51	50	#10	500	65H8639	125.36
BC4LH-S25-L	394	7	102	120	¼"	50	65H8643	58.57

(79558)

DOME-TOP BARB TY MARKER AND FLAG TIES

RoHS Compliant Available

PANDUIT®

- Used to fasten and identify bundles at the same time
- Can be marked with Panduit® Marker Pens or Computer Printable Labels
- Custom imprinting with text, symbols or trademarks available using Panduit® Custom Hot Stamping Service

BM2S-C

BF1M-C

BM1M-C, BM2M-C

Dome-Top® Barb Ty marker and flag cable ties are constructed of durable Nylon 6.6. Color: natural. Also available in black, weather-resistant nylon and sizes to bundle diameters up to 4.00" (102mm); *go online or call.* UL recognized.

Mfg. Part No.	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Min. Loop Tensile Strength (lbs.)	Write-On Area (in.)	Pkg. of	Stock No.	Price per Pkg. 1-2
BF1M-C	117	2.4	23	18	0.36 x 0.81	100	65H8660	35.35
BM1M-C	107	2.4	23	18	0.29 x 1.09	100	94C2830	36.75
BM2M-C	201	2.4	51	18	0.29 x 1.09	100	65H8668	52.93
BM2S-C	203	4.7	51	50	0.49 x 0.91	100	65H8671	69.33

(79495)

EXTRA-HEAVY TIE MOUNTS

RoHS Compliant Available

PANDUIT®

Designed for use with Panduit® extra heavy cross-section lashing ties for mounting cable, large wire bundles or tubular shapes. Material: weather-resistant nylon for use outdoors. Color: black. **Sold in packages of 25 and 100 pieces.**

Mfg. Part No.	Hole Diameter	Pkg. Qty.	Stock No.	Price per Pkg. 1-2
TMEH-S8-C0	0.18" (4.6mm)	100	70B4918	120.46
TMEH-S8-Q0	0.18" (4.6mm)	25	97B2125	47.77
TMEH-S10-C0	0.20" (5.1mm)	100	70B9145	125.88
TMEH-S10Q0	0.20" (5.1mm)	25	98F301	49.57
TMEH-S25-C0	0.26" (6.6mm)	100	96B1040	124.35
TMEH-S25-Q0	0.26" (6.6mm)	25	84F616	52.56

(60774)

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(212564)

CABLE TIE MOUNTS

RoHS Compliant Available

PANDUIT®

Fig. 1

Fig. 2

Fig. 3

Fig. 4

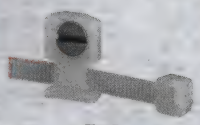


Fig. 5

Fig. 6

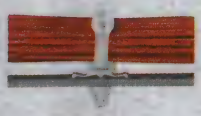


Fig. 7

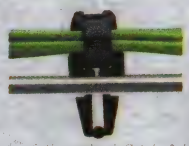


Fig. 8

Fig. 9

SIZE CODES FOR CABLE TIE MOUNTS

+Use with cable ties: **M**=Miniature; **I**=Intermediate; **S**=Standard; **H**=Heavy (including Light Heavy-LF). *Order cable ties separately on page 1273.*

Size Code	Fig.	W x L	Mounting	Use With Cable Ties+
A	1	0.50 x 0.50"	Adhesive	M
B	1	0.75 x 0.75"	Adhesive	M,I
C	1	1.00 × 1.00"	Adhesive	M,I,S
D	1	1.12 x 1.12"	Adhesive	M,I,S
E	1	1.50 x 1.50"	Adhesive	M,I,S,H
F	1	2.00 x 2.00"	Adhesive	M,I,S,H
G	2	1.00 x 1.00"	Adhesive	M,I,S
H	3	1.13 x 1.13"	Adhesive	M,I,S
J	4	0.37 x 0.75"	#8 Screw	M,I,S
L	5	0.75 x 0.50"	#8 Screw	M,I,S
M	6	0.32 x 0.50"	#4 Screw	M
N	6	0.42 x 0.63"	#6 Screw	M,I,S
O	6	0.42 x 0.63"	#8 Screw	M,I,S
P	6	0.61 x 0.86"	#8 or #10 Screw	M,I,S,H
R†	7	0.36 x 0.75"	Push-¼" hole	M,I,S
S††	7	0.60 x 0.71"	Push-¼" hole	M,I,S
T‡	8	0.38 x 0.30"T	Push-¼" hole	M,I,S
U	9	0.53 x 0.55"	Push 3/16" Hole	M,I,S
V	9	0.39 x 0.40"	Puch ¼" Hole	M,I,S

Mfg. Part No.	Size Code	Description	Color/ Material	Pkg. of	Stock No.	Price per Pkg. 1-2
ABM1M-A-C	A	4-Way Mount	White/Nylon	100	89F2504	64.01
ABM1M-A-M	A	4-Way Mount	White/Nylon	1000	89F2509	390.44
ABM1M-AT-M0	A	4-Way Mount	Black/Nylon±	1000	94H8427	538.88
ABMM-A-C	B	4-Way Mount	White/ABS	100	78F622	83.66
ABMM-AT-C0	B	4-Way Mount	Black/ABS±	100	99F9557	102.58
ABMM-A-D	B	4-Way Mount	White/ABS	500	87F6091	273.00
ABM2S-A-C	C	4-Way Mount	White/ABS	100	78F623	122.85
ABM2S-A-D	C	4-Way Mount	White/ABS	500	89F2510	338.56
ABM2SATC0	C	4-Way Mount	Black/ABS±	100	94F1494	146.54
ABM2SATD0	C	4-Way Mount	Black/ABS±	500	94F5617	442.45
ABM112-A-C	D	4-Way Mount	White/Nylon	100	94B4057	112.62
ABM112-AT-C0	D	4-Way Mount	Black/Nylon±	100	96B3892	148.43
ABM3H-A-L	E	4-Way Mount	White/Nylon	50	84F1818	98.04
ABM3H-A-T	E	4-Way Mount	White/Nylon	200	84F1819	272.81
ABM4H-A-T	F	4-Way Mount	White/Nylon	200	84F1820	357.57
ABM4H-AT-T0	F	4-Way Mount	Black/Nylon±	200	65H8612	414.90
ABM100-A-C	G	4-Way Mount	White/Nylon	100	95F5094	112.68
ABM100-AT-C0	G	4-Way Mount	Black/Nylon±	100	88F3129	134.44
ABM100-A-D	G	4-Way Mount	White/Nylon	500	95F5097	310.60
ABMS-A-D	H	2-Way Mount	Natural/Nylon	500	78F616	347.80
TA1S8-C	J	Tie Anchor Mount*	Natural/Nylon	100	78F620	43.78
TA1S8-M	J	Tie Anchor Mount*	Natural/Nylon	1000	78F621	203.68
TA1S8-M0	J	Tie Anchor Mount*	Black/Nylon±	1000	96B2513	280.16
LPMS-S8-C	L	Low Profile Mount	Natural/Nylon	100	84F603	37.05
LPMS-S8-M	L	Low Profile Mount	Natural/Nylon	1000	98F7641	239.79
TM1S4-C	M	Cradle Mount	Natural/Nylon	100	89F2506	30.83
TM1S4-C0	M	Cradle Mount	Black/Nylon±	100	97B2126	35.16
TM2S6-C	N	Cradle Mount	Natural/Nylon	100	89F2507	45.02
TM2S6-C0	N	Cradle Mount	Black/Nylon±	100	97B2128	51.44

CONTINUED

CABLE TIE MOUNTS (CONT.)

Mfg. Part No.	Size Code	Description	Color/ Material	Pkg. of	Stock No.	Price per Pkg. 1-2
● TM2S6-M	N	Cradle Mount	Natural/Nylon	1000	89F2513	258.86
● TM2S6-M0	N	Cradle Mount	Black/Nylon±	1000	24C4591	310.27
● TM2S8-C	O	Cradle Mount	Natural/Nylon	100	78F624	45.00
● TM2S8-C0	O	Cradle Mount	Black/Nylon±	100	97B2129	52.56
● TM2S8-M	O	Cradle Mount	Natural/Nylon	1000	89F2514	242.42
● TM2S8-M0	O	Cradle Mount	Black/Nylon±	1000	97B2131	291.91
● TM3S8-C	P	Cradle Mount*	Natural/Nylon	100	94F3155	66.75
● TM3S8-C0	P	Cradle Mount*	Black/Nylon±	100	97B2133	86.14
● TM3S8M	P	Cradle Mount*	Natural/Nylon	1000	84F2089	410.28
● TM3S8-M0	P	Cradle Mount*	Black/Nylon±	1000	66H4435	517.32
● TM3S10-C	P	Cradle Mount**	Natural/Nylon	100	87F6100	61.60
● TM3S10-C0	P	Cradle Mount**	Black/Nylon±	100	98B2548	85.51
● TM3S10-M	P	Cradle Mount**	Natural/Nylon	1000	50F2892	403.49
● TM3S10-M0	P	Cradle Mount**	Black/Nylon±	1000	97B2972	527.35
● PWMS-H25-C	R	Winged Push Barb Mount	Natural/Nylon	100	89F2508	40.62
● PWMS-H25-C0	R	Winged Push Barb Mount	Black/Nylon±	100	64K1682	49.93
● TM2PWH25-C	S	Winged Push Barb Mount	Natural/Nylon	100	95F5095	91.80
● TM2PWH25-M30	S	Winged Push Barb Mount	Natural/Nylon	1000	61J9368	548.93
● PM2H25-C	T	Push Barb Mount	Natural/Nylon	100	94F3129	41.17
● PM2H25-M0	T	Push Barb Mount	Black/Nylon±	1000	25C3993	303.89
● MPMS19-C0	U	Masonary Push Barb Mount	Black/Nylon±	100	84F598	50.96
● MPMS25-C0	V	Masonary Push Barb Mount	Black/Nylon±	100	84F1822	59.71

†For 0.105″ maximum panel; ††For 0.09″ maximum panel; ‡0.18″H for 0.125″ maximum panel
*With #8 screw; **With #10 screw; ±Outdoor use/weather resistant
(6502)

PAN-STEEL STAINLESS STEEL CABLE TIES

RoHS Compliant Available

PANDUIT®

Pan-Steel® high-strength 304 stainless steel cable ties are designed for bundling, identifying and fastening applications in harsh environments. Fast and easy to install. Resistant to abrasion, radiation, weathering corrosion and temperature extremes. Self-locking, no sharp edges and easily installed by hand or tool; *order installation tool separately on page 1283*. For extra protection, choose polyester-coated 316 stainless steel ties, *ordered separately below*. **Sold in package quantities indicated in table below.**

STAINLESS STEEL CABLE TIES

Mfg. Part No.	Maximum Bundle Diameter	Length	Cross-Section Tensile	Pkg. of	Stock No.	Price per Pkg. 1-2
● MLT1S-CP	1.00″	5.0″	Std. 200-lb.	100	84F1852	107.62
● MLT2S-CP	2.00″	7.9″		100	81F4590	110.22
● MLT4S-CP	4.00″	14.3″		100	94F2792	131.94
● MLT2H-LP	2.00″	7.9″	Heavy 450-lb.	50	94F3105	67.78
● MLT4H-LP	4.00″	14.3″		50	81F4586	79.16
● MLT6H-LP	6.00″	20.5″		50	84F1850	118.23
POLYESTER-COATED 316 STAINLESS STEEL CABLE TIES						
● MLTFC4H-LP316	4.00″	14.3″		50	52K3023	141.36

(6414)

PAN-TY FLUOROPOLYMER CABLE TIES

RoHS Compliant Available

PANDUIT®

- Low-smoke density and excellent flammability rating of UL94V-0
- Commonly accepted solution for bundling qualified cable without conduit in air handling space applications
- Distinctive maroon color recognized by many inspectors

Pan-Ty® fluoropolymer cable ties are rated UL listed, UL recognized as suitable for use in plenum or air handling spaces per NEC, Sec. 300-22(C) and (D).

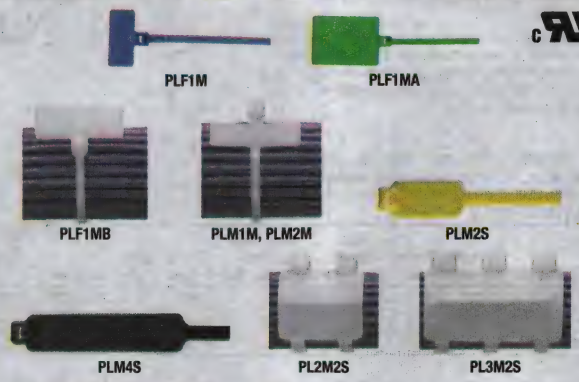
Mfg. Part No.	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Min. Loop Tensile Strength (lbs.)	Pkg. of	Stock No.	Price per Pkg. 1-2
● PLT1M-C702Y	99	2.5	22	18	100	52K3080	101.74
● PLT2S-C702Y	188	4.8	48	50	100	52K3087	212.36
● PLT3S-C702Y	295	4.8	76	50	100	52K3091	310.81

(73910)

PAN-TY MARKER AND FLAG TIES

RoHS Compliant Available

PANDUIT®



- Used to fasten and identify bundles at the same time
- Mark with Panduit® marker pens or computer printable labels
- Custom imprinting with text, symbols or trademarks available using Panduit® custom hot stamping service

Pan-Ty® marker and flag cable ties are constructed of durable Nylon 6.6. Color: natural. Outdoor, high-temperature and colored marker and flag cable ties are also available; *go online or call*. UL recognized.

Mfg. Part No.	Width (mm)	Lgth. (mm)	Max. Bundle Dia. (mm)	Min. Loop Tensil Strgth. (lbs.)	Write-On Area (in.)	Pkg. of	Stock No.	Price per Pkg. 1-2
● PLF1M-C	2.5	109	22	18	0.31 x 0.75	100	78F592	36.39
● PLF1M-M	2.5	109	22	18	0.31 x 0.75	1000	78F593	225.42
● PLF1MA-C	2.5	130	22	18	0.76 x 1.04	100	84F1958	49.46
● PLF1MA-M	2.5	130	22	18	0.76 x 1.04	1000	84F1959	359.00
● PLF1MB-C	2.5	101	19	18	0.31 x 0.92	100	88C9452	50.70
● PLM1M-C	2.5	99	19	18	0.26 x 0.95	100	78F513	36.69
● PLM1M-M	2.5	99	19	18	0.26 x 0.95	1000	78F543	229.78
● PLM2M-C	2.5	203	51	18	0.26 x 0.95	100	94F3120	53.08
● PLM2M-M	2.5	203	51	18	0.26 x 0.95	1000	94F2835	362.45
● PLM2S-C	4.7	188	45	50	0.44 x 0.87	100	78F514	69.37
● PLM4S-C	4.7	371	102	50	0.44 x 2	100	94F3164	96.03
● PL2M2S-L	4.7	188	45	50	0.87 x 1.07	50	94F2851	88.03
● PL3M2S-L	4.7	188	45	50	0.87 x 1.79	50	01C2146	113.76

(13166)

PAN-TY METAL DETECTABLE CABLE TIES

RoHS Compliant Available

PANDUIT®

- Metal impregnated material — choice of polypropylene or nylon 6.6
- Identifiable by metal detectors and x-ray inspection equipment
- Distinct blue color facilitates quick visual detection
- Standard cross section
- One-piece cable tie design with locking wedge construction for consistent performance and reliability
- Curved tie tip for easy pick up and faster threading
- Smooth, round edges won't damage cable

Pan-Ty® metal detectable cable ties are designed to help the food, beverage, and pharmaceutical industries meet product manufacturing safety standards. Featuring metal impregnated material, these metal detectable products are identifiable by metal detectors and x-ray inspection equipment. Help companies comply with the U.S. Food and Drug Administration HACCP (Hazard Analysis and Critical Control Points) standards and the European Union (EU) hygiene monitoring regulations. Matching cable tie mounts are available; *go online or call*.

POLYPROPYLENE CABLE TIES — DARK BLUE

Polypropylene metal detectable material is ideal for use in processing and packaging areas where aggressive acid and alkaline chemicals are used to clean the equipment. Excellent chemical resistant cable tie and mount solution for food and pharmaceutical processing equipment manufacturing applications. Max. continuous use temperature per test method UL 746B: 239°F (115°C).

Mfg. Part No.	Cross Section	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Min. Loop Tensile Strength (lbs.)	Pkg. of	Stock No.	Price per Pkg. 1-2
● PLT1M-C186	Miniature	99	2.5	22	18	100	23T0261	29.39
● PLT2I-C186	Interm-ediate	203	3.6	51	40	100	24T4731	41.27
● PLT2S-C186	Standard	186	4.8	47	30	100	23T0262	35.04
● PLT4S-C186	Standard	366	4.8	102	30	100	23T0267	81.39
● PLT4H-L186	Light-Heavy	368	7.6	102	120	50	23T0266	60.18

➤ CONTINUED ➤

PAN-TY METAL DETECTABLE CABLE TIES (CONT.)

Mfg. Part No.	Cross Section	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Min. Loop Tensile Strength (lbs.)	Pkg. of	Stock No.	Price per Pkg. 1-2
Nylon 6.6 metal detectable cable ties and mounts are an excellent solution for general-purpose maintenance and repair applications. Ideal for use in control panels and overhead cable runs. Max. continuous use temperature per test method UL 746B: 185°F (85°C).								
PLT3S-C86	Standard	291	4.8	76	50	100	72P2465	65.05
PLT3H-L86	Light-Heavy	290	7.6	76	120	50	17T6856	51.40

(166558)

PAN-TY RELEASABLE CABLE TIES

RoHS Compliant Available

PANDUIT®

- Extended release tab permits easy release and re-use where changes are anticipated during development, production, or servicing in the field
- To release, grasp the head of the cable tie, deflect release tab, and pull the cable tie away from the bundle

Pan-Ty® releasable cable ties are constructed of durable Nylon 6.6. Color: natural. Also available in black, weather-resistant nylon; *go online or call.* UL listed, UL recognized.

Mfg. Part No.	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Min. Loop Tensile Strength (lbs.)	Pkg. of	Stock No.	Price per Pkg. 1-2
PRT1S-C	122	4.8	25	50	100	99B2021	36.09
PRT1.5S-M	160	4.8	38	50	1000	89F225	180.51
PRT2S-C	188	4.8	48	50	100	78F515	45.75
PRT2S-M	188	4.8	48	50	1000	84F2186	181.16
PRT3S-C	292	4.8	38	50	100	94F2858	73.85
PRT3S-M	292	4.8	78	50	1000	94F5607	464.93
PRT4S-C	368	4.8	102	50	100	94F3133	94.93
PRT4S-M	368	4.8	102	50	1000	94F5717	530.83
PRT2H-L	213	7.6	51	80	50	29H3059	48.68
PRT3H-TL	290	7.6	76	80	250	66H3292	248.74
PRT4H-L	368	7.6	102	80	50	94F2859	60.24
PRT4H-TL	368	7.6	102	80	250	22C0962	245.25

(13157)

PAN-TY WING PUSH MOUNT CABLE TIES

RoHS Compliant Available

PANDUIT®

- Used to attach a bundle to another surface such as a flat panel
- Anchor is easily pressed into pre-drilled hole and locks in place
- Wings provide constant tension for a stable, secure and rattle-free installation

Pan-Ty® wing push mount cable ties are constructed of Nylon 6.6. Color: natural. UL recognized.

Mfg. Part No.	Lgth. (mm)	Width (mm)	Max. Bundle Dia. (mm)	Min. Loop Tensile Strgth. (lbs.)	Pkg. of	Stock No.	Price per Pkg. 1-2
PLWP1M-C	109	2.5	22	18	100	89F1174	29.64
PLWP1S-C	132	4.8	25	50	100	89F1175	36.43

(91145)

PAN-TY CLAMP TIES

RoHS Compliant Available

PANDUIT®

- Used to secure cable bundle to another surface such as a control panel, communication rack, wall or ceiling
- Design allows for bundling before or after screwing clamp in place
- Curved tip is easy to pick up from flat surfaces, allows faster initial threading and speeds installation

Pan-Ty® clamp ties are constructed of durable Nylon 6.6. Color: natural. Also available in weather resistant and heat stabilized materials; *go online or call.* UL listed, UR recognized.

Mfg. Part No.	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Min. Loop Tensile Strength (lbs.)	Screw Size	Pkg. of	Stock No.	Price per Pkg. 1-2
PLC1M-S4-C	109	2.5	19	18	#4	100	94F3118	32.38
PLC1.5I-S8-C	155	3.4	32	40	#8	100	94F3117	32.58
PLC1.5I-S8-M	155	3.4	32	40	#8	1000	84F1323	264.20
PLC2S-S6-C	201	4.8	47	50	#6	100	94F3119	34.32

CONTINUED

PAN-TY CLAMP TIES (CONT.)

Mfg. Part No.	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Min. Loop Tensile Strength (lbs.)	Screw Size	Pkg. of	Stock No.	Price per Pkg. 1-2
PLC2S-S10-C	201	4.8	47	50	#10	100	78F512	39.29
PLC2S-S10-M	201	4.8	47	50	#10	1000	78F542	269.23
PLC3S-S10-C	305	4.8	76	50	#10	100	84F1325	91.37
PLC4S-S10-C	381	4.8	102	50	#10	100	84F1326	100.79
PLC4S-S10-M	381	4.8	102	50	#10	1000	84F1979	660.76
PLC2H-S25-L	229	7.6	51	120	¼	50	99B6637	48.74
PLC4H-S25-L	384	7.6	102	120	¼	50	89F223	58.19
PLC4H-S25-TL	384	7.6	102	120	¼	250	48F6576	238.05

(13162)

PAN-TY CABLE TIES

RoHS Compliant Available

PANDUIT®

- Large selection of sizes
- One-piece construction
- Locking design provides consistent performance and reliability
- Low threading force
- Curved tip design allows for easy pick up, faster initial threading and installation

Pan-Ty® cable ties are constructed of durable Nylon 6.6. Color: natural. Also available in additional sizes, styles, colors and materials; *go online or call.* UL listed (except where noted), UL recognized.

Mfg. Part No.	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Min. Loop Tensile Strength (lbs.)	Pkg. of	Stock No.	Price per Pkg. 1-2
PLT.7M-C	79	2.3	17	18	100	89F229	13.34
PLT.7M-M	79	2.3	17	18	1000	89F230	38.60
PLT1M-C	99	2.5	22	18	100	78F506	17.16
PLT1M-M	99	2.5	22	18	1000	78F536	45.00
PLT1.5M-C	142	2.5	32	18	100	78F580	22.04
PLT1.5M-M	142	2.5	32	18	1000	78F586	76.09
PLT2M-C	203	2.5	51	18	100	78F581	22.13
PLT2M-M	203	2.5	51	18	1000	78F587	73.47
PLT1.5I-C	142	3.6	35	40	100	78F507	19.10
PLT1.5I-M	142	3.6	35	40	1000	78F537	75.21
PLT2I-C	203	3.6	51	40	100	78F582	28.87
PLT2I-M	203	3.6	51	40	1000	78F588	96.14
PLT2.5I-M	246	3.7	84	40	1000	48F6955	190.88
PLT3I-C	290	3.7	76	40	100	78F584	36.03
PLT3I-M	290	3.7	76	40	1000	78F590	204.71
PLT4I-C	368	3.7	102	40	100	78F585	50.53
PLT4I-M	368	3.7	102	40	1000	78F611	292.20
PLT1.5S-C	157	4.8	38	50	100	78F583	24.06
PLT1.5S-M	157	4.8	38	50	1000	78F589	105.70
PLT2S-C	188	4.8	48	50	100	78F508	24.14
PLT2S-M	188	4.8	48	50	1000	78F538	101.16
PLT3S-C	292	4.8	76	50	100	78F509	49.29
PLT3S-M	292	4.8	76	50	1000	78F539	268.80
PLT4S-C	368	4.8	102	50	100	78F510	55.55
PLT4S-M	368	4.8	102	50	1000	78F540	300.41
PLT5S-C	445	4.8	127	50	100	94F2849	81.13
PLT5S-M	445	4.8	127	50	1000	94F3127	420.74
PLT6LH-C	556	7.6	152	120	100	95F3558	92.99
PLT7LHC	627	7.6	178	120	100	98F1691	106.74
PLT9LH-L	775	7.6	262	120	50	50F2901	78.80
PLT9LH-C	775	7.6	262	120	100	84F1320	134.86
PLT10LH-L	871	7.6	262	120	50	98F6614	108.28
PLT4H-L	368	7.6	102	120	50	78F511	40.48
PLT4H-TL	368	7.6	102	120	250	90F1729	149.82
PLT5H-C*	450	8.9	127	175	100	27C1280	101.79
PLT5H-L*	450	8.9	127	175	50	95B0147	66.49
PLT6H-L*	530	8.9	152	175	50	66H2868	73.96
PLT8H-L*	779	8.9	229	175	50	70B458	95.77
PLT13H-Q*	1.1+	8.9	330	175	25	06H2959	78.33

*UL recognized only; +m
(6501)

WIRE & CABLE TIES

STAINLESS STEEL CABLE TIE MOUNTS

RoHS Compliant Available

PANDUIT®

Provides an entire stainless steel attachment when used with Pan-Steel® stainless steel cable ties, *order separately on page 1272*. Screw-fastened. Low profile design. Utilizes only one hole for mounting. **Sold in packages of 100.**

Mfg. Part No.	For Use with Pan-Steel® Cable Ties	Mounting Method	Size (in.)	Stock No.	Price per Pkg. 1-2
● MTM1H-C	MLT-S/LH/H	#8 Screw	0.4 x 0.9	96F3458	117.91
● MTM1H10-C	MLT-S/LH/H	#10 Screw	0.4 x 0.9	95F5452	118.52
● MTM1H25-C	MLT-S/LH/H	¼″ Screw	0.4 x 0.9	95F5453	146.32

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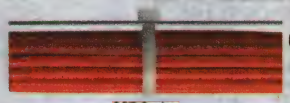
STA-STRAP CABLE, CLAMP AND MARKER TIES

RoHS Compliant Available

PANDUIT®

c UL us

SSC Series



SST Series

SSM Series

- Exclusive two-piece design offers low thread force
- Releasable prior to final tensioning and cut-off
- Small head height allows more efficient use of space in compact areas

Sta-Strap® cable ties are ideal for normal bundling and thru-panel applications. Sta-Strap® clamp ties can be pre-mounted before tying bundle. Sta-Strap® marker ties can be used as a wrap-around or as a flag marker to fasten and identify bundles at the same time. **Sold in packages quantities listed in table below.**

STA-STRAP® CABLE TIES

Mfg. Part No.	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Min. Loop Tensile Strength (lbs.)	Pkg. of	Stock No.	Price per Pkg. 1-2
● SST1M-C	102	2.4	20	18	100	78F516	21.27
● SST1.5M-C	140	2.4	32	18	100	78F517	27.09
● SST1.5M-M	140	2.4	32	18	1000	78F530	91.13
● SST1.5I-C	137	3.4	32	40	100	90F5901	24.01
● SST1.5I-M	137	3.4	32	40	1000	78F610	97.88
● SST2I-C	206	3.4	51	40	100	78F518	37.30
● SST3I-C	279	3.4	76	40	100	78F519	50.41
● SST3I-M	279	3.4	76	40	1000	78F532	255.28
● SST4I-C	375	3.4	102	40	100	78F521	65.32
● SST2S-C	172	4.6	45	50	100	78F609	30.76
● SST2S-M	172	4.6	45	50	1000	78F685	130.21
● SST3S-C	279	4.6	76	50	100	78F520	62.98
● SST4S-M	381	4.6	102	50	1000	89F1182	376.42
● SST4H-D	376	7.6	102	120	500	78F535	391.40
● SST8H-L	699	7.6	203	120	50	78F523	118.65
● SST8H-D	699	7.6	203	120	500	90F1726	919.64

STA-STRAP® CLAMP TIES

Mfg. Part No.	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Min. Loop Tensile Strength (lbs.)	Screw Size	Pkg. of	Stock No.	Price per Pkg. 1-2
● SSC2S-S10-C	187	4.6	45	50	#10	100	78F524	53.06
● SSC4H-S25-L	395	7.6	102	120	1/4″	50	78F526	86.10

STA-STRAP® MARKER TIES

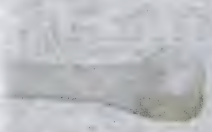
Mfg. Part No.	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Min. Loop Tensile Strength (lbs.)	Write-On Area (in.)	Pkg. of	Stock No.	Price per Pkg. 1-2
● SSM2S-C	170	4.6	45	50	0.44 x 0.96	100	78F527	102.99
● SSM2S-D	170	4.6	45	50	0.44 x 0.96	500	78F504	291.80

(73911)

SUPER-GRIP™ CABLE TIES AND MOUNTS

RoHS Compliant Available

PANDUIT®



Super-Grip™ Cable Tie

SGABM20-A-C

SGABM25-A-C

SGABM30-A-C

SGABM40-A-L

SGTA1S8-C

Innovative Solution for Bundling Wire and Cable

- High grip strength grips tight preventing ties from moving laterally along length of bundle
- Thin, wide strap body improves tie flexibility while maintaining loop tensile strength
- Flared neck and strong locking wedge provides improved strength for rough installation and excellent small bundle performance
- Tapered tip with aggressive grips thread easily and alows positioning prior to locking for faster, accurate installation
- Low profile tie heads and mounts help conserve space, reduces height
- Stronger bridge design allows mount to support increased installation force

Super-Grip™ cable ties and mounts are designed to withstand rough installation practices that occur in MRO and construction projects. Super-Grip™ cable ties provide superior bundle tightness, increased excellent tensile strength, and excellent strap flexibility. Super-Grip™ cable tie mounts are available in a wide variety of styles to maximize application flexibility. Constructed of durable white nylon 6.6. Also available in black weather-resistant nylon 6.6; *go online or call.*

SUPER-GRIP™ CABLE TIES

Mfg. Part No.	Cross Section	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Min. Loop Tensile Strength (lbs.)	Pkg. of	Stock No.	Price per Pkg. 1-2
● SG100M-C	Miniature	106	3	25	18	100	17T6979	15.58
● SG150I-C	Intermediate	157	4.3	38	40	100	17T6980	18.04
● SG200S-C	Standard	211	5.7	51	50	100	54K2837	22.59
● SG370S-C	Standard	389	5.7	107	70	100	17T6981	52.25
● SG450H-L	Heavy	471	9.7	132	175	50	17T6982	48.28

ADHESIVE-BACKED SUPER-GRIP™ CABLE TIE MOUNTS

Mfg. Part No.	Used with Cable Ties	Length (in.)	Width (in.)	Screw Size	Pkg. of	Stock No.	Price per Pkg. 1-2
● SGABM20-A-C	Min., Int.	0.75	0.75	...	100	04M0014	93.00
● SGABM25-A-C	Min., Int., Std.	1.00	1.00	...	100	23T0268	122.83
● SGABM30-A-C	Min., Int., Std.	1.12	1.12	...	100	23T0270	127.37
● SGABM40-A-L	Min., Int., Std., Lt. Hvy., Hvy	1.50	1.50	...	50	23T0271	99.76
● SGABM50-A-L		2.00	2.00	...	50	23T0272	114.07
● SGABM25-S6-C	Min., Int., Std.	1.00	1.00	#6 (M3)	100	23T0269	101.80

SCREW-APPLIED SUPER-GRIP™ CABLE TIE MOUNT

● SGTA1S8-C	Min., Int., Std.	0.80	0.37	#8 (M4)	100	03M5908	42.08

(166559)

TAK-TAPE HOOK AND LOOP CABLE TIE ROLLS

RoHS Compliant Available

PANDUIT®

- Hook and loop fastener for general-purpose bundling
- Thin and flexible to quickly wrap around bundle
- Adjustable, releasable and reusable
- Cut-to-length continuous rolls

Tak-Tape™ hook and loop cable tie rolls are made of a unique material with polypropylene hooks on one side and nylon loops on the other so it fastens to itself. Color: black. **Mfg. part nos. TTS-20R0 sold in single 6.1m rolls, TTS-35R3-0 sold in packages of three 10.7m rolls, and TTS-35RX0 sold in packages of ten 10.7m rolls.**

Mfg. Part No.	Roll Length (m)	Width (mm)	Max. Bundle Dia.	Min. Loop Tensile Strength (lbs.)	Pkg. of	Stock No.	Price Each 1-2
● TTS-20R0	6.1	19.1	Various	40	1 Roll	63H2473	17.32
● TTS-35R3-0	10.7	19.1	Various	40	3 Rolls	17T7318	90.46
● TTS-35RX0	10.7	19.1	Various	40	10 Rolls	12K5496	274.09

(83877)

TAK-TY AND TAPE-TY HOOK AND LOOP CABLE TIES

RoHS Compliant Available

PANDUIT®

8″ and 12″ Lengths — 6″, 12″, 18″ Lengths and Continuous Rolls

- Tak-Ty® — Durable polyethylene hook and nylon loop material (non-plenum use ties)
- Adjustable, releasable, and reusable
- No risk of over-tensioning or damaging high-performance copper and fiber optic cable
- Available in many styles, sizes and colors to suit a variety of applications

Tak-Ty® **HLTP** and **HLSP** style hook and loop cable ties are UL listed for plenum use in air handling spaces per NEC Section 300-22(c) and (d) and have a flammability rating of UL94V-2. Color: black. Other colors are available; go online or call. **Sold in packages of 10 ties in convenient perforated rolls of 6″, 12″, 18″ strips lengths and 8″ and 12″ loop tie lengths, except for mfg. part nos. with R0 suffix which are sold in cut-to-length continuous rolls of 15″.**

TAK-TY® HLT AND HLTP STYLES — LOOP CABLE TIES WITH SLOT FOR PREWRAPPING BUNDLES

Mfg. Part No.	Tie Length (in.)	Tie Width (in.)	Max. Bundle Dia. (in.)	Min. Loop Tensile Strength (lbs.)*	Pkg. Qty.	Stock No.	Price per Pkg. 1-2
HLT2I-X0	8	0.5	1.91	40	10	66F3595	14.33
HLT3I-X0	12	0.5	3.18	40	10	66F3596	18.61
HLTP2I-X0	8	0.5	1.91	40	10	17C1625	20.65
HLTP3I-X0	12	0.5	3.18	40	10	17C1641	26.74
TAK-TY® HLS AND HLSP STYLES — STRIP CABLE TIES							
HLS1.5S-X0	6	0.75	1.5	50	10	66F3597	12.77
HLS3S-X0	12	0.75	3.2	50	10	66F3598	21.12
HLS5S-X0	18	0.75	5	50	10	66F3599	30.72
HLSP1.5S-X0	6	0.75	1.5	50	10	16C7690	17.49

TAK-TY® HLM AND HLS STYLES — CONTINUOUS ROLL

Mfg. Part No.	Width (in.)	Max.Bundle Dia.	Min. Loop Tensile Strength (lbs.)*	Roll Length (ft.)	Stock No.	Price per Roll 1-2
HLM-15R0	0.33	Various	40	15	12K5422	20.58
HLS-15R0	0.75	Various	50	15	66F3600	29.30
HLS-75R0	0.75	Various	50	15	93B6334	117.76

TAPE-TY™ HLTT STYLE — LOW-PROFILE, PRE-CUT CABLE TIES WITH NON-SLIP LEADER

Tape-Ty™ **HLTT** style low-profile hook and loop cable ties are constructed of ultra-thin, flexible polypropylene hook and polyamide loop materials. An adhesive non-slip applicator prevents lateral movement of tie and allows tighter fastening of cable bundle. Leaves no residue and is safe to use on high-performance cabling. Pre-cut ties eliminate cutting ties to length and staging them for each job. Adjustable, releasable, and reusable. Color: black. **Sold in coreless reel of 100 cable ties.**

Mfg. Part No.	Tie Length (in.)	Tie Width (in.)	Max. Bundle Dia. (in.)	Min. Loop Tensile Strength (lbs.)*	No. of Ties Per Reel	Stock No.	Price per Reel 1-2
HLTT1.5S-C20	7	0.75	1.50	30	100	58T3930	156.74

*Minimum 2″ overlap required to achieve loop tensile rating
(12538)

ULTRA-CINCH HOOK AND LOOP TIES

RoHS Compliant Available

PANDUIT®

- Unique material with hooks and loops on same side
- User can secure a greater range of bundle diameters, including smaller bundles
- Adjustable, releasable and reusable multiple times
- Low-profile contoured cinch-ring
- Soft material used on high performance cabling to protect against over-tensioning
- Tapered tip threads easily for fast installation

UCT, UGCTE and UGCTC (Top to Bottom)

Ultra-Cinch™ hook and loop ties feature grommet on **mfg. part no. UGCTC** (center mount) and **UGCTE** (end mount) to provide reliable installations, that resists pull-out, and allows cable bundles to be securely fastened to surfaces. Color: black. Available in 7 other colors; *go online or call.* **Sold in packages of 10.**

Mfg. Part No.	Length (in.)	Width (in.)	Max. Bundle Dia. (in.)	Min. Loop Tensile Strength (lbs.)	Stock No.	Price per Pkg. 1-2
UCT3S-X0	12	0.85	3	50	95H4675	23.47
UCT5S-X0	18	0.85	5	50	95H4676	28.71
UGCTE3S-X0	12	0.85	3	50	95H4683	36.36
UGCTE5S-X0	18	0.85	5	50	95H4684	43.80
UGCTC3S-X0	12	0.85	3	50	95H4681	37.27

(79557)

WEATHER-RESISTANT PAN-TY CABLE TIES

RoHS Compliant Available

PANDUIT®

- Weather resistant — ideal for outdoor use
- Greater resistant to ultraviolet light
- High strength and low thread force
- One-piece construction for consistent performance and reliability
- Curved tip design allows for easy pick up, faster initial threading and installation

Pan-Ty® weather-resistant cable ties are constructed of Nylon 6.6. Color: black. UL listed (except where noted), UL recognized.

Mfg. Part No.	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Min. Loop Tensile Strength (lbs.)	Pkg. of	Stock No.	Price per Pkg. 1-2
PLT.7M-M0	79	2.3	17	18	1000	94F2836	56.68
PLT1M-C0	99	2.5	22	18	100	89F227	19.90
PLT1M-M30	99	2.5	22	18	1000	94F2839	60.83
PLT1.5M-C0	142	2.5	32	18	100	89F221	22.52
PLT1.5M-M30	142	2.5	32	18	1000	96F8051	85.85
PLT2M-C0	203	2.5	51	18	100	94F3126	26.06
PLT2M-M0	203	2.5	51	18	1000	94F2843	96.80
PLT1.5I-C0	142	3.6	35	40	100	89F228	21.64
PLT1.5I-M0	142	3.6	35	40	1000	89F220	93.80
PLT2I-C0	203	3.6	51	40	100	89F208	31.76
PLT2I-M0	203	3.6	51	40	1000	89F209	125.20
PLT3I-C0	290	3.7	76	40	100	96F8060	43.68
PLT3I-M0	290	3.7	76	40	1000	96F8064	250.40
PLT4I-C0	368	3.7	102	40	100	97B0621	57.77
PLT4I-M0	368	3.7	102	40	1000	70B5133	422.71
PLT1.5S-C0	157	4.8	38	50	100	96F8097	24.71
PLT1.5S-M0	157	4.8	38	50	1000	94F2837	117.12
PLT2S-C0	188	4.8	48	50	100	89F210	23.72
PLT2S-M0	188	4.8	47.8	50	1000	89F211	103.80
PLT3S-M0	292	4.8	76	50	1000	87F6097	293.00
PLT4S-C0	368.3	4.8	102	50	100	89F216	54.60
PLT4S-M0	368	4.8	102	50	1000	89F217	311.20
PLT5S-C0	445	4.8	127	50	100	97B0627	82.46
PLT5S-M0	445	4.8	127	50	1000	98B9365	522.55
PLT7LH-L0*	627	7.6	178	120	50	84F637	79.18
PLT9LH-C0*	775	7.6	262	120	100	96F8085	164.35
PLT2H-TL0*	206	7.6	51	120	250	97B0598	141.68
PLT4H-L0*	368	7.6	102	120	50	89F215	40.37
PLT4H-TL0*	368	7.6	102	120	250	90F3513	179.41
PLT5H-C0*	450	8.9	127	175	100	97B0626	127.29
PLT6H-L0*	530	8.9	152	175	50	94F3128	83.21
PLT6H-C0*	530	8.9	152	175	100	66H2866	139.59
PLT8H-C0*	779	8.9	229	175	100	97B0630	177.30

*UL recognized only
(83824)

WEATHER-RESISTANT DOME-TOP BARB TY CABLE TIES

RoHS Compliant Available

PANDUIT®

- Weather resistant — for outdoor use
- Greater resistance to ultraviolet light
- Dome-Top head features unique patented design with round, smooth edges
- Stainless steel locking barb provides consistent performance and reliability
- Infinitely adjustable for tight bundles throughout its entire bundle range
- High-strength and low thread force

Dome-Top® Barb Ty weather-resistant cable ties are constructed of Nylon 6.6. Color: black. UL listed, UL recognized (except where noted).

Mfg. Part No.	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Min. Loop Tensile Strength (lbs.)	Pkg. of	Stock No.	Price per Pkg. 1-2
BT1M-C0	102	2.4	23	18	100	97B0432	21.70
BT1M-M0	102	2.4	23	18	1000	97B0433	76.74
BT1.5M-C0	160	2.4	38	18	100	27C0723	27.76
BT1.5M-M0	160	2.4	38	18	1000	01C0380	108.15
BT2M-C0	201	2.4	51	18	100	97B0435	29.26
BT2M-M0	201	2.4	51	18	1000	97B4014	109.44
BT4M-M0	361	2.4	102	18	1000	98B8699	192.06
BT1.5I-C0	155	3.6	38	40	100	94B7864	24.04
BT1.5I-M0	155	3.6	38	40	1000	96B0914	104.80
BT2I-C0	203	3.6	51	40	100	94B7868	35.23
BT2I-M0	203	3.6	51	40	1000	97B0131	138.14
BT3I-C0	287	3.6	76	40	100	27C2290	48.81

➤CONTINUED➤

WIRE & CABLE TIES

WEATHER-RESISTANT DOME-TOP BARB TY CABLE TIES (CONT.)

Mfg. Part No.	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Min. Loop Tensile Strength (lbs.)	Pkg. of	Stock No.	Price per Pkg. 1-2
● BT2S-C0	203	4.7	51	50	100	29C7778	25.86
● BT2S-M0	203	4.7	51	50	1000	93B6413	113.15
● BT3S-C0	305	4.7	76	50	100	19C0300	52.78
● BT3S-M0	305	4.7	76	50	1000	14C7445	319.37
● BT2LH-TL0*	221	7	51	120	250	65H8731	141.63
● BT3LH-L0*	300	7	76	120	50	65H7807	40.17
● BT4LH-L0*	378	7	102	120	50	65H8754	41.08
● BT4LH-TL0*	378	7	102	120	250	65H8755	179.41
● BT5LH-C0*	460	7	127	120	100	97B3368	90.26
● BT6LH-C0*	538	7	152	120	100	35C5297	104.20
● BT9LH-C0*	780	7	229	120	100	01C7196	162.48

*Not UL listed or UL recognized
(83911)

DOUBLE-SIDED, DOUBLE-LOCKING CABLE TIES

RoHS Compliant Available pro-POWER

Natural

Black UV-Resistant

- Double-locking molded teeth design on both sides of tie provides greater tensile strength
- Availble in popular natural or ultraviolet black
- Black ties resist degradation by UV rays -- great for outdoor use
- Meets UL94V-2 flammability classification
- UL recognized component listing E125869

NATURAL NYLON TIES

Flexible double-sided, double-locking cable ties are great for bundling wire, cable, hoses, duct and countless other applications. Constructed from durable nylon 6/6 material. Serviceable in temperatures of -40° to +185°F (40° to 85°C).

Mfg. Part No.	Length (in.)	Bundle Diameter (in.)	Tensile Strength (lbs.)	Pkg. of	Stock No.	Price per Pkg. 1-4
● SPC25006	8	2	75	100	06P9588	5.39
● SPC25007	11	3	75	100	06P9589	7.95
● SPC25008	14	4	75	100	06P9591	11.18
● SPC23773	14	4	75	1000	08N8169	79.13
● SPC25009	15	4	120	50	06P9593	15.17
BLACK UV-RESISTANT NYLON TIES						
● SPC23817	11	3	75	100	11N6784	8.56

(74116)

NYLON CABLE TIE ASSORTMENTS

RoHS Compliant Available pro-POWER

SPC35325

SPC35326

SPC35327

Mfg. part no. SPC35325 500-pc. standard nylon cable tie assortment includes: 200 4″ long, 18-lb. tensile strength ties consisting of 100 in natural and 25 each in red, blue, yellow and black; 200 5.5″ long, 40-lb. tensile strength ties consisting of 100 each in natural and black; and 100 7″ long, 40-lb. tensile strength ties consisting of 50 each in natural and black. All packaged in a handy storage container.

Mfg. Part No.	Description	Stock No.	Price Each
● SPC35325	500-Pc. Cable Tie Assortment	71R4604	14.70

Mfg. part no. SPC3536 650-pc. standard nylon cable tie assortment includes: 300 4″ long, 18-lb. tensile strength ties consisting of 100 in natural and 50 each in red, blue, yellow and green; 300 8″ long, 18-lb. tensile strength ties in natural; and 50 11″ long, 50-lb. tensile strength ties in natural. All packaged in a handy storage container.

● SPC35326	650-Pc. Cable Tie Assortment	71R4605	21.48

➤CONTINUED➤

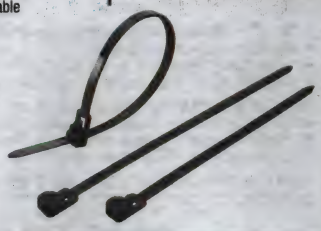
NYLON CABLE TIE ASSORTMENTS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
Mfg. part no. SPC3537 400-pc. neon-colored standard nylon cable tie assortment includes: 200 4″ long, 18-lb. tensile strength ties consisting of 50 each in neon pink, neon orange, neon green and neon yellow; 100 6″ long, 40-lb. tensile strength ties consisting of 25 each in neon pink, neon orange, neon green and neon yellow; and 100 8″ long, 18-lb. tensile strength ties consisting of 25 each in neon pink, neon orange, neon green and neon yellow. All neatly packaged in a convenient storage case.			
● SPC35327	400-Pc. Neon-Colored Cable Tie Assortment	71R4606	21.01

(176228)

RELEASABLE NYLON CABLE TIES

RoHS Compliant Available pro-POWER



- Releasable and reusable
- Adjustable for tight, secure bundles
- Durable nylon construction
- Fast and easy installation

These releasable nylon cable ties permit easy release and reuse making them ideal for use where changes are anticipated, such as development, production or servicing in the field. Color: black. **Sold in packages of 100.**

Mfg. Part No.	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Tensile Strength (lbs.)	Pkg. of	Stock No.	Price per Pkg.
● SPC35320	125	4.5	25	50	100	71R4599	13.85
● SPC35321	150	4.5	35	50	100	71R4600	15.69
● SPC35322	200	4.5	50	50	100	71R4601	17.78
● SPC35323	250	4.5	65	50	100	71R4602	27.29
● SPC35324	300	4.5	80	50	100	71R4603	6.99

(176225)

STAINLESS STEEL CABLE TIES

RoHS Compliant Available pro-POWER

- Most popular sizes and tensile strengths
- Rugged stainless steel (304) construction
- Designed for high-temperature applications
- Made tough to handle severe environmental conditions
- Adjustable for tight, secure bundles
- Fast and easy installation
- **Sold in packages of 100**

Mfg. Part No.	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Tensile Strength (lbs.)	Pkg. of	Stock No.	Price per Pkg.
● SPC35309	201	4.6	51	220	100	71R4588	83.03
● SPC35310	266	4.6	69	220	100	71R4589	125.58
● SPC35311	300	4.6	80	220	100	71R4590	131.04
● SPC35312	362	4.6	102	220	100	71R4591	139.78
● SPC35313	521	4.6	152	220	100	71R4592	162.14
● SPC35314	127	7.9	25	550	100	71R4593	125.58
● SPC35315	201	7.9	51	550	100	71R4594	145.37
● SPC35316	266	7.9	69	550	100	71R4595	156.55
● SPC35317	300	7.9	80	550	100	71R4596	167.73
● SPC35318	362	7.9	102	550	100	71R4597	178.91
● SPC35319	521	7.9	152	550	100	71R4598	178.60

(176222)

STANDARD NYLON CABLE TIES

RoHS Compliant Available pro-POWER

- Large selection of sizes and tensile strengths
- Durable nylon construction
- Adjustable for tight, secure bundles
- Fast and easy installation

Natural

Black

Perfect for indoor general-purpose applications, these standard nylon cable ties come in popular natural or black. **Sold in package quantities indicated in tables below.**

NATURAL

Mfg. Part No.	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Tensile Strength (lbs.)	Pkg. of	Stock No.	Price per Pkg.
● SPC35190	80	2.4	16	18	100	71R4469	2.10
● SPC35211	80	2.4	16	18	1000	71R4490	13.92
● SPC35191	100	2.5	22	18	100	71R4470	2.10

➤CONTINUED➤

STANDARD NYLON CABLE TIES (CONT.)

Mfg. Part No.	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Tensile Strength (lbs.)	Pkg. of	Stock No.	Price per Pkg.
SPC35212	100	2.4	22	18	1000	71R4491	15.80
SPC35192	142	2.4	35	18	100	71R4471	3.89
SPC35213	142	2.4	35	18	1000	71R4492	29.04
SPC35193	165	2.4	43	18	100	71R4472	5.59
SPC35214	165	2.4	43	18	1000	71R4493	34.26
SPC35194	203	2.4	55	18	100	71R4473	5.69
SPC35215	203	2.4	55	18	1000	71R4494	35.26
SPC35195	142	3.2	34	40	100	71R4474	5.49
SPC35216	142	3.2	34	40	1000	71R4495	35.26
SPC35196	203	3.6	53	40	100	71R4475	7.58
SPC35217	203	3.6	53	40	1000	71R4496	49.68
SPC35197	250	3.6	68	40	100	71R4476	11.94
SPC35218	250	3.6	68	40	1000	71R4497	79.90
SPC35198	292	3.6	82	40	100	71R4477	14.11
SPC35219	292	3.6	82	40	1000	71R4498	93.38
SPC35199	368	3.6	105	40	100	71R4478	14.64
SPC35200	160	4.8	39	50	100	71R4479	7.19
SPC35220	160	4.8	39	50	1000	71R4499	46.17
SPC35201	190	4.8	49	50	100	71R4480	8.50
SPC35221	190	4.8	49	50	1000	71R4500	56.23
SPC35202	203	4.8	52	50	100	71R4481	8.95
SPC35222	203	4.8	52	50	1000	71R4501	59.55
SPC35203	300	4.8	83	50	100	71R4482	15.14
SPC35204	368	4.8	105	50	100	71R4483	19.59
SPC35205	450	4.8	131	50	100	71R4484	32.76
SPC35206	550	4.8	162	50	100	71R4485	55.87
SPC35207	203	7.6	52	120	100	71R4486	20.91
SPC35208	300	7.6	80	120	100	71R4487	29.02
SPC35209	380	7.6	105	120	100	71R4488	42.46
SPC35210	450	8	128	175	100	71R4489	57.16
BLACK							
SPC35224	80	2.4	16	18	100	71R4503	2.10
SPC35245	80	2.4	16	18	1000	71R4524	13.44
SPC35225	100	2.4	22	18	100	71R4504	2.10
SPC35246	100	2.4	22	18	1000	71R4525	16.16
SPC35226	142	2.4	35	18	100	71R4505	3.94
SPC35247	142	2.4	35	18	1000	71R4526	25.19
SPC35227	165	2.4	43	18	100	71R4506	5.53
SPC35248	165	2.4	43	18	1000	71R4527	34.26
SPC35228	203	2.4	55	18	100	71R4507	5.43
SPC35249	203	2.4	55	18	1000	71R4528	35.97
SPC35229	142	3.2	34	40	100	71R4508	5.30
SPC35250	142	3.2	34	40	1000	71R4529	36.32
SPC35230	203	3.6	53	40	100	71R4509	7.58
SPC35251	203	3.6	53	40	1000	71R4530	56.69
SPC35231	250	3.6	68	40	100	71R4510	12.08
SPC35252	250	3.6	68	40	1000	71R4531	79.89
SPC35232	292	3.6	82	40	100	71R4511	14.11
SPC35253	292	3.6	82	40	1000	71R4532	93.41
SPC35233	368	3.6	105	40	100	71R4512	14.64
SPC35234	160	4.8	39	50	100	71R4513	7.19
SPC35254	160	4.8	39	50	1000	71R4533	46.17
SPC35235	190	4.8	49	50	100	71R4514	8.50
SPC35255	190	4.8	49	50	1000	71R4534	56.23
SPC35236	203	4.8	52	50	100	71R4515	9.27
SPC35256	203	4.8	52	50	1000	71R4535	61.34
SPC35237	300	4.8	83	40	100	71R4516	15.14
SPC35238	368	4.8	105	50	100	71R4517	17.66
SPC35239	450	4.8	131	50	100	71R4518	33.78
SPC35240	550	4.8	162	50	100	71R4519	54.24
SPC35241	203	7.6	52	120	100	71R4520	20.91
SPC35257	203	7.6	52	120	1000	71R4536	134.35
SPC35242	300	7.6	80	120	100	71R4521	29.89
SPC35243	380	7.6	105	120	100	71R4522	42.88
SPC35244	450	8	128	175	100	71R4523	57.16

(176213)

WEATHER-RESISTANT NYLON CABLE TIES

RoHS Compliant Available

pro-POWER

- Ideal for outdoor use
- Resistance to UV light
- Large selection of sizes and tensile strengths
- Durable weather-resistant nylon
- Adjustable for tight, secure bundles
- Fast and easy installation

These weather-resistant cable ties are constructed of durable nylon with Carbonate A added for a greater resistance to ultra violet light. Color: black. **Sold in package quantities indicated in tables below.**

Mfg. Part No.	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Tensile Strength (lbs.)	Pkg. of	Stock No.	Price per Pkg.
SPC35258	75	2.4	15	18	100	71R4537	2.41
SPC35288	75	2.4	15	18	1000	71R4567	15.42
SPC35259	100	2.4	22	18	100	71R4538	2.48
SPC35289	100	2.4	22	18	1000	71R4568	16.41
SPC35290	120	2.4	28	18	1000	71R4569	26.42
SPC35260	142	2.4	35	18	100	71R4539	4.36
SPC35291	142	2.4	35	18	1000	71R4570	29.84
SPC35261	160	2.4	43	18	100	71R4540	6.01
SPC35292	160	2.4	43	18	1000	71R4571	39.79
SPC35262	203	2.4	55	18	100	71R4541	6.25
SPC35293	203	2.4	55	18	1000	71R4572	40.56
SPC35263	400	3.175	116	18	100	71R4542	19.54
SPC35264	120	3.175	28	40	100	71R4543	4.87
SPC35265	142	3.175	34	40	100	71R4544	6.10
SPC35294	142	3.175	34	40	1000	71R4573	40.56
SPC35266	150	3.6	36	40	100	71R4545	6.54
SPC35295	150	3.6	36	40	1000	71R4574	43.76
SPC35267	180	3.6	46	40	100	71R4546	8.72
SPC35296	180	3.6	46	40	1000	71R4575	57.69
SPC35268	203	3.175	53	40	100	71R4547	8.62
SPC35297	203	3.175	53	40	1000	71R4576	57.69
SPC35269	250	3.6	68	40	100	71R4548	13.88
SPC35298	250	3.6	68	40	1000	71R4577	91.87
SPC35270	265	3.6	68	40	100	71R4549	13.93
SPC35299	265	3.6	68	40	1000	71R4578	95.48
SPC35271	292	3.6	82	40	100	71R4550	16.22
SPC35300	292	3.6	82	40	1000	71R4579	106.79
SPC35272	330	3.6	93	40	100	71R4551	16.54
SPC35273	368	3.6	105	40	100	71R4552	16.25
SPC35301	120	4.8	22	50	1000	71R4580	46.87
SPC35275	160	4.8	39	50	100	71R4554	8.28
SPC35302	160	4.8	39	50	1000	71R4581	53.13
SPC35276	190	4.8	49	50	100	71R4555	9.78
SPC35303	190	4.8	49	50	1000	71R4582	64.65
SPC35277	203	4.8	52	50	100	71R4556	10.54
SPC35304	203	4.8	52	50	1000	71R4583	69.85
SPC35278	250	4.8	68	50	100	71R4557	16.54
SPC35305	250	4.8	68	50	1000	71R4584	108.78
SPC35279	280	4.8	77	50	100	71R4558	16.82
SPC35306	280	4.8	77	50	1000	71R4585	111.96
SPC35280	310	4.8	86	50	100	71R4559	18.96
SPC35281	368	4.8	105	50	100	71R4560	21.05
SPC35282	450	4.8	131	50	100	71R4561	38.46
SPC35283	203	7.6	52	120	100	71R4562	24.05
SPC35307	203	7.6	52	120	1000	71R4586	158.22
SPC35284	240	7.6	61	120	100	71R4563	26.85
SPC35308	240	7.6	61	120	1000	71R4587	178.69
SPC35285	300	7.6	80	120	100	71R4564	34.38
SPC35286	340	7.6	92	120	100	71R4565	41.43
SPC35287	380	7.6	105	120	100	71R4566	48.84

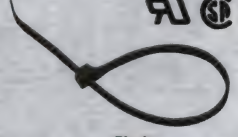
(176224)

NYLON CABLE TIES

pro-POWER

- Large selection of sizes
- Durable nylon 6.6 construction
- Easily adjustable for tight, secure bundles
- UL94V-2 flammability rated
- UL recognized, CSA certified

Natural



Black

Choose general-purpose cable ties for indoor applications in popular natural and black, black weather-resistant cable ties for outdoor use. Releasable cable ties that permit easy release and reuse are also available in natural and black; *go online or call.* **Sold in package quantities indicated in tables below.**

➤CONTINUED➤

WIRE & CABLE TIES

NYLON CABLE TIES (CONT.)

GENERAL-PURPOSE NYLON CABLE TIES — NATURAL

Mfg. Part No.	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Tensile Strength (lbs.)	Pkg. of	Stock No.	Price per Pkg. 1-4
CBBR6666	99.06	2.489	21.717	18	100	04N9652	3.58
CBBR6672	142.24	3.2	35.052	18	100	04N9655	6.94
CBBR6690	369.824	3.607	107.696	18	100	04N9669	16.98
CBBR6681	202.946	3.607	53.543	40	100	04N9660	11.76
CBBR6686	299.974	3.607	82.804	40	100	04N9665	17.40
CBBR6688	299.72	4.801	85.344	40	100	04N9667	20.01
CBBR6689	299.72	4.801	85.344	40	1000	04N9668	125.26
CBBR6682	202.946	3.607	53.543	40	1000	04N9661	84.51
CBBR6683	202.946	4.572	53.543	50	100	04N9662	15.99
CBBR6684	202.946	4.572	53.543	50	1000	04N9663	122.20
CBBR6692	369.824	4.801	107.696	50	100	04N9670	21.86
CBBR6693	369.824	4.801	107.696	50	1000	04N9671	148.74
CBBR6677	179.832	4.8	40.818	50	1000	04N9657	105.36

GENERAL-PURPOSE NYLON CABLE TIES — BLACK

CBBR6697	99.06	2.489	21.717	18	100	04N9675	3.61
CBBR7244	142.24	3.479	35.052	18	100	04N9680	6.85

➤ CONTINUED ➤

NYLON CABLE TIES (CONT.)

GENERAL-PURPOSE NYLON CABLE TIES — BLACK

Mfg. Part No.	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Tensile Strength (lbs.)	Pkg. of	Stock No.	Price per Pkg. 1-4
CBBR7245	142.24	3.479	35.052	18	1000	04N9681	45.45
CBBR7247	160.02	2.489	42.418	18	100	04N9683	4.59
CBBR7250	199.898	2.489	53.34	18	100	04N9686	7.28
CBBR7251	199.898	2.489	53.34	18	1000	04N9687	55.91
CBBR7258	299.72	3.607	82.804	40	100	04N9693	18.20
CBBR7259	299.72	3.607	82.804	40	1000	04N9694	145.93
CBBR7256	202.946	4.572	53.543	40	1000	04N9691	129.78
CBBR7261	299.72	4.496	85.344	50	1000	48P5299	127.74
CBBR7265	373.126	4.801	107.696	50	1000	04N9699	153.61
CBBR7268	499.872	4.699	149.073	50	100	04N9702	34.22
CBBR7252	199.898	6.782	53.34	120	100	04N9688	25.46

WEATHER-RESISTANT NYLON CABLE TIES — BLACK

Mfg. Part No.	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Tensile Strength (lbs.)	Pkg. of	Stock No.	Price per Pkg. 1-4
CBBR7711	292.1	3.607	82.804	40	100	04N9712	20.97

(115448)

VRT, VHRT, VHST, VUVT AND VTZT SERIES CABLE TIES

MADE IN USA · RoHS Compliant Available · pro-POWER

VRT series is for general-purpose indoor applications. UL94V-2 rated flammability. –40°F to +185°F continuous temp. range. **VUVT series** is for general-purpose outdoor applications. UL94V-2 rated flammability. –40°F to +185°F continuous temperature range. **VHST series** for higher-temp., indoor applications. UL94V-2 rated flammability. –40°F to +220°F continuous temp. range. **VTZT series** are for high-temp., chemical, radiation applications. –50°F to +302°F continuous temp. range. **VHRT series** for plenum wiring applications. Low smoke density. –50°F to +248°F continuous temp. range. *Order cable tie installation tools separately; go online or call.* **Sold in packages of quantities listed below.**

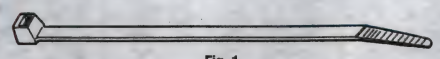


Fig. 1

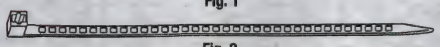


Fig. 2

VRT SERIES, NATURAL NYLON 6/6 TIES - FIG. 1

Bundle Diameter	Tensile Strength	Length	Width	Mfg. Part No.	Pkg. of	Stock No.	Price per Pkg. 1-2	Mfg. Part No.	Pkg. of	Stock No.	Price per Pkg. Each
⅝″	18 lbs.	3⅜″	0.08″	● VRT-05M-C	100	81N1693	6.34	● VRT-05M-M	1000	81N1692	42.17
¾″	18 lbs.	4″	0.10″	● VRT-06M-C	100	78N506	6.22	● VRT-06M-M	1000	78N536	40.72
1¼″	18 lbs.	5¾″	0.10″	● VRT101M-C	100	84N1531	11.86	● VRT101M-M	1000	84N1532	75.13
2″	18 lbs.	8″	0.10″	● VRT-11M-C	100	78N517	11.80	● VRT-11M-M	1000	78N530	70.05
1¼″	30 lbs.	6″	0.14″	● VRT-10I-C	100	78N507	12.02	● VRT-10I-M	1000	78N537	79.97
2″	40 lbs.	8½″	0.15″	● VRT-16S-C	100	78N508	19.19	● VRT-16S-M	1000	78N538	136.68
3″	40 lbs.	11½″	0.15″	● 8409-0379	100	16N869	38.99	● 8409-0382	1000	16N872	249.32
4″	40 lbs.	14½″	0.15″	● 8409-0385	100	16N875	38.38	● 8409-0388	1000	16N878	273.36
1¾″	50 lbs.	8″	0.18″	● VRT-16I-C	100	78N518	18.57	● VRT-16I-M	1000	78N531	123.59
3″	50 lbs.	11¾″	0.18″	● VRT-22S-C	100	78N509	43.84	● VRT-22S-M	1000	78N539	293.24
4″	50 lbs.	15½″	0.18″	● VRT-36S-C	100	78N510	45.60	● VRT-36S-D	500	78N540	135.72
4″	120 lbs.	15¼″	0.30″	● VRT-34H-L	50	78N511	41.95	● VRT-34H-C	100	78N541	104.40
6″	175 lbs.	21″	0.35″	● 8409-0340	25	16N830	29.18	...	...	...	...
8¾″	120 lbs.	29¾″	0.30″	● 8409-0338	50	16N828	53.22	...	...	...	...

VUVT SERIES, BLACK WEATHER-RESISTANT NYLON 6/6 TIES - FIG. 1

Bundle Diameter	Tensile Strength	Length	Width	Mfg. Part No.	Pkg. of	Stock No.	Price per Pkg. 1-2	Mfg. Part No.	Pkg. of	Stock No.	Price per Pkg. Each
⅝″	18 lbs.	3⅜″	0.10″	● VUVT-05M-C	100	46N2670	6.56	● VUVT-05M-M	1000	46N2679	44.49
¾″	18 lbs.	4″	0.10″	● VUVT-06M-C	100	46N2671	5.90	● VUVT-06M-M	1000	46N2680	40.72
2″	18 lbs.	8″	0.10″	● VUVT-11M-C	100	46N2672	11.58	● VUVT-11M-M	1000	46N2681	75.87
1¼″	30 lbs.	6″	0.14″	● VUVT-10I-C	100	46N2673	12.02	● VUVT-10I-M	1000	46N2682	79.97
2″	40 lbs.	8½″	0.15″	● VUVT-16S-C	100	46N2675	19.77	● VUVT-16S-M	1000	46N2684	118.73
3″	40 lbs.	11½″	0.15″	● 8409-0380	100	16N870	38.27	● 8409-0383	1000	16N873	231.88
4″	40 lbs.	14½″	0.15″	● 8409-0386	100	16N876	41.52	● 8409-0389	1000	16N879	279.92
1¾″	50 lbs.	8″	0.18″	● VUVT-16I-C	100	46N2674	19.19	● VUVT-16I-M	1000	46N2683	128.22
4″	50 lbs.	15½″	0.18″	● VUVT-36S-C	100	46N2677	46.05	● VUVT-36S-D	500	46N2686	135.72
4″	120 lbs.	15¼″	0.30″	● VUVT-34H-L	50	46N2678	43.21	● VUVT-34H-C	100	46N2687	100.58
8¾″	120 lbs.	29¾″	0.30″	● 8409-0339	50	16N829	59.07	...	...	...	...

VHST SERIES, BLACK HEAT-STABILIZED NYLON 6/6 TIES - FIG. 1

Bundle Diameter	Tensile Strength	Length	Width	Mfg. Part No.	Pkg. of	Stock No.	Price per Pkg. 1-2	Mfg. Part No.	Pkg. of	Stock No.	Price per Pkg. 1-2
⅝″	18 lbs.	3⅜″	0.08″	● 8409-0365	100	16N855	6.67	● 8409-0366	1000	16N856	45.24
¾″	18 lbs.	4″	0.10″	● 8409-0367	100	16N857	6.67	● 8409-0368	1000	16N858	44.35
1¼″	18 lbs.	5¾″	0.10″	● 8409-0369	100	16N859	12.56	● 8409-0370	1000	16N860	86.52
2″	18 lbs.	8″	0.10″	● 8409-0372	100	16N862	13.11	● 8409-0374	1000	16N864	87.24
1¼″	30 lbs.	6″	0.14″	● 8409-0375	100	16N865	12.98	● 8409-0376	1000	16N866	86.02
2″	40 lbs.	8½″	0.15″	● 8409-0377	100	16N867	21.52	● 8409-0378	1000	16N868	143.22
3″	40 lbs.	11½″	0.15″	● 8409-0381	100	16N871	42.59	● 8409-0384	1000	16N874	276.99
4″	40 lbs.	14½″	0.15″	● 8409-0387	100	16N877	42.59	...	...	...	...
1¾″	50 lbs.	8″	0.18″	● 8409-0391	100	16N881	20.53	● 8409-0392	1000	16N882	143.22

➤ CONTINUED ➤

VRT, VHRT, VHST, VUVT AND VTZT SERIES CABLE TIES (CONT.)

VHST SERIES, BLACK HEAT-STABILIZED NYLON 6/6 TIES - FIG. 1

Bundle Diameter	Tensile Strength	Length	Width	Mfg. Part No.	Pkg. of	Stock No.	Price per Pkg. 1-2	Mfg. Part No.	Pkg. of	Stock No.	Price per Pkg. Each
3″	50 lbs.	11¾″	0.18″	8409-0393	100	16N883	46.45	8409-0394	1000	16N884	303.16
4″	50 lbs.	15½″	0.18″	8409-0395	100	16N885	51.18	8409-0396	500	16N886	145.05

VTZT SERIES, AQUA BLUE TEFZEL® TIES - FIG. 1

Mfg. Part No.	Bundle Dia.	Tensile Strength	Length	Width	Pkg. of	Stock No.	Price per Pkg. 1-4
8409-0360	¾″	9 lbs.	4″	0.10″	100	16N850	149.98
8409-0361	1¾″	30 lbs.	8″	0.18″	100	16N851	283.26

VHRT SERIES, RED HALAR® TIES - FIG. 1

8409-0358	⅞″	14 lbs.	4″	0.10″	100	16N848	155.61
8409-0359	1¾″	40 lbs.	8″	0.18″	100	16N849	277.87

LADDER TIES - FIG. 2
Not tool installable.

1703	1¾″	40 lbs.	7″	0.14″	100	92N3613	17.97
1704	3″	40 lbs.	11″	0.14″	100	92N3614	54.87

(6487)

ADHESIVE-BACKED FLAT CABLE TIE HOLDERS

RoHS Compliant Available

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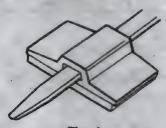
Fig. 1

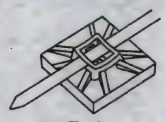
Fig. 2

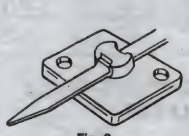
Fig. 3

Sold in package quantities indicated below.

Mfg. Part No.	Fig.	L x W	Description	Tensile Strength	Pkg. of	Stock No.	Price per Pkg. Each
VRTH-02	1	1.03 x 0.68″	2-Way/PVC	18-50 lbs.	100	23N3670	53.38
VRTH-04A	3	1.00 x 1.00″	Swivel Mount	18-50 lbs.	100	37N2110	101.18
2587	2	0.50 x 0.50″	4-Way/Nylon	18-50 lbs.	100	92N4802	53.78
2588	2	0.50 x 0.50″	4-Way/Nylon	18-50 lbs.	1000	92N4803	514.51
VRTH-05A	2	0.75 x 0.75″	4-Way/Nylon	18-50 lbs.	100	81N2596	48.44
8408-1024	2	0.75 x 0.75″	4-Way/Nylon	18-50 lbs.	1000	16N8736	487.05
VRTH-10-A	2	0.84 x 0.84″	4-Way/PVC	18-50 lbs.	100	50N4897	26.24
8413-1034	2	0.84 x 0.84″	4-Way/PVC	18-50 lbs.	1000	16N8750	238.60
VRTH-07A	2	1.00 x 1.00″	4-Way/Nylon	18-50 lbs.	100	81N2598	63.78
VRTH-12-SA	2	1.08 x 1.08″	4-Way/Nylon	18-50 lbs.	100	50N4898	34.16
2585	2	2.00 x 2.00″	4-Way/Nylon	18-120 lbs.	100	92N4800	235.81

(6361)

CABLE TIES

RoHS Compliant Available

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Fig. 1 - Screw Mount

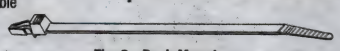


Fig. 2 - Push Mount

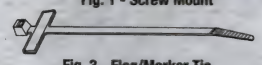


Fig. 3 - Flag/Marker Tie

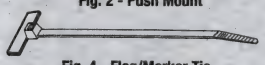


Fig. 4 - Flag/Marker Tie

Fig. 5 - Flag/Marker Tie

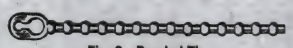


Fig. 6 - Beaded Tie

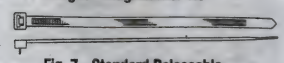


Fig. 7 - Standard Releasable

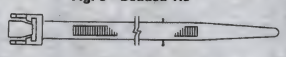


Fig. 8 - Quick Releasable

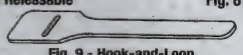


Fig. 9 - Hook-and-Loop

VMT SERIES, NATURAL NYLON 6/6 SCREW MOUNT TIES - FIG. 1
Ties secure wire bundles with a common screw and pre-drilled hole. **Sold in package quantities indicated below.**

Mfg. Part No.	Bundle Diameter	Tensile Strength	Length	Width	Screw Size	Pkg. of	Stock No.	Price per Pkg. 1-2
8409-0342	¾″	18 lbs.	4¼″	0.10″	#4	100	16N832	32.53
8409-0344	1¼″	30 lbs.	6¼″	0.14″	#8	100	16N834	35.65
8409-0347	4″	120 lbs.	16¼″	0.30″	¼″	50	16N837	36.88

VPMT SERIES, NATURAL NYLON 6/6 PUSH MOUNT TIES - FIG. 2
Ties snap into a pre-drilled hole.

Mfg. Part No.	Bundle Diameter	Tensile Strength	Length	Width	Hole Size	Pkg. of	Stock No.	Price per Pkg. 1-2
8409-0348	1¼″	30 lbs.	6½″	0.14″	0.187″	100	16N838	34.20

VFMT SERIES, NATURAL NYLON 6/6, FLAG AND MARKER TIES - FIGS. 3, 4, 5
Ties bundles and identify wires. Can be marked with **type TNMP-0** SPC marker pen; *order separately; go online or call.*

➤CONTINUED➤

CABLE TIES (CONT.)

Mfg. Part No.	Bundle Diameter	Tensile Strength	Length	Width	Fig.	Pkg. of	Stock No.	Price per Pkg. 1-2
8409-0352	¾″	18 lbs.	4″	0.10″	3	100	16N842	32.42
8409-0353	¾″	18 lbs.	4″	0.10″	3	1000	16N843	216.64
8409-0354	¾″	18 lbs.	4¼″	0.10″	4	100	16N844	30.25
8409-0355	¾″	18 lbs.	4¼″	0.10″	4	1000	16N845	206.21
8409-0356	1¾″	50 lbs.	8″	0.18″	5	100	16N846	47.47

COLORED BEADED TIES - FIG. 6
Wrap around wire bundle thread through specially designed loop, pull tight, and lock in place. To add more to bundle, open the tie, add wires, and refasten. High-dielectric strength makes beaded ties perfect for electrical harnesses. Not tool installable.

Mfg. Part No.	Length	Color	Material	Pkg. of	Stock No.	Price per Pkg. 1-2
BTP-4-RED	4″	Red	Polyethylene	100	32N692	14.86
BTP-4-YEL	4″	Yellow	Polyethylene	100	32N1250	15.62
BTP-4-BLU	4″	Blue	Polyethylene	100	32N1251	14.86
BTN-4-WHT	4″	White	Polyethylene	100	32N1267	11.41
BTP-6-YEL	6″	Yellow	Polyethylene	100	23N3684	27.67
BTP-6-BLU	6″	Blue	Polyethylene	100	23N3685	26.35
BTN-6-WHT	6″	White	Polyethylene	100	23N3686	26.10
BTP-8-RED	8″	Red	Nylon	100	23N3687	42.98
BTP-8-YEL	8″	Yellow	Polyethylene	100	23N3688	34.64
BTP-8-BLU	8″	Blue	Polyethylene	100	23N3689	36.38
BTN-8-WHT	8″	White	Polyethylene	100	23N3690	34.72
BTP-10-BLU	10″	Blue	Polyethylene	100	23N3693	44.37
BTN-10-WHT	10″	White	Nylon	100	23N3694	41.63

VRTR SERIES, NATURAL NYLON STANDARD RELEASABLE TIES - FIG. 7
Ideal for applications that require changing or repair. Tie is easily removed by depressing protruding tab in head. Not tool installable.

Mfg. Part No.	Bundle Diameter	Tensile Strength	Length	Width	Pkg. of	Stock No.	Price per Pkg. 1-2
VRTR-12S-C	1½″	50 lbs.	6″	0.19″	100	81N1697	19.39
VRTR-16S-C	2″	50 lbs.	8″	0.19″	100	81N1699	23.45
VRTR-32S	4″	50 lbs.	15½″	0.18″	100	95N3331	93.81

NATURAL NYLON QUICK RELEASABLE TIES - FIG. 8
Releasable, adjustable and reusable. Tie releases by simply pressing tab with finger; no tools required. Not tool installable.

Mfg. Part No.	Bundle Diameter	Tensile Strength	Length	Width	Pkg. of	Stock No.	Price per Pkg. 1-2
2603	2½″	40 lbs.	10½″	0.21″	100	92N4818	65.53

BLACK HOOK-AND-LOOP RELEASABLE TIES - FIG. 9
Easy to wrap and unwrap. Ideal for power cords, extension cords, and computer cable. Not tool installable. Other colors available; *go online or call.*

Mfg. Part No.	Bundle Diameter	Length	Width	Pkg. of	Stock No.	Price per Pkg. 1-4
8408-0418	1″	6″	½″	10	16N981	23.23
8408-0419	1½″	8″	½″	10	16N982	25.82
8408-0420	2½″	11″	½″	10	16N983	30.01
8408-0421	3½″	15″	¾″	10	16N984	72.51

(6488)

WIRE & CABLE TIES

3

CABLE TIES

RoHS Compliant Available

pro-POWER

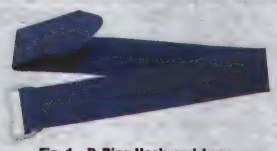


Fig. 1 - D-Ring Hook-and-Loop

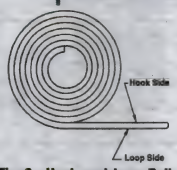


Fig. 2 - Hook-and-Loop Rolls

Fig. 3 Twist-Lock

D-RING HOOK-AND-LOOP RELEASABLE TIES - FIG.1
Allows for easy bunding of cable for permanent or temporary use. Woven nylon tie with 1" nylon D-ring buckle for easy cinching. Releasable, adjustable, reusable. Operating temperature: 120°. Not tool installable. **Sold in multiples of 10.**

Mfg. Part No.	Color	Bundle Diameter	Length	Width	Stock No.	Price Each 1-9
● SPC5345	Black	2"	9"	1"	50N928	5.24
● SPC5352	Black	3"	12"	1"	50N935	8.67
● SPC5359	Black	4"	15"	1"	50N942	0.61
● SPC5366	Black	5"	20"	1"	50N949	10.86
● SPC5373	Black	6½"	24"	1"	50N956	6.12

HOOK-AND -LOOP ROLLS - FIG. 2
Create the cable tie size required by cutting only the length needed and saving the remainder for future use. Low-density polyethylene hook with durable nylon knit loop. Releasable, adjustable, and reusable. Choose from 6 popular colors. Operating temperature: 120°. Individually wrapped. Not tool installable. **Sold in 15' rolls.**

Mfg. Part No.	Color	Bundle Diameter	Length	Width	Stock No.	Price per Roll 1-9
● SPC5325	Black	Various	15'	1"	50N691	25.12
● SPC5326	Blue	Various	15'	1"	50N692	33.04

TWIST-LOCK NYLON TIES - FIG. 3
Nylon 6/6 twist-type ties are ideal for wire bundling and a variety of other applications. Easy to use and reuse. Simply twist to secure wire bundles and untwist to unwrap. UL recognized. **Sold in packages of 100.**

Mfg. Part No.	Diameter	Color	Stock No.	Price per Pkg. 1-4
● TWT-3	0.20-0.30"	Natural	78N594	10.87
● TWT-3-CG GRN	0.20-0.30"	Green	90N6331	10.72
● TWT-4	0.30-0.40"	Natural	78N595	11.44
● TWT-4-CB BLUE	0.30-0.40"	Blue	90N6332	11.77
● TWT-5	0.40-0.50"	Natural	78N596	13.04
● TWT-8	0.70-0.80"	Natural	78N597	15.01
● TWT-8-CY YEL	0.70-0.80"	Yellow	90N6333	15.73

(60970)

SCREW MOUNT FLAT CABLE TIE HOLDERS

RoHS Compliant Available

pro-POWER

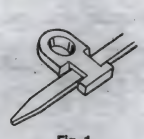


Fig. 1

Fig. 2

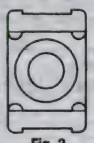


Fig. 3

Fig. 4

Fig. 5

Fig. 6

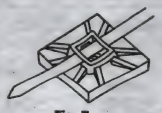


Fig. 7

Material: nylon. Color: natural. **Sold in packages of 100.**

Mfg. Part No.	Fig.	L x W	Description	Tensile Strength	Screw or Panel	Stock No.	Price per Pkg. Each
● VRTH-01	1	0.75 x 0.50"	Low-Profile Mount	18-50 lbs.	#8 Screw	23N3669	37.45
● 8409-0362	2	0.40 x 0.80"	Tie Anchor Plate	18-50 lbs.	#8 Screw	16N852	26.20
● 8409-0363	3	0.38 x 0.60"	Std. Tie Anchor	18-50 lbs.	#8 Screw	16N853	28.89
● 8409-0364	3	0.62 x 0.88"	Hvy. Tie Anchor	18-120 lbs.	#10 Screw	16N854	36.64
● 3359	4	0.40 x 0.60"	Pushbutton Mount	18-50 lbs.	0.250" Hole	92N4505	45.13
● VRTH-03	5	0.56 x 0.50"	Winged Push Mount	18-50 lbs.	0.187" Hole	37N2108	40.97
● 2184	6	0.26 x 0.40"	Push Mount	18-50 lbs.	0.250" Hole	92N4504	46.03
● VRTH-05	7	0.75 x 0.75"	4-Way/Nylon	18-50 lbs.	#6 Screw	81N2595	41.14

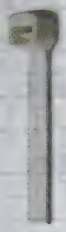
(6483)

CATAMOUNT® TWISTTAIL® CABLE TIES

RoHS Compliant Available

Thomas&Betts

- Quick, easy, tool-less installation
- Remove excess tail with "bend and twist" motion
- Tail breaks off neat and clean
- Durable nylon construction
- Easily adjustable for tight, secure bundles



Just Twist Tail Off...DONE!

Catamount® TwistTail® cable ties are designed to lower installation costs and ease fastening for harness fabrication and wire bundling. Constructed of durable nylon available in natural or weather- and UV-resistant black for outdoor use. Temperature range: -40°F to 185°F. Flammability rating: UL94V-2. UL recognized. **Sold in packages of 50.**

Mfg. Part No.	Color	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Min. Loop Tensile Strength (lbs.)	Pkg. of	Stock No.	Price per Pkg. 1-49
● TT-7-30-9-L	Natural	196.51	4.74	44.45	30	50	89T0918	7.36
● TT-7-30-0-L	Black	196.51	4.74	44.45	30	50	89T0917	8.11
● TT-11-30-9-L	Natural	298.37	4.74	76.2	30	50	89T0914	11.73
● TT-11-30-0-L	Black	298.37	4.74	76.2	30	50	89T0913	12.91
● TT-14-30-9-L	Natural	374.24	4.74	101.6	30	50	89T0916	14.34
● TT-14-30-0-L	Black	374.24	4.74	101.6	30	50	89T0915	15.77

(203507)

TY-RAP® LOW-PROFILE CABLE TIES

RoHS Compliant Available

Thomas&Betts

Natural

UV Black

- Low-profile, contoured head reduces clearance and overall bundle size
- Classic oval design prevents snags, damage, and is easier to pull through
- Safeguard wall eliminates exposure to sharp edges so ties are easier on hands
- Non-magnetic stainless steel locking device for maximum strength and tightness

- Versatile nylon 6.6 material provides high strength and a wide temperature range
- No-slip tail with ribbed design for easy gripping and pulling during tensioning
- Turned-up tip provides quick pick-up and orients tie for easier assembly

Ty-Rap® low-profile cable ties securely fasten wire and cable in a variety of electrical and non-electrical applications. Its smooth, notchless body provide an infinite number of locking positions to fastening at the precise bundle diameter needed. Constructed of durable nylon 6.6 available in natural or weather- and UV-resistant black for outdoor use. Temperature range: -40°F to 185°F. Flammability rating: UL94V-2. UL listed, UL recognized, CSA certified, CE complaint. **Sold in package quantities indicated below.**

Mfg. Part No.	Color	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Min. Loop Tensile Strength (lbs.)	Pkg. of	Stock No.	Price per Pkg. 1-49
● SF100-18-100	Natural	118	2.4	25.4	18	1	75H9246	0.10
● SF100-18	Natural	118	2.4	25.4	18	1000	97B3703	56.26
● SF100-18X-100	Black	118	2.4	25.4	18	1	22C9039	0.15
● SF100-18X	Black	118	2.4	25.4	18	1	50H7578	0.08
● SF175-50	Natural	195	4.8	44.4	50	1000	90B7613	116.51
● SF175-50X	Black	195	4.8	44.4	50	1	75H9277	0.15
● SF300-50	Natural	288	4.8	76.2	50	1000	25C1072	291.71
● SF300-50X	Black	288	4.8	76.2	50	1	50H7585	0.38
● SF400-50	Natural	369	4.8	101.6	50	1000	23C9813	355.44

(203508)

CATAMOUNT® CABLE TIES

RoHS Compliant Available

Thomas&Betts

Standard

Outdoor Weatherable

Catamount® cable ties are constructed of nylon 6.6 and designed to lower installation costs and ease fastening for harness fabrication and wire bundling in the manufacturing environment. Integrally formed nylon pawl combines low insertion and high locking strength. Rounded, low-profile head reduces number of snags. Tails have 2-sided finger-grip design that helps the operator grasp and pull ties snug. "Sure Grip" tab keeps tail from popping out while being threaded, then holds it securely for final tightening by hand or tool. Quick, easy pull-through increases productivity and reduces operator fatigue. Smooth edges prevent damage to wire insulation, reducing the opportunity for shorting. Color: natural (standard) or black (outdoor weatherable). Temperature range: –40°F to +185°F. **Sold in package quantities indicated below.**

➤CONTINUED➤

CATAMOUNT® CABLE TIES (CONT.)

STANDARD CABLE TIES

Mfg. Part No.	Max. Bundle Diam. (in.)	Tie Body Width (in.)	Length (in.)	Min.Tensile Strength (lbs.)	Pkg. of	Stock No.	Price per Pkg. 1-4
TY075-18	0.75	0.095	3.6	18	1000	16F1186	42.82
TY125-18	1.25	0.095	5.34	18	1000	16F1187	62.71
TY125-40	1.25	0.14	5.6	40	1000	16F1188	77.60
TY175-50	1.75	0.184	7.3	50	1000	91F3215	100.71
TY200-40	2	0.14	8	40	1000	16F1190	130.38
OUTDOOR WEATHERABLE CABLE TIES							
TY175-50X	1.75	0.184	7.3	50	1000	16F1203	106.91
TY200-40X	2	0.14	8	40	1000	16F1200	122.18
TY400-50X	4	0.184	14.3	50	1000	16F1205	348.48

(15440)

CABLE TIE MOUNTS

RoHS Compliant Available

Thomas&Betts

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6

Sold in package quantities indicated below.

Mfg. Part No.	Fig.	Description	Pkg. of	Stock No.	Price per Pkg. 1-4
TC5342A	1	2-Way Adhesive-Backed Mount Base For Use with Ty-Rap® Cable Ties 0.190″ Max. Width	100	10F8223	96.97
TC342A			1000	31F2613	409.12
TC5347A	2	4-Way Adhesive-Backed or Screw Mount Base For Use with Ty-Rap® Cable Ties 0.190″ Max. Width and 0.301″ Max. Width for Diagonal 2-Way Entry	100	10F8226	93.11
TC347A			1000	10F8227	451.04
TC5823	3	0.250″ Push-in Mount Base	100	10F8225	35.36
LPM-9-M	4	Low Profile Mount Base for Use with Cable Ties up to 50 lbs. Tensile Strength (Miniature through Standard)	1000	48F3174	197.80
SMNY-001-0-D	5	Screw Mount Base for Use with Cable Ties up to 50 lbs. Tensile Strength	500	48F3179	71.40
SMNY-001-9-D				48F3177	59.43
MCNY-1250-9-D	6	Mounting Cradle Base for Use with Cable Ties up to 50 lbs. Tensile Strength (Miniature through Standard)	500	48F3181	732.31

(6454)

TY-RAP CABLE TIE INSTALLATION TOOLS AND MARKING PEN

Thomas&Betts

ERG50

WT193A

WT2-TB

Ty-Rap® ergonomic-designed cable tie installation tools reduce user stress and strain. 360° rotating nose enables operation from any position. Front-access tension-adjustment wheel permits fast, easy changes. Feature an automatic cutting mechanism and orange and black comfort-grip handle. **Mfg. part no. ERG50** tool installs nylon cable ties 18-50 lbs. tension, 0.094-0.184″ wide. **Mfg. part no. ERG120** tool installs nylon cable ties 50-120 lbs. tension, 0.184-0.301″ wide.

Mfg. Part No.	Description	Stock No.	Price Each
ERG50	Ty-Rap® Ergonomic Cable Tie Tool, 18-50 lbs. Tension	22M0151	193.27
ERG120	Ty-Rap® Ergonomic Cable Tie Tool, 50-120 lbs. Tension	22M0150	457.43

Mfg. part no. WT193A Ty-Rap® heavy-duty metallic cable tie installation tool for nylon cable ties 18-50 lbs. tension, 0.094-0.184″ wide. Features adjustable tension setting and automatic cutting once desired tension has been reached. Tool size: 7.17″L x 5.31″W.

Mfg. Part No.	Description	Stock No.	Price Each
WT193A	Ty-Rap® Heavy-Duty Metallic Cable Tie Tool, 18-50 lbs. Tension	31F2657	286.35

These Ty-Rap® lightweight basic tensioning tools (twist-and-cut) are intended for maintenance and small batch use. Features manual cutting mechanism. Tool size: 5.28″L x 2.17″W. **Mfg. part no. WT2-TB** tool installs cable ties 50-120 lbs. tension, 0.184-0.301″ tie wide. **Mfg. part no. WT1-TB** tool installs nylon cable ties 18-50 lbs. tension, 0.094-0.184″ wide.

CONTINUED

TY-RAP CABLE TIE INSTALLATION TOOLS AND MARKING PEN (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
WT1-TB	Ty-Rap® Lightweight Cable Tie Tool, 18-50 lbs. Tension, Orange	31F2639	31.31
WT2-TB	Ty-Rap® Lightweight Cable TieTool, 50-120 lbs. Tension, Black	34F1256	51.86

(6455)

TY-RAP® CABLE TIES WITH MOUNTING HEADS

RoHS Compliant Available

Thomas&Betts

Ty-Rap® rugged nylon 6.6 cable ties with stainless steel locking device and mounting hole head. Color: natural. Flammability rating: UL 94 V-2. UL recognized. **Sold in packages of 100.**

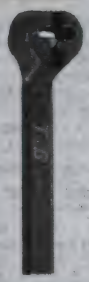
Mfg. Part No.	Length (in.)	Max. Bundle Diam. (in.)	Screw Size	Min. Unlocking Strength (lbs.)	Pkg. of	Stock No.	Price per Pkg. 1-4
TY533M	4	0.625	4	18	100	31F2722	52.81
TY534M	6	1.125	8	40	100	31F2661	52.93
TY535M	7.8	1.75	10	50	100	31F2662	40.65

(6453)

TY-RAP DETECTABLE CABLE TIES

RoHS Compliant Available

Thomas&Betts



- Detectable by metal detectors, x-ray equipment and visual detection equipment
- Rated to 1.5mm ferrous sphere
- Nylon 6.6 patent-pending detectable compound
- Oval, low-profile head and smooth molded body strap
- Stainless steel locking device for superior holding power
- Adjustable design for a perfect fit
- Bright blue for easy visual detection

Ty-Rap® detectable cable ties are the perfect alternative to using expensive stainless steel fasteners. Ideal for food and beverage processing, pharmaceutical production, chemical and compounds manufacturing, tobacco processing, tie and airbag manufacturing and any other industry sensitive to contamination using detection equipment. Made from Nylon 6.6 but incorporating a unique, patent-pending compound that's detectable by metal detectors and x-ray equipment. Flammability rating: UL94V-2. Maximum operating temperature: 185°F/85°C.

Mfg. Part No.	Tie Body Length (mm)	Tie Body Width (mm)	Max. Bundle Dia. (mm)	Tensile Strength (lbs.)	Stock No.	Price Each 1-49
TY523M-NDT	91.9	2.4	16	18	22M2103	0.31
TY525M-NDT	185.7	4.826	44.45	50	21M5354	0.36
TY527M-NDT	340.36	6.86	88.9	120	22M2104	1.29
TY528M-NDT	360.68	4.83	101.6	50	22M2105	0.81

(93073)

TY-RAP EXTRA HIGH-TEMPERATURE CABLE TIES

RoHS Compliant Available

Thomas&Betts

- High-temperature, heat-stabilizing Nylon 4.6
- Oval, low-profile head and smooth molded body strap
- Stainless steel locking device for superior holding power
- Unlimited tensioning range for a perfect fit
- Light green color

Ty-Rap® extra high-temperature cable ties are designed to withstand extended usage in extra high-temperature environments. Made tough for industrial OEM and MRO and commercial construction applications. Flammability rating: UL94V-2. Temperature rating: -40°F/-40°C to 302°F/150°C.

Mfg. Part No.	Tie Body Length (mm)	Tie Body Width (mm)	Max. Bundle Dia. (mm)	Tensile Strength (lbs.)	Stock No.	Price Each 1-49
TYHT23M	91.948	2.362	15.875	18	48K5630	1.22
TYHT25M	185.674	4.7	44.45	50	48K5631	1.26
TYHT28M	360.68	4.674	88.9	50	48K5633	5.69

(93067)

TY-RAP FASTENERS

RoHS Compliant Available

Thomas&Betts

Loop Tie

Buckle Tie

Ty-Rap® durable nylon fasteners are easy to release and reuse, making them ideal for applications where changes are anticipated or continuous access is required. Ideal for fiber-optics, computer and network wiring and telecom cable. Choose pre-cut fasteners with loop tie end or rigid buckle end. Also available in a continuous hook-and-loop roll; *go online or call.* Color: black. **Sold in package quantities indicated below.**

CONTINUED

TY-RAP FASTENERS (CONT.)

Mfg. Part No.	Description	Max. Bundle Diam. (in.)	Length (in.)	Min. Tensile Strength (lbs.)	Pkg. of	Stock No.	Price per Pkg. 1-4
● F0200-40-0	Loop Ties	2	9	40	10	63R7733	19.61
● F0350-40-0	Loop Ties	3.5	13	40	10	65T6668	19.18
● FOL300-50-0	Buckle Ties	3	12	50	10	65T6667	23.16
● FOL-500-50-0	Buckle Ties	5	18	50	10	48F3167	39.09

(39371)

TY-RAP STAINLESS STEEL SELF-LOCKING NYLON 6.6 CABLE TIES

RoHS Compliant Available

Thomas&Betts

Fig. 1

Fig. 2

Fig. 3

Features:
- Oval, low-profile head and smooth molded body strap
- Stainless steel locking device for superior holding power
- Adjustable design for a perfect fit
- Temperature rating: -40°F to 185°F (-40°C to 85°C)
- Flammability rating: UL94V-2
- Meet MIL Spec. MS3367-5 (Natural and Black only)

Available in:
- Natural Nylon 6.6
- Black, weather- and ultraviolet-resistant Nylon 6.6 for outdoor use
- Colored UV-stabilized Nylon 6.6

Fig. 4

Fig. 5

Sold in package quantities indicated in tables below.

NATURAL TY-RAP® SELF-LOCKING TIES, 18 LBS.TENSILE STRENGTH — FIG. 1

Tie Body Lgth. (in.)	Tie Body Width (in.)	Max. Bundle Dia. (in.)	Mfg. Part No.	Pkg. of 100 Stock No.	Pkg. of 100 Price per Pkg. 1-4	Mfg. Part No.	Pkg. of 1000 Stock No.	Pkg. of 1000 Price per Pkg. 1-4
3.6	0.09	0.63	● TY523M	31F2658	17.63	● TY23M	31F2654	52.65
7	0.09	1.5	● TY52315M	10F8228	23.43	● TYB2315M	10F8218	79.99
8	0.09	2	● TY5232M	31F2713	24.57	● TY232M	31F2650	77.61
14	0.09	4	● TY5234M	31F2714	35.53	● TY234M	31F2651	106.20

NATURAL TY-RAP® SELF-LOCKING TIES, 40 LBS. TENSILE STRENGTH — FIG. 1

5.5	0.14	1.13	● TY524M	31F2659	20.33	● TY24M	31F2524	54.48
8.2	0.14	2	● TY5242M	31F2715	30.92	● TY242M	31F2652	59.23
11.1	0.14	3	● TY526M	31F2716	37.92	● TY26M	31F2605	123.91
14.5	0.14	4	● TY5244M	31F2717	77.55	● TY244M	31F2653	233.13

NATURAL TY-RAP® SELF-LOCKING TIES, 50 LBS. TENSILE STRENGTH — FIG. 1

7.3	0.185	1.75	● TY525M	31F2660	25.66	● TY25M	31F269	74.56
11.6	0.187	3	● TY5253M	10F8229	52.79	● TY253M	10F8219	214.60
14.2	0.187	4	● TY528M	31F2718	58.64	● TY28M	31F2502	181.73

NATURAL TY-RAP® SELF-LOCKING TIES, 120 LBS. TENSILE STRENGTH — FIG. 1

Tie Body Lgth. (in.)	Tie Body Width (in.)	Max. Bundle Dia. (in.)	Mfg. Part No.	Pkg. of 50 Stock No.	Pkg. of 50 Price per Pkg. 1-4	Mfg. Part No.	Pkg. of 500 Stock No.	Pkg. of 500 Price per Pkg. 1-2
13.4	0.27	3.5	● TY527M	31F2719	43.35	● TY27M	31F2501	189.19

BLACK, WEATHER-RESISTANT TY-RAP® SELF-LOCKING TIES, 18 LBS. TENSILE STRENGTH — FIG. 2

Tie Body Lgth. (in.)	Tie Body Width (in.)	Max. Bundle Dia. (in.)	Mfg. Part No.	Pkg. of 100 Stock No.	Pkg. of 100 Price per Pkg. 1-4	Mfg. Part No.	Pkg. of 1000 Stock No.	Pkg. of 1000 Price per Pkg. 1-4
3.6	0.091	0.63	● TY523MX	94F1680	23.50	● TY23MX	94F1675	81.00
7	0.091	1.5	● TY52315MX	94F2984	30.75	● TYB2315MX	46M2524	85.21
8	0.091	2	...	...	...	● TY232M-X	50B7995	115.00
14	0.091	4	● TY5234MX	88F5440	44.10	● TY234MX	46M2525	153.96

BLACK, WEATHER-RESISTANT TY-RAP® SELF-LOCKING TIES, 40 LBS. TENSILE STRENGTH — FIG. 2

5.5	0.14	1.13	● TY524MX	94F1346	25.55	● TY24MX	99F3071	74.87
8.2	0.14	2	● TY5242MX	94F2985	37.09	● TY242MX	94F6329	98.88
11.1	0.14	3	● TY526MX	90F6112	50.26	● TY26MX	10WX3014	171.53
14.5	0.14	4	● TY5244MX	98F7566	66.88	● TY244MX	83F2886	306.07

BLACK, WEATHER-RESISTANT TY-RAP® SELF-LOCKING TIES, 50 LBS.TENSILE STRENGTH — FIG. 2

7.3	0.184	1.75	● TY525MX	70B878	27.31	● TY25MX	98F5905	81.71
11.6	0.184	3	● TY5253MX	94F2986	55.70	● TY253MX	98F5854	256.05
14.2	0.184	4	● TY528MX	94F1682	63.75	● TY28MX	98F3601	244.19

➤CONTINUED➤

TY-RAP STAINLESS STEEL SELF-LOCKING NYLON 6.6 CABLE TIES (CONT.)

BLACK, WEATHER-RESISTANT TY-RAP® SELF-LOCKING TIES, 120 LBS. TENSILE STRENGTH — FIG. 2

Tie Body Lgth. (in.)	Tie Body Width (in.)	Max. Bundle Dia. (in.)	Mfg. Part No.	Pkg. of 100 Stock No.	Pkg. of 100 Price per Pkg. 1-4	Mfg. Part No.	Pkg. of 1000 Stock No.	Pkg. of 1000 Price per Pkg. 1-4
8.8	0.27	2	● TY5272MX	94F1347	26.65	...	...	...
13.4	0.27	3.5	● TY527MX	94F1681	46.46	● TY27MX	94F1678	255.17
18	0.27	5	● TY5275MX	01F432	62.31	● TY275MX	94B6881	476.74

NATURAL TY-RAP® IDENTIFICATION CABLE TIES

Mfg. Part No.	Fig.	Tie Body Length (in.)	Tie Body Width (in.)	Max. Bundle Dia. (in.)	Tensile Strength (lbs.)	Stock No.	Pkg. of	Price per Pkg. 1-4
● TY546M	3	7.1	0.184	1.75	50	31F2663	100	116.66
● TY51M	4	3.6	0.091	0.625	18	31F2530	500	127.92

COLORED TY-RAP® UV-STABILIZED CABLE TIES — FIG. 5

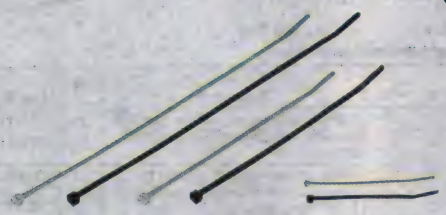
Ty-Rap® self-locking colored cable ties are available in 9 popular colors and a multi-color assortment. Perfect for where cable fastening is required to match the color of equipment or used for identification purposes. Ideal for outdoor wire and cable bundling, these weather-resistant ties are constructed of UV-stabilized Nylon 6.6 with stainless steel locking device. **Mfg. part no. TY525M-CLRS** multi-color assortment contains 100 cable ties in black, brown, red, orange, yellow, green, blue, purple, gray and white (10 of each color). UL listed, CSA certified. **Sold in packages quantities indicated in table below.**

Mfg. Part No.	Color	Tie Body Lgth. (mm)	Tie Body Width (mm)	Max. Bundle Dia. (mm)	Tensile Strength (lbs.)	Stock No.	Pkg. of	Price per Pkg. 1-4
● TY525M-CLRS	Multi-color	185.67	4.83	44.45	50	52M2227	100	30.03
● TY25M-2	Red	185.67	4.83	44.45	50	90B5264	1000	135.20
● TY25M-5	Green	185.67	4.749	44.45	50	08P0333	1000	105.35

(6452)

CABLE TIES

3M



Cable ties are molded from 6/6 nylon and designed to meet a wide range of temperatures from -40°F to 185°F. Reliable self-locking head with heavy double teeth on the one-piece lock mechanism. They are available in a variety of sizes and styles, including weather-resistant black nylon for indoor and outdoor use and natural nylon for indoor use only. Cable ties are used to secure wire bundles, harnesses and components quickly, without slipping. UL recognized.

MINIATURE CABLE TIES

Mfg. Part No.	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Min. Loop Tensile Strength (lbs.)	Color	Pkg. of	Stock No.	Price Each
PB4BK18-M	104.14	2.5	19.1	18	Black	1	73T7982	0.03

INTERMEDIATE CABLE TIES

Mfg. Part No.	Length (mm)	Width (mm)	Max. Bundle Dia. (mm)	Min. Loop Tensile Strength (lbs.)	Color	Pkg. of	Stock No.	Price per Pkg. 1-4
PB6NT40-M	147.32	3.6	31.8	40	Natural	1000	83T1568	33.72

STANDARD CABLE TIES

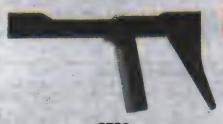
PB8NT50-M	193.04	4.6	50.8	50	Natural	1000	83T1569	43.62

(89316)

CABLE TIE TOOLS — INSTALLER-CONTROLLED TENSION AND CUT-OFF

PANDUIT®

- Economical tools for maintenance or construction applications
- Operator-controlled tension and cut-off
- Reduce tension slightly, twist tool ¼ turn in either direction to cut off excess cable tie



STS2

STH2

Inexpensive, maintenance-free, all-purpose tools for low-volume applications. Ergonomic handle design and short handle span. Top-loading feature for right or left-handed users. Ideal for use with the full line of Panduit® cable ties.

Mfg. Part No.	Description	Construction	Stock No.	Price Each
STS2	Installs Miniature, Intermediate and Standard Cross Section Cable Ties	Durable Black Housing and Handle	81F4588	39.89
STH2	Installs Standard, Heavy-Standard, Light-Heavy and Heavy Cross Section Cable Ties	Durable Red Housing and Black Handle	81F4589	53.54

(83945)

CABLE TIE TOOLS — TOOL CONTROLLED TENSION AND CUT-OFF

PANDUIT®

GTS GTSL GTH

- Provide flush cut-off of cable tie, which limits exposure to sharp edges
- Tool controlled tension and cut-off provides consistent results and speeds installation to lower installed cost

Mfg. Part No.	Description	Construction	Stock No.	Price Each
GTS	Installs Subminiature, Miniature, Intermediate and Standard Cross Section Cable Ties	Ergonomic Design, Impact-Resistant Resin Housing, Narrow Nose, Cushion Handle	98B5644	204.14
GTSL	Installs Subminiature, Miniature, Intermediate and Standard Cross Section Cable Ties	Ergonomic Design, Gray Impact-Resistant Resin Housing, Narrow Nose and Cushion Handle with Maroon Selector Knob and Trigger Handle. Features shorter handle reach (than **GTS**) for users with smaller hands	19K9830	237.74
GTH	Installs Standard, Heavy-Standard, Light-Heavy and Heavy Cross Section Cable Ties	Ergonomic Design, Gray Impact-Resistant Resin Housing, Narrow Nose and Cushion Handle with Red Selector Knob and Trigger Handle	49H4343	385.90
GS2B	Installs Miniature, Intermediate and Standard Cross Section Cable Ties	Controlled tension, Flush cut-off, Metal Housing, Selector Knob, Trigger Handle	78F547	358.74
GS4H	Installs Standard, Heavy-Standard, Light-Heavy and Heavy Cross Section Cable Ties	Metal Housing w/Gray Finish, Red Selector Knob & Trigger Handle	78F566	614.70

(6422)

INSTALLATION TOOLS

PANDUIT®

For standard, light-heavy and heavy cross-section Pan-Steel® stainless steel ties, *ordered separately on page 1272*. When installing over resilient objects **mfg. part no. GS4MT** automatically tensions and cuts off tie flush when predetermined tension is reached. **Mfg. part no. ST2MT** enables the installer to control tension, twist and cut off. *More Panduit cable tie installation tools available on this page.*

ST2MT GS4MT

Mfg. Part No.	Description	Stock No.	Price Each
GS4MT	Cable Tie Installation Tool	94F3097	867.21
ST2MT	Cable Tie Installation Tool	94F3151	369.62

(6457)

CABLE TIE INSTALLATION TOOLS

pro-POWER

Mfg. Part No. 8506T-001 Heavy Duty Cable Tie Tool Features:

- Automatic Tighten and Trim Flushing
- Adjustable Tension Settings
- Trigger Which Deposits Waste When Released
- Tie Accomodation of 18 to 50lb.
- Yellow Color
- Rugged Construction of Lightweight Polycarbonate
- High-Impact ABS Plastic Construction
- Squeeze to Tension, Twist to Cut
- Tie Accomodation of 18- to 50lb.

8506T-001

Mfg. Part No. SPC5299 Economy Cable Tie Tool Features:

- High-Impact ABS Plastic Construction
- Squeeze to Tension, Twist to Cut
- Tie Accomodation of 18- to 50lb.
- Left- or Right-Hand Operation
- Tie Accomodation of 0.35" to 0.50" Wide and 0.080" Thick
- Tension Adjustment
- Suited For Spot-Tying Applications
- Lightweight All-Metal Construction with Blue Enamel Finish

SPC5299

Mfg. Part No.	Description	Stock No.	Price Each
SPC5299	Economy Tool	50N230	49.49
8506T-001	Heavy-Duty Tool	50N9502	464.15

(6477)

DATACOM® CABLE TIE GUN

Xcelite®

- Die-cast steel construction for durability and long life
- Provides a flush cut with each use for neat, professional installations
- Tension adjustment allows use on miniature, intermediate, standard and heavy-duty cable ties

Mfg. Part No.	Description	Stock No.	Price Each
DCT300V	Datacom Cable Tie Gun	73C3406	38.40

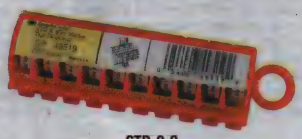
(88483)

SCOTCHCODE™ WIRE MARKER TAPE AND DISPENSER STD SERIES

RoHS Compliant Available

3M

Compact, refillable 10-roll tape dispenser filled with number or color-code Scotchcode™ tape. Great for marking wire, cable, tubing, terminal blocks and panels. User can pull-out and tear-off the exact amount of tape needed from the dispenser for their particular application. Features polyester film wire marking tape with acrylic pressure-sensitive adhesive. Tape rolls are 0.215" wide, 8 ft. long. Special end loop for hooking dispenser to a belt or tool pouch. *Order replacement rolls of* **SDR series** Scotchcode™ wire *marker tape separately online or call.*



STD-0-9

10-ROLL DISPENSER WITH NUMBERED TAPE
Includes one roll each of numbers 0 through 9 consecutive, one number per roll. Six characters per inch of tape.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
STD-0-9	Dispenser Filled with 10 Rolls of **NUMBERED** Tape (One each of 0-9)	44F3232	58.37

10-ROLL DISPENSER WITH COLORED TAPE
Includes one roll of each of the following colors: black, blue, brown, gray, green, orange, red, violet, white, yellow.

STD-C	Dispenser Filled with 10 Rolls of **COLORED** Tape	44F3233	57.16

EMPTY WIRE MARKER TAPE DISPENSER

STD	Wire Marker Tape Dispenser Only (Tape Not Included)	95F6311	18.89

(6420)

SCOTCHCODE™ WIRE MARKER TAPE REFILLS FOR WIRE MARKER TAPE DISPENSER SDR SERIES

RoHS Compliant Available

3M

ScotchCode™ SDR wire marking tape is a polyester film tape with an acrylic pressure-sensitive adhesive used in the 3M™ STD ScotchCode™ tape dispenser; *order separately on page 9*. From the STD dispenser, the user can pull out and tear off the amount of tape needed for their particular application such as marking wires, terminal blocks, and panels. Tape rolls available in consecutive 0-9 number combination, multiple colors, and in individual numbers and individual colors listed in table below. Alphabet also available; *for example, to order* **"A"** *use* **mfg. part no. SDR-A**. Each roll is 0.215"W x 8'.

SDR-MC

10-ROLL PACKS

Mfg. Part No.	Description	Stock No.	Price per Pkg. 1-4
SDR-0-9*	0-9 Consecutive — One Number Per Roll	46M2506	39.02
SDR-MC*	Multicolor — One Roll Each of the 10 Colors Below	61M4639	38.21

*Sold in packages of 10 rolls

SINGLE ROLLS

Mfg. Part No.	Legend or Color	Stock No.	Price per Roll 1-9
SDR-0	0	44F3234	3.55
SDR-1	1	44F3235	3.65
SDR-2	2	44F3236	3.65
SDR-3	3	44F3237	3.55
SDR-4	4	44F3238	3.55
SDR-5	5	44F3239	3.55
SDR-6	6	44F3240	3.55
SDR-7	7	44F3241	3.59
SDR-8	8	44F3242	3.55
SDR-9	9	44F3243	3.59
SDR-BK	Black	44F3244	3.59
SDR-BL	Blue	44F3245	3.55
SDR-BN	Brown	44F3246	3.59
SDR-GN	Green	44F3247	3.55
SDR-GY	Gray	44F3248	3.59
SDR-OR	Orange	44F3249	3.38
SDR-RD	Red	44F3250	3.59
SDR-VL	Violet	44F3251	3.38
SDR-WH	White	95F9665	3.38
SDR-YL	Yellow	95F9666	3.59
SDR-A	A	95C2336	3.55

CONTINUED

WIRE IDENTIFICATION & MARKING SYSTEMS

SCOTCHCODE™ WIRE MARKER TAPE REFILLS FOR WIRE MARKER TAPE DISPENSER SDR SERIES (CONT.)

Mfg. Part No.	Legend or Color	Stock No.	Price per Roll 1-9
● SDR-B	B	95C2337	3.55
● SDR-C	C	95C2338	3.59

(6421)

SCOTCHCODE™ WRITE-ON WIRE MARKER TAPE DISPENSERS AND MARKING PENS

RoHS Compliant Available

3M

Flexible, compact Scotchcode™ write-on tape system for marking wire and cable is easy to use. Lightweight, durable dispenser provides a flat, stable writing surface. **Mfg. part no. SWD** regular, write-on tape dispenser contains 250 die-cut markers on a roll, transparent, pressure-sensitive vinyl tape and one **mfg. part no. SMP** black ink marking pen. **Mfg. part no. SLW** large, write-on tape dispenser with 1×¾″ writing area contains 70 die-cut markers on a roll, transparent, pressure-sensitive vinyl tape and one **mfg. part no. SMP** black ink marking pen. *Order* **mfg. part no. SLW-R** *refill tape rolls and additional* **mfg. part no. SMP-B** *marking pens separately ; go online or call.*

SWD, SLW

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● SWD	Regular Dispenser with Black Marking Pen	87F735	40.55
● SLW	Large Dispenser with Black Marking Pen	87F737	46.35
● SWD-R	Refill Tape Roll for **Mfg. Part No. SWD**	87F736	31.05

(6418)

RAYCHEM WP SERIES WHITE POLYESTER THERMAL TRANSFER PRINTABLE LABELS

UL CSA RoHS Compliant Available

TE connectivity

Authorized Distributor

- Ideal for use in PCB component labeling and bar code applications
- Ink receptive topcoat

WP series white, polyester film thermal transfer printable labels with a permanent acrylic adhesive. Ideal for bar coding, PCB and component labeling, as well as, general-purpose labeling applications that require a high durability white label. Resistant to a variety of solvents while maintaining print quality. Service temperature: -40°C to +150°C. Color: white. UL listed, CSA certified. **Sold only in roll quantities listed in table below — priced per label.**

Mfg. Part No.	Label Width (in)	Label Height (in.)	Labels per Roll	Stock No.	Price per Label
● WP-080080-10-9	0.315	0.315	10000	29K8480	0.03
● WP-095095-10-9	0.375	0.375	10000	29K8481	0.05
● WP-101508-2.5-9	4.000	2.000	2500	29K8482	0.43
● WP-127111-10-9	0.500	0.437	10000	29K8483	0.01
● WP-165051-25-9	0.650	0.200	25000	29K8484	0.02
● WP-191064-10-9	0.750	0.250	10000	29K8485	0.02
● WP-229064-10-9	0.900	0.250	10000	29K8486	0.03
● WP-254097-10-9	1.000	0.380	10000	29K8487	0.05
● WP-254127-10-9	1.000	0.500	10000	29K8488	0.07
● WP-318064-10-9	1.250	0.250	10000	29K8489	0.05
● WP-381064-10-9	1.500	0.250	10000	29K8490	0.05
● WP-381191-5-9	1.500	0.750	5000	29K8491	0.09
● WP-508064-10-9	2.000	0.250	10000	29K8492	0.08
● WP-508127-5-9	2.000	0.500	5000	29K8493	0.08
● WP-508254-5-9	2.000	1.000	5000	29K8494	0.14
● WP-699254-5-9	2.750	1.000	5000	29K8495	0.14
● WP-762254-5-9	3.000	1.000	5000	29K8496	0.26
● WP-762508-2.5-9	3.000	2.000	5000	29K8497	0.32

(84679)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

(212570)

SPB SERIES SCOTCHCODE™ PREPRINTED WIRE MARKER BOOKS

RoHS Compliant Available

3M

SPB series Scotchcode™ preprinted wire marker books are ideal for marking electrical wires and terminal strips to maximum diameter of 0.47″. Also used to mark load centers and alarm systems. Made of vinyl-impregnated cloth with a top coat and a natural rubber adhesive. Black characters printed on white background. Size: 1.37″ (34.79) x 0.22″ (5.58), with a 0.22″ (5.58) x 0.22″ (5.58) terminal marker.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● SPB-01	45 Each 0-9; 15 Each L1,L2,L3,T1,T2,T3	95F6275	23.90
● SPB-02	10 Each A-Z; 0-15, +, –, /	95F6276	23.90
● SPB-03	10 Each 1-45	95F6277	20.10
● SPB-14	10 Each 46-90	95C2341	23.90
● SPB-08	6 Each 1-15; 4 Each 16-90; 2 Each A-Z, +, -, 1, 0	95C2339	22.86
● SPB-12	15 Each A-Z, 8 (+), 7 (-), 21 blank	95C2340	24.20

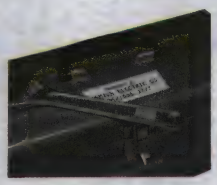
(6400)

IDXPERT HAND-HELD LABELER KITS AND ACCESSORIES

RoHS Compliant Available

BRADY.

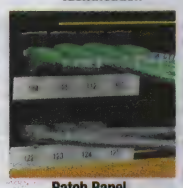
Keyboard Layout



General Identification

Electrical Panel Identifcation

- Produces 300 dpi thermal transfer printing that stays crisp and bright
- Creates a wide variety of labels: self-lams, sleeves, continuous tapes and more
- Choose from assorted label materials up to 1.5″ wide
- Prints characters up to 1.25″
- 82 built-in symbols plus barcodes
- Quick-loading "Smart Cartridge" auto-senses label type and size
- Intuitive user interface for easy access to complex functions
- Memory stores frequently used set-ups
- Larger, more informative display
- Ergonomic design fits comfortable in hand



Patch Panel Identification

IDXPERT™ portable, hand-held labelers offer two printer keyboard layouts with identical functionality and supplies. Delivers edge-to-edge label printing to reduce materials expenses. Tough, drop-tested construction and easy-to-see bright yellow color make these labelers ideal for the field. Quick-loading label cartridges make switching jobs really fast. Choose from several label materials in a variety of sizes and colors; *ordered separately from table below.* Perfect for a variety of applications including wire and cable marking, terminal block marking, patch panel, outlet and faceplate marking, electrical component marking and for racks, data centers, labs and general industrial identification.

IDXPERT™ LABELER KITS

IDXPERT™ labeler kits include hardside carrying case, serial communications cable for upgrades only, one 1.5″ x 30′ continuous tape label cartridge and product CD-rom.

Mfg. Part No.	Description	Stock No.	Price Each
● XPERT-KEY	IDXPERT™ Hand-Held Labeler Kit, Keyboard Layout	11J6151	477.34
● XPERT-AC	AC Adapter	12J5019	88.89

PERMASLEEVE™ WIRE AND CABLE LABELS, HEAT-SHRINK POLYOLEFIN

Mfg. Part No.	Color	W x L (In.)†	Labels Per Cartridge	Stock No.	Price Each
XPS-125-1	Black on White	1.015 x 0.235	100	57J1481	93.68
XPS-187-1	Black on White	1.015 x 0.335	100	57J1484	102.84
XPS-250-1	Black on White	1.015 x 0.439	100	57J1487	123.45
XPS-375-1	Black on White	1.015 x 0.645	100	57J1489	178.34
XPS-125-CONT	Black on White	12 ft Continuous*	...	57J1479	77.91
XPS-125-CONT-YL-BK	Black on Yellow	12 ft Continuous*	...	57J1480	46.52
XPS-187-CONT	Black on White	12 ft Continuous*	...	57J1482	83.18
XPS-187-CONT-YL-BK	Black on Yellow	12 ft Continuous*	...	57J1483	85.68
XPS-250-CONT	Black on White	8 ft Continuous*	...	57J1485	91.54
● XPS-250-CONT-YL-BK	Black on Yellow	8 ft Continuous*	...	57J1486	56.23
XPS-375-CONT	Black on White	8 ft Continuous*	...	57J1488	119.72

WIRE AND CABLE LABELS, SELF-LAMINATING VINYL

● XSL-11-427	Black on White	0.50 x 0.75 x 0.37	450	57J1492	82.92
● XSL-96-427	Black on White	1.00 x 0.75 x 0.37	250	77M8278	59.17
● XSL-17-427	Black on White	0.50 x 1.00 x 0.37	450	77M8028	99.51
● XSL-18-427	Black on White	0.75 x 1.00 x 0.37	250	55M6285	67.97
● XSL-19-427	Black on White	1.00 x 1.00 x 0.37	250	77M8029	76.72
XSL-103-427	Black on White	1.00 x 1.25 x 0.50	250	57J1491	87.75
● XSL-30-427	Black on White	0.75 x 1.50 x 0.50	250	57J1503	74.58
XSL-31-427	Black on White	1.00 x 1.50 x 0.50	250	57J1504	92.13

CONTINUED

IDXPERT HAND-HELD LABELER KITS AND ACCESSORIES (CONT.)

WIRE AND CABLE LABELS, SELF-LAMINATING VINYL

Mfg. Part No.	Color	W x L (In.)†	Labels Per Cartridge	Stock No.	Price Each
XSL-21-427	Black on White	1.00 x 2.50 x 0.75	100	57J1498	61.36
XSL-21-427-YL-BK	Black on Yellow	1.00 x 2.50 x 0.75	100	57J1499	41.74
XSL-116-427	Black on White	1.50 x 2.50 x 0.75	100	57J1494	61.36
XSL-34-427	Black on White	1.50 x 6.00 x 1.50	50	57J1508	48.48
ADHESIVE WRAPAROUND WIRE AND CABLE LABELS, VINYL CLOTH					
X-7-498	Black on White	0.50 x 0.50	300	57J1438	71.66
X-11-498	Black on White	0.50 x 0.75	275	57J1421	71.79
X-18-498	Black on White	0.75 x 1.00	225	57J1426	75.31
X-19-498	Black on White	1.00 x 1.00	200	57J1428	65.13
X-103-498	Black on White	1.00 x 1.25	200	57J1420	39.69

TERMINAL BLOCK LABELS, VINYL CLOTH

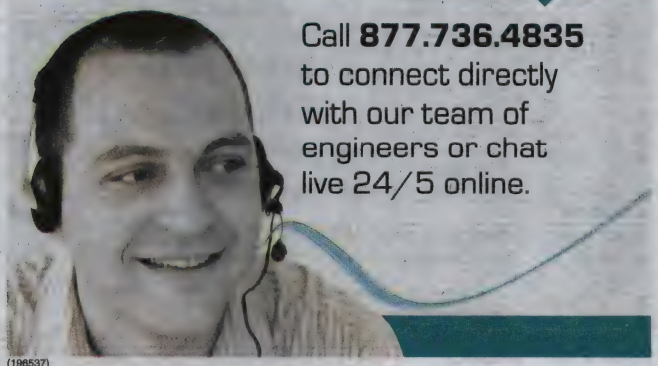
Mfg. Part No.	Color	W x L (In.)†	Stock No.	Price Each
XC-240-498	Black on White	0.240 x 20' Continuous*	57J1463	54.69
XC-318-498	Black on White	0.318 x 20' Continuous*	57J1464	56.03
XC-375-498	Black on White	0.375 x 20' Continuous*	57J1466	57.36
INDOOR/OUTDOOR GRADE FACILITY AND SAFETY LABELS, VINYL				
XC-500-595-BL-WT	White on Blue	0.50 x 30' Continuous*	32T5349	42.29
XC-500-595-GN-WT	White on Green	0.50 x 30' Continuous*	45T0721	42.29
XC-500-595-WT-BK	Black on White	0.50 x 30' Continuous*	40T8703	42.29
XC-500-595-WT-RD	Red on White	0.50 x 30' Continuous*	45T0724	42.29
XC-1000-595-WT-BK	Black on White	1.00 x 30' Continuous*	45T0710	59.28
XC-1500-595-OR-BK	Black on Orange	1.5"W x 30'L Continuous*	45T0716	70.07

LAB VIAL AND TUBE LABELS, NYLON CLOTH

Mfg. Part No.	Color	W x L (In.)†	Labels Per Cartridge	Stock No.	Price Each
X-11-499	Black on White	0.75 x 0.50	275	57J1422	34.73
X-84-499	Black on White	0.90 x 0.50	250	57J1442	35.97
BINS, STORAGE AND GENERAL INDUSTRIAL ID LABELS, GLOSS POLYESTER					
X-17-422	Black on White	1.00 x 0.50	500	57J1423	93.51
X-30-422	Black on White	1.50 x 0.75	250	57J1434	57.93
XC-500-422	Black on White	0.50 x 30' Continuous*	...	57J1467	59.28
XC-1000-422	Black on White	1.00 x 30' Continuous*	...	57J1445	67.36
BINS, STORAGE AND GENERAL INDUSTRIAL ID LABELS, METALLIZED POLYESTER					
X-17-428-SV-BK	Black on Silver	1.00 x 0.50	450	57J1424	65.39
X-29-428-SV-BK	Black on Silver	1.50 x 0.50	450	57J1433	74.56
X-20-428-SV-BK	Black on Silver	2.00 x 1.00	100	57J1429	41.84
BINS, STORAGE AND GENERAL INDUSTRIAL ID LABELS, ULTRA-AGGRESSIVE POLYESTER					
X-17-483	Black on White	1.00 x 0.50	450	57J1425	59.43
X-20-483	Black on White	2.00 x 1.00	100	57J1430	37.69

†Dimensions are in inches unless otherwise noted; *Cut-to-length continuous tape
(83001)

TECHNICAL SUPPORT HOTLINE



Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

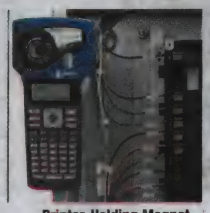
(196537)

BMP21 PORTABLE LABEL AND WIRE MARKER PRINTER AND ACCESSORIES

RoHS Compliant Available

BRADY.

- Produces clear 203dpi thermal transfer printing that stays legible for years
- Wide variety of label materials including nylon cloth, self-laminating vinyl and heat-shrink sleeves
- Easy-to-peel labeling tapes from ¼" to ¾" wide
- Intuitive keypad with electrical and datacom symbols
- Multiple line printing and serialization
- Prints letters in upper and lower case
- Prints numbers, 80 symbols and barcodes
- Choice of six font sizes
- Six languages installed: English, French, Spanish, German, Dutch, Portuguese
- Memory stores 12 frequently used files
- Ergonomic design fits comfortably in user's hand
- Easy-to-see blue case with impact-resistant rubber bumpers
- Large informative LCD display with backlight
- Quick, top-load, drop-in labeling tape cartridge
- Built-in industrial-strength dual cutter holds label until needed
- Automatic shutoff
- Runs on batteries or AC adapter
- One-year manufacturer's limited warranty



Printer-Holding Magnet for One-Handed Operation

Prints Durable, Made-to-Last Labels

Creates Basic Labels and Barcodes on Demand

BMP™21 hand-held label and wire marker printer is an affordable, easy-to-use, quick-to-print, must-have labeling tool that's built tough for the field. Prints super-tough industrial labels and wire markers ideal for identifiying and organizing. Features built-in intelligence that senses label tape size and automatically formats the label design. Powered by six AA batteries (not included) or optional AC adapter, *ordered separately below.* Lightweight, only 1.66 lbs. Dimensions: 9.2L x 4.6W x 2.8"H. Printer comes with one **mfg. part no. M21-750-499** nylon cloth labeling tape cartridge and a handy quick-start guide. Select from a large assortment of accessories, kits and labeling tape cartridges in an array of different materials and colors; *ordered separately below.*

Mfg. Part No.	Description	Stock No.	Price Each
BMP21	Portable Label and Wire Marker Printer with One **M21-750-499** Nylon Cloth Labeling Tape Cartridge	26R5389	180.94
ACCESSORIES AND KITS			
BMP21-HC	Hardsided Carrying Case	26R5391	36.75
BMP21-MAGNET	BMP21 Printer-Holding Magnet	26R5397	15.75
BMP21-TOOL	BMP21Multifunctional Accessory — Incl.: BMP21-MAGNET Printer-Holding Magnet, Pole Strap, Belt Strap and Desktop Printer Stand	26R5398	31.50
BMP21-AC	AC Plug-In Adapter - North America	26R5390	42.00
BMP21-KIT-110940	Kit Incl.: BMP21 Printer, BMP21-HC Carrying Case, BMP-TOOL Multifunctional Accessory, BMP21-AC Adapter	26R5392	283.34
BMP21-KIT-110941	Kit Incl.: BMP21 Printer, BMP21-HC Carrying Case, BMP21-AC Adapter	26R5393	236.79
BMP21-KIT-110942	Kit Incl.: BMP21 Printer, BMP21-HC Carrying Case	26R5394	164.43
BMP21-KIT-110943	Kit Incl.: BMP21 Printer, BMP21-AC Adapter	26R5395	209.71
BMP21-KIT-114305	Kit Incl.: BMP21 Printer, BMP21-TOOL Multifunctional Accessory	26R5396	202.75

LABELING TAPE CARTRIDGES

Wide array of label types, materials and sizes made to withstand extreme temperatures and chemicals. Tough adhesive backing keeps labels in place even on irregular surfaces. Indoor/outdoor vinyl material lasts up to five years in extreme outdoor conditions.

Mfg. Part No.	Material	Text Color on Material Color	Size	Stock No.	Price Each
M21-375-499	Nylon Cloth	Black on White	0.375"W x 16'L	26R5410	37.77
M21-500-499	Nylon Cloth	Black on White	0.5"W x 16'L	26R5422	39.20
M21-750-499	Nylon Cloth	Black on White	0.75"W x 16'L	26R5435	42.70
M21-375-499-TB	Nylon Cloth Term. Block	Black on White	0.375"W x 16'L	26R5411	39.58
M21-500-499-TB	Nylon Cloth Term. Block	Black on White	0.5"W x 16'L	26R5423	39.20
M21-375-423	Polyester	Black on White	0.375" W x 21'L	26R5406	32.18
M21-500-423	Polyester	Black on White	0.5" W x 21'L	26R5418	36.73
M21-750-423	Polyester	Black on White	0.75"W x 21'L	26R5430	38.90
M21-375-430	Polyester	Black on Clear	0.375" W x 21'L	26R5407	20.37
M21-500-430	Polyester	Black on Clear	0.5" W x 21'L	26R5419	20.37
M21-750-430	Polyester	Black on Clear	0.75"W x 21'L	26R5432	22.63
M21-375-488	Lab Polyester	Black on White*	0.375" W x 21'L	26R5409	23.87
M21-500-488	Lab Polyester	Black on White*	0.5" W x 21'L	26R5421	23.87
M21-750-488	Lab Polyester	Black on White*	0.75"W x 21'L	26R5434	26.78
M21-375-461	Lab Polyester	Black on Clear+	0.375" W x 21'L	26R5408	22.45
M21-500-461	Lab Polyester	Black on Clear+	0.5" W x 21'L	26R5420	22.24
M21-375-595-WT	Indoor/Outdoor Vinyl	Black on White	0.375" W x 21'L	45T0452	33.28
M21-750-595-YL	Indoor/Outdoor Vinyl Film	Black on Yellow	0.75"W x 21'L	45T0463	40.49
M21-750-427	Vinyl	Black on White	0.75"W x 14'L	26R5431	48.57
M21-1000-427	Vinyl	Black on White	1" W x 14'L	26R5399	55.17
M21-1250-427	Vinyl	Black on White	1.25"W x 14'L	26R5401	56.17
M21-1500-427	Vinyl	Black on White	1.5"W x 14'L	72T0084	56.86

CONTINUED

WIRE IDENTIFICATION & MARKING SYSTEMS

BMP21 PORTABLE LABEL AND WIRE MARKER PRINTER AND ACCESSORIES (CONT.)

PERMASLEEVE™ HEAT-SHRINK WIRE MARKER SLEEVE CARTRIDGES — BLACK ON WHITE

Mfg. Part No.	Material	Text Color on Material Color	Size	Stock No.	Price Each
● M21-125-C-342	Polyolefin	0.235"W x 7'L		26R5400	69.21
● M21-187-C-342	Polyolefin	0.335"W x 7'L		26R5403	75.52
● M21-250-C-342	Polyolefin	0.439"W x 7'L		26R5404	86.37
● M21-375-C-342	Polyolefin	0.645"W x 7'L		26R5405	97.58

*Matte white finish; +Matte white printable zone
(155730)

BMP®41 PORTABLE THERMAL-TRANSFER LABEL PRINTER STARTER KITS

RoHS Compliant Available

BRADY.

NEW

BMP®41 Label Printer

BMP41-KIT-EL Electrical Starter Kit

BMP41-KIT-VD DataComm Starter Kit

- Ergonomic design fits comfortably in user's hand
- Built tough — drop-tested and environment resistant
- Easy-to-see case with impact-resistant rubber bumpers
- Large informative LCD display with backlight provides clear visibility
- Produces clear 300dpi thermal transfer printing that stays legible
- Print speed of 1.3" per second
- QWERTY keypad, graphics library, hot keys and menu functions make label design simple
- Easy-to-use WYSIWYG functionality — design shown in printer display is what you get on label
- 4 to 103 point font sizes with autosizing
- 445 built-in symbols and barcodes, additional via software
- 48MB memory stores up to 25000 labels
- Quick, easy-to-load, drop-in label cartridges with already matched ribbon
- Long life rechargeable battery delivers power to print anywhere
- Prints up to 300 labels per day for high volume printing
- Prints true-sized 1" wide identification to maximize amount of data on label
- Prints on a wide variety of label materials including nylon cloth, self-laminating vinyl and heat-shrink sleeves
- Prints on die-cut and continuous length materials
- Two-year manufacturer's warranty

BMP®41 hand-held, portable label printer is an affordable, easy-to-use, quick-to-print, must-have labeling tool that's built tough for the field. It can print up to 300 labels per day, including die-cut or continuous labels up to 1" wide. This rugged device withstands harsh conditions to get the job done where you need it. It is built with additional protection to survive falls of up to six feet high. With an ergonomic design, long rechargeable battery life and easy-to-use features, this printer is engineered for the worker on-the-go. Lightweight, only 2.85 lbs. Dimensions: 10.3" H x 6" W x 3.6" D. Choice of two starter kits — Electrical or DataComm — everything needed to start making quality, professional-looking labels. *Order additional* **M series** *labeling cartridges in an array of types, sizes, materials, and colors separately on pages 1286-1287.*

BMP®41 ELECTRICAL STARTER KIT

Mfg. part no. BMP41-KIT-EL Electrical starter kit includes: BMP®41 label printer, rechargeable battery pack, USB cable assembly, AC adapter, hard-side storage case, M-143-427 1" black on white self-laminating vinyl wire marker cartridge (200 ea.), **M-48-498** 1" black on white vinyl cloth wraparound wire marker cartridge (180 ea.), **M-187-075-342** 0.75" black on white PermaSleeve® heat-shrink wire marking sleeve cartridge (80 ea.), **MC1-1000-595-OR-BK** 1" black on orange vinyl tape cartridge (25'L), two **MC1-1000-595-WT-BK** 1" black on white vinyl tape cartridges (25'L), product CD, Brady printer drivers CD and quick start guide.

Mfg. Part No.	Description	Stock No.	Price Each
● BMP41-KIT-EL	BMP41 Electrical Starter Kit	33X1314	508.00

BMP®41 DATACOMM STARTER KIT

Mfg. part no. BMP41-KIT-VD Voice/Data Communications DataComm starter kit includes: BMP®41 label printer, rechargeable battery pack, USB cable, AC adapter, hard-side storage case, **M-51-427** 1" black on white self-laminating vinyl wire marker cartridge (110 ea.), **MC-475-412** 0.475" black on white polypropylene tag cartridge (20'L), **MC1-1000-595-YL-BK** 1" black on yellow vinyl tape cartridge (25'L), two **MC1-1000-595-WT-BK** 1" black on white vinyl tape cartridges (25'L), product CD, Brady printer drivers CD and quick start guide.

Mfg. Part No.	Description	Stock No.	Price Each
● BMP41-KIT-VD	BMP41 DataComm Starter Kit	33X1315	464.00

(211516)

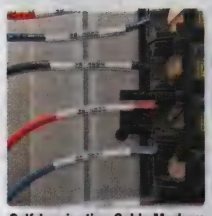
BMP®51 AND BMP®53 LABEL MAKER PORTABLE PRINTERS AND ACCESSORIES

RoHS Compliant Available

BRADY.

BMP-51 Label Maker

75447314708 BMP-53 Label Maker with AC Adaptor

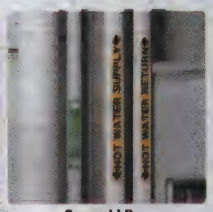


Self-Laminating Cable Markers

Cable Flags

Patch Panel

Barcodes



General I.D.

Quick and Easy Label Design

- Prints FAST — 1" per second
- Produces clear 300dpi thermal transfer printing
- Multiple line printing, serialization and barcodes
- Built-in label apps for fast, easy label design
- Built-in Bluetooth® or optional Wi-Fi and Ethernet cards for wireless printing from a network
- USB PC connectivity with Label Mark™ 5 label design and printing software compatibility
- Durable built-in cutter that retains label after it's cut until needed
- Automatic label formatting and label material recognition
- Prints on a variety of continuous and die-cut materials
- Prints labels up to 1.5" wide or continuous labels up to 40" long
- 3 battery power options: AA batteries, AC adaptor or rechargeable Li-Ion battery

Hassle-Free Printer Cartridges

- Ribbon and label materials in ONE easy-to-load cartridge
- "No jam" technology so cartridges snap easily into place
- Worry-free printing -- always the right ribbon for the material
- Wide variety of tough, durable label materials that won't fade, smear or fall off

Wireless Printing Capabilities

- Brady Network Card with Bluetooth® technology comes standard with printer
- Create, edit, print and save labels with an Android® phone using FREE Brady Mobile apps
- Optional Wi-Fi and/or Ethernet cards allow user to connect to a network

BMP®51 Label Maker has all the latest features for portable printing on the go: QWERTY keyboard, large graphical display screen with backlight, easy-to-use label design apps, fast print speed, extensive connectivity, networking options, and much more. It offers built-in Bluetooth® technology or an optional Wi-Fi or Ethernet card, which means you can print wirelessly to this printer from a computer or Android phone. **BMP®53** Label Maker has many of the same features as the BMP®51 Label Maker, minus the display screen and keyboard. It uses the same label cartridges to create labels with LabelMark™ software from a PC or by using a Brady Mobile App on a smart phone.

BMP®51 AND BMP®53 LABEL MAKER PRINTERS

All Label Maker printers come with hard-sided carrying case, battery tray for AA batteries, USB cable, drivers CD, product CD, Quick Start guide, and one **mfg. part no. MC-1500-595-WT-BK** label cartridge. Select from a wide assortment of printer starter kits, printer accessories, and labeling cartridges in an array of different materials to meet every printing need; *order separately below.*

Mfg. Part No.	Description	Stock No.	Price Each
● 75447314707	BMP51 Printer with AC Adaptor	89T4130	430.00
● 75447314703	BMP51 Printer, Rechargeable Li-Ion Battery Pack and AC Adaptor/Battery Charger	89T4128	450.00
● 75447314705	BMP51 Printer, Label Mark 5 Software and AC Adaptor	89T4129	579.00
● 75447314708	BMP53 Printer with AC Adaptor	78T0495	339.00
● 75447314704	BMP53 Printer, Rechargeable Li-Ion Battery Pack and AC Adaptor/Battery Charger	78T0493	359.00
● 75447314706	BMP53 Printer, Label Mark 5 Software and AC Adaptor	78T0494	488.10
ACCESSORIES			
● M50-MAGNET	**BMP50 Series** Printer-Holding Magnet	77T9914	25.00
● BMP-UBP-AC	Li-Ion Rechargeable Battery Pack with AC Adaptor/Battery Charger	89T4125	99.00
● BMP-UBP	Li-Ion Rechargeable Battery Pack	89T4124	85.00
● M50-AC	**BMP50 Series** AC Adaptor/Battery Charger	77T9911	59.00
● M50-BATT-TRAY	**BMP50 Series** Spare AA Battery Tray	89T4126	15.00
M50-HC	Hard-Sided Carrying Case	77T9913	50.00
M50-SC	Soft-Sided Carrying Case	89T4127	29.99
LM5STDCD	Label Mark™ 5 Std. Software — CD-ROM	57R6038	219.00
LM5PRFCD	Label Mark™ 5 Pro Software — CD-ROM	52R7647	379.00
● NET-BT-WIFI-LAN	Brady Network Card — Bluetooth/WiFi/Ethernet	77T9915	100.00
● NET-WIFI	Brady Network Card — Bluetooth® and WiFi	77T9917	70.00
● NET-LAN	Brady Network Card — Ethernet	77T9916	85.00

➤CONTINUED➤

BMP®51 AND BMP®53 LABEL MAKER PORTABLE PRINTERS AND ACCESSORIES (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
BMP51 and **BMP53** Voice / Data Communications Starter Kits include a variety of voice/data labeling materials plus hard-sided carrying case, USB cable and AC power supply.			
75447370841	Voice/Data Comm Starter Kit with **BMP51** Printer and Li-Ion Battery	**89T4131**	635.00
66282098154	Voice/Data Comm Starter Kit with **BMP53** Printer and LabelMark 5 Software	**78T0487**	658.35
BMP51 and **BMP53** Electrical Starter Kits include a variety of wire and cable marking materials, continuous tape for panel ID plus hard-sided carrying case, USB cable and AC power supply.			
75447370842	Electrical Starter Kit with **BMP51** Printer and Li-Ion Battery	**89T4132**	650.00
66282098155	Electrical Starter Kit with **BMP53** Printer and LabelMark 5 Software	**78T0488**	676.17
BMP51 and **BMP53** Facility ID Starter Kits include a variety of durable indoor/outdoor vinyl and polyester tapes plus hard-sided carrying case, USB cable and AC power supply.			
75447370843	Facility ID Starter Kit with **BMP51** Printer and Li-Ion Battery	**89T4133**	670.00
66282098156	Facility ID Starter Kit with **BMP53** Printer and LabelMark 5 Software	**78T0489**	691.81
BMP51 and **BMP53** Lab ID Starter Kits include a variety of lab ID labeling materials plus hard-sided carrying case, USB cable and AC power supply.			
75447370844	Lab ID Starter Kit with **BMP51** Printer and Li-Ion Battery	**89T4134**	640.00
66282098157	Lab ID Starter Kit with **BMP53** Printer and LabelMark 5 Software	**78T0490**	663.71

M SERIES LABELING CARTRIDGES

Choose from individual die-cut labels or continuous cut-to-length tape. Both come conveniently packaged with ribbon and label material in ONE easy-to-load cartridge. Additional label types, sizes, materials, and colors are available to meet every printing need; *go online or call.*

WIRE AND CABLE FLAGS — NYLON CLOTH WITH TWO PRINTABLE SIDES

Mfg. Part No.	Text Color on Material Color	Size	No. of Labels	Stock No.	Price Each
M-152-499	Black on White	1.5"W x 0.5"H	160	**77T2912**	37.06
WIRE AND CABLE FLAG FOR SMALLER DIAMETERS — POLYPROPYLENE					
MFT-01-425	Black on White	0.788"W x 1.18"H	200	**89T4194**	19.94
WRAP AROUND WIRE WRAP LABELS — REPOSITIONABLE VINYL CLOTH					
M-7-498	Black on White	0.5"W x 0.5"H	240	**77T2950**	34.35
M-11-498	Black on White	0.5"W x 0.75"H	220	**77T2879**	34.41
M-163-498	Black on White	0.5"W x 1"H	180	**77T2914**	33.80
SELF-LAMINATING WIRE AND CABLE MARKERS — VINYL					
M-11-427	Black on White	0.5"W x 0.75"H	360	**77T2878**	39.75
M-32-427	Black on White	1.5"W x 1.5"H	180	**77T2944**	49.41
M-116-427	Black on White	2.5"W x 1.5"H	80	**77T2885**	29.42
M-33-427	Black on White	4"W x 1.5"H	70	**77T2945**	48.71
M-34-427	Black on White	6"W x 1.5"H	40	**77T2946**	37.84
MC-750-427	Black on White	0.375"W x 0.75"H	*	**89T4180**	46.76
MC-1000-427	Black on White	0.375"W x 1"H	*	**89T4158**	56.47
MC-1250-427	Black on White	0.5"W x 1.25"H	*	**89T4164**	57.78
MC-1500-427	Black on White	0.5"W x 0.5"H	*	**89T4165**	59.14
VOICE AND DATA COMM ID LABELS — GLOSS POLYESTER					
M-7-422	Black on White	0.5"W x 0.5"H	280	**77T2949**	32.26
MC-375-422	Black on White	0.375"W x 25'L	*	**77T2996**	33.58
MC-475-422	Black on White	0.475"W x 25'L	*	**77T3000**	39.59
MC-500-422	Black on White	0.5"W x 25'L	*	**77T3001**	42.96
MC-625-422	Black on White	0.625"W x 25'L	*	**89T4179**	44.95

REFLECTIVE LABELING TAPE — FOR CONTINUOUS CUT-TO-LENGTH LABELS

Mfg. Part No.	Text Color on Material Color	Size	Stock No.	Price Each
MC-500-584	Black on White	0.5"W x 20'L	**89T4174**	56.81
MC-500-584-YL	Black on Yellow	0.5"W x 20'L	**89T4175**	56.81
MC-750-584	Black on White	0.75"W x 20'L	**89T4182**	69.26
MC-750-584-YL	Black on Yellow	0.75"W x 20'L	**89T4183**	69.26
MC-1000-584	Black on White	1"W x 20' L	**89T4160**	71.66
MC-1000-584-YL	Black on Yellow	1"W x 20' L	**89T4161**	71.66
MC-1500-584	Black on White	1.5"W x 20'L	**89T4166**	84.44
MC-1500-584-YL	Black on Yellow	1.5"W x 20'L	**89T4167**	84.44
TERMINAL BLOCK MARKERS — VINYL CLOTH				
MC-240-498	Black on White	0.24"W x 16'L	**77T2991**	42.68
MC-318-498	Black on White	0.318"W x 16'L	**77T2994**	43.73
MC-375-498	Black on White	0.375"W x 16'L	**77T2998**	55.97
INDOOR / OUTDOOR GRADE VINYL LABELING TAPE				
MC-500-595-WT-BK	Black on White	0.5"W x 25'L	**77T3008**	35.25
MC-500-595-CL-BK	Black on Clear	0.5"W x 20'L	**77T3004**	28.20
MC-500-595-YL-BK	Black on Yellow	0.5"W x 25'L	**77T3010**	35.25
MC-500-595-OR-BK	Black on Orange	0.5"W x 25'L	**77T3006**	35.25
MC-500-595-WT-RD	Red on White	0.5"W x 25'L	**77T3009**	35.25
MC-500-595-BK-WT	White on Black	0.5"W x 25'L	**89T4176**	35.25
MC-500-595-CL-WT	White on Clear	0.5"W x 20'L	**89T4177**	28.20
MC-500-595-BL-WT	White on Blue	0.5"W x 25'L	**77T3003**	35.25

➤ CONTINUED ➤

BMP®51 AND BMP®53 LABEL MAKER PORTABLE PRINTERS AND ACCESSORIES (CONT.)

INDOOR / OUTDOOR GRADE VINYL LABELING TAPE

Mfg. Part No.	Text Color on Material Color	Size	Stock No.	Price Each
MC-500-595-RD-WT	White on Red	0.5"W x 25'L	**77T3007**	35.25
MC-500-595-GN-WT	White on Green	0.5"W x 25'L	**77T3005**	35.25
MC-1500-595-WT-BK	Black on White	1.5"W x 25'L	**77T2986**	56.97
MC-1500-595-CL-BK	Black on Clear	1.5"W x 20'L	**77T2982**	45.57
MC-1500-595-YL-BK	Black on Yellow	1.5"W x 25'L	**77T2988**	56.97
MC-1500-595-OR-BK	Black on Orange	1.5"W x 25'L	**77T2984**	56.97
MC-1500-595-WT-RD	Red on White	1.5"W x 25'L	**77T2987**	56.97
MC-1500-595-BK-WT	White on Black	1.5"W x 25'L	**89T4168**	56.97
MC-1500-595-CL-WT	White on Clear	1.5"W x 20'L	**89T4169**	45.57
MC-1500-595-BL-WT	White on Blue	1.5"W x 25'L	**77T2981**	56.97
MC-1500-595-RD-WT	White on Red	1.5"W x 25'L	**77T2985**	56.97
MC-1500-595-GN-WT	White on Green	1.5"W x 25'L	**77T2983**	56.97

PERMASLEEVE™ HEAT-SHRINK WIRE MARKER SLEEVES — POLYOLEFIN

Mfg. Part No.	Max. Wire Diameter	Txt. Color on Mat. Color	Size	No. of Sleeves	Stock No.	Price Each
M-125-1-342	0.046" - 0.11"	Blk on White	1.015"H x 0.235"W	80	**77T2897**	46.02
M-187-1-342	0.062" - 0.15"	Blk on White	1.015"H x 0.335"W	80	**77T2923**	50.52
M-250-1-342	0.094" - 0.215"	Blk on White	1.015"H x 0.439"W	80	**77T2934**	60.66
M-375-1-342	0.125" - 0.32"	Blk on White	1.015"H x 0.645"W	80	**77T2947**	87.63
MC-125-342	0.046" - 0.11"	Blk on White	0.235"W x 7'L	*	**77T2978**	39.72
MC-125-342-YL	0.046" - 0.11"	Blk on Yellow	0.235"W x 7'L	*	**77T2979**	39.72
MC-187-342	0.062" - 0.15"	Blk on White	0.335"W x 7'L	*	**77T2989**	43.62
MC-187-342-YL	0.062" - 0.15"	Blk on Yellow	0.335"W x 7'L	*	**77T2990**	43.62
MC-250-342	0.094" - 0.215"	Blk on White	0.439"W x 7'L	*	**77T2992**	48.01
MC-250-342-YL	0.094" - 0.215"	Blk on Yellow	0.439"W x 7'L	*	**77T2993**	48.01

*Continuous tape for cut-to-length labels
(202069)

BMP71 THERMAL TRANSFER LABEL PRINTER AND ACCESSORIES

RoHS Compliant Available

BRADY.

One Smart, Fast Printer That Does It All

- Produces 300 dpi thermal transfer printing that stays crisp and clear
- Choose from assorted label materials including self-laminating, raised panel labels and PermaSleeve™ heat-shrink sleeves, and more
- Large 3.5" full-color graphical LCD display with on screen indicators
- Easy to operate QWERTY style keypad layout
- Fast — print speed of 1.5" per second
- Prints on over 400 continuous and die-cut label materials
- Prints labels up to 2" wide on continuous label materials
- Prints characters from 4pt to 174pt (scalable)
- Built-in label design wizards, bar code symbologies, serialization,and graphics
- 200mb memory — storage space for over 100,000 label files
- Quick-loading label and continuous tape rolls
- Built-in touch cell in labels and ribbons allows printer to automatically format label
- Stand alone and PC compatible
- Rechargeable NiMH battery pack or AC powered
- Portable with convenient large carrying handle

BMP™71 portable, industrial thermal transfer label printer is perfect for a variety of applications including wire and cable marking, electrical component marking, PCB labeling, data communications labeling, facility, safety and maintenance identification, general and industrial labeling, health care identification, lab identification, panel identification and security identification. **Mfg. part no. BMP71-QC** includes BMP™71 label printer, quick charger, hard-sided storage/carrying case, NiMH rechargeable battery pack, battery charger/AC power supply, roll of M71-31-423 BradyBondz™ polyester labels (1.5" W x 1" H), M71-R6000 black high-density ribbon cartridge, cleaning strip, USB cable, CD (contains user's manual, print driver and tutorial) and Quick Start guide. Choose from several label materials in a variety of sizes and colors; *order separately below. Order Brady LabelMark® label design and MarkWare Express® sign and label design software separately; go online or call.* Size: 12"L x 9.5"W x 4.5"H. Manufacturer's 12-month warranty.

Mfg. Part No.	Description	Stock No.	Price Each
BMP71-QC	Portable Thermal Transfer Label Printer with Quick Charger	**63R6466**	1345.69
M71-BATT	BMP™71 Rechargeable NiMH Battery Pack	**68R4206**	85.00

BMP™71 SELF-LAMINATING LABELS

Self-laminating vinyl labels have a matte finish and provide a white printable zone with a protective, translucent overlaminating area and permanent acrylic adhesive. Offers excellent abrasion, smudge, water and oil resistance. Material has good clarity, conformability and is self-extinguishing. Ideal for panel identification and wire and cable marking applications.

Mfg. Part No.	Material	Color	W x H (In.)	Labels per Roll	Stock No.	Price Each
M71-11-427	Vinyl	White	0.5 x 0.75	500	**63R6911**	38.65
M71-17-427	Vinyl	White	0.5 x 1	500	**63R6942**	41.39
M71-29-427	Vinyl	White	0.5 x 1.5	500	**63R7000**	50.63
M71-18-427	Vinyl	White	0.75 x 1	250	**63R6950**	33.78
M71-30-427	Vinyl	White	0.75 x 1.5	250	**63R7013**	37.72
M71-19-427	Vinyl	White	1 x 1	250	**63R6958**	37.17
M71-31-427	Vinyl	White	1 x 1.5	250	**63R7027**	47.65
BM71-31-427	Vinyl	White	1 x 1.5	1000	**63R6507**	334.21
M71-21-427	Vinyl	White	1 x 2.5	100	**63R6974**	28.47
M71-23-427	Vinyl	White	1 x 4	100	**63R6982**	33.89

➤ CONTINUED ➤

WIRE IDENTIFICATION & MARKING SYSTEMS

BMP71 THERMAL TRANSFER LABEL PRINTER AND ACCESSORIES (CONT.)

Mfg. Part No.	Material	Color	W x H (in.)	Labels per Roll	Stock No.	Price Each
● M71-32-427	Vinyl	White	1.5 x 1.5	250	63R7036	49.28
● M71-33-427	Vinyl	White	1.5 x 4	100	63R7040	45.87

BMP™71 LABELS

Repositionable vinyl cloth labels have a semi-gloss finish and are ideal for laboratory identification, panel identification, PCR tube, through hole - top, and wire and cable marking applications. BradyBondz™ ultra aggressive polyester labels have a gloss finish and permanent rubber-based adhesive. Ideal for general, industrial and panel identification applications.

● M71C-1000-483	Polyester	White	1.5 x 50′ L	63R7106	88.66

BMP™71 PERMA-SLEEVE™ HEAT-SHRINK LABELING SLEEVES

PermaSleeve™ heat shrinkable irradiated polyolefin wire marker sleeves have a matte finish and 3:1 shrink ratio. Ideal for panel identification and wire and cable marking applications.

● M71-125-1-342	Polyolefin	White	1.015 x 0.235	100	63R6919	50.37
● BM71-125-1-342	Polyolefin	White	1.015 x 0.235	1000	63R6478	351.89
● M71-187-1-342	Polyolefin	White	1.015 x 0.335	100	63R6953	56.09
● BM71-187-1-342	Polyolefin	White	1.015 x 0.335	1000	63R6487	392.60
● M71-250-1-342	Polyolefin	White	1.015 x 0.439	100	63R6987	67.94
● M71-375-1-342	Polyolefin	White	1.015 x 0.645	100	63R7052	100.07
● BM71-125-175-342	Polyolefin	White	1.765 x 0.235	1000	63R6479	472.79
● BM71-187-175-342	Polyolefin	White	1.765 x 0.335	1000	63R6489	511.03
● M71-250-175-342	Polyolefin	White	1.765 x 0.439	100	63R6989	91.48

BMP™71 INDOOR/OUTDOOR LABELING TAPE

Indoor/outdoor-grade, high-gloss, durable, flexible vinyl tape adheres well to pipes, walls, equipment, windows and most clean, dry surfaces. Conforms well to irregular, curved or rough surfaces. Stands up to grease, oil and most industrial chemicals.

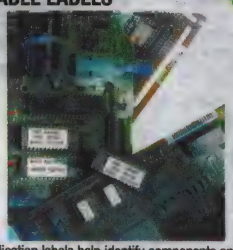
Mfg. Part No.	Material	Color	W (in.) x L (Ft.)	Stock No.	Price Each
● M71C-500-595-YL	Vinyl Film	Yellow	0.5 x 50	45T0514	49.12
● M71C-1000-595-YL	Vinyl Film	Yellow	1 x 50	45T0480	67.19
● M71C-1000-595-BL	Vinyl Film	Blue	1 x 50	45T0465	67.19
● M71C-1000-595-OR	Vinyl Film	Orange	1 x 50	45T0473	67.19
● M71C-2000-595-YL	Vinyl Film	Yellow	2 x 50	45T0497	101.94
● M71C-2000-595-BL	Vinyl Film	Blue	2 x 50	45T0482	101.94
● M71C-2000-595-GN	Vinyl Film	Green	2 x 50	45T0486	101.94
● M71C-2000-595-OR	Vinyl Film	Orange	2 x 50	45T0490	101.94
● M71C-2000-595-RD	Vinyl Film	Red	2 x 50	45T0493	101.94
● M71C-2000-595-BK	Vinyl Film	Black	2 x 50	45T0481	101.94
● M71C-2000-595-CL	Vinyl Film	Clear	2 x 50	45T0484	101.94

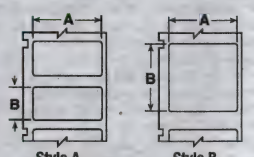
(174956)

COMPONENT AND GENERAL ID PRINTABLE LABELS

RoHS Compliant Available

BRADY.





Style A Style B

Electronic application labels help identify components and tools. For use with Brady's TLS2200® and TLS PC Link™ thermal transfer portable label printers; *ordered separately on page 1289*. **Sold in roll quantities listed in tables below.**

POLYESTER LABELS

Mfg. Part No.	Style	Color	Label Dimensions A (Width)	Label Dimensions B (Height)	Labels Per Roll	Stock No.	Price per Roll Each
● PTL-9-423*	A	Gloss White	0.65″	0.20″	750	48F5382	44.69
● PTL-15-423*	A	Gloss White	1.00″	0.275″	750	48F5383	53.60
● PTL-28-423*	A	Gloss White	1.50″	0.25″	750	48F5386	112.93

*Use with **mfg. part no. R6010** ribbon; **Use with **mfg. part no. R4310** ribbon

VINYL CLOTH LABELS

Mfg. Part No.	Style	Color	Label Dimensions A (Width)	Label Dimensions B (Height)	Labels Per Rolls	Stock No.	Price per Roll Each
● PTL-17-498**	B	White	1.00″	0.50″	500	04H2562	106.22

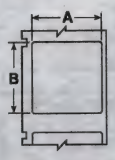
Use with **mfg. part no. R4310 ribbon

(39396)

COMPONENT AND GENERAL IDENTIFICATION LABELS

RoHS Compliant Available

BRADY.



For use on components in control panels, electronic components and circuit boards, faceplates, and electronic receptacles. **Sold in rolls of 500.**

Mfg. Part No.	Label Material	Label Dimensions A	Label Dimensions B	Lines of Print	Stock No.	Price per Roll Each
● CL-105-619	Polyester	0.50″	0.275″	1	48F5309	37.60
● CL-111-502	Vinyl Cloth	1.00″	0.275″	1	48F5310	97.59
● CL-111-619	Polyester	1.00″	0.275″	1	48F5311	45.07
● CL-311-502	Vinyl Cloth	1.00″	0.275″	3	48F5313	71.39
● CL-311-619	Polyester	1.00″	0.50″	3	48F5314	91.38
● CL-517-619*	Polyester	1.50″	0.75″	4	48F5319	42.47

***Sold in rolls of 250**

(39389)

HANDIMARK PORTABLE LABEL MAKER AND ACCESSORIES

RoHS Compliant Available

BRADY.

- Fast, economical and easy to use
- Built-in bar code 3 of 9 symbology
- Create custom labels whenever and wherever you need them
- Runs on battery or AC adapter
- Tough vinyl tape designed for outdoor use and industrial environments

Mfg. part no. 42001 HandiMark™ portable label maker comes complete with 113 built-in symbols and pictos that enables you to create your own custom labels in 12 different languages including Spanish and French. This portable label maker can also be used to print bar codes in an inventory system. Comes complete with 1 roll of white, 2″ tape, 1 black ribbon, battery charger, rechargeable nickel-cadmium battery, cleaning kit, symbol reference chart and a hard cover carrying case. *Order AC adapter separately; go online or call*.

Mfg. Part No.	Description	Stock No.	Price Each
BMP71	Portable Thermal Transfer Label Printer	63R5940	895.00

INDOOR/OUTDOOR GRADE TAPE

Tape rolls 50′ long.

Mfg. Part No.	Color	Roll Width (in.)	Stock No.	Price Each
● 142271	White	2	45T0744	104.36
● 142277	Green	2	45T0749	104.36

RIBBONS

Ribbons 75′ long.

Mfg. Part No.	Color	Cartridge Size (in.)	Stock No.	Price Each
42012	White	2	06H1568	46.35
42011	Black	2	31C8287	45.44
42013	Red	2	07H3490	35.13
42014	Blue	2	07H3493	35.13

(77688)

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element14.com

(198547)

IP THERMAL TRANSFER PRINTER

RoHS Compliant Available

BRADY.

Smart Cell Technology
- Printer, materials and ribbon communicate with each other making printing fast and hassle-free

Intelligence by Design
- No more calibration for notched, gapped or continuous material
- Center justified material guides keep print image consistent
- Easy loading with straight feed path

Intuitive LCD Display
- Correct material and ribbon match displayed
- Sensor position visually shown
- Monitors material and ribbon usage
- Intelligent troubleshooting with corrective action

Ready for Work
- 300dpi or 600dpi models
- Lightweight, compact design with convenient flip top
- USB, serial and Ethernet 10/100 connectivity

IP™ thermal transfer printer, material and software system is fully integrated and easy-to-use. The system offers material and ribbon recognition monitored on an LCD display, automatic formatting and user-friendly printer features. Material information is sent to the software, where template and settings are automatically populated. The user simply creates data on template, then clicks and prints. These high-performance printers come complete with power cord, USB cable, ribbon centering take-up spindle, printed Quick-Start manual, product CD including: Windows® printer driver, electronic Quick-Start manual, Brady IP™ Printer Operator/Configuration manual and web links, software demo CD, and printer cleaning film. Both models accept a variety of Brady **THT** and **THTEP** labels, **B-593 series** raised panel labels, specialty die-cut labels, sleeves and tags, **4300, 6000** and **6100 series** IP-R thermal transfer ribbons, and LabelMark™ labeling software; *go online or call.*

Mfg. Part No.	Description	Print Resolution (dpi)	Print Speed (″/sec)	Stock No.	Price Each
BP-IP300	IP™ Thermal Transfer Printer	300	8	55M3395	2006.16

(101305)

LAT SERIES LASERTAB LASER PRINTABLE LABELS

RoHS Compliant Available

BRADY.

Select from an assortment of blank, printable LASERTAB® labels for use with most laser printers. Ideal for general and industrial identification. Other label sizes, types, and materials are available; *go online or call.*

SELF-LAMINATING POLYESTER —0.34″ PRINTABLE AREA, TRANSLUCENT OVERLAMINATING AREA

Mfg. Part No.	Label Dimensions (In.) Width	Height	Color	Pkg. of	Stock No.	Price per Pkg. Each
LAT-17-361-1	1	1	White	1000	04H1848	109.21
POLYESTER						
LAT-4-747-10	0.8	0.25	White	10000	04H1912	245.26
LAT-8-747-10	1	0.375	White	10000	01H9990	339.96
POLYESTER, NON DIE-CUT SHEETS						
LAT-28-747-25SH	8.5	11	White	25	28C7723	147.08
LAT-28-773-25-SH*	8.5	11	Silver	25	90B3846	178.73

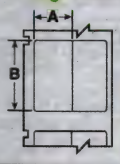
*Metallizied polyester
(105374)

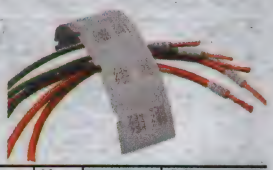
MULTIPLE-ACROSS WIRE MARKING STRIPS

RoHS Compliant Available

BRADY.

Will repeat the full legend for the entire length of the label in wire and strip modes. **Sold in rolls of 500 total labels (250 labels, 2 across).**





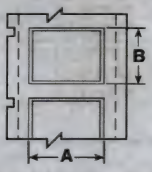
Mfg. Part No.	AWG	Sleeve Dimension A	B	Material	Lines of Print	Stock No.	Price per Roll Each
WML-505-502-2S	10-14	0.50″	0.75″	Vinyl Cloth	4	48F5351	58.34

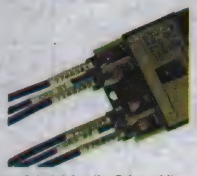
(39390)

PERMASLEEVE HEAT-SHRINKABLE WIRE MARKER SLEEVES

RoHS Compliant Available

BRADY.





Permasleeve® polyolefin heat-shrink wire markers have a 3:1 shrink ratio. Color: white.

Mfg. Part No.	Sleeve Dim. A	B	Wire Dia. Range Min.	Max.	AWG	Labels Per Roll	Stock No.	Price per Roll 1-49
PSPT-125-1-WT	1.015″	0.235″	0.046″	0.110″	22-16	100	48F5388	87.21
PSPT-187-1-WT	1.015″	0.335″	0.062″	0.150″	18-12	100	48F5389	97.10

CONTINUED

PERMASLEEVE HEAT-SHRINKABLE WIRE MARKER SLEEVES (CONT.)

Mfg. Part No.	Sleeve Dim. A	B	Wire Dia. Range Min.	Max.	AWG	Labels Per Roll	Stock No.	Price per Roll 1-49
PSPT-250-1-WT	1.015″	0.439″	0.094″	0.215″	16-10	100	48F5390	117.62
PSPT-375-1-WT	1.015″	0.645″	0.125″	0.320″	12-4	100	04H2493	99.83
PSPT-375-175-WT	1.765″	0.645″	0.125″	0.320″	12-4	100	10R6565	190.74
PSPT-500-175-WT	1.765″	0.851″	0.187″	0.450″	8-1	100	04H2499	269.31

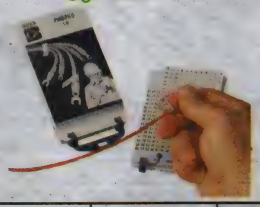
(39397)

PORTA-PACK WIRE MARKER BOOKS

RoHS Compliant Available

BRADY.

Porta-Pack® wire marker books are slim, lightweight, and pocket-size making them easy to carry and easy to use. Includes terminal marker with each wire marker.



Mfg. Part No.	Legend	No. Markers Per Legend	Stock No.	Price Each 1-49
PWM-PK-1	0 thru 9	45	48F5352	45.52
PWM-PK2	A thru Z, 0 thru 15, +, --, /	10	08H0481	45.52
PWM-PK-3	1 thru 45	10	48F5354	46.43
PWM-PK-8	1 thru 15 16 thru 90 A thru Z, +, --, /, 0	6 4 2	48F5355	46.89

(39391)

TLS PC LINK THERMAL LABELING SYSTEM

RoHS Compliant Available

BRADY.

TLS PC Link™ thermal labeling system offers a rugged, small and lightweight desktop/portable solution. Provides capabilities such as thermal transfer printing, bar coding, and multiple material configurations. Comes with a Windows® driver that allows the unit to print labels from LabelMark (included with TLS PC Link™), Codesoft software, or any Windows® software application available. The printer also has its own printer control language. The firmware is upgradeable through the mini-DIN series jack, and the unit operates off AC power or the included rechargeable battery. For efficient label design, editing and printing, *order* **mfg. part no. LM4** *LabelMark labeling software separately on page 9.*

Mfg. Part No.	Description	Stock No.	Price Each
TLSPC	TLS PC Link Printer	31C9238	640.50
ACCESSORIES			
TLSPC-BP	Rechargeable Battery Pack	35C2166	59.98
PCK-5	Cleaning Kit	87W8008	13.91

(68879)

TLS2200 THERMAL LABELING SYSTEM

RoHS Compliant Available

BRADY.

Lightweight, hand-held thermal transfer printer prints labels up to 2″ wide. Ideal for printing labels for wire markers, patch panels, circuit boards, and much more. Handles bar coding and multiple material configurations. Custom True Type font. Adjustable for 6 different label widths. Maximum print width: 1.81″. 2-line LCD, 16 characters wide. Prints up to 500 labels per battery charge. 203 dpi thermal transfer print mechanism. FCC Class A approved. Includes ribbon, battery pack, charger, test labels, cleaning card, manual, and hard case.

Mfg. Part No.	Description	Stock No.	Price Each
TLS2200	Thermal Labeling System	48F5375	1028.42
R4310	Black Ribbon	48F5380	54.90
R6010	Black Ribbon	48F5381	54.90

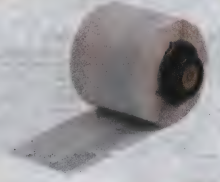
(39395)

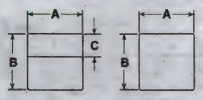
WIRE IDENTIFICATION & MARKING SYSTEMS

TLS 2200/TLS PC LINK THERMAL TRANSFER PRINTABLE LABELS

RoHS Compliant Available

BRADY.





Thermal transfer printable vinyl marking labels make wire and cable identification easy. Ideal for use with Brady's TLS 2200® and TLS PC Link™ thermal transfer portable printers; *order separately, go online or call.*

SELF-LAMINATING VINYL — WHITE PRINTABLE AREA, TRANSLUCENT OVERLAMINATING AREA

Mfg. Part No.	Label Dimensions (In.) A	B	C (Printable Area)	Labels per Roll	Stock No.	Price per Roll 1-49
● PTL-17-427	0.5	1	0.375	500	48F5398	78.04
● PTL-11-427	0.75	0.5	0.375	500	48F5394	69.22
● PTL-18-427	0.75	1	0.375	250	48F5400	64.97
● PTL-19-427	1	1	0.375	250	48F5401	70.06
● PTL-21-427	1	2.5	0.75	100	48F5402	53.65
● PTL-23-427	1	4	1	100	48F5403	63.90
● PTL-33-427	1.5	4	1	100	04H2737	82.14
● PTL-66-427	1.94	3.15	1	100	04H2800	46.09
● PTL-107-427	2	1.5	0.5	100	04H2520	59.25

REPOSITIONABLE VINYL-CLOTH — WHITE

Mfg. Part No.	Label Dimensions (In.) (Printable Area) A	B	Labels per Roll	Stock No.	Price per Roll Each
● PTL-7-498	0.5	0.5	500	04H2806	93.50
● PTL-11-498	0.75	0.5	500	04H2524	83.42
● PTL-29-498	1.5	0.5	500	04H2681	52.25

(39399)

WIRE AND CABLE MARKING LABELS

RoHS Compliant Available

BRADY.

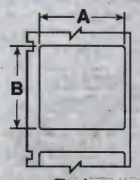


Fig. 1

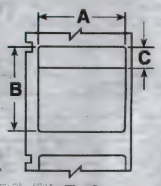


Fig. 2

Ideal for use on wire and cable for easy identification. Also use on electronic components in control panels, on circuit boards and faceplates.

6 - 10 AWG — MAX. WIRE DIAMETER: 0.26″

Mfg. Part No.	Fig.	Label Material	Dimensions (In.)+ A	B	C	Lines of Print	Labels Per Roll	Stock No.	Price per Roll 1-49
● WML-305-292	2	Vinyl*	0.5	1.25	0.5	3	250	48F5328	70.21
● WML-911-502	1	Vinyl Cloth	1	1.25	....	8	250	48F5347	55.78
● WML-311-292	2	Vinyl*	1	1.25	0.5	3	250	04H5969	63.17
● WML-317-292	2	Vinyl*	1.5	1.25	0.5	3	250	48F5332	111.91
10 - 12 AWG — MAX. WIRE DIAMETER: 0.21″									
● WML-205-292-1	2	Vinyl*	0.5	1	0.375	2	250	48F5324	69.22
● WML-711-499	2	Nylon Cloth	1	1	0.375	6	250	48F5342	51.34
● WML-211-292-1	2	Vinyl*	1	1	0.375	2	250	48F5326	86.94
10 - 16 AWG — MAX. WIRE DIAMETER: 0.16″									
● WML-505-499	1	Nylon Cloth	0.5	0.75	...	4	250	48F5333	39.88
● WML-505-502	1	Vinyl Cloth	0.5	0.75	...	4	250	48F5334	40.21
● WML-205-292-75	2	Vinyl*	0.5	0.75	0.375	2	250	48F5325	59.29
● WML-511-499	1	Nylon Cloth	1	0.75	...	4	250	25C5377	47.63
● WML-511-502	1	Vinyl Cloth	1	0.75	...	4	250	48F5337	48.09
● WML-211-292-75	2	Vinyl*	1	0.75	0.375	2	250	48F5327	40.97
● WML-511-292	2	Vinyl*	1	2.5	0.75	4	100	48F5335	65.52
16 - 22 AWG — MAX. WIRE DIAMETER: 0.11″									
● WML-305-499	1	Nylon Cloth	0.5	0.5	...	3	500	48F5329	63.13
● WML-305-502	1	Vinyl Cloth	0.5	0.5	...	3	500	48F5330	63.66

*Self-laminating vinyl; +NOTE: Measurements based on THHN wire
(39387)

WIRE MARKER CARDS

RoHS Compliant Available

BRADY.

WM series card-mounted wire markers are able to withstand moderate heat, oil and dirt. Markers hold tightly to the wire due to their high adhesion properties and can be re-used with ease if repositioning is required. Available in black on matte white background. Choice of individual numbers or symbols and as consecutive numbers or letters. Length: 1.5″ per marker. **Sold in packages of 25 cards.**

Mfg. Part No.	Legend	Qty. of Markers Per Card	Stock No.	Price per Pkg. Each
● WM-0-PK	0	36	26R7741	45.93
● WM-1-PK	1	36	26R7773	61.70
● WM-2-PK	2	36	26R8079	60.49
● WM-3-PK	3	36	26R8327	61.70
● WM-4-PK	4	36	26R8580	45.93
● WM-5-PK	5	36	25R4073	45.93
● WM-6-PK	6	36	26R8660	45.93
● WM-7-PK	7	36	26R8702	61.70
● WM-8-PK	8	36	26R8734	45.93
● WM-9-PK	9	36	26R4635	62.30
● WM-1-33-PK	1 thru 33	1 of Ea. Consecutive Number	26R7795	60.49
● WM-34-66-PK	34 thru 66	1 of Ea. Consecutive Number	26R8438	61.70
● WM-67-99-PK	67 thru 99	1 of Ea. Consecutive Number	26R8692	62.30
● WM-A-Z-PK	A thru Z	1 of Ea. Consecutive Letter	26R7573	45.93
● WM-MIN-PK	-	36	27R0231	61.70
● WM-PLS-PK	+	36	27R0198	61.70

(39393)

K SERIES LABEL PRINTERS AND ACCESSORIES

RoHS Compliant Available

KROY®

Features:
- Auto sizing
- Faster print speeds
- Self-contained battery charger (K5100 printer only)
- Quick response time
- Scaleable and downloadable fonts
- Print resolution of 300dpi

2562000 K4100 Printer

2561000 K5100 Printer

Mfg. part no. 2562000 K4100 desktop industrial label printer offers a versatile line of supplies including industrial labels, self-laminating wire wraps and shrink tubing which gives its the flexibility to make labeling easy. **Mfg. part no. 2561000** K5100 hand-held portable label and wire marking printer offers flexibility on-site or at a desk. It can be taken anywhere for fast labeling at your fingertips. Both printers can be connected to a PC for customizing and printing labels, wire wraps and shrink tubing. *Order accessories and tape labeling cartridges separately below.*

Mfg. Part No.	Description	Stock No.	Price Each
● 2562000	**K4100** Computer-Compatible Desktop Label Printer — Includes Software and Drives, Serial Cable, AC Adapter, Power Cord and Owners Manual	90H9194	398.54
2561000	**K5100** Hand-Held Portable Label and Wire Marking Printer — Includes CD-ROM with KLDS Software and Drives, Serial Cable, AC Adapter, Power Cord and Owners Manual	90H9193	520.68
ACCESSORIES			
● 2562900	K4100 Carrying Case	88H1789	120.59
● 2563900	K5100 Carrying Case	90H9197	120.59
2449300	K5100 (6) C-Size Rechargeable Nickel-Cadmium Batteries	42K5333	55.13

INDUSTRIAL LABELING TAPE CARTRIDGES — FOR KROY K SERIES PRINTERS
Other colors, sizes, and types are available; *go online or call. Order heat-shrink tube labeling cartridges separately on page 1291.*

Mfg. Part No.	Color	Width (In.)	Stock No.	Price per Cartridge
● 2560101	Black/Clear	0.375	39C0315	38.85
● 2558316	Black/White	0.5	24C4506	42.64
● 2558343	Black/Yellow	0.5	73C6825	41.51
● 2558116	Black/White	1	29C5392	44.22
● 2558143	Black/Yellow	1	73C6823	41.69
● 2438631	Black/Red	1	90H9187	39.55

(77954)

INDUSTRIAL UV-COATED LABELING CARTRIDGES FOR KROY K SERIES PRINTERS

KROY®

Industrial UV-coated label cartridges for use in K2000-PC, K3000-PC, K2000 and K2500 printers only. **Sold in lengths of 40′ per cartridge.**

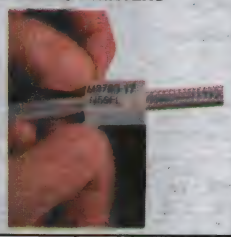
Mfg. Part No.	Color	Stock No.	Price per Cartridge
0.5″ INDUSTRIAL UV-COATED LABELS			
2487901	Black on Clear Tape	19C7426	40.34
2487916	Black on White Tape	19C7427	39.28
2487943	Black on Yellow Tape	19C7432	38.85
2487920	White on Black Tape	19C7429	39.68
0.8″ INDUSTRIAL UV-COATED LABELS			
2438716	Black on White Tape	19C7408	37.41
1″ INDUSTRIAL UV-COATED LABELS			
2438601	Black on Clear Tape	19C7396	41.51
2438602	White on Clear Tape	19C7397	41.07
2438616	Black on White Tape	19C7399	41.96
2438620	White on Black Tape	19C7402	41.51
2438643	Black on Yellow Tape	19C7404	41.07

(62277)

SELF-LAMINATING WIRE-WRAP LABELING CARTRIDGES FOR KROY K SERIES PRINTERS

KROY®

For use in K2500, K2000, K3000-PC and K2000-PC printers. Ideal for marking wires with connectors or after terminating. Easy to use, simply wraps around wire.



Mfg. Part No.	Size	Printable Area	Fits Wire	No. of Labels per Cartridge	Stock No.	Price per Cartridge
2556708	0.5 x 1″	0.25 x 1″	16-22	270	19C7440	35.89
2556707	1 x 1″	0.375 x 1″	10-12	175	19C7439	37.18
2556702	1.25 x 1″	0.5 x 1″	8-12	160	19C7434	37.59
2556703	2.5 x 1″	0.75 x 1″	6-10	110	19C7435	37.97
2556701	4 x 1″	1 x 1″	4-6	80	19C7433	35.89

(62275)

SHRINK TUBE LABELING CARTRIDGES FOR KROY K SERIES PRINTERS

RoHS Compliant Available

KROY®

Heat-shrink tube labeling cartridges for use in **K series** printers; *ordered separately* ***on page 1290***. Premium polyolefin heat-shrink tubing and black thermal transfer resin ribbon. Ultra thin wall, cadmium-free with a 3:1 shrink ratio. Operating temperature range: -40° F to +275° F (135°C); up to 392°F (200°C) for a short duration. Tubing is flame-retardent, temperature-, chemical-, water- and abrasion-resistant. **Sold in lengths of 110″ per cartridge.**

Mfg. Part No.	Tube Size	Color	Stock No.	Price per Cartridge
2470001	0.125″ (3.2mm)	Black on White	19C7416	42.93
2470002	0.125″ (3.2mm)	Black on Yellow	31C1905	43.39
2470011	0.188″ (4.8mm)	Black on White	19C7417	44.27
2470012	0.188″ (4.8mm)	Black on Yellow	31C1906	36.63
2470021	0.25″ (6.4mm)	Black on White	19C7418	46.97
2470022	0.25″ (6.4mm)	Black on Yellow	19C7419	47.45
2470031	0.38″ (9.6mm)	Black on White	19C7420	49.65
2470032	0.38″ (9.6mm)	Black on Yellow	19C7421	49.12
2470041	0.5″ (12.8mm)	Black on White	19C7422	52.33
2470042	0.5″ (12.8mm)	Black on Yellow	19C7423	52.89

(62274)

NEW PRODUCTS ADDED DAILY

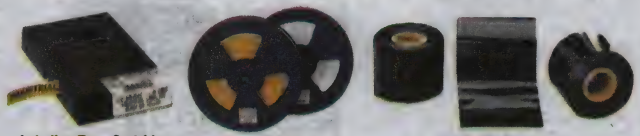
See the newest products, technologies and suppliers on our website.

(196560)

LABELING SUPPLIES FOR KROY DURATYPE 240 AND 244 LABEL PRINTERS

RoHS Compliant Available

KROY®



Labeling Tape Cartridge — Shrink Tubing Reels — Resin Printer Ribbons

Select from a variety of labeling supplies, cartridges and ribbons for Kroy DuraType **240** and **244** printers including general-purpose tape cartridges and industrial tape cartridges. Specialty labels include self-laminateing wire wrap to professionally mark wire and cable, and shrink tubing. Other colors, sizes, and types are available; *go online or call.*

GENERAL-PURPOSE LAMINATED POLYESTER LABELING TAPE CARTRIDGES

2.0-mil polyester with thermal transfer ribbon and over-laminating film contained in an easy load, snap in cartridge for the **240SE** and **244RS** printers. Suitable for most general-purpose labelling applications. Chemical and water resistant.

Mfg. Part No.	Color	Width (In.)	Stock No.	Price per Cartridge
2227501	Black/Clear	0.5	26C0072	40.38
2227543	Black/Yellow	0.5	23C1531	40.38
2227502	White/Clear	0.5	26C0074	40.38
2227520	White/Black	0.5	23C1526	40.38
2227517	Blue/White	0.5	29C3773	38.48
INDUSTRIAL LAMINATED POLYESTER LABELING TAPE CARTRIDGES				
2357-516	Black/White	0.5	20C5892	54.44

SHRINK TUBING REELS

Premium heat-shrink tube labeling comes on a continuous 100′ reel to provide a cost-effective method for marking and identifiying shrink tubing, wire and cable. Ultra-thin wall, cadmium-free polyolefin tubing with a low recovery temperature of 194°F and a shrink ratio of 3:1. Tubing is flame-, temperature-, chemical-, water- and abrasion-resistant. Meets MIL-I 23053/5 Class 1 and 3, MIL-I R 46846 Type V specifications and UL-224VW-I rating. **Sold in reels of 100′.**

Mfg. Part No.	Color	Width (In.)	Stock No.	Price per Reel
98-WT31-0342	White	0.125	61H8595	177.61
98-YT31-0342	Yellow	0.125	94C1129	177.61
98-WT31-0642	White	0.25	27C6248	206.56
98-YT31-0642	Yellow	0.25	70C5225	206.56
98-YT31-0942	Yellow	0.375	70C5227	236.83
98-WT31-1242	White	0.5	84C8763	2.30
98-YT31-1242	Yellow	0.5	70C5229	260.52
98-WT31-1942	White	0.75	90H9211	361.44
98-WT31-2542	White	1	94C1126	479.20

RESIN PRINTER RIBBONS

Resin printer ribbons offer the maximum chemical, water and abrasion resistance. Excellent for printing on to synthetic labels such as polyesters, vinyls, and polyimides label stocks.

Mfg. Part No.	Color	Width (In.)	Stock No.	Price Each
92-BLK-PR243U	Black	2.43	90H9198	51.81

(77394)

SHRINK TUBE LABELING CARTRIDGES FOR KROY TM600, TM650 AND 244ST PRINTERS

KROY®

Shrink tube labeling cartridges for **TM600**, **TM650** and **244ST series** printers. **Sold in lengths of 100″ per cartridge.**

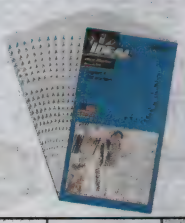
Mfg. Part No.Type	Tube Size	Color	Stock No.	Price per Cartridge
2404201	0.125″	Black on White	19C7388	46.97
2404202	0.125″	Black on Yellow	19C7389	46.95
2404210	0.188″	Black on White	19C7390	48.31
2404211	0.188″	Black on Yellow	19C7391	48.30
2404220	0.250″	Black on White	19C7392	50.17
2404221	0.250″	Black on Yellow	19C7393	49.64

(62281)

WIRE-MARKER BOOKLETS

IDEAL®

Self-sticking wire markers in convenient pocket-size booklets. Plastic-impregnated cloth construction resists dirt, moisture, and oil. Non-smear black legends on white background provide high visibility. Temperature range: –40° to +250°F. Perforated 1.5″ (38.10) markers can be separated into half-length sizes.



Mfg. Part No.	Legend	Number of Markers	Stock No.	Price Each 1-4
44-101	0 to 9	45 Each	35F2238	28.14
44-102	A to Z, 0 to 15, +, -, /	10 Each	35F2239	27.34
44-103	1 to 45	10 Each	35F2240	28.14
44-104	46 to 90	10 Each	35F2241	27.34

(5600)

WIRE IDENTIFICATION & MARKING SYSTEMS

LS8E SERIES PANTHER HAND-HELD THERMAL TRANSFER PRINTERS AND ACCESSORIES

RoHS Compliant Available

PANDUIT®

- **LS8EQ** models with innovative QWERTY keypad for improved productivity
- Cut-to-length functionality eliminates label waste
- Partial cut feature provides tear-apart strips of labels
- Fast-loading label cassette includes both labels and ribbon
- Large graphic display with backlight for improved visibility
- Compact, rugged and easy-to-use on site

LS8EQ with QWERTY Keypad LS8E

LS8E series PanTher™ hand-held, thermal transfer printers print self-laminating labels, heat-shrink labels, flag labels, marker plates,continuous tapes and die-cut labels for wire and cable, patch panels, faceplates and other network applications. The fast-loading P1™ label cassettes contain an integrated memory device for automatic formatting, recalling last legend used and number of labels remaining in cassette . Select the printer that best fits your needs. *Order additional printer accessories separately below.* An assortment of P1™ label cassettes are available; *go online or call.*

LS8EQ PANTHER™ HAND-HELD THERMAL TRANSFER PRINTER

LS8EQ PanTher™ printer includes an innovative QWERTY style keypad for faster text entry and label design for enhanced productivity.

Mfg. Part No.	Kit Contents	Stock No.	Price Each 1-2
● LS8EQ	LS8EQ printer w/QWERTY keypad, S100X150VAC labels & batteries	17T6030	433.64
● LS8EQ-KIT	LS8EQ printer w/QWERTY keypad, labels, 6 AA batteries, USB cable, software, bumper, wriststrap, case	60R6786	497.41
● LS8EQ-KIT-ACS	LS8EQ-KIT w/ adapter and manual	17T6031	548.22
LS8E PANTHER™ HAND-HELD THERMAL TRANSFER PRINTER			
● LS8E	LS8E PanTher printer, self-laminating label cassette & 6 AA batteries	39M3229	433.64
● LS8E-KIT	PanTher printer, label cassette, batteries, PC interface kit, wriststrap, bumper & case	39M3230	509.08
● LS8E-KIT-ACS	PanTher printer, labels, batteries, adapter, PC interface kit, wriststrap, bumper & case	89M7125	548.22

ACCESSORIES FOR LS8E AND LS8EQ PANTHER™ PRINTERS

Mfg. Part No.	Description	Stock No.	Price Each 1-2
● LS8E-ACS*	120VAC Power Adapter for North America	41M8177	116.84
LS8-CASE	Hardside Carrying Case	67K8119	117.04
LS8-CLN	Cleaning Cassette Kit	67K8120	94.40

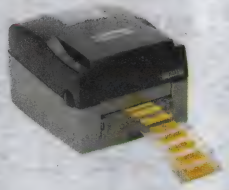
*Not used to charge batteries
(90843)

TDP43ME THERMAL TRANSFER DESKTOP PRINTER

RoHS Compliant Available

PANDUIT®

Mfg. part no. TDP43ME 300 dpi thermal transfer desktop printer creates crisp, clear legends with superior legibility at speeds up to 4″ per second. Compact, lightweight design enables use in office or remote locations. Use to print a wide variety of self-laminating labels, component labels, non-laminated labels, heat-shrink labels, marker plates and continuous tapes up to 4.25″ wide. This thermal transfer printer comes complete with Panduit's Easy-Mark™ labeling software, **RMEH4BL** hybrid black printer ribbon, AC power adapter with U.S. power cord, USB cable, user manual, Quick-Start card, and driver disk. Can also be used with Panduit's Pan-Mark® 2.5 for Windows® labeling software, *order separately; go online or call.* Easy-loading hybrid and resin printer ribbons are available; *order separately on this page.*



Mfg. Part No.	Description	Stock No.	Price Each
● TDP43ME	Thermal Transfer Desktop Printer	43T4696	1718.14

(84226)

PLD SERIES CABLE MARKER DISPENSER KITS

RoHS Compliant Available

PANDUIT®

Mfg. part nos. S100X125VARY and **S100X225VARY** self-laminating vinyl marker kits contain dispenser, roll of blank markers, and marking pen. Marker tape rolls load easily into tough polypropylene dispenser.

Mfg. Part No.	Blank Markers: Overall Size	Blank Markers: Write-On Area	Blank Markers: Labels per Roll	Stock No.	Price Each 1-2
● S100X125VARY	1.0 x 1.25″	1.0 x .38″	200	52K3171	52.83
● S100X225VARY	1.0 x 2.25″	1.0 x .75″	100	52K3179	53.75

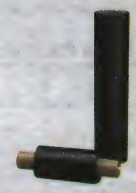
(13227)

RIBBONS FOR MFG. PART NO. TDP43ME THERMAL TRANSFER PRINTER

RoHS Compliant Available

PANDUIT®

Ribbons load easily into **mfg. part no. TDP43ME** thermal transfer desktop printer; *ordered separately on this page.* Hybrid wax/resin ribbons are recommended for use with heat-shrink, self-laminating, Turn-Tell® labels, and tan polyimide, and vinyl cloth labels. Resin ribbons are recommended for use with polyester and white polyimide component labels, marker plates, raised panel labels, nylon cloth labels, and continuous vinyl tape.



Mfg. Part No.	Description	Width (in.)	Roll Length (ft.)	Stock No.	Price per Roll
● RMEH2BL	Black, Hybrid Thermal Transfer Ribbon	2.50	300	58T4245	39.19
● RMEH4BL	Black, Hybrid Thermal Transfer Ribbon	4.25	300	58T4246	69.61
● RMER4BL	Black, Resin Thermal Transfer Ribbon	4.25	300	58T4249	69.61

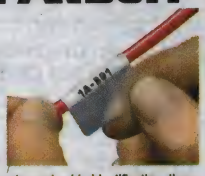
(84227)

SELF-LAMINATING LABEL CASSETTES

RoHS Compliant Available

PANDUIT®

- Vinyl label material and ribbon in one cassette
- Fast loading makes changing labels easy
- For hand-held thermal transfer printers
- Offers crisp, clear legends with superior legibility
- Clear overlaminate protects label for clear, permanent identification



P1™ self-laminating vinyl label cassette includes both label and ribbon. Ideal for wire and cable identification, these adhesive-backed labels feature a white print-on area and clear, protective overlaminate. Designed for use with Panduit's **LS8E series** hand-held thermal transfer printer; ordered separately *on this page.* Ribbon and label color: black on white.

Mfg. Part No.	Width (in.)	Length (in.)	Print-On Area Ht. (in.)	Cable O.D. (in.)	For AWG	Labels per Cassette	Stock No.	Price Each
● S050X075VAC	0.5	0.75	0.25	0.08 - 0.16	18-14	450	67K8413	72.16
● S100X125VAC	1.0	1.25	0.38	0.12 - 0.28	12-10	225	67K8417	68.74
● S100X150VAC	1.0	1.50	0.50	0.16 - 0.32	Cat.5e/6	200	67K8418	64.14
● S100X225VAC	1.0	2.25	0.75	0.24 - 0.48	8-4	125	67K8421	66.76
● S100X400VAC	1.0	4.00	1.00	0.32 - 0.95	2-1	75	67K8422	40.75

(84232)

SELF-LAMINATING LABELS FOR LASER/INK JET PRINTERS

RoHS Compliant Available

PANDUIT®

Labels can be printed in both laser and ink jet printers. Self-laminating labels include a colored print-on area and clear overlaminate to protect the legend for clear and durable identification. Available in polyester material and supplied on 8.5″ x 11″ sheets. Labeling software packages include all label formats for quick and easy label production.

Mfg. Part No.	Width (in.)	Length (in.)	Print-On Height (in.)	Pkg. Qty.	Stock No.	Price per Pkg.
● S100X125YAJ	1.00	1.25	0.38	2500	08J3933	303.89
● S100X150YAJ	1.00	1.50	0.50	2500	08J3940	356.43
● S100X225YAJ	1.00	2.25	0.75	1000	02J8312	245.69
● S100X400YAJ	1.00	4.00	1.00	1000	08J3964	296.14

(84218)

THERMAL TRANSFER SELF-LAMINATING WIRE MARKERS

RoHS Compliant Available

PANDUIT®

Designed for permanent, clean identification of wire and cable. Labels are mounted on 1″ (25.4mm) cores for a variety of thermal transfer desktop printer types including the Panduit **mfg. part no. PTR2E** and **PTR3E** printers. Vinyl material for indoor applications.

Mfg. Part No.	Label Size W x L	Print-On Area W x L	Labels per Roll	Stock No.	Price per Roll 1-2
● S100X150VA1Y	1.00″ x 1.50″	1.00″ x 0.50″	2500	51K9653	230.47

(62371)

Custom Cable Assembiles to your specs to mate with the complete line of connectors!
Call 1.800.463.9275

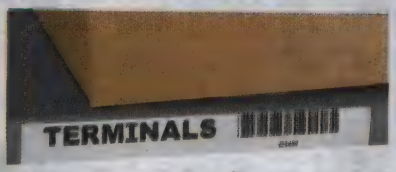
(212562)

CONTINUOUS LABELING TAPE CASSETTES

RoHS Compliant Available

PANDUIT®

- Vinyl label material and ribbon in one cassette
- Fast loading makes changing labels easy
- For hand-held thermal transfer printers
- Offers crisp, clear legends with superior legibility



P1™ continuous vinyl labeling tape cassettes are ideal for creating custom pipe markers, voltage markers, terminal block labels, signs, bin markers and network ID labels. Designed for use with Panduit's **LS8E** and **LS9 series** hand-held thermal transfer printers; *ordered separately on page 1292*. Use for flat label applications only.

Mfg. Part No.	Ribbon and Material Color	Height In. (mm)	Length Ft. (M)	Stock No.	Price Each
T038X000VPC-BK	Black on White	0.38 (9.65)	25 (7.6)	**67K8728**	47.69
T050X000VPC-BK	Black on White	0.50 (12.7)	25 (7.6)	**67K8731**	47.69
T075X000VPC-BK	Black on White	0.75 (19.1)	25 (7.6)	**67K8739**	55.03
T100X000VPC-BK	Black on White	1.00 (25.4)	25 (7.6)	**67K8741**	61.98

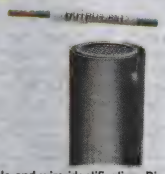
(82403)

HEAT-SHRINK LABEL CASSETTES

RoHS Compliant Available

PANDUIT®

- Heat-shrinkable label material and ribbon in one cassette
- 3:1 shrink ratio
- Fast loading makes changing labels easy
- For hand-held thermal transfer printers



P1™ heat-shrink label cassettes are ideal for cable and wire identification. Die- cut, flattened, Mil-grade polyolefin heat-shrink labels feature a crisp, clear white printable area for superior legibility. Meets MIL-M-81531, MIL-STD-202F Method 215A, Solution A, C, D print performance requirements. Meets UL Standard 224 for flammability. Temperature rating: -67°F to 275°F (-55°C to 135°C). Color: white print-on area, black ribbon. Designed for use with Panduit's **LS8E series** hand-held thermal transfer printers; *ordered separately on page 1292*.

Mfg. Part No.	Width (in.)	Length (in.)	Min./Max. Cable O.D. (in.)	Dia. (in.)	AWG	Labels per Cassette	Stock No.	Price per Cassette
H100X025H1C	0.25	1	0.04 / 0.13	⅛	22-16	100	**60M3742**	81.54
H100X034H1C	0.34	1	0.06 / 0.19	3⁄16	18-12	100	**47P0598**	89.51
H100X044H1C	0.44	1	0.08 / 0.25	¼	16-10	100	**05N1500**	107.43
H100X064H1C	0.64	1	0.13 / 0.38	⅜	12-6	75	**34T1608**	119.33
H100X084H1C	0.84	1	0.17 / 0.50	½	8-1	75	**17T5891**	114.80

(18436)

PAN-CODE WIRE MARKER BOOKS

RoHS Compliant Available

PANDUIT®

Pan-Code™ wire marker books are easy to carry and easy to use. Vinyl cloth material with black legends on white background. Marker size: 1.375″ (34.93) long for up to 0.375″ (9.53) outer diameter with matching terminal marker. Feature 10 pages per book, except **mfg. part nos. PCMB-13** and **PCMB-25** which features 12 pages per book.

Mfg. Part No.	Legends	No. Markers/ Each Legend	Stock No.	Price Each 1-2	Price Each 3-4
PCMB-1	0-9	45	**87F6093**	30.80	29.26
PCMB-2	A-Z, 0-15, +, –, /	10	**87F6383**	30.80	29.26
PCMB-3	1-45	10	**87F6094**	31.34	29.78
PCMB-4	1, 2, 3	150	**87F6384**	34.42	32.21
PCMB-5	A, B, C	150	**87F6385**	34.42	32.21
PCMB-8	1-15 16-90 A-Z, +, -, /, 0	6 4 2	**87F4562**	34.16	31.97
PCMB-9	1, 2, 3, A, B, C L1, L2, L3, T1, T2, T3	45 30	**87F4563**	34.42	32.21
PCMB-11	1-30	15	**87F4565**	34.42	32.21
PCMB-12	A-Z + – Blank (Write-On)	15 8 7 21	**87F4566**	34.16	31.97
PCMB-13	+, -, AC, DC POS, NEG, GND NEUT SPARE, Blank (write-on)	45 33 27 21	**83F7244**	34.42	32.21

➤ CONTINUED ➤

PAN-CODE WIRE MARKER BOOKS (CONT.)

Mfg. Part No.	Legends	No. Markers/ Each Legend	Stock No.	Price Each 1-2	Price Each 3-4
PCMB-16	0-33, A, B, C, +, – L1, L2, L3, T1, T2, T3	10 10	**87F4567**	34.16	31.97
PCMB-25	0-9 L1, L2, L3, T1, T2, T3	45 15	**87F4568**	34.42	32.21

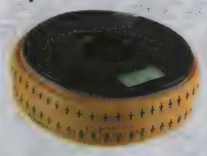
(6464)

CABLE MARKERS

RoHS Compliant Available

pro-POWER

- Straight cut, oval type 0.197″ wide markers
- Yellow PVC with black legend
- Can be used as conventional wire markers or alternatively on carrier strips
- Carrier strip holds markers for easy installation
- Secured at either end using cable ties or lacing cord



Wire diameter 0.138-0.236″. Operating temperature -65 to 70°C. **Sold in spools of 500.**

Mfg. Part No.	Legend	Stock No.	Price per Spool 1-49
FM1(-)	- (Dash)	**24M2102**	14.70
FM1(0)	0	**24M2130**	14.70
FM1(1)	1	**24M2131**	14.70
MCFM-1(EARTH)	Earth (Symbol)	**24M4434**	14.24
FM1(2)	2	**24M2132**	14.70
FM1(3)	3	**24M2133**	14.70
FM1(4)	4	**24M2134**	14.70
FM1(5)	5	**24M2135**	14.70
FM1(6)	6	**24M2136**	14.70
FM1(7)	7	**24M2137**	14.70
FM1(8)	8	**24M2138**	14.70
FM1(9)	9	**24M2139**	14.70
FM1(A)	A	**24M2104**	14.30
FM1(E)	E	**24M2108**	14.70
FM1(F)	F	**24M2109**	14.30
FM1(G)	G	**24M2110**	14.30
FM1(I)	I	**24M2112**	14.30
FM1(J)	J	**24M2113**	14.30
FM1(L)	L	**24M2115**	14.30
FM1(N)	N	**24M2117**	14.30
FM1(P)	P	**24M2119**	14.30
FM1(Q)	Q	**24M2120**	14.30
FM1(R)	R	**24M2121**	14.30
FM1(S)	S	**24M2122**	14.30
FM1(T)	T	**24M2123**	14.30
FM1(U)	U	**24M2124**	14.30
FM1(V)	V	**24M2125**	14.30
FM1(W)	W	**24M2126**	14.70
FM1(X)	X	**24M2127**	14.30
FM1(Y)	Y	**24M2128**	14.30
FM1(Z)	Z	**24M2129**	14.30

CARRIER STRIPS

Mfg. part no. MS065 carrier strip holds 9 markers. **Sold in packages of 100.**

Mfg. Part No.	Length	Stock No.	Price per Pkg. 1-49
MS065 65MM CARRIER STRIP	2.559″	**24M4996**	5.30

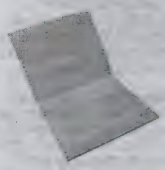
(102907)

EZCODE WIRE AND CABLE MARKER SHEETS

RoHS Compliant Available

Thomas&Betts

EZCode® customize and personalize markers using information stored in word processors, automatic typewriters, or computer printers. Using pin-fed holes and fan-folded sheets that fit standard printers or laser printable sheets, these markers can provide entire schematic wiring data, serial numbers, sequencing data, data coding, and routing and connecting information. Self-laminating vinyl provides maximum protection against most common elements. **Sold in packages of 25 sheets.**



MARKER SHEETS FOR STANDARD PRINTERS

Mfg. Part No.	Marker Size	Wire Diameter	Markers per Sheet	Total Markers per Package	Stock No.	Price per Pkg. 1-4
WES-12112	½ x 1½″	0.313″	64	1600	**87F991**	156.23
WES-1112	1 x 1½″	0.313″	32	800	**65T6703**	152.27
MARKER SHEETS FOR LASER PRINTERS						
WLP-1112	1 x 1½″	0.313″	48	1200	**16F1175**	160.51
WLP-1214	1 x 2¼″	0.469″	32	800	**16F1176**	159.83
WLP-12112	½ x ½″	0.313″	96	2400	**16F1178**	158.52

(6450)

WIRE IDENTIFICATION & MARKING SYSTEMS

EZCODE WIRE MARKER BOOKS

RoHS Compliant Available

Thomas&Betts

EZCode® pocket-pack wire marker books are easy to carry, and easy to use.

WBC VINYL CLOTH STANDARD BOOKS

Mfg. Part No.	Number of Markers and Legends	Stock No.	Price Each 1-9
● WM-0-9M	46 Each Page	46F5979	27.81
● WM-A-33	10 Each: 1-33, A, B, C, +, -, T_1, T_2, T_3, L_1, L_2, L_3	46F5984	27.81
● WM-0-45	10 Each: 0 Thru 45	46F6503	27.55
● WM-A-90	6 Each: 0-15, 4 Each: 16-90, 2 Each: A-Z	46F5985	27.81
● WM-46-90	10 Each	46F5980	27.81
● WM-A-Z	10 Each: A Thru Z, +, –, and 0 Thru 15	46F5981	27.81
WSL VINYL SELF-LAMINATING STANDARD BOOKS			
● WMSL-0-45	10 Each: 0 Thru 45	46F5967	29.33
WSL VINYL SELF-LAMINATING STANDARD BLANK WRITE-ON BOOKS			
● WM-BW3	30 1"x4-7/8" Marking Area: 1"x1"	67T2148	29.60
● WM-BW5	50 1"x2-3/4" Marking Area: 1"x ¾"	46F5972	29.02

(6449)

RAYCHEM CM-NMX SERIES PRINTABLE, MILITARY-GRADE TIE-ON CABLE MARKERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Extremely lightweight
- Ultimate tensile strength and tear resistance — 25N/mm (min.)
- Flame-resistant
- Excellent solvent resistance
- Meets MIL-STD-202, Method 215K for fluid resistance
- Thermal transfer printable — meets SAE-AS-5942 for print permanence
- Easily attached using cable ties

CM-NMX series printable, military-grade tie-on cable markers identify wire and cable bundles, hose and pipe, and conduit in a variety of applications, such as industrial, energy, aerospace and defense industries where light weight and resistance to harsh environments are important. Ideal for post termination assembly, as well as, retrofit and repair capability. Four pre-cut holes allow for easy attachment to cable or wire bundles using cable ties. Compatible with the latest, economical thermal-transfer printable technology for faster printing and sharper print resolutions. Meets requirements of DMS 2325, DMS 2409, ASTM-G-154-26, ASTM-D-570, ASTM-D-568. Constructed of highly-durable and flame-resistant meta-aramid material. Colors: white and yellow. *Order cable ties separately; go online or call.* **Sold in rolls of 2500 markers.**

Mfg. Part No.	Color	Printable Height (mm)	Printable Length (mm)	Stock No.	Price per Roll Each
● CM-NMX-2.5K-1/4-4H-9	White	6.4	50.8	32T5303	899.34
● CM-NMX-2.5K-1/4-4H-4	Yellow	6.4	50.8	32T5302	899.34
● CM-NMX-2.5K-1/2-4H-9	White	12.7	50.8	32T5301	1455.34
● CM-NMX-2.5K-1/2-4H-4	Yellow	12.7	50.8	32T5300	1455.34

(194756)

RAYCHEM CM-SCE SERIES POLYOLEFIN TIE-ON CABLE MARKER TAGS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Side-entry provides access to big size wire bundles as well as retrofit and repair capability
- Highly flame-retardant
- Highly resistant to abrasion, mechanical abuses, fluids, lubricants and solvents
- Standard cable tie-wraps install markers
- Excellent print permanence when printing on the rough side of marker

CM-SCE series polyolefin tie-on cable marker tags are flat, rigid, non-adhesive labels that can be used to identify large cable and wire bundles in environments such as military and aerospace. Marker tags feature 4 tie-wrap holes and are easily applied to cable or wire bundles with standard cable ties. Print performance meets or exceeds the requirements of SAE AS81531 4.6.2 and MIL-STD-202F, Method 215J. Operating temperature range: -55°C to +135°C. Color: white. **Sold in rolls of 250 tags.**

Mfg. Part No.	Label Size (in.)	Markable Height (in.)	Markable Length (in)	Stock No.	Price per Roll 1-2
● CM-SCE-TP-1/4-4H-9	0.250	0.25	2	17M9922	80.44
● CM-SCE-TP-1/2-4H-9	0.500	0.50	2	17M9921	140.50
● CM-SCE-1/2-4H-9	0.500	0.50	2	41M0765	155.37

(84713)

200 IDENT THERMAL TRANSFER PRINTER AND ACCESSORIES

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features:
- Lightweight, portable — only 4kg (8.82 lbs)
- Automatic calibration
- Simple ribbon and media loading procedure
- Superior print position accuracy
- Cutter and perforator option; *available separately below*
- Touch screen
- Full DHCP (Dynamic Host Configuration Protocol)
- USB 2.0 (full speed)
- USB master ports on the front and back of printer
- LAN 10/100 Base (Ethernet) connection

Specifications:
- Printing speeds: 30, 40, 50, 75, 100, 125mm/s (recommended 50mm/s)
- Print width:108mm (4.25") max.
- Label width: 10 to 116mm (backing paper width)
- Label height: 6 to 1000mm
- Printer dimensions: 253mmW x 322mmD x 189mmH
- Rated: 100V to 240V; 50/60Hz, 45W typical / 100W max.
- Power save mode: 1.8W
- RAM 64MB, Memory IFFS flash 16MB
- Operating system: Windows™ XP
- Operating temperature range: 5°C to 40°C (40°F to 104°F)
- Operating humidity: 25% to 85% non-condensing RH
- UL listed, CE compliant, FCC Class A, CB, CCC (China Compulsory Certification), GOST

Applications:
- For TE identification marker sleeves, cable markers, and labels
- Ideal low volume printing

T200 Ident thermal transfer printer with 300dpi print head is the perfect solution for cable identification plus a whole range of basic labeling printing applications. The increased accuracy and added flexibility of a movable media sensor extends the variety of products approved for this portable printer while reducing the number of misprints. Touch screen provides an easier user interface for set-up and enhances the user experience. Printer includes parallel communications cable, power supply, print head cleaning pen and CD ROM user guide. Designed to print on a wide range of TE Connectivity identification marker sleeves, cable markers, and labels. *Order* **WinTotal 5** or ***PEP-5*** (Express, Pro, Suite) *wire identification and basic labeling printing software separately; go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each
● EC6996-000	T200 Ident Thermal Transfer Printer	63W2510	1420.84

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
EC8456-000	T200 Ident Cutter— Cut length up to 10mm	63W2511	678.96
EC8869-000	T200 Ident Perforator — Max. Product Width of 45mm	63W2512	958.12
EC8927-000	T200 Ident Print Head — 300dpi	63W2514	322.55
EC8926-000	T200 Ident DR4 Drive Roller	63W2513	73.20

(209142)

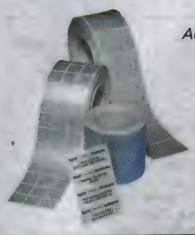
RAYCHEM MP SERIES METALIZED POLYESTER THERMAL TRANSFER PRINTABLE LABELS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Metalized appearance
- Ideal for rating plate applications



MP series thermal transfer printable metalized polyester film with a permanent acrylic adhesive, designed for rating plates and other applications that require a metal look, such as nameplates, equipment labels, detailed product information labels and serial number plates. Service temperature: -40°C to +150°C. UL listed, CSA certified. **Sold in roll quantities indicated in table below.**

Mfg. Part No.	Label Width (in)	Label Height (in.)	Labels Per Roll	Stock No.	Price per Roll
● MP-191064-10-8A	0.750	0.250	10000	17M9308	120.00
● MP-254127-10-8A	1.000	0.500	10000	17M9310	235.87
● MP-381064-10-8A	1.500	0.250	10000	17M9312	170.00
● MP-699254-5-8A	2.750	1.000	5000	17M9316	398.02
● MP-762508-2.5-8A	3.000	2.000	2500	17M9317	520.98

(84672)

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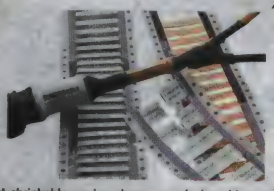
(212563)

RAYCHEM RPS SERIES COMMERCIAL-GRADE HEAT-SHRINKABLE WIRE IDENTIFICATION SLEEVES

RoHS Compliant Available

TE connectivity

Authorized Distributor



- Permanent identification sleeves
- Computer-printable
- Excellent print performance
- Configured for ease of kitting
- Good chemical and solvent resistance
- 3:1 shrink ratio

RPS series commercial-grade heat-shrinkable marker sleeves are designed to meet commercial and industrial wire and cable identification needs. Made from durable, heat-shrinkable polyolefin. Meets the performance requirements of SAE-AMS-DTL-23053/5 classes 1 and 3 and SAE AS81531 4.6.2, MIL-STD-202F Method 215J specifications. A standard heat gun with reflector is used to shrink the sleeves onto the wire or cable. Operating temperature range: -30°C to +105°C. UL recognized (Standard 224, file E35586), CSA certified (file 31929).

Mfg. Part No.	AWG	Color	Expanded ID (in.)	Recovered ID (in.)	Qty. per. Pkg.	Stock No.	Price per Roll
RPS-22-18/2.0-4	22-18	Yellow	0.125	0.042	250	67K9483	90.98
RPS-22-18/2.0-9	22-18	White	0.125	0.042	250	67K8987	68.86
RPS-22-18/2.0-S1-4*	22-18	Yellow	0.125	0.042	250	67K9481	117.88
RPS-22-18/2.0-S3-9+	22-18	White	0.125	0.042	250	80K8129	114.00
RPS-1K-22-18/2.0-9	22-18	White	0.125	0.042	1000	41M0770	295.79
RPS-18-12/2.0-4	18-12	Yellow	0.187	0.062	250	67K9479	95.41
RPS-18-12/2.0-9	18-12	White	0.187	0.062	250	67K9480	94.58
RPS-18-12/2.0-S1-9*	18-12	White	0.187	0.062	250	67K9478	90.97
RPS-16-10/2.0-4	16-10	Yellow	0.250	0.083	250	67K9475	101.27
RPS-16-10/2.0-9	16-10	White	0.250	0.083	250	67K9476	125.12
RPS-16-10/2.0-S1-9*	16-10	White	0.250	0.083	250	67K9474	95.20
RPS-10-2/2.0-4	10-2	Yellow	0.500	0.166	250	67K9471	264.81
RPS-10-2/2.0-9	10-2	White	0.500	0.166	250	67K9472	229.18
RPS-8-4/2.0-9	8-4	White	0.375	0.125	250	41M0771	170.33

*1 perforated score; + 3 perforated scores
(84691)

RAYCHEM TMS-SCE SERIES MILITARY-GRADE HEAT-SHRINKABLE WIRE IDENTIFICATION SLEEVES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Permanent identification sleeves
- Computer-printable
- Lightweight for aerospace applications
- Military specification material and print performance
- 3:1 shrink ratio
- VW all flame tubing test rated
- Quick recovery for heat-sensitive areas

TMS-SCE series military-grade heat-shrinkable marker sleeves are made from durable, flame-retardant, radiation cross-linked polyolefin. Printable by dot matrix or thermal transfer printers, the marks are permanent immediately after printing and remain legible even when exposed to abrasion, aggressive cleaning solvents, and military fuels and oils. The sleeves meet the mark permanence requirements of SAE-AMS-DTL-23053/5 classes 1 and 3, as well as SAE AS81531 4.6.2 and MIL-STD-202F both before and after shrinking. Operating temperature range: -55°C to +135°C. UL recognized (Standard 224, file E35586), CSA certified (file 31929).

Mfg. Part No.	Color	Expanded ID (in.)	Recovered ID (in.)	Qty. per. Roll	Stock No.	Price per Roll
TMS-SCE-3/32-2.0-9	White	0.093	0.031	250	17M9323	87.12
TMS-SCE-1/8-2.0-4	Yellow	0.125	0.042	250	67K9537	118.36
TMS-SCE-1/8-2.0-9	White	0.125	0.042	250	41M0777	107.74
TMS-SCE-1K-1/8-2.0-9	White	0.125	0.042	1000	36C3108	449.57
TMS-SCE-3/16-2.0-9	White	0.187	0.062	250	67K9541	137.42
TMS-SCE-3/16-2.0-S1-4*	Yellow	0.187	0.062	250	67K9538	226.20
TMS-SCE-1K-3/16-2.0-9	White	0.187	0.062	1000	82H2157	587.15
TMS-SCE-3/8-2.0-4	Yellow	0.375	0.125	250	41M0783	226.50
TMS-SCE-3/8-2.0-9	White	0.375	0.125	250	41M0784	205.61
TMS-SCE-1K-3/8-2.0-9	White	0.375	0.125	1000	41M0780	1352.73
TMS-SCE-1/4-2.0-4	Yellow	0.25	0.083	250	67K9534	189.68
TMS-SCE-1/4-2.0-9		0.25	0.083	250	67K9535	125.93
TMS-SCE-1/4-2.0-S1-9*	White	0.25	0.083	250	17M9937	288.64
TMS-SCE-1K-1/4-2.0-9	White	0.25	0.083	1000	41M0779	627.83
TMS-SCE-1/2-2.0-4	Yellow	0.5	0.166	250	67K9531	311.48
TMS-SCE-1/2-2.0-9	White	0.5	0.166	250	67K9532	224.96
TMS-SCE-1/2-2.0-9-CS2170	White	0.5	0.166	250	41M0776	414.36
TMS-SCE-1K-1/2-2.0-9	White	0.5	0.166	1000	41M0778	1099.02
TMS-SCE-3/4-2.0-9	White	0.75	0.25	250	41M0782	415.11
TMS-SCE-1-2.0-9	White	1	0.333	250	41M0775	453.05
TMS-SCE-1-1/2-2.0-9	White	1.5	0.5	250	41M0773	964.22

*1 perforated score
(84686)

RAYCHEM THERMAL TRANSFER PRINTERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

T312M

Mfg. part no. T312M robust, computer-driven thermal transfer printer is specially designed to produce high-quality alpha/numeric text, graphic images, barcodes and 2D Data Matrix marks for UID applications using PrintEasy label design and printing software; *ordered separately, go online or call.* Ideal for use with TE/Raychem's range of thermal transfer printable label products; *order separately on pages 1284 and 1294.* Rugged and durable metal construction makes this printer suitable for demanding industrial and commercial environments. Features a 4.1" printhead and print speeds of 8" per second. Enhanced memory and 32 bit processor provide fast data processing and print speeds. *Order printer ribbons separately below.*

Mfg. Part No.	Description	Print Resolution (dpi)	Stock No.	Price Each

BLACK RESIN RIBBON FOR T208M PRINTER — 4.33"W x 242'L

Mfg. Part No.	Compatible Labels	Stock No.	Price Each 1-4
1330-0607-T200	HM, HMM, HW,MP,MV, NC, TN, TTP, WP, WV Series Thermal Transfer Printable Pressure Sensitive Labels	42J5829	37.89

BLACK RESIN RIBBONS FOR T312M PRINTERS — 4.33"W x 984'L

TMS-RJS-RIBBON-4RPSCE	For Use on RPS and TMS-SCE Series Wire Marker Sleeve Products	29K8322	82.30
1330-0607-10	For Use on WP, HW, MP, HM, HMM, CP, MV, TN, WV, SP, TTP, TTPA and HPK Series Label Products	29K8329	76.17
1330-0619-10*	For Use on T1K, T2K, TSK, T2Y, KIT Series Thermal Transfer Printable Polyimide Film Labels	73K6373	98.01

*For all T300 and T400 series printers
(87097)

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(196537)

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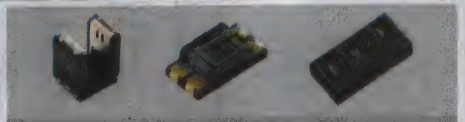

Optical Sensors

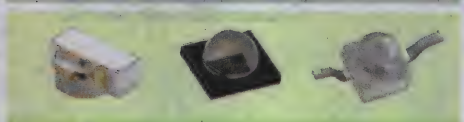

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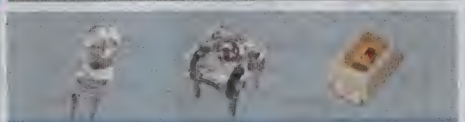
Photo Detectors

IR Receivers



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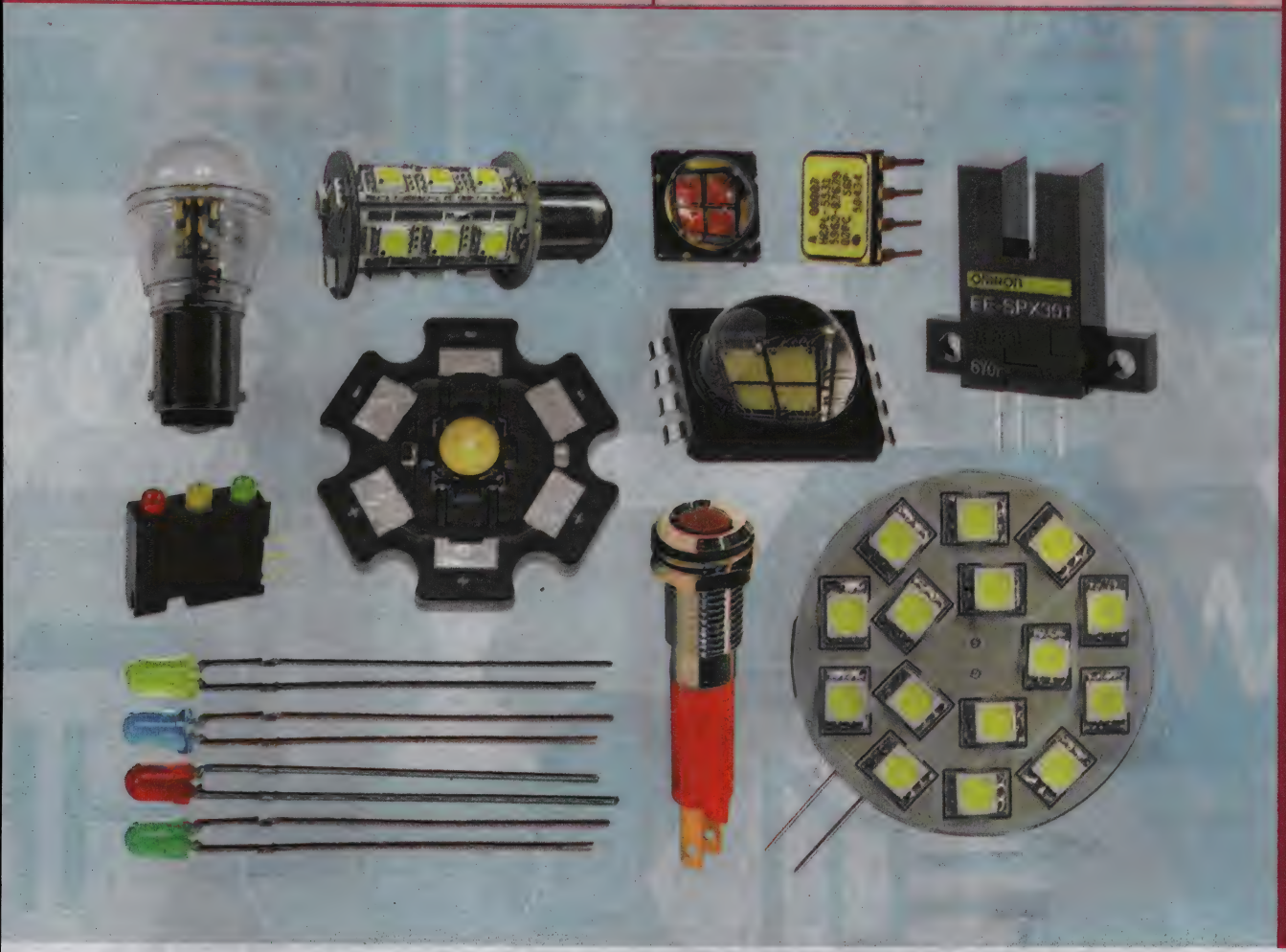
Phototransistors 1398-1399
Sensors 1399-1401
Ultraviolet Components 1388

FIBER OPTIC & LASER ELECTRONICS

Fiber Optic 1403-1405



To search by manufacturer, see our detailed Manufacturer Index on page 2458.

DISPLAYS, LAMPS, LEDs, INDICATORS & SENSORS

	HIGH BRIGHTNESS & HIGH POWER LEDS	HIGH POWER LED MODULES	STANDARD LEDS	LED ARRAYS, BAR GRAPHS & DISPLAYS	LED REPLACEMENTS	LED PANEL MOUNT INDICATORS	LED CIRCUIT BOARD INDICATORS
3M					•		
Avago Technologies	•	•	•	•			
Bivar	•	•	•		•	•	•
Bridgelux	•	•	•				
CEC Industries Ltd.					•		
CML	•	•	•		•	•	•
CML Innovative Technologies	•	•	•		•	•	•
Cree	•	•	•		•		
Dialight	•	•	•		•	•	•
IDEC					•		
LED Engin	•	•	•		•		
Lumex	•	•	•	•	•	•	•
Noritake itron				•			
Osram Sylvania	•	•	•		•		
Panasonic	•	•	•				
Patlite					•		
TT electronics OPTEK Technology	•	•	•		•		
VCC	•	•	•	•	•	•	•
Vishay	•	•	•	•			
Wamco	•	•	•	•	•	•	•

LED TESTER

TENMA®

Specifications:
- Tests 2, 5, 10, 20, 30 and 50mA LEDs
- Tests 3P Common Cathode and Common Anode LEDs
- Requires 9V Battery (Not Included)

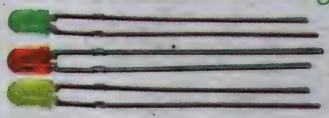
Mfg. Part No.	Description	Stock No.	Price Each
MC20159	LED TESTER	83K9059	38.24

(88490)

HIGH-INTENSITY LED LAMPS

RoHS Compliant Available

AVAGO TECHNOLOGIES



T-1 ¾

RECTANGULAR (2X5mm)

T-1 (3mm)

Mfg. Part No.	Color	Luminous Intensity (mcd)	Test Current (mA)	Viewing Angle	Stock No.	Price Each 1-9
HLMP-K600	Green	1	10	60°	39K9991	0.50
HLMP-K640	Green	21	20	45°	39K9992	0.50
HLMP-1503	Green	1	10	60°	40K0032	0.41
HLMP-1790	Green	2.3	2	50°	40K0046	0.50
HLMP-1503-D0000	Green	4.2	10	60°	40K0033	0.48
HLMP-1520	Green	22	10	45°	40K0034	0.50
HLMP-1521	Green	22	10	45°	40K0035	0.41
HLMP-1540	Green	45	20	45°	40K0036	0.55
HLMP-1700	Red	2.1	2	50°	40K0044	0.50
HLMP-1301	Red	3.4	10	60°	42K5948	0.41
HLMP-3301-F00B2	Red	5.4	10	60°	40K0051	0.72
HLMP-1321	Red	30	10	45°	40K0024	0.41
HLMP-1340	Red	55	20	45°	40K0025	0.55
HLMP-K150	Red	2	1	60°	39K9989	0.50
HLMP-K155	Red	3	1	45°	39K9990	0.60
HLMP-K101	Red	45	20	60°	39K9987	0.50
HLMP-K105	Red	65	20	45°	39K9988	0.55
HLMP-1719	Yellow	2.1	2	50°	40K0045	0.50
HLMP-1401	Yellow	2.2	10	60°	06F6576	0.41
HLMP-1421	Yellow	15	10	45°	40K0029	0.41
HLMP-1440	Yellow	45	20	45°	40K0030	0.55

T-1¾ (5mm)

HLMP-C208-S0000	Amber	3	20	8°	39K9939	0.48
HLMP-3416	Yellow	50	10	35°	06F6723	0.41
HLMP-4740	Green	2.3	2	50°	40K0082	0.50
HLMP-3507	Green	4.2	10	60°	40K0061	0.41
HLMP-3507-D00B2	Green	4.2	10	60°	40K0062	0.90
HLMP-3962	Green	10.6	10	60°	40K0077	0.60
HLMP-3590	Green	55	20	32°	40K0066	0.60
HLMP-C523	Green	69.8	20	25°	39K9945	0.60
HLMP-C515	Green	170	20	15°	39K9944	0.60
HLMP-3950	Green	265	20	24°	42K5950	0.60
HLMP-D401	Orange	5.4	10	60°	39K9951	0.41
HLMP-3301-D0000	Red	2.1	10	60°	40K0049	0.48
HLMP-4700	Red	2.3	2	50°	40K0080	0.50
HLMP-3301	Red	5.4	10	60°	40K0048	0.41
HLMP-3762	Red	8.6	10	60°	40K0073	0.60
HLMP-3750	Red	125	20	24°	42K5949	0.60
HLMP-C215	Red	138	20	15°	39K9940	0.60
HLMP-4101	Red	1	20	8°	40K0079	0.60
HLMP-D150	Red	3	1	65°	39K9949	0.50
HLMP-D155	Red	10	1	24°	39K9950	0.60
HLMP-3316	Red	60	10	35°	40K0053	0.41
HLMP-3390	Red	55	20	32°	06F6716	0.60
HLMP-D101	Red	70	20	65°	39K9947	0.55
HLMP-D105	Red	240	20	24°	39K9948	0.55
HLMP-C625-P0000	Red	700	20	25°	39K9946	0.48
HLMP-C025-P0000	Red	1	20	25°	39K9938	0.48
HLMP-C008-U0000	Red	6	20	8°	39K9937	0.48
HLMP-4719	Yellow	2.1	2	50°	40K0081	0.50
HLMP-3401	Yellow	5.7	10	60°	40K0057	0.41

➤CONTINUED➤

HIGH-INTENSITY LED LAMPS (CONT.)

T-1¾ (5mm)

Mfg. Part No.	Color	Luminous Intensity (mcd)	Test Current (mA)	Viewing Angle	Stock No.	Price Each 1-9
HLMP-3862	Yellow	9.2	10	60°	40K0075	0.60
HLMP-3490	Yellow	55	20	32°	40K0060	0.60
HLMP-C323	Yellow	96.2	20	25°	39K9942	0.60
HLMP-3850	Yellow	140	20	24°	40K0074	0.60
HLMP-0800	Red, Green	2.6	20	100°	40K0023	0.99

RECTANGULAR (2 x 5mm)

HLMP-0504	Green	2.6	20	100°	40K0022	0.90
HLMP-S501-C0000	Green	4	20	110°	40K0018	0.41
HLMP-S501	Green	...	20	110°	40K0017	0.41
HLMP-0301	Red	2.1	20	100°	40K0020	0.90
HLMP-S201	Red	...	20	110°	40K0014	0.41
HLMP-S100	Red	7.5	20	110°	40K0013	0.50
HLMP-0401	Yellow	3.6	20	100°	40K0021	0.90
HLMP-S301	Yellow	...	20	110°	40K0016	0.41

RECTANGULAR (8.89 mm x 3.81 mm)

HLMP-2800	Green	25	20	°	06F6673	2.63

MOUNTING CLIP

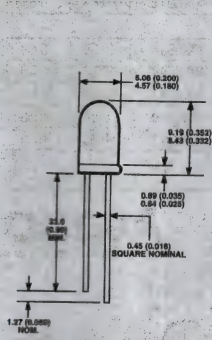
Mfg. Part No.	Description	Stock No.	Price Each 1-9
HLMP-0103	Black plastic mounting clip and retaining ring	40K0019	0.35

(2637)

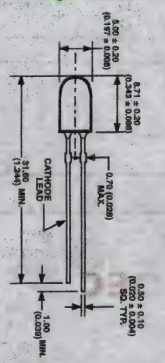
HIGH-PERFORMANCE LEDs IN ROUND AND OVAL PACKAGES

RoHS Compliant Available

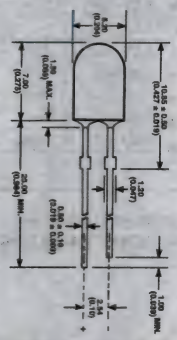
AVAGO TECHNOLOGIES



AlInGap II 5mm Round Package (All Viewing Angles)



5mm Oval LED Lamps (35° x 70° Viewing Angle)



AlInGaP 5mm Oval Package (40° x 100° Viewing Angle)

OVAL 5mm

Mfg. Part No.	Color	Luminous Intensity (cd)	Wavelength (nm)	Lead Type	Stock No.	Price Each 1-9
HLMP-BD06-P0000	Red	0.88	630	Straight	39K9808	0.70
HLMP-HG65-VY0DD	Red	2.4	630	Standoffs	34P4394	0.72

ROUND 5mm

HLMP-ED31-SV000	Red	5.5	630	Straight	39K9959	0.77
HLMP-EG08-Y2000	Red	27	626	Straight	39K9961	0.70
HLMP-EG12-UX0DD	Red	9.3	630	straight	30M1003	0.68
HLMP-EG1A-Z10DD	Red	21	630	Straight	45P6704	0.77
HLMP-EG1B-Z10DD	Red	21	630	Standoffs	45P6705	0.77
HLMP-EG24-PS000	Red	2.5	626	Straight	39K9964	0.50
HLMP-EG2A-XY0DD	Red	12	630	Straight	45P6706	0.77
HLMP-EG2B-XY0DD	Red	12	630	Standoffs	45P6707	0.77
HLMP-EG35-TW0DD	Red	7.2	630	Straight	30M1020	0.70
HLMP-EG3A-WX0DD	Red	9.3	630	Straight	45P6709	0.77
HLMP-EG3B-WX0DD	Red	9.3	630	Standoffs	45P6711	0.77
HLMP-WG02	Red	0.026	626	Straight	41K9810	0.50
HLMP-EL08-VY000	Amber	12	590	Straight	39K9970	0.60
HLMP-EL1A-Z1KDD	Amber	21	594.5	Straight	45P6712	0.81
HLMP-EL1B-Z1KDD	Amber	21	594.5	Standoffs	45P6714	0.81
HLMP-EL24-PS000	Amber	2.5	590	Straight	39K9972	0.60
HLMP-EL2A-XYKDD	Amber	12	594.5	Straight	45P6716	0.86
HLMP-EL2B-XYKDD	Amber	12	594.5	Standoffs	45P6718	0.86
HLMP-EL3A-WXKDD	Amber	9.3	594.5	Straight	45P6722	0.86
HLMP-EL3B-WXKDD	Amber	9.3	594.5	Standoffs	45P6726	0.86
HLMP-WL02	Amber	0.035	590	Straight	41K9811	0.50
HLMP-EL1A-Z1LDD	Amber	21	590	Straight	45P6713	0.81
HLMP-EL1B-Z1LDD	Amber	21	590	Standoffs	45P6715	0.81
HLMP-EL2A-XYLDD	Amber	12	590	Straight	45P6717	0.86

➤CONTINUED➤

THROUGH-HOLE LEDS

HIGH-PERFORMANCE LEDs IN ROUND AND OVAL PACKAGES (CONT.)

ROUND 5mm

Mfg. Part No.	Color	Luminous Intensity (cd)	Wavelength (nm)	Lead Type	Stock No.	Price Each 1-9
● HLMP-EL2B-XYLDD	Amber	12	590	Standoffs	45P6719	0.86
● HLMP-EL3A-WXLDD	Amber	9.3	590	Straight	45P6723	0.86
● HLMP-EL3B-WXLDD	Amber	9.3	590	Standoffs	45P6727	0.86

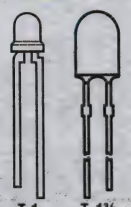
(29482)

5V, 12V INTEGRATED RESISTOR LAMPS

RoHS Compliant Available

AVAGO TECHNOLOGIES

Features:
- Integral Current Limiting Resistor
- TTL Compatible
- Wide Viewing Angle: 60°
- Tinted/Diffused Lamps



5V SERIES

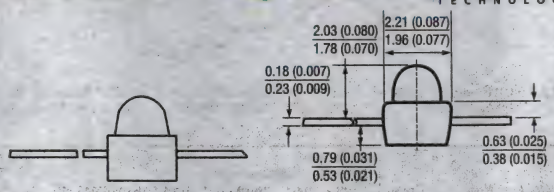
Mfg. Part No.	Color	Luminous Intensity Typ. @ 20mA (mcd)	Package	Stock No.	Price Each 1-9	Price Each 10-24
● HLMP-1600	Red	2.1	T-1	40K0037	0.68	0.53
● HLMP-1620	Yellow	2.2	T-1	40K0039	0.68	0.53
● HLMP-1640	Green	1.6	T-1	40K0041	0.68	0.53
● HLMP-3600	Red	2.1	T-1¾	40K0067	0.68	0.53
● HLMP-3650	Yellow	2.2	T-1¾	40K0070	0.68	0.53
● HLMP-3680	Green	1.6	T-1¾	40K0072	0.68	0.53
12V SERIES						
● HLMP-1601	Red	2.1	T-1	40K0038	0.68	0.53
● HLMP-1621	Yellow	2.2	T-1	40K0040	0.72	0.56
● HLMP-1641	Green	1.6	T-1	40K0043	0.68	0.53
● HLMP-3601	Red	2.1	T-1¾	40K0069	0.68	0.53
● HLMP-3651	Yellow	2.2	T-1¾	40K0071	0.68	0.53

(78923)

SUBMINIATURE HIGH PERFORMANCE LAMPS

RoHS Compliant Available

AVAGO TECHNOLOGIES



Features:
- **HLMX-PXXX** Flat Top Lamps Ideal for Backlighting and Light Piping Applications
- **HLMX-QXXX** Dome Lamps Ideal for High Brightness Applications
- Wide Range of Drive Currents
- Ideal for Space Limited Applications
- Axial Leads
- Available with Lead Configurations for Surface Mount and Through-Hole PC Board Mounting
- **Tape & Reel Qty. 1500**

15° VIEWING ANGLE

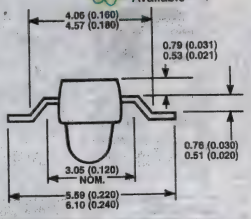
Mfg. Part No.	Color	Viewing Angle	Luminous Intensity @20mA (mcd)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● HLMP-Q106	Red	15°	400	06F6482	0.68
28° VIEWING ANGLE					
● HLMP-6305	Red	28°	40	40K0085	0.50
90° VIEWING ANGLE					
● HLMP-Q150	Red	90°	1.8	40K0006	0.65
● HLMP-7000	Red	90°	1	06F6859	0.60
● HLMP-6300	Red	90°	10	40K0084	0.50
● HLMP-6620	Red	90°	2	06F6836	0.90
● HLMP-6000	Red	90°	1.2	40K0083	0.60
● HLMP-6300-F0011	Red	90°	10	16M3787	0.68
● HLMP-6820	Green	90°	2	40K0093	0.90
● HLMP-7040	Green	90°	0.6	06F6862	0.60
● HLMP-6500	Green	90°	7	40K0088	0.50
● HLMP-6400	Yellow	90°	9	43K7064	0.50
125° VIEWING ANGLE					
● HLMT-PL00	Amber	125°	150	06F6880	0.72

(2636)

SUBMINIATURE SOLID-STATE DOME LAMPS

RoHS Compliant Available

AVAGO TECHNOLOGIES



UNTINTED/NON-DIFFUSED - HIGH-BRIGHTNESS

Mfg. Part No.	Color	Luminous Intensity Typ. @ 10mA (mcd)	Typical V_f @ 10mA (V)	Stock No.	Price Each 1-9
● HLMP-6305	Red	40	1.8	40K0085	0.50
UNTINTED/DIFFUSED					
● HLMP-6620	Red	2	1.8	06F6836	0.90
● HLMP-6820	Green	2	2.1	40K0093	0.90
TINTED/DIFFUSED					
● HLMP-6000	Red	1.2	1.6	40K0083	0.60
● HLMP-6300	Red	10	1.8	40K0084	0.50
● HLMP-6400	Yellow	9	2	43K7064	0.50
● HLMP-6500	Green	7	2.1	40K0088	0.50
● HLMP-6500-F0010	Green	7	2.1	40K0089	0.68
● HLMP-7000	Red	1	1.8	06F6859	0.60
● HLMP-7040	Green	0.6	2.1	06F6862	0.60
● HLMP-Q150	Red	1.8	1.6	40K0006	0.65

(2638)

DISCRETE LEDs

RoHS Compliant Available

BIVAR MOVING LIGHT

STANDARD 3mm PACKAGE

Type	Color	Wavelength (nm)	Luminous Intensity (mcd)	VF (V)	IF (mA)	Viewing Angle (°)	Stock No.	Price Each 1-9
● 3SURC	Red	640	200	1.8	20	30	20K5370	0.28
● 3UGC	Green	570	200	2.1	20	30	20K5377	0.25
● 3UYC	Yellow	590	300	2	20	30	20K5382	0.28
STANDARD 5mm PACKAGE								
● 5SGD	Green	568	30	2.1	20	45	55M6691	0.18
● 5SRD	Red	645	40	1.7	20	45	33R8538	0.13
● 5SYD	Yellow	590	300	2	20	45	33R8548	0.25
4-PIN, 4.6mm DOME								
● R50RED-4-0045	Red	635	6	2.4	50	45	33R6565	1.09
● R50RGB-4-0045	Red/ Blue/ Green/	635/ 470/ 525	4000/ 400/ 5000	2.6/ 3.8/ 3.8	50	45	33R6568	4.96
ULTRAVIOLET 3mm								
● UV3TZ-395-30	Purple	395	...	3.4	15	30	08N5418	1.33
● UV3TZ-405-30	Purple	405	...	3.4	15	30	08N5412	1.37
ULTRAVIOLET 5mm								
● UV5TZ-395-30	Purple	397.5	...	3.4	15	30	33R7988	1.35
● UV5TZ-405-30	Purple	407.5	...	3.4	15	30	33R7991	1.27

(175993)

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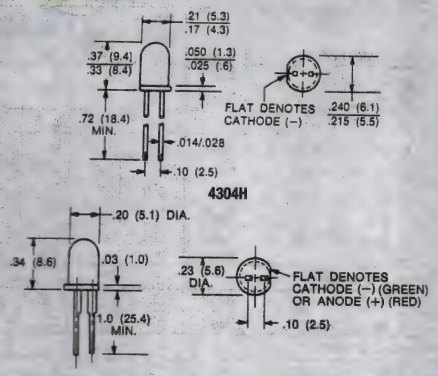
(196526)

4304H AND 4301H1/5 SERIES T-1 ¾ SUPER BRITE LED LAMPS

RoHS Compliant Available

Chicago Miniature Lighting, LLC
Lighting the world since 1910

LED lamps with 5mm T-1¾ Super Brite LEDs. **4304 series** lamps feature high-intensity light output, wide viewing angle and diffused package type. **Mfg. Part No. 4301H1/5** features red and green in the same two-lead package. Chips are brightness-matched for uniform red and green light output. Continuous forward current: 25mA max.



Mfg. Part No.	Emitted Color	View Angle (°)	Luminous Intensity Typ. (mcd)	Wave-length (nm)	Forward Voltage Typ. (V)	Stock No.	Price Each 1-24	Price Each 25-99
4301H1/1	Red	60	20	625	2	93K6777	1.24	1.15
4301H1/5	Red/Green	50	25	650	2.2	95F9397	0.65	0.60
4304H1	Red	65	6.3	650	2	93K6988	0.24	0.22
4304H5	Green	75	10	563	2.1	93K6989	0.21	0.19
4304H7	Yellow	65	6.3	585	2.1	16M1520	0.24	0.22
4305H5	Green	30	100	563	2.2	18M1287	0.23	0.22
4305H7	Yellow	30	160	585	2.2	93F3520	0.23	0.22
4308H1	Red	24	240	645	1.8	93K6779	0.56	0.52

(35779)

CREE 5mm ROUND, HIGH BRIGHTNESS LEDs

RoHS Compliant Available

CREE

Applications:
- Advertising signs
- Indicators
- Traffic Lights
- Automotive Lighting

These round LED families offer superior light output for excellent readability in outdoor applications. The lamps are made with an advanced optical-grade epoxy that offers superior high-temperature and high-moisture resistance performance in outdoor sign and signal applications. The encapsulation resin contains UV inhibitors to minimize the effects of long-term exposure to direct sunlight, resulting in stable light output over the life of the LED.

Mfg. Part No.	Color	Luminous Intensity (cd)	Wave-length (nm)	View Angle (°)	Stock No.	Price Each 1-49
C503B-BCS-CV0Z0461	Blue	4.1	480	30	04R6675	0.22
C503B-BCN-CV0Z0461	Blue	4.1	480	30	04R6674	0.22
C566C-BFS-CS0W0451	Blue	1.5	475	Oval	73P7836	0.26
C566C-BFN-CS0W0352	Blue	1.5	470	Oval	78R6662	0.30
C5SMF-BJS-CR0U0352	Blue	1.1	470	Oval	78R6591	0.27
C4SMK-BJS-CQ0T0352	Blue	0.78	470	Oval	78R6506	0.29
CLM4B-BKW-CTBVA363	Blue	0.55	470	120	83T3702	0.26
CLM1B-BKW-CTAUB363	Blue	0.45	470	120	83T3697	0.28
CLM1B-BKW-CTBUB453	Blue	0.45	470	120	83T3698	0.29
C503B-GAS-CB0F0791	Green	34	535	15	04R6677	0.26
C503B-GAN-CB0F0791	Green	34	535	15	04R6676	0.26
C503B-GCS-CY0C0791	Green	12.5	535	30	04R6679	0.26
C503B-GCN-CY0C0791	Green	12.5	535	30	04R6678	0.26
C566C-GFS-CV0Z0792	Green	5.2	535	Oval	73P7898	0.35
C5SMF-GJS-CV0Y0792	Green	4.4	535	Oval	08R2858	0.32
CLM4B-GKW-CWBYA693	Green	1.8	527	120	83T3703	0.29
CLM1B-GKW-CVAXA7A3	Green	1.3	527	120	83T3699	0.32
C503B-RAS-CY0B0AA1	Red	12	630	15	06R2522	0.18
C503B-RAN-CY0B0AA1	Red	12	630	15	08R2969	0.18
C503B-RAN-CY0B0AA2	Red	12	624	15	08R2970	0.21
C503B-RCN-CW0Z0AA2	Red	5.1	624	30	08R2994	0.21
C503B-RCS-CW0Z0AA1	Red	5.1	630	30	08R2999	0.16
C503B-RCN-CW0Z0AA1	Red	5.1	630	30	08R2993	0.18
C503B-RBN-CW0Z0AA1	Red	5	630	23	02P7158	0.15
C503B-RBN-CX0Y0AA1	Red	5	630	23	08R2983	0.16
C566C-RFS-CT0W0BB2	Red	2.2	624	Oval	08R3048	0.25
C5SMF-RJS-CT0W0BB2	Red	2.2	625	Oval	08R2866	0.22

CONTINUED

CREE 5mm ROUND, HIGH BRIGHTNESS LEDs (CONT.)

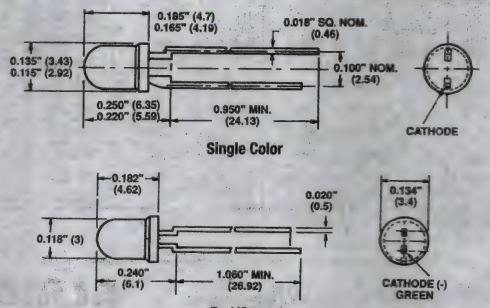
Mfg. Part No.	Color	Luminous Intensity (cd)	Wave-length (nm)	View Angle (°)	Stock No.	Price Each 1-49
C566C-RFN-CT0W0BB2	Red	2.2	621	Oval	08R3042	0.25
CLM4B-RKW-CWAXBAA3	Red	1.6	624	120	83T3704	0.23
C503B-AAS-CY0B0251	Amber	13	596	15	08R2880	0.16
C503B-AAN-CY0B0251	Amber	13	596	15	08R2874	0.16
C503B-ABN-CW0Z0251	Amber	5	596	23	73P7938	0.16
C503B-ABN-CX0Y0341	Amber	5	596	23	08R2889	0.18
CLM2B-AEW-CYBB0263	Amber	5	591	60	83T3700	0.30
C566C-AFS-CU0W0252	Amber	2.5	596	Oval	73P7876	0.25
C5SMF-AJS-CU0V0342	Amber	2.1	591	Oval	08R2848	0.25
CLM4B-AKW-CWAXB263	Amber	1.5	591	120	83T3701	0.24
C503C-WAN-CBADB151	Cool White	46.1	...	15	28T0872	0.25
C513A-WSN-CV0Y0151	Cool White	4	...	55	04R6682	0.25
C513A-WSS-CV0Y0151	Cool White	4	...	55	04R6683	0.26
CLA2A-WKW-CYBZ0343	Cool White	3.8	...	120	83T3696	0.45
C535A-WJN-CS0V0151	Cool White	3	...	110	73P7832	0.21
C535A-WJN-CS0V0231	Cool White	3	...	110	73P7833	0.23
C535A-WJN-CT0V0231	Cool White	3	...	110	73P7849	0.23
C535A-WJN-CU0V0231	Cool White	3	...	110	73P7870	0.23
CLA1A-WKW-CXAYB153	Cool White	2.8	...	120	83T3694	0.25
CLA1A-WKW-CXAYB453	Cool White	2.8	...	120	83T3695	0.26
CLA1A-MKW-CWBYA133	Warm White	2.5	...	120	83T3693	0.25
CLV1A-FKB-CHMKPEHBB7A363	Red/ Green/ Blue	R 0.55/ G 0.85/ B 0.32	R 624nm/ G 540nm/ B 480nm	120	83T3708	0.54
CLV6A-FKB-CKNPRGJBB7A363		R 0.7/ G 1.6/ B 0.4		120	83T3709	0.76
CLV6A-FKB-CM1Q1H1BB7R3R3				120	78R6464	0.93
CLVBA-FKA-CA1D181BB7R3R3		R 0.32/ G 0.5/ B 0.16		110	83T3706	0.63
CLVBA-FKA-CAEDH8BBB7A363				110	83T3705	0.57
CLVBA-FKA-CC1F1L1BB7R3R3				110	83T3707	0.68
CLX6A-FKB-CJNNRFJBB7A363		R 0.7/ G 1.4/ B 0.4		120	83T3710	0.62

(132434)

521 SERIES 3mm DIAMETER LEDs

RoHS Compliant Available

Dialight



3mm subminiature LED lamps are ideal where space is limited. Diffused lens available in green, yellow, red, orange and bicolors red/green, yellow/green. Single LEDs provide multiple colors. Use low-current (2mA) where power is limited. Viewing angle ±30°. Snap mount Clip: 515-0006F.

Mfg. Part No.	Color LED/Lens	V_F (V)	Luminous Intensity (mcd)	I_F (mA)	Stock No.	Price Each 1-24	Price Each 25-99
521-9210F	Green Diffused	2.1	12.6	20	30K0564	0.76	0.58
521-9211F	Yellow	2.1	10	20	30K0565	0.76	0.58
521-9216F	Red Diffused	2	10	20	30K0567	0.74	0.57
521-9498F	Orange Diffused	2.2	7	10	30K0624	0.42	0.38
521-9325F	Yellow/Diffused	1.8	1.6	2	30K0588	0.94	0.81
521-9324F	Red Diffused	1.7	1.6	2	30K0587	1.19	0.91
521-9326F	Green Diffused	1.9	1.6	2	30K0589	0.72	0.60
521-9459F	Red/Green Diffused	2/2.1	4.7/10	10	30K0613	1.67	1.27
521-9628F	Red/Green Diffused	1.8/2.1	12.6/3.7	20	30K0632	0.76	0.58
521-9478F	Yellow/Green Diffused	2.1	4.3/6.3	10	30K0620	1.34	1.12

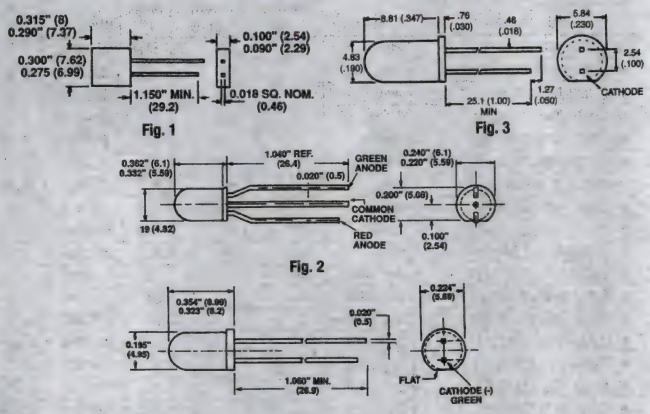
(2553)

THROUGH-HOLE LEDS

521 SERIES 5mm DIAMETER LEDs

RoHS Compliant Available

Dialight



5mm diameter LED lamps available in diffused, non-diffused and water-clear high-brightness lens. Two and three-leaded bicolors, resistor for 5V operation and 2 x 7mm rectangular LEDs also available. Viewing angle ±30°.

Mfg. Part No.	Fig.	Color LED/Lens	V_F (V)	Luminous Intensity (mcd)	Stock No.	Price Each 1-24	Price Each 25-99
● 521-9183F	3*	Red/Diffused	5	8	30K0558	0.92	0.83
● 521-9240F	3	Red/Diffused	2	6.3	30K0568	0.45	0.41
● 521-9215F	...	Red/Diffused	5	29	30K0566	0.74	0.62
● 521-9651F	4	Red/Green Diffused	1.8/ 2.1	90/ 40	30K0641	1.39	1.20
● 521-9672F	4	Red/Diffused	5	12.3	30K0643	0.45	0.41
● 521-9831F	3	Red/Diffused	2	6.3	30K0659	2.86	2.39
● 521-9246F	3	Red/Diffused	2.2	7	30K0569	0.65	0.56
● 521-9247F	3	Red/Non-Diff.	2.2	60	30K0570	0.57	0.51
● 521-9248F	3	Yellow/Diffused	2.2	8	30K0571	0.57	0.51
● 521-9250F	3	Green/Diffused	2.3	5.2	30K0573	0.64	0.55
● 521-9251F	3	Green	2.3	70	30K0574	0.65	0.56
● 521-9264F	1	Red/Diffused	1.9	5	30K0575	0.65	0.58
● 521-9270F	3	Green/Diffused	2.4	8	30K0578	0.70	0.62
● 521-9284F	...	Yellow	5	8	30K0580	0.85	0.73
● 521-9320F	3	Red/Diffused	1.8	2	30K0583	0.90	0.81
● 521-9321F	3	Yellow/Diffused	1.9	1.8	30K0584	0.85	0.73
● 521-9323F	...	Green/Diffused	7.5	5.6	30K0586	0.72	0.60
● 521-9327F	3	Green/Diffused	1.8	1.8	30K0590	0.42	0.32
● 521-9450F	2	Red/Green Diff.	2.1/2.3	5/8	30K0606	1.85	1.42
● 521-9462F	4	Red/Green Diff.	1.8/2.1	90/40	30K0616	1.67	1.27
● 521-9464F	3	Red/Water-Clear	2.2	125	30K0617	0.57	0.44
● 521-9465F	3	Green/Water-Clear	2.3	120	30K0618	0.74	0.62
● 521-9466F	3	Yellow/Water-Clear	2.2	140	30K0619	0.94	0.81

*Lead diameter: 0.25"
(2554)

THROUGH HOLE LEDs

RoHS Compliant Available

LUMEX
Creating LED and LCD Solutions Together™

1.9mm

Mfg. Part No.	Color	Wave-length (nm)	IF (mA)	VF (V)	Lumin. Intens. (mcd)	Stock No.	Price Each 1-99
● SSL-LXA228GC-TR11	Green	565	20	2.2	30	75K1523	0.28
● SSL-LXA228SIC-TR31	Red	636	20	2	475	20J1256	0.22
● SSL-LXA228SRC-TR11	Red	660	20	1.7	600	75K1525	0.34
● SSL-LXA228SUGCTR11	Green	574	20	2.2	200	20J1266	0.26
● SSL-LXA228SUGCTR31	Green	574	20	2.2	200	20J1268	0.23
● SSL-LXA228SYC-TR31	Yellow	590	20	2	250	20J1270	0.41

➤CONTINUED➤

THROUGH HOLE LEDs (CONT.)

2mm x 5mm

Mfg. Part No.	Color	Wave-length (nm)	IF (mA)	VF (V)	Lumin. Intens. (mcd)	Stock No.	Price Each 1-99
● SSL-LX2573AD	Amber	605	30	2	5	09J9272	0.15
● SSL-LX2573GD	Green	565	20	2.2	10	09J9273	0.13
● SSL-LX2573ID	Red	635	30	2	10	09J9274	0.16
● SSL-LX2573PGD	Green	555	25	2.1	6	09J9506	0.17
● SSL-LX2573SRD	Red	660	30	1.7	80	09J9507	0.21
● SSL-LX2573USBD	Blue	470	20	3.5	70	20J1563	1.67
● SSL-LX2573YD	Yellow	585	150	2.1	10	67K1166	0.15
● SSL-LX2579IGW	Red/ Green	635/ 565	20	2.1/ 2.8	14/ 8	13J0690	0.34
2mm TAPER BODY							
● SSL-LX20465GD	Green	565	25	2.2	10	09J9504	0.17
● SSL-LX20465ID	Red	635	30	2	25	09J9505	0.18
2.1mm x 2.2mm							
● SSL-LXA227IC-TR31A	Red	635	20	2	60	77M1364	0.12
2.3mm x 8mm							
● SSL-LX25783ID	Red	635	30	2	9	09J9278	0.16
● SSL-LX25783GD	Green	565	25	2.2	9	67K1167	0.17
T-1 (3mm)							
● SSL-LX3059GYW	Yellow/ Green	565/ 585	25/30	2.2/2	6	09J9300	0.41
● SSL-LX3059IGW	Red/ Green	635/ 565	30/25	2/2.2	30	09J9301	0.31
● SSL-LX3034GD	Green	565	25	2.2	10	58K2368	0.15
● SSL-LX3054IID	Red	635	20	2	20	20J1892	0.33
● SSL-LX3054SOC	Orange	610	20	2	2.5	77M1538	0.40
● SSL-LX3044AD	Amber	605	30	2.1	15	09J9510	0.14
● SSL-LX3044GC	Green	565	25	2.2	100	09J9279	0.16
● SSL-LX3044GD	Green	565	25	2.2	40	09J9280	0.18
● SSL-LX3044GD-5V	Green	565	12	5	6	09J9512	0.34
● SSL-LX3044GD-12V	Green	565	12	2.2	6	09J9511	0.32
● SSL-LX3044GT	Green	565	25	2.2	40	09J9281	0.15
● SSL-LX3044HD	Red	700	25	2	6	09J9282	0.14
● SSL-LX3044IC	Red	635	30	2.1	125	09J9283	0.13
● SSL-LX3044ID	Red	635	30	2	30	09J9284	0.16
● SSL-LX3044ID-5V	Red	635	12	5	6	09J9514	0.34
● SSL-LX3044ID-12V	Red	635	12	2	6	09J9513	0.34
● SSL-LX3044IT	Red	635	30	2	30	09J9515	0.14
● SSL-LX3044LID	Red	635	30	2	30	09J9286	0.15
● SSL-LX3044LYD	Yellow	585	30	2.1	30	09J9287	0.16
● SSL-LX3044PGD	Green	555	25	2.2	20	09J9516	0.16
● SSL-LX3044SRC/D	Red	660	30	1.8	600	09J9288	0.20
● SSL-LX3044SRD/G	Red	660	20	1.8	500	20J1787	0.49
● SSL-LX3044UPGC	Green	525	20	3.5	1.1	77M1443	1.10
● SSL-LX3044USBC	Blue	470	20	3.5	1.	60K6946	1.53
● SSL-LX3044USBD	Blue	470	20	3.5	80	20J1791	1.07
● SSL-LX3044YC	Yellow	585	30	2.1	90	09J9291	0.14
● SSL-LX3044YD	Yellow	585	30	2.1	30	09J9292	0.14
● SSL-LX3044YD-5V	Yellow	585	12	5	6	09J9518	0.38
● SSL-LX3044YD-12V	Yellow	585	12	2.1	6	58K2370	0.35
● SSL-LX3052ID	Red	635	30	2	30	09J9294	0.21
● SSS-LX3054GD-250B	Green	565	20	2.2	12	20J2730	1.06
● SSL-LX3044SOC	Orange	620	20	2	1	09J9491	0.47
● SSL-LX3054UWC/A	White	...	20	3.5	750	74K1761	3.64
4mm x 7mm							
● SSL-LX4673GD-LA20	Green	565	25	2.2	6	09J9302	0.43
● SSL-LX4673ID-LA20	Red	635	30	2	12	09J9303	0.41
● SSL-LX4673YD-LA20	Yellow	585	30	2.1	6	09J9304	0.44
4mm							
● SSL-LX4064GD	Green	565	20	2.2	30	20J2065	0.15
T-1 3/4 (5mm)							
● SSL-LX5063GD	Green	565	20	2.2	30	20J2180	0.15
● SSL-LX5063ID	Red	635	30	2	40	09J9522	0.16
● SSL-LX5093AD	Amber	605	30	2	30	59K0271	0.17
● SSL-LX5093AD-TR	Amber	605	20	2	30	20J2349	0.23
● SSL-LX5093GD	Green	565	25	2.2	30	59K0273	0.12
● SSL-LX5093GD-12V	Green	565	12	2.2	20	09J9527	0.33
● SSL-LX5093GD-5V	Green	565	12	5	20	58K2373	0.35
● SSL-LX5093GT	Green	565	25	2.2	50	09J9308	0.14
● SSL-LX5093HD	Red	700	25	2	5	63K6467	0.14
● SSL-LX5093HD-5V	Red	700	12	5	3	09J9529	0.34
● SSL-LX5093IC	Red	635	20	2	80	20J2396	0.13
● SSL-LX5093ID	Red	635	30	2	40	09J9310	0.15
● SSL-LX5093ID-5V	Red	635	12	5	20	09J9530	0.34

➤CONTINUED➤

THROUGH HOLE LEDs (CONT.)

T-1 3/4 (5mm)

Mfg. Part No.	Color	Wave-length (nm)	IF (mA)	VF (V)	Lumin. Intens. (mcd)	Stock No.	Price Each 1-99
SSL-LX5093IT	Red	635	30	2	80	09J9312	0.15
SSL-LX5093LGD	Green	565	25	2.2	30	09J9313	0.16
SSL-LX5093LGT	Green	565	30	2.2	80	09J9314	0.16
SSL-LX5093LID	Red	635	20	2	40	09J9315	0.17
SSL-LX5093LYD	Yellow	585	30	2.1	30	09J9316	0.18
SSL-LX5093LYD-TR	Yellow	585	20	2.1	30	77M1627	0.21
SSL-LX5093PGD	Green	555	25	2.2	30	09J9531	0.17
SSL-LX5093SRD/D	Red	660	30	1.7	250	09J9321	0.20
SSL-LX5093UEGC	Green	502	20	3.5	1.5	56J9639	1.69
SSL-LX5093USBC	Blue	470	20	3.5	1	20J2492	0.87
SSL-LX5093USBD	Blue	470	20	3.5	300	09J9458	1.73
SSL-LX5093UWW	White	550	20	3.6	680	57J2335	1.97
SSL-LX5093XAC	Amber	610	30	2	600	09J9532	0.21
SSL-LX5093XGC	Green	565	25	2.2	250	09J9533	0.21
SSL-LX5093XIC	Red	635	30	2	600	09J9323	0.20
SSL-LX5093YD	Yellow	585	30	2.1	30	09J9326	0.14
SSL-LX5097IGW	Red/ Green	635/ 565	30/25	2.1	20	09J9328	0.53
SSL-LX5093UWC/A	White	...	20	3.5	740	59K0274	2.60
SSL-LX5093XUWC	White	...	20	3.5	2.3	09J9325	1.82
SSL-LX50595UBC125	Blue	470	20	3.6	2	20J2174	5.50
SSL-LX50595UPGC125	Green	574	20	3.4	5	20J2175	6.35
SSL-LX5093XUSBC	Blue	470	20	3.5	2.5	20J2516	2.57
SSL-LX5097SISGSYC	Red/ Yellow/ Green	636/ 585/ 565	20	2/ 2.1/ 2.2	700/ 450/ 65	77M1652	1.38
SSL-LX5099LBI-SRD	Red	660	10.5	9	10	20J2583	1.48
SSL-LX5099SISYW	Red/ Yellow	636/ 590	20	2	800/ 500	72J5285	1.35
SSS-LX5093GD-500B	Green	565	20	2.2	30	20J2826	0.71
SSS-LX5093GT-250B	Green	565	20	2.2	150	20J2840	1.06
SSS-LX5093SRD-350B	Red	660	20	1.7	100	20J2915	1.30
SSS-LX5093SRT11-25	Red	660	20	1.7	300	20J2919	1.30
SSL-LX5093SYC	Yellow	590	20	2.1	1	09J9322	0.65
SSL-LX5093SOC	Orange	610	20	2	2.5	67K1169	0.66
SSL-LX5093SRC/E	Red	660	20	1.7	2.8	09J9320	0.63
SSL-LX5093SRC/DU	Red	660	20	1.7	1.2	20J2454	0.24
SSL-LX5093SYD	Yellow	590	20	2.1	300	20J2488	0.32
SSL-LX5093XRC	Red	660	20	1.7	1.2	20J2501	0.23
SSL-LX5093XRC-TR	Red	660	20	1.7	1.2	77M1645	0.22
SSL-LX5093SRC/DV	Red	660	20	1.7	1.5	09J9492	0.22
SSL-LX5093SRC/DW	Red	660	20	1.7	1.8	58K2374	0.59
T-1 3/4 (5mm)-TAPERED TIP							
SSL-LX5093XRC/4	Red	660	20	1.7	2.5	09J9324	0.61
T-1 3/4 (5mm)-TAPERED							
SSL-LX100133XYC/B	Yellow	595	20	2.1	2.5	60K6944	0.48
SSL-LX100133USBD	Blue	470	20	3.6	300	77M1377	2.35
GULL WING							
SSL-LXA227GD-5V	Green	565	12	5	8	59K0269	0.70

(80616)

20mm 6-CHIP JUMBO LED DOME

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Features:
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- Custom Shapes/Easily/Tooled/Low Minimum
- PCB with Chips on the Board Construction
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Applications:
- Board or Panel Indication or Illumination
- Backlighting of Overlays and Graphics
- Annunciator and Control Panels
- Telecom Switches and Central Station Equipment
- Large Panel Indicators

Mfg. Part No.	Emitted Color	Wave-length (nm)	Lens	I_F (mA)	V_F (V)	Lumin. Intens. (mcd)	View. Angle (°)	Stock No.	Price Each 1-9
SSL-LX20R6GD	Green	565	Green Dfsd	20	6.6	25	120	09J9748	3.36
SSL-LX20R6SRD	Red	660	Red Dfsd	20	5.1	60	120	09J9750	3.61

(80673)

MCL SERIES THROUGH HOLE LEDs WITH ROUND LENS

RoHS Compliant Available

multicomp

T-1 (3mm)

Mfg. Part No.	Color	Wave-length Typ	Luminous Intensity	Forward Voltage	Viewing Angle (°)	Stock No.	Price Each 1-249
MCL034PT	Red	650nm	12mcd	2.1V	36	14N9381	0.08
MCL514PD	Red	650nm	1.6mcd	2.1V	76	14N9471	0.09
MCL034PD	Red	650nm	2.6mcd	2.1V	76	14N9380	0.08
MCL034URC	Red	643nm	1.2cd	1.9V	36	14N9393	0.27
MCL034SRT	Red	643nm	250mcd	1.9V	36	14N9388	0.10
MCL514SRD	Red	643nm	45mcd	1.85V	76	14N9472	0.09
MCL034SRD	Red	643nm	35mcd	1.9V	70	14N9386	0.10
MCL034MT	Red	625nm	35mcd	2V	36	14N9379	0.09
MCL514MD	Red	625nm	9.5mcd	2V	76	14N9470	0.14
MCL034MD	Red	625nm	9.8mcd	2V	76	14N9378	0.13
MCL034AT	Orange	625nm	35mcd	2V	36	14N9370	0.08
MCL034AD	Orange	625nm	12mcd	2V	76	14N9369	0.11
MCL514AD	Orange	625nm	8.5mcd	2V	76	14N9467	0.12
MCL034BD	Amber	608nm	8.5mcd	2.1V	76	14N9371	0.12
MCL034BT	Amber	606nm	33mcd	2.1V	36	14N9373	0.12
MCL514BD	Amber	606nm	8.5mcd	2.1V	76	14N9468	0.14
MCL034SBC	Amber	606nm	1.6cd	2.1V	36	14N9383	0.16
MCL034YT	Yellow	590nm	32mcd	2.1V	36	14N9395	0.12
MCL034YD	Yellow	590nm	9.5mcd	2.1V	76	14N9394	0.12
MCL514YD	Yellow	590nm	6.4mcd	2.1V	76	14N9473	0.10
MCL034LYD	Yellow	590nm	3.5mcd	1.85V	76	14N9377	0.21
MCL034SGC	Green	572nm	1.3cd	2.1V	36	14N9385	0.20
MCL514GD	Green	570nm	10mcd	2.1V	76	14N9469	0.11
MCL034LGD	Green	570nm	3.2mcd	1.85V	76	14N9376	0.20
MCL034UGC	Green	527nm	4.5cd	3.4V	36	14N9392	0.44
MCL034BGC	Blue Green	510nm	3.65cd	3.4V	36	14N9372	0.47
T-1 3/4 (5mm)							
MCL053HPD/5	Red	650nm	2.8mcd	2.1V	45	15P2065	0.39
MCL053URC	Red	643nm	1.45cd	1.85V	16	14N9431	0.26
MCL053SRT	Red	643nm	250mcd	1.85V	16	14N9426	0.10
MCL053SRD	Red	643nm	50mcd	1.85V	45	14N9424	0.10
MCL053MT	Red	625nm	55mcd	2V	16	14N9417	0.10
MCL053MD	Red	625nm	15mcd	2V	45	14N9416	0.09
MCL053SAC	Orange	625nm	2.75cd	2.1V	16	14N9420	0.12
MCL053AT	Orange	625nm	50mcd	2V	16	15P2063	0.08
MCL053HAD/12	Orange	625nm	16mcd	2V	45	14N9408	0.47
MCL053HAD/5	Orange	625nm	16mcd	2V	45	15P2064	0.47
MCL053AD	Orange	625nm	9.5mcd	2V	45	14N9402	0.11
MCL053SBC	Amber	605nm	2cd	2.1V	16	14N9421	0.20
MCL053BT	Amber	605nm	45mcd	2.1V	16	14N9405	0.12
MCL053SYC	Yellow	592nm	2.5cd	2.1V	16	14N9429	0.20
MCL053YD	Yellow	590nm	15mcd	2.1V	45	14N9432	0.12
MCL053HYD/5	Yellow	590nm	15mcd	2.1V	45	14N9413	0.34
MCL053LYD	Yellow	587nm	8mcd	1.9V	45	14N9415	0.21
MCL053UGC	Green	527nm	4.5cd	3.4V	16	14N9430	0.44
MCL053SGC	Green	572nm	1.85cd	2.1V	16	14N9423	0.20
MCL053LGD	Green	570nm	7mcd	1.9V	45	14N9414	0.20

(203437)

MCL SERIES THROUGH HOLE LEDs WITH RECTANGULAR LENS

RoHS Compliant Available

multicomp

2mm x 5mm BULB SIZE

Mfg. Part No.	Color	Luminous Intensity	Forward Voltage	Stock No.	Price Each 1-249
MCL453SRD	Red	12mcd	1.85V	14N9465	0.11
MCL453MD	Red	3.8mcd	2V	14N9463	0.15
MCL453PD	Red	1.2mcd	2.1V	14N9464	0.09
MCL453BD	Amber	3.6mcd	2.1V	14N9461	0.14
MCL453YD	Yellow	3.4mcd	2.1V	14N9466	0.10
MCL453GD	Green	3.2mcd	2.1V	14N9462	0.11
5mm x 5mm BULB SIZE					
MCL293SRD	Red	20mcd	1.85V	14N9457	0.10
MCL293PD	Red	1.2mcd	2.1V	14N9456	0.11
MCL293AD	Orange	4.5mcd	2V	14N9452	0.11
MCL293BD	Amber	4.5mcd	2.1V	14N9453	0.15
MCL293YD	Yellow	3.4mcd	2.1V	14N9458	0.16

(203523)

THROUGH-HOLE LEDS

1.8mm THROUGH HOLE LEDs

RoHS Compliant Available — multicomp

Features:
- Viewing Angle: 70°
- Forward Current: 20mA

Mfg. Part No.	Color	Forward Voltage	Luminous Intensity	Wave-length Typ	Stock No.	Price Each 1-249
● MCL914MD	Red	2V	6.5mcd	627nm	14N9477	0.16
● MCL914AD	Orange	2V	6.5mcd	627nm	14N9474	0.14
● MCL914YD	Yellow	2.1V	6mcd	590nm	14N9480	0.15
● MCL914GD	Green	2.1V	5.8mcd	570nm	14N9476	0.13

(203517)

2mm THROUGH HOLE LEDs

RoHS Compliant Available — multicomp

Mfg. Part No.	Color	Vf (V)	Lumin. Intens. (mcd)	Wave-length (nm)	View. Angle (°)	If (mA)	Stock No.	Price Each 1-249
● MCL223PD	Red	2.1	2.6	650	60	10	14N9443	0.08
● MCL223SRD	Red	1.85	25	643	60	20	14N9444	0.10
● MCL223MD	Red	2	7.8	625	60	20	14N9442	0.12
● MCL223AD	Orange	2	8	625	60	20	14N9439	0.11
● MCL223BD	Amber	2.1	7.5	608	76	20	14N9440	0.12
● MCL223YD	Yellow	2.1	7.5	590	76	20	14N9445	0.11
● MCL223GD	Green	2.1	7	570	76	20	14N9441	0.13

(203518)

HI-RELIABILITY VISIBLE LEDs

RoHS Compliant Available — TT electronics, OPTEK Technology

Features:
- Hermetically sealed TO-46 package
- Choice of blue, green, red or yellow
- High-brightness with well-defined spatial radiation patterns
- ESD protection built in

"Hi-Reliability" Visible LEDs function in the abnormally severe levels of mechanical, environmental and electrical stress that are typical of military and harsh industrial applications.

LEDS SCREENED AND QCI PROGRAM-PATTERNED AFTER MIL-PRF-19500

Mfg. Part No.	Color	Wave. (nm)	Lumin. Intens. (cd)	If (mA)	Vf (V)	Viewing Angle (°)	Stock No.	Price Each 1-99
● OVM4BTX	Blue	465	2.26	20	2.6	18	11N5694	27.26
● OVM4GTX	Green	530	6.52	20	2.6	18	11N5695	27.26
● OVM4RTX	Red	624	3.3	20	1.8	18	11N5696	27.26
● OVM4YTX	Yellow	589	2.01	20	1.8	18	11N5697	27.26
STANDARD LEDS								
● OVM4B	Blue	463	2.26	20	2.6	18	78R4976	17.77
● OVM4G	Green	530	6.52	20	2.6	18	78R4977	17.77
● OVM4R	Red	630	3.3	20	1.8	18	78R4978	17.77
● OVM4Y	Yellow	591	2.01	20	1.8	18	78R4979	18.66

(203554)

HIGH BRIGHTNESS LEDS

RoHS Compliant Available — TT electronics, OPTEK Technology

Fig. 1 Fig. 2 Fig. 3 Fig. 4

4 PIN

Mfg. Part No.	Fig.	Chip Color	Chip Wave-length (nm)	Luminous Flux @ I_F (mA)	Luminous Flux Typ. (mlm)	V_F	Stock No.	Price Each 1-99
● OVFSAAC8	1	Amber	591	70	8000	2.5	52K5235	0.27
● OVFSRAC8	1	Red	630	70	8000	2.5	52K5239	0.26
● OVFSW6C8	1	White	...	30	7000	4	52K5240	0.49

CONTINUED

HIGH BRIGHTNESS LEDS (CONT.)

Mfg. Part No.	Fig.	Chip Color	Chip Wave-length (nm)	Luminous Flux @ I_F (mA)	Luminous Flux Typ. (mlm)	V_F	Stock No.	Price Each 1-99
3mm ROUND								
● OVLBB4C7	2	Blue	470	20	900	3.4	52K5245	0.35
● OVLBG4C7	2	Green	531	20	4500	3.4	52K5246	0.39
● OVLBR4C7	2	Red	623	30	1900	2.2	52K5247	0.21
● OVLBY4C7	2	Yellow	595	20	1800	2	52K5248	0.21
5mm ROUND								
● OVLEW1CB9	3	White	...	15	24000	3.2	52K5249	0.46
● OVLFB3C7	3	Blue	475	20	2000	3.4	52K5252	0.35
● OVLFG3C7	3	Green	525	20	7000	3.4	52K5253	0.39
● OVLFR3C7	3	Red	624	30	5000	2	52K5254	0.21
● OVLFY3C7	3	Yellow	589	30	4000	2	52K5255	0.20
5mm TAPERED HIGH INTENSITY								
● OVLGB0C6B9	3	Blue	475	20	3800	3.4	52K5256	0.35
● OVLGC0C6B9	3	Blue Green	511	20	9800	3.4	52K5257	0.40
● OVLGY0C9B9	3	Yellow	595	20	10300	2	52K5262	0.13
5mm CYLINDER								
● OVLLB8C7	4	Blue	470	25	440	3.4	52K5273	0.35
● OVLLG8C7	4	Green	525	20	1200	3.4	52K5274	0.39
● OVLLR8C7	4	Red	623	20	380	2.2	52K5275	0.20
● OVLLY8C7	4	Yellow	589	20	340	2	52K5276	0.21

* Otherwise noted as Luminous Flux (lm)

(87947)

ULTRA BRIGHT LED LAMPS

RoHS Compliant Available — AND OPTOELECTRONICS

Mfg. Part No.	LED Color	Luminous Intensity Typ. (mcd)	Forward Current (mA)	Viewing Angle (°)	Material	Stock No.	Price Each 1-99
CLEAR DOMED LENS							
● AND5GA	Green	125	20	30	GaP	16F1805	0.60
● AND5RA	Red	480	20	30	GaAlAs	16F1801	0.73
● AND5YA	Yellow	625	20	30	InGaAlP	16F1804	0.52
CLEAR FLAT LENS							
● AND4GA	Green	15	20	140	GaP	96F8864	0.48
CLEAR T-1 3/4, 10mm							
● AND520HB	Blue	900	20	20	InGaN	95B1795	3.61
● AND240GCP	Green	780	20	20	GaP	93F4506	0.78
● AND113GP	Green	50	10	30	GaP	15B5582	0.32
● AND520HG	Green	5000	20	20	InGaN	95B1796	3.92
CLEAR T-1 3/4, 5mm							
● AND185HAP	Amber	11150	20	6	InGaAlP	75C9588	0.77
● AND120CRP	Red	2000	20	22	GaAlAs	88K1869	0.53
● AND130CR	Red	2000	20	16	GaAlAs	94F8346	0.46
● AND155CRP	Red	1250	20	20	GaAlAs	90F7065	0.68
● AND113S	Red	150	10	30	GaAsP	15B5584	0.37
● AND113RP	Red	18	10	30	GaP	15B5583	0.28
● AND157HRP	Red	1800	20	20	InGaAlP	92F2641	0.72
● AND180HRP	Red	6000	20	8	InGaAlP	92F2646	0.72
● AND180HSP	Red	6000	20	8	InGaAlP	52F6144	0.79
DIFFUSED T-1 3/4, 5mm							
● AND134CRP	Red	600	20	40	GaAlAs	83F8483	0.40
● AND114-R	Red	5	10	60	GaP	01H9629	0.28
● AND114RP	Red	5	10	60	GaP	15B5589	0.26
● AND520HW	White	4000	20	25	InGaN	95B1797	3.83
CLEAR T-1, 3mm							
● AND125CRP	Red	600	20	36	GaAlAs	88K1036	0.43
● AND262HBA	Blue	250	20	40	GaN	40C1898	1.43
● AND160NG	Green	250	20	15	GaP	95B8655	0.59
● AND262GCP	Green	110	20	36	GaP	50B831	0.23
● AND123R	Red	12	10	50	GaP	15B5596	0.28
● AND262HS	Red	630	20	10	InGaAlP	40C1897	0.60
● AND262HW	White	750	20	38	InGaN	40C1895	0.80
DIFFUSED T-1, 3mm							
● AND124Y	Yellow	20	10	60	GaAsP	15B5598	3.37
● AND124R	Red	3	10	60	GaP	94F279	0.30
CLEAR T-3, 10mm							
● AND190HBA	Blue	1500	20	10	GaN	83C8443	2.62
● AND190GCP	Green	700	20	8	GaP	50F3824	2.87
● AND190CRP	Red	11000	20	8	GaAlAs	93K7530	2.83
● AND190HRP	Red	10000	20	8	InGaAlP	16F1796	2.78

(3808)

MCL SERIES ROUND LED LAMPS

RoHS Compliant Available

multicomp

Features:
- Forward Voltage=5V
- Viewing angle=45

Mfg. Part No.	Color	Luminous Intensity	Wavelength Typ	Stock No.	Price Each 1-249
MCLF056GD	Green	8.8mcd	570nm	14N9365	0.90
MCLF056AD	Orange	9.8mcd	625nm	14N9364	0.90
MCLF056YD	Yellow	9.8mcd	590nm	14N9368	1.00
MCLF056MD	Red	10mcd	625nm	14N9366	0.97

(203558)

L2XRxxxx SERIES BI-COLOUR LEDs

RoHS Compliant Available

multicomp

Features:
- High light output and uniform match for two colours
- Low current requirements
- IC compatible
- Forward Voltage: Yellow=2.1V, Green=2.1V

Mfg. Part No.	Color	Viewing Angle (°)	Wavelength	Luminous Intensity	Bulb Size	Stock No.	Price Each 1-99
L23R3000K2P2	Yellow Green	118	Y 585nm G 567nm	Y 7mcd G 8.3mcd	T-1 (3mm)	97K4090	1.83
L23R5005K2P2	Yellow Green	90	Y 685nm G 567nm	Y 13mcd G 15mcd	T-1 3/4 (5mm)	97K4091	2.41

(203562)

MCLF SERIES 5mm ROUND THROUGH HOLE LEDs

RoHS Compliant Available

multicomp

Specifications:
- Forward Voltage: 5V
- Viewing angle: 45°

Mfg. Part No.	Color	Luminous Intensity	Wavelength Typ	Stock No.	Price Each 1-249
MCLF056MD	Red	10mcd	625nm	14N9366	0.97
MCLF056AD	Orange	9.8mcd	625nm	14N9364	0.90
MCLF056YD	Yellow	9.8mcd	590nm	14N9368	1.00
MCLF056GD	Green	8.8mcd	570nm	14N9365	0.90

(203466)

BI-COLOR LED LAMPS

RoHS Compliant Available

multicomp

Lenses are white diffused.

Mfg. Part No.	Color	Viewing Angle	Luminous Intensity/If (mcd/mA) Typ.	Stock No.	Price Each 1-49
BULB SIZE: T-1					
MC20394	Red/Yellow	60	30/20	87K7031	0.99
MC20392	Yellow/Yellow Green	60	30/20	87K7029	0.99
MCL036PURGW	Red/Green	76	30/10	14N9397	0.23
MCL039AGW	Orange/Green	76	8.2/8	14N9399	0.24
MCL036YGW	Yellow/Green	76	11/10	14N9398	0.19
L23R5005K2P2	Yellow, Green	90	13/15	97K4091	2.41
L23R3000K2P2	Yellow, Green	118	7/8.3	97K4090	1.83
BULB SIZE: T-1 3/4					
MCL-57EGW	Red/Green	60	40/25	92N5366	1.31
MC20415	Red/Yellow	60	25/20	87K7049	0.78
MCL056AGW	Orange/Green	45	16/15	15P2066	0.24
MCL056YGW	Yellow/Green	45	15/14	14N9435	0.25
MCL059AGW	Orange/Green	45	16/15	14N9436	0.23
MCL059YGW	Yellow/Green	45	15/14	14N9438	0.19
BULB SIZE: 2mm x 5mm					
MCL236PURGW	Red/Green	120	12/3.1	14N9447	0.24
MCL239PURGW	Red/Green	120	12/3.1	14N9450	0.23
MCL236AGW	Orange/Green	120	3.2/3.1	14N9446	0.18
MCL239AGW	Orange/Green	120	3.2/3.1	14N9449	0.24
MCL236YGW	Yellow/Green	120	3.2/3.1	14N9448	0.18
MCL239YGW	Yellow/Green	120	3.2/3.1	14N9451	0.26

(17434)

LED LAMPS

ROHM SEMICONDUCTOR

Mfg. Part No.	LED Color	Vf (V)	Lumin. Intens. (mcd)	If (mA)	Wavelength (nm)	Stock No.	Price Each 1-9
T-1 ¾ (5mm)							
SLA580ECT3FXU	Green	3.3	8	20	527	40P3261	2.26
SLI-560YT3FXN	Yellow	1.9	1	20	591	40P3265	0.55
SLR-56VR3FN	Red	2	10	10	650	74M4560	0.42
T-1 (3mm)							
SLR-325VCT31P	Red	2	16	10	630	40P3268	0.38

(207806)

ULTRABRIGHT LEDS

RoHS Compliant Available

VISHAY

Mfg. Part No.	Color (Wavelength)	Stock No.	Price Each 1-9	Price Each 10-49
T-1 ¾ (5mm), PHI = ±4°				
TLCR5800	Red (622 nm)	22H1217	0.24	0.22
TLCY5800	Yellow (593 nm)	58K2440	0.23	0.21
T-1 ¾ (5mm), PHI = ±9°				
TLCR5100	Red (622 nms)	22H1216	0.24	0.22
TLCY5100	Yellow (593 nm)	58K2439	0.25	0.23
SMD (0603 Size)				
TLMG1100-GS08	Green (575 nm)	26K5584	0.34	0.28

(74701)

STANDARD LEDS

RoHS Compliant Available

VISHAY

Features:
- Standard T-1 and T-1 ¾ Packages
- Suitable for DC, High Peak Current and Pulse Operations

Applications:
- Status Lights, OFF/ON Indicator, Background Illuminations, Readout Lights, Outdoor LED Panels, Front Panel Indicators, Traffic Signals

Mfg. Part No.	Color (Wavelength)	Luminous Intensity I_V @ I_F (mcd, mA)	V_F @ I_F (V, mA)	Stock No.	Price Each 1-9
T-1 (3mm), phi = ±16°					
TLDR4900	Red (648nm)	200 (>63) @ 20	1.8 (<2.2) @ 20	59K0278	0.29
TLHR4900	Red (612-625nm)	13 (>6.3) @ 10	2 (<3) @ 20	58K2485	0.20
TLHG4900	Green (562-575nm)	37 (>16) @ 10	2.4 (<3) @ 20	58K2465	0.26
T-1 (3mm), phi = ±22°					
TLHR4200	Red (612-625nm)	8 (>4) @ 10	2 (<3) @ 20	58K2481	0.20
TLHR4201	Red (612-625nm)	10 (>6.3) @ 10	2 (<3) @ 20	33C1319	0.21
TLHR4205	Red (612-625nm)	15 (>10) @ 10	2 (<3) @ 20	33C1320	0.21
TLHY4200	Yellow (581-594nm)	10 (>4) @ 10	2.4 (<3) @ 20	58K2488	0.20
TLHY4205	Yellow (581-594nm)	20 (>10) @ 10	2.4 (<3) @ 20	33C1345	0.21
TLHG4200	Green (562-575nm)	10 (>6.3) @ 10	2.4 (<3) @ 20	58K2460	0.24
TLHG4201	Green (562-575nm)	15 (>10) @ 10	2.4 (<3) @ 20	33C1273	0.27
TLHG4205	Green (562-575nm)	20 (>16) @ 10	2.4 (<3) @ 20	33C1274	0.26
TLHB4200	Blue (428nm)	50 (>25) @ 20	3.9 (<4.5) @ 20	58K2445	0.70
TLHB4201	Blue (428nm)	132 (>40) @ 20	3.9 (<4.5) @ 20	58K2446	0.72
TLHK4200	Red (630nm)	50 (>25) @ 10	1.9 (<2.6) @ 20	58K2471	0.18
T-1 (3mm), phi = ±30°					
TLHR4400	Red (612-625nm)	3 (>1.6) @ 10	2 (<3) @ 20	60K6962	0.21
TLHR4401	Red (612-625nm)	5 (>2.5) @ 10	2 (<3) @ 20	58K2482	0.21
TLHR4405	Red (612-625nm)	10 (>6.3) @ 10	2 (<3) @ 20	58K2483	0.23
TLHO4400	Orange (598-611nm)	4 (>1.6) @ 10	2.4 (<3) @ 20	33C1307	0.20
TLHY4400	Yellow (581-594 nm)	3 (>1.6) @ 10	2.4 (<3) @ 20	58K2489	0.22
TLHY4401	Yellow (581-594nm)	5 (>2.5) @ 10	2.4 (<3) @ 20	33C1347	0.21
TLHY4405	Yellow (581-594nm)	10 (>6.3) @ 10	2.4 (<3) @ 20	33C1348	0.23
TLHG4400	Green (562-575nm)	4 (>2.5) @ 10	2.4 (<3) @ 20	58K2461	0.25
TLHG4401	Green (562-575nm)	6 (>4) @ 10	2.4 (<3) @ 20	58K2462	0.27
TLHG4405	Green (562-575nm)	12 (>6.3) @ 10	2.4 (<3) @ 20	58K2463	0.27
TLHB4400	Blue (428nm)	15 (>6.3) @ 20	3.9 (<4.5) @ 20	95K4833	0.74
TLUR4400	Red (645nm)	0.8 (>0.4) @ 10	1.6 (<2) @ 20	33C1437	0.20
TLUR4401	Red (645nm)	5 (>1) @ 10	1.6 (<2) @ 20	33C1438	0.20
T-1 (3mm), phi = ±40°					
TLDR4400	Red (650nm)	45 (>25) @ 20	1.8 (<2.2) @ 20	58K2442	0.24
T-1 (3mm), phi = ±60°					
TLHR4600	Red (635nm)	2 (>1) @ 10	2 (<3) @ 20	58K2484	0.20
TLHR4605	Red (635nm)	6 (>2.5) @ 10	2 (<3) @ 20	33C1326	0.21
TLHY4605	Yellow (585nm)	5 (>2.5) @ 10	2.4 (<3) @ 20	33C1351	0.20
TLHG4600	Green (565nm)	2 (>1) @ 10	2.4 (<3) @ 20	58K2464	0.24

CONTINUED

THROUGH-HOLE LEDS • LED EMITTERS & ARRAYS

STANDARD LEDS (CONT.)

Mfg. Part No.	Color (Wavelength)	Luminous Intensity I_V @ I_F (mcd, mA)	V_F @ I_F (V, mA)	Stock No.	Price Each 1-9
T-1 (3mm), phi = ±60°					
● TLHG4605	Green (565nm)	6 (>4) @ 10	2.4 (<3) @ 20	33C1280	0.26
● TLHK4600	Red (643nm)	15 (>6.3) @ 10	1.9 (<2.6) @ 20	35C3671	0.17
T-1¾ (5mm), phi = ±14°					
● TLHR5200	Red (635nm)	20 (>10) @ 10	2 (<3) @ 20	33C1328	0.20
● TLHR5201	Red (635nm)	30 (>16) @ 10	2 (<3) @ 20	33C1329	0.22
● TLHR5205	Red (635nm)	40 (>25) @ 10	2 (<3) @ 20	58K2486	0.20
● TLHY5200	Yellow (585nm)	30 (>10) @ 10	2.4 (<3) @ 20	58K2492	0.18
● TLHG5200	Green (565 nm)	30 (>16) @ 10	2.4 (<3) @ 20	58K2466	0.14
● TLHG5201	Green (565nm)	40 (>25) @ 10	2.4 (<3) @ 20	33C1286	0.16
● TLHG5205	Green (565nm)	50 (>40) @ 10	2.4 (<3) @ 20	33C1287	0.16
● TLHG6200	Green (565nm)	30 (>16) @ 10	2.4 (<3) @ 20	33C1293	0.15
T-1¾ (5mm), phi = ±22°					
● TLHB5800	Blue (428nm)	380 (>130) @ 20	3.9 (<4.5) @ 20	95B4836	0.73
T-1¾ (5mm), phi = ±30°					
● TLDR5400	Red (650nm)	70 (>35) @ 20	1.8 (<2.2) @ 20	58K2443	0.24
● TLHR5401	Red (635nm)	7 (>4) @ 10	2 (<3) @ 20	58K2487	0.20
● TLHR5405	Red (635nm)	10 (>6.3) @ 10	2 (<3) @ 20	33C1333	0.20
● TLHY5400	Yellow (585nm)	3.5 (>1.6) @ 10	2.4 (<3) @ 20	58K2494	0.19
● TLHY5401	Yellow (585nm)	7 (>4) @ 10	2.4 (<3) @ 20	33C1357	0.19
● TLHY5405	Yellow (585nm)	10 (>6.3) @ 10	2.4 (<3) @ 20	33C1358	0.20
● TLHG5400	Green (565nm)	4 (>1.6) @ 10	2.4 (<3) @ 20	33C1289	0.15
● TLHG5401	Green (565 nm)	7 (>4) @ 10	2.4 (<3) @ 20	33C1290	0.17
● TLHG5405	Green (565nm)	15 (>6.3) @ 10	2.4 (<3) @ 20	58K2467	0.17
● TLHR6400	Red (635nm)	3.5 (>1.6) @ 10	2 (<3) @ 20	33C1337	0.19
● TLHR6401	Red (635nm)	7 (>4) @ 10	2 (<3) @ 20	33C1338	0.20
● TLHR6405	Red (635nm)	10 (>6.3) @ 10	2 (<3) @ 20	33C1339	0.20
● TLHY6400	Yellow (585nm)	3.5 (>1.6) @ 10	2.4 (<3) @ 20	33C1362	0.18
● TLHY6405	Yellow (585nm)	10 (>6.3) @ 10	2.4 (<3) @ 20	33C1364	0.19
● TLHG6400	Green (565nm)	4 (>1.6) @ 10	2.4 (<3) @ 20	58K2469	0.14
● TLHG6401	Green (565nm)	7 (>4) @ 10	2.4 (<3) @ 20	33C1296	0.16
● TLHG6405	Green (565nm)	15 (>6.3) @ 10	2.4 (<3) @ 20	58K2470	0.16
● TLHB5400	Blue (428nm)	15 (>6.3) @ 20	3.9 (<4.5) @ 20	59K0279	0.76
● TLHF5400	Orange (610nm)	60 (>16) @ 10	2 (<2.6) @ 20	58K2458	0.22
● TLHK5400	Red (643nm)	26 (>10) @ 10	2 (<2.6) @ 20	58K2474	0.18
● TLUR5400	Red (660 nm)	0.8 (>0.4) @ 10	1.6 (<2) @ 20	33C1439	0.15
● TLUR5401	Red (660 nm)	2.5 (>1) @ 10	1.6 (<2) @ 20	33C1440	0.15
● TLUR6400	Red (660 nm)	0.8 (>0.4) @ 10	1.6 (<2) @ 20	33C1441	0.15
● TLUR6401	Red (660 nm)	2.5 (>1) @ 10	1.6 (<2) @ 20	33C1442	0.15
T-1¾ (5mm), phi = ±4°					
● TLDR5800	Red (650nm)	2500 (>1000) @ 20	1.8 (<2.2) @ 20	58K2444	0.25
● TLHY5800	Yellow (585 nm)	250 (>100) @ 20	2.4 (<3) @ 20	58K2495	0.18
● TLHG5800	Green (565 nm)	700 (>400) @ 20	2.4 (<3) @ 20	58K2468	0.14
● TLHK5800	Red (643 nm)	2500 (>1000) @ 10	1.9 (<2.6) @ 20	33C1304	0.19
T-1¾ (5mm), phi = ±9°					
● TLHK5100	Red (643 nm)	(>320) @ 20	1.9 (<2.6) @ 20	33C1301	0.19
● TLHE5100	Yellow (590 nm)	(>750) @ 20	2 (<2.6) @ 20	58K2452	0.20
● TLHG5100	Green (565 nm)	(>240) @ 20	2.4 (<3) @ 20	33C1282	0.21
T-¾ (1.8mm), phi = ±20°					
● TLUR2400	Red (660 nm)	0.8 (>0.4) @ 10	1.6 (<2) @ 20	33C1435	0.23
● TLUG2400	Green (565 nm)	5 (>1.6) @ 10	2.4 (<3) @ 20	33C1431	0.25
T-¾ (1.8mm), phi = ±10°					
● TSHG6210	Clear (850 nm)	...	1.8 (<3) @ 100	64R5033	0.82

(69020)

LED LAMPS

RoHS Compliant Available

VCC

Features:
- Low Power Consumption
- High Intensity
- I.C. Compatible

Applications:
- Commercial Outdoor Sign Board
- Front Panel Indicator
- Dot-Matrix Module
- LED Bulb

Mfg. Part No.	Color	Size	Wavelength Typ. (nm)	Lumin. Intens.	View. Angle (°)	Stock No.	Price Each 1-9
● VAOL-3GAE4	Red	T-1 (3mm)	640	150mcd	30	57P7111	0.22
● VAOL-3GCE4	Yellow	T-1 (3mm)	590	150mcd	30	57P7112	0.24
● VAOL-3GDE4	Green	T-1 (3mm)	570	170mcd	30	57P7113	0.22
● VAOL-3GSBY4	Blue	T-1 (3mm)	470	2.5cd	30	57P7114	0.46
● VAOL-3GWY4	White	T-1 (3mm)	...	3.5cd	30	57P7115	0.51

➤ CONTINUED ➤

LED LAMPS (CONT.)

Mfg. Part No.	Color	Size	Wavelength Typ. (nm)	Lumin. Intens.	View. Angle (°)	Stock No.	Price Each 1-9
● VAOL-3LSBY4	Blue	T-1 (3mm)	470	1.2cd	60	57P7126	0.43
● VAOL-3LWY4	White	T-1 (3mm)	...	2.5cd	60	57P7127	0.48
● VAOL-5701AE4	Red	T-1 3/4 (5mm)	640	85mcd	100	57P7148	0.22
● VAOL-5701CE4	Yellow	T-1 3/4 (5mm)	590	80mcd	100	57P7149	0.22
● VAOL-5701DE4	Green	T-1 3/4 (5mm)	570	100mcd	100	57P7150	0.24
● VAOL-5701SBY4	Blue	T-1 3/4 (5mm)	470	1cd	100	57P7151	0.44
● VAOL-5701WY4	White	T-1 3/4 (5mm)	...	1.8cd	100	57P7152	0.50
● VAOL-5GAE4	Red	T-1 3/4 (5mm)	643	250mcd	30	57P7132	0.22
● VAOL-5GCE4	Yellow	T-1 3/4 (5mm)	590	380mcd	30	41P0241	0.22
● VAOL-5GDE4	Green	T-1 3/4 (5mm)	570	380mcd	30	41P0243	0.22
● VAOL-5GSBY4	Blue	T-1 3/4 (5mm)	470	7cd	30	57P7133	0.44
● VAOL-5GWY4	White	T-1 3/4 (5mm)	...	7cd	30	50P9329	0.52
● VAOL-5LSBY4	Blue	T-1 3/4 (5mm)	470	1.5cd	60	57P7142	0.44
● VAOL-5LWY4	White	T-1 3/4 (5mm)	...	5cd	60	57P7143	0.49
● VAOL-10GAT4	Red	T-3 (10mm)	640	480mcd	30	57P7106	0.27
● VAOL-10GRE4	Red	T-3 (10mm)	623	2.5cd	25	20T1648	0.32
● VAOL-10GCE4	Yellow	T-3 (10mm)	590	200mcd	30	57P7107	0.29
● VAOL-10GYE4	Yellow	T-3 (10mm)	590	2.5cd	25	20T1649	0.30
● VAOL-10GDE4	Green	T-3 (10mm)	570	350mcd	30	57P7108	0.27
● VAOL-10GGE4	Green	T-3 (10mm)	572	1.3cd	25	20T1647	0.30
● VAOL-10GSBY4	Blue	T-3 (10mm)	470	7cd	30	57P7109	0.57
● VAOL-10GWY4	White	T-3 (10mm)	...	8cd	30	57P7110	0.60

(147897)

LOW-CURRENT LEDS

RoHS Compliant Available

VISHAY.

Mfg. Part No.	V_F V	Color Wavelength	Lum. Intens. I_V @ I_F (mcd, mA)	V_F @ I_FV, mA	Product Series	Stock No.	Price Each 1-9
T-1 (3mm), PHI = ±25°							
● TLLR4400	1.9 (<2.4)	High-Efficiency Red (635 nm)	1.2 (>0.63) @ 2	1.9 (<2.4) @ 2	(3mm) Tinted Diff.	33C1369	0.20
● TLLR4401	1.9 (<2.4)	High-Efficiency Red (635 nm)	2 (>1) @ 2	1.9 (<2.4) @ 2	(3mm) Tinted Diff.	58K2498	0.20
● TLLY4400	2.4 (<2.9)	Yellow (585 nm)	1.2 (>0.63) @ 2	2.4 (<2.9) @ 2	(3mm) Tinted Diff.	58K2501	0.19
● TLLG4400	1.9 (<2.4)	Green (565 nm)	1.2 (>0.63) @ 2	1.9 (<2.4) @ 2	(3mm) Tinted Diff.	58K2496	0.20
● TLLG4401	1.9 (<2.4)	Green (565 nm)	2 (>1) @ 2	1.9 (<2.4) @ 2	(3mm) Tinted Diff.	59K0282	0.22
T-1¾ (5mm), PHI = ±25°							
● TLLR5400	1.9 (<2.4)	High-Efficiency Red (635 nm)	1.2 (>0.63) @ 2	1.9 (<2.4) @ 2	(5mm) Tinted Diff.	58K2499	0.18
● TLLR5401	1.9 (<2.4)	High-Efficiency red (635 nm)	2 (>1) @ 2	1.9 (<2.4) @ 2	(5mm) Tinted Diff.	58K2500	0.19
● TLLY5401	2.4 (<2.9)	Yellow (585 nm)	2 (>1) @ 2	2.4 (<2.9) @ 2	(5mm) Tinted Diff.	58K2503	0.16
● TLLG5400	1.9 (<2.4)	Green (565 nm)	1.2 (>0.63) @ 2	1.9 (<2.4) @ 2	(5mm) Tinted Diff.	33C1367	0.18
● TLLG5401	1.9 (<2.4)	Green (565 nm)	2 (>1) @ 2	1.9 (<2.4) @ 2	(5mm) Tinted Diff.	58K2497	0.20

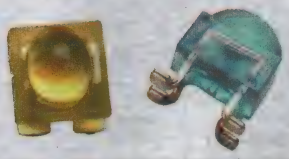
(74695)

ALMD SERIES HIGH BRIGHTNESS SMT ROUND LEDs

RoHS Compliant Available

AVAGO TECHNOLOGIES

Features:
- Compact form factor
- High brightness material
- Jedec MSL 2A
- Compatible with industrial reflow soldering process
- Typical Viewing angle: 30°
- Tinted, non-diffused



The new Avago **ALMD-xx3D** LED series has the same or just slightly less luminous intensity than conventional high brightness, through-hole LEDs. The LEDs are made with an advanced optical grade epoxy for superior performance in outdoor sign applications.

Mfg. Part No.	LED Color	Luminous Intensity (cd)	Forward Voltage @ 20mA (V)	IF	Wavelength (nm)	Stock No.	Price Each
TINTED							
● ALMD-EG3D-VX002	Red	9.3	2.1	20	630	71R7508	1.10
● ALMD-EL3D-VX002	Amber	9.3	2.1	20	594.5	71R7509	1.10
NON-DIFFUSED							
● ALMD-LG36-WZ002	Red	2.9	2.1	20	630	71R7511	1.10
● ALMD-LL36-WZ002	Amber	2.9	2.1	20	594.5	71R7512	1.10

(196161)

LUMEX TitanBrite™ HIGH POWER LEDs

RoHS Compliant Available

LUMEX — Creating LED and LCD Solutions Together™

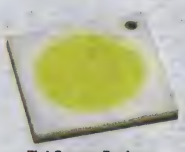
Features:
- Offers high intensity light of up to 58, 210 and 300 lumens respectively
- Provides thermal resistance as low as 7°C/Watt
- 2-Watt version is available in yellow (591 nm typ) and red (623 nm typ)
- 3-Watt and 5-Watt are offered in blue (465 nm typ), warm white (2700K), and cool white (6000K) with red, green and yellow versions available at no additional cost

Applications:
- Appliances
- Automotive
- Communications equipment
- Industrial controls
- Life safety equipment
- Medical equipment
- Meter displays
- Military applications
- Security electronics
- Test and measurement

Round Package

Square Package

Square Red, Green or Blue


Flat Square Package

8mm ROUND PACKAGE

Mfg. Part No.	LED Color	CCT or Wavelength	IF (mA)	VF (V)	Lumin. Intens. (mcd)	Stock No.	Price Each 1-9
SML-LXL8047MWCTR/3	Warm White	3000K	700	4.6	140	79R3150	11.10
SML-LXL8047UWCTR/3	Cool White	6000K	700	4.6	160	79R3152	10.49
9mm SQUARE PACKAGE							
SML-LXL99SIC-TR/2	Red	635nm	500	2.7	42	91R0451	8.69
SML-LXL99SYC-TR/2	Yellow	598nm	500	2.5	58	91R0453	8.69
12mm SQUARE FLAT PACKAGE							
SML-LX4747MWC-TR10	Warm White	3000	1000	10.4	530	50T9043	42.32
SML-LX4747UWC-TR10	Cool White	6000	1000	10.4	600	50T9045	42.32

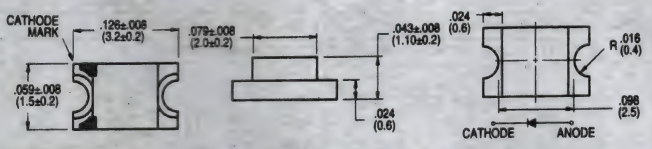
(192118)

CMD15-21 AND 22 SERIES (1206 & 1210) SURFACE MOUNT LEDS

RoHS Compliant Available

Chicago Miniature Lighting, LLC — *Lighting the world since 1910*

SMD



The **CMD15 series** surface mount LEDs are designed to permit easy post-reflow solder joint inspection. All types have clear lenses and viewing angle of 140° except **mfg. part nos. CMD15-21VRD, VGD,** and **VYD** which are diffused and have viewing angle of 160°. Average forward current: 30ma except for Green which is 25ma. Reverse voltage (@ I_R = 100μA) = 5.0V. **Also available in tape on reel for high-speed insertion.**

CMDIS-21 SERIES

Mfg. Part No.	Color	Luminous Intensity (mcd)	V_f (V)	Wave-length (nm)	Stock No.	Price Each 1-24
CMD15-21SRC/TR8	Super Red	15	1.7	660	93K6504	0.31
CMD15-21VRC/TR8	H.E. Red	6	2	640	93B3495	0.23
CMD15-21VRD/TR8	H.E. Red	4	2	640	93K6506	0.21
CMD15-21VYC/TR8	Yellow	6	2	585	93K6507	0.25
CMD15-21VYD/TR8	Yellow	4	2	585	93K6508	0.21
CMD15-21UBC/TR8	Blue	45	4.9	430	93K6505	2.18
CMD15-21UGC/TR8	Green	12	2.1	565	93B3513	0.19
CMD15-21VGC/TR8	Green	10	2.1	570	15M8857	0.22
CMD15-21VGD/TR8	Green	6.5	2.1	570	93B3572	0.20
CMD15-22 SERIES						
CMD15-22SRUGC/TR8	Red/GRN	15/12	1.7/2.1	660/565	93B3575	0.59

(19528)

TECHNICAL SUPPORT HOTLINE

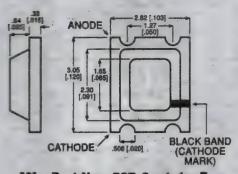
Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

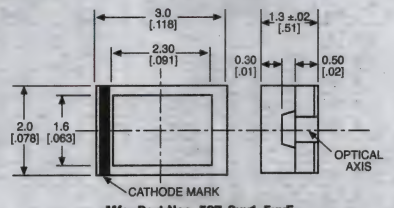
597 SERIES SURFACE MOUNT LEDs

RoHS Compliant Available

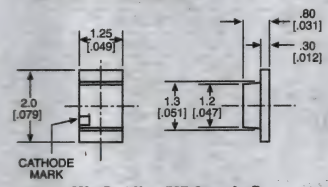
Dialight



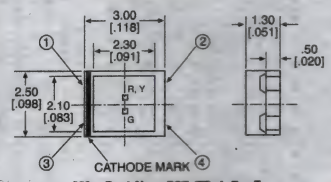
Mfg. Part Nos. 597-3xx1-1xxF



Mfg. Part Nos. 597-3xx1-5xxF



Mfg. Part Nos. 597-3xxx-4xxF



Mfg. Part Nos. 597-77x1-5xxF

Compatible with automatic placement equipment and infrared reflow processes. Meet EIA-481-1 standard. Help to eliminate mixed technology PC board processing. Compatible with Dialight's Optopipe™ series light pipes. **Sold individually on 8mm tape except packages of 20 pieces.** Suffix **xx2F** in mfg. part nos. = Cut Tape; suffix **xx7F** = full reel quantities of 2000.

Mfg. Part No.	Color	VF (V)	Typ. Lum. Intensity (mcd)	IF (mA)	Stock No.	Price Each 1-24
597-2001-202F	Red	2	32	10	30K4850	0.62
597-2001-213F	Red	2	32	10	30K4851	0.54
597-2003-502F	Red	2.2	40	20	20T0153	0.98
597-2033-502F	Red	2.2	63	20	20T0154	0.98
597-2751-602F	Red	2	45	20	20T0169	1.21
597-3001-107F	Red	2	4	20	30K4873	0.42
597-3001-207F	Red	2	10	20	30K4876	0.72
597-3002-502F	Red	2.2	63	20	20T0174	1.04
597-3002-507F	Red	2.2	63	20	48T2044	0.66
597-3021-502F	Red	2	6.3	20	30K4891	0.32
597-3021-507F	Red	2	6.3	20	30K4892	0.32
597-3032-502F	Red	2.2	100	20	20T0175	1.08
597-3032-507F	Red	2.2	100	20	48T2045	0.57
597-3111-402F	AlGaAs Red	1.7	17	30	30K4899	0.56
597-3111-407F	AlGaAs Red	1.7	17	20	30K4900	0.51
597-3111-502F	AlGaAs Red	1.75	16	20	30K4901	0.41
597-3111-507F	AlGaAs Red	1.75	16	20	30K4902	0.45
597-3121-207F	AlGaAs Red	1.75	20	10	30K4904	0.65
597-5111-402F	Red	1.7	11.7	20	30K5001	0.58
597-5111-407F	Red	1.7	11.7	20	30K5002	0.51
597-5112-402F	Red	1.7	11.7	20	30K5003	0.54
597-5112-407F	Red	1.7	11.7	20	30K5004	0.49
597-6001-607F	Red	2	280	20	06P3488	0.58
597-2301-202F	Green	2	32	10	30K4862	0.62
597-2301-213F	Green	2	32	10	30K4863	0.54
597-2311-407F	Green	2.1	5.2	20	30K4865	0.56
597-2501-602F	Green	2	50	20	20T0162	1.24
597-2601-602F	Green	3.2	195	20	20T0165	2.20
597-3301-102F	Green	2.1	10	20	30K4934	0.45
597-3301-107F	Green	2	12	20	30K4935	0.99
597-3301-202F	Green	2.1	10	20	30K4936	0.70
597-3301-207F	Green	2.1	10	20	30K4938	0.70
597-3301-502F	Green	2.2	16	25	30K4944	0.33
597-3301-507F	Green	2.1	10	20	30K4945	0.32
597-3311-402F	Green	2.1	7.5	30	30K4956	0.58
597-3311-407F	Green	2.2	7.5	25	30K4957	0.51
597-3312-502F	Green	2.1	18	20	20T0177	1.04
597-3312-507F	Green	2.1	18	25	48T2047	0.57
597-3322-502F	Green	3.2	140	20	20T0178	4.51
597-3322-507F	Green	3.2	140	20	48T2048	3.70
597-5311-407F	Green	2.1	6.4	20	30K5014	0.51
597-5312-407F	Green	2.1	6.4	20	30K5016	0.49
597-2222-602F	Yellow	2.4	125	20	20T0158	3.36
597-2401-213F	Yellow	2	32	10	30K4867	0.45
597-2403-502F	Yellow	2	63	20	20T0160	1.11
597-2403-507F	Yellow	2	63	20	48T2040	0.64
597-3401-107F	Yellow	2.1	8	20	30K4964	0.74
597-3401-202F	Yellow	2.1	7	20	30K4965	0.68
597-3401-207F	Yellow	2.1	7	20	30K4967	0.63
597-3401-402F	Yellow	2.2	6	30	30K4969	0.56

➤CONTINUED➤

597 SERIES SURFACE MOUNT LEDs (CONT.)

Mfg. Part No.	Color	VF (V)	Typ. Lum. Intensity (mcd)	IF (mA)	Stock No.	Price Each 1-24
● 597-3401-407F	Yellow	2.2	6	20	30K4970	0.40
● 597-3401-507F	Yellow	2.1	7	20	30K4972	0.43
● 597-3402-502F	Yellow	2.2	160	20	20T0180	1.04
● 597-3402-507F	Yellow	2.2	160	20	48T2049	0.66
● 597-5312-402F	Yellow	2.1	11.7	20	30K5015	0.53
● 597-6401-607F	Yellow	2	450	20	06P3500	0.58
● 597-2203-502F	Orange	2.2	100	20	20T0155	0.98
● 597-2203-507F	Orange	2.2	100	20	48T2039	0.56
● 597-2211-602F	Orange	2	125	20	20T0156	1.72
● 597-3202-502F	Orange	2.2	160	20	20T0176	1.04
● 597-3202-507F	Orange	2.2	160	20	48T2046	0.64
● 597-2503-502F	Yellow Green	2.2	25	20	20T0164	0.98
● 597-2503-507F	Yellow Green	2.2	25	20	48T2041	0.66
● 597-3502-502F	Yellow Green	2.2	25	20	20T0181	1.04
● 597-3502-507F	Yellow Green	2.2	25	20	48T2050	0.64
● 597-2603-502F	Blue	3.2	140	20	20T0167	2.78
● 597-2603-507F	Blue	3.2	140	20	48T2042	2.69
● 597-2901-602F	Blue	3.8	125	20	20T0170	3.28
● 597-3601-207F	Blue	3.5	16	10	75R0571	1.99
● 597-3602-502F	Blue	3.3	100	20	20T0182	3.93
● 597-3602-507F	Blue	3.3	100	20	48T2051	3.25
● 597-6601-607F	Blue	3	180	20	06P3508	0.72
● 597-2903-502F	White	3.1	170	10	20T0172	1.78
● 597-2903-507F	White	3.1	170	10	20T0173	0.70
● 597-3901-831F	White	3.4	240	10	20T0185	0.92
● 597-3902-502F	White	3.2	900	20	20T0186	4.19
● 597-3902-507F	White	3.2	900	100	48T2052	4.17
● 597-6901-607F	White	3.15	112	20	06P3512	0.57
● 597-7701-107F	Red/Green	2/2	4/12	20	30K5022	1.30
● 597-7701-202F	Red/Green	2/2.1	16/16	20	30K5023	0.97
● 597-7701-207F	Red/Green	2/2.1	16/16	20	30K5025	1.05
● 597-7701-502F	Red/Green	2/2.2	6.3/20	25	30K5027	0.61
● 597-7701-507F	Red/Green	2/2.2	6.3/20	20	30K5028	0.59
● 597-7703-602F	Red/Green	2/2	55/45	20	20T0188	1.41
● 597-5411-402F	Yellow/Green	2.1	11.7	20	30K5017	0.62
● 597-5411-407F	Yellow/Green	2.1	11.7	20	30K5018	0.56
● 597-5412-407F	Yellow/Green	2.1	11.7	20	30K5020	0.27
● 597-7721-107F	Yellow/Green	2.1/2	8/12	20	30K5035	1.08
● 597-7721-502F	Yellow/Green	2.1/2.2	6.3/20	25	30K5038	0.72
● 597-7721-507F	Yellow/Green	2.1/2.2	6.3/20	20	30K5039	0.39

(28882)

598 SERIES MICRO LED® SMD LEDs

RoHS Compliant Available

Dialight

0603 1208 1210

The *598 Series* of microLED® SMD LEDs is comprised of 10 different package styles incorporating the most popular color combinations. Single color, bi-color, tri-color and right angle package styles are available. Common wavelengths are available in various package styles to maintain color consistency.
All *598 Series* LEDs are RoHS compliant and many colors offered conform to the ANSI/VITA 40 standard regarding status indication. The *598 Series* is available in both small quantities and tape and reel.

0603 CASE SIZE, AlInGaP MATERIAL, WATER CLEAR LENS STYLE, 140° VIEWING ANGLE

Mfg. Part No.	Color	Lum. Int. (mcd)	Wavelength (nm)	V_F Typ. (V)	Tape Cut Stock No.	Tape Cut Price Each 1-24
● 5988010107F	Red	40	635	2.2	75R0572	0.11
● 5988020107F	Red Orange	150	625	2	75R0573	0.12
● 5988030107F	Orange	150	610	2	75R0574	0.18
● 5988040107F	Yellow	130	595	2	75R0575	0.12
● 5988050107F	Yellow	130	590	2	75R0576	0.12
● 5988060107F	Yellow Green	40	575	2	75R0577	0.11
0603 CASE SIZE, GaP MATERIAL, WATER CLEAR LENS STYLE, 140° VIEWING ANGLE						
● 5988070107F	Green	20	570	2	75R0578	0.11
0603 CASE SIZE, InGaN MATERIAL, WATER CLEAR LENS STYLE, 140° VIEWING ANGLE						
● 5988081107F	Green	300	523	3.2	75R0579	0.51
● 5988091107F	Blue	140	473	3.2	75R0580	0.43
0606 CASE SIZE, Bi Color, WATER CLEAR LENS STYLE, 140° VIEWING ANGLE						
● 5988410207F	Red, Green	60/40	635/565	2/2	22M3088	0.10
● 5988460207F	Red, Yellow	135/50	590/640	2/2.2	22M3100	0.10

➤CONTINUED➤

598 SERIES MICRO LED® SMD LEDs (CONT.)

0606 CASE SIZE, Tri Color, WATER CLEAR LENS STYLE, 140° VIEWING ANGLE

Mfg. Part No.	Color	Lum. Int. (mcd)	Wavelength (nm)	V_F Typ. (V)	Tape Cut Stock No.	Tape Cut Price Each 1-24
● 5988710307F	Red, Green, Blue	60/120/90	635/525/470	2/ 3.2/ 3.2	75R0622	1.80
● 5988720307F	Red Orange, Green, Blue	80/150/60	625/525/470	2.2/ 3/ 3.2	75R0623	1.80
0805 CASE SIZE, AlInGaP MATERIAL, WATER CLEAR LENS STYLE, 140° VIEWING ANGLE						
● 5988110107F	Red	40	635	2.2	75R0581	0.11
● 5988120107F	Red Orange	150	625	2	75R0582	0.11
● 5988130107F	Orange	150	610	2	75R0583	0.18
● 5988140107F	Yellow	130	595	2	75R0584	0.11
● 5988150107F	Yellow	130	590	2	75R0585	0.11
● 5988160107F	Yellow Green	40	575	2	75R0586	0.10
0805 CASE SIZE, GaP MATERIAL, WATER CLEAR LENS STYLE, 140° VIEWING ANGLE						
● 5988170107F	Green	20	570	2	75R0587	0.10
0805 CASE SIZE, InGaN MATERIAL, WATER CLEAR LENS STYLE, 140° VIEWING ANGLE						
● 5988181107F	Green	300	523	3.2	75R0588	0.51
● 5988191107F	Blue	140	473	3.2	75R0590	0.34
1206 CASE SIZE, AlInGaP MATERIAL, WATER CLEAR LENS STYLE, 140° VIEWING ANGLE						
● 5988210107F	Red	80	635	2	75R0591	0.11
● 5988220107F	Red Orange	150	625	2	75R0592	0.12
● 5988230107F	Orange	110	610	2	75R0593	0.18
● 5988240107F	Yellow	130	595	2	75R0594	0.11
● 5988250107F	Yellow	130	590	2	75R0595	0.11
● 5988260107F	Yellow Green	40	575	2	75R0596	0.11
1206 CASE SIZE, InGaN MATERIAL, WATER CLEAR LENS STYLE, 140° VIEWING ANGLE						
● 5988281107F	Green	300	523	3.2	75R0598	0.59
● 5988291107F	Blue	140	473	3.2	75R0599	0.34
1206 CASE SIZE, GaP MATERIAL, WATER CLEAR LENS STYLE, 140° VIEWING ANGLE						
● 5988270107F	Green	20	570	2	75R0597	0.11
1208 CASE SIZE, AlInGaP MATERIAL, WATER CLEAR LENS STYLE, 160° VIEWING ANGLE						
● 5988320107F	Red Orange	120	625	2	75R0601	0.15
1208 CASE SIZE, InGaN MATERIAL, WATER CLEAR LENS STYLE, 160° VIEWING ANGLE						
1208 CASE SIZE, Bi Color, WATER CLEAR LENS STYLE, 160° VIEWING ANGLE						
● 5988510207F	Red, Green	60/40	635/565	2/2	75R0613	0.24
● 5988520207F	Red Orange, Green	110/40	625/568	2/2	75R0614	0.24
● 5988540207F	Yellow, Green	110/40	590/565	2/2	75R0615	0.24
● 5988560207F	Red, Yellow	135/50	590/635	2.2/ 2.2	75R0616	0.24
1208 CASE SIZE, Tri Color, WATER CLEAR LENS STYLE, 160° VIEWING ANGLE						
● 5988810307F	Red, Green, Blue	60/90/120	635/525/470	2.2/ 3.2/ 3.2	75R0624	2.25
1210 CASE SIZE, Bi Color, WATER CLEAR LENS STYLE, 140° VIEWING ANGLE						
● 5988610207F	Red, Green	60/40	635/568	2/2	75R0617	0.28
● 5988621207F	Red Orange, Green	100/220	625/525	2/3.2	75R0619	0.70
● 5988640207F	Yellow, Green	110/40	590/568	2/2	75R0620	0.24
● 5988660207F	Red, Yellow	110/60	590/635	2.2/ 2.2	75R0621	0.24
1210 CASE SIZE, Tri Color, WATER CLEAR LENS STYLE, 140° VIEWING ANGLE						
● 5988610307F	Red/Green/Blue	60/ 120/ 90	645/ 530/ 475	2/ 3.2/ 3.2	75R0618	1.83

(91073)

CHIP LEDs

RoHS Compliant Available

ROHM SEMICONDUCTOR

1.6MM x 2.3MM

Mfg. Part No.	LED Color	Vf (V)	Lumin. Intens. (mcd)	If (mA)	Wavelength (nm)	Stock No.	Price Each 1-9
● SML-010MTT86P	Yellow Green	2.2	25	25	570	74M4561	0.58
● SML012BCTT86T	Blue	3.3	100	20	468	40P3303	1.92
1.25MM X 1.4MM							
● SML-210VTT86L	Red	2	4	20	635	40P3312	0.45
● SML-210YTT86M	Yellow	2.1	6.3	20	590	74M4564	0.43
● SML-211DTT86K	Orange	1.8	2.5	2	608	40P3313	0.44
● SML-211UTT86K	Red	1.8	2.5	2	625	40P3314	0.44

➤CONTINUED➤

CHIP LEDs (CONT.)

0.8MM X 1.2MM

Mfg. Part No.	LED Color	Vf (V)	Lumin. Intens. (mcd)	If (mA)	Wavelength (nm)	Stock No.	Price Each 1-9
SML-311YTT86K	Yellow	1.8	2.5	2	590	40P3326	0.35
SML-510MWT86N	Green	2.2	16	20	570	40P3327	0.26
SML-A12UTT86T	Red	2	100	20	630	40P3291	0.50
0.8MM X 1.6MM							
SML-512DWT86T	Orange	2	100	20	609	40P3331	0.55
SML-P11MTT86	Yellow Green	1.9	2.1	1	569	61T4695	0.45
SML-P12UTT86	Red	2	85	20	620	61T4703	0.37
MULTICOLOR, 2.3MM X 2.1MM							
SML-020MLTT86PN	Red Green	1.75 2.2	9 9	20	660 570	40P3308	0.69

(207807)

POWER MINI SMD LED

RoHS Compliant Available

VISHAY.

Features:

- Utilizing latest advanced AlInGaP technology
- Luminous intensity and color categorized per packing unit
- Luminous intensity ratio per packing unit Ivmax./Ivmin. ≤1.6
- ESD-withstand voltage: up to 2 kV according to JESD22-A114-B
- Preconditioning: acc. to JEDEC level 2a
- IR reflow soldering
- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC
- AEC-Q101 qualified

The new **MiniLED series** has been designed in a small white SMT package. The feature of the device is the very small package 2.3 mm x 1.3 mm x 1.4 mm. The **MiniLED** is an obvious solution for small-scale, high-power products that are expected to work reliability in an arduous environment. This is often the case in automotive and industrial application.

Mfg. Part No.	Color	Luminous Intensity Typ. (mcd)	Forward Voltage (V)	Stock No.	Price Each 1-9
VLMS233T1V1-GS08	Red	450	2	77T9951	0.40
VLMR233T2V2-GS08	Red	650	2	77T9950	0.40
VLMR234ABCA-GS08	Red	2000	2.2	19X7755	0.20
VLMK234ABCA-GS08	Amber	2500	2.25	19X7753	0.20
VLMK233U1AA-GS08	Amber	680	2.1	77T9947	0.40
VLMY31J2K2-GS08	Yellow	11.2	2.1	62W4801	0.28
VLMY233T2V2-GS08	Yellow	650	2.15	82T8694	0.40
VLMY333U1AA-GS08	Yellow	750	2.15	62W4802	0.52
VLMY234ABCA-GS08	Yellow	2000	2.3	19X7757	0.20
VLMY51Z1AA-GS08	Yellow	7100	2.2	62W4803	0.91
VLMYG30G2J1-GS08	Yellow Green	5.56	1.9	62W4797	0.25
VLMYG30G2K1-GS08	Yellow Green	900	1.9	62W4798	0.25
VLMYG30H2K1-GS08	Yellow Green	900	1.9	62W4799	0.25
VLMYG33P1Q2-GS08	Yellow Green	112	2	62W4800	0.25
VLMW45R1S1-5K6L-08	White	224	3.3	62W4796	0.69
VLMW41S1T2-7K8L-08	White	450	3.3	62W4792	0.78
VLMW41S1T2-8K8L-08	White	450	3.3	62W4793	0.78
VLMW41S1T2-JKKL-08	White	450	3.3	62W4785	0.78
VLMW41S1T2-JKPL-08	White	450	3.3	62W4786	0.78
VLMW41S1T2-KKLL-08	White	450	3.3	62W4787	0.78
VLMW41S1T2-LKML-08	White	450	3.3	62W4788	0.78
VLMW41S1T2-MKNL-08	White	450	3.3	62W4789	0.78
VLMW41S1T2-NKOL-08	White	450	3.3	62W4790	0.78
VLMW41S1T2-OKPL-08	White	450	3.3	62W4791	0.78
VLMW42T2U2-6K6L-08	White	710	3.3	62W4794	0.71
VLMW42T2V1-6K7L-08	White	900	3.3	62W4795	0.71

(202145)

SUPER THIN ChipLEDS

RoHS Compliant Available

VISHAY.

Features:

- Super thin ChipLED with exceptional brightness 1.6 mm x 0.8 mm x 0.8 mm (L x W x H)
- High reliability PCB based
- Temperature range - 55 °C to + 85 °C
- Wavelength (465 to 475) nm (blue), typ. 525 nm (true green), typ. 571 nm (yellow green), (584.5 to 597) nm (yellow), typ. 605 nm (soft orange), typ. 631 nm (super red)
- InGaN blue available with protection diode, device type VLMB1310 with HBM 8000 V
- AlInGaP and InGaN technology
- Viewing angle: extremely wide 130°
- Grouping parameter: luminous intensity, wavelength, VF
- Available in 8 mm tape on 7" diameter reel
- Compatible to IR reflow soldering
- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC
- Preconditioning: according to JEDEC level 2a

The new **ChipLED** series have been designed in the smallest SMD package. This innovative ChipLED technology opens the way to smaller products of higher performance, more design in flexibility, enhanced applications
The 0603 LED is an obvious solution for small-scale, high brightness products that are expected to work reliably in an arduous environment.

➤CONTINUED➤

SUPER THIN ChipLEDS (CONT.)

Mfg. Part No.	Color	Luminous Intensity Typ. (mcd)	V_f (V)	Wave-length (nm)	Stock No.	Price Each 1-9
VLMG1300-GS08	Yellow Green	35	2	571	76T8664	0.20
VLMO1300-GS08	Orange	90	2	605	76T8665	0.20
VLMS1300-GS08	Red	54	2	631	76T8666	0.19
VLMB1300-GS08	Blue	180	3.8	...	76T8662	0.22
VLMB1310-GS08	Blue	180	3.8	...	76T8663	0.27
VLMW1300-GS08	White	180	3.15	...	76T8668	0.30
VLMY1300-GS08	Yellow	180	2.4	...	76T8669	0.20
VLMTG1300-GS08	Green	450	3.2	525	76T8667	0.28
VLMW11R2S2-5K8L-08	White	280	4		41M0061	1.02
VLMY3100-GS08	Yellow	10	2	625	05W7016	0.28
VLMT3100-GS08	Red	1.1	2.2	625	05W7014	0.25
VLMG31L1M2-GS08	Green	28	2.2	575	05W7012	0.26
VLMD3100-GS08	Red	11.2	1.8	648	05W7011	0.30
VLMC3101-GS08	Green	1.6	1.9	575	05W7010	0.26
VLMV3100-GS08	Red, Green	R 6mcd, G 6mcd	2.4V	R 625nm, G 575nm	05W7015	0.29
VLMRGB343-ST-UV-RS	Red, Green, Blue	...	...	...	05W7013	1.78

(202148)

Little Star® 1W POWER SMD LED

RoHS Compliant Available

VISHAY.

Features:

- Super high brightness surface mount LED
- High flux output; up to 113 lm
- 120° viewing angle
- Compact package outline (L x W x H) in mm: 6.0 x 6.0 x 1.5
- Ultra low height profile - 1.5 mm
- Designed for high current drive; up to 350 mA
- Low thermal resistance; RthJP = 10 K/W
- Qualified according to JEDEC moisture sensitivity level 2a
- Compatible with IR reflow soldering
- Little Star® are class 1M LED products. Do not view directly with optical instrument
- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC
- ESD-withstand voltage: up to 2 kV according to JESD22-A114-B

The **VLMW712U2U3XV**, **VLMW712T3U3US**, and **VLMW712T2T3QN** use new nitride phosphor system display negligible color shift across operation temperature range. With its extremely high level of brightness and the ultra low high profile, which is only 1.5 mm are highly suitable for both conventional lighting and specialized application such as automotive signal lights, traffic lights, channel lights, tube lights and garden lights among others.

Mfg. Part No.	Color	Luminous Intensity Typ. (mcd)	Forward Voltage (V)	Stock No.	Price Each 1-9
VLMW712T2T3QN-GS08	Warm White	25	3.6	82T8687	2.74
VLMW712T3U3US-GS08	Neutral White	29.4	3.6	82T8689	2.74
*VLMW712U2U3XV-GS08	Cool White	33.5	3.5	82T8691	2.74

(202148)

SMD LEDs WITH RECTANGULAR LENS

RoHS Compliant Available

multicomp

0603 PACKAGE

Mfg. Part No.	Color	Luminous Intensity	Forward Voltage	Stock No.	Price Each 1-249
MCL-S290SRC	Red	15mcd	1.85V	14N9361	0.10
MCL-S290YC	Yellow	10mcd	2.1V	14N9362	0.11
MCL-S291SBLC	Blue	50mcd	3.4V	14N9363	0.32
0805 PACKAGE					
MCL-S270SRC	Red	17mcd	1.85V	14N9358	0.13
MCL-S270YC	Yellow	10mcd	2.1V	14N9359	0.10
MCL-S270GC	Green	10mcd	2.1V	14N9356	0.13
MCL-S270SBLC	Blue	55mcd	3.5V	14N9357	0.39
1206 PACKAGE					
MCL-S250SBLC	Blue	65mcd	3.4V	14N9350	0.40
1210 PACKAGE					
MCL-S255YGC	Yellow, Green	Y 10mcd G 9mcd	Y 2.1V G 2.1V	14N9354	0.24

(203494)

element14 COMMUNITY

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element14.com

(196545)

LED EMITTERS & ARRAYS

MULTI-COLOR SURFACE MOUNT LEDS

RoHS Compliant Available

TT electronics
OPTEK Technology
NEW

- Full color RGB
- Luminous intensity: Red = 105mcd, Green = 330mcd, Blue = 200mcd
- Wavelength: Red = 625nm, Green = 530nm, Blue = 475nm
- Compatible with automatic placement equipment
- Compatible with infrared and vapor phase reflow solder process

Applications:
- Automotive backlighting for dashboard and switches
- Telecommunications (backlighting for telephones and faxes)

The OVSRRGBCC3TM is compact full color in a miniature surface mount package with a 150° viewing angle. This 1204 package provides top emitting mounting. The device can be used on smaller boards with a higher packing density and is ideal for handheld applications.

Mfg. Part No.	Forward Current	Forward Voltage	Stock No.	Price Each 1-1499
● OVSRRGBCC3TM	R 20mA, G 20mA, B 20mA	R 2V, G 3.3V, B 3.3V	29X7948	0.49

(212467)

RGB SURFACE MOUNT LEDs

RoHS Compliant Available

VCC

Mfg. Part No.	IF (mA)	Wavelength (nm)	Lumin. Intens. (mcd)	View. Angle (°)	Size (mm)	Stock No.	Price Each 1-9
● VAOL-S1513RGB	20	632/ 518/ 468	140/ 180/ 70	120	3.2x2.6x1.1	65R4612	1.34
● VAOS-SP4RGB4	20	631/ 530/ 475	285/ 450/ 180	120	PLCC4	65R4615	1.65
● VAOL-S2223RGB	20	630/ 540/ 480	72/ 180/ 45	120	2.7x1.0x1.35	65R4614	1.50

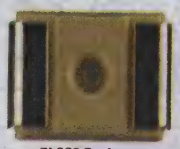
(175975)

SURFACE MOUNT LEDs

RoHS Compliant Available

VCC

1206 Package



PLCC2 Package

Mfg. Part No.	Color	Viewing Angle (°)	Forward Voltage (V)	Forward Current (mA)	Stock No.	Price Each 1-9
0402 PACKAGE						
● VAOL-S4RP4	Red	120	2	20	27R0098	0.29
● VAOL-S4YP4	Yellow	120	2	20	27R0101	0.29
● VAOL-S4GT4	Green	120	2	20	27R0097	0.29
● VAOL-S4SB4	Blue	120	3.6	20	27R0099	0.45
● VAOL-S4WR4	White	130	3	5	27R0100	0.66
0603 PACKAGE						
● VAOL-S6RP4	Red	120	2	25	27R0103	0.19
● VAOL-S6YP4	Yellow	120	1.9	10	27R0106	0.19
● VAOL-S6GT4	Yellow Green	120	2.35	20	27R0102	0.19
● VAOL-S6SB4	Blue	120	3	2	27R0104	0.34
● VAOL-S6WR4	White	130	3.1	25	27R0105	0.46
0805 PACKAGE						
● VAOL-S8RP4	Red	140	2	20	27R0108	0.21
● VAOL-S8YP4	Yellow	140	2	20	27R0111	0.20
● VAOL-S2WR4	White	120	3.5	20	27R0095	0.69
● VAOL-S8GT4	Green	140	2	20	27R0107	0.20
● VAOL-S8SB4	Blue	140	3.3	20	27R0109	0.33
1206 PACKAGE						
● VAOL-S12RP4	Red	130	2	20	27R0088	0.22
● VAOL-S12YP4	Yellow	130	2	20	27R0091	0.20
● VAOL-S12GT4	Green	130	2	20	27R0087	0.21
● VAOL-S12SB4	Blue	130	3.5	20	27R0089	0.30
● VAOL-S12WR4	White	140	2.9	5	27R0090	0.47
PLCC2 PACKAGE						
● VAOL-S2RP4	Red	120	2.35	20	27R0093	0.42
● VAOL-S2YP4	Yellow	120	2.35	20	27R0096	0.42
● VAOL-S2SB4	Blue	120	3.5	20	27R0094	0.60

(163079)

STANDARD PLCC-2 SMD LEDS

RoHS Compliant Available

VISHAY.

Features:
- High efficient InGaN technology
- Chromaticity coordinate categorized according to CIE1931 per packing unit
- EIA and ICE standard package
- Compatible with reflow, vapor phase and wave solder processes according to CECC 00802 and J-STD-020
- Preconditioning: according to JEDEC level 2a
- ESD-withstand voltage: Up to 2 kV according to JESD22-A114-B
- AEC-Q101 qualified

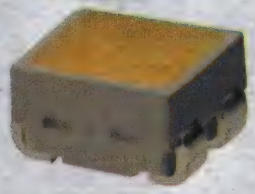
Mfg. Part No.	LED Color	Lumin. Inten. (mcd)	Forward Current (mA)	Forward Voltage (V)	Viewing Angle (°)	Tape Cut Stock No.	Tape Cut Price Each 1-7499
VLMW41 SERIES STANDARD SMD LED PLCC-2							
● VLMW41S1T2-JKKL-08	White	450	20	3.3	120	62W4785	0.78
● VLMW41S1T2-JKPL-08	White	450	20	3.3	120	62W4786	0.78
● VLMW41S1T2-KKLL-08	White	450	20	3.3	120	62W4787	0.78
● VLMW41S1T2-LKML-08	White	450	20	3.3	120	62W4788	0.78
● VLMW41S1T2-MKNL-08	White	450	20	3.3	120	62W4789	0.78
● VLMW41S1T2-NKOL-08	White	450	20	3.3	120	62W4790	0.78
● VLMW41S1T2-OKPL-08	White	450	20	3.3	120	62W4791	0.78
● VLMW41S1T2-7K8L-08	White	450	20	3.3	120	62W4792	0.78
● VLMW41S1T2-8K8L-08	White	450	20	3.3	120	62W4793	0.78
VLMW42T2 SERIES STANDARD SMD LED PLCC-2							
● VLMW42T2U2-6K6L-08	White	710	20	3.3	120	62W4794	0.71
● VLMW42T2V1-6K7L-08	White	900	20	3.3	120	62W4795	0.71
VLMW45R1 SERIES STANDARD SMD LED PLCC-2							
● VLMW45R1S1-5K6L-08	White	224	20	3.3	120	62W4796	0.69

(210104)

CREE PLCC4 SMD LEDs CLA1B SERIES

RoHS Compliant Available

CREE



Features:
- Size (mm):3.2 x 2.8
- Typical CRI for Cool White is 75
- Typical CRI for Warm White is 80
- Viewing angle: 120 degree

The CLA1B is packaged in an industry standard footprint with an improved package to provide high reliability & performance. They are designed to work under a wide range of environmental conditions. The wide viewing-angle makes these LEDs ideally suited for linear lighting, panel lighting and general illumination applications.

Mfg. Part No.	Color	CCT (K)	Lumin. Flux (lm)	If (mA)	Vf (V)	Stock No.	Price Each 1-9
● CLA1B-MKW-XD0E0E53	Warm White	4700	8.6	30	3.2	59T0438	0.29
● CLA1B-MKW-XD0E0E63	Warm White	4700	8.6	30	3.2	59T0439	0.29
● CLA1B-WKW-XD0F0E13	Cool White	8300	9.6	30	3.2	59T0442	0.29
● CLA1B-WKW-XD0F0E23	Cool White	8300	9.6	30	3.2	59T0443	0.30
● CLA1B-WKW-XD0F0E33	Cool White	8300	9.6	30	3.2	59T0444	0.30

(203531)

OVS SERIES SMD SUPER BRIGHT LEDs

RoHS Compliant Available

multicomp

Mfg. Part No.	Color	Luminous Intensity	Forward Voltage	Viewing Angle (°)	Stock No.	Price Each 1-249
0603 PACKAGE						
● OVS-0608	Red	300mcd	2.1V	130	15R2208	0.48
● OVS-0606	Yellow	350mcd	2.1V	130	15R2207	0.71
● OVS-0603	Blue	100mcd	3.2V	130	15R2205	0.37
● OVS-0604	Green	300mcd	3.2V	130	15R2206	0.48
● OVS-0601	White	340mcd	3.2V	140	15R2204	0.68
0805 PACKAGE						
● OVS-0806	Yellow	400mcd	2.1V	130	15R2212	0.64
● OVS-0804	Green	300mcd	3.2V	130	15R2211	0.48
● OVS-0803	Blue	100mcd	3.2V	130	15R2210	0.47
● OVS-0801	White	400mcd	3.2V	140	15R2209	0.56
PLCC4 PACKAGE						
● OVS-3308	Red	1.25cd	2.1V	120	15R2225	1.77
● OVS-3008	Red	420mcd	2.1V	120	15R2219	0.71
● OVS-3006	Yellow	450mcd	2.1V	120	15R2218	0.89
● OVS-3306	Yellow	1.34cd	2.1V	120	15R2224	1.95
● OVS-3004	Green	500mcd	3.2V	120	15R2217	0.71
● OVS-3304	Green	1.55cd	3.2V	120	15R2223	1.56
● OVS-3003	Blue	200mcd	3.2V	120	15R2216	0.54
● OVS-3303	Blue	540mcd	3.2V	120	15R2222	0.93

CONTINUED

OVS SERIES SMD SUPER BRIGHT LEDs (CONT.)

PLCC4 PACKAGE

Mfg. Part No.	Color	Luminous Intensity	Forward Voltage	Viewing Angle (°)	Stock No.	Price Each 1-249
OVS-3001	White	1.25cd	3.2V	120	15R2215	1.01
OVS-3301	White	3.3cd	3.2V	120	15R2221	1.16
PLCC2 PACKAGE						
OVS-3101	White	700mcd	3.2V	120	15R2220	0.64
PLCC6 PACKAGE						
OVS-3309	Red Green Blue	R 450mcd G 470mcd B 100mcd	R 2.1V G 3.2V B 3.5V	120	15R2226	3.13
OVS-5309	Red Green Blue	R 1.1cd G 1.46cd B 430mcd	R 2.1V G 3.2V B 3.2V	120	15R2230	3.20
OVS-5101	White	2.75cd	3.2V	120	15R2229	4.74
RIGHT ANGLE SMD PACKAGE						
OVS-2101	White	1.3cd	3.2V	120	15R2214	0.80

(203493)

HIGH POWER LEDs

RoHS Compliant Available

TT electronics
OPTEK Technology

Features:
- High luminous flux output for illumination
- Exposed pad design for excellent heat transfer
- Designed for high current operation
- Reflow soldering applicable

OVSPW OVS5M OVLENS

Applications:
- Automotive (exterior and interior lighting)
- Backlighting LCD displays (televisions and computer monitors)
- Entertainment (studios, theaters, nightclubs, restaurants)
- Accent lighting (wall wash, landscape, spotlight)
- Bicycle and pedestrian safety lights

Do not look directly at LED with unshielded eyes or damage to retina may occur.

0.5-Watt SMD 3.5x3.5mm

Mfg. Part No.	Color	Vf (V)	If (mA)	Lumin. Intens. (mcd)	Lumin. Flux (lm)	Stock No.	Price Each 1-99
OVS5MABCR4	Amber	2.2	200	4.5	...	32R7690	0.34
OVS5MBBCR4	Blue	3.4	180	...	6	32R7691	0.41
OVS5MGBCR4	Green	3.5	180	...	25	32R7692	0.92
OVS5MRBCR4	Red	2.2	200	4	...	32R7693	0.35
OVS5MWBCR4	White	3.2	180	...	25	32R7694	0.54
OVS5MWWBCR4	Warm White	3.2	180	...	25	32R7695	0.57
OVS5MYBCR4	Yellow	2.2	200	5	...	32R7696	0.35

0.5-Watt SMD 6x6mm

Mfg. Part No.	Color	Viewing Angle	Flux (lm) @ I_F-mA	Flux (lm) Typ.	Stock No.	Price Each 1-99
OVS5WBCR4	White	120	150	35	45M7038	1.18

1-Watt SMD 6x6mm

Mfg. Part No.	Color	Viewing Angle	Flux (lm) @ I_F-mA	Flux (lm) Typ.	Stock No.	Price 1-1999 1-99
OVSPRBCR44	Red	40	400	30	45M7031	1.48
OVSPW1BCR4	White	120	350	90	45P7996	1.83
OVSPYBCR44	Yellow	40	400	35	45M7034	1.48

Secondary Lenses for 6x6mm Power SMD (OVSxxxCR4 Series)

Mfg. Part No.	Color	Viewing Angle	Stock No.	Price Each 1-99
OVLENS234	Clear with Black holder	23	46M2591	1.47

(85819)

0.25W COOL WHITE PLCC4 SMD LEDs

RoHS Compliant Available

AVAGO TECHNOLOGIES

Features:
- 4000K to 8000K CCT
- ANSI bin
- Wide view angle 120°
- High reliability package with enhanced silicone resin encapsulation

Applications:
- Fluorescent replacement
- Under cabinet lighting
- Panel lights
- Retail display lighting

Mfg. Part No.	CCT (K)	Lumin. Flux (lm)	If (mA)	Vf (V)	Stock No.	Price Each 1-9
ASMT-UWBG-NACA8	8000	19	80	3.4	83T2227	1.41
ASMT-UWBG-NACB8	6500	19	80	3.4	83T2228	1.41
ASMT-UWBG-NACC8	5700	19	80	3.4	83T2229	1.41
ASMT-UWBG-NACD8	5000	19	80	3.4	83T2230	1.41
ASMT-UWBG-NACE8	4500	19	80	3.4	83T2231	1.41

CONTINUED

0.25W COOL WHITE PLCC4 SMD LEDs (CONT.)

Mfg. Part No.	CCT (K)	Lumin. Flux (lm)	If (mA)	Vf (V)	Stock No.	Price Each 1-9
ASMT-UWBG-NACF8	4000	19	80	3.4	83T2232	1.41
ASMT-UYBG-NACG8	3500	19	80	3.4	83T2248	1.41
ASMT-UYBG-NACH8	3000	19	80	3.4	83T2249	1.41
ASMT-UYBG-NACJ8	2700	19	80	3.4	83T2250	1.41

(203572)

0.5W COOL WHITE PLCC4 SMD LEDs

RoHS Compliant Available

AVAGO TECHNOLOGIES

Features:
- 4000K to 8000K CCT
- ANSI bin
- Wide view angle 120°
- High reliability package with enhanced silicone resin encapsulation

Applications:
- Fluorescent replacement
- Under cabinet lighting
- Panel lights
- Retail display lighting

Mfg. Part No.	CCT (K)	Lumin. Flux (lm)	If (mA)	Vf (V)	Stock No.	Price Each 1-9
ASMT-QWBG-NFHAE	8000	48	150	3.4	83T2194	1.77
ASMT-QWBG-NFHBE	6500	48	150	3.4	83T2195	1.77
ASMT-QWBG-NFHCE	5700	48	150	3.4	83T2196	1.77
ASMT-QWBG-NFHDE	5000	48	150	3.4	83T2197	1.77
ASMT-QWBG-NFHEE	4500	48	150	3.4	83T2198	1.77
ASMT-QWBG-NFHFE	4000	48	150	3.4	83T2199	1.77
ASMT-QYBG-NEGGE	3500	41.8	150	3.4	83T2215	1.77
ASMT-QYBG-NEGHE	3000	41.8	150	3.4	83T2216	1.77
ASMT-QYBG-NEGJE	2700	41.8	150	3.4	83T2217	1.77

(203555)

1W POWER LED LIGHT SOURCE

RoHS Compliant Available

AVAGO TECHNOLOGIES

Features:
- Energy Efficient
- Exposed Pad for Excellent Heat Transfer
- Suitable for SMT Process
- High Current Operation
- Long Operating Life
- Wide Viewing Angle
- Silicone Encapsulation
- InGaN Technology
- 120° Viewing Angle

ASMT-Ax00

Applications:
- Portable (Flashlight, Bicycle Headlight)
- Reading Light
- Architectural Lighting
- Garden Lighting
- Decorative Lighting

1W Power LED Light Source is a high performance energy efficient device which can handle high thermal and high driving current. The low profile package and exposed pad design has excellent heat transfer from the package to the motherboard. Compatible with SMT reflow soldering process and manual soldering.

ASMT-Ax00

Mfg. Part No.	Color	Luminous Flux (lm)	Stock No.	Price Each 1-9
ASMT-AB00-NMP01	Blue	18	51R2234	4.56
ASMT-AC00-NST00	Cyan	58	13T8287	5.56
ASMT-AG00-NST00	Green	65	51P3764	4.80
ASMT-AL00-NNP01	Royal Blue	350 mW*	51R2236	5.02
ASMT-AN00-NTUJ1	Neutral White	99.6	76R7646	5.97
ASMT-AN00-NTUK1	Neutral White	99.6	76R7647	5.97

COLLIMATOR LENS OPTION

Mfg. Part No.	Viewing Angle (°)	Stock No.	Price Each 1-9
ASMT-M006	6	30M0599	2.63
ASMT-M015	15	30M0600	2.35
ASMT-M030	30	32M7252	2.35

* Radiometric Power (mW)
(89558)

NEW PRODUCTS ADDED DAILY
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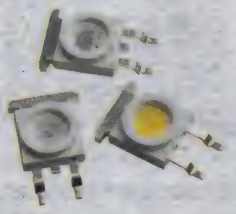
(196560)

LED EMITTERS & ARRAYS

1W MOONSTONE POWER LED

RoHS Compliant Available

AVAGO TECHNOLOGIES



Applications:
- Portable lighting – flash light, bicycle headlight & miner light
- Safety / security lighting – exit and emergency sign light
- Task lighting – reading light, spot light, track light
- General lighting – street lighting, interior lighting
- Decorative lighting – cove lighting, contour lighting and garden lighting
- Billboard backlighting – sign backlighting

Avago's **Moonstone™** high-power LED-family has the widest high power offering on the same platform (0.5W, 1W, and 3W). The industry-proven power transistor package grants a robust and reliable performance. The exposed pad design has excellent heat transfer from the package to the motherboard.
The advanced 3x1Watt **RGB Moonstone™** package delivers typ.108lumens at 350mA. The selection of the Red, Green, and Blue dies helps to achieve a high flux (typ. 90 lumen) D65 white color point and a wide color gamut. The robust package design makes it an excellent choice for color mixing applications.

Mfg. Part No.	Color	IF (mA)	Lumin. Flux (lm)	View. Angle (°)	Stock No.	Price Each 1-9
● ASMT-MA00-AGH00	Amber	350	35	120	85M3423	4.89
● ASMT-MB00-NDF00	Blue	350	15	120	05R6637	5.25
● ASMT-MG00-NJK00	Green	350	60	120	05R6639	5.67
● ASMT-MR00-AHJ00	Red	350	40	120	85M3425	5.25
● ASMT-MRK0-AHJ00	Red	350	40	120	14N5948	7.14

(105834)

1WATT HIGH-POWER AstraLEDs®

RoHS Compliant Available

LUMEX Creating LED and LCD Solutions Together™

Features:
- Delivers a total flux level of up to 30lm with power input of 350mA
- Designed for use with automatic surface-mount soldering processes
- Available with two different lens shapes for maximum viewing angle
- Extended metal backplanes to allow efficient heat transfer to the PCB or other mounting surface

Applications:
- Appliances
- Automotive
- Communications equipment
- Industrial controls
- Life safety equipment
- Medical equipment
- Meter displays
- Military applications
- Security electronics
- Test and measurement

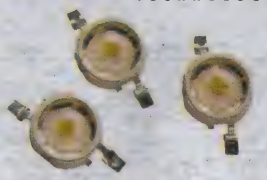
Mfg. Part No.	Emitted Color	Wave-length (nm)	V_F Typ. (V)	I_F Typ. (mA)	Lumin. Flux (lm)	Viewing Angle (°)	Stock No.	Price Each 1-9
● SML-LX1610UWC/A	White	...	3.5	350	30	110	22M4358	9.42
● SML-LX1610RGBW/A	Red/ Green/ Blue	626/ 525/ 470	2.1/ 3.5/ 3.5	300/ 350/ 350	25/ 25/ 8	110	47P0810	13.94

(90037)

3W POWER LED LIGHT SOURCE

RoHS Compliant Available

AVAGO TECHNOLOGIES



Features:
- Available in Red, Red Orange, Amber, Blue, Royal Blue, Cool White, Neutral White and Warm White color
- Energy efficient
- Exposed metal slug for excellent heat transfer
- Compatible with reflow soldering process
- High current operation
- Long operation life
- Wide viewing angle at 140°
- Silicone encapsulation
- Non-ESD sensitive (threshold > 16 kV)
- MSL 2a products

Applications:
- Architectural lighting
- Channel backlighting
- Contour lighting
- Retail Display lighting
- Decorative lighting
- Garden lighting
- Safety, exit and emergency signs lighting
- Specialty lighting
- Task lighting

This 3W Power LED Light Source is a high performance energy efficient device which can handle high thermal and high driving current. The exposed pad design enables excellent heat transfer from the package to the motherboard.

Mfg. Part No.	Color	Lumin. Flux (lm)	Vf (V)	If (mA)	Wavelength (nm) or CCT	Stock No.	Price Each 1-9
● ASMT-AA30-ARS00	Amber	50	2.1	350	590	71R7569	4.98
● ASMT-AB31-NMP00	Blue	18	3.2	350	470	73R4542	6.18
● ASMT-AB31-NNP00	Blue	23	3.2	700	460	64T1850	5.31
● ASMT-JB31-NNP01	Blue	25	3.2	700	460	64T1855	4.35
● ASMT-AG31-NTU00	Green	78	3.2	700	525	92R5387	5.67
● ASMT-AR30-ARS00	Red	50	2.1	700	625	92R5392	4.98
● ASMT-AL31-NPQ00	Royal Blue	...	3.4	350	455	73R4543	6.18
● ASMT-JL31-NPR01	Royal Blue	...	3.2	700	455	64T1856	4.35
● ASMT-AW31-NUV00	Cool White	100	3.4	350	10000K	73R4545	6.51
● ASMT-AW31-NVW01	Cool White	115	3.2	700	10000K	64T1854	5.64
● ASMT-MW22-NNP00	Cool White	120	3.2	700	10000K	64T1874	5.43

➤CONTINUED➤

3W POWER LED LIGHT SOURCE (CONT.)

Mfg. Part No.	Color	Lumin. Flux (lm)	Vf (V)	If (mA)	Wavelength (nm) or CCT	Stock No.	Price Each 1-9
● ASMT-JW32-NWXH1	Cool White	125	3.2	700	10000K	64T1863	4.80
● ASMT-JW32-NWXJ1	Cool White	125	3.2	700	10000K	64T1864	4.80
● ASMT-JW32-NWXK1	Cool White	125	3.2	700	10000K	64T1865	4.80
● ASMT-JW33-NUV01	Cool White	100	3.2	700	10000K	64T1867	4.65
● ASMT-AN31-NVW01	Neutral White	115	3.2	700	4500K	64T1852	5.76
● ASMT-JN32-NWXG1	Neutral White	125	3.2	700	4500K	64T1858	4.80
● ASMT-JN32-NWXH1	Neutral White	125	3.2	700	4500K	64T1859	4.80
● ASMT-JN33-NUV01	Neutral White	100	3.2	700	4500K	64T1861	4.92
● ASMT-AY31-NTU01	Warm White	90	3.2	700	3500K	76T8802	6.90
● ASMT-JY32-NUWH1	Warm White	105	3.2	700	3500K	64T1868	6.00
● ASMT-JY32-NUWJ1	Warm White	105	3.2	700	3500K	64T1869	6.00
● ASMT-JY32-NUWK1	Warm White	105	3.2	700	3500K	64T1870	6.00
● ASMT-JY33-NRS01	Warm White	60	3.2	700	3500K	64T1872	4.65
● ASMT-MY22-NMP00	Warm White	110	3.2	700	4000K	64T1876	5.58

(176955)

3W MINI POWER LED LIGHT SOURCE

RoHS Compliant Available

AVAGO TECHNOLOGIES

Features:
- Small footprint and low profile
- Symmetrical outline
- Energy efficient
- Direct heat transfer from metal slug to mother board
- Compatible with reflow soldering process
- High current operation
- Long operation life
- Wide viewing angle
- Silicone encapsulation
- Non-ESD sensitive (threshold > 16kV)
- MSL 1 products

Applications:
- Sign backlight
- Safety, exit and emergency sign lightings
- Specialty lighting such as task lighting and reading lights
- Commercial lighting
- Accent or marker lightings, strip or step lightings
- Portable lightings, bicycle head lamp, torch lights.
- Decorative lighting
- Architectural lighting
- Street lighting
- Tunnel lighting

The 3W Mini Power LED Light Source is a high performance energy efficient device which can handle high thermal and high driving current.

Mfg. Part No.	Color	CCT (K)	Lumin. Flux (lm)	Vf (V)	If (mA)	Stock No.	Price Each 1-9
● ASMT-JN32-NUV01	Neutral White	4500	100	3.2	350	71R7573	5.48
● ASMT-JN32-NVVH1	Neutral White	4500	105	3.2	350	92R5401	6:93
● ASMT-JY31-NSU01	Warm White	3500	70	3.5	350	14R8746	4.62
● ASMT-JY32-NTV01	Warm White	3500	85	3.2	350	71R7583	5.86
● ASMT-JY32-NTVH1	Warm White	3050	85	3.2	350	92R5406	6.78
● ASMT-JY33-NSTJ1	Warm White	3250	60	3.2	350	92R5409	6.21
● ASMT-JW31-NUV01	Cool White	10000	95	3.5	350	24R9052	5.12
● ASMT-JW32-NUV01	Cool White	10000	100	3.2	350	71R7578	5.48
● ASMT-JW32-NVVH1	Cool White	5650	105	3.2	350	92R5403	6.93
● ASMT-JW32-NVVJ1	Cool White	6300	105	3.2	350	92R5404	6.93
● ASMT-JA30-ARS01	Amber	...	45	2.4	350	14R8738	3.96
● ASMT-JB31-NMP01	Blue	...	20	3.5	350	14R8739	4.43
● ASMT-JG31-NTU01	Green	...	78	3.2	350	92R5398	5.71
● ASMT-JR30-ARS01	Red	...	45	2.4	350	14R8744	3.96
● ASMT-JH30-ARS01	Red Orange	...	45	2.4	350	14R8741	3.96
● ASMT-JL31-NPQ01	Royal Blue	...	...	3.5	350	14R8742	4.43

(176956)

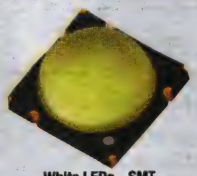
LZ1 HIGH LUMINOUS EFFICACY LED EMITTERS

RoHS Compliant Available

LED ENGIN BRIGHT LIGHT. TINY PACKAGE.

Applications:
- Indoor and outdoor Architectural Lighting
- Stage and Entertainment Lighting
- Backlighting
- Traffic and signal Lights
- Full Color Displays
- Projectors
- Emergency Lighting
- Medical
- Automotive

Color LEDs - SMT



White LEDs - SMT

Features:
- Ultra-small foot print – 4.4mm x 4.4mm x 3.1mm
- Surface mount ceramic package with integrated glass lens
- Very high Luminous Flux density
- New industry standard for Lumen Maintenance (>90% at 100,000 Hours)
- JEDEC Level 2 for Moisture Sensitivity Level
- Autoclave compliant (JEDEC JESD22-A102-C)
- Lead (Pb) free and RoHS compliant
- Reflow solderable (up to 6 cycles)

LED EMITTERS

Mfg. Part No.	Color	V_F (V)	I_F (A)	Wavelength (nm)	Lum. Flux (lm)	Package	Stock No.	Price Each 1-9
● LZ1-00A100	Amber	2.7	1.2	590	105	SMT	48T1384	5.37
● LZ1-00G100	Green	4.7	1.2	523	165	SMT	48T1388	5.70

➤CONTINUED➤

LZ1 HIGH LUMINOUS EFFICACY LED EMITTERS (CONT.)

Mfg. Part No.	Color	V_F (V)	I_F (A)	Wavelength (nm)	Lum. Flux (lm)	Package	Stock No.	Price Each 1-9
LZ1-00R100	Red	2.7	1.2	625	120	SMT	48T1390	5.37
LZ1-00UA00-00U5	Violet	3.9	700	395	...	SMT	93T1317	26.80
LZ1-00UA00-00U6	Violet	3.9	700	400	...	SMT	93T1318	26.80
LZ1-00UA00-00U8	Violet	3.9	700	410	...	SMT	93T1319	28.09

WHITE LED EMITTERS

Mfg. Part No.	Color	V_F (V)	I_F (A)	Corr. Color Temp. (K)	Lum. Flux (lm)	Package	Stock No.	Price Each 1-9
LZ1-00WW00	Warm White	3.7	1.2	3100	165	SMT	48T1396	5.37

DENTAL BLUE, DEEP RED, FAR RED, AND UV LED EMITTERS

Mfg. Part No.	Color	V_F (V)	I_F (A)	Wavelength (nm)	Rad. Flux (mW)	Package	Stock No.	Price Each 1-99
LZ1-00R300	Far Red	2.5	1.2	735	405	SMT	48T1392	6.24
LZ1-00R400	Infrared	2	1	850	...	SMT	48T1393	6.68
LZ1-00UA00-U7	UV	3.9	0.7	...	950	SMT	48T1394	19.14
LZ1-00U600-00U1	UV	4.1	0.7	365	...	SMT	93T1320	31.60
LZ1-00U600-U0	UV	4.1	0.7	...	...	SMT	48T1395	32.38
LZ1-00R200	Red	2.5	1	660	660	SMT	29X4404	4.17

(136275)

LZ1 HIGH LUMINOUS EFFICACY LED EMITTERS ON MCPCBs

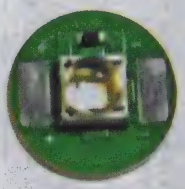
RoHS Compliant Available

LED ENGIN BRIGHT LIGHT. TINY PACKAGE.

Features:
- Very high Luminous Flux density
- New industry standard for Lumen Maintenance (>90% at 100,000 Hours)
- JEDEC Level 2 for Moisture Sensitivity Level
- Autoclave compliant (JEDEC JESD22-A102-C)
- Lead (Pb) free and RoHS compliant
- Reflow solderable (up to 6 cycles)

Applications:
- Indoor and outdoor Architectural Lighting
- Stage and Entertainment Lighting
- Backlighting
- Traffic and signal Lights
- Full Color Displays
- Projectors
- Emergency Lighting
- Medical
- Automotive

MCPCB



Mini MCPCB

Mfg. Part No.	Color	V_F (V)	I_F (A)	Wavelength (nm)	Lum. Flux (lm)	Package	Stock No.	Price Each 1-9
LZ1-30A100	Amber	2.7	1.2	590	105	Mini MCPCB	48T1410	12.14
LZ1-10B200	Blue	3.7	1.2	465	46	MCPCB	48T1398	12.99
LZ1-30B200	Blue	3.7	1.2	465	46	Mini MCPCB	48T1411	12.14
LZ1-10G100	Green	4.7	1.2	523	165	MCPCB	48T1401	13.34
LZ1-30G100	Green	4.7	1.2	523	165	Mini MCPCB	48T1414	12.47
LZ1-10R100	Red	2.7	1.2	625	120	MCPCB	48T1403	12.99
LZ1-30R100	Red	2.7	1.2	625	120	Mini MCPCB	48T1416	12.14
LZ1-10R400	Infrared	2	1	850	500	MCPCB	48T1406	9.75

WHITE LED EMITTERS

Mfg. Part No.	Color	V_F (V)	I_F (A)	Corr. Color Temp. (K)	Lum. Flux (lm)	Package	Stock No.	Price Each 1-9
LZ1-10CW00	Cool White	3.7	1.2	5500	227	MCPCB	48T1399	12.14
LZ1-30NW00	Neutral White	3.7	1.2	4000	200	Mini MCPCB	48T1415	11.39
LZ1-10WW00	Warm White	3.7	1.2	3100	165	MCPCB	48T1409	12.14
LZ1-30WW00	Warm White	3.7	1.2	3100	165	Mini MCPCB	48T1422	12.99

DENTAL BLUE, DEEP RED, FAR RED, VIOLET AND UV LED EMITTERS

Mfg. Part No.	Color	V_F (V)	I_F (A)	Wavelength (nm)	Rad. Flux (mW)	Package	Stock No.	Price Each 1-9
LZ1-10DB00	Dental Blue	3.7	1.2	460	900	MCPCB	48T1400	29.27
LZ1-30DB00	Dental Blue	3.7	1.2	460	900	Mini MCPCB	48T1413	27.61
LZ1-10R200	Deep Red	3	1.2	660	700	MCPCB	48T1404	12.14
LZ1-30R200	Deep Red	3	1.2	660	700	Mini MCPCB	48T1417	12.14
LZ1-10R300	Far Red	2.5	1.2	735	310	MCPCB	48T1405	10.43
LZ1-30R300	Far Red	2.5	1.2	735	310	Mini MCPCB	48T1418	9.75
LZ1-10UA00-U7	Violet	3.9	0.7	405	512	MCPCB	48T1407	28.29
LZ1-30UA00	Violet	3.9	0.7	400	550	Mini MCPCB	48T1420	26.38

(192446)

LZ4 HIGH LUMINOUS EFFICACY LED EMITTERS

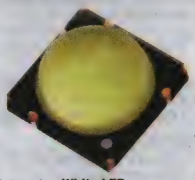
RoHS Compliant Available

LED ENGIN BRIGHT LIGHT. TINY PACKAGE.

Features:
- Ultra-small foot print – 7.0mm x 7.0mm x 4.1mm
- Very low Thermal Resistance (3°C/W)
- Individually addressable die
- Very high Luminous Flux density
- New industry standard for Lumen Maintenance (>90% at 100,000 Hours)
- JEDEC Level 2 for Moisture Sensitivity Level
- Autoclave compliant (JEDEC JESD22-A102-C)
- Lead (Pb) free and RoHS compliant
- Reflow solderable (up to 6 cycles)

Applications:
- Emergency vehicle lighting
- Strobe and warning lights
- Marine and buoy lighting
- Aviation and obstruction lighting
- Roadway beacons and traffic signaling
- Architectural lighting
- Stage and studio lighting
- Landscape lighting
- Automotive signal and marker lights

Color LEDs



White LEDs

LED EMITTERS

Mfg. Part No.	Color	V_F (V)	I_F (A)	Wave-length (nm)	Lumin. Flux (lm)	Package	Stock No.	Price Each 1-9
LZ4-00B200	Blue	14.6	1	465	170	SMT	48T1424	13.81
LZ4-01B200	Blue	14	0.7	460	130	SMT	48T1440	18.07
LZ4-01G100	Green	14.4	0.7	525	425	SMT	48T1442	18.07
LZ4-00UA00-00U5	Violet	16.5	1	395	...	SMT	93T1321	78.90
LZ4-00UA00-00U6	Violet	16.5	1	400	...	SMT	93T1322	78.90
LZ4-00UA00-00U7	Violet	16.5	1	405	...	SMT	93T1323	78.90
LZ4-00UA00-00U8	Violet	16.5	1	410	...	SMT	93T1324	78.90
LZ4-00MA00	Red Green Blue Amber	2.6 3.8 3.7 2.7	1	625 520 460 590	115 140 40 75	SMT	48T1429	12.05
LZ4-01MA00	Red Green Blue Amber	2.6 3.8 3.7 2.7	1	625 520 460 590	115 140 40 75	SMT	48T1443	14.67
LZ4-00MC00	Red Green Blue	2.6 3.8 3.7	1	625 520 460	115 280 40	SMT	48T1430	11.41
LZ4-01MC00	Red Green Blue	2.6 3.8 3.7	1	625 520 460	115 280 40	SMT	48T1444	14.67
LZ4-01MD00	Red Green Blue White	2.6 4.5 3.7 3.7	1	625 523 460	105 145 42 2050	SMT	48T1445	13.37

WHITE LED EMITTERS

Mfg. Part No.	Color	3.7	I_F (A)	CCT (K)	Lumin. Flux (lm)	Package	Stock No.	Price Each 1-9
LZ4-01NW00	Neutral White	14	700	4100	610	SMT	48T1446	18.07
LZ4-01WW00	Warm White	14	700	3100	500	SMT	48T1448	18.07
LZ4-01CW00	Cool White	14	700	5500	680	SMT	48T1441	18.07

DENTAL BLUE, DEEP RED, AND UV LED EMITTERS

Mfg. Part No.	Color	V_F (V)	I_F (A)	Wave-length (nm)	Rad. Flux (W)	Package	Stock No.	Price Each 1-99
LZ4-00R100	Red	10	1	627	317	SMT	48T1433	10.43
LZ4-00R300	Red	9	0.7	740	...	SMT	48T1435	11.18
LZ4-00UA00	UV	16.5	1	...	2.7	SMT	48T1437	74.80
LZ4-00U605	UV	4.1	0.7	365	260	SMT	39T9126	41.65
LZ4-00R400	Infrared	7.4	0.7	850	...	SMT	48T1436	16.30
LZ4-00D100	Dental Blue UV	4.3 11.1	1	...	...	SMT	48T1427	72.42

(136290)

PCB FABRICATION & ASSEMBLY

Quality US-based manufacturers—as fast as 48-hour turnaround!

(197415)

LED EMITTERS & ARRAYS

LZ4 HIGH LUMINOUS EFFICACY LED EMITTERS ON MCPCBs

RoHS Compliant Available

LED ENGIN
BRIGHT LIGHT. TINY PACKAGE.

Features:
- Very low Thermal Resistance (3°C/W)
- Individually addressable die
- Very high Luminous Flux density
- New industry standard for Lumen Maintenance (>90% at 100,000 Hours)
- JEDEC Level 2 for Moisture Sensitivity Level
- Autoclave compliant (JEDEC JESD22-A102-C)
- Lead (Pb) free and RoHS compliant

MCPCB

Applications:
- Emergency vehicle lighting
- Strobe and warning lights
- Marine and buoy lighting
- Aviation and obstruction lighting
- Roadway beacons and traffic signaling
- Architectural lighting
- Stage and studio lighting
- Landscape lighting
- Automotive signal and marker lights

LED EMITTERS ON MCPCBs WITH CLEAR DOME LENS

Mfg. Part No.	Color	V_F (V)	I_F (A)	Wave-length (nm)	Lumin. Flux (lm)	Stock No.	Price Each 1-9
● LZ4-40B200	Blue	14.6	1	465	145	48T1457	18.88
● LZ4-40G100	Green	16.8	0.7	523	480	48T1460	22.16
● LZ4-40R100	Red	10	1	627	317	48T1462	20.37
● LZ4-20MC00	Red Green Blue	2.6 3.8 3.7	1	625 520 460	115 140 40	48T1451	16.36

LED EMITTERS ON MCPCBs WITH FLAT TOP LENS

● LZ4-41B200	Blue	14	0.7	460	130	48T1469	24.16
● LZ4-41G100	Green	14.4	0.7	525	425	48T1471	24.16
● LZ4-41R100	Red	9	0.7	625	350	48T1473	24.16
● LZ4-21MA00	Red Amber Green Blue	2.2 2.5 3.5 3.5	0.7	630 595 525 457	85 75 140 30	48T1453	19.56
● LZ4-21MC00	Red 2 Green Blue	2.2 7 3.5	0.7	625 520 460	85 280 30	48T1454	19.56
● LZ4-21MD00	Red Green Blue White	2.2 3.35 3.2 3.2	0.7	630 525 457 5500K	85 140 30 170	48T1455	17.45

WHITE LED EMITTERS ON MCPCBs WITH CLEAR DOME LENS

Mfg. Part No.	Color	V_F (V)	I_F (A)	CCT (K)	Lumin. Flux (lm)	Stock No.	Price Each 1-9
● LZ4-40NW00-0040	Neutral White	14	1	4000	760	93T1325	13.95
● LZ4-40WW00-0030	Warm White	14	0.7	3000	630	93T1326	14.93

WHITE LED EMITTERS ON MCPCBs WITH FLAT TOP LENS

● LZ4-41CW00	Cool White	14	0.7	5500	680	48T1470	24.16
● LZ4-41NW00	Neutral White	14	0.7	4100	610	48T1472	24.16
● LZ4-41WW00	Warm White	14	1	3100	550	48T1474	24.16

DENTAL BLUE, DEEP RED, IR AND UV LED EMITTERS

Mfg. Part No.	Color	V_F (V)	I_F (A)	Wave-length (nm)	Rad. Flux (kW)	Stock No.	Price Each 1-9
● LZ4-40R300	Red	9	0.7	740	1	48T1464	20.30
● LZ4-40R400	Infrared	7.4	0.7	850	...	48T1465	21.44
● LZ4-40UA00	UV	16.5	1	400	2.1	48T1466	79.05
● LZ4-20D100	3 Dental Blue UV	4.3 11.1	1	...	...	48T1449	89.00

(192447)

ES RECTANGLE ARRAY SERIES

RoHS Compliant Available

BRIDGELUX
The Magic of Light™

Features:
- Delivers between 400 and 2000 "hot" lumens
- Compact high flux density light source
- High quality uniform illumination without pixilation
- Industry's lowest thermal resistance
- Plug and play solution enables rapid design integration
- More energy efficient than incandescent, halogen and fluorescent lamps
- Long operating life and reduced operating costs

The Bridgelux ES Array Series enables lamp and luminaire manufacturers to cost effectively meet rapidly increasing global regulatory standards for general lighting such as Energy Star, Title 24, Part L and others. These new arrays are 30-60% more energy efficient than previous product generations while dramatically reducing the price per lumen. The series delivers between 400 and 2000 "hot" lumens (lumens under normal operating conditions) in a compact high flux density light source, enabling the replacement of incandescent, halogen and fluorescent conventional light sources.

➤CONTINUED➤

ES RECTANGLE ARRAY SERIES (CONT.)

FULL ANSI: Q3, Q4, R3, R4

Mfg. Part No.	CCT (K)	Color	Lumin. Flux (lm)	IF (mA)	VF (V)	Stock No.	Price Each 1-99
● BXRA-27E1200-B-00	2700	Warm White	1200	500	30	73T6175	8.37
● BXRA-27E2000-B-00	2700	Warm White	2000	700	37.4	73T6176	13.89
● BXRA-27G2000-B-00	2700	Warm White	2000	700	37.4	73T6183	14.59
● BXRA-30G0800-B-00	3000	Warm White	800	500	21	73T6195	6.20
● BXRA-30E1200-B-00	3000	Warm White	1200	500	30	73T6189	8.37
● BXRA-35E0800-B-00	3500	Warm White	800	500	21	73T6200	5.91
● BXRA-35E1200-B-00	3500	Warm White	1200	500	30	73T6201	8.62
● BXRA-50C1100-B-00	5000	Cool White	1100	500	21	73T6211	7.59
● BXRA-50C1600-B-00	5000	Cool White	1600	500	30	73T6212	11.02
● BXRA-56C2600-B-00	5600	Cool White	2600	700	37.4	73T6220	17.63
3 SDCM							
● BXRA-27E0540-A-03	2700	Warm White	540	350	18.1	05W7346	3.62
● BXRA-27G0800-B-03	2700	Warm White	800	500	21	05W7357	7.97
● BXRA-27G1200-B-03	2700	Warm White	1200	500	30	05W7358	11.57
● BXRA-27E2000-B-03	2700	Warm White	2000	700	37.4	05W7350	17.63
● BXRA-27E2000-B-03	2700	Warm White	2000	700	37.4	05W7350	17.63
● BXRA-30E0540-A-03	2700	Warm White	540	350	18.1	05W7364	3.62
● BXRA-30E0740-A-03	2700	Warm White	740	350	28.1	05W7365	5.43
● BXRA-30G0740-A-03	3000	Warm White	740	350	28.1	05W7374	6.00
● BXRA-30E0800-B-03	3000	Warm White	800	500	21	05W7366	7.21
● BXRA-30G1200-B-03	3000	Warm White	1200	500	30	05W7376	11.57
● BXRA-30E1200-B-03	3000	Warm White	1200	500	30	05W7367	10.47
● BXRA-30G1200-B-03	3000	Warm White	1200	500	30	05W7376	11.57
● BXRA-30G2000-B-03	3000	Warm White	2000	700	37.4	05W7377	18.51
● BXRA-30E2000-B-03	3000	Warm White	2000	700	37.4	05W7368	16.75
● BXRA-30G4000-H-03	3000	Warm White	4000	2.1	24.4	05W7378	36.67
● BXRA-30E4000-H-03	3000	Warm White	4000	2.1	24.4	05W7369	33.88
● BXRA-30E7000-J-03	3000	Warm White	7000	2.8	30.4	05W7370	55.44
● BXRA-35E4000-H-03	3500	Warm White	4000	2.1	24.4	05W7383	34.93
● BXRA-35E7000-J-03	3500	Warm White	7000	2.8	30.4	05W7384	55.44
● BXRA-40E0810-A-03	4000	Neutral White	810	350	28.1	05W7385	5.55
● BXRA-40E0950-B-03	4000	Neutral White	950	500	21	05W7386	7.21
● BXRA-40E0950-B-03	4000	Neutral White	950	500	21	05W7386	7.21
● BXRA-40E1350-B-03	4000	Neutral White	1350	500	30	05W7387	11.02
● BXRA-40E1350-B-03	4000	Neutral White	1350	500	30	05W7387	11.02
● BXRA-40E2200-B-03	4000	Neutral White	2200	700	37.4	05W7388	17.63
● BXRA-40E2200-B-03	4000	Neutral White	2200	700	37.4	05W7388	17.63
● BXRA-40E4500-H-03	4000	Neutral White	4500	2.1	24.4	05W7389	34.93
● BXRA-40E7500-J-03	4000	Neutral White	7500	2.8	30.4	05W7390	55.44

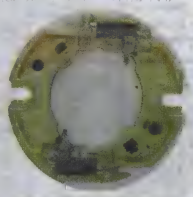
(138998)

LED ARRAY HOLDERS FOR BRIDGELUX ES & RS ARRAYS

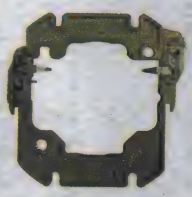
RoHS Compliant Available

molex

ES LED Holder Without Cover



ES LED Holder With Cover



RS LED Holder

Features:
- Compression contacts to power array
- Double-ended wire-trap terminal to attach power source
- Screw-mount attachment method for securing array to heat sink
- Snap-lock feature allows for attaching an optic or clear protective cover
- Releasable wire trap for rework or replacement
- High-temperature thermoplastic housing
- Overall form factor is fewer than 50.00mm (1.96") in diameter
- Clear LED protective cover is available with a snap-lock feature

Molex's LED Array Holder, ideal for OEM light-fixture manufacturers, simplifies the LED installation process for Bridgelux energy-efficient ES and RS Arrays. LED array holders simplify the LED installation process by eliminating the need for hand or SMT soldering and expensive SMT equipment. The holders will allow customers to install LED arrays quickly into fixtures, enable field replacements and facilitate upgrades to current applications.

LED ARRAY HOLDER FOR BRIDGELUX ES ARRAYS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 180150-0000	LED Holder Without Cover	39T3345	3.49
● 180150-0001	LED Holder With Cover	39T3347	4.73
LED ARRAY HOLDER FOR BRIDGELUX RS ARRAYS			
● 180180-0000	LED Holder Without Cover	48T0236	5.78

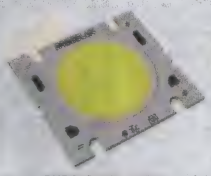
(195375)

RS ARRAY SERIES

RoHS Compliant Available

BRIDGELUX. The Magic of Light™

Features:
- Compact high flux density light source
- High quality uniform illumination without pixilation
- Plug and play solution enables rapid design integration
- More energy efficient than incandescent, halogen and fluorescent lamps
- Long operating life and reduced operating costs



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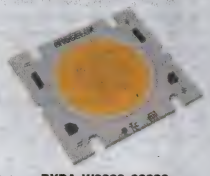


BXRA-W3000-00000

The **Bridgelux** family of LED Array products delivers high performance, compact and cost-effective solidstate lighting solutions to serve the general lighting market. These products combine the higher efficacy, lifetime, and reliability benefits of LEDs with the light output levels of many conventional lighting sources. The **Bridgelux RS Array** Series has been specified to enable lamp and luminaire designs with comparable performance to existing high wattage CFL and HID conventional light sources for retail, commercial, industrial and outdoor/street lighting applications. The CFL and HID light sources cannot be readily dimmed; **Bridgelux Arrays** are extremely well equipped for all types of light-on-demand applications, where they can be instantaneously and smoothly dimmed up or down without any effect on lifetime.
The **Bridgelux RS Array** series provides a high performance alternative to conventional solid state solutions, delivering between 3000 and 8500 lumens under application conditions in warm, neutral and cool white color temperatures. These compact high flux density light sources deliver uniform high quality illumination without pixilation or the multiple shadow effect caused by LED component based solutions, enabling excellent beam control for precision lighting. To simplify system design for appropriate light output, **Bridgelux LED Arrays** are specified to deliver performance under typical use conditions.

LATEST GENERATION ARRAY PRODUCTS

Mfg. Part No.	CCT (K)	Color	Lumin. Flux (lm)	IF (A)	VF (V)	Thermal Res. (°C/W)	Stock No.	Price Each 1-99
BXRA-27G4000-H-00	2700	Warm White	4000	2.1	24.4	0.31	73T6184	28.06
BXRA-27G7000-J-00	2700	Warm White	7000	2.8	30.4	0.26	73T6185	44.53
BXRA-40E4500-H-00	4000	Neutral White	4500	2.1	24.4	0.31	73T6209	26.72
BXRA-50C5300-H-00	5000	Cool White	5300	2.1	24.4	0.31	73T6214	34.93

EARLIER GENERATION ARRAY PRODUCTS

Mfg. Part No.	CCT (K)	Color	Lumin. Flux (lm)	IF (A)	VF (V)	Thermal Res. (°C/W)	Stock No.	Price Each 1-99
BXRA-N3500-00L00	4100	Neutral White	3500	2.1	25.6	0.2	55T8714	43.72

(164678)

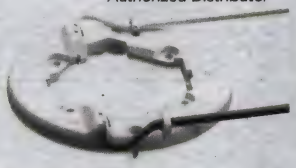
SOLDERLESS LED SOCKETS FOR BRIDGELUX RS LED

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features:
- Allows solderless termination to Bridgelux RS LED's
- Poke-in terminals accepts 18–22 solid, 18–20 pre-bond, or 18 AWG stranded wire
- Cleared area designated for reflector mounting
- LED retained in housing with slight press-fit (LED not included)
- Four screw attachment using M3 or #4 screws (not included)
- Integrated features for polarization on heat sink
- Features molded in wire strain reliefs
- 70mm approximate overall diameter
- Mating cycles: 1 mating cycle for poke-in; 5 mating cycles for LED heat sink
- Alignment pins use same hole size as mounting screws
- Accepts standard LEDIL OY Britney Series reflectors
- Current rating: 3A max.
- Voltage rating: 60VDC
- Dielectric Withstand Voltage: 500VDC
- Terminals: Tin plated, copper alloy
- Housing: UL 94V0 rated high temperature thermoplastic, UV FI resistant
- Continuous operating temperature: -40°C to 105°C



The TE Solderless LED Socket, Type BR is a quick termination connector system for use with the Bridgelux RS LED. The one piece connector assembly features the TE poke-in wire termination to wire types ranging from 18 – 22 AWG wire. Termination to the Bridgelux RS LED is simplified with locating features that properly position the LED into the socket prior to mounting the full assembly onto the heat sink with four screws. The socket is designed to accept commercially available LEDIL Britney Series Optics but ample space is available to allow for the use of other custom optical solutions.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
2154455-1	Solderless LED Socket, Type BR	46T5984	2.58

(195697)

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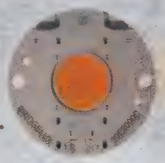
(212565)

BRIDGELUX VERO™ SERIES LED ARRAYS

RoHS Compliant Available

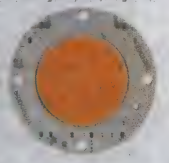
BRIDGELUX. The Magic of Light™

Vero 10



Vero 13

Vero 18



Vero 29

Features:
- Lumen output performance ranging from 800 to 20,000 lm
- Broad range of CCT options from 2700K to 5000K
- CRI options include minimum 80, 90, and 97 CRI Decor products
- 3SDCM standard for 2700K-4000K CCT options
- Reliable operation at up to 2X rated drive current
- Radial die pattern and improved lumen density
- Thermally isolated solder pads
- Onboard connector port
- Top side part markings

Benefits:
- Broad application coverage for interior and exterior lighting
- Flexibility to respond to application driven lighting design requirements
- High quality true color reproduction
- Uniform consistent white light
- Flexibility in design optimization
- Improved optical control
- Enhanced ease of use and manufacturability
- Solder-less connectivity enables plug & play installation and field upgradability
- Improved inventory management and quality control

Mfg. Part No.	LED Color	CCT (K)	Luminous Flux (lm)	V_F (V)	I_F (mA)	Stock No.	Price Each 1-999
VERO 10							
BXRC-27E1000-B-03	White	2700	1000	27.5	350	62W5794	4.55
BXRC-27G1000-B-03	White	2700	1000	27.5	350	62W5798	4.55
BXRC-27H1000-B-03	White	2700	1000	27.5	350	62W5801	5.91
BXRC-30E1000-B-03	White	3000	1000	27.5	350	62W5805	4.55
BXRC-30G1000-B-03	White	3000	1000	27.5	350	62W5809	4.55
BXRC-30H1000-B-03	White	3000	1000	27.5	350	62W5812	5.91
BXRC-35E1000-B-03	White	3500	1000	27.5	350	62W5816	4.55
BXRC-40E1000-B-03	White	4000	1000	27.5	350	62W5820	4.55
BXRC-50C1000-B-04	White	5000	1000	27.5	350	62W5824	4.55
VERO 13							
BXRC-27E2000-C-03	White	2700	2000	33.7	500	62W5795	7.43
BXRC-27G2000-C-03	White	2700	2000	33.7	500	62W5799	7.43
BXRC-27H2000-C-03	White	2700	2000	33.7	500	62W5802	9.66
BXRC-30E2000-C-03	White	3000	2000	33.7	500	62W5806	7.43
BXRC-30G2000-C-03	White	3000	2000	33.7	500	62W5810	7.43
BXRC-30H2000-C-03	White	3000	2000	33.7	500	62W5813	9.66
BXRC-35E2000-C-03	White	3500	2000	33.7	500	62W5817	7.43
BXRC-40E2000-C-03	White	4000	2000	33.7	500	62W5821	7.43
BXRC-50C2000-C-04	White	5000	2000	33.7	500	62W5825	7.43
BXRC-40G2000-C-02	Neutral White	4000	2000	32.5	500	49X8011	8.91
BXRC-40G2000-C-03	Neutral White	4000	2000	32.5	500	49X8012	7.43
BXRC-50G2000-C-04	Cool White	5000	2000	32.5	500	49X8026	7.43
VERO 18							
BXRC-27E4000-F-03	White	2700	4000	30.6	1050	62W5796	13.15
BXRC-27G4000-F-03	White	2700	4000	30.6	1050	62W5800	13.15
BXRC-27H4000-F-03	White	2700	4000	30.6	1050	62W5803	17.10
BXRC-30E4000-F-03	White	3000	4000	30.6	1050	62W5807	13.15
BXRC-30G4000-F-03	White	3000	4000	30.6	1050	62W5811	13.15
BXRC-30H4000-F-03	White	3000	4000	30.6	1050	62W5814	17.10
BXRC-35E4000-F-03	White	3500	4000	30.6	1050	62W5818	13.15
BXRC-40E4000-F-03	White	4000	4000	30.6	1050	62W5822	13.15
BXRC-50C4000-F-04	White	5000	4000	30.6	1050	62W5826	13.15
BXRC-40G4000-F-02	Neutral White	4000	4000	29.5	1050	49X8015	15.78
BXRC-40G4000-F-03	Neutral White	4000	4000	29.5	1050	49X8016	13.15
BXRC-50E4000-F-04	Cool White	5000	4000	29.5	1050	49X8023	13.15
BXRC-50G4000-F-04	Cool White	5000	4000	29.5	1050	49X8028	13.15
VERO 29							
BXRC-27E10K0-L-03	White	2700	10000	39.8	2100	62W5793	30.10
BXRC-27G10K0-L-03	White	2700	10000	39.8	2100	62W5797	30.10
BXRC-30E10K0-L-03	White	3000	10000	39.8	2100	62W5804	30.10
BXRC-30G10K0-L-03	White	3000	10000	39.8	2100	62W5808	30.10
BXRC-35E10K0-L-03	White	3500	10000	39.8	2100	62W5815	30.10
BXRC-40E10K0-L-03	White	4000	10000	39.8	2100	62W5819	30.10
BXRC-50C10K0-L-04	White	5000	10000	39.8	2100	62W5823	30.10
BXRC-40G10K0-L-02	Neutral White	4000	10000	36.8	2100	49X8007	36.12
BXRC-40G10K0-L-03	Neutral White	4000	10000	36.8	2100	49X8008	30.10
BXRC-50E10K0-L-04	Cool White	5000	10000	36.8	2100	49X8019	30.10
BXRC-50G10K0-L-04	Cool White	5000	10000	36.8	2100	49X8024	30.10

(209429)

LED EMITTERS & ARRAYS

V6 SERIES LED ARRAY LIGHT ENGINES

NEW

BRIDGELUX The Magic of Light™

- Enhanced optical control
- Clean white light without pixilation
- High quality true color reproduction
- Significantly reduced thermal resistance and increased operating temperatures
- Uniform consistent white light
- Easy to use with daylight and motion detectors to enable increased energy savings
- Environmentally friendly with no disposal issue

The Bridgelux V6 LED Array products delivers high quality light in a compact solid state lighting solution. These products can be efficiently operated at twice the normal drive current, enabling design flexibility. This high flux density light source is designed to enable a wide range of sub 1000 lumen directional luminaires and replacement lamps for commercial and residential applications.

Mfg. Part No.	Luminous Intensity	Forward Current	Forward Voltage	Stock No.	Price Each 1-999
BXRE-27G0400-A-03	90cd	175mA	17.8V	36X2142	2.18
BXRE-27G0400-B-03	90cd	350mA	8.9V	36X2143	2.18
BXRE-30G0400-A-03	100cd	175mA	17.8V	36X2146	2.18
BXRE-30G0400-B-03	100cd	350mA	8.9V	36X2147	2.18
BXRE-27E0400-A-03	110cd	175mA	17.8V	36X2140	2.07
BXRE-27E0400-B-03	110cd	350mA	8.9V	36X2141	2.07
BXRE-30E0400-A-03	115cd	175mA	17.8V	36X2144	2.07
BXRE-30E0400-B-03	115cd	350mA	8.9V	36X2145	2.07
BXRE-50E0400-A-04	125cd	175mA	17.8V	36X2152	2.07
BXRE-50E0400-B-04	125cd	350mA	8.9V	36X2153	2.07
BXRE-40E0400-A-03	130cd	175mA	17.8V	36X2148	2.07
BXRE-40E0400-B-03	130cd	350mA	8.9V	36X2149	2.07
BXRE-50C0400-A-04	135cd	175mA	17.8V	36X2150	2.07
BXRE-50C0400-B-04	135cd	350mA	8.9V	36X2151	2.07

(212202)

V8 SERIES LED ARRAY LIGHT ENGINES

RoHS Compliant Available

NEW

BRIDGELUX The Magic of Light™

- Enhanced optical control
- Clean white light without pixilation
- High quality true color reproduction
- Significantly reduced thermal resistance and increased operating temperatures
- Uniform consistent white light
- Easy to use with daylight and motion detectors to enable increased energy savings
- Environmentally friendly with no disposal issue

The Bridgelux V8 LED Array products delivers high quality light in a compact solid state lighting solution. These products can be efficiently driven at twice the normal current, enabling design flexibility not previously possible. This high flux density light source is designed to enable a wide range of sub 1000 lumen directional luminaires and replacement lamps for commercial and residential applications.

Mfg. Part No.	CCT	Luminous Flux	Forward Current	Forward Voltage	Stock No.	Price Each 1-999
● BXRE-27G0500-A-03	2700K	380lm	350mA	23.7V	17X1482	3.29
● BXRE-27E0500-A-03	2700K	465lm	350mA	23.7V	17X1479	3.14
● BXRE-27G0800-A-03	2700K	570lm	350mA	35.6V	17X1483	3.97
● BXRE-27G0800-B-03	2700K	570lm	700mA	17.8V	17X1484	3.97
● BXRE-27E0800-A-03	2700K	695lm	350mA	35.6V	17X1480	3.78
● BXRE-27E0800-B-03	2700K	695lm	700mA	17.8V	17X1481	3.78
● BXRE-30G0500-A-03	3000K	415lm	350mA	23.7V	17X1488	3.29
● BXRE-30E0500-A-03	3000K	490lm	350mA	23.7V	17X1485	3.14
● BXRE-30G0800-A-03	3000K	620lm	350mA	35.6V	17X1489	3.97
● BXRE-30G0800-B-03	3000K	620lm	700mA	17.8V	17X1490	3.97
● BXRE-30E0800-A-03	3000K	730lm	350mA	35.6V	17X1486	3.78
● BXRE-30E0800-B-03	3000K	730lm	700mA	17.8V	17X1487	3.78
● BXRE-40E0500-A-03	4000K	535lm	350mA	23.7V	17X1491	3.14
● BXRE-40C0800-B-04	4000K	800lm	700mA	26.7V	49X8035	3.78
● BXRE-40C0800-A-04	4000K	800lm	1.05A	32.5V	49X8034	3.78
● BXRE-40E0800-A-03	4000K	805lm	350mA	35.6V	17X1492	3.78
● BXRE-40E0800-B-03	4000K	805lm	700mA	17.8V	17X1493	3.78
● BXRE-50C0500-A-04	5000K	575lm	350mA	23.7V	17X1494	3.14
● BXRE-50E0800-B-04	5000K	800lm	700mA	26.7V	49X8040	3.78
● BXRE-50E0800-A-04	5000K	800lm	1.05A	32.5V	49X8039	3.78
● BXRE-50C0800-A-04	5000K	865lm	350mA	35.6V	17X1495	3.78
● BXRE-50C0800-B-04	5000K	865lm	700mA	17.8V	17X1496	3.78

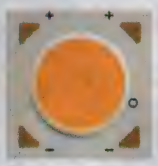
(212192)

V10 SERIES LED ARRAY LIGHT ENGINES

NEW

RoHS Compliant Available

BRIDGELUX The Magic of Light™



- Enhanced optical control
- Clean white light without pixilation
- High quality true color reproduction
- Significantly reduced thermal resistance and increased operating temperatures
- Uniform consistent white light
- Easy to use with daylight and motion detectors to enable increased energy savings
- Environmentally friendly with no disposal issue

The Bridgelux V10 LED Array products deliver high quality light in a compact solid state lighting solution. These products can be efficiently driven at twice the normal current, enabling design flexibility not previously possible. This high flux density light source is designed to enable a wide range of high quality 750 to 2,000 lumen directional luminaires and replacement lamps for commercial and residential applications.

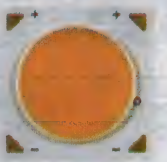
Mfg. Part No.	CCT	Luminous Flux	Forward Current	Forward Voltage	Stock No.	Price Each 1-999
CRI = 70						
● BXRE-50C1000-B-04	5000K	1000lm	350mA	26.7V	49X8038	4.79
CRI = 80						
● BXRE-27E1000-B-03	2700K	1000lm	350mA	26.7V	49X8030	4.79
● BXRE-30E1000-B-03	3000K	1000lm	350mA	26.7V	49X8032	4.79
● BXRE-40E1000-B-03	4000K	1000lm	350mA	26.7V	49X8036	4.79
CRI = 90						
● BXRE-27G1000-B-03	2700K	1000lm	350mA	26.7V	49X8031	5.03
● BXRE-30G1000-B-03	3000K	1000lm	350mA	26.7V	49X8033	5.03
● BXRE-40G1000-B-03	4000K	1000lm	350mA	26.7V	49X8037	5.03
● BXRE-50G1000-B-04	5000K	1000lm	350mA	26.7V	49X8041	4.79

(212193)

V15 SERIES LED ARRAY LIGHT ENGINES

NEW

BRIDGELUX The Magic of Light™



- Enhanced optical control
- Clean white light without pixilation
- High quality true color reproduction
- Significantly reduced thermal resistance and increased operating temperatures
- Uniform consistent white light
- Easy to use with daylight and motion detectors to enable increased energy savings
- Environmentally friendly with no disposal issue

The Bridgelux V15 LED Array products deliver high quality light in a compact solid state lighting solution. These products can be efficiently driven at twice the normal current, enabling design flexibility not previously possible. This high flux density light source is designed to enable a wide range of high quality 750 to 2,000 lumen directional luminaires and replacement lamps for commercial and residential applications.

Mfg. Part No.	CCT	Luminous Flux	Forward Current	Forward Voltage	Stock No.	Price 1-999
BXRE-30G3001-D-03	3000K	2500lm	700mA	36.4V	61X9394	9.46
BXRE-30E3001-D-03	3000K	2899lm	700mA	36.4V	61X9393	9.46
BXRE-40G3001-D-03	4000K	2680lm	700mA	36.4V	61X9396	9.46
BXRE-40E3001-D-03	4000K	3074lm	700mA	36.4V	61X9395	9.46

(212410)

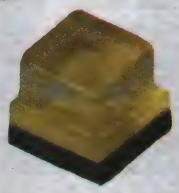
CREE® XLAMP® XQ-D LED ARRAYS

RoHS Compliant Available

CREE

Features:

- Cree's smallest lighting class LED: 1.6 x 1.6 x 1.6mm
- Binned at 25°C
- 700 mA maximum drive current
- Low thermal resistance: 7.5°C/W
- Wide viewing angle: 145°
- Reflow solderable - JEDEC J-STD-020C compatible
- Unlimited floor life at 30°C/85% RH
- UL-recognized component (E349212)



Cree **XLamp XQ-D** LEDs revolutionize high-power LEDs by delivering lighting-class reliability and a wider spread of light than typical plastic packages. The XQD's innovative wide light emission can improve the omnidirectionality of replacement lamps, while also reducing system cost by using fewer LEDs. Using Cree's newest generation of silicon carbide-based LED chips, XQ-D is optimized to dramatically lower system cost in replacement lamp, non-directional

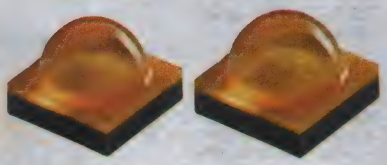
Mfg. Part No.	Color	CCT (K)	I_F (A)	V_F (V)	Luminous Flux (lm)	Stock No.	Price Each 1-9
● XQDAWT-00-0000-00000HDE1	Cool White	...	700	3.1	...	69W1121	1.05
● XQDAWT-00-0000-00000HDE2	Cool White	...	700	3.1	...	69W1123	1.05
● XQDAWT-00-0000-00000HBE8	Warm White	2700	700	3.1	93.9	69W1119	1.12
● XQDAWT-00-0000-00000HDE5	Warm White	4000	700	3.1	107	69W1127	1.05
● XQDAWT-00-0000-00000HDE3	Warm White	5000	700	3.1	107	69W1125	1.12
● XQDAWT-00-0000-00000HBE7	White	4300	700	3.1	93.9	69W1117	1.05

(210223)

CREE XLamp® XB-D LEDs

RoHS Compliant Available

CREE



Features:
- Cree's smallest lighting class LED: 2.45 x 2.45 mm
- Up to 136 lm/W in cool white (@ 85°C, 350 mA)
- 1 A maximum drive current
- Low thermal resistance: 6.5°C/W
- Wide viewing angle: 115°
- Reflow solderable - JEDEC J-STD-020C compatible
- Unlimited floor life at ≤ 30°C/85% RH
- Electrically neutral thermal path

The **XLamp XB-D** is Cree's newest lighting class LED, bringing the next generation of performance and price to LED lighting applications. The **XLamp XB-D** delivers similar performance to the XP-G LED in a package that is 48% smaller than the **XLamp XP** footprint.

Mfg. Part No.	Color	CCT (K)	Lumin. Flux. (lm)	If (mA)	Vf (V)	Stock No.	Price Each 1-9
XBDAWT-02-0000-000000E51	Cool White	6200	130	350	2.9	76T1570	1.56
XBDAWT-02-0000-000000F51	Cool White	6200	122	350	2.9	76T1572	1.74
XBDAWT-02-0000-00000LAE7	Warm White	3000	87.4	350	2.9	76T1562	1.41
XBDAWT-02-0000-00000LBE7	Warm White	3000	93.9	350	2.9	76T1564	1.74
XBDAWT-02-0000-00000LCE3	Neutral White	5000	100	350	2.9	76T1566	1.36
XBDAWT-02-0000-00000LDE3	Neutral White	5000	107	350	2.9	76T1568	1.56
XBDBLU-00-0000-000000Z01	Blue	...	35.2	350	3.1	44W5325	2.15
XBDGRN-00-0000-000000B01	Green	...	93.9	350	3.3	44W5327	2.15
XBDRDO-00-0000-000000901	Red Orange	...	80.6	350	2.25	44W5329	2.12
XBDRED-00-0000-000000701	Red	...	67.2	350	2.25	44W5331	2.15
XBDROY-00-0000-000000L01	Royal Blue	...	-999	350	3.1	44W5333	2.09

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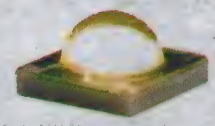
CREE XLamp® XP-C LEDs

RoHS Compliant Available

CREE



Features:
- Maximum drive current: up to 500 mA
- Low thermal resistance: as low as 12 °C/W
- Wide viewing angle: 125°
- Unlimited floor life at ≤ 30 °C/85% RH
- Reflow solderable - JEDEC J-STD-020C compatible
- Electrically neutral thermal path

Applications:
- Color-changing lighting
- Portable and personal lighting
- Outdoor lighting, indoor directional lighting
- Commercial lighting
- Emergency-vehicle lighting

The XLamp XP-C LED combines the proven lighting-class performance and reliability of the XLamp XR-E LED in a package with 80% smaller footprint. The XLamp XP-C LED continues Cree's history of innovation in LEDs for lighting applications with wide viewing angle, symmetrical package, unlimited floor life and electrically neutral thermal path.

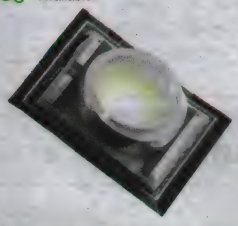
Mfr. Part No.	Color	Forward Voltage (V)	Luminous Flux (lm)	Stock No.	Price Each 1-9
XPCAMB-L1-0000-00401	Amber	2.2	51.7	70R1032	2.39
XPCRDO-L1-0000-00601	Red Orange	2.2	62	13T6020	2.25
XPCRED-L1-0000-00401	Red	2.2	51.7	13T6023	2.39
XPCGRN-L1-0000-00801	Green	3.5	73.9	70R1034	2.53
XPCBLU-L1-0000-00V01	Blue	3.4	18.1	70R1033	2.39
XPCBLU-L1-0000-00W01	Blue	3.4	23.5	13T6017	1.79
XPCROY-L1-0000-00801	Royal Blue	3.4	300 mW*	70R1037	2.12
XPCWHT-L1-0000-007F6	Neutral White	3.4	67.2	08P1650	1.28

* Radiometric Power (mW)
(165127)

CREE XLamp® XR-E LEDs

RoHS Compliant Available

CREE



Features:
- Colors: White, Royal Blue, Blue, Green
- Maximum drive current: up to 1000 mA
- Industry's lowest thermal resistance: 8°C/W
- Max junction temperature: 150°C
- Industry-leading JEDEC standard prequalification testing
- Surface Mount Technology
- Electrically Isolated Thermal Path
- Integrated Lens
- Small Footprint — 7.0mm x 9.0mm
- Lumen Maintenance of Greater Than 70% on Average After 50,000 Hours

The **XLamp XR-E LED** is leading the LED lighting revolution with its unprecedented lighting-class brightness, efficacy, lifetime and quality of light. These lighting-class features enable the XLamp XR-E LED to replace many traditional light sources and save money with energy-efficient light and long lifetimes. Cree XLamp LEDs bring high performance and quality of light to a wide range of lighting applications, including color-changing lighting, portable and personal lighting, outdoor lighting, indoor directional lighting, commercial lighting and emergency-vehicle lighting.

Mfg. Part No.	Color	Luminous Flux (lm) @ 350 mA	Vf (V)	If (mA)	Stock No.	Price Each 1-9
XREBLU-L1-R250-00K01	Blue	30.6	3.7	1000	02P7196	7.07
XREBLU-L1-0000-00J02	Blue	23.5	3.3	350	08P1937	6.21
XREGRN-L1-R250-00P01	Green	67.2	3.5	700	02P7197	5.56

➤CONTINUED➤

CREE XLamp® XR-E LEDs (CONT.)

Mfg. Part No.	Color	Luminous Flux (lm) @ 350 mA	Vf (V)	If (mA)	Stock No.	Price Each 1-9
XREWHT-L1-0000-00D01	Cool White	114	3.3	1000	08P2027	7.02
XREWHT-L1-R250-00C01	Cool White	100	3.7	1000	02P7198	6.84
XREWHT-L1-0000-00C01	Cool White	100	3.7	1000	49X1093	6.84
XREWHT-L1-0000-00AE4	Neutral White	87.4	3.5	700	08P1987	6.69

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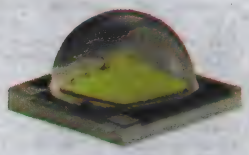
CREE XLamp® XM-L LEDs

RoHS Compliant Available

CREE



Features:
- Delivers 1000 lumens at 100 lumens per Watt
- Low thermal resistance: 2.5°C/W
- ANSI-compatible chromaticity bins
- Unlimited floor life at <=30°C/85% RH
- Reflow solderable - JEDEC J-STD-020C
- Electrically neutral thermal path

Applications:
- Street and roadway
- Outdoor area
- LED replacement lamps
- Indoor commercial
- High-bay and industrial

The **XLamp XM-L** is the industry's brightest, highest-performing lighting-class LED, now available in the full spectrum of white. With breakthrough light output and efficacy, **XM-L** is designed for very high-lumen applications such as high-bay, indoor commercial or roadway lighting. **XLamp XM-L** LEDs offer the unique combination of very high efficacy at very high drive currents, providing a 20% efficiency gain over the **XLamp XP-G** LED at the same current. With this available efficacy, **XM-L** can lower total system cost by reducing the number of LEDs and optics in the system. Also available in tape and reel; *go online or call.*

Mfg. Part No.	Color	CCT (K)	Lumin. Flux (lm)	If (mA)	Vf (V)	Tape Cut Stock No.	Tape Cut Price Each 1-9
XMLAWT-00-0000-0000T5050	Cool White	8300	260	700	2.9	13T6012	5.89
XMLAWT-00-0000-0000T5053	Cool White	8300	260	700	2.9	13T6014	5.77
XMLAWT-00-0000-0000T6053	Cool White	8300	280	700	2.9	13T6016	6.98
XMLAWT-02-0000-0000T5050	Cool White	8300	260	700	2.9	13T8077	5.89
XMLAWT-02-0000-0000T5053	Cool White	8300	260	700	2.9	13T8079	5.77
XMLAWT-02-0000-0000T6051	Cool White	8300	280	700	2.9	13T8081	6.46
XMLAWT-00-0000-000LT30E5	Neutral White	4000	220	700	2.9	27T9473	5.61
XMLAWT-00-0000-000LT40E5	Neutral White	4000	240	700	2.9	27T9483	6.46
XMLAWT-00-0000-000LT40E4	Neutral White	4500	240	700	2.9	27T9481	5.61
XMLAWT-00-0000-000LT50E4	Neutral White	4500	260	700	2.9	27T9487	8.14
XMLAWT-00-0000-000LT40E3	Neutral White	5000	240	700	2.9	27T9479	5.61
XMLAWT-00-0000-000LT50E3	Neutral White	5000	260	700	2.9	27T9485	7.02
XMLAWT-02-0000-000LT40E4	Neutral White	4500	240	700	2.9	27T9491	5.61
XMLAWT-00-0000-000LS60E8	Warm White	2700	182	700	2.9	27T9465	5.61
XMLAWT-00-0000-000LT20E8	Warm White	2700	200	700	2.9	27T9471	7.02
XMLAWT-00-0000-000LT20E7	Warm White	3000	200	700	2.9	27T9469	5.61
XMLAWT-00-0000-000LT30E7	Warm White	3000	220	700	2.9	27T9477	7.45
XMLAWT-00-0000-000LT20E6	Warm White	3500	200	700	2.9	27T9467	5.61
XMLAWT-00-0000-000LT30E6	Warm White	3500	220	700	2.9	27T9475	6.46
XMLAWT-02-0000-000LT20E7	Warm White	3000	200	700	2.9	27T9489	5.61

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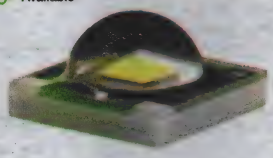
CREE XLamp® XP-E LEDs

RoHS Compliant Available

CREE



Features:
- Industry-leading flux output in all whites and colors
- Symmetrical package
- Unlimited floor life at <= 30 degrees C/85% RH
- Electrically-isolated thermal path

Applications:
- Portable
- LED light bulbs
- Architectural
- Signage
- Retail display
- Transportation
- Emergency vehicle

The **XLamp XP-E** LED combines the proven performance and reliability of the **XLamp XR** color LED in a package with 80% smaller footprint. The **XLamp XP-E** LED continues Cree's history of innovation in LEDs for lighting applications with wide viewing angle, symmetrical package, unlimited floor life and electrically neutral thermal path.

MULTI-COLOR LEDs

Mfg. Part No.	Color	Lumin. Flux (lm)	If (mA)	Vf (V)	Stock No.	Price Each 1-9
XPEAMB-L1-0000-00601	Amber	62	350	2.1	67R3633	3.28
XPEAMB-L1-R250-00401	Amber	56.8	500	2.4	15R3932	2.85
XPEBLU-L1-0000-00201	Blue	39.8	350	3.2	13T6028	3.99
XPEBLU-L1-R250-00Y01	Blue	35.2	1000	3.5	15R3933	2.53
XPEGRN-L1-R250-00C01	Green	107	700	3.7	15R3934	3.21
XPERDO-L1-R250-00501	Red Orange	62	700	2.5	15R3935	2.53
XPERDO-L1-0000-00901	Red Orange	87.4	350	2.1	55T0991	3.52
XPERDO-L1-0000-00A01	Red Orange	93.9	350	2.1	55T0989	3.80
XPERED-L1-0000-00401	Red	51.7	350	2.1	16R0428	1.39
XPERED-L1-0000-00701	Red	67.2	350	2.1	55T0993	3.52
XPERED-L1-0000-00801	Red	73.9	350	2.1	55T0995	3.80

➤CONTINUED➤

CREE XLamp® XP-E LEDs (CONT.)

CRI=85, WHITE LEDs

Mfg. Part No.	Color	CCT (K)	Lumin. Flux (lm)	If (mA)	Vf (V)	Stock No.	Price Each 1-9
● XPEWHT-P1-R250-006E8	White	2700	67.2	350	3.2	13T9236	1.97
● XPEWHT-P1-R250-007E7	White	3200	73.9	350	3.2	13T9239	1.97

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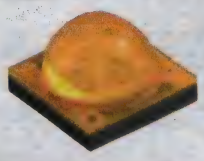
CREE XLamp® XT-E LEDs

RoHS Compliant Available

CREE



Features:
- Available in white, 80-CRI min
- white, 70-min CRI white
- Binned at 85 °C
- Cool white efficacy of up to 148 lm/W (@ 85 °C, 350 mA)
- Royal Blue wall plug efficiency of up to 53% (@ 85 °C, 350 mA)
- Wide viewing angle: 115-140°
- Thermal resistance: 5 °C/W
- Maximum drive current: 1.5 A
- Electrically neutral thermal path
- Vf binning supported for XT-E White
- Unlimited floor life at ≤ 30 °C/85% RH
- Reflow solderable - JEDEC J-STD-020C Compatible

Cree XLamp LEDs bring high performance and quality of light to a wide range of lighting applications, including remotephosphor, color-changing, portable and personal, outdoor, indoordirectional, transportation, stage and studio, commercial and emergency-vehicle lighting.

Mfg. Part No.	Color	CCT (K)	Luminous Flux Typ. (lm)	Forward Voltage (V)	Stock No.	Price Each 1-9
● XTEAWT-02-0000-00000LCE7	Warm White	3000	100	2.85	76T9197	2.25
● XTEAWT-02-0000-00000LBE7	Warm White	3000	93.9	2.85	76T1590	1.76
● XTEAWT-02-0000-00000LBE8	Warm White	2700	93.9	2.85	76T1592	2.07
● XTEAWT-02-0000-00000LAE7	Warm White	3000	87.4	2.85	76T1586	1.92
● XTEAWT-02-0000-00000LAE8	Warm White	2700	87.4	2.85	76T1588	1.69
● XTEAWT-02-0000-00000LEE3	Neutral White	5000	114	2.85	76T9199	1.84
● XTEAWT-02-0000-000000G51	Cool White	6200	130	2.85	76T1596	2.40
● XTEAWT-02-0000-000000F51	Cool White	6200	122	2.85	76T1594	2.12

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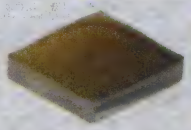
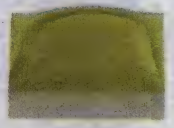
CREE® XLAMP® XH-B AND XH-G SERIES LED ARRAYS

RoHS Compliant Available

CREE

Features:
- Package size: 3.0 x 3.0mm
- Available in white, 70-minimum
- CRI cool white, 80-minimum
- CRI white and 85- and
- 90-minimum CRI warm white
- Unlimited floor life at 30°C/85% RH





Cool White

Specifications:
- Thermal resistance: 45°C/W
- Viewing angle (FWHM): 130°
- DC forward current: 125mA
- Reverse voltage: -5V
- Forward voltage: 65mA
- LED junction temperature: 150°C

The **XLamp XH-G LED** is a new type of mid-power LED that delivers the unique combination of high performance and reliability. Unlike common mid-power plastic packages of today, the ceramic-based XH LEDs are designed to deliver the long calculated L70 lifetimes of Cree's other high-power LEDs, such as XP or XT LEDs. XH LEDs are optimized for fluorescent replacement lighting applications, such as troffers and panel lights, where high efficacy, long lifetime and smooth appearance are critical. The XH LEDs allow lighting manufacturers to offer products that meet the lifetime expectations of LED technology without compromising performance. The **XH-G LED** delivers leading efficacy levels of up to 170 lumens-per-watt at 65 mA, 5000 K, 80 CRI. The **XH-B LED** delivers leading efficacy levels of up to 140 lumens-per-watt at 65 mA, 5000 K, 80 CRI.

CREE® XLAMP® XH-B LEDS

Mfg. Part No.	Color	CCT (K)	I_F (mA)	Lumin. Flux (lm)	Tape Cut Stock No.	Tape Cut Price Each 1-999
● XHBAWT-02-0000-00000HWE7	Warm White	3700	65	23.5	89W0687	0.46
● XHBAWT-02-0000-00000HXE5	Neutral White	4000	65	26.8	89W0690	0.39
● XHBAWT-02-0000-00000HXE3	Neutral White	5000	65	26.8	89W0689	0.49
● XHBAWT-02-0000-00000HXE1	Cool White	6500	65	26.8	89W0688	0.49
CREE® XLAMP® XH-G LEDS						
● XHGAWT-02-0000-00000HWE7	Warm White	3700	65	23.5	89W0695	0.39
● XHGAWT-02-0000-00000HXE3	Neutral White	5000	65	26.8	89W0697	0.59
● XHGAWT-02-0000-00000HXE5	Neutral White	5000	65	26.8	89W0698	0.51
● XHGAWT-02-0000-00000HXE1	Cool White	6500	65	26.8	89W0696	0.59

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X-LAMP XB-E AND XB-G SERIES HIGH-VOLTAGE HVW LEDS

NEW

RoHS Compliant Available

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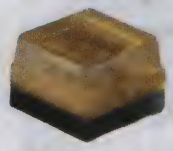

Features:
- Cree's smallest lighting class LED: 2.45 X 2.45 mm
- Binned @ 85 °C
- Available in white, 80-minimum CRI white
- Wide viewing angle
- Reflow solderable - JEDEC J-STD-020C compatible
- Unlimited floor life at ≤ 30°C/85% RH
- Electrically neutral thermal path

Specifications:
- Thermal resistance, junction to solder point: 7.5°C/W
- Reverse voltage: 0.1V
- Forward voltage (@ 44 mA, 85 °C): 26.5V
- LED junction temperature: 150°

XLamp **XB-E** and **XB-G** high-voltage, white, omni-directional replacement lamps. the XLamp XB-E High-Voltage White LED delivers high efficacy in the small XB footprint. Built on Cree's SC³ Technology™ Platform, the XLamp XB-E High-Voltage White LED enables smaller and more efficient driver circuits than standard-voltage LEDs. In addition, the XB-E and XB-G LED has a wider light distribution that can improve the omni-directionality for ENERGY STAR replacement lamps. These system optimizations together with the wide light distribution enable more-efficient and better LED replacements for omni-directional lamps.

Mfg. Part No.	CCT	I_F Max (mA)	V_F @ Test (V)	Viewing Angle	Stock No.	Price Each 1-9
XB-E SERIES — WARM WHITE						
● XBEHVW-H0-0000-00000HCE8	2700	125	24	135°	95W4200	1.89
● XBEHVW-H0-0000-00000HCE8	2700	125	24	135°	95W4201	1.62
XB-E SERIES — NEUTRAL WHITE						
● XBEHVW-H0-0000-00000HEE3	5000	125	24	135°	95W4202	1.61
● XBEHVW-H0-0000-00000HEE3	5000	125	24	135°	95W4203	1.38
XB-G SERIES — WARM WHITE						
● XBGHVW-H0-0000-00000HDE8	2700	200	22.5	140°	95W4204	2.32
● XBGHVW-H0-0000-00000HDE8	2700	200	22.5	140°	95W4205	2.00

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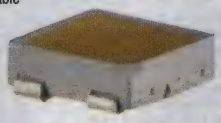
CREE XLamp® ML-B LEDs

RoHS Compliant Available

CREE

Applications:
- Linear Lighting
- Fluorescent Retrofits
- Retail Display Lighting



Features:
- Available in white (2,600 K to 8,300 K CCT)
- ANSI-compatible sub-bins
- Maximum drive current: 100 mA
- 120° viewing angle, uniform chromaticity profile
- Electrically neutral thermal path
- Unlimited floor life at ≤ 30°C/85% RH

The **Cree® XLamp® ML-B LED** brings lighting-class reliability and performance to ¼-watt LEDs. With XLamp lighting-class reliability, a wide viewing angle, uniform light output, and industry-leading chromaticity binning in a 3.5-mm X 3.5-mm package, the **XLamp ML-B LED** continues Cree's history of segment-focused product innovation in LEDs for lighting applications. Also available in tape and reel; *go online or call.*

Mfg. Part No.	LED Color	CCT (K)	IF (mA)	VF (V)	Lumin. Flux (lm)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● MLBAWT-A1-0000-000VE8	Warm White	2700	80	3.3	23.5	27T9457	0.39
● MLBAWT-A1-R250-000VE7	Warm White	3000	80	3.3	18.1	23T0287	0.39
● MLBAWT-A1-R250-000WE7	Warm White	3000	80	3.3	23.5	23T0291	0.54
● MLBAWT-A1-0000-000WE7	Warm White	3000	80	3.3	30.6	27T9464	0.54
● MLBAWT-A1-0000-000VE7	Warm White	3200	80	3.3	23.5	27T9456	0.39
● MLBAWT-A1-0000-000VE6	Warm White	3500	80	3.3	23.5	27T9455	0.39
● MLBAWT-A1-0000-000WE6	Warm White	3500	80	3.3	30.6	27T9463	0.44
● MLBAWT-A1-0000-000VE5	Warm White	4000	80	3.3	23.5	27T9454	0.39
● MLBAWT-A1-0000-000WE5	Warm White	4000	80	3.3	30.6	27T9462	0.44
● MLBAWT-A1-0000-000WE4	Cool White	4500	80	3.3	30.6	27T9461	0.39
● MLBAWT-A1-R250-000WE3	Cool White	5000	80	3.3	23.5	23T0289	0.41
● MLBAWT-A1-0000-000WE3	Cool White	5000	80	3.3	30.6	27T9460	0.41
● MLBAWT-A1-0000-000WDY	Daylight White	6000	80	3.3	23.5	27T9459	0.36
● MLBAWT-A1-0000-000WDT	Daylight White	7000	80	3.3	23.5	27T9458	0.36

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CREE XLamp® ML-C LEDs

RoHS Compliant Available

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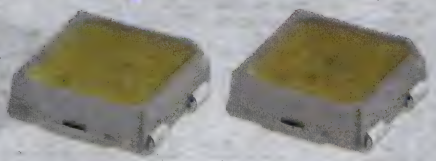
Specifications:
- Available in both parallel and series
- ANSI-compatible sub-bins
- Maximum drive current: 350 mA for parallel, 175 mA for series
- 120° viewing angle, uniform chromaticity profile
- Electrically neutral thermal path



The Cree XLamp ML-C LED brings lighting-class performance to ⅓-watt LEDs and continues Cree's history of leading-edge innovation in LEDs for lighting applications. The XLamp ML-C LED brings high performance and a smooth look to a wide range of lighting applications, including linear lighting, LED replacement lamps, fluorescent retrofits and retail-display lighting.

PARALLEL

Mfg. Part No.	Color	CCT (K)	Lumin. Flux (lm)	I_F (mA)	V_F (V)	Stock No.	Price Each 1-9
MLCAWT-A1-0000-000WE7	Warm White	3200	23.5	100	3.2	88T2723	0.49
MLCAWT-A1-0000-000XE5	Warm White	4300	26.8	100	3.2	88T2729	0.49
MLCAWT-A1-0000-000XE1	Cool White	5000	26.8	100	3.2	88T2725	0.54
MLCAWT-A1-0000-000XE3	Cool White	5000	26.8	100	3.2	88T2727	0.54
SERIES							
MLCSWT-A1-0000-000WE7	Warm White	3200	23.5	100	3.2	88T2731	0.49
MLCSWT-A1-0000-000XE5	Warm White	4300	26.8	100	3.2	88T2737	0.49
MLCSWT-A1-0000-000XE1	Cool White	5000	26.8	100	3.2	88T2733	0.72
MLCSWT-A1-0000-000XE3	Cool White	5000	26.8	100	3.2	88T2735	0.72

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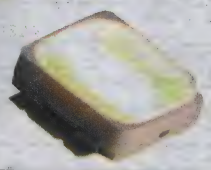
CREE XLamp® MX-6 LEDs

RoHS Compliant Available

CREE

Features:
- Maximum drive current: 350 mA
- Wide viewing angle: 120°
- Electrically neutral thermal path
- Qualification at max drive current
- Unlimited floor life at ≤ 30°C/85% RH



TYPICAL CRI=75

Mfg. Part No.	Color	CCT (K)	IF (mA)	VF (V)	Lumin. Flux (lm)	Stock No.	Price Each 1-9
MX6AWT-A1-R250-000D51	Cool White	6500	350	3.3	122	25R3684	1.36
MX6AWT-A1-0000-000DE4	Cool White	4500	300	3.3	107	13T4472	0.89
MX6AWT-A1-0000-000CDZ	Cool White	5000	300	3.3	100	34R8186	0.80
TYPICAL CRI=80							
MX6AWT-A1-R250-0009E7	Warm White	3000	350	3.3	92	25R8183	1.41
MX6AWT-A1-0000-000BE6	Warm White	3500	300	3.3	93.9	13T4457	0.86
MINIMUM CRI=80							
MX6AWT-H1-0000-000AE5	White	4000	300	3.3	87.4	23T0293	1.48
MX6AWT-H1-0000-000AE6	White	3500	300	3.3	87.4	23T0294	1.69
MX6AWT-H1-0000-000AE7	White	3000	300	3.3	87.4	23T0295	1.69
MX6AWT-H1-0000-0009E7	White	3000	300	3.3	80.6	23T0297	1.48
MX6AWT-H1-0000-0008E8	White	2700	300	3.3	73.9	23T0296	2.53

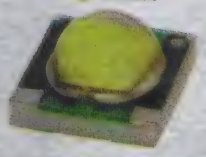
(163077)

CREE XLamp® XP-G LEDs (85-CRI)

RoHS Compliant Available

CREE

Features:
- Minimum CRI for white is 85
- ANSI-compatible chromaticity bins
- Maximum drive current: 1000 mA
- Low thermal resistance: 6°C/W
- Wide viewing angle: 125°
- Unlimited floor life at ≤ 30°C/85% RH
- Reflow solderable - JEDEC J-STD-020C
- Electrically neutral thermal path
- UL-recognized component (E326295)



Mfg. Part No.	LED Color	CCT (K)	IF (mA)	VF (V)	Lumin. Flux (lm)	Stock No.	Price Each 1-9
XPGWHT-P1-R250-008E8	White	2700	350	3	80.6	13T9253	3.37
XPGWHT-P1-R250-009E7	White	3200	350	3	87.4	13T9255	3.37

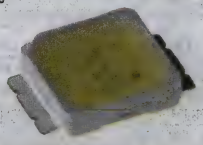
(192117)

CREE XLamp® MX-6S LEDs

RoHS Compliant Available

CREE

Features:
- Available in white (2,600 K to 8,300 K CCT)
- Wide viewing angle: 120°
- 20 VDC nominal with voltage binning available
- Electrically neutral thermal path
- Qualification at max drive current
- Unlimited floor life at ≤ 30°C/85% RH



The **Cree XLamp MX-6S** LED provides the proven lighting-class performance and reliability of Cree XLamp LEDs in a high voltage, PLCC configuration. The **XLamp MX-6S** LED brings a high quality of light to a range of lighting applications that require near-line-voltage configuration, including LED light bulbs, fluorescent retrofits and retail-display lighting.

TYPICAL CRI = 75

Mfg. Part No.	LED Color	Lumin. Flux (lm)	IF (mA)	VF (V)	Stock No.	Price Each 1-9
MX6SWT-A1-0000-000DE3	Cool White	114	60	20	93R4709	1.41
MX6SWT-A1-0000-000DF4	Cool White	114	60	20	93R4711	1.41
MX6SWT-A1-0000-000E51	Cool White	122	60	20	93R4714	1.28
MX6SWT-A1-0000-000EE3	Cool White	122	60	20	93R4712	1.48
MX6SWT-A1-0000-000F51	Cool White	130	60	20	93R4716	1.36
MX6SWT-A1-0000-000G51	Cool White	139	60	20	93R4717	1.56
TYPICAL CRI = 80						
MX6SWT-A1-0000-000AE8	Warm White	93.9	60	20	93R4703	1.50
MX6SWT-A1-0000-000BE7	Warm White	100	60	20	93R4704	1.41
MX6SWT-A1-0000-000BE8	Warm White	100	60	20	93R4705	1.48
MX6SWT-A1-R250-000CE7	Warm White	107	60	20	93R4692	1.48
MX6SWT-A1-0000-000CE8	Warm White	107	60	20	93R4708	1.69
MX6SWT-A1-0000-000DE5	Warm White	114	60	20	93R4710	1.48
MX6SWT-A1-0000-000EE5	Warm White	122	60	20	93R4713	1.69
MINIMUM CRI = 80						
MX6SWT-H1-0000-000AE8	Warm White	87.4	60	20	23T0298	1.48
MX6SWT-H1-0000-000BE7	Warm White	93.9	60	20	23T0299	1.48
MX6SWT-H1-0000-000CE5	Cool White	100	60	20	23T0300	1.48

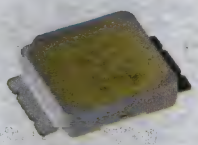
(192116)

CREE XLamp® MX-6S LEDs (80-CRI)

RoHS Compliant Available

CREE

Features:
- Minimum CRI for white is 80
- Available in white (2,600 K to 8,300 K CCT)
- Wide viewing angle: 120°
- 20 VDC nominal with voltage binning available
- Electrically neutral thermal path
- Qualification at max drive current
- Unlimited floor life at ≤ 30°C/85% RH



The **Cree XLamp MX-6S** LED provides the proven lighting-class performance and reliability of Cree XLamp LEDs in a high voltage, PLCC configuration. The **XLamp MX-6S** LED brings a high quality of light to a range of lighting applications that require near-line-voltage configuration, including LED light bulbs, fluorescent retrofits and retail-display lighting.

MFR. Part No.	LED Color	CCT (K)	IF (mA)	VF (V)	Lumin. Flux (lm)	Stock No.	Price Each 1-9
MX6SWT-H1-0000-000AE8	Warm White	2700	60	20	87.4	23T0298	1.48
MX6SWT-H1-0000-000BE7	Warm White	3000	60	20	93.9	23T0299	1.48
MX6SWT-H1-0000-000CE5	Cool White	4000	60	20	100	23T0300	1.48

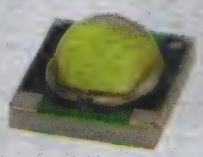
(192090)

CREE XLamp® XP-G LEDs

RoHS Compliant Available

CREE

Features:
- ANSI-compatible chromaticity bins
- Maximum drive current: 1000 mA
- Low thermal resistance: 6°C/W
- Wide viewing angle: 125°
- Unlimited floor life at ≤ 30°C/85% RH
- Reflow solderable - JEDEC J-STD-020C
- Electrically neutral thermal path
- UL-recognized component (E326295)



TYPICAL CRI = 70

Mfr. Part No.	Color	VF (V)	IF	Luminous Flux (lm)	Stock No.	Price Each 1-9
XPGWHT-01-0000-00EE5	Outdoor	3	350mA	114	65R6885	2.81
XPGWHT-01-0000-00FE3	Outdoor	3	350mA	122	65R6886	3.09
XPGWHT-01-R250-00GC1	Outdoor	3.25	350mA	139	64T5276	3.52
XPGWHT-01-R250-00GC2	Outdoor	3.25	350mA	139	64T5277	3.83
XPGWHT-01-R250-00GC3	Outdoor	3.25	350mA	139	64T5278	3.65
TYPICAL CRI = 70						
XPGWHT-L1-0000-00G51	Cool White	2.9	350mA	130lm	11X2758	3.37
TYPICAL CRI = 75						
XPGWHT-L1-R250-00E51	Cool White	3.3	1A	114	25R3685	5.61
XPGWHT-L1-R250-00F51	Cool White	3.3	1A	122	25R3686	2.44
XPGWHT-L1-R250-00G51	Cool White	3.3	1A	130	25R3687	3.37

CONTINUED

LED EMITTERS & ARRAYS

CREE XLamp® XP-G LEDs (CONT.)

Mfr. Part No.	Color	VF (V)	IF	Luminous Flux (lm)	Stock No.	Price Each 1-9
TYPICAL CRI = 75						
● XPGWHT-L1-0000-00H53	Cool White	3	350mA	139	34R9389	2.88
● XPGWHT-L1-0000-00F53	Cool White	3	350mA	122	25R9667	2.01
● XPGWHT-L1-0000-00G53	Cool White	3	350mA	130	34R9386	1.75
TYPICAL CRI = 80						
● XPGWHT-L1-0000-00BE8	Warm White	3	350mA	93.9	65R6883	3.37
● XPGWHT-L1-0000-00CE7	Warm White	3	350mA	100	65R6884	3.37
● XPGWHT-L1-0000-00CE6	Warm White	3	350mA	100	67R3665	1.92
● XPGWHT-L1-R250-00EE7	Warm White	2.75	350mA	122	64T5273	4.65
● XPGWHT-L1-R250-00DE8	Warm White	2.5	350mA	114	64T5272	4.65
● XPGBWT-L1-R250-00F51	Cool White	2.8	350mA	122	05W7058	2.81
● XPGBWT-L1-R250-00G51	Cool White	2.8	350mA	130	05W7059	3.28
● XPGBWT-L1-R250-00H51	Cool White	2.8	350mA	139	05W7060	4.28
TYPICAL CRI = 85						
● XPGWHT-01-0000-00EE5	Neutral White	3	350mA	122	65R6885	2.81
● XPGWHT-01-0000-00FE3	Neutral White	3	350mA	130	65R6886	3.09
MINIMUM CRI = 85						
● XPGWHT-P1-R250-008E8	White	3	350mA	80.6	13T9253	3.37
● XPGWHT-P1-R250-009E7	White	3	350mA	87.4	13T9255	3.37

(163078)

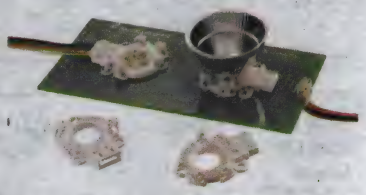
SOLDERLESS LED SOCKETS FOR CREE XLAMP MP-L LED

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features:
- Operating current: 500mA
- Operating voltage: 30VDC
- Housings: UL94V-0 rated high temp thermoplastic
- Contacts Silver plated copper alloy interface to LED, tin interface to wire or PCB
- Dielectric withstanding voltage: 500 VDC
- Select silver plated contact interface to Cree XLamp MP-L LED
- 6 line termination in both wire and board termination versions
- Secure attachment to substrate using three standard #4 or M3 screws
- Wire version incorporates 6 position AMP Mini CT header (ordered separately)
- Low profile- <3 mm height around dome (w/o latches; 5.20 mm high at connector interface)



Tyco Electronics' Solderless LED Socket, Type CM provides a solderless quick termination to the 1500 lumen output Cree XLamp® MP-L™ LED. This solderless termination technique facilitates easy integration of the LED into the end customer's lighting fixtures with simple screw-down installation. Multiple versions are offered to provide application flexibility. To further enhance functionality to the fixture manufacturer, the socket also features integral, robust, snap attachment of LEDIL Tyra series reflector optics.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
SOLDERLESS LED SOCKETS			
● 2106946-1	LED to Wire, w/o Optics Latch	83R7955	9.61
● 2106946-2	LED to Wire, with Optics Latch	83R7956	11.47
● 2106946-3	LED to Board, w/o Optics Latch	83R7957	11.04
● 2106946-4	LED to Board, with Optics Latch	83R7958	9.61
● 2106946-5	LED to Inverted Wire, w/o Optics Latch	83R7959	11.04
● 2106946-6	LED to Inverted Wire, with Optics Latch	83R7960	11.04
ACCESSORIES			
● 2058943-1	AMP Mini CT, 2 position Cable Assembly	87R0399	0.84
● 2058943-2	AMP Mini CT, 3 position Cable Assembly	87R0400	0.96
● 2058943-3	AMP Mini CT, 4 position Cable Assembly	87R0401	1.00
● 2058943-4	AMP Mini CT, 5 position Cable Assembly	87R0402	1.29
● 2058943-5	AMP Mini CT, 6 position Cable Assembly	35R2609	1.54

(179634)

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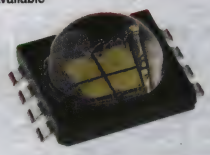
(196525)

CREE XLamp® MC-E LEDs

RoHS Compliant Available

CREE



Features:
- Industry's first lighting-class multi-chip LED
- Highest XLamp lumen density (lm/mm²)
- Individually addressable LED's
- Lowest XLamp thermal resistance:3° C/W
- Electrically isolated thermal path

Specifications:
- Viewing Angle = 110°
- Forward Voltage = 3.2 V
- Maximum Drive Current: 700 mA per LED die

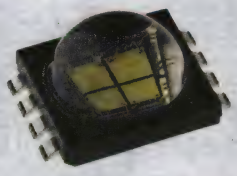
Mfg. Part No.	Color	CCT Range Min.	CCT Range Max.	Luminous Flux (lm) @ 350 mA	Stock No.	Price Each 1-9
● MCE4WT-A2-0000-000JE5	Cool White	3700 K	5000 K	320	02P7186	14.85
● MCE4WT-A2-0000-000M01	Daylight White	5000 K	10 000 K	430	40P1429	17.01

(133270)

CREE XLamp® MC-E COLOR LED EMITTERS

RoHS Compliant Available

CREE



Features:
- High lumen density
- Small, multi-color optical source for efficient color mixing
- Max drive current: 700 mA per emitter
- Thermal performance: 3°C/W

Applications:
- Architectural/decorative lighting
- Stage and studio lighting
- Retail display

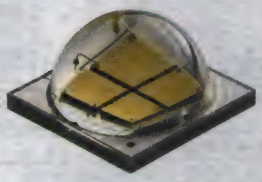
Mfg. Part No.	IF (mA)	VF (V)	Lumin. Flux (lm)	Wave-length (nm)	Stock No.	Price Each 1-9
RED/GREEN/BLUE/COOL WHITE						
● MCE4CT-A2-0000-00A5AAAA1	700	2.2/3.4/ 3.2/3.2	30.6/67.2/ 8.2/95	630/535/ 465/XY	15R3931	20.53
RED/GREEN/BLUE/NEUTRAL WHITE						
● MCE4CT-A2-0000-00A4AAAB1	700	2.2/3.4/ 3.2/3.2	30.6/67.2/ 8.2/80	630/535/ 465/XY	15R3930	20.79

(152787)

CREE® XLAMP® MK-R LED ARRAYS

RoHS Compliant Available

CREE



Features:
- Available in ANSI white bins as well as 4-step and 2-step EasyWhite bins at 2700 K, 3000 K, 3500 K, 4000 K, 4500 K and 5000 K CCT
- Maximum drive current: 1250 mA
- Low thermal resistance: 1.7 °C/W
- Maximum junction temperature: 150 °C
- Binned at 85 °C
- Viewing angle: 120°
- Available in cool white, 70-, 80- and 90.CRI minimums
- Unlimited floor life at 30 oC/85% RH
- Reflow solderable - JEDEC J.STD.020C
- Electrically neutral thermal path
- UL-recognized component (E349212)

Built on Cree's revolutionary SC3 Technology. platform, the **XLamp MK.R** LED brings new levels of performance to directional LED arrays, enabling lighting manufacturers to create the next generation of high-lumen indoor and outdoor LED lighting systems. In single-LED systems, the **XLamp MK.R**, with EasyWhite. color binning, provides the LED industry's tightest unit-to-unit color consistency. For systems using multiple LEDs, the MK-R enables manufacturers to use fewer LEDs while maintaining light output and color consistency, which translates to lower system cost. The **XLamp MK.R** is optimized for directional lighting applications and is a welcome addition to applications requiring high lumen output, a compact optical source and a broad palette of color temperature and CRI values.

Mfg. Part No.	LED Color	CCT (K)	I_F (A)	V_F (V)	Luminous Flux (lm)	Stock No.	Price Each 1-9
● MKRAWT-02-0000-0D00J20E1	Cool White	6500	1.25	12	1040	53W6827	10.56
● MKRAWT-02-0000-0D00J2051	Cool White	6200	1.25	12	1040	53W6829	9.51
● MKRAWT-02-0000-0D00J20E2	Cool White	5700	1.25	12	1040	53W6828	10.56
● MKRAWT-02-0000-0D0BH40E3	Cool White	5000	1.25	12	970	53W6767	8.98
● MKRAWT-02-0000-0D0BH40E4	Cool White	4500	1.25	12	970	53W6768	9.41
● MKRAWT-02-0000-0D0HH20E5	Cool White	4000	1.25	12	900	53W6796	9.41
● MKRAWT-02-0000-0D0UE40E7	Cool White	3000	1.25	12	635	53W6815	9.41
● MKRAWT-02-0000-0D0UD40E8	Cool White	2700	1.25	12	550	53W6806	8.32
● MKRAWT-02-0000-0D0HH250H	Cool White	5000	1.25	12	900	53W6805	10.38
● MKRAWT-02-0000-0D0HH245H	Cool White	4500	1.25	12	900	53W6803	10.66
● MKRAWT-02-0000-0D0HH240H	Cool White	4000	1.25	12	900	53W6801	10.82
● MKRAWT-02-0000-0D0HG430H	Warm White	3000	1.25	12	840	53W6785	10.99
● MKRAWT-02-0000-0D0UE430H	Warm White	3000	1.25	12	635	53W6817	10.82
● MKRAWT-02-0000-0D0HG227H	Warm White	2700	1.25	12	780	53W6776	10.99
● MKRAWT-02-0000-0D0UE227H	Warm White	2700	1.25	12	590	53W6812	10.38

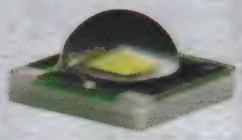
(210222)

CREE HIGH-EFFICIENCY WHITE XLamp® XP-E LEDs

RoHS Compliant Available

CREE

Features:
- Light output and efficiency similar to XLamp XP-G
- Maximum drive current: 1000 mA
- Low thermal resistance: 6°C/W
- Maximum junction temperature: 150°C
- Wide viewing angle: 120°
- Electrically neutral thermal path



Applications:
- Color-changing
- Portable and personal
- Outdoor
- Indoor-directional
- Transportation
- Stage and studio
- Commercial and emergency-vehicle lighting

XLamp XP-E High Efficiency White LEDs upgrade the XLamp XP-E to leading performance levels for diffuse lighting applications. **XP-E HEW** is designed to enable faster adoption of LED light in cost-sensitive, consumer lighting products. Compared to the standard XLamp XP-E, **XP-E HEW** can reduce LED count by 50% and still deliver the same system performance.

Mfg. Part No.	LED Color	CCT	IF (mA)	VF (V)	Lumin. Flux (lm)	Stock No.	Price Each 1-9
XPEHEW-H1-0000-00AE8	White	2700	350	3	87.4	23T0330	3.24
XPEHEW-H1-0000-00BE7	White	3000	350	3	93.9	23T0331	3.24
XPEHEW-H1-0000-00BE8	White	2700	350	3	93.9	23T0332	3.93
XPEHEW-H1-0000-00CE7	White	3000	350	3	100	23T0333	3.93

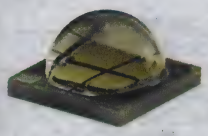
(192092)

CREE EASYWHITE XLamp® XM-L LEDs

RoHS Compliant Available

CREE

Features:
- EasyWhite 2- and 4-step color temperatures
- High lumen density
- High CRI options
- 6-V & 12-V high voltage options
- Characterized and binned at 85°C
- Wide viewing angle (115°)
- Electrically isolated thermal path



Applications:
- 20-25W halogen MR, PAR and B10-style replacement lamps
- Small form factor directional lighting
- Track lighting
- Accent lighting

Achieving high light output at a consistent color for small-form-factor applications has been traditionally a design challenge. The **XM-L EasyWhite** LED combines high light output and small footprint of the existing **XM-L** package with Cree's unique **EasyWhite** color temperatures to provide an LED that is optimized for small-form-factor directional lighting.

FOUR STEP

Mfg. Part No.	CCT (K)	Luminous Flux (lm)	Forward Voltage (V)	Forward Current (mA)	Stock No.	Price Each 1-9
XMLEZW-00-0000-0B00T630F	3000	280	6	700	39T0966	7.30
XMLEZW-00-0000-0B00T527F	2700	260	6	700	39T0962	7.30

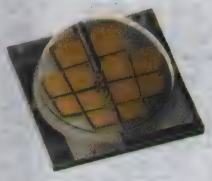
(194507)

CREE EASYWHITE XLamp® MT-G LEDs

RoHS Compliant Available

CREE

Features:
- EasyWhite 2- and 4-step color temperatures
- High lumen density
- Minimum 80 CRI (2700 K, 3000 K)
- Electrically isolated thermal path
- Wide viewing angle (120°)



Applications:
- MR-style retrofit lamps
- Accent & track
- Retail display
- Down lights
- Hospitality
- Museums & art galleries

XLamp MT-G LEDs enable designs with consistent color, small form factor and unprecedented performance. While achieving high lumen output from a space-constrained and thermally-constrained form factor has been challenging in the past, MT-G enables 35–50-watt halogen MR16 retrofit lamps. In addition, the **MT-G** LED can be driven to much higher currents in less constrained designs, achieving up to 1525 lumens at 4 A at 85°C in warm-white (3000-K) color temperatures. **XLamp MT-G** LEDs are the industry's first LEDs to be binned for luminous flux and chromaticity at 85°C, which can simplify luminaire design calculations and speed time-to-market.

Mfg. Part No.	CCT (K)	Lumin. Flux (lm)	Forward Voltage @ 1.1mA (V)	Tape Cut Stock No.	Tape Cut Price Each 1-499
MTGEZW-01-0000-0B00E027F	2700	480	5.6	29T5951	17.11
MTGEZW-01-0000-0B00F030F	3000	520	5.6	29T5952	17.11
MTGEZW-01-0000-0B00G040F	4000	560	5.6	29T5953	17.11

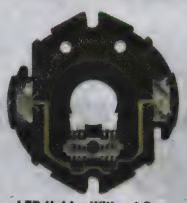
(196162)

LED ARRAY HOLDER FOR CREE XLAMP MP-L ARRAYS

RoHS Compliant Available

molex

Features:
- Available in serial and parallel wiring options
- Compression contacts to power array
- Double-ended wire-trap terminal to attach power source
- Screw-mount attachment method for securing array to heat sink
- Releasable wire trap for rework or replacement
- High-temperature thermoplastic housing
- Overall form factor is 44.85 by 42.00mm (1.77 by 1.65")
- Available with and without clear LED protective cover
- Snap lock feature for optional optic



LED Holder Without Cover

LED Holder With Cover

Molex's LED MP-L Array Holder, ideal for OEM light-fixture manufacturers, simplifies the LED installation process for Cree energy-efficient XLamp MP-L arrays and is available in serial and parallel wiring options. LED array holders simplify the LED installation process by eliminating the need for hand or SMT soldering and expensive SMT equipment. The holders will allow customers to install LED arrays quickly into fixtures, enable field replacements and facilitate upgrades to current applications.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
180160-0000	LED Holder Without Cover - Parallel Wiring	39T3348	3.60
180160-0001	LED Holder With Cover - Parallel Wiring	39T3349	4.72
180160-0002	LED Holder Without Cover - Series Wiring	39T3350	4.37
180160-0003	LED Holder With Coverr - Series Wiring	39T3351	4.74

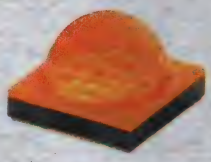
(195376)

CREE® XLAMP® XT-E HVW SMD LED ARRAYS

RoHS Compliant Available

CREE

Features:
- Binned at 85°C
- Cree-standard mechanical footprint of 3.45 X 3.45mm
- Electrically neutral thermal path
- Unlimited floor life at 30°C/85% RH
- Available in standard CRI and 80.minimum CRI configurations
- UL-recognized component (E349212)



The Cree XLamp XT-E High Voltage White LED provides the lightingclass performance and reliability of Cree XLamp LEDs in a smallform, high-voltage configuration. The XT-E HVW LED is an order of magnitude smaller than other high voltage LED arrays, allowing easy implementation of spaceconstrained lighting applications with smaller, more efficient high voltage drivers. Among these applications are small lamps such as B10, GU10 and E17.

Mfg. Part No.	Color	I_F (A)	V_F (V)	Viewing Angle (°)	Stock No.	Price Each 1-999
XTEHVW-H0-0000-00000HAE8	Warm White	44	24	115	67W2791	1.22
XTEHVW-H0-0000-00000HBE7	Warm White	44	24	115	67W2792	1.22
XTEHVW-H0-0000-00000LDE3	Neutral White	44	24	115	67W2793	1.17
XTEHVW-H0-0000-00000LDE4	Neutral White	44	24	115	67W2794	1.76
XTEHVW-H0-0000-00000LDE4	Neutral White	44	24	115	67W2794	1.76

(210220)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196537)

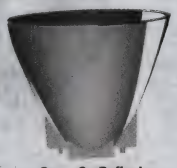
SOLDERLESS LED SOCKETS FOR PHILLIPS LUMILEDS LUXEON S LED

RoHS Compliant Available

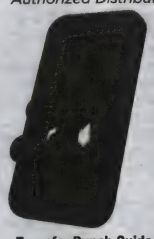
TE connectivity

Authorized Distributor

Type LS Socket w/o Latch



Snap-On Reflector



Trasnfer Punch Guide

Features:
- Solderless termination to LUXEON S LED
- Integral optics attachment features
- LED locator to aid assembly
- Three screw attachment using M3 or #4 screws
- No-strip IDC termination of 24 AWG solid & stranded wires
- Integral thermal spring frame helps provide adequate normal force for LED to heat sink
- Low profile – housing optical interference <2% of total LED light output
- Socket size: 35.9mm x 29.6mm
- Fits within 42.2mm diameter circumscribed circle centered on LED
- 3mm height within optical emission area
- 5.20mm height at the connector interface
- For use with 24AWG UL1007 solid or stranded wire or equivalent
- Current rating: 1.5A
- Voltage rating: 40 VDC
- Dielectric withstand voltage: 1070 VDC
- Terminals: Tin plated, copper alloy, Gold on LED interface
- Stainless steel LED pressure spring
- Housing and locator: UL 94V0 rated high temperature thermoplastic
- Continuous operating temperature: -40°C to 105°C

The TE Solderless LED Socket, type LS is a quick termination connector system for use with the Philips Lumileds LUXEON S. The connector features easy, snap-together tool-less insulation displacement termination to 24AWG wire. Termination to the LUXEON S LED is simplified by the use of an easily applied locator frame that pre-positions the LED on a heatsink prior to final connectorization using the socket. The socket eliminates the need to design, manufacture and integrate a complex metal clad circuit board (MCPCB) assembly into the lighting fixture. This frees the lighting fixture designer to move beyond the limitations inherent in a planar MCPCB LED assemblies. The ability to easily place an LED anywhere in a fixture using simple hand tools provides the fixture designer with a broad range of novel integration possibilities

SOLDERLESS LED SOCKET

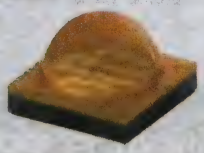
Mfg. Part No.	Description	Stock No.	Price Each 1-24
● 2154235-2	Type LS Socket with Latch	92T7588	3.05
● 2154235-1	Type LS Socket w/o Latch	92T7587	1.81
ACCESSORIES			
● 1-2154430-1	Type LS Snap-On Reflector	92T7586	6.32
TOOLING			
2154473-1	Type LS Trasnfer Punch Guide & Tool	92T7589	23.08

(203515)

CREE XLamp® XT-E HIGH VOLTAGE LEDs

RoHS Compliant Available

CREE



Features:
- Delivers up to 300 lumens at 3W, 85°C
- ANSI-compatible chromaticity bins
- Available in all CCTs and high CRI
- Typical voltage: 46V

The Cree XLamp® XT-E High Voltage White LED provides the lighting class performance and reliability of Cree XLamp® LEDs in a smallform, high voltage configuration. The XT-E HVW LED is an order of magnitude smaller than other high voltage LED arrays, allowing easy implementation of space constrained lighting applications with smaller, more efficient high voltage drivers. Among these applications are small lamps such as B10, GU10 and E17.

Mfg. Part No.	Color	CCT (K)	Lumin. Flux (lm)	If (mA)	Vf (V)	Stock No.	Price Each 1-9
● XTEHVW-Q0-0000-00000L7E8	Warm White	2700	67.2	22	45	65T5694	1.94
● XTEHVW-Q2-0000-00000L7E8	Warm White	2700	67.2	22	47.5	65T5766	2.15
● XTEHVW-Q0-0000-00000L8E8	Warm White	2700	73.9	22	47.5	65T5700	1.97
● XTEHVW-Q2-0000-00000L8E8	Warm White	2700	73.9	22	47.5	65T5772	2.17
● XTEHVW-Q0-0000-00000L8E7	Warm White	3000	73.9	22	47.5	65T5698	1.94
● XTEHVW-Q2-0000-00000L8E7	Warm White	3000	73.9	22	47.5	65T5770	2.15
● XTEHVW-Q2-0000-00000L9E7	Warm White	3000	80.6	22	47.5	65T5779	2.17
● XTEHVW-Q0-0000-00000L9E7	Warm White	3700	80.6	22	46	65T5707	1.97
● XTEHVW-Q0-0000-00000LBE3	Neutral White	5000	93.9	22	47.5	65T5670	1.94
● XTEHVW-Q2-0000-00000LBE3	Neutral White	5000	93.9	22	47.5	65T5742	2.15
● XTEHVW-Q2-0000-00000LCE3	Neutral White	5000	100	22	47.5	65T5748	2.17
● XTEHVW-Q0-0000-00000LCE3	Neutral White	5000	100	22	50	65T5676	1.97
● XTEHVW-Q2-0000-00000LC51	Cool White	5000	100	22	47.5	65T5753	2.15
● XTEHVW-Q0-0000-00000LC51	Cool White	...	100	22	50	65T5681	1.94
● XTEHVW-Q2-0000-00000LD51	Cool White	5000	107	22	47.5	65T5760	2.17
● XTEHVW-Q2-0000-00000LE51	Cool White	6200	114	22	50	83T3711	2.22
● XTEHVW-Q0-0000-00000LD51	Cool White	8300	107	22	46	65T5688	1.97

➤CONTINUED➤

CREE XLamp® XT-E HIGH VOLTAGE LEDs (CONT.)

XLAMP XT-E HVW STANDARD KIT CODES

Mfg. Part No.	Color	CCT (K)	Lumin. Flux (lm)	If (mA)	Vf (V)	Stock No.	Price Each 1-9
● XTEHVW-D0-0000-00000HBE8	Warm White	2700	93.9	88	12	67W2788	1.22
● XTEHVW-D0-0000-00000HCE7	Warm White	3000	100	88	12	67W2789	1.22

(196167)

CREE XLAMP® CXA1304 AND CXA1816 LED ARRAYS

RoHS Compliant Available

CREE

Features:
- Available in ANSI white bins as well as 4-step and 2-step EasyWhite bins at 2700K, 3000K, 3500K, 4000K and 5000K CCT
- 85°C binning and characterization
- 115° viewing angle, uniform chromaticity profile
- Top-side solder connections
- Thermocouple attach point
- NEMA SSL-3 2011 standard flux bins

CXA1304

CXA1816

The XLamp **CXA1304** and **CXA1816** LED array expands Cree's family of highflux, multi-die arrays in a smaller, easy-to-use platform. With XLamp lighting-class reliability, the **CXA1304** and **CXA1816** small, uniform emitting surface enables both directional and non-directional lighting applications including lamp retrofit and luminaire designs. Available in 2-step and 4-step color consistency. The **CXA1304** features a 6mm optical source, and the **CXA1816** features a 12mm optical source. The **CXA1304** and **CXA1816** brings new levels of flux and efficacy to this form factor.

CXA1304 - ANSI WHITE

Mfg. Part No.	CCT (K)	Lumin. Flux (lm)	I_F (mA)	Stock No.	Price Each 1-9
● CXA1304-0000-000N00A20E8	2700	330	250	94W7068	2.96
● CXA1304-0000-000C00A20E8	2700	330	1 A	94W7049	2.96
● CXA1304-0000-000N00A40E8	2700	355	250	94W7072	3.19
● CXA1304-0000-000C00A40E8	2700	355	1 A	94W7053	3.19
● CXA1304-0000-000N00A40E7	3000	355	250	94W7071	2.96
● CXA1304-0000-000C00A40E7	3000	355	1 A	94W7052	2.96
● CXA1304-0000-000N00B20E7	3000	380	250	94W7077	3.19
● CXA1304-0000-000C00B20E7	3000	380	1 A	94W7058	3.19
● CXA1304-0000-000N00A40E6	3500	355	250	94W7070	2.96
● CXA1304-0000-000C00A40E6	3500	355	1 A	94W7051	2.96
● CXA1304-0000-000C00B20E5	4000	380	1 A	94W7057	2.96
● CXA1304-0000-000N00B20E5	4000	380	250	94W7076	2.96
● CXA1304-0000-000N00B40E5	4000	410	250	94W7082	3.19
● CXA1304-0000-000C00B40E5	4000	410	1 A	94W7063	3.19
● CXA1304-0000-000C00B40E3	5000	410	1 A	94W7062	2.96
● CXA1304-0000-000N00B40E3	5000	410	250	94W7081	2.96
● CXA1304-0000-000N00C20E3	5000	440	250	94W7085	3.19
● CXA1304-0000-000C00C20E3	5000	440	1 A	94W7066	3.19
CXA1304 - EASY WHITE					
● CXA1304-0000-000N00A227F	2700	330	250	94W7069	3.19
● CXA1304-0000-000C00A227F	2700	330	1 A	94W7050	3.19
● CXA1304-0000-000N00A427F	2700	355	250	94W7073	3.42
● CXA1304-0000-000C00A427F	2700	355	1 A	94W7054	3.42
● CXA1304-0000-000N00A430F	3000	355	250	94W7074	3.19
● CXA1304-0000-000C00A430F	3000	355	1 A	94W7055	3.19
● CXA1304-0000-000N00B230F	3000	380	250	94W7078	3.42
● CXA1304-0000-000C00B230F	3000	380	1 A	94W7059	3.42
● CXA1304-0000-000N00A435F	3500	355	250	94W7075	3.19
● CXA1304-0000-000C00A435F	3500	355	1 A	94W7056	3.19
● CXA1304-0000-000N00B235F	3500	380	250	94W7079	3.42
● CXA1304-0000-000C00B235F	3500	380	1 A	94W7060	3.42
● CXA1304-0000-000N00B240F	4000	380	250	94W7080	3.19
● CXA1304-0000-000C00B240F	4000	380	1 A	94W7061	3.19
● CXA1304-0000-000N00B440F	4000	410	250	94W7083	3.42
● CXA1304-0000-000C00B440F	4000	410	1 A	94W7064	3.42
● CXA1304-0000-000N00B450F	5000	410	250	94W7084	3.19
● CXA1304-0000-000C00B450F	5000	410	1 A	94W7065	3.19
● CXA1304-0000-000N00C250F	5000	440	250	94W7086	3.42
● CXA1304-0000-000C00C250F	5000	440	1 A	94W7067	3.42
CXA1310 - EASY WHITE					
● CXA1310-0000-000N00J230F	3000	1040	450	36X1953	11.14
CXA1816 - ANSI WHITE					
● CXA1816-0000-000N00M40E8	2700	1485	900	94W7087	12.95
● CXA1816-0000-000N00N20E8	2700	1590	900	94W7091	13.99
● CXA1816-0000-000N00N20E7	3000	1590	900	94W7090	12.95
● CXA1816-0000-000N00N40E7	3000	1710	900	94W7096	13.99
● CXA1816-0000-000N00N20E6	3500	1590	900	94W7089	12.95
● CXA1816-0000-000N00N40E6	3500	1710	900	94W7095	13.99
● CXA1816-0000-000N00P20E5	4000	1830	900	94W7099	13.99
● CXA1816-0000-000N00P40E5	4000	1965	900	94W7102	16.32

➤CONTINUED➤

CREE XLAMP® CXA1304 AND CXA1816 LED ARRAYS (CONT.)

CXA1816 - ANSI WHITE

Mfg. Part No.	CCT (K)	Lumin. Flux (lm)	I_F (mA)	Stock No.	Price Each 1-9
CXA1816-0000-000N00P40E3	5000	1965	900	94W7101	13.99
CXA1816-0000-000N00Q20E3	5000	2100	900	94W7105	16.32
CXA1816 - EASY WHITE					
CXA1816-0000-000N00M427F	2700	1485	900	94W7088	13.99
CXA1816-0000-000N00N227F	2700	1590	900	94W7092	15.29
CXA1816-0000-000N00N230F	3000	1590	900	94W7093	13.99
CXA1816-0000-000N00N235F	3500	1590	900	94W7094	13.99
CXA1816-0000-000N00N430F	3000	1710	900	94W7097	15.29
CXA1816-0000-000N00N435F	3500	1710	900	94W7098	15.29
CXA1816-0000-000N00P240F	4000	1830	900	94W7100	15.29
CXA1816-0000-000N00P440F	4000	1965	900	94W7103	17.62
CXA1816-0000-000N00P450F	5000	1965	900	94W7104	15.29
CXA1816-0000-000N00Q250F	5000	2100	900	94W7106	17.62
CXA1520 - EASY WHITE					
CXA1520-0000-000N00N430F	3000	1710	900	07X2420	27.20
CXA1520-0000-000N00P240F	4000	1830	900	07X2421	27.20
CXA1520-0000-000N00P250F	5000	1830	900	07X2422	25.90
CXA1520-0000-000N0UM440F	4000	1485	900	07X2418	27.20
CXA1520-0000-000N0YK230F	3000	1200	900	07X2419	25.90
CXA1820 - EASY WHITE					
CXA1820-0000-000N00P430F	3000	1965	1.05 A	07X2423	16.32
CXA1820-0000-000N00Q230F	3000	2100	1.05 A	07X2424	17.62
CXA1820-0000-000N00Q240F	4000	2100	1.05 A	07X2425	16.32
CXA1820-0000-000N00Q450F	5000	2260	1.05 A	07X2426	16.32
CXA1850 - EASY WHITE					
CXA1850-0000-000N00U430F	3000	3955	2.1 A	36X1954	40.00
CXA2590 - EASY WHITE					
CXA2590-0000-000R00Y430F	3000	6910	1.8 A	36X1955	68.00
CXA3070 - EASY WHITE					
CXA3070-0000-000N00Z230F	3000	7390	2.5 A	07X2427	40.00
CXA3070-0000-000N00Z240F	4000	7390	2.5 A	07X2428	38.00
CXA3070-0000-000N00Z450F	5000	7945	2.5 A	07X2429	38.00

(210344)

CREE XLamp® CXA SERIES LED ARRAYS

RoHS Compliant Available

CREE

Features:
- Available in ANSI white bins as well as 4-step and 2-step EasyWhite bins at 2700K, 3000K, 3500K, 4000K and 5000K CCT
- 80 and 90 minimum CRI options
- Forward voltage: 37 V
- 85 °C binning and characterization
- 115° viewing angle, uniform chromaticity profile
- Top-side solder connections
- Thermocouple attach point

CXA1507 LEDS

Mfg. Part No.	LED Color	CCT (K)	Lumin. Flux (lm)	Forward Current (mA)	Vf (V)	Stock No.	Price Each 1-9
CXA1507-0000-000N00F20E7	White	3000	759	200	38.4	05W6440	5.94
CXA1507-0000-000N00F40E5	White	3000	815	200	38.4	05W6453	6.28
CXA1507-0000-000N00F40E7	White	3000	815	200	38.4	05W6455	6.17
CXA1507-0000-000N00F40E8	White	3000	815	200	38.4	05W6456	6.84
CXA1507-0000-000N00F427F	White	2700	815	200	38.4	05W6457	7.74
CXA1507-0000-000N00G40E3	White	5000	938	200	38.4	05W6476	6.53
CXA1507-0000-000N00G40E5	White	4000	938	200	38.4	05W6477	7.24
CXA1512 LEDS							
CXA1512-0000-000N00K20E7	White	3000	1359	350	38	44W6064	8.81
CXA1512-0000-000N00K40E7	White	3000	1461	350	38	44W6065	9.59
CXA1512-0000-000N00K40E8	White	2700	1461	350	38	44W6066	10.88
CXA1512-0000-000N00K427F	White	2700	1461	350	38	44W6067	11.66
CXA1512-0000-000N00M20E5	White	4000	1563	350	38	44W6068	10.15
CXA1512-0000-000N00M40E3	White	5000	1682	350	38	44W6069	10.15
CXA1512-0000-000N00M40E5	White	4000	1682	350	38	44W6070	11.52
CXA2520 LEDS							
CXA2520-0000-000N00P40E7	White	3000	2226	550	37	44W6071	16.32
CXA2520-0000-000N00Q20E7	White	3000	2379	550	37	44W6072	17.10
CXA2520-0000-000N00Q20E8	White	2700	2379	550	37	44W6073	18.91
CXA2520-0000-000N00Q227F	White	2700	2379	550	37	44W6074	20.47
CXA2520-0000-000N00Q230F	White	3000	2379	550	37	44W6075	18.39
CXA2520-0000-000N00Q435F	White	3500	2560	550	37	44W6076	20.47
CXA2520-0000-000N00Q450F	White	5000	2560	550	37	44W6077	16.25
CXA2520-0000-000N00R250F	White	5000	2741	550	37	44W6078	17.22
CXA2530 LEDS							
CXA2530-0000-000N00S40E7	White	3000	3372	800	37.9	44W6079	24.13
CXA2530-0000-000N00T20E5	White	4000	3609	800	37.9	44W6080	24.13

➤CONTINUED➤

CREE XLamp® CXA SERIES LED ARRAYS (CONT.)

CXA2530 LEDS

Mfg. Part No.	LED Color	CCT (K)	Lumin. Flux (lm)	Forward Current (mA)	Vf (V)	Stock No.	Price Each 1-9
CXA2530-0000-000N00T20E7	White	3000	3609	800	37.9	44W6081	25.13
CXA2530-0000-000N00T20E8	White	2700	3609	800	37.9	44W6082	30.99
CXA2530-0000-000N00T227F	White	2700	3609	800	37.9	44W6083	31.86
CXA2530-0000-000N00T230F	White	3000	3609	800	37.9	44W6084	28.82
CXA2530-0000-000N00T435F	White	3500	3879	800	37.9	44W6085	33.44
CXA2530-0000-000N00U20E5	White	4000	4150	800	37.9	44W6086	30.42
CXA3050 LEDS							
CXA3050-0000-000N00V427F	Warm White	2700	5122	1400	42	73W9180	34.00
CXA3050-0000-000N00W227F	Warm White	2700	5477	1400	42	73W9181	36.00
CXA3050-0000-000N00W230F	Warm White	3000	5477	1400	42	73W9182	34.00
CXA3050-0000-000N00W235F	Warm White	3500	5477	1400	42	73W9183	34.00
CXA3050-0000-000N00W430F	Warm White	3000	5888	1400	42	73W9184	36.00
CXA3050-0000-000N00W435F	Warm White	3500	5888	1400	42	73W9185	36.00
CXA3050-0000-000N0HW240F	Cool White	4000	5477	1400	42	73W9176	34.00
CXA3050-0000-000N0HW440F	Cool White	4000	5888	1400	42	73W9177	37.79
CXA3050-0000-000N0HW450F	Cool White	5000	5888	1400	42	73W9178	34.00
CXA3050-0000-000N0HX250F	Cool White	5000	6299	1400	42	73W9179	37.39

(208672)

HIGH EFFICIENCY WHITE LEDS

NEW

RoHS Compliant Available

Panasonic

- Small package size: 3.2mm x 0.3mm x 0.6mm
- High power white LED chip with high reflectance materials
- Low luminous degradation: 40,000 hrs, 70%

Applications:
- LED lighting
- Ceiling lights
- Car cabin lighting
- Under shelf lighting

Featuring a compact, 3230 package size, high power LED chip, and high reflectance materials, these LEDs exhibit a high luminous efficiency of 150lm/W. This is the same luminous efficiency as a fluorescent light! With a low forward voltage and low luminous degradation, the LNJ03004xxD1 series is a perfect fit for energy efficient lighting applications that require low power consumption and long lifetime. Also, with a wide operating temperature range of -40°C to 105°C, these LEDs can even be used in automotive applications.

Mfg. Part No.	CCT	Color	Luminous Flux	Forward Current	Forward Voltage	Stock No.	Price Each 1-24
LNJ03004BLD1	2700K	Warm White	24.7lm	60mA	2.95V	54X1674	0.27
LNJ03004GLD1	2700K	Warm White	50lm	75mA	6.2V	54X1677	0.36
LNJ03004BND1	5000K	Cool White	26.5lm	60mA	2.95V	54X1675	0.27
LNJ03004GND1	5000K	Cool White	54lm	75mA	6.2V	54X1678	0.36
LNJ03004BDD1	6500K	Daylight White	26.5lm	60mA	2.95V	54X1673	0.27
LNJ03004GDD1	6500K	Daylight White	54lm	75mA	6.2V	54X1676	0.36

(212265)

CREE XLamp® CXA2011 LED ARRAYS

RoHS Compliant Available

CREE

Features:
- High lumen density in a single, easy-to-use package
- Characterized and binned at 85°C
- Wide viewing angle (120°)
- Screw-down attachment

Applications:
- Surface-mount downlights
- Recessed can lights
- Pendant lights
- A19 replacement bulbs
- Exterior area lights
- Commercial wall pack

The first screw-down LED array to be characterized at 85°C, the **XLamp CXA2011** LED delivers high lumen output in a single, easy-to-use package. The **CXA2011** LED can address applications with a wide range of power (11 - 45W), light output and efficacies. From 800 lumen, 60W A19 replacement bulbs to 2000+ lumen downlights and commercial wall packs, the **CXA2011** LED can simplify design and speed time to market.

ANSI WHITE

Mfg. Part No.	CCT (K)	Luminous Flux (lm)	Forward Current (mA)	Stock No.	Price Each 1-9
CXA2011-0000-000P00G00E7	3000	780	270	39T2968	20.72
CXA2011-0000-000P00H00E7	3000	900	270	39T2979	22.02
CXA2011-0000-000P00J00E3	5000	1040	270	39T2988	22.02
EASYWHITE - 2 STEP					
CXA2011-0000-000P00G030H	3000	780	270	39T2973	25.90
CXA2011-0000-000P00H030H	3000	900	270	39T2981	27.59
CXA2011-0000-000P00H035H	3500	900	270	39T2983	26.81
CXA2011-0000-000P00H035H	3500	900	270	39T2983	26.81
CXA2011-0000-000P00J050H	5000	1040	270	39T2990	27.59
EASYWHITE - 4 STEP					
CXA2011-0000-000P00G027F	2700	780	270	39T2970	22.67
CXA2011-0000-000P00G030F	3000	780	270	39T2972	22.02
CXA2011-0000-000P00H040F	4000	900	270	39T2984	22.67

➤CONTINUED➤

LED EMITTERS & ARRAYS

CREE XLamp® CXA2011 LED ARRAYS (CONT.)

EASYWHITE - 4 STEP

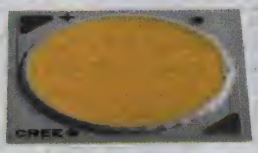
Mfg. Part No.	CCT (K)	Luminous Flux (lm)	Forward Current (mA)	Stock No.	Price Each 1-9
● CXA2011-0000-000P00H040F	4000	900	270	39T2984	22.67
● CXA2011-0000-000P00J050F	5000	1040	270	39T2989	23.31

(196159)

CREE® XLAMP® CXA2540 SERIES LED ARRAYS

RoHS Compliant Available

CREE



Features:
- Available in ANSI white binsas well as 4-step and 2-step
- Forward voltage: 37 V
- Maximum drive current: 2100mA
- 115° viewing angle
- Uniform chromaticity profile
- Top-side solder connections
- Thermocouple attach point
- NEMA SSL-3 2011 standard flux bins
- Mechanical and optical footprint consistent with CXA2520 and CXA2530

The XLamp CXA2540 LED array expands Cree's family of high flux, multi-die integrated arrays, offering high performance in an easy-to-use platform. With XLamp lighting-class reliability, the CXA2540's uniform emitting surface enables both directional and non-directional lighting applications and luminaire and lamp designs. Available in 2.step and 4.step color consistency, and featuring a 19.mm optical source, the CXA2540 brings new levels of flux and efficacy to this form factor.

Mfg. Part No.	LED Color	CCT (K)	I_F (A)	V_F (V)	Lumin. Flux (lm)	Viewing Angle (°)	Stock No.	Price Each 1-9
● CXA2540-0000-000N00U227F	White	2700	1.7	42	3680	115	69W1110	33.67
● CXA2540-0000-000N00U427F	White	2700	1.7	42	3955	115	69W1111	36.26
● CXA2540-0000-000N00U430F	White	3000	1.7	42	3955	115	69W1112	33.67
● CXA2540-0000-000N00V230F	White	3000	1.7	42	4230	115	69W1114	36.26
● CXA2540-0000-000N00U435F	White	3500	1.7	42	3955	115	69W1113	33.67
● CXA2540-0000-000N00V235F	White	3500	1.7	42	4230	115	69W1115	36.26
● CXA2540-0000-000N0HV240F	White	4000	1.7	42	4230	115	69W1106	36.26
● CXA2540-0000-000N0HV440F	White	4000	1.7	42	4545	115	69W1107	32.00
● CXA2540-0000-000N0HV450F	White	5000	1.7	42	4545	115	69W1108	36.26
● CXA2540-0000-000N0HW250F	White	5000	1.7	42	4860	115	69W1109	32.00

(210221)

L2 SERIES STARBOARD LIGHT ENGINES

NEW

RoHS Compliant Available

BIVAR MOVING LIGHT

The L2 Series is optimized for high light output, high CRI, and lighting uniformity, making it ideal for directional lighting applications. It delivers consistent color in a compact, highly efficient package that enables true halogen performance in a thermally constrained design. The products in this series provide the lighting industry with efficient, environmentally friendly LED lighting.

STARBOARD LIGHT ENGINES

Mfg. Part No.	CCT	Color	Luminous Flux	Forward Voltage	Viewing Angle	Stock No.	Price Each 1-9
● L2-PGW1-F	3100K	Warm White	155lm	3.3V	85°	08X0859	12.99
● L2-PGW2-F	3100K	Warm White	155lm	3.3V	35°	08X0861	12.99
● L2-PGW3-F	3100K	Warm White	155lm	3.3V	45°	08X0863	12.99
● L2-TGW1-F	3000K	Warm White	186lm	5.9V	120°	08X0867	29.11
● L2-MLW1-F	3100K	Warm White	201lm	3.3V	125°	08X0845	14.15
● L2-TGN1-F	4000K	Neutral White	216lm	5.9V	120°	08X0865	29.11
● L2-PGN2-F	4100K	Neutral White	186lm	3.3V	35°	08X0855	12.52
● L2-PGN3-F	4100K	Neutral White	186lm	3.3V	45°	08X0857	13.40
● L2-PGN1-F	4100K	Neutral White	186lm	3.3V	85°	08X0853	13.40
● L2-MLN1-F	4100K	Neutral White	241lm	3.3V	125°	08X0843	14.15
● L2-PGC2-F	6500K	Cool White	216lm	3.3V	35°	08X0849	12.68
● L2-PGC3-F	6500K	Cool White	216lm	3.3V	45°	08X0851	12.68
● L2-PGC1-F	6500K	Cool White	216lm	3.3V	85°	08X0847	12.68
● L2-MLC1-F	6500K	Cool White	281lm	3.3V	125°	08X0841	18.65

Forward Current = 1A

ACCESSORIES

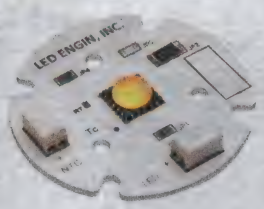
Mfg. Part No.	Accessory Type	For Use With	Stock No.	Price Each 1-9
● L2CON-24	24" Cable	Starboard Light Engines	08X0869	5.83

(212455)

LZC SERIES CONNECTORIZED MCPCB LED STAR BOARD

RoHS Compliant Available

LED ENGIN BRIGHT LIGHT. TINY PACKAGE.



Features:
- Poke-home connectors already mounted on the MCPCB for easy connections
- 1-channel configuration allows for easy driver control for LZC emitters
- Very low Thermal Resistance for MCPCB adds only 0.6°C/W
- Zener Diodes for ESD protection
- On-board thermistor for common constant current source with thermal feedback option
- LuxiGen LZC Lens family (8° / 15° / 23° / 32° / 45°) holders align with the MCPCB cutouts

The LZC-FxxxT1 MCPCB with two 2-pin poke-home connectors provides a convenient method to connect LED Engin's LZC emitters. One 2-pin poke-home connector supports 2 parallel strings of 6 die in series; the second one connects the thermistor.

STAR BOARDS WITH POKE-HOME CONNECTORS AND THERMISTOR

Mfg. Part No.	Color	CCT (K)	Lumin. Intens. (lm)	Vf (V)	If (mA)	Stock No.	Price Each 1-9
● LZC-F0CWT1	Cool White	5500	2100	42	700	82T2645	46.11
● LZC-F0NWT1	Neutral White	4000	1850	42	700	82T2646	43.50
● LZC-F0WWT1	Warm White	3100	1400	42	700	82T2647	43.50

UV AND MULTICOLOR LZC EMITTERS ON STAR BOARDS

Mfg. Part No.	Color	Vf (V)	If (A)	Wavelength (nm)	Rad. or Lumious Flux	Stock No.	Price Each 1-9
● LZC-70U600	UV	49	0.7	365	2.8mW	39T2223	321.30
● LZC-70UA00	UV	44	1	400	6.5W	39T2224	172.89

(202156)

LZP SERIES CONNECTORIZED MCPCB LED STAR BOARD

RoHS Compliant Available

LED ENGIN BRIGHT LIGHT. TINY PACKAGE.

Features:
- 1-channel configuration allows for easy driver control for LZP emitters
- Very low Thermal Resistance for MCPCB adds only 0.1°C/W
- Zener Diodes for ESD protection
- On-board thermistor for common constant current source with thermal feedback option
- LuxiGen LZP Lens family (15° / 23° / 32°) holders align with the MCPCB cutouts

The **LZP-HxxxT1**, MCPCB with three 2-pin poke-home connectors provides a convenient method to connect LED Engin's LZP emitters. One 2 pin poke-home connector supports 4 parallel strings of 6 die in series; a second one is for connecting to the thermistor, and a third one is available for an optional center die for custom emitters.
The **LZP-Dxxxxx**, MCPCB is provided with five channels: four independent channels with strings of six white LED dies in series each and one channel for optional center pad function (not used with LZP-0xxx00 emitter). The MCPCB contains zener diodes for each channel resulting in enhanced ESD protection. It also provides six mounting features that allow for M3 or #4 screws to attach the MCPCB to a heat sink and allow the alignment of a **LLxx-3T11** series lens holder.

STAR BOARDS WITH POKE-HOME CONNECTORS AND THERMISTOR

Mfg. Part No.	Color	CCT (K)	Lumin. Intens. (lm)	Vf (V)	If (mA)	Stock No.	Price Each 1-9
LZP-H0CWT1	Cool White	5500	3600	21	700	82T2648	69.75
LZP-H0NWT1	Neutral White	4100	3300	21	700	82T2649	69.75
LZP-H0WWT1	Warm White	3100	2600	21	700	82T2650	69.75

STANDARD STAR BOARDS WITH ZENER DIODES

● LZP-D0CW00	Cool White	5500	4300	21	700	39T9122	70.13

ACCESSORIES

Mfg. Part No.	Description	Beam Type	Beam Angle	Stock No.	Price Each 1-9
● LLFL-3T11-H	Lens with Holder	Flood	32°	39T9116	13.55
● LLNF-3T11-H	Lens with Holder	Narrow Flood	23°	39T9117	13.55

(202154)

HIGH BRIGHTNESS LED POWER MODULES

RoHS Compliant Available

VISHAY.

Applications:
- Internal lighting in buildings
- Tunnel lights
- Reading lamp, table lamp
- General lighting

Mfg. Part No.	LED Color	CCT (K)	Power (W)	Luminous Flux @ Test (lm)	Stock No.	Price Each 1-9
● VLSL4012A	Daylight White	7000	35	1740	37T9008	90.45
● VLPC0101C6	Cool White	5700	4.4	430	62W1211	13.59
● VLPC0303A1	Cool White	7000	...	810	62W1212	48.97
● VLPC0303A2	Cool White	7000	...	1590	62W1213	43.36
● VLPC0303C6	Cool White	5700	44	3100	62W1215	103.39

CONTINUED

HIGH BRIGHTNESS LED POWER MODULES (CONT.)

Mfg. Part No.	LED Color	CCT (K)	Power (W)	Luminous Flux @ Test (lm)	Stock No.	Price Each 1-9
VLPC0401A2J	Cool White	7000	...	580	62W1216	34.13
VLPC0601A1	Cool White	7000	...	540	62W1217	41.47
VLPC1201A1	Cool White	7000	...	540	62W1218	68.54
VLPC1201A1J	Cool White	7000	...	1080	62W1219	67.55
VLSL3012A2	Cool White	7000	...	2100	62W1234	80.59
VLSL3024A2	Cool White	7000	...	4200	62W1235	126.33
VLSL4012A	Cool White	7000	...	2100	62W1240	82.93
VLSL4024A	Cool White	7000	...	4200	62W1241	128.66
VLSL4036A	Cool White	7000	...	6300	62W1242	175.96
VLPN0101C6	Cool White	4000	4.4	350	62W1221	13.59
VLPN0303A1	Cool White	5000	...	720	62W1222	35.08
VLPN0303C6	Cool White	4000	44	2600	62W1224	103.39
VLSL3112A2	Cool White	4000	...	1600	62W1236	68.54
VLSL3124A2	Cool White	4000	...	3200	62W1237	105.34
VLSL4112A	White	4000	...	1600	62W1243	72.43
VLSL4124A	Cool White	4000	...	3200	62W1244	107.67
VLSL4136A	Cool White	4000	...	4800	62W1245	144.47
VLPW0101C6	Warm White	2870	4.4	330	62W1226	13.59
VLPW0303A1	Warm White	3500	...	660	62W1227	35.08
VLPW0303A2	Warm White	3500	...	840	62W1228	35.49
VLPW0303C6	Warm White	3000	44	2500	62W1230	103.39
VLSL3212A2	Warm White	3500	...	1500	62W1238	68.54
VLSL3224A2	Warm White	3500	...	3000	62W1239	105.34
VLSL4212A	Warm White	3500	...	1500	62W1246	72.43
VLSL4224A	Warm White	3500	...	3000	62W1247	107.67
VLSL4236A	Warm White	3500	...	4500	62W1248	144.47

(210197)

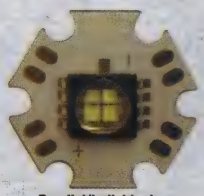
STAR EMITTER BOARDS WITH CREE's MCE LEDs

RoHS Compliant Available

multicomp

Features:
- Available with EasyWhite bins
- ANSI-compatible neutral & warm white chromaticity bins
- Individually addressable LEDs
- Low thermal resistance: 3 ##UndefTag-786##C/W
- Electrically-isolated thermal path

Series



Parallel/Individual

The **MCE** LED is a lighting-class, multi-chip LED that provides high lumen output in a small footprint package. The **MCE** LED is now available with EasyWhite™ bins, which improve LED-to-LED color consistency and reduce manufacturing complexity. Compared to discrete LEDs, **MCE** LEDs reduce the distance between LED die, creating a small optical source for excellent optical control and efficient color mixing. To simplify evaluation and integration the **MCE** LEDs have been placed on MCPCBs.

SERIES

Mfr. Part No.	Color	Lumin. Flux (lm)	Vf (V)	View. Angle (°)	Stock No.	Price Each 1-24
MCE4WT-A2-0000-00JF7-STARSR	Warm White	320	3.2	110	34R6385	31.51
MCE4WT-A2-0000-00KE4-STARSR	Neutral White	370	3.2	110	34R6388	25.60
PARALLEL						
MCE4WT-A2-0000-00K02-STARP	Cool White	370	3.2	110	34R6390	26.89
MCE4WT-A2-0000-00KE4-STARP	Neutral White	370	3.2	110	34R6387	28.06
INDIVIDUAL						
MCE4WT-A2-0000-00M02-STARIND	Cool White	430	3.2	110	34R6392	30.67

(164428)

EMITTER BOARDS WITH CREE's XPE LEDs

RoHS Compliant Available

multicomp

Features:
- Industry-leading flux output in all whites and colors
- Unlimited floor life at <= 30 degrees C/85% RH
- Electrically-isolated thermal path

Round - Single LED

Star

The **XPE** LED combines the proven lighting-class performance and reliability of the XRE LED in a package with 80% smaller footprint. To simplify evaluation and integration the **XPE** LEDs have been placed on MCPCBs.

➤ CONTINUED ➤

EMITTER BOARDS WITH CREE's XPE LEDs (CONT.)

STAR - SINGLE LED

Mfg. Part No.	Color	Lumin. Flux (lm)	Vf (V)	Stock No.	Price Each 1-49
XPEWHT-L1-0000-009E7-STAR	Warm White	80.6	3.2	34R6414	10.27
XPEWHT-L1-0000-00D02-STAR	Cool White	107	3.2	34R6408	11.31
XPEWHT-L1-0000-00E02-STAR	Cool White	114	3.2	34R6410	13.64
ROUND - SINGLE LED					
XPEWHT-L1-0000-009E7-LBB2	Warm White	80.6	3.2	34R6413	10.69
XPEWHT-L1-0000-00C02-LBB2	Cool White	100	3.2	34R6405	10.62
XPEWHT-L1-0000-00E02-LBB2	Cool White	114	3.2	34R6409	12.88

(164445)

STAR EMITTER BOARDS WITH CREE's XRC LEDs

RoHS Compliant Available

multicomp

The **XRC** LED gives lighting designers the flexibility and performance to create the next generation of LED lighting products. **XRC** LEDs feature electrically neutral thermal path, low thermal resistance and support for a wide range of drive currents. To simplify evaluation and integration the **XRC** LEDs have been placed on a STAR MCPCB.

Mfg. Part No.	Color	Lumin. Flux (lm)	Vf (V)	View Angle (°)	Stock No.	Price Each 1-49
XRCAMB-L1-0000-00M01-STAR	Amber	39.8	2.2	90	34R6417	7.06
XRCRED-L1-0000-00M01-STAR	Red	39.8	2.2	90	34R6418	8.79

(164448)

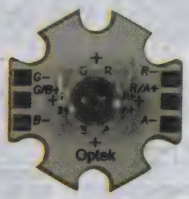
OPTIMAL IV 4-1 WATT LED ASSEMBLY

RoHS Compliant Available

TT electronics

OPTEK Technology

Features:
- Viewing Angle = 60°
- Designed for 4 1-watt chips in recessed cavity with an optical grade 5mm diameter lens
- Exceptional thermal resistance



The **OV4Z** Series devices are exceptionally bright and ideally suited for applications including large signage; interior, exterior and landscape architectural lighting; recreational areas such as pools, spas and boats; and specialty lighting including vending machines, display cases and stage lighting.

MONO-COLOR LED

Mfg. Part No.	LED Color	Forward Voltage @ 700 mA (V)	Luminous Flux @ 700 mA (lm)	Wavelength (nm)	Stock No.	Price Each 1-99
OV4ZGGGG	Green	14.6	272	535	45P8000	12.93

(147091)

HIGH POWER EMITTERS ON MCPCBs

RoHS Compliant Available

VCC

Applications:
- Effect and accent lighting
- Architectural lighting
- Room lighting
- Speciality lighting

Features:
- High energy efficiency
- Long operating life

Mfg. Part No.	Color	Power (W)	Luminous Flux (lm)	Viewing Angle (°)	Stock No.	Price Each 1-9
VAOL-SW1XAX-SA	White	1	90	130	27R0193	7.56
VAOL-SX1XAX-SA	Warm White	1	80	130	27R0194	7.20
VAOL-SR1XAX-SA	Red	1	50	120	27R0191	6.08
VAOL-SO1XAX-SA	Red Orange	1	55	120	27R0190	7.20
VAOL-SA1XAX-SA	Amber	1	50	120	27R0188	6.08
VAOL-ST1XAX-SA	Green	1	90	150	27R0192	6.08
VAOL-SB1XAX-SA	Blue	1	35	150	27R0189	7.56

(163061)

LED EMITTERS & ARRAYS

CREE EASYWHITE XLamp® MP-L LEDs

RoHS Compliant Available

CREE

Features:
- EasyWhite™ color temperatures
- High lumen density
- Minimum 80 CRI (2700K, 3000K)
- Electrically isolated thermal path

Applications:
- Commercial/residential directional lighting
- LED retrofit bulbs
- General indoor/outdoor illumination

The **XLamp MPL EasyWhite™ LED** offers the performance, color consistency and lumen density to displace conventional light sources, in a breakthrough 12mm x 13mm package design. Combining Cree EasyWhite™ technology with up to 1500 lumens of light at 250mA, the MPL EasyWhite™ simplifies system design and increases color consistency enabling new applications previously achievable only through the use of multiple LED components. The MPL EasyWhite™ LED is the perfect choice for lighting applications where high luminous flux output is required from a single, small point source.

Mfr. Part No.	CCT (K)	CRI	Lumin. Flux (lm)	IF (mA)	VF (V)	Stock No.	Price Each 1-9
● MPLEZW-A1-R100-0000B027H	2700	80	700	250	26.5	**79R7491**	27.09
● MPLEZW-A1-0000-0000B027F	2700	80	700	150	25	**63R1260**	24.56
● MPLEZW-A1-R100-0000B027F	2700	80	700	150	25	**63R1253**	24.56
● MPLEZW-A1-R100-0000C030H	3000	80	800	250	26.5	**79R7494**	30.17
● MPLEZW-A1-0000-0000B030F	3000	80	700	150	25	**63R1261**	24.56
● MPLEZW-A1-R100-0000B030F	3000	80	700	150	25	**63R1254**	24.56
● MPLEZW-A1-R100-0000B035F	3500	77	800	150	25	**63R1255**	19.36
● MPLEZW-A1-R100-0000B035F	3500	77	700	150	25	**63R6141**	24.56
● MPLEZW-A1-R100-0000C035F	3500	77	800	150	25	**63R1257**	27.49
● MPLEZW-A1-R100-0000C040F	4000	77	800	150	25	**63R1258**	32.26
● MPLEZW-A1-R100-0000D040F	4000	77	900	150	25	**63R1259**	24.56

(166284)

LED MODULE STRIPS

RoHS Compliant Available

TT electronics OPTEK Technology

Applications:
- Channel Letters & Signs
- Landscape lighting
- Decorative interior/exterior lighting
- Special effects stage lighting
- Large Area Back-lighting

Features:
- Low Power Consumption
- Super Flux LED
- Waterproof (IP67)

3 LED MODULE STRIPS (30 modules / strip)

Mfg. Part No.	Color	Wavelength (nm) or CCT (K)	Illumination (lux@0.5m) Typ.	Stock No.	Price Each 1-24
● OVM12F3R7	Red	623	20	**19P2474**	2.94
● OVM12F3Y7	Yellow	590	18	**19P2476**	2.98
● OVM12F3G7	Green	525	14	**19P2473**	3.27
● OVM12F3B7	Blue	470	6	**19P2472**	3.27
● OVM12F3W7	White	7000K	16	**19P2475**	3.65

(147092)

VISIBLE LED ASSEMBLIES

RoHS Compliant Available

TT electronics OPTEK Technology

Features:
- Available in bar, ring, flood, or spot styles
- Mono-color per strip (Blue, Green, Red, Yellow, White)*
- Various component beam angle options
- Power connected to either end on light bars
- Available with or without lens
- Universal connector (Tyco 2-292173-2 mates with 173977-2)

OPA729WD

OPA729 - 10 Watt Light Bar on Heat Spreader

Mfg. Part No.	Color	# of LEDs	V_F (V)	Viewing Angle (°)	Flux (lm)	CCT	Stock No.	Price Each 1-99
● OPA729W	White	10	18	120	480	7000K	**30M5148**	36.96
OPA739 - 3 Watt Light Bar on Heat Spreader								
● OPA739W	White	3	2.5	120	144	7000K	**30M5158**	12.36

*Other colors available. Go online or call.
(94518)

FLEXIBLE LED LIGHT STRIP

RoHS Compliant Available

TT electronics OPTEK Technology

Features:
- High brightness LEDs mounted on flexible circuit board
- Energy saving lighting solution
- Low power consumption
- Operating life longer than fluorescent and incandescent light sources

Applications:
- Commercial and residential decoration
- Under-counter lighting
- Media illumination
- Large area backlighting
- Small to medium channel letters
- Point-of-sale displays
- Neon replacement

This LED Light Strip is a flexible and scalable lighting solution using 30 high brightness LEDs per strip to supply illumination for residential, commercial, and industrial applications. Up to 16 feet (5 meters) can be operated with a single 12V power supply. Dual-sided tape provides easy installation in most indoor applications and allows many different configurations.

Mfg. Part No.	Color	Wavelength (nm) or CCT (K)	Illumination (lux@0.5m) Typ.	Stock No.	Price Each 1-9
● OVQ12S30R7	Red	625	32	**19P2484**	12.01
● OVQ12S30Y7	Yellow	590	32	**19P2487**	12.16
● OVQ12S30G7	Green	525	50	**19P2483**	13.94
● OVQ12S30B7	Blue	470	20	**19P2482**	13.26
● OVQ12S30W7	White	5500K	68	**19P2486**	13.95
● OVQ12S30WW7	Warm White	3300K	60	**19P2485**	14.55

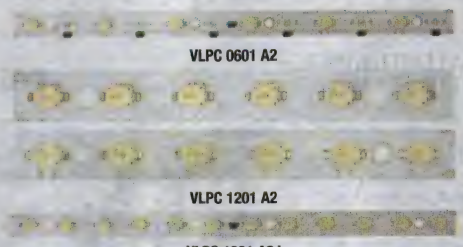
(147093)

HIGH BRIGHTNESS LED POWER MODULES

RoHS Compliant Available

VISHAY.

Applications:
- Automotive internal lighting
- Internal lighting in buildings
- Tunnel lights
- Reading lamp, table lamp
- General lighting application



Features:
- Metal core PCB: Al > 1 thickness
- Single side/single layer PCB
- Shiny white surface
- 6 or 12 LED's minimum 82 lm at 350 mA each
- Prepared to devide in half strips also, by cutting
- Conductive top layer: Cu (min. 18 um)
- Isolation layer prepreg (100 um)
- ESD withstand voltage: up to 2 kV according to JESD22-A114-B
- Color binning
- LM80 certified LEDs

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● VLPC0601A2	6 LEDs in a row on a 240 mm x 14 mm PCB that provides 870 lm	**46T5773**	43.68
● VLPC1201A2	12 LEDs in a row on a 240 mm x 14 mm PCB that provides 1740 lm	**46T5774**	67.19
● VLPC1201A2J	Half a VLPC1201A2J, resulting in two modules each measuring 120 mm x 14 mm with 6 LEDs and luminous flux of 870 lm	**46T5775**	67.25

(196165)

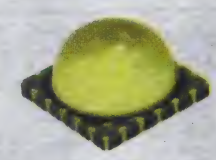
LZC HIGH LUMINOUS EFFICACY LED ARRAYS AND LENSES

RoHS Compliant Available

LED ENGIN BRIGHT LIGHT. TINY PACKAGE.

Features:
- Ultra-small foot print - 9.0mm x 9.0mm
- Surface mount ceramic package with integrated glass lens
- Very low Thermal Resistance
- New industry standard for Lumen Maintenance (>90% at 100,000 Hours)

Applications:
- Stage and Studio lighting
- Architectural lighting



LZC EMITTER

Mfg. Part No.	Color	IF (A)	Lumin. Flux (lm)	Wavelength (nm) or CCT (K)	Stock No.	Price Each 1-9
● LZC-00UA00-U7	Ultra Violet	0.7	6500 mW	400 nm	**48T1370**	191.25
● LZC-00MA00	Red/Amber Green/Blue	1	320/265 435/120	625/590 523/462	**48T1366**	40.75
● LZC-00MC00	Red/Green Blue	1	430/560 155	625/523 462	**48T1367**	40.75
LZC EMITTER ON 4 CHANNEL 4x3 STAR MCPCB						
● LZC-70NW00-0040	Neutral White	1	2300	4000	**93T1315**	34.50
● LZC-70WW00-0030	Warm White	1	1800	3000	**93T1316**	34.50

CONTINUED

LZC HIGH LUMINOUS EFFICACY LED ARRAYS AND LENSES (CONT.)

LZC EMITTER ON 4 CHANNEL 4x3 STAR MCPCB

Mfg. Part No.	Color	IF (A)	Lumin. Flux (lm)	Wavelength (nm) or CCT (K)	Stock No.	Price Each 1-9
LZC-80MC00	Red/Green Blue	1	430/560 155	625/523 462	48T1376	45.64
LZC-A3MA00	Red/Ambe Green/Blue	1	320/265 435/120	625/590 523/462	83T7625	39.94

LED LENSES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
LLNF-3T08-H	Narrow Flood Beam Lens	15R7411	5.80

(163075)

LED SIGNAGE MODULES

RoHS Compliant Available

wamco

Applications:
- Front-lit or back-lit channel letter signage
- Indoor or outdoor decorative lighting

WL BFL425

WL BFL445 WL BFL645

Features:
- Solid-state reliability with long operating life - reducing maintenance costs
- Low power consumption - providing significant energy savings
- Low voltage (12-24VDC) operation - providing for added safety
- Water resistant (IP67 Rated) for outdoor applications
- Easy installation
- 3-5 year warranty on applicable models

A series of LED modules available in a variety of sizes and configurations to support lighting of all sizes and styles of channel letters and single and double-sided box signs.

COLOR: WHITE; CCT RANGE: 8200K-15000K

Mfg. Part No.	Supply Voltage (V)	Power Consump.	Lumin. Flux (lm)	Dimensions L x W x H (mm)	Stock No.	Price Each 1-24
WL-BFL125-DW12	12	240mW	13	23x8x7.5	86T5287	3.62
DOUBLE SIDED LIGHTING - COLOR: WHITE; CCT RANGE 8200K-15000K						
WL-BFL645-DW24	24	2.64W	156	270x15x7	86T5291	29.55

(202080)

REFLECTORS

RoHS Compliant Available

LEDiL

BRIDGELUX BXRA-C0800/1200/2000 SERIES

Mfg. Part No.	Beam Type	Beam Angle	Lens Dia. (mm)	Lens Hgt. (mm)	Stock No.	Price Each 1-9
C11506_BROOKE-S	Spot	24°	19.2	19.5	83T0785	6.85
C11507_BROOKE-M	Medium	32°	19.2	19.5	83T0786	7.33
C11508_BROOKE-W	Wide	50°	19.2	19.5	83T0787	6.40
CN12159_LENA-S-DL	Spot	11°	...	87.8	83T0622	32.62
CN12160_LENA-W-DL	Wide	46°	...	87.8	83T0623	32.62
CN12164_LENA-M	Medium	19°	19.7	86.2	83T0627	26.98
CN12168_LENA-M-DL	Medium	20°	...	87.8	83T0631	32.62
CREE MT-G AND MT-G2 SERIES						
C11862_MINNIE-W	Wide	18°	32.4	14.75	83T0841	4.20
C12095_MINNIE-M-MTG	Medium	26°	12.8	14.75	86T5843	2.22
C12097_MINNIE-WWW-MTG	Wide	74°	12.8	14.75	86T5844	2.39
CA12239_MINNIE-M-MTG-ASSY	Medium	26°	...	15.8	86T5840	2.67
CA12240_MINNIE-WWW-MTG-ASSY	Wide	74°	...	15.8	86T5841	2.67
CREE MP-L SERIES						
CA11475_TYRA2-S	Spot	10°	...	25.2	83T0439	5.17
CA11476_TYRA2-M	Medium	16°	...	25.2	83T0440	5.17
CA11477_TYRA2-W	Wide	26°	...	25.2	83T0441	5.17

➤CONTINUED➤

REFLECTORS (CONT.)

CREE MC-E SERIES

Mfg. Part No.	Beam Type	Beam Angle	Lens Dia. (mm)	Lens Hgt. (mm)	Stock No.	Price Each 1-9
CA10716_BOOM-S	Spot	10°	...	13.54	83T0376	3.89
CA10928_BOOM-M	Medium	19°	...	13.54	83T0383	3.62
CA10929_BOOM-W	Wide	24°	...	13.54	83T0384	3.62
CREE CXA20 SERIES						
C12083_BROOKE-SCR-M	Medium	23°	17.9	20.15	83T0852	7.33
C12084_BROOKE-SCR-W	Wide	42°	17.9	20.15	83T0853	7.33
C12461_BARBARA-WW	Wide	60°	19.3	44.7	83T0883	8.06
LUMILEDS LUXEON M SERIES						
C11862_MINNIE-W	Medium	18°	32.4	14.75	83T0841	4.20
C12095_MINNIE-M-MTG	Wide	26°	12.8	14.75	86T5843	2.22
C12097_MINNIE-WWW-MTG	Wide	74°	12.8	14.75	86T5844	2.39
LUMILEDS LUMINUS SST-50 AND SST-90 SERIES						
C10977_LILY-S	Spot	10°	14.2	13.6	83T0756	3.89
C10978_LILY-M	Medium	15°	14.2	13.6	83T0757	3.62
C10979_LILY-W	Wide	22.5°	14.2	13.6	83T0758	3.62

(203530)

LENSES FOR CREE LEDs

RoHS Compliant Available

LEDiL

LENS

Mfg. Part No.	Lens Shape	Lens Dia.	Lens Color	Stock No.	Price Each 1-9
FCN10810_LC1-D	Round	21.6mm	Transparent	83T1061	3.83
CA11264_HEIDI-D	Round	21.6mm	Transparent	83T0413	4.67
CA11265_HEIDI-M	Round	21.6mm	Transparent	83T0414	4.67
FCN10807_LC1-M	Round	21.6mm	White	83T1058	3.83
CA12064_EMILY-M	Round	26mm	Transparent	83T0510	4.67
CA11388_EMILY-M	Round	26mm	Transparent	83T0431	4.67
C10685_EVA-M	Round	35mm	...	83T0719	4.67
C10892_GT3-M	Round	35mm	...	83T0738	6.11
CA11266_HEIDI-O	Round	21.6mm	Transparent	83T0415	4.67
CA11389_EMILY-O	Round	26mm	Transparent	83T0432	4.67
CA11267_HEIDI-O-90	Round	21.6mm	Transparent	83T0416	4.67
CA11390_EMILY-O-90	Round	26mm	Transparent	83T0433	4.67
CA11248_STRADA-S	Rectangular	...	Transparent	83T0410	4.51
C11249_STRADA-S	Rectangular	...	Transparent	83T0773	4.32
FCN10808_LC1-RS	Round	21.6mm	White	83T1059	3.83
CA11245_STRADA-DN	Rectangular	...	Transparent	83T0409	4.85
C11242_STRADA-DW	Rectangular	...	Transparent	83T0771	4.32
C11244_STRADA-DN	Rectangular	...	Transparent	83T0772	4.32
CA11416_STRADA-T-DN	Rectangular	...	Transparent	83T0435	4.51
CA11426_STRADA-T-DW	Rectangular	...	Transparent	83T0437	4.51
C10757_STRADA-DW	Rectangular	...	Transparent	83T0730	4.32
CA11256_STRADA-DW	Rectangular	...	Transparent	83T0412	4.51
C11415_STRADA-T-DN	Rectangular	...	Transparent	83T0781	4.32
C11425_STRADA-T-DW	Rectangular	...	Transparent	83T0783	4.32
CA10823_STRADA-A	Rectangular	...	...	79T9247	4.51
CA10927_STRADA-B	Rectangular	...	...	83T0382	4.51
CA11934_EMILY-W	Round	26mm	Transparent	83T0483	4.67
C10686_EVA-W	Round	35mm	...	83T0720	4.67
C10909_EVA-WW	Round	35mm	...	83T0741	4.67
CA11890_STRADA-SQ-T-DN	Square	...	Transparent	83T0477	5.42
CA11892_STRADA-SQ-T-DW	Square	...	Transparent	83T0478	5.42
C11889_STRADA-SQ-T-DN	Square	...	Transparent	83T0842	4.67
C11891_STRADA-SQ-T-DW	Square	...	Transparent	83T0843	4.67
C11962_STRADA-SQ-T-DW	Square	...	Transparent	83T0850	4.67
C10684_EVA-D	Round	35mm	...	83T0718	4.67
FCN10809_LC1-REC	Round	21.6mm	Transparent	83T1060	3.83
CA11348_STRADA-C	Rectangular	...	Transparent	83T0418	4.51
C11277_STRADA-C	Rectangular	...	Transparent	83T0776	4.32
CA10950_STRADA-B2	Rectangular	...	Transparent	83T0386	4.51
CA11253_STRADA-C2	Rectangular	...	Transparent	83T0411	4.51
C10949_STRADA-B2	Rectangular	...	Transparent	83T0749	4.32
C11252_STRADA-C2	Rectangular	...	Transparent	83T0774	4.32
C10527_FLARE-C-D	Rectangular	...	Transparent	83T0713	4.70
C10966_STRADA-C	Rectangular	...	Transparent	83T0750	4.32
C11185_STRADA-DN	Rectangular	...	Transparent	83T0765	4.32
FA11948_JULIA-A-TAPE	Round	18.86mm	Transparent	86T5845	2.51

➤CONTINUED➤

LENSES FOR CREE LEDs (CONT.)

Mfg. Part No.	Lens Shape	Lens Dia.	Lens Color	Stock No.	Price Each 1-9
● F11947_JULIA-A	Round	18.86mm	Transparent	86T5847	2.69
● C12226_STRADA-FW	Rectangular	...	Transparent	83T0860	4.32
● CA12238_STRADA-FW-TAPE	Rectangular	...	Transparent	86T5838	2.66
● CA12087_STRADA-FW-TAPE	Rectangular	...	Transparent	86T5831	2.66
● C12086_STRADA-FW	Rectangular	...	Transparent	86T5842	4.32
● CA11483_LXP2-M	...	...	...	83T0444	4.32
LENS WITH HOLDER					
● CA11172_TINA2-D-BLK	Round	16.1mm	Transparent	83T0397	3.11
● FA10646_TINA-D	Round	16.1mm	Transparent	83T0948	4.67
● CA11482_LXP2-D	Round	21.6mm	Black	83T0443	4.32
● FA10697_LN2-M	Oval	21.6mm	...	78R8194	4.67
● FP11075_LISA2-M-CLIP	Round	9.9mm	Transparent	83T1121	4.67
● FP10995_LISA2-M-PIN	Round	9.9mm	Transparent	83T1105	4.67
● CA11174_TINA2-M-BLK	Round	16.1mm	Black	83T0399	3.11
● FA10647_TINA-M	Round	16.1mm	White	83T0949	4.67
● FA10645_TINA-M	Round	16.1mm	...	83T0947	4.67
● CN10953_IRIS-M	Round	38mm	Black	83T0602	11.75
● CA11355_LAURA-M	Square	21.6mm	...	83T0420	4.67
● FA10339_NIS83-MX-M	Square	...	...	83T0940	4.67
● FA10340_NIS83-MX-O	Square	...	...	83T0941	4.67
● FP11125_LISA2-O-PIN	Round	9.9mm	Transparent	83T1139	5.02
● FA11201_TINA-O	Round	16.1mm	Transparent	83T0982	4.67
● CN11470_IRIS-O	Round	38mm	Black	83T0603	12.58
● FCN11104_LC1-O-90	Round	21.6mm	Transparent	83T1065	3.83
● FP11055_LISA2-RS-PIN	Round	9.9mm	Transparent	83T1115	5.02
● CP10641_LISA-SS	Round	10.5mm	...	83T0651	4.67
● CA11171_TINA2-RS-BLK	Round	16.1mm	Black	83T0396	3.11
● FA10888_TINA-RS	Round	16.1mm	Transparent	83T0960	4.67
● FA10887_TINA-RS	Round	16.1mm	...	83T0959	4.67
● FCN12076_IRIS-SCREW	Round	38mm	Black	83T1082	12.58
● FA11908_CXM_SS	Square	...	Transparent	55T6290	3.82
● CA11365_LAURA-O	Square	...	...	83T0425	5.02
● CA11353_LAURA-RS	Square	...	...	83T0419	4.67
● FA10696_LN2-RS	Oval	21.6mm	...	78R8192	4.67
● CA10609_NIS83-MX-2-SS	...	...	...	83T0373	5.02
● CA10610_NIS83-MX-2-RS	...	...	...	83T0374	4.67
● FA10698_LN2-REC	Oval	21.6mm	...	78R8196	4.67
● FP11076_LISA2-W-CLIP	Round	9.9mm	Black	83T1122	4.67
● FP10996_LISA2-W-PIN	Round	9.9mm	Transparent	83T1106	4.67
● CA11175_TINA2-W-BLK	Round	16.1mm	Black	83T0400	3.11
● CA11176_TINA2-WW-BLK	Round	16.1mm	Black	83T0401	3.11
● FA10839_TINA-W	Round	16.1mm	Transparent	83T0957	4.67
● FA11904_TINA3-WWW	Round	16.1mm	Transparent	83T1010	4.14
● FA10901_TINA-WW	Round	16.1mm	White	83T0961	4.38
● FA11902_TINA3-W	Round	16.1mm	White	83T1008	4.14
● FA10838_TINA-W	Round	16.1mm	...	83T0956	4.67
● FA11045_LC1-W	Round	21.6mm	...	83T0965	4.67
● FA10344_NIS83-MX-W	Square	...	...	83T0943	4.67
● FA10903_NIS83-MX-WW	Square	...	...	83T0962	4.67
● CA11766_LAURA-WW	Square	...	...	83T0461	4.67
● FA10644_TINA-D	Round	16.1mm	...	83T0946	4.67
● FA11200_TINA-O	Round	16.1mm	...	83T0981	4.67
● FA10695_LN2-D	Oval	21.6mm	...	78R8190	5.02
● CA11360_LAURA-D	Square	21.6mm	...	83T0423	5.02
● CA10608_NIS83-MX-2-D	Square	mm	...	83T0372	4.67
LENS WITH HOLDER AND POSITION PINS					
● FP10997_LISA2-WW-PIN	Round	9.9mm	...	83T1107	4.67
● FP11429_LISA2-WWW-PIN	Round	9.9mm	...	83T1142	5.02
LENS WITH HOLDER AND SNAP HOOKS					
● FP11077_LISA2-WW-CLIP	Round	9.9mm	...	83T1123	4.67
● FP11431_LISA2-WWW-CLIP	Round	9.9mm	...	83T1144	4.67
LENS WITHOUT HOLDER					
● C10373_NIS83-MX-7-M	Round	38mm	...	83T0706	7.39
● C10633_NIS83-MX-7-MD	Round	38mm	...	83T0717	7.39
● C10367_PLATINUMROCKET3M	Round	50mm	...	83T0705	7.39
● FP11121_LISA2-O-CLIP	Round	9.9mm	Transparent	83T1135	4.67
● FP11085_LISA2-RS-CLIP	Round	9.9mm	Transparent	83T1131	4.67
● CA11387_EMILY-SS	Round	26mm	Transparent	83T0430	4.67
● C10366_PLATINUMROCKET3SS	Round	50mm	...	83T0704	7.39
● C10814_NIS83-MX-5-W	Round	35.5mm	...	83T0734	6.11
● C10585_NIS83-MX-7-W	Round	38mm	...	83T0715	7.39
● C10365_PLATINUMROCKET3W	Round	50mm	...	83T0703	7.39
● C10818_STRADA-A	Rectangular	...	Transparent	83T0735	4.32

➤ CONTINUED ➤

LENSES FOR CREE LEDs (CONT.)

Mfg. Part No.	Lens Shape	Lens Dia.	Lens Color	Stock No.	Price Each 1-9
LENS WITH POSITION PINS					
C13095_MELODY-3-M	Round	50.6mm	Transparent	08X5651	6.58
C13236_SANDRA-12-S	Round	67mm	Transparent	08X5661	8.73
C13226_DOROTHY-4-A	Round	50.6mm	Transparent	08X5656	6.58
C13055_EMMA-360	Square	...	Transparent	08X5650	0.80
LENS WITH TAPE					
CA12530_HEIDI-D	Round	21.6mm	Transparent	08X5502	4.67
● CA10932_FLARE-B	Rectangular	...	Transparent	83T0385	6.14
MULTI-LED					
● C11602_SATU-M	Round	21.8mm	Transparent	83T0795	4.45
● C10922_GT4-M	Round	35mm	Transparent	83T0744	6.11
● C10755_CUTE-3-M	Round	35mm	Transparent	83T0728	6.90
● C10472_RER-5-M	Round	35.6mm	Transparent	83T0712	6.11
● F10390_PENTA-5-M	Round	35.6mm	Transparent	83T1177	6.11
● C11711_ANNA-40-3-M	Round	40mm	Transparent	83T0810	6.90
● C11193_TUIJA-3-M	Round	50mm	Transparent	83T0768	7.39
● C10921_GT4-S	Round	35mm	Transparent	83T0743	6.11
● C10754_CUTE-3-SS	Round	35mm	Transparent	83T0727	6.90
● C10891_GT3-S	Round	35mm	Transparent	83T0737	6.11
● C11192_TUIJA-3-SS	Round	50mm	Transparent	83T0767	7.39
● C11544_SATU-W	Round	21.8mm	Transparent	83T0791	4.45
● C10923_GT4-W	Round	35mm	Transparent	83T0745	6.11
● C10975_GT4-WW	Round	35mm	Transparent	83T0755	6.11
● C10756_CUTE-3-W	Round	35mm	Transparent	83T0729	6.90
● C10893_GT3-W	Round	35mm	Transparent	83T0739	6.11
● C11712_ANNA-40-3-W	Round	40mm	Transparent	83T0811	6.90
● C11191_TUIJA-3-W	Round	50mm	Transparent	83T0766	7.39
● C12362_STRADA-2X2-DWC	Square	...	Transparent	83T0877	5.12
● C12361_HB-2X2	Square	...	Transparent	83T0876	4.21
● C12345_HB-5X1	Rectangular	...	Transparent	83T0871	10.27

(203491)

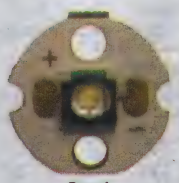
EMITTER BOARDS WITH CREE's XPC LEDs

RoHS Compliant Available

multicomp

Features:
- Unlimited floor life at <= 30 degrees C/85% RH
- Electrically-isolated thermal path

The **XPC** LED combines the proven lighting-class performance and reliability of the XRE LED in a package with 80% smaller footprint. To simplify evaluation and integration the **XPC** LEDs have been placed on MCPCBs.



Round

Mfg. Part No.	Color	Luminous Flux (lm)	Vf (V)	View. Angle (°)	Stock No.	Price Each 1-49
● XPCWHT-L1-0000-007E7-LBB2	Warm White	67.2	3.4	110	34R6395	8.48
● XPCWHT-L1-0000-008E4-LBB2	Neutral White	73.9	3.4	110	34R6397	7.77

(164444)

LENSES FOR OSRAM LEDs

RoHS Compliant Available

LEDiL

DIAMOND DRAGON SERIES

Mfg. Part No.	Beam Type	# of LEDs	Beam Angle	Lens Dia. (mm)	Stock No.	Price Each 1-9
● FCN10795_LD1-M	Medium	1	24°	21.6	83T1050	3.83
● FCN10797_LD1-REC	Rect	1	40° x 24°	21.6	83T1052	3.83
● FCN10798_LD1-D	Diffuser	1	14°	21.6	83T1053	3.83
GOLDEN DRAGON + SERIES						
● C10268_TITANUM-3-S	Spot	3	7°	50	83T0699	7.39
● C10365_PLATINUMROCKET3W	Wide	3	23°	50	83T0703	7.39
● C10366_PLATINUMROCKET3SS	Spot	3	7°	50	83T0704	7.39
● C10367_PLATINUMROCKET3M	Medium	3	10°	50	83T0705	7.39
● FA10642_TINA-D	Diffused	1	6°	16.1	83T0944	4.67
● C10449_TINA-W	Wide	1	36°/ 37°	16	83T0711	3.83
● C10472_RER-5-M	Medium	5	14.5°	35.6	83T0712	6.11
● C10758_STRADA-A	Street	1	92° x 158°	...	83T0731	4.32
● C10908_STRADA-B	Street	1	106° x 54°	...	83T0740	4.32

➤ CONTINUED ➤

LENSES FOR OSRAM LEDs (CONT.)

GOLDEN DRAGON + SERIES

Mfg. Part No.	Beam Type	# of LEDs	Beam Angle	Lens Dia. (mm)	Stock No.	Price Each 1-9
C10915_STRADA-C	Street	1	146°	...	83T0742	4.12
CA10820_STRADA-A	Street	1	...	...	83T0377	4.51
PLATINUM DRAGON SERIES						
C10710_CUTE-3-S	Spot	3	5.6°	35	83T0724	6.90
C10711_CUTE-3-M	Medium	3	14°	35	83T0725	6.90
C10712_CUTE-3-W	Wide	3	16°	35	83T0726	6.90
OSLON SSL 80/150 AND SQUARE SERIES						
C10754_CUTE-3-SS	Spot	3	5°	35	83T0727	6.90
C10755_CUTE-3-M	Medium	3	25°	35	83T0728	6.90
C10756_CUTE-3-W	Wide	3	40°	35	83T0729	6.90
C10891_GT3-S	Spot	3	14°	35	83T0737	6.11
C10892_GT3-M	Medium	3	14°	35	83T0738	6.11
C10893_GT3-W	Wide	3	40°	35	83T0739	6.11
CA11264_HEIDI-D	Diffuser	1	12°	21.6	83T0413	4.67
CA11266_HEIDI-O	Oval	1	14° x 47°	21.6	83T0415	4.67
FCN12076_IRIS-SCREW	Spot	1	4°	38	83T1082	12.58
FP11001_LISA2-M-PIN	Medium	1	12°	9.9	83T1111	5.02
FP11002_LISA2-W-PIN	Wide	1	16°	9.9	83T1112	4.67
FP11047_LISA2-RS-PIN	Spot	1	8°	9.9	83T1114	4.67
OSLON SSL 80/150 SERIES						
C10921_GT4-S	Spot	4	18°	35	83T0743	6.11
C10922_GT4-M	Medium	4	27°	35	83T0744	6.11
C10923_GT4-W	Wide	4	37°	35	83T0745	6.11
C10975_GT4-WW	Wide	4	56°	35	83T0755	6.11
C11191_TUIJA-3-W	Wide	3	54°	50	83T0766	7.39
C11192_TUIJA-3-SS	Spot	3	11°	50	83T0767	7.39
C11193_TUIJA-3-M	Medium	3	18°	50	83T0768	7.39
C10949_STRADA-B2	...	1	116° x 44°	...	83T0749	4.32
C11252_STRADA-C2	...	1	124°	...	83T0774	4.32
C11249_STRADA-S	Spot	1	144° x 168°	...	83T0773	4.32
C11415_STRADA-T-DN	Wide	1	...	...	83T0781	4.32
C11425_STRADA-T-DW	Wide	1	...	...	83T0783	4.32
C12086_STRADA-FW	Asymmetric	1	...	...	86T5842	4.32
CA10950_STRADA-B2	...	1	116° x 44°	...	83T0386	4.51
CA11253_STRADA-C2	...	1	124°	...	83T0411	4.51
CA11256_STRADA-DW	Wide	1	88° x 148°	...	83T0412	4.51
CA11248_STRADA-S	Spot	1	144° x 168°	...	83T0410	4.51
CA11416_STRADA-T-DN	Wide	1	...	...	83T0435	4.51
CA11426_STRADA-T-DW	Wide	1	...	...	83T0437	4.51
CA12087_STRADA-FW-TAPE	Asymmetric	1	...	...	86T5831	2.66
C11544_SATU-W	Wide	1	32°	21.8	83T0791	4.45
C11602_SATU-M	Medium	1	26°	21.8	83T0795	4.45
C11711_ANNA-40-3-M	Medium	3	28°	40	83T0810	6.90
C11712_ANNA-40-3-W	Wide	3	...	40	83T0811	6.90
CA10932_FLARE-B	Rect	1	6° x 48°	...	83T0385	6.14
CA11265_HEIDI-M	Medium	1	28°	21.6	83T0414	4.67
CA11267_HEIDI-O-90	Oval 90°	1	10° x 52°	21.6	83T0416	4.67
CA11387_EMILY-SS	Spot	1	5°	26	83T0430	4.67
CA11387_EMILY-SS	Spot	1	5°	26	83T0430	4.67
CA11388_EMILY-M	Medium	1	18°	26	83T0431	4.67
CA11389_EMILY-O	Oval	1	44° x 10°	26	83T0432	4.67
CA11390_EMILY-O-90	Oval 90°	1	44° x 10°	26	83T0433	4.67
CA11934_EMILY-W	Wide	1	36°	26	83T0483	4.67
F11947_JULIA-A	Wide	1	108° x 164°	18.86	86T5847	2.69
FA11948_JULIA-A-TAPE	Wide	1	108° x 164°	18.86	86T5845	2.51
FA11204_TINA-O	Oval	1	6° x 18°	16.1	83T0984	4.67
FA11205_TINA-D	Diffused	1	6°	16.1	83T0985	4.67
FA11206_TINA-M	Medium	1	14°	16.1	83T0986	5.02
FA11207_TINA-W	Wide	1	19°	16.1	83T0987	4.67
FA11208_TINA-RS	Spot	1	4.5°	16.1	83T0988	4.67
FP11081_LISA2-M-CLIP	Medium	1	12°	9.9	83T1127	4.67
FP11082_LISA2-W-CLIP	Wide	1	16°	9.9	83T1128	4.67
FP11084_LISA2-RS-CLIP	Spot	1	8°	9.9	83T1130	5.02
FP11120_LISA2-O-CLIP	Oval	1	5° x 16°	9.9	83T1134	4.67
FP11124_LISA2-O-PIN	Oval	1	5° x 16°	9.9	83T1138	4.67

(203488)

LENSES FOR LUMILEDS LEDS

RoHS Compliant Available

LEDiL

LUXEON A, REBEL AND REBEL ES SERIES

Mfg. Part No.	Beam Type	# of LEDs	Beam Angle	Lens Dia. (mm)	Stock No.	Price Each 1-9
FP10992_LISA2-M-PIN	Medium	1	13°	9.9	83T1102	5.02
FP10993_LISA2-W-PIN	Wide	1	19°	9.9	83T1103	5.02
FP11056_LISA2-RS-PIN	Real Spot	1	9°	9.9	83T1116	4.67
FP11072_LISA2-M-CLIP	Medium	1	13°	9.9	83T1118	4.67
FP11073_LISA2-W-CLIP	Wide	1	19°	9.9	83T1119	4.67
FP11086_LISA2-RS-CLIP	Real Spot	1	9°	9.9	83T1132	4.67
FP11122_LISA2-O-CLIP	Oval	1	5° x 16°	9.9	83T1136	4.67
FP11126_LISA2-O-PIN	Oval	1	10° x 24°	9.9	83T1140	5.02
LUXEON REBEL SERIES						
C10971_GT4-S	Spot	4	18°	35	83T0751	6.11
C10972_GT4-M	Medium	4	28°	35	83T0752	6.11
C10973_GT4-W	Wide	4	36°	35	83T0753	6.11
C10974_GT4-WW	Wide	4	62°	35	83T0754	6.11
CP10544_LISA-SS	Smooth Spot	1	10.8°	10.5	83T0650	5.02
FA11203_TINA-O	Oval	1	7° x 18°	16.1	83T0983	4.67
FA11209_TINA-D	Diffuser	1	7.5°	16.1	83T0989	4.67
FA11210_TINA-M	Medium	1	16°	16.1	83T0990	4.45
FA11211_TINA-W	Wide	1	22°	16.1	83T0991	4.67
FA11212_TINA-RS	Real Spot	1	6°	16.1	83T0992	4.45
FCN10806_LR1-D	Diffuser	1	11°	21.6	83T1057	3.83
FCN10890_LR1-W	Wide	1	48°	21.6	83T1062	3.83
FX10852_RES-D	Diffuser	1	8°	21.6 x 21.6	83T1172	3.38
FX10853_RES-SS	Smooth Spot	1	6°	21.6 x 21.6	83T1173	3.38
FX10854_RES-O	Oval	1	6° x 23°	21.6 x 21.6	83T1174	3.38
FX10855_RES-W	Wide	1	17°	21.6 x 21.6	83T1175	3.38
FX10856_RES-RS	Real Spot	1	4°	21.6 x 21.6	83T1176	3.38
FCX11157_RES-O-90	Oval 90°	1	6° x 23°	21.6 x 21.6	83T1091	4.14

(203529)

LED LENSES & TRIPLE LENSES

RoHS Compliant Available

Dialight

Designed for Luxeon, Cree, Nichia & Osram leds, the **OPK2, OPTX, OPIO and OPGD series** adhesive backed lenses offer three different illumination patterns: spot, wide and oval. The base lens is attached by its adhesive backing and automatically centered by placing it directly to the PCB over the LED dramatically cutting down on assembly time. The base lens is a spot beam and can be used on its own or with an OPAA clipon sub lens to provide either a diffuse, oval or wide beam pattern. The **OPTX-3, OPK2-3, OPIO-3 and OPGD-3** triple base are also spot lenses. If used on their own, they offer two different **OPTL** sub-lenses for micro (diffuse) or wide beam pattern. The triple base lenses are fixed over the LEDs on the PCB using locating pegs. The sub lenses attach easily to the base lens with an integral snap-lock system. All **OP series** lenses are made from optical grade PMMA (acrylics) to ensure excellent optical properties as well as long-term material stability and durability.

SPOT BASE MODULES

Mfg. Part No.	Half Divergence Angle (°)	For Use With	Stock No.	Price Each 1-24
OPTX-1-006	6	Cree XLamp LED	20M5671	2.87
OPGD-1-002	2	Osram Golden Dragon LED	20M5663	2.79
SUB LENS FOR SPOT BASE MODULES				
OPAA-1-DF	8	Spot Base Module	20M5636	0.86
OPAA-1-OSL	8 x 25	Spot Base Module	20M5637	0.63
TRIPLE SPOT BASE MODULES				
OPK2-3-006	6	Luxeon K2 LED	20M5668	4.80
ADHESIVE BACKED BASE MODULES				
OPC-11OVAL	8 x 25	Rebel - Oval Base Module	78M1717	1.80
OPC-11SPOT	5	Rebel - Spot Base Module	78M1718	1.85
OPC-11WIDE	20	Rebel - Wide Base Module	78M1719	1.80
ADHESIVE BACKED REFLECTORS				
OPC-11COL	...	Rebel - Spot	78M1715	1.88
OPC-12COL	...	Rebel - Wide	78M1720	1.94
OPC-12COL	13	Rebel - Wide	78M1720	1.94

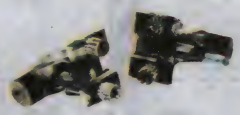
(90069)

LIGHT PIPES

RoHS Compliant Available

Dialight

Mfg. Part No. 515-1001F

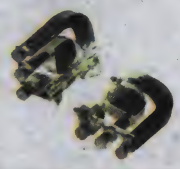


Mfg. Part No. 515-1011F

Mfg. Part No. 515-1020F

Mfg. Part No. 515-1023F

Mfg. Part No. 515-1061F



Mfg. Part No. 515-1064F

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● 515-1001F	Single-Element	30K0382	0.68
● 515-1011F	Single-Element	30K0391	0.43
● 515-1020F	3.5mm 4-Element	30K0394	1.77
● 515-1023F	Quad Level	30K0405	1.09
● 515-1061F	3mm Bi-Level	30K0456	0.84
● 515-1064F	2.5mm Tri-Level	30K0459	0.74
● 515-1118F	2-Element	30K0526	1.21

(72861)

PANEL MOUNT RIGID LIGHT PIPES

RoHS Compliant Available

BIVAR MOVING LIGHT

Features:

- Protect circuits from ESD
- Use with SMD or Thru-Hole Series LEDs
- PLP Series Panel Light Pipes press fit into panel
- For PLP1 Series added retention and contrast, use C-103-SR Self-Retaining Clip
- For PLP5 Series added retention and contrast, use C-105-SR

Light Pipes are ideal for applications where an automatically placed LED requires its output redirected to a front panel. Light pipes are engineered of 94V-0 compliant clear polycarbonate for maximum light transmission and viewing angle to 120°. Light pipes will also protect circuits from accidental damage from ESD by isolating the PCB from potential contact.

Mfg. Part No.	Length (mm)	Mounting Hole Dia. (mm)	No. of Light Pipes	Stock No.	Price Each 1-9
● PLP1-100-F	0.1	3.073	1	25R4076	0.86
● PLP1-125-F	3.2	3.073	1	81H0236	0.91
● PLP1-250-F	6.4	3.073	1	20K2181	0.54
● PLP1-350	0.35	3.073	1	34R4529	0.92
● PLP1-375	9.5	3.073	1	91B5455	0.92
● PLP1-375-F	0.375	3.073	1	20K2183	0.92
● PLP1-500-F	12.7	3.073	1	42J5380	0.92
● PLP1-625-F	0.625	3.073	1	87H7179	0.92
● PLP1-750	19	3.073	1	91B6940	0.86
● PLP1-750-F	19	3.073	1	20K2184	0.92
● PLP1-830-F	0.83	3.073	1	33R6364	0.92
● PLP2-125	3.2	2.921	1	08H1192	0.50
● PLP2-215	0.215	2.921	1	48P5256	0.92
● PLP2-250	6.4	2.921	1	73H0910	0.51
● PLP2-350	8.9	2.921	1	11J3982	0.56
● PLP2-375	9.5	2.921	1	73H0907	0.50
● PLP2-500	12.7	2.921	1	29H3385	0.56
● PLP2-625	15.9	2.921	1	26H8043	0.92
● PLP2-750	19	2.921	1	84H9876	0.55
● PLP2-1000	1	2.921	1	33R6365	0.92
● PLP2-1200	1.2	2.921	1	33R6366	0.92
● PLP5-2-125	0.125	3.962	1	33R6406	0.68
● PLP5-2-250	6.4	3.962	1	40K2133	0.68
● PLP5-2-350	0.35	3.962	1	58P0429	0.86
● PLP5-2-500	12.7	3.962	1	33R6429	0.94
● PLP5-2-625	15.9	3.962	1	42J5719	0.56
● PLP5-2-750	19	3.962	1	42J5764	0.70
● PLP5-2-1000	1	3.962	1	18P9431	0.70
● PLP5-2-1250	1.25	3.962	1	33R6411	0.92
● PLP5-2-1500	1.5	3.962	1	33R6413	0.94
● PLP5-125	3.2	4.953	1	09J9721	0.56
● PLP5-250	6.4	4.953	1	20K2188	0.92
● PLP5-375	0.375	4.953	1	20K2190	0.91
● PLP5-500	12.7	4.953	1	20K2191	0.92

➤ CONTINUED ➤

PANEL MOUNT RIGID LIGHT PIPES (CONT.)

Mfg. Part No.	Length (mm)	Mounting Hole Dia. (mm)	No. of Light Pipes	Stock No.	Price Each 1-9
● PLP5-1250	1.25	4.953	1	20K2186	0.92
● PLP5-1500	38.1	4.953	1	20K2187	0.86

(166281)

SURFACE MOUNT RIGHT ANGLE LIGHT PIPE

RoHS Compliant Available

BIVAR MOVING LIGHT

Mfg. Part No.	Length (mm)	Height (mm)	Number of Light Pipes	Stock No.	Price Each 1-9
● RLP1-200-500	14	5	1	39T1571	0.96
● RLP1-200-650	17	5	1	39T1572	0.90
● RLP1-200-800	20	5	1	39T1573	0.91
● RLP1-400-500	14	10	1	39T1574	0.96
● RLP1-400-650	17	10	1	39T1575	0.90
● RLP1-400-800	20	10	1	39T1576	0.98
● RLP1-600-500	14	15	1	39T1577	0.89
● RLP1-600-650	17	15	1	39T1578	0.90
● RLP1-600-800	20	15	1	39T1579	0.91
● RLP2-200-500	14	5	2	39T1580	1.10
● RLP2-200-650	17	5	2	39T1581	1.11
● RLP2-200-800	20	5	2	39T1582	1.20
● RLP2-400-500	14	10	2	39T1583	1.12
● RLP2-400-650	17	10	2	39T1584	1.12
● RLP2-400-800	20	10	2	39T1585	1.13
● RLP2-600-500	14	15	2	39T1586	1.10
● RLP2-600-650	17	15	2	39T1587	1.11
● RLP2-600-800	20	15	2	39T1588	1.12
● RLP3-200-500	14	5	3	39T1589	1.24
● RLP3-200-650	17	5	3	39T1590	1.26
● RLP3-200-800	20	5	3	39T1591	1.28
● RLP3-400-500	14	10	3	39T1592	1.35
● RLP3-400-650	17	10	3	39T1593	1.27
● RLP3-400-800	20	10	3	39T1594	1.29
● RLP3-600-500	14	15	3	39T1595	1.25
● RLP3-600-650	17	15	3	39T1596	1.27
● RLP3-600-800	20	15	3	39T1597	1.29
● RLP4-200-500	14	5	4	39T1598	1.56
● RLP4-200-650	17	5	4	39T1599	1.59
● RLP4-200-800	20	5	4	39T1600	1.50
● RLP4-400-500	14	10	4	39T1601	1.45
● RLP4-400-650	17	10	4	39T1602	1.47
● RLP4-400-800	20	10	4	39T1603	1.50
● RLP4-600-500	14	15	4	39T1604	1.45
● RLP4-600-650	17	15	4	39T1605	1.47

(195413)

LENSES FOR LEDENGIN 5W SERIES LEDs

RoHS Compliant Available

LEDiL

Mfg. Part No.	Beam Type	# of LEDs	Beam Angle	Lens Dia. (mm)	Stock No.	Price Each 1-9
● FCN10784_LE1-RS	Spot	1	8°	21.6	83T1043	4.12
● FCN10785_LE1-REC	Rect	1	19° x 12°	21.56	83T1044	3.83
● FCN11103_LE1-0-90	Oval 90°	1	...	21.5	83T1064	3.83

(203528)

element14 COMMUNITY

Get inspired, collaborate, design, research, ask experts questions.

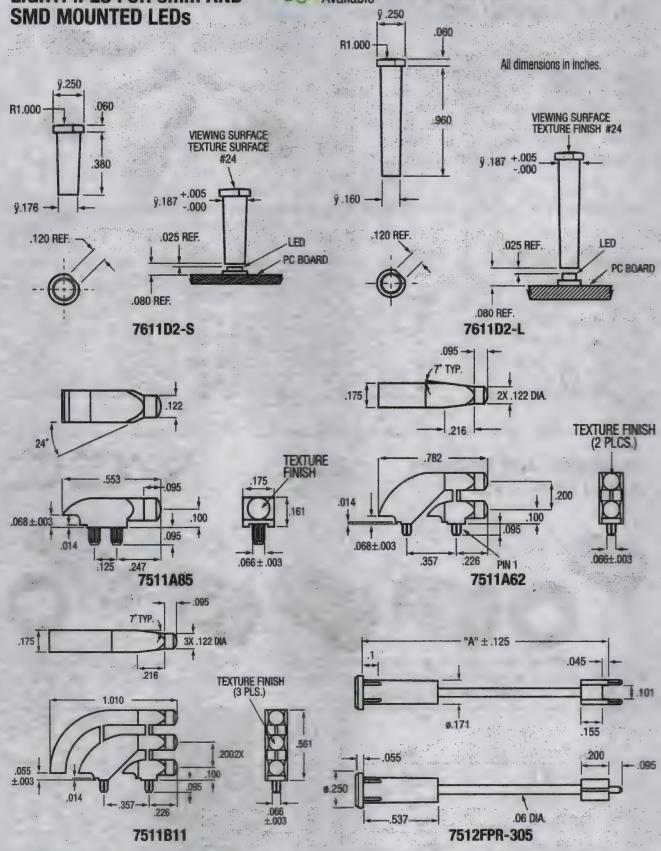
element14.com

(196545)

BRIGHT PIPES™ OPTICAL LIGHTPIPES FOR 3mm AND SMD MOUNTED LEDs

RoHS Compliant Available

Chicago Miniature Lighting, LLC
Lighting the world since 1910



- Precision engineered with *"ray tracing"* for bright, optically precise even indication and attractive appearance
- ESD protected from circuitry for reliability
- High-contrast and wide-viewing angle for greater visibility
- Designed for use with Bright Chip™ LEDs

Mfg. part nos. 7611D2-S and **7611D2-L** lightpipes are designed for panel mounting. **7511 series** lightpipes are low profile and have matching center lines to allow for side-by-side mounting. Feature large lens for high visibility and parts inserted after reflow to permit LED pad inspection before assembly. **Mfg. part no. 7512FPR-305** Flexpipe™ flexible optical lightpipe with precision fiber-optics for long distance SMT LED to lens. Eliminates need for precision mechanical alignment of components to panel. Feature large lens for high visibility and parts inserted after reflow to permit LED pad inspection before assembly.

Mfg. Part No.	Description	Stock No.	Price Each 1-24	Price Each 25-99
7511A62	T-1 Right-Angle Lightpipe (2 LED High)	73H0577	0.88	0.81
7511A85	T-1 Right-Angle Lightpipe (1 LED)	82H9865	0.71	0.66
7511A86	Lightpipe	09J4559	0.69	0.64
7511B11	T-1 Right-Angle Lightpipe (3 LED High)	82H9871	1.06	0.98
7512FPR-305	Flexible Fiber-Optic Lightpipe, Panel Mount	82H9892	2.91	2.69
7611D2-S	0.380"H Vertical Lightpipe	94B5032	0.78	0.73
7611D2-L	0.960"H Vertical Lightpipe	73C0962	0.86	0.80

(80590)

VERTICAL RIGID LIGHT PIPES FOR SMD LEDs

RoHS Compliant Available

BIVAR MOVING LIGHT

Features:
- Protect circuit from ESD
- Use with SM0603–SM0805 Series LEDs
- May be heat staked or glued

SINGLE MOUNT

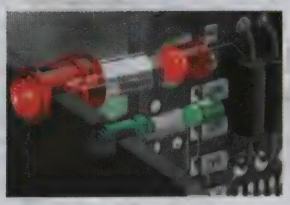
Mfg. Part No.	Height (mm)	Face Type	Stock No.	Price Each 1-9
VLP-250F	6.4	Flat	18M4461	0.19
VLP-250-R	6.4	Round	34R5493	0.31
VLP-300-R	7.6	Round	34R5494	0.31
VLP-350-F	8.9	Flat	34R5495	0.27
VLP-450-R	11.4	Round	34R5500	0.36

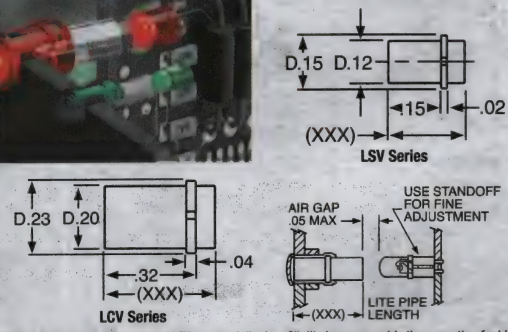
(166283)

LSV SERIES LITEPIPES FOR PCB MOUNTED LEDs

RoHS Compliant Available

VCC





Designed to transmit light from PCB mounted LED to panel display. Cliplite lenses provide the mounting for Litepipes and produce 180° of viewing angle. Use **mfg. part no. SMB200** lens mount for **LSV series** (3mm) Litepipes and **mfg. part no. CLB300** lens mount for **LCV series** (5mm) Litepipes, ordered separately; *go online or call.* For added security use retaining rings **mfg. part nos. RNG190** (3mm) and **RNG 268** (5mm), also ordered separately; *go online or call.*

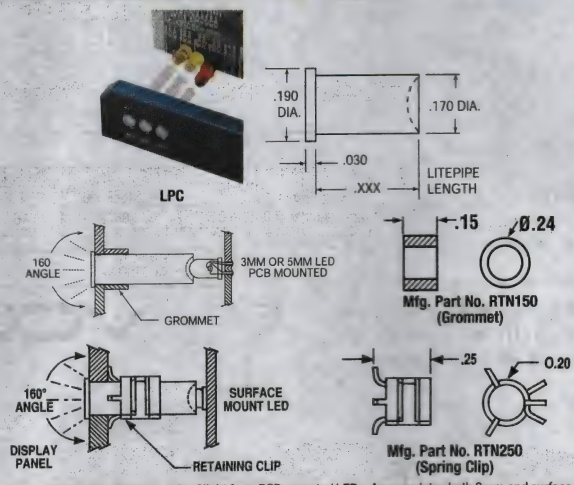
Mfg. Part No.	Length (mm)	Mounting Hole Dia. (mm)	Stock No.	Price Each 1-9
LSV020CTP	5.08	4.3	57P6968	0.30
LSV040CTP	10.16	4.3	57P6969	0.41
LSV060CTP	15.24	4.3	57P6970	0.42
LSV080CTP	20.32	4.3	57P6971	0.45
LSV100CTP	25.4	4.3	57P6972	0.43
LCV036CTP	9.14	6.35	57P6749	0.43
LCV056CTP	14.22	6.35	57P6750	0.40
LCV076CTP	19.3	6.35	83H2380	0.30
LCV096CTP	24.38	6.35	57P6751	0.30
LCV136CTP	34.54	6.35	57P6753	0.44

(38270)

LPC SERIES LITEPIPES FOR 3mm AND SMD MOUNTED LEDs

RoHS Compliant Available

VCC



Designed to produce 160° viewing angle of light from PCB mounted LEDs. Accomodates both 3mm and surface mount LEDs. Litepipes are able to display single color devices or mix multi-colored LEDs into a single color. Sizes from 0.200″ (5.08) to 2.00″ (50.80). Use **mfg. part no. RTN150** grommet with sizes 0.200″, (020) through 0.500″ (050) and **mfg. part no. RTN250** spring clip for sizes 0.500″ (050) to 2.00″ (50.80); *both ordered separately below.*

Mfg. Part No.	Size	Stock No.	Price Each 1-9
LPC020CTP	0.2″	57P6762	0.41
LPC022CTP	0.22″	57P6763	0.42
LPC024CTP	0.24″	57P6764	0.41
LPC026CTP	0.26″	57P6765	0.42
LPC028CTP	0.28″	05C4194	0.42
LPC030CTP	0.3″	57P6766	0.42
LPC032CTP	0.32″	57P6767	0.42
LPC034CTP	0.34″	57P6768	0.40
LPC036CTP	0.36″	57P6769	0.42
LPC038CTP	0.38″	57P6770	0.41
LPC040CTP	0.4″	57P6771	0.41
LPC042CTP	0.42″	57P6772	0.40
LPC044CTP	0.44″	70K9551	0.42

CONTINUED

LIGHT PIPES

LPC SERIES LITEPIPES FOR 3mm AND SMD MOUNTED LEDs (CONT.)

Mfg. Part No.	Size	Stock No.	Price Each 1-9
● LPC046CTP	0.46″	57P6773	0.42
● LPC048CTP	0.48″	57P6774	0.40
● LPC050CTP	0.5″	98B2730	0.41
● LPC052CTP	0.52″	21J8466	0.42
● LPC054CTP	0.54″	83H9033	0.42
● LPC056CTP	0.56″	57P6775	0.40
● LPC058CTP	0.58″	26H2654	0.41
● LPC060CTP	0.6″	57P6776	0.40
● LPC062CTP	0.62″	57P6777	0.42
● LPC064CTP	0.64″	37J0952	0.41
● LPC066CTP	0.66″	57P6778	0.42
● LPC068CTP	0.68″	83H5321	0.42
● LPC072CTP	0.72″	57P6780	0.40
● LPC076CTP	0.76″	97H8559	0.40
● LPC078CTP	0.78″	57P6782	0.40
● LPC080CTP	0.8″	57P6783	0.42
● LPC082CTP	0.82″	57P6784	0.41
● LPC084CTP	0.84″	57P6785	0.42
● LPC088CTP	0.88″	57P6786	0.40
● LPC092CTP	0.92″	57P6788	0.41
● LPC096CTP	0.96″	57P6790	0.40
● LPC100CTP	1″	57P6792	0.47
● LPC102CTP	1.02″	57P6793	0.47
● LPC105CTP	1.05″	57P6794	0.48
● LPC110CTP	1.1″	57P6796	0.48
● LPC-115-CTP	1.15″	57P6761	0.49
● LPC117CTP	1.17″	96H9957	0.46
● LPC120CTP	1.2″	57P6797	0.46
● LPC125CTP	1.25″	81H4807	0.48
● LPC-130-CTP	1.3″	96B7369	0.48
● LPC135CTP	1.35″	57P6800	0.46
● LPC137CTP	1.37″	57P6801	0.30
● LPC140CTP	1.4″	94B1459	0.49
● LPC150CTP	1.5″	57P6805	0.47
● LPC152CTP	1.52″	57P6806	0.48
● LPC170CTP	1.7″	90H0144	0.48
● LPC175CTP	1.75″	57P6813	0.46
● LPC177CTP	1.77″	57P6814	0.46
● LPC187CTP	1.87″	73H2764	0.46
● LPC190CTP	1.9″	16C1767	0.46
● LPC200CTP	2″	57P6821	0.47

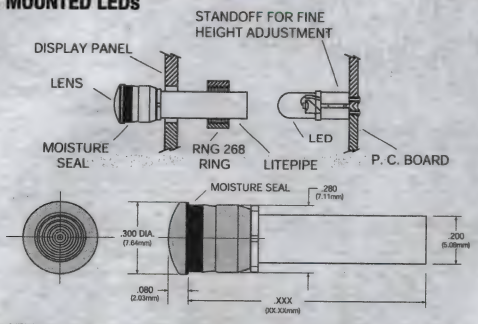
MOUNTING ACCESSORIES

Mfg. Part No.	Use With	Stock No.	Price Each 1-24
● RTN150	LITEPIPE® with diameter of 0.2″ to 0.5″	98B5279	0.12
● RTN250	LITEPIPE® with diameter of 0.5″ to 2″	96B7371	0.14

(69159)

LMS SERIES NEMA 3 MOISTURE SEALED LITEPIPE ASSEMBLIES FOR PCB MOUNTED LEDs

RoHS Compliant Available



The **LMS** series NEMA 3 moisture sealed push-on lightpipes provide a method for transmitting light from surface mount, T1 and T1-3/4 LEDs. Low-profile panel lenses provide 180° viewing angle. Panel hole size: 0.283″ on 0.375″ centers, panel thickness 0.031″-0.125″.

Mfg. Part No.	Color	Size	Stock No.	Price Each 1-9
● LMS053CTP	Clear	0.53″	26K8909	1.62
● LMS073CTP	Clear	0.73″	08N2935	1.61

(84790)

LCS SERIES NEMA 4 MOISTURE SEALED LITEPIPE ASSEMBLIES FOR PCB MOUNTED LEDs

RoHS Compliant Available

The **LCS** series of NEMA 4 moisture sealed **threaded** light pipes provide a method of transmitting light from a surface mount T-1 or T-1 ¾ LED. Low-profile panel Lenses provide 180° viewing angle. Panel hole dia. is 0.312. Can be used with panel thickness of 0.032 to 0.125. The assembly consists of lightpipe, domed lens and mounting hardware. Available in assorted lengths and colors.

Mfg. Part No.	Color	Max Length (in)	Stock No.	Price Each 1-9
● LCS032CTP	Clear	0.32	08N2904	2.32
● LCS032GTP	Green	0.32	08N2905	2.12
● LCS032RTP	Red	0.32	08N2906	2.12
● LCS052CTP	Clear	0.52	08N2907	2.18
● LCS112CTP	Clear	1.12	08N2918	2.23
● LCS132CTP	Clear	1.32	08N2922	2.21

(90082)

LSS SERIES 3MM MOISTURE SEALED LIGHT PIPES

RoHS Compliant Available

This lens and lightpipe unit was developed to provide moisture sealing and dust control for display panels when the LED is attached to a circuit board. The **LSS series** is designed for use with surface mount LEDs as well as standard thru-hole LEDs, horizontally or vertically circuit board mounted.

Mfg. Part No.	Color	Max Length (mm)	Stock No.	Price Each 1-9
LSS 024 ATP.	Amber	6.1	96T9827	1.89
● LSS 024 BTP	Blue	6.1	96T9828	1.22
LSS 024 GTP.	Green	6.1	96T9830	1.89
LSS 024 RTP.	Red	6.1	96T9831	1.89
LSS 024 YTP.	Yellow	6.1	96T9832	1.89
● LSS 044 ATP	Amber	11.18	96T9833	1.22
● LSS 044 BTP	Blue	11.18	96T9834	1.22
● LSS 044 CTP	Transparent	11.18	96T9835	1.22
● LSS 044 GTP	Green	11.18	96T9836	1.22
● LSS 044 RTP	Red	11.18	96T9837	1.22
● LSS 044 YTP	Yellow	11.18	96T9838	1.22
● LSS 064 ATP	Amber	16.26	96T9839	1.22
● LSS 064 BTP	Blue	16.26	96T9840	1.22
● LSS 064 CTP	Transparent	16.26	96T9841	1.22
● LSS 064 GTP	Green	16.26	96T9842	1.22
● LSS 064 RTP	Red	16.26	96T9843	1.22
● LSS 064 YTP	Yellow	16.26	96T9844	1.22
● LSS 084 ATP	Amber	21.34	96T9845	1.22
● LSS 084 BTP	Blue	21.34	96T9846	1.22
● LSS 084 CTP	Transparent	21.34	96T9847	1.22
● LSS 084 GTP	Green	21.34	96T9848	1.22
● LSS 084 RTP	Red	21.34	96T9849	1.22
● LSS 084 YTP	Yellow	21.34	96T9850	1.22
● LSS 104 ATP	Amber	26.4	96T9851	1.22
● LSS 104 BTP	Blue	26.4	96T9852	1.22
● LSS 104 CTP	Transparent	26.4	96T9853	1.22
● LSS 104 GTP	Green	26.4	96T9854	1.22
● LSS 104 RTP	Red	26.4	96T9855	1.22
● LSS 104 YTP	Yellow	26.4	96T9856	1.22
● LSS 124 ATP	Amber	31.5	96T9857	1.22
● LSS 124 BTP	Blue	31.5	96T9858	1.22
● LSS 124 CTP	Transparent	31.5	96T9859	1.22
● LSS 124 GTP	Green	31.5	96T9860	1.22
● LSS 124 RTP	Red	31.5	96T9861	1.22
● LSS 124 YTP	Yellow	31.5	96T9862	1.22

(208480)

2.5MM LMC MICROLITEPIPE

RoHS Compliant Available

The 2.5mm LITEPIPE® provides a method of transmitting the light from PCB mounted LEDs to the front display panel. Both styles of LEDs, surface mount, 3mm and 5mm standard packages can be displayed in this manner. The LITEPIPE® assembly is easily installed. Pass the LITEPIPE® through the panel opening and press on grommet retainer (**RTN 100**)to secure unit to the panel. Slide PCB into position aligning LED with the end of the LITEPIPE®. Mounts in .102″ (2.59mm) hole on 3/16″ centers. Use grommet retainer (**RTN 100**).

Mfg. Part No.	Color	Max. Length	Stock No.	Price Each 1-9
LMC020CTP	Clear	0.2″	57P6754	0.41
LMC040CTP	Clear	0.4″	57P6755	0.42
LMC060CTP	Clear	0.6″	57P6756	0.43
LMC080CTP	Clear	0.8″	57P6757	0.44
LMC100CTP	Clear	1.0″	57P6758	0.43
LMC120CTP	Clear	1.2″	57P6759	0.43

GROMMET RETAINERS

Mfg. Part No.	Max. Length	Stock No.	Price Each 1-9
RTN100	3.81mm	57P6981	0.14

(94550)

FLEXIBLE LIGHT PIPE ASSEMBLIES

RoHS Compliant Available

BIVAR MOVING LIGHT

Features:
- Eliminates need for thru-hole drilling of PCBs
- Exclusively designed for Flexible Light Pipe Lens Cap Assemblies
- Brilliant LED display capable of being extended from 2.5" (63.5mm) to 328" (100m) via the FLP mono-fiber

SMFLP FLPR FLPV

The use of light pipes returns flexibility to the designer and can elimnate components and costly assembly steps resulting in a practical and economical indication solution. Light Pipes are the perfect solution for moving light from the source to the destination. The Light Pipes act as a conduit for the light allowing for distances of a few millimeters up to 100 meters.

RIGHT ANGLE, 7mm LENS

Mfg. Part No.	LED Color	Length (mm)	Light Pipe Shape	Stock No.	Price Each 1-9
FLP25R6.0-SA	Amber	152.5	Circular with Flat Top	73R3911	2.82
FLP25R6.0-SUG	Green	152.5	Circular with Flat Top	73R3912	2.80
FLP25R6.0-UBW	Blue	152.5	Circular with Flat Top	73R3914	4.44
FLP25R6.5-SA	Amber	165.1	Circular with Flat Top	73R3916	2.74
FLP25R6.5-SUR	Red	165.1	Circular with Flat Top	73R3918	2.92
FLP25R6.5-UBW	Blue	165.1	Circular with Flat Top	73R3919	4.25
RIGHT ANGLE, 4mm LENS					
FLPR6.0-BC	Red / Green	152.5	Circular	33R4904	1.83
FLPR6.0-H-RP	Red	152.5	Circular	33R4905	1.55
FLPR6.0-SG	Green	152.5	Circular	34R3556	1.68
VERTICAL, 3mm LENS					
FLPV6.0-SBC	Red / Green	152.5	Circular	33R5057	1.68
SURFACE MOUNT ADAPTER, 4mm LENS					
SMFLP12.0	...	304.8	Circular	34R5383	2.88
2MM FIBER OPTIC CORE, 4.2MM FLAT FACE LENS, 10.0 IN					
FLPF-10.0	...	254	Circular with Flat Top	06W0002	7.29
2MM FIBER OPTIC CORE, 4.2MM FLAT FACE LENS, 12.0 IN					
R2F-12.0-RED	...	304.8	Circular with Flat Top	79R5567	4.70
2MM FIBER OPTIC CORE, 7MM ROUND LENS, 10.0 IN					
FLP25-10.0	...	254	Circular	06W0003	8.18
5 MM ROUND LENS, 10.0 IN					
LC2-10.0	...	254	Circular	06W0004	7.25
SURFACE MOUNT ADAPTER ONLY					
SMFLP	Adapter Piece for Flexible Light Pipe and SMD LEDs			71P8473	0.31

(177031)

FLEXIBLE LIGHT PIPE INDICATORS

RoHS Compliant Available

BIVAR MOVING LIGHT

1.5mm FIBER OPTIC CORE, 8.4MM DIFFUSED LENS, 10.0 IN

Mfg. Part No.	LED Color	Length (mm)	Light Pipe Shape	Stock No.	Price Each 1-9
PM3-K1522-10.00	White	254	Circular	06W0160	12.08
1.5MM FIBER OPTIC CORE, 4MM CIRCULAR LENS, 10.0 IN					
PM4-C1522-10.00	White	254	Circular	06W0216	2.04
IP67 RATED SEALED 1.5MM FIBER OPTIC CORE, 8.44MM CIRCULAR LENS, 10.0 IN					
PM3-P1522-10.00	White	254	Circular	06W0177	9.21
2MM FIBER OPTIC CORE, 4MM DOME LENS, 10.0 IN					
PM4-D2031-10.00	White	254	Circular	06W0217	6.81
2MM FIBER OPTIC CORE, 4MM FLAT LENS, 10.0 IN					
PM4-F2031-10.00	White	254	Circular with Flat Top	06W0218	5.11
2MM FIBER OPTIC CORE, 5MM CIRCULAR LENS, 10.0 IN					
PM5-C2031-10.00	White	254	Circular	06W0219	5.08
2MM FIBER OPTIC CORE, 12.4MM DIFFUSED LENS, 10.0 IN					
PM5-K2031-10.00	White	254	Circular	06W0236	13.48
IP67 RATED SEALED , 2MM FIBER OPTIC CORE, 12.4MM DIFFUSED LENS, 10.0 IN					
PM5-P2031-10.00	White	254	Circular	06W0253	15.24
2MM FIBER OPTIC CORE, 7MM CIRCULAR LENS, 10.0 IN					
PM7-C2031-10.00	White	254	Circular	06W0292	5.42

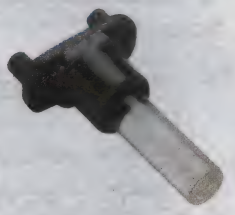
(208482)

LOW PROFILE PANEL FLUSH LIGHT PIPES

RoHS Compliant Available

Features:
- Allows easy panel removal
- Low profile, panel flush design blends in until light is emitted
- Mates to any PCB using SMD 4 (sold seperately)
- Optical grade acrylic for maximum light transmission
- Efficient production assembly
- Available in standard lengths of .300"[7.62] to 1.20"[30.48]

Specifications:
- Light Pipe Color: Clear optical grade acrylic, UL rating 94-H
- Light Pipe Mounting: PC Board
- Light Pipe Shape: Circular w/ Flat top
- SMD 4 (PCB mount): Nylon, (black) UL rating 94-V2



LIGHT PIPES

Mfg. Part No.	Length (mm)	Stock No.	Price Each 1-9
LPCM 030 CTP	7.62	63W5098	0.39
LPCM 040 CTP	10.16	63W5099	0.39
LPCM 050 CTP	12.7	63W5100	0.39
LPCM 060 CTP	15.24	63W5101	0.39
LPCM 080 CTP	20.32	63W5102	0.39
LPCM 090 CTP	22.86	63W5103	0.39
LPCM 100 CTP	25.4	63W5104	0.44
LPCM 110 CTP	27.94	63W5105	0.44
LPCM 120 CTP	30.48	63W5106	0.44

MOUNTING BASES

Mfg. Part No.	For Use With	Stock No.	Price Each 1-9
SMD 4	VCC Panel Flush Light Pipes	63W5107	0.60

(209568)

FLEXFIRE™ FLEXIBLE LIGHT PIPES

RoHS Compliant Available

The FLX Series consists of an optical fiber attached to a VCC lens coupler. This lens coupler then attaches firmly to a whole host of VCC lenses. This flexibility allows for an engineer to select from many different lens colors and styles. *Both the lenses and LED couplers are sold separately.* The FLX Series works with the CLB 300, CLF 280, CLR 301, and SQB 400 panel lenses.

Mfg. Part No.	Length (mm)	Stock No.	Price Each 1-9
FLX 02	50.8	41R3583	2.80
FLX 04	101.6	41R3584	3.50
FLX 08	203.2	41R3586	5.18
FLX 12	304.8	41R3587	6.56

CONTINUED

LIGHT PIPES • MOUNTING ACCESSORIES

FLEXFIRE™ FLEXIBLE LIGHT PIPES (CONT.)

COUPLERS

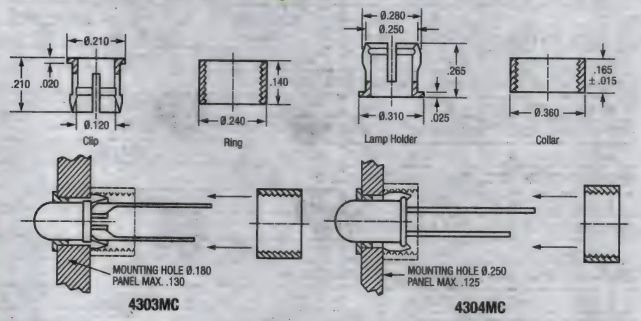
Mfg. Part No.	Description	Stock No.	Price Each 1-9
● THR 22	Through Hole Coupler	41R3589	0.72
● SMD 22	Surface Mount Coupler	41R3588	0.45

(163085)

MOUNTING ACCESSORIES FOR LEDS

RoHS Compliant Available

Chicago Miniature Lighting, LLC
Lighting the world since 1910



MOUNTING CLIPS FOR T-1 (3mm) AND T-1¾ (5mm) LEDs

4303MC series mounting clip installs quickly and provides secure mounting for T-1 high dome LEDs such as the **4303F series**. Material: black polypropylene. Mounting hole: 0.180″ minimum in panels up to 0.130″ thick.

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● 4303MC	Mounting clips for T-1high dome LEDs	93B9614	0.24

4304MC series mounting clip installs quickly and provides secure mounting for T-1-3/4 high dome LEDs such as **4301H, 4304H, 4305H** or **4308H series**. Material: black polypropylene. Mounting hole: 0.250″ minimum in panels up to 0.125″ thick.

● 4304MC	Mounting clips for T-1 3/4 high dome LEDs	66F5952	0.26

(3873)

LED SPACERS

RoHS Compliant Available

Chicago Miniature Lighting, LLC
Lighting the world since 1910

For T-1¾ and T-1 LEDs with leads spaced at 0.1″ (2.54mm).

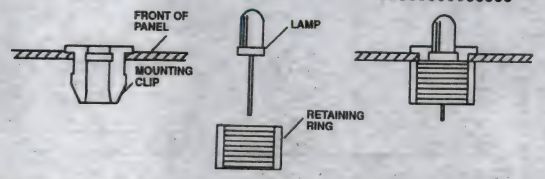
Mfg. Part No.	Size	Stock No.	Price Each 1-24	25-99	100-249
● 00624200	0.2″ (5.08)	44F5290	0.16	0.15	0.14
● 00624250	0.25″ (6.35)	44F5289	0.16	0.15	0.13
● CM00624625	0.625″ (15.88)	44F5286	0.18	0.16	0.15

(3874)

DISCRETE LED SNAP-IN MOUNTING HARDWARE

RoHS Compliant Available

Dialight



Mounting hardware for rear mounting of **521 series** LEDs. Check chart below for correct product. Note recommended mounting hole and panel thickness below.

Mfg. Part No.	Recommended Mtg. Hole	Max. Panel Thickness	Stock No.	Price Each 1-24
● 515-0004F	0.265″ (6.73)	7/64″ (2.78)	68K1692	1.05
● 515-0006F	0.165″ (4.19)	0.1″ (2.54)	30K0378	1.29

Clips are used with the following LEDs

515-0004		515-0005	515-0006	
521-9183	521-9450	521-9173	521-9210	521-9430
521-9246	521-9460	521-9174	521-9211	521-9431
521-9247	521-9464	521-9445	521-9215	521-9432
521-9248	521-9465	521-9651	521-9216	521-9459
521-9249	521-9466	521-9724	521-9322	521-9478
521-9250	521-9704	...	521-9323	521-9498
521-9251	...	...	521-9324	521-9628
521-9284	...	...	521-9325	521-9636
521-9320	...	...	521-9326	521-9428
521-9321	...	...	521-9408	521-9768
521-9327	...	...	521-9427	521-9831

(2555)

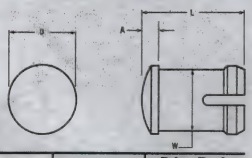
ROUND LOW PROFILE LED LENS CAPS

RoHS Compliant Available

KEYSTONE
ELECTRONICS CORP.

- Material: Polycarbonate

The lens cap protects the LED from physical damge while guarding the components from electrostatic discharge (ESD), up to 16KV. The caps feature striated lines and fresnel rings which permit up to 180° viewing angles with either diffused or non-diffused LED's. They provide exceptionally high contrast and visibility. **8659** is T1 LED size clear color. *Other colors available, go online or call.*



Mfg. Part No.	A Lens Profile	D Diameter	L Length	W Width	Stock No.	Price Each 1-249
● 8659	0.06″	0.19″	0.29″	0.171″	98B5506	0.80

(78696)

PANEL MOUNT BEZELS AND HOLDERS

RoHS Compliant Available

LUMEX
Creating LED and LCD Solutions Together™

SSH-LX3050

ONE PIECE LED PUSH MOUNT PANEL HOLDER

Mfg. Part No.	For Use With	Material	Panel Hole	Panel Thickness	Stock No.	Price Each 1-9
● SSH-LX3050	T-1	Black polypropylene	0.175″	0.189″	09J9214	0.10
● SSH-LX5091	T-1¾	Black polypropylene	0.250″	0.173″	09J9216	0.08
● SSH-LXH501	T-1¾	Black nylon	0.330″	0.307″	09J9213	0.14

(80516)

LED SERIES NYLON SPACERS

RoHS Compliant Available

multicomp

FOR USE WITH: T-1 (3mm) LEDs

Mfg. Part No.	Height (mm)	External Diameter (mm)	Stock No.	Price Each 1-249
● LED3-3	3	4.2	97K2886	0.09
● LED3-4	4	4.2	97K2887	0.07
● LED3-5	5	4.2	97K2888	0.07
● LED3-10	10	4.2	71K0152	0.09
● LED3-13	13	4.2	97K2880	0.10
● LED3-16	16	4.2	97K2881	0.08
● LED3-17	17	4.2	97K2882	0.11
● LED3-20	20	4.2	97K2883	0.09
● LED3-22	22	4.2	97K2884	0.10
● LED3-23	23	4.2	97K2885	0.14
FOR USE WITH: T-1 3/4 (5mm) LEDs				
● LED-2A	2	5	74K4726	0.06
● LED-3A	3	5	97K2861	0.08
● LED-4.5A	4.5	5	97K2862	0.09
● LED-5SX3	6	7.4	97K2864	0.08
● LED-6.5A	6.5	5	97K2866	0.09
● LED-5X3	6.5	7.4	97K2865	0.08
● LED-5KX3	7.7	7.4	97K2863	0.10
● LED-7X3	8	7.4	97K2867	0.10
● LED-8X3	9	7.4	97K2869	0.10
● LED-8MX3	9.5	7.4	97K2868	0.10
● LED-10	10	5	97K2852	0.09
● LED-10X3	11.5	7.4	97K2853	0.08
● LED-13	13	5	97K2854	0.10
● LED-16	16	5	97K2855	0.11
● LED-17	17	5.6	97K2857	0.10
● LED-16X3	16.1	7.1	97K2856	0.09
● LED-20	20.2	5	97K2858	0.09
● LED-23	23	5.1	97K2860	0.10

(203553)

LEDX SERIES NYLON HOLDERS

RoHS Compliant Available

multicomp

Mfg. Part No.	Height (mm)	For Use With	Stock No.	Price Each 1-249
LEDX-3	3	5mm Square LEDs	97K2873	0.09
LEDX-5	5	5mm Square LEDs	97K2874	0.10
LEDX-6	6	5mm Square LEDs	97K2875	0.12
LEDX-7	7	5mm Square LEDs	97K2876	0.09
LEDX-8	8	5mm Square LEDs	97K2877	0.11
LEDX-9	9	5mm Square LEDs	97K2878	0.11
LEDX-10	10	5mm Square LEDs	97K2870	0.16
LEDX-11	11	5mm Square LEDs	97K2871	0.17
LEDX-12	12	5mm Square LEDs	97K2872	0.17

(203556)

LED PANEL MOUNTS

RoHS Compliant Available

multicomp

Securely mount an LED to a panel with a thickness (D) of 0.32-0.125″ (0.8-3.2). Snap-together ring and clip holds a T-1¾ (5mm) LED. Material: nylon 6/6. Color: black. **Sold in packages of 100.**

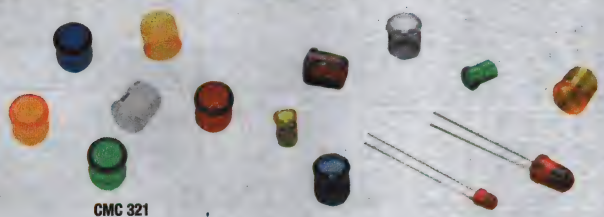
Mfg. Part No.	Fits	Dimensions A	Dimensions B	Dimensions C	Stock No.	Price Each 1-4
2599	T-1	0.21″ (5.3)	0.21″ (5.3)	0.174-0.18″ (4.4-4.6)	92N4814	33.98
2600	T-1¾	0.3″ (7.6)	0.26″ (6.6)	0.267-0.273″ (6.8-6.9)	92N4815	34.57

(17444)

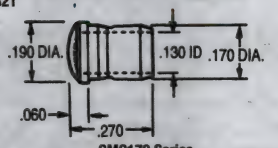
CLIPLITE® PANEL LENSES FOR PCB MOUNTED LEDs

RoHS Compliant Available

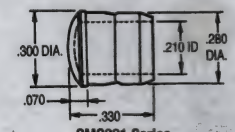
VCC



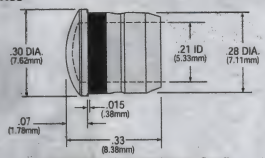
CMC 321



SMC170 Series



CMC321 Series



CMC322 Series (Moisture Seal)

T1 and T1-¾ size low-profile panel lenses provide 180° viewing angle. **SMC170 series** for T1 LEDs. Hole size: 0.171″ on 0.250″ centers, panel thickness 0.031″-0.090″. **CMC321** and **CMS322 series** for T1-¾ LEDs. **CMS322 series** also provides a moisture seal. Hole size: 0.283″ on 0.375″ centers, panel thickness 0.031″-0.125″. Use retaining ring **mfg. part no. RNG165** (internal dia.: 0.165″ [0.240″ external] and length: 0.150″) for **SMC170 series**, ordered separately; *go online or call*. Use retaining ring **mfg. part no. RNG268** (internal dia.: 0.270″ [0.36″ external] and length: 0.170″) for **CMC321** or **CMS 322 series**, ordered separately; *go online or call*.

Mfg. Part No.	Color	Stock No.	Price Each 1-9
SMC170RTP	Red	57P6992	0.38
SMC170GTP	Green	57P6991	0.38
SMC170BTP	Blue	57P6990	0.38
SMC170YTP	Yellow	57P6993	0.38
SMC170CTP	Clear	35K3939	0.35
CMC321RTP	Red	57P6515	0.41
CMC321ATP	Amber	57P6512	0.39
CMC321GTP	Green	57P6514	0.43
CMC321BTP	Blue	57P6513	0.39
CMC321YTP	Yellow	57P6516	0.41
CMC321CTP	Clear	97B3658	0.27
CMS322RTP	Red	90B1543	1.19

CONTINUED

CLIPLITE® PANEL LENSES FOR PCB MOUNTED LEDs (CONT.)

Mfg. Part No.	Color	Stock No.	Price Each 1-9
CMS322ATP	Amber	57P6524	1.14
CMS322GTP	Green	57P7639	1.14
CMS322BTP	Blue	57P6525	1.21
CMS322YTP	Yellow	57P6527	1.14
CMS322CTP	Clear	57P6526	0.79
CML325CTP	Clear	19C8775	0.33

(2566)

P-C-LITE® PCB MOUNTING CLIPS FOR LEDS

RoHS Compliant Available

VCC

Features:
- Universal, used for mounting all standard 5mm LEDs.
- Low cost installation method for panel mounting LEDs.
- Styles include inner/outer reflector, standard and extended clip types.
- Accommodate panel thickness ranging from .032″ to .250″.

LED MOUNTING CLIP

Mfg. Part No.	Type	Stock No.	Price Each 1-24
CLP125BLK	LED Mounting Clip, Standard Clip for 5MM LEDs	88H4146	0.17
CLP126BLK	LED Mounting Clip, Extended clip for 5MM LEDs	57P6503	0.23
CLP127BLK	LED Mounting Clip, Outer Reflecting clip for 5MM LEDs	88H4149	0.17
CLP129BLK	LED Mounting Clip, Inner Reflecting clip for 5MM LEDs	57P6504	0.23

RETAINING RING

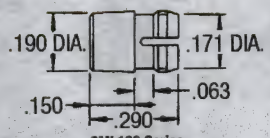
Mfg. Part No.	Type	Stock No.	Price Each 1-24
RNG 268	Black Mounting Ring	23K2393	0.13

(90523)

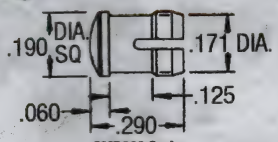
CLIPLITE® LENS MOUNTS FOR T1 AND T1-¾ LEDs

RoHS Compliant Available

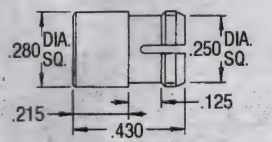
VCC



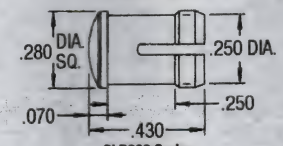
SML190 Series



SMB200 Series



CLF280 Series



CLB300 Series

Standard and low profile lenses, provide 180° viewing angle. Colors: red, green, blue, amber, yellow and clear. Hole size T1, 0.171″, on 0.250″ centers. Panel thickness T1: **SML190 series**, 0.031-0.062″; **SMB200 series**, 0.062-0.125″. Hole size T1-¾, 0.250″ on 0.375″ centers. Panel thickness, **CLF280 series**, 0.062-0.125″. **CLB300 series**, 0.031-0.250″. **Mfg. part no. SPC125** spacers are used with **CLB300 series**, on panels less than 0.188″, and are ordered separately along with lenses and mounts; *go online or call*.

Mfg. Part No.	Color	Stock No.	Price Each 1-9
SML190RTP	Red	57P6998	0.38
SML190GTP	Green	57P6997	0.36
SML190CTP	Clear	57P6996	0.34
SMB200RTP	Red	57P6986	0.29
SMB200GTP	Green	57P6985	0.39
SMB200BTP	Blue	57P6983	0.26
SMB200YTP	Yellow	57P6987	0.38
SMB200CTP	Clear	57P6984	0.26
CLF280RTP	Red	57P6501	0.32
CLF280ATP	Amber	57P6498	0.39
CLF280GTP	Green	57P6500	0.42

CONTINUED

MOUNTING ACCESSORIES

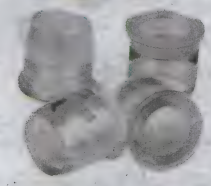
CLIPLITE® LENS MOUNTS FOR T1 AND T1-¾ LEDs (CONT.)

Mfg. Part No.	Color	Stock No.	Price Each 1-9
● CLF280BTP	Blue	65H6650	0.39
● CLF280YTP	Yellow	57P6502	0.41
● CLF280CTP	Clear	57P6499	0.27
● CLB300RTP	Red	57P6496	0.26
● CLB300ATP	Amber	57P6493	0.41
● CLB300GTP	Green	57P6495	0.26
● CLB300BTP	Blue	08P0923	0.42
● CLB300YTP	Yellow	57P6497	0.41
● CLB300CTP	Clear	57P6494	0.24

(2547)

CLIPMOUNT® PANEL MOUNTS FOR LEDS

RoHS Compliant Available



T1 and T1-¾ size low-profile panel mounts provide 90° viewing angle. Also can be used with Conxrite LED cable interconnects.

Mfg. part no. SMC130 for T1 LED. Hole size: 0.171″ on 0.250″ centers, panel thickness: 0.031″-0.090″. **Mfg. part no. CMC285** for T1-3/4 LEDs. Hole size: 0.283″ on 0.375″ centers, panel thickness: 0.031″-0.125″. *Order retaining ring* **mfg. part no. RNG132** *for* **mfg. part no. SMC130** *separately below.* Order retaining ring **mfg. part no. RNG268** for **mfg. part no. CMC285,** ordered separately below; *go online or call.*

Mfg. Part No.	Color	Use With LED Type	Stock No.	Price Each 1-9
● SMC130CTP	Clear	3mm LEDs	57P6988	0.31
● SMC130BLK	Black	3mm LEDs	83H9357	0.25
● CMC285CTP	Clear	5mm LEDs	57P6510	0.39
● CMC285BLK	Black	5mm LEDs	19M0056	0.32

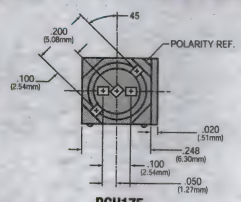
RETAINING RINGS

Mfg. Part No.	Use With	Stock No.	Price Each 1-9
● RNG132	3mm - SMC Panel Mount	35C0590	0.20
● RNG165	5mm	57P6979	0.15

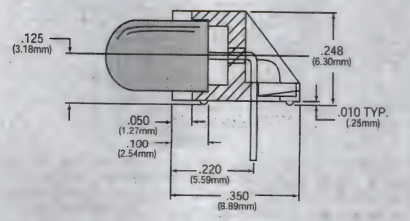
(69029)

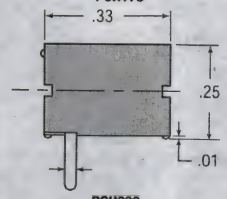
P-C-LITE® PCB MOUNTS FOR LED CIRCUIT BOARDS

RoHS Compliant Available

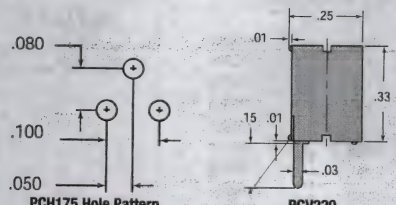


PCH175

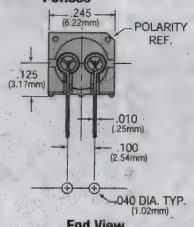




PCH330



PCH175 Hole Pattern PCV220



End View

PCH 330, PCV 220 and **SMD 330** are relampable sockets for circuit board mounting of LEDs. They are soldered directly to the PCB which permits easy insertion or removal of the LED. **PCH 175** is a right angle PCB mount for bi and tri-lead LEDs. **PCH 175** Dove-tail feature allows mounting of multiple LEDs as a single unit.

➤CONTINUED➤

P-C-LITE® PCB MOUNTS FOR LED CIRCUIT BOARDS (CONT.)

Mfg. Part No.	Type	Stock No.	Price Each 1-9
● PCH175	Right Angle Bi or Tri-Lead	08N2955	0.15
● PCH330	Horizontal Bi-lead Thru-hole	08N2956	0.80
● PCV220	Vertical Bi-lead Thru-hole	08N2957	0.82

(84770)

CONXRITE® LED CABLE ASSEMBLIES WITH PUSH-ON LENSES AND SOCKETS

RoHS Compliant Available

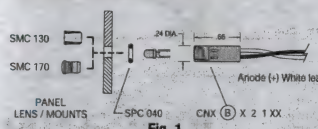


Fig. 1

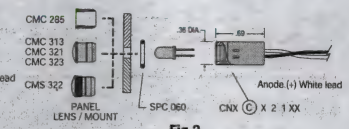


Fig 2

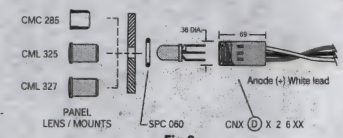


Fig 3

Designed to replace labor-intensive hard-wiring of panel-mounted LEDs to PCB. 3mm **CNXBE** and **CNXBX series** connector assemblies use **SMC170** lens or **SMC130** mount; 5mm **CNXCE** and **CNXCX series** assemblies use a **CMC321** lens or **CMC285** mount. *Order lenses and mounts separately; go online or call.* Thin panels (0.032″) use spacer **mfg. part no. SPC040** for 3mm or **mfg part no. SPC060** for 5mm assemblies. *Order both ring spacers separately below.* **CNXBE**, **CNXCE** and **CNXDF series** cables are supplied with panel and header connector. The **BX, CX** and **DX** cables are supplied with panel connector and bare wire leads. **CNXV** and **H** series locking headers provide positive locking between PCB and cable assembly.

PANEL (LED) CONNECTOR: T1 (3mm) BI-LEAD

Mfg. Part No.	Fig.	Connection Style	L (in.)	Stock No.	Price Each 1-9	Price Each 10-99
● CNXBE4104	1	2 Pos. Connector	0.102	08N2895	2.34	2.15
● CNXBE4108	1	2 Pos. Connector	0.203	08N2896	2.79	2.57
● CNXBE4112	1	2 Pos. Connector	0.305	08N2897	3.17	2.92
● CNXBE4118	1	2 Pos. Connector	0.457	08N2898	3.35	3.07
● CNXBX4104	1	Stripped Leads	0.102	58K8639	1.50	1.38
● CNXBX4108	1	Stripped Leads	0.203	08N2899	1.63	1.50
PANEL (LED) CONNECTOR: T1-3/4 (5mm) BI-LEAD						
● CNXCE4108	2	2 Pos. Connector	203.2	57P6545	2.66	2.49
● CNXCE4118	2	2 Pos. Connector	0.457	08N2900	3.03	2.78
● CNXCE4124	2	2 Pos. Connector	0.61	32M0523	3.22	2.96
● CNXCX4118	2	Stripped Leads	0.305	08N2901	2.18	2.00
OPTIONAL SPACERS						
● SPC040		Spacer for 3mm LED Assy		57P7006	0.11	0.09
● SPC060		Spacer for 5mm LED Assy		57P7007	0.11	0.10

(94575)

LENSES FOR CONXRITE® LED CABLE INTERCONNECTS

RoHS Compliant Available

5mm THREADED LENSES

Mfg. Part No.	LED Type	Style	Color	Stock No.	Price Each 1-9
● CMC441RTP	T1-3/4 (5mm) Bi-lead	Lens and retaining ring included. (Not Moisture Sealed)	Red	57P6522	0.94
● CMC441ATP			Amber	57P6518	0.94
● CMC441GTP			Green	57P6521	0.94
● CMC441BTP			Blue	57P6519	0.95
● CMC441YTP			Yellow	57P6523	0.95
● CMC441CTP			Clear	57P6520	0.96
5mm WATER TIGHT LENSES					
● CMS442RTP	T1-3/4 (5mm) Bi-lead	Lens and retaining ring included. (Not Moisture Sealed)	Red	57P6532	1.90
● CMS442GTP			Green	57P6531	1.76
● CMS442BTP			Blue	57P6529	1.69
● CMS442CTP			Clear	57P6530	1.92

➤CONTINUED➤

LENSES FOR CONXRITE® LED CABLE INTERCONNECTS (CONT.)

10mm THREADED LENSES

Mfg. Part No.	LED Type	Style	Color	Stock No.	Price Each 1-9
HMC461RTP	T3-3/4 (10mm) Bi-lead	Lens and retaining ring included. (Not Moisture Sealed)	Red	83H2381	1.34
HMC461ATP			Amber	57P6740	1.34
HMC461GTP			Green	57P6742	1.42
HMC461CTP			Clear	57P6741	1.40
10mm WATER TIGHT LENSES					
HMS462RTP	T3-3/4 (10mm) Bi-lead	Lens and retaining ring included. (Not Moisture Sealed)	Red	57P6747	2.26
HMS462GTP			Green	57P6746	2.24
HMS462BTP			Blue	57P6745	2.26
HMS462CTP			Clear	81H0021	2.28

(133593)

P-C-LITE PCB MOUNTS WITH LEDs

RoHS Compliant Available

VCC

PCH 175 is a right angle PCB mount for bi and tri-lead LEDs. **PCH 175** Dove-tail feature allows mounting of multiple LEDs as a single unit.

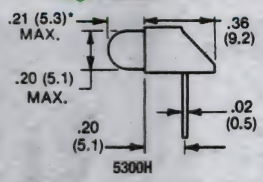
Mfg. Part No.	Description	Stock No.	Price Each 1-9
PCH 175 01	5mm LED Right Angle Mount with Red LED	03P2990	0.69

(133282)

5300 SERIES CIRCUIT BOARD INDICATORS

RoHS Compliant Available

Chicago Miniature Lighting, LLC
Lighting the world since 1910



T-1¾ RIGHT ANGLE LED ASSEMBLIES

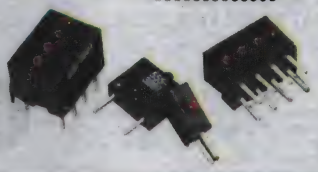
Mfg. Part No.	Color	Wavelength (nm)	Luminous Intensity (mcd)	Forward Voltage Typ. (V)	Stock No.	Price Each 1-24
5300H1	Red	650	6.3	2	93K6788	0.43
5300H5	Green	563	10	2.2	93F3513	0.43
5300H7	Yellow	585	6.3	2.1	93K6789	0.42
T-1-3/4 BI-COLOR RIGHT ANGLE LED ASSEMBLIES						
5300H1/5	Red/Green	650	6	2.2	93F7854	0.92

(2556)

555 SERIES SINGLE 2mm SUBMINIATURE INDICATORS

RoHS Compliant Available

Dialight



555 series top-view and right-angle single indicators feature 2mm standard efficiency and resistor LED. They are fully compatible with **555 series** quad indicators, ordered separately; *go online or call.*

Mfg. Part No.	LED Color	VF Typ.	IF (mA)	Luminous Intensity (mcd)	Stock No.	Price Each 1-24
555-2001F	Red	1.6	40	1.2	30K2708	1.40
555-2003F	Red	6	6	1.9	30K2710	1.41
555-2007F	Red	6	3	0.9	30K2715	1.47
555-2008F	Red	24	3	0.9	30K2717	1.85
555-2301F	Green	2.4	25	1	30K2720	1.25
555-3301F	Green	2.4	25	1	30K2736	1.97
555-3303F	Green	6	4.7	2.5	30K2737	2.11
555-2303F	Green	6	4.7	2.5	30K2721	1.41
555-2401F	Yellow	2.2	25	2	30K2723	1.42
555-2403F	Yellow	5	4.7	2.1	30K2724	1.45

(2590)

CIRCUIT BOARD INDICATOR SURFACE MOUNT LEDS

RoHS Compliant Available

Dialight

Available on Tape & Reel; *go online or call.*

SINGLE LED, SINGLE COLOR

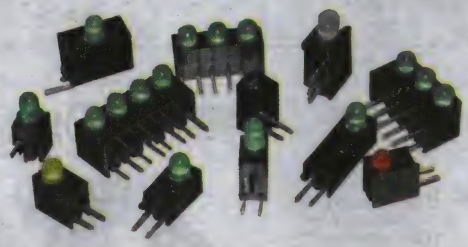
Mfg. Part No.	Color	Lens Style	Typ. VF (V)	Lum. Intens. (mcd)	Stock No.	Price Each 1-24
591-2101-013F	Red	Round	1.75	18	75R0559	1.44
595-2101-002F	Red	Square	1.7	25	30K4823	1.54
595-2101-007F	Red	Square	1.7	25	30K4824	1.12
591-2001-002F	Red	Round	2	5	30K4658	1.01
591-2001-007F	Red	Round	2	4.5	75R0558	1.65
591-2304-013F	Green*	Round	1.8	22	78M4683	1.47
591-2201-002F	Green	Round	2.1	9.1	30K4674	1.55
591-2301-002F	Green	Round	2	4	30K4680	0.92
591-2301-013F	Green	Round	2	4	30K4682	1.06
595-2301-002F	Green	Square	2.1	11	30K4832	1.21
591-2401-007F	Yellow	Round	2	5.7	75R0561	1.65
591-2401-002F	Yellow	Round	2	5	30K4688	0.94
595-2401-002F	Yellow	Square	2.2	9	30K4837	1.52
591-2601-013F	Blue	Round	3.5	6	75R0562	2.84
SINGLE LED, DUAL COLOR						
591-3001-002F	Red / Green	Round	2	8	30K4724	2.72
591-3001-007F	Red / Green	Round	2.6	8	30K4725	1.92
591-3001-013F	Red / Green	Round	2	8	30K4726	1.92
591-3001-113F	Red, Green	Square	2	6.8	30K4731	2.46
DUAL LED, SINGLE COLOR						
DUAL LED, DUAL COLOR						
592-3131-013F	Yellow Green / Yellow Green	Round	2 / 2	6.5 / 8	30K4817	1.68

*Low-current, 2mA devices.
(72859)

551 SERIES SINGLE 3mm LED INDICATORS

RoHS Compliant Available

Dialight



551 series single 3mm LED indicators offer high efficiency, low current and integral resistor LED in packages that put the LED center line at a height of 0.200, 0.250, and 0.450". Some indicators also available in quad block; *go online or call for more information.*

Mfg. Part No.	LED Color	VF Typ.	Current (mA)	Lum. Intens. Typ. (mcd)	Stock No.	Price Each 1-24
551-0207F	Green	2.1	10	16	30K1434	0.74
551-0307F	Yellow	2.1	10	6.3	30K1466	0.76
551-0407F	Red	2	10	10	30K1498	0.74
551-1107F	Red	1.8	2	1.8	30K1572	0.99
551-1207F	Yellow	1.9	2	1.6	30K1601	0.97
551-1307F	Green	1.8	2	1.6	30K1624	0.99
551-3007F	Red/Green	2	10	5	30K1707	1.49
551-0607F	Green	5	10	19	30K1542	1.16
551-0807F	Blue	3.2	10	40	30K1562	2.42
551-0209F	Green	2.1	10	16	30K1456	0.90
551-0409F	Red	2	10	10	30K1516	0.90
551-1309F	Green	1.9	10	1.6	30K1650	0.71
551-3009F	Red/Green	2	20	10/4.7	30K1713	1.70

(2591)

CIRCUIT BOARD INDICATORS

550 SERIES 5mm SINGLE-LED INDICATORS

RoHS Compliant Available

Dialight

High luminous intensity solid-state light source available in red, green or yellow and 2-leaded bicolor. Right-angle housing offers ease of assembly and pre-trimmed leads compatible with dual or quad **550 series**.

Mfg. Part No.	Fig.	Color	V_F(V)	Current (mA)	Luminous Intensity (mcd)	Stock No.	Price Each 1-24
● 550-0404F	1	Red	2	20	12.3	30K0806	0.92
● 550-0204F	1	Green	2.1	20	12.3	30K0763	0.90
● 550-0304F	1	Yellow	2.1	20	12.3	30K0790	0.90
● 550-1004F	1	Red	4	20	1000	30K0874	2.77
● 550-2504F	1	Orange	1.9	10	7	30K1068	0.83
● 550-5104F	1	Red	2.1	20	34	30K1147	1.17
● 550-5204F	1	Green	2.2	20	34	30K1160	1.20
● 550-0205F	2	Green	2.1	20	12.3	30K0766	0.57
● 550-0405F	2	Red	2	20	12.3	30K0809	0.74
● 550-0705F	2	Green	5	12	8	30K0849	1.04
● 550-1005F	2	Blue	4	20	1000	30K0875	2.81
● 550-1205F	2	Yellow	1.9	2	1.8	30K0905	0.97
● 550-0207F	3	Green	2.1	20	12.3	30K0779	0.71
● 550-0307F	3	Yellow	2.1	20	12.3	30K0797	0.61
● 550-0407F	3	Red	2	20	12.3	30K0814	0.57
● 550-1107F	3	Red	1.8	2	2	30K0891	0.90
● 550-1307F	3	Green	1.8	2	1.8	30K0923	0.97
● 550-2207F	3	Green	2.1	10	10	30K0968	0.67
● 550-2307F	3	Yellow	2.1	10	6.3	30K1006	0.80
● 550-2407F	3	Red	2.2	10	7	30K1047	0.66
● 550-3007F	3	Red/Grn	1.75/2	10	14/6	30K1092	1.58

(2597)

553 SERIES 3mm BI-LEVEL INDICATORS

RoHS Compliant Available

Dialight

Bi-level solid state light source available in red, green or yellow; with or without integral resistors. Also available in standard and super efficient versions. **553 series** design conserves PC board space and right angle housing offers ease of assembly. Leads are pretrimmed.

Mfg. Part No.	LED Color (Top/Bot)	VF Typ.	Current (mA)	Luminous Intensity (mcd)	Stock No.	Price Each 1-24
● 553-0112F	Red/Green	2/2.1	10	10/16	30K2145	1.70
● 553-0113F	Red/Yellow	2/2.1	10	10/6.3	30K2173	1.75
● 553-0121F	Green/Red	2.1/2.1	10	16/10	30K2195	1.29
● 553-0122F	Green/Green	2.1/2.1	10	16/16	30K2207	1.48
● 553-0122-200F	Green/Green	2.1/2.1	10	16/16	30K2216	1.65
● 553-0132F	YellowGreen	2.1/2.1	10	6.3/16	30K2277	1.67
● 553-0133-300F	Yellow/Yellow	2.1/2.1	10	6.3/6.3	30K2300	1.65
● 553-0211F	Red/Red	1.7/1.7	2	1.6/1.6	30K2361	1.82
● 553-0212F	Red/Green	1.7/1.9	2	1.6/1.6	30K2371	1.82
● 553-0221F	Green/Red	1.9/1.7	2	1.6/1.6	30K2385	1.33
● 553-0222F	Green/Green	1.9/1.9	2	1.6/1.6	30K2393	1.82
● 553-0232F	Yellow/Green	1.8/1.9	2	5/1.6	30K2440	1.50
● 553-0321F	Green/Red	5/5	10	19/29	30K2487	1.93
● 553-0711F	Red/Green, Red/Green	2/2.1, 2/2.1	10	4.7/10, 4.7/10	30K2529	2.43
● 553-0744F	Yellow/Green, Yellow/Green	2.1/2.1, 2.1/2.1	10	4.3/6.3, 4.3/6.3	30K2602	2.43
● 553-0711-200F	Red/Green, Red/Green	2/2.1, 2/2.1	10	4.7/10, 4.7/10	30K2541	2.57

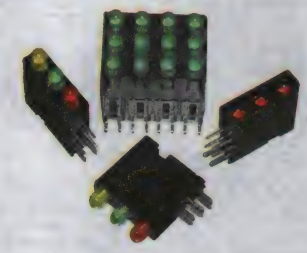
(2521)

3mm SINGLE, TRI- AND QUAD-LEVEL INDICATORS

RoHS Compliant Available

Dialight

Design conserves PC board space and right angle housing offers ease of assembly. Leads are pre-trimmed. Also available in standard and super-efficient versions; *go online or call.*



SINGLE-LEVEL INDICATORS

Mfg. Part No.	LED Color	V_F Typ.	Current (mA)	Luminous Intensity (mcd)	Stock No.	Price Each 1-24	Price Each 25-99
● 551-1107-004F	Red	1.7	3	1.6	30K1574	3.28	2.67

TRI-LEVEL INDICATORS

Mfg. Part No.	LED Color	V_F Typ.	Current (mA)	Luminous Intensity (mcd)	Stock No.	Price Each 1-24	Price Each 25-99
● 564-0100-132F	Rd/Yl/Gr	2*/ 2.1*/ 2.2	10	10/10/12.6	30K3457	2.78	2.26
● 564-0300-132F	Rd/Yl/Gr	5/5/5	10/10/12	4/8/8	30K3674	2.62	2.13

QUAD-LEVEL INDICATORS

Mfg. Part No.	LED Color	V_F Typ.	Current (mA)	Luminous Intensity (mcd)	Stock No.	Price Each 1-24	Price Each 25-99
● 568-0101-111F	Rd/Rd/Rd/Rd	2	10	10	30K4003	3.47	2.82
● 568-0102-222F	Gr/Gr/Gr/Gr	2.1*	10	8.5	30K4051	3.37	2.74
● 568-0721-111F	Rd/Gr/Rd/Gr	2-2.1	20	5.6	30K4241	4.34	3.89

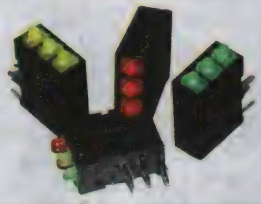
*I_F = 20mA.
(2567)

2mm LED CBI TRI-LEVEL CIRCUIT BOARD INDICATORS

RoHS Compliant Available

Dialight

Features:
- Designed to Accommodate DIN 41494
- Multiple CBIs Form Horizontal LED Arrays on 0.200″ (5.08) Center-Lines
- Housing Stand-Offs Facilitate PC Board Cleaning
- Viewing Angle: 70°
- Solderability per MIL-STD-202F, Method 208F



Mfg. Part No.	Color	Peak Wave-length (nm)	Luminous Intensity (mcd)*	V_F** (V)	Stock No.	Price Each 1-24
● 570-0100-132F	Red-Yellow-Green	627-590-565	15-8-10	2.5	30K4476	2.73
● 570-0100-222F	Green-Green-Green	565	8.7	2.1	30K4486	2.73

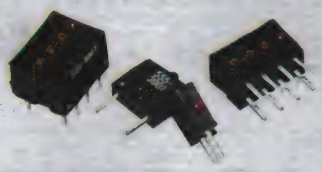
*I_V=10mA; **V_F=20mA.
(72860)

2mm LED CBI® QUAD CIRCUIT BOARD INDICATORS

RoHS Compliant Available

Dialight

Small 2mm design conserves board space. Highly reliable, vibration- and shock-resistant unit is available with a variety of LEDs; *go online or call.* Viewing angle: ±20°. Test current for standard efficiency units: 20mA. Test voltage for integral resistor units: 5V. Housing material meets UL94V-0.



STANDARD EFFICIENCY

Mfg. Part No.	Color	Wave Length (nm)	Luminous Intensity (mcd)	V_F	Current (mA)	Stock No.	Price Each 1-24
● 555-4001F	Red	650	1.2	1.6	20	30K2741	4.18

INTEGRAL RESISTOR - 5V

Mfg. Part No.	Color	Wave Length (nm)	Luminous Intensity (mcd)	Current (mA)	Stock No.	Price Each 1-24
● 555-4003F	Red	650	1.9	6	30K2746	4.57
● 555-4007F	Red	650	0.9	3	30K2751	4.57
● 555-4303F	Green	565	2.5	4.7	30K2755	4.79

(2642)

PC BOARD MOUNT LEDS

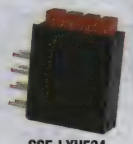
RoHS Compliant Available

LUMEX — Creating LED and LCD Solutions Together™

SSF-LXH100

SSF-LXH103

SSF-LXH240


SSF-LXH534

NOTE: Dimensions shown may vary with different mfg. part no. suffixes. Please see manufacturer's datasheets for exact dimensions; *go online or call.*

T-3/4 (1.8mm) PACKAGE

Mfg. Part No.	Color	Typ. V_f (V)	$I_{f\ (Max)}$ (mA)	Lumin. Intens. (mcd)	Viewing Angle (°)	Stock No.	Price Each 1-24	Price Each 25-99
SSF-LXH5147GYIID	Red Yellow	2 2.1 2.2	20	20 15 15	60	77M1242	5.48	4.58
SSF-LXH555GD	Green	2.1	20	8	50	18J0526	1.46	1.22
2 x 3mm PACKAGE								
SSF-LXH534SUGD	Green	2.2	20	30	100	74M8056	11.42	9.54
SSF-LXH534SYD	Yellow	2	20	70	100	77M1262	9.70	8.10
2.5 x 7mm PACKAGE								
SSF-LXH25780GD	Green	2.2	20	9	110	20J0017	1.40	1.17
T-1 (3mm) PACKAGE								
SSF-LXH103ID	Red	2.1	20	30	60	04M4606	0.43	0.36
SSF-LXH103YD	Yellow	2.1	20	30	60	09J9200	0.43	0.36
SSF-LXH103GD	Green	2.1	20	30	60	09J9196	0.41	0.34
SSF-LXH103LID	Red	2	20	40	60	09J9199	0.49	0.41
SSF-LXH103LGD	Green	2.1	20	15	80	09J9198	0.44	0.37
SSF-LXH2103IID/4	Red	2	20	40	60	09J9205	1.63	1.36
SSF-LXH2103GGD/4	Green	2.2	20	30	60	09J9204	1.74	1.44
SSF-LXH2103LIID/4	Red	2	20	4	60	09J9206	1.78	1.48
SSF-LXH2300LGD-LM	Green	2.2	20	50	60	09J9632	1.00	0.83
SSF-LXH240IID	Red	2	20	15	80	09J9208	1.33	1.10
SSF-LXH240GGD	Green	2.2	20	40	60	09J9207	1.08	0.90
SSF-LXH103USBD	Blue	3.5	20	80	60	19J9651	4.08	3.41
SSF-LXH103UWC	White	3.3	20	1.2	34	77M1091	3.07	2.57
SSF-LXH2103GDIYW/4	Red Yellow Green	2 2.1 2.2	20	30 20 30	60	19J9791	2.73	2.28
SSF-LXH2103LYGD/4	Yellow Green	2.1 2.2	20	30	60	19J9833	2.30	1.92
SSF-LXH2103YYD/4	Yellow	2.1	20	30	60	19J9859	2.23	1.86
SSF-LXH2300YD-LM	Yellow	2.1	20	50	60	19J9903	0.97	0.81
SSF-LXH240IGD	Red Green	2 2.2	20	40 30	60	19J9936	2.02	1.69
SSF-LXH240LIID	Red	2	20	15	80	19J9951	1.92	1.60
SSF-LXH240YGWSBD	Yellow Green	2.1 2.2	20	...	60	77M1145	6.10	5.09
SSF-LXH240YGYGW	Yellow Green	2.1 2.8	...	...	80	19J9965	3.39	2.84
SSF-LXH303GD	Green	2.2	20	30	60	20J0037	0.81	0.68
SSF-LXH304GD	Green	2.2	20	30	60	20J0100	0.62	0.52
SSF-LXH305AD-TR	Amber	2	20	40	60	20J0114	1.80	1.50
SSF-LXH305SGD-TR	Green	2.2	20	150	60	20J0145	1.92	1.60
SSF-LXH305SRD-TR	Red	1.7	20	80	60	20J0151	0.63	0.60
SSF-LXH305SYD	Yellow	2.1	20	250	60	20J0155	3.48	2.91
SSF-LXH305SYD-TR	Yellow	2.1	20	250	60	20J0156	3.26	2.72
SSF-LXH340YIID	Red Yellow	2 2.1	20	40 30	60	77M1200	2.96	2.47
SSF-LXH475GYW	Yellow Green	2.1 2.2	20	8	80	77M1209	6.88	5.75
SSF-LXH475LGD	Green	2.2	20	30	60	20J0339	4.87	4.06
SSF-LXH4RAGD	Green	2.1	20	30	60	20J0228	1.80	1.51
SSF-LXH4RAHGW	Red Green	...	...	3 4	60	20J0229	2.40	2.01
SSF-LXH4RAID	Red	2.1	20	40	60	20J0230	2.11	1.76
T-1 3/4 (5mm) PACKAGE								
SSF-LXH100GD-5V	Green	5	12	10	60	40K0246	1.07	0.89
SSF-LXH100ID-01	Red	2	20	40	60	09J9192	0.39	0.33
SSF-LXH100ID	Red	2	20	40	60	09J9191	0.44	0.36
SSF-LXH100YD-01	Yellow	2.1	20	30	60	09J9626	0.61	0.51
SSF-LXH100YD	Yellow	2.1	20	30	60	09J9625	0.52	0.43
SSF-LXH100GD-01	Green	2.2	20	30	60	09J9190	0.53	0.44
SSF-LXH100GD	Green	2.2	20	30	60	09J9189	0.42	0.35
SSF-LXH100LID	Red	2	20	40	60	09J9194	0.42	0.35
SSF-LXH100LGD	Green	2.2	20	30	60	09J9193	0.40	0.33
SSF-LXH100MID	Red	2	20	30	60	09J9621	0.55	0.46
SSF-LXH104ID	Red	2	20	40	60	09J9202	0.53	0.44
SSF-LXH104GD	Green	2.2	20	30	60	09J9201	0.51	0.43

➤ CONTINUED ➤

PC BOARD MOUNT LEDS (CONT.)

T-1 3/4 (5mm) PACKAGE

Mfg. Part No.	Color	Typ. V_f (V)	$I_{f\ (Max)}$ (mA)	Lumin. Intens. (mcd)	Viewing Angle (°)	Stock No.	Price Each 1-24	Price Each 25-99
SSF-LXHM250IGIGW	Red Green	2.2	60	30 25	60	09J9616	1.91	1.59
SSF-LXH100HGW	Red Green	2 2.2	20	6 20	60	19J9523	1.17	0.98
SSF-LXH100MHGW	Red Green	2 2.2	20	6 20	60	19J9562	1.37	1.15
SSF-LXH100MLGD	Green	2.2	20	30	60	19J9566	1.14	0.95
SSF-LXH169SISUGW	Red Green	2 2.2	20	500 200	60	57J6050	5.72	4.78
SSF-LXH250IGIGW	Red Green	2 2.2	20	30 25	60	19J9985	3.25	2.71
SSF-LXH4RA5GD	Green	2.1	20	30	60	20J0241	1.91	1.59
SSF-LXHM250GGD	Green	2.2	20	30	60	19J9476	2.04	1.70

(BO593)

PANEL MOUNT LED ASSEMBLIES

RoHS Compliant Available

BIVAR MOVING LIGHT

Features:
- Press fit mounting
- Variety of terminations
- Standard 6.35mm mounting hole diameter
- Bi-color T-1 ¾ LEDs

3-LEAD BICOLOR

Mfg. Part No.	Color	Termination Type	Stock No.	Price Each 1-9
PM53-RYW12.0CC	Red, Yellow	12" of wire with connector	73R3935	2.64
PM53-YGW12.0	Yellow, Green	12" of wire, No connector	73R3937	1.95
3-LEAD BICOLOR RECESSED				
PM5R3-BC	Red, Green	No Wire, No Connector	73R3921	0.54
PM5R3-BCW12.0	Red, Green	12" of wire, No connector	73R3922	1.95
PM5R3-BCW12.0CC	Red, Green	12" of wire with connector	73R3923	2.64
PM5R3-RY	Red, Yellow	No Wire, No Connector	73R3924	0.59
PM5R3-RYW12.00	Red, Yellow	12" of wire, No connector	73R3926	1.96
PM5R3-RYW12.0CC	Red, Yellow	12" of wire with connector	73R3925	2.64
PM5R3-YGW12.0	Yellow, Green	12" of wire, No connector	73R3928	1.96
PM5R3-YGW12.0CC	Yellow, Green	12" of wire with connector	73R3929	2.64
PM53-BCW12.0	Red, Green	12" of wire, No connector	73R3931	2.06

(177437)

PM3 SERIES PANEL MOUNT INDICATORS

RoHS Compliant Available

BIVAR MOVING LIGHT

Features:
- Press fit mounting
- Variety of terminations
- Standard 3.6mm mounting hole diameter
- 24AWG wire leads

DIFFUSED LENS, 12 IN. WIRE, NO CONNECTOR

Mfg. Part No.	Luminous Intensity	Color	Color	Stock No.	Price Each 1-9
PM3BWDW12.0	10	Blue	4	06W0186	2.47
PM3GDW12.0	25	Green	2.1	06W0191	1.31
PM3RDW12.0	2	Red	1.7	06W0208	1.39
PM3YDW12.0	20	Yellow	2	06W0213	1.31
DIFFUSED LENS, NO WIRE					
PM3RD	2	Red	2.1	06W0207	0.33
PM5BWD	15	Blue	4	20K2240	1.34
PM3GD	25	Green	2.1	20K2210	0.35
PM3YD	20	Yellow	2	20K2228	0.33
TINTED LENS, NO WIRE					
PM3PGT	10	Green	2.2	06W0203	0.47
TINTED LENS, 12 IN. WIRE, NO CONNECTOR					
PM3PGTW12.0	10	Green	2.2	06W0204	1.57

(208870)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

PANEL MOUNT INDICATORS

PM5 SERIES PANEL MOUNT INDICATORS

RoHS Compliant Available

BIVAR MOVING LIGHT

Features:
- Press fit mounting
- Variety of terminations
- Standard 6.35mm mounting hole diameter
- Bi-color T-1 ¾ LEDs

Mfg. Part No.	Luminous Intensity	Color	Stock No.	Price Each 1-9
● PM5AD	25	Amber	06W0256	0.36
● PM5ADW12.0	25	Amber	06W0257	1.35
● PM5AC	40	Amber	06W0254	0.36
● PM5ACW12.0	40	Amber	06W0255	1.35
● PM5AT	40	Amber	06W0258	0.36
● PM5ATW12.0	40	Amber	06W0259	1.35
● PM5BWDW12.0	15	Blue	06W0262	2.33
● PM5BWD	15	Blue	20K2240	1.34
● PM5BWC	25	Blue	06W0260	1.34
● PM5BWCW12.0	25	Blue	06W0261	2.33
● PM5BWT	30	Blue	06W0263	1.34
● PM5BWTW12.0	30	Blue	06W0264	2.33
● PM5GDW12.0	25	Green	06W0267	1.32
● PM5GC	40	Green	06W0265	0.33
● PM5GT	40	Green	06W0268	0.33
● PM5GTW12.0	40	Green	06W0269	1.32
● PM5GCW12.0	40	Green	06W0266	1.32
● PM5PGC	10	Green	06W0275	0.49
● PM5PGT	10	Green	06W0279	0.49
● PM5PGTW12.0	10	Green	06W0280	1.48
● PM5PGCW12.0	10	Green	06W0276	1.48
● PM5PGD	10	Green	06W0277	0.49
● PM5PGDW12.0	10	Green	06W0278	1.48
● PM5RC	2	Red	06W0281	0.31
● PM5RCW12.0	2	Red	06W0282	1.30
● PM5RT	2	Red	06W0285	0.31
● PM5RTW12.0	2	Red	06W0286	1.30
● PM5RD	2	Red	06W0283	0.33
● PM5RDW12.0	2	Red	06W0284	1.40
● PM5HDW12.0	25	Red	06W0272	1.32
● PM5HC	40	Red	06W0270	0.33
● PM5HCW12.0	40	Red	06W0271	1.32
● PM5HT	40	Red	06W0273	0.33
● PM5HTW12.0	40	Red	06W0274	1.32
● PM5YDW12.0	25	Yellow	06W0289	1.32
● PM5YTW12.0	40	Yellow	06W0291	1.32
● PM5YT	40	Yellow	06W0290	0.33
● PM5YC	40	Yellow	06W0287	0.33
● PM5YCW12.0	40	Yellow	06W0288	1.32
● PM5-KAD	20	Amber	06W0220	1.98
● PM5-KADW12.0	25	Amber	06W0221	2.97
● PM5-PADW12.0	25	Amber	06W0238	14.07
● PM5-PAD	25	Amber	06W0237	13.05
● PM5-PBWDW12.0	200	Blue	06W0240	15.05
● PM5-PBWD	200	Blue	06W0239	14.06
● PM5-KBWD	200	Blue	06W0222	2.96
● PM5-KBWDW12.0	200	Blue	06W0223	3.95
● PM5-KGD	30	Green	06W0224	1.95
● PM5-KGDW12.0	30	Green	06W0225	2.94
● PM5-KPGD	10	Green	06W0228	2.11
● PM5-KPGDW12.0	10	Green	06W0229	3.10
● PM5-PPGDW12.0	10	Green	06W0246	14.20
● PM5-PGDW12.0	30	Green	06W0242	14.04
● PM5-PPGD	10	Green	06W0245	13.21
● PM5-PGD	30	Green	06W0241	13.05
● PM5-KWDW12.0	600	White	06W0233	4.40
● PM5-KWD	600	White	06W0232	3.41
● PM5-PWDW12.0	600	White	06W0250	15.50
● PM5-PWD	600	White	06W0249	14.51
● PM5-KRD	40	Red	06W0230	1.93
● PM5-KRDW12.0	40	Red	06W0231	3.14
● PM5-KHD	25	Red	06W0226	1.95
● PM5-KHDW12.0	25	Red	06W0227	2.94
● PM5-PHDW12.0	25	Red	06W0244	14.04
● PM5-PRDW12.0	40	Red	06W0248	14.02
● PM5-PHD	25	Red	06W0243	13.05
● PM5-PRD	40	Red	06W0247	13.03
● PM5-KYD	300	Yellow	06W0234	1.95
● PM5-KYDW12.0	300	Yellow	06W0235	2.94

➤CONTINUED➤

PM5 SERIES PANEL MOUNT INDICATORS (CONT.)

Mfg. Part No.	Luminous Intensity	Color	Stock No.	Price Each 1-9
● PM5-PYDW12.0	300	Yellow	06W0252	14.04
● PM5-PYD	300	Yellow	06W0251	13.05

(208322)

PANEL MOUNT INDICATORS

NEW

RoHS Compliant Available

BIVAR MOVING LIGHT

- Forward current: 20mA
- Forward voltage: 24V
- Luminous intensity: 20mcd
- Mounting hole diameter: 8mm
- IP67 rated
- Smart sensor technology automatically senses and adjusts for appropriate intensity
- Wide viewing angle capabilities with a 7mm water clear Fresnel lens
- Black metal housing for ruggedized applications (shock and vibration resistant)
- Non-polarized quick disconnect terminal blades which also work as soldering lugs for wire connection

Applications:
- Servers and server appliances
- Test and measurement equipment
- Electrical and control instrument panels
- Military and utility vehicle dashboards
- Commercial and communication control boxes
- Wireless and power line infrastructure
- Water and waste treatment equipment

Mfg. Part No.	Color	Stock No.	Price Each 1-999
PM5-M124-BLU	Blue	46X9008	47.00
PM5-M124-GRN	Green	46X9009	47.00
PM5-M124-RED	Red	46X9010	47.00
PM5-M124-YLW	Yellow	46X9011	47.00

(212107)

MPC SERIES STANDARD METAL PANEL MOUNT INDICATORS

RoHS Compliant Available

BIVAR MOVING LIGHT

Features:
- Press fit mounting
- Variety of terminations
- Standard 6.35mm mounting hole diameter
- Bi-color T-1 ¾ LEDs

Mfg. Part No.	Luminous Intensity (mcd)	Color	Stock No.	Price Each 1-9
3MM LED W\ WATER CLEAR LENS				
● MPC3RD	2	Red	06W0032	1.56
3MM LED W\ WATER CLEAR LENS WITH WIRE NO CONNECTOR				
● MPC3GDW12.0	25	Green	06W0017	2.57
● MPC3RDW12.0	2	Red	06W0033	2.55
● MPC3YDW12.0	20	Yellow	06W0037	2.57
3MM LED W\ WATER CLEAR LENS WITH WIRE CONNECTOR				
● MPC3BWDW12.0	10	Blue	06W0013	3.70
3MM RECESSED LED W\ DIFFUSED LENS W/WIRE NO CONNECTOR				
● MPR3BWDW12.0	10	Blue	06W0082	3.70
● MPR3GDW12.0	25	Green	06W0086	2.76
● MPR3RDW12.0	2	Red	06W0102	2.74
● MPR3YDW12.0	20	Yellow	06W0106	2.57
● MPR3BWD	10	Blue	20K1765	2.60
3MM RECESSED LED W\ DIFFUSED LENS				
● MPR3RD	2	Red	06W0101	1.45
● MPC3BWD	10	Blue	20K1737	2.60
● MPC3YD	20	Yellow	20K1744	1.47
● MPR3YD	20	Yellow	20K1772	1.58
● MPC3GD	25	Green	57H7170	1.58
3MM RECESSED LED W\ DIFFUSED LENS				
● MPR3GD	25	Green	98B6708	1.58
● MPR3BWCW12.0	15	Blue	06W0081	3.70
5MM LED W\ DIFFUSED LENS				
● MPC5BWD	15	Blue	20K1746	2.69
● MPR5BWD	15	Blue	67H3129	2.69
5MM LED W\ DIFFUSED LENS WITH WIRE CONNECTOR				
● MPC5BWDW12.0	15	Blue	06W0047	3.78
5MM LED W\ DIFFUSED LENS WITH WIRE NO CONNECTOR				
● MPC5GDW12.0	25	Green	06W0051	2.83
● MPC5HDW12.0	25	Red	06W0055	2.83
● MPC5YDW12.0	25	Yellow	06W0071	2.83

➤CONTINUED➤

MPC SERIES STANDARD METAL PANEL MOUNT INDICATORS (CONT.)

5MM RECESSED LED W\ DIFFUSED LENS WITH WIRE NO CONNECTOR

Mfg. Part No.	Luminous Intensity (mcd)	Color	Stock No.	Price Each 1-9
MPR5BWDW12.0	15	Blue	06W0117	3.78
MPR5GDW12.0	25	Green	06W0121	2.63
MPR5RDW12.0	1.5	Red	06W0137	2.81
MPR5YDW12.0	25	Yellow	06W0141	2.63
5MM LED W\ DIFFUSED LENS				
MPC5RD	2	Red	06W0066	1.62
MPR5RD	1.5	Red	06W0136	1.51
MPC5GD	25	Green	20K1748	1.53
MPC5YD	25	Yellow	20K1755	1.53
5MM RECESSED LED W\ DIFFUSED LENS W/WIRE NO CONNECTOR				
MPR5HD	40	Red	20K1776	1.64
MPR5YD	25	Yellow	20K1787	1.53
MPR5GD	25	Green	67H3127	1.64

(208483)

QUICK MOUNT PANEL MOUNT INDICATORS

RoHS Compliant Available

BIVAR MOVING LIGHT

- Reverse voltage max: 5V
- Power dissipation max: 150 mW

8.4MM DIFFUSED LED, NO WIRE

Mfg. Part No.	Luminous Intensity (mcd)	Color	Stock No.	Price Each 1-9
PM3-KAD	100	Amber	06W0144	1.26
PM3-KBWD	200	Blue	06W0146	2.23
PM3-KGD	30	Green	06W0148	1.25
PM3-KHD	30	Red	06W0150	1.25
PM3-KPGD	20	Green	06W0152	1.39
PM3-KRD	40	Red	06W0154	1.23
PM3-KWD	2.5	White	06W0156	1.87
PM3-KYD	30	Yellow	06W0158	1.25
8.4MM DIFFUSED LENS 12 IN. WIRE, NO CONNECTOR				
PM3-KADW12.0	100	Amber	06W0145	2.42
PM3-KBWDW12.0	200	Blue	06W0147	3.22
PM3-KGDW12.0	20	Green	06W0149	2.41
PM3-KHDW12.0	20	Red	06W0151	2.24
PM3-KPGDW12.0	20	Green	06W0153	2.38
PM3-KRDW12.0	40	Red	06W0155	2.39
PM3-KWDW12.0	2.5	White	06W0157	2.86
PM3-KYDW12.0	30	Yellow	06W0159	2.41
IP67 RATED SEALED 8.4MM DIFFUSED LENS NO WIRE				
PM3-PAD	100	Amber	06W0161	11.89
PM3-PBWD	200	Blue	06W0163	12.87
PM3-PHD	30	Red	06W0167	11.89
PM3-PPGD	20	Green	06W0169	12.03
PM3-PRD	40	Red	06W0171	11.87
PM3-PWD	2.5	Neutral White	06W0173	12.51
PM3-PYD	30	Yellow	06W0175	11.89
PM3-P1522-10.00	...	White	06W0177	9.21
IP67 RATED SEALED 8.4MM DIFFUSED LENS 12 IN WIRE, NO CONNECTOR				
PM3-PADW12.0	100	Amber	06W0162	13.78
PM3-PBWDW12.0	200	Blue	06W0164	13.86
PM3-PGDW12.0	30	Green	06W0166	12.87
PM3-PHDW12.0	30	Red	06W0168	13.78
PM3-PPGDW12.0	20	Green	06W0170	13.75
PM3-PRDW12.0	40	Red	06W0172	12.86
PM3-PWDW12.0	2.5	White	06W0174	13.50
PM3-PYDW12.0	30	Yellow	06W0176	12.88

(206609)

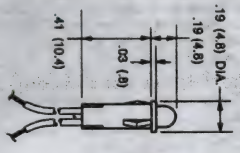
5110F SERIES LED PANEL MOUNT INDICATORS

RoHS Compliant Available

Chicago Miniature Lighting, LLC
Lighting the world since 1910

- Low Current: Only 2mA
- Built-In Chip Resistor
- Operates Directly Off 5V Supply
- No External Resistor Needed

Mfg. Part No. 5110F indicator features wire leads and super-brite T-1 LED 20 mcd-diffused lens to allow wide angle viewing. Snap-fits in 0.155-0.158″ (3.93-4.01mm) diameter hole in panels 0.031-0.062″ (0.78-1.57mm) thick. 6″, 26 AWG leads stripped 0.25″ (6.35mm). Black nylon housing. Amber color also available; *go online or call for more information.*



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5110F SERIES LED PANEL MOUNT INDICATORS (CONT.)

Mfg. Part No.	Color	Luminous Intensity (mcd)	Current (mA)	Forward Voltage Typ. (V)	Stock No.	Price Each 1-24
5110F1	Red	10	10	2	93F7470	1.40
5110F5	Green	16	20	2.2	93K6784	1.40
5110F7	Yellow	6.3	20	2.1	93F7866	1.38
5110F1LC	Red	2.5	2	1.8	16M0863	1.81
5110F1-5V	Red	8	10	5	92F3598	1.93
5110F5-5V	Green	8	10	5	93K6786	1.93
5110F1-12V	Red	8	13	12	16M1416	1.97
5110F5-12V	Green	8	13	12	93K6785	1.93

(2559)

5100H SERIES LED PANEL MOUNT INDICATORS

RoHS Compliant Available

Chicago Miniature Lighting, LLC
Lighting the world since 1910

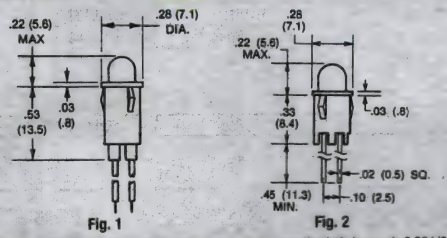


Fig. 1 Fig. 2

Indicator **type 5100H** snap-fits in 0.249/0.254″ (6.33/6.45) diameter mounting hole in panels 0.031/0.062″ (0.78/1.57) thick. Features 6″ (152.4) wire leads 24AWG insulated, bonded strands, stripped 0.25″ (6.35). **Type 5100H1/5** is bi-color. Lights red or green by reversing polarity. **Type 5102H** features built-in resistor chip (5V or 12V) to operate directly off 5-volt or 12-volt supply without external resistor. **Type 5101H** features wire-wrap 0.45″ (11.3) terminals. Black nylon housing.

Mfg. Part No.	Fig.	Color*	Luminous Intensity (mcd)	Current (mA)	Forward Voltage Typ. (V)	Stock No.	Price Each 1-24
5100H1	1	Red	30	20	2	18M8146	1.20
5100H3	1	Amber	20	20	2	18M8148	1.25
5100H5	1	Green	30	20	2.2	20M4417	1.17
5100H7	1	Yellow	25	20	2.1	18M8149	1.20
5100H1/5	1	Red/Grn	6	20	2.2	18M8147	1.86
5102H1-5V	1	Red	6	10	5	93F3484	1.69
5102H3-5V	1	Amber	7	10	5	93F3486	1.69
5102H5-5V	1	Green	10	12	5	93F3485	1.69
5102H1-12V	1	Red	4	13	12	18M8153	1.66
5102H3-12V	1	Amber	4	13	12	93F3489	1.69
5102H5-12V	1	Green	4	13	12	18M8154	1.66
5101H1	2	Red	6.3	20	2.2	18M8151	1.18
5101H5	2	Green	10	20	2.1	18M8152	1.18

* Colors are super-brite

(2558)

NON-RELAMPABLE 5/16″ LED PANEL MOUNT INDICATORS

RoHS Compliant Available

Chicago Miniature Lighting, LLC
Lighting the world since 1910

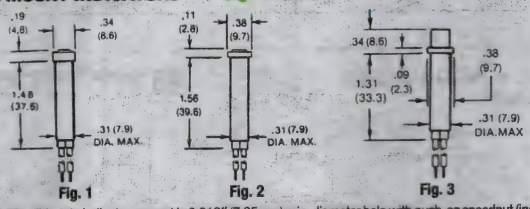


Fig. 1 Fig. 2 Fig. 3

Neon and LED solid-state indicators mount in 0.313″ (7.95mm) min. diameter hole with push-on speednut (included). All have 4.4-4.8″ (112-122.9mm) long, 22 AWG wire leads **except** Mfg. Part Nos. with Q in the type number which have 0.187″ (4.75mm) tinned brass quick-connect terminals. Neon indicators (**Mfg. Part Nos. 2110, 2120** and **2150**): 105-125VAC. **Mfg. Part No. 2150** has polished stainless steel bezel. Wire lead models feature black leads. LED solid state indicators (**Mfg. Part No. 2191**): 12V and 24V, as indicated by suffix in type number. Polished stainless steel bezel. Wire lead models feature red (+) anode lead.

NEON INDICATORS WITH BUILT-IN RESISTOR

Mfg. Part No.	Fig.	Lens Color	Stock No.	Price Each 1-24
2110A1	1	Red	18M7959	2.55
2110A2	1	Clear	18M7960	2.57
2110A3	1	Amber	18M7961	2.59
2110A4	1	White	18M7962	2.54
2120A1	2	Red	93F3569	2.58
2120A3	2	Amber	18M7967	2.77
2120A4	2	White	18M7968	2.80
2150A1	3	Red	26M8362	2.67
2150A2	3	Clear	18M7969	2.67
2150A3	3	Amber	26M8363	2.72

CONTINUED

PANEL MOUNT INDICATORS

NON-RELAMPABLE 5/16″ LED PANEL MOUNT INDICATORS (CONT.)

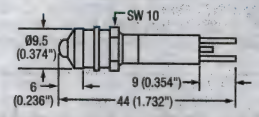
Mfg. Part No.	Fig.	Lens Color	Stock No.	Price Each 1-24
● 2152A5	3	Green	18M7973	3.88
● 2150A4	3	White	26M8364	2.67
● 2150QA1	3	Red	18M7970	2.75
● 2150QA3	3	Amber	18M7971	2.75
● 2150QA4	3	White	18M7972	2.69
● 2152QA5	3	Green	18M7974	4.02
LED SOLID-STATE INDICATORS				
● 2191L1-12V	3	Red	18M7975	3.26
● 2191L1-24V	3	Red	18M7976	3.33
● 2191L5-12V	3	Green	18M7977	3.33
● 2191L5-24V	3	Green	18M7978	3.33
● 2191L7-24V	3	Yellow	18M7980	3.33
● 2191QL1-12V	3	Red	93K6762	3.48
● 2191QL1-24V	3	Red	93K6763	3.54
● 2191QL5-12V	3	Green	93K6764	3.48
● 2191QL5-24V	3	Green	16M0460	3.48
● 2191QL7-24V	3	Yellow	18M7981	3.54
● 2191U5-24V	3*	Green	88M9621	3.33
● 2191U1-12V	3*	Red	93B8864	3.33

* Dome Style
(2563)

M8 LED INDICATORS

RoHS Compliant Available

CML INNOVATIVE TECHNOLOGIES — WHERE INNOVATION COMES TO LIGHT



M8 LED indicators mount in 0.315-0.323″ (8-8.2mm) diameter hole in panels and maximum thickness of 0.217″ (5.5mm). High brightness LEDs with color diffused lenses and chrome bezels. Solder tab terminal. 0.110 x 0.031″ (2.8 x 0.8mm). Brass terminal: anode. Brass-tinned terminal: cathode. IP40 rating. Black bezel is also available; *go online or call.*

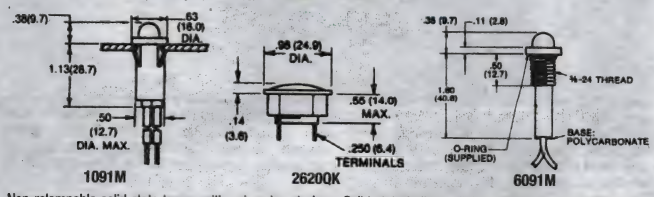
Mfg. Part No.	Color	Voltage	Current (mA)	Stock No.	Price Each 1-9
● 19040251	Green	12VDC	20	95C0330	4.98
● 19040252	Yellow	12VDC	20	93K6702	4.91
● 19040253	Red	12VDC	20	93K6703	4.85
● 19040257	Blue	12VDC	20	93K6704	7.95
● 19040351	Green	24VDC	20	93K6705	4.93
● 19040352	Yellow	24VDC	20	93K6706	4.93
● 19040353	Red	24VDC	20	95C0336	4.93
● 19040357	Blue	24VDC	20	93K6707	8.15
● 19510330	Red	130VAC	5	95C0390	9.55
● 19510331	Green	130VAC	5	95C0391	9.36
● 19510332	Yellow	130VAC	5	93K6743	9.23
● 19510430	Red	230VAC	5	93K6744	9.67
● 19510431	Green	230VAC	5	93K6745	9.23
● 19510432	Yellow	230VAC	5	93K6746	9.23

(72965)

SPECIAL NON-RELAMPABLE INDICATORS

RoHS Compliant Available

Chicago Miniature Lighting, LLC — *Lighting the world since 1910*



Non-relampable solid state lamps with polycarbonate lens. Solid state indicator lights (**1091M** and **6091M series**) feature built-in current-limiting resistor and rectifier diode. No. 22 AWG wire leads. Stainless-steel bezel. **1091M series** snap-fits into 0.5-0.505″ diameter hole in panels 0.02-0.1″ thick. **6091M series** mounts in a 0.38″ min. diameter hole. Supplied with internal tooth-lock washer and hex nut.

Mfg. Part No.	Color	Voltage	Stock No.	Price Each 1-24
● 1091M1-6V	Red	6	16M0432	3.24
● 1091M1-12V	Red	12	93K6623	3.19
● 1091M5-12V	Green	12	16M2705	3.26
● 1091M1-24V	Red	24	93K6624	3.19
● 1091M5-24V	Green	24	93K6626	3.13
● 1091M7-24V	Yellow	24	16M0435	3.26
● 1091M1-125VAC	Red	125	95F9388	3.79
● 1091M5-125VAC	Green	125	93K6625	3.71

➤CONTINUED➤

SPECIAL NON-RELAMPABLE INDICATORS (CONT.)

Mfg. Part No.	Color	Voltage	Stock No.	Price Each 1-24
● 1091M7-125VAC	Yellow	125	16M0434	3.79
● 2620QK1	Red	105-125VAC	18M8029	3.45
● 2620QK3	Amber	105-125VAC	18M8030	3.43
● 2622QK5	Green	105-125VAC	18M8032	4.48
● 6091M1-24V	Red	24	18M8215	7.20
● 6091M5-24V	Green	24	18M8216	7.07
● 6091M7-24V	Yellow	24	18M8217	6.37

(2549)

SUNLIGHT VISIBLE M8 LED INDICATORS

RoHS Compliant Available

CML INNOVATIVE TECHNOLOGIES — WHERE INNOVATION COMES TO LIGHT

Sunlight visible **M8** LED indicators mount in 0.315-0.323″ (8-8.2mm) diameter hole in panels and maximum thickness of 0.217″ (5.5mm). Super bright LEDs with color diffused lenses and chrome bezels. Solder tab terminal: 0.110 x 0.031″ (2.8 x 0.8mm). Brass terminal: anode. Brass tinned terminal: cathode. IP67 rating. Black bezel is also available; *go online or call.*

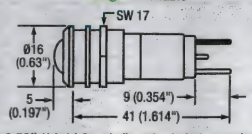
Mfg. Part No.	Color	Voltage	Current (mA)	Stock No.	Price Each 1-24
● 19080250	Red	12VAC/DC	17	93K6709	6.55
● 19080252	Yellow	12VAC/DC	17	93K6710	8.80
● 19080255	Green	12VAC/DC	17	95C0341	15.08
● 19080257	Blue	12VAC/DC	17	93K6711	15.08
● 1908025W	White	12VAC/DC	17	93K6708	16.13
● 19080350	Red	24VAC/DC	17	93K6713	6.55
● 19080352	Yellow	24VAC/DC	17	93K6714	9.03
● 19080355	Green	24VAC/DC	17	93K6715	15.27
● 19080357	Blue	24VAC/DC	17	93K6716	14.42
● 1908035W	White	24VAC/DC	17	93K6712	15.26

(72966)

M14 LED INDICATORS

RoHS Compliant Available

CML INNOVATIVE TECHNOLOGIES — WHERE INNOVATION COMES TO LIGHT



M14 LED indicators mount in 0.55-0.56″ (14-14.2mm) diameter hole in panels and maximum thickness of 0.433″ (11mm). High brightness LEDs with color diffused lenses and chrome bezels. Solder tab terminal. 0.11 x 0.031″ (2.8 x 0.8mm). Brass terminal: anode. Brass tinned terminal: cathode. IP40 rating. Black bezel is also available; *go online or call.*

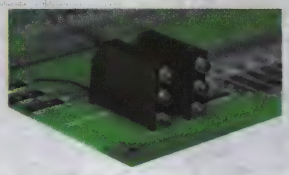
Mfg. Part No.	Color	Voltage	Current (mA)	Stock No.	Price Each 1-24
● 19210250	Red	12VDC	20	93K6725	8.60
● 19210251	Green	12VDC	20	93K6726	8.48
● 19210252	Yellow	12VDC	20	95C0361	7.48
● 19210350	Red	24VDC	20	93K6727	8.37
● 19210352	Yellow	24VDC	20	93K6728	8.01
● 19350130	Red	130VAC	6	16M0452	12.74
● 19350131	Green	130VAC	6	93K6729	14.74
● 19350133	Yellow	130VAC	6	16M0453	14.54
● 19350230	Red	230VAC	3	93K6730	12.90
● 19350231	Green	230VAC	3	93K6731	14.72

(72967)

DIALIGHT 593 SERIES 3mm TRI-LEVEL PRISM SURFACE MOUNT INDICATORS

RoHS Compliant Available

Dialight



Features:
- Incorporates latest LED technology, specifically designed for surface mounting
- Patented Tri-level design provides increased indication without increased space
- Illumination areas compatible with industry standard 3mm through-hole Tri-level Circuit Board Indicators
- Helps to eliminate mixed technology pc board processing

The **593 Series** Tri level Prism is available in 11 LED color options including bi-color and tri-color. There are numerous color combinations that can be supplied in any of the three positions from top to bottom depending upon customers needs.

Mfg. Part No.	LED Color	V_F (V)	Lumin. Intens. (mcd)	I_F (mA)	Stock No.	Price Each 1-299
● 593-303030-013F	3 Red, Green	2	7/10	30	78M7279	4.73

(106487)

SUNLIGHT VISIBLE M14 LED INDICATORS

RoHS Compliant Available

CML INNOVATIVE TECHNOLOGIES — WHERE INNOVATION COMES TO LIGHT

Sunlight visible **M14** LED indicators mount in 0.55-0.56″ (14-14.2mm) diameter hole in panels and maximum thickness of 0.433″ (11mm). Super bright LEDs with color diffused lenses and chrome bezels. Solder tab terminal. 0.110 x 0.031″ (2.8 x 0.8mm). Brass terminal: anode. Brass tinned terminal: cathode. IP67 rating. Black bezel is also available; *go online or call.*

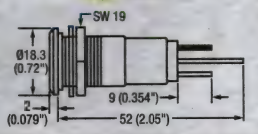
Mfg. Part No.	Color	Voltage	Current (mA)	Stock No.	Price Each 1-9
192A0250	Red	12VAC/DC	17	93K6718	9.06
192A0252	Yellow	12VAC/DC	17	16M0449	12.16
192A0255	Green	12VAC/DC	17	93K6719	18.33
192A0257	Blue	12VAC/DC	17	16M0450	18.33
192A0350	Red	24VAC/DC	17	93K6721	9.29
192A0352	Yellow	24VAC/DC	17	93K6722	12.71
192A0355	Green	24VAC/DC	17	93K6723	18.80
192A0357	Blue	24VAC/DC	17	93K6724	18.16
192A035W	White	24VAC/DC	17	93K6720	18.92

(72968)

M16 LED INDICATORS

RoHS Compliant Available

CML INNOVATIVE TECHNOLOGIES — WHERE INNOVATION COMES TO LIGHT



M16 LED indicators mount in 0.63-0.645″ (16-16.4mm) diameter hole in panels and maximum thickness of 0.433″ (11mm). High brightness LEDs with color diffused lens and chrome bezel. Black bezel is also available; *go online or call.* Solder tab terminal. 0.11″ x 0.031″ (2.8 x 0.8mm). Brass terminal = Anode; Brass tinned terminal = Cathode. IP67 rating.

Mfg. Part No.	Color	Voltage	Current (mA)	Stock No.	Price Each 1-4
19380250M	Red	12VAC/DC	16	93K6733	14.74
19380255M	Green	12VAC/DC	14	95C0373	18.91
19380350M	Red	24VAC/DC	16	93K6736	14.97
19380352M	Yellow	24VAC/DC	16	93K6737	15.35
19380355M	Green	24VAC/DC	14	93K6738	20.28
19380357M	Blue	24VAC/DC	14	95C0379	19.87
1938035WM	White	24VAC/DC	14	93K6735	19.77
19410130M	Red	130VAC	6	93K6740	17.42
19410132M	Yellow	130VAC	6	16M0456	16.83
19410135M	Green	130VAC	6	16M0457	21.04
19410137M	Blue	130VAC	6	93K6741	21.03
1941013WM	White	130VAC	6	93K6739	21.30
19410235M	Green	230VAC	3	93K6742	20.77

(72969)

081 AND 095 SERIES INDICATORS, 11/16″ MOUNTING HOLE BASES

Dialight

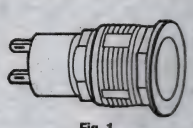


Fig. 1

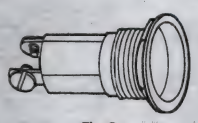


Fig. 2

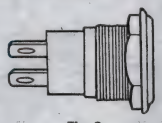


Fig. 3

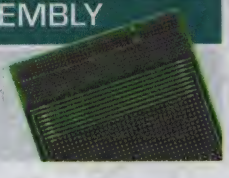
Use with a variety of lens caps to provide maximum lighting for specific applications. *Order lamps separately on page 1344. Uses incandescent, neon, cluster based LED or multi-chip based LED lamps.*

Mfg. Part No.	Lens Fig.	Use With Lamp Type	Voltage	Fig.	Stock No.	Price Each 1-24	Price Each 25-99
081-0410-01-303	1 to 5	T-3¼ Bayonet Inc	2-120	1	50F6194	16.33	13.66
081-1059-01-303	1 to 5	T2 Inc	6-120	3	50F6200	12.64	10.57

(2593)

PCB FABRICATION & ASSEMBLY

Quality US-based manufacturers—as fast as 48-hour turnaround!



(197415)

052, 081, 095, AND 135 SERIES LENS CAPS AND HOLDER FOR 081 SERIES BASE

RoHS Compliant Available

Dialight

Fig. 1

Fig. 2

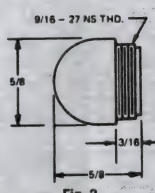


Fig. 3

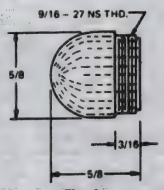


Fig. 4

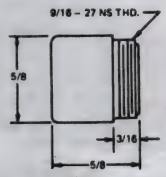


Fig. 5

LENS CAPS

Mfg. Part No.	Color	Fig.	Stock No.	Price Each 1-24	Price Each 25-99	Price Each 100-249
081-0111-203	Red	1	61M2765	6.95	5.67	4.79
081-0112-303	Green	1	50F6202	13.00	10.59	8.95
081-0137-303	Clear	1	50F6205	7.33	5.96	4.84
081-0433-303	Amber	2	50F6208	6.91	5.63	4.76
081-0437-303	Clear	2	50F6210	8.49	7.33	5.88
095-0933	Amber	3	55M8244	2.83	2.37	1.90
095-3171-003	Red	3	61M2774	7.44	5.69	4.67
095-3172-003	Green	3	61M2776	6.54	5.32	4.31
052-0992	Green	4	25F335	6.06	4.63	3.81
052-0993	Amber	4	70M7821	5.13	4.17	3.38
052-3191-003	Red	4	61M2761	6.45	5.24	4.25
052-3192-003	Green	4	61M2762	6.45	5.24	4.25
052-3193-003	Amber	4	61M2763	6.57	5.34	4.33
135-3271-003	Red	5	61M2802	5.30	4.05	3.33
HOLDER						
080-3202-05-301	LED BAYONET HOLDER		05B3300	40.74	35.75	30.56

*Green lens caps not recommended for use with neon lamps.

(2594)

249 SERIES LED AND NEON PANEL MOUNT INDICATORS

RoHS Compliant Available

Dialight

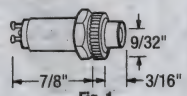


Fig. 1

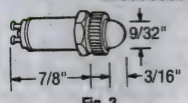


Fig. 2

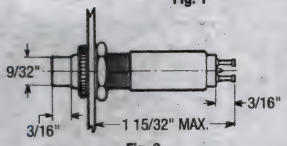


Fig. 3

Fig. 4

249 series indicators offer high efficiency LEDs, standard, or high brightness neon lamps in black anodized aluminum housing. LED products offer integral resistors and long life for low voltage applications. Neon products supplied with integral resistors for line voltage requirements. **249 series** units are complete assemblies including base, lamp and lens in one. For **249 series** LED with short stovepipe lens (see Fig. 2), change the 8th and the 9th digits in the type no. from **33** to **37.** To order 3.6V devices, change the 6th and 7th digits to **67.**

0.375″ (9.53mm) MTG. HOLE, LED PANEL MOUNT, FIG. 1

Mfg. Part No.	Color	V_F (V)	Stock No.	Price Each 1-24
249-7967-3332-504F	Green	3.6	33M2192	8.87
249-7968-3332-504F	Green	5	33M2194	8.23
249-7972-3332-504F	Green	28	33M2200	10.80
249-7867-3331-504F	Red	3.6	33M2182	9.88
249-7868-3331-504F	Red	5	33M2184	8.08
249-8071-3333-504F	Yellow	14	33M2209	11.90
249-8072-3333-504F	Yellow	28	33M2211	11.34

0.375″ (9.53mm) MTG. HOLE, LED PANEL MOUNT, FIG. 2

Mfg. Part No.	Color	V_F (V)	Stock No.	Price Each 1-24
249-7868-3731-504F	Red	5	33M2185	9.88
249-7871-3731-504F	Red	14	33M2189	13.69
249-7872-3731-504F	Red	28	33M2191	7.93
249-7972-3732-504F	Green	28	33M2201	10.80
249-8072-3733-504F	Yellow	28	33M2212	11.34

CONTINUED

PANEL MOUNT INDICATORS

249 SERIES LED AND NEON PANEL MOUNT INDICATORS (CONT.)

0.375″ (9.53mm) MTG. HOLE, NEON PANEL MOUNT, FIG. 3

To order **249 series** neon with stovepipe lens (see Fig. 4), change the 8th and 9th digits in the mfg. part no. from **14** to **09**. **249-7841 models** have standard brightness and rate 105–125 VAC/VDC. Others have high brightness and rate 110–125 VAC/VDC.

Mfg. Part No.	Color	Stock No.	Price Each 1-24
249-7841-1431-574	Red	25F1161	17.96
249-7841-1433-574	Amber	25F1162	16.56
249-7866-1431-514	Red	20F891	20.66
249-7866-1433-514	Amber	20F892	17.96
249-7866-1435-514	White	20F893	26.93
● 249-8067-3333-504F	Yellow	45T1122	19.03

0.375″ (9.53mm) MTG. HOLE, NEON PANEL MOUNT, FIG. 4

Mfg. Part No.	Color	Stock No.	Price Each 1-24
249-7841-0933-574	Amber	25F1152	34.89

(2539)

LED, INCANDESCENT AND NEON DATALAMP INDICATORS

RoHS Compliant Available

Dialight

Cartridges have aluminum housing with nickel silver pins, offset for polarization. IC compatible. LED's internal fresnel ring pattern allows maximum light distribution. Housing: black anodized. Incandescent and neon housings have clear anodized finish. High brightness neon units have a 5000-hour minimum life; standard brightness, 25,000 hours. Cartridges accept holders, connectors, and speed clips. Cartridges with stovepipe lenses (Fig. 2) and long cylindrical lenses are available; *go online or call.*

507 SERIES LED CARTRIDGES

Mfg. Part No.	Color	VF (V)	Current (mA)	Lum. Intens. (mcd)	Stock No.	Price Each 1-24	Price Each 25-99
● 507-4757-3331-500F	Red	5	15	10	33M4027	5.50	4.48
● 507-4760-3331-500F	Red	14	20	10	33M4030	5.24	4.27
● 507-4761-3331-500F	Red	28	15	10	33M4032	6.84	5.57
● 507-4857-3332-500F	Green	5	20	50	33M4036	8.71	7.10
● 507-4861-3332-500F	Green	28	20	50	33M4041	8.99	7.52
● 507-4957-3333-500F	Yellow	5	20	35	33M4044	10.32	8.41
● 507-4960-3333-500F	Yellow	14	20	35	33M4046	9.00	7.32
● 507-4961-3333-500F	Yellow	28	20	35	33M4047	11.02	8.98
● 507-5064-3334-500F	Blue	5	10	100	33M4050	13.55	11.33

507 SERIES INCANDESCENT CARTRIDGES

Mfg. Part No.	Color	VF (V)	Current (mA)	CP	Life (Hrs.)	Stock No.	Price Each 1-24	Price Each 25-99
● 507-3911-1431-600	Red	10	40	0.08	10000	61M2816	6.82	5.55
● 507-3911-1432-600	Green	10	40	0.08	10000	14M6780	6.51	5.31
● 507-3917-1472-600F	Green	28	40	0.34	4000	33M3906	5.83	4.87
● 507-3918-1471-600	Red	28	40	0.3	7000	25F1176	3.95	3.79
● 507-3918-1472-600	Green	28	40	0.3	7000	25F1177	7.57	6.54

507 SERIES NEON CARTRIDGES

Mfg. Part No.	Color	AC/DC (V)	Res.	Brightness	Stock No.	Price Each 1-24	Price Each 25-99
● 507-4537-0933-640F	Amber	105-125	100K	Standard	33M3979	6.85	5.59
● 507-4538-0931-610F	Red	110-125**	47K	High	33M4000	7.37	5.99
● 507-4538-0933-610F	Amber	110-125**	47K	High	33M4002	7.23	5.88
● 507-4538-1431-630F	Red	110-125**	47K	High	33M4009	5.94	4.96

*Uses holder **250-8758-33-504**.
**110-125 VAC
(2584)

556 SERIES HIGH INTENSITY WATERTIGHT LED PANEL MOUNT INDICATORS

RoHS Compliant Available

Dialight

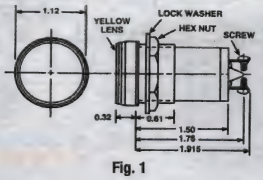


Fig. 1

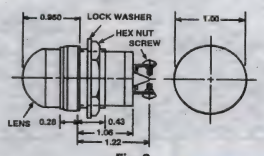


Fig. 2

➤ CONTINUED ➤

556 SERIES HIGH INTENSITY WATERTIGHT LED PANEL MOUNT INDICATORS (CONT.)

556 series indicators incorporate inGaN and AlIGaN technologies for higher intensities and feature 100,000-hour life, uniform illumination, watertight, and tamperproof design. For use indoors or out. Suited for instrument panels, electrical/electronic control panels and where highly visible indication is critical. Rugged metal housing. Uses 1″ (25.4mm) mounting hole Operating temperature: –25°C to +85°C. Domed or flat lens.

FLAT LENS—FIG. 1

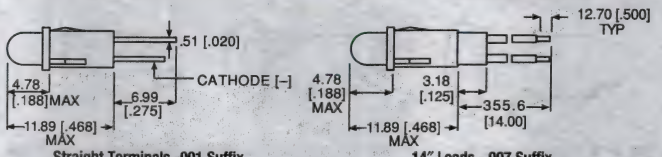
Mfg. Part No.	VF (V)	Color	Current (mA)	Intensity (foot lamberts)	Stock No.	Price Each 1-24	Price Each 25-99
● 556-1603-304F	12VDC	Green	60	4000	33M4199	40.35	35.40
● 556-1503-304F	12VDC	Red	95	3000	33M4192	34.89	30.62
● 556-1003-304F	12VDC	White	60	4000	33M4165	49.18	43.15
● 556-1803-324F	12VAC	Blue	60	1200	27T5436	41.35	39.69
● 556-1603-324F	12VAC	Green	60	4000	27T5419	47.61	41.77
● 556-1903-324F	12VAC	Orange	95	3000	27T5441	42.20	37.03
● 556-1503-324F	12VAC	Red	95	3000	27T5412	42.20	37.03
● 556-1003-324F	12VAC	White	60	4000	27T5408	41.35	39.69
● 556-1703-324F	12VAC	Yellow	95	3000	27T5429	41.17	36.13
● 556-1604-304F	24VDC	Green	32	4000	33M4200	43.51	36.39
● 556-1504-304F	24VDC	Red	46	3000	33M4193	34.89	30.62
● 556-1004-304F	24VDC	White	32	4000	78M4580	47.98	42.10
● 556-1704-304F	24VDC	Yellow	46	3000	33M4211	35.50	31.16
● 556-1605-304F	125VAC	Green	9.5	1800	33M4201	40.35	35.40
● 556-1505-304F	125VAC	Red	10.5	1200	33M4195	34.89	30.62
● 556-1705-304F	125VAC	Yellow	10.5	1200	33M4212	38.57	32.26
DOMED LENS—FIG. 2							
● 556-3803-324F	12VAC	Blue	60	1200	27T5475	42.38	40.68
● 556-3603-324F	12VAC	Green	60	4000	27T5458	47.61	41.77
● 556-3903-324F	12VAC	Orange	95	3000	27T5479	47.89	42.02
● 556-3503-324F	12VAC	Red	95	3000	27T5451	42.20	37.03
● 556-3003-324F	12VAC	White	60	4000	27T5445	42.38	40.68
● 556-3703-324F	12VAC	Yellow	95	3000	27T5468	41.17	36.13
● 556-3504-304F	24VDC	Red	46	1300	33M4259	34.89	30.62
● 556-3604-304F	24VDC	Green	32	1800	33M4268	40.35	35.40
● 556-3004-304F	24VDC	White	32	1200	33M4226	52.65	44.03
● 556-3605-304F	125VAC	Green	9.5	700	78M4588	40.35	35.40
● 556-3505-304F	125VAC	Red	10.5	500	33M4260	34.89	30.62
● 556-3507-304F	125VAC	Red	10	700	33M4264	35.76	31.39
● 556-3704-304F	24VAC	Yellow	46	1800	33M4275	35.50	31.16
● 556-3705-304F	125VAC	Yellow	10.5	500	78M4590	35.76	31.39
● 556-3805-324F	125VAC	Blue	9.5	500	27T5477	41.35	39.69
● 556-3605-324F	125VAC	Green	9.5	1800	27T5460	48.80	42.81
● 556-3905-324F	125VAC	Orange	10.5	500	27T5481	44.46	39.01
● 556-3505-324F	125VAC	Red	10.5	1200	27T5453	41.17	36.13
● 556-3705-324F	125VAC	Yellow	10.5	1200	27T5470	41.17	36.13
● 556-3005-324F	125VAC	White	9	1800	27T5447	41.35	39.69

(2605)

558 SERIES PANEL MOUNT LED INDICATORS

RoHS Compliant Available

Dialight



Straight Terminals -001 Suffix

14″ Leads - 007 Suffix

558 series snap-in mount LED indicators feature ultra-bright, water-clear LEDs. Require no additional mounting hardware for 0.031-0.062″ thick panels. Power requirements range from 2-20mA. Housing is black polycarbonate. Feature 0.156″ (3.96mm) mounting hole. Termination: mfg. part nos. with **001 suffix** = straight; **003 suffix** = 6″ leads; and **007 suffix** = 14″ leads.

Mfg. Part No.	Color	VF (V)	Current (mA)	Luminous Intensity (mcd)	Stock No.	Price Each 1-24	Price Each 25-99
● 558-0101-001F	Red	2	10	10	30K2819	0.93	0.78
● 558-0101-003F	Red	2	10	10	30K2820	1.80	1.51
● 558-0101-007F	Red	2	10	10	30K2821	1.80	1.51
● 558-0102-001F	Red	5	12	29	30K2830	1.55	1.30
● 558-0102-003F	Red	5	12	29	30K2831	2.17	1.82
● 558-0102-007F	Red	5	12	29	30K2832	2.19	1.83
● 558-0701-007F	Red	1.8	20	170	30K2875	2.13	1.78
● 558-1101-007F	Red	1.8	2	1.8	30K2879	1.54	1.29
● 558-0201-001F	Green	2.1	10	16	30K2833	0.93	0.78
● 558-0201-003F	Green	2.1	10	16	30K2834	1.76	1.48
● 558-0201-007F	Green	2	10	16	30K2835	1.76	1.48
● 558-0202-001F	Green	5	12	19	30K2850	1.54	1.33
● 558-0202-003F	Green	5	12	19	30K2851	2.13	1.78

➤ CONTINUED ➤

558 SERIES PANEL MOUNT LED INDICATORS (CONT.)

Mfg. Part No.	Color	VF (V)	Current (mA)	Luminous Intensity (mcd)	Stock No.	Price Each 1-24	Price Each 25-99
558-0501-007F	Green	2.1	20	70	30K2869	2.13	1.78
558-0301-001F	Yellow	2.1	10	6.3	30K2856	0.94	0.79
558-0301-007F	Yellow	2	10	6.3	30K2858	1.76	1.48
558-0301-003F	Yellow	2.1	10	6.3	30K2857	1.80	1.51
558-0302-003F	Yellow	5	12	12.6	30K2862	2.13	1.78
558-0302-007F	Yellow	5	12	12.6	30K2863	2.13	1.78
558-3101-007F	Red/Green	1.8/2.1	20	12.6/3.7	30K2906	2.42	2.02
558-6403-007F	White	3.6	20	850	30K2911	3.44	2.80

(2602)

559 SERIES LED INDICATORS — 0.250″ MOUNTING HOLE

RoHS Compliant Available

Dialight

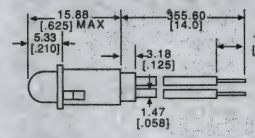


Fig. 1 (14″ Wire Leads)

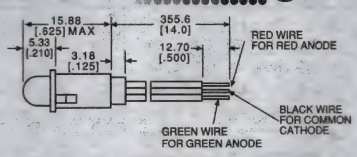


Fig. 2 (3-Leaded Bi-Color)

559 series are snap-in mounted diffused LED indicators available in three-leaded bi-color (fig. 2) and 2, 5 and 12V models. Feature 14″ wire leads. 0.250″ (6.35mm) mounting hole. 6″ (152.4mm) wire lead versions are also available; *go online or call.*

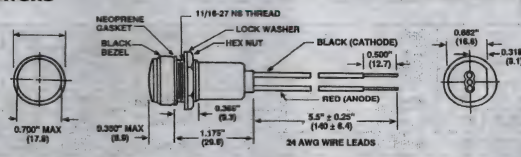
Mfg. Part No.	Fig.	Color	VF (V)	Current (mA)	Luminous Intensity (mcd)	Stock No.	Price Each 1-24	Price Each 25-99
559-0102-007F	1	Red	5	13	2	30K2942	1.58	1.36
559-0103-007F	1	Red	12	13	2	30K2948	1.93	1.73
559-0202-007F	1	Green	5	12	8	30K2957	1.58	1.36
559-0302-007F	1	Yellow	5	10	8	30K2968	1.61	1.39
559-0303-007F	1	Yellow	12	13	8	30K2975	1.97	1.77
559-0203-003F	**	Green	12	13	4	30K2964	1.54	1.29
559-0203-007F	1	Green	12	13	8	30K2965	1.82	1.53
559-1101-001F	1	Red	1.8	2	2	30K2976	1.25	1.05
559-2301-001F	1	Yellow	2.1	10	6.3	30K3019	1.10	0.92
559-5201-001F	*	Green	2.2	20	34	30K3073	1.15	0.97
559-2101-007F	1	Red	2	10	7	30K2997	1.35	1.16
559-2201-007F	1	Green	2	10	10	30K3008	1.38	1.19
559-2301-007F	1	Yellow	2	10	6.3	30K3021	1.39	1.20
559-3001-001F	2	R/G	2.1	20	90	30K3033	1.97	1.65
559-3001-007F	2	R/G	1.75/2	20	90/40	30K3035	2.39	2.00
559-3501-007F	2	R/G	2.1	10	5/8	30K3043	2.86	2.18
559-3601-007F	2	Y/G	1.6/1.6	10	20/20	30K3061	3.69	3.00
559-5201-007F	1	Green	2.1	20	34	30K3075	1.71	1.43
559-5601-007F	1	Green	2.3	20	120	30K3094	2.19	1.67
559-5701-007F	1	Yellow	2.2	20	140	30K3099	1.76	1.48
559-6001-007F	1	Blue	3.6	20	650	30K3113	8.70	6.65
559-6101-007F	1	Red	1.9	20	2.1	30K3116	2.34	1.91

*Straight terminals.
**6″ Wire Leads.
(2603)

557 SERIES WATERTIGHT LED PANEL MOUNT INDICATORS

RoHS Compliant Available

Dialight



557 series indicators for 0.688″ (17.48mm) mounting hole feature superbright colors, 100,000-hour life, uniform illumination, watertight, tamperproof design and 6″ (152.4mm) wire leads. Suited for instrument panels, electrical/electronic control panels and where highly visible indication is critical. Housing material: polycarbonate with black aluminum bezel. Operating temperature: –25°C to +85°C.

Mfg. Part No.	Color*	V_F(V)	Current (mA)	Intensity (foot lamberts)	Stock No.	Price Each 1-24	Price Each 25-99
557-1502-203F	Red	5	80	1000	33M4322	13.29	11.12
557-1103-203F	Red	12	20	100	33M4306	10.72	9.41
557-1503-203F	Red	12	20	1000	33M4324	13.29	11.12
557-1505-203F	Red	24	20	1000	33M4330	13.29	11.12
557-1104-203F	Red	28	20	...	33M4307	11.01	9.67
557-1602-203F	Green	5	16	1000	33M4334	13.63	11.96
557-1203-203F	Green	12	25	...	33M4309	11.78	9.86

CONTINUED

557 SERIES WATERTIGHT LED PANEL MOUNT INDICATORS (CONT.)

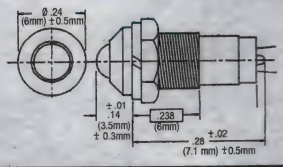
Mfg. Part No.	Color*	V_F(V)	Current (mA)	Intensity (foot lamberts)	Stock No.	Price Each 1-24	Price Each 25-99
557-1603-203F	Green	12	16	1000	33M4335	13.63	11.96
557-1605-203F	Green	24	16	1000	33M4340	13.63	11.96
557-1204-203F	Green	28	25	1000	33M4310	13.35	10.88
557-1802-203F	Blue	5	16	250	33M4353	14.00	12.29
557-1803-203F	Blue	12	16	250	33M4354	13.63	11.96
557-1805-203F	Blue	24	16	250	33M4356	13.89	12.19
557-1702-203F	Yellow	5	80	1000	33M4344	12.67	11.12
557-1303-203F	Yellow	12	25	100	33M4313	11.88	9.94
557-1703-203F	Yellow	12	20	1000	33M4345	12.33	10.82
557-1705-203F	Yellow	24	20	1000	33M4350	12.33	10.82
557-1003-203F	White	12	16	700	33M4300	13.63	11.96
557-1005-203F	White	24	16	700	33M4303	14.98	12.54

*Colors are superbright
(2604)

605 SERIES FOR 5mm MOUNTING HOLE

RoHS Compliant Available

Dialight



Mfg. Part No.	Color	VF (V)	Current (mA)	Luminous Intensity (mcd)	Stock No.	Price Each 1-24	Price Each 25-99	Price Each 100-249
605-1111-110F	Red	2	15	38	30K5051	4.78	4.01	3.21
605-1211-110F	Green	2	15	72	30K5052	5.18	4.22	3.42
605-1311-110F	Yellow	2	15	53	30K5053	5.23	4.25	3.45

(2675)

606 SERIES FOR 6mm MOUNTING HOLE

RoHS Compliant Available

Dialight

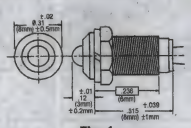


Fig. 1

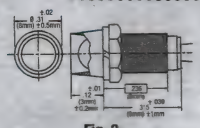


Fig. 2

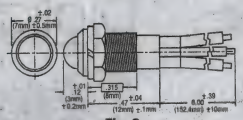


Fig. 3

Fig. 4

All indicators are supplied with integral resistor, except Mfg. Part Nos. with **110** suffix.

Mfg. Part No.	Fig	Color	V_F(V)	Current (mA)	Luminous Intensity (mcd)	Stock No.	Price Each 1-24	Price Each 25-99	Price Each 100-249
606-1111-110F	1	Red	2	5	8	30K5057	4.52	3.67	2.98
606-1211-110F	1	Green	2	15	30	30K5058	5.23	4.25	3.45
606-1311-110F	1	Yellow	2	15	30	30K5060	5.23	4.25	3.45
606-2111-110F	2	Red	2	5	8	30K5064	4.52	3.67	2.98
606-1415-110F	3	R/G	2	10	35/18	30K5061	6.39	5.20	4.22
606-1415-120F	3	R/G	6	10	35/18	30K5062	7.33	5.96	4.84
606-1415-130F	3	R/G	12	10	35/18	30K5063	6.82	5.55	4.70
606-2415-110F	4	R/G	2	10	35/18	30K5067	5.15	4.31	3.63
606-2415-120F	4	R/G	6	10	35/18	30K5068	5.80	4.85	4.09
606-2415-130F	4	R/G	12	10	35/18	30K5069	5.80	4.85	4.09

(2676)

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PANEL MOUNT INDICATORS

607 SERIES FOR 7mm MOUNTING HOLE

RoHS Compliant Available — Dialight

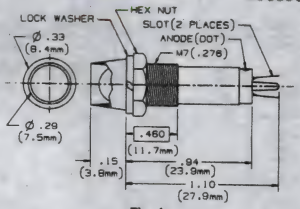

Fig. 1

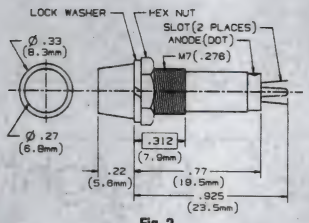

Fig. 2

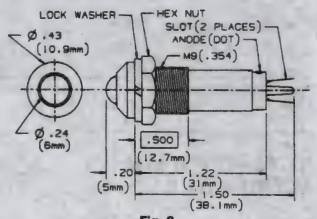

Fig. 3

All indicators have an integral resistor, except mfg. part nos. with **-110** suffix.

Mfg. Part No.	Fig.	Color	V_F(V)	Current (mA)	Luminous Intensity (mcd)	Stock No.	Price Each 1-24	25-99	100-249
● 607-2112-120F	1	Red	6	15	22	30K5081	4.47	3.42	2.81
● 607-2212-120F	1	Green	6	15	50	30K5084	4.82	3.69	3.03
● 607-2312-120F	1	Yellow	6	15	66	30K5087	4.72	3.61	2.97
● 607-2112-130F	1	Red	12	15	22	30K5082	4.47	3.42	2.81
● 607-2212-130F	1	Green	12	15	50	30K5085	4.72	3.61	2.97
● 607-2312-130F	1	Yellow	12	15	66	30K5088	3.92	3.38	2.71
● 607-3132-130F	2	Red	12	15	20	30K5090	2.97	2.42	1.96
● 607-3232-130F	2	Green	12	15	45	30K5092	3.23	2.63	2.13
● 607-1112-120F	3	Red	6	15	22	30K5072	4.61	3.52	2.90
● 607-1212-130F	3	Green	12	15	50	30K5076	4.72	3.61	2.97
● 607-1312-120F	3	Yellow	6	15	66	30K5078	4.72	3.61	2.97
● 607-1312-130F	3	Yellow	12	15	66	30K5079	3.66	2.98	2.42
● 607-1112-110F	*	Red	2	15	22	30K5071	3.46	2.82	2.28
● 607-2112-110F	*	Red	2	15	22	30K5080	2.71	2.27	1.91
● 607-2212-110F	*	Green	2	15	50	30K5083	3.76	3.06	2.48
● 607-2312-110F	*	Yellow	2	15	66	30K5086	3.79	3.08	2.50

*Same as Fig. 1 except length – 0.67"
(2677)

608 SERIES FOR 8mm MOUNTING HOLE

RoHS Compliant Available — Dialight

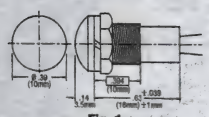

Fig. 1

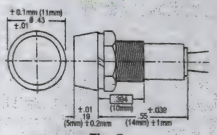

Fig. 2

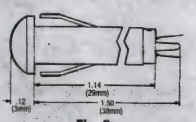

Fig. 3

Forward voltage is 2V. Current is 15mA.

Mfg. Part No.	Color	Luminous Intensity (mcd)	Fig.	Stock No.	Price Each 1-24	25-99	100-249
● 608-1131-110F	Red	20	1	30K5095	2.55	2.07	1.68
● 608-1231-110F	Green	15	1	30K5101	2.87	2.34	1.90
● 608-1331-110F	Yellow	4	1	30K5105	2.62	2.13	1.80
● 608-3131-110F	Red	20	2	30K5118	2.49	2.03	1.65
● 608-3231-110F	Green	15	2	30K5119	2.90	2.36	1.91

608 SERIES 0.315" (8.00mm) LED SNAP-IN — FIG. 3
All indicators are supplied with an integral resistor. Forward voltage is 6V. Current is 15mA.

Mfg. Part No.	Color	VDC (V)	Stock No.	Price Each 1-24	25-99	100-249
● 608-1132-220F	Red	6	30K5096	3.29	2.68	2.17
● 608-1132-230F	Red	12	30K5097	3.27	2.66	2.16
● 608-1132-240F	Red	24	30K5098	3.20	2.60	2.11
● 608-1232-220F	Green	6	30K5102	3.49	2.84	2.31
● 608-1232-230F	Green	12	30K5103	3.42	2.78	2.26
● 608-1232-240F	Green	24	30K5104	3.84	3.43	2.65

(2608)

609 SERIES FOR 9mm MOUNTING HOLE

RoHS Compliant Available — Dialight

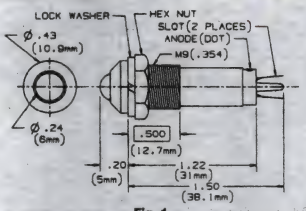

Fig. 1

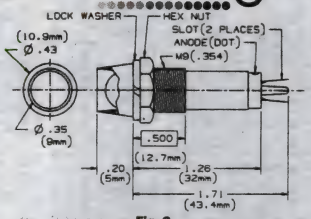

Fig. 2

All indicators are supplied with integral resistor. **Mfg. part nos. 609-1122-140F/609-2122-140F** have black housings, all others are chrome.

Mfg. Part No.	Fig.	Color	V_F (V)	Current (mA)	Luminous Intensity (mcd)	Stock No.	Price Each 1-24	25-99	100-249
● 609-1112-120F	1	Red	6	15	60	30K5123	4.28	3.27	2.69
● 609-1112-130F	1	Red	12	15	60	30K5124	4.19	3.21	2.63
● 609-1112-140F	1	Red	24	15	60	30K5125	6.81	5.54	4.49
● 609-1122-140F	1	Red	24	15	60	30K5128	7.23	5.88	4.77
● 609-1212-120F	1	Green	6	15	110	30K5129	3.35	2.73	2.21
● 609-1222-120F	1	Green	6	15	110	30K5132	7.86	6.39	5.18
● 609-1212-130F	1	Green	12	15	110	30K5130	4.19	3.21	2.63
● 609-1322-130F	1	Yellow	12	15	90	30K5139	7.65	6.22	5.04
● 609-1312-130F	1	Yellow	12	15	90	30K5136	4.19	3.21	2.63
● 609-2112-120F	2	Red	6	15	60	30K5141	4.32	3.30	2.71
● 609-2112-130F	2	Red	12	15	60	30K5142	4.28	3.27	2.69
● 609-2122-140F	2	Red	24	15	60	30K5146	7.43	6.05	4.90
● 609-2212-120F	2	Green	6	15	110	30K5147	3.35	2.73	2.21
● 609-2212-130F	2	Green	12	15	110	30K5148	4.32	3.30	2.71
● 609-2312-130F	2	Yellow	12	15	90	30K5154	4.19	3.21	2.63
● 609-2322-140F	2	Yellow	24	15	90	30K5158	7.86	6.39	5.18

(2609)

612 AND 616 SERIES FOR 12mm MOUNTING HOLE

RoHS Compliant Available — Dialight

612 SERIES

Mfg. Part No.	Color	Luminous Intensity (mcd)	Voltage Rating (VDC)	Stock No.	Price Each 1-24	25-99	100-249
● 612-3132-120F	Red	60	6	33M6301	4.54	3.69	3.00
● 612-3132-130F	Red	60	12	33M6302	4.64	3.77	3.06
● 612-3132-140F	Red	60	24	32M1611	4.54	3.69	3.00
● 612-3232-120F	Green	110	6	33M6303	4.54	3.69	3.00
● 612-3232-130F	Green	110	12	33M6304	4.64	3.77	3.06
● 612-3232-140F	Green	110	24	32M1610	4.54	3.69	3.00
● 612-3332-120F	Yellow	90	6	33M6305	4.54	3.69	3.00
● 612-3332-130F	Yellow	90	12	33M6306	4.68	3.81	3.09
616 SERIES							
● 616-1132-120F	Red	60	6	33M6307	5.28	4.29	3.48
● 616-1132-130F	Red	60	12	33M6308	5.42	4.41	3.58
● 616-1132-140F	Red	60	24	33M6309	5.28	4.29	3.48
● 616-1232-120F	Green	110	6	33M6310	5.28	4.29	3.48
● 616-1232-130F	Green	110	12	33M6311	5.42	4.41	3.58
● 616-1232-140F	Green	110	24	33M6312	5.38	4.37	3.55
● 616-1332-120F	Yellow	90	6	33M6313	5.42	4.41	3.58
● 616-1332-140F	Yellow	90	24	33M6315	5.28	4.29	3.48

(94580)

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(212569)

657 SERIES WATERTIGHT LED PANEL MOUNT INDICATORS

RoHS Compliant Available

Dialight

Features:
- IP67 / NEMA 4X
- Cool-to-the-touch operation
- Available with non-tinted lenses to eliminate "phantom effect"
- Daylight viewable
- Resistant to shock and vibration
- Anti-Capillary wire
- LED technology engineered for up to 100k hours of operation

Applications:
- Electrical control panels
- Wastewater treatment controls
- Dashboards - vehicles
- Outdoor pixels on lane control and signage
- Status indication on industrial equipment

FLAT LENS VERSION

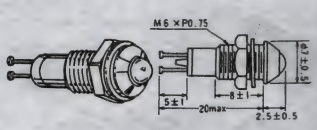
Mfr. Part No.	Color	Lens Color	Voltage (VDC)	Current (mA)	Stock No.	Price Each 1-24
657-1004-303F	White	White	24	20	51R6170	14.59
657-1502-103F	Red	Red	5	20	51R6171	13.19
657-1502-303F	Red	White	5	19	51R6172	12.94
657-1503-103F	Red	Red	12	20	51R6173	12.94
657-1504-103F	Red	Red	24	20	51R6175	12.94
657-1504-303F	Red	White	24	19	51R6176	12.94
657-1602-103F	Green	Green	5	20	51R6177	14.59
657-1604-103F	Green	Green	24	20	51R6181	14.31
657-1702-103F	Yellow	Yellow	5	20	51R6183	13.30
657-1704-303F	Yellow	White	24	19	51R6188	12.94
657-1802-103F	Blue	Blue	5	20	51R6189	14.70
657-1803-303F	Blue	White	12	20	51R6192	14.31
DOME LENS VERSION						
657-2503-103F	Red	Red	12	20	51R6206	13.19
657-2504-103F	Red	Red	24	20	51R6208	12.94
657-2602-103F	Green	Green	5	20	51R6210	14.31
657-2603-103F	Green	Green	12	20	51R6212	14.59
657-2604-103F	Green	Green	24	20	51R6214	14.59

(163827)

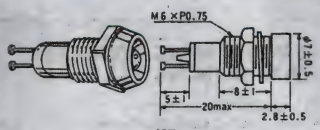
400 SERIES LED INDICATOR LIGHTS

RoHS Compliant Available

MLEC



406



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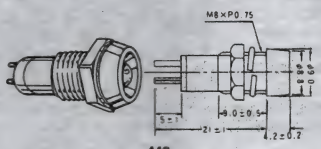


440

406 series LED indicator features macrodome lens. Voltage range from 2-24V with built-in resistor. Panel hole: 0.244″(6.2mm) - 2V models. All lamps chrome-plated brass bodies except items with **BO** in mfg. part no. are black anodized brass. **407 series** has large dish-shaped reflector around LED to produce a larger illumination area. Panel hole: 0.244″(6.2mm) - 2V models. **406** and **407 series** 5, 12 and 24V models feature 0.28″ (7.11mm) cutout size and solder tab terminations. **440 series** is a larger version of **407 series** to provide even greater illumination. Panel hole: 0.335″ (8.5mm). All lamps feature black anodized body.

Mfg. Part No.	Color	Voltage (V)	Luminous Intensity (mcd)	Stock No.	Price Each 1-24
LED-406R-5	Red	5	10	87F916	20.98
LED-406R-12	Red	12	10	87F917	20.79
LED-406R-24	Red	24	10	87F918	21.52
LED-406-RBO-24	Red	24	10	87F921	22.55
LED-406G	Green	2	1	35F3720	22.83
LED-406G-5	Green	5	10	87F932	22.27
LED-406G-12	Green	12	10	87F933	22.83
LED-407R	Red	2	0.5-0.6	35F3718	19.06
LED-407R-5	Red	5	10	87F922	20.98
LED-407R-12	Red	12	10	87F923	21.52
LED-407R-24	Red	24	10	87F924	21.26
LED407R24 15″ LEADS	Red	24	10	77C5084	20.44
LED-407G	Green	2	1	35F3721	22.55
LED-407G-5	Green	5	10	87F936	22.27
LED-407G-12	Green	12	10	87F937	22.27
LED-407-GBO-12	Green	12	10	87F940	22.48
LED-407Y-12	Yellow	12	0.2-1.6	87F963	22.06

➤CONTINUED➤

400 SERIES LED INDICATOR LIGHTS (CONT.)

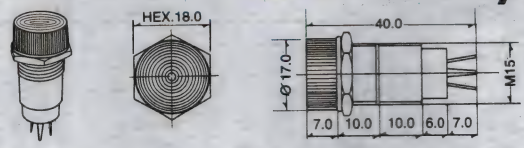
Mfg. Part No.	Color	Voltage (V)	Luminous Intensity (mcd)	Stock No.	Price Each 1-24
LED-440G	Green	2	15	23F5501	19.32
LED-440R	Red	2	15	23F5500	18.72

(2517)

1501 SERIES LARGE INDICATOR LIGHTS

RoHS Compliant Available

MLEC



Features:
- Mount in 15mm Panel Hole
- Nut and Washer Provided
- Solder Terminals Standard

LED light source and top hat style lens for units listed. Other lens style, colors and light sources available; *go online or call.*

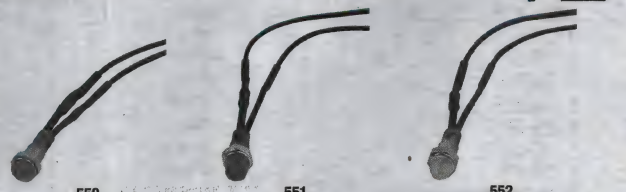
Mfg. Part No.	Lens	Voltage (V)	Current (mA)	Luminous Intensity (mcd)	Stock No.	Price Each 1-24
L1501-12G	Green	12	20	20	52F9235	16.78
L1501-24G	Green	24	20	20	52F9236	16.99
L1501-12R	Red	12	20	500	52F9237	16.78
L1501-24R	Red	24	20	500	52F9238	16.78

(2659)

MODEL 550 MINIATURE INDICATOR LIGHTS

RoHS Compliant Available

MLEC



550 Flush Style — 551 Top Hat Style — 552 Dome Style

Features:
- 5mm Hole
- High-Impact Plastic Construction
- Nut and Washer Supplied
- Available in a Variety of Light Sources Including Incandescent, Neon or LED
- Available with a Choice of Flush, Top Hat Style or Dome Lens

Wire leads available as an option on 2V LED or all incandescent versions. All others are standard with external resistor and 6″ wire leads. To order top hat lens, replace **550** in Mfg. Part No. with **551**. Dome-type lens are **552**. Incandescent and neon (with resistor) versions are also available. Replace **L** in the Mfg. Part No. with **F** for incandescent or **NR** for neon with resistor.

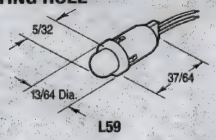
Mfg. Part No.	Voltage (V)	Color	Luminous Intensity (mcd)	Current (mA)	Stock No.	Price Each 1-24
L550-12G	12	Green	1	30	95B7876	13.76
L550-24G	24	Green	1	30	95B7879	13.93
L550-24R	24	Red	0.6	30	95B7880	12.68
L550-24Y	24	Yellow	2.5	25	95B7881	13.76

(48283)

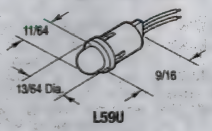
L59 AND L59UD SERIES SNAP-MOUNT LED INDICATORS FOR 1/4″ MOUNTING HOLE

RoHS Compliant Available

LC&D LEECRAFT



L59



L59U

L59UD Series:
- Built-In Integral Bezel
- Diffused Wide Viewing Angle LED
- 6″-Coded Wire Leads
- Panel Range: 0.115″-0.13″ (2.9-3.3mm)

L59 Series:
- Black Nylon Housing and Bezel
- 0.062″ Max. Panel Thickness
- Dome-Shape Lens

L59 series LED indicators feature long life, solid state reliability. Types listed have 6″ insulated wire leads. 2-volt and 6-volt indicators and indicators with bare wire terminals also available; *go online or call.* **L59UD series** indicators feature termination: 6″-coded wire leads; red = anode(+), black = cathodel(-).

➤CONTINUED➤

PANEL MOUNT INDICATORS

L59 AND L59UD SERIES SNAP-MOUNT LED INDICATORS FOR ¼″ MOUNTING HOLE (CONT.)

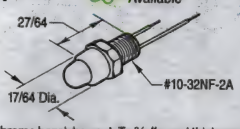
DIFFUSED

Mfg. Part No.	Lens Color	Volts (VDC)	Stock No.	Price Each 1-24	Price Each 25-99
● L59D-R12-W	Red	12	10F7458	9.25	7.14
● L59D-G12-W	Green	12	10F7459	9.25	7.14
● L59D-Y12-W	Yellow	12	10F7460	7.40	5.70
● L59D-R24-W	Red	24	10F7461	8.24	6.37
● L59D-G24-W	Green	24	10F7462	8.24	6.37
● L59D-Y24-W	Yellow	24	10F7463	9.57	7.39
UNDIFFUSED					
● L59UD-G6-W	Green	6	16F753	6.64	5.12
● L59UD-R12-W	Red	12	16F754	6.94	5.35
● L59UD-G12-W	Green	12	16F755	7.01	5.41
● L59UD-Y12-W	Yellow	12	16F756	6.64	5.12
● L59UD-R24-W	Red	24	16F757	7.25	5.59
● L59UD-G24-W	Green	24	16F758	5.95	4.58
● L59UD-Y24-W	Yellow	24	16F759	7.01	5.40

(2511)

L58 SERIES SOLID STATE LED INDICATORS FOR .191″ MOUNTING HOLE

RoHS Compliant Available



Subminiature indicators have 6″ leads, chrome bezel, hex nut. To 3/16″ panel thickness. Diffused 60° viewing angle. Mfg. part nos. listed have 6″ color-coded insulated wire leads. Indicators with bare wire terminal also available; *go online or call.*

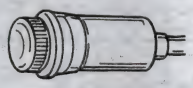
Mfg. Part No.	Lens Color	Volts (VDC)	Stock No.	Price Each 1-24	Price Each 25-99
● L58D-R2-W	Red	2	60F1325	8.16	7.88
● L58D-G2-W	Green	2	60F1326	8.40	8.05
● L58D-R6-W	Red	6	10F7464	9.32	8.98
● L58D-G6-W	Green	6	10F7465	9.58	9.18
● L58D-R12-W	Red	12	10F7467	8.71	8.39
● L58D-G12-W	Green	12	10F7468	9.32	8.98
● L58D-Y12-W	Yellow	12	10F7469	9.58	9.18
● L58D-R24-W	Red	24	10F7470	9.40	9.04
● L58D-G24-W	Green	24	10F7471	9.52	9.16
● L58D-Y24-W	Yellow	24	10F7472	9.41	9.07

(2513)

L32R-CL SERIES DAYBRIGHT LED INDICATORS FOR ½″ MOUNTING HOLE

RoHS Compliant Available

LED Indicator lights have a 360° viewing angle and daybright visibility. Features: flat cylindrical lens, black nylon housing, and 6″ wire leads. Other voltage options, colors, lens styles and terminations available; *go online or call.* UL recognized, CSA certified.



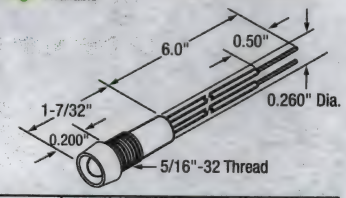
Mfg. Part No.	Lens Color	Volts (VDC)	Stock No.	Price Each 1-24	Price Each 25-99
● L32R-ACL24-1113	Amber	24	91F3978	11.15	10.75
● L32R-GCL24-1112	Green	24	91F3979	11.15	10.75
● L32R-RCL24-1111	Red	24	91F3980	11.30	10.89

(13154)

L79 SERIES LED INDICATORS FOR 5/16″ MOUNTING HOLE

RoHS Compliant Available

L79 series LED indicators are constructed with a threaded housing with a built-in reflector. Each unit has a high brightness diffused LED, 2 color-coded 6″ wire leads. 125VAC unit has a bipolar LED and 2 6″ white wire leads. Lights mount into a 5/16″ diameter mounting hole with a max. panel thickness of 0.25″. A hex nut and lockwasher are supplied. Current: 20mA typical. Clear LEDs, 2V, 6V and other colors are available, *go online or call.*



Mfg. Part No.	Len Color	Volts (VDC)	Stock No.	Price Each 1-24	Price Each 25-99
● L79D-G12-W	Green	12	83F7617	8.10	7.76
● L79D-G24-W	Green	24	83F7618	8.66	8.35
● L79D-R125-W	Red	125*	83F7619	7.93	7.64

➤ CONTINUED ➤

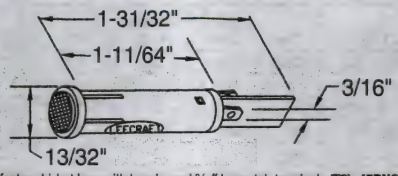
L79 SERIES LED INDICATORS FOR 5/16″ MOUNTING HOLE (CONT.)

Mfg. Part No.	Len Color	Volts (VDC)	Stock No.	Price Each 1-24	Price Each 25-99
● L79D-R12-W	Red	12	83F7620	8.55	8.19
● L79D-R24-W	Red	24	83F7621	8.66	8.35

*AC Design Volts
(32202)

45 AND L45 SERIES NEON, INCANDESCENT AND LED INDICATORS FOR 5/16″ MOUNTING HOLE

RoHS Compliant Available



45RN series neon indicators feature hi-hat lens with bezels, and 3/16″ brass tab terminals **(T3)**. **45RNG18 series** have 7,000-hour life at 28V; 32,000-hour life at 24V. Speed nut included. **L45RN series** are solid-state LED press fit indicators with 3/16″ quick-disconnect tab terminals and chrome bezel, 3 MCD. Speed nut included. 7th and 8th digits of type number indicate voltage. UL recognized, CSA certified. 6V, 14V and 250V units, 1/8″ tab terminals, and LED units also available; *go online or call.*

125 VOLT ½WATT, NEON WITH BUILT-IN RESISTOR

Mfg. Part No.	Lens Color	Life (Hrs.)	Stock No.	Price Each 1-24	Price Each 25-99
● 45RN-2111T3	Red	25000	60F3600	13.61	9.34
● 45RN-2113T3	Amber	25000	60F3601	12.72	8.73
● 45RN-2112T3	Green	25000	98B9503	9.77	6.71
28 VOLT 0.04 AMP, INCANDESCENT					
● 45RNG18-2111T3	Red	7000	60F3616	14.88	10.24
● 45RNG18-2112T3	Green	7000	60F3617	15.34	10.56
● 45RNG18-2115T3	White	7000	60F3620	15.23	10.48
SOLID-STATE, LED					
● L45RN-R24-2111	Red	100000	10F7485	12.76	8.76
● L45RN-Y24-2116	Yellow	100000	10F7487	12.76	8.76

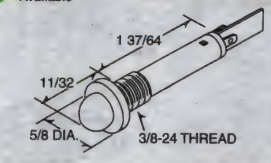
(2515)

75 AND L75 SERIES INDICATORS FOR 3/8″ MOUNTING HOLE

RoHS Compliant Available

75 Series Oil-Tight Indicators
- Dome Lens and Nickel-Plated Bezel
- Current-Limiting Resistors for 125V and 250V
- ⅛W with 25,000 Life Hours
- Termination: 6″ Wire Leads, Stripped ½″ or 3/16″ Q.C. Terminals with T Suffix

L75 Series Solid-State Indicators
- Color-Coded Wire Leads



Red = anode(+), black = cathode(–); or one tinned 3/16″ terminal to identify the anode(+) and one non-tinned terminal denoting cathode(–). Amber indicators, and 2V and 6V indicators also available. *Go online or call for ordering information.*

NEON INDICATORS

Mfg. Part No.	Lens Color	Volts	Stock No.	Price Each 1-24	Price Each 25-99	Price Each 100+
● 75R-2211	Red	125V	16F733	7.92	6.28	4.23
● 75R-2212	Green	125V	16F734	9.45	7.50	5.05
● 75R-2213	Amber	125V	16F735	7.50	5.95	4.01
● 75R-2211T	Red	125V	16F736	7.43	5.89	3.97
● 75R-2212T	Green	125V	16F737	8.78	6.97	4.70
● 75R-2213T	Amber	125V	16F738	7.53	5.97	4.02
SOLID-STATE LED INDICATORS						
● L75R-R12-2211	Red	12VDC	16F769	11.26	8.89	6.01
● L75R-R24-2211	Red	24VDC	16F773	10.52	8.31	5.62
● L75R-R24-2211T	Red	24VDC	16F775	10.52	8.31	5.62
● L75R-G24-2212T	Green	24VDC	16F776	11.49	8.09	6.15

(2654)

DEV KIT HQ™

Newest technology, Development Kits & Evaluation Boards from the best suppliers.

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(196525)

PANEL MOUNT LEDS

RoHS Compliant Available

LUMEX
Creating LED and LCD Solutions Together™

SSI-LXH387

SSI-LXH312 SSI-LXH1090 SSI-LXH600

Applications:
- Front panel status indicators
- Alarm/warning indicators
- Front panel circuit fault indicators
- Instrument control panels
- Medical diagnostics indicators
- Industrial automation control panels

Features:
- State-of-the-Art, LED Technology
- Choice of Colors and Lens Finishes
- Bi-Color Styles Optional
- Insulated Lead Lengths Optional
- Easy installation through panel

Mfg. Part No.	Description	Color	Wave. (nm)	V_F (V)	Lumin. Intens. (mcd)	Stock No.	Price Each 1-9
SSI-LXH312ID-150	T-1	Red	635	2	30	04M4607	1.12
SSI-LXR1612ID	T-1	Red	635	2	30	43K8836	2.04
SSI-LXR3612SRD	T-1	Red	660	1.8	65	85K9075	1.93
SSI-LXR3612ID	T-1	Red	635	2	30	28M9293	2.12
SSI-LXH312SRD-150	T-1	Super Red	660	1.7	80	28M9292	1.65
SSI-LXR1612YD	T-1	Yellow	585	2.1	30	40K0248	2.05
SSI-LXR3612YD	T-1	Yellow	585	2.1	30	11M1720	2.80
SSI-LXH312YD-150	T-1	Yellow	585	2.1	30	09J9227	1.48
SSI-LXH312GD12V150	T-1 (3mm)	Green	565	12	10	20J0583	1.84
SSI-LXH312GD-150	T-1	Green	565	2.1	30	85K9074	1.06
SSI-LXR1612GD	T-1	Green	565	2.2	30	16M1405	2.10
SSI-LXR3612GD	T-1	Green	565	2.2	30	09J9251	2.10
SSI-LXR3612GD-150	T-1 (3mm)	Green	565	2.2	30	20J0898	2.56
SSI-RM3091SUGD-150	T-1 (3mm)	Green	574	2.2	50	18K8703	4.54
SSI-LXH9ID-150	T-1 ¾	Red	635	2	40	01M9112	1.66
SSI-LXH9SID-150	T-1 ¾ (5mm)	Red	636	2	100	13M4825	1.33
SSI-LXH9SRD-150	T-1 ¾ (5mm)	Red	660	1.7	80	20J0794	1.41
SSI-LXH600HD-150	T-1 ¾ (5mm)	Red	700	2	8	20J0666	1.37
SSI-LXH600ID-150	T-1 ¾	Red	635	2	40	09J9234	1.11
SSI-LXH600SID-150	T-1 ¾ (5mm)	Red	...	2	100	75M3143	2.20
SSI-LXH387ID	T-1 ¾	Red	635	2	10	09J9229	1.74
SSI-LXR3816SRD-150	T-1 ¾ (5mm)	Red	660	1.8	40	20J0969	3.77
SSI-LXR4815SRD	T-1 ¾	Red	660	1.8	300	54M6085	2.11
SSI-LXR4815ID	T-1 ¾	Red	635	2	40	04M4608	1.99
SSI-LXR9126SID110V	T-1 ¾ (5mm)	Red	636	120	100	64T2735	10.60
SSI-LXH387SRD	T-1 ¾	Super Red	660	1.7	60	09J9230	1.61
SSI-LXR4815YD	T-1 ¾	Yellow	585	2.1	20	09J9643	1.48
SSI-LXH600YD-150	T-1 ¾	Yellow	585	2.1	30	09J9236	0.98
SSI-LXH387YD	T-1 ¾	Yellow	585	2.1	10	09J9231	1.69
SSI-LXH9YD-150	T-1 ¾	Yellow	585	2.1	30	09J9243	1.43
SSI-LXR9126SYD110V	T-1 ¾ (5mm)	Yellow	590	120	170	64T2733	9.44
SSI-LXH600GD-150	T-1 ¾	Green	565	2.2	30	09J9232	1.15
SSI-LXH9GD-300	T-1 ¾ (5mm)	Green	...	2.2	30	20J0775	1.78
SSI-LXH387GD	T-1 ¾	Green	565	2.2	10	09J9228	1.37
SSI-RM3091GD-150	T-1 ¾	Green	565	2.2	30	09J9644	4.63
SSI-LXH9GD-150	T-1 ¾	Green	565	2.2	30	09J9241	1.35
SSI-LXR4815GD	T-1 ¾	Green	565	2.2	30	09J9640	2.08
SSI-LXR9126SGD110V	T-1 ¾ (5mm)	Green	574	120	60	64T2734	10.60
SSI-LXR1612YD12V15	3mm	Yellow	585	12	10	77M1325	3.69
SSI-LXMP5011IC-150	4mm	Red	635	2	20	20J0844	2.16
SSI-LXMP5011GC-150	4mm	Green	565	2.2	15	20J0842	2.16
SSI-LXH387GD-150	4.9mm	Green	565	2.2	60	20J0611	2.47
SSI-LXH8080SRD	8mm	Super Red	660	1.7	80	09J9239	1.88
SSI-LXH8080ID	8mm	Red	635	2	40	09J9238	1.90
SSI-LXH8080GD	8mm	Green	565	2.2	30	09J9237	1.50
SSI-LXH1090SRD	10mm	Super Red	660	1.7	80	09J9222	2.14
SSI-LXR4915SID	10mm	Red	636	2	550	77M1347	2.96
SSI-LXH1090ID	10mm	Red	635	2	40	09J9221	1.81
SSI-LXH1090YD	10mm	Yellow	585	2.1	30	09J9223	1.96
SSI-LXH1090GD	10mm	Green	565	2.2	30	09J9220	2.02
SSI-LXMP059YD	2mm x 5mm	Yellow	585	2.1	10	09J9246	1.03
SSI-LXMP059GD	2mm x 5mm	Green	565	2.2	10	09J9244	0.71
SSI-LXMP059GD-150	5mm x 2mm	Green	565	2.2	10	20J0801	2.07
SSI-LXH072GD	2.3mm x 7mm	Green	565	2.2	9	09J9217	1.14
SSI-LXH072USBD	2.5mm x 7mm	Blue	470	3.5	40	77M1277	3.22

(80505)

PANEL MOUNT 3mm LED INDICATORS

multicomp

A range of panel mounting LED indicators in high quality bright chrome or black chrome plated brass housings. Fitted with fixing nut and washer. Shorter lead indicates Cathode.

Mfg. Part No.	Color	Luminous Intensity (mcd)	Forward Voltage (V)	Forward Current (mA)	Mounting Hole Dia. (mm)	Stock No.	Price Each 1-99
PROMINENT - BRIGHT CHROME, 4mm X 7mm BEZEL, TOTAL L BEHIND = 11.5mm							
MC19020001	Green	27	2.6	45	6	26M1365	2.33
MC19020002	Yellow	32	2.6	45	6	26M1366	2.33
MC19020003	Red	17.5	2.6	45	6	26M1367	2.45
MC19020007	Blue	5	4.4	50	6	26M1368	4.31
MC19020008	Orange	17.5	2.6	30	6	26M1369	1.81
PROMINENT - BLACK CHROME, 4mm X 7mm BEZEL, TOTAL L BEHIND = 11.5mm							
MC19021001	Green	27	2.6	45	6	26M1370	2.60
MC19021002	Yellow	32	2.6	45	6	26M1371	2.74
MC19021003	Red	17.5	2.6	45	6	26M1372	2.74
MC19021007	Blue	5	4.4	50	6	26M1373	5.53
MC19021008	Orange	17.5	2.6	30	6	26M1374	2.66
RECESSED - BRIGHT CHROME, 3mm X 7mm BEZEL, TOTAL L BEHIND = 13mm							
MC19030002	Yellow	28	2.6	45	6	26M1376	1.85
MC19030003	Red	15	2.6	45	6	26M1377	2.41
MC19030007	Blue	6	4.4	50	6	26M1378	5.06
MC19030008	Orange	15	2.6	30	6	26M1379	1.88
RECESSED - BLACK CHROME, 3mm X 7mm BEZEL, TOTAL L BEHIND = 13mm							
MC19031002	Yellow	28	2.6	45	6	26M1381	2.66
MC19031003	Red	15	2.6	45	6	26M1382	2.70
MC19031008	Orange	15	2.6	30	6	26M1383	2.02
PROMINENT - BRIGHT CHROME, 5mm X 9.5mm BEZEL, TOTAL L BEHIND = 12mm							
MC19040002	Yellow	25	2.6	45	8	26M1385	2.69
MC19040007	Blue	6	4.4	50	8	26M1386	4.21
MC19040008	Orange	20	2.6	30	8	26M1387	1.86
PROMINENT - BLACK CHROME, 5mm X 9.5mm BEZEL, TOTAL L BEHIND = 12mm							
MC19041001	Green	25	2.6	45	8	26M1388	2.02
MC19041002	Yellow	25	2.6	45	8	26M1389	2.29
MC19041003	Red	20	2.6	45	8	26M1390	2.29
MC19041007	Blue	6	4.4	50	8	26M1391	4.43
MC19041008	Orange	20	2.6	30	8	26M1392	2.77
RECESSED - BRIGHT CHROME, 3mm X 9.5mm BEZEL, TOTAL L BEHIND = 15mm							
MC19050001	Green	30	2.6	45	8	26M1393	2.97
MC19050002	Yellow	27	2.6	45	8	26M1394	2.17
MC19050003	Red	27	2.6	45	8	26M1395	2.76
MC1905007	Blue	7	4.4	50	8	26M1397	4.21
MC19050008	Orange	27	2.6	30	8	26M1396	2.01
RECESSED - BLACK CHROME, 3mm X 9.5mm BEZEL, TOTAL L BEHIND = 15mm							
MC19051002	Yellow	27	2.6	45	8	26M1399	3.14
MC19051003	Red	27	2.6	45	8	26M1400	3.07
MC19051007	Blue	7	4.4	50	8	26M1401	5.67
MC19051008	Orange	27	2.6	30	8	26M1402	2.98

(203487)

HARMONY™ XB7 MONOLITHIC LED PILOT LIGHTS

NEW

RoHS Compliant Available

Schneider Electric

- Mounting hole diameter: 22mm
- Dimensions: 29mm x 29mm x 54mm
- Shape of signaling unit head: Round
- Bulb Base: Integral LED
- IP rating: IP65 (front face)/IP20 (rear face)

Mfg. Part No.	Color	Current (mA@DC)	Voltage (V)	Stock No.	Price Each 1-9
Screw Clamp Terminals					
XB7EV06BP	Blue	27	24	95W9861	37.69
XB7EV06GP	Blue	21	120	95W9863	37.69
XB7EV06MP	Blue	20	230	95W9865	37.69
XB7EV03BP	Green	-999	24	65K4222	39.95
XB7EV03GP	Green	21	120	95W9849	37.69

➤CONTINUED➤

PANEL MOUNT INDICATORS

HARMONY™ XB7 MONOLITHIC LED PILOT LIGHTS (CONT.)

Screw Clamp Terminals

Mfg. Part No.	Color	Current (mA@DC)	Voltage (V)	Stock No.	Price Each 1-9
● XB7EV03MP	Green	20	230	95W9851	36.04
● XB7EV08BP	Orange	27	24	87W5907	37.69
● XB7EV08GP	Orange	21	120	95W9873	37.69
● XB7EV08MP	Orange	20	230	95W9875	36.04
● XB7EV04BP	Red	-999	24	45M7207	37.69
● XB7EV04GP	Red	21	120	47W8610	37.69
● XB7EV04MP	Red	20	230	95W9855	37.69
● XB7EV07BP	Transparent	-999	24	05W3685	37.69
● XB7EV07GP	Transparent	21	120	95W9868	37.69
● XB7EV07MP	Transparent	20	230	95W9870	39.95
● XB7EV05BP	Yellow	-999	24	65K4223	37.69
● XB7EV05GP	Yellow	21	120	47W8612	37.69
● XB7EV05MP	Yellow	20	230	95W9859	36.04
Faston Connectors					
● XB7EV06BP3	Blue	27	24	95W9862	36.04
● XB7EV06GP3	Blue	21	120	95W9864	36.04
● XB7EV06MP3	Blue	20	230	95W9866	36.04
● XB7EV03BP3	Green	27	24	95W9848	36.04
● XB7EV03GP3	Green	21	120	95W9850	36.04
● XB7EV03MP3	Green	20	230	95W9852	36.04
● XB7EV08BP3	Orange	27	24	95W9872	36.04
● XB7EV08GP3	Orange	21	120	95W9874	36.04
● XB7EV08MP3	Orange	20	230	95W9876	36.04
● XB7EV04BP3	Red	27	24	95W9853	36.04
● XB7EV04GP3	Red	21	120	95W9854	36.04
● XB7EV04MP3	Red	20	230	95W9856	36.04
● XB7EV07BP3	Transparent	27	24	95W9867	36.04
● XB7EV07GP3	Transparent	21	120	95W9869	36.04
● XB7EV07MP3	Transparent	20	230	95W9871	36.04
● XB7EV05BP3	Yellow	27	24	95W9857	36.04
● XB7EV05GP3	Yellow	21	120	95W9858	36.04
● XB7EV05MP3	Yellow	20	230	95W9860	36.04

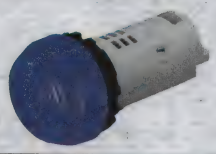
(211472)

AP22M SERIES LED PILOT LIGHT INDICATORS

NEW

IDEC

- Viewable in direct sunlight
- Visible from all directions
- The use of an ultra bright LED that is not susceptible to external scattered light ensures high visibility and provides for more accurate recognition
- Panel front: IP66 (IEC 60529), UL Type 4X, terminals: IP20



Mfg. Part No.	Color	Forward Voltage	Forward Current	Mounting Hole Dia.	Stock No.	Price Each 1-24
AP22M-2Q3A	Amber	12VDC	21mA	22mm	62X8002	36.98
AP22M-2Q3G	Green	12VDC	22mA	22mm	62X8003	36.98
AP22M-2Q3R	Red	12VDC	21mA	22mm	62X8004	36.98
AP22M-2QHA	Amber	120VAC	24mA	22mm	62X7999	46.04
AP22M-2QHG	Green	120VAC	24mA	22mm	62X8000	46.04
AP22M-2QHR	Red	120VAC	24mA	22mm	62X8001	46.04

(212517)

LED PILOT LAMP INDICATORS

RoHS Compliant Available

multicomp

Features:
- Mounting hole diameter: 22mm
- Expected life: 30,000 hours.
- IP rating: IP65.
- Brightness: 600cd/m2.
- Operating temperature: -25°C to +55°C.
- Forward Voltage: 24V ac and DC 110V ac (50Hz) 230V ac (50Hz)

This range of LED lamps offers high illumination output, long life, low temperature and is supplied as a complete unit with encapsulated LED ready to fit. The range provides even lighting in each colour.

Mfg. Part No.	LED Color	Forward Voltage (V)	Stock No.	Price Each 1-99
● RAD225B	Amber	24	33R0930	5.22
● RAD224B	Red	24	26R2970	5.29
● RAD221B	White	24	26R2969	6.72
● RAD225F	Amber	110	33R0931	5.15
● RAD224F	Red	110	33R0928	5.15
● RAD223F	Green	110	33R0926	5.15
● RAD221F	White	110	33R0923	7.26

➤ CONTINUED ➤

LED PILOT LAMP INDICATORS (CONT.)

Mfg. Part No.	LED Color	Forward Voltage (V)	Stock No.	Price Each 1-99
● RAD225P	Amber	230	33R0932	5.02
● RAD224P	Red	230	33R0929	5.22
● RAD223P	Green	230	33R0927	5.22
● RAD221P	White	230	33R0924	6.72

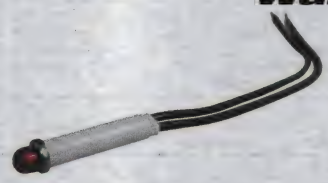
(203473)

DOME LENSE LED PANEL MOUNT INDICATORS 8mm MOUNTING DIA.

RoHS Compliant Available

wamco™

Features:
- Solid-state reliability
- Long operating life
- Low power consumption
- White nylon housing
- Polycarbonate lens
- 6" Wire leads with 0.50" strip
- 0.310" Minimum mounting hole
- Agency approvals



Mfg. Part No.	Lens Color	Supply Voltage (V)	Termin. Style	Stock No.	Price Each 1-24
● WL-2191U1-6V	Red	6	Wire Leaded	86T5734	3.13
● WL-2191U1-12V	Red	14	Wire Leaded	86T5732	3.13
● WL-2191U1-24V	Red	28	Wire Leaded	86T5733	3.13
● WL-2191U5-6V	Green	6	Wire Leaded	86T5737	2.98
● WL-2191U5-12V	Green	14	Wire Leaded	86T5735	3.17
● WL-2191U5-24V	Green	28	Wire Leaded	86T5736	3.17
● WL-2191U7-6V	Yellow	6	Wire Leaded	86T5740	2.98
● WL-2191U7-12V	Yellow	14	Wire Leaded	86T5738	3.17
● WL-2191U7-24V	Yellow	28	Wire Leaded	86T5739	3.17

(202083)

FLAT LENSE LED PANEL MOUNT INDICATORS 8mm MOUNTING DIA.

RoHS Compliant Available

wamco™

Specifications:
- Mounts in 8.0 - 8.2mm (0.315"-0.323") diameter hole
- Superflat bezel indicators fit panels up to 10.0mm (0.394") thick
- Solderable faston terminations

Features:
- Solid-state reliability
- Long operating life
- Low power consumption
- Low heat generation

High brightness color diffused LEDs are fitted in high-quality satin chrome or black chrome metal bezels and fitted with fixing nut and washer. Faston/solder tab brass terminals 2.8 x 0.8 mm (0.110" x 0.031"). Anode terminal marked "+" on VDC products.

Mfg. Part No.	Lens Color	Supply Voltage (V)	Bezel Finish	Lumin. Intens. (mcd)	Stock No.	Price Each 1-24
● WL-19010251	Green	12	Satin	10	86T5512	4.79
● WL-19011251	Green	12	Black	10	86T5519	4.91
● WL-19010351	Green	24	Satin	10	86T5514	4.90
● WL-19011351	Green	24	Black	10	86T5521	5.22
● WL-19012351	Green	24	Matte	8	86T5527	4.91
● WL-19010451	Green	28	Satin	10	86T5516	4.90
● WL-19011451	Green	28	Black	10	86T5524	4.91
● WL-19012353	Red	24	Matte	13	86T5528	5.22
● WL-19011353	Red	24	Black	15	86T5523	4.91
● WL-19010453	Red	28	Satin	15	86T5518	4.90
● WL-19011453	Red	28	Black	15	86T5526	4.91
● WL-19010252	Yellow	12	Satin	10	86T5513	4.61
● WL-19011252	Yellow	12	Black	10	86T5520	4.91
● WL-19010352	Yellow	24	Satin	10	86T5515	4.90
● WL-19011352	Yellow	24	Black	10	86T5522	4.91
● WL-19010452	Yellow	28	Satin	10	86T5517	4.61
● WL-19011452	Yellow	28	Black	10	86T5525	4.91

(202084)

PROMINENT BEZEL LED PANEL MOUNT INDICATORS 8mm MOUNTING DIA.

RoHS Compliant Available

wamco™

Specifications:
- Mounts in 8.0 - 8.2mm (0.315"-0.323") diameter hole
- Prominent bezel indicators fit panels up to 5.5mm (0.217") thick
- Solderable faston terminations

Features:
- Solid-state reliability
- Long operating life
- Low power consumption
- Low heat generation

High brightness color diffused LEDs are fitted in high-quality satin chrome or black chrome metal bezels and fitted with fixing nut and washer. Faston/solder tab brass terminals 2.8 x 0.8 mm (0.110" x 0.031"). Anode terminal marked "+" on VDC products.

Mfg. Part No.	Lens Color	Supply Voltage (V)	Bezel Finish	Lumin. Intens. (mcd)	Stock No.	Price Each 1-24
WL-19080257	Blue	12	Satin	700	86T5587	13.16
WL-19081257	Blue	12	Black	700	86T5599	12.25
WL-19040257	Blue	12	Satin	90	86T5532	6.47
WL-19041257	Blue	12	Black	90	86T5546	6.76
WL-19080255	Green	12	Satin	1400	86T5586	12.83
WL-19040251	Green	12	Satin	40	86T5529	4.41
WL-19081250	Red	12	Black	1250	86T5597	5.42
WL-19040253	Red	12	Satin	80	86T5531	4.41
WL-19041253	Red	12	Black	80	86T5545	4.86
WL-1908025W	White	12	Satin	1100	86T5584	12.27
WL-1908125W	White	12	Black	1100	86T5596	12.40
WL-1904125W	White	12	Black	450	86T5543	6.39
WL-19080252	Yellow	12	Satin	1200	86T5585	6.88
WL-19081252	Yellow	12	Black	1200	86T5598	7.36
WL-19040252	Yellow	12	Satin	40	86T5530	4.46
WL-19041252	Yellow	12	Black	40	86T5544	4.86
WL-19080357	Blue	24	Satin	700	86T5590	12.27
WL-19081357	Blue	24	Black	700	86T5604	12.40
WL-19040357	Blue	24	Satin	90	86T5537	6.19
WL-19041357	Blue	24	Black	90	86T5550	6.39
WL-19081355	Green	24	Black	1400	86T5603	13.13
WL-19040351	Green	24	Satin	40	86T5534	4.41
WL-19041351	Green	24	Black	40	86T5548	5.17
WL-19081350	Red	24	Black	1250	86T5601	5.42
WL-19040353	Red	24	Satin	80	86T5536	4.41
WL-1908035W	White	24	Satin	1100	86T5588	12.99
WL-1908135W	White	24	Black	1100	86T5600	12.96
WL-1904035W	White	24	Satin	450	86T5533	7.14
WL-1904135W	White	24	Black	450	86T5547	7.14
WL-19080352	Yellow	24	Satin	1200	86T5589	7.59
WL-19081352	Yellow	24	Black	1200	86T5602	7.04
WL-19040352	Yellow	24	Satin	40	86T5535	4.41
WL-19041352	Yellow	24	Black	40	86T5549	5.17
WL-19080457	Blue	28	Satin	700	86T5595	12.25
WL-19081457	Blue	28	Black	700	86T5609	12.25
WL-19040457	Blue	28	Satin	90	86T5542	6.19
WL-19041457	Blue	28	Black	90	86T5555	6.76
WL-19080455	Green	28	Satin	1400	86T5594	12.25
WL-19081455	Green	28	Black	1400	86T5608	12.25
WL-19040451	Green	28	Satin	40	86T5539	4.46
WL-19041451	Green	28	Black	40	86T5552	5.17
WL-19080450	Red	28	Satin	1250	86T5592	5.62
WL-19081450	Red	28	Black	1250	86T5606	5.62
WL-19040453	Red	28	Satin	80	86T5541	4.46
WL-19041453	Red	28	Black	80	86T5554	4.86
WL-1908045W	White	28	Satin	1100	86T5591	12.25
WL-1908145W	White	28	Black	1100	86T5605	12.25
WL-1904045W	White	28	Satin	450	86T5538	7.56
WL-1904145W	White	28	Black	450	86T5551	7.14
WL-19080452	Yellow	28	Satin	1200	86T5593	7.14
WL-19081452	Yellow	28	Black	1200	86T5607	7.14
WL-19040452	Yellow	28	Satin	40	86T5540	4.46
WL-19041452	Yellow	28	Black	40	86T5553	4.86

(202065)

HIGH HAT LENSE LED PANEL MOUNT INDICATORS 8mm MOUNTING DIA.

RoHS Compliant Available

wamco™

Features:
- Solid-state reliability
- Long operating life
- Low power consumption
- White nylon housing
- Polycarbonate lens
- 6" Wire leads with 0.50" strip
- 0.310" Minimum mounting hole
- Agency approvals

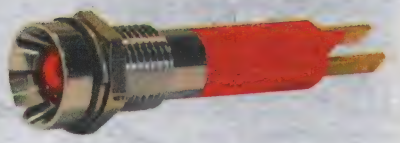
Mfg. Part No.	Lens Color	Supply Voltage (V)	Termin. Style	Stock No.	Price Each 1-24
WL-2191L1-12V	Red	14	Wire Leaded	86T5724	3.17
WL-2191L1-24V	Red	28	Wire Leaded	86T5725	3.09
WL-2191L5-6V	Green	6	Wire Leaded	86T5728	3.17
WL-2191L5-12V	Green	14	Wire Leaded	86T5726	3.13
WL-2191L5-24V	Green	28	Wire Leaded	86T5727	3.17
WL-2191L7-6V	Yellow	6	Wire Leaded	86T5731	2.98
WL-2191L7-12V	Yellow	14	Wire Leaded	86T5729	2.98
WL-2191L7-24V	Yellow	28	Wire Leaded	86T5730	3.17
WL-2191SL1-12V	Red	12	Wire Leaded	94T2342	3.41
WL-2191SL1-24V	Red	24	Wire Leaded	94T2343	3.58
WL-2191SL1-6V	Red	6	Wire Leaded	94T2344	3.41
WL-2191SL5-12V	Green	12	Wire Leaded	94T2345	3.41
WL-2191SL5-24V	Green	24	Wire Leaded	94T2346	3.41
WL-2191SL5-6V	Green	6	Wire Leaded	94T2347	3.41
WL-2191SL6-12V	Blue	12	Wire Leaded	94T2348	3.41
WL-2191SL6-24V	Blue	24	Wire Leaded	94T2349	3.62
WL-2191SL6-6V	Blue	6	Wire Leaded	94T2350	3.41
WL-2191SL7-12V	Yellow	12	Wire Leaded	94T2351	3.41
WL-2191SL7-24V	Yellow	24	Wire Leaded	94T2352	3.41
WL-2191SL7-6V	Yellow	6	Wire Leaded	94T2353	3.41
WL-2191SU1-12V	Red	12	Wire Leaded	94T2354	3.41
WL-2191SU1-24V	Red	24	Wire Leaded	94T2355	3.41
WL-2191SU1-6V	Red	6	Wire Leaded	94T2356	3.58
WL-2191SU5-12V	Green	12	Wire Leaded	94T2357	3.41
WL-2191SU5-24V	Green	24	Wire Leaded	94T2358	3.41
WL-2191SU5-6V	Green	6	Wire Leaded	94T2359	3.41
WL-2191SU6-12V	Blue	12	Wire Leaded	94T2360	3.41
WL-2191SU6-24V	Blue	24	Wire Leaded	94T2361	3.41
WL-2191SU6-6V	Blue	6	Wire Leaded	94T2362	3.41
WL-2191SU7-12V	Yellow	12	Wire Leaded	94T2363	3.41
WL-2191SU7-24V	Yellow	24	Wire Leaded	94T2364	3.41
WL-2191SU7-6V	Yellow	6	Wire Leaded	94T2365	3.41

(202104)

RECESSED BEZEL LED PANEL MOUNT INDICATORS 8mm MOUNTING DIA.

RoHS Compliant Available

wamco™



Specifications:
- Mounts in 8.0 - 8.2mm (0.315"-0.323") diameter hole
- Recessed bezel indicators fit panels up to 8.0mm (0.315") thick
- Solderable faston terminations

Features:
- Solid-state reliability
- Long operating life
- Low power consumption
- Low heat generation

High brightness color diffused LEDs are fitted in high-quality satin chrome or black chrome metal bezels and fitted with fixing nut and washer. Faston/solder tab brass terminals 2.8 x 0.8 mm (0.110" x 0.031"). Anode terminal marked "+" on VDC products.

Mfg. Part No.	Lens Color	Supply Voltage (V)	Bezel Finish	Lumin. Intens. (mcd)	Stock No.	Price Each 1-24
WL-19051257	Blue	12	Black	90	86T5575	6.76
WL-19091257	Blue	12	Black	700	86T5629	12.40
WL-19050257	Blue	12	Satin	90	86T5560	6.47
WL-19090257	Blue	12	Satin	700	86T5614	12.27
WL-19051251	Green	12	Black	40	86T5572	5.17
WL-19091255	Green	12	Black	1400	86T5628	12.40
WL-19050251	Green	12	Satin	40	86T5557	4.46
WL-19090255	Green	12	Satin	1400	86T5613	12.27
WL-19051253	Red	12	Black	80	86T5574	5.17
WL-19091250	Red	12	Black	1250	86T5626	5.12
WL-19050253	Red	12	Satin	80	86T5559	4.46

CONTINUED

PANEL MOUNT INDICATORS

RECESSED BEZEL LED PANEL MOUNT INDICATORS 8mm MOUNTING DIA. (CONT.)

Mfg. Part No.	Lens Color	Supply Voltage (V)	Bezel Finish	Lumin. Intens. (mcd)	Stock No.	Price Each 1-24
● WL-19090250	Red	12	Satin	1250	86T5611	5.84
● WL-1905125W	White	12	Black	450	86T5571	5.10
● WL-1909125W	White	12	Black	1100	86T5625	13.13
● WL-1905025W	White	12	Satin	450	86T5556	7.14
● WL-1909025W	White	12	Satin	1100	86T5610	12.99
● WL-19051252	Yellow	12	Black	40	86T5573	5.17
● WL-19091252	Yellow	12	Black	1200	86T5627	7.04
● WL-19050252	Yellow	12	Satin	40	86T5558	4.20
● WL-19090252	Yellow	12	Satin	1200	86T5612	6.88
● WL-19051357	Blue	24	Black	90	86T5578	6.76
● WL-19091357	Blue	24	Black	700	86T5632	12.40
● WL-19050357	Blue	24	Satin	90	86T5565	6.55
● WL-19090357	Blue	24	Satin	700	86T5619	12.27
● WL-19050351	Green	24	Satin	40	86T5562	4.41
● WL-19090355	Green	24	Satin	1400	86T5618	12.83
● WL-19050353	Red	24	Satin	80	86T5564	4.46
● WL-19090350	Red	24	Satin	1250	86T5616	5.84
● WL-1905135W	White	24	Black	450	86T5576	7.14
● WL-1909135W	White	24	Black	1100	86T5630	12.40
● WL-1905035W	White	24	Satin	450	86T5561	7.14
● WL-1909035W	White	24	Satin	1100	86T5615	12.99
● WL-19051352	Yellow	24	Black	40	86T5577	5.17
● WL-19091352	Yellow	24	Black	1200	86T5631	7.45
● WL-19050352	Yellow	24	Satin	40	86T5563	4.20
● WL-19090352	Yellow	24	Satin	1200	86T5617	7.28
● WL-19051457	Blue	28	Black	90	86T5583	6.39
● WL-19091457	Blue	28	Black	700	86T5637	12.68
● WL-19050457	Blue	28	Satin	90	86T5570	7.14
● WL-19090457	Blue	28	Satin	700	86T5624	12.25
● WL-19051451	Green	28	Black	40	86T5580	4.86
● WL-19091455	Green	28	Black	1400	86T5636	13.26
● WL-19050451	Green	28	Satin	40	86T5567	5.17
● WL-19090455	Green	28	Satin	1400	86T5623	12.97
● WL-19051453	Red	28	Black	80	86T5582	4.86
● WL-19091450	Red	28	Black	1250	86T5634	5.94
● WL-19050453	Red	28	Satin	80	86T5569	5.17
● WL-19090450	Red	28	Satin	1250	86T5621	5.62
● WL-1905145W	White	28	Black	450	86T5579	7.14
● WL-1909145W	White	28	Black	1100	86T5633	12.68
● WL-1905045W	White	28	Satin	450	86T5566	7.14
● WL-1909045W	White	28	Satin	1100	86T5620	12.25
● WL-19051452	Yellow	28	Black	40	86T5581	4.86
● WL-19091452	Yellow	28	Black	1200	86T5635	7.89
● WL-19050452	Yellow	28	Satin	40	86T5568	5.17
● WL-19090452	Yellow	28	Satin	1200	86T5622	7.14

(202109)

LED PANEL MOUNT INDICATORS 9.65mm MOUNTING HOLE DIAMETER

RoHS Compliant Available

wamco

Features:
- White nylon housing
- Polycarbonate lens
- Stainless steel bezel
- Fully gasketed construction
- 0.187" x 0.020" Thick tinned brass quick connect terminals or 6" wire leads with 0.50" strip
- Fits 0.380" hole in 0.030" to 0.250" thick panels
- Solid state models include built-in current limiting resistor and rectifier diode
- Neon models include built-in current limiting resistor
- Agency approvals
- IP67 Rated

Wire Leaded Quick Disconnect

Mfg. Part No.	Lens Color	Supply Voltage (V)	Lens Shape	Termin. Style	Stock No.	Price Each 1-24
● WL-6091M1-12V	Red	14	Dome	Wire Leaded	86T5757	5.59
● WL-6091M1-24V	Red	28	Dome	Wire Leaded	86T5758	5.50
● WL-6091M5-12V	Green	14	Dome	Wire Leaded	86T5759	5.44
● WL-6091M5-24V	Green	28	Dome	Wire Leaded	86T5760	5.44
● WL-6091M7-12V	Yellow	14	Dome	Wire Leaded	86T5761	5.20
● WL-6091M7-24V	Yellow	28	Dome	Wire Leaded	86T5762	5.44
● WL-6091QM1-12V	Red	14	Dome	Quick Disconnect	86T5763	5.20
● WL-6091QM1-24V	Red	28	Dome	Quick Disconnect	86T5764	5.20

➤ CONTINUED ➤

LED PANEL MOUNT INDICATORS 9.65mm MOUNTING HOLE DIAMETER (CONT.)

Mfg. Part No.	Lens Color	Supply Voltage (V)	Lens Shape	Termin. Style	Stock No.	Price Each 1-24
● WL-6091QM5-12V	Green	14	Dome	Quick Disconnect	86T5765	5.50
● WL-6091QM5-24V	Green	28	Dome	Quick Disconnect	86T5766	5.50
● WL-6091QM7-12V	Yellow	14	Dome	Quick Disconnect	86T5767	5.20
● WL-6091QM7-24V	Yellow	28	Dome	Quick Disconnect	86T5768	5.20

(202103)

LED DOME PANEL MOUNT INDICATORS 0.50" MOUNTING HOLE DIAMETER

RoHS Compliant Available

wamco

Features:
- White nylon housing
- Polycarbonate lens
- Stainless steel bezel
- 0.187" x 0.020" Thick tinned brass quick connect terminals or 6" wire leads with 0.50" strip
- Snap-Fit into 0.500 inch (12.7mm) hole in 0.030" to 0.090" thick panels
- Agency approvals

Wire Leads Quick Disconnects

Mfg. Part No.	Lens Color	Supply Voltage (V)	Lens Shape	Termin. Style	Stock No.	Price Each 1-24
● WL-1091M1-12V	Red	12-14	Dome	Wire Leaded	86T5457	3.07
● WL-1091M1-24V	Red	24-28	Dome	Wire Leaded	86T5458	3.16
● WL-1091M1-6V	Red	6	Dome	Wire Leaded	86T5459	3.11
● WL-1091M5-12V	Green	12-14	Dome	Wire Leaded	86T5460	3.07
● WL-1091M5-24V	Green	24-28	Dome	Wire Leaded	86T5461	3.16
● WL-1091M5-6V	Green	6	Dome	Wire Leaded	86T5462	2.93
● WL-1091M7-12V	Yellow	12-14	Dome	Wire Leaded	86T5463	3.11
● WL-1091M7-24V	Yellow	24-28	Dome	Wire Leaded	86T5464	3.07
● WL-1091M7-6V	Yellow	6	Dome	Wire Leaded	86T5465	2.93
● WL-1091QM1-12V	Red	12-14	Dome	Quick Disconnect	86T5466	3.31
● WL-1091QM1-24V	Red	24-28	Dome	Quick Disconnect	86T5467	3.37
● WL-1091QM5-12V	Green	12-14	Dome	Quick Disconnect	86T5468	3.26
● WL-1091QM5-24V	Green	24-28	Dome	Quick Disconnect	86T5469	3.26
● WL-1091QM7-12V	Yellow	12-14	Dome	Quick Disconnect	86T5470	3.26
● WL-1091QM7-24V	Yellow	24-28	Dome	Quick Disconnect	86T5471	3.31

(202074)

DOME LENSE LED PANEL MOUNT INDICATORS 14mm MOUNTING HOLE DIAMETER

RoHS Compliant Available

wamco

Specifications:
- Mounts in 14.0 - 14.2mm (0.55"-0.56") diameter hole
- Fit panels up to 11mm (0.433") thick
- Solderable faston terminations

Features:
- Solid-state reliability
- Long operating life
- Low power consumption
- Low heat generation

High brightness color diffused LEDs are fitted in high-quality satin chrome or black chrome metal bezels and fitted with fixing nut and washer. Faston/solder tab brass terminals 2.8 x 0.8 mm (0.110" x 0.031"). Anode terminal marked "+" on VDC products.

Mfg. Part No.	Lens Color	Supply Voltage (V)	Bezel Finish	Lumin. Intens. (mcd)	Stock No.	Price Each 1-24
● WL-192A0257	Blue	12	Satin	800	86T5642	14.91
● WL-192A1257	Blue	12	Black	800	86T5657	12.25
● WL-192A2257	Blue	12	Matte	800	86T5669	15.02
● WL-19210257	Blue	12	Satin	60	86T5674	11.29
● WL-19211257	Blue	12	Black	60	86T5689	11.29
● WL-192A0357	Blue	24	Satin	800	86T5647	14.91
● WL-192A1357	Blue	24	Black	800	86T5662	15.02
● WL-19210357	Blue	24	Satin	60	86T5679	11.29
● WL-19211357	Blue	24	Black	60	86T5694	11.29
● WL-192A0457	Blue	28	Satin	800	86T5652	12.25
● WL-192A1457	Blue	28	Black	800	86T5666	12.25
● WL-19210457	Blue	28	Satin	60	86T5684	11.29
● WL-19211457	Blue	28	Black	60	86T5699	11.29
● WL-192A0251	Green	12	Satin	1400	86T5640	12.97
● WL-192A1251	Green	12	Black	1400	86T5655	12.97
● WL-19210251	Green	12	Satin	80	86T5672	6.83

➤ CONTINUED ➤

DOME LENSE LED PANEL MOUNT INDICATORS 14mm MOUNTING HOLE DIAMETER (CONT.)

Mfg. Part No.	Lens Color	Supply Voltage (V)	Bezel Finish	Lumin. Intens. (mcd)	Stock No.	Price Each 1-24
WL-19211251	Green	12	Black	80	86T5687	7.24
WL-192A0351	Green	24	Satin	1400	86T5645	12.97
WL-192A1351	Green	24	Black	1400	86T5660	13.14
WL-19210351	Green	24	Satin	80	86T5677	6.91
WL-19211351	Green	24	Black	80	86T5692	6.84
WL-192A0451	Green	28	Satin	1400	86T5650	12.25
WL-192A1451	Green	28	Black	1400	86T5664	12.25
WL-19210451	Green	28	Satin	80	86T5682	6.94
WL-19211451	Green	28	Black	80	86T5697	6.94
WL-192A0250	Red	12	Satin	1000	86T5639	7.49
WL-192A1250	Red	12	Black	1000	86T5654	7.27
WL-192A2250	Red	12	Matte	1000	86T5667	7.27
WL-19210250	Red	12	Satin	160	86T5671	6.76
WL-19211250	Red	12	Black	160	86T5686	6.84
WL-192A0350	Red	24	Satin	1000	86T5644	7.40
WL-192A1350	Red	24	Black	1000	86T5659	7.60
WL-19210350	Red	24	Satin	160	86T5676	6.91
WL-19211350	Red	24	Black	160	86T5691	6.84
WL-192A0450	Red	28	Satin	1000	86T5649	8.47
WL-192A1450	Red	28	Black	1000	86T5663	8.47
WL-19210450	Red	28	Satin	160	86T5681	6.94
WL-19211450	Red	28	Black	160	86T5696	6.94
WL-192A025W	White	12	Satin	2100	86T5638	14.91
WL-192A125W	White	12	Black	2100	86T5653	15.02
WL-1921025W	White	12	Satin	200	86T5670	11.29
WL-1921125W	White	12	Black	200	86T5685	11.29
WL-192A035W	White	24	Satin	2100	86T5643	15.78
WL-192A135W	White	24	Black	2100	86T5658	12.25
WL-1921035W	White	24	Satin	200	86T5675	11.29
WL-1921135W	White	24	Black	200	86T5690	11.29
WL-192A045W	White	28	Satin	2100	86T5648	12.25
WL-1921045W	White	28	Satin	200	86T5680	11.29
WL-1921145W	White	28	Black	200	86T5695	11.29
WL-192A0252	Yellow	12	Satin	1300	86T5641	9.92
WL-192A1252	Yellow	12	Black	1300	86T5656	10.08
WL-192A2252	Yellow	12	Matte	1300	86T5668	10.08
WL-19210252	Yellow	12	Satin	80	86T5673	6.83
WL-19211252	Yellow	12	Black	80	86T5688	6.84
WL-192A0352	Yellow	24	Satin	1300	86T5646	10.50
WL-192A1352	Yellow	24	Black	1300	86T5661	10.67
WL-19210352	Yellow	24	Satin	80	86T5678	6.91
WL-19211352	Yellow	24	Black	80	86T5693	7.24
WL-192A0452	Yellow	28	Satin	1300	86T5651	8.47
WL-192A1452	Yellow	28	Black	1300	86T5665	8.47
WL-19210452	Yellow	28	Satin	80	86T5683	6.94
WL-19211452	Yellow	28	Black	80	86T5698	6.94

(202101)

CNX 480 SERIES LED PANEL MOUNT INDICATORS

RoHS Compliant Available

Technical:
- Mounting Hole: 10.1mm
- Operating Temperature: -40°C to 80°C
- Panel Thickness: 1.5mm min. to 8.1mm max.
- LED Current Output: 20mA
- Socket Body: Aluminum Alloy
- Lens: Polycarbonate, UL Rating 94-V2
- Washer: Steel, Zinc Plated, UL Rating 94-V0
- Retaining Nut: Aluminum Alloy
- Nut and washer to be packaged seperately
- Wire: 24 AWG

SOCKET BODY FINISH - ANODIZED BLACK

Mfg. Part No.	LED Color	Luminous Intensity	Forward Voltage (V)	Stock No.	Price Each 1-24
CNX 480 1 BTP 12	Blue	1.3cd	3	12T9757	10.55
CNX 480 1 BTP 24	Blue	1.3cd	3	12T9758	10.91
CNX 480 1 CTP 12	White	4.9cd	2.8	12T9759	10.17
CNX 480 1 CTP 24	White	4.9cd	2.8	12T9760	10.39
CNX 480 1 GTP 12	Green	485mcd	1.9	12T9761	10.49
CNX 480 1 GTP 24	Green	485mcd	1.9	12T9762	10.22
CNX 480 1 RTP 12	Red	345mcd	1.8	12T9763	10.49
CNX 480 1 RTP 24	Red	345mcd	1.8	12T9764	10.22

CONTINUED

CNX 480 SERIES LED PANEL MOUNT INDICATORS (CONT.)

Mfg. Part No.	LED Color	Luminous Intensity	Forward Voltage (V)	Stock No.	Price Each 1-24
CNX 480 1 YTP 12	Yellow	380mcd	1.9	12T9765	9.99
CNX 480 1 YTP 24	Yellow	380mcd	1.9	12T9766	10.22
SOCKET BODY FINISH - ANODIZED CLEAR					
CNX 480 2 BTP 12	Blue	1.3cd	3	12T9767	10.17
CNX 480 2 BTP 24	Blue	1.3cd	3	12T9768	10.39
CNX 480 2 CTP 12	White	4.9cd	2.8	12T9769	10.17
CNX 480 2 CTP 24	White	4.9cd	2.8	12T9770	10.39
CNX 480 2 GTP 12	Green	485mcd	1.9	12T9771	9.99
CNX 480 2 GTP 24	Green	485mcd	1.9	12T9772	10.60
CNX 480 2 RTP 12	Red	345mcd	1.8	12T9773	9.99
CNX 480 2 RTP 24	Red	345mcd	1.8	12T9774	10.22
CNX 480 2 YTP 12	Yellow	380mcd	1.9	12T9775	9.99
CNX 480 2 YTP 24	Yellow	380mcd	1.9	12T9776	10.22

(194397)

RUGGEDIZED LED PANEL MOUNT INDICATOR

RoHS Compliant Available

Features:
- Designed for harsh and outdoor environments
- Wide angle viewable
- Low profile for anti-vandalism
- Direct sunlight visibility
- Resistant to shock and vibration
- ESD protection

Applications:
- Istrument panels
- Disinfection and sterilization environments
- Transportation dashboards
- Safety applications
- Outdoor signage
- Aircraft and military
- Industrial machinery
- Electrical control panels
- Vending and gaming machines

CNX 482 Series offers a robust anodized aluminum body delivering NEMA 4 protection from the elements.

BLACK ANODIZED BEZEL AND BODY FINISH

Mfg. Part No.	Lens Color	Lumin. Intens. (cd)	Vf (V)	If (mA)	Wire Lead Length (inches)	Stock No.	Price Each 1-9
CNX 482 1 BTP 12	Blue	1.3	3	20	12	82T9862	15.03
CNX 482 1 BTP 24	Blue	1.3	3	20	24	82T9863	14.63
CNX 482 1 CTP 12	Transparent	4.9	2.8	20	12	82T9864	14.31
CNX 482 1 CTP 24	Transparent	4.9	2.8	20	24	82T9865	14.63
CNX 482 1 GTP 12	Green	485	1.9	20	12	82T9866	14.61
CNX 482 1 GTP 24	Green	485	1.9	20	24	82T9867	14.38
CNX 482 1 RTP 12	Red	345	1.8	20	12	82T9868	14.78
CNX 482 1 RTP 24	Red	345	1.8	20	24	82T9869	15.10
CNX 482 1 YTP 12	Yellow	380	1.9	20	12	82T9870	14.08
CNX 482 1 YTP 24	Yellow	380	1.9	20	24	82T9871	14.38
CLEAR ANODIZED BEZEL AND BODY FINISH							
CNX 482 2 BTP 12	Blue	1.3	3	20	12	82T9872	15.03
CNX 482 2 BTP 24	Blue	1.3	3	20	24	82T9873	15.36
CNX 482 2 CTP 12	Transparent	4.9	2.8	20	12	82T9874	14.31
CNX 482 2 CTP 24	Transparent	4.9	2.8	20	24	82T9875	14.63
CNX 482 2 GTP 12	Green	485	1.9	20	12	82T9876	14.78
CNX 482 2 GTP 24	Green	485	1.9	20	24	82T9877	15.10
CNX 482 2 RTP 12	Red	345	1.8	20	12	82T9878	14.78
CNX 482 2 RTP 24	Red	345	1.8	20	24	82T9879	14.38
CNX 482 2 YTP 12	Yellow	380	1.9	20	12	82T9880	14.78

(202140)

22mm TuffLED™ PANEL MOUNT INDICATORS

RoHS Compliant Available

Features:
- Designed for extreme harsh and outdoor environments
- Variety of connection options for fast, easy installation
- Built-in LED can be used with 5, 12 or 24 volt D/C circuits
- Fast pitch threads ease assembly, requiring only1 turn
- Special nut assembles by finger or with 1" hextool
- Direct sunlight visibility wide angle viewable
- Resistant to shock and vibration
- Moisture sealed, IP 67/NEMA 6P rated

Specifications:
- Installation specification mounting hole: .855-.910" (21.7-23.1mm)
- Panel thickness Up to .300" (7.6mm)
- Operating temperature: -40°C to +80°C
- Body material: Polycarbonate, UL 94-V2

CONTINUED

PANEL MOUNT INDICATORS

22mm TuffLED™ PANEL MOUNT INDICATORS (CONT.)

- Retaining nut: PBT/glass filled, UL 94-V0
- Wire: 22 AWG 1007/1569
- Bezel: Plastic ABS, UL 94-HB or Metal: aluminum alloy

INDICATORS - COLORED BODY - SCREW BLOCK TERMINATION

Mfg. Part No.	Forward Voltage (V)	LED Color	Luminous Intensity (mcd)	Stock No.	Price Each 1-9
● CNX722C50005B	5	Green	1400	86W5848	15.48
● CNX722C20005B	5	Red	1900	86W5830	15.48
● CNX722C40005B	5	Yellow	200	86W5839	15.48
● CNX722C50012B	12	Green	1400	86W5851	15.48
● CNX722C20012B	12	Red	1900	86W5833	14.74
● CNX722C40012B	12	Yellow	200	86W5842	15.48
● CNX722C50024B	24	Green	1400	86W5854	15.48
● CNX722C20024B	24	Red	1900	86W5836	15.48
● CNX722C90024B	24	White	1700	86W5872	14.74
● CNX722C40024B	24	Yellow	200	86W5845	15.48
INDICATORS - COLORED BODY - QUICK DISCONNECT					
● CNX722C50005T	5	Green	1400	86W5849	13.24
● CNX722C20005T	5	Red	1900	86W5831	13.24
● CNX722C90005T	5	White	1700	86W5867	12.61
● CNX722C40005T	5	Yellow	200	86W5840	12.96
● CNX722C50012T	12	Green	1400	86W5852	13.24
● CNX722C20012T	12	Red	1900	86W5834	13.24
● CNX722C90012T	12	White	1700	86W5870	12.61
● CNX722C40012T	12	Yellow	200	86W5843	13.24
● CNX722C50024T	24	Green	1400	86W5855	13.24
● CNX722C20024T	24	Red	1900	86W5837	13.24
● CNX722C90024T	24	White	1700	86W5873	12.61
● CNX722C40024T	24	Yellow	200	86W5846	12.61
INDICATORS - COLORED BODY - WIRE LEADS					
● CNX722C50005W	5	Green	1400	86W5850	11.96
● CNX722C20005W	5	Red	1900	86W5832	11.96
● CNX722C40005W	5	Yellow	200	86W5841	11.96
● CNX722C50012W	12	Green	1400	86W5853	11.96
● CNX722C20012W	12	Red	1900	86W5835	11.96
● CNX722C40012W	12	Yellow	200	86W5844	11.96
● CNX722C20024W	24	Red	1900	86W5838	11.96
● CNX722C90024W	24	White	1700	86W5874	11.39
● CNX722C40024W	24	Yellow	200	86W5847	11.39

BEZELS

Mfg. Part No.	Bezel Color	Stock No.	Price Each 1-24
● BZL722-A	Aluminum	86W5821	1.54
● BZL722-B	Brushed Aluminum	86W5822	1.54
● BZL722-C	Chrome	86W5823	1.04
● BZL722-0	Black	86W5824	0.58
● BZL722-2	Red	86W5825	0.61
● BZL722-4	Yellow	86W5826	0.61
● BZL722-5	Green	86W5827	0.61
● BZL722-6	Blue	86W5828	0.58
● BZL722-9	White	86W5829	0.58

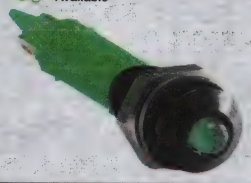
(209638)

Q SERIES 6MM IP67 PROMINENT BEZEL TYPE PANEL MOUNT LED INDICATORS

RoHS Compliant Available

APEM

Features:
- 3mm coloured diffused epoxy lens
- Bright chrome or black chrome
- (2.0 x 0.5) Terminals
- IP67 sealing option (EN60529)
- Supplied with fixing nut and spring washer



BLACK CHROME FINISH

Mfg. Part No.	Color	Supply Voltage (V)	Lumin. Intens. (mcd)	Forward Voltage (V @ 20mA)	Viewing Angle (°)	Stock No.	Price Each 1-9
● Q6P1BXXB12E	Blue	12	65	3.8	100	16R0095	12.98
● Q6P1BXXG12E	Green	12	40	2.2	100	73P4713	9.56
● Q6P1BXXR12E	Red	12	40	2	100	16R0098	9.56
● Q6P1BXXW12E	White	12	100	3.8	100	16R0100	13.40
● Q6P1BXXY12E	Yellow	12	30	2.1	100	16R0102	9.56
● Q6P1BXXB24E	Blue	24	65	3.8	100	16R0096	12.98
● Q6P1BXXG24E	Green	24	40	2.2	100	16R0097	9.56
● Q6P1BXXR24E	Red	24	40	2	100	16R0099	9.56

➤ CONTINUED ➤

Q SERIES 6MM IP67 PROMINENT BEZEL TYPE PANEL MOUNT LED INDICATORS (CONT.)

Mfg. Part No.	Color	Supply Voltage (V)	Lumin. Intens. (mcd)	Forward Voltage (V @ 20mA)	Viewing Angle (°)	Stock No.	Price Each 1-9
● Q6P1BXXW24E	White	24	100	3.8	100	16R0101	13.40
● Q6P1BXXY24E	Yellow	24	30	2.1	100	16R0103	9.56
BRIGHT CHROME FINISH							
● Q6P1CXXB12E	Blue	12	65	3.8	100	16R0104	12.98
● Q6P1CXXG12E	Green	12	40	2.2	100	41M1436	8.66
● Q6P1CXXR12E	Red	12	40	2	100	41M1438	9.56
● Q6P1CXXW12E	White	12	100	3.8	100	16R0106	13.40
● Q6P1CXXY12E	Yellow	12	30	2.1	100	41M1440	9.56
● Q6P1CXXB24E	Blue	24	65	3.8	100	16R0105	12.98
● Q6P1CXXG24E	Green	24	40	2.2	100	41M1437	10.22
● Q6P1CXXR24E	Red	24	40	2	100	41M1439	9.56
● Q6P1CXXW24E	White	24	100	3.8	100	16R0107	13.40
● Q6P1CXXY24E	Yellow	24	30	2.1	100	41M1441	9.56

(198645)

Q SERIES 6MM IP67 RECESSED BEZEL TYPE PANEL MOUNT LED INDICATORS

RoHS Compliant Available

APEM

Features:
- 3mm coloured diffused epoxy lens
- Bright chrome or black chrome
- (2.0 x 0.5) Terminals
- IP67 sealing option (EN60529)
- Supplied with fixing nut and spring washer

BLACK CHROME FINISH

Mfg. Part No.	Color	Supply Voltage (V)	Lumin. Intens. (mcd)	Forward Voltage (V @ 20mA)	Viewing Angle (°)	Stock No.	Price Each 1-9
● Q6R1BXXB12E	Blue	12	65	3.8	100	16R0108	12.98
● Q6R1BXXG12E	Green	12	40	2.2	100	16R0110	9.56
● Q6R1BXXR12E	Red	12	40	2	100	16R0112	9.56
● Q6R1BXXW12E	White	12	100	3.8	100	16R0114	13.40
● Q6R1BXXY12E	Yellow	12	30	2.1	100	16R0116	9.56
● Q6R1BXXB24E	Blue	24	65	3.8	100	16R0109	12.98
● Q6R1BXXG24E	Green	24	40	2.2	100	16R0111	9.56
● Q6R1BXXR24E	Red	24	40	2	100	16R0113	9.56
● Q6R1BXXW24E	White	24	100	3.8	100	16R0115	13.40
● Q6R1BXXY24E	Yellow	24	30	2.1	100	16R0117	9.56
BRIGHT CHROME FINISH							
● Q6R1CXXB12E	Blue	12	65	3.8	100	16R0118	12.98
● Q6R1CXXG12E	Green	12	40	2.2	100	16R0120	9.56
● Q6R1CXXR12E	Red	12	40	2	100	16R0122	9.56
● Q6R1CXXW12E	White	12	100	3.8	100	16R0124	13.40
● Q6R1CXXY12E	Yellow	12	30	2.1	100	16R0126	9.56
● Q6R1CXXB24E	Blue	24	65	3.8	100	16R0119	12.98
● Q6R1CXXG24E	Green	24	40	2.2	100	16R0121	9.56
● Q6R1CXXR24E	Red	24	40	2	100	16R0123	9.56
● Q6R1CXXW24E	White	24	100	3.8	100	16R0125	13.40
● Q6R1CXXY24E	Yellow	24	30	2.1	100	16R0127	10.22

(198646)

Q SERIES 6MM IP67 FLAT BEZEL TYPE PANEL MOUNT LED INDICATORS

RoHS Compliant Available

APEM

Features:
- 3mm coloured diffused epoxy lens
- Bright chrome or black chrome
- (2.0 x 0.5) Terminals
- IP67 sealing option (EN60529)
- Supplied with fixing nut and spring washer

BLACK CHROME FINISH

Mfg. Part No.	Color	Supply Voltage (V)	Lumin. Intens. (mcd)	Forward Voltage (V @ 20mA)	Viewing Angle (°)	Stock No.	Price Each 1-9
● Q6F1BXXB12E	Blue	12	8	3.8	100	16R0081	12.98
● Q6F1BXXG12E	Green	12	8	2.2	100	16R0083	8.66
● Q6F1BXXR12E	Red	12	10	2	100	16R0085	7.45
● Q6F1BXXW12E	White	12	15	3.8	100	16R0087	13.40
● Q6F1BXXY12E	Yellow	12	8	2.1	100	16R0089	9.56
● Q6F1BXXB24E	Blue	24	8	3.8	100	16R0082	12.98
● Q6F1BXXG24E	Green	24	8	2.2	100	16R0084	10.22
● Q6F1BXXR24E	Red	24	10	2	100	16R0086	7.35
● Q6F1BXXW24E	White	24	15	3.8	100	16R0088	13.40
● Q6F1BXXY24E	Yellow	24	8	2.1	100	16R0090	9.56

➤ CONTINUED ➤

Q SERIES 6MM IP67 FLAT BEZEL TYPE PANEL MOUNT LED INDICATORS (CONT.)

BRIGHT CHROME FINISH

Mfg. Part No.	Color	Supply Voltage (V)	Lumin. Intens. (mcd)	Forward Voltage (V @ 20mA)	Viewing Angle (°)	Stock No.	Price Each 1-9
Q6F1CXXB12E	Blue	12	8	3.8	100	16R0091	12.98
Q6F1CXXG12E	Green	12	8	2.2	100	41M1430	9.56
Q6F1CXXR12E	Red	12	10	2	100	41M1432	9.56
Q6F1CXXW12E	White	12	15	3.8	100	16R0093	13.40
Q6F1CXXY12E	Yellow	12	8	2.1	100	41M1434	9.56
Q6F1CXXB24E	Blue	24	8	3.8	100	16R0092	12.98
Q6F1CXXG24E	Green	24	8	2.2	100	41M1431	9.56
Q6F1CXXR24E	Red	24	10	2	100	41M1433	9.56
Q6F1CXXW24E	White	24	15	3.8	100	16R0094	13.40
Q6F1CXXY24E	Yellow	24	8	2.1	100	41M1435	9.56

(198647)

Q SERIES 8MM IP67 PROMINENT BEZEL TYPE PANEL MOUNT LED INDICATORS

RoHS Compliant Available

APEM

Features:
- 5mm coloured diffused epoxy lens
- Bright chrome or black chrome
- (2.8 x 0.8) Terminals
- IP67 sealing option (EN60529)
- Supplied with fixing nut and spring washer

BLACK CHROME FINISH

Mfg. Part No.	Color	Supply Voltage (V)	Lumin. Intens. (mcd)	Forward Voltage (V @ 20mA)	Viewing Angle (°)	Stock No.	Price Each 1-9
Q8P1BXXG110E	Green	110	40	2.2	100	10R0943	11.07
Q8P1BXXR110E	Red	110	50	2	100	16R0155	13.06
Q8P1BXXW110E	White	110	150	3.8	100	16R0158	16.03
Q8P1BXXY110E	Yellow	110	40	2.1	100	16R0161	13.06
Q8P1BXXB12E	Blue	12	90	3.8	100	16R0151	13.30
Q8P1BXXG12E	Green	12	40	2.2	100	16R0153	9.85
Q8P1BXXR12E	Red	12	50	2	100	16R0156	9.85
Q8P1BXXY12E	Yellow	12	40	2.1	100	16R0162	9.85
Q8P1BZZRYG12E	Red/ Yellow/ Green	12	20/ 10/ 10	2/ 2.2/ 2.1	100	16R0164	12.86
Q8P1BXXG24E	Green	24	40	2.2	100	16R0154	10.54
Q8P1BXXR24E	Red	24	50	2	100	16R0157	9.85
Q8P1BXXY24E	Yellow	24	40	2.1	100	16R0163	9.85
Q8P1BZZRYG24E	Red/ Yellow/ Green	24	20/ 10/ 10	2/ 2.2/ 2.1	100	16R0165	10.75

BRIGHT CHROME FINISH

Mfg. Part No.	Color	Supply Voltage (V)	Lumin. Intens. (mcd)	Forward Voltage (V @ 20mA)	Viewing Angle (°)	Stock No.	Price Each 1-9
Q8P1CXXB110E	Blue	110	90	3.8	100	16R0166	15.62
Q8P1CXXG110E	Green	110	40	2.2	100	16R0169	12.21
Q8P1CXXR110E	Red	110	50	2	100	16R0170	11.07
Q8P1CXXW110E	White	110	150	3.8	100	16R0171	16.03
Q8P1CXXY110E	Yellow	110	40	2.1	100	16R0174	12.21
Q8P1CXXB12E	Blue	12	90	3.8	100	16R0167	13.30
Q8P1CXXG12E	Green	12	40	2.2	100	41M1450	8.93
Q8P1CXXR12E	Red	12	50	2	100	41M1452	9.85
Q8P1CXXW12E	White	12	150	3.8	100	16R0172	13.69
Q8P1CXXY12E	Yellow	12	40	2.1	100	41M1454	9.85
Q8P1CZZRYG12E	Red/ Yellow/ Green	12	20/ 10/ 10	2/ 2.2/ 2.1	100	41M1456	12.02
Q8P1CXXB24E	Blue	24	90	3.8	100	16R0168	13.30
Q8P1CXXG24E	Green	24	40	2.2	100	41M1451	9.85
Q8P1CXXR24E	Red	24	50	2	100	41M1453	9.85
Q8P1CXXW24E	White	24	150	3.8	100	16R0173	13.69
Q8P1CXXY24E	Yellow	24	40	2.1	100	41M1455	9.85
Q8P1CZZRYG24E	Red/ Yellow/ Green	24	20/ 10/ 10	2/ 2.2/ 2.1	100	41M1457	12.02

(198649)

Q SERIES 8MM IP67 RECESSED BEZEL TYPE PANEL MOUNT LED INDICATORS

RoHS Compliant Available

APEM

Features:
- 5mm coloured diffused epoxy lens
- Bright chrome or black chrome
- (2.8 x 0.8) Terminals
- IP67 sealing option (EN60529)
- Supplied with fixing nut and spring washer

BLACK CHROME FINISH

Mfg. Part No.	Color	Supply Voltage (V)	Lumin. Intens. (mcd)	Forward Voltage (V @ 20mA)	Viewing Angle (°)	Stock No.	Price Each 1-9
Q8R1BXXB110E	Blue	110	90	3.8	100	16R0175	15.62
Q8R1BXXG110E	Green	110	40	2.2	100	16R0178	12.21
Q8R1BXXR110E	Red	110	50	2	100	16R0181	11.65
Q8R1BXXW110E	White	110	150	3.8	100	16R0184	16.03
Q8R1BXXY110E	Yellow	110	40	2.1	100	16R0187	12.21
Q8R1BXXB12E	Blue	12	90	3.8	100	16R0176	13.30
Q8R1BXXR12E	Red	12	50	2	100	16R0182	9.85
Q8R1BXXW12E	White	12	150	3.8	100	16R0185	13.69
Q8R1BXXY12E	Yellow	12	40	2.1	100	16R0188	9.85
Q8R1BXXB24E	Blue	24	90	3.8	100	16R0177	13.30
Q8R1BXXG24E	Green	24	40	2.2	100	16R0180	9.85
Q8R1BXXR24E	Red	24	50	2	100	16R0183	9.85
Q8R1BXXW24E	White	24	150	3.8	100	16R0186	13.69
Q8R1BXXY24E	Yellow	24	40	2.1	100	16R0189	10.54

BRIGHT CHROME FINISH

Mfg. Part No.	Color	Supply Voltage (V)	Lumin. Intens. (mcd)	Forward Voltage (V @ 20mA)	Viewing Angle (°)	Stock No.	Price Each 1-9
Q8R1CXXB110E	Blue	110	90	3.8	100	16R0190	15.62
Q8R1CXXG110E	Green	110	40	2.2	100	16R0192	12.21
Q8R1CXXR110E	Red	110	50	2	100	16R0194	12.21
Q8R1CXXW110E	White	110	150	3.8	100	16R0196	16.03
Q8R1CXXY110E	Yellow	110	40	2.1	100	16R0199	12.21
Q8R1CXXB12E	Blue	12	90	3.8	100	77M0404	13.30
Q8R1CXXG12E	Green	12	40	2.2	100	16R0193	9.85
Q8R1CXXR12E	Red	12	50	2	100	24R8829	7.63
Q8R1CXXW12E	White	12	150	3.8	100	16R0197	13.69
Q8R1CXXY12E	Yellow	12	40	2.1	100	75M9446	9.85
Q8R1CXXW24E	White	24	150	3.8	100	16R0198	13.69
Q8R1CXXY24E	Yellow	24	40	2.1	100	16R0200	9.85

(198650)

Q SERIES 8MM IP67 FLAT BEZEL TYPE PANEL MOUNT LED INDICATORS

RoHS Compliant Available

APEM

Features:
- 5mm coloured diffused epoxy lens
- Bright chrome or black chrome
- (2.8 x 0.8) Terminals
- IP67 sealing option (EN60529)
- Supplied with fixing nut and spring washer

BLACK CHROME FINISH

Mfg. Part No.	Color	Supply Voltage (V)	Lumin. Intens. (mcd)	Forward Voltage (V @ 20mA)	Viewing Angle (°)	Stock No.	Price Each 1-9
Q8F1BXXB110E	Blue	110	4	3.8	100	16R0128	15.62
Q8F1BXXG110E	Green	110	8	2.2	100	16R0131	12.89
Q8F1BXXR110E	Red	110	10	2	100	16R0134	12.21
Q8F1BXXW110E	White	110	25	3.8	100	16R0136	16.03
Q8F1BXXY110E	Yellow	110	6	2.1	100	16R0139	12.21
Q8F1BXXB12E	Blue	12	4	3.8	100	16R0129	13.30
Q8F1BXXG12E	Green	12	8	2.2	100	16R0132	7.63
Q8F1BXXR12E	Red	12	10	2	100	46P6012	9.85
Q8F1BXXY12E	Yellow	12	6	2.1	100	46P6015	9.85
Q8F1BXXB24E	Blue	24	4	3.8	100	16R0130	12.06
Q8F1BXXG24E	Green	24	8	2.2	100	16R0133	8.93
Q8F1BXXR24E	Red	24	10	2	100	16R0135	8.34
Q8F1BXXW24E	White	24	25	3.8	100	16R0138	13.69
Q8F1BXXY24E	Yellow	24	6	2.1	100	16R0140	9.85

BRIGHT CHROME FINISH

Mfg. Part No.	Color	Supply Voltage (V)	Lumin. Intens. (mcd)	Forward Voltage (V @ 20mA)	Viewing Angle (°)	Stock No.	Price Each 1-9
Q8F1CXXB110E	Blue	110	4	3.8	100	16R0141	15.62
Q8F1CXXR110E	Red	110	10	2	100	16R0145	10.35
Q8F1CXXW110E	White	110	25	3.8	100	16R0146	16.03
Q8F1CXXB12E	Blue	12	4	3.8	100	16R0142	13.30
Q8F1CXXG12E	Green	12	8	2.2	100	41M1442	9.85
Q8F1CXXR12E	Red	12	10	2	100	41M1444	8.93
Q8F1CXXW12E	White	12	25	3.8	100	16R0147	13.69
Q8F1CXXY12E	Yellow	12	6	2.1	100	41M1446	9.85
Q8F1CXXB24E	Blue	24	4	3.8	100	16R0143	13.30
Q8F1CXXG24E	Green	24	8	2.2	100	41M1443	9.85

CONTINUED

PANEL MOUNT INDICATORS

Q SERIES 8MM IP67 FLAT BEZEL TYPE PANEL MOUNT LED INDICATORS (CONT.)

BRIGHT CHROME FINISH

Mfg. Part No.	Color	Supply Voltage (V)	Lumin. Intens. (mcd)	Forward Voltage (V @ 20mA)	Viewing Angle (°)	Stock No.	Price Each 1-9
● Q8F1CXXR24E	Red	24	10	2	100	41M1445	9.85
● Q8F1CXXW24E	White	24	25	3.8	100	16R0148	13.69
● Q8F1CXXY24E	Yellow	24	6	2.1	100	41M1447	10.54

(198648)

Q SERIES 12MM IP67 PROMINENT BEZEL TYPE PANEL MOUNT LED INDICATORS

RoHS Compliant Available

APEM

Features:
- 8mm coloured diffused epoxy lens
- Bright chrome or black chrome
- (2.8 x 0.8) Terminals
- IP67 sealing option (EN60529)
- Supplied with fixing nut and spring washer

BLACK CHROME FINISH

Mfg. Part No.	Color	Supply Voltage (V)	Lumin. Intens. (mcd)	Forward Voltage (V @ 20mA)	Viewing Angle (°)	Stock No.	Price Each 1-9
● Q12P1BXXB110E	Blue	110	500	3.3	60	15R9833	19.84
● Q12P1BXXG110E	Green	110	50	2.2	60	15R9836	12.38
● Q12P1BXXR110E	Red	110	100	1.9	60	15R9839	13.08
● Q12P1BXXW110E	White	110	350	3.3	60	15R9842	19.41
● Q12P1BXXY110E	Yellow	110	50	2.1	60	15R9845	21.89
● Q12P1BXXB12E	Blue	12	500	3.3	60	15R9834	17.58
● Q12P1BXXG12E	Green	12	50	2.2	60	15R9837	10.67
● Q12P1BXXR12E	Red	12	100	1.9	60	15R9840	12.32
● Q12P1BXXW12E	White	12	350	3.3	60	15R9843	18.38
● Q12P1BXXY12E	Yellow	12	50	2.1	60	15R9846	13.57
● Q12P1BXXB24E	Blue	24	500	3.3	60	15R9835	13.86
● Q12P1BXXG24E	Green	24	50	2.2	60	15R9838	12.16
● Q12P1BXXR24E	Red	24	100	1.9	60	15R9841	12.32
● Q12P1BXXW24E	White	24	350	3.3	60	15R9844	18.38
● Q12P1BXXY24E	Yellow	24	50	2.1	60	15R9847	12.32
BRIGHT CHROME FINISH							
● Q12P1CXXB110E	Blue	110	500	3.3	60	15R9848	19.91
● Q12P1CXXG110E	Green	110	50	2.2	60	15R9851	14.64
● Q12P1CXXR110E	Red	110	100	1.9	60	15R9854	15.67
● Q12P1CXXW110E	White	110	350	3.3	60	15R9857	16.76
● Q12P1CXXY110E	Yellow	110	50	2.1	60	15R9860	17.77
● Q12P1CXXB12E	Blue	12	500	3.3	60	15R9849	17.58
● Q12P1CXXG12E	Green	12	50	2.2	60	15R9852	13.57
● Q12P1CXXR12E	Red	12	100	1.9	60	15R9855	13.57
● Q12P1CXXW12E	White	12	350	3.3	60	15R9858	18.38
● Q12P1CXXY12E	Yellow	12	50	2.1	60	15R9861	13.57
● Q12P1CXXB24E	Blue	24	500	3.3	60	15R9850	17.58
● Q12P1CXXG24E	Green	24	50	2.2	60	15R9853	10.53
● Q12P1CXXR24E	Red	24	100	1.9	60	15R9856	14.52
● Q12P1CXXW24E	White	24	350	3.3	60	15R9859	18.38
● Q12P1CXXY24E	Yellow	24	50	2.1	60	15R9862	13.57

(198651)

Q SERIES 14MM IP67 PROMINENT BEZEL TYPE PANEL MOUNT LED INDICATORS

RoHS Compliant Available

APEM

Features:
- 10mm coloured diffused epoxy lens
- Bright chrome or black chrome
- (2.8 x 0.8) Terminals
- IP67 sealing option (EN60529)
- Supplied with fixing nut and spring washer

BLACK CHROME FINISH

Mfg. Part No.	Color	Supply Voltage (V)	Lumin. Intens. (mcd)	Forward Voltage (V @ 20mA)	Viewing Angle (°)	Stock No.	Price Each 1-9
● Q14P1BXXB110E	Blue	110	280	3.2	100	15R9893	18.52
● Q14P1BXXG110E	Green	110	40	2.2	100	15R9896	11.45
● Q14P1BXXR110E	Red	110	80	2	100	15R9899	12.67
● Q14P1BXXW110E	White	110	350	3.2	100	15R9902	17.73
● Q14P1BXXY110E	Yellow	110	30	2.1	100	15R9905	12.67
● Q14P1BXXB12E	Blue	12	280	3.2	100	15R9894	14.95
● Q14P1BXXW12E	White	12	350	3.2	100	15R9903	15.43
● Q14P1BXXY12E	Yellow	12	30	2.1	100	15R9906	10.35

➤CONTINUED➤

Q SERIES 14MM IP67 PROMINENT BEZEL TYPE PANEL MOUNT LED INDICATORS (CONT.)

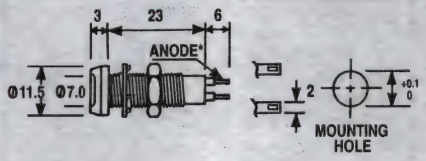
Mfg. Part No.	Color	Supply Voltage (V)	Lumin. Intens. (mcd)	Forward Voltage (V @ 20mA)	Viewing Angle (°)	Stock No.	Price Each 1-9
● Q14P1BZZRYG12E	Red/ Yellow/ Green	12	80/ 50/ 50	2/ 2.2/ 2.1	100	15R9908	11.88
● Q14P1BXXG24E	Green	24	40	2.2	100	15R9898	10.35
● Q14P1BXXR24E	Red	24	80	2	100	15R9901	10.35
● Q14P1BXXW24E	White	24	350	3.2	100	15R9904	15.43
● Q14P1BXXY24E	Yellow	24	30	2.1	100	15R9907	10.35
● Q14P1BZZRYG24E	Red/ Yellow/ Green	24	80/ 50/ 50	2/ 2.2/ 2.1	100	15R9909	11.88
BRIGHT CHROME FINISH							
● Q14P1CXXB110E	Blue	110	280	3.2	100	15R9910	17.31
● Q14P1CXXG110E	Green	110	40	2.2	100	15R9913	12.67
● Q14P1CXXR110E	Red	110	80	2	100	15R9914	12.67
● Q14P1CXXW110E	White	110	350	3.2	100	15R9915	17.73
● Q14P1CXXY110E	Yellow	110	30	2.1	100	15R9918	12.67
● Q14P1CXXB12E	Blue	12	280	3.2	100	15R9911	14.95
● Q14P1CXXG12E	Green	12	40	2.2	100	41M1422	10.35
● Q14P1CXXR12E	Red	12	80	2	100	41M1424	11.07
● Q14P1CXXW12E	White	12	350	3.2	100	15R9916	15.43
● Q14P1CZZRYG12E	Red/ Yellow/ Green	12	80/ 50/ 50	2/ 2.2/ 2.1	100	41M1428	12.71
● Q14P1CXXB24E	Blue	24	280	3.2	100	15R9912	14.95
● Q14P1CXXG24E	Green	24	40	2.2	100	41M1423	11.07
● Q14P1CXXR24E	Red	24	80	2	100	41M1425	10.35
● Q14P1CXXW24E	White	24	350	3.2	100	15R9917	15.43
● Q14P1CXXY24E	Yellow	24	30	2.1	100	41M1427	10.35
● Q14P1CZZRYG24E	Red/ Yellow/ Green	24	80/ 50/ 50	2/ 2.2/ 2.1	100	41M1429	9.33

(198653)

508 SERIES INDUSTRIAL PANEL MOUNTING WATER-TIGHT IP67 LED INDICATORS

RoHS Compliant Available

MARL



Features:
- 8.1mm Mounting Hole
- High-Intensity, Sunlight-Readable LEDs
- Fully Potted Internally to Protect from Vibration, Shock and Water Ingress
- Brass Body for Safe Use in Hazardous Areas

Operating temperature: -20C to +60C. Storage temperature: -30°C to +85°C. Lens: smoked. Mean time between failure: 100,000 hours. Rating: CO2 IP67.

Mfg. Part No.	Color	Voltage (VDC @ 20mA)	Current (mA@DC)	Luminous Intensity I_v @ 20mA	Wave-length (nm)	Stock No.	Price Each 1-24
● 508-501-21	Red	12	19	11	643	35C0860	42.48
● 508-501-22	Red	24	20	11	643	68K1220	42.04
● 508-501-23	Red	24-28	20	11	643	32M1453	41.59
● 508-521-21	Yellow	12	19	16	591	35C0862	41.59
● 508-521-22	Yellow	24	20	16	591	35C0863	42.48
● 508-521-23	Yellow	24-28	20	16	591	32M1454	42.48
● 508-532-21	Green	12	20	23	527	35C0864	42.48
● 508-532-22	Green	24	20	23	527	35C0865	42.04
● 508-532-23	Green	24-28	20	23	527	32M1455	41.59
● 508-930-23	Blue	24-28	20	7	470	32M1456	41.59
● 508-997-21	Cold White	12	20	14	...	35C0866	40.05
● 508-997-22	Cold White	24	20	14	...	68K1221	41.59
● 508-997-23	Cool White	24-28	20	14	...	32M1457	40.05

(69177)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

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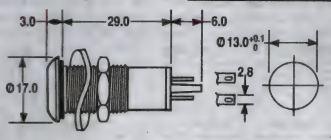
528 SERIES WATER-TIGHT IP67 LED INDICATORS

RoHS Compliant Available

MARL



Features:
- Robust Stainless Steel Housing
- Low-Profile Styling
- Mounting: 13mm

Lens: colored diffused. Wide viewing angle. Operating temperature: -40°C to +60°C. Mean time between failure: 100,000 hours.

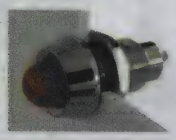
Mfg. Part No.	Color	Voltage V_f @ 20mA	Current (mA@DC)	Luminous Intensity I_v @ 20mA	Wave-length (nm)	Stock No.	Price Each 1-24
528-501-21	Red	12 VDC	19	11	643	68K1242	65.14
528-501-22	Red	24 VDC	20	11	643	68K1243	65.66
528-501-75	Red	110 VAC	7	11	643	35C0914	65.66
528-521-21	Yellow	12 VDC	19	16	591	68K1244	63.23
528-521-22	Yellow	24 VDC	20	16	591	35C0916	63.23
528-521-75	Yellow	110 VAC	7	16	591	35C0917	63.23
528-532-21	Green	12 VDC	20	23	527	68K1245	66.36
528-532-22	Green	24 VDC	20	23	527	68K1246	65.66
528-532-75	Green	110 VAC	7	23	527	35C0920	65.66

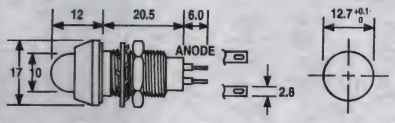
(69170)

514 SERIES WATER-TIGHT IP67 LED INDICATORS

RoHS Compliant Available

MARL





Features:
- 12.7mm Mounting
- Bright Nickel-Plated Brass Housing
- Robust Termination Tags Accept
- Push-On Connectors

Wide viewing angle. Operating temperature: -40°C to +85°C. Lens: coloured diffused. Mean time between failure: 100,000 hours.

STANDARD INTENSITY

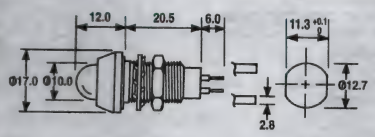
Mfg. Part No.	Color	Voltage @ 20mA	Current (mA@DC)	Luminous Intensity I_v @ 20mA	Wave-length (nm)	Stock No.	Price Each 1-24
514-102-21	Red	12 VDC	20	450	660	68K1223	42.28
514-102-22	Red	24 VDC	19	450	660	68K1224	40.29
514-102-72	Red	24 VAC	19	450	660	35C0883	40.29
514-102-75	Red	110 VAC	9	450	660	68K1225	41.84
514-105-72	Red	24 VAC	20	100	627	68K1229	42.28
514-105-75	Red	110 VAC	9	100	627	68K1230	41.84
514-111-04	Yellow	2.1 VDC	20	50	590	80K9324	42.28
514-111-23	Yellow	24-28 VDC	20	50	590	32M1460	42.28
514-111-72	Yellow	24 VAC	20	50	590	68K1233	42.28
514-111-75	Yellow	110 VAC	9	50	590	68K1234	41.29
514-114-04	Green	2.2 VDC	20	60	565	35C0895	40.29
514-114-22	Green	24 VDC	20	60	565	68K1236	42.28
514-114-72	Green	24 VAC	19	60	565	68K1237	41.84
514-114-75	Green	110 VAC	9	60	565	68K1238	41.84

(69179)

651 SERIES WATER-TIGHT IP67 LED INDICATORS

RoHS Compliant Available

MARL



Features:
- 12.7mm Mounting
- Black Anodized Aluminum Housing
- Full Internal Potting Making the Product Ideal for Use in Arduous Environments
- Excellent Wide Viewing Angle Characteristics
- Sealed to IP67

Wide viewing angle. Operating temperature: -20°C to +60°C. Lens: colored diffused. Mean time between failure: 100,000 hours.

CONTINUED

651 SERIES WATER-TIGHT IP67 LED INDICATORS (CONT.)

STANDARD INTENSITY

Mfg. Part No.	Color	Voltage V_f @ 20mA	Current (mA@DC)	Luminous Intensity I_v @ 20mA	Wave-length (nm)	Stock No.	Price Each 1-24
651-105-21	Red	12 VDC	20	100	625	68K1249	42.04
651-105-22	Red	24 VDC	20	100	627	68K1250	40.48
651-114-21	Green	12 VDC	20	60	565	35C0927	42.93
651-114-22	Green	24 VDC	20	60	565	68K1252	42.04
651-114-75	Green	110 VAC	9	60	565	99H8411	41.70

HIGH INTENSITY

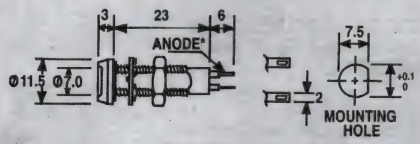
Mfg. Part No.	Color	Voltage V_f @ 20mA	Current (mA@DC)	Luminous Intensity I_v @ 20mA	Wave-length (nm)	Stock No.	Price Each 1-24
651-102-21	Red	12 VDC	19	450	660	68K1247	42.04
651-102-22	Red	12 VDC	20	100	627	68K1248	42.48

(69182)

677 SERIES HIGH-PERFORMANCE PANEL MOUNTING WATER-TIGHT IP67 LED INDICATORS

RoHS Compliant Available

MARL



- 8.1mm Mounting Hole
- Fully Potted Internally to Protect Against Vibration, Shock and Water Ingress
- Outstanding Optical Performance
- Rugged Recessed Lens Assembly
- Robust Termination Tags Accept Push-On Connectors

Operating temperature: -40°C to +85°C. Lens: flat smoked. Mean time between failure: 100,000 hours.

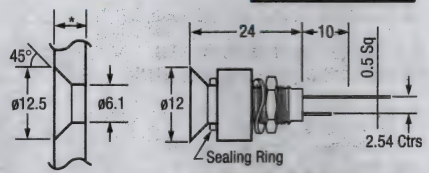
Mfg. Part No.	Color	Voltage V_f @ 20mA	Current (mA@DC)	Luminous Intensity I_v @ 20mA	Wave-length (nm)	Stock No.	Price Each 1-9
677-501-21	Red	12 VDC	20	11	643	35C0929	29.45
677-501-22	Red	24 VDC	20	11	643	68K1253	29.77
677-501-23	Red	24-28 VDC	20	11	643	35C0931	29.14
677-521-23	Yellow	24-28 VDC	20	16	591	35C0934	29.14
677-532-21	Green	12 VDC	20	23	527	68K1254	29.77
677-532-22	Green	24 VDC	20	23	527	68K1255	29.45
677-532-23	Green	24-28 VDC	20	23	527	35C0937	29.45

(69181)

696 SERIES WATER-TIGHT IP67 LED INDICATORS

RoHS Compliant Available

MARL



Anode termination indicated by long pin
*Min/Max Panel Thickness is 3/6.5mm

Features:
- 6.1mm Mounting
- Black Anodized Aluminum
- Low-Profile Styling

Lens: colored diffused. Wide angle viewing. Operating temperature: -40°C ~ +60°C. Mean time between failure = 100,000 hours.

Mfg. Part No.	Color	Voltage (VDC @ 20mA)	Current (mA@DC)	Luminous Intensity I_v @ 20mA	Wave-length (nm)	Stock No.	Price Each 1-24
696-301-22	Red	24 VDC	20	900	660	35C0943	53.85
696-324-22	Green	24 VDC	20	7.8	525	68K1259	51.85

(69183)

604 SERIES PROFESSIONAL LED INDICATORS 5mm DIA MOUNTING

RoHS Compliant Available

MARL

Features:
- Bright nickel plated brass housing
- Excellent wide viewing angle characteristics
- Sealed to IP67
- Suitable for high vibration applications
- Internal reverse protection diode fitted as standard in all voltage models

CONTINUED

PANEL MOUNT INDICATORS

604 SERIES PROFESSIONAL LED INDICATORS 5mm DIA MOUNTING (CONT.)

The **604 Series** is a 5.0mm mounting, Professional LED Panel Indicator featuring a high intensity LED element in a range of colors and voltages. A reverse protection diode is fitted as standard in all voltage models. Termination is achieved by 150mm of color coded flying leads. This particular device is fitted with a low profile, smoked lens assembly to provide excellent wide angle viewing and on/off contrast ratio. The precision turned housing is manufactured from brass with a high quality, bright nickel finish, and is supplied complete with full mounting hardware.

Mfg. Part No.	Color	Voltage (Vopr)	Current (mA@DC)	Luminous Intensity (mcd) I_v @ 20mA	Wavel-ength (nm)	Stock No.	Price Each 1-9
● 604-301-04	Red	2.1 V	20	900	660	96M8676	26.08
● 604-301-23	Red	28 V	20	900	660	96M8677	27.16
● 604-324-04	Green	2.2 V	20	7.8	525	96M8678	26.08
● 604-324-23	Green	28 V	20	7.8	525	96M8679	27.16
● 604-325-04	Yellow	2.2 V	20	4.3	590	96M8680	25.11
● 604-325-23	Yellow	28 V	20	4.3	590	96M8681	27.16
● 604-934-04	Blue	2.2 V	20	2.3	470	96M8682	26.64
● 604-934-23	Blue	28 V	20	2.3	470	96M8683	27.16

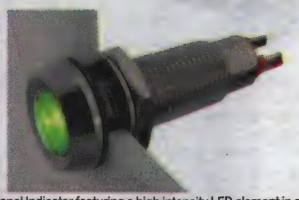
(147218)

507 SERIES PROFESSIONAL LED INDICATORS 8.1mm DIA MOUNTING

RoHS Compliant Available

MARL

Features:
- Robust bright nickel plated brass housing
- Low profile styling, sunlight readable LEDs
- Sealed to IP67
- Suitable for high vibration applications
- Internal reverse protection diode fitted as standard in all voltage models



The **507 Series** is a 8.1mm mounting, Professional LED Panel Indicator featuring a high intensity LED element in a range of colors and voltages. A reverse protection diode is fitted as standard in all voltage models. Termination is achieved by standard solder/crimp tags. This particular device is fitted with a low profile, colored diffused lens assembly to provide excellent wide angle viewing. The precision turned housing is manufactured from brass with a high quality, bright nickel finish, and is supplied complete with full mounting hardware.

Mfg. Part No.	Color	Voltage (Vopr)	Current (mA@DC)	Luminous Intensity (mcd) I_v @ 20mA	Wavel-ength (nm)	Stock No.	Price Each 1-9
● 507-501-21	Red	12 V	19	11	643	96M8565	22.81
● 507-501-23	Red	28 V	20	11	643	96M8566	23.85
● 507-521-21	Yellow	12 V	19	16	591	96M8567	24.14
● 507-532-21	Green	12 V	20	23	527	96M8569	23.85
● 507-532-23	Green	28 V	20	23	527	88M0620	23.85
● 507-930-21	Blue	12 V	20	7	470	96M8570	24.14

(147213)

524 SERIES PROFESSIONAL LED INDICATORS 8.1mm DIA MOUNTING

RoHS Compliant Available

MARL

Features:
- Robust stainless steel housing
- Low profile styling, sunlight readable LEDs
- Sealed to IP67
- Wide viewing angle
- Suitable for high vibration applications
- Internal reverse protection diode fitted as standard in all voltage models.

The 524 Series has precision turned stainless steel housing that supports the LED element in a range of colors and voltages. Termination is achieved by standard solder/crimp tags. Fitted with a low profile, colored diffused lens assembly. Comes complete with full mounting hardware.

Mfg. Part No.	Color	Voltage V_f @ 20mA	Current (mA@DC)	Luminous Intensity I_v @ 20mA	Wavel-ength (nm)	Stock No.	Price Each 1-24
● 524-532-86	Green	115 V	20	23	527	28H9168	46.85

(90560)

534 SERIES PROFESSIONAL LED INDICATORS 8.1mm DIA MOUNTING

RoHS Compliant Available

MARL

Features:
- Each product will operate over a wide voltage input range
- Robust stainless steel housing
- Full internal potting to resist shock and vibration
- Sealed to IP67
- True Bi-polar product for low voltage DC applications

➤CONTINUED➤

534 SERIES PROFESSIONAL LED INDICATORS 8.1mm DIA MOUNTING (CONT.)

The **534 Series** is a 8.1mm mounting, Professional LED Panel Indicator featuring a high intensity LED element in a range of colors and voltages. This is a truly bi-polar product and operates over a wide voltage range. Termination is achieved by standard solder/crimp tags. This particular device is fitted with a low profile, colored diffused lens assembly to provide excellent wide angle viewing. The precision turned housing is manufactured from high quality stainless steel, and is supplied complete with full mounting hardware.

Mfg. Part No.	Color	Voltage (Vopr)	Current (mA@DC)	Luminous Intensity (mcd) I_v @ 20mA	Wavel-ength (nm)	Stock No.	Price Each 1-9
● 534-501-75	Red	110 V	6	11	643	79M5334	28.61
● 534-532-63	Green	28 V	16	23	527	79M5337	27.26
● 534-532-75	Green	110 V	6	23	527	79M5338	28.61
● 534-930-75	Blue	110 V	6	7	470	79M5340	27.26
● 534-997-63	Cool White	28 V	16	14	...	79M5341	27.26

(147215)

Q SERIES 16MM IP67 FLAT BEZEL TYPE PANEL MOUNT LED INDICATORS

RoHS Compliant Available

APEM

Features:
- 10mm coloured diffused epoxy lens
- Bright chrome or black chrome
- (2.8 x 0.8) Terminals
- IP67 sealing option (EN60529)
- Supplied with fixing nut and spring washer

Mfg. Part No.	Color	Supply Voltage (V)	Lumin. Intens. (mcd)	Forward Voltage (V @ 20mA)	Viewing Angle (°)	Stock No.	Price Each 1-9
BLACK CHROME FINISH							
● Q16F1BXXB110E	Blue	110	10	3.2	100	15R9919	19.59
● Q16F1BXXG110E	Green	110	5	2.2	100	15R9922	15.72
● Q16F1BXXR110E	Red	110	10	2	100	15R9925	15.72
● Q16F1BXXW110E	White	110	20	3.2	100	15R9928	20.91
● Q16F1BXXY110E	Yellow	110	4	2.1	100	15R9931	15.72
● Q16F1BXXB12E	Blue	12	10	3.2	100	15R9920	17.06
● Q16F1BXXG12E	Green	12	5	2.2	100	15R9923	13.21
● Q16F1BXXR12E	Red	12	10	2	100	15R9926	13.21
● Q16F1BXXW12E	White	12	20	3.2	100	15R9929	18.40
● Q16F1BXXY12E	Yellow	12	4	2.1	100	15R9932	13.21
● Q16F1BXXB24E	Blue	24	10	3.2	100	15R9921	17.06
● Q16F1BXXG24E	Green	24	5	2.2	100	15R9924	13.21
● Q16F1BXXR24E	Red	24	10	2	100	15R9927	13.21
● Q16F1BXXW24E	White	24	20	3.2	100	15R9930	18.40
BRIGHT CHROME FINISH							
● Q16F1CXXB110E	Blue	110	10	3.2	100	15R9934	19.59
● Q16F1CXXG110E	Green	110	5	2.2	100	15R9937	15.72
● Q16F1CXXR110E	Red	110	10	2	100	85M2452	15.72
● Q16F1CXXY110E	Yellow	110	4	2.1	100	15R9945	15.72
● Q16F1CXXB12E	Blue	12	10	3.2	100	15R9935	17.06
● Q16F1CXXG12E	Green	12	5	2.2	100	15R9938	13.21
● Q16F1CXXR12E	Red	12	10	2	100	15R9940	13.21
● Q16F1CXXW12E	White	12	20	3.2	100	15R9943	18.40
● Q16F1CXXY12E	Yellow	12	4	2.1	100	15R9946	13.21
● Q16F1CXXB24E	Blue	24	10	3.2	100	15R9936	17.06
● Q16F1CXXG24E	Green	24	5	2.2	100	15R9939	13.21
● Q16F1CXXW24E	White	24	20	3.2	100	15R9944	18.40
● Q16F1CXXY24E	Yellow	24	4	2.1	100	15R9947	13.21

(198654)

537 SERIES PROFESSIONAL LED INDICATORS 8.1mm DIA MOUNTING

RoHS Compliant Available

MARL

Features:
- Each product will operate over a wide voltage input range
- Bright nickel plated brass housing
- Full internal potting to resist shock and vibration
- Sealed to IP67
- True Bi-polar product for low voltage DC applications

The **537 Series** is a 8.1mm mounting, Professional LED Panel Indicator featuring a high intensity LED element in a range of colors and voltages. This is a truly bi-polar product and operates over a wide voltage range. Termination is achieved by standard solder/crimp tags. This particular device is fitted with a low profile, colored diffused lens assembly to provide excellent wide angle viewing. The precision turned housing is manufactured from brass with a high quality, bright nickel finish, and is supplied complete with full mounting hardware.

➤CONTINUED➤

537 SERIES PROFESSIONAL LED INDICATORS 8.1mm DIA MOUNTING (CONT.)

Mfg. Part No.	Color	Voltage (Vopr)	Current (mA@DC)	Luminous Intensity (mcd) I_v @ 20mA	Wavel-ength (nm)	Stock No.	Price Each 1-9
537-501-75	Red	110 V	6	11	643	79M6920	27.18
537-521-75	Yellow	110 V	6	16	591	79M6922	26.17
537-532-75	Green	110 V	6	23	527	79M6924	27.47

(147216)

698 SERIES PROFESSIONAL LED INDICATORS 8.1mm DIA MOUNTING

RoHS Compliant Available

MARL

Features:
- Each product will operate over a wide voltage input range
- Black anodised aluminium housing
- Full internal potting to resist shock and vibration
- Sealed to IP67
- True Bi-polar product for low voltage DC applications

The **698 Series** is a 8.1mm mounting, Professional LED Panel Indicator featuring a high intensity LED element in a range of colors and voltages. This is a truly bi-polar product and operates over a wide voltage range. Termination is achieved by standard solder/crimp tags. This particular device is fitted with a low profile, smoked lens assembly to provide excellent wide angle viewing and on/off contrast ratio. The precision turned housing is manufactured from aluminium with a high quality, black anodised finish, and is supplied complete with full mounting hardware.

Mfg. Part No.	Color	Voltage DC (Vdc)	Current (mA@DC)	Luminous Intensity (mcd) I_v @ 20mA	Wavel-ength (nm)	Stock No.	Price Each 1-9
698-501-63	Red	28 V	16	11	643	79M5404	26.90
698-501-75	Red	110 V	6	11	643	79M5405	26.90
698-521-63	Yellow	28 V	16	16	591	79M5406	26.90
698-532-63	Green	28 V	16	23	527	79M5408	26.62
698-532-75	Green	110 V	6	23	527	79M5409	26.62
698-930-63	Blue	28 V	16	7	470	79M5410	26.62

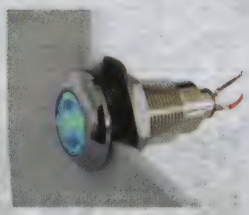
(147222)

531 SERIES PROFESSIONAL LED INDICATORS 12.7mm DIA MOUNTING

RoHS Compliant Available

MARL

Features:
- Each product will operate over a wide voltage input range
- Bright nickel plated brass housing
- Full internal potting to resist shock and vibration
- Sealed to IP67
- True Bi-polar product for low voltage DC applications



The **531 Series** is a 12.7mm mounting, Professional LED Panel Indicator featuring a high intensity LED element in a range of colors. This is a truly bi-polar product and operates over a wide voltage range. Termination is achieved by standard solder/crimp tags. This particular device is fitted with a low profile, colored diffused lens assembly to provide excellent wide angle viewing. The precision turned housing is manufactured from brass with a high quality, bright nickel finish, and is supplied complete with full mounting hardware.

Mfg. Part No.	Color	Voltage (Vopr)	Current (mA@DC)	Luminous Intensity (mcd) I_v @ 20mA	Wavel-ength (nm)	Stock No.	Price Each 1-9
531-501-63	Red	28 V	16	11	643	79M6901	33.60
531-501-75	Red	110 V	6	11	643	79M6902	33.60
531-521-63	Yellow	28 V	16	16	591	79M6903	33.60
531-521-75	Yellow	110 V	6	16	591	79M6904	33.60
531-532-63	Green	28 V	16	23	527	79M6905	32.02
531-532-75	Green	110 V	6	23	527	79M6906	33.60
531-930-63	Blue	28 V	16	7	470	79M6907	33.60
531-930-75	Blue	110 V	6	7	470	79M6908	33.60

(147214)

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(196545)

690 SERIES HIGH INTENSITY LED PANEL INDICATORS

RoHS Compliant Available

MARL

- Voltage rating: 8 - 48VAC/VDC
- DC current rating: 10mA
- Operating Temperature: -40°C to 80°C
- Power dissipation max.: 480 mW
- UL Certified - Certificate Number 20120419-E349017
- High Intensity LED Panel Indicator
- Black anodised aluminium housing
- Wide viewing angle
- Suitable for high vibration applications
- Sealed to IP67 - weather proof and suitable for use in external applications

Mfg. Part No.	Color	Luminous Intensity (mcd)	Wave Length (nm)	Stock No.	Price Each 1-9
690-501-66	Red	600	630	28W2761	49.59
690-930-66	Blue	140	465	28W2762	49.59
690-940-66	Infrared	20mW/sr	940	28W2763	49.59
690-946-66	Infrared	20mW/sr	880	28W2764	49.59
690-997-66	White	27000	...	28W2765	49.59
690-521-66	Yellow	600	858	94T3858	51.09
690-532-66	Green	800	515	94T3860	51.50

(208871)

538 SERIES PROFESSIONAL LED INDICATORS 12.7mm DIA MOUNTING

RoHS Compliant Available

MARL

Features:
- Each product will operate over a wide voltage input range
- Robust stainless steel housing
- Full internal potting to resist shock and vibration
- Sealed to IP67
- True Bi-polar product for low voltage DC applications

The **538 Series** is a 12.7mm mounting, Professional LED Panel Indicator featuring a high intensity LED element in a range of colors and voltages. This is a truly bi-polar product and operates over a wide voltage range. Termination is achieved by standard solder/crimp tags. This particular device is fitted with a low profile, colored diffused lens assembly to provide excellent wide angle viewing. The precision turned housing is manufactured from high quality stainless steel, and is supplied complete with full mounting hardware.

Mfg. Part No.	Color	Voltage (Vopr)	Current (mA@DC)	Luminous Intensity (mcd) I_v @ 20mA	Wavel-ength (nm)	Stock No.	Price Each 1-9
538-501-63	Red	28 V	16	11	643	79M5343	31.98
538-501-75	Red	110 V	6	11	643	79M5344	31.64
538-521-75	Yellow	110 V	6	16	591	79M5346	31.98
538-532-63	Green	28 V	16	23	527	79M5347	30.47
538-532-75	Green	110 V	6	23	527	79M5348	31.98
538-930-75	Blue	110 V	6	7	470	79M5350	31.98

(147217)

699 SERIES PROFESSIONAL LED INDICATORS 12.7mm DIA MOUNTING

RoHS Compliant Available

MARL

Features:
- Each product will operate over a wide voltage input range
- Black anodised aluminium housing
- Full internal potting to resist shock and vibration
- Sealed to IP67
- True Bi-polar product for low voltage DC applications

The **699 Series** is a 12.7mm mounting, Professional LED Panel Indicator featuring a high intensity LED element in a range of colors and voltages. This is a truly bi-polar product and operates over a wide voltage range. Termination is achieved by standard solder/crimp tags. This particular device is fitted with a low profile, colored diffused lens assembly to provide excellent wide angle viewing and on/off contrast ratio. The precision turned housing is manufactured from aluminium with a high quality, black anodised finish, and is supplied complete with full mounting hardware.

Mfg. Part No.	Color	Voltage DC (Vdc)	Current (mA@DC)	Luminous Intensity (mcd) I_v @ 20mA	Wavel-ength (nm)	Stock No.	Price Each 1-9
699-501-63	Red	28 V	16	11	643	79M5414	31.98
699-501-75	Red	110 V	6	11	643	79M5415	30.47
699-532-63	Green	28 V	16	23	527	79M5418	31.64
699-532-75	Green	110 V	6	23	527	79M5419	31.98

(147223)

LAMP BASED – PANEL-MOUNT INDICATORS

NON-RELAMPABLE ½" PANEL MOUNT INDICATORS

RoHS Compliant Available

Chicago Miniature Lighting, LLC
Lighting the world since 1910

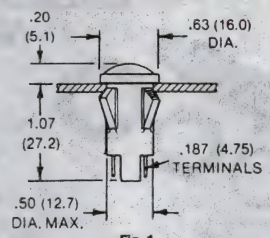


Fig. 1
Wire Leads
Q.C. Terminals Shown

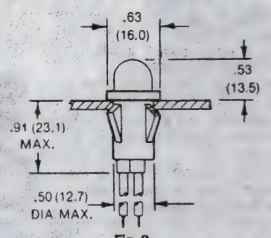


Fig. 2
Wire Leads Shown
Q.C. Terminals

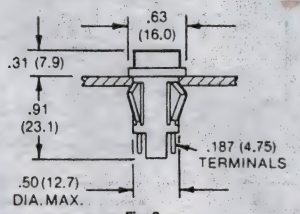


Fig. 3
Wire Leads
Q.C. Terminals Shown

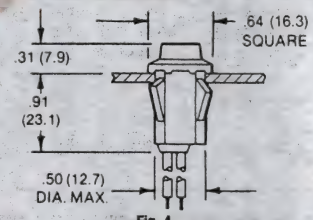


Fig. 4
Wire Leads Shown
Q.C. Terminals

Neon, incandescent and LED indicators snap-fit into 0.5-0.505" (12.7-12.83mm) diameter hole in panels 0.02-0.100" (0.51-2.54mm) thick. All have 4.4-4.8" (112-122.9mm) long, 22 AWG wire leads **except** Mfg. Part Nos. with **Q** in the part number which have 0.187" (4.75mm) tinned-brass quick-connect terminals. Polished stainless steel bezel, white nylon housing. **Mfg. Part Nos. 1050C/1051C** feature wire leads (Q.C. terminals shown). **Mfg. Part Nos. 1050QA/1051QA** feature Q.C. terminals (wire leads shown). Wire lead models **Mfg. Part Nos. 1030** and **1050** feature black leads; **Mfg. Part Nos. 1031** and **1051** feature one black lead and one red lead. **Mfg. Part Nos. 1090** 12V indicators feature yellow leads for 12V; 28V models feature purple leads.

NEON INDICATORS WITH BUILT-IN RESISTOR

Mfg. Part No.	Fig.	Lens Color	Voltage (V)	Stock No.	Price Each 1-24
● 1030D1	1	Red	125	18M7882	2.54
● 1030D3	1	Amber	125	18M7883	2.49
● 1030D4	1	White	125	18M7884	2.53
● 1030QD1	1	Red	125	18M7885	2.60
● 1030QD3	1	Amber	125	93F3557	2.65
● 1030QD4	1	White	125	18M7886	2.65
● 1031D1	1	Red	250	18M7887	2.49
● 1031D3	1	Amber	250	18M7888	2.50
● 1031QD1	1	Red	250	18M7889	2.50
● 1032D5	1	Green	125	18M7890	3.45
● 1032QD5	1	Green	125	18M7891	3.86
● 1050A1	2	Red	125	18M7892	2.52
● 1050A2	2	Clear	125	18M7893	2.42
● 1050A3	2	Amber	125	18M7894	2.57
● 1050A4	2	White	125	18M7895	2.52
● 1050QA1	2	Red	125	18M7903	2.65
● 1050QA2	2	Clear	125	18M7904	2.64
● 1050QA3	2	Amber	125	18M7905	2.60
● 1050QA4	2	White	125	93F3539	2.64
● 1051A1	2	Red	250	18M7912	2.52
● 1051A2	2	Clear	250	18M7913	2.55
● 1051QA1	2	Red	250	20M7057	2.65
● 1052A5	2	Green	125	18M7916	3.57
● 1052QA5	2	Green	125	18M7918	3.67
● 1050C1	3	Red	125	18M7896	2.52
● 1050C2	3	Clear	125	18M7897	2.57
● 1050C3	3	Amber	125	18M7898	2.52
● 1050QC1	3	Red	125	18M7906	2.60
● 1050QC2	3	Clear	125	18M7907	2.50
● 1050QC3	3	Amber	125	19M0212	2.60
● 1050QC4	3	White	125	18M7908	2.65
● 1051C1	3	Red	250	18M7914	2.57
● 1051QC1	3	Red	250	18M7915	2.65
● 1051QC3	3	Amber	250	19M0213	2.65
● 1052C5	3	Green	125	18M7917	3.50
● 1052QC5	3	Green	125	20M7058	3.67
● 1050C4	4	White	125	18M7899	2.52
● 1050N1	4	Red	125	18M7900	2.67
● 1050N3	4	Amber	125	18M7901	2.71
● 1050QN1	4	Red	125	18M7909	2.92
● 1050QN3	4	Amber	125	18M7910	2.77
● 1050QN4	4	White	125	18M7911	2.92

➤CONTINUED➤

NON-RELAMPABLE ½" PANEL MOUNT INDICATORS (CONT.)

INCANDESCENT INDICATORS WITH BUILT-IN RESISTOR

Mfg. Part No.	Fig.	Lens Color	Voltage (V)	Stock No.	Price Each 1-24
● 1090D1-28V	1	Red	28	18M7928	3.03
● 1090A1-12V	2	Red	12	18M7920	3.03
● 1090A1-28V	2	Red	28	18M7921	3.10
● 1090A3-12V	2	Amber	12	18M7922	3.00
● 1090A3-28V	2	Amber	28	18M7923	3.03
● 1090A5-28V	2	Green	28	18M7924	3.03
● 1090QA1-12V	2	Red	12	18M7930	3.26
● 1090QA1-28V	2	Red	28	18M7931	3.09
● 1090C1-12V	3	Red	12	18M7925	3.10
● 1090C1-28V	3	Red	28	18M7926	3.10
● 1090C3-12V	3	Amber	12	20M4360	2.91
● 1090C3-28V	3	Amber	28	98F9115	4.10
● 1090QC1-12V	3	Red	12	18M7933	3.22
● 1090QC1-28V	3	Red	28	18M7934	3.22
● 1090QC3-28V	3	Amber	28	18M7936	3.28
● 1090QC4-28V	3	White	28	18M7937	3.22
● 1090QC5-12V	3	Green	12	18M7938	3.22
● 1090QC5-28V	3	Green	28	18M9768	3.28
● 1090C5-28V	4	Green	28	18M7927	3.10

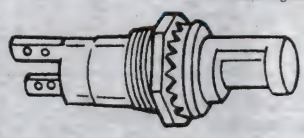
LED INDICATORS WITH BUILT-IN RESISTOR

● 1091QM1-12V	...	Red	12	01C3789	3.52
● 1091QM1-24V	...	Red	24	93K6628	3.45
● 1091QM5-12V	...	Green	12	93K6629	3.45
● 1091QM5-24V	...	Green	28	88F4882	3.45
● 1091QM7-24V	...	Yellow	24	93K6631	3.52

(2562)

900 SERIES INSTRUMENT LIGHTS

Chicago Miniature Lighting, LLC
Lighting the world since 1910



Mfg. Part No. 900-200 fixed hood, solder lug terminals. Mounts hole 0.688" in diameter to 0.406" panel thickness. Uses T-3¼ miniature bayonet lamp.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
900-200	Fixed Hood, Solder Lug Terminals	39F3462	32.45

(2599)

(196527)

INCANDESCENT PANEL MOUNT INDICATORS 0.50″ MOUNTING HOLE DIAMETER

RoHS Compliant Available

wamco™

WL 1090Ax

WL 1090Cx

WL 1090Dx

0.50″ (12.54mm) MOUNTING HOLE DIAMETER

Mfg. Part No.	Lens Color	Lens Shape	Supply Voltage (V)	Termin. Style	Stock No.	Price Each 1-24
WL-1090A1-12V	Red	Dome	12	Wire Leaded	86T5423	2.81
WL-1090A1-28V	Red	Dome	28	Wire Leaded	86T5424	2.81
WL-1090A3-12V	Amber	Dome	12	Wire Leaded	86T5425	2.85
WL-1090A3-28V	Amber	Dome	28	Wire Leaded	86T5426	2.85
WL-1090A4-12V	White	Dome	12	Wire Leaded	86T5427	2.85
WL-1090A4-28V	White	Dome	28	Wire Leaded	86T5428	2.85
WL-1090A5-12V	Green	Dome	12	Wire Leaded	86T5429	2.81
WL-1090A5-28V	Green	Dome	28	Wire Leaded	86T5430	2.85
WL-1090A6-12V	Blue	Dome	12	Wire Leaded	86T5431	2.85
WL-1090A6-28V	Blue	Dome	28	Wire Leaded	86T5432	2.85
WL-1090C1-12V	Red	Cylindrical Flat Top	12	Wire Leaded	86T5433	2.85
WL-1090C1-28V	Red	Cylindrical Flat Top	28	Wire Leaded	86T5434	2.81
WL-1090C3-12V	Amber	Cylindrical Flat Top	12	Wire Leaded	86T5435	2.85
WL-1090C3-28V	Amber	Cylindrical Flat Top	28	Wire Leaded	86T5436	2.81
WL-1090C4-12V	White	Cylindrical Flat Top	12	Wire Leaded	86T5437	2.68
WL-1090C4-28V	White	Cylindrical Flat Top	28	Wire Leaded	86T5438	2.85
WL-1090C5-12V	Green	Cylindrical Flat Top	12	Wire Leaded	86T5439	2.85
WL-1090C5-28V	Green	Cylindrical Flat Top	28	Wire Leaded	86T5440	2.81
WL-1090D1-12V	Red	Flat	12	Wire Leaded	86T5441	2.81
WL-1090D1-28V	Red	Flat	28	Wire Leaded	86T5442	2.81
WL-1090D3-12V	Amber	Flat	12	Wire Leaded	86T5443	2.81
WL-1090D3-28V	Amber	Flat	28	Wire Leaded	86T5444	2.89
WL-1090D4-12V	White	Flat	12	Wire Leaded	86T5445	2.68
WL-1090D4-28V	White	Flat	28	Wire Leaded	86T5446	2.68
WL-1090D5-12V	Green	Flat	12	Wire Leaded	86T5447	2.85
WL-1090D5-28V	Green	Flat	28	Wire Leaded	86T5448	2.81
WL-1090QC1-12V	Red	Cylindrical Flat Top	12	Quick Connect	86T5449	2.98
WL-1090QC1-28V	Red	Cylindrical Flat Top	28	Quick Connect	86T5450	3.02
WL-1090QC3-12V	Amber	Cylindrical Flat Top	12	Quick Connect	86T5451	2.84
WL-1090QC3-28V	Amber	Cylindrical Flat Top	28	Quick Connect	86T5452	2.84
WL-1090QC4-12V	White	Cylindrical Flat Top	12	Quick Connect	86T5453	2.84
WL-1090QC4-28V	White	Cylindrical Flat Top	28	Quick Connect	86T5454	3.02
WL-1090QC5-12V	Green	Cylindrical Flat Top	12	Quick Connect	86T5455	2.84
WL-1090QC5-28V	Green	Cylindrical Flat Top	28	Quick Connect	86T5456	2.98
0.31″ (7.87mm) MOUNTING HOLE DIAMETER						
WL-2194A1-28V	Red	Cylindrical Flat Top	28	Wire Leaded	86T5741	2.98
WL-2194A3-28V	Amber	Cylindrical Flat Top	28	Wire Leaded	86T5742	2.98
WL-2195A1-28V	Red	Cylindrical Flat Top	28	Wire Leaded	86T5743	2.81
WL-2195A5-28V	Green	Cylindrical Flat Top	28	Wire Leaded	86T5744	2.81
WL-2194SA1-12V	Red	Cylindrical Flat Top	12	Wire Leaded	94T2366	3.15
WL-2194SA1-28V	Red	Cylindrical Flat Top	28	Wire Leaded	94T2367	2.96
WL-2194SA3-12V	Amber	Cylindrical Flat Top	12	Wire Leaded	94T2370	2.96
WL-2194SA3-28V	Amber	Cylindrical Flat Top	28	Wire Leaded	94T2371	2.96
WL-2194SA5-12V	Green	Cylindrical Flat Top	12	Wire Leaded	94T2372	2.96
WL-2194SA5-28V	Green	Cylindrical Flat Top	28	Wire Leaded	94T2373	2.96

(202072)

TECHNICAL SUPPORT HOTLINE

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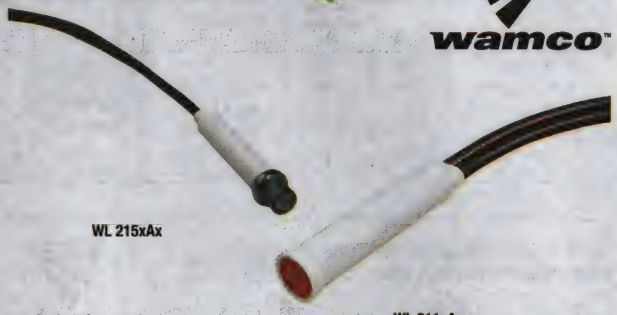
(196535)

NEON PANEL MOUNT INDICATORS 8mm MOUNTING HOLE DIAMETER

RoHS Compliant Available

wamco™



WL 215xAx

WL 211xAx

Mfg. Part No.	Color	Supply Voltage (V)	Terminal Type	Lense Type	Stock No.	Price Each 1-24
WL-2110A3	Amber	125	Wire Leaded	Flush	86T5702	2.34
WL-2150A3	Amber	125	Wire Leaded	High Hat	86T5714	2.47
WL-2112A6	Blue	115	Wire Leaded	Flush	86T5709	2.37
WL-2152A6	Blue	115	Wire Leaded	High Hat	86T5721	2.50
WL-2110A2	White	125	Wire Leaded	Flush	86T5701	2.34
WL-2150A2	White	125	Wire Leaded	High Hat	86T5713	2.50
WL-2112A5	Green	125	Wire Leaded	Flush	86T5708	2.34
WL-2152A5	Green	125	Wire Leaded	High Hat	86T5720	2.53
WL-2110A1	Red	125	Wire Leaded	Flush	86T5700	2.34
WL-2150A1	Red	125	Wire Leaded	High Hat	86T5712	2.47
WL-2110A4	White	125	Wire Leaded	Flush	86T5703	2.23
WL-2150A4	White	125	Wire Leaded	High Hat	86T5715	2.35
WL-2111A3	Amber	230	Wire Leaded	Flush	86T5706	2.23
WL-2151A3	Amber	250	Wire Leaded	High Hat	86T5718	2.50
WL-2113A6	Blue	230	Wire Leaded	Flush	86T5711	3.31
WL-2153A6	Blue	230	Wire Leaded	High Hat	86T5723	3.55
WL-2111A2	White	230	Wire Leaded	Flush	86T5705	2.23
WL-2151A2	White	230	Wire Leaded	High Hat	86T5717	2.50
WL-2113A5	Green	250	Wire Leaded	Flush	86T5710	3.11
WL-2153A5	Green	230	Wire Leaded	High Hat	86T5722	3.77
WL-2111A1	Red	250	Wire Leaded	Flush	86T5704	2.37
WL-2151A1	Red	230	Wire Leaded	High Hat	86T5716	2.50
WL-2111A4	White	230	Wire Leaded	Flush	86T5707	2.23
WL-2151A4	White	230	Wire Leaded	High Hat	86T5719	2.35
WL-2150SA1	Red	115	Wire Leaded	High Hat	94T2332	2.39
WL-2150SA2	White	115	Wire Leaded	High Hat	94T2333	2.39
WL-2150SA3	Amber	115	Wire Leaded	High Hat	94T2334	2.39
WL-2152SA5	Green	115	Wire Leaded	High Hat	94T2338	3.07
WL-2152SA6	Blue	115	Wire Leaded	High Hat	94T2339	3.07
WL-2151SA1	Red	230	Wire Leaded	High Hat	94T2335	2.39
WL-2151SA2	White	230	Wire Leaded	High Hat	94T2336	2.39
WL-2151SA3	Amber	230	Wire Leaded	High Hat	94T2337	2.39
WL-2153SA5	Green	230	Wire Leaded	High Hat	94T2340	3.07
WL-2153SA6	Blue	230	Wire Leaded	High Hat	94T2341	3.07

(202073)

NEON PANEL MOUNT INDICATORS ⅜″ MOUNTING HOLE DIA.

RoHS Compliant Available

wamco™

WL 601xMx

WL 604xQMx

Mfg. Part No.	Color	Supply Voltage (V)	Terminal Type	Stock No.	Price Each 1-24
WL-6010QM3	Amber	125	Quick Connect	86T5748	4.43
WL-6012QM5	Green	115	Quick Connect	86T5754	5.69
WL-6010QM1	Red	115	Quick Connect	86T5747	4.43
WL-6010M3	Amber	125	Wire Leaded	86T5746	4.71
WL-6012M5	Green	125	Wire Leaded	86T5753	5.69
WL-6010M1	Red	125	Wire Leaded	86T5745	4.80

CONTINUED

LAMP BASED – PANEL-MOUNT INDICATORS

NEON PANEL MOUNT INDICATORS 3/8″ MOUNTING HOLE DIA. (CONT.)

Mfg. Part No.	Color	Supply Voltage (V)	Terminal Type	Stock No.	Price Each 1-24
● WL-6011QM3	Amber	230	Quick Connect	86T5752	4.43
● WL-6013QM5	Green	230	Quick Connect	86T5756	5.69
● WL-6011QM1	Red	230	Quick Connect	86T5751	4.43
● WL-6011M3	Amber	230	Wire Leaded	86T5750	4.43
● WL-6013M5	Green	230	Wire Leaded	86T5755	5.38
● WL-6011M1	Red	250	Wire Leaded	86T5749	4.71

(202114)

NEON PANEL MOUNT INDICATORS 0.50″ MOUNTING HOLE DIA.

RoHS Compliant Available

wamco

Mfg. Part No.	Color	Supply Voltage (V)	Terminal Type	Lense Type	Stock No.	Price Each 1-24
● WL-1030QD3	Amber	125	Quick Connect	Semi Flush	86T5321	2.39
● WL-1050QA3	Amber	125	Quick Connect	Dome	86T5343	2.42
● WL-1050QC3	Amber	125	Quick Connect	High Hat	86T5347	2.39
● WL-1060QC3	Amber	115	Quick Connect	High Hat	86T5384	2.66
● WL-1060QD3	Amber	115	Quick Connect	Semi Flush	86T5388	2.50
● WL-1052QA6	Blue	115	Quick Connect	Dome	86T5367	3.55
● WL-1050QA2	White	125	Quick Connect	Dome	86T5342	2.27
● WL-1050QC2	White	125	Quick Connect	High Hat	86T5346	2.42
● WL-1032QD5	Green	125	Quick Connect	Semi Flush	86T5330	3.52
● WL-1052QA5	Green	125	Quick Connect	Dome	86T5366	3.55
● WL-1052QC5	Green	125	Quick Connect	High Hat	86T5368	3.50
● WL-1060QC5	Green	115	Quick Connect	High Hat	86T5386	3.34
● WL-1060QD5	Green	115	Quick Connect	Semi Flush	86T5390	3.18
● WL-1030QD1	Red	125	Quick Connect	Semi Flush	86T5320	2.45
● WL-1050QA1	Red	125	Quick Connect	Dome	86T5341	2.39
● WL-1050QC1	Red	125	Quick Connect	High Hat	86T5345	2.42
● WL-1060QC1	Red	115	Quick Connect	High Hat	86T5383	2.62
● WL-1060QD1	Red	115	Quick Connect	Semi Flush	86T5387	2.50
● WL-1030QD4	White	125	Quick Connect	Semi Flush	86T5322	2.42
● WL-1050QA4	White	125	Quick Connect	Dome	86T5344	2.42
● WL-1050QC4	White	125	Quick Connect	High Hat	86T5348	2.42
● WL-1060QC4	White	115	Quick Connect	High Hat	86T5385	2.50
● WL-1060QD4	White	115	Quick Connect	Semi Flush	86T5389	2.50
● WL-1030D3	Amber	125	Wire Leaded	Semi Flush	86T5318	2.34
● WL-1050A3	Amber	125	Wire Leaded	Dome	86T5335	2.37
● WL-1050C3	Amber	125	Wire Leaded	High Hat	86T5339	2.34
● WL-1060C3	Amber	115	Wire Leaded	High Hat	86T5376	2.66
● WL-1060D3	Amber	115	Wire Leaded	Semi Flush	86T5380	2.50
● WL-1052A6	Blue	115	Wire Leaded	Dome	86T5364	3.34
● WL-1050A2	White	125	Wire Leaded	Dome	86T5334	2.34
● WL-1050C2	White	125	Wire Leaded	High Hat	86T5338	2.23
● WL-1032D5	Green	125	Wire Leaded	Semi Flush	86T5329	3.29
● WL-1052A5	Green	125	Wire Leaded	Dome	86T5363	3.34
● WL-1052C5	Green	125	Wire Leaded	High Hat	86T5365	3.29

➤ CONTINUED ➤

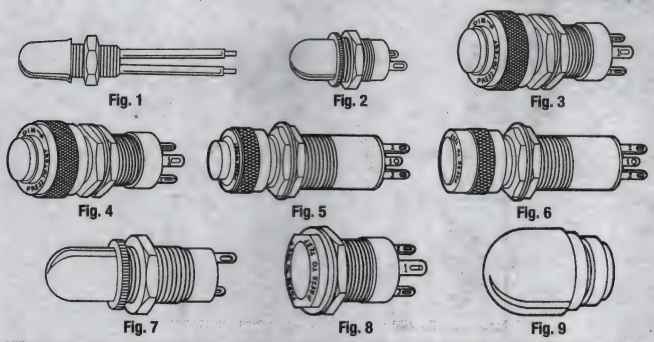
NEON PANEL MOUNT INDICATORS 0.50″ MOUNTING HOLE DIA. (CONT.)

Mfg. Part No.	Color	Supply Voltage (V)	Terminal Type	Lense Type	Stock No.	Price Each 1-24
● WL-1060C5	Green	115	Wire Leaded	High Hat	86T5378	3.38
● WL-1060D5	Green	115	Wire Leaded	Semi Flush	86T5382	3.18
● WL-1030D1	Red	125	Wire Leaded	Semi Flush	86T5317	2.34
● WL-1050A1	Red	125	Wire Leaded	Dome	86T5333	2.34
● WL-1050C1	Red	125	Wire Leaded	High Hat	86T5337	2.34
● WL-1060C1	Red	115	Wire Leaded	High Hat	86T5375	2.50
● WL-1060D1	Red	115	Wire Leaded	Semi Flush	86T5379	2.66
● WL-1030D4	White	125	Wire Leaded	Semi Flush	86T5319	2.37
● WL-1050A4	White	125	Wire Leaded	Dome	86T5336	2.23
● WL-1050C4	White	125	Wire Leaded	High Hat	86T5340	2.23
● WL-1060C4	White	115	Wire Leaded	High Hat	86T5377	2.50
● WL-1060D4	White	115	Wire Leaded	Semi Flush	86T5381	2.50
● WL-1031QD3	Amber	250	Quick Connect	Semi Flush	86T5327	2.42
● WL-1051QA3	Amber	230	Quick Connect	Dome	86T5358	2.27
● WL-1051QC3	Amber	250	Quick Connect	High Hat	86T5361	2.39
● WL-1061QC3	Amber	230	Quick Connect	High Hat	86T5400	2.50
● WL-1061QD3	Amber	230	Quick Connect	Semi Flush	86T5404	2.50
● WL-1053QA6	Blue	230	Quick Connect	Dome	86T5373	3.34
● WL-1033QD5	Green	250	Quick Connect	Semi Flush	86T5332	3.58
● WL-1053QA5	Green	230	Quick Connect	Dome	86T5372	3.55
● WL-1053QC5	Green	250	Quick Connect	High Hat	86T5374	3.55
● WL-1061QC5	Green	230	Quick Connect	High Hat	86T5402	3.18
● WL-1061QD5	Green	230	Quick Connect	Semi Flush	86T5406	3.18
● WL-1031QD1	Red	250	Quick Connect	Semi Flush	86T5326	2.27
● WL-1051QA1	Red	250	Quick Connect	Dome	86T5357	2.39
● WL-1051QC1	Red	250	Quick Connect	High Hat	86T5360	2.36
● WL-1061QC1	Red	230	Quick Connect	High Hat	86T5399	2.66
● WL-1061QD1	Red	230	Quick Connect	Semi Flush	86T5403	2.50
● WL-1031QD4	White	230	Quick Connect	Semi Flush	86T5328	2.42
● WL-1051QA4	White	230	Quick Connect	Dome	86T5359	2.27
● WL-1051QC4	White	230	Quick Connect	High Hat	86T5362	2.42
● WL-1061QC4	White	230	Quick Connect	High Hat	86T5401	2.50
● WL-1061QD4	White	230	Quick Connect	Semi Flush	86T5405	2.50
● WL-1031D3	Amber	250	Wire Leaded	Semi Flush	86T5324	2.23
● WL-1051A3	Amber	230	Wire Leaded	Dome	86T5351	2.23
● WL-1051C3	Amber	250	Wire Leaded	High Hat	86T5355	2.23
● WL-1061C3	Amber	230	Wire Leaded	High Hat	86T5392	2.50
● WL-1061D3	Amber	230	Wire Leaded	Semi Flush	86T5396	2.50
● WL-1053A6	Blue	230	Wire Leaded	Dome	86T5370	3.14
● WL-1051A2	White	250	Wire Leaded	Dome	86T5350	2.23
● WL-1051C2	White	230	Wire Leaded	High Hat	86T5354	2.37
● WL-1033D5	Green	250	Wire Leaded	Semi Flush	86T5331	3.34
● WL-1053A5	Green	230	Wire Leaded	Dome	86T5369	3.29
● WL-1053C5	Green	250	Wire Leaded	High Hat	86T5371	3.14
● WL-1061C5	Green	230	Wire Leaded	High Hat	86T5394	3.34
● WL-1061D5	Green	230	Wire Leaded	Semi Flush	86T5398	3.18
● WL-1031D1	Red	250	Wire Leaded	Semi Flush	86T5323	2.37
● WL-1051A1	Red	250	Wire Leaded	Dome	86T5349	2.34
● WL-1051C1	Red	250	Wire Leaded	High Hat	86T5353	2.40
● WL-1061C1	Red	230	Wire Leaded	High Hat	86T5391	2.50
● WL-1061D1	Red	230	Wire Leaded	Semi Flush	86T5395	2.66
● WL-1031D4	White	230	Wire Leaded	Semi Flush	86T5325	2.37
● WL-1051A4	White	230	Wire Leaded	Dome	86T5352	2.23
● WL-1051C4	White	230	Wire Leaded	High Hat	86T5356	2.23
● WL-1061C4	White	230	Wire Leaded	High Hat	86T5393	2.50
● WL-1061D4	White	230	Wire Leaded	Semi Flush	86T5397	2.50
● WL-1062C3	Amber	480	Wire Leaded	High Hat	86T5408	2.96
● WL-1062D3	Amber	480	Wire Leaded	Semi Flush	86T5412	2.96
● WL-1062C5	Green	480	Wire Leaded	High Hat	86T5410	3.69
● WL-1062D5	Green	480	Wire Leaded	Semi Flush	86T5414	3.74
● WL-1062C1	Red	480	Wire Leaded	High Hat	86T5407	3.11
● WL-1062D1	Red	480	Wire Leaded	Semi Flush	86T5411	3.15
● WL-1062C4	White	480	Wire Leaded	High Hat	86T5409	2.96
● WL-1062D4	White	480	Wire Leaded	Semi Flush	86T5413	2.96
● WL-1063C3	Amber	600	Wire Leaded	High Hat	86T5416	2.96
● WL-1063D3	Amber	600	Wire Leaded	Semi Flush	86T5420	2.96
● WL-1063C5	Green	600	Wire Leaded	High Hat	86T5418	3.52
● WL-1063D5	Green	600	Wire Leaded	Semi Flush	86T5422	3.52
● WL-1063C1	Red	600	Wire Leaded	High Hat	86T5415	2.96
● WL-1063D1	Red	600	Wire Leaded	Semi Flush	86T5419	3.15
● WL-1063C4	White	600	Wire Leaded	High Hat	86T5417	2.96
● WL-1063D4	White	600	Wire Leaded	Semi Flush	86T5421	2.96

(202115)

MIL SPEC PANEL-MOUNT INDICATORS

Dialight



Military type panel-mount indicators are QPL listed per MIL-L-780 (MS25041 & MS25331). The MIL-L-3661 number permits the ordering of a complete assembly, or separate lens cap and base, with the MIL designation for the base only marked on the lamp holder. The MS number specifies a complete assembly and the full MS number (less lamp) is marked on the lamp holder. Available in red, green, amber, blue, clear and white. Uses 5V non-replaceable incandescent lamp.

252 SERIES 0.193″ MOUNTING HOLE

Mfg. Part No.	MIL No.	Color	Fig.	Stock No.	Price Each 1-24	25-99	100-249
252-9951-0971	LHC82/1RT2	Red	1	**25F1295**	38.06	33.40	28.55
252-9951-0972	LHC82/1GT2	Green	1	**25F1294**	30.32	25.36	21.36

162 SERIES 15/32″ MOUNTING HOLE
Can use T-1-3/4 (**Mfg. Part No. 521-0327**) midget flange base incandescent lamp. 28V indicators.

162-8430-0931-502	MS25256-6	Red	2	**25F1205**	18.60	15.56	13.11
162-8430-0932-502	MS25256-4	Green	2	**25F1204**	18.60	15.56	13.11
162-8430-0933-502	MS25256-2	Amber	2	**25F1203**	18.60	15.56	13.11

800 SERIES 15/32″ MOUNTING HOLE
Non-dimming press-to-test, can use T-1-3/4 (**Mfg. Part No. 521-0327**) midget flange base incandescent lamp or based LED lamp. 28V indicators.

800-1030-0331-504	MS25041-6	Red	3	**25F988**	18.50	16.24	13.88
800-1030-0332-504	MS25041-7	Green	3	**25F989**	18.50	16.24	13.88
800-1030-0333-504	MS25041-8	Amber	3	**25F990**	22.38	19.64	16.79
800-1030-0334-504	MS25041-11	Blue	3	**25F1515**	23.33	20.48	17.50
800-1030-0337-504	MS25041-5	Clear	3	**25F987**	21.93	19.25	16.45

801 SERIES 15/32″ MOUNTING HOLE
Press-to-test with dimmer, can use T-1-3/4 (**Mfg. Part No. 521-0327**) midget flange base incandescent lamp or based LED lamp. 28V indicators.

801-1030-0331-504	MS25041-2	Red	4	**25F984**	28.08	23.49	19.79
801-1030-0332-504	MS25041-3	Green	4	**25F985**	30.20	25.26	21.28
801-1030-0333-504	MS25041-4	Amber	4	**25F986**	25.37	21.22	17.88
801-1030-0334-504	MS25041-10	Blue	4	**25F1514**	24.49	20.48	17.26

803 SERIES 5/8″ MOUNTING HOLE
Press-to-test, can use T-3-1/4 (**Mfg. Part No. 521-0757**) miniature bayonet base incandescent lamp. 2-55V indicators.

803-1710-0331-504	MS25331-6	Red	5	**25F995**	42.11	36.95	31.58
803-1710-0332-504	MS25331-7	Green	5	**25F996**	36.65	32.16	27.49
803-1710-0333-504	MS25331-8	Amber	5	**25F997**	37.64	33.03	28.23

804 SERIES 5/8″ MOUNTING HOLE
Press-to-test with dimmer, can use T-3-1/4 (**Mfg. Part No. 521-0757**) miniature bayonet base incandescent lamp. 2-55V indicators.

804-1710-0331-504	MS25331-2	Red	6	**25F991**	41.76	36.64	31.32
804-1710-0332-504	MS25331-3	Green	6	**25F992**	37.72	33.10	28.30
804-1710-0333-504	MS25331-4	Amber	6	**25F993**	36.29	31,85	27.22

137 SERIES 15/32″ MOUNTING HOLE
Use C7A (**Mfg. Part No. 521-9047**) neon glow lamp with built-in 62 resistor. Indicators are 105-125VAC/DC.

137-8836-0931-552	MS25257-4	Red	7	**25F1201**	27.18	23.85	20.38
137-8836-0933-552	MS25257-2	Amber	7	**25F1200**	27.66	24.27	20.74
137-8836-0937-552	MS25257-6	Clear	7	**25F1202**	27.66	24.27	20.74

812 SERIES 15/32″ MOUNTING HOLE
Press-to-test, can use T-1¾ (**Mfg. Part No. 521-0327**) midget flange base incandescent lamp. **Mfg. Part No. 812-1030-09-506** is a 1.35-28V indicator.

Mfg. Part No.	Color	Fig.	Stock No.	Price Each 1-24	25-99	100-249
812-1030-09-506	...	8	**25F1600**	21.92	19.24	16.44
812-0971	Red	9	**25F1610**	12.68	10.61	8.94
812-0972	Green	9	**25F1611**	18.78	14.35	11.79

(2588)

125 SERIES OILTIGHT INDICATORS

RoHS Compliant Available

Dialight

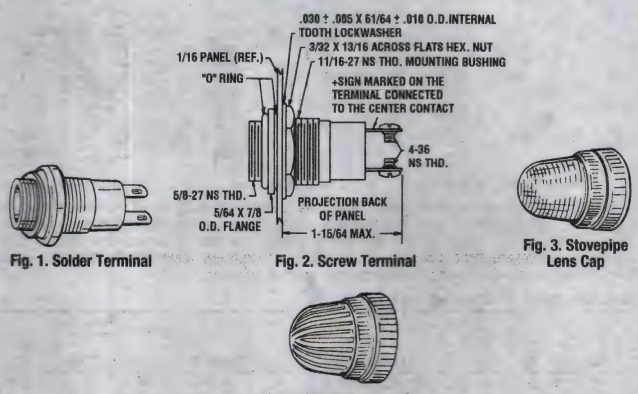


Fig. 1. Solder Terminal
Fig. 2. Screw Terminal
Fig. 3. Stovepipe Lens Cap
Fig. 4. Stovepipe Lens Cap (Internal Fluting)

125 SERIES BASE - 11/16″ MOUNTING HOLE

Mfg. Part No.	Lamp Type	Volts AC	Fig.	Stock No.	Price Each 1-24	25-99
125-0410-11-103	T-3¼ MB INC*	2-120	1	**45F566**	18.35	15.35
● 125-1310-11-103	T-3¼ MB INC*	2-120	2	**25F906**	21.69	18.14
125-0408-11-143	B1A neon	105-125†	1	**45F567**	20.97	17.54

* Can also use cluster based LED or multichip based LED lamps. † are AC/DC.

125 SERIES CAP - UNFROSTED

Mfg. Part No.	Color	Fig.	Stock No.	Price Each 1-24	25-99
125-1131-403	Red	3	**45F582**	9.79	7.98
125-1132-403	Green**	3	**45F583**	11.71	9.55
125-1133-403	Amber	3	**45F584**	16.80	14.05
125-1191-403	Red	4	**45F568**	9.79	7.98
125-1192-403	Green**	4	**45F569**	10.18	8.30
125-1193-403	Amber	4	**45F570**	10.18	8.30
125-1197-403	Clear	4	**45F574**	11.25	9.17

** Not recommended for neon applications.
(2537)

177 SERIES OILTIGHT INDICATORS

RoHS Compliant Available

Dialight

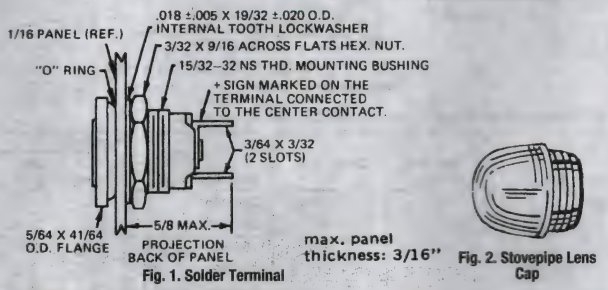


Fig. 1. Solder Terminal
Fig. 2. Stovepipe Lens Cap

177 SERIES BASE - 15/32″ MOUNTING HOLE, FIG. 1

Mfg. Part No.	Lamp Type	Voltage (V)	Stock No.	Price Each 1-24	25-99	100-249
177-8430-09-503	T-1¾ MF INC	1.35-28	**25F1637**	11.74	9.82	8.27

177 SERIES LENS CAP - UNFROSTED, FIG. 2

Mfg. Part No.	Color	Stock No.	Price Each 1-24	25-99	100-249
● 177-0931-003	Red	**74M8428**	7.79	6.35	5.37
● 177-0932-003	Green	**61M2812**	12.86	10.76	9.06

(2538)

LAMP BASED – PANEL-MOUNT INDICATORS

103 SERIES OILTIGHT BASES AND LENSES

RoHS Compliant Available

Dialight

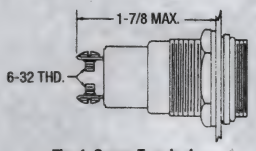


Fig. 1. Screw Terminal

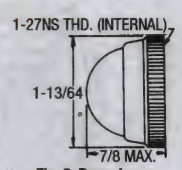


Fig. 2. Dome Lens

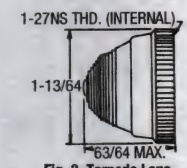


Fig. 3. Torpedo Lens

Oil-tight indicators are manufactured with a rubber gasket installed between the plastic lens and metal holder, as well as with a rubber O-ring which fits tightly on to a notch in the base. These make assembly virtually impervious to oil, water and dust. The lens holder is brass with either satin chrome or white nickel finish, and the base is white nickel-plated brass. **103 series** base models can be used with either dome or torpedo lens. Torpedo faceted lens **mfg. part no. 103-1331-403** also available. *Order lamps separately; go online or call.*

103 SERIES BASE - 1″ MOUNTING HOLE, FIG. 1

Mfg. Part No.	Lamp Type	Stock No.	Price Each 1-24	25-99	100-249
103-0901-05-103	S-6 Candelabra Base	57F3733	29.82	26.16	22.36
● 103-3101-05-103	S-6 Candelabra Base	45F590	26.32	23.09	19.74
103-3502-05-103	S-6 Double Contact Bayonet Base	45F589	26.49	23.24	19.87

103 SERIES CAP - UNFROSTED

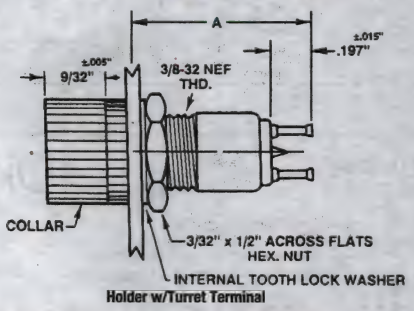
Mfg. Part No.	Color	Fig.	Stock No.	Price Each 1-24	25-99	100-249
● 103-1237-403	Clear	2	61M2793	14.21	11.89	10.02
● 103-0533-403	Amber	3	65F1101	21.86	16.70	13.72
● 103-1331-403	Red	...	45F591	12.44	10.41	8.77
● 103-1332-403	Green	...	61M2794	14.21	11.89	10.02

(2674)

CARTRIDGE HOLDERS FOR 507 SERIES DATALAMPS

RoHS Compliant Available

Dialight



Holder w/Turret Terminal

Order **507 series** datalamps, cartridge connectors, speed clips, and caps separately.

Mfg. Part No.	Terminal Type	Dimension A	Stock No.	Price Each 1-24	25-99	100-249
● 250-8738-14-504*	Turret	1.031″ (26.19)	25F1485	10.56	8.60	7.28
250-8745-14-504*	Turret	1.125″ (28.58)	25F1486	17.73	14.84	12.49
250-8758-33-504*	Turret	1.428″ (36.27)	28F1801	25.91	22.73	19.43
● 508-7538-504	Solder Cup	0.891″ (22.63)	25F1167	12.02	10.06	8.47
● 508-8738-504	Turret	0.891″ (22.63)	70M8864	13.24	10.79	9.12
● 508-8745-504	Turret	0.984″ (24.99)	25F1292	13.83	11.57	9.75

* Holder without collar.
(2585)

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element14.com

(196545)

051 AND 080 SERIES SPLASH-PROOF INDICATORS, 1″ MOUNTING HOLE

RoHS Compliant Available

Dialight

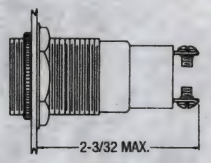


Fig. 1

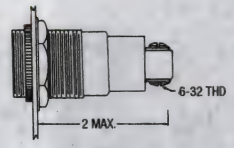


Fig. 2

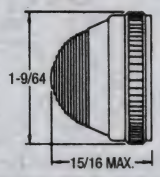


Fig. 3

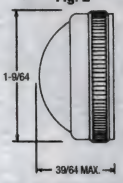


Fig. 4

Uses S6 candelabra screw base incandescent, convex, torpedo lens style lamp. Watertight. 2 to 120V operation. **Mfg. part no. 051-3101-01-303** terminal: screw with protruding positions. **Mfg. part no. 080-0901-05-303** terminal: screw with side positions.

051 AND 080 SERIES SOCKETS

Mfg. Part No.	Fits Lens Fig.	Fig.	Stock No.	Price Each 1-24	25-99	100-249
080-0901-05-303	4	2	50F6069	31.64	27.76	23.73

051 AND 080 SERIES LENS CAPS

Mfg. Part No.	Color	Fig.	Stock No.	Price Each 1-24	25-99	100-249
● 080-0532-303	Green	3	50F6071	12.07	10.81	8.33
● 080-0533-303	Amber	3	50F6072	13.16	10.73	9.07
● 080-0112-303	Green	4	50F6076	12.77	10.68	9.00
● 080-0117-303	Clear	4	50F6079	13.12	10.97	9.25

(2607)

150 AND 151 SERIES UNIVERSAL INDICATOR LIGHTS

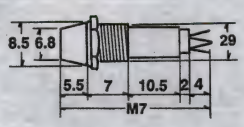
RoHS Compliant Available

MLEC

Features:
- Versatile, High-Impact Plastic Units
- Provide Excellent Visibility
- Mounted in 0.281″ (7.14mm) Hole
- Nut and Washer Supplied

Square Lens

Round Lens



Digits after dash in type number denote voltage.

INCANDESCENT LAMPS - ROUND

Mfg. Part No.	Lens	Stock No.	Price Each 1-24	25-49	50-99
● F151-24C	Clear	50F7397	9.77	9.15	9.03
● F151-12R	Red	23F5518	10.48	9.82	9.68
● F151-12G	Green	23F5520	9.77	9.15	9.03
● F151-24R	Red	23F5521	10.48	9.82	9.68
● F151-24A	Amber	23F5522	10.48	9.82	9.68
● F151-24G	Green	23F5523	10.21	9.57	9.44
● F151-12B	Blue	50F7394	9.77	9.15	9.03

LED LAMPS - ROUND

● L151-12R	Red	23F5542	13.13	12.31	12.16
● L151-24R	Red	23F5545	13.47	12.62	12.48
● L151-24G	Green	23F5546	15.64	14.65	14.49
● L151-24Y	Yellow	23F5547	15.44	14.47	14.30

NEON LAMPS*

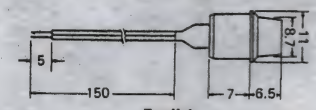
Lens	Square Type	Stock No.	Round Type	Stock No.	Price Each 1-24	25-49	50-99
Red	● NR150-110R	23F5524	● NR151/110R	23F5527	14.76	13.80	13.67
Amber	● NR150-110A	23F5525	● NR151/110A	23F5528	14.76	13.80	13.67
Green	● NR150-110G	50F7398	● NR151-110G	50F7403	14.57	13.63	13.50

* Also available in 220V; *go online or call.*
(2502)

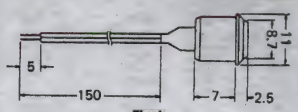
100 AND 101 SERIES MODULAR INDICATOR LIGHT ASSEMBLIES

RoHS Compliant Available

MLEC



Top Hat



Flush

Features:
- 100 and 101 Series Modular Lights
- Mounted with a Rubber Bushing
- Snap into a 9mm Diameter Panel Cutout
- No Nuts or Washers Required
- 6″ (152.4mm) Wire Leads

A variety of light sources– incandescent, neon, green glow and LED – fit into the bushing. A complete color selection of lens assemblies are slipped in from the top. Lens assemblies may be mounted independently from light source and mated in the final assembly. Lens colors/light sources are interchangeable.

LAMP ASSEMBLIES

Mfg. Part No.	Description	Voltage (V)	If (mA)	Avg. Life (Hrs.)	Stock No.	Price Each 1-24
F614	Incandescent	12-14	80	30,000	39F3526	23.88
F628	Incandescent	24-28	40	30,000	39F3527	23.58
N5115	Neon	100-120	1.5	10,000	39F3528	11.57
G5115	Green Glow	100-120	1.5	10,000	39F3529	26.07

LENS/BUSHING ASSEMBLIES

Flush Style Lens/100			Top Hat Style Lens/101			Price Each
Mfg. Part No.	Stock No.	Color	Mfg. Part No.	Stock No.	Color	1-24
100-R	39F3531	Red	101-R	39F3537	Red	6.43
100-Y	39F3532	Yellow	101-Y	39F3538	Yellow	6.41
100-G	39F3533	Green	101-G	39F3539	Green	6.41
100-C	39F3536	Clear	101-C	39F3542	Clear	6.43

(2518)

32 SERIES PRESSFIT INDICATORS FOR ½″ PANEL MOUNTING HOLE

RoHS Compliant Available

LC&D Lighting Components and Design Inc. LEECRAFT A Lighting Components and Design Company

Features: Neon, Incandescent and LED indicators; choice of lens: flush, square, flat cylindrical or dome (hi-hat and square lens is available), 6″ wire leads or 3/16″ brass tab terminals (T). **32R** Neon indicators supplied with current limiting resistors for 125V, ⅓W with 25,000-hour life. 28V=.04A with 7,000-hours life (32,000-hour life at 24V). 14V=0.10A with 10,000-hours life. 6V-.20A with 5,000-hours life. **32RG1 Series** for 6V, **32RG3 Series** for 14V and **32RG18 Series** for 28V also available. Other colors and voltages are available; *go online or call.* UL listed, CSA certified.

125V NEON INDICATORS WITH DOME LENS AND BEZEL

Mfg. Part No.	Lens Color	Stock No.	Price Each 1-24	Price Each 25-49
32R-2211	Red	94F5487	6.55	5.88
32R-2212	Green	16F743	6.04	5.43
32R-2213	Amber	16F744	6.46	5.81
32R-2211T	Red	94F5488	6.20	5.57
32R-2212T	Green	16F745	6.63	5.96
32-2215	White	60F1277	5.85	5.26
125V NEON INDICATORS WITH FLAT CYLINDRICAL LENS AND BEZEL				
32R-2111	Red	25F1331	6.38	5.73
32R-2112	Green	94F5485	6.59	5.94
32R-2113	Amber	16F742	6.59	5.94
32R-2115	White	16F777	6.46	5.81
32R-2111T	Red	25F1333	6.77	6.08
32R-2112T	Green	94F5486	6.20	5.57
125V NEON INDICATORS WITH FLUSH LENS AND BEZEL				
32R-2311	Red	16F746	6.04	5.43
32R-2312	Green	16F747	6.04	5.43
32R-2313	Amber	16F748	6.04	5.43
32R-2311T	Red	94F5240	6.20	5.57

(2516)

NEW PRODUCTS ADDED DAILY

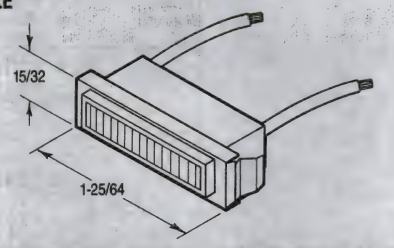
See the newest products, technologies and suppliers on our website.

(196560)

31 SERIES RECTANGULAR NEON INDICATORS FOR 1.281″ x .395″ MOUNTING HOLE

RoHS Compliant Available

LC&D Lighting Components and Design Inc. LEECRAFT A Lighting Components and Design Company



31 series single indicator units have chrome-plated bezels, snap-fit in panel thickness to 0.090″; rated 125V, ⅓W, 25,000 hour life. UL listed, CSA certified. 6V, 14V, 28V, and 250V units, amber, blue and clear colors, and wire leads and 3/16″ tab terminals also available; *go online or call.*

NEON LAMP AND 0.25″ TAB TERMINALS

Mfg. Part No.	Lens Color	Voltage	Stock No.	Price Each 1-24	Price Each 25-49
31-2111T	Red	125 V	25F1395	7.30	5.77
31-2112T	Green	125 V	16F787	9.03	7.13
31-2115T	White	125 V	25F1398	11.07	9.85
INCANDESCENT LAMP AND 0.25″ TAB TERMINAL					
31G18-2111T	Red	28 V	98F878	9.41	8.56
31G18-2112T	Green	28 V	94F5471	9.74	8.86
31G18-2115T	White	28 V	25F1330	17.16	11.81

(2622)

BULB INSTALLERS/REMOVERS

Dialight

Inside diameters of 11/16″ and 11/32″.

Mfg. Part No.	Bulb Size	Material	Stock No.	Price Each 1-24	Price Each 25-99
506-0073	T 3 ¼ & 6S6	Synthetic Rubber*	25F480	4.39	3.57

*Meets Military Standard MIL-R-6855 Class IV
(47570)

INCANDESCENT LAMPS

RoHS Compliant Available

CEC INDUSTRIES LTD.

SINGLE FILAMENT

Mfg. Part No.	Base Type	Bulb Size	Supply Voltage (V)	MSCP	Avg. Bulb Life (hr)	Power Rating (W)	Stock No.	Price Each 1-99
120MB	Miniature Bayonet / BA9S	T-2 1/2	120	0.36	7500	3	03M1486	1.99
130MB	BA9s	T-2 1/2	130	0.36	7500	3.25	03M1515	2.48
1813	Miniature Bayonet / BA9S	T-3 1/4	14.4	0.86	1000	1.44	03M1640	0.54
1815	Miniature Bayonet / BA9S	T-3 1/4	14	1.4	3000	2.8	03M1641	0.54
1819	Miniature Bayonet / BA9S	T-3 1/4	28	0.34	2500	1.12	03M1644	1.06
1822	Miniature Bayonet / BA9S	T-3 1/4	36	2.1	1000	3.6	03M1648	1.34
1829	Miniature Bayonet / BA9S	T-3 1/4	28	1	1000	1.96	03M1652	1.04
1850	Miniature Bayonet / BA9S	T-3 1/4	5	0.25	1500	0.45	03M1660	0.81
1866	Miniature Bayonet / BA9S	T-3 1/4	6.3	0.65	5000	1.57	03M1662	1.02
1892	BA9s	T-3 1/4	14.4	0.75	1000	1.73	03M1671	0.59
1895	Miniature Bayonet / BA9S	G-4 1/2	14	2	2000	3.78	03M1673	0.50
24MB	Miniature Bayonet / BA9S	T-2 1/2	24	0.5	10000	1.68	03M1754	2.25
313	Miniature Bayonet / BA9S	T-3 1/4	28	3.5	500	4.76	03M1864	1.44
456	BA9s	G-4 1/2	28	2	5000	4.76	03M1994	0.84
49	BA9s	T-3 1/4	2	0.04	1000	0.12	03M2014	0.72
55	Miniature Bayonet / BA9S	G-4 1/2	7	2	500	2.87	03M2037	0.59

CONTINUED

INCANDESCENT LAMPS (CONT.)

Mfg. Part No.	Base Type	Bulb Size	Supply Voltage (V)	MSCP	Avg. Bulb Life (hr)	Power Rating (W)	Stock No.	Price Each 1-99
● 57	Miniature Bayonet / BA9S	G-4 1/2	14	2	500	3.36	03M2055	0.51
● 757	Miniature Bayonet / BA9S	T-3 1/4	28	0.62	15000	2.24	03M2298	0.62
● 1004	BA15d	B-6	12.8	15	200	12.03	03M1334	0.63
● 1076	BA15d	S-8	12.8	32	200	23.04	03M1430	0.63
● 1142	BA15d	S-8	12.8	21	1000	18.43	03M1444	0.63
● 1196	BA15d	RP-11	12.5	50	300	37.5	03M1472	2.25
● 1224	BA15d	G-6	32	3.8	200	5.12	03M1495	2.84
● 1252	BA15d	G-6	28	3	2000	6.44	03M1507	1.62
● 308	BA15d	S-8	28	21	300	18.76	03M1857	2.25
● 624	BA15d	G-6	28	6	1000	10.36	03M2156	1.62
● 64	BA15d	G-6	7	3	1000	4.41	03M2167	0.72
● 1003	BA15s	B-6	12.8	15	200	12.03	03M1269	0.63
● 1073	BA15s	S-8	12.8	32	200	23.04	03M1428	0.63
● 1129	BA15s	S-8	6.4	21	200	16.83	03M1436	0.63
● 1141	BA15s	S-8	12.8	21	1000	18.43	03M1441	0.62
● 1156	BA15s	S-8	12.8	32	1200	26.88	03M1453	0.62
● 1195	BA15s	RP-11	12.5	50	300	37.5	03M1471	2.02
● 1203	BA15s	S-8	28	21	400	19.88	03M1491	1.84
● 303	BA15s	G-6	28	6	500	8.4	03M1840	1.44
● 623	BA15s	G-6	28	6	1000	10.36	03M2155	1.44
● 63	BA15s	G-6	7	3	1000	4.41	03M2165	0.63
● 67	BA15s	G-6	13.5	4	5000	7.96	03M2188	0.55
● 89	BA15s	G-6	13	6	750	7.54	03M2416	0.63
● 97	BA15s	G-6	13.5	6	5000	7.83	03M2461	0.59
● 112	Miniature Screw	TL-3	1.2	...	5	0.264	03M1434	0.63
● 13	Miniature Screw	G-3 1/2	3.7	0.98	15	1.11	03M1514	0.58
● 1821	Miniature Screw	T-3 1/4	28	3.4	500	4.76	03M1647	1.44
● 233	Edison Screw / E10	G-3 1/2	2.33	0.42	10	0.629	03M1734	0.54
● 243	Edison Screw / E10	TL-3	2.33	...	10	0.629	03M1764	1.44
● 245	Edison Screw / E10	G-3 1/2	2.46	0.9	15	1.23	03M1765	0.63
● 27	Edison Screw / E10	G-4 1/2	4.9	1.4	300	1.47	03M1787	0.55
● 40	Miniature Screw	T-3 1/4	6.3	0.5	3000	0.945	03M1962	0.63
● 425	Edison Screw / E10	G-4 1/2	5	2.3	15	12.5	03M1981	1.04
● 46	Miniature Screw	T-3 1/4	6.3	0.9	3000	1.57	03M1996	0.62
● 502	Edison Screw / E10	G-4 1/2	5.1	0.6	100	0.765	03M2023	0.81
● 52	Edison Screw / E10	G-3 1/2	14.4	0.75	1000	1.44	03M2030	0.59
● 605	Edison Screw / E10	G-4 1/2	6.15	3.4	15	3.08	03M2134	0.81
● E212-2	Festoon	T-3 (10mm)	13.5	6	2000	9.99	02M9640	0.72
● 3175	Festoon	T-3 1/4	12	9.55	400	10	03M1879	0.80
● 327	Midget Flange	T-1 3/4 (5mm)	28	0.34	4000	1.12	03M1887	1.04
● 328	Midget Flange	T-1 3/4 (5mm)	6	0.34	1000	1.2	03M1888	1.44
● 387	Midget Flange	T-1 3/4 (5mm)	28	0.34	7000	1.12	03M1937	1.63
● 334	Midget Groove	T-1 3/4 (5mm)	28	0.34	4000	1.12	03M1891	1.44
● 336	Midget Groove	T-1 3/4 (5mm)	14	0.5	1500	1.12	03M1893	1.44
● 388	Midget Groove	T-1 3/4 (5mm)	28	0.3	7000	1.12	03M1938	1.42
● 1767-69L	Midget Screw	T-1 3/4 (5mm)	2.5	0.2	500	0.5	03M1628	4.44
● 120PSB	Telephone Slide	T-2	120	...	75000	6.6	03M1488	2.40
● 24PSB	Telephone Slide	T-2	24	...	10000	1.75	03M1755	1.99
● 28PSB	Telephone Slide	T-2	28	...	5000	1.12	03M1796	2.02
● E85	Wedge	T-1 1/2	28	0.3	7000	1.12	02M9647	0.79
● 17	Wedge	T-1 3/4 (5mm)	28	0.65	5000	1.82	03M1623	0.99
● 193	Wedge	T-3 1/4	14	2	15000	4.62	03M1684	0.58
● 2450X	Wedge	T-3 1/4	24	4.4	5000	4.99	03M1766	2.43
● 259	Wedge	T-3 1/4	6.3	0.65	5000	1.57	03M1784	0.51
● 2821	Wedge	T-3 1/4	12	1.76	1000	3	03M1799	0.76
● 2825	Wedge	T-3 1/4	12	4	300	4.8	03M1800	0.72
● 285	Wedge	T-3 1/4	5	0.25	1500	0.45	03M1804	1.04
● 37	Wedge	T-1 3/4 (5mm)	14	0.5	2500	1.26	03M1923	0.62
● 400	Wedge	T-3 1/4	28	1.6	1000	2.8	03M1966	0.81
● 555	Wedge	T-3 1/4	6.3	0.9	3000	1.57	03M2041	0.54
● 655	Wedge	T-3 1/4	28	3	7000	5.6	03M2179	0.80
● 657	Wedge	T-3 1/4	28	0.62	15000	2.24	03M2181	0.83
● 73	Wedge	T-1 3/4 (5mm)	14	0.3	15000	1.12	03M2273	0.63
● 74	Wedge	T-1 3/4 (5mm)	14	0.7	500	1.4	03M2280	0.63
● 85	Wedge	T-1 3/4 (5mm)	28	0.3	7000	1.12	03M2342	0.81
● 901	Wedge	T-5	12.8	3.7	500	3.97	03M2420	0.81

➤ CONTINUED ➤

INCANDESCENT LAMPS (CONT.)

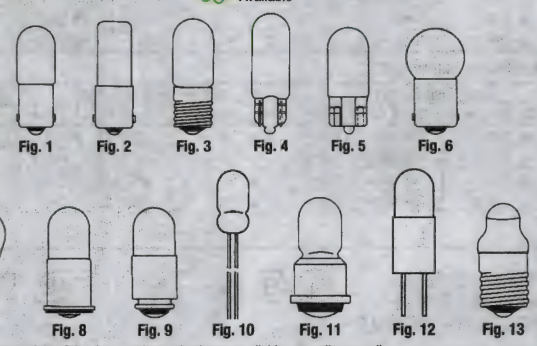
Mfg. Part No.	Base Type	Bulb Size	Supply Voltage (V)	MSCP	Avg. Bulb Life (hr)	Power Rating (W)	Stock No.	Price Each 1-99
● 908	Wedge	T-5	6	12	50	9	03M2431	0.81
● 909	Wedge	T-5	6	3	50	3.72	03M2432	0.81
● 915	Wedge	T-5	12	11	50	9	03M2438	0.81
● 918	Wedge	T-5	12.8	6.5	500	7.17	03M2443	0.81
● 921	Wedge	T-5	12.8	21	1000	17.92	03M2445	0.81
● 923	Wedge	T-5	12.8	12.5	500	11.65	03M2452	0.76
● 927	Wedge	T-5	6	8	50	7.2	03M2454	0.81
● 939	Wedge	T-5	6	7.5	50	5.4	03M2457	0.80
● 680	Wire Leaded	T-1 (3mm)	5	0.03	60000	0.3	03M2197	0.80
● 7219	Wire Leaded	T-1 (3mm)	12	0.15	10000	0.72	03M2270	0.80

(175978)

MINIATURE INCANDESCENT LAMPS

RoHS Compliant Available

Chicago Miniature Lighting, LLC
Lighting the world since 1910



Sold in packages of 10. Other base styles and voltages available; *go online or call.*

Mfg. Part No.	Fig.	Design Volts (V)	Design Amps (A)	Average Life (Hrs.)	Lamp Size	Stock No.	Price Each 1-24
● 43-10PK	1	2.5	0.5	3,000	T-3-1/4	93K6776	9.80
● 1850	1	5	0.09	1,500	T-3-1/4	93K6683	7.50
● 44-10PK	1	6.3	0.25	3,000	T-3-1/4	93K6780	7.37
● 755	1	6.3	0.15	20,000	T-3-1/4	12P6322	7.82
● 1847-10PK	1	6.3	0.15	7,500	T-3-1/4	93K6682	10.07
● 1866-10PK	1	6.3	0.25	5,000	T-3-1/4	93K6698	7.60
● 756-10PK	1	14	0.08	15,000	T-3-1/4	93K6828	8.13
● 1815-10PK	1	14	0.2	3,000	T-3-1/4	93K6677	11.57
● 1891-10PK	1	14	0.24	500	T-3-1/4	93K6700	10.87
● 1893-10PK	1	14	0.33	3,000	T-3-1/4	96F5711	6.96
● 1892-10PK	1	14.4	0.12	1,000	T-3-1/4	19M0223	13.29
● 1818-10PK	1	24	0.17	250	T-3-1/4	93K6679	17.83
● 757-10PK	1	28	0.08	7,500	T-3-1/4	06M4903	8.10
● CM1820-10PK	1	28	0.1	1,000	T-3-1/4	15M8867	6.71
● CM1864-10PK	1	28	0.17	1,500	T-3-1/4	93K6540	7.31
● 1873*	1	28	0.5	7,000	T-3-1/4	93K6699	1.56
● 1822-10PK	1	36	0.1	1,000	T-3-1/4	16M0448	9.99
● CM1835-10PK	1	55	0.5	5,000	T-3-1/4	93K6539	18.94
● 8-3995 PK10	1	130	0.2	2,000	T-3-1/4	19M0296	7.55
● 24MB-10PK	2	24	0.073	10,000	T-2	19M0228	11.99
● 28MB-10PK	2	28	0.04	5,000	T-2	19M0231	12.09
● 120MB*	2	120	0.025	5,000	T-2	90F7486	1.20
● 120MB-10PK	2	120	0.025	5,000	T-2	19M0218	9.76
● 8-967-10PK	2	120	0.025	5,000	T-2	28M8267	51.48
● 399-10PK	3	28	0.04	10,000	T-1-3/4	96F5776	6.27
● 1821-10PK	3	28	0.17	500	T-3-1/4	19M0222	18.46
● 86-10PK	4	6.3	0.2	20,000	T-1-3/4	93K6839	6.30
● 73*	4	14	0.08	15,000	T-1 3/4 (5mm)	25F1646	0.78
● 73-10PK	4	14	0.08	15,000	T-1-3/4	16M0909	6.88
● CM757*	4	28	0.08	7,500	T-3 1/4	10M8268	0.92
● 259-10PK	5	6.3	0.25	10,000	T-3-1/4	93K6773	5.87
● 161-10PK	5	14	0.19	1,500	T-3-1/4	93K6675	6.00
● 2470X-10PK	5	24	0.3	12,000	T-3-1/4	19M0230	14.49
● 656-10PK	5	28	0.06	5,000	T-3-1/4	93K6824	5.72
● 51-10PK	6	7.5	0.22	1,000	G-3-1/2	93K6782	7.76
● 53-10PK	6	14.4	0.12	1,000	G-3-1/2	93K6787	8.98
● 356-10PK	6	24	0.17	500	G-3-1/2	93K6774	12.13
● 1450-10PK	6	24	0.035	3,000	G-3-1/2	19M0220	9.86
1156-10PK	7	12.8	2.1	600	S-8	96F5662	8.55
307-10PK	7	28	0.66	300	S-8	96F5735	15.70

➤ CONTINUED ➤

MINIATURE INCANDESCENT LAMPS (CONT.)

Mfg. Part No.	Fig.	Design Volts (V)	Design Amps (A)	Average Life (Hrs.)	Lamp Size	Stock No.	Price Each 1-24
1080*	7	30	0.9	5,000	S-8	19M0215	4.82
338-10PK	8	2.7	0.06	6,000	T-1-3/4	19M0241	6.43
3150-10PK	8	5	0.06	5,000	T-1-3/4	19M0234	6.99
7333-10PK	8	5	0.06	25,000	T-1-3/4	20M4449	9.88
7335-10PK	8	5	0.115	40,000	T-1-3/4	96F5835	9.88
328-10PK	8	6	0.2	1,000	T-1-3/4	19M0237	6.13
349-10PK	8	6.3	0.2	5,000	T-1-3/4	19M0243	8.96
394-10PK	8	12	0.04	10,000	T-1-3/4	19M0255	8.32
330-10PK	8	14	0.08	1,500	T-1-3/4	19M0238	5.93
382-10PK	8	14	0.08	15,000	T-1-3/4	19M0248	8.05
327-10PK	8	28	0.04	4,000	T-1-3/4	19M0236	6.47
376-10PK	8	28	0.06	25,000	T-1-3/4	19M0246	6.57
385-10PK	8	28	0.04	50,000	T-1-3/4	19M0249	8.05
387-10PK	8	28	0.04	10,000	T-1-3/4	19M0250	6.01
7341-10PK	8	28	0.065	5,000	T-1-3/4	19M0278	6.65
336-10PK	9	14	0.08	1,500	T-1-3/4	19M0240	5.79
386-10PK	9	14	0.08	15,000	T-1-3/4	96F5770	9.02
388-10PK	9	28	0.04	10,000	T-1-3/4	19M0251	6.01
683-10PK	10	5	0.06	40,000	T-1	96F5813	8.98
715-10PK	10	5	0.115	40,000	T-1	19M0275	9.29
6833-10PK	10	5	0.06	25,000	T-3/4	19M0270	12.24
7152-10PK	10	5	0.115	40,000	T-1	96F5824	10.03
7153AS15-10PK	10	5	0.115	40,000	T-3/4	96F5827	15.26
7219-10PK	10	12	0.06	16,000	T-1	96F5829	4.54
6838*	10	28	0.024	4,000	T-1 (3mm)	25F1904	1.68
6838-10PK	10	28	0.024	16,000	T-1	19M0271	15.19
6839*	11	28	0.024	4,000	T-1 (3mm)	25F191	1.71
7361-10PK	12	5	0.06	25,000	T-1-3/4	96F5837	8.73
7683-10PK	12	5	0.06	40,000	T-1	19M0288	18.41
7715-10PK	12	5	0.115	40,000	T-1	96F5851	14.64
7381-10PK	12	6.3	0.2	20,000	T-1-3/4	19M0281	6.86
7373-10PK	12	14	0.1	10,000	T-1-3/4	96F5863	8.94
7382-10PK	12	14	0.08	15,000	T-1-3/4	19M0282	9.10
7646-10PK	12	14	0.08	1,000	T-1-1/4	19M0286	19.38
7327-10PK	12	28	0.04	4,000	T-1-3/4	96F5864	9.86
7374-10PK	12	28	0.04	50,000	T-1-3/4	19M0279	10.61
7387-10PK	12	28	0.04	10,000	T-1-3/4	88M9626	7.94
7839-10PK	12	28	0.024	16,000	T-1	19M0289	17.09
7876-10PK	12	28	0.06	25,000	T-1-3/4	19M0290	0.80
12PSB-10PK	13	12	0.17	12,000	T-2	19M0217	9.39
24PSB-10PK	13	24	0.073	10,000	T-2	19M0229	9.95
28ESB-10PK	13	28	0.04	6,000	T-2	18M8033	10.71
28PSB-10PK	13	28	0.04	5,000	T-2	21M5206	9.95
120PSB-10PK	13	120	0.025	5,000	T-2	18M7939	12.30

* Sold Individually
(2611)

MINIATURE INCANDESCENT LAMPS

RoHS Compliant Available

Chicago Miniature Lighting, LLC
Lighting the world since 1910

Sold in packages of 10. Other base styles and voltages available; *go online or call.*

Mfg. Part No.	Fig.	Design Volts	Design Amps	Average Life (Hrs.)	Lamp Size	Stock No.	Price Each 1-24
53-10PK	8	14.4	0.12	1,000	G-3½	93K6787	8.98
51-10PK	8	7.5	0.22	1,000	G-3½	93K6782	7.76
356-10PK	8	24	0.17	500	G-3½	93K6774	12.13
1450-10PK	8	24	0.035	3,000	G-3½	19M0220	9.86
307-10PK	9	28	0.66	300	S-8	96F5735	15.70
1156-10PK	9	12.8	2.1	600	S-8	96F5662	8.55
385-10PK	11	28	0.04	50,000	T-1¾	19M0249	8.05
387-10PK	11	28	0.04	10,000	T-1¾	19M0250	6.01
394-10PK	11	12	0.04	10,000	T-1¾	19M0255	8.32
7333-10PK	11	5	0.06	25,000	T-1¾	20M4449	9.88
7335-10PK	11	5	0.115	40,000	T-1¾	96F5835	9.88
7341-10PK	11	28	0.065	5,000	T-1¾	19M0278	6.65
382-10PK	11	14	0.08	15,000	T-1¾	19M0248	8.05
328-10PK	11	6	0.2	1,000	T-1¾	19M0237	6.13
338-10PK	11	2.7	0.06	6,000	T-1¾	19M0241	6.43
349-10PK	11	6.3	0.2	5,000	T-1¾	19M0243	8.96
376-10PK	11	28	0.06	25,000	T-1¾	19M0246	6.57
330-10PK	11	14	0.08	1,500	T-1¾	19M0238	5.93
327-10PK	11	28	0.04	4,000	T-1¾	19M0236	6.47
3150-10PK	11	5	0.06	5,000	T-1¾	19M0234	6.99

(13739)

MINIATURE INCANDESCENT LAMPS

RoHS Compliant Available

Chicago Miniature Lighting, LLC
Lighting the world since 1910

Sold in packages of 10. Other base styles and voltages available; *go online or call.*

Mfg. Part No.	Fig.	Design Volts	Design Amps	Average Life (Hrs.)	Lamp Size	Stock No.	Price Each 1-24
388-10PK	12	28	0.04	10,000	T-1-3/4	19M0251	6.01
386-10PK	12	14	0.08	15,000	T-1-3/4	96F5770	9.02
336-10PK	12	14	0.08	1,500	T-1-3/4	19M0240	5.79
6833-10PK	13	5	0.06	25,000	T-3/4	19M0270	12.24
7153AS15-10PK	13	5	0.115	40,000	T-3/4	96F5827	15.26
7219-10PK	13	12	0.06	16,000	T-1	96F5829	4.54
7152-10PK	13	5	0.115	40,000	T-1	96F5824	10.03
715-10PK	13	5	0.115	40,000	T-1	19M0275	9.29
683-10PK	13	5	0.06	40,000	T-1	96F5813	8.98
6838-10PK	13	28	0.024	16,000	T-1	19M0271	15.19
6838	13	28	0.024	4,000	Wire Leaded	25F1904	1.68
6839	14	28	0.024	4,000	Sub-Midget Flanged	25F191	1.71
7839-10PK	15	28	0.024	16,000	T-1	19M0289	17.09
7683-10PK	15	5	0.06	40,000	T-1	19M0288	18.41
7715-10PK	15	5	0.115	40,000	T-1	96F5851	14.64
7646-10PK	15	14	0.08	1,000	T-1-1/4	19M0286	19.38
7876-10PK	15	28	0.06	25,000	T-1-3/4	19M0290	0.80
7387-10PK	15	28	0.04	10,000	T-1-3/4	88M9626	7.94
7361-10PK	15	5	0.06	25,000	T-1-3/4	96F5837	8.73
7374-10PK	15	28	0.04	50,000	T-1-3/4	19M0279	10.61
7373-10PK	15	14	0.1	10,000	T-1-3/4	96F5863	8.94
7382-10PK	15	14	0.08	15,000	T-1-3/4	19M0282	9.10
7327-10PK	15	28	0.04	4,000	T-1-3/4	96F5864	9.86
7381-10PK	15	6.3	0.2	20,000	T-1-3/4	19M0281	6.86
28ESB-10PK	16	28	0.04	6,000	T-2	18M8033	10.71
12PSB-10PK	16	12	0.17	12,000	T-2	19M0217	9.39
24PSB-10PK	16	24	0.073	10,000	T-2	19M0229	9.95
28PSB-10PK	16	28	0.04	5,000	T-2	21M5206	9.95
120PSB-10PK	16	120	0.025	5,000	T-2	18M7939	12.30

(13740)

INCANDESCENT LAMPS

RoHS Compliant Available

multicomp

Sold in packages of 10 (unless noted +, sold individually). EFC* indicates end foot candle. Some lamps also available in **packages of 100**. *For bulb and base illustrations plus lamp terminology, go online or call.*

Mfg. Part No.	Base Type	Volts (V)	Amps (mA)	MSCP	Avg. Life Hrs.	Stock No.	Price Each 1-24
BULB TYPE B-3 ½							
PR-2	S.C. Mini Flanged	2.38		0.8	15	50N8050	2.74
PR-3	S.C. Mini Flanged	3.57	500	1.5	15	13P0373	2.65
BULB TYPE G-3 1/2							
14	Miniature Screw	2.47	300	0.5	15	12P6307	4.35
50	Miniature Screw	7.5		1	1000	53M5086	2.60
53	Miniature Bayonet / BA9S	14.4		1	1000	50N8065	3.47
356	Miniature Bayonet / BA9S	28		3.5	500	12P6315	7.02
BULB TYPE G-4 1/2							
55	Miniature Bayonet / BA9S	7		2	500	50N8066	3.55
57	Miniature Bayonet / BA9S	14		2	500	50N8067	3.34
BULB TYPE G-6							
90	D.C. Bayonet	13		6	750	61M2949	3.87
BULB TYPE R-12 +							
1383	S.C. Bayonet	13	1.5 A	...	300	12P6306	3.24
BULB TYPE S-8							
307	S.C. Bayonet	28		21	300	50N171	3.29
1156	S.C. Bayonet	12.8	1.44 A	21	1200	96F7954	4.04
1157	D.C. Bayonet	12.8		32/3	5000	96F7955	4.04
1460X	D.C. Prefocus	6.5	2.75 A	23	100	53M5053	7.28
1493	D.C. Bayonet	6.5	2.75 A	23	100	50N8130	6.34
1619	S.C. Bayonet	6.7	1.9 A	15	500	96F7965	10.85
1630	D.C. Prefocus	6.5	2.75 A	23	100	50N8131	7.12
1683	S.C. Bayonet	28	1.02 A	32	500	50N8132	6.19
BULB TYPE T-1							
685	Midget Flange	5		0.05	25000	53M5333	11.08
715	Wire Leaded	5		0.15	40000	53M5338	3.02
718	Midget Flange	5		0.15	40000	53M5339	10.34
6838	Wire Leaded	28		0.15	4000	53M5331	4.50
6839	Sub-Midget Flanged	28		0.15	4000	53M5332	13.66
7219	Wire Leaded	12		0.15	10000	53M5340	3.48
7714	Bi Pin	5		0.09	25000	50N8227	14.41

CONTINUED

INCANDESCENT LAMPS (CONT.)

BULB TYPE T-1

Mfg. Part No.	Base Type	Volts (V)	Amps (mA)	MSCP	Avg. Life Hrs.	Stock No.	Price Each 1-24
● 7715	Bi Pin	5		0.15	40000	50N8189	14.23
7839	Bi Pin	28		0.15	40000	50N8190	9.03
BULB TYPE T 1-3/4							
● 37	Wedge	14		0.5	1500	50N8056	5.48
● 56	Wedge	5		0.15	20000	53M5321	2.84
● 73	Wedge	14		0.3	15000	53M5341	2.48
● 74	Wedge	14		0.7	500	50N8069	6.45
● 85	Wedge	28		0.3	7000	53M5351	2.68
86	Wedge	6.3		0.4	20000	50N8071	2.84
● 327	Midget Flange	28		0.34	4000	53M5071	3.60
● 328	Midget Flange	6		0.34	1000	53M5072	3.50
● 330	Midget Flange	14		0.5	1500	50N8084	3.85
● 334	Midget Groove	28		0.34	4000	53M5073	5.23
● 335	Midget Screw	28		0.34	4000	50N8088	5.41
338	Midget Flange	2.7		0.04	6000	50N8226	11.82
● 342	Miniature Screw	6		0.03	10000	50N8089	5.53
● 344	Midget Flange	10		0.002	50000	50N8090	6.63
● 345	Midget Flange	6		0.03	10000	50N8091	3.90
● 370	Midget Flange	18		0.15	10000	54M6087	3.67
● 376	Midget Flange	28		0.34	25000	53M5074	3.85
● 379	Midget Groove	6.3		0.4	20000	53M5076	5.14
● 381	Midget Flange	6.3		0.4	20000	53M5077	3.90
● 382	Midget Flange	14		0.3	15000	50N8100	3.71
● 385	Midget Flange	28	40	0.15	10000	12P6317	3.67
386	Midget Groove	14		0.3	15000	50N8102	5.31
● 387	Midget Flange	28		0.3	7000	53M5078	3.60
● 388	Midget Groove	28		0.3	7000	50N8104	3.98
● 394	Midget Flange	12		0.12	10000	53M5079	3.90
● 1768	Miniature Screw	6		0.6	1000	50N8134	6.84
● 1769	Miniature Screw	2.5		0.22	500	50N8135	5.23
● 2181	Wire Leaded	6.3		0.4	20000	50N8117	2.61
● 2182	Wire Leaded	14		0.3	40000	50N8118	2.61
2185	Wire Leaded	28		0.15	10000	50N8119	3.10
● 2187	Wire Leaded	28		0.3	7000	50N8120	2.88
● 7327	Bi Pin	28		0.34	4000	53M5342	6.17
● 7328	Bi Pin	6		0.6	1000	53M5343	6.45
7333	Midget Flange	5		0.05	25000	50N8170	5.01
7341	Midget Flange	28		0.65	5000	50N8172	5.01
7349	Bi Pin	6.3		0.55	5000	50N8173	9.05
● 7373	Bi Pin	14		0.5	10000	50N8178	5.01
● 7377	Bi Pin	6.3		0.23	1000	53M5345	5.01
● 7381	Bi Pin	6.3		0.4	20000	50N8182	5.11
● 7382	Bi Pin	14		0.3	15000	53M5346	5.08
● 7387	Bi Pin	28		0.3	7000	53M5347	5.04
BULB TYPE T 1-1/4							
● 6PSB	Telephone Slide	6		550	20000	61M2947	8.28
● 12ESB	Telephone Slide #5	12		650 EFC	7500	50N8212	7.76
● 12PSB	Telephone Slide	12		2000 EFC	12000	50N8211	6.08
● 24ESB	Telephone Slide #5	24		850 EFC	8000	50N8216	8.08
● 24PSB	Telephone Slide	24		3000 EFC	10000	53M5064	6.08
● 28ESB	Telephone Slide	28		1500 EFC	6000	50N8220	8.19
● 28PSB	Telephone Slide	28		1600 EFC	5000	53M5069	5.80
● 48PSB	Telephone Slide	48		1800 EFC	10000	53M5085	7.68
● 120PSB	Telephone Slide	120		1200 EFC	75000	53M5050	7.74
● 120RB	Miniature Bayonet	120		1000 EFC	7500	53M5051	70.73
● 7632	Bi Pin	28		0.32	1000	53M5349	14.41
BULB TYPE T 2-1/2							
● 12MB	Miniature Bayonet	12		0.35	12000	16N7507	8.43
● 24MB	Miniature Bayonet / BA9S	24		0.5	10000	16N7512	7.92
● 60MB	Miniature Bayonet	60		0.73	7500	16N7513	13.10
● 120MB	Miniature Bayonet / BA9S	120		0.36	7500	53M5049	8.88
BULB TYPE T 2-1/4							
787	Bi Pin	6	1.67A	16	100	16N8748	9.95
BULB TYPE T-3							
● 211-2	Rigid Loops/ End Caps	12.8		12	1000	53M5062	7.97
BULB TYPE T 3-1/4							
● 8-3995	Miniature Bayonet	130		0.3	2000	53M5350	9.25
● 43	Miniature Bayonet	2.5		0.5	3000	50N8057	2.88
● 47	Miniature Bayonet / BA9S	6.3		0.5	3000	11R6433	6.48
48	Midget Screw	2		0.04	1000	50N8061	4.83
● 656	Wedge	28		0.62	2500	53M5327	2.84

➤CONTINUED➤

INCANDESCENT LAMPS (CONT.)

BULB TYPE T 3-1/4

Mfg. Part No.	Base Type	Volts (V)	Amps (mA)	MSCP	Avg. Life Hrs.	Stock No.	Price Each 1-24
● 161	Wedge	14		1	1500	53M5054	2.65
● 168	Wedge	14		3	1500	53M5055	3.55
● 194	Wedge	14		2	2500	53M5060	2.68
● 313	Miniature Bayonet / BA9S	28		3.5	500	50N8081	3.55
● 657	Wedge	28		0.62	15000	53M5328	3.04
● 658	Wedge	14		0.31	15000	53M5329	3.04
● 755	Miniature Bayonet / BA9S	6.3		0.33	20000	12P6322	7.82
● 756	Miniature Bayonet / BA9S	14		0.31	15000	53M5348	6.56
● 757	Miniature Bayonet / BA9S	28			7500	12P6323	3.73
● 1490	Miniature Bayonet	3.2	160	0.2	3000	13P0406	6.98
● 1813	Miniature Bayonet / BA9S	14.4		0.86	1000	50N8137	2.90
● 1815	Miniature Bayonet / BA9S	14		1.4	3000	12P6308	3.08
● 1816	Miniature Bayonet / BA9S	13		3	1000	53M5056	5.59
● 1818	Miniature Bayonet / BA9S	24		3.3	250	53M5057	3.50
● 1819	Miniature Bayonet / BA9S	28		0.34	2500	50N8141	3.60
● 1820	Miniature Bayonet / BA9S	28		0.34	1000	53M5058	3.76
● 1821	Miniature Screw	28	170	3.4	500	12P6309	3.76
● 1822	Miniature Bayonet / BA9S	36		2.1	1000	50N8144	3.50
● 1828	Miniature Bayonet / BA9S	37.5		0.65	3000	53M5059	2.88
● 1829	Miniature Bayonet / BA9S	28		1	1000	50N8145	2.84
● 1835	Miniature Bayonet / BA9S	55			5000	10R6573	5.60
● 1847	Miniature Bayonet / BA9S	6.3		0.38	5000	50N8147	3.08
● 1850	Miniature Bayonet / BA9S	5		0.25	1500	50N8148	3.34
● 1864	Miniature Bayonet / BA9S	28		3	1500	50N8149	3.50
● 1893	Miniature Bayonet / BA9S	14		2	7500	50N8153	3.62
BULB TYPE T-3/4							
● 2	Wire Leaded	5	20	0.03	10000	10R6574	5.96
● 6833	Wire Leaded	5		0.05	25000	50N8159	5.26
BULB TYPE TL-3							
● 222	Miniature Screw	2.25		...	5	50N8077	2.76

(2582)

MINIATURE LAMPS

RoHS Compliant Available

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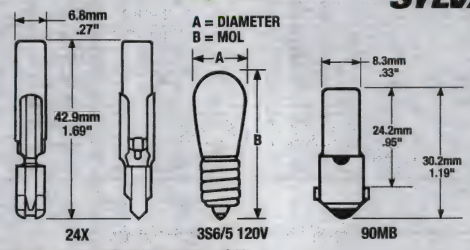

Lamps are listed by type number. **Sold in packages of 10.**

Mfg. Part No.	Voltage (V)	Current (A)	Life Hours	Size	Stock No.	Price per Pkg. Each
● 24X	24	0.035	8,000	T2	75M6083	14.97
3S65 120V	120	3W	3,000	T1.75	96F6633	39.89
● 90MB	90	0.03	5,000	T2.5	96F6717	24.58
● 120MB	120	0.025	7,500	T2-½	98M5045	17.03
● 120MB 6W	120	0.052	3,000	T2-½	75M6081	23.98
● 120PSB	120	0.025	7,500	T2	98M5046	15.71
● 12PSB	12	0.17	12,000	T2	96F6573	19.95
● 1815	14	0.2	3,000	T3-¼	96F6589	11.11
● 1816	13	0.33	1,000	T3-¼	96F6590	13.79
● 1819	28	0.04	2,500	T3-¼	96F6591	8.32
● 1820	28	0.1	1,000	T3-¼	96F6592	13.24
● 1829	28	0.07	1,000	T3-¼	96F6595	9.97
● 1864	28	0.17	1,500	T3-¼	96F6599	12.88
● 24E	24	0.035	7,000	T2	96F6620	14.21
● 24MB	24	0.07	10,000	T2-½	96F6622	17.32
● 24PSB	24	0.073	10,000	T2	96F6624	13.00
● 28ESB	28	0.04	6,000	T2	75M6084	21.19
● 28MB	28	0.04	5,000	T2-½	96F6629	23.60
● 60PSB	28	0.04	5,000	T2	75M6087	21.39
● 327	28	0.04	4,000	T1-¾	96F6642	10.72
● 328	6	0.2	1,000	T1-¾	96F6643	11.97
● 313	28	0.017	500	T3-¾	50N8081	3.55
387	28	0.04	7,000	T1-¾	96F6654	9.62
388	28	0.04	7,000	T1-¾	96F6655	17.79

➤CONTINUED➤

MINIATURE LAMPS (CONT.)

Mfg. Part No.	Voltage (V)	Current (A)	Life Hours	Size	Stock No.	Price per Pkg. Each
44	13	0.33	1,000	T3-¼	96F6658	9.24
48PSB	48	0.05	10,000	T2	98M5489	16.10
20T3Q/CL 12V	512	20W	2,000	T3-¼	99F6527	9.52
60PSB	60	0.05	7500	T2	75M6087	21.39
64111 12V5W	12	5W	240	HAL/T2-3/4	92F2702	98.92
64156 H3 24V70W	24	0.07	225	T3-¼	01N4426	152.05
658	14	0.08	15,000	T3-¼	96F6695	12.02
6S6CL 120V	120	0.05	1,500	S6	01N4425	17.78
73	14	0.08	15,000	T1-¾	96F6701	10.24
755	6.3	0.15	20,000	T3-¼	96F6707	7.68
756	14	0.08	15,000	T3-¼	96F6708	12.34
757	28	0.08	7,500	T3-¼	96F6709	10.86
85	28	0.04	7,000	T1-¾	96F6713	7.56
86	6.3	0.2	20,000	T1-3/4	96F6714	11.66

(10024)

TUBULAR INCANDESCENT LAMPS

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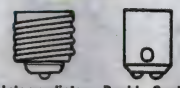

Intermediate Base — Double-Contact Bayonet Base

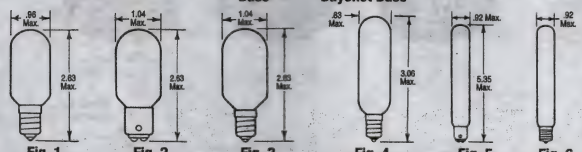

Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6

Mfg. Part No.	Fig.	Volts	Watts	Finish	Base	Stock No.	Price Each 1-24
15T7N-130V	4	130	15	Clear	Intermediate Screw	16N7519	0.80
15T7C-130V	1	130	15	Clear	Candelabra Screw	16M2719	0.82
20T6-1/2N-130V	6	130	20	Clear	Intermediate Screw	27C1913	1.37
20T6-1/2F-130V	6	130	20	Frosted	Intermediate Screw	16N7523	1.42
20T6-1/2DC/F-130V	5	130	20	Frosted	Double Contact Bayonet	53M5061	1.40
25T8C-120V	3	120	25	Clear	Candelabra Screw	16N7531	0.86
25T8N-130V	3	130	25	Clear	Intermediate	53M5066	0.89
25T8DC-130V	2	130	25	Clear	Double Contact Bayonet	16N7533	0.87

Tubular incandescent cylindrical lamps for a variety of applications. For **Fig. 1**; *go online or call.*

(2662)

STANDARD INCANDESCENT BULBS

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Candelabra Screw — Double-Contact Bayonet

For use with indicators. **Sold in packages of 10.** For base illustrations; *go online or call.*

Mfg. Part No.	Watts	Base	Volts	Stock No.	Price per Pkg. Each
3S6/5 120V	3	Candelabra Screw	120	12P6311	12.49
6S6/30V-10PK	6	Candelabra Screw	30	53M5324	6.37
6S6DC/30V	6	Double-Contact Bayonet	30	53M5326	7.04
6S6/120V	6	Candelabra Screw	120	53M5322	6.91
6S6/130V	6	Candelabra Screw	130	16N7499	5.93
6S6DC/130V	6	Double-Contact Bayonet	130	61M2948	6.99
6S6/145V	6	Candelabra Screw	145	16N7500	6.82
100A/RS/TF	6	Candelabra Screw	155	16M2704	3.45
7C7/120V	7	Candelabra Screw	120	12P6321	2.32
10C7-120V-CS	10	Candelabra Screw	120	12P6302	3.02
10S6/230V	10	Candelabra Screw	230	96F7953	7.84

(12633)

AUDIOVISUAL LAMPS

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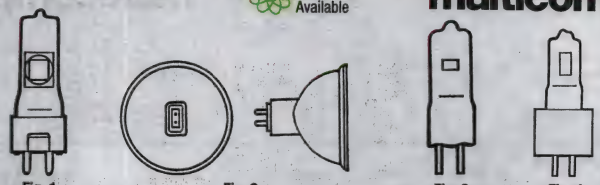

Fig. 1 Fig. 2 Fig. 3 Fig. 4

Mfg. Part No.	Fig.	Volts	Watts (W)	MOD (Max. mm)	Filament Type	Avg. Life Hrs.	App.	Stock No.	Price Each 1-24
DZE	1	24	150	14.0	CBAR6	100	Microfilm	53M4962	23.46
DDL	2	20	150	50.5	CC-6	500	Microfilm	19C8449	14.00
EJY	2	19	80	50.5	CC-6	25	Proj./Fiber -Opt.	19C8461	21.07
EKE	2	21	150	50.5	CC-6	200	8mm	53M4965	16.35
ELC	2	24	250	50.7	CC-6	50	16mm/ Printer	61M2942	14.00
ELH	2	120	300	50.7	CC-8	35	Slide	12P6283	11.97
ENH	2	120	250	50.7	CC-8	175	Slide	53M4966	18.28
ENH	2	120	250	50.7	CC-8	175	Slide	53M4966	18.28
ENX	2	82	360	50.7	CC-8	75	OHP	19C8472	12.74
BRL	3	12	50	11.5	CBAR6	50	Projection	53M4958	8.76
EHJ	3	24	250	13.5	CBAR6	50	Slide	19C8456	11.77
FCS	3	24	150	13.5	CBAR6	50	Projection	19C7970	9.40
FCR	3	12	100	11.5	CBAR6	50	Projection	19C8482	9.99
EYB	4	82	360	11.5	CC-8	75	OHP	19C8479	16.77

(60975)

NEON LAMPS

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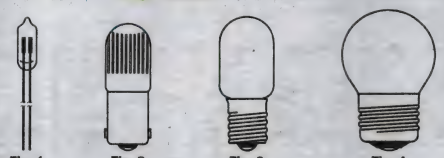

Fig. 1 Fig. 2 Fig. 3 Fig. 4

Sold in packages of 10.

Mfg. Part No.	Design Current (mA)	Series Resistor Ohms	Series Resistor Watts	Fig.	Lamp Size	Stock No.	Price per Pkg. 1-24
C2A-10PK	1.9	30K	¼	1	T-1¼	45T6583	4.07

Sold individually.

Mfg. Part No.	Design Current (mA)	Series Resistor Ohms	Series Resistor Watts	Fig.	Lamp Size	Stock No.	Price Each 1-24
A1C	1.2	47K	¼	1	T-2	25F811	0.41
A9A	0.7	100K	¼	1	T-2	25F812	0.36
B1A-10PK	0.3	220K	¼	2	T-3¼	19M0199	1.05
B2A-10PK	1.2	47K	¼	2	T-3¼	19M0200	1.24

(2527)

(197417)

LAMPS • LAMP SOCKETS/HOLDERS

MICROSCOPE LAMPS

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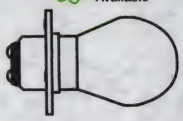
For base illustrations; *go online or call.*



Mfg. Part No.	Amps (Watts)	Width (Max.)	Length (Max.)	Base	Stock No.	Price Each 1-24
● 1460X	2.75	26.5mm	50mm	D.C. Prefocus	53M5053	7.28
● 1630	2.75	26.5mm	50mm	D.C. Prefocus	50N8131	7.12

(13436)

NEON GLOW LAMPS

RoHS Compliant Available

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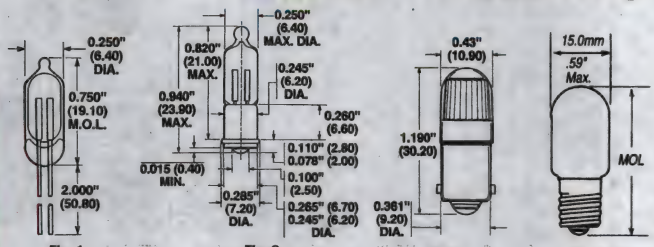

Fig. 1 Wire Leads — Fig. 2 Midget Flange Base — Fig. 3 Min. Bayonet Base — Fig. 4 Candelabra Screw

Neon glow lamps are used for indicators and circuit control applications. Two closely spaced electrodes cause neon gas to ionize and glow when voltage is applied. Since they have no filament, lamps withstand considerable shock vibration. Neon lamps are ideal for line-voltage AC as well as for 90V and up DC applications. They are rugged and long-lived; properly specified neon lamps will outlast the equipment in which they are incorporated. Neon lamps have tinned leads, and are ideal for use on printed circuit boards. External resistors not included except resistor included in base. Current voltage: 120 except (+) 105-125. **Sold in packages of 10.**

Mfg. Part No.	Bulb Type	Max. Overall Length	Current (mA)	Max. Breakdown Volts AC	Max. Breakdown Volts DC	Average Life Hours	Series Resistor	Stock No.	Price Per Pkg. 1-24
FIG. 1									
● A1A(NE-2)	T-2	1.000"	0.7	65	90	25,000	100K	61M2935	7.39
● A9A(NE-2E)	T-2	1.000"	0.7	65	90	25,000	100K	12P6270	3.01
FIG. 2									
● C7A(NE-2D)	T-2	0.940"	0.7	65	90	25,000	100K	61M2940	23.76
● C9A	T-2	0.940"	¼	95	135	25,000	30K	61M2941	20.06
FIG. 3									
● B1A(NE-51)	T-3¼	1.186"	0.3	65	90	15,000	220K	61M2936	11.70
● B1A-R (NE-51R)	T-3¼	1.186"	0.3	65	90	15,000	150K*	61M2937	20.52
● B2A(NE-51H)	T-3¼	1.186"	1.2	95	135	20,000	47K	61M2938	12.70
FIG. 4									
● B7A(NE45)+	T-4¼	1.540"	2.0	65	90	5,000	None *	61M2939	72.87

*30K ohm resistor built in base.

(2625)

FLUORESCENT LAMPS

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GX23 - Fig. 1 — GX23-2 - Fig. 2

COMPACT FLUORESCENT-13 Watts

Mfg. Part No.	Fig.	Bulb	Base	Color Temp.	Initial Lumens	Avg. Life Hours	Max. Lgth.	Stock No.	Price Each 1-24	Price Each 25-49
● DT13/27	1	T4	GX23	2700K	825K	10000	7"	31C8491	5.24	4.70
● QT13/27	2	T4	GX23-2	2700K	810K	10000	4.6"	31C8571	9.66	8.67

(68358)

0.719" DIA. UNIVERSAL LAMP HOUSING FOR PILOT LAMP

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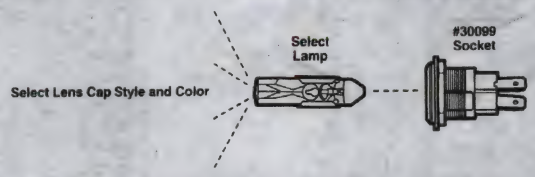

Mfg. Part No. 30099 assembly dimensions - Socket: 0.91" (23.11) (front of panel to end of terminals). Lenses: 0.63" (16.00) diameter, 0.38" (9.65) height. *Select T-2 lamp and lens capability to comprise complete lamp assembly; sold separately on pages 1368-1370.*

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 30099/PLH	Universal lamp housing	35F2829	9.86

(2580)

LENS CAPS AND SOCKETS FOR TYPES 30099 AND 31099 ASSEMBLIES

RoHS Compliant Available

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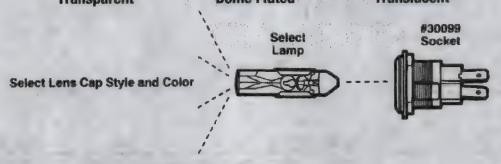
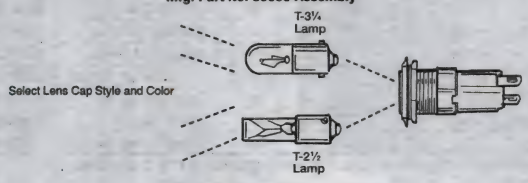
Dome Transparent — Dome Fluted — Flat Top Translucent



Mfg. Part No. 30099 Assembly



Mfg. Part No. 31099 Assembly

Order **mfg. part nos. 30099** and **31099** separately *on page 1372.*

LENS CAPS

Mfg. Part No.	Description	Stock No.	Price Each 1-24	Price Each 25-49
● 30110 PILOT TPLR	Dome Transparent Red	35F2835	1.04	0.87
● 30111 PILOT TPLA	Dome Transparent Yellow	35F2836	1.21	1.02
● 30112 PILOT TPLG	Dome Transparent Green	35F2837	1.10	0.92
● 30120 PILOT FLR	Dome Fluted Red	35F2792	1.06	0.89
● 30122 PILOT FLG	Dome Fluted Green	35F2794	0.98	0.82
● 30126 PILOT FLA	Dome Fluted Amber	35F2793	0.91	0.76
SOCKETS				
● 30099/PLH	Universal Lamp Housing	35F2829	9.86	8.94
● 31099/PLH/BAY	Miniature Bayonet Bbase Lamp Assembly	44F1326	12.33	11.28

(48285)

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(212565)

LAMP SOCKETS

RoHS Compliant Available

JKL® COMPONENTS CORPORATION

Mfg. Part No.	Fig. #	Lamp Base Type	Lamp Socket Size	Termination Type	Stock No.	Price Each 1-9
29MB-T	1	BA9s	T-3 1/4	Lug Terminal	92T9191	2.17
29MB-12	2	BA9s	T-3 1/4	11.75″ 22AWG Lead Wires	92T9192	2.27
2910F-42	3	Festoon	42mm	1/4″ Solder Tabs	92T9193	0.70
2910F-47	4	Festoon	47mm	1/4″ Solder Tabs	92T9194	0.71
2914	5	Bi Pin	T-1 3/4	2 Brass Tin-Plated Pins	92T9195	0.52
2948-6G	6	Wedge	T-1 1/2	6″ 20AWG insulated Lead Wires	92T9203	1.05
2967-22-120-BLA	7	Wedge	T-1 1/2	Twist Lock with 6″ 20AWG Lead Wires	92T9205	0.97
2934/BLK	8	Wedge	T-1 3/4	Twist Lock	92T9198	0.68
2936	9	Wedge	T-1 3/4	Solder Terminals	92T9199	0.19
2944-6G	10	Wedge	T-1 3/4	6″ 20AWG Lead Wires	92T9200	0.88
2946T	11	Wedge	T-1 3/4	Twist Lock with 2.82mm Solder Terminals	92T9202	0.88
2933	12	Wedge	T-3 1/4	Twist Lock	92T9196	0.44
2933T	13	Wedge	T-3 1/4	Twist Lock with 1/4″ Solder Tabs	92T9197	0.45
294502	14	Wedge	T-3 1/4	Phosphor Bronze 1.6mm Terminals	92T9201	0.56
2964-8B	15	Wedge	T-3 1/4	8″ Lead Wires	92T9204	1.35
2993-G5	16	G5	16.9mm	6″ 18AWG Lead Wires	92T9206	2.85
2993-G6	17	G6	17mm	6″ 18AWG Lead Wires	92T9207	2.24

(203469)

LAMP HOLDERS

RoHS Compliant Available

multicomp

Specifications:
- Supply voltage: 120V

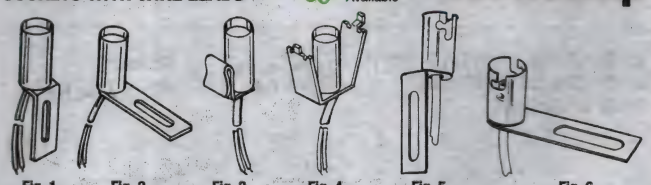
Mfg. Part No.	For Use With	Lamp Base Type	Power Rating (W)	Stock No.	Price Each 1-99
CB-240	Candelabra Bayonet Base Lamps	BA15d	75	46W3261	1.93
CB-25	DC Candelabra Bayonet Base Lamps	BA15d	75	46W3262	1.42
CB-275	Candelabra Bayonet Base Lamps	BA15d	76	46W3263	1.42
CB-30	Double Contact Candelabra Bayonet Base Lamps	BA15d	75	47W2283	1.60
CB-71	Double Contact Candelabra Bayonet Base Lamps	BA15d	75	47W2284	1.42
CB-72	Double Contact Candelabra Bayonet Base Lamps	BA15d	75	47W2285	1.42
SCB-275	Candelabra Bayonet Base Lamps	BA15s	75	47W2286	1.29
SCB-71	Candelabra Bayonet Base Lamps	BA15s	...	47W2287	1.29
SCB-25	Candelabra Bayonet Base Lamps	BA15s	75	46W3267	1.29
SCB-30	SC Candelabra Bayonet Base Lamps	BA15s	75	46W3268	1.46
SCB-72	SC Candelabra Bayonet Base Lamps	BA15s	75	46W3269	1.29
G6-R32-12	Lamps G4 MR11, GX5.3, MR16, G6.35	G6	100	46W3264	1.00
G6-R32HKY-12	G4 MR11, GX5.3, MR16, G6.35 Lamps	G6	100	46W3265	1.18
SC-6023	Bulb Base E26 to GU24	Bayonet	660	46W3266	2.38
WB-207-12	Incandescent and Xenon Lamps	Wedge	75	46W3270	1.44
WB-240PL-12	T3 1/4 and T5 Wedge Lamps	Wedge	75	46W3271	1.38
WB-4087-12	Incandescent and Xenon Lamps	Wedge	75	46W3272	1.66

(210345)

MINIATURE BAYONET SOCKETS WITH WIRE LEADS

RoHS Compliant Available

multicomp



Single contact miniature bayonet sockets with molded black nylon housings. Insulated and break resistant. Mounting brackets insulated from socket. Brackets are 0.025/0.032″ (0.635/0.813) cadmium-plated steel. Rating: 75 watts @ 125V.

Mfg. Part No.	Fig.	Stock No.	Price Each 1-24	25-49	50-99	100-249
SPC21761	1	16M1252	5.88	4.93	4.48	4.03
SPC21763	2	16M1254	5.88	4.93	4.48	4.03
SPC21764	3	16M1255	5.67	4.76	4.32	3.89
SPC21762	4	16M1253	10.06	8.46	7.67	6.92
These sockets feature a grounded socket case with one wire lead.						
SPC21765	5	16M1256	3.57	3.00	2.72	2.46
SPC21766	6	16M1257	4.00	3.36	3.05	2.75

(2671)

DEV KIT HQ™

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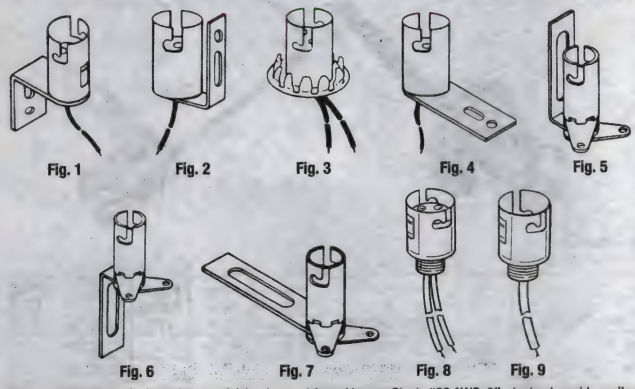
(196528)

LAMP SOCKETS/HOLDERS • LED REPLACEMENTS

CANDELABRA BAYONET SOCKETS

RoHS Compliant Available

multicomp



These sockets accept single contact candelabra bayonet-based lamps. Single #22 AWG, 6″ wire lead provides voltage to socket. Mounting bracket is electrically connected to socket shell, providing ground connection. Brackets are 0.025/0.42″ cadmium plated steel.

Mfg. Part No.	Fig.	Stock No.	Price Each 1-24
● SPC21736	1*	16M1227	2.64
● SPC21737	2*	16M1228	7.85
● SPC21738	4	16M1229	6.45
● SPC21739	9	16M1230	11.62

These sockets accept double contact candelabra bayonet-based lamps. Two #18 AWG, 6″ wire leads and Nema grade phenolic washers provide insulation from mounting bracket. Brackets are 0.30/0.48″ cadmium plated steel.

● SPC21740	1	16M1231	4.45
● SPC21741	2	16M1232	5.31
● SPC21744	3	16M1235	7.46
● SPC21742	4	16M1233	3.76
● SPC21743	8	16M1234	9.98

These sockets accept single contact candelabra bayonet-based lamps. Supplied with two solder terminals, steel with tin-electro plating, and a shell insulated from the bracket. Designed for low voltage incandescent lamps, 6V to 28V.

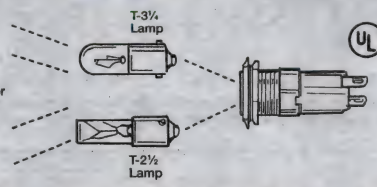
● SPC21734	5	16M1225	2.60
● SPC21733	6	16M1224	3.40
● SPC21735	7	16M1226	2.60

* Single wire terminal.
(2678)

31099 SERIES T-2½ OR T-3¼ MINIATURE BAYONET BASE LAMP ASSEMBLY

RoHS Compliant Available

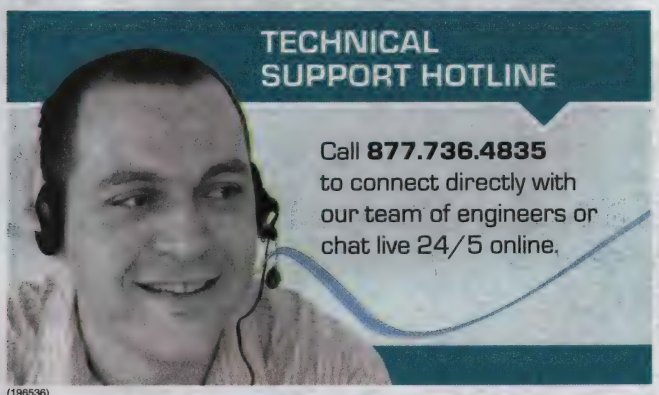
OSRAM SYLVANIA



31099 series assembly dimensions - Socket: 1.68″ (42.67) (front of panel to end of terminals). Lenses: 0.63″ (16.00) diameter, 0.38″ (9.65) height. *Select T-2½ or T-3¼ lamp and cap on pages 1368-1370* UL listed, CSA certified.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 31099/PLH/BAY	Miniature bayonet base lamp assembly	44F1326	12.33

(2581)



(196536)

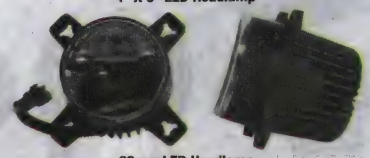
LED HEADLAMPS FOR HEAVY DUTY VEHICLES

Dialight

Certifications and Ratings:
- SAE / DOT Compliant
- FMVSS108 Visual Aim

Features:
- 5 year limited warranty
- Expected life >10 Years
- No frequent relamping
- Protection against over-voltage/surge/spikes
- Less prone to alignment errors
- Wide beam pattern
- Industry first reflector based design
- Weatherproof design

4″ X 6″ LED Headlamp



90mm LED Headlamp

Dialight's new LED headlamps are designed for heavy duty vehicles. With their dual voltage capabilities (12 and 24V), they will easily replace any 4″ x 6″ halogen low-beam light or 90mm halogen / HID light in the market as a retrofit without any need for retooling.
All of Dialight's long life LED luminaires are designed to meet the most demanding specification criteria while offering maximum energy savings, reduced maintenance costs, and a superior quality of light.

4″ x 6″ LED HEADLAMPS

Mfg. Part No.	Beam Type	Oper. Volt. (VDC)	Power Rating (W)	Current Draw @ 12VDC (A)	Current Draw @ 24VDC (A)	Stock No.	Price Each 1-24
● DLL434CT	Low	12 and 24	14	1.2	0.58	65T6515	242.57
● DLH424CT	High	12 and 24	21	1.75	0.88	65T6514	303.22
90mm LED HEADLAMPS							
● DLL324CT	Low	12 and 24	14	1.2	0.58	65T6518	238.40
● DLH324CT	High	12 and 24	21	1.75	0.88	65T6517	303.22

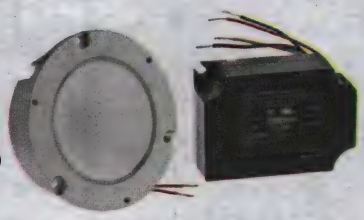
(202202)

CREE® LMH2 SERIES LED MODULE AND POWER SUPPLY KITS

RoHS Compliant Available

CREE

Features:
- Cree TrueWhite® Technology; >90 CRI for all available CCT (2700 K to 4000 K)
- LED modules fit standard junction box configurations
- 80 LPW system efficacy
- 850 or 1250 lumens nominal
- Power input of 120 V/60 Hz or 277 V/60 Hz
- Supports dimming to 5% (120 and 230 V)
- UL approval (120 and 277 V)
- California Title 24 compliance (120 and 277 V)
- LED LM-80 data available
- Optional heat sink



Applications:
- LED Retro Fit
- Lighting fixtures - indoor downlight, wall sconces, pendants, track heads
- Residential and commercial

The Cree LMH2 LED module kit is the ideal choice for enabling rapid LED luminaire development where bright, beautiful, long-life lighting is required. The LMH2 module kit incorporates Cree's award-winning TrueWhite® LED technology with a power driver. The kit consists of a system of driver electronics, optics and primary thermal management for use in residential and commercial lighting applications. Additional thermal management availabe with optional heat sink below. The LMH2 module light source and power driver provide a wide selection of mounting and electrical options for design and manufacturing flexibility. *(CREE REQUIRES LICENSING AGREEMENT FOR OEM APPLICATIONS)*

EasyWhite® LED MODULES - 10.5W, 850lm (PART NO.'S BELOW INCLUDE POWER DRIVERS)

Mfg. Part No.	Color	CCT (K)	I_F (mA)	Lum. Flux (lm)	Supply Voltage (V)	Stock No.	Price Each 1-9
● LMH020-0850-27G9-00000TW	Warm White	2700	88	850	120	77T2843	25.33
● LMH020-0850-27G9-10100TW	Warm White	2700	88	850	120	77T2844	61.63
● LMH020-0850-27G9-20100TW	Warm White	2700	46	850	230	77T2845	58.72
● LMH020-0850-27G9-30000TW	Warm White	2700	38	850	277	77T2846	61.63
● LMH020-0850-30G9-00000TW	Warm White	3000	88	850	120	77T2847	25.33
● LMH020-0850-30G9-10100TW	Warm White	3000	88	850	120	77T2848	58.72
● LMH020-0850-30G9-20100TW	Warm White	3000	46	850	230	77T2849	61.63
● LMH020-0850-30G9-30000TW	Warm White	3000	38	850	277	77T2850	58.72
● LMH020-0850-35G9-00000TW	Warm White	3500	88	850	120	77T2851	25.33
● LMH020-0850-35G9-10100TW	Warm White	3500	88	850	120	77T2852	61.63
● LMH020-0850-35G9-20100TW	Warm White	3500	46	850	230	77T2853	58.72
● LMH020-0850-35G9-30000TW	Warm White	3500	38	850	277	77T2854	58.72
● LMH020-0850-40G9-00000TW	Cool White	4000	88	850	120	77T2855	25.33
● LMH020-0850-40G9-10100TW	Cool White	4000	88	850	120	77T2856	58.72
● LMH020-0850-40G9-20100TW	Cool White	4000	46	850	230	77T2857	58.72
● LMH020-0850-40G9-30000TW	Cool White	4000	38	850	277	77T2858	58.72
LMH020-6000-35G9-70300TW	White	3500	1700	6000	277	33X0941	138.57
LMH020-6000-40G9-70300TW	White	4000	1700	6000	277	33X0943	138.57
LMH020-6000-30G9-70300TW	White	3000	1700	6000	277	33X0939	138.57

➤CONTINUED➤

CREE® LMH2 SERIES LED MODULE AND POWER SUPPLY KITS (CONT.)

EasyWhite® LED MODULES - 15.5W, 1250lm (PART NO.'S BELOW INCLUDE POWER DRIVERS)

Mfg. Part No.	Color	CCT (K)	I_F (mA)	Lum. Flux (lm)	Supply Voltage (V)	Stock No.	Price Each 1-9
LMH020-1250-27G9-00000TW	Warm White	2700	130	1250	120	77T2859	29.80
LMH020-1250-27G9-10100TW	Warm White	2700	88	1250	120	75T9326	69.08
LMH020-1250-27G9-20100TW	Warm White	2700	46	1250	230	77T2860	69.08
LMH020-1250-27G9-30000TW	Warm White	2700	38	1250	277	77T2861	69.08
LMH020-1250-30G9-00000TW	Warm White	3000	130	1250	120	77T2862	29.80
LMH020-1250-30G9-10100TW	Warm White	3000	88	1250	120	77T2863	72.50
LMH020-1250-30G9-20100TW	Warm White	3000	46	1250	230	77T2864	69.08
LMH020-1250-30G9-30000TW	Warm White	3000	38	1250	277	77T2865	69.08
LMH020-1250-35G9-00000TW	Warm White	3500	130	1250	120	77T2866	31.28
LMH020-1250-35G9-10100TW	Warm White	3500	88	1250	120	77T2867	69.08
LMH020-1250-35G9-20100TW	Warm White	3500	46	1250	230	77T2868	71.74
LMH020-1250-35G9-30000TW	Warm White	3500	38	1250	277	77T2869	69.08
LMH020-1250-40G9-00000TW	Cool White	4000	130	1250	120	77T2870	29.80
LMH020-1250-40G9-10100TW	Cool White	4000	88	1250	120	77T2871	72.50
LMH020-1250-40G9-20100TW	Cool White	4000	46	1250	230	77T2872	69.08
LMH020-1250-40G9-30000TW	Cool White	4000	38	1250	277	77T2873	69.08

OPTIONAL ACCESSORIES

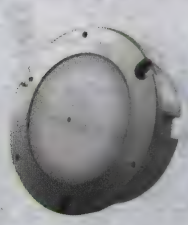
Mfg. Part No.	Description	Stock No.	Price Each
LMH020-HS00-0000-0000001	Heat sink is designed to work with all LMH2 lumen levels	77T2842	11.05
LMD300-CA00-0000-0000001	Conduit cover, 230V LMD300 DALI + Touch Driver	43W5984	1.12

(201301)

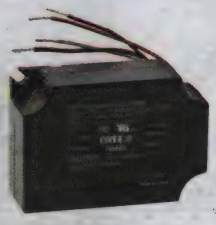
CREE® LMH2 SERIES LED MODULE AND POWER SUPPLY KITS

RoHS Compliant Available

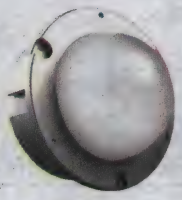
CREE



Flat Lens



120V and 230V Power Drivers



Dome Lens

Features:

- Industry-leading light-source efficacy of 97 lm/W (steady state)
- Available in 2700 K, 3000 K, 3500 K and 4000 K CCT
- >90 CRI for all CCTs
- Minimum 95 CRI available for 3500 K at 3000 lm
- Broad selection of mounting and wiring options
- Industry-leading 5-year limited system warranty
- Designed to last 50,000 hours at L70
- No UV in light output
- No mercury in light source

Cree LED modules provide lighting designers and manufacturers with simple, easy-to-adopt LED lighting solutions that reduce luminaire development time and speed time-to-market. Each kit contains one LED module and one power supply. Cree LMH2 LED modules are the ideal choice for enabling rapid luminaire development where bright, beautiful, long-life lighting is required. The ease of use of the LMH series of modules enables this versatile LED lighting module to jump-start the design process for recessed downlights, wall sconces or pendant lights in demanding end markets such as retail, museums, hospitality, restaurants and studio lighting.

Mfg. Part No.	Color	Luminous Flux (lm)	CCT (K)	I_F (mA)	Stock No.	Price Each Each
LMH020-2000-27G9-70300TW	White	2000	2700	900	66W8429	75.99
LMH020-2000-30G9-70300TW	White	2000	3000	900	66W8433	80.07
LMH020-2000-35G9-70300TW	White	2000	3500	900	66W8437	80.07
LMH020-2000-40G9-70300TW	White	2000	4000	900	66W8441	80.07
LMH020-2000-27G9-20200TW	White	2000	2700	900	66W8427	84.78
LMH020-2000-30G9-20200TW	White	2000	3000	900	66W8431	80.46
LMH020-2000-35G9-20200TW	White	2000	3500	900	66W8435	84.78
LMH020-2000-40G9-20200TW	White	2000	4000	900	66W8439	84.78
LMH020-3000-27G9-70300TW	White	3000	2700	900	66W8445	91.06
LMH020-3000-30G9-70300TW	White	3000	3000	900	66W8449	95.57
LMH020-3000-35G9-70300TW	White	3000	3500	900	66W8453	91.06
LMH020-3000-40G9-70300TW	White	3000	4000	900	66W8457	91.06
LMH020-3000-27G9-20200TW	White	3000	2700	900	66W8443	95.77
LMH020-3000-30G9-20200TW	White	3000	3000	900	66W8447	95.77
LMH020-3000-35G9-20200TW	White	3000	3500	900	66W8451	95.77
LMH020-3000-40G9-20200TW	White	3000	4000	900	66W8455	95.77
LMH020-8000-30G9-00000TW	White	8000	3000	2 A	52X5625	104.30
LMH020-8000-35G9-00000TW	White	8000	3500	2 A	52X5627	104.30
LMH020-8000-40G9-00000TW	White	8000	4000	2 A	52X5629	104.30

CONTINUED

CREE® LMH2 SERIES LED MODULE AND POWER SUPPLY KITS (CONT.)

DOME LENS

Mfg. Part No.	Color	Luminous Flux (lm)	CCT (K)	I_F (mA)	Stock No.	Price Each Each
LMH020-2000-27G9-70301TW	White	2000	2700	900	66W8430	80.07
LMH020-2000-35G9-70301TW	White	2000	3500	900	66W8438	80.07
LMH020-2000-40G9-70301TW	White	2000	4000	900	66W8442	80.07
LMH020-2000-27G9-20201TW	White	2000	2700	900	66W8428	84.78
LMH020-2000-30G9-20201TW	White	2000	3000	900	66W8432	84.78
LMH020-2000-35G9-20201TW	White	2000	3500	900	66W8436	84.78
LMH020-2000-40G9-20201TW	White	2000	4000	900	66W8440	84.78
LMH020-3000-27G9-70301TW	White	3000	2700	900	66W8446	91.06
LMH020-3000-30G9-70301TW	White	3000	3000	900	66W8450	91.06
LMH020-3000-35G9-70301TW	White	3000	3500	900	66W8454	91.06
LMH020-3000-40G9-70301TW	White	3000	4000	900	66W8458	91.06
LMH020-3000-27G9-20201TW	White	3000	2700	900	66W8444	95.77
LMH020-3000-30G9-20201TW	White	3000	3000	900	66W8448	95.77
LMH020-3000-35G9-20201TW	White	3000	3500	900	66W8452	95.77
LMH020-3000-40G9-20201TW	White	3000	4000	900	66W8456	95.77
LMH020-6000-40G9-70301TW	White	6000	4000	1700	33X0944	138.57
LMH020-6000-35G9-70301TW	White	6000	3500	1700	33X0942	138.57
LMH020-6000-30G9-70301TW	White	6000	3000	1700	33X0940	138.57
LMH020-6000-30G9-00001TW	White	6000	3000	1.7	23X6670	81.95
LMH020-6000-35G9-00001TW	White	6000	3500	1.7	23X6672	81.95
LMH020-6000-40G9-00001TW	White	6000	4000	1.7	23X6674	81.95

FLAT LENS MODULES

OPTIONAL ACCESSORIES

Mfg. Part No.	For Use With	Stock No.	Price Each Each
LMH020-HS00-0000-0000001	87.2mm x 40mm Heat sink is designed to work with all LMH2 lumen levels	77T2842	11.05
LMH020-HS00-0000-0000081	153mm x 100mm Heat sink is designed to work with all LMH2 lumen levels	52X5624	37.25
LMD300-CA00-0000-0000001	Conduit cover, 230V LMD300 DALI + Touch Driver	43W5984	1.12
LMD800-0120-C2A0-7030000	120-277V LMD800 Dimming Driver	52X5623	71.52

(210082)

element14 COMMUNITY

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(196547)

LED REPLACEMENTS

FAA LED REPLACEMENT BEACONS

RoHS Compliant Available

Dialight

L810

L864

Features and Benefits:
- Industry's Longest Warranty = Complete performance 5 year warranty.
- All LED Flash Head with 10+ Years Life Expectancy = Reduction in expensive tower climbs and maintenance costs.
- Uses State-of-the-Art High Flux LED Technology = Long life and resistant to shock and vibration.
- Environmentally Friendly (20 Watt Power Consumption) = Over 90% more efficient than incandescent.
- Very Precise Optics (Patented) = Minimum ground scatter light (Community friendly lighting system).
- Smallest Flash Head in the Industry, 8.41″ high = Significantly less wind loading than a xenon or incandescent.
- IP66 rated = completely sealed from the outside environment.
- Lightest Flash Head in the Industry (20LBS) = Easy to handle and install.

Certified by:
- FAA AC NO: 150 / 5345-43F
- FAA Engineering Brief No. 67

Qualified by:
- Intertek ETL

Technical:
- Unit Weight: 20lbs (9Kg)
- Supply Voltage: 120-240 VAC Universal Input
- Watts: 20W Rated (10 Watts EQ)
- Operating Temp: -40°F to +131°F (-40°C to +55°C)
- Power Factor: >0.9

Compliant to:
- ICAO Annex 14, 5th Edition, 2009
- ICAO Aerodromes Design Manual, Chapter 18
- Canadian Aviation Regulation CAR 621.19 (Transport Canada)
- DGAC Mexico

The **Dialight Vigilant™ D464 Series** LED based medium intensity red beacon utilizes state-of-the-art optical design to achieve the most compact, efficient, FAA compliant **L864** device in the market. While it readily interfaces into existing installations, its robust, low power design will provide years of maintenance free service (*Payback = 1.5 Years*).

L864 RED BEACON

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● D464A13001	L-864 Compliant Red FAA Beacon, 120/230 VAC	32T8748	2825.68

Features:
- Simple retro-fit version using existing wiring and mounting pattern
- Weather/corrosion resistant lamp assembly and housing
- Self-contained wiring compartment eliminates additional boxes
- Threaded 1″ and ¾″ bottom hub for mounting
- Can be operated steady or flashed
- Uses 95% less energy than incandescent
- 5 year warranty
- Resistant to shock and vibration
- IP65 / IP66 / NEMA 4X

Technical:
- Container Weight: 1.25lbs (Retro Unit), 2lbs (Single Unit), 4.6lbs (Dual Unit)
- Nominal Input Power: 6.5W (FAA - 120/230 VAC Units)
- Power Factor: >0.9
- Operating Temp: -40°F to +131°F (-40°C to +55°C)

Meets:
- FAA AC NO: 150 / 5345-43F
- FAA Engineering Brief No. 67
- ICAO Annex 14, 4th Edition, July 2004
- ICAO Aerodromes Design Manual, Chapter 18
- Canadian Aviation Regulation CAR 621.9
- German Air Traffic Control Notices For Pilots Part I 6, January 2005

Qualified by:
- Intertek ETL
- Lighting Sciences Canada
- DGAC Mexico

The **Dialight Vigilant™ RTO Series** obstruction light utilizes a unique optical, electrical and mechanical design . The **RTO** series is the most universal, compact and efficient obstruction light in the world. ETL Certified to the FAA requirements, the **RTO** series fixture is also ICAO and Transport Canada compliant. Also available as a single fixture for direct replacement of incandescent lamp/lens technology (*Payback = 1.5 Years*).

L810 RED OBSTRUCTION LIGHT

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● RT01R07004	L-810 Compliant Red FAA Marker, Single Fixture Retro, 120/230VAC	32T8752	139.69
● RT01R07001	L-810 Compliant Red FAA Marker, Single Fixture, 120/230VAC	32T8750	167.63
● RT01R07002	L-810 Compliant Red FAA Marker, Double Fixture, 120/230VAC	32T8751	322.55

(194506)

Q-RAY™ DOWNLED LED RECESSED DOWNLIGHTS

RoHS Compliant Available

wamco™

Features:
- No UV light or heat generated through the light beam protect valuables on display and cooling during summer months
- Low power consumption to minimize carbon emission
- Durable & long lasting up to 50,000 hours or more
- No reflector required. Light loss is minimal with long lumens maintenance hours
- Dimmable* down to 5%
- No mercury content

Mfg. Part No.	Color	Power Rating (W)	Supply Voltage (V)	CCT (K)	Stock No.	Price Each 1-9
● WL-QDL05-USW-27G24E	Warm White	12	125	2700	28W5059	100.08
● WL-QDL05-USW-30G24E	Warm White	12	125	3000	28W5060	100.08

➤ CONTINUED ➤

Q-RAY™ DOWNLED LED RECESSED DOWNLIGHTS (CONT.)

Mfg. Part No.	Color	Power Rating (W)	Supply Voltage (V)	CCT (K)	Stock No.	Price Each 1-9
● WL-QDL06-USW-27G24E	Warm White	14	125	2700	28W5061	100.08
● WL-QDL06-USW-30G24E	Warm White	14	125	3000	28W5062	100.08

(208478)

LED LIGHT BARS

RoHS Compliant Available

CALIFIA LIGHTING

Bayfront - B7100

Coastline - C5000

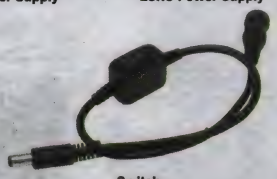
Coastline - C5400

Pennisula - P3100

USA Power Supply

EURO Power Supply

Features:
- Low profile
- Long life
- Instant on
- Mercury and lead free
- No UV
- Constant voltage: 24VDC
- Rated life: 50,000 hours



Switch

PENNISULA SERIES: 2 WATTS, 0.83″(W)x0.60″(H)x12″(L), 120° BEAM ANGLE

Mfg. Part No.	Color	CCT (K)	Lumin. Flux (lm)	Lense Style	On/Off Dimming	Stock No.	Price Each 1-9
● P3100-C-S	Cool White	6500	190	Semi	No	28W5050	33.39
● P3100-N-S	Neutral White	4500	180	Semi	No	28W5051	33.39
● P3100-S-S	Warm White	2700	160	Semi	No	28W5052	31.50
● P3100-W-S	Warm White	3000	170	Semi	No	28W5053	31.50
BAYFRONT SERIES: 4 WATTS, 0.63″(W)x0.75″(H)x12″(L), 120° BEAM ANGLE							
● B7100-C-S	Cool White	6500	180	Frosted	No	28W5040	64.64
● B7100-N-S	Neutral White	4500	170	Frosted	No	28W5041	64.64
● B7100-S-S	Warm White	2700	160	Frosted	No	28W5042	60.98
● B7100-W-S	Warm White	3000	160	Frosted	No	28W5043	60.98
COASTLINE SERIES: 5 WATTS, 0.86″(W)x0.30″(H)x12″(L), 120° BEAM ANGLE							
● C5000-C-S	Cool White	6500	390	None	Yes	28W5044	78.08
● C5000-N-S	Neutral White	4750	365	None	Yes	28W5045	78.08
● C5000-W-S	Warm White	3100	365	None	Yes	28W5046	78.08
COASTLINE SERIES: 5 WATTS, 0.86″(W)x0.47″(H)x12″(L), 35° BEAM ANGLE							
● C5400-C-S	Cool White	6500	390	Clear	Yes	28W5047	90.00
● C5400-N-S	Neutral White	4750	365	Clear	Yes	28W5048	90.00
● C5400-W-S	Warm White	3100	320	Clear	Yes	28W5049	90.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● WA-UL-001	AC/DC Power Supply, 24VDC, 14.4W USA with Mating Connector	28W5055	13.31
● WA-VDE-001	AC/DC Power Supply, 24VDC, 14.4W Euro with Mating Connector	28W5056	13.05
● SW-1001	In-Line On/Off Switch	28W5054	5.20

(208202)

MODULAR LED LIGHTBARS

RoHS Compliant Available

LUMEX

Creating LED and LCD Solutions Together™

Applications:
- Cabinet Lighting
- Undercabinet Lighting
- Kitchen Lighting
- Garage Lighting
- Bookshelf Illumination
- Cupboard Lighting
- Showcase Displays
- Cove Lighting

LED Lightbar Kit

Features:
- 12" Modular LED Lightbar Kit available
- Available in lengths of 6, 12 and 24 inches for extendable design solutions
- Compatible connector cables available in 10", 20" or 40" lengths to connect Lightbars to desired length
- Mounting clips are available in 45° or 90°° angle varieties
- A specially designed transformer is available to allow for simplified installation and immediate wall plug-in
- For brightness control, a dimmer switch is available and effective on an entire line of connected light switches
- Ultra thin heat sink
- CE, UL, IP60, and RoHS compliant
- Warm, neutral and cool white colors are available in standard formats.

The SunBrite family of Modular LED Lightbar technologies combine high-performance, ease-of-installation, flexibility and cost savings. Unlike many alternative lighting technologies, the SunBrite LED Lightbar can be installed with ease without the need to hire an electrician to open walls and install new wiring.

MODULAR LED LIGHTBAR KIT

Mfg. Part No.	Kit Contents	Stock No.	Price Each 1-9
SSP-LBK12MW024K03	12" LED Light Bar (Warm White, 24VDC, 3W, 120° Viewing Angle), Flat Mounting Clip with Screw, Power Adapter and 12" Power Line Cable	76T8790	63.51

6" LED LIGHTBARS, 24VDC

Mfg. Part No.	Color	Lumin. Flux (lm)	Power Rating (W)	Dimensions (H x L) mm	Stock No.	Price Each 1-9
SSP-LB06MW024K03	Warm White	150	2.5	13.25 x 154	76T8791	28.29
12" LED LIGHTBARS, 24VDC						
SSP-LB12MW024K03	Warm White	190	3.3	13.25 x 304	76T8792	40.62
SSP-LB12MW024K05	Warm White	300	5	13.25 x 304	76T8793	52.53
SSP-LB12NW024K03	Neutral White	220	3.3	13.25 x 304	76T8794	40.62
SSP-LB12NW024K05	Neutral White	300	5	13.25 x 304	76T8795	50.58
SSP-LB12UW024K03	Cool White	220	3.3	13.25 x 304	76T8796	40.62
SSP-LB12UW024K05	Cool White	360	5	13.25 x 304	76T8797	52.53
24" LED LIGHTBARS, 24VDC						
SSP-LB24MW024K10	Warm White	600	10	13.25 x 604	76T8798	104.37
SSP-LB24UW024K07	Cool White	440	6.6	13.25 x 604	76T8799	85.26

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
SSP-CA12	12-inch Power Line Connection Cable	76T8787	3.09
SSP-CN10	10" Connection Cable Between Light Bars	76T8788	3.14
SSP-DM0	Dimmer Switch	76T8789	23.08
SSP-MTCF1	Mounting Clip (Flat Type), includes screw	76T8800	0.69
SSP-PW024	24W Power Adaptor, 100VAC to 240VAC INPUT, 24VDC/1.0A OUTPUT	76T8801	20.33

(201316)

NEW PRODUCTS ADDED DAILY

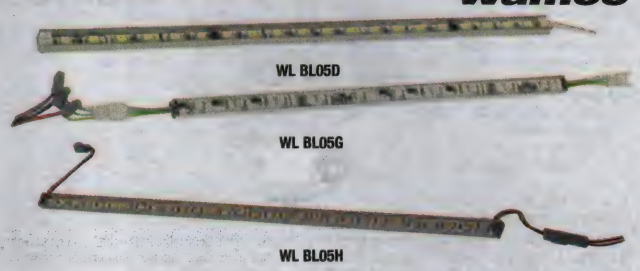
See the newest products, technologies and suppliers on our website.

(196562)

LED LIGHT BARS

RoHS Compliant Available

wamco™



Features:
- Solid-state reliability with long operating life - reducing maintenance costs
- Low power consumption - providing significant energy savings
- Low voltage (24VDC) operation - providing for added safety
- Low heat generation
- 3 year warranty

A linear lighting system for interior and exterior applications such as path, cove, shelf, display case, and signage lighting. Available in white, warm white and full color versions in multiple lengths.

WL-B05D SERIES LED STICKS FOR INTERIOR AND EXTERIOR APPLICATIONS

Mfg. Part No.	Color	CCT (K)	Volt. (V)	Pwr. Rtg. (W)	Lumin. Flux (lm)	Length (mm)	# of LEDs	Stock No.	Price Each 1-9
WL-B05D04L0300	Warm White	3000	24	4.5	270	313	20	86T5292	44.33
WL-B05D09L0600	Warm White	3000	24	9	540	614	40	86T5294	82.84
WL-B05D09W0600	White	6500	24	9	600	614	40	86T5295	86.03
WL-B05G SERIES LED STICKS FOR INTERIOR APPLICATIONS									
WL-B05G03F0300	RGB	...	24	3.5	76	306	10	86T5296	69.62
WL-B05G07F0600	RGB	...	24	7	152	607	20	86T5297	89.96
WL-B05G10F0900	RGB	...	24	10.5	228	908	30	86T5298	124.56
WL-B05H SERIES LED STICKS FOR INTERIOR AND EXTERIOR APPLICATIONS									
WL-B05H09L0600	Warm White	3000	24	9	540	614	40	86T5299	93.42
WL-B05H09W0600	White	6000	24	9	600	614	40	86T5300	93.42

(202075)

LED LAMP T8 TUBE LIGHTS

c UL us

RoHS Compliant Available

multicomp™

- Beam Angle (Degree): 120°
- Colour Accuracy(CRI): 70Ra
- Product Weight: 220G
- Rating Life: 35000hours
- Base: G13
- Input Voltage (AC / DC): 120V
- Dimension(mm): 603.2 × 26

Mfg. Part No.	Color	CCT (K)	Power Rating (W)	Current (mA)	Lumin. Flux (lm)	Stock No.	Price Each 1-9
MC-T8-60-10W-L-UM-CW-00	Cool White	6000	11	92	77	96T9635	24.20
MC-T8-60-10W-L-UM-CW-01	Cool White	6000	11	92	86	96T9636	23.30
MC-T8-120-20W-L-UM-CW-00	Cool White	6000	20	167	92	96T9627	39.43
MC-T8-120-20W-L-UM-CW-01	Cool White	6000	20	167	100	96T9628	38.08
MC-T8-150-24W-L-UM-CW-00	Cool White	6000	24	200	89	96T9631	51.75
MC-T8-150-24W-L-UM-CW-01	Cool White	6000	24	200	100	96T9632	51.08
MC-T8-60-10W-L-UM-WW-00	Warm White	3000	11	92	68	96T9637	24.20
MC-T8-60-10W-L-UM-WW-01	Warm White	3000	11	92	77	96T9638	23.30
MC-T8-120-20W-L-UM-WW-00	Warm White	3000	20	167	82	96T9629	40.95
MC-T8-120-20W-L-UM-WW-01	Warm White	3000	20	167	90	96T9630	38.08
MC-T8-150-24W-L-UM-WW-00	Warm White	3000	24	200	79	96T9633	51.75
MC-T8-150-24W-L-UM-WW-01	Warm White	3000	24	200	90	96T9634	51.08

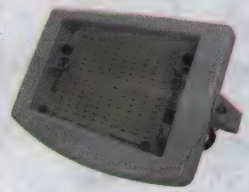
(208477)

LED REPLACEMENTS

LED LIGHTING SYSTEM i-VIEW 501

RoHS Compliant Available

wamco™



Features:
- Energy efficient (up to 75% energy saving compared to 150W HQI or halogen lamps)
- 35W (around 40W including DC power supply) power consumption
- Available in White: 6500K and Warm White: 3300K
- Long service life (up to 40,000 hours)
- Water resistant (outdoor use, IP65)
- UL Approved
- 3 year warranty

Applications:
- Lighting for small and medium sized billboards and traffic signs
- Wall washing (buildings, bridges, etc)

Wamco **i-View 501** is an LED lighting system designed for small and medium sized billboards or traffic signs as well as a wall washing of buildings, bridges, sculptures, etc. **i-View 501** has much lower power consumption (around 40W including DC power supply) than conventional 150W HQI lamp and Halogen lighting fixtures.

WL-B05D SERIES LED STICKS FOR INTERIOR APPLICATIONS

Mfg. Part No.	Color	CCT (K)	Supply Voltage (V)	Lumin. Flux (lm)	Stock No.	Price Each 1-4
● WL-B501035L04	Warm White	3300	24	2300	86T5301	263.81
● WL-B501035W04	White	6500	24	2350	86T5302	266.11

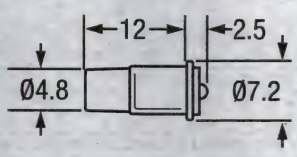
(202119)

206 SERIES FILAMENT REPLACEMENT LEDS—T1 ¾

RoHS Compliant Available

MARL

Features:
- Direct Replacement for T13/4 MF SX6s
- Reverse Polarity Options
- Center Contact, Anode as Standard



206 series filament replacement LEDs are ideal for replacing incandescent lamps with longer lasting, brighter LEDs. Mean time between failure: 100,000 hours. Typical technical characteristics: Ta = 25°C. Water clear lens. Wide viewing angle. Operating temperature: -40°C ~ +80°C. Storage temperature: -40°C ~ +80°C.

Mfg. Part No.	Color	Voltage (VDC)	Current DC (mA)	Luminous Intensity (mcd)	Wave Length (nm)	Stock No.	Price Each 1-9
● 206-532-20-38	Green	5-6	20	23000	527	81C9264	12.46
● 206-532-21-38	Green	12	20	23000	527	68K1162	12.31
● 206-997-20-38	Cool White	5-6	20	14000	...	81C9268	12.46
● 206-997-21-38	Cool White	12	20	14000	...	81C9269	12.46
● 206-997-22-38	Cool White	24	20	14000	...	68K1165	12.62

(72261)

PCB FABRICATION & ASSEMBLY

Quality US-based manufacturers—as fast as 48-hour turnaround!

(197417)

LED REPLACEMENT LAMPS FOR INDOOR APPLICATIONS

RoHS Compliant Available

wamco™

Features:
- Low cost operation: 85% electricity savings compared to incandescent
- Maintenance free – long operating life
- Unique thermal system. Maintains LED junction temperature below 90°C, with only 60°C housing temperature
- Excellent color rendering. CRI-80 with warm white
- Dimmable
- UV and IR free
- UL Approved

WL L04CA10 WL L07A19

DIRECT REPLACEMENT OF 15-40 WATT CANDELABRA LAMPS

Mfg. Part No.	Color	Power Rating (W)	Supply Voltage (V)	CCT (K)	Stock No.	Price Each 1-9
● WL-L04CA10-W27	Warm White	4	120	2800	86T5305	47.55
DIRECT REPLACEMENT OF 60 WATT E26/27 INCANDESCENT BULB						
● WL-L07A19-W27	Warm White	7	120	2800	86T5308	60.06

(202082)

3M COMMERCIAL LED A-19 REPLACEMENT LAMPS

NEW

3M

Features:
- Approved for use in fully enclosed luminaries
- Over 70% of bulb surface illuminated
- Dimmable
- 0.99 power factor
- Usable in damp environments

Specificatons:
- Voltage: 120VAC 50/60Hz
- Base Type: E26
- Size/Format: A19
- Weight: 130g

A-19

A-19 EDISON SCREW / E26

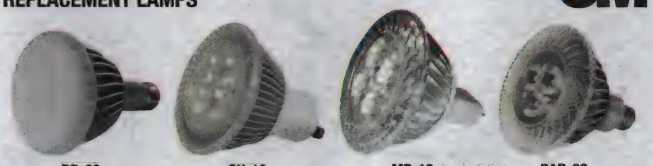
Mfg. Part No.	LED Color	CCT	Avg. Bulb Life	Power (W)	Voltage (V)	Stock No.	Price Each 1-4
RCA19B4	Cool White	4000K	32Yr	12	120	04X5250	29.67
RCA19C4	Cool White	4000K	32Yr	10	120	04X5252	29.67
RCA19B3	White	3000K	25Yr	12	120	04X5249	27.87
RCA19C3	White	3000K	32Yr	10	120	04X5251	29.67

(211394)

3M COMMERCIAL LED REPLACEMENT LAMPS

NEW

3M



BR-30 GU-10 MR-16 PAR-38

Features:
- 5-year warranty
- No UV or IR radiation
- PAR30L, PAR-38, MR-16, GU-10 Halogen form factor (ANSI compliant)
- BR-30 replaces 75W Incandescent lamps

Specificatons:
- Life: 50,000 hours
- PAR30L, PAR-38, GU-10, BR-30 Voltage: 120V
- MR-16 Volatege: 12VAC

BR-30 MEDIUM SCREW

Mfg. Part No.	LED Color	CCT	Avg. Bulb Life	Power (W)	Voltage (V)	Stock No.	Price Each 1-4
RCBR30B27	White	2700K	50000h	12	120	04X5253	37.73
RCBR30B3	White	3000K	50000h	12	120	04X5254	39.99
GU10							
RCGU10	White	2700K	50000h	7	120	04X5255	34.99
MR16 GU5.3							
RCMR16	White	2700K	50000h	6	12	04X5256	34.41
PAR30L MEDIUM SCREW							
RCPAR30LB3	White	3000K	50000h	13	120	04X5257	51.73
PAR38 MEDIUM SCREW							
RCPAR38B27	White	2700K	50000h	15	120	04X5258	57.80
RCPAR38B3	White	3000K	50000h	15	120	04X5259	57.80

(211412)

PAR20 SERIES LED LAMP REPLACEMENTS

RoHS Compliant Available

multicomp

Features:
- Designed as high quality replacement of 35W halogen PAR20 lamps
- Dimmable 20-100%
- Suitable for indoor environments
- Available in WW CCT with 80CRI
- Reduces energy consumption up to 80%
- Lasts 33 times longer than halogen lamps

Specifications:
- Bulb Size: 60mm
- Supply Voltage: 120V
- Average bulb life: 25000h
- Power factor: 0.95

EDISON SCREW / E26 LAMP BASE TYPE

Mfg. Part No.	Color	CCT (K)	Beam Angle	Power Rating (W)	Stock No.	Price Each 1-4
PAR20-LED120V6W25-3000DIM	Warm White	3000	25°	6	92T9573	15.60
PAR30-LED120V10W25-3000DIM	Warm White	3000	25°	10	92T9574	27.30
PAR38-LED120V15W25-3000DIM	Warm White	3000	25°	15	92T9575	42.90
PAR20-LEDE26120V6W40-3000DIM	Warm White	3000	40°	6	05W3808	16.51
PAR30-LEDE26120V10W40-3000DIM	Warm White	3000	40°	10	05W3811	27.30
PAR38-LEDE26120V15W40-3000DIM	Warm White	3000	40°	15	05W3814	42.90
PAR20-LEDE26120V6W25-6000DIM	Cool White	6000	25°	6	05W3807	15.60
PAR30-LEDE26120V10W25-6000DIM	Cool White	6000	25°	10	05W3810	28.65
PAR38-LEDE26120V15W25-6000DIM	Cool White	6000	25°	15	05W3813	42.90
PAR20-LEDE26120V6W40-6000DIM	Cool White	6000	40°	6	05W3809	15.60
PAR30-LEDE26120V10W40-6000DIM	Cool White	6000	40°	10	05W3812	28.65
PAR38-LEDE26120V15W40-6000DIM	Cool White	6000	40°	15	05W3815	45.02

(209458)

LED PAR TYPE LAMP REPLACEMENTS

RoHS Compliant Available

wamco™

WL L07PAR20

WL L07PAR20 P

WL L11PAR30 P

WL L13PAR30

WL L17PAR38

WL L17PAR28 P

Features:
- Unique thermal system
- Long life - 50,000 hours rated life to 70% of initial light output
- Unique optics design provides uniform illumination
- Excellent color rendering. CRI-80 with warm white
- Dimmable
- UV and IR free
- UL Approved

Applications:
- Residential/Commercial Lighting
- Architectural lighting
- Art gallery and museum
- Industrial and commercial area lighting
- P = Waterproof for outdoor applications

RETROFIT FOR MOST PAR20 - REPLACEMENT FOR 55W HALOGEN LAMP

Mfg. Part No.	Color	Power Rating (W)	Supply Voltage (V)	CCT (K)	Stock No.	Price Each 1-9
WL-L07PAR20-W30NF	Warm White	7	120	3000	86T5309	58.34
WL-L07PAR20-W30NF-P	Warm White	7	120	3000	86T5310	85.80
RETROFIT FOR MOST PAR30 - REPLACEMENT FOR 75W HALOGEN LAMP						
WL-L11PAR30-W30NF-P	Warm White	11	120	3000	86T5311	103.55
WL-L13PAR30-W30NF	Warm White	13	120	3000	86T5312	77.39
RETROFIT FOR MOST PAR38 - REPLACEMENT FOR 100W HALOGEN LAMP						
WL-L17PAR38-W30NF	Warm White	17	120	3000	86T5313	104.10
WL-L17PAR38-W30NF-P	Warm White	17	120	3000	86T5314	101.21

(202079)

MR-16 RETROFIT LEDs

RoHS Compliant Available

LUMEX
Creating LED and LCD Solutions Together™

Features:
- Instant light-on
- Quiet (no hum) operation
- Drop in replacement as regular bulbs at compatible rated voltage
- 12V AC/DC power input
- Emits virtually no heat and will not fade fabrics or furnishings
- Equivalent lifespan of up to 17 years assuming Energy Star avg. daily usage of 4 hrs per day

Applications:
- Residential or commercial use
- Hospitality lighting
- Retail lighting
- Indoor lighting
- Spot and flood lights

The SunBrite MR-16 Retrofit LED provides significant cost and performance benefits compared to halogen alternatives widely available in the market today. The SunBrite MR-16 Retrofit LED (SSP-M16 series) technology offers comparable brightness (300 Lumens at 12 volts) and color performance (CRI over 80) to halogen alternatives, while simultaneously providing significant energy, cost and lifespan improvements. The metal body construction of the MR-16 LED serves as a natural heat sink and makes the technology more durable than halogen alternatives. This greatly reduces labor costs associated with bulb replacements – especially in high-ceiling or other difficult to reach locations.

Mfg. Part No.	Color	Beam Angle	Luminous Flux (lm)	CCT (K)	Stock No.	Price Each 1-9
SSP-M16MW012C05	Warm White	24°	315	3000	76T0970	38.78
SSP-M16MW012E05	Warm White	50°	320	3000	76T0971	36.95
SSP-M16UW012C05	Cool White	24°	315	5000	76T0972	38.78
SSP-M16UW012E05	Cool White	50°	325	5000	76T0973	38.78

(201319)

MR16 SERIES LED LAMP REPLACEMENTS

RoHS Compliant Available

multicomp

Features:
- LED lamp designed as high quality replacement of 20W halogen lamps
- Dimmable 20-100%
- Suitable for indoor environments
- Reduces energy consumption up to 80%
- Lasts 33 times longer than halogen lamps

Specifications:
- Average Bulb Life: 25000 hrs
- Bulb size: 50mm
- Supply Voltage: 120V

EDISON SCREW / E26 LAMP BASE TYPE - 4 WATT

Mfg. Part No.	Color	CCT (K)	Beam Angle	Supply Voltage (V)	Stock No.	Price Each 1-4
MR16-LEDE26120V4W25-2700DIM	Warm White	2700	25°	120	92T9564	12.48
MR16-LEDE26120V4W40-2700DIM	Warm White	2700	40°	120	92T9572	13.05
MR16-LEDE26120V4W25-6000DIM	Cool White	6000	25°	120	92T9565	12.48
MR16-LEDE26120V4W40-6000DIM	Cool White	6000	40°	120	92T9566	12.48
GU10 LAMP BASE TYPE - 4 WATT						
MR16-LEDGU10120V4W25-3000DIM	Warm White	3000	25°	120	92T9568	12.48
MR16-LEDGU10120V4W40-3000DIM	Warm White	3000	40°	120	92T9567	13.05
MR16-LEDGU10120V4W25-6000DIM	Cool White	6000	25°	120	92T9569	12.48
MR16-LEDGU10120V4W40-6000DIM	Cool White	6000	40°	120	92T9561	13.21
GU5.3 LAMP BASE TYPE - 5 WATT						
MR16-LEDGU5.312V5W25-2700DIM	Warm White	2700	25°	12	92T9570	13.26
MR16-LEDGU5.312V5W40-2700DIM	Warm White	2700	40°	12	92T9562	13.26
MR16-LEDGU5.312V5W25-6000DIM	Cool White	6000	25°	12	92T9571	11.70
MR16-LEDGU5.312V5W40-6000DIM	Cool White	6000	40°	12	92T9563	11.70

(209456)

(196526)

LED REPLACEMENTS

TRUE 360™ MINIATURE LEDS

RoHS Compliant Available

CEC INDUSTRIES LTD.

Features and Benefits:
- Major reduction in heat generation
- Shatter resistant plastic envelope
- AC-DC bi-polar design
- Low maintenance/labor savings
- True 360° viewing angle
- Long life: 100,000 hours
- Solid state, high shock/vibration resistant

T-3 ¼, WEDGE BASE, 12V

Mfg. Part No.	Color	Wave-length (nm)	Luminous Flux (Lumens)	Can replace these bulbs	Stock No.	Price Each 1-9
● L12V-WB-R	Red	629	3.15	158, 159, 161, 168, 184, 193, 194, 658	43T7533	10.08
T-3 1/4, WEDGE BASE, 24V						
● L24V-WB-A	Amber	590	1.54	152, 400, 464, 585, 655, 656, 657	78R3989	10.08
● L24V-WB-B	Blue	470	0.8		78R3990	16.37
T-3 1/4, MINIATURE BAYONET BASE, 6.3V						
● L24V-WB-G	Green	525	3.5	51,55,44,239,755, 1406,1847,1850, 1866,1810,1888,1906	78R3991	16.37
● L24V-WB-R	Red	629	3.15		78R3992	10.08
● L24V-WB-W	White	...	2.8		78R3993	17.52
● L24V-WB-WW	Warm White	...	2.2		78R3994	16.37
T-3 1/4, MINIATURE BAYONET BASE, 12V						
LM1012MB-R	Red	625	3.8	53,57,182,293, 756,1445,1488, 1815,1816, 1889, 1891,1893,1895	85K8147	10.64
LM1012MB-W	White	...	3.1		85K8148	17.30
T-3 1/4, MINIATURE BAYONET BASE, 24V						
● L24V-MB-B	Blue	470	1.85	313,757,1818, 1819,1820,1829, 1843,1864,1873, 1437,1450,1484	78R3984	17.52
● L24V-MB-W	White	...	3.1	313, 757, 1818, 1819, 1820, 1829, 1843, 1864, 1873, 1437, 1450, 1484	78R3987	17.86
T-3 1/4, MINIATURE BAYONET BASE, 48V						
LM1048MB-W	White	...	0.78	48MB,3T4/48V	85K8196	17.29
T-3 1/4, MINIATURE BAYONET BASE, 60V						
LM1060MB-W	White	...	1	60MB,3T4/60V, 1835	85K8202	17.29
T-3 1/4, MINIATURE BAYONET BASE, 120V						
● L120V-MB-B	Blue	470	0.35	120 MB	45T9726	16.34
● L120V-MB-G	Green	525	1.5		37T9657	17.52
T-3 1/4, MINIATURE BAYONET BASE, 160V						
LM10160MB-W	White	...	1.2	160 MB	85K8172	17.53
T-3 1/4, MINIATURE SCREW BASE, 6.3V						
LM1006MS-W	White	...	3.1	40,46,50,133, 134,401,438, 502,1482	85K8136	17.53
T-6, CANDELABRA SCREW BASE, 120V						
L20120CS-W	White	...	1.2	3S6/12V, 6S6/12V	90T0827	18.03
L20120CS-WW	Warm White	...	1.2	3S6/12V, 6S6/12V	94T5278	18.26
T-1 3/4, WEDGE BASE, 12V						
LM0512WB-W	White	...	0.55	18,37,73,74	85K8124	7.18

(88574)

multicomp AT NEWARK ELEMENT14

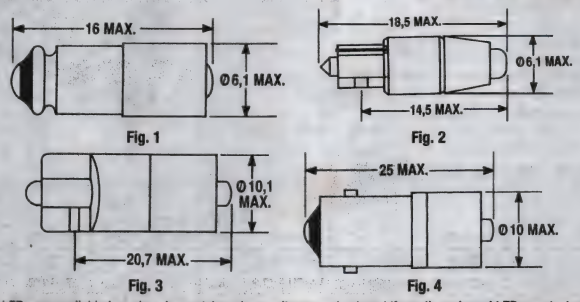
Affordable, performance board level & box build components at newark.com/multicomp

(212569)

BASED LEDS - T-1 ¾ THROUGH T-3 ¼

RoHS Compliant Available

CML INNOVATIVE TECHNOLOGIES WHERE INNOVATION COMES TO LIGHT



Based LEDs are available in various base styles, sizes, voltages and colors. Life on these based LEDs are typically in excess of 100K hours as opposed to as low as 500 for some based incandescent bulbs.

T 1¾ MIDGET GROOVE BASE LEDS - FIGURE 1

Mfg. Part No.	Color	Voltage Rating (VDC)	Current AC/DC (mA)	Typical Intensity (mcd)	Stock No.	Price Each 1-9	Price Each 10-99
● 1512125UG3	Green	12	14	910	93K6661	10.63	7.51
● 1512125UR3	Red	12	14	330	93K6662	7.45	5.22
● 1512125W3	White	12	14	700	93K6664	10.91	7.64
● 1512135UG3	Green	24	14	700	93K6666	10.91	7.64
● 1512135UR3	Red	24	14	330	93K6667	7.68	5.43
● 1512135W3	White	24	14	700	93K6669	10.78	7.55
● 1512145UG3	Green	28	14	910	93K6671	11.25	7.95
● 1512145UR3	Red	28	14	330	93K6672	8.13	5.75
T 1-3/4 WEDGE BASE LEDS - FIGURE 2							
● 1511A35UY3	Yellow	24	12	240	93K6640	8.85	6.25
● 1511A45W3	White	28	12	600	93K6645	11.96	8.37
● 1512145W3	White	28	12	600	93K6674	10.91	7.64
T 3-1/4 WEDGE BASE LEDS - FIGURE 3							
● 1860225W3	White Clear	12	16	1600	93K6684	11.81	8.27
T10 BA9 STYLE SINGLE CONTACT BAYONET BASE - FIGURE 4							
● 1860235W3	White	24	15	750	93K6688	11.51	8.13
● 1860235W3D	White	24	15	750	50H7189	11.16	7.81
● 18602350	Red	24	15	350	93K6689	8.16	5.71
● 18602351	Green	24	15	1000	93K6690	12.18	8.61
● 18602357	Blue	24	15	300	93K6692	11.16	7.81
● 1860245W3	White	24	15	750	93K6693	11.97	8.38
● 1860613W3D	White	130 VAC	5	250	82H9458	14.87	10.40

(89151)

586 SERIES BASED LED LAMPS

RoHS Compliant Available

Dialight

- LEDs Feature 100,000 Life Hours
- Highly Reliable, Shock and Vibration Resistant
- Uses up to 90% less energy than incandescent lamps

Dialight's **586 series** based LED lamps are designed to directly replace many subminiature and miniature incandescent lamps.The benefits of LED technology over incandescent are significant.

T1-3/4 BULB SIZE

Mfg. Part No.	Color	Base Type	Wave-length (nm)	Voltage (V)	Current (mA)	Intensity Typ. (mcd)	Stock No.	Price Each 1-24
● 586-1101-101F	Red	Midget Flange	639	6	10	775	33M4493	3.71
● 586-1101-103F	Red	Midget Flange	639	14	10	775	30M2103	3.87
● 586-1101-105F	Red	Midget Flange	639	28	10	775	33M4494	3.60
● 586-1102-101F	Green	Midget Flange	520	6	10	600	33M4495	7.09
● 586-2406-205F	White	Mini-Bayonet	...	28	7.5	412	33M4607	7.46
● 586-1106-105F	White	Midget Flange	...	28	10	460	33M4502	6.16

T3-1/4 BULB SIZE

Mfg. Part No.	Color	Base Type	Wave-length (nm)	Voltage (V)	Cur-rent (mA)	Intensity Typ. (mcd)	Stock No.	Price Each 1-24
● 586-2403-205F	Yellow	Miniature Bayonet / BA9S	592	28	7.5	637	33M4593	5.15
● 586-6406-205F	White	Miniature Bayonet / BA9S	...	28	11	4000	22M4404	17.79

(97802)

T-3¼ MINIATURE BAYONET LED LAMPS (BA9's)

RoHS Compliant Available

Dialight

Replace incandescent lamps with a LED lamp for greater brightness and longer life. The **586 series** LED lamps are polarized single LEDs in a T-3¼ bayonet based package, designed to directly replace popular incandescent lamps. Example incandescent lamp replacement numbers are: 44, 47, 313, 755, 757, 1815, 1819, 1847, 1866, 1889, 1891, 1892, 1893 and 1895. **586-2 models** are 29.21mm (1.15") L x 10.92mm (0.43") W.

Mfg. Part No.	Color	Dominant Wavelength (nm)	Nominal Voltage (V)	Forward Current Typ. (mA)	Intensity Typ. (mcd)	Stock No.	Price Each 1-24
586-2401-103	Red	630	14	15	1400	25C0082	6.55
● 586-2401-105F	Red	630	28	15	1050	33M4578	3.70
● 586-2406-105F	White	*	28	15	825	33M4604	5.89

*Color Coordinates: x = 0.33, y = 0.365
(72858)

LED REPLACEMENT BULBS T3-1/4 (BA9S) BAYONET BASED

RoHS Compliant Available

wamco™

Features:
- Solid-state reliability
- Long operating life
- Low power consumption
- Low heat generation

WL 1860 Series

WL 1862 Series

High brightness solid-state light emitting diode (LED) technology ideally suited for replacement of incandescent lamps. The specified versions include an integrated protection diode allowing for operation at an equivalent alternating voltage.

Mfg. Part No.	Color	Current (mA)	Lumin. Intens. (mcd)	Wavelength (nm)	Stock No.	Price Each 1-24
12V AC/DC, REPLACES INCANDESCENT LAMPS 12MB, 181, 756, 1488 1815, 1894, 1891, 1893, 1898						
● WL-18602250	Red	15	2500	630	86T5481	6.25
● WL-18602257	Blue	15	700	470	86T5482	8.08
● WL-1860225W3D	White	15	800	...	86T5480	8.55
24V AC/DC, REPLACES INCANDESCENT LAMPS 24MB, 1437, 1818						
● WL-18602350	Red	15	2500	630	86T5484	6.25
● WL-18602351	Green	15	2400	525	86T5485	8.45
● WL-18602357	Blue	15	700	470	86T5486	8.55
● WL-1860235W3D	White	15	800	...	86T5483	8.45
28V AC/DC, REPLACES INCANDESCENT LAMPS 313, 757, 1819, 1820, 1829, 1843, 1864, 1873						
● WL-18602450	Red	15	2500	630	86T5488	6.17
● WL-18602451	Green	15	2400	525	86T5489	8.45
● WL-18602452	Yellow	15	600	589	86T5490	6.91
● WL-18602457	Blue	15	700	470	86T5491	8.08
● WL-1860245W3	White	15	1700	...	86T5487	8.67
130VAC, REPLACES INCANDESCENT LAMP 949						
● WL-18606130	Red	5	800	630	86T5494	7.14
● WL-18606131	Green	5	800	525	86T5495	11.91
● WL-18606132	Yellow	5	200	589	86T5496	8.34
● WL-18606137	Blue	5	250	470	86T5497	11.25
● WL-1860613W3	White	5	530	...	86T5492	12.06
● WL-1860613W3D	White	5	280	...	86T5493	11.76
ULTRA BRIGHT TRIO LED, 24V AC/DC, REPLACES INCANDESCENT LAMPS 24MB, 1437, 1818						
● WL-18620350	Red	17	8400	630	86T5499	9.63
● WL-18620351	Green	17	7800	525	86T5500	19.32
● WL-18620352	Yellow	17	2100	589	86T5501	9.63
● WL-18620357	Blue	17	2400	470	86T5502	19.32
● WL-1862035W3D	White	17	...	...	86T5498	20.45
ULTRA BRIGHT TRIO LED, 28V AC/DC, REPLACES INCANDESCENT LAMPS 313, 757, 1819, 1820, 1829, 1843, 1864, 1873						
● WL-18620450	Red	17	8400	630	86T5503	9.63
● WL-18620452	Yellow	17	7800	589	86T5504	9.63
ULTRA BRIGHT TRIO LED, 130VAC, REPLACES INCANDESCENT LAMP 949						
● WL-18626130	Red	5	2400	630	86T5505	12.38
● WL-18626131	Green	5	2400	525	86T5506	21.56

➤CONTINUED➤

LED REPLACEMENT BULBS T3-1/4 (BA9S) BAYONET BASED (CONT.)

Mfg. Part No.	Color	Current (mA)	Lumin. Intens. (mcd)	Wavelength (nm)	Stock No.	Price Each 1-24
ULTRA BRIGHT TRIO LED, 130VAC, REPLACES INCANDESCENT LAMP 949						
● WL-18626132	Yellow	5	600	589	86T5507	12.38
● WL-18626137	Blue	5	750	470	86T5508	20.37
ULTRA BRIGHT TRIO LED, 230VAC, REPLACES INCANDESCENT LAMP 949						
● WL-18626230	Red	3	1500	630	86T5509	11.70
● WL-18626231	Green	3	1410	525	86T5510	21.56
● WL-18626232	Yellow	3	450	589	86T5511	11.70

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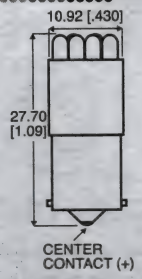
T-3¼ BAYONET LED CLUSTER LAMPS

RoHS Compliant Available

Dialight

Cluster



Features:
- LEDs Feature 100,000 Life Hours
- Highly Reliable, Shock and Vibration Resistant
- AC or DC Operation
- 120 Degree Viewing Angle

Replace incandescent lamps with a cluster of LEDs for greater brightness and longer life. **585 series** LED cluster lamps are available polarized or non-polarized, up to 120VAC, in a T-3¼ bayonet based package. The lamps directly replace a wide variety of incandescent lamps, for example: 44, 47, 313, 755, 757, 1815, 1819, 1847, 1866, 1889, 1891, 1892, 1893 and 1895. **585-5 models** are 1.09" (27.7mm) L x 0.430" (10.92mm) W.

Based LED Color	For Use With Lens Cap
Red	Red Transparent, Red Transparent Fluted
Yellow	Amber Transparent, Amber Transparent Fluted
Green	Green Transparent, Green Transparent Fluted

Mfg. Part No.	Color	Base Type	Wave-length (nm)	Voltage (V)	Cur-rent (mA)	Intensity Typ. (mcd)	Stock No.	Price Each 1-24
CLUSTER								
585-5525	Bright Yellow	Bayonet	592	28	30	2100	52F464	15.29
585-5556	Bright Yellow	Bayonet	592	120VAC	9	945	52F468	8.66
585-4325	Green	Bayonet	565	28	15	75	52F381	8.79
● 585-5356F	Green	Bayonet	565	120VAC	0.009	220	33M4463	8.66
585-5225	Ultra Red	Bayonet	660	28	20	560	52F397	12.93
● 585-5256F	Ultra Red	Bayonet	660	120VAC	9	252	97W1523	8.66
T-1-3/4 BI-PIN, WEDGE AND MIDGET FLANGE								
● 585-1315F	Green	Midget Flange	565	28	15	75	33M4453	9.60
● 585-1225F	Red	Midget Flange	660	28	14	64	33M4450	10.82

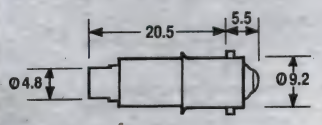
(48287)

255 SERIES FILAMENT REPLACEMENT LEDS— T1 ¾ BAYONET CAP

RoHS Compliant Available

MARL

Features:
- Unique SOLO Technology - Single Product for Multivoltage Operating Range: 8-48VAC/DC
- Resistant to Vibration and Shock



Replace incandescent lamps with longer lasting and brighter LEDs. Lens: water clear. Wide viewing angle. Operating temperature: -20°C to +50°C. Mean time between failure: 100,000 hours.

Mfg. Part No.	Color	Voltage (VDC)	Current DC (mA)	Luminous Intensity (mcd)	Wave Length (nm)	Stock No.	Price Each 1-9
● 255-501-64-38	Red	8 - 48	10	2750	660	68K1207	16.77
● 255-521-64-38	Yellow	8 - 48	10	4500	590	68K1208	16.77
● 255-532-64-38	Green	8 - 48	10	6000	525	69K4415	20.13
● 255-997-64-38	Cool White	8 - 48	10	3000	...	68K1209	21.58

(69174)

LED REPLACEMENTS

LED LAMPS WITH BASES

RoHS Compliant Available

multicomp

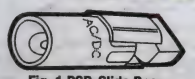


Fig. 1 PSB-Slide Base

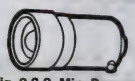


Fig. 2 S.C. Min. Bayonet

Single LEDs are available in 4 colors and 4 styles. Resistors are in base AC and DC. Lenses are water-clear.

Mfg. Part No.	Replaces Incand. Mfg. Part No.'s	Volt. (V)	Emitted Color	Wave. Peak (nm)	Typ. I_V (MCD)* @ I_F=20mA	Viewing Angle	Stock No.	Price Each 1-24
FIG. 1 - PSB-SLIDE BASES, MOL = 1.18″								
● SPC10538	24PSB5 or 28PSB5	24-28 AC/DC	White	Mixed	1270	60°	12P6297	15.10
● SPC10539			Red	635	2000	50°	19C8073	14.17
● SPC10540			Green	520	3400	45°	19C8074	10.86
● SPC10544	120PSB5	110-130 AC/DC	White	520	3400	45°	19C8078	22.90
● SPC10545			Green	590	1300	30°	61M2944	13.39
FIG. 2 - MINI BAYONET BASES, MOL = 1.19″								
● SPC10554	SPAN ERROR	SPAN ERROR	White	Mixed	1560	50°	19C8088	22.43
● SPC10556	24MB, 28MB, 1818, 1843, 1819, 1829, 757, 1820, 1864, 313, 1873	24-28 AC/DC	Green	520	2400	45°	19C8090	14.77
● SPC10558	120MB	110-130 AC/DC	White	Mixed	1560	50°	19C8092	22.61

* mcd correct only for 20mA; lamps may not be 20mA due to different resistors
(59577)

LED REPLACEMENT BULBS T1-3/4 MIDGET FLANGE AND GROOVE BASED

RoHS Compliant Available

wamco™

Features:
- Solid-state reliability
- Long operating life
- Low power consumption
- Low heat generation

WL 1510 Series

WL 1512 Series

High brightness solid-state light emitting diode (LED) technology ideally suited for replacement of incandescent lamps.

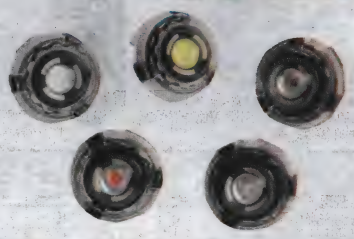
Mfg. Part No.	Color	Current (mA)	Lumin. Intens. (mcd)	Wavelength (nm)	Stock No.	Price Each 1-24
12V AC/DC, MIDGET GROOVE, REPLACES INCANDESCENT LAMPS 336, 386, 393						
● WL-1512125B3	Blue	14	680	470	86T5475	7.47
● WL-1512125UR3	Red	14	350	630	86T5476	5.39
● WL-1512125W3D	White	14	720	...	86T5477	7.47
24V AC/DC, MIDGET GROOVE, REPLACES INCANDESCENT LAMPS 276, 334, 388						
● WL-1512135B3	Blue	14	680	470	86T5478	7.47
● WL-1512135W3	White	14	1430	...	86T5479	7.91
28VDC, MIDGET FLANGE, POSITIVE CENTER, REPLACES INCANDESCENT LAMPS 327, 376, 385, 387						
● WL-1510145UR3	Red	14	2400	630	86T5472	5.80
● WL-1510145UY3	Yellow	14	600	589	86T5473	6.53
● WL-1510145W3	White	14	1430	...	86T5474	9.11

(202071)

SCREW THREAD POWER LED

WELDON A DIVISION OF AKRON BRASS

Features:
- Solder-Free mechanical attachment for easy installation and replacement
- Annular contact arrangement eliminates need for radial alignment
- Excellent thermal coupling to lighting system
- Large LED chip allows high drive current
- Outstanding light output
- Wide viewing angle
- UV resistant cover lens
- Operating Temperature Range: -40°C to +85°C



Mfg. Part No.	Color	Wave-length (nm)	Luminous Flux (lm)	Forward Voltage (V) @ 20 mA	View Angle (°)	Stock No.	Price Each 1-49
9900-1201-12	Red	632	40	230	130	89M5415	3.93
9900-1201-13	Red	632	95	230	130	89M5416	6.02
9900-1201-22	Amber	597	40	230	130	89M5417	4.29
9900-1201-23	Amber	597	95	230	130	89M5418	5.02

➤CONTINUED➤

SCREW THREAD POWER LED (CONT.)

Mfg. Part No.	Color	Wave-length (nm)	Luminous Flux (lm)	Forward Voltage (V) @ 20 mA	View Angle (°)	Stock No.	Price Each 1-49
9900-1201-37	White	...	52	3.5	110	89M5419	6.63
9900-1201-77	Green	540	50	3.5	120	89M5422	6.55

(113836)

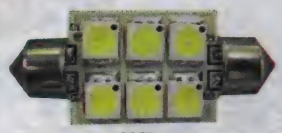
FESTOON BASED LED BULB REPLACEMENTS

RoHS Compliant Available

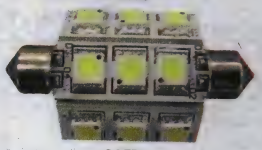
multicomp

3 LEDs

6 LEDs WATERPROOF



6 LEDs



9 LEDs

Features:
- High brightness, small size
- Long life span:>5000hours
- Environment friendly
- No mercury or other materials
- No UV, IR
- Energy-saving, Environment friendly
- 10-30VDC Supply Voltage

Applications:
- Reading lights (Automotive, Marine, Aircraft)
- Portable (flashlight, bicycle)
- Decorative
- Architectural Detail
- Cove Lighting
- Automotive Exterior
- Household appliances

Mfg. Part No.	Color	CCT (K)	Power Rating (W)	Current (mA)	Lumin. Flux (lm)	Stock No.	Price Each 1-4
FESTOON 37mm, 3 LEDs							
● MCF373BS30DCW	Cool White	7000	0.66	40	52	78T6855	7.37
● MCF373BS30DWW	Warm White	3200	0.66	40	48	78T6857	7.17
FESTOON 37mm, 6 LEDs							
● MCF376BS30DCW	Cool White	7000	1.5	110	107	78T6861	8.73
● MCF376BS30DWW	Warm White	3200	1.5	110	97	78T6863	8.73
FESTOON 42mm, 3 LEDs							
● MCF423BS30DCW	Cool White	7000	0.5	40	45	78T6869	6.86
● MCF423BS30DWW	Warm White	3200	0.5	40	38	78T6871	6.86
FESTOON 42mm, 6 LEDs							
● MCF426BS30DWW	Warm White	3200	1.5	90	97	78T6885	9.37
FESTOON 42mm, 6 LEDs, WATERPROOF							
● MCF426NSC30DCW	Cool White	7000	...	40	...	78T6887	8.57
● MCF426NSC30DWW	Warm White	3200	...	40	40	78T6888	8.10
FESTOON 42mm, 9 LEDs							
● MCF429BS30DCW	Cool White	7000	2	160	160	78T6889	11.84
● MCF429BS30DWW	Warm White	3200	2.1	160	141	78T6891	11.84

(202157)

G4 BASED 360 DEGREE LED BULB REPLACEMENTS

RoHS Compliant Available

multicomp

12 LEDs

18 LEDs - 2W

18 LEDs - 3.2W

Features:
- Designed as an ideal replacement for halogen G4 lamp
- Super bright SMD5050 LEDs as the light source
- Operating voltage range 10-30V
- No mercury
- No UV, IR or other deleterious radiation
- Consumes as low as 1.3W power
- Rated life up to 40,000hrs

Applications:
- Marine
- Automotive
- Backlighting
- Light source in fixtures

Mfg. Part No.	Color	CCT (K) or Wavelength (nm)	Power Rating (W)	Current (mA)	Lumin. Flux (lm)	Stock No.	Price Each 1-4
12 LEDs							
● MCG412NSTP30DCW	Cool White	7000K	0.54	45	60	78T6919	8.47
● MCG412NSTP30DWW	Warm White	3200K	0.54	45	55	78T6920	8.57

➤CONTINUED➤

G4 BASED 360 DEGREE LED BULB REPLACEMENTS (CONT.)

18 LEDs, 2W

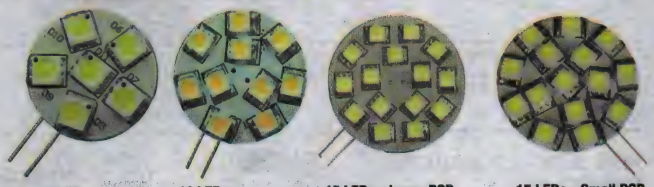
Mfg. Part No.	Color	CCT (K) or Wavelength (nm)	Power Rating (W)	Current (mA)	Lumin. Flux (lm)	Stock No.	Price Each 1-4
MCG418BS30DCW01	Cool White	7000K	2.04	200	182	78T6970	14.96
18 LEDs, 3.2W							
MCG418BS30DWW00	Warm White	3200K	3.2	200	212	79T9213	16.03
MCG418BS30DGN	Green	550nm	3.2	200	80	78T6971	15.14
MCG418BS30DRD	Red	700nm	3.2	200	170	78T6972	16.03

(202161)

G4 SIDE PIN BASED LED BULB REPLACEMENTS

RoHS Compliant Available

multicomp



6 LEDs | 10 LEDs | 15 LEDs - Large PCB | 15 LEDs - Small PCB

Features:
- Designed as an ideal replacement for halogen G4 lamp
- Super bright SMD5050 LEDs as the light source
- Operating voltage range 10-30V
- No mercury
- No UV, IR or other deleterious radiation
- Consumes as low as 1.3W power
- Rated life up to 40,000hrs

Applications:
- Marine
- Automotive
- Backlighting
- Light source in fixtures

6 LEDs

Mfg. Part No.	Color	CCT (K)	Power Rating (W)	Current (mA)	Lumin. Flux (lm)	Stock No.	Price Each 1-4
MCG46BSS30DCW	Cool White	7000	1.2	100	88	78T7038	8.57
10 LEDs							
MCG410BSS30DCW	Cool White	7000	2.2	180	165	78T6914	11.22
15 LEDs, SMALL PCB							
MCG415BS30DSWW	Warm White	3200	1.8	190	157	78T6957	13.71
15 LEDs, LARGE PCB							
MCG415BSS30DCW	Cool White	7000	3	190	240	78T6942	14.51
MCG415BSS30DWW	Warm White	3200	3	190	197	78T6945	13.71

(202168)

WEDGE T10 BASED LED BULB REPLACEMENTS

RoHS Compliant Available

multicomp

10 LEDs | 6 LEDs | 15 LEDs | 18 LEDs

Features:
- Designed as a direct replacement for traditional T10 incandescent Auto bulbs
- No UV, IR or other deleterious radiation
- No deleterious material
- Low power consumption
- Long life up to 40,000hrs
- Excellent thermal performance

6 LEDs, SIDE BASED

Mfg. Part No.	Color	CCT (K)	Power Rating (W)	Current (mA)	Lumin. Flux (lm)	Stock No.	Price Each 1-4
MCT106BSS30DWW	Warm White	3200	1.5	100	97	78T7137	8.73
10 LEDs, SIDE BASED							
MCT1010BSS30DCW	Cool White	7000	2.4	180	157	78T7086	11.22
15 LEDs, BOTTOM BASED							
MCT1015SS12DCW	Cool White	7000	1.3	60	82	78T7097	11.88
18 LEDs, BOTTOM BASED							
MCT1018BS30DCW00	Cool White	7000	3.2	200	266	78T7108	15.58
MCT1018BS30DWW00	Warm White	3200	3.2	200	231	78T7111	15.58

(202189)

S8 BAYONET AND SCREW BASED LED BULB REPLACEMENTS

RoHS Compliant Available

multicomp

BA15S BAYONET BASE | BA15D BAYONET BASE | BAY15D BAYONET BASE (OFFSET PINS) | E14 SCREW BASE | E12 SCREW BASE

Features:
- Drop in Replacement
- Instant ON/OFF
- Shock & Vibration Resistant
- Ultra-energy-efficient replacement for max 15W halogen auto lamps
- 40,000 hours average lifetime: Less maintenance
- No mercury
- Waterproof
- No UV, IR
- 10-30V DC for use where current is not constant

Applications:
- Tail light
- Instrument light
- Dome light
- Under hood light

BA15S BAYONET BASE

Mfg. Part No.	Color	CCT (K)	Power Rating (mW)	Current (mA)	Lumin. Flux (lm)	Stock No.	Price Each 1-4
MCS815S16NS30DWW	Warm White	3200	700	14	60	79T1323	13.37
MCS815S16NS30DNW	Neutral White	4750	700	14	63	79T1322	13.03
MCS815S16NS30DCW	Cool White	7000	700	14	68	79T1321	13.37
BA15D BAYONET BASE							
MCS815D16NS30DWW	Warm White	3200	700	14	60	79T1317	13.19
MCS815D16NS30DNW	Neutral White	4750	700	14	63	79T1316	13.19
MCS815D16NS30DCW	Cool White	7000	700	14	68	79T1315	13.37
BAY15D BAYONET BASE (OFFSET PINS)							
MCS8Y15D16NS30DWW	Warm White	3200	700	14	60	79T1311	13.03
MCS8Y15D16NS30DNW	Neutral White	4750	700	14	63	79T1310	13.19
MCS8Y15D16NS30DCW	Cool White	7000	700	14	68	79T1309	13.19
E12 SCREW BASE							
MCS8E1216NS30DWW	Warm White	3200	700	14	60	79T1301	13.19
MCS8E1216NS30DNW	Neutral White	4750	700	14	63	79T1300	13.19
MCS8E1216NS30DCW	Cool White	7000	700	14	68	78T7069	13.19
E14 SCREW BASE							
MCS8E1416NS30DWW	Warm White	3200	700	14	60	79T1305	12.46
MCS8E1416NS30DCW	Cool White	7000	700	14	68	78T7074	13.03

(202193)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196537)

LCD DISPLAYS

WEATHER RESISTANT DATA DISPLAYS

NEW RoHS Compliant Available Storm Interface

Features:
- Impact, shock and vibration resistant
- Sealed for use in wet or dirty environments
- Programmable USB display controller and system interface
- Display connects to the host system via a single USB cable with a USB Mini-B connector
- Resistant to petrochemicals, detergents and most commonly used non-abrasive cleaning agents
- Easy to use API with downloadable object code libraries
- USB 2.0 HID compliant device
- Transflective display mode

- Supply voltage: 5V
- Graphic displays: 128 x 64 pixel
- Character displays: 4 or 8 line x 20 characters

These robust, monochrome displays are ideal for use in exposed or industrial environments. Bright white transflective display technology is securely encased within a sealed and impact resistant bezel. The bezel features a hard coated UV and scratch resistant, polycarbonate window. These USB 2.0 display devices can be easily installed into any control panel or equipment enclosure. The display assemblies can be specified with or without three independently illuminated menu navigation keys. Illumination is under software control (on/off/flashing). The Storm 5100 Series displays are rated for use in either industrial or extreme environments. They offer a ready to use display solution for a wide range of indoor or outdoor applications.

DATA DISPLAYS

Mfg. Part No.	LCD Display Type	Stock No.	Price Each 1-9	10-24	25-49
INDUSTRIAL - DISPLAY ONLY					
● 5100-0003	Character	33X3906	103.82	96.45	90.12
● 5100-1003	Graphic	33X3908	112.33	104.35	97.51
INDUSTRIAL - 3 KEYS					
● 5103-0003	Character	33X3910	115.80	107.57	100.52
● 5103-1003	Graphic	33X3912	124.29	115.46	107.89
EXTREME - DISPLAY ONLY					
● 5100-0103	Character	33X3907	120.31	111.76	104.43
● 5100-1103	Graphic	33X3909	128.80	119.65	111.80
EXTREME - 3 KEYS					
● 5103-0103	Character	33X3911	132.27	122.87	114.81
● 5103-1103	Graphic	33X3913	140.78	130.78	122.20

Industrial Displays: IP54, Extreme Displays: IP65

ACCESSORIES

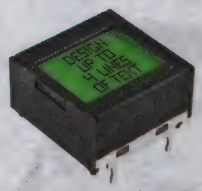
Mfg. Part No.	Accessory Type	Stock No.	Price Each 1-49	50-99	100-249
● 5100-FK03	USB Display Fixing Kit and Gasket	33X3905	12.40	11.25	10.31
● 4500-013	One Meter USB Cable for USB Display (USB A to 90° USB Mini-B)	08X3773	5.40	5.40	5.40

(211545)

SmartSwitch LCD DISPLAYS

NEW NKK SWITCHES

Features:
- 36X24: up to 3 lines of 6 characters each
- 64X32: up to 4 lines of 10 characters each
- Broad and even light distribution
- Consistent bright backlighting
- Lower energy consumption
- Programmable
- Viewing area 13.9mm x 10.6mm
- Epoxy sealed terminals



These LCD Displays are the smallest off-the-shelf LCD display in the market. This display is about the size of a nickel coin. Use the display for graphics, animations, and alphanumeric messages. Flexible control of backlighting and LCD. Single, Bicolor, and RGB backlighting. SMARTDISPLAY can be used alone or in conjunction with electromechanical switches. Ideal for control panels and keyboards.

Mnf. Part No.	Size	Backlight LED	Display Condition	Display Mode	Stock No.	Price Each Each
IS01BCCF	36 x 24	Red, Green	Transflective	STN	09X9994	34.44
IS01BFRGB	36 x 24	Red, Green, Blue	Transflective	FSTN	09X9997	44.01
IS01DBFRGB	64 x 32	Red, Green, Blue	Transflective	FSTN	09X9998	51.85

(211889)

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(196525)

LCD PANEL/SEGMENT DISPLAYS

RoHS Compliant Available AND Displays

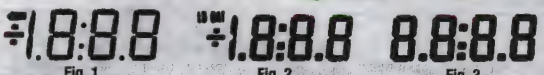


Fig. 1 Fig. 2 Fig. 3

Operating temperature range: –30°C to +85°C. Backlight viewing mode designation: DU suffix for reflective, EU suffix for transflective.

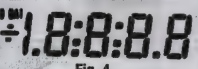


Fig. 4

Mfg. Part No.*	Digit Height (in.)	Fig.	Package Dimensions (L x W)	Stock No.	Price Each 1-9
● FE0201W-DU	0.5″	1	2 x 1.2″	44F4116	5.62
● FE0203W-DU	0.5″	2	2 x 1.2″	93K7551	6.93
● FE0203W-EU	0.5″	2	2 x 1.2″	88K1930	8.01
● FE0202W-DU	0.5″	3	2 x 1.2″	88K1087	6.93
● FE0206W-DU	0.5″	4	2 x 1.2″	44F4119	7.08

* **DU suffix** indicates reflective mode; **EU suffix** which indicates transflective option for backlighting is also available; *go online or call*. **Example:** to receive a 0.5″ high, 4-digit, wide temperature, high humidity, reflective panel display, order FE202W-DU.
(3878)

INTELLIGENT ALPHANUMERIC STN DISPLAYS

RoHS Compliant Available AND Displays

All mfg. part nos. with a "-GST" suffix are gray STN reflective. All mfg. part nos. with a "-LED" suffix are transmissive with a yellow/green LED backlight. All mfg. part nos. use the HD44780 microcontroller.

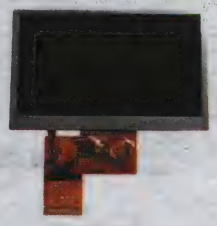
Mfg. Part No.	Line x Characters	Character Size (mm)	Dimensions Viewing (mm)	Overall (mm)	Stock No.	Price Each 1-4
● AND671GST	1 x 16	3.07 x 6.56	64.5 x 13.8	80 x 36 x 11.3	88K1874	7.29
● AND491GST	2 x 16	2.95 x 4.35	64.5 x 13.8	80 x 36 x 11.3	88K1872	9.05
● AND491GST-LED	2 x 16	2.95 x 4.35	64.5 x 13.8	80 x 36 x 11.3	15B5644	24.09
● AND731GST	4 x 16	2.95 x 4.15	61.8 x 25.2	87 x 60 x 11.6	91F4659	22.55
● AND721GST	4 x 20	2.95 x 4.75	76 x 25.2	98 x 60 x 12	88K1875	20.95
● AND721GST-LED	4 x 20	2.95 x 4.75	76 x 25.2	98 x 60 x 16	15B5652	26.03

(3877)

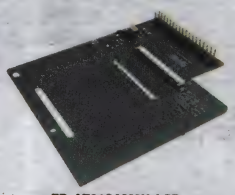
LCD MODULES AND EXPANSION BOARDS

RoHS Compliant Available KENTEC DISPLAY

Features:
- White LED backlight
- Touch screen/ panel



K430WQA-V4-F



EB-AT91SAM3U-LCD

TFT LCD MODULES

Mfg. Part No.	Dimensions LxHxD (mm)	Viewing Area LxH (mm)	Resolution Dots (pixels)	Interface	Stock No.	Price Each 1-24
K430WQA-V4-F	105.5x67.2x4.1	95.04x53.86	480x272	24-bit RGB	82T4652	23.81
K50DWN0-V1-F	120.8x76x4.2	108x64.8	800x480	24-bit RGB	82T4653	56.50
K70DWN0-V1-F	164.9x100x7.3	154.08x85.92	800x480	24-bit RGB	82T4654	55.86
K90DWN0-V1-F	211.1x126.5x7.2	198x111.7	800x480	24-bit RGB	82T4655	91.27
BI-STABLE CHOLESTERIC DISPLAY MODULE - BUILT IN VOLTAGE BOOSTER						
KTBCD430-D1	65x43.4x3.15	55.025x27.055	128x64	SPI	82T4649	18.49

For Use With:
- 4.3 inch: K430WQC-V3-FF
- 5.0 inch: K50DWN2-V1-FF
- 7.0 inch: K70DWN2-V1-FF
- 9.0 inch: K90DWN2-V1-FF

Specifications:
- LED backlight driver circuit
- 60 pin FPC connector
- Core Architecture: ARM Cortex-M3

EXPANSION BOARDS

Mfg. Part No.	Dimensions LxHxD (mm)	Development Board	Dev. Board Manuf.	Stock No.	Price Each
EB-AT91SAM3U-LCD	90x76.85x12	EM-AT91SAM3U	Atmel	82T4644	7.50
EB-STM32DISCOVERY-LCD	94x43x12	STM32VLDISCOVERY	ST Micro	82T4646	7.50
EB-STM3210E-LCD	80x76.9x12	EM-STM3210E	ST Micro	82T4648	7.50

(200560)

LCD MODULES

RoHS Compliant Available

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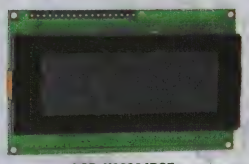

LCR-U02004DSF

LCR-U12864GSF

Applications:
- Appliances
- Communications equipment
- Industrial controls
- Life safety equipment
- Medical equipment
- Meter displays
- Military applications
- Security electronics
- Test and measurement

Features:
- -40°C - +85°C
- Available in either positive or negative image display
- High-resolution, high-duty daylight visibility
- Available from 8 x 1 character display up to a 320 x 240 graphic display
- Wide variety of color choices when paired with LED backlights
- Custom sizes available

CHARACTER

Mfg. Part No.	Character Count x Line	Char. Size (mm)	Display Area H x W (mm)	Supply Voltage (V)	Stock No.	Price Each 1-4
LCR-U01602DSF/AWH	16 x 2	4.35	14 x 64	5	65R6889	16.51
LCR-U01602DSF/DWH	16 x 2	9.66	24 x 99	5	65R6890	26.06
LCR-U02002DSF-WH	20 x 2	5.55	18.6 x 83	5	65R6891	23.34
LCR-U02004DSF-WH	20 x 4	4.75	25 x 76.3	5	65R6892	28.28

GRAPHIC

Mfg. Part No.	Description	Pixel Size H x W (mm)	Display Area H x W (mm)	Supply Voltage (V)	Stock No.	Price Each 1-9
LCR-U12864GSF-WH	128 x 64	0.48x0.48	38.8x70	12.9	65R6893	32.04

(175977)

LCD DISPLAY MODULES

RoHS Compliant Available

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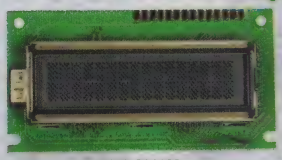
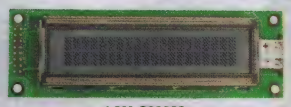


LCM-S01602



LCM-S02002

LCM-S04002

Applications:
- Communications equipment
- Industrial controls
- Life safety equipment
- Medical equipment
- Meter displays
- Security electronics
- Test and measurement

Features:
- Reliable user-interface display
- Low power consumption
- Very long operational life
- Custom sizes available

LCD CHARACTER MODULES

Mfg. Part No.	Description	Line x Char.	Char. Size W x H (mm)	Stock No.	Price Each 1-4
LCM-S01601DSF	STN, Transflective	1 x 16	3.07x6.56	19J7609	13.71
LCM-S01601DSR	STN, Reflective	1 x 16	3.07x6.56	19J7616	10.83
LCM-S01601DTR	TN, Reflective	1 x 16	3.07x6.56	19J7625	8.38
LCM-S01602DSF/A	STN, Transflective	2 x 16	2.96x5.56	14M5872	15.15
LCM-S01602DSR/C	STN, Reflective	2 x 16	2.96x5.56	18J1317	11.95
LCM-S01602DSF/B	STN, Transflective	2 x 16	2.96x5.56	19J7630	15.12
LCM-S01602DSF/C	STN, Transflective	2 x 16	2.96x5.56	19J7632	14.95
LCM-S01602DSR/A	STN, Reflective	2 x 16	2.96x5.56	19J7646	11.88
LCM-S01602DSR/B	STN, Reflective	2 x 16	2.96x5.56	19J7648	12.96
LCM-S01602DSR/D	STN, Reflective	2 x 16	4.84x9.63	19J7649	17.65
LCM-S01602DTR/A	TN, Reflective	2 x 16	2.96x5.56	19J7660	9.79
LCM-S01602DTR/C	TN, Reflective	2 x 16	2.96x5.56	19J7663	9.59
LCM-S01604DSR	STN, Reflective	4 x 16	2.95x4.65	19J7671	23.57
LCM-S02002DSF	STN, Transflective	2 x 20	3.2x5.55	19J7674	22.66
LCM-S02002DSR	STN, Reflective	2 x 20	3.2x5.55	19J7676	17.70
LCM-S02004DSF	STN, Transflective	4 x 20	2.95x4.75	19J7680	33.66
LCM-S02004DSR	STN, Reflective	4 x 20	2.95x4.75	19J7686	23.48
LCM-S02402DSF	STN, Transflective	2 x 24	3.2x5.55	19J7691	23.81
LCM-S04002DSF	STN, Transflective	2 x 40	3.2x5.55	19J7703	40.01
LCM-S04004DSF	STN, Transflective	4 x 40	2.78x4.89	19J7709	75.74

(94570)

SINGLE AND DUAL 7-SEGMENT DISPLAYS

RoHS Compliant Available

AVAGO TECHNOLOGIES

Features:
- Low current operation
- Right Hand Decimal
- Excellent characters appearance
- Available in CA and CC

Fig. A - Single Digit

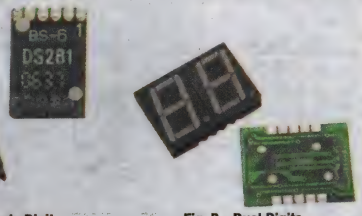


Fig. B - Dual Digits

Mfg. Part No.	Color	Fig.	Intensity Per Seg (mcd)	Digit Height (mm)	Common Pin	Stock No.	Price Each 1-999
HDSM-281C	Red	A	7.5	7	Common Anode	78M1220	1.06
HDSM-291C	Red	B	7.5	7	Common Anode	78M1228	4.29
HDSM-283H	Green	A	6	7	Common Cathode	78M1226	2.98
HDSM-281B	Blue	A	6	7	Common Anode	15P5813	3.96
HDSM-283B	Blue	A	6	7	Common Cathode	15P5814	3.96
HDSM-291B	Blue	B	6	7	Common Anode	15P5815	3.48
HDSM-293B	Blue	B	6	7	Common Cathode	15P5816	7.26
HDSM-433B	Blue	A	11.2	10	Common Cathode	15P5818	2.22
HDSM-441B	Blue	B	11.2	10	Common Anode	15P5819	7.92
HDSM-443B	Blue	B	11.2	10	Common Cathode	15P5820	7.92
HDSM-531B	Blue	A	13.5	14	Common Anode	15P5821	5.28
HDSM-533B	Blue	A	13.5	14	Common Cathode	15P5822	5.28
HDSM-541B	Blue	B	13.5	14	Common Anode	15P5823	6.97
HDSM-543B	Blue	B	13.5	14	Common Cathode	15P5824	6.97
HDSM-431W	White	A	40	10	Common Anode	11R1334	6.60
HDSM-433W	White	A	40	10	Common Cathode	11R1335	6.60
HDSM-441W	White	B	40	10	Common Anode	11R1336	9.38
HDSM-443W	White	B	40	10	Common Cathode	11R1337	9.38
HDSM-531W	White	A	44	14	Common Anode	11R1338	3.64
HDSM-533W	White	A	44	14	Common Cathode	11R1339	7.59
HDSM-541W	White	B	44	14	Common Anode	11R1340	5.82

(133274)

7-SEGMENT RIGHT-HAND DECIMAL DISPLAYS

RoHS Compliant Available

AVAGO TECHNOLOGIES

Fig. 1
0.30″ (7.62) Mini
0.50H × 0.30W × 0.24″D

Fig. 2
0.30″ (7.62)
0.75H × 0.40W × 0.18″D

Fig. 3
0.43″ (10.92)
0.75H × 0.50W × 0.25″D

Fig. 4
0.56″ (14.2)
0.67H × 0.49W × 0.31″D

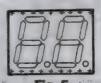


Fig. 5
0.56″ (14.2)
(Dual Digit)
0.67H × 1.00W × 0.31″D

Fig. 6
0.40″ (10.2)
0.053H x 0.40W x 0.11″D

Fig. 7
0.315″ (8.0)
0.433H x 0.28W x 0.197″D

Fig. 8
0.40″ (10.2)
0.508H x 0.385W x 0.25″D

Fig. 9
0.56″ (14.22)
0.637H x 0.495W x 0.315″D

Mfg. part nos. ending in "1" are Common Anode; mfg. part nos. ending in "3" are Common Cathode. DIP package.

Mfg. Part No.	Fig.	Color	Intensity Per Segment Typ. (mcd)	Stock No.	Price Each 1-9
HDSP-7501	1	Red	5.39	43K8803	3.30
HDSP-7501-CD000	1	Red	5.39	43K7001	3.69
HDSP-7503	1	Red	5.39	54K2750	3.30
HDSP-7511	1	Red	1.05	43K7002	3.78
HDSP-7801	1	Green	6.8	43K7004	3.30
HDSP-7803	1	Green	6.8	54K2751	3.30
HDSP-A101	1	Red	3.6	43K6962	3.96
HDSP-A103	1	Red	3.6	06F5522	3.96
HDSP-A153	1	Red	14	43K6964	4.05
5082-7610	2	Red	1.115	43K8876	3.66
5082-7611	2	Red	1.115	09F7194	3.66
5082-7613	2	Red	1.115	43K8878	3.66
HDSP-3601	2	Green	4	06F5654	3.66
5082-7650	3	Red	1.115	43K8880	3.66
5082-7651	3	Red	1.115	09F7207	3.66
5082-7653	3	Red	1.115	09F7210	3.66
HDSP-E103	3	Red	3.9	43K6966	4.38

➤ CONTINUED ➤

7-SEGMENT RIGHT-HAND DECIMAL DISPLAYS (CONT.)

Mfg. Part No.	Fig.	Color	Intensity Per Segment Typ. (mcd)	Stock No.	Price Each 1-9
● HDSP-5501	4	Red	3.7	06F5694	3.00
● HDSP-5503	4	Red	3.7	43K8802	3.00
● HDSP-5551	4	Red	1.48	43K6996	3.45
● HDSP-5601	4	Green	3.1	54K2749	3.00
● HDSP-5603	4	Green	3.1	06F5719	3.00
● HDSP-H101	4	Red	4.2	43K6974	3.60
● HDSP-H103	4	Red	4.2	43K6975	3.60
● HDSP-H153	4	Red	16	06F5563	3.75
● HDSP-521E	5	Red	4	43K6990	1.76
● HDSP-521G	5	Green	3.5	43K6991	1.76
● HDSP-523E	5	Red	4	27C2527	1.76
● HDSP-523G	5	Green	3.5	27C2528	1.76
● HDSP-5521	5	Red	3.7	43K6994	4.50
● HDSP-5523	5	Red	3.7	43K6995	4.50
● HDSP-0760	6	Red	140	39K9788	35.72
● HDSP-0762	6	Red	140	39K9789	37.24
● HDSP-0772	6	Red	620	39K9790	37.24
● HDSP-U111	7	Red	3.6	06F5583	4.56
● HDSP-F101	8	Red	3.9	06F5537	3.96
● HDSP-F201	8	Red	1.2	43K6969	3.30
● HDSP-F203	8	Red	1.2	43K6970	3.30
● HDSP-5703	9	Yellow	2.75	06F5725	3.00
● HDSP-3900	...	Red	7	06F5662	5.22
● HDSP-8601	...	Green	1.5	43K7005	5.22

(2619)

7-SEGMENT LED DISPLAYS

RoHS Compliant Available

LUMEX
Creating LED and LCD Solutions Together™

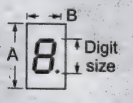


Fig. 1

Only .56" (14.20mm) and .80" (20.32mm) have active decimal points.

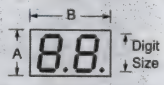


Fig. 2

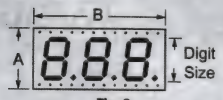


Fig. 3

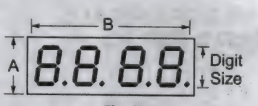


Fig. 4

Mfg. Part No.	Emitted Color	Digit Size (mm)	No. of Digits	I_V (cd)	Stock No.	Price Each 1-9
COMMON ANODE — FIG. 1						
● LDS-A352RI	Green	7.62	1	2.5	09J9112	3.38
● LDS-A324RI	Red	9.1	1	3.5	09J9473	2.91
● LDS-A304RI	Red	7.62	1	2	19J8094	3.08
● LDS-E3904RI	Red	9.9	1	5	19J8343	5.06
● LDS-A404RI	Red	10.16	1	5.6	19J8136	2.29
● LDS-A414RI	Red	10.9	1	3.9	09J9475	2.58
● LDS-A504RI	Red	12.7	1	5	09J9476	13.20
● LDS-A514RI	Red	14.2	1	3.9	28M9252	2.10
● LDS-A516RI	Red	14.2	1	12	09J9478	3.57
● LDS-A5206RI	Red	13.2	1	13.3	19J8173	3.76
● LDS-HTA514RI	Red	14.22	1	3.9	67R4237	1.68
● LDS-A814RI	Red	20.32	1	5.6	19J8198	4.67
● LDS-A816RI	Red	20.32	1	13.3	19J8202	4.19
● LDS-AA14RI	Red	25.4	1	9.8	09J9470	5.27
● LDS-C516RI	Red	14.22	1	13.3	28M9254	3.34
● LDS-C816RI	Red	20.3	1	13.3	09J9488	3.77
● LDS-AA184RD-SI	Red	45.7	1	13	77M0599	22.82
● LDS-AD16RI	Red	58.4	1	22.5	19J8077	22.72
COMMON CATHODE — FIG. 1						
● LDS-C322RI	Green	9.1	1	2.5	09J9481	2.45
● LDS-HTC302RI	Green	7.62	1	3.5	67R4238	1.72
● LDS-C356RI	Red	7.62	1	6	09J9118	3.67
● LDS-C416RI	Red	10.9	1	9.8	09J9484	3.58
● LDS-C812RI	Green	20.3	1	2.5	19J8329	3.87
● LDS-C324RI	Red	9.1	1	3.5	19J8248	2.67
● LDS-C406RI	Red	10.16	1	9.8	19J8285	3.92
● LDS-HTC514RI	Red	14.22	1	3.9	67R4241	1.72
● LDS-C814RI	Red	20.32	1	5.6	19J8334	2.76
● LDS-F8006RI	Red	20.32	1	10	19J8357	9.03

➤ CONTINUED ➤

7-SEGMENT LED DISPLAYS (CONT.)

Mfg. Part No.	Emitted Color	Digit Size (mm)	No. of Digits	I_V (cd)	Stock No.	Price Each 1-9
COMMON ANODE — FIG. 2						
● LDD-A512RI	Green	14.2	2	3.9	09J9461	3.87
● LDD-E302NI	Green	7.62	2	2.5	19J7834	3.58
● LDD-M512RI-RA	Green	14.2	2	3.9	19J7873	6.20
● LDD-HTA512RI	Green	14.22	2	3.5	67R4226	2.34
● LDD-A514RI	Red	14.2	2	3.9	09J9109	3.40
● LDD-A516RI	Red	14.2	2	13	09J9462	4.92
● LDD-A403NI	Yellow	10.2	2	3.9	04M4561	4.43
● LDD-HTA514RI	Red	14.22	2	3.5	67R4227	2.46
● LDD-A814RI	Red	20.3	2	3.9	19J7805	7.68
COMMON CATHODE — FIG. 2						
● LDD-C512RI	Green	14.2	2	3.9	19J7817	3.97
● LDD-HTC512RI	Green	14.22	2	3.5	67R4228	2.34
● LDD-C514RI	Red	14.2	2	3.9	09J9110	3.80
● LDD-C516RI	Red	14.2	2	13.3	09J9464	5.49
● LDD-HTF304NI	Red	7.62	2	2	67R4233	2.86
● LDD-C406NI	Red	10.2	2	6.3	19J7811	7.04
● LDD-HTC514RI	Red	14.22	2	3.9	67R4229	3.17
COMMON ANODE — FIG. 3						
● LDT-A514RI	Red	14.2	3	3.9	09J9490	3.14
● LDT-A512RI	Green	14.22	3	3.9	19J8372	3.62
● LDT-M2804RI	Red	7.1	3	5	77M0632	3.64
● LDT-M2806RI	Red	7.1	3	6	77M0633	3.51
COMMON ANODE — FIG. 4						
● LDQ-A512RI	Green	14.22	4	3.9	19J8004	6.47
● LDQ-M5207RI-USB	Blue	13.2	4	6	77M0595	46.61
● LDQ-M284RI	Red	7.1	4	5	19J8015	4.86
● LDQ-M3604RI	Red	9.1	4	2	77M0591	5.21
● LDQ-M516RI	Red	14.22	4	13.3	19J8025	9.13
COMMON CATHODE — FIG. 4						
● LDQ-N286RI	Red	7.1	4	9	19J8030	9.13
● LDQ-N516RI	Red	14.2	4	13.3	09J9489	8.63
● LDQ-N514RI	Red	14.22	4	3.9	19J8036	7.11

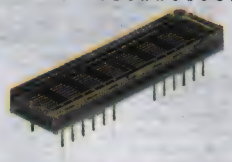
(80504)

ALPHANUMERIC LED DISPLAY

RoHS Compliant Available

AVAGO TECHNOLOGIES

Low power on-board CMOS IC has memory, ASCII decoder, driver circuitry. DIP pkg., TTL compatible, wave solderable, end-stackable. 16-segment display available; *go online or call.*



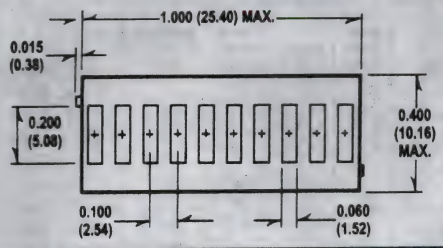
Mfg. Part No.	Color	Description	Stock No.	Price Each 1-9
4 CHARACTER SMART, DECODES 128 ASCII CHARACTERS				
● HDLO-2416	Red	0.2" (5) 5 × 7 Dot Matrix	39K9785	20.90
8 CHARACTER SMART, DECODES 128 ASCII CHARACTERS				
● HDSP-2111	Yellow	0.2" (5) 5 × 7 Flexible Dot Matrix 0.77" (19.6) Pkg. Ht.	06F5615	35.28
● HDSP-2112	Red	0.2" (5) 5 × 7 Flexible Dot Matrix 0.77" (19.6) Pkg. Ht.	06F5616	35.28
● HDSP-2113	Green	0.2" (5) 5 × 7 Flexible Dot Matrix 0.77" (19.6) Pkg. Ht.	43K6980	35.28
8 CHARACTER 5mm SMART DISPLAYS				
● HDSP-2532	Red	Parallel interface,	39K9795	33.40
● HDSP-2533	Green	6.9mm character ht.,	06F5634	33.40
4 AND 8 CHARACTER SMART, SERIAL INPUT, INDIVIDUAL DOT CONTROL				
● HCMS-2963	Green	1x4 Character 0.2" (5) 5×7 Font, Serial Input	39K9781	21.94
● HCMS-2965	AlGaAs Red	1x4 Character 0.2" (5) 5×7 Font, Serial Input	39K9783	24.20
● HCMS-2973	Green	1x8 Character 0.2" (5) 5×7 Font, Serial Input	06F5397	33.40

(9463)

10-ELEMENT BAR GRAPH ARRAY

RoHS Compliant Available

AVAGO TECHNOLOGIES



Mfg. Part No.	Color	Light Emitting Area No./Size	Intensity Typical Per LED	Stock No.	Price Each 1-9	Price Each 10-24
HDSP-4830	HER	10 Areas/ 0.2 x 0.06"	250µcd @ 20mA	43K8801	6.00	5.00
HDSP-4832	3 HER	10 Areas/ 0.2 x 0.06"	3800µcd @ 20mA	06F5686	6.92	6.27
HDSP-4836	2 HER	10 Areas/ 0.2 x 0.06"	3800µcd @ 20mA	43K6988	6.92	6.27
HDSP-4840	Yellow	10 Areas/ 0.2 x 0.06"	1900µcd @ 10mA	06F5688	7.14	5.95
HDSP-4850	Green	10 Areas/ 0.2 x 0.06"	1900µcd @ 10mA	43K6989	7.14	5.95
HLCP-J100	AlGaAs	10 Areas/ 0.2 x 0.06"	1000mcd @ 20mA	43K7017	7.14	5.95

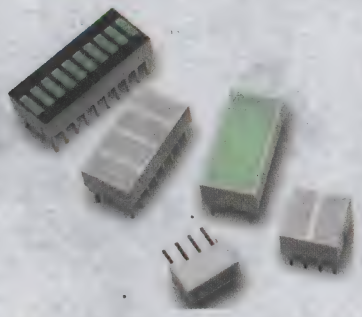
LED array packages. Pins: 20. Dimensions: 0.2"H x 0.4"W x 1"L.
(32797)

LED LIGHT BARS

RoHS Compliant Available

AVAGO TECHNOLOGIES

Features:
- Designed for Fixed Message Annunciation
- HLCP-X100 Series Designed for Low Current
- Flush Mountable
- Centers: 2.54mm



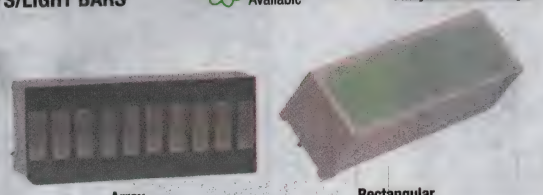
Mfg. Part No.	Dim. L x W x H (mm)	Light Emitting Areas No.	Light Emitting Areas Size (mm)	Pkg.	Stock No.	Price Each 1-9
AlGaAs RED						
HLMP-2300	8.89 x 4.953 x 6.223	1	8.89 x 3.81	4-SIP	43K7042	1.75
HLMP-2350	19.05 x 4.953 x 6.223	1	19.05 x 3.81	8-SIP	43K7043	2.98
HLMP-2620	20.32 x 10.16 x 6.223	4	8.89 x 3.81	16-DIP	43K7049	3.75
HLMP-2655	8.89 x 8.89 x 6.223	1	8.89 x 8.89	8-DIP	43K7050	2.63
HLMP-2685	20.32 x 10.16 x 6.223	1	8.89 x 19.05	16-DIP	43K7051	3.75
YELLOW						
HLMP-2400	8.89 x 4.953 x 6.223	1	8.89 x 3.81	4-SIP	43K7044	1.75
HLMP-2450	19.05 x 4.953 x 6.223	1	19.05 x 3.81	8-SIP	43K7045	2.98
HLMP-2720	8.89 x 8.89 x 6.223	4	8.89 x 3.81	16-DIP	06F6665	3.75
HLMP-2755	8.89 x 8.89 x 6.223	1	8.89 x 8.89	8-DIP	43K7054	2.63
HLMP-2785	20.32 x 10.16 x 6.223	1	8.89 x 19.05	16-DIP	43K7056	3.75
GREEN						
HLMP-2500	8.89 x 4.953 x 6.223	1	8.89 x 3.81	4-SIP	43K7046	1.75
HLMP-2550	19.05 x 4.953 x 6.223	1	19.05 x 3.81	8-SIP	06F6649	2.98
HLMP-2820	20.32 x 10.16 x 6.223	4	8.89 x 3.81	16-DIP	43K7058	3.75
HLMP-2855	8.89 x 8.89 x 6.223	1	0.35 x 0.35	8-DIP	43K7060	2.63
HLMP-2885	20.32 x 10.16 x 6.223	1	8.89 x 19.05	16-DIP	43K7062	3.75
BICOLOR: GREEN/YELLOW						
HLMP-2965	8.89 x 8.89 x 6.223	1	8.89 x 8.89	8-DIP	43K7063	5.94

(2620)

PC MOUNT LED ARRAYS/LIGHT BARS

RoHS Compliant Available

LUMEX Creating LED and LCD Solutions Together™



Mfg. Part No.	Figure	Emitted Color	Wave. (nm)	V_{Fmax} (V)	I_V (mcd)	I_F (mA)	Stock No.	Price Each 1-9
SSA-LXB10GW-GF/LP	Array	Green	565	2.2	8	20	09J9182	3.31
SSA-LXB10GW	Array	Green	565	2.2	8	20	19J8970	2.43
SSA-LXB10GW-RA	Array	Green	565	2.2	8	20	19J8971	6.40
SSA-LXB10IW-GF/LP	Array	Red	635	2	8	20	09J9184	3.79
SSB-LX2350IW	Rect.	Red	635	2.1	50	20	67K1154	1.69
SSB-LX2450YW	Rect.	Yellow	585	2.1	40	20	67K1156	1.68
SSB-LX2685IW	Rect.	Red	635	2.1	80	20	67K1160	2.34
SSB-LXH100SRW	...	Red	660	1.7	150	20	67K1152	3.34
SSA-LXB525SRD	...	Red	660	1.7	40	20	19J9115	7.52
SSA-LXH1025GD	...	Green	565	2.2	10	20	19J9121	5.30
SSB-DL2010GC	...	Green	565	4.4	24	20	19J9263	3.25
SSB-DL5216GC	...	Green	565	4.2	24	20	19J9272	5.05
SSB-DL6028AC	...	Amber	605	4.2	16	20	19J9278	9.87
SSB-DL6028GC	...	Green	565	4.2	45	960	19J9279	9.19
SSB-DL8634GW	...	Green	565	4.4	25	80	19J9292	13.97
SSB-LX02GC	...	Green	565	4.4	10	20	19J9310	0.94
SSB-LX02SRC	...	Red	660	3.6	50	20	19J9314	1.15
SSB-LX02SYC	...	Yellow	590	4.2	170	20	19J9315	1.67
SSB-LX2755SBD/A	...	Blue	430	3.8	38	20	77M1015	10.74
SSA-LXH1025G8Y1I1D	...	Red/ Yellow/ Green	...	...	...	20	19J9132	5.32

(80661)

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(196537)

INFRARED COMPONENTS

THROUGH HOLE INFRARED EMITTING DIODES

RoHS Compliant Available

TT electronics
OPTEK Technology

Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6 Fig. 7

Mfg. Part No.	Fig.	Viewing Angle (°)	Power Rating (mW)	V_F Max. (V)	I_F Max. (mA)	Stock No.	Price Each 1-99	100-249	250-499
935nm GaAs									
● OP124	5	24	1	1.5	50	**08F2916**	2.35	2.25	2.16
● OP131	1	18	3	1.75	100	**08F2917**	2.47	2.35	2.27
● OP132	1	18	4	1.75	100	**08F2918**	2.47	2.35	2.27
● OP133	1	18	5	1.75	100	**08F2920**	2.47	2.35	2.27
● OP133W	1	50	5	1.75	100	**52F4486**	4.37	4.16	4.02
● OP140A	3	40	0.4	1.6	20	**08F2922**	0.66	0.63	0.60
● OP140B	1	40	0.3	1.6	50	**08F2923**	0.67	0.63	0.61
● OP165A	2	18	1.95	1.6	50	**08F2941**	0.75	0.71	0.69
● OP165D	1	18	0.28	1.6	50	**08F2944**	0.68	0.65	0.63
● OP166A	2	18	1.95	1.6	20	**08F2945**	0.81	0.77	0.74
890nm GaAlAs									
● OP224	5	24	3.5	1.8	100	**52F4488**	2.28	2.17	2.10
● OP231	1	18	1.5	2	100	**08F2950**	3.09	2.95	2.84
● OP232	1	18	2	2	100	**08F2952**	3.05	2.90	2.80
● OP232W	1	50	3.5	2	100	**08F2953**	2.56	2.43	2.35
● OP233	1	18	3	2	100	**08F2954**	3.05	2.90	2.80
● OP240A	3	40	0.6	1.8	20	**08F2957**	0.66	0.63	0.60
● OP240B	3	40	0.4	1.8	50	**08F2958**	0.66	0.63	0.60
● OP265A	2	18	2.7	1.8	20	**08F2969**	0.83	0.79	0.76
● OP266A	1	18	2.7	1.8	50	**01C3571**	0.85	0.81	0.78
● OP290A	4	50	210	4	1500	**08F2978**	0.77	0.74	0.71
● OP291A	4	50	16	2	150	**08F2980**	0.76	0.72	0.70
● OP293A	7	60	16	2	200	**08F2984**	0.66	0.63	0.60
● OP295A	4	20	44	4	1500	**08F2986**	0.71	0.68	0.65
● OP296B	4	20	2.6	2	100	**91F1833**	0.68	0.65	0.63
● OP297A	4	20	0.7	1.75	20	**08F2991**	0.68	0.65	0.63
● OP298A	6	25	3	2	1500	**08F2993**	0.66	0.63	0.60
● OP298B	1	25	2.4	2	100	**98F7169**	0.67	0.63	0.61

(3835)

INFRARED-EMITTING DIODES

RoHS Compliant Available

VISHAY

INFRARED EMITTERS

Mfg. Part No.	Peak Wave-length (nm)	Angle (±°)	Radiant Intensity (mW/sr)*	Rise and Fall Time (ns)*	Pkg.	Stock No.	Price Each 1-9
● CQY37N	950	12	5	400	1.8 mm	**33C0671**	0.38
● CQY36N	950	55	1.5	400	1.8 mm	**33C0670**	0.36
● TSAL5100	940	10	130	800	T1-3/4, 5 mm	**33C1730**	0.23
● TSAL6100	940	10	130	800	T1-3/4, 5 mm	**33C1732**	0.22
● TSAL6200	940	17	60	800	T1-3/4, 5 mm	**95B4858**	0.24
● TSAL6400	940	25	40	800	T1-3/4, 5 mm	**95B4859**	0.23
● TSAL7400	940	25	40	800	T1-3/4, 5 mm	**33C1734**	0.23
● TSFF5210	870	10	180	15	T1-3/4, 5 mm	**54K7366**	0.82
● TSFF5410	870	22	70	15	T1-3/4, 5 mm	**54K7367**	0.82
● TSHF5210	870	10	160	30	T1-3/4, 5 mm	**93K0963**	0.40
● TSHF5410	870	22	70	30	T1-3/4, 5 mm	**93K0964**	0.37
● TSHG6200	850	10	160	20	T1-3/4, 5 mm	**45J3438**	1.15
● TSHG6400	850	22	70	20	T1-3/4, 5 mm	**93K0965**	1.15
● TSHG8200	830	10	160	20	T1-3/4, 5 mm	**93K0966**	1.20
● TSAL4400	940	25	30	800	T-1	**58K2524**	0.23
● VSLB9530S	940	18	60	15	TELUX	**04X5279**	0.84
● TSKS5400S	950	30	9	400	Side View	**86H2546**	0.61
● TSSF4500	870	22	20	30	T1-3/4, 5 mm	**88K1270**	0.79
● TSUS5400	950	22	14	800	T1-3/4, 5 mm	**88K1275**	0.23
● TSUS5402	950	22	20	800	T1-3/4, 5 mm	**88K1276**	0.23

➤CONTINUED➤

INFRARED-EMITTING DIODES (CONT.)

SURFACE MOUNT

Mfg. Part No.	Peak Wave-length (nm)	Angle (±°)	Radiant Intensity (mW/sr)*	Rise and Fall Time (ns)*	Pkg.	Stock No.	Price Each 1-9
● TSMF1000	870	17	5	30	1.9 mm	**33C1776**	0.80
● TSMF1000	870	17	5	30	1.9 mm	**54X3813**	0.39
● TSML1000	950	12	7	800	1.9 mm	**33C1780**	0.76
● TSML1020	950	12	7	800	1.9 mm	**33C1781**	0.76
● VSMF4710-GS08	870	60	10	15	PLCC-2	**31M2971**	0.76
● VSMG3700-GS08	850	60	10	20	PLCC-2	**31M2973**	1.02
● VSML3710-GS08	950	60	8	800	PLCC-2	**31M2974**	0.49
● VSMS3700-GS08	950	60	4.5	30	PLCC-2	**31M2975**	0.41

* Forward Current = 100 mA
(52472)

INFRARED EMITTING DIODES

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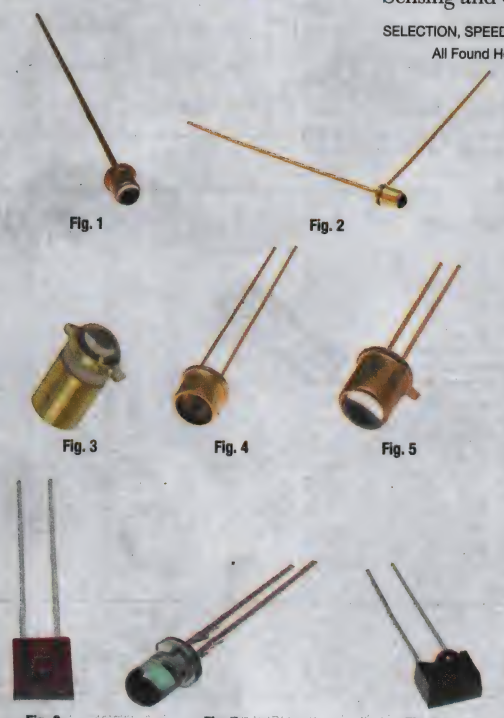

Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6 Fig. 7 Fig. 8

HERMETIC PACKAGING

Mfg. Part No.	Fig.	Beam Angle	V_F Max. @I_F (V)	Output Min. H (mW/cm²)	Output Min. @ I_F (mA)	Peak Wave-length (nm)	Stock No.	Price Each 1-9	10-49	50-99
● SE1450-003L	2	24°	1.6	0.7	50	935	**87F6444**	6.19	5.45	4.57
● SE2460-003	3	18°	1.6	...	...	935	**87F6446**	3.72	2.75	2.48
● SE2470-002	3	18°	1.8	6	50	880	**87F6447**	4.28	2.66	2.50
● SE3455-003	4	90°	1.7	4.8	100	935	**87F6488**	5.98	3.72	3.49
● SE3470-003	4	90°	1.9	10.5	100	880	**87F6489**	5.50	4.84	4.06
● SE5450-013	5	20°	1.7	1	100	935	**90F8506**	5.69	5.01	4.20
● SE5455-002	5	20°	1.7	3.5	100	935	**87F6491**	5.55	4.89	4.10
● SE5455-003	4	20°	1.7	...	...	935	**90F8519**	5.24	3.89	3.49
● SE5470-003	5	20°	1.9	2.6	100	880	**50F5061**	5.60	4.92	4.13
● SE5470-004	5	20°	1.9	3.5	100	880	**50F5062**	5.55	4.89	4.10
PLASTIC PACKAGING										
● SEP8506-001	6	50°	1.5	0.36	20	935	**92F7084**	1.14	1.01	0.85
● SEP8506-002	6	50°	1.5	0.52	20	935	**15N4331**	1.91	1.12	1.02
● SEP8506-003	6	50°	1.5	0.9	20	935	**90F8508**	1.11	0.90	0.85
● SEP8705-002	7	15°	1.7	1.4	20	880	**89F5761**	1.99	1.75	1.47
● SEP8705-003	7	15°	1.7	2.7	20	880	**89F5762**	1.72	1.51	1.27
● SEP8706-001	6	50°	1.7	2.6	20	880	**89F5763**	5.25	3.27	3.06
● SEP8706-003	6	50°	1.7	0.65	20	880	**90F8509**	1.47	1.30	1.09

➤CONTINUED➤

INFRARED EMITTING DIODES (CONT.)

PHOTODIODE DETECTORS HERMETIC PACKAGING

Mfg. Part No.	Fig.	Acceptance Angle	$I_{C(on)}$ Min. @ V_R = 20V (µA)	Rated @ H (mW/cm²)	Stock No.	Price Each 1-9	10-99	100-499
SD1420-002L	2	24°	5	5	90F8521	6.68	3.89	3.45
SD2420-002	3	48°	7	20	90F8522	3.77	3.39	3.16
SD5421-002	5	18°	40	5	90F8524	9.05	8.01	7.25
PHOTOTRANSISTOR DETECTORS HERMETIC PACKAGING								
SD1440-003	1	24°	3	5	87F6471	5.01	4.43	4.02
SD1440-003L	2	24°	3	5	87F6472	5.13	4.54	4.11
SD3443-003	4	90°	2	5	90F8526	4.36	3.97	3.31
SD5443-002	5	18°	4	5	89F5767	5.13	4.37	4.19
SD5443-003	5	18°	8	5	87F6476	4.55	4.03	3.65
SDP8314-301	5	12°	4	5	96F6394	4.71	2.94	2.76
PLASTIC PACKAGING								
SDP8105-001	7	20°	5	70	96F6392	1.76	1.50	1.44
SDP8405-002	7	20°	7	5	59K0255	1.73	1.47	1.41
SDP8405-003	7	20°	1.2	70	90F8527	1.60	1.36	1.30
SDP8405-014	7	20°	0.64	70	96F6396	1.37	1.25	1.04
SDP8406-003	6	50°	3.4	1	87F6484	1.10	1.00	0.84
SDP8436-002	8	18°	4	1	93F7710	1.52	1.29	1.24
SDP8436-003	8	18°	7	...	59K0256	1.35	1.15	1.10
PHOTODARLINGTON DETECTORS HERMETIC PACKAGING								
SD5410-002	5	12°	4	0.2	90F8540	6.64	4.13	3.88
SD5410-003	5	12°	8	0.2	90F8541	5.86	4.99	4.78

(3838)

5mm ROUND INFRARED LAMP

RoHS Compliant Available

multicomp

Features:
- High Radiant Intensity: 15mW at 20mA
- Low Forward Voltage: 1.5V

Mfg. Part No.	Forward Current If(AV)	Viewing Angle (°)	Supply Voltage	Peak Wavelength (nm)	Package	Stock No.	Price Each 1-249
OFL-5102	20	10	1.25V	940	T-1 3/4 (5mm)	15R2144	0.17

(203560)

HIGH SPEED SURFACE MOUNT INFRARED EMITTING DIODES

RoHS Compliant Available

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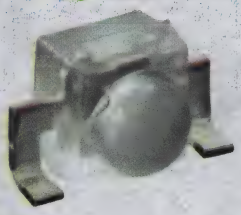

Features:
- Package type: surface mount
- Peak wavelength: 850nm
- High reliability
- High radiant power
- Very high radiant intensity
- Angle of half intensity: ±28°
- Suitable for high pulse current operation
- Floor life: 4 weeks, MSL 2a, acc. J-STD-020

DIMENSIONS (L x W x H in mm): 2.3 x 2.55 x 2.3

Mfg. Part No.	Beam Angle (°)	V_F (V)	I_F (mA)	Peak Wavelength (nm)	Radiant Intensity (mW/Sr)	Stock No.	Price Each 1-9
VSMB2948SL	50	1.6	100	940	20	62W1341	0.46
VSMB2943SLX01	50	1.6	100	940	20	62W1340	0.50
VSMB2943RGX01	50	1.6	100	940	20	62W1339	0.50
VSMB2943GX01	50	1.6	100	940	20	62W1338	0.50
DIMENSIONS (L x W x H in mm): 2.3 x 2.3 x 2.55							
VSMY2853G	56	1.9	100	850	35	62W1349	0.66
VSMY2853RG	56	1.9	100	850	35	62W1350	0.66
VSMY2853SL	56	1.9	100	850	35	62W1351	0.66

(209511)

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(196525)

IR HIGH-PERFORMANCE EMITTERS

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VISHAY.

Mfg. Part No.	±Phi (°)	T_{R1}, T_F (ns)	I_e @ I_F (mW/sr, mA)	V_F @ I_F (V, mA)	Pkg.	Stock No.	Price Each 1-9
VSLY5850	3	10	600	1.9	T-1 3/4 (5mm)	65T4007	1.27
VSLY5850	3	10	600	1.9	T-1 3/4 (5mm)	65T4007	1.27
TSTA7100	5	600	50	1.4	Metal	33C1869	2.88
VSMB2000X01	12	15	40	1.6	Gullwing	70R1441	0.73
VSMB2020X01	12	15	40	1.6	Gullwing	70R1442	0.69
TSHA5201	12	600	50	1.5	5 mm, Plastic	58K2527	0.32
TSTA7300	12	600	20	1.4	Metal	33C1870	3.02
VSLY3850	18	10	70	1.9	T-1 (3mm)	65T4006	1.18
VSLY3850	18	10	600	1.9	T-1	78T1294	1.18
TSHA4401	20	600	30	1.5	3 mm, Plastic	33C1756	0.34
VSLB3940	22	15	65	1.9	T-1 (3mm)	76R1477	0.42
TSFF5510	38	15	32	1.45	T-1 3/4	70R1418	1.15
VSMY98545	45	15	350	2.3	SMD	29X1480	7.59
VSMB1940X01	60	15	6	1.6	0805	70R1440	0.75
VSMB3940X01-GS08	60	15	13	1.6	PLCC-2	70R1443	0.69
VSMF4720-GS08	60	15	16	1.45	PLCC-2	70R1444	0.78
VSMG2720-GS08	60	15	14	1.45	PLCC-2	70R1445	0.46

(74693)

INFRARED RECEIVERS

RoHS Compliant Available

VISHAY.

Enhanced immmunity against disturbance lights. No occurance of disturbance pulses at the output. Power on setting time: <200µs. Transmission distance: 35m. Supply voltage (V_S): 2.7 - 5.5V. Supply current (I_{SD}): 0.7 - 1.5mA. Directivity: ±45°.

Mfg. Part No.	f_0 (kHz)	Stock No.	Price Each 1-9	10-99	100-249
TSOP31236	36	58K2547	1.19	1.11	1.00
TSOP31238	38	58K2549	1.19	1.11	1.00
TSOP31240	40	59K0286	1.19	1.11	1.00
TSOP31256	56	09J4519	1.19	1.11	1.00
TSOP34830	30	88K2015	1.19	1.11	1.00
TSOP34836	36	88K1266	1.27	1.18	1.06
TSOP34838	38	88K2016	1.27	1.18	1.06
TSOP34840	40	88K1267	1.25	1.17	1.05

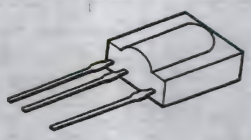
(52586)

INFRARED RECEIVERS

RoHS Compliant Available

VISHAY.

Features:
- Operation with short bursts possible (greater than 6 cycles/burst)
- Photo detector and preamplifier in one package
- Internal filter for PCM frequency
- Improved shielding against electrical field disturbance
- Low power consumption; Output active low
- High immunity against ambient light
- Enhanced data rate of 4000 bit/s
- Transmission Distance: 35m
- Directivity: ±45°
- TTL and CMOS Compatibility



Remote control modules have internal filter for PCM accuracy and improved shielding against all electrical field disturbances. Continuous data transmission possible (1200bits/sec). **TSOP1200 series** has enhanced immunity against all kinds of disturbance light and no occurances of disturbance pulses at the output.

DISTRIBUTED AMBIENT LIGHT APPLICATIONS

Mfg. Part No.	Carrier Frequency (kHz)	Package	Min. Irradiance (mW/m²)	Stock No.	Price Each 1-9	10-99
TSOP1138.	38	Standard	0.6	20M1622	1.16	0.97
TSOP2140	40	Small Size	0.4	59K0284	1.16	0.97
TSOP2230	30	Small Size	0.4	58K2541	1.10	0.92
TSOP2236	36	Small Size	0.4	58K2542	1.10	0.92
TSOP2238	38	Small Size	0.4	58K2544	1.15	0.96
TSOP2256	56	Small Size	0.4	59K0285	1.10	0.92
TSOP34138	38	LED-7b	0.4	88K2014	1.34	1.12
TSOP4138	38	LED-7b	0.17	59K0287	1.23	1.03
TSOP58038	38	Standard	0.5	70R1423	0.68	0.60
TSOP75338WTR	38	SMD	0.3	70R1424	1.47	1.13

(52590)

INFRARED COMPONENTS • ULTRAVIOLET COMPONENTS • DETECTORS • OPTOCOUPLERS

IR RECEIVER MODULES FOR REMOTE CONTROL SYSTEMS

RoHS Compliant Available

VISHAY

Features
- Photo detector and preamplifier in one package
- Internal filter for PCM frequency
- Continuous data transmission possible
- TTL and CMOS compatibility
- Output active low
- Low power consumption
- High immunity against ambient light

Special Features
- Improved immunity against ambient light
- Suitable burst length (≥ 10 cycles/burst)

TSOP362 Series are miniaturized SMD-IR Receiver Modules for infrared remote control systems. PIN diode and preamplifier are assembled on lead frame, the epoxy package is designed as IR filter. The demodulated output signal can directly be decoded by a microprocessor. **TSOP362 Series** is the standard IR remote control SMD-Receiver series, for 3V supply voltage supporting all major transmission codes.

STANDARD APPLICATIONS, USED WITH MAJOR RC CODES

Mfg. Part No.	Voltage Rating (V)	Angle of half transmission distance	Carrier Frequency (kHz)	Stock No.	Price Each 1-9
● TSOP75456WTR	5.5	75	56	78R7372	1.38

(209640)

INFRARED TRANSCEIVERS

RoHS Compliant Available

VISHAY

LOW-POWER CONSUMPTION

Mfg. Part No.	Dim. (mm) (H x W X L)	Trans. Dist.* (m)	Oper. (V)+	Logic (V)	Stock No.	Price Each 1-9
● TFDU4101-TT3	4 x 4.7 x 9.7	0 - 3	2.7 - 5.5	$V_{log} = V_{CC}$	27M9702	5.62
LOW-POWER CONSUMPTION; SHUTDOWN PIN						
● TFDU6103-TR3	4 x 4.7 x 9.7	0 - 1	2.7 - 5.5	$V_{log} = V_{CC}$	47M0477	4.51
● TFDU6103-TT3	4 x 4.7 x 9.7	0 - 1	2.7 - 5.5	$V_{log} = V_{CC}$	47M0478	4.72

*Transmit distance
(74703)

ULTRA-VIOLET LED

RoHS Compliant Available

LUMEX
Creating LED and LCD Solutions Together™

Features:
- TO-46 package with glass lens in a through-hole format
- Available in 385nm, 405nm and 415nm wavelengths at 4-6mW
- Longer lifespan; greater than 50,000 hours
- Alternate wavelengths available

Applications:
- Bacterial and superficial sterilization
- Biohazard detection
- Counterfeit detection
- Dental and dermatology equipment
- Forensic applications
- Ink fluorescing
- Phototherapy
- Water Sterilization
- Polymer Curing

In addition to enhanced life span, QuasarBrite UV LEDs provide several key benefits compared to alternative technologies like CCFLs. QuasarBrite UV LEDs provide a uniform beam pattern. QuasarBrite UV LEDs do not use the hazardous mercury material found in CCFL technology and are more durable in their design, thereby significantly reducing maintenance costs. Finally, Lumex's UV LEDs have up to 70% lower energy consumption than CCFLs. These factors combined allow Lumex's QuasarBrite UV LEDs to provide up to a 50% cost savings compared to CCFLs.

Mfg. Part No.	Peak Wavelength (nm)	Vf (V)	If (mA)	Pd (mW)	Package	Stock No.	Price Each 1-9
● SSL-LXT046355C	355	3.6	20	200	TO-46	50T9047	37.24
● SSL-LXT046365C	365	3.6	20	200	TO-46	50T9048	31.49
● SSL-LXT046375C	377	3.6	20	200	TO-46	50T9049	25.50
● SSL-LXT046UV3C	415	3.3	20	200	TO-46	63R5642	9.87

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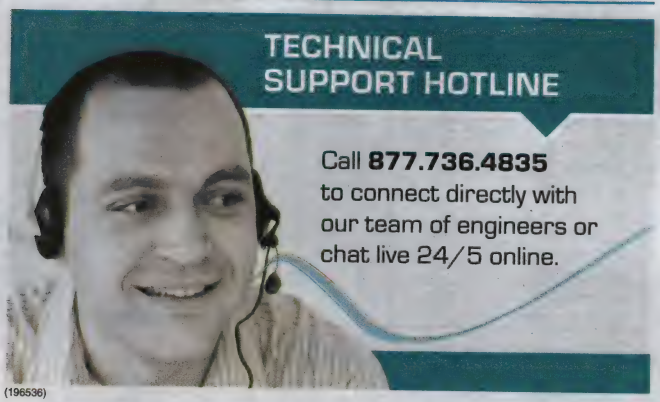

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ULTRAVIOLET (UV) LEDs

RoHS Compliant Available

VCC

Applications:
- Commercial Outdoor Sign Board
- Front Panel Indicator
- Dot-Matrix Module
- LED Bulb

Features:
- Low Power Consumption
- I.C. Compatible

VCC Ultraviolet (UV) LEDs are based on InGaN material technology. They have a water transparent lense and emit the color purple (UV).

Mfg. Part No.	Size	Luminous Intensity (mcd)	Viewing Angle (°)	Wavelength Typ. (nm)	Stock No.	Price Each 1-9
● VAOL-3EUV0Y4	T-1 (3mm)	150	15	405	08R4594	0.71
● VAOL-3EUV8Y4	T-1 (3mm)	72	15	385	08R4595	0.93
● VAOL-3GUV0Y4	T-1 (3mm)	120	30	405	08R4596	0.72
● VAOL-3GUV8Y4	T-1 (3mm)	55	30	385	08R4597	0.84
● VAOL-5EUV0T4	T-1 3/4 (5mm)	200	15	405	08R4598	0.71
● VAOL-5EUV8T4	T-1 3/4 (5mm)	100	15	385	08R4599	0.92
● VAOL-5GUV0T4	T-1 3/4 (5mm)	160	30	405	08R4600	0.88
● VAOL-5GUV8T4	T-1 3/4 (5mm)	80	30	385	08R4601	0.88

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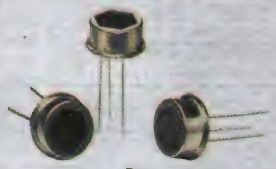
DETECTORS

RoHS Compliant Available

EXCELITAS TECHNOLOGIES

- Test Conditions: T = 22°C
- Responsivity: 100°C Black Body
- Noise: 0.3 to 10Hz Bandwidth
- NEP: 100°C Black Body, 1Hz Electric Bandwidth
- D*: 100°C Black Body, 1Hz Electric Bandwidth
- **Mfg. Part No. LHI814 G2/G20** May Be Equipped with 2 Different Narrow Band Infrared Filters



Pyro

PYROELECTRIC INFRARED DETECTORS — DUAL ELEMENT DETECTORS

Mfg. Part No.	Pkg.	Responsivity (V/w) typ. 1Hz	Noise (UVpp) typ.	Active Area (mm²)	NEP (W/√hz) typ.	Stock No.	Price Each 1-24	Price Each 25-49
● LHI 878	TO-5	4000	20	2 x 1, 2 x 1	7.5×10^{-10}	27H0758	5.88	4.57
● LHI 968	TO-5	3800	20	2 x 1, 2 x 1	7.5×10^{-10}	27H0759	8.90	6.92

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APPLICATION SPECIFIC OPTOCOUPLERS

RoHS Compliant Available

AVAGO TECHNOLOGIES

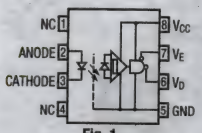


Fig. 1

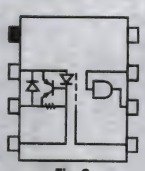


Fig. 2

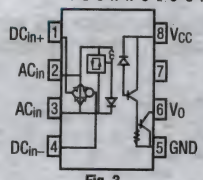


Fig. 3

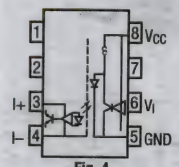


Fig. 4

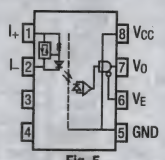


Fig. 5

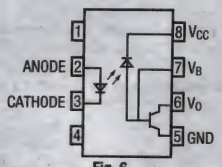


Fig. 6

Mfg. Part No.	Fig.	Description	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-99
● HCPL-2400-000E	1	Logic Gate 10MBd	31K6968	6.81	5.67	4.77
● HCPL-2602-000E	2	Line Termination for Receivers; 10MBd	31K6985	7.21	6.53	5.17
● HCPL-3700-000E	3	Voltage/Current Detection	88H7829	4.56	3.80	3.19
● HCPL-3760-000E	3	Voltage/Current Detection; Low-Current	31K7011	7.26	6.58	5.21
● HCPL-4100-000E	4	Current Loop Transmitter; 20mA	88H7830	8.51	7.71	6.10
● HCPL-4200-000E	5	Current Loop Receiver; 20mA	88H7831	8.51	7.71	6.10
● HCPL-4562-000E	6	Analog/Video Amp;BW=17MHz; 8-PDIP	31K7033	3.31	2.76	2.32
● HCNW4562-300E	6	Analog/Video Amp; BW=9MHz; Wide Body,Gull Wing	36K5463	4.76	3.96	3.33

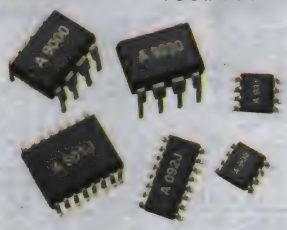
(2669)

HCPL-90xx/-09xx DIGITAL ISOLATOR

RoHS Compliant Available

AVAGO TECHNOLOGIES

Features:
- +3.3V and +5V TTL/CMOS compatible
- 3ns max. pulse width distortion
- 6ns max. propagation delay skew
- 15ns max. propagation delay
- High speed: 100 MBd
- 15kV/µs min. common mode rejection
- Tri-state output (HCPL-9000/-0900)
- 2500V RMS isolation
- UL1577 and IEC 61010-1 approved



Applications:
- Digital fieldbus isolation
- Multiplexed data transmission
- Computer peripheral interface
- High speed digital systems
- Isolated data interfaces
- Logic level shifting

HCPL-90xx/-09xx series CMOS digital isolators integrated high speed performance and excellent transient immunity specifications. All devices operate at 3.3V or 5V supply voltages, boasting low power consumption.

UNI-DIRECTIONAL

Mfg. Part No.	Channels	Pkg.	Stock No.	Price Each 1-9	Price Each 10-24
HCPL-0900-000E	1	8-SOIC	65K5566	5.46	4.55
HCPL-0930-000E	2	8-SOIC	65K5571	7.09	6.42
HCPL-9030-000E	2	8-DIP	65K5592	7.09	6.42
HCPL-090J-000E	4	16-SOIC	65K5564	10.21	9.25
BI-DIRECTIONAL					
HCPL-0931-000E	2	8-SOIC	65K5573	7.09	6.42
HCPL-092J-000E	4	16-SOIC	65K5569	10.21	9.25

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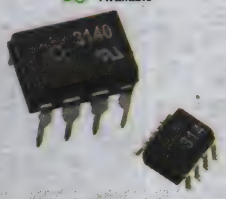
INTEGRATED GATE DRIVE OPTOCOUPLERS

RoHS Compliant Available

AVAGO TECHNOLOGIES



SINGLE CHANNEL

Mfg. Part No.	I_F (mA)	Prop. Delay t_{PHL} max. (µs)	CMR min. (kV/µs)	I_{OUT} min. (A)	Package	Stock No.	Price Each 1-9
HCNW3120-000E	7	0.5	15	2.5	8-DIP	88H7745	4.98
HCPL-316J-000E	7	0.5	15	2.5	16-SOIC	88H7827	7.55
HCPL-3120-000E	7	0.5	15	2.5	8-DIP	88H7818	3.15
HCPL-3120-300E	7	0.5	15	2.5	8-SOIC	88H7819	3.21
HCPL-0314-000E	8	0.7	10	0.4	8-SOIC	88H7763	2.81
HCPL-3140-000E	8	0.7	10	0.4	8-DIP	83H6569	2.70
HCPL-314J-000E	10	0.7	10	0.4	16-SOIC	88H7822	3.86
ACPL-312U-000E	20	0.3	25	0.5	8-DIP	08R2639	4.82
ACPL-312U-300E	20	0.3	25	0.5	8-SOIC	08R2640	4.88
ACPL-312T-000E	16	0.3	35	2	8-DIP	14N5781	6.78
ACPL-P314-000E	25	0.7	10	0.6	6-SOIC	26M8770	3.19
ACPL-W302-000E	25	0.7	10	0.4	6-SOIC	05M6838	2.55
ACPL-3130-000E	25	0.5	40	2.5	8-DIP	21M9143	4.02
ACPL-36JV-000E	...	0.3	30	2	16-SOIC	67R4533	8.20

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HIGH-SPEED DARLINGTON OUTPUT OPTOCOUPLERS

RoHS Compliant Available

AVAGO TECHNOLOGIES

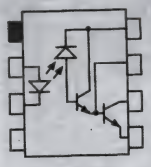


Fig. 1

Fig. 2

100kBd DARLINGTON OUTPUT, SINGLE CHANNEL — FIG. 1

Mfg. Part No.	I_F (mA)	CTR Min. (%)	t_{PHL} (µs)	t_{PLH} (µs)	Package	Stock No.	Price Each 1-9
HCNW139-000E	0.5	200	30	115	8-DIP	31K6882	3.44
HCPL-070A-000E	0.04	500	500	500	8-SOIC	31K6938	4.11
HCPL-0700-000E	1.6	300	15	70	8-SOIC	31K6941	2.21
HCPL-0701-000E	0.5	400	30	115	8-SOIC	31K6942	2.48
6N138-000E	1.6	300	15	70	8-DIP	31K7922	1.93
6N139-000E	0.5	400	30	115	8-DIP	31K7923	1.93
100kBd DARLINGTON OUTPUT, DUAL CHANNEL — FIG. 2							
HCPL-073A-000E	0.04	500	500	500	8-SOIC	31K6949	9.48
HCPL-0731-000E	0.5	300	120	90	8-SOIC	31K6954	5.33
HCPL-2730-000E	0.5	300	120	90	8-DIP	88H7816	3.38
HCPL-2731-000E	0.5	300	120	90	8-SOIC	88H7817	3.54
HCPL-4731-000E	0.04	500	500	500	8-DIP	31K7040	7.09

†Tape & Reel

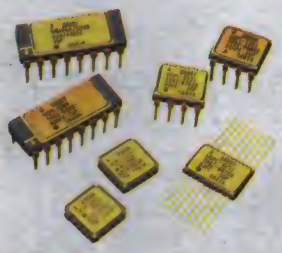
(17129)

HERMETICALLY SEALED OPTOCOUPLERS

RoHS Compliant Available

AVAGO TECHNOLOGIES

Features:
- 4 Channels
- Typ. Data Rate: 100KBd
- Current Transfer Ratio: 300% min.
- Input Current: 0.5-5mA
- Gold Plated Lead Finish



HERMETICALLY SEALED HIGH GAIN OPTOCOUPLERS

Mfg. Part No.	Class	Stock No.	Price Each 1-9
6N140A	Commercial	09F7267	79.63
6N140A/883B	Class H (Military)	06B4504	80.92

Features:
- Performance Guaranteed over Full Military Temperature Range: -55°C to +125°C
- Hermetically Sealed Packages
- ac/dc Signal & Power Switching
- Connection A 0.8A, 1.0 Ohms
- Connection B 1.6A, 0.25 Ohms
- Input Current 10-20mA

HERMETICALLY SEALED POWER MOSFET OPTOCOUPLER - 90V 1.0 OHM

Mfg. Part No.	Description	Package	Stock No.	Price Each 1-9	Price Each 10-49
HSSR-7110	Single Channel	8-PDIP	06F7133	85.45	81.32

†Available in different contact finishes (solder dipped devices contain lead), *call*

‡Available in Flat Pack

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HIGH-SPEED TRANSISTOR OUTPUT OPTOCOUPLERS

RoHS Compliant Available

AVAGO TECHNOLOGIES

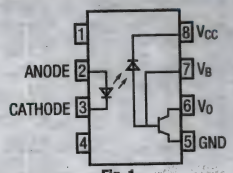

Fig. 1

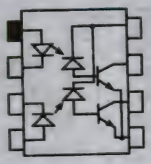

Fig. 2

1MBd TRANSISTOR OUTPUT SINGLE CHANNEL — FIG. 1

Mfg. Part No.	I_F (mA)	CTR Min. (%)	t_{PLH} Max (µs)	t_{PHL} Max (µs)	CMR Min. (V/µs)	Package	Stock No.	Price Each 1-9
HCNW4506-000E	10	44	0.55	0.4	15k	8-DIP	31K6900	3.92
HCPL-4506-300E	10	44	0.55	0.4	15k	8-SOIC	36K5524	3.05
HCPL-4506-000E	10	44	0.55	0.4	15k	8-DIP	88H7837	3.49

CONTINUED

HIGH-SPEED TRANSISTOR OUTPUT OPTOCOUPLERS (CONT.)

Mfg. Part No.	I_F (mA)	CTR Min. (%)	t_{PLH} Max (µs)	t_{PHL} Max (µs)	CMR Min. (V/µs)	Package	Stock No.	Price Each 1-9
● HCNW4504-000E	12	25	1.4	1	10k	8-DIP	36K5461	3.82
● HCPL-4504-000E	12	26	1.4	1	10k	8-DIP	88H7834	3.15
● 6N135-000E	16	7	2	2	1k	8-DIP	31K7915	1.93
● 6N136-000E	16	19	1	1	1k	8-DIP	89H3258	1.93
● HCNW136-000E	16	19	1	1	1k	8-DIP	88H7743	3.00
● HCNW4503-000E	16	19	1	1	15k	8-DIP	31K6896	3.44
● HCPL-0453-000E	16	19	1	1	15k	8-SOIC	88H7766	3.07
● HCPL-0501-000E	16	19	1	1	1k	8-SOIC	31K6928	2.18
● HCPL-4502-000E	16	19	1	1	1k	8-DIP	31K7017	1.84
● HCPL-4503-000E	16	19	1	1	15k	8-DIP	88H7832	2.81
● HCPL-2502-000E	25	15	0.8	0.8	1k	8-DIP	31K6972	2.63
1MBd TRANSISTOR OUTPUT DUAL CHANNEL — FIG. 2								
● HCPL-0530-000E	16	7	2	2	1k	8-SOIC	31K6930	4.34
● HCPL-0531-000E	16	19	1	1	1k	8-SOIC	88H7771	4.50
● HCPL-2530-000E	16	7	2	2	1k	8-DIP	31K6974	3.15
● HCPL-2531-000E	16	19	1	1	1k	8-DIP	88H7809	3.30
● HCPL-2531-300E	16	19	1	1	1k	8-PDIP	31K6977	3.37

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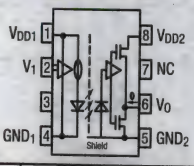
HIGH-SPEED DIGITAL CMOS LOGIC GATE

RoHS Compliant Available

AVAGO TECHNOLOGIES



Mfg. Part No.	Package	Data Rate Mb/S	PWD Max. (nS)	Prop Delay Max. (nS)	Stock No.	Price Each 1-9
● HCPL-7710-000E	8-PDIP	12.5	8	40	88H7839	5.78
● HCPL-7710-300E	8-PDIP	12.5	8	40	31K7053	5.85
● HCPL-7720-000E	8-DIP	25	8	40	31K7055	6.42
● HCPL-7721-000E	8-DIP	25	6	40	88H7842	7.07
● HCPL-7723-000E	8-DIP	50	2	22	31K7060	7.23
● HCPL-0710-000E	8-SOIC	12.5	8	40	88H7792	6.10
● HCPL-0708-000E	8-SOIC	15	30	60	83H6561	4.66
● HCPL-0720-000E	8-SOIC	25	8	40	88H7794	6.75
● HCPL-0721-000E	8-SOIC	25	6	40	31K6946	7.39
● HCPL-0723-000E	8-SOIC	50	2	22	31K6947	7.15

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5MBd DIGITAL LOGIC GATE OPTOCOUPLER

RoHS Compliant Available

AVAGO TECHNOLOGIES

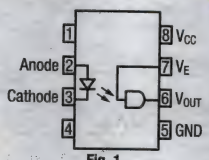


Fig. 1

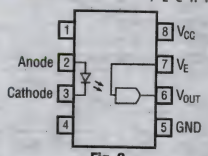


Fig. 2

SINGLE CHANNEL — FIG. 1

Mfg. Part No.	Output Current (mA)	I_f (mA)	t_{prop} (µs)	CMR Min. (V/µs)	Package	Stock No.	Price Each 1-9
● HCNW2201-000E*	25	1.6	0.3	1k	8-DIP	31K6885	4.14
● HCNW2211-000E*	25	1.6	0.3	10k	8-DIP	31K6887	4.50
● HCPL-0201-000E†	25	1.6	0.3	1k	8-SOIC	88H7760	3.79
● HCPL-0211-000E†	25	1.6	0.3	10k	8-SOIC	31K6912	4.37
● HCPL-2200-000E†	25	1.6	0.21	2.5k	8-DIP	31K6955	3.57
● HCPL-2201-000E†	5	1.6	0.3	1K	8-DIP	31K6957	3.47
● HCPL-2211-000E†	25	1.6	0.3	10k	8-DIP	88H7800	3.92
● HCPL-2212-000E‡	5	1.6	0.3	10K	8-DIP	31K6962	3.92
DUAL CHANNEL — FIG. 2							
● HCPL-2231-000E	5	1.8	0.3	1K	8-DIP	88H7801	8.00
● HCPL-2231-300E†	5	1.8	0.3	1K	8-SOIC	31K6964	8.06
● HCPL-2232-000E	5	1.8	0.3	10K	8-DIP	88H7803	10.35
● HCPL-2232-300E†	5	1.8	0.3	10K	8-SOIC	31K6965	10.41

*400 mil Wide Body DIP; † Gull Wing Surface Mount Option; ‡ 630V Peak VDE 0884 with Option 060 and Pin 6 Not Connected

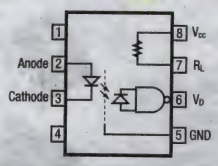
(2666)

8 MBd LOGIC GATE OPTOCOUPLER

RoHS Compliant Available

AVAGO TECHNOLOGIES

Features:
- 300 mil DIP
- Peak Voltage: 630V
- Insulation (UL=1 min.): 2500V



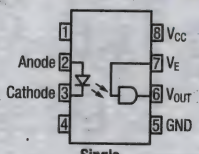
Mfg. Part No.	I_f mA	CMR-V/ms @ (Vcm)	Package	Stock No.	Price Each 1-9
● HCPL-2300-000E	0.5	100 (50V)	8-DIP	88H7805	7.42

(73118)

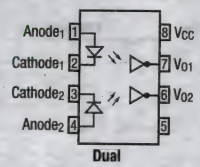
10 MBd DIGITAL LOGIC GATE OPTOCOUPLERS

RoHS Compliant Available

AVAGO TECHNOLOGIES



Single



Dual

SINGLE CHANNEL

Mfg. Part No.	I_f (mA)	t_{PLH} Max. (nS)	t_{PHL} Max. (nS)	CMR - V/µs@ V_{CM} dV/dt (V/µs)	CMR - V/µs@ V_{CM} V_{CM} (V)	Package	Stock No.	Price Each 1-9
● 6N137-000E	5	100	100	10000	10	8-DIP	89H3260	1.88
● HCNW2601-000E	5	100	100	5000	50	8-DIP	31K6890	3.57
● HCNW2611-000E	5	100	100	10000	1000	8-DIP	31K6891	4.66
● HCNW2611-300E	5	100	100	10000	1000	8-SOIC	31K6892	4.72
● HCPL-0600-000E	5	100	100	10000	10	8-SOIC	88H7774	2.63
● HCPL-0601-000E	5	100	100	5000	50	8-SOIC	88H7776	2.63
● HCPL-2601-000E	5	100	100	5000	50	8-DIP	88H7810	2.51
● HCPL-2601-300E	5	100	100	5000	50	8-SOIC	31K6981	2.59
● HCPL-2611-000E	5	100	100	10000	1000	8-DIP	31K6989	2.81
● HCPL-M600-000E	5	100	100	10000	10	5-SOIC	31K6907	2.81
● HCPL-M611-000E	5	100	100	10000	1000	5-SOIC	88H7757	3.05
DUAL CHANNEL								
● HCPL-0630-000E	5	100	100	10000	10	8-SOIC	88H7785	5.85
● HCPL-0630-500E	5	100	100	10000	10	8-SOIC	77M8901	6.50
● HCPL-0631-000E	5	100	100	5000	50	8-SOIC	88H7787	5.85
● HCPL-063A-000E	5	100	100	1000	50	8-SOIC	88H7779	6.67
● HCPL-063N-000E	3	100	100	15000	1000	8-SOIC	88H7783	8.79
● HCPL-0661-000E	5	100	100	10000	1000	8-SOIC	88H7789	8.51
● HCPL-2630-000E	5	100	100	10000	10	8-DIP	88H7813	4.02
● HCPL-2630-300E	5	100	100	10000	10	8-SOIC	31K6998	4.08
● HCPL-2631-000E	5	100	100	5000	50	8-DIP	88H7814	4.34
● HCPL-2631-300E	5	100	100	5000	50	8-SOIC	31K7000	4.40
● HCPL-263A-000E	5	100	100	1000	50	8-DIP	31K6994	6.26
● HCPL-263N-000E	3	100	100	15000	1000	8-DIP	31K6997	7.20
● HCPL-4661-000E	5	100	100	10000	1000	8-DIP	31K7034	7.20

(73119)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196562)

ACSL-6XX0 15 MBd DIGITAL LOGIC GATE OPTOCOUPLER

RoHS Compliant Available

AVAGO TECHNOLOGIES

Features:
- Available in dual, triple and quad channel configurations
- Bi-directional
- Wide supply voltage range 3.0V to 5.5V
- Wide operating temperature range -40 to 100°C
- High-speed: 15 MBd typical, 10 MBd minimum
- 10kV/µS minimum CMR at Vcm = 1000V
- LSTTL/TTL compatible
- Safety and regulatory approvals (Pending)
  - 2500Vrms for 1 min per UL1577
  - CSA Component Acceptance
  - IEC/EN/DIN EN 60747-5-2
- 16-NSOIC package for triple and quad channels

Applications:
- I2C - Power over Ethernet
- I2C - Extended Bus Transmission
- I2C - Telecommunication (Power Control System)
- Digital isolation for A/D & D/A converters
- Data Acquisition
- Full duplex fieldbus communication
- Instrument I/O isolation
- Pulse transformer replacement
- Computer parallel and serial interfaces
- Microprocessor system interfaces

ACSL-6xx0 series is the markets first 3.3V, 15MBd, Multi-Channel and Bi-Directional Digital Logic Gate Optocoupler. These multi-channel product family offers in dual, triple and quad channels configuration integrated in a single thin 8-SO or 16-SO packages. Both forward and reverse channels configuration are integrated in a monolithic form that is achieved through a patented process technology.

ALL-IN-ONE MULTI-CHANNEL

Mfg. Part No.	Forward Channels	Reverse Channels	Package	Stock No.	Price Each 1-9	Price Each 10-24
ACSL-6400-00TE	4	0	16-SOIC	64J9639	7.94	7.19
BI-DIRECTIONAL MULTI-CHANNEL						
ACSL-6210-00RE	1	1	8-SOIC	64J9635	4.50	3.75
ACSL-6410-00TE	3	1	16-SOIC	71K0634	8.51	7.71

(68959)

20 MBd DIGITAL LOGIC GATE OPTOCOUPLERS

RoHS Compliant Available

AVAGO TECHNOLOGIES

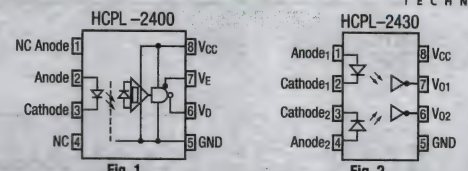


Fig. 1 Fig. 2

Mfg. Part No	Fig.	I_F (mA)	t_{PROP} max. (ns)	CMR min. (V/µs)	Package	Stock No.	Price Each 1-9	Price Each 10-24
HCPL-2400-000E	1	4	60	1000	8-DIP	31K6968	6.81	5.67
HCPL-2430-000E	2	4	60	1000	8-DIP	88H7807	12.07	11.56
HCPL-2430-300E	2	4	60	1000	8-SOIC	31K6970	12.12	11.61

(73120)

MINIATURE ISOLATION AMPLIFIER OPTOCOUPLERS

RoHS Compliant Available

AVAGO TECHNOLOGIES

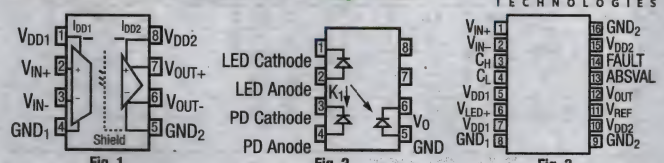


Fig. 1 Fig. 2 Fig. 3

Mfg. Part No.	Fig.	Nonlinearity	BW (Hz)	Gain Tolerance (+/-%)	Pkg.	Stock No.	Price Each 1-9	Price Each 10-24
HCPL-7800-000E	1	0.2%	100k	3%	8-DIP	88H7844	12.28	11.12
HCPL-7800A-000E	1	0.2%	100k	1%	8-DIP	88H7847	14.16	13.56
HCPL-7800A#500	1	0.2%	100k	1%	8-PDIP	05M6395	21.05	17.52
HCPL-7800A-300E	1	0.2%	100k	1%	8-SOIC	88H7848	14.21	13.61
HCPL-7840-300E	1	0.2%	100k	5%	8-SOIC	31K7061	7.26	6.58
HCPL-7510-300E	1	0.4%	100k	3%	8-SOIC	36K5532	6.01	5.01
HCPL-7520-300E	1	0.4%	100k	5%	8-SOIC	60K5967	5.52	4.60
HCPL-7840-000E	1	0.2%	100k	3%	8-DIP	88H7850	7.21	6.53
HCPL-7860-000E	1	0.14%	18k	...	8-DIP	31K7064	7.66	6.94
HCNR200-000E	2	0.25%	1.5M	15%	8-DIP	88H7710	4.27	3.56
HCNR201-000E	2	0.25%	1.5M	5%	8-DIP	88H7711	5.69	4.74
HCPL-788J-000E	3	0.4%	30k	5%	16-SOIC	31K7067	9.73	8.81

(2668)

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Quality US-based manufacturers—
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(197415)

3.3V OPTOCOUPLERS

RoHS Compliant Available

AVAGO TECHNOLOGIES

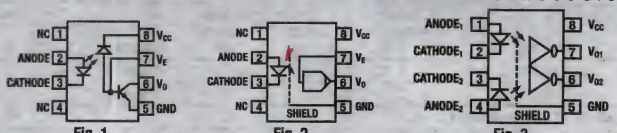

Fig. 1 Fig. 2 Fig. 3

Features:
- Offers Superior Isolation Performance in Low-Voltage Designs
- Higher Data Rates, Lower Power Consumption
- High CMR Performance
- Cost-Effective
- CSA Certified, VDE Approved

3.3V- 1Mbd TRANSISTOR OUTPUT OPTOCOUPLER – FIGURE 1

Mfg. Part No.	Output (Mbd)	If Min. (mA)	Tprop (max.)	IR Min. (V/µs)	Chan.	Pkg.	Stock No.	Price Each 1-9	Price Each 10-24
3.3V - 15 MBd LOGIC GATE OPTOCOUPLERS – FIGURE 2									
HCPL-060L-000E	15	5	75ns	15k	1	8-SOIC	31K6932	3.00	2.66
3.3V - 15 MBd LOGIC GATE OPTOCOUPLERS – FIGURE 3									
HCPL-063L-000E	15	5	75ns	15k	2	8-SOIC	88H7781	6.42	5.35
3.3V - 15 MBd LOGIC GATE OPTOCOUPLERS									
HCPL-263L-000E	15	5	75ns	15k	2	8-PDIP	31K6996	5.14	4.28
ACPL-K63L-000E	15	5	40ns	15k	1	8-SOIC	99K1744	7.00	5.84
ACPL-M60L-000E	15	20	40ns	15k	1	5-SOIC	02M9223	2.63	2.33
3.3V - 25 MBd LOGIC GATE OPTOCOUPLERS									
ACPL-072L-000E	25	5	40ns	10k	1	8-SOIC	93K8138	5.14	4.28

(68709)

OPTOISOLATORS

RoHS Compliant Available

TT electronics OPTEK Technology

Fig. 1 Fig. 2 Fig. 3

Mfg. Part No.	Fig.	CTR Min. (%)	V_{EC} (V)	V_{BRCEO} (V)	I_C Min. (mA)	Isolation Min. (kVDC)	Stock No.	Price Each 1-9	Price Each 10-99	Price Each 100-249
OPI1264A	1	25	5	30	2.5	10	08F2861	2.88	2.49	2.33
OPI1264B	1	50	5	30	5	10	08F2862	2.88	2.49	2.33
OPI1264C	1	100	5	30	10	10	08F2863	2.88	2.49	2.33
OPI1266	2	Photologic		16	2.5	16	01C3448	8.34	7.20	6.75
OPI1268	2	Photologic		16	2.5	16	83H0206	7.81	6.75	6.32
OPI1268S	2	Photologic		18	30	20	56T4074	7.04	6.72	6.47
OPI120	3	20	5	25	25	15	08F2860	11.37	9.83	9.21

(3837)

LOW INPUT CURRENT PHOTOTRANSISTOR OUTPUT OPTOCOUPLERS

RoHS Compliant Available

VISHAY

Features:
- Phototransistor output
- Low input current
- Single Channel
- Low profile package (half pitch)

Specifications:
- High collector emitter voltage, V_{CEO} = 80V
- Isolation test voltage = 3750V_{RMS}
- Ambient temperature range: -55°C to +110°C

VOS615 SERIES — SSOP-4

Mfg. Part No.	Isolation Voltage (kV)	Input Current (mA)	Output Voltage (V)	Stock No.	Price Each 1-9
VOS615A-X001T	3.75	50	80	63W3400	0.53
VOS615A-2T	3.75	50	80	63W3401	0.49
VOS615A-2X001T	3.75	50	80	63W3402	0.57
VOS615A-3T	3.75	50	80	63W3403	0.49
VOS615A-3X001T	3.75	50	80	63W3404	0.57
VOS615A-4T	3.75	50	80	63W3405	0.49
VOS615A-4X001T	3.75	50	80	63W3406	0.53
VOS615AT	3.75	50	80	63W3407	0.49
VOS617 SERIES — SSOP-4					
VOS617A-X001T	3.75	50	80	63W3408	0.57
VOS617A-2T	3.75	50	80	63W3409	0.53
VOS617A-2X001T	3.75	50	80	63W3410	0.57
VOS617A-3X001T	3.75	50	80	72W1538	0.61
VOS617A-4T	3.75	50	80	63W3411	0.53
VOS617A-4X001T	3.75	50	80	63W3412	0.57
VOS617A-7T	3.75	50	80	63W3413	0.53

➤CONTINUED➤

LOW INPUT CURRENT PHOTOTRANSISTOR OUTPUT OPTOCOUPLERS (CONT.)

Mfg. Part No.	Isolation Voltage (kV)	Input Current (mA)	Output Voltage (V)	Stock No.	Price Each 1-9
VOS617 SERIES — SSOP-4					
● VOS617A-7X001T	3.75	50	80	63W3414	0.57
● VOS617AT	3.75	50	80	63W3415	0.57
VOS618 SERIES — SSOP-4					
● VOS618A-X001T	3.75	50	80	63W3416	0.75
● VOS618A-7T	3.75	50	80	63W3417	0.71
● VOS618AT	3.75	50	80	63W3418	0.71
● VOS618A-2X001T	3.75	50	80	72W1540	0.75
VOS627 SERIES — SSOP-4					
● VOS627A-X001T	3.75	50	80	66W5599	0.89
VOS628 SERIES — SSOP-4					
● VOS628A-X001T	3.75	50	80	66W5605	0.93

(210001)

OPTOCOUPLERS

RoHS Compliant Available

VISHAY.

Mfg. Part No.	Isolation Voltage (kV)	Input Current (mA)	Output Voltage (V)	Package	Stock No.	Price Each 1-9
PHOTOTRIAC, NON-ZERO CROSSING, 1.5kV/µS dV/dt, 600V						
● VO3052-X001	5.3	60	600	6-DIP	62W1291	1.10
● VO3053-X009T	5.3	60	600	6-SMD	63W3422	1.24
PHOTOTRIAC, ZERO CROSSING, 1.5kV/µS dV/dt, 600V						
● VO3062-X016	5.3	60	600	6-DIP	62W1293	1.02
● VO3063-X016	5.3	60	600	6-DIP	62W1296	1.07
● VO3062-X017T	5.3	60	600	6-SMD	63W3423	1.24
● VO3063-X009T	5.3	60	600	6-SMD	63W3424	1.24
2.5A OUTPUT CURRENT IGBT AND MOSFET DRIVER						
● VO3120	5.3	16	500	8-DIP	14R9220	1.54
● VO3120-X007T	5.3	16	500	8-SMD	14R9221	1.90
● VO3120-X019T	5.3	25	...	8-SMD	63W3425	1.96
0.5A OUTPUT CURRENT IGBT AND MOSFET DRIVER						
● VO3150A	5.3	16	500	8-DIP	14R9222	1.29
● VO3150A-X007T	5.3	16	500	8-SMD	14R9223	1.39

(209993)

HIGH-SPEED OPTOCOUPLERS

RoHS Compliant Available

VISHAY.

Mfg. Part No.	Channels	CTR Min (%)	T_{PLH} Max (nS)	T_{PHL} Max (nS)	R_L (kΩ)	CMR typ (V/µs)	Package	Stock No.	Price Each 1-9
ANALOG HIGH-SPEED — 0.1MBd									
● 6N138	1	300	10	35	2.2	500	8-DIP	35K5294	1.02
● 6N139	1	500	25	60	4.7	500	8-DIP	35K3079	1.17
● SFH6319T	1	500	60	25	4.1	1000	8-SOIC	21H7788	1.27
ANALOG HIGH-SPEED — 1 MBd									
● 6N135	1	5	0.3	0.3	2.2	1000	8-DIP	35K3077	1.27
● 6N136	1	15	0.2	0.2	4.7	1000	8-DIP	35K3078	1.32
● SFH6136	1	15	0.2	0.2	4.1	1000	8-DIP	35K0164	1.29
● SFH6316T	1	15	1	1	4.1	1000	8-SOIC	21H7786	1.53
● SFH636	1	15	0.8	0.8	1.9	10000	6-DIP	35K3225	2.29
● SFH6345	1	15	0.8	0.8	4.1	30000	8-DIP	35K0167	1.47
● SFH6326	2	15	0.8	0.8	1.9	1000	8-DIP	35K0166	1.65

Mfg. Part No.	Channels	Input Current (mA)	Isolation Voltage (kV)	Output Voltage (V)	CMR Min (V/µs)	Package	Stock No.	Price Each 1-9
DIGITAL HIGH-SPEED — 5MBd								
● SFH6721T	1	5	4	15	2500	8-SOIC	21H7810	2.04
● SFH6700	1	5	5.3	15	1000	8-DIP	35K4885	1.51
● SFH6711	1	5	5.3	15	2500	8-DIP	35K4887	1.57
● SFH6731	2	5	5.3	15	1000	8-DIP	35K0170	2.10
● SFH6732	2	5	5.3	15	5000	8-DIP	35K0171	2.10
DIGITAL HIGH-SPEED — 10 MBd								
● VO0601T	1	15	4	7	5000	8-SOIC	43K9733	2.36
● 6N137	1	15	5.3	7	100	8-DIP	52M1895	1.35
● 6N137A	1	20	5	7	...	8-DIP	62W3564	1.13
● 6N137A-X001	1	20	5	7	...	8-DIP	62W3565	1.20
● 6N137A-X007T	1	20	5	7	1000	8-SMD	63W3448	1.24
● 6N137A-X017T	1	20	5	7	1000	8-SMD	63W3449	1.18
● VO2630	2	10	5.3	7	100	8-DIP	43K9742	2.29
● VO4661	2	10	5.3	7	10000	8-DIP	43K9748	2.41

➤ CONTINUED ➤

HIGH-SPEED OPTOCOUPLERS (CONT.)

Mfg. Part No.	Channels	Input Current (mA)	Isolation Voltage (kV)	Output Voltage (V)	CMR Min (V/µs)	Package	Stock No.	Price Each 1-9
DIGITAL HIGH-SPEED — 10 MBd								
● SFH6700-X009T	1	10	5.3	15	1000	8-SMD	63W3393	1.77
● SFH6755T	2	15	3	7	100	8-SOIC	23K1172	3.21
● SFH6136-X018	1	25	5.3	25	1000	8-SMD	62W0483	1.11
● SFH6325-X009T	2	25	5.3	25	1000	8-SMD	63W3455	2.16

(74706)

VACTROL® ANALOG OPTOISOLATORS

EXCELITAS TECHNOLOGIES

VTL5C

Provide low noise, infinitely variable resistor as output element. Resistance is inversely proportional to input drive current. Applications include: audio limiting and compression, automatic gain control, linear and DC isolators, SCR and TRIAC drives, logic interfacing and noiseless switching.

Mfg. Part No.	Output Resistance On: Input Current (mA)	Output Resistance On: Dark Adapted Typ. (Ω)	Turn-off (Decay) To 100 KΩ Max. (ms)	Stock No.	Price Each 1-24	Price Each 25-49
VTL5C4	10	125	1500	43F888	6.67	6.14

(3774)

OPTOCOUPLERS WITH DARLINGTON OUTPUT

RoHS Compliant Available

VISHAY.

Mfg. Part No.	Isolation Voltage (VRMS)	CTR/V_{OLOW} (%)	I_F test (mA)	I_F max. (mA)	V_{CEO} (V)	T_{ON}/T_{OFF} (µs)	R_L (Ω)	I_C (mA)	Stock No.	Price Each 1-9
SMD - MF16										
● TCMD4000	3750	>600	5	60	>35	300/250	100	10	22H1087	2.06
SMD - SOIC8										
● IL223AT	3000	500	1	60	30	...	...	50	20H8792	1.04
● ILD223T	3000	500	1	60	30	...	...	50	20H8682	1.52
TH - DIP16										
● ILQ30	5300	100	10	60	30	10/35	100	125	58K1688	3.22
● ILQ31	5300	200	10	60	30	10/35	100	125	20H8738	3.14
● ILQ55	5300	100	10	60	55	10/35	100	125	58K1691	3.38
● ILQ32	5300	500	10	60	30	15/30	...	...	58K1689	3.08
TH - DIP6										
● H11B1	5300	500	1	60	25	5/30	100	100	58K1624	1.08
● ILD55	5300	100	10	60	30	10/35	100	125	59K0211	1.88
● 4N32	5300	500	10	60	30	60	180	125	88K2145	0.38
● 4N33	5300	500	10	60	30	60	180	125	88K1390	0.39
● H11AA1-X006	5300	500	...	60	30	60	10	...	43K9133	1.02

(74705)

LINEAR OPTOCOUPLERS

RoHS Compliant Available

VISHAY.

Mfg. Part No.	Isolation Voltage (V_{RMS})	I_F (mA)	I_F (mA)	Transfer Gain Linearity (K3)	Stock No.	Price Each 1-9	Price Each 10-99
8-PDIP							
● IL300	5.3	60	8-DIP	0.56 to 1.65	58K1707	3.96	3.64
● IL300-E	5.3	60	8-DIP	0.851 to 0.955	58K1710	11.50	10.35
● IL300-F	5.3	60	8-DIP	0.945 to 1.061	58K1712	11.34	10.20
● IL300-EF	5.3	60	8-DIP	0.851 to 1.061	58K1711	6.62	5.96

(74702)

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(212565)

VOD211 SERIES PHOTOTRANSISTOR OUTPUT DUAL CHANNEL OPTOCOUPLERS

RoHS Compliant Available

Features:
- Two channel coupler
- SOIC-8 surface mountable package
- Standard lead spacing of 0.05"

Specifications:
- Isolation test voltage, 4000 VRMS
- Temperature range: -40°C to + 100°C

8-SOIC

Mfg. Part No.	Isolation Voltage (kV)	Input Current (mA)	Output Voltage (V)	Stock No.	Price Each 1-9
VOD211T	4	30	70	63W3456	0.95

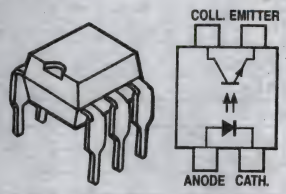
(209998)

CNY SERIES OPTOCOUPLERS WITH PHOTOTRANSISTOR OUTPUT

RoHS Compliant Available

Applications:
- Switch-Mode Power Supplies
- Line Receivers
- Computer Peripheral Interfaces

CNY series optocouplers consist of a phototransistor optically coupled to a gallium arsenide infrared-emitting diode in a 6-lead plastic dual inline package. The elements are mounted on 1 leadframe using a coplanar technique, providing a fixed distance between input and output for highest safety requirements.



TH-DIL300-6

Mfg. Part No.	Isolation Voltage (VRMS)	CTR min @ I_f(test) (%)	CTR max @ I_f(test) (%)	I_F max. (mA)	V_{CEO} (V)	t_{on}/t_{off} (µs)	R_L (Ω)	I_C (mA)	Stock No.	Price Each 1-9
CNY17-1	5300	40	80	60	70	11/7	100	5	35C1609	0.37
CNY17-2	5300	63	125	60	70	11/7	100	5	35C1610	0.40
CNY17-3	5300	100	200	60	70	11/7	100	5	35C1611	0.40
CNY17-4	5300	160	320	60	70	11/7	100	5	35C1612	0.39
TH-DIP6										
CNY17F-1	5300	40	80	60	70	3/18	75	50	59K0133	0.37
CNY17F-2	5300	63	125	60	70	4.2/23	75	50	58K0169	0.37
CNY17F-3	5300	100	200	60	70	4.2/23	75	50	58K0172	0.40
CNY17F-4	5300	160	320	60	70	6/25	75	50	58K0176	0.39
TH-HV-A										
CNY64	8000 (VDE)	50-300	300	75	>32	5/3	100	5	20H4911	1.68
CNY64B	8000 (VDE)	100-200	300	75	>32	5/3	100	5	20H4913	1.92
TH-HV-B										
CNY65	8000 (VDE)	50-300	300	75	>32	5/3	100	5	20H4914	1.79
CNY65A	8000 (VDE)	63-125	300	75	>32	5/3	100	5	20H4915	1.86
CNY65B	8000 (VDE)	100-200	300	75	>32	5/3	100	5	20H4916	1.95
CNY65EXI	11600 (VDE)	50-300	300	75	>32	5/3	100	5	20H4917	5.64
CNY65BEXI	11600 (VDE)	100	200			...	...	...	61W8970	5.75

(69153)

SFH SERIES OPTOCOUPLERS WITH PHOTOTRANSISTOR OUTPUT

RoHS Compliant Available

SMD-DIP4-9

Mfg. Part No.	Isolation Voltage (kV_{RMS})	I_F max. (mA)	V_{CEO} (V)	Stock No.	Price Each 1-9
SFH6186-2	5.3	5	55	58K2210	0.74
SFH6186-3	5.3	5	55	21H7751	0.74
SFH6186-4	5.3	5	55	21H7753	0.74
SFH6186-5	5.3	5	55	58K2211	0.70
SFH6106-1	5.3	60	70	58K2191	0.74
SFH6106-2	5.3	60	70	60K6772	0.73
SFH6106-3	5.3	60	70	58K2192	0.73
SFH615A-4X016	5.3	60	70	43K9495	0.63
SFH6156-1	5.3	60	70	58K2201	0.48
SFH6156-2	5.3	60	70	58K2203	0.48
SFH6156-4T	5.3	60	70	21H7733	0.81
SFH6186-5T	5.3	60	55	43K9553	1.01
SFH6206-2T	5.3	60	70	05W6925	0.80
SMD-MF16-I					
SFH6916	3.75	5	70	21H7817	4.40
SMD-SOP4MF					
SFH690ABT	3.75	5	70	58K2221	0.65
SFH690AT	3.75	5	70	21H7814	0.73
SFH690BT	3.75	5	70	59K0261	0.69

CONTINUED

SFH SERIES OPTOCOUPLERS WITH PHOTOTRANSISTOR OUTPUT (CONT.)

SMD-SOP4MF

Mfg. Part No.	Isolation Voltage (kV_{RMS})	I_F max. (mA)	V_{CEO} (V)	Stock No.	Price Each 1-9
SFH1690CT	3.75	5	70	43K9392	0.81
SFH690DT	3.75	50	70	66M1320	0.73
SFH1690BT-X001	3.75	50	70	62W0479	0.61
SFH608-2X006	5.3	50	55	62W0480	1.16
SFH6156-3T0	5.3	60	70	62W0488	0.54
SFH620A-1X001	5.3	60	70	62W0491	0.64
SFH620AGB-X001	5.3	60	70	62W0492	0.64
SFH6186-5T	5.3	60	55	43K9553	1.01
TH-DIP4					
SFH618A-2	5.3	5	55	21H7744	0.70
SFH618A-3	5.3	5	55	58K2209	0.70
SFH618A-4	5.3	5	55	21H7746	0.70
SFH618A-5	5.3	5	55	59K0259	0.74
SFH610A-1	5.3	60	70	58K2187	0.70
SFH617A-1	5.3	60	70	58K2205	0.62
SFH617A-2	5.3	60	70	58K2206	0.61
SFH617A-3	5.3	60	70	58K2207	0.58
SFH617A-4	5.3	60	70	58K2208	0.58
SFH615A-1	5.3	60	70	58K2195	0.48
SFH615A-2	5.3	60	70	58K2196	0.48
SFH615A-3	5.3	60	70	58K2197	0.51
SFH615A-4	5.3	60	70	58K2199	0.48
SFH640-2	5.3	10	300	97K9550	1.55

(74708)

4N SERIES OPTOCOUPLERS WITH PHOTOTRANSISTOR OUTPUT

RoHS Compliant Available

TH-DIP-6

Mfg. Part No.	Isolation Voltage (VRMS)	CTR/$V_{O\ Low}$ @ I_C/I_F min. (%)	I_F test (mA)	I_F max. (mA)	V_{CEO} (V)	T_{ON}/T_{OFF} (µs)	R_L (Ω)	I_C (mA)	Stock No.	Price Each 1-9
4N25	5300	20	10	60	>32	4 / 3	100	10	88K1384	0.35
4N26	5300	20	10	60	>32	4 / 3	100	10	88K2144	0.36
4N27	5300	100 (>20)	10	60	>32	4 / 3	100	10	88K1388	0.35
4N28	5300	100 (>20)	10	60	>32	4 / 3	100	10	88K1389	0.36
4N35	5300	150 (>100)	10	60	>32	5,5 / 4,5	100	2	88K1392	0.36
4N36	5300	150 (>100)	10	60	>32	5,5 / 4,5	100	2	88K1396	0.35
4N37	5300	150 (>100)	10	60	>32	5,5 / 4,5	100	2	88K1397	0.36
SMD-6										
4N35-X007	5000	...	10	...	70	10 / 10	10	50	22H5480	0.42

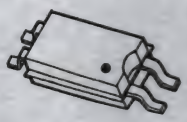
(74710)

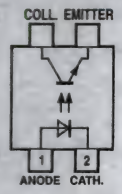
TCMT SERIES OPTOCOUPLERS WITH TRANSISTOR OUTPUT

RoHS Compliant Available

Applications:
- Programable Logic Controllers
- Modems
- Answering Machines and General Usage

TCMT series optocouplers consist of a phototransistor optically coupled to a gallium arsenide infrared-emitting diode in a 4-leadplastic Miniflat package. The elements are mounted on 1 leadframe using a coplanar technique, providing a fixed distance between input and output for highest safety requirements. Collector emitter voltage/repetitive peak voltage: >70.





SMD - MF16

Mfg. Part No.	Isolation Voltage (VRMS)	CTR/V_{OLow} (%)	I_F test (mA)	V_{CEO} (V)	T_{ON}/T_{OFF} (µs)	R_L (Ω)	I_C (mA)	Stock No.	Price Each 1-9
TCMT4100	3750	50-600	5	>70	6/5	100	2	06H1639	1.87
SMD - MF4									
TCMT1100	3750	50-600	5	>70	6/5	100	2	35C2106	0.63
TCMT1103	3750	100-200	10	>70	6/5	100	2	35C2109	0.60
TCMT1104	3750	160-320	10	>70	6/5	100	2	35C2110	0.60
TCMT1106	3750	100-300	5	>70	6/5	100	2	35C2112	0.64
TCMT1107	3750	80-160	5	>70	6/5	100	2	35C2113	0.60
TCMT1108	3750	130-260	5	>70	6/5	100	2	35C2114	0.64
TCMT1109	3750	200-400	5	>70	6/5	100	2	35C2115	0.64

(69156)

OPTOCOUPLERS

OPTOCOUPLERS WITH AC INPUT AND TRANSISTOR OUTPUT

RoHS Compliant Available

VISHAY.

Mfg. Part No.	Isolation Voltage (VRMS)	CTR min @ I_F(test) (%)	CTR max @ I_F(test) (%)	I_F (test) (mA)	I_F max. (mA)	V_{CEO} (V)	T_{ON}/T_{OFF} (µs)	R_L (Ω)	Stock No.	Price Each 1-9
SMD - DIP4-9										
● SFH6206-1	5300	40	125	10	60	70	3/2.3	75	21H7770	0.58
● SFH6206-2	5300	63	200	10	60	70	3/2.3	75	60K6774	0.58
● SFH6286-2	5300	63	125	1	50	55	6/5.5	100	21H7780	1.06
● SFH6286-3	5300	100	200	1	50	55	6/5.5	100	58K2216	1.00
SMD - MF16										
● TCMT4600	3750	80	300	5	60	>70	6/5	100	22H1089	2.06
SMD - MF4										
● TCMT1600	3750	80	300	5	60	>70	6/5	100	22H1088	0.70
SMD - SOIC8										
● IL256AT	3000	20	...	10	60	30	...	...	20H8804	0.98
● ILD256T	3000	20	...	10	30	70	...	...	20H8687	1.36
TH - DIL300-16										
● K814P	5000	>20	300	5	60	>70	6/5	100	21H0422	0.34
TH-DIL300-4										
● TCET1600G	8000 (VDE)	>20	300	5	60	>70	6/5	100	22H1064	0.32
TH - DIL400-4										
● TCET1600	8000 (VDE)	>20	300	5	60	>70	6/5	100	22H1063	0.34
TH - DIP-16										
● ILQ620GB	5300	50	600	5	60	70	...	...	58K1695	3.67
TH - DIP4										
● SFH620A-1	5300	40	125	10	60	70	3/2.3	75	21H7759	0.58
● SFH620A-2	5300	63	200	10	60	70	3/2.3	75	21H7761	0.58
● SFH620A-3	5300	100	320	10	60	70	3/2.3	75	59K0260	0.61
● SFH628A-2	5300	63	125	1	60	70	6/5.5	100	21H7776	1.06
● SFH628A-3	5300	100	200	1	60	70	6/5.5	100	62K3462	1.00
● SFH628A-4	5300	160	320	1	60	70	6/5.5	100	58K2215	1.05
TH - DIP6										
● H11AA1	5300	20	...	10	60	30	...	...	58K1620	1.14
● IL250	5300	50	...	10	60	30	...	...	58K1705	1.22
● IL252	5300	100	...	10	60	30	...	...	58K1706	1.07
TH - DIP8										
● ILD250	5300	20	...	19	60	30	...	...	58K1666	2.53
● ILD252	5300	100	...	10	60	30	50	...	20H8685	3.19
● ILD755-2	5300	1000	...	1	60	60	100	...	58K1684	3.98
● ILD620	5300	50	600	5	60	70	...	...	58K1676	1.65
SMD-16										
● ILQ620-X009T	5300	50	600	1	60	70	...	...	05W6841	3.56

(74707)

IL SERIES OPTOCOUPLERS WITH TRANSISTOR OUTPUT

RoHS Compliant Available

VISHAY.

Mfg. Part No.	Isolation Voltage (kV_{RMS})	CTRmin @ I_F(test) (%)	CTRmax @ I_F(test) (%)	I_F (mA)	V_{CEO} (V)	Stock No.	Price Each 1-9	Price Each 10-99
SMD - SOIC8								
● IL217AT	4	100	130	1	30	20H8789	0.97	0.83
● IL205AT	4	40	80	10	70	20H8780	0.84	0.72
● IL207AT	4	100	200	10	70	20H8782	0.89	0.76
● IL211AT	4	20	50	10	30	20H8784	0.84	0.72
● IL213AT	4	100	130	10	30	20H8786	0.89	0.76
● ILD205T	4	40	80	10	70	20H8678	1.13	1.01
● ILD206T	4	63	125	10	70	01H7271	1.14	1.02
● ILD207T	4	100	200	10	70	97C8648	1.16	1.04
● ILD213T	4	100	...	10	70	20H8680	1.13	1.01
● ILD217T	4	100	...	10	70	20H8681	1.23	1.10
● ILD207-X001T	4	...	...	30	70	63W3373	1.14	1.02
TH - DIP16								
● ILQ615-1	5.3	40	80	10	70	20H8746	2.75	2.53
● ILQ615-2	5.3	63	125	10	70	62K3435	2.56	2.39
● ILQ615-3	5.3	100	200	10	70	58K1692	2.56	2.39
● ILQ615-4	5.3	160	320	10	70	20H8750	2.75	2.53
● ILQ621	5.3	50	600	10	70	58K1696	2.56	2.39
● ILQ621GB	5.3	100	600	10	70	58K1697	2.72	2.50
TH - DIP6								
● IL2	5.3	100	500	60	70	58K1703	0.76	0.71
● IL5	5.3	50	400	60	70	58K1726	0.70	0.66

➤ CONTINUED ➤

IL SERIES OPTOCOUPLERS WITH TRANSISTOR OUTPUT (CONT.)

Mfg. Part No.	Isolation Voltage (kV_{RMS})	CTRmin @ I_F(test) (%)	CTRmax @ I_F(test) (%)	I_F (mA)	V_{CEO} (V)	Stock No.	Price Each 1-9	Price Each 10-99
TH - DIP6								
● IL4208-X007T	5.3	...	...	60	800	05W6844	3.70	3.22
● IL4108-X009T	5.3	...	...	60	800	05W6843	3.70	3.22
TH - DIP8								
● ILD74	5.3	12	...	20	20	58K1682	1.20	1.12
● MCT6	5.3	20	...	20	30	58K1824	1.15	0.97
● ILD1	5.3	20	300	60	50	58K1663	1.34	1.13
● ILD2	5.3	100	500	60	70	60K5997	1.07	1.00
● ILD5	5.3	50	400	60	70	58K1671	1.59	1.49
● ILD615-2	5.3	63	125	10	70	58K1674	1.20	1.12
● ILD615-4	5.3	160	320	10	70	58K1675	1.24	1.16
● ILD621	5.3	50	600	10	70	58K1678	1.14	1.07
● ILD621GB	5.3	100	600	10	70	58K1679	1.33	1.24
SMD-6								
● IL410-X008T	5.3	...	...	60	600	63W3377	3.42	2.97
● IL4118-X017T	5.3	...	...	60	800	63W3378	4.71	4.09
● IL4208-X017T	5.3	...	...	60	800	63W3380	3.76	3.27
● IL420-X008T	5.3	...	...	60	600	63W3379	3.42	2.97
SMD-8								
● ILD755-2X007T	5.3	...	...	60	60	63W3454	4.59	3.99
● ILD615-1X007T	5.3	...	...	60	70	63W3374	1.47	1.30
● IL300-E-X017T	5.3	...	...	60	...	63W3376	12.36	10.74
SMD-16								
● ILQ615-3X009T	5.3	...	...	60	70	63W3375	2.84	2.47

(74709)

MC AND MOC SERIES OPTOCOUPLERS WITH TRANSISTOR OUTPUT

RoHS Compliant Available

VISHAY.

Mfg. Part No.	Isolation Voltage (VRMS)	CTR/V_{OLOW} (%)	I_F test (mA)	I_F max. (mA)	V_{CEO} (V)	Stock No.	Price Each 1-9	Price Each 10-99
TH - DIL300-8								
● MCT62H	5300	>100	5	60	>70	21H1293	0.62	0.58
TH - DIP-6								
● H11A3	5300	20	10	60	70	58K1622	0.51	0.47
● SFH600-1	5300	63	10	60	70	58K2178	0.39	0.36
● MCT5211	5300	110	1	60	70	58K1823	1.32	1.12
● MOC8101	5300	50	10	60	30	21H2203	0.45	0.42
● MOC8102	5300	73	10	60	30	58K1957	0.45	0.42
● MOC8103	5300	108	10	60	30	58K1958	0.45	0.42
● MOC8104	5300	160	10	60	30	60K6271	0.45	0.42
TH - DIP-8								
● MCT6	5300	20	10	60	30	58K1824	1.15	0.97

(74712)

(196527)

PHOTOTRIAC OUTPUT OPTOCOUPLERS

RoHS Compliant Available

VISHAY.

Applications:
- Home appliances
- Microwave ovens
- Washing machines
- Inductive heating cooker
- Refridgerators
- Industrial equipment

Features:
- Max trigger current (I_{FT}): 10mA
- Isolation test voltage 5300V_{RMS}
- Pure tin leads

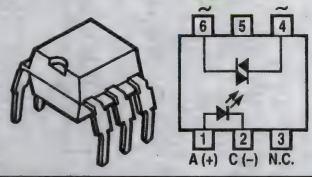
Mfg. Part No.	Isolation Voltage (Vrms)	Input Current (mA)	Output Voltage (V)	Trigger Current (mA)	Package	Stock No.	Price Each 1-9
HIGH DV/DT LOW INPUT CURRENT							
VO4256D-X001	5.3	60	600	1.6	6-DIP	62W1308	2.04
VO4257H-X009T	5.3	60	700	2	6-SMD	63W3432	2.80
VO4258H-X017T	5.3	60	800	2	6-SMD	63W3433	2.93
NON-ZERO CROSSING							
VO3053-X009T	5.3	60	600	5	6-SMD	63W3422	1.24
VO3052-X001	5.3	60	600	10	6-DIP	62W1291	1.10
POWER PHOTOTRIAC							
VO2223A-X007T	5.3	50	600	10	8-SMD	63W3420	1.16
ZERO CROSSING							
VO3062-X016	5.3	60	600	10	6-DIP	62W1293	1.02
VO3062-X017T	5.3	60	600	10	6-SMD	63W3423	1.24
VO3063-X016	5.3	60	600	5	6-DIP	62W1296	1.07
VO3063-X009T	5.3	60	600	5	6-SMD	63W3424	1.24
ZERO CROSSING, HIGH DV/DT LOW INPUT CURRENT							
VO4156H-X007	5.3	60	400	2	6-SMD	62W1298	2.01
VO4156H-X016	5.3	60	600	2	6-DIP	62W1299	2.06
VO4157D-X017T	5.3	60	700	1.6	6-SMD	63W3426	3.07
VO4157H-X017T	5.3	60	700	2	6-SMD	63W3427	2.90
VO4157M-X001	5.3	60	700	3	6-DIP	62W1302	2.41
VO4157M-X017T	5.3	60	700	3	6-SMD	63W3428	2.84
VO4158D-X009T	5.3	60	800	1.6	6-SMD	63W3429	3.16
VO4158H-X017T	5.3	60	800	2	6-SMD	63W3430	3.04
VO4158M-X016	5.3	60	800	3	6-DIP	62W1306	2.61
VO4158M-X018T	5.3	60	800	3	6-SMD	63W3431	2.99

(209460)

OPTOCOUPLERS WITH TRIAC/SCR OUTPUT

RoHS Compliant Available

VISHAY.



TH-DIL300-6

Mfg. Part No.	Isolation Voltage (VRMS)	I_{FT} (max.) (mA)	V_{DRM} (max.) (V)	Dv/dt (V/µs)	Stock No.	Price Each 1-9
K3011P	6000 (VDE)	<10	250	10	21H0413	0.62
K3020P	6000 (VDE)	<30	400	10	35C1755	0.60
K3021P	6000 (VDE)	<15	400	10	35C1756	0.66
K3022P	6000 (VDE)	<10	400	10	35C1757	0.64
K3023P	6000 (VDE)	<5	400	10	35C1758	0.69
SMD-6						
K3010P-X007T	6000 (VDE)	<15	250	10	63W3381	0.89

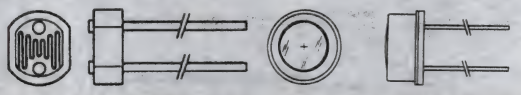
TH-DIP-6

Mfg. Part No.	Isolation Voltage (VRMS)	I_F (min.) (mA)	I_F (test) (mA)	Dv/dt (V/µs)	Stock No.	Price Each 1-9
IL410	5300	2	60	10000	58K1715	3.08
IL420	5300	2	60	10000	58K1719	3.17
IL4208	5300	2	60	10000	58K1722	3.35
IL4116	5300	1.3	60	10000	58K1717	3.44
IL4118	5300	1.3	60	10000	58K1718	4.04
IL4216	5300	1.3	60	10000	58K1723	3.19
IL4218	5300	1.3	60	10000	59K0215	4.29
TH-DIP-8						
VO2223A-X007T	5300	...	50	...	63W3420	1.16

(69157)

CdS PHOTOCONDUCTIVE CELLS

EXCELITAS TECHNOLOGIES



Economy solutions for many light level sensing applications: **mfg. part no. VT43N3** for street lights; **mfg. part no. VT90N2** for night lights; **mfg. part no. VT935G** for toys and cameras; **mfg. part no. VT90N2** for low light detection; **mfg. part no. VT33N1** for photocopiers; **mfg. part no. VT50N3** for flame detection.

Mfg. Part No.	Resistance (kOhms) 10 lux 2850k Min.	Max.	Dark Min.	Dark Sec.	Stock No.	Price Each 1-24	25-49
VT20N2	16	52	500	5	96F9261	12.57	11.47
VT30N1	6	18	200	5	99F5100	12.34	11.26

(3771)

FIBER OPTIC DEVICES

RoHS Compliant Available

TT electronics OPTEK Technology

Fig. 1

Fig. 2

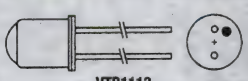
Mfg. Part No.	Fig.	Package	Description	Flux Responsivity Typ. (A/W)	Rise/Fall Time (ns)	Stock No.	Price Each 1-99
OPF470	1	TO-18 Green Cap	Pin Photodiode	0.45	6	08F2852	8.32
OPF472	2	ST Threaded Cube/Dip				08F2854	14.32

(73901)

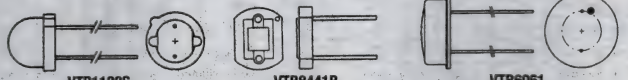
SILICON PHOTODIODES

RoHS Compliant Available

EXCELITAS TECHNOLOGIES



VTB1113



VTP1188S VTB8441B VTB6061

Optical detectors for sensing in such applications as bar code scanners, brightness controls, encoders, copier toner density, optical communications, headlight dimmers, etc. **Suffix B** in mfg. part no. denotes device incorporates an infrared rejection filter.

Mfg. Part No.	Package	Min. (µA)	Typ. (µA)	I_d Max.	@ V_R	Stock No.	Price Each 1-49	50-99
VTB-1013BH	TO-46	0.8	1.3	20pA	2V	79K2449	10.87	9.37
VTB1113H	TO-46 Lensed	30	60	20pA	2V	79K2457	6.80	5.85
VTB5051BH	TO-5 Hermetic	8	13	250pA	2V	79K2459	48.29	41.62
VTB8441BH	8mm Ceramic	4	5	100pA	2V	79K2473	5.42	4.67
VTP1188SH	Lens Ceramic	...	200	30nA	10V	79K2522	2.98	2.57
VTB6061H	TO-8 Hermetic	260	350	2nA	2V	79K2466	42.10	36.29

(3776)

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(212569)

PHOTODIODES WITH SOLDERABLE CONTACTS

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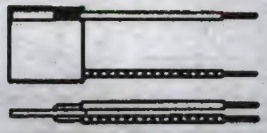
EXCELITAS TECHNOLOGIES



Mfg. Part No.	Active Area in² (mm²)	Open Circuit Voltage V_{OC}* Typ. (V)	Dark Current I_D† Max. (µA)	Stock No.	Price Each 1-4	Price Each 5-9
● VTS3085H	0.035 (22.4)	0.45	0.1	79K2560	6.06	5.39
● VTS3082H	0.138 (88.9)	0.45	0.2	79K2557	15.24	13.55

*@2850K, 1000lux; †@H = 0, V_R = 100mV
(3777)

SILICON PIN PHOTODIODE

RoHS Compliant Available

VISHAY.

Features:
- Package type: leaded
- Package form: T-1
- Dimensions (in mm): ∅ 3
- High radiant sensitivity
- Suitable for visible and near infrared radiation
- Fast response times
- Package matched with IR emitter series VSLB3940, TSUS4300, and TSAL4400
- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC

TEFD4300 is a silicon PIN photodiode with high radiant sensitivity in clear, T-1 plastic package. It is sensitive to visible and near infrared radiation.

Mfg. Part No.	Dark Current (nA)	Half Angle (°)	Wavelength Typ (nm)	Package	Stock No.	Price Each 1-9
● TEFD4300	150	20	950	T-1 (3mm)	82T8676	0.58
● TEFD4300F	150	20	950	T-1 (3mm)	82T8678	0.58
● TEFD4300F	150	20	950	T-1 (3mm)	82T8678	0.58

(202147)

DETECTORS PHOTO PIN DIODES

RoHS Compliant Available

VISHAY.

Diodes have filter matched for GaAs IREDs.

Mfg. Part No.	Wavelength (nm)	Dark Current (nA)	Angle of Half Sensiivity (°)	Package	Stock No.	Price Each 1-9	Price Each 10-49
PIN PHOTODIODES							
● BPV10	920	1	20	T-1 3/4 (5mm)	32C9134	0.75	0.70
● BPV10NF	940	1	20	T-1 3/4 (5mm)	32C9136	0.74	0.69
● BP104	950	2	65	DIP	14M4504	0.82	0.78
● BPW34	900	2	65	DIP	32C9150	1.03	0.87
● BPW24R	900	2	12	T0-18	32C9149	3.99	3.67
● BPV22F	950	2	60	Radial Leaded	95B4213	0.85	0.80
● BPV23FL	950	2	60	Radial Leaded	32C9143	0.73	0.69
● BPW41N	950	2	65	Radial Leaded	32C9151	0.78	0.73
● BPW46	900	2	65	Radial Leaded	32C9152	0.81	0.77
● BPW82	950	2	65	Radial Leaded	32C9157	0.77	0.72
SURFACE MOUNT PIN PHOTODIODES							
● TEMD1000	940	1	15	SMD	58K2402	0.77	0.66
● TEMD5010X01	940	2	65	SMD	54K7187	1.29	1.14
● TEMD5020X01	900	2	65	SMD	54K7188	1.22	1.08
● TEMD5110X01	940	2	65	SMD	54K7189	1.23	1.09
● TEMD5080X01	940	2	65	SMD	70R1411	1.60	1.41
● TEMD5510FX01	540	2	65	SMD	70R1412	1.95	1.73
● TEMD6010FX01	540	2	60	1206	54M1261	1.69	1.50
● TEMD6200FX01	540	0.1	60	0805	70R1413	1.00	0.90
● TEMD7000X01	900	1	60	0805	70R1414	0.78	0.67
● TEMD7100X01	950	1	60	0805	70R1415	0.78	0.67
● VBP104FAS	950	2	65	SMD	70R1428	0.94	0.81
● VBP104FASR	950	2	65	SMD	70R1429	0.94	0.81
● VBP104S	940	2	65	SMD	70R1430	0.94	0.81
● VBP104SR	940	2	65	SMD	70R1431	0.94	0.81
● VBPW34FAS	950	2	65	SMD	70R1447	1.01	0.86
● VBPW34FASR	950	2	65	SMD	70R1425	1.01	0.86
● VBPW34S	940	2	65	SMD	70R1426	1.07	0.92
● VBPW34SR	940	2	65	SMD	70R1427	1.01	0.86
● VEMD2000X01	940	1	15	SMD	70R1432	0.78	0.64
● VEMD2020X01	940	1	15	SMD	70R1433	0.83	0.68
SILICON PN PHOTODIODE							
● BPW21R	565	2	50	T0-5	32C9148	12.48	11.22
● BPW20RF	920	2	50	T0-5	93C9593	5.63	5.18
● VEMD2503X01	900	1	35	SMD	04X4990	0.72	0.62
● VEMD2523SLX01	900	1	35	SMD	04X4991	0.80	0.66
● VEMD2023SLX01	940	1	35	SMD	04X4988	0.77	0.66

➤CONTINUED➤

DETECTORS PHOTO PIN DIODES (CONT.)

Mfg. Part No.	Wavelength (nm)	Dark Current (nA)	Angle of Half Sensiivity (°)	Package	Stock No.	Price Each 1-9	Price Each 10-49
SILICON PN PHOTODIODE							
● VEMD2003X01	940	1	35	SMD	04X4987	0.72	0.62
● VEMD2023X01	940	1	35	SMD	04X4989	0.72	0.62

(52592)

PHOTOMICROSENSORS — NONAMPLIFIED

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

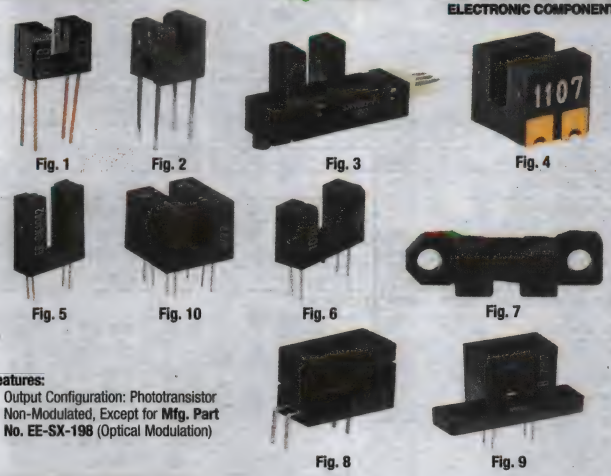


Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 10 Fig. 6 Fig. 7 Fig. 8 Fig. 9

Features:
- Output Configuration: Phototransistor
- Non-Modulated, Except for **Mfg. Part No. EE-SX-198** (Optical Modulation)

TRANSMISSIVE SENSING METHOD

Mfg. Part No.	Fig.	Sensing Distance (mm)	Terminal Type	On/Off Type	Aperture Orientation, Width (mm)	Slot Width/ Depth (mm)	Stock No.	Price Each 1-24
● EE-SG3	9	3.6	Solder	4/4	Hor., 0.2	3.6/9	36K7268	4.47
● EE-SH3	7	...	Solder	4/4	Hor., 0.5	3.4/7.2	36K7269	3.86
● EE-SV3	...	...	Solder	4/4	Hor., 0.5	3.4/7.2	36K3211	4.97
● EE-SV3-B	...	...	PC Board	4/4	Hor., 0.5	3.4/7.2	35K4492	3.97
● EE-SX1018	1	2	PC Board	4/4	Hor., 0.5	2/4.5	39K9776	2.44
● EE-SX1041	1	5	PC Board	4/4	Hor., 0.5	5/8.2	36K3212	2.07
● EE-SX1071	1	3.4	PC Board	4/4	Hor., 0.5	3.4/7.2	36K7271	2.07
● EE-SX198	1	3	PC Board	4/4	Hor., 0.5	3/7.5	35K4494	2.07
● EE-SX1103	2	2	PC Board	10/10	Hor., 0.4	2/2.8	36K1923	1.41
● EE-SX1105	2	2	PC Board	10/10	Hor., 0.4	2/2.6	35K3187	1.41
● EE-SX1106	2	3	PC Board	10/10	Hor., 0.4	3/3.9	39K9777	1.41
● EE-SX4009-P1*	3	5	Amp® Connector	3kHz	Hor., 0.5	5/10.5	36K1924	4.53
● EE-SX1042	5	5	PC Board	4/4	Hor., 0.5	5/12	36K3213	2.24
● EE-SX1070	6	8	PC Board	3kHz	Hor., 0.5	8/8.2	36K3214	2.03
● EE-SX4070	6	8	PC Board	3kHz	Hor., 0.5	8/7.5	88K1916	2.55
● EE-SX1088-W1***	7	3.4	61cm Wires	4/4	Ver., 0.5	8/8.2	26M8263	12.71

TRANSMISSIVE SENSING METHOD

Mfg. Part No.	Fig.	Sensing Distance (mm)	Terminal Type	On/Off Type	Aperture Orientation, Width (mm)	Slot Width/ Depth (mm)	Stock No.	Tape Cut Price Each 1-24
● EE-SX1107	4	1	SMT	10/10	Hor., 0.15	1/2	36K3215	1.45
● EE-SX1109	4	3	SMT	10/10	Hor., 0.5	3/3.5	36K7272	1.63

REFLECTIVE SENSING METHOD

Mfg. Part No.	Fig.	Sensing Distance (mm)	Terminal Type	On/Off Type	Sensing Method	Sensing Object	Stock No.	Price Each 1-24
● EE-SY169	8	4	PC Board	30/30	Red LED Reflective	White Paper	88K1083	18.30
● EE-SB5	9	5	Solder	30/30	Reflective	White Paper	35K4491	6.19
● EE-SB5-B	9	5	PC Board	30/30	Reflective	White Paper	36K1921	5.92
● EE-SF5	...	5	Solder	30/30	Reflective	White Paper	39C6306	5.21
● EE-SF5-B	...	5	PC Board	30/30	Reflective	White Paper	35K3185	5.21

*Output configuration is Photo IC Light-ON, ***Vertical Slot
(5264)

AMPLIFIED PHOTOMICROSENSORS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

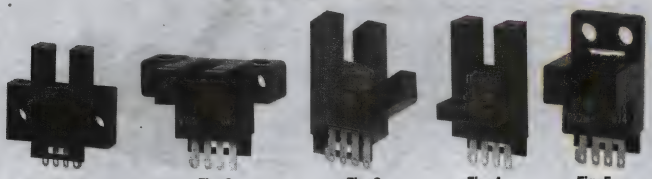


Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5

Features:
- Operating Voltage: 5 - 24VDC
- Response Frequency: 1 kHz Max.
- LED Status Indicator, Off When Object Detected

"A" suffix denotes LED status indicator on when object detected. UL recognized, CE compliant. *Use connector and converter options* **EE-1001, EE-1006, EE-1006A** *and* **EE-2002;** *go online or call.*

Mfg. Part No.	Fig.	Slot Width	Slot Depth	Output Config.	Output Type	Stock No.	Price Each 1-4	Price Each 5-9
EE-SX670	1	5mm	9mm	LO/DO	NPN, 100mA Max.	52F3827	28.05	27.33
EE-SX670A	1	5mm	9mm	LO/DO	NPN, 100mA Max.	18M7274	25.91	25.26
EE-SX671	2	5mm	9mm	LO/DO	NPN, 100mA Max.	52F3828	26.73	26.05
EE-SX671A	2	5mm	9mm	LO/DO	NPN, 100mA Max.	18M7275	26.73	26.05
EE-SX671P	2	5mm	9mm	LO/DO	PNP, 50mA Max.	18M7276	26.73	26.05
EE-SX672	3	5mm	9mm	LO/DO	NPN, 100mA Max.	52F3829	26.73	26.05
EE-SX672A	3	5mm	9mm	LO/DO	NPN, 100mA Max.	52F3833	26.73	26.05
EE-SX673	4	5mm	9mm	LO/DO	NPN, 100mA Max.	52F3830	28.35	27.63
EE-SX673A	4	5mm	9mm	LO/DO	NPN, 100mA Max.	18M7277	28.05	27.33
EE-SX674	5	5mm	9mm	LO/DO	NPN, 100mA Max.	90B3079	28.05	27.33
EE-SX674A	5	5mm	9mm	LO/DO	NPN, 100mA Max.	18M7278	30.71	29.94

(68281)

AMPLIFIED, MODULATED PHOTOMICROSENSORS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

Features:
- Operating Voltage: 12-24VDC
- **Mfg. Part No. EE-SPX301** Operating Voltage: 5-24VDC
- Output: NPN, 80mA Max.
- Response Frequency: 500Hz
- Optically Modulated to Minimize Interference
- Large Slot Width
- LED Status Indicator, Off When Object Detected

Use Connector and Converter options EE-1001, EE-1006, EE-1006A, and EE-2002 on page 1398.

Mfg. Part No.	Slot Width	Slot Depth	Output	Dimensions H	Dimensions W	Dimensions D	Stock No.	Price Each 1-4	Price Each 5-9
EE-SPX301	3.6mm	9mm	Dark-On	1.24" (31.5mm)	1.02" (26mm)	0.28" (7mm)	16F7249	52.85	51.51

(68283)

AMPLIFIED PHOTOMICROSENSORS, PREWIRED

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

Fig. 1 Fig. 2 Fig. 3

Features:
- Operating Voltage: 5 - 24VDC
- Output: NPN, 100mA Max.
- Response Frequency: 1kHz
- LED Status Indicator, Off When Object Detected
- Standard M3 Screw Mounting

Prewired 2m flexible cable connection. *To order units with LED status indicator ON when object detected, add suffix* **"A"** *to mfg. part no.; for PNP, add suffix* **"P"**. *For PNP with LED ON when object detected, add suffix* **"R"**. ULCanadian/USA recognized, CE compliant.

Mfg. Part No.	Slot Width /Depth	Output	Dimensions H	Dimensions W	Dimensions D	Fig.	Stock No.	Price Each 1-4	Price Each 5-9
EE-SX770	5mm /9mm	DO	1.22" (31.1mm)	0.71" (18mm)	0.16" (4mm)	1	41M3166	37.38	36.43
EE-SX771	5mm /9mm	DO	0.83" (21mm)	0.71" (18mm)	0.51" (13mm)	2	42M1824	38.35	37.38
EE-SX771A	5mm /9mm	DO	0.83" (21mm)	0.71" (18mm)	0.51" (13mm)	2	31C7142	38.72	...
EE-SX772	5mm /9mm	DO	0.83" (21mm)	0.47" (12mm)	0.48" (12.3mm)	3	93K7544	38.35	37.38

➤CONTINUED➤

AMPLIFIED PHOTOMICROSENSORS, PREWIRED (CONT.)

Mfg. Part No.	Slot Width /Depth	Output	Dimensions H	Dimensions W	Dimensions D	Fig.	Stock No.	Price Each 1-4	Price Each 5-9
EE-SX871	5mm /9mm	LO	0.83" (21mm)	0.83" (18mm)	0.51" (13mm)	2	88K1918	38.73	37.74
EE-SX872	5mm /9mm	LO	0.83" (21mm)	0.47" (12mm)	0.48" (12.3mm)	3	04M4519	39.08	38.09

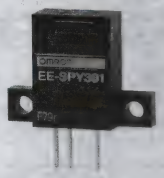
(68284)

AMPLIFIED PHOTOMICROSENSORS, DIFFUSE REFLECTIVE

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

Features:
- Operating Voltage: 5 - 24VDC
- Output: NPN, 80mA Max.
- Response Frequency: 100Hz
- Optically Modulated To Reduce Interference
- LED Status Indicator, ON When Object Detected
- 5mm Sensing Distance



Use Connector options **EE-1001**, **EE-1003** *on page 1398.*

Mfg. Part No.	Sensing Direction	Output	Dimensions H	Dimensions W	Dimensions D	Stock No.	Price Each 1-4	Price Each 5-9
EE-SPY301	Horizontal	Dark-On	1.02" (26mm)	0.79" (20mm)	0.28" (7mm)	18M7268	50.80	49.51
EE-SPY302	Vertical	Dark-On				18M7269	50.80	49.51
EE-SPY401	Horizontal	Light-On				52F3839	50.27	49.00
EE-SPY402	Vertical	Light-On				18M7271	50.80	49.51

(68286)

AMPLIFIED PHOTOMICROSENSORS, CONVERGENT REFLECTIVE

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

Features:
- Operating Voltage: 5-24VDC
- Output: NPN, 80mA Max.
- Response Frequency: 100Hz
- Optically Modulated to Minimize Interference
- LED Status Indicator, On When Object Detected
- Sensing Distance: 2-6mm

Use Connector Options **EE-1001** and **1006** found online or call.

Mfg. Part No.	Maximum Range (mm)	Sensing Direction	Output	Stock No.	Price Each 1-4	Price Each 5-9
EE-SPY411	6	Horizontal	Light-On	18M7272	50.27	49.00
EE-SPY312	5	Vertical	Dark-On	18M7270	50.82	49.53
EE-SPY412	5	Vertical	Light-On	18M7273	51.34	50.05
EE-SPY415	11	Horizontal	Dark-On	17M6594	23.10	20.82

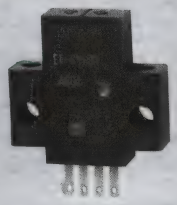
(68287)

AMPLIFIED PHOTOMICROSENSORS, DIFFUSE REFLECTIVE WITH ADJUSTABLE SENSITIVITY

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

Features:
- Operating Voltage: 5 - 24VDC
- Output: NPN, 100mA Max.
- Response Frequency: 50Hz
- LED Status Indicator, ON When Object Detected
- Sensing Distance: 1 - 5mm Adjustable



Use **Connector options EE-1001** and **EE-1006** found online or call.

Mfg. Part No.	Sensing Direction	Output	Dimensions H	Dimensions W	Dimensions D	Stock No.	Price Each 1-4	Price Each 5-9
EE-SY671	Hortizontal	Light-On/ Dark-On	0.98" (25mm)	1.00" (25.4mm)	0.27" (6.95mm)	18M7279	30.71	29.94
EE-SY672	Vertical	Light-On/ Dark-On	0.98" (25mm)	1.00" (25.4mm)	0.27" (6.95mm)	52F3844	31.04	30.25

(68288)

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(196525)

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OMRON AUTOMATION & SAFETY

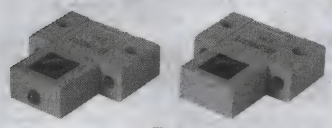

Fig. 1

Fig. 2

- Operating Voltage: 5-24VDC
- Output: NPN, 100mA Max.
- Response Frequency: 100Hz, **Mfg. Part Nos. EE-SPW411**
- Optically Modulated to Reduce Interference
- LED Status Indicator, Off When Object Detected

Mfg. part nos. EE-SPW311 and **EE-SPW411** are seperate emitter and amplified receiver microsensors pairs with quick connector termination. *Use connector EE-1006 on this page.* Connection to amplifier is via prewired 2m cable.

Mfg. Part No.	Sensing Distance	Output	Fig.	Stock No.	Price Each 1-4	Price Each 5-9
● EE-SPW311	1m	DO	1	**18M7263**	118.07	115.07
● EE-SPW411	30cm	LO	2	**18M7264**	118.56	115.56

(68285)

AMPLIFIED COMPACT PHOTOMICROSENSORS, PREWIRED

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

Features:

- Prewired Compact Sensing Head for Easy Mounting in Space-Confined Areas
- Light Modulation Effectively Reduces External Light Interference
- Easy-to-Use Photomicrosensor with Cable Attached
- Wide Operating Voltage Range: 5 to 24VDC
- Optical Axis Monitoring with a Light-ON Indicator
- Amplifier's NPN Output Can Be Directly Connected to a TTL and Programmable Controller
- Incorporates Dust-Proof Slit
- Detects an Object with 0.5mm Diameter
- Dimensions in inches (mm): 0.61H x 1.07L x 0.27 (15.5 x 27.2 x 6.95)

Mfg. Part No.	Slot Width (mm)	Slot Depth (mm)	Output	Stock No.	Price Each 1-4	Price Each 5-9
● EE-SPX405-W2A	5	9	Light-ON	**18M7267**	87.27	85.06
● EE-SPX305-W2A	5	9	Dark-ON	**52F3836**	87.27	85.06

(73109)

PHOTOMICROSENSOR ACCESSORIES

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

For use with Omron photomicrosensors, *Go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
● E39-R1	Reflector	**27M2403**	18.92	17.59
● EE-1001	Connector With Quick Connect Terminals	**93K7545**	3.75	3.58
● EE-1006	Connector With 2m Wire Harness	**18M7281**	21.54	20.30
● EE-1006A	Connector Holder for **Mfg. Part No. EE-1006**	**91B9905**	5.19	4.92
● EE-1002	Connector With Quick Connect Terminals	**88K1919**	3.65	3.50
● EE-1003	Connector With 2m Wire Harness	**27M2346**	5.12	4.82
● EE-1003A	Connector Holder for **Mfg. Part No. EE-1003**	**18M7280**	1.98	1.88
● EE-2002	NPN to PNP Output Converter	**27M2347**	31.89	30.04

(68289)

AMPLIFIED TRANSMISSIVE PHOTOMICROSENSOR WITH LIGHT MODULATION

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

Features:

- Light Modulation Effectively Reduces External Light Interference
- Easy Adjustment and Optical Axis Monitoring With a Light-ON Indicator
- Operating Voltage: 5 to 24VDC
- Amplifier Output Can Be Directly Connected to a Programmable Controller (PLC)
- Easy-to-Wire Connector Type
- Dimensions: 24H x 26L x 6W (mm)

Mfg. Part No.	Slot Width	Slot Depth	Output	Stock No.	Price Each 1-4	Price Each 5-9
● EE-SPX301	3.6mm	9mm	Dark-On	**16F7249**	52.85	51.51

(73257)

AMPLIFIED, MODULATED PHOTOMICROSENSOR WITH LONG SENSING DISTANCE

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

Features:

- Long Sensing Distance With Built-in Amplifier and Light Modulation
- Light Modulation Effectively Reduces External Light Interference
- Easy Adjustment and Optical Axis Monitoring With a Light-ON Operation Indicator
- Wide Operating Voltage Range (5 to 24VDC) Makes a Smooth Connection Possible With TTLs, Relays and Programmable Controllers (PLCs)
- Easy-to-Wire Connector Assures Ease of Maintenance
- 100Hz Response Frequency
- Light Source: GaAs Infrared LED (Pulse-Modulated) With a Wavelength of 940nm
- Dark-ON Output Configuration Also Available; *Go online or call*
- *Use Connectors* **EE-1002**, **EE-1003** and **EE-1003A** and Reflector **E39-R1** *on this page*

Mfg. Part No.	Sensing Method	Sensing Distance	Output	Stock No.	Price Each 1-4
● EE-SPZ401-A	Diffuse (Retroreflective)	200mm	Light-On	**27M2345**	58.48

(73108)

5mm ROUND PHOTOTRANSISTOR

RoHS Compliant Available

multicomp

Features:

- Collector-emitter voltage: 30V
- Emitter-collector voltage: 5V
- Operating Temperature Range: -25°C to +85°C
- Storage Temperature Range: -40°C to +100°C

Mfg. Part No.	Peak Wavelength (nm)	Power Consumption (mW)	Package	Stock No.	Price Each 1-249
● OFT-5301	860	75	T-1 3/4 (5mm)	**15R2146**	0.24

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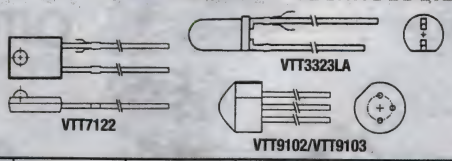
PHOTOTRANSISTORS

RoHS Compliant Available

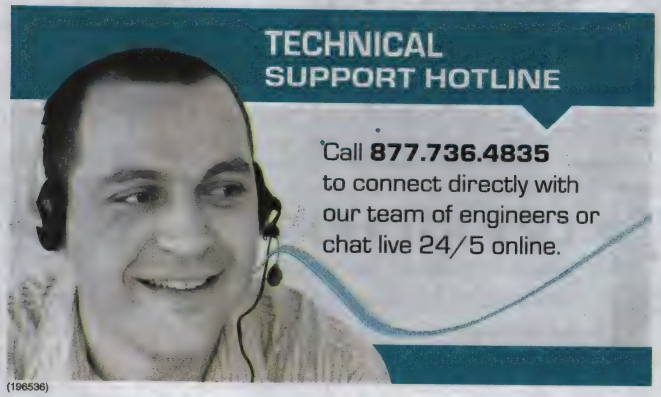
EXCELITAS TECHNOLOGIES



Mfg. Part No.	Light Current I_C Min. (mA)	Light Current I_C H (fc)	Dark Current I_{CEO}* Max. (nA)	Dark Current I_{CEO}* V_{CE}(V)	Emitter Breakdown $V_{BR(ECO)}$	Stock No.	Price Each 1-49	Price Each 50-99
● VTT3323LAH	2	20	100	10	5	**79K2590**	0.74	0.71
● VTT7122H	1	100	100	10	5	**79K2597**	0.63	0.60
● VTT9102H	6	20	100	5	4	**79K2605**	2.40	2.31
● VTT9103H	13	20	100	5	4	**79K2606**	3.31	3.17

* @ H = 0

(3773)



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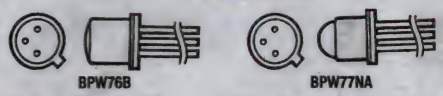
PHOTOTRANSISTORS

RoHS Compliant Available

VISHAY.



BPW76B BPW77NA

Hermetically-sealed packages.

Mfg. Part No.	Peak Wave-length (nm)	Band-width (nm)	Collector Light Current, Typical (mA)	Angle of Half Sensi-tivity (°)	Rise and Fall Time (µs)	Pkg.	Stock No.	Price Each 1-9
BPV11F	930	900 to 980	9	15	6	5 mm, T-1 3/4	32C9138	0.73
BPV11	850	620 to 980	10	15	6		32C9137	0.68
BPW96B	850	620 to 980	1.5	20	2		32C9166	0.65
BPW96C	850	620 to 980	1.5	20	2		32C9167	0.62
BPW16N	825	620 to 960	0.14	40	5	1.8 mm	32C9145	0.51
BPW17N	825	620 to 960	1	12	5	1.8 mm	32C9146	0.54
BPW76A	850	620 to 980	0.4	40	6	T0-18	32C9154	3.02
BPW76B	850	620 to 980	0.4	40	6	T0-18	95B4217	2.99
BPW77NA	850	620 to 980	7.5	10	6	T0-18	95B4218	3.02
BPW77NB	850	620 to 980	7.5	10	6	T0-18	95B4219	3.06
TEKT5400S	920	850 to 980	4	37	6	Side View	22H1091	0.69
TCZT8020-PAER	950	...	...	25	...	...	54M1258	1.09
SURFACE MOUNT								
TEMT1000	950	750 to 980	7	15	2	1.9 mm	33C1233	0.76
TEMT7000X01	850	470 to 1090	0.45	60	...	0805	70R1416	0.78
TEMT7100X01	870	750 to 1010	0.45	60	...	0805	70R1417	0.80
VEMT2000X01	860	790 to 970	6	15	...	SMD	70R1434	0.78
VEMT2020X01	860	790 to 970	6	15	...	SMD	70R1435	0.74
VEMT2520X01	850	...	...	15	...	SMD	65T3920	0.52
VEMD2520X01	900	...	...		...	SMD	65T3918	0.28

(52594)

REFLECTIVE SENSORS

RoHS® Compliant Available

Honeywell
Sensing and Control

SELECTION, SPEED, SERVICE.
All Found Here.

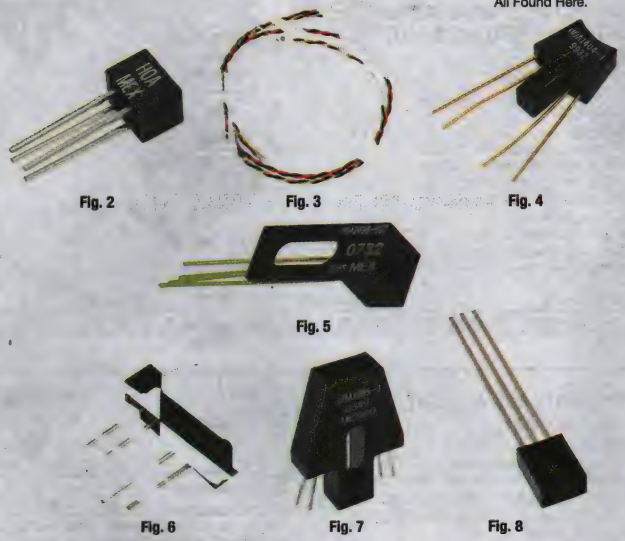


Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6 Fig. 7 Fig. 8

PLASTIC TRANSISTOR OUTPUT

Mfg. Part No.	Fig.	Light Current I_L @ I_F IL (mA)	IF (mA)	Target Distance	Stock No.	Price Each 1-9	10-49	50-99
HOA1397-002	2	0.7	20	0.05″	87F6508	4.74	4.32	4.27
HOA0149-001	6	1	40	0.15″	89F5784	4.22	3.84	3.79
HOA1405-002	7	0.8	30	0.2″	90F8550	5.73	5.22	5.14
HLC1395-002	8	0.6	10	0.04″	96F6323	2.47	1.95	1.81
PLASTIC DARLINGTON OUTPUT								
HOA0709-011	...	1	40	0.15″	87F6487	6.64	6.05	5.97
HOA1397-032	2	7	20	0.05″	87F6707	5.10	4.65	4.58
HERMETIC TRANSISTOR OUTPUT								
HOA1180-002	3	0.16	30	0.5″	10M5200	17.68	16.10	15.89
HOA1404-002	4	0.8	30	0.2″	87F6510	15.53	14.15	13.96

CONTINUED

REFLECTIVE SENSORS (CONT.)

HERMETIC TRANSISTOR OUTPUT

Mfg. Part No.	Fig.	Light Current I_L @ I_F IL (mA)	IF (mA)	Target Distance	Stock No.	Price Each 1-9	10-49	50-99
HOA2498-002	5	0.16	30	0.5″	90F8552	11.92	10.86	10.72
HOA1406-001	...	2.5	40	0.2″	10M5202	27.40	20.50	19.65
HERMETIC DARLINGTON OUTPUT								
HOA1180-003	3	2	30	0.5″	10M5201	21.66	19.73	19.47
HOA1404-003	4	2	30	0.2″	90F8555	15.50	14.13	13.93
HERMETIC DARLINGTON OUTPUT								
Mfg. Part No.	Fig.	Light Current I_L @ I_F (mA)	(mA)	Target Distance	Stock No.	Price Each 1-9	10-49	50-99
HOA0891-T55	3	2	30	0.5″	05M0337	10.70	10.30	9.79

(3813)

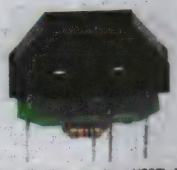
HOA6480 SERIES BARCODE SENSOR

RoHS Compliant Available

Honeywell
Sensing and Control

SELECTION, SPEED, SERVICE.
All Found Here.

Features:
- Class IIIB VCSEL
- Digital ouput
- Depth of field: 4.5mm ±0.5mm (0.180″ ±0.20″)
- Focal length: 4.5mm (0.180″)
- Allows measurement with no contact
- Resolution: 0.254mm (0.010″)
- Pin termination



The **HOA6480 series** is a reflective barcode sensor that incorporates a VCSEL (Vertical Cavity Surface-emitting Laser) emitter and phototransistor detector in a custom-molded plastic package. The VCSEL technology allows the sensor to operate with a very low drive current. The phototransistor drives an operational amplifier with an open-collector output, providing users with flexibility in their interface designs.

Mfg. Part No.	Supply Current (mA)	Scan Speed	Stock No.	Price Each 1-9	10-49	50-99
HOA6480-001	15	254mm(10″) per second	71J4541	99.02	78.31	72.76

(85532)

HALLOGIC® HALL EFFECT SENSORS

RoHS Compliant Available

TT electronics
OPTEK Technology

Sensors meet the demands of motion sensing in harsh environments. All case styles are plastic lateral. Operate point @ T_A = 25°C, unless otherwise indicated.

Mfg. Part No.	Gauss Operate Point Min	Max	Release Point Min	Max	Hysteresis Min	Max	Stock No.	Price Each 1-99
OHN3020U	70	350	50	330	20	...	08F2591	1.82
OHN3140U	70[1]	200	50	180	20	...	08F2600	2.09
OH090U	0	180	-100	100	10	100	08F2612	1.83
OH180U	70	290	0	230	20	120	08F2613	1.86
OH360U	235	465	120	325	30	200	08F2614	1.69
OHN3120U	70	350	50	330	20	...	08F2597	2.12
OHS3175U	25	170	-170	-25	100	...	08F2610	1.59

(1) T_A = −40°C to 125°C
(9369)

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(196545)

SENSORS • INFRARED COMPONENTS

REFLECTIVE OBJECT SENSORS

RoHS Compliant Available

TT electronics — OPTEK Technology

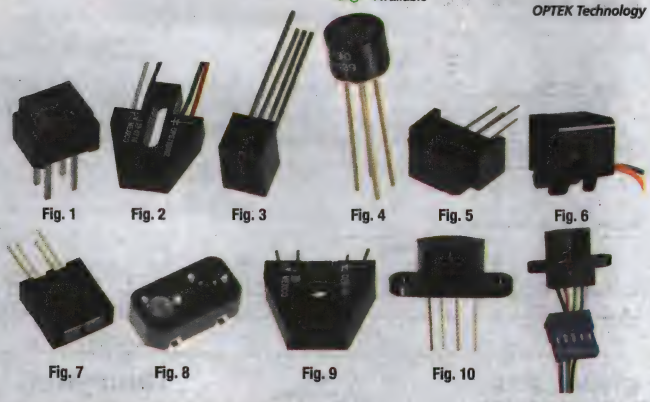


Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6 Fig. 7 Fig. 8 Fig. 9 Fig. 10 Fig. 11

PHOTOTRANSISTOR REFLECTIVE OBJECT SENSORS

Mfg. Part No.	Fig.	Wave-length (nm)	$I_{C(ON)}$ Min. (mA)	Test Conditions I_F (mA)	Test Conditions V_{CE} (V)	Test Conditions Distance (Inches)	Stock No.	Price Each 1-99	Price Each 100-249	Price Each 250-499
● OPB607A	1	935	25	20	5	0.05	08F2620	1.29	1.23	1.19
● OPB608A	1	890	2	20	5	0.05	52F6179	1.70	1.55	1.46
● OPB608V	1	850	5	10	5	0.11	11J5266	11.79	10.76	10.09
● OPB700Z	2	890	0.025	40	5	0.2	69K8446	9.50	8.67	8.13
● OPB700ALZ	2	890	0.025	40	5	0.2	69K8445	10.89	9.95	9.33
● OPB701Z	2	890	2	40	5	0.2	69K8448	9.65	9.20	8.87
● OPB701ALZ	2	890	2	40	5	0.2	69K8447	10.10	9.63	9.30
● OPB703	2	890	0.3	40	5	0.15	08F2639	2.17	2.08	2.00
● OPB704	2	890	0.2	40	5	0.15	08F2641	2.51	2.38	2.30
● OPB704WZ	2	890	0.2	40	30	0.15	69K8449	3.73	3.56	3.43
● OPB706A	3	935	0.5	20	5	0.05	08F2643	1.85	1.76	1.70
● OPB707A	3	935	25	20	5	0.05	08F2644	2.48	2.37	2.28
● OPB710	4	935	0.15	20	5	0.25	08F2647	8.02	7.33	6.87
● OPB710F	4	935	0.15	50	5	0.25	52F6182	8.45	8.06	7.77
● OPB711	5	890	0.35	50	5	0.08	08F2648	2.46	2.34	2.25
● OPB716Z	6	890	...	...	5.25	0.5	73K1076	6.36	6.07	5.85
● OPB730	4	935	1	50	5	0.25	08F2650	6.66	6.36	6.13
● OPB730F	4	935	1	50	5	0.25	52F6183	8.08	7.71	7.43
● OPB732WZ	7	850	0.25	30	1	1	73K1080	4.86	4.63	4.46
● OPB733TR	8	890	0.1	20	5	0.5	14R4368	3.46	3.15	2.96
● OPB742	9	890	0.01	40	5	0.15	08F2652	2.69	2.47	2.31
● OPB745	9	890	5	40	5	0.15	08F2653	3.19	2.91	2.73
● OPB750N	10	890	0.5	50	24	0.08	01C3068	4.86	4.44	4.16
● OPB755TZ	...	890	0.5	50	24	0.08	69K8452	5.84	5.56	5.37
● OPB770TZ	11	890	...	25	5.25	0.08	73K1087	6.73	6.42	6.18

(3893)

DEVICE PAIRS

RoHS Compliant Available

TT electronics — OPTEK Technology

Fig. 1 Fig. 2

Mfg. Part No.	Fig.	Description	I_F (mA)	V_{BRCEO} (V)	$I_{C(ON)}$ Min. (mA)	Dist. (in.)	Stock No.	Price Each 1-99
● OPS666	1	LED/Sensor Matched Pair/T-1	20	5	1	0.25	08F2907	1.40
● OPS692	2	LED/Sensor Matched Pair Lateral	20	5	1	0.125	01C3528	1.03

(84914)

PHOTOSENSORS

RoHS Compliant Available

TT electronics — OPTEK Technology

Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6 Fig. 7

All are phototransistors. All **mfg. part nos. OP505** are narrow reception.

Mfg. Part No.	Fig.	Beam Angle	$I_{C(ON)}$ Min. (mA)	V_{CE} (V)	E_e (mW/cm²)	Stock No.	Price Each 1-99	Price Each 100-249	Price Each 250-499
● OP505D	1	18	0.55	5	0.5	08F3009	0.51	0.49	0.47
● OP505C	1	18	1.1	5	0.5	08F3008	0.53	0.50	0.48
● OP505A	1	18	4.3	5	0.5	08F3006	0.70	0.63	0.58
● OP506A	1		4.3	5	0.5	08F3011	0.84	0.75	0.70
● OP535A	1	60	10.5	5	0.13	94B4223	0.75	0.72	0.69
● OP593A	2	130	3	5	1.7	08F3024	0.81	0.72	0.67
● OP598A	3	25	7.5	5	1.7	08F3026	0.77	0.69	0.64
● OP598C	3		2.5	5	1.7	08F3027	0.64	0.61	0.59
● OP802SL	4		2	5	5	08F3033	2.61	2.49	2.40
● OP803SL	4	25	4	5	5	08F3037	2.63	2.51	2.41
● OP804SL	4	25	7	5	5	08F3040	2.82	2.53	2.33
● OP805SL	4	25	15	5	5	08F3042	3.11	2.78	2.57
● OP830SL	4		15	5	0.5	08F3043	2.77	2.65	2.55
● OP802WSL	5	75	2.5	5	5	08F3035	2.59	2.47	2.38
● OP830WSL	5		4	5	0.5	08F3045	2.72	2.59	2.50
● OP550A	6		2.55	5	1	08F3016	0.79	0.71	0.66
● OP644SL	7		7	5	20	25H7639	2.14	2.05	1.97

(3836)

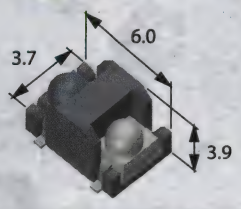
REFLECTIVE OPTICAL SENSOR WITH PIN PHOTODIODE OUTPUT

RoHS Compliant Available

VISHAY

Applications
- Proximity sensor
- Object sensor
- Motion sensor

Features:
- Operating distance 2mm to 40mm
- High intensity IR emitter, 950 mm
- High light to voltage linearity
- High sensitivity PIN Photodiode
- IR band pass filter
- Crosstalk barrier



Diemenions are shown in (mm).

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● TCND5000	Reflective Optical Sensor with PIN Photodiode Output — LF	23K1221	2.23

(84112)

PROXIMITY AND AMBIENT LIGHT SENSOR

RoHS Compliant Available

VISHAY

Features:
- Package type: surface mount
- Dimensions (L x W x H in mm): 3.95 x 3.95 x 0.75
- Integrated infrared emitter, ambient light sensor, proximity sensor, and signal conditioning IC
- Interrupt function
- Supply voltage range IR anode: 2.5 V to 5 V
- I2C Bus H-level range: 1.7 V to 5 V
- Floor life: 168 h, MSL 3, acc. J-STD-020
- Low stand by current consumption: 1.5 µA
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC

The **VCNL4010** is a fully integrated proximity and ambient light sensor. Fully integrated means that the infrared emitter is included in the package. It has 16 bit resolution. It includes a signal processing IC and features standard I2C communication interface. It features an interrupt function.

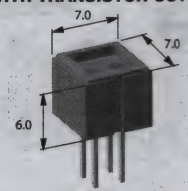
Mfg. Part No.	Sensing Range	Sensor Output	Supply Voltage Range DC (V)	Stock No.	Price Each 1-9
● VCNL4010-GS08	1mm to 200mm	Digital	2.5V to 3.6V	76T8660	2.93
● VCNL4020-GS08	1mm to 200mm	Digital	2.5V to 3.6V	76T8661	2.93

(202149)

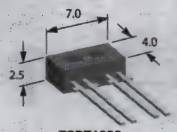
REFLECTIVE OPTICAL SENSORS WITH TRANSISTOR OUTPUT

RoHS Compliant Available

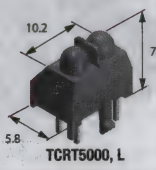
VISHAY.



CNY70



TCRT1000



TCRT5000, L

Sensors have polycarbonate housing. V_{CEO} 1mA: < 32V. Output Configuration: Transistor. Dimensions are shown in (mm).

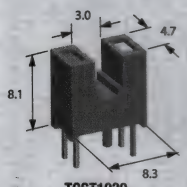
Mfg. Part No.	Operating Range * (mm)	Peak Operating Distance (mm)	Output	Stock No.	Price Each 1-9
CNY70	0 to 3	1	Phototransistor	95B4223	1.17
TCRT1000	1 to 2	1	Phototransistor	95B4819	1.03
TCRT1010	1 to 2	1	Phototransistor	95B4820	1.08
TCRT5000	1 to 14	2.5	Phototransistor	95B4821	1.03
TCRT5000L	1 to 14	2.5	Phototransistor	33C1109	1.05
TCND5000	2 to 25	8	Photodiode	23K1221	2.23

* Relative collector current greater than 20%
(52676)

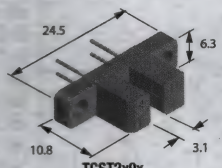
TRANSMISSIVE OPTICAL SENSORS WITH TRANSISTOR OUTPUT

RoHS Compliant Available

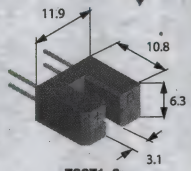
VISHAY.



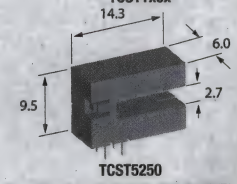
TCST1030



TCST2x0x



TCST1x0x



TCST5250

Subminiature optical sensors have transistor output and are surface mountable. V_{CEO} 1mA: 70V. **Mfg. part no. TCUT1200**: dual-channel, 0.24mm resolution, 0.3mm aperture. **Mfg. part no. TCPT1200**: single channel, 0.24mm resolution, 0.24mm, 0.3mm aperture. Polycarbonate housing. Dimensions are shown in (mm).

TRANSISTOR OUTPUT

Mfg. Part No.	I_C/I_{FT} (mA)	CTR/$V_{O\ low}$ @I_F/I_S %/V (mA)	V_{CEO}/V_{CC} (V)	Dist/Gap (mm)	Resol. (mm)	Apert. (mm)	On/Off Time (us)	Stock No.	Price Each 1-9
TCST1030	2.5 (>1.2)	25 (>12) @ 10	70	3.1	0.8	...	15/10	95B4823	0.85
TCST1103	4 (>2)	20 (>10) @ 20	70	3.1	0.6	1	10/8	33C1113	1.26
TCST2103	4 (>2)	20 (>10) @ 20	70	3.1	0.6	1	10/8	33C1118	1.35
TCST1202	2 (>1)	10 (>5) @ 20	70	3.1	0.4	0.5	10/8	33C1114	1.25
TCST2202	2 (>1)	10 (>5) @ 20	70	3.1	0.4	0.5	10/8	33C1119	1.33
TCST1300	0.5 (>0.25)	2.5 (>1.25) @ 20	70	3.1	0.2	0.25	10/8	33C1117	1.23
TCST2300	0.5 (>0.25)	2.5 (>1.25) @ 20	70	3.1	0.2	0.25	10/8	33C1120	1.50
TCST5250	1.5 (>0.5)	7.5 (>2.5) @ 20	70	2.7	0.4	0.5	15/10	33C1123	1.15
TCUT1300X01	0.6 (>0.3)	...	20	3	...	0.3	20/30	54M1254	1.77
TCPT1350X01	...	...	20	3	...	0.3	9/16	95W5621	1.57

(52677)

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(196560)

TRANSMISIVE SENSORS

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SELECTION, SPEED, SERVICE.
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Fig. 1

Fig. 2

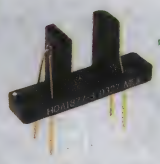

Fig. 3

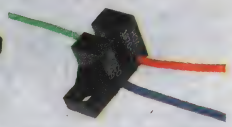

Fig. 4

Fig. 6

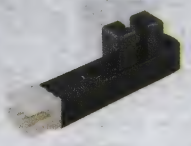

Fig. 7

Fig. 8

HERMETIC TRANSISTOR OUTPUT

Mfg. Part No.	Fig.	Collector Current $I_{C(ON)}$ @ I_F (mA)	(mA)	Sensor Aperture L x W	Aperture Gap Depth	Aperture Gap Width	Stock No.	Price Each 1-9	Price Each 10-49
HOA1873-011	1	0.3	30	0.06″ Diameter	...	0.1″	91B4804	5.54	5.03
HOA1875-002	2	0.6	30	0.05″ Diameter	0.25″	0.2″	87F6515	13.57	12.32
HOA1877-002	3	0.5	30	0.05″ Diameter	0.5″	0.375″	87F6448	13.57	12.33
HERMETIC DARLINGTON OUTPUT									
HOA1875-003	2	1.8	30	0.05″ Diameter	0.25″	0.2″	90F8598	15.01	13.62
HOA1874-012	1	1.8	30	0.06″ Diameter	...	0.12″	05M0338	6.26	4.32
PLASTIC TRANSISTOR OUTPUT									
HOA0875-T51	1	0.5	20	0.06 x 0.01″	0.345″	0.125″	10M5197	5.78	5.25
HOA1873-012	1	1.8	20	0.06″ Diameter	0.25″	0.1″	87F6514	5.95	5.40
HOA1882-012	2	1.8	20	0.06″ Diameter	0.22″	0.2″	10M5204	4.41	4.01
HOA1879-015	1	1.8	20	0.04 x 0.01″	0.325″	0.125″	96F6342	6.23	4.30
HOA1870-031	4	0.3	20	0.04 x 0.006″	0.25″	0.07″	10M5203	10.96	9.94
HOA1881-012	...	1.8	20	0.06″ Diameter	0.295″	0.125″	87F6450	8.77	7.96
HOA1884-012	6	1.8	20	0.06 x 0.02″	0.315″	0.125″	10M5205	7.15	4.93
HOA1887-012	8	1.8	20	0.06 x 0.01″	0.125″	0.25″	01F758	10.64	9.68
HOA1889-011	...	50	20	...	0.02″	0.07″	95B2606	10.66	10.13
HOA0881-T55	...	50	10	0.06 x 0.05″	...	0.125″	92F7046	6.45	5.86
HOA0880-T51	...	50	20	0.06 x 0.01″	...	0.125″	98F9810	8.60	7.80
HOA0875-N51	...	50	20	0.06 x 0.01″	...	0.125″	90F8604	5.50	5.00
PLASTIC DARLINGTON OUTPUT									
HOA1873-013	1	4	20	0.06″ Diameter	0.25″	0.1″	98F027	6.05	5.49
HOA1870-033	4	2	20	0.04 x 0.006″	0.25″	0.07″	90F8557	10.91	9.92
HOA1887-013	8	4	20	0.06 x 0.01″	0.125″	0.25″	10M5206	12.22	11.09

PLASTIC OPTOSCHMITT OUTPUT

Mfg. Part No.	Fig.	Operating Voltage (V)	Sensor Aperture L x W	Gap Depth	Gap Width	Stock No.	Price Each 1-9	Price Each 10-49
HOA0971-N51	1	4.5-10	0.060 in x 0.010″	...	0.125″	92F7101	6.16	5.60
HOA1877-001	...	...	0.5″ Diameter	...	0.375″	90B7026	12.57	11.42
HOA7720-M11	7	4.5-5.5	0.070 x 0.020″	0.295″	0.118″	79T0499	3.59	2.16
HOA7730-M11	7	4.5-5.5	0.070 x 0.020″	0.295″	0.118″	79T0500	2.65	2.40
HOA6961-T51	1	4.5-12	0.060 in x 0.010″	...	0.125″	96F6351	7.32	5.05
HOA6972-N55	1	4.5-12	0.060 in x 0.010″	...	0.125″	90F8565	6.61	4.47
HOA0971-N51	1	4.5-12	0.060 in x 0.010″	...	0.125″	92F7101	6.16	5.60

Mfg. Part No.	Fig.	$I_{FT(ON)}$ Max (mA)	Sensor Aperture L x W	Gap Depth	Gap Width	Stock No.	Price Each 1-9	Price Each 10-49
HOA2001-001	1	10	0.060″ Diameter	0.305″	0.120″	10M5207	6.52	5.93
HOA2003-001	1	20	0.040 x 0.010″	0.325″	0.125″	90F8559	10.69	9.72
HOA6990-T51	...	15	0.060 x 0.010″	0.345″	0.125″	10M5208	7.26	6.79
HOA6991-T51	...	15	0.060 x 0.010″	0.345″	0.125″	10M8424	11.64	10.57
HOA6992-T51	...	15	0.060 x 0.010″	0.345″	0.125″	15M0933	19.18	17.43
HOA2004-001	6	20	0.040 x 0.020″	0.315″	0.125″	90F8560	7.93	7.21
HOA2005-001	8	20	0.060 x 0.010″	0.250″	0.125″	01F760	12.21	7.96

PLASTIC TRANSMISSIVE ENCODER

Mfg. Part No.	Fig.	Features	Resolution	Slot Width	Stock No.	Price Each 1-9	Price Each 10-49
HOA0902-011	1	Dual Channel IC Direct TTL interface	0.018″	0.126″	93F4638	11.99	10.89

(3812)

SWITCHES

OPTICAL SWITCHES

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EXCELITAS TECHNOLOGIES

VTR16D1 VTL13D7-20 VTR17D1

Optical switches for sensing in such applications as printers and typewriters, floppy drives, copiers, etc. Sealed case.

Mfg. Part No.	Light Current Min. (mA)	Light Current @ V_{CE} (V)*	Dark Current Max. (nA)	Dark Current @ V_{CE} (V)†	Stock No.	Price Each 1-24	Price Each 25-49
● VTR16D1H	0.3**	5	100	5	79K2545	6.64	6.05
● VTR17D1H	0.3**	5	100	5	79K2546	7.00	6.36
● VTL13D7-20H	0.225	5	100	10	79K2517	6.41	5.82

* @ I_F = 20mA; † @ I_F = 0mA; ** 2.5mm(0.100") from a 90% reflective surface.
(3775)

PHOTOTRANSISTOR SLOTTED OPTICAL SWITCHES

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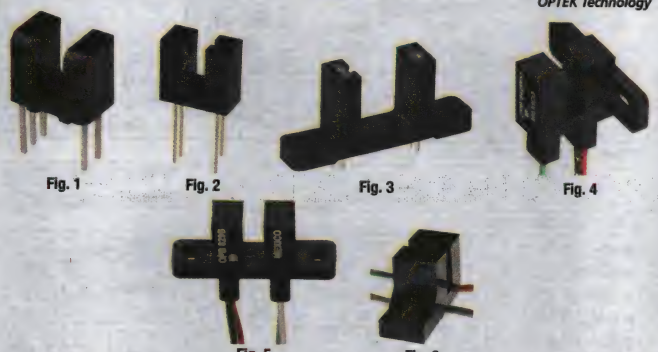

Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6

Mfg. Part No.	Fig.	$I_{C(ON)}$ MIN (mA)	Test Conditions I_F (mA)	Test Conditions V_{CE} (V)	Slot Gap (in)	Slot Depth (in)	Sensor Aperture (in)	Stock No.	Price Each 1-9
● OPB620	1	1	5	5	0.19	0.285	0.06	08F2623	2.05
● OPB818	2	0.1	20	10	0.2	0.25	0.06	08F2662	3.22
● OPB804	2	0.5	20	10	0.15	0.33	0.06	08F2655	2.17
● OPB848	2	1	20	10	0.1	0.25	0.06	08F2682	2.94
● OPB825	2	0.5	20	10	0.16	0.285	0.06	08F2671	1.54
● OPB815L	3	3.5	20	10	0.375	0.43	...	66F3367	2.60
● OPB360T55	3	3.5	20	0.4	0.125	0.345	0.05	01C2931	2.77
● OPB370T55	3	3.5	20	0.4	0.125	0.345	0.05	01C2951	2.10
● OPB806	3	0.4	20	0.5	0.125	0.375	0.06	08F2656	3.05
● OPB828C	3	1.8	20	0.6	0.12	0.315	0.06	08F2675	1.90
● OPB854A3	3	3	16	1	0.1	0.25	0.05	08F2684	2.03
● OPB866T55	3	1	10	5	0.125	0.345	0.05	08F2701	2.12
● OPB380T11Z	3	1	20	0.4	0.125	0.345	0.01	69K8441	4.28
● OPB830W55Z	4	0.5	20	10	0.125	0.315	0.05	66K6946	5.86
● OPB840L51	4	0.5	20	10	0.125	0.315	0.01	08F2681	3.58
● OPB830W11Z	4	0.5	20	10	0.125	0.315	0.01	69K8459	4.91
● OPB830W51Z	4	0.5	20	10	0.125	0.315	0.01	69K8460	4.44
● OPB840W11Z	4	0.5	20	10	0.125	0.315	0.01	69K8461	5.26
● OPB840W51Z	4	0.5	20	10	0.125	0.315	0.01	69K8462	4.32
● OPB840W55Z	4	0.5	20	10	0.125	0.315	0.05	69K8463	4.02
● OPB810W51Z	5	.625	20	10	0.375	0.345	0.01	66K0452	5.74
● OPB800W55Z	5	.625	20	10	0.375	0.35	0.05	69K8453	3.92
● OPB829AZ	5	1.8	20	0.6	0.125	0.315	...	73K1103	3.56
● OPB829CZ	5	1.8	20	0.6	0.125	0.315	0.06	67K9175	4.93
● OPB390T51Z	5	2.5	20	0.4	0.125	0.345	0.01	69K8443	3.84
● OPB390T55Z	5	3.5	20	0.4	0.125	0.345	0.05	69K8444	3.68
● OPB801W55Z	5	1.25	10	5	0.375	0.35	0.05	69K8454	3.92
● OPB802W55Z	5	2.25	20	0.6	0.375	0.35	0.05	69K8455	4.11
● OPB815WZ	5	3.5	20	10	0.375	0.43	0.06	69K8456	6.40
● OPB881T55Z	5	1	10	5	0.125	0.345	0.05	69K8466	3.94
● OPB829AZ	5	1.8	20	0.6	0.125	0.315	...	73K1103	3.56
● OPB829DZ	5	1.8	20	0.6	0.125	0.315	0.01	73K1105	3.37
● OPB821Z	6	0.5	20	5	0.08	0.255	0.04	69K8458	6.52
● OPB820S5	6	0.3	20	5	0.08	0.255	0.005	08F2664	4.57
● OPB821S5Z	6	0.3	20	5	0.08	0.255	0.005	69K8457	4.58
● OPB880P51Z	...	0.5	20	10	0.13	0.345	0.05	73K1122	4.76
● OPB850A	...	0.5	20	5	...	...	...	07H9525	3.15

➤CONTINUED➤

PHOTOTRANSISTOR SLOTTED OPTICAL SWITCHES (CONT.)

Mfg. Part No.	Fig.	$I_{C(ON)}$ MIN (mA)	Test Conditions I_F (mA)	Test Conditions V_{CE} (V)	Slot Gap (in)	Slot Depth (in)	Sensor Aperture (in)	Stock No.	Price Each 1-9
● OPB822SD	...	0.1	20	10	0.09	0.3	0.01	08F2668	5.76
● OPB871N55	...	1	10	5	0.125	0.345	0.05	08F2712	2.91
● OPB390P51Z	...	30	50	30	...	...	...	40P0535	3.73
● OPB857Z	...	1.5	20	10	0.15	0.355	0.35	69K8465	5.20

*Indicates wired verison
(3891)

PHOTOLOGIC® SLOTTED OPTICAL SWITCHES

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Fig. 1 Fig. 2 Fig. 3 Fig. 4

Mfg. Part No.	Fig.	Output Type	I_F(+) MAX (mA)	Supply Voltage (V)	Slot (in.) Gap	Slot (in.) Depth	Sensor Aperture (in.)	Stock No.	Price Each 1-99
● OPB900W55Z	1	Buffer/TP	40	4.75-5.25	0.375	0.35	0.05	69K8467	5.63
● OPB910W55Z	1	Buffer/TP	40	4.75-5.25	0.375	0.35	0.05	69K8468	5.74
● OPB930W55Z	4	Buffer/TP	15	4.75-5.25	0.125	0.315	0.05	69K8470	4.91
● OPB931W51Z	2	Buffer/OC	20	4.75-5.25	0.125	0.415	0.01	73K1183	5.32
● OPB940W51Z	4	Buffer/TP	15	4.75-5.25	0.125	0.315	0.01	69K8472	5.36
● OPB960T51	1	Buffer/TP	15	4.5-16	0.125	0.345	0.01	08F2737	3.11
● OPB970N11	2	Buffer/TP	40	4.5-16	0.125	0.345	0.01	08F2752	3.46
● OPB980T51Z	1	Buffer/TP	15	4.5-16	0.125	0.345	0.01	69K8474	5.01
● OPB990T55Z	1	Buffer/TP	15	4.5-16	0.125	0.345	0.05	69K8476	4.61
● OPB616	3	Buffer/OC	50	4.5-16	0.15	0.24	...	52F6161	1.80
● OPB911W55Z	1	Buffer/OC	40	4.5-16	0.375	0.35	0.05	69K8469	5.43
● OPB981T51Z	1	Buffer/OC	15	4.5-16	0.125	0.345	0.01	69K8475	4.97
● OPB961N51	2	Buffer/OC	15	4.5-16	0.125	0.345	0.01	08F2739	3.05
● OPB991L51Z	...	Buffer/OC	15	4.5-16	0.125	0.345	0.01	69K8477	4.97
● OPB991L55Z	...	Buffer/OC	15	4.5-16	0.125	0.345	0.05	69K8478	4.61
● OPB962N51	2	Invert/TP	40	4.5-16	0.125	0.345	0.01	08F2743	2.93
● OPB962T51	1	Invert/TP	40	4.5-16	0.125	0.345	0.01	08F2745	3.05
● OPB972T51	1	Invert/TP	40	4.5-16	0.125	0.345	0.01	08F2754	3.05
● OPB618	3	Invert/OC	3	4.5-16	0.15	0.24	...	52F6163	1.91
● OPB933W55Z	4	Invert/OC	40	4.5-16	0.125	0.315	0.05	69K8471	4.91
● OPB963T55	1	Invert/OC	15	4.5-16	0.125	0.345	0.05	08F2750	3.09
● OPB973N51	2	Invert/OC	40	4.5-16	0.125	0.345	0.01	08F2755	3.05
● OPB973T51	1	Invert/OC	40	4.5-16	0.125	0.345	0.01	08F2757	3.05
● OPB625	2	Buffer/10K	3	4.5-16	0.19	0.285	0.06	08F2624	1.83
● OPB917BZ	...	Buffer/10K	50	4.5-16	0.2	0.86	0.01	73K1179	5.22

(9385)

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(197417)

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- Low drive current, high power density
- Monitor photodiode included
- Components have narrow and circularly symmetric beam angle

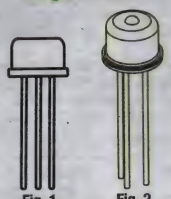

Fig. 1 Fig. 2

Mfg. Part No.	Package Style	Fig.	Data Rate Min.	Output Power 25°C	Output Power 70°C	Forward Current	Stock No.	Price Each 1-99	Price Each 100-249
OPV310	TO-46, Flat Window	1	2.5 Gbps	2mW	1.55mW	7 mA	02E6734	14.17	13.52
OPV314Y	TO-46, Micro-Lens	2		2mW	1.55mW		02E6735	20.01	19.09
OPV314YAT	ST Recept., Unatten.	...		0.8mW*	0.65mW*		02E6736	23.76	22.67

* Coupled into a 50/125µm, multimode fiber
(69028)

VERTICAL CAVITY SURFACE EMITTING LASER FOR SENSING APPLICATIONS

RoHS Compliant Available

TT electronics — OPTEK Technology

Specifications:
- 850nm VCSEL Technology
- Min. Output Power: 1.5 mW
- Max. Forward Current: 20 mA

Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5

Mfg. Part No.	Fig.	Package	Optical Power (mW) 25°C	Optical Power (mW) 70°C	Laser Class	Beam Angle	Stock No.	Price Each 1-99
OPV300	1	TO-46, Flat Lens	2.5	1.1	1M	24°	53H7378	12.73
OPV310	1	TO-46, Flat Lens	1.5	1.1	1M	24°	02E6734	14.17
OPV302	2	TO-46, Dome Lens	2	1.1	3B	4°	27K2375	10.47
OPV314Y	2	TO-46, Dome Lens	1.4	1.1	1M	...	02E6735	20.01
OPV314YAT	2	TO-46, Dome Lens	1.4	1.1	1M	...	02E6736	23.76
OPV322	3	Pill Pack, Dome Lens	2	1.1	3B	6°	27K2381	6.41
OPV332	4	T-1, Dome Lens	2.5	0.6	3B	4°	27K2382	5.73
OPV380	5	Plastic Lateral	2.5	0.6	1M	20°	27K2383	5.82

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FIBER OPTIC RECEIVERS

RoHS Compliant Available

TT electronics — OPTEK Technology

Data rate: 5.0MBd. Rise/fall time: 65.0ns. Fig. 1

Mfg. Part No.	Fig.	Package	Receiver Type	Input Sensitivity dbm/µW	Output Type	Stock No.	Price Each 1-99
OPF520	1	TO-18, Green Cap	DC Coupled Schmitt	-9.2/120	TTL CMOS	52F6155	7.57
OPF522	2	ST Tall	DC Coupled	-40/0.1	Analog	52F6157	17.75
OPF2412T	3	Threaded ST Plastic DIP	DC Coupled Schottky	-40/0.1	TTL CMOS	66F3366	13.14

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650nm DISCRETE OPTICAL COMPONENTS FOR FIELDBUS APPLICATIONS

RoHS Compliant Available

AVAGO TECHNOLOGIES

Meets Industrial SERCO, PROFIBUS and INTERBUS-S standard. SMA and ST ports, 650nm wavelength technology. Specified for use with 1mm plactic and 200µm HCS optical fiber.

Mfg. Part No.	Data Rate (MBd)	Distance (m) POF	Distance (m) HCS	Connector	Stock No.	Price Each 1-9
SERCOS OPTICAL TRANSMITTERS - FIELDBUS APPLICATIONS						
HFBR-1505AZ	10	40	200	SMA	74K5144	16.60
PROFIBUS OPTICAL TRANSMITTERS - FIELDBUS APPLICATIONS						
HFBR-1515BZ	10	40	200	ST	74K5147	16.60
SERCOS OPTICAL RECEIVERS - FIELDBUS APPLICATIONS						
HFBR-2505AZ	10	40	200	SMA	74K5166	19.92
PROFIBUS OPTICAL RECEIVERS - FIELDBUS APPLICATIONS						
HFBR-2515BZ	10	40	200	ST	74K5170	19.92

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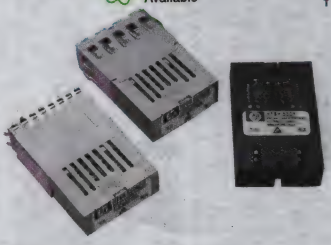
FIBER-OPTIC TRANSCEIVERS

RoHS Compliant Available

AVAGO TECHNOLOGIES



Mfg. Part No.	Data Rate (MBd)	Distance (m)	Wave-length (nm)	Conn-ector	Voltage (V)	Stock No.	Price Each 1-9
MULTI-MODE SC/ST DUPLEX - ENTERPRISE							
AFBR-5803ATZ	125	2000	1300	ST	3.3/5	31K6408	35.31
AFBR-53D5Z	1.25 GBd (GbE)	550	850	SC	5	31K6406	64.36
MULTI-MODE SC/ST DUPLEX - METRO							
MULTI-MODE LC DUPLEX							
AFBR-57F5PZ	14.025 Gb/s	200	860	LC	3.465	56T4982	180.98
MULTI-MODE FIBER MTP (MPO)							
AFBR-79EQDZ	40 Gb/s	100	850	MPO	3.3	56T4984	303.90
AFBR-79Q4Z	40 Gb/s		850	MPO		51R2227	395.32

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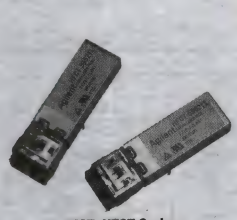
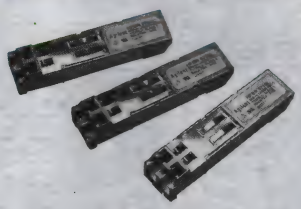
FIBER-OPTIC LC 3.3V TRANSCEIVERS

RoHS Compliant Available

AVAGO TECHNOLOGIES



AFCT, HFCT Series



AFBR, HFBR Series

Mfg. Part No.	Data Rate (MBd)	Distance (m)	Wavelength (nm)	Pin-Out	Stock No.	Price Each 1-9
MULTI-MODE SFF LC TRANSCEIVERS - ENTERPRISE						
HFBR-5961ALZ	125	2000	1300	2x5	74K5213	54.38
HFBR-5961LZ	125	2000	1300	2x5	74K5214	56.93
HFBR-5963ALZ	125	2000	1300	2x5	74K5215	54.38
HFBR-5963LZ	125	2000	1300	2x5	74K5216	56.93
HFBR-5911LZ	1.25 GBd	550	850	2x5	74K5211	59.28
HFBR-59L1ALZ	1.06/1.25 GBd (FC/GbE)	500	850	2x5	74K5209	83.63
MULTI-MODE SFF LC TRANSCEIVERS - STORAGE						
AFBR-5921ALZ	2.125/1.06 GBd (FC)	500	850	2x5	71K0692	46.82
AFBR-59M5LZ	2.125/1.06 GBd (FC)	500	850	2x6	74K4796	46.82
AFBR-59R5LZ	4.25/2.125/1.06 GBd (FC)	500	850	2x7	71K0691	45.39

CONTINUED

FIBER-OPTIC LC 3.3V TRANSCEIVERS (CONT.)

Mfg. Part No.	Data Rate (MBd)	Distance (m)	Wavelength (nm)	Pin-Out	Stock No.	Price Each 1-9
High-performance transceivers for serial optical data communications at 2488Mb/s. Single-mode fiber modules are designed to provide SONET/SDH-compliant links. The transmitter section incorporates an FP laser. Applications includes SONET/SDH equipment interconnect, OC-48/SDH STM-16 rate and short-reach ATM/SONET links. Nominal operating wavelength: 1300nm. Operating temperature range: 0°C to +70°C. Meet full IEC 825 and CDRH Class 1 safety standards.						
● AFCT-5971LZ	125	10000	1300	2x5	52K5702	96.35
● AFCT-5971ALZ	125	10000	1300	2x5	52K5701	105.99
SINGLE-MODE SFF LC TRANSCEIVERS - METRO						
● AFCT-5961ATGZ	155 (OC3)	15000	1300	2x5	31K6440	105.99
● AFCT-5961ATLZ	155 (OC3)	15000	1300	2x5	31K6441	105.99
● AFCT-5961NGZ	155 (OC3)	40000	1300	2x5	31K6442	134.89
● AFCT-5961NLZ	155 (OC3)	40000	1300	2x5	31K6443	134.89
● AFCT-5961TGZ	155 (OC3)	15000	1300	2x5	31K6444	96.35
● AFCT-5961TLZ	155 (OC3)	15000	1300	2x5	31K6445	96.35
● AFCT-5962ATGZ	155 (OC3)	15000	1300	2x10	31K6446	110.80
● AFCT-5962ATLZ	155 (OC3)	15000	1300	2x10	31K6447	110.80
● AFCT-5962NGZ	155 (OC3)	40000	1300	2x10	31K6448	139.71
● AFCT-5962NLZ	155 (OC3)	40000	1300	2x10	31K6449	139.71
● AFCT-5962TGZ	155 (OC3)	15000	1300	2x10	31K6450	101.17
● AFCT-5962TLZ	155 (OC3)	15000	1300	2x10	31K6451	101.17
● AFCT-5963ATGZ	155 (OC3)	15000	1300	2x5	31K6452	105.99
● AFCT-5963ATLZ	155 (OC3)	15000	1300	2x5	31K6453	105.99
● AFCT-5963NGZ	155 (OC3)	40000	1300	2x5	31K6454	134.89
● AFCT-5963NLZ	155 (OC3)	40000	1300	2x5	31K6455	134.89
● AFCT-5963TGZ	155 (OC3)	15000	1300	2x5	31K6456	96.35
● AFCT-5963TLZ	155 (OC3)	15000	1300	2x5	31K6457	96.35
● AFCT-5964ATGZ	155 (OC3)	15000	1300	2x10	31K6458	110.80
● AFCT-5964ATLZ	155 (OC3)	15000	1300	2x10	31K6459	110.80
● AFCT-5964NGZ	155 (OC3)	40000	1300	2x10	31K6460	139.71
● AFCT-5964NLZ	155 (OC3)	40000	1300	2x10	31K6461	139.71
● AFCT-5964TGZ	155 (OC3)	15000	1300	2x10	31K6462	101.17
● AFCT-5964TLZ	155 (OC3)	15000	1300	2x10	31K6463	101.17
MULTI-MODE SFP LC TRANSCEIVERS - ENTERPRISE						
Offer maximum flexibility to fiber channel designers, manufacturers, and system integrators to implement a range of multimode applications. Incorporate the latest 3.3VDC compatible transceiver technology including an 850nm VCSEL transmitter as well as a convenient LC-Duplex optical interface.						
● HFBR-57E0ALZ	125	2000	1300	...	74K5203	59.32
● HFBR-57E0APZ	125	2000	1300	...	74K5204	60.38
● HFBR-57E0LZ	125	2000	1300	...	74K5205	54.38
● HFBR-57E0PZ	125	2000	1300	...	74K5206	55.44
MULTI-MODE SFP LC TRANSCEIVERS - STORAGE						
● AFBR-57M5APZ	2.125/1.06/1.25 GBd (FC/GbE)	550	850	...	71K0689	43.00
● AFBR-57R5APZ	4.25/2.125/1.06 GBd (FC)	500	850	...	71K0690	49.86
● AFBR-57R5AEZ	4.25/2.125/1.06 GBd (FC)	500	850	...	17M6555	49.86
● AFBR-57D9AMZ	8.5/4.25/2.125 GBd	150	850	...	56W5071	70.20
MULTI-MODE SFP TRANSCEIVERS - ETHERNET						
● AFBR-5715APZ	1.25 Gbps (50/125µm)	550	850	...	02M9298	47.58
● AFBR-5715PZ	1.25 Gbps (50/125µm)	550	850	...	02M9300	42.34
● AFBR-703ASDZ	10 Gbps	...	850	...	11R1066	150.98
● AFBR-5803AQZ	100 Mbps	...	1380	1x9	42M4101	36.92
● AFBR-5803ATQZ	100 Mbps	...	1380	1x9	42M4102	36.92
● AFBR-709DMZ	10 Gbps	...	850	...	51R2226	144.79
● AFBR-707SDZ	10 Gbps	...	1310	...	08R2722	213.65
● AFBR-709SMZ	10 Gbps	...	850	...	56W5074	98.73
MULTI-MODE SFP TRANSCEIVERS - BASE STATION						
● AFBR-57J5APZ	3.07/2.46 Gbps	500	850	...	11N8923	46.08

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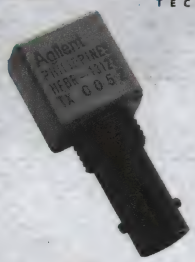
1300nm DISCRETE OPTICAL COMPONENTS

RoHS Compliant Available

AVAGO TECHNOLOGIES

Applications:
- Desktop Links for High-Speed LANs
- Distance Extension Links
- Telecom Switch Systems
- TAXIchip® Compatible
- FDDI Concentrators, Bridges, Routers, and Network Interface Cards
- 100 Mbps ATM Interfaces
- Fast Ethernet Interfaces
- General-Purpose, Point-to-Point Data Communications



HFBR-1312TZ

➤ CONTINUED ➤

1300nm DISCRETE OPTICAL COMPONENTS (CONT.)

HFBR-1312TZ/2316TZ: Transmitter and receiver provide low-cost fiber-optic links. Signal rates over 155 megabaud. Link distances over 5km. Dual-in-line package panel-mountable ST® and SC connector receptacles. Auto insertable and wave-solderable. Specified with 62.5/125 5m and 50/125 5m fiber. Compatible with **HFBR-0400 series**, also available; *go online or call.*

HFBR-1115TZ/2115TZ: Full compliance with the optical performance requirements of the FDDI PMD® standard, the ATM 100-Mbps physical layer and the 100-Mbps fast Ethernet physical layer. Compact 16-pin DIP package with plastic ST® connector. Wave-solder and aqueous wash process compatible package. Manufactured in an ISO 9001 certified facility. Other versions available for ATM and fiber channel; *go online or call.*

DISCRETE OPTICAL COMPONENTS - 1300nm

Mfg. Part No.	Data Rate (MBd)	Distance (m)	Connector	Stock No.	Price Each 1-9
● HFBR-1312TZ	32	5000	ST	71K0256	50.83
	160	2000	ST		
● HFBR-2316TZ	32	5000	ST	71K0273	50.83
	160	2000	ST		
● HFBR-1115TZ	125	2000	ST	71K0255	67.98
● HFBR-2115TZ	125	2000	ST	71K0272	67.98
● AFBR-1310Z	Transmitter for multi GHz analog links		FC/PC	83T2182	80.25
● AFBR-2310Z	Receiver for multi GHz analog links		FC	83T2183	30.50

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FIBER OPTIC TRANSCEIVERS MT-RJ PACKAGE

RoHS Compliant Available

AVAGO TECHNOLOGIES

Avago's MT-RJ transceivers are suitable for LAN use and utilize the established MT ferrule design with RJ-45 style connector. MT-RJ fiber connector is half the size of a standard SC-duplex module. This allows system designers to double the port density on a typical system blade, significantly reducing the cost-per-port to customers. Transceivers have industry-standard multisource footprint with common electrical-optical pinout functionality, operating at 3.3V. 2x5 DIP package.

FIBER OPTIC TRANSCEIVERS - MULTIMODE MT-RJ

Mfg. Part No.	Data Rate (MBd)	Distance (m)	Wavelength (nm)	Stock No.	Price Each 1-9
● AFBR-5903AZ	125	2000	1300	31K6416	51.20
● AFBR-5903Z	125	2000	1300	31K6418	48.19
● HFBR-5912EZ	1.25 GBd	550	850	74K5212	67.03

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MULTIMODE HFBR-x0400 SERIES MINIATURE LINK PACKAGE

RoHS Compliant Available

AVAGO TECHNOLOGIES

Transmitters Receivers

DISCRETE OPTICAL TRANSMITTERS- MINIATURE LINK

HFBR-14x2Z/14x4Z fiber optic transmitters contains an 820nm AlGaAs emitter capable of efficiently launching optical power into 4 different optical fiber sizes: 50/125µm, 62.5/125µm, 100/140µm and 200µm HCS®. This allows the designer flexibility in choosing the fiber size. **HFBR-14xxZ series** transmitters are designed to operate with Avago's **HFBR-24xxZ series** fiber optic receivers; *ordered separately below.* Application notes are available with circuit recommendations for operation from DC to 160 MBd transmitter; *go online or call.*

Mfg. Part No.	Connector	Stock No.	Price Each 1-9
● HFBR-1424Z	FC	74K5142	21.63
● HFBR-1402Z	SMA	71K0257	21.63
● HFBR-1404Z	SMA	71K0258	21.63
● HFBR-1412TZ	ST	71K0259	21.63
● HFBR-1412Z	ST	71K0260	21.63
● HFBR-1414TZ	ST	71K0261	21.63
● HFBR-1414Z	ST	71K0262	21.63
● HFBR-1415TZ	ST	74K5140	21.63

DISCRETE OPTICAL RECEIVERS - MINIATURE LINK

HFBR-24x2Z 820nm fiber optic receivers are designed to operate with Avago's **HFBR-14xx series** fiber optic transmitters, *ordered separately above* and 50/125µm, 62.5/125µm, 100/140µm and 200µm HCS® fiber optic cable, also available; *go online or call.* Consistent coupling into the receiver is assured by the lensed optical system. Response does not vary with fiber size ≤ 0.100µm.

➤ CONTINUED ➤

MULTIMODE HFBR-x0400 SERIES MINIATURE LINK PACKAGE (CONT.)

Mfg. Part No.	Connector	Stock No.	Price Each 1-9
HFBR-2422Z	FC	74K5164	21.63
AFBR-2419MZ	Metal ST	48W2229	23.54
HFBR-24E6Z	SC	74K5157	21.63
HFBR-24E2Z	SC	74K5156	20.25
HFBR-2402Z	SMA	71K0274	21.63
HFBR-2406Z	SMA	71K0275	21.63
AFBR-2409Z	SMA	48W2228	21.40
HFBR-2412Z	ST	71K0277	21.63
AFBR-2419Z	ST	48W2231	21.40
HFBR-2416Z	ST	71K0279	21.63
HFBR-2414TZ	Threaded ST	74K5160	21.63
HFBR-2412TZ	Threaded ST	71K0276	21.63
AFBR-2419TZ	Threaded ST	48W2230	21.40
HFBR-2416TZ	Threaded ST	71K0278	21.63

AFBR-24x9Z 50 MBd Miniature Link Fiber Optic Receivers are designed to operate with Avago's **HFBR-14xx series** fiber optic transmitters. Provides cost effective, high performance fiber optic communication links for information systems and industrial applications with link distances of up to 3 km. The receivers are directly compatible with popular "industry-standard" connectors: ST® and SMA. They are designed for use with 62.5/125 ìm multi mode fiber.

Mfg. Part No.	Connector	Stock No.	Price Each 1-9
AFBR-2419MZ	Metal ST	48W2229	23.54
AFBR-2409Z	SMA	48W2228	21.40
AFBR-2419Z	ST	48W2231	21.40
AFBR-2419TZ	Threaded ST	48W2230	21.40

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HFBR-0500Z SERIES VERSATILE LINK PACKAGE

RoHS Compliant Available

AVAGO TECHNOLOGIES

The most cost-effective family of fiber-optics from Avago consists of discrete transmitters and receivers based on 660nm technology. Optimized for 1mm plastic fiber and 200µm HCS™ fiber.

DISCRETE OPTICAL TRANSMITTERS - VERSATILE LINK

Mfg. Part No.	Module Style	Data Rate (MBd)	Distance (m) POF	Oper. Temp.	Stock No.	Price Each 1-9
HFBR-1521Z	Horizontal	5 MBd	20	-40 to +85°C	71K0263	12.48
HFBR-1522Z	Horizontal	1 MBd	45	-40 to +85°C	71K0264	12.48
HFBR-1523Z	Horizontal	40 KBd	110	-40 to +85°C	71K0265	12.48
HFBR-1527Z	Horizontal	32 MBd 125 MBd	40 30	0 to +70°C	71K0267	12.73
HFBR-1528Z	Horizontal	10 MBd	100	-40 to +85°C	71K0268	12.73
AFBR-1624Z	Horizontal	50 MBd	50	-40 to +85°C	93T4600	18.39
HFBR-1531Z	Vertical	5 MBd	20	0 to +70°C	71K0269	13.28
HFBR-1532Z	Vertical	1 MBd	45	0 to +70°C	71K0270	13.28
AFBR-1539Z	Vertical	10 MBd	50	0 to +85°C	43X4269	14.94
AFBR-1634Z	Vertical	50 MBd	50	0 to +85°C	43X4270	20.68
AFBR-1639Z	Vertical	50 MBd	50	0 to +85°C	43X4271	20.68
AFBR-1644Z	Tilted	50 MBd	50	-40 to +85°C	45W7074	20.68

DISCRETE OPTICAL RECEIVERS - VERSATILE LINK

HFBR-2521Z	Horizontal	5 MBd	20	-40 to +85°C	71K0280	12.48
HFBR-2522Z	Horizontal	1 MBd	45	-40 to +85°C	71K0281	12.48
HFBR-2523Z	Horizontal	40 KBd	110	-40 to +85°C	71K0282	12.48
HFBR-2528Z	Horizontal	10 MBd	100	-40 to +85°C	71K0285	22.91
HFBR-2531Z	Vertical	5 MBd	20	0 to +70°C	71K0286	13.28
HFBR-2532Z	Vertical	1 MBd	45	0 to +70°C	71K0287	13.28
AFBR-2539Z	Vertical	50 MBd	50	0 to +85°C	43X4272	22.41
AFBR-2634Z	Vertical	50 MBd	50	0 to +85°C	43X4273	22.41

(69212)

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(212565)

PLASTIC OPTICAL FIBER CABLE FOR VERSATILE LINK PRODUCTS

RoHS Compliant Available

AVAGO TECHNOLOGIES

Compatible with Avago Versatile Link Family of connectors and fiber optics components. 1mm diameter plastic optical fiber (POF) in 2 grades: Low-cost standard attenuation POF (R) and high-performance low loss POF (E). Available with simplex connectors (N), duplex connectors (M) and unconnectored (U).

PLASTIC OPTICAL FIBER CABLE

Mfg. Part No.	Length (m)	Grade	Cable Connector Styles	Stock No.	Price Each 1-9
HFBR-RNS001Z	1	Standard Attenuation	Simplex Connectored	71K0248	6.87
HFBR-RNS005Z	5	Standard Attenuation	Simplex Connectored	71K0249	11.18
HFBR-RNS010Z	10	Standard Attenuation	Simplex Connectored	71K0250	15.57
HFBR-RLS001Z	1	Standard Attenuation	Latching Simplex Connectored	74K5126	6.87
HFBR-RMD005Z	5	Standard Attenuation	Duplex Connectored	71K0246	19.82
HFBR-RMD010Z	10	Standard Attenuation	Duplex Connectored	71K0247	26.50
HFBR-RTD010Z	10	Standard Attenuation	Latching Duplex Connectored	74K5132	26.50
HFBR-RUD100Z	100	Standard Attenuation	Duplex Unconnectored	71K0251	161.28
HFBR-RUD500Z	500	Standard Attenuation	Duplex Unconnectored	71K0252	650.03
HFBR-RUS100Z	100	Standard Attenuation	Simplex Unconnectored	71K0253	79.45
HFBR-RUS500Z	500	Standard Attenuation	Simplex Unconnectored	71K0254	349.09
HFBR-EUD500Z	500	High Performance, Low Loss	Duplex Unconnectored	71K0243	650.03
HFBR-EUS500Z	500	High Performance, Low Loss	Simplex Unconnectored	71K0244	433.35

PLASTIC OPTICAL FIBER CONNECTORS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
HFBR-4501Z	Gray Simplex Connector/Crimp Ring	74K5180	1.28
HFBR-4503Z	Gray Simplex Latching Connector with Crimp Ring	74K5181	1.11
HFBR-4505Z	Gray Adapter (Bulkead/Feedthrough)	74K5182	1.93
HFBR-4506Z	Parchment Duplex Connector with Crimp Ring	74K5183	1.92
HFBR-4511Z	Blue Simplex Connector/Crimp Ring	74K5184	1.28
HFBR-4513Z	Blue Simplex Latching Connector with Crimp Ring	74K5185	1.11
HFBR-4515Z	Blue Adapter (Bulkead/Feedthrough)	74K5186	1.93
HFBR-4516Z	Gray Duplex Connector with Crimp Ring	74K5187	1.92
HFBR-4531Z	Black Crimpless Simplex Non-latching Connector	74K5191	1.11
HFBR-4532Z	Black Crimpless Simplex Latching Connector	74K5192	1.11
HFBR-4533Z	Blue Crimpless Simplex Non-latching Connector	74K5193	1.11
HFBR-4535Z	Gray Crimpless Simplex Non-latching Connector	74K5194	1.11

PLASTIC OPTICAL FIBER ACCESSORIES

HFBR-4522Z	500 HFBR-0500 Products Port Plugs	74K5189	0.77
HFBR-4525Z	1000 Simplex Crimp Rings - Price per PK 1000	71K0288	120.56
HFBR-4593Z	Polishing Kit (one polishing tool, two pieces 600 grit abrasive paper, and two pieces 3µm pink lapping film)	74K5195	5.65
HFBR-4597Z	Plastic Fiber Crimping Tool	74K5196	287.02

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There's a certain energy at Eaton. It's the power of uniting some of the world's most respected names to build a brand you can trust to meet your every power management need.

Eaton is dedicated to ensuring that reliable, efficient and safe power is available when it's needed most. Building on over 100 years of experience in electrical power management, the experts at Eaton deliver customized, integrated solutions to solve your most critical challenges. To learn more visit **Eaton.com/Electrical**

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Circuit Protection

FUSES, RESETTABLE PTCS & GDTS

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Blade Fuses 1446-1447
Circuit Protection Kits 1463
Electrical Power Fuses 1447-1454
Electronic Cartridge Fuses 1433-1444
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To search by manufacturer, see our detailed Manufacturer Index on page 2458.

GAS DISCHARGE TUBES

2030-XXT-SM SERIES FAST ACTING 3-ELECTRODE MINIATURE GAS DISCHARGE TUBES

RoHS Compliant Available

BOURNS®

- Size: 5 mm diameter, 7.3 mm length
- Very fast acting
- Small size
- Stable breakdown throughout life
- Designed to operate with TBU® devices
- RoHS compliant versions available
- UL Recognized

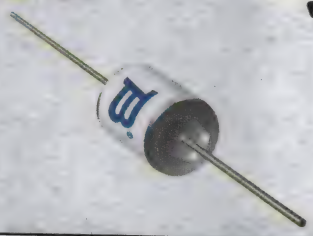
Mfg. Part No.	DC Sparkover @ 100V/s	Impulse Sparkover (5kV 1.2/50Us)	Stock No.	Price Each 1-9
● 2030-23T-SMLF	80V	650V	94T5234	2.60
● 2030-42T-SMLF	135V	850V	94T5235	3.04

(209592)

SA2 SERIES HIGH VOLTAGE GAS DISCHARGE TUBES

RoHS Compliant Available

BOURNS®



- High insulation resistance
- Quick response, long service life
- Available DC breakdown range: 2.4 kV to 7.2 kV
- Wide operating temperature range
- RoHS compliant

Bourns® **SA2 Series** two-electrode High Voltage Gas Discharge Tube devices are designed for high isolation applications. The series offers high insulation resistance over a wide temperature range and is offered with DC breakdowns from 2.4 kV to 7.2 kV.

Mfg. Part No.	DC Breakdown Voltage Typ. (500V/s)	Impulse Breakdown Max.	Nominal Impulse Discharge	Stock No.	Price Each 1-9
● SA2-3000-CLT-STD	3kV	4.5kV	5kA	53W9955	2.88
● SA2-3600-CLT-STD	3.6kV	5.4kV	5kA	53W9959	2.88
● SA2-5500-CLT-STD	5.5kV	8kV	5kA	53W9963	2.88
● SA2-6200-CLT-STD	6.2kV	8kV	5kA	53W9968	2.88
● SA2-6300-CLT-STD	6.3kV	9.2kV	5kA	53W9971	2.88
● SA2-7200-CLT-STD	7.2kV	10kV	5kA	53W9974	2.88

(209530)

2095 SERIES HIGH VOLTAGE 2-ELECTRODE GAS DISCHARGE TUBES

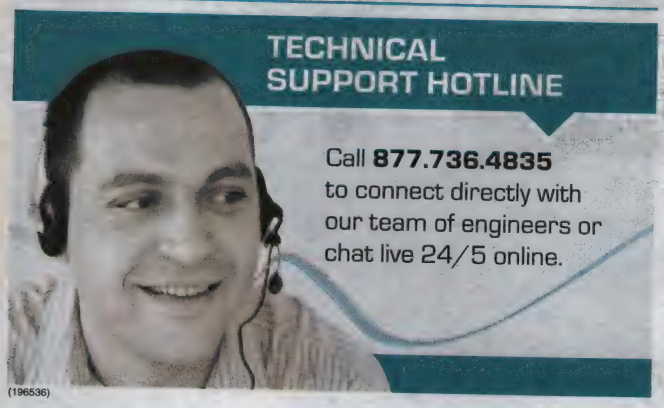
RoHS Compliant Available

BOURNS®

- Size: 8 mm diameter, 8 mm length
- Axial leaded device
- High voltage range up to 6 kV
- High insulation resistance
- RoHS compliant
- UL Recognized

Mfg. Part No.	DC Sparkover ±20% @ 100V/s	Impulse Sparkover 1000 V/us	Impulse Discharge Current 8/20us, 1 operation	Stock No.	Price Each 1-9
● 2095-80-BLF	800V	1.2kV	8kA	94T5423	1.43
● 2095-160-BLF	1.6kV	2.4kV	8kA	94T5403	1.43
● 2095-250-BLF	2.5kV	3.6kV	8kA	94T5407	1.43
● 2095-270-BLF	2.7kV	3.8kV	5kA	94T5409	1.43
● 2095-350-BLF	3.5kV	5kV	5kA	94T5413	1.43

(209579)



(196536)

2093 SERIES HIGH VOLTAGE 2-ELECTRODE GAS DISCHARGE TUBES

RoHS Compliant Available

BOURNS®

- Size: 6.2 mm diameter, 4.2 mm length
- Surface mount device
- High voltage range
- Compact size
- High insulation resistance
- RoHS compliant
- UL Recognized

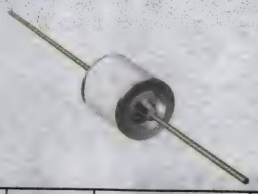
Mfg. Part No.	DC Sparkover ±20% @ 100V/s	Impulse Sparkover 1000 V/us	Impulse Discharge Current 8/20us, 1 operation	Stock No.	Price Each 1-9
● 2093-120-SM-RPLF	1.2kV	1.8kV	5kA	94T5393	1.17
● 2093-250-SM-RPLF	2.5kV	3.2kV	5kA	94T5396	1.17
● 2093-270-SM-RPLF	2.7kV	3.4kV	5kA	94T5397	1.17

(209578)

2089 SERIES HIGH VOLTAGE MINI-2-ELECTRODE GAS DISCHARGE TUBES

RoHS Compliant Available

BOURNS®



- Mini-compact size: 5.5 mm diameter, 6 mm length
- Axial leaded device
- High voltage range up to 4 kV
- High insulation resistance
- RoHS compliant
- UL Recognized

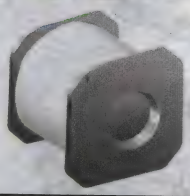
Mfg. Part No.	DC Sparkover ±20% @ 100V/s	Impulse Sparkover 1000 V/us	Impulse Discharge Current 8/20us, 1 operation	Stock No.	Price Each 1-9
● 2089-160-BLF	1.6kV	2.6kV	3kA	94T5380	1.14
● 2089-250-BLF	2.5kV	3.5kV	3kA	94T5384	1.14
● 2089-360-BLF	3.6kV	4.6kV	3kA	94T5390	1.22

(209577)

2087 SERIES HIGH VOLTAGE MINI-2-ELECTRODE GAS DISCHARGE TUBES

RoHS Compliant Available

BOURNS®



- Mini-compact size: 4 mm diameter, 4.2 mm length
- Surface mount device
- High voltage range
- High insulation resistance
- RoHS compliant
- UL Recognized

Mfg. Part No.	DC Sparkover ±20% @ 100V/s	Impulse Sparkover 1000 V/us	Impulse Discharge Current 8/20us, 1 operation	Stock No.	Price Each 1-9
● 2087-80-SM-RPLF	800V	1.4kV	3kA	94T5373	0.97
● 2087-120-SM-RPLF	1.2kV	1.8kV	3kA	94T5369	0.90
● 2087-150-SM-RPLF	1.5kV	2.1kV	3kA	94T5370	0.90

(209576)

2097 SERIES HIGH-VOLTAGE 2-ELECTRODE GAS DISCHARGE TUBES

RoHS Compliant Available

BOURNS®

- Size: 11.8 mm diameter, 17.5 mm length
- High power rating
- High voltage range
- RoHS compliant
- UL Recognized

Mfg. Part No.	DC Sparkover ±20% @ 100V/s	Impulse Sparkover 1000 V/us	Impulse Discharge Current 8/20us, 5 operations	Stock No.	Price Each 1-9
● 2097-100-DLF	1kV	1.7kV	20kA	52W9066	17.68
● 2097-160-DLF	1.6kV	2.5kV	20kA	52W9069	16.52
● 2097-220-DLF	2.2kV	2.8kV	20kA	52W9071	16.52

(209571)

2063 SERIES HIGH-CURRENT 2-ELECTRODE GAS DISCHARGE TUBES

RoHS Compliant Available

BOURNS®

- Size: 11.8 mm diameter, 17 mm length
- 100 kA surge rating
- High power handling
- Low leakage
- RoHS compliant
- UL Recognized

Mfg. Part No.	DC Sparkover ±20% @ 100V/s	Impulse Sparkover 1000 V/us	Impulse Discharge Current 8/20us, 5 operations	Stock No.	Price Each 1-9
2063-23-ALF	230V	700V	60kA	52W9058	10.63
2063-35-ALF	350V	900V	60kA	52W9060	10.63
2063-47-ALF	470V	1.1kV	60kA	52W9062	10.63
2063-60-ALF	600V	1.3kV	60kA	52W9063	11.37
2063-80-ALF	800V	1.5kV	60kA	52W9065	11.37

(209570)

2061 SERIES HIGH-CURRENT 2-ELECTRODE GAS DISCHARGE TUBES

RoHS Compliant Available

BOURNS®

- Size: 11.8 mm diameter, 12 mm length
- 60 kA surge rating
- High power handling
- Low leakage
- RoHS compliant
- UL Recognized

Mfg. Part No.	DC Sparkover ±20% @ 100V/s	Impulse Sparkover 1000 V/us	Impulse Discharge Current 8/20us, 5 operations	Stock No.	Price Each 1-9
2061-23-ALF	230V	700V	40kA	52W9049	9.75
2061-35-ALF	350V	900V	40kA	52W9052	9.75
2061-42-ALF	420V	1kV	40kA	52W9053	9.75
2061-47-ALF	470V	1.1kV	40kA	52W9054	9.75
2061-60-ALF	600V	1.3kV	40kA	52W9055	10.43

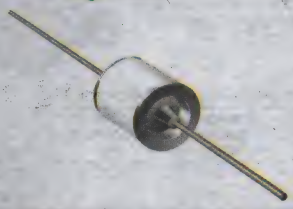
(209569)

2057 SERIES LIGHT DUTY 2-ELECTRODE MINIATURE GAS DISCHARGE TUBES

RoHS Compliant Available

BOURNS®

- Compact size: 5.5 mm diameter, 6 mm length
- Low capacitance
- Low leakage
- RoHS compliant
- UL Recognized



Mfg. Part No.	DC Sparkover ±20% @ 100V/s	Impulse Sparkover 1000 V/us	Impulse Discharge Current 8/20us, 10 operations	Stock No.	Price Each 1-9
2057-09-BLF	90V	700V	5kA	52W8976	0.70
2057-23-BLF	230V	700V	5kA	52W8982	0.70
2057-35-BLF	350V	900V	5kA	52W8988	0.70
2057-47-BLF	470V	1.1kV	5kA	52W8992	0.65

(209564)

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element14.com

(196545)

2056 SERIES LIGHT DUTY 3-ELECTRODE GAS DISCHARGE TUBES

RoHS Compliant Available

BOURNS®

- Compact size: 6 mm diameter, 8 mm length
- Low capacitance and insertion loss
- Switch-Grade Fail-Short option available
- RoHS compliant
- UL Recognized

Mfg. Part No.	DC Sparkover ±20% @ 100V/s	Impulse Sparkover 1000 V/us	Impulse Discharge Current 8/20us, 10 operations	Stock No.	Price Each 1-9
2056-09-B2LF	90V	850V	5kA	52W8926	1.46
2056-23-B2LF	230V	700V	5kA	52W8941	1.46
2056-35-B2LF	350V	750V	5kA	52W8951	1.46
2056-42-B2LF	420V	800V	5kA	52W8961	1.46
2056-60-B2LF	600V	1kV	5kA	52W8971	1.46

(209583)

2053 SERIES LIGHT DUTY 2-ELECTRODE MINIATURE GAS DISCHARGE TUBES

RoHS Compliant Available

BOURNS®

- Size: 4 mm diameter, 4.2 mm length
- Mini-surface mount footprint
- Low capacitance
- High insulation resistance
- RoHS compliant
- UL Recognized

Mfg. Part No.	DC Sparkover ±20% @ 100V/s	Impulse Sparkover 1000 V/us	Impulse Discharge Current 8/20us, 10 operations	Stock No.	Price Each 1-9
2053-09-SM-RPLF	90V	800V	3kA	52W8915	0.78
2053-23-SM-RPLF	230V	700V	3kA	52W8917	0.78
2053-35-SM-RPLF	350V	800V	3kA	52W8920	0.78
2053-40-SM-RPLF	400V	800V	3kA	52W8921	0.78

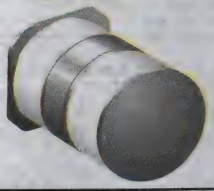
(209563)

2052 SERIES LIGHT DUTY 3-ELECTRODE SYMMETRICAL GAS DISCHARGE TUBES

RoHS Compliant Available

BOURNS®

- Size: 5 mm diameter, 7.2 mm length
- Surface mount design
- Symmetrical breakdown voltage (L-L, L-G)
- Low capacitance and insertion loss
- UL Recognized
- RoHS compliant



Mfg. Part No.	DC Sparkover ±20% @ 100V/s (L-L, L-G)	Impulse Sparkover 1000 V/us	Impulse Discharge Current 8/20us, 10 operations	Stock No.	Price Each 1-9
2052-23-SM-RPLF	230V	700V	5kA	52W8906	1.44
2052-35-SM-RPLF	350V	750V	5kA	52W8908	1.44
2052-40-SM-RPLF	400V	800V	5kA	52W8909	1.44
2052-47-SM-RPLF	470V	900V	5kA	52W8911	1.44

(209582)

2045 SERIES MEDIUM DUTY 2-ELECTRODE GAS DISCHARGE TUBES

RoHS Compliant Available

BOURNS®

- Size: 8 mm diameter, 6 mm length
- Low capacitance
- High insulation resistance
- RoHS compliant
- UL Recognized

Mfg. Part No.	DC Sparkover ±30% @ 100V/s	Impulse Sparkover 1000 V/us	Impulse Discharge Current 8/20us, 10 operations	Stock No.	Price Each 1-9
2045-09-BLF	90V	600V	10kA	52W8862	0.81
2045-14-BLF	145V	700V	10kA	52W8868	0.81
2045-23-BLF	230V	700V	10kA	52W8870	0.81

CONTINUED

GAS DISCHARGE TUBES

2045 SERIES MEDIUM DUTY 2-ELECTRODE GAS DISCHARGE TUBES (CONT.)

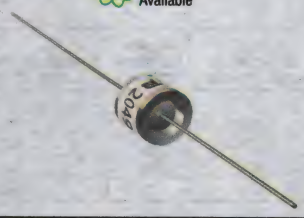
Mfg. Part No.	DC Sparkover ±30% @ 100V/s	Impulse Sparkover 1000 V/us	Impulse Discharge Current 8/20us, 10 operations	Stock No.	Price Each 1-9
● 2045-35-BLF	350V	900V	10kA	52W8876	0.75
● 2045-47-BLF	470V	1.1kV	10kA	52W8880	0.81

(203767)

2049 SERIES MEDIUM DUTY 2-ELECTRODE GAS DISCHARGE TUBES

RoHS Compliant Available

BOURNS®



- Size: 8 mm diameter, 6 mm length
- Low capacitance
- High insulation resistance
- RoHS compliant
- UL Recognized

Mfg. Part No.	DC Sparkover ±30% @ 100V/s	Impulse Sparkover 1000 V/us	Impulse Discharge Current 8/20us, 10 operations	Stock No.	Price Each 1-9
● 2049-09-BLF	90V	600V	15kA	52W8884	0.88
● 2049-14-BLF	145V	700V	15kA	52W8890	0.81
● 2049-23-BLF	230V	700V	15kA	52W8892	0.88
● 2049-35-BLF	350V	900V	15kA	52W8898	0.81
● 2049-47-BLF	470V	1.1kV	15kA	52W8902	0.81
● 2049-60-BLF	600V	1.3kV	15kA	52W8904	0.88

(209561)

SPARCTUBE™ SWITCHING SPARK GAPS

RoHS Compliant Available

BOURNS®

- Fast switching rate
- High energy, low loss capability
- Wide operating temperature range
- Long service life
- High insulation resistance
- RoHS compliant

The **ST series** is a switching spark gap device that features breakdown voltages between 350 V and 1000 V including the most utilized versions of 800 V and 840 V, which are ideally suited for automotive HID Xenon headlight applications. Characterized by long-term reliability and high temperature performance, the **Sparctube™ ST series** is designed specifically for voltage controlled switching of capacitive discharge circuits where high energy, low loss and a fast rate of switching are required.

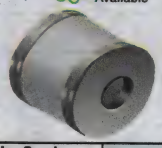
Mfg. Part No.	Static Breakdown Voltage @ 800 V/s	Stock No.	Price Each 1-9	10-99	100-249
● ST-0400-BLT-STD	400V	54W0115	2.88	1.92	1.51
● ST-0470-BLT-STD	470V	54W0117	2.88	1.92	1.51
● ST-0600-BLT-STD	600V	54W0119	2.88	1.92	1.51
● ST-0620-BLT-STD	620V	54W0121	2.88	1.92	1.51
● ST-0800-BLT-STD	800V	54W0128	2.88	1.92	1.51
● ST-0840-BLT-STD	840V	54W0130	2.88	1.92	1.51

(209531)

HEAVY DUTY 2-POLE GDTs

RoHS Compliant Available

BOURNS®



- Capacitance: < 5 pF
- Impulse discharge current, 10-350uS (>1 operation): 8 kA
- Impulse discharge current, 8-20uS (>10 operations): 40 kA
- 12.7 x 12.7 mm

Mfg. Part No.	Breakover Voltage (VDC)	Impulse Sparkover Voltage @1000V/us (V)	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 2047-09-ALF	90	650	05R9267	10.22	9.17	8.07	7.45
● 2047-15-ALF	150	600	05R9268	10.22	9.17	8.07	7.45
● 2047-23-ALF	230	650	05R9269	10.22	9.17	8.07	7.45
● 2047-35-ALF	350	800	05R9270	10.22	9.17	8.07	7.45

(191232)

2-POLE GAS DISCHARGE TUBES

RoHS Compliant Available

BOURNS®

- Capacitance: < 1 pF
- Impulse discharge current (1 operation): 20 kA
- Impulse discharge current, 8-20uS (10 operations): 10 kA
- Approximately 8 mm diameter, 6 mm long

Radial Leaded

Surface Mount

RADIAL LEADED

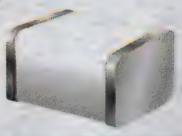
Mfg. Part No.	Breakover Voltage (VDC)	Impulse Sparkover Volt. @1000V/us (V)	Lead Wire Dia. (mm)	Stock No.	Price Each 1-9	10-24	25-49
● 2027-09-BLF	90	500	0.8	75K9369	1.54	1.33	1.23
● 2027-09-CLF	90	500	1.0	75K9371	1.43	1.24	1.14
● 2027-15-BLF	150	575	0.8	75K9372	1.54	1.33	1.23
● 2027-23-BLF	230	675	0.8	43K2286	1.57	1.36	1.26
● 2027-25-BLF	250	700	0.8	88K8044	1.43	1.24	1.14
● 2027-30-BLF	300	800	0.8	14P9834	1.43	1.24	1.14
● 2027-35-BLF	350	875	0.8	75K9376	1.43	1.24	1.14
● 2027-47-BLF	470	1	0.8	75K9380	1.43	1.24	1.14
● 2027-60-BLF	600	1.1	0.8	43K2287	1.43	1.24	1.14
SURFACE MOUNT							
● 2027-07-SM-RPLF	75	500	...	34R2358	1.26	1.18	1.10

(159806)

MINIATURE 2-POLE GDTs

RoHS Compliant Available

BOURNS®



- Capacitance: < 1 pF
- Service life, 8/2uS (10 operations): 2 kA
- Ttmp range: -40° to +90°C
- Dimensions: 2.7H x 3.2W x 4.5Lmm
- UL recocognized file E153537, DIN ISO2859

Mfg. Part No.	Breakover Voltage (VDC)	Impulse Sparkover Voltage @1000V/us (V)	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 2051-09-SM-RPLF	90	600	39T9176	0.82	0.77	0.71	0.65
● 2051-35-SM-RPLF	350	800	39T9181	0.77	0.73	0.67	0.62
● 2051-42-SM-RPLF	420	900	39T9183	0.75	0.66	0.62	0.54

(194908)

MINIATURE 2-POLE GDTs

RoHS Compliant Available

BOURNS®

- Capacitance: < 1 pF
- Service life, 8-20uS (2 operations): 1 kA
- Service life, 10-700uS (10 operations): 150A
- Approximately 5mm diameter, 4.4mm long

For use with Bourns transient blocking units (TBUs); *on page 342*

Mfg. Part No.	Breakover Voltage (VDC)	Impulse Sparkover Voltage @1000V/us (V)	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 2031-15T-SM-RPLF	60	500	22T0341	1.39	1.30	1.22	1.04
● 2031-23T-SM-RPLF	185	650	22T0344	1.39	1.30	1.22	1.04
● 2031-42T-SM-RPLF	360	850	22T0347	1.29	1.21	1.13	0.97

(192337)

MINIATURE 3-POLE GDTs

RoHS Compliant Available

BOURNS®

Fig. 1 Fig. 2 Fig. 3 Fig. 4

- Capacitance: < 2 pF
- Impulse discharge current (1 operation): 20 kA
- Impulse discharge current, 8-20uS (10 operations): 10 kA
- Approximately 5 mm diameter, 7.5 mm long

RADIAL LEADED

Mfg. Part No.	Fig.	Breakover Voltage (VDC)	Impulse Sparkover Voltage @1000V/us (V)	Lead Wire Dia. (mm)	Stock No.	Price Each 1-9	10-24
● 2036-07-B2LF	1	75	525	0.8	88K8051	2.18	1.90
● 2036-07-B3LF	2	75	525	0.8	75K9390	2.18	1.90

CONTINUED

MINIATURE 3-POLE GDTs (CONT.)

Mfg. Part No.	Fig.	Breakover Voltage (VDC)	Impulse Sparkover Voltage @1000V/us (V)	Lead Wire Dia. (mm)	Stock No.	Price Each 1-9	Price Each 10-24
2036-09-BLF	3	90	550	0.8	75K9395	2.06	1.79
2036-20-B2LF	1	200	575	0.8	32K7254	2.18	1.90
SURFACE MOUNT							
2036-07-SM-RPLF	4	75	525	...	75K9393	2.07	1.94
2036-09-SM-RPLF	4	90	550	...	75K9397	2.10	1.97
2036-15-SM-RPLF	4	150	500	...	88K8053	2.10	1.97

(162711)

3-POLE GAS DISCHARGE TUBES

RoHS Compliant Available

BOURNS®

- Capacitance: < 2 pF
- Impulse discharge current (1 operation): 40 kA
- Impulse discharge current, 8-20uS (10 operations): 20 kA
- Approximately 8 mm diameter, 11 mm long

Mfg. Part No.	Breakover Voltage (VDC)	Impulse Sparkover Voltage @1000V/us (V)	Pitch Spacing (mm)	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49
2026-09-C2LF	90	600	4.4	75K9362	2.18	1.90	1.73
2026-15-C2	150	575	4.4	61H1672	2.35	2.04	1.86
2026-23-C2LF	230	650	4.4	75K9363	2.18	1.90	1.73
2026-35-C2LF	350	875	4.4	33M7558	2.18	1.90	1.73
2026-35-C3LF	350	875	4.75	34R2355	2.18	1.90	1.73
2026-40-C3LF	400	925	4.75	34R2356	2.18	1.90	1.73

(159799)

3-POLE FAST GDTs

RoHS Compliant Available

BOURNS®

- Capacitance: < 1 pF
- Service life, 8/20uS (1 operations): 5 kA
- Service life, 2/10uS (10 operations^2): 1kA
- Approximately 8mm diameter, 11.2mm long

For use with Bourns transient blocking units (TBUs); *on page 342*

Mfg. Part No.	Breakover Voltage (VDC)	Impulse Sparkover Voltage @1000V/us (V)	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49	Price Each 50-99
2020-15T-A1LF	60	500	29T5839	2.53	2.20	2.00	1.92
2020-15T-C2FLF	60	500	29T5840	3.13	2.73	2.48	2.38
2020-15T-C2LF	60	500	29T5841	2.69	2.34	2.13	2.04
2020-15T-C4FLF	60	500	29T5842	3.13	2.73	2.48	2.38
2020-15T-C4LF	60	500	29T5843	2.69	2.34	2.13	2.04
2020-23T-A1LF	180	650	29T5845	2.53	2.20	2.00	1.92
2020-23T-C2FLF	180	650	29T5846	3.13	2.73	2.48	2.38
2020-23T-C2LF	180	650	29T5847	2.69	2.34	2.13	2.04
2020-23T-C4FLF	180	650	29T5848	3.13	2.73	2.48	2.38
2020-23T-C4LF	180	650	29T5849	2.69	2.34	2.13	2.04
2020-42T-ALF	360	850	29T5850	2.97	2.59	2.35	2.26
2020-42T-A1LF	360	850	29T5851	2.97	2.59	2.35	2.26
2020-42T-C2FLF	360	850	29T5852	3.37	2.93	2.67	2.56
2020-42T-C2LF	360	850	29T5853	2.69	2.34	2.13	2.04
2020-42T-C4FLF	360	850	29T5854	3.17	2.84	2.50	2.31
2020-42T-C4LF	360	850	29T5855	3.13	2.73	2.48	2.38

(194532)

2-POLE GDT's

RoHS Compliant Available

EPCOS

- Capacitance: < 1.5 pF
- Service life, 8/2uS (10 operations): 10 kA max.
- Temp range: -40°C to +90°C

5kA/5A - 8 x 8MM

Mfg. Part No.	Breakover Voltage Nominal (VDC)	Impulse Sparkover Voltage @1000V/us (V)	Stock No.	Price Each 1-9	Price Each 10-99	Price Each 100-249	Price Each 250-499
B88069X2010S102	588V	700	90H9669	3.62	2.93	2.29	1.76
B88069X2040S102	1kV	1.1	94H7525	3.89	3.15	2.46	1.89

(203979)

2-POLE GDT's CERAMIC

RoHS Compliant Available

EPCOS

- Capacitance: < 1.5 pF
- Service life, 8/2uS (10 operations): 20 kA max.
- Temp range: -40°C to +90°C

LIGHT-DUTY TYPES 5kA/5A - 8 x 6MM

Mfg. Part No.	Breakover Voltage (VDC)	Impulse Sparkover Voltage @1000V/us (V)	Stock No.	Price Each 1-9	Price Each 10-99	Price Each 100-499	Price Each 500-999
B88069X180S102	75	600	06J1842	1.90	1.50	1.13	0.85
B88069X720S102	90	550	88H4191	1.92	1.52	1.14	0.86
B88069X780S102	720	1.1	06J1845	1.79	1.41	1.06	0.80
MEDIUM-DUTY/HIGH VOLTAGE TYPES 5kA/2.5A - 8 x 8MM							
B88069X2190S102	2.5	3.9	02H6081	2.75	2.22	1.70	1.29
B88069X2590S102	4.5	5.8	65H5763	2.24	1.81	1.38	1.05
B88069X2620S102	5.5	6.5	20M4582	2.75	2.22	1.70	1.29
MEDIUM-DUTY/HIGH VOLTAGE TYPES 10kA/10A - 8 x 8MM							
B88069X2140S102	800	1.1	06J1853	2.75	2.22	1.70	1.29
B88069X2180S102	1.4	2.1	26H1894	2.71	2.19	1.67	1.28
HEAVY-DUTY TYPES 20kA/20A - 8 x 6MM							
B88069X1380S102	90	550	06J1850	1.92	1.55	1.18	0.90
B88069X2250S102	230	550	06J1856	2.31	1.87	1.43	1.09
B88069X2380S102	350	800	06J1857	2.31	1.87	1.43	1.09
B88069X1490S102	500	1	29M3834	2.34	1.89	1.45	1.11
B88069X2880S102	600	1.1	43J3954	2.34	1.89	1.45	1.11

(197430)

2 AND 3-POLE GDT's CERAMIC

RoHS Compliant Available

EPCOS

- Capacitance: < 1.5 pF max.
- Service life, 8/2uS (10 operations): 20 kA max.
- Temp range: -40°C to +90°C

2-POLE, LIGHT-DUTY TYPES 5kA/5A - 5 x 5MM

Mfg. Part No.	Breakover Voltage (VDC)	Impulse Sparkover Voltage @1000V/us (V)	Stock No.	Price Each 1-9	Price Each 10-99	Price Each 100-499	Price Each 500-999
B88069X1640T902	90	550	59T9276	2.44	2.24	1.69	1.05
3-POLE, LIGHT-DUTY TYPES 5kA/5A - 5 x 7.6MM							
B88069X4051T902	90	600	59T9277	3.63	3.34	2.52	1.56
3-POLE, HEAVY-DUTY TYPES 20kA/20A - 8 x 6MM							
B88069X1630T602	90	550	59T9275	2.38	2.19	1.65	1.02

(197649)

2-POLE BROADBAND GAS DISCHARGE TUBES

RoHS Compliant Available

Littelfuse®

Expertise Applied | Answers Delivered

- UL file no. E128662
- DC breakover voltage: 90V
- Nom. impulse discharge current (10 shots, 8x20us): 5kA
- Max. capacitance @ 1MHz: 1.5pF
- Operational temperature: -40° to +90°C

Mfg. Part No.	Typical Impulse Sparkover Voltage (V)	Max. Cap. @ 1MHz (pF)	Tape Cut Stock No.	Tape Cut Price Each 1-9
SL0902A090SM	700	1.5	58K6424	2.11
SL1002A090SM	650	1.2	17H2147	1.25

(177409)

NEW PRODUCTS ADDED DAILY

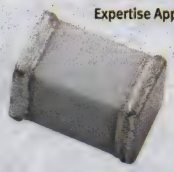
See the newest products, technologies and suppliers on our website.

(196560)

2-POLE SURFACE MOUNT GAS DISCHARGE TUBES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered



- GHz working frequency
- 1-2KA surge capability tested with 8/20µs pulse as defined by IEC 61000-4-5
- Non-radioactive
- Low capacitance (<1pF)
- Voltage ranges from 75V to 420V
- UL recognized
- Conforms to ITU-T K12, IEC 1000-4-5
- Square outline (4.5 x 3.2 x 2.7mm)
- **Q suffix** indicates quick response version

Mfg. Part No.	DC Breakdown Typ.@ 100V/s	Impulse Breakdown @ 1kV/µs	Stock No.	Price Each 1-9	10-24	25-99	100-249
SG75	75V	650V	88T2465	1.46	1.30	1.17	1.03
SG90	90V	600V	88T2466	1.48	1.31	1.19	1.04
SG150	150V	600V	88T2456	1.43	1.26	1.14	1.00
SG230	230V	800V	88T2457	1.34	1.20	1.17	1.00
SG300	300V	850V	88T2458	1.34	1.20	1.17	1.00
SG300Q	300V	650V	88T2459	1.34	1.20	1.17	1.00
SG350	350V	900V	88T2460	1.34	1.20	1.17	1.00
SG350Q	350V	700V	88T2461	1.34	1.20	1.17	1.00
SG400	400V	950V	88T2462	1.34	1.20	1.17	1.00
SG420	420V	1kV	88T2463	1.34	1.20	1.17	1.00
SG420Q	420V	750V	88T2464	1.34	1.20	1.17	1.00

(202058)

GAS DISCHARGE TUBES / SURGE ARRESTERS

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

Fig. 1

Fig. 3

Fig. 2

- Small size
- Rugged ceramic-metal construction
- Low capacitance (<1pF)
- Nonradioactive 600-1000V
- Operating temp. : -40°C to +125°C
- Available with or without leads
- UL recognized: File No. E111526
- Meets REA PE-80

Series	Dimensions (mm) Diameter	Body Length	Lead Length
AC	8.1	6.07	38.1
CG/CG2	8.1	6.07	27.96
CG/CG2 MS	8.3	6.05	...
CG3-1.5/CG3-3.0	8	6	28
CG3-7.5	8	7.9	27.05
CG5	5	5	...
CG5 MS	5.7	5.01	...
PMT3/PMT8	8.1	10.1	...

Suffix MS=Surface mount, 04=Bent leads 4.39mm apart, 10=Bent leads 4.75mm apart, 14=Straight leads. F=with failsafe. **Sold individually.** Tape and reel packaging also available add "TR" to type suffix; *go online or call.*

Mfg. Part No.	Fig.	DC Breakdown Volt. Nom. (V)	Max. (V)	Impulse Breakdown (100V/µs) Voltage Max. (V)	Stock No.	Price Each 1-9	10-24	25-49
CG75L	1	75	90	400	44F3903	3.02	2.75	2.65
CG90L	1	90	108	400	64K2257	3.02	2.75	2.65
CG110L	1	110	132	400	65K1022	3.14	2.86	2.76
CG2-145L	1	145	174	500	64K2242	3.02	2.75	2.65
CG2-230L	1	230	265	600	64K2244	3.02	2.75	2.65
CG2-300L	1	300	345	700	46F3581	3.02	2.75	2.65
CG2-350L	1	350	403	750	64K2248	3.14	2.86	2.76
CG2-470L	1	470	540	850	44F3905	3.02	2.75	2.65
CG2-600L	1	600	690	1	64K2250	3.14	2.93	2.82
CG2-800L	1	800	920	1.2	64K2252	3.02	2.81	2.71
CG21000L	1	1000	1150	1.5	65F1457	3.10	2.89	2.78
AC120L	1	...	500	700	64K2239	3.16	2.88	2.78
AC240L	1	...	715	800	67K0042	3.12	2.84	2.74
CG75MS	2	75	90	400	01J1225	3.36	3.05	2.88
CG2-600MS	2	600	690	1	64K2251	3.13	2.83	2.68
PMT809004	...	90	113	800	42B445	5.58	5.20	5.01
PMT809004F	...	90	113	800	42B446	6.43	5.99	5.77
CG590L	1	90	113	500	30K6829	1.28	1.28	1.21
CG5-600L	1	600	720	1	30K6827	1.09	1.09	1.03
CG3-1.5L	1	1500	1800	2.2	64K2256	3.68	3.43	3.30
CG33.0L-03	1	3000	3600	6	48K7377	3.54	3.30	3.18

➤CONTINUED➤

GAS DISCHARGE TUBES / SURGE ARRESTERS (CONT.)

Mfg. Part No.	Fig.	DC Breakdown Volt. Nom. (V)	Max. (V)	Impulse Breakdown (100V/µs) Voltage Max. (V)	Stock No.	Price Each 1-9	10-24	25-49
CG35.0L	1	5000	6000	7500	41B9888	3.95	3.68	3.54
PMT3(310)25004	3	250	300	600	42B415	5.58	5.20	5.01

(74678)

PTC RESETTABLE FUSES

RoHS Compliant Available

BOURNS®

- Temp. range: -40°C to +85°C
- Packaged per EIA 481-1 standard
- UL recognized, CSA certified, TÜV approved

TÜV Rheinland

DIMENSIONS (mm)

Mfg. Part No.	Height Above PC Board Max.	Width Max.	Length Max.	Mfg. Part No.	Height Above PC Board Max.	Width Max.	Length Max.
MF-MSMF010	1.10	3.41	4.73	MF-MSMF200	0.85	3.41	4.73
MF-MSMF014	1.10	3.41	4.73	MF-MSMF250/16	1.60	3.41	4.73
MF-MSMF020/60	1.10	3.41	4.73	MF-MSMF260	0.85	3.41	4.73
MF-MSMF030	1.10	3.41	4.73	MF-NSMF012	1.10	1.80	3.40
MF-MSMF050	0.85	3.41	4.73	MF-NSMF020	0.85	1.80	3.40
MF-MSMF075	0.85	3.41	4.73	MF-NSMF035	0.85	1.80	3.40
MF-MSMF075/24	0.85	3.41	4.73	MF-NSMF050	0.85	1.80	3.40
MF-MSMF110	0.75	3.41	4.73	MF-NSMF075	0.70	1.80	3.40
MF-MSMF110/16	0.75	3.41	4.73	MF-NSMF110	0.70	1.80	3.40
MF-MSMF125	0.85	3.41	4.73	MF-NSMF150	0.70	1.80	3.40
MF-MSMF150	0.85	3.41	4.73	MF-NSMF200	1.60	1.80	3.50

1812 CASE SIZE

Mfg. Part No.	Voltage Max. (V)	Current Max. (A)	Hold Current (A)	Trip Current (A)	Resistance (Ω) Min.	Max.	Stock No.	Tape Cut 1-9
MF-MSMF010-2	60	40	0.1	0.3	0.7	15	02J2714	0.53
MF-MSMF014-2	60	40	0.14	0.34	0.4	6.5	02J2715	0.53
MF-MSMF020-2	30	80	0.2	0.4	0.4	6	96M0893	0.53
MF-MSMF020/60-2	60	40	0.2	0.4	0.4	6	17M0697	0.63
MF-MSMF030-2	30	10	0.3	0.6	0.3	3	02J2717	0.52
MF-MSMF050-2	15	100	0.5	1	0.15	1	02J2718	0.42
MF-MSMF075/24-2	24	40	0.75	1.5	0.11	0.45	02J2720	0.63
MF-MSMF110-2	6	100	1.1	2.2	0.04	0.21	02J2721	0.35
MF-MSMF110/16-2	16	100	1.1	2.2	0.04	0.21	02J2722	0.67
MF-MSMF125-2	6	100	1.25	2.5	0.035	0.14	02J2723	0.49
MF-MSMF150-2	6	100	1.5	3	0.03	0.12	02J2724	0.49
MF-MSMF200-2	8	40	2	4	0.02	0.08	02J2726	0.49
1206 CASE SIZE								
MF-NSMF012-2	30	10	0.12	0.29	1.35	8.5	89M6030	0.45
MF-NSMF035-2	6	100	0.35	0.75	0.3	1.2	61J7366	0.32
MF-NSMF050-2	13.2	100	0.5	1	0.15	0.7	02J2730	0.45
MF-NSMF075-2	6	100	0.75	1.5	0.1	0.4	02J2731	0.42
MF-NSMF110-2	6	100	1.1	2.2	0.06	0.2	02J2732	0.42
MF-NSMF150-2	6	100	1.5	3	0.03	0.13	02J2733	0.34

(135717)

MF-RM SERIES PTC RESETTABLE FUSES

RoHS Compliant Available

BOURNS®

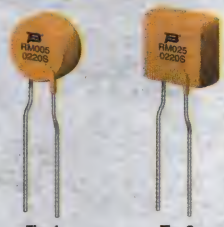


Fig. 1 Fig. 2

- Radial leaded devices
- Cured, flame retardant epoxy polymer insulating material meets UL 94V-0 requirements
- Bulk packaging, tape and reel available
- Resettable circuit protection
- RoHS compliant

TÜV Rheinland

Mfg. Part No.	Fig.	Holding Current	Tripping Current	Operating Voltage	Carrying Current	Initial Res.	Stock No.	Price Each 1-9
MF-RM005/240-2	1	50mA	120mA	240VAC	1A	18.5ohm	52W9029	0.62
MF-RM008/240-2	1	80mA	190mA	240VAC	1.2A	7.4ohm	52W9031	0.62
MF-RM012/240-2	1	120mA	300mA	240VAC	1.2A	3ohm	52W9033	0.62
MF-RM016/240-2	1	160mA	370mA	240VAC	2A	2.5ohm	52W9035	0.62

➤CONTINUED➤

MF-RM SERIES PTC RESETTABLE FUSES (CONT.)

Mfg. Part No.	Fig.	Holding Current	Tripping Current	Operating Voltage	Carrying Current	Initial Res.	Stock No.	Price Each 1-9
MF-RM025/240-2	2	250mA	560mA	240VAC	3.5A	1.3ohm	52W9037	0.61
MF-RM033/240-2	2	330mA	740mA	240VAC	4.5A	0.77ohm	52W9039	0.77
MF-RM040/240-2	2	400mA	900mA	240VAC	5.5A	0.6ohm	52W9041	0.81
MF-RM055/240-2	2	550mA	1.25A	240VAC	7A	0.45ohm	52W9043	1.04

(209565)

PTC RESETTABLE FUSES

SMD RoHS Compliant Available BOURNS TÜV Rheinland

Fig. 1

Fig. 2

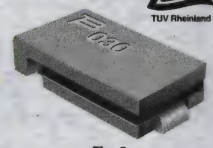


Fig. 3

DIMENSIONS (mm)

Mfg. Part No.	Height Above PC Board Max.	Width Max.	Length Max.	Mfg. Part No.	Height Above PC Board Max.	Width Max.	Length Max.
MF-USMF005	1.10	2.80	3.43	MF-SM050	3.18	5.44	7.98
MF-USMF010	1.10	2.80	3.43	MF-SM075	3.18	5.44	7.98
MF-USMF020	1.10	2.80	3.43	MF-SM100	3.00	5.44	7.98
MF-USMF035	0.85	2.80	3.43	MF-SM125	3.00	5.44	7.98
MF-USMF050	0.85	2.80	3.43	MF-SM150	3.00	6.71	9.50
MF-USMF075	0.85	2.80	3.43	MF-SM185	3.00	6.71	9.50
MF-USMF110	0.85	2.80	3.43	MF-SM200	3.00	6.71	9.50
MF-SMDF050	1.09	4.93	5.44	MF-SM250	3.00	6.71	9.50
MF-SMDF150	0.85	4.93	5.44	MF-SM260	3.00	5.44	7.98
MF-SM030	3.18	5.44	7.98	MF-SM013/250V	7.40	3.20	6.60

Mfg. Part No.	Fig.	Voltage Max. (V)	Current Max. (A)	Hold Current (A)	Trip Current (A)	Resistance (Ω) Min.	Resistance (Ω) Max.	Stock No.	Tape Cut 1-9
1210 CASE SIZE									
MF-USMF005-2	1	30	10	0.05	0.15	2.8	50	75K7706	0.40
MF-USMF010-2	1	30	10	0.1	0.3	0.8	15	83K0406	0.40
MF-USMF020-2	1	30	10	0.2	0.4	0.4	5	88K5712	0.40
MF-USMF050-2	1	13.2	40	0.5	1	0.18	0.9	83K0438	0.40
MF-USMF075-2	1	6	40	0.75	1.5	0.07	0.45	83K0399	0.37
MF-USMF110-2	1	6	40	1.1	2.2	0.05	0.21	61J7437	0.29
2018 CASE SIZE									
MF-SMDF050-2	2	60	10	0.55	1.2	0.2	1	02J2737	0.49
2920/3425 CASE SIZE									
MF-SM030-2	3	60	40	300	600	0.9	4.8	60K6266	0.20
MF-SM030-2	3	60	40	0.3	0.6	0.9	4.8	55M3399	0.65
MF-SM050-2-99	3	60	40	0.5	1	0.35	1.4	61J7427	0.69
MF-SM075-2-99	3	30	80	0.75	1.5	0.23	1	61J7428	0.50
MF-SM075/60-2	3	60	10	0.75	1.5	0.23	1	43K0669	0.53
MF-SM100-2-99	3	30	80	1.1	2.2	0.12	0.48	61J7429	0.54
MF-SM100/33-2	3	33	40	1.1	2.2	0.12	0.41	60H8381	0.56
MF-SM125-2	3	15	100	1.25	2.5	0.07	0.25	05B2584	0.70
MF-SM150/33-2	3	33	40	1.5	3	0.06	0.23	60H8382	0.57
MF-SM185/33-2	3	33	40	1.8	3.6	0.04	0.15	01H9194	0.76
MF-SM200-2	3	15	100	2	4	0.045	0.125	05B2588	0.53
MF-SM200-2-99	3	15	100	2	4	0.045	0.125	61J7434	0.53
MF-SM260-2	3	6	100	2.6	5.2	0.025	0.075	58K1852	0.50
MF-SM300-2	3	6	100	3	6	0.015	0.048	75K7700	0.63
TELECOM									
MF-SM013/250V-2	...	60	3	0.13	...	6.5	12	32K6248	1.20

(14936)

multicomp AT NEWARK ELEMENT14

Affordable, performance board level & box build components at

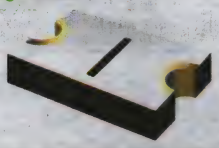
newark.com/multicomp

(212569)

PTC RESETTABLE FUSES

RoHS Compliant Available BOURNS SMD

- Low profile 0603 footprint results in very fast time to react to fault events
- Max. current: 40A
- Typ. tripped power dissipation: 500mW
- Temp. range: -40°C to +85°C
- Max. dimensions (H x W x L): 0.65 x 1.05 x 1.85 mm



Mfg. Part No.	Max. Voltage (V)	Holding Current	Tripping Current	Resistance (Ω) Min.	Resistance (Ω) Max.	Stock No.	Price Each 1-9	Price Each 10-24
MF-FSMF020X-2	9	200mA	500mA	0.55	3.5	05R7832	0.42	0.38

(177393)

PTC RESETTABLE FUSES

RoHS Compliant Available BOURNS TÜV Rheinland

- Radial leaded devices
- Cured, flame-retardant epoxy polymer insulating material meets UL 94V-0 requirements
- UL recognized, CSA certified, TÜV approved

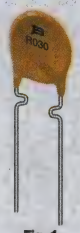


Fig. 1

Fig. 2

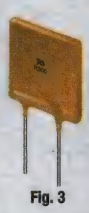


Fig. 3

Fig. 4

DIMENSIONS (mm)

Mfg. Part No.	Height Above PC Board Max.	Width Max.	Depth Max.	Lead Pitch Max.	Mfg. Part No.	Height Above PC Board Max.	Width Max.	Depth Max.	Lead Pitch Max.
MF-R005	8.300	8.000	3.1	5.1	MF-RX185	22.90	17.80	3.1	5.10
MF-R010	12.70	7.400	3.1	5.1	MF-RX185/72	21.18	15.18	3.1	5.10
MF-R017	12.70	7.400	3.1	5.1	MF-RHT200	14.00	9.400	3.0	5.10
MF-RX018/250	13.60	11.00	4.6	5.1	MF-R250	18.30	12.00	3.0	5.10
MF-R020	12.70	7.400	3.1	5.1	MF-R250-0-10	18.30	12.00	3.0	5.10
MF-R025	12.70	7.400	3.1	5.1	MF-RX250	26.40	21.30	3.1	10.2
MF-R030	13.40	7.400	3.1	5.1	MF-RX250/72	23.84	17.84	3.1	10.2
MF-R040	13.70	7.400	3.1	5.1	MF-R300	18.30	12.00	3.0	5.10
MF-R050	13.70	7.900	3.1	5.1	MF-RX300	37.60	24.90	3.1	10.2
MF-R065	15.20	9.700	3.1	5.1	MF-RX375	33.50	28.40	3.1	10.2
MF-R075	16.00	10.40	3.1	5.1	MF-RX375/72	29.51	23.51	3.1	10.2
MF-R090	16.70	11.70	3.1	5.1	MF-R400	24.80	14.40	3.0	10.2
MF-R110	14.00	8.900	3.1	5.1	MF-RHT450	15.60	10.40	3.0	5.10
MF-RX110	18.00	13.00	3.1	5.1	MF-R500	24.90	17.40	3.0	10.2
MF-R135	18.90	8.900	3.1	5.1	MF-R600	31.90	19.30	3.0	10.2
MF-RX135	19.60	14.50	3.1	5.1	MF-RHT650	22.20	12.70	3.0	5.10
MF-RX135/72	18.26	12.26	3.1	5.1	MF-R700	29.80	22.10	3.0	10.2
MF-R160	16.80	10.20	3.1	5.1	MF-R800	32.90	24.20	3.0	10.2
MF-RX160	21.30	16.30	3.1	5.1	MF-R900	32.90	24.20	3.0	10.2
MF-RX160/72	19.94	13.94	3.1	5.1	MF-R1100	32.90	24.20	3.0	10.2
MF-R185	18.40	12.00	3.1	5.1	MF-RHT1300	28.70	23.50	3.6	10.2

Mfg. Part No.	Fig.	Hold Current (A)	Trip Current (A)	Voltage Max. (V)	Current Max. (A)	Resistance (Ω) Min.	Resistance (Ω) Max.	Stock No.	Price Each 1-9
MF-R005-0	...	0.05	0.1	60	40	7.3	11.1	60H8335	0.26
MF-R010	1	0.1	0.2	60	40	2.5	4.5	58K1834	0.27
MF-R010-0-99	1	0.1	0.2	60	40	2.5	4.5	61J7383	0.27
MF-R017	1	0.17	0.34	60	40	2	3.2	05B2483	0.30
MF-R020	1	0.2	0.4	60	40	1.5	2.84	58K1835	0.45
MF-R025	1	0.25	0.5	60	40	1	1.95	60K6264	0.45
MF-R025-0-99	1	0.25	0.5	60	40	1	1.95	61J7389	0.42
MF-R030	1	0.3	0.6	60	40	0.76	1.36	58K1836	0.27
MF-R030-0-99	1	0.3	0.6	60	40	0.76	1.36	61J7391	0.27
MF-R040	1	0.4	0.8	60	40	0.52	0.86	58K1837	0.48
MF-R040-0-99	1	0.4	0.8	60	40	0.52	0.86	61J7393	0.48
MF-R050	1	0.5	1	60	40	0.41	0.77	58K1838	0.48
MF-R050-0-99	1	0.5	1	60	40	0.41	0.77	61J7395	0.48
MF-R065	1	0.65	1.3	60	40	0.27	0.48	59K0235	0.45
MF-R065-0-99	1	0.65	1.3	60	40	0.27	0.48	61J7397	0.45
MF-RX065/72-0	3	0.65	1.3	72	40	0.27	0.48	14P9766	0.63
MF-R075	1	0.75	1.5	60	40	0.18	0.4	58K1839	0.19
MF-R090	1	0.9	1.8	60	40	0.14	0.31	59K0236	0.31
MF-R110	1	1.1	2.2	30	40	0.1	0.18	33M7482	0.28
MF-R110-0-99	1	1.1	2.2	30	40	0.1	0.18	61J7403	0.30
MF-RX110†	...	1.1	2.2	60	40	0.15	0.25	05B2444	0.48
MF-R135	1	1.35	2.7	30	40	0.065	0.115	58K1840	0.28
MF-R135-0-99	1	1.35	2.7	30	40	0.065	0.115	61J7406	0.30
MF-RX135/72-2*	3	1.35	2.7	72	40	0.12	0.19	61J7370	0.59

➤CONTINUED➤

PTC RESETTABLE FUSES (CONT.)

Mfg. Part No.	Fig.	Hold Current (A)	Trip Current (A)	Voltage Max. (V)	Current Max. (A)	Resistance (Ω) Min.	Resistance (Ω) Max.	Stock No.	Price Each 1-9
● MF-R160	1	1.6	3.2	30	40	0.055	0.105	58K1841	0.48
● MF-RX160†	...	1.6	3.2	60	40	0.09	0.14	05B2454	0.50
● MF-RX160/72-0	3	1.6	3.2	72	40	0.09	0.14	61J7371	0.44
● MF-R185	1	1.85	3.7	30	40	0.04	0.07	58K1842	0.22
● MF-RX185†	...	1.85	3.7	60	40	0.08	0.12	05B2459	0.53
● MF-RX185/72-0	3	1.85	3.7	72	40	0.08	0.12	61J7373	0.44
● MF-RHT200-0	1	2	3.8	16	100	0.045	0.11	30M2483	0.75
● MF-R250	3	2.5	5	30	40	0.025	0.048	59K0237	0.49
● MF-R250-0-99	3	2.5	5	30	40	0.025	0.048	61J7412	0.49
● MF-R250-0-10	4	2.5	5	30	40	0.025	0.048	43K0667	0.49
● MF-RX250†	...	2.5	5	60	40	0.05	0.08	05B2464	0.59
● MF-RX250/72-0	3	2.5	5	72	40	0.05	0.08	61J7375	0.48
● MF-R300	3	3	6	30	40	0.02	0.05	58K1843	0.26
● MF-R300-0-99	3	3	6	30	40	0.02	0.05	61J7414	0.28
● MF-RX300†	...	3	6	60	40	0.04	0.06	05B2469	0.57
● MF-RX375†	...	3.75	7.5	60	40	0.03	0.05	05B2474	0.71
● MF-RX375/72-0	3	3.75	7.5	72	40	0.03	0.05	61J7379	0.61
● MF-R400	3	4	8	30	40	0.01	0.03	58K1844	0.54
● MF-R400-0-99	3	4	8	30	40	0.01	0.03	61J7416	0.58
● MF-RHT450-0	3	4.5	7.8	16	100	0.022	0.054	33M7469	0.78
● MF-R500	3	5	10	30	40	0.01	0.03	16F1791	0.61
● MF-R500-0-99	3	5	10	30	40	0.01	0.03	61J7418	0.62
● MF-R600	3	6	12	30	40	0.005	0.02	16F1792	0.60
● MF-R700	3	7	14	30	40	0.005	0.02	59K0238	0.64
● MF-R800	3	8	16	30	40	0.005	0.02	58K1845	0.66
● MF-R900	3	9	18	30	40	0.005	0.01	58K1846	0.66
● MF-R1100	3	11	22	16	100	0.003	0.014	60H8377	0.70

† Same as Fig. 1 but with straight leads. * **Sold as tape & reel.**
(4162)

POLYTRON™ SURFACE MOUNT PPTC RESETTABLE FUSES

RoHS Compliant Available

COOPER Bussmann

- 6 to 60 volts
- Current rating from 0.05 to 3.0 amps
- Fast time-to-trip
- Low resistance
- Halogen and lead free
- Operating temperature: -40°C to +85°C
- Surface temperature trip state: 125°C
- Wave solder: 260°C, 10 sec.
- Infrared reflow: 260°C, 10 sec. max.
- Nickel/tin-plated coper terminal
- UL recognized, TÜV approved

1812 Case

1206 Case

PolyTron™ **PTS1812** and **PTS1206 series** surface mount, resettable PPTC devices are ideal for applications such as medical equipment, telecommunications, white goods, computers and peripherals and rechargeable battery packs.

1812 CASE SIZE

Mfg. Part No.	Voltage Max. (VDC)	Current Max. (A)	Hold Current @23°C	Trip Current @23°C	Resistance (Ω) Initial Min.	Resistance (Ω) Post Trip Max.	Stock No.	Tape Cut 1-9
● PTS181230V010	30	100	100mA	300mA	1.6	15	29T5175	0.21
● PTS181260V014	60	10	140mA	340mA	1.5	6	29T5182	0.21
● PTS181230V020	30	100	200mA	400mA	0.8	5	29T5176	0.21
● PTS181216V035	16	100	350mA	700mA	0.32	1.5	29T5168	0.21
● PTS181216V050	16	100	500mA	1A	0.15	1	29T5169	0.33
● PTS181213V075	13.2	100	750mA	1.5A	0.11	0.45	29T5167	0.35
● PTS181224V075	24	100	750mA	1.5A	0.11	0.29	29T5172	0.36
● PTS181233V075	33	20	750mA	1.5A	0.11	0.4	29T5177	0.36
● PTS18128V110	8	100	1.1A	2.2A	0.04	0.21	29T5183	0.36
● PTS181216V110	16	100	1.1A	2.2A	0.06	0.18	29T5170	0.36
● PTS181224V110	24	20	1.1A	2.2A	0.06	0.2	29T5173	0.36
● PTS181233V110	33	20	1.1A	2.2A	0.06	0.2	29T5178	0.36
● PTS18126V125	6	100	1.25A	2.5A	0.05	0.14	29T5179	0.23
● PTS181216V125	16	100	1.25A	2.5A	0.05	0.14	29T5171	0.23
● PTS18128V150	8	100	1.5A	3A	0.04	0.11	29T5184	0.23
● PTS181212V150	12	100	1.5A	3A	0.04	0.11	29T5166	0.34
● PTS181224V150	24	20	1.5A	3A	0.04	0.12	29T5174	0.34
● PTS18128V160	8	100	1.6A	3.2A	0.03	0.1	29T5185	0.34
● PTS18128V200	8	100	2A	3.5A	0.02	0.06	29T5186	0.33
● PTS18126V260	6	100	2.6A	5A	0.015	0.047	29T5180	0.33
● PTS18126V300	6	100	3A	5A	0.012	0.04	29T5181	0.35

➤CONTINUED➤

POLYTRON™ SURFACE MOUNT PPTC RESETTABLE FUSES (CONT.)

1206 CASE SIZE

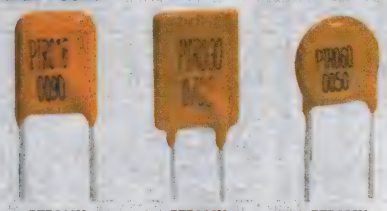
Mfg. Part No.	Voltage Max. (VDC)	Current Max. (A)	Hold Current @23°C	Trip Current @23°C	Resistance (Ω) Initial Min.	Resistance (Ω) Post Trip Max.	Stock No.	Tape Cut 1-9
● PTS120660V005	60	100	50mA	150mA	3.6	50	29T5164	0.20
● PTS120660V010	60	100	100mA	250mA	1.6	15	29T5165	0.20
● PTS120630V012	30	100	120mA	290mA	1.4	6	29T5156	0.20
● PTS120630V016	30	100	160mA	370mA	1.1	4.5	29T5157	0.20
● PTS120624V020	24	100	200mA	420mA	0.65	2.6	29T5155	0.20
● PTS120616V025	16	100	250mA	500mA	0.55	2.3	29T5153	0.20
● PTS120616V035	16	100	350mA	750mA	0.3	1.2	29T5154	0.20
● PTS12066V050	6	100	500mA	1A	0.15	0.7	29T5158	0.20
● PTS120615V050	15	100	500mA	1A	0.15	0.7	29T5152	0.20
● PTS12066V075	6	100	750mA	1.5A	0.1	0.29	29T5159	0.20
● PTS12066V100	6	100	1A	1.8A	0.065	0.21	29T5160	0.33
● PTS12066V110	6	100	1.1A	2.2A	0.07	0.2	29T5161	0.33
● PTS12066V150	6	100	1.5A	3A	0.04	0.12	29T5162	0.33
● PTS12066V200	6	100	2A	3.5A	0.02	0.08	29T5163	0.33

(195556)

POLYTRON™ RADIAL LEADED THRU-HOLE PTC RESETTABLE FUSES

RoHS Compliant Available

COOPER Bussmann



PTR016V PTR030V PTR060V

- 16V, 30V and 60V DC devices
- Fast time-to-trip
- Low resistance
- Halogen and lead free
- Straight tin-plated leads
- Cured epoxy resin insulator; meets UL94V-0 requirements
- Operating temperature: -40°C to +85°C
- Surface temperature trip state: 125°C
- UL recognized, TÜV approved

PolyTron™ **PTR016V, PTR030V** and **PTR060V series** resettable radial leaded thru-hole PTC devices are ideal for applications such as medical equipment, telecommunications, white goods, and computers and peripherals. **PTR030V** and **PTR060V series** devices also used for industrial power transmission applications, consumer and automotive electronics and rechargeable battery packs.

16 VOLT DC

Mfg. Part No.	Voltage Max. (VDC)	Current Max. (A)	Hold Current @23°C	Trip Current @23°C	Resistance (Ω) Initial Max.	Resistance (Ω) Post Trip Max.	Stock No.	Tape Cut 1-9
● PTR016V0075-TR	16	40	750mA	1.5A	0.175	0.230	39T9710	0.35
● PTR016V0090-TR	16	40	900mA	1.8A	0.12	0.180	39T9711	0.41
● PTR016V0110-TR	16	40	1.1A	2.2A	0.095	0.140	39T9712	0.42
● PTR016V0120-TR	16	40	1.2A	2.4A	0.0975	0.140	39T9713	0.42
● PTR016V0135-TR	16	40	1.35A	2.7A	0.074	0.120	39T9714	0.42
● PTR016V0155-TR	16	40	1.55A	3.1A	0.0705	0.100	39T9715	0.41
● PTR016V0160-TR	16	40	1.6A	3.2A	0.061	0.110	39T9716	0.42
● PTR016V0185-TR	16	40	1.85A	3.7A	0.051	0.090	39T9717	0.44
● PTR016V0250-TR	16	40	2.5A	5A	0.036	0.070	39T9718	0.44
● PTR016V0300-TR	16	100	3A	5.1A	0.065	0.098	39T9719	0.46
● PTR016V0400-TR	16	100	4A	6.8A	0.038	0.060	39T9720	0.49
● PTR016V0500-TR	16	100	5A	8.5A	0.023	0.034	39T9721	0.55
● PTR016V0600-TR	16	100	6A	10.2A	0.018	0.028	39T9722	0.58
● PTR016V0700-TR	16	100	7A	11.9A	0.013	0.020	39T9723	0.58
● PTR016V0800-TR	16	100	8A	13.6A	0.011	0.018	39T9724	0.64
● PTR016V0900-TR	16	100	9A	15.3A	0.009	0.014	39T9725	0.64
● PTR016V1000-TR	16	100	10A	17A	0.007	0.010	39T9726	0.66
● PTR016V1100-TR	16	100	11A	18.7A	0.006	0.009	39T9727	0.69
● PTR016V1200-TR	16	100	12A	20.4A	0.006	0.009	39T9728	0.77
● PTR016V1300-TR	16	100	13A	22.1A	0.006	0.008	39T9729	0.81
● PTR016V1400-TR	16	100	14A	23.8A	0.005	0.007	39T9730	0.85
● PTR016V1500-TR	16	100	15A	25.5A	0.005	0.007	39T9731	0.90

30 VOLT DC

● PTR030V0090-TR	30	40	900mA	1.8A	0.12	0.22	39T9732	0.40
● PTR030V0110-TR	30	40	1.1A	2.2A	0.1	0.17	39T9733	0.42
● PTR030V0135-TR	30	40	1.35A	2.7A	0.08	0.13	39T9734	0.44
● PTR030V0160-TR	30	40	1.6A	3.2A	0.07	0.11	39T9735	0.46
● PTR030V0185-TR	30	40	1.85A	3.7A	0.06	0.09	39T9736	0.46
● PTR030V0250-TR	30	40	2.5A	5A	0.04	0.07	39T9737	0.49
● PTR030V0300-TR	30	40	3A	6A	0.05	0.08	39T9738	0.53
● PTR030V0400-TR	30	40	4A	8A	0.03	0.05	39T9739	0.54
● PTR030V0500-TR	30	40	5A	10A	0.03	0.05	39T9740	0.55

➤CONTINUED➤

POLYTRON™ RADIAL LEADED THRU-HOLE PTC RESETTABLE FUSES (CONT.)

30 VOLT DC

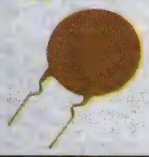
Mfg. Part No.	Voltage Max. (VDC)	Current Max. (A)	Hold Current @23°C	Trip Current @23°C	Resistance (Ω) Initial Max.	Resistance (Ω) Post Trip Max.	Stock No.	Tape Cut 1-9
PTR030V0600-TR	30	100	6A	12A	0.02	0.04	39T9741	0.61
PTR030V0700-TR	30	100	7A	14A	0.02	0.03	39T9742	0.64
PTR030V0800-TR	30	100	8A	16A	0.013	0.02	39T9743	0.67
PTR030V0900-TR	30	100	9A	18A	0.01	0.02	39T9744	0.70
60 VOLT DC								
PTR060V0010-TR	60	40	100mA	200mA	4.5	7.50	39T9745	0.37
PTR060V0017-TR	60	40	170mA	340mA	5.21	8.00	39T9746	0.35
PTR060V0020-TR	60	40	200mA	400mA	2.75	4.40	39T9747	0.35
PTR060V0025-TR	60	40	250mA	500mA	1.95	3.00	39T9748	0.35
PTR060V0030-TR	60	40	300mA	600mA	1.33	2.10	39T9749	0.36
PTR060V0040-TR	60	40	400mA	800mA	0.86	1.29	39T9750	0.40
PTR060V0050-TR	60	40	500mA	1A	0.77	1.17	39T9751	0.40
PTR060V0065-TR	60	40	650mA	1.3A	0.48	0.72	39T9752	0.41
PTR060V0075-TR	60	40	750mA	1.5A	0.4	0.60	39T9753	0.41
PTR060V0090-TR	60	40	900mA	1.8A	0.31	0.47	39T9754	0.42
PTR060V0110-TR	60	40	1.1A	2.2A	0.25	0.38	39T9755	0.42
PTR060V0135-TR	60	40	1.35A	2.7A	0.19	0.30	39T9756	0.44
PTR060V0160-TR	60	40	1.6A	3.2A	0.14	0.22	39T9757	0.44
PTR060V0185-TR	60	40	1.85A	3.7A	0.12	0.19	39T9758	0.47
PTR060V0250-TR	60	40	2.5A	5A	0.08	0.13	39T9759	0.52
PTR060V0300-TR	60	40	3A	6A	0.06	0.10	39T9760	0.56
PTR060V0375-TR	60	40	3.75A	7.5A	0.05	0.08	39T9761	0.56

(195560)

72V POLYFUSE RESETTABLE PTCs

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered



- 72VDC voltage rating
- 40A interrupting current rating
- Temp. range: -40°C to +85°C

c UL us TÜV Rheinland

BULK

Mfg. Part No.	Holding Current (A)	Tripping Current (A)	Initial Resistance Min (Ω)	Initial Resistance Max (Ω)	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49
72R020XU	0.2	0.4	1.83	4.4	33P9978	0.44	0.41	0.38
72R025XU	0.25	0.5	1.25	3	33P9980	0.45	0.42	0.38
72R050XU	0.5	1	0.5	1.17	33P9986	0.50	0.46	0.43
72R065XU	0.65	1.3	0.31	0.72	33P9988	0.50	0.47	0.43
72R075XU	0.75	1.5	0.25	0.6	33P9990	0.51	0.48	0.44
72R090XU	0.9	1.8	0.2	0.47	33P9992	0.51	0.48	0.44
72R160XF	1.6	3.2	0.09	0.22	33P9997	0.54	0.51	0.47
72R185XF	1.85	3.7	0.08	0.19	33P9999	0.58	0.55	0.51
72R250XF	2.5	5	0.05	0.13	34P0002	0.65	0.61	0.56
72R300XF	3	6	0.04	0.1	34P0004	0.68	0.63	0.58
72R375XH	3.75	7.5	0.03	0.08	34P0006	0.71	0.66	0.61
TAPE CUT								
72R020XPR	0.2	0.4	1.83	4.4	33P9977	0.48	0.45	0.41
72R025XPR	0.25	0.5	1.25	3	33P9979	0.48	0.45	0.42
72R040XPR	0.4	0.8	0.55	1.29	33P9983	0.52	0.49	0.45
72R065XPR	0.65	1.3	0.31	0.72	33P9987	0.54	0.50	0.46
72R090XPR	0.9	1.8	0.2	0.47	33P9991	0.52	0.49	0.45
72R160XMR	1.6	3.2	0.09	0.22	33P9998	0.58	0.54	0.50

(138554)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

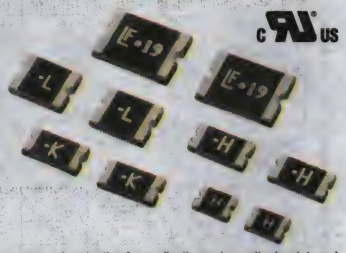
(212570)

POLYFUSE® LoRho SERIES RESETTABLE PTCs

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

c UL us



- Ultra low internal resistance
- Very thin profile
- Miniature size saves board space
- Allows a higher hold current dvice in a smaller factor and lower profile as compared to a standard PPTC
- Fast response to fault currents
- 0402 size available - the smallest PPTC in the marketCompatible with high temperature solders
- Broadest range of Hold Current ratings (100mA to 7A)
- RoHS compliant, Lead Free and Halogen Free
- UL and TUV recognized
- 0603L150SL ideal for USB 3.0

Littelfuse **LoRho™** Surface Mount PPTC devices provide overcurrent protection for applications where ultra low internal resistance, ultra low voltage drop and automatic resettable protection are desired. This new series allows a higher hold current device in a smaller factor and lower profile as compared to a standard PPTC. It offers ultra low internal resistance while maintaining the high level electrical characteristics and performances of standard PPTC products. All devices are UL and TUV recognized and have maximum fault current of 50A. They are available in 0402 to 2920 sizes while the hold current ranges from 100mA to 7A. Littelfuse 0402 size **LoRho™** SMD PPTC is the smallest size surface mounted PPTC device available in the market. "TH" in mfg. part no. indicates thin profile.

Mfg. Part No.	Marking	Holding Current	Tripping Current	Voltage Max. (VDC)	Fault Current Max. (A)	Resistance R1 Max. (Ω)	Stock No.	Price Each 1-9
0402L010SLKR	...	100mA	300mA	6	40	2	69W6433	2.75
0402L020SLKR	...	200mA	500mA	6	40	1.25	69W6434	2.75
0402L035SLKR	...	350mA	700mA	6	50	0.7	69W6435	2.75
0402L050SLKR	...	500mA	1A	6	50	0.4	69W6436	2.75
0603L050SLYR	K	500mA	1A	6	50	0.35	69W6437	1.82
0603L075SLYR	N	750mA	1.5A	6	50	0.25	69W6438	1.82
0603L100SLYR	S	1A	1.8A	6	50	0.12	69W6439	1.82
0603L175SLYR	V	1.75A	3.5A	6	50	0.06	69W6440	1.82
0805L075SLYR	G	750mA	1.5A	6	50	0.16	88T7684	1.82
0805L110SLYR	-H	1.1A	1.8A	6	50	0.13	64R8127	1.89
0805L175SLYR	-V	1.75A	3.5A	6	50	0.055	69W6441	1.82
0805L200SLTHYR	-L	2A	4A	6	50	0.045	69W6442	1.82
0805L260SLTHYR	-S	2.6A	5A	6	50	0.035	69W6443	2.15
0805L300SLWR	-N	3A	6A	6	50	0.03	69W6444	2.15
1206L110SLYR	-H	1.1A	2.2A	6	50	0.1	64R8193	1.82
1206L110/12SLYR	-H1	1.1A	2.2A	12	50	0.13	69W6445	2.78
1206L150SLYR	-K	1.5A	3A	6	50	0.065	64R8195	1.82
1206L150/12SLYR	-K1	1.5A	3A	12	50	0.08	69W6446	2.78
1206L175SLYR	-F	1.75A	3.5A	6	50	0.03	69W6447	1.82
1206L200SLYR	-L	2A	4A	6	50	0.025	69W6448	1.82
1206L300SLYR	...	3A	6A	6	50	0.02	88T7685	2.15
1206L300SLTHYR	-N	3A	6A	6	50	0.02	69W6449	1.82
1206L350SLTHYR	-T	3.5A	7A	6	50	0.018	69W6450	1.82
1206L400SLWR	-Y	4A	8A	6	50	0.014	69W6451	2.15
1206L450SLWR	-Z	4.5A	9A	6	50	0.014	69W6452	2.15
1206L380SLWR	...	3.8A	8A	6	50	0.016	88T7686	2.15
1210L175SLYR	-J	1.75A	3.5A	6	50	0.04	69W6453	1.82
1210L260SLYR	-S	2.6A	5A	6	50	0.02	69W6454	1.82
1210L300SLYR	-N	3A	6A	6	50	0.02	69W6455	1.82
1210L450SLWR	-Y	4.5A	9A	6	50	0.014	69W6456	2.15
1812L260SLPR	LF-26	2.6A	6A	6	50	0.024	69W6457	1.82
1812L270SLPR	LF-27	2.7A	6.2A	6	50	0.022	69W6458	1.82
1812L300SLPR	LF-30	3A	7A	6	50	0.021	69W6459	2.15
1812L370SLPR	LF-37	3.7A	9.1A	6	50	0.018	69W6460	2.15
2920L700SLPR	LF700	7A	14A	6	50	0.007	69W6461	3.14

(209466)

POLYFUSE® RESETTABLE PTCs

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

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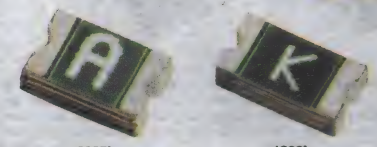

0805L 1206L

Mfg. Part No.	Marking	Holding Current	Tripping Current	Voltage Max. (VDC)	Fault Current Max. (A)	Resistance R1 Max. (Ω)	Stock No.	Price Each 1-9
0805L010YR	A	100mA	300mA	15	100	6	18M4774	2.48
0805L020YR	C	200mA	500mA	9	100	3.5	05M2226	2.45
0805L035YR	E	350mA	750mA	6	100	1.2	18M4775	2.38

CONTINUED

RESETTABLE PTCS

POLYFUSE® RESETTABLE PTCs (CONT.)

Mfg. Part No.	Mar-king	Holding Current	Tripping Current	Voltage Max. (VDC)	Fault Current Max. (A)	Resistance R1 Max. (Ω)	Stock No.	Price Each 1-9
● 0805L050WR	F	500mA	1A	6	100	0.85	18M4776	2.67
● 0805L075WR	G	750mA	1.5A	6	40	0.35	18M4777	2.74
● 0805L100WR	N	1.1A	1.95A	6	40	0.21	18M4778	2.95
● 1206L012WR	A	125mA	290mA	30	100	6	05M2298	0.50
● 1206L016WR	B	160mA	370mA	30	100	4.5	05M2299	0.50
● 1206L025YR	D	250mA	500mA	16	100	2.3	05M2301	0.50
● 1206L035YR	J	350mA	750mA	6	100	1.2	05M2302	0.50
● 1206L035/16YR	J	350mA	750mA	16	100	1.2	01P9665	0.48
● 1206L050YR	F	500mA	1A	6	100	0.7	53M6118	0.50
● 1206L075THYR	G	750mA	1.5A	8	100	0.29	64R8192	0.50
● 1206L075/13.2WR	G1	750mA	1.5A	13.2	100	0.35	64R8191	0.67
● 1206L110THYR	H	1.1A	2.2A	8	100	0.18	64R8194	0.67
● 1206L175PR	V	1.75A	3.5A	6	100	0.09	81R0491	0.62
● 1206L200PR	L	2A	3.5A	6	100	0.08	64R8197	0.73

(202222)

16V POLYFUSE RESETTABLE PTCs

RoHS Compliant Available

Littelfuse®

Expertise Applied | Answers Delivered

- 16VDC voltage rating
- Meets all USB protection requirements
- Temp. range: -40°C to +85°C

c UL us — TÜV Rheinland

BULK

Mfg. Part No.	Holding Current (A)	Tripping Current (A)	Interrupting Current Max (A)	Initial Resistance Min (Ω)	Initial Resistance Max (Ω)	Stock No.	Price Each 1-9	Price Each 10-24
● 16R250GU	2.5	4.7	100	0.022	0.053	33P9962	0.57	0.54
● 16R300GU	3	5.1	100	0.038	0.098	33P9964	0.57	0.54
● 16R400GU	4	6.8	100	0.021	0.06	33P9966	0.61	0.57
● 16R500GU	5	8.5	100	0.015	0.034	33P9968	0.66	0.62
● 16R800GF	8	13.6	100	0.0056	0.0175	33P9973	0.83	0.77
● 16R1000GF	10	17	100	0.004	0.0102	33P9944	0.83	0.78
● 16R1100GF	11	18.7	100	0.0037	0.0089	33P9948	0.82	0.75
● 16R1400GH	14	23.8	100	0.0026	0.0064	33P9954	1.14	1.04
● 16R110BU	1.1	2.2	40	0.05	0.14	33P9947	0.51	0.48
● 16R135BU	1.35	2.7	40	0.04	0.12	33P9953	0.52	0.49
● 16R185BU	1.85	3.7	40	0.03	0.09	33P9958	0.54	0.51
TAPE CUT								
● 16R090BPR	0.9	1.8	40	0.07	0.18	33P9942	0.57	0.53
● 16R110BPR	1.1	2.2	40	0.05	0.14	33P9946	0.52	0.49
● 16R250BPR	2.5	5	40	0.02	0.06	33P9959	0.55	0.52
● 16R300GPR	3	5.1	100	0.038	0.098	33P9963	0.61	0.57
● 16R400GPR	4	6.8	100	0.021	0.06	33P9965	0.67	0.63
● 16R500GPR	5	8.5	100	0.015	0.034	33P9967	0.69	0.65
● 16R700GMR	7	11.9	100	0.0077	0.02	33P9972	0.79	0.74
● 16R1200GMR	12	20.4	100	0.0033	0.0086	33P9951	1.02	0.92

(138553)

POLYFUSE® RESETTABLE PTCs

RoHS Compliant Available

Littelfuse®

Expertise Applied | Answers Delivered

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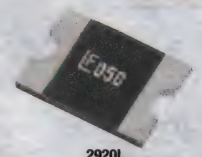
1210L / 1812L



2920L

1210L and 1812 series low-profile, low resistance surface mount fuses have a compact design to save board space. Feature fast response to fault currents and are compatible with high temperature solders. **2920L series** low-profile, high voltage surface mount fuses feature fast response to fault currents. **250R and 600R series** radial leaded fuses feature fast time-to-trip. **600R series** also available in ammo pack. Full reel versions also available; *go online or call*.

SURFACE MOUNT

Mfg. Part No.	Holding Current (mA)	Tripping Current (mA)	Operating Voltage (VDC)	Current Max. (A)	Initial Resis. Min. (Ω)	R1 Max. (Ω)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● 1210L005WR	50	150	30	10	3.6	50	18M4780	0.69
● 1210L020WR	200	400	30	10	0.8	5	05M2313	0.69

➤CONTINUED➤

POLYFUSE® RESETTABLE PTCs (CONT.)

Mfg. Part No.	Holding Current (mA)	Tripping Current (mA)	Operating Voltage (VDC)	Current Max. (A)	Initial Resis. Min. (Ω)	R1 Max. (Ω)	Tape Cut Stock No.	Tape Cut Price Each 1-9
● 1210L050YR	500	1000	13.2	100	0.25	0.9	18M4783	0.69
● 1210L07524PR	750	1500	24	100	0.13	0.4	88T7687	1.06
● 1210L175WR	1750	3500	6	100	0.04	0.08	64R8200	0.97
● 1210L200PR	2000	4000	6	100	0.02	0.07	64R8201	1.03
● 1210L200SLYR	2000	4000	6	50	0.005	0.024	64R8202	2.15
● 1210L350SLWR	3500	7000	6	...	...	0.018	88T7688	2.15
● 1210L350SL-SYR	3500	7000	6	50	0.003	0.018	64R8203	3.41
● 1812L014DR	140	340	60	10	1.5	6	18M4784	0.49
● 1812L035/30DR	350	750	30	100	0.8	5	64R8224	1.92
● 1812L050PR	500	1000	15	100	0.15	1	18M4786	0.50
● 1812L050/30PR	500	1000	30	100	0.15	1	64R8225	1.03
● 1812L075/24DR	750	1500	24	100	0.11	0.29	05M2399	0.71
● 1812L075/33DR	750	1500	33	20	0.11	0.4	05M2400	0.74
● 1812L110PR	1100	2200	6	100	0.04	0.21	18M4788	0.56
● 1812L110/16DR	1100	1950	16	100	0.06	0.18	05M2402	0.64
● 1812L110/33MR	1100	1950	33	20	0.06	0.2	05M2403	0.62
● 1812L150ZR	1500	3000	8	100	0.04	0.11	94B6280	0.52
● 1812L150/12DR	1500	3000	12	100	0.04	0.11	05M2406	0.69
● 1812L150/24MR	1500	3000	24	20	0.04	0.12	05M2407	0.62
● 1812L260/12MR	2600	5000	12	100	0.03	0.055	64R8230	0.99
● 1812L300MR	3000	5000	6	100	0.015	0.04	64R8232	1.88
● 1812L350SLPR	3500	...	6	...	...	0.025	88T7690	2.15
● 2920L030DR	300	600	60	10	1.2	4.8	18M4789	0.73
● 2920L050DR	500	1000	60	10	0.35	1.4	18M4790	0.75
● 2920L075DR	750	1500	30	40	0.35	1	18M4791	0.75
● 2920L100PR	1100	2200	33	40	0.12	0.41	18M4792	0.75
● 2920L125PR	1250	2500	15	40	0.07	0.25	18M4793	0.76
● 2920L150DR	1500	3000	33	40	0.08	0.23	18M4794	0.73
● 2920L185DR	1850	3700	33	40	0.065	0.15	18M4795	0.76
● 2920L200DR	2000	4000	15	40	0.05	0.125	18M4796	0.76
● 2920L200/24DR	2000	4000	24	40	0.05	0.125	05M2797	1.02
● 2920L250DR	2500	5000	15	40	0.035	0.085	18M4797	0.76
● 2920L300/15DR	3000	5000	15	40	0.015	0.048	05M2801	1.05

RADIAL LEADED

Mfg. Part No.	Holding Current (mA)	Tripping Current (mA)	Operating Voltage (VDC)	Current Max. (A)	Initial Resis. Min. (Ω)	R1 Max. (Ω)	Sold Individually Stock No.	Sold Individually Price Each 1-9
● 250R120U	120	240	60	3	4	16	05M2690	0.76
● 250R180F	180	650	60	10	0.8	4	05M2714	0.87
● 600R150F	150	300	600	3	6	22	05M2975	1.01

(89633)

0603 PTC RESETTABLE FUSES

RoHS Compliant Available

Littelfuse®

Expertise Applied | Answers Delivered

- Max. fault current: 40A
- Max. power dissipation: 500mW
- Matte-tin solder-plated copper terminals
- Temp. range: -40°C to +85°C

c UL us — TÜV Rheinland

0603L series provides low resistance and fast response to fault currents. **Sold as tape & reel.**

Mfg. Part No.	Voltage (VDC)	Holding Current (mA)	Tripping Current (mA)	Initial Resistance Min (Ω)	Initial Resistance Max (Ω)	Stock No.	Tape Cut 1-9	Tape Cut 10-24
● 0603L010YR	15	100	300	0.9	6	01P9425	2.74	2.48
● 0603L035YR	6	350	750	0.2	1	01P9428	2.74	2.48
● 0603L050YR	6	500	1	0.1	0.68	88T7683	1.82	1.65

(134604)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

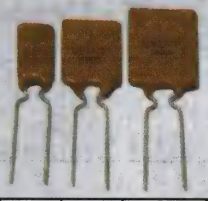
(196535)

PTC RESETTABLE FUSES - RADIAL LEADED

RoHS Compliant Available

multicomp

- Low resistance, fast trip time, lower trip-to-hold ratio
- Temp. range: -40°C to +85°C
- Agency recognition: UL(E211981), C-UL (E211981),TÜV (R3-50004084)



Mfg. Part No.	Voltage Max. (V)	Hold Current (A)	Trip Current (A)	Current Max. (A)	Resistance (Ω) Min.	Resistance (Ω) Max.	Stock No.	Price Each 1-249	Price Each 250-499	Price Each 500-999
MC36245	16	750mA	1.3A	40	0.08	0.23	21T9763	0.27	0.21	0.19
MC36246	30	900mA	1.8A	40	0.07	0.18	21T9764	0.42	0.32	0.29
MC36247	30	1.1A	2.2A	40	0.05	0.14	21T9765	0.45	0.34	0.30
MC36248	16	1.2A	2A	40	0.04	0.14	21T9766	0.47	0.35	0.31
MC36249	30	1.35A	2.7A	40	0.04	0.12	21T9767	0.48	0.36	0.32
MC36250	16	1.55A	2.7A	40	0.03	0.12	21T9768	0.53	0.40	0.36
MC36251	30	1.6A	3.2A	40	0.03	0.11	21T9769	0.53	0.40	0.36
MC36252	30	1.85A	3.7A	40	0.03	0.09	21T9770	0.51	0.38	0.34
MC36253	30	2.5A	5A	40	0.02	0.07	21T9771	0.57	0.43	0.39

(192416)

PTC RESETTABLE FUSES - SURFACE MOUNT

RoHS Compliant Available

multicomp

- Temp. range: -40°C to +85°C

Mfg. Part No.	Voltage Max. (V)	Hold Current	Trip Current	Current Max. (A)	Res. (Ω) Min.	Res. (Ω) Max.	Stock No.	Price Each 1-249
0805 CASE SIZE								
MC36206	9	200mA	500mA	100	0.4	3.5	21T9724	0.38
MC36210	6	350mA	750mA	100	0.25	1.2	21T9728	0.41
MC36213	6	500mA	1A	100	0.15	0.85	21T9731	0.62
MC36215	6	750mA	1.5A	40	0.09	0.35	21T9733	0.57
MC36220	6	1A	1.95A	40	0.06	0.21	21T9738	0.76
1206 CASE SIZE								
MC36207	30	200mA	400mA	10	0.6	2.5	21T9725	0.27
MC36211	16	350mA	750mA	40	0.3	1.2	21T9729	0.26
MC36216	6	750mA	1.5A	100	0.09	0.29	21T9734	0.41
MC36221	6	1A	1.8A	100	0.055	0.21	21T9739	0.41
MC36222	6	1.1A	2.2A	100	0.04	0.18	21T9740	0.38
MC36229	6	1.5A	3A	100	0.04	0.12	21T9747	0.51
1210 CASE SIZE								
MC36203	60	50mA	150mA	10	3.6	50	21T9721	0.27
MC36205	60	100mA	250mA	10	1.6	15	21T9723	0.27
MC36208	30	200mA	400mA	10	0.8	5	21T9726	0.26
MC36212	16	350mA	700mA	40	0.32	1.3	21T9730	0.26
MC36214	16	500mA	1A	40	0.25	0.9	21T9732	0.27
MC36217	8	750mA	1.5A	40	0.13	0.4	21T9735	0.26
MC36223	6	1.1A	2.2A	100	0.06	0.21	21T9741	0.38
MC36230	6	1.5A	3A	100	0.04	0.11	21T9748	0.38
MC36236	6	1.75A	4A	100	0.02	0.8	21T9754	0.38
MC36239	6	2A	4A	100	0.015	0.7	21T9757	0.38
1812 CASE SIZE								
MC33190	16	500mA	1A	40	0.15	1	06R3437	0.27
MC33193	16	750mA	1.5A	40	0.11	0.45	06R3440	0.27
MC33187	60	140mA	300mA	10	1.2	6.5	06R3434	0.27
2920 CASE SIZE								
MC36227	33	1.25A	2.5A	40	0.05	0.25	21T9745	0.51
MC33197	33	1.5A	3A	40	0.05	0.23	06R3444	0.43
MC36240	16	2A	4A	40	0.04	0.12	21T9758	0.51
MC36241	16	2.5A	5A	40	0.04	0.085	21T9759	0.51
FSMD SERIES								
MC36204	60	100mA	300mA	10	1.6	15	21T9722	0.27
MC36209	16	350mA	700mA	40	0.32	1.5	21T9727	0.26
MC36218	24	750mA	1.5A	40	0.11	0.29	21T9736	0.41
MC36219	33	750mA	1.5A	40	0.11	0.4	21T9737	0.38
MC36224	16	1.1A	1.95A	100	0.04	0.18	21T9742	0.33
MC36225	24	1.1A	2.2A	100	0.06	0.2	21T9743	0.38
MC36226	6	1.25A	2.5A	100	0.05	0.14	21T9744	0.33
MC36228	8	1.5A	3A	100	0.04	0.11	21T9746	0.33
MC36231	12	1.5A	3A	100	0.04	0.11	21T9749	0.38

➤ CONTINUED ➤

PTC RESETTABLE FUSES - SURFACE MOUNT (CONT.)

FSMD SERIES

Mfg. Part No.	Voltage Max. (V)	Hold Current	Trip Current	Current Max. (A)	Res. (Ω) Min.	Res. (Ω) Max.	Stock No.	Price Each 1-249
MC36232	24	1.5A	3A	100	0.04	0.12	21T9750	0.41
MC36233	8	1.6A	3.2A	100	0.03	0.1	21T9751	0.33
MC36234	12	1.6A	3.2A	100	0.03	0.1	21T9752	0.38
MC36235	16	1.6A	3.2A	100	0.03	0.1	21T9753	0.41
MC36237	6	1.9A	4.9A	100	0.003	0.025	21T9755	0.38
MC36238	8	2A	3.5A	100	0.02	0.07	21T9756	0.38
MC36244	6	2.6A	5A	100	0.015	0.047	21T9762	0.38
MC36242	13.2	2.6A	5A	100	0.015	0.05	21T9760	0.51
MC36243	16	2.6A	5A	100	0.015	0.05	21T9761	0.55

(147244)

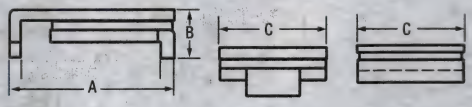
RAYCHEM/POLYSWITCH SURFACE MOUNT PTC RESETTABLE FUSES

RoHS Compliant Available

TE connectivity

Authorized Distributor

Top View



Side View | End View | End View (midSMD products only)

- SMD size 7255 (mm), 2920 (mils)
- Typical activation temperature: 125°C
- Thermal derating: medium
- Not designed for wave soldering to circuit boards
- Meet MIL-T-10727B specifications
- UL recognized, CSA certified, TÜV approved
- Also available on tape and reel, *go online or call*

Mfg. Part No.	Hold Current (A)*	Trip Current	Oper. Volt. (VDC)	Current Max. (A)	R1 Max. Post Trip (Ω)	Dimensions (mm) A x B x C Max.	Tape Cut Stock No.	Tape Cut Price Each 1-9
SMD030F-2	300mA	600mA	60	10	4.8	7.98 x 3.18 x 5.44	69K8044	0.55
SMD030F-2018-2	300	800mA	60	20	2.3	7.98 x 3.18 x 5.44	76T4571	0.57
SMD050F-2	500mA	1A	60	10	1.4	7.98 x 3.18 x 5.44	69K8045	0.62
SMD075F-2	750mA	1.5A	30	40	1	7.98 x 3.18 x 5.44	69K8046	0.50
SMD100F-2	1.1A	2.2A	30	40	0.48	7.98 x 3.18 x 5.44	69K8048	0.51
SMD125F-2	1.25A	2.5A	15	40	0.25	7.98 x 3.18 x 5.44	69K8051	0.60
SMD150F-2	1.5A	3A	15	40	0.25	7.98 x 3.18 x 5.44	69K8052	0.51
SMD185F-2	1.8A	3.6A	33	40	0.165	7.98 x 3.18 x 5.44	69K8055	0.60
SMD200F-2	2A	4A	15	40	0.125	7.98 x 3.18 x 5.44	69K8056	0.55
SMD250F-2	2.5A	5A	15	40	0.085	7.98 x 3.18 x 5.44	69K8058	0.54
SMD260F-2	2.6A	5.2A	6	40	0.075	7.98 x 3.18 x 5.44	69K8059	0.52
SMD300F-2	3A	6A	6	40	0.048	7.98 x 3.18 x 5.44	69K8060	0.56
SMD300F/15-2	3A	6A	15	40	0.05	7.98 x 3.18 x 5.44	76T4572	0.61

*Hold current @ 20°C

(9389)

RAYCHEM/POLYSWITCH SMD PTC RESETTABLE FUSES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- 0603 case size
- 9VDC max. operating voltage
- 40A max. short circuit current

Mfg. Part No.	Holding Current	Tripping Current	Resistance (Ω) Min	Resistance (Ω) Max	Power Dissipation (mW)	Stock No.	Price Each 1-9	Price Each 10-99
FEMTOSMDC016F-02	160mA	400mA	1	4.2	500	60R4051	0.42	0.39

(179323)

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(196545)

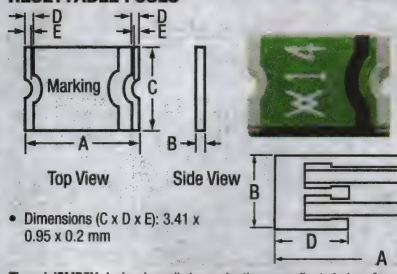
RESETTABLE PTCS

RAYCHEM/POLYSWITCH miniSMD™ SURFACE MOUNT DEVICES PTC RESETTABLE FUSES

RoHS Compliant Available

TE connectivity

Authorized Distributor



- Dimensions (C x D x E): 3.41 x 0.95 x 0.2 mm

The miniSMD™ devices' small size make them excellent choices for computers and peripherals, disk drives, adapter cards, DC-to-DC converters, portable electronics and phones, and other high-density electronics. Available on full reels; *go online or call.* UL recognized, CSA certified, TÜV approved.

Mfg. Part No.	Oper. Volt. Max. (VDC)	Hold Current (A)*	Trip Current (A)	Current Max. (A)	R1 Max. Post Trip (Ω)	Dim. (mm) A x B Max.	Tape Cut Stock No.	Tape Cut Price Each 1-9
● MINISMDC014F-2	60	140	340	10	6	4.73 x 0.89	69K8005	0.35
● MINISMDC020F-2	30	200	400	10	3.3	4.73 x 0.89	69K8006	0.35
● MINISMDC050F-2	24	500	1	100	1	4.73 x 0.62	69K8007	0.34
● MINISMDC075F-2	13.2	750	1.5	100	0.45	4.73 x 0.62	69K8008	0.33
● MINISMDC110F-2	8	1.1	2.2	100	0.21	4.73 x 0.62	69K8010	0.31
● MINISMDC150F-2	6	1.5	3	100	0.11	4.73 x 0.48	69K8016	0.38
● MINISMDC160F-2	9	1.6	3.2	100	0.1	4.73 x 0.48	69K8019	0.34
● MINISMDC200F-2	8	2	4	100	0.07	4.73 x 1.22	69K8020	0.43
● MINISMDC260F-2	6	2.6	5	100	0.043	4.73 x 1.25	69K8021	0.36
SOLD INDIVIDUALLY								
● MINISMDC260F/13.2-2	13.2	2.6	5	100	0.05	4.83 x 1.52	02M9769	0.59

*Hold current, 20°C
(9390)

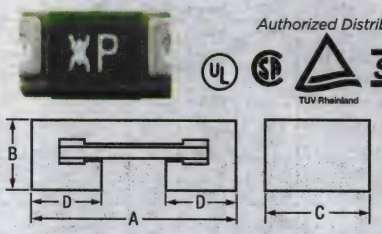
RAYCHEM/POLYSWITCH SURFACE MOUNT PTC RESETTABLE FUSES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Smaller size saves board space and cost
- Dimensions (A x C x D): 3.00 x 1.80 x 0.75 mm
- Higher voltage ratings allow use in new applications
- UL listed, CSA certified, TÜV approved



Mfg. Part No.	Hold Current (A)	Trip Current (A)	Oper. Volt. (VDC)	Current Max. (A)	R1 Max. Post Trip (Ω)	Dim. (mm) B (max.)	Tape Cut Stock No.	Tape Cut Price Each 1-49
● NANOSMDC012F-2	120mA	390mA	48	10	6.5	1.00	79R2482	0.32
● NANOSMDC016F-2	160mA	450mA	48	10	5	1.00	76T4555	0.35
● NANOSMDC020F-2	200mA	420mA	24	100	2.6	0.64	69K8024	0.36
● NANOSMDC035F-2	350mA	750mA	16	20	1.4	0.64	69K8025	0.40
● NANOSMDC075F-2	750mA	1.5A	6	100	0.4	0.48	69K8027	0.38
● NANOSMDC110F-2	1.1A	2.2A	6	100	0.2	1.00	69K8028	0.38

(72722)

RAYCHEM/POLYSWITCH PTC RESETTABLE STRAP FUSES

RoHS Compliant Available

TE connectivity

Authorized Distributor

Fig. 1

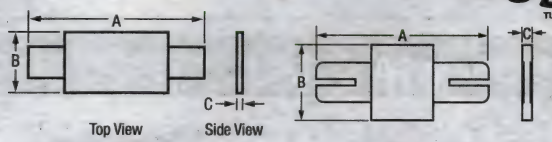


Fig. 1 Fig. 2

- For use in rechargeable battery packs
- Current = 100A max.
- SRP: 120°C
- Thermal derating: medium
- UL recognized, CSA certified, TÜV approved
- Also available on tape and reel, *go online or call*

➤ CONTINUED ➤

RAYCHEM/POLYSWITCH PTC RESETTABLE STRAP FUSES (CONT.)

Mfg. Part No.	Fig.	Hold Current (A)*	Trip Current (A)	Oper. Volt. Max. (VDC)	Initial Res. (Ω) Min.	Initial Res. (Ω) Max.	Dim. (mm) A x B x C Max.	Stock No.	Price Each 1-9
● SRP120F	1	1.2	2.7	15	0.085	0.16	22.1 x 5.2 x 1	40K9555	0.57
● SRP175F	1	1.75	3.8	15	0.05	0.09	23.1 x 5.2 x 1	99H2613	0.60
● SRP200F	1	2	4.4	30	0.03	0.06	23.4 x 11 x 1.1	99H2614	0.58
● SRP350F	1	3.5	6.3	30	0.017	0.031	31.8 x 13 x 1.1	99H2616	0.60
● SRP420F	1	4.2	7.6	30	0.012	0.024	32.4 x 13.6 x 1.1	31K9843	0.64

*@20°C
(9387)

RAYCHEM/POLYSWITCH LINE VOLTAGE PTCS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Current ratings from 50mA to 2A
- Operating voltage: 240VAC
- Fast time-to-trip
- Low resistance

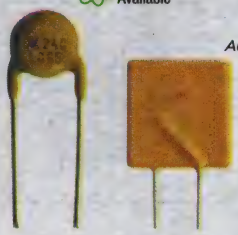


Fig. 1 Fig. 2

Mfg. Part No.	Fig.	Hold Current	Trip Current	Initial Res. (Ω) Min	Initial Res. (Ω) Max	Dimensions (mm) Width	Dimensions (mm) Height Above PC Board	Dimensions (mm) Lead Spacing	Stock No.	Price Each 1-249
● LVR005NK	...	50mA	120mA	18.5	31	8.3	12.9	5.8	26M0483	1.18
● LVR025K	...	250mA	560mA	1.3	2.1	18.8	9.6	5.8	26M0487	0.59
● LVR005NS	1	50mA	120mA	18.5	31	6.9	9.9	5.8	08N1946	0.50
● LVR008NS	1	80mA	190mA	7.4	12	7.2	10.2	5.8	45P7788	0.53
● LVR012S	1	120mA	300mA	3	6.5	8.3	10.7	5.8	04H7523	0.51
● LVR016S	1	160mA	370mA	2.5	4.1	9.9	12.5	5.8	04H7526	0.59
● LVR025S	2	250mA	560mA	1.3	2.1	9.6	17.4	5.8	04H7529	0.58
● LVR040S	2	400mA	900mA	0.6	0.97	11.5	19.5	5.8	04H7532	0.71
● LVR055S	2	550mA	1.25A	0.45	0.73	14	21.7	5.8	78K8420	0.75
● LVR075S	2	750mA	1.5A	0.316	0.483	11.5	23.4	6.1	02M9711	1.20
● LVR100S	1	1A	2A	0.218	0.334	18.7	24.4	11.4	02M9712	1.35
● LVR125S	1	1.25A	2.5A	0.165	0.253	21.2	27.4	11.4	02M9713	1.52

(155092)

RAYCHEM/POLYSWITCH THRU-HOLE PTC RESETTABLE FUSES

RoHS Compliant Available

TE connectivity

Authorized Distributor

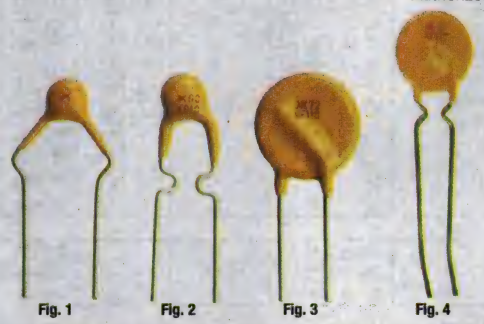


Fig. 1 Fig. 2 Fig. 3 Fig. 4

Fast time to trip. Current = 40A max. Typical activation temperature: 125°C. Thermal derating: medium. Resettable overcurrent circuit protection up to 60V @ 40A or 600V @ 3A. PolySwitch™ resettable fuses are low in resistance and are available in through-hole and surface mount configurations. Solid-state construction. UL recognized, CSA certified, TÜV approved. **Sold individually.** Tape & reel also available; *go online or call.* Most popular values listed, additional values available; *go online or call.*

Mfg. Part No.	Fig.	Hold Current (A)	Trip Current (A)	Oper. Volt. (V)	Initial Res. Min. (Ω)	Initial Res. Max. (Ω)	Dim. (mm) A x B x C Max.	Price Each Stock No.	Price Each 1-9
● RXEF005	1	50	100	60	7.3	11.1	8 x 8.3 x 5.8	04H8104	0.37
● RXEF010	2	100	200	60	2.5	4.5	7.4 x 11.6 x 5.8	04H8106	0.36
● RXEF017	2	170	340	60	3.3	5.21	7.4 x 12.7 x 5.8	04H8108	0.36
● RXEF020	3	200	400	72	1.83	2.75	7.4 x 11.6 x 5.8	04H8110	0.37
● RXEF025	3	250	500	72	1.25	1.95	7.4 x 12.7 x 5.8	04H8112	0.38
● RXEF030	3	300	600	72	0.88	1.33	7.4 x 12.7 x 5.8	04H8114	0.37
● RXEF040	3	400	0.8	72	0.55	0.86	7.6 x 13.5 x 5.8	04H8116	0.41

➤ CONTINUED ➤

RAYCHEM/POLYSWITCH THRU-HOLE PTC RESETTABLE FUSES (CONT.)

Mfg. Part No.	Fig.	Hold Current (A)	Trip Current (A)	Oper. Volt. (V)	Initial Res. Min. (Ω)	Initial Res. Max. (Ω)	Dim. (mm) A x B x C Max.	Price Each Stock No.	Price Each 1-9
RXEF050	3	500	1	72	0.5	0.77	7.9 x 13.7 x 5.8	04H8118	0.36
RXEF065	3	650	1.3	72	0.31	0.48	9.4 x 14.5 x 5.8	04H8120	0.35
RXEF075	3	750	1.5	72	0.25	0.4	10.2 x 15.2 x 5.8	04H8122	0.41
RXEF090	3	900	1.8	72	0.2	0.31	11.2 x 15.8 x 5.8	99H1959	0.42
RXEF110	3	1.1	2.2	72	0.15	0.25	12.8 x 17.5 x 5.8	04H8124	0.44
RXEF135	3	1.35	2.7	72	0.12	0.19	14.5 x 19.1 x 5.8	04H8126	0.44
RXEF160	3	1.6	3.2	72	0.09	0.14	16.3 x 20.8 x 5.8	04H8128	0.44
RXEF185	3	1.85	3.7	72	0.08	0.12	17.5 x 22.4 x 5.8	04H8130	0.50
RXEF250	3	2.5	5	72	0.05	0.08	20.8 x 25.4 x 10.9	04H8132	0.60
RXEF300	3	3	6	72	0.04	0.06	23.9 x 28.6 x 10.9	04H8134	0.70
RXEF375	3	3.75	7.5	72	0.03	0.05	27.2 x 31.8 x 10.9	04H8136	0.83

TAPE & REEL
Suffix-2 indicates tape & reel packaging and **suffix K** indicates standard kinked lead.

Mfg. Part No.	Fig.	Hold Current	Trip Current	Oper. Volt. (V)	Initial Res. Min. (Ω)	Initial Res. Max. (Ω)	Dim. (mm) A x B x C Max.	Tape Cut Stock No.	Tape Cut 1-9
RXEF010-2	2	100mA	200mA	60	2.5	4.5	7.4 x 11.6 x 5.8	76T4562	0.41
RXEF017-2	2	170mA	340mA	60	3.3	5.21	7.4 x 12.7 x 5.8	76T4563	0.35
RXEF020-2	3	200mA	400mA	72	1.83	2.75	7.4 x 11.7 x 5.8	76T4564	0.36
RXEF030-2	3	300mA	600mA	72	0.88	1.33	7.4 x 12.7 x 5.8	76T4565	0.37
RXEF040-2	3	400mA	800mA	72	0.55	0.86	7.6 x 13.5 x 5.8	76T4566	0.39
RXEF065-2	3	650mA	1.3A	72	0.31	0.48	9.4 x 14.5 x 5.8	76T4567	0.42
RXEF075-2	3	750mA	1.5A	72	0.25	0.4	10.2 x 15.2 x 5.8	76T4568	0.40
RXEF090-2	3	900mA	1.8A	72	0.2	0.31	11.2 x 15.8 x 5.8	76T4569	0.45
RXEF110-2	3	1.1A	2.2A	72	0.15	0.25	12.8 x 17.5 x 5.8	76T4570	0.46
RXEF110K-2	4	1.1A	2.2A	72	0.15	0.25	12.8 x 17.5 x 5.8	03M0963	0.46

(9371)

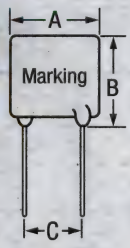
RAYCHEM/POLYSWITCH THRU-HOLE PTC RESETTABLE FUSES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Can be used in a wide variety of automotive, computer, and general electronics applications
- High-current carrying capability (up to 11 amps) in a small package with fast trip times
- Current rating: 100A max.; use for hold currents up to 14A
- Operating voltage: 16V
- Typical activation temperature: 125°C
- Thermal derating medium



Mfg. Part No.	Hold Current (A)	Trip Current (A)	Initial Res. Min. (Ω)	Initial Res. Max. (Ω)	Dimensions (mm) A x B x C Max.	Sold Individually Stock No.	Sold Individually Price Each 1-9
RGEF300	3	5.1	0.038	0.0645	7.1 x 11 x 5.8	04H7807	0.48
RGEF400	4	6.8	0.021	0.0385	8.9 x 12.8 x 5.8	04H7809	0.53
RGEF500	5	8.5	0.015	0.023	10.4 x 14.3 x 5.8	04H7811	0.57
RGEF700	7	11.9	0.0077	0.013	11.2 x 19.7 x 5.8	04H7815	0.66
RGEF800	8	13.6	0.0056	0.011	12.7 x 20.9 x 5.8	04H7817	0.60
RGEF1000	10	17	0.0040	0.0071	16.5 x 25.2 x 5.8	04H7797	0.81
RGEF1100	11	18.7	0.0037	0.0062	17.5 x 26 x 5.8	04H7799	0.77
RGEF1200	12	20.4	0.0033	0.00595	17.5 x 28 x 10.9	04H7801	0.98
RGEF1400	14	23.8	0.0056	0.00445	23.5 x 27.9 x 10.9	04H7803	1.16

TAPE CUT
Suffix -2 indicates tape & reel packaging.

Mfg. Part No.	Hold Current (A)	Trip Current (A)	Initial Res. Min. (Ω)	Initial Res. Max. (Ω)	Dimensions (mm) A x B x C Max.	Tape Cut Stock No.	Tape Cut Price Each 1-9
RGEF300-2	3	5.1	0.038	0.0645	7.1 x 11 x 5.8	76T4556	0.50
RGEF500-2	5	8.5	0.015	0.024	10.4 x 14.3 x 5.8	76T4557	0.61

(16629)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

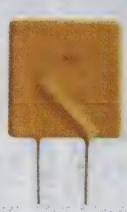
RAYCHEM/POLYSWITCH THRU-HOLE PTC RESETTABLE FUSES

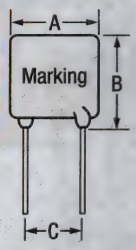
RoHS Compliant Available

TE connectivity

Authorized Distributor

- Provide a smaller form factor with lower resistance and higher hold current capability (up to 9 amps)
- Current rating: 40A max.
- Operating voltage: 30V
- Typical activation temperature: 125°C
- Thermal derating: medium
- UL recognized, CSA certified, TÜV approved
- Also available on tape & reel; *go online or call*





Mfg. Part No.	Hold Current*	Trip Current	Initial Res. (Ω) Min.	Initial Res. (Ω) Max.	Dimensions (mm) A x B x C Max.	Sold Individually Stock No.	Sold Individually Price Each 1-9
RUEF090	0.9mA	1.8A	0.07	0.12	7.4 x 12.2 x 5.8	04H7985	0.39
RUEF110	1.1A	2.2A	0.07	0.1	7.4 x 14.2 x 5.8	04H7987	0.38
RUEF110S	1.1A	2.2A	0.07	0.1	7.4 x 14.2 x 5.8	03M0925	0.39
RUEF135	1.35A	2.7A	0.04	0.08	8.9 x 13.5 x 5.8	04H7989	0.43
RUEF160	1.6A	3.2A	0.03	0.07	8.9 x 15.2 x 5.8	04H7991	0.42
RUEF185	1.85A	3.7A	0.03	0.06	10.2 x 15.7 x 5.8	04H7993	0.44
RUEF250	2.5A	5A	0.02	0.04	11.4 x 18.3 x 5.8	04H7995	0.42
RUEF250U-2	2.5A	5A	0.02	0.04	11.4 x 18.3 x 5.8	03M0931	0.42
RUEF300	3A	6A	0.02	0.05	11.4 x 16.5 x 5.8	04H7997	0.47
RUEF300U	3A	6A	0.02	0.05	11.4 x 16.5 x 5.8	03M0934	0.45
RUEF400	4A	8A	0.01	0.03	14 x 19.3 x 5.8	04H7999	0.50
RUEF500	5A	10A	0.01	0.03	14 x 24.1 x 10.9	04H8001	0.69
RUEF600	6A	12A	0.005	0.002	16.5 x 24.1 x 10.9	04H8003	0.73
RUEF700	7A	14A	0.005	0.002	19.1 x 25.9 x 10.9	04H8005	0.77
RUEF800	8A	16A	0.005	0.013	21.6 x 28.4 x 10.9	04H8007	0.76
RUEF900	9A	18A	0.005	0.01	24.1 x 29 x 10.9	04H8009	0.86

TAPE CUT
Suffix K indicates standard kinked lead and **suffix -2** indicates tape & reel packaging.

Mfg. Part No.	Hold Current*	Trip Current	Initial Res. (Ω) Min.	Initial Res. (Ω) Max.	Dimensions (mm) A x B x C Max.	Tape Cut Stock No.	Tape Cut Price Each 1-9
RUEF090-2	900mA	1.8A	0.070	0.12	7.4 x 12.2 x 7.6	76T4558	0.39
RUEF250-2	2.5A	5A	0.020	0.04	11.4 x18.3 x 7.6	76T4559	0.46
RUEF300K-2	3A	6A	0.020	0.05	11.4 x 16.5 x 7.6	76T4560	0.45
RUEF400-2	4A	8A	0.010	0.03	14 x 19.3 x 7.6	76T4561	0.50

*Hold current @ 20°C.
(16637)

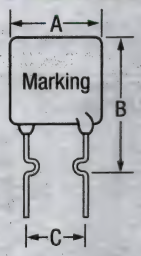
RAYCHEM/POLYSWITCH RADIAL-LEADED PTC RESETTABLE FUSES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- 16V high temperature
- Flatter thermal derating and operating temperature up to 125°C
- Typical activation temperature: 125°C
- Thermal derating: medium
- UL recognized, CSA certified, TÜV approved



Available on tape & reel, *go online or call.*

Mfg. Part No.	Hold Current (A)*	Trip Current (A)	Oper. Volt. (V)	Current Max. (A)**	Initial Res. (Ω) Min.	Initial Res. (Ω) Max.	Dim. (mm) A x B x C Max.	Sold Individually Stock No.	Sold Individually Price Each 1-9
RHEF050	0.5	500	30	40	0.48	0.79	7.4 x 12.7 x 5.8	40K8288	0.41
RHEF070	0.7	1.4	30	40	0.3	0.541	6.9 x 10.8 x 5.8	04H7866	0.41
RHEF400	4	7	16	100	0.018	0.029	11.4 x 18 x 5.8	04H7874	0.57
RHEF450	4.5	7.8	16	100	0.022	0.0355	10.4 x 15.6 x 5.8	04H7876	0.62
RHEF600	6	10.8	16	100	0.013	0.0215	11.2 x 21 x 5.8	04H7878	0.69
RHEF1000	10	18.5	16	100	0.0062	0.0103	17.5 x 26.5 x 10.9	04H7868	0.96
RHEF1500	15	28	16	100	0.0032	0.0063	23.5 x 28.7 x 10.9	04H7872	1.53

*Hold Current @ 25°C; **Device may withstand higher interrupt current at lower voltages. Each application will need to be individually evaluated.
(72719)

RAYCHEM/POLYSWITCH RADIAL-LEADED PTC RESETTABLE FUSES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Current: 3A max.
- Resettable overcurrent protection
- Fast time-to-trip speed (**-T suffix**)
- Low parasitic capacitance/flat impedance with frequency
- **-U suffix** indicates uncoated

Fig. 1

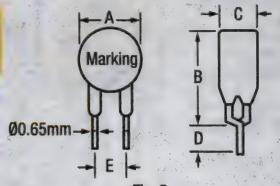


Fig. 2

BULK

Mfg. Part No.	Fig.	Hold Current (mA)	Trip Current (mA)	Oper. Volt. (VDC)	Initial Res. (Ω) Min	Initial Res. (Ω) Max	Dimensions (mm) Width	Dimensions (mm) Height Above PCB	Dimensions (mm) Lead Spacing	Stock No.	Price Each 1-9
● TRF250-080U	2	80	160	60	14	20	4.8	9.3	5	03M1129	0.61
● TRF250-080T	2	80	160	60	15	22	5.8	9.9	5	03M1128	0.53
● TRF250-110U	2	110	220	60	5	9	5.3	9.4	5	03M1131	0.64
● TRF250-120	1	120	240	60	4	8	6.5	11	5	86K0364	0.66
● TRF250-120U	1	120	240	60	6	10	6.0	10	5	03M1143	0.62
● TRF250-120T	1	120	240	60	7	12	6.5	11	5	03M1134	0.72
● TRF250-145	2	145	290	60	3	6	6.5	11	5	84K9427	0.67
● TRF250-145T	2	145	290	60	5.4	7.5	6.5	11	5	03M1149	0.85
● TRF250-145U	2	145	290	60	3.5	6.5	6	10	5	03M1151	0.58
● TRF250-180	2	180	360	100	0.8	2.2	...	12	5	04H8313	0.68
● TRF600-150	1	150	300	250	6	10	9	12.5	5	40K9784	0.88
● TRF600-150-RB	1	150	300	250	9	12	...	12.6	5	40K9786	1.15
● TRF600-160	1	160	320	250	4	10	16	12.6	5	03M1156	1.01

TAPE CUT

Mfg. Part No.	Fig.	Hold Current (mA)	Trip Current (mA)	Oper. Volt. (VDC)	Initial Res. (Ω) Min	Initial Res. (Ω) Max	Dimensions (mm) Width	Dimensions (mm) Height Above PCB	Dimensions (mm) Lead Spacing	Stock No.	Tape Cut 1-9
● TRF250-120-2	1	120	240	60	4	8	6.5	11	5	03M1133	0.49
● TRF250-120T-2	1	120	240	60	7	12	6.5	11	5	03M1142	0.64
● TRF250-145-2	2	145	290	60	3	6	6.5	11	5	76T4573	0.59

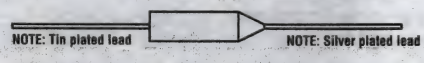
(94490)

THERMAL CUT-OFFS

RoHS Compliant Available

NTE ELECTRONICS, INC.

- Maximum Current Rating: 15A
- Typical Opening Temperature Tolerance: +0°C, -4°C
- 18-Gauge Solid Copper Wire
- Full 1½" Leads to Fit All Replacement Configurations



Each device comes packaged with 2 crimp splices for solderless connection (poly-bag or carton pack orders only). **Mfg. part no. NTE8182** is UL listed file no. E117626; all other part nos. UL listed file no. E49429 and CSA certified file no. LR43279.

Mfg. Part No.	Max. Temp. for Opening °C	Max. Temp. for Opening °F	Stock No.	Price Each 1-99	Price Each 100-499	Price Each 500-999
● NTE8070	72	162	06M7498	1.95	1.85	1.81
● NTE8076	77	171	29C4795	1.89	1.79	1.75
● NTE8081	84	184	06M7499	1.95	1.85	1.81
● NTE8085	87	189	30C5661	1.91	1.81	1.78
● NTE8090	93	200	06M7500	1.95	1.85	1.81
● NTE8096	98	209	55R1324	1.89	1.79	1.75
● NTE8098	100	212	51M8916	1.95	1.85	1.81
● NTE8103	104	220	29C4797	1.93	1.82	1.79
● NTE8108	109	229	29C4798	1.95	1.85	1.81
● NTE8115	117	243	29C4799	1.95	1.85	1.81
● NTE8118	121	250	06M7501	1.95	1.85	1.81
● NTE8125	128	263	06M7502	1.95	1.85	1.81
● NTE8139	141	286	06M7503	1.93	1.82	1.79
● NTE8149	152	306	06M7504	1.95	1.85	1.81
● NTE8167	169	336	06M7505	1.95	1.85	1.81
● NTE8181	184	364	06M7506	1.95	1.85	1.81
● NTE8182	192	378	06M7507	2.64	2.50	2.45
● NTE8213	216	421	42M2426	1.89	1.79	1.75
● NTE8226	228	443	95M9613	1.95	1.85	1.81
● NTE8242	240	464	29C4804	1.93	1.82	1.79

(70314)

EYP SERIES THERMAL CUTOFFS (TCO) / THERMAL-LINKS

RoHS Compliant Available

Panasonic

Features:
- Compact and insulated
- Quick temperature response
- Mountable in a small space without insulation or protection
- High reliability — opens reliably when the equipment becomes abnormal, and is not resettable
- Solid structure — unique formed lead provides reliable TCO connection and provides easy assembly handling
- UL recognized, CSA certified, VDE, BEAB, CCC, JET approved

Applications:
- Transformers, solenoids, ICs
- Ventilation fans, electric fans
- Small electric motors
- Driers, gas home appliances, heating devices
- Fluorescent lights
- Adapters,bBatteries
- For overheating protection

ELECTRICAL RATING: 250VAC, 50VDC, AXIAL LEADED

Mfg. Part No.	Functioning Temp. (°C)	Stock No.	Price Each 1-9
● EYP-2BN082	86	90R8624	0.66
● EYP-2BN109	114	90R8626	0.66

(209145)

MICROTEMP® THERMAL FUSES

RoHS Compliant Available

THERMODISC

Nonresettable axial fuses are designed to provide upper-limit temperature protection on all industrial appliances. Microtemp® thermal cut-off opens immediately when the internal temperature reaches the maximum rated temperature. Fuse is not resettable and should be replaced after opening. Rating: 10A @ 250VAC. Breakdown voltage when open: 1200VAC. Body length: 0.58" (14.7). Body diameter: 0.16" (4.0). Lead diameter: 0.04" (1.0).

Mfg. Part No.	Opening Temp. (°C)	Stock No.	Price Each 1-99	Price Each 100-249	Price Each 250-499
● G4A01072C	72	09WX6679	1.21	1.09	0.98
● G4A01084C	84	09WX6680	1.19	1.07	0.97
● G4A01098C	98	09WX6681	1.21	1.09	0.98
● G4A01104C	104	67C6642	1.19	1.07	0.97
● G4A01110C	110	24C4997	1.21	1.09	0.98
● G4A01117C	117	67C6643	1.21	1.09	0.98
● G4A01121C	121	09WX6682	1.19	1.07	0.97
● G4A01128C	128	67C6644	1.19	1.07	0.97
● G4A01144C	144	27C9988	1.19	1.07	0.97
● G4A01152C	152	67C6645	1.19	1.07	0.97
● G4A01167C	167	09WX6683	1.19	1.07	0.97
● G4A01184C	184	09WX6684	1.19	1.07	0.97
● G4A01192C	192	67C6646	1.21	1.09	0.98
● G4A01216C	216	67C6647	1.21	1.09	0.98
● G4A01229C	229	46WX2026	1.21	1.09	0.98
● G4A01240C	240	30C5836	1.21	1.09	0.98

(40873)

SURFACE MOUNT TIME-DELAY CHIP FUSES

RoHS Compliant Available

COOPER Bussmann SMD

- Protects against overcurrents in secondary applications
- High inrush withstand capability
- Wire-in-air performance
- Voltage (VAC/VDC): 63 V (≤ 1A); 32 V (≥ 1A)
- Interrupting current: 50A (≤ 1A); 35A (≥ 1A)
- Wave solder immersion: 260°C, 10 sec. max.
- Solder reflow: 260°C, 30 sec. max.

% of Current	Trip Time
100	4 Hours Minimum
200	1 Sec. Minimum, 120 Sec. Maximum
300	0.05 Sec. Minimum, 3 Sec. Maximum
800	0.002 Sec. Minimum, 0.05 Sec. Maximum

Mfg. Part No.	Current	Typical Melt (I^2T) DC	Typical Voltage Drop (mV)	Stock No.	Price Each 1-49	Price Each 50-99	Price Each 100-499
● TR/3216TD800-R	800mA	0.16	75	56P2724	1.29	0.86	0.76
● TR/3216TD1-R	1A	0.32	75	56P2710	0.83	0.79	0.75
● TR/3216TD1.5-R	1.5A	0.62	75	56P2711	0.58	0.55	0.52
● TR/3216TD2-R	2A	1.3	60	56P2714	0.83	0.79	0.75
● TR/3216TD2.5-R	2.5A	2.25	55	56P2715	0.58	0.55	0.52
● TR/3216TD4-R	4A	5.2	56	56P2717	1.29	0.86	0.76
● TR/3216TD5-R	5A	8.4	66	56P2718	0.83	0.79	0.75
● TR/3216TD6.3-R	6.3A	13.8	75	56P2720	1.34	0.89	0.79
● TR/3216TD7-R	7A	18	67	56P2721	1.29	0.86	0.76
● TR/3216TD8-R	8A	38	65	56P2723	1.29	0.86	0.76

➤CONTINUED➤

SURFACE MOUNT TIME-DELAY CHIP FUSES (CONT.)

Mfg. Part No.	Current	Typical Melt (I^2T) DC	Typical Voltage Drop (mV)	Stock No.	Price Each 1-49	50-99	100-499
TR/3216TD10-R	10A	54.4	65	56P2712	2.17	1.37	1.25
TR/3216TD12-R	12A	64	65	56P2713	1.90	1.46	1.28

(142196)

FAST-ACTING CHIP™ FUSES

RoHS Compliant Available

COOPER Bussmann

SMD

- Rapid interruption of excessive current
- Compatible with reflow and wave solder
- Excellent environmental integrity
- Ampere rating marked and oriented facing up in carrier
- Solder-free design provides excellent temperature cycling characteristics
- Heat and shock tolerant
- Interrupting rating: 50A (≤ 7A), 150A (≥ 10A)
- Wave immersion: 260°C, 10 seconds max.
- Infrared reflow: 260°C, 30 seconds max.

Thermal shock: MIL-STD-202, Method 107. Vibration: MIL-STD-202, Method 204. Moisture resistance: MIL-STD-202, Method 106. Solderability: ANSI/J-STD-002, Test B. UL recognized, CSA certified. **Tape & reel qty: 3000.**

Mfg. Part No.	Current	Voltage (VAC)	Voltage (VDC)	Stock No.	Tape Cut Price Each 1-9
TR/3216FF250-R	250mA	32	63	19K7751	0.81
TR/3216FF375-R	375mA	32	63	19K7753	0.78
TR/3216FF500-R	500mA	32	63	19K7757	0.78
TR/3216FF750-R	750mA	32	63	19K7760	0.80
TR/3216FF1-R	1A	32	63	19K7749	0.81
TR/3216FF1.5-R	1.5A	32	63	19K7748	0.80
TR/3216FF2R	2A	32	63	95J9753	0.81
TR/3216FF2.5-R	2.5A	32	63	19K7750	0.80
TR/3216FF3-R	3A	32	63	19K7752	0.80
TR/3216FF4-R	4A	32	32	19K7755	0.78
TR/3216FF5-R	5A	32	32	19K7756	0.78
TR/3216FF6.5-R	6.5A	32	32	19K7758	0.78
TR/3216FF7-R	7A	32	32	19K7759	0.89
TR/3216FF10-R	10A	...	24	56P2706	1.34
TR/3216FF15-R	15A	...	24	56P2708	1.36
TR/3216FF20-R	20A	...	24	56P2709	1.31

(72270)

SURFACE MOUNT FAST-ACTING BRICK™ FUSES

RoHS Compliant Available

COOPER Bussmann

c UL us SMD

- Overcurrent protection of systems up to 125VAC/72VDC
- High inrush withstand capability
- Interrupting current: 50A @ 75 VDC, 300A @ 32 VDC
- Wave solder immersion: 260°C, 10 sec. max.
- Solder reflow: 260°C, 30 sec. max.

% of Current	Trip Time
100	4 Hours Minimum
200	5 Second Maximum

Mfg. Part No.	Current	Melting I^2T (A^2-sec)	Typical Voltage Drop (mV)	Stock No.	Price Each 1-9	10-99	100-249
TR2/6125FF500-R	500mA	0.08	605	56P2747	0.74	0.60	0.50
TR2/6125FF750-R	750mA	0.152	433	56P2750	0.74	0.60	0.50
TR2/6125FF1-R	1A	0.22	415	56P2735	0.74	0.60	0.50
TR2/6125FF1-25R	1.25A	0.355	410	56P2736	0.74	0.60	0.50
TR2/6125FF2-R	2A	1.67	160	56P2741	0.74	0.60	0.50
TR2/6125FF2.5-R	2.5A	5.2	155	56P2742	0.76	0.62	0.52
TR2/6125FF3-R	3A	6.24	153	56P2743	0.74	0.60	0.50
TR2/6125FF3.5-R	3.5A	7.28	150	56P2744	0.74	0.60	0.50
TR2/6125FF4-R	4A	7.4	145	56P2745	0.74	0.60	0.50
TR2/6125FF5-R	5A	9.5	141	56P2746	0.74	0.60	0.50
TR2/6125FF6.3-R	6.3A	15.1	135	56P2748	0.74	0.60	0.50
TR2/6125FF7-R	7A	37.25	112	56P2749	0.74	0.60	0.50
TR2/6125FF10-R	10A	67.75	110	56P2738	0.74	0.60	0.50
TR2/6125FF12-R	12A	210.59	106	56P2739	0.74	0.60	0.50
TR2/6125FF15-R	15A	296.1	104	56P2740	0.74	0.60	0.50

(142199)

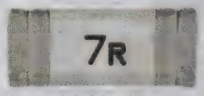
SURFACE MOUNT TIME-DELAY BRICK™ FUSES

RoHS Compliant Available

COOPER Bussmann

UL CSA SMD

- Overcurrent protection of systems up to 125VAC/60VDC
- High inrush withstand capability
- Interrupting current AC/DC: 50A
- Wave solder immersion: 260°C, 10 sec. max.
- Solder reflow: 260°C, 30 sec. max.



% of Current	Trip Time
100	4 Hours Minimum
200	1 Second Minimum
200	2-4 Seconds Typical
200	60 Seconds Maximum

Mfg. Part No.	Current	Typical Melt (I^2T) DC	Typical Voltage Drop (mV)	Stock No.	Tape Cut 1-49	50-99	100-499
TR1/6125TD500-R	500mA	0.716	245	19K7406	1.41	0.94	0.84
TR1/6125TD750-R	750mA	1.07	250	19K7408	1.47	0.97	0.87
TR1/6125TD1-R	1A	2.88	256	19K7399	1.47	0.97	0.87
TR1/6125TD2-R	2A	9.45	133	56P2726	1.41	0.94	0.84
TR1/6125TD3-R	3A	15.3	97	56P2728	1.41	0.94	0.84
TR1/6125TD4-R	4A	38.8	106	56P2730	1.41	0.94	0.84
TR1/6125TD5-R	5A	34.4	100	56P2731	1.41	0.94	0.84
TR1/6125TD7-R	7A	90.2	99	56P2732	1.41	0.94	0.84

(142200)

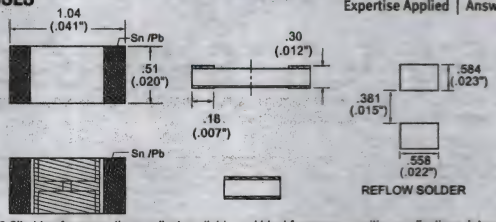
SLIMLINE VERY FAST-ACTING THIN-FILM FUSES

SMD

RoHS Compliant Available

Littelfuse

Expertise Applied | Answers Delivered



EIA size 0402 SlimLine fuses are the smallest available and ideal for space sensitive applications. Interrupting ratings: 35A@32VDC. Body material: epoxy substrate; terminations: copper/nickel/tin-lead, cover coat: conformal coating. Soldering parameters: reflow solder — 260°C, 30 seconds maximum. Operating temperature: -55°C to 90°C.

ELECTRICAL CHARACTERISTICS

% of Ampere Rating	Opening Time @ 25°C
100%	4 Hours Min.
200%	5 sec Max.
300%	0.2 sec Max.

Mfg. Part No.	Current	Voltage (V)	Resistance Cold Ohm*	Nominal Melting I^2t (A^2 Sec.)	Stock No.	Tape Cut 1-9
0435.500KR	500mA	32	0.150	0.0053	30C5437	1.12
0435.750KR	750mA	32	0.105	0.012	30C5438	1.13
0435002.KR	2A	32	0.030	0.100	30C5431	1.12

*Measured @10% of rated current, 25°C; **Measured at rated voltage

(72166)

NANO2® 485 SERIES SURFACE MOUNT FUSES

RoHS Compliant Available

Littelfuse

Expertise Applied | Answers Delivered

UL CSA

- Fast Acting / Surface mount high fuse for high voltage (up to 600VDC) applications
- Fully compatible with lead-free solder alloys and higher temperature profiles associated with lead-free assembly
- Relatively high breaking capacity at 100A
- RoHS compliant / Halogen Free
- Rating – 1 to 3.15A

The **485 Nano2** Fuse Series is a small, fast acting, surface mount ceramic fuse rated at a remarkable 600VDC at its small size and with 100A breaking capacity. It is primarily designed for circuit protection in high energy applications. This product is fully compatible with lead-free solder alloys and higher temperature profiles associated with lead-free assembly.

Mfg. Part No.	Current	Voltage VAC	Voltage VDC	Stock No.	Price Each 1-9	10-24	25-49	25-49
0485001.DR	1A	-999V	600V	69W6463	5.53	5.15	4.59	4.22
0485002.DR	2A	-999V	600V	69W6464	5.53	5.15	4.59	4.22
048501.5DR	1.5A	-999V	600V	69W6465	5.53	5.15	4.59	4.22
048502.5DR	2.5A	-999V	600V	69W6466	5.32	4.96	4.41	4.06
04853.15DR	3.15A	-999V	600V	69W6467	5.32	4.96	4.41	4.06

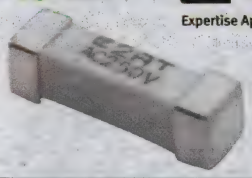
(209529)

SURFACE MOUNT FUSES

NANO² 250V FUSES

RoHS Compliant Available

Littelfuse®
Expertise Applied | Answers Delivered



- 0.5 to 5A
- Time lag
- 250VAC voltage rating
- Dimensions (H x W x D): 3.12 x 3.12 x 10.1 mm

Trips in 4 hours min. at 100%, 120 sec. min. at 200%. **Sold as tape & reel.**

Mfg. Part No.	Current (A)	Stock No.	Tape Cut 1-9	10-24	25-99	100-249
● 0443.500DR	0.5	01P9266	1.62	1.44	1.30	1.14
● 0443001.DR	1	01P9268	1.52	1.37	1.33	1.14
● 044301.5DR	1.5	01P9273	1.46	1.32	1.28	1.10
● 0443002.DR	2	01P9269	1.56	1.39	1.25	1.10
● 0443003.DR	3	01P9270	1.46	1.32	1.28	1.10
● 0443004.DR	4	01P9271	1.56	1.39	1.25	1.10
● 0443005.DR	5	01P9272	1.58	1.40	1.26	1.10

(134615)

NANO²® SLO-BLO® SURFACE MOUNT FUSES

RoHS Compliant Available

Littelfuse®
Expertise Applied | Answers Delivered

SMD

Interrupting ratings: 50A @ 125VAC/VDC and 300A @32VDC (375mA to 5A ratings), 50A @ 72VAC/60VDC (7A rating). Ceramic body with gold-plated cap terminations. Soldering parameters: wave solder—260°C, 3 sec. max. Reflow solder—230°C, 30 sec. max. Solderability: MIL-STD-202, Method 208. Operating temperature: -55°C to 125°C. Dimensions (H x W x D): 2.69 x 2.69 x 6.10 mm. Packaging specifications: 12mm tape and reel; 1000 pieces per reel, add packaging **suffix MR**; 5000 per reel, add packaging **suffix NR**.

ELECTRICAL CHARACTERISTICS

% of Ampere Rating	Opening Time
100%	4 hours, Min.
200%	1 sec., Min.; 60 sec., Max.
300%	0.2 sec., Min.; 3 sec., Max.
800%	0.02 sec., Min.; 0.1 sec., Max.

Mfg. Part No.	Current	Voltage VAC	Voltage VDC	Tape Cut Stock No.	Price Each 1-9	Price Each 10-24	Tape & Reel Stock No.	Reel Qty.	Price Each 1-999
● 0452.375MRL	375mA	125	32	12J2897	1.61	1.46	53K9070	1000	0.70
● 0452.500MRL	500mA	125	32	12J2898	1.61	1.46	53K9071	1000	0.70
● 0452.750MRL	750mA	125	32	12J2899	1.57	1.42	53K9072	1000	0.68
● 0452001.MRL	1A	125	32	12J2900	1.57	1.42	53K9073	1000	0.68
● 045201.5MRL	1.5A	125	32	12J2905	1.61	1.46	53K9078	1000	0.70
● 0452002.MRL	2A	125	32	12J2901	1.57	1.42	53K9074	1000	0.68
● 045202.5MRL	2.5A	125	32	12J2906	1.61	1.46	53K9079	1000	0.70
● 0452003.MRL	3A	125	32	12J2902	1.57	1.42	53K9075	1000	0.68
● 0452005.MRL	5A	125	32	12J2904	1.57	1.42	53K9077	1000	0.68
● 0452007.MRL	7A	72	60	64R8024	2.10	1.90	...	...	...

(85695)

NANO²® VERY FAST-ACTING SURFACE MOUNT FUSES

RoHS Compliant Available

Littelfuse®
Expertise Applied | Answers Delivered

SMD

% of Ampere Rating	Ampere Rating	Opening Time at 25°C
100%	1/16 –15	4 hours Min.
200%	1/16 –10	5 sec. Max.
	12-15	20 sec. Max.

Mfg. Part No.	Current	Voltage (VAC/VDC)	Interrupting Rating	Stock No.	Price Each 1-999	Price Each 1000-1999
● 0448.062MR	62mA	32	50A @ 125V AC / DC, 300A @ 32V DC	58K7699	1.16	1.16
● 0448.080MR	80mA	32	50A @ 125V AC / DC, 300A @ 32V DC	58K7700	2.60	2.35

➤CONTINUED➤

NANO²® VERY FAST-ACTING SURFACE MOUNT FUSES (CONT.)

Mfg. Part No.	Current	Voltage (VAC/VDC)	Interrupting Rating	Stock No.	Price Each 1-999	Price Each 1000-1999
● 0448.100MR	100mA	32	50A @ 125V AC / DC, 300A @ 32V DC	58K7701	2.60	2.35
● 0448.125MR	125mA	32	50A @ 125V AC / DC, 300A @ 32V DC	58K7702	2.67	2.42
● 0448.160MR	160mA	32	50A @ 125V AC / DC, 300A @ 32V DC	25R5529	1.16	1.04
● 0448.200MR	200mA	32	50A @ 125V AC / DC, 300A @ 32V DC	25R5530	1.16	1.04
● 0448.250MR	250mA	32	50A @ 125V AC / DC, 300A @ 32V DC	58K7705	1.25	1.12
● 0448.315MR	315mA	32	50A @ 125V AC / DC, 300A @ 32V DC	58K7706	1.26	1.14
● 0448.375MR	375mA	32	50A @ 125V AC / DC, 300A @ 32V DC	58K7707	1.26	1.14
● 0448.400MR	400mA	32	50A @ 125V AC / DC, 300A @ 32V DC	58K7708	1.26	1.14
● 0448.500MR	500mA	32	50A @ 125V AC / DC, 300A @ 32V DC	58K7709	1.26	1.14
● 0448.630MR	630mA	32	50A @ 125V AC / DC, 300A @ 32V DC	58K7710	1.21	1.10
● 0448.750MR	750mA	32	50A @ 125V AC / DC, 300A @ 32V DC	58K7711	1.21	1.10
● 0448.800MR	800mA	32	50A @ 125V AC / DC, 300A @ 32V DC	58K7712	1.21	1.10
● 0448001.MR	1A	32	50A @ 125V AC / DC, 300A @ 32V DC	58K7713	1.21	1.10
● 04481.25MR	1.25A	32	50A @ 125V AC / DC, 300A @ 32V DC	58K7728	1.21	1.10
● 044801.5MR	1.5A	32	50A @ 125V AC / DC, 300A @ 32V DC	58K7720	1.21	1.10
● 044801.6MR	1.6A	32	50A @ 125V AC / DC, 300A @ 32V DC	58K7721	1.26	1.14
● 0448002.MR	2A	32	50A @ 125V AC / DC, 300A @ 32V DC	58K7714	1.24	1.12
● 0448003.MR	3A	32	50A @ 125V AC / DC, 300A @ 32V DC	58K7715	1.21	1.10
● 04483.15MR	3.15A	32	50A @ 125V AC / DC, 300A @ 32V DC	58K7729	1.26	1.14
● 044803.5MR	3.5A	32	50A @ 125V AC / DC, 300A @ 32V DC	58K7726	1.26	1.14
● 0448004.MR	4A	32	50A @ 125V AC / DC, 300A @ 32V DC	58K7716	1.24	1.12
● 0448005.MR	5A	32	50A @ 125V AC / DC, 300A @ 32V DC	58K7717	1.21	1.10
● 044806.3MR	6.3A	32	50A @ 125V AC / DC, 300A @ 32V DC	58K7727	1.26	1.14
● 0448007.MR	7A	32	50A @ 125V AC / DC, 300A @ 32V DC	58K7718	1.26	1.14
● 0448010.MR	10A	32	35A @ 125V AC, 50A @ 125V DC, 300A @ 32V DC	25R5548	0.61	0.56
● 0448012.MR	12A	24	50A @ 65V AC / DC, 300A @ 24V DC	25R5549	1.16	1.04
● 0448015.MR	15A	24	50A @ 65V AC / DC, 300A @ 24V DC	25R5550	1.29	1.18

(177483)

VERY FAST-ACTING SURFACE MOUNT FUSES

RoHS Compliant Available

Littelfuse®
Expertise Applied | Answers Delivered

% of Ampere Rating	Opening Time @ 25°C
100%	4 Hours Min.
200%	5 Sec Max.
300%	0.2 sec Max.

SMD

Mfg. Part No.	Case Size	Current	Breaking Capacity	Marking	Stock No.	Price Each 1-9
● 0466.125NR	1206	125mA	50A @ 125V AC / DC	B	12J3721	0.79
● 0466.200NR	1206	200mA	50A @ 125V AC / DC	C	12J3722	0.81
● 0466.250NR	1206	250mA	50A @ 125V AC / DC	D	12J3723	0.81
● 0466.375NR	1206	375mA	50A @ 125V AC / DC	E	12J3724	0.82
● 0466.500NR	1206	500mA	50A @ 63V AC / DC	F	12J3725	0.79
● 0466.750NR	1206	750mA	50A @ 63V AC / DC	G	12J3726	0.81
● 0466001.NR	1206	1A	50A @ 63V AC / DC	H	99M1302	0.81
● 04661.25NR	1206	1.25A	50A @ 63V AC / DC	J	12J3734	0.81
● 046601.5NR	1206	1.5A	50A @ 63V AC / DC	K	12J3731	0.81
● 04661.75NR	1206	1.75A	50A @ 63V AC / DC	L	12J3735	0.79
● 0466002.NR	1206	2A	50A @ 63V AC / DC	N	99M1303	0.79
● 046602.5NR	1206	2.5A	50A @ 32V AC / DC	O	12J3733	0.82
● 0466003.NR	1206	3A	50A @ 32V AC / DC	P	86H2954	0.81
● 0466004.NR	1206	4A	50A @ 32V AC / DC	S	12J3729	0.81
● 0466005.NR	1206	5A	50A @ 32V AC / DC	T	73H0807	0.81

➤CONTINUED➤

VERY FAST-ACTING SURFACE MOUNT FUSES (CONT.)

Mfg. Part No.	Case Size	Current	Breaking Capacity	Marking	Stock No.	Price Each 1-9
0467.250NR	0603	250mA	50A @ 32V AC / DC	D	78H3486	1.04
0467.375NR	0603	375mA	50A @ 32V AC / DC	E	12J3736	1.01
0467.500NR	0603	500mA	50A @ 32V AC / DC	F	12J3737	1.01
0467.750NR	0603	750mA	50A @ 32V AC / DC	G	97H3940	0.95
0467001.NR	0603	1A	50A @ 32V AC / DC	H	12J3738	1.01
046701.5NR	0603	1.5A	35A @ 32V AC / DC	K	12J3740	1.01
0467002.NR	0603	2A	35A @ 32V AC / DC	N	12J3739	1.01
046702.5NR	0603	2.5A	35A @ 32V AC / DC	O	12J3741	1.01
0467003.NR	0603	3A	35A @ 32V AC / DC	P	96H8994	1.04
0467004.NR	0603	4A	35A @ 32V AC / DC	S	96H8997	0.95
0467005.NR	0603	5A	35A @ 32V AC / DC	T	96H9002	1.05

(178396)

0603 CERAMIC SURFACE MOUNT FUSES

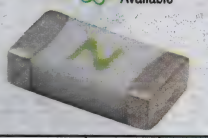
RoHS Compliant Available

Littelfuse

Expertise Applied | Answers Delivered

SMD

- Ultra high I^2t values
- Advanced ceramic body
- Interrupting rating: 50A @ 32VDC
- Operating temperature: -55°C to +150°C



Mfg. Part No.	Current (A)	Nominal Melting I^2t (A^2-sec)	Marking	Stock No.	Tape Cut 1-9	10-24	25-99	100-249
0441002.WR	2	0.3103	N	72R6749	1.17	1.04	0.94	0.82
044102.5WR	2.5	0.5520	O	72R6755	1.17	1.04	0.94	0.82
0441003.WR	3	0.8165	P	72R6750	1.17	1.04	0.94	0.82
044103.5WR	3.5	0.9438	R	72R6756	1.17	1.04	0.94	0.82
0441004.WR	4	1.2659	S	72R6751	1.17	1.04	0.94	0.82
0441005.WR	5	1.6287	T	72R6752	1.17	1.04	0.94	0.82
0441006.WR	6	2.6049	U	72R6753	1.17	1.04	0.94	0.82

(178441)

NANO²® SURFACE MOUNT FUSES WITH CLIPS

RoHS Compliant Available

Littelfuse

Expertise Applied | Answers Delivered

- 62mA to 10A current ratings
- 125V voltage rating
- Interrupting rating (<10A): 50A @ 125VAC/VDC, 300A @ 32VDC
- Interrupting rating (10A): 35A @125VAC, 50A @ 125VDC, 300A @ 32VDC
- **Sold on tape & reel**

Mfg. Part No.	Current	Blow Characteristic	Stock No.	Tape Cut 1-9	10-24	25-49	50-99
0157.062DR	62mA	Very Fast Acting	01P8848	3.06	2.78	2.62	2.24
0157.125DR	125mA	Very Fast Acting	01P8849	3.06	2.78	2.62	2.24
0157.250DR	250mA	Very Fast Acting	01P8851	2.80	2.54	2.40	2.05
0157.500DR	500mA	Very Fast Acting	01P8854	2.80	2.54	2.40	2.05
0157.750DR	750mA	Very Fast Acting	01P8856	2.48	2.24	2.12	1.81
0157001.DR	1A	Very Fast Acting	01P8858	2.48	2.24	2.12	1.81
015701.5DR	1.5A	Very Fast Acting	01P8870	2.38	2.15	2.04	1.74
0157002.DR	2A	Very Fast Acting	01P8860	2.48	2.24	2.12	1.81
0157003.DR	3A	Very Fast Acting	01P8862	2.48	2.24	2.12	1.81
0157005.DR	5A	Very Fast Acting	01P8866	2.44	2.21	2.09	1.78
015706.3DR	6.3A	Very Fast Acting	01P8877	2.38	2.15	2.04	1.74
0157007.DR	7A	Very Fast Acting	01P8868	2.48	2.24	2.12	1.81
0157008.DR	8A	Very Fast Acting	01P8869	2.48	2.24	2.12	1.81
0157010.DR	10A	Very Fast Acting	01P8872	2.64	2.39	2.27	1.93
0157.375DRT	375mA	Slow Blow	01P8853	3.28	3.00	2.77	2.38
0157.500DRT	500mA	Slow Blow	01P8855	3.22	3.00	2.67	2.46
0157.750DRT	750mA	Slow Blow	01P8857	3.19	2.89	2.74	2.33
0157001.DRT	1A	Slow Blow	01P8859	3.07	2.78	2.64	2.25
015701.5DRT	1.5A	Slow Blow	01P8871	3.07	2.78	2.64	2.25
0157002.DRT	2A	Slow Blow	01P8861	3.07	2.78	2.64	2.25
0157003.DRT	3A	Slow Blow	01P8863	3.07	2.78	2.64	2.25
0157005.DRT	5A	Slow Blow	01P8867	3.07	2.78	2.64	2.25

(138555)

OMNI-BLOK® FUSE BLOCKS WITH FUSES

RoHS Compliant Available

Littelfuse

Expertise Applied | Answers Delivered

SMD

- Permits quick and easy replacement of NANO²® surface mount fuses
- Fuse replacement accomplished without exposing the PC board to the detrimental side effects of solder heat
- Soldering parameters (fuse installed): 500°F (260°C), 30 sec.
- Solderability: MIL-STD-202, method 208
- Dimensions (H x W x L): 3.81 x 5.03 x 9.73mm
- Fuse block is not UL recognized
- **Sold on tape & reel**
- *See more Omni-blok® fuse blocks online or call for our complete line*

WITH VERY FAST-ACTING FUSE INSTALLED

Mfg. Part No.	Current (A)	Stock No.	Tape Cut 1-9	10-24	25-49	50-99
0154.062DR	62mA	44K0221	2.94	2.67	2.52	2.15
0154.125DR	125mA	66F4346	2.94	2.67	2.52	2.15
0154.250DR	250mA	03B079	2.87	2.60	2.46	2.10
0154.375DR	375mA	03B081	2.80	2.54	2.40	2.05
0154.500DR	500mA	67K0916	2.80	2.54	2.40	2.05
0154.750DR	750mA	66F4348	2.48	2.24	2.12	1.81
0154001.DR	1A	66F4349	2.38	2.15	2.04	1.74
015401.5DR	1.5A	66F4350	2.38	2.15	2.04	1.74
0154002.DR	2A	66F4351	2.38	2.15	2.04	1.74
015402.5DR	2.5A	88F3737	2.48	2.24	2.12	1.81
0154003.DR	3A	66F4352	2.38	2.15	2.04	1.74
015403.5DR	3.5A	03B093	2.38	2.15	2.04	1.74
0154004.DR	4A	03B088	2.38	2.15	2.04	1.74
0154005.DR	5A	07H2535	2.38	2.15	2.04	1.74
015406.3DR	6.3A	03B094	2.38	2.15	2.04	1.74
0154007.DR	7A	67K0918	2.38	2.15	2.04	1.74
0154008.DR	8A	32H7186	2.38	2.15	2.04	1.74
0154010.DR	10A	49H7649	2.54	2.30	2.18	1.86
WITH SLO-BLO® FUSE INSTALLED						
0154.375DRT	375mA	03B082	3.30	3.07	2.74	2.52
0154.500DRT	500mA	03B084	3.30	3.07	2.74	2.52
0154.750DRT	750mA	03B086	3.15	2.86	2.71	2.30
0154001.DRT	1A	52F9164	3.07	2.78	2.64	2.25
015401.5DRT	1.5A	67K0919	3.15	2.86	2.71	2.30
0154002.DRT	2A	52F9166	3.07	2.78	2.64	2.25
015402.5DRT	2.5A	52F9167	3.07	2.78	2.64	2.25
0154003.DRT	3A	52F9168	3.07	2.78	2.64	2.25
0154004.DRT	4A	52F9170	3.15	2.86	2.71	2.30

(9373)

0603 FAST-ACTING CERAMIC SURFACE MOUNT FUSES

RoHS Compliant Available

Littelfuse

Expertise Applied | Answers Delivered

SMD

- 250mA to 6A current ratings
- 50A interrupting current at rated voltage
- Dimensions (H x W x D): 0.502 x 0.85 x 1.54mm
- Temp. range: -55°C to 150°C
- **Sold as tape & reel**

Mfg. Part No.	Current	Voltage (V)	Stock No.	Tape Cut 1-9
0438.250WR	250mA	-999	01P9251	1.13
0438.500WR	500mA	-999	01P9253	1.21
0438.750WR	750mA	-999	01P9254	1.21
0438001.WR	1A	-999	01P9255	1.24
04381.25WR	1.25A	-999	01P9264	1.21
043801.5WR	1.5A	-999	01P9261	1.13
0438002.WR	2A	-999	01P9256	1.21
0438003.WR	3A	-999	01P9257	1.21
0438004.WR	4A	-999	01P9258	1.13
0438005.WR	5A	-999	01P9259	1.21

(137277)

multicomp AT NEWARK ELEMENT14

Affordable, performance board level & box build components at

newark.com/multicomp

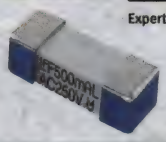
(212569)

SURFACE MOUNT FUSES

NANO²® 250V FAST-ACTING SURFACE MOUNT FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered



- Ideal for lighting systems
- Complies with IEC publication IEC60127-4-Universal Modular Fuse-Links (UMF)
- Interrupting rating: 100A @ 250VAC
- Dimensions (H x W x D): 4.5 x 4.5 x 12.1 mm
- Other current ratings are available, *go online or call*

Mfg. Part No.	Current	Stock No.	Price Each 1-9	10-24	25-99	100-249
● 0464.500DR	500mA	78J1589	1.36	1.21	1.09	0.95

(173151)

NANO²® TIME-DELAY SURFACE MOUNT FUSES WITH CLIPS

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

c UL us SMD

- Interrupting rating: 50A @ 250VAC
- Dimensions (H x W x D): 4.8 x 3.12 x 10.9 mm

% of Ampere Rating	Opening Time at 25°C
100%	4 hours Min.
250%	120 secs. Max.

Mfg. Part No.	Current	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 0160.500MR	500mA	64R7819	3.22	2.91	2.61	2.34
● 0160001.MR	1A	64R7821	3.33	3.02	2.86	2.44
● 016001.5MR	1.5A	64R7826	3.33	3.02	2.86	2.44
● 0160003.MR	3A	64R7823	3.22	2.91	2.61	2.34
● 0160005.MR	5A	64R7825	3.33	3.02	2.86	2.44

(177482)

NANO²® SLO-BLO® SURFACE MOUNT FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

c UL us SMD

- Interrupting rating: 50A @ 125VAC/VDC

% of Ampere Rating	Opening Time at 25°C
100%	4 hours Min.
200%	1 sec. Min.; 60 sec. Max.
300%	0.2 sec. Min.; 3 sec. Max
800%	0.02 sec. Min.; 0.1 sec. Max.

Mfg. Part No.	Current	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 0449.375MR	375mA	01P9276	1.65	1.49	1.44	1.23
● 0449.500MR	500mA	01P9277	1.71	1.55	1.50	1.28
● 0449.750MR	750mA	01P9278	1.71	1.55	1.50	1.28
● 044901.5MR	1.5A	01P9284	1.64	1.49	1.44	1.23
● 0449002.MR	2A	01P9280	1.71	1.55	1.50	1.28
● 044902.5MR	2.5A	01P9285	1.64	1.49	1.44	1.23
● 0449003.MR	3A	01P9281	1.65	1.49	1.44	1.23
● 0449004.MR	4A	01P9282	1.65	1.49	1.44	1.23
● 0449005.MR	5A	01P9283	1.71	1.55	1.50	1.28

(177485)

NANO²® HIGH CURRENT SURFACE MOUNT FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

c UL us SMD

% of Ampere Rating	Opening Time at 25°C
100%	4 hours Min.
200%	60 sec. Max.

➤ CONTINUED ➤

NANO²® HIGH CURRENT SURFACE MOUNT FUSES (CONT.)

Mfg. Part No.	Current	Voltage VAC	Voltage VDC	Interrupting Rating	Stock No.	Price Each 1-9
● 0456020.ER	20A	125	100	100A @ 125V AC, 300A @ 65V AC / 100V DC, 1kA @ 32V DC	96M8791	4.39
● 0456030.ER	30A	125	32	100A @ 125V AC, 300A @ 65V AC, 1kA @ 32V DC	01P9331	3.95
● 0456040.DR	40A	...	60	600A @ 60V DC	64R8027	4.89

(177486)

TELELINK® SLO-BLO® SURFACE MOUNT FUSES WITH CLIPS

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

c UL us SMD

- Interrupting rating: 60A @ 600VAC
- Dimensions (H x W x D): 4.8 x 3.12 x 10.9 mm

% of Ampere Rating	Opening Time at 25°C
100%	4 hours Min.
250%	1 sec. Min.; 120 secs. Max.

Mfg. Part No.	Current	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 0159.500MR	500mA	56P4442	3.06	2.82	2.74	2.47
● 01591.25MR	1.25A	56P4444	3.06	2.82	2.74	2.47
● 0159002.MR	2A	56P4443	3.06	2.82	2.74	2.47

(177481)

SURFACE MOUNT FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

UL CSA

Fig. 1

Fig. 2

FAST ACTING (350VAC / 125VDC)

Mfg. Part No.	Fig.	Current	Breaking Capacity	Stock No.	Price Each 1-9
● 0446002.ZRP	1	2A	100A @ 350V AC, 50A @ 125V DC, 450A @ 60V DC	16M0405	1.15
● 0446003.ZRP	1	3A	100A @ 350V AC, 50A @ 125V DC, 450A @ 60V DC	16M0406	1.14
● 0446005.ZRP	1	5A	100A @ 350V AC, 50A @ 125V DC, 450A @ 60V DC	05M2215	1.15
● 044607.5ZRP	1	7.5A	100A @ 350V AC, 50A @ 125V DC, 450A @ 60V DC	05M2217	1.14
● 0446010.ZRP	1	10A	100A @ 350V AC, 50A @ 125V DC, 450A @ 60V DC	05M2216	1.17
TIME DELAY (63VAC / 32VDC)					
● 0468.500NR	2	500mA	50A @ 63V AC / DC	93K3981	1.21
● 0468001.NR	2	1A	50A @ 63V AC / DC	12J3745	1.21
● 046801.5NR	2	1.5A	50A @ 63V AC / DC	78J1591	1.21
● 0468002.NR	2	2A	35A @ 63V AC, 50A @ 63V DC	12J3746	1.24
● 0468003.NR	2	3A	50A @ 32V AC / DC	12J3747	1.21

(177070)

1206 HIGH-INRUSH CAPACITY NANO® SURFACE MOUNT FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

UL SMD

- 1A to 10A current ratings
- Interrupting currents: 1A-6.3A (50A@75VDC) / 7A-10A (50A@63VDC)
- Dimensions (H x W x D): 1.575 x 1.575 x 3.175mm
- Temp. range: -55°C to 125°C
- **Sold as tape & reel**

Mfg. Part No.	Current	Stock No.	Tape Cut 1-9	10-24
● 0458001.DR	1A	01P9332	1.49	1.32
● 045801.5DR	1.5A	01P9339	1.34	1.21
● 045801.6DR	1.6A	01P9340	1.43	1.27
● 0458002.DR	2A	01P9333	1.47	1.30
● 045802.5DR	2.5A	01P9342	1.34	1.21
● 0458003.DR	3A	01P9334	1.39	1.26
● 04583.15DR	3.15A	01P9346	1.43	1.27
● 045803.5DR	3.5A	01P9343	1.34	1.21

➤ CONTINUED ➤

1206 HIGH-INRUSH CAPACITY NANO® SURFACE MOUNT FUSES (CONT.)

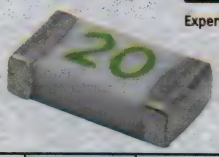
Mfg. Part No.	Current	Stock No.	Tape Cut 1-9	Tape Cut 10-24
0458004.DR	4A	01P9335	1.39	1.26
0458005.DR	5A	01P9336	1.47	1.30
045806.3DR	6.3A	01P9344	1.49	1.32
0458007.DR	7A	01P9337	1.47	1.30
0458008.DR	8A	01P9338	1.43	1.27
0458010.DR	10A	01P9341	2.12	1.92

(138551)

1206 HIGH CURRENT CAPABILITY CERAMIC SURFACE MOUNT FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered



- 150A interrupting current at 32V
- Dimensions (H x W x D): 0.835 x 1.67 x 3.118 mm
- Temp. range: -55°C to 150°C
- **Sold as tape & reel**

Mfg. Part No.	Current	Stock No.	Tape Cut 1-9	Tape Cut 10-24	Tape Cut 25-99	Tape Cut 100-249
0501015.WR	15A	01P9409	0.99	0.88	0.79	0.69
0501020.WR	20A	01P9410	0.99	0.88	0.79	0.69

Available in low profile version, with thickness of 0.502 mm height; *go online or call.*

(138552)

1206 FAST-ACTING SURFACE MOUNT FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

- Ultra high I^2t values
- Advanced ceramic body
- Interrupting rating: 50A @ 32VAC/VDC
- Operating temperature: -55°C to +150°C

Mfg. Part No.	Current (A)	Nominal Melting I^2t (A^2-sec)	Marking	Stock No.	Tape Cut 1-9	Tape Cut 10-24	Tape Cut 25-99	Tape Cut 100-249
0440.375WR	375mA	0.01455	E	64R8006	0.93	0.83	0.75	0.66
0440.750WR	750mA	0.09312	G	64R8008	0.93	0.83	0.75	0.66
0440001.WR	1A	0.21054	H	64R8009	0.93	0.83	0.75	0.66
04401.75WR	1.75A	0.3312	L	64R8020	0.96	0.85	0.77	0.68
0440002.WR	2A	0.4326	N	64R8010	0.96	0.85	0.77	0.68
044002.5WR	2.5A	0.8191	O	64R8017	0.96	0.85	0.77	0.68
0440003.WR	3A	1.232	P	64R8011	0.96	0.85	0.77	0.68
044003.5WR	3.5A	1.789	R	64R8018	0.96	0.85	0.77	0.68
0440004.WR	4A	2.601	S	64R8012	0.96	0.85	0.77	0.68
0440005.WR	5A	4.761	T	64R8013	0.96	0.85	0.77	0.68
0440007.WR	7A	8.464	W	64R8014	0.96	0.85	0.77	0.68
0440008.WR	8A	12.95	X	64R8015	0.96	0.85	0.77	0.68

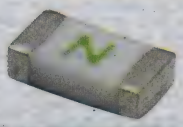
(178440)

1206 FAST-ACTING CERAMIC SURFACE MOUNT FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

% of Ampere Rating	Ampere Rating	Opening Time @ 25°C
100%	250mA - 8A	4 hours Min.
250%	750mA - 8A	5 sec Max.
350%	250mA - 500mA	6 sec Max.
350%	750mA - 8A	1 sec Max.



Mfg. Part No.	Current	Breaking Capacity	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-99
0437.250WR	250mA	50A @ 125V AC / DC	01P9235	1.00	0.89	0.80
0437.375WR	375mA	50A @ 125V AC / DC	01P9236	0.96	0.85	0.77
0437.500WR	500mA	50A @ 63V AC / DC	01P9237	1.00	0.89	0.80
0437005.WR	5A	50A @ 32V AC / DC	01P9243	0.99	0.88	0.79

(178403)

1206 SLO-BLO® SURFACE MOUNT FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

% of Ampere Rating	Ampere Rating	Opening Time at 25°C
100%	1A - 8A	4 hours Minimum
200%	1A - 8A	1 sec. Min.; 120 sec. Max.
300%	1A - 8A	0.1 sec. Min.; 3 sec. Max.
800%	1A - 8A	0.002 sec. Min.; 0.05 sec. Max.

Mfg. Part No.	Current	Voltage (VDC)	Interrupting Rating	Marking Code	Stock No.	Price Each 1-2999	Price Each 3000-5999	Price Each 6000-8999
0469001.WR	1A	63	50A @ 63V DC	H	64R8028	0.32	0.32	0.31
04691.25WR	1.25A	63	50A @ 63V DC	J	64R8039	0.32	0.32	0.31
0469004.WR	4A	32	60A @ 32V DC	S	64R8031	0.84	0.79	0.73
0469005.WR	5A	32	60A @ 32V DC	T	64R8032	0.82	0.77	0.71
0469006.WR	6A	24	60A @ 24V DC	U	64R8033	0.85	0.80	0.74
0469007.WR	7A	24	60A @ 24V DC	W	64R8034	0.86	0.80	0.74

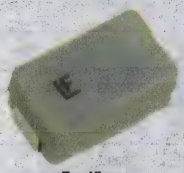
(177480)

PICO® SURFACE MOUNT FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

- Molded thermoplastic body
- Tin-plated copper terminals
- Dimensions (H x W x L): 3.05 x 4.32 x 7.24 mm



Top View

Bottom View

VERY FAST-ACTING

Mfg. Part No.	Current	Interrupting Rating	Stock No.	Price Each 1-9	Price Each 10-24
0459.062UR	62mA	50A @ 125V AC, 300A @ 125V DC	97F8270	2.93	2.66
0459.125UR	125mA	50A @ 125V AC, 300A @ 125V DC	90F9081	1.74	1.57
0459.250UR	250mA	50A @ 125V AC, 300A @ 125V DC	97F8271	1.74	1.57
0459.500UR	500mA	50A @ 125V AC, 300A @ 125V DC	97F8272	1.32	1.20
0459.750UR	750mA	50A @ 125V AC, 300A @ 125V DC	99F9293	1.27	1.16
0459001.UR	1A	50A @ 125V AC, 300A @ 125V DC	97F8273	1.31	1.19
045901.5UR	1.5A	50A @ 125V AC, 300A @ 125V DC	66F4355	1.32	1.20
0459002.UR	2A	50A @ 125V AC, 300A @ 125V DC	97F8274	1.27	1.16
045902.5UR	2.5A	50A @ 125V AC, 300A @ 125V DC	90F9089	1.28	1.16
0459003.UR	3A	50A @ 125V AC, 300A @ 125V DC	42K3321	1.31	1.19
0459004.UR	4A	50A @ 125V AC, 300A @ 125V DC	90F9091	1.27	1.16
0459005.UR	5A	50A @ 125V AC, 300A @ 125V DC	97F8277	1.32	1.20

TIME-DELAY

0460.500UR	500mA	50A @ 125V AC, 300A @ 125V DC	75R5362	2.57	2.33
0460.750UR	750mA	50A @ 125V AC, 50A @ 125V DC	75R5363	3.58	3.33
0460001.ER	1A	50A @ 125V AC, 50A @ 125V DC	78J0039	2.45	2.22
046001.5UR	1.5A	50A @ 125V AC, 50A @ 125V DC	93B5380	2.57	2.33
0460002.UR	2A	50A @ 125V AC, 50A @ 125V DC	50F3607	2.47	2.24
046002.5UR	2.5A	50A @ 125V AC, 50A @ 125V DC	78J0044	2.47	2.24
0460003.UR	3A	50A @ 125V AC, 50A @ 125V DC	07H1648	2.47	2.24
046003.5UR	3.5A	50A @ 125V AC, 50A @ 125V DC	78J0045	2.47	2.24
0460005.UR	5A	50A @ 125V AC, 50A @ 125V DC	96F8122	2.47	2.24

(177487)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

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(212570)

SURFACE MOUNT FUSES • RADIAL LEAD FUSES

UMF 250 SERIES QUICK-ACTING SURFACE MOUNT FUSES

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

SMD

- 0.5 - 10A
- 250 VAC/125 VDC
- 100A - 200A breaking capacity
- Ceramic housing
- Tin-plated copper alloy terminals
- Dimensions: 10.1 x 3 mm
- UL 248-14 standard
- CSA C22.2 no. 248.14

Mfg. Part No.	Rated Current	Rated Voltage VAC	Rated Voltage VDC	Stock No.	Price Each 1-49
● 3405.0163.11	500mA	250V	125V	64T4792	1.31
● 3405.0176.11	10A	250V	125V	64T4800	1.31

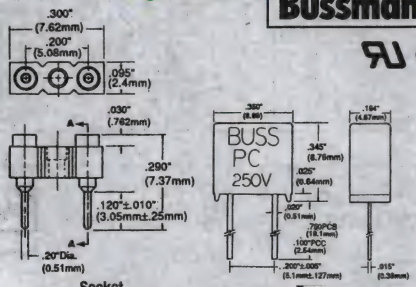
(209572)

FAST-ACTING PC BOARD FUSES

RoHS Compliant Available

COOPER Bussmann

- Ideal for line side protection
- Board washable
- UL recognized - File E19180, Guide JDYX2
- CSA certified - File 42731, Class 1422-01



Socket Fuse

PC-Tron® subminiature PC board fuses limit energy let-through. 250V. The PC-Tron subminiature fuse is UL Recognized for DC supplementary overcurrent protection to provide individual protection for components or internal circuits. **"BK/" indicates packaged in bulk.** *Order fuse socket separately below.*

0.75" (19.05) LEADS

Mfg. Part No.	Current	AC Interrupting Current @250V	AC Interrupting Current @125V	Lead Length	Stock No.	Price Each 1-9	Price Each 10-49
● BK/PCB-1/2-R	500mA	50A	10kA	0.75" (19.05)	48K9797	5.77	5.14
● BK/PCB-3/4-R	750mA	50A	10kA	0.75" (19.05)	48K9801	2.28	1.82
● BK/PCB-1-R	1A	50A	10kA	0.75" (19.05)	48K9795	5.71	5.08
● BK/PCB-1-1/2-R	1.5A	50A	10kA	0.75" (19.05)	48K9796	5.57	4.96
● BK/PCB-2-R	2A	50A	10kA	0.75" (19.05)	48K9798	2.37	1.89
● BK/PCB-2-1/2-R	2.5A	50A	10kA	0.75" (19.05)	48K9799	5.57	4.96
● BK/PCB-3-R	3A	50A	...	0.75" (19.05)	48K9800	2.34	1.87
● BK/PCC-1/2-R	500mA	50A	10kA	0.1" (2.54)	48K9804	2.34	1.87
● BK/PCC-3/4-R	750mA	50A	10kA	0.1" (2.54)	48K9808	5.57	4.96
● BK/PCC-1-R	1A	50A	10kA	0.1" (2.54)	48K9802	2.28	1.82
● BK/PCC-1-1/2-R	1.5A	50A	10kA	0.1" (2.54)	48K9803	5.77	5.14
● BK/PCC-2-R	2A	50A	10kA	0.1" (2.54)	48K9805	2.28	1.82
● BK/PCC-2-1/2-R	2.5A	50A	10kA	0.1" (2.54)	48K9806	5.77	5.14
● BK/PCC-3-R	3A	50A	10kA	0.1" (2.54)	48K9807	2.28	1.82
● BK/PCD-5-R	5A	...	10kA	0.75" (19.05)	48K9809	2.34	1.87
● BK/PCE-5-R	5A	...	10kA	0.1" (2.54)	48K9810	2.28	1.82
● BK/PCE-5-R	5A	...	10kA	0.1" (2.54)	48K9810	2.28	1.82
● BK/PCH-3/4-R	750mA	50A	10kA	0.125" (3.175)	48K9825	8.17	7.54
● BK/PCI-5-R	5A	...	10kA	0.125" (3.175)	48K9826	8.17	7.54

SOCKET FOR PC-TRON® PC BOARD FUSES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
BK/PCS	PC Board Fuse Socket	46F8594	1.48

(2321)

TECHNICAL SUPPORT HOTLINE

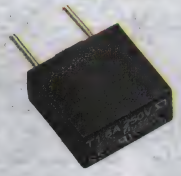
Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

TIME-DELAY SUBMINIATURE THRU-HOLE FUSES

RoHS Compliant Available

COOPER Bussmann



SS-5 series radial leaded fast-acting thru-hole fuses are internationally accepted for primary and secondary overcurrent protection. Designed to UL 248-14. Can be placed directly into PC board or plugged into **mfg part no. PCS-R** fuseholder; *order separately below.* Solderability: EIA-186-9E, Method 9. High frequency vibration: MIL-STD-202F, Method 201A. Pins are tin plated copper. Compatible with leaded and lead-free reflow and wave solder. UL recognized, CSA, VDE (500mA-4A), SEMKO, CQC, PSE (1-5A).

BULK PACK — 200 PER BAG

Mfg. Part No.	Current	Voltage (VAC)	Interrupting Current (A)*	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99
● SS-5-500MA-BK	500mA	250	35	77K7925	2.40	1.92	1.75
● SS-5-630MA-BK	630mA	250	35	77K7927	2.40	1.92	1.75
● SS-5-800MA-BK	800mA	250	35	77K7929	2.40	1.92	1.75
● SS-5-1A-BK	1A	250	35	77K7911	2.40	1.92	1.75
● SS-5-1.25A-BK	1.25A	250	35	77K7907	2.40	1.92	1.75
● SS-5-1.6A-BK	1.6A	250	35	77K7909	2.40	1.92	1.75
● SS-5-2A-BK	2A	250	35	77K7915	2.40	1.92	1.75
● SS-5-2.5A-BK	2.5A	250	35	77K7913	2.40	1.92	1.75
● SS-5-3.15A-BK	3.15A	250	35	77K7917	2.40	1.92	1.75
● SS-5-4A-BK	4A	250	40	77K7919	2.40	1.92	1.75
● SS-5-5A-BK	5A	250	50	77K7923	2.40	1.92	1.75
AMMO PACK TAPED — 1,000 PER BOX							
● SS-5-500MA-AP	500mA	250	35	77K7924	1.29	1.04	0.87
● SS-5-630MA-AP	630mA	250	35	77K7926	1.25	1.00	0.84
● SS-5-800MA-AP	800mA	250	35	77K7928	1.25	1.00	0.84
● SS-5-1A-AP	1A	250	35	77K7910	1.25	1.00	0.84
● SS-5-1.25A-AP	1.25A	250	35	77K7906	1.25	1.00	0.84
● SS-5-1.6A-AP	1.6A	250	35	77K7908	1.25	1.00	0.84
● SS-5-2A-AP	2A	250	35	77K7914	1.25	1.00	0.84
● SS-5-2.5A-AP	2.5A	250	35	77K7912	1.29	1.04	0.87
● SS-5-3.15A-AP	3.15A	250	35	77K7916	1.25	1.00	0.84
● SS-5-4A-AP	4A	250	40	77K7918	1.25	1.00	0.84
● SS-5-5A-AP	5A	250	50	77K7922	1.25	1.00	0.84

*At rated voltage

FUSE HOLDERS

Mfg. Part No.	Stock No.	Price Each 1-9	Price Each 10-99	Price Each 100-199
BK/PCS	46F8594	1.48	1.19	0.99

(94579)

TIME-DELAY SUBMINIATURE PC BOARD FUSES

RoHS Compliant Available

COOPER Bussmann

- Voltage = 250VAC

SR-5 series time-delay radial leaded subminiature fuses. Designed to IEC 60127-3. Internationally accepted for primary and secondary overcurrent protection. Can be placed directly into PC board or plugged into **PCS-R** fuseholder; *order separately below.* High inrush withstand capability. Solderability: EIA-186-9E, Method 9. High frequency vibration: MIL-STD-202F, Method 201A. Compatible with leaded and lead-free reflow and wave solder.

BULK PACK

Mfg. Part No.	Current	Interrupting Current (A)*	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99
● SR-5-50MA-BK	50mA	35	56P2701	2.85	2.28	2.09
● SR-5-100MA-BK	100mA	35	56P2687	2.85	2.28	2.09
● SR-5-200MA-BK	200mA	35	56P2693	2.85	2.28	2.09
● SR-5-315MA-BK	315mA	35	56P2697	2.03	1.62	1.49
● SR-5-500MA-BK	500mA	35	63K6462	0.78	0.63	0.53
● SR-5-630MA-BK	630mA	35	63K6464	0.75	0.61	0.51
● SR-5-1A-BK	1A	35	63K6448	0.78	0.63	0.53
● SR-5-1.25A-BK	1.25A	35	63K6444	2.03	1.62	1.49
● SR-5-1.6A-BK	1.6A	35	63K6446	2.03	1.62	1.49
● SR-5-2A-BK	2A	35	63K6452	2.03	1.62	1.49
● SR-5-2.5A-BK	2.5A	35	63K6450	0.75	0.61	0.51
● SR-5-3.15A-BK	3.15A	35	63K6454	0.78	0.63	0.53

➤CONTINUED➤

TIME-DELAY SUBMINIATURE PC BOARD FUSES (CONT.)

Mfg. Part No.	Current	Interrupting Current (A)*	Stock No.	Price Each 1-9	10-49	50-99
SR-5-4A-BK	4A	40	63K6456	0.75	0.61	0.51
SR-5-5A-BK	5A	50	63K6460	2.03	1.62	1.49

AMMO PACK

Mfg. Part No.	Current	Interrupting Current (A)*	Stock No.	Price Each 1-9	10-99	100-199
SR-5-500MA-AP	500mA	35	63K6461	0.61	0.51	0.42
SR-5-630MA-AP	630mA	35	63K6463	0.59	0.49	0.41
SR-5-800MA-AP	800mA	35	63K6465	0.59	0.49	0.41
SR-5-1A-AP	1A	35	63K6447	0.59	0.49	0.41
SR-5-1.25A-AP	1.25A	35	63K6443	0.59	0.49	0.41
SR-5-1.6A-AP	1.6A	35	63K6445	0.59	0.49	0.41
SR-5-2A-AP	2A	35	63K6451	0.61	0.51	0.42
SR-5-2.5A-AP	2.5A	35	63K6449	0.59	0.49	0.41
SR-5-3.15A-AP	3.15A	35	63K6453	1.03	0.83	0.69
SR-5-4A-AP	4A	40	63K6455	0.59	0.49	0.41
SR-5-5A-AP	5A	50	63K6459	0.59	0.49	0.41

*At rated voltage

FUSE HOLDERS

Mfg. Part No.	Stock No.	Price Each 1-9	10-99	100-199
BK/PCS	46F8594	1.48	1.19	0.99

(87954)

FAST-ACTING SUBMINIATURE THRU-HOLE FUSES

RoHS Compliant Available

COOPER Bussmann

- Accepted for primary and secondary overcurrent protection

SR-5F series radial leaded fast-acting thru-hole fuses are designed to UL 248-14. Can be placed directly into PC board or plugged into **PCS-R** fuseholder; *order separately below.* Interrupting rating @ rated voltage: 50A. Solderability: EIA-186-9E, Method 9. High frequency vibration: MIL-STD-202F, Method 201A. Pins are tin plated copper. Compatible with leaded and lead-free reflow and wave solder. **"-BK" indicates packaged in bulk.**

BULK

Mfg. Part No.	Current	Voltage (V)	Stock No.	Price Each 1-9	10-49	50-99
SR-5F-800MA-BK	800mA	250	77K7834	2.16	1.73	1.58
SR-5F-1A-BK	1A	250	77K7816	2.16	1.73	1.58
SR-5F-1.25A-BK	1.25A	250	77K7812	2.16	1.73	1.58
SR-5F-1.6A-BK	1.6A	250	77K7814	2.16	1.73	1.58
SR-5F-2A-BK	2A	250	77K7820	2.16	1.73	1.58
SR-5F-2.5A-BK	2.5A	250	77K7818	2.16	1.73	1.58
SR-5F-3.15A-BK	3.15A	250	77K7822	2.16	1.73	1.58
SR-5F-4A-BK	4A	250	77K7824	2.24	1.79	1.64
SR-5F-5A-BK	5A	250	77K7828	2.16	1.73	1.58
SR-5F-6.3A-BK	6.3A	125	20M1605	2.24	1.79	1.64
SR-5F-7A-BK	7A	125	20M1607	2.16	1.73	1.58
SR-5F-8A-BK	8A	125	20M1609	2.16	1.73	1.58
SR-5F-10A-BK	10A	125	20M1603	2.16	1.73	1.58

AMMO PACK

Mfg. Part No.	Current	Voltage (V)	Stock No.	Price Each 1-9	10-49	50-99
SR-5F-800MA-AP	800mA	250	77K7833	1.62	1.30	1.19
SR-5F-1A-AP	1A	250	77K7815	1.62	1.30	1.19
SR-5F-1.25A-AP	1.25A	250	77K7811	1.62	1.30	1.19
SR-5F-1.6A-AP	1.6A	250	77K7813	1.62	1.30	1.19
SR-5F-2A-AP	2A	250	77K7819	1.62	1.30	1.19
SR-5F-2.5A-AP	2.5A	250	77K7817	1.62	1.30	1.19
SR-5F-3.15A-AP	3.15A	250	77K7821	1.62	1.30	1.19
SR-5F-4A-AP	4A	250	77K7823	1.62	1.30	1.19
SR-5F-5A-AP	5A	250	77K7827	1.62	1.30	1.19
SR-5F-6.3A-AP	6.3A	125	20M1604	1.62	1.30	1.19
SR-5F-7A-AP	7A	125	20M1606	1.62	1.30	1.19
SR-5F-8A-AP	8A	125	20M1608	1.62	1.30	1.19
SR-5F-10A-AP	10A	125	20M1602	1.62	1.30	1.19

CONTINUED

FAST-ACTING SUBMINIATURE THRU-HOLE FUSES (CONT.)

FUSEHOLDERS

Mfg. Part No.	Stock No.	Price Each 1-9	10-99	100-199
BK/PCS	46F8594	1.48	1.19	0.99

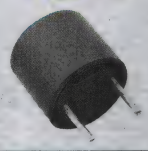
(94578)

TIME LAG MICRO FUSES

RoHS Compliant Available

COOPER Bussmann

- Time lag micro fuse
- Base and cap material is a thermoplastic, UL 94-V0
- Leads are tin-lead plated copper alloy



Mfg. Part No.	Current	Stock No.	Price Each 1-9	10-99	100-199	200-499
BK/ETF-100MA	100mA	96C9109	1.48	1.18	0.99	0.97
BK/ETF-4A	4A	83R2668	2.87	2.30	2.10	1.87

(202230)

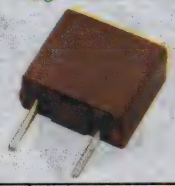
TE5® TIME-DELAY SUBMINIATURE FUSES

RoHS Compliant Available

Littelfuse

Expertise Applied | Answers Delivered

- Direct solderable or plug-in versions
- Low internal resistance
- Breaking capacity: 130A @ 250VAC
- Rated at 250V
- Temp. rating: -40°C to +125°C



% of Ampere Rating	Opening Time
150	1 Hour Minimum
210	120 Secs Maximum
275	400 ms Minimum, 10 Secs Maximum
400	150 ms Minimum, 3 Secs Maximum
1000	20 ms Minimum, 150 ms Maximum

Sold in tape/ammopack (0000 suffix) or with short leads in bulk (0440 suffix).

Mfg. Part No.	Current	Lead Length (mm)	Stock No.	Price Each 1-9	10-24	25-49	50-99
40008000000	800mA	18.8	10R0006	0.99	0.89	0.86	0.74
40011000000	1A	18.8	10R0008	1.05	0.93	0.84	0.74
40011250000	1.25A	18.8	10R0010	1.01	0.90	0.81	0.71
40011600000	1.6A	18.8	10R0012	1.05	0.93	0.84	0.74
40012000000	2A	18.8	10R0014	1.01	0.90	0.81	0.71
40012500000	2.5A	18.8	10R0016	1.05	0.93	0.84	0.74
40013150000	3.15A	18.8	10R0018	1.10	0.98	0.88	0.77
40016300000	6.3A	18.8	10R0020	1.18	1.07	1.03	0.89
40008000440	800mA	4.3	10R0007	0.90	0.82	0.79	0.73
40011000440	1A	4.3	10R0009	0.93	0.85	0.82	0.76
40011250440	1.25A	4.3	10R0011	0.90	0.82	0.79	0.73
40011600440	1.6A	4.3	10R0013	0.90	0.82	0.79	0.73
40012000440	2A	4.3	10R0015	0.92	0.84	0.81	0.75
40012500440	2.5A	4.3	10R0017	0.98	0.89	0.86	0.79
40013150440	3.15A	4.3	10R0019	1.02	0.92	0.89	0.82
40016300440	6.3A	4.3	10R0021	1.16	1.06	1.02	0.94

(148480)

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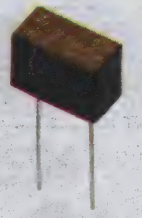
(196545)

RADIAL LEAD FUSES

TE7 807 SERIES TIME LAG RADIAL LEAD FUSES

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered



- Lead-free and RoHS compliant
- Reduced PCB space requirements
- Direct solderable or plug-in versions
- Low internal resistance
- Shock safe casing
- Vibration resistant
- Halogen free

TE7 807 Series is a time lag type sub-miniature fuse designed for overcurrent protection. It is 300V rated and designed in accordance to IEC 60127-4.

Mfg. Part No.	Current	Voltage	Voltage	Stock No.	Price Each 1-999
● 80708000000	800mA	300V	100A @ 300V AC	91T4560	1.25
● 80711000000	1A	300V	100A @ 300V AC	91T4562	1.25
● 80711250000	1.25A	300V	100A @ 300V AC	91T4564	1.25
● 80711600000	1.6A	300V	100A @ 300V AC	91T4566	1.25
● 80712000000	2A	300V	100A @ 300V AC	91T4568	1.25
● 80712500000	2.5A	300V	100A @ 300V AC	91T4570	1.25
● 80713150000	3.15A	300V	100A @ 300V AC	91T4572	1.25
● 80714000000	4A	300V	100A @ 300V AC	91T4574	1.25
● 80715000000	5A	300V	100A @ 300V AC	91T4576	1.25
● 80716300000	6.3A	300V	100A @ 300V AC	91T4578	1.25

(209575)

UNIVERSAL MODULAR TE TIME-DELAY PC BOARD FUSES

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

- Designed in accordance to IEC 60127-4
- 250V voltage rating
- 150A @ 250VAC interrupting rating
- 7.5mm lead pitch
- Operating temp: -40°C to +125°C

Sold in tape/ammopack (0000 suffix) or with short leads in bulk (0440 suffix).

Mfg. Part No.	Current	Lead Length (mm)	Stock No.	Price Each 1-9	10-99	100-249	250-499
● 80408000000	800mA	18.8	65T5259	1.58	1.50	1.42	1.34
● 80411000000	1A	18.8	65T5261	1.80	1.71	1.62	1.53
● 80411250000	1.25A	18.8	65T5263	1.58	1.50	1.42	1.34
● 80411600000	1.6A	18.8	65T5265	1.58	1.50	1.42	1.34
● 80412000000	2A	18.8	65T5267	1.74	1.66	1.57	1.48
● 80412500000	2.5A	18.8	65T5269	1.58	1.50	1.42	1.34
● 80413150000	3.15A	18.8	65T5271	1.58	1.50	1.42	1.34
● 80414000000	4A	18.8	65T5273	1.58	1.50	1.42	1.34
● 80415000000	5A	18.8	65T5275	1.80	1.71	1.62	1.53
● 80416300000	6.3A	18.8	65T5277	1.80	1.71	1.62	1.53
● 80408000440	800mA	4.3	65T5260	1.80	1.71	1.62	1.53
● 80411000440	1A	4.3	65T5262	1.80	1.71	1.62	1.53
● 80411250440	1.25A	4.3	65T5264	1.80	1.71	1.62	1.53
● 80411600440	1.6A	4.3	65T5266	1.80	1.71	1.62	1.53
● 80412000440	2A	4.3	65T5268	1.57	1.49	1.41	1.33
● 80412500440	2.5A	4.3	65T5270	1.80	1.71	1.62	1.53
● 80413150440	3.15A	4.3	65T5272	1.80	1.71	1.62	1.53
● 80414000440	4A	4.3	65T5274	1.80	1.71	1.62	1.52
● 80415000440	5A	4.3	65T5276	1.58	1.50	1.42	1.34
● 80416300440	6.3A	4.3	65T5278	1.58	1.50	1.42	1.34

(198003)

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(196560)

WICKMANN TE5® TIME-DELAY PC BOARD FUSES

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

- IEC 60127-3/IV standard
- VDE expert report, SEMKO, cULus recognized, METI-PSE, CCC, CQC approvals
- 250V voltage rating
- 5.08mm lead pitch
- Temp. range: -40°C to +85°C

Order fuse holders separately online or call. **Sold in tape/ammopack (0000 suffix) or bulk (0440 suffix).**

Mfg. Part No.	Current	Breaking Capacity @250VAC	Lead Length (mm)	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 39208000000	800mA	25A	18.8	67K2140	0.80	0.75	0.69	0.63
● 39211000000	1A	25A	18.8	67K2142	0.75	0.70	0.65	0.59
● 39211250000	1.25A	25A	18.8	67K2144	0.75	0.70	0.65	0.59
● 39211600000	1.6A	25A	18.8	67K2146	0.75	0.70	0.65	0.59
● 39212000000	2A	25A	18.8	67K2148	0.80	0.75	0.69	0.63
● 39212500000	2.5A	25A	18.8	67K2150	0.75	0.70	0.65	0.59
● 39213150000	3.15A	32A	18.8	67K2152	0.80	0.75	0.69	0.63
● 39214000000	4A	40A	18.8	67K2154	0.80	0.75	0.69	0.63
● 39215000000	5A	50A	18.8	32M4588	0.75	0.70	0.65	0.59
● 39216300000	6.3A	63A	18.8	32M4589	0.75	0.70	0.65	0.59
● 39208000440	800mA	25A	4.3	67K2141	0.86	0.79	0.76	0.70
● 39211000440	1A	25A	4.3	67K2143	0.93	0.84	0.81	0.75
● 39211250440	1.25A	25A	4.3	67K2145	0.86	0.79	0.76	0.70
● 39211600440	1.6A	25A	4.3	67K2147	0.86	0.79	0.76	0.70
● 39212000440	2A	25A	4.3	67K2149	0.86	0.79	0.76	0.70
● 39212500440	2.5A	25A	4.3	67K2151	0.93	0.84	0.81	0.75
● 39213150440	3.15A	32A	4.3	67K2153	0.86	0.79	0.76	0.70
● 39214000440	4A	40A	4.3	67K2155	0.86	0.79	0.76	0.70
● 39215000440	5A	50A	4.3	81R0730	0.83	0.75	0.73	0.67

(136307)

WICKMANN TE5® TIME-DELAY PC BOARD FUSES

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

- UL 248-14, CSA C22.2 No. 248.14 standards
- UL listed, cUL listed, METI-PSE approvals
- 125V voltage rating
- 100A @ 125VAC interrupting rating
- 5.08mm lead pitch
- Temp. range: -40°C to +85°C

Order fuse holders separately; *go online or call.* **Sold in tape/ammopack (000 suffix) or with short leads in bulk (0440 suffix).**

Mfg. Part No.	Current	Lead Length (mm)	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 39604000000	400mA	18.8	67K2217	0.83	0.76	0.73	0.67
● 39605000000	500mA	18.8	15P8387	0.89	0.81	0.78	0.72
● 39612500000	2.5A	18.8	15P8388	0.83	0.76	0.73	0.67
● 39613150000	3.15A	18.8	15P8389	0.89	0.81	0.78	0.72
● 39614000000	4A	18.8	15P8390	0.83	0.76	0.73	0.67
● 39615000000	5A	18.8	15P8391	0.83	0.76	0.73	0.67
● 39600800440	80mA	4.3	67K2204	1.32	1.20	1.15	1.06
● 39601000440	100mA	4.3	67K2206	1.17	1.06	1.03	0.95
● 39601250440	125mA	4.3	67K2208	1.17	1.06	1.03	0.95
● 39602000440	200mA	4.3	67K2212	0.97	0.89	0.86	0.79
● 39602500440	250mA	4.3	67K2214	1.02	0.93	0.90	0.83
● 39604000440	400mA	4.3	02P6720	0.97	0.89	0.86	0.79
● 39605000440	500mA	4.3	67K2220	0.97	0.89	0.86	0.79
● 39606300440	630mA	4.3	67K2222	1.05	0.95	0.92	0.85
● 39608000440	800mA	4.3	67K2224	1.05	0.95	0.92	0.85
● 39611000440	1A	4.3	67K2226	0.97	0.89	0.86	0.79
● 39611250440	1.25A	4.3	67K2228	0.97	0.89	0.86	0.79
● 39611600440	1.6A	4.3	67K2230	0.97	0.89	0.86	0.79
● 39612000440	2A	4.3	67K2232	1.05	0.95	0.92	0.85
● 39612500440	2.5A	4.3	67K2234	0.97	0.89	0.86	0.79
● 39613150440	3.15A	4.3	67K2236	1.03	0.94	0.91	0.84
● 39614000440	4A	4.3	67K2238	1.05	0.95	0.92	0.85
● 39615000440	5A	4.3	67K2240	0.97	0.89	0.86	0.79
● 39616300440	6.3A	4.3	67K2242	1.05	0.95	0.92	0.85

(136292)

WICKMANN TR5® TIME-DELAY PC BOARD FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

- IEC 60127-3/IV standard
- VDE, SEMKO, cULus recognized, METI-PSE, CCC approvals
- 250V voltage rating
- 5.08mm lead pitch
- Temp. range: -40°C to +85°C

Order fuse holders separately; *go online or call.* **Sold in tape/ammopack (0001 suffix), with short leads in bulk (0411 suffix) or with short leads in tape/reel (0431 suffix).**

Mfg. Part No.	Current	Interrupting Current @ 250VAC (A)	Lead Length (mm)	Stock No.	Price Each 1-9	10-24	25-49	50-99
37205000001	500mA	35	18.8	02P0247	0.70	0.66	0.60	0.55
37211000001	1A	35	18.8	02P0253	0.69	0.64	0.59	0.54
37213150001	3.15A	35	18.8	67K1928	0.70	0.66	0.60	0.55
37200500411	50mA	35	4.3	02P0235	1.00	0.91	0.87	0.81
37200630411	63mA	35	4.3	84M8623	1.01	0.92	0.89	0.82
37200800411	80mA	35	4.3	02P0240	0.80	0.75	0.69	0.63
37201000411	100mA	35	4.3	16M3496	0.85	0.80	0.73	0.67
37201250411	125mA	35	4.3	02P0245	0.85	0.80	0.73	0.67
37201600411	160mA	35	4.3	67K1890	0.86	0.81	0.74	0.68
37202000411	200mA	35	4.3	67K1893	0.86	0.81	0.74	0.68
37202500411	250mA	35	4.3	67K1896	0.86	0.81	0.74	0.68
37203150411	315mA	35	4.3	67K1899	0.71	0.66	0.61	0.56
37204000411	400mA	35	4.3	67K1902	0.76	0.71	0.66	0.60
37205000411	500mA	35	4.3	96M9483	0.75	0.70	0.65	0.59
37206300411	630mA	35	4.3	48M5754	0.71	0.66	0.61	0.56
37208000411	800mA	35	4.3	60M5893	0.75	0.70	0.65	0.59
37211000411	1A	35	4.3	02P0254	0.75	0.70	0.65	0.59
37211250411	1.25A	35	4.3	02P0257	0.75	0.70	0.65	0.59
37211600411	1.6A	35	4.3	77M8233	0.75	0.70	0.65	0.59
37212000411	2A	35	4.3	67K1923	0.75	0.70	0.65	0.59
37212500411	2.5A	35	4.3	67K1926	0.71	0.66	0.61	0.56
37213150411	3.15A	35	4.3	67K1929	0.75	0.70	0.65	0.59
37214000411	4A	40	4.3	67K1932	0.75	0.70	0.65	0.59
37215000411	5A	50	4.3	67K1935	0.78	0.73	0.67	0.61
37216300411	6.3A	50	4.3	67K1938	0.75	0.70	0.65	0.59
37200400431	40mA	35	4.3	67K1873	1.10	1.00	0.97	0.89
37200500431	50mA	35	4.3	02P0236	0.98	0.90	0.86	0.80
37200500431	50mA	35	4.3	98K6062	0.76	0.74	0.73	0.69
37200800431	80mA	35	4.3	02P0241	0.81	0.73	0.71	0.65
37201000431	100mA	35	4.3	02P0243	0.81	0.73	0.71	0.65
37201600431	160mA	35	4.3	15P8374	0.81	0.73	0.71	0.65
37202500431	250mA	35	4.3	15P8375	0.81	0.73	0.71	0.65
37203150431	315mA	35	4.3	15P8376	0.75	0.70	0.65	0.59
37204000431	400mA	35	4.3	67K1903	0.81	0.76	0.70	0.64
37205000431	500mA	35	4.3	02P0248	0.81	0.76	0.70	0.64
37208000431	800mA	35	4.3	02P0252	0.75	0.70	0.65	0.59
37211000431	1A	35	4.3	31M7882	0.81	0.76	0.70	0.64
37211250431	1.25A	35	4.3	02P0258	0.75	0.70	0.65	0.59
37211600431	1.6A	35	4.3	02P0260	0.75	0.70	0.65	0.59
37212000431	2A	35	4.3	15P8377	0.75	0.70	0.65	0.59
37212500431	2.5A	35	4.3	15P8378	0.75	0.70	0.65	0.59
37213150431	3.15A	35	4.3	15P8380	0.81	0.76	0.70	0.64
37214000431	4A	40	4.3	15P8381	0.75	0.70	0.65	0.59
37215000431	5A	50	4.3	15P8382	0.75	0.70	0.65	0.59
37216300431	6.3A	50	4.3	67K1939	0.81	0.76	0.70	0.64

(136301)

WICKMANN TR5® FAST-ACTING PC BOARD FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

- IEC 60127-3/III standard
- VDE, SEMKO, cULus recognized, METI-PSE, CCC approvals
- 250V voltage rating
- 5.08mm lead pitch
- Temp. range: -40°C to +85°C

Order fuse holders separately; *go online or call.* **Sold in tape/ammopack (000 suffix), with short leads in bulk (041 suffix) or with short leads in tape/reel (043 suffix).**

Mfg. Part No.	Current (A)	Interrupting Current @ 250VAC (A)	Lead Length (mm)	Stock No.	Price Each 1-9	10-24	25-49	50-99
37011000000	1.000	35	18.8	67K1843	0.73	0.69	0.63	0.58
37013150000	3.150	35	18.8	67K1858	0.73	0.69	0.63	0.58
37015000000	5.000	50	18.8	67K1865	0.74	0.70	0.64	0.59

➤CONTINUED➤

WICKMANN TR5® FAST-ACTING PC BOARD FUSES (CONT.)

Mfg. Part No.	Current (A)	Interrupting Current @ 250VAC (A)	Lead Length (mm)	Stock No.	Price Each 1-9	10-24	25-49	50-99
37000500410	0.050	35	4.3	67K1805	3.64	3.39	3.26	3.14
37000630410	0.063	35	4.3	67K1808	3.31	3.08	2.97	2.86
37001000410	0.100	35	4.3	67K1814	0.78	0.73	0.67	0.61
37001250410	0.125	35	4.3	67K1817	0.73	0.69	0.63	0.58
37001600410	0.160	35	4.3	67K1820	0.73	0.69	0.63	0.58
37002000410	0.200	35	4.3	67K1823	0.73	0.69	0.63	0.58
37002500410	0.250	35	4.3	67K1826	0.78	0.73	0.67	0.61
37003150410	0.315	35	4.3	67K1829	0.79	0.74	0.68	0.62
37004000410	0.400	35	4.3	67K1832	0.79	0.74	0.68	0.62
37005000410	0.500	35	4.3	67K1835	0.78	0.73	0.67	0.61
37006300410	0.630	35	4.3	67K1838	0.73	0.69	0.63	0.58
37008000410	0.800	35	4.3	67K1841	0.78	0.73	0.67	0.61
37011000410	1.000	35	4.3	67K1844	0.81	0.76	0.70	0.64
37011250410	1.250	35	4.3	12M6120	0.78	0.73	0.67	0.61
37011600410	1.600	35	4.3	67K1850	0.79	0.74	0.68	0.62
37012000410	2.000	35	4.3	67K1853	0.78	0.73	0.67	0.61
37012500410	2.500	35	4.3	67K1856	0.79	0.74	0.68	0.62
37013150410	3.150	35	4.3	67K1859	0.78	0.73	0.67	0.61
37014000410	4.000	40	4.3	67K1863	0.81	0.76	0.70	0.64
37015000410	5.000	50	4.3	67K1866	0.78	0.73	0.67	0.61
37016300410	6.300	63	4.3	67K1869	0.73	0.69	0.63	0.58
37000500430	0.050	35	4.3	15P8362	3.35	3.12	3.00	2.89
37001000430	0.100	35	4.3	15P8363	0.78	0.73	0.67	0.62
37002500430	0.250	35	4.3	15P8364	0.78	0.73	0.67	0.62
37003150430	0.315	35	4.3	15P8365	0.78	0.73	0.67	0.62
37011000430	1.000	35	4.3	15P8366	0.78	0.73	0.67	0.62
37011250430	1.250	35	4.3	15P8367	0.78	0.73	0.67	0.62
37011600430	1.600	35	4.3	15P8368	0.78	0.73	0.67	0.62
37012000430	2.000	35	4.3	15P8369	0.78	0.73	0.67	0.62
37012500430	2.500	35	4.3	15P8370	0.78	0.73	0.67	0.62
37013150430	3.150	35	4.3	15P8371	0.78	0.73	0.67	0.62
37014000430	4.000	40	4.3	15P8372	0.78	0.73	0.67	0.62
37015000430	5.000	50	4.3	67K1867	0.78	0.73	0.67	0.62
37016300430	6.300	63	4.3	67K1870	0.84	0.79	0.73	0.66

(136300)

WICKMANN TR5® TIME-DELAY PC BOARD FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

- UL 248-14 standards
- UL listed, cULus listed, CSA certified approvals
- 250V voltage rating
- 50A @ 250VAC interrupting rating
- Dimensions (Dia. x H): 8.5 x 8mm
- 5.08mm lead pitch
- Temp. range: -40°C to +85°C

Order fuse holders separately; *go online or call.* **Sold in tape/ammopack (000 suffix), with short leads in bulk (041 suffix) or with short leads in tape/reel (043 suffix).**

Mfg. Part No.	Current (A)	Lead Length (mm)	Stock No.	Price Each 1-9	10-24	25-49	50-99
37415000000	5.000	18.8	67K2072	0.89	0.81	0.78	0.72
37418000000	8.000	18.8	67K2078	0.89	0.81	0.78	0.72
37421000000	10.000	18.8	67K2081	0.99	0.90	0.87	0.80
37400500410	0.050	4.3	67K2013	1.46	1.33	1.28	1.18
37400800410	0.080	4.3	67K2019	1.27	1.15	1.11	1.03
37401000410	0.100	4.3	67K2022	1.36	1.24	1.20	1.10
37401250410	0,125	4.3	67K2025	1.15	1.05	1.01	0.93
37401600410	0.160	4.3	67K2028	1.14	1.03	1.00	0.92
37402000410	0.200	4.3	67K2031	1.15	1.05	1.01	0.93
37402500410	0.250	4.3	67K2034	1.07	0.97	0.94	0.87
37403150410	0.315	4.3	67K2037	1.05	0.95	0.92	0.85
37404000410	0.400	4.3	67K2040	0.88	0.80	0.77	0.71
37405000410	0.500	4.3	67K2043	0.93	0.85	0.82	0.76
37406300410	0.630	4.3	67K2046	0.88	0.80	0.77	0.71
37408000410	0.800	4.3	67K2049	0.88	0.80	0.77	0.71
37411000410	1.000	4.3	67K2052	0.93	0.85	0.82	0.76
37411250410	1.250	4.3	67K2055	0.88	0.80	0.77	0.71
37411600410	1.600	4.3	67K2058	0.88	0.80	0.77	0.71
37412000410	2.000	4.3	67K2061	0.93	0.85	0.82	0.76
37412500410	2.500	4.3	67K2064	0.95	0.86	0.83	0.77
37413150410	3.150	4.3	67K2067	0.95	0.86	0.83	0.77
37414000410	4.000	4.3	67K2070	0.97	0.88	0.85	0.78
37415000410	5.000	4.3	67K2073	0.88	0.80	0.77	0.71
37416300410	6.300	4.3	67K2076	0.88	0.80	0.77	0.71

➤CONTINUED➤

RADIAL LEAD FUSES

WICKMANN TR5® TIME-DELAY PC BOARD FUSES (CONT.)

Mfg. Part No.	Current (A)	Lead Length (mm)	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 37421000410	10.000	4.3	67K2082	0.97	0.89	0.86	0.79
● 37402000430	0.200	4.3	67K2032	1.12	1.02	0.98	0.91
● 37405000430	0.500	4.3	67K2044	0.92	0.84	0.81	0.75
● 37411000430	1.000	4.3	67K2053	0.99	0.90	0.87	0.80
● 37411250430	1.250	4.3	67K2056	0.92	0.84	0.81	0.75
● 37411600430	1.600	4.3	67K2059	0.92	0.84	0.81	0.75
● 37412000430	2.000	4.3	67K2062	0.92	0.84	0.81	0.75
● 37413150430	3.150	4.3	67K2068	0.92	0.84	0.81	0.75
● 37414000430	4.000	4.3	67K2071	0.99	0.90	0.87	0.80
● 37415000430	5.000	4.3	67K2074	0.92	0.84	0.81	0.75
● 37416300430	6.300	4.3	67K2077	0.92	0.84	0.81	0.75
● 37421000430	10.000	4.3	67K2083	1.02	0.93	0.90	0.83

(136303)

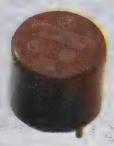
WICKMANN TR5® FAST-ACTING PC BOARD FUSES

RoHS Compliant Available

Littelfuse

Expertise Applied | Answers Delivered

- UL 248-14, CSA C22.2 No. 248.14 standards
- UL listed, CSA certified approvals
- 250V voltage rating
- 50A @ 250VAC interrupting rating
- Dimensions (Dia. x H): 8.5 x 8mm
- 5.08mm lead pitch
- Temp. range: -40°C to +85°C



Order fuse holders separately; *go online or call.* **Sold with short 4.3mm leads in bulk (041 suffix) or with short 4.3mm leads in tape/reel (043 suffix).**

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 37300500410	0.050	67K1941	3.60	3.35	3.23	3.10
● 37300800410	0.080	67K1947	3.60	3.35	3.23	3.10
● 37301000410	0.100	67K1950	0.95	0.86	0.83	0.77
● 37301250410	0.125	67K1953	0.88	0.80	0.77	0.71
● 37301600410	0.160	67K1956	0.95	0.86	0.83	0.77
● 37302000410	0.200	67K1959	0.88	0.80	0.77	0.71
● 37302500410	0.250	67K1962	0.93	0.85	0.82	0.76
● 37303150410	0.315	67K1965	0.88	0.80	0.77	0.71
● 37304000410	0.400	67K1968	0.88	0.80	0.77	0.71
● 37305000410	0.500	67K1971	0.95	0.86	0.83	0.77
● 37306300410	0.630	67K1974	0.93	0.85	0.82	0.76
● 37311000410	1.000	67K1980	0.93	0.85	0.82	0.76
● 37311250410	1.250	67K1983	0.88	0.80	0.77	0.71
● 37311600410	1.600	67K1986	0.95	0.86	0.83	0.77
● 37312000410	2.000	67K1989	0.93	0.85	0.82	0.76
● 37312500410	2.500	67K1992	0.93	0.85	0.82	0.76
● 37313150410	3.150	67K1995	0.95	0.86	0.83	0.77
● 37314000410	4.000	67K1998	0.95	0.86	0.83	0.77
● 37315000410	5.000	67K2001	0.95	0.86	0.83	0.77
● 37316300410	6.300	67K2004	0.93	0.85	0.82	0.76
● 37321000410	10.000	67K2010	0.88	0.80	0.77	0.71
● 37301000430	0.100	67K1951	0.92	0.84	0.81	0.75
● 37305000430	0.500	67K1972	0.92	0.84	0.81	0.75
● 37311000430	1.000	67K1981	0.92	0.84	0.81	0.75
● 37312000430	2.000	67K1990	0.92	0.84	0.81	0.75
● 37313150430	3.150	67K1996	0.99	0.90	0.87	0.80
● 37314000430	4.000	67K1999	0.92	0.84	0.81	0.75
● 37318000430	8.000	67K2008	0.99	0.90	0.87	0.80
● 37321000430	10.000	67K2011	0.92	0.84	0.81	0.75

(136302)

multicomp AT NEWARK ELEMENT14

Affordable, performance board level & box build components at

newark.com/multicomp

(212569)

NON RESETTABLE 250V SUBMINIATURE FUSES

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

- Rated current: 50mA to 6.3A
- Rated voltage: 250V
- Low breaking capacity: 35A
- Size:: 8.5mm diameter
- 5.08mm lead spacing
- Order fuse holder separately below

Fuse

Fuse Holder

Other rated currents are available on tape and reel; *go online or call.*

FAST-ACTING

Mfg. Part No.	Current	Stock No.	Price Each 1-9	10-24
● 0034.6001	50mA	88K2046	1.15	1.07
● 0034.6002	63mA	98B9104	1.11	1.04
● 0034.6004	100mA	35C5328	0.84	0.78
● 0034.6005	125mA	23B8407	0.84	0.78
● 0034.6008	250mA	19J7233	0.82	0.77
● 0034.6011	500mA	88K1288	0.85	0.80
● 0034.6014	1A	92B2095	0.82	0.77
● 0034.6017	2A	97B3621	0.82	0.77
● 0034.6018	2.5A	92B2090	0.84	0.78
● 0034.6019	3.5A	88K2047	0.84	0.78
● 0034.6020	4A	31C2026	0.82	0.77
● 0034.6021	5A	50B7030	0.82	0.77
TIME-DELAY				
● 0034.6603	63mA	06C0265	1.30	1.23
● 0034.6606	125mA	16F2129	0.83	0.78
● 0034.6608	200mA	16F2131	0.88	0.83
● 0034.6609	250mA	16F2132	0.89	0.84
● 0034.6611	400mA	16F2143	0.83	0.78
● 0034.6614	800mA	16F2146	0.89	0.84
● 0034.6615	1A	16F2147	0.88	0.83
● 0034.6616	1.25A	96K3183	0.88	0.83
● 0034.6617	1.6A	16F2149	0.89	0.84
● 0034.6618	2A	88K2048	0.89	0.84
● 0034.6619	2.5A	16F2151	0.89	0.84
● 0034.6620	3.15A	88K2049	0.88	0.83
● 0034.6622	5A	16F2154	0.89	0.84
● 0034.6623	6.3A	90B5409	0.89	0.84
TELECOM TIME-DELAY				
● 2040.0612	500mA	91F7241	1.24	1.18
● 2040.0615	1A	88K2122	1.24	1.18

FUSE HOLDER

Mfg. Part No.	Description	Stock No.	Price Each 1-49
● 0031.7601	Fuse Holder	92B2225	0.54

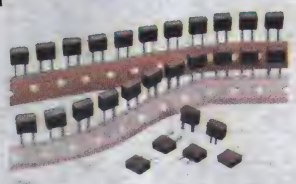
(2399)

RADIAL LEADED FAST-ACTING AND SLOW-BLOW FUSES - RECTANGULAR

RoHS Compliant Available

multicomp

- 35A or 10 x rated current (whichever is greater) @ 250VAC interrupt rating
- Tin plated alloy leads
- Black thermoplastic body
- Operating temp.: -55°C to +125°C
- SEMKO and CCC approved
- Dimensions (H x W x D): 7.7 x 8.35 x 4.3mm
- Lead pitch: 5.08mm



FAST-ACTING

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-249	250-499	500-999
● MCMSF 1A 250V	1.000	95M6618	0.58	0.52	0.47
● MCMSF 1.6A 250V	1.600	95M6617	0.58	0.52	0.47
● MCMSF 2A 250V	2.000	95M6620	0.61	0.55	0.49
● MCMSF 2.5A 250V	2.500	95M6619	0.58	0.52	0.47
● MCMSF 3.15A 250V	3.150	95M6621	0.58	0.52	0.47
● MCMSF 4A 250V	4.000	95M6622	0.61	0.55	0.49
● MCMSF 5A 250V	5.000	95M6623	0.61	0.55	0.49
● MCMSF 6.3A 250V	6.300	95M6624	0.61	0.55	0.49
SLOW-BLOW					
● MST 160MA 250V	0.160	95M6781	0.52	0.47	0.42
● MST 250MA 250V	0.250	95M6785	0.49	0.44	0.40

➤CONTINUED➤

RADIAL LEADED FAST-ACTING AND SLOW-BLOW FUSES - RECTANGULAR (CONT.)

SLOW-BLOW

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-249	250-499	500-999
MST 315MA 250V	0.315	95M6787	0.33	0.29	0.26
MST 400MA 250V	0.400	95M6789	0.33	0.29	0.26
MST 500MA 250V	0.500	95M6790	0.34	0.30	0.27
MST 630MA 250V	0.630	95M6791	0.34	0.31	0.27
MST 1A 250V	1.000	95M6780	0.34	0.31	0.27
MST 1.6A 250V	1.600	95M6779	0.33	0.29	0.26
MST 2A 250V	2.000	95M6783	0.34	0.31	0.27
MST 3.15A 250V	3.150	95M6786	0.33	0.29	0.26
MST 4A 250V	4.000	95M6788	0.33	0.29	0.26

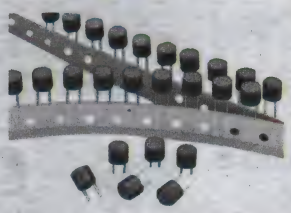
(116550)

RADIAL LEADED FAST-ACTING AND SLOW-BLOW FUSES - ROUND

RoHS Compliant Available

multicomp

- 35A or 10 x rated current (whichever is greater) @ 250VAC interrupt rating
- Tin plated alloy leads
- Black thermoplastic, UL 94-V0 body
- Operating temp.: -55°C to +125°C
- SEMKO, CCC and KTL approved
- Dimensions (Dia. x H): 8.35 x 7.7mm
- Lead pitch: 5.08mm



FAST-ACTING

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-249	250-499	500-999
MCMEF 1A 250V	1.000	08N3249	0.54	0.49	0.43
MCMEF 1.6A 250V	1.600	08N3248	0.52	0.47	0.42
MCMEF 2A 250V	2.000	08N3251	0.52	0.47	0.42
MCMEF 2.5A 250V	2.500	08N3250	0.54	0.49	0.43
MCMEF 3.15A 250V	3.150	08N3252	0.54	0.49	0.43
MCMEF 4A 250V	4.000	95M6598	0.53	0.48	0.43
MCMEF 5A 250V	5.000	95M6599	0.53	0.48	0.43
MCMEF 6.3A 250V	6.300	95M6600	0.52	0.47	0.42

SLOW-BLOW

MCMET 160MA 250V	0.160	95M6604	0.46	0.41	0.37
MCMET 200MA 250V	0.200	95M6607	0.48	0.43	0.39
MCMET 250MA 250V	0.250	95M6608	0.47	0.43	0.38
MCMET 315MA 250V	0.315	95M6610	0.48	0.43	0.39
MCMET 400MA 250V	0.400	95M6612	0.48	0.43	0.39
MCMET 500MA 250V	0.500	95M6613	0.32	0.29	0.26
MCMET 630MA 250V	0.630	95M6614	0.33	0.29	0.26
MCMET 800MA 250V	0.800	95M6615	0.31	0.28	0.25
MCMET 1A 250V	1.000	95M6603	0.32	0.29	0.26
MCMET 1.25A 250V	1.250	95M6601	0.33	0.29	0.26
MCMET 1.6A 250V	1.600	95M6602	0.33	0.29	0.26
MCMET 2A 250V	2.000	95M6606	0.33	0.29	0.26
MCMET 3.15A 250V	3.150	95M6609	0.33	0.29	0.26

(116551)

FAST-ACTING, WIRE-IN-AIR SUBMINIATURE FUSES

RoHS Compliant Available

COOPER Bussmann

- Axial leaded
- Fast-acting, wire-in-air design
- Copper lead wires
- High temperature epoxy plastic body, UL 94 V0
- Interrupt rating: 50A at 125VAC

Shock resistance: MIL-STD-202, Method 213, Test Condition 1 (Sawtooth). Vibration resistance: MIL-STD-202, Method 201 (10-55Hz x 3 axis/ no load). Moisture resistance: MIL-STD-202F, Method 106. Soldering heat resistance: 260°C, 10 sec. per IEC 68-2-20. Salt spray: MIL-STD-202, Method 101, Test Condition B (48 hours). UL Recognized. CSA Certified. **Tape & reel qty: 2500.**

Mfg. Part No.	Current	Voltage (VAC)	Tape Cut Stock No.	Price Each 1-9	10-99
TR1-MCRW100MA	100mA	125	96C9918	0.77	0.63
TR1-MCRW125MA	125mA	125	96C9920	0.77	0.63
TR1-MCRW150MA	150mA	125	96C9922	0.77	0.63
TR1-MCRW200MA	200mA	125	96C9925	0.77	0.63
TR1-MCRW250MA	250mA	125	96C9926	0.79	0.64

➤CONTINUED➤

FAST-ACTING, WIRE-IN-AIR SUBMINIATURE FUSES (CONT.)

Mfg. Part No.	Current	Voltage (VAC)	Tape Cut Stock No.	Price Each 1-9	10-99
TR1-MCRW300MA	300mA	125	96C9928	0.77	0.63
TR1-MCRW375MA	375mA	125	96C9929	0.77	0.63
TR1-MCRW500MA	500mA	125	96C9932	0.77	0.63
TR1-MCRW750MA	750mA	125	96C9934	0.80	0.65
TR1-MCRW1A	1A	125	96C9916	0.79	0.64
TR1-MCRW1-5A	1.5A	125	96C9915	0.77	0.63
TR1-MCRW2A	2A	125	96C9924	0.77	0.63
TR1-MCRW2-5A	2.5A	125	96C9923	0.77	0.63
TR1-MCRW3A	3A	125	96C9927	0.77	0.63
TR1-MCRW4A	4A	125	96C9930	0.79	0.64
TR1-MCRW5A	5A	125	96C9931	0.79	0.64
TR1-MCRW7A	7A	125	96C9933	0.77	0.63
TR1-MCRW10A	10A	125	96C9917	0.80	0.65
TR1-MCRW15A	15A	125	96C9921	0.79	0.64

(85660)

PICO® II SUBMINIATURE IC PROTECTOR FUSES

HF

RoHS Compliant Available

Littelfuse

Expertise Applied | Answers Delivered

- Designed for short circuit protection in electronic circuits
- Encapsulated, epoxy-coated body; solder coated copper wire leads
- Interrupting rating: 50A @ 125VAC/VDC
- Operating temperature: -55°C to +125°C

Mfg. Part No.	Current	Stock No.	Price Each 1-249	250-499	500-999	1000-4999
0491005.MAT1	5A	98K4544	0.49	0.44	0.40	0.36

(178436)

PICO® II VERY FAST-ACTING AXIAL LEAD FUSES

RoHS Compliant Available

Littelfuse

Expertise Applied | Answers Delivered

HF

251 series PICO® II very fast-acting axial lead fuses is designed to meet an extensive array of performance characteristics in a space-saving subminiature package. Interrupting rating: 300A at 125VDC, 50A at 125VAC. Available in rating of .0625 to 15A. Body material: encapsulated, epoxy-coated. 0.28" body length, 0.095" body diameter, 1.5" lead length, 0.025" lead diameter. Packaging tape & reel per EIA-296. UL recognized, CSA certified.

TAPE CUT / TAPE & REEL

Mfg. Part No.	Current	Tape Cut Stock No.	Price Each 1-9	10-24	Tape & Reel Stock No.	Reel Qty.	Price Each 1-9
0251005.NRT1L	5A	...	...	...	16M0075	5000	0.74

AMMO PACK

Mfg. Part No.	Current	Ammo Pack Stock No.	Price Each 1-9	10-24
0251.062MAT1L	62mA	98K4402	0.82	0.79
0251.250NAT1L	250mA	98K4403	0.52	0.49
0251001.HAT1L	1A	99M1300	0.84	0.79
025101.5MAT1L	1.5A	98K4411	0.44	0.41
0251002.MAT1L	2A	98K4406	0.85	0.76
0251003.HAT1L	3A	01P9059	0.82	0.76
0251004.MAT1L	4A	98K4408	0.44	0.41
0251005.HAT1L	5A	99M1301	0.91	0.86
0251007.MAT1L	7A	98K4410	0.44	0.41
0251015.NAT1L	15A	25R5302	0.85	0.80

(85682)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

(212570)

AXIAL LEAD FUSES

PICO® II 250V VERY FAST-ACTING AXIAL LEAD FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

Interrupting rating: 50A at rated voltage 250VAC. Available in rating of 62mA to 5A. Body material: encapsulated, epoxy-coated body; solder coated copper leads. Packaging tape and reel per EIA-296; **suffix T1** 3,000 per reel.

Mfg. Part No.	Current	Ammo PK (HAT1L Suffix)	Price Each 1-9	Bulk (MXL Suffix)	Price 1-9	Tape Cut (WRT1L Suffix)	Price Each 1-9
0263.062	...	...	...	12J4255	2.59	12J4256	2.75
0263.125	125mA	98K4430	1.84	12J4257	2.26	12J4258	2.04
0263.250	250mA	98K4431	1.86	12J4259	2.66	12J4260	2.75
0263.500	500mA	98K4433	1.09	12J4263	2.20	12J4264	2.04
0263.750	750mA	98K4434	1.96	12J4265	2.20	12J4266	2.04
0263001	1A	98K4435	1.82	12J4267	2.26	12J4268	2.04
0263002	2A	98K4436	1.82	12J4269	1.92	12J4270	1.80
0263003	3A	98K4437	1.96	12J4271	1.92	12J4272	1.80
0263005	5A	98K4439	1.82	12J4275	1.92	12J4277	1.80
026301.5	1.5A	98K4440	1.06	12J4278	1.87	12J4279	1.80

(85683)

PICO® TIME-DELAY SUBMINIATURE AXIAL LEADED FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

- 500mA to 5A current ratings
- 125V voltage rating
- 50A interrupting rating
- 52.4mm (2.062") lead length
- Temp. range: -55°C to +125°C
- **Sold on tape & reel**

Mfg. Part No.	Current	Stock No.	Tape Cut 1-9	10-24	25-49	50-99
● 0472.500MRT1L	500mA	33P9895	1.40	1.27	1.23	1.05
● 0472001.MRT1L	1A	33P9899	1.35	1.22	1.18	1.01
● 047201.5MRT1L	1.5A	33P9911	1.35	1.22	1.18	1.01
● 0472002.MRT1L	2A	33P9903	1.35	1.22	1.18	1.01
● 0472003.MRT1L	3A	33P9907	1.40	1.27	1.23	1.05
● 0472005.MRT1L	5A	01P9393	1.35	1.22	1.18	1.01

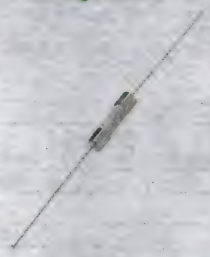
(138556)

5x20MM SLO-BLO® AXIAL LEADED FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

- Ceramic body cartridge
- Meets IEC 60127-2 spec. for time-lag fuses
- UL recognized (1A – 10A)
- CSA certified (1A – 10A)
- VDE approved (1A – 8A)
- CE compliant (1A – 10A)
- Voltage Rating 250V



Mfg. Part No.	Current (A)	Interrupting Rating	Stock No.	Price Each 1-9	10-24	25-49
● 0215001.MXESPP	1	1500 A @ 250 VAC	84R9169	0.64	0.60	0.55
● 02151.25MXESPP	1.25		84R9178	0.66	0.62	0.57
● 021501.6MXESPP	1.6		84R9174	0.64	0.60	0.55
● 0215002.MXESPP	2		84R9170	0.64	0.60	0.55
● 021502.5MXESPP	2.5		84R9176	0.64	0.60	0.55
● 02153.15MXESPP	3.15		84R9179	0.66	0.62	0.57
● 0215004.MXESPP	4		84R9171	0.64	0.60	0.55
● 0215005.MXESPP	5		84R9172	0.64	0.60	0.55
● 021506.3MXESPP	6.3		84R9177	0.64	0.60	0.55
● 0215008.MXESPP	8		84R9173	0.77	0.72	0.67
● 0215010.MXESPP	10		84R9175	0.84	0.78	0.72

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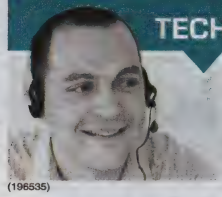
TECHNICAL SUPPORT HOTLINE



Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

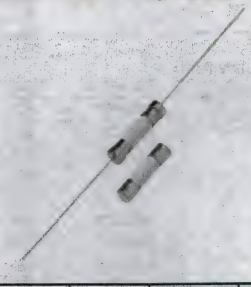
(196535)

TIME LAG, 5 x 20MM AXIAL LEAD AND CARTRIDGE FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

- DC and AC characteristics
- Ceramic body
- Interrupting rating: 100A @500VAC, 200A @ 450VDC
- SEMKO and PSE recognized



Sold individually.

Mfg. Part No.	Current	Fuse Leads	Stock No.	Price Each 1-49	50-99	100-249	250-499
● 0977.800MXEP	800mA	Leaded	31T8673	10.21	9.22	8.49	7.83
● 0977002.MXP	2A	Unleaded	31T8676	8.23	7.44	6.85	6.31
● 09773.15MXEP	3.15A	Leaded	31T8691	9.24	8.35	7.68	7.08
● 09773.15MXP	3.15A	Unleaded	31T8692	8.23	7.44	6.85	6.31
● 0977004.MXP	4A	Unleaded	31T8678	8.23	7.44	6.85	6.31
● 0977005.MXP	5A	Unleaded	31T8680	7.66	6.94	6.36	5.88
● 0977010.MXP	10A	Unleaded	31T8684	8.14	7.36	6.75	6.24

(194917)

PICO® II TIME LAG FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

PICO® II time lag fuses are designed for applications that require moderate inrush withstand. Interrupting rating: 50A at rated voltage 125VAC/VDC. Body material: encapsulated, epoxy-coated. Available ratings: .50 to 5A. UL recognized, CSA certified. Order **281 series** "push-on" retaining nut chassis mount fuseholders for MICRO® and PICO® II fuses separately online or call.

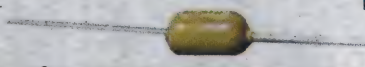
Mfg. Part No.	Current	Voltage (VAC)	Tape Cut Stock No.	Price Each 1-9	10-24
● 0471.500NRT1L	500mA	125	12J3750	1.19	1.06
● 0471001.NRT1L	1A	125	12J3752	1.24	1.10
● 0471002.NRT1L	2A	125	12J3754	1.22	1.08
● 047102.5NRT1L	2.5A	125	12J3764	1.19	1.06
● 0471003.NRT1L	3A	125	12J3756	1.19	1.06
● 0471004.NRT1L	4A	125	12J3758	1.19	1.06
● 0471005.NRT1L	5A	125	12J3760	1.22	1.08

(85696)

PICO® II SLO-BLO® FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered



PICO® II Slo-Blo® fuses combines time delay performance characteristics with the proven reliability of a PICO® fuse. Interrupting rating: 50A at rated voltage 125 VAC/VDC. Available ratings: .375 to 7A. Body material: encapsulated, epoxy-coated. Tape & reel packaging per EIA-296. UL recognized, CSA certified. Order **281 series** "push-on" retaining nut chassis mount fuseholders for MICRO® and PICO® II fuses separately on *on page 1460.*

Mfg. Part No.	Current	Voltage (VAC)	Tape Cut Stock No.	Price Each 1-9	10-24
● 0473.375MRT1L	375mA	125	53K9083	1.63	1.47
● 0473.500MRT1L	500mA	125	53K9084	1.57	1.42
● 0473.750MRT1L	750mA	125	53K9085	1.61	1.46
● 0473001.MRT1L	1A	125	53K9086	1.57	1.42
● 047301.5MRT1L	1.5A	125	53K9092	1.57	1.42
● 0473002.MRT1L	2A	125	53K9087	1.57	1.42
● 047302.5MRT1L	2.5A	125	53K9093	1.61	1.46
● 0473003.MRT1L	3A	125	53K9088	1.61	1.46
● 0473003.MXL	3A	125	64R8075	1.61	1.45
● 047303.5MRT1L	3.5A	125	53K9094	1.63	1.47
● 0473004.MRT1L	4A	125	53K9089	1.61	1.46
● 0473005.MRT1L	5A	125	53K9090	1.57	1.42
● 0473007.MRT1L	7A	125	53K9091	1.61	1.46

(85697)

2.8 x 38.1mm AXIAL LEADED VERY FAST-ACTING AND SLOW-BLOW FUSES

RoHS Compliant Available

multicomp

- Solder coated copper wire leads
- Encapsulated, epoxy-coated body
- 50A @ 125VAC interrupt rating
- 300A @ 125VDC interrupt rating (very fast-acting)
- 50A @ 125VDC interrupt rating (slow-blow)
- Operating temp.: -55°C to +125°C
- Dimensions (Dia. x L): 2.8 x 38.1mm

VERY FAST-ACTING

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-249	250-499	500-999
MCPFP 0.5A 125V	0.500	95M6640	0.56	0.50	0.45
MCPFP 1A 125V	1.000	95M6642	0.51	0.45	0.41
MCPFP 1.5A 125V	1.500	95M6641	0.56	0.50	0.45
MCPFP 2A 125V	2.000	95M6645	0.53	0.47	0.42
MCPFP 3A 125V	3.000	95M6648	0.53	0.47	0.42
MCPFP 4A 125V	4.000	95M6649	0.56	0.50	0.45
MCPFP 5A 125V	5.000	95M6650	0.53	0.47	0.42
MCPFP 8A 125V	8.000	95M6653	0.53	0.48	0.43
MCPFP 10A 125V	10.00	95M6643	0.53	0.47	0.42
SLOW-BLOW					
MCPSP 0.5A 125V	0.500	95M6661	0.71	0.64	0.57
MCPSP 1A 125V	1.000	95M6663	0.71	0.64	0.57
MCPSP 2A 125V	2.000	95M6665	0.68	0.61	0.55
MCPSP 3A 125V	3.000	95M6666	0.68	0.61	0.55

(115541)

3.18 x 38.1mm AXIAL LEADED VERY FAST-ACTING AND SLOW-BLOW FUSES

RoHS Compliant Available

multicomp

- 50A @ 250VAC interrupt rating
- Operating temp.: -55°C to +125°C
- Solder coated copper wire leads
- Encapsulated, epoxy-coated body
- Dimensions (Dia. x L): 3.18 x 38.1mm

VERY FAST-ACTING

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-249	250-499	500-999
MCPEP 0.375A 250V	0.375	95M6630	0.68	0.61	0.55
MCPEP 0.5A 250V	0.500	95M6631	0.71	0.64	0.57
MCPEP 1A 250V	1.000	95M6632	0.61	0.55	0.49
MCPEP 2A 250V	2.000	95M6633	0.58	0.52	0.47
MCPEP 3A 250V	3.000	95M6634	0.71	0.64	0.57
MCPEP 4A 250V	4.000	95M6635	0.58	0.52	0.47
MCPEP 5A 250V	5.000	95M6636	0.61	0.55	0.49
SLOW-BLOW					
MCPMP 0.5A 250V	0.500	95M6654	0.74	0.67	0.60
MCPMP 1A 250V	1.000	95M6656	0.74	0.67	0.60
MCPMP 1.25A 250V	1.250	95M6655	0.81	0.72	0.65
MCPMP 2A 250V	2.000	95M6657	0.73	0.66	0.59
MCPMP 3A 250V	3.000	95M6658	0.84	0.76	0.68
MCPMP 5A 250V	5.000	95M6659	0.73	0.66	0.59
MCPMP 7A 250V	7.000	95M6660	0.74	0.67	0.60

(116685)

GLR SERIES FAST-ACTING IN-LINE FUSES

RoHS Compliant Available

COOPER Bussmann

GLR series 300V-rated fuses for fluorescent fixtures. UL listed, CSA certified. Mount in **mfg. part no. HLR** fuse holder with preattached 6" (152.40), #18-gauge lead; *order separately below.*

Mfg. Part No.	Current Rating (A)	Stock No.	Price Each 1-9	10-49	50-99
GLR-2	2	28F304	4.47	3.98	3.81
GLR-5	5	28F308	4.47	3.98	3.81
GLR-10	10	28F034	4.62	4.11	3.93

CONTINUED

GLR SERIES FAST-ACTING IN-LINE FUSES (CONT.)

FUSE HOLDER FOR GLR SERIES FUSES

Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-24	25-49
BK/HLR	Holder & Lead	29M7932	7.17	6.62	6.34

(2349)

FAST-ACTING 5 x 15mm GLASS FUSES

RoHS Compliant Available

COOPER Bussmann

- 250 VAC
- UL Listed
- CSA Certified

Fast-acting. Glass tube, nickel-plated brass endcap construction.

Mfg. Part No.	Current	Stock No.	Price Each 1-9	10-49	50-99
BK/C520-100-R	100mA	48K9467	2.98	2.38	2.18
BK/C520-125-R	125mA	48K9468	1.32	1.06	0.88
BK/C520-250-R	250mA	48K9471	0.97	0.78	0.65
BK/C520-500-R	500mA	48K9477	0.97	0.79	0.66
BK/C520-2-R	2A	48K9470	0.96	0.78	0.65
BK/C520-2.5-R	2.5A	48K9469	2.98	2.38	2.18
BK/C520-3-R	3A	48K9473	0.66	0.55	0.46
BK/C520-3-5-R	3.5A	48K9472	2.98	2.38	2.18
BK/C520-4-R	4A	48K9475	2.86	2.29	2.10
BK/C520-5-R	5A	48K9476	0.65	0.54	0.45

(16639)

FAST-ACTING 5 x 20mm GLASS FUSES

RoHS Compliant Available

COOPER Bussmann

- Designed to IEC 60127-2 (32mA-6.3A)
- UL recognized (160mA-10A)
- Semko approved (160mA-10A)
- VDE approved (160mA-10A)

Fast-acting, low-breaking capacity. Glass tube, nickel-plated brass endcap construction. **S500-V series** with 0.032" x 1.5" copper tinned axial leads available; *go online or call.*

Mfg. Part No.	Current	Voltage (VAC)	Stock No.	Price Each 1-9	10-49	50-99
BK/S500-32-R	32mA	250	48K9866	1.80	1.44	1.31
BK/S500-40-R	40mA	250	48K9868	1.80	1.44	1.31
BK/S500-50-R	50mA	250	48K9871	5.31	4.73	4.52
BK/S500-63-R	63mA	250	48K9874	5.31	4.73	4.52
BK/S500-80-R	80mA	250	48K9877	1.80	1.44	1.31
BK/S500-100-R	100mA	250	48K9857	1.81	1.45	1.33
BK/S500-125-R	125mA	250	48K9858	1.81	1.45	1.33
BK/S500-160-R	160mA	250	48K9859	0.99	0.80	0.66
BK/S500-200-R	200mA	250	48K9862	3.63	3.23	3.09
BK/S500-250-R	250mA	250	48K9863	0.98	0.79	0.66
BK/S500-315-R	315mA	250	48K9865	0.95	0.77	0.64
BK/S500-400-R	400mA	250	48K9869	0.99	0.80	0.66
S500-500-R	500mA	250	92K9975	5.16	4.44	3.89
BK/S500-500-R	500mA	250	48K9872	0.34	0.31	0.24
BK/S500-630-R	630mA	250	48K9875	0.33	0.30	0.24
BK/S500-800-R	800mA	250	48K9878	0.35	0.31	0.25
BK/S500-1-R	1A	250	48K9855	0.34	0.31	0.24
BK/S500-1.25-R	1.25A	250	48K9853	0.35	0.31	0.25
BK/S500-1.6-R	1.6A	250	48K9854	0.35	0.31	0.25
BK/S500-2-R	2A	250	48K9861	0.34	0.31	0.24
BK/S500-2.5-R	2.5A	250	48K9860	0.34	0.31	0.24
BK/S500-3.15-R	3.15A	250	48K9864	0.34	0.31	0.24
BK/S500-4-R	4A	250	48K9867	0.34	0.31	0.24
BK/S500-5-R	5A	250	48K9870	0.33	0.30	0.24
BK/S500-6.3-R	6.3A	250	48K9873	0.34	0.31	0.24
BK/S500-8-R	8A	250	48K9876	1.09	0.87	0.73
BK/S500-10-R	10A	250	48K9856	1.09	0.87	0.73
S500-250-R	250mA	250	92K9969	1.47	1.41	1.34
S500-2-R	2A	250	92K9967	3.58	3.07	2.69

(85657)

ELECTRONIC CARTRIDGE FUSES

FAST-ACTING 5 × 20mm GLASS FUSES

RoHS Compliant Available

COOPER Bussmann

- UL Listed (63mA-6A)
- UL Recognized (7A-15A)
- CSA Certified (63mA-6A)

Fast-acting, low-breaking capacity. Glass tube, nickel-plated brass endcap construction. **GMA-V series** with 0.032: x 1.5″ copper tinned axial leads available; *go online or call.* **"BK/" indicates packaged in bulk.**

Mfg. Part No.	Current	Voltage (AC)	Stock No.	Price Each 1-9	10-49	50-99	100-249
● BK/GMA-63-R	63mA	250	48K9542	1.66	1.33	1.22	1.08
● BK/GMA-100-R	100mA	250	48K9525	0.79	0.64	0.54	0.52
● BK/GMA-125-R	125mA	250	48K9526	0.79	0.64	0.54	0.52
● BK/GMA-200-R	200mA	250	48K9530	0.83	0.68	0.57	0.54
● BK/GMA-250-R		250	48K9531	0.81*	0.66	0.55	0.53
● BK/GMA-300-R	300mA	250	48K9535	0.81	0.66	0.55	0.53
● BK/GMA-315-R	315mA	250	48K9536	0.82	0.67	0.56	0.54
● BK/GMA-500-R	500mA	250	48K9539	0.46	0.38	0.32	0.29
● BK/GMA-600-R	600mA	250	48K9541	2.06	1.71	1.43	1.30
● BK/GMA-750-R	750mA	250	48K9544	0.45	0.37	0.31	0.28
● BK/GMA-800-R	800mA	250	48K9546	0.65	0.54	0.45	0.41
● BK/GMA-1-R	1A	250	48K9523	0.38	0.31	0.26	0.24
● BK/GMA-1.25-R	1.25A	250	48K9520	0.37	0.31	0.26	0.24
● BK/GMA-1.5-R		250	48K9521	0.38	0.31	0.26	0.24
● BK/GMA-1.6-R	1.6A	250	48K9522	0.39	0.32	0.27	0.24
● BK/GMA-2-R	2A	250	48K9529	0.38	0.31	0.26	0.24
● BK/GMA-2.5-R		250	48K9528	0.37	0.30	0.25	0.23
● BK/GMA-3-R		250	48K9534	0.38	0.31	0.26	0.24
● BK/GMA-3.15-R	3.15A	125	48K9532	0.38	0.31	0.26	0.24
● BK/GMA-3.5-R	3.5A	125	48K9533	0.38	0.32	0.26	0.24
● BK/GMA-4-R		125	48K9537	0.37	0.30	0.25	0.23
● BK/GMA-5-R		125	48K9538	0.37	0.30	0.25	0.23
● BK/GMA-6-R	6A	125	48K9540	0.37	0.30	0.25	0.23
● BK/GMA-7-R	7A	125	48K9543	0.37	0.30	0.25	0.23
● BK/GMA-8-R	8A	125	48K9545	0.37	0.30	0.25	0.23
● BK/GMA-10-R		125	48K9524	0.37	0.30	0.25	0.23
● BK/GMA-15-R	15A	125	48K9527	0.37	0.30	0.25	0.23

(2317)

FAST-ACTING 5 x 20mm CERAMIC FUSES

RoHS Compliant Available

COOPER Bussmann

- Designed to IEC 60127-2
- UL recognized (50mA and 315mA-10A)
- Semko (50mA, 160mA-10A)
- VDE (50mA, 160-315mA, 80mA-10A

Fast-acting. Ceramic tube, nickel brass endcap construction. Rated voltage: 250VAC. **S501-V series** with 0.02″ x 1.5″ (50mA-5A) and 0.03″ (≥ 6.3A) copper tinned axial leads also available; *go online or call.*

Mfg. Part No.	Current	Stock No.	Price Each 1-9	10-49	50-99
● BK/S501-80-R	80mA	48K9921	5.11	4.54	4.35
● BK/S501-100-R	100mA	48K9904	1.81	1.45	1.32
● BK/S501-160-R	160mA	48K9906	1.81	1.45	1.32
● BK/S501-250-R	250mA	48K9910	4.50	4.00	3.83
● BK/S501-500-R	500mA	48K9917	1.44	1.16	0.97
● BK/S501-2-R	2A	48K9908	4.96	3.97	3.63
● BK/S501-2.5-R	2.5A	34P2527	1.39	1.12	0.93
● BK/S501-3.15-R	3.15A	48K9911	1.43	1.15	0.96
● BK/S501-4-R	4A	48K9913	1.44	1.16	0.97
● BK/S501-5-R	5A	48K9915	1.43	1.15	0.96
● BK/S501-6.3-R	6.3A	48K9918	1.43	1.15	0.96
● BK/S501-8-R	8A	77K8439	4.79	4.26	4.08
● BK/S501-10-R	10A	77K8421	3.08	2.47	2.26

(85827)

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Get inspired, collaborate, design, research, ask experts questions.

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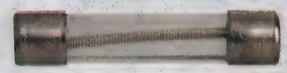
(196545)

TIME-DELAY ¼ x 1¼″ FUSES

RoHS Compliant Available

COOPER Bussmann

- UL Listed (1/16-8A)
- UL Recognized (9-30A)
- CSA Certified (1/16-8A)



Glass tube, nickel-plated brass endcap construction. **MDL-V series** with 0.032″ x 1.5″ copper tinned axial leads available; *go online or call.* **"BK/" indicates packaged in bulk.**

Mfg. Part No.	Current (A)	Voltage (VAC)	Stock No.	Price Each 1-9	10-24	25-49
● BK/MDL-1/16-R	1/16	250	48K9759	7.00	6.46	6.19
● BK/MDL-1/10-R	1/10	250	48K9758	3.20	2.56	2.34
● BK/MDL-1/8-R	1/8	250	48K9762	3.16	2.53	2.31
BK/MDL-15/100	15/100	250	96C9437	7.95	7.34	7.03
● BK/MDL-2/10-R	2/10	250	48K9772	3.20	2.56	2.34
● BK/MDL-1/4-R	1/4	250	48K9761	1.32	1.06	0.89
● BK/MDL-3/10-R	3/10	250	48K9778	1.28	1.02	0.85
● BK/MDL-3/8-R	3/8	250	48K9781	3.86	3.44	3.29
● BK/MDL-4/10-R	4/10	250	48K9784	4.01	3.57	3.42
● BK/MDL-1/2-R	1/2	250	48K9760	0.96	0.77	0.65
● BK/MDL-6/10-R	6/10	250	48K9788	1.33	1.07	0.89
● BK/MDL-7/10-R	7/10	250	48K9791	0.99	0.80	0.67
● BK/MDL-3/4-R	3/4	250	48K9780	0.96	0.78	0.65
● BK/MDL-8/10-R	8/10	250	48K9793	1.33	1.07	0.89
● BK/MDL-1-R	1	250	48K9752	0.96	0.77	0.65
● BK/MDL-1-2/10-R	1 2/10	250	48K9755	3.08	2.74	2.62
● BK/MDL-1-1/4-R	1 1/4	250	48K9754	1.35	1.08	0.90
● BK/MDL-1-1/2-R	1 1/2	250	48K9753	0.96	0.77	0.65
● BK/MDL1-6/10-R	1 6/10	250	48K9756	1.35	1.08	0.90
● BK/MDL-2-R	2	250	48K9768	0.94	0.76	0.64
● BK/MDL-2-1/4-R	2 1/4	250	48K9770	2.96	2.64	2.52
● BK/MDL-2-1/2-R	2 1/2	250	48K9769	0.96	0.77	0.65
● BK/MDL-2-8/10-R	2 8/10	250	48K9771	3.08	2.74	2.62
● BK/MDL-3-R	3	250	48K9775	0.94	0.76	0.64
● BK/MDL-3-2-10-R	3 2/10	250	48K9777	1.33	1.07	0.89
● BK/MDL-3-1/2-R	3 1/2	250	48K9776	0.96	0.78	0.65
● BK/MDL-4-R	4	250	48K9783	0.94	0.76	0.64
● BK/MDL-5-R	5	250	48K9785	0.94	0.76	0.64
● BK/MDL-6-R	6	250	48K9786	0.96	0.77	0.65
● BK/MDL-6-1/4-R	6 1/4	250	48K9787	0.96	0.78	0.65
● BK/MDL-7-R	7	250	48K9789	0.94	0.76	0.64
● BK/MDL-7-1/2-R	7 1/2	250	48K9790	0.99	0.79	0.66
● BK/MDL-8-R	8	250	48K9792	0.94	0.76	0.64
● BK/MDL-9-R	9	32	48K9794	0.95	0.77	0.65
● BK/MDL-10-R	10	32	48K9763	1.42	1.14	0.95
● BK/MDL-12-R	12	250	48K9764	4.49	3.60	3.29
● BK/MDL-15-R	15	32	48K9765	1.42	1.14	0.95
● BK/MDL-20-R	20	32	48K9773	1.34	1.08	0.90

(2325)

TIME-DELAY ¼ x 1¼″ CERAMIC FUSES

RoHS Compliant Available

COOPER Bussmann

- UL listed (3/10-20A)
- UL recognized (25-30A)
- CSA certified (3/10-15A)

Ceramic tube, nickel-plated brass endcap construction. **MDA-V series** with 0.032″ x 1.5″ (≤ 15A) and 0.04″ x 1.5″ (≥ 20A) copper tinned axial leads also available; *go online or call.* **"BK/" indicates packaged in bulk.**

Mfg. Part No.	Current (A)	Voltage (VAC)	Voltage (VDC)	Stock No.	Price Each 1-9	10-24	25-49
● BK/MDA-1-10-R	100mA	250	...	48K9683	8.32	7.68	7.36
● BK/MDA-2/10-R	200mA	250	...	48K9694	8.90	8.21	7.87
● BK/MDA-1/4-R	250mA	250	...	48K9686	1.67	1.34	1.22
● BK/MDA-4/10-R	400mA	250	...	48K9702	4.53	4.03	3.86
● BK/MDA-1/2-R	500mA	250	...	48K9685	2.37	1.90	1.73
● BK/MDA-6/10-R	600mA	250	...	48K9706	4.53	4.03	3.86
● BK/MDA-3/4-R	750mA	250	...	48K9699	4.53	4.03	3.86
● BK/MDA-8/10-R	800mA	250	...	48K9709	4.53	4.03	3.86
● BK/MDA-1-R	1A	250	...	48K9679	1.72	1.37	1.26
● BK/MDA-1-1/4-R	1.25A	250	...	48K9681	4.71	4.19	4.01
● BK/MDA-1-1/2-R	1.5A	250	...	48K9680	1.63	1.30	1.19
● BK/MDA-1-6/10-R	1.6A	250	...	48K9682	4.53	4.03	3.86
● BK/MDA-2-R	2A	250	...	48K9691	1.72	1.37	1.26
● BK/MDA-2-1/2-R	2.5A	250	...	48K9692	1.67	1.34	1.22
● BK/MDA-3-R	3A	250	...	48K9697	1.72	1.37	1.26
● BK/MDA-3-2/10-R	3.2A	250	...	48K9698	4.71	4.19	4.01
● BK/MDA-4-R	4A	250	...	48K9701	1.72	1.37	1.26
● BK/MDA-5-R	5A	250	...	48K9703	1.72	1.37	1.26

CONTINUED

TIME-DELAY ¼ x 1¼" CERAMIC FUSES (CONT.)

Mfg. Part No.	Current (A)	Voltage (VAC)	Voltage (VDC)	Stock No.	Price Each 1-9	10-24	25-49
BK/MDA-6-R	6A	250	...	48K9704	2.37	1.90	1.73
BK/MDA-6-1/4-R	6.25A	250	...	48K9705	2.37	1.90	1.73
BK/MDA-7-R	7A	250	...	48K9707	1.67	1.34	1.22
BK/MDA-8-R	8A	250	...	48K9708	1.72	1.37	1.26
BK/MDA-10-R	10A	250	...	48K9688	1.72	1.37	1.26
BK/MDA-12-R	12A	250	...	48K9689	1.72	1.37	1.26
BK/MDA-15-R	15A	250	...	48K9690	1.72	1.37	1.26
BK/MDA-20-R	20A	250	125	48K9695	1.63	1.30	1.19
BK/MDA-25A-R	25A	250	125	48K9696	1.72	1.37	1.26
BK/MDA-30A-R	30A	250	125	48K9700	4.68	4.16	3.98

(2421)

¼" x 1¼" CARTRIDGE FUSES

COOPER Bussmann

- Glass tube, electroplated brass endcap construction
- Interrupting rating equals 10 times rated current
- **TDC10** designed to British Standard BS2950A

Mfg. Part No.	Blow Characteristic	Current	Breaking Capacity	Stock No.	Price Each 1-9	10-49	50-99
TDC10 250MA	Fast Acting	250mA	2.5A @ 1kV AC	09WX6362	3.29	2.64	2.42
TDC10 60MA	Fast Acting	60mA	600mA @ 1kV DC	09WX6366	17.45	16.64	15.39
TDC11 3A	Time Delay	3A	30A @ 250V AC	09WX6376	14.05	12.92	12.63

(178387)

FAST/MEDIUM ¼ x 1" CERAMIC BRITISH PLUG TOP FUSES

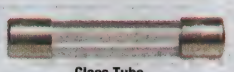
RoHS Compliant Available

COOPER Bussmann

- Asta, BSI approved
- BS1362, IEC 269-3A

Fast/medium acting 8AG British plug top fuses. Ceramic tube, silver-plated copper end caps. Weight: 2.5g.

Ceramic Tube



Glass Tube

Mfg. Part No.	Current (A)	Voltage (VAC)	Stock No.	Price Each 1-9	10-49	50-99
BK/TDC180-3	3	240	52F7560	3.50	3.11	2.98
TDC180-5	5	240	91K6651	1.29	1.05	0.87
BK/TDC180-10	10	240	52F7562	3.37	3.00	2.87
BK/TDC180-13	13	240	52F7563	1.95	1.74	1.66

¼" x 1¼" CARTRIDGE FUSES

Glass tube, electroplated brass endcap construction. Interrupting rating equals 10 times rated current. **TDC10** designed to British Standard BS2950A.

Mfg. Part No.	Blow Characteristic	Current	Breaking Capacity	Stock No.	Price Each 1-4	5-9	10-19
TDC10 60MA	Fast Acting	60mA	600mA @ 1kV DC	09WX6366	17.45	16.64	15.39
TDC10 250MA	Fast Acting	250mA	2.5A @ 1kV AC	09WX6362	3.29	2.64	2.42
TDC10 500MA	Fast Acting	500mA	5A @ 750V AC	09WX6365	3.29	2.64	2.42
TDC10 1A	Fast Acting	1A	10A @ 350V AC	09WX6352	3.29	2.64	2.42
TDC10 5A	Fast Acting	5A	50A @ 250V AC	09WX6364	3.29	2.64	2.42
TDC11 500MA	Time Delay	500mA	5A @ 750V AC	09WX6378	18.79	17.91	16.57
TDC11 3A	Time Delay	3A	30A @ 250V AC	09WX6376	14.05	12.92	12.63

(2491)

FAST-ACTING ¼ x 1" GLASS FUSES

COOPER Bussmann

- UL listed (≤ 5A)
- UL recognized (6-20A)
- BK = bulk packaging

Mfg. Part No.	Current (A)	Voltage (VAC)	Stock No.	Price Each 1-4	5-9	10-19	20-49
BK/AGX-1-100	0.01	250	07J9971	27.85	26.52	24.54	23.87
BK/AGX-1-32	0.03125	250	07J9973	28.69	27.32	25.27	24.59
BK/AGX-1-10	0.1	250	96C9066	5.47	4.87	4.66	4.19
BK/AGX-1-4	0.25	250	96C9068	1.54	1.24	1.03	1.01
BK/AGX-4-10	0.4	250	96C9072	3.17	2.82	2.70	2.42
BK/AGX-1-2	0.5	250	96C9067	1.27	1.02	0.85	0.83
BK/AGX-1	1	250	27F987	1.08	0.88	0.74	0.71
AGX-1-1/4	1.25	250	01C1281	2.20	1.76	1.61	1.43
AGX-1 1/2	1.5	250	27F988	2.20	1.76	1.61	1.43
BK/AGX-2	2	250	27F989	0.77	0.63	0.52	0.50
AGX-2-1/2	2.5	125	02J8548	2.29	1.83	1.68	1.49
BK/AGX-3	3	125	94F2187	0.75	0.61	0.51	0.49
AGX-4	4	125	94F2484	2.26	1.81	1.65	1.47
BK/AGX-5	5	250	28F049	0.58	0.48	0.40	0.37

➤CONTINUED➤

FAST-ACTING ¼ x 1" GLASS FUSES (CONT.)

Mfg. Part No.	Current (A)	Voltage (VAC)	Stock No.	Price Each 1-4	5-9	10-19	20-49
AGX-6	6	125	02J8553	1.67	1.34	1.22	1.09
BK/AGX-7	7	125	07J9977	0.75	0.61	0.51	0.49
BK/AGX-10	10	250	94F2186	0.58	0.48	0.40	0.37
BK/AGX-15	15	32	02J8547	0.56	0.46	0.39	0.35

(2326)

FAST-ACTING ¼ x 1¼" GLASS FUSES

RoHS Compliant Available

COOPER Bussmann

- UL listed (≤ 10A)
- UL recognized (11-30A)
- CSA certified

Fast-acting. Glass tube, nickel-plated brass endcap construction. **AGC-V series** with 0.032" x 1.5" copper tinned leads available; *go online or call.*

Mfg. Part No.	Current	Voltage (VAC)	Stock No.	Price Each 1-9	10-49	50-99
BK/AGC-1/10-R	100mA	250	48K9378	2.93	2.61	2.50
BK/AGC-1/8-R	125mA	250	48K9382	1.51	1.21	1.01
BK/AGC-15/100-R	150mA	250	48K9387	2.29	1.83	1.68
BK/AGC-3/16-R	187.5mA	250	48K9399	3.48	3.10	2.97
BK/AGC-2/10-R	200mA	250	48K9392	2.24	1.80	1.64
BK/AGC-1/4-R	250mA	250	48K9381	1.37	1.10	0.92
BK/AGC-3/10-R	300mA	250	48K9398	1.41	1.13	0.95
BK/AGC-3/8-R	375mA	250	48K9401	1.43	1.15	0.96
BK/AGC-4/10-R	400mA	250	48K9405	3.62	3.22	3.08
BK/AGC-1/2-R	500mA	250	48K9380	0.72	0.59	0.49
BK/AGC-6/10-R	600mA	250	48K9411	2.16	1.73	1.58
BK/AGC-3/4-R	750mA	250	48K9400	0.74	0.60	0.50
BK/AGC-8/10-R	800mA	250	48K9415	2.16	1.73	1.58
BK/AGC-1-R	1A	250	48K9372	0.43	0.36	0.30
BK/AGC-1-1/4-R	1.25A	250	48K9374	0.44	0.37	0.31
BK/AGC-1-1/2-R	1.5A	250	48K9373	0.43	0.36	0.30
BK/AGC-1-6/10-R	1.6A	250	48K9376	0.45	0.37	0.31
BK/AGC-1-8/10-R	1.8A	250	48K9377	1.25	1.00	0.84
BK/AGC-1-3/4-R	1.75A	250	48K9375	1.25	1.00	0.84
BK/AGC-2-R	2A	250	48K9389	0.43	0.36	0.30
BK/AGC-2-1/2-R	2.5A	250	48K9390	0.44	0.37	0.31
BK/AGC-3-R	3A	250	48K9395	0.43	0.36	0.30
BK/AGC-3-2/10-R	3.2A	250	48K9397	0.50	0.41	0.34
BK/AGC-3-1/2-R	3.5A	250	48K9396	0.55	0.46	0.38
BK/AGC-4-R	4A	250	48K9404	0.71	0.57	0.48
BK/AGC-5-R	5A	250	48K9407	0.68	0.56	0.47
BK/AGC-6-R	6A	250	48K9409	0.68	0.56	0.47
BK/AGC-6-1/4-R	6.25A	250	48K9410	0.70	0.58	0.49
BK/AGC-7-R	7A	250	48K9412	0.72	0.59	0.49
BK/AGC-7-1/2-R	7.5A	250	48K9413	0.94	0.76	0.64
BK/AGC-8-R	8A	250	48K9414	0.83	0.67	0.56
BK/AGC-9-R	9A	250	48K9416	1.01	0.81	0.67
BK/AGC-10-R	10A	250	48K9383	0.76	0.62	0.52
BK/AGC-12-R	12A	32	48K9384	0.49	0.41	0.34
BK/AGC-14-R	14A	32	48K9385	0.50	0.41	0.34
BK/AGC-15-R	15A	32	48K9386	0.48	0.40	0.33
BK/AGC-20-R	20A	32	48K9393	0.48	0.40	0.33
BK/AGC-25-R	25A	32	48K9394	0.49	0.41	0.34
BK/AGC-30-R	30A	32	48K9402	0.49	0.41	0.34
BK/AGC-V-1-4-R	250mA	250	48K9343	3.43	3.05	2.92
BK/AGC-V-1-2-R	500mA	250	48K9342	3.03	2.43	2.22
BK/AGC-V-3-4-R	750mA	250	48K9358	3.17	2.54	2.32
BK/AGC-V-3-R	3A	250	48K9354	2.64	2.12	1.93

(2419)

TIME-DELAY 5 x 20mm GLASS FUSES

RoHS Compliant Available

COOPER Bussmann

- Designed to IEC 60127-2 (500mA-10A)
- UL recognized (32mA-15A)
- Semko (32mA-10A)
- VDE (32mA-10A)

Time-Delay, low-breaking capacity. Glass tube, nickel-plated brass endcap construction. **S506-V series** with 0.02" x 1.5" copper tinned axial leads also available; *go online or call.*

Mfg. Part No.	Current	Voltage (VAC)	Stock No.	Price Each 1-9	10-24	25-49
BK/S506-32-R	32mA	250	48K9970	5.93	5.48	5.25
BK/S506-80-R	80mA	250	48K9980	6.15	5.67	5.44

➤CONTINUED➤

TIME-DELAY 5 x 20mm GLASS FUSES (CONT.)

Mfg. Part No.	Current	Voltage (VAC)	Stock No.	Price Each 1-9	10-24	25-49
● BK/S506-100-R	100mA	250	48K9962	1.88	1.51	1.38
● BK/S506-125-R	125mA	250	48K9963	1.27	1.02	0.85
● BK/S506-160-R	160mA	250	48K9964	1.27	1.02	0.85
● BK/S506-250-R	250mA	250	48K9968	5.28	4.88	4.67
● BK/S506-315-R	315mA	250	51K9904	1.27	1.02	0.85
● BK/S506-400-R	400mA	250	48K9973	1.83	1.47	1.34
● BK/S506-500-R	500mA	250	48K9976	0.99	0.80	0.67
● BK/S506-630-R	630mA	250	48K9979	1.31	1.05	0.88
● BK/S506-800-R	800mA	250	48K9981	1.00	0.81	0.68
● BK/S506-1-R	1A	250	48K9961	0.95	0.76	0.64
● BK/S506-1.25-R	1.25A	250	48K9959	3.69	3.28	3.14
● BK/S506-1.6-R	1.6A	250	48K9960	1.00	0.81	0.68
● BK/S506-2-R	2A	250	48K9966	0.96	0.78	0.66
● BK/S506-2.5-R	2.5A	250	48K9965	1.00	0.81	0.68
● S506-3.15-R	3.15A	250	93K0019	3.65	3.14	2.75
● BK/S506-3.15-R	3.15A	250	48K9969	0.99	0.80	0.67
● BK/S506-4-R	4A	250	48K9971	0.99	0.80	0.67
● BK/S506-5-R	5A	250	48K9974	0.96	0.78	0.66
● BK/S506-6.3-R	6.3A	250	48K9977	0.99	0.80	0.67

(85658)

MEDIUM TIME-DELAY 5 x 20mm GLASS FUSES

RoHS Compliant Available

COOPER Bussmann

- UL Listed (63mA-6.3A)
- UL Recognized (7-10A)
- CSA Certified (63mA-6.3A)

Medium time-delay, low-breaking capacity. Glass tube, nickel-plated brass endcap construction. **GMC-V series** with 0.02" x 1.5" copper tinned axial leads also available; *go online or call.*

Mfg. Part No.	Current	Voltage (VAC)	Stock No.	Price Each 1-9	10-49	50-99
● BK/GMC-63-R	63mA	250	48K9599	5.01	4.45	4.27
● BK/GMC-80-R	80mA	250	48K9604	5.80	5.16	4.94
● BK/GMC-100-R	100mA	250	48K9580	4.80	4.27	4.09
● BK/GMC-125-R	125mA	250	48K9581	1.88	1.51	1.38
● BK/GMC-150-R	150mA	250	48K9582	1.50	1.21	1.01
● BK/GMC-200-R	200mA	250	48K9585	4.62	4.11	3.93
● BK/GMC-250-R	250mA	250	48K9586	1.48	1.19	0.99
● BK/GMC-315-R	315mA	250	48K9591	1.04	0.83	0.70
● BK/GMC-500-R	500mA	250	48K9595	0.87	0.70	0.59
● BK/GMC-600-R	600mA	250	48K9598	0.87	0.71	0.59
● BK/GMC-630-R	630mA	250	48K9600	3.02	2.69	2.57
● BK/GMC-750-R	750mA	250	48K9602	1.16	0.93	0.78
BK/GMC-800MA	800mA	250	87F1595	4.01	3.56	3.41
● BK/GMC-1-R	1A	250	48K9578	0.84	0.68	0.57
● BK/GMC-1.25-R	1.25A	250	48K9575	0.87	0.71	0.59
● BK/GMC-1.5-R	1.5A	250	48K9576	0.86	0.70	0.59
● BK/GMC-1.6-R	1.6A	250	48K9577	1.16	0.93	0.78
● BK/GMC-2-R	2A	250	48K9584	0.87	0.70	0.59
● BK/GMC-2.5-R	2.5A	250	48K9583	0.89	0.72	0.60
● BK/GMC-3-R	3A	250	48K9589	0.84	0.68	0.57
● BK/GMC-3.15-R	3.15A	250	48K9587	0.84	0.68	0.57
● BK/GMC-3.5-R	3.5A	125	48K9588	1.16	0.93	0.78
● BK/GMC-4-R	4A	125	48K9592	0.84	0.68	0.57
● BK/GMC-5-R	5A	125	48K9594	0.84	0.68	0.57
● BK/GMC-6-R	6A	125	48K9597	0.86	0.70	0.59
● BK/GMC-6.3-R	6.3A	125	48K9596	0.86	0.70	0.59
● BK/GMC-7-R	7A	125	48K9601	1.12	0.90	0.75
● BK/GMC-8-R	8A	125	48K9603	0.89	0.72	0.60
● BK/GMC-10-R	10A	125	48K9579	0.84	0.68	0.57

(2318)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

TIME-DELAY 5 x 20mm GLASS FUSES

RoHS Compliant Available

COOPER Bussmann

- UL listed (125mA-3A)
- UL recognized (4A)
- CSA certified

Time-delay, low-breaking capacity. Glass tube, nickel-plated brass endcap construction. **GMD-V series** with 0.02" x 1.5" copper tinned axial leads also available; *go online or call.*

Mfg. Part No.	Current	Voltage (VAC)	Stock No.	Price Each 1-9	10-49	50-99
● BK/GMD-125-R	125mA	250	48K9630	5.62	5.00	4.79
● BK/GMD-150-R	150mA	250	48K9631	2.36	1.89	1.72
● BK/GMD-200-R	200mA	250	48K9634	1.11	0.89	0.75
● BK/GMD-250-R	250mA	250	48K9635	1.11	0.89	0.75
● BK/GMD-300-R	300mA	250	48K9637	1.46	1.30	1.24
● BK/GMD-315-R	315mA	250	48K9638	5.43	4.83	4.62
● BK/GMD-500-R	500mA	250	48K9641	0.89	0.72	0.60
● BK/GMD-600-R	600mA	250	48K9642	0.90	0.73	0.61
● BK/GMD-630-R	630mA	250	48K9643	3.29	2.93	2.80
● BK/GMD-750-R	750mA	250	48K9644	3.17	2.82	2.70
● BK/GMD-800-R	800mA	250	48K9645	3.17	2.82	2.70
● BK/GMD-1-R	1A	250	48K9629	0.87	0.70	0.59
● BK/GMD-1.2-R	1.2A	250	48K9625	3.51	3.13	2.99
● BK/GMD-1.5-R	1.5A	250	48K9627	0.89	0.73	0.61
● BK/GMD-1.6-R	1.6A	250	48K9628	3.29	2.93	2.80
● BK/GMD-2-R	2A	250	48K9633	0.87	0.70	0.59
● BK/GMD-2.5-R	2.5A	250	48K9632	0.89	0.72	0.60
● BK/GMD-3-R	3A	250	48K9636	0.89	0.73	0.61
● BK/GMD-4-R	4A	250	48K9639	0.87	0.70	0.59

(85661)

VERY FAST-ACTING ¼ x 1-¼" CERAMIC FUSES

RoHS Compliant Available

COOPER Bussmann

Very fast acting. Ceramic tube, nickel-plated brass endcap construction.

Mfg. Part No.	Current (A)	Voltage (VAC)	Stock No.	Price Each 1-9	10-49	50-99
● BK/GBB-1-R	1	250	48K9479	5.03	4.48	4.29
● BK/GBB-2-R	2	250	48K9485	5.10	4.54	4.34
● BK/GBB-3-R	3	250	48K9487	5.03	4.48	4.29
● BK/GBB-4-R	4	250	48K9489	5.03	4.48	4.29
● BK/GBB-6-R	6	250	48K9490	13.66	12.52	12.24
● BK/GBB-8-R	8	250	48K9491	13.66	12.52	12.24
● BK/GBB-9-R	9	250	48K9492	13.66	12.52	12.24
● BK/GBB-10-R	10	250	48K9481	6.95	6.42	6.15
● BK/GBB-12-R	12	250	48K9482	13.66	12.52	12.24
● BK/GBB-15-R	15	250	48K9483	4.91	4.36	4.18
● BK/GBB-20-R	20	250	48K9486	6.79	6.27	6.01
● BK/GBB-30-R	30	250	48K9488	6.79	6.27	6.01

(2324)

FAST-ACTING ¼ x 1¼" CERAMIC FUSES

RoHS Compliant Available

COOPER Bussmann

- UL Listed (¼-15A)
- UL Recognized (20-30A)
- CSA Certified

Fast-acting. Ceramic tube, nickel-plated brass endcap construction. **ABC-V series** with 0.032" (0-15A) or 0.04" (20-30A) copper tinned axial leads also available; *go online or call.*

Mfg. Part No.	Current (A)	Voltage (VAC)	Stock No.	Price Each 1-9	10-49	50-99
● BK/ABC-1/4-R	¼	250	48K9318	2.42	2.15	2.06
● BK/ABC-1/2-R	½	250	48K9317	2.42	2.15	2.06
● BK/ABC-3/4-R	¾	250	48K9328	3.11	2.76	2.65
● BK/ABC-1-R	1	250	48K9315	1.02	0.82	0.68
● BK/ABC-1-1/2-R	1½	250	48K9316	0.98	0.79	0.66
● BK/ABC-2-R	2	250	48K9323	0.97	0.78	0.65
● BK/ABC-2-1/2-R	2½	250	48K9324	2.96	2.64	2.52
● BK/ABC-3-R	3	250	48K9327	0.97	0.78	0.65
● BK/ABC-4-R	4	250	48K9330	1.36	1.09	0.91
● BK/ABC-5-R	5	250	48K9331	0.95	0.77	0.65
● BK/ABC-6-R	6	250	48K9332	0.98	0.79	0.66
● BK/ABC-7-R	7	250	48K9333	1.29	1.04	0.87

CONTINUED

FAST-ACTING ¼ x 1¼" CERAMIC FUSES (CONT.)

Mfg. Part No.	Current (A)	Voltage (VAC)	Stock No.	Price Each 1-9	10-49	50-99
BK/ABC-8-R	8	250	48K9334	0.98	0.79	0.66
BK/ABC-10-R		250	48K9319	0.97	0.78	0.65
BK/ABC-12-R	12	250	48K9320	0.97	0.78	0.65
BK/ABC-15-R		250	48K9321	0.93	0.75	0.62
BK/ABC-18-R	18	250	48K9322	2.00	1.60	1.47
BK/ABC-20-R	20	250	48K9325	1.39	1.12	0.93
BK/ABC-25-R	25	125	48K9326	1.35	1.08	0.91
BK/ABC-30-R	30	250	48K9329	1.35	1.08	0.91

(2422)

FAST-ACTING 3AB ELECTRONIC CARTRIDGE FUSES

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

- 6.3 x 32 mm
- Ceramic body
- Axial leaded (38.1 mm single lead length)

Mfg. Part No.	Current	Voltage (VAC)	Breaking Capacity	Stock No.	Price Each 1-9
0505010.MXEP	10A	450	20kA @ 450V AC, 1kA @ 250V DC	01P9411	3.72
0505012.MXEP	12A	450	20kA @ 450V AC, 1kA @ 250V DC	56P4453	3.65
0505015.MXEP	15A	500	...	01P9413	3.36
0505016.MXEP	16A	500	50kA @ 500V AC, 20kA @ 500V DC	01P9415	4.42
0505020.MXEP	20A	500	30kA @ 500V AC, 20kA @ 500V DC	01P9417	4.42
0505025.MXEP	25A	500	30kA @ 500V AC, 20kA @ 500V DC	01P9419	5.00
0505030.MXEP	30A	500	30kA @ 500V AC, 20kA @ 500V DC	01P9421	5.12

(175892)

3AB SLO-BLO® CARTRIDGE FUSES

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

- UL listed (125mA - 10A)
- UL recognized (12A - 30A)
- CSA certified (125mA - 30A)
- CE compliant (125mA - 30A)

3AB Slo-Blo® cartridge fuses permit higher interrupting rating and voltage rating. Ideal for applications where high-current loads are expected. Ceramic body. Available ratings: 0.010 to 30A. Interrupting ratings: 0.010-20A, 10,000A at 125 VAC, 25-30A at 400A at 250 VAC, 0.010-3.2A , 100A at 250 VAC, 4-20A, 400A at 250 VAC.

Mfg. Part No.	Current Rating	Voltage Rating (V)	Stock No.	Price Each 1-9	10-24	25-49
0326.010HXP	10mA	250	26K8669	4.10	3.82	3.68
0326.100HXP	100mA	250	26K8672	4.10	3.82	3.68
0326.200HXP	200mA	250	26K8677	1.86	1.69	1.63
0326.250HXP	250mA	250	26K8678	1.84	1.67	1.61
0326.300HXP	300mA	250	26K8679	1.86	1.69	1.63
0326.400HXP	400mA	250	26K8681	1.79	1.63	1.57
0326.500HXP	500mA	250	26K8682	1.84	1.67	1.61
0326.600HXP	600mA	250	26K8683	1.79	1.63	1.57
0326.750HXP	750mA	250	26K8685	1.79	1.63	1.57
0326.800HXP	800mA	250	26K8686	1.79	1.63	1.57
0326001.HXP	1A	250	26K8687	1.79	1.63	1.57
03261.25HXP	1.25A	250	26K8706	1.79	1.63	1.57
032601.5HXP	1.5A	250	26K8695	1.84	1.67	1.61
0326002.HXP	2A	250	26K8688	1.79	1.63	1.57
032602.5HXP	2.5A	250	26K8700	1.84	1.67	1.61
0326003.HXP	3A	250	26K8689	1.79	1.63	1.57
032603.2HXP	3.2A	250	26K8704	1.86	1.69	1.63
0326004.HXP	4A	250	26K8690	1.84	1.67	1.61
0326005.HXP	5A	250	26K8691	1.79	1.63	1.57
0326005.MXP	5A	250	42K9876	1.71	1.55	1.50
03266.25HXP	6.25A	250	26K8707	1.79	1.63	1.57
0326007.HXP	7A	250	26K8692	1.84	1.67	1.61
0326008.HXP	8A	250	26K8693	1.79	1.63	1.57
0326010.HXP	10A	250	26K8697	1.79	1.63	1.57
0326010.MXP	10A	250	42K9882	1.75	1.59	1.54
0326012.HXP	12A	250	26K8698	1.79	1.63	1.57
0326015.HXP	15A	250	26K8699	1.79	1.63	1.57
0326020.HXP	20A	250	26K8702	1.79	1.63	1.57
0326025.HXP	25A	250	26K8703	1.86	1.69	1.63
0326030.HXP	30A	250	26K8705	1.84	1.67	1.61

(85692)

3AB SLO-BLO® AXIAL-LEAD TYPE FUSES

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

- UL Listed (0.125A - 10A)
- UL Recognized (12A - 30A)
- CSA Certified (0.125A - 30A)
- CE Compliant (0.125A - 30A)

3AB slo-blo axial-lead fuses permits higher interrupting rating and voltage rating. Ideal for applications where high current loads are expected. Ceramic body. Available rating: 0.010 to 30A. Interrupting rating: 0.010-20A, 10,000A at 125 VAC, 25-30A at 400A at 250 VAC, 0.010-3.2A , 100A at 250 VAC, 4-20A, 400A at 250 VAC, RoHS compliant.

Mfg. Part No.	Current	Voltage (V)	Stock No.	Price Each 1-9	10-24	25-49	50-99
0325.500HXP	500mA	250	26K8643	2.47	2.25	2.17	2.00
0325001.HXP	1A	250	26K8648	2.47	2.25	2.17	2.00
032501.5HXP	1.5A	250	26K8656	2.47	2.25	2.17	2.00
0325002.HXP	2A	250	26K8649	2.57	2.33	2.25	2.08
0325005.HXP	5A	250	26K8652	2.47	2.25	2.17	2.00
0325008.HXP	8A	250	26K8654	2.47	2.25	2.17	2.00
0325010.HXP	10A	250	26K8658	2.57	2.33	2.25	2.08
0325012.HXP	12A	250	26K8659	2.57	2.33	2.25	2.08
0325015.HXP	15A	250	26K8660	2.47	2.25	2.17	2.00
0325020.HXP	20A	250	26K8663	2.47	2.25	2.17	2.00
0325020.MXP	20A	250	42K9848	2.44	2.22	2.15	1.98
0325030.MXP	30A	250	42K9851	2.44	2.22	2.15	1.98

(85691)

3AG SLO-BLO® AXIAL LEAD FUSES

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

- UL listed (0 - 8A)
- CSA certified (0 - 8A)
- UL recognized (10 - 30A)
- CE compliant

3AG Slo-Blo® fast-acting axial lead fuses meet a broad range of circuit protection applications. Glass body. Available ratings: 0.010 to 30A. Interrupting ratings: 0.01-8A, 1000A @ 125 VAC; 00.1-1A, 35A @ 250 VAC; 1.2-3.2A, 100A @ 250 VAC; 4-8A, 200A @ 250 VAC; 10-30A, 300A @ 32 VAC.

Mfg. Part No.	Current	Voltage (V)	Stock No.	Price Each 1-9	10-24	25-49
0315.200HXP	200mA	250	26K8531	1.56	1.42	1.37
0315.250HXP	250mA	250	26K8532	1.63	1.48	1.43
0315.300HXP	300mA	250	26K8533	1.56	1.42	1.37
0315.500HXP	500mA	250	26K8536	1.56	1.42	1.37
0315001.HXP	1A	250	26K8541	1.56	1.42	1.37
03151.25HXP	1.25A	250	26K8562	1.56	1.42	1.37
031501.5HXP	1.5A	250	26K8549	1.63	1.48	1.43
0315002.HXP	2A	250	26K8542	1.63	1.48	1.43
031502.5HXP	2.5A	250	26K8555	1.63	1.48	1.43
0315003.HXP	3A	250	26K8543	1.56	1.42	1.37
0315004.HXP	4A	250	26K8544	1.56	1.42	1.37
0315005.HXP	5A	250	26K8545	1.61	1.46	1.41
0315007.HXP	7A	250	26K8546	1.63	1.48	1.43
0315008.HXP	8A	250	26K8547	1.61	1.46	1.41
0315010.HXP	10A	32	26K8552	1.63	1.48	1.43
0315020.HXP	20A	32	26K8557	2.13	1.93	1.87
0315030.HXP	30A	32	26K8560	2.21	2.01	1.94

(85687)

3AG SLO-BLO® CARTRIDGE FUSES

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

- UL listed (0 - 8A)
- CSA certified (0 - 8A)
- UL recognized (10 - 30A)
- CE compliant

313P series 3AG Slo-Blo® fast-acting cartridge fuses meet a broad range of circuit protection applications. Glass body. Available ratings: 0.010 to 30A. Interrupting ratings: 0.01-8A, 1000A @ 125 VAC; 00.1-1A, 35A @ 250 VAC; 1.2-3.2A, 100A @ 250 VAC; 4-8A, 200A @ 250 VAC; 10-30A, 300A @ 32 VAC.

Mfg. Part No.	Current	Voltage (V)	Stock No.	Price Each 1-9	10-24	25-49
0313.010HXP	10mA	250	26K8460	4.08	3.80	3.66
0313.031HXP	31mA	250	26K8471	4.08	3.80	3.66
0313.040HXP	40mA	250	26K8461	4.13	3.85	3.70
0313.062HXP	62.5mA	250	26K8462	2.32	2.11	2.03
0313.100HXP	100mA	250	26K8463	2.26	2.05	1.98
0313.125HXP	125mA	250	26K8464	2.26	2.05	1.98
0313.150HXP	150mA	250	26K8465	2.34	2.13	2.06

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3AG SLO-BLO® CARTRIDGE FUSES (CONT.)

Mfg. Part No.	Current	Voltage (V)	Stock No.	Price Each 1-9	10-24	25-49
0313.175HXP	175mA	250	26K8466	1.36	1.23	1.19
0313.187HXP	187.5mA	250	26K8467	1.36	1.23	1.19
0313.200HXP	200mA	250	26K8468	1.34	1.22	1.18
0313.250HXP	250mA	250	26K8469	1.31	1.19	1.15
0313.250MXP	250mA	250	42K9656	1.24	1.13	1.09
0313.300HXP	300mA	250	26K8470	1.31	1.19	1.15
0313.375HXP	375mA	250	26K8472	1.34	1.22	1.18
0313.400HXP	400mA	250	26K8473	1.36	1.23	1.19
0313.500HXP	500mA	250	26K8474	0.99	0.90	0.87
0313.500MXP	500mA	250	42K9660	0.97	0.89	0.86
0313.600HXP	600mA	250	26K8475	1.02	0.93	0.90
0313.700HXP	750mA	250	26K8476	1.03	0.94	0.91
0313.750HXP	750mA	250	26K8477	0.99	0.90	0.87
0313.800HXP	800mA	250	26K8478	1.03	0.94	0.91
0313001.HXP	1A	250	26K8479	0.99	0.90	0.87
0313001.MXP	1A	250	42K9665	0.95	0.86	0.83
031301.2HXP	1.2A	250	26K8486	0.99	0.90	0.87
03131.25HXP	1.25A	250	26K8500	0.99	0.90	0.87
031301.5HXP	1.5A	250	26K8487	0.99	0.90	0.87
031301.6HXP	1.6A	250	26K8488	1.02	0.93	0.90
031301.8HXP	1.8A	250	26K8489	0.99	0.90	0.87
0313002.HXP	2A	250	26K8480	0.99	0.90	0.87
0313002.MXP	2A	250	42K9666	0.97	0.89	0.86
03132.25HXP	2.25A	250	26K8501	1.03	0.94	0.91
031302.5HXP	2.5A	250	26K8493	0.99	0.90	0.87
031302.8HXP	2.8A	250	26K8494	0.99	0.90	0.87
0313003.HXP	3A	250	26K8481	0.99	0.90	0.87
0313003.MXP	3A	250	42K9667	0.97	0.89	0.86
031303.2HXP	3.2A	250	26K8497	0.99	0.90	0.87
0313004.HXP	4A	250	26K8482	1.14	1.04	1.00
0313004.MXP	4A	250	42K9668	1.12	1.02	0.98
0313005.HXP	5A	250	26K8483	1.14	1.04	1.00
0313005.MXP	5A	250	42K9669	1.09	0.99	0.96
03136.25HXP	6.25A	250	26K8502	1.14	1.04	1.00
031306.3HXP	6.3A	250	26K8499	1.14	1.04	1.00
0313007.HXP	7A	250	26K8484	1.14	1.04	1.00
0313008.HXP	8A	250	26K8485	1.14	1.04	1.00
0313010.HXP	10A	32	26K8490	1.14	1.04	1.00
0313012.HXP	12A	32	26K8491	1.18	1.08	1.04
0313015.HXP	15A	32	26K8492	1.14	1.04	1.00
0313020.HXP	20A	32	26K8495	1.49	1.36	1.31
0313025.HXP	25A	32	26K8496	1.49	1.36	1.31
0313030.HXP	30A	32	26K8498	1.46	1.32	1.28

(85685)

3AB FAST-ACTING CARTRIDGE FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

- 250 VAC
- UL listed (0.125A - 15A)
- UL recognized (20A - 30A)
- CSA certified (0.125A - 20A)
- CE compliant (0.125A - 30A)

3AB fast-acting cartridge fuses permit higher interrupting rating and voltage rating. Ideal for applications where high-current loads are expected. Ceramic body. Available ratings: 0.125 to 30A. Interrupting ratings: 0.125-20A, 10,000A at 125 VAC, 20-30A at 400A at 250 VAC, 0.125-0.75A , 35A at 250 VAC, 1-3A, 100A at 250 VAC, 4-15A, 750A at 250VAC, 20A, 1,000A at 250VAC, 200A at 300 VAC, 25-30A, 100A at 250 VAC.

Mfg. Part No.	Current	Stock No.	Price Each 1-9	10-24	25-49	50-99
0314.500HXP	500mA	26K8506	0.99	0.90	0.87	0.80
0314.750HXP	750mA	26K8507	0.97	0.88	0.85	0.78
0314001.HXP	1A	26K8508	0.97	0.88	0.85	0.78
0314002.HXP	2A	26K8509	0.97	0.88	0.85	0.78
0314002.MXP	2A	25R5398	0.44	0.41	0.39	0.37
0314003.HXP	3A	26K8510	0.99	0.90	0.87	0.80
0314004.HXP	4A	26K8511	0.97	0.88	0.85	0.78
0314005.HXP	5A	26K8512	0.97	0.88	0.85	0.78
0314006.HXP	6A	26K8513	1.01	0.91	0.88	0.81
0314007.HXP	7A	26K8514	1.01	0.91	0.88	0.81
0314008.HXP	8A	26K8515	0.97	0.88	0.85	0.78
0314008.MXP	8A	25R5404	0.44	0.42	0.41	0.38
0314010.HXP	10A	26K8516	0.97	0.88	0.85	0.78
0314012.HXP	12A	26K8517	0.99	0.90	0.87	0.80
0314015.HXP	15A	26K8518	0.97	0.88	0.85	0.78

➤CONTINUED➤

3AB FAST-ACTING CARTRIDGE FUSES (CONT.)

Mfg. Part No.	Current	Stock No.	Price Each 1-9	10-24	25-49	50-99
0314015.MXP	15A	42K9704	0.94	0.86	0.83	0.76
0314020.HXP	20A	26K8519	1.43	1.30	1.26	1.16
0314020.MXP	20A	42K9705	1.40	1.27	1.23	1.13
0314025.HXP	25A	26K8520	1.43	1.30	1.26	1.16
0314025.MXP	25A	42K9706	1.42	1.29	1.24	1.15
0314030.HXP	30A	26K8521	1.47	1.34	1.29	1.19
0314030.MXP	30A	25R5409	0.69	0.66	0.65	0.60

(85686)

312P SERIES 3AG FAST-ACTING CARTRIDGE FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

- UL listed (8 - 30A)
- CSA certified (8 - 30A)
- CE compliant

312P series 3AG fast-acting cartridge fuses meet a broad range of circuit protection applications. Glass body. Available ratings: 0.032 to 30A.

Mfg. Part No.	Current	Voltage (V)	Breaking Capacity	Stock No.	Price Each 1-9	10-24
0312.062HXP	62mA	250	35A @ 250V AC, 10kA @ 125V AC	26K8431	2.12	1.93
0312.100HXP	100mA	250	35A @ 250V AC, 10kA @ 125V AC	26K8432	2.12	1.93
0312.125HXP	125mA	250	35A @ 250V AC, 10kA @ 125V AC	26K8433	1.23	1.12
0312.150HXP	150mA	250	35A @ 250V AC, 10kA @ 125V AC	26K8434	1.26	1.15
0312.175HXP	175mA	250	35A @ 250V AC, 10kA @ 125V AC	26K8435	1.23	1.12
0312.187HXP	187.5mA	250	35A @ 250V AC, 10kA @ 125V AC	26K8436	1.23	1.12
0312.200HXP	200mA	250	35A @ 250V AC, 10kA @ 125V AC	26K8437	1.28	1.16
0312.250HXP	250mA	250	35A @ 250V AC, 10kA @ 125V AC	26K8438	1.23	1.12
0312.300HXP	300mA	250	35A @ 250V AC, 10kA @ 125V AC	26K8439	1.26	1.15
0312.375HXP	375mA	250	35A @ 250V AC, 10kA @ 125V AC	26K8440	0.39	0.37
0312.500HXP	500mA	250	35A @ 250V AC, 10kA @ 125V AC	26K8441	0.38	0.36
0312.600HXP	600mA	250	35A @ 250V AC, 10kA @ 125V AC	26K8442	0.40	0.37
0312.750HXP	750mA	250	35A @ 250V AC, 10kA @ 125V AC	26K8443	0.39	0.37
0312001.HXP	1A	250	35A @ 250V AC, 10kA @ 125V AC	26K8444	0.38	0.36
03121.25HXP	1.25A	250	100A @ 250V AC, 10kA @ 125V AC	26K8457	0.40	0.37
031201.5HXP	1.5A	250	100A @ 250V AC, 10kA @ 125V AC	26K8452	0.38	0.36
031201.6HXP	1.6A	250	100A @ 250V AC, 10kA @ 125V AC	26K8453	0.40	0.37
03121.75HXP	1.75A	250	100A @ 250V AC, 10kA @ 125V AC	26K8458	0.40	0.37
031201.8HXP	1.8A	250	100A @ 250V AC, 10kA @ 125V AC	26K8454	0.38	0.36
0312002.HXP	2A	250	100A @ 250V AC, 10kA @ 125V AC	26K8445	0.38	0.36
03122.25HXP	2.25A	250	100A @ 250V AC, 10kA @ 125V AC	26K8459	0.38	0.36
031202.5MXP	2.5A	250	100A @ 250V AC, 10kA @ 125V AC	26K8456	0.38	0.35
0312003.HXP	3A	250	100A @ 250V AC, 10kA @ 125V AC	26K8446	0.38	0.36
0312004.HXP	4A	250	200A @ 250V AC, 10kA @ 125V AC	26K8447	0.38	0.36
0312005.HXP	5A	250	200A @ 250V AC, 10kA @ 125V AC	26K8448	0.38	0.36
0312006.HXP	6A	250	200A @ 250V AC, 10kA @ 125V AC	26K8449	0.38	0.36
0312007.HXP	7A	250	200A @ 250V AC, 10kA @ 125V AC	26K8450	0.38	0.36
0312008.HXP	8A	250	200A @ 250V AC, 10kA @ 125V AC	26K8451	0.38	0.36
0312010.HXP	10A	250	200A @ 250V AC, 10kA @ 125V AC	26K8455	0.38	0.36
0312015.HXP	15A	32	300A @ 32V AC	93K3657	0.72	0.68

(85684)

5 x 20mm FAST-ACTING CARTRIDGE FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

Leaded

Unleaded

- 32mA to 15A current ratings
- 250V voltage rating
- 35A interrupting rating
- Designed to international IEC standards
- Meets the IEC 60127-2, Sheet 2 specifications for fast-acting fuses

UL recognized (32mA - 6.3A), CSA certified (32mA - 6.3A), CE compliant (50mA - 15A), British BSI licence (400mA - 6.3A) SEMKO approved (32mA - 6.3A). More axial lead current ratings available; *go online or call.* **Sold in bulk.**

Mfg. Part No.	Current	Fuse Leads	Stock No.	Price Each 1-9	10-24	25-49	50-99
0217001.MXEP	1A	Leaded	26K8000	0.92	0.84	0.81	0.75
0217.032HXP	32mA	Unleaded	26K7972	1.86	1.69	1.63	1.51

➤CONTINUED➤

5 x 20mm FAST-ACTING CARTRIDGE FUSES (CONT.)

Mfg. Part No.	Current	Fuse Leads	Stock No.	Price Each 1-9	10-24	25-49	50-99
0217.050HXP	50mA	Unleaded	26K7975	1.91	1.74	1.68	1.55
0217.063HXP	63mA	Unleaded	26K7977	1.91	1.74	1.68	1.55
0217.080HXP	80mA	Unleaded	26K7979	1.12	1.02	0.98	0.91
0217.100HXP	100mA	Unleaded	26K7981	1.09	0.99	0.96	0.88
0217.125HXP	125mA	Unleaded	26K7983	1.12	1.02	0.98	0.91
0217.160HXP	160mA	Unleaded	26K7985	1.14	1.03	1.00	0.92
0217.200HXP	200mA	Unleaded	26K7987	1.09	0.99	0.96	0.88
0217.250HXP	250mA	Unleaded	26K7989	1.09	0.99	0.96	0.88
0217.315HXP	315mA	Unleaded	26K7991	1.12	1.02	0.98	0.91
0217.400HXP	400mA	Unleaded	26K7993	0.37	0.35	0.32	0.29
0217.500P	500mA	Unleaded	50M5583	0.27	0.24	0.22	0.20
0217.500HXP	500mA	Unleaded	26K7995	0.36	0.33	0.31	0.28
0217.630HXP	630mA	Unleaded	26K7997	0.37	0.34	0.31	0.29
0217.800HXP	800mA	Unleaded	26K7999	0.37	0.34	0.31	0.29
0217001.HXP	1A	Unleaded	26K8001	0.36	0.33	0.31	0.28
02171.25HXP	1.25A	Unleaded	26K8022	0.37	0.34	0.31	0.29
021701.6HXP	1.6A	Unleaded	26K8011	0.37	0.35	0.32	0.29
0217002.HXP	2A	Unleaded	26K8003	0.36	0.33	0.31	0.28
021702.5HXP	2.5A	Unleaded	26K8018	0.36	0.33	0.31	0.28
02173.15HXP	3.15A	Unleaded	26K8024	0.36	0.33	0.31	0.28
0217004.HXP	4A	Unleaded	26K8005	0.36	0.33	0.31	0.28
0217005.P	5A	Unleaded	50M5589	0.23	0.21	0.19	0.17
0217005.HXP	5A	Unleaded	26K8007	0.36	0.33	0.31	0.28
021706.3HXP	6.3A	Unleaded	26K8020	0.36	0.33	0.31	0.28
0217008.HXP	8A	Unleaded	26K8009	0.36	0.33	0.31	0.28
0217010.P	10A	Unleaded	50M5591	0.27	0.24	0.22	0.20
0217010.HXP	10A	Unleaded	26K8013	0.36	0.33	0.31	0.28
0217015.HXP	15A	Unleaded	26K8015	0.37	0.34	0.31	0.29
0217.250MXP	250mA	Unleaded	42K9348	1.07	0.97	0.94	0.86
0217005.MXP	5A	Unleaded	42K9357	0.35	0.33	0.30	0.28
0217010.MXP	10A	Unleaded	42K9360	0.35	0.32	0.30	0.27
0217015.MXP	15A	Unleaded	42K9361	0.35	0.32	0.30	0.27

(85670)

3.6 x 10 mm SLO-BLO® AXIAL LEADED CARTRIDGE FUSES

RoHS Compliant Available

Littelfuse®
Expertise Applied | Answers Delivered

- 100mA to 10A current ratings
- 250V voltage rating
- 3.6 x 10 mm fuse size
- Single pigtail axial lead format
- Ceramic body material
- Designed to UL/CSA 248 standard (**875 series**)
- Designed to meet IEC 60127-3 standard sheet 4 (**877 series**)

Mfg. Part No.	Current	Interrupting Current Max (A)	Stock No.	Price Each 1-9	10-24	25-49
0875.100MXEP	100mA	50	01P9479	2.74	2.50	2.41
0875.125MXEP	125mA	50	01P9481	2.74	2.50	2.41
0875.200MXEP	200mA	50	01P9483	2.74	2.50	2.41
0875.250MXEP	250mA	50	01P9485	2.74	2.50	2.41
0875.500MXEP	500mA	50	01P9491	2.19	1.99	1.92
0875.800MXEP	800mA	50	01P9495	2.19	1.99	1.92
0875001.MXEP	1A	50	01P9497	2.11	1.92	1.85
087501.5MXEP	1.5A	50	01P9507	2.14	1.95	1.88
087501.6MXEP	1.6A	50	01P9509	2.14	1.95	1.88
0875002.MXEP	2A	50	01P9499	2.06	1.87	1.81
087502.5MXEP	2.5A	50	01P9511	2.06	1.87	1.81
0875003.MXEP	3A	50	01P9501	2.14	1.95	1.88
0875004.MXEP	4A	50	01P9503	2.06	1.87	1.81
0875005.MXEP	5A	50	01P9505	2.11	1.92	1.85
0877002.MXEP	2A	35	06R1585	1.46	1.33	1.28
08773.15MXEP	3.15A	35	06R1588	1.42	1.29	1.25
0877004.MXEP	4A	40	06R1586	1.42	1.29	1.25
087706.3MXEP	6.3A	63	06R1587	1.48	1.35	1.30

(147156)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

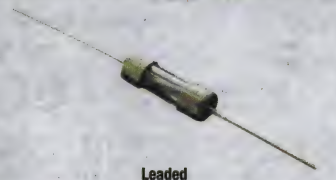
newark.com/custom-panel-meters

(212570)

2AG FAST-ACTING CARTRIDGE FUSES

RoHS Compliant Available

Littelfuse®
Expertise Applied | Answers Delivered



Leaded

Unleaded

- Same performance as standard 3AG in ⅓ space
- Glass body material
- Amp rating at 100%, 4 hour min.; 135%, 1 hour max.; 200%, 1 second max.
- Interrupting ratings: 10,000A @ 125VAC (⅛-10A), 35A @ 250VAC (⅛-1A), 100A @ 250VAC (1.5-3.5A)

Sold in bulk (HXP, MXP) or on tape & reel (T1P, T3W).

BULK PACKAGING

Mfg. Part No.	Current	Voltage (V)	Fuse Leads	Stock No.	Price Each 1-9	10-24	25-49	50-99
0224.375HXP	375mA	250	Leaded	26K8097	0.89	0.81	0.79	0.72
0224.500HXP	500mA	250	Leaded	26K8101	0.93	0.85	0.82	0.75
0224001.HXP	1A	250	Leaded	26K8109	0.93	0.85	0.82	0.75
022401.5HXP	1.5A	250	Leaded	26K8141	0.89	0.81	0.79	0.72
0224002.HXP	2A	250	Leaded	26K8113	0.93	0.85	0.82	0.75
022402.5HXP	2.5A	250	Leaded	26K8149	0.89	0.81	0.79	0.72
0224003.HXP	3A	250	Leaded	26K8117	0.89	0.81	0.79	0.72
0224004.HXUP	4A	125	Leaded	34P0205	0.96	0.87	0.84	0.78
0224005.HXUP	5A	250	Leaded	80K9083	0.93	0.85	0.82	0.75
0224006.HXUP	6A	125	Leaded	39M4821	0.93	0.85	0.82	0.75
0224008.HXUP	8A	125	Leaded	34P0206	0.89	0.81	0.79	0.72
0224010.HXUP	10A	125	Leaded	82K8230	0.93	0.85	0.82	0.75
0225.375HXP	375mA	250	Unleaded	26K8160	0.64	0.60	0.55	0.50
0225.500HXP	500mA	250	Unleaded	26K8161	0.64	0.60	0.55	0.50
0225.750HXP	750mA	250	Unleaded	26K8162	0.65	0.61	0.56	0.52
0225001.HXP	1A	250	Unleaded	26K8163	0.65	0.61	0.56	0.52
022501.5HXP	1.5A	250	Unleaded	26K8172	0.65	0.61	0.56	0.52
0225002.HXP	2A	250	Unleaded	26K8164	0.65	0.61	0.56	0.52
022502.5HXP	2.5A	250	Unleaded	26K8174	0.64	0.60	0.55	0.50
0225003.HXP	3A	250	Unleaded	26K8165	0.64	0.60	0.55	0.50
022503.5HXP	3.5A	250	Unleaded	26K8175	0.66	0.62	0.57	0.52
0225004.HXUP	4A	250	Unleaded	45M6217	0.68	0.63	0.58	0.53
0225005.HXUP	5A	250	Unleaded	80K7740	0.67	0.63	0.58	0.53
0225006.HXUP	6A	125	Unleaded	06M6464	0.68	0.63	0.58	0.53
0225007.HXUP	7A	125	Unleaded	79K3487	0.68	0.63	0.58	0.53
0225008.HXUP	8A	125	Unleaded	51M2265	0.68	0.63	0.58	0.53
0225010.HXUP	10A	125	Unleaded	93K7474	0.68	0.63	0.58	0.53

TAPE & REEL

Mfg. Part No.	Current	Voltage (V)	Fuse Leads	Stock No.	Tape Cut 1-9
0224001.DRT1P	1A	250	Leaded	53K8959	1.08

(85673)

6 X 32MM 3AB FAST-ACTING 1000V AC/DC HIGH VOLTAGE FUSES

RoHS Compliant Available

Littelfuse®
Expertise Applied | Answers Delivered

- 10kA interrupting rating
- Protection from high-energy short-circuits
- UL recognized (315mA - 500mA)
- CE certified (315mA - 500mA)

Mfg. Part No.	Current Rating	Voltage Rating (V)	Interrupting Rating	Stock No.	Price Each 1-9	10-24	25-49
0508.315MXP	0.315	1000	10kA @ 1000Vac 10kA @ 1000Vdc	76R0549	7.20	6.70	6.45
0508.500MXP	0.5	1000		76R0551	7.20	6.70	6.45

(189689)

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Affordable, performance board level & box build components at

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(212569)

ELECTRONIC CARTRIDGE FUSES

3AB FAST-ACTING AXIAL-LEAD TYPE FUSES

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

- 250 VAC
- UL Listed (0.125A - 15A)
- UL Recognized (20A - 30A)
- CSA Certified (0.125A - 20A)
- CE Compliant (0.125A - 30A)

324P series 3AB fast-acting axial-lead fuses permits higher interrupting rating and voltage rating. Ideal for applications where high current loads are expected. Ceramic body. Available rating: 0.125 to 30A. Interrupting rating: 0.125-20A, 10,000A at 125 VAC, 20-30A at 400A at 250 VAC, 0.125-0.75A , 35A at 250 VAC, 1-3A, 100A at 250 VAC, 4-15A, 750A at 250VAC, 20A, 1,000A at 250VAC, 200A at 300 VAC, 25-30A, 100A at 250 VAC. RoHS compliant.

Mfg. Part No.	Current	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 0324.500HXP	500mA	26K8614	1.79	1.63	1.57	1.45
● 0324.750HXP	750mA	26K8615	1.72	1.57	1.51	1.39
● 0324001.HXP	1A	26K8616	1.72	1.57	1.51	1.39
● 0324002.HXP	2A	26K8617	1.79	1.63	1.57	1.45
● 0324003.HXP	3A	26K8618	1.72	1.57	1.51	1.39
● 0324005.HXP	5A	26K8620	1.72	1.57	1.51	1.39
● 0324008.HXP	8A	26K8623	1.72	1.57	1.51	1.39
● 0324010.HXP	10A	26K8624	1.72	1.57	1.51	1.39
● 0324012.HXP	12A	26K8625	1.79	1.63	1.57	1.45
● 0324015.HXP	15A	26K8626	1.77	1.61	1.55	1.43
● 0324015.MXP	15A	42K9811	1.64	1.49	1.44	1.33
● 0324020.HXP	20A	26K8627	2.34	2.13	2.06	1.89
● 0324020.MXP	20A	42K9812	2.20	2.00	1.94	1.78
● 0324025.HXP	25A	26K8628	2.31	2.10	2.03	1.87
● 0324030.HXP	30A	26K8629	2.34	2.13	2.06	1.89

(85690)

5x20mm SLO-BLO® CARTRIDGE FUSES

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

Leaded

Unleaded

- 20mA to 10A current ratings
- 250V voltage rating
- 1500A interrupting rating
- Ceramic body material
- Designed to international IEC standards
- Meet IEC 60127-2, Sheet 5 specifications for time-lag fuses

UL recognized (50mA - 12A), CSA certified (50mA - 12A), CE compliant (200mA - 12A), British BSI licence (200mA - 6.3A), SEMKO (200mA - 10A). **Sold in bulk.**

Mfg. Part No.	Current	Fuse Leads	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 0215.200HXP	200mA	Unleaded	26K7611	1.60	1.46	1.41	1.30
● 0215.250P	250mA	Unleaded	50M5529	0.49	0.45	0.40	0.36
● 0215.250HXP	250mA	Unleaded	26K7613	1.58	1.44	1.39	1.28
● 0215.315HXP	315mA	Unleaded	26K7615	1.60	1.46	1.41	1.30
● 0215.315MXP	315mA	Unleaded	42K9299	1.51	1.37	1.32	1.22
● 0215.500HXP	500mA	Unleaded	26K7619	1.58	1.44	1.39	1.28
● 0215.500MXP	500mA	Unleaded	42K9301	1.51	1.37	1.32	1.22
● 0215.630HXP	630mA	Unleaded	26K7621	1.54	1.40	1.35	1.25
● 0215.800HXP	800mA	Unleaded	26K7623	1.60	1.46	1.41	1.30
● 0215001.HXP	1A	Unleaded	26K7625	1.56	1.42	1.37	1.26
● 02151.25HXP	1.25A	Unleaded	26K7645	1.60	1.45	1.40	1.29
● 02151.25MXP	1.25A	Unleaded	42K9313	1.49	1.35	1.31	1.20
● 021501.6HXP	1.6A	Unleaded	26K7635	1.56	1.42	1.37	1.26
● 021501.6MXP	1.6A	Unleaded	42K9309	1.53	1.39	1.34	1.24
● 0215002.HXP	2A	Unleaded	26K7627	1.56	1.42	1.37	1.26
● 0215002.MXP	2A	Unleaded	42K9305	1.49	1.35	1.31	1.20
● 021502.5HXP	2.5A	Unleaded	26K7641	1.60	1.45	1.40	1.29
● 021502.5MXP	2.5A	Unleaded	42K9311	1.55	1.41	1.36	1.25
● 02153.15HXP	3.15A	Unleaded	26K7647	1.60	1.45	1.40	1.29
● 02153.15MXP	3.15A	Unleaded	42K9314	1.53	1.39	1.34	1.24
● 0215004.HXP	4A	Unleaded	26K7629	1.56	1.42	1.37	1.26
● 0215004.MXP	4A	Unleaded	42K9306	1.49	1.35	1.31	1.20
● 0215005.HXP	5A	Unleaded	26K7631	1.56	1.42	1.37	1.26
● 0215005.MXP	5A	Unleaded	42K9307	1.53	1.39	1.34	1.24
● 021506.3HXP	6.3A	Unleaded	26K7643	1.56	1.42	1.37	1.26
● 021506.3MXP	6.3A	Unleaded	42K9312	1.53	1.39	1.34	1.24
● 0215008.HXP	8A	Unleaded	26K7633	1.56	1.42	1.37	1.26
● 0215008.MXP	8A	Unleaded	42K9308	1.49	1.35	1.31	1.20

CONTINUED

5x20mm SLO-BLO® CARTRIDGE FUSES (CONT.)

Mfg. Part No.	Current	Fuse Leads	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 0215010.HXP	10A	Unleaded	26K7637	1.56	1.42	1.37	1.26
● 0215010.MXP	10A	Unleaded	42K9310	1.49	1.35	1.31	1.20
● 0215005.MXEP	5A	Leaded	26K7630	2.20	2.00	1.93	1.78

(85666)

500VAC/400VDC 5x20mm SLO-BLO® CARTRIDGE FUSES

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

- 1A to 8A current ratings
- Ceramic body
- Designed to international (IEC) standards
- Follow the IEC 60127-2, sheet 5 specifications for time-lag fuses
- Temp. range: -55°C to +125°C
- **Sold in bulk**

Mfg. Part No.	Current	Interrupting Rating @500VAC	@400VDC	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 0477001.MXP	1A	100A	1500A	33P9923	1.52	1.39	1.34	1.23
● 0477002.MXP	2A	100A	1500A	33P9925	1.52	1.39	1.34	1.23
● 04773.15MXP	3.15A	100A	1500A	33P9941	1.48	1.35	1.30	1.20
● 0477005.MXP	5A	100A	500A	33P9929	1.48	1.35	1.30	1.20
● 0477008.MXP	8A	100A	500A	33P9931	1.76	1.60	1.54	1.42

(138558)

239 SERIES 5x20mm SLO-BLO® CARTRIDGE FUSES

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

- UL listed
- CSA certified

239 series Slo-Blo® fuses with 10,000A interrupting rating. Glass body material. Designed to UL/ CSA/ ANCE 248 standard. Axial lead formats available; *go online or call.* Available ratings: 0.200A to 7A.

Mfg. Part No.	Current Rating	Voltage Rating (V)	Stock No.	Price Each 1-9	10-24	25-49
● 0239.200HXP	200mA	250	26K8392	1.28	1.17	1.13
● 0239.250HXP	250mA	250	26K8394	1.24	1.12	1.08
● 0239.300HXP	300mA	250	26K8396	1.27	1.15	1.11
● 0239.400HXP	400mA	250	26K8398	0.97	0.89	0.86
● 0239.500HXP	500mA	250	26K8400	0.95	0.86	0.83
● 0239.500MXP	500mA	250	42K9591	0.94	0.85	0.82
● 0239.100MXP	100mA	250	93K3375	1.18	1.07	1.03
● 0239.600HXP	600mA	250	26K8402	0.99	0.90	0.87
● 0239.750HXP	750mA	250	26K8406	0.99	0.90	0.87
● 0239.800HXP	800mA	250	26K8408	0.99	0.90	0.87
● 0239001.HXP	1A	250	26K8410	0.95	0.86	0.83
● 0239001.MXP	1A	250	25R5279	0.20	0.19	0.18
● 02391.25HXP	1.25A	250	26K8426	0.97	0.89	0.86
● 023901.6HXP	1.6A	250	26K8422	0.95	0.86	0.83
● 0239002.HXP	2A	250	26K8412	0.95	0.86	0.83
● 0239002.MXP	2A	250	25R5280	0.20	0.19	0.18
● 023902.5HXP	2.5A	250	26K8424	0.95	0.86	0.83
● 0239003.HXP	3A	250	26K8414	0.95	0.86	0.83
● 0239003.MXP	3A	250	25R5281	0.20	0.19	0.18
● 02393.15HXP	3.15A	250	26K8428	0.99	0.90	0.87
● 0239004.HXP	4A	125	26K8416	0.97	0.89	0.86
● 0239004.MXP	4A	125	25R5282	0.20	0.19	0.18
● 0239005.HXP	5A	125	26K8418	0.97	0.89	0.86
● 0239005.MXP	5A	125	25R5283	0.25	0.24	0.23
● 0239007.MXP	7A	125	26K8420	0.92	0.84	0.81

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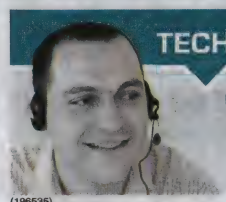
TECHNICAL SUPPORT HOTLINE



Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

5 x 20mm SLO-BLO® CARTRIDGE FUSES

RoHS Compliant Available

Littelfuse

Expertise Applied | Answers Delivered

Leaded

Unleaded

- 32mA to 15A current ratings
- 250V voltage rating
- 35A interrupting rating
- Glass body material
- Designed to international IEC standards
- Meet IEC 60127-2, Sheet 3 specifications for time-lag fuses
- Other axial lead formats also available; *go online or call.*

UL recognized (32mA - 15A), CSA certified (32mA - 15A), CE compliant (32mA - 15A), British BSI licence (80mA - 6.3A), SEMKO(32mA - 6.3A). **Sold in bulk.**

Mfg. Part No.	Current	Fuse Leads	Stock No.	Price Each 1-9	10-24	25-49	50-99
0218.032HXP	32mA	Unleaded	26K8026	2.56	2.33	2.25	2.07
0218.040HXP	40mA	Unleaded	26K8028	2.49	2.27	2.19	2.02
0218.050HXP	50mA	Unleaded	26K8030	2.56	2.33	2.25	2.07
0218.063HXP	63mA	Unleaded	26K8032	2.49	2.27	2.19	2.02
0218.080HXP	80mA	Unleaded	26K8034	2.59	2.36	2.27	2.10
0218.100HXP	100mA	Unleaded	26K8036	1.46	1.32	1.28	1.18
0218.125HXP	125mA	Unleaded	26K8038	1.46	1.32	1.28	1.18
0218.125MXP	125mA	Unleaded	42K9372	1.39	1.26	1.22	1.12
0218.160HXP	160mA	Unleaded	26K8040	1.49	1.36	1.31	1.21
0218.200HXP	200mA	Unleaded	26K8042	1.51	1.38	1.33	1.22
0218.250HXP	250mA	Unleaded	26K8044	1.46	1.32	1.28	1.18
0218.315HXP	315mA	Unleaded	26K8046	1.49	1.36	1.31	1.21
0218.400HXP	400mA	Unleaded	26K8048	1.49	1.36	1.31	1.21
0218.400MXP	400mA	Unleaded	26M5064	0.27	0.24	0.21	0.19
0218.500HXP	500mA	Unleaded	26K8050	1.00	0.91	0.88	0.81
0218.630HXP	630mA	Unleaded	26K8052	1.03	0.93	0.90	0.83
0218.800HXP	800mA	Unleaded	26K8054	1.03	0.93	0.90	0.83
0218001.HXP	1A	Unleaded	26K8056	1.00	0.91	0.88	0.81
02181.25HXP	1.25A	Unleaded	26K8076	1.00	0.91	0.88	0.81
021801.6HXP	1.6A	Unleaded	26K8066	1.00	0.91	0.88	0.81
0218002.HXP	2A	Unleaded	26K8058	1.00	0.91	0.88	0.81
021802.5HXP	2.5A	Unleaded	26K8072	1.00	0.91	0.88	0.81
02183.15HXP	3.15A	Unleaded	26K8078	1.00	0.91	0.88	0.81
02183.15MXP	3.15A	Unleaded	42K9392	0.95	0.87	0.84	0.77
0218004.HXP	4A	Unleaded	26K8060	1.00	0.91	0.88	0.81
0218005.HXP	5A	Unleaded	26K8062	1.00	0.91	0.88	0.81
021806.3HXP	6.3A	Unleaded	26K8074	1.00	0.91	0.88	0.81
021806.3MXP	6.3A	Unleaded	42K9390	0.98	0.89	0.86	0.79
0218008.HXP	8A	Unleaded	26K8064	1.60	1.45	1.40	1.29
0218010.HXP	10A	Unleaded	26K8068	1.55	1.41	1.36	1.26
0218010.MXP	10A	Unleaded	42K9387	1.48	1.35	1.30	1.20
0218015.HXP	15A	Unleaded	26K8070	1.55	1.41	1.36	1.26
0218015.MXEP	15A	Leaded	26K8069	2.17	1.98	1.91	1.76

(85671)

5x20mm SLO-BLO® CARTRIDGE FUSES

RoHS Compliant Available

Littelfuse

Expertise Applied | Answers Delivered

- UL recognized
- CSA certified
- CE compliant
- British BSI Licence
- Swedish file

Mfg. Part No.	Current	Voltage (V)	Stock No.	Price Each 1-9	10-24	25-49
0219.125MXAP	125mA	250	26K7650	1.47	1.34	1.29
0219.160MXAP	160mA	250	26K7653	1.41	1.29	1.24
0219.200MXAP	200mA	250	26K7656	1.41	1.29	1.24
0219.250MXAP	250mA	250	26K7659	1.45	1.32	1.27
0219.315MXAP	315mA	250	26K7662	1.41	1.29	1.24
0219.400MXAP	400mA	250	26K7665	1.47	1.34	1.29
0219.500MXAP	500mA	250	26K7668	1.01	0.91	0.88
0219.630MXAP	630mA	250	26K7671	1.01	0.91	0.88
0219.800MXAP	800mA	250	26K7674	0.97	0.88	0.85
0219001.MXAP	1A	250	26K7677	0.97	0.88	0.85
02191.25MXAP	1.25A	250	26K7698	0.97	0.88	0.85
021901.6MXAP	1.6A	250	26K7689	1.01	0.91	0.88

CONTINUED

5x20mm SLO-BLO® CARTRIDGE FUSES (CONT.)

Mfg. Part No.	Current	Voltage (V)	Stock No.	Price Each 1-9	10-24	25-49
0219002.MXAP	2A	250	26K7680	0.99	0.90	0.87
0219002.MXABP	2A	250	98K4389	0.40	0.36	0.32
021902.5MXAP	2.5A	250	26K7692	0.97	0.88	0.85
02193.15MXAP	3.15A	250	26K7701	1.01	0.91	0.88
0219004.MXAP	4A	250	26K7683	1.01	0.91	0.88
0219005.MXAP	5A	250	26K7686	0.97	0.88	0.85
0219005.MXABP	5A	250	98K4390	0.41	0.37	0.33
021906.3MXAP	6.3A	250	26K7695	1.01	0.91	0.88

Slo-Blo® fuses with 150A interrupting rating. Glass body material. Designed to international IEC standards for use globally. Meet IEC 60127-2, Sheet 6 specifications for time-lag fuses. Axial lead formats also available; *go online or call.* Available ratings: 0.125A to 6.3A.

(85535)

5 x 20mm SLO-BLO® CARTRIDGE FUSES

RoHS Compliant Available

Littelfuse

Expertise Applied | Answers Delivered

Leaded

Unleaded

- 20mA to 6.3A
- 250V
- 35A interrupting rating
- Glass body material
- Meet IEC 60127-2, Sheet 3 specifications for time-lag fuses

E suffix indicates leaded fuse. UL recognized, CSA certified, CE compliant, British BSI licence, SEMKO approved. **Sold in bulk.**

Mfg. Part No.	Current	Fuse Leads	Stock No.	Price Each 1-9	10-24	25-49
0213002.MXEP	2A	Leaded	26K7594	1.01	0.92	0.89
021306.3MXEP	6.3A	Leaded	26K7604	1.05	0.95	0.92
0213001.MXP	1A	Unleaded	33P4236	0.91	0.83	0.80
021301.6MXP	1.6A	Unleaded	33P4237	0.91	0.83	0.80
0213002.MXP	2A	Unleaded	26K7595	0.91	0.83	0.80
021302.5MXP	2.5A	Unleaded	33P4238	0.93	0.85	0.82
02133.15MXP	3.15A	Unleaded	26K7609	0.94	0.86	0.83
0213005.MXP	5A	Unleaded	26K7599	0.91	0.83	0.80
021306.3MXP	6.3A	Unleaded	26K7605	0.93	0.85	0.82

(85667)

5x20mm MEDIUM-ACTING CARTRIDGE FUSES

RoHS Compliant Available

Littelfuse

Expertise Applied | Answers Delivered

- 1A to 6.3A ratings
- Interrupting rating: 10,000A @ 125VAC
- Glass body material
- Designed to UL/ CSA/ ANCE 248 standard
- Axial lead versions also available; *go online or call*

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-9	10-24	25-49
0233001.MXP	1	26K7739	0.89	0.81	0.78
02331.25MXP	1.25	26K7759	0.87	0.79	0.76
023301.6MXP	1.6	26K7751	0.89	0.81	0.78
0233002.MXP	2	26K7741	0.87	0.79	0.76
023302.5MXP	2.5	26K7753	0.89	0.81	0.78
0233003.MXP	3	26K7743	0.89	0.81	0.78
02333.15MXP	3.15	26K7761	0.90	0.82	0.79
023303.5MXP	3.5	26K7755	0.90	0.82	0.79
0233004.MXP	4	26K7745	0.87	0.79	0.76
0233005.MXP	5	26K7747	0.89	0.81	0.78
0233006.MXP	6	26K7749	0.90	0.82	0.79
023306.3MXP	6.3	26K7757	0.87	0.79	0.76

(85677)

ELECTRONIC CARTRIDGE FUSES

5 X 20mm FAST-ACTING CARTRIDGE FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

- 50mA to 10A current ratings
- 250V voltage rating
- 1500A interrupting rating
- Ceramic body material
- Designed to international IEC standards
- Meet IEC 60127-2, Sheet 1 specifications for fast-acting fuses
- Axial lead formats also available; *go online or call*

UL recognized (50mA - 10A), CSA certified (50mA - 10A), CE compliant (50mA - 12A), British BSI license (1A - 6.3A), SEMKO approved (32mA - 6.3A).

Mfg. Part No.	Current	Fuse Leads	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 0216.050HXP	50mA	Unleaded	26K7924	2.01	1.83	1.76	1.63
● 0216.063HXP	63mA	Unleaded	26K7926	1.93	1.76	1.70	1.56
● 0216.080HXP	80mA	Unleaded	26K7928	1.54	1.40	1.35	1.25
● 0216.100HXP	100mA	Unleaded	26K7930	1.58	1.44	1.39	1.28
● 0216.125HXP	125mA	Unleaded	26K7932	1.54	1.40	1.35	1.25
● 0216.160HXP	160mA	Unleaded	26K7934	1.60	1.46	1.41	1.30
● 0216.200HXP	200mA	Unleaded	26K7936	1.58	1.44	1.39	1.28
● 0216.250HXP	250mA	Unleaded	26K7938	1.58	1.44	1.39	1.28
● 0216.315HXP	315mA	Unleaded	26K7940	1.60	1.46	1.41	1.30
● 0216.500P	500mA	Unleaded	50M5557	0.30	0.29	0.27	0.26
● 0216.500HXP	500mA	Unleaded	26K7944	1.54	1.40	1.35	1.25
● 0216.630HXP	630mA	Unleaded	26K7946	1.54	1.40	1.35	1.25
● 0216.800HXP	800mA	Unleaded	26K7948	1.60	1.46	1.41	1.30
● 0216001.P	1A	Unleaded	50M5560	0.13	0.13	0.12	0.11
● 0216001.HXP	1A	Unleaded	26K7950	1.39	1.27	1.22	1.13
● 02161.25HXP	1.25A	Unleaded	26K7968	1.43	1.30	1.25	1.16
● 021601.6HXP	1.6A	Unleaded	26K7960	1.45	1.32	1.27	1.17
● 0216002.HXP	2A	Unleaded	26K7952	1.39	1.27	1.22	1.13
● 021602.5HXP	2.5A	Unleaded	26K7964	1.43	1.30	1.25	1.16
● 02163.15HXP	3.15A	Unleaded	26K7970	1.43	1.30	1.25	1.16
● 0216004.HXP	4A	Unleaded	26K7954	1.43	1.30	1.25	1.16
● 0216005.P	5A	Unleaded	50M5563	0.13	0.13	0.12	0.11
● 0216005.HXP	5A	Unleaded	26K7956	1.43	1.30	1.25	1.16
● 021606.3HXP	6.3A	Unleaded	26K7966	1.39	1.27	1.22	1.13
● 0216008.HXP	8A	Unleaded	26K7958	1.43	1.30	1.25	1.16
● 0216010.HXP	10A	Unleaded	26K7962	1.39	1.27	1.22	1.13
● 0216016.MXP	16A	Unleaded	50M5567	0.23	0.22	0.21	0.20

(85668)

235 SERIES 5x20mm FAST-ACTING CARTRIDGE FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

- UL listed
- CSA certified
- CE compliant

235 series fast-acting fuses with 10,000A interrupting rating. Glass body material. Designed to UL/ CSA/ ANCE 248 standard. Available ratings: 0.100A to 6A.

Mfg. Part No.	Current Rating	Voltage Rating (V)	Stock No.	Price Each 1-9	10-24	25-49
● 0235.100HXP	100mA	250	26K8354	0.89	0.81	0.78
● 0235.200HXP	200mA	250	26K8358	0.91	0.83	0.80
● 0235.250HXP	250mA	250	26K8360	0.89	0.81	0.78
● 0235.500HXP	500mA	250	26K8366	0.54	0.50	0.46
● 0235.800HXP	800mA	250	26K8372	0.55	0.52	0.48
● 0235001.HXP	1A	250	26K8374	0.44	0.41	0.38
● 02351.25HXP	1.25A	250	26K8390	0.46	0.43	0.39
● 023501.6HXP	1.6A	250	26K8386	0.45	0.42	0.39
● 0235002.HXP	2A	250	26K8376	0.44	0.41	0.38
● 0235003.HXP	3A	250	26K8378	0.44	0.41	0.38
● 0235004.HXP	4A	125	26K8380	0.45	0.42	0.39
● 0235005.HXP	5A	125	26K8382	0.44	0.41	0.38
● 0235006.HXP	6A	125	26K8384	0.45	0.42	0.39

(85679)

element14 COMMUNITY

Get inspired, collaborate, design, research, ask experts questions.

element14.com

(196545)

350V 2AG FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

- 350VAC voltage rating
- 100A max. interrupting current
- Glass body
- Nickel-plated brass caps
- Tin-plated copper leads
- Temp. range: -55°C to +125°C

Sold individually in bulk.

FAST-ACTING

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 0208002.MXEP	2	01P8897	0.63	0.59	0.54	0.50
● 0208003.MXEP	3	01P8900	0.65	0.61	0.57	0.52
● 0208004.MXEP	4	01P8903	0.63	0.59	0.54	0.50
● 0208005.MXEP	5	01P8906	0.63	0.59	0.54	0.50
SLOW BLOW (TIME LAG)						
● 0209.500MXEP	0.5	01P8936	0.85	0.77	0.75	0.69
● 0209001.MXEP	1	01P8948	0.88	0.80	0.77	0.71

(134616)

2AG SLO-BLO® CARTRIDGE FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

- 250mA to 7A current ratings
- 5 x 15mm fuse size
- Glass body material
- Interrupting ratings: 10,000A @ 125VAC (250mA-3.5A), 400A @ 125VAC (4-7A), 35A @ 250VAC (250mA-1A), 100A @ 250VAC (1.5-3.5A)

S suffix denotes indicating fuse. **Sold in bulk or on tape & reel.**

% of Ampere Rating	Opening Time
100	4 hours, Minimum
135	1 hour, Maximum
200	3 seconds, Minimum
	20 seconds, Maximum

BULK PACKAGING

Mfg. Part No.	Current	Voltage (V)	Indicating	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 0230.250HXP	250mA	250	No	26K8213	0.99	0.90	0.87	0.80
● 0230.375HXP	375mA	250	No	26K8225	0.99	0.90	0.87	0.80
● 0230.500HXP	500mA	250	No	26K8233	1.02	0.93	0.90	0.83
● 0230.750HXP	750mA	250	No	26K8249	0.99	0.90	0.87	0.80
● 0230001.HXSP	1A	250	No	26K8258	1.15	1.05	1.01	0.93
● 0230001.HXP	1A	250	No	26K8259	0.99	0.90	0.87	0.80
● 023001.5HXP	1.5A	250	No	26K8314	1.03	0.94	0.91	0.84
● 0230002.HXP	2A	250	No	26K8267	0.99	0.90	0.87	0.80
● 023002.5HXP	2.5A	250	No	26K8322	1.03	0.94	0.91	0.84
● 0230003.HXP	3A	250	No	26K8275	1.03	0.94	0.91	0.84
● 023003.5HXP	3.5A	250	No	26K8330	0.99	0.90	0.87	0.80
● 0230004.HXP	4A	125	No	26K8283	1.03	0.94	0.91	0.84
● 0230005.HXP	5A	125	No	26K8291	1.03	0.94	0.91	0.84
● 0230006.HXP	6A	125	No	26K8299	0.99	0.90	0.87	0.80
● 0230007.HXP	7A	125	No	26K8307	1.03	0.94	0.91	0.84

TAPE & REEL

Mfg. Part No.	Current	Voltage (V)	Indicating	Stock No.	Tape Cut Price 1-1499
● 0230003.DRT1P	3A	250	No	26K8279	1.17
● 023003.5DRT1P	3.5A	250	No	26K8335	1.25
● 0230005.DRT1P	5A	125	No	26K8295	1.30

(137278)

5x20mm MEDIUM-ACTING CARTRIDGE FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

- 1 to 10A ratings
- Interrupting rating: 10,000A @ 250V
- Glass body material
- Designed to UL/ CSA/ ANCE 248 standard
- Axial lead versions also available; *go online or call*

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-9	10-24	25-49
● 0234001.MXP	1	26K7763	0.98	0.89	0.86
● 02341.25MXP	1.25	26K7787	0.95	0.87	0.84
● 023401.6MXP	1.6	26K7777	0.95	0.87	0.84

➤CONTINUED➤

5x20mm MEDIUM-ACTING CARTRIDGE FUSES (CONT.)

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-9	10-24	25-49
0234002.P	2	50M5598	0.19	0.18	0.17
0234002.MXP	2	26K7765	0.95	0.87	0.84
023402.5MXP	2.5	26K7781	0.95	0.87	0.84
0234003.P	3	50M5599	0.19	0.18	0.18
0234003.MXP	3	26K7767	0.98	0.89	0.86
02343.15MXP	3.15	26K7789	0.95	0.87	0.84
023403.5MXP	3.5	26K7783	0.98	0.89	0.86
0234004.MXP	4	26K7769	0.95	0.87	0.84
0234005.P	5	50M5601	0.20	0.19	0.18
0234005.MXP	5	26K7771	0.98	0.89	0.86
0234006.MXP	6	26K7773	0.95	0.87	0.84
023406.3MXP	6.3	26K7785	0.95	0.87	0.84
0234008.P	8	50M5603	0.20	0.19	0.18
0234008.MXP	8	26K7775	0.99	0.90	0.87
0234010.MXP	10	26K7779	0.98	0.89	0.86

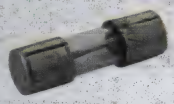
(85678)

2AG SLO-BLO® CARTRIDGE FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

- 250mA to 7A current ratings
- 5 x 15mm fuse size
- Glass body material
- Interrupting ratings: 10,000A @ 125VAC (250mA-3.5A), 400A @ 125VAC (4-7A), 35A @ 250VAC (250mA-1A), 100A @ 250VAC (1.5-3.5A)



S suffix denotes indicating fuse. **Sold in bulk.**

% of Ampere Rating	Opening Time
100	4 hours, Minimum
135	1 hour, Maximum
200	3 seconds, Minimum
	20 seconds, Maximum

Mfg. Part No.	Current	Voltage (V)	Indicating	Stock No.	Price Each 1-9	10-24	25-49	50-99
0229.250HXP	250mA	250	No	26K8176	0.75	0.71	0.65	0.59
0229.375HXP	375mA	250	No	26K8180	0.76	0.72	0.66	0.60
0229.500HXP	500mA	250	No	26K8182	0.75	0.71	0.65	0.59
0229.750HXP	750mA	250	No	26K8186	0.76	0.72	0.66	0.60
0229001.HXP	1A	250	No	26K8189	0.75	0.71	0.65	0.59
02291.25HXP	1.25A	250	No	26K8209	0.76	0.72	0.66	0.60
022901.5HXP	1.5A	250	No	26K8203	0.75	0.71	0.65	0.59
0229002.HXP	2A	250	No	26K8191	0.73	0.69	0.63	0.58
022902.5HXP	2.5A	250	No	26K8205	0.76	0.72	0.66	0.60
0229003.HXP	3A	250	No	26K8193	0.73	0.69	0.63	0.58
022903.5HXP	3.5A	250	No	26K8207	0.76	0.72	0.66	0.60
0229004.HXP	4A	125	No	26K8195	0.76	0.72	0.66	0.60
0229005.HXP	5A	125	No	26K8197	0.75	0.71	0.65	0.59
0229007.HXP	7A	125	No	26K8201	0.76	0.72	0.66	0.60
0229.250HXSP	250mA	250	Yes	26K8177	0.85	0.77	0.75	0.69
0229001.HXSP	1A	250	Yes	26K8190	0.88	0.80	0.78	0.72
0229001.MXP	1A	250	No	42K9459	0.70	0.66	0.61	0.55
0229002.HXSP	2A	250	Yes	26K8192	0.88	0.80	0.78	0.72
0229003.HXSP	3A	250	Yes	26K8194	0.88	0.80	0.78	0.72
0229005.HXSP	5A	125	Yes	26K8198	0.85	0.77	0.75	0.69

(85674)

3.6 x10mm TIME DELAY MICRO CARTRIDGE FUSES

RoHS Compliant Available

multicomp

- Glass body
- Nickel plated brass end caps
- Interrupting rating: 50A @ 250VAC
- Operating temperature: -55°C to +125°C

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-249	250-499	500-999	1000-4999
MCPDS .500	500	31T8246	0.21	0.19	0.17	0.15
MCPDS 001	1	31T8249	0.22	0.19	0.17	0.16
MCPDS 1.50	1.5	31T8257	0.21	0.19	0.17	0.15
MCPDS 002	2	31T8250	0.21	0.19	0.17	0.15
MCPDS 2.50	2.5	31T8259	0.21	0.19	0.17	0.15
MCPDS 003	3	31T8251	0.21	0.19	0.17	0.15
MCPDS 004	4	31T8252	0.21	0.19	0.17	0.15
MCPDS 005	5	31T8253	0.22	0.19	0.17	0.16
MCPDS 6.30	6.3	31T8260	0.24	0.21	0.19	0.17

CONTINUED

3.6 x10mm TIME DELAY MICRO CARTRIDGE FUSES (CONT.)

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-249	250-499	500-999	1000-4999
MCPDS 007	7	31T8254	0.23	0.21	0.19	0.17
MCPDS 008	8	31T8255	0.23	0.21	0.19	0.17
MCPDS 010	10	31T8256	0.26	0.23	0.21	0.19

(197710)

3.6 x10mm FAST ACTING MICRO CARTRIDGE FUSES

RoHS Compliant Available

multicomp

- Glass body
- Nickel plated brass end caps
- Interrupting rating: 50A @ 250VAC
- Operating temperature: -55°C to +125°C

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-249	250-499	500-999	1000-4999
MCPGS 1.50	1.5	31T8272	0.20	0.18	0.16	0.14
MCPGS 002	2	31T8266	0.20	0.18	0.16	0.14
MCPGS 2.50	2.5	31T8274	0.20	0.18	0.16	0.14
MCPGS 3.15	3.15	31T8275	0.20	0.18	0.16	0.14
MCPGS 004	4	31T8267	0.20	0.18	0.16	0.14
MCPGS 005	5	31T8268	0.20	0.18	0.16	0.14
MCPGS 6.30	6.3	31T8276	0.23	0.20	0.18	0.16
MCPGS 007	7	31T8269	0.23	0.20	0.18	0.16
MCPGS 008	8	31T8270	0.23	0.20	0.18	0.16
MCPGS 010	10	31T8271	0.23	0.20	0.18	0.16

(197711)

ANTISURGE 5 x 20mm GLASS FUSES

RoHS Compliant Available

multicomp

- Time delay, low breaking capacity
- 250VAC
- 5 x 20mm physical size
- Glass tube, nickel-plated brass endcap construction
- Optional axial leads are .032" x 1.5" copper tinned
- Designed to IEC 60127-2 (50mA - 6.3A)

Mfg. Part No.	Current	Stock No.	Price Each 1-249	250-499	500-999	1000-4999
MCF06G-32MA	32mA	26M1250	1.28	1.15	1.02	0.92
MCF06G-40MA	40mA	26M1252	1.36	1.22	1.09	0.98
MCF06G-50MA	50mA	26M1255	0.70	0.63	0.56	0.51
MCF06G-63MA	63mA	26M1258	0.66	0.59	0.53	0.48
MCF06G-80MA	80mA	26M1260	0.79	0.71	0.63	0.57
MCF06G-100MA	100mA	26M1242	0.74	0.66	0.59	0.54
MCF06G-125MA	125mA	26M1243	0.69	0.62	0.55	0.50
MCF06G-160MA	160mA	26M1244	0.68	0.61	0.55	0.50
MCF06G-200MA	200mA	26M1246	0.51	0.46	0.41	0.37
MCF06G-250MA	250mA	26M1247	0.56	0.50	0.45	0.41
MCF06G-315MA	315mA	26M1249	0.58	0.52	0.47	0.42
MCF06G-500MA	500mA	26M1256	0.31	0.28	0.25	0.23
MCF06G-630MA	630mA	26M1259	0.30	0.27	0.24	0.22
MCF06G-800MA	800mA	26M1261	0.28	0.26	0.23	0.21
MCF06G-1A	1A	26M1240	0.28	0.25	0.23	0.21
MCF06G-1.25A	1.25A	26M1238	0.28	0.25	0.23	0.20
MCF06G-2A	2A	14M8655	0.29	0.26	0.24	0.21
MCF06G-3.15A	3.15A	26M1248	0.29	0.26	0.24	0.21
MCF06G-6.3A	6.3A	26M1257	0.28	0.25	0.23	0.20
MCF06G-10A	10A	26M1241	0.48	0.43	0.39	0.35

(102882)

QUICK BLOW CERAMIC FUSES

RoHS Compliant Available

multicomp

- 250VAC
- 5 x 20mm physical size
- Ceramic tube, nickel brass endcap construction
- Optional axial leads are .032" x 1.5" copper tinned
- Designed to IEC 60127-2

Mfg. Part No.	Current	Stock No.	Price Each 1-249	250-499	500-999	1000-4999
MCF04C-200MA	200mA	26M1210	1.05	0.94	0.84	0.76
MCF04C-315MA	315mA	34M7348	0.97	0.87	0.78	0.70
MCF04C-500MA	500mA	26M1215	0.82	0.74	0.66	0.59
MCF04C-800MA	800mA	26M1218	0.82	0.74	0.66	0.59
MCF04C-2A	2A	26M1209	0.39	0.35	0.31	0.28
MCF04C-2.5A	2.5A	26M1208	0.41	0.37	0.33	0.30

CONTINUED

ELECTRONIC CARTRIDGE FUSES

QUICK BLOW CERAMIC FUSES (CONT.)

Mfg. Part No.	Current	Stock No.	Price Each 1-249	250-499	500-999	1000-4999
● MCF04C-4A	4A	26M1213	0.41	0.37	0.33	0.30
● MCF04C-6.3A	6.3A	26M1216	0.48	0.43	0.39	0.35
● MCF04C-8A	8A	26M1217	0.52	0.46	0.42	0.38
● MCF04C-10A	10A	26M1205	0.53	0.47	0.42	0.38

(102884)

ANTISURGE HRC 5 x 20mm CERAMIC FUSES

RoHS Compliant Available

multicomp

- Time delay, high rupturing capacity (HRC)
- 250VAC
- Ceramic tube, nickel plated brass endcap construction
- Optional axial leads are .032" x 1.5" copper tinned
- Designed to IEC 60127-2 (1A-6.3A)
- RoHS compliant version available (-R option)
- 20 x 5mm fuses

Mfg. Part No.	Current	Stock No.	Price Each 1-249	250-499	500-999	1000-4999
● MCF03C-500MA	500mA	26M1200	0.77	0.69	0.62	0.56
● MCF03C-1A	1A	26M1196	0.41	0.37	0.33	0.30
● MCF03C-1.25A	1.25A	26M1194	0.41	0.37	0.33	0.30
● MCF03C-1.6A	1.6A	26M1195	0.41	0.37	0.33	0.30
● MCF03C-2.5A	2.5A	26M1197	0.40	0.36	0.32	0.29
● MCF03C-3.15A	3.15A	26M1198	0.41	0.36	0.33	0.29
● MCF03C-4A	4A	26M1199	0.38	0.34	0.31	0.28
● MCF03C-6.3A	6.3A	26M1201	0.44	0.39	0.35	0.32
● MCF03C-8A	8A	23M2491	0.45	0.40	0.36	0.32
● MCF03C-10A	10A	20M6579	0.40	0.36	0.32	0.29

(102883)

5 x 20mm TIME LAG SURFACE MOUNT FUSES

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

- Directly solderable on printed circuit boards

Mfg. Part No.	Current (A)	Breaking Capacity	Stock No.	Price Each 1-99	100-249	250-499	500-999
● 0034.5620.11	2	35A @ 250V AC	15J1458	1.15	1.03	0.94	0.85
● 0034.5621.11	2.5	35A @ 250V AC	15J1459	1.28	1.15	1.04	0.94
● 0034.5622.11	3.15	35A @ 250V AC	15J1460	1.28	1.15	1.04	0.94
● 0034.5624.11	5	80A @ 250V AC	15J1462	1.21	1.09	0.98	0.89
● 0034.5625.11	6.3	63A @ 250V AC	15J1463	1.28	1.15	1.04	0.94
● 0034.5626.11	8	80A @ 250V AC	15J1464	1.45	1.31	1.18	1.07
● 0034.5627.11	10	100A @ 250V AC	15J1465	1.38	1.24	1.12	1.02

(202233)

250V 5 x 20mm FUSES

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

- Current: 63mA-20A available
- Breaking capacity: 35A
- Order fuseholders separately *on page 1461*
- Add "PT" or "TR" suffixes to part no. for pigtail or tape & reel versions, respectively

FAST-ACTING FUSES

Mfg. Part No.	Current	Stock No.	Price Each 1-249	250-499
● 0034.1510	250mA	50M5476	0.42	0.38
● 0034.1511	315mA	04F970	1.02	0.96
● 0034.1513	500mA	88K2038	0.26	0.25
● 0034.1514	630mA	04F973	0.24	0.23
● 0034.1515	800mA	04F974	0.24	0.22
● 0034.1516	1A	88K2039	0.25	0.23
● 0034.1518	1.6A	04F977	0.24	0.22
● 0034.1519	2A	88K2040	0.25	0.23
● 0034.1520	2.5A	04F961	0.24	0.22
● 0034.1521	3.15A	04F962	0.26	0.25
● 0034.1522	4A	88K2041	0.24	0.22
● 0034.1523	5A	04F964	0.25	0.23
● 0034.1524	6.3A	88K2042	0.24	0.22
● 0034.1526	10A	94B4339	0.25	0.23

CONTINUED

250V 5 x 20mm FUSES (CONT.)

TIME-DELAY FUSES

Mfg. Part No.	Current	Stock No.	Price Each 1-249	250-499
● 0034.3105	63mA	90B9822	1.31	1.29
● 0034.3108	125mA	04F967	0.52	0.51
● 0034.3110	200mA	04F951	0.55	0.54
● 0034.3111	250mA	88K2043	0.34	0.33
● 0034.3112	315mA	04F953	0.34	0.33
● 0034.3113	400mA	04F954	0.34	0.34
● 0034.3114	500mA	04F955	0.29	0.28
● 0034.3115	630mA	04F956	0.34	0.34
● 0034.3116	800mA	04F957	0.34	0.33
● 0034.3117	1A	04F958	0.35	0.34
● 0034.3118	1.25A	04F959	0.34	0.33
● 0034.3119	1.6A	93K7610	0.34	0.33
● 0034.3120	2A	04F943	0.35	0.34
● 0034.3121	2.5A	04F944	0.34	0.33
● 0034.3122	3.15A	04F945	0.35	0.34
● 0034.3123	4A	04F946	0.34	0.33
● 0034.3124	5A	88K2044	0.35	0.34
● 0034.3125	6.3A	04F948	0.34	0.33
● 0034.3126	8A	88K2045	0.34	0.33
● 0034.3128	12.5A	22C1088	0.57	0.56
● 0034.3129	16A	50B7028	0.56	0.55
● 0034.3130	20A	51B1053	0.57	0.56

(2396)

5 x 20mm 250V HIGH-BREAKING CARTRIDGE FUSES

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

- Current: 0.05-16A available
- Order fuseholders separately *on page 1461*

FAST ACTING, 250VAC, IEC 60127-2/1

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-9	10-24	25-49
● 0001.1004	1	04F934	0.50	0.49	0.46
● 0001.1007	2	04F937	0.50	0.49	0.46
● 0001.1009	3.15	04F939	0.50	0.49	0.46
● 0001.1010	4	04F940	0.48	0.47	0.45
● 0001.1011	5	04F941	0.50	0.49	0.46
● 0001.1012	6.3	04F924	0.48	0.47	0.45
● 0001.1014	10	93K7607	0.47	0.46	0.43
● 0001.1015	12.5	50M5456	0.64	0.57	0.51
● 0001.1016	16	93K7608	0.51	0.50	0.47
TIME DELAY, 250VAC /300VDC, IEC 60127-2//5					
● 0001.2503	0.8	24C7972	1.60	1.56	1.47
● 0001.2504	1	88F3636	0.48	0.47	0.44
● 0001.2505	1.25	50M5462	0.66	0.59	0.53
● 0001.2507	2	25C7712	0.47	0.46	0.43
● 0001.2508	2.5	50B7020	0.48	0.47	0.44
● 0001.2509	3.15	98B9731	0.47	0.46	0.43
● 0001.2510	4	25C7776	0.47	0.46	0.43
● 0001.2511	5	50M5468	0.56	0.50	0.45
● 0001.2512	6.3	88K2034	0.49	0.48	0.45
● 0001.2513	8	88F4533	0.47	0.46	0.43
● 0001.2514	10	88K2035	0.49	0.48	0.45
● 0001.2515	12.5	50B7021	0.47	0.46	0.43
● 0001.2516	16	92B5520	0.47	0.46	0.43
TIME DELAY, 250VAC /300VDC, IEC 60127-2//5, GOLD PLATING					
● 0001.2707.11	2	15J1279	1.05	0.95	0.86
● 0001.2710.11	4	15J1282	1.05	0.95	0.86
● 0001.2714.11	10	15J1286	1.00	0.90	0.81

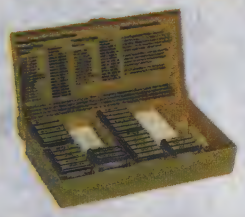
(69207)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

BUSS® 140-PIECE FUSE KIT



COOPER Bussmann

140-piece assortment of ¼ × 1¼″ fuses includes 1/2A to 30A fuses, plus 2 fuse holders, fuse clips and 1 fuse puller. Rugged nylon case with positive closure. Ideal for factory or field-service use.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
NO. 140	¼ x 1¼″ Fuse Kit	89F1893	505.89

(2327)

BUSS® 270-PIECE FUSE KIT

COOPER Bussmann

Diverse kit contains 59 different products including 270 fuses: ¼ x 1¼″ and 5 x 20mm fuses in the ⅛ to 30A range; small dimension 125V and 250V fuses; fast-acting, time-delay and axial-leaded fuses; 7 fuse holders and fuse clips. Clear-plastic case. Comes with complete application and cross-reference data.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
270	270-Piece Fuse Kit	87F2357	900.03

(2331)

BUSS® 220-PIECE FUSE KIT

COOPER Bussmann

220-piece kit contains 5 x 20mm fuses in 200mA to 10A range, plus 1 fuse holder and 1 fuse puller. Tough, yellow case with positive closure. Ideal for factory or field-service use.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
220	5 x 20mm Fuse Kit	95F3864	930.33

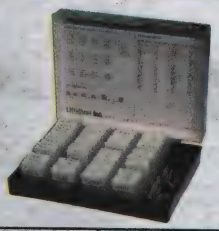
(2332)

FUSE ASSORTMENT KITS

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

Features 280 popular fuses in a wide assortment of 3AG (¼-8A), 2AG glass (½-3A), 5 x 20mm (½-6.3A), 3AB ceramic (10-30A), fast-acting and Slo-Blo® fuses. Also includes 10 variations of fuse clips, fuse blocks, panel mount and in-line fuse holders. Comes with plastic storage case and cross reference information.



Mfg. Part No.	Description	Stock No.	Price Each 1-4
00940376Z	Electronic Fuse Kit	90F9123	485.65

Features 150 popular fuses in an assortment of 3AG (1/2-10A), 5 x 20mm (1/2-6.3A), and 3AB ceramic (10-20A), fast-acting and Slo-Blo® fuses. Plus 5 variations of fuse holders, fuse clips and fuse blocks. Includes a rugged, clear plastic storage case.

00940377Z	Economical Fuse Kit	90F9124	180.71

Contains an assortment of 75 universally popular 3AG fast-acting and Slo-Blo® fuses (15 boxes of 5 fuses each). Packaged in a handy, durable plastic caddy case. Caddy case also available separately.

● 00940037Z	Industrial Fuse Kit	27F677	64.32

(9308)

HIGH-SPEED SEMICONDUCTOR FUSES

RoHS Compliant Available

COOPER Bussmann

High-speed fuses protect SCRs, diodes and other semiconductor devices. **FW series** available in 4 voltage ratings: 150, 250, 500, 700VAC. Ampere ratings: 1 to 1000A. **FWP series** rated 700V. Ampere ratings: 1-50A. Additional ratings available *go online or call.*

Fig. 1 - Cartridge

Fig. 2 - Stud Mount

Mfg. Part No.	Fig.	Size	Current (A)	Voltage (V)	Stock No.	Price Each 1-4	5-9	10-19
● FWP-30A14F	1	14 x 51mm	30	700	63R7734	42.49	40.46	37.43
● FWP-50A14F	1	14 x 51mm	50	700	08R5684	40.82	38.91	35.99
● FWX-60A	2	0.81 x 1.59″	60	250	95F3874	93.48	88.89	84.31
● FWX-70A	2	1.22 x 1.59″	70	250	02B3137	110.19	103.97	98.32
● FWX-100A	2	1.22 x 1.59″	100	250	95F3875	109.33	103.16	97.55

(2423)

HIGH-SPEED SEMICONDUCTOR FUSES

RoHS Compliant Available

COOPER Bussmann

Cartridge style high speed fuses are rated 500V and available from 250mA to 200A. Stud mount high speed fuses are rate 500V and available from 35A to 1600A. High speed fuses protect SCRs, diodes and other semiconductor devices. UL recognized, CSA approved (0.25-7A).

Fig. 1 - Cartridge

Fig. 2 - Stud Mount

Mfg.Part No.	Fig.	Size	Current	Stock No.	Price Each 1-24	25-49	50-99
● FWH-.500A6F	1	1/4 x 1-1/4″	500mA	91F4736	22.66	21.18	18.34
● FWH-001A6F	1	1/4 x 1-1/4″	1A	91F4737	25.29	23.18	22.66
FWH-3.15A6F	1	1/4 x 1-1/4″	3.15A	91F4739	24.41	22.38	21.87
● FWH-6.30A6F	1	1/4 x 1-1/4″	6.3A	91F4740	25.29	23.18	22.66
FWH-010A6F	1	1/4 x 1-1/4″	10A	91F4742	25.24	23.14	22.62
FWH-016A6F	1	1/4 x 1-1/4″	16A	91F4745	25.24	23.14	22.62
FWH-020A6F	1	1/4 x 1-1/4″	20A	08R5673	13.45	12.82	11.86
● FWH-60A	2	0.813 x 1.593″	60A	50F3613	94.01	89.40	84.80
● FWH-100A	2	1.156 x 1.836″	100A	94F2217	107.66	102.38	97.10
FWH-125B	2	1.156 x 1.836″	125A	02B3010	105.72	99.76	94.34
● FWH-150A	2	1.156 x 1.836″	150A	94F2450	158.59	149.64	141.51

(13049)

HIGH SPEED FERRULE FUSES

RoHS Compliant Available

COOPER Bussmann

- Interrupting rating 200kA RMS symmetrical
- Excellent cycling capability and DC performance
- Low arc voltage and low energy let-through (I2t)
- Low watts loss in a compact size
- Used with finger-safe holders/blocks

DIMENSIONS: 14 x 51mm (9/16 x 2″)

Mfg. Part No.	Current (A)	Voltage Rating VAC	VDC	Stock No.	Price Each 1-4	5-9	10-19	20-49
● FWP-20A14F	20	700	700	08R5678	23.23	22.15	20.48	19.91
● FWP-25A14F	25	700	700	08R5679	23.95	22.83	21.11	20.52
● FWP-32A14F	32	700	700	08R5680	23.23	22.15	20.48	19.91
● FWP-40A14F	40	660	700	08R5682	23.95	22.83	21.11	20.52
DIMENSIONS: 22 x 58mm (7/8 x 2 9/32″)								
● FWP-40A22F	40	700	500	08R5683	67.81	64.42	61.04	57.65
● FWP-50A22F	50	660	500	08R5685	67.15	63.80	60.44	57.09
● FWP-100A22F	100	660	500	08R5677	67.81	64.42	61.04	57.65

(202228)

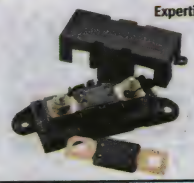
HIGH SPEED FUSES • BLADE FUSES

32V BOLT-DOWN MEGA® FUSES

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

- 40 to 500A current ratings
- Breaking capacity: 2000A @ 32VDC
- Voltage rating: 32VDC
- Operating temperature: -40°C to + 125°C
- Copper terminals (Ag available)
- M6 or M8 bolts available



FUSES

Mg. Part No.	Current (A)	Color Code	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 0298060.ZXB	60	...	64J7271	7.98	7.43	7.15	6.88
● 0298080.ZXEH	80	Red	15M6274	6.80	6.34	6.10	5.87
● 0298100.ZXEH	100	Yellow	78J5684	6.97	6.49	6.25	6.01
● 0298125.ZXEH	125	Green	91C4952	6.80	6.34	6.10	5.87
● 0298150.ZXEH	150	Orange	12J4291	6.97	6.49	6.25	6.01
● 0298175.ZXEH	175	White	50M5617	6.76	6.10	5.61	5.17
● 0298200.ZXEH	200	Blue	95C1550	6.97	6.49	6.25	6.01
● 0298250.ZXEH	250	Pink	78J5686	6.80	6.34	6.10	5.87
● 0298300.ZXH	300	Grey	05J1461	10.44	9.72	9.36	9.00

FUSE BLOCK

Mg. Part No.	Current (A)	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 02980900Z	250	50B4762	21.08	18.89	18.24	17.43
● 02981001ZXT	500	98K4453	7.15	6.80	6.42	6.03

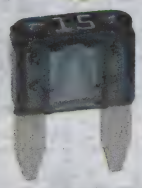
(177069)

FAST-ACTING AUTOMOTIVE BLADE FUSES

RoHS Compliant Available

COOPER Bussmann

Miniature auto blade fuses are rated 32V. Interrupting rating: 1000A. Enclosed element offers protection against shocks and sparks. Corrosion resistant for longer service life. Color-coded by amp rating. UL recognized (2A, 5A, 7.5A & 10A).



Mfg. Part No.	Color	Current (A)	Stock No.	Price Each 1-9	10-99	100-199	200-499
● BK/ATM-2	Grey	2	97F7587	1.16	0.93	0.78	0.76
● BK/ATM-3	Purple	3	96C9073	1.24	0.99	0.83	0.81
● BK/ATM-4	Pink	4	97F7589	1.19	0.95	0.80	0.78
● BK/ATM-5	Tan	5	97F7590	0.93	0.75	0.63	0.60
● BK/ATM-7-1/2	Brown	7.5	97F7591	1.24	0.99	0.83	0.81
● BK/ATM-10	Red	10	97F7592	0.93	0.75	0.63	0.60
● BK/ATM-15	Blue	15	97F7593	0.95	0.77	0.65	0.62
● BK/ATM-20	Yellow	20	97F7594	1.16	0.93	0.78	0.76
● BK/ATM-25	Transparent	25	97F7595	0.95	0.77	0.65	0.62
● BK/ATM-30	Green	30	97F7605	0.96	0.78	0.65	0.63

(55473)

FAST-ACTING AUTOMOTIVE BLADE FUSES

RoHS Compliant Available

COOPER Bussmann

Fuses are color-coded by amp rating. 32VDC. Feature enclosed element that offers protection against shocks and sparks. Corrosion resistant for longer service life. UL listed.

Mfg. Part No.	Color	Current (A)	Stock No.	Price Each 1-9	10-99	100-199	200-499
● BK/ATC-3	Purple	3	97F7596	1.01	0.82	0.69	0.66
● BK/ATC-4	Pink	4	02J8571	0.77	0.62	0.52	0.50
● BK/ATC-5	Tan	5	97F7598	0.86	0.70	0.58	0.56
● BK/ATC-7-1/2	Brown	7.5	97F7599	0.77	0.62	0.52	0.50
● BK/ATC-10	Red	10	97F7600	0.75	0.61	0.51	0.49
● BK/ATC-15	Blue	15	97F7601	0.75	0.61	0.51	0.49
● BK/ATC-20	Yellow	20	97F7602	0.77	0.62	0.52	0.50
● BK/ATC-25	Transparent	25	97F7603	1.00	0.80	0.67	0.65
● BK/ATC-30	Green	30	97F7604	0.77	0.62	0.52	0.50
● BK/ATC-40	Orange	40	02B2118	0.79	0.64	0.54	0.52

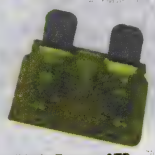
(2374)

AUTOMOTIVE BLADE FUSES

RoHS Compliant Available

multicomp

Mini Blade Fuses



Blade Fuses - ATO

Blade Fuses- Illuminated

- Transparent body
- Voltage rating: 32V and less

MINI BLADE FUSES, DIMENSIONS (L x W x H): 11mm x 3.8mm x 9mm
Equivalent minimum and ATM fuses. Replaces minimum and ATM fuses.

Mfg. Part No.	Color	Current (A)	Stock No.	Price Each 1-249	250-499	500-999	1000-4999
● MCAST 3A 32V	Violet	3	08N2487	0.27	0.24	0.22	0.20
● MCAST 4A 32V	Pink	4	08N2489	0.27	0.25	0.22	0.20
● MCAST 5A 32V	Tan	5	08N2490	0.27	0.24	0.22	0.20
● MCAST 7.5A 32V	Brown	7.5	08N2491	0.27	0.25	0.22	0.20
● MCAST 10A 32V	Red	10	08N2483	0.29	0.26	0.23	0.21
● MCAST 15A 32V	Blue	15	08N2484	0.27	0.24	0.22	0.20
● MCAST 20A 32V	Yellow	20	08N2485	0.27	0.24	0.22	0.20
● MCAST 25A 32V	Natural	25	08N2486	0.26	0.24	0.21	0.19
● MCAST 30A 32V	Green	30	08N2488	0.27	0.25	0.22	0.20

BLADE FUSES - ATO, DIMENSIONS (L x W x H): 19.1mm x 5mm x 12.2mm
Equivalent ATO and ATC fuses.

● MCATQ 20A 32V	Yellow	20	08N2494	0.24	0.22	0.20	0.18

BLADE FUSES- ILLUMINATED - MINI BLADE, DIMENSIONS (L x W x H): 11.2mm x 4mm x 9mm
Integrated LED, Illuminated to indicate fuse failure. Designed specifically for use in automotive applications although now common in consumer electronics.

● MCASP-L-E 5A	Tan	5	96M8222	1.09	0.98	0.88	0.79
● MCASP-L-E 7.5A	Brown	7.5	96M8223	1.09	0.98	0.88	0.79
● MCASP-L-E 10A	Red	10	96M8217	1.15	1.03	0.92	0.83
● MCASP-L-E 15A	Blue	15	96M8218	1.09	0.98	0.88	0.79
● MCASP-L-E 25A	Natural	25	96M8220	1.05	0.94	0.84	0.76
● MCASP-L-E 30A	Green	30	96M8221	1.05	0.94	0.84	0.76

BLADE FUSES- ILLUMINATED - ATO, DIMENSIONS (L x W x H): 19.3mm x 5.25mm x 12.54mm
Integrated LED, Illuminated to indicate fuse failure. Designed specifically for use in automotive applications although now common in consumer electronics.

● MCATP-L-E 5A	Tan	5	96M8229	1.09	0.98	0.88	0.79
● MCATP-L-E 7.5A	Brown	7.5	96M8230	1.09	0.98	0.88	0.79
● MCATP-L-E 10A	Red	10	96M8224	1.05	0.94	0.84	0.76
● MCATP-L-E 15A	Blue	15	96M8225	1.09	0.98	0.88	0.79
● MCATP-L-E 20A	Yellow	20	96M8226	1.08	0.97	0.86	0.78
● MCATP-L-E 25A	Natural	25	96M8227	1.09	0.98	0.88	0.79

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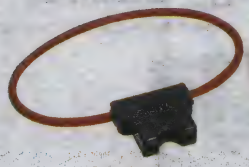
FUSE HOLDERS

RoHS Compliant Available

multicomp



In-Line Fuse Holder

In-Line Fuse Holder - Splashproof

Fuse Block

- Fuse blocks and In-line fuseholders suitable for use with automotive blade type fuses

FUSE BLOCKS

Mfg. Part No.	Type	Current (A)	Holder Terminals	Stock No.	Price Each 1-249	250-499	500-999	1000-4999
● MCCQ-122	Mini Blade	15	Pin	08N2503	0.59	0.53	0.48	0.43
● MCCQ-121	ATO	30	Pin	08N2502	0.59	0.53	0.48	0.43
IN-LINE FUSE HOLDERS								
● MCCQ-211A	ATO	20	Wire Leaded	08N2504	2.15	1.93	1.72	1.56
● MCCQ-211N	ATO	30	Wire Leaded	08N2506	1.96	1.76	1.61	1.48
IN-LINE FUSE HOLDERS - SPLASHPROOF								
● MCCQ-211CN	ATO	30	Wire Leaded	08N2505	2.55	2.30	2.08	1.89

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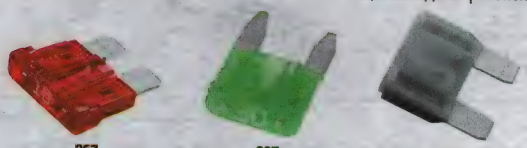
AUTOMOTIVE BLADE FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered



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AUTOFUSE® FAST-ACTING ATO® BLADE FUSES

Compact fuses rated 32V and color-coded for easy amp identification. UL listed.

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-9	10-24	25-49
0257004.PXPV	4	78J5286	1.15	1.05	1.01

MINI® FUSE AUTOMOTIVE BLADE FUSES

Blade fuses have same features as ATO® fuses, listed above, except in a smaller design. Heat-resistant housing ideal for engine compartments and other high-temperature areas. Color-coded. UL listed. *Order in-line fuse holders separately; go online or call.*

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-249	250-499	500-999	1000-4999
0297002.WXN	2	98K4443	0.38	0.34	0.30	0.28
029707.5WXNV	7.5	95F2012	0.84	0.79	0.72	0.66
0297010.WXNV	10	95F2013	0.84	0.79	0.72	0.66
0297015.WXNV	15	95F2014	0.84	0.79	0.72	0.66
0297020.WXN	20	98K4449	0.18	0.17	0.16	0.15
0297020.WXNV	20	95F2015	0.84	0.79	0.72	0.66
0297025.WXNV	25	95F2016	0.84	0.79	0.72	0.66
0297030.WXNV	30	95F2024	0.84	0.79	0.72	0.66

MAXI™ FUSE AUTOMOTIVE BLADE FUSES

Maxi™ fuse blade fuses replace the commonly used fusible wire or fusible link to protect a high current segment or system of the wiring harness. For easy-access, under-the-hood fuse box installations.

Mfg. Part No.	Current (A)	Nom. Cold Resist. (mΩ)	Volt. Drop @ Rated Curr. (mV)	Min. Melting (I^2t)	Max. Clear. (A^2s)	Stock No.	Price Each 1-9	10-24	25-49
0299020.ZXNV	20	3.1	76	1100	1550	91F3197	2.08	1.89	1.82
0299020.ZXOCR	20	3.1	76	1100	1550	98K4455	2.24	2.01	1.84
0299025.ZXNV	25	2.4	75	2087	...	95C1867	2.08	1.89	1.82
0299060.TXN	60	0.9	77	15300	21900	95M7670	3.26	2.94	2.71
0299080.TXN	80	0.6	79	8800	12700	50M5624	1.65	1.56	1.48
0299080.ZXNV	80	0.6	79	8800	12700	91F3203	3.40	3.17	3.05

(9364)

MIDI® TIME-DELAY AUTOMOTIVE BOLT-DOWN FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

- Interrupting rating: 1000A @ 32VDC
- Voltage rating: 32VDC
- Operating temperature range: -40°C to + 125°C

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-9	10-24	25-49	50-99
0498040.M	40	12J3801	2.56	2.32	2.24	2.07
0498050.M	50	78J1610	2.56	2.32	2.24	2.07
0498060.M	60	78J1611	2.56	2.32	2.24	2.07
0498070.M	70	78J1612	2.66	2.42	2.33	2.15
0498080.M	80	12J3802	2.56	2.32	2.24	2.07
0498100.M	100	12J3803	2.95	2.68	2.59	2.39

(178406)

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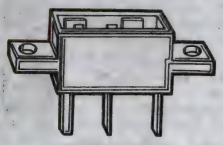
(212569)

FAST-ACTING TELECOMMUNICATIONS INDICATING FUSES

RoHS Compliant Available

COOPER Bussmann®

GMT



HLT Fuse Holder

Designed for telecommunications, computer and control circuit applications. Feature visual spring indication and alarm circuit activation. Rated 125VAC, 60VDC. UL recognized. Mount in **HLT** and **HLS** fuse holders; *order separately below.*

INDICATING FUSES

Mfg. Part No.	Current (A)	Color	Stock No.	Price Each 1-9	10-49	50-99
BK/GMT-1/4A	0.25	Violet	28F316	3.02	2.42	2.21
BK/GMT-1/2A	0.5	Red	28F317	3.02	2.42	2.21
BK/GMT-3/4A	0.75	Brown	03J3198	3.14	2.52	2.30
BK/GMT-1A	1	Gray	28F320	3.02	2.42	2.21
BK/GMT-1-1-3A	1.33	White	28F321	3.14	2.52	2.30
BK/GMT-1-1/2A	1.5	White/Yellow	96C9281	8.53	7.88	7.55
BK/GMT-2A	2	Orange	28F322	3.77	3.36	3.22
BK/GMT-3A	3	Blue	28F323	3.02	2.42	2.21
BK/GMT-4A	4	White/Brown	07J9987	3.10	2.48	2.27
BK/GMT-5A	5	Green	28F324	3.02	2.42	2.21
BK/GMT-7-1/2A	7.5	Black/White	96C9284	3.77	3.36	3.22
BK/GMT-10A	10	Red/White	28F326	3.02	2.42	2.21
BK/GMT-12A	12	Yellow/Green	95F5184	3.01	2.68	2.56
BK/GMT-15A	15	Red/Blue	27C1011	3.02	2.42	2.21

FUSE HOLDERS FOR GMT SERIES FUSES

Mfg. Part No.	Current (A)	Mounting	Stock No.	Price Each 1-9	10-49	50-99
BK/HLT	15	PC Board Thru Hole	28F360	3.10	2.48	2.27
BK/HLS	15	Panel Mount	95F3885	3.46	3.07	2.94

(2336)

CUBEFUSE® PANEL MOUNT FAST-ACTING FUSES

RoHS Compliant Available

COOPER Bussmann®

- Maximize uptime and reliability using fuses designed and listed to UL 2579 (low voltage fuses - fuses for 600VDC photovoltaic systems)
- Fast-acting protection specifically designed for low-fault current conditions that occur in PV systems
- Maximize return on investment with fuses proven to withstand harsh temperatures; demonstrated performance in extreme temperature cycling conditions, ranging from -40°C through 90°C
- Minimize panel space by up to 70% with readily available Class CF holders
- Proven to clear faults faster than the UL requirement
- Minimal energy consumption leading to increased efficiency
- Ampacity rejecting holders help prevent overfusing
- Finger-safe construction minimizes exposure to live parts, reducing hazard to personnel

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-4	5-9	10-24	25-49
PVCF35RN	35	75T4641	63.92	60.78	57.65	54.20
PVCF40RN	40	75T4642	63.92	60.78	57.65	54.20
PVCF45RN	45	75T4643	63.92	60.78	57.65	54.20
PVCF50RN	50	75T4644	63.92	60.78	57.65	54.20
PVCF60RN	60	75T4646	63.92	60.78	57.65	54.20
PVCF70RN	70	75T4647	126.13	119.02	112.55	99.61
PVCF80RN	80	79T1341	126.13	119.02	112.55	99.61
PVCF90RN	90	75T4648	126.13	119.02	112.55	99.61
PVCF100RN	100	75T4635	126.13	119.02	112.55	99.61

(203520)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

(212570)

ELECTRICAL POWER FUSES

CUBEFUSE® PANEL MOUNT FAST-ACTING FUSES

RoHS Compliant Available

COOPER Bussmann

- Finger-safe power fuse system
- Smallest footprint of any class fuse including Class J, CC, T and RK
- Class CF meets Class J fast-acting electrical performance requirements
- Faster response to damaging faults to help reduce destructive thermal and magnetic forces
- True fast-acting fuse construction
- High interrupting rating to safely interrupt faults up to 300kA
- No venting of arc or molten metal and gases during opening
- Low let-through currents under fault conditions

True, finger-safe fast-acting fuse construction delivers faster response to damaging faults to help reduce destructive thermal and magnetic forces. Ideally suited for protecting Uninterruptable Power Supplies (UPS) and other critical applications that benefit from fast-acting fuse protection.

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-4	5-9	10-19
● FCF1RN	1	75T4290	39.30	37.42	34.62
● FCF3RN	3	75T4296	39.30	37.42	34.62
● FCF6RN	6	75T4302	41.65	39.67	36.70
● FCF10RN	10	75T4291	41.65	39.67	36.70
● FCF15RN	15	75T4293	40.47	38.55	35.66
● FCF20RN	20	75T4294	39.30	37.42	34.62
● FCF25RN	25	75T4295	39.30	37.42	34.62
● FCF30RN	30	75T4297	40.47	38.55	35.66
● FCF35RN	35	75T4298	65.10	61.91	58.72
● FCF40RN	40	75T4299	65.10	61.91	58.72
● FCF45RN	45	75T4300	65.10	61.91	58.72
● FCF50RN	50	75T4301	65.10	61.91	58.72
● FCF60RN	60	75T4303	65.10	61.91	58.72
● FCF70RN	70	75T4304	128.45	121.20	114.62
● FCF80RN	80	75T4305	128.45	121.20	114.62
● FCF90RN	90	75T4306	128.45	121.20	114.62
● FCF100RN	100	75T4292	128.45	121.20	114.62

(203519)

BRITISH STYLE SEMICONDUCTOR PROTECTION FUSES

RoHS Compliant Available

COOPER Bussmann

- Voltage: 240VAC / 140VDC
- Length: 41.8mm

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-4	5-9	10-19	20-49
● 16LET	16	98K5945	69.48	65.75	62.34	58.86
● 25LET	25	02B6560	61.51	58.49	55.48	52.16
● 35LET	35	02B6628	59.71	56.79	53.86	50.64
● 50LET	50	98K9618	67.81	64.17	60.83	57.44
● 63LET	63	02B6772	64.20	61.05	57.90	54.44
● 80LET	80	02B6837	61.51	58.49	55.48	52.16
● 100LET	100	02B5841	66.73	63.46	60.19	56.59
● 125LET	125	98K5492	78.06	73.87	70.03	66.13
● 180LET	180	98K6036	87.87	83.15	78.83	74.43

(178438)

BRITISH STYLE SEMICONDUCTOR PROTECTION FUSES

RoHS Compliant Available

COOPER Bussmann

- Voltage: 660VAC / 450VDC
- Length: 41.8mm

Mfg. Part No.	Current (A)	Length (mm)	Stock No.	Price Each 1-4	5-9	10-19
● 15ET	15	63.5	98K5771	73.81	69.85	66.22
● 25ET	25	63.5	98K8424	73.81	69.85	66.22
● 40ET	40	63.5	98K9153	84.08	79.57	75.43
● 56ET	56	63.5	26M7565	81.74	77.35	73.33
● 75EET	75	70.0	99K0689	48.08	45.65	43.22
● 80ET	80	63.5	99K0772	92.09	87.15	82.63
● 110EET	110	70.0	88F3684	177.52	167.51	158.40

(178439)

600V FAST-ACTING DC MIDGET FUSES

RoHS Compliant Available

COOPER Bussmann

- 13/32" x 1½" cartridge fuse
- Interrupting current: 100kA @ 600VAC, 50kA @ 600VDC

Mfg. Part No.	Current	Stock No.	Price Each 1-24	25-49	50-99	100-249
● DCM-3/10	300mA	02J8611	27.65	26.50	24.85	23.70
● DCM-2	2A	02J8605	27.65	26.50	24.85	23.70
● KLM-5	5A	63R7738	30.10	28.67	26.52	25.80

(142205)

FAST-ACTING 13/32 x 1½" FERRULE FUSES

RoHS Compliant Available

COOPER Bussmann

Melamine, Limitron® ferrule fuses rated 600V for circuits with high available short-circuit currents. Interrupting rating: 100,000AIC. UL listed (2A, 5A, 7.5A and 10A are UL recognized), CSA certified.

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-4	5-9	10-19
● KTK-1/10	1/10	63R7750	31.13	29.65	27.42
KTK 2/10	2/10	50F2991	31.84	30.32	28.05
● KTK-1/4	¼	63R7752	27.42	26.12	24.16
● KTK-1	1	28F197	18.96	17.43	17.05
● KTK-1-1/2	1½	63R7749	27.19	25.90	23.96
● KTK-2	2	63R7756	24.91	23.72	21.94
● KTK-3	3	63R7758	24.32	23.16	21.43
● KTK-5	5	63R7761	24.32	23.16	21.43
● KTK-7	7	63R7763	29.46	28.06	25.96
● KTK-10	10	63R7753	24.32	23.16	21.43
● KTK-12	12	63R7754	29.42	28.02	25.92
● KTK-15	15	63R7755	24.32	23.16	21.43
● KTK-20	20	63R7757	24.41	23.24	21.50
● KTK-25	25	14N8864	24.99	23.80	22.02
● KTK-30	30	63R7759	24.41	23.24	21.50

(2329)

FAST-ACTING 13/32 x 1⅜" FERRULE FUSES

COOPER Bussmann

BBS series ferrule fuses for control, gaseous vapor fixture, HID ballasts, electronic circuits. Fuses available from 1/10 - 5A. Voltage rating: 600VAC. UL listed, CSA certified.

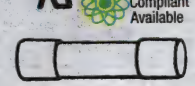
Mfg. Part No.	Current	Stock No.	Price Each 1-4	5-9	10-24
BBS-4/10	400mA	25M7664	17.54	16.13	15.77
BBS-1/2	500mA	25M7658	17.02	15.65	15.30
BBS-1	1A	70B8498	13.13	12.12	11.62
BBS-2	2A	94F2502	13.18	12.17	11.66
BBS-3	3A	70B1128	12.87	11.88	11.39

(2373)

FAST-ACTING FERRULE FUSES

RoHS Compliant Available

COOPER Bussmann



- Designed for multimeters only
- Voltage: 1000V
- UL recognized

Melamine tube, nickel-plated brass end caps. Intended to carry 100% of rated current indefinitely. Not intended for branch circuit protection.

Mfg. Part No.	Current	Stock No.	Price Each 1-4	5-9	10-19
DMM-B-44/100	440mA	96B8587	33.67	32.06	29.66
● DMM-B-11A	11A	51M8728	41.23	39.26	36.32

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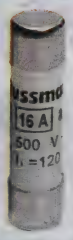
CLASS gG/gL IEC 60269 INDUSTRIAL FERRULES FUSES



COOPER Bussmann

- Dimensions: 10.3 x 38 x 10 mm
- Solderability: In accordance with IEC 68-2-20

Mfg. Part No.	Current (A)	Voltage Rating (VAC)	Stock No.	Price Each 1-9	10-19	20-49	50-99
C10G2	2	500	08R5530	15.47	14.27	13.68	11.90
C10G4	4	500	08R5534	15.01	13.85	13.27	11.55
C10G6	6	500	08R5535	15.01	13.85	13.27	11.55
C10G10	10	500	08R5528	15.47	14.27	13.68	11.90
C10G32	32	400	08R5533	15.01	13.85	13.27	11.55

(202232)

GENERAL PURPOSE FUSES

COOPER Bussmann

- Protects lighting, heating and other circuits not subject to temporary surges
- For general purpose circuits, size at ampere rating of circuit
- For motor circuits, size at 300% to 400%

NON series is rated at 250 VAC (or less), and from 1 to 600 A. Termination: Ferrule.

Mfg Part No.	Current (A)	Voltage (VAC)	Stock No.	Price Each 1-9
NON-3	3	250	27F2439	7.00
NON-5	5	250	94F2253	7.17
NON-15	15	250	27F2442	5.74
NON-30	30	250	27F2445	5.43
NON-35	35	250	27F2446	8.68
NON-40	40	250	27F2447	8.68
NON-60	60	250	27F2450	8.68

(80054)

CLASS CC TIME-DELAY 13/32 x 1½" LOW-PEAK® TIME-DELAY FUSES

COOPER Bussmann

LP-CC series 13/32" x 1½" (10.3mm x 38.1mm) time-delay fuses are all-purpose, space-saving branch circuit fuses that meet most protection requirements up to 30A. Feature faster response to short-circuit currents and higher interrupting rating than mechanical overcurrent protective devices. Rated: 600VAC. Ratings available from ½-30A.

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-4	5-9	10-19
LP-CC-1/2	½	97F7582	31.36	29.87	27.63
LP-CC-1	1	97F7583	30.75	29.28	27.09
LP-CC-2	2	97F7580	31.36	29.87	27.63
LP-CC-3	3	95F3879	30.75	29.28	27.09
LP-CC-4	4	95F3881	31.36	29.87	27.63
LP-CC-5	5	95F3882	30.75	29.28	27.09
LP-CC-6	6	95F3883	33.57	31.97	29.57
LP-CC-8	8	52F5718	32.91	31.34	28.99
LP-CC-10	10	95F3884	30.75	29.28	27.09
LP-CC-12	12	95F3865	33.57	31.97	29.57
LP-CC-15	15	95F3866	30.75	29.28	27.09
LP-CC-20	20	95F3867	31.69	30.18	27.92
LP-CC-25	25	02B4549	32.91	31.34	28.99
LP-CC-30	30	95F3868	30.75	29.28	27.09

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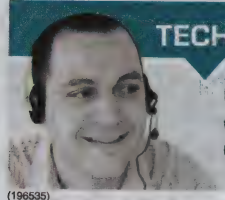


TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

CLASS G TIME-DELAY FERRULE FUSES

RoHS Compliant Available

COOPER Bussmann

SC series time-delay ferrule fuses are ideal for branch and supplementary protection. 13/32" fuse diameter; length varies with electrical rating. Interrupting rating: 100,000AIC. Ampere rating: 7-60A (time-delay). Voltage ratings: 480VAC, 300VDC except **mfg. part nos. SC-10, SC-15** and **SC-20** (600VAC, 170VDC). 600V rating: can be used in 120/208, 120/240 and 277/480 volt circuits. **SC** fuses are about ½ the size of 600V NEC fuse type. Ampere ratings above 6A have a degree of overload time-delay which permits them to pass temporary overloads. At 200% load, they have a minimum opening time of 12 seconds. UL listed, Class G. CSA certified.

Mfg. Part No.	Current (A)	Length	Stock No.	Price Each 1-4	5-9
SC-10	10	1 5/16" (33.2)	30M2623	15.00	13.75
SC-15	15	1 5/16" (33.2)	27F2425	11.83	10.92
SC-20	20	1 13/32" (35.8)	27F2426	12.44	11.48
SC-25	25	1 5/8" (41.4)	27F2427	23.20	22.09
SC-30	30	1 5/8" (41.4)	27F2428	20.40	18.70
SC-40	40	2¼" (57.1)	27F2429	22.64	20.75
SC-50	50	2¼" (57.1)	27F2430	25.01	22.93
SC-60	60	2¼" (57.1)	27F2431	22.10	20.26

(55371)

TIME-DELAY 13/32 x 1½" FUSES

COOPER Bussmann

FNM series dual-element Fusetron® fuses for circuits with high inrush currents. Fuse opening time: 4 hours, minimum @ 110% load; 1 hour, maximum @ 135% load.

Mfg. Part No.	Current (A)	Voltage (V)	Stock No.	Price Each 1-4	5-9	10-24
FNM-1/2	½	250	27F863	13.67	12.53	12.25
FNM-6/10	6/10	250	94F2516	13.83	12.68	12.39
FNM-1	1	250	27F864	12.93	11.85	11.59
FNM-1-1/4	1¼	250	94F2199	15.27	13.99	13.68
FNM-2	2	250	27F866	12.51	11.55	11.07
FNM-2-1/2	2½	250	27F872	13.33	12.22	11.94
FNM-3	3	250	96F6103	13.37	12.34	11.83
FNM-3-2/10	3 2/10	250	27F867	13.74	12.69	12.16
FNM-4	4	250	27F868	13.53	12.49	11.97
FNM-5	5	250	27F869	12.51	11.55	11.07
FNM-6	6	250	02B2886	13.33	12.22	11.94
FNM-6 1/4	6¼	250	27F873	13.74	12.69	12.16
FNM-7	7	250	94F2203	13.58	12.54	12.02
FNM-8	8	250	27F874	13.37	12.34	11.83
FNM-10	10	250	27F870	12.51	11.55	11.07
FNM-12	12	125	27F875	13.48	12.36	12.08
FNM-15	15	125	27F876	12.51	11.55	11.07
FNM-20	20	32	98F1097	13.06	12.05	11.55
FNM-30	30	32	94F2202	13.06	12.05	11.55

(2333)

GDB SERIES FAST-ACTING 5 x 20mm GLASS FUSES

RoHS Compliant Available

COOPER Bussmann

GDB series glass, 250V, low-interrupting fuses meet IEC 127, Sheet 2. Other amp ratings also available; *go online or call.*

Mfg. Part No.	Current Rating	Stock No.	Price Each 1-9	10-49	50-99
BK/GDB-50MA	50mA	96C9177	7.41	6.60	6.32
BK/GDB-80MA	80mA	46F079	6.48	5.98	5.73
BK/GDB-100MA	100mA	46F080	6.48	5.98	5.73
BK/GDB-160MA	160mA	96C9172	4.91	4.36	4.18
BK/GDB-200MA	200mA	96C9173	4.91	4.36	4.18
BK/GDB-250MA	250mA	46F084	5.10	4.54	4.34
BK/GDB-315MA	315mA	46F085	4.91	4.36	4.18
BK/GDB-500MA	500mA	46F087	0.47	0.39	0.33
BK/GDB-630MA	630mA	46F088	0.63	0.53	0.44
BK/GDB-800MA	800mA	46F089	3.98	3.54	3.39
BK/GDB-1A	1A	46F090	0.47	0.39	0.33
BK/GDB-1-6A	1.6A	46F092	0.64	0.53	0.45
BK/GDB-2A	2A	46F093	0.47	0.39	0.33
BK/GDB-2-5A	2.5A	46F094	0.64	0.53	0.45
BK/GDB-3-15A	3.15A	46F095	0.47	0.39	0.33

CONTINUED

ELECTRICAL POWER FUSES

GDB SERIES FAST-ACTING 5 × 20mm GLASS FUSES (CONT.)

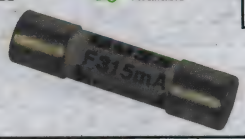
Mfg. Part No.	Current Rating	Stock No.	Price Each 1-9	10-49	50-99
BK/GDB-4A	4A	46F096	0.46	0.38	0.32
BK/GDB-5A	5A	46F097	0.47	0.39	0.33
BK/GDB-6-3A	6.3A	46F098	0.47	0.39	0.33
● S500-10-R	10A	51K9833	3.31	2.95	2.82

(2315)

GDA SERIES FAST-ACTING 5 × 20mm CERAMIC FUSES

RoHS Compliant Available

COOPER Bussmann



GDA series ceramic, high-interrupting fuses are rated 250V. Meet IEC 127, Sheet 1. UL recognized.

Mfg. Part No.	Current Rating	Stock No.	Price Each 1-9	10-49	50-99
BK/GDA-500MA	500mA	46F063	2.73	2.19	2.00
BK/GDA-630MA	630mA	46F064	2.66	2.13	1.95
BK/GDA-1A	1A	46F066	2.73	2.19	2.00
BK/GDA-1-6A	1.6	29C6344	5.75	5.11	4.89
BK/GDA-2A	2A	46F069	2.66	2.13	1.95
● BK/S501-2.5-R	2.5A	34P2527	1.39	1.12	0.93
BK/GDA-3-15A	3.15A	46F071	2.66	2.13	1.95
BK/GDA-4A	4A	46F072	2.66	2.13	1.95
BK/GDA-5A	5A	46F073	2.73	2.19	2.00
BK/GDA-6-3A	6.3A	46F074	2.66	2.13	1.95

(2314)

GDC SERIES TIME-LAG 5 × 20mm GLASS FUSES

RoHS Compliant Available

COOPER Bussmann

GDC series fuses rated 250V. Meet IEC 127, Sheet 3.

Mfg. Part No.	Current Rating	Stock No.	Price Each 1-9	10-99
● BK/S506-160-R	160mA	48K9964	1.27	1.02
● BK/S506-250-R	250mA	48K9968	5.28	4.88
● BK/S506-315-R	315mA	51K9904	1.27	1.02
● BK/S506-400-R	400mA	48K9973	1.83	1.47
BK/GDC-500MA	500mA	46F111	1.28	1.03
BK/GDC-630MA	630mA	46F112	5.07	4.51
BK/GDC-1A	1A	46F114	1.25	1.00
BK/GDC-1-25A	1.25A	46F115	4.88	4.34
BK/GDC-1-6A	1.6A	46F116	1.75	1.40
BK/GDC-2A	2A	46F117	1.25	1.00
BK/GDC-2-5A	2.5A	46F118	1.80	1.44
BK/GDC-3.15A	3.15A	46F119	1.25	1.00
BK/GDC-4A	4A	46F120	1.25	1.00
BK/GDC-5A	5A	46F121	1.25	1.00
BK/GDC-6-3A	6.3A	46F122	1.25	1.00

(2316)

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(196546)

FNQ SERIES TIME-DELAY 13/32 x 1½" FUSES

RoHS Compliant Available

COOPER Bussmann

FNQ series time-delay fuses for motor control transformers and other circuits with inrush currents. Rated 500V. Interrupting rating: 10,000AIC. * denotes UL listed only.

Mfg. Part No.	Current Rating (A)	Stock No.	Price Each 1-4	5-9	10-19
FNQ-1/4	¼	27F2454	34.01	32.39	29.96
FNQ-1/2	½	27F2455	31.24	29.75	27.52
● FNQ-1	1	29M9935	29.67	28.26	26.14
● FNQ-1-6/10	1 6/10	27F2457	30.56	29.10	26.92
● FNQ-2	2	29M9938	29.09	27.70	25.63
● FNQ-2-1/2	2½	29M9939	31.48	29.98	27.73
FNQ-3	3	96F6104	29.67	28.26	26.14
● FNQ-3-2/10	3 2/10	27F2460	31.17	29.69	27.46
● FNQ-3-1/2	3½	29M9941	33.86	32.24	29.83
● FNQ-4	4	29M9943	29.09	27.70	25.63
● FNQ-5	5	30M2600	29.67	28.26	26.14
● FNQ-6	6	29M9944	29.67	28.26	26.14
● FNQ-7	7	29M9945	31.48	29.98	27.73
● FNQ-8	8	29M9946	29.67	28.26	26.14
● FNQ-10	10	29M9936	29.09	27.70	25.63
● FNQ-12	12	27F2466	29.96	28.54	26.40
● FNQ-15	15	29M9937	29.09	27.70	25.63
● FNQ-20*	20	94F2204	29.09	27.70	25.63
● FNQ-25*	25	29M9940	29.96	28.54	26.40
● FNQ-30*	30	29M9942	29.09	27.70	25.63

(2350)

TIME-DELAY PIN INDICATING FUSES

RoHS Compliant Available

COOPER Bussmann

HPF-C

Time-delay 13/32 x 1½" pin indicating fuses for use in electronic circuits with high inrush currents. Silver-plated indicating pin for positive signal activation. Mount in **HPF-C** panel-mount holder; *order separately below.* Ratings available up to 30A; *go online or call.* UL listed, CSA certified.

Mfg. Part No.	Current (A)	Voltage (V)	Stock No.	Price Each 1-4	5-9	10-24
FNA-1	1	125	28F335	23.43	21.47	20.99
FNA-2	2	125	28F341	23.07	21.97	20.32
FNA-10	10	125	28F356	22.80	21.71	20.09
PANEL MOUNT FUSE HOLDER						
● HPF-C	...	600	63R8556	24.97	23.78	22.00

(2347)

CLASS J 600V DUAL ELEMENT TIME DELAY FUSES

COOPER Bussmann

- Dual element with minimum 10 second delay at 500% overload
- Protects against motor burnout from overload
- Faster response than mechanical overcurrent protective devices
- Lower watts loss reduces power consumption
- Space saving package for equipment down sizing

Knife Blade

Cartridge

Rated at 600VAC (or less), and from 1 to 600 A. Use Class J fuseblock; **J600 series**. UL listed, CSA certified, Class J.

DIMENSIONS

Amps	Fuse Size (in.)
1-30	2.25 x 0.81
35-60	2.38 x 1.06
70-100	4.63 x 1.13
110-200	5.75 x 1.63
225-400	7.126 x 1.625
450-600	8.0 x 2.6

CONTINUED

CLASS J 600V DUAL ELEMENT TIME DELAY FUSES (CONT.)

1-60A (CARTRIDGE)

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-4	Price Each 5-9
LPJ-3SP	3	02B4584	37.79	35.99
LPJ-5SP	5	02B4596	37.43	35.64
LPJ-6SP	6	02B4599	37.43	35.64
LPJ-8SP	8	02B4604	39.50	37.62
LPJ-10SP	10	02B4564	36.69	34.94
LPJ-12SP	12	02B4567	39.12	37.26
LPJ-15SP	15	02B4569	36.69	34.94
LPJ-20SP	20	02B4577	37.43	35.64
LPJ-25SP	25	02B4580	37.43	35.64
LPJ-35SP	35	02B4587	60.78	57.80
LPJ-40SP	40	02B4591	61.99	58.95
LPJ-45SP	45	02B4593	62.60	59.53
LPJ-50SP	50	02B4597	61.99	58.95
LPJ-60SP	60	02B4600	60.78	57.80
70-600A (KNIFE BLADES)				
LPJ-80SP	80	02B4605	122.81	115.88
LPJ-100SP	100	02B4565	122.81	115.88
LPJ-150SP	150	02B4570	223.94	215.32

(80035)

LOW-PEAK® CUBEFUSE® DIN MOUNT TIME-DELAY FUSES & FUSE HOLDERS

RoHS Compliant Available

COOPER Bussmann

- Finger-safe industrial fuse system
- Meet UL Class J performance
- Type 2 "no damage" protection for IEC motor starters when properly sized
- Dual-element time-delay
- Long time delay to minimize nuisance circuit openings from temporary overloads and transient surges
- Interrupt faults to 300kA at 600VAC (100kA at 300VDC)
- No venting of arc or molten metal and gasses during opening
- Small footprint, low power consumption

Fuse

Fuse Holder

Provides true dual-element fuse construction with minimum 10-sec. time-delay @ 500% of rating. Time delay allows for back-up protection against motor burnout from overload or single phasing if other overload devices fail.

INDICATING FUSES

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-19	Price Each 20-49
TCF6	6	30M2624	46.08	43.89	40.59	39.50
TCF10	10	34M8753	45.18	43.02	39.80	38.72
TCF15	15	28C2924	46.53	44.32	40.99	39.88
TCF17-1/2	17.5	30C9779	40.98	39.02	36.10	35.12
TCF20	20	28C2925	45.18	43.02	39.80	38.72
TCF25	25	28C2926	45.18	43.02	39.80	38.72
TCF30	30	23C6710	46.08	43.89	40.59	39.50
TCF40	40	23C6713	69.55	66.14	62.73	58.98
TCF45	45	28C2928	71.63	68.12	64.61	60.75
TCF50	50	28C2929	69.55	66.14	62.73	58.98
TCF60	60	30M2625	70.94	67.46	63.99	60.16
TCF70	70	19K5632	138.86	131.03	123.91	109.67
TCF90	90	19K5633	138.86	131.03	123.91	109.67
TCF100	100	21J9515	138.86	131.03	123.91	109.67
NON-INDICATING FUSES						
TCF1RN	1	27R1564	38.16	36.34	33.62	32.71
TCF3RN	3	27R1565	38.93	37.07	34.29	33.37
TCF6RN	6	83R6066	38.16	36.34	33.62	32.71
TCF10RN	10	83R6055	39.31	37.44	34.63	33.69
TCF15RN	15	83R6057	38.16	36.34	33.62	32.71
TCF17-1/2RN	17.5	83R6058	39.84	37.94	35.10	34.15
TCF20RN	20	83R6059	38.16	36.34	33.62	32.71
TCF25RN	25	83R6060	40.45	38.53	35.64	34.67
TCF30RN	30	83R6061	38.16	36.34	33.62	32.71
TCF35RN	35	83R6062	63.22	60.12	57.03	53.62
TCF40RN	40	83R6063	63.22	60.12	57.03	53.62
TCF45RN	45	83R6064	63.22	60.12	57.03	53.62
TCF50RN	50	83R6065	63.22	60.12	57.03	53.62
TCF60RN	60	83R6067	65.12	61.93	58.74	55.23
TCF70RN	70	83R6068	124.71	117.67	111.28	98.49
TCF80RN	80	83R6069	124.71	117.67	111.28	98.49
TCF90RN	90	83R6070	124.71	117.67	111.28	98.49
TCF100RN	100	83R6056	124.71	117.67	111.28	98.49

CONTINUED

LOW-PEAK® CUBEFUSE® DIN MOUNT TIME-DELAY FUSES & FUSE HOLDERS (CONT.)

FUSEHOLDERS

Mfg. Part No.	No. of Poles	Current (A)	Wire Range (AWG)	Dual Wire (AWG)	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-24
TCFH30N	1	30	14-8	14	09R2652	16.73	15.34	14.99
TCFH60N	1	60	14-4	10-6	09R2653	23.67	21.70	21.20
TCFH100N	1	100	10-1	6	09R2651	26.83	25.55	23.64

(68049)

CLASS CC TIME-DELAY 13/32 x 1½" REJECTION FUSES

RoHS Compliant Available

COOPER Bussmann

Time-delay fuses with built-in rejection feature for control transformers and motor branch circuits. Designed to UL 508 and NEC 430-72 standards. Interrupting rating: 200,000AIC. Rated 600V. Ratings available from ¼-30A.

Mfg. Part No.	Current Rating (A)	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-19
FNQ-R-1/4	¼	29M9921	35.37	33.68	31.16
FNQ-R-4/10	4/10	29M9929	40.30	38.38	35.50
FNQ-R-1/2	½	29M9920	32.84	31.28	28.93
FNQ-R-6/10	6/10	29M9932	39.91	38.01	35.16
FNQ-R-1	1	29M9918	31.57	30.06	27.81
FNQ-R-1-1/2	1½	29M9919	32.26	30.72	28.42
FNQ-R-2	2	29M9923	32.91	31.34	28.99
FNQ-R-2-1/2	2½	29M9924	36.08	34.36	31.78
FNQ-R-3	3	29M9926	31.90	30.38	28.11
FNQ-R-4	4	29M9928	33.98	32.36	29.94
FNQ-R-5	5	29M9930	32.26	30.72	28.42
FNQ-R-6	6	29M9931	36.08	34.36	31.78
FNQ-R-7-1/2	7½	29M9933	38.13	36.32	33.59
FNQ-R-8	8	29M9934	35.37	33.68	31.16
FNQ-R-10	10	95F3878	33.98	32.36	29.94
FNQ-R-12	12	29M9922	33.03	31.46	29.10
FNQ-R-15	15	91F6000	32.07	30.54	28.25
FNQ-R-20	20	29M9925	33.18	31.60	29.23
FNQ-R-25	25	91F6002	33.85	32.24	29.82
FNQ-R-30	30	29M9927	33.18	31.60	29.23

(2351)

FAST-ACTING 13/32 x 1½" CLASS CC FUSES

RoHS Compliant Available

COOPER Bussmann

Melamine, Limitron® 600V class CC fuses with 200,000AIC rejection. Class CC. UL listed for branch circuit protection. CSA certified.

Mfg. Part No.	Current Rating (A)	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-19
KTK-R-1/2	½	63R7741	27.87	26.54	24.55
KTK-R-1	1	63R7739	26.38	25.12	23.24
KTK-R-1-1/2	1½	63R7740	26.91	25.63	23.71
KTK-R-2	2	63R7744	26.38	25.12	23.24
KTK-R-3	3	63R7745	26.91	25.63	23.71
KTK-R-5	5	63R7746	26.38	25.12	23.24
KTK-R-6	6	63R7747	28.22	26.87	24.86
KTK-R-8	8	63R7748	28.62	27.26	25.22
KTK-R-10	10	63R7742	26.38	25.12	23.24
KTK-R-15	15	63R7743	26.38	25.12	23.24
KTK-R-20	20	94F2243	26.38	25.12	23.24
KTK-R-25	25	95F3862	28.62	27.26	25.22
KTK-R-30	30	95F3863	26.38	25.12	23.24

(2330)

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(196560)

ELECTRICAL POWER FUSES

FUSETRON® TIME-DELAY DUAL-ELEMENT FUSES

COOPER Bussmann

Fuses for rejection or ordinary fuse clips. Fit existing fused equipment. Fusetron® fuse link element handles heavy overloads, short circuits and has a thermal cutout element for light overloads. Interrupt rating: 200,000A RMS symmetrical.

250V FUSES

Available from1/10A to 600A; *go online or call.*

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-4	5-9	10-24
FRN-R-2	2	28F253	17.43	15.98	15.61
FRN-R-3	3	94F2210	16.86	15.46	15.11
FRN-R-4	4	28F256	16.86	15.46	15.11
FRN-R-5	5	28F257	15.95	14.63	14.29
FRN-R-6-1/4	6¼	28F258	17.86	16.37	16.00
FRN-R-8	8	28F259	16.86	15.46	15.11
FRN-R-10	10	28F260	15.95	14.63	14.29
FRN-R-12	12	94F2209	16.28	14.92	14.58
FRN-R-15	15	28F262	13.88	12.81	12.28
FRN-R-20	20	28F264	13.88	12.81	12.28
FRN-R-25	25	28F265	14.04	12.96	12.42
FRN-R-30	30	28F266	13.55	12.51	11.99
FRN-R-40	40	28F268	23.65	21.68	21.19
FRN-R-50	50	28F270	23.65	21.68	21.19
FRN-R-60	60	28F271	23.38	21.43	20.94

FUSETRON® 600V FUSES

Available from 1A to 600A; *go online or call.*

FRS-R-1	1	27F2400	31.06	29.58	27.37
FRS-R-3	3	90F6102	27.45	26.14	24.18
FRS-R-10	10	27F2411	28.00	26.67	24.67
FRS-R-15	15	27F2412	24.82	23.64	21.87
FRS-R-20	20	27F2413	24.82	23.64	21.87
FRS-R-25	25	27F2414	25.11	23.92	22.12
FRS-R30	30	27F2415	24.24	23.08	21.35
FRS-R-35	35	27F2416	42.83	40.79	37.73
FRS-R-40	40	27F2417	42.42	40.40	37.37
FRS-R-50	50	27F2418	42.42	40.40	37.37
FRS-R-60	60	27F2419	42.42	40.40	37.37
FRS-R-100	100	27F2420	85.15	80.98	76.80

(2334)

FAST-ACTING MIL SPEC ELECTRICAL POWER FUSES

RoHS Compliant Available

Littelfuse — Expertise Applied | Answers Delivered

- 600VAC voltage rating
- 100,000A interrupting current at rated VAC
- 200,000A interrupting current at 500VAC (military type F60C)
- 150,000A interrupting current at 500VDC (military type F60C)

Fast-acting fuses designed for use in circuits with high AC fault current capacity or where military approval is required.

% of Ampere Rating	Ampere Rating	Opening Time
135%	1/10–30	1 hour, Maximum
200%	1/10–30	2 minutes, Maximum

Mfg. Part No.	Current	Stock No.	Price Each 1-9	10-99	100-249	250-499
● 0KLK.100T	100mA	81F2137	31.23	26.77	24.76	23.89
● 0KLK.250T	250mA	81F2138	26.72	22.90	21.18	20.44
● 0KLK.500T	500mA	81F2140	26.74	22.92	21.20	20.46
● 0KLK007.T	7A	88F1179	28.41	24.35	22.52	21.73

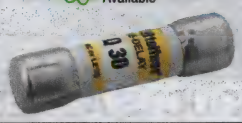
(139037)

500V SLO-BLO® ELECTRICAL POWER FUSES

RoHS Compliant Available

Littelfuse — Expertise Applied | Answers Delivered

- 500VAC voltage rating
- 10,000A interrupting current at rated VAC



% of Ampere Rating	Ampere Rating	Opening Time
135%	1/10–30	1 hour, Maximum
200%	3.2–30	12 seconds, Minimum
	0–3	5 seconds, Minimum

➤CONTINUED➤

500V SLO-BLO® ELECTRICAL POWER FUSES (CONT.)

Mfg. Part No.	Current	Stock No.	Price Each 1-9	10-99	100-249	250-499
● 0FLQ020.T	20A	93B0150	29.76	25.51	23.59	22.77

(139002)

CLASS CC SLO-BLO® ELECTRICAL POWER FUSES

RoHS Compliant Available

Littelfuse — Expertise Applied | Answers Delivered

- 600VAC/250VDC voltage rating
- 200,000A interrupting current at rated VAC
- 20,000A interrupting current at rated VDC

CCMR fuses (formerly KLMR) are specifically designed to withstand sustained starting currents of small motors. The CCMR fuses provide short-circuit protection for motor branch-circuits.

% of Ampere Rating	Ampere Rating	Opening Time
110%	1/10–30	15 minutes, Maximum
135%	1/10–30	1 hour, Maximum

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-9	10-99	100-249
CCMR001.T	1	52F5729	31.52	27.02	24.99
CCMR01.5T	1.5	02B6903	32.75	28.07	25.96
CCMR002.T	2	02B6912	30.60	26.23	24.26
CCMR012.T	12	07C8610	33.74	28.92	26.74
● CCMR050.T	50	51M8710	59.59	51.09	47.24

(139040)

CLASS RK5 DUAL-ELEMENT ELECTRICAL POWER FUSES

Littelfuse — Expertise Applied | Answers Delivered

- 250VAC/125VDC voltage rating
- 200,000A interrupting current at rated VAC
- 20,000A interrupting current at rated VDC

FLNR series fuses provide protection for all types of circuits especially those containing motors. Use with **LR250 series** fuse blocks.

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-9	10-24	25-49	50-99
FLNR010.T	10	81F2180	16.81	15.07	14.55	13.90
FLNR015.T	15	81F2181	13.47	12.07	11.66	11.14
FLNR020.T	20	81F2183	13.47	12.07	11.66	11.14
FLNR030.T	30	81F2185	13.47	12.07	11.66	11.14

(139046)

FAST-ACTING AC FUSES

RoHS Compliant Available

Littelfuse — Expertise Applied | Answers Delivered

Current-limiting fuses with high-interrupting rating: 100,000A. Ideal for control circuits, street lighting, H.I.D. lighting and computers. UL listed, CSA certified.

Mfg. Part No.	Current (A)	Voltage (V)	Stock No.	Price Each 1-9	10-99	100-249
● 0KLK001.T	1	600	18M9127	24.73	21.20	19.61
● 0KLK002.T	2	600	81F2144	24.73	21.20	19.61
● 0KLK003.T	3	600	18M9128	24.97	21.41	19.80
● 0KLK005.T	5	600	18M9129	24.97	21.41	19.80
● 0KLK006.T	6	600	18M9130	24.97	21.41	19.80
● 0KLK008.T	8	600	18M9131	24.73	21.20	19.61
● 0KLK010.T	10	600	81F2150	24.24	20.78	19.22
● 0KLK015.T	15	600	81F2151	24.73	21.20	19.61
● 0KLK020.T	20	600	81F2152	24.24	20.78	19.22
● 0KLK025.T	25	600	18M9132	24.24	20.78	19.22
● 0KLK030.T	30	600	81F2154	24.97	21.41	19.80

(9359)

multicomp AT NEWARK ELEMENT14

Affordable, performance board level & box build components at newark.com/multicomp

(212569)

KLK-D SERIES FAST-ACTING FUSES

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

Same as **KLK series** fuses, *ordered separately on page 1452*, except interrupting rating: 10,000A @ 600VDC; 100,000A @ 600VAC. UL listed, CSA certified.

Mfg. Part No.	Current	Stock No.	Price Each 1-9	10-99	100-249
KLKD001.T	1A	95F841	29.30	25.11	23.22
KLKD002.T	2A	95F843	30.18	25.87	23.92
KLKD003.T	3A	95F845	29.30	25.11	23.22
KLKD004.T	4A	95F847	30.18	25.87	23.92
KLKD005.T	5A	95F848	30.18	25.87	23.92
KLKD008.T	8A	18M9125	30.18	25.87	23.92
KLKD010.T	10A	18M9126	29.30	25.11	23.22
KLKD015.T	15A	02B8056	29.89	25.62	23.69
KLKD020.T	20A	02B8060	32.33	27.71	25.63
KLKD030.T	30A	02B8066	32.65	27.98	25.88

(9360)

SLO-BLO® FUSES

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

Time-delay 13/32 x 1½" fuses offer supplemental protection for small motors, control transformers, solenoids, circuits with high inrush currents. Interrupting rating: 10,000A.

Mfg. Part No.	Current (A)	Voltage (V)	Stock No.	Price Each 1-9	10-24
0FLM.500T	1/2	250	18M9074	14.44	12.94
0FLM001.T	1	250	18M9075	13.29	11.91
0FLM002.T	2	250	18M9076	13.75	12.81
0FLM02.5T	2.5	250	18M9080	14.17	12.70
0FLM003.T	3	250	02B7000	14.52	13.52
0FLM03.2T	3-2/10	250	81F2129	14.27	13.29
0FLM004.T	4	250	81F2130	14.01	13.05
0FLM005.T	5	250	81F2131	13.43	12.51
0FLM6.25T	6-1/4	250	18M9083	14.79	13.77
0FLM008.T	8	250	81F2133	14.01	13.05
0FLM010.T	10	250	18M9077	13.75	12.81
0FLM012.T	12	250	18M9078	14.07	12.61
0FLM015.T	15	250	18M9079	13.43	12.51
0FLM020.T	20	250	94F1984	14.01	13.05
0FLM025.T	25	250	18M9081	14.62	13.10
0FLM030.T	30	250	18M9082	14.52	13.52

(9184)

SLO-BLO® FUSES

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

Time-delay 13/32 x 1½" fuses offer supplemental protection for small motors, control transformers, solenoids, circuits with high inrush currents. Interrupting rating: 10,000A. UL listed, CSA certified 500V ratings permit use on 480V circuits.

Mfg. Part No.	Current (A)	Voltage (V)	Stock No.	Price Each 1-9	10-99
0FLQ.250T	¼	500	18M9084	32.81	28.13
0FLQ001.T	1	500	18M9085	29.76	25.51
0FLQ002.T	2	500	81F2160	28.89	24.76
0FLQ003.T	3	500	98F080	29.76	25.51
0FLQ03.2T	3 3/10	500	81F2162	30.36	26.03
0FLQ004.T	4	500	81F2163	28.89	24.76
0FLQ005.T	5	500	81F2164	29.76	25.51
0FLQ010.T	10	500	81F2167	28.89	24.76
0FLQ015.T	15	500	81F2169	28.89	24.76
0FLQ025.T	25	500	95F833	29.76	25.51
0FLQ030.T	30	500	70B8394	29.47	25.26

(9182)

CLASS K5 ONE-TIME FUSES

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

For general-purpose feeder and branch circuits. Voltage rating: 250V. Interrupting rating: 50,000A. 50A and 60A versions also available. *Order* **CH250 series** *fuse blocks separately; go online or call.* UL listed Class K5, CSA certified.

Mfg. Part No.	Current	Dia. x L (in.)	Stock No.	Price Each 1-9	10-24	25-49	50-99
0NLN003.T	3A	9/16 x 2	81F2213	7.14	6.65	6.40	6.15
0NLN006.T	6A	9/16 x 2	81F2214	7.40	6.89	6.63	6.38
0NLN005.T	5A	9/16 x 2	02B9949	7.14	6.65	6.40	6.15
0NLN010.T	10A	9/16 x 2	81F2215	6.21	5.78	5.57	5.35
0NLN015.T	15A	9/16 x 2	81F2216	5.41	5.04	4.85	4.67
0NLN020.T	20A	9/16 x 2	81F2217	5.22	4.86	4.68	4.50
0NLN025.T	25A	9/16 x 2	81F2218	5.98	5.57	5.36	5.15
0NLN030.T	30A	9/16 x 2	81F2219	5.41	5.04	4.85	4.67

(9183)

1000VDC SOLAR POWER FUSES

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

- Specifically designed for photovoltaic (PV) systems
- Midget (10x38mm) fuse can protect PV modules and their conductors from reverse overcurrent conditions
- 20kA interrupting rating
- "Dead front" touch-safe fuse holder has pressure plate terminals and can be mounted on 35mm DIN rail

FUSES

Mfg. Part No.	Current (A)	PC Board Tabs	Stock No.	Price Each 1-9	10-99	100-249
0SPF001.T	1	No	72R6732	32.60	27.94	25.84
0SPF002.T	2	No	72R6733	33.58	28.78	26.62
0SPF003.T	3	No	72R6734	32.60	27.94	25.84
0SPF004.T	4	No	72R6735	32.60	27.94	25.84
0SPF005.T	5	No	72R6736	32.60	27.94	25.84
0SPF006.T	6	No	72R6737	32.60	27.94	25.84
0SPF010.T	10	No	72R6739	33.58	28.78	26.62
0SPF015.T	15	No	72R6741	37.04	31.75	29.36
0SPF025.T	25	No	72R6742	33.58	28.78	26.62
0SPF030.T	30	No	72R6743	32.60	27.94	25.84
0SPF001.HXR	1	Yes	75R5348	44.00	37.71	34.87
0SPF002.HXR	2	Yes	75R5349	42.71	36.61	33.85
0SPF003.HXR	3	Yes	75R5350	44.00	37.71	34.87
0SPF004.HXR	4	Yes	75R5351	42.71	36.61	33.85
0SPF005.HXR	5	Yes	75R5352	42.71	36.61	33.85
0SPF006.HXR	6	Yes	75R5353	42.71	36.61	33.85
0SPF008.HXR	8	Yes	75R5354	42.71	36.61	33.85
0SPF010.HXR	10	Yes	75R5355	45.28	38.81	35.89
0SPF012.HXR	12	Yes	75R5356	42.71	36.61	33.85
0SPF015.HXR	15	Yes	75R5357	42.71	36.61	33.85
0SPF020.HXR	20	Yes	75R5358	42.71	36.61	33.85
0SPF025.HXR	25	Yes	75R5359	42.71	36.61	33.85
0SPF030.HXR	30	Yes	75R5360	42.71	36.61	33.85

FUSE HOLDERS

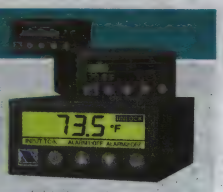
Mfg. Part No.	No. of Poles	Current (A)	Stock No.	Price Each 1-9	10-99	100-249
LPHV0001Z	1	30	23R9136	25.48	21.84	20.20
LPHV0002Z	2	30	23R9138	50.96	43.68	40.39
LPHV0003Z	3	30	23R9140	78.75	67.50	62.42

(177010)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters



(212570)

ELECTRICAL POWER FUSES • FUSE BLOCKS, HOLDERS & CLIPS

TIME-DELAY DUAL-ELEMENT INDICATOR FUSES

Littelfuse® Expertise Applied | Answers Delivered

- 2 to 400A
- Dual element, time-delay
- Fuses provide visual blown fuse indication at a glance
- Minimizes exposure to live circuits
- Solid-state construction

Mfg. Part No.	Current	Voltage VAC	Voltage VDC	Stock No.	Price Each 1-9	10-99	100-249	250-499
FLSR060.TXID	60A	600	300	02B7223	43.38	37.19	34.39	33.19

(9407)

KLDR/KLKR SERIES CLASS CC FUSES

RoHS Compliant Available

Littelfuse® Expertise Applied | Answers Delivered

Class CC time-delay 13/32 x 1-1/2" fuses protect control transformers and other components with high magnetizing currents during first half-cycle. Voltage rating: (600VAC/300VDC). Interrupting rating: 200,000A. Rejection feature added to one fuse cap. UL listed, CSA certified. *Go online or call for more details on the complete line of* **KLDR series** *SLO-BLO® fuses.*

Mfg. Part No.	Current (A)	Blow Characteristic	Stock No.	Price Each 1-9	10-99	100-249
● KLDR.100T	0.10	Slow Blow	02B7987	34.87	29.89	27.64
● KLDR.500T	0.50	Slow Blow	87F5378	39.74	34.06	31.50
● KLDR.750T	0.75	Slow Blow	87F5380	40.13	34.40	31.81
● KLDR001.T	1.00	Slow Blow	87F5382	32.38	27.75	25.66
● KLDR01.5T	1.50	Slow Blow	18M9122	32.12	27.53	25.46
● KLDR002.T	2.00	Slow Blow	87F5388	32.77	28.09	25.97
● KLDR03.5T	3.50	Slow Blow	18M9123	38.96	33.39	30.88
● KLDR005.T	5.00	Slow Blow	95F2054	33.09	28.36	26.23
KLDR010.T	10.00	Slow Blow	95F2062	34.49	29.56	27.34
KLDR015.T	15.00	Slow Blow	20C2896	31.92	27.36	25.31
● KLKR002.T	2.00	Fast Acting	02B8082	27.17	23.28	21.53
● KLKR010.T	10.00	Fast Acting	02B8079	26.90	23.06	21.32
● KLKR020.T	20.00	Fast Acting	02B8085	26.90	23.06	21.32

(9230)

250V SHOCK PROTECTION FUSE HOLDERS

RoHS Compliant Available

bulgin a brand of Elektron Technology

Mfg. Part No.	Fig.	Fuse Size	Current (A)	Mounting	Protection Category	Stock No.	Price Each 1-99	100-249
● FX0267	...	5mm x 20mm	6.3	Base	PC1	06WX9424	2.59	2.32
● FX0345	...	5mm x 20mm	6.3	Panel	PC1	06WX9429	11.05	9.98
● FX0365	1	5mm x 20mm	6.3	Panel	PC1	06WX9433	14.46	13.20
● FX0321	2	5mm x 20mm	6.3	PC Board	PC1	06WX9426	2.34	2.14
● FX0380	...	5mm x 20mm	10	In-Line	PC1	06WX9434	3.99	3.60
● FX0385	3	5mm x 20mm	10	In-Line	PC1	06WX9435	7.90	7.22
● FX0359	...	5mm x 20mm	16	Panel	PC2	06WX9431	3.89	3.51
● FX0455/S	...	5mm x 20mm	16	Panel	PC2	06WX9442	3.77	3.41
● FX0462	4	5mm x 20mm	16	Panel	PC2	97K0379	4.68	4.28
● FX0185	3	6.3mm x 32mm	10	In-Line	PC1	06WX9423	8.05	7.35
● FX0326	...	6.3mm x 32mm	13	Base	PC1	06WX9418	2.98	2.70
● FX0415	6	6.3mm x 32mm	16	Panel	PC2	06WX9437	8.14	7.43
● FX0415/S	...	6.3mm x 32mm	16	Panel	PC2	06WX9436	6.47	5.84

➤ CONTINUED ➤

250V SHOCK PROTECTION FUSE HOLDERS (CONT.)

Mfg. Part No.	Fig.	Fuse Size	Current (A)	Mounting	Protection Category	Stock No.	Price Each 1-99	100-249
● FX0417	7	6.3mm x 32mm	20	Panel	PC2	23WX3330	9.97	9.10
● FX0419	8	6.3mm x 32mm	20	Panel	PC2	97K0378	9.94	9.08

(178437)

ADAPTERS FOR DIN AND AMERICAN RAILS

RoHS Compliant Available

COOPER Bussmann®

- Buss DIN-Rail Adapters Permit Secure, Positive Snap-On Mounting of Buss 0 to 30 Ampere Fuseblocks (One, Two, or Three Pole) On the Various Size Rails (Rail Mounting Eliminates Costly and Time Consuming Drilling, Tapping, and Screw Mounting
- Adapter Mechanically Locks Into Mounting Hole of Fuseblock in Seconds to Become an Integral Part of the Block
- One Adapter is Required for Buss One and Two Pole Blocks
- With the Exception of the 32mm DIN-Rail, All Blocks With Adapters Can Be Removed From a Rail Simply By Pulling Up Its release Tab
- Use of Rail End-Stops On Both Sides of Adapters Is Recommended

Mfg. Part No.	For Use With Fuse Block	Stock No.	Price Each 1-9	10-49	50-99
● DRA-1	CC, G & H (250V)	02B2597	5.33	4.74	4.54
● DRA-2	R (250V) & M	02B2598	5.33	4.74	4.54

(72267)

¼ x 1¼" FUSE BLOCKS

RoHS Compliant Available

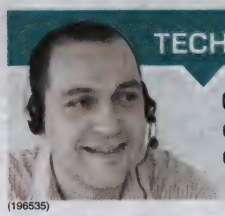
COOPER Bussmann®

Individual thermoplastic barrier blocks with sealed base, 1-piece mounting clips. Multiple units may be subdivided to desired number of poles. UL recognized, CSA certified.

Mfg. Part No.	Poles	Clip	Stock No.	Price Each 1-9	10-99	100-199	200-499
25A SOLDER TERMINALS							
● BK/S-8001-1-R	1	0°	63K6134	1.44	1.16	0.97	0.94
BK/S-8001-3	3	0°	72C4523	8.17	7.54	7.22	6.28
● BK/S-8002-1-R	1	40°	63K6135	1.27	1.02	0.85	0.83
● BK/S-8002-12-R	12	40°	63K9410	24.61	23.43	21.68	21.09
20A 1/4" QUICK-CONNECT TERMINALS							
● BK/S-8201-1-R	1	0°	63K6137	1.51	1.21	1.01	0.98
● BK/S-8201-2-R	2	0°	65K4441	3.20	2.85	2.73	2.45
BK/S-8201-4	4	0°	08J0137	10.07	9.29	8.91	7.74
BK/S-8201-5	5	0°	08J0138	12.77	11.79	11.30	9.82
BK/S-8201-10	10	0°	08J0134	24.38	22.35	21.84	21.34
● BK/S-8202-1-R	1	40°	63K6138	1.79	1.44	1.31	1.17
● BK/S-8202-2-R	2	40°	63K9412	3.31	3.05	2.93	2.54
● BK/S-8202-3-R	3	40°	63K9413	8.33	7.69	7.37	6.41
● BK/S-8202-10-R	10	40°	72K6298	24.39	23.22	21.48	20.90
● BK/S-8202-12-R	12	40°	63K9411	24.61	23.43	21.68	21.09
30A SCREW TERMINALS							
● BK/S-8301-1-R	1	0°	63K6139	4.09	3.64	3.49	3.13
● BK/S-8301-2-R	2	0°	63K9415	12.36	11.33	11.08	10.82
● BK/S-8301-3-R	3	0°	63K9416	15.12	13.86	13.54	13.23
● BK/S-8301-4-R	4	0°	72K6301	18.20	16.68	16.30	15.92
● BK/S-8301-5-R	5	0°	65K4442	21.30	20.28	18.76	18.26
● BK/S-8301-10-R	10	0°	72K6300	45.80	43.62	40.34	39.25
● BK/S-8301-12-R	12	0°	63K9414	46.08	43.89	40.59	39.50

(2345)

TECHNICAL SUPPORT HOTLINE



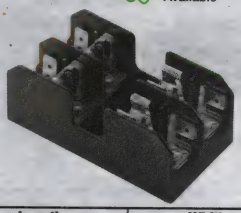
Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

FUSE BLOCKS

RoHS Compliant Available

COOPER Bussmann



- Class CC fuseblocks
- Ampere rating: 1/10 to 30 A
- Voltage rating: 600VAC
- UL flammability: 94V0
- For use with Class CC fuses (Cooper Bussman LP-CC, KTK-R, and FRQ-R)

DIMENSIONS

Poles	Length	Width	Height
1	3″	0.828″	1.21″
2	3″	1.625″	1.21″
3	3″	2.375″	1.21″

Mfg. Part No.	No. of Poles	Description	Stock No.	Price Each 1-4	5-9	10-19
● BC6031B	1	Box Lug	02B2170	26.16	24.91	23.04
● BC6031PQ	1	Pressure Plate w/ Quick Connect*	02B2172	17.71	16.23	15.86
● BC6031S	1	Screw	63R7689	14.23	13.04	12.75
● BC6031SQ	1	Screw w/Quick Connect*	90F8842	13.73	12.59	12.30
BC6032B	2	Box Lug	02B2173	50.08	47.69	44.12
BC6032P	2	Pressure Plate	02B2174	22.50	21.43	19.82
BC6032PQ	2	Pressure Plate w/ Quick Connect*	02B2175	22.56	21.48	19.87
BC6032S	2	Screw	98F522	20.21	18.53	18.11
BC6032SQ	2	Screw w/Quick Connect*	98F5333	21.68	19.87	19.42
● BC6033B	3	Box Lug	02B2176	68.12	64.78	61.44
● BC6033P	3	Pressure Plate	02B2177	29.01	27.62	25.55
● BC6033PQ	3	Pressure Plate w/ Quick Connect*	02B2178	30.48	29.03	26.85
● BC6033S	3	Screw	98F1635	25.65	24.42	22.59
● BC6033SQ	3	Screw w/Quick Connect*	02B2179	25.65	24.42	22.59

*Quick Connect rated for 20A maximum.
(72274)

IN-LINE FUSE HOLDER FOR 5x15mm AND 5x20mm FUSES

RoHS Compliant Available

COOPER Bussmann

Mfg. part no. HHT is a black 2-piece screw-together assembly in-line fuse holder. Supplied with 13″ long red 16AWG wire. Electrical ratings: 5 x 15mm rated 5A at 32V; 5 x 20mm rated 10A at 32V. Dimensions (Dia. x L): 0.42 x 1.84″. Wire length: 13″.

Mfg. Part No.	Stock No.	Price Each 1-9	10-49	50-99	100-249
● BK/HHT	91F4760	3.15	2.52	2.30	2.05

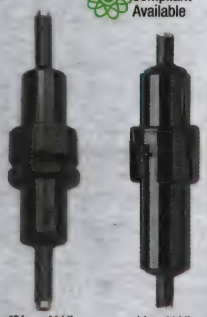
(13233)

WATER RESISTANT IN-LINE FUSE HOLDERS

RoHS Compliant Available

COOPER Bussmann

For exposed locations. Copper crimp. Accept various wire sizes. **"BK/" indicates packaged in bulk.**



13/32 x 1-1/2″ 13/32 x 1½″ ¼ x 1¼″

Mfg. Part No.	Wire Range	Rated	Stock No.	Price Each 1-4	5-9	10-19	20-49
BK/HEB-AA	#12-8	30A @ 600V	95F800	34.91	33.24	30.75	29.92
BK/HEB-BB	#10-4	30A @ 600V	99M3966	37.22	35.44	32.79	31.90
1/4 x 1-1/4″							
● BK/HFA-R	#16-12	20A @ 250V	65K4436	28.93	27.56	25.49	24.80

(2377)

HRK SERIES FUSE HOLDER

RoHS Compliant Available

COOPER Bussmann

- For ¼ x ⅞″ to ¼ x 1¼″ Fuses
- #14 AWG Copper Wire Leads
- 8″ (203) Leads
- Three Springs Furnished to Accept Different Fuse Lengths
- Wire Leads Are Staked and Soldered to the Contacts of the Fuse Holder

Mfg. Part No.	Voltage Rating	Current Rating	Stock No.	Price Each 1-9	10-49	50-99	100-199
● BK/HRK-R	32V	15A	63K9371	5.34	4.75	4.55	4.09

(2343)

IN-LINE UNIVERSAL FUSE HOLDERS

RoHS Compliant Available

COOPER Bussmann

Versatile nylon fuse holders for dry environments. Designed for ¼″ diameter x ⅞ to 1¼″ fuses. Accept #12 to #18-gauge wire. Rated 30A @ 32V. **HHB** has in-line crimp terminal.

Mfg. Part No.	Stock No.	Price Each 1-9	10-49	50-99	100-249
● BK/HHB-R	63K9349	1.89	1.51	1.38	1.23

(2342)

¼ x 1¼″ WATER-RESISTANT IN-LINE FUSE HOLDER

RoHS Compliant Available

COOPER Bussmann

Withstands water, salt spray, ultra-violet light and ozone. Accepts #12 to #18 gauge wire. Yellow for high visibility.Rated 30A @ 32V.

Mfg. Part No.	Stock No.	Price Each 1-4	5-9	10-24	25-49
● BK/HFB-R	63K9348	12.23	11.22	10.98	10.71

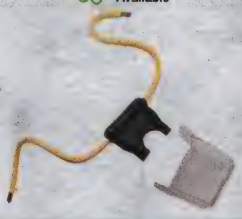
(2341)

AUTO FUSE HOLDER

RoHS Compliant Available

COOPER Bussmann

In-line fuse holder for **ATC® series** blade-type auto fuses. Rated 30A. #12-gauge lead wire attached.



Mfg. Part No.	Stock No.	Price Each 1-9	10-49	50-99	100-199
● BK/HHD	97F7607	4.79	4.26	4.08	3.67

(2375)

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(196545)

FUSE BLOCKS, HOLDERS & CLIPS

FUSE CLIPS

RoHS Compliant Available

COOPER Bussmann

Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5

"BK/" prefix indicates "bulk." All items regardless of prefix are sold in bulk (each).

PC BOARD THROUGH HOLE

Mfg. Part No.	Fig.	Fuse Type	Clip Material	End Stop	Leads	Stock No.	Price Each 1-9	Price Each 10-99
● BK/1A1119-10-R	1	1/4"	Cartridge Brass	Yes	Angled-In	63K6814	0.35	0.29
● BK/1A1907-03-R	1	1/4"	Beryllium Copper	Yes	Straight	63K6817	0.65	0.54
● BK/1A1907-06-R	1	1/4"	Cartridge Brass	Yes	Straight	63K6818	0.20	0.18
● BK/1A4534-01-R	2	1/4"	Beryllium Copper	Yes	Angled-Out	63K6823	0.99	0.79
● BK/1A3399-04-R	3	5mm	Beryllium Copper	No	Straight	63K6820	0.68	0.56
● BK/1A3399-10-R	3	5mm	Spring Bronze	No	Straight	63K6821	0.31	0.28
● BK/1A3400-09-R	4	13/32"	Spring Bronze	Yes	Straight	63K6822	0.77	0.63
● BK/1A5018-10-R	3	5mm	Spring Bronze	Yes	Straight	63K6824	0.33	0.29
● BK/1A5600	...	ATC	Cartridge Brass	No	Straight	81H0063	0.92	0.75

SCREW MOUNT

Mfg. Part No.	Fig.	Fuse Type	Clip Material	End Stop	Mounting Hole Dia. (in.)	Stock No.	Price Each 1-9	Price Each 10-49
● 5672-11	5	9/32"	Spring Bronze	No	0.172	94F2262	2.36	1.89
● BK/5681-15	5	1/4"	Spring Bronze	No	0.132	94F2444	0.44	0.36
● BK/5681-15-R	5	1/4"	Spring Bronze	No	0.132	63K7643	0.41	0.34
● 5956-16	5	13/32"	Spring Bronze	No	0.196	90F6091	0.86	0.72
● BK/5956-16-R	5	13/32"	Spring Bronze	No	0.196	63K9418	0.49	0.41
● 5960-07	5	13/32"	Beryllium Copper	Yes	0.196	02B6751	5.46	4.85
● 5960-63	5	13/32"	Spring Bronze	Yes	0.172	27F597	2.74	2.19

(2356)

LAMP INDICATING 1/4 x 1 1/4" FUSE HOLDERS

COOPER Bussmann

HKT

Vibration-resistant holders fit panels to 3/16" (4.76) thick. **HKL** is UL recognized, CSA certified.

Mfg. Part No.	Current (A)	Volts	Lamp Type	Lens Color	Knob Type	Stock No.	Price Each 1-4	Price Each 5-9
BK/HKL	15	90-250	Neon	Clear	Octagon	27F813	23.88	21.89
BK/HKL-X	15	90-250	Neon	Clear	Flat-Sided	27F814	28.25	26.90
BK/HKT	20	13-22	Incandescent	Amber	Octagon	96C9313	41.14	39.18
BK/HKX	20	22-33	Incandescent	Amber	Flat-Sided	96C9314	43.12	41.06

(2344)

FUSE HOLDING RAIL MOUNT TERMINAL BLOCKS

RoHS Compliant Available

COOPER Bussmann

Ratings: 30A, 600V; UL/CSA. 1 pole. Fuse size: 13/32" x 1 1/2" (KTK-R, FNQ-R or LP-CC). AWG: #8-22 CU. Mounting options: 35mm DIN rail, C-Rail. Torque Rating: 18 in/lb. max. Operating temperature: 105°C.

Mfg. Part No.	Stock No.	Price Each 1-9
● NDNF1-WH	69K7611	7.15

(72266)

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(196560)

PANEL MOUNT FUSE HOLDERS

RoHS Compliant Available

COOPER Bussmann

HKP-HH

Bayonet-type knobs. Fit into panels up to 0.313" (7.95) thick. 250V voltage rating. UL recognized, CSA certified. **"BK/" indicates packaged in bulk.**

1/4 x 1-1/4"

Mfg. Part No.	Current (A)	Description	Stock No.	Price Each 1-9	Price Each 10-49
● BK/HKP-R	30	Solder Terminal	63K9357	3.22	2.87
● BK/HKP-CC-R	30	Short Behind Panel	63K9355	3.22	2.87
● BK/HKP-HH-R	15	1/4" Quick Connect	63K9356	4.67	4.16
1/4 x 1"					
BK/HJM	5	Solder Lug	27F819	7.60	7.01
BK/HMJ	20	Wire Leads	30F175	6.71	6.20
0.27 x 0.25" Sub-miniature for limited space applications. For military fuses FM01 series. Meets military specification - MIL-F-19207/26					
BK/HWA-AF	5	Solder Lug	28F381	21.85	20.81

(2354)

PANEL MOUNT FUSE HOLDERS

RoHS Compliant Available

COOPER Bussmann

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Designed to international specifications per IEC #257 and accept either 5 x 20mm (**suffix M**) or 1/4 x 1 1/4" (**suffix I**) fuses. Rear panel mount version allows pre-wiring before insertion in panel. 250V voltage rating. UL recognized, CSA certified, SEMKO approved, VDE approved. Additional models available; *go online or call.* **"BK/" indicates packaged in bulk.**

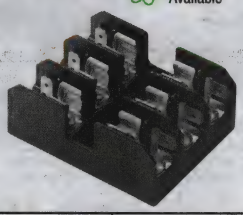
Mfg. Part No.	Fig.	Current (A)	Terminals	Body Style	Stock No.	Price Each 1-9	Price Each 10-49
● BK/HTB-22I-R	1	15	Solder/Quick Connect	Low Profile	63K9372	3.40	3.02
● BK/HTB-22M-R	1	15	Solder/Quick Connect	Low Profile	63K9373	3.11	2.76
● BK/HTB-24I-R	1	15	Solder/Quick Connect	Low Profile	63K9374	3.03	2.42
● BK/HTB-24M-R	1	15	Solder/Quick Connect	Low Profile	63K9375	3.69	3.29
● BK/HTB-26I-R	1	20	Quick Connect	Low Profile	63K9376	3.60	3.20
● BK/HTB-26M-R	1	16	Quick Connect	Low Profile	63K9377	4.06	3.62
● BK/HTB-28I-R	1	20	Quick Connect	Low Profile	63K9378	3.11	2.76
● BK/HTB-28M-R	1	16	Quick Connect	Low Profile	63K9379	7.90	7.29
● BK/HTB-32I-R	2	15	Quick Connect	Low Profile	63K9380	2.90	2.58
● BK/HTB-34I-R	2	15	Solder/Quick Connect	Low Profile	63K9382	2.98	2.65
● BK/HTB-34M-R	2	15	Solder/Quick Connect	Low Profile	63K9383	2.93	2.61
● BK/HTB-36I-R	2	20	Quick Connect	Low Profile	63K9384	3.11	2.76
● BK/HTB-36M-R	2	16	Quick Connect	Low Profile	63K9385	3.51	3.13
● BK/HTB-38I-R	2	20	Quick Connect	Low Profile	63K9386	3.69	3.29
● BK/HTB-62I-R	3	15	Solder/Quick Connect	Front Panel	63K9397	8.36	7.72
● BK/HTB-64I-R	3	15	Solder/Quick Connect	Front Panel	63K9398	8.36	7.72
● BK/HTB-64M-R	3	15	Solder/Quick Connect	Front Panel	63K9399	7.49	6.91
● BK/HTB-66I-R	3	20	Quick Connect	Front Panel	63K9400	5.20	4.80
● BK/HTB-92M-R	3	15	Solder/Quick Connect	Low Profile	63K9405	6.76	6.24
● BK/HTB-82I-R	4	15	Quick Connect	Low Profile	63K9402	6.76	6.24
● BK/HTB-86I-R	4	20	Quick Connect	Low Profile	63K9403	7.62	7.04
● BK/HTB-42I-R	...	15	Solder/Quick Connect	High Profile	63K9387	3.05	2.71
● BK/HTB-44I-R	...	15	Solder/Quick Connect	High Profile	63K9388	5.50	4.89
● BK/HTB-44M-R	...	15	Solder/Quick Connect	High Profile	63K9389	6.76	6.24
● BK/HTB-46I-R	...	20	Quick Connect	High Profile	63K9390	5.20	4.80
● BK/HTB-48I-R	...	20	Quick Connect	High Profile	63K9392	4.24	3.77
● BK/HTB-52I-R	...	15	Solder/Quick Connect	High Profile	63K9393	6.76	6.24
● BK/HTB-54I-R	...	15	Solder/Quick Connect	High Profile	63K9394	3.15	2.52

(2357)

SUPPLEMENTARY FUSE BLOCKS

RoHS Compliant Available

COOPER Bussmann



- Current:: 1/10 to 30A
- Voltage: 600VAC
- For use with any 13/32″ x 1½″ fuses (Cooper Bussman KTK, FNQ, FNM, BAF, BAN and AGU)

DIMENSIONS

Poles	Length	Width	Height
1	3″	0.828″	1.21″
2	3″	1.625″	1.21″
3	3″	2.375″	1.21″

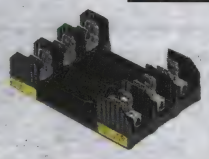
Mfg. Part No.	No. of Poles	Description	Stock No.	Price Each 1-4	5-9	10-24
● BM6031B	1	Box Lug	70B1126	21.56	19.77	19.32
● BM6031PQ	1	Pressure Plate w/Quick Connect*	02B2359	13.82	12.76	12.23
BM6031SQ	1	Screw w/Quick Connect*	28F357	10.09	9.32	8.93
BM6032B	2	Box Lug	94F2505	36.95	35.19	32.55
BM6032PQ	2	Pressure Plate w/Quick Connect*	98F7990	21.78	19.96	19.51
BM6032SQ	2	Screw w/Quick Connect*	28F358	16.57	15.19	14.84
● BM6033B	3	Box Lug	63R8445	55.50	52.86	48.90
● BM6033PQ	3	Pressure Plate w/Quick Connect*	02B2360	23.82	22.68	20.98
BM6033SQ	3	Screw w/Quick Connect*	28F359	21.46	19.67	19.23

*Quick Connect rated for 20A maximum.
(72275)

250V CLASS H FUSE BLOCKS

RoHS Compliant Available

COOPER Bussmann



- Amp Rating: 1/10 to 30A
- Voltage Rating: 250V
- UL Flammability: 94V0
- Material: Thermoplastic
- Agency Information: CE, UL Listed, UL 4248, Guide IZLT, File 14853 CSA Certified, C22.2 No. 39, Class 6225-01, File 47235
- Withstand Rating (SCCR): 10kA RMS Sym.
- For use with Class H Fuses (NON and REN)

DIMENSIONS

Poles	Length	Width	Height
1	3″	1.09″	1.41″
2	3″	2.05″	1.41″
3	3″	3″	1.41″

Mfg. Part No.	No. of Poles	Description	Stock No.	Price Each 1-4	5-9	10-24
● H25030-1S	1	Screw	94F2082	13.42	12.39	11.87
● H25030-2S	2	Screw	94F2083	19.44	17.82	17.42
● H25030-3S	3	Screw	70B9500	24.01	22.86	21.15

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PC BOARD BLOCK FUSE HOLDERS

RoHS Compliant Available

COOPER Bussmann

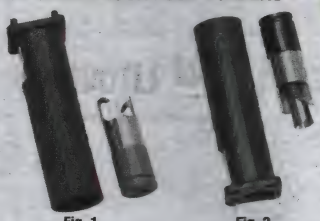


Fig. 1 Fig. 2

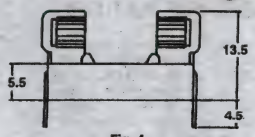


Fig. 4

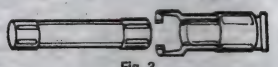


Fig. 3

Fig. 5

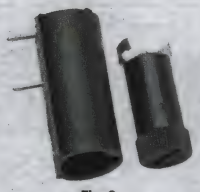


Fig. 6

HB series accepts 5 x 20mm (type number suffix **M**) or ¼ x 1¼″ (mfg. part no. suffix **I**) fuse with proper carrier. **HTC series** accepts 5 x 20mm fuses. Rated 250V. UL recognized, CSA certified, SEMKO approved.

➤ CONTINUED ➤

PC BOARD BLOCK FUSE HOLDERS (CONT.)

Mfg. Part No.	Fig.	Description†	Stock No.	Price Each 1-9	10-24	25-49	50-99
● BK/HBV-I-R	1	V/M w/pins	63K9344	5.41	5.00	4.79	4.16
BK/HBV-M	2	V/M w/pins	46F022	10.59	9.77	9.37	8.14
● BK/HBW-I-R	...	V/M	63K9346	9.81	9.05	8.68	7.54
● BK/HBH-I-R	3	H/M	63K9342	3.19	2.84	2.72	2.44
● BK/HTC-15M	4	V/M Fuse Block	95F1467	2.36	1.89	1.72	1.53
● BK/HTC-35M	...	H/M	93F5379	3.37	3.00	2.87	2.58
● BK/HTC-45M	5	V/M	09J4511	6.90	6.37	6.10	5.31
● BK/HTC-50M	6	H/M Fuse Block	93F5383	6.90	6.37	6.10	5.31

†V/M=vertical mount; H/M=horizontal mount
(2358)

5 x 20mm FUSE HOLDER

RoHS Compliant Available

COOPER Bussmann

Panel mount fuse holder saves space. **Mfg. part no. HTC-35M** rated 6.3A, 250V. UL recognized, CSA certified, SEMKO approved. Meet IEC 257, PC2 standards.

Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-49	50-99	100-199
● BK/HTC-35M	Threaded Cap	93F5379	3.37	3.00	2.87	2.58

(2359)

13/32″ FUSE HOLDERS

RoHS Compliant Available

COOPER Bussmann

HPS

For 13/32″ diameter fuses in various lengths. 1-piece side terminal and threaded insert eliminates 2-piece solder fabrication. Combination ¼″ quick-connect/solder terminals. **HPF** have screw-type knob; **HPS** have bayonet knob.

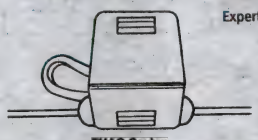
Mfg. Part No.	Current (A)	Voltage (VAC)	Fuse	Stock No.	Price Each 1-4	5-9	10-24	25-49
● BK/HPS	20	600	13/32″, 1½″	94F2236	21.83	20.80	19.24	18.71
● BK/HPS-L	5	600	13/32″ x 1⅜″	08J0158	28.95	27.57	25.50	24.81
● BK/HPS-RR	30	600	Class CC	70B4605	36.06	34.34	31.77	30.91
BK/HPM	20	600	13/32″, ½″	94F6452	52.80	50.28	46.51	45.26
● BK/HPF	20	600	1½″ long	29M6909	18.57	17.03	16.66	16.25
● BK/HPF-EE	15	600	SC 0 to 15	29M6910	25.94	23.78	23.24	22.70

* Sleeve on body for leaded fuses; † With splash-resistant knob.
(2355)

ATO® AUTO FUSE HOLDERS

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered



FHAC Series

FHAC series intended for ATO/FKS fuses. Supplied with two 4″ wire leads. Includes protective cover for harsh environment. **155 series** intended for use with 32V Autofuse® fuses. Capable of snap-mounting to panel from rear. Fuseholders interlock for multiple mounting. Supplied with 8″ wire loop and fuse. **445 series** intended for use with 32V ATO® fuses rated to 15A.

Mfg. Part No.	Current (A)	AWG	With Fuse	Assembled	Wire Color	Stock No.	Price Each 1-9	10-24
● FHAC0001ZXJ	20	16	No	...	Black	56P4171	5.80	5.40
● FHAC0001ZXJG	20	16	No	...	Black	98K4258	2.70	2.58
● FHAC0002ZXJ	30	12	No	...	Orange	56P4173	6.24	5.81
● 01550303ZXA	3	14	Yes	Yes	Black	03B770	5.08	4.73
● 01550320ZXU	20	14	Yes	Yes	Black	14R8570	3.02	2.81
● 01550400Z	30	14	No	Yes	Black	94B5786	2.82	2.56
● 01550430ZXU	30	10	Yes	Yes	Black	67C2793	4.21	3.92

(9209)

FUSE BLOCKS, HOLDERS & CLIPS

INTERNATIONAL SHOCK-SAFE PC BOARD FUSE HOLDERS

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

Shock-safe design eliminates the possibility of electrical shock, per IEC Standards 65 and 127. Screw-driver slot knob. UL recognized, CSA certified, VDE approved.

Mfg. Part No.	Fuse Size	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 03450101H	¼" x 1¼"	72K7286	3.67	3.41	3.29	3.16
● 03450101HX010	¼" x 1¼"	02B7621	2.89	2.63	2.54	2.34
KNOBS ONLY						
● 03450121H	5mm x 20mm	67K0268	4.87	4.53	4.36	4.20
● 03450121HX020	5mm x 20mm	33C3107	2.44	2.22	2.14	1.97

(147428)

WICKMANN PANEL MOUNT FUSE HOLDERS FOR 5x20mm SHOCK-SAFE FUSES

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

- IEC 60127-6, UL 512, CSA C22.2. No.39 standards
- VDE, SEMKO, UL recognized, CSA approvals
- SEV approval (**850 series**)
- 250V voltage rating

FUSE HOLDER

Mfg. Part No.	Current (A)	Length (mm)	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 80000000005	16	45.7	02P0347	1.63	1.48	1.43	1.32
● 82000000005	16	32.0	02P0354	1.43	1.30	1.26	1.16
● 85000001009	10	33.0	67K2340	2.21	2.01	1.94	1.78

CAP

Mfg. Part No.	Fuse Size	Use With Series	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 81600000005	6.3x32mm	800	02P0352	1.31	1.19	1.15	1.06
● 83500000005	6.3x32mm	820	87K6784	0.92	0.84	0.81	0.74
● 83700000005	5x20mm	820	52M9922	1.28	1.17	1.13	1.04
● 85500001009	5x20mm	850	67K2344	1.56	1.42	1.37	1.27

(136316)

WICKMANN MINIATURE PCB MOUNT FUSE HOLDERS FOR 5x20mm FUSES

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

- IEC 60127-6, CSA C22.2-39, UL 512 standards
- SEV, VDE ÜG, SEMKO, UL, CSA approvals
- 10A current rating
- 250V voltage rating

FUSE HOLDERS — Thru Hole

Mfg. Part No.	PC Board Mounting	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 65600001009	Thru Hole	67K2318	0.94	0.85	0.82	0.76
● 65800001009	Surface Mount	67K2320	1.29	1.18	1.14	1.05

COVERS

Mfg. Part No.	Color	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 65900000009	Transparent	67K2322	0.79	0.74	0.68	0.62
● 66000001009	Opaque	67K2323	0.89	0.81	0.78	0.72

(136314)

155 SERIES BAYONET KNOB IN-LINE TYPE FUSE HOLDERS FOR 3AG AND SFE FUSES

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

Bayonet-knob holders for use at 32 volts or less with fuses rated up to 20A when proper spring installed. **"A" suffix** denotes 19" loop of red vinyl 14 AWG wire.

Mfg. Part No.	Fuse Installed	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 155004U	...	12J4031	1.77	1.61	1.56	1.43
● 01550006ZXU	...	12J4032	1.73	1.57	1.52	1.40
● 01550009ZXU	...	67K1432	1.79	1.63	1.58	1.45

➤CONTINUED➤

155 SERIES BAYONET KNOB IN-LINE TYPE FUSE HOLDERS FOR 3AG AND SFE FUSES (CONT.)

Mfg. Part No.	Fuse Installed	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 01550014ZXU	...	67K1433	1.73	1.57	1.52	1.40
● 01550004ZXA	SFE 4	03B760	3.45	3.21	3.09	2.97
● 01550006ZXA	SFE 6	03B761	3.58	3.34	3.21	3.09
● 01550020ZXA	SFE 20	67K1434	3.45	3.21	3.09	2.97

Includes 15" loop of 14 AWG wire and 3 springs for 3AG and SFE type fuses.

Mfg. Part No.	Stock No.	Price Each 1-9
● 01500145Z	27F1071	3.39

(9204)

IN-LINE TYPE FUSE HOLDERS FOR 3AG-SFE FUSES

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

For use at 32V or less with fuses rated to 20A. Assembled fuseholders include fuse (except for **mfg. part no. 01500215Z**) and 19" loop of #14 AWG red vinyl insulated wire (except for **mfg. part no. 01550100Z** which comes with an 8" loop of wire). Unassembled fuseholders are do not include fuse or wire *; order 3AG fuse and #14 AWG wire separately.*

Fig. 1

TWIST-LOCK

Mfg. Part No.	Fig.	Fuse Size	Wire Hole Dia. (in.)	Assembled	Includes Fuse	Stock No.	Price Each 1-9	10-24
● 01550120ZXA	1	1/4 x 1-1/4"	0.14	Yes	SFE 20	67K1436	3.32	3.09
● 01550120ZXU	1	1/4 x 1-1/4"	0.14	No	...	67K1437	0.82	0.74
● 01500322H	...	1/4 x 1-1/4"	...	...	...	72K6881	6.20	5.77
BAYONET KNOB								
● 01550100Z	...	...	0.20	...	...	7089326	2.81	2.56

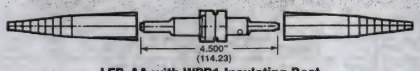
(9227)

WATERPROOF IN-LINE FUSE HOLDER AND BOOT

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

- Ideal for Utility Pole Circuit Protection



LEB-AA with WPB1 Insulating Boot

Rugged fuse holders are designed for outdoor use, including wet and corrosive conditions. Accept 13/32 x 1½" Midget fuses. Rating: 600 volts, 30A maximum. **WPB1** insulating boots protect conductor terminals; *order separately below.* UL recognized, CSA certified

Mfg. Part No.	Conductors Per Terminal: Load Side	Line Side	Stock No.	Price Each 1-9
● 0LEB00AAX	1 #12-8, 2 #12	1 #12-8, 2 #12	14R4381	33.73

WPB1 INSULATING BOOT – 2 REQUIRED

Mfg. Part No.	Description	Stock No.	Price Each 1-9
WPB1	Insulating Boot	95F2067	6.67

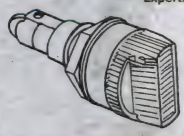
(9232)

BLOWN-FUSE INDICATING PANEL MOUNT FUSE HOLDERS FOR 3AG FUSES

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

Panel mount fuse holders with blown-fuse indicator lamp and bayonet-style bar knob. Rated 20A up to 250V. Panel thickness to 0.250" (6.35mm). Lamp color: * denotes incandescent lamp, no resistor; † denotes neon lamp, with resistor. Includes hardware. UL recognized, CSA certified.



Mfg. Part No.	Lamp: Volts	Amps	Lens Color	Stock No.	Price Each 1-9	10-99	100-249	250-499
● 03440024H*	16-32	0.04	Amber	27F783	24.16	20.71	19.15	18.48
● 03440125H	100-125	0.002	Clear	27F784	19.80	17.74	17.13	16.37
● 03440250H†	200-250	0.002	Clear	27F785	19.80	17.74	17.13	16.37

(9207)

PANEL MOUNT 3AG FUSE HOLDERS

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

3AG fuse holders rated 20A up to 250V. Fluted or knurled knobs. Include neoprene washer and metal hex nut. Panel thickness to 0.250". UL recognized, CSA certified.

Straight Mount

Right Angle Mount

Mfg. Part No.	Mounting	Terminals	Knob Type	Stock No.	Price Each 1-9	10-24	25-49	50-99
03420001H**	...	Solder	...	27F752	8.59	7.99	7.70	7.40
03420004H	Right Angle	Solder	Fluted	67K0263	3.56	3.31	3.19	3.07
03420004HXP*	Right Angle	Solder	Fluted	67K0264	3.76	3.50	3.37	3.24
03420006Z†	Straight	Solder	...	67K1753	22.75	20.39	19.69	18.81
03420012H	Straight	Solder	Knurled	67K1754	3.39	3.15	3.04	2.92
03420014H	Straight	Solder	Fluted	27F668	3.39	3.15	3.04	2.92
03420014X	Straight	Solder	Fluted	67K1755	7.83	7.29	7.02	6.75
03420022H	Right Angle	Solder	Knurled	67K0265	3.65	3.40	3.27	3.15
03420028H	Right Angle	3/16" QC	Fluted	69K7601	4.15	3.86	3.72	3.58
03420048H	Right Angle	3/16" QC	Knurled	67K0266	4.10	3.81	3.67	3.53
03420058H	Straight	3/16" QC	Knurled	28F153	3.90	3.63	3.50	3.37
03420828H	Right Angle	1/4" QC	Fluted	68K1109	3.99	3.72	3.58	3.44
03420838H	Straight	1/4" QC	Fluted	27F795	4.18	3.89	3.75	3.60
03420848H	Right Angle	1/4" QC	Knurled	67K0267	4.39	4.09	3.94	3.79
03420858H	Straight	1/4" QC	Knurled	27F797	4.18	3.89	3.75	3.60

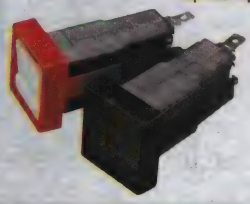
*Drip-proof; †Watertight; QC = Quick Connect; ** One straight and one right-angle terminal
(9203)

LOW PROFILE SNAP MOUNT FUSE HOLDERS FOR 3AG FUSES

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

Low-profile fuse holders snap into panels 0.031-0.125" (0.787-3.175) thick. Tin-plated brass, quick connect/solder terminals. Rated 15A to 250V. *Order bezel caps separately below.*



FUSE HOLDERS

Mfg. Part No.	Terminals	Bezel Color	Bezel Cap Color	Stock No.	Price Each 1-9	10-24	25-49
03480670Z	3/16"	Black	...	28F163	4.94	4.60	4.43
03480671Z	3/16"	Black	Red	12J4392	6.60	6.14	5.92
03480677Z	3/16"	Black	Black	67K1757	6.84	6.37	6.13
03480870Z	1/4"	Black	...	28F166	4.94	4.60	4.43

COLOR BEZEL CAPS

Mfg. Part No.	Color	Stock No.	Price Each 1-9	10-24	25-49
03480001Z	Red	28F167	1.95	1.77	1.71
03480005Z	White	28F168	1.95	1.77	1.71
03480007Z	Black	28F169	1.95	1.77	1.71

(9206)

INTERNATIONAL SHOCK-SAFE PANEL MOUNT TYPE FUSE HOLDERS

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

Fig. 1
Low-Profile
Fingergrip Knob

Fig. 2
Rear Mount
Fingergrip Knob

Fig. 3
High-Profile
Screwdriver Slot Knob

Shock-safe design eliminates the possibility of electrical shock, per IEC Standards 65 and 257. Universal fuse holder body accepts 3AG, 2AG, and 5 x 20mm fuse sizes depending on knob selected. Choice of three terminal styles: dual purpose 3/16" solder/quick-connect, 3/16" NEMA quick-connect, and 1/4" NEMA/DIN quick-connect. *Go online or call for drip-proof option available on screwdriver slot knob style, straightback terminal style, and 2AG fuse holders.* UL recognized, CSA certified, VDE approved, SEMKO approved.

Fig. 4
Low-Profile
Screwdriver Slot Knob

FOR 3AG FUSES

Mfg. Part No.	Fig.	Terminal	Stock No.	Price Each 1-9	10-24	25-49	50-99
03453LF1H	1	3/16" Solder/Quick-Connect	67K0271	3.01	2.81	2.70	2.60
03453LF1ZX010	1	3/16" Solder/Quick-Connect	40C0213	2.23	2.03	1.96	1.80
03453LF2ZX010	1	3/16" Solder/Quick-Connect	65H5821	2.20	2.00	1.93	1.78
03453LF3H	1	3/16" NEMA Quick-Connect	67K0272	3.30	3.07	2.96	2.85
03453LF7H	1	1/4" NEMA/DIN Quick-Connect	67K0273	3.22	3.00	2.88	2.77
03453RF1H	2	3/16" Solder/Quick-Connect	67K0276	3.30	3.07	2.96	2.85
03453RF2H	2	3/16" Solder/Quick-Connect	94B6815	3.30	3.07	2.96	2.85
03453RF3H	2	3/16" NEMA Quick-Connect	90F9490	3.55	3.30	3.18	3.06
03453RF7H	2	1/4" NEMA/DIN Quick-Connect	67K0277	3.50	3.26	3.14	3.02
03453HS1H	3	3/16" Solder/Quick-Connect	67K0269	3.13	2.92	2.81	2.70
03453HS3H	3	3/16" NEMA Quick-Connect	90F9143	3.22	3.00	2.88	2.77
03453HS7H	3	1/4" NEMA/DIN Quick-Connect	67K0270	3.22	3.00	2.88	2.77
03453LS1H	4	3/16" Solder/Quick-Connect	67K0274	3.01	2.81	2.70	2.60
03453LS7H	4	1/4" NEMA/DIN Quick-Connect	67K0275	3.22	3.00	2.88	2.77
FOR 5 x 20 mm FUSES							
03455LF1H	1	3/16" Solder/Quick-Connect	67K0278	3.22	3.00	2.89	2.78
03455LF7H	1	1/4" NEMA/DIN Quick-Connect	67K0279	3.72	3.46	3.34	3.21
03455LF8H	1	1/4" NEMA/DIN Quick-Connect	02B7694	3.72	3.46	3.34	3.21
03455HS2H	3	3/16" Solder/Quick-Connect	02B7688	3.31	3.08	2.97	2.85
03455LS1H	4	3/16" Solder/Quick-Connect	67K0280	3.31	3.08	2.97	2.85
03455LS7H	4	1/4" NEMA/DIN Quick-Connect	67K0281	3.72	3.46	3.34	3.21
03455LS8H	4	1/4" NEMA/DIN Quick-Connect	02B7700	3.63	3.38	3.25	3.13

(9306)

WICKMANN MINIATURE PCB MOUNT FUSE HOLDERS FOR 5x20mm FUSES

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

- 6.3A current rating
- 250V voltage rating
- 0.5 x 1.2mm solder pins

FUSE HOLDER

Mfg. Part No.	PC Board Thickness (mm)	PC Board Mounting	Stock No.	Price Each 1-9	10-24	25-49	50-99
64600001003	3	Through Hole	67K2308	0.63	0.59	0.54	0.50

(136311)

TECHNICAL SUPPORT HOTLINE

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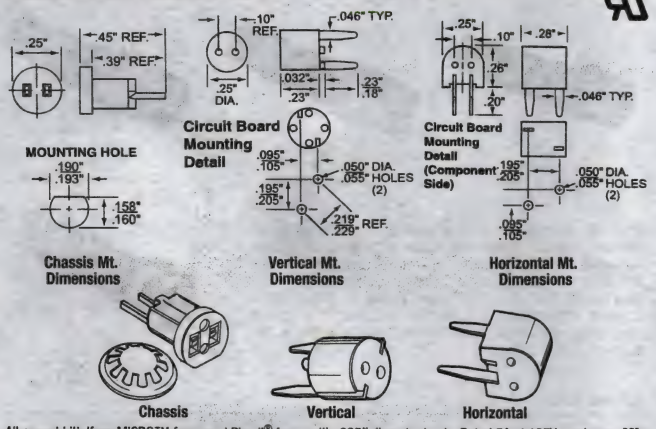
(196539)

FUSE BLOCKS, HOLDERS & CLIPS

PUSH-ON RETAINING NUT CHASSIS MOUNT AND VERTICAL/HORIZONTAL PC BOARD MOUNT FUSE HOLDERS

RoHS Compliant Available

Littelfuse — Expertise Applied | Answers Delivered



All accept Littelfuse MICRO™ fuses and Pico II® fuses with .025" diameter leads. Rated 5A at 125V maximum. **Mfg. part no. 281001** chassis mount fuse holder features molded black thermoset body and push-on retaining nut. All others are PC board mount holders with white thermoplastic body.

Mfg. Part No.	Mounting	Plating	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 02810001H	Chassis	Silver	67K1684	2.87	2.61	2.52	2.32
● 02810005H	Vertical	Silver	67K1685	2.57	2.34	2.26	2.08
● 02810007H	Horizontal	Silver	67K1686	2.57	2.34	2.26	2.08
● 02810008H	Vertical	Tin	98F3951	2.66	2.42	2.34	2.15
● 02810010H	Horizontal	Tin	95F832	2.80	2.54	2.46	2.26

(9179)

WICKMANN PCB MOUNT FUSE HOLDERS FOR 5x20mm SHOCK-SAFE FUSES

RoHS Compliant Available

Littelfuse — Expertise Applied | Answers Delivered

- IEC 60127-6, UL 512, CSA C22.2. No.39 standards
- VDE, SEMKO, UL recognized, CSA approvals
- 250V voltage rating

FUSE HOLDER

Mfg. Part No.	PC Board Mounting	Length (mm)	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 83000000005	Horizontal	32.0	27M3144	1.21	1.10	1.06	0.98
● 81100000005	Vertical	46.3	02P0350	1.61	1.47	1.41	1.30

CAP

Mfg. Part No.	Fuse Size	Use With Series	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 81600000005	6.3x32mm	810/811	02P0352	1.31	1.19	1.15	1.06
● 83500000005	6.3x32mm	830/831	87K6784	0.92	0.84	0.81	0.74

(136317)

L600 MIDGET FUSE BLOCKS

RoHS Compliant Available

Littelfuse — Expertise Applied | Answers Delivered

Compact, 600V fuse blocks for 13/32 x 1½" midget fuses. Locking blocks together permits any number of poles. Box lug terminals rated 30A. Quick connect terminals rated 20A. Dielectric strength: 1200V minimum. Clip/terminals: tin-plated copper alloy. UL94V0 rated thermoplastic base. Type numbers with **C** suffix have copper box lug terminals; **SQ** suffix have screw/quick connect terminals.

Mfg. Part No.	Poles	Stock No.	Price Each 1-9	10-24	25-49	50-99
● L60030M1C	1	18M9174	21.90	19.62	18.95	18.11
● L60030M2C	2	18M9176	35.98	30.84	28.52	27.53
● L60030M3C	3	18M9178	53.55	45.90	42.45	40.97
● L60030M1SQ	1	18M9175	10.90	10.15	9.78	9.40
● L60030M2SQ	2	18M9177	17.14	15.36	14.83	14.17
● L60030M3SQ	3	18M9179	21.87	19.60	18.93	18.09

(9185)

IN-LINE FUSEHOLDER COVER FOR MAXI STYLE BLADE FUSE

RoHS Compliant Available

Littelfuse — Expertise Applied | Answers Delivered

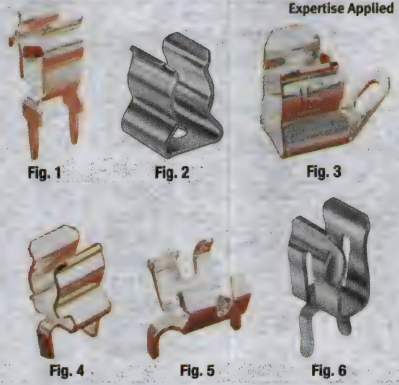
Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 01520007Z	MAXI Style Blade Fuseholder Cover	85C1688	8.68	8.08	7.78	7.48

(190772)

PC BOARD AND RIVET/ EYELET MOUNT FUSE CLIPS

RoHS Compliant Available

Littelfuse — Expertise Applied | Answers Delivered



Mfg. Part No.	Fig.	Fuse Type	Clip Mounting	Clip Material	Clip Plating	Fuse Stops	Stock No.	Price Each 1-9
● 01000056Z	1	5mm	Thru Hole	Spring Brass	Tin	Yes	81R0341	0.34
● 01090002H	2	NEC 30-60A	Rivet/Eyelet	Spring Brass	Nickel	No	02B7243	3.53
● 01050003H	3	13/32		Spring Brass	Tin	Yes	11J7046	0.66
● 10207101009	3	6.3mm	Thru Hole	Copper Alloy	Tin	Yes	76R6904	0.28
● 01220088Z	3	1/4"	Thru Hole	Beryllium Copper	Tin	Yes	81R0348	0.70
● 01020074Z	4	1/4"	Thru Hole	Spring Brass	Tin	No	81R0344	0.20
● 01020078H	5	1/4"	Thru Hole	Spring Brass	Tin	No	20F606	0.39
● 01020071Z	6	...	Thru Hole	Spring Brass	Tin	Yes	74R6921	0.21
● 01110005MR	...	5mm	Thru Hole	Phosphor Bronze	Tin	Yes	97B4067	0.33
● 01110501Z	6	5mm	Thru Hole	Spring Brass	Tin	Yes	69R7705	0.12

(9304)

WICKMANN SUBMINIATURE PCB MOUNT FUSE HOLDERS FOR TE5® AND TR5® FUSES

RoHS Compliant Available

Littelfuse — Expertise Applied | Answers Delivered

- 6.3A current rating
- 250V voltage rating
- 5.08mm lead pitch
- Thermoplastic body
- Copper alloy solderable tinned leads

Mfg. Part No.	Height (mm)	PC Board Mounting	Color	Stock No.	Price Each 1-9	10-24	25-49
● 56000001319	3.00	Through Hole	White	12M6117	0.91	0.83	0.80
● 56000001009	4.30	Through Hole	White	15P8392	0.75	0.70	0.65
● 56000001009	4.30	Through Hole	White	98K6125	0.46	0.44	0.42
● 56200001009	4.44	Through Hole	Black	67K2295	1.41	1.28	1.24
● 56400001009	4.47	Surface Mount	Black	67K2297	1.86	1.68	1.59

(136309)

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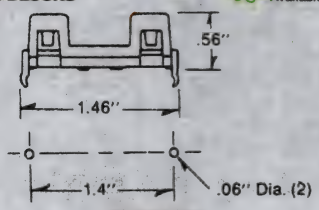
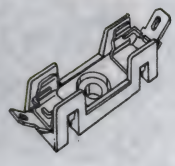
(196546)

OMNI-BLOK® FUSE BLOCKS

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered





PC Board Type
(Single-Pole Units Only)

1-piece clip/terminal provides low contact resistance. Multiple-pole units may be broken to desired number of poles. Dielectric strength: 1500V minimum. Glass reinforced, thermoplastic base, rated UL 94V0. UL recognized, CSA certified to 300V.

Mfg. Part No.	Terminal	Poles	Stock No.	Price Each 1-9	Price Each 10-24
FOR SIZE 2AG FUSES					
02540001Z	254001-Solder	1	67K1658	1.38	1.25
02540208Z	254208-.100" Q.C.	8	67K1659	9.94	9.26
FOR SIZE 5 x 20mm FUSES					
05200003Z	520003	1	67K2290	1.17	1.06
05200004Z	520004	1	67K7448	1.20	1.09
05200101Z	520101	1	69K7674	1.26	1.14
FOR SIZE 3AG FUSES					
03540001ZXGY	354001-GY/Solder	1	67K1758	1.13	1.03
03540002ZXGY	354002-GY/Solder	2	67K1759	2.26	2.05
03540012ZXGY	354012-GY/Solder	12	67K1761	11.77	10.96
03540101ZXGY	354101-GY PC Board	1	67K1768	1.22	1.11
03540601ZXGY	354601-GY/3/16" Q.C.	1	67K1780	1.16	1.06
03540612ZXGY	354612-GY/3/16" Q.C.	12	67K1781	12.06	11.22
03540621ZXBL	354621-BL/3/16" Q.C.*	1	12J4408	1.23	1.12
03540801ZXGY	354801-GY/1/4" Q.C.	1	67K1782	1.13	1.03
03540802ZXGY	354802-GY/1/4" Q.C.	2	67K7446	2.20	2.00
03540101ZXGY	354812-GY/1/4" Q.C.	1	67K1768	1.22	1.11
03540901ZXGY	354901-GY/1/4" Q.C.	1	67K1783	4.06	3.78
03540902ZXGY	354902-GY/1/4" Q.C.	2	94H7141	3.61	3.37
03540912ZXGY	354912-GY/1/4" Q.C.	12	67K1784	18.93	16.97

*With Anti-Rotation Boss
(9307)

MINI® FUSE PC BOARD FUSE HOLDERS

RoHS Compliant Available

Littelfuse
Expertise Applied | Answers Delivered

Stackable Vertical Mount

PC board holders for MINI® Fuse 32V blade-type auto fuses. UL recognized (15A), CSA certified (10A).

Mfg. Part No.	Dimensions (mm) H	W	D
01530007Z	7.6	17.3	12.9
01530008Z	12.9	17.3	7.6
01530009Z	12.9	17.3	7.6

Mfg. Part No.	Mounting Orientation	Stock No.	Price Each 1-9	10-24	25-49	50-99
01530007Z	Horizontal	67K1420	3.82	3.47	3.35	3.09
01530008Z	Vertical Single/Stackable (End)	67K1421	3.67	3.34	3.22	2.97
01530009Z	Vertical Stackable	67K1422	3.67	3.34	3.22	2.97

(9259)

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Affordable, performance board level
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(212569)

MCHT SERIES FUSEHOLDERS

RoHS Compliant Available

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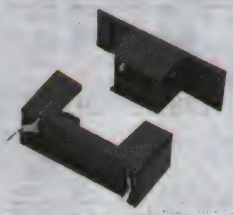
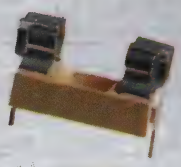


MCHTC-100M



MCHTC-15M

MCHTC-50M

MCHTC-70M

MCHTC-30M

MCHTC-35M

FUSEHOLDERS

Mfg. Part No.	Current	Description	Stock No.	Price Each 1-249
MCHTC-100M	5A	Semi-enclosed, 5x20mm, PCB mount	09WX9248	1.05
MCHTC-15M	6.3A	Open, 5x20mm, PCB mount	10WX2851	1.03
CFH05	6.3A	Finger release screw cap, w/screwdriver slot	74M3024	2.02
CFH04	6.3A	Nylon screwdriver release screw cap	74M3025	2.50
MCHTC-50M	6.3A	Finger release bayonet cap, horizontal	10WX2853	3.02
CFH12	10A	Nylon screwdriver release bayonet cap	74M3026	2.98

ACCESSORIES

Mfg. Part No.	Description	For Use With	Stock No.	Price Each 1-249
MCHTC-150M	Transparent cover	Mfg. Part No.: MCHTE-15M	05C0240	0.74

(102877)

¼" FUSE HOLDERS

RoHS Compliant Available

multicomp

Accept ¼ x 1¼" fuses with bayonet-type knobs in panels to 0.313" (7.95) thick. Rated 30A/250V, except (*) 15A/250V. UL recognized, CSA certified. **Sold individually.**

Mfg. Part No.	Description	Stock No.	Price Each 1-49	50-99
MCHKP-RH	Solder Terminal	17M6446	5.93	5.05
MCHKP-HH-RH*	¼" Q.C.	17M6445	5.45	4.67

Q.C. = Quick Connect
(16636)

FUSE HOLDERS

RoHS Compliant Available

multicomp

Fig. 1

Fig. 2

Fig. 3

PANEL MOUNT 6.3 X 32MM FUSEHOLDERS

Designed to international specifications per IEC 257 and accept ¼ x 1¼" fuses. All models are panel mountable. UL recognized, CSA certified, VDE and SEMKO approved. **Sold individually.**

Mfg. Part No.	Fig.	Description‡	Stock No.	Price Each 1-49	50-99
MCHTB-22I-RH	1	L/P, S.C.	17M6448	3.43	2.90
MCHTB-28I-RH	1	L/P, Q.C.	17M6449	11.90	10.05
MCHTB-44I-RH	2	L/P, S.C.	17M6452	10.56	8.92
MCHTB-48I-RH	2	H/P, Q.C.	17M6453	4.15	3.50
MCHTB-34I-RH	3	L/P, S.C.	17M6450	10.56	8.92
MCHTB-36I-RH	3	L/P, Q.C.	17M6451	12.99	10.98

1/4" FUSEHOLDERS

Accept 1/4 x 1-1/4" fuses with bayonet-type knobs in panels to 0.313" (7.95) thick. UL recognized, CSA certified. **Sold individually.**

Mfg. Part No.	Rating	Description	Stock No.	Price Each 1-49	50-99
MCHKP-RH	30A/250V	L/P, Q.C.	17M6446	5.93	5.05
MCHKP-HH-RH	15A/250V	L/P, Q.C.	17M6445	5.45	4.67

➤CONTINUED➤

FUSE HOLDERS (CONT.)

Mfg. Part No.	Fig.	Description‡	Stock No.	Price Each 1-49	Price Each 50-99
For 13/32″ diameter fuses in various lengths. 1-piece side terminal and threaded insert eliminates 2-piece solder fabrications. Combination 1/4″ quick-connect/solder terminals. Bayonet knob. **Sold individually**.					
● MCHPS-RH	30A,600V	L/P, Q.C.	17M6447	8.66	...
IN LINE FUSEHOLDERS					

Mfg. Part No.	Fuse Size Held	Fuse Holder Material	Stock No.	Price Each 1-99	Price Each 100-249
MCCQ-209F2	6.3 x 32mm	PVC	31T8244	1.75	1.35
MCCQ-209F5	6.3 x 32mm	Nylon	31T8245	2.00	1.55
● MC11WF031	5 x 20mm	Brass	63T5205	1.08	0.81
● MC11WF032	6.35 x 30mm	...	63T5206	1.23	0.95

‡ L/P = Low-Profile; H/P = High-Profile; S.C. = Solder Connect; Q.C. = Quick Connect
(16638)

PC FUSE CLIPS AND HOLDERS

RoHS Compliant Available

KEYSTONE ELECTRONICS CORP.

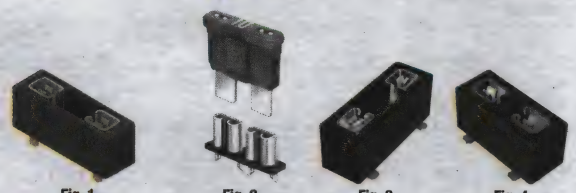


Fig. 1 Fig. 2 Fig. 3 Fig. 4

Fig. 5 Fig. 6 Fig. 7

Fig. 8 Fig. 9 Fig. 10

Fig. 11 Fig. 12 Fig. 13 Fig. 14

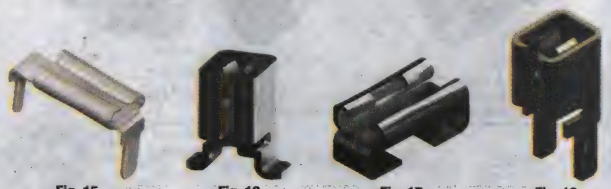


Fig. 15 Fig. 16 Fig. 17 Fig. 18

Fig. 19 Fig. 20 Fig. 21 Fig. 22 Fig. 23

HOLDERS

Mfg. Part No.	Fig.	Fuse Size	Current (A)	Holder Terminals	Stock No.	Price Each 1-49
● 3557-2	1	ATC/ATO	20	Through Hole	22M2712	1.30
● 3522-2	2	ATC/ATO	30	Through Hole	95F3327	1.05
● 3544-2	2	Mini	30	Through Hole	76M7847	1.10

CONTINUED

PC FUSE CLIPS AND HOLDERS (CONT.)

Mfg. Part No.	Fig.	Fuse Size	Current (A)	Holder Terminals	Stock No.	Price Each 1-49
● 3587	3	Standard	20	Surface Mount	24T5059	0.97
● 3587TR+	3	Standard	20	Surface Mount	24T5060	1.34
● 3588	4	Mini	20	Surface Mount	24T5061	0.97
● 3588TR+	4	Mini	20	Surface Mount	24T5062	1.31
● 4628	5	5mm	5	Through Hole	62W5120	0.70
● 4527	5	5mm	5	Through Hole	62W5109	0.70
● 3527	6	5mm	6.3	Through Hole	62W5055	1.69
● 4525	7	5mm	10	Through Hole	22M2845	2.43
● 4243	8	5mm	15	Quick Connect	28H8539	2.41
● 4245	9	3AG	15	Through Hole	62W5106	2.05
● 3552	10	Subminiature	5	Through Hole	22M2706	0.89
CLIPS						
● 3522	11	ATC/ATO	30	Through Hole	66F6703	0.17
● 3550	12	ATC/ATO	30	Through Hole	62W5664	0.41
● 3564	13	Mini	30	Through Hole	62W5063	0.19
● 3544	14	Mini	30	Through Hole	62W5057	0.27
● 3549	15	Mini	30	Through Hole	20T9637	0.40
● 3563	...	Mini	30	Surface Mount	62W5062	0.25
● 3586	16	Mini/Standard	20	Surface Mount	24T5057	0.15
● 3586TR+	16	Mini/Standard	20	Surface Mount	24T5058	0.48
● 3569	17	Mini	15	Surface Mount	24T5055	0.39
● 3569TR+	17	Mini	15	Surface Mount	24T5056	0.82
● 3555	...	Maxi	60	Through Hole	62W5058	0.27
● 3557	18	Universal	20	Through Hole	22M2711	0.21
● 3521‡	19	5mm/2AG	10	Through Hole	95F3329	0.16
● 3561‡	20	5mm/2AG	10	Surface Mount	62W5060	0.16
● 3562‡	21	5mm/3AG	15	Through Hole	62W5061	0.25
● 3565	22	4AG	15	Screw	62W5666	0.16
● 3566‡	23	5AG	30	Through Hole	62W5064	0.48

+Sold Tape Cut (price each); ‡ UL recognized

COVERS

Mfg. Part No.	For Use With	Stock No.	Price Each 1-99
● 3527C	Mfg. part no. 3527	62W5056	0.43
● 4527C	Mfg. part no. 4527	62W5110	0.25
● 4628C	Mfg. part no. 4628	62W5121	0.23

(36072)

FUSE CLIPS

RoHS Compliant Available

KEYSTONE ELECTRONICS CORP.

3518P 3513 3530 3532

Printed circuit types are available in snap-fit and press-fit for wave soldering. Rated 15A. Available with orientation tabs and end stops. Constructed of tin-plated brass. UL recognized. **Mfg. part no. 3513** is snap-in clip style. **Mfg. part no. 3532** is same as **mfg. part no. 3531** without mounting ears.

Mfg. Part No.	Fits Fuse	Mtg. Hole Separation	Mtg. Hole Diameter	Stock No.	Price Each 1-49
● 3513	3AG	0.300″ (7.6)	0.067″ (1.7)	74R7980	0.26
● 3518P	5mm	0.270″ (6.9)	...	95F3322	0.22
● 3530	3AG	0.270″ (6.9)	0.068″ (1.7)	74R7984	0.17
● 3532	3AG	...	0.136″ (3.45)	74R7986	0.18

(9254)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196562)

OPEN-DESIGN FUSE CLIPS/BLOCKS

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

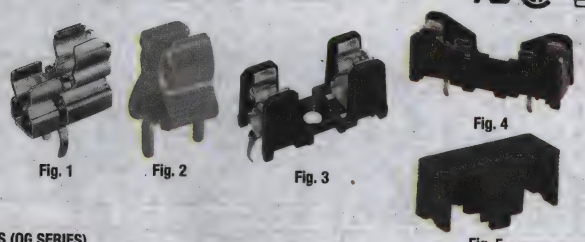


Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5

CLIPS (OG SERIES)

Mfg. Part No.	Fig.	Voltage (VAC)	Current (A)	Fuse Size	Terminals	Stock No.	Price Each 1-49
0751.0099	1	250	10	5 x 20mm 6.3 x 32mm	Bowed, Tin-Plated Bronze	88K2078	0.60
0751.0100	1	250	10		Bowed, Tin-Plated Brass	95B8510	0.54
0751.0052	...	250	6.3	5 x 20mm	Straight, Tin-Plated Bronze	96F8289	0.20
0751.0110	...	250	6.3	5 x 20mm	Bowed, Tin-Plated Brass	24C7847	0.09
CLIPS (CQP SERIES)							
8040.0001	2	600	32	6.3 x 32mm	Tin-Plated Beryllium-Copper	53R1228	0.88
8040.0003	2	600	32	6.3 x 32mm	Silver-Plated Beryllium-Copper	53R1229	0.81
BLOCKS (OGN SERIES)							
0031.8201	3	250	10	5 x 20mm	Bowed, 22.5mm Spacing	96F8317	0.76
0031.8211	3	250	10	5 x 20mm	Bowed, 25mm Spacing	96B9380	0.79
0031.8221	...	250	10	5 x 20mm	Surface Mount	85F224	1.27
0031.8231	4	250	10	5 x 20mm 6.3 x 32mm	Bowed, 35.4mm Spacing	92F1964	1.36

COVERS

Mfg. Part No.	Fig.	Description	For Use With	Stock No.	Price Each 1-49	Price Each 50-99
0853.9561	...	Transparent Cover	OG (Clip) 5 x 20mm	18C4063	0.60	0.45
0853.0551	...	Transparent Cover	OGN (Block) 5 x 20mm	90B9824	0.71	0.51
0853.0571	5	Reflow Cover	OGN (Block) 5 x 20mm	32C3887	1.01	0.73

(2398)

5 x 20 mm & 6.3 x 32 mm FUSE HOLDERS & CARRIERS

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6 Fig. 7 Fig. 8 Fig. 9

- Mounting: panel or PC board
- Fuse carrier type: slotted or fingergrip
- Breaking capacity: 2.25W max. @ 25 deg C (IEC 127-6)
- Fuse carriers mate with fuse sockets to form a complete fuse holder

FUSE HOLDERS (250VAC)

Mfg. Part No.	Fig.	Current (A)	Fuse Size (mm)	Terminals	Mounting	Bayonet Fuse Carrier	Stock No.	Price Each 1-9
3101.0010	1	10	5 x 20	Quick Connect	Panel	Slotted	84K0264	2.95
3101.0015	...	10	5 x 20	Quick Connect	Panel	Fingergrip	84K0265	2.88
3101.0030	...	10	5 x 20	Quick Connect	Panel	Slotted	92F1944	2.92
3101.0035	2	10	5 x 20	Quick Connect	Panel	Fingergrip	92F1945	2.88

CONTINUED

5 x 20 mm & 6.3 x 32 mm FUSE HOLDERS & CARRIERS (CONT.)

Mfg. Part No.	Fig.	Current (A)	Fuse Size (mm)	Terminals	Mounting	Bayonet Fuse Carrier	Stock No.	Price Each 1-9
3101.0036	2	16	5 x 20	Solder	Panel	Fingergrip	25M2352	2.54
3101.0115	...	16	5 x 20	Solder	Panel	Fingergrip	25M2354	5.78
3101.0020	3	16	5 x 20	Solder	Panel	Slotted	93K3656	2.09
3101.0025	...	16	5 x 20	Solder	Panel	Fingergrip	98K8708	3.77
3101.0120	3	16	5 x 20	Solder Lug	Panel	Slotted	12C1498	4.76
0031.3901	...	10	5 x 20	Solder Lug	Panel	Slotted	91B7789	4.02
0031.1081	4	10	5 x 20	Solder Lug	Panel	Slotted	84K0228	5.09
0031.1085	...	10	5 x 20	Solder Lug	Panel	Slotted	88K2036	5.09
3101.0040	5	10	5 x 20	Solder Lug	PC Board	Slotted	92F1941	2.98
3101.0045	6	10	5 x 20	Solder Lug	PC Board	Fingergrip	84K0266	2.88
3101.0050	7	10	5 x 20	Solder Lug	PC Board	Slotted	84K0267	2.92
3101.0055	...	10	5 x 20	Solder Lug	PC Board	Fingergrip	23B7666	2.92
0031.3558	...	10	5 x 20	Solder Lug	PC Board	Slotted	84K0233	4.09
0031.3821	...	10	5 x 20	Solder Lug	PC Board	Slotted	50H2005	3.46
0031.3571	...	10	5 x 20	Solder Lug	PC Board	Slotted	32C2780	2.99
0031.3981	...	10	5 x 20	Solder Lug	PC Board	Slotted	95F2996	3.78
0031.1693	8	10	5 x 20 6.3 x 32	Quick Connect	Panel	Slotted	63J8598	2.69
0031.1699	8	10	6.3 x 32	Quick Connect	Panel	Slotted	84K0232	4.11
0031.1659	...	10	6.3 x 32	Solder Lug	Panel	Slotted	84K0230	3.88
0031.1680	...	10	6.3 x 32	Solder Lug	Panel	Slotted	84K0231	3.88
0031.3822	...	10	6.3 x 32	Solder Lug	PC Board	Slotted	23B4840	3.42

FUSE SOCKETS

Mfg. Part No.	Fig.	Voltage (VAC)	Current (A)	Fuse Size (mm)	Terminals	Mounting	Stock No.	Price Each 1-49
0031.1694	...	250	10	6.3 x 32	Quick Connect	Panel	92B8549	2.54
0031.3804	...	250	10	5 x 20 6.3 x 32	Solder Lug	PC Board	34C4579	2.38
0031.3577	...	250	10		Solder Lug	PC Board	88F4229	1.99
0031.1653	...	250	10		Solder Lug	Panel	93B3562	2.73
0031.1673	9	250	10		Solder Lug	Panel	93K7609	2.69
0031.1631	...	500	10		Quick Connect	Panel	96B0421	5.05

FUSE CARRIERS

Mfg. Part No.	Voltage (VAC)	Current (A)	Fuse Size (mm)	Type	Stock No.	Price Each 1-99
0031.1693	250	10	5 x 20 6.3 x 32	Slotted	63J8598	2.69
0031.1663	250	10	5 x 20	Slotted	93B5171	1.84
0031.1661	250	16	6.3 x 32	Slotted	70C4953	1.21
0031.1613	500	10	6.3 x 32	Slotted	84K0229	5.34

(2400)

USB 2.0 AND USB 3.0 COORDINATED CIRCUIT PROTECTION DEVICES KIT

NEW

TE connectivity

Authorized Distributor

Specifications:
- Current Rating: 0.015A
- Voltage Rating: 6V

Applications:
- Automotive systems
- Computers and peripherals
- Industrial controls
- Multimedia

KIT CONTENTS

Raychem Part No.	Qty.	Description
PESD0603-240	5	Polymer ESD Devices
SESD1103Q6UG-0020-090	5	Silicon ESD Devices
SESD0802Q4UG-0020-090	5	Silicon ESD Devices
SESD0402Q2UG-0020-090	5	Silicon ESD Devices
ZEN065V130A24LS	5	PolyZen Devices
ZEN059V130A24LS	5	PolyZen Devices
MINISMDC200F-2	5	PolySwitch Resettable Devices
ZEN056V130A24LS	5	PolyZen Devices
MINISMDC260F-2	5	PolySwitch Resettable Devices
MINISMDC160F-2	5	PolySwitch Resettable Devices
NANOSMDC150F-2	5	PolySwitch Resettable Devices
NANOSMDC075F-2	5	PolySwitch Resettable Devices

Mfg. Part No.	Description	Stock No.	Price Each 1-24
2110861-1	Circuit Protection Devices Kit	45X6310	53.53

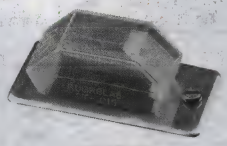
(212253)

FLEXIBLE TRANSPARENT ENVIRONMENTAL SEALING BOOTS FOR CIRCUIT BREAKERS

RoHS Compliant Available

APM HEXSEAL

Flexible, transparent silicone rubber sealing boots for lever-actuated style circuit breakers. Units provide an environmental seal for breaker and panel cutout. Tolerant to sunlight, weather, salt spray, ozone, most acids/cleaning solvents. UL recognized, CSA certified.



CT10 Series
Front-Panel Mounted
Circuit-Breaker Boots

FRONT-PANEL MOUNTED BOOTS

Mfg. Part No.	No. of Poles	Designed to Fit Circuit Breaker: Sensata	Carling Technologies	Eaton	Tyco/P&B	Stock No.	Price Each 1-49
● CT1015	1	IEL/APL/UPL/205 (1-Pole); IEL (2- and 3-Pole); MIL-M-55629/1 & MIL-M-55629/2	CA 1 DA 1	AM-1 AM-12	W91	16F4916	23.32
● CT1020	2	IELH/APL/UPL/205 (2-Pole); IEL (4-Pole); MIL-M-55629/3 & MIL-M-55629/4	CA2 DA2	AM-2 AM-33	W92	16F4917	28.19
● CT1050	3	IELH/APL/UPL/205 (3-Pole); IEL (5-Pole); MIL-M-55629/5 & MIL-M-55629/6	CA-3 DA-3	AM-3 AM-333	W93	16F4918	31.10
● 1213/44	...	...	...	KD	...	29H4846	2.41

(5164)

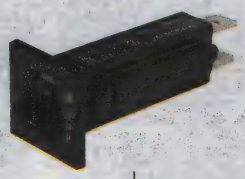
P&B FUSEHOLDER TYPE CIRCUIT BREAKERS

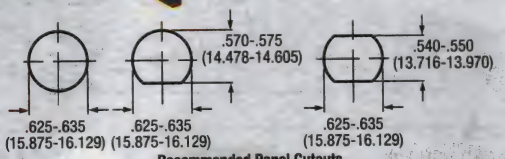
RoHS Compliant Available

TE connectivity

Authorized Distributor

- Approved to many international standards
- Replaces slow blow glass cartridge fuse
- Labor-saving snap-in mounting
- Button extends for visual trip indicator
- Pushbutton to reset breaker





Recommended Panel Cutouts

SPECIFICATIONS

Calibration	Will continuously carry 100% of rated load. 3-15A models—may trip between 101% and 134%, but must trip at 135% of rating within one hour at +25°C. 0.25-2 amp models—may trip between 101% and 174%, but must trip at 175% of rating within one hour at +25°C.
Dielectric Strength	Over 1,500Vrms
Maximum Operating Voltages	32VDC; 250VAC, 50/60Hz
Interrupt Capacity	1,000A at 250VAC, 50/60Hz and 32VDC in accordance with UL standard 1077.
Resettable Overload Capacity	6 times rated current for 0.25-2A models. 10 times rated current for 3-15A models.
Reset Time	180 seconds max. for 0.25-2A models. 10 to 60 seconds for 3-15A models.
Termination	0.250″ (6.35) quick connects. Soldering to terminals is not recommended.
Mounting	Snaps into panel from front. See recommended panel cutouts.
Approximate Weight	0.35 oz. (10 g)

The **W28 series** is a single-pole, thermal circuit breaker featuring a reset button which cannot be manually pulled to disconnect the load. On an overload, the reset button opens and a white indicator extends for visual trip indication. Ideal for replacement of slow-blow glass cartridge fuses. Snaps in panels up to 0.062″ (1.57mm) thick. and 0.105″ (2.667mm) thick. Maximum operating voltage is 250VAC or 32VDC. Trip times shown in table are at 200% of load and +25°C. UL recognized (File E69543), CSA certified (File LR15734), VDE approved, DEMKO approved, SEV approved.

0.250″ QUICK CONNECT — MOUNTS IN .032″-.062″ THICK PANEL

Mfg. Part No.	Current Rating (A)	Trip Time (sec)	Stock No.	Price Each 1-9	10-24	25-49
● W28-XQ1A-0.25	0.25	4.5-28	75F005	5.40	4.57	4.19
● W28-XQ1A-0.50	0.50	4.5-28	75F006	5.40	4.57	4.19
● W28-XQ1A-0.75	0.75	4.5-28	90F1227	6.06	4.99	4.57
● W28-XQ1A-1	1.00	4.5-28	75F007	4.55	4.14	3.79
● W28-XQ1A-2	2.00	4.5-28	75F008	4.55	4.14	3.79
● W28-XQ1A-3	3.00	2.2-15	75F009	2.45	2.23	2.04

➤ CONTINUED ➤

P&B FUSEHOLDER TYPE CIRCUIT BREAKERS (CONT.)

Mfg. Part No.	Current Rating (A)	Trip Time (sec)	Stock No.	Price Each 1-9	10-24	25-49
● W28-XQ1A-4	4.00	2.2-15	90F1228	2.93	2.48	2.27
● W28-XQ1A-5	5.00	2.2-15	75F010	2.45	2.23	2.04
● W28-XQ1A-6	6.00	2.2-15	90F1229	2.93	2.48	2.27
● W28-XQ1A-7	7.00	2.2-15	75F011	2.93	2.48	2.27
● W28-XQ1A-8	8.00	2.2-15	75F012	2.72	2.48	2.27
● W28-XQ1A-10	10.00	2.2-15	75F013	2.72	2.48	2.27
● W28-XQ1A-12	12.00	2.2-15	75F014	2.45	2.23	2.04
● W28-XQ1A-15	15.00	2.2-15	75F015	2.45	2.23	2.04
● W28-XQ1A-20	20.00	2.2-15	52F5525	3.00	2.48	2.27
0.250″ QUICK CONNECT — MOUNTS IN .075″-.105″ THICK PANEL						
● W28-XT1A-5	5.00	2.2-15	08H7080	3.26	2.92	2.64
● W28-XT1A-10	10.00	2.2-15	66F3424	3.19	2.86	2.59
● W28-XT1A-12	12.00	2.2-15	23C9372	3.26	2.86	2.59
● W28-XT1A-15	15.00	2.2-15	99F6269	3.19	2.64	2.42

(2495)

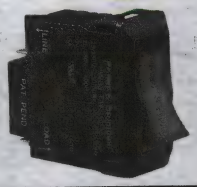
P&B W33 THERMAL CIRCUIT BREAKERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- 2 to 20A ratings
- 1- or 2-pole sensing
- Lighted or non-lighted rocker actuator



Specification	Description
Calibration	Will continuously carry 100% of rated load. May trip between 101% and 135% of rated load, but must trip at 135% within one hour at +25°C.
Dielectric Strength	Over 2,000Vrms.
Maximum Operating Voltages	50VDC; 250VAC to 400Hz.
Interrupt Capacity	1,000A at 50VDC; 250VAC, 60Hz; 125/250VAC, 400Hz; 1,500A at 125/250VAC, 60Hz.
Resettable Overload Capacity	10 times rated current.
Termination	Poles 1 and 2
Mounting	Snaps into panel from front.
Cutout Size	Fits 0.875 x 1.750 (22.22 x 44.45) panel opening from .032-.250″ (0.813-6.35) thick.
Actuator	Rocker or lighted rocker.
Shock	30g tested to IEC 68-2-27, test Ea.
Vibration	8g tested to IEC 68-2-6, test Fc.
Endurance Cycling	50,000 operations at rated load; 1,000 operations at 200% rated load.

Current sensing thermal circuit breakers feature models with a single pole breaker and a single pole "on-off" switch and indicator light in one convenient, snap-in mount package. Available with black or white rocker (non-lighted) or with lighted rocker (120VAC neon light with resistor). 0.250 × 0.032″ (6.350 × 0.813) quick connect/solder terminals. International I/O rocker marking. UL recognized (File E695430), CSA certified (File LR15734). Meets requirements of IEC. All are non-lighted. Versions with lighted rocker also available; *go online or call.*

Mfg. Part No.	Current Rating (A)	Rocker Color	Stock No.	Price Each 1-24	25-49	50-99
● W33-S1N1Q-5	5	Black	17M3350	16.66	15.94	14.43
● W33-S1N1Q-10	10	Black	17M3348	18.57	16.25	14.71
● W33-S1N1Q-15	15	Black	93F6690	16.98	16.43	15.87
● W33-S1N1Q-20	20	Black	17M3349	16.98	16.43	15.87
● W33-T2N1Q-5*	5	White	93F6701	29.98	28.24	26.92
● W33-T2N1Q-10*	10	White	93F6702	29.46	27.75	26.46
● W33-T2N1Q-15*	15	White	93F6703	23.78	22.54	20.39
● W33-T2N1Q-20*	20	White	93F6704	25.12	23.84	22.01
● W33-S4B1Q-5	5	Amber	93F6697	21.65	19.32	17.48
● W33-S4B1Q-10	10	Amber	17M3351	21.56	20.46	18.89
● W33-S4B1Q-15	15	Amber	93F6699	21.56	20.46	18.89
● W33-S4B1Q-20	20	Amber	08H7137	21.65	19.32	17.48
● W33-T4B1Q-5*	5	Amber	17M3352	28.29	27.26	25.16
● W33-T4B1Q-10*	10	Amber	93F6706	27.80	26.79	24.73
● W33-T4B1Q-15*	15	Amber	93F6707	27.80	26.79	24.73

*Both poles 1 and 2 series trip overload sensing
(2424)

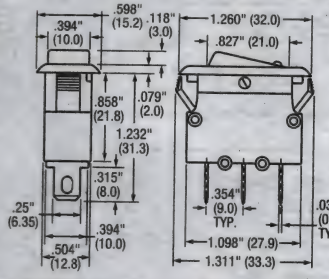
P&B ROCKER-ACTUATED THERMAL CIRCUIT BREAKERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Compact, trip-free, rocker-actuated design
- 5A to 20A ratings
- Provides circuit protection and power switching in a single unit
- Indicator lamp standard on listed items
- Snaps into same cutout as many common power switches
- Quick contact terminals, 0.250″ (6.35) straight
- Red translucent rocker
- RESET/OFF marked on bezel



Breakers will continuously carry 100% of rated load. May trip between 101% and 134%, but must trip at 135% within one hour at +25°C. Interrupt capacity: 1000A in accordance with UL standard 1077. Dielectric strength: 1500VAC for 60 sec. Resettable overload capacity is ten times rated load. Reset time: 60 seconds. Operating temperature: 0°C to +60°C. Numerous additional mounting and termination options available; *go online or call.* UL recognized as supplementary protectors under UL 1077, file E69453, in Canada and the United States.

Mfg. Part No.	Max. Operating Voltage (VAC)	Current Rating (A)	Typical Resistance (Ω)	Stock No.	Price Each 1-9	10-24	25-49
W51-A121B1-5	125	5	0.050	08H0787	3.49	2.97	2.73
W51-A121B1-10	125	10	0.025	08H0784	3.42	3.10	2.84
W51-A121B1-15	125	15	0.017	08H0785	3.72	2.97	2.73
W51-A121B1-20	125	20	0.0125	08H0786	3.42	2.91	2.67
W51-A122B1-10	250	10	0.025	08H0788	3.42	3.10	2.84
W51-A122B1-15	250	15	0.017	08H0789	3.75	3.19	2.93

(74451)

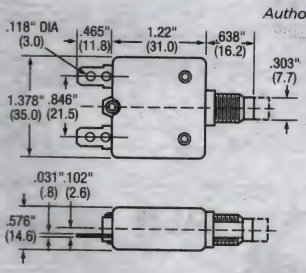
P&B PUSH-TO-RESET ONLY THERMAL CIRCUIT-BREAKERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- New economical design
- 5 to 40A ratings
- Cannot be manually tripped
- Button extends for visual trip indication
- Push button to reset breaker
- White button with red rate marking (vertical)
- Quick-connect terminals, 0.250″ (6.35mm) straight
- Metal-knurled net/hex nut mounting hardware
- Mounting hardware assembled to bushing
- Maximum operating voltage: 250VAC



Breakers will continuously carry 100% of rated load. May trip between 101% and 134%, but must trip at 135% within one hour at +25°C. Interrupt capacity: 1000A in accordance with UL standard 1077. Dielectric strength: 1500VAC for 60 sec. Resettable overload capacity is 10 times rated load. Reset time: 60 seconds. Operating temperature: 0°C to +60°C. UL 1500 (ignition protected) versions also available; *go online or call.* Numerous additional mounting and termination options available. Nameplates and mounting hardware also available; *go online or call.* All breakers except 35A and 40A are UL recognized as supplementary protectors under UL 1077, file E69543, in Canada and the United States.

Mfg. Part No.	Current Rating (A)	Typical Resistance (Ω)	Stock No.	Price Each 1-9	10-24	25-49
W54-XB1A4A10-5	5	0.050	08H0797	2.86	2.57	2.35
W54-XB1A4A10-10	10	0.025	08H0792	2.92	2.47	2.27
W54-XB1A4A10-15	15	0.017	08H0793	3.12	2.57	2.35
W54-XB1A4A10-20	20	0.012	08H0794	2.86	2.42	2.22
W54-XB1A4A10-25	25	0.010	08H0795	2.94	2.68	2.45
W54-XB1A4A10-30	30	0.008	08H0796	2.94	2.68	2.45

(74453)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

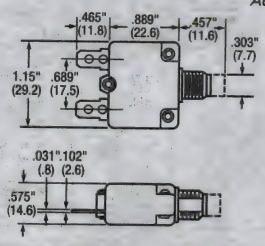
P&B COMPACT, PUSH-TO-RESET ONLY THERMAL CIRCUIT BREAKERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- 4 to 20A ratings
- Cannot be manually tripped
- Button extends for visual trip indication
- Push button to reset breaker
- White button with red rate marking (vertical)
- Quick-connect terminals, .250″ (6.35) straight
- Metal-knurled net/hex nut mounting hardware
- Mounting hardware assembled to bushing
- Maximum operating voltage: 250VAC



Breakers will continuously carry 100% of rated load. May trip between 101% and 134%, but must trip at 135% within one hour at +25°C. Interrupt capacity: 1000A in accordance with UL standard 1077. Dielectric strength: 1500VAC for 60 sec. Resettable overload capacity is ten times rated load. Reset time: 60 seconds. Operating temperature: 0°C to +60°C. UL 1500 (ignition protected) versions also available; *go online or call.* Numerous additional mounting and termination options available. Nameplates and mounting hardware also available; *go online or call.*

Mfg. Part No.	Current Rating (A)	Typical Resistance (Ω)	Stock No.	Price Each 1-9	10-24	25-49
W57-XB7A4A10-5	5	0.050	08H0801	2.03	1.67	1.53
W57-XB7A4A10-10	10	0.025	08H0798	1.63	1.48	1.36
W57-XB7A4A10-15	15	0.017	08H0799	2.06	1.63	1.50
W57-XB7A4A10-20	20	0.012	08H0800	2.33	1.97	1.80

(74452)

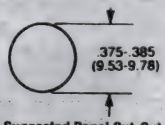
P&B PUSHBUTTON AND TOGGLE-ACTIVATED THERMAL CIRCUIT BREAKERS

RoHS Compliant Available

TE connectivity

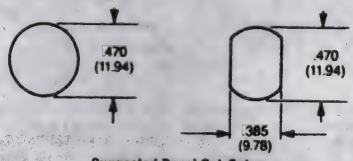
Authorized Distributor

W23



Suggested Panel Cut-Out

W31



Suggested Panel Cut-Outs

W23 and **W31 series** circuit breakers are single-pole, thermal devices. Both units may also be used as a switch. Each breaker has trip-free feature which allows contacts to open on an overload even with toggle or button held in On position. **W23** and **W31 series** will carry 100% of rated load continuously but must trip at 135% of rated load at 25°C within one hour. Both units UL recognized under file E69543, CSA certified under file LR15734. Trip times listed are at 200% rating. **W31 series** units have antirotation flats but also mount in round hole. See suggested panel cut-outs. Dimensions: 2.04L x .690W x 1.38H″

Mfg. Part No.	Current Rating (A)	Stock No.	Price Each 1-9	10-24	25-49	50-99
PUSHBUTTON, 11-30 SEC. TRIP TIME						
W23-X1A1G-1	1.0	17M3338	34.99	31.98	28.49	26.05
W23-X1A1G-2	2.0	95F9218	34.99	31.98	28.49	26.05
W23-X1A1G-3	3.0	70B8785	34.99	31.98	28.49	27.21
PUSHBUTTON, 6-22 SEC. TRIP TIME						
W23-X1A1G-5	5.0	18M9756	20.56	18.69	17.14	15.82
W23-X1A1G-7.50	7.5	18M9757	24.19	21.61	19.80	18.28
W23-X1A1G-10	10.0	17M3339	20.56	18.69	17.14	15.82
W23-X1A1G-15	15.0	44F944	20.56	18.69	17.14	15.82
W23-X1A1G-20	20.0	44F945	23.71	18.69	17.14	15.82
W23-X1A1G-25	25.0	44F946	23.71	21.61	19.80	18.28
W23-X1A1G-30	30.0	18M9753	20.56	18.69	17.14	15.82
W23-X1A1G-35	35.0	18M9754	24.19	23.24	21.77	20.47
W23-X1A1G-40	40.0	18M9755	24.19	21.61	19.80	18.28
W23-X1A1G-50	50.0	17M3340	23.71	21.61	19.80	18.28
TOGGLE-ACTUATED, 11-30 SEC. TRIP TIME						
W31-X2M1G-1	1.0	87F615	44.63	39.84	36.53	33.71
W31-X2M1G-2	2.0	17M3343	43.54	38.87	35.64	32.89
W31-X2M1G-3	3.0	17M3345	41.85	38.87	35.64	32.89
TOGGLE-ACTIVATED, 6-22 SEC. TRIP TIME						
W31-X2M1G-5	5.0	18M9759	29.54	26.88	24.64	22.74
W31-X2M1G-7.50	7.5	87F620	28.37	26.88	24.64	22.74

CONTINUED

THERMAL CIRCUIT-BREAKERS

P&B PUSHBUTTON AND TOGGLE-ACTIVATED THERMAL CIRCUIT BREAKERS (CONT.)

TOGGLE-ACTIVATED, 6-22 SEC. TRIP TIME

Mfg. Part No.	Current Rating (A)	Stock No.	Price Each 1-9	10-24	25-49	50-99
● W31-X2M1G-10	10.0	17M3341	32.73	26.88	24.64	22.74
● W31-X2M1G-15	15.0	17M3342	25.58	23.26	21.32	19.68
● W31-X2M1G-20	20.0	18M9758	25.58	23.26	21.32	19.68
● W31-X2M1G-25	25.0	17M3344	29.51	26.88	24.64	22.74
● W31-X2M1G-30	30.0	17M3346	29.54	26.88	24.64	22.74
● W31-X2M1G-35	35.0	87F612	28.87	27.35	25.07	23.14
● W31-X2M1G-40	40.0	17M3347	30.62	27.35	25.07	23.14
● W31-X2M1G-50	50.0	29M9965	28.37	26.88	24.64	22.74

(2394)

P&B PUSH-TO-RESET ONLY THERMAL CIRCUIT BREAKERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

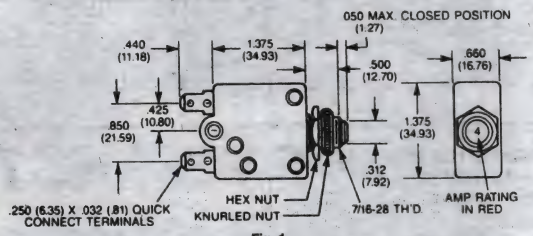


Fig. 1

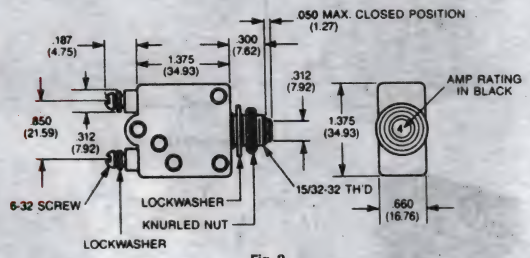


Fig. 2

Single-pole, thermal-type features recessed reset button. Cannot be manually pulled out to disconnect circuit. Reset button extends when overload occurs and breaker opens; red band appears for visible trip indication. Continuously carries 100% rated load. May trip between 101% and 144% of rated load, must trip at 145% at 25°C. Trip times listed in table are at 200% rating. Quick-Connect and #6-32 screw terminals are available. Fig. 1 has 0.5″ (12.70) mounting bushing with 7/16-28 silver thread. Recommended cutout is 0.440-0.450″ (17.3-17.7) dia. hole. Fig. 2 has 0.300″ (7.62) mounting bushing with 15/32-32 black thread. Recommended cutout is 0.470-0.480″ (18.5-18.9) dia. hole. **Mfg. part no. W58-XB6A4A-4** has a .465″ (11.81) mounting bushing with 3/8-24 silver thread. Recommended cutout is .370-.380″ (15.0-15.3) dia. hole. UL 1500 (ignition protected) and 1077 rated. UL recognized, CSA certified. 3/8″ plastic bushing option available; *go online or call.*

QUICK CONNECT TERMINALS, 10-45 SEC. TRIP TIME—FIG. 1

Mfg. Part No.	Current (A)	Trip Time (sec @ 200%)	Stock No.	Price Each 1-9	10-24	25-49	50-99
● W58-XB1A4A-1	1	10-45	56F870	6.10	5.55	5.09	4.70
● W58-XB1A4A-2	2	10-45	56F871	6.10	5.55	5.09	4.70
● W58-XB1A4A-3	3	10-45	56F872	6.10	5.55	5.09	4.70
● W58-XB1A4A-4	4	10-45	56F873	7.03	6.39	5.85	5.40
QUICK-CONNECT TERMINALS, 6-30 SEC. TRIP TIME—FIG. 1							
● W58-XB1A4A-3.5	3.5	6-30	57F280	7.68	6.84	6.18	4.88
● W58-XB1A4A-5	5	6-30	56F874	3.93	3.77	3.49	3.25
● W58-XB1A4A-6	6	6-30	57F275	5.03	4.59	4.20	3.88
● W58-XB1A4A-7	7	6-30	56F875	5.13	4.59	4.20	3.88
● W58-XB1A4A-8	8	6-30	57F276	5.03	3.97	3.64	3.36
● W58-XB1A4A-10	10	6-30	56F876	3.93	3.77	3.49	3.25
● W58-XB1A4A-12	12	6-30	57F277	5.03	4.59	4.20	3.88
● W58-XB1A4A-15	15	6-30	56F877	4.78	3.77	3.49	3.25
● W58-XB1A4A-20	20	6-30	56F878	3.93	3.77	3.49	3.25
● W58-XB1A4A-25	25	6-30	57F278	4.37	3.97	3.64	3.36
● W58-XB1A4A-30	30	6-30	57F279	4.37	3.97	3.64	3.36
#6-32 SCREW TERMINALS, 10-45 SEC. TRIP TIME—FIG. 2							
● W58-XC4C12A-1	1	10-45	57F281	7.03	5.55	5.09	4.70
● W58-XC4C12A-2	2	10-45	17M3353	7.03	6.39	5.85	5.40
● W58-XC4C12A-3	3	10-45	17M3355	7.03	6.39	5.85	5.40
● W58-XC4C12A-7	7	10-45	17M3357	5.81	5.17	4.74	4.37
● W58-XC4C12A-25	25	10-45	29M9967	5.78	5.27	4.83	4.45

➤CONTINUED➤

P&B PUSH-TO-RESET ONLY THERMAL CIRCUIT BREAKERS (CONT.)

#6-32 SCREW TERMINALS, 6-30 SEC. TRIP TIME—FIG. 2

Mfg. Part No.	Current (A)	Trip Time (sec @ 200%)	Stock No.	Price Each 1-9	10-24	25-49	50-99
● W58-XC4C12A-5	5	6-30	17M3356	5.81	5.17	4.74	4.37
● W58-XC4C12A-10	10	6-30	29M9966	4.95	4.50	4.12	3.80
● W58-XC4C12A-15	15	6-30	57F292	4.95	4.50	4.12	3.80
● W58-XC4C12A-20	20	6-30	17M3354	5.51	5.17	4.74	4.37
● W58-XC4C12A-30	30	6-30	57F294	5.39	4.50	4.12	3.80

(2395)

THERMAL CIRCUIT BREAKERS

RoHS Compliant Available

Carling Technologies™ Innovative Designs. Powerful Solutions.

- Rated 125-250VAC, 48VDC
- M11 Mounting Hole
- Type C Black Plastic Bushing
- Type 3 Plastic Mounting Nut
- 0.250″ Tab Terminals
- UL Recognized, cUL Recognized, TÜV Approved

CLB Series CMB Series

Series	Dimensions (mm) Height	Depth	Dimensions (in.) Height	Depth
CLB	35.0	58.6	1.379	2.310
CMB	29.3	45.2	1.154	1.781

CLB SERIES

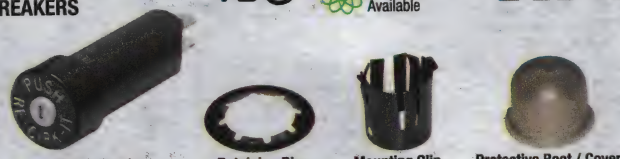
Mfg. Part No.	Current (A)	Stock No.	Price Each 1-49
● CLB-053-11A3N-B-A	5	84K1120	9.13
● CLB-073-11A3N-B-A	7	84K1121	6.95
● CLB-103-11A3N-B-A	10	84K1122	4.49
● CLB-203-11A3N-B-A	20	84K1123	5.52
● CLB-253-11A3N-B-A	25	84K1124	6.61
● CLB-303-11A3N-B-A	30	84K1125	6.77
CMB SERIES			
● CMB-053-11C3N-B-A	5	01H9766	8.74
● CMB-123-11C3N-B-A	12	84K1127	2.87
● CMB-153-11C3N-B-A	15	85K8031	4.77
● CMB-203-11C3N-B-A	20	84K1128	2.70

(73435)

THERMAL CIRCUIT BREAKERS

RoHS Compliant Available

EATON



Circuit Breaker Retaining Ring Mounting Clip Protective Boot / Cover

Replaces slow-blow glass fuses and fuse holders. Units mount in the same space as a 0.625″ (15.88) fuse holder and provide resettable capability after tripping. A trip indicator button provides visual indication of trip condition and can't be manually switched to the OFF position. Trip time @ 200%: 2.5-24 seconds @25°C. *Retaining ring, mounting clip and boot ordered separately; go online or call.* UL recognized, CSA certified.

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-49	50-99	100-249
● KD1-.05A	0.5	96B5634	8.73	8.01	7.30
● KD1-1	1	29F1601	10.94	10.05	9.19
● KD1-2	2	29F1602	6.15	5.66	5.17
● KD1-2R5	2.5	44F914	6.23	5.72	5.23
● KD1-3	3	29F1603	6.15	5.66	5.17
● KD1-4	4	29F1604	6.14	5.64	5.17
● KD1-5	5	29F1605	6.15	5.66	5.17
● KD1-6	6	29F1606	6.23	5.72	5.23
● KD1-7	7	29F1607	6.06	5.57	5.10
● KD1-8	8	29F1608	6.23	5.72	5.23
● KD1-9	9	29F1609	5.02	4.60	4.22
● KD1-10	10	29F1610	5.80	5.33	4.88
● KD1-12	12	81F1731	6.06	5.57	5.10
● KD1-15	15	29F1611	6.23	5.72	5.23

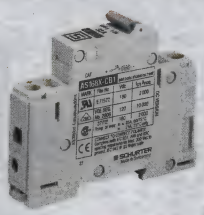
(2391)

THERMAL-MAGNETIC CIRCUIT BREAKERS

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

- Actuation: Manual On/Off, Positive Trip
- Current/Voltage: 0.5-50A/277VAC
- Short-Circuit Capacity: Up to 10,000A
- Meets UL1077-Circuit Breakers for Equipment and UL508-Manual Motor Protection
- Mounting/Terminals: Snap-In DIN Rail/Clamp Box Lug with Pozidrive Screws
- Optional Locking Device for OFF Position



UL recognized, CSA certified, VDE approved. Other rated currents as well as 2-, 3- and 4-pole versions also available; *go online or call.*

1-POLE

Mfg. Part No.	Current (A)	Power (HP)	Stock No.	Price Each 1-9	10-24	25-49	50-99
AS168X-CB1G010	1	...	91F6118	37.39	28.25	26.59	24.93
AS168X-CB1G020	2	0.167	84K0183	36.34	27.46	25.84	24.23
AS168X-CB1G030	3	0.33	91F6120	36.34	27.46	25.84	24.23
AS168X-CB1G040	4	0.33	91F6121	36.76	27.77	26.14	24.51
AS168X-CB1G050	5	0.5	84K0184	36.97	27.93	26.29	24.65
AS168X-CB1G100	10	2	85K8030	37.39	28.25	26.59	24.93
AS168X-CB1G120	12	2	91F6124	29.31	22.14	20.84	19.55
AS168X-CB1G150	15	3	84K0185	29.82	22.52	21.21	19.89
AS168X-CB1G200	20	3	91F6126	29.82	22.52	21.21	19.89
AS168X-CB1G300	30	5	91F6127	29.31	22.14	20.84	19.55
2-POLE							
AS168X-CB2G020	2	...	91F6129	81.22	61.36	57.76	54.14
AS168X-CB2G050	5	1.5	88K1039	80.30	60.67	57.11	53.53
AS168X-CB2G100	10	3	91F6133	79.61	60.15	56.62	53.07
AS168X-CB2G120	12	3	84K0187	62.56	47.27	44.49	41.71
AS168X-CB2G150	15	5	01M6883	66.31	50.11	47.16	44.21
AS168X-CB2G200	20	5	91F6136	65.56	49.54	46.63	43.71
AS168X-CB2G300	30	10	91F6137	66.31	50.11	47.16	44.21
3-POLE							
AS168X-CB3G100	10	5	84K0191	119.92	90.60	85.27	79.95
AS168X-CB3G150	15	10	91F6145	100.58	76.00	71.53	67.06
AS168X-CB3G300	30	20	91F6147	94.89	71.70	67.48	63.26

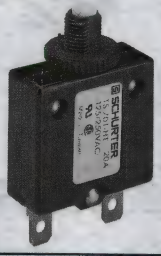
(47878)

THERMAL CIRCUIT BREAKERS

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

- Single pole
- Actuation: manual push/cycle trip
- Current/voltage: 3-40A/250VAC, 50VDC
- Short-circuit capacity: 200A
- Mounting: 3/8″ x 28T thread neck
- 6.3 x 0.8mm Quick-Connect Terminals
- Weight: Approximately 24 Grams



UL recognized, CSA certified. For other ratings, temperature de-rating factors and trip curves; *go online or call.*

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-9	10-24
TS-701-HT-3	3	88K1257	4.99	4.44
TS-701-HT-5	5	88K1258	4.99	4.44
TS-701-HT-7	7	88K1259	3.75	3.34
TS-701-HT-12	12	32C2224	3.00	2.67
TS-701-HT-20	20	32C2229	3.52	3.14

(69036)

THERMAL CIRCUIT-BREAKERS

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

Threaded Neck

Front Snap-in

Rear Snap-in

- Supplementary protection for general industrial use
- Current/voltage: 4-16A/240VAC; 48/32VDC
- Single pole
- Trip time @135% load: 17.5 sec
- Trip time @200% load: 3-23 sec
- Short-circuit capacity: 8 x I_n
- Mounting type: plug-in
- Terminals: 10L x 0.8W x 6.3H mm quick-connect
- Actuation: manual push/cycle trip
- Temperature range: -5°C to 60°C

➤ CONTINUED ➤

THERMAL CIRCUIT-BREAKERS (CONT.)

UL 1077 recognized, CSA C22.2 235 certified, IEC 60934 approved, GB 17701 Chinese compulsory certification. IP40 protection (accessible range), IP00 (termination range). Other rated currents and accessories available; *For trip curves and thermal derating correction factors, go online or call.*

THREADED NECK (51.5L x 19W x 19H mm)

Mfg. Part No.	Current (A)	Voltage (VDC)	Stock No.	Price Each 1-9	10-24	25-49
T9-311C-4	4	48	71M0538	2.06	1.96	1.82
T9-311C-6	6	48	71M0540	2.06	1.96	1.82
T9-311C-10	10	48	71M0533	2.06	1.96	1.82
T9-311C-12	12	48	71M0534	2.06	1.96	1.82
T9-311C-15	15	32	71M0536	2.06	1.96	1.82
FRONT SNAP-IN (42.2L x 19W x 19H mm)						
T9-611P-4A	4	48	33P8630	3.99	3.60	3.31
T9-611P-5A	5	48	28K1540	2.10	2.00	1.86
T9-611P-6A	6	48	28K1541	1.92	1.83	1.69
T9-611P-8A	8	48	28K1542	2.10	2.00	1.86
T9-611P-10A	10	48	28K1537	2.04	1.94	1.79
T9-611P-12A	12	48	88K1279	1.92	1.83	1.69
T9-611P-16A	16	32	28K1539	2.10	2.00	1.86
REAR SNAP-IN (51.5L x 25W x 15.5H mm)						
T9-711C-6	6	48	71M0550	1.92	1.83	1.69
T9-711C-10	10	48	71M0543	1.92	1.83	1.69
T9-711C-12	12	48	71M0544	1.92	1.83	1.69
T9-711C-16	16	32	71M0547	1.92	1.83	1.69

ACCESSORY

Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-24	25-49
TZZ31	IP65 Cover for Threaded Neck Style	52M7716	0.82	0.71	0.60

(84591)

THERMAL CIRCUIT BREAKERS

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

- Single pole
- Actuation: manual push/cycle trip
- Current/voltage: 3-16A/250VAC; 32VDC
- Short-circuit capacity: 200A
- Mounting: 7/16 x 28T thread neck
- Terminals: 6.3 x 0.8mm quick-connect
- Weight: approximately 15g

UL recognized, CSA certified. For other currents, temperature de-rating factors and trip curves, *go online or call.*

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-9	10-24
TS-709-5	5	88K2012	3.84	3.40
TS-709-8	8	93K7602	3.45	3.05
TS-709-12	12	88K1260	2.52	2.23
TS-709-15	15	88K2011	2.48	2.19

(69037)

TRIP-FREE SINGLE-POLE THERMAL CIRCUIT-BREAKERS

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

- Actuation: manual push/positive trip
- Current: 0.05-16A available
- Voltage: 240 VAC, 48 VDC
- 6.3 x 0.8mm quick-connect terminals
- Protective dust cover available; order separately below

UL recognized, CSA certified, VDE approved. Protective dust cover also available; *go online or call.*

THREADED NECK MOUNTING W/ HEXAGONAL NUT

Mfg. Part No.	Current (A)	Neck Length	Stock No.	Price Each 1-9	10-24	25-49
T11-311-0.5	0.5	8mm	32C2395	8.91	7.76	6.99
T11-311-1	1	8mm	88K2018	8.84	7.69	6.93
T11-311-1.5	1.5	8mm	88K2019	8.84	7.69	6.93
T11-311-2	2	8mm	32C2404	8.72	7.59	6.84
T11-311-3	3	8mm	32C2405	8.84	7.69	6.93
T11-311-5	5	8mm	16F2155	8.72	7.59	6.84
T11-311-10	10	8mm	88K2020	8.84	7.69	6.93
T11-211-1	1	6mm	16F2156	8.72	7.59	6.84

➤ CONTINUED ➤

TRIP-FREE SINGLE-POLE THERMAL CIRCUIT-BREAKERS (CONT.)

Mfg. Part No.	Current (A)	Neck Length	Stock No.	Price Each 1-9	10-24	25-49
● T11-211-1.5	1.5	6mm	88K1277	8.84	7.69	6.93
● T11-211-2	2	6mm	88K1278	8.72	7.59	6.84
● T11-211-3	3	6mm	32C2321	8.72	7.59	6.84
● T11-211-5	5	6mm	32C2331	8.72	7.59	6.84
● T11-211-10	10	6mm	88K2017	8.84	7.69	6.93
SNAP-IN MOUNTING						
● T11-611-0.5	0.5	...	32C2425	8.84	7.69	6.93
● T11-611-16	16	...	98K1976	10.41	9.41	8.66

COVERS

Mfg. Part No.	Color	Degree of Protection	Stock No.	Price Each 1-9	10-24	25-49	50+
● TZZ01	Transparent	IP54	91B4164	3.32	2.87	2.42	1.90

(16831)

THERMAL CIRCUIT BREAKERS

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

- Non-illuminated switches
- Rocker-actuated
- Variety of rocker colors and legends
- Positively trip-free release
- Snap-in mounting
- Quick-connect terminals (6.3 x 0.8mm)
- Insulation resistance: 500 VDC, over 100 Mohms
- Operating temperature: -10°C to 55°C
- Mechanical endurance: 50,000 cycles

1-Pole 2-Pole 3-Pole

1-POLE, 240VAC/32VDC

Mfg. Part No.	Current (A)	Rocker Color	Rocker Legend	Rocker Surface	Stock No.	Price Each
● TA35-CFTWKJ20C0	2	White	ON - OFF	Printed	35M4258	11.45
● TA35-CFTWF030C0	3	White	I - 0	Embossed	35M4248	10.13
● TA35-CFTRF050C0	5	Red	I - 0	Embossed	35M4235	9.40
● TA35-CFTWF070C0	7	White	I - 0	Embossed	35M4265	9.40
● TA35-CFTRF100C0	10	Red	I - 0	Embossed	35M4285	9.40
● TA35-CFTWF150C0	15	White	I - 0	Embossed	35M4266	9.93
● TA35-CFTWF200C0	20	White	I - 0	Embossed	35M4231	10.06
2-POLE, 240VAC/60VDC						
● TA35-CBDWF030C0	3	White	I - 0	Embossed	35M4251	17.76
● TA35-CBDWF050C0	5	White	I - 0	Embossed	35M4268	18.37
● TA35-CBTWF060C0	6	White	I - 0	Embossed	35M4271	15.81
● TA35-CBDWF070C0	7	White	I - 0	Embossed	35M4269	16.82
● TA35-CBTWF100C0	10	White	I - 0	Embossed	35M4276	15.61
● TA35-CBDWF150C0	15	White	I - 0	Embossed	35M4270	18.37
● TA35-CBTWF160C0	16	White	I - 0	Embossed	35M4284	14.78
● TA35-CBDWF200C0	20	White	I - 0	Embossed	35M4242	18.37
● TA35-CBTWF200C0	20	White	I - 0	Embossed	35M4232	15.81
3-POLE, 415Y/240VAC						
● TA35-CKDWF120C0	12	White	I - 0	Embossed	35M4246	25.29

COVERS
Covers offer IP65 protection for thermal circuit breakers.

Mfg. Part No.	Poles	Stock No.	Price Each 1-24	25-49
● TA35-CZZ11	1	35M4281	1.30	1.25
● TA35-CZZ21	2	35M4282	1.38	1.32

Other ratings, trip curves and thermal derating factors available; *go online or call.*
(94517)

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(196545)

THERMAL CIRCUIT BREAKERS

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

- Actuation: rocker
- Current/voltage: 0.1-20A/240VAC, 30VDC
- Short-circuit capacity: 10 x 1n/300A
- Mounting/terminals: snap-in mounting/ quick connect terminals
- I/O legend

Ordering options include lighted or unlighted, protective cover, mechanical lock-out latch, snap-in or flange mounting, shunt terminal, auxiliary contact (change-over), and assorted accessories; *go online or call.* UL recognized, CSA certified, VDE approved.

Mfg. Part No.	No. of Poles	Current (A)	Switch Color	I/O Legend	Stock No.	Price Each 1-9	10-24
● TA45-ABTBL050C0	1	5	Black	Printed	91F6160	18.41	16.34
● TA45-ABTWF150C0	1	15	White	Embossed	84K0171	19.70	17.48
● ABTWF160C0	1	16	White	Embossed	88K1866	19.44	17.26
● TA45-ABTBF200C0	1	20	Black	Embossed	04M4501	19.44	17.26
● TA45-ABDBL050C0	2	5	Black	Printed	93K7647	26.24	23.29
● TA45-ABDWF100C0	2	10	White	Embossed	91B0283	25.92	22.99
● TA45-ABDBL100C0	2	10	Black	Printed	32C0520	25.40	22.54
● TA45-ABDBL150C0	2	15	Black	Printed	32C0523	26.24	23.29

ACCESSORIES
Factory installed.

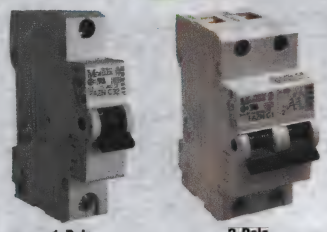
Mfg. Part No.	Description	Stock No.	Price Each 1-24	25-49
● AZM01	Collar w/Cover	91B0320	2.77	2.66
● AZM03	Raised Collar	84K0193	1.37	1.31

(47879)

THERMAL MAGNETIC CIRCUIT BREAKERS

RoHS Compliant Available

EATON



1-Pole 2-Pole

Suitable for DIN rail mounting, these thermal-magnetic miniature circuit breakers are UL listed as supplementary protectors, UL 1077/CSA 235. Available in single or multiple pole versions and according to EN60898. CSA certified, CE compliant. To view trip curves, *go online or call.*

Instantaneous trip response 3-5 times current rating.

277VAC MAX.

Mfg. Part No.	No. of Poles	Current (A)	Stock No.	Price Each Each	2-5
● FAZ-B10/1-SP	1	10	32M7843	53.70	51.22
● FAZ-B13/1-SP	1	13	32M7844	50.72	48.39
● FAZ-B20/1-SP	1	20	32M7845	51.75	49.36
● FAZ-B32/2	2	32	86K9999	113.26	108.03
277/480VAC MAX.					
● FAZ-B20/2	2	20	95M4249	113.26	108.03
277/480VAC MAX.					
● FAZ-B13/3	3	13	29M6689	203.16	193.80
● FAZ-B25/3	3	25	32M7847	194.41	185.45

Instantaneous trip response time 13-17 times current rating.

240VAC MAX.

Mfg. Part No.	No. of Poles	Current (A)	Stock No.	Price Each Each	2-5
● FAZ-S 1/1	1	1	51M8753	77.81	74.23
● FAZ-S 2/1	1	2	15M6255	78.70	75.08
● FAZ-S3/1	1	3	89K7285	74.91	71.47
● FAZ-S4/1	1	4	32M7854	77.81	74.23

Instantaneous trip response 5-10 times current rating.

277VAC MAX.

Mfg. Part No.	No. of Poles	Current (A)	Stock No.	Price Each Each	2-5
● FAZ-C1/1-SP	1	1	14M9324	63.08	60.17
● FAZ-C2/1-SP	1	2	14M9323	61.85	59.00
230/400VAC MAX.					
● FAZ-C10/1	1	10	96K9760	27.74	26.43

CONTINUED

THERMAL MAGNETIC CIRCUIT BREAKERS (CONT.)

277/480VAC MAX.

Mfg. Part No.	No. of Poles	Current (A)	Stock No.	Price Each Each	Price Each 2-5
FAZ-C13/1-SP	1	13	32M7849	51.75	49.36
FAZ-C16/1-SP	1	16	87K2004	52.20	49.79
277/480VAC MAX.					
FAZ-C2/2	2	2	82K9812	128.79	122.85
FAZ-C10/2	2	10	83K0455	113.75	108.51
FAZ-C13/2	2	13	29M6685	113.26	108.03
FAZ-C16/2	2	16	78K6486	112.28	107.10
FAZ-C20/2	2	20	87K2013	112.28	107.10
FAZ-C25/2	2	25	32M7850	108.38	103.38
277/480YVAC MAX.					
FAZ-C4/2	2	4	03M2561	124.31	118.58
277/480VAC MAX.					
FAZ-C4/3	3	4	32M7852	177.35	169.18
FAZ-C6/3	3	6	32M7853	174.84	166.78
FAZ-C32/3	3	32	87K0320	174.84	166.78

(38970)

BR & SU SERIES CIRCUIT BREAKERS & SUPPLEMENTARY PROTECTORS

NEW **Weidmüller**

BR Series, 1-Pole

SU Series, 2-Pole

Compared to traditional fuse installation, the UL489/CSA C22.2 No.5-02, UL1077/CSA C22.2 No.235 compliant circuit breakers listed here assist with the complex task of selecting correct types and characteristics and offer a less bulky installation solution. The range of miniature, molded-case circuit breakers, in combination with accessories for factory or on-site installation, offer enhanced control and monitoring capabilities. Installation kits include all parts and instructions to make the on-site job easy. UL489/CSA C22.2 No.5-02 and UL1077/CSA C22.2 No.235 compliant 1, 2 and 3-pole-type circuit breakers from 0.5 to 60A and with type C and D characteristics. Attachments such as neutral switches, auxiliary contacts and shunt trips are also available for this system. All accessories for modern busbar installations are available in compliance with the relevant UL standards.

UL489/CSA C22.2 No.5-02 (BRANCH RATED) CIRCUIT BREAKERS

Mfg. Part No.	Poles	Curve	Current	Stock No.	Price Each 1-9
BR1C05AC	1	C	500mA	27X7351	23.30
BR1C1AC	1	C	1A	27X7352	23.30
BR1C2AC	1	C	2A	27X7354	23.30
BR1C5AC	1	C	5A	27X7356	23.30
BR1C10AC	1	C	10A	27X7353	23.30
BR1C20AC	1	C	20A	69W7108	23.30
BR1C30AC	1	C	30A	27X7355	23.30
BR1D05AC	1	D	500mA	27X7357	23.30
BR1D1AC	1	D	1A	27X7358	23.30
BR1D2AC	1	D	2A	23X5717	23.30
BR1D5AC	1	D	5A	27X7362	23.30
BR1D10AC	1	D	10A	23X5719	23.30
BR1D15AC	1	D	15A	23X5721	23.30
BR1D20AC	1	D	20A	27X7359	23.30
BR1D30AC	1	D	30A	27X7360	23.30
BR1D40AC	1	D	40A	27X7361	25.63
BR1D50AC	1	D	50A	27X7363	25.63
BR2D10AC	2	D	10A	27X7364	46.59
BR2D15AC	2	D	15A	27X7365	46.59
BR2D20AC	2	D	20A	27X7366	46.59
BR2D30AC	2	D	30A	27X7367	46.59
BR3D5AC	3	D	5A	27X7374	69.88
BR3D10AC	3	D	10A	27X7368	69.88
BR3D15AC	3	D	15A	27X7369	69.88
BR3D20AC	3	D	20A	27X7370	69.88
BR3D25AC	3	D	25A	27X7371	69.88
BR3D30AC	3	D	30A	27X7372	69.88
BR3D40AC	3	D	40A	27X7373	76.88
BR3D50AC	3	D	50A	27X7375	76.88
UL1077/CSA C22.2 No.235 SUPPLEMENTARY PROTECTORS					
SU1C05AC	1	C	500mA	27X7376	15.46
SU1C1AC	1	C	1A	27X7377	15.37

CONTINUED

BR & SU SERIES CIRCUIT BREAKERS & SUPPLEMENTARY PROTECTORS (CONT.)

UL1077/CSA C22.2 No.235 SUPPLEMENTARY PROTECTORS

Mfg. Part No.	Poles	Curve	Current	Stock No.	Price Each 1-9
SU1C2AC	1	C	2A	27X7380	15.37
SU1C5AC	1	C	5A	27X7383	15.37
SU1C10AC	1	C	10A	27X7378	15.37
SU1C15AC	1	C	15A	27X7379	15.37
SU1C25AC	1	C	25A	27X7381	15.37
SU1C30AC	1	C	30A	27X7382	15.37
SU2C5AC	2	C	5A	27X7386	28.43
SU2C15AC	2	C	15A	27X7384	28.43
SU2C30AC	2	C	30A	27X7385	28.43
SU3C5AC	3	C	5A	27X7390	42.65
SU3C10AC	3	C	10A	27X7387	42.65
SU3C15AC	3	C	15A	27X7388	42.65
SU3C20AC	3	C	20A	27X7389	42.65

ACCESSORIES FOR BRANCH CIRCUIT BREAKERS

Mfg. Part No.	Description	Curve	Stock No.	Price Each 1-9
BAU11	Auxiliary Contact	1NO + 1NC	27X7391	19.40
BB112	Busbar	1Ph / 12P	27X7392	12.09
BB212	Busbar	2Ph / 12P	27X7393	15.63
BB312	Busbar	3Ph / 12P	27X7394	19.36
BPF35	Power Feed Lug		69W7343	8.52
BTPC100	Touch Protection Cap	Branch / Busbar	27X7395	1.52
MS34	Mounting Screw		27X7396	0.63
SAU11	Auxiliary Contact	Supplementary, 1NO + 1NC	27X7397	18.67
TPC	Touch Protection Cap		27X7398	0.55

(212191)

THERMAL-MAGNETIC CIRCUIT-BREAKERS – SUPPLEMENTAL

RoHS Compliant Available **Weidmüller**

- Versions 0.05 to 16A available
- Voltage: 250VAC/65VDC
- Mounts on 35mm DIN-rail or 32mm w/ adapter
- Tease-free design to reduce contact damage
- Push button trip/reset function
- Trip free design; cannot close into a fault
- UL1077 recognized

Dimensions (H x W x D): 80 x 12.5 x 60.5 mm. *Trip curves available online at www.newark.com.* 2-pole versions, jumpers and marking tags also available; *go online or call.*

SINGLE POLE

Mfg. Part No.	Current (A)	Trip Time @200%, Min-Max (sec)	Stock No.	Price Each 1-9	10-99	100-499	500-999
9101203500	1	10-120	11B209	49.58	45.23	38.14	35.97
9101503500	2	10-120	11B216	49.58	45.23	38.14	35.97
9101703500	3	10-120	11B220	50.10	45.69	38.54	36.35
9101803500	5	10-120	11B224	49.58	45.23	38.14	35.97
9101903500	10	7.5-50	14M6874	49.58	45.23	38.14	35.97
9102003500	15	7.5-50	11B234	49.58	45.23	38.14	35.97

(106006)

THERMAL MAGNETIC CIRCUIT-BREAKERS – SUPPLEMENTAL

RoHS Compliant Available **Weidmüller**

- Current ratings from 0.5 to 63 A
- Voltage rating of 50VDC/277VAC
- Mounts on 35mm DIN rail
- Optional auxiliary contacts
- UL 1077; CSA C 22.2 No. 235; VDE

Dimensions (H x W x D): 86 x 18 x 70 mm. *Trip curves and other accessories available online.*

CONTINUED

THERMAL MAGNETIC CIRCUIT-BREAKERS – SUPPLEMENTAL (CONT.)

SINGLE POLE CIRCUIT-BREAKERS 1-Pole

Mfg. Part No.	Current (A)	Trip Time @200%, Min-Max (sec)	Stock No.	Price Each 1-9	10-99	100-499
● 9925360000	1	19-125	55M3051	50.31	45.88	38.70
● 9925380000	2	19-125	55M3052	52.25	47.65	40.19
● 9925410000	6	19-125	55M3055	53.36	48.67	41.05
● 9925430000	10	13-120	55M3056	49.58	45.23	38.14
● 9925450000	20	13-120	55M3058	48.67	44.40	37.45
● 9925460000	25	13-120	55M3059	47.23	43.08	36.33
● 9925490000	50	30-280	55M3062	62.46	56.97	48.05

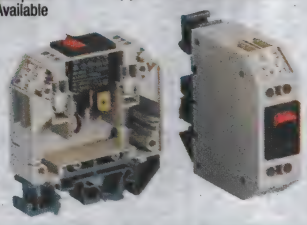
(109351)

TOGGLE SWITCH MODULE

RoHS Compliant Available

wieland

Switch module functions to turn on or off a branch circuit under load. Available in DPST circuit variation. Unit is rated 8A at 125V and 4A at 250V and is designed with a universal mounting base for DIN rail assembly. Ideal for enclosures with restricted space and/or a hard-to-reach disconnect. Housing: polyamide 6.6. Pressure connector: zinc-plated and chromated steel. Current bar: tin-plated copper alloy. Color: gray.



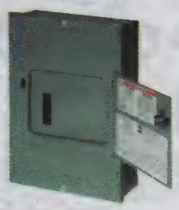
Mfg. Part No.	Circuit	Stock No.	Price Each 1-24
● 34.243.0012.0	DPST	74R8963	58.51

(69532)

LOAD CENTERS AND CIRCUIT-BREAKERS

RoHS Compliant Available

SQUARE D by Schneider Electric



8 Space Load Center w/Door

2-Pole Branch Circuit-Breaker

1-Pole Ground Fault Interrupter

2-Pole Ground Fault Interrupter

Load Centers:

- Single phase
- 30 to 100A, 2 to 20 circuits
- Indoor version
- Shielded copper bus with electro tin plated copper bus bars sandwiched between two polymer shields to insulate and secure the interior
- Reduced installation time: straight-in mains wiring and uniform termination lugs minimize service cable bends
- Convertible mains for fast field conversion between main breaker and main lugs
- Standard 22,000/10,000 A series short circuit current rating on main breaker load centers
- Single captive interior mounting screw can't be lost
- Easy to mount and remove interior
- Split branch neutral with up to 50% more terminations than UL requirement for simplified wiring and reduced clutter
- Designed to rotate 180° to accommodate top or bottom service entrance feed
- Combination slot/square-drive neutral, ground, and cover screw to accommodate flat blade and square-head screwdrivers
- Three ground bar mounting locations (left, right, and end) for easy wiring
- **"-S" suffix** in mfg. part no. indicates surface mount cover included

LOAD CENTERS

Mfg. Part No.	Mains Current (A)	No. of Branch Spaces	No. of Branch Circuits	Stock No.	Price Each 1-24	25-49	50-99	100-249
Q0816L100DS	100	8	16	80C4461	158.35	150.99	147.30	134.78
Q0112M100	100	12	12	80C3969	334.39	318.84	311.06	284.62
Q0116M100	100	16	16	80C4007	378.68	361.07	352.26	322.32

BRANCH CIRCUIT-BREAKERS

Mfg. Part No.	Current (A)	No. of Poles	Stock No.	Price Each 1-24	25-49	50-99	100-249
Q0110	10	1	30C5814	32.49	30.98	30.23	27.66
Q0115	15	1	71M0300	32.49	30.98	30.23	27.66
Q0125	25	1	80C4063	32.49	30.98	30.23	27.66
Q0120	20	1	03C3032	32.15	30.66	29.91	27.37
Q0130	30	1	71M0301	28.25	26.94	26.28	24.05
Q0140	40	1	80C4117	30.96	29.52	28.80	26.36
● Q0B230	30	2	16B1841	99.42	94.80	92.48	84.62

LOAD CENTER GROUND BAR KITS

All grounding kits are supplied with mounting screws, necessary installation instructions, and a self-adhesive label. Field-installable in all load centers. Same wire size as terminals. Suitable for copper or aluminum wire.

CONTINUED

LOAD CENTERS AND CIRCUIT-BREAKERS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each 1-24	25-49	50-99	100-249
● PK3GTA1	Ground Bar Kit, 3 Spaces	51R3533	13.38	12.77	12.46	11.42
● PK4GTA	Ground Bar Kit, 4 Spaces	51R1341	12.83	12.26	11.96	10.96
● PK7GTA	Ground Bar Kit, 7 Spaces	51R1343	13.92	13.30	12.97	11.89
● PK9GTA	Ground Bar Kit, 9 Spaces	51R1344	15.94	15.20	14.85	13.61
● PK12GTA	Ground Bar Kit, 12 Spaces	98B2991	18.80	17.95	17.50	16.03
● PK15GTA	Ground Bar Kit, 15 Spaces	51R1339	20.34	19.42	18.94	17.36

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24	25-49	50-99	100-249
Q0C12US	Cover w/Door for Q0112M100	80C3697	43.83	41.79	40.76	37.30
Q0C20U100S	Cover w/Door for Q0120M100	80C3704	41.76	39.82	38.84	35.54
Q0SAMK	Load Center Surge Arrester Mounting Kit	94B2062	14.86	14.06	12.65	11.97

(105262)

THERMAL-MAGNETIC MINIATURE CIRCUIT BREAKERS

RoHS Compliant Available

SQUARE D by Schneider Electric

- Mounting feet (included) allow surface or flush mounting or 35mm DIN rail mounting
- Three handle positions: ON, OFF, and TRIPPED, with red VISI-TRIP indicator
- UL489 listed for branch circuit protection; NEMA standard AB-1; CSAC22.2 No. 5.1
- UL listed 120/240VAC to 10 kA 1- and 2-pole; 240VAC, 10kA for 3-pole
- Also 48VDC 5 kA AIR
- UL listed as HACR type - 15 - 70 A
- Terminal lug wire size 1 #14 - #2AWG copper or aluminum
- Reversible line and load lugs for front or rear wiring
- Single handle with internal common trip (multiple poles)
- *Order field-installable accessories separately below*
- Factory-installed electrical auxiliaries available; *go online or call*

120/240VAC

Mfg. Part No.	No. of Poles	Current (A)	Stock No.	Price Each Each	2-4
Q0U110	1	10	90B9266	49.40	46.71
Q0U115	1	15	90B2458	49.40	46.71
● Q0U120	1	20	16B1975	50.44	47.70
Q0U125	1	25	16B1981	49.92	47.21
● Q0U130	1	30	11R7906	49.40	46.71
● Q0U140	1	40	14R4374	47.57	44.98
Q0U150	1	50	16B2001	49.92	47.21
Q0U160	1	60	16B2004	49.92	47.21
Q0U1100	1	100*	16B1969	214.78	203.10
● Q0U210	2	10	11R7907	102.94	97.34
● Q0U215	2	15	16B2017	106.18	100.41
Q0U220	2	20	16B2023	91.66	86.67
● Q0U230	2	30	11R7908	106.18	100.41
Q0U240	2	40	16B2038	107.11	101.29
Q0U245	2	45	16B2042	102.94	97.34
● Q0U250	2	50	11R7909	107.11	101.29
Q0U260	2	60	16B2050	102.94	97.34
Q0U2100	2	100*	16B2015	302.82	286.35

240VAC

Q0U3100	3	100*	16B2073	507.66	480.04

*Requires high ampere accessories

FIELD-INSTALLABLE ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
Q0UHFSC1	1-Pole Finger Safe Cover for High Ampere Q0U (1 Piece)	80C3881	3.32

(72421)

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(196560)

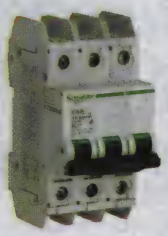
MULTI-9™ C60N UL489 MINIATURE CIRCUIT BREAKERS

Schneider Electric

- 1-2-3 Pole Configurations
- Small Size: Less Than ¾" Per Pole (0.71")
- Interrupt Rating 10KA @ 120VAC (1P), 240VAC (2 or 3P); 5KAC @ 240VAC (1P)
- DC Rating 10KA @ 60VDC (1P) and 125VDC (2P)
- Common Tripping of All Poles
- Padlock Attachment in the "Off" Position Only

This series is a UL 489 version of the C60N family of DIN mount circuit protectors. Meets global applications and code requirements including UL, IEC and CSA. CE compliant. Features C trip curve for typical loads; magnetic release operates between 7 and 10 times ampere rating. Box lug terminals. D. Curve (10-14 times handle rating) and a variety of accessories also available; *go online or call.*

1-Pole



3-Pole

Mfg. Part No.	No. of Poles	Current (A)	Stock No.	Price Each Each	Price Each 2-4
60101	1	1	30C9349	142.30	135.86
60103	1	2	30C9351	143.53	137.03
60104	1	3	30C9352	141.07	134.68
60105	1	4	30C9353	136.76	130.57
60106	1	5	30C9354	143.53	137.03
60107	1	6	30C9355	129.77	123.89
60109	1	8	30C9357	129.77	123.89
60110	1	10	30C9358	130.89	124.97
60112	1	15	30C9360	128.64	122.82
60113	1	20	30C9361	124.71	119.07
60115	1	30	30C9363	136.60	130.41
60138	2	3	30C9369	306.21	292.35
60140	2	5	30C9371	306.21	292.35
60144	2	10	30C9375	277.59	265.03
60146	2	15	30C9377	275.78	263.30
60147	2	20	30C9378	280.02	267.35
60149	2	30	30C9380	292.55	279.31

(68923)

MULTI-9 C60N UL 1077 SUPPLEMENTARY PROTECTORS

UL RoHS Compliant Available Schneider Electric

- Intended for use within equipment where branch circuit protection is already provided or not needed
- C-Curve types are dual rated for UL 1077 and UL 489A for DC Telecom applications
- Suitable for reverse feeding
- 10K AIR @ 120/240VAC; 5K AIR @ 480Y/277

Magnetic release operates between 7 and 10 times rating.

Mfg. Part No.	No. of Poles	Current (A)	Stock No.	Price Each 1-5	Price Each 6-14
MG24425	1	1	42M2331	87.97	83.20
MG24426	1	2	96F2008	89.62	84.76
MG24430	1	6	96F2011	89.62	84.76
MG24432	1	10	96F2013	88.68	83.87
MG24520	2	6	29M8594	223.50	211.39
MG24448	2	8	96F2020	189.90	179.62
MG24452	2	20	29M8579	227.93	215.58
MG17449	2	60	16B1279	263.49	249.20
MG24464	3	6	96F2027	277.62	262.57
MG24466	3	10	96F2029	273.41	258.60
MG17469	3	60	16B1293	369.10	349.09

Magnetic release operates between 10 and 14 times rating.

Mfg. Part No.	No. of Poles	Current (A)	Stock No.	Price Each 1-5	Price Each 6-14
MG17406	1	15	16B1242	105.61	99.89
MG24506	1	10	29M8591	116.02	110.82
MG17456	2	15	16B1284	227.93	215.58
MG24525	2	20	32M7192	227.93	215.58
MG24538	3	10	16B1472	329.36	311.52
MG24541	3	20	16B1475	316.54	299.39
MG17474	3	60	16B1298	354.73	335.50

CONTINUED

MULTI-9 C60N UL 1077 SUPPLEMENTARY PROTECTORS (CONT.)

ACCESSORIES

Mfg. Part No.	No. of Poles	Current (A)	Stock No.	Price Each 1-5	Price Each 6-14
MG26928	Supplementary Protector Alarm Switch		96F2031	67.34	64.22
MG26985	Multi 9 Mounting Kit		16B1514	19.03	18.14
MG27046	Multi 9 Rotary Handle		17C7955	143.53	136.89
MG27047	Multi 9 Door Interlock Handle		17C7956	119.05	113.54

(78549)

THERMAL MAGNETIC CIRCUIT BREAKERS

RoHS Compliant Available

SQUARE D by Schneider Electric

Fig. 1

Fig. 2

Fig. 3

Fig. 4

- 15 to 250A ratings
- Voltage: 600VAC / 250VDC
- Dual-break rotating contacts reduce the amount of peak current during a short circuit fault
- Reduced let-through currents
- Integral push-to-trip button
- Field installable accessories and trip units available below
- Dimensions (H x D): 163 x 87 mm
- Width: 70 mm (2-pole), 105 mm (3-pole)

INTERRUPTING RATINGS (UL / CSA / NOM)

	240 VAC	480 VAC	600 VAC	250 VDC	500 VDC
D	25 kA	18 kA	14 kA	20 kA	-
G	65 kA	35 kA	18 kA	20 kA	20 kA

H-FRAME

Mfg. Part No.	Fig.	No. of Poles	Current (A)	Stock No.	Price Each
HDL26015	1	2	15	20K0019	956.05
HDL26020	1	2	20	20K0020	956.05
HDL26025	1	2	25	20K0021	956.05
HDL26030	1	2	30	20K0022	956.05
HDL26040	1	2	40	20K0024	956.05
HDL26050	1	2	50	20K0025	956.05
HDL26060	1	2	60	20K0026	956.05
HDL26070	1	2	70	20K0027	1167.04
HDL26080	1	2	80	20K0028	1167.04
HDL26100	1	2	100	20K0029	1167.04
HDL26125	1	2	125	20K0030	2276.92
HDL26150	1	2	150	20K0031	2328.15
HGL26015	1	2	15	20K0118	1394.52
HGL26020	1	2	20	20K0119	1394.52
HGL26025	1	2	25	20K0120	1394.52
HGL26030	1	2	30	20K0121	1394.52
HGL26040	1	2	40	20K0123	1394.52
HGL26050	1	2	50	20K0125	1394.52
HGL26060	1	2	60	20K0126	1394.52
HGL26070	1	2	70	20K0127	1645.07
HGL26080	1	2	80	20K0128	1645.07
HGL26100	1	2	100	20K0130	1645.07
HGL26125	1	2	125	20K0132	3361.55
HGL26150	1	2	150	20K0133	3361.55
HDL36015	2	3	15	20K0032	1195.61
HDL36020	2	3	20	20K0033	1195.61
HDL36025	2	3	25	20K0034	1195.61
HDL36030	2	3	30	20K0035	1222.52
HDL36035	2	3	35	20K0036	1195.61
HDL36040	2	3	40	20K0037	1195.61
HDL36045	2	3	45	20K0038	1195.61
HDL36050	2	3	50	20K0039	1195.61
HDL36060	2	3	60	20K0040	1222.51
HDL36070	2	3	70	20K0041	1459.34
HDL36080	2	3	80	20K0042	1459.34
HDL36090	2	3	90	20K0043	1459.34
HDL36100	2	3	100	20K0044	1459.34
HDL36125	2	3	125	20K0046	2921.43
HDL36150	2	3	150	20K0048	2857.14
HGL36015	2	3	15	20K0136	1640.67

CONTINUED

THERMAL/MAGNETIC CIRCUIT-BREAKERS

THERMAL MAGNETIC CIRCUIT BREAKERS (CONT.)

Mfg. Part No.	Fig.	No. of Poles	Current (A)	Stock No.	Price Each
● HGL36020	2	3	20	20K0137	1640.67
● HGL36025	2	3	25	20K0138	1640.67
● HGL36030	2	3	30	20K0139	1640.67
● HGL36035	2	3	35	20K0140	1640.67
● HGL36040	2	3	40	20K0141	1640.67
● HGL36045	2	3	45	20K0142	1640.67
● HGL36050	2	3	50	20K0143	1640.67
● HGL36060	2	3	60	20K0144	1640.67
● HGL36070	2	3	70	20K0145	1869.24
● HGL36080	2	3	80	20K0146	1869.24
● HGL36090	2	3	90	20K0147	1869.24
● HGL36100	2	3	100	20K0148	1869.24
● HGL36125	2	3	125	20K0150	3954.96
● HGL36150	2	3	150	20K0151	3954.96
J-FRAME					
● JDL26150	3	2	150	20K0825	2390.12
● JDL26175	3	2	175	20K0826	2390.12
● JDL26200	3	2	200	20K0827	2390.12
● JDL26225	3	2	225	20K0828	2390.12
● JDL26250	3	2	250	20K0829	3283.52
● JGL26150	3	2	150	20K0855	3529.67
● JGL26175	3	2	175	20K0856	3529.67
● JGL26200	3	2	200	20K0857	3529.67
● JGL26225	3	2	225	20K0858	3529.67
● JGL26250	3	2	250	20K0859	4671.44
● JDL36150	4	3	150	20K0830	3000.00
● JDL36175	4	3	175	20K0831	3000.00
● JDL36200	4	3	200	20K0832	3000.00
● JDL36225	4	3	225	20K0833	3000.00
● JDL36250	4	3	250	20K0834	4119.79
● JGL36150	4	3	150	20K0862	4152.76
● JGL36175	4	3	175	20K0863	4152.76
● JGL36200	4	3	200	20K0864	4152.76
● JGL36225	4	3	225	20K0865	4152.76
● JGL36250	4	3	250	20K0866	5495.61

AUTOMATIC SWITCHES

Similar in construction to circuit breakers except that the switches open instantaneously at a factory-set non-adjustable trip point calibrated to protect only the molded case switch itself.

● HGL36000S15	...	3	150	20K0134	1950.22
● JGL36000S25	...	3	250	20K0860	2478.14

ACCESSORIES

Mfg. Part No.	Description	Features	Stock No.	Price Each
AL150HD	Mechanical Lug	15 - 150 A, 14-3/0 AWG	74R1158	88.07
● AL175JD	Mechanical Lug	150 - 175 A, 4-4/0 AWG	74R1159	131.55
● AL250JD	Mechanical Lug	200 - 250 A, #3/0-350 kcmil	74R1160	130.41
CU150HD	Mechanical Lug	15 - 150 A, 14-2/0 AWG	74R1161	174.52
CU250JD	Mechanical Lug	200 - 250 A, 1/0 AWG-300 kcmil	74R1162	351.28
S29305	DIN Rail Mounting Bracket	...	64M3061	210.32
● S29338	Rotary Operating Handle	Extended Door Mount (Black)	13M3027	441.98
● S29340	Rotary Operating Handle	Extended Door Mount (Red)	13M3028	446.38
S29343	Rotary Operating Handle	Telescoping (Black)	34M0054	550.40
S29369	Rotary Handle Interlock	...	64M3062	552.64
S29384	Shunt Trip Kit		72K0926	816.16
● S29386	Shunt Trip Kit	120 VAC	20K3720	802.12
S29406	Undervoltage Trip Kit	120 VAC	34M0058	802.12
● S29408	Undervoltage Trip Kit	380 - 480 VAC	13M3030	802.12
● S29450	Auxiliary Switch	1A / 1B Standard Contacts	20K3721	345.73
S37422	Padlock Attachment	Controls toggle devices	72K0931	142.02

(177477)

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(212569)

SERIES G THERMAL-MAGNETIC CIRCUIT BREAKERS

EG Frame

JG Frame

HMCP (EG-Frame)

- Available in frame sizes up to 2500A
- Safely interrupt up to 200,000A
- Asymmetrical interrupting capacities at 480 VAC
- Easy installation
- Electronic trip units from 20 to 2500A
- Built-in ground fault protection down to 20A
- Provide increased performance in 35% less space than standard circuit breakers or comparable fusible devices
- Field installable accessories through 630A

"G" signifies global applications: UL, CSA, CE, IEC, KEMA & KEUR. The **HMCP** circuit breaker is an instantaneous-only motor circuit protector (MCP), is available in ratings from 3 to 1200A for motor starters sizes 0 through 8 and is UL 489.

EG-FRAME CIRCUIT BREAKERS, 15 - 125A, 480VAC (18K AIC), 250VDC (10K AIC)

Mfg. Part No.	No. of Poles	Current (A)	Trip Time @ 800% Min (sec)	Trip Time @ 800% Max (sec)	Trip Unit	Stock No.	Price Each 1-4
● EGB3020FFG	3	20	0.9	5	Fixed	46K7631	655.04
● EGH3025FFG	3	25	...	...	Fixed Thermal, Fixed Magnetic	50K4360	1080.70
● EGB3050FFG	3	50	0.9	5	Fixed	46K7653	634.73
● EGB3060FFG	3	60	0.9	5	Fixed	46K7655	660.12
● EGB3125FFG	3	125	0.9	5	Fixed	50K4144	1594.23
JG-FRAME CIRCUIT BREAKERS, 63 -250A (35K), 600VAC, 250VDC							
● JGS3200FAG	3	200	0.8	1.5	Fixed Thermal, Adj. Magnetic	51K1823	2535.21
● JGS3250FAG	3	250	0.8	1.5		51K1826	2832.77

MOTOR CIRCUIT PROTECTORS, EG-FRAME - 600Y/347 VAC, 250 VDC

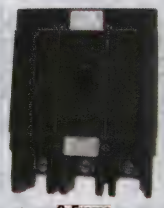
Mfg. Part No.	Continuous Current (A)	Motor Full Load Current (A)	Stock No.	Price Each 1-4
● HMCPE050K2C	50	11.5 - 43.5	47K9858	866.05

(110557)

SERIES C THERMAL-MAGNETIC CIRCUIT BREAKERS

- Field installable accessories through 630A
- Easy installation
- Trip units from 20 to 2500A
- Meet IEEE 1584-2002 guide for performing arc flash hazard calculations
- 3 poles
- Fixed trip unit

F-Frame



G-Frame

F-FRAME CIRCUIT BREAKERS, 35 kAIC

Mfg. Part No.	Current (A)	Voltage VAC	Voltage VDC	Trip Time @ 800% Min (sec)	Trip Time @ 800% Max (sec)	Stock No.	Price Each 1-4
● FD3015	15	600	250	2.6	9	50K7206	1305.57
● FD3025	25	600	250	1.3	5.1	50K7259	1295.53
● FD3100	100	600	250	0.3	3	50K7435	1465.32
● FD3125	125	600	250	0.28	3	50K7505	3172.07
F-FRAME CIRCUIT BREAKERS, 65 kAIC							
● HFD3030	30	600	250	2.5	9	50K9065	1612.74
● HFD3100	100	600	250	0.3	3	50K9251	1983.47
● ED3200	200	240	125	...	...	50K4084	1261.66
F-FRAME CIRCUIT BREAKERS, 14 kAIC							
● FDB3150	150	600	250	...	...	50K6983	2341.50
F-FRAME MOTOR CIRCUIT PROTECTORS							
● HMCP007C0C	7	600	250	...	...	47K9877	911.62
● HMCP015E0C	15	600	250	...	...	47K9883	911.62
● HMCP050K2	50	600	250	...	...	51K0270	1129.97

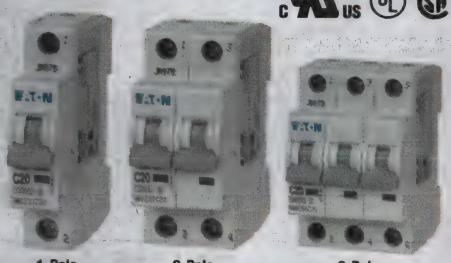
(110558)

MOELLER UL 1077 DIN RAIL SUPPLEMENTARY PROTECTORS

RoHS Compliant Available

EATON

- Designed for inductive loads
- Response time of instantaneous trip: C curve (5–10X I_n current rating)
- UL recognized and CSA Certified as supplementary protectors
- For international and domestic use (conform to IEC 60947-2)
- UL file number 177451
- **"-RT" suffix** indicates ring tongue terminals
- **"-SP" suffix** indicates option for single packaging



1-Pole 2-Pole 3-Pole

C CURVE

Mfg. Part No.	No. of Poles	Current	Stock No.	Price Each 1-9	Price Each 10-24
FAZ-C2/1-RT-SP	1	2A	58M6149	66.17	63.16
FAZ-C3/1-RT-SP	1	3A	58M6175	70.14	66.95
FAZ-C4/1-NA-SP	1	4A	58M6204	65.43	62.44
FAZ-C6/1-NA-SP	1	6A	63R8280	58.83	56.15
FAZ-C8/1-NA-SP	1	8A	52M9067	55.50	52.97
FAZ-C8/1-RT-SP	1	8A	58M6253	62.07	59.24
FAZ-C10/1-NA-SP	1	10A	58M6116	58.83	56.15
FAZ-C10/1-RT-SP	1	10A	58M6117	62.07	59.24
FAZ-C10/1-SP	1	10A	96K2531	48.93	46.70
FAZ-C25/1-SP	1	25A	83K8448	49.49	47.23
FAZ-C40/1-SP	1	40A	58M6213	54.89	52.39
FAZ-C50/1-SP	1	50A	58M6226	69.25	66.09
FAZ-C63/1-SP	1	63A	58M6240	73.41	70.06
FAZ-C13/1-NA-SP	1	13A	58M6126	58.77	56.08
FAZ-C13/1-RT-SP	1	13A	58M6127	62.07	59.24
FAZ-C15/1-NA-SP	1	15A	58M6136	58.83	56.15
FAZ-C16/1-NA-SP	1	16A	32M6088	55.50	52.97
FAZ-C20/1-NA-SP	1	20A	58M6157	58.77	56.08
FAZ-C25/1-NA-SP	1	25A	58M6166	55.44	52.91
FAZ-C1/2	2	1A	28M7982	124.85	119.09
FAZ-C1/2-NA	2	1A	58M6097	136.94	130.63
FAZ-C3/2	2	3A	80K9806	130.47	124.45
FAZ-C3/2-NA	2	3A	58M6178	136.58	130.28
FAZ-C3/2-RT	2	3A	58M6179	150.68	143.73
FAZ-C4/2-NA	2	4A	31M3629	142.73	136.14
FAZ-C5/2-NA	2	5A	88K1546	139.68	133.24
FAZ-C5/2-RT	2	5A	58M6224	157.46	150.20
FAZ-C6/2-NA	2	6A	58M6235	130.74	124.71
FAZ-C8/2-RT	2	8A	58M6256	145.40	138.70
FAZ-C10/2-NA	2	10A	31M3638	130.74	124.71
FAZ-C10/2-RT	2	10A	58M6120	139.14	132.73
FAZ-C16/2-NA	2	16A	32M6087	131.88	125.80
FAZ-C20/2-NA	2	20A	48M1382	132.38	126.28
FAZ-C25/2-NA	2	25A	58M6169	126.20	120.38
FAZ-C30/2-NA	2	30A	31M3641	130.20	124.20
FAZ-C30/2-RT	2	30A	58M6186	144.08	137.44
FAZ-C40/2-NA	2	40A	58M6218	144.50	137.84
FAZ-C40/2	2	40A	58M6217	130.47	124.45
FAZ-C50/2	2	50A	58M6228	151.78	144.78
FAZ-C63/2	2	63A	58M6242	158.61	151.30
FAZ-C1/3	3	1A	55R2203	178.17	169.96
FAZ-C2/3	3	2A	58M6153	178.17	169.96
FAZ-C3/3-NA	3	3A	58M6180	204.26	194.84
FAZ-C5/3-NA	3	5A	55M0091	204.48	195.06
FAZ-C6/3-NA	3	6A	32M6081	189.00	180.29
FAZ-C10/3	3	10A	95K4157	167.74	160.01
FAZ-C10/3-RT	3	10A	58M6121	208.43	198.82
FAZ-C15/3-RT	3	15A	58M6139	208.43	198.82
FAZ-C16/3-NA	3	16A	32M6079	197.50	188.40
FAZ-C20/3-NA	3	20A	55M0093	189.00	180.29
FAZ-C25/3-NA	3	25A	55M0092	189.14	180.42
FAZ-C25/3-RT	3	25A	58M6171	208.43	198.82
FAZ-C32/3-NA	3	32A	58M6194	204.26	194.84
FAZ-C40/3-RT	3	40A	58M6220	247.46	236.05
FAZ-C40/3-NA	3	40A	31M3691	226.87	216.41
FAZ-C40/3	3	40A	87K2007	177.35	169.18
FAZ-C50/3	3	50A	96K2529	203.43	194.05
FAZ-C63/3	3	63A	87K0303	203.16	193.80

➤CONTINUED➤

MOELLER UL 1077 DIN RAIL SUPPLEMENTARY PROTECTORS (CONT.)

ACCESSORIES

Mfg. Part No.	Description	Features	Stock No.	Price Each 1-9
FAZ-XHINW1	Auxiliary / Trip Indicating Contact	2-Pole Contact or Auxiliary Contact/Trip Indicating Contact	83T1579	57.92
FAZ-XAA-C-12-110VAC	Shunt Trip	Allows Remote Trip of WMZS (12-110 VAC / 12-60 VDC)	58M6526	87.94
FAZ-XAA-C-110-415VAC	Shunt Trip	Allows Remote Trip of WMZS (110-415 VAC / 110-230 VDC)	55M7996	87.94

(175981)

POWERPACT ELECTRONIC TRIP CIRCUIT BREAKERS

RoHS Compliant Available

SQUARE D by Schneider Electric

- 3-pole
- 60A to 250A
- Voltage: 600VAC
- Includes Micrologic electronic trip unit

H-Frame J-Frame

PowerPact H- and J-frame circuit breakers are designed to protect electrical systems from damage caused by overloads and short circuits. The Micrologic electronic trip unit provide adjustable protection settings for greater system flexibility. In addition to electronic protection, Micrologic trip units allow users to monitor both energy and power. Through direct access to in-depth information and networking using open protocols, **PowerPact** circuit breakers with Micrologic trip units let operators optimize the management of their electrical installations. Far more than a circuit breaker, these circuit breakers are a measurement and communication tool ready to meet energy-efficiency needs through optimized power requirements, increased energy availability, and improved installation management.

INTERRUPTING RATINGS

	UL/CSA/NOM			IEC 647-2 Icu/Ics				
	240VAC	480VAC	600VAC	220/240VAC	380/440/415VAC	500/525VAC	690VAC	500VDC
G	65kA	35kA	18kA	65/65kA	35/35kA	18/18kA	...	20kA

H-FRAME

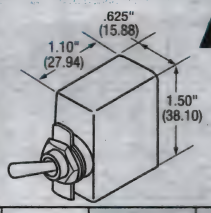
Mfg. Part No.	Current (A)	Micrologic Trip Unit	Stock No.	Price Each 1-2	Price Each 3-4	Price Each 5-9
HGL36060U31X	60	LI Standard Protection	92T2809	1151.09	1111.94	1088.44
HGL36060U33X	60	LSI Standard Protection	92T2810	1337.42	1291.93	1264.64
HGL36060U43X	60	LSI Plus Ammeter	92T2811	1697.35	1639.62	1604.98
HGL36060U44X	60	LSIG Plus Ammeter	92T2812	2199.04	2124.24	2079.36
HGL36100U31X	100	LI Standard Protection	92T2813	1296.01	1251.93	1225.48
HGL36100U33X	100	LSI Standard Protection	92T2814	1425.61	1377.12	1348.03
HGL36100U43X	100	LSI Plus Ammeter	92T2815	1842.30	1779.63	1742.04
HGL36100U44X	100	LSIG Plus Ammeter	92T2816	2343.98	2264.25	2216.41
HGL36150U31X	150	LI Standard Protection	92T2817	2734.51	2641.50	2585.70
HGL36150U33X	150	LSI Standard Protection	92T2818	2869.86	2772.24	2713.67
HGL36150U43X	150	LSI Plus Ammeter	92T2819	3164.78	3057.14	2992.55
HGL36150U44X	150	LSIG Plus Ammeter	92T2820	3666.46	3541.75	3466.93
J-FRAME						
JGL36250U31X	250	LI Standard Protection	92T2821	2980.56	2879.18	2818.35
JGL36250U33X	250	LSI Standard Protection	92T2822	2975.25	2874.06	2813.34
JGL36250U43X	250	LSI Plus Ammeter	92T2823	3570.31	3448.87	3376.01
JGL36250U44X	250	LSIG Plus Ammeter	92T2824	4284.51	4138.78	4051.34

(203471)

MIL SERIES MAGNETIC CIRCUIT BREAKERS

AIRPAX

All types listed are sealed, series configuration, medium trip delay and rated for 50VDC/240VAC. MIL-PRF-39019 approved and UL recognized units are also available. For other options and ratings from 0.05A to 20A, *go online or call.*



Mfg. Part No.	No. of Poles	Current (A)	Stock No.	Price Each 1-9	Price Each 10-24
AP1-1-72-502	1	5	03C5791	209.77	190.45
AP1-1-72-103	1	10	03C5783	671.53	609.63
AP1-1-72-203	1	20	03C5787	195.25	177.25
AP12-1-72-103	2	10	03C6275	1126.34	1022.53

➤CONTINUED➤

HYDRAULIC MAGNETIC CIRCUIT-BREAKERS

MIL SERIES MAGNETIC CIRCUIT BREAKERS (CONT.)

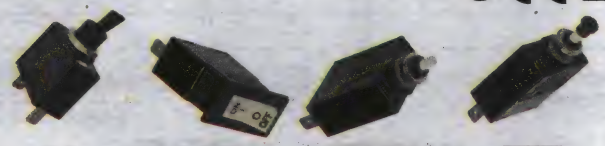
Mfg. Part No.	No. of Poles	Current (A)	Stock No.	Price Each 1-9	Price Each 10-24
AP12-1-72-153	2	15	03C6276	1126.34	1022.53
AP12-1-72-203	2	20	03C6279	821.19	273.79

(72710)

SNAPAK® MAGNETIC CIRCUIT BREAKERS

RoHS Compliant Available

AIRPAX



Toggle | Rocker | Push-to-Reset | Push/Pull

SNAPAK® offers power switching and accurate, reliable circuit protection in a single snap-acting magnetic circuit breaker. SNAPAK® combines the functions of three separate components: power switch, fuse, and fuseholder that allows for less assembly, lower inventory, and greater panel density through less clutter. SNAPAK® can be operated at either DC or 50/60Hz. Voltages on units up to 7.5A are up to 50VDC/250VAC. Voltages above 7.5A are up to 32VDC/125VAC. All types listed are series circuit breakers with rocker action. Body color: black; handle color: white. Dimensions (H x W x D): 34.43 x 17.27 x 29.97 mm (1.375 x 0.680 x 1.180"). UL recognized, CSA certified, CE compliant, VDE approved. For breakers over 20A, *go online or call.*

1 POLE

Mfg. Part No.	Handle Style	Current Rating (A)	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49	Price Each 50-99
● T11-2-1.00A-01-11AL-V	Toggle	1	03C9231	19.87	17.92	17.02	16.27
● T11-2-2.00A-01-11AL-V	Toggle	2	03C9288	20.10	18.11	17.20	16.45
● T11-2-5.00A-01-11AL-V	Toggle	5	03C9344	20.14	18.15	17.25	16.49
● T11-2-10.0A-01-11AL-V	Toggle	10	03C9250	20.38	18.37	17.45	16.69
● T11-2-20.0A-01-11AL-V	Toggle	20	90C0671	20.38	18.37	17.45	16.69
● R11-2-5.00A-B06CV-V	Rocker	5	34C9849	18.35	16.55	15.71	15.02
● R11-2-10.0A-B06CV-V	Rocker	10	34C9845	24.74	22.30	21.18	20.24
● R11-2-20.0A-B06CV-V	Rocker	20	34C9848	24.74	22.30	21.18	20.24
● PR11-2-1.00A-XX-V	Push-to-Reset	1	03C7949	23.90	21.54	20.46	19.55
● PR11-2-2.00A-XX-V	Push-to-Reset	2	03C7955	23.90	21.54	20.46	19.55
● PR11-2-5.00A-XX-V	Push-to-Reset	5	03C7964	22.58	20.35	19.33	18.47
● PR11-2-10.0A-XX-V	Push-to-Reset	10	03C7951	23.90	21.54	20.46	19.55
● PR11-2-20.0A-XX-V	Push-to-Reset	20	03C7958	23.90	21.54	20.46	19.55
● PP11-2-2.00A-XX-V	Push/Pull	2	03C7619	18.63	16.80	15.95	15.24
● PP11-2-5.00A-XX-V	Push/Pull	2.5	47M2271	23.90	21.54	20.46	19.55
● PP11-2-10.0A-XX-V	Push/Pull	10	03C7605	21.94	19.78	18.78	17.95

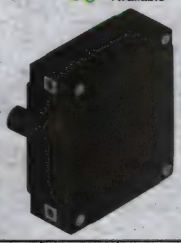
(15827)

MAGNETIC CIRCUIT BREAKERS

RoHS Compliant Available

AIRPAX

IEG series magnetic circuit breakers provide low-cost power switching, reliable circuit protection, and accurate circuit control. One toggle handle per pole. AC units are 250VAC. DC units are rated up to 80VDC. Available in both DC long delay and 50/60Hz long delay. UL recognized, CSA certified, CE compliant, and VDE approved.



Mfg. Part No.	No. of Poles	Current (A)	No. of Handles	Stock No.	Price Each 1-9
● IEG6-1-72-5.00-01-V	1	5	1/unit	04C6640	26.06
● IEG6-1-72-10.0-01-V	1	10	1/unit	04C6637	25.42
● IEG6-1-72-15.0-01-V	1	15	1/unit	90C0653	52.88
● IEG6-1-72-20.0-01-V	1	20	1/unit	04C6638	37.65
● IEG6-1-72-30.0-01-V	1	30	1/unit	90C0654	26.13
● IEGH66-1-72-15.0-01-V	2	15	1/Pole	90C0648	118.00
● IEGH66-1-72-20.0-01-V	2	20	1/Pole	90C0649	118.00
● IEGH66-1-72-30.0-01-V	2	30	1/Pole	90C0650	60.54
● IEGH66-1-72-50.0-01-V	2	50	1/Pole	90C0652	122.78

(69201)

MAGNETIC CIRCUIT BREAKERS

RoHS Compliant Available

AIRPAX

All types are DC, 50/60Hz medium delay and are rated: 65VDC/250VDC. All types below are an internal series configuration. 0.05 to 100A (up to 9 poles available). Dimensions (H x W x D): 63.25 x 19.05 x 46.99 (2.490 x 0.750 x 1.850"). MIL-PRF-55629 also available; *go online or call.* UL recognized, CSA certified.

Mfg. Part No.	No. of Poles	Current (A)	Stock No.	Price Each 1-9	Price Each 10-24
● UPL1-1-72-502	1	5	91F9467	95.57	85.35
● UPL1-1-72-103	1	10	91F9468	95.57	85.35
● UPL1-1-72-303	1	30	91F9472	95.57	85.35
● UPL1-1-72-403	1	40	91F9473	91.06	81.32
● UPL1-1-72-503	1	50	91F9474	91.06	81.32
● UPL11-1-72-303	2	30	91F9481	244.80	218.61

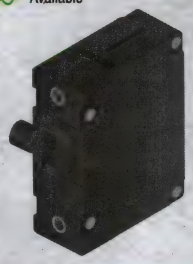
(69148)

MAGNETIC CIRCUIT BREAKERS

RoHS Compliant Available

AIRPAX

All types listed are series configuration, medium trip delay and rated for 65VDC/250VAC. Dimensions (H x W x D): 50.80 x 19.95 x 41.65 mm (2.00 x 0.75 x 1.64"). *Go online or call* for other options, ratings from 0.5 to 50.0 amps and additional poles. MIL-PRF-55629 approvals are also available.



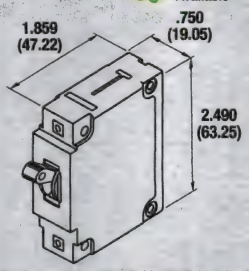
Mfg. Part No.	No. of Poles	No. of Handles	Current (A)	Stock No.	Price Each 1-9	Price Each 10-24
● UPG6-1-72-502-01	1	1/Unit	5	91F9486	76.51	68.78
● UPG6-1-72-103-01	1	1/Unit	10	91F9487	72.90	65.54
● UPG6-1-72-203-01	1	1/Unit	20	91F9489	76.51	68.78
● UPG6-1-72-253-01	1	1/Unit	25	91F9490	26.53	23.85
● UPG6-1-72-303-01	1	1/Unit	30	91F9491	76.51	68.78
● UPGH66-1-72-103-01	2	1/Pole	10	16M2516	179.11	161.01
● UPGH66-1-72-153-01	2	1/Pole	15	03C9916	180.67	162.41
● UPGH66-1-72-253-01	2	1/Pole	25	35C0039	89.12	80.12

(69149)

MAGNETIC CIRCUIT BREAKERS

RoHS Compliant Available

AIRPAX



Magnetic circuit breakers provide low-cost power switching, reliable circuit protection, and accurate circuit control. Circuit breakers listed below have one toggle handle per unit or pole. All units feature stud terminals and are rated DC/60Hz long delay. Other options and ratings from 0.05 to 50A are available; *go online or call.* UL recognized, CSA certified, CE compliant, VDE approved.

Mfg. Part No.	No. of Poles	Current (A)	No. of Handles	Stock No.	Price Each 1-9	Price Each 10-24
● IELK1-1-72-10.0-01-V	1	10	1 per Unit	60K5996	62.72	57.07
● IELK1-1-72-15.0-01-V	1	15	1 per Unit	59K0207	62.72	57.07
● IELK1-1-72-20.0-01-V	1	20	1 per Unit	59K0208	65.82	59.89
● IELK1-1-72-30.0-01-V	1	30	1 per Unit	90C0667	65.82	59.89
● IELK1-1-72-50.0-01-V	1	50	1 per Unit	59K0209	65.82	59.89
● IELHK11-1-72-10.0-01-V	2	10	1 per Pole	59K0199	160.40	145.95
● IELHK11-1-72-15.0-01-V	2	15	1 per Pole	90C0658	73.65	67.02

➤CONTINUED➤

MAGNETIC CIRCUIT BREAKERS (CONT.)

Mfg. Part No.	No. of Poles	Current (A)	No. of Handles	Stock No.	Price Each 1-9	Price Each 10-24
IELHK11-1-72-30.0-01-V	2	30	1 per Pole	59K0200	164.37	149.56
IELHK11-1-72-50.0-01-V	2	50	1 per Pole	59K0202	81.66	74.30

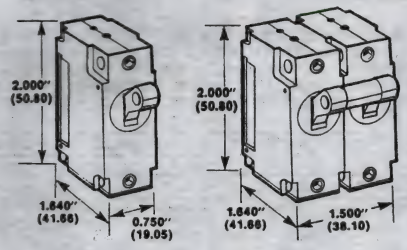
(69198)

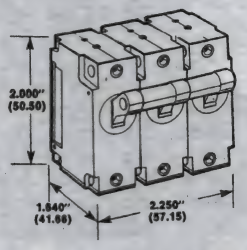
P&B MAGNETIC HYDRAULIC CIRCUIT BREAKERS

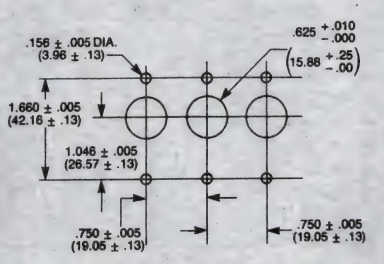
RoHS Compliant Available

TE connectivity

Authorized Distributor







- Available in 1-, 2-, and 3-pole models
- White toggle activator
- Operating voltage: 277VAC or 65VDC
- Trip-free construction
- Operating temperature: –40°C to +85°C
- 0.032 x 0.250" (0.81x6.35) Quick-connect terminals
- For motor start applications (curve 10)
- UL interrupt capacity in Amps: 3500–5000
- #6-32 mounting screws

UL 1500 (ignition protected) versions also available; *go online or call*. Toggle guards available to lock circuit breaker in the off position, preventing accidental operation. Long delay trip curve, single actuator/multiple pole and relay (remote) trip options also available; *go online or call*. UL recognized, CSA certified. VDE approved units are available; *order same type number and add* "**V**" to end.

1-POLE

Mfg. Part No.	Operating Voltage (V)	Current Rating (A)	Trip Time @ 200% of Load (sec)	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-24
W67-X2Q52-5	65	5	2.2-20	77B4553	24.63	22.13	20.42
W67-X2Q50-5	65	5	0.03	17M3364	24.16	21.71	20.03
W67-X2Q52-10	65	10	2.2-20	17M3365	23.01	20.96	18.97
W67-X2Q52-15	65	15	2.2-20	17M3366	24.16	20.56	18.61
W67-X2Q52-20	65	20	2.2-20	17M3367	32.34	26.61	24.20
W67-X2Q52-30	65	30	2.2-20	93F3140	21.59	19.39	17.90
W67-X2Q13-1	277	1	1.5-15	57F248	22.44	20.16	18.60
W67-X2Q12-2	277	2	2.2-20	20M7053	20.75	20.12	18.91
W67-X2Q13-2	277	2	1.5-15	17M3361	21.84	19.62	18.10
W67-X2Q12-3	277	3	2.2-20	56F807	21.84	18.61	16.84
W67-X2Q13-3	277	3	1.5-15	57F250	21.84	19.62	18.10
W67-X2Q12-5	277	5	2.2-20	56F809	18.41	16.77	16.40
W67-A2Q12-5*	277	5	2.2-20	20M7052	30.00	26.95	24.86
W67-X2Q12-7	277	7	2.2-20	18M9761	21.39	18.97	17.16
W67-X2Q12-10	277	10	2.2-20	56F880	20.83	17.90	16.40
W67-X2Q13-10	277	10	1.5-15	57F254	21.23	18.97	17.16
W67-X2Q110-15	277	15	9-100	50F9221	19.75	17.50	17.16
W67-X2Q12-15	277	15	2.2-20	19M4742	20.42	17.90	16.40
W67-X2Q13-15	277	15	1.5-15	17M3360	21.84	19.62	18.10
W67-X2Q110-20	277	20	9-100	17M3358	21.40	19.12	17.30
W67-X2Q13-20	277	20	1.5-15	17M3362	21.84	19.62	18.10
W67-X2Q12-20	277	20	2.2-20	56F882	20.83	17.90	16.40
W67-X2Q13-25	277	25	1.5-15	18M9762	22.44	20.16	18.60
W67-X2Q12-30	277	30	2.2-20	18M9760	21.84	17.90	16.40
W67-X2Q13-30	277	30	1.5-15	17M3363	21.84	19.62	18.10
2-POLE							
W68-X2Q12-3	277	3	2.2-20	56F888	51.59	43.89	39.71
W68-X2Q12-5	277	5	2.2-20	56F890	39.74	38.06	35.13
W68-X2Q12-7	277	7	2.2-20	17M3369	49.55	44.22	40.01
W68-X2Q12-10	277	10	2.2-20	18M9763	41.09	37.35	34.24
W68-X2Q110-10	277	10	9-100	90F1232	49.61	44.58	41.12
W68-X2Q12-15	277	15	2.2-20	20M7055	48.31	41.51	38.05

CONTINUED

P&B MAGNETIC HYDRAULIC CIRCUIT BREAKERS (CONT.)

Mfg. Part No.	Operating Voltage (V)	Current Rating (A)	Trip Time @ 200% of Load (sec)	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-24
2-POLE							
W68-X2Q12-20	277	20	2.2-20	18M9764	47.36	41.51	38.05
W68-X2Q110-20	277	20	9-100	90F1233	49.19	43.89	39.71
W68-X2Q12-25	277	25	2.2-20	56F895	51.59	43.89	39.71
W68-X2Q12-30	277	30	2.2-20	56F896	45.34	37.35	34.24
3-POLE							
W69-X2Q12-5	277	5	2.2-20	56F993	68.87	62.02	57.25
W69-X2Q12-10	277	10	2.2-20	17M3372	65.63	62.02	57.25
W69-X2Q12-15	277	15	2.2-20	17M3373	68.87	62.02	57.25
W69-X2Q12-20	277	20	2.2-20	56F997	66.11	63.11	58.25
W69-X2Q110-20	277	20	9-100	17M3370	65.66	58.59	53.01
W69-X2Q12-25	277	25	2.2-20	17M3374	70.59	63.42	58.52
W69-X2Q12-30	277	30	2.2-20	56F999	63.93	58.74	57.25
W69-X2Q110-30	277	30	9-100	17M3371	65.66	57.46	51.99

* With auxiliary switch (.093" quick-connect)

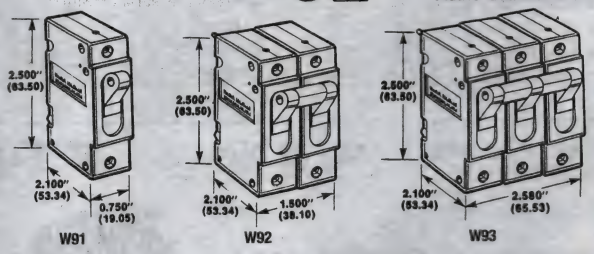
(9460)

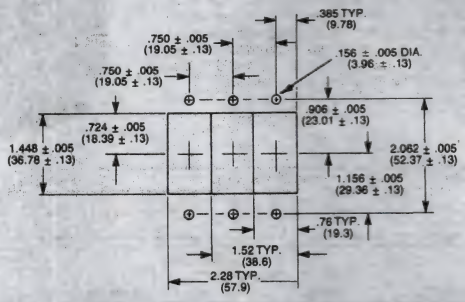
P&B STANDARD MAGNETIC HYDRAULIC CIRCUIT BREAKERS

RoHS Compliant Available

TE connectivity

Authorized Distributor





W9 series circuit breakers are available in 1-, 2-, and 3-pole models with ratings to 50A. **Prefix W91** in mfg. part no. = 1-pole; **W92** = 2-pole; **W93** = 3-pole. Operating voltage: 277VAC or 65VDC. All units utilize a trip free construction. Operating temperature: –40°C to +85°C. **W9 series** terminates in #10-32 studs. Mount with #6-32 screws and feature a time delay curve tailored for motor start applications (curve 10). UL interrupt capacity in amps: 3500–5000. UL recognized, CSA certified. VDE approved units are available; *order same mfg. part no. and add* "**V**" *to end*. UL 1500 (ignition protected) versions also available; *go online or call*.

Mfg. Part No.	Current (A)	Trip Time (200% Load) (sec)	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-24
W91-X112-1	1	2.2-20	17M3375	22.43	20.15	18.59
W91-X112-2	2	2.2-20	56F763	21.46	19.68	18.16
W91-X112-5	5	2.2-20	56F766	21.23	20.06	18.51
W91-X113-5	5	0.15-1.5	17M3380	21.83	18.61	16.84
W91-X112-7	7	2.2-20	56F767	22.43	20.15	18.59
W91-X112-10	10	2.2-20	56F768	21.23	20.06	18.51
W91-X113-10	10	0.15-1.5	57F221	22.25	19.99	18.44
W91-X152-10	10	0.60-8.0	17M3381	23.48	20.96	18.97
W91-X112-15	15	2.2-20	56F769	20.83	17.90	16.40
W91-X113-15	15	0.15-1.5	17M3379	20.83	18.61	16.84
W91-X152-15	15	0.60-8.0	17M3382	23.95	20.96	18.97
W91-X112-20	20	2.2-20	56F770	17.71	16.10	14.76
W91-X152-20	20	0.60-8.0	17M3383	24.61	20.96	18.97
W91-X1110-20	20	9-100	17M9363	21.23	19.99	18.44
W91-X112-25	25	2.2-20	17M3376	20.98	18.85	17.40
W91-X112-30	30	2.2-20	17M3377	34.01	24.81	22.44
W91-X152-30	30	0.60-8.0	17M3384	37.61	27.43	24.82
W91-X152-40	40	0.60-8.0	13F3625	24.61	20.96	18.97
W91-X112-40	40	2.2-20	56F774	21.56	20.22	18.66
W91-X112-50	50	2.2-20	17M3378	34.61	25.24	22.83
W91-X152-50	50	0.60-8.0	13F3626	24.15	20.56	18.61

CONTINUED

HYDRAULIC MAGNETIC CIRCUIT-BREAKERS

P&B STANDARD MAGNETIC HYDRAULIC CIRCUIT BREAKERS (CONT.)

Mfg. Part No.	Current (A)	Trip Time (200% Load) (sec)	Stock No.	Price Each 1-4	5-9	10-24
● W92-X112-1	1	2.2-20	17M3386	48.33	43.14	39.03
● W92-X112-2	2	2.2-20	17M3388	68.95	62.68	56.99
● W92-X112-3	3	2.2-20	17M3391	49.30	43.14	39.03
● W92-X112-5	5	2.2-20	17M3393	48.34	45.66	42.15
● W92-X112-7	7	2.2-20	56F795	50.69	45.54	42.02
● W92-X112-10	10	2.2-20	17M3387	48.34	41.51	38.05
● W92-X112-15	15	2.2-20	56F797	48.33	41.51	38.05
● W92-X112-20	20	2.2-20	17M3389	45.66	41.51	38.05
● W92-X112-25	25	2.2-20	17M3390	68.95	62.68	56.99
● W92-X1110-30	30	0.15-1.5	17M3385	57.96	54.03	50.60
● W92-X112-30	30	2.2-20	17M3392	48.33	41.51	38.05
● W92-X112-40	40	2.2-20	56F812	49.80	45.66	42.15
● W92-X112-50	50	2.2-20	56F813	48.33	41.51	38.05
● W92-X113-15	15	0.15-1.5	17M3394	54.75	44.22	40.01
● W92-X1110-20	20	0.15-1.5	90F1226	53.48	52.66	51.08
● W93-X112-5	5	2.2-20	56F832	90.55	80.84	73.14
● W93-X112-10	10	2.2-20	17M3397	79.11	75.50	71.88
● W93-X112-15	15	2.2-20	17M3398	88.99	84.10	77.63
● W93-X112-20	20	2.2-20	56F836	88.99	84.10	77.63
● W93-X112-25	25	2.2-20	17M3399	90.55	85.57	78.99
● W93-X112-30	30	2.2-20	56F838	80.52	70.09	64.69
● W93-X112-40	40	2.2-20	56F840	85.11	78.07	77.63
● W93-X112-50	50	2.2-20	17M3400	76.42	70.09	64.69
● W93-X1110-20	20	9-100	17M3395	92.38	80.84	73.14
● W93-X1110-30	30	9-100	17M3396	88.99	79.45	71.88

(16427)

HYDRAULIC-MAGNETIC CIRCUIT BREAKERS

RoHS Compliant Available

EATON

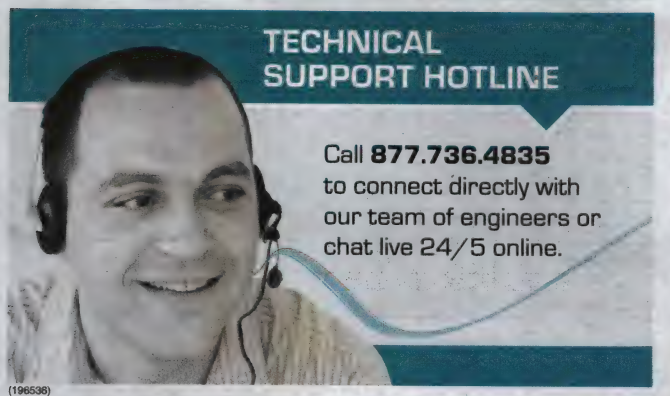
Breaker terminals are 0.32" x 0.250" push-on type. Mount with #6-32 screws. Units with **D3** in mfg. part no. are rated AC/DC and are suitable for 250V, 50/60Hz and 65VDC. Breakers with **A8** in mfg. part no. are rated at 250V, 50/60Hz and provide high inrush withstanding for momentary initial surges. Operating temp. range: –40° to +85°C. Other current ratings available . For trip curves , *go online or call.*

1-Pole

Dimensions	1-Pole (H x W x D)	2-Pole (H x W x D)
inches	2.00 x 0.75 x 1.90	2.00 x 1.50 x 1.90
millimeters	50.08 x 19.05 x 48.26	50.08 x 38.10 x 48.26

Mfg. Part No.	No. of Poles	Current (A)	Trip Time @ 200% (sec.)	Stock No.	Price Each 1-4	5-14	15-24
● JA1S-D3-AB-01-D-A-5-2	1	5	1.7-18	10M5217	11.59	11.33	11.07
● JA1S-D3-AB-01-D-A-10-2	1	10	1.7-18	10M5218	11.59	11.33	11.07
● JA1S-D3-AB-01-D-A-15-2	1	15	1.7-18	10M5219	11.59	11.33	11.07
● JA1S-D3-AB-01-D-A-20-2	1	20	1.7-18	10M5220	11.59	11.33	11.07
● JA1SD3A003002E	1	30	1.7-18	10M5223	11.59	11.33	11.07
● JA2S-D3-LB-01-D-A-20-3	2	20	0.15-1.9	10M5229	28.26	27.62	26.98
● JA2S-A8-LB-01-D-A-20-10	2	20	10-120	10M5225	28.26	27.62	26.98

(2309)



(196536)

HYDRAULIC-MAGNETIC CIRCUIT BREAKERS

RoHS Compliant Available

EATON

- Lightweight circuit breakers
- Available In 1-, 2-, and 3- pole models
- Operating temperature range: –40°C to +85°C
- Items with D3 in mfg. part no. are rated AC/DC and are suitable for 250V, 50/60Hz and 80VDC
- A8 in mfg. part no. are rated at 250V, 50/60Hz and provides high inrush withstanding for momentary initial surges
- Time-delay curve 10 recommended for motor start applications

1-Pole

Features knurled handle for positive grip. Electrical ratings: UL1077 listed from 0.1 to 100 amperes at 80VDC with 10,000 ampere interrupting capability; 0.1 to 20 amperes at 120VAC with 10,000 ampere interrupting capability; 0.1 to 50 amperes at 120/240VAC with 5,000 ampere interrupting capability. Units are available in 10-32 ¼-20 and 6mm metric connecting terminal studs, as well as 10-32 screws and banana mate terminals. Other ampere ratings available; UL489 rated circuit breakers are also available by changing "DA" in mfg. part number to "DDU." VDE approved items available; *go online or call.*"

Dimensions	1-Pole (H x W x D)	2-Pole (H x W x D)	3-Pole (H x W x D)
inches	2.500 x 0.750 x 1.841	2.500 x 1.500 x 1.841	2.500 x 2.250 x 1.841
millimeters	63.50 x 19.05 x 46.76	63.50 x 38.10 x 46.76	63.50 x 57.15 x 46.76

Mfg. Part No.	No. of Poles	Current (A)	Trip Time @ 200% (sec.)	Stock No.	Price Each 1-4	5-14	15-24
● AM1R-D3-AC07D-A-20-2	1	20	1.7-18	10M5113	23.78	23.05	22.01
● AM1R-D3-AC-07-D-A-25-2	1	25	1.7-18	10M5119	23.59	22.87	21.84
● AM1RD3AC07DA153	1	15	0.15-1.9	10M5118	23.76	23.03	22.00
● AM1RD3AC07DA502	1	15	18	27C4674	23.94	23.21	22.16
● AM1R-A8-AC-07-D-A-15-10	1	15	10-120	27C0900	26.91	26.09	24.91
● AM2RD3LC07DA152	2	15	1.7-18	10M5122	61.53	59.65	56.97
● AM2RD3LC07DA202	2	20	1.7-18	10M5123	61.53	59.65	56.97
● AM2RD3LC07DA502	2	50	1.7-18	10M5126	61.53	59.65	56.97
● AM2RD3LC07DA303	2	30	0.15-1.9	27C0911	61.53	59.65	56.97
● AM3RD3LC07DA202	3	20	1.7-18	10M5129	106.15	102.92	98.28

(2310)

MAGNETIC HYDRAULIC CIRCUIT BREAKERS

RoHS Compliant Available

Carling Technologies™
Innovative Designs. Powerful Solutions.

Fig. 1

Fig. 2

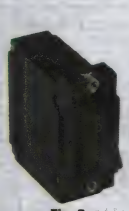


Fig. 3

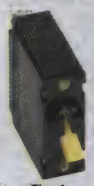


Fig. 4

Fig. 5

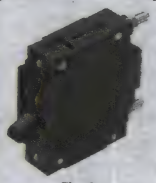


Fig. 6

Fig. 7

DIMENSIONS

Series	No. of Poles	Actuator	Height (mm)	Width (mm)	Depth (mm)
A	1	Handle or Rocker	50.80	19.18	41.66
A	2	Handle	50.80	38.48	41.66
B	1	Handle	50.80	19.18	43.94
B	2	Handle	50.80	38.48	43.94
C	1	Handle	63.50	19.18	47.00
C	2	Handle	63.50	38.48	47.00

Circuit breakers have trip free mechanism and wiping contacts. The **B series** and **C series** hydraulic/magnetic circuit breakers have UL 1500 ignition protection, series trip circuit and front panel snap-in. All units are supplied with all-purpose, AC/DC medium delay curves rated up to 80VDC/277VAC. All series have 6-32 x 0.195" threaded inserts for mounting except **mfg. part no. AA2-B0-24-630-1B2-C** which has ISO M3 x 5mm threaded inserts. **"C" suffix** indicates UL recognized & CSA accepted (except for **C series** where it indicates UL recognized & CSA certified). **"D" suffix** indicates VDE certified, UL recognized & CSA accepted (except for **C series** where it indicates VDE certified, UL recognized & CSA certified). **"E" suffix"** indicates TUV certified, UL recognized & CSA accepted.

Mfg. Part No.	Fig.	No. of Poles	Current (A)	Actuator Type	Terminals	Stock No.	Price Each Each
● AA1-B0-34-615-3D1-C	...	1	15	Handle	Screw 8-32 (Bus Type)	32C5860	27.13
● AA1-B0-34-630-3D1-C	...	1	30	Handle	Push-On 0.250 Tab (Q.C.)	76K1002	27.13
● AA1-B0-26-615-3D1-C	...	1	15	Handle	Screw 8-32 (Bus Type)	64K1986	27.27
● AA2-B0-24-630-1B2-C	1	2	30	Handle	Push-On 0.250 Tab (Q.C.)	06M4085	67.51

➤ CONTINUED ➤

MAGNETIC HYDRAULIC CIRCUIT BREAKERS (CONT.)

Mfg. Part No.	Fig.	No. of Poles	Current (A)	Actuator Type	Terminals	Stock No.	Price Each Each
AC1-B0-34-450-131-D	3	1	5	Rocker	Push-On 0.250 Tab (Q.C.)	76K1003	33.06
AC1-B0-34-610-131-D	3	1	10	Rocker	Push-On 0.250 Tab (Q.C.)	76K1004	27.83
AC1-B0-34-615-131-D	3	1	15	Rocker	Push-On 0.250 Tab (Q.C.)	76K1005	27.84
AC1-B0-34-620-131-D	3	1	20	Rocker	Push-On 0.250 Tab (Q.C.)	76K1006	32.71
AC1-B0-34-625-131-D	3	1	25	Rocker	Push-On 0.250 Tab (Q.C.)	76K1007	31.50
BA1-B034610121D	4	1	10	Handle	Stud 10-32, Threaded	81K0101	22.44
BA1-B0-34-615-121-D	4	1	15	Handle	Push-On 0.250 Tab (Q.C.)	76K1010	24.69
BA2-B0-34-610-121-D	5	2	10	Handle	Stud 10-32, Threaded	76K2878	63.48
BA2-B0-34-615-121-D	5	2	15	Handle	Push-On 0.250 Tab (Q.C.)	76K1014	64.84
CA1-B0-34-630-121-D	6	1	30	Handle	Stud 10-32, Threaded	76K1019	32.42
CA2-B0-34-620-121-D	7	2	20	Handle	Stud 10-32, Threaded	76K3880	79.32
CA2-B0-34-630-121-D	7	2	30	Handle	Stud 10-32, Threaded	76K1021	80.80

(2406)

1-POLE DIN-MOUNT MINIATURE CIRCUIT-BREAKERS

RoHS Compliant Available

IDEC

- Integrated electric shock protection structure (IP20)
- Meets UL1077 standard
- Rated voltage: 250VAC / 65VDC
- Rated short-circuit capacity: 2500A
- Max. trip time: 240 sec @ 125% rated current (medium time delay curve)
- Auxiliary/alarm contact terminals are equipped with terminal covers
- Spring-up, fingersafe terminals (ring terminals can also be installed w/ captive terminal screws)
- Retractable actuator
- Trip-free mechanism maintains the circuit open even when the operator is turned on after tripping
- Dimensions (H x W x D): 78.8 x 17.5 x 66 mm
- 2- and 3-pole versions, padlock attachments, panel mounting brackets and marking plates are also available; *go online or call*

SERIES TRIP (CURRENT TRIP)

Mfg. Part No.	Current	Auxiliary Contacts	Stock No.	Price Each 1-9	10-24	25-49	50+
NC1V-1100-0.1AA	100mA	None	69R8091	24.13	21.90	20.61	19.24
NC1V-1100-0.3AA	300mA	None	69R8094	22.77	20.66	19.44	18.15
NC1V-1100-0.5AA	500mA	None	69R8097	22.77	20.66	19.44	18.15
NC1V-1100-1AA	1A	None	69R8100	22.77	20.66	19.44	18.15
NC1V-1100-2AA	2A	None	69R8109	24.13	21.90	20.61	19.24
NC1V-1100-3AA	3A	None	69R8118	23.24	21.09	19.85	18.53
NC1V-1100-5AA	5A	None	69R8124	24.13	21.90	20.61	19.24
NC1V-1100-7AA	7A	None	69R8127	24.13	21.90	20.61	19.24
NC1V-1100-10AA	10A	None	69R8103	24.13	21.90	20.61	19.24
NC1V-1100-15AA	15A	None	69R8106	24.13	21.90	20.61	19.24
NC1V-1100-20AA	20A	None	69R8112	24.13	21.90	20.61	19.24
NC1V-1100-25AA	25A	None	69R8115	22.77	20.66	19.44	18.15
NC1V-1100-30AA	30A	None	69R8121	24.13	21.90	20.61	19.24
NC1V-1111-0.1AA	100mA	1	69R8156	37.94	34.43	32.40	30.24
NC1V-1111-0.3AA	300mA	1	69R8159	37.94	34.43	32.40	30.24
NC1V-1111-0.5AA	500mA	1	69R8162	40.22	36.50	34.35	32.06
NC1V-1111-1AA	1A	1	69R8165	40.22	36.50	34.35	32.06
NC1V-1111-2AA	2A	1	69R8174	40.22	36.50	34.35	32.06
NC1V-1111-3AA	3A	1	69R8183	37.94	34.43	32.40	30.24
NC1V-1111-5AA	5A	1	69R8189	39.76	36.08	33.96	31.70
NC1V-1111-7AA	7A	1	69R8192	40.22	36.50	34.35	32.06
NC1V-1111-10AA	10A	1	69R8168	40.22	36.50	34.35	32.06
NC1V-1111-15AA	15A	1	69R8171	40.22	36.50	34.35	32.06
NC1V-1111-20AA	20A	1	69R8177	40.22	36.50	34.35	32.06
NC1V-1111-25AA	25A	1	69R8180	40.22	36.50	34.35	32.06
NC1V-1111-30AA	30A	1	69R8186	40.22	36.50	34.35	32.06

(175903)

AC BRANCH RATED CIRCUIT BREAKERS

RoHS Compliant Available

Weidmüller

Single Pole

Double Pole

- 13mm width per pole
- Mounts on 35mm DIN rail
- Up to 25A
- 120/240 VAC, 50/60 Hz
- 4-28 sec trip time at 200%

TRIP CHARACTERISTICS

Value	125%	150%	200%	400%	600%	800%	1000%
Min (sec)	15	8	4	0.7	0.09	0.007	0.005
Max (sec)	300	90	28	4	1.5	0.6	0.4

AC branch rated circuit breakers are UL 489 listed, CSA C22.2 no. 5-02 certified, CE compliant, and VDE approved. Single pole dimensions (H x W x D): 92.8 x 13 x 74mm (3.65 x 0.51 x 2.91"). Double pole dimensions (H x W x D): 92.8 x 26 x 74mm (3.65 x 1.02 x 2.91"). *Bus bar and trip curves available; go online or call.*

CIRCUIT BREAKERS

Mfg. Part No.	Current (A)	No. of Poles	Stock No.	Price Each 1-9	10-99	100-499	500-999
9926251000	500	1	21M4516	24.66	22.49	18.97	17.89
9926251001	1	1	62K2736	20.61	19.01	17.93	17.67
9926251002	2	1	62K2737	20.61	19.01	17.93	17.67
9926251003	3	1	55M3092	20.86	19.24	18.15	17.89
9926251005	5	1	61H7538	20.61	19.01	17.93	17.67
9926251006	6	1	55M3094	20.86	19.24	18.15	17.89
9926251008	8	1	55M3096	20.86	19.24	18.15	17.89
9926251010	10	1	52K9500	21.12	19.48	18.38	18.11
9926251015	15	1	61H7535	20.61	19.01	17.93	17.67
9926251020	20	1	62K2738	20.88	19.25	18.16	17.89
9926252003	3	2	55M3126	41.80	38.55	36.39	35.83
9926252005	5	2	21M4534	41.36	38.14	36.00	35.45
9926252006	6	2	55M3128	40.93	37.74	35.62	35.08
9926252010	10	2	21M4535	41.80	38.55	36.39	35.83
9926252015	15	2	21M4536	40.93	37.74	35.62	35.08
9926252020	20	2	21M4537	48.37	44.12	37.21	35.08

(103512)

DC BRANCH RATED CIRCUIT BREAKERS

RoHS Compliant Available

Weidmüller

- 13mm width
- Single pole
- Mounts on 35mm DIN rail
- Up to 60A
- 80 VDC
- 4-28 sec trip time at 200%

Single Pole

DC branch rated circuit breakers are UL 489 listed, CE compliant, and VDE approved. Single pole dimensions (H x W x D): 92.8 x 13 x 74mm (3.65 x 0.51 x 2.91"). *Trip curves available; go online or call.*

CIRCUIT BREAKERS

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-9	10-99	100-499	500-999
9926251900	500mA	21M4517	23.30	21.25	17.92	16.90
9926251901	1	21M4518	20.61	19.01	17.93	17.67
9926251902	2	21M4519	20.61	19.01	17.93	17.67
9926251904	4	55M3125	20.86	19.24	18.15	17.89
9926251905	5	21M4520	21.12	19.48	18.38	18.11
9926251910	10	21M4521	21.12	19.48	18.38	18.11
9926251915	15	21M4522	20.61	19.01	17.93	17.67
9926251920	20	21M4523	20.61	19.01	17.93	17.67
9926251930	30	21M4525	20.86	19.24	18.15	17.89

ACCESSORIES

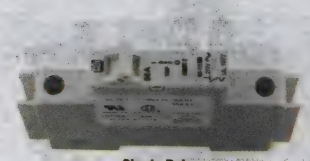
Mfg. Part No.	Description	Stock No.	Price Each 1-9
67101904	Bus Bar for Single Pole Circuit Breakers	55M2316	60.95

(103513)

SUPPLEMENTAL CIRCUIT BREAKERS

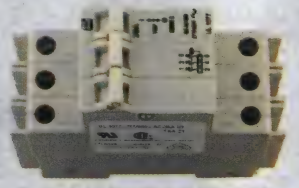
RoHS Compliant Available

Weidmüller



Single Pole

Double Pole



Triple Pole

- 13mm width per pole
- Mounts on 35mm DIN rail
- Factory fitted auxiliary or trip alarm
- 240/480 VAC, 50/60 Hz
- 6-40 sec trip time at 200%

Supplemental circuit breakers are UL 1077 recognized, VDE (EN 60947-2) approved, CSA C22.2 no. 235 certified, and CE compliant. Single pole dimensions (H x W x D): 92.8 x 13 x 73mm (3.65 x 0.51 x 2.87"). Double pole dimensions (H x W x D): 92.8 x 26 x 73mm (3.65 x 1.02 x 2.87"). Triple pole dimensions (H x W x D): 92.8 x 39 x 73mm (3.65 x 1.54 x 2.87"). *Bus bar and trip curves available online.*

CIRCUIT BREAKERS

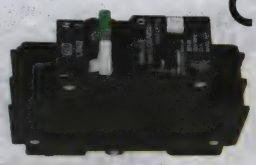
Mfg. Part No.	Current (A)	No. of Poles	Stock No.	Price Each 1-9	10-99	100-499	500+
● 9926251501	1	1	55M3101	20.40	18.81	17.75	17.49
● 9926251502	2	1	55M3102	19.27	17.77	16.77	16.52
● 9926251504	4	1	55M3104	20.40	18.81	17.75	17.49
● 9926251505	5	1	55M3105	20.40	18.81	17.75	17.49
● 9926251510	10	1	55M3108	19.27	17.77	16.77	16.52
● 9926251515	15	1	55M3109	20.40	18.81	17.75	17.49
● 9926251520	20	1	55M3110	20.40	18.81	17.75	17.49
● 9926251535	35	1	55M3113	20.40	18.81	17.75	17.49
● 9926252506	6	2	55M3144	40.47	37.32	35.21	34.69
● 9926252510	10	2	55M3145	40.04	36.93	34.84	34.32
● 9926252530	30	2	55M3149	40.47	37.32	35.21	34.69
● 9926253510	10	3	55M3154	57.84	53.33	50.33	49.58
● 9926253520	20	3	55M3157	57.84	53.33	50.33	49.58
● 9926253530	30	3	55M3159	60.07	55.38	52.27	51.49

(103514)

GFCI MAGNETIC HYDRAULIC CIRCUIT-BREAKERS – SUPPLEMENTAL

RoHS Compliant Available

Weidmüller



- UL1077 and UL1053 recognized
- 26mm width
- Single pole plus switched neutral earth leakage protection
- Current ratings up to 50A
- Voltage: 240VAC
- Trip time @200%: 6-40 sec
- Trip indication (mid trip handle position)
- Mounts on 35mm DIN-rail

Dimensions (H x W x D): 93 x 26 x 68.8mm (3.66 x 1.02 x 2.71"). *Trip curves available online.* Lockout handle 67101913 also available; *go online or call.*

CIRCUIT BREAKERS

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-9	10-99	100-499
● 9926291115	15	77M8108	129.37	119.28	112.56

(106004)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

(212570)

UL 98 AND UL 489 NON-FUSIBLE AND FUSIBLE ROTARY DISCONNECTS

RoHS Compliant Available

EATON

- 3 Poles
- High short-circuit current ratings – 200 kAIC
- Compact version available for UL 489 and UL 98
- The fusible product (30A - 800A) uses double break contacts, completely isolating the fuse in the open position, providing enhanced safety

R9C Non-Fusible

R9K Fusible

UL 98 rotary disconnects, available in fusible and non-fusible designs, are tested and approved to the stringent UL98 standard. They are heavy duty products that can be used for almost any main disconnect switch application. UL 489 rotary disconnects are UL certified for motor load short circuit protection. The **R9 series** has a variety of direct or external handles, shafts, and accessories available; *go online or call.*

UL98 SWITCH BODIES NON-FUSIBLE— OPEN, COMPACT

Mfg. Part No.	Current (A)	Frames	Color	Handle Type	Length	Stock No.	Price Each 1-4
● R9C3030U	30	C	...	...	...	41T3566	185.31
● R9C3060U	60	C	...	...	...	41T3567	202.46
● R9C3100U	100	C	...	...	...	41T3568	226.81
HANDLES							
● DHR9	30/60/100	D	...	...	...	41T3513	13.08
● DHR9DE	200	C only	...	Direct	...	41T3514	81.15
SHAFTS							
● SF55SH5X5	30/60/100	D&E	...	Direct	...	41T3606	9.06
● SF90SH5X5	30/60/100	A,B&C	...	Selector	55mm (2.2")	41T3607	14.77
● SF150SH5X5	30/60/100	A,B&C	...	Selector	90mm (3.5")	41T3580	20.55
● SF200SH5X5	30/60/100	A,B&C	...	Selector	150mm (6.0")	41T3587	23.06
● SF320SH5X5	30/60/100	A,B&C	...	Selector	200mm (7.9")	41T3595	24.59
UL 489 SWITCH BODIES FUSIBLE— OPEN, COMPACT							
● R4H3030FCC	30	H	...	...	...	41T3556	263.71
● R4H3030FJ	30	H	...	...	...	41T3558	253.45
HANDLES							
● DHR9HC	30	H	...	Direct	...	41T3516	39.97
● DHR9HJ	30	H	...	Direct	...	41T3517	49.92
SHAFTS							
● SHB0N12HV*	30	H&V	Black	Selector	...	41T3608	58.89
● SHR0N12HV*	30	H&V	Red	Selector	...	41T3612	62.42
● SF200PH5X5	30	H	...	1 Pistol	200mm (7.9")	41T3585	22.27
● SF320PH5X5	30	H	...	1 Pistol	320mm (12.6")	41T3593	26.13
● SF400PH5X5	30	H	...	1 Pistol	400mm (15.7")	41T3601	36.63

* NEMA Rating: 3R/12

UL98 SWITCH BODIES FUSIBLE— OPEN

Mfg. Part No.	Current (A)	Frames	Color	Handle Type	Length	Stock No.	Price Each 1-4
● R9K3060FJ	60	K	...	...	...	41T3574	403.39
● R9K3100FJ	100	K	...	...	...	41T3575	586.54
● R9L3200FJ	200	L	...	...	...	41T3576	1494.98
● R9M3400FJ	400	M	...	...	...	41T3577	1971.25
● R9N3600FJ	600	N	...	...	...	41T3578	3073.33
● R9N3800FL	800	N	...	...	...	41T3579	4749.27
HANDLES							
● DHR9J2M	60-400	J,K,L&M	...	...	...	41T3518	86.02
● DHR9N	600-800	N	...	...	...	41T3519	118.49
● PHB2N12F	60-400	D,E,K,L&M	...	...	...	41T3540	83.74
● PHR2N12F	60-400	D,E,K,L&M	...	...	...	41T3550	83.74
● PHB3N4XF	600/800	F,G&N	...	...	...	41T3544	318.84
● PHR3N4XF	600/800	F,G&N	...	...	...	41T3554	318.84
SHAFTS							
● SF200PH10X10	60-400	D,E,I,J,K,L&M	...	1or2 Pistol	200mm (7.9")	41T3582	26.13
● SF320PH10X10	60-400	D,E,I,J,K,L&M	...	1or2 Pistol	320mm (12.6")	41T3590	42.63
● SF400PH10X10	60-400	D,E,I,J,K,L&M	...	1or2 Pistol	400mm (15.7")	41T3598	49.92
● SF500PH10X10	60-400	D,E,I,J,K,L&M	...	1or2 Pistol	500mm (19.7")	41T3604	61.04
● SF200PH12X12	600/800	N	...	3 Pistol	200mm (7.9")	41T3583	33.04
● SF320PH12X12	600/800	N	...	3 Pistol	320mm (12.6")	41T3591	40.22
● SF400PH12X12	600/800	N	...	3 Pistol	400mm (15.7")	41T3599	45.24
● SF500PH12X12	600/800	N	...	3 Pistol	500mm (19.7")	41T3605	64.63

AUXILARY CONTACTS

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● AC1NOR9	Auxiliary Contact, 1NO, for R9 V-frame, Universal U type	41T3504	31.60
● AC1NCR9	Auxiliary Contact, 1NC, for R9 V-frame, Universal U type	41T3500	30.64
● AC1NO1NCJ2N	Aux Contact, 1NO/1NC, side mounted	41T3505	72.53
● AC2NO2NCJ2N	Aux Contact, 2NO/2NC, side mounted	41T3510	145.06

➤CONTINUED➤

UL 98 AND UL 489 NON-FUSIBLE AND FUSIBLE ROTARY DISCONNECTS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● AC1N01NCJ2NT	Aux Contact, 1N0/1NC w/ Test	41T3506	121.36
● AC2N02NCJ2NT	Aux Contact, 2N0/2NC w/ Test	41T3511	242.72

(195532)

CIRCUIT-LOCK® SWITCHED ENCLOSURES

RoHS Compliant Available

HUBBELL Wiring Device-Kellems

- Unfused disconnect switches are suitable as motor disconnects
- Completely non-metallic enclosure is non-conductive and will not corrode
- Accepts auxilliary contacts that can signal PLC controllers
- Large actuator handle indicates position and complies with OSHA lockout requirements
- Available in 30A, 60A and 100A ratings

Non-conducting internal frame automatically bonds all grounds. UL listed, CSA certified.

Mfg. Part No.	Description	Rating	Stock No.	Price Each 1-4
HBLDS3	Disconnect switch		35B317	250.18
HBLDS3AC	Disconnect switch w/aux. contacts	30	35B318	294.01
● HBLDS3SS	Disconnect, Unfused, 4X, SS	30	48W2102	465.48
● HBLDS3SSAC	Disconnt, Unfused, 4X, SS, W/AC	30	48W2103	480.24
● HBLDS3SSVFD	Disconnect, Unfused, 4X, SS, W/AC2	30	48W2104	480.24
HBLDS6AC	Disconnect switch w/aux. contacts	60	35B320	425.48
● HBLDS6SS	Disconnect, Unfused, 4X, SS	60	48W2105	622.92
● HBLDS6SSAC	Disconnect, Unfused, 4X, SS, W/AC	60	48W2106	659.46
HBLDS10	Disconnect switch	100	35B315	526.59
● HBLDS10SS	Disconnect, Unfused, 4X, SS	100	48W2100	711.66
● HBLDS10SSAC	Disconnect, Unfused, 4X, SS, W/AC	100	48W2101	748.20

ACCESSORIES

Mfg. Part No.	Description	Rating	Stock No.	Price Each 1-4
HBL100RNB	Neutral block	100	88H7345	21.44
HBLAC1	Auxilliary contacts, break before break	30	71C7830	60.56
HBLDS60100RS	Replacement Switch	30/60	88H7193	401.84

(80404)

MD ENCLOSED MOTOR DISCONNECT SWITCHES

RoHS Compliant Available

SQUARE D by Schneider Electric

Key Features

- Water-tight NEMA 4X polycarbonate enclosure
- Ideal for use in wash down or rugged industrial applications
- Covers additional enclosure types, such as NEMA 1, 12, 3R and 4
- Standard 3-pole design: Optional additional power pole
- Available in 30 A and 60 A sizes
- Horsepower rated
- Clear "ON/OFF" indication
- Front padlockable handle complies with OSHA lockout/tagout requirements
- Accepts up to three 8 mm padlocks

This MD motor disconnect switch serves as a local on/off switch for a motor when the motor branch circuit protection is in a central enclosure. It is in a compact NEMA 4X enclosure and is available in 30 A and 60 A versions.

Mfg. Part No.	Current Rating	No. of Poles	Stock No.	Price Each
MD3304X	30	3	52T4374	172.07
MD3604X	60	3	52T4375	230.37

ACCESSORIES

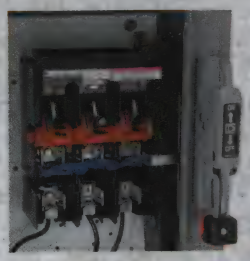
Mfg. Part No.	Description	Stock No.	Price Each
MDSAN11	1N0 + 1NC auxiliary contact module	52T4371	37.21
MDSAN20	2N0 auxiliary contact module	52T4372	73.64
MDS30P	Additional power pole - 30A	52T4373	45.25

(209305)

FLANGE MOUNT DISCONNECT SWITCHES

SQUARE D by Schneider Electric

- Designed for control panel installations
- Common switch profile 30 to 100A
- Interchangeable fuse clips 30 to 60A
- Switch and operating mechanism and handle mechanism included
- Variable depth range: 6 ⅝" to 18"
- Cable operated
- Disconnect switch size: 30A and 60A at 600VAC



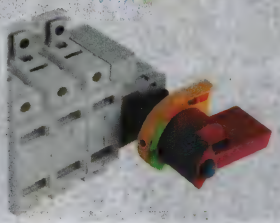
Mfg. Part No.	Current Rating (A)	Fuse Clip Rating (A) 250V	Fuse Clip Rating (A) 600V	Horsepower Max. AC	Horsepower Max. DC	Stock No.	Price Each 1-4
9422ATCF331	30	60	30	20	5	17B3616	606.68

(105263)

FUSIBLE AND NON-FUSIBLE DISCONNECT SWITCHES AND ACCESSORIES

RoHS Compliant Available

Schneider Electric



IEC-style disconnect switches utilize the latest technology and are designed to reduce panel space up to 25% without sacrificing performance or personnel safety. Available in ratings from 30-100A. Supplied with line-side terminal shrouds, all switches offer clear "on" and "off" position indication on both handle and switch, and can be padlocked in the "off" position with up to 3 locks. For complete disconnect select switch, shaft and handle. UL listed, CSA certified, CE compliant.

COMPACT FUSIBLE IEC-STYLE DISCONNECT SWITCHES

Mfg. Part No.	Description	Stock No.	Price Each Each	Price Each 2-4
GS1DDU3	30A, 3-Pole, Class CC, Use 5 x 5 Shaft	96B0146	261.66	246.81
GS1DU3	30A, 3-Pole, Class J, Use 5 x 5 Shaft	96B0147	282.05	266.04
FUSIBLE IEC-STYLE DISCONNECT SWITCHES				
GS1GU3	60A, 3-Pole, Class J, Use 10 x 10 Shaft	96B0150	364.80	344.10
COMPACT NON-FUSIBLE IEC-STYLE DISCONNECT SWITCHES				
● LK3DU3	30A, 3-Pole, Use 5 x 5 Shaft	96B0198	238.42	224.89

*Type 4, 4X-Rated (Indoor Use Only)

(51071)

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(196547)

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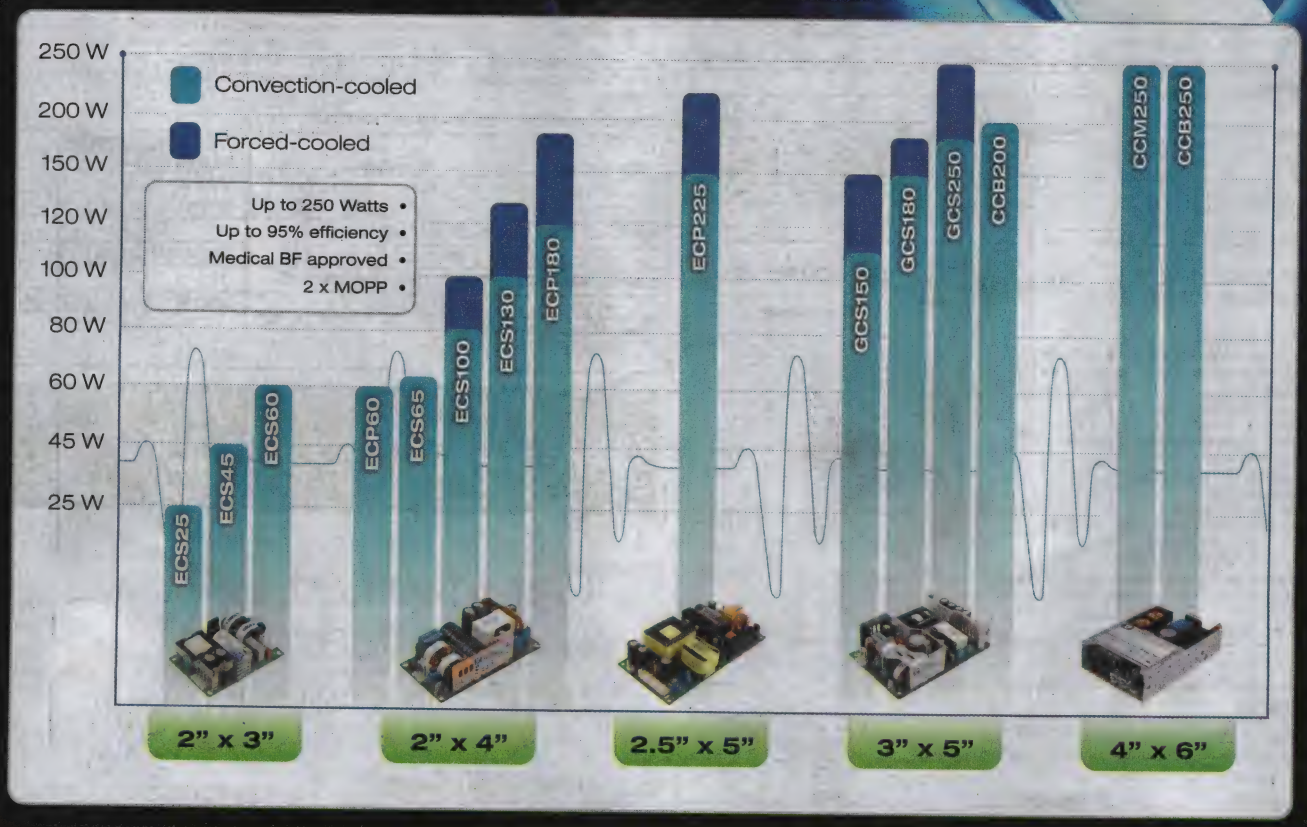
XP Power provides a wide range of medically approved power supplies with convection-cooled ratings for healthcare applications.



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DC-TO-DC CONVERTERS

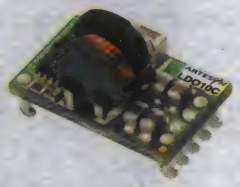
LD010C SERIES 50W C-CLASS NON-ISOLATED DC/DC CONVERTER

NEW

ARTESYN EMBEDDED TECHNOLOGIES

TUV Rheinland

- Surface mount
- Small package — 16.51mm x 10.41mm x 13.13mm
- Single output
- Total power: 50W
- Input voltage: 3VDC to 13.8VDC
- 10A current rating
- Adjustable output voltage: 0.59V to 5.1V
- High efficiency: up to 94% typ.
- Coplanarity: 150µm
- Excellent transient response
- Remote on/off
- Power enable
- Minimum airflow
- Termination voltage capability
- Operating temperature: -40°C to +85°C
- Flammability rated: UL94-V-0
- Two-year manufacturer's warranty



LD010C series 50W DC/DC converter is a high-density, open-frame, non-isolated converter for space sensitive applications. This 5-pin surface mount model has a wide input range and offers an adjustable output with 10A capability. Efficiency (high-input) is 91% typical (5Vin, 2.5Vout, 10A load). Current sink capability for termination applications. No added input or output capacitors needed for ripple current capability or stability.

Mfg. Part No.	Input Range (VDC)	Output Range (V)	Output Current Max. (A)	Regulation Line - Load	Stock No.	Price Each 1-49
LD010C-005W05-SJ	3 - 13.8	0.59 - 5.1	10	±0.2% - ±0.5%	71K5982	21.57

(211435)

CME SERIES ISOLATED 0.75W SINGLE OUTPUT DC/DC CONVERTERS

NEW

RoHS Compliant Available

muRata Ps Murata Power Solutions

- Cost effective, lower-power alternative to 1W converters
- Single isolated output
- 1kVDC or 3kVDC isolation options
- Wide temperature performance @ full 1W load (-40°C to 85°C)
- Industry standard packages and pinouts
- 3.3V and 5V inputs
- 3.3V, 5V and 12V outputs

DIP

SIP

CME series 0.75W single output DC/DC converters in popular input and output voltages. Galvanic isolation allows this device to be configured to provide an isolated negative rail in systems where only positive rails exist.

Mfg. Part No.	Isolation (kVDC)	Input Voltage (VDC) Nom.	Min.	Max	Output Voltage (DC)	Output Current	Efficiency (%)	Stock No.	Price Each 1-4
DIP PACKAGE									
● CME0505DC	1	5	4.5	5.5	5V	150mA	70	29X1503	3.74
SIP PACKAGE									
● CME0505SC	1	5	4.5	5.5	5V	150mA	70	29X1504	3.74
● CME0512SC	1	5	4.5	5.5	12V	63mA	77	29X1506	3.74
● CME0303S3C	3	3.3	2.97	3.63	3.3V	227mA	73	29X1501	3.74
● CME0305S3C	3	3.3	2.97	3.63	5V	150mA	73	29X1502	3.74
● CME0505S3C	3	5	4.5	5.5	5V	150mA	70	29X1505	3.74
● CME0512S3C	3	5	4.5	5.5	12V	63mA	75	29X1507	3.74

(211524)

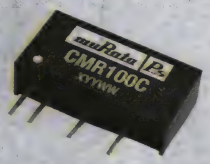
CMR SERIES ISOLATED 0.75W SINGLE AND DUAL OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

muRata Ps Murata Power Solutions

NEW

- Cost effective, lower-power alternative to 1W converters
- Single or dual isolated outputs
- 1kVDC or 3kVDC isolation options
- Wide temperature performance @ full 1W load (-40°C to 85°C)
- Industry standard SIP package and pinouts
- 5V, 12V, and 24V inputs
- 5V, ±12V and ±15V outputs



CMR series 0.75W single and dual output DC/DC converters in popular input and output voltages. Galvanic isolation allows this device to be configured to provide an isolated negative rail in systems where only positive rails exist.

Mfg. Part No.	Isolation (kVDC)	Input Voltage (VDC) Nom.	Min.	Max	Output Voltage (DC)	Output Current	Efficiency (%)	Stock No.	Price Each 1-4
● CMR100C	1	5	4.5	5.5	5V	150mA	69	29X1511	3.74
● CMR118C	1	24	21.6	26.4	5V	150mA	70	29X1512	3.74
● CMR0505SA3C	3	5	4.5	5.5	5V	150mA	68	29X1508	4.14
● CMR0512S3C	3	5	4.5	5.5	±12V	±31mA	78	29X1509	4.14
● CMR0515S3C	3	5	4.5	5.5	±15V	±25mA	79	29X1510	4.14
● CMR1215S3C	3	12	10.8	13.2	±15V	±25mA	79	29X1513	4.14

(211526)

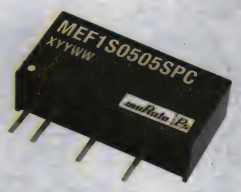
MEF1 SERIES ISOLATED 1W REGULATED SINGLE OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

muRata Ps Murata Power Solutions

NEW

- Short circuit protection
- Operation to zero load
- Output regulation <1%
- Power density 0.85W/cm3
- Single isolated output
- UL94V-0 rated package material
- Footprint from 1.17cm2
- 1kVDC or 3kVDC isolation options
- 3.3V, 5V, 12V and 24V inputs
- 3.3V and 5V outputs
- Fully encapsulated with toroidal magnetics



MEF1 series isolated 1W regulated single output DC/DC converters is used where a tightly regulated supply is required. Ideal for situations where the input voltage is not tightly controlled. The single rail regulated output makes this device a perfect choice to power sensors, such as pressure transducers, hall effect sensors and mass airflow sensors.

Mfg. Part No.	Isolation (kVDC)	Input Voltage (VDC) Nom.	Min.	Max.	Output Voltage (DC)	Output Current	Efficiency (%)	Stock No.	Price Each 1-4
● MEF1S0303SPC	1	3.3	3.135	3.465	3.3	303mA	66	23X5765	5.07
● MEF1S0305SPC	1	3.3	3.135	3.465	5	200mA	71	23X5767	5.07
● MEF1S0503SPC	1	5	4.75	5.25	3.3	303mA	68.5	23X5769	5.07
● MEF1S0505SPC	1	5	4.75	5.25	5	200mA	73	23X5771	5.07
● MEF1S1203SPC	1	12	11.4	12.6	3.3	303mA	69	23X5773	5.07
● MEF1S1205SPC	1	12	11.4	12.6	5	200mA	73.5	23X5775	5.07
● MEF1S2403SPC	1	24	22.8	25.2	3.3	303mA	69	23X5777	5.07
● MEF1S2405SPC	1	24	22.8	25.2	5	200mA	73	23X5779	5.07
● MEF1S0303SP3C	3	3.3	3.135	3.465	3.3	303mA	66	23X5766	5.58
● MEF1S0305SP3C	3	3.3	3.135	3.465	5	200mA	71	23X5768	5.58
● MEF1S0503SP3C	3	5	4.75	5.25	3.3	303mA	68.5	23X5770	5.58
● MEF1S0505SP3C	3	5	4.75	5.25	5	200mA	73	23X5772	5.58
● MEF1S1203SP3C	3	12	11.4	12.6	3.3	303mA	69	23X5774	5.58
● MEF1S1205SP3C	3	12	11.4	12.6	5	200mA	73.5	23X5776	5.58
● MEF1S2403SP3C	3	24	22.8	25.2	3.3	303mA	69	23X5778	5.58
● MEF1S2405SP3C	3	24	22.8	25.2	5	200mA	73	23X5780	5.58

(211528)

NCS1 SERIES ISOLATED 1W 4:1 INPUT SINGLE OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

muRata Ps Murata Power Solutions

NEW

- 4:1 Wide range voltage input
- Single output
- 1kVDC isolation
- 3.3V, 5V and 12V inputs
- No electrolytic capacitors
- Continuous short circuit protection
- Industry standard package and pinout
- Operating temperature range: -40°C to 105°C with derating

NCS1 series of DC/DC converters are ideally suited for applications in telecommunications, battery powered systems, process control and distrbuted power systems.

Mfg. Part No.	Input Voltage Nom.	Min.	Max	Output Voltage (VDC)	Output Current (mA)	Efficiency (%) 5V or 24V Input	12V Input	Stock No.	Price Each 1-4
● NCS1S1203SC	12	4.5	18	3.3V	303mA	77	75	41X4062	8.45
● NCS1S1205SC	12	4.5	18	5V	200mA	79	77	41X4063	8.45
● NCS1S1212SC	12	4.5	18	12V	83mA	78	79	41X4064	8.45
● NCS1S2403SC	24	9	36	3.3V	303mA	78.5	76	41X4065	8.45
● NCS1S2405SC	24	9	36	5V	200mA	82	80	41X4066	8.45
● NCS1S2412SC	24	9	36	12V	83mA	83	80	41X4067	8.45

(211891)

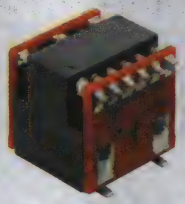
MTU2 SERIES ISOLATED 2W SINGLE AND DUAL OUTPUT SURFACE MOUNT DC/DC CONVERTERS

RoHS Compliant Available

muRata Ps Murata Power Solutions

NEW

- Miniature, high-perforamnce SMD design
- Single or dual isolated outputs
- 1kVDC isolation
- Efficiency up to 85% (Typ)
- MSL Level 1
- Power density 3.403W/cm^3
- 3.3V, 5V, 12V, and 24V inputs
- 5V, 12V and 24V single and dual outputs
- Multi-layer ceramic capacitors



MTU2 series miniature surface mount, high-performance DC/DC converters offer 2W of available output power over a wide temperature range and feature a footprint reduction of over 50% from previous generations of 2W SMD DC/DC devices. It is more efficient and offers improved regulation performance for applications where a wide output voltage variation can not be tolerated. Pin compatible with the **MTU1 series** isolated 1W single and dual output SMD DC/DC converters. Suitable for all applications where high volume production is envisaged.

➤CONTINUED➤

MTU2 SERIES ISOLATED 2W SINGLE AND DUAL OUTPUT SURFACE MOUNT DC/DC CONVERTERS (CONT.)

Mfg. Part No.	Isolation (kVDC)	Input Voltage (VDC) Nom.	Min.	Max	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)	Tape Cut Stock No.	Price Each 1-4
MTU2S0305MC	1	3.3	2.97	3.63	5	400	79	45X6292	8.70
MTU2S0505MC	1	5	4.5	5.5	5	400	82	45X6294	8.70
MTU2S0524MC	1	5	4.5	5.5	24	83	85	45X6296	8.70
MTU2S1205MC	1	12	10.8	13.2	5	400	80	45X6298	8.70
MTU2S2405MC	1	24	21.6	26.4	5	400	80	45X6300	8.70
MTU2D0505MC	1	5	4.5	5.5	±5	±200	82	45X6286	8.70
MTU2D0512MC	1	5	4.5	5.5	±12	±83	85	45X6288	8.70
MTU2D1212MC	1	12	10.8	13.2	±12	±83	83	45X6290	8.70

(212003)

MGJ2 SERIES ISOLATED 2W DUAL OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

Murata Power Solutions

NEW

- Developed specifically for IGBT driver applications
- 5.2kVDC isolation test voltage
- 5V, 12V, 15V and 24V inputs
- +15V/-5V, +15V/-8.7V and +20V/-5V outputs
- Power density 0.81W/cm^3
- Ripple & Noise (typ.) 30mVp-p
- Short-circuit protection
- Ultra-low coupling capacitance
- SIP package style
- Footprint 1.96cm^2
- Size: 19.65 x 12.65 x 9.95mm
- Operation to 100°C
- Convection air cooling

MGJ2 series DC/DC converters are ideal for powering "high-side" and "low-side" gate drive circuits for IGBTs and Mosfets in bridge circuits. A choice of asymmetric output voltages allows optimum drive levels for best system efficiency and EMI. Characterized for high-isolation and dv/dt requirements commonly seen in bridge circuits used in motor drives and inverters, these units are built to provide reliability and long life and feature an industrial grade temperature rating.

Mfg. Part No.	Input Voltage (VDC)	Output 1 VDC	mA	Output 2 VDC	mA	Efficiency (%)	Stock No.	Price Each 1-4
MGJ2D051505SC	5	15	80	-5	40	76	53X9022	8.30
MGJ2D051509SC	5	15	80	-8.7	40	77.5	53X9023	8.30
MGJ2D052005SC	5	20	80	-5	40	78.5	53X9024	8.30
MGJ2D121505SC	12	15	80	-5	40	80	53X9025	8.30
MGJ2D121509SC	12	15	80	-8.7	40	80	53X9026	8.30
MGJ2D122005SC	12	20	80	-5	40	82	53X9027	8.30
MGJ2D151505SC	15	15	80	-5	40	80	53X9028	8.30
MGJ2D151509SC	15	15	80	-8.7	40	80	53X9029	8.30
MGJ2D152005SC	15	20	80	-5	40	81	53X9030	8.30
MGJ2D241505SC	24	15	80	-5	40	80.5	53X9031	8.30
MGJ2D241509SC	24	15	80	-8.7	40	82	53X9032	8.30
MGJ2D242005SC	24	20	80	-5	40	82	53X9033	8.30

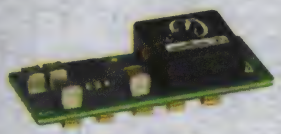
(212281)

OKAMI OKY SERIES 3, 5, 10, 16 AMP DOSA POL SMT DC/DC CONVERTERS

RoHS Compliant Available

Murata Power Solutions

OKY-T/3 & T/5-W5 Series



OKY-T/10 & T/16-D12 Series

- Drop-in replacement for DOSA PoL converters
- Competitive alternative to discrete designs
- Choice of 3A, 5A, 10A and 16A output current
- High load capacitance to 1000µF
- High power conversion efficiency up to 96%
- Virtually no derating across rated temperature range
- Wide input voltage range and user selectable output voltage
- UL/EN/IEC 60950-1 safety

OKY-T/3, T/5-D12 series converters include under voltage lockout (UVLO), ouput short circuit protection, over-current and over temperature protection. Designed to support a wide range of applications, Okami™ modules are ideal for powering the latest generation of FPGAs and DSPs, are drop-in replacement for other DOSA-compliant parts, and are an alternative to discrete designs.

Dimensions(LxWxH): 0.82 x 0.47 x 0.28"

Mfg. Part No.	Input (V) Min.	Input (V) Max.	Output (VDC)	Power (W)	Output Current (A)	Tape Cut Stock No.	Price Each 1-4
OKY-T/3-W5N-C	2.4	5.5	3.63	10.9	3	07R8790	6.25
OKY-T/3-W5P-C	2.4	5.5	3.63	10.9	3	07R8791	6.25
OKY-T/3-D12N-C	8.3	14	5	15.3	3	56P4923	6.25
OKY-T/3-D12P-C	8.3	14	5	15.3	3	56P4925	6.25
OKY-T/5-W5N-C	2.4	5.5	3.63	18	5	07R8792	7.86
OKY-T/5-W5P-C	2.4	5.5	3.63	18	5	07R8793	7.86

➤CONTINUED➤

OKAMI OKY SERIES 3, 5, 10, 16 AMP DOSA POL SMT DC/DC CONVERTERS (CONT.)

Mfg. Part No.	Input (V) Min.	Input (V) Max.	Output (VDC)	Power (W)	Output Current (A)	Tape Cut Stock No.	Price Each 1-4
OKY-T/5-D12N-C	8.3	14	5.5	25	5	56P4927	7.86
OKY-T/5-D12P-C	8.3	14	5.5	25	5	33R6270	7.86
Dimensions(LxWxH): 1.3 x 0.53 x 0.33"							
OKY-T/10-D12N-C	8.3	14	5.5	50	10	10R4024	12.59
OKY-T/10-D12P-C	8.3	14	5.5	50	10	10R4025	12.59
OKY2-T/10-D12N-C	8.3	14	5.5	50	10	10R4028	14.13
OKY2-T/10-D12P-C	8.3	14	5.5	50	10	10R4029	14.13
OKY-T/16-D12N-C	8.3	14	5.5	80	16	10R4026	14.13
OKY-T/16-D12P-C	8.3	14	5.5	80	16	10R4027	14.13
OKY2-T/16-D12N-C	8.3	14	5.5	80	16	10R4030	16.07
OKY2-T/16-D12P-C	8.3	14	5.5	80	16	10R4031	15.18

(142204)

OKAMI OKL SERIES 12V 3 AMP iLGA SMT POL DC/DC CONVERTERS

RoHS Compliant Available

Murata Power Solutions

- iLGA inspectable land grid array
- 4.5-14VDC input voltage range
- Programmable output voltage from 0.591-5.5VDC
- Drives up to 200 µF ceramic capacitive loads
- High power conversion effi ciency at 93%
- Outstanding thermal derating performance
- Over temperature and over current protection
- On/Off control and Power Good signal

OKL-T/3 series are miniature non-isolated Point-of-Load (PoL) DC/DC power converters for embedded applications. Featuring iLGA inspectable Land Grid Array (LGA) format that allows easy access of all pin connections for inspection of LGA solder joints. Based on fixed-frequency synchronous buck converter switching topology, the high power conversion efficient Point of Load (PoL) module features programmable output voltage and on/off control. These units are designed to meet all standard UL/EN/ IEC 60950-1 safety and FCC EMI/RFI emissions certifications. Dimensions(LxWxH): 0.48 x 0.48 x 0.25".

Mfg. Part No.	Input (V) Min.	Input (V) Max.	Output Voltage (VDC)	Power (W)	Output Current (A)	Tape Cut Stock No.	Price Each 1-4
OKL-T/3-W12N-C	4.5	14	5.5	15	3	10R4022	8.65
OKL-T/3-W12P-C	4.5	14	5.5	15	3	10R4023	9.05
OKL-T/3-W5N-C	2.4	5.5	3.63	9.9	3	74R7927	8.65
OKL-T/6-W5N-C	2.4	5.5	3.3	19.8	6	74R7931	10.88
OKL-T/6-W12N-C	4.5	14	5.5	30	6	74R7929	11.38

(148738)

OKAMI OKI-78SR SERIES 1.5 AMP SIP DC/DC CONVERTERS

RoHS Compliant Available

Murata Power Solutions

- Ultra wide 7 to 36 VDC input range
- Fixed Outputs of 3.3 or 5 VDC up to 1.5 Amps
- Vertical SIP-mount, small footprint package
- "No heat sink" direct replacement for 3-terminal 78xx-series linear regulators
- Short circuit protection
- Outstanding thermal derating performance
- UL/EN/IEC 60950-1 safety approvals

OKI-78SR series are non-isolated switching regulator (SR) DC/DC power converters for embedded applications. The fixed single output converters offer both tight regulation and high efficiency directly at the power usage site and are a direct plug-in replacement for TO-220 package 78xx series linear regulators. Typically, no extra outside components are required. All standard safety and EMI/RFI certifications are available. Dimensions (LxWxH): 0.30 x 0.41 x 0.65".

Mfg. Part No.	Input (V) Min.	Input (V) Max.	Output Voltage (VDC)	Power (W)	Output Current (A)	Efficiency (Typ.) %	Stock No.	Price Each 1-4
OKI-78SR-3.3/1.5-W36-C	7	36	3.3	4.95	1.5	85.5	72R3615	4.72
OKI-78SR-5/1.5-W36-C	7	36	5	7.5	1.5	90.5	72R3616	4.79

(176255)

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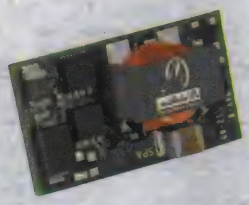
(196525)

DC-TO-DC CONVERTERS

OKAMI OKI SERIES 3A DOSA-SMT DC/DC CONVERTERS

RoHS Compliant Available

Murata Power Solutions



- Non-isolated SMT POL DC/DC power module
- Wide 16-40Vdc input voltage range
- Selectable output voltage from 0.7525-4.5Vdc (**OKI-T/3-W32**), 0.7525-5.5Vdc (**OKI-T/3-W40**) and 5.021-15.5Vdc (**OKI-T/36W-W40**)
- 3A output current models
- Drives 1000µF ceramic capacitive loads
- High power conversion efficiency
- Outstanding thermal derating performance
- On/Off control, positive or negative polarity
- Industry-standard (DOSA) surface-mount package
- UL/EN/IEC 60950-1 safety (pending)
- RoHS-6 hazardous substance compliance

OKI-T/3 and **OKI-T/36 series** are non-isolated Point-of-Load (POL) DC/DC power converters for embedded applications. These converters also include under voltage lock out (UVLO), output short circuit protection, overcurrent and over temperature protections. Applications include powering CPU's, industrial 24V transducers and POS terminals. Dimensions(LxWxH): 0.82 x 0.47 x 0.34".

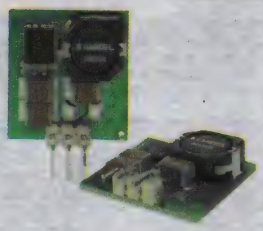
Mfg. Part No.	Input Voltage	Output Voltage (VDC)	Power (W)	Output Current (A)	Tape Cut Stock No.	Tape Cut Price Each 1-249
OKI-T/3-W32N-C	9V to 32V	4.5	13.5	3	52T7391	9.63
OKI-T/3-W32P-C	9V to 32V	4.5	13.5	3	52T7392	9.63
OKI-T/3-W40N-C	16V to 40V	5.5	15	3	51R4699	14.60
OKI-T/3-W40P-C	16V to 40V	5.5	15	3	51R4701	13.96
OKI-T/36W-W40N-C	19V to 40V	15.5	36	3	27T2076	16.45

(164459)

78SR SERIES, HIGH EFFICIENCY, SINGLE OUTPUT, NON-ISOLATED DC/DC CONVERTERS

RoHS Compliant Available

Murata Power Solutions



- Up to 95% efficiency– no costly heat sinks or fans required
- Wide 7.5– 36VDC input voltage range
- Two package options: 3-pin vertical mount SIP, low profile, horizontal mount SIP
- No external input/output filter capacitors required
- –40 to +70°C full load operation
- Open frame design minimizes self-heating and pc-board footprint
- Low noise output for powering sensitive instrumentation

78SR series step-down switching regulators provide high-efficiency drop-in replacements for LM7805 and LM7812 applications. Their higher efficiency ensures significantly lower heat generation and provides increased run time in battery-powered applications, making these regulators ideal for low power "green" applications.

Mfg. Part No.	Input Voltage, Min.	Input Voltage, Max.	Output 1 (VDC) +	Output Current 1 (A)	Stock No.	Price Each 1-4
78SR-3.3/2-C	8	32	3.3	2	40M6585	13.68
78SRH-3.3/2-C	8	32	3.3	2	40M6587	13.68
78SR-5/2-C	8	32	5	2	40M6586	14.93
78SRH-5/2-C	8	32	5	2	40M6588	14.93
7803SR-C	7.5	36	3.3	0.5	87K6144	11.51
7803SRH-C	7.5	36	3.3	0.5	87K6145	12.32
7805SR-C	7.5	36	5	0.5	87K6146	12.40
7805SRH-C	7.5	36	5	0.5	87K6147	11.51
7812SR-C	15	36	12	0.4	87K6148	12.56
7812SRH-C	15	36	12	0.4	87K6149	12.32

(102087)

HPR SERIES DC/DC CONVERTERS

RoHS Compliant Available

Murata Power Solutions

- High Output Power Density
- Highly Efficient
- Low Cost
- Internal Input and Output Filtering

HPR1XX and HPR4XX series uses advanced circuit design and packaging technology to deliver superior reliability and performance. **HPR1XX series** models: 0.785L x 0.525W x 0.375"H; **HPR10XXC series and HPR4XX series** models: 0.77L x 0.24W x 0.4"H.

0.75 WATT MINIATURE PACKAGE

Mfg. Part No.	Input Voltage, Min.	Input Voltage, Max.	Output 1 (VDC) +	Rated Output Current (mA)	Stock No.	Price Each 1-4
HPR100C	4.5	5.5	5	150	62K2811	9.43
HPR104C	4.5	5.5	±12	±30	70K2435	12.11
HPR105C	4.5	5.5	±15	±25	70K2438	12.11
HPR107C	10.8	13.2	12	62	70K2444	8.80
HPR112C	13.5	16.5	5	150	70K2459	9.12
HPR120C	21.6	26.4	15	50	70K2483	8.80
HPR122C	21.6	26.4	±12	±30	70K2489	11.44

➤ CONTINUED ➤

HPR SERIES DC/DC CONVERTERS (CONT.)

1 WATT UNREGULATED SIP

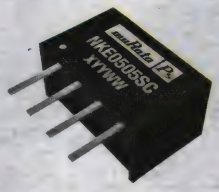
Mfg. Part No.	Input Voltage, Min.	Input Voltage, Max.	Output 1 (VDC) +	Rated Output Current (mA)	Stock No.	Price Each 1-4
HPR1000C	4.5	5.5	5	200	87K4094	9.68
HPR1023C	21.6	26.4	±15	±34	87K4116	11.88
0.75 WATT MINIATURE SIP						
HPR400C	4.5	5.5	5	150	67K8914	13.31
HPR402C	4.5	5.5	15	50	70K2496	12.57
HPR403C	4.5	5.5	±5	±75	70K2497	17.82
HPR404C	4.5	5.5	±12	±30	70K2498	18.86
HPR405C	4.5	5.5	±15	±25	70K2499	18.86
HPR407C	10.8	13.2	12	62	70K2501	12.57
HPR410C	10.8	13.2	±12	±30	70K2503	17.82
HPR411C	10.8	13.2	±15	±25	70K2504	17.82
HPR414C	13.5	16.5	15	50	70K2507	12.57
HPR417C	13.5	16.5	±15	±25	70K2509	17.82
HPR418C	21.6	26.4	5	150	70K2510	12.57
HPR422C	21.6	26.4	±12	±30	70K2513	17.82
HPR423C	21.6	26.4	±15	±25	70K2514	17.82

(74297)

NKE SERIES ISOLATED SUBMINIATURE 1W SINGLE OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

Murata Power Solutions



- Subminiature SIP and DIP Package Styles
- Efficiency to 81%
- Wide Temperature Range: -40°C to 85°C
- UL 94V-0 Package Material
- Footprint at 0.69cm^2
- Single Isolated Output
- Industry-Standard Pinout
- No Heatsink Required
- Internal SMD Construction
- Fully Encapsulated with Toroidal Magnetics
- No External Components Required
- UL60950 recognized

NKE series are subminiature DC/DC converters that have improved efficiency, lower output ripple and 3kVDC isolation capabilities. Galvanic isolation allows the device to be configured to provide an isolated negative rail in systems where only positive rails exist. Pin output SIP: 1 = -VIN; 2 = +VIN; 3 = -VOUT; 4 = +VOUT.

Mfg. Part No.*	Input Voltage, Min.	Input Voltage, Max.	Output 1 (VDC) +	Output Current 1 (mA)	Stock No.	Price Each 1-4
NKE0303DC	2.97	3.63	3.3	303	61K3032	8.29
NKE0303SC	2.97	3.63	3.3	303	61K3033	8.39
NKE0305DC	2.97	3.63	5	200	61K3034	8.39
NKE0305SC	2.97	3.63	5	200	61K3035	8.39
NKE0503DC	4.5	5.5	3.3	303	61K3038	8.39
NKE0503SC	4.5	5.5	3.3	303	61K3039	7.92
NKE0505DC	4.5	5.5	5	200	61K3040	8.49
NKE0505SC	4.5	5.5	5	200	61K3042	8.49
NKE0505SEC	4.5	5.5	5	200	61K3043	8.39
NKE0509SC	4.5	5.5	9	111	61K3045	8.39
NKE0512DC	4.5	5.5	12	83	61K3046	7.92
NKE0512SC	4.5	5.5	12	83	60K0303	7.92
NKE0515DC	4.5	5.5	15	66	61K3047	7.92
NKE0515SC	4.5	5.5	15	66	61K3048	7.92
NKE1205DC	10.8	13.2	5	200	61K3049	8.39
NKE1205SC	10.8	13.2	5	200	61K3050	8.39
NKE1209SC	10.8	13.2	9	111	61K3052	7.92
NKE1212DC	10.8	13.2	12	83	61K3053	7.92
NKE1212SC	10.8	13.2	12	83	61K3054	8.49
NKE1215DC	10.8	13.2	15	66	61K3055	7.92
NKE1215SC	10.8	13.2	15	66	61K3056	7.92

***SC suffix** denotes SIP and **DC suffix** denotes DIP package styles

(70291)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

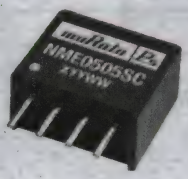
(196535)

NME SERIES ISOLATED 1W SINGLE OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

muRata Ps Murata Power Solutions

- Efficiency from 82%
- Operating temperature: -40°C to 85°C
- Power density: 1.53W/cm^3
- UL 94V-0 package material
- 1kVDC isolation
- Internal SMD construction
- Fully encapsulated with with toroidal magnetics
- MTTF up to 3.4 million hours



NME series of DC/DC converters is particularly suited for isolating and/or converting DC power rails. The galvanic isolation allows the device to be configured to provide an isolated negative rail in system where only positive rail exists.

SIP PACKAGE

Mfg. Part No.	Input Voltage Nom.	Input Voltage Min.	Input Voltage Max	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)	Stock No.	Price Each 1-4
NME0505SC	5	4.5	5.5	5	200	69	61K3108	8.95
NME0509SC	5	4.5	5.5	9	111	77	61K3110	8.45
NME0512SC	5	4.5	5.5	12	83	78	61K3112	8.84
NME0515SC	5	4.5	5.5	15	66	80	61K3114	8.95
NME0524SC	5	4.5	5.5	24	42	80	61K3116	8.95
NME1205SC	12	10.8	13.2	5	200	69	61K3118	9.06
NME1209SC	12	10.8	13.2	9	111	74	61K3120	8.45
NME1212SC	12	10.8	13.2	12	83	76	61K3122	8.45
NME1215SC	12	10.8	13.2	15	66	75	61K3123	8.95
NME1515SC	15	13.5	16.5	15	67	82	70K3922	9.66
NME2405SC	24	21.6	26.4	5	200	70	61K3125	10.51
NME2409SC	24	21.6	26.4	9	111	75	61K3127	10.51
NME2412SC	24	21.6	26.4	12	83	80	61K3129	10.99
NME2415SC	24	21.6	26.4	15	66	80	61K3131	10.51
DIP PACKAGE								
NME0505DC	5	4.5	5.5	5	200	69	61K3107	8.84
NME0509DC	5	4.5	5.5	9	111	77	61K3109	8.45
NME0512DC	5	4.5	5.5	12	83	78	61K3111	8.45
NME0515DC	5	4.5	5.5	15	66	80	61K3113	8.45
NME1205DC	12	10.8	13.2	5	200	69	61K3117	8.95
NME1212DC	12	10.8	13.2	12	83	76	61K3121	8.45
NME1215DC	12	10.8	13.2	15	66	75	96B4173	8.45
NME2405DC	24	21.6	26.4	5	200	70	61K3124	11.00
NME2412DC	24	21.6	26.4	12	83	80	61K3128	11.00
NME2415DC	24	21.6	26.4	15	66	80	61K3130	11.00

(155318)

NMF SERIES ISOLATED 1W REGULATED SINGLE OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

muRata Ps Murata Power Solutions

- Output regulation <1.5%
- Output programmable
- Power density: 0.85W/cm^3
- UL 94V-0 package material
- 1kVDC isolation
- Internal SMD construction
- MTTF up to 2.4 million hours

NMF series of DC/DC converters is used where a tightly regulated supply is required. the output trim pin makes the device particularly suitable for applications requiring a programmable output voltage. The 5V output version can be used to give a regulated output, adjustable between 1.2V and 5.0V with a single resistor.

DIP PACKAGE STYLE

Mfg. Part No.	Input Voltage Nom.	Input Voltage Min.	Input Voltage Max	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)	Stock No.	Price Each 1-4
NMF0505DC	5	4.75	5.25	5	100	50	61K3140	9.00
SIP PACKAGE STYLES								
NMF0505SC	5	4.75	5.25	5	100	50	61K3141	8.56
NMF0512SC	5	4.75	5.25	12	83	62	61K3145	8.56
NMF0515SC	5	4.75	5.25	15	67	62	61K3147	8.56
NMF1205SC	12	11.4	12.6	5	100	50	61K3149	8.95
NMF1212SC	12	11.4	12.6	12	83	62	61K3153	8.56
NMF1215SC	12	11.4	12.6	15	67	62	61K3155	9.06
NMF2405SC	24	22.8	25.2	5	100	50	61K3157	9.86
NMF2412SC	24	22.8	25.2	12	83	62	61K3161	9.86
NMF2415SC	24	22.8	25.2	15	67	62	61K3163	9.86

(155319)

MEV1 SERIES 3kVDC ISOLATED 1W SINGLE & DUAL OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

muRata Ps Murata Power Solutions

- Efficiency to 89% (typ)
- Power density 0.85W/cm3
- Wide temperature performance at full 1 Watt load, –40°C to 85°C
- UL 94V-0 package material
- No heatsink required
- Industry standard pinout
- 3kVDC isolation (1 minute)
- 5V, 12V, 15V, 24V, & 48V inputs
- 5V, 9V, 12V, & 15V output
- Fully encapsulated with toroidal magnetics
- No external components required
- No electrolytic or tantalum capacitors

MEV1 series is the new high performance version of the 1W **NMV series**; *ordered separately go online or call.* **MEV1 series** is more efficient and offers improved regulation performance ≤5% for applications where a wide output voltage variation can not be tolerated. They are ideally suited for providing local supplies on control system boards with the added benefit of 3kVDC galvanic isolation to reduce switching noise. **MEV1 series** is available in an industry SIP 7 or DIP 14 package.

SIP PACKAGE

Mfg. Part No.	No. of Outputs	Input Voltage	Output Voltage (V)	Output Current (mA)	Load Regulation Typ. (%)	Load Regulation Max. (%)	Efficiency (%)	Stock No.	Price Each 1-4
MEV1S0505SC	1	4.5V to 5.5V	5	200	5.4	6.2	84	27P7532	9.43
MEV1S0509SC	1	4.5V to 5.5V	9	111	4.2	5.5	86.5	27P7533	9.55
MEV1S0512SC	1	4.5V to 5.5V	12	84	4.6	5.5	87	27P7534	9.02
MEV1S0515SC	1	4.5V to 5.5V	15	67	4.5	5	87.5	27P7535	9.02
MEV1S1205SC	1	10.8V to 13.2V	5	200	4.5	5	84	27P7536	9.55
MEV1S1209SC	1	10.8V to 13.2V	9	111	3	3.3	86	27P7537	9.02
MEV1S1212SC	1	10.8V to 13.2V	12	84	3	3.6	88	27P7538	9.02
MEV1S1215SC	1	10.8V to 13.2V	15	67	2.5	2.9	88	27P7539	9.02
MEV1S1505SC	1	13.5V to 16.5V	5	200	4	5	83.5	25R7962	9.02
MEV1S1509SC	1	13.5V to 16.5V	9	111	2.5	3.5	86.5	25R7963	9.02
MEV1S1512SC	1	13.5V to 16.5V	12	84	2.3	3.5	87.5	25R7964	9.02
MEV1S1515SC	1	13.5V to 16.5V	15	67	2.5	3.5	89	25R7965	9.02
MEV1S2405SC	1	21.6V to 26.4V	5	200	3.3	5	84	25R7966	9.02
MEV1S2409SC	1	21.6V to 26.4V	9	111	2.2	3.5	86.5	25R7967	9.02
MEV1S2412SC	1	21.6V to 26.4V	12	84	2	3.5	87.5	25R7968	9.55
MEV1S2415SC	1	21.6V to 26.4V	15	67	1.8	3	87.5	25R7969	9.55
MEV1S4805SC	1	43.2V to 52.8V	5	200	3.3	5	79.5	25R7970	9.02
MEV1S4809SC	1	43.2V to 52.8V	9	111	2.4	3.5	82	25R7971	9.02
MEV1S4812SC	1	43.2V to 52.8V	12	84	2	3	82	25R7972	9.02
MEV1S4815SC	1	43.2V to 52.8V	15	67	1.9	3	82.5	25R7973	9.02
MEV1D0505SC	2	4.5V to 5.5V	±5	±100	5.1	6.5	85	58T3441	9.02
MEV1D0509SC	2	4.5V to 5.5V	±9	±56	4.1	5.2	87	58T3443	9.02
MEV1D0512SC	2	4.5V to 5.5V	±12	±42	4.2	5.4	87.5	58T3445	9.34
MEV1D0515SC	2	4.5V to 5.5V	±15	±33	4	5.2	88	58T3447	9.02
MEV1D1205SC	2	10.8V to 13.2V	±5	±100	3.8	4.5	85	58T3449	9.02
MEV1D1209SC	2	10.8V to 13.2V	±9	±56	2.7	3.5	87	58T3451	9.02
MEV1D1212SC	2	10.8V to 13.2V	±12	±42	2.7	3.4	89.5	58T3453	9.02
MEV1D1215SC	2	10.8V to 13.2V	±15	±33	2.2	3	88.5	58T3455	9.02
MEV1D1505SC	2	13.5V to 16.5V	±5	±100	3.3	4	84.5	58T3457	9.02
MEV1D1509SC	2	13.5V to 16.5V	±9	±56	2.2	2.9	87	58T3459	9.02
MEV1D1512SC	2	13.5V to 16.5V	±12	±42	2.1	3	88	58T3461	9.02
MEV1D1515SC	2	13.5V to 16.5V	±15	±33	2.3	3	90.5	58T3463	9.02
MEV1D2405SC	2	21.6V to 26.4V	±5	±100	2.9	4	84	58T3465	9.02
MEV1D2409SC	2	21.6V to 26.4V	±9	±56	1.9	2.7	86	58T3467	9.02
MEV1D2412SC	2	21.6V to 26.4V	±12	±42	1.8	2.7	88	58T3469	9.02
MEV1D2415SC	2	21.6V to 26.4V	±15	±33	1.5	2.4	88	58T3471	9.02
MEV1D4805SC	2	43.2V to 52.8V	±5	±100	2.6	3.3	80	58T3472	9.02
MEV1D4809SC	2	43.2V to 52.8V	±9	±56	1.6	2.4	83	58T3473	9.02
MEV1D4812SC	2	43.2V to 52.8V	±12	±42	1.4	2.2	84	58T3474	9.02
MEV1D4815SC	2	43.2V to 52.8V	±15	±33	1.3	2.2	85	58T3475	9.02
DIP PACKAGE									
MEV1S0505DC	1	4.5V to 5.5V	5	200	5.4	6.5	84	66R0554	9.55
MEV1S0509DC	1	4.5V to 5.5V	9	111	4.2	5.5	86.5	66R0555	9.02
MEV1S0512DC	1	4.5V to 5.5V	12	84	5	5.7	87	66R0556	9.02
MEV1S0515DC	1	4.5V to 5.5V	15	67	4.4	5.5	87.5	66R0557	9.55
MEV1S1205DC	1	10.8V to 13.2V	5	200	4.6	5.5	84	66R0558	9.55
MEV1S1209DC	1	10.8V to 13.2V	9	111	3	3.5	86	66R0559	9.02
MEV1S1212DC	1	10.8V to 13.2V	12	84	3.1	3.7	88	66R0560	9.02
MEV1S1215DC	1	10.8V to 13.2V	15	67	2.5	3.3	88	66R0561	9.02
MEV1S1505DC	1	13.5V to 16.5V	5	200	4	5.2	83.5	66R0562	9.02
MEV1S1509DC	1	13.5V to 16.5V	9	111	2.6	3.3	86.5	66R0563	9.02
MEV1S1512DC	1	13.5V to 16.5V	12	84	2.3	3	87.5	66R0564	9.02
MEV1S1515DC	1	13.5V to 16.5V	15	67	2.5	3.2	89	66R0565	9.02
MEV1S2405DC	1	21.6V to 26.4V	5	200	3.4	4.5	84	66R0566	9.55
MEV1S2409DC	1	21.6V to 26.4V	9	111	2.3	3.3	86.5	66R0567	9.02
MEV1S2412DC	1	21.6V to 26.4V	12	84	2	3	87.5	66R0568	9.02
MEV1S2415DC	1	21.6V to 26.4V	15	67	1.8	3	87.5	66R0569	9.02

➤CONTINUED➤

MEV1 SERIES 3kVDC ISOLATED 1W SINGLE & DUAL OUTPUT DC/DC CONVERTERS (CONT.)

DIP PACKAGE

Mfg. Part No.	No. of Outputs	Input Voltage	Output Voltage (V)	Output Current (mA)	Load Regulation Typ. (%)	Load Regulation Max. (%)	Efficiency (%)	Stock No.	Price Each 1-4
● MEV1D0505DC	2	4.5V to 5.5V	±5	±100	5.1	6.5	85	58T3440	9.02
● MEV1D0509DC	2	4.5V to 5.5V	±9	±56	4.1	5.2	87	58T3442	9.02
● MEV1D0512DC	2	4.5V to 5.5V	±12	±42	4.2	5.4	87.5	58T3444	9.02
● MEV1D0515DC	2	4.5V to 5.5V	±15	±33	4	5.2	88	58T3446	9.02
● MEV1D1205DC	2	10.8V to 13.2V	±5	±100	3.8	4.5	85	58T3448	9.02
● MEV1D1209DC	2	10.8V to 13.2V	±9	±56	2.7	3.5	87	58T3450	9.02
● MEV1D1212DC	2	10.8V to 13.2V	±12	±42	2.7	3.4	89.5	58T3452	9.02
● MEV1D1215DC	2	10.8V to 13.2V	±15	±33	2.2	3	88.5	58T3454	9.02
● MEV1D1505DC	2	13.5V to 16.5V	±5	±100	3.3	4	84.5	58T3456	9.02
● MEV1D1509DC	2	13.5V to 16.5V	±9	±56	2.2	2.9	87	58T3458	9.02
● MEV1D1512DC	2	13.5V to 16.5V	±12	±42	2.1	3	88	58T3460	9.02
● MEV1D1515DC	2	13.5V to 16.5V	±15	±33	2.3	3	90.5	58T3462	9.02
● MEV1D2405DC	2	21.6V to 26.4V	±5	±100	2.9	4	84	58T3464	9.02
● MEV1D2409DC	2	21.6V to 26.4V	±9	±56	1.9	2.7	86	58T3466	9.02
● MEV1D2412DC	2	21.6V to 26.4V	±12	±42	1.8	2.7	88	58T3468	9.02
● MEV1D2415DC	2	21.6V to 26.4V	±15	±33	1.5	2.4	87.5	58T3470	9.02

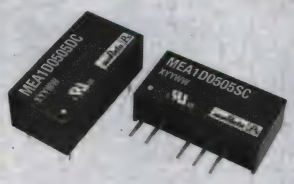
(136938)

MEA SERIES 1kVDC ISOLATED 1W DUAL OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

muRata Ps Murata Power Solutions

- Efficiency to 89.5%
- Power density 0.85W/cm3
- Wide temperature performance at full 1 Watt load, –40°C to 85°C
- UL 60950 recognized
- No heatsink required
- Industry standard pinout
- Power sharing on output
- 5V, 12V, 15V, 24V & 48V input
- 5V, 9V, 12V, & 15V output
- Fully encapsulated with toroidal magnetics
- No external components required
- No electrolytic or tantalum capacitors



MEA series is the new high performance version of our 1W **NMA series** ordered separately; *go online or call.* **MEA series** is more efficient and offers improved regulation performance ≤5% for applications where a wide output voltage variation can not be tolerated. They are ideally suited for providing dual rail supplies with the added benefit of galvanic isolation to reduce switching noise. All of the rated power may be drawn from a single output providing the total load does not exceed 1 watt.

SIP

Mfg. Part No.	Input (V) Min.	Input (V) Max.	Output Voltage (VDC)	Output Current (mA)	Load Regulation Typ. (%)	Load Regulation Max. (%)	Efficiency (%)	Stock No.	Price Each 1-4
● MEA1D0505SC	4.5	5.5	±5	±100	4.8	5.4	85	27P7524	8.18
● MEA1D0509SC	4.5	5.5	±9	±56	3.7	4.5	86.5	27P7525	8.18
● MEA1D0512SC	4.5	5.5	±12	±42	4	5	87	27P7526	8.66
● MEA1D0515SC	4.5	5.5	±15	±33	3.8	4.5	87	27P7527	8.18
● MEA1D1205SC	10.8	13.2	±5	±100	3.5	4	85	27P7528	8.18
● MEA1D1209SC	10.8	13.2	±9	±56	2.5	3	86.5	27P7529	8.18
● MEA1D1212SC	10.8	13.2	±12	±42	2.6	3.5	89	27P7530	8.18
● MEA1D1215SC	10.8	13.2	±15	±33	2.2	3	88	27P7531	8.66
● MEA1D1505SC	13.5	16.5	±5	±100	3	3.5	84	53R1515	8.18
● MEA1D1509SC	13.5	16.5	±9	±56	2.1	2.5	87	53R1516	8.18
● MEA1D1512SC	13.5	16.5	±12	±42	2	2.5	87.5	53R1517	8.18
● MEA1D1515SC	13.5	16.5	±15	±33	2	2.5	89.5	53R1518	8.66
● MEA1D2405SC	21.6	26.4	±5	±100	2.8	3.5	84.5	53R1519	8.66
● MEA1D2409SC	21.6	26.4	±9	±56	1.8	2.5	87.5	53R1520	8.66
● MEA1D2412SC	21.6	26.4	±12	±42	1.6	2.5	87	53R1521	8.18
● MEA1D2415SC	21.6	26.4	±15	±33	1.5	2.5	88.5	53R1522	8.66
● MEA1D4805SC	43.2	52.8	±5	±100	2.6	4	80	53R1523	8.18
● MEA1D4809SC	43.2	52.8	±9	±56	1.6	3	82	53R1524	8.18
● MEA1D4812SC	43.2	52.8	±12	±42	1.6	3	83	53R1525	8.66
● MEA1D4815SC	43.2	52.8	±15	±33	1.3	2.5	83.5	53R1526	8.18

DIP

● MEA1D0505DC	4.5	5.5	±5	±100	5	6.2	85	75R2556	8.32
● MEA1D0509DC	4.5	5.5	±9	±56	3.9	5	86.7	75R2557	8.32
● MEA1D0512DC	4.5	5.5	±12	±42	4.2	5.3	87	75R2558	8.81
● MEA1D0515DC	4.5	5.5	±15	±33	4.1	5.3	87.5	75R2559	8.32
● MEA1D1205DC	10.8	13.2	±5	±100	3.6	4.5	84.5	75R2560	8.81
● MEA1D1209DC	10.8	13.2	±9	±56	2.6	3.5	86.5	75R2561	8.32
● MEA1D1212DC	10.8	13.2	±12	±42	2.7	3.5	89	75R2562	8.81
● MEA1D1215DC	10.8	13.2	±15	±33	2.3	3	88	75R2563	8.81
● MEA1D1505DC	13.5	16.5	±5	±100	3.1	4	84	75R2564	8.81
● MEA1D1509DC	13.5	16.5	±9	±56	2.2	3	87	75R2565	8.32

➤ CONTINUED ➤

MEA SERIES 1kVDC ISOLATED 1W DUAL OUTPUT DC/DC CONVERTERS (CONT.)

DIP

Mfg. Part No.	Input (V) Min.	Input (V) Max.	Output Voltage (VDC)	Output Current (mA)	Load Regulation Typ. (%)	Load Regulation Max. (%)	Efficiency (%)	Stock No.	Price Each 1-4
● MEA1D1512DC	13.5	16.5	±12	±42	2	2.7	87.5	75R2566	8.32
● MEA1D1515DC	13.5	16.5	±15	±33	2	2.7	89.5	75R2567	8.32
● MEA1D2405DC	21.6	26.4	±5	±100	2.8	4	84.5	75R2568	8.32
● MEA1D2409DC	21.6	26.4	±9	±56	2	3.8	87	75R2569	8.32
● MEA1D2412DC	21.6	26.4	±12	±42	1.6	2.5	87	75R2570	8.32
● MEA1D2415DC	21.6	26.4	±15	±33	1.5	2.3	88	75R2571	8.81

(136937)

1W DUAL ISOLATED OUTPUT, DC/DC CONVERTERS

RoHS Compliant Available

muRata Ps Murata Power Solutions

- SIP and DIP Package Styles
- High-Performance and Low-Cost
- Industry-Standard Pinout
- Operating Temperature: -40°C to 85°C with No Heat Sink and No Derating
- Power Sharing on Dual Version

1 kV isolation. Pin output: SIP: 1 = +VIN; 2 = -VIN; 4 = -VOUT; 5 = OV; 6 = +VOUT. Pin ouput DIP: 1 = -VIN; 7 = NC; 8 = OV; 9 = +VOUT; 11 = -VOUT; 14 = +VIN.

Mfg. Part No.	Input Voltage, Min.	Input Voltage, Max.	Output Voltage (VDC)±	Output Current (mA)±	Stock No.	Price Each 1-4
● NMA0505SC	4.5	5.5	5	100	61K3058	9.54
● NMA0509DC	4.5	5.5	9	55	61K3059	9.60
● NMA0512SC	4.5	5.5	12	42	61K3062	9.77
● NMA0515SC	4.5	5.5	15	33	61K3064	9.66
● NMA1205SC	10.8	13.2	5	100	61K3066	9.54
● NMA1209SC	10.8	13.2	9	55	61K3068	9.12
● NMA1212SC	10.8	13.2	12	42	61K3070	9.77
● NMA1215SC	10.8	13.2	15	33	61K3072	9.54
● NMA1505SC	13.5	16.5	5	100	70K3902	9.12
● NMA1512DC	13.5	16.5	12	42	12N3797	9.60
● NMA1515DC	13.5	16.5	15	33	70K3904	9.60
● NMA1515SC	13.5	16.5	15	33	70K3905	9.12

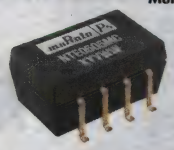
(37173)

NTE SERIES 1kVDC ISOLATED, 1W SINGLE-OUTPUT SURFACE MOUNT DC/DC CONVERTERS

RoHS Compliant Available

muRata Ps Murata Power Solutions

- Surface mount (SOIC)
- Ideal for high-volume applications
- No heat sink required
- Toroidal magnetics
- Multi-layer ceramic capacitors
- Lead-free compatible



NTE series miniature surface mount DC/DC converters feature lead-frame technology and transfer molding techniques to bring all the benefits of IC style packaging to hybrid circuitry. Co-planarity of lead positions is based upon IEC 191-6:1990. Suitable for all applications where high-volume production is required. Wide temperature performance at full 1W load, -40°C to +85°C. Case rated to UL94V-0. Size: 0.26H x 0.44W x 0.5"D.

Mfg. Part No.	Input Voltage (VDC) Min.	Input Voltage (VDC) Max.	Output Voltage (VDC)	Output Current (mA)	Stock No.	Price Each 1-4
● NTE0303MC	2.97	3.63	3.3	303	69K1245	8.76
● NTE0303MC-R	2.97	3.63	3.3	33	70K4002	7.20
● NTE0305MC	2.97	3.63	5	200	70K4003	8.57
● NTE0312MC	2.97	3.63	12	83	70K4007	8.28
● NTE0315MC	2.97	3.63	15	66	70K4009	8.28
● NTE0503MC	4.5	5.5	3.3	303	58K5214	8.28
● NTE0505MEC	4.5	5.5	5	200	57K9667	8.28
● NTE0506MC	4.5	5.5	6	167	48M5369	8.76
● NTE0509MC	4.5	5.5	9	111	61K3401	8.28
● NTE0505MC	4.5	5.5	5	200	61K3399	8.76
● NTE0512MC	4.5	5.5	12	83	61K3403	8.28
● NTE0515MC	4.5	5.5	15	66	61K3405	8.28
● NTE1205MC	10.8	13.2	5	200	61K3407	8.28
● NTE1209MC	10.8	13.2	9	111	61K3409	8.28
● NTE1212MC	10.8	13.2	12	83	61K3411	8.76
● NTE1215MC	10.8	13.2	15	66	61K3413	8.28

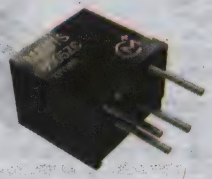
(108728)

MEU1 SERIES ISOLATED 1W SINGLE OUTPUT DC/DC CONVERTERS

NEW

RoHS Compliant Available

Murata Power Solutions



- Single isolated output
- 1kVDC isolation
- Efficiency up to 87% typical
- Wide temperature performance at full 1W load, –40°C to 85°C
- Power density 2.61W/cm^3
- 3.3V, 5V, and 12V input
- 3.3V, 5V, 9V, 12V and 15V output
- PCB mounting
- Footprint reduction over previous 1W DC/DC's
- Dimensions: 7.95mmH x 8.3mmW x 6.1mmD

MEU1 series is a new range of ultra-miniature through-hole 1W DC/DC converters, available in a ZIP style pinout. Ideally suited for providing local supplies on control system boards. The added benefit of 1kVDC galvanic isolation to reduce switching noise allows the device to be configured to provide an isolated negative rail in systems where only positive rails exist.

Mfg. Part No.	Input Voltage Nom.	Input Voltage Min.	Input Voltage Max	Output Voltage (VDC)	Output Current	Efficiency Typ.(%)	Stock No.	Price Each 1-4
MEU1S0303ZC	3.3	2.97	3.63	3.3	303mA	76	08X6972	5.07
MEU1S0305ZC	3.3	2.97	3.63	5	200mA	79	08X6973	5.07
MEU1S0309ZC	3.3	2.97	3.63	9	111mA	79	08X6974	5.07
MEU1S0312ZC	3.3	2.97	3.63	12	83mA	81	08X6975	5.07
MEU1S0315ZC	3.3	2.97	3.63	15	67mA	81	08X6976	5.07
MEU1S0503ZC	5	4.5	5.5	3.3	303mA	77	08X6977	5.07
MEU1S0505ZC	5	4.5	5.5	5	200mA	81	08X6978	5.07
MEU1S0509ZC	5	4.5	5.5	9	111mA	81	08X6979	5.07
MEU1S0512ZC	5	4.5	5.5	12	83mA	83	08X6980	5.07
MEU1S0515ZC	5	4.5	5.5	15	67mA	83	08X6981	5.07
MEU1S1205ZC	12	10.8	13.2	5	200mA	83	08X6982	5.07
MEU1S1209ZC	12	10.8	13.2	9	111mA	84	08X6983	5.07
MEU1S1212ZC	12	10.8	13.2	12	83mA	86	08X6984	5.07
MEU1S1215ZC	12	10.8	13.2	15	67mA	87	08X6985	5.07

(211430)

NMH SERIES ISOLATED 2W DUAL OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

Murata Power Solutions

- Efficiency up to 86%
- Power density up to 1.44W/cm3
- Operating temperature: -40°C to 85°C
- Dual output from a single input rail
- UL 94V-0 package material
- Industry standard pinout
- Power sharing on output
- Internal SMD construction

NMH series is the standard buliding blocks for on-board point-of-use power systems. They are ideally suited for providing dual rail supplies on single rail boards with the added benefit of galvanic isolation to reduce circuit noise. All of the rated power may be drawn from a single pin provided the total load does not exceed 2 watts. Pin compatibility with the NMA 1W series ensures minimal effort in upgrading distributed power systems.

Mfg. Part No.	Input Voltage Nom.	Input Voltage Min.	Input Voltage Max	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)	Stock No.	Price Each 1-4
SIP PACKAGE								
NMH0505SC	5	4.5	5.5	5	200	80	61K3173	13.73
NMH0509SC	5	4.5	5.5	9	111	81	61K3175	13.73
NMH0512SC	5	4.5	5.5	12	83	82	61K3177	14.22
NMH0515SC	5	4.5	5.5	15	67	84	61K3179	14.72
NMH1205SC	12	10.8	13.2	5	200	80	61K3181	14.35
NMH1209SC	12	10.8	13.2	9	111	83	61K3183	14.53
NMH1212SC	12	10.8	13.2	12	83	84	61K3185	14.35
NMH1215SC	12	10.8	13.2	15	67	84	61K3187	14.53
NMH2405SC	24	21.6	26.4	5	200	81	61K3189	13.73
DIP PACKAGE								
NMH0505DC	5	4.5	5.5	5	200	80	61K3172	14.53
NMH0509DC	5	4.5	5.5	9	111	81	61K3174	13.73
NMH0512DC	5	4.5	5.5	12	83	82	61K3176	13.73
NMH0515DC	5	4.5	5.5	15	67	84	61K3178	13.73
NMH1205DC	12	10.8	13.2	5	200	80	61K3180	13.73
NMH1209DC	12	10.8	13.2	9	111	83	61K3182	13.73
NMH1212DC	12	10.8	13.2	12	83	84	61K3184	13.73
NMH1215DC	12	10.8	13.2	15	67	84	61K3186	13.73
NMH2405DC	24	21.6	26.4	5	200	81	61K3188	14.53
NMH2412DC	24	21.6	26.4	12	83	86	61K3192	13.73

(155321)

ISOLATED 2W SINGLE-OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

Murata Power Solutions

- Single Isolated Output
- No Heat Sink or External Components Required
- Fully Encapsulated
- Operating Temperature: -40°C to 85°C

NML series used when an isolated supply is required. 1kVDC isolation. 4-pin SIP package style. Pin compatible with **NME series**; *order separately online or call.* UL 94V-0 package material. Power density: 2.01W/cm^3. Pin output: SIP. 1 = -VIN; 2 = +VIN; 3 = -VOUT; 4 = +VOUT.

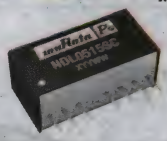
Mfg. Part No.	Input Voltage, Min.	Input Voltage, Max.	Output 1 (VDC) +	Output Current 1 (mA)	Stock No.	Price Each 1-4
NML0505SC	4.5	5.5	5	400	61K3212	13.73
NML0509SC	4.5	5.5	9	222	61K3213	13.73
NML0512SC	4.5	5.5	12	167	61K3214	14.53
NML0515SC	4.5	5.5	15	133	61K3215	13.73
NML1205SC	10.8	13.2	5	400	61K3216	14.72
NML1209SC	10.8	13.2	9	222	61K3217	13.73
NML1212SC	10.8	13.2	12	167	61K3218	14.22
NML1215SC	10.8	13.2	15	133	61K3219	14.72

(61670)

2W ISOLATED WIDE-INPUT, SINGLE-OUTPUT DC/DC CONVERTERS WITH 1kVDC ISOLATION

RoHS Compliant Available

Murata Power Solutions



- 2:1 Wide Operating Range
- 5V, 12V, 24V and 48V Input Voltage
- No Electrolytic Capacitors

Low-noise wide-input converters have regulated outputs over the temperature range –40°C to +85°C with no power derating. Isolation: 1kVDC. Features continuous short-circuit protection with current foldback, ceramic capacitors and substrate, SMD construction. SIP packaging, UL 94V-1 packaging. Pin output SIP: 1 = -VIN; 2 = +VIN; 3 = CTRL; 5 = No Connection Allowed; 6 = +V_{out}; 7 = -VOUT; 8 = CS.

Mfg. Part No.	Input Voltage, Min.	Input Voltage, Max.	Output 1 (VDC) +	Output Current 1 (mA)	Stock No.	Price Each 1-4
5V NOMINAL INPUT						
NDL0505SC	4.5	9	5	400	61K2958	20.24
NDL0512SC	4.5	9	12	167	61K2960	20.24
NDL0515SC	4.5	9	15	134	61K2961	20.24
12V NOMINAL INPUT						
NDL1205SC	9	18	5	400	61K2962	21.42
NDL1212SC	9	18	12	167	61K2964	21.69
NDL1215SC	9	18	15	134	61K2965	21.42
24V NOMINAL INPUT						
NDL2405SC	18	36	5	400	61K2966	21.42
NDL2409SC	18	36	9	222	61K2967	20.24
NDL2412SC	18	36	12	167	61K2968	21.16
NDL2415SC	18	36	15	134	61K2969	20.24
48V NOMINAL INPUT						
NDL4805SC	36	72	5	400	61K2970	20.24
NDL4812SC	36	72	12	167	61K2972	20.24
NDL4815SC	36	72	15	134	61K2973	20.24

(52576)

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(196546)

DC-TO-DC CONVERTERS

MEV3 SERIES 3kVDC ISOLATED 3W SINGLE OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

Murata Power Solutions

- Efficiency from 83%
- Power density 1.9W/cm3
- Wide temperature performance at full 3 Watt load, –40°C to 85°C
- UL 94V-0 package material
- No heat sink required
- Industry standard pinout — 7-pin SIP package
- 3kVDC isolation (1 minute)
- 5V and 12V input
- 5V, 9V, 12V, and 15V output
- Fully encapsulated with toroidal magnetics
- No external components required
- No electrolytic or tantalum capacitors

MEV3 series high-performance 3W DC/DC converters offer 3 watts of available output power in a previously rated 2W package capable of operation over the full industrial temperature range of -40°C to 85°C. Features a pin compatible power upgrade path from the 1W **NMV/MEV** and 2W **NMK series** converters. Ideally suited for providing local supplies on control system boards with the added benefit of 3kVDC galvanic isolation to reduce switching noise.

Mfg. Part No.	Input Voltage Nom.	Input Voltage Min.	Input Voltage Max	Output Voltage (VDC)	Output Current (mA)	Load Regulation Typ. (%)	Load Regulation Max. (%)	Efficiency (%)	Stock No.	Price Each 1-4
● MEV3S0505SC	5	4.5	5.5	5	600	6.8	8	83	25R2402	14.56
● MEV3S0509SC	5	4.5	5.5	9	333	5.5	7	87	25R2403	14.74
● MEV3S0512SC	5	4.5	5.5	12	250	5	7	85.5	25R2404	13.92
● MEV3S0515SC	5	4.5	5.5	15	200	5	6	87.5	25R2405	13.92
● MEV3S1205SC	12	10.8	13.2	5	600	4.5	6	84	25R2406	13.92
● MEV3S1209SC	12	10.8	13.2	9	333	3.6	5	87.5	25R2407	14.74
● MEV3S1212SC	12	10.8	13.2	12	250	3.2	4.5	88	25R2408	13.92
● MEV3S1215SC	12	10.8	13.2	15	200	2.8	4	89	25R2409	13.92

(155084)

DATEL® UWR SERIES SINGLE OUTPUT, MIXED VOLTAGE DC/DC CONVERTERS

RoHS Compliant Available

Murata Power Solutions

c UL us

- Industry-standard pinouts
- Fully isolated
- Designed to meet UL1950 and EN60950
- EMI/EMC characterized
- Modifications and customs for OEM's available on most models; *go online or call*

3W, DIP: 1.25 x 0.80 x 0.45″ **14-20W**

Mfg. Part No.	Input Min. (V)	Input Max. (V)	Output Power (W)	Output 1 (VDC) +	Output Current 1 (mA)	Line Reg. (%)	Load Reg. (%)	Stock No.	Price Each 1-4
● UWR-5/500-D48-C	18	72	3	5	500	0.2	0.5	87K5778	45.65
5W, MINIATURE: 1 x 1 x 0.45″									
● UWR-15/335-D24-C	18	36	5	15	335	2	2	87K5707	61.02
6-10W, SMALL: 2 x 1 x 0.375″									
● UWR-5/1600-D5A-C	4.7	7.25	8	5	1600	0.2	0.5	87K5753	78.23
● UWR-5/1800-D48A-C	18	75	9	5	1800	0.2	0.5	87K5754	78.23
● UWR-5/2000-D12A-C	9	18	10	5	2000	0.2	0.5	87K5755	77.37
● UWR-5/2000-D24E-C	18	36	10	5	2000	0.2	0.5	87K5756	82.86
● UWR-5.2/1500-D5A-C	4.7	7.25	8	5.2	1500	0.2	0.5	87K5749	78.23
● UWR-12/665-D5A-C	4.7	7.25	8	12	665	0.2	0.5	87K5686	82.10
14-20W, SMALL: 2 x 2 x 0.45″									
● UWR-5/4000-D12A-C	9	36	20	5	4000	0.3	0.5	87K5774	91.97
● UWR-5/4000-D48A-C	18	75	20	5	4000	0.3	0.5	87K5775	95.44
● UWR-12/1650-D12A-C	9	36	20	12	1650	0.3	0.5	87K5680	91.97
● UWR-12/1650-D48A-C	18	75	20	12	1650	0.3	0.5	87K5681	95.44
● UWR-15/1300-D48A-C	18	75	20	15	1300	0.3	0.5	87K5706	100.16
7-15W, SMALL: 1 x 2 x 0.49″									
● UWR-3.3/4250-D12A-C	10	18	14	3.3	4250	0.2	0.5	25R6696	50.69
● UWR-5/3000-D24A-C	18	36	15	5	3000	0.2	0.3	54M4103	46.94
● UWR-5/3000-D48AC-C	36	75	15	5	3000	0.2	0.3	87K5768	35.26
● UWR-5/3000-D12A-C	10	18	15	5	3000	0.2	0.3	25R6697	50.69
● UWR-5/3000-D12AT-C	10	18	15	5	3000	0.2	0.3	87K5762	50.69
● UWR-5/3000-D24AC-C	18	36	15	5	3000	0.2	0.3	87K5763	46.94
● UWR-12/1250-D24AC-C	18	36	15	12	1250	0.2	0.3	87K5669	46.94
26-40W, SMALL: 2 x 2 x 0.45″									
● UWR-5/7-D12A-C	10	18	35	5	8	0.5	0.5	87K5780	67.05
● UWR-5/8-D24A-C	18	36	40	5	8	0.5	0.5	87K5781	62.58

(84023)

NMT SERIES 3W TRIPLE OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

Murata Power Solutions

- Input/output isolation 1kVDC
- Power sharing on outputs
- Industrial temperature range
- UL 94V-0 package material
- Internal SMD construction
- Toroidal magnetics
- No external components required
- Power density 1.65W/cm³

NMT series DC/DC converter offers three output voltages of -24V, -48V and -72V from a single isolated 5V input voltage. Designed for use with telecommunications circuits requiring an on board supply for the -72V RING-TIP connection service generated from a nominal 5V DC input supply rail. The device also offers battery level voltages of -24V and -48V for access control and data pump IC's. Packaged in an 8 pin SIP case for minimum PCB footprint. The rated power may be shared or drawn from any one output providing the total output load does not exceed 3W.

Mfg. Part No.	Input Voltage (VDC)	Output 1 VDC	Output 1 mA	Output 2 VDC	Output 2 mA	Output 3 VDC	Output 3 mA	Efficiency (%)	Stock No.	Price Each 1-4
● NMT0572SC	5	-24	42	-48	21	-72	14	85	61K3236	15.75
● NMT1272SC	12	-24	42	-48	21	-72	14	85	61K3237	15.41

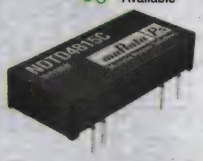
(155341)

NDTD SERIES ISOLATED, 3W DUAL-OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

Murata Power Solutions

- Low-profile 24-pin DIP package
- Industry standard footprint
- 2:1 wide range voltage input
- Short circuit protection
- 1kVDC isolation
- No heat seat required
- Fully encapsulated



NDTD series low-profile DC/DC converters offering dual outputs over a 2:1 input voltage range. All parts deliver 3W output power up to +85°C without heatsinking. A flyback oscillator design with isolated feedback is used to give regulation over the full operating range of 25% to 100% of full load. **NOTE:** It is strongly recommended that external capacitors be used on input and output to guarantee performance over full load and input voltage range. Plastic case is rated to UL94V-0 and encapsulant to UL94V-1. Connection pins are formed from a tin-plated alloy 42 lead frame. Size: 0.27H x 0.57W x 1.27″D.

Mfg. Part No.	Input Voltage (VDC) Min.	Input Voltage (VDC) Max.	Output Voltage (VDC)	Output Current* (mA)	Efficiency %* (Min.)	Stock No.	Price Each 1-4
● NDTD0503C	4.5	9	±3.3	±454	67	87K4648	18.54
● NDTD0505C	4.5	9	±5	±300	72	87K4649	19.62
● NDTD0512C	4.5	9	±12	±125	76	87K4650	18.54
● NDTD0515C	4.5	9	±15	±100	75	87K4651	19.62
● NDTD1203C	9	18	±3.3	±454	73	87K4652	18.54
● NDTD1205C	9	18	±5	±300	75	87K4653	19.62
● NDTD1212C	9	18	±12	±125	78	87K4654	19.62
● NDTD1215C	9	18	±15	±100	78	87K4655	18.54
● NDTD2403C	18	36	±3.3	±454	73	70K3779	18.54
● NDTD2405C	18	36	±5	±300	78	70K3781	18.54
● NDTD2412C	18	36	±12	±125	82	70K3782	19.62
● NDTD2415C	18	36	±15	±100	82	70K3783	19.63
● NDTD4803C	36	75	±3.3	±454	72	87K4656	18.54
● NDTD4805C	36	75	±5	±300	76	87K4657	18.54
● NDTD4812C	36	75	±12	±125	80	87K4658	18.54
● NDTD4815C	36	75	±15	±100	81	87K4659	18.54

*Full load

(108606)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

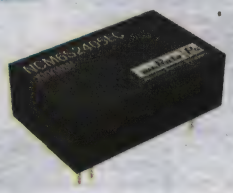
(196561)

NCM6 SERIES ISOLATED 6W WIDE-INPUT SINGLE AND DUAL OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

NEW

Murata Power Solutions



- 4:1 Wide range voltage input
- Single and dual output
- 5200VDC isolation
- Typical efficiency to 88%
- 5V, 12V and 48V nominal inputs
- Power density 0.94W/cm
- 5mm creepage guaranteed
- Under voltage lock-out
- Industry-standard package with standard pinout
- Size: 32W x 20L x 10.75mmH (1.26 x 0.787 x 0.423")
- Control pin
- Operating temperature range: -40°C to 85°C

NCM6 series of DC/DC converters offer single and dual output voltages from wide input voltage ranges of 4.5V to 9V, 9V to 36V and 18V to 75V. Features a control pin that provides an OFF function which puts the converter into a low power mode when >3V is applied to the pin; when the control pin is left un-connected or less than 1V the converter is ON. Ideally suited for applications in medical, telecommunications, battery powered systems, process control and distrbuted power systems.

SINGLE OUTPUT

Mfg. Part No.	Input Voltage Nom.	Input Voltage Min.	Input Voltage Max	Output Voltage (VDC)	Output Current	Efficiency (%) Typ. 5V, 12, or 48V Input	Efficiency (%) Typ. 24V Input	Stock No.	Price Each 1-4
NCM6S0503EC	5	4.5	9	3.3	1.52A	75	...	51X2471	24.32
NCM6S0505EC	5	4.5	9	5	1.2A	80	...	51X2472	24.32
NCM6S0512EC	5	4.5	9	12	500mA	82	...	51X2473	24.32
NCM6S0515EC	5	4.5	9	15	400mA	82	...	51X2474	24.32
NCM6S1203EC	12	9	36	3.3	1.52A	79	77	51X2475	24.32
NCM6S1205EC	12	9	36	5	1.2A	82	80	51X2476	24.32
NCM6S1212EC	12	9	36	12	500mA	86	83	51X2477	24.32
NCM6S1215EC	12	9	36	15	400mA	87	84	51X2478	24.32
NCM6S4803EC	48	18	75	3.3	1.52A	74	76	51X2479	24.32
NCM6S4805EC	48	18	75	5	1.2A	78	80	51X2480	24.32
NCM6S4812EC	48	18	75	12	500mA	82	84	51X2481	24.32
NCM6S4815EC	48	18	75	15	400mA	83	86	51X2482	24.32
DUAL OUTPUT									
NCM6D0505EC	5	4.5	9	±5	±600mA	80	...	51X2462	27.04
NCM6D0512EC	5	4.5	9	±12	±250mA	83	...	51X2463	27.04
NCM6D0515EC	5	4.5	9	±15	±200mA	83	...	51X2464	27.04
NCM6D1205EC	12	9	36	±5	±600mA	83	80	51X2465	27.04
NCM6D1212EC	12	9	36	±12	±250mA	88	84	51X2466	27.04
NCM6D1215EC	12	9	36	±15	±200mA	87	84	51X2467	27.04
NCM6D4805EC	48	18	75	±5	±600mA	80	81	51X2468	27.04
NCM6D4812EC	48	18	75	±12	±250mA	82	84	51X2469	27.04
NCM6D4815EC	48	18	75	±15	±200mA	83	86	51X2470	27.04

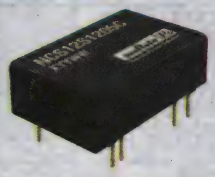
(212176)

NCS12 SERIES ISOLATED 12W SINGLE AND DUAL OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

NEW

Murata Power Solutions



- 4:1 Wide range voltage input
- Typical load regulation from 0.05%
- 1.5kVDC isolation
- 3.3V, 5V, 12V and 15V outputs
- Operating temperature range -40°C to 85°C
- Package materials rated UL 94V-0
- No electrolytic capacitors
- Thermal shutdown
- Under voltage lock-out
- Current fold-back
- Size: 32mmW x 20mmD x 10mmH

NCS 12 series DC/DC converters offer single and dual output voltages from input voltage ranges of 9-36V and 18-75V. Housed in an industry standard package with a standard pin-out these converters feature a metal case for improved EMI shielding and are encapsulated for superior thermal performance. Ideal for applications including telecommunications, battery powered systems, and process control and distributed power systems.

SINGLE OUTPUT

Mfg. Part No.	Input Voltage Nom.	Input Voltage Min.	Input Voltage Max	Output Voltage (VDC)	Output Current	Efficiency Typ.(%)	Stock No.	Price Each 1-4
NCS12S1203C	12	9	36	3.3	3.6A	83.5	99W6388	30.42
NCS12S1205C	12	9	36	5	2.4A	88	99W6389	30.42
NCS12S1212C	12	9	36	12	1A	84.5	99W6390	30.42
NCS12S1215C	12	9	36	15	800mA	85.5	99W6391	30.42
NCS12S4803C	48	18	75	3.3	3.6A	85.5	99W6392	30.42
NCS12S4805C	48	18	75	5	2.4A	87.5	99W6393	30.42
NCS12S4812C	48	18	75	12	1A	84.5	99W6394	30.42
NCS12S4815C	48	18	75	15	800mA	85	99W6395	30.42
DUAL OUTPUT								
NCS12D1205C	12	9	36	5V, -5V	1.2A	81.5	99W6382	30.42
NCS12D1212C	12	9	36	12V, -12V	500mA	85	99W6383	30.42
NCS12D1215C	12	9	36	15V, -15V	400mA	86	99W6384	30.42

➤CONTINUED➤

NCS12 SERIES ISOLATED 12W SINGLE AND DUAL OUTPUT DC/DC CONVERTERS (CONT.)

DUAL OUTPUT

Mfg. Part No.	Input Voltage Nom.	Input Voltage Min.	Input Voltage Max	Output Voltage (VDC)	Output Current	Efficiency Typ.(%)	Stock No.	Price Each 1-4
NCS12D4805C	48	18	75	5V, -5V	1.2A	80	99W6385	30.42
NCS12D4812C	48	18	75	12V, -12V	500mA	85	99W6386	30.42
NCS12D4815C	48	18	75	15V, -15V	400mA	85	99W6387	30.42

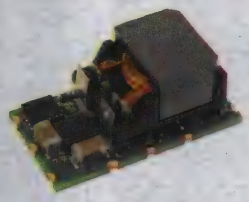
(211218)

OKAMI OKLx-T/xx-Wx SERIES 12 AND 20 AMP iLGA SMT POL DC/DC CONVERTERS

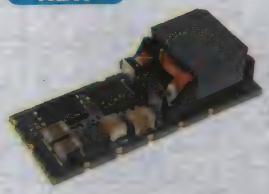
RoHS Compliant Available

NEW

Murata Power Solutions



OKLx-T/12-W5, OKLx-T/12-W12



OKLx-T/20-W5, OKLx-T/20-W12

- iLGA inspectable Land Grid Array
- Programmable output voltage
- Drives 1000µF ceramic capacitive loads
- High-power conversion efficiency up to 95%
- Outstanding thermal derating performance
- Under voltage lock-out (UVLO)
- Short-circuit protection
- Over-temperature and over-current protection
- On/Off control
- Choice of Postive or Negative logic
- Optional Sequence/Tracking operation

OKLx-T/xx-Wx series non-isolated point-of-Load (PoL) DC-DC power converters for embedded applications are based on fixed-frequency synchronous buck converter switching topology. The tiny form factor is configured on a Land Grid Array (LGA) assembly. Applications include powering CPU's, datacom/telecom systems, distributed bus architectures (DBA), programmable logic and mixed voltage systems.

Mfg. Part No.	Input (V) Min.	Input (V) Max.	Output Voltage Range (VDC)	Output Power (W)	Output Current (A)	On/Off Logic	Stock No.	Tape Cut Price Each 1-249
OKLx-T/12-W5 SERIES — Dimensions (LxWxH): 0.8 x 0.45 x 0.34"								
OKL-T/12-W5P-C+	2.4	5.5	600mV to 3.63V	39.6	12A	Pos	38X4498	10.66
OKL-T/12-W5N-C+	2.4	5.5	600mV to 3.63V	39.6	12A	Neg	38X4495	11.16
OKL2-T/12-W5P-C*	2.4	5.5	600mV to 3.63V	39.6	12A	Pos	38X4510	10.95
OKL2-T/12-W5N-C*	2.4	5.5	600mV to 3.63V	39.6	12A	Neg	38X4508	10.95
OKLx-T/20-W5 SERIES — Dimensions (LxWxH): 1.3 x 0.53 x 0.34"								
OKL-T/20-W5P-C+	2.4	5.5	600mV to 3.63V	66	20A	Pos	38X4501	12.58
OKL-T/20-W5N-C+	2.4	5.5	600mV to 3.63V	66	20A	Neg	38X4499	12.58
OKL2-T/20-W5P-C*	2.4	5.5	600mV to 3.63V	66	20A	Pos	38X4518	10.90
OKL2-T/20-W5N-C*	2.4	5.5	600mV to 3.63V	66	20A	Neg	38X4516	10.90
OKLx-T/12-W12 SERIES — Dimensions (LxWxH): 0.8 x 0.45 x 0.34"								
OKL2-T/12-W12P2-C*	4.5	14	690mV to 5.5V	60	12A	Pos	38X4506	10.95
OKL2-T/12-W12N2-C*	4.5	14	690mV to 5.5V	60	12A	Neg	38X4504	10.95
OKLx-T/20-W12 SERIES — Dimensions (LxWxH): 1.3 x 0.53 x 0.34"								
OKL2-T/20-W12P2-C*	4.5	14	690mV to 5.5V	100	20A	Pos	38X4514	10.90
OKL2-T/20-W12N2-C*	4.5	14	690mV to 5.5V	100	20A	Neg	38X4512	10.90

*Sequence/tracking operation installed; +Sequence/tracking operation not installed

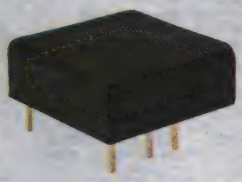
(211604)

SPM15 SERIES ISOLATED 15W SINGLE OUTPUT POTTED METAL PACKAGE DC/DC CONVERTERS

RoHS Compliant Available

NEW

Murata Power Solutions



- Wide range input voltages 9-36 and 18-75VDC
- Dimensions: 1 x 1 x 0.41" (25.4 x 25.4 x 10.41mm)
- Adjustable Vout (+10% to -10%)
- High Efficiency
- Positive and Negative logic, remote On/Off control option
- Monotonic startup into pre-bias output conditions
- Continuous short circuit protection
- Over-temperature and over-voltage protection
- Low output ripple and noise
- Strong thermal derating characteristics
- Operational temperature range: –40°C to +85°C
- 1600V I/O isolation
- Packaged in a five-sided EMI shielding metal package with non-conductive base
- Through-hole mounting — standard 0.15" (3.8mm) pin length
- Certified to UL 60950-1, CAN/CSA-C22.2 No. 60950-1, IEC60950-1, safety approvals, 2nd edition, with AM1

SPM15 series isolated DC-DC converters feature a full 15W output in one square inch of board area delivering efficient regulated DC power for PCB mounting. Accepts a wide range of input voltages, ideal for industrial applications in transportation, medical systems, electronic test equipment, industrial processing equipment, industrial applications where power modules must meet rugged environmental requirements, high power density, and where isolated output voltages are required. Modules provide voltage isolation (basic insulation) from input to output of up to 1600V and deliver full output power to +70°C with no airflow. These converters are ideal for applications that do not require any heat sinking or forced air cooling.

➤CONTINUED➤

SPM15 SERIES ISOLATED 15W SINGLE OUTPUT POTTED METAL PACKAGE DC/DC CONVERTERS (CONT.)

Mfg. Part No.	Output Vout (V)	Output Iout (A)	Output Power (W)	Input Voltage (VDC) Min.	Input Voltage (VDC) Max.	On/Off Control Logic	Stock No.	Price Each 1-4
● SPM15-033-Q12-C	3.3	4.5A	14.85	9	36	None	19X7274	33.47
● SPM15-033-Q12N-C	3.3	4.5A	14.85	9	36	Negative	19X7275	31.97
● SPM15-033-Q12P-C	3.3	4.5A	14.85	9	36	Positive	19X7276	32.72
● SPM15-033-Q48-C	3.3	4.5A	14.85	18	75	None	19X7277	31.97
● SPM15-033-Q48N-C	3.3	4.5A	14.85	18	75	Negative	19X7278	32.47
● SPM15-033-Q48P-C	3.3	4.5A	14.85	18	75	Positive	19X7279	32.72
● SPM15-050-Q12-C	5	3A	15	9	36	None	19X7280	33.47
● SPM15-050-Q12N-C	5	3A	15	9	36	Negative	19X7281	31.97
● SPM15-050-Q12P-C	5	3A	15	9	36	Positive	19X7282	32.73
● SPM15-050-Q48-C	5	3A	15	18	75	None	19X7283	31.97
● SPM15-050-Q48N-C	5	3A	15	18	75	Negative	19X7284	32.47
● SPM15-050-Q48P-C	5	3A	15	18	75	Positive	19X7285	32.72
● SPM15-120-Q12-C	12	1.3A	15.6	9	36	None	19X7286	33.47
● SPM15-120-Q12N-C	12	1.3A	15.6	9	36	Negative	19X7287	31.97
● SPM15-120-Q12P-C	12	1.3A	15.6	9	36	Positive	19X7288	32.73
● SPM15-120-Q48-C	12	1.3A	15.6	18	75	None	19X7289	31.97
● SPM15-120-Q48N-C	12	1.3A	15.6	18	75	Negative	19X7290	32.48
● SPM15-120-Q48P-C	12	1.3A	15.6	18	75	Positive	19X7291	32.73
● SPM15-150-Q12-C	15	1.1A	16.5	9	36	None	19X7292	33.47
● SPM15-150-Q12N-C	15	1.1A	16.5	9	36	Negative	19X7293	31.97
● SPM15-150-Q12P-C	15	1.1A	16.5	9	36	Positive	19X7294	32.73
● SPM15-150-Q48-C	15	1.1A	16.5	18	75	None	19X7295	31.97
● SPM15-150-Q48N-C	15	1.1A	16.5	18	75	Negative	19X7296	32.48
● SPM15-150-Q48P-C	15	1.1A	16.5	18	75	Positive	19X7297	32.73

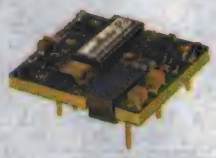
(211529)

UEI15 AND UEI25 SERIES ISOLATED, WIDE INPUT RANGE 15/25W DC/DC CONVERTERS

RoHS Compliant Available

muRata Ps Murata Power Solutions

- Small footprint, ideal for high current applications
- Industry standard 0.9" x 1.1" X 0.335" open frame package/ pinout
- 9-36 and 18-75VDC Q12 & Q48, 36-75VDC for D48 wide range inputs
- Double lead-free assembly and attachment
- 2250V basic Isolation (Q48 & D48 models)
- Up to 15 W or greater total output power with overtemperature shutdown
- High efficiency synchronous rectifier forward topology
- Stable no-load operation with no required external components
- Usable -40 to 85°C temperature range (with derating)
- Extensive self-protection shut down features
- On/off control polarity: **suffix P** indicates positive, **suffix N** indicates negative
- Surface mount version available; *go online or call*



Featuring a full 15 watt or greater output in one square inch of board area, the **UEI series** isolated DC/DC converter family offers efficient regulated DC power for printed circuit board mounting. Meets UL 60950-1, CAN/CSA-C22.2 No. 60950-1, IEC60950-1, EN60950-1 safety approvals.

15 WATT

Mfg. Part No.*	Input Voltage	Output Voltage (V)	Output Current (A)	Output Power Max. (W)	Efficiency (%)	Stock No.	Price Each 1-4
● UEI15-033-Q12P-C	9V to 36V	3.3	4.5	14.85	89	06P9408	31.83
● UEI15-050-Q12P-C	9V to 36V	5	3	15	87	06P9409	33.42
● UEI15-120-Q12P-C	9V to 36V	12	1.3	15.6	84	12N4059	33.06
● UEI15-150-Q12P-C	9V to 36V	15	1.1	16.5	85	06P9411	32.89
● UEI15-033-Q48N-C	18V to 75V	3.3	5	16.5	88	12N4054	29.75
● UEI15-050-Q48N-C	18V to 75V	5	3	15	86	12N4056	30.90
● UEI15-120-Q48N-C	18V to 75V	12	1.3	15.6	85	06P9410	29.75
● UEI15-150-Q48N-C	18V to 75V	15	1.1	16.5	85	06P9412	30.79
25 WATT							
● UEI25-033-D48N-C	36V to 75V	3.3	7.5	25.2	89.5	78R7655	24.63
● UEI25-033-D48P-C	36V to 75V	3.3	7.5	25.2	89.5	78R7656	25.14
● UEI25-050-D48N-C	36V to 75V	5	5	25.2	91	78R7657	25.14
● UEI25-050-D48P-C	36V to 75V	5	5	25.2	91	78R7658	24.63
● UEI25-120-D48N-C	36V to 75V	12	2.1	25.2	87.5	78R7659	24.63
● UEI25-120-D48P-C	36V to 75V	12	2.1	25.2	87.5	78R7660	26.38

* Please refer to the part number structure for additional ordering information and options.
(133291)

BEI15 SERIES ISOLATED, BIPOLAR 15W DC/DC CONVERTERS

RoHS Compliant Available

muRata Ps Murata Power Solutions

- Ideal for high current applications and for powering digital systems
- Choice of 9-36V and 18-75V input ranges with positive or negative on/ off polarity
- 2250VDC basic isolation and extensive self protection features
- Usable -40°C to 85°C temperature range (with derating)

BEI-15 series isolated, wide input DC/DC converters deliver a full 15W of output power with efficiency levels up to 86% from one square inch of board area and are a space-saving, pin compatible, drop-in replacement for prior generations of 1" x 2" DC/DC converters. A small footprint solution for high current applications in mobile and battery powered products, test equipment and telecoms and wireless designs.

Mfg. Part No.	Input (V) Min.	Input (V) Max.	Output Voltage (VDC)	Output Current (mA)	Regulation Max. Line (%)	Regulation Max. Load (%)	Efficiency (%)	Stock No.	Price Each 1-4
● BEI15-050-Q12N-C	9	36	±5	±1.5	±0.25	±0.25	84	65R4680	34.77
● BEI15-050-Q12P-C	9	36	±5	±1.5	±0.25	±0.25	84	65R4681	32.62
● BEI15-120-Q12N-C	9	36	±12	±625	±0.25	±0.25	86	65R4684	33.13
● BEI15-120-Q12P-C	9	36	±12	±625	±0.25	±0.25	86	65R4685	34.23
● BEI15-150-Q12N-C	9	36	±15	±500	±0.25	±0.25	84	65R4688	34.77
● BEI15-150-Q12P-C	9	36	±15	±500	±0.25	±0.25	84	65R4689	33.61
● BEI15-050-Q48N-C	18	75	±5	±1.5	±0.25	±0.25	83.5	65R4682	32.62
● BEI15-050-Q48P-C	18	75	±5	±1.5	±0.25	±0.25	83.5	65R4683	33.13
● BEI15-120-Q48N-C	18	75	±12	±625	±0.25	±0.25	85.5	65R4686	32.62
● BEI15-120-Q48P-C	18	75	±12	±625	±0.25	±0.25	85.5	65R4687	33.13
● BEI15-150-Q48N-C	18	75	±15	±500	±0.25	±0.25	86	65R4690	32.62
● BEI15-150-Q48P-C	18	75	±15	±500	±0.25	±0.25	86	65R4691	34.77

(167458)

10W, 15W AND 25W ISOLATED, SINGLE-OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

muRata Ps Murata Power Solutions

NPH10S NPH15S NPH25S

- High-Efficiency to 89%
- Industry-Standard Output
- No Electrolytic Capacitors
- Internal Over-Temperature Protection
- Industrial Temperature Range
- Continuous Rating to 30W @ 60° Without Heat Sink

Versatile single-output converters have high-surge capability for start up and transient loads, and thermal protection from sustained overload. Copper case achieves efficient heat transfer and screening. 1kVDC input/output. Isolation pin pattern based on industry standard. Mfg. part nos. ending with **EIC** suffix have optional TRIM and SS pins fitted. UL recognized.

10W

Mfg. Part No.	Input Voltage, Min.	Input Voltage, Max.	Output 1 (VDC) +	Output Current 1 (A)	Stock No.	Price Each 1-4
● NPH10S2403EIC	18	36	3.4	2.94	61K3336	37.21
● NPH10S2403IC	18	36	3.4	2.94	61K3337	37.21
● NPH10S2405EIC	18	36	5.1	1.96	61K3338	37.21
● NPH10S2405IC	18	36	5.1	1.96	61K3339	39.05
● NPH10S2412EIC	18	36	12.1	830	61K3340	38.64
● NPH10S2412IC	18	36	12.1	0.83	61K3341	37.21
● NPH10S2415IC	18	36	15.1	0.67	61K3343	37.21
● NPH10S4803IC	36	75	3.4	2.94	61K3345	37.21
● NPH10S4805EIC	36	75	5.1	1.96	61K3346	37.21
● NPH10S4805IC	36	75	5.1	1.96	61K3347	37.21
15W						
● NPH15S2403IC	18	36	3.4	4.4	61K3353	51.96
● NPH15S2405EIC	18	36	5.1	3	61K3354	49.51
● NPH15S2405IC	18	36	5.1	3	61K3355	50.74
● NPH15S2412EIC	18	36	12.1	1.3	61K3356	51.96
● NPH15S2412IC	18	36	12.1	1.3	61K3357	49.51
● NPH15S2415IC	18	36	15.1	1	61K3359	49.51
● NPH15S4803IC	36	75	3.4	4.4	61K3361	51.96
● NPH15S4805IC	36	75	5.1	3	61K3363	49.51
● NPH15S4812IC	36	75	12.1	1.3	61K3365	49.51
● NPH15S4815IC	36	75	15.1	1	61K3367	49.51
25W						
● NPH25S2403IC	18	36	3.4	7.3	61K3369	56.54
● NPH25S2405EIC	18	36	5.1	5	61K3370	56.54
● NPH25S2405IC	18	36	5.1	5	61K3371	56.54
● NPH25S2412IC	18	36	12.1	2.1	61K3373	58.25

CONTINUED

10W, 15W AND 25W ISOLATED, SINGLE-OUTPUT DC/DC CONVERTERS (CONT.)

25W

Mfg. Part No.	Input Voltage, Min.	Input Voltage, Max.	Output 1 (VDC) +	Output Current 1 (A)	Stock No.	Price Each 1-4
NPH25S2415EIC	18	36	15.1	1.7	61K3374	56.54
NPH25S2415IC	18	36	15.1	1.7	61K3375	59.34

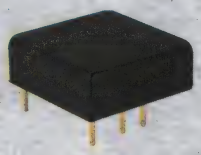
(52578)

SPM25 SERIES ISOLATED 25W SINGLE OUTPUT POTTED METAL PACKAGE DC/DC CONVERTERS

RoHS Compliant Available

NEW

Murata Power Solutions



- 2:1 input voltage range: 36-75VDC
- Dimensions: 1 x 1 x 0.41″ (25.4 x 25.4 x 10.41mm)
- Adjustable Vout (+10% to -10%)
- High Efficiency
- Positive and Negative logic, remote On/Off control option
- Monotonic startup into pre-bias output conditions
- Continuous short circuit protection
- Over-temperature and over-voltage protection
- Low output ripple and noise
- Strong thermal derating characteristics
- Operational temperature range: –40°C to +85°C
- 1600V I/O isolation
- Packaged in a five-sided EMI shielding metal package with non-conductive base
- Through-hole mounting — standard 0.15″ (3.8mm) pin length
- Certified to UL 60950-1, CAN/CSA-C22.2 No. 60950-1, IEC60950-1, safety approvals, 2nd edition, with AM1

SPM25 series isolated DC-DC converters feature a full 25W output in one square inch of board area delivering efficient regulated DC power for PCB mounting. Accepts a 2:1 input voltage range of 36V to 75V, ideal for industrial applications in transportation, medical systems, electronic test equipment, industrial processing equipment, industrial applications where power modules must meet rugged environmental requirements, high power density, and where isolated output voltages are required. Modules provide voltage isolation (basic insulation) from input to output of up to 1600V and deliver full output power to +70°C with no airflow. These converters are ideal for applications that do not require any heat sinking or forced air cooling.

Mfg. Part No.	Output Vout (V)	Output Iout (A)	Output Power (W)	Input Voltage (VDC) Min.	Input Voltage (VDC) Max.	On/Off Control Logic	Stock No.	Price Each 1-4
SPM25-033-D48-C	3.3	7.575A	25	36	75	None	19X7298	41.46
SPM25-033-D48N-C	3.3	7.575A	25	36	75	Negative	19X7299	41.96
SPM25-033-D48P-C	3.3	7.575A	25	36	75	Positive	19X7300	42.21
SPM25-050-D48-C	5	5A	25	36	75	None	19X7301	41.46
SPM25-050-D48N-C	5	5A	25	36	75	Negative	19X7302	41.96
SPM25-050-D48P-C	5	5A	25	36	75	Positive	19X7303	42.21
SPM25-120-D48-C	12	2.1A	25.2	36	75	None	19X7304	41.46
SPM25-120-D48N-C	12	2.1A	25.2	36	75	Negative	19X7305	41.96
SPM25-120-D48P-C	12	2.1A	25.2	36	75	Positive	19X7306	42.21

(211530)

DATEL® BWR SERIES DUAL OUTPUT, MIXED VOLTAGE DC/DC CONVERTERS

RoHS Compliant Available

Murata Power Solutions

- Proven on SMT-on-pcb construction
- Output voltages: ±5, ±12 or ±15 Volts
- Industry-standard pinouts
- Fully isolated
- -40° to +100°C operating temperature
- EMI/EMC characterized
- Modifications and customs for OEM's available on most models; *go online or call*

3W, DIP: 1.25 x 0.80 x 0.45″

Mfg. Part No.	Input Voltage, Min.	Input Voltage, Max.	Output Power (W)	Output 1 (VDC) +	Output Current 1 (mA)	Stock No.	Price Each 1-4
BWR-5/250-D12-C	9	18	3	5	250	87K3509	47.36
BWR-5/250-D48-C	18	72	3	5	250	87K3510	44.40
BWR-12/125-D12-C	9	18	3	12	125	87K3470	47.36
BWR-12/125-D48-C	18	72	3	12	125	87K3471	45.65
BWR-15/100-D12-C	9	18	3	15	100	87K3485	49.18
BWR-15/100-D48-C	18	72	3	15	100	87K3486	44.40
5W, MINIATURE: 1 x 1 x 0.45″							
BWR-5/500-D24-C	18	36	5	5	500	87K3516	58.43
7-10W, SMALL: 2 x 1 x 0.375″							
BWR-5/700-D48A-C	18	72	7	5	700	87K3521	78.32
BWR-12/415-D12A-C	9	18	10	12	415	87K3475	77.66
BWR-12/415-D48A-C	18	72	10	12	415	87K3476	76.15
BWR-15/330-D12A-C	9	18	10	15	330	87K3490	77.66
BWR-15/330-D48A-C	18	72	10	15	330	87K3491	76.46
15-20W, SMALL: 2 x 2 x 0.45″							
BWR-5/1700-D12A-C	9	18	17	5	1.7	87K3507	93.24
BWR-12/830-D12A-C	9	18	20	12	830	87K3483	93.24
BWR-15/670-D12A-C	9	18	20	15	670	87K3499	94.87

➤CONTINUED➤

DATEL® BWR SERIES DUAL OUTPUT, MIXED VOLTAGE DC/DC CONVERTERS (CONT.)

15-17W, SMALL: 2 x 2 x 0.45″

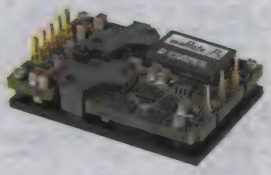
Mfg. Part No.	Input Voltage, Min.	Input Voltage, Max.	Output Power (W)	Output 1 (VDC) +	Output Current 1 (mA)	Stock No.	Price Each 1-4
BWR-5/1500-D24AC-C	18	36	15	5	1.5	87K3504	56.98
BWR-15/575-D12AC-C	9	18	17	15	575	87K3493	56.92
BWR-15/575-D24A-C	18	36	17	15	575	73P4543	56.98
30W, SMALL: 2 x 2 x 0.45″							
BWR-5/3-3.3/4.25-D24A-C	18	36	30	5	3A	87K3512	69.56
33W, SMALL: 2 x 2 x 0.45″							
BWR-5/6-3.3/7-D12-C	10	18	33	5	6A	87K3518	75.22
BWR-5/6-3.3/7-D24-C	18	36	33	5	6A	87K3519	73.65
BWR-5/6-3.3/7-D48-C	36	75	33	5	6A	87K3520	75.73

(83985)

DATEL® UQQ SERIES SINGLE OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

Murata Power Solutions



- Standard quarter-brick package/pinout in through-hole version
- Low cost; low profile, 0.43″(0.92mm)
- 9-36V or 18-75V wide range inputs
- Output current: 7 to 25 Amps
- Output voltages: 3.3, 5, 12, 15 or 24V
- Interleaved synchronous-rectifier topology:ultra high efficiency, no output reverse conduction
- Outstanding thermal performance
- On/off control, trim & sense functions
- Fully isolated, up to 2250Vdc (BASIC)
- Output overvoltage protection
- Fully I/O protected; thermal shutdown
- UL/EN/IEC60950 safety approvals

UQQ series employ an interleaved, synchronous-rectifier topology that exploits 100% of their duty cycle. They simultaneously achieve ultra-high efficiency (to 91%), tight line/load regulation, low noise, and quick step response. A state of the art, single-board, open-frame design with reduced component count, high efficiency, low-on-resistance FET's, and planar magnetics embedded in heavy-copper pc boards all contribute to impressive thermal derating. All UQQ quarter-bricks are designed to meet the BASIC-insulation requirements of UL/EN/IEC60950 and they will carry the CE mark. Ideal for applications requiring wide range input, improved electrical and thermal performance.

Mfg. Part No.	Input (V) Min.	Input (V) Max.	Output Voltage (VDC)	Output Cur. (A)	Output Power (Max.)	Reg. Line (%) ±	Reg. Load (%) ±	Stock No.	Price Each 1-4
UQQ-3.3/25-Q12PB-C	9	36	3.3	25	82.5	0.05	0.125	17M3139	117.04
UQQ-3.3/25-Q48PB-C	18	75	3.3	25	82.5	0.05	0.2	17M3143	115.05
UQQ-5/17-Q12P-C	9	36	5	17	85	0.05	0.06	17M3146	113.53
UQQ-5/17-Q12PB-C	9	36	5	17	85	0.05	0.06	17M3147	117.04
UQQ-5/20-Q48PB-C	18	75	5	20	100	0.05	0.165	17M3151	115.05
UQQ-12/8-Q12P-C	9	36	12	8	96	0.05	0.05	17M3126	109.11
UQQ-12/8-Q12PB-C	9	36	12	8	96	0.05	0.05	17M3127	117.04
UQQ-12/8-Q48P-C	18	75	12	8	96	0.05	0.1	17M3130	107.12
UQQ-12/8-Q48PB-C	18	75	12	8	96	0.05	0.1	17M3131	113.08
UQQ-15/7-Q12P-C	9	36	15	7	105	0.05	0.1	40M2757	109.11
UQQ-15/7-Q12PB-C	9	36	15	7	105	0.05	0.1	40M2758	119.94
UQQ-24/4-Q12PB-C	10	36	24	4	96	0.05	0.075	12N4066	117.04

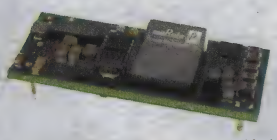
(102116)

PAE SERIES 100W, 29.8V OUTPUT EIGHTH-BRICK ISOLATED DC/DC CONVERTERS

RoHS Compliant Available

NEW

Murata Power Solutions



Without Baseplate

With Baseplate

- 2:1 Input voltage range (36 to 75VDC - nominal 48 VDC)
- Single +29.8Vout can be adjusted from +23.84 to 32.78VDC
- Up to 100W output power @ 36 to 75Vin
- Efficiency 92.5% (typ.)
- 1500V I/O isolation
- Industry standard eighth brick package
- Through-hole mount — 4.78mm pin length
- Available with baseplate for conduction cooling applications and with ground connection pin 3
- Remote on/off control of either negative or positive logic polarity
- Monotonic startup into pre-bias/pre-load output conditions
- Over current, over temperature, input under voltage and output short circuit protection
- Low output ripple and noise
- Strong thermal derating performance
- Operational temperature range –40°C to +100°C (baseplate temp.)
- Certified to UL 60950-1, CSA-C22.2 No. 60950-1

➤CONTINUED➤

PAE SERIES 100W, 29.8V OUTPUT EIGHTH-BRICK ISOLATED DC/DC CONVERTERS (CONT.)

PAE series fully isolated power amplifier eighth-brick DC/DC converters have been designed specifically for use with multi-channel power amplifiers such as those found in the latest generation of microcell wireless transceiver applications requiring up to 100W. With a typical efficiency of 92.5%, these converters keep power dissipation on the module to a minimum, therefore, reducing system temperatures and helping network operators save energy costs. **PAE series** has been designed to meet the demanding "low noise" requirements in modern communications systems and will require minimal Vout filtering in most applications. Other ideal applications include indoor/outdoor Wi-Fi installations, RF test equipment, CATV systems and MRI imaging equipment.

Mfg. Part No.	Output (V)	Output (A)	Output (W)	Input Voltage	On/Off Polarity	With Baseplate	Stock No.	Price Each 1-4
● PAE-29/3-D48N-C	29.8	3.3	98.34	36 to 75	Negative	No	08X6988	62.03
● PAE-29/3-D48NB-C	29.8	3.3	98.34	36 to 75	Negative	Yes	08X6989	60.31
● PAE-29/3-D48NB3-C	29.8	3.3	98.34	36 to 75	Negative	Yes w/Pin 3	08X6990	60.89
● PAE-29/3-D48P-C	29.8	3.3	98.34	36 to 75	Positive	No	08X6991	62.65
● PAE-29/3-D48PB-C	29.8	3.3	98.34	36 to 75	Positive	Yes	08X6992	60.89
● PAE-29/3-D48PB3-C	29.8	3.3	98.34	36 to 75	Positive	Yes w/Pin 3	08X6993	61.47

(211429)

UWQ SERIES WIDE INPUT, ISOLATED DOSA QUARTER BRICK DC/DC CONVERTERS

RoHS Compliant Available

NEW

muRata Ps Murata Power Solutions

- Fixed DC outputs, 12V @ 20A
- Standard quarter-brick open-frame package
- Wide range 18 to 60VDC input voltage
- Fully isolated, up to 2250Vdc (Basic)
- Remote ON/OFF enable control
- DOSA-compatible pinouts and form factor
- High-efficiency synchronous rectifier topology for minimal heat generation and "no heat sink" operation
- Stable no-load operation
- Monotonic start-up into pre-bias output condiution
- Output overvoltage, overcurrent, and short circuit protection
- Input undervoltage lockout and thermal shutdown
- Load-Sharing option: Multiple-unit parallel operation for increased current
- Trim & Sense option: Trimmable output from 10V to 13.2V
- Dimensions: 2.3 x 1.45 x 0.46" (58.4 x 36.8 x 11.7mm)
- Standard pin length 0.18" (4.6mm)
- UL/EN/IEC/CSA 60950-1, 2nd edition

UWQ series offers high output current (up to 20A) in an industry standard "quarter brick" package requiring no heat sink for most applications. Delivers fixed DC output voltages up to 240W (12V @20A) for PCB mounting. Wide range inputs of 18 to 60VDC (48V nom.) are ideal for datacom and telecom systems. Load-sharing option for paralleling up to three modules in demanding, power-hungry applications. Trim & Sense option is trimmable from 10.8V to 13.2Vout and includes Sense pins to compensate for voltage drops at the load. To power digital systems, the outputs offer fast settling to current steps and tolerance of higher capacitive loads. Excellent ripple and noise specifications provide compatibility to CPUs, ASICs, programmable logic and FPGAs. No minimum load is required. For systems needing controlled startup/shutdown, an external remote On/Off control may use either positive or negative logic.

THRU-HOLE

Mfg. Part No.	Output (V)	Output (A)	Output (W)	Input (VDC) Min.	Input (VDC) Max.	Regulation (Max.) Line	Regulation (Max.) Load	On/Off Control Logic	Stock No.	Price Each 1-4
● UWQ-12/20-T48N-C	12V	20A	247.2	18	60	±1.0	±1.5	Negative	41X4020	71.97
● UWQ-12/20-T48P-C	12V	20A	247.2	18	60	±1.0	±1.5	Positive	41X4026	72.79
● UWQ-12/20-T48NS-C*	12V	20A	247.2	18	60	±1.25	±2.5	Negative	41X4023	73.02
● UWQ-12/20-T48PS-C*	12V	20A	247.2	18	60	±1.25	±2.5	Positive	41X4029	73.84
● UWQ-12/20-T48NT-C†	12V	20A	247.2	18	60	±0.25	±0.3	Negative	41X4024	85.69
● UWQ-12/20-T48PT-C†	12V	20A	247.2	18	60	±0.25	±0.3	Positive	41X4030	86.68
THRU-HOLE WITH BASEPLATE										
● UWQ-12/20-T48NB-C	12V	20A	247.2	18	60	±1.0	±1.5	Negative	41X4021	73.62
● UWQ-12/20-T48PB-C	12V	20A	247.2	18	60	±1.0	±1.5	Positive	41X4027	86.33
● UWQ-12/20-T48NBS-C*	12V	20A	247.2	18	60	±1.25	±2.5	Negative	41X4022	77.41
● UWQ-12/20-T48PBS-C*	12V	20A	247.2	18	60	±1.25	±2.5	Positive	41X4028	64.93
● UWQ-12/20-T48NTB-C†	12V	20A	247.2	18	60	±0.25	±0.3	Negative	41X4025	65.04
● UWQ-12/20-T48PTB-C†	12V	20A	247.2	18	60	±0.25	±0.3	Positive	41X4031	67.25

*With Load Share option; †With Trim & Sense option
(211896)

CC-E SERIES ULTRA COMPACT, 1.5W TO 25W SINGLE OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- Compact footprint /low profile
- Through hole or SMT versions
- 5V, 12V, 24V & 48V inputs
- 3.3 to 30V* single
- Output voltage adjustment
- Input - output isolation
- Five-year manufacturer's warranty

CC-E series are ultra compact, open frame DC/DC converters. Self contained requires no external components. **R** indicates suitable for surface mount.

SPECIFICATIONS:		
Nominal Output Voltage:	3.3	5V	12/15V*
DC Input:	5V: 4.5-9.0V, 12V: 9-18V, 24V: 18-36V, 48V: 36-76V		
Line Regulation:	20 (40 CC15; 30 CC25)	40	
Load Regulation:	40 (120 CC15; 200 CC25)	100	
Output Ripple (typ./max.BW 50MHz):	40/120	30/120	
Operating Temp.- Convection:	-40 to 85°C, derates linearly to 40% load from 50°C to 85°C		

➤ CONTINUED ➤

CC-E SERIES ULTRA COMPACT, 1.5W TO 25W SINGLE OUTPUT DC/DC CONVERTERS (CONT.)

SPECIFICATIONS:	
Operating Temp.- Forced Air:	-40°C to 85°C with 1m/s air full load
Dimensions: (DIP Through Hole and SMD package) (SIP Through Hole only)	CC1R5: 0.650 x 0.654 x 0.335; CC3: 0.900 x 0.654 x 0.335; CC6: 0.900 x 0.831 x 0.335 CC10: 1.400 x 0.890 x 0.335; CC15: 1.500 x 1.264 x 0.295; CC25: 1.701 x 1.768 x 0.295 CC3 (SIP): 1.09 x 0.362 x 0.705

Mfg. Part No.**	Input (V) Min.	Input (V) Max.	Output (VDC)	Output Cur. (A)	Output Power Max.	Reg. (mV) Line (%)	Reg. (mV) Load (%)	Efficiency (%)	Stock No.	Price Each 1-9
● CC1R50503SRE	4.5	9	3.3	0.4	1.5	20	40	71	05M6909	9.70
● CC1R51203SFE	9	18	3.3	0.4	1.5	20	40	73	05M6916	9.70
● CC1R52403SFE	18	36	3.3	0.4	1.5	20	40	72	05M6924	9.70
● CC1R52403SRE	18	36	3.3	0.4	1.5	20	40	72	05M6925	9.70
● CC1R54803SFE	36	76	3.3	0.4	1.5	20	40	70	05M6932	9.70
● CC1R54803SRE	36	76	3.3	0.4	1.5	20	40	70	05M6933	9.70
● CC1R50505SFE	4.5	9	5	0.3	1.5	20	40	77	05M6910	9.70
● CC1R50505SRE	4.5	9	5	0.3	1.5	20	40	77	05M6911	9.70
● CC100505SFE	4.5	9	5	2	10	20	40	84	05M6942	26.26
● CC1R51205SFE	9	18	5	0.3	1.5	20	40	78	05M6918	9.70
● CC1R51205SRE	9	18	5	0.3	1.5	20	40	78	05M6919	9.70
● CC31205SFE	9	18	5	0.6	3	20	40	79	05M6990	11.21
● CC31205SRE	9	18	5	0.6	3	20	40	79	05M6991	11.21
● CC61205SFE	9	18	5	1.2	6	20	40	82	05M7022	15.96
● CC101205SFE	9	18	5	2	10	20	40	86	05M6950	26.26
● CC1R52405SFE	18	36	5	0.3	1.5	20	40	77	05M6926	9.70
● CC1R52405SRE	18	36	5	0.3	1.5	20	40	77	05M6927	9.70
● CC32405SFE	18	36	5	0.6	3	20	40	78	05M6998	11.21
● CC32405SRE	18	36	5	0.6	3	20	40	78	05M6999	11.21
● CC62405SFE	18	36	5	1.2	6	20	40	81	05M7030	15.96
● CC102405SFE	18	36	5	2	10	20	40	86	05M6958	26.26
● CC102405SRE	18	36	5	2	10	20	40	86	05M6959	26.26
● CC252405SFE	18	36	5	5	25	30	200	90	05M6978	51.51
● CC1R50512SFE	4.5	9	12	0.125	1.5	40	100	80	05M6914	9.70
● CC30512SFE	4.5	9	12	0.25	3	40	100	82	05M6986	11.21
● CC30512SRE	4.5	9	12	0.25	3	40	100	82	05M6987	11.21
● CC1R51212SFE	9	18	12	0.125	1.5	40	100	82	05M6922	9.70
● CC31212SFE	9	18	12	0.25	3	40	100	82	05M6994	11.21
● CC31212SRE	9	18	12	0.25	3	40	100	82	05M6995	11.21
● CC61212SFE	9	18	12	0.5	6	40	100	85	05M7026	15.96
● CC32412SFE	18	36	12	0.25	3	40	100	82	05M7002	11.21
● CC6-2412SF-E	18	36	12	0.5	6	40	100	87	04M7378	15.96
● CC102412SFE	18	36	12	1	10	40	100	87	05M6962	26.26
● CC34812SRE	36	76	12	0.25	3	40	100	81	05M7011	11.21
● CC104812SRE	36	76	12	1	10	40	100	88	05M6971	26.26

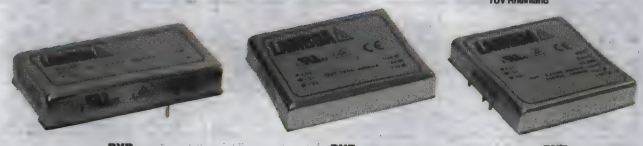
* For 24V/30V output - connnect across +Vout & -Vout and leave "common out" pin not connected
**R indicates suitable for surface mount. Example suffix SRE
(103036)

PX SERIES SINGLE, DUAL AND TRIPLE OUTPUT DC-DC CONVERTERS

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

TÜV Rheinland



PXD PXE PXF

- Industry standard footprints
- Six-sided shielding
- Agency approved
- 12V, 24V and 48V inputs

10W, PXD SERIES DIMENSIONS (L x W x H): 2 x 1 x 0.4"

Mfg. Part No.	Input (V) Min.	Input (V) Max.	Output 1 (VDC) + (V)	Output 1 (VDC) + (A)	Output 2 (VDC) - (V)	Output 2 (VDC) - (A)	Output 3 (VDC) (V)	Output 3 (VDC) (A)	Stock No.	Price Each 1-9
● PXD1024WS05	9	36	5	2	...	...	...	...	26M8306	55.55
● PXD1024WS12	9	36	12	0.83	...	...	...	...	71K9629	55.55
● PXD1024WD12	9	36	12	+416	12	416	...	...	71K9628	58.58
30W, PXD SERIES DIMENSIONS (L x W x H): 2 x 1 x 0.4"										
● PXD3024WS3P3	9	36	3.3	7.5	...	...	...	...	46R0059	96.96
● PXD3048WS3P3	18	75	3.3	7.5	...	...	...	...	60R3064	96.96
● PXD3024WS05	9	36	5	6	...	...	...	...	46R0056	96.96
● PXD3048WS05	18	75	5	6	...	...	...	...	60R3061	96.96

➤ CONTINUED ➤

PX SERIES SINGLE, DUAL AND TRIPLE OUTPUT DC-DC CONVERTERS (CONT.)

Mfg. Part No.	Input (V) Min.	Input (V) Max.	Output 1 (VDC) + (V)	Output 1 (VDC) + (A)	Output 2 (VDC) - (V)	Output 2 (VDC) - (A)	Output 3 (VDC) (V)	Output 3 (VDC) (A)	Stock No.	Price Each 1-9
30W, PXD SERIES DIMENSIONS (L x W x H): 2 x 1 x 0.4"										
PXD3024WS12	9	36	12	2.5	...	...	...	...	46R0057	96.96
PXD3048WS12	18	75	12	2.5	...	...	...	...	60R3062	96.96
PXD3024WS15	9	36	15	2	...	...	...	...	46R0058	96.96
PXD3048WS15	18	75	15	2	...	...	...	...	60R3063	96.96
PXD3024WD05	9	36	5	+3	-5	3	...	...	46R0053	104.03
PXD3048WD05	18	75	5	+3	-5	3	...	...	46R0060	104.03
PXD3024WD12	9	36	12	+1.25	-12	1.25	...	...	46R0054	104.03
PXD3048WD12	18	75	12	+1.25	-12	1.25	...	...	46R0061	104.03
PXD3024WD15	9	36	15	+1	-15	1	...	...	46R0055	104.03
PXD3048WD15	18	75	15	+1	-15	1	...	...	46R0062	104.03
20W, PXE SERIES DIMENSIONS (L x W x H): 2 x 1.6 x 0.4"										
PXE2024WS05	9	36	5	4	...	...	...	...	73J2122	67.67
PXE2024WS12	9	36	12	1.67	...	...	...	...	23K1736	67.67
PXE2024WD12	9	36	12	+833	12	833	...	...	36J9943	76.76
30W, PXE SERIES DIMENSIONS (L x W x H): 2 x 1.6 x 0.4"										
PXE3012S05	9	18	5	6	...	...	...	...	71K9632	85.85
PXE3012S12	9	18	12	2.5	...	...	...	...	73K4037	85.85
PXE3012D12	9	18	12	+1.25	12	1.25	...	...	71K9631	93.93
PXE3024S05	18	36	5	6	...	...	...	...	71K9634	85.85
PXE3024S12	18	36	12	2.5	...	...	...	...	73J2135	85.85
PXE3024D12	18	36	12	+1.25	12	1.25	...	...	10M5243	93.93
40W, PXF SERIES DIMENSIONS (L x W x H): 2 x 2 x 0.4"										
PXF4012S05	9	18	5	8	...	...	...	...	71K9636	96.96
PXF4012S12	9	18	12	3.333	...	...	...	...	71K9637	96.96
PXF4012D12	9	18	12	+1.8	12	1.8	...	...	71K9635	96.96
PXF4012T0512	9	18	5	6	+12	400	-12	-400	71K9638	117.16
PXF4024S05	18	36	5	8	...	...	...	...	71K9639	96.96
PXF4024S12	18	36	12	3.333	...	...	...	...	73K4038	96.96
PXF4024D12	18	36	12	+1.8	12	1.8	...	...	41J2217	96.96
PXF4024T0512	18	36	5	6	+12	400	-12	-400	71K9640	117.16

(84192)

PXB SERIES SINGLE AND DUAL OUTPUT 15W DC-DC CONVERTERS

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- Wide range input (4:1) (PXB15-xxW)
- Industry standard 1" x 1" footprint
- Through hole
- Six sided shielding
- Agency approved
- Two-year manufacturer's warranty

PXB series DC/DC converters feature a 1 x 1" footprint, which can replace older 2 x 1" models. Mfg. part nos. with; **N** suffix indicates negative logic remote on/off; **P** indicates positive logic remote on/off; **T** indicates trim - remote adjust (single ouput models only). UL recognized, CE compliant, VDE approved.

SPECIFICATIONS:

Mfg. Part No.:	PXB15-xxS	PXB15-xxWS	PXB15-xxD	PXB15-xxWD
Voltage Adjustment (T suffix):	±10%		n/a	
Line Regulation:	±0.2%		±0.5%	
Load Regulation:	±0.2%		±1.0%	
Remote On/Off:	Negative Logic /N (standard): ON: Short or <1.2V, OFF: Open or 3-15V Positive Logic /P (optional): ON: Open or 3-15V, OFF Short or <1.2V			
Isolation Voltage (Input to Putput):	1600 VDC minimum			
Dimensions:	1L x 1W x 0.39"H			

SINGLE OUTPUT

Mfg. Part No.	Output Voltage	Output Current (A)	Output Power (W)	Input Voltage	Effi-ciency (%)	Stock No.	Price Each 1-9
PXB15-12S3P3/NT	3.3	4A	13.2	9V to 18V	84	23R7758	51.01
PXB15-24WS3P3/NT	3.3	4A	13.2	9V to 36V	86	23R7772	56.56
PXB15-24S3P3/NT	3.3	4A	13.2	18V to 36V	86	23R7765	51.01
PXB15-48WS3P3/NT	3.3	4A	13.2	18V to 75V	86	23R7786	56.56
PXB15-48S3P3/NT	3.3	4A	13.2	36V to 75V	86	23R7779	51.01
PXB15-12S05/NT	5	3A	15	9V to 18V	86	23R7755	51.01
PXB15-24WS05/NT	5	3A	15	9V to 36V	86	23R7769	56.56
PXB15-24S05/NT	5	3A	15	18V to 36V	86	23R7762	51.01
PXB15-48WS05/NT	5	3A	15	18V to 75V	86	23R7783	56.56
PXB15-48S05/NT	5	3A	15	36V to 75V	88	23R7776	51.01
PXB15-12S12/NT	12	1.3A	15.6	9V to 18V	85	23R7756	51.01
PXB15-24WS12/NT	12	1.3A	15.6	9V to 36V	87	23R7770	56.56
PXB15-24S12/NT	12	1.3A	15.6	18V to 36V	87	23R7763	51.01
PXB15-48WS12/NT	12	1.3A	15.6	18V to 75V	87	23R7784	56.56
PXB15-48S12/NT	12	1.3A	15.6	36V to 75V	88	23R7777	51.01

➤CONTINUED➤

PXB SERIES SINGLE AND DUAL OUTPUT 15W DC-DC CONVERTERS (CONT.)

Mfg. Part No.	Output Voltage	Output Current (A)	Output Power (W)	Input Voltage	Effi-ciency (%)	Stock No.	Price Each 1-9
PXB15-12S15/NT	15	1A	15	9V to 18V	87	23R7757	51.01
PXB15-24WS15/NT	15	1A	15	9V to 36V	87	23R7771	56.56
PXB15-24S15/NT	15	1A	15	18V to 36V	88	23R7764	51.01
PXB15-48WS15/NT	15	1A	15	18V to 75V	87	23R7785	56.56
PXB15-48S15/NT	15	1A	15	36V to 75V	88	23R7778	51.01
DUAL OUTPUT							
PXB15-12D05/N	±5	±1.5A	15	9V to 18V	85	24T8881	56.56
PXB15-24WD05/N	±5	±1.5A	15	9V to 36V	85	24T8887	61.61
PXB15-24D05/N	±5	±1.5A	15	18V to 36V	85	24T8884	56.56
PXB15-48WD05/N	±5	±1.5A	15	18V to 75V	85	24T8893	61.61
PXB15-48D05/N	±5	±1.5A	15	36V to 75V	85	24T8890	56.56
PXB15-12D12/N	±12	±625mA	15	9V to 18V	87	24T8882	56.56
PXB15-24WD12/N	±12	±625mA	15	9V to 36V	87	24T8888	61.61
PXB15-24D12/N	±12	±625mA	15	18V to 36V	88	24T8885	56.56
PXB15-48WD12/N	±12	±625mA	15	18V to 75V	86	24T8894	61.61
PXB15-48D12/N	±12	±625mA	15	36V to 75V	89	24T8891	56.56
PXB15-12D15/N	±15	±500mA	15	9V to 18V	88	24T8883	56.56
PXB15-24WD15/N	±15	±500mA	15	9V to 36V	88	24T8889	61.61
PXB15-24D15/N	±15	±500mA	15	18V to 36V	88	24T8886	56.56
PXB15-48WD15/N	±15	±500mA	15	18V to 75V	87	24T8895	61.61
PXB15-48D15/N	±15	±500mA	15	36V to 75V	88	24T8892	56.56

(153741)

PH-A280 SERIES 50W TO 150W, 200 TO 425VDC INPUT DC-DC CONVERTERS

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

NEW

- 200 to 425VDC input
- Baseplate cooled
- Full power @ 100°C baseplate
- Quarter brick footprint
- 5-year manufacturer's warranty
- UL recognized, CSA certified, CE compliant

SPECIFICATIONS:

Output Voltage (Nom.):	5V	12V	24V	48V
Input Voltage Range:	200 - 425VDC			
Output Voltage Adjustment:	4-6VDC	9.6-13.2VDC	19.2-26.4VDC	38.4-52.8VDC
Ripple and Noise (Max.) pk-pk:	100mV	150mV	240mV	400mV
Line and Load Regulation:	10mV	24mV	48mV	96mV
Overcurrent Protection:	102-150% (Constant Current Style)			
Overvoltage Protection*:	125-150%	115-145%	115-145%	115-145%
Remote On/Off:	Low = ON, Open = OFF			
Operating Temperature:	-40°C to +100°C Baseplate, -40°C to +85°C Ambient			
Safety Agency Approvals:	UL60950-1, CSA60950-1, EN60950-1, CE Mark			
Dimensions:	37.2mmW x 12.7mmH x 58.3mmD			

*Cycle input or remote on/off to reset

Mfg. Part No.	Output Voltage (V)	Output Current (A)	Output Power (W)	Input Current (A)	Effi-ciency %	Stock No.	Price Each Each
PH50A2805	5	10A	50	0.21	86	23X5814	139.00
PH75A2805	5	15A	75	0.32	86	23X5818	140.00
PH100A2805	5	20A	100	0.42	86	23X5807	163.00
PH50A28012	12	4.2A	50.4	0.21	88	23X5811	139.00
PH75A28012	12	6.3A	75.6	0.31	88	23X5815	140.00
PH100A28012	12	8.4A	100.8	0.41	88	23X5804	163.00
PH150A28012	12	12.5A	150	0.62	88	23X5808	175.00
PH50A28024	24	2.1A	50.4	0.21	88	23X5812	139.00
PH75A28024	24	3.2A	76.8	0.31	89	23X5816	140.00
PH100A28024	24	4.2A	100.8	0.41	89	23X5805	163.00
PH150A28024	24	6.3A	151.2	0.61	89	23X5809	175.00
PH50A28048	48	1.1A	52.8	0.21	89	23X5813	139.00
PH75A28048	48	1.6A	76.8	0.31	90	23X5817	140.00
PH100A28048	48	2.1A	100.8	0.4	90	23X5806	163.00
PH150A28048	48	3.2A	153.6	0.6	90	23X5810	175.00

(211511)

DC-TO-DC CONVERTERS

PAH SERIES HALF-BRICK DC-TO-DC CONVERTERS (50-200W)

RoHS Compliant Available

TDK·Lambda
Innovating Reliable Power

- Industry-Standard Footprints and Pin-Outs
- High Efficiency
- Single Output
- Zero Preload Current
- Level B EMI with External Filtering
- Remote On/Off

Input Voltage Range: 36-76VDC. Dimensions: 2.8W x 0.5H x 2.4"D. UL recognized, CSA certified, CE compliant, VDE approved. Two-year manufacturer's warranty.

Mfg. Part No.	Output: Output 1 (VDC) +	Output: Output Current 1 (A)	Output: Output Power (W)	Stock No.	Price Each 1-9
● PAH50S48-5/V	5	10	50	71K9038	79.79
● PAH50S48-12/V	12	4.2	50.4	73K1284	79.79
● PAH50S48-15/V	15	3.4	51	71K9036	79.79
● PAH50S48-24/V	24	2.1	50.4	71K9037	79.79
● PAH50S48-28/V	28	1.8	50.4	31C9764	79.79
● PAH75S485/V	5	15	75	18C0301	93.93
● PAH75S48-12/V	12	6.3	75.6	71K9039	93.93
● PAH75S48-15/V	15	5	75	31C9766	93.93
● PAH75S48-24	24	3.2	76.8	99B2289	93.93
● PAH75S48-28/V	28	2.7	75.6	71K9040	93.93
● PAH100S48-5/V	5	20	100	71K9032	108.07
● PAH100S48-12/V	12	8.4	100.8	71K9030	108.07
● PAH100S48-15/V	15	6.7	100.5	31C9751	108.07
● PAH100S48-24/V	24	4.2	100.8	71K9031	108.07
● PAH100S48-28/V	28	3.6	100.8	31C9752	108.07
● PAH150S485/V	5	30	150	18C0290	121.20
● PAH150S48-12/V	12	4.2	150	71K9033	121.20
● PAH150S48-15/V	15	10	150	72K7291	121.20
● PAH150S48-28/V	28	5.4	150	74K8493	121.20
● PAH200S48-12/V	12	16.7	200.4	72K7292	131.30
● PAH200S48-15/V	15	13.4	201	71K9034	131.30
● PAH200S48-24/V	24	8.4	201.6	71K9035	131.30
● PAH200S48-28/V	28	7.2	201.6	31C9760	131.30

(57870)

NON-ISOLATED, WIDE OUTPUT ADJUSTABLE POWER MODULES

RoHS Compliant Available

TEXAS INSTRUMENTS

SINGLE OUTPUT

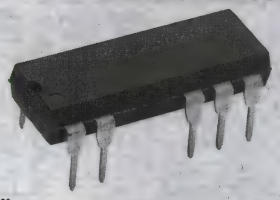
Mfg. Part No.	Input (V) Min.	Input (V) Max.	Output 1 (VDC) +	Output Current 1 (A)	Eff. ciency (%)	Pkg./ Case	Stock No.	Price Each 1-9
● PTH03010WAH	2.95	3.65	2.5	15	93	10-DIP	87H2503	21.71
● PTH04070WAH	3	5.5	3.6	3	92	5-DIP	44J0217	9.14
PTH04070WAS	3	5.5	3.6	3	92	5-DIP	44J0218	9.14
● PTH05010WAH	4.5	5.5	3.6	15	95	10-DIP	73H4315	21.71
● PTH05020WAH	4.5	5.5	3.6	22	95	10-DIP	73H4317	28.07
● PTH08080WAH	4.5	18	5.5	2.25	93.5	5-DIP	24K0569	9.14
PTH08080WAS	4.5	18	5.5	2.25	93.5	5-DIP	24K4726	9.14
● PTH08T241WAD	4.5	14	5.5	10	95	11-DIP	22M1622	20.22
● PTH08T210WAZ	5.5	14	3.6	30	93	14-DIP	66K4114	33.68
● PTH08T220WAD	4.5	14	5.5	16	95	11-DIP	66K4116	23.58
● PTH08T240WAD	4.5	14	5.5	10	95	11-DIP	71K9425	20.21
● PTH08T240WAZ	4.5	14	5.5	10	95	11-DIP	71K9429	20.21
● PTH08T250WAD	4.5	14	3.6	50	94	22-DIP	53M3841	57.38
● PTH12000WAH	10.8	13.2	5.5	6	92	5-DIP	86H7984	12.92
PTH12000WAS	10.8	13.2	5.5	6	92	5-DIP	87H2507	12.92
● PTH12010WAH	10.8	13.2	5.5	12	94	10-DIP	83H8348	21.71
● PTH12030WAH	10.8	13.2	5.5	26	94.5	13-DIP	90H3326	38.09
● PTH12060WAH	10.8	13.2	5.5	10	94	10-DIP	90H0362	20.18
● PTH04T220WAD	2.2	5.5	3.6	16	94	11-DIP	27M0664	21.44
● PTN78000AAH	7	29	-3	1.5	77	5-DIP	28K3818	17.00
● PTN78000HAH	15	36	22	1.5	77	5-DIP	33K5367	17.00
● PTN78000WAH	7	29	-12.6	1.5	77	5-DIP	65J6317	17.00
PTN78000WAS	7	36	12.6	1.5	91	5-DIP	65J6318	17.00
● PTN78020WAH	7	36	12.6	6	77	5-DIP	73J8281	28.82
PTN78020WAS	7	29	12.6	1.5	77	5-DIP	73J8282	28.82
● PTN78060WAH	7	36	12.6	3	94	7-DIP	71J7324	22.64

(88862)

ISOLATED UNREGULATED DC-TO-DC CONVERTERS

RoHS Compliant Available

TEXAS INSTRUMENTS



- Thermal Protection
- Device-to-Device Synchronization
- EN55022 Class B EMC Performance
- JEDEC 14- and 18-Pin and SO-28 Packages
- Switching Frequency: 400kHz Max.
- VOUT Accuracy: 5%

Applications: Point-of-use power conversion, ground loop elimination, data acquisition, industrial control and instrumentation, and test equipment. UL 1950 recognized.

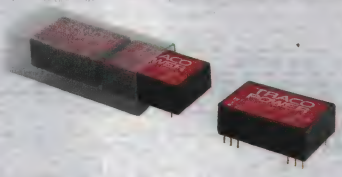
Mfg. Part No.	Input (V) Min.	Input (V) Max.	Output 1 (VDC) +	Output Current 1 (mA)	Eff-ciency (%)	Pkg./ Case	Stock No.	Price Each 1-9
MINIATURE , SINGLE OUTPUT, 1W—UP TO 85% EFFICIENCY								
● DCR010503P	4.5	5.5	3.37	300	78	10-PDIP	74C9364	12.27
● DCP010505BP	4.5	5.5	5.25	200	80	7-PDIP	74K3717	10.96
● DCR010505P	4.5	5.5	5.1	300	78	10-PDIP	74K3734	12.27
● DCV010512P-U	4.5	5.5	12.6	83	85	7-SOP	74C9390	12.15
● DCV010505P-U	4.5	5.5	5.25	200	78	7-SOP	74C9384	12.15
MINIATURE, DOUBLE OUTPUT, 1W—UP TO 85% EFFICIENCY								
● DCP010512DBP	4.5	5.5	12.6	83	82	7-PDIP	74K3720	10.96
● DCP010505DBP	4.5	5.5	5.25	100	81	7-PDIP	74K3718	10.96
● DCP010515DBP-U	4.5	5.5	15.75	33	85	7-SOP	74K3724	10.96
● DCP011515DBP	13.5	16.5	15.75	33	80	7-PDIP	74C9332	11.03
● DCP010515DBP	4.5	5.5	15.75	33	85	7-PDIP	74K3723	10.96
● DCP011512DBP	13.5	16.5	12.6	41	78	7-PDIP	74K3725	11.03
● DCP012415DBP-U	21.6	26.4	15.75	33	76	7-SOP	76K4235	11.03
● DCV010512DP-U	4.5	5.5	12.6	41	82	7-SOP	74C9387	12.15
● DCV010515DP-U	4.5	5.5	15.75	33	85	7-SOP	74C9393	12.15
MINIATURE, SINGLE OUTPUT, 2W—UP TO 89% EFFICIENCY								
● DCP020503P	4.5	5.5	3.46	606	74	7-PDIP	74C9339	11.85
● DCP020505P	4.5	5.5	5.25	400	80	7-PDIP	74K3726	11.85
● DCP020505U	4.5	5.5	5.25	400	80	12-SOP	74K3727	11.85
● DCP020507P	4.5	5.5	7.35	286	81	7-PDIP	74C9343	11.85
● DCP020509P	4.5	5.5	9.45	222	82	7-PDIP	74C9346	11.85
● DCP020509U	4.5	5.5	9.45	222	82	12-SOP	74K3728	11.85
● DCP021212P	10.8	13.2	12.6	400	88	7-PDIP	74K3731	11.85
MINIATURE, DOUBLE OUTPUT, 2W—UP TO 89% EFFICIENCY								
● DCP021212DP	10.8	13.2	12.6	83	88	7-PDIP	74K3730	11.85
● DCP022415DP	21.6	26.4	15.75	83	79	7-PDIP	74K3733	11.85
● DCP020515DP	4.5	5.5	15.75	66	85	7-PDIP	79K6170	11.85

(63509)

TEL 3 SERIES, 3 WATT, 2:1 AND 3:1 INPUT RANGE DC/DC CONVERTERS

RoHS Compliant Available

TRACO POWER



Features:
- Wide 2:1 and 3:1 input range
- High efficiency up to 81%
- DIL-24 plastic package
- Short-circuit protection
- I/O isolation 1500 VDC
- Safety standards / approvals: UL/cUL 60950-1, IEC/EN 60950-1 and CB report
- 3-year product warranty

Specifications:
- Regulation:
  Line regulation: ± 0.5% max.
  Load regulation: (single output) ± 0.5% max. (dual output) ± 1.0% max.
- Ripple & Noise: <60 mVpk-pk typ. (20 MHz BW)
- I/O-Isolation: 1500 VDC
- Operating temperature range: -40°C to +85°C, above 70°C derating 3.3%/K

TEL 3 series isolated 3 Watt converters feature high efficiency, which allows operation temperature up to 71°C at full load and low output noise.

Mfg. Part No.	Input Voltage (VDC): Nom.	Input Voltage (VDC): Min.	Input Voltage (VDC): Max	Output Voltage (VDC)	Output Current Max. (mA)	Effici-ency Typ. (%)	Stock No.	Price Each 1-4
● TEL 3-0511	5	4.5	9	5	600	70	51R4773	18.48
● TEL 3-0512	5	4.5	9	12	250	74	51R4774	18.48
● TEL 3-0522	5	4.5	9	±12	±125	74	51R4775	20.77
● TEL 3-0523	5	4.5	9	±15	±100	74	51R4776	21.03
● TEL 3-1211	12	9	18	5	600	76	51R4777	18.48
● TEL 3-1212	12	9	18	12	250	80	51R4778	19.56
● TEL 3-1222	12	9	18	±12	±125	80	51R4779	19.87
● TEL 3-1223	12	9	18	±15	±100	80	51R4780	20.77
● TEL 3-2011	20	10	30	5	600	76	51R4781	29.59
● TEL 3-2012	20	10	30	12	250	80	51R4782	28.19
● TEL 3-2022	20	10	30	±12	±125	80	51R4783	29.11
● TEL 3-2023	20	10	30	±15	±100	80	51R4784	30.55
● TEL 3-2411	24	18	36	5	600	77	51R4785	19.57
● TEL 3-2412	24	18	36	12	250	81	51R4786	18.48

➤CONTINUED➤

TEL 3 SERIES, 3 WATT, 2:1 AND 3:1 INPUT RANGE DC/DC CONVERTERS (CONT.)

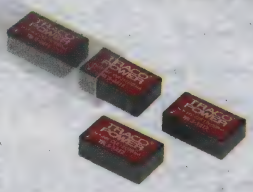
Mfg. Part No.	Input Voltage (VDC) Nom.	Min.	Max	Output Voltage (VDC)	Output Current Max. (mA)	Efficiency Typ. (%)	Stock No.	Price Each 1-4
TEL 3-2422	24	18	36	±12	±125	81	51R4787	21.30
TEL 3-2423	24	18	36	±15	±100	81	51R4788	19.87
TEL 3-4811	48	36	75	5	600	77	51R4789	18.48
TEL 3-4812	48	36	75	12	250	81	51R4790	19.56
TEL 3-4822	48	36	75	±12	±125	81	51R4791	21.03
TEL 3-4823	48	36	75	±15	±100	81	51R4792	19.87

(164419)

TEL 5 SERIES, 5 WATT DC/DC CONVERTERS

RoHS Compliant Available

TRACO POWER



Features:
- 24-pin DIP with industry standard pinout
- High power density
- Regulated outputs
- Indefinite short-circuit protection
- Lead-free design
- 3-year manufacturer's product warranty
- CSA certified

Specifications:
- Regulation:
  Input variation: 0.3% max. Vin min. to Vin max.
  Load variation: 20 - 100%: 1% max. (single output), 2% max. (dual output balanced load)
- Ripple and noise (20 MHz BW): 75 mV pk-pk max.
- I/O isolation 1500 VDC
- Operating temperature range: -40°C to +85°C

TEL 5 series of 5W DC/DC converters feature a wide input range of 2:1, state-of-the-art SMD-technology, high reliability (MTBF >1 Mio. h) and high efficiency up to 86%, qualifying these units for many cost-critical applications in industrial and consumer electronics.

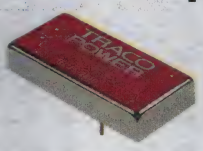
Mfg. Part No.	Input Voltage (VDC) Nom.	Min.	Max.	Output Voltage (VDC)	Output Current Max.	Efficiency Typ. (%)	Stock No.	Price Each 1-4
TEL 5-1210	12	9	18	3.3	1.2A	77	51R4800	22.99
TEL 5-1211	12	9	18	5	1A	81	51R4801	22.99
TEL 5-1212	12	9	18	12	500mA	84	51R4802	22.99
TEL 5-1222	12	9	18	±12	±250mA	84	51R4803	26.17
TEL 5-1223	12	9	18	±15	±200mA	84	51R4804	25.84
TEL 5-2410	24	18	36	3.3	1.2A	79	51R4805	22.99
TEL 5-2411	24	18	36	5	1A	83	51R4806	22.99
TEL 5-2412	24	18	36	12	500mA	86	51R4807	22.99
TEL 5-2422	24	18	36	±12	±250mA	86	51R4808	26.17
TEL 5-2423	24	18	36	±15	±200mA	86	51R4809	25.60

(178880)

TEL 15 SERIES, 15 WATT DC/DC CONVERTERS

RoHS Compliant Available

TRACO POWER



Features:
- Single and dual output models
- High efficiency up to 86%
- Indefinite short-circuit protection
- Industry standard pinout
- 3-year manufacturer's product warranty
- CSA certified

Specifications:
- Regulation:
  Input variation: 1% max. Vin min. to Vin max.
  Load variation: 10 - 100%: 0.5% max. (single output), 1% / 3% max. balanced / unbalanced load (dual output)
- Ripple and noise (20 MHz BW): 50 mV pk-pk max. (single output) 75 mV pk-pk max. (dual output)
- I/O isolation 1500 VDC
- Operating temperature range: -40°C to +71°C @ full load

TEL 15 series DC/DC-converter modules feature state-of-the-art SMD-technology. These highly reliable, high-efficiency converters provide an economical solution for many cost critical applications in industrial and consumer electronics.

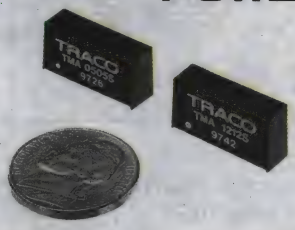
Mfg. Part No.	Input Voltage (VDC) Nom.	Min.	Max.	Output Voltage (VDC)	Output Current Max.	Efficiency Typ. (%)	Stock No.	Price Each 1-4
TEL 15-1211	12	9	18	5.1	3A	81	51R4745	55.52
TEL 15-1212	12	9	18	12	1.25A	86	51R4746	55.52
TEL 15-1222	12	9	18	±12	±625mA	86	51R4747	60.13
TEL 15-1223	12	9	18	±15	±500mA	86	51R4748	57.29
TEL 15-2411	24	18	36	5.1	3A	81	51R4749	52.90
TEL 15-2412	24	18	36	12	1.25A	86	51R4750	52.90
TEL 15-2422	24	18	36	±12	±625mA	86	51R4751	60.13
TEL 15-2423	24	18	36	±15	±500mA	86	51R4752	57.29

(178876)

TMA SERIES, 1 WATT DC/DC CONVERTERS

RoHS Compliant Available

TRACO POWER



Features:
- Single-in-line package (SIP)
- Single and dual output models
- High efficiency up to 81%
- Industry standard pinout
- 100% burn-in (8 h)
- 3-year manufacturer's product warranty

Specifications:
- Regulation:
  Input variation: ± 1.2% / 1% change Vin.
  Load variation 20 - 100%: ± 10% max.
- Ripple and noise: 75 mV pk-pk max.
- I/O isolation 1000 VDC
- Operating temperature range: -40°C to +85°C

TMA series miniature, isolated 1W DC/DC converters require only 1.2 cm2 board space making them an ideal solution in many space critical applications for board level power distribution.

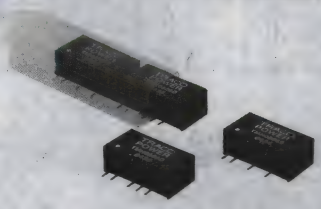
Mfg. Part No.	Input Voltage (VDC ±10%)	Output Voltage (VDC)	Output Current Max. (mA)	Efficiency Typ. (%)	Stock No.	Price Each 1-4
TMA 0505S	5	5	200	71	51R5298	6.36
TMA 0512S	5	12	80	78	51R5300	7.09
TMA 0515S	5	15	65	78	51R5302	7.09
TMA 0505D	5	±5	±100	72	51R5297	7.59
TMA 0512D	5	±12	±40	78	51R5299	7.59
TMA 0515D	5	±15	±35	79	51R5301	7.59
TMA 1205S	12	5	200	73	51R5304	7.09
TMA 1212S	12	12	80	80	51R5306	7.09
TMA 1215S	12	15	65	80	51R5308	6.70
TMA 1205D	12	±5	±100	74	51R5303	7.59
TMA 1212D	12	±12	±40	81	51R5305	7.59
TMA 1215D	12	±15	±35	81	51R5307	7.17
TMA 1505S	15	5	200	73	51R5310	7.09
TMA 1512S	15	12	80	80	51R5312	6.70
TMA 1515S	15	15	65	80	51R5314	6.70
TMA 1505D	15	±5	±100	74	51R5309	7.59
TMA 1512D	15	±12	±40	81	51R5311	7.17
TMA 1515D	15	±15	±35	81	51R5313	7.17
TMA 2405S	24	5	200	71	51R5316	8.81
TMA 2412S	24	12	80	78	51R5318	8.32
TMA 2415S	24	15	65	79	51R5320	8.81
TMA 2405D	24	±5	±100	72	51R5315	8.32
TMA 2412D	24	±12	±40	79	51R5317	8.81
TMA 2415D	24	±15	±35	80	51R5319	8.70

(178862)

TMH SERIES, 2 WATT DC/DC CONVERTERS

RoHS Compliant Available

TRACO POWER



Features:
- Single-in-line package (SIP)
- SMD-design
- Isolated single and dual output
- I/O isolation 1000 VDC
- High efficiency up to 83%
- Industry standard pinout
- 100% burn-in (8 h)
- 3-year product warranty

Specifications:
- Regulation:
  Line regulation: ± 1.2% / 1% change Vin.
  Load regulation: ± 10% max.
- Ripple & Noise: (5 Vin models) 75 mV pk-pk max. (12/24 Vin models) 150 mV pk-pk max. (20 MHz BW)
- I/O-Isolation: 1000 VDC
- Operating temperature range: -40°C to +85°C, above 70°C derating 3%/K

TMH series are ultra miniature, isolated 2 Watt DC/DC converters. Requiring only 1.5 cm2 board space they offer the ideal solution in many space critical applications for board level power distribution.

Mfg. Part No.	Input Voltage (VDC) Nom.	Min.	Max	Output Voltage (VDC)	Output Current Max. (mA)	Efficiency Typ. (%)	Stock No.	Price Each 1-4
TMH 0505S	5	4.5	5.5	5	400	76	51R5334	9.94
TMH 0512S	5	4.5	5.5	12	165	80	51R5336	9.94
TMH 0515S	5	4.5	5.5	15	130	80	51R5338	10.52
TMH 0505D	5	4.5	5.5	±5	±200	77	51R5333	10.86
TMH 0512D	5	4.5	5.5	±12	±80	79	51R5335	11.51
TMH 0515D	5	4.5	5.5	±15	±65	79	51R5337	11.50
TMH 1205S	12	10.8	13.2	5	400	78	51R5340	9.94
TMH 1212S	12	10.8	13.2	12	165	82	51R5342	9.94
TMH 1215S	12	10.8	13.2	15	130	83	51R5344	9.94
TMH 1205D	12	10.8	13.2	±5	±200	79	51R5339	10.86
TMH 1212D	12	10.8	13.2	±12	±80	82	51R5341	10.86
TMH 1215D	12	10.8	13.2	±15	±65	82	51R5343	10.86
TMH 2405S	24	21.6	26.4	5	400	77	51R5346	10.52
TMH 2412S	24	21.6	26.4	12	165	81	51R5348	10.52

CONTINUED

TMH SERIES, 2 WATT DC/DC CONVERTERS (CONT.)

Mfg. Part No.	Input Voltage (VDC) Nom.	Min.	Max	Output Voltage (VDC)	Output Current Max. (mA)	Efficiency Typ. (%)	Stock No.	Price Each 1-4
● TMH 2415S	24	21.6	26.4	15	130	82	51R5350	9.94
● TMH 2405D	24	21.6	26.4	±5	±200	79	51R5345	10.86
● TMH 2412D	24	21.6	26.4	±12	±80	81	51R5347	10.86
● TMH 2415D	24	21.6	26.4	±15	±65	82	51R5349	10.86

(164422)

TMR 2 SERIES, 2 WATT, DC/DC CONVERTERS

RoHS Compliant Available

TRACO POWER

Features:
- Wide 2:1 input voltage range
- Full SMD design
- Temperature range –40° to +85°C
- High efficiency
- Excellent load and line regulation
- 3-year product warranty

Specifications:
- Regulation:
  Line variation: ± 0.5% max.
  Load variation:± 0.85% max. (3.3VDC models)
  0.75% max. (single output models)
  ± 1.0% max. (balanced load)(dual output models)
- Ripple & Noise: 50 mVpk-pk typ. (20 MHz BW)
- I/O isolation 1000VDC
- Operating temperature range: -40°C to +85°C, above +75°C derating 2%/K

TMR-2 series isolated 2 Watt DC/DC converter modules with regulated output. The compact SIP-8 plastic package with small footprint occupy only 2.0 cm² (0.3 square in.) of board space. Further features include remote On/Off control and continuous short circuit protection. The ultra-compact dimensions makes them ideal for many space critical applications in communication equipment, instrumentation and industrial electronics.

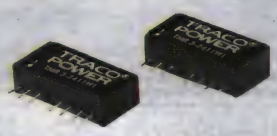
Mfg. Part No.	Input Voltage (VDC) Nom.	Min.	Max	Output Voltage (VDC)	Output Current Max.	Efficiency Typ. (%)	Stock No.	Price Each 1-4
● TMR 0510	5	4.5	9	3.3	500mA	64	51R5451	19.64
● TMR 0511	5	4.5	9	5	400mA	66	51R5452	20.79
● TMR 0512	5	4.5	9	12	165mA	71	51R5453	20.53
● TMR 0521	5	4.5	9	±5	±200mA	64	51R5454	20.56
● TMR 0522	5	4.5	9	±12	±85mA	69	51R5455	21.76
● TMR 0523	5	4.5	9	±15	±65mA	71	51R5456	20.56
● TMR 1210	12	9	18	3.3	500mA	70	51R5457	19.64
● TMR 1211	12	9	18	5	400mA	73	51R5458	20.34
● TMR 1212	12	9	18	12	165mA	80	51R5459	19.64
● TMR 1221	12	9	18	±5	±200mA	73	51R5460	21.76
● TMR 1222	12	9	18	±12	±85mA	78	51R5461	20.56
● TMR 1223	12	9	18	±15	±65mA	78	51R5462	20.56
● TMR 2410	24	18	36	3.3	500mA	71	51R5477	19.64
● TMR 2411	24	18	36	5	400mA	74	51R5478	19.64
● TMR 2412	24	18	36	12	165mA	81	51R5479	19.64
● TMR 2421	24	18	36	±5	±200mA	74	51R5480	20.56
● TMR 2422	24	18	36	±12	±85mA	78	51R5481	20.56
● TMR 2423	24	18	36	±15	±65mA	80	51R5482	20.56
● TMR 4811	48	36	75	5	400mA	73	51R5516	20.79
● TMR 4821	48	36	75	±5	±85mA	71	51R5517	20.56
● TMR 4822	48	36	75	±12	±65mA	77	51R5518	20.56

(178504)

TMR 3WI SERIES, 3 WATT, DC/DC CONVERTERS

RoHS Compliant Available

TRACO POWER



Features:
- Highest power density in SIP package
- Ultra wide 4:1 input range
- Small footprint: 21.8 x 9.2 mm
- Temperature range –40° to +85°C
- High efficiency up to 81%
- Excellent load and line regulation
- Short-circuit protection
- Remote On/Off control
- 3-year product warranty

Specifications:
- Regulation:
  Line variation: ± 0.2% max.
  Load variation: ± 1% max. (single output models)
  ± 1% max. (balanced load) (dual output models)
- Ripple & Noise: 30 mVpk-pk max. (20 MHz BW)
- I/O isolation 1500VDC
- Operating temperature range: -40°C to +85°C, above +70°C derating 3.3%/K

TMR-3WI series are isolated 3W DC/DC converters with regulated output. The product comes in a ultra-compact SIP plastic package with a small footprint occupying only 2.0 cm² (0.3 square in.) of board space, ideal for many space critical applications in battery-powered equipment and instrumentation.

Mfg. Part No.	Input Voltage (VDC) Nom.	Min.	Max.	Output Voltage (VDC)	Output Current (Max.)	Efficiency Typ. (%)	Stock No.	Price Each 1-4
● TMR 3-1210WI	12	4.5	18	3.3	700mA	74	51R5487	29.11
● TMR 3-1211WI	12	4.5	18	5	600mA	78	51R5489	29.11
● TMR 3-1212WI	12	4.5	18	12	250mA	80	51R5491	29.11
● TMR 3-1213WI	12	4.5	18	15	200mA	80	51R5492	30.55
● TMR 3-1221WI	12	4.5	18	±5	±300mA	80	51R5493	31.42
● TMR 3-1222WI	12	4.5	18	±12	±125mA	80	51R5495	32.98
● TMR 3-1223WI	12	4.5	18	±15	±100mA	80	51R5497	31.42

➤CONTINUED➤

TMR 3WI SERIES, 3 WATT, DC/DC CONVERTERS (CONT.)

Mfg. Part No.	Input Voltage (VDC) Nom.	Min.	Max.	Output Voltage (VDC)	Output Current (Max.)	Efficiency Typ. (%)	Stock No.	Price Each 1-4
● TMR 3-2410WI	24	9	36	3.3	700mA	75	51R5498	30.55
● TMR 3-2411WI	24	9	36	5	600mA	80	51R5500	29.11
● TMR 3-2412WI	24	9	36	12	250mA	81	51R5502	29.11
● TMR 3-2413WI	24	9	36	15	200mA	81	51R5503	29.11
● TMR 3-2421WI	24	9	36	±5	±300mA	79	51R5504	31.42
● TMR 3-2422WI	24	9	36	±12	±125mA	80	51R5506	31.42
● TMR 3-2423WI	24	9	36	±15	±100mA	81	51R5508	32.98
● TMR 3-4810WI	48	18	75	3.3	700mA	74	51R5509	30.55
● TMR 3-4811WI	48	18	75	5	600mA	79	51R5510	29.11
● TMR 3-4812WI	48	18	75	12	250mA	79	51R5511	29.11
● TMR 3-4813WI	48	18	75	15	200mA	79	51R5512	29.11
● TMR 3-4821WI	48	18	75	±5	±300mA	79	51R5513	32.98
● TMR 3-4822WI	48	18	75	±12	±125mA	79	51R5514	31.42
● TMR 3-4823WI	48	18	75	±15	±100mA	80	51R5515	32.98

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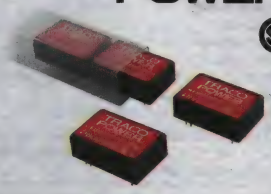
TEN 5WI SERIES, 6 WATT, 4:1 INPUT RANGE DC/DC CONVERTERS

RoHS Compliant Available

TRACO POWER



Features:
- Ultra wide 4:1 Input Range
- High efficiency up to 84%
- Input filter meets EN 55022, class A and FCC, level A
- Short circuit protection
- Industry standard pin out
- Six-side shielded metal case, with insulated base plate
- Safety standards / approvals: UL/cUL 60950-1, IEC/EN 60950-1 and CB report
- 3-year product warranty

Specifications:
- Regulation:
  Line regulation: ± 0.3% max.
  Load regulation: ± 2.0% max.
- Ripple & Noise: 75 mVpk-pk typ. (20 MHz BW)
- I/O-Isolation: 1500 VDC
- Operating temperature range: -40°C to +85°C, above 70°C derating 3.5%/K

TEN 5WI series of high performance DC/DC converters feature over voltage protection and continuous short circuit protection. Typical applications are battery operated equipment and distributed power architectures in communication, instrumentation and industrial electronics, everywhere a wide input voltage range is required.

Mfg. Part No.	Input Voltage (VDC) Nom.	Min.	Max	Output Voltage (VDC)	Output Current Max. (mA)	Efficiency Typ. (%)	Stock No.	Price Each 1-4
● TEN 5-2410WI	24	9	36	3.3	1200	76	51R4962	42.05
● TEN 5-2411WI	24	9	36	5	1000	79	51R4964	34.99
● TEN 5-2412WI	24	9	36	12	500	84	51R4966	33.96
● TEN 5-2413WI	24	9	36	15	400	83	51R4967	33.96
● TEN 5-2421WI	24	9	36	±5	±500	79	51R4968	37.43
● TEN 5-2422WI	24	9	36	±12	±250	84	51R4970	37.82
● TEN 5-2423WI	24	9	36	±15	±200	83	51R4972	36.04
● TEN 5-4810WI	48	18	75	3.3	1200	76	51R4973	42.05
● TEN 5-4811WI	48	18	75	5	1000	79	51R4974	35.64
● TEN 5-4812WI	48	18	75	12	500	84	51R4975	33.96
● TEN 5-4813WI	48	18	75	15	400	83	51R4976	33.96
● TEN 5-4821WI	48	18	75	±5	±500	79	51R4977	36.04
● TEN 5-4822WI	48	18	75	±12	±250	84	51R4978	36.04
● TEN 5-4823WI	48	18	75	±15	±200	83	51R4979	36.04

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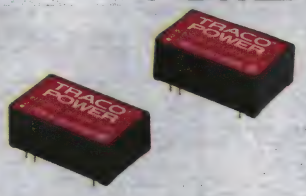
TEN 6WIN SERIES, 6 WATT DC/DC CONVERTERS

RoHS Compliant Available

TRACO POWER



- Wide 4:1 input voltage range
- High efficiency
- Operating temperature range –40°C to +85°C
- No minimum load required
- Models with 1'500 VDC and 3'000 VDC I/O isolation (functional insulation)
- Input filter meets EN 55022, class A
- Overload protection
- DIP-24 plastic package
- Industry standard pinout
- 3-year product warranty

SINGLE OUTPUT

Mfg. Part No.	Input Voltage Range	Output Voltage	Output Current (Max.)	Stock No.	Price Each 1-4
● TEN 6-2410WIN	9V to 36V	3.3	1.2A	70W2237	25.41
● TEN 6-2411WIN	9V to 36V	5	1.2A	70W2238	26.67
● TEN 6-2412WIN	9V to 36V	12	500mA	70W2239	25.41
● TEN 6-2413WIN	9V to 36V	15	400mA	70W2240	25.41
● TEN 6-2415WIN	9V to 36V	24	250mA	70W2241	25.41
● TEN 6-4810WIN	18V to 75V	3.3	1.2A	70W2245	25.41
● TEN 6-4811WIN	18V to 75V	5	1.2A	70W2246	25.41

➤CONTINUED➤

TEN 6WIN SERIES, 6 WATT DC/DC CONVERTERS (CONT.)

Mfg. Part No.	Input Voltage Range	Output Voltage	Output Current (Max.)	Stock No.	Price Each 1-4
TEN 6-4812WIN	18V to 75V	12	500mA	70W2247	25.41
TEN 6-4813WIN	18V to 75V	15	400mA	70W2248	25.41
TEN 6-4815WIN	18V to 75V	24	250mA	70W2249	25.41
DUAL OUTPUT					
TEN 6-2421WIN	9V to 36V	5V, -5V	500mA, 500mA	70W2242	27.72
TEN 6-2422WIN	9V to 36V	12V, -12V	250mA, 250mA	70W2243	27.72
TEN 6-2423WIN	9V to 36V	15V, -15V	200mA, 200mA	70W2244	27.72
TEN 6-4821WIN	18V to 75V	5V, -5V	500mA, 500mA	70W2250	27.72
TEN 6-4822WIN	18V to 75V	12V, -12V	250mA, 250mA	70W2251	27.72
TEN 6-4823WIN	18V to 75V	15V, -15V	200mA, 200mA	70W2252	27.72

(209916)

TEN 8WI SERIES, 8 WATT, DC/DC CONVERTERS

RoHS Compliant Available

TRACO POWER

Features:
- Ultra wide 4:1 input range
- High efficiency up to 88%
- Input filter meets EN 55022, class A and FCC, level A with external capacitor
- Short circuit protection
- Six-side shielded metal case, with insulated base plate
- Remote on/off
- Industry standard pin out
- 3-year product warranty

Specifications:
- Regulation:
  Line regulation:± 0.2% max.
  Load regulation: ± 0.5% max. (single output models)
  ± 1.0% max. (dual output models)
- Ripple & Noise: 50 mVpk-pk typ. (20 MHz BW)
- I/O-Isolation: 1500 VDC
- Operating temperature range: -40°C to +85°C, above 70°C derating 3.5%/K
- Remote On/Off: shutdown input for low current (2.5 mA) in standby operation

TEN 8WI series high performance DC/DC converters feature over voltage protection and under voltage lockout. Full SMD-design with use of ceramic chip capacitors provides high reliability and long product life. Safety standards / approvals: cUL/UL 60950-1, IEC/EN 60950-1.

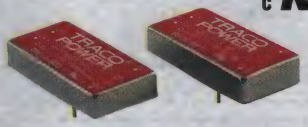
Mfg. Part No.	Input Voltage (VDC) Nom.	Min.	Max.	Output Voltage (VDC)	Output Current (Max.)	Efficiency Typ. (%)	Stock No.	Price Each 1-4
TEN 8-2410WI	24	9	36	3.3	2A	85	51R4997	51.16
TEN 8-2411WI	24	9	36	5	1.5A	87	51R4999	46.32
TEN 8-2412WI	24	9	36	12	665mA	86	51R5001	44.13
TEN 8-2413WI	24	9	36	15	535mA	86	51R5002	44.13
TEN 8-2421WI	24	9	36	±5	±800mA	84	51R5004	51.16
TEN 8-2422WI	24	9	36	±12	±335mA	86	51R5006	48.75
TEN 8-2423WI	24	9	36	±15	±265mA	86	51R5008	48.75
TEN 8-4810WI	48	18	75	3.3	2A	85	51R5010	48.75
TEN 8-4811WI	48	18	75	5	1.5A	87	51R5012	44.13
TEN 8-4812WI	48	18	75	12	665mA	87	51R5014	44.13
TEN 8-4813WI	48	18	75	15	535mA	88	51R5015	44.13
TEN 8-4821WI	48	18	75	±5	±800mA	84	51R5016	48.75
TEN 8-4822WI	48	18	75	±12	±335mA	86	51R5018	48.75
TEN 8-4823WI	48	18	75	±15	±265mA	87	51R5019	48.75

(166272)

TEN 12WI SERIES, 12 WATT, DC/DC CONVERTERS

RoHS Compliant Available

TRACO POWER



Features:
- Ultrawide 4 : 1 input range
- Full SMD-design
- Input Filter meets EN 55022, Class A and FCC, level A without external components
- Indefinite short-circuit protection
- Overvoltage protection
- Remote on/off (optional)
- Insulated baseplate
- 3-year product warranty

Specifications:
- Regulation:
  Line variation: ± 0.5% max.
  Load variation:± 0.5% max.
- Ripple & Noise: 50 mVpk-pk typ. (20 MHz BW)
- I/O-Isolation: 1500 VDC
- Operating temperature range: -40°C to +85°C, above 60°C derating 2%/K

TEN 12WI series 12W DC/DC converter modules feature a ultra wide 4:1 input voltage range in a compact 2 x 1.0" low profile package with industry-standard footprint. Safety standards: UL 1950, EN 60950, IEC 60950

Mfg. Part No.	Input Voltage (VDC) Nom.	Min.	Max.	Output Voltage (VDC)	Output Current (Max.)	Efficiency Typ. (%)	Stock No.	Price Each 1-4
TEN 12-2410	24	9	36	3.3	2.4A	78	51R4810	60.07
TEN 12-2411	24	9	36	5	2A	82	51R4811	54.57
TEN 12-2412	24	9	36	12	1A	84	51R4812	53.25
TEN 12-2422	24	9	36	±12	±500mA	84	51R4813	54.53
TEN 12-2423	24	9	36	±15	±400mA	84	51R4814	54.53
TEN 12-4810	48	18	75	3.3	2.4A	78	51R4815	60.07

CONTINUED

TEN 12WI SERIES, 12 WATT, DC/DC CONVERTERS (CONT.)

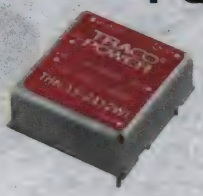
Mfg. Part No.	Input Voltage (VDC) Nom.	Min.	Max.	Output Voltage (VDC)	Output Current (Max.)	Efficiency Typ. (%)	Stock No.	Price Each 1-4
TEN 12-4811	48	18	75	5	2A	82	51R4816	53.25
TEN 12-4812	48	18	75	12	1A	84	51R4817	53.25
TEN 12-4822	48	18	75	±12	±500mA	84	51R4818	54.53
TEN 12-4823	48	18	75	±15	±400mA	84	51R4819	57.23

(166264)

THN 15WI SERIES 15W DC/DC CONVERTERS

RoHS Compliant Available

TRACO POWER



- Smallest encapsulated 15W converter
- Ultra compact size: 1.0 x 1.0 x 0.4"
- Shielded metal case with isolated baseplate
- Ultrawide 4:1 input ranges 9-36VDC or 18-75VDC
- Output voltage trim
- I/O isolation voltage 1500VDC
- Very high efficiency up to 87%
- Operating temp. range : -40°C to +85°C
- Remote On/Off control
- Industry standard pinout
- 3-year product warranty

SINGLE OUTPUT

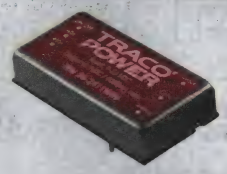
Mfg. Part No.	Input Voltage	Output Voltage (V)	Output Current	Efficiency (%)	Stock No.	Price Each 1-4	Price Each 5-9
THN 15-2410WI	9V to 36V	3.3	4A	86	51R5263	58.30	56.03
THN 15-2411WI	9V to 36V	5	3A	86	51R5264	58.92	56.62
THN 15-2412WI	9V to 36V	12	1.3A	87	51R5265	58.92	56.62
THN 15-2413WI	9V to 36V	15	1A	88	51R5266	56.14	53.95
THN 15-4810WI	18V to 75V	3.3	4A	86	51R5270	58.92	56.62
THN 15-4811WI	18V to 75V	5	3A	88	51R5271	56.14	53.95
THN 15-4812WI	18V to 75V	12	1.3A	88	51R5272	56.14	53.95
THN 15-4813WI	18V to 75V	15	1A	88	51R5273	56.14	53.95
DUAL OUTPUT							
THN 15-2421WI	9V to 36V	±5	±1.5A	85	51R5267	58.58	56.38
THN 15-2422WI	9V to 36V	±12	±625mA	88	51R5268	59.70	57.45
THN 15-2423WI	9V to 36V	±15	±500mA	88	51R5269	59.70	57.45
THN 15-4821WI	18V to 75V	±5	±1.5A	85	51R5274	58.58	56.38
THN 15-4822WI	18V to 75V	±12	±625mA	89	51R5275	58.58	56.38
THN 15-4823WI	18V to 75V	±15	±500mA	88	51R5276	58.58	56.38

(191952)

TEN 20WIN SERIES, 20 WATT, DC/DC CONVERTERS

RoHS Compliant Available

TRACO POWER



Features:
- High power density in 2 x 1 x 0.4" package
- Ultra wide 4:1 input range
- High efficiency up to 88%
- Short circuit protection
- Remote on/off
- Industry standard pin out
- Metal case with insulated base plate
- 3-year product warranty

Specifications:
- Regulation:
  Line variation:: ± 0.2% max.
  Load variation: ± 0.5% max. (single output models)
  ± 1.0% max. (dual output models)
- Output voltage adjustment: ±10% (only single output models by external resistor)
- Conducted EMI: EN 55022, class A and FCC, level A, with ext. capacitor
- Ripple & noise (20 MHz BW): 75mV pk-pk typ. (single output models)
  100mV pk-pk typ. (dual output models)
- I/O-Isolation: 1500 VDC
- Operating temperature range: -40°C to +85°C; above 65°C derating 2.5%/K

TEN 20WIN series of high performance DC/DC converters feature output voltage trimming and over voltage protection. Typical applications include battery operated equipment and distributed power architectures in communication and industrial electronics, everywhere isolated tightly regulated voltages are required. Safety standards/approvals: UL/cUL 60950-1, IEC/EN 60950-1.

Mfg. Part No.	Input Voltage (VDC) Nom.	Min.	Max.	Output Voltage (VDC)	Output Current (Max.)	Efficiency Typ. (%)	Stock No.	Price Each 1-4
TEN 20-2410WIN	24	9	36	3.3	5.5A	85	51R4843	63.48
TEN 20-2411WIN	24	9	36	5	4A	88	51R4845	67.33
TEN 20-2412WIN	24	9	36	12	1.67A	86	51R4847	63.48
TEN 20-2413WIN	24	9	36	15	1.33A	86	51R4848	63.48
TEN 20-2421WIN	24	9	36	±5	±2A	88	51R4849	69.66
TEN 20-2422WIN	24	9	36	±12	±835mA	87	51R4851	69.66
TEN 20-2423WIN	24	9	36	±15	±665mA	87	51R4853	69.66
TEN 20-4810WIN	48	18	75	3.3	5.5A	85	51R4854	63.48
TEN 20-4811WIN	48	18	75	5	4A	88	51R4856	65.92
TEN 20-4812WIN	48	18	75	12	1.67A	87	51R4858	66.62

CONTINUED

DC-TO-DC CONVERTERS

TEN 20WIN SERIES, 20 WATT, DC/DC CONVERTERS (CONT.)

Mfg. Part No.	Input Voltage (VDC) Nom.	Min.	Max.	Output Voltage (VDC)	Output Current (Max.)	Efficiency Typ. (%)	Stock No.	Price Each 1-4
● TEN 20-4813WIN	48	18	75	15	1.33A	87	51R4859	63.48
● TEN 20-4821WIN	48	18	75	±5	±2A	89	51R4860	69.66
● TEN 20-4822WIN	48	18	75	±12	±835mA	88	51R4861	73.11
● TEN 20-4823WIN	48	18	75	±15	±665mA	88	51R4862	69.66

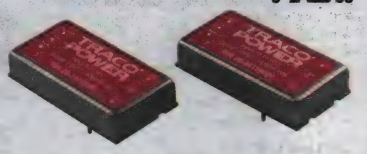
(166273)

TEN 20WIR SERIES, 20 WATT DC/DC CONVERTERS

RoHS Compliant Available

TRACO POWER

- 2" x 1" metal package
- Ultra wide 4:1 input voltage range 9–36, 18–75, 43–160 VDC
- EN 50155 approval for railway applications
- Thermal shock and vibration resistant according EN 61373
- Input filter meets EN 55022 class B without external components
- High efficiency up to 89%
- No minimum load required
- Operating temperature range –40°C to +85°C
- Under voltage lock-out circuit
- Remote On/Off
- Output voltage adjustable
- Lead free design, RoHS compliant
- 3-year product warranty



SINGLE OUTPUT

Mfg. Part No.	Input Voltage Range	Output Voltage	Output Current (Max.)	Stock No.	Price Each 1-4
● TEN 20-2410WIR	9V to 36V	3.3	4.5A	70W2201	87.20
● TEN 20-2411WIR	9V to 36V	5	4A	70W2202	87.20
● TEN 20-2412WIR	9V to 36V	12	1.67A	70W2203	84.35
● TEN 20-2413WIR	9V to 36V	15	1.33A	70W2204	84.35
● TEN 20-4810WIR	18V to 75V	3.3	4.5A	70W2207	87.20
● TEN 20-4811WIR	18V to 75V	5	4A	70W2208	87.20
● TEN 20-4812WIR	18V to 75V	12	1.67A	70W2209	84.35
● TEN 20-4813WIR	18V to 75V	15	1.33A	70W2210	84.35
● TEN 20-7210WIR	43V to 160V	3.3	4.5A	70W2213	95.80
● TEN 20-7211WIR	43V to 160V	5	4A	70W2214	95.80
● TEN 20-7212WIR	43V to 160V	12	1.67A	70W2215	87.20
● TEN 20-7213WIR	43V to 160V	15	1.33A	70W2216	87.20
DUAL OUTPUT					
● TEN 20-2422WIR	9V to 36V	12V, -12V	833mA, 833mA	70W2205	87.20
● TEN 20-2423WIR	9V to 36V	15V, -15V	667mA, 667mA	70W2206	87.20
● TEN 20-4822WIR	18V to 75V	12V, -12V	833mA, 833mA	70W2211	87.20
● TEN 20-4823WIR	18V to 75V	15V, -15V	667mA, 667mA	70W2212	87.20
● TEN 20-7222WIR	43V to 160V	12V, -12V	833mA, 833mA	70W2217	95.80
● TEN 20-7223WIR	43V to 160V	15V, -15V	667mA, 667mA	70W2218	95.80

(209917)

TEN 25WI SERIES, 25/30 WATT, DC/DC CONVERTERS

RoHS Compliant Available

TRACO POWER

Features:
- Ultra wide 4:1 input voltage range
- Adjustable output voltage
- Input filter meets EN 55022, class A and FCC, level A without external components
- 3-year product warranty

Specifications:
- Regulation:
  Line variation: ± 0.5% max.
  Load variation: ± 1% max. (single output models)
  ± 2% max. (balanced load) (dual output models)
- Ripple & Noise: 80 mVpk-pk max. (20 MHz BW)
- Operating temperature range: -40°C to +85°C, above 55°C derating 2%/K, above 65°C derating 2.5%/K

TEN 25WI series high performance 30W DC/DC converter modules feature ultra wide 4:1 input voltage ranges in a compact low profile case with industry standard footprint. Standard features include remote On/Off, output voltage trimming, over voltage protection, under voltage lockout, over temperature and short circuit protection.

Mfg. Part No.	Input Voltage (VDC) Nom.	Min.	Max	Output Voltage (VDC)	Output Current (Max.)	Efficiency Typ. (%)	Stock No.	Price Each 1-4
● TEN 25-2410WI	24	10	40	3.3	5.5A	82	83R7215	67.95
● TEN 25-2411WI	24	10	40	5	5A	85	83R7216	69.66
● TEN 25-2412WI	24	10	40	12	2.5A	89	83R7217	73.11
● TEN 25-2413WI	24	10	40	15	2A	89	83R7218	73.11
● TEN 25-2422WI	24	10	40	±12	±1.25A	89	83R7219	71.79
● TEN 25-2423WI	24	10	40	±15	±1A	89	83R7220	71.79
● TEN 25-4810WI	48	18	75	3.3	5.5A	82	83R7221	67.95
● TEN 25-4811WI	48	18	75	5	5A	85	83R7222	69.66
● TEN 25-4812WI	48	18	75	12	2.5A	89	83R7223	69.66

➤CONTINUED➤

TEN 25WI SERIES, 25/30 WATT, DC/DC CONVERTERS (CONT.)

Mfg. Part No.	Input Voltage (VDC) Nom.	Min.	Max	Output Voltage (VDC)	Output Current (Max.)	Efficiency Typ. (%)	Stock No.	Price Each 1-4
● TEN 25-4813WI	48	18	75	15	2A	89	83R7224	69.66
● TEN 25-4822WI	48	18	75	±12	±1.25A	89	83R7225	71.79
● TEN 25-4823WI	48	18	75	±15	±1A	89	83R7226	71.79

(179638)

TEN 40WI SERIES, 40 WATT DC/DC CONVERTERS

RoHS Compliant Available

TRACO POWER

- High power density: 40W in 2"x2"x0.4" metal package
- Ultra wide 4:1 input voltage range
- Very high efficiency up to 87 %
- No minimum load required for single output models
- Over temperature protection
- Under voltage lockout
- Remote On/Off
- Shielded metal case with insulated baseplate
- Optional heat-sink
- 3-year product warranty

SINGLE OUTPUT

Mfg. Part No.	Input Voltage Range	Output Voltage	Output Current (Max.)	Stock No.	Price Each 1-4
● TEN 40-2410WI	9V to 36V	3.3V	10A	28W5290	109.70
● TEN 40-2411WI	9V to 36V	5V	8A	74T7528	109.70
● TEN 40-2412WI	9V to 36V	12V	3.35A	74T7529	109.70
● TEN 40-2413WI	9V to 36V	15V	2.65A	28W5291	109.70
● TEN 40-4810WI	18V to 75V	3.3V	10A	28W5293	109.70
● TEN 40-4811WI	18V to 75V	5V	8A	28W5294	109.70
● TEN 40-4812WI	18V to 75V	12V	3.35A	28W5295	109.70
● TEN 40-4813WI	18V to 75V	15V	2.65A	28W5296	109.70
DOUBLE OUTPUT					
● TEN 40-2422WI	9V to 36V	12V, -12V	1.65A, 1.65A	24T2889	109.60
● TEN 40-2423WI	9V to 36V	15V, -15V	1.35A, 1.35A	28W5292	116.73
● TEN 40-4822WI	18V to 75V	12V, -12V	1.65A, 1.65A	28W5297	116.73
● TEN 40-4823WI	18V to 75V	15V, -15V	1.35A, 1.35A	28W5298	116.73

(209889)

TEN 50 SERIES, 50 WATT DC/DC CONVERTERS

RoHS Compliant Available

TRACO POWER

- Highest power density: 50 W in 1" x 2" x 0.4" package
- Excellent efficiency up to 92 %
- Operating temperature range –40°C to +85°C
- No minimum load required
- Output voltage adjustable
- Remote On/Off
- I/O isolation 1500 VDC
- 3-year product warranty

Mfg. Part No.	Input Voltage Range	Output Voltage	Output Current (Max.)	Stock No.	Price Each 1-4
● TEN 50-1211	9V to 18V	5	10	70W2228	105.20
● TEN 50-1212	9V to 18V	12	4.16	70W2229	105.20
● TEN 50-1213	9V to 18V	15	3.333	70W2230	105.20
● TEN 50-2411	18V to 36V	5	10	70W2231	103.40
● TEN 50-2412	18V to 36V	12	4.16	70W2232	103.40
● TEN 50-2413	18V to 36V	15	3.333	70W2233	103.40
● TEN 50-4811	36V to 75V	5	10	70W2234	103.40
● TEN 50-4812	36V to 75V	12	4.16	70W2235	103.40
● TEN 50-4813	36V to 75V	15	3.333	70W2236	103.40

(209928)

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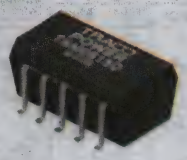
(212565)

TSM SERIES, 1 WATT, DC/DC CONVERTERS

RoHS Compliant Available

TRACO POWER



Features:
- SMD package (SOIC-14/18)
- Construction in lead frame technology
- Isolated single and dual Output
- High efficiency
- Operating temperature –40°C to +85°C
- Reflow solder temperature up to 245°C
- High accuracy of pin co-planarity
- Available in tape and reel package
- 3-year product warranty

Specifications:
- Regulation:
  Line variation: 1.2%/1% change Vin
  Load variation:10% max.
- Ripple & Noise: 120 mVpk-pk typ. (20 MHz BW)
- I/O-Isolation 1000VDC
- Operating temperature range: -40°C to +85°C (no derating)

TSM series are isolated DC/DC converters with 1 watt output power implemented in a molded plastic package with a pin accuracy suitable for automated SMD production. The devices can be soldered without any problems in a high temperature lead free solder process. With their small footprint these converters are the economical solution for point of load power conversion, ground loop elimination, noise reduction and digital interface applications.

Mfg. Part No.	Input Voltage (VDC) Nom.	Min.	Max.	Output Voltage (VDC)	Output Current (Max.)	Efficiency Typ. (%)	Stock No.	Price Each 1-4
TSM 0505S	5	4.5	5.5	5	200mA	80	51R5662	12.97
TSM 0509S	5	4.5	5.5	9	110mA	78	51R5663	12.97
TSM 0512S	5	4.5	5.5	12	80mA	80	51R5665	12.25
TSM 0505D	5	4.5	5.5	±5	±100mA	75	51R5661	14.18
TSM 0512D	5	4.5	5.5	±12	±40mA	79	51R5664	13.40
TSM 0515D	5	4.5	5.5	±15	±30mA	30	51R5666	13.40
TSM 1205S	12	10.8	13.2	5	200mA	81	51R5668	13.14
TSM 1209S	12	10.8	13.2	9	110mA	78	51R5669	12.25
TSM 1212S	12	10.8	13.2	12	80mA	81	51R5671	12.25
TSM 1205D	12	10.8	13.2	±5	±100mA	75	51R5667	13.40
TSM 1212D	12	10.8	13.2	±12	±40mA	80	51R5670	13.40
TSM 1215D	12	10.8	13.2	±15	±65mA	80	51R5672	13.40

(178505)

TES 2N SERIES, 2 WATT, DC/DC CONVERTERS

RoHS Compliant Available

TRACO POWER

Features:
- Low profile SMD-package
- Wide 2:1 input voltage range
- Short-circuit protection
- Qualified for leadfree reflow solder process according IPC J-STD-020C
- Available in tape and reel package
- 3-year product warranty

Specifications:
- Regulation:
  Line variation: ± 0.5% max.
  Load variation: ± 0.75% max. (single output models)
  ± 2.0% (balanced load) (dual output models)
- Ripple & Noise: 50 mVpk-pk typ. (20 MHz BW)
- I/O isolation 1500VDC
- Operating temperature range: -40°C to +85°C, above +71°C derating 3.5%/K

TES-2N series high performance 2 Watt DC/DC converter modules require just 3 cm² space on the PCB. A high efficiency allows an operating temperature range of –40°C to +85°C. A built-in EMI input filter complies with EN 55022, class A. Typical applications include battery operated equipment, instrumentation, communication and industrial electronics, everywhere isolated, tightly regulated voltages are required.

Mfg. Part No.	Input Voltage (VDC) Nom.	Min.	Max.	Output Voltage (VDC)	Output Current (Max.)	Efficiency Typ. (%)	Stock No.	Price Each 1-4
TES 2N-0510	5	4.5	9	3.3	500mA	70	51R5113	27.26
TES 2N-0511	5	4.5	9	5	400mA	73	51R5114	27.26
TES 2N-0512	5	4.5	9	12	165mA	75	51R5115	27.26
TES 2N-0513	5	4.5	9	15	135mA	73	51R5116	27.26
TES 2N-0521	5	4.5	9	±5	±200mA	64	51R5117	28.19
TES 2N-0522	5	4.5	9	±12	±85mA	69	51R5118	29.59
TES 2N-0523	12	9	18	±15	±65mA	71	51R5119	28.19
TES 2N-1210	12	9	18	3.3	500mA	73	51R5120	27.26
TES 2N-1211	12	9	18	5	400mA	77	51R5121	27.26
TES 2N-1212	12	9	18	12	165mA	80	51R5122	27.26
TES 2N-1213	12	9	18	15	135mA	80	51R5123	28.61
TES 2N-1221	12	9	18	±5	±200mA	73	51R5124	28.19
TES 2N-1222	12	9	18	±12	±85mA	78	51R5125	28.19
TES 2N-1223	12	9	18	±15	±65mA	78	51R5126	28.19
TES 2N-2410	24	18	36	3.3	500mA	72	51R5127	28.61
TES 2N-2411	24	18	36	5	400mA	77	51R5128	28.61
TES 2N-2412	24	18	36	12	165mA	80	51R5129	27.26
TES 2N-2413	24	18	36	15	135mA	81	51R5130	27.26
TES 2N-2421	24	18	36	±5	±200mA	74	51R5131	28.19
TES 2N-2422	24	18	36	±12	±85mA	78	51R5132	28.19
TES 2N-2423	24	18	36	±15	±65mA	80	51R5133	29.59
TES 2N-4810	48	36	75	3.3	500mA	71	51R5134	30.27
TES 2N-4811	48	36	75	5	400mA	73	51R5135	30.27
TES 2N-4812	48	36	75	12	165mA	79	51R5136	30.27
TES 2N-4813	48	36	75	15	135mA	79	51R5137	30.27
TES 2N-4821	48	36	75	±5	±200mA	71	51R5138	31.19

➤CONTINUED➤

TES 2N SERIES, 2 WATT, DC/DC CONVERTERS (CONT.)

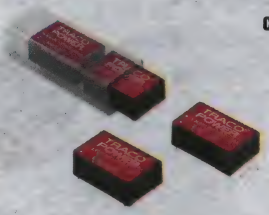
Mfg. Part No.	Input Voltage (VDC) Nom.	Min.	Max.	Output Voltage (VDC)	Output Current (Max.)	Efficiency Typ. (%)	Stock No.	Price Each 1-4
TES 2N-4822	48	36	75	±12	±85mA	77	51R5139	31.19
TES 2N-4823	48	36	75	±15	±65mA	77	51R5140	31.19

(177835)

THB 3 SERIES, 3 WATT DC/DC CONVERTERS

RoHS Compliant Available

TRACO POWER



- Supplementary and reinforced insulation
- I/O isolation 3000 VACrms rated for 300 Vrms working voltage
- Medical safety to UL 60601-1 and IEC/EN 60601-1 3rd edition, 2 x MOOP
- Industrial safety to IEC/EN/UL 60950-1
- Isolation test voltage 6000 Vpk
- Wide 2:1 input voltage ranges
- Extended operating temperature range –40°C to 71°C max.
- Input filter meets EN55022, class A
- Continuous short-circuit protection
- High reliability
- 3-year product warranty

Mfg. Part No.	Input Voltage Range	Output Voltage	Output Current (Max.)	Stock No.	Price Each 1-4
SINGLE OUTPUT					
THB 3-0511	4.5V to 9V	5V	600mA	51R5186	42.60
THB 3-0512	4.5V to 9V	12V	250mA	51R5187	42.60
THB 3-0515	4.5V to 9V	24V	125mA	51R5188	42.60
THB 3-1211	9V to 18V	5V	600mA	51R5191	42.60
THB 3-1212	9V to 18V	12V	250mA	51R5192	44.24
THB 3-1215	9V to 18V	24V	125mA	51R5193	42.60
THB 3-2411	18V to 36V	5V	600mA	51R5196	42.60
THB 3-2412	18V to 36V	12V	250mA	51R5197	42.60
THB 3-2415	18V to 36V	24V	125mA	51R5198	42.60
THB 3-4811	36V to 75V	5V	600mA	51R5201	42.60
THB 3-4812	36V to 75V	12V	250mA	51R5202	42.60
THB 3-4815	36V to 75V	24V	125mA	51R5203	46.20
DUAL OUTPUT					
THB 3-0522	4.5V to 9V	12V, -12V	125mA, 125mA	51R5189	44.52
THB 3-0523	4.5V to 9V	15V, -15V	100mA, 100mA	51R5190	44.52
THB 3-1222	9V to 18V	12V, -12V	125mA, 125mA	51R5194	44.52
THB 3-1223	9V to 18V	15V, -15V	100mA, 100mA	51R5195	44.52
THB 3-2422	18V to 36V	12V, -12V	125mA, 125mA	51R5199	44.52
THB 3-2423	18V to 36V	15V, -15V	100mA, 100mA	51R5200	44.52
THB 3-4822	36V to 75V	12V, -12V	125mA, 125mA	51R5204	48.28
THB 3-4823	36V to 75V	15V, -15V	100mA, 100mA	51R5205	44.52

(209884)

THD 12WI SERIES 12W DC/DC CONVERTERS

RoHS Compliant Available

TRACO POWER

- Highest power density: 12W in DIP 24 package
- Ultra-wide 4:1 input range
- Very high efficiency up to 85%
- I/O isolation 1500V
- Input filter meets EN 55022A without ext. components
- Remote On/Off
- Under voltage lock-out circuit
- Shielded metal case with insulated baseplate
- Continuous short-circuit protection
- Operating temp. range -40°C to +85°C
- Lead free design, RoHS compliant
- Ripple and noise (20 MHz bandwidth): 85 mVpk-pk max.
- Load variation 10 – 100 % single output models: 0.5 % max.
- Dual output models balanced load: 1.0 % max.
- Dual output models unbalanced load: 5.0 % max
- 3-year product warranty

Mfg. Part No.	No. of Outputs	Input Voltage	Output Voltage	Output Current	Stock No.	Price Each 1-4
SINGLE OUTPUT						
THD 12-2410WI	1	9V to 36V	3.3V	3.5A	51R5224	55.81
THD 12-2411WI	1	9V to 36V	5.1V	2.4A	51R5225	55.81
THD 12-2412WI	1	9V to 36V	12V	1A	51R5226	55.81
THD 12-2413WI	1	9V to 36V	15V	800mA	51R5227	55.81
THD 12-4810WI	1	18V to 75V	3.3V	3.5A	51R5231	55.81
THD 12-4811WI	1	18V to 75V	5.1V	2.4A	51R5232	55.81
THD 12-4812WI	1	18V to 75V	12V	1A	51R5233	55.81
THD 12-4813WI	1	18V to 75V	15V	800mA	51R5234	55.81
DUAL OUTPUT						
THD 12-2421WI	2	9V to 36V	5V, -5V	1.2A, 1.2A	51R5228	61.48
THD 12-2422WI	2	9V to 36V	12V, -12V	500mA, 500mA	51R5229	58.58
THD 12-2423WI	2	9V to 36V	15V, -15V	400mA, 400mA	51R5230	58.58

➤CONTINUED➤

THD 12WI SERIES 12W DC/DC CONVERTERS (CONT.)

DUAL OUTPUT

Mfg. Part No.	No. of Outputs	Input Voltage	Output Voltage	Output Current	Stock No.	Price Each 1-4
● THD 12-4821WI	2	18V to 75V	5V, -5V	1.2A, 1.2A	51R5235	58.58
● THD 12-4822WI	2	18V to 75V	12V, -12V	500mA, 500mA	51R5236	58.58
● THD 12-4823WI	2	18V to 75V	15V, -15V	400mA, 400mA	51R5237	58.58

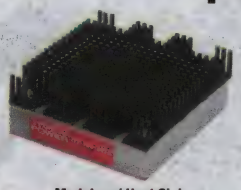
(203957)

TEP 75WI SERIES 75W DC/DC CONVERTERS

RoHS Compliant Available

TRACO POWER

- Screw terminal adaptor available for easy connection
- Ultra wide 4:1 input voltage range
- Full load operation up to 60°C with convection cooling
- Soft start
- Reverse input voltage protection
- Input protection filter
- 3-year product warranty



Module w/ Heat Sink

Mfg. Part No.	Input Voltage	Output Voltage (V)	Output Current (A)	Efficiency (%)	Stock No.	Price Each 1-4	Price Each 5-9
● TEP 75-2411WI	9V to 36V	5	15	88	51R5030	171.06	162.51
● TEP 75-2412WI	9V to 36V	12	6.3	88	51R5031	164.40	156.18
● TEP 75-2413WI	9V to 36V	15	5	88	51R5032	164.40	156.18
● TEP 75-2415WI	9V to 36V	24	3.2	87	51R5033	171.06	162.51
● TEP 75-2416WI	9V to 36V	28	2.7	87	51R5034	171.06	162.51
● TEP 75-2418WI	9V to 36V	48	1.6	87	51R5035	164.40	156.18
● TEP 75-4811WI	18V to 75V	5	15	90	51R5036	164.40	156.18
● TEP 75-4812WI	18V to 75V	12	6.3	89	51R5037	164.40	156.18
● TEP 75-4813WI	18V to 75V	15	5	89	51R5038	164.40	156.18
● TEP 75-4815WI	18V to 75V	24	3.2	87	51R5039	171.06	162.51
● TEP 75-4816WI	18V to 75V	28	2.7	87	51R5040	164.40	156.18
● TEP 75-4818WI	18V to 75V	48	1.6	87	51R5041	164.40	156.18

HEAT SINK

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● TEP-HS1	Heat Sink w/ Thermal Pad and Mounting Screws	51R5042	56.34

(191951)

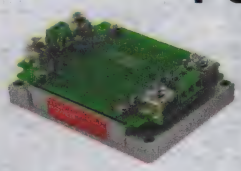
TEP100 SERIES, 100 WATT, DC/DC CONVERTERS

RoHS Compliant Available

TRACO POWER

Features:

- Rugged, compact metal case
- Screw terminal adaptor available
- Wide 2:1 input voltage range
- Full load operation up to 60°C with convection cooling
- Soft start
- Reverse input voltage protection
- Input protection filter
- Three-year manufacturer's warranty



Specifications:

- Regulation:
  Line variation: ± 0.2% max.
  Load variation: ± 0.3% max.
- Ripple & Noise: 75 mVpk-pk max. (20 MHz BW) 3.3 & 5VDC models, 100 mVpk-pk max. 12 & 15VDC models, 200 mVpk-pk max. 24 & 28VDC models, 300 mVpk-pk max. 48VDC models
- I/O isolation: 2250VDC input/output, 1500VDC input/case
- Operating temperature range: -40°C to +75°C

TEP-100 series isolated high performance DC/DC converter modules with ultra-wide 2:1 input voltage range feature output voltage trimming, remote on/off and under voltage lockout. Suitable for a wide range of applications, but designed for industrial applications where often no PCB mounting is possible and the module has to be mounted on a chassis. For easy connection there is a unique adaptor with screw terminals available; *go online or call*. For a converter with chassis mount adapter add suffix **-CM** to mfg. part no.; *go online or call.*

SOLDER PINS

Mfg. Part No.	Input Voltage (VDC) Nom.	Input Voltage (VDC) Min.	Input Voltage (VDC) Max.	Output Voltage (VDC)	Output Current (Max.)	Efficiency Typ. (%)	Stock No.	Price Each 1-4
● TEP 100-1210	12	9	18	3.3	25A	90	83R7227	182.98
● TEP 100-1211	12	9	18	5	20A	91	83R7228	182.98
● TEP 100-1212	12	9	18	12	8.4A	91	83R7229	190.39
● TEP 100-1213	12	9	18	15	6.7A	91	83R7230	182.98
● TEP 100-1215	12	9	18	24	4.2A	90	83R7231	190.39
● TEP 100-1216	12	9	18	28	3.6A	90	83R7232	190.39
● TEP 100-1218	12	9	18	48	2.1A	90	83R7233	182.98
● TEP 100-2410	24	18	36	3.3	25A	91	83R7234	181.26
● TEP 100-2411	24	18	36	5	20A	93	83R7235	181.26
● TEP 100-2412	24	18	36	12	8.4A	93	83R7236	174.20
● TEP 100-2413	24	18	36	15	6.7A	93	83R7237	174.20
● TEP 100-2415	24	18	36	24	4.2A	92	83R7238	181.26

➤ CONTINUED ➤

TEP100 SERIES, 100 WATT, DC/DC CONVERTERS (CONT.)

Mfg. Part No.	Input Voltage (VDC) Nom.	Input Voltage (VDC) Min.	Input Voltage (VDC) Max.	Output Voltage (VDC)	Output Current (Max.)	Efficiency Typ. (%)	Stock No.	Price Each 1-4
● TEP 100-2416	24	18	36	28	3.6A	92	83R7239	181.26
● TEP 100-2418	24	18	36	48	2.1A	92	83R7240	181.26
● TEP 100-4810	48	36	75	3.3	25A	91	83R7241	174.20
● TEP 100-4811	48	36	75	5	20A	93	83R7242	174.20
● TEP 100-4812	48	36	75	12	8.4A	93	83R7243	179.68
● TEP 100-4813	48	36	75	15	6.7A	93	83R7244	174.20
● TEP 100-4815	48	36	75	24	4.2A	92	83R7245	179.69
● TEP 100-4816	48	36	75	28	3.6A	92	83R7246	174.20
● TEP 100-4818	48	36	75	48	2.1A	92	83R7247	174.20

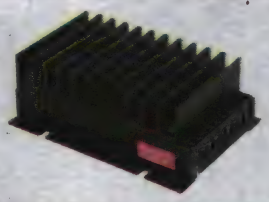
(179639)

TEP 150WI SERIES 150W DC/DC CONVERTERS

RoHS Compliant Available

TRACO POWER

- Shielded metal case with screw terminals
- Compact dimensions: 98 x 52 x 34 mm
- Ultra-wide 4:1 input voltage range
- Very high efficiency up to 87%
- Constant current output characteristic for battery load applications
- Overtemperature protection
- Operating temp. range –40°C to +75°C
- Reverse input protection
- I/O isolation 2250 VDC (basic insulation)
- Easy chassis and wall mounting
- Three-year manufacturer's warranty



Mfg. Part No.	Input Voltage	Output Voltage (V)	Output Current (A)	Efficiency (%)	Stock No.	Price Each 1-4
● TEP 150-2412WI	9V to 36V	12	12.5	85	51R5020	279.85
● TEP 150-2413WI	9V to 36V	15	10	85	51R5021	277.44
● TEP 150-2415WI	9V to 36V	24	6.3	86	51R5022	277.45
● TEP 150-2416WI	9V to 36V	28	5.4	86	51R5023	275.04
● TEP 150-2418WI	9V to 36V	48	3.2	86	51R5024	277.44
● TEP 150-4812WI	18V to 75V	12	12.5	86	51R5025	273.24
● TEP 150-4813WI	18V to 75V	15	10	86	51R5026	277.44
● TEP 150-4815WI	18V to 75V	24	6.3	87	51R5027	272.04
● TEP 150-4816WI	18V to 75V	28	5.4	87	51R5028	277.44
● TEP 150-4818WI	18V to 75V	48	3.2	87	51R5029	277.44

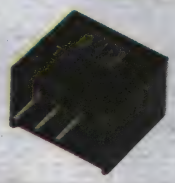
(191926)

TR SERIES 0.5A SINGLE OUTPUT DC/DC CONVERTERS

NEW RoHS Compliant Available

XP Power

- 3 Pin SIP 3T switching regulator
- Wide input range
- Continuous short-circuit protection
- Pin compatible with **LM78MXX**
- Efficiency up to 94%
- Convection-cooled
- Three-year manufacturer's warranty



SPECIFICATIONS:

Line Regulation:	±0.5% max.
Load Regulation:	±0.8% from 10% to 100% load
Isolation:	Non-isolated
Ripple & Noise:	60mV pk-pk with 10% min. load, 20MHz bandwidth
Switching Frequency:	570kHz typical
Operating Temperature:	-40°C to +85°C, **TR05S3V3** and **TR05S05** derate from 100% load @ 70°C to 40% load @ 85°C; **TR05S12** and **TR05S15** derate from 100% load @ 65°C to 40% load @ 85°C
Dimensions (WxLxH):	0.46" x 0.294" x 0.40" (11.68mm x 7.5mm x 10.16mm)

Mfg. Part No.	Input Voltage (VDC)	Output Voltage	No Load Input Current	Output Current	Efficiency* (%)	Stock No.	Price Each 1-4
● TR05S3V3	4.5 to 28	3.3V	1mA	500mA	75-89	29X2286	3.45
● TR05S05	7 to 28	5V	1mA	500mA	80-92	29X2283	3.45
● TR05S12	14 to 28	12V	1.5mA	500mA	90-94	29X2284	5.25
● TR05S15	17 to 28	15V	2mA	500mA	92-94	29X2285	5.25

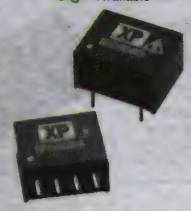
*Efficiency range given for max. Vin to min. Vin

(211557)

IE SERIES 1 WATT SINGLE OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

XP Power



- SIP or DIP package
- 1000VDC isolation
- Industry standard pinout
- Short circuit protection
- Three-year manufacturer's warranty

SPECIFICATIONS:	
Input Voltage (Nom. ±10%):	5VDC, 12VDC or 24VDC Models
Line Regulation:	1.2%/1% ΔVin
Load Regulation:	±10%, 20-100% Load Change, 3.3V models ±20%
Isolation Voltage:	1000VDC
Ripple & Noise:	100mV pk-pk max., 20MHz BW
MTBF:	>1.1MHrs. to MIL-HDBK-217F @ 25C°, GB
Operating Temperature:	-40°C to +85°C
Dimensions:	SIP: 0.46W x 0.38H x 0.24"L DIP: 0.5W x 0.27H x 0.4"L

Mfg. Part No.*	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	No Load Input Current (mA)	Efficiency (%)	Stock No.	Price Each 1-4
IE0503S	5	3.3	300	25	72	88M0709	4.15
IE0505S	5	5	200	25	75	88M0711	4.15
IE0505D	5	5	200	25	75	04R8549	4.15
IE0509S	5	9	111	25	77	88M0713	4.15
IE0512S	5	12	84	25	78	88M0715	4.15
IE0512D	5	12	84	25	78	04R8550	4.15
IE0515S	5	15	66	25	78	88M0717	4.15
IE0515D	5	15	66	25	78	04R8551	4.15
IE0524S	5	24	42	25	78	88M0719	4.15
IE1203S	12	3.3	300	16	72	88M0721	4.15
IE1205S	12	5	200	16	75	88M0723	4.15
IE1205D	12	5	200	16	75	04R8552	4.15
IE1209S	12	9	111	16	77	88M0725	4.15
IE1212S	12	12	84	16	78	88M0727	4.15
IE1212D	12	12	84	16	78	04R8553	4.15
IE1215S	12	15	66	16	78	88M0729	4.15
IE1224S	12	24	42	16	78	88M0731	4.15
IE2403S	24	3.3	300	10	72	88M0733	4.15
IE2405S	24	5	200	10	75	88M0735	4.15
IE2405D	24	5	200	10	75	04R8554	4.15
IE2409S	24	9	111	10	77	88M0737	4.15
IE2412S	24	12	84	10	78	88M0739	4.15
IE2412D	24	12	84	10	78	04R8555	4.15
IE2415S	24	15	66	10	78	88M0741	4.15
IE2415D	24	15	66	10	78	04R8556	4.15
IE2424S	24	24	42	10	78	88M0743	4.15

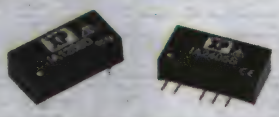
*Mfg. part nos. with **S suffix** = SIP package, **D suffix** = DIP package
(108584)

IA SERIES 1 WATT DUAL OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

XP Power

- SIP or DIP package
- Industry standard pinout
- 1000VDC isolation
- Three-year manufacturer's warranty



SPECIFICATIONS:	
Input Voltage (Nom. ±10%):	3.3VDC, 5VDC, 12VDC, 24VDC and 48VDC†
Line Regulation:	1.2%/1% ΔVin
Load Regulation:	±10%, 20-100% load change, ±20% for 3.3 V models
Isolation Voltage:	1000VDC min.
Ripple & Noise:	75mV pk-pk max., 20MHz bandwidth
MTBF:	>1.12MHrs. to MIL-HDBK-217F @ 25°C, GB
Operating Temperature:	-40°C to +85°C
Dimensions (WxLxH):	SIP package: 0.76" x 0.24" x 0.4" (19.3mm x 6.09mm x 10.16mm) DIP package: 0.8" x 0.4" x 0.25" (20.32mm x 1016mm x 6.35mm)

†For 48V models a 10µF capacitor is required between +Vin and -Vin pins

Mfg. Part No.*	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency Typical (%)	Stock No.	Price Each 1-4
IA0305D	3.3	±5	±100	66	29X2189	4.50
IA0503S	5	±3.3	±151	65	88M0691	4.25
IA0503D	5	±3.3	±151	65	29X2190	4.50
IA0505S	5	±5	±100	74	88M0692	4.25

CONTINUED

IA SERIES 1 WATT DUAL OUTPUT DC/DC CONVERTERS (CONT.)

Mfg. Part No.*	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency Typical (%)	Stock No.	Price Each 1-4
IA0505D	5	±5	±100	74	04R8531	4.50
IA0509S	5	±9	±55	77	88M0693	4.25
IA0512S	5	±12	±42	78	88M0694	4.25
IA0512D	5	±12	±42	78	04R8532	4.50
IA0515S	5	±15	±33	80	88M0695	4.25
IA0515D	5	±15	±33	80	04R8533	4.50
IA0524S	5	±24	±21	80	88M0696	4.25
IA0524D	5	±24	±21	80	29X2191	4.50
IA1203S	12	±3.3	±151	66	88M0697	4.25
IA1203D	12	±3.3	±151	66	29X2192	4.50
IA1205S	12	±5	±100	75	88M0698	4.25
IA1205D	12	±5	±100	75	04R8534	4.50
IA1209S	12	±9	±55	76	88M0699	4.25
IA1212S	12	±12	±42	78	88M0700	4.25
IA1212D	12	±12	±42	78	04R8535	4.50
IA1215S	12	±15	±33	80	88M0701	4.25
IA1215D	12	±15	±33	80	04R8536	4.50
IA1224S	12	±24	±21	76	88M0702	4.25
IA1224D	12	±24	±21	76	29X2193	4.50
IA2403S	24	±3.3	±151	68	88M0703	4.25
IA2403D	24	±3.3	±151	68	29X2194	4.50
IA2405S	24	±5	±100	74	88M0704	4.25
IA2405D	24	±5	±100	74	04R8537	4.50
IA2409S	24	±9	±55	76	88M0705	4.25
IA2409D	24	±9	±55	76	29X2195	4.50
IA2412S	24	±12	±42	78	88M0706	4.25
IA2412D	24	±12	±42	78	04R8538	4.50
IA2415S	24	±15	±33	78	88M0707	4.25
IA2415D	24	±15	±33	78	04R8539	4.50
IA2424S	24	±24	±21	78	88M0708	4.25
IA4803S	48	±3.3	±151	60	29X2197	6.50
IA4803D	48	±3.3	±151	60	29X2196	6.75
IA4805D	48	±5	±100	70	29X2198	6.75
IA4809S	48	±9	±55	72	29X2200	6.50
IA4809D	48	±9	±55	72	29X2199	6.75
IA4812D	48	±12	±42	74	29X2201	6.75
IA4815S	48	±15	±33	74	29X2203	6.50
IA4815D	48	±15	±33	74	29X2202	6.75
IA4824S	48	±24	±21	70	29X2205	6.50
IA4824D	48	±24	±21	70	29X2204	6.75

*Mfg. part nos. with **S suffix** = SIP package, **D suffix** = DIP package
(108587)

ISF SERIES 1 WATT SINGLE AND DUAL OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

XP Power

- Single and dual output
- SMD package
- Industry standard pinout
- 1000VDC Isolation
- Short circuit protection
- MTBF >3.5 MHrs
- Three-year manufacturer's warranty

SPECIFICATIONS:	
Input Voltage Range:	Nominal ±10%
Line Regulation:	1.2%/1% Δ Vin
Load Regulation:	7.5% 10-100% load change
Isolation Voltage:	1000VDC standard
Ripple & Noise:	Single output: 100 mV pk-pk, Dual output: 75 mV pk-pk, 20 MHz bandwidth
MTBF:	>3.5 MHrs to MIL-HDBK-217F at 25°C, GB
Operating Temperature:	-40°C to +85°C, full load
Dimensions:	0.441W x 0.5L x 0.246"H single output 0.441W x 0.6L x 0.250"H dual output

Mfg. Part No.	Input Voltage Range (VDC) Min.	Input Voltage Range (VDC) Max.	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)	Stock No.	Price Each 1-4
ISF0303A	2.97	3.63	3.3	300	73	52R2755	5.50
ISF0305A	2.97	3.63	5	200	74	52R2756	5.50
ISF0503A	4.5	5.5	3.3	300	72	52R2757	5.50
ISF0505	4.5	5.5	±5	±100	77	52R2758	6.00
ISF0505A	4.5	5.5	5	200	77	52R2759	5.50
ISF0509	4.5	5.5	±9	±55	76	52R2760	6.00
ISF0509A	4.5	5.5	9	110	76	52R2761	5.50
ISF0512	4.5	5.5	±12	±42	79	52R2762	6.00
ISF0512A	4.5	5.5	12	84	79	52R2763	5.50

CONTINUED

DC-TO-DC CONVERTERS

ISF SERIES 1 WATT SINGLE AND DUAL OUTPUT DC/DC CONVERTERS (CONT.)

Mfg. Part No.	Input Voltage Range (VDC) Min.	Max.	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)	Stock No.	Price Each 1-4
ISF0515	4.5	5.5	±15	±34	78	52R2764	6.00
ISF0515A	4.5	5.5	15	67	78	52R2765	5.50
ISF1205	10.8	13.2	±5	±100	69	52R2766	6.00
ISF1205A	10.8	13.2	5	200	69	52R2767	5.50
ISF1209	10.8	13.2	±9	±55	73	52R2768	6.00
ISF1209A	10.8	13.2	9	110	73	52R2769	5.50
ISF1212	10.8	13.2	±12	±42	73	52R2770	6.00
ISF1212A	10.8	13.2	12	84	73	52R2771	5.50
ISF1215	10.8	13.2	±15	±34	74	52R2772	6.00
ISF1215A	10.8	13.2	15	67	74	52R2773	5.50
ISF2403A	21.6	26.4	3.3	300	69	52R2774	5.50
ISF2405	21.6	26.4	±5	±100	70	52R2775	6.00
ISF2405A	21.6	26.4	5	200	70	52R2776	5.50
ISF2409	21.6	26.4	±9	±55	72	52R2777	6.00
ISF2409A	21.6	26.4	9	110	72	52R2778	5.50
ISF2412	21.6	26.4	±12	±42	75	52R2779	6.00
ISF2412A	21.6	26.4	12	84	75	52R2780	5.50
ISF2415A	21.6	26.4	15	67	76	52R2781	5.50
ISF2424A	21.6	26.4	24	42	77	52R2782	5.50

(165112)

IL SERIES 2 WATT SINGLE OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

XP Power

- 4-Pin SIP package
- 1000VDC isolation
- Industry standard pinout
- Short circuit protection
- Three-year manufacturer's warranty

SPECIFICATIONS:

Input Voltage (Nom. ±10%):	5VDC, 12VDC or 24VDC Models
Line Regulation:	1.2%/1% ΔVin
Load Regulation:	±10%, 20-100% Load Change (3.3V Models ±20%)
Isolation Voltage:	1000VDC Input to Output
Ripple & Noise:	150mV pk-pk, 20MHz BW
MTBF:	>1.2MHrs. to MIL-HDBK-217F@25C, GB
Operating Temperature:	-40°C to +85°C
Dimensions:	0.46W x 0.4H x 0.3"L

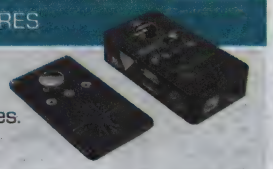
Mfg. Part No.	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	No Load Input Current (mA)	Efficiency (%)	Stock No.	Price Each 1-4
IL0503S	5	3.3	400	35	71	88M0763	7.00
IL0505S	5	5	400	35	77	88M0764	7.00
IL0509S	5	9	222	35	80	88M0765	7.00
IL0512S	5	12	168	35	82	88M0766	7.00
IL0515S	5	15	132	35	82	88M0767	7.00
IL0524S	5	24	84	35	82	88M0768	7.00
IL1203S	12	3.3	400	20	72	88M0769	7.00
IL1205S	12	5	400	20	78	88M0770	7.00
IL1209S	12	9	222	20	82	88M0771	7.00
IL1212S	12	12	168	20	84	88M0772	7.00
IL1215S	12	15	132	20	84	88M0773	7.00
IL1224S	12	24	84	25	82	88M0774	7.00
IL2403S	24	3.3	400	10	74	88M0775	7.00
IL2405S	24	5	400	10	80	88M0776	7.00
IL2409S	24	9	222	10	84	88M0777	7.00
IL2412S	24	12	168	10	84	88M0778	7.00
IL2415S	24	15	132	10	84	88M0779	7.00
IL2424S	24	24	84	10	84	88M0780	7.00

(108595)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures



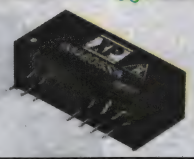
(212568)

IM SERIES 2 WATT SINGLE AND DUAL OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

XP Power

- Regulated single and dual output
- Wide 4:1 input range
- SIP package
- 1500VDC isolation
- Remote on/off
- Continuous short circuit protection
- Three-year manufacturer's warranty



SPECIFICATIONS:

Input Voltage Range:	24 V (9-36 VDC) 48 V (18-75 VDC)
Line Regulation:	±0.5% max
Load Regulation:	±0.5% max from 10-100% load*
Isolation Voltage:	1500VDC
Ripple & Noise:	50 mV pk-pk max, 20 MHz bandwidth
MTBF:	>1.2 MHrs to MIL-HDBK-217F at 25°C, GB
Operating Temperature:	-40°C to +100°C, derate from 100% load at 75°C to 0% load at 100°C
Dimensions:	0.36W x 1.02L x 0.49"H

Mfg. Part No.	Input Voltage Range (VDC) Min.	Max.	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)	Stock No.	Price Each 1-4
IM2403SA	9	36	3.3	500	75	52R2741	14.50
IM2405S	9	36	±5	±200	81	52R2742	15.90
IM2405SA	9	36	5	400	81	52R2743	14.50
IM2412S	9	36	±12	±85	83	52R2744	15.90
IM2412SA	9	36	12	165	84	52R2745	14.50
IM2415S	9	36	±15	±65	82	52R2746	15.90
IM2415SA	9	36	15	135	85	52R2747	14.50
IM4803SA	18	75	3.3	500	75	52R2748	14.50
IM4805S	18	75	±5	±200	80	52R2749	15.90
IM4805SA	18	75	5	400	80	52R2750	14.50
IM4812S	18	75	±12	±85	81	52R2751	15.90
IM4812SA	18	75	12	165	84	52R2752	14.50
IM4815S			±	±	84	52R2753	15.90
IM4815SA	18	75	15	135	84	52R2754	14.50

*Operation at no load will not damage the converter but ripple & noise may be higher

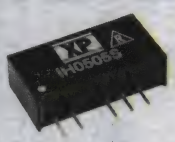
(165116)

IH SERIES 2 WATT DUAL OUTPUT DC/DC CONVERTERS

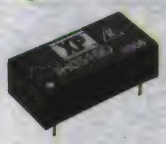
RoHS Compliant Available

XP Power

- SIP or DIP Packaging
- Dual output
- 1000VDC isolation (3000VDC isolation also available for SIP packaging)
- Industry standard pinout
- Short circuit protection
- MTBF >1.1MHrs
- Three-year manufacturer's warranty



SIP package



DIP package

SPECIFICATIONS:

Input Voltage (Nom. ±10%):	5VDC, 12VDC, 24VDC Models
Line Regulation:	1.2%/1% ΔVin
Load Regulation:	±10% 20-100% Load Change (±3.3V Models 20%)
Isolation Voltage:	1000VDC
Ripple & Noise:	75mV pk-pk max., 20MHz BW
MTBF:	>1.1MHrs. to MIL-HDBK-217F @ 25°C, GB
Operating Temperature:	-40°C to +85°C
Dimensions:	SIP: 0.78W x 0.4H x 0.3"L DIP: 0.8W x 0.28H x 0.4"L

Mfg. Part No.*	Input Voltage (VDC)	Output 1 VDC	Output 1 mA	Output 2 VDC	Output 2 mA	No Load Input Current (mA)	Efficiency (%)	Stock No.	Price Each 1-4
IH0503S	5	3.3	200	-3.3	200	30	65	88M0745	6.25
IH0505D	5	5	200	-5	200	30	72	14M8369	7.00
IH0505S	5	5	201	-5	200	30	72	88M0746	6.25
IH0509D	5	9	111	-9	111	30	77	04R8574	7.00
IH0509S	5	9	111	-9	111	30	77	88M0747	6.25
IH0512D	5	12	84	-12	84	30	78	04R8576	7.00
IH0512S	5	12	84	-12	84	30	78	88M0748	6.25
IH0515D	5	15	66	-15	66	30	80	04R8578	7.00
IH0515S	5	15	66	-15	66	30	80	88M0749	6.25
IH0524S	5	24	42	-24	42	30	80	88M0750	6.25
IH1203S	12	3.3	200	-3.3	200	20	67	88M0751	6.25
IH1205D	12	5	200	-5	200	20	75	04R8582	7.00
IH1205S	12	5	201	-5	200	20	75	88M0752	6.25
IH1209D	12	9	111	-9	111	20	77	04R8584	7.00
IH1209S	12	9	111	-9	111	20	77	88M0753	6.25
IH1212D	12	12	84	-12	84	20	82	04R8586	7.00

CONTINUED

IH SERIES 2 WATT DUAL OUTPUT DC/DC CONVERTERS (CONT.)

Mfg. Part No.*	Input Voltage (VDC)	Output 1 VDC	Output 1 mA	Output 2 VDC	Output 2 mA	No Load Input Current (mA)	Efficiency (%)	Stock No.	Price Each 1-4
IH1212S	12	12	84	-12	84	20	82	88M0754	6.25
IH1215D	12	15	66	-15	66	20	82	04R8588	7.00
IH1215S	12	15	66	-15	66	20	82	88M0755	6.25
IH1224S	12	24	42	-24	42	20	82	88M0756	6.25
IH2403S	24	3.3	200	-3.3	200	10	68	88M0757	6.25
IH2405D	24	5	200	-5	200	10	75	04R8592	7.00
IH2405S	24	5	201	-5	200	10	75	88M0758	6.25
IH2409D	24	9	111	-9	111	10	80	04R8594	7.00
IH2409S	24	9	111	-9	111	10	80	88M0759	6.25
IH2412D	24	12	84	-12	84	10	82	04R8596	7.00
IH2412S	24	12	84	-12	84	10	82	88M0760	6.25
IH2415D	24	15	66	-15	66	10	82	04R8598	7.00
IH2415S	24	15	66	-15	66	10	82	88M0761	6.25
IH2424S	24	24	42	-24	42	10	82	88M0762	6.25

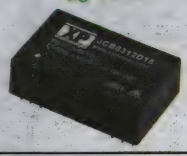
*Mfg. part nos. with **S suffix** = SIP package with 1000VDC isolation, **D suffix** = DIP package with 1000VDC isolation; †Add **SH suffix** for SIP packaging with 3000VDC; *go online or call*
(154793)

JCB SERIES 3W DC-DC CONVERTERS

RoHS Compliant Available

XP Power

- 2:1 input range
- Operating temperature -40°C to +100°C
- Single & dual outputs
- 1500VDC isolation
- 3 year warranty



SPECIFICATIONS:

Input Voltage:	5V (4.5-9VDC), 12V (9-18VDC), 24V (18-36VDC), 48V (36-72VDC)
Line Regulation:	±0.5% max
Load Regulation:	±0.5% max
Isolation Voltage:	1500VDC
Ripple & Noise:	60 mV pk-pk max, 20 MHz bandwidth
MTBF:	>2 MHrs to MIL-HDBK-217F at 25°C, GB
Operating Temp:	-40°C to +100°C, derate from 100% load @ +85°C to no load at +100°C
Dimensions (H x W x L):	0.40 x 0.80 x 1.25" (10.16 x 20.32 x 31.75mm)

SINGLE OUTPUT

Mfg. Part No.	Input Voltage	Output Voltage (V)	Output Current (mA)	Efficiency (%)	Stock No.	Price Each 1-4
JCB0305S05	4.5V to 9V	5	600	70	99R4300	13.25
JCB0305S09	4.5V to 9V	9	333	72	99R4301	13.25
JCB0305S12	4.5V to 9V	12	250	74	99R4302	13.25
JCB0305S15	4.5V to 9V	15	200	74	24T5850	13.25
JCB0305S24	4.5V to 9V	24	125	70	99R4303	13.25
JCB0312S05	9V to 18V	5	600	76	99R4309	13.25
JCB0312S09	9V to 18V	9	333	77	99R4310	13.25
JCB0312S12	9V to 18V	12	250	79	99R4311	13.25
JCB0312S15	9V to 18V	15	200	79	24T5851	13.25
JCB0312S24	9V to 18V	24	125	79	99R4312	13.25
JCB0324S09	18V to 36V	9	333	80	99R4319	13.25
JCB0324S12	18V to 36V	12	250	82	99R4320	13.25
JCB0324S15	18V to 36V	15	200	82	24T5852	13.25
JCB0324S24	18V to 36V	24	125	80	99R4321	13.25
JCB0348S05	36V to 72V	5	600	77	99R4327	13.25
JCB0348S09	36V to 72V	9	333	78	99R4328	13.25
JCB0348S12	36V to 72V	12	250	80	99R4329	13.25
JCB0348S15	36V to 72V	15	200	80	24T5853	13.25
JCB0348S24	36V to 72V	24	125	80	99R4330	13.25
DUAL OUTPUT						
JCB0305D05	4.5V to 9V	±5	±300	69	99R4295	19.00
JCB0305D09	4.5V to 9V	±9	±167	70	99R4296	14.25
JCB0305D12	4.5V to 9V	±12	±125	72	99R4297	14.25
JCB0305D15	4.5V to 9V	±15	±100	74	99R4298	14.25
JCB0305D24	4.5V to 9V	±24	±63	70	99R4299	14.25
JCB0312D05	9V to 18V	±5	±300	77	99R4304	14.25
JCB0312D09	9V to 18V	±9	±167	78	99R4305	14.25
JCB0312D12	9V to 18V	±12	±125	78	99R4306	14.25
JCB0312D15	9V to 18V	±15	±100	78	99R4307	14.25
JCB0312D24	9V to 18V	±24	±63	78	99R4308	14.25
JCB0324D05	18V to 36V	±5	±300	78	99R4313	14.25
JCB0324D09	18V to 36V	±9	±167	79	99R4314	14.25
JCB0324D12	18V to 36V	±12	±125	80	99R4315	14.25
JCB0324D15	18V to 36V	±15	±100	80	99R4316	14.25

➤CONTINUED➤

JCB SERIES 3W DC-DC CONVERTERS (CONT.)

DUAL OUTPUT

Mfg. Part No.	Input Voltage	Output Voltage (V)	Output Current (mA)	Efficiency (%)	Stock No.	Price Each 1-4
JCB0324D24	18V to 36V	±24	±63	80	99R4317	14.25
JCB0348D05	36V to 72V	±5	±300	78	99R4322	14.25
JCB0348D09	36V to 72V	±9	±167	79	99R4323	14.25
JCB0348D12	36V to 72V	±12	±125	80	99R4324	14.25
JCB0348D15	36V to 72V	±15	±100	80	99R4325	14.25
JCB0348D24	36V to 72V	±24	±63	80	99R4326	14.25

(192404)

IZ SERIES 3 WATT REGULATED SINGLE AND DUAL OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

XP Power

- Regulated single and dual output
- Wide 2:1 input range
- SIP package
- 1600VDC isolation
- Continuous short circuit protection
- Remote on/off
- Three-year manufacturer's warranty

SPECIFICATIONS:

Input Voltage:	5VDC (4.5-9VDC) 12VDC (9-18VDC) 24VDC (18-36VDC) 48VDC (36-72VDC)
Line Regulation:	±0.5% max.
Load Regulation:	±1% max. from 25-100% Load
Isolation Voltage:	1600VDC
Ripple & Noise:	75mV pk-pk max., 20MHz BW
MTBF:	>1.34MHrs. to MIL-HDBK-217F @ 25°C, GB
Operating Temperature:	-40°C to +70°C Derate from 100% Load, @ 70°C to 0% Load @ 100°C
Dimensions:	0.86W x 0.44H x 0.36"L

Mfg. Part No.	Input Voltage (VDC)	Output 1 VDC	Output 1 mA	Output 2 VDC	Output 2 mA	No Load Input Current (mA)	Efficiency (%)	Stock No.	Price Each 1-4
IZ0503SA	5	3.3	700	...	...	65	74	04R8625	13.25
IZ0505SA	5	5	600	...	...	70	76	04R8627	13.25
IZ0512SA	5	12	250	...	...	75	82	04R8629	13.25
IZ0515SA	5	15	200	...	...	75	82	04R8631	13.25
IZ0505S	5	5	300	-5	300	90	77	04R8626	13.50
IZ0512S	5	12	125	-12	125	90	81	04R8628	13.50
IZ0515S	5	15	100	-15	100	90	82	04R8630	13.50
IZ1203SA	12	3.3	700	...	...	25	76	04R8632	13.25
IZ1205SA	12	5	600	...	...	15	81	04R8634	13.25
IZ1212SA	12	12	250	...	...	35	84	04R8636	13.25
IZ1215SA	12	15	200	...	...	35	84	04R8638	13.25
IZ1205S	12	5	300	-5	300	45	80	04R8633	13.50
IZ1212S	12	12	125	-12	125	45	83	04R8635	13.50
IZ1215S	12	15	100	-15	100	45	82	04R8637	13.50
IZ2403SA	24	3.3	700	...	...	15	74	04R8639	13.25
IZ2405SA	24	5	600	...	...	15	79	04R8641	13.25
IZ2412SA	24	12	250	...	...	20	82	04R8643	13.25
IZ2415SA	24	15	200	...	...	20	84	04R8645	13.25
IZ2405S	24	5	300	-5	300	20	80	04R8640	13.50
IZ2412S	24	12	125	-12	125	20	83	04R8642	13.50
IZ2415S	24	15	100	-15	100	20	83	04R8644	13.50
IZ4803SA	48	3.3	700	...	...	10	75	04R8646	13.25
IZ4805SA	48	5	600	...	...	10	78	04R8648	13.25
IZ4812SA	48	12	250	...	...	15	81	04R8649	13.25
IZ4815SA	48	15	200	...	...	15	81	04R8651	13.25
IZ4805S	48	5	300	-5	300	15	78	04R8647	13.50
IZ4812S	48	12	125	-12	125	20	80	46P9875	13.50
IZ4815S	48	15	100	-15	100	15	81	04R8650	13.50

(154792)

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(212569)

DC-TO-DC CONVERTERS

JCD SERIES 4-6W SINGLE & DUAL OUTPUT DC-DC CONVERTERS

RoHS Compliant Available

XP Power

- 2:1 Input range
- Industry standard package
- 1600VDC isolation
- Continuous short circuit protection
- -40°C to +100°C operating temperature
- Single and dual outputs
- Three-year manufacturer's warranty

SPECIFICATIONS:	
Input Voltage Range:	5V (4.5-9VDC), 12V (9-18VDC), 24V (18-36VDC), 48V (36-72VDC)
Line Regulation:	±0.5%
Load Regulation:	±0.5% single outputs, ±1.5% for S3V3 & D03 models
Ripple & Noise:	60 mV pk-pk, 20 MHz bandwidth
Isolation:	1600VDC Input to Output, 1600VDC Input to Case, 1600VDC Output to Case
Operating Temperature:	-40°C to +100°C
Dimensions:	10.4 x 20.32 x 31.75mm (0.4 x 0.8 x 1.25")
Emissions:	EN55022 Class A conducted with external components

Mfg. Part No.	Output Power (W)	Input Voltage	Output Voltage (V)	Output Current	Effi-ciency (%)	Stock No.	Price Each 1-4
● JCD0405S3V3	4	4.5V to 9V	3.3	1.2A	73%	62T2013	18.50
● JCD0405S05	4	4.5V to 9V	5	800mA	78%	62T2010	18.50
● JCD0405S12	4	4.5V to 9V	12	333mA	82%	62T2011	18.50
● JCD0405S15	4	4.5V to 9V	15	266mA	82%	62T2012	18.50
● JCD0405D03	4	4.5V to 9V	±3.3	±600mA	76%	62T2006	19.50
● JCD0405D05	4	4.5V to 9V	±5	±400mA	79%	62T2007	19.50
● JCD0405D12	4	4.5V to 9V	±12	±166mA	83%	62T2008	19.50
● JCD0405D15	4	4.5V to 9V	±15	±133mA	81%	62T2009	19.50
● JCD0412S3V3	4	9V to 18V	3.3	1.2A	74%	62T2025	18.50
● JCD0412S05	4	9V to 18V	5	800mA	78%	62T2020	18.50
● JCD0412S09	4	9V to 18V	9	444mA	80%	62T2021	18.50
● JCD0412S12	4	9V to 18V	12	333mA	82%	62T2022	18.50
● JCD0412S15	4	9V to 18V	15	266mA	83%	62T2023	18.50
● JCD0412S24	4	9V to 18V	24	166mA	82%	62T2024	18.50
● JCD0412D03	4	9V to 18V	±3.3	±600mA	76%	62T2014	19.50
● JCD0412D05	4	9V to 18V	±5	±400mA	78%	62T2015	19.50
● JCD0412D09	4	9V to 18V	±9	±220mA	80%	62T2016	19.50
● JCD0412D12	4	9V to 18V	±12	±166mA	78%	62T2017	19.50
● JCD0412D15	4	9V to 18V	±15	±133mA	80%	62T2018	19.50
● JCD0412D24	4	9V to 18V	±24	±83mA	80%	62T2019	19.50
● JCD0424S3V3	4	18V to 36V	3.3	1.2A	77%	62T2037	18.50
● JCD0424S05	4	18V to 36V	5	800mA	80%	62T2032	18.50
● JCD0424S09	4	18V to 36V	9	444mA	82%	62T2033	18.50
● JCD0424S12	4	18V to 36V	12	333mA	84%	62T2034	18.50
● JCD0424S15	4	18V to 36V	15	266mA	82%	62T2035	18.50
● JCD0424S24	4	18V to 36V	24	166mA	83%	62T2036	18.50
● JCD0424D03	4	18V to 36V	±3.3	±600mA	77%	62T2026	19.50
● JCD0424D05	4	18V to 36V	±5	±400mA	80%	62T2027	19.50
● JCD0424D09	4	18V to 36V	±9	±220mA	83%	62T2028	19.50
● JCD0424D12	4	18V to 36V	±12	±166mA	83%	62T2029	19.50
● JCD0424D15	4	18V to 36V	±15	±133mA	82%	62T2030	19.50
● JCD0424D24	4	18V to 36V	±24	±83mA	79%	62T2031	19.50
● JCD0448S3V3	4	36V to 72V	3.3	1.2A	76%	62T2049	18.50
● JCD0448S05	4	36V to 72V	5	800mA	80%	62T2044	18.50
● JCD0448S09	4	36V to 72V	9	444mA	83%	62T2045	18.50
● JCD0448S12	4	36V to 72V	12	333mA	84%	62T2046	18.50
● JCD0448S15	4	36V to 72V	15	266mA	81%	62T2047	18.50
● JCD0448S24	4	36V to 72V	24	166mA	85%	62T2048	18.50
● JCD0448D03	4	36V to 72V	±3.3	±600mA	76%	62T2038	19.50
● JCD0448D05	4	36V to 72V	±5	±400mA	80%	62T2039	19.50
● JCD0448D09	4	36V to 72V	±9	±220mA	83%	62T2040	19.50
● JCD0448D12	4	36V to 72V	±12	±166mA	83%	62T2041	19.50
● JCD0448D15	4	36V to 72V	±15	±133mA	83%	62T2042	19.50
● JCD0448D24	4	36V to 72V	±24	±83mA	79%	62T2043	19.50
● JCD0505S3V3	5	4.5V to 9V	3.3	1.3A	74%	62T2057	19.50
● JCD0505S05	5	4.5V to 9V	5	1A	77%	62T2054	19.50
● JCD0505S12	5	4.5V to 9V	12	417mA	82%	62T2055	19.50
● JCD0505S15	5	4.5V to 9V	15	333mA	82%	62T2056	19.50
● JCD0505D03	5	4.5V to 9V	±3.3	±750mA	76%	62T2050	20.75
● JCD0505D05	5	4.5V to 9V	±5	±500mA	79%	62T2051	20.75
● JCD0505D12	5	4.5V to 9V	±12	±208mA	82%	62T2052	20.75
● JCD0505D15	5	4.5V to 9V	±15	±167mA	82%	62T2053	20.75
● JCD0512S3V3	5	9V to 18V	3.3	1.3A	74%	62T2069	19.50
● JCD0512S05	5	9V to 18V	5	1A	77%	62T2064	19.50
● JCD0512S09	5	9V to 18V	9	555mA	80%	62T2065	19.50
● JCD0512S12	5	9V to 18V	12	417mA	82%	62T2066	19.50

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JCD SERIES 4-6W SINGLE & DUAL OUTPUT DC-DC CONVERTERS (CONT.)

Mfg. Part No.	Output Power (W)	Input Voltage	Output Voltage (V)	Output Current	Effi-ciency (%)	Stock No.	Price Each 1-4
● JCD0512S15	5	9V to 18V	15	333mA	82%	62T2067	19.50
● JCD0512S24	5	9V to 18V	24	208mA	82%	62T2068	19.50
● JCD0512D03	5	9V to 18V	±3.3	±750mA	70%	62T2058	20.75
● JCD0512D05	5	9V to 18V	±5	±500mA	77%	62T2059	20.75
● JCD0512D09	5	9V to 18V	±9	±278mA	79%	62T2060	20.75
● JCD0512D12	5	9V to 18V	±12	±208mA	80%	62T2061	20.75
● JCD0512D15	5	9V to 18V	±15	±167mA	79%	62T2062	20.75
● JCD0512D24	5	9V to 18V	±24	±104mA	81%	62T2063	20.75
● JCD0524S3V3	5	18V to 36V	3.3	1.3A	75%	62T2081	19.50
● JCD0524S05	5	18V to 36V	5	1A	80%	62T2076	19.50
● JCD0524S09	5	18V to 36V	9	555mA	82%	62T2077	19.50
● JCD0524S12	5	18V to 36V	12	417mA	83%	62T2078	19.50
● JCD0524S15	5	18V to 36V	15	333mA	84%	62T2079	19.50
● JCD0524S24	5	18V to 36V	24	208mA	84%	62T2080	19.50
● JCD0524D03	5	18V to 36V	±3.3	±750mA	76%	62T2070	20.75
● JCD0524D05	5	18V to 36V	±5	±500mA	79%	62T2071	20.75
● JCD0524D09	5	18V to 36V	±9	±278mA	83%	62T2072	20.75
● JCD0524D12	5	18V to 36V	±12	±208mA	83%	62T2073	20.75
● JCD0524D15	5	18V to 36V	±15	±167mA	83%	62T2074	20.75
● JCD0524D24	5	18V to 36V	±24	±104mA	82%	62T2075	20.75
● JCD0548S3V3	5	36V to 72V	3.3	1.3A	76%	62T2093	19.50
● JCD0548S05	5	36V to 72V	5	1A	80%	62T2088	19.50
● JCD0548S09	5	36V to 72V	9	555mA	84%	62T2089	19.50
● JCD0548S12	5	36V to 72V	12	417mA	80%	62T2090	19.50
● JCD0548S15	5	36V to 72V	15	333mA	82%	62T2091	19.50
● JCD0548S24	5	36V to 72V	24	208mA	85%	62T2092	19.50
● JCD0548D03	5	36V to 72V	±3.3	±750mA	74%	62T2082	20.75
● JCD0548D05	5	36V to 72V	±5	±500mA	80%	62T2083	20.75
● JCD0548D09	5	36V to 72V	±9	±278mA	82%	62T2084	20.75
● JCD0548D12	5	36V to 72V	±12	±208mA	84%	62T2085	20.75
● JCD0548D15	5	36V to 72V	±15	±167mA	81%	62T2086	20.75
● JCD0548D24	5	36V to 72V	±24	±104mA	81%	62T2087	20.75
● JCD0605S3V3	6	4.5V to 9V	3.3	1.4A	75%	62T2101	20.50
● JCD0605S05	6	4.5V to 9V	5	1.2A	77%	62T2098	20.50
● JCD0605S12	6	4.5V to 9V	12	500mA	83%	62T2099	20.50
● JCD0605S15	6	4.5V to 9V	15	400mA	83%	62T2100	20.50
● JCD0605D03	6	4.5V to 9V	±3.3	±909mA	76%	62T2094	21.50
● JCD0605D05	6	4.5V to 9V	±5	±600mA	80%	62T2095	21.50
● JCD0605D12	6	4.5V to 9V	±12	±250mA	84%	62T2096	21.50
● JCD0605D15	6	4.5V to 9V	±15	±200mA	84%	62T2097	21.50
● JCD0612S3V3	6	9V to 18V	3.3	1.4A	74%	62T2113	20.50
● JCD0612S05	6	9V to 18V	5	1.2A	77%	62T2108	20.50
● JCD0612S09	6	9V to 18V	9	666mA	79%	62T2109	20.50
● JCD0612S12	6	9V to 18V	12	500mA	81%	62T2110	20.50
● JCD0612S15	6	9V to 18V	15	400mA	82%	62T2111	20.50
● JCD0612S24	6	9V to 18V	24	250mA	81%	62T2112	20.50
● JCD0612D03	6	9V to 18V	±3.3	±909mA	74%	62T2102	21.50
● JCD0612D05	6	9V to 18V	±5	±600mA	76%	62T2103	21.50
● JCD0612D09	6	9V to 18V	±9	±333mA	81%	62T2104	21.50
● JCD0612D12	6	9V to 18V	±12	±250mA	79%	62T2105	21.50
● JCD0612D15	6	9V to 18V	±15	±200mA	80%	62T2106	21.50
● JCD0612D24	6	9V to 18V	±24	±125mA	80%	62T2107	21.50
● JCD0624S3V3	6	18V to 36V	3.3	1.4A	75%	62T2125	20.50
● JCD0624S05	6	18V to 36V	5	1.2A	80%	62T2120	20.50
● JCD0624S09	6	18V to 36V	9	666mA	83%	62T2121	20.50
● JCD0624S12	6	18V to 36V	12	500mA	83%	62T2122	20.50
● JCD0624S15	6	18V to 36V	15	400mA	83%	62T2123	20.50
● JCD0624S24	6	18V to 36V	24	250mA	85%	62T2124	20.50
● JCD0624D03	6	18V to 36V	±3.3	±909mA	76%	62T2114	21.50
● JCD0624D05	6	18V to 36V	±5	±600mA	81%	62T2115	21.50
● JCD0624D09	6	18V to 36V	±9	±333mA	83%	62T2116	21.50
● JCD0624D12	6	18V to 36V	±12	±250mA	83%	62T2117	21.50
● JCD0624D15	6	18V to 36V	±15	±200mA	83%	62T2118	21.50
● JCD0624D24	6	18V to 36V	±24	±125mA	82%	62T2119	21.50
● JCD0648S3V3	6	36V to 72V	3.3	1.4A	75%	62T2137	20.50
● JCD0648S05	6	36V to 72V	5	1.2A	80%	62T2132	20.50
● JCD0648S09	6	36V to 72V	9	666mA	84%	62T2133	20.50
● JCD0648S12	6	36V to 72V	12	500mA	84%	62T2134	20.50
● JCD0648S15	6	36V to 72V	15	400mA	81%	62T2135	20.50
● JCD0648S24	6	36V to 72V	24	250mA	85%	62T2136	20.50
● JCD0648D03	6	36V to 72V	±3.3	±909mA	76%	62T2126	21.50
● JCD0648D05	6	36V to 72V	±5	±600mA	80%	62T2127	21.50
● JCD0648D09	6	36V to 72V	±9	±333mA	83%	62T2128	21.50
● JCD0648D12	6	36V to 72V	±12	±250mA	84%	62T2129	21.50

➤ CONTINUED ➤

JCD SERIES 4-6W SINGLE & DUAL OUTPUT DC-DC CONVERTERS (CONT.)

Mfg. Part No.	Output Power (W)	Input Voltage	Output Voltage (V)	Output Current	Effi-ciency (%)	Stock No.	Price Each 1-4
JCD0648D15	6	36V to 72V	±15	±200mA	82%	62T2130	21.50
JCD0648D24	6	36V to 72V	±24	±125mA	83%	62T2131	21.50

(198660)

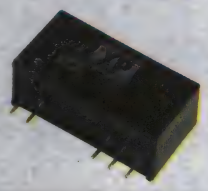
ITX SERIES 6W SINGLE AND DUAL OUTPUT DC/DC CONVERTERS

NEW

RoHS Compliant Available

XP Power

- 2:1 Input range
- SIP-8 plastic case
- Single and dual outputs
- 1500VDC isolation
- Short circuit protection
- Three-year manufacturer's warranty



SPECIFICATIONS:	
Input Voltage Range:	5V (4.5-9VDC), 12V (9-18VDC), 24V (18-36VDC), 48V (36-75VDC)
Line Regulation:	±0.2% max
Load Regulation:	±1% max 0% to 10% load
Ripple & Noise:	75mV pk-pk max @ 20MHz bandwidth (measured using 0.1µF capacitor)
Isolation:	1500VDC Input-to-Output
Operating Temperature:	-40°C to +90°C (see datasheet for derating)
Dimensions:	21.85 x 11.1 x 9.2mm (0.86 x 0.44 x 0.36")
Emissions:	EN55022 Class A conducted and radiated

Mfg. Part No.	Output Voltage (V)	Output Current	Input Current (mA) No Load	Input Current (mA) Full Load	Capacitive Load Max. (µF)	Effi-ciency (%)	Stock No.	Price Each 1-4
5V NOM. INPUT VOLTAGE — 4.5V TO 9V								
ITX0503SA	3.3	1.3A	105	1114	6600	77	47X2657	22.00
ITX0505SA	5	1.2A	105	1481	3300	81	47X2659	22.00
ITX0509SA	9	666mA	105	1445	2000	83	47X2660	22.00
ITX0512SA	12	500mA	105	1428	1600	84	47X2662	22.00
ITX0515SA	15	400mA	105	1428	1400	84	47X2664	22.00
ITX0524SA	24	250mA	105	1428	680	84	47X2665	22.00
ITX0505S	±5	±600mA	105	1481	±2000	81	47X2658	23.00
ITX0512S	±12	±250mA	105	1428	±900	84	47X2661	23.00
ITX0515S	±15	±200mA	105	1428	±660	84	47X2663	23.00
12V NOM. INPUT VOLTAGE — 9V TO 18V								
ITX1203SA	3.3	1.3A	55	458	6600	78	47X2666	22.00
ITX1205SA	5	1.2A	55	602	3300	83	47X2668	22.00
ITX1209SA	9	666mA	55	595	2000	84	47X2669	22.00
ITX1212SA	12	500mA	55	588	1600	85	47X2671	22.00
ITX1215SA	15	400mA	55	588	1400	85	47X2673	22.00
ITX1224SA	24	250mA	55	595	680	84	47X2674	22.00
ITX1205S	±5	±600mA	55	609	±2000	82	47X2667	23.00
ITX1212S	±12	±250mA	55	595	±900	84	47X2670	23.00
ITX1215S	±15	±200mA	55	595	±660	84	47X2672	23.00
24V NOM. INPUT VOLTAGE — 18V TO 36V								
ITX2403SA	3.3	1.3A	30	229	6600	78	47X2675	22.00
ITX2405SA	5	1.2A	30	301	3300	83	47X2677	22.00
ITX2409SA	9	666mA	30	294	2000	85	47X2678	22.00
ITX2412SA	12	500mA	30	294	1600	85	47X2680	22.00
ITX2415SA	15	400mA	30	290	1400	86	47X2682	22.00
ITX2424SA	24	250mA	30	294	680	85	47X2683	22.00
ITX2405S	±5	±600mA	30	304	±2000	82	47X2676	23.00
ITX2412S	±12	±250mA	30	297	±900	84	47X2679	23.00
ITX2415S	±15	±200mA	30	297	±660	84	47X2681	23.00
48V NOM. INPUT VOLTAGE — 36V TO 75V								
ITX4803SA	3.3	1.3A	15	114	6600	78	47X2684	22.00
ITX4805SA	5	1.2A	15	152	3300	82	47X2686	22.00
ITX4809SA	9	666mA	15	148	2000	84	47X2687	22.00
ITX4812SA	12	500mA	15	147	1600	85	47X2689	22.00
ITX4815SA	15	400mA	15	145	1400	86	47X2691	22.00
ITX4824SA	24	250mA	15	148	680	84	47X2692	22.00
ITX4805S	±5	±600mA	15	152	±2000	82	47X2685	23.00
ITX4812S	±12	±250mA	15	147	±900	85	47X2688	23.00
ITX4815S	±15	±200mA	15	147	±660	85	47X2690	23.00

(212150)

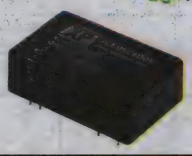
JCE SERIES 6W SINGLE AND DUAL OUTPUT DC/DC CONVERTERS

NEW

RoHS Compliant Available

XP Power

- 2:1 input range
- DIP-24 package, plastic case rated UL94V-0
- Single and dual outputs
- 1500VDC isolation
- Three-year manufacturer's warranty



SPECIFICATIONS:	
Input Voltage Range:	12V (9 - 18VDC) 24V (18 - 36VDC) 48V (36 - 75VDC)
Line Regulation:	±0.5% max.
Load Regulation:	±1.2% max.(single output), ±5% max.(dual output) from 10% to 100%
Isolation:	1500VDC input to output
Ripple & Noise:	80mV pk-pk, 100mV for D24 models, 20MHz bandwidth
Operating Temperature:	-40°C to +100°C
Dimensions:	1.25"W x 0.8"L x 0.4"H

Mfg. Part No.	Output Voltage (VDC)	Output Current	Input Current* (mA) No Load	Input Current* (mA) Full Load	Effi-ciency (%)	Stock No.	Price Each 1-4
INPUT VOLTAGE RANGE — 9-18VDC							
JCE0612S3V3	3.3V	1.4A	7	513	75	19X6801	17.75
JCE0612S05	5V	1.2A	7	633	79	19X6797	17.75
JCE0612S12	12V	500mA	10	602	83	19X6798	17.75
JCE0612S15	15V	400mA	10	595	84	19X6799	17.75
JCE0612S24	24V	250mA	20	610	82	19X6800	17.75
JCE0612D03	3.3V, -3.3V	909mA, 909mA	10	658	76	19X6792	18.30
JCE0612D05	5V, -5V	600mA, 600mA	10	625	80	19X6793	18.30
JCE0612D12	12V, -12V	250mA, 250mA	15	602	83	19X6794	18.30
JCE0612D15	15V, -15V	200mA, 200mA	20	595	84	19X6795	18.30
JCE0612D24	24V, -24V	125mA, 125mA	35	617	81	19X6796	18.30
INPUT VOLTAGE RANGE — 18-36VDC							
JCE0624S3V3	3.3V	1.4A	7	260	74	19X6811	17.75
JCE0624S05	5V	1.2A	7	316	79	19X6807	17.75
JCE0624S12	12V	500mA	7	301	83	19X6808	17.75
JCE0624S15	15V	400mA	7	301	83	19X6809	17.75
JCE0624S24	24V	250mA	10	305	82	19X6810	17.75
JCE0624D03	3.3V, -3.3V	909mA, 909mA	7	329	76	19X6802	18.30
JCE0624D05	5V, -5V	600mA, 600mA	7	312	80	19X6803	18.30
JCE0624D12	12V, -12V	250mA, 250mA	10	301	83	19X6804	18.30
JCE0624D15	15V, -15V	200mA, 200mA	15	298	84	19X6805	18.30
JCE0624D24	24V, -24V	125mA, 125mA	20	305	82	19X6806	18.30
INPUT VOLTAGE RANGE — 36-75VDC							
JCE0648S3V3	3.3V	1.4A	7	128	76	19X6821	17.75
JCE0648S05	5V	1.2A	7	154	82	19X6817	17.75
JCE0648S12	12V	500mA	7	151	84	19X6818	17.75
JCE0648S15	15V	400mA	7	151	84	19X6819	17.75
JCE0648S24	24V	250mA	7	151	84	19X6820	17.75
JCE0648D03	3.3V, -3.3V	909mA, 909mA	7	162	78	19X6812	18.30
JCE0648D05	5V, -5V	600mA, 600mA	7	154	82	19X6813	18.30
JCE0648D12	12V, -12V	250mA, 250mA	7	151	84	19X6814	18.30
JCE0648D15	15V, -15V	200mA, 200mA	7	151	84	19X6815	18.30
JCE0648D24	24V, -24V	125mA, 125mA	15	158	80	19X6816	18.30

*When one input is set at 100% load and other varies between 25% and 100% load

(211540)

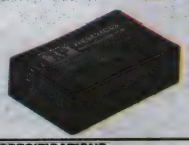
JTE SERIES 6W SINGLE AND DUAL OUTPUT DC/DC CONVERTERS

NEW

RoHS Compliant Available

XP Power

- 4:1 input range
- DIP-24 package, plastic case
- Single and dual outputs
- 1500VDC isolation
- Three-year manufacturer's warranty



SPECIFICATIONS:	
Input Voltage Range:	24V (9 - 36VDC) 48V (18 - 75VDC)
Line Regulation:	±0.5% max.
Load Regulation:	±1.2% max.(single output), ±5% max.(dual output) from 10% to 100%
Isolation:	1500VDC input to output; 1000VDC input/output to case
Ripple & Noise:	80mV pk-pk, 100mV for D24 models, 20MHz bandwidth
Operating Temperature:	-40°C to +100°C, derate from 100% load @ +60°C to no load @ +100°C
Dimensions:	1.25"W x 0.8"L x 0.4"H

CONTINUED

DC-TO-DC CONVERTERS

JTE SERIES 6W SINGLE AND DUAL OUTPUT DC/DC CONVERTERS (CONT.)

INPUT VOLTAGE RANGE — 9-36VDC

Mfg. Part No.	Output Voltage (VDC)	Output Current	Input Current* (mA) No Load	Input Current* (mA) Full Load	Efficiency (%)	Stock No.	Price Each 1-4
● JTE0624S3V3	3.3V	1.4A	10	257	76	19X6831	17.95
● JTE0624S05	5V	1.2A	10	316	80	19X6827	17.95
● JTE0624S12	12V	500mA	10	301	84	19X6828	17.95
● JTE0624S15	15V	400mA	10	301	84	19X6829	17.95
● JTE0624S24	24V	250mA	10	301	84	19X6830	17.95
● JTE0624D03	3.3V, -3.3V	909mA, 909mA	10	324	78	19X6822	18.50
● JTE0624D05	5V, -5V	600mA, 600mA	10	308	82	19X6823	18.50
● JTE0624D12	12V, -12V	250mA, 250mA	10	301	84	19X6824	18.50
● JTE0624D15	15V, -15V	200mA, 200mA	15	301	84	19X6825	18.50
● JTE0624D24	24V, -24V	125mA, 125mA	20	308	82	19X6826	18.50
INPUT VOLTAGE RANGE — 18-75VDC							
● JTE0648S3V3	3.3V	1.4A	7	128	76	19X6841	17.95
● JTE0648S05	5V	1.2A	7	154	82	19X6837	17.95
● JTE0648S12	12V	500mA	7	151	84	19X6838	17.95
● JTE0648S15	15V	400mA	7	151	84	19X6839	17.95
● JTE0648S24	24V	250mA	7	151	84	19X6840	17.95
● JTE0648D03	3.3V, -3.3V	909mA, 909mA	7	162	78	19X6832	18.50
● JTE0648D05	5V, -5V	600mA, 600mA	7	154	82	19X6833	18.50
● JTE0648D12	12V, -12V	250mA, 250mA	7	151	84	19X6834	18.50
● JTE0648D15	15V, -15V	200mA, 200mA	7	151	84	19X6835	18.50
● JTE0648D24	24V, -24V	125mA, 125mA	10	158	80	19X6836	18.50

*Input current measured at nominal input voltage
(211541)

JTF SERIES 8-15W SINGLE AND DUAL OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

XP Power

- High-power density
- Wide 4:1 input range
- Single and dual outputs
- Overload, overvoltage and short circuit protection
- Remote on/off control
- 1600VDC isolation
- Three-year manufacturer's warranty

SPECIFICATIONS:

Input Voltage Range:	24V (9 - 36VDC), 48V (18 - 75VDC)
Line Regulation:	±0.2% max single, ±0.5% dual
Load Regulation:	±0.5% max single, ±1.0% max dual
Isolation Voltage:	1600VDC Input to Output, 1600VDC Input to Case, 1600VDC Output to Case
Ripple & Noise:	75mV pk-pk, 20MHz bandwidth for JTF08, 85mV pk-pk, 20MHz bandwidth for JTF10 and JTF12, 60mV pk-pk 20MHz bandwidth for JTF15
MTBF:	>1MHrs. to MIL-HDBK-217F @ 25°C, GB
Operating Temp:	-40°C to +105°C, derate from 100% load at +60°C to no load at +105°C for 10W, 12W and 15W versions and from 100% load at +70°C to no load at +105°C for 8W version
Dimensions (H x W x D):	0.4 x 0.8 x 1.25"

Mfg. Part No.	Power (W)	Input Voltage	Output Voltage (VDC)	Output Current	Efficiency (%)	Stock No.	Price Each 1-4
● JTF0824S3V3	8	9V to 36V	3.3	2A	83	99R4338	28.00
● JTF0824S05	8	9V to 36V	5	1.5A	86	99R4335	28.00
● JTF0824S12	8	9V to 36V	12	665mA	87	99R4336	28.00
● JTF0824S15	8	9V to 36V	15	535mA	87	99R4337	28.00
● JTF0824D05	8	9V to 36V	±5	±800mA	84	99R4331	29.00
● JTF0824D12	8	9V to 36V	±12	±335mA	86	99R4332	29.00
● JTF0824D15	8	9V to 36V	±15	±265mA	87	99R4333	29.00
● JTF0848S3V3	8	18V to 75V	3.3	2A	82	99R4345	28.00
● JTF0848S05	8	18V to 75V	5	1.5A	86	99R4342	28.00
● JTF0848S12	8	18V to 75V	12	665mA	87	99R4343	28.00
● JTF0848S15	8	18V to 75V	15	535mA	87	99R4344	28.00
● JTF0848D05	8	18V to 75V	±5	±800mA	84	99R4339	29.00
● JTF0848D12	8	18V to 75V	±12	±335mA	87	99R4340	29.00
● JTF0848D15	8	18V to 75V	±15	±265mA	87	99R4341	29.00
● JTF1024S3V3	10	9V to 36V	3.3	2.7A	85	24T5311	29.00
● JTF1024S05	10	9V to 36V	5	2A	87	24T5308	29.00
● JTF1024S12	10	9V to 36V	12	833mA	88	24T5309	29.00
● JTF1024S15	10	9V to 36V	15	667mA	88	24T5310	29.00
● JTF1024D05	10	9V to 36V	±5	±1A	85	24T5305	30.00
● JTF1024D12	10	9V to 36V	±12	±417mA	87	24T5306	30.00
● JTF1024D15	10	9V to 36V	±15	±330mA	87	24T5307	30.00
● JTF1048S3V3	10	18V to 75V	3.3	2.7A	84	24T5318	29.00

➤CONTINUED➤

JTF SERIES 8-15W SINGLE AND DUAL OUTPUT DC/DC CONVERTERS (CONT.)

Mfg. Part No.	Power (W)	Input Voltage	Output Voltage (VDC)	Output Current	Efficiency (%)	Stock No.	Price Each 1-4
● JTF1048S05	10	18V to 75V	5	2A	87	24T5315	29.00
● JTF1048S12	10	18V to 75V	12	833mA	87	24T5316	29.00
● JTF1048S15	10	18V to 75V	15	667mA	87	24T5317	29.00
● JTF1048D05	10	18V to 75V	±5	±1A	85	24T5312	30.00
● JTF1048D12	10	18V to 75V	±12	±417mA	88	24T5313	30.00
● JTF1048D15	10	18V to 75V	±15	±330mA	88	24T5314	30.00
● JTF1224S3V3	12	9V to 36V	3.3	3.5A	87	04R8895	30.50
● JTF1224S05	12	9V to 36V	5	2.4A	89	04R8892	30.50
● JTF1224S12	12	9V to 36V	12	1A	90	04R8893	30.50
● JTF1224S15	12	9V to 36V	15	800mA	90	04R8894	30.50
● JTF1224D05	12	9V to 36V	±5	±1.2A	87	04R8889	31.00
● JTF1224D12	12	9V to 36V	±12	±500mA	90	04R8890	31.00
● JTF1224D15	12	9V to 36V	±15	±400mA	90	04R8891	31.00
● JTF1248S3V3	12	18V to 75V	3.3	3.5A	87	04R8902	30.50
● JTF1248S05	12	18V to 75V	5	2.4A	89	04R8899	30.50
● JTF1248S12	12	18V to 75V	12	1A	90	04R8900	30.50
● JTF1248S15	12	18V to 75V	15	800mA	90	04R8901	30.50
● JTF1248D05	12	18V to 75V	±5	±1.2A	87	04R8896	31.00
● JTF1248D12	12	18V to 75V	±12	±500mA	90	04R8897	31.00
● JTF1248D15	12	18V to 75V	±15	±400mA	90	04R8898	31.00
● JTF1524S3V3	15	9V to 36V	3.3	4A	87	89T3565	35.00
● JTF1524S05	15	9V to 36V	5.1	3A	89	89T3562	35.00
● JTF1524S12	15	9V to 36V	12	1.25A	90	89T3563	35.00
● JTF1524S15	15	9V to 36V	15	1A	90	89T3564	35.00
● JTF1524D05	15	9V to 36V	±5	±1.5A	86	89T3559	37.00
● JTF1524D12	15	9V to 36V	±12	±625mA	89	89T3560	37.00
● JTF1524D15	15	9V to 36V	±15	±500mA	90	89T3561	37.00
● JTF1548S3V3	15	36V to 75V	3.3	4A	86	89T3573	35.00
● JTF1548S05	15	36V to 75V	5	3A	88	89T3569	35.00
● JTF1548S12	15	36V to 75V	12	1.25A	90	89T3570	35.00
● JTF1548S15	15	36V to 75V	15	1A	89	89T3571	35.00
● JTF1548D05	15	36V to 75V	±5	±1.5A	86	89T3566	37.00
● JTF1548D12	15	36V to 75V	±12	±625mA	89	89T3567	37.00
● JTF1548D15	15	36V to 75V	±15	±500mA	90	89T3568	37.00

(152404)

JCA10 SERIES 10W SINGLE AND DUAL OUTPUT DC-DC CONVERTERS

NEW

RoHS Compliant Available

XP Power

- Compact 1" x 0.8" metal package
- Industry standard pin out
- 2:1 input range
- Single and dual outputs
- Overvoltage, overcurrent and short circuit protection
- 3-year manufacturer's warranty
- CE compliant

TÜV Rheinland

SPECIFICATIONS:

Input Voltage:	5V (4.5-9VDC), 12V (9-18VDC), 24V (18-36VDC), 48V (36-75VDC)
Line Regulation:	±0.3% max
Load Regulation:	±1%
Ripple & Noise:	50mV pk-pk, 20MHz bandwidth
Isolation Voltage:	1500VDC Input to Output, 500VDC Input to Case, 500VDC Output to Case
Operating Temperature:	-40°C to +100°C, derate from 100% load at +70°C linearly to 0% load at +100°C
Dimensions (H x W x D):	0.4" x 0.8" x 1" (10mm x 20.3mm x 25.4mm)

SINGLE OUTPUT

Mfg. Part No.	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (A)	Efficiency (%)	Stock No.	Price Each 1-4
● JCA1005S03	4.5 to 9	3.3V	2.42A	82	29X2224	34.00
● JCA1005S05	4.5 to 9	5V	1.6A	86	29X2225	34.00
● JCA1005S12	4.5 to 9	12V	830mA	85	29X2226	34.00
● JCA1005S15	4.5 to 9	15V	660mA	86	29X2227	34.00
● JCA1012S03	9 to 18	3.3V	2.42A	84	29X2231	34.00
● JCA1012S05	9 to 18	5V	1.6A	89	29X2232	34.00
● JCA1012S12	9 to 18	12V	830mA	89	29X2233	34.00
● JCA1012S15	9 to 18	15V	660mA	89	29X2234	34.00
● JCA1024S03	18 to 36	3.3V	2.42A	85	29X2238	34.00
● JCA1024S05	18 to 36	5V	1.6A	88	29X2239	34.00
● JCA1024S12	18 to 36	12V	830mA	89	29X2240	34.00
● JCA1024S15	18 to 36	15V	660mA	90	29X2241	34.00
● JCA1048S03	36 to 75	3.3V	2.42A	82	29X2245	34.00
● JCA1048S05	36 to 75	5V	1.6A	89	29X2246	34.00

➤CONTINUED➤

JCA10 SERIES 10W SINGLE AND DUAL OUTPUT DC-DC CONVERTERS (CONT.)

Mfg. Part No.	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (A)	Effi-ciency (%)	Stock No.	Price Each 1-4
JCA1048S12	36 to 75	12V	830mA	89	29X2247	34.00
JCA1048S15	36 to 75	15V	660mA	89	29X2248	34.00
DUAL OUTPUT						
JCA1005D01	4.5 to 9	5V, -5V	800mA, 800mA	82	29X2221	37.00
JCA1005D02	4.5 to 9	12V, -12V	420mA, 420mA	84	29X2222	37.00
JCA1005D03	4.5 to 9	15V, -15V	330mA, 330mA	85	29X2223	37.00
JCA1012D01	9 to 18	5V, -5V	800mA, 800mA	85	29X2228	37.00
JCA1012D02	9 to 18	12V, -12V	420mA, 420mA	88	29X2229	37.00
JCA1012D03	9 to 18	15V, -15V	330mA, 330mA	89	29X2230	37.00
JCA1024D01	18 to 36	5V, -5V	800mA, 800mA	85	29X2235	37.00
JCA1024D02	18 to 36	12V, -12V	420mA, 420mA	89	29X2236	37.00
JCA1024D03	18 to 36	15V, -15V	330mA, 330mA	90	29X2237	37.00
JCA1048D01	36 to 75	5V, -5V	800mA, 800mA	85	29X2242	37.00
JCA1048D02	36 to 75	12V, -12V	420mA, 420mA	89	29X2243	37.00
JCA1048D03	36 to 75	15V, -15V	330mA, 330mA	89	29X2244	37.00

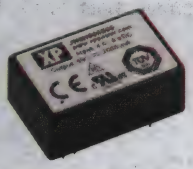
(211554)

JHM SERIES 10W SINGLE AND DUAL OUTPUT MEDICAL DC/DC CONVERTERS

RoHS Compliant Available

XP Power

- International Medical Approvals
- 4000VAC reinforced insulation
- Meets IEC60601-1, 3rd Edition
- 2 uA Patient leakage current
- DIP24 package
- EN55011 Level A with no external components
- Three-year manufacturer's warranty



SPECIFICATIONS:

Input Voltage Range:	5V (4.5-9 VDC), 12V (9-18 VDC), 24V (18-36 VDC)
Line Regulation:	±0.3% max.
Load Regulation:	±2% max 0% to 10% load, ±1% max 10% to 100% load
Ripple & Noise:	1% pk-pk max at 20 MHz bandwidth
Isolation:	4000VAC for 1 min. double/reinforced with a working voltage of 250VAC. Meets 2 x MOPP per 3rd edition of IEC60601-1 5000 VAC for 10 ms in accordance with IEC60664-1
Operating Temperature:	-40°C to +80°C (see datasheet for derating)
Dimensions:	12.7 x 20.32 x 31.75mm (0.5 x 0.8 x 1.25")
Emissions:	EN55011 & EN55022 level A conducted & radiated with no external components
Safety Approvals:	ANSI/AMMI ES60601-1 3rd edition, CSA22.2 No. 60601-1:2008 IEC60601-1 3rd Edition

SINGLE OUTPUT

Mfg. Part No.	Input Voltage	Output Voltage (V)	Output Current	Input Current (mA) No Load	Input Current (mA) Full Load	Effi-ciency (%)	Stock No.	Price Each 1-4
JHM1005S05	4.5V to 9V	5	2A	100	2690	83.5	62T2141	45.00
JHM1005S12	4.5V to 9V	12	833mA	115	2640	85	62T2142	45.00
JHM1005S15	4.5V to 9V	15	666mA	115	2640	85	62T2143	45.00
JHM1012S05	9V to 18V	5	2A	50	1310	86	62T2147	45.00
JHM1012S12	9V to 18V	12	833mA	50	1280	88	62T2148	45.00
JHM1012S15	9V to 18V	15	666mA	50	1265	89	62T2149	45.00
JHM1024S05	18V to 36V	5	2A	25	645	87	62T2153	45.00
JHM1024S12	18V to 36V	12	833mA	20	630	89	62T2154	45.00
JHM1024S15	18V to 36V	15	666mA	20	630	89	62T2155	45.00
DUAL OUTPUT								
JHM1005D05	4.5V to 9V	±5	±1A	130	2760	81.5	62T2138	49.00
JHM1005D12	4.5V to 9V	±12	±420mA	115	2695	84	62T2139	49.00
JHM1005D15	4.5V to 9V	±15	±333mA	115	2670	84	62T2140	49.00
JHM1012D05	9V to 18V	±5	±1A	50	1345	84	62T2144	49.00
JHM1012D12	9V to 18V	±12	±420mA	50	1290	88	62T2145	49.00
JHM1012D15	9V to 18V	±15	±333mA	50	1280	88	62T2146	49.00
JHM1024D05	18V to 36V	±5	±1A	20	660	85	62T2150	49.00
JHM1024D12	18V to 36V	±12	±420mA	25	640	88	62T2151	49.00
JHM1024D15	18V to 36V	±15	±333mA	25	635	88	62T2152	49.00

(197849)

JTK SERIES 15-20W HIGH POWER DENSITY DC/DC CONVERTERS

RoHS Compliant Available

XP Power

- High power density
- Wide 4:1 input range
- Operating temperature -40°C to +100°C
- Single and dual outputs
- 1600VDC isolation
- High efficiency - up to 89%
- Three-year manufacturer's warranty

JTK series feature an input to output and input/output to case isolation of 1,600VDC for up to 1 minute and remote on/off signal. This can be used to control the output rails or to sequence start-up procedures. All units feature overvoltage and continuous short circuit protection. Ideal for use in a wide variety of mobile, portable and wireless products, and where designers are looking to reduce the size of their end product.

SPECIFICATIONS:

Input Voltage Range:	24V (9-36VDC), 48V (18-75VDC)
Line Regulation:	±0.2% max (**JTK15 series**), ±0.5% max (**JTK20 series**)
Load Regulation:	±0.5% max single, ±1.0% max dual
Isolation:	1600VDC Input to Output, 1600VDC Input to Case, 1600VDC Output to Case
Ripple & Noise:	100 mV pk-pk, 20 MHz bandwidth**
Operating Temperature:	-40°C to +100°C, derate from 100% load at +65°C to no load at +100°C (**JTK15 series**) -40°C to +100°C, derate from 100% load @ +55°C to no load @ +100°C (**JTK20 series**)
Dimensions:	1.00W x 1.00L x 0.39"H

Mfg. Part No.	Power (W)	Input Voltage	Output Voltage (VDC)	Output Current	Effi-ciency (%)	Stock No.	Price Each 1-4
JTK1524S3V3	15	9V to 36V	3.3	4A	86	52R2831	35.00
JTK1524S05	15	9V to 36V	5	3A	87	52R2829	35.00
JTK1524S12	15	9V to 36V	12	1.3A	88	52R2830	35.00
JTK1524S15	15	9V to 36V	15	1A	89	32R7663	35.00
JTK1524D05	15	9V to 36V	±5	±1.5A	85	32R7661	37.00
JTK1524D12	15	9V to 36V	±12	±625mA	88	52R2828	37.00
JTK1524D15	15	9V to 36V	±15	±500mA	89	32R7662	37.00
JTK1548S3V3	15	18V to 75V	3.3	4A	84	52R2837	35.00
JTK1548S05	15	18V to 75V	5	3A	86	32R7664	35.00
JTK1548S12	15	18V to 75V	12	1.3A	87	52R2835	35.00
JTK1548S15	15	18V to 75V	15	1A	88	52R2836	35.00
JTK1548D05	15	18V to 75V	±5	±1.5A	84	52R2832	37.00
JTK1548D12	15	18V to 75V	±12	±625mA	87	52R2833	37.00
JTK1548D15	15	18V to 75V	±15	±500mA	88	52R2834	37.00
JTK2024S3V3	20	9V to 36V	3.3	4.5A	86	24T5324	45.00
JTK2024S05	20	9V to 36V	5	4A	89	24T5321	45.00
JTK2024S12	20	9V to 36V	12	1.67A	89	24T5322	45.00
JTK2024S15	20	9V to 36V	15	1.33A	89	24T5323	45.00
JTK2024D12	20	9V to 36V	±12	±833mA	89	24T5319	47.00
JTK2024D15	20	9V to 36V	±15	±667mA	89	24T5320	47.00
JTK2048S3V3	20	18V to 75V	3.3	4.5A	86	24T5330	45.00
JTK2048S05	20	18V to 75V	5	4A	89	24T5327	45.00
JTK2048S12	20	18V to 75V	12	1.67A	89	24T5328	45.00
JTK2048S15	20	18V to 75V	15	1.33A	90	24T5329	45.00
JTK2048D12	20	18V to 75V	±12	±833mA	89	24T5325	47.00
JTK2048D15	20	18V to 75V	±15	±667mA	89	24T5326	47.00

*At nominal input voltage; **Measured with 20 MHz bandwidth and 1µF ceramic and 10µF tantalum capacitor across output rails

(165077)

JCM SERIES 15/20W SINGLE AND DUAL OUTPUT DC-DC CONVERTERS

RoHS Compliant Available

XP Power

- Very high power density - 1" x 1" package
- 2:1 input range
- Operating Temperature -40°C to +105°C
- Single and dual outputs
- High efficiency - up to 89%
- 1600VDC isolation
- Output trim
- Remote on/off
- Three-year manufacturer's warranty

JCM series ultra compact low power DC-DC converters come in a 1 x 1" (25.4 x 25.4mm) encapsulated metal package. These PCB mounted converters accommodate a wide 2:1 input voltage range, accepting either 9V to 18V, 18V to 36V or 36V to 75V , covering the nominal inputs of +12, +24 or +48VDC. Single output models provide +3.3, +5, +12 or +15VDC, while the duals offer +/-5, +/-12 or +/-15VDC. All units feature overvoltage and continuous short circuit protection.

SPECIFICATIONS:

Input Voltage:	12V (9-18VDC), 24V (18-36VDC), 48V (36-75VDC)
Line Regulation:	±0.2% max. (**JCM15 series**), ±0.5% max. (**JCM20 series**)
Load Regulation:	Single output models: ±0.5% max, Dual output models: ±1% max
Isolation Voltage:	1600VDC
Ripple & Noise:	100mV pk-pk, 20MHz bandwidth**
MTBF:	>560 KHrs to MIL-STD-217F at 25°C, GB

CONTINUED

JCM SERIES 15/20W SINGLE AND DUAL OUTPUT DC-DC CONVERTERS (CONT.)

SPECIFICATIONS:	
Operating Temperature:	-40°C to +105°C, derate from 100% load at +65°C to no load at +105°C
Dimensions (H x W x D):	0.39 x 1.00 x 1.00" (9.90 x 25.4 x 25.4mm)

Mfg. Part No.	Input Voltage	Output Voltage (V)	Output Current	Efficiency (%)	Stock No.	Price Each 1-4
15W						
● JCM1512S3V3	9V to 18V	3.3	4A	85	79R9183	30.75
● JCM1512S05	9V to 18V	5	3A	86	79R9180	30.75
● JCM1512S12	9V to 18V	12	1.3A	88	79R9181	30.75
● JCM1512S15	9V to 18V	15	1A	89	79R9182	30.75
● JCM1512D05	9V to 18V	±5	±1.5A	85	79R9177	31.25
● JCM1512D12	9V to 18V	±12	±625mA	89	79R9178	31.25
● JCM1512D15	9V to 18V	±15	±500mA	89	79R9179	31.25
● JCM1524S3V3	18V to 36V	3.3	4A	86	79R9190	30.75
● JCM1524S05	18V to 36V	5	3A	87	79R9187	30.75
● JCM1524S12	18V to 36V	12	1.3A	88	79R9188	30.75
● JCM1524S15	18V to 36V	15	1A	89	79R9189	30.75
● JCM1524D05	18V to 36V	±5	±1.5A	85	79R9184	31.25
● JCM1524D12	18V to 36V	±12	±625mA	88	79R9185	31.25
● JCM1524D15	18V to 36V	±15	±500mA	89	79R9186	31.25
● JCM1548S3V3	36V to 75V	3.3	4A	85	79R9197	30.75
● JCM1548S05	36V to 75V	5	3A	86	79R9194	30.75
● JCM1548S12	36V to 75V	12	1.3A	88	79R9195	30.75
● JCM1548S15	36V to 75V	15	1A	88	79R9196	30.75
● JCM1548D05	36V to 75V	±5	±1.5A	84	79R9191	31.25
● JCM1548D12	36V to 75V	±12	±625mA	87	79R9192	31.25
● JCM1548D15	36V to 75V	±15	±500mA	88	79R9193	31.25
20W						
● JCM2012S3V3	9V to 18V	3.3	4.5A	86	24T5292	43.00
● JCM2012S05	9V to 18V	5	4A	90	24T5289	43.00
● JCM2012S12	9V to 18V	12	1.67A	89	24T5290	43.00
● JCM2012S15	9V to 18V	15	1.33A	89	24T5291	43.00
● JCM2012D12	9V to 18V	±12	±833mA	89	24T5287	45.00
● JCM2012D15	9V to 18V	±15	±667mA	89	24T5288	45.00
● JCM2024S3V3	18V to 36V	3.3	4.5A	86	24T5298	43.00
● JCM2024S05	18V to 36V	5	4A	89	24T5295	43.00
● JCM2024S12	18V to 36V	12	1.67A	89	24T5296	43.00
● JCM2024S15	18V to 36V	15	1.33A	89	24T5297	43.00
● JCM2024D12	18V to 36V	±12	±833mA	89	24T5293	45.00
● JCM2024D15	18V to 36V	±15	±667mA	89	24T5294	45.00
● JCM2048S3V3	36V to 75V	3.3	4.5A	86	24T5304	43.00
● JCM2048S05	36V to 75V	5	4A	89	24T5301	43.00
● JCM2048S12	36V to 75V	12	1.67A	89	24T5302	43.00
● JCM2048S15	36V to 75V	15	1.33A	90	24T5303	43.00
● JCM2048D12	36V to 75V	±12	±833mA	89	24T5299	45.00
● JCM2048D15	36V to 75V	±15	±667mA	89	24T5300	45.00

(178972)

RDC20 SERIES 20W SINGLE AND DUAL OUTPUT DC/DC CONVERTERS

NEW

RoHS Compliant Available

XP Power

CE

- 72VDC and 110VDC input for railway applications
- Single and dual outputs
- 1500VDC basic isolation
- High power density
- High efficiency — up to 88%
- Remote On/Off
- Overvoltage, overload, overtemperture protection
- Short circuit protection
- Three-year manufacturer's warranty

SPECIFICATIONS:	
Input Voltage Range:	72V (36-140VDC), 110V (55-176VDC)
Line Regulation:	±0.2% max
Load Regulation:	Single output models ±0.5%; Dual output models ±1% (balanced outputs)
Ripple & Noise:	100mV or 1% pk-pk Single output models; 150mV or 1% pk-pk Dual output models , whichever is greater, @ 20MHz bandwidth (measured with 1µF ceramic capacitor in parallel with 10µF electrolytic capacitor across output rails)
Isolation:	1500VAC Input-to-Output, 1600VDC Input -to-Case and Output-to-Case
Operating Temperature:	-40°C to +85°C (see datasheet for derating)
Dimensions:	50.8 x 25.4 x 10.16mm (2 x 1 x 0.4")
EMC - Emissions:	EN50121-3-2, Railway applications - electromagnetic compatibility for rolling stock apparatus; Emissions: EN55011

CONTINUED

RDC20 SERIES 20W SINGLE AND DUAL OUTPUT DC/DC CONVERTERS (CONT.)

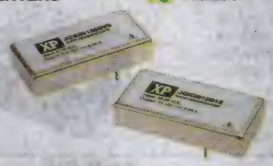
Mfg. Part No.	Output Voltage (V)	Output Current	Input Current (mA) No Load	Input Current (mA) Full Load	Capacitive Load Max. (µF)	Efficiency (%)	Stock No.	Price Each 1-4
72V NOM. INPUT VOLTAGE — 36V TO 140VDC								
● RDC2072S3V3	3.3	6A	20	312	10000	88	47X2706	90.00
● RDC2072S05	5	4A	25	313	6800	88.5	47X2703	90.00
● RDC2072S12	12	1.65A	15	318	1000	86.5	47X2704	90.00
● RDC2072S15	15	1.33A	20	318	700	87	47X2705	90.00
● RDC2072D05	±5	±2A	35	319	±1000	87	47X2700	100.00
● RDC2072D12	±12	±830mA	20	323	±470	85.5	47X2701	100.00
● RDC2072D15	±15	±670mA	20	324	±330	86	47X2702	100.00
110V NOM. INPUT VOLTAGE — 55V TO 176VDC								
● RDC20110S3V3	3.3	6A	15	208	10000	86.5	47X2699	90.00
● RDC20110S05	5	4A	20	209	6800	87	47X2696	90.00
● RDC20110S12	12	1.65A	15	212	1000	85	47X2697	90.00
● RDC20110S15	15	1.33A	15	211	700	86	47X2698	90.00
● RDC20110D05	±5	±2A	30	211	±1000	86	47X2693	100.00
● RDC20110D12	±12	±830mA	15	215	±470	84	47X2694	100.00
● RDC20110D15	±15	±670mA	15	215	±330	85	47X2695	100.00

(212165)

JCK30 SERIES 30 WATT SINGLE AND DUAL OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

XP Power



- 2:1 input range
- High power density
- Single and dual outputs
- High efficiency - up to 92%
- Remote On/Off
- 1600VDC isolation
- Three-year manufacturer's warranty

JCK30 series 30 Watt ultra compact low power DC/DC converters come in a metal case that measures just 2" x 1". These encapsulated PCB mounted converters accommodate a wide 2:1 input voltage range, accepting either 9 – 18, 18 – 36 or 36 – 75 VDC, covering the nominal inputs of +12, +24 or +48 VDC. Single output models provide +3.3, +5, +12 or +15 VDC, while the duals offer +/-5, +/-12 or +/-15 VDC. All units feature overvoltage and continuous short circuit protection.

SPECIFICATIONS:	
Input Voltage Range:	12 V (9-18 VDC) 24 V (18-36 VDC) 48 V (36-75 VDC)
Line Regulation:	±0.5% max.
Load Regulation:	Single output models: ±0.5% max Dual output models: ±1% max balanced outputs
Isolation:	1600VDC Input to Output 1600VDC Input to Case 1600VDC Output to Case
Ripple & Noise:	100 mV or 1% pk-pk
Operating Temperature:	-40°C to +105°C, derate from 100% at +50°C to 0% at +105°C
Dimensions:	1.00W x 2.00L x 0.4"H

Mfg. Part No.	Input Voltage Range (VDC) Min.	Input Voltage Range (VDC) Max.	Output Voltage (VDC)	Output Current (A)	Input Current* No Load (mA)	Input Current* Full Load (mA)	Efficiency (%)	Stock No.	Price Each 1-4
● JCK3012S3V3	9	18	3.3	8	80	2426	89	79R9161	50.00
● JCK3012S05	9	18	5	6	120	2874	91	79R9158	50.00
● JCK3012S12	9	18	12	2.5	50	2809	91	79R9159	50.00
● JCK3012S15	9	18	15	2	50	2809	92	79R9160	50.00
● JCK3012D05	9	18	±5	±3	180	2874	89	79R9155	53.00
● JCK3012D12	9	18	±12	±1.25	50	2874	90	79R9156	53.00
● JCK3012D15	9	18	±15	±1	60	2874	91	79R9157	53.00
● JCK3024S3V3	18	36	3.3	8	60	1185	91	79R9169	50.00
● JCK3024S05	18	36	5	6	100	1420	92	79R9166	50.00
● JCK3024S12	18	36	12	2.5	30	1436	92	79R9167	50.00
● JCK3024S15	18	36	15	2	30	1420	92	79R9168	50.00
● JCK3024D05	18	36	±5	±3	120	1437	90	79R9163	53.00
● JCK3024D12	18	36	±12	±1.25	30	1453	91	79R9164	53.00
● JCK3024D15	18	36	±15	±1	40	1437	91	79R9165	53.00
● JCK3048S3V3	36	75	3.3	8	50	593	90	79R9176	50.00
● JCK3048S05	36	75	5	6	60	710	91	79R9173	50.00
● JCK3048S12	36	75	12	2.5	30	718	91	79R9174	50.00
● JCK3048S15	36	75	15	2	30	718	91	79R9175	50.00
● JCK3048D05	36	75	±5	±3	70	710	90	79R9170	53.00
● JCK3048D12	36	75	±12	±1.25	30	718	90	79R9171	53.00
● JCK3048D15	36	75	±15	±1	40	718	90	79R9172	53.00

*Input current specified at nominal 12, 24 V or 48 V input

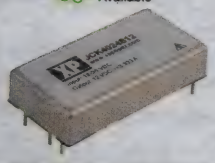
**Measured with 20 MHz bandwidth and 1µF ceramic capacitor across output rails

(178971)

JCK SERIES 40W DC-DC CONVERTERS

RoHS Compliant Available

XP Power



- 2:1 input range
- Very high power density - 2" x 1" package
- Single and dual outputs
- High efficiency up to 92%
- Remote On/Off
- 1600VDC isolation
- Three-year manufacturer's warranty

SPECIFICATIONS:	
Input Voltage:	12V (9-18VDC), 24V (18-36VDC), 48V (36-75VDC)
Line Regulation:	±0.5% max
Load Regulation:	±0.5% max (single output), ±1% max (dual output)
Isolation Voltage:	1600VDC
Ripple & Noise:	100 mV for 3V3 +5V models, 150 mV for other models
MTBF:	330 kHrs min to MIL-HDBK-217F at 25°C, GB
Operating Temp:	-40°C to +70°C, derate from 100% load at 55°C to 60% load at 70°C
Dimensions (H x W x D):	0.40 x 1.00 x 2.00" (10.16 x 25.4 x 50.8mm)

SINGLE OUTPUT

Mfg. Part No.	Input Voltage	Output Voltage (V)	Output Current (A)	Stock No.	Price Each 1-4
JCK4012S3V3	9V to 18V	3.3	8	24T5274	65.00
JCK4012S05	9V to 18V	5	8	24T5271	65.00
JCK4012S12	9V to 18V	12	3.33	24T5272	65.00
JCK4012S15	9V to 18V	15	2.67	24T5273	65.00
JCK4024S3V3	18V to 36V	3.3	8	24T5280	65.00
JCK4024S05	18V to 36V	5	8	24T5277	65.00
JCK4024S12	18V to 36V	12	3.33	24T5278	65.00
JCK4024S15	18V to 36V	15	2.67	24T5279	65.00
JCK4048S3V3	36V to 75V	3.3	8	24T5286	65.00
JCK4048S05	36V to 75V	5	8	24T5283	65.00
JCK4048S12	36V to 75V	12	3.33	24T5284	65.00
JCK4048S15	36V to 75V	15	2.67	24T5285	65.00
DUAL OUTPUT					
JCK4012D12	9V to 18V	±12	±1.67	24T5269	68.00
JCK4012D15	9V to 18V	±15	±1.33	24T5270	68.00
JCK4024D12	18V to 36V	±12	±1.67	24T5275	68.00
JCK4024D15	18V to 36V	±15	±1.33	24T5276	68.00
JCK4048D12	36V to 75V	±12	±1.67	24T5281	68.00
JCK4048D15	36V to 75V	±15	±1.33	24T5282	68.00

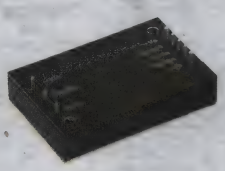
(194435)

RDQ SERIES 100-150 WATT SINGLE OUTPUT DC/DC CONVERTERS

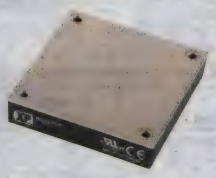
NEW

RoHS Compliant Available

XP Power



RDQ100



RDQ150

- 110VDC input for rail applications
- Up to 92% efficiency
- Quarter and half brick packages
- Baseplated cooled

- Remote On/OFF and remote sense
- Overvoltage and short circuit protection
- Three-year manufacturer's warranty

SPECIFICATIONS:	
Input Voltage:	66-160V
Line Regulation:	±0.2% max. from high line to low line
Load Regulation:	±0.2% max. from 0-100% load
Isolation Voltage:	2250VDC Input-to-Output 2250VDC Input-to-Case 1500VDC Output-to-Case
Ripple & Noise:	5V models: 100mV pk-pk, 12V models: 150mV max. pk-pk, 24V models: 240mV max. pk-pk; 20MHz Bandwidth measured with 10µF tantalumn and 1µF ceramic capacitor across output
MTBF:	380kHrs typical to MIL-HDBK-217F @ 25°C, GB
Operating Temperature:	-40°C to +100°C base plate
Dimensions:	RDQ100 models: 2.28W x 1.45L x 0.5"H (57.9 x 36.8 x 12.7mm) RDQ150 models: 2.28W x 2.4L x 0.5"H (57.9 x 61 x 12.7mm)
EMC:	EN50121-3-2, Railway applications - electromagnetic compatibility for rolling stock apparatus; Emissions: EN55011
Safety Approval:	UL60950-1 (basic insulation)

CONTINUED

RDQ SERIES 100-150 WATT SINGLE OUTPUT DC/DC CONVERTERS (CONT.)

100W MODELS

Mfg. Part No.	Output Voltage (V)	Output Current (A)	Input Current (mA) No Load	Input Current (mA) Full Load	Capacitive Load Max. (µF)	Effi-ciency (%)	Stock No.	Price Each 1-4
RDQ100110S05	5	20	30	1010	10000	90	47X2719	160.00
RDQ100110S12	12	8.4	40	993	8800	90	47X2720	160.00
RDQ100110S24	24	4.2	60	1030	1500	91	47X2721	160.00
150W MODELS								
RDQ150110S05	5	30	40	1474	10000	92.5	47X2722	175.00
RDQ150110S12	12	12.5	40	1474	5600	92.5	47X2723	175.00
RDQ150110S24	24	6.5	60	1541	2200	91	47X2724	175.00

(212168)

2.5W TO 18W DIN MOUNT DC-DC CONVERTERS

RoHS Compliant Available

WAGO

- End plate 859-525 included and attached
- Mounting on DIN 35 rail

DC-DC Converters are DIN-rail mount, and feature the CAGE CLAMP® spring pressure wiring technology for conductors 28 - 14 AWG. Marking system also available; *go online or call.*

859 Series

789 Series

859 SERIES, 6mm WIDE HOUSING

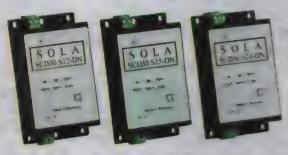
Mfg. Part No.	Input (V) Min.	Input (V) Max.	Output (VDC)	Output Cur. (A)	Power Rating (W)	Stock No.	Price Each 1-24
859-801	10	30	5	500	2.5	29K5536	96.01
859-802	15	30	10	500	5	29K5537	120.81
859-804	8	16	24	250	6	29K5538	107.46
859-805	15	30	12	500	6	29K5539	131.69
789 SERIES							
789-851	19.2	28.8	5	1.5	7.5	99M1224	121.27
789-852	19.2	28.8	12	1.5	18	99M1225	119.34
789-853	8	16	24	350	8.4	96K5465	129.08

(138561)

SCD SERIES ENCAPSULATED INDUSTRIAL DC/DC CONVERTERS

RoHS Compliant Available

SOLA HD



- DIN Rail or Chassis Mount
- IP20 Protection
- Simple Snap-On for DIN Rail TS35/7.5 or TS35/15
- Wide 20VDC-to 72VDC-Input Range
- Isolated Outputs
- 5-Year Manufacturer's Warranty

SCD series converters are compact, rugged power supplies designed to power industrial control instrumentation devices and equipment where AC power industrial is not convenient or accessible. Dimensions: 2.55(W) x 4.71(H) x 1.29(D).

Mfg. Part No.	Description	Output Voltages: Output 1 (VDC) +	Output Voltages: Output Current 1 (A)	Output Voltages: Output 2 (VDC) -	Output Voltages: Output Current 2 (A)	Min. Load V1 A	Stock No.	Price Each 1-4
SCD30S5-DN	5V	5	5	...	...	0	73K1345	219.94
SCD30S12-DN	12V	12	2.5	...	...	0	73K1341	219.94
SCD30S15-DN	15V	15	2	...	...	0	73K1342	218.98
SCD30S24-DN	24V	24	1.3	...	...	0	73K1343	219.94
SCD30S48-DN	48V	48	0.6	...	...	0	73K1344	228.12
SCD30D15-DN	Dual O/P±15V	15	0.8	-15	0.8	0.15	73K1340	235.93

(65882)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

(212570)

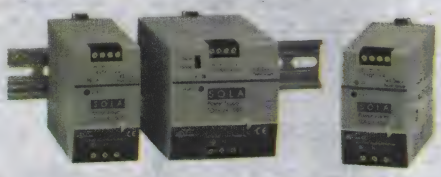
DIN RAIL POWER SUPPLIES

SDP-T SERIES DIN RAIL POWER SUPPLIES

RoHS Compliant Available

SOLA HD

- Low output noise
- PowerBoost™ industrial overload design
- -10°C to 60°C with no derating
- Ripple less than 50mVp-p
- Screw terminal connections
- Input Voltage: 85 to 264 VAC; 90 to 375** VDC (except where noted*)



High efficiency (85 to 88%) compact power supplies provide fast connection, short circuit, overload and underload protection. Each unit contains a DC indicator and front panel adjustment potentiometer.

Mfg. Part No.	DC Output Voltage	Output Current (A)	Stock No.	Price Each 1-4
● SDP5-5-100T	5 to 6	5	78K6127	117.12
● SDP2-12-100T	10 to 12	2.5	78K6124	130.96
● SDP3-15-100T	12 to 15	4.2 to 3.4	78K6126	144.78
● SDP1-48-100T	48 to 56	1	78K6123	133.65
● SDP06-24-100T	24 to 28	0.6	78K6121	63.73
● SDP1-24-100T	24 to 28	1.3	78K6122	88.55
● SDP2-24-100T	24 to 28	2.1	78K6125	117.12
● SDP4-24-100RT*	24 to 28	4.2	16M0092	155.38

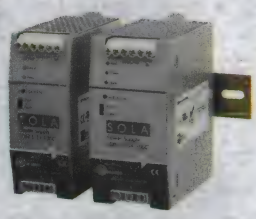
*Class 1 limited power source rating; Input Voltage: 210 to 375VDC**.
**Not UL Listed for DC input.
(77675)

SDN-C SERIES COMPACT DIN RAIL POWER SUPPLIES

RoHS Compliant Available

SOLA HD

- Compact packaging to save space on the DIN rail
- Visual diagnostic LED's for input/output status
- High MTBF means high reliability and long life
- Higher efficiency saves energy and lowers amount of heat generated in panel
- Powerboost™ overload capability to start high inrush loads
- Accepts universal voltage 85-264VAC, 50/60 Hz input
- Active Power Factor Correction
- Patented DIN rail mounting clip
- User adjustable output voltage accessible via front face
- Parallel capability standard
- Industrial grade design: -25° to 60°C operation without derating,
- Rugged metal housing; easy on/off DIN mounting
- Large, IP20-rated, screw terminals for #10 AWG/6mm2, for quick, easy installation
- Fully tested and burned in at the factory
- Highly efficient switching technology
- Five-year manufacturer's limited warranty
- UL listed - E61379, UL508, CSA C22.2 No. 107.1
- UL recognized - ITE, E137632; Haz. Loc., E234790
- CE compliant - IEC/EN60950-1, 2nd Edition
- Meets SEMI F47 Sag Immunity
- ATEX directive - EN60079-0, EN60079-15 on 5A,10A, 40A models



SDN-C series DIN rail power supplies are the next generation of the popular **SDN series**. These models combine high efficiency and compact size with new visual diagnostic LED's. Features include sag immunity, power factor correction, and universal voltage input. Wide temperature operating range and parallel operation capability make the new SDN-C units suitable to a variety of industrial applications.

Mfg. Part No.	Output Voltage (DC)	Output Current	Input Current (A)	Input Voltage (VAC)	Dimensions (mm) H	W	D	Stock No.	Price Each 1-4
● SDN 5-24-100C	24	5	1.65-.55	85-264	123	50	110	40M7849	279.67
● SDN 10-24-100C	24	10	3.2-1.0	85-264	123	60	110	40M7848	412.42
● SDN20-24-100C	24	20	6A / 3A	85-264	123	87	127	10R6981	615.35
● SDN40-24-100C	24	40	12A / 4A	85-264	123	180	122	05X8379	860.77

(91205)

DEV KIT HQ™

Newest technology, Development Kits & Evaluation Boards from the best suppliers.

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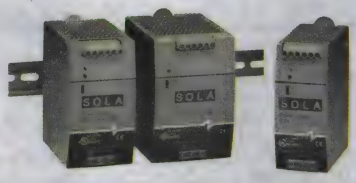
(196525)

SDN-P SINGLE PHASE DIN RAIL POWER SUPPLIES

RoHS Compliant Available

SOLA HD

- Easy to Mount and Connect
- High Efficiency (>88%)
- Ripple <50mVpp
- Input Voltage: 115/230VAC (Auto Select)
- Output Voltage: 24-28VDC Adj.
- High MTBF and Reliability
- Indefinite Short Circuit, Overvoltage and Overtemperature Protection
- >20ms Hold-Up
- -10°C to 60°C with No Derating
- 5-Year Warranty
- Selectable Single- or Parallel-Use
- Class 1, Division 2 Hazardous Location
- Power Factor Correction



Mfg. Part No.	Output Current (A)	Dimensions (in.) H	W	D	Stock No.	Price Each 1-4
12 VDC						
● SDN-9-12-100P	9	4.88	2.56	4.55	01N5181	263.70
● SDN-16-12-100P	16	4.88	3.26	4.55	12P4741	383.94
24 VDC						
● SDN2.5-24-100P*	2.5	4.88	1.97	4.55	49H7684	171.03
● SDN4-24-100LP*	4	4.88	2.56	4.55	64K0509	251.57
● SDN 5-24-100P	5	4.88	2.56	4.55	47M2369	260.41
● SDN10-24-100P**	10	4.88	3.26	4.55	80K9315	379.16
48 VDC						
● SDN-5-48-100P	5	4.88	3.26	4.55	12P4742	383.94

REDUNDANCY MODULES — SINGLE PHASE SDN SERIES

Mfg. Part No.	For Use With	Stock No.	Price Each 1-4
● SDN2.5/20RED	SDN2.5-24-100P, SDN4-24-100LP, SDN5-24-100P, SDN10-24-100P	98H3673	76.47

ACCESSORY

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● SDN-PMBRK2	Chassis Mount Bracket	68H8557	7.54

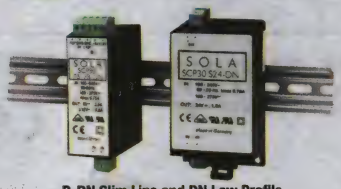
* Class 2 limited power source rating
** Meets OVDA Requirements for DeviceNet Power Supplies
(61881)

RUGGED SCP ENCAPSULATED SERIES

RoHS Compliant Available

SOLA HD

- Wide Range of Output Voltages
- DIN Rail or Chassis Mount
- Single- and Multiple-Output Voltages
- Screw Terminations with 12AWG
- Compact, Space-Saving Design
- Temperature Range: 0°C to +50°C
- Input Voltage: 85-264VAC
- Ripple < 50mVpp
- Dimensions: 4.72(H) x 2.55(W) x 1.29(D)
- 5-Year Warranty



B-DN Slim Line and DN Low Profile

Slim-line DIN rail mount only versions available, *change mfg. part no. suffix to* **B-DN** (i.e., **SCP3053.3B-DN**).*

Mfg. Part No.	DC Output Voltage	Output Current	Stock No.	Price Each 1-4
● SCP30S3.3-DN	3.3V	6.0A	83F2959	172.83
● SCP30S5-DN	5V	6.0A	73K1363	166.03
● SCP30S12-DN	12V	2.5A	73K1357	164.71
● SCP30S15-DN	15V	2.0A	16M0089	164.70
● SCP30D12-DN	±12V	1.2/1.2A	73K1352	185.79
● SCP30D15-DN	±15V	1.0/1.0A	73K1353	185.79
● SCP30D512-DN	5V/12V	3.0/1.2A	73K1355	193.44
● SCP30D524-DN	5V/24V	3.0/0.6A	73K1356	191.08
● SCP30T512-DN	5V/±12V	3.0/0.6/0.6A	73K1365	201.63
● SCP30T515-DN	5V/±15V	3.0/0.5/0.5A	73K1366	201.63
● SCP30S24-DN	24V	1.3A	73K1360	164.71
● SCP30S48-DN	48V	0.6A	73K1362	160.60

*Slim line version not available on SCP30D512-DN
(62681)

SDN SERIES THREE PHASE DIN RAILS

RoHS Compliant Available

SOLA HD

- Easy to Mount and Connect
- High Efficiency (>90%)
- High MTBF and Reliability
- High Grade and Low Stress Design Components
- Short Circuit Protection
- Overvoltage and Over Temperature Protection
- Auto Select 115/230 VAC, 50/60 Hz Input
- Output voltage, 22.5-28.5V Adj.
- Ripple and noise, <50mVpp
- >20ms Hold-Up
- -25°C to 60°C With No Derating

Mfg. Part No.	Output Current (A)	Power (W)	Dimensions (in.) H	W	D	Stock No.	Price Each 1-4
SDN5-24-480C	5	120	4.85	2.00	4.36	56T8191	313.67
SDN10-24-480C	10	240	4.88	2.36	4.36	56T8190	451.77
SDN20-24-480CC	20	480	4.85	3.35	4.70	73R7415	552.63
SDN40-24-480C	40	960	4.85	7.09	4.66	73R7416	825.55

REDUNDANCY MODULES — THREE PHASE SDN SERIES

Mfg. Part No.	For Use With	Stock No.	Price Each 1-4
SDN30/40 RED	SND5-24-480C, SDN10-24-480C, SDN20-24-480CC, SDN40-24-480C	39M5520	132.94

ACCESSORY

Mfg. Part No.	Description	Stock No.	Price Each 1-4
SDN-PMBRK2	Chassis Mount Bracket	68H8557	7.54

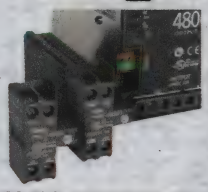
(70055)

PS6R SERIES DIN RAIL SWITCHING POWER SUPPLIES

NEW

RoHS Compliant Available

IDEC



DC-DC Converter Module with Branch Terminal Module Attached to 480W Power Supply

A Power Revolution — Highly Efficient, Space-Saving, and Easily Expandable

- Energy-saving 93% efficiency
- Power range: 120W, 240W, 480W
- Input voltage: 100 to 240V AC (voltage range: 85 to 264V AC/110 to 350V DC)
- Accommodates plug-in output modules, *ordered separately*, for additional 5V, 12V, 15V outputs
- Accepts plug-in branch terminal module, *ordered separately*, for two pair additional terminals
- Up to 70°C (158°F) operating temperature
- LED status indicators — low voltage and operation indication
- Captive spring-up screw terminals — use ring or fork terminals
- Finger-safe construction prevents electric shocks
- DIN rail or panel mount
- UL listed -- File No. E177168; UL508 CSA C22.2 No. 107.1
- TUV approved, CE complaint -- EN60950-1, EN50178, EN61204-3

Branch Terminal Module

DC-DC Converter Module

PS6R series switching power supplies offer a built-in expansion slot that allows the use of plug-in DC-DC converter modules, enabling users to add 5V, 12V and 15V outputs to the standard 24V version, or a plug-in branch terminal module that provides two additional pairs of output screw terminals (positive and negative) for more wiring capacity.

PS6R SERIES SWITCHING POWER SUPPLIES

Mfg. Part No.	Output Power (W)	Output Current (A)	Output Voltage (VDC ±10%)	Stock No.	Price Each 1-9
PS6R-F24	120	5	24	19X1331	195.34
PS6R-G24	240	10	24	19X1332	275.47
PS6R-J24	480	20	24	95W9880	375.64

DC-DC CONVERTER MODULES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
PS9Z-6RM1	Output: +5V, 2A, 10W	95W9881	63.00
PS9Z-6RM2	Output: +12V, 1A, 12W	95W9882	63.00
PS9Z-6RM3	Output: +/-5V, 1A, 10W	19X1334	69.30
PS9Z-6RM4	Output: +/-15V, 0.4A, 12W	19X1335	69.30
PS9Z-6RM5	Output: +5V, 1A/+12V, 0.5A, 11W	95W9883	75.60
PS9Z-6RM6	Output: +/-12V, 0.5A, 12W	19X1336	69.30

➤CONTINUED➤

PS6R SERIES DIN RAIL SWITCHING POWER SUPPLIES (CONT.)

BRANCH TERMINAL MODULE

Mfg. Part No.	Description	Stock No.	Price Each 1-4
PS9Z-6RS1	Additional Screw Terminals for Wiring: 2 + Terminals / 2 - Terminals	95W9884	31.50

(211473)

PS5R SERIES SWITCHING POWER SUPPLIES

IDEC

- Universal input: 7.5 to 75W: 85-264VAC/105-370VDC; 100W: 100-120VAC/200-240VAC, 240-370VDC (selectable); 120 to 240W: 85-264VAC/105-370VDC
- Unique spring-up, finger safe terminals (ideal for ring lug wire), IP20
- Power factor correction (75W,120W, & 240W models)
- Voltage adjustment: +/-10%
- Output capabilities in 5VDC, 12VDC, or 24VDC
- Overcurrent/overvoltage protection
- DIN rail or panel surface mount
- Parallel operation: 75W, 120W and 240W model
- Worldwide approvals

Mfg. Part No.	Power (W)	Output Voltage (VDC)	Output Current (A)	Dimensions (H x W x D) mm	Stock No.	Price Each 1-4
PS5R-A05	7.5	5	1.5	75 x 45 x 70	31C9443	72.16
PS5R-A12	7.5	12	0.6	75 x 45 x 70	83F4500	72.16
PS5R-A24	7.5	24	0.3	75 x 45 x 70	83F4501	71.36
PS5R-B05	12.5	5	2.5	75 x 45 x 95	31C9444	119.13
PS5R-B12	15	12	1.2	75 x 45 x 95	83F4502	111.57
PS5R-B24	15	24	0.6	75 x 45 x 95	83F4503	105.36
PS5R-C12	30	12	2.5	75 x 90 x 95	83F4504	160.37
PS5R-C24	30	24	1.3	75 x 90 x 95	83F4505	141.83
PS5R-D24	50	24	2.1	75 x 90 x 95	83F4506	176.95
PS5R-Q24	75	24	3.1	120 x 85 x 140	92C3196	245.81
PS5R-E24	100	24	4.2	75 x 145 x 95	83F4507	255.30
PS5R-F24	120	24	5.0	120 x 115 x 140	72C3779	306.90
PS5R-G24	240	24	10.0	120 x 200 x 140	19C1265	439.09

(28370)

SLIM LINE POWER SUPPLIES

RoHS Compliant Available

IDEC

- Lightweight and compact in size
- Unique spring-up, finger safe terminals (ideal for ring lug wire)
- Power factor correction (60W to 240W)
- Overcurrent/overvoltage protection
- Voltage adjustment ±10%
- Universal input: 10W to 90W: 85-264VAC/100-370VDC; 120W and 240W: 85-264VAC/100-350VDC
- IP20 rating
- Voltage adjustment ±10%
- DIN rail or panel mount
- Meets SEMI F47 sag immunity (120W and 240W only)
- Class 1, Div. 2 hazardous locations (ANSI 12.12.01)

POWER SUPPLIES

Mfg. Part No.	Power Rating (W)	Output Voltage (VDC)	Output Current (A)	H x W x D (mm)	Stock No.	Price Each 1-4	5-9	10-24
PS5R-SB05	10	5	2	90 x 22.5 x 95	37M1373	102.46	93.38	85.60
PS5R-SB12	15	12	1.2	90 x 22.5 x 95	37M1374	105.40	96.05	88.07
PS5R-SB24	15	24	0.65	90 x 22.5 x 95	37M1375	105.40	96.05	88.07
PS5R-SC12	30	12	2.50	95 x 36 x 108	84H1291	170.56	148.55	136.93
PS5R-SC24	30	24	1.30	95 x 36 x 108	84H1292	141.73	123.45	113.79
PS5R-SD24	60	24	2.50	95 x 36 x 108	78H0788	180.38	157.10	144.84
PS5R-SE24	90	24	3.75	115 x 46 x 121	70H8557	269.64	234.85	216.49
PS5R-SF24	120	24	5.00	115 x 50 x 129	08J5077	277.01	241.27	222.40
PS5R-SG24	240	24	10.00	125 x 80 x 143	08J5078	473.50	412.41	380.14

➤CONTINUED➤

DIN RAIL POWER SUPPLIES

SLIM LINE POWER SUPPLIES (CONT.)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24	25-49	50-99
● PS9Z-5R1B	Vertical Panel Mounting Bracket for PS5R-SB models	37M1376	8.24	7.41	7.00
● PS9Z-5R2B	Flat Panel Mounting Bracket for PS5R-SB	37M1379	16.48	14.82	13.99
● PS9Z-5R1C	Panel Mounting Bracket for PS5R-SC and PS5R-SD models	19K6219	6.63	5.96	5.63

(77677)

PS5R SERIES 3-PHASE POWER SUPPLY

RoHS Compliant Available

IDEC

- Switching Power Supply
- 480W Output Power
- Wide Input Voltage Range: 320 – 575 VAC (3-phase operation), 360 – 575 VAC (2-phase operation)
- Output: 24 VDC, 20A
- Overcurrent and Overvoltage Protection
- DIN rail mount

Mfg. Part No.	Output Power	Output Current	Output Voltage	Stock No.	Price Each 1-4
● PS5R-TJ24	480W	20	24	46W0832	406.36

(209550)

S8VS VISUALLY MONITORING SWITCHING POWER SUPPLIES

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Ultra-Compact, DIN Mount Package
- Status at a Glance with 7-Segment LED Display
- Incorporates a Maintenance Forecast and Run-Time Monitor
- Three Year Warranty
- Meets UL508

Maintenance forecast monitor displays remaining life of power supply. Run-time monitor displays how long the output has been "ON". 90W and higher models have two outputs: one for undervoltage output and the other for either of the monitoring functions.

Mfg. Part No.	Description	Output Power (W)	Output Voltage (V)	Output Current (A)	Stock No.	Price Each 1-4
● S8VS01505	Standard without indication monitor	10	5	2	57J2940	103.55
● S8VS01512	Standard without indication monitor	15	12	1.2	57J3216	103.55
● S8VS03005	Standard without indication monitor	20	5	4	64J4324	136.15
● S8VS03012	Standard without indication monitor	30	12	2.5	27K5167	136.74
● S8VS03024	Standard without indication monitor	30	24	1.3	27K5168	136.74
● S8VS-06024	Standard without indication monitor	60	24	2.5	77C5986	173.61
● S8VS-06024A	With maintenance forecast monitor	60	24	2.5	88K2002	188.07
● S8VS-06024B	With total run time monitor	60	24	2.5	77C5988	184.06
● S8VS-09024A	With maintenance forecast monitor	90	24	3.75	88K2004	231.62
● S8VS-09024B	With total run time monitor	90	24	3.75	77C5991	235.17
● S8VS-12024	Standard without indication monitor	120	24	5	65H4902	273.48
● S8VS-12024A	With maintenance forecast monitor	120	24	5	86H8287	292.13
● S8VS12024B	With total runtime monitor	120	24	5	67J3081	290.86
● S8VS18024	Standard without indication monitor	180	24	7.5	67J3082	361.98
● S8VS-18024A	With maintenance forecast monitor	180	24	7.5	63J6250	439.39
● S8VS18024B	With total runtime monitor	180	24	7.5	67J3083	414.63
● S8VS-24024	Standard without indication monitor	240	24	10	65H4909	426.27
● S8VS-24024A	With maintenance forecast monitor	240	24	10	86H8284	532.22
● S8VS24024B	With total runtime monitor	240	24	10	67J3084	479.69
● S8VS-48024	Standard without indication monitor	480	24	20	96M0144	667.73

➤ CONTINUED ➤

S8VS VISUALLY MONITORING SWITCHING POWER SUPPLIES (CONT.)

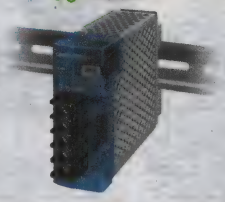
Mfg. Part No.	Description	Output Power (W)	Output Voltage (V)	Output Current (A)	Stock No.	Price Each 1-4
● S8VS-48024B	With total runtime monitor	480	24	20	75M2142	800.66
● S8VS-48024A	With maintenance forecast monitor	480	24	20	96M0153	799.47

(72182)

S8VM SWITCHING POWER SUPPLIES

RoHS Compliant Available

OMRON AUTOMATION & SAFETY



- Compact size with a uniform height
- Input voltage: 100-240VAC
- Output voltage: 24VDC
- Wide power range: 15W-1500W
- DIN rail mounted

Dual undervoltage detection allows clear distinction between input, load or age related features. Transistor output. Captive screw type terminals. 300W, 600W and 1500W models available; *go online or call.*

Mfg. Part No.	Power Rating (W)	Output Current (A)	Dimensions H x W x D inches (mm)	Stock No.	Price Each 1-4
● S8VM01524CD	15	650	3.33 x 1.32 x 3.32 (84.5 x 33.5 x 84.5)	80K3134	85.47
● S8VM03024CD	30	1.3	3.33 x 1.32 x 3.32 (84.5 x 33.5 x 99.5)	80K3152	89.72
● S8VM05024CD	50	2.2	3.33 x 1.32 x 4.90 (84.5 x 33.5 x 124.5)	80K3169	110.65
● S8VM10024CD	100	4.5	3.33 x 1.38 x 6.48 (84.5 x 35 x 164.5)	80K3185	163.32
● S8VM15024CD	150	6.5	3.33 x 1.73 x 6.48 (84.5 x 44 x 164.5)	80K3203	198.50
● S8VM-60024C	600	27	3.30 x 4.00 x 7.56 (83.8 x 101.8 x 192)	40M9588	837.28

(89785)

BLOCK TYPE POWER SUPPLY SYSTEMS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- AC/DC Bus System
- Input: 100 to 240VAC (85 to 264VAC), 50/60Hz (47Hz to 63Hz)
- Up to Four Blocks Can be Connected to Increase Power From 60 to 240W
- N + 1 Redundant Capability (12 and 24V Models)
- Easy Creation of Multi-Power Supply Configuration With Different Output Power Supplies (24, 12, and 5V Models)
- Over Current Protection
- Over Voltage Protection
- Class II Output and Class I Division 2 Approved
- Complies with EN6100-3-2 (Limits for Harmonic Current)
- Outside Dimensions: 128.1 x 48 x 120" (5.04 x 1.90 x 4.72mm)

For use with **mfg. part no. PFP-50N** 0.5m x 7.3mm, **mfg. part no. PFP-100N** 1m x 7.3mm and **mfg. part no. PFP-100N2** 1m x 16mm DIN rail tracks, and **mfg. part no. PFP-M** end plate.

BASIC BLOCK

Mfg. Part No.	Output Voltage (V)	Output Current (A)	Description	Stock No.	Price Each 1-4
● S8TS-02505F	5	5	Without Bus Line Connector	29C7948	239.28
● S8TS-03012F-E1	12	2.5	With Bus Line Connector	29C7959	256.00
● S8TS-06024F-E1	24	2.5	With Bus Line Connector	29C7965	244.49

BUS LINE CONNECTOR

Mfg. Part No.	Description	Package Unit	Stock No.	Price Each 1-4
● S8T-BUS01	AC/DC Line Bus for Parallel Operation	1 Connector	29C7972	15.82

(70341)

DSP SERIES 7.5 TO 100 WATT DIN RAIL MOUNT POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- Low profile for building automation
- 5V to 24V outputs
- Wide range AC input
- UL1310 Class 2*
- Class II double insulation
- -25 to +71°C operation
- Convection cooled
- DIN rail or chassis mount
- Two-year manufacturer's warranty

DSP series low 2.2" profile fits into wall mounted cabinets. Wide range AC for global use with no input selector switches. Full power at 61°C no derating needed. Size (W x D x H): **DSP10**: 0.71 x 3.58 x 2.19"; **DSP30**: 2.09 x 3.58 x 2.19"; **DSP60**: 2.8 x 3.58 x 2.19"; **DSP100**: 3.54 x 3.58 x 2.19".

Mfg. Part No.	Output Voltage (V)	Output Current (A)	Power (W)	Efficiency %	Hold Up Time 115 VAC in (ms)	Stock No.	Price Each 1-9
● DSP10-5	5	1.5	7.5	74	74	39M5711	24.44
● DSP30-5	5	3	15	74	74	39M5718	39.39

➤ CONTINUED ➤

DSP SERIES 7.5 TO 100 WATT DIN RAIL MOUNT POWER SUPPLIES (CONT.)

Mfg. Part No.	Output Voltage (V)	Output Current (A)	Power (W)	Efficiency %	Hold Up Time 115 VAC in (ms)	Stock No.	Price Each 1-9
DSP60-5	5	7	35	80	80	39M5722	47.47
DSP10-12	12	830	10	78	78	39M5708	24.44
DSP30-12	12	2.1	25.2	82	82	30M0232	39.39
DSP60-12	12	4.5	54	84	84	39M5719	47.47
DSP100-12	12	6	72	82	82	39M5712	62.04
DSP10-15	15	670	10.1	78	78	39M5709	24.44
DSP30-15	15	2	30	83	83	39M5716	39.39
DSP60-15	15	4	60	85	85	39M5720	47.47
DSP100-15	15	5	75	85	85	39M5713	62.04
DSP10-24	24	420	10.1	80	80	39M5710	24.44
DSP30-24	24	1.3	31.2	83	83	39M5717	39.39
DSP60-24	24	2.5	60	86	86	39M5721	47.47
DSP100-24/C2	24	3.8	91.2	89	89	39M5715	62.04
DSP100-24	24	4.2	100.8	85	85	39M5714	62.04

* Excludes models: **DSP60-5**, **DSP60-12**, **DSP100-12**, **DSP100-15**, **DSP100-24**
(93066)

DRB-15-100 SERIES 15-100W, 5-48V OUTPUT DIN RAIL MOUNT AC/DC POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

NEW

- Space-saving compact size
- Input voltage 85 - 264VAC
- 5V, 12V, 24V or 48V outputs
- High efficiency (up to 91%)
- Low no load power draw
- Green LED indicates DC is OK
- Convection cooled
- Durable, flame-retardant polycarbonate case, rated UL94V-0
- ErP compliant design
- UL listed, CE compliant
- Three-year manufacturer's warranty

SPECIFICATIONS:

Mfg. Part No.	DRB15241	DRB30xxx	DRB50xxx	DRB100241
AC Input Voltage Range:	85 - 2645VAC (Withstands 300VAC for 5 seconds)			
Input Frequency:	47 - 63Hz			
No Load Power Draw:	<0.3W	<0.3W	<0.3W	<0.5W
Conducted and Radiated EMI:	EN55022-B			
Operating Temperature*:	-20°C to +70°C (**DRB30-100** derate linearly to 50% load above 55°C)			
Safety Agency Approvals:	UL508 Listed, UL60950-1, CSA22.2 No.60950-1, EN60950-1, CE Compliant			
Dimensions:	0.71W x 2.95H x 3.54"D	0.83W x 2.95H x3.54"D	1.18W x 2.95H x 3.54"D	1.77W x 2.95H x 3.94"D

Mfg. Part No.	Output Voltage (V)	Adjust Range (V)	Output Current (A)	Output Power (W)	Efficiency % (115/230VAC)	Stock No.	Price Each
DRB5051	5	5-5.5	6.0	30	79 / 80	18X3674	57.27
DRB30121	12	12-15	2.5	30	86 / 88	18X3669	50.90
DRB50121	12	12-15	4.2	50.4	88 / 90	18X3671	57.27
DRB15241	24	24-28	0.63	15.1	87 / 90	18X3668	42.42
DRB30241	24	24-28	1.25	30	88 / 90	18X3670	50.90
DRB50241	24	24-28	2.1	50.4	88 / 90	18X3672	61.54
DRB100241	24	24-28	4.2	100.8	90 / 91	18X3667	81.66
DRB50481	48	48-52.8	1.05	50.4	90 / 91	18X3673	57.27

*For opertion below -10°C, start up load is derated linearly to 50% load down to -20°C
(211487)

DLP-PU AND DPP SERIES DIN RAIL MOUNT POWER SUPPLIES

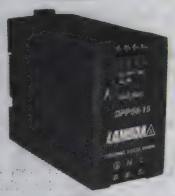
RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

TÜV Rheinland

- Low Cost
- Convection Cooled
- Green LED indicators
- NEC Class 2 Compliant
- UL508 Listed

DLP-PU/E



DPP50-15

DPP series offers universal input, compact size and a two year warranty.

Mfg. Part No.	Power (W)	Output Voltage (V)	Output Current (A)	Stock No.	Price Each 1-9
DPP25-5	25	5	5	73K2873	48.48
DPP30-12	30	12	2.5	73K2874	48.48
DPP50-15	50	15	3.4	73K6074	54.54
DPP15-24	15	24	630	73K2872	40.40
DPP30-24	30	24	1.3	73K2875	48.48
DPP50-24	50	24	2.1	73K2876	54.54
DPP100-24	100	24	4.2	73K6073	77.77
DPP50-48	50	48	1.05	73K2877	54.54

Mfg. part no. DLP-PU/E features internal o-ring diodes, output voltage monitoring (via relays) and a three year warranty.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
DLPPU/E	20A Power Supply Parallel or Redundancy Module	71K2977	91.91

(84113)

DPP120-240 SERIES 120W AND 240W DIN RAIL MOUNT POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- Low cost
- 12V, 24V or 48V outputs
- Auto-ranging input (no manual switching)
- Parallel function switch
- -25 to +71°C operation
- Convection cooled
- Two-year manufacturer's warranty

DPP120-240 series snaps onto DIN Rail TS35/7.5 or TS35/15; *go online or call.* No tools required.

SPECIFICATIONS:

Mfg. Part No.	DPP-120	DPP-240
AC Input Voltage Range:	90 - 132 /186- 264VAC, single phase. Auto select	
Input Frequency:	47 - 63Hz	
Ripple & Noise (20MHz BW):	50mV	100mV
Conducted & Radiated EMI:	EN55022 class B	EN55022 class A
Operating Temperature:	0 to +71°C, derate linearly to 2.5%/°C from 61°C to 71°C	
Safety Agency Approvals:	UL508 Listed, UL60950-1, EN60950-1, CE	
Dimensions:*	2.5W x 4.92H x 4.59"D	3.27W x4.92H x 4.57"D

Mfg. Part No.	Output Power (W)	Output 1 VDC +	Output Current 1	Stock No.	Price Each 1-9
DPP120-12-1	120	12	10	66M7752	80.80
DPP120-24-1	120	24	5	66M7753	80.80
DPP120-48-1	120	48	2.5	66M7754	80.80
DPP240-24-1	240	24	10	66M7755	121.20
DPP240-48-1	240	48	5	66M7756	121.20

* Recommend 1" clearance on all sides
(103587)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196538)

DIN RAIL POWER SUPPLIES

DLP SERIES 24V OUTPUT DIN RAIL MOUNT POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- Low Cost
- 3-Year Warranty
- UL508 Listed
- Convection Cooled
- Power Factor Correction to EN61000-3-2
- Conducted and Radiated EMI, Class B
- Input Transient Protected IEC61000-4

Mfg. Part No.	Output (V)	Output (A)	Power (W)	Load Reg mV	Line Reg mV	Stock No.	Price Each 1-9
● DLP75-24-1/E	24	3.1	75	192	120	71K2982	62.62
● DLP100-24-1/E	24	4.1	98.4	192	120	71K2978	84.84
● DLP120-24-1/E	24	5	120	192	120	71K2979	90.90
● DLP180-24-1/E	24	7.5	180	192	120	71K2980	123.22
● DLP240-24-1/E	24	10	240	192	120	71K2981	146.45

(77451)

DPP480 SERIES SINGLE OUTPUT DIN RAIL POWER SUPPLY

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- 90-264 VAC Input
- 120-370 VDC Input
- Active PFC
- Parallel Function Switch
- -25 to +71°C Operation
- Convection Cooled

Mfg. Part No.	Output Power (W)	Output Voltage (V)	Output Current (A)	Dimensions (Inches) Height	Width	Depth	Stock No.	Price Each 1-9
● DPP480241	480	24	20	4.92	6.89	4.57	83K3881	202.00
● DPP480-48-1	480	48	10	4.92	6.89	4.57	18M4560	202.00

(89549)

DPP120-960 SERIES 120W, 240W, 480W, 960W, 3 PHASE DIN RAIL MOUNT POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- Low cost
- 12V, 24V or 48V outputs
- Wide range 340 to 575VAC input
- Parallel function switch (240 & 480W)
- Current share (960W)
- -25 to +71°C operation
- Convection cooled
- Two-year manufacturer's warranty

DPP120-960 series snaps onto DIN Rail TS35/7.5 or TS35/15; *go online or call.* No tools required.

SPECIFICATIONS:

Mfg. Part No.	DPP120-xx-3	DPP240-xx-3	DPP480-xx-3	DPP960-xx-3
AC Input Voltage Range: *	340 - 575VAC, three phase			
Input Frequency:	47 - 63Hz			
Ripple & Noise (20MHz BW):	100mV	100mV	100mV	80mV
Conducted & Radiated EMI:	EN55022 class B			
Operating Temperature:	-25°C to +71°C (derate linearly 2.5%/°C from 61 to 71°C, 3.5%/°C for DPP960)			
Safety Agency Approvals:	UL508 Listed, UL60950-1, EN60950-1, CE			
Dimensions:*	2.92W x 4.88H x 4.68"D	3.5W x 4.88H x 4.68"D	5.91W x 4.88H x 4.68"D	10.86W x 4.88H x 4.68"D

Mfg. Part No.	Output Power (W)	Output Voltage (V)	Output Current (A)	Efficiency (%)	Stock No.	Price Each 1-9
● DPP120-12-3	120	12	10	87	26R3617	105.04
● DPP120-24-3	120	24	5	89	26R3618	105.04
● DPP240-24-3	240	24	10	90	26R3619	142.41
● DPP240-48-3	240	48	5	90	26R3620	142.41
● DPP480-24-3	480	24	20	92	26R3621	200.99
● DPP480-48-3	480	48	10	91	26R3622	200.99
● DPP960-24-3	960	24	40	91	26R3623	359.56
● DPP960-48-3	960	48	20	93	26R3624	359.56

* Single phase input is permissible, but output load must be derated to 75% load

(159802)

40W TO 60W DIN MOUNT DC-DC CONVERTERS

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- Single, dual and triple output
- 1600VDC input to output isolation
- 85% typical efficiency at nominal input & full load
- Wide operating temperature range
- Internally protected
- Dimensions (W x H x L): 0.96 x 2.27 x 4.92" (24.5 x 57.6 x 125mm)

Mfg. Part No.	Output Voltage	Output Current	Input Voltage	Stock No.	Price Each 1-9
SINGLE OUTPUT, 40W					
● DPX4024WS05	5V	8A	9.5V to 36V	21T9599	158.57
● DPX4048WS05	5V	8A	18V to 75V	21T9606	158.57
● DPX4024WS12	12V	3.33A	9.5V to 36V	21T9600	158.57
● DPX4048WS12	12V	3.33A	18V to 75V	21T9607	158.57
● DPX4024WS15	15V	2.67A	9.5V to 36V	21T9601	158.57
● DPX4048WS15	15V	2.67A	18V to 75V	21T9608	158.57
SINGLE OUTPUT, 60W					
● DPX6024S05	5V	12A	18V to 36V	21T9609	183.82
● DPX6048S05	5V	12A	36V to 75V	21T9612	183.82
● DPX6048S12	12V	5A	36V to 75V	21T9613	183.82
● DPX6024S12	12V	5A	18V to 36V	21T9610	183.82
● DPX6048S15	15V	4A	36V to 75V	21T9614	183.82
● DPX6024S15	15V	4A	18V to 36V	21T9611	183.82
DUAL OUTPUT, 40W					
● DPX4024WD12	12V / -12V	1.667A / -1.67A	9.5V to 36V	21T9597	163.62
● DPX4048WD12	12V / -12V	1.667A / -1.67A	18V to 75V	21T9604	163.62
● DPX4024WD15	15V / -15V	1.333A / -1.333A	9.5V to 36V	21T9598	163.62
● DPX4048WD15	15V / -15V	1.333A / -1.333A	18V to 75V	21T9605	163.62
TRIPLE OUTPUT, 40W					
● DPX4012T0512	5V / 12V / -12V	6A / 400mA / -400mA	9.5V to 18V	21T9593	169.68
● DPX4024T0512	5V / 12V / -12V	6A / 400mA / -400mA	18V to 36V	21T9595	169.68
● DPX4048T0512	5V / 12V / -12V	6A / 400mA / -400mA	36V to 75V	21T9602	169.68
● DPX4012T0515	5V / 15V / -15V	6A / 300mA / -300mA	9.5V to 18V	21T9594	169.68
● DPX4024T0515	5V / 15V / -15V	6A / 300mA / -300mA	18V to 36V	21T9596	169.68
● DPX4048T0515	5V / 15V / -15V	6A / 300mA / -300mA	36V to 75V	21T9603	169.68

(192364)

TBL SERIES, 15 TO 150 WATT, INDUSTRIAL POWER SUPPLIES

RoHS Compliant Available

TRACO POWER

Features:

- Low profile case, module height only 55mm
- Fits into flat control panels used in building automation
- Universal input range 85 to 264 VAC
- Adjustable output voltage
- Short circuit and overload protection
- DC–OK indicator
- Easy snap-on mounting on DIN-rail
- Three-year manufacturer's warranty

Specifications:

- Output regulation: 1%
- Ripple & noise: <100 mVpk-pk
- Operating temperature range: –25°C to +70°C max.

TBL series ultra-compact, low profile, small DIN-rail mount power supplies fit in standardized wall mounted control panels used in the building automation industry. The power supplies can be operated at full load across an ambient temperature range of –25°C to +60°C without need of additional cooling. For commercial and residential applications requesting safety class II the product is approved to UL 1310. UL508 listed.

Mfg. Part No.	Output Voltage (VDC)*	Output Current (A)	Power (W)	Stock No.	Price Each 1-4
● TBL 015-105	5	2.4	12	51R4722	47.93
● TBL 015-112	12	1.25	15	51R4723	55.10
● TBL 015-124	24	630	15	51R4724	51.98
● TBL 030-112	12	2.5	30	51R4725	62.41
● TBL 030-124	24	1.25	30	51R4726	62.41
● TBL 060-112	12	4.5	54	51R4727	73.60
● TBL 060-124	24	2.5	60	51R4728	78.39
● TBL 090-112	12	6	72	51R4729	104.99
● TBL 090-124	24	3.75	90	51R4730	99.05
● TBL 150-112	12	10	120	83R7213	147.34
● TBL 150-124	24	6.25	150	83R7214	141.80

*Adjustable

(165217)

TCL SERIES, 24 TO 240 WATT, INDUSTRIAL POWER SUPPLIES

RoHS Compliant Available

TRACO POWER

Features:
- Ultracompact plastic housing
- Choice of connection: detachable screw terminal blocks or spring clamp terminals
- Reliable snap-on DIN rail mounting
- Bracket for wall mounting included
- Universal input 85 to 264 VAC, 50/60 Hz, 85 to 375 VDC
- Adjustable output voltage
- Overload and short-circuit protection
- Three-year manufacturer's warranty
- UL listed, UL recognized, CSA certified, CE compliant

Specifications:
- Output regulation: 2.5% (1% for **mfg. part no. TCL 60-112C**)
- Ripple and noise: <50 mVpk-pk
- Operating temperature range: –10°C to +70°C max.

TCL series compact, lightweight DIN-rail mount power supplies for industrial, office and residential applications. With tightly regulated output voltage and high immunity against electrical disturbances on the mains these supplies provide a reliable power source for sensitive loads in industrial process controls, machine tools and other equipment exposed to a difficult industrial environment.

DETACHABLE SCREW TERMINAL BLOCK MODELS

Mfg. Part No.	Power (W)	Output Voltage Adjustable (VDC)	Output Current (A)	Stock No.	Price Each 1-4
TCL 024-105	24	5.1 - 5.25	4	51R4731	87.55
TCL 024-112	24	12 - 16	2	51R4732	83.32
TCL 024-124	24	24 - 28	1	51R4733	67.51
TCL 060-112	60	12 - 15	4	51R4736	104.70
TCL 060-124	60	24 - 28	2.5	51R4738	95.99
TCL 060-148	60	48 - 56	1.25	27T3498	97.80
TCL 120-112	120	12 - 15	8	51R4741	158.60
TCL 120-124	120	24 - 28	5	51R4743	134.89
TCL 240-124	240	24 - 28	10	27T6100	192.91
SPRING CLAMP TERMINAL MODELS					
TCL 024-124C	24	24 - 28	1	51R4734	78.36
TCL 060-112C	60	12 - 15	4	51R4737	109.72
TCL 060-124C	60	24 - 28	2.5	51R4739	107.51
TCL060-148C	60	48 - 56	1.25	52W8814	101.60
TCL 120-112C	120	12 - 15	8	51R4742	167.40
TCL 120-124C	120	24 - 28	5	51R4744	157.38

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
TCL-REM240	Redundancy Module	52W8809	44.31

(178865)

TCL-DC SERIES, DIN-RAIL DC/DC CONVERTERS

RoHS Compliant Available

TRACO POWER

Features:
- Compact, slim plastic housing
- Detachable screw terminal block
- Reliable snap-on DIN-rail mount
- Bracket for wall mounting included
- Wide input voltage range 18 to 75 VDC
- Adjustable output voltage
- Overload and short circuit protection
- Three-year manufacturer's warranty
- UL listed

Specifications:
- Regulation:
  Input variation Vin min. to Vin max.: 0.5% max.
  Load variation 0 - 100%: 0.5% max.
- Ripple and noise (20 MHz bandwidth): < 50 mV pk-pk
- I/O isolation 1500 VDC
- Operating temperature range: -10°C to +70°C max.

TCL-DC series DIN-rail DC/DC converters offer a wide 18-75 VDC input voltage range to operate from all popular DC supply voltage systems. Easy installation, just snaps onto DIN rails or mount on chassis or wall with supplied mounting bracket. With tightly regulated output voltage these converters provide a reliable power source for sensitive loads in industrial process controls, factory automation and other equipment exposed to a critical industrial environment.

Mfg. Part No.	Input Voltage Range	Output Voltage	Output Current (Max.)	Stock No.	Price Each 1-4
TCL 012-124DC	9.5V to 18V	24	1A	20T1695	92.59
TCL 024-105DC	18V to 75V	5	5A	78R5875	96.13
TCL 024-112DC	18V to 75V	12	2A	27W5773	96.13
TCL 024-124DC	18V to 75V	24	1A	51R4735	94.16
TCL 060-112DC	18V to 75V	12	5A	27W5774	112.40
TCL 060-124DC	18V to 75V	24	2.5A	51R4740	122.37

(178867)

INDUSTRIAL POWER SUPPLIES

RoHS Compliant Available

TRACO POWER

- Rugged metal case for harsh industrial environments
- Industrial operating temperature range: –25°C to +70°C
- Overload and and overtemperature protection
- Power boost up to 120 %
- Power-Good signal
- Shock and vibration proof
- International safety approval package
- ATEX certification for hazardouse locations
- Decoupling module for redundant operation (optional)
- Wall mounting (opt.)
- 3-year product warranty

Mfg. Part No.	Output Power Max (W)	Output Voltage	Output Current (Max.)	Stock No.	Price Each 1-4
TSPC080-124	80	24	3.3	52W8818	97.32
TSPC120-124	120	24	5	52W8819	122.80
TSPC240-124	240	24	10	52W8820	168.80
TSPC480-124	480	24	20	52W8821	247.54

(209894)

TSP SERIES 72 TO 600W INDUSTRIAL POWER SUPPLIES

RoHS Compliant Available

TRACO POWER

- True industrial grade design
- Rugged metal case for harsh industrial environments
- For worldwide use – Autoselect input and international safety approvals
- Single- and two-phase wide-range input 100/230–500 VAC (**TSP-WR**)
- Variable output voltage
- Indefinite short circuit, overvoltage and overtemperature protection
- Power OK signal
- Remote On/Off
- Shock and vibration proof
- Wall mounting (opt.)
- Redundancy module
- Buffer module for power backup
- Battery controller module
- Three-year manufacturer's warranty

SPECIFICATIONS

Model:	TSP	TSP-WR
Input Voltage Range:	85-132 / 187-264VAC autoselect 85-263VAC universal input (**TSP 070/090**)	85-132VAC / 187-550VAC range selectable by selector switch 187-264VAC / 323-550VAC autoranges
Input Frequency:	47 - 63Hz	50/60Hz
Efficiency:	87% typ.	88% typ.
Operating Temp:	-25°C to +70°C	

Mfg. Part No.	Output Power	Output Voltage	Output Current	Stock No.	Price Each 1-4
TSP 070-112	72W	12	6	51R5673	159.89
TSP 090-124	90W	24	3.75	51R5674	113.07
TSP 090-148	96W	48	2	51R5675	135.20
TSP 140-112	144W	12	12	51R5676	183.20
TSP 180-124	180W	24	7.5	51R5677	178.68
TSP 180-124WR	180W	24	7.5	51R5678	239.52
TSP 180-148	192W	48	4	51R5679	195.97
TSP 360-124	360W	24	15	51R5680	258.60
TSP 360-124WR	360W	24	15	51R5681	362.14
TSP 360-148	360W	48	7.5	51R5682	293.57
TSP 600-124	600W	24	25	51R5683	343.80
TSP600-124WR	600W	24	25	52W8826	590.96
TSP 600-148	600W	48	12.5	51R5684	414.67

BATTERY CONTROLLER MODULES

Mfg. Part No.	Input Voltage	Input Power (Max.)	Output Voltage	Output Power (Max.)	Stock No.	Price Each 1-4
TSP-BCM24	24VDC	360W	24VDC	360W	51T4145	160.00
TSP BCM24A	24VDC	600W	24VDC	600W	25T1488	277.53

REDUNDANCY MODULES

TSP-REM360	2 x 24VDC 2 x Control Input	2 x 360W	24VDC (24-27VDC)	360W	51R5686	163.80
TSP-REM600		2 x 600W		600W	05W3143	234.74

BUFFER MODULE

Mfg. Part No.	Operating Voltage Range	Buffer Time	Output Power (Max.)	Stock No.	Price Each 1-4
TSP-BFM24	24VDC to 28VDC	200ms typ. @ 25A max. 4s max. @ 1.2A	600W	51R5685	241.81

(203960)

DIN RAIL POWER SUPPLIES

TSP-3P SERIES, 240–960 WATT, INDUSTRIAL POWER SUPPLIES

RoHS Compliant Available

TRACO POWER

- Three-phase input 3AC 400V or 3AC 500V
- 200% boost power for up to 5 seconds
- Alternative to AC transformers
- Fully regulated 24 VDC output with 10 A, 20 A or 40 A
- Rugged metal case design qualified for harsh industrial environment
- High efficiency >92%
- Operating temperature range: –25°C to +60°C (full power)
- Overload and over temperature protection
- Industrial safety approvals
- Cost effective design
- Three-year manufacturer's warranty

Mfg. Part No.	Output Power Max.	Input Voltage	Output Voltage	Output Current (Max.)	Stock No.	Price Each 1-4
● TSP240-124-3PAC400	240W	320V to 440V	24	10	52W8822	233.98
● TSP240-124-3PAC500	240W	400V to 550V	24	10	52W8823	240.86
● TSP480-124-3PAC400	480W	320V to 440V	24	20	52W8824	299.68
● TSP480-124-3PAC500	480W	400V to 550V	24	20	52W8825	316.11
● TSP960-124-3PAC400	960W	320V to 440V	24	40	52W8827	505.77
● TSP960-124-3PAC500	960W	400V to 550V	24	40	52W8828	530.60

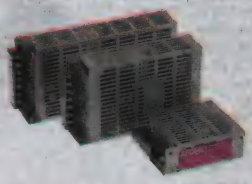
(209892)

TIS SERIES, 50–600 WATT, INDUSTRIAL POWER SUPPLIES

RoHS Compliant Available

TRACO POWER

c UL us



- Switch mode power supplies for DIN-rail mount
- Six power ranges with 2, 3, 6, 12, 20 and 24 A output current (24 VDC models)
- Selectable 115/230 VAC input
- Very low ripple and noise
- EMI complies with EN 61000-6-3 and EN 61000-6-4
- Operating temperature range –25°C to +70°C
- Worldwide safety approvals incl. class I, div. 2 location
- Easy snap-on mount on DIN-rails or chassis mount
- Three-year manufacturer's warranty

Mfg. Part No.	Input Voltage	Output Power Max. (W)	Output Voltage	Output Current (Max.)	Stock No.	Price Each 1-4
● TIS50-112	93V to 264V	50	12	3.5	52W8815	130.40
● TIS 50-124	93V to 264V	50	24	2	51R5292	119.20
● TIS 75-124	93V to 132V, 187V to 264V	75	24	3	51R5295	144.40
● TIS 75-148	93V to 132V, 187V to 264V	75	48	1.5	51R5296	193.60
● TIS 150-124	93V to 132V, 187V to 264V	150	24	6	51R5289	205.90
● TIS 150-148	93V to 132V, 187V to 264V	150	48	3	51R5290	256.14
● TIS 300-124	93V to 132V, 187V to 264V	300	24	12	51R5291	272.18
● TIS 600-124	93V to 132V, 187V to 264V	600	24	24	51R5294	422.31

(209890)

TMP AND TMPM SERIES, 4 TO 60 WATT AC/DC POWER MODULES

RoHS Compliant Available

TRACO POWER

c UL us

PCB Mount

- Ultra compact, low profile plastic casing
- Fully encapsulated (pollution/dust)
- Single- and dual-output models
- Two package versions: Screw terminal block for chassis mount and Solder pins for direct PCB mount
- DIN-rail mount adaptor (optional)
- Universal input 85-264 VAC, 47-440 Hz
- Protection Class II
- IEC/EN/UL 60950-1 approval, CB-report
- Over-temperature protection
- Protection against short circuit and oveload
- Three-year manufacturer's warranty

Mfg. Part No.	Output Power Max (W)	Output Voltage	Output Current (Max.)	Mount	Stock No.	Price Each 1-4
● TMPM 04105	4	5V	800mA	PCB	70W2297	20.33
● TMPM 04112	4	12V	333mA	PCB	70W2298	20.33
● TMPM 04124	4	24V	167mA	PCB	70W2299	20.33
● TMPM 04215	4	15V, -15V	133mA, 133mA	PCB	70W2300	23.80
● TMP 60105	51	5.1V	10A	PCB	70W2291	96.07
● TMP 60105C	51	5.1V	10A	Chassis	70W2292	97.60
● TMP 60112	60	12V	5A	PCB	70W2293	92.02
● TMP 60112C	60	12V	5A	Chassis	70W2294	94.20
● TMP 60124	60	24V	2.5A	PCB	70W2295	92.02
● TMP 60124C	60	24V	2.5A	Chassis	70W2296	94.20

(209932)

EPSITRON® SWITCH-MODE DIN RAIL MOUNT POWER SUPPLY WITH CHARGER/ CONTROLLER FOR UPS

NEW

RoHS Compliant Available

WAGO

- Battery control technology for smooth charging and predictive maintenance applications
- Potential-free contacts provide function monitoring
- Buffer time can be set on site via rotary switch
- Parameter setting and monitoring via RS-232 interface
- Prepared for protection Class I equipment
- Natural convection cooling when horizontally mounted
- Enclosed for use in switchgear cabinets
- Electrically isolated output voltage (SELV) acc. to EN 60950-1/UL 60
- Dimensions: 60mmW x 127mmH x 135.5mmL
- Ambient operating temperature: -25° to +70°C

Mfg. part no. 787-1675 standard single-phase AC/DC switch-mode power supply unit and electronic charger- and controller are housed in the same unit, saving space and reducing cost. Provides an uninterruptible 24VDC voltage at a maximum load current of up to 5A in both an error-free AC power supply network and in the event of power failure when the buffer mode is activated without interruption delivering reliable sevice. *Order Epsitron® lead-acid absorbed glass mat (AGM) battery modules separately below.*

Mfg. Part No.	Input Voltage (VAC)	Output Voltage (VDC)	Output Current (A)	Power (W)	Efficiency (%)	Stock No.	Price Each 1-9
● 787-1675	85-264	24	5	120	89	54W6318	368.19

EPSITRON® LEAD-ACID (AGM) BATTERY MODULES

Mfg. Part No.	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (A)	Capacity (Ah)	Stock No.	Price Each 1-9
● 787-876	24	24	7.5	1.2	54W8477	161.35
● 787-871	24	24	20	3.2	54W8474	247.67
● 787-872	24	24	21	7	54W8475	262.83

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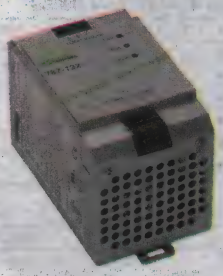
EPSITRON® ECO POWER SWITCH-MODE DIN RAIL MOUNT POWER SUPPLIES

NEW

RoHS Compliant Available

WAGO



- Nominal output voltage 24VDC; 22 to 28VDC adjustable
- Output currents of 2.5A, 5A or 10A
- Efficiency level to 82%
- Rugged flat, solid metal housing
- Maintenance-free Cage Clamp® connection terminations
- Front-panel adjustable output voltage
- LED status indication, variable voltage input
- Open circuit and short-circuit protected
- Mounts easily on DIN carrier rail
- Prepared for Class I equipment
- Natural convection cooling when horizontally mounted
- Enclosed for use in switchgear cabinets
- Parallel operation, series connection possible
- Electrically isolated output voltage (SELV) acc. to EN 60950-1/UL 60950

EPSITRON® ECO power supplies are an economical alternative for applications that simply require 24VDC without additional functions. Feature high load-carrying capacity that delivers 1.1 times the nominal rated current with lowered output voltage -- ideal for starting capacitive loads. These ECO power supplies provide a wide input voltage range making them tolerant of voltage fluctations and allowing operation on different power networks in Europe, America or Asia without additional conversion or adjustment.

Mfg. Part No.	Input Voltage (VAC)	Output Voltage (VDC)	Output Current (A)	Power (W)	Dimensions (mm) (W x H x L)	Stock No.	Price Each 1-24
● 787-712	85-264	24	2.5	60	50 x 92 x 136	76R4862	92.33
● 787-722	85-264	24	5	120	75 x 92 x 136	76R4863	134.15
● 787-732	85-264	24	10	240	110 x 92 x 136	76R4864	190.64

(212133)

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(196546)

PRO ECO SERIES DIN RAIL SWITCH MODE AC/DC POWER SUPPLIES

RoHS Compliant Available

Weidmüller

NEW

- One-phase switch-mode power unit for DIN rail mounting
- Compact corrosion-resistance metal housing
- High efficiency, performance and flexibility
- Extremely easy to maintain
- Temperature and over-heating protection
- Short-circuit protection and overload resistance
- Remote monitoring via integrated status relay
- AC input range: 85 to 264VAC (derating @ 100VAC)
- DC input range: 80 to 370 VDC (derating @ 120VDC)
- Wide-range rated input: 100 to 240VAC
- Frequency range AC: 47 to 63Hz
- Screw terminal connections (input/output)
- Operating temperature: -25° to +70°C
- UL listed, CE compliant

Mfg. Part No.	Output Power (W)	Output Voltage (V)	Output Current (A)	Dimensions (mm) H x W x D	Stock No.	Price Each 1-24
1469470000	72	24	3	125 x 34 x 100	52X5509	150.43
1469480000	120	24	5	125 x 40 x 100	52X5510	196.61
1469490000	240	24	10	125 x 60 x 100	52X5511	303.49
1469510000	480	24	20	125 x 100 x 120	42X5673	486.90
1469520000	960	24	40	125 x 160 x 120	52X5512	870.87

(212186)

PRO-M SERIES DIN RAIL SWITCH MODE POWER SUPPLIES

RoHS Compliant Available

Weidmüller

- Slim housings for space saving installation in the cabinet
- DIN-rail mountable without any gap (no clearance necessary)
- Operating temperature range of -25°C to +70°C
- Autoselect input for wide input range without any switch; for DC and AC voltages
- Power boost of 120% enables inductive and capacitive loads; additional starting capacity with up to a 2-minute boost
- Parallel connections allow simple power increase for up to five units without diode module
- MTBF > 500,000 Hours

24 VDC **PRO-M** power supplies all feature a solid ultra-slim metal housing, and are designed to mount on a DIN-rail with no ventilation gap required between multiple units. Available in single-phase versions from 70W to 1000W, making them particularly suited for use in many automation applications. The wide-ranging AC and DC inputs, broad operating temperature range and international approvals make the **PRO-M** supplies a strong choice.

Mfg. Part No.	Output Power	Output Voltage (V)	Output Current (A)	Dimensions (mm) H x W x D	Stock No.	Price Each 1-9
8951330000	70W	24	3	130 x 33 x 125	85R5055	143.63
8951340000	120W	24	5	130 x 40 x 125	65R4836	187.15
8951360000	250W	24	10	130 x 60 x 150	85R5056	280.72
8951370000	500W	24	20	130 x 121 x 150	85R5057	448.01
8951380000	1kW	24	40	130 x 180 x 150	85R5058	743.84

(196384)

ECOLINE SERIES DIN RAIL SWITCH MODE POWER SUPPLIES

RoHS Compliant Available

Weidmüller

Switched-mode power unit in a compact metal housing for rail mounting in performance classes 70 to 1000W (single phase) and 250 to 1000W (three phase). The ECOLINE power supplies can be universally deployed because of their wide input range from 85VAC to 265VAC (single phase) and 340VAC to 575VAC (three phase) . A floating relay contact in the output circuit indicates short-circuits and overloads. A floating relay contact in the output circuit indicates short-circuits and overloads.

Mfg. Part No.	Output Power (W)	Output Voltage (V)	Output Current (A)	Dimensions (mm) H x W x D	Stock No.	Price Each 1-9
SINGLE PHASE						
8708660000	70	24	3	125 x 55.5 x 110	81H4708	134.63
8708670000	120	24	5	125 x 65.5 x 110	96H7061	220.80
8708680000	250	24	10	125 x 125.5 x 110	65H5733	388.87
THREE PHASE						
8708700000	250	24	10	125 x 125.5 x 110	21M3615	349.23

(196382)

INSTAPOWER SERIES DIN RAIL SWITCH MODE POWER SUPPLIES

RoHS Compliant Available

Weidmüller

One-phase switched-mode power unit in installation housing in performance classes 24 and 48W. The INSTA power units can be universally deployed because of their wide input range from 85VAC to 265VAC. They are available with output voltages from 5V to 48V.

Mfg. Part No.	Output Power (W)	Output Voltage	Output Current	Dimensions (mm) H x W x D	Stock No.	Price Each 1-9
9928890012	24	12	1.5	62.5 x 52 x 90.5	85C0579	109.18
9928890024	24	24	1	62.5 x 52 x 90.5	25C6551	108.24
8754960000	25	5	5	90.5 x 70 x 62.5	55M2635	93.42
8754970000	48	12	4	90.5 x 70 x 62.5	55M2636	107.91
8739140000	48	24	2	90.5 x 70 x 62.5	47M1442	107.91

(196383)

CONNECTPOWER SERIES DIN RAIL SWITCH MODE POWER SUPPLY

RoHS Compliant Available

Weidmüller

- One-phase switched-mode power unit in a compact metal housing for rail mounting
- This power supply can be universally deployed because of its wide input range from 85 V AC to 265 V AC
- 300W ConnectPower power pack includes active PFC control and comprehensive monitoring functions
- To increase the power output, up to five power units can be connected in parallel without decoupling on the output side

Mfg. Part No.	Output Power	Output Voltage	Output Current	Dimensions (mm) H x W x D	Stock No.	Price Each 1-9
9925340012	160W	15	8	127 x 57 x 175	56J8505	389.57

(209547)

CONNECTPOWER SERIES DIN RAIL DC/DC CONVERTER

RoHS Compliant Available

Weidmüller

DC/DC converter for the 50-W and 250-W power class in a compact metal housing for mounting on the terminal rail.

Mfg. Part No.	Output Power	Output Voltage	Output Current	Stock No.	Price Each 1-9
9919372412	36W	10.5 - 14.5	3	20J3031	359.09

(209548)

DNR10-60 SERIES DIN RAIL MOUNT SWITCHING POWER SUPPLIES

RoHS Compliant Available

XP Power

- Rugged design for industrial applications
- Up to 89% efficiency
- Wide adjustment range
- DC OK 24 V models
- Full power to +60°C
- Connector options*
- Three-year manufacturer's warranty

DNR010-60 series DIN rail mount industrial AC/DC power supplies feature over voltage, overload and short circuit protection. Convection cooled. 30-60W models are suitable for battery-charging applications. DC standby versions are also available; *go online or call*. CE compliant, TÜV approved and UL508 listed, UL1310 (except DNR30US05, DNR60US05 and DNR60US12).

SPECIFICATIONS:	
Input Voltage:	90-264 VAC, 120-370 VDC: DNR10/18 85-264 VAC, 90-375 VDC: DNR30/60
Line Regulation:	10-18 W: ±1.0% max 30-60 W: ±0.5% max
Load Regulation:	10-18 W: ±2.0% max 30-60 W: ±0.5% max

CONTINUED

DNR10-60 SERIES DIN RAIL MOUNT SWITCHING POWER SUPPLIES (CONT.)

SPECIFICATIONS:

Isolation Voltage:	3000 VAC Input to Output 1500 VAC Input to Ground 500 VAC Output to Ground
Ripple & Noise:	50 mV pk-pk, 20 MHz BW
MTBF:	780 kHrs typical Bellcore, Issue 6 at +40°C, GB (DNR05/10/18) 530 kHrs typical Bellcore, Issue 6 at +40°C, GB (DNR30/60)
Operating Temperature:	-25°C to +70°C. DNR10 derate linearly from 100% load at +60°C to 70% load at +70C. DNR18 derate linearly from 100% load at +50°C to 60% load at +70°C. DNR30/60 derate linearly from 100% load at +60°C to 75% load at +70°C.
Dimensions:	0.89W x 3.48H x 4.53"L 10/18W Models 1.59W x 3.60H x 4.53"L 30/60W Models

Mfg. Part No.	Power (W)	Output Voltage Trim (V)	Output Voltage (V)	Output Current (A)	Efficiency (%)	Stock No.	Price Each 1-4
● DNR10US05	10	4.5 -5.75	5	2	73	**19P1915**	23.50
● DNR10US12	10	10.8-13.8	12	840	75	**19P1916**	23.50
● DNR10US15	10	13.5-17.25	15	670	76	**19P1917**	23.50
● DNR10US24	10	21.6-28.8	24	420	76	**66M8131**	23.50
● DNR18US05	18	4.5 -5.75	5	3	75	**19P1920**	32.00
● DNR18US12	18	10.8-13.8	12	1.5	77	**19P1921**	32.00
● DNR18US15	18	13.5-17.25	15	1.2	77	**19P1922**	32.00
● DNR18US24	18	21.6-28.8	24	750	77	**88M3106**	32.00
● DNR30US05	30	5 -5.5	5	6	79	**19P1925**	38.00
● DNR30US12	30	12-14	12	2.5	84	**88M3108**	38.00
● DNR30US24	30	24-28	24	1.25	86	**19P1926**	38.00
● DNR30US48	30	48-55	48	625	86	**19P1927**	38.00
● DNR60US05	60	5 -5.5	5	10	79	**19P1930**	42.00
● DNR60US12	60	12-14	12	5	86	**19P1931**	42.00
● DNR60US24	60	24-28	24	2.5	89	**19P1932**	42.00
● DNR60US48	60	48-55	48	1.25	89	**19P1933**	42.00

*Add suffix **-S** for spring clamp connection option (special order)
(136304)

DSL240 SERIES DIN RAIL MOUNT 240W AC/DC POWER SUPPLIES

NEW RoHS Compliant Available XP Power

- Ultra slim design
- 150% peak load for 3 seconds
- High efficiency — up to 93%
- Hazardous locations approval
- Parallel capability
- Full power from -40°C to +60°C
- Overvoltage, overload and short circuit protection
- Natural convection cooled
- Three-year manufacturer's warranty
- UL listed, CE compliant, TÜV approved

SPECIFICATIONS:

Input Voltage:	88-264VAC (120-375VDC)
Line Regulation:	±1% max
Load Regulation:	±1% (±5% in parallel mode)
Isolation Voltage:	3000VAC Input to Output, 1500VAC Input to Ground, 500VAC Output to Ground
Ripple & Noise:	100mV pk-pk max @ 20MHz bandwidth
MTBF:	>370kHrs tol Bellcore, Issue 6 at +40°C, GB
Operating Temperature:	-40°C to +70°C
EMC Emissions:	EN55022, Class B conducted and radiated
Safety Approvals:	UL508, UL60950-1, EN60950-1, ANSI/ISA 12.12.01 (Class I, Div. 2, Groups A,B,C,D)
Dimensions:	2.52W x 4.9H x 4.59"L (64 x 124.5 x 116.6mm)

Mfg. Part No.	Output Voltage (V)	Power (W)	Output Voltage Trim (V)	Output Current (A)	Efficiency (%)	Stock No.	Price Each 1-4
● DSL240PS12-I	12	192	11.75-14.5	16	90	**47X2578**	155.00
● DSL240PS24-I	24	240	22.5-28.5	10	93	**47X2579**	155.00

(212159)

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(196560)

DNR120-480 SERIES DIN RAIL MOUNT SWITCHING POWER SUPPLIES

RoHS Compliant Available XP Power

- Up to 90% efficiency
- Wide adjustment range
- Parallel function
- Full Power to +60°C
- UL6950 and UL508
- Three-year manufacturer's warranty

DNR120-480 series DIN rail mount AC/DC power supplies feature over voltage, overload and short circuit protection. Convection cooled. A maximum of 3 units can be paralleled. Total power available is 90% of the rated current of each unit when used in parallel. DC standby versions are also available; *go online or call.* CE compliant, TÜV approved and UL listed.

SPECIFICATIONS:

Input Voltage:	DNR120AS and DNR240PS: 93-132/186-264 VAC, auto select, 210-370 VDC DNR480PS: 90-264 VAC, 120-370 VDC
Line Regulation:	±0.5% max
Load Regulation:	±1% (±5% for units in parallel)
Isolation Voltage:	3000 VAC Input to Output 1500 VAC Input to Ground 500 VAC Output to Ground
Ripple & Noise:	120 W models: 50 mV pk-pk 240-480 W models: 100 mV pk-pk. 20 MHz BW
MTBF:	450 kHrs typical Bellcore, Issue 6 at +40°C, GB
Operating Temperature:	DNR120: -10°C to +70°C, derate linearly from +60°C at 2.5%/°C DNR240: -25°C to +70°C, derate linearly from +60°C at 2.5%/°C DNR480 PS: -25°C to +70°C, derate linearly from +55°C at 2.5%/°C
Dimensions:	2.50W x 4.92H x 4.57"L DNR120AS Models 3.27W x 4.92H x 4.39"L DNR240PS Models 6.89W x 4.92H x 4.57"L DNR480PS Models

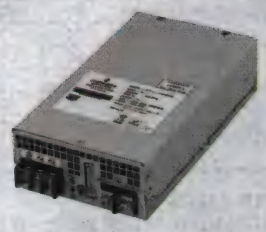
Mfg. Part No.	Power (W)	Output Voltage Trim (V)	Output Voltage (V)	Output Current (A)	Efficiency (%)	Stock No.	Price Each 1-4
● DNR120AS12-I	120	11.4-14.5	12	10	84	**19P1918**	75.00
● DNR120AS24-I	120	22.5-30	24	5	86	**07R8083**	75.00
● DNR120AS48-I	120	45-55	48	2.5	87	**19P1919**	75.00
● DNR240PS24-I	240	22.5-28.5	24	10	89	**19P1923**	112.00
● DNR240PS48-I	240	47-56	48	5	90	**19P1924**	112.00
● DNR480PS24-I	480	22.5-28.5	24	20	89	**19P1928**	192.00
● DNR480PS48-I	480	47-56	48	10	90	**19P1929**	192.00

(136305)

LCM300 SERIES 310W BULK FRONT END AC/DC POWER SUPPLY

NEW ARTESYN EMBEDDED TECHNOLOGIES

- Single 310W (350W peak) output power
- Dimensions: 1.61"H x 4"W x 7"L
- 7.1W per cubic inch
- Industrial/medical safety
- -40°C to +70°C (linear derating to 50% from 50 °C to 70 °C)
- High efficiency: 91% @ 230VAC
- Variable speed "Smart Fans"
- DSP controlled front end
- ±0.05% adjustment range
- Margin programming
- Integrated OR-ing FET
- Three-year manufacturer's warranty
- PMBus Compliant
- EMI Class B
- EN61000 Immunity
- UL listed: 60950-1 508/1598/1433 60601-1 Ed 3
- CSA certified: 60650-1
- VDE approved: 60650-1 60601



LCM300 series 310W AC/DC power supply does not require any derating at low line and provides the full power across the input range 90 to 264VAC. **Mfg. part no. LCM300Q-T-4** offers a 24V output, which can be trimmed to ±20% and features efficiency greater than 91% at full load, a typical power factor of 0.98, and a power density of 7.1W/in3. The compact 1U x 4"W x 7"L enclosed form factor includes a smart fan for self-contained cooling. Backed by a comprehensive set of industrial and medical safety approvals, **mfg. part no. LCM300Q-T-4** is ideal for industrial applications such as burn-in systems, test and measurement equipment, laser-carving machines, and factory automation; non-patient contact and non-patient critical medical, dental and laboratory applications; as well as for telecom and datacom equipment.

Mfg. Part No.	Input Range (VAC) Min.	Input Range (VAC) Max.	Output (VDC)	Adjustment Range (V)	Output Current Max.	Stock No.	Price Each 1-9
LCM300Q-T-4	90	264	24	19.2 - 28.8	12.5	**04X6326**	187.28

(211428)

FRONT END POWER SUPPLIES

DS460S-3 SERIES FRONT END POWER SUPPLY

RoHS Compliant Available

ARTESYN EMBEDDED TECHNOLOGIES

- Active power factor correction
- EN61000-3-2 harmonic compliance
- Active AC inrush control
- 1U X 2U short form factor
- Hot plug operation
- N + 1 redundant
- High efficiency redundancy
- Active current sharing
- Built-in cooling fan
- I2C communication interface bus
- PMBus compliant
- EERPOM for FRU data

Mfg. part no. DS460S-3-002 is a high-efficiency bulk front-end power supply intended for systems that use distributed power architectures. Rated at 460 watts, it generates a main payload output of 12VDC and an auxiliary output of 12VDC for powering standby circuitry. This power supply is digitally programmable – equipped with an I2C interface and uses the industry-standard PMBus™ communications protocol. Intended primarily for use in rack-mounting server type applications, such as data centers. This power supply uses an advanced power conversion topology to maximize efficiency and has exceptionally compact form factors – a height of just 1.6″, makes it ideal for use in 1U high rack-mounting equipment.

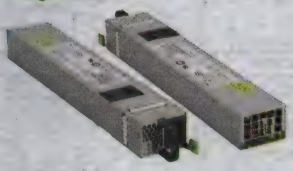
Mfg. Part No.	Input Voltage Range	Output Voltage	Output Power (W)	Stock No.	Price Each 1-9
DS460S-3-002	90V to 264V	12.3V @36A	460	28W5359	185.80

(210039)

DS760SL SERIES FRONT END POWER SUPPLY

RoHS Compliant Available

ARTESYN EMBEDDED TECHNOLOGIES



- 18.1 W/cu-in
- 1U X 54.5 mm form factor (slimline)
- N + 1 redundant
- Hot-swap
- Internal OR'ing
- 5.0 V housekeeping
- Variable speed "smart fans"
- EMI Class A
- EN61000 Immunity

Mfg. Part No.	Input Voltage Range	Output Voltage	Output Power (W)	Stock No.	Price Each 1-4
DS760SL-3	90V to 264V	12V @62.3A	760	10R0819	437.80

(210036)

DS1200 SERIES FRONT END POWER SUPPLY

RoHS Compliant Available

ARTESYN EMBEDDED TECHNOLOGIES

- Active power factor correction
- EN61000-3-2 harmonic compliance
- Active AC inrush control
- 1U X 2U form factor
- 21.71 W / in^3
- No minimum load required
- Hot plug operation
- N + 1 redundant
- Internal OR'ing fets
- Active current sharing (10 - 100% load)
- Built-in cooling fan (40 mm x 28 mm)
- I2C communication interface bus
- PMBus compliant
- EERPOM for FRU data
- Red/green bi-color LED status
- Internal fan speed control
- Fan Fail Tach Output Signal
- INTEL, SSI Std. logic timing
- INTEL, SSI Std. FRU data format
- Full digital control

Mfg. Part No.	Input Voltage Range	Output Voltage	Output Power (W)	Stock No.	Price Each 1-9
DS1200-3	180V to 264V	12V @100A	1200	12P5286	395.41

(210038)

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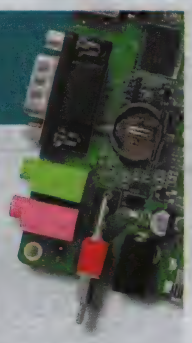

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(196526)

LCM1500 SERIES 1500W BULK FRONT END AC/DC POWER SUPPLY

NEW

ARTESYN EMBEDDED TECHNOLOGIES

- Single 1500W output power
- Dimensions: 2.5"H x 5.2"W x 10"L
- 12W per cubic inch
- Industrial/medical safety
- -40°C to +70°C (linear derating to 50% from 50 °C to 70 °C)
- High efficiency: 91% typ. @ full load / 230VAC nom.
- Variable speed "Smart Fans"
- DSP controlled front end
- ±10% adjustment range
- Margin programming
- Integrated OR-ing FET
- Three-year manufacturer's warranty
- PMBus Compliant
- EMI Class A
- EN61000 Immunity
- UL recognized: ITE (UL60950-1); Medical (ANSI/AAMI ES60601-1)
- TUV approved: SuD ITE + Medical (EN60950-1, EN60601-1) BSMI CB Report
- CE compliant: LVD (EN60950-1 + RoHS)

LCM1500 series 1500W AC/DC power supply does not require any derating at low line and provides the full power across the input range 90 to 264 VAC. **Mfg part no. LCM1500Q-T-4** is rated for 24V single output, which can be trimmed to ±10 percent. A sophisticated digital control loop optimizes efficiency across a wide load range, giving this model efficiency greater than 91% at full load, a typical power factor of 0.99, and a power density of 12W/in3. Backed by a comprehensive set of industrial and medical safety approvals, **mfg part no. LCM1500Q-T-4** is ideal for industrial applications such as burn-in systems, test and measurement equipment, laser-carving machines, and factory automation; non-patient contact and non-patient critical medical, dental and laboratory applications; as well as for telecom and datacom equipment.

Mfg. Part No.	Input Range (VAC) Min.	Input Range (VAC) Max.	Output (VDC)	Adjustment Range (V)	Output Current Max.	Stock No.	Price Each 1-4
LCM1500Q-T-4	90	264	24	21.6 - 26.4	67	04X6323	557.24

(211434)

D1U86G-W-460-12-HxxDC SERIES 86MM 1U AC/DC FRONT END POWER SUPPLIES

RoHS Compliant Available

NEW

muRata Ps Murata Power Solutions

- 460W output power
- Exceeds 92% efficiency @ 50% load (230VAC Input)
- 12V main output
- 1U height: 3.4″ x 7.75″ x 1.57″
- 11.1 Watts per cubic inch density
- N+1 redundancy capable, including hot plugging (up to 8 in parallel)
- Droop current sharing on 12V main output, ORing FET
- Overvoltage, overcurrent, overtemperature protection
- Internal cooling fan (variable speed)
- PMBus™ / I²C interface with status indicators

D1U86G-W-460-12-HxxDC series bulk front end power supplies meet the needs of systems requiring high efficiency distributed power architectures. Output power is rated at 460W with one main and one standby output. Features high-efficiency performance, hot plug capability, and parallel operation with droop current sharing. Closed-loop internal fan cooling provides reliable long life operation. Industry standard PMBus™ communication protocol makes system integration seamless and straightforward. The low-profile design and dense packaging makes these supplies ideal for delivering reliable, efficient power to servers, workstations, storage devices and other distributed power systems. Choice of Back-to-front or front-to-back airflow models.

Mfg. Part No.	Power Output (W)	Output Main/Standby (VDC)	Airflow	Stock No.	Price Each 1-4
D1U86G-W-460-12-HB4DC	460	12 / 12	Back to Front	18X2345	224.38
D1U86G-W-460-12-HB3DC			Front to Back	18X2344	224.38

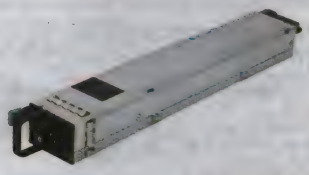
(211519)

D1U54P-W-1200-12-HxxC SERIES 54MM 1U AC/DC FRONT END POWER SUPPLIES

RoHS Compliant Available

NEW

muRata Ps Murata Power Solutions



- 1200W output power
- 80 PLUS® Platinum efficiency
- 12V main output
- 3.3V standby output of 10W
- 1U height: 2.15″ x 12.65″ x 1.57″
- 28 Watts per cubic inch density
- N+1 redundancy capable, including hot plugging (up to 8 in parallel)
- Active current sharing on 12V main output; ORing FET
- Overvoltage, overcurrent, overtemperature protection
- Internal cooling fan (variable speed)
- PMBus™ / I²C interface with status indicators

D1U54P-W-1200-12-HxxxC series are 80 PLUS® Platinum efficiency 1200W, power factor corrected, front end power supplies with a 12V main output and a 3.3V (3A) standby. Feature active current sharing and up to 8 supplies may be operated in parallel. These supplies may be hot plugged, can recover from overtemperature faults, and have status LEDs on the front panel in addition to logic and PMBus™ status signals. Low profile 1U package and >28W/cubic inch power density make these supplies ideal for delivering reliable, efficient power to servers, workstations, storage systems and other 12V distributed power systems. Choice of Back-to-front or front-to-back airflow models.

➤ CONTINUED ➤

FRONT END POWER SUPPLIES

D1U54P-W-1200-12-HxxC SERIES 54MM 1U AC/DC FRONT END POWER SUPPLIES (CONT.)

Mfg. Part No.	Power Output High/Low Line AC (W)	Output Main/Standby (VDC)	Airflow	Stock No.	Price Each 1-4
● D1U54P-W-1200-12-HA4PC	1200 / 1000	12 / 5	Back to Front	18X2343	392.83
● D1U54P-W-1200-12-HA3PC			Front to Back	18X2342	392.83

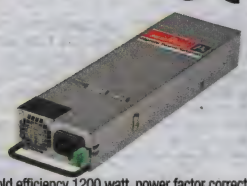
(211517)

D1U3CS-W-1200-12-HxxC SERIES AC/DC FRONT END POWER SUPPLIES

RoHS Compliant Available

muRata Ps Murata Power Solutions

- 1200W output power
- Certified to Climate Savers Computing Initiatives℠ and 80 PLUS® Gold efficiency
- 12V main output
- 3.3V OR 5V standby output of 20W
- 1U height: 3.20"x11.00"x1.57"
- 12.7 Watts per cubic inch density
- N+1 redundancy capable, ncluding hot plugging (up to 8 in parallel)
- Active current sharing on 12V main output, ORing FET



D1U3CS-W-1200-12-HxxC series are 80 PLUS Gold efficiency 1200 watt, power factor corrected front end supplies with a 12V main output and a 5V or 3.3V (20W) standby. They have active current sharing and up to 8 supplies may be operated in parallel. The supplies may be hot plugged, they recover from overtemperature faults, and have status LEDs on their front panel in addition to logic and PMBus status signals.

Mfg. Part No.	Power Output High Line AC	Power Output Low Line AC	Main Output (V)	Airflow	Stock No.	Price Each 1-4
● D1U3CS-W-1200-12-HA3C	1200W	1000W	12	Back to front	06W1789	413.52
● D1U3CS-W-1200-12-HA4C			12		06W1790	413.52
● D1U3CS-W-1200-12-HC3C			12	Front to back	06W1791	413.52
● D1U3CS-W-1200-12-HC4C			12		06W1792	413.52

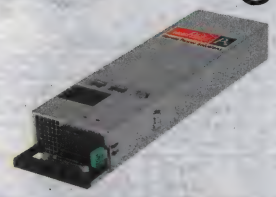
(209888)

DC/DC AND AC/DC FRONT END POWER SUPPLIES

RoHS Compliant Available

muRata Ps Murata Power Solutions

- 850W output power
- 87% efficient at half power
- 12V main output
- 3.3V standby output of 20W
- 1U height: 3.20"x11.00"x1.57"
- 15.4 Watts per cubic inch density
- N+1 redundancy capable, ncluding hot plugging (up to 4 or 8 in parallel)
- Active current sharing on 12V main output, ORing FET



D1U3CS-D-850-12-HC4C are highly efficient DC input and **D1U3CS-W-850-12-HC4C** is a 80 PLUS Gold efficiency power factor corrected front end power supplies both with 12V main output and a 3.3V (20W) standby. They have active current sharing and up to 8 supplies **mfg. part no. D1U3CS-D-850-12-HC4C** and 4 supplies **mfg. part no. D1U3CS-W-850-12-HC4C** may be operated in parallel. The supplies may be hot plugged, they recover from overtemperature faults, and have logic and PMBus status signals.

Mfg. Part No.	Power Output	Main Output	Airflow	Stock No.	Price Each 1-4
● D1U3CS-D-850-12-HC4C	850W	12	Back to front	06W1788	622.86
● D1U3CS-W-850-12-HC4C		12		06W1793	416.16

(209887)

FPS SERIES FRONT END POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- 1U high
- Up to 3000W, 3 units, in 19" rack
- Hotswap capable, o-ring diodes built-in
- High efficiency
- Full array of signals

Mfg. part no. FPS100024 utilizes less cabinet space and provides easier system monitoring. Suitable for N+1 redundancy. Less heat dissipated in system.

Mfg. Part No.	Output Voltage (V)	Output Current (A)	Power (W)	Stock No.	Price Each 1-9
● FPS100024	24	40	960	71K3965	606.00
● FPS100032	32	31	992	80K8505	606.00
● FPS100048	48	21	1.008	73J5064	606.00

➤ CONTINUED ➤

FPS SERIES FRONT END POWER SUPPLIES (CONT.)

1U RACK

Mfg. Part No.	Output Voltage (V)	Output Current (A)	Power (W)	Stock No.	Price Each 1-9
● FPSS1U	3-Slot Rack with 2 Blanking Panels			16M8664	646.40

(84552)

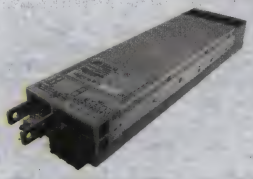
RFE SERIES 1000-1600W 1U FRONT END POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- 1U high
- Internal ORing Diodes/ FETs
- Current Share
- High Efficiency (**RFE1600 Series**)
- I2C, PMBus Communication Option (**RFE1600 Series**)

RFE Series



RFE1600 Series

RFE1000 SERIES

Mfg. Part No.	Output Voltage	Output Voltage Range	Output Current	Power	I2C	Stock No.	Price Each 1-9
● RFE1000-24-Y	24	21.5 - 29V	40	960W	...	46R0080	488.84
● RFE1000-32-Y	32	28.8 - 38.4V	31	992W	...	46R0081	488.84
● RFE1000-48-Y	48	43 - 58V	21	1.008kW	...	46R0082	488.84

RFE1600 SERIES

Mfg. Part No.	Output Voltage	Output Voltage Range	Output Current	Power	I2C	Stock No.	Price Each 1-9
● RFE160012	12	9.6 - 13.2V	133	1.596kW	...	53W8396	898.90
● RFE160012/S	12	9.6 - 13.2V	133	1.596kW	Yes	53W8397	946.37
● RFE160024	24	19.2 - 29V	67	1.608kW	...	53W8398	898.90
● RFE160024/S	24	19.2 - 29V	67	1.608kW	Yes	53W8399	946.37
● RFE160048	48	38.4 - 58V	33	1.584kW	...	48W4051	898.90
● RFE160048/S	48	38.4 - 58V	33	1.584kW	Yes	53W8400	946.37

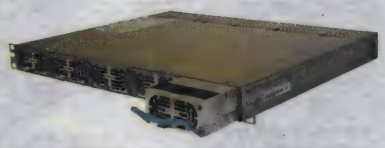
(165054)

HFE SERIES 1U FRONT END POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- Contain up to five units (**HFE1600**) and four units (**HFE2500**) per 1U rack
- Provide up to 7600W (**HFE1600**) and 9500W (**HFE2500**) per 1U rack
- Internal ORing MOSFET and Current Share
- High efficiency
- Full array of signals available



HFE1600 SERIES

Mfg. Part No.	Out. Volt. (V)	Adj. Range (V)	Max. Current @ Vin> 170VAC (A)	Max. Power @ Vin> 170VAC (kW)	Effi-ciency (%)	I2C	Stock No.	Price Each 1-9
● HFE1600-12	12	9.6 - 13.2	133	1.596	90	No	24T8184	743.36
● HFE1600-12/S	12	9.6 - 13.2	133	1.596	90	Yes	24T8185	826.18
● HFE1600-24	24	19.2 - 29	67	1.608	90	No	24T8186	730.23
● HFE1600-24/S	24	19.2 - 29	67	1.608	90	Yes	24T8187	813.05
● HFE1600-32	32	25.6 - 38.4	47	1.5	90	No	56W3961	939.30
● HFE1600-32/S	32	25.6 - 38.4	47	1.5	90	Yes	56W3962	989.80
● HFE1600-48	48	38.4 - 58	33	1.584	92	No	24T8188	717.10
● HFE1600-48/S	48	38.4 - 58	33	1.584	92	Yes	24T8189	798.91

HFE2500 SERIES

● HFE2500-12	12	9.6 - 13.2	200	2.4	90	No	71T7839	1010.00
● HFE2500-12/S	12	9.6 - 13.2	200	2.4	90	Yes	71T7840	1090.80
● HFE2500-24	24	19.2 - 29	104	2.496	90	No	71T7841	986.77
● HFE2500-24/S	24	19.2 - 29	104	2.496	90	Yes	71T7842	1068.58
● HFE2500-48	48	38.4 - 58	52	2.496	91	No	71T7843	981.72
● HFE2500-48/S	48	38.4 - 58	52	2.496	91	Yes	71T7844	1064.54

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● HFE1600-S1U	1U Rack for HFE1600, IEC input	24T8182	866.58
● HFE1600-S1U-TB	1U Rack for HFE1600, terminal block input	24T8183	866.58
● HFE2500-S1U	1U Rack for HFE2500, IEC input	71T7837	1041.31
● HFE2500-S1U-TB	1U Rack for HFE2500, terminal block input	71T7838	1041.31
● HFE/C15-U	Rack power cable for HFE1600	76T0997	18.64
● HFE/C19-U	Rack power cable for HFE2500	71T7836	34.59

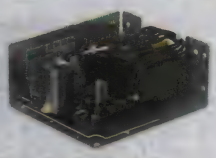
(197163)

SILVER LINE LINEAR POWER SUPPLIES

RoHS Compliant Available

SOLA HD

- Screw Terminal Connections
- Input Voltage: 100/120/220/230/240AC
- Input Frequency: 47-63Hz
- Line and Load Regulation Combined 0.1%
- Ripple 3.0mV Maximum Peak-to-Peak
- Automatic Current Limiting
- DC Output Adjustable 10% Minimum
- Temperature Range: 0°C to +50°C
- Optional Cover Kits Available for Additional Safety
- 2-Year Warranty



Screw Terminal Connections Save Installation Time

Silver Line Linears now available up to 288 watts. Feature industry standard footprints with the added convenience of screw terminal for AC input and DC outputs. Used in process control circuits, instrumentation, drives, CNC machinery and microprocessor circuits. Built-in over voltage protection, which provides both transient and power supply malfunction protection, is standard on 5 volt models and optional for other models *(order separately below)*. Covers sold separately; *go online or call*. When covers are used, derate the power supply by 15% of its rated value.

SINGLE OUTPUT SERIES POWER SUPPLIES

Mfg. Part No.	Output 1	Output 2	Output 3	Dimensions (in.) H	W	D	Stock No.	Price Each 1-4
SLS-05-030-1T	5V/3.0A	N/A	N/A	2.07	4.84	3.99	48F3005	80.05
SLS-05-060-1T	5V/6.0A	N/A	N/A	2.95	5.62	4.87	93K6594	118.20
SLS-12-017T	12V/1.7A*	N/A	N/A	2.07	4.84	3.99	93K6597	80.05
SLS-12-034T	12V/3.4A	N/A	N/A	2.95	5.62	4.87	93K6598	113.15
SLS-12-051T	12V/5.1A	N/A	N/A	3.30	7.00	4.87	93K6599	163.79
SLS-12-068T	12V/6.8A	N/A	N/A	3.30	9.00	4.87	93K6600	183.95
SLS-15-045T	15V/4.5A	N/A	N/A	3.30	7.00	4.87	93K6601	163.79
SLS-15-060T	15V/6.0A	N/A	N/A	3.30	9.00	4.87	93K6602	182.37
SLS-24-012T	24V/1.2A	N/A	N/A	2.07	4.84	3.99	93K6603	80.05
SLS-24-024T	24V/2.4A	N/A	N/A	2.95	5.62	4.87	93K6604	113.15
SLS-24-036T	24V/3.6A	N/A	N/A	3.30	7.00	4.87	93K6605	163.79
SLS-24-048T	24V/4.8A	N/A	N/A	3.30	9.00	4.87	93K6606	217.82
SLS-24-072T	24V/7.2A	N/A	N/A	3.76	4.88	13.87	93K6607	239.78
SLS-24-120T	24V/12.0A	N/A	N/A	4.00	4.88	16.85	93K6608	325.85
DUAL OUTPUT SERIES POWER SUPPLIES								
SLD12-1010-12T	+12V/1.0A*	–12V/1.0A*	N/A	1.62	6.50	4.00	93K6590	95.38
SLD12-1818-12T	+12V/1.8A*	–12V/1.8A*	N/A	2.50	7.00	4.87	93K6591	133.41
SLD-12-3434-12T	+12V/3.4A	–12V/3.4A	N/A	2.75	9.00	4.87	93K6589	185.74
SLD15-3030-15T	+15V/3.0A	–15V/3.0A	N/A	2.75	9.00	4.87	93K6593	185.74
SLD12-6034-05T	+5V/6.0A	+12V/3.4A	N/A	2.75	9.00	4.87	93K6592	197.55
SLD-12-3015-05T	+5V/3.0A	+12V/1.5A	N/A	2.50	7.00	4.87	93K6588	138.92
TRIPLE OUTPUT SERIES POWER SUPPLIES								
SLT12-31010-12T	+5V/3.0A	+12V/1.0A*	–12V/1.0A*	2.50	10.25	4.00	93K6610	158.73
SLT12-61818-12T	+5V/6.0A	+12V/1.8A*	–12V/1.8A*	2.75	11.00	4.87	93K6612	214.60
SLT12-20404-12T	+5V/2.0A	+12V/0.4A*	+12V/0.4A*	1.62	6.50	4.00	93K6609	119.87

* Adjustable to 15 volts.

OVERVOLTAGE PROTECTION KIT

Mfg. Part No.	Description	Dimensions (in.) H	W	D	Stock No.	Price Each 1-4
SL012-000-1	6.2V-34V/12A Intermittent; 8A continuous (Not for Use With Covers)	0.56	1.55	1.50	93K6616	22.33
SL0-12-000-TB	Overvoltage Kit for Units w/Covers	...	...	...	93K6614	22.33

COVER OPTIONS

Mfg. Part No.	Description	Stock No.	Price Each 1-4
SLCASA-CVR	Cover for SLS-05-030-1T; 12-017T; 24-012T	48F3021	38.48
SLCASB-CVR	Cover for SLS-05-060-1T; 12-034T; or 24-024T	48F3022	38.48
SLCASC-CVR	Cover for SLS-05-090-1T; 12-051T; or-15-045T; -24-036T	48F3023	38.85
SLCASI-CVR	Cover for SLS-05-120-1T; 12-068T; -15-060T; -24-048T	48F3026	39.05

Note: Covers are sold separately. When covers are used, derate the power supply by 15% of its rated value.
(3105)

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(212565)

SINGLE AND MULTIPLE OUTPUT 25 - 60W POWER SUPPLIES

RoHS Compliant Available

ARTESYN EMBEDDED TECHNOLOGIES

- Universal input
- High efficiency
- Wide choice of outputs
- Remote Sense
- Built-in EMI filter
- Low output ripple
- Adjustable output
- Over voltage protection
- Overload protection
- Enclosure kits available
- -M suffix includes medical safety approvals

60-Watt LPS60 Series

50-Watt LPT50 Series

Applications Include:
- Telecommunications, Computer Peripherals, Test and Industrial Equipment and Business Machines

LP series low power switch mode power supplies offer outstanding performance and reliability. Available in single and multiple outputs. Units are designed for a wide range of applications. CE compliant.

SPECIFICATIONS

Input Range:	85 - 264VAC 120 - 370VDC
Frequency:	47 - 440Hz
Inrush Current:	<15A Peak @ 115VAC; <30A Peak @ 230VAC
EMI Filter:	FCC Class B Conducted EN55022 Class B conducted VDE 0873 PT3 Class B Conducted

Mfg. Part No.	Output Voltage	Minimum Load	Stock No.	Price Each 1-4
25-WATT LPS SERIES; SINGLE OUTPUT; 3W X 5L X 1.2"H				
LPS22	5V	5A	62K3437	45.71
LPS23	12V	2.1A	62K3438	44.36
LPS24	15V	1.7A	62K3439	44.78
LPS25	24V	1.3A	62K3440	46.37
25-WATT LPT SERIES; TRIPLE OUTPUT; 3W x 5L x 1.2"H				
LPT22	5V, 12V, -12V	3A, 1.5A, 500mA	62K3448	45.48
LPT23	5V, 12V, -12V	4A, 500mA, 500mA	62K3449	47.68
LPT24	5V, 12V, -5V	3A, 1.5A, 500mA	62K3450	47.78
LPT25	5V, 15V, -15V	3A, 1.5A, 500mA	62K3451	48.14
40-WATT LPS SERIES; SINGLE OUTPUT; 3W x 5L x 1.2"H				
LPS42	5V	8A	62K3441	50.39
LPS43	12V	3.3A	62K3442	49.67
LPS44	15V	2.6A	62K3443	49.41
LPS45	24V	1.7A	64K3161	50.15
LPS48	48V	900mA	17B6364	47.20
40-WATT LPT SERIES; TRIPLE OUTPUT; 3W x 5L x 1.2"H				
LPT41	3.3V, 5V, 12V	4A, 1.5A, 500mA	17B6370	56.64
LPT42	5V, 12V, -12V	4A, 2A, 500mA	62K3452	45.71
LPT43	5V, 12V, -12V	6A, 500mA, 500mA	67K2805	52.44
LPT44	5V, 12V, -12V	4A, 2A, 500mA	92F5317	50.65
LPT45	5V, 15V, -15V	4A, 2A, 500mA	62K3453	51.68
LPT46	5V, 24V, 12V	4A, 1A, 500mA	64K0482	51.68
LPT47	5V, 24V, -12V	4A, 1A, 500mA	16F7025	50.65
40-WATT LPT-M SERIES; TRIPLE OUTPUT; 3W x 5L x 1.2"H				
LPT42-M	5V, 12V, -12V	4A, 2A, 500mA	17B6371	60.40
50-WATT LPT SERIES; TRIPLE OUTPUT; 2W x 4L x 1.3"H				
LPT51	3.3V, 5V, 12V	8A, 3A, 500mA	21M5768	54.74
LPT52	5V, 12V, -12V	8A, 3A, 500mA	50M1563	55.36
LPT53	5V, 15V, -15V	8A, 2.4A, 500mA	95M8332	57.02
LPT54	5V, 24V, 12V	8A, 1.5A, 500mA	95M8334	55.36
50-WATT LPT-M SERIES; TRIPLE OUTPUT; 2W x 4L x 1.3"H				
LPT51-M	3.3V, 5V, 12V	8A, 3A, 500mA	95M8330	64.18
LPT52-M	5V, 12V, -12V	8A, 3A, 500mA	95M8331	66.85
LPT53-M	5V, 15V, -15V	8A, 2.4A, 500mA	95M8333	64.18
LPT54-M	5V, 24V, 12V	8A, 1.5A, 500mA	95M8335	64.90
60-WATT LPS SERIES; SINGLE OUTPUT; 3W x 5L x 1.65"H				
LPS62	5V	12A	62K3444	64.20
LPS63	12V	5A	62K3445	64.81
LPS64	15V	4A	62K3446	64.81
LPS65	24V	2.5A	62K3447	64.20
60-WATT LPT SERIES; TRIPLE OUTPUT; 3W x 5L x 1.65"H				
LPT62	5V, 12V, -12V	7A, 3A, 700mA	62K3454	58.75
LPT63	5V, 15V, -15V	7A, 2.8A, 700mA	62K3455	68.85
LPT64	5V, 12V, -5V	7A, 3A, 700mA	62K3456	66.84
LPT65	5V, 24V, 12V	7A, 1.5A, 700mA	62K3457	68.85
60-WATT LPT-M SERIES; TRIPLE OUTPUT; 3W x 5L x 1.69"H				
LPT62-M	5V, 12V, -12V	7A, 3A, 700mA	17B6373	73.87

CONTINUED

SWITCHING POWER SUPPLIES

SINGLE AND MULTIPLE OUTPUT 25 - 60W POWER SUPPLIES (CONT.)

ENCLOSURE KITS

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● LPX40	Enclosure Kit for LP25/40 Series	62K3458	11.46
● LPX60	Enclosure Kit for LP60 Series	62K3459	11.60
● LPX50	Enclosure Kit for LPX5X / LPX10X-M / NPX4X-M	70K3002	10.63

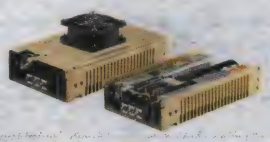
(42374)

NTS AND NTQ SERIES NETWORKING 70 - 350W SINGLE AND QUAD OUTPUT

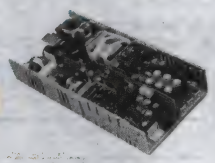
RoHS Compliant Available

ARTESYN EMBEDDED TECHNOLOGIES

- Input range: 85 -26VAC
- Frequency: 47 -63Hz
- Active power factor correction
- Remote sense
- Power fail and remote inhibit
- Over voltage, overload and thermal overload protection



NTS



NTQ

Mfg. Part No.	Output 1 V @ A	Output 2 V @ A	Output 3 V @ A	Output 4 V @ A	Stock No.	Price Each 1-4
● NTS353	12 @ 16.6 (29.2A)	...	...	...	97H0853	221.18
● NTS503	12 @ 16.6 (29.2A)	...	...	...	12P5702	296.17
● NTS355-CF	24 @ 6.5 (14.6A)	...	...	...	12P5701	231.79
● NTS355	24 @ 8.3 (14.6A)	...	...	...	95M8336	207.31
● NTS358	48 @ 4.2 (7.3A)	...	...	...	24K4665	207.31
● NTS359	54 @ 3.7 (6.5A)	...	...	...	06M5738	207.31
● NTQ123	3.3 @ 14 (25A)	5 @ 12.5 (24A)	12 @ 1 (2A)	12 @ 0.5 (1A)	88F5318	167.77
● NTQ163	5 @ 15 (30A)	3.3 @ 10 (20A)	12* @ 2 (4.5A)	12* @ 2 (4.5A)	69K2679	227.81

*Outputs are floating; ( ) indicates amps forced air cooling
(70273)

NPS20-M SERIES 40W MEDICAL AC/DC POWER SUPPLIES

RoHS Compliant Available

ARTESYN EMBEDDED TECHNOLOGIES

TÜV Rheinland

- Medical and ITE safety approvals
- 2x4x1U form factor
- Overload and short circuit protection
- Built-in Class B EMI filter
- Remote sense
- EN61000-3-2 compliant
- Adjustable main output
- Less than 300mw no-load power consumption

NPS20-M series power supply is a compact open-frame design; measuring just 2 x 4 x 1", with a typical full load efficiency of 87%. The supply is primarily intended for use in information technology equipment (ITE) and light industrial systems, as well as, for equipment intended for non-patient contact and non-patient critical use in low power medical, dental and laboratory applications.

SPECIFICATIONS:	
Input Voltage:	90-264VAC (120-300VDC)
Input Frequency:	47-440Hz
Operating Temperature:	0°C to 50°C ambient derate each output as 2.5% per degree from 50°C to 80°C. -20°C start up
Approvals and Standards:	TUV, UL, CSA, and NEMKO: 60950, 60601-1, CB: Certificate and report, CE: Mark (LVD), CQC: Mark

Mfg. Part No.	Output Power Max. (W)	Output Voltage (V)	Output Current (A)	Stock No.	Price Each 1-4
● NPS22-M	40	5	8	82R5435	30.50
● NPS23-M	40	12	3.3	82R5436	31.72
● NPS24-M	40	15	2.7	82R5437	30.50
● NPS25-M	40	24	1.8	82R5438	32.06
● NPS28-M	40	48	840mA	82R5439	30.50

(179636)

NFS40 SERIES 40 WATT SINGLE AND TRIPLE OUTPUT AC/DC POWER SUPPLIES

RoHS Compliant Available

ARTESYN EMBEDDED TECHNOLOGIES

- 5.0 x 3.0 x 1.2 inch package (1U applications)
- Industry standard package
- Overvoltage and short circuit protection
- 40 W with free air convection
- EN55022, EN55011 conducted noise level A
- UL, VDE and CSA safety approvals
- Medical safety approval models available
- Two-year manufacturer's warranty

NFS40 series 40 watt universal input AC/DC power supplies include over voltage and short circuit protection. **NFS40 medical series** has a lower safety ground leakage and higher isolation as required for medical safety approval.

➤CONTINUED➤

NFS40 SERIES 40 WATT SINGLE AND TRIPLE OUTPUT AC/DC POWER SUPPLIES (CONT.)

STANDARD SERIES

Mfg. Part No.	Output 1 + (VDC)	Output 1 + (A)*	Output 2 + (VDC)	Output 2 + (A/mA)*	Output 3- (VDC)	Output 3- (A/mA)*	Output Power (W)	Stock No.	Price Each 1-4
● NFS40-7605J	5.1	8	...	...	...	...	40	71K8875	50.63
● NFS40-7608J	12	2	12	2	-12	500mA	50	71K8877	46.13
● NFS40-7610J	15	2	15	2	-15	500mA	50	71K8878	52.18
● NFS40-7612J	12	4	...	...	...	...	40	71K8879	50.39
● NFS40-7615J	15	3.3	...	...	...	...	40	71K8880	50.14
● NFS40-7624J	24	2	...	...	...	...	40	71K8881	50.15
● NFS40-7607J	5.1	3	12	2	-5	500mA	40	71K8876	50.65
● NFS40-7628J	5.1	4	12	350mA	-12	500mA	40	71K8882	52.18
MEDICAL SERIES									
● NFS40-7912J	12	4	...	...	...	...	40	71K8885	58.13
● NFS40-7915J	15	3.3	...	...	...	...	40	71K8886	57.27
● NFS40-7924J	24	2	...	...	...	...	40	71K8887	58.91
● NFS40-7908J	5.1	3	12	2	-12	0	40	71K8883	62.34
● NFS40-7910J	5.1	3	15	2	-15	500mA	40	71K8884	62.93
● NFS40-7928J	5.1	4	12	350	-12	1	40	71K8888	60.40

*Forced air, 20 CFM at 1 atmosphere, 50 W maximum
(110629)

NPS40-M SERIES 60 WATT SINGLE OUTPUT AC/DC POWER SUPPLIES

RoHS Compliant Available

ARTESYN EMBEDDED TECHNOLOGIES

- Universal input
- Less than 1U high and 2" x 4" footprint
- Remote sense
- Overload and short circuit protection
- Adjustable output voltage
- High efficiency
- High MTBF
- Built in EMI filter (CISPR 22 Class B)
- International Efficiency Level V, Energy Star 2.0 & CeC compliant (except **NPS42-M**)

- Less than 300mW no-load power consumption
- 0°C to +80°C operation
- Input power <74 watts

Compact **NPS40-M series** supports up to 45W with convection cooling and up to 60W with forced air cooling. Backed by a comprehensive set of worldwide IT equipment (ITE) and non-patient contact and non-patient critical medical safety approvals, power supplies are ideal for use in light industrial, instrumentation and process systems as well as low-power dental and laboratory equipment.

DIMENSIONS: 4"L x 2"W x 1"H

Mfg. Part No.	Output Voltage (V)	Max. Load with 30CFM Forced Air	Output Power (W)	Ripple P/P (PARD)*(mV)	Stock No.	Price Each 1-4
● NPS42-M	5	11	60	50	65R4935	37.48
● NPS43-M	12	5	60	120	65R4936	37.13
● NPS44-M	15	4	60	150	65R4937	37.48
● NPS45-M	24	2.5	60	240	65R4938	37.48
● NPS48-M	48	1.25	60	480	65R4939	36.04

*Peak-to-peak with 20MHz bandwidth and 10µF (tantalum capacitor) in parallel with a 0.1µF capacitor at rated line voltage and load ranges
(167439)

NPS60-M SERIES 60W POWER SUPPLIES

RoHS Compliant Available

ARTESYN EMBEDDED TECHNOLOGIES

- Medical and ITE Safety Approvals
- Universal input
- Less than 1U high
- 2" x 4" footprint
- Remote sense
- Overload and short circuit protection
- Adjustable output voltage
- High efficiency
- High MTBF
- Built in EMI filter (CISPR 22 Class B)
- International Efficiency Level V, Energy Star 2.0 & CeC compliant (except **NPS62-M**)
- Less than 300 mW no-load power consumption
- 0°C to +80°C operation
- Input power <74 watts
- Complies with EN61000-3-2
- UL Class I approved

- Class II approved (with Class A EMI)
- LPX50 enclosure kit available
- Dual AC fuses

Mfg. Part No.	Output Voltage (V)	Output Current (A)	Eff. Typ (%)	Ripple P/P (mV)	Stock No.	Price Each 1-9
NPS62-M	5	11	80	50	85R8993	44.87
● NPS63-M	12	5	87	120	85R8994	43.14
NPS64-M	15	4	87	150	87W8030	43.14
● NPS65-M	24	2.5	87	240	85R8995	22.71

(210023)

LCT43-E SERIES TRIPLE OUTPUT AC-DC POWER SUPPLY

RoHS Compliant Available

ARTESYN EMBEDDED TECHNOLOGIES

- Totally enclosed
- Universal input
- Quick installation
- Built-in EMI filter
- Low output ripple
- Overvoltage and overload protection
- Two-year manufacturer's warranty

SPECIFICATIONS	
Input Range	85 - 264VAC (wide range), 120 - 300VDC
Frequency	47-63Hz
Efficiency	70% typical at full load
EMI Filter	FCC Class B conducted and radiated; CISPR 22 Class B conducted and radiated; EN55022 Class B conducted and radiated; Bellcore GR-1089-core Class B conducted
Max. Power	47W with 12CFM forced air
Size (LxWxH)	3.2" x 6.2" x 1.5"
Operating Temp.	0°C to +70°C

Mfg. Part No.	Output Voltage	Output Current w/ Convection Cooling	Output Current Max. @ 12CFM Forced Air	Stock No.	Price Each 1-9
LCT43-E	5V / 12V / -12V	4A / 1A / 500mA	7A / 1.2A / 500mA	17B6327	56.93

(203772)

LPS50 SERIES SINGLE OUTPUT POWER SUPPLIES

RoHS Compliant Available

ARTESYN EMBEDDED TECHNOLOGIES

- Universal input
- 2 x 4" footprint
- Remote sense
- Overload and short circuit protection
- Adjustable output voltage
- High efficiency
- High MTBF
- LED power good indicator
- Input power <74 watts
- Built in EMI filter (CISPR 22 Class B)
- Complies with EN61000-3-2
- UL Class I approved
- Medical safety approval models available

SPECIFICATIONS	
Input range:	90-264 VAC, 127-300 VDC
Frequency:	47-440 Hz
Inrush current:	<50A @ 230 VAC, cold start @ 25C
Dimensions:	1.29 x 1.72 x 4.00" (H x W x D)

STANDARD SERIES

Mfg. Part No.	Power (W)	Output Voltage (V)	Output Current (A)	Stock No.	Price Each 1-4
LPS52	55	5	11	32M1309	53.89
LPS53	60	12	5	46M4522	53.10
LPS54	60	15	4	32M1310	51.55
LPS55	60	24	2.5	48M0678	52.71
LPS58	60	48	1.25	19K4313	51.55
MEDICAL SERIES					
LPS52-M	55	5	11	19K4306	60.40
LPS53-M	60	12	5	19K4308	60.40
LPS54-M	60	15	4	19K4310	61.08
LPS55-M	60	24	2.5	84K2961	61.08
LPS58-M	60	48	1.25	19K4314	60.40

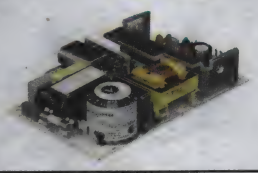
(83902)

LPS40-M SERIES 40W MEDICAL AC/DC POWER SUPPLIES

RoHS Compliant Available

ARTESYN EMBEDDED TECHNOLOGIES

- Medical safety approvals
- Universal input
- 3" x 5" footprint
- Less than 1U high
- Remote sense on main output
- Low output ripple
- Adjustable 5V output
- Overvoltage protection
- Overload protection
- 110 KHz switching frequency



SPECIFICATIONS:	
Input Voltage:	85-264VAC (120-300VDC)
Input Frequency:	47-440Hz
Efficiency:	70% typical at full load
Maximum Power:	40 W for convection; 55 W with 30CFM forced air
Operating Temp:	0° to 50°C ambient derate each output at 2.5% per degree from 50° to 70°C -20°C start up

CONTINUED

LPS40-M SERIES 40W MEDICAL AC/DC POWER SUPPLIES (CONT.)

Mfg. Part No.	Output Voltage (V)	Output w/ Convection Cooling Power (W)	Output w/ Convection Cooling Current (A)	Output w/ 30CFM Forced Air Power (W)	Output w/ 30CFM Forced Air Current (A)	Stock No.	Price Each 1-9
LPS42-M	5	40	8	55	11	17B6360	56.64
LPS43-M	12	40	3.3	55	4.5	17B6361	57.49
LPS44-M	15	40	2.6	55	3.6	17B6362	56.64
LPS45-M	24	40	1.6	55	2.3	17B6363	56.64

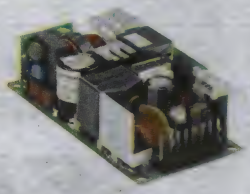
(196400)

LPS100-M SERIES 150W MEDICAL AC/DC POWER SUPPLIES

RoHS Compliant Available

ARTESYN EMBEDDED TECHNOLOGIES

- Medical and ITE safeties
- Active power factor correction
- 2" x 4" footprint
- Less than 1U high
- EN61000-3-2 compliant
- Remote sense
- Power fail
- Adjustable main output
- Built-in Class B EMI filter
- Overvoltage protection
- Overload protection
- Thermal overload protection
- Isolated12 V Fan output



SPECIFICATIONS:	
Input Voltage:	90-264VAC (120-300VDC)
Input Frequency:	47-63Hz
Efficiency:	88% typical at full load
Maximum Power:	100 W for convection (80 W for **LPS102-M**); 150 W with 30 CFM forced air (120 W for **LPS102-M**)
Fan Output:	12 V @ 1 A isolated, ± 10%
Operating Temp:	0° to 50°C ambient derate each output at 2.5% per degree from 50° to 70°C -20°C start up

Mfg. Part No.	Output Voltage (V)	Output w/ Convection Cooling Power (W)	Output w/ Convection Cooling Current (A)	Output w/ 30CFM Forced Air Power (W)	Output w/ 30CFM Forced Air Current (A)	Stock No.	Price Each 1-4
LPS102-M	5	80	16	120	24	68R2472	93.43
LPS103-M	12	100	8.3	150	12.5	12P5577	94.11
LPS104-M	15	100	6.7	150	10	68R2473	93.43
LPS105-M	24	100	4.2	150	6.3	68R2474	93.43
LPS108-M	48	100	2.1	150	3.1	68R2475	94.11
LPS109-M	54	150	2.8	150	2.8	05W4917	91.37

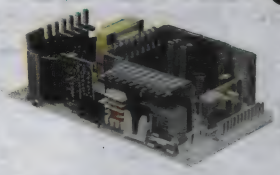
(196397)

LPQ110 SERIES AC/DC POWER SUPPLIES

RoHS Compliant Available

ARTESYN EMBEDDED TECHNOLOGIES

- Universal input
- High efficiency
- Remote sense on main output
- Built-in EMI filter
- Low output ripple
- Adjustable 5V output
- Overvoltage and overload protection
- Adjustable floating 4th output (**LPQ112** and **LPQ113**)
- Power fail
- Optional L bracket (**-B suffix**)
- Cover kit available (**LPX110-C**); *go online or call*



SPECIFICATIONS	
Input Range	85-264VAC, 120-300VDC
Frequency	47-440Hz
Efficiency	70% typical at full load
EMI Filter	FCC Class B conducted; CISPR 22 Class B conducted; EN55022 Class B conducted; VDE 0878 PT3 Class B conducted
Max. Power	80W for convection; 110W with 30CFM forced air
Operating Temp.	0° to +50°C ambient, derate each output at 2.5%/degree from +50° to +70°C

Mfg. Part No.	Output Voltage	Output Current w/ Convection Cooling	Output Current Max. @ 30CFM Forced Air	Stock No.	Price Each 1-9
LPQ112	5V/12V/-12V/±5-25V	9A/4.5A/700mA/2.5A	11A/5A/1A/3A	01M8181	140.14
LPQ113	5V/15V/-15V/±5-25V	9A/4.5A/700mA/2.5A	11A/5A/1A/3A	52F114	136.08
LPQ113-B	5V/15V/-15V/±5-25V	9A/4.5A/700mA/2.5A	11A/5A/1A/3A	17B6328	145.06
LPQ114	5V/12V/-15V/24V	9A/4.5A/700mA/3.5A	11A/5A/1A/4.5A	52F115	133.53
LPQ114-B	5V/12V/-12V/24V	9A/4.5A/700mA/3.5A	11A/5A/1A/4.5A	17B6329	147.79

(203862)

SWITCHING POWER SUPPLIES

LCC250 SERIES POWER SUPPLIES

RoHS Compliant Available

ARTESYN EMBEDDED TECHNOLOGIES

- Wide Operating Temperature Range suited for outdoor application
- IP64 Rated
- Conduction-cooled or convection
- Differential Remote Sense
- Output Adjust
- Output On/Off (Positive or Negative logic user selectable)

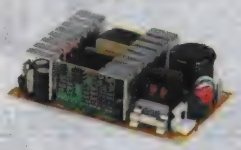
Mfg. Part No.	Output Voltage (V)	Output Current (A)	Output Ripple P/P	Adjustment Range	Stock No.	Price Each 1-4
● LCC250-12U-4P	12	20.8	1%	±10%	48T3288	188.05
● LCC250-24U-4P	24	10.4	1%	+14.6 / -15%	48T3668	188.05

(210041)

NLP SERIES POWER SUPPLIES

RoHS Compliant Available

ARTESYN EMBEDDED TECHNOLOGIES



NLP series power supplies include overvoltage and short-circuit protection, and meet EN55022 and EN55011 conducted and radiated emissions level B. Available in single-, dual-, and triple-output models. Two-year manufacturer's warranty. All models are UL listed, CSA certified, VDE approved.

20-25-WATT UNIVERSAL OPEN-FRAME SWITCHERS; 4.00 x 2.07 x 0.91″

Mfg. Part No.	Output Volts (V) 1	2	3	Max. Output Amps (A) 1	2	3	Stock No.	Price Each 1-9
● NLP25-7608J	+5	+12	-12	2.0	0.8	0.1	71K8922	41.44
● NLP25-7629J	+5	+12	...	2.0	0.8	...	71K8926	40.23
● NLP25-7605J	+5	...	...	5.0	...	...	71K8920	40.23

40-WATT UNIVERSAL OPEN-FRAME SWITCHERS; 4.25 x 2.5 x 1.12″

Mfg. Part No.	Output 1	Output 2	Output 3	Stock No.	Price Each 1-9
● NLP40-7605J	5V @ 8.0A	...	...	71K8936	48.61
● NLP40-7612J	12V @ 3.3A	...	...	71K8939	51.64
● NLP40-7615J	15V @ 2.6A	...	...	71K8940	50.07
● NLP40-7624J	24V @ 1.6A	...	...	71K8942	50.14
● NLP40-7617J	48V @ 0.8A	...	...	71K8941	48.61
● NLP40-7608J	5V @ 4.0A	+12V @ 2.0A	–12V @ 0.2A	71K8937	45.47
● NLP40-7610J	5V @ 4.0A	+15V @ 1.6A	–15V @ 0.2A	71K8938	50.79
● NLP40-7629J	5V @ 4.0A	+12V @ 2.0A	...	71K8944	52.15
● NLP40-7627J	12V @ 1.8A	–12V @ 1.8A	...	71K8943	51.16

60-75-WATT OPEN-FRAME SWITCHERS WITH HARMONIC CORRECTION (PER EN61000-3-2); 5.00 x 3.00 x 1.26″

Mfg. Part No.	Output 1	Output 2	Output 3	Stock No.	Price Each 1-9
● NLP65-9605J	5V @ 10.0A	...	...	71K8957	66.10
● NLP65-9612J	12V @ 5.4A	...	...	71K8964	66.84
● NLP65-9912J	12V @ 7.0A	...	...	71K8972	77.75
● NLP65-9624J	24V @ 2.7A	...	...	71K8969	68.85
● NLP65-9629J	5V @ 7.0A	+12V @ 2.5A	...	71K8970	66.10
● NLP65-9620J	5V @ 7.0A	+24V @ 2.0A	...	71K8967	68.74
● NLP65-9608J	5V @ 7.0A	+12V @ 2.5A	–12V @ 0.65A	71K8960	68.74
● NLP65-9610J	5V @ 7.0A	+15V @ 2.2A	–15V @ 0.65A	71K8962	69.51

65-75-WATT OPEN-FRAME SWITCHERS; 5.00 x 3.00 x 1.26″

● NLP65-7605J	5V @ 10.0A	...	...	71K8946	64.16
● NLP65-7612J	12V @ 5.4A	...	...	71K8951	67.49
● NLP65-7624J	24V @ 2.7A	...	...	71K8955	64.89
● NLP65-7629J	5V @ 7.0A	+12V @ 2.5A	...	71K8956	64.89
● NLP65-7608J	5V @ 7.0A	+12V @ 2.5A	–12V @ 0.65A	71K8948	64.89
● NLP65-7608GJ	5V @ 7.0A	+12V @ 2.5A	–12V @ 0.65A	71K8947	66.10
● NLP65-7610GJ	5V @ 7.5A	+15V @ 2.2A	–15V @ 0.65A	71K8949	66.10

80-110-WATT UNIVERSAL OPEN-FRAME SWITCHERS WITH PFC; 6.50 x 3.00 x 1.26″

Mfg. Part No.	Output Volts (V) 1	2	3	Max. Output Amps (A) 1	2	3	Stock No.	Price Each 1-9
● NLP110-9605J*	+5	...	...	15	...	...	71K8898	104.39
● NLP110-9608J*	+12	-5	-12	6.5	13	0.65	71K8899	104.39
● NLP110-9612J*	+12	...	...	6.4	...	...	71K8900	104.39
● NLP110-9617J*	+48	...	...	1.6	...	...	71K8901	104.39
● NLP110-9624J*	+24	...	...	3.2	...	...	71K8902	106.39
● NLP110-9693J*	+5	+3.3	+12	13	13	0.65	71K8903	107.23
● NLP110-9924J*	+24	...	...	3.2	...	...	71K8908	107.23

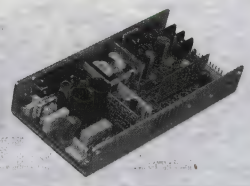
*Free air convection
(52181)

SINGLE AND QUAD OUTPUT 110 TO 350W POWER SUPPLIES

RoHS Compliant Available

ARTESYN EMBEDDED TECHNOLOGIES

- High Efficiency
- Remote Sense
- Built-In EMI Filter
- Low Output Ripple
- Adjustable Output
- Overvoltage,Overload and Thermal Overload Protection
- **-C suffix** includes cover
- **-CF suffix** includes conver with fan
- **-CEF suffix** includes end-mount fan chassis
- **-M suffix** indicates medical grade



SINGLE OUTPUT

Mfg. Part No.	Power (W)	Output Voltage (V)	Output Current (A)	Stock No.	Price Each 1-9
● LPS122	120	5	26	31K9270	151.10
● LPS125	120	24	5.4	45H3154	151.10
● LPS128	120	48	2.7	60H8174	151.10
● LPS172	175	5	22	67K0328	211.79
● LPS173	175	12	9.1	67K0329	211.79
● LPS174	175	15	7.3	67K0330	211.79
● LPS175	175	24	4.5	67K0331	211.79
● LPS175-M	175	24	4.5	60H8181	238.27
LPS255-CF	250	24	10.4	60H8182	330.74
● LPS352-C	350	5	70	16F7031	346.72
● LPS353-C	350	12	29.2	32M1308	376.43
● LPS354-C	350	15	23.3	16F7033	364.05
● LPS355-C	350	24	14.6	16F7034	371.01

QUAD OUTPUT

Mfg. Part No.	Power (W)	Output Voltage	Output Current	Stock No.	Price Each 1-9
● LPQ142	145	5V, 12V, -12V, ± 3.3V to 25V	12A, 5A, 1A, 1.5A	67K0321	191.22
● LPQ142-CF	145	5V, 12V, -12V, ± 3.3V to 25V	25A, 6A, 1.5A, 4.5A	67K0322	224.48
● LPQ172	175	5V, 12V, -12V, ± 3.3V to 25V	15A, 6A, 1.5A, 2A	67K0326	230.69
● LPQ172-C	175	5V, 12V, -12V, ± 3.3V to 25V	15A, 6A, 1.5A, 2A	60H8172	236.12
● LPQ173	175	5V, 12V, -12V, 5V	10A, 6A, 200mA, 10A	24K4621	227.79
● LPQ201-M	200	3.3V, 5V, 12V, -12V	13A, 13A, 5A, 1A	69R7145	145.79
● LPQ202-M	200	5V, 12V, 24V, -12V	13A, 5A, 1.5A, 1A	69R7146	150.75
● LPQ252-C	250	5V, 12V, -12V, ± 5V to 25V	35A, 10A, 6A, 6A	38C8398	309.13
● LPQ252-CF	250	5V, 12V, -12V, ± 5V to 25V	35A, 10A, 6A, 6A	88F3421	358.15
● LPQ253-CF	250	5V, 15V, -15V, ± 5V to 25V	35A, 10A, 6A, 6A	94B0183	335.68
● LPQ253-CEF	250	5V, 15V, -15V, ± 5V to 25V	35A, 10A, 6A, 6A	17B6333	376.42
● LPQ253-C	250	5V, 15V, -15V, ± 5V to 25V	35A, 10A, 6A, 6A	94B1120	309.13
● LPQ352-C	350	5V, 12V, -12V, 3.3V to 24V	50A, 12A, 6A, 6A	16F7035	412.37
● LPQ352-CEF	350	5V, 12V, -12V, 3.3V to 24V	50A, 12A, 6A, 6A	17B6334	468.10
● LPQ352-CF	350	5V, 12V, -12V, 3.3V to 24V	50A, 12A, 6A, 6A	17B6335	468.10
● LPQ353-C	350	5V, 15V, -15V, 3.3V to 24V	50A, 12A, 6A, 6A	16F7036	407.29

MATING CONNECTOR KITS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 70-841-009	LPS150 Series Mating Connector Kit	16C7360	10.08
● 70-841-005	LPS250 Series Mating Connector Kit	27C7690	12.54
● 70-841-011	LPX 350 Series Mating Connector Kit	10C2595	12.54

COVERS

● LPX-150-C	LP150 Series Cover	67K0332	12.41
● LPX200	Cover Enclosure Kit	85R8799	10.36

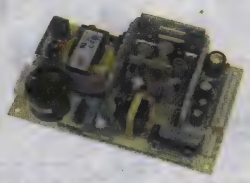
(70272)

NFS110 SERIES 110W SINGLE AND QUAD OUTPUT AC/DC POWER SUPPLIES

RoHS Compliant Available

ARTESYN EMBEDDED TECHNOLOGIES

- Single and multi output
- 7.0 x 4.25 x 1.8″ package
- 110W with 20CFM
- Adjustable outputs
- EN55022, EN55011 conducted emissions level B
- Two-year manufacturer's warranty



NFS110 series is a 110 W universal input AC-DC power supply on a 7 x 4.25″ card. **NFS110 series** is highly reliable and versatile product for a wide range of communication and industrial applications, with a very high peak current capability on each output for drive and motor applications. The NFS110 provides 80W of output power with free air convection cooling which can be boosted to 110W with 20 CFM of air.

SPECIFICATIONS:	
Input Voltage:	85-264VAC (120-370VDC)
Input Frequency:	47-440Hz
Line Regulation:	±0.1% max.

➤ CONTINUED ➤

NFS110 SERIES 110W SINGLE AND QUAD OUTPUT AC/DC POWER SUPPLIES (CONT.)

SPECIFICATIONS:

Isolation Voltage:	3000 VAC Input/output 1500 VAC Input/chassis
Operating Temperature:	0°C to +70°C
Approvals and Standards:	VDE0805, EN60950, IEC950, IEC1010, UL1950, CSA C22.2 No. 950

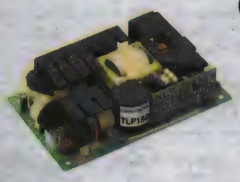
Mfg. Part No.	Output Power (W) Max.	Output 1 (V)	Output 1 (A)	Output 2 (V)	Output 2 (A)	Output 3 (V)	Output 3 (A)	Output 4 (V)	Output 4 (A)	Stock No.	Price Each 1-4
NFS110-7601PJ				12	4.5	-12	0.5	-5	0.5	71K8859	115.98
NFS110-7602PJ	110	24	4.5	24	3.5	12	4.5	-12	0.5	71K8861	115.98
NFS110-7604PJ	110	15	5	15	4	-15	0.5	-5	0.5	71K8863	115.98
NFS110-7612J	110	12	7	...	...	...	...	...	...	71K8864	117.76
NFS110-7624J	110	24	3.5	...	...	...	...	...	...	71K8865	116.80
ACCESSORIES											
NFS110CJ	Cover Kit for NFS110 Series									71K8871	25.43

(179635)

TLP150 SERIES 150 WATT SINGLE OUTPUT AC/DC POWER SUPPLIES

RoHS Compliant Available

ARTESYN EMBEDDED TECHNOLOGIES



- 150W on main channel with only 200LFM
- Low profile fits 1U applications
- Active PFC and EN61000-3-2 compliant
- Integrated or-ing diode
- Active current sharing
- Integrated control and monitoring features
- Compliance to EN55022-B conducted noise standard
- 12V fan output
- 5V standby output (optional with **F suffix**)
- Two-year manufacturer's warranty

TLP150 series 150 watt universal input AC/DC power supplies include over current, over voltage and over temperature protection. The main output channel is compatible with systems that implement distributed power and point-of-load architectures. It can also be used to power electromechanical devices such as relays, motors and pumps. **TLP150 medical series** has a low earth leakage current suitable for use in medical equipment.

STANDARD SERIES — DIMENSIONS: 5L x3W x 1.25"H

Mfg. Part No.	DC Output Voltage (V)	Output Current (A)*	Output Power (W)	Efficiency % (Typ.)	Stock No.	Price Each 1-9
TLP150R-96S12FJ	12	12.5	150	81	77K8843	152.98
TLP150R-96S12J	12	12.5	150	81	77K8844	147.41
TLP150R-96S24FJ	24	6.3	150	81	77K8845	152.98
TLP150R-96S24J	24	6.3	150	81	77K8846	152.42
TLP150R-96S36J	36	4.2	150	81	95M8337	147.41
TLP150R-96S48FJ	48	3.2	150	81	77K8847	152.98
TLP150R-96S48J	48	3.2	150	81	77K8848	147.41
MEDICAL SERIES						
TLP150N-99S12FJ	12	12.5	150	81	77K8839	167.94
TLP150N-99S12J	12	12.5	150	81	77K8840	162.15
TLP150N-99S24FJ	24	6.3	150	81	30M2714	167.94
TLP150N-99S24J	24	6.3	150	81	77K8841	164.22

*Forced air, 20CFM at 1 atmosphere, 150W maximum

(110630)

MVAD040 SERIES 40W HIGH-DENSITY AC/DC POWER SUPPLIES

NEW

RoHS Compliant Available

muRata Ps Murata Power Solutions

- ITE (2nd) and Medical 3rd ed. MOOP safety approved
- 40W compact high density
- 2" x 4" standard footprint
- High efficiency up to 89%
- Universal AC input
- Low profile - 1U package
- Convection-cooled operation up to 40W
- Complies with 5000m altitude
- UL Class I and II approved
- Input power < 0.3W @ no load
- Complies with ErP/Energy Star requirement average efficiency (24V/48V) > 85.3%
- UL recognized, VDE approved, CE certified

MVAD040series switching power supplies utilize advanced component and circuit technologies to deliver high efficiency. Designed for medical, telecom, and industrial applications to satisfy 1U height design considerations, the **MVAD040 series** measures only 2" x 4" x 1.3". All models offer universal AC input and compliance to worldwide safety and EMC standards.

Mfg. Part No.	Natural Convection Cooling	Main Output (V1)	Output Current	Stock No.	Price Each 1-4
MVAD040-12	40W	12	3.34	01X0586	24.12
MVAD040-24		24	1.67	01X0587	24.12
MVAD040-48		48	840	01X0588	24.12

(211219)

MVAD065 SERIES 65W HIGH DENSITY AC/DC POWER SUPPLIES

RoHS Compliant Available

muRata Ps Murata Power Solutions

- ITE (2nd) and Medical (3rd ed. MOOP, Risk management) safety approved
- 65W compact high density
- 2" x 4" standard footprint
- High efficiency up to 90%
- Remote Sense
- Universal AC input
- Low profile - 1U package
- Convection-cooled operation up to 65W
- Complies with 5000m altitude
- RoHS compliant
- Input power < 74W
- Input power < 0.3W @ no load
- Complies with ErP/Energy Star requirement (average efficiency > 87%)

MVAD065 series switching power supplies utilize advanced component and circuit technologies to deliver high efficiency. Designed for medical, telecom, and industrial applications to satisfy 1U height design considerations, the **MVAD065 series** measures only 2.0" x 4.0" x 1.3". All models offer universal AC input and compliance to worldwide safety and EMC standards.

Mfg. Part No.	Natural Convection Cooling	Main Output (V1)	Output Current (A)	Stock No.	Price Each 1-4
MVAD065-12	60W	12	5	86W5703	29.76
MVAD065-24	65W	24	2.71	86W5704	29.76
MVAD065-48		48	1.36	86W5705	29.76

(209926)

MVAB120 SERIES 120W HIGH DENSITY 2" x 4" AC/DC POWER SUPPLIES

RoHS Compliant Available

muRata Ps Murata Power Solutions

- 120W compact high density
- 2"x 4" standard footprint
- High efficiency up to 91%
- Universal AC input with active PFC
- Low profile - 1U package
- Convection-cooled operation up to 75W
- Over-voltage, over-current and over-temperature protection
- Operating temperature: -20°C to +70°C
- ITE (2nd) and medical 3rd ed. MOOP safety approved
- UL Class I and II approved
- Two-year manufacturer's warranty

MVAB120 series switching power supplies utilize advanced component and circuit technologies to deliver high efficiency. Designed for medical, telecom and industrial applications to satisfy 1U height design considerations. All models offer universal AC input with active power factor correction (PFC) and compliance to worldwide safety and EMC standards — IEC60950-1:2006/A11:2009; UL60950-1 2nd Edition 2007-03-27, CSA 22.2 No.60950-1 2nd Edition 2007.03; EN60950-1:2006+A11:2009; IEC60601-1 Edition 3 MOOP; ANSI/AAMI ES60601-1 (2005+C1:09+A2:10), CSA 22.2 No. 60601-1 (2008) 3rd Edition MOOP; EN60601-1:2006 3rd Edition MOOP (Evaluated); CE marked per LVD.

FOR INDUSTRIAL/TELECOM APPLICATIONS — 2" x 4" x 1.35"

Mfg. Part No.	Natural Convection Cooling	Forced Air Cooling	Main Output (V1)	Output Current (A)	Stock No.	Price Each 1-4
MVAB120-12	75W	120W @ 250LFM	12	10A	06W1794	52.28
MVAB120-24			24	5A	06W1795	52.28
MVAB120-28			28	4.29A	38X4522	52.28
MVAB120-48			48	2.5A	06W1796	52.28

FOR MEDICAL AND INDUSTRIAL/TELECOM APPLICATIONS — 2" x 4" x 1.41"

These medically approved models are ideal for Mains-powered medical equipment and meet UL-60601-1 3rd edition safety standards for MOOP (Means of Operator Protection). **NOTE:** Mfg. part nos. ending in -01 are medically approved models; mfg. part numbers not ending with -01 are not medically approved. Medical approved models are not designed for DC input voltage.

MVAB120-12-01	75W	120W @ 250LFM	12	10A	38X4520	61.40
MVAB120-24-01			24	5A	38X4521	61.40
MVAB120-28-01			28	4.29A	38X4523	61.40
MVAB120-48-01			48	2.5A	38X4524	61.40

(209685)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures

(212568)

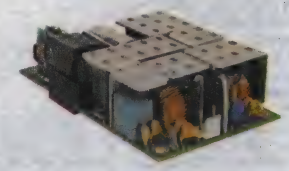
SWITCHING POWER SUPPLIES

MVAC250 SERIES 250W HIGH DENSITY AC/DC POWER SUPPLIES

RoHS Compliant Available

muRata Ps Murata Power Solutions

- 3rd ed. medical and ITE safety approved
- 250W compact high density
- 3″ x 5″ standard footprint
- High efficiency up to 94%
- Remote sense
- Remote On/Off, Power OK (MVAC250-xxAFx)
- Universal AC input with active PFC
- Less than 1U high – 1.4″
- Convection cooled operation up to 170W
- Isolated 12V@1A fan output
- Isolated 5V@2A standby output with models MVAC250-xxAFx
- RoHS compliant
- Active inrush protection
- Current sharing option



MVAC250 series switching power supplies utilize advanced component and circuit technologies to deliver high efficiency. Designed for medical, telecom and industrial applications to satisfy 1U height design considerations, the **MVAC250 series** measures only 3.0″ x 5.0″ x 1.40″. All models offer universal AC input with active power factor correction (PFC) and compliance to worldwide safety and EMC standards.

Mfg. Part No.	Natural Convection Cooling	Forced Air Cooling	Main Out (V1)	Fan Out (V2)	Aux Out (V3)	Output Current (A)	Stock No.	Price Each 1-4
● MVAC250-12F	170W	250W @ 250LFM	12	12	...	20.8	48W6570	128.19
● MVAC250-24F			24	12	...	10.4	48W6572	133.96
● MVAC250-48F			50	12	...	5	48W6574	128.19
● MVAC250-12AFD			12	12	5	20.8	48W6569	142.45
● MVAC250-24AFD			24	12	5	10.4	48W6571	136.32
● MVAC250-48AFD			50	12	5	5	48W6573	142.45

(209925)

MVAC400 SERIES 400W HIGH DENSITY AC/DC POWER SUPPLIES

RoHS Compliant Available

muRata Ps Murata Power Solutions

- High efficiency up to 94%
- 3″ x 5″ standard footprint
- 1.5kVDC isolation
- Remote sense
- Remote On/Off, Power OK
- Isolated 12V@1A fan output
- Isolated 5V@2A standby output

MVAC400 series switching power supplies utilize advanced component and circuit technologies to deliver high efficiency. Designed for medical, computing, communications, telecom and other OEM applications to satisfy 1U height design considerations, the **MVAC400 series** measures only 3.0″ x 5.0″ x 1.40″. All models offer universal AC input with active power factor correction (PFC) and compliance to worldwide safety and EMC standards.

SPECIFICATIONS:	
Input Voltage:	90-264VAC (127-300VDC optionally available)*
Input Frequency:	47-63Hz
Operating Temperature Range:	-10°C to 50°C
Safety:	IEC60950-1:2006/A11:2009, UL60950-1 2nd Ed. 2007-03-27, CSA22.2 N0.60950-1 2nd Ed. 2007.03, EN60690-1:2006+A11:2009 (Evaluated), IEC60601-1 Ed. 3 MOOP, ANSI/AAMI ES60601-1 (2005+C1:09+A2:10), CSA 22.2 No. 60601-1 (2008) 3rd Edition MOOP, EN60601-1:2006 3rd ed.MOOP (Evaluated), CE Marking per LVD

Mfg. Part No.	Natural Convection Cooling	Forced Air Cooling	Main Output (V1)	Output Current (A)	Stock No.	Price Each 1-4
● MVAC400-12AF	250W	400W @ 250LFM	12	33.3	06W1797	178.58
● MVAC400-24AF			24	16.7	06W1799	186.62
● MVAC400-48AF			50	8	06W1801	178.58
● MVAC400-12AFD			12	33.3	06W1798	178.58
● MVAC400-24AFD			24	16.7	06W1800	178.58
● MVAC400-48AFD			50	8	06W1802	178.58

*DC Input 127-300VDC option available; *go online or call.*
(209883)

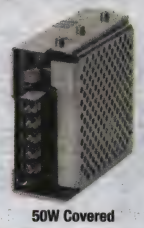
S8JX SERIES SWITCH MODE POWER SUPPLIES

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

15W Covered

15W Open Frame

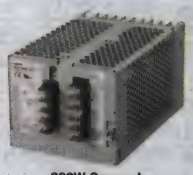


50W Covered

50W Open Frame

100W Covered

100W Open Frame



300W Covered

- Wide variety of output voltage variations: 48V for 15 to 150W and 5 or 12V for 150W
- Input voltage: 100 to 240VAC / 80 to 370VDC (free), S8JX-G15005 switchable between 100 to 120VAC and 200 to 240VAC (DC power cannot be input)
- DIN rail mount
- Screw-mount at the top (except 300W model)
- Safety standards: UL 508/60950-1, cUL CSA C22.2 No. 107.1, cUR CSA C22.2 No. 60950-1, EN 50178 (VDE 0160), EN 60950-1 (VDE 0805 Teil 1)

Mfg. Part No.	Power (W)	Output Voltage (V)	Output Current (A)	Efficiency (%)	Configuration	Stock No.	Price Each
● S8JX-G01505CD	15	5	3	68	Covered	73R0410	71.00
● S8JX-G01505D	15	5	3	68	Open Frame	73R0411	67.75
● S8JX-G01512CD	15	12	1.3	68	Covered	73R0414	71.81
● S8JX-G01512D	15	12	1.3	68	Open Frame	73R0415	67.75
● S8JX-G01524CD	15	24	0.65	68	Covered	73R0422	71.81
● S8JX-G01524D	15	24	0.65	68	Open Frame	73R0423	67.75
● S8JX-G03505CD	35	5	7	73	Covered	73R0426	77.42
● S8JX-G03505D	35	5	7	73	Open Frame	73R0427	77.42
● S8JX-G03512CD	35	12	3	73	Covered	73R0430	82.07
● S8JX-G03512D	35	12	3	73	Open Frame	73R0431	77.42
● S8JX-G03524CD	35	24	1.5	73	Covered	73R0438	82.07
● S8JX-G03524D	35	24	1.5	73	Open Frame	73R0439	77.42
● S8JX-G05005CD	50	5	10	76	Covered	09R1285	93.79
● S8JX-G05005D	50	5	10	76	Open Frame	09R1286	88.48
● S8JX-G05012CD	50	12	4.2	76	Covered	09R1289	88.48
● S8JX-G05012D	50	12	4.2	76	Open Frame	09R1290	88.48
● S8JX-G05024CD	50	24	2.1	76	Covered	09R1293	73.95
● S8JX-G05024D	50	24	2.1	76	Open Frame	09R1294	88.48
● S8JX-G10005CD	100	5	20	76	Covered	09R1297	106.91
● S8JX-G10005D	100	5	20	76	Open Frame	09R1298	102.31
● S8JX-G10012CD	100	12	8.5	76	Covered	09R1301	106.91
● S8JX-G10012D	100	12	8.5	76	Open Frame	09R1302	102.31
● S8JX-G10024CD	100	24	4.5	76	Covered	63P9107	87.96
● S8JX-G10024D	100	24	4.5	76	Open Frame	09R1305	102.31
● S8JX-G15024CD	150	24	6.5	85	Covered	09R1308	121.36
● S8JX-G15024D	150	24	6.5	85	Open Frame	09R1309	121.36
● S8JX-G30024CD	300	24	14	82	Covered	73R0441	336.59

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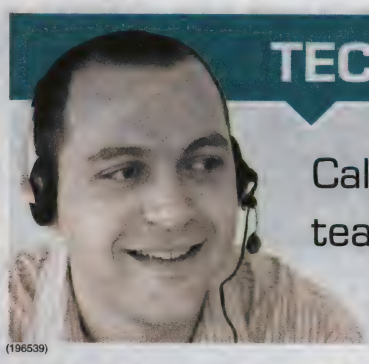


TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196539)

SCP SERIES: EXTREME ENVIRONMENT POWER SUPPLIES

RoHS Compliant Available

SOLA HD

Features:

- IP66/67 versatile, NEMA 4X Rated
- Listed power supply for stand alone applications
- Can be mounted in any orientation without limitation
- Universal input
- High ambient temperature up to 60°C without derating
- Worldwide approvals
- DC OK green LED
- Ffive-year limited manufacturer's warranty

Mfg. part no. SCP100S24X-CP is designed for control power applications where a grounded power supply output is required and **mfg. part no. SCP100S24X-DVN** for DeviceNet™ application where an isolated output from ground is required.

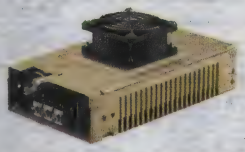
Mfg. Part No.	Power (W)	Output Voltage (V)	Output Current (A)	Stock No.	Price Each 1-4
SCP100S24X-CP	95	24	3.8	08N8132	335.44
SCP100S24X-DVN	95	24	3.8	46P6867	340.60

(84800)

GL SERIES SINGLE- AND MULTI-OUTPUT SWITCHERS

RoHS Compliant Available

SOLA HD



- Industry standard footprints
- Universal input (85-264VAC)
- Full power to 50°C
- High demonstrated MTBF
- Automatic overvoltage protection
- Overload protection
- Built-in EMI Filtering
- Extensive safety approvals
- Derated operation to 70°C
- 250 VA and higher VA size enclosed
- Two-year limited manufacturer's warranty

GL series provides a broad range of AC/DC power supply solutions that covers power ratings from 25 watts to 500 watts for use in various industrial and medical applications requiring standard footprint size and very high reliability. These low-profile AC/DC switchers offer universal input voltage with no switches or jumpers, ideal for higher volume worldwide applications. **M** suffix indicates medical models; **C** suffix with cover; **CEF** with cover and end fan; **CF** with cover and top fan.

DIMENSIONS: 5.00 × 3.00 x 1.14″ (L x W x H)

Mfg. Part No.	Output 1	Output 2	Output 3	Output 4	Power Rating (W)	Stock No.	Price Each 1-4
GLS22	5V, 5A*	...	...	...	25	87P0920	67.57
GLT22	5V, 3A	12V, 1.5A	-12V, 0.5A	...	25	87P0969	63.15
GLS43	12V, 3.3A*	...	...	...	40	87P0936	73.22
GLS45	24V, 1.6A*	...	...	...	40	87P0942	73.22
GLT42	5V, 4A	12V, 2A	-12V, 0.5A	...	40	87P0977	66.33
GLT45	5V, 4A	15V, 2A	-15V, 0.5A	...	40	87P0984	76.40
DIMENSIONS: 4.00 × 2.00 x 1.3″ (L x W x H)							
GLT52	5V, 8A	12V, 3A	-12V, 0.5A	...	50	87P0989	81.17
GLT54	5V, 8A	24V, 1.5A	-12V, 0.5A	...	50	87P0993	81.17
GLS53	12V, 5A*	...	...	...	60	87P0953	75.57
GLS55	24V, 2.5A*	...	...	...	60	87P0958	77.86
DIMENSIONS: 5.00 × 3.00 x 1.69″ (L x W x H)							
GLT62	5V, 7A	12V, 3A	-12V, 0.7A	...	60	87P0995	88.47
GLT64	5V, 7A	12V, 3A	-5V, 0.7A	...	60	87P0999	102.73
GLT65	5V, 7A	24V, 1.5A	+12V, 0.7A	...	60	87P1000	97.88
DIMENSIONS: 7.00 × 4.00 x 1.8″ (L x W x H)							
GLQ112	5V, 9A	12V, 4.5A	-12V, 0.7A	...	80	87P0882	205.25
GLQ113	5V, 9A	15V, 4.5A	-15V, 07A	...	80	87P0883	213.56
GLQ114	5V, 9A	12V, 4.5A	-12V, 1A	...	80	87P0884	205.25
DIMENSIONS: 7.00 × 4.00 x 1.5″ (L x W x H)							
GLQ142	5V, 12A	12V, 5A	-12V, 1A	±3.3-25V, 1.5A*	80	87P0886	318.82
DIMENSIONS: 8.5 × 4.25 x 1.5″ (L x W x H)							
GLS153	12V, 9.1A*	...	...	...	110	87P0905	312.13
GLS155	24V, 4.5A*	...	...	...	110	87P0906	299.98
DIMENSIONS: 4.00 × 2.00″ (L x W)							
GLS105-M	24V, 4.2A	...	...	...	100	87P0898	229.92
DIMENSIONS: 8.5 × 4.25 x 1.5″ (L x W x H)							
GLQ152	5V, 15A	12V, 2.6A	-12V, 2A	±5-25V, 2.5A*	110	87P0887	338.39
GLQ153	5V, 15A	15V, 4.8A	-15V, 1.6A	±5-25V, 2.5A*	110	87P0888	322.28
GLQ154	5V, 15A	12V, 6A	-12V, 2A	24V, 3.5A	110	87P0889	325.22
GLS173	12V, 9.1A*	...	...	...	110	87P0909	352.80
GLQ172	5V, 15A	12V, 6A	-12V, 0.2A	±3.3-25V, 2A*	110	87P0890	379.42
DIMENSIONS: 5.00 × 3.00″ (L x W)							
GLS205-M	24V, 5.2A	...	...	...	125	87P0918	383.20
DIMENSIONS: 9.00 × 5.00 x 2″ (L x W x H)***							
GLS253-C	12V, 21A	...	...	...	250	87P0926	469.03
GLS255-C	24V, 10.4A*	...	...	...	250	87P0927	480.64

➤CONTINUED➤

GL SERIES SINGLE- AND MULTI-OUTPUT SWITCHERS (CONT.)

DIMENSIONS: 9.00 × 5.00 x 2.5″ (L x W x H)***

Mfg. Part No.	Output 1	Output 2	Output 3	Output 4	Power Rating (W)	Stock No.	Price Each 1-4
GLQ252-C	5V, 35A	12V,10A	-12V, 6A	±5-25V, 6A*	250	87P0891	519.12
GLQ253-C	5V, 35A	15V,10A	-15V, 6A	±5-25V, 6A*	250	87P0892	519.12
GLS352-C	5V, 70A	...	...	...	350	87P0928	640.70
GLS354-C	15V, 23.3A*	...	...	...	350	87P0930	640.70
GLS355-C	24V, 14.6A*	...	...	...	350	87P0931	698.95
GLS355-CEF	24V, 14.6A*	...	...	...	350	87P0932	698.95
GLQ352-CEF	5V, 50A	12V,12A	-12V, 6A	±3.3-24V, 6A*	350	87P0894	757.21

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
GLX250-CEF	Cover end fan kit for the GL250	87P1010	96.10
GLX250-CF	Cover with top fan kit for the GL250/350	87P1011	67.23
GLX40	Enclosure kit for the GL20 and GL40	87P1012	16.02
GLX200	Enclosure kit for the GL200-M series	73R7414	16.02

*Floating output; ***30 CFM of air is needed for full rating of models with 250 Watts and higher power

(3344)

HK-A SERIES SINGLE OUTPUT 115VAC INPUT INDUSTRIAL POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda
Innovating Reliable Power

- Small size, low profile design
- Adjustable potentiometer
- 85 - 132VAC input, 47-440Hz
- ±10% output adjustment
- Three-year manufacturer's warranty
- UL listed, CSA certified

HK-A series single output 115VAC input industrial power supplies are convection cooled units. Ideal for factory automation applications such as process control, NC-machining, packaging equipment, materials handling, chemical processing and robots. Used for test and measurement applications such as burn-in and test, automated test, instrumentation, measurement and detection. Also popular for automatic service applications such as vending machines, elevators, video gaming and point-of-sale equipment. Operating temperature range: 0°C to +60°C uncovered, 0°C to +50°C covered.

Mfg. Part No.	Output Range (V)	Max. Current *	Power (W)	H x L x D Dimensions (in.)	Stock No.	Price Each 1-9
HK10A-5/A	4.5 - 5.5	2A	10	2.83 x 2.83 x 1.02	80K5870	40.40
HK15A-5/A	4.5 - 5.5	3A	15	2.83 x 3.31 x 1.08	80K5877	42.42
HK25A-5/A	4.5 - 5.5	5A	25	2.83 x 3.90 x 1.26	80K5883	46.46
HK50A-5/A	4.5 - 5.5	10A	50	2.83 x 4.69 x 1.38	80K5887	59.92
HK100A-5/A	4.5 - 5.5	20A	100	3.66 x 5.91 x 1.52	80K5873	99.69
HK150A-5/A	4.5 - 5.5	30A	150	3.66 x 6.69 x 1.85	80K5880	135.74
HK10A-12/A	10.8 - 13.2	900mA	10	2.83 x 2.83 x 1.02	80K5868	40.40
HK15A-12/A	10.8 - 13.2	1.3A	15	2.83 x 3.31 x 1.08	80K5874	42.42
HK25A-12/A	10.8 - 13.2	2.1A	25	2.83 x 3.90 x 1.26	80K5881	46.46
HK50A-12/A	10.8 - 13.2	4.2A	50	2.83 x 4.69 x 1.38	80K5884	59.92
HK100A-12/A	10.8 - 13.2	8.5A	100	3.66 x 5.91 x 1.52	80K5871	99.69
HK150A-12/A	10.8 - 13.2	12.5A	150	3.66 x 6.69 x 1.85	87H0959	135.74
HK10A-15/A	13.5 - 16.5	700mA	10	2.83 x 2.83 x 1.02	84K0209	40.40
HK15A-15/A	13.5 - 16.5	1A	15	2.83 x 3.31 x 1.08	80K5875	42.42
HK25A-15/A	13.5 - 16.5	1.7A	25	2.83 x 3.90 x 1.26	80K5882	46.46
HK50A-15/A	13.5 - 16.5	3.4A	50	2.83 x 4.69 x 1.38	80K5885	59.92
HK100A-15/A	13.5 - 16.5	7A	100	3.66 x 5.91 x 1.52	80K5872	99.69
HK150A-15/A	21.6 - 26.4	10A	100	3.66 x 5.91 x 1.52	80K5878	135.74
HK10A-24/A	21.6 - 26.4	500mA	10	2.83 x 2.83 x 1.02	80K5869	40.40
HK15A-24/A	21.6 - 26.4	700mA	15	2.83 x 3.31 x 1.08	80K5876	42.42
HK25A-24/A	21.6 - 26.4	1.1A	25	2.83 x 3.90 x 1.26	71K4909	46.46
HK50A-24/A	21.6 - 26.4	2.2A	50	2.83 x 4.69 x 1.38	80K5886	59.92
HK100A-24/A	21.6 - 26.4	4.5A	100	3.66 x 5.91 x 1.52	82K8579	99.69
HK150A-24/A	21.6 - 26.4	6.5A	150	3.66 x 6.69 x 1.85	80K5879	135.74

*Derate to 80% load from 0°C to -10°C

(90438)

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(212569)

SWITCHING POWER SUPPLIES

HWS SERIES SINGLE OUTPUT INDUSTRIAL POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- Limited lifetime manufacturer's warranty
- UL508 approved
- SEMI F47 compliant, high line AC
- Universal input, 85-265VAC
- High efficiency

Mfg. Part No.	Output Voltage (V)	Output Current	Power (W)	Dimensions (in.) H	W	D	Stock No.	Price Each 1-9
● HWS15-3/A	3.3	3A	15	3.23	1.24	3.15	09K9414	42.42
● HWS30-3/A	3.3	6A	30	3.23	1.24	3.74	09K9426	54.54
● HWS50-3/A	3.3	10A	50	3.23	1.24	4.72	09K9432	116.15
● HWS100-3/A	3.3	20A	100	3.23	1.3	6.30	09K9408	167.66
● HWS150-3/A	3.3	30A	150	3.23	1.65	6.30	09K9420	218.16
● HWS300-3	3.3	60A	198	3.23	2.40	6.50	80K8471	368.65
● HWS600-3	3.3	120A	396	3.23	3.94	6.50	80K8477	560.55
● HWS1000-3	3.3	200A	660	3.25	5	9.45	51M2840	1168.57
● HWS15-5/A	5	3A	15	3.23	1.24	3.15	09K9416	42.42
● HWS30-5/A	5	6A	30	3.23	1.24	3.74	09K9428	54.54
● HWS50-5/A	5	10A	50	3.23	1.24	4.72	09K9434	116.15
● HWS100-5/A	5	20A	100	3.23	1.3	6.30	09K9410	167.66
● HWS150-5/A	5	30A	150	3.23	1.65	6.30	09K9422	218.16
● HWS300-5	5	60A	300	3.23	2.40	6.50	80K8473	368.65
● HWS600-5	5	120A	600	3.23	3.94	6.50	80K8479	560.55
● HWS1000-5	5	200A	1000	3.25	5	9.45	51M2843	1168.57
● HWS1000-6	6	167A	1002	3.25	5	9.45	51M2844	1168.57
● HWS1000-7	7.5	134A	1005	3.25	5	9.45	51M2846	1168.57
● HWS15-12/A	12	1.3A	15	3.23	1.24	3.15	09K9411	42.42
● HWS30-12/A	12	2.5A	30	3.23	1.24	3.74	09K9423	54.54
● HWS50-12/A	12	4.3A	50	3.23	1.24	4.72	09K9429	116.15
● HWS100-12/A	12	8.5A	100	3.23	1.3	6.30	09K9405	167.66
● HWS150-12/A	12	13A	150	3.23	1.65	6.30	09K9417	218.16
● HWS300-12	12	27A	324	3.23	2.40	6.50	80K8468	368.65
● HWS600-12	12	53A	648	3.23	3.94	6.50	80K8474	560.55
● HWS1000-12	12	88A	1056	3.25	5	9.45	51M2838	1168.57
● HWS1500-12	12	125A	1.5	3.25	5	11	80K8465	1305.23
● HWS15-15/A	15	1A	15	3.23	1.24	3.15	09K9412	42.42
● HWS30-15/A	15	2A	30	3.23	1.24	3.74	09K9424	54.54
● HWS50-15/A	15	3.5A	50	3.23	1.24	4.72	09K9430	116.15
● HWS100-15/A	15	7A	100	3.23	1.3	6.30	09K9406	167.66
● HWS150-15/A	15	10A	150	3.23	1.65	6.30	09K9418	218.16
● HWS300-15	15	22A	330	3.23	2.40	6.50	80K8469	368.65
● HWS600-15	15	43A	645	3.23	3.94	6.50	80K8475	560.55
● HWS1000-15	15	70A	1056	3.25	5	9.45	51M2839	1168.57
● HWS1500-15	15	100A	1500	3.25	5	11	80K8466	1305.23
● HWS15-24/A	24	650mA	15	3.23	1.24	3.15	09K9413	42.42
● HWS30-24/A	24	1.3A	30	3.23	1.24	3.74	09K9425	54.54
● HWS50-24/A	24	2.2A	50	3.23	1.24	4.72	09K9431	116.15
● HWS100-24/A	24	4.5A	100	3.23	1.3	6.30	09K9407	167.66
● HWS150-24/A	24	6.5A	150	3.23	1.65	6.30	09K9419	218.16
● HWS300-24	24	14A	336	3.23	2.40	6.50	80K8470	368.65
● HWS600-24	24	27A	648	3.23	3.94	6.50	80K8476	560.55
● HWS1000-24	24	44A	1056	3.25	5	9.45	50M9533	1168.57
● HWS1500-24	24	70A	1560	3.25	5	11	74K2155	1305.23
● HWS1000-36	36	29.3A	1512	3.25	5	9.45	51M2841	1168.57
● HWS150036	36	46.5A	1512	3.25	5	11	51M2849	1305.23
● HWS150036/HD	36	46.5A	1512	3.23	4.98	11.02	05M7867	1685.69
● HWS15-48/A	48	330mA	15	3.23	1.24	3.15	09K9415	42.42
● HWS30-48/A	48	650mA	30	3.23	1.24	3.74	09K9427	54.54
● HWS50-48/A	48	1.1A	50	3.23	1.24	4.72	09K9433	116.15
● HWS100-48/A	48	2.1A	100	3.23	1.3	6.30	09K9409	167.66
● HWS150-48/A	48	3.3A	150	3.23	1.65	6.30	09K9421	218.16
● HWS300-48	48	7A	336	3.23	2.40	6.50	80K8472	368.65
● HWS600-48	48	13A	624	3.23	3.94	6.50	80K8478	560.55
● HWS1000-48	48	22A	1056	3.25	5	9.45	51M2842	1168.57
● HWS1500-48	48	32A	1536	3.25	5	11	80K8467	1305.23
● HWS1000-60	60	17.6A	1056	3.25	5	9.45	51M2845	1168.57

DIN RAIL MOUNTING BRACKETS

Mfg. Part No.	For Use With	Stock No.	Price Each 1-9
● DIN-01	HWS15 and HWS30	76K0756	16.92
● DIN02	HWS50	83K3880	16.92
● DIN-03	TDK Lambda HWS80, HWS100 & HWS150 Power Supplies	67K3635	20.20

(84154)

RWS-B SERIES 50 TO 600W SINGLE OUTPUT INDUSTRIAL POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

NEW

- Wide range AC input 85 to 265VAC (300VAC for 5 sec.)
- High efficiency
- Enclosed design, compact size
- Simplified functionality
- Solid, dependable performance
- Five-year manufacturer's warranty
- UL recognized, CSA certified, CE compliant

RWS-B series AC-DC power supplies comprise of four models rated from 50 to 600W featuring a "simple function" design to deliver solid basic performance with additional functionality optimized with regard to customer requirements and specific applications. Improved efficiency at low loads and power consumption during standby. The service life of the electrolytic capacitors is rated for at least five years, resulting in increased reliability. Ideal for use in general industrial equipment including automated devices for industrial and commercial applications, measuring instruments, and communications equipment.

SPECIFICATIONS

Models	RWS50B	RWS100B	RWS150B
AC Input Voltage Range:	85 - 265VAC (47-63Hz), 300VAC for 5 seconds		
DC Input Voltage Range:	120 - 370VDC (47-63Hz), 330VDC for **RWS600B**		
Inrush Current (100 / 200VAC):	18/36A	15 / 30A	16 / 32A
Input Current (100 / 200VAC Typ.):	1.1/0.7	1.3 / 0.7A	1.9 / 1A
Leakage Current (Max.):	750µA max., typically 175µA @ 115VAC, 63Hz		
Cooling:	Convection		
Safety Agency Approvals:	UL / CSA(cUL) / IEC 60950-1 (2nd Ed.), CE Mark EN60950-1		
Conducted & Radiated EMI:	EN55011/ EN55022-B, FCC Class B, VCCI-B		
Operating Temperature:	-10°C to +70°C, derate linearly to 20°C load from 50°C to 70°C (100 - 150W from 40 to 70°C)		
Dimensions:	3.23W x 1.34H x 3.2"D	3.7W x 1.54H x 4.25"D	3.7W x 1.61H x 5.04"D

SPECIFICATIONS

Models	RWS300B	RWS600B
AC Input Voltage Range:	85 - 265VAC (47-63Hz), 300VAC for 5 seconds	
DC Input Voltage Range:	120 - 370VDC (47-63Hz), 330VDC for **RWS600B**	
Inrush Current (100 / 200VAC):	17 / 34A	20 / 40A
Input Current (100 / 200VAC Typ.):	3.8 / 2.1A	7.2 / 4A
Leakage Current (Max.):	750µA max., typically 175µA @ 115VAC, 63Hz	
Cooling:	Internal Fan	
Safety Agency Approvals:	UL / CSA(cUL) / IEC 60950-1 (2nd Ed.), CE Mark EN60950-1	
Conducted & Radiated EMI:	EN55011/ EN55022-B, FCC Class B, VCCI-B	
Operating Temperature:	-10°C to +70°C, derate linearly to 20°C load from 50°C to 70°C (100 - 150W from 40 to 70°C)	
Dimensions:	4.02W x 1.61H x 6.7"D	4.72W x2.4H x 7.48"D

Mfg. Part No.	Output Voltage (V)	Adjust Range (V)	Max. Current (A)	Output Power (W)	Load/ Line Reg (mV)	Efficiency* (%)	Stock No.	Price 1-9
RWS50B5*	5	4.5-5.75	10	50	40/20	77/79	78X5352	39.00
● RWS100B5*	5	4.5-5.75	14	70	40/20	77/79	41X4236	59.00
● RWS150B5*	5	4.5-5.75	21	105	40/20	77/79	41X4240	70.00
● RWS300B5	5	4.5-5.75	50	250	40/20	75/78	41X4244	109.00
● RWS600B5	5	4.5-5.75	100	500	70/20	74/77	41X4248	217.00
RWS50B12*	12	10.8-18.3	4.3	51.6	96/48	82/84	78X5349	39.00
● RWS100B12*	12	10.8-18.3	8.5	102	96/48	82/84	41X4233	59.00
● RWS150B12*	12	10.8-18.3	13	156	96/48	84/87	41X4237	70.00
● RWS300B12	12	10.8-18.3	25	300	96/48	79/82	41X4241	109.00
● RWS600B12	12	10.8-18.3	50	600	96/48	81/84	41X4245	217.00
● RWS300B15	15	13.5-17.2	20	300	120/60	81/84	62X6237	109.00
● RWS600B15	15	13.5-17.2	40	600	120/60	81/84	62X6252	217.00
RWS50B24*	24	21.6-27.6	2.2	52.8	192/96	86/87	78X5350	39.00
● RWS100B24*	24	21.6-27.6	4.5	108	192/96	85/87	41X4234	59.00
● RWS150B24*	24	21.6-27.6	6.5	156	192/96	86/89	41X4238	70.00
● RWS300B24*	24	21.6-27.6	12.5	300	192/96	85/88	41X4242	109.00
● RWS600B24	24	21.6-27.6	25	600	192/96	84/88	41X4246	217.00
● RWS300B36	36	32.4-41.4	8.4	302.4	288/144	85/88	62X6242	109.00
● RWS600B36	36	32.4-41.4	16.7	601.2	288/144	84/88	62X6259	217.00
RWS50B48*	48	43.2-52.8	1.1	52.8	384/192	86/88	78X5351	39.00
● RWS100B48	48	43.2-52.8	2.1	100.8	384/192	85/87	41X4235	59.00
● RWS150B48	48	43.2-52.8	3.3	158.4	384/192	86/89	41X4239	70.00
● RWS300B48	48	43.2-52.8	6.3	302.4	384/192	85/88	41X4243	109.00
● RWS600B48	48	43.2-52.8	12.5	600	384/192	85/88	41X4247	217.00

CONTINUED

RWS-B SERIES 50 TO 600W SINGLE OUTPUT INDUSTRIAL POWER SUPPLIES (CONT.)

Double Sided Board Coating

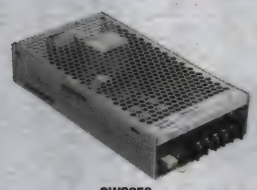
Mfg. Part No.	Output Voltage (V)	Adjust Range (V)	Max. Current (A)	Output Power (W)	Load/ Line Reg (mV)	Efficiency* (%)	Stock No.	Price 1-9
RWS50B5/CO2*	5	4.5-5.75	10	50	40/20	77/79	79X0868	58.91
RWS100B5/CO2*	5	4.5-5.75	14	70	40/20	77/79	62X6230	71.50
RWS150B5/CO2*	5	4.5-5.75	21	105	40/20	77/79	62X6234	83.00
RWS300B5/CO2	5	4.5-5.75	50	250	40/20	75/78	62X6247	127.00
RWS600B5/CO2	5	4.5-5.75	100	500	70/20	74/77	62X6266	257.00
RWS50B12/CO2*	12	10.8-18.3	4.3	51.6	96/48	82/84	79X0865	58.91
RWS100B12/CO2*	12	10.8-18.3	8.5	102	96/48	82/84	62X6227	71.50
RWS150B12/CO2*	12	10.8-18.3	13	156	96/48	84/87	62X6231	83.00
RWS300B12/CO2	12	10.8-18.3	25	300	96/48	79/82	62X6235	127.00
RWS600B12/CO2	12	10.8-18.3	50	600	96/48	81/84	62X6249	257.00
RWS300B15/CO2	15	13.5-17.2	20	300	120/60	81/84	62X6238	127.00
RWS600B15/CO2	15	13.5-17.2	40	600	120/60	81/84	62X6253	257.00
RWS50B24/CO2*	24	21.6-27.6	2.2	52.8	192/96	86/87	79X0866	58.91
RWS100B24/CO2*	24	21.6-27.6	4.5	108	192/96	85/87	62X6228	71.50
RWS150B24/CO2*	24	21.6-27.6	6.5	156	192/96	86/89	62X6232	83.00
RWS300B24/CO2*	24	21.6-27.6	12.5	300	192/96	85/88	62X6240	127.00
RWS600B24/CO2	24	21.6-27.6	25	600	192/96	85/88	62X6256	257.00
RWS300B36/CO2	36	32.4-41.4	8.4	302.4	288/144	85/88	62X6243	127.00
RWS600B36/CO2	36	32.4-41.4	16.7	601.2	288/144	84/88	62X6260	257.00
RWS50B48/CO2*	48	43.2-52.8	1.1	52.8	384/192	86/88	79X0867	58.91
RWS100B48/CO2	48	43.2-52.8	2.1	100.8	384/192	85/87	62X6229	71.50
RWS150B48/CO2	48	43.2-52.8	3.3	158.4	384/192	86/89	62X6233	83.00
RWS300B48/CO2	48	43.2-52.8	6.3	302.4	384/192	85/88	62X6245	127.00
RWS600B48/CO2	48	43.2-52.8	12.5	600	384/192	85/88	62X6263	257.00
Remote On/Off								
RWS300B5/R	5	4.5-5.75	50	250	40/20	75/78	62X6248	118.00
RWS300B12/R	12	10.8-18.3	25	300	96/48	79/82	62X6236	118.00
RWS300B15/R	15	13.5-17.2	20	300	120/60	81/84	62X6239	118.00
RWS300B24/R*	24	21.6-27.6	12.5	300	192/96	85/88	62X6241	118.00
RWS300B36/R	36	32.4-41.4	8.4	302.4	288/144	85/88	62X6244	118.00
RWS300B48/R	48	43.2-52.8	6.3	302.4	384/192	85/88	62X6246	118.00
Remote On/Off, Remote Sense, Parallel Operation, DC Good Signal								
RWS600B5/FO	5	4.5-5.75	100	500	70/20	74/77	62X6267	257.00
RWS600B5/RFO	5	4.5-5.75	100	500	70/20	74/77	62X6268	263.00
RWS600B12/FO	12	10.8-18.3	50	600	96/48	81/84	62X6250	257.00
RWS600B12/RFO	12	10.8-18.3	50	600	96/48	81/84	62X6251	257.00
RWS600B15/FO	15	13.5-17.2	40	600	120/60	81/84	62X6254	257.00
RWS600B15/RFO	15	13.5-17.2	40	600	120/60	81/84	62X6255	263.00
RWS600B24/FO	24	21.6-27.6	25	600	192/96	85/88	62X6257	257.00
RWS600B24/RFO	24	21.6-27.6	25	600	192/96	85/88	62X6258	263.00
RWS600B36/FO	36	32.4-41.4	16.7	601.2	288/144	84/88	62X6261	257.00
RWS600B36/RFO	36	32.4-41.4	16.7	601.2	288/144	84/88	62X6262	263.00
RWS600B48/FO	48	43.2-52.8	12.5	600	384/192	85/88	62X6264	257.00
RWS600B48/RFO	48	43.2-52.8	12.5	600	384/192	85/88	62X6265	263.00

*Also rated UL:508, CSA C22.2 No. 107.1-01
(211918)

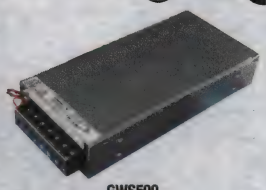
GWS SERIES SINGLE OUTPUT POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power



GWS250



GWS500

- Standby power draw < 0.5W
- Average active efficiency @ 230V: 92.7%
- ErP compliant
- 41mm height (1U compatible)
- Convection cooled (250W)
- 5V / 300mA Aux supply
- Output remote programming
- Down to 25% load: Class C harmonics (IEC 61000-3-2)
- Allows use in lighting equipment
- Five-year manufacturer's warranty

Model	GWS250	GWS500
AC Input Voltage:	85 - 264VAC	
Input Frequency:	47 - 63Hz	
DC Input Voltage:	120 - 373VDC	
Power Factor:	Meets EN61000-3-2 (Typical PF 0.98/0.95)	
Operating Temperature:	-25°C to +70°C; derate linearly to 50% load from +50°C to +70°C	

➤CONTINUED➤

GWS SERIES SINGLE OUTPUT POWER SUPPLIES (CONT.)

Model	GWS250	GWS500
Safety Agency Approvals:	UL60950-1, CSA C22.2 No 60950-1-07 (cUL), EN60950-1 2nd Edition, IEC60950-1, CE Mark	
Dimensions (L x W x H):	7.8 x 4.1 x 1.61"	8.6 x 4.1 x 1.61"

Mfg. Part No.	Power (W)	Output Voltage (V)	Adjustable Range (V)	Output Current (A)	Efficiency (%)	Stock No.	Price Each 1-9
GWS250-12	250	12	10.8-13.2	21	92	48T0587	181.80
GWS250-24	250	24	22-28.8	10.5	92	48T0588	181.80
GWS250-36	250	36	32-40	7	93	48T0589	181.80
GWS250-48	250	48	42-57.6	5.3	93	48T0590	181.80
GWS500-12	500	12	10.8-13.2	42	89	64T4978	274.72
GWS500-24	500	24	22-28.8	21	90	64T4979	274.72
GWS500-36	500	36	32-40	14	90	64T4980	274.72
GWS500-48	500	48	42-57.6	10.5	90	64T4981	274.72

(196514)

HWS300P AND 600P PEAK POWER INDUSTRIAL POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- Limited lifetime manufacturer's warranty
- 300% peak power capability
- Small package size
- Universal input, 85-265VAC
- High efficiency

PEAK POWER

Mfg. Part No.	Output Voltage (V)	Output Current (A) [Peak 110 /230VAC]	Power (W)	Dimensions (in.) H	W	D	Stock No.	Price Each 1-9
HWS300P24	24	12.5 [21/42]	300	3.23	2.4	6.5	19P2361	435.31
HWS600P24	24	25 [40.5/83]	600	3.23	3.94	6.5	19P2364	663.57
HWS600P36	36	16.7 [25/55.5]	601.2	3.23	3.94	6.5	19P2365	663.57
HWS300P36	36	8.4 [14/28]	302.4	3.23	2.4	6.5	19P2362	435.31
HWS300P48	48	6.3 [10.5/21]	302.4	3.23	2.4	6.5	19P2363	435.31
HWS600P48	48	12.5 [20/41.5]	600	3.23	3.94	6.5	19P2366	663.57

(172776)

HWS30-1500/ME SINGLE OUTPUT MEDICAL POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- Limited lifetime manufacturer's warranty
- Medical Approvals[2]
- Universal input, 85-265VAC
- High efficiency
- Broad 30W to 1500W product range

MEDICAL GRADE

Mfg. Part No.	Output Voltage (V)	Output Current	Power (W)	Dimensions (in.) H	W	D	Stock No.	Price Each 1-9
HWS30-5/ME	5	6A	30	3.23	1.24	3.74	05M7875	54.54
HWS50-5/ME	5	10A	50	3.23	1.24	4.72	05M7892	123.22
HWS100-5/ME	5	20A	100	3.23	1.3	6.3	05M7852	169.68
HWS150-5/ME	5	30A	150	3.23	1.65	6.3	05M7863	223.21
HWS30-12/ME	12	2.5A	30	3.23	1.24	3.74	05M7871	54.54
HWS50-12/ME	12	4.3A	51.6	3.23	1.24	4.72	05M7884	123.22
HWS100-12/ME	12	8.5A	102	3.23	1.3	6.3	05M7843	169.68
HWS150-12/ME	12	13A	156	3.23	1.65	6.3	05M7854	223.21
HWS30-15/ME	15	2A	30	3.23	1.24	3.74	05M7872	54.54
HWS50-15/ME	15	3.5A	52.5	3.23	1.24	4.72	05M7885	123.22
HWS100-15/ME	15	7A	105	3.23	1.3	6.3	05M7845	169.68
HWS150-15/ME	15	10A	150	3.23	1.65	6.3	05M7856	223.21
HWS30-24/ME	24	1.3A	31.2	3.23	1.24	3.74	05M7873	54.54
HWS50-24/ME	24	2.2A	52.8	3.23	1.24	4.72	05M7887	123.22
HWS100-24/ME	24	4.5A	108	3.23	1.3	6.3	05M7847	169.68
HWS150-24/ME	24	6.5A	156	3.23	1.65	6.3	05M7858	223.21
HWS300-24/ME	24	14A	336	3.23	2.4	6.5	05M7879	414.10
HWS150024/ME	24	65A	1560	3.23	4.98	11.02	05M7866	1414.00
HWS150036/ME	36	42A	1512	3.23	4.98	11.02	05M7868	1414.00
HWS30-48/ME	48	650mA	31.2	3.23	1.24	3.74	05M7874	54.54
HWS50-48/ME	48	1.1A	52.8	3.23	1.24	4.72	05M7890	123.22
HWS100-48/ME	48	2.1A	100.8	3.23	1.3	6.3	05M7850	169.68

➤CONTINUED➤

SWITCHING POWER SUPPLIES

HWS30-1500/ME SINGLE OUTPUT MEDICAL POWER SUPPLIES (CONT.)

Mfg. Part No.	Output Voltage (V)	Output Current	Power (W)	Dimensions (in.) H	W	D	Stock No.	Price Each 1-9
● HWS150-48/ME	48	3.3A	158.4	3.23	1.65	6.3	05M7861	223.21
● HWS150048/ME	48	32A	1536	3.23	4.98	11.02	05M7870	1414.00

DIN RAIL MOUNTING BRACKETS

Mfg. Part No.	For Use With	Stock No.	Price Each 1-9
● DIN-01	HWS15 and HWS30	76K0756	16.92
● DIN02	HWS50	83K3880	16.92
● DIN-03	TDK Lambda HWS80, HWS100 & HWS150 Power Supplies	67K3635	20.20

(172775)

HWS50-1500/HD SINGLE OUTPUT INDUSTRIAL POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- Limited lifetime manufacturer's warranty
- -10°C to +71°C Operation (-40°C start up)
- Universal input, 85-265VAC
- Conformally coated pcbs

HARSH ENVIRONMENT

Mfg. Part No.	Output Voltage (V)	Output Current	Power (W)	Dimensions (in.) H	W	D	Stock No.	Price Each 1-9
● HWS50-3/HD	3	10A	33	3.23	1.24	4.72	05M7888	152.51
● HWS100-3/HD	3	20A	66	3.23	1.3	6.3	05M7848	213.11
● HWS150-3/HD	3	30A	99	3.23	1.65	6.3	05M7859	275.73
● HWS300-3/HD	3	60A	198	3.23	2.4	6.5	05M7880	488.84
● HWS50-5/HD	5	10A	50	3.23	1.24	4.72	05M7891	152.51
● HWS100-5/HD	5	20A	100	3.23	1.3	6.3	05M7851	213.11
● HWS150-5/HD	5	30A	150	3.23	1.65	6.3	05M7862	275.73
● HWS300-5/HD	5	60A	300	3.23	2.4	6.5	05M7882	488.84
● HWS600-5/HD	5	120A	600	3.23	3.94	6.5	39P8165	626.20
● HWS1000-5/HD	5	200A	1000	3.25	5	9.45	39P8163	1414.00
● HWS50-12/HD	12	4.3A	51.6	3.23	1.24	4.72	05M7883	152.51
● HWS100-12/HD	12	8.5A	102	3.23	1.3	6.3	05M7842	213.11
● HWS150-12/HD	12	13A	156	3.23	1.65	6.3	05M7853	275.73
● HWS300-12/HD	12	27A	324	3.23	2.4	6.5	05M7876	488.84
● HWS600-12/HD	12	53A	636	3.23	3.94	6.5	05M7893	626.20
● HWS150012/HD	12	125A	1050	3.23	4.98	11.02	05M7864	1685.69
● HWS50-15/HD	15	3.5A	52.5	3.23	1.24	4.72	03M5339	152.51
● HWS100-15/HD	15	7A	105	3.23	1.3	6.3	05M7844	213.11
● HWS150-15/HD	15	10A	150	3.23	1.65	6.3	05M7855	275.73
● HWS300-15/HD	15	22A	330	3.23	2.4	6.5	05M7877	488.84
● HWS600-15/HD	15	43A	645	3.23	3.94	6.5	05M7894	626.20
● HWS150015/HD	15	100A	1050	3.23	4.98	11.02	05M7865	1685.69
● HWS50-24/HD	24	2.2A	52.8	3.23	1.24	4.72	05M7886	152.51
● HWS100-24/HD	24	4.5A	108	3.23	1.3	6.3	05M7846	213.11
● HWS150-24/HD	24	6.5A	156	3.23	1.65	6.3	05M7857	275.73
● HWS300-24/HD	24	14A	336	3.23	2.4	6.5	05M7878	488.84
● HWS600-24/HD	24	27A	648	3.23	3.94	6.5	05M7895	626.20
● HWS1500-24/HD	24	70A	1560	3.25	5	11	03M5936	1685.69
● HWS150036/HD	36	46.5A	1512	3.23	4.98	11.02	05M7867	1685.69
● HWS50-48/HD	48	1.1A	52.8	3.23	1.24	4.72	05M7889	152.51
● HWS100-48/HD	48	2.1A	100.8	3.23	1.3	6.3	05M7849	213.11
● HWS150-48/HD	48	3.3A	158.4	3.23	1.65	6.3	05M7860	275.73
● HWS300-48/HD	48	7A	336	3.23	2.4	6.5	05M7881	488.84
● HWS600-48/HD	48	13A	624	3.23	3.94	6.5	39P8164	626.20
● HWS1000-48/HD	48	22A	1104	3.25	5	9.45	39P8162	1414.00
● HWS150048/HD	48	32A	1536	3.23	4.98	11.02	05M7869	1685.69

DIN RAIL MOUNTING BRACKETS

Mfg. Part No.	For Use With	Stock No.	Price Each 1-9
● DIN-01	HWS15 and HWS30	76K0756	16.92
● DIN02	HWS50	83K3880	16.92
● DIN-03	TDK Lambda HWS80, HWS100 & HWS150 Power Supplies	67K3635	20.20

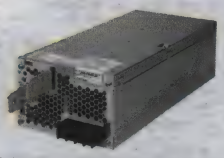
(172774)

HWS1800T SERIES SINGLE OUTPUT 1800W 3PH INDUSTRIAL POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- Three phase input (170 - 265VAC)
- High efficiency
- SEMI F47 compliant
- Five-year manufacturer's warranty



Ideal for applications such as factory automation, semiconductor fabrication and test and measurement. Features compact size and high efficiency for easier system cooling.

SPECIFICATIONS:

Input Voltage:	Three phase 170-265VAC
Input Frequency:	47-63Hz
Ripple & Noise:	200-400mV
Efficiency:	84-90%
Conducted & Radiated EMI:	EN55011 / EN55022-A, FCC-A, VCCI-A
Operating Temperature:	-10° to +70°C, derate linearly to 50% load from 50° to 70°C, -20°C start up
Dimensions:	4.98W x 3.23H x 11"D

Mfg. Part No.	Output 1 V	Output 1 A	Output Power (W)	Stock No.	Price Each 1-9
● HWS1800T12	12	125	1500	54M8355	1590.75
● HWS1800T15	15	100	1500	54M8356	1590.75
● HWS1800T24	24	75	1800	54M8357	1590.75
● HWS1800T36	36	50	1800	54M8358	1590.75
● HWS1800T48	48	37.5	1800	54M8359	1590.75
● HWS1800T60	60	30	1800	54M8360	1906.88

(100561)

LS SERIES SINGLE OUTPUT GENERAL PURPOSE POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- Small size
- 115VAC or 230VAC input
- Withstands 300VAC surges (5s)
- Three-year manufacturer's warranty

Ideal for use in test and measurement, and automated service applications. Power factor meets EN61000-3-2, -3. Mounting plates available, *go online or call.*

SPECIFICATIONS:

Mfg. Part No.	LS25	LS35	LS50	LS75	LS100	LS150
AC Input Voltage (300 VAC for 5s):	88 - 264VAC (See note 2 for **LS100**)					88-132/ 176-264VAC (1)
Input Frequency:	47 - 63Hz					
DC Input Voltage:	125 - 373VDC					248-273VDC
Operating Temperature:	-25° to +70°C. Derate linearly to 50% load from +50° to +70°C (2)					
Safety Agency Approvals:	UL60950-1, EN60950-1, IEC60950-1, CE Mark					
Conducted and Radiated EMI:	EN55011/EN55022-B, FCC-B					
Dimensions (L x W x H"):	3.1 x 2.0 x 1.1"	3.9 x 3.2 x 1.4"	3.9 x 3.8 x 1.4"	5.1 x 3.8 x 1.5"	6.3 x 3.8 x 1.5"	7.8 x 3.9 x 1.5"

Mfg. Part No.	Output 1 (VDC) +	Output Power (W)	Output Current 1	Efficiency (%)	Stock No.	Price Each
● LS25-3.3	3.3	20	6A	75	57P6385	25.67
● LS25-5	5	25	5A	79	06R2927	16.80
● LS25-12	12	25	2.1A	83	10R7004	16.50
● LS25-15	15	26	1.7A	83	06R2923	16.50
● LS25-24	24	25	1.1A	84	06R2924	16.50
● LS25-36	36	27	750mA	84	06R2925	30.92
● LS25-48	48	27	570mA	85	06R2926	30.02
● LS35-3.3	3.3	23	7A	75	06R2929	34.22
● LS35-5	5	35	7A	78	06R2932	19.00
● LS35-12	12	36	3A	82	10R7005	18.25
● LS35-15	15	36	2.4A	83	06R2928	32.67
● LS35-24	24	36	1.5A	84	06R1736	27.93
● LS35-36	36	36	1A	84	06R2930	35.25
● LS35-48	48	38	800mA	84	06R2931	35.25
● LS50-3.3	3.3	33	10A	75	41R6822	40.86
● LS505	5	50	10A	80	08N3007	20.75
● LS5012	12	50	4.2A	84	08N3001	20.41
● LS5015	15	51	3.4A	85	08N3002	20.41
● LS5024	24	53	2.2A	86	08N3003	20.41
● LS5036	36	50.4	1.4A	86	08N3005	38.89
● LS5048	48	52.8	1.1A	86	08N3006	40.06

➤CONTINUED➤

LS SERIES SINGLE OUTPUT GENERAL PURPOSE POWER SUPPLIES (CONT.)

Mfg. Part No.	Output 1 (VDC) +	Output Power (W)	Output Current 1	Efficiency (%)	Stock No.	Price Each
LS75-3.3	3.3	49.5	15A	75	41R6823	44.07
LS755	5	60	12A	79	08N3014	23.95
LS7512	12	72	6A	84	08N3008	23.65
LS7515	15	75	5A	85	08N3009	23.65
LS7524	24	77	3.2A	86	08N3010	23.65
LS7536	36	75	2.1A	86	08N3012	23.65
LS7548	48	76	1.6A	87	08N3013	36.72
LS1005	5	80	16A	79	08N2993	32.00
LS10012	12	102	8.5A	82	08N2987	30.50
LS10015	15	105	7A	84	08N2988	56.07
LS10024	24	108	4.5A	86	08N2989	30.50
LS10036	36	108	3A	86	08N2991	54.44
LS10048	48	110	2.3A	86	08N2992	30.50
LS1503	3.3	99	30A	75	08N2997	73.11
LS1505	5	130	26A	79	08N3000	38.00
LS15012	12	150	12.5A	83	08N2994	35.50
LS15015	15	150	10A	85	08N2995	35.50
LS15024	24	150	6.5A	86	08N2996	35.50
LS15036	36	155	4.3A	87	08N2998	35.50
LS15048	48	158	3.3A	87	08N2999	35.50

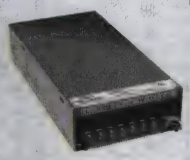
(1) Switch selectable for 115 or 230VAC
(2) LS50, LS75-3 & -5: Derate linearly to 70% load from +50 to +70°C.
LS75-12, -15, -24, -36, -48 Derate linearly to 60% load from +50 to +70°C.
LS100-3 & -5 Derate linearly to 60% load from +45 to +70°C.
LS100-12, -15, -24, -36, -48 Derate linearly to 60% load from +50 to +70°C.
LS150-3 & -5, Derate linearly to 50% load from +40 to +70°C.
LS150-12, -15, -24, -36, -48 Derate linearly to 70% load from +50 to +70°C.
(115479)

LS200 SERIES SINGLE OUTPUT, GENERAL PURPOSE POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- Small size
- 115VAC or 230VAC input
- Withstands 300VAC surges (5s)
- Three-year manufacturer's warranty



LS200 series are enclosed style general purpose power supplies with internal fan. Ideal for use in light industrial, automated service, and test and measurement applications. U channel style with no internal fan available; *go online or call.*

SPECIFICATIONS:	
AC Input Voltage (300 VAC for 5s):	85 - 264VAC
Input Frequency:	47 - 63Hz
DC Input Voltage:	120 - 373VDC
Operating Temperature:	-25°C to +70°C. Derate linearly to 60% load from +50°C to +70°C
Safety Agency Approvals:	UL60950-1, EN60950-1 (cUL), IEC60950-1 2nd Edition, CE Mark
Conducted and Radiated EMI:	EN55011/EN55022-B, FCC-B
Dimensions (L x W x H"):	7.8 x 3.9 x 1.61"

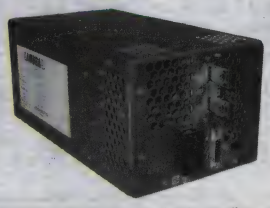
Mfg. Part No.	Output 1 (VDC) +	Output Power (W)	Output Current 1	Efficiency (%)*	Stock No.	Price Each 1-9
LS200-3.3	3.3	132	40A	67/68	72R3600	105.12
LS200-5	5	200	40A	72/75	72R3603	72.50
LS200-7.5	7.5	201	26.7A	74/77	72R3604	72.50
LS200-12	12	200	16.7A	76/79	72R3597	72.50
LS200-15	15	201	13.4A	80/83	72R3598	97.99
LS200-24	24	201	8.4A	82/84	72R3599	72.50
LS200-36	36	201	5.6A	82/85	72R3601	72.50
LS200-48	48	201	4.2A	82/85	72R3602	72.50

*115/230VAC input
(176261)

LZSA SERIES SINGLE-OUTPUT INDUSTRIAL POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power



- Input transient protected
- -40°C to +71°C operation
- MIL-STD-810E vibration / shock
- UL508, SEMIF47, factory mutual (Class 1, Division 2)
- Five-year manufacturer's warranty

Ideal for industrial applications requiring reliable performance under harsh operating conditions. Features superior thermal design and wide range adjustment of output. **Mfg. part no. LZSA15003-001** is an upgraded version designed to deliver increased power.

➤CONTINUED➤

LZSA SERIES SINGLE-OUTPUT INDUSTRIAL POWER SUPPLIES (CONT.)

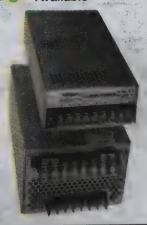
Mfg. Part No.	Output Voltage (V)	Output Current (A)	Output Power	Stock No.	Price Each 1-9
LZSA-500-3	24	21	504W	05M3602	1084.74
LZSA-1000-2	12	84	1.008kW	88M9794	1555.40
LZSA-1000-3	24	42	1.008kW	30M8203	1414.00
LZSA15003-001	24	63	1.512kW	73R5244	1903.85

(109387)

SWS SERIES SINGLE OUTPUT GENERAL PURPOSE POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power



- Low Cost
- Power Factor Correction to EN61000-3-2
- Universal Input (85-265VAC)
- Input Transient Protected IEC61000-4
- Enclosed

Mfg. Part No.	Output Voltage (V)	Power (W)	Output Current (A)	Stock No.	Price Each 1-9
SWS50-3	3.3	50	10	72K0773	39.62
SWS75-3	3.3	75	15	72K0779	45.83
SWS100-3	3.3	100	20	72K0765	59.04
SWS150-3	3.3	150	30	72K0768	70.32
SWS300-3	3.3	300	55	27K4137	135.97
SWS600-3	3.3	600	100	27K4140	243.96
SWS50-5	5	50	10	72K0774	39.62
SWS75-5	5	75	15	72K0780	45.83
SWS100-5	5	100	20	72K0766	59.04
SWS150-5	5	150	30	72K0769	70.32
SWS300-5	5	300	55	42J5950	135.97
SWS600-5	5	600	100	42J5953	243.96
SWS50-12	12	50	4.3	09J9927	39.62
SWS75-12	12	75	6.3	72K0777	45.83
SWS100-12	12	100	8.5	72K0763	59.04
SWS150-12	12	150	12.5	72K7324	70.32
SWS300-12	12	300	26	27K4135	135.97
SWS600-12	12	600	50	27K4138	243.96
SWS50-15	15	50	3.5	07J2044	39.62
SWS75-15	15	75	5	72K7325	45.83
SWS100-15	15	100	6.7	72K0764	59.04
SWS150-15	15	150	10	73K4044	70.32
SWS300-15	15	300	21	27K4136	135.97
SWS600-15	15	600	40	27K4139	243.96
SWS50-24	24	50	2.1	72K0772	39.62
SWS75-24	24	75	3.2	72K0778	45.83
SWS100-24	24	100	4.3	09J9918	59.04
SWS150-24	24	150	6.3	72K0767	70.32
SWS300-24	24	300	13	72K0770	135.97
SWS600-24	24	600	25	72K0775	243.96
SWS300-36	36	313.2	8.7	10K0649	135.97
SWS300-48	48	300	6.7	72K0771	135.97
SWS600-48	48	600	12.5	72K0776	243.96

(77454)

SWS300A SINGLE OUTPUT GENERAL PURPOSE POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- Lower cost
- Active power factor correction
- Universal input (85 - 265VAC)
- Input transient protected IEC61000-4
- Level B EMI
- Enclosed

SPECIFICATIONS	
Input Voltage Range:	85 to 265VAC (47 to 63Hz) or 120 to 370VDC
Operating Temp:	-10 to +65°C (derating is model specific)
Approvals:	UL60950, CSA60950, EN60950, EN50178, CE Mark
Conducted & Radiated EMI:	EN55011 / EN55022-B, FCC Class B
Dimensions:	2.05 x 4.01 x 7.8"

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SWS300A SINGLE OUTPUT GENERAL PURPOSE POWER SUPPLIES (CONT.)

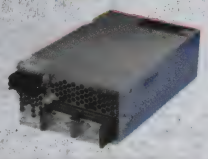
Mfg. Part No.	Output Voltage Nom. (V)	Output Current (A)	Efficiency (%)	Stock No.	Price Each 1-9
● SWS300A3	3.3	55	69 / 72	24T9081	122.21
● SWS300A4	4	55	72 / 75	24T9085	122.21
● SWS300A5	5	55	75 / 78	24T9089	122.21
● SWS300A7R5	7.5	40	77 / 80	24T9091	122.21
● SWS300A12	12	26	79 / 83	24T9074	122.21
● SWS300A15	15	21	80 / 84	24T9076	122.21
● SWS300A24	24	13	82 / 85	24T9078	122.21
● SWS300A36	36	8.8	83 / 87	24T9083	122.21
● SWS300A48	48	6.7	83 / 86	24T9087	122.21

(196231)

SWS600/1000L SERIES SINGLE OUTPUT LOW PROFILE AC/DC POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power



- Low cost
- Low profile
- Active power factor correction
- Universal input (85 - 265VAC)
- Input transient protected IEC61000-4
- Medical certifications **SWS1000L series**

SWS600/1000L series feature power factor correction and global safety approvals, which support global use. Variable fan speed provides greater reliability and lower acoustical noise.

SPECIFICATIONS:

Mfg. Part No.	SWS600	SWS1000L
Input Voltage Range:	85 - 265VAC 47 - 63Hz or 120 - 350VDC	
Power Factor:	Meets EN61000-3-2 Class A	
Conducted and Radiated EMI:	EN55011/ EN55022-B, FCC Class B	
Operating Temperature:	-40°C start up. -20°C to 74°C, derating linearly to 50% load above 50°C	
Safety Agency Certification:	UL, CSA, EN60950-1, UL60601-1 (1000W only), IEC61010-1 (600W only), EN50178, CE Mark	
Dimensions (WxHxD):	2.4 x 4.72 x 7.48"	2.4 x 5.91 x 9.45"

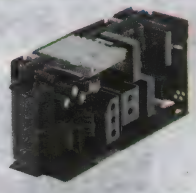
Mfg. Part No.	Output Power (W)	Output 1 (VDC) + (V)	(A)	Efficiency (%)	Stock No.	Price Each 1-9
● SWS600L-3	396	3.3	120	72	94M5293	271.69
● SWS600L-5	600	5	120	77	51M3234	271.69
● SWS600L-12	636	12	53	82	51M3232	271.69
● SWS600L-15	645	15	43	82	94M5292	271.69
● SWS600L-24	648	24	27	84	51M3233	271.69
● SWS600L-36	648	36	18	84	94M5294	271.69
● SWS600L-48	624	48	13	84	94M5295	271.69
● SWS600L-60	600	60	10	84	94M5296	271.69
MEDICAL SERIES						
● SWS1000L-3	660	3.3	200	76	94M5287	551.61
● SWS1000L-5	1000	5	200	81	94M5290	551.61
● SWS1000L-12	1056	12	88	84	94M5284	551.61
● SWS1000L-15	1050	15	70	84	94M5285	551.61
● SWS1000L-24	1056	24	44	86	94M5286	551.61
● SWS1000L-36	1044	36	29	86	94M5288	551.61
● SWS1000L-48	1056	48	22	86	94M5289	551.61
● SWS1000L-60	1020	60	17	86	94M5291	551.61

(110627)

JWS SERIES INDUSTRIAL POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power



- Radiated and conducted EMI
- Universal AC input
- Optional DIN rail mounting
- Input transient protection
- Power factor and harmonic correction
- Wide range output adjustment
- 200% Peak power capability for 10 seconds (**JWS-P** models)
- Approved to VDE0160 machinery directive
- UL recognized, CSA certified, CE compliant
- Five-year manufacturer's warranty

Mfg. Part No.	Output Voltage (V)	Power (W)	Max. Amps @		Stock No.	Price Each 1-9
● JWS3002	2	120	60	36	48F3062	452.37
● JWS600-2	2	240	120	72	71K5445	746.04
● JWS503/A	3.3	33	10	6	71K5443	153.22
● JWS753/A	3.3	49.5	15	9	71K5455	206.12
● JWS1003/A	3.3	66	20	12	48F3070	242.60
● JWS1503/A	3.3	99	30	18	71K5429	315.56
● JWS3003	3.3	198	60	36	71K5437	452.37

➤CONTINUED➤

JWS SERIES INDUSTRIAL POWER SUPPLIES (CONT.)

Mfg. Part No.	Output Voltage (V)	Power (W)	Max. Amps @		Stock No.	Price Each 1-9
● JWS6003	3.3	396	120	72	71K5449	746.04
● JWS505/A	5	50	10	6	71K5444	153.22
● JWS755/A	5	75	15	9	71K5457	206.12
● JWS1005/A	5	100	20	12	71K5424	242.60
● JWS1505/A	5	150	30	18	71K5431	315.56
● JWS300-5	5	300	60	36	71K5433	452.37
● JWS6005	5	600	120	72	71K5451	746.04
● JWS5012/A	12	51.6	4.3	2.6	71K5440	153.22
● JWS7512/A	12	75.6	6.3	3.8	71K5453	206.12
● JWS10012/A	12	102	8.5	5.1	71K5420	242.60
● JWS15012/A	12	156	13	7.8	71K5426	315.56
● JWS30012	12	324	27	16.2	71K5434	452.37
● JWS60012	12	636	53	31.8	71K5446	746.04
● JWS5015/A	15	52.5	3.5	2.1	71K5441	153.22
● JWS7515/A	15	75	5	3.0	76K6330	206.12
● JWS10015/A	15	105	7	4.2	71K5421	242.61
● JWS15015/A	15	150	10	6.0	71K5427	315.56
● JWS30015	15	330	22	13.2	71K5435	452.37
● JWS60015	15	645	43	25.8	71K5447	746.04
● JWS5024/A	24	52.8	2.2	1.3	71K5442	153.22
● JWS70P-24	24	72.0	3.6	2.2	71K5452	279.63
● JWS7524/A	24	76.8	3.2	1.9	71K5454	206.12
● JWS10024/A	24	108	4.5	2.7	71K5422	242.60
● JWS120P-24	24	120	5.1	3.1	71K5425	362.98
● JWS15024/A	24	156	6.5	3.9	01M8021	315.56
● JWS240P-24	24	240	10.2	6.1	71K5432	560.53
● JWS30024	24	336	14	8.4	48F6166	452.37
● JWS480P-24	24	480	20.4	12.2	31C9748	858.04
● JWS60024	24	648	27	16.2	71K5448	746.04
● JWS50-28/A	28	56	2	16.2	83C5709	153.22
● JWS150-28/A	28	154	5.5	...	74C5860	315.56
● JWS600-28	28	644	23	16.1	81C8273	746.04
● JWS7548/A	48	76.8	1.6	...	71K5456	206.12
● JWS10048/A	48	100.8	2.1	1.3	71K5423	242.60
● JWS120P-48	48	120	2.5	1.5	31C9745	362.98
● JWS15048/A	48	158.4	3.3	2	71K5430	315.56
● JWS240P-48	48	240	5	3	31C9747	560.53
● JWS30048	48	312	6.5	3.9	71K5438	452.37
● JWS480P-48	48	480	10	6	71K5439	858.04
● JWS60048	48	624	13	7.8	71K5450	746.04

(49367)

MWS65 SERIES 55W TO 67W AC/DC POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- Medical and ITE certifications
- BF rated
- Very low 1" profile
- Industry standard footprint
- Up to 89% efficient
- <0.3W off-load power draw

SPECIFICATIONS

AC Input Voltage:	85 - 265VAC
DC Input Voltage:	120 - 370VDC
Load / Line Regulation:	0.8% / 0.4%
Operating Temperature:	-20 to +70°C, derate linearly to 50% load from 50 to 70°C, guaranteed start up at -25°C
Safety Agency Approvals:	UL60950-1, CSA60950-1, EN60950-1, EN50178 (0V II), CE Mark UL60601-1, EN60601-1 (2nd & 3rd edition)
Dimensions (W x L x H):	2 x 4 x 1" (50.8 x 101.6 x 22.9mm)

Mfg. Part No.	Output Voltage (V)	Adjustment Range (V)	Output Current (A)	Output Power (W)	Efficiency (%) @ 115/230VAC	Stock No.	Price Each 1-9
● MWS65-5	5	4.5-5.5	11	55	80/82	78T6306	47.07
● MWS65-12	12	10.8-13.2	5	60	84/86	78T6303	47.07
● MWS65-15	15	13.5-16.5	4.4	66	85/87	78T6304	47.07
● MWS65-24	24	21.6-26.4	2.8	67.2	86/88	55T1157	47.07
● MWS65-48	48	43.2-52.8	1.4	67.2	87/89	78T6305	47.07

(198888)

RTW SERIES SINGLE OUTPUT INDUSTRIAL POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- Ultra thin package
- SEMI F47 compliant (high line AC)
- Universal input
- High efficiency
- 5 year warranty

Ideal for applications such as semiconductor fabrication and LED signs. Ultra thin package allows for use in small spaces. Wide range AC input supports global use. **C** suffix indicates cover for (50W, 100W and 150W models) and **H** suffix cover for (300W models). **L** suffix indicates vertical terminal block (50-150W models only).

SPECIFICATIONS:

Models	50W	100W	150W	300W
Input Voltage Range:	85 - 265VAC or 120 - 370VDC†			
Input Frequency:	47 - 440Hz			
Line Regulation:	0.2% (85-132 or 170-265VAC line change)			
Load Regulation:	0.4% (0-100% load change)			
Safety Agency Approvals:	UL60950-1, CSA60950-1 (cUL), EN60950-1, CE Mark			
Conducted & Radiated EMI:	EN55011/ EN55022-B, FCC-B			
Operating Temperature:	-10°C to +71°C, -20°C start up. See derating curves on datasheet			
Dimensions:	0.87W x 3.23H x 4.88"D	0.98W x 3.23H x 6.3"D	1.18W x 3.62H x 7.09"D	1.57W x 4.72H x 9.84"D

Mfg. Part No.	Output Voltage (V)	Output Range (V)	Max. Current (A)	Output Power (W)	Efficiency (%)*	Stock No.	Price Each
RTW03-12R	3.3	2.6 - 4	12.5	41.2	75/77	50M0396	145.44
RTW03-12RC	3.3	2.6 - 4	12.5	41.2	75/77	50M0397	159.58
RTW03-25R	3.3	2.6 - 4	25	82.5	79/81	50M0398	259.57
RTW03-25RC	3.3	2.6 - 4	25	82.5	79/81	50M0399	259.57
RTW03-35R	3.3	2.6 - 4	35	115.5	80/83	50M0400	299.97
RTW03-35RC	3.3	2.6 - 4	35	115.5	80/83	50M0401	331.28
RTW03-70RH	3.3	1.8 - 3.6	70	231	83/86	50M0402	449.45
RTW03-70RL	3.3	1.8 - 3.6	70	231	83/86	50M0403	449.45
RTW05-10R	5	4 - 5.8	10	50	80/82	50M0404	145.44
RTW05-10RC	5	4 - 5.8	10	50	80/82	50M0405	159.58
RTW05-20R	5	4 - 5.8	20	100	83/85	50M0406	259.57
RTW05-20RC	5	4 - 5.8	20	100	83/85	50M0407	259.57
RTW05-30R	5	4 - 5.8	30	150	83/86	50M0408	299.97
RTW05-30RC	5	4 - 5.8	30	150	83/86	50M0409	331.28
RTW05-60RH	5	3.5 - 5.6	60	300	84/87	50M0410	449.45
RTW05-60RL	5	3.5 - 5.6	60	300	84/87	50M0411	449.45
RTW12-4R3	12	9.6 - 13.2	4.3	51.6	81/83	50M0416	145.44
RTW12-4R3C	12	9.6 - 13.2	4.3	51.6	81/83	50M0417	159.58
RTW12-8R4	12	9.6 - 13.2	8.4	100.8	84/86	50M0418	259.57
RTW12-8R4C	12	9.6 - 13.2	8.4	100.8	84/86	50M0419	259.57
RTW12-12R	12	9.6 - 13.2	12.5	150	84/87	50M0412	299.97
RTW12-12RC	12	9.6 - 13.2	12.5	150	84/87	50M0413	331.28
RTW12-25RH	12	7.2 - 14.2	25	300	83/86	50M0414	449.45
RTW12-25RL	12	7.2 - 14.2	25	300	83/86	50M0415	449.45
RTW15-3R5	15	12 - 16.5	3.5	52.5	82/85	50M0424	145.44
RTW15-3R5C	15	12 - 16.5	3.5	52.5	82/85	50M0425	159.58
RTW15-6R7	15	12 - 16.5	6.7	100.5	85/87	50M0426	259.57
RTW15-6R7C	15	12 - 16.5	6.7	100.5	85/87	50M0427	259.57
RTW15-10R	15	12 - 16.5	10	150	84/87	50M0420	299.97
RTW15-10RC	15	12 - 16.5	10	150	84/87	50M0421	331.28
RTW15-20RH	15	10.5 - 18	20	300	83/86	50M0422	449.45
RTW15-20RL	15	10.5 - 18	20	300	83/86	50M0423	449.45
RTW24-2R2	24	19.2 - 26.4	2.2	52.8	82/85	50M0430	145.44
RTW24-2R2C	24	19.2 - 26.4	2.2	52.8	82/85	50M0431	159.58
RTW24-4R2	24	19.2 - 26.4	4.2	100.8	85/87	50M0432	259.57
RTW24-4R2C	24	19.2 - 26.4	4.2	100.8	85/87	50M0433	259.57
RTW24-6R3	24	19.2 - 26.4	6.3	151.2	86/88	50M0434	299.97
RTW24-6R3C	24	19.2 - 26.4	6.3	151.2	86/88	50M0435	331.28
RTW24-13RH	24	16.8 - 26.4	13	312	85/88	50M0428	449.45
RTW24-13RL	24	16.8 - 26.4	13	312	85/88	50M0429	449.45
RTW28-1R8	28	22.4 - 30.8	1.8	50.4	82/85	50M0436	145.44
RTW28-1R8C	28	22.4 - 30.8	1.8	50.4	82/85	50M0437	159.58
RTW28-3R6	28	22.4 - 30.8	3.6	100.8	85/87	50M0440	259.57
RTW28-3R6C	28	22.4 - 30.8	3.6	100.8	85/87	50M0441	259.57
RTW28-5R4	28	22.4 - 30.8	5.4	151.2	86/88	50M0442	299.97
RTW28-5R4C	28	22.4 - 30.8	5.4	151.2	86/88	50M0443	331.28
RTW28-11RH	28	22.4 - 30.8	11	308	85/88	50M0438	449.45
RTW28-11RL	28	19.6 - 33.6	11	308	85/88	50M0439	449.45
RTW48-1R1	48	38.4 - 52.8	1.1	52.8	82/85	50M0444	145.44
RTW48-1R1C	48	38.4 - 52.8	1.1	52.8	82/85	50M0445	159.58
RTW48-2R1	48	38.4 - 52.8	2.1	100.8	85/88	50M0446	259.57
RTW48-2R1C	48	38.4 - 52.8	2.1	100.8	85/88	50M0447	259.57
RTW48-3R2	48	38.4 - 52.8	3.2	153.6	86/89	50M0448	299.97

➤CONTINUED➤

RTW SERIES SINGLE OUTPUT INDUSTRIAL POWER SUPPLIES (CONT.)

Mfg. Part No.	Output Voltage (V)	Output Range (V)	Max. Current (A)	Output Power (W)	Efficiency (%)*	Stock No.	Price Each
RTW48-3R2C	48	38.4 - 52.8	3.2	153.6	86/89	50M0449	331.28
RTW48-6R5H	48	33.6 - 55	6.5	312	86/89	50M0450	449.45
RTW48-6R5L	48	33.6 - 55	6.5	312	86/89	50M0451	449.45

†Safety approvals do not cover DC input; *100/200VAC
(95187)

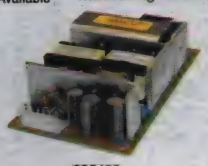
CSS65 AND 150 SERIES MEDICAL AND ITE, AC/DC POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- Wide range AC input
- Low profile, industry standard footprint
- Global safety agency compliance

CSS65



CSS150

CSS65 and **150 series** features a wide range AC input for global operation and dual input fuses for easier system compliance.

SPECIFICATIONS:

Mfg. Part No.:	CSS65	CSS150
Input Voltage Range:	90 - 264VAC (47 - 63Hz) or 120 - 370VDC	90 - 264VAC (47 - 400Hz)* or 120 - 180VDC
Operating Temperature:	0°C to +70°C derate linearly to 50% load from 50°C to 70°C	
Efficiency:	86% typical (115VAC input)	89% typical
Safety Agency Approvals:	UL60601-1, EN60601-1, IEC60601-1	UL60601-1, EN60601-1, IEC60601-1, CE mark, UL/ EN60950-1
Conducted and Radiated EMI:	EN55011-B, FCC Class B	
Dimensions (W x L x H"):	2 x 4 x 1.18" (including underside components)	3 x 5 x 1.3" (including underside components)

Mfg. Part No.	Output 1 (VDC) +	Output Power (W)†	Output Current 1†	Stock No.	Price Each 1-9
CSS65-5	5	40	8A	41R5000	49.34
CSS65-12	12	60	5A	73P5350	49.34
CSS65-15	15	60	4A	41R4995	49.34
CSS65-19	19	65	3.43A	41R4996	49.34
CSS65-24	24	65	2.71A	41R4997	49.34
CSS65-36	36	65	1.81A	41R4998	49.34
CSS65-48	48	65	1.36A	41R4999	49.34
CSS150-12	12	150	12.5A	41R4990	69.19
CSS150-15	15	150	10A	41R4991	69.19
CSS150-24	24	150	6.3A	41R4992	69.19
CSS150-36	36	150	4.2A	41R4993	69.19
CSS150-48	48	150	3.1A	41R4994	69.19

*Derate linearly to 90W convection rating from 90 to 100VAC input
†Rating for the **CSS150** is with forced air (100W convection)
(176263)

ZWS300BAF SERIES 300W SINGLE OUTPUT CONVECTION-COOLED POWER SUPPLIES

NEW

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

TÜV Rheinland

- Input voltage: 85 to 265VAC (47-63Hz); 120-370VDC
- Power factor corrected for worldwide use
- Convection cooled (300W) or forced air (336-338W)
- Less than 0.5mA earth leakage current
- Efficiency: 86% / 89%
- Overcurrent and overvoltage protection
- Operating temperature*: -10°C to +70°C
- UL60950-1, CSA60950-1, EN60950-1, EN50178 OV II, CE compliant (AC input only)
- Dimensions: 3.31W x 1.65H x 7.09"D (84 x 42 x 180mm) open frame
- Five-year manufacturer's warranty

ZWS300BAF series power supplies are ideal for communication, test/measurement and industrial applications. Mfg. part nos. with no suffix have JST connectors; mfg. part nos. with **"/L" suffix** indicates L bracket; **"/A" suffix** indicates cover and L bracket; **"/R" suffix** indicates remote On/Off; **"/T" suffix** indicates screw terminals; **"/TL" suffix** indicates screw terminals and L bracket; **"/TA" suffix** indicates screw terminals, cover and L bracket; **"/C02" suffix** indicates protective PCB coating.

ADJUSTMENT RANGE: 9.6V TO 13.2V

Mfg. Part No.	Output Voltage (V)	Current Max. (A) Convection	Current Max. (A) Forced Air	Line Reg (mV)	Load Reg (mV)	Ripple & Noise (mV)	Stock No.	Price Each Each
ZWS300BAF12	12	25	25	48	100	100	47X2086	189.88
ZWS300BAF12/L	12	25	25	48	100	100	47X2089	199.98
ZWS300BAF12/A	12	25	25	48	100	100	47X2087	205.03
ZWS300BAF12/R	12	25	25	48	100	100	47X2090	199.98
ZWS300BAF12/T	12	25	25	48	100	100	47X2091	189.88

➤CONTINUED➤

SWITCHING POWER SUPPLIES

ZWS300BAF SERIES 300W SINGLE OUTPUT CONVECTION-COOLED POWER SUPPLIES (CONT.)

Mfg. Part No.	Output Voltage (V)	Current Max. (A) Convection	Current Max. (A) Forced Air	Line Reg (mV)	Load Reg (mV)	Ripple & Noise (mV)	Stock No.	Price Each Each
● ZWS300BAF12/TL	12	25	25	48	100	100	47X2093	199.98
● ZWS300BAF12/TA	12	25	25	48	100	100	47X2092	205.03
● ZWS300BAF12/C02	12	25	25	48	100	100	47X2088	205.03
ADJUSTMENT RANGE: 13.5V TO 20.3V								
● ZWS300BAF15	15	20	22	60	120	120	47X2094	189.88
● ZWS300BAF15/L	15	20	22	60	120	120	47X2097	199.98
● ZWS300BAF15/A	15	20	22	60	120	120	47X2095	205.03
● ZWS300BAF15/R	15	20	22	60	120	120	47X2098	199.98
● ZWS300BAF15/T	15	20	22	60	120	120	47X2099	189.88
● ZWS300BAF15/TL	15	20	22	60	120	120	47X2101	199.98
● ZWS300BAF15/TA	15	20	22	60	120	120	47X2100	205.03
● ZWS300BAF15/C02	15	20	22	60	120	120	47X2096	205.03

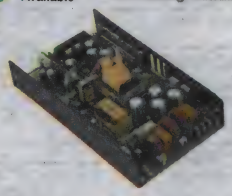
*Convection: derate linearly to 40% load from 40°C to 70°C; 1.4m/s airflow: derate linearly to 60% load from 50°C to 70°C
(212129)

CSS500 SERIES 500W AC-DC MEDICAL OR INDUSTRIAL POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- 360W convection rating (500W forced air)
- High efficiency
- IEC60601-1 or IEC60950-1 certifications
- ORing FET & current share
- Dual input fuses



SPECIFICATIONS	
Input Voltage Range:	90 to 264VAC (47 to 63Hz)
Input Current (115/230VAC):	6 / 3A
Efficiency:	87% to 92%, model & input dependant
Operating Temp:	Convection (U channel): 0 to +70°C, derate linearly to 35% load from 40°C to 70°C Forced air (or internal fan): 0 to +70°C, derate linearly to 50% load from 50°C to 70°C
Approvals:	Medical: UL60601-1, IEC60601-1 Industrial: UL60950-1, EN60601-1, CE Mark
Dimensions:	U Channel: 8 x 4.7 x 1.51" End Fan (/S) 9 x 4.7 x 1.63" Top Fan (/T) 8 x 4.7 x 2.85"

Mfg. Part No.	Output Voltage (VDC)	Output Current Forced Air (A)	Mechanical Options	Safety Certifications	Stock No.	Price Each 1-9
● CSS500-12	12	41.67	U Channel	Medical	24T7684	270.68
● CSS500-12/I	12	41.67	U Channel	Industrial	24T7685	242.40
● CSS500-24	24	20.84	U Channel	Medical	24T7690	270.68
● CSS500-24/I	24	20.84	U Channel	Industrial	24T7691	242.40
● CSS500-30	30	16.67	U Channel	Medical	24T7696	270.68
● CSS500-30/I	30	16.67	U Channel	Industrial	24T7697	242.40
● CSS500-36	36	13.89	U Channel	Medical	24T7702	270.68
● CSS500-36/I	36	13.89	U Channel	Industrial	24T7703	242.40
● CSS500-48	48	10.42	U Channel	Medical	24T7708	270.68
● CSS500-48/I	48	10.42	U Channel	Industrial	24T7709	242.40

(196214)

CUS250LD SERIES SINGLE OUTPUT POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- High Efficiency, up to 90%
- 1.18" high
- Wide Range AC Input
- Convection Cooled

SPECIFICATIONS	
AC Input Voltage (300VAC for 5s):	85 - 265VAC
Input Frequency	47 - 63Hz
DC Input Voltage:	0 - 370VDC (No safety certification)
Inrush Current (cold start)	20A at 115VAC, 40A at 230VAC
Power Factor	Meets EN61000-3-2 (Typical PF 0.98/0.95)
Input Current (115/230VAC)	2.8A / 1.4A
Weight (Typ)	700g
Size (LxWxH)	7.8 x 4 x 1.18"

➤CONTINUED➤

CUS250LD SERIES SINGLE OUTPUT POWER SUPPLIES (CONT.)

Mfg. Part No.	Output Voltage	Adjust Range (V)	Output Current (A)	Output Power (W)	Stock No.	Price Each 1-9
● CUS250LD3	3.3	2.97 - 3.63	50	165	87W7610	134.33
● CUS250LD4	4.2	3.78 - 4.62	50	210	87W7611	134.33
● CUS250LD5	5	4.5 - 5.5	50	250	87W7612	134.33
● CUS250LD12	12	10.8 - 13.2	21	252	87W7608	134.33
● CUS250LD24	24	21.6 - 26.4	10.5	252	87W7609	134.33

(210024)

175W AND 350W SINGLE AND MULTIPLE OUTPUT MODULAR POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- Medical approvals
- 1U form factor
- Up to 90% efficient
- Active power factor correction
- Universal input (90 - 264VAC)
- Up to 6 outputs
- UL Recognized, CSA Certified, CE Compliant
- Line regulation: < 0.1%
- Load regulation: < 10%
- Other models available; *go online or call*

175W

350W

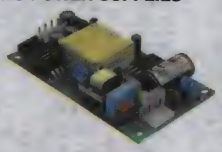
Mfg. Part No.	Nom. Output Voltage (V)	Max. Output Current (A)	Power (W)	Stock No.	Price Each 1-9
● NV11G000	24	7.5	175	10K0348	124.23
● NV1350FF	5/15/-15	25/5/1	175	09J4844	194.93
● NV1350TT	5/12/-12	25/5/1	175	88K1965	163.62
● NV1453FF	5/3.3/15/-15	25/15/5/1	175	09J4846	207.05
● NV1453FFN	5/3.3/15/-15/5	25/15/5/1/2	175	09J4847	250.48
● NV1453TT	5/3.3/12/-12	25/15/5/1	175	09J4848	207.05
● NV1453TTN	5/3.3/12/-12/5	25/15/5/1/2	175	09J4849	250.48
● NV3222CV	5/24/12/12	40/8/13/4	350	88K1966	581.00
● NV3222FL	5/5/12/12/24	25/10/12/4/8	350	04M4579	775.00
● NV3222GF	5/12/12/24	25/4/4/7	350	04M4580	633.00
● NV3222H8	5/12/12	25/16/4	350	04M4581	581.00

(80005)

ZPSA SERIES 20W TO 100W AC/DC POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power



ZPSA20

ZPSA100

- Single output
- Wide range AC input
- Low profile, industry standard footprint
- Global safety agency compliance

ZPSA series features industry standard footprint with up to 88% efficiency, wide range AC input for global operation and Class B conducted EMI reduces system filtering required. Meets EN61000-4 immunity.

SPECIFICATIONS:			
Mfg. Part No.	ZPSA20	ZPSA40/60	ZPSA100
Input Voltage Range:	85 - 264VAC (47 - 440Hz) or 120 - 370VDC	90 - 264VAC (47 - 440Hz) or 120 - 370VDC	
Ripple and Noise*:	1% or 50mV whichever is greater		1% (5V: 2%)
Conducted and Radiated EMI:	EN55022-B, FCC Class B		
Operating Temperature:	0°C to +70°C derate linearly to 37.5% load from 45 to 70°C	0°C to +70°C with derating	
Safety Agency Certification:	UL60950-1, CSA60950-1 (cUL), EN60950-1, CE Mark	UL60950-1, CSA60950-1, EN60950-1 Class I, CE Mark (LVD)	
Dimensions (WxLxH):	2 x 3.5 x 0.79"	2 x 4 x 1.07"	3 x 5 x 1.05"

ZPSA20 SERIES

Mfg. Part No.	Output Power (W)	Output Voltage (V)	Output Current (A)	Efficiency (%)	Stock No.	Price Each 1-9
● ZPSA203R3	15	3.3	4.4	82	94M5300	23.31
● ZPSA205	22	5	4.4	82	94M5301	23.31
● ZPSA209	22	9	2.45	82	94M5302	23.31
● ZPSA2012	20	12	1.8	82	94M5297	23.31
● ZPSA2015	21	15	1.4	82	94M5298	23.31
● ZPSA2024	22	24	0.92	82	94M5299	23.31
ZPSA40/60 SERIES						
● ZPSA403R3	20	3.3	6	74	94M5307	28.74
● ZPSA405	30	5	6	79	94M5311	28.74
● ZPSA409	40	9	4.45	83	94M5312	28.74
● ZPSA4012	40	12	3.34	85	94M5303	28.74

➤CONTINUED➤

ZPSA SERIES 20W TO 100W AC/DC POWER SUPPLIES (CONT.)

ZPSA40/60 SERIES

Mfg. Part No.	Output Power (W)	Output Voltage (V)	Output Current (A)	Efficiency (%)	Stock No.	Price Each 1-9
ZPSA4015	40	15	2.67	85	94M5304	28.74
ZPSA4024	40	24	1.67	86	94M5305	28.74
ZPSA4028	40	28	1.43	86	94M5306	28.74
ZPSA4030	40	30	1.33	87	94M5308	28.74
ZPSA4036	40	36	1.11	87	94M5309	28.74
ZPSA4048	40	48	0.834	88	94M5310	28.74
ZPSA603R3	26	3.3	8	74	94M5317	31.08
ZPSA605	40	5	8	79	94M5321	31.08
ZPSA609	60	9	6.67	83	94M5322	31.08
ZPSA6012	60	12	5	85	94M5313	31.08
ZPSA6015	60	15	4	85	94M5314	31.08
ZPSA6024	60	24	2.5	86	94M5315	31.08
ZPSA6030	60	30	2	87	94M5318	31.08
ZPSA6036	60	36	1.67	87	94M5319	31.08
ZPSA6048	60	48	1.25	88	94M5320	31.08
ZPSA100 SERIES						
ZPSA100-5	100	5	20	83	24T9681	65.80
ZPSA100-9	100	9	11.2	84	24T9682	65.80
ZPSA100-12	100	12	8.4	84	24T9676	65.80
ZPSA100-15	100	15	6.7	84	24T9677	65.80
ZPSA100-18	100	18	5.6	84	24T9678	65.80
ZPSA100-24	100	24	4.2	84	24T9679	65.80
ZPSA100-48	100	48	2.1	84	24T9680	65.80

*Measured with 0.1uF ceramic and 10uF electrolytic at 20MHz BW
(110631)

ZPD, ZPT SERIES MULTIPLE-OUTPUT POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda
Innovating Reliable Power

- Low-profile, industry standard footprint
- Compact design
- Wide range AC input
- High-efficiency, up to 88%
- Meets EN61000-4 immunity
- Global Safety Agency Compliance
- UL recognized, CSA certified, CE compliant

ZPD, ZPT series

Ideal for applications such as computer peripherals, datacom, point of sale and test and measurement. Features continuous hiccup-mode short-circuit protection, overvoltage protection and convention cooling. One-year manufacturer's warranty.

SPECIFICATIONS:

Input Voltage:	90-264VAC or 120-370VDC
Input Frequency:	47-440Hz
Line Regulation:	+/- 1% for V1 and V3, +/- 2% for V2
Load Regulation:	
Ripple & Noise:	1% or 50mV (whichever is greater)
Efficiency:	Up to 88%
Conducted & Radiated EMI:	EN55022-B, FCC Class B
Operating Temperature:	0° to +70°C
Dimensions:	4.0L x 2.0W x 1.2"H

ZPD SERIES DUAL-OUTPUT UNITS

Mfg. Part No.	Output 1 V	Output 1 A	Output 2 V	Output 2 A	Output 3 V	Output 3 A	Output Power (W)	Stock No.	Price Each 1-9
ZPD40512	5	3.2	+12	2	...	...	40	52K4880	52.06
ZPD40524	5	3.2	+24	1	...	...	40	52K4881	52.06
ZPT SERIES TRIPLE-OUTPUT UNITS									
ZPT405125N	5	3.2	+12	2	-5	300	40.5	73K1385	52.06
ZPT4051212N	5	3.2	+12	2	-12	300	42.6	52K4901	52.06
ZPT4051515N	5	3.2	+15	1.5	-15	300	42	52K4903	52.06
ZPT4052412N	5	3.2	+24	1	-12	300	42.6	52K4904	52.06
ZPT405245N	5	3.2	+24	1	-5	300	40.5	52K4906	52.06
ZPT4052412P	5	3.2	+24	1	12	300	42.6	52K4905	52.06
ZPT403512N	3.3	5	5	2	-12	300	30	52K4900	52.06

(85492)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

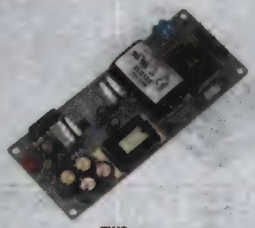
(212570)

ZWS SERIES SINGLE-OUTPUT POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda
Innovating Reliable Power

TÜV Rheinland



ZWS

ZWS-AF / ZWS-PAF

- Power factor and harmonic correction
- Input transient protection
- Radiated & conducted EMI per EN55022-B & FCC Class B
- Universal AC input
- Output adjustment (10%)
- High quality design
- Worldwide safety agency approvals
- 200% peak current capability for printer and motor applications (ZWS-PAF)
- Two- to five-year manufacturer's warranty

SPECIFICATIONS

Model	ZWS	ZWS-AF	ZWS-PAF
AC Input Voltage:	85-265VAC		
Input Frequency:	47-440Hz	47-63Hz	
DC Input Voltage:	110-330VDC	120-370VDC	
Operating Temperature:	-10°C to +60°C, derate linearly to 70% load from +50°C to +60°C	-10°C to +70°C, derate linearly to 70% load from +60°C to +70°C	
Safety Agency Approvals:	UL60950-1, CSA60950-1, EN60950-1, CE Mark	UL60950-1, CSA60950-1, EN60950-1, EN50178, CE Mark	

ZWS SERIES

Mfg. Part No.	Output Power (W)	Output Voltage (V)	Max. Current	Stock No.	Price Each 1-9
ZWS5-3	5	3.3	1A	72K1630	21.76
ZWS5-5	5	5	1A	72K1631	21.76
ZWS5-12	5	12	420mA	72K1628	21.76
ZWS5-15	5	15	340mA	17B5337	21.76
ZWS5-24	5	24	220mA	72K1629	21.76
ZWS10-3	10	3.3	2A	72K1615	26.41
ZWS-10-5	10	5	2A	72K1611	26.41
ZWS10-12	10	12	850mA	72K1612	26.41
ZWS10-15	10	15	700mA	72K1613	26.41
ZWS10-24	10	24	450mA	72K1614	26.41
ZWS15-3	15	3.3	3A	72K1619	32.63
ZWS15-5	15	5	3A	72K1620	32.63
ZWS15-12	15	12	1.25A	72K1616	32.63
ZWS15-15	15	15	1A	72K1617	32.63
ZWS15-24	15	24	650mA	72K1618	32.63
ZWS30-3	30	3.3	6A	72K1626	37.29
ZWS30-5	30	5	6A	72K1627	37.29
ZWS30-12	30	12	2.5A	80K6206	37.29
ZWS50-3	50	3.3	10A	72K1633	45.83
ZWS50-5	50	5	10A	72K1634	45.83
ZWS50-12	50	12	4.3A	83F2689	45.83
ZWS50-24	50.4	24	2.1A	72K1632	45.83
ZWS-AF SERIES					
ZWS75AF3	49.5	3.3	15A	83K4209	73.81
ZWS100AF3	66	3.3	20A	06M0903	84.69
ZWS75AF5	75	5	15A	10K0935	73.81
ZWS75AF12	75.6	12	6.3A	10K0923	73.81
ZWS75AF24	76.8	24	3.2A	10K0931	73.81
ZWS100AF5	100	5	20A	10K0816	84.69
ZWS100AF12	102	12	8.5A	10K0804	84.69
ZWS150AF5	150	5	30A	10K0832	107.21
ZWS150AF12	150	12	12.5A	10K0820	107.21
ZWS150AF24	151.2	24	6.3A	10K0828	107.21
ZWS-PAF SERIES					
ZWS150PAF-48	206.4	48	4.3A*	09J4862	130.52
ZWS240PAF-24	300	24	12.5A*	72K1623	174.03
ZWS240PAF-48	302.4	48	6.3A*	72K1624	174.03

*Indicates max. current forced air
(28479)

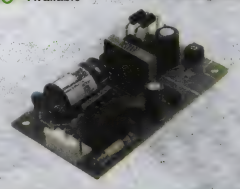
SWITCHING POWER SUPPLIES

ZWS10-30B SERIES SINGLE OUTPUT POWER SUPPILES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- Universal input 85 - 265VAC
- Five-year mnufacturer's warranty
- Small Size
- <0.5W off load power draw
- 10-year E-cap lifetime



Mfg. Part No.	Output Voltage	Adjust Range (V)	Output Current (A)	Output Power (W)	Stock No.	Price Each 1-9
● ZWS10B3	3.3	2.97-3.63	2	6.6	53W5520	26.41
● ZWS15B3	3.3	2.97-3.63	3	9.9	53W5525	32.63
● ZWS30B3	3.3	2.97-3.63	6	19.8	53W5530	37.29
● ZWS10B5	5	4.5-5.5	2	10	53W5521	26.41
● ZWS15B5	5	4.5-5.5	3	15	53W5526	32.63
● ZWS30B5	5	4.5-5.5	6	30	53W5531	37.29
● ZWS10B12	12	10.8-13.2	0.9	10.8	53W5517	26.41
● ZWS15B12	12	10.8-13.2	1.3	15.6	53W5522	32.63
● ZWS30B12	12	10.8-13.2	2.5	30	53W5527	37.29
● ZWS10B15	15	13.5-16.5	0.7	10.5	53W5518	26.41
● ZWS15B15	15	13.5-16.5	1	15	53W5523	32.63
● ZWS30B15	15	13.5-16.5	2	30	53W5528	37.29
● ZWS10B24	24	21.6-26.4	0.5	12	53W5519	26.41
● ZWS15B24	24	21.6-26.4	0.7	16.8	53W5524	32.63
● ZWS30B24	24	21.6-26.4	1.3	31.2	53W5529	37.29

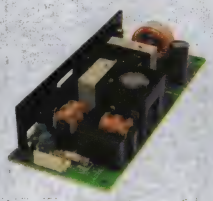
(210025)

ZWS "B" SERIES SINGLE OUTPUT WORLDWIDE POWER SUPPLIES

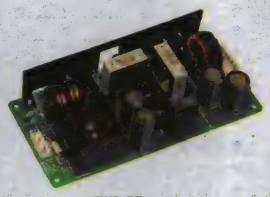
RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- Universal input 85 to 265VAC
- Power factor corrected for worldwide use
- Convection cooled for better field reliability
- Five-year manufacturer's warranty
- Compact design
- Ideal for Factory Automation, Test & Measurement and Light Industrial Equipment



ZWS-BAF



ZWS-BP

ZWS-BAF SERIES

Mfg. Part No.	Output Voltage (V)	Adjustable Range (V)	Output Current (A)	Output Power (W)	Efficiency (%)	Stock No.	Price Each 1-9
● ZWS100BAF-3	3.3	2.97-3.63	20	66	82 / 84	84R9227	84.29
● ZWS150BAF-3	3.3	2.97-3.63	30	99	82 / 84	84R9257	98.35
● ZWS50BAF5	5	4.5-5.5	10	50	82 / 84	41T5633	60.60
● ZWS75BAF5	5	4.5-5.5	15	75	82 / 84	41T5657	72.97
● ZWS100BAF-5	5	4.5-5.5	20	100	84 / 86	84R9237	84.29
● ZWS150BAF-5	5	4.5-5.5	30	150	85 / 87	84R9267	98.35
● ZWS50BAF12	12	10.8-13.2	4.3	51.6	83 / 85	41T5613	60.60
● ZWS75BAF12	12	10.8-13.2	6.3	75.6	83 / 85	41T5637	72.97
● ZWS100BAF-12	12	10.8-13.2	8.5	102	86 / 88	84R9212	84.29
● ZWS150BAF-12	12	10.8-13.2	12.5	150	85 / 88	84R9242	98.35
● ZWS50BAF15	15	13.5-16.5	3.5	52.5	83 / 86	41T5617	60.60
● ZWS75BAF15	15	13.5-16.5	5	75	84 / 86	41T5641	72.97
● ZWS100BAF-15	15	13.5-16.5	6.7	100.5	86 / 88	84R9217	84.29
● ZWS150BAF-15	15	13.5-16.5	10	150	86 / 89	84R9247	98.35
● ZWS50BAF24	24	21.6-26.4	2.1	50	84 / 87	41T5621	60.60
● ZWS75BAF24	24	21.6-26.4	3.2	76.8	84 / 87	41T5645	72.97
● ZWS100BAF-24	24	21.6-26.4	4.3	103.2	87 / 89	84R9222	84.29
● ZWS300BAF24	24	21.6-27.5	12.5	300	89 / 91	47W2821	189.88
● ZWS300BAF24/TL	24	21.6-27.5	12.5	300	89 / 91	47W2828	199.98
● ZWS150BAF-24	24	21.6-26.4	6.3	151.2	88 / 90	84R9252	98.35
● ZWS300BAF36	36	32.4-39.6	8.4	302.4	88 / 91	47W2829	189.88
● ZWS300BAF36/TL	36	32.4-39.6	8.4	302.4	88 / 91	47W2836	199.98
● ZWS50BAF48	48	39.5-52.8	1.1	52.8	84 / 86	41T5629	60.60
● ZWS75BAF48	48	39.5-52.8	1.6	76.8	85 / 88	41T5653	72.97
● ZWS300BAF48	48	39.5-52.8	6.3	302.4	88 / 91	47W2837	189.88
● ZWS100BAF-48	48	39.5-52.8	2.1	100.8	88 / 90	84R9232	84.29
● ZWS150BAF-48	48	39.5-52.8	3.2	153.6	89 / 91	84R9262	98.35
ZWS-BP SERIES							
● ZWS150BP24	24	21.6-26.4	6.3	151.2	87 / 90	94T6142	130.29
● ZWS240BP24	24	21.6-26.4	10	240	88 / 91	94T6145	186.85

➤CONTINUED➤

ZWS "B" SERIES SINGLE OUTPUT WORLDWIDE POWER SUPPLIES (CONT.)

ZWS-BP SERIES

Mfg. Part No.	Output Voltage (V)	Adjustable Range (V)	Output Current (A)	Output Power (W)	Efficiency (%)	Stock No.	Price Each 1-9
● ZWS150BP36	36	32.4-39.6	4.2	151.2	87 / 90	94T6143	130.29
● ZWS240BP36	36	32.4-39.6	6.7	241.2	88 / 91	94T6146	186.85
● ZWS150BP48	48	39.6-52.8	3.2	153.6	87 / 90	94T6144	130.29
● ZWS240BP48	48	39.6-52.8	5	240	88 / 91	94T6147	186.85

(192070)

ZWQ SERIES QUAD OUTPUT POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

Features:

- 80W to 170W quad output power supplies
- Universal input, 85-265VAC
- Power factor corrected
- Adjustable main and fourth output
- Floating fourth output
- Low profile, <1U high

ZWQ series can be used as positive or negative output. Convection cooling. Outputs 2 and 3 are user selectable via connector or PCB.

80W

Mfg. Part No.	Output 1 (V/A)	Output 2 (V/A)	Output 3 (V/A)	Output 4 (V/A)	Stock No.	Price Each 1-9
● ZWQ805222/A	5/8	+12/2	-15/2	12/3	10K0794	163.62
● ZWQ805223/A	5/8	+12/2	-15/2	3.3/7	10K0797	163.62
● ZWQ805224/A	5/8	+12/2	-15/2	24/1.5	88K2032	163.62
● ZWQ805225/A	5/8	+12/2	-15/2	5/7	88K2033	163.62
130W						
● ZWQ1305222/A	5/15	+12/4	-15/4	12/4	10K0782	182.81
● ZWQ1305223/A	5/15	+12/4	-15/4	3.3/10	10K0785	182.81
● ZWQ1305224/A	5/15	+12/4	-15/4	24/2	10K0788	182.81
● ZWQ1305225/A	5/15	+12/4	-15/4	5/10	10K0791	182.81

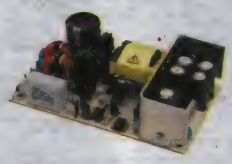
(84545)

SC SERIES SINGLE- AND MULTIPLE-OUTPUT POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- Global Safety Agency Compliance
- Meet EN61000-4 (-2 to -6) specifications
- Low cost
- Low profile
- One-year manufacturer's warranty
- UL recognized, CSA certified, CE compliant



AC input: 85-264VAC; 47-63Hz. Dimensions: 3"L x 5"W.

Mfg. Part No.	Output Voltage (V)	Output Current (A)	Power (W)	Forced Air or Fan (A)	Stock No.	Price Each 1-9
● SCS6012	12	5.0	60	6.7	48F3106	51.51
● SCS120PW12	12	10	120	...	80K8510	60.60
● SCS120PW15	15	8	120	...	80K8511	60.60
● SCS120PW32	32	3.75	120	...	24T8974	60.60
● SCS120PW36	36	3.34	120	...	24T8975	60.60
● SCS120PW48	48	2.5	120	...	24T8976	60.60
● SCS4024	24	1.6	40	2.3	48F6445	48.48
● SCS6024	24	2.5	60	3.3	48F3107	51.51
● SCS120PW24	24	5	120	...	80K8512	60.60
● SCS6028	28	2.1	60	2.9	82K8618	51.51
● SCS4048	48	0.9	40	1.2	48F6447	48.48
● SCS6048	48	1.3	60	1.7	93K7596	51.51
● SCD601515	15 -15	2.2 1.8	60	2.9 2.4	72K0352	66.66
● SCT42	5.0 12 -12	4.0 2.0 0.5	40	5.0 2.5 0.7	72K0382	51.51
● SCT45	5.0 15 -15	4.0 2.0 0.5	40	5.0 2.5 0.7	72K0385	51.51
● SCT62	5.0 12 -12	7.0 3.0 0.7	40	8.0 3.5 1.0	72K0390	54.04
● SCT63	5.0 15 -15	7.0 2.8 0.7	60	8.0 3.3 1.0	72K0391	54.04
● SCT65	5.0 24 12	7.0 1.5 0.7	60	8.0 2.0 1.0	72K0393	54.04

(49379)

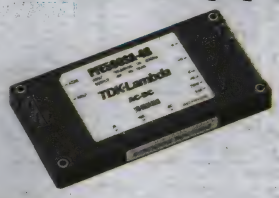
PFE300SA-700SA SERIES 300 TO 714W AC-DC POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

NEW

- Low profile, small size saves space
- 100°C baseplate temperature
- High-power density
- High-efficiency
- Suitable for conduction cooling
- Power Factor Corrected (PFC)
- Full brick footprint
- Overtemperature protection
- 2-year manufacturer's warranty
- UL recognized, CSA certified, CE compliant



SPECIFICATIONS:

Mfg. Part No.:	PFE300SA, PFE500SA	PFE700SA
AC Input:	85 to 265VAC, 47-63Hz	
Input Current (100 / 200VAC):	3.5 / 2A, 6.1 / 2.9A	8.3 / 4A
Power Factor:	0.95 min., Meets EN61000-3-2	
Ripple and Noise:	1%	4V
Parallel Operation:	No	Yes (Droop Mode)
Overcurrent Protection:	105-140% (Automatic Recovery)	
Overvoltage Protection:	125-150%	115-145%
Operating Temperature:	-40°C to +100°C Baseplate	
Safety Agency Approvals:	UL60950-1, CSA60950-1 (cUL), EN60950-1, CE Mark (LVD)	
Dimensions:	61mmW x 12.7mmH x 116.8mmD	

Mfg. Part No.*	Output Voltage (V)	Adjust. Range (V)	Max. Current (A)	Output Power (W)	Load/Line Reg. (mV)	Effic-iency† (%)	Stock No.	Price Each Each
PFE300SA12	12	9.6-14.4	25	300	48	84 / 85	23X5786	247.45
PFE300SA12/T	12	9.6-14.4	25	300	48	84 / 85	23X5787	247.45
PFE500SA12	12	9.6-14.4	33	396	48	84 / 86	23X5792	267.46
PFE500SA12/T	12	9.6-14.4	33	396	48	84 / 86	23X5793	267.46
PFE300SA28	28	22.4-33.6	10.8	302	56	86 / 88	23X5788	247.45
PFE300SA28/T	28	22.4-33.6	10.8	302	56	86 / 88	23X5789	247.45
PFE500SA28	28	22.4-33.6	18	504	56	86 / 89	23X5794	267.46
PFE500SA28/T	28	22.4-33.6	18	504	56	86 / 89	23X5795	267.46
PFE300SA48	48	38.4-57.6	6.3	302	96	87 / 89	23X5790	247.45
PFE300SA48/T	48	38.4-57.6	6.3	302	96	87 / 89	23X5791	247.45
PFE500SA48	48	38.4-57.6	10.5	504	96	88 / 90	23X5796	267.46
PFE500SA48/T	48	38.4-57.6	10.5	504	96	88 / 90	23X5797	267.46
PFE700SA48	51	None	14	714	50-57V‡	88 / 91	23X5798	291.95
PFE700SA48/T	51	None	14	714	50-57V‡	88 / 91	23X5799	291.95

*Mfg. part nos. with **suffix T** have 3.3mm non-threaded inserts, all others have M3 tapped mounting inserts; ‡Total regulation range; †100 / 200VAC (Efficiency values @115/230VAC are 1% higher
(211515)

PFE300-1000 SERIES SINGLE OUTPUT FULL BRICK AC-DC POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- Low profile, small size
- 100°C baseplate temperature
- High power density
- High efficiency
- Two-year manufacturer's warranty

Low profile assists system integration. Easier to cool high efficiency. Power Factor Corrected (PFC) supports global use. Up to 100°C baseplate temperature for operation in harsh environments. **Mfg. part no. PFE 500F** incorporates current share (F = full featured). **T** in suffix indicates 3.3mm non-threaded inserts (4).

SPECIFICATIONS:

Mfg. Part No.:	PFE300 PFE500	PFE700	PFE500F	PFE1000F
Input Voltage Range:	85 - 265VAC (PFE-S operation to 440Hz possible (2))			
Input Frequency:	47 - 63Hz			
Power Factor:	0.95 minimum			0.95 minimum, meets EN61000-3-2
Ripple & Noise: (1)	1%	4V	1%	1%
Operating Baseplate Temp.:	-40°C to +85°C-100°C (model dependent)			
Safety Agency Approvals:	UL60950-1, CSA60950-1 (cUL), EN60950-1, CE mark (LVD)			
Dimensions:	2.4W x 0.5H x 4.6"D	2.76W x 0.5H x 4.8"D		3.94W x 0.53H x 6.3"D

Mfg. Part No.	Output Voltage (V)	Output Range (V)	Max. Current (A)	Output Power (W)	Efficiency (%)	Stock No.	Price Each 1-9
PFE300S-12	12	9.6 - 14.4	25	300	83	12P6480	252.50
PFE300S-12/T	12	9.6 - 14.4	25	300	83	12P6481	252.50
PFE500S-12	12	9.6 - 14.4	33	396	83	12P6486	275.73
PFE500F12	12	9.6 - 14.4	42	504	83	94M5278	357.54
PFE500F12/T	12	9.6 - 14.4	42	504	83	94M5279	357.54
PFE300S-28	28	22.4 - 33.6	10.8	302	86	12P6482	252.50
PFE300S-28/T	28	22.4 - 33.6	10.8	302	86	12P6483	252.50

➤CONTINUED➤

PFE300-1000 SERIES SINGLE OUTPUT FULL BRICK AC-DC POWER SUPPLIES (CONT.)

Mfg. Part No.	Output Voltage (V)	Output Range (V)	Max. Current (A)	Output Power (W)	Efficiency (%)	Stock No.	Price Each 1-9
PFE500F28	28	22.4 - 33.6	18	504	86	94M5280	357.54
PFE500F28/T	28	22.4 - 33.6	18	504	86	94M5281	357.54
PFE500S-28	28	22.4 - 33.6	18	504	86	12P6488	275.73
PFE300S-48	48	38.4 - 57.6	6.3	302	86	12P6484	252.50
PFE300S-48/T	48	38.4 - 57.6	6.3	302	86	12P6485	252.50
PFE500F48	48	38.4 - 57.6	10.5	504	86	94M5282	357.54
PFE500F48/T	48	38.4 - 57.6	10.5	504	86	94M5283	357.54
PFE500S-48	48	38.4 - 57.6	10.5	504	86	12P6490	275.73
PFE700S-48	51	...	14	714	89	12P6492	300.98
PFE1000F-12	12	9.6 - 14.4	60	720	82	34P0189	683.77
PFE1000F-12/T	12	9.6 - 14.4	60	720	82	34P0190	683.77
PFE1000F-28	28	22.4 - 33.6	36	1.008	86	34P0191	683.77
PFE1000F-28/T	28	22.4 - 33.6	36	1.008	86	34P0192	683.77
PFE1000F-48	48	38.4 - 57.6	21	1.008	86	34P0193	683.77
PFE1000F-48/T	48	38.4 - 57.6	21	1.008	86	34P0194	683.77

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
ARA00499	EMI Choke, - For PFE Module; Series:PFE	04P1800	12.63
DFP10112	Input Inductor for PFE300-700	04P1802	1.26

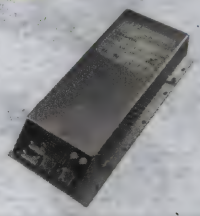
(1) External components are required, consult Application Notes
(2) Requires the use of an undervoltage relay or similar
(97262)

CPFE500F SERIES 500W CONDUCTION COOLED POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- Base plate cooled, no fan required
- 90 to 265VAC (47-440Hz) input voltage
- High efficiency (85% at 75% loading)
- Protective coating option
- MIL STD 461/462D CE102 EMC
- Dimensions (L x W x D): 270 x 126 x 55mm



Mfg. Part No.	Output Voltage (V)	Output Current (A)	Stock No.	Price Each 1-9
CPFE500F-12-NLC	12	42	12T3233	769.62
CPFE500F-24-NLC	24	18	12T3234	769.62
CPFE500F-28-NLC	28	18	12T3235	769.62
CPFE500F-48-NLC	48	10.5	12T3236	769.62

(192372)

KM SERIES 5-40W MEDICAL AC-DC BOARD MOUNT POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- Small size and lightweight
- PC board mountable
- Wide range input
- Medical safety certifications (4kVAC input - output)
- Class II (no ground needed)

KM series small size and high efficiency minimizes PCB space, while lowering heat dissipated in system. Features a wide range input for global use with no manual intervention.

SPECIFICATIONS:

Mfg. Part No.	KMS15	KMD15	KMT15	KMS40	KMD40	KMT40
Input Voltage Range:	90 - 264VAC 47 - 440Hz or 110 - 375VDC					
Switching Frequency:	132 kHz					
Ripple & Noise (pk-pk):	50mV or 1%, whichever is greater					
Conducted EMI:	EN55011 Class B			EN55011 Class A		
Operating Temperature:	-25°C to 70°C, derate linearly to 50% load from 50°C to 70°C. Max case temperature 95°C.					
Safety Agency Certification:	UL60601-1, IEC60601-1, CE Mark					
Dimensions (LxWxH):	2.52 x 1.79 x 0.92"			3.5 x 2.5 x 1.06"		

Mfg. Part No.	Output Power (W)	Output 1 (VDC) + (V)	Output 1 (VDC) + (A)	Output 2 (VDC) - (V)	Output 2 (VDC) - (A)	Output 3 (VDC) (V)	Output 3 (VDC) (A)	Effi-ciency (%)	Stock No.	Price Each 1-9
KMS15-3P3	9.9	3.3	3	...	...	...	...	74	66M7771	50.12
KMS40-3P3	26.4	3.3	8	...	...	...	...	75	66M7777	75.37
KMS15-5	15	5	3	...	...	...	...	78	66M7772	50.12
KMS40-5	40	5	8	...	...	...	...	79	66M7778	75.37
KMS15-9	15	9	1.67	...	...	...	...	79	66M7773	50.12

➤CONTINUED➤

SWITCHING POWER SUPPLIES

KM SERIES 5-40W MEDICAL AC-DC BOARD MOUNT POWER SUPPLIES (CONT.)

Mfg. Part No.	Output Power (W)	Output 1 (VDC) + (V)	Output 1 (VDC) + (A)	Output 2 (VDC) - (V)	Output 2 (VDC) - (A)	Output 3 (VDC) (V)	Output 3 (VDC) (A)	Effi-ciency (%)	Stock No.	Price Each 1-9
● KMS40-9	40	9	4.44	...	...	...	...	82	66M7779	75.37
● KMS15-12	15	12	1.25	...	...	...	...	81	66M7768	50.12
● KMS40-12	40	12	3.33	...	...	...	...	83	66M7774	75.37
● KMS15-15	15	15	1	...	...	...	...	81	66M7769	50.12
● KMS40-15	40	15	2.67	...	...	...	...	83	66M7775	75.37
● KMS15-24	15	24	0.62	...	...	...	...	83	66M7770	50.12
● KMS40-24	40	24	1.67	...	...	...	...	83	66M7776	75.37
● KMD15-55	15	5	1.5	-5	1.5	...	...	78	66M7762	54.39
● KMD40-55	40	5	4	-5	4	...	...	79	66M7767	80.80
● KMD40-512	40	5	5	12	1.25	...	...	80	66M7765	80.80
● KMD40-524	40	5	5	24	0.625	...	...	80	66M7766	80.80
● KMD15-1212	15	12	625	-12	0.625	...	...	80	66M7760	54.39
● KMD40-1212	40	12	1.66	-12	1.66	...	...	83	66M7763	80.80
● KMD15-1515	15	15	500	-15	0.5	...	...	81	66M7761	54.39
● KMD40-1515	40	15	1.33	-15	1.33	...	...	81	66M7764	80.80
● KMT15-51212	15	5	2	+12	0.2	-12	0.2	78	66M7780	70.70
● KMT40-51212	40	5	5	+12	0.6	-12	0.6	80	66M7782	95.95
● KMT15-51515	15	5	2	+15	0.15	-15	0.15	78	66M7781	70.70
● KMT40-51515	40	5	5	+15	0.5	-15	0.5	80	66M7783	95.95

(103588)

KPSA SERIES 5-15 WATT AC/DC BOARD MOUNT POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda
Innovating Reliable Power

- Low profile
- Smaller footprint
- PC board mountable

KPSA series features a smaller footprint to minimize PCB space and a wide range input for global use with no manual intervention. Easy to use no external components or ground connector needed. Ideal for applications such as factory automation, printers, motor drives and kiosks. Class II UL approved, CE compliant.

Mfg. Part No.	Output Voltage (V)	Output Current	Output Power (W)	Stock No.	Price Each 1-9
● KPSA53R3	3.3	1.25A	4.1	19P2380	19.42
● KPSA55	5	1A	5	19P2381	19.42
● KPSA512	12	420mA	5	19P2377	19.42
● KPSA515	15	330mA	5	19P2378	19.42
● KPSA524	24	230mA	5.5	19P2379	19.42
● KPSA103R3	3.3	2.5A	8.3	19P2370	24.87
● KPSA153R3	3.3	3A	9.9	19P2375	29.92
● KPSA105	5	2A	10	19P2371	24.87
● KPSA1012	12	840mA	10.1	19P2367	24.87
● KPSA1015	15	670mA	10.1	19P2368	24.87
● KPSA1024	24	420mA	10.1	19P2369	24.87
● KPSA155	5	3A	15	19P2376	29.92
● KPSA1512	12	1.25A	15	19P2372	29.92
● KPSA1515	15	1A	15	19P2373	29.92
● KPSA1524	24	630mA	15.1	19P2374	29.92

(136318)

TMLM SERIES 4 TO 20W AC/DC POWER MODULES

RoHS Compliant Available

TRACO POWER

- AC/DC power modules for PCB mounting
- Highest power density
- Fully encapsulated plastic case
- Universal input 90–264 VAC, 47–440 Hz
- High efficiency
- EMI meets EN 55022, class B and FCC, level B
- Low ripple and noise
- Short circuit and overload protection
- Three-year manufacturer's warranty

SINGLE OUTPUT

Mfg. Part No.	Output Power (W)	Output Voltage (VDC)	Output Current	Stock No.	Price Each 1-4
● TMLM 04103	4	3.3	1.2A	51R5387	26.67
● TMLM 04105	4	5	800mA	51R5388	26.67
● TMLM 04109	4	9	444mA	51R5389	25.41
● TMLM 04112	4	12	333mA	51R5390	26.67
● TMLM 04115	4	15	267mA	51R5391	26.67
● TMLM 04124	4	24	167mA	51R5392	26.67
● TMLM 05103	4.1	3.3	1.25A	51R5395	53.60
● TMLM 05105	5	5	1A	51R5396	53.60

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TMLM SERIES 4 TO 20W AC/DC POWER MODULES (CONT.)

Mfg. Part No.	Output Power (W)	Output Voltage (VDC)	Output Current	Stock No.	Price Each 1-4
● TMLM 05112	5	12	420mA	51R5397	56.25
● TMLM 05115	5	15	333mA	51R5398	53.60
● TMLM 05124	5.5	24	230mA	51R5399	53.60
● TMLM 10103	8.2	3.3	2.4A	51R5400	53.47
● TMLM 10105	10	5	2A	51R5401	53.47
● TMLM 10112	10	12	833mA	51R5402	56.12
● TMLM 10115	10	15	667mA	51R5403	56.12
● TMLM 10124	10	24	417mA	51R5404	53.47
DUAL OUTPUT					
● TMLM 04253	3.5	5 / 3.3	600mA / 150mA	51R5394	27.72
● TMLM 04225	3.6	12 / 5	250mA / 120mA	51R5393	27.72

(195382)

TML SERIES 5 TO 30W AC/DC POWER MODULES

RoHS Compliant Available

TRACO POWER

- Encapsulated power supplies
- PCB mount or chassis mount with screw terminals
- Single, dual and triple output models
- Universal input 85–264VAC, 47–440Hz
- EMI meets EN 55022, class B and FCC, level B
- Low ripple and noise
- Short circuit and overload protection
- Three-year manufacturer's warranty

Chassis Mount

SINGLE OUTPUT

Mfg. Part No.	Output Power (W)	Output Voltage	Output Current	Mount	Stock No.	Price Each 1-4
● TML 05105	5	5V	1A	PCB	51R5351	58.44
● TML 05112	5	12V	416mA	PCB	51R5352	55.68
● TML 05124	5	24V	200mA	PCB	51R5353	58.44
● TML 10105	10	5V	2A	PCB	51R5356	63.94
● TML 10112	10	12V	833mA	PCB	51R5357	60.92
● TML 10124	10	24V	416mA	PCB	51R5358	60.92
● TML 15105	15	5V	3A	PCB	51R5362	64.83
● TML 15105C	15	5V	3A	Chassis	51R5363	78.91
● TML 15112	15	12V	1.25A	PCB	51R5364	64.83
● TML 15112C	15	12V	1.25A	Chassis	51R5365	75.19
● TML 15124	15	24V	625mA	PCB	51R5366	61.77
● TML 15124C	15	24V	625mA	Chassis	51R5367	78.92
● TML 30105	30	5V	6A	PCB	51R5376	101.72
● TML 30105C	30	5V	6A	Chassis	51R5377	110.08
● TML 30112	30	12V	2.5A	PCB	51R5378	96.92
● TML 30112C	30	12V	2.5A	Chassis	51R5379	110.08
● TML 30124	30	24V	1.25A	PCB	51R5380	101.72
● TML 30124C	30	24V	1.25A	Chassis	51R5381	110.08
DOUBLE OUTPUT						
● TML 05212	5	12V, -12V	200mA, 200mA	PCB	51R5354	56.60
● TML 05215	5	15V, -15V	160mA, 160mA	PCB	51R5355	56.60
● TML 10205	10	5V, -5V	800mA, 800mA	PCB	51R5359	66.62
● TML 10212	10	12V, -12V	380mA, 380mA	PCB	51R5360	63.48
● TML 10215	10	15V, -15V	300mA, 300mA	PCB	51R5361	66.62
● TML 15212	15	12V, -12V	650mA, 650mA	PCB	51R5368	64.12
● TML 15212C	15	12V, -12V	650mA, 650mA	Chassis	51R5369	81.60
● TML 15215	15	15V, -15V	500mA, 500mA	PCB	51R5370	64.12
● TML 15215C	15	15V, -15V	500mA, 500mA	Chassis	51R5371	81.60
● TML 30212	30	12V, -12V	1.3A, 1.3A	PCB	51R5382	100.75
● TML 30212C	30	12V, -12V	1.3A, 1.3A	Chassis	51R5383	113.83
TRIPLE OUTPUT						
● TML 15512	15	5V, 12V, -12V	2A, 200mA, 200mA	PCB	51R5372	76.47
● TML 15512C	15	5V, 12V, -12V	2A, 200mA, 200mA	Chassis	51R5373	93.80
● TML 15515	15	5V, 15V, -15V	2A, 150mA, 150mA	PCB	51R5374	80.26
● TML 15515C	15	5V, 15V, -15V	2A, 150mA, 150mA	Chassis	51R5375	94.79
● TML 30512C	30	5V, 12V, -12V	3A, 630mA, 630mA	Chassis	51R5386	132.77
● TML 30512	30	5V, 12V, -12V	3A, 630mA, 630mA	PCB	51R5385	117.16

(203958)

TMP SERIES, 7 TO 60 WATT, AC/DC POWER MODULES

RoHS Compliant Available

TRACO POWER

Features:
- Ultra compact, low profile plastic case
- Single, dual and triple output models
- Universal input 85-264VAC, 47-440Hz
- Protection class II
- IEC/EN/UL 60950-1 approval, CB-report
- Short circuit and overload protection
- Three-year manufacturer's warranty

PCB Mount with Solder Pins

Chassis Mount with Screw Terminal Block

Specifications:
- Regulation:
  Line variation: ± 1% max.
  Load variation: ± 1% max. (single output models)
  ± 2.5% max. (balanced load)(dual output models)
  ± 1% max. (triple output models)
- Ripple & Noise: 30 mVpk-pk max. (20 MHz BW)
- I/O isolation: 3000VAC (60 sec.)
- Operating temperature range: -40°C to +60°C, above +50°C derating 3.5%/K

TMP series AC/DC power modules are fully encapsulated power supplies in an ultra-compact module. They feature easy chassis mounting with screw terminal block connection or direct PCB mounting with solder pins. Full compliance with International safety standards for industrial control equipment qualifies the products for worldwide markets. DIN rail mount adaptor is also available; *go online or call.*

SINGLE OUTPUT PCB MOUNT WITH SOLDER PINS

Mfg. Part No.	Output Power Max.	Output Voltage (VDC)	Output Current (Max.)	Stock No.	Price Each 1-4
TMP 07103	4.6	3.3	1.4A	51R5405	40.66
TMP 07105	7	5	1.4A	51R5406	40.66
TMP 07112	7	12	585mA	51R5407	40.66
TMP 07124	7	24	290mA	51R5408	40.66
TMPM 10103	8.3	3.3	2.5A	51R5446	47.13
TMPM 10105	10	5	2A	51R5447	47.13
TMPM 10112	10	12	830mA	51R5448	47.13
TMPM 10115	10	15	665mA	51R5449	47.13
TMPM 10124	10	24	415mA	51R5450	47.13
TMP 10105	10	5	2A	51R5409	46.44
TMP 10112	10	12	830mA	51R5410	46.44
TMP 10124	10	24	415mA	51R5411	46.44
TMP 15105	15	5	3A	51R5414	51.52
TMP 15112	15	12	1.25A	51R5416	51.52
TMP 15124	15	24	625mA	51R5418	51.52
TMP 15148	15	48	310mA	51R5420	51.52
TMP 30105	30	5	6A	51R5430	71.15
TMP 30112	30	12	2.5A	51R5432	71.15
TMP 30124	30	24	1.25A	51R5434	74.67
TMP 30148	30	48	625mA	51R5436	71.15
SINGLE OUTPUT CHASSIS MOUNT WITH SCREW TERMINAL BLOCK					
TMP 15105C	15	5	3A	51R5415	60.84
TMP 15112C	15	12	1.25A	51R5417	60.84
TMP 15124C	15	24	625mA	51R5419	60.84
TMP 15148C	15	48	310mA	51R5421	58.58
TMP 30105C	30	5	6A	51R5431	82.44
TMP 30112C	30	12	2.5A	51R5433	84.93
TMP 30124C	30	24	1.25A	51R5435	82.44
TMP 30148C	30	48	625mA	51R5437	82.44

DUAL AND TRIPLE OUTPUT PCB MOUNT WITH SOLDER PINS

Mfg. Part No.	Output Power Max. (W)*	Output 1 VDC	Output 1 mA/A	Output 2 VDC	Output 2 mA/A	Output 3 VDC	Output 3 mA	Stock No.	Price Each 1-4
TMP 10212	10	12	380mA	-12	380mA	...	...	51R5412	48.75
TMP 10215	10	15	300mA	-15	300mA	...	...	51R5413	48.75
TMP 15212	15	12	650mA	-12	650mA	...	...	51R5422	53.83
TMP 15215	15	15	500mA	-15	500mA	...	...	51R5424	56.49
TMP 15512	15	12	200A	+12	200mA	-12	200mA	51R5426	58.84
TMP 15515	15	15	150A	+15	150mA	-15	150mA	51R5428	56.66
TMP 30212	30	12	1.3A	-12	1.3A	...	...	51R5438	77.80
TMP 30215	30	15	1A	-15	1A	...	...	51R5440	77.80
TMP 30512	30	12	600A	+12	600mA	-12	600mA	51R5442	87.33
TMP 30515	30	15	500A	+15	500mA	-15	500mA	51R5444	87.33
DUAL AND TRIPLE OUTPUT CHASSIS MOUNT WITH SCREW TERMINAL BLOCK									
TMP 15212C	15	12	650mA	-12	650mA	...	...	51R5423	63.72
TMP 15215C	15	15	500mA	-15	500mA	...	...	51R5425	63.72
TMP 15512C	15	12	200A	+12	200mA	-12	200mA	51R5427	71.09
TMP 15515C	15	15	150A	+15	150mA	-15	150mA	51R5429	67.74
TMP 30212C	30	12	1.3A	-12	1.3A	...	...	51R5439	90.76
TMP 30215C	30	15	1A	-15	1A	...	...	51R5441	89.81
TMP 30512C	30	12	600A	+12	600mA	-12	600mA	51R5443	99.69
TMP 30515C	30	15	500A	+15	500mA	-15	500mA	51R5445	102.83

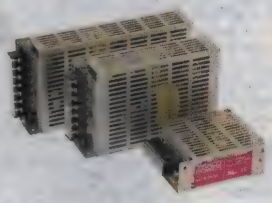
*Total load not to exceed 30 Watt
(178873)

TXL SERIES, 25 TO 300 WATT, SINGLE AND MULTIPLE OUTPUT ENCLOSED POWER SUPPLIES

RoHS Compliant Available

TRACO POWER

Features:
- Compact metal housing with screw terminal block
- Choice of single, dual and triple output models
- Multiple output models with isolated outputs
- Universal input 85 to 264 VAC
- Overload and short-circuit protection
- Three-year manufacturer's warranty
- EMI/EMC compliance with EN 61000-6-3 and EN 61000-6-1
- Compliance to EN 6100-3-2 (PFC)
- UL recognized, CE compliant



Specifications:
- Line variation: ± 1% max.
- Load variation: 2% max. (single output models)
- 4% max. main output/ 6% max. for output 2/3 20-100% load (multiple output models)
- Ripple and noise: 3.3 VDC output <50mV (20 MHz BW)
- I/O isolation: 3000VAC (input/output)
- Operating temperature range: -10°C to +70°C

TXL series compact, encased power supplies designed for a wide range of cost-critical applications. Features a low-profile metal case and screw terminal block connection making these units easy to install in any equipment.

SINGLE OUTPUT MODELS

Mfg. Part No.	Output Power Max. (W)	Output Voltage Nom. (VDC)	Output Current Max. (A)	Stock No.	Price Each 1-4
TXL 025-05S	25	5	5	51R5695	48.94
TXL 025-12S	25	12	2.1	51R5696	48.94
TXL 025-24S	25	24	1.1	51R5697	50.00
TXL 025-48S	25	48	570mA	51R5699	47.13
TXL 035-05S	35	5	7	51R5700	56.45
TXL 035-12S	35	12	3	51R5703	59.24
TXL 035-24S	35	24	1.5	51R5706	56.45
TXL 050-05S	50	5	10	51R5707	65.18
TXL 060-12S	60	12	5	51R5715	68.41
TXL 060-24S	60	24	2.5	51R5716	68.41
TXL 060-3.3S	60	3.3	15	51R5717	80.26
TXL 060-05S	60	5	12	51R5708	76.47
TXL 070-12S	70	12	6	51R5718	80.26
TXL 070-24S	70	24	3	51R5719	79.41
TXL 100-05S	100	5	20	51R5720	105.28
TXL 100-12S	100	12	8.5	51R5727	101.18
TXL 100-24S	100	24	4.3	51R5728	104.37
TXL 100-48S	100	48	2.3	51R5729	101.18
TXL 150-12S	150	12	12.5	51R5732	108.21
TXL 150-24S	150	24	6.3	51R5733	130.18
TXL 230-12S	230	12	19.2	76T0959	146.92
TXL 230-24S	230	24	9.6	76T1338	141.20
TXL 350-24S	350	24	14.7	07W3768	173.43
TXL 350-48S	350	48	7.5	28W5249	173.43
TXL 750-24S	750	24	31.3	28W5250	365.20
TXL 750-48S	750	48	15.8	28W5251	365.20
TXL 1000-24S	1000	24	40	12T2448	715.11

MULTIPLE OUTPUT MODELS

Mfg. Part No.	Output Power Max. (W)	Output 1* (Main Output) VDC	Output 1* A	Output 2* VDC	Output 2* A	Output 3* VDC	Output 3* A	Stock No.	Price Each 1-4
TXL 035-0512D	35	12	2.5	+12	2.5	...	...	51R5701	71.53
TXL 035-0524D	35	24	1.3	+24	1.3	...	...	51R5702	71.53
TXL 035-1212D	35	12	1.5	-12	1.5	...	...	51R5704	71.53
TXL 035-1515D	35	15	1.5	-15	1.5	...	...	51R5705	72.29
TXL 060-0512DI	60	12	4	12	4	...	...	51R5709	96.23
TXL 060-0524DI	60	24	2.2	24	2.2	...	...	51R5712	97.25
TXL 060-0521TI	60	12	3.5	12	3.5	-5	1	51R5710	104.81
TXL 060-0522TI	60	12	3.5	12	3.5	-12	1	51R5711	104.81
TXL 060-0533TI	60	15	3	15	3	-15	1	51R5713	104.81
TXL 060-0534TI	60	24	1.2	12	1.5	24	1.2	51R5714	101.61
TXL 100-0512DI	100	12	7	12	7	...	...	51R5721	113.40
TXL 100-0524DI	100	24	3.5	24	3.5	...	...	51R5724	144.72
TXL 100-0521TI	100	12	5	12	5	5	1.5	51R5722	126.94
TXL 100-0522TI	100	12	5	12	5	12	1.5	51R5723	126.94
TXL 100-0533TI	100	15	4	15	4	15	1.5	51R5725	122.00
TXL 100-0534TI	100	24	4	12	4	24	2	51R5726	126.94

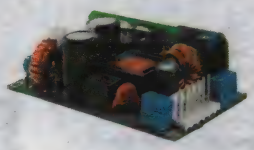
*Total power must not exceed specified max. output power
(178875)

SWITCHING POWER SUPPLIES

TOP 60 / 100 / 200 SERIES, AC/DC POWER SUPPLIES

RoHS Compliant Available

TRACO POWER



- 100W power supply in 2.0"x 4.0" footprint
- Full load operation up to +50°C with convection cooling
- Highest efficiency, 90% typ.
- EMI filter meets EN 55022, level B
- Compliance with EN 61000-3-2
- Low leakage current
- Safety class I and class II operation
- Three-year manufacturer's warranty

SPECIFICATIONS

Series	TOP 60	TOP 100	TOP 200
Input Voltage Range:	85 - 264VAC (AC Input Range)	90 - 132 / 187 - 264VAC autorange	120 - 240VAC (AC Input Range)
Input Frequency:	47 - 63Hz	47 - 63Hz	47 - 63Hz
Efficiency:	89 - 91% (75 % for Top 60316 & 60317)	89 - 91% (Vin = 115VAC) 90 - 92% (Vin = 230VAC)	89 - 91% / 90 - 93% (Vin = 115VAC) 90 - 93% / 92-95% (Vin = 230VAC)
Isolation Voltage:	4000VAC (Input / Output), 1500VAC (Input / Field Ground), 500VAC (Output / Field Ground)	4000VAC (Input / Output), 2000VAC (Input / Field Ground), 500VAC (Output / Field Ground)	3000VAC (Input / Output), 1500VAC (Input / Field Ground), 500VAC (Output / Field Ground)
Operating Temperature:	-10°C to +70°C	-25°C to +70°C	-25°C to +70°C

TOP 60 SERIES

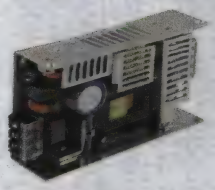
Mfg. Part No.	Output Voltage (Adjustment Range)	Output Current	Stock No.	Price Each 1-4
● TOP 60105	(48V to 52V)	11A	53W5591	58.79
● TOP 60112	(48V to 52V)	5A	53W5592	51.34
● TOP 60115	(48V to 52V)	4.3A	53W5593	51.34
● TOP 60124	(48V to 52V)	2.7A	53W5594	51.34
● TOP 60148	(48V to 52V)	1.35A	53W5595	51.34
● TOP 60252	5V, 12V (48V to 52V)	6A, 3A	53W5596	56.24
● TOP 60254	5V, 24V (48V to 52V)	6A, 1.5A	53W5597	56.24
● TOP 60316	3.3V, 5.2V, 12V (48V to 52V)	6A, 3A, 500mA	53W5598	59.43
● TOP 60317	5V, 3.3V, 12V (48V to 52V)	6A, 1.5A, 500mA	53W5599	59.43
● TOP 60318	5V, 24V, -12V (48V to 52V)	6A, 1.5A, 500mA	53W5600	59.43
● TOP 60522	5V, 12V, -12V (48V to 52V)	6A, 3A, 500mA	41T5379	59.43
● TOP 60533	5V, 15V, -15V (48V to 52V)	6A, 2.4A, 500mA	53W5601	59.43
TOP 100 SERIES				
● TOP 100-105	(5V to 5.2V)	20A	51R5638	94.58
● TOP 100-112	12V (12V to 13V)	8.3A	51R5639	93.45
● TOP 100-115	(15V to 16V)	6.7A	51R5640	89.04
● TOP 100-124	24V (24V to 26V)	4.2A	51R5641	90.32
● TOP 100-148	(48V to 52V)	2.1A	51R5642	89.04
TOP 200 SERIES				
● TOP 200-112	(48V to 52V)	16A	53W5587	140.60
● TOP 200-115	(48V to 52V)	13A	53W5588	140.60
● TOP 200-124	(48V to 52V)	8.3A	53W5589	126.00
● TOP 200-148	(48V to 52V)	4.2A	53W5590	126.00

(203959)

TXH SERIES 120 TO 480W METAL CASE POWER SUPPLIES

RoHS Compliant Available

TRACO POWER



- Compact U-bracket and enclosed power supplies
- Screw terminal block
- Very high efficiency up to 93 %
- No internal fan for 120W and 240W models
- Universal input 90 – 264VAC
- Adjustable output voltage
- EMI/EMC compliance with EN 61000-6-3 and EN 61000-6-1
- Compliance to EN 61000-3-2 (PFC)
- Short circuit and overvoltage protection
- Three-year manufacturer's warranty

Mfg. Part No.	Output Power (W)	Output Voltage (V)	Output Current (A)	Stock No.	Price Each 1-4
● TXH 120-112	120	12	10	51R5689	118.00
● TXH 120-124	120	24	5	51R5690	118.00
● TXH 120-148	120	48	2.5	51R5691	118.00
● TXH 240-112	240	12	20	51R5692	155.35
● TXH 240-124	240	24	10	51R5693	151.60
● TXH 240-148	240	48	5	51R5694	151.60
● TXH 360-112	360	12	30	53W5544	291.47
● TXH 360-124	360	24	15	53W5545	291.47

➤ CONTINUED ➤

TXH SERIES 120 TO 480W METAL CASE POWER SUPPLIES (CONT.)

Mfg. Part No.	Output Power (W)	Output Voltage (V)	Output Current (A)	Stock No.	Price Each 1-4
● TXH 360-148	360	48	7.5	53W5546	291.47
● TXH 480-112	480	12	40	53W5547	338.46
● TXH 480-124	480	24	20	53W5548	338.46
● TXH 480-148	480	48	13.33	53W5549	338.46

ACCESSORIES

Mfg. Part No.	Accessory Type	For Use With	Stock No.	Price Each 1-4
● TXH 120-COV	Cover Kit	TXH 120 Series Power Supplies	53W5543	7.17
● TXH 240-COV	Cover Kit	TXH 240 Series Power Supplies	48T6936	8.55

(203961)

ECL SERIES 5-30W ULTRA COMPACT SINGLE AND MULTIPLE OUTPUT AC/DC POWER SUPPLIES

RoHS Compliant Available

XP Power

GREEN XP POWER

TUV Rheinland

- Ultra compact size
- Single, dual and triple outputs from 3.3 to 48V
- Encapsulated PCB mount (**-E suffix**)
- Encapsulated chassis mount w/ screw terminals (**-S suffix**)
- Open frame PCB mount (**-P suffix**)
- Open frame chassis mount (**-T suffix**)
- Peak load capability
- Class II construction
- Three-year manufacturer's warranty

SPECIFICATIONS

Input Voltage:	85-264VAC (120-370 VDC)
Input Frequency:	47-63Hz
No Load Input Power:	<0.3W
Line Regulation:	±0.5% max single output, ±0.9% max multiple outputs
Load Regulation:	±1% max single output, <10% max multiple output
Ripple & Noise:	Single output versions: 3.3-5V: 50mV pk-pk, 12-15V: 120mV pk-pk, 24-48V: 200mV pk-pk Multiple output versions: 1% pk-pk on any output, 20 MHz bandwidth
Isolation:	3000 VAC Input to Output
Operating Temp:	-20°C to +70°C, derate linearly from 100% at +50°C to 50% at +70°C
Safety Approvals:	EN60950, UL60950, CSA22.2 No. 234 per cUL
EMC:	EN55022, level B conducted and radiated

5W, ENCAPSULATED PCB MOUNT, DIMENSIONS (H x W x L): 0.91 x 1.07 x 2.06"

Mfg. Part No.	Output Power (W)	Output Voltage (V)	Output Current	Effi-ciency (%)	Stock No.	Price Each 1-4
● ECL05US03-E	4.3	3.3	1.3A	72	52R2670	26.00
● ECL05US05-E	5	5	1A	75	52R2673	26.00
● ECL05US09-E	5	9	550mA	78	52R2676	26.00
● ECL05US12-E	5	12	410mA	78	52R2679	26.00
● ECL05US15-E	5	15	330mA	80	52R2682	26.00
● ECL05US24-E	5	24	210mA	82	52R2685	26.00
● ECL05US48-E	5	48	100mA	82	52R2688	26.00
5W, OPEN FRAME PCB MOUNT, DIMENSIONS (H x W x L): 0.90 x 1.00 x 2.00"						
● ECL05US03-P	4.3	3.3	1.3A	72	52R2671	20.00
● ECL05US05-P	5	5	1A	75	52R2674	20.00
● ECL05US09-P	5	9	550mA	78	52R2677	20.00
● ECL05US12-P	5	12	410mA	78	52R2680	20.00
● ECL05US15-P	5	15	330mA	80	52R2683	20.00
● ECL05US24-P	5	24	210mA	82	52R2686	20.00
● ECL05US48-P	5	48	100mA	82	52R2689	20.00
5W, OPEN FRAME CHASSIS MOUNT, DIMENSIONS (H x W x L): 0.85 x 1.00 x 2.56"						
● ECL05US03-T	4.3	3.3	1.3A	72	52R2672	20.00
● ECL05US05-T	5	5	1A	75	52R2675	20.00
● ECL05US09-T	5	9	550mA	78	52R2678	20.00
● ECL05US12-T	5	12	410mA	78	52R2681	20.00
● ECL05US15-T	5	15	330mA	80	52R2684	20.00
● ECL05US24-T	5	24	210mA	82	52R2687	20.00
● ECL05US48-T	5	48	100mA	82	52R2690	20.00
10W, ENCAPSULATED PCB MOUNT, DIMENSIONS (H x W x L): 0.91 x 1.07 x 2.06"						
● ECL10US03-E	8.6	3.3	2.6A	72	89M0081	30.00
● ECL10US05-E	10	5	2A	75	89M0082	30.00
● ECL10US09-E	10	9	1.1A	78	89M0083	30.00
● ECL10US12-E	10	12	830mA	78	89M0084	30.00
● ECL10US15-E	10	15	670mA	80	89M0085	30.00
● ECL10US24-E	10	24	420mA	82	89M0086	30.00
● ECL10US48-E	10	48	210mA	82	89M0087	30.00

➤ CONTINUED ➤

ECL SERIES 5-30W ULTRA COMPACT SINGLE AND MULTIPLE OUTPUT AC/DC POWER SUPPLIES (CONT.)

10W, OPEN FRAME PCB MOUNT, DIMENSIONS (H x W x L): 0.90 x 1.00 x 2.00″

Mfg. Part No.	Output Power (W)	Output Voltage (V)	Output Current	Effi-ciency (%)	Stock No.	Price Each 1-4
ECL10US03-P	8.6	3.3	2.6A	72	32M6275	23.00
ECL10US05-P	10	5	2A	75	32M6277	23.00
ECL10US09-P	10	9	1.1A	78	32M6279	23.00
ECL10US12-P	10	12	830mA	78	32M6281	23.00
ECL10US15-P	10	15	670mA	80	32M6283	23.00
ECL10US24-P	10	24	420mA	82	32M6285	23.00
ECL10US48-P	10	48	210mA	82	32M6287	23.00

10W, OPEN FRAME CHASSIS MOUNT, DIMENSIONS (H x W x L): 0.85 x 1.00 x 2.56″

ECL10US03-T	8.6	3.3	2.6A	72	32M6276	23.00
ECL10US05-T	10	5	2A	75	32M6278	23.00
ECL10US09-T	10	9	1.1A	78	32M6280	23.00
ECL10US12-T	10	12	830mA	78	32M6282	23.00
ECL10US15-T	10	15	670mA	80	32M6284	23.00
ECL10US24-T	10	24	420mA	82	32M6286	23.00
ECL10US48-T	10	48	210mA	82	32M6288	23.00

15W, ENCAPSULATED PCB MOUNT, DIMENSIONS (H x W x L): 0.96 x 1.31 x 2.56″

ECL15US03-E	10	3.3	3A	75	89M0088	35.00
ECL15US05-E	15	5	3A	78	89M0089	35.00
ECL15US09-E	15	9	1.67A	80	89M0090	35.00
ECL15US12-E	15	12	1.25A	80	89M0091	35.00
ECL15US15-E	15	15	1A	80	89M0092	35.00
ECL15US24-E	15	24	630mA	82	89M0093	35.00
ECL15US48-E	15	48	320mA	82	89M0094	35.00
ECL15UD01-E	15	12/-12	650mA/650mA	82	24T5153	40.00
ECL15UD02-E	15	15/-15	500mA/500mA	82	24T5157	40.00
ECL15UD03-E	15	5/12	1.5A/625mA	81	24T5161	40.00
ECL15UT02-E	15	5/12/-12	2A/200mA/200mA	81	24T5165	45.00
ECL15UT03-E	15	5/15/-15	2A/150mA/150mA	81	24T5169	45.00

15W, OPEN FRAME PCB MOUNT, DIMENSIONS (H x W x L): 0.96 x 1.21 x 2.44″

ECL15US03-P	10	3.3	3A	75	32M6289	27.00
ECL15US05-P	15	5	3A	78	32M6291	27.00
ECL15US09-P	15	9	1.67A	80	32M6293	27.00
ECL15US12-P	15	12	1.25A	80	32M6295	27.00
ECL15US15-P	15	15	1A	80	32M6297	27.00
ECL15US24-P	15	24	630mA	82	32M6299	27.00
ECL15US48-P	15	48	320mA	82	32M6301	27.00
ECL15UD01-P	15	12/-12	650mA/650mA	82	24T5154	34.00
ECL15UD02-P	15	15/-15	500mA/500mA	82	24T5158	34.00
ECL15UD03-P	15	5/12	1.5A/625mA	81	24T5162	34.00
ECL15UT02-P	15	5/12/-12	2A/200mA/200mA	81	24T5166	38.00
ECL15UT03-P	15	5/15/-15	2A/150mA/150mA	81	24T5170	38.00

15W ENCAPSULATED CHASSIS MOUNT W/ SCREW TERMINALS, DIMENSIONS (H x W x L): 1.04 x 1.36 x 3.31″

ECL15US03-S	10	3.3	3A	75	52R2691	35.00
ECL15US05-S	15	5	3A	78	52R2692	35.00
ECL15US09-S	15	9	1.67A	80	52R2693	35.00
ECL15US12-S	15	12	1.25A	80	52R2694	35.00
ECL15US15-S	15	15	1A	80	52R2695	35.00
ECL15US24-S	15	24	630mA	82	52R2696	42.00
ECL15US48-S	15	48	320mA	82	52R2697	42.00
ECL15UD01-S	15	12/-12	650mA/650mA	82	24T5155	48.00
ECL15UD02-S	15	15/-15	500mA/500mA	82	24T5159	48.00
ECL15UD03-S	15	5/12	1.5A/625mA	81	24T5163	48.00
ECL15UT02-S	15	5/12/-12	2A/200mA/200mA	81	24T5167	53.00
ECL15UT03-S	15	5/15/-15	2A/150mA/150mA	81	24T5171	53.00

15W, OPEN FRAME CHASSIS MOUNT, DIMENSIONS (H x W x L): 0.91 x 1.25 x 3.10″

ECL15US03-T	10	3.3	3A	75	32M6290	27.00
ECL15US05-T	15	5	3A	78	32M6292	27.00
ECL15US09-T	15	9	1.67A	80	32M6294	27.00
ECL15US12-T	15	12	1.25A	80	32M6296	27.00
ECL15US15-T	15	15	1A	80	32M6298	27.00
ECL15US24-T	15	24	630mA	82	32M6300	27.00
ECL15US48-T	15	48	320mA	82	32M6302	27.00
ECL15UD01-T	15	12/-12	650mA/650mA	82	24T5156	34.00
ECL15UD02-T	15	15/-15	500mA/500mA	82	24T5160	34.00
ECL15UD03-T	15	5/12	1.5A/625mA	81	24T5164	34.00
ECL15UT02-T	15	5/12/-12	2A/200mA/200mA	81	24T5168	36.00
ECL15UT03-T	15	5/15/-15	2A/150mA/150mA	81	24T5172	36.00

25W, ENCAPSULATED PCB MOUNT, DIMENSIONS (H x W x L): 1.10 x 1.50 x 3.10″

ECL25US03-E	20	3.3	6A	75	04R8432	46.00
ECL25US05-E	25	5	5A	78	04R8433	46.00

➤ CONTINUED ➤

ECL SERIES 5-30W ULTRA COMPACT SINGLE AND MULTIPLE OUTPUT AC/DC POWER SUPPLIES (CONT.)

25W, ENCAPSULATED PCB MOUNT, DIMENSIONS (H x W x L): 1.10 x 1.50 x 3.10″

Mfg. Part No.	Output Power (W)	Output Voltage (V)	Output Current	Effi-ciency (%)	Stock No.	Price Each 1-4
ECL25US09-E	25	9	2.8A	80	04R8434	46.00
ECL25US12-E	25	12	2.1A	80	04R8435	46.00
ECL25US15-E	25	15	1.67A	80	04R8436	46.00
ECL25US24-E	25	24	1.04A	82	04R8437	46.00
ECL25US48-E	25	48	520mA	82	04R8438	46.00

25W, OPEN FRAME PCB MOUNT, DIMENSIONS (H x W x L): 1.05 x 1.36 x 2.96″

ECL25US03-P	20	3.3	6A	75	95M8911	33.00
ECL25US05-P	25	5	5A	78	95M8913	33.00
ECL25US09-P	25	9	2.8A	80	95M8915	33.00
ECL25US12-P	25	12	2.1A	80	95M8917	33.00
ECL25US15-P	25	15	1.67A	80	95M8919	33.00
ECL25US24-P	25	24	1.04A	82	95M8921	33.00
ECL25US48-P	25	48	520mA	82	95M8923	33.00

25W ENCAPSULATED CHASSIS MOUNT W/ SCREW TERMINALS, DIMENSIONS (H x W x L): 1.12 x 1.57 x 3.78″

ECL25US03-S	20	3.3	6A	75	52R2698	54.00
ECL25US05-S	25	5	5A	78	52R2699	54.00
ECL25US09-S	25	9	2.8A	80	52R2700	54.00
ECL25US12-S	25	12	2.1A	80	52R2701	54.00
ECL25US15-S	25	15	1.67A	80	52R2702	54.00
ECL25US24-S	25	24	1.04A	82	52R2703	54.00
ECL25US48-S	25	48	520mA	82	52R2704	54.00

25W, OPEN FRAME CHASSIS MOUNT, DIMENSIONS (H x W x L): 1.00 x 1.36 x 3.46″

ECL25US03-T	20	3.3	6A	75	95M8912	35.00
ECL25US05-T	25	5	5A	78	95M8914	35.00
ECL25US09-T	25	9	2.8A	80	95M8916	35.00
ECL25US12-T	25	12	2.1A	80	95M8918	35.00
ECL25US15-T	25	15	1.67A	80	95M8920	35.00
ECL25US24-T	25	24	1.04A	82	95M8922	35.00
ECL25US48-T	25	48	520mA	82	95M8924	35.00

30W, ENCAPSULATED PCB MOUNT, DIMENSIONS (H x W x L): 1.10 x 1.50 x 3.10″

ECL30UD01-E	30	12/-12	1.3A/1.3A	84	24T5173	58.00
ECL30UD02-E	30	15/-15	1A/1A	83	24T5177	58.00
ECL30UD03-E	30	5/12	3A/1.3A	81	24T5181	58.00
ECL30UT02-E	30	5/12/-12	3A/630mA/630mA	83	24T5185	62.00
ECL30UT03-E	30	5/15/-15	3A/500mA/500mA	81	24T5189	62.00

30W, OPEN FRAME PCB MOUNT, DIMENSIONS (H x W x L): 1.05 x 1.36 x 2.96″

ECL30UD01-P	30	12/-12	1.3A/1.3A	84	24T5174	51.00
ECL30UD02-P	30	15/-15	1A/1A	83	24T5178	51.00
ECL30UD03-P	30	5/12	3A/1.3A	81	24T5182	51.00
ECL30UT02-P	30	5/12/-12	3A/630mA/630mA	83	24T5186	56.00
ECL30UT03-P	30	5/15/-15	3A/500mA/500mA	81	24T5190	56.00

30W, ENCAPSULATED CHASSIS MOUNT W/ SCREW TERMINALS, DIMENSIONS (H x W x L): 1.12 x 1.57 x 3.78″

ECL30UD01-S	30	12/-12	1.3A/1.3A	84	24T5175	66.00
ECL30UD02-S	30	15/-15	1A/1A	83	24T5179	66.00
ECL30UD03-S	30	5/12	3A/1.3A	81	24T5183	66.00
ECL30UT02-S	30	5/12/-12	3A/630mA/630mA	83	24T5187	70.00
ECL30UT03-S	30	5/15/-15	3A/500mA/500mA	81	24T5191	70.00

30W, OPEN FRAME CHASSIS MOUNT, DIMENSIONS (H x W x L): 1.00 x 1.36 x 3.46″

ECL30UD01-T	30	12/-12	1.3A/1.3A	84	24T5176	51.00
ECL30UD02-T	30	15/-15	1A/1A	83	24T5180	39.00
ECL30UD03-T	30	5/12	3A/1.3A	81	24T5184	51.00
ECL30UT02-T	30	5/12/-12	3A/630mA/630mA	83	24T5188	56.00
ECL30UT03-T	30	5/15/-15	3A/500mA/500mA	81	24T5192	56.00

ACCESSORIES

ECL15 DIN CLIP	**ECL15 Series** DIN Rail Mounting Kit	79R9153	3.00
ECL25/30 DIN CLIP	**ECL25/ECL30 Series** DIN Rail Mounting Kit	79R9154	3.00

(196376)

element14 COMMUNITY

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(196545)

SWITCHING POWER SUPPLIES

ECE SERIES 5W TO 60W ENCAPSULATED AC/DC POWER SUPPLIES

RoHS Compliant Available

XP Power

- Ultra compact size
- Single outputs from 3.3 to 48V
- Encapsulated
- PCB mount (chassis and DIN rail mount versions available; *go online or call*)
- <0.3W no load input power
- Peak load capability
- Three-year manufacturer's warranty

SPECIFICATIONS:

Input Voltage:	85-264VAC (120-370VDC) derate load from 100% @ 90VAC to 90% @ 85VAC
Input Frequency:	47-63Hz
Line Regulation:	±0.5% max
Load Regulation:	±1% max
Ripple & Noise:	3.3-5V versions: 60mV pk-pk; all other models: 1% pk-pk max. 20MHz bandwidth
Operating Temperature:	-25°C to +70°C, derate linearly from 100% at +50°C to 50% at +70°C
EMC:	EN55022, level B conducted and radiated, EN61000-4, EN61000-3
Safety Approvals:	EN60950-1, UL60950-1, CSA22.2 No. 234 per cUL
Dimensions (L x W x H):	ECE05: 1.0″ x 1.0″ x 0.6″ ECE10: 1.5″ x 1.0″ x 0.6″ ECE20: 2.06″ x 1.07″ x 0.91″ ECE40: 3.1″ x 1.5″ x 1.1″ ECE60: 3.6 x 1.5 x 1.1″

Mfg. Part No.	Output Power (W)	Output Voltage (VDC)	Output Current*	Efficiency (%)	Stock No.	Price Each 1-4
● ECE05US03	5	3.3	1.51A	74	89T3512	18.00
● ECE05US05	5	5	1A	80	89T3513	18.00
● ECE05US09	5	9	550mA	82	89T3514	18.00
● ECE05US12	5	12	410mA	82	89T3515	18.00
● ECE05US15	5	15	330mA	84	89T3516	18.00
● ECE05US24	5	24	210mA	83	89T3517	18.00
● ECE05US48	5	48	100mA	85	89T3518	18.00
● ECE10US03	10	3.3	2.6A	77	89T3519	27.00
● ECE10US05	10	5	2A	80	89T3520	27.00
● ECE10US09	10	9	1.11A	82	89T3521	27.00
● ECE10US12	10	12	830mA	83	89T3522	27.00
● ECE10US15	10	15	660mA	82	89T3523	27.00
● ECE10US24	10	24	410mA	83	89T3524	27.00
● ECE10US48	10	48	210mA	83	89T3525	27.00
● ECE20US03	15	3.3	4.5A	73	24T5125	42.00
● ECE20US05	20	5	4A	77	24T5126	42.00
● ECE20US09	20	9	2.22A	83	24T5127	42.00
● ECE20US12	20	12	1.67A	82	24T5128	42.00
● ECE20US15	20	15	1.33A	83	24T5129	42.00
● ECE20US24	20	24	830mA	82	24T5130	42.00
● ECE20US48	20	48	420mA	86	24T5131	42.00
● ECE40US03	33	3.3	10A	73	24T5132	59.00
● ECE40US05	40	5	8A	77	24T5135	59.00
● ECE40US09	40	9	4.44A	80	24T5138	59.00
● ECE40US12	40	12	3.33A	84	24T5141	59.00
● ECE40US15	40	15	2.67A	84	24T5144	59.00
● ECE40US24	40	24	1.67A	85	24T5147	59.00
● ECE40US48	40	48	830mA	86	24T5150	59.00
ECE60US03	33	3.3	10A	79	47X2580	75.00
ECE60US05	50	5	10A	83	47X2582	75.00
ECE60US09	60	9	6.67A	87	47X2584	75.00
ECE60US12	60	12	5A	87	47X2586	75.00
ECE60US15	60	15	4A	88	47X2588	75.00
ECE60US24	60	24	2.5A	89	47X2590	75.00
ECE60US36	60	36	1.67A	88	47X2592	75.00
ECE60US48	60	48	1.25A	86	47X2594	75.00

*Peak load of 130% available for < 30s with max duty cycle of 10%
(194511)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

EML15 SERIES 15W SINGLE-OUTPUT AC/DC POWER SUPPLIES

NEW

XP Power

Encapsulated - PCB Mount

Encapsulated - Screw Terminals

Open Frame - PCB Mount

- Ultra compact size
- Single outputs from 3.3 to 48V
- Encapsulated or open frame
- PCB, chassis mount and screw terminals
- Class II
- Peak load capability
- Convection cooled
- Input protection: internal 2A fuse
- Overvoltage, overload protection
- Short circuit protection
- Three-year manufacturer's warranty
- Medical safety approvals

SPECIFICATIONS:

Input Voltage:	85-264VAC (120-370VDC)
Input Frequency:	47-63Hz
Line Regulation:	±0.5% max.
Load Regulation:	±1% max.
Ripple & Noise:	3.3-5V versions: 50mV pk-pk; 12-15V versions: 120mV pk-pk; 24-48V version: 200mV pk-pk. 20MHz bandwidth
Operating Temperature:	-20°C to +70°C, derate linearly from 100% at +50°C to 50% at +70°C
EMC:	EN55022, level B conducted and radiated
Safety Approvals:	EN60601-1, AB51/AAIMT ES60601-1, IEC60601-1

Mfg. Part No.	Output Power (W)	Output Voltage (VDC)	Output Current	Efficiency (%)	Stock No.	Price Each 1-4
ENCAPSULATED PCB MOUNT — 2.56W X 1.31L X 0.96″H						
EML15US03-E	10	3.3	3A	75	47X2596	39.00
EML15US05-E	15	5	3A	78	47X2600	39.00
EML15US09-E	15	9	1.67A	80	47X2604	39.00
EML15US12-E	15	12	1.25A	80	47X2608	39.00
EML15US15-E	15	15	1A	80	47X2612	39.00
EML15US24-E	15	24	630mA	82	47X2616	39.00
EML15US36-E	15	36	420mA	82	47X2620	39.00
EML15US48-E	15	48	320mA	82	47X2624	39.00
ENCAPSULATED SCREW TERMINAL — 3.3W X 1.36L X 1.04″H						
EML15US03-S	10	3.3	3A	75	47X2598	47.00
EML15US05-S	15	5	3A	78	47X2602	47.00
EML15US09-S	15	9	1.67A	80	47X2606	47.00
EML15US12-S	15	12	1.25A	80	47X2610	47.00
EML15US15-S	15	15	1A	80	47X2614	47.00
EML15US24-S	15	24	630mA	82	47X2618	47.00
EML15US36-S	15	36	420mA	82	47X2622	47.00
EML15US48-S	15	48	320mA	82	47X2626	47.00
OPEN FRAME PCB MOUNT — 2.44W X 1.21L X 0.95″H						
EML15US03-P	10	3.3	3A	75	47X2597	30.00
EML15US05-P	15	5	3A	78	47X2601	30.00
EML15US09-P	15	9	1.67A	80	47X2605	30.00
EML15US12-P	15	12	1.25A	80	47X2609	30.00
EML15US15-P	15	15	1A	80	47X2613	30.00
EML15US24-P	15	24	630mA	82	47X2617	30.00
EML15US36-P	15	36	420mA	82	47X2621	30.00
EML15US48-P	15	48	320mA	82	47X2625	30.00
OPEN FRAME CHASSIS MOUNT — 3.1W X 1.25L X 0.91″H						
EML15US03-T	10	3.3	3A	75	47X2599	30.00
EML15US05-T	15	5	3A	78	47X2603	30.00
EML15US09-T	15	9	1.67A	80	47X2607	30.00
EML15US12-T	15	12	1.25A	80	47X2611	30.00
EML15US15-T	15	15	1A	80	47X2615	30.00
EML15US24-T	15	24	630mA	82	47X2619	30.00
EML15US36-T	15	36	420mA	82	47X2623	30.00
EML15US48-T	15	48	320mA	82	47X2627	30.00

(212142)

ECP225 20W SERIES POWER SUPPLIES

RoHS Compliant Available

XP Power

GREEN XP POWER

- Low 1" profile with 2.5" x 5" footprint
- //W convection / forced-cooled
- High efficiency - up to 95%
- Medical and ITE approvals
- Built-in fan supply
- <0.5W No load input power
- Three-year manufacturer's warranty

SPECIFICATIONS	
Input Voltage:	85-264 VAC
Input Frequency:	47-63 Hz
Line Regulation:	±0.5%
Isolation:	3000VAC Input to Output, 1500VAC Input to Ground, 1500VAC Output to Ground
Operating Temp:	-20°C to +70°C derate from 100% load at 50°C to 50% load at 70°C
Safety Approvals:	UL60950-1, IEC60950-1, EN60950-1, ANSI/AAMI ES 60601-1, IEC60601-1, EN60601-1
EMC:	EN55022/11, Level B conducted and Level A radiated

Mfg. Part No.	Output Voltage (V)	Output Power (W)	Output Current (A)	Efficiency (%)	Stock No.	Price Each 1-4
ECP225PS12	12	150	12.5	93	85W2911	125.00
ECP225PS15	15	150	10	93	85W2912	125.00
ECP225PS24	24	150	6.25	94	85W2913	125.00
ECP225PS28	28	150	5.36	94	85W2914	125.00
ECP225PS48	48	150	3.1	94	85W2915	125.00

(210026)

ECS SERIES 25-130W SINGLE OUTPUT AC/DC POWER SUPPLIES

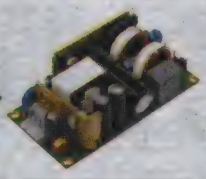
RoHS Compliant Available

XP Power

GREEN XP POWER

- Ultra compact 2" x 3" and 2" x 4" packages
- IT and medical safety approvals
- Green mode, <0.5 W standby power
- Class I & Class II construction
- Low leakage current
- Three-year manufacturer's warranty

ECS25 / ECS40 / ECS60



ECS65 / ECS100 / ECS130

ECS series next generation open frame power supplies feature smaller size and new "green mode", which ensures they meet the no load power consumption and energy efficiency specifications. For covered versions, add **suffix -C** to model number or order **mfg. part nos. ECM40/60 COVER KIT** (2" x 4" models) or **ECS25/45 COVER KIT** (2" x 3" models) for standalone cover; *go online or call.*

SPECIFICATIONS:	
Input Voltage Range:	80 - 264VAC or 120 - 370VDC, derate output power <90VAC
Input Frequency:*	47 - 400Hz*
Efficiency:	up to 90%, model dependent
Line Regulation:	±0.5% max
Load Regulation:	±1%
Ripple & Noise:	1% pk-pk V1, 20MHz bandwidth
Operating Temperature:	-20°C to +70°C derate linearly from +50°C at 2.5%/°C to 50% load at +70 °C
EMC:	EN55011/22, level B conducted and level A radiated, **ECS25** level B radiated
Safety Approvals:	IEC60950-1 CB report, CSA 22.2 No. 60950-1, UL60950-1, TUV EN60950-1, IEC60601-1 CB report, CSA 22.2 No. 60601-1, ANSI/AMMI ES 60601-1, TUV 60601-1, including Risk Management

DIMENSIONS: 3.0"L X 2.0"W X 0.95"H

Mfg. Part No.	Output Power (W) Force Cooled (10 CFM)	Output Power (W) Convection Cooled	Output Voltage (VDC)	Output Current	Stock No.	Price Each 1-4
ECS25US12	...	25	12	2.08A	67R9470	25.00
ECS25US15	...	25	15	1.67A	67R9471	25.00
ECS25US24	...	25	24	1.04A	67R9472	25.00
ECS25US48	...	25	48	520mA	67R9473	25.00
DIMENSIONS: 3.0"L X 2.0"W X 1.05"H						
ECS45US05	...	30	5	6A	67R9474	38.00
DIMENSIONS: 3.0"L X 2.0"W X 0.95"H						
ECS45US12	...	45	12	3.75A	67R9475	38.00
ECS45US15	...	45	15	3A	67R9476	38.00
ECS45US24	...	45	24	1.9A	67R9477	38.00
ECS45US48	...	45	48	950mA	67R9478	38.00
DIMENSIONS: 3.0"L x 2.0"W x 1.05"H						
ECS60US05	...	40	5	8A	94T6170	45.00
ECS60US12	...	60	12	5A	24T5193	45.00
ECS60US15	...	60	15	4A	24T5194	45.00

➤ CONTINUED ➤

ECS SERIES 25-130W SINGLE OUTPUT AC/DC POWER SUPPLIES (CONT.)

DIMENSIONS: 3.0"L x 2.0"W x 1.05"H

Mfg. Part No.	Output Power (W) Force Cooled (10 CFM)	Output Power (W) Convection Cooled	Output Voltage (VDC)	Output Current	Stock No.	Price Each 1-4
ECS60US24	...	60	24	2.5A	24T5195	45.00
ECS60US48	...	60	48	1.25A	24T5196	45.00
DIMENSIONS: 4.0"L X 2.0"W X 1.05"H						
ECS65US12	...	65	12	5.4A	67R9479	41.00
ECS65US15	...	65	15	4.3A	67R9480	41.00
ECS65US18	...	65	18.5	3.4A	32T2459	41.00
ECS65US24	...	65	24	2.7A	67R9481	41.00
ECS65US28	...	65	28	2.3A	67R9482	41.00
ECS65US48	...	65	48	1.4A	67R9483	41.00
DIMENSIONS: 4"L X 2"W X 1.25"H						
ECS100US12	100	80	12	8.3A	33R2421	59.00
ECS100US15	100	80	15	6.7A	33R2422	59.00
ECS100US18	100	80	18	5.5A	32T2461	59.00
ECS100US24	100	80	24	4.2A	33R2423	59.00
ECS100US28	100	80	28	3.6A	33R2424	59.00
ECS100US48	100	80	48	2.1A	33R2425	59.00
ECS130US12	130	100	12	10.9A	19X6864	67.00
ECS130US15	130	100	15	8.7A	19X6865	67.00
ECS130US18	130	100	18	7.3A	19X6866	67.00
ECS130US24	130	100	24	5.4A	19X6867	67.00
ECS130US28	130	100	28	4.7A	19X6868	67.00
ECS130US48	130	100	48	2.7A	19X6869	67.00

ACCESSORIES

Cover not suitable for Class II installations. Derate power output by 20% when using cover.

Mfg. Part No.	Decription	Stock No.	Price Each 1-4
ECS25-60 COVER	Cover for ECS25/45	67R9469	11.00
ECM40/60 COVER	Cover for ECM40/60 and ECS65/100/130	32M6304	16.00

*Safety approvals cover frequency 47-63Hz

(159804)

ECM SERIES INDUSTRIAL AND MEDICAL APPROVALS 40 /60 WATT COMPACT SINGLE AND TRIPLE OUTPUT POWER SUPPLIES

RoHS Compliant Available

XP Power

- Industrial and medical 3rd edition approvals
- Ultra compact design
- High efficiency to 90%
- Class I and II
- Low leakage current
- 4000VAC isolation, 2 x MOPP
- Dual fused input protection
- Three-year manufacturer's warranty

ECM40

ECM60

SPECIFICATIONS:	
Input Voltage:	90-264VAC (120-370VDC)
Input Frequency:	47-63Hz; 440Hz
Line Regulation:	±0.5% max.
Load Regulation:	±1% single output models; ±3% V1, ±5% V2 and V3 **ECM40/60** multi-output models
Ripple & Noise:	1% pk-pk, 20MHz BW
Efficiency:	80 to 85% typical
Operating Temperature:	0° to +70°C
EMC:	EN55022 and EN55011 Class B conducted

OUTPUT POWER: 40W, DIMENSIONS: 1.20 x 2.00 x 4.00" (H x W x D)

Mfg. Part No.	Output 1 Voltage (V)	Output 1 Current	Output 2 Voltage (V)	Output 2 Current	Output 3 Voltage (V)	Output 3 Current	Stock No.	Price Each 1-4
ECM40US05	5	8A	...	...	...	...	72K8442	39.00
ECM40US09	9	4.4A	...	...	...	...	72K8443	39.00
ECM40US12	12	3.5A	...	...	...	...	72K8444	39.00
ECM40US15	15	2.7A	...	...	...	...	72K8445	39.00
ECM40US24	24	1.7A	...	...	...	...	71J0110	39.00
ECM40US48	48	900mA	...	...	...	...	72K8446	39.00
ECM40UD22	5	6A	15	1.5A	...	...	51P3505	44.00
ECM40UT31	12	2A	12	2A	-12	500mA	72K8447	49.00
ECM40UT33	15	1.5A	15	1.5A	-15	500mA	72K8448	49.00
ECM40UT34	12	500mA	5	1.5A	12	500mA	72K8449	49.00

➤ CONTINUED ➤

SWITCHING POWER SUPPLIES

ECM SERIES INDUSTRIAL AND MEDICAL APPROVALS 40 /60 WATT COMPACT SINGLE AND TRIPLE OUTPUT POWER SUPPLIES (CONT.)

OUTPUT POWER: 60W, DIMENSIONS: 1.20 x 2.00 x 4.00″ (H x W x D)

Mfg. Part No.	Output 1 Voltage (V)	Output 1 Current	Output 2 Voltage (V)	Output 2 Current	Output 3 Voltage (V)	Output 3 Current	Stock No.	Price Each 1-4
● ECM60US05	5	12A	...	...	...	...	72K8450	48.00
● ECM60US07	7	8.6A	...	...	...	...	44T9257	48.00
● ECM60US09	9	6.7A	...	...	...	...	72K8451	48.00
● ECM60US12	12	5A	...	...	...	...	72K8452	48.00
● ECM60US15	15	4A	...	...	...	...	71J0120	48.00
● ECM60US24	24	2.5A	...	...	...	...	73K2386	48.00
● ECM60US28	28	2.14A	...	...	...	...	94T6169	48.00
● ECM60US33	33	1.8A	...	...	...	...	72K5890	48.00
● ECM60US48	48	1.25A	...	...	...	...	72K8453	48.00
● ECM60UT31	12	3A	12	3A	-12	500mA	72K8454	53.00
● ECM60UT33	15	2.5A	15	2.5A	-15	500mA	72K8455	53.00
● ECM60UT34	12	1.5A	5	1.5A	12	500mA	72K8456	53.00

COVER, DIMENSIONS: 1.52 x 2.52 x 4.49″ (H x W x D)

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● ECM40/60 COVER	Cover for ECM40/60 and ECS65/100/130	32M6304	16.00

(63622)

VCT/VFT80/150 SERIES AC/DC 40-150W SINGLE OUTPUT POWER SUPPLIES

TUV Rheinland c UL us

RoHS Compliant Available

XP Power

- Universal input
- 40-100W convection cooled, 80-150W forced cooled
- <0.5W no-load input power
- 2″ x 4″ and 3″ x 5″ footprints
- Fits 1U applications
- Economical

GREEN POWER

SPECIFICATIONS:	
Input Voltage:	85-264VAC
Input Frequency:	47-63Hz
Line Regulation:	±0.5% max.
Load Regulation:	±1% max. *, **VFT150** ±5% max.*
Ripple & Noise:	1% max. pk-pk **
Operating Temperature:	-10° to +70°C, derates from 100% load @ +50°C to 50% load @ 70°C
EMC:	EN55022, Level B conducted and radiated
Safety Approvals:	UL60950, IEC60950, EN60950

DIMENSIONS: 1.15″H x 2″W x 4″D

Mfg. Part No.	Output Power (W)	Output Voltage (V)	Output Current (A)	Peak Current (A)†	Efficiency Typ. (%)	Stock No.	Price Each 1-4
● VCT40US05	40	5	8	10	82	04R9677	23.00
● VCT60US12	60	12	5	6.3	87	04R9678	23.00
● VCT60US15	60	15	4	5	87	04R9679	23.00
● VCT60US24	60	24	2.5	3.1	88	04R9680	23.00
● VFT80US05	80	5	12	15	80	67R9659	28.00
● VFT80US12	80	12	6.67	8.34	87	67R9661	28.00
● VFT80US15	80	15	5.53	6.91	87	67R9662	28.00
● VFT80US24	80	24	3.33	4.16	88	67R9663	28.00

DIMENSIONS: 1.34″H x 3″W x 5″D

Mfg. Part No.	Output Power (W)	Output Voltage (V)	Output Current (Convection) (A)	Output Current (Force-Cooled) (A)	Efficiency Typ. (%)	Stock No.	Price Each 1-4
● VFT150PS05	150	5	16	20	85	67R9655	60.00
● VFT150PS12	150	12	8.3	12.5	85	67R9656	60.00
● VFT150PS15	150	15	6.66	10	87	94T6174	60.00
● VFT150PS24	150	24	4.2	6.25	85	67R9657	60.00
● VFT150PS48	150	48	2.1	3.13	85	67R9658	60.00

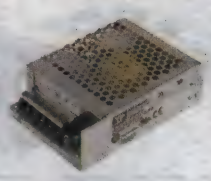
*Load regulation is measured from 60% to full load and from 60% to 20% load (60% ±40% full load);
**Measured at the output connector with a 0.1μF ceramic capacitor and a 10μF electrolytic capacitor
†Peak load lasting <30s with a maximum duty cycle of 10%, average output power not to exceed nominal
(148731)

VCS SERIES AC/DC 50-100W SINGLE OUTPUT INDUSTRIAL POWER SUPPLIES

RoHS Compliant Available

XP Power

- Chassis mount industrial supplies
- Green mode, <0.5 W standby power
- Convection cooled
- Class B Conducted and radiated emissions
- Output voltages from 5V to 48V
- Economical



GREEN POWER

VCS series chassis mount industrial power supplies include over voltage over load and short circuit protection. Wt. 0.55lbs. (VCS50), Wt. 0.88lbs. (VCS70), Wt. 1.1lbs. (VCS100).

SPECIFICATIONS:	
Input Voltage:	85-264VAC (127-370VDC)
Input Frequency:	47-63Hz
Efficiency:	85% typical
Line Regulation:	±0.5%, 90VAC to 264VAC input
Load Regulation:	±0.5 %, (5V & 12V versions are 1%), 0% to 100% load
Ripple & Noise:	1% maximum for all voltages
Operating Temperature:	-25°C to 70°C, derate from 100% load at 50°C to 50% load at 70°C.
EMC:	EN55022 Class B conducted and radiated with output floating and grounded
Safety Approvals:	IEC60950-1 (2005-12): CB Report, CSA C22.2 No.60950-1-03, UL60950-1 (2003), TUV EN60950-1:2006, EN60950-1:2006+A11

DIMENSIONS: 1.42″H x 3″W x 4.3″D

Mfg. Part No.	Output Power (W)	Output Voltage (V)	Output Current (A)	Stock No.	Price Each 1-4
● VCS50US05	40	5	8	68R2923	19.00
● VCS50US12	50	12	4.2	68R2924	19.00
● VCS50US15	50	15	3.3	68R2925	19.00
● VCS50US24	50	24	2.1	68R2926	19.00
● VCS50US48	50	48	1.05	68R2927	19.00
DIMENSIONS: 1.57″H x 3.88″W x 5.12″D					
● VCS70US05	50	5	10	68R2928	22.00
● VCS70US12	70	12	5.83	68R2929	22.00
● VCS70US15	70	15	4.67	68R2930	22.00
● VCS70US24	70	24	2.92	68R2931	22.00
● VCS70US48	70	48	1.46	68R2932	22.00
DIMENSIONS: 1.65″H x 3.87″W x 6.26″D					
● VCS100US05	70	5	14	68R4458	29.00
● VCS100US12	100	12	8.33	68R4459	29.00
● VCS100US15	100	15	6.67	68R4460	29.00
● VCS100US24	100	24	4.17	68R4461	29.00
● VCS100US48	100	48	2.08	68R4462	29.00

(176081)

ECP150 SERIES AC/DC 150 WATT SINGLE OUTPUT POWER SUPPLIES

RoHS Compliant Available

XP Power

- Medical 3rd edition safety approvals
- 100W convection, 150W force-cooled ratings
- Single outputs from 12V to 48V
- Built-in fan supply
- <0.5 W no load input power
- 2″ x 4″ footprint
- Fits 1U applications

GREEN POWER

ECP150 series compact single output power supplies include over voltage, over load and short circuit protection.

SPECIFICATIONS:	
Input Voltage Range:	90 - 264VAC
Input Frequency:	47 - 63Hz
Line Regulation:	±0.5% max.
Load Regulation:	±0.5% max.
Cooling:	Convection cooled: 100 W Forced cooled: 150 W with 15 CFM
Ripple & Noise:	1% max. pk-pk**
EMC:	EN55011/22, Level B conducted and radiated
Operating Temperature:	-20°C to +70°C derate from 100% load at 50°C to 50% load at 70°C
Safety Approvals:	UL60950-1, IEC60950-1, EN60950-1, ANSI/AMMI ES 60601-1, IEC60601-1, EN60601-1
Dimensions (L x W x H):	4.0″ x 2.0″ x 1.26″

Mfg. Part No.	Output Power (W)*	Output Voltage (V)	Output Current (Convection) (A)	Output Current (Force-Cooled) (A)*	Ripple and Noise pk-pk** (mV)	Fan Output	Stock No.	Price Each 1-4
● ECP150PS12	150	12	8.33	12.5	120	12V/0.5A	68R2070	89.00
● ECP150PS15	150	15	6.67	10	150	12V/0.5A	68R2071	89.00

CONTINUED

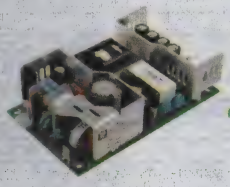
ECP150 SERIES AC/DC 150 WATT SINGLE OUTPUT POWER SUPPLIES (CONT.)

Mfg. Part No.	Output Power (W)*	Output Voltage (V)	Output Current (Convection) (A)	Output Current (Force-Cooled) (A)*	Ripple and Noise pk-pk** (mV)	Fan Output	Stock No.	Price Each 1-4
ECP150PS24	150	24	4.17	6.25	240	12V/0.5A	68R2072	89.00
ECP150PS28	150	28	3.5	5.4	280	12V/0.5A	68R2073	89.00
ECP150PS48	150	48	2.08	3.1	480	12V/0.5A	68R2074	89.00

* Requires 15CFM; **Measured with 20MHz bandwidth
(175921)

GCS SERIES 150/180/250W AC/DC POWER SUPPLIES

- Convection/forced-cooled ratings
- Universal 85 to 264VAC input
- IT and medical safety approvals (Class I and II)
- < 0.5W Standby power (150W and 180W models)
- Overvoltage, overload, overtemperature protection
- Short circuit protection
- Dual fusing for compliance with IEC60601-1
- Class B Emissions
- Three-year manufacturer's warranty
- UL recognized, TUV approved, CE compliant



XP Power

GCS series AC/DC single-output power supplies are designed to minimize the no load power consumption and maximize efficiency in order to facilitate equipment design to the latest environmental legislation. Approved for Class I and II applications, these units achieve EN55011/2 Level B emissions compliance while maintaining very low earth leakage currents, making them suitable for a wide range of 1U and other industrial, IT and medical applications.

SPECIFICATIONS	
Input Voltage:	85-264VAC derate load below 90VAC
Input Frequency:	47-63Hz
Line Regulation:	±0.5%
Efficiency:	93%
Isolation:	4000VAC Input to Output 2 x MOPP, 1500VAC Input to Ground 1 x MOPP, 1500VAC Output to Ground 1 x MOPP — IEC60601-1 Ed 3
Operating Temperature:	-40°C to +70°C derate output from 100% @ +50°C to 50% @ +70°C
EMC:	EN61204-3, high severity level, EN55011/22 level B conducted EN55011/22 level B radiated (GCS180/GSC250 level A)
Safety Approvals:	EN60601-1 Ed 3 including Risk Management, UL60950-1, CSA 22.2 No. 60950-1-1:08, ANSI/AAMI ES60601-1:2005, CSA C22.2 No. 60601-1:08, TUV EN60950-1:2006, EN60601-1/A12:2006,
Dimensions:	5 x 3 x 1.42" (127 x 76.2 x 36.3mm)

Mfg. Part No.	Output Voltage (V)	Output Power Max. (W)	Output Current (A) Convection-Cooled	Output Current (A) Forced-Cooled (7CFM)	Stock No.	Price Each 1-4
GCS150PS12	12	157	9.2	12.5	85W2919	75.00
GCS150PS15	15	157	7.3	10	85W2920	75.00
GCS150PS24	24	157	4.6	6.3	85W2921	75.00
GCS150PS28	28	157	3.9	5.4	85W2922	75.00
GCS150PS48	48	157	2.3	3.2	85W2923	75.00
GCS180PS12	12	187	12.5	15	85W2924	89.00
GCS180PS15	15	187	10	12	85W2925	89.00
GCS180PS24	24	187	6.3	7.5	85W2926	89.00
GCS180PS28	28	187	5.4	6.4	85W2927	89.00
GCS180PS48	48	187	3.1	3.7	85W2928	89.00
GCS250PS12	12	232	15	18.8	47X2628	105.00
GCS250PS15	15	232	12	15	47X2629	105.00
GCS250PS24	24	257	7.5	10.4	47X2630	105.00
GCS250PS28	28	257	6.4	8.9	47X2631	105.00
GCS250PS48	48	257	3.7	5.2	47X2632	105.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
GCS150/180 CVR KIT	GCS150/180/250 Series Power Supplies Cover Kit	85W2916	15.00
GCS150/180 EF CVR	GCS150/180/250 Series Power Supplies Fan Cover	85W2917	27.00
GCS150/180 TF CVR	GCS150/180/250 Series Power Supplies Fan Cover	85W2918	27.00

(210031)

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(212565)

LCL SERIES 150-500 WATT ENCLOSED AC/DC POWER SUPPLIES

RoHS Compliant Available

- Single output industrial supplies
- High efficiency
- Cost effective
- 150W convection cooled
- 300W and 500W with internal fans
- Outputs from 12V to 48V
- Three-year manufacturer's warranty

XP Power

LCL series single output, chassis mount, enclosed AC/DC power supplies provide typical efficiency of 88% at full load. The 150 watt units are convection cooled while the others benefit from an integral cooling fan. These self-contained units require no additional forced airflow. All units come with screw terminals and self-retaining guards.

SPECIFICATIONS	
Input Voltage:	85-264VAC (127-370 VDC)*
Input Frequency:	47-63Hz
Efficiency:	88% typical at full load & 230VAC
Line Regulation:	±0.5% max for LCL150, ±0.3% for LCL300 & LCL500
Load Regulation:	±1% max
Isolation:	3000 VAC Input to Output 1500 VAC Input to Ground 500 VAC Output to Ground
Operating Temperature:	-10°C to +70°C, derate from 100% load at +50°C to 50% load at +70°C
Safety Approvals:	EN60950-1, UL60950-1, CSA60950 No 22.2
EMC:	EN55022 level B conducted, level A radiated

Mfg. Part No.	Output 1 V	Output 1 A	Trim Range (V)	Ripple & Noise†	Output Power (W)	Stock No.	Price Each 1-4
LCL150 DIMENSIONS (L x W x H): 7.55 x 3.74 x 1.97", Wt. 1.39 lbs.							
LCL150PS12	12	12.5	11-13	100 mV pk-pk	150	52R2906	63.00
LCL150PS15	15	10	14-16	100 mV pk-pk	150	52R2907	63.00
LCL150PS24	24	6.3	23-25	150 mV pk-pk	150	52R2908	63.00
LCL150PS48	48	3.1	47-49	250 mV pk-pk	250	52R2909	63.00
LCL300 DIMENSIONS (L x W x H): 8.07 x 4.33 x 1.97", Wt. 1.94 lbs.							
LCL300PS12	12	25	11-13	150 mV pk-pk	300	52R2910	117.00
LCL300PS15	15	20	14-16	150 mV pk-pk	300	52R2911	117.00
LCL300PS24	24	13	23-25	150 mV pk-pk	310	52R2912	117.00
LCL300PS48	48	6.7	47-49	240 mV pk-pk	320	52R2913	117.00
LCL500 DIMENSIONS (L x W x H): 9.84 x 5.00 x 2.08", Wt. 3.2 lbs.							
LCL500PS12	12	42	11-13	120 mV pk-pk	500	52R2914	200.00
LCL500PS15	15	34	14-16	150 mV pk-pk	500	52R2915	200.00
LCL500PS24	24	21	23-25	150 mV pk-pk	500	52R2916	200.00
LCL500PS48	48	10.5	47-49	240 mV pk-pk	500	52R2917	200.00

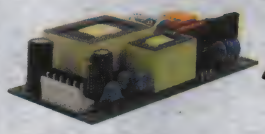
*Output power derates linearly from 100% at 90VAC to 90% at 85VAC
†Measured with 20 MHz bandwidth
(165073)

ECP180 SERIES AC/DC 180 WATT SINGLE OUTPUT POWER SUPPLIES

NEW

RoHS Compliant Available

- Low 1" profile with 2"x4" footprint
- 120W convection, 180W force-cooled ratings
- Single outputs from 12V to 48V
- High efficiency up to 95%
- Overvoltage, overload and short circuit protection
- Built-in fan supply
- <0.5W no load input power
- 3-year manufacturer's warranty



XP Power

TUV Rheinland

SPECIFICATIONS:	
Input Voltage Range:	85 - 264VAC, derated from 120W @ 100VAC to 110W @ 90VAC and 100W @ 85VAC when convection cooled
Input Frequency:	47 - 63Hz
Line Regulation:	±0.5% max.
Load Regulation:	±0.5% max.
Cooling:	Convection cooled: 120W Forced cooled: 180W with 10CFM
Fan Output:	12V / 0.5A
Ripple & Noise:	1% max. pk-pk, 20MHz bandwidth
Operating Temperature:	-20°C to +70°C derate from 100% load @ 50°C to 50% load @ 70°C
EMC:	EN55022/11, Level B conducted and level A radiated
Safety Approvals:	UL60950-1, IEC60950-1, EN60950-1, ANSI/AAMI ES 60601-1, IEC60601-1, EN60601-1
Dimensions (L x W x H):	4" x 2" x 1" (101.6mm x 50.8mm x 25.4mm)

CONTINUED

SWITCHING POWER SUPPLIES

ECP180 SERIES AC/DC 180 WATT SINGLE OUTPUT POWER SUPPLIES (CONT.)

Mfg. Part No.	Output Voltage (V)	Output Current (A) Convection	Output Current (A) Force-Cooled*	Ripple & Noise pk-pk** (mV)	Efficiency (%)	Stock No.	Price Each 1-4
ECP180PS12	12V	10A	15A	120	92	19X6858	107.00
ECP180PS15	15V	8A	12A	150	92	19X6859	107.00
ECP180PS24	24V	5A	7.5A	240	93	19X6860	107.00
ECP180PS28	28V	4.3A	6.43A	280	93	19X6861	107.00
ECP180PS36	36V	3.33A	5A	360	94	19X6862	107.00
ECP180PS48	48V	2.5A	3.75A	480	94	19X6863	107.00

*Requires 10CFM; **Measured with 20MHz bandwidth
(211552)

EMH SERIES 250/350W AC/DC POWER SUPPLIES

RoHS Compliant Available

XP Power

- Single and Dual output models
- IT and 3rd edition medical (BF) approvals
- 80V - 275VAC operation
- 12V/0.6A Fan supply V3
- Analog signals options (**EMH350**)
- 5V Standby supply V2 (**EMH350**)
- Three-year manufacturer's warranty

SPECIFICATIONS	
Input Voltage:	80-275VAC, derate output power <90VAC
Input Frequency:	47-63Hz
Line Regulation:	±0.5% maximum
Load Regulation:	±1% V1, ±5% V2
Ripple & Noise:	1% pk-pk, 20MHz bandwidth
Isolation:	4000VAC input to output 2 x MOPP, 1500VAC input to ground 1 x MOPP, 1500VAC output to ground 1 x MOPP
Operating Temp:	0°C to +70°C, derate linearly from +50°C at 2.5% /°C to 50% load at +70°C
Safety Approvals:	EN60601-1, ANSI/AAMI ES60601-1, CSA22.2 No.60601-1 per cUL BF rated, including risk management, EN60950, UL60950
EMC:	EN55011/22 level B conducted, level A radiated

Mfg. part nos. with **-01** or **U suffix** feature Remote Sense to compensate for 0.5V total voltage drop, 5V Standby supply, AC OK/Power Fail, Inhibit V1 and V Fan, and Current Share functions. Mfg. part nos. with **-EF suffix** are integral end fan models that have all the same features plus variable-speed fan control.

250W, SINGLE OUTPUTS — 5"L x 3"W x 1.43" H

Mfg. Part No.	Output Power (W)	Output Voltage (V)	Output Current (A)	Standby Supply V2	Stock No.	Price Each 1-4
EMH250PS12	252	12	21	...	89T2206	125.00
EMH250PS18	252	18	14	...	89T2208	125.00
EMH250PS24	252	24	10.5	...	89T2209	125.00
EMH250PS48	250	48	5.2	...	89T2210	125.00
350W, SINGLE OUTPUTS — 5"L x 3"W x 1.43" H						
EMH350PS12	354	12	29.2	5V / 2A	89T2211	210.00
EMH350PS18	354	18	19.5	5V / 2A	89T2213	210.00
EMH350PS24	355	24	14.6	5V / 2A	89T2215	210.00
EMH350PS48	354	48	7.3	5V / 2A	89T2217	210.00
EMH350PS12-01	354	12	29.2	5V / 2A	89T2212	220.00
EMH350PS18-01	354	18	19.5	5V / 2A	89T2214	220.00
EMH350PS24-01	355	24	14.6	5V / 2A	89T2216	220.00
EMH350PS48-01	354	48	7.3	5V / 2A	89T2218	220.00

350W, DUAL OUTPUTS — 6"L x 4"W x 1.57" H

Mfg. Part No.	Output Power (W)	Output 1 Voltage (V)	Output 1 Current (A)	Output 2 Voltage (V)	Output 2 Current (A)	Standby Supply V2	Stock No.	Price Each 1-4
EMH350PD21-U	354	12	16.5	24	8.3	5V / 2A	19X7070	255.00
EMH350PD22-U	354	12	16.5	36	5.5	5V / 2A	19X7072	255.00
EMH350PD23-U	355	12	16.5	48	4.2	5V / 2A	19X7074	255.00
EMH350PD24-U	354	24	8.3	48	4.2	5V / 2A	19X7076	255.00
EMH350PD21-EF	354	12	16.5	24	8.3	5V / 2A	97W1004	290.00
EMH350PD22-EF	354	12	16.5	36	5.5	5V / 2A	19X7071	290.00
EMH350PD23-EF	355	12	16.5	48	4.2	5V / 2A	19X7073	290.00
EMH350PD24-EF	354	24	8.3	48	4.2	5V / 2A	19X7075	290.00

TOP FAN COVER KIT — 5"L x 3"W x 1.43"H

Mfg. Part No.	Description	Stock No.	Price Each 1-4
EMH TF KIT	Top Fan Cover Kit	89T2205	35.00

(202126)

EMH350 SERIES 350W DUAL OUTPUT AC-DC POWER SUPPLIES

RoHS Compliant Available

NEW

XP Power

- Dual output
- IT and Medical (BF) approvals
- Remote sense compensates for 0.5V total voltage drop
- 12V/0.6A fan supply
- 5V/2A standby supply
- AC OK / Power Fail
- Inhibit V1 and V Fan
- Current share
- Variable speed fan control (models with **suffix EF** only)
- Three-year manufacturer's warranty

EMH350PDxx-U

EMH350PDxx-EF

SPECIFICATIONS	
Input Voltage:	80-275VAC derate output power <90VAC
Input Frequency:	47-63Hz
Line Regulation:	±0.5% max
Load Regulation:	Output 1: ±1%, ±5% standby
Ripple & Noise:	1% pk-pk, 20MHz bandwidth
Efficiency:	87% typical
Isolation:	4000VAC Input to Output 2xMOPP, 1500VAC Input to Ground 1xMOPP, 1500VAC Output to Ground 1xMOPP
Operating Temperature:	0°C to +70°C, derate from 25% at +50°C to 50% at +70°C
Safety Approvals:	EN60601-1, ANSI/AAMI ES60601-1, CSA22.2 No. 60601-1 per cUL BF Rated, Including Risk Management, EN60950, UL60950
EMC:	EN55011/22, Level B/A conducted/radiated
Dimensions (L x W x H):	Open Frame: 6" x 4" x 1.57"; Enclosed: 7" x 4" x 1.75"

OPEN FRAME

Mfg. Part No.	Power (W)	Output 1 V	Output 1 A	Output 2 V	Output 2 A	Fan Supply V3	Stock No.	Price Each 1-4
EMH350PD21-U	354	12V	16.5A	24	8.3	12V/0.6A	19X7070	255.00
EMH350PD22-U	354	12V	16.5A	36	5.5	12V/0.6A	19X7072	255.00
EMH350PD23-U	355	12V	16.5A	48	4.2	12V/0.6A	19X7074	255.00
EMH350PD24-U	354	24V	8.3A	48	4.2	12V/0.6A	19X7076	255.00
ENCLOSED WITH INTEGRAL END FAN AND VARIABLE SPEED CONTROL								
EMH350PD21-EF	354	12V	16.5A	24	8.3	12V/0.6A	97W1004	290.00
EMH350PD22-EF	354	12V	16.5A	36	5.5	12V/0.6A	19X7071	290.00
EMH350PD23-EF	355	12V	16.5A	48	4.2	12V/0.6A	19X7073	290.00
EMH350PD24-EF	354	24V	8.3A	48	4.2	12V/0.6A	19X7075	290.00

(211531)

SHP SERIES 350/650/1000W AC/DC POWER SUPPLIES

RoHS Compliant Available

XP Power

- Increased power at >180VAC input
- Rugged industrial construction
- -20°C to +70°C operation
- 5V standby
- AC OK, remote on/off and active current share
- Screw terminals
- Three-year manufacturer's warranty

SHP350/650/1000 series AC/DC power supplies are for use in a range of industrial applications. The unit is comprised of a main output with voltages from 12-48VDC and a 5VDC standby supply, which can be utilized with the signals and control features for detection of loss of AC input and remote on/off control. Suffix **-EF** indicates end fan.

SPECIFICATIONS	
Input Voltage:	85-264VAC
Input Frequency:	47-63Hz
Efficiency:	85% typical
Line Regulation:	±0.5%
Load Regulation:	650W: ±1% V1, ±5% V3, 350 & 1000W: ±1% V1, ±5% V2
Ripple & Noise:	1% pk-pk V1, 20 MHz bandwidth
Isolation:	3000VAC input to output, 1500VAC input to ground, 500VDC output to ground
Operating Temperature:	-20°C to +70°C, derate linearly from +50°C at 2.5%/ °C to 50% load at +70°C (-40°C startup for 1000W)
Safety Approvals:	IEC60950-1 CB report, CSA 22.2 No. 60950-1, UL60950-1, TUV, EN60950-1, SEMI F47
EMC:	EN55022 class B conducted, class A radiated

DIMENSIONS (L x W x H): 7 x 3.6 x 2.1", WEIGHT: 1.73 lbs

Mfg. Part No.	Output 1 V	Output 1 A	Standby Supply	Max Output Power*	Stock No.	Price Each 1-4
SHP350PS12	12	26.5	5V/0.2A	318W	89T3574	133.00
SHP350PS15	15	22	5V/0.2A	330W	89T3575	133.00
SHP350PS24	24	14.5	5V/0.2A	348W	89T3576	133.00
SHP350PS28	28	12.5	5V/0.2A	350W	89T3577	133.00
SHP350PS36	36	9.7	5V/0.2A	350W	89T3578	133.00
SHP350PS48	48	7.3	5V/0.2A	350W	89T3579	133.00

➤CONTINUED➤

SHP SERIES 350/650/1000W AC/DC POWER SUPPLIES (CONT.)

DIMENSIONS (L x W x H): 9.18 x 4 x 2.5", WEIGHT: 2.8 lbs

Mfg. Part No.	Output 1 V	Output 1 A	Standby Supply	Max Output Power*	Stock No.	Price Each 1-4
SHP650PS12-EF	12	50	5V/0.2A	607W	52R2920	240.00
SHP650PS15-EF	15	40	5V/0.2A	607W	52R2921	240.00
SHP650PS24-EF	24	27	5V/0.2A	655W	52R2922	240.00
SHP650PS28-EF	28	23	5V/0.2A	655W	52R2923	240.00
SHP650PS36-EF	36	18	5V/0.2A	655W	52R2924	240.00
SHP650PS48-EF	48	13.5	5V/0.2A	655W	52R2925	240.00

DIMENSIONS (L x W x H): 9.48 x 5.90 x 2.4", WEIGHT: 4.6 lbs

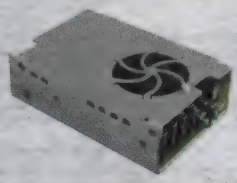
SHP1000PS12	12	83	5V/1.0A	1kW	67R9496	450.00
SHP1000PS15	15	67	5V/1.0A	1kW	67R9497	450.00
SHP1000PS24	24	42	5V/1.0A	1.013kW	67R9498	450.00
SHP1000PS28	28	36	5V/1.0A	1.013kW	67R9499	450.00
SHP1000PS36	36	28	5V/1.0A	1.013kW	67R9500	450.00
SHP1000PS48	48	21	5V/1.0A	1.013kW	67R9501	450.00

* **SHP350:** Up to 420W at >180VAC input. **SHP1000:** Up to 1200W at >180VAC input (except 12V/15V output).
(165074)

FCM400 SERIES 400 WATT INDUSTRIAL AND MEDICAL AC/DC POWER SUPPLIES

RoHS Compliant Available

XP Power



- 400W continuous, 600W peak
- IT and Medical 3rd edition approvals
- 80V - 275VAC operation
- Screw terminals
- AC OK and remote on/off
- 5V standby
- Three-year manufacturer's warranty

FCM400 series compact AC/DC power supplies are for use in both industrial and medical applications. The single output units feature dual fusing, AC OK, remote on/off and a 5V standby supply. Wt. 1.8 lbs.

SPECIFICATIONS	
Input Voltage:	80-275VAC, Derate below 90VAC
Input Frequency:	47-63Hz
Efficiency:	85% typical
Line Regulation:	±0.5% max.
Load Regulation:	±1% V1, ±5% V2
Ripple & Noise:	1% pk-pk, 20 MHz bandwidth
Isolation:	4000 VAC input to output, 2x MOPP 1500 VAC input to ground, 1 x MOPP 500 VDC output to ground
Operating Temperature:	-10°C to +70°C, derate linearly from +50°C at 2.5%/ °C to 50% load at +70°C
EMC:	EN55011/22 level B conducted, level A radiated
Safety Approvals:	IEC60950-1 CB report, CSA 22.2 No. 60950-1, UL60950-1, TUV, EN60950-1, IEC60601-1 CB report, CSA 22.2 No. 60601-1, ANSI/AMMI ES 6060101 (including Risk Management), TUV60601-1

DIMENSIONS (L x W x H): 6 x 4 x 1.93"

Mfg. Part No.	Output 1 V	Output 1 A	Standby Supply (V2)	Max Output Power (W)	Stock No.	Price Each 1-4
FCM400PS12	12	33.3	5V/0.5A	400	67R9646	250.00
FCM400PS15	15	26.6	5V/0.5A	400	67R9647	250.00
FCM400PS24	24	16.6	5V/0.5A	400	67R9648	250.00
FCM400PS28	28	14.2	5V/0.5A	400	67R9649	250.00
FCM400PS36	36	11.1	5V/0.5A	400	67R9650	250.00
FCM400PS48	48	8.3	5V/0.5A	400	67R9651	250.00

(176066)

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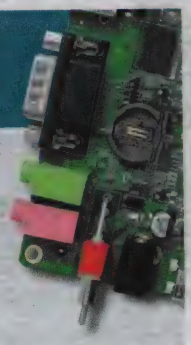

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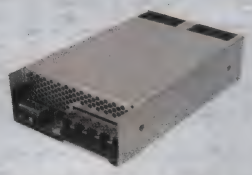
(196526)

MHP650/1000 SERIES 650/1000 WATT AC/DC MEDICAL POWER SUPPLIES

RoHS Compliant Available

XP Power



- Medical 3rd edition safety approvals
- -20°C to +70°C operation
- AC OK, remote on/off and active current share
- Screw terminals
- 5V standby
- Variable fan speed for noise reduction
- Three-year manufacturer's warranty

MHP650/1000 series AC/DC power supplies are for use in medical applications. Each series offers six output voltage variants covering the nominal voltages of +12, +15, +24, +28, + 36 or +48 VDC, and can be trimmed within +/- 10% of nominal. A +5 VDC, 1W always on output is also provided for standby purposes. MHP ranges feature a constant current overload characteristic making them suitable for motor and other industrial type loads. Suffix **-EF** indicates end fan.

SPECIFICATIONS	
Input Voltage:	80-264VAC- MHP650, 85-264VAC- MHP1000. Derate below 90VAC
Input Frequency:	47-63Hz
Efficiency:	86% typical
Line Regulation:	±0.5% max.
Load Regulation:	±1% V1, ±5% V3
Ripple & Noise:	1% pk-pk V1, 20 MHz bandwidth
Isolation:	4000 VAC input to output, 2 x MOPP 1500 VAC input to ground, 1 x MOPP 500 VDC output to ground
Operating Temperature:	-20°C to +70°C, derate linearly from +50°C at 2.5%/ °C to 50% load at +70°C (-40°C startup for 1000W)
Safety Approvals:	IEC60601-1 CB report, ANSI/AMMI ES 60601-1 (including Risk Management), EN60601-1, CSA 22.2 No. 60601-1
EMC:	EN55011/22 level B conducted, level A radiated

DIMENSIONS (L x W x H): 9.18 x 4 x 2.5", WEIGHT: 2.8 lbs.

Mfg. Part No.	Output 1 V	Output 1 A	Standby Supply (V3)	Max Output Power (W)	Stock No.	Price Each 1-4
MHP650PS12-EF	12	50	5V/0.2A	607	67R9490	398.00
MHP650PS15-EF	15	40	5V/0.2A	607	67R9491	398.00
MHP650PS24-EF	24	27	5V/0.2A	655	67R9492	398.00
MHP650PS28-EF	28	23	5V/0.2A	655	67R9493	398.00
MHP650PS36-EF	36	18	5V/0.2A	655	67R9494	398.00
MHP650PS48-EF	48	13.5	5V/0.2A	655	67R9495	398.00

DIMENSIONS (L x W x H): 9.55 x 5.90 x 2.4", WEIGHT: 4.6 lbs.

Mfg. Part No.	Output 1 V	Output 1 A	Standby Supply (V3)	Max Output Power (W)*	Stock No.	Price Each 1-4
MHP1000PS12	12	83	5V/1.0A	1	67R9484	525.00
MHP1000PS15	15	67	5V/1.0A	1.01	67R9485	525.00
MHP1000PS24	24	42	5V/1.0A	1.013	67R9486	525.00
MHP1000PS28	28	36	5V/1.0A	1.013	67R9487	525.00
MHP1000PS36	36	28	5V/1.0A	1.013	67R9488	525.00
MHP1000PS48	48	21	5V/1.0A	1.013	67R9489	525.00

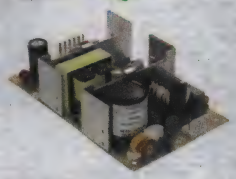
* **MHP1000:** Increased power up to 1200W at input >180VAC (except 12V/15V output).
(175893)

ALS SERIES SINGLE OUTPUT SWITCH MODE POWER SUPPLIES

RoHS Compliant Available

TRIAD

TUV Rheinland



ALS series is a single output power supply. It provides a DC output power in an open frame package. Excellent performance specifications are provided, together with compliance to European EMC and Low Voltage directive.

SPECIFICATIONS:	
Input Voltage:	90-264VAC/120-370VDC
Input Frequency:	47-63Hz
Operating Temperature:	Convection Cooling 0-50°C
EMC:	EN55022, Class A
TUV:	EN60950

DIMENSIONS: 1.40 x 3.00 x 5.00" (H x W x D)

Mfg. Part No.	Output Voltage (V)	Output Current (A)	Power (W)	Stock No.	Price Each 1-9
ALS50-3.3	3.3	9.1	50	79K5238	35.46
ALS50-5	5	9.6	50	79K5239	35.46
ALS50-12	12	4.2	50	79K5236	37.59
ALS50-24	24	2.1	50	79K5237	35.46

CONTINUED

ALS SERIES SINGLE OUTPUT SWITCH MODE POWER SUPPLIES (CONT.)

DIMENSIONS: 1.65 x 3.00 x 5.00" (H x W x D)

Mfg. Part No.	Output Voltage (V)	Output Current (A)	Power (W)	Stock No.	Price Each 1-9
● ALS75-3.3	3.3	12	75	79K5242	38.10
● ALS75-5	5	12	75	79K5243	38.10
● ALS75-12	12	6.2	75	79K5240	38.10
● ALS75-24	24	3.1	75	79K5241	40.39

(88111)

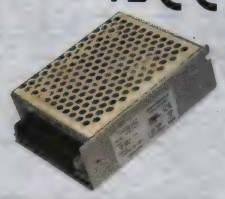
AEU65 SERIES SINGLE OUTPUT SWITCH MODE AC/DC POWER SUPPLIES

RoHS Compliant Available

TRIAD

NEW

AEU65 series enclosed, single output, switch mode AC/DC power supply designed for a wide variety of applications where high reliability is desired, including for the industrial and telecommunications markets. Excellent performance specifications are provided, together with compliance to European EMC (EN55022, Class B and EN61000-3-2), and Low Voltage directive (TUV EN60950). Three-year manufacturer's warranty. UL recognized, TUV approved, CE compliant.



SPECIFICATIONS (@ 25°C):	
Input Voltage:	90-264VAC, 127-373VDC
Input Frequency:	47-63Hz
Input Current:	1.6A @115VAC, 0.8A @230VAC Typical
Inrush Current (Max.):	30A @115VAC, 60A @ 230VAC -- Cold Start
Operating Temperature:	-20° to 50°C @ Full Load
Leakage Current:	<2.4mA / 240VAC
Cooling:	Natural Convection
Dimensions:	99mmL x 75mmW x 35mmH
EMC:	EN55022, Class B and EN61000-3-2
UL:	60950-1
TUV:	EN60950-1 (Insulation Class 1)

Mfg. Part No.	Output Voltage (V)	Output Current (A)	Power (W)	Stock No.	Price Each 1-9
● AEU65-033	3.3	10	33	20X5433	34.04
● AEU65-050	5	10	50	20X5434	34.04
● AEU65-120	12	5.4	64.8	20X5435	34.04
● AEU65-150	15	4.3	64.5	20X5436	34.04
● AEU65-240	24	2.7	64.8	20X5437	34.04
● AEU65-360	36	1.8	64.8	20X5438	34.04
● AEU65-480	48	1.35	64.8	19X1343	34.03

(211505)

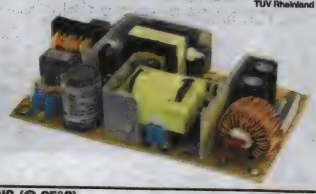
ABU125 SERIES SINGLE OUTPUT SWITCH MODE AC/DC POWER SUPPLIES WITH PFC

RoHS Compliant Available

TRIAD

NEW

ABU125 series open frame, single output, switch mode AC/DC power supply with PFC (Power Factor Correction) is designed for a wide variety applications where high reliability is desired, including the industrial and telecommunications markets. Excellent performance specifications are provided, together with compliance to European EMC (EN55022, Class B and EN61000-3-2), and Low Voltage directive (TUV EN60950).Three-year manufacturer's warranty. UL recognized, TUV approved, CE compliant.



SPECIFICATIONS (@ 25°C):	
Input Voltage:	90-264VAC, 127-373VDC
Input Frequency:	47-63Hz
Input Current:	1.6A @115VAC, 0.8A @230VAC Typical
Inrush Current (Max.):	30A @115VAC, 60A @ 230VAC -- Cold Start
PFC (Power Factor Correction):	>0.95/230VAC, >0.98/115VAC @ Full Load
Operating Temperature:	-20° to 50°C @ Full Load
Leakage Current:	<2.4mA / 240VAC
Cooling:	Natural Convection or Fan @ 15CFM
Dimensions:	127mmL x 76.2mmW x 27mmH
EMC:	EN55022, Class B and EN61000-3-2
UL:	60950-1
TUV:	EN60950-1 (Insulation Class 1)

➤CONTINUED➤

ABU125 SERIES SINGLE OUTPUT SWITCH MODE AC/DC POWER SUPPLIES WITH PFC (CONT.)

Mfg. Part No.	Output Voltage (V)	Output Current (A)*	Power (W)*	Stock No.	Price Each 1-9
● ABU125-050	5	10/20A	70/100	20X5426	71.84
● ABU125-120	12	8.5/10.5A	102/126	20X5427	71.84
● ABU125-150	15	6.7/8.4A	100.5/126	20X5428	71.84
● ABU125-240	24	4.2/5.2A	100.8/124.8	20X5429	71.84
● ABU125-270	27	3.75/4.6A	101.25/124.2	20X5430	71.84
● ABU125-360	36	2.8/3.5A	100.8/126	20X5431	71.84
● ABU125-480	48	2.1/2.6A	100.8/124.8	20X5432	71.84
● ABU125-560	56	1.6/1.96A	90/110	44X7170	71.84

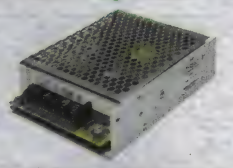
*Natural Convection/15CFM Fan

(211507)

AWSP SERIES SINGLE OUTPUT SWITCH MODE POWER SUPPLIES

RoHS Compliant Available

TRIAD



The **AWSP series** is a single output power supply. This closed frame design provides high reliability for a wide variety of applications, including the industrial and telecommunications markets. Excellent performance specifications are provided, together with compliance to European EMC and Low Voltage directive.

SPECIFICATIONS		
Mfg. Part Nos.	AWSP40/AWSP60	AWSP100/AWSP150
Input Voltage:	85-264VAC	88-264VAC
Input Frequency:	47-63Hz	
Operating Temperature:	-10 to 60°C	
EMC:	EN55022, Class B and EN61000-3-2	
TUV:	EN60950	

DIMENSIONS: 1.50 x 3.86 x 5.08" (H x W x D)

Mfg. Part No.	Output Voltage (V)	Output Current (A)	Power (W)	Stock No.	Price Each 1-9
● AWSP40-5	5	7.6	40	79K5252	33.58
● AWSP40-12	12	3.3	40	79K5250	34.54
● AWSP40-24	24	1.7	24	79K5251	34.54
DIMENSIONS: 1.50 x 3.86 x 6.30" (H x W x D)					
● AWSP60-5	5	12	60	79K5255	36.33
● AWSP60-12	12	5	60	79K5253	36.96
● AWSP60-24	24	2.5	60	79K5254	36.54
DIMENSIONS: 1.65 x 3.86 x 7.83" (H x W x D)					
● AWSP100-5	5	20	100	79K5246	70.52
● AWSP100-12	12	8.4	100	79K5244	69.72
● AWSP100-24	24	4.2	100	79K5245	71.72
● AWSP150-5	5	30	150	79K5249	70.71
● AWSP150-12	12	1.25	150	79K5247	74.10
● AWSP150-24	24	6.3	150	79K5248	76.22

(88113)

LDS70 SERIES LED LIGHTING POWER SUPPLIES

RoHS Compliant Available

ARTESYN EMBEDDED TECHNOLOGIES

- Constant Current & Constant Voltage operation
- Dimming options
- Free-Air rated - No forced air necessary for cooling
- Class 2 Outputs
- IP64 to IP67 water protection
- CISPR 15 / FCC Part 15 EMI performance
- Class C harmonics
- < 1.0W No-load power
- > 0.9 Power factor
- Efficiency (typical): 88% (230VAC), 87% (115VAC)

Mfg. Part No.	Input Voltage	Output Voltage	Output Current	Dimming Interface	IP Rating	Stock No.	Price Each 1-4
● LDS70-12-H03	90V AC to 305V AC	12VDC	5A	0 - 10V	IP67	14T0543	88.91
● LDS70-58-U00	90V AC to 264V AC	58VDC	1.2A	None	IP67	14T0547	75.64
● LDS70-58-U01	100V AC to 240V AC	58VDC	1.2A	2-Level	IP64	14T0548	87.44
● LDS70-58-H03	90V AC to 305V AC	58VDC	1.2A	0 - 10V	IP67	14T0546	88.06

(192377)

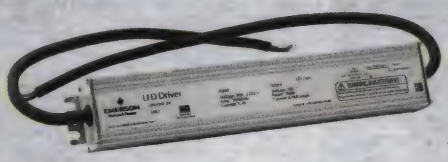
LDS100 SERIES 100W LED POWER SUPPLIES

RoHS Compliant Available

ARTESYN EMBEDDED TECHNOLOGIES

Features
- Constant current
- Constant voltage operation
- Dimming options
- Free-air rated

Compliance
- Class 2 outputs
- IP64 to IP67 water protection
- CISPR 15 / FCC Part 15 EMI performance
- Class C harmonics
- < 1.0W No-load power
- > 0.9 Power factor



LDS100 series 100 watt LED power supplies feature active power factor correction rated at 0.9 minimum to support Energy Star requirements and meet the class C harmonic requirements of IEC 61000-3-2. They have programmable current limit levels, controlled via an IEC 60929 compliant interface using a standard 0 to 10 V signal, to support dimming and are rated for operation over a wide case temperature range of -40 to 90°C without forced air cooling. Further help minimize running costs with a very high conversion efficiency, typically 90 percent when operating from a nominal 230 Vac input. Housed in a slimline, up to IP67 rated package measuring just 8.5 x 1.65 inches (215 x 42 mm), with a height of only 1.2 inches (30 mm), these power supplies are easy to accommodate in to modern LED lighting fixtures with limited space.

Mfg. Part No.	Output Current (A)	Output Voltage (VDC)	Input Voltage (VAC)	Stock No.	Price Each 1-4
LDS100-24-U00	4.1	24	100V to 240V	48T3672	86.33
LDS100-24-H00	4.1	24	120V to 277V	48T3670	92.24
LDS100-24-H03	4.1	24	120V to 277V	48T3671	97.58
LDS100-31-H03	3.16	31	120V to 277V	75T5192	98.89
LDS100-48-H03	2	48	120V to 277V	75T5193	98.89

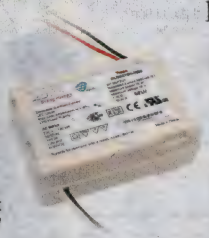
(198154)

TROPO 15W DIMMABLE LED DRIVERS

RoHS Compliant Available

ROAL living energy

- 120VAC and 230VAC inputs available
- Output current availability 0.35A-1.5A
- Operates with industry standard dimmers
- Compact encapsulated assembly
- Active power factor correction
- Output over-voltage, over-current, short-circuit protection and auto recovery
- High temperature operation (up to 90°C case)
- Long life 5 year warranty
- UL and ENEC approved, CE mark



TROPO series switch mode power supply technology is designed to generate one constant current output from an AC input, and work with industry standard lighting controls in dimming applications.

SPECIFICATIONS:	
Input Voltage:	90-135VAC (L Models), 176-265VAC (H Models)
Input Frequency:	47-63 Hz
Operating Temperature:	-30°C to +90°C case temp without derating
Efficiency (%):	80% typical @ >120VAC, full load
EMC and EMI:	EN55015 Class B, FCC Class47CFR Part 15 Class B
Safety Approvals:	UL60950-1 recognized, UL8750 compliant, ENEC Mark and CE Mark for EU
Dimension (LxWxH):	3.21 x 2.21 x 1.13"

CONSTANT CURRENT MODELS

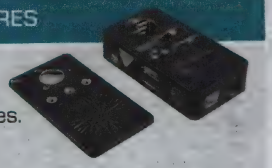
Mfg. Part No.	Input Voltage (VAC)	Output Voltage Range (VDC)	Output Current (mA)	Power (W)	Stock No.	Price Each 1-9
RLDD015L-600	120	8-12	1.5	7.2	69R7349	38.70
RLDD015L-800	120	8-12	1.5	9.6	69R7350	38.70
RLDD015L-900L	120	10-12	1.5	10.8	69R7351	26.95
RLDD015L-1000	120	10-16	1.5	15	69R7347	38.70
RLDD015L-1200	120	10-13.2	1.5	16.92	69R7348	38.70
RLDD015H-600	230	8-12	1.5	7.2	69R7344	38.70
RLDD015H-800	230	8-12	1.5	9.6	69R7345	38.70
RLDD015H-900L	230	10-12	1.5	10.8	69R7346	38.70
RLDD015H-1000	230	10-16	1.5	16	69R7342	38.70
RLDD015H-1200	230	10-13.2	1.5	15.84	69R7343	38.70

(168159)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures

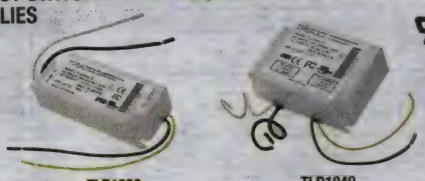


(21250c)

TLD1020/40 SERIES 20-40 W SINGLE OUTPUT SWITCHING POWER SUPPLIES

RoHS Compliant Available

TRIAD



TLD1020 TLD1040

TLD1020/40 series 20-40 watt single output encapsulated switching power supplies feature power factor correction for use in indoor and outdoor IP66/NEMA 4 applications.

SPECIFICATIONS:	
Input Voltage:	90-264VAC
Input Frequency:	47-63 Hz
Operating Temperature:	-40°C to +60°C Full Load, derate 1%/°C from 60°C to 70°C max
Efficiency (%):	84
EMC Emissions:	Compliant to 47CFR, Part 2, Part 15 and Cispr PUB, 22
Class II Safety Approval:	UL/cUL 1310, UL48, CE Mark (LVD)
Dimension (LxWxH):	TLD1020: 3.74 x 1.57 x 0.97" TLD1040: 3.74 x 2.76 x 1.26"

CONSTANT VOLTAGE MODELS

Mfg. Part No.	Output Voltage (V)	Output Current (mA)	Power (W)	Stock No.	Price Each 1-9
TLD1020-12	12	1660	40	45P2892	37.70
TLD1020-24	24	830	40	46M3498	37.70
TLD1040-12	12	3330	40	45P2896	48.78
TLD1040-24	24	1670	40	46M3500	51.70
CONSTANT CURRENT MODELS					
TLD1020-24-C0350	12-24	350	40	45P2893	35.97
TLD1020-24-C0700	12-24	700	40	45P2894	35.97
TLD1040-24-C1050	12-24	1050	40	45P2897	48.78
TLD1040-36-C0700	18-36	700	40	45P2898	48.78
TLD1040-36-C1050	18-36	1050	40	45P2899	48.78

(138900)

TLM40 SERIES 26 WATT SINGLE OUTPUT DC/DC CONVERTERS

RoHS Compliant Available

TRIAD

TLM series is a 26 watt constant current encapsulated DC/DC switching power supply used for indoor and outdoor IP66/NEMA 4 applications.

SPECIFICATIONS:	
Input Voltage:	10-40 VDC
Operating Temperature:	-40°C to +60°C Full Load, derate 1%/°C from 60°C to 70°C max
Efficiency (%):	90
Dimensions (LxWxH):	1.26 x 1.22 x 0.59"

Mfg. Part No.	Input Voltage (VDC)	Output Voltage (VDC)	Output Current	Stock No.	Price Each
TLM4036DC-0350	10 ~ 40	2 ~	350mA	45P2900	19.20
TLM4036DC-0700	10 ~ 40	2 ~	700mA	45P2901	19.20
TLM4036DC-1000	10 ~ 40	2 ~	1A	45P2902	19.20

(138950)

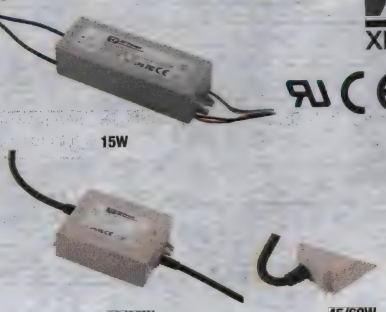
DLE SERIES 15/25/35/45/60W AC/DC LED DRIVERS

NEW

RoHS Compliant Available

XP Power

- AC input LED driver
- Constant voltage or current operation
- High power factor
- High efficiency
- Waterproof to IP67
- Class 2
- 90-305VAC input voltage range
- Three-year manufacturer's warranty



15W 25/35W 45/60W

CONTINUED

LED POWER SUPPLIES

DLE SERIES 15/25/35/45/60W AC/DC LED DRIVERS (CONT.)

SPECIFICATIONS:	
Input Voltage:	15W models: 90-264VAC; all other models: 90-305VAC
Input Frequency:	47-63 Hz
Power Factor:	15W models: >0.83; all other models: >0.9 @ 230VAC, full load
Line Regulation:	±0.5%
Load Regulation:	±1% in constant voltage mode; ±5% in constant current mode
Efficiency (%):	Up to 88%, model dependent
Isolation:	3750VAC Input to Output
Operating Temperature:	15W models:-20°C to +70°C; all other models: -20°C to +50°C
EMC Emissions:	EN55015, class B conducted and radiated
Harmonic Currents:	EN61000-3-2, class C
Safety Approvals:	EN61347, UL8750, CE Mark
Dimensions (LxWxH):	15W models: 4.33 x 1.38 x 0.98″ (110 x 35 x 25mm) 25/35W models: 4.33 x 2.89 x 1.29″ (110 x 73.5 x 33mm) 45/60W models: 6.73 x 1.78 x 1.27″ (171.1 x 45.3 x 32.5mm)
Lead Length:	5.9″ (150mm) each end

Mfg. Part No.	Output Power (W)	Output Voltage Range (V)	Output Current	Efficiency (%)	Stock No.	Price Each 1-4
15 WATT MODELS						
● DLE15PS12-V	15	12	1.25A	81	19X6844	18.00
● DLE15PS24-V	15	24	630mA	83	19X6845	18.00
● DLE15PS1250-A	15	8-12	1.25A	81	19X2726	18.00
● DLE15PS700-A	15	14-22	700mA	83	19X6848	18.00
● DLE15PS500-A	15	24-30	500mA	83	19X6847	18.00
● DLE15PS350-A	14.7	26-42	350mA	84	19X6846	18.00
25/35 WATT MODELS						
DLE25PS12	25	9-12	2.1A	79	47X2558	27.00
DLE25PS24	25	12-24	1.05A	80	47X2559	27.00
DLE25PS36	25	24-36	700mA	80	47X2560	27.00
DLE25PS48	24	33-48	500mA	80	47X2561	27.00
DLE25PS57	20	40-57	350mA	78	47X2562	27.00
DLE35PS12	30	9-12	2.5A	80	47X2563	31.00
DLE35PS24	34	12-24	1.4A	81	47X2564	31.00
DLE35PS36	36	24-36	1A	82	47X2565	31.00
DLE35PS48	34	33-48	700mA	83	47X2566	31.00
DLE35PS57	28	40-57	500mA	82	47X2567	31.00
45/60 WATT MODELS						
● DLE45PS24	45	16-24	1.85A	85	47X2569	41.00
● DLE45PS36	45	24-36	1.25A	86	47X2570	41.00
● DLE45PS48	48	34-48	1A	87	47X2571	41.00
● DLE45PS57	40	40-57	700mA	87	47X2572	41.00
● DLE60PS12	50	9-12	4.2A	86	47X2573	42.00
● DLE60PS24	60	16-24	2.5A	86	47X2574	42.00
● DLE60PS36	60	24-36	1.65A	87	47X2575	42.00
● DLE60PS48	60	34-48	1.25A	88	47X2576	42.00
● DLE60PS57	60	40-57	1.05A	88	47X2577	42.00

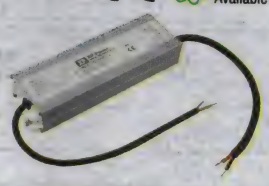
(211551)

DLG SERIES 50-150W AC/DC LED DRIVERS

RoHS Compliant Available

XP Power

- AC input LED driver
- Constant voltage & current operation
- High power factor
- High efficiency
- Waterproof to IP67
- 90-305VAC input voltage range
- Three-year manufacturer's warranty



SPECIFICATIONS:	
Input Voltage:	90-305VAC
Input Frequency:	47-63 Hz
Power Factor:	>0.94 at 230VAC, full load
Line Regulation:	±0.5%
Load Regulation:	±1.0% in constant voltage mode, ±5.0% in constant current mode
Efficiency (%):	Up to 90.5%, model dependent
Isolation:	3750VAC Input to Output, 1880VAC Input to Ground, 500VAC Output to Ground
Operating Temp:	**DLG50/70:** -40°C to +60°C, derate from 100% at +50°C to 0% at +60°C **DLG100/150:** -30°C to +70°C, derate from 100% at +55°C to 60% at +70°C
EMC Emissions:	EN55015, class B conducted and radiated
Harmonic Currents:	EN61000-3-2, class A EN61000-3-2, class C for loads >80%
Safety Approvals:	EN61347, UL8750, CE Mark DLG100/150: IEC60950-1, EN60950-1, UL60950-1
Dimensions (LxWxH):	**DLG50/70:** 6.93 x 2.68 x 1.54″ (176.0 x 68.0 x 39.0mm) **DLG100/150:** 8.74 x 2.68 x 1.54″ (222.0 x 68.0 x 39.0mm)

➤CONTINUED➤

DLG SERIES 50-150W AC/DC LED DRIVERS (CONT.)

Mfg. Part No.	Output Power (W)	Output Voltage (VDC)	Output Current (A)	Output Voltage Range in Constant Current Mode (V)	Efficiency (%)	Stock No.	Price Each 1-4
● DLG50PS12	50	12	4.2	8.5-12	84.0	34T4696	55.00
● DLG50PS24	50	24	2.1	19-24	86.0	34T4697	55.00
● DLG50PS36	50	36	1.4	26-36	88.0	34T4698	55.00
● DLG50PS48	50	48	1.05	35-48	88.0	34T4699	55.00
● DLG75PS12	59	12	4.9	8.5-12	84.0	34T4700	68.00
● DLG75PS24	75	24	3.15	19-24	86.0	34T4701	68.00
● DLG75PS36	75	36	2.1	26-36	88.0	34T4702	68.00
● DLG75PS48	67	48	1.4	35-48	88.0	34T4703	68.00
● DLG100PS12	100	12	8.3	9-12	88.0	34T4688	85.00
● DLG100PS24	100	24	4.2	14-24	90.0	34T4689	85.00
● DLG100PS36	100	36	2.8	26-36	90.0	34T4690	85.00
● DLG100PS48	100	48	2.1	34-48	90.5	34T4691	85.00
● DLG150PS12	132	12	11	9-12	88.0	34T4692	93.00
● DLG150PS24	150	24	6.3	14-24	90.0	34T4693	93.00
● DLG150PS36	150	36	4.2	26-36	90.0	34T4694	93.00
● DLG150PS48	150	48	3.2	33-48	90.0	34T4695	93.00
● DLG150PS54*	150	54	2.8	38-54	90.0	52T3231	115.00

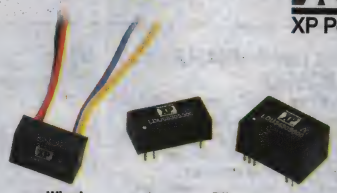
*Not UL8750 approved (196212)

LDU SERIES DC/DC LED DRIVERS

RoHS Compliant Available

XP Power

- Constant current output
- LED drive current up to 1000mA
- LED strings from 2V to 57V
- High efficiency up to 97% typical
- Remote on/off
- Open or short circuit LED protection
- PWM digital and analog voltage dimming control
- Three-year manufacturer's warranty



Wired DIL

SPECIFICATIONS:	
Input Voltage:	**LDU05 / LDU07 / LDU14**: 7-16VDC **LDU08 / LDU20 / LDU24**: 7-30VDC **LDU48**: 7-60VDC **LDU56**: 9-60VDC
Output Current Trim:	25-100%
Operating Temperature:	**LDU05 / LDU07 / LDU14 / LDU08 / LDU24**: -40°C to +85°C **LDU20**: -40°C to +70°C **LDU14 1000mA unit / LDU24 1000mA unit**: -40°C to +70°C **LDU48 150-350mA unit / LDU56 300-350mA unit** -40°C to +85°C **LDU48 500-750mA unit / LDU56 500-100mA unit** : -40°C to +70°C **LDU48 1000mA unit**: -40°C to +55°C
EMC Emissions:	EN55022 class B conducted and radiated with external components **LDU56 series** EN55015 class B conducted and radiated with external components
Dimension (LxWxH):	**LDU05 / LDU07 / LDU14**: 0.5 x 0.4 x 0.27″ **LDU08 (14-pin DIL) / LDU20**: 0.8 x 0.4 x 0.27″ **LDU08 (Wired) / LDU24**: 0.92 x 0.55 x 0.4″ **LDU48 / LDU56**: 1.25 x 0.8 x 0.49″

WITH DIMMING CONTROL

Mfg. Part No.	Input Voltage	Output Voltage	Power (W)	Output Current	Efficiency (%)	Stock No.	Price Each 1-4
● LDU0516S300	7V to 16V	2V to 14V	4.2	300mA	93	82T8706	9.00
● LDU0516S350	7V to 16V	2V to 14V	4.9	350mA	93	82T8707	9.00
● LDU0716S500	7V to 16V	2V to 14V	7	500mA	93	82T8708	10.00
● LDU0830S300	7V to 30V	2V to 28V	8	300mA	95	52R2661	10.00
● LDU0830S350	7V to 30V	2V to 28V	8	350mA	95	52R2662	10.00
● LDU1416S600	7V to 16V	2V to 14V	8.4	600mA	93	82T8710	11.00
● LDU1416S700	7V to 16V	2V to 14V	9.8	700mA	93	82T8711	11.00
● LDU1416S1000	7V to 16V	2V to 14V	14	1A	93	82T8709	11.00
● LDU2030S500	7V to 30V	2V to 28V	14	500mA	95	82T8712	12.00
● LDU2030S600	7V to 30V	2V to 28V	17	600mA	95	82T8713	12.00
● LDU2030S700	7V to 30V	2V to 28V	20	700mA	95	82T8714	12.00
● LDU2430S500	7V to 30V	2V to 28V	14	500mA	95	52R2664	12.50
● LDU2430S600	7V to 30V	2V to 28V	17	600mA	95	52R2665	12.50
● LDU2430S700	7V to 30V	2V to 28V	20	700mA	95	52R2666	12.50
● LDU2430S1000	7V to 30V	2V to 28V	24	1A	95	52R2663	12.50
● LDU4860S150	7V to 60V	2V to 57V	9	150mA	97	34T4710	24.00
● LDU4860S250	7V to 60V	2V to 57V	14	250mA	97	34T4712	24.00
● LDU4860S300	7V to 60V	2V to 57V	17	300mA	97	34T4714	24.00
● LDU4860S350	7V to 60V	2V to 57V	20	350mA	97	34T4716	24.00
● LDU4860S500	7V to 60V	2V to 57V	29	500mA	97	34T4718	26.00
● LDU4860S600	7V to 60V	2V to 57V	34	600mA	97	34T4720	26.00
● LDU4860S700	7V to 60V	2V to 57V	40	700mA	97	34T4722	26.00
● LDU4860S1000	7V to 60V	2V to 48V	48	1A	97	34T4708	26.00

➤CONTINUED➤

LDU SERIES DC/DC LED DRIVERS (CONT.)

Mfg. Part No.	Input Voltage	Output Voltage	Power (W)	Output Current	Efficiency (%)	Stock No.	Price Each 1-4
LDU5660S300	9V to 60V	2V to 56V	16.8	300mA	97	29X2251	15.00
LDU5660S350	9V to 60V	2V to 56V	19.6	350mA	97	29X2253	15.00
LDU5660S500	9V to 60V	2V to 56V	28	500mA	97	29X2255	15.00
LDU5660S600	9V to 60V	2V to 56V	33.6	600mA	97	29X2257	15.00
LDU5660S700	9V to 60V	2V to 56V	39.2	700mA	97	29X2259	15.00
LDU5660S1000	9V to 60V	2V to 56V	50	1A	97	29X2249	15.00
WIRED VERSION WITH DIMMING CONTROL							
LDU0830S350-WD	7V to 30V	2V to 28V	8	350mA	95	34T4704	10.00
LDU2430S500-WD	7V to 30V	2V to 28V	14	500mA	95	34T4706	13.00
LDU2430S700-WD	7V to 30V	2V to 28V	20	700mA	95	34T4707	13.00
LDU2430S1000-WD	7V to 30V	2V to 28V	24	1A	95	34T4705	13.00
LDU4860S150-WD	7V to 60V	2V to 57V	9	150mA	97	34T4711	24.00
LDU4860S250-WD	7V to 60V	2V to 57V	14	250mA	97	34T4713	24.00
LDU4860S300-WD	7V to 60V	2V to 57V	17	300mA	97	34T4715	24.00
LDU4860S350-WD	7V to 60V	2V to 57V	20	350mA	97	34T4717	24.00
LDU4860S500-WD	7V to 60V	2V to 57V	29	500mA	97	34T4719	26.00
LDU4860S600-WD	7V to 60V	2V to 57V	34	600mA	97	34T4721	26.00
LDU4860S700-WD	7V to 60V	2V to 57V	40	700mA	97	34T4723	26.00
LDU4860S1000-WD	7V to 60V	2V to 48V	48	1A	97	34T4709	26.00
LDU5660S300-WD	9V to 60V	2V to 56V	16.8	300mA	97	29X2252	16.00
LDU5660S350-WD	9V to 60V	2V to 56V	19.6	350mA	97	29X2254	16.00
LDU5660S500-WD	9V to 60V	2V to 56V	28	500mA	97	29X2256	16.00
LDU5660S600-WD	9V to 60V	2V to 56V	33.6	600mA	97	29X2258	16.00
LDU5660S700-WD	9V to 60V	2V to 56V	39.2	700mA	97	29X2260	16.00
LDU5660S1000-WD	9V to 60V	2V to 56V	50	1A	97	29X2250	16.00

(164266)

DCH3 SERIES EXTERNAL POWER ADAPTERS

RoHS Compliant Available

ARTESYN EMBEDDED TECHNOLOGIES

- Switching wallmount power supply
- Universal AC input
- Available in multiple AC plug configurations
- Overload and short circuit protection
- Constant voltage, constant current
- High MTBF
- Built in EMI filter (CISPR 22 Class B)
- Efficiency level IV for suffix **-0001, -0002 and -0004**
- Efficiency level V for suffix **-0005 and -0006**
- 2 year warranty

DCH3-050US

SPECIFICATIONS:

Series:	DCH3
Input range:	100-254 VAC (wide range)
Frequency:	47-63 Hz
EMI/RFI:	FCC Part 15, Subpart B Class B and EN55022 (CISPR 22) Class B and EMC89/336/EEC
Safety ground leakage current:	10 µA @ 50/60 Hz, 230 VAC input
Operating temperature:	0°C to 45°C ambient
Dimensions (L x W x H):	2.3 x 1.8 x 1.0"

Mfg. Part No.	Output Voltage (V)	Output Current (mA)	Max. Power (W)	Output Plug	Stock No.	Price Each 1-4
DCH3-050US-0001	5	550	3	Mini USB 2.0	95M8322	7.59
DCH3-050US-0002	5	550	3	Micro USB 2.0	95M8323	7.87
DCH3-050US-0004	5	550	3	USB-A	68R2387	7.97
DCH3-050US-0005	5	550	3	Mini USB 2.0	39T2387	8.72
DCH3-050US-0006	5	550	3	Micro USB 2.0	39T2388	9.16

(110625)

DCH5 SERIES EXTERNAL POWER ADAPTER

RoHS Compliant Available

ARTESYN EMBEDDED TECHNOLOGIES

- USB Switching wallmount power supply
- Universal AC input
- Regulated output
- Overload and short circuit protection
- Constant voltage, constant current
- Energy Star Efficiency Level V
- Built in EMI filter (CISPR 22 Class B)
- Cable less with USB-A receptacle
- Available in various country AC plugs; *go online or call*

DCH5-050US

SPECIFICATIONS:

Series:	DCH5
Input range:	100 - 240VAC
Frequency:	47-63Hz
EMI/RFI:	FCC Part 15, Subpart B Class B and EN55022 (CISPR 22) Class B and EMC

➤CONTINUED➤

DCH5 SERIES EXTERNAL POWER ADAPTER (CONT.)

SPECIFICATIONS:

Safety ground leakage current:	20µA @ 60Hz, 264VAC input
Operating temperature:	0°C to 40°C ambient

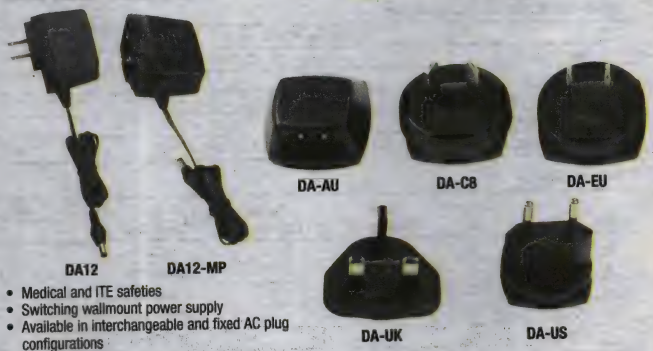
Mfg. Part No.	Power (W)	Output Voltage (V)	Output Current (A)	Output Connector	Stock No.	Price Each 1-4
DCH5-050US	5	5	1	USB-A	39T2392	10.71

(194916)

WALL-MOUNT POWER ADAPTERS - MEDICAL

RoHS Compliant Available

ARTESYN EMBEDDED TECHNOLOGIES



- Medical and ITE safeties
- Switching wallmount power supply
- Available in interchangeable and fixed AC plug configurations
- US and EU interchangeable AC plugs can be inserted in multiple orientations (straight or 90°)
- CE Mark EMC and LVD
- Universal AC input
- Fully regulated output
- Overload and short circuit protection
- Thermal protection
- Efficiency level V
- Constant voltage
- High MTBF
- Built in EMI filter (CISPR 22 Class B)

WALL-MOUNT POWER ADAPTERS

Mfg. Part No.	Power (W)	Output Voltage (V)	Output Current Max. (A)	Stock No.	Price Each 1-4	Price Each 5-9
DA12-050US-M	10	5	2	68R2374	14.54	13.80
DA12-050MP-M	10	5	2	85R6563	13.75	13.05
DA12-050MP-M-M2.1	10	5	2	85R6564	10.20	9.64
DA12-120US-M	12	12	1	12P5255	13.75	13.05
DA12-120MP-M	12	12	1	85R6565	13.75	13.05
DA18-120US-M	18	12	1.5	21T9415	17.74	17.47
DA18-120MP-M	18	12	1.5	21T9413	17.74	17.47
DA18-150US-M	18	15	1.2	85R6570	17.74	17.47
DA18-150MP-M	18	15	1.2	85R6568	17.74	17.47

INTERCHANGEABLE PLUGS

Mfg. Part No.	Description	Stock No.	Price Each 1-4	5-9	10-24	25-49
DA-AU	Australia 2-prong	85R6558	1.71	1.65	1.57	1.42
DA-C8	C8 - 2 receptacle	85R6559	1.71	1.65	1.57	1.42
DA-EU	Europe 2-prong	85R6560	1.71	1.65	1.57	1.42
DA-UK	United Kingdom 3-prong	85R6561	1.71	1.65	1.57	1.42
DA-US	U.S. 2-prong	85R6562	1.71	1.65	1.57	1.42
DA-ALL	Includes all except for C8	85R6557	7.11	6.86	6.60	5.93

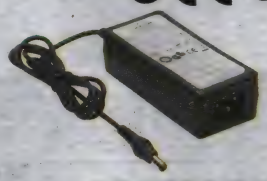
(192078)

12V OUTPUT 24W DESKTOP POWER ADAPTER

RoHS Compliant Available

ARTESYN EMBEDDED TECHNOLOGIES

- Universal AC input (90 to 264VAC)
- Fully regulated output
- EN61000-3-2 compliant
- Overcurrent and overvoltage protection
- High efficiency
- High MTBF
- IEC320 AC input receptacle 3 pin (type C14)
- Built in EMI filter (CISPR 22 Class B)
- LED power good indicator
- AC input fuse
- Efficiency Level V
- CE Mark EMC and LVD
- Meets K.21 Basic Surge requirement



Mfg. Part No.	Max. Power (W)	Output Voltage (VDC)	Output Current (A)	Stock No.	Price Each 1-4	Price Each 5-9
AD2412N3L	24	12	2	68R2255	23.88	23.51

(192108)

EXTERNAL POWER SUPPLIES

DPS50 SERIES SINGLE OUTPUT EXTERNAL DESKTOP POWER SUPPLIES

RoHS Compliant Available

ARTESYN EMBEDDED TECHNOLOGIES

- Universal AC input
- Fully regulated output
- Overload and short circuit protection
- Constant voltage
- High efficiency
- High MTBF
- LED power good indicator
- Input power <74 watts
- Built in EMI filter (CISPR 22 Class B)
- IEC320 AC receptacle, 3 pin (type C14)
- CE Mark EMC and LVD (except for the **DPS52** and **DPS52-M**)
- Complies with EN61000-3-2
- Medical safety approval models available

SPECIFICATIONS:	
Input range:	90-264 VAC, 127-300 VDC
Frequency:	47-440 Hz
Inrush current:	<60A @ 230 VAC, cold start @ 25C
Input current:	<2.0A rms @ 115 VAC, <1A @ 230 VAC
Dimensions:	1.62 x 2.39 x 5.24" (H x W x D)

STANDARD SERIES

Mfg. Part No.	Power (W)	Output Voltage (V)	Output Current (A)	Stock No.	Price Each 1-4
● DPS52	30	5	6	01M7353	57.20
● DPS53	60	12	5	04M4512	57.20
● DPS54	60	15	4	19K4296	58.04
● DPS55	60	24	2.5	01M7357	57.20
● DPS58	60	48	1.25	01M7359	55.53
MEDICAL SERIES					
● DPS52-M	30	5	6	01M7354	64.79
● DPS53-M	60	12	5	01M7355	67.72
● DPS54-M	60	15	4	01M7356	64.79
● DPS55-M	60	24	2.5	01M7358	64.79

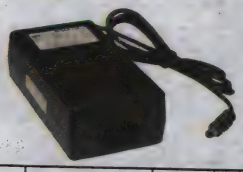
(83890)

DTM65-C SERIES 40W TO 65W EXTERNAL POWER SUPPLIES - MEDICAL

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- CEC and EISA compliant for easier system compliance
- Wide range AC input: 90V to 264V (47Hz to 63Hz)
- Greater than 85% efficiency
- Medical certifications
- Dimensions (W x L x H): 2.72 x 5.2 x 1.57"



Mfg. Part No.	Output Voltage (V)	Output Current (A)	Power (W)	Stock No.	Price Each 1-9
● DTM65PW050C	5	8	40	41R5463	70.70
● DTM65PW120C	12	5	60	41R5464	70.70
● DTM65PW150C	15	4	60	41R5465	70.70
● DTM65PW180C	18	3.6	65	41R5466	70.70
● DTM65PW240C	24	2.7	65	41R5467	70.70
● DTM65PW360C	36	1.8	65	41R5468	70.70
● DTM65PW480C	48	1.35	65	41R5469	70.70

(192373)

DT100/150-C SERIES 100W TO 150W AC/DC EXTERNAL POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda Innovating Reliable Power

- CEC and EISA* compliant
- Wide range AC input
- Power factor correction
- Low profile and lightweight
- One-year manufacturer's

DT100/150-C series 100 to 150W AC/DC external power supplies include over voltage and short circuit protection. AC input connector: IEC 320-C14 standard (accepts IEC320-C13). Output connector: Kycon KPP-4P or equivalent Pins 1 & 2: -Vout, Pins 3 & 4: +Vout. Case color: black.

SPECIFICATIONS:	
Input Voltage:	90 - 264VAC
Input Frequency:	47-63Hz
Total Regulation:	+5% / -2%
Hold Up Time (Typ.):	16ms @t 115VAC input
Efficiency:	>85% typical
Operating Temperature:	0°C to +40°C

➤ CONTINUED ➤

DT100/150-C SERIES 100W TO 150W AC/DC EXTERNAL POWER SUPPLIES (CONT.)

DIMENSIONS: 6.7L x 3.35W x 1.73"H

Mfg. Part No.	Output Voltage (V)	Output Current (A)	Power (W)	Ripple & Noise (mV)	Stock No.	Price Each 1-9
● DT100PW120C	12	8.34	100	240	25R6249	84.84
● DT100PW160C	16	6.25	100	320	25R6250	84.84
● DT100PW190C	19	5.27	100	380	25R6251	84.84
● DT100PW240C	24	4.17	100	480	25R6252	84.84
● DT100PW360C	36	2.78	100	480	25R6253	84.84
● DT100PW480C	48	2.09	100	480	25R6254	84.84
● DT150PW120C	12	11.67	140	240	25R6255	94.94
● DT150PW160C	16	9.38	150	320	25R6256	94.94
● DT150PW190C	19	7.9	150	380	25R6257	94.94
● DT150PW240C	24	6.25	150	480	25R6258	94.94
● DT150PW360C	36	4.17	150	480	25R6259	94.94
● DT150PW480C	48	3.13	150	480	25R6260	94.94

*EISA - Energy Independence and Security Act of 2007

(155091)

WSU SERIES EXTERNAL SWITCHMODE POWER SUPPLIES

RoHS Compliant Available

TRIAD

Features

- No minimum load required
- Double insulated
- Overvoltage and short circuit protection
- Class B EMI
- EISA 2007 and CEC compliant
- Five-year manufacturer's warranty

Specifications

- Power Range: 6.75-36W
- Input: 100-240VAC, 50/60Hz, NEMA 1-15P
- Output: Six foot cord with standard barrel type connector
- Dielectric Isolation (Input to Output): 4KVDC for 60 secs.
- Operating Temperature: 0°C to 40°C @ Max. Load
- Storage Temperature: -20°C to 60°C
- Humidity: 5% to 95%, Non-condensing

Fig. 1

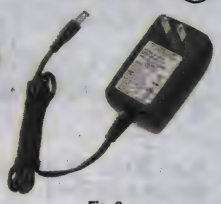


Fig. 2

Fig. 3

Fig. 4

DIMENSIONS	Fig. 1	Fig. 2	Fig. 3	Fig. 4
H x W x D (mm)	60 x 39 x 31	71 x 43 x 30	77 x 48 x 31	84 x 53 x 31

POSITIVE (+) OUTPUT BARREL PLUG CENTER TERMINAL

Mfg. Part No.	Fig.	Output Voltage (V)	Output Current (A)	Power Rating (W)	Efficiency Level	Stock No.	Price Each 1-9
● WSU045-1500	1	4.5	1.5	6.75	V	83T4294	8.17
● WSU045-2000	2	4.5	2	9	V	83T4296	9.32
● WSU045-3000	3	4.5	3	13.5	V	83T4298	13.97
● WSU050-1500	1	5	1.5	7.5	V	83T4300	8.35
● WSU050-2000	2	5	2	10	V	83T4302	10.17
● WSU050-3000	3	5	3	15	V	83T4304	14.25
● WSU050-4000	3	5	4	20	IV	83T4306	17.35
● WSU060-1250	1	6	1.25	7.5	V	83T4308	8.17
● WSU060-2000	2	6	2	12	IV	83T4310	9.84
● WSU060-3000	3	6	3	18	IV	83T4312	13.97
● WSU060-4000	3	6	4	24	IV	83T4314	17.58
● WSU075-1000	1	7.5	1	7.5	V	83T4316	8.07
● WSU075-1500	2	7.5	1.5	11.25	IV	83T4318	9.84
● WSU075-2400	3	7.5	2.4	18	IV	83T4320	13.97
● WSU075-3200	3	7.5	3.2	24	V	83T4322	17.58
● WSU075-4000	4	7.5	4	30	IV	83T4324	27.55
● WSU090-0800	1	9	0.8	7.2	V	83T4326	8.07
● WSU090-1300	2	9	1.3	11.7	V	83T4328	9.97
● WSU090-2000	3	9	2	18	V	83T4330	13.79
● WSU090-2500	3	9	2.5	22.5	IV	83T4332	17.58
● WSU090-3500	4	9	3.5	31.5	IV	83T4334	27.87
● WSU120-0700	1	12	0.7	8.4	V	83T4336	8.07
● WSU120-1000	2	12	1	12	V	83T4338	10.05
● WSU120-1500	3	12	1.5	18	V	83T4340	14.25
● WSU120-2000	3	12	2	24	V	83T4342	17.35
● WSU120-3000	4	12	3	36	V	83T4344	27.55
● WSU135-0620	1	13.5	0.62	8.37	V	83T4346	7.64

➤ CONTINUED ➤

WSU SERIES EXTERNAL SWITCHMODE POWER SUPPLIES (CONT.)

Mfg. Part No.	Fig.	Output Voltage (V)	Output Current (A)	Power Rating (W)	Efficiency Level	Stock No.	Price Each 1-9
WSU135-0880	2	13.5	0.88	11.88	V	83T4348	9.32
WSU135-1330	3	13.5	1.33	18	V	83T4350	13.97
WSU135-1770	3	13.5	1.77	23.9	V	83T4352	17.58
WSU135-2660	4	13.5	2.66	35.91	V	83T4354	27.87
WSU150-0560	1	15	0.56	8.4	V	83T4356	8.17
WSU150-0800	2	15	0.8	12	V	83T4358	9.32
WSU150-1200	3	15	1.2	18	V	83T4360	13.97
WSU150-1600	3	15	1.6	24	V	83T4362	17.58
WSU150-2400	4	15	2.4	36	V	83T4364	26.29
WSU180-0450	1	18	0.45	8.1	V	83T4366	8.17
WSU180-0660	2	18	0.66	11.88	V	83T4368	9.32
WSU180-1000	3	18	1	18	V	83T4370	13.79
WSU180-1330	3	18	1.33	23.94	V	83T4372	17.18
WSU180-2000	4	18	2	36	V	83T4374	26.29
WSU240-0500	2	24	0.5	12	V	83T4376	10.17
WSU240-0750	3	24	0.75	18	V	83T4378	13.97
WSU240-1000	3	24	1	24	V	83T4380	17.94
WSU240-1500	4	24	1.5	36	V	83T4382	27.55
NEGATIVE (-) OUTPUT BARREL PLUG CENTER TERMINAL							
WSU045-1500-R	1	4.5	1.5	6.75	V	83T4295	7.64
WSU045-2000-R	2	4.5	2	9	V	83T4297	9.32
WSU045-3000-R	3	4.5	3	13.5	V	83T4299	13.06
WSU050-1500-R	1	5	1.5	7.5	V	83T4301	8.17
WSU050-2000-R	2	5	2	10	V	83T4303	9.97
WSU050-3000-R	3	5	3	15	V	83T4305	13.97
WSU050-4000-R	3	5	4	20	IV	83T4307	17.58
WSU060-1250-R	1	6	1.25	7.5	V	83T4309	8.07
WSU060-2000-R	2	6	2	12	IV	83T4311	9.97
WSU060-3000-R	3	6	3	18	IV	83T4313	13.97
WSU060-4000-R	3	6	4	24	IV	83T4315	17.58
WSU075-1000-R	1	7.5	1	7.5	V	83T4317	8.17
WSU075-1500-R	2	7.5	1.5	11.25	IV	83T4319	9.32
WSU075-2400-R	3	7.5	2.4	18	IV	83T4321	13.06
WSU075-3200-R	3	7.5	3.2	24	V	83T4323	17.58
WSU075-4000-R	4	7.5	4	30	IV	83T4325	27.87
WSU090-0800-R	1	9	0.8	7.2	V	83T4327	8.17
WSU090-1300-R	2	9	1.3	11.7	V	83T4329	9.97
WSU090-2000-R	3	9	2	18	V	83T4331	13.97
WSU090-2500-R	3	9	2.5	22.5	IV	83T4333	16.43
WSU090-3500-R	4	9	3.5	31.5	IV	83T4335	26.29
WSU120-0700-R	1	12	0.7	8.4	V	83T4337	8.35
WSU120-1000-R	2	12	1	12	V	83T4339	10.17
WSU120-1500-R	3	12	1.5	18	V	83T4341	13.79
WSU120-2000-R	3	12	2	24	V	83T4343	17.58
WSU120-3000-R	4	12	3	36	V	83T4345	27.87
WSU135-0620-R	1	13.5	0.62	8.37	V	83T4347	7.64
WSU135-0880-R	2	13.5	0.88	11.88	V	83T4349	9.32
WSU135-1330-R	3	13.5	1.33	18	V	83T4351	13.97
WSU135-1770-R	3	13.5	1.77	23.9	V	83T4353	16.43
WSU135-2660-R	4	13.5	2.66	35.91	V	83T4355	26.29
WSU150-0560-R	1	15	0.56	8.4	V	83T4357	7.64
WSU150-0800-R	2	15	0.8	12	V	83T4359	9.97
WSU150-1200-R	3	15	1.2	18	V	83T4361	13.06
WSU150-1600-R	3	15	1.6	24	V	83T4363	16.43
WSU150-2400-R	4	15	2.4	36	V	83T4365	26.29
WSU180-0450-R	1	18	0.45	8.1	V	83T4367	8.17
WSU180-0660-R	2	18	0.66	11.88	V	83T4369	9.32
WSU180-1000-R	3	18	1	18	V	83T4371	13.97
WSU180-1330-R	3	18	1.33	23.94	V	83T4373	16.43
WSU180-2000-R	4	18	2	36	V	83T4375	26.29
WSU240-0500-R	2	24	0.5	12	V	83T4377	9.84
WSU240-0750-R	3	24	0.75	18	V	83T4379	13.97
WSU240-1000-R	3	24	1	24	V	83T4381	17.35
WSU240-1500-R	4	24	1.5	36	V	83T4383	27.87

(201250)

WALL PLUG-IN POWER SUPPLIES

RoHS Compliant Available

TRIAD

- Input voltage 120VAC
- Available in 60Hz only

Wall plug-in power sources eliminate the need for internal power supply cooling devices, thereby reducing the noise level, size and weight of the end product. These compact power sources keep heat away from sensitive circuits, and supply a safer lower output to the end product. They are completely enclosed to prevent tampering. 6 ft. cord length. UL listed.

AC/DC UNREGULATED MODELS

Mfg. Part No.	Output Voltage	Output Current	Dimensions (mm) H	W	D	Stock No.	Price Each 1-9
WDU6-200	6V	200mA	60	43	39	73K6298	8.17
WDU6-300	6V	300mA	60	43	39	97F7909	8.66
WDU6-600	6V	600mA	70	50	41	97F7910	10.53
WDU6-800	6V	800mA	70	50	41	96M9190	10.89
WDU6-1000	6V	1A	70	50	41	96M9189	11.74
WDU6-1200	6V	1.2A	70	50	41	97F7913	12.93
WDU75-800	7.5V	800mA	70	50	41	96M9191	11.14
WDU9-100	9V	100mA	60	43	39	97F7917	9.31
WDU9-300	9V	300mA	60	43	39	97F7918	8.82
WDU9-500	9V	500mA	70	50	41	97F7919	10.24
WDU9-1000	9V	1A	80	60	48	97F7920	14.45
WDU9-1200	9V	1.2A	80	60	48	97F7921	17.32
WDU9-2300	9V	2.3A	85	68	55	96M9192	40.23
WDU12-300	12V	300mA	70	50	41	79K0043	10.10
WDU12-600	12V	600mA	80	60	48	18M9750	14.23
WDU12-1200	12V	1.2A	80	60	48	96M9178	18.70
WDU12-1900	12V	1.9A	85	68	55	96M9179	37.02
WDU15-600	15V	600mA	80	60	48	97F7926	15.66
WDU15-1000	15V	1A	80	60	48	18M9751	21.58
WDU15-1700	15V	1.7A	85	68	55	96M9180	40.74
WDU18-200	18V	200mA	70	50	41	96M9183	10.60
WDU18-300	18V	300mA	70	50	41	96M9184	11.40
WDU18-600	18V	600mA	80	60	48	79K0047	15.01
WDU18-1000	18V	1A	80	60	48	97F7931	20.17
WDU18-1400	18V	1.4A	85	68	55	96M9182	39.43
WDU24-200	24V	200mA	60	43	39	96M9186	10.25
WDU24-300	24V	300mA	70	50	41	96M9187	11.25
WDU24-500	24V	500mA	80	60	48	96M9188	16.48
WDU24-800	24V	800mA	80	60	48	23M2737	28.70
WDU24-1200	24V	1.2A	85	68	55	96M9185	41.17
AC/AC UNREGULATED MODELS							
WAU12-200	12V	200mA	60	43	39	96M0298	10.17
WAU12-500	12V	500mA	70	50	41	96M0301	18.81
WAU12-1000	12V	1A	70	50	41	96M0296	19.51
WAU12-1500	12V	1.5A	80	60	48	96M0297	17.01
WAU12-2000	12V	2A	80	60	48	96M0299	18.94
WAU12-2500	12V	2.5A	85	68	55	96M0300	21.78
WAU16-400	16V	400mA	70	50	41	96M0303	19.35
WAU16-500	16V	500mA	80	60	48	96M0304	15.05
WAU16-1000	16V	1A	80	60	48	63M5191	16.58
WAU16-2400	16V	2.4A	85	68	55	96M0302	25.17
WAU20-200	20V	200mA	70	50	41	96M0305	14.07
WAU20-500	20V	500mA	80	60	48	96M0307	15.50
WAU20-2000	20V	500mA	85	68	55	96M0306	36.45
WAU24-200	24V	200mA	70	50	41	96M0310	15.34
WAU24-450	24V	450mA	70	50	41	96M0311	19.89
WAU24-750	24V	750mA	80	60	48	96M0312	16.63
WAU24-1000	24V	1A	80	60	48	96M0308	16.83
WAU24-1800	24V	1.8A	85	68	55	96M0309	40.58

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EXTERNAL POWER SUPPLIES

VEP SERIES 8, 15, 24 AND 36W SINGLE-OUTPUT PLUG-IN EXTERNAL POWER SUPPLIES

RoHS Compliant Available

XP Power

- Output voltages from 5 to 24V
- <0.3W no load input power
- Efficiency Level V (24W Level IV)
- Interchangeable AC input connectors — USA, UK, EU, Australia and China versions
- Class II construction
- CEC2008 and EISA 2007 compliant
- Medical and ITE approvals (36W ITE only)
- China Compulsory Certification (CCC) qualified (24W only)

GREEN XP POWER

SPECIFICATIONS:	
Input Voltage:	90 -264 VAC
Input Frequency:	47 - 63 Hz
Line Regulation:	±0.5% max.
Load Regulation:	±5% max.
Overload Protection:	120 - 280%, auto recovery
Isolation:	4000 VAC input-to-output
Operating Temperature:	0 to +40°C
EMC:	EN55022 level B conducted and radiated
Safety Approvals:	All Models: EN60950, UL60950-1, IEC60950-1, CSA 60950-1, EN60601-1, UL60601-1, IEC60601-1 All Models (except 36W): CSA C22.2 No 601.1 24W Only: China Compulsory Certification (CCC) Qualified

VEP series desktop plug-in power supplies include over voltage, over load and short circuit protection. Output cable length is approximately 71″. *Order Interchangeable AC input connectors (plugs) separately below.*

VEP08 SERIES — DIMENSIONS (in.): 1.06H x 2.83W x 1.67D

Mfg. Part No.	Output Power (W)	Output Voltage (V)	Output Current	Ripple and Noise	Over-voltage Trip (V)	Stock No.	Price Each 1-4
● VEP08US05	8	5	1.6A	150 mV	10	04R9684	12.50
● VEP08US09	8	9	880mA	200 mV	18	04R9685	12.50
● VEP08US12	8	12	660mA	200 mV	20	04R9686	12.50
VEP15 SERIES — DIMENSIONS: 1.2H x 2.95W x 1.81D							
● VEP15US05	10	5	2A	50 mV	9	04R9687	15.00
● VEP15US09	12.6	9	1.4A	100 mV	15	04R9688	15.00
● VEP15US12	15	12	1.25A	100 mV	20	04R9689	15.00
● VEP15US24	15	24	630mA	200 mV	35	04R9690	15.00
VEP24 SERIES — DIMENSIONS (in.): 1.14H x 3.46W x 1.89D							
● VEP24US05	12.5	5	2.5A	100 mV	10	04R9691	17.00
● VEP24US09	19.8	9	2.2A	100 mV	18	04R9692	17.00
● VEP24US12	24	12	2A	100 mV	20	04R9693	17.00
● VEP24US24	24	24	1A	100 mV	35	04R9694	17.00
VEP36 SERIES — DIMENSIONS (in.): 4.02H x 1.42W x 2.09D							
● VEP36US09	27	9	3A	200 mV	25	24T5331	19.00
● VEP36US12	36	12	3A	200 mV	28	24T5332	19.00
● VEP36US15	36	15	2.4A	200 mV	28	24T5333	19.00
● VEP36US24	36	24	1.5A	200 mV	42	24T5334	19.00

INTERCHANGEABLE AC INPUT CONNECTORS (PLUGS)

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● VEP PLUG US	North American (USA) Interchangeable AC Input Plug	15R8359	1.00
● VEP PLUG UK	United Kingdom (UK) Interchangeable AC Input Plug	15R8358	2.00
● VEP PLUG EU	European Union (EU) Interchangeable AC Input Plug	15R8357	1.30
● VEP PLUG AU	Australia (AU) Interchangeable AC Input Plug	24R2777	1.30
● VEP PLUG CN	China (CN) Interchangeable AC Input Plug	24R2778	1.00

(152449)

VEH SERIES 20/40/60/90 WATT EXTERNAL POWER SUPPLIES

RoHS Compliant Available

XP Power

- Energy Efficiency Level V
- CEC 2008 and EISA 2007 compliant
- China Compulsory Cert. (CCC) qualified (**VEH60**)
- Single outputs from 5V to 48V
- Universal input
- High power density
- Approved as a limited power source (except **VEH90**)

GREEN XP POWER

VEH series compact desktop power supplies include overload and short circuit protection. **VEH20, VEH40** and **VEH60 series** output connector is 5.5mm diameter outer barrel, inner diameter is 2.5mm barrel with center positive (+) and outer shell negative (-) polarity. **VEH90 series** output connector is Power Mini Din that mates with Kycon KPJ-4S or equivalent. All models have 48″ (1220mm) long output cable.

➤CONTINUED➤

VEH SERIES 20/40/60/90 WATT EXTERNAL POWER SUPPLIES (CONT.)

SPECIFICATIONS		
Models:	VEH20/VEH40	VEH60/VEH90
Input Voltage:	90-264VAC	
Input Frequency:	47-63Hz	
Input Current:	**VEH20** - 0.5A max/**VEH40**- 1A max	**VEH60** - 1.7A max/**VEH90** - 1.5A max @ 90VAC
No Load Input Power:	<0.3W	<0.5W
Load Regulation:	5%	±5% max.
Ripple & Noise:	**VEH20/VEH40/VEH90** - 1% pk-pk max, 20MHz bandwidth†; **VEH60** - 200mv pk-pk max, 20MHz bandwidth†	
Operating Temp.:	0 °C to +60 °C derate linearly from 100% load at +40 °C to 50% load at +60 °C	
EMC:	EN55022, Level B conducted and radiated	
Safety Approvals:	EN60950-1, UL/cUL60950-1	**VEH60** - IEC60950-1, EN60950-1, UL/cUL60950-1, China Compulsory Cerification (CCC) qualified; **VEH90** - EN60950-1:2001, UL/cUL60950-1

20 WATTS — DIMENSIONS (L x W x H): 3.90 x 1.65 x 1.22″

Mfg. Part No.	Output Voltage (V)	Ouput Current (A)	Output Power (W)	Overvoltage Protection (V)	Effi-ciency (%)‡	Stock No.	Price Each 1-4
VEH20US05	5	3	15	...	87	29X4128	12.00
VEH20US12	12	1.67	20	...	87	29X4129	12.00
VEH20US15	15	1.33	20	...	87	29X4130	12.00
VEH20US18	18	1.11	20	...	87	29X4131	12.00
VEH20US24	24	830mA	20	...	87	93T4436	12.00
VEH20US48	48	420mA	20	...	87	29X4132	12.00
40 WATTS — DIMENSIONS (L x W x H): 4.21 x 1.85 x 1.19″							
VEH40US05	5	5	25	...	87	29X4133	16.00
VEH40US12	12	3.33	40	...	87	29X4134	16.00
VEH40US15	15	2.67	40	...	87	29X4135	16.00
VEH40US18	18	2.22	40	...	87	29X4136	16.00
VEH40US24	24	1.67	40	...	87	29X4137	16.00

60 WATTS — DIMENSIONS (L x W x H): 4.62 x 2.09 x 1.26″

Mfg. Part No.	Output Voltage (V)	Ouput Current (A)	Output Power (W)	Overvoltage Protection** (V)	Effi-ciency (%)‡	Stock No.	Price Each 1-4
● VEH60US12	12	5	60	16	85	04R9681	27.50
● VEH60US15	15	4	60	18	87	04R9682	27.50
● VEH60US19	19	3.16	60	25	87	98T4669	30.00
● VEH60US24	24	2.5	60	30	87	04R9683	27.50
90 WATTS — DIMENSIONS (L x W x H): 5.24 x 2.28 x 1.19″							
● VEH90PS12	12	7.5	90	16	88	67R9652	45.00
● VEH90PS19	19	4.74	90	25	88	67R9653	45.00
● VEH90PS24	24	3.75	90	32	89	67R9654	45.00

†Measured at the output connector with a 0.1µF ceramic capacitor and a 10µF electrolytic capacitor; **Typical values; ‡Efficiency given is the average of efficiencies measured with output loads of 25%, 50%, 75% and 100%

(148718)

AFM SERIES 30-60W EXTERNAL POWER SUPPLIES

RoHS Compliant Available

XP Power

- Energy efficiency level V
- <0.3W no load input power (<0.5W **AFM60**)
- CEC2008 and EISA2007 compliant
- IT and medical approvals
- Class II Versions
- 0°C to +70°C operating temperature
- Three-year manufacturer's warranty

GREEN XP POWER

SPECIFICATIONS:	
Input Voltage:	80-264VAC, derate output power 25% <90VAC
Input Frequency:	47-63Hz
Ripple & Noise:	1% pk-pk max, 20MHz BW
Efficiency:	>87% Typical
Operating Temperature:	0°C to +70°C, derate from 100% power @ +40°C to 60% power @ +70°C
EMC:	EN55011/22/FCC Class B conducted and radiated
Safety Approvals;	EN60950-1, UL60950-1, IEC60950-1, EN60601-1(3rd Edition), UL60601-1(2nd Edition), IEC60601-1(3rd Edition)
Dimensions (L x W x H):	**AFM30** and **AFM45**: 4.76″ x 1.97″ x 1.21″, **AFM60**: 4.92″ x 2.44″ x 1.33″
Inlet/Output Connector:	Class I version with IEC-320-C14 inlet; Class II version with IEC-320-C8 inlet; Barrel-type 2.5mm output plug
Cable Length:	37.4″ ±2″ (950mm ±50mm)

VERSIONS WITH STANDARD AC IEC-320-C14 INLET

Mfg. Part No.	Output Power (W)	Output Voltage (VDC)	Output Current (A)	Stock No.	Price Each 1-4
● AFM30US12	30	12	2.5	85W2884	25.00
● AFM30US15	30	15	2	85W2886	25.00
● AFM30US18	30	18	1.67	85W2888	25.00

➤CONTINUED➤

AFM SERIES 30-60W EXTERNAL POWER SUPPLIES (CONT.)

Mfg. Part No.	Output Power (W)	Output Voltage (VDC)	Output Current (A)	Stock No.	Price Each 1-4
AFM30US24	30	24	1.25	85W2890	25.00
AFM45US12	48	12	4	24T5117	31.00
AFM45US15	48	15	3.2	24T5118	31.00
AFM45US18	48	18	2.67	24T5119	31.00
AFM45US24	48	24	2	24T5120	31.00
AFM60US12	60	12	5	24T5121	35.00
AFM60US15	60	15	4	24T5122	35.00
AFM60US18	60	18	3.34	24T5123	35.00
AFM60US24	60	24	2.5	24T5124	35.00
CLASS II VERSIONS WITH A POLARIZED IEC320-C8 INLET					
AFM30US12C2	30	12	2.5	85W2885	25.00
AFM30US15C2	30	15	2	85W2887	25.00
AFM30US18C2	30	18	1.67	85W2889	25.00
AFM30US24C2	30	24	1.25	85W2891	25.00
AFM45US12C2	48	12	4	19X6786	31.00
AFM45US15C2	48	15	3.2	45T6460	31.00
AFM45US18C2	48	18	2.67	19X6787	31.00
AFM45US24C2	48	24	2	19X6788	31.00
AFM60US12C2	60	12	5	19X6789	35.00
AFM60US15C2	60	15	4	19X6790	35.00
AFM60US18C2	60	18	3.34	19X6791	35.00
AFM60US24C2	60	24	2.5	71T8017	35.00

(194057)

AEB SERIES 36/45/70/100 WATT COMPACT EXTERNAL POWER SUPPLIES

RoHS Compliant Available

XP Power

- CEC 2008 and EISA compliant
- China Compulsory Certification (CCC) qualified
- Low-profile, compact design
- Single outputs from 5V to 48V
- Universal input
- High-power density
- Three-year manufacturer's warranty

AEB series compact external power supplies include over voltage, over load and short circuit protection. Output connector is 5.5mm dia. outer barrel, inner dia. is 2.5mm with a center positive (+) and outer shell negative (-) polarity.

SPECIFICATIONS:

Mfg. Part No.	AEB36	AEB45	AEB70	AEB100
Input Voltage:	90-264VAC			
Input Frequency:	47-63Hz			
Line Regulation:	±1%			
Ripple & Noise:	1% pk-pk max, 20 MHz BW (see note**)			
Efficiency:	85% minimum @ 230VAC and 100% load			
Operating Temperature:	0°C to +60°C derate linearly from 100% load at +40°C to 60% load at +60°C		0°C to +60°C derate linearly from 100% load at +40°C to 50% load at +60°C	
EMC:	EN55022, Level B conducted and radiated			

36W OUTPUT POWER — DIMENSIONS: 0.79H x 1.97W x 4.33"D

Mfg. Part No.	Output Voltage (V)	Output Current	Output Power Max (W)	Load Regulation %*	Stock No.	Price Each 1-4
AEB36US05	5	4A	20	±6	12P6941	30.00
AEB36US09	9	3A	27	±5	12P6942	30.00
AEB36US12	12	2.5A	30	±5	12P6943	30.00
AEB36US13	13.5	2.4A	32	±5	12P6944	30.00
AEB36US15	15	2.4A	36	±3	12P6945	30.00
AEB36US18	18	2A	36	±2	12P6946	30.00
AEB36US24	24	1.5A	36	±2	12P6948	30.00
AEB36US48	48	750mA	36	±2	12P6949	30.00
45W OUTPUT POWER — DIMENSIONS: 1.22H x 2.05W x 4.72"D						
AEB45US12	12	3.75A	45	±3	12P6950	38.00
AEB45US15	15	3A	45	±3	12P6951	38.00
AEB45US18	18	2.5A	45	±2	12P6952	38.00
AEB45US19	19	2.37A	45	±2	12P6953	38.00
AEB45US24	24	1.88A	45	±2	12P6954	38.00
AEB45US48	48	1A	48	±2	12P6955	38.00
70W OUTPUT POWER — DIMENSIONS: 1.20H x 2.28W x 5.20"D						
AEB70US12	12	5.5A	66	±5	77M9128	52.00
AEB70US15	15	4.6A	69	±3	77M9129	52.00
AEB70US18	18	3.9A	70	±2	77M9130	52.00
AEB70US19	19	3.7A	72	±2	77M9131	52.00
AEB70US24	24	3A	72	±2	77M9132	52.00
AEB70US48	48	1.5A	72	±2	77M9133	52.00

➤CONTINUED➤

AEB SERIES 36/45/70/100 WATT COMPACT EXTERNAL POWER SUPPLIES (CONT.)

100W OUTPUT POWER — DIMENSIONS: 1.38H x 2.76W x 5.90"D

Mfg. Part No.	Output Voltage (V)	Output Current	Output Power Max (W)	Load Regulation %*	Stock No.	Price Each 1-4
AEB100PS12	12	8.34A	100	±4	11R6440	88.00
AEB100PS125	12.5	8A	100	±4	11R6441	88.00
AEB100PS15	15	6.67A	100	±4	11R6442	88.00
AEB100PS24	24	4.17A	100	±2	11R6443	88.00
AEB100PS48	48	2.08A	100	±2	11R6444	88.00

*Load regulation is measured from 60% to full load and from 60% to 20% load (60% ±40% full load)
**Measured at the output connector with a 0.1 µF ceramic capacitor and a 10 µF electrolytic capacitor.
(106508)

VEF SERIES 50W AND 65W EXTERNAL POWER SUPPLIES

NEW

RoHS Compliant Available

XP Power

- Energy Efficiency Level V
- CEC2008, EISA2007, ErP compliant
- China Compulsory Certification (CCC) qualified
- Single outputs from 12V to 24V
- No load input power <0.3W
- High-power density

SPECIFICATIONS:

Input Voltage:	90-264VAC
Input Frequency:	47-63Hz
Ripple & Noise:	240mv pk-pk, 20MHz bandwidth
Operating Temperature:	-10°C to +60°C, derate from 100% power @ +40°C to 50% load @ +60°C
EMC:	EN5502 level B conducted and radiated
Safety Approvals:	IEC60950-1, EN609501-1, UL/cUL60950-1, CCC qualified, Approved as Limited Power Source
Dimensions (L x W x H):	4.58" (116.3) x 2.06" (52.4mm) x 1.23" (31.3mm)
Inlet / Output Connector:	IEC320-C14 / Barrel type plug 2.5mmID x 5.5mmOD x 11mmL
Cable Length:	47.2" (1200mm)

Mfg. Part No.	Output Power (W)	Output Voltage (VDC)	Output Current (A)	Effi-cien-cy (%)	Stock No.	Price Each 1-4
VEF50US12	50	12V	4.17A	88	19X6870	25.00
VEF50US15	50	15V	3.33A	88	19X6871	25.00
VEF50US19	50	19V	2.63A	88	19X6872	25.00
VEF50US24	50	24V	2.08A	88	19X6873	25.00
VEF65US12	65	12V	5.41A	88	19X6874	27.00
VEF65US19	65	19V	3.42A	89	19X6875	27.00
VEF65US24	65	24V	2.71A	89	19X6876	27.00

(211548)

AHM SERIES 85-250 WATT IT AND MEDICAL EXTERNAL POWER SUPPLIES

RoHS Compliant Available

XP Power

- Energy Efficiency Level V
- EISA2007 and CEC2008 compliant
- Medical and ITE approvals
- <0.5W no load output power
- Class I and Class II versions on 85W and 100W
- High efficiency
- IP (x) 1 environmental rating
- Three-year manufacturer's warranty

AHM series compact IT and medical desktop power supplies include over voltage, over load, over temperature and short circuit protection. For Class I versions shell is connected to earth. For Class II versions shell is capacitively coupled to input. For Class II versions, add suffix C2 to 85W and 100W model numbers.

SPECIFICATIONS:

Input Voltage:	90-264VAC
Input Frequency:	47-63Hz
Line Regulation:	1.0% max.
Ripple & Noise:	1.5% max pk-pk (see note *)
Efficiency:	90% typical
Operating Temperature:	0 °C to +60 °C, derate from 100% power at +40 °C to 50% power at +60 °C
EMC:	EN55011/FCC/VCCI, Class B conducted and radiated
Safety Approvals:	EN60601-1, UL60601-1, CSA22.2 No. 601-1 per cUL, EN60950, UL60950

➤CONTINUED➤

AHM SERIES 85-250 WATT IT AND MEDICAL EXTERNAL POWER SUPPLIES (CONT.)

Mfg. Part No.	Output Voltage (V)	Output Current (A)	Output Power Max (W)	Total Regulation %**	Stock No.	Price Each 1-4
DIMENSIONS: 1.45H x 2.5W x 5.90"D						
● AHM85PS12	12	7.08	85	5	67R9465	65.00
● AHM85PS12C2-8	12	7.08	85	5	85W2907	65.00
● AHM85PS15	15	5.67	85	5	67R9466	65.00
● AHM85PS15CS-8	15	5.67	85	5	85W2908	65.00
● AHM85PS19	19	4.47	85	5	67R9467	65.00
● AHM85PS19C2-8	19	4.47	85	5	85W2909	65.00
● AHM85PS24	24	3.54	85	5	67R9468	65.00
● AHM85PS24C2-8	24	3.54	85	5	85W2910	65.00
DIMENSIONS: 1.45H x 2.5W x 6.30"D						
● AHM100PS12	12	8.33	100	5	67R9445	71.00
● AHM100PS12C2-8	12	8.33	100	5	85W2892	71.00
● AHM100PS15	15	6.67	100	5	67R9446	71.00
● AHM100PS15C2-8	15	6.67	100	5	85W2893	71.00
● AHM100PS19	19	5.26	100	5	67R9447	71.00
● AHM100PS19C2-8	19	5.26	100	5	85W2894	71.00
● AHM100PS24	24	4.16	100	5	67R9448	71.00
● AHM100PS24C2-8	24	4.16	100	5	85W2895	71.00
● AHM100PS48	48	2.08	100	5	67R9449	71.00
● AHM100PS48C2-8	48	2.08	100	5	85W2896	71.00
DIMENSIONS: 1.45H x 3.14W x 7.87"D						
● AHM150PS12	12	12.5	150	5	67R9450	92.00
● AHM150PS12C2-8	12	12.5	150	5	85W2897	92.00
● AHM150PS15	15	10	150	5	67R9451	92.00
● AHM150PS15C2-8	15	10	150	5	85W2898	92.00
● AHM150PS19	19	7.89	150	5	67R9452	92.00
● AHM150PS19C2-8	19	7.89	150	5	85W2899	92.00
● AHM150PS24	24	6.25	150	5	67R9453	92.00
● AHM150PS24C2-8	24	6.25	150	5	85W2900	92.00
● AHM150PS48	48	3.13	150	5	67R9454	92.00
● AHM150PS48C2-8	48	3.13	150	5	85W2901	92.00
DIMENSIONS: 1.45H x 3.14W x 7.87"D						
● AHM180PS12	12	13.75	165	5	67R9455	99.00
● AHM180PS12C2-8	12	13.5	180	5	85W2902	99.00
● AHM180PS15	15	12	180	5	67R9456	99.00
● AHM180PS15C2-8	15	12	180	5	85W2903	99.00
● AHM180PS19	19	9.47	180	5	67R9457	99.00
● AHM180PS19C2-8	19	9.47	180	5	85W2904	99.00
● AHM180PS24	24	7.5	180	5	67R9458	99.00
● AHM180PS24C2-8	24	7.5	180	5	85W2905	99.00
● AHM180PS48	48	3.75	180	5	67R9459	99.00
● AHM180PS48C2-8	48	3.75	180	5	85W2906	99.00
DIMENSIONS: 1.45H x 3.48W x 8.77"D						
● AHM250PS12T	12	17.5	210	5	67R9460	140.00
● AHM250PS15T	15	14.66	220	5	67R9461	140.00
● AHM250PS19T	19	12.63	240	5	67R9462	140.00
● AHM250PS24T	24	10.41	250	5	67R9463	140.00
● AHM250PS48T	48	5.21	250	5	67R9464	140.00

* Ripple and noise measured at 20 MHz bandwidth with a 10 µ F tantalum and 0.1 µF ceramic cap connected at the measurement point

** Total regulation includes initial set accuracy, line and load regulation

(175918)

VEH SERIES 120W AND 150W EXTERNAL POWER SUPPLIES

NEW RoHS Compliant Available XP Power

- Energy Efficiency Level V
- CEC2008 and EISA2007 compliant
- ErP compliant (150W units only)
- Single outputs from 12V to 24V
- 500m operating altitude
- Overvoltage, overcurrent and short circuit protection

GREEN XP POWER

SPECIFICATIONS:	
Input Voltage:	90-264VAC
Input Frequency:	47-63Hz
No Load Input Power:	120W units: <0.3W 150W units: <0.35W
Line Regulation:	±0.5% max.
Load Regulation:	3% max.

➤CONTINUED➤

VEH SERIES 120W AND 150W EXTERNAL POWER SUPPLIES (CONT.)

SPECIFICATIONS:	
Ripple & Noise:	120W units: 1% pk-pk max., 20MHz bandwidth† 150W units: 1.5% for 12V, 1% for 19/24V pk-pk max., 20MHz bandwidth†
Isolation:	3000VAC Input to Output 1500VAC Input to Ground Negative Output is connected to Ground
Operating Temperature:	0°C to +60°C, derate linearly from 100% load @ +40°C to 50% load @ +60°C
EMC:	EN55022 level B conducted and radiated
Safety Approvals:	EN609501-1, UL/cUL60950-1
Inlet / Output Connector:	IEC320-C14 / Power Mini Din (mates with Kycon KPJ-4S or equivalent)
Cable Length:	47.2" (1200mm)

Mfg. Part No.	Output Power (W)	Output Voltage (VDC)	Output Current (A)	Overvoltage Protection** (V)	Effi-ciency (%)‡	Stock No.	Price Each 1-4
120 WATTS — DIMENSIONS (L x W x H): 6.61" x 2.8" x 1.48"							
● VEH120PS12	120	12V	10A	16	89	29X2287	63.00
● VEH120PS19	120	19V	6.32A	26	89	29X2288	63.00
● VEH120PS24	120	24V	5A	32	90	29X2289	63.00
150 WATTS — DIMENSIONS (L x W x H): 6.85" x 2.91" x 1.65"							
● VEH150PS12	150	12V	12.5A	20	91	19X6877	70.00
● VEH150PS19	150	19V	7.9A	27	91	19X6878	70.00
● VEH150PS24	150	24V	6.25A	34	91	19X6879	70.00

†Measured at the output connector with a 0.1µF ceramic capacitor and a 10µF electrolytic capacitor; **Typical values; ‡Average of efficiencies measured @ 25%, 50%, 75% and 100% load and 230VAC input

(211549)

POWERVERTER ULTRA-COMPACT DC/AC INVERTERS

RoHS Compliant Available TRIPP·LITE POWER PROTECTION

PV700HF

PV1800GFCI

PV3000GFCI

- Ideal for powering laptops, small appliances, tools and mobile office equipment
- Rugged all metal housings
- Low battery-voltage alarms/shutdowns
- DC overload protection

Mfg. part nos. PV150 and **PV375** include a cigarette lighter plug. Remaining models are user supplied cable installation. **Mfg. part no. PV3000GFCI** is OSHA compliant.

Mfg. Part No.	Output (Continuous/ Peak)	Outlets	Dimensions (mm) H	W	L	Wt. (lbs.)	Stock No.	Price Each
● PV150	150/300W	1	44.5	95.3	146.1	1.3	81C9215	50.35
● PV375	375/600W	2	50.8	107.95	177.8	2.2	70H8575	77.38
● PVINT375	375/600W	1	50.8	108	196.9	2	92H1871	72.66
● PV700HF	700/1400W	3	69.85	207.518	127	2.8	52M2280	140.82
● PV1000HF	1000/2000W	4	107.95	152.4	330.2	6	27C4803	340.92
● PV1800HF	1800/3600W	4	101.6	152.4	381	7.25	27C4809	475.32
● PV3000HF	3000/6000W	4	101.6	266.7	342.9	13.2	65H7563	722.68

POWERVERTER PLUS INVERTER w/ GFCI OUTLETS

Industrial-strength power for heavy-duty applications.

Mfg. Part No.	Output (Continuous/ Peak)	Outlets	Dimensions (mm) H	W	D	Wt. (lbs.)	Stock No.	Price Each
● PV1800GFCI	1800/3600W	2	101.6	152.4	381	7.25	80R2149	531.89
● PV3000GFCI	3000/6000W	4	109.2	317.5	375.9	12.2	74P0134	975.10

(51186)

POWERVERTER® PLUS HIGH-PERFORMANCE INVERTERS

RoHS Compliant Available TRIPP·LITE POWER PROTECTION

- High-efficiency operation conserves batteries for longer run times
- Frequency control for operating stability
- Converts DC battery power to 120V, 60Hz AC power
- Automatic overload protection
- Clean, quiet operation

These PowerVerter® industrial-strength inverters are ideal for heavy-duty applications such as power tools, pumps, fans, desktop computer systems, portable electronics and battery chargers. Maintain up to 200% of their rated output for short durations, providing adequate power to start large AC motors and handle heavy inductive loads. Two NEMA-rated AC outlets. Diagnostic LEDs offer continuous status on load level and battery charge. Easy connection and mounting with user-supplied cable and hardware. Color: black. Instruction manual included. One-year manufacturer's warranty.

➤CONTINUED➤

POWERVERTER® PLUS HIGH-PERFORMANCE INVERTERS (CONT.)

Mfg. Part No.	Input (VDC)	Continuous Output (W)	Peak Output (W)	Dimensions (in.) H	W	D	Wt. (lbs.)	Stock No.	Price Each
PV1250FC	12	1250	2500	7	8.75	9	23.2	45K1362	432.00
PV2000FC	12	2000	4000	7.25	8.5	16.25	39	17C6603	702.00
PV2400FC	24	2400	4800	7.3	8.5	16.5	39	17C6604	822.00

(59070)

APS INVERTERS WITH INTEGRATED BATTERY CHARGER AND AUTOMATIC SWITCHOVER

RoHS Compliant Available

TRIPP-LITE POWER PROTECTION

APS2012

APS1012SW

Automatically sense and switch AC output between outside power (utility or generator) and battery power when no AC power is available. Ideal for use as mobile power systems or stationary UPS/emergency power supplies. 3-stage battery charger for quicker recharge, plus protection against over-charge and over-discharge to ensure a longer service life from batteries. High-efficiency output is frequency-controlled to support sensitive loads.

Mfg. Part No.	Input Voltage	Output Voltage	Continuous Output	Peak Output	Outlets	Shipping Weight (lbs.)	Stock No.	Price Each 1-4
APS750	12V	120V	750W	1.5kW	2	19	97F9171	488.03
APS1250	12V	120V	1.25kW	2.5kW	2	25	97F9172	655.74
APSX1250	12V	230V	1.25kW	2.5kW	2	26	52K3979	691.38
APS2012	12V	120V	2kW	4kW	Hardwire	44	95B4197	962.92
APSINT2012	12V	230V	2kW	4kW	Hardwire	46	89C2077	1015.25
APS2424	24V	120V	2.4kW	4.8kW	Hardwire	42	95B4198	1082.29
APSINT2424	24V	230V	2.4kW	4.8kW	Hardwire	42	25H8751	1141.11
APS3636VR	36V	120V	3.6kW	7.2kW	Hardwire	61	94C1037	1354.46
APS INT3636VR	36V	230V	3.6kW	7.2kW	Hardwire	63	53M0509	1428.07
APS2448UL	48V	120V	2.4kW	4.8kW	Hardwire	43	73J5324	1115.72
NEW PURE WAVE SINE WAVE INVERTER/CHARGERS								
APS1012SW	12V	120V	1kW	2kW	Hardwire	37	82T5488	1161.00
APS2012SW	12V	120V	2kW	4kW	Hardwire	56	82T5489	1512.00
APSX1012SW	12V	230V	1kW	2kW	Hardwire	37	82T5486	1421.20
APSX2012SW	12V	230V	2kW	4kW	Hardwire	56	82T5487	1596.00

REMOTE MODULE

Provides remote control operation for all listed models. Includes RJ-45 plug, 50-foot cord and same LED meters and power switch as the front panels of the compatible models.

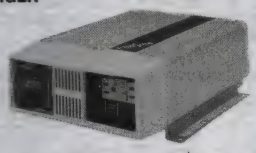
Mfg. Part No.	Stock No.	Price Each 1-4
APSRM4	11J7830	160.90
APSRMSW*	82T5485	178.00

* Remote Module for Pure Sine Wave Inverters only.

(50915)

PROSINE™ INVERTERS AND INVERTER/CHARGER

xantrex Smart choice for power



PROsine™ inverters deliver true sine wave AC output: a clean, reliable electric power, often better than grid power supplied by local electric companies. Feature automatic overload, short circuit, over temperature, reverse polarity fuses and AC backfeed and over/under voltage protection. PROsine 1000s and 1800s dimensions: 4.5H x 11.0W x 15.4"D. Approvals: CSA NRTL/C (120V models), UL458, UL1741 CSA 107.1, designed to meet KKK-A-1822D.

Mfg. Part No.	Surge	Output Power	Description	Stock No.	Price Each
PROSINE 1000 WITH GFCI AC OUT	1300W	1000W	GFCI AC Outlet	83F6846	719.49
PROSINE 1800 WITH GFCI AC OUT	2300W	1800W	GFCI AC Outlet	83F6849	1380.40

(30872)

DC/AC POWER INVERTER

xantrex Smart choice for power

PROWATT® power inverter plugs in for instant portable AC power to run laptops, printers, or fax machines. Convert battery power to standard AC power. Provide extra-long battery running time without recharging. Inverter can be plugged into cigarette lighter or any 12-volt battery pack for portable AC power. Compatible with AC adapter/charger found on computers. Surge to power levels far beyond their continuous ratings for short periods of time. Ideal for running loads with high start-up requirements. Internal circuits protect equipment from spikes and voltage fluctuations. Automatically shut down if overloaded or overheated. *Order inverter accessories separately; go online or call.*

20-30VDC INPUT

Mfg. part No.	Surge	Output Power (Continuous)	L x W x H	Stock No.	Price Each
PROWATT 800/24	1/2hp	800W	10 x 9 x 3"	01F276	732.64

(12237)

CS AND ES SERIES BACK-UPS

RoHS Compliant Available

APC by Schneider Electric

CS series

ES series

CS and **ES series** Back-UPS utilize less power during normal operation and provide enough backup power to work through short and medium length power outages. They also safeguard equipment from damaging surges and spikes that travel along utility, data and phone lines. Most models include CD software, which automatically saves open files and gracefully shuts down the computer during extended outages. Additional features like an audible alarm, LED status indicator, user replaceable battery, push-button circuit breaker and transformer-block spaced outlets make these Back-UPS the perfect units to protect ones productivity from the constant threat of power outages and lost data. Three-year manufacturer's warranty. UL listed, CE compliant, FCC and C-Tick approval.

CS SERIES — BATTERY BACK-UP AND PROTECTION FOR BUSINESS COMPUTERS

Back-UPS **CS series** desk-top tower units ideally protect business and office computer systems. All models include CD with software, cord management straps, USB cable, and user manual.

Mfg. Part No.	Receptacles	Capacity VA/W	Half/ Full Load (min.)	Dimensions (mm) H	W	D	Color	Stock No.	Price Each 1-5
BK350	3 NEMA 5-15R Battery Backup 3 NEMA 5-15R Surge	350/210	18/5	165	91	284	Beige	49H8516	110.63
BK500	3 NEMA 5-15R Battery Backup 3 NEMA 5-15R Surge	500/300	15.4/3.4	165	91	284	Beige	49H8517	149.67
BK500BLK	3 NEMA 5-15R Battery Backup 3 NEMA 5-15R Surge	500/300	15.4/3.4	165	91	284	Black	85H1627	147.09

ES SERIES — BATTERY BACK-UP AND PROTECTION FOR HOME COMPUTERS

Back-UPS **ES series** desktop units ideally protect home and home office computer systems. All models include CD software and USB cable (except **mfg. part no. BE350G**) and user manual.

Mfg. Part No.	Receptacles	Capacity VA/W	Half/ Full Load (min.)	Dimensions (mm) H	W	D	Color	Stock No.	Price Each 1-14
BE350G	3 NEMA 5-15R Battery Backup 3 NEMA 5-15R Surge	350VA / 200W	5.6/40	89	159	279	Black	03P0372	66.34
BE550G	4 NEMA 5-15R Battery Backup 4 NEMA 5-15R Surge	550VA / 330W	13.4/3.2	89	179	305	Black	02P6395	89.97
BE650G1	4 NEMA 5-15R Battery Backup 4 NEMA 5-15R Surge	650VA / 390W	13.1/-999	90	180	300	Black	58T5684	107.27
BE750G	5 NEMA 5-15R Battery Backup 5 NEMA 5-15R Surge	750VA / 450W	11.8/2.5	88	180	343	Black	71M2017	134.52

(75504)

UPS SYSTEMS

RS SERIES BACK-UPS

RoHS Compliant Available

APC by Schneider Electric

BR1000G

RS series Back-UPS offer high-performance protection for business and office computer systems. It provides abundant battery backup power, allowing user to work through medium and extended length power outages. It also safeguards equipment from damaging surges and spikes that travel along utility, phone and network lines. Features automatic voltage regulation (AVR) that instantly adjusts both low and high voltages to safe levels, so user can work indefinitely during brownouts and overvoltage situations, saving the battery for power outages when it's needed most. Shutdown software automatically powers down the computer system in the event of an extended power outage. Additional features like audible alarms, LED status indicators, user replaceable battery, push-button circuit breakers and plentiful outlets make the **RS series** Back-UPS perfect to protect business' productivity from the constant threat of power problems and lost data. All models includes CD with software, USB cable and user manual. Three-year manufacturer's warranty.

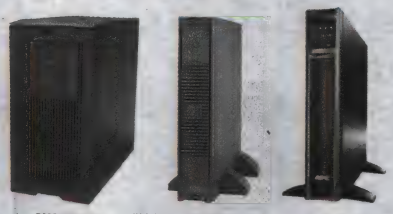
Mfg. Part No.	Receptacles	Capacity VA/W	Half/ Full Load (min.)	Dim. (mm) H	W	D	Color	Stock No.	Price Each 1-5
● BR700G	3 NEMA 5-15R Battery Backup 3 NEMA 5-15R Surge	700/420	13/4	190	91	310	Black	**50R4988**	159.68
● BR1000G	4 NEMA 5-15R Battery Backup 4 NEMA 5-15R Surge	1000/600	20/-999	250	100	382	Black	**73R5349**	179.93
● BR1300G	5 NEMA 5-15R Surge 5 NEMA 5-15R Battery Backup	1300/780	14/5	302	112	381	Black	**82R3903**	215.00
● BR1500G	5 NEMA 5-15R Surge 5 NEMA 5-15R Battery Backup	1500/865	14/4	302	112	381	Black	**80R9745**	249.71

(75505)

TOWER/RACK MOUNT SMART-UPS SYSTEMS

RoHS Compliant Available

APC by Schneider Electric



SUA3000XL SC1000 SMX750

Intelligent and efficient network power protection from entry level to scaleable runtime. Ideal for servers, point-of-sale, routers, switches, hubs and other network devices. Entry level 420-1500VA, Standard 750-5000VA, Extended Run 750-3000VA. Two year repair or replace manufacturer's warranty. UL listed, CSA certified.

SUA SERIES

SUA series Smart-UPS® protect critical data by supplying reliable, network-grade power in either traditional tower or rack-optimized form factors. Perfect for protecting business critical servers, voice and data networks, point of sale, retail/bank back office and ATM's. Features high real-power output (watts), generous runtime, sine wave output, 16-segment LED visual display and intelligent battery management. Most models have DB-9 RS-232, SmartSlot and USB interface ports. All include CD with software, Smart UPS signalling RS-232 and/or USB cable and user manual.

Mfg. Part No.	Receptacles	Cap. VA/W	Half/ Full Load (min.)	Dim. (mm) H	W	D	Rack U Ht.	Color	Stock No.	Price Each 1-5
SUA1000US**	8 NEMA 5-15R	1000/ 670	20/6	216	170	439	...	Black	**85H3736**	677.56
SUA3000XL+	8 NEMA 5-15R 2 NEMA 5-20R	3000/ 2700	17/5	432	196	503	5	Black	**33M8076**	1494.47

SC SERIES

SC series Smart-UPS is ideal for small and medium businesses looking to protect basic entry-level servers (with smaller, non-redundant power supplies), networking equipment and point-of-sale (POS) devices from power disturbances and outages. These models feature network grade runtime, hot swap batteries, and built-in data line protection for worry free uninterruptible power protection for increased availability. All models have DB-9 RS-232 interface port; **mfg. part no. SC1000** also has a USB port. All include CD with software, Smart UPS signalling RS-232 cable and user manual.

SC620*	4 NEMA 5-15R	620/ 390	16/6	168	119	368	...	Gray	**57J4970**	219.86
SC420*	4 NEMA 5-15R	420/ 260	14/6	168	119	368	...	Gray	**61J3612**	152.40

➤CONTINUED➤

TOWER/RACK MOUNT SMART-UPS SYSTEMS (CONT.)

SMX SERIES

SMX series Smart-UPS systems have extremely high efficiency at low, medium and high load levels making them ideal for today's multi-core or virtualized servers that have varying load consumption. Features a 16-segment LED display, extended range automatic voltage regulation (AVR), and pure sine wave output on battery. Additional manageability options are available through the Smart-Slot interface, which is an internal slot for the installation of optional accessory cards.

Mfg. Part No.	Recep-tacles	Cap. VA/W	Half/ Full Load (min.)	Dim. (mm) H	W	D	Rack U Ht.	Color	Stock No.	Price Each 1-5
● SMX750 +	8 NEMA 5-15R	750/ 600	38/ 14	432	89	490	2	Black	**50R5669**	581.19
● SMX1000 +	8 NEMA 5-15R	1000/ 600	24/ 8	432	89	490	2	Black	**50R5666**	706.15
● SMX1500RM2U +	8 NEMA 5-15R	1500/ 1200	17/ 6	89	432	490	2	Black	**50R5667**	885.83
● SMX1500RM2UNC +	8 NEMA 5-15R	1500/ 1200	17/ 6	89	432	490	2	Black	**50R5668**	1237.63

REPLACEMENT BATTERY PACK

Mfg. Part No.	Description	Capacity (vAh)	Stock No.	Price Each 1-2
● SUA48XLBP	48V Battery Pack for Smart-UPS **SUA2200XL** and **SUA3000XL** Tower/Rack Convertible Models	1632	**41M0424**	716.16

*Tower; **Tower - NAFTA for U.S.A. Distribution Only; +Tower/Rack Convertible; ++Tower/Rack Mount
(75507)

SMART-UPS SERIES UNINTERRUPTIBLE POWER SUPPLY SYSTEMS

RoHS Compliant Available

APC by Schneider Electric

SUA1000RM2U, SUA750RM1U

SUM1500RMXL2U

SMC1000, SMC1500

SMT750

SMC1000-2U, SMC1500-2U

SMT750RM2U

SMX2000RMLV2U

Smart-UPS® 120V output/input systems provide equipment with backup safety and surge protection. Perfect for protecting business critical servers, voice and data networks, point of sale, retail/bank back office and ATM's. Features high real power output (watts), generous runtime, sine wave output, 16-segment LED visual display, and intelligent battery management. All units have an APC SmartSlot, an internal accessory slot that allows installation of optional accessories to enhance performance. Parts with **NC suffix** include network card. Two year repair or replace manufacturer's warranty. UL listed, CSA certified.

SUA SERIES

SUA series models include CD with software, rack mounting hardware, Smart-UPS signalling RS-232 cable, USB cable and user manual.

Mfg. Part No.	Recep-tacles	Cap-acity VA/W	Half/ Full Load (min.)	Dim. (mm) H	W	D	U Ht.	Stock No.	Price Each 1-5
SUA750RM1U	4 NEMA 5-15R	750/480	24/7	44	432	660	1	**67H1556**	597.50
SUA1000RM1U	4 NEMA 5-15R	1000/640	15/5	44	432	660	1	**67H1551**	723.11

SUM SERIES

SUM series model inculdes CD with software, installation guide, rack mounting brackets and support rails, Smart UPS signalling RS-232 cable, USB cable, user manual and Web/SNMP management card.

● SUM1500RMXL2U	8 NEMA 5-15R 1 NEMA 5-15P	1440/1425	...	86	432	678	2	**52K9230**	1361.40

SMC SERIES

SMC series models include CD with software, USB cable, user manual.

● SMC1000	8 NEMA 5-15R	1kVA / 600W	...	215	171	439	...	**94T3765**	348.49
● SMC1000-2U	6 NEMA 5-15R	1kVA / 600W	...	89	432	406	2	**94T3766**	509.00

➤CONTINUED➤

SMART-UPS SERIES UNINTERRUPTIBLE POWER SUPPLY SYSTEMS (CONT.)

SMC SERIES

Mfg. Part No.	Recep-tacles	Cap-acity VA/W	Half/ Full Load (min.)	Dim. (mm) H	W	D	U Ht.	Stock No.	Price Each 1-5
SMC1500	8 NEMA 5-15R	1.5kVA / 900W	...	219	171	439	...	94T3767	461.10
SMC1500-2U	6 NEMA 5-15R	1.5kVA / 900W	...	89	432	475	2	94T3768	641.79

SMT SERIES

SMT series models include CD with software, Documentation CD, Smart UPS signalling RS-232 cable, and USB cable.

SMT750	6 NEMA 5-15R	750/ 500	16/5	161	138	363	...	57R7113	381.72
SMT750RM2U	6 NEMA 5-15R	750/ 500	...	89	432	406	2	21T9525	509.95
SMT1000	8 NEMA 5-15R	1000/ 670	21/6	219	171	439	...	57R7111	517.44
SMT1000RM2U	8 NEMA 5-15R	1000/ 700	...	89	432	457	2	21T9521	645.12
SMT1500	8 NEMA 5-15R	1440/ 980	24/7	216	170	439	...	57R7112	636.06
SMT1500RM2U	8 NEMA 5-15R	1440/ 1000	...	89	432	457	2	21T9522	800.99
SMT2200	8 NEMA 5-15R 2 NEMA 5-20R	2200/ 1980	24/7	432	196	544	...	65R0014	947.01
SMT2200RM2U	8 NEMA 5-15R 2 NEMA 5-20R	2200/ 1980	...	86	480	683	2	21T9523	1222.35
SMT3000	8 NEMA 5-15R 2 NEMA 5-20R	3000/ 2700	14/6	432	196	544	...	65R0015	1322.17
SMT3000RM2U	8 NEMA 5-15R 2 NEMA 5-20R	3000/ 2700	...	86	480	683	2	21T9524	1394.39

SMX SERIES

SMX series models include CD w/ software, Documentation CD, Installation guide, Rack Mounting brackets, Rack mounting hardware, Rack Mounting support rails, Removable support feet, Smart UPS signalling RS-232 cable, USB cable.

SMX2000RMLV2U	3 NEMA 5-15R 3 NEMA 5-20R 1 NEMA L5-20R	1920/ 1800	...	85	432	667	2	21T9527	1354.50
SMX2000RMLV2UNC	3 NEMA 5-15R 3 NEMA 5-20R 1 NEMA L5-20R	1920/ 1800	...	85	432	667	2	48T2693	1576.72
SMX2200RMLV2U	6 NEMA 5-15R 2 NEMA 5-20R	2200/ 1980	...	85	431	667	2	21T9528	1362.68
SMX3000RMLV2U	3 NEMA 5-15R 3 NEMA 5-20R 1 NEMA L5-30R	3000/ 2700	...	85	432	667	2	21T9529	1623.62
SMX3000RMLV2UNC	3 NEMA 5-15R 3 NEMA 5-20R 1 NEMA L5-30R	3000/ 2700	...	85	432	667	2	21T9530	1865.08

(75508)

3S SERIES BATTERY BACKUP AND SURGE PROTECTION UPS

RoHS Compliant Available

EATON Powering Business Worldwide

NEW

- Ease of use plug-and-play functionality enables automatic integration (models **3S550**, **3S750** only)
- Sleek, compact design looks good displayed alongside high-tech equipment
- Space-saving wall or desk mount capability
- Premium protection for up to 10 devices, including those using data lines
- Provides up to 45 minutes of battery backup
- Data line protection for telephone, fax or Ethernet
- User-replaceable batteries
- Three-year manufacturer's warranty, includes batteries

3S series UPS provides power protection for office and home computer equipment and peripherals, broadline modems (internet and TV), IP telephony and POS equipment. EcoControl functionality provides up to 30 percent greater energy savings than typical battery backups (model **3S750** only). Features HID-compliant USB port for automatic integration with Windows, Mac and Linux (no drivers required). Up to 10 receptacles — (5) battery backup and surge protection, (5) surge protection. Offer integrated graceful shutdown capability for connected devices.

Mfg. Part No.	Power Rating	Input Connect-ion	Output Recept-acles*	Dimensions (In.) (H x W x D)	Stock No.	Price Each Each
3S 350	350VA / 200W	5-15P	(8) 5-15R	3.4 x 5.5 x 13.2	47X1694	88.00
3S 550	550VA / 330W	5-15P		3.4 x 5.5 x 13.2	47X1695	110.00
3S 750	750VA / 450W	5-15P	(10) 5-15R	3.4 x 6.7 x 13.2	47X1696	141.95

*On each unit, half of receptacles provide battery backup and surge protection, half provide surge protection only

(212084)

5P SERIES NETWORK RACKMOUNT UPS

RoHS Compliant Available

EATON Powering Business Worldwide

NEW

- Conserves valuable rackmount space with compact 1U or 2U configurations
- Graphical interactive LCD display interface providess all critical UPS information in a single screen view
- Fully integrates with Intelligent Power® Software Suite for continuous up time of servers and virtual machines
- Extends battery service life by 50% with ABM Technology
- Three-year manufacturer's warranty, includes battery

5P series rackmount UPS delivers reliable enterprise-class backup power with an efficiency rating of up to 99% perfect for network closets and small data centers. Protects more devices by providing 20% more wattage than comparable UPSs. When paired with Eaton's free Intelligent Power® Software Suite, the user can seamlessly monitor and manage connected equipment, even in virtualized environments. ENERGY STAR® qualified 2U rackmount models help consumers save money and protect the environment through energy efficient products and practices. UPS comes complete with USB and RS-232 cables, four-post rail kit (model **5P550R** ears only), user manual CD, Intelligent Power Software Suite CD and Quick-Start guide. 2U models only include tower pedestals and Phillips head screwdriver. Globals models only include two IEC-to-IEC jumper cables, output and input cable locking systems.

ENERGY STAR® 2U RACKMOUNT/TOWER MODELS — 120V, 50/60HZ

Mfg. Part No.	Power Rating	Input Connect-ion	Output Recept-acles	Dimensions (In.) (H x W x D)	Stock No.	Price Each Each
5P1500RT	1.44kVA / 1.44kW	5-15P	(8) 5-15R	3.4 (2U) x 17.1 x 20.6	47X1700	963.90
5P2200RT	1.95kVA / 1.92kW	5-20P	(4) 5-15R, (4) 5-20R	3.4 (2U) x 17.1 x 20.6	47X1703	1732.00
5P3000RT	3kVA / 2.7kW	L5-30P	(3) 5-15R, (3) 5-20R, (1) L5-30R	3.4 (2U) x 17.1 x 25.4	47X1705	2074.00
1U RACKMOUNT MODELS — 120V, 50/60HZ						
5P550R	550VA / 420W	5-15P	(5) 5-15R	1.7 (1U) x 17.2 x 14.3	47X1706	441.00
5P750R	750VA / 600W	5-15P		1.7 (1U) x 17.2 x 20.0	47X1708	495.00
5P1000R	1kVA / 770W	5-15P		1.7 (1U) x 17.2 x 20.0	04X4169	840.00
5P1500R	1.44kVA / 1.1kW	5-15P		1.7 (1U) x 17.2 x 21.8	47X1699	905.25
1U GLOBAL RACKMOUNT MODELS — 208/230V, 50/60HZ						
5P850GR	850VA / 600W	C14	(4) C13	1.7 (1U) x 17.2 x 20.0	39X0899	537.00
5P1550GR	1.55kVA / 1.1kW	C14	(6) C13	1.7 (1U) x 17.2 x 21.8	47X1702	1156.00

(212085)

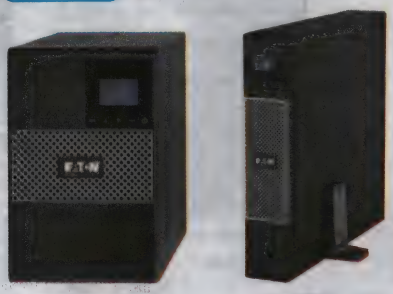
5P SERIES NETWORK TOWER UPS

RoHS Compliant Available

EATON Powering Business Worldwide

NEW

- Slim spacing-saving design leaves room for expanding IT systems
- Provides more real power (watts) to protect more equipment
- Graphical interactive LCD display interface providess all critical UPS information in a single screen view
- Fully integrates with Intelligent Power® Software Suite for continuous up time of servers and virtual machines
- Extends battery service life by 50% with ABM Technology
- Three-year manufacturer's warranty, includes battery



5P1000 5P3000

5P series tower UPS delivers reliable enterprise-class backup power with an efficiency rating of up to 99% perfect for network closets and computer rooms. Protects more devices by providing 20% more wattage than comparable UPSs. When paired with Eaton's free Intelligent Power® Software Suite, the user can seamlessly monitor and manage connected equipment, even in virtualized environments. UPS comes complete with USB and RS-232 cables, user manual CD, Intelligent Power Software Suite CD and Quick-Start guide. Models **5P2200** and **5P3000** only include tower pedestals and Phillips head screwdriver. Globals models only include two IEC-to-IEC jumper cables.

TOWER MODELS — 120V, 50/60HZ

Mfg. Part No.	Power Rating	Input Connections	Output Recept.	Dimensions (In.) (H x W x D)	Stock No.	Price Each Each
5P750	750VA / 600W	5-15P	(8) 5-15R	9.1 x 5.9 x 13.6	47X1707	371.25
5P1000	1kVA / 770W	5-15P	(8) 5-15R	9.1 x 5.9 x 13.6	47X1697	699.00
5P1500	1.44kVA / 1.1kW	5-15P	(8) 5-15R	9.1 x 5.9 x 17.5	47X1698	869.00
5P3000*	3kVA / 2.7kW	L5-30P	(6) 5-20R, (1) L5-30R	3.4 x 17.4 x 25.4	47X1704	1696.00
GLOBAL TOWER MODELS — 208/230V, 50/60HZ						
5P850G	850VA / 600W	C14	(6) C13	9.1 x 5.9 x 13.6	11X2721	537.00
5P1550G	1.55kVA / 1.1kW	C14	(8) C13	9.1 x 5.9 x 17.5	47X1701	943.00

*Energy Star® qualified tower model helps consumers save money and protect the environment through energy efficient products and practices

(212086)

UPS SYSTEMS

5S SERIES DESKTOP/ WORKSTATION UPS

RoHS Compliant Available

NEW

EATON
Powering Business Worldwide

- Fits in small spaces — use as tower or desktop monitor stand
- Interface is auto-recognized when plugged in with Windows®, Macintosh® and Linux® environments
- User-friendly LCD* display provides critical information in a single screen view
- Eco-control* saves up to 30% on energy consumption
- Provides surge protection for network phone lines, cable TV and satellite applications
- Three-year manufacturer's warranty, includes battery

5S series small, compact UPS delivers backup power for desktop PCs and workstations. When paired with Eaton's UPS Companion software users can enhance power protection capabilities and provide safe system shutdown. Features Eco-Control outlets (models **5S700LCD**, **5S1000LCD**, **5S1500LCD** only), outlets with battery backup and surge protection, outlets with surge protection, offet outlets to accommodate bulky transformers, reset button (circuit breaker) and six-foot line cord. UPS comes complete with USB cable and user manual.

DESKTOP TOWER MODELS — 120V, 50/60HZ

Mfg. Part No.	Power Rating	Input Connect-ion	Output Recept-acles	Dimensions (In.) (H x W x D)	Stock No.	Price Each
● 5S550	550VA / 330W	5-15P	(8) 5-15R	9.8 x 3.4 x 10.2	23X5693	161.00
● 5S700	700VA / 420W				47X1717	179.00
● 5S700LCD *	700VA / 420W				47X1719	160.65
● 5S1000LCD *	1kVA / 600W		(10) 5-15R	9.8 x 3.4 x 15.0	47X1714	172.50
● 5S1500LCD *	1.5kVA / 900W				47X1716	286.45
GLOBAL DESKTOP TOWER MODELS — 208/230V, 50/60HZ						
● 5S700G	700VA / 420W	C14	(6) C13	9.8 x 3.4 x 10.2	47X1718	162.00
● 5S1500G	1.5kVA / 900W	C14	(8) C13	9.8 x 3.4 x 15.0	47X1715	388.00

*Models with LCD Display and Eco-Control
(212087)

5SC SERIES SERVER AND NETWORK TOWER UPS

RoHS Compliant Available

NEW

EATON
Powering Business Worldwide

- Graphical interactive LCD display interface providess all critical UPS information in a single screen view
- Extends battery service life by 50% with ABM Technology
- USB port is HID-compliant for integration into Windows®, Mac® OS and Linux®
- Reliable power protection, even in battery mode with pure sineware output
- Buck-and-boost operation ensures consistent input voltage to connected equipment
- Adjustable input waveform sensitivity adapts to specific environments, like genset
- Three-year manufacturer's warranty, includes battery

5SC series tower UPS provides affordable and reliable power protection for small business servers, storage and network equipment. Features an LCD display interface that provides a clear status of key UPS parameters, such as input and output voltage, load and battery level and estimated runtime. Designed to protect tower servers, network-attached storage (NAS) and network equipment, and similar IT applications; and its compact footprint accommodates tight spaces, such as small network closets, medical offices, automatic teller machines (ATMs), ticket machines and kiosks. UPS comes complete with 6-ft. input power cord, USB and serial cable, software CD, and user manual. Global models include two IEC output power cords but no input power cord.

TOWER MODELS — 120V, 50/60HZ

Mfg. Part No.	Power Rating	Input Connect-ion	Output Recept-acles	Dimensions (In.) (H x W x D)	Stock No.	Price Each
● 5SC500	500VA / 350W	5-15P	(4) 5-15R	8.2 x 5.9 x 9.4	29X5938	213.75
● 5SC750	750VA / 525W		(6) 5-15R	8.2 x 5.9 x 13.4	44X1546	410.00
● 5SC1000	1kVA / 700W		(8) 5-15R	8.2 x 5.9 x 13.4	47X1709	470.00
● 5SC1500	1.44kVA / 1.08kW		(8) 5-15R	8.2 x 5.9 x 16.1	47X1710	605.00
GLOBAL TOWER MODELS — 230V, 50/60HZ						
● 5SC500G	500VA / 350W	C14	(4) C13	8.2 x 5.9 x 9.4	47X1712	328.00
● 5SC750G	750VA / 525W		(6) C13	8.2 x 5.9 x 13.4	47X1713	472.00
● 5SC1500G	1.5kVA / 1.05kW		(8) C13	8.2 x 5.9 x 16.1	47X1711	522.00

(212088)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

(212570)

5PX SERIES NETWORK AND SERVER TOWER UPS

EATON
Powering Business Worldwide

- Enables you to customize UPS settings, view load and power consumption through the interactive LCD screen interface
- Fully integrated with Intelligent Power Software Suite for continuous up time of servers and virtual machines
- Monitors and manages power consumption through managed outlets
- Provides more real power (watts) to protect more equipment and leave room for expanding IT systems
- Extends battery service life by 50% with ABM Technology
- Protects you with a three-year warranty, which includes the battery

5PX UPS is an integrated power management solution. Paired seamlessly with Intelligent Power Software Suite, the **5PX** provides the tools you need to manage your equipment, even in virtualized environments. Designed with managed outlet segments, you can monitor energy consumption on the intuitive LCD screen. It also delivers more power than comparable UPSs and has an efficiency rating of up to 99%.

120V, 50/60Hz

Mfg. Part No.	Rating	Input Plug	Output Receptacle	Dimensions (H x W x D)	Stock No.	Price Each
5PX1000RT	1kVA / 1kW	5-15P	(8) 5-15R	3.4 x 17.4 x 20.6″	51T3714	951.00
5PX1500RT	1.44kVA / 1.44kW	5-15P		3.4 x 17.4 x 20.6″	51T3715	1244.00
5PX2200RT	1.95kVA / 1.92kW	5-20P	(8) 5-20R	3.4 x 17.4 x 20.6″	51T3716	2061.00
5PX3000RT2U	3kVA / 2.7kW	L5-30P	(1) L5-30R, (6) 5-20R	3.4 x 17.4 x 25.4″	51T3717	2430.00
5PX3000RT3U	3kVA / 2.7kW	L5-30P		5.1 x 17.4 x 19.6″	51T3718	2578.00

EXTENDED BATTERY MODULES

Mfg. Part No.	Rating	For Use With	Dimensions (H x W x D)	Stock No.	Price Each
5PXEBM48RT	48V	5PX1000RT/5PX1500RT/ 5PX2200RT	3.4 x 17.4 x 20.6″	74T0770	784.00
5PXEBM72RT2U	72V	5PX3000RT2U	3.4 x 17.4 x 25.4″	74T0771	1151.00

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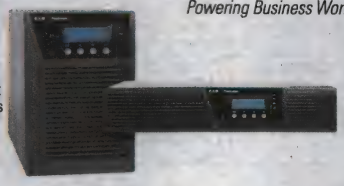
POWERWARE® 9130 SERIES UPS SYSTEMS

EATON
Powering Business Worldwide



- Protects against downtime, data loss and process interruption by providing continuous, clean power
- Cuts energy usage and costs with >95% efficiency rating in high efficiency mode
- Conserves rack space with 2U rackmount form factor that includes internal batteries and a 4-post rail kit
- Provides more real wattage in less space with a 0.9 power factor
- Maximizes runtimes with optional extended battery modules
- Two-year limited factory warranty and a load protection guarantee

9130 series UPS delivers optimal power quality, provides superior power management, resolves utility power protection problems and supplies continuous power conditioning to all connected equipment. Simplifies UPS monitoring and management with a bright LCD user interface, intuitive power management software and optional eNotify Remote Monitoring service. Increases battery service life and system uptime with ABM battery-charging technology and hot-swappable batteries. **9130 series** delivers essential power protection for IT and networking data center equipment, medical systems, manufacturing process control or anywhere critical equipment and applications require clean, continuous power.

NORTH AMERICAN TOWER MODELS: 120V, 50/60 Hz

Mfg. Part No.	Plugs/ Recep-tacles	Capacity	Full Load (min.)	Dimensions (in.) H	W	D	Stock No.	Price Each
PW9130L700T	5-15P/ 6) 5-15R	700VA / 630W	>3	9.1	6.3	13.8	12R3230	931.00
PW9130L1000T-XL	5-15P/ (6) 5-15R	1kVA / 900W	>3	9.1	6.3	15.0	51P2907	1202.00
PW9130L1500T-XL	5-15P/ (6) 5-15R	1.5kVA / 1.35kW	>3	9.1	6.3	16.9	51P2909	1658.00
INTERNATIONAL MODELS: 230V, 50/60 Hz								
PW9130I2000T-XL	C14/ (8) C13, (1) C19	2kVA / 1.8kW	>3	12.8	8.4	16.1	16R1635	2108.00
NORTH AMERICAN RACK MODELS: 120V, 50/60 Hz								
PW9130L700R-XL2U	5-15P/ (6) 5-15R	700VA / 630W	>3	3.4	17.2	17.7	51P2915	989.00
PW9130L1000R-XL2U	5-15P/ (6) 5-15R	1kVA / 900W	>3	3.4	17.2	17.7	51P2906	1230.00
PW9130L1500R-XL2U	5-15P/ (6) 5-15R	1.5kVA / 1.35kW	>3	3.4	17.2	17.7	51P2908	1831.00

➤ CONTINUED ➤

POWERWARE® 9130 SERIES UPS SYSTEMS (CONT.)

EXTENDED BATTERY MODULES

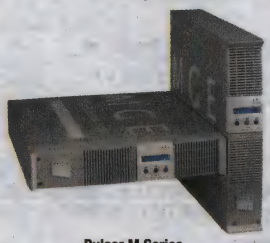
Mfg. Part No.	Plugs/ Recep-tacles	Capacity	Full Load (min.)	Dimensions (in.) H	W	D	Stock No.	Price Each
PW9130N1000T-EBM	Extended Battery Module for 9130 series 1000 VA Tower UPS						51P2918	610.00
PW9130N1500T-EBM	Extended Battery Module for 9130 series 1500 VA Tower UPS						51P2920	769.00
PW9130N1000R-EBM2U	Extended Battery Module for 9130 series 700 and 1000 VA Rackmount UPS						51P2917	737.00
PW9130N1500R-EBM2U	Extended Battery Module for 9130 series 1500 VA Rackmount UPS						51P2919	737.00

*C14, w/ detachable L6-20P; †C20, w/ detachable L6-20P
(142156)

MGE OFFICE PROTECTION SYSTEMS PULSAR AND PULSAR M SERIES UPS SYSTEMS

EATON
Powering Business Worldwide

Pulsar EX Series



Pulsar M Series

Pulsar EX and Pulsar M series are packed with high-availability features like an automatic by-pass or hot-swappable batteries. Their network manageability is outstanding due to switched outlets to remotely reboot connected equipment or to extend backup time for the most critical servers. The bundled software suite provides a vast array of power management capabilities, like the ability to shutdown multiple servers or to be interfaced with the network even without a Web/SNMP card.

PULSAR EX SERIES

Pulsar EX series is made of high-performance UPSs designed for power protection of individual IT systems exposed to harsh conditions. Their on-line double conversion technology can ride through long lasting brownout conditions without draining the batteries while their high output provides typically 20% more power than comparable products. Available in different form factors like mini-tower or 2U Rack/Tower. **Pulsar EX series** is the ideal solution for mid-range servers and internetworking equipment with Power Factor Corrected power supplies.

Mfg. Part No.	Plug/ Recep-tacles	Cap. VA/W	Half/ Full Load (min.)	Dimensions (in.) H	W	D	Wt. lbs.	Stock No.	Price Each
86700	5-15P/ (4) 5-15R	700/ 630	16/ 10	9.52	6	17.32	27.5	96M0133	701.00
86701	5-15P/ (4) 5-15R	1000/ 900	18/ 12	9.52	6	17.32	33	96M0134	787.00
86702	5-15P/ (6) 5-15R	1000/ 900	18/ 12	9.52	6	17.32	39.6	95M8416	877.00
86703	5-15P/ (4) 5-15R	1500/ 1350	13/ 9	9.52	6	19.29	39.6	88M0379	1065.00
86704	5-15P/ (6) 5-15R	1500/ 1350	13/ 9	9.52	6	19.29	45	95M5286	1139.00

PULSAR M SERIES

Pulsar M series is made of high-performance UPSs designed for power protection of servers and IT equipment exposed to harsh conditions. Their on-line double conversion technology can ride through long lasting brownout conditions without draining the batteries. Pulsar M is available in 2 Rack/Tower versatile form factors: 2U height for server protection in deep, high density rack enclosures, or 3U for shorter telecom/networking racks. **Pulsar M series** is the ideal solution for individual protection of enterprise servers.

PULSML2200-XL2U	NEMA 5-20P/ (6) NEMA 5-20R, (1) NEMA L5-20R;	2100/ 1650	12/ 4	3.39	17.32	25.2	68	58P0391	1658.00
PULSML2200-XL3U	NEMA 5-20P/ (6) NEMA 5-20R, (1) NEMA L5-20R;	2100/ 1650	12/ 4	5.16	17.32	19.29	70	58P0392	1401.00

EXTENDED BATTERY MODULES

Mfg. Part No.	For Use With	Stock No.	Price Each
86705	Pulsar EXB series of UPS's	96M0135	695.00
86706	Pulsar EXB RT2U series of UPS's	95M8418	802.00
PULSMI3000-EBM	Pulsar M series of UPS's	58P0390	1004.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
NETWORK-MS	Mini-Slot Network Management Card (SNMP/Web 10/100)	30M7376	279.00

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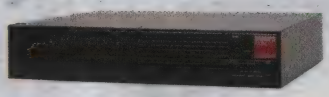
A11H SERIES ON-LINE UNINTERRUPTIBLE POWER SUPPLIES

RoHS Compliant Available

SANYO DENKI



Rack Mount

Tower

- 19" rack mountable and tower models
- Single-phase, 2-wire AC input/output
- 55VAC to 150VAC input voltage window
- 40Hz to 120 Input frequency window
- On-line topology
- Overcurrent breaker protection
- UL listed
- Three-year manufacturer's warranty

A11H series on-line UPS reduces the use of batteries due to its wide 55VAC to 150VAC input voltage window resulting in longer battery life and high reliability. Plus its wide 40Hz to 120Hz input frequency window allows for small inexpensive generators, resulting in high dependability. Features forced air cooling, PC (RS-232C) interface, remote, emergency power off, maintenance-free sealed lead-acid battery and 6.12-ft input cable.

RACK MOUNT

Mfg. Part No.	NEMA Output Recep-tacles	Capacity kVA / W	FL*	Dimensions (in.) H	W	D	Wt. lbs.	Stock No.	Price Each 1-4
● A11H102A011USP	(6) 5-15R	1 / 700	5	3.39	17.32	16.06	37.5	14R8445	836.76
● A11H152A011USP	(6) 5-15R	1.5 / 1050	5	3.39	17.32	19.69	48.5	14R8447	1178.81
● A11H202A011USP	(4) 5-20R	2 / 1400	5	3.39	17.32	22.24	63.9	14R8448	1424.55
TOWER									
● A11H102A011USTWP	(6) 5-15R	1 / 700	5	10.63	6.81	16.93	37.5	14R8446	845.30

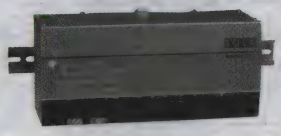
*Backup Time Full Load (min.)
(152405)

SDU SERIES OFF-LINE DIN RAIL UPS

RoHS Compliant Available

SOLAHD

- Compact industrial design
- Wide operating temperature range, 0°C to 50°C
- Phone line surge protection included
- Software and communication cable included
- Simulated sinewave output
- RS232 communication port
- USB port and Form C dry contact, optional
- Two-year manufacturer's warranty



SDU series off-line DIN rail UPS provides economical protection from damaging impulses and power interruptions. These units include accessible connection screw termination for critical devices needing battery back-up.

Mfg. Part No.	Capacity (VA/W)	Volts, Frequency In/Out	Full Load (min.)	Input/Output Connections	Wt. (lbs.)	Stock No.	Price Each 1-2
SDU500	500/300	120VAC, 50/60Hz	4.5	10-24AWG; Screw torque: 5.5 lb.-inch	4.7	28K6417	322.84
SDU850	850/510		2.5		11.4	28K6418	452.50
SDU5005	500/300	230VAC, 50/60Hz	4.5		11.5	89K7693	387.66
SDU-850-5	850/510		2.5		11.9	64K2043	517.32

SDU SERIES ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-2
RELAYCARD-SDU	Dry contact I/O relay box, IP20 touch proof screw terminals, wire size range 12-22 AWG (IEC 2.5mm); N.O./N.C. form	64K2194	164.49
● SDU-PMBRK	Chassis mount brackets to secure UPS to wall, panel or enclosure	67K3281	29.46

(84612)

TECHNICAL SUPPORT HOTLINE

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(196537)

UPS SYSTEMS

SDU SERIES 24V DC DIN RAIL UPS

RoHS Compliant Available

SOLA HD

- Modular, rugged industrial grade design
- Microprocessor based controls
- Automatic self-test feature for UPS function and battery management check
- Power module wide operation temperature range (-20 to +50°C)
- Flexible batteries back-up expansion capabilities
- Overload protection in normal and battery modes
- User replaceable batteries
- IIP-20 rated input and output screw terminals
- No internal fan, no extra cooling required
- Sturdy, reliable all metal DIN rail mounting connector
- LED status indicators
- Universal Dry Contact Relay terminals provide remote signaling
- Monitoring, diagnostics, and remote turn-on and shut-off capabilities
- Two-year manufacturer's warranty

SDU DC UPS series is a powerful, microprocessor controlled UPS that provides protection from power interruptions. With an input voltage range of 22.5 to 30.0 Vdc, the DC UPS is the ideal power back-up solution for your critical connected loads. These units were designed for use with **SDN series** of power supplies.

Mfg. Part No.	Capacity VA	Output Voltage	Full Load (min.)	Input/Output Connections	Wt. (lbs.)	Stock No.	Price Each 1-4
SDU 10-24	240	24	14	IP20 rated screw terminals. Wire range:16-12AWG for copper conductors rated 90°	1.65	60M3378	286.61
SDU 20-24	480	24	4		1.65	60M3379	341.48

BATTERY MODULES

Mfg. Part No.	Description	Stock No.	Price Each 1-2
SDU 24-BAT	24V DIN Rail/Panel Mount Battery Module (cable included)	60M3380	176.06
SDU 24-BATEM	24V External Mount Battery Module (cable included)	60M3381	300.93

SDU SERIES ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-2
● SDU-PMBRK	Chassis mount brackets to secure UPS to wall, panel or enclosure	67K3281	29.46

(102100)

S1K SERIES COMPACT UNINTERRUPTIBLE POWER SYSTEMS (UPS)

SOLA HD

Features:

- Small, compact design
- Data-line surge protection for phone or network
- DB-9 communications interface; software and cable included
- Step sinewave output
- Voltage: 115VAC input and output
- Frequency: 50 or 60Hz input and output
- Input plug: 5-15P
- Two-year manufacturer's warranty
- UL listed

Economical and compact protection from damaging impulses and lost data due to power interruptions. **S1K Offline series** is designed to fit easily under a desk, or in any other location where space is limited.

Mfg. Part No.	Recep-tacles	Capacity	Runtime* Typ. (min.)	Dimensions (in.) H	W	D	Wt. (lbs.)	Stock No.	Price Each 1-4
S1K320	4 NEMA 5-15R 3 Battery, 1 Surge	320VA / 240W	10	5.3	3.8	10.4	8.8	34C1972	144.37
S1K520		520VA / 360W	15	5.3	3.8	12.6	11.6	34C1973	173.50
S1K650		650VA / 390W	15	5.3	3.8	10.4	8.1	34C1974	292.97
S1K850		850VA / 600W	25	5.3	3.8	10.4	10.8	34C1975	408.81
S1K1200		1.2kVA / 720W	30	5.3	3.8	12.6	10.8	34C1971	633.15
S1K1500	4 NEMA 5-15R 4 Battery	1.5kVA / 900W	70	7.5	5.11	15	30	86K9397	704.36

S1K ACCESSORY

Mfg. Part No.	Description	Wt. (lbs.)	Stock No.	Price Each 1-4
S1K-PMBRK**	Wall/Panel Mount Bracket Kit for S1K (320VA-1200VA) UPS	1	29K8558	35.26

*For a typical PC and monitor **For use with all S1K series except S1K1500
(70251)

S3K SERIES INDUSTRIAL GRADE LINE INTERACTIVE UNINTERRUPTIBLE POWER SUPPLIES (UPS)

SOLA HD

- Line-interactive with data line protection for telephone and network connections
- Automatic voltage regulation (AVR) topology — Saves battery over/undervoltages when input is below 87V
- Sinewave output
- Configurable input voltage
- Automatic self test function
- User replaceable "Hot Swapping" batteries
- UL listed
- Two-year manufacturer's warranty

S3K series UPS protect against most power disturbances including over/under voltages through line-interactive technology. Additionally, **S3K series** UPS are provided with an input circuit protector and a pair of surge protected data line connectors (RJ-45), with an automatic test function to insure the capability of the battery to supply power in emergency situations. Should the battery fail this test, the UPS will display a warning to indicate that the battery needs to be replaced.

S3K SERIES MINI TOWER SERIES — 120V MODELS; S3K700 AND S3K1000 DIMENSIONS: 8.30 X 5.50″ (H X W), S3K1600 DIMENSIONS: 8.90 X 6.70″ (H X W)

Mfg. Part No.	Receptacles	Capacity VA/W	Half/ Full Load (Min.)	Depth (in.)	Wt. (lbs.)	Stock No.	Price Each 1-4
S3K700	4 NEMA 5-15R	700/480	14/5	17.20	34.1	83H5285	683.33
S3K1000		1000/750	13/4	17.20	37.0	83H5276	948.70
S3K1600	6 NEMA 5-15R	1440/1200	10/3	17.70	70.4	83H5277	1263.03

(78298)

S4K2U-C / S4K2U-5C INDUSTRIAL ON-LINE UNINTERRUPTIBLE POWER SYSTEMS (UPS)

SOLA HD

Features:

- Hardwire capability for permanent installation
- Small 2U (S4KC) height, 4U (S4K4U) height maximizes available space
- Input and output noise suppression
- Higher output power factor of 0.90 (S4KC)
- PWM inverter reduces output voltage distortion
- Add on batteries for extended back-ups
- Integral sealed non-spillable batteries
- Hot swappable user replaceable battery
- Automatic restart and manual battery test
- Rack-mount or stand-alone tower mounting
- Two-year limited manufacturer's warranty

S4KC is a single-phase, on-line (double-conversion) UPS system available in 500-3000VA, 120V and 230V. On-Line design means zero transfer time from external to internal power. When utility power fails, your critical load remains supported by a seamless flow of power. S4KC protects equipment from virtually all power disturbances due to blackouts, brownouts, sags, surges or noise interference. The rack-tower models are also supplied with securing flanges and rack slide mounting hardware. Units can be easily hardwired by removing the attached line cord and receptacle plate. All units include a conduit knockout cover in the box. S4KC4U is a single-phase, on-line (double-conversion) UPS system available in 6000VA, 120V/ 240V.

S4K2U-C, 120 VAC, 50/60 Hz TOWER/RACK-MOUNT, DIMENSIONS:16.9 X 3.4″ (W x H)

Mfg. Part No.	Plug/ Recep.	Ca-pacity	Volts In/ Out	Half/ Full Load (min.)	Depth (In.)	Wt. (lbs.)	Stock No.	Price Each
S4K2U700-C	5-15P/(6) 5-15R	700VA / 630W	120/120 (50/60Hz)	27/11	19.7	52.9	67R1468	1241.79
S4K2U1000-C		1kVA / 900W		17/7	19.7	52.9	67R1460	1585.71
S4K2U1500-C		1.5kVA / 1.35kW		11/4	19.7	57.3	67R1462	1975.41
S4K2U2000-C	5-20P/(6) 5-20R (15/20 Amp Type)	2kVA / 1.8kW		11/3	19.7	61.7	67R1463	2528.87
S4K2U3000-C	5-30P/(5) 5-20R (15/20 Amp Type):(1) L5-30R	3kVA / 2.7kW		11/3	23.7	70.5	67R1465	4077.03

S4K2U-5C, 230 VAC, 50/60 Hz TOWER/RACK-MOUNT DIMENSIONS:16.9 X 3.3″ (W x H)

S4K2U1000-5C	IEC 320-C14/(6) IEC 320-C13	1kVA / 900W	230/240 (50/60Hz)	17/6	19.6	44	67R1461	1704.16
S4K2U2000-5C	IEC 320-C20/(6) IEC 320-C13	2kVA / 1.8kW		11/3	19.6	61.7	67R1464	2614.04
S4K2U3000-5C	IEC 320-C20/(6) IEC 320-C13 (1) IEC 320-C19	3kVA / 2.7kW		11/3	23.7	70.5	67R1466	4154.22

CONTINUED

S4K2U-C / S4K2U-5C INDUSTRIAL ON-LINE UNINTERRUPTIBLE POWER SYSTEMS (UPS) (CONT.)

EXTERNAL BATTERY CABINETS, DIMENSIONS:17 X 3.5″ (W x H), -C MODELS 16.9 X 3.4″ (W x H)

Mfg. Part No.	UPS Model	Cabinet Qty.	Half/ Full Load (mins.)	Depth Each Cabinet (in.)	Wt. (lbs.)	Stock No.	Price Each
S4K2U48-BAT-C	S4K2U700C	Internal One Two Three Four	.../11 .../41 .../104 .../140 .../158	19.7	70.5	67R1467	962.18
	S4K2U1000C (-5)	Internal One Two Three Four	.../7 .../35 .../73 .../106 .../134				
	S4K2U1500C	Internal One Two Three Four	.../4 .../23 .../38 .../71 .../96				
	S4K2U2000C (-5)	Internal One Two Three Four	.../3 .../17 .../33 .../40 .../71				
S4K2U96-BAT-C	S4K2U3000C (-5)	Internal One Two Three Four	.../3 .../18 .../38 .../51 .../73	23.7	93.5	67R1469	1186.32

S4K2U AND S4K4U SERIES ACCESSORY

Mfg. Part No.	UPS Models	Description	Wt. (lbs.)	Stock No.	Price Each 1-4
SRS1832	Sola S4K2U-C & S4K4U-C Series UPS	Rack Slide Kit for Racks with 18-32″ Support Rails	8	36K2814	192.59

(39770)

ECO-UPS SERIES ENERGY-SAVING UPS SYSTEMS

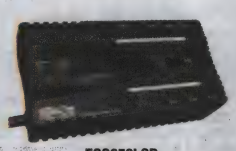
TUV Rheinland

RoHS Compliant Available

TRIPP·LITE POWER PROTECTION

- 350VA – 850VA
- Green Outlet™ Technology
- Up to 99% Efficiency
- Protection from Blackouts, Phantom Loads, Surges & Line Noise
- Tel/Modem Line Protection
- LCD Status Screen (Select Models)

EC350UPS



EC0650LCD

Designed for home and office applications, **ECO-UPS** Systems protect your computer, electronics and other equipment from downtime, damage and data loss caused by power problems, including blackouts, surges and line noise. Reliable battery backup power keeps computers operating through shorter outages and allows enough time to save files and shut down during longer ones. Free PowerAlert software* saves files automatically on unattended computers, and **ECO-UPS** Systems also work with built-in power management features of popular desktop operating systems. Surge-blocking phone jacks protect telephones, fax machines, analog modems, DSL modems and other communications equipment. Select models include an illuminated LCD status screen that displays voltage, wattage, runtime and other useful information. **ECO750UPS** is ENERGY STAR qualified for its ability to save customers money while helping to protect the environment.

ECO-UPS ENERGY-SAVING UPS SYSTEM

Mfg. Part No.	Capacity	Backup Runtime Half/Full Load (min.)	Dimensions (mm) H	W	D	Wt. (lbs.)	Stock No.	Price Each
ECO350UPS	350VA / 180W	11.3/3.1	76.2	203.2	162.56	5.2	74P0141	81.21
ECO550UPS	550VA / 300W	10/3.5	78.74	274.32	144.78	6.6	74P0142	111.66
ECO750UPS	750VA / 450W	11.6/2.8	78.74	309.88	175.26	8.8	74P0143	155.95
ECO-UPS ENERGY-SAVING UPS SYSTEM WITH LCD								
ECO650LCD	650VA / 325W	10/3	88.9	273.05	146.05	6.25	46T3769	128.27
ECO850LCD	850VA / 425W	13/2.8	88.9	304.8	177.8	9.5	46T3770	149.03
GSA/TAA-COMPLIANT ECO-UPS ENERGY-SAVING UPS SYSTEM								
ECO550UPSTAA	550/300	9.6/3	78.74	274.32	144.78	6.6	67R1444	127.35
ECO750UPSTAA	750/450	11/2.5	78.74	310	176	8.8	67R1445	169.56

(144703)

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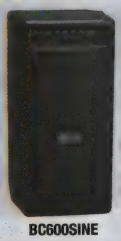
(196560)

BC PRO® AND BC PERSONAL® UPS STANDBY SYSTEMS

RoHS Compliant Available

TRIPP·LITE POWER PROTECTION

BCPERS300



BC600SINE

BC Pro® and **BC Personal®** UPS systems provide entry-level, reliable, standby protection for personal computers. Input receptacles are NEMA 5-15P (120V, 15A) and output receptacles are NEMA 5-15R (120V). **BC PRO series** models use free basic PowerAlert software (Web download) and comm. port to provide unattended shutdown. **BC600SINE** maintains 120V sine wave output during blackouts and severe voltage fluctuations and is compatible with Active Power Factor Corrected (PFC) power supplies.

Mfg. Part No.	Output Capacity	Backup Runtime Half/ Full Load (min.)	Outlets (NEMA 5-15R)	Dim. (in.) H	W	D	Wt. (lbs.)	Stock No.	Price Each 1-9
BCPERS300	300VA / 180W	16.8/6.3	3	8.5	4.25	5.5	10.8	83F6116	134.54
BCPERS450	450VA / 280W	14.8/4.6	3	8.5	5.25	7.5	12	83F6117	153.81
BCPRO600	600VA / 345W	14.5/5.7	6*	10.75	5.25	7.25	19	83F6122	197.68
BC600SINE	600VA / 375W	11.1/3.3	6*	10.75	5.25	7.5	14.6	46T3768	216.00
BCPRO1050	1.05kVA / 705W	23/7	6*	11.2	6.8	7	29	92F8626	463.22
BCPRO1400	1.4kVA / 940W	24/8	6*	12.75	7.5	9	36.4	92F8609	646.10

* 3 additional surge suppression-only outlets

(3879)

INTERNET OFFICE™ STANDBY UPS SYSTEMS

UL

TRIPP·LITE POWER PROTECTION

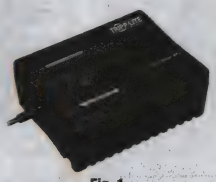


Fig. 1

Fig. 2

Fig. 3

- Compact, internet-ready standby protection for home/office computers, modems and all peripherals
- UL listed

Free basic PowerAlert software (Web download) and communication port provide automatic unattended shutdown. Built-in jacks protect against surge damage on the phone/DSL or phone/DSL/ethernet lines.

LOW-PROFILE

Mfg. Part No.	Capacity (VA/W)	Back-up Run-time Half/ Full Load (min.)	Outlets (NEMA5-15R)	Dimensions (in.) H	W	D	Fig.	Stock No.	Price Each 1-9
INTERNET350SER	350/180	10/2.5	6 (3UPS/ 3Surge)*	3	10.5	5	1	09J4249	78.80
INTERNET350U	350/180	11/3	6 (3UPS/ 3Surge)	3	8	6.4	1	73C7059	73.76
INTERNET550U	550/300	10/3.5	8 (4UPS/ Surge, 4 (Surge only)	3.1	10.8	5.7	1	58K9725	100.94
INTERNET550SER	550/300	11.5/3	8 (3UPS/ 3Surge)*	3.1	10.9	5.7	1	09J4250	102.91
INTERNET750U	750/450	11.4/2.4	12 (6UPS/ 6Surge)	3.1	12	7	1	09J4251	140.01
TOWER									
INTERNETOFFICE500	500/280	14.8/4.6	6 (3UPS/ 3Surge)	8.5	5.25	7	2	83F6120	197.78
INTERNETOFFICE700	700/425	11.2/3.9	6 (3UPS/ 3Surge)	10.8	5.25	7.5	3	53H7299	185.85
STANDBY MINI-DESKTOP UPS									
BC350	350/180	10/2.5	6 (3UPS/ 3Surge)	3	10.5	5	1	78K5536	70.49

*DB9 port

(12230)

UPS SYSTEMS

SMARTPRO® INTELLIGENT NETWORK UPS SYSTEMS

RoHS Compliant Available

TRIPP·LITE POWER PROTECTION

Fig. 1

Fig. 2

Fig. 3

- Automatic voltage regulation (AVR) supports equipment during brownouts and overvoltages
- Free enhanced PowerAlert software and up to 4 comm. ports provide network power management
- Extended run options

The tower counterpart to the SmartPro® rack mount line with intelligent, microprocessor-controlled protection and a full range of power management features to protect network servers.

STANDARD RUNTIME SYSTEMS

Mfg. Part No.	Cap. VA/W	Back-up Run-time Half/ Full Load (min.)	Outlets (NEMA5-15R)	Dimensions (in.) H	W	D	Wt. lbs.	Fig.	Stock No.	Price Each 1-2
SMART550USB	550/ 300	14.8/4.6	6	8.5	5	6.5	14.4	1	**81C9225**	168.66
● SMART750	700/ 450	16.2/5.6	6	11.75	7.25	7.5	23	1	**96F9200**	341.87
SMART700SER	700/ 450	16.9/5.9	6	11.75	7.25	7.8	21	1	**09J4272**	348.98
SMART750USB	750/ 450	11/3	6	10.75	5.25	7.5	20	1	**88H4316**	208.80
SMART750SLT	750/ 500	17.8/6.5	8	10.25	6.75	13.25	30	1	**82K9296**	441.44
SMART1050	1050/ 705	23/8	6	11.75	7.25	7.25	29	1	**16F1210**	462.57
SMART1050SLT	1050/ 650	19/7	8	10.25	6.75	13.25	36	2	**97H2865**	520.26
SMART1500	1500/ 980	20/7	6	12.75	7.5	9	38.4	1	**81C9221**	651.36
SMART1500SLT	1500/ 900	22/8	8	10.25	6.75	13.2	45	2	**09J4271**	704.36
SMART2200VS	2200/ 1600	20/8	9 (7 5-15R, 2 5-5/20R)	14.25	9.25	12	52.4	3	**88H2977**	960.48
EXTENDED RUNTIME SYSTEMS										
● SMART750XLA	750/ 500	20.7+/ 10+	8	10.1	6.7	13.8	33.9	1	**46P6694**	529.87
SMART1500XL*	1500/ 980	20/ 7+	6*	12.75	7.5	9	41.6	1	**53H8289**	810.16
SMART2200NET	2200/ 1700	27/ 11+	6	17	9	12.5	80	3	**92F3235**	1071.49
SMART3000NET	3000/ 2400	23/ 7+	4 NEMA5-15R, 4 NEMA5-15/20R	17	9	12.5	89	3	**52F6936**	1384.14
SMART3000VS	3000/ 2200	14/ 4+	7 NEMA5-15R, 2 NEMA5-15/20R, 1 L5-30R	14.25	9.25	12	59	3	**73J5841**	1346.29

*External battery capability and higher continuous power capacity; +Extended backup times with optional external battery packs
(3922)

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(212565)

SMARTPRO® RACK/TOWER INTELLIGENT LINE-INTERACTIVE UPS SYSTEMS

RoHS Compliant Available

TRIPP·LITE POWER PROTECTION

- Automatic Voltage Regulation (AVR) Supports Equipment During Brownouts and Overvoltages
- Rack/Stack/Tower Adaptable Cabinets Occupy Less Space — As Slim As 1U
- Extended Runtime Options

Incorporates intelligent, microprocessor-controlled protection with a full range of power management features to protect network servers, rack mount equipment and more. Free enhanced PowerAlert software and up to 4 communication ports (USB and DB9) provide unparalleled network power management. **Mfg. part no. SMART5000RT3U** includes 3U power module and 3U battery module and offers 208 and 120V output. 17.5 inch external width.

Mfg. Part No	Capa-city	Back-up Run-time Half/ Full Load (min.)	Outlets (NEMA5-15R)	Dimensions (in.) H	W	D	Wt. lbs.	Stock No.	Price Each 1-2
SMART500RT1U	500VA / 300W	14.6/ 3.2	7	1.75	17.5	11.75	18.8	**09J4394**	263.86
SMART750RM1U	750VA / 600W	16.2/ 4.8	6	1.75	17.5	16.75	30	**53H8293**	578.09
SMART1000RM1U	1kVA / 800W	14/ 4	6	1.75	17.5	16.75	32	**81C9219**	739.30
SMART1500RM2U	1.5kVA / 1kW	15/ 5.3	8	3.5	17.5	13.5	46	**94H7821**	850.03
● SMART2200RM2U	2.2kVA / 1.92kW	12/ 4.5	6	3.5	17.5	19.5	65	**27C4816**	1409.40
SMART1500RMXL2UA	1.5kVA / 1kW	14/ 4.9†	8	3.5	17.5	13.5	43.5	**09J4393**	937.96
SMART2200RMXL2U	2.2kVA / 1.6kW	12/ 4.5†	8	3.5	17.5	19.5	64	**81C9224**	1310.87
SMART3000RM2U	3kVA / 2.25kW	10/ 3.45	9	3.5	17.5	19.5	64	**27C4819**	1476.96
SMART5000RT3U*	5kVA / 4kW	38/ 16†	14	5.25/ 5.25	17.5/ 17.5	22.5/ 25	256	**71C9423**	4552.20

*Power module; †External battery module; Extended backup times with external battery packs
(68230)

OMNISMART™ LINE-INTERACTIVE UPS SYSTEMS

RoHS Compliant Available

TRIPP·LITE POWER PROTECTION

- Phone/DSL/Ethernet protection options safeguard against surge damage on the phone/DSL/ Ethernet lines

Mid-level, line-interactive UPS series offer automatic voltage regulation at an affordable price to protect computers, workstation and small servers. Free basic PowerAlert software (web download) and USB communication port provide automatic unattended shutdown.

OMNISMART700

OMNISMART™

Mfg. Part No.	Ca-pacity VA/W	Back-up Run-time Half/ Full Load (min.)	Outlets (NEMA5-15R)	Dimensions (in.) H	W	D	Wt. lbs.	Stock No.	Price Each 1-9
OMNISMART300PNP	300/ 180	29.8/ 10.8	3*	8.5	5.25	7	14	**83F6115**	204.70
OMNISMART500	500/ 300	14.6/ 3.7	6†	8.5	5.25	7	14	**17C6601**	291.60
OMNISMART700	700/ 450	8.3/ 2.2	6‡	10.8	5.25	7.5	20	**17C6602**	381.14
OMNISMART1050	1050/ 705	23/ 7	6	11.5	6.8	7.2	28.6	**52F6954**	470.64
● OMNISMART1400	1400/ 940	24/ 8	6	12.8	7.5	9.2	36.4	**13B3726**	666.74
OMNI VS (VALUE SERIES)									
OMNIVS800	800/ 475	11.5/ 3.5	7†	10.75	5.25	7.25	15.9	**09J4216**	212.91
OMNIVS1000	1000/ 500	14/ 3.5	8†	10.75	5.25	7.5	18.4	**09J4214**	232.21
OMNIVS1500	1500/ 940	8.5/ 4	8**	11.75	7.25	7.2	22.2	**82K9292**	351.47
OMNIVS1500XL	1500/ 940	13/ 4.5†+	8‡	11.75	7.25	7.5	28	**09J4215**	386.88

*Built-in jacks protect against surge damage on one phone/DSL line; †protect against surge damage on two phones/DSL lines; ‡protect against surge damage on one phone/DSL/ethernet line; +Extended backup times with external battery pack
**1Tel or 10BT
(3898)

LINE INTERACTIVE UPS SYSTEMS FOR HEALTHCARE MARKET

RoHS Compliant Available

TRIPP·LITE POWER PROTECTION

TÜV Rheinland

- Medical-grade models are UL 60601-1 listed with built-in isolation transformers reducing leakage to less than 100 microamps
- Automatic voltage regulation supports equipment during brownouts without draining battery power
- Automatic shutdown system when left unattended
- Hospital-grade plug and receptacles

SMART700HG

SMART2500XLHG

MEDICAL-GRADE — RATED UL 60601-1

Mfg. Part No.	Capacity	Backup Runtime Half/Full Load (min.)	Dimensions (in.) H	W	D	Wt. (lbs.)	Stock No.	Price Each 1-2
SMART700HG	700VA / 450W	42/18	12.8	7.5	9	18.4	13B3746	780.57
SMART1200XLHG	1kVA / 750W	28/10	12.8	7.5	9.5	22.2	31C1607	1012.44
● SMART2500XLHG	2.2kVA / 1.92kW	13/4.4	9.72	8.9	19	28	66W5751	2516.00
OMNISMART350HG	330VA / 225W	46/10	10.8	5.2	7.2	28.6	31C1577	566.40

(12233)

SMARTONLINE® RACK/TOWER ON-LINE UPS SYSTEMS

RoHS Compliant Available

TRIPP·LITE POWER PROTECTION

- On-line double-conversion rack / tower UPS
- 100/110/120/127V 50/60Hz output; High efficiency economy mode option
- Interactive LCD with 9 selectable screens of UPS and site power data
- Expandable runtime, Hot-swap batteries
- USB, RS-232 & EPO ports, support for SNMP/WEB card option
- 2 independently switched load banks

Online, double-conversion Uninterruptible Power Supply (UPS) maintains perfectly regulated output power by continuously converting raw AC input to DC, then re-converting output back to AC. Fully regulated sine wave AC output with +/-2% voltage regulation powers network equipment continuously, even during severe brownouts and overvoltages, all without depleting UPS battery reserves. Maintains battery-derived AC output during power failures with zero transfer time. Highly efficient operation in optional economy mode saves BTU heat output and energy costs. Network management interfaces support communications via USB, RS-232, contact-closure and optional SNMPWEBCARD network interface. Built-in DB9 port offers both enhanced RS-232 data and basic contact closure monitoring ability. HID-compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X. Includes PowerAlert monitoring software and complete cabling. Emergency Power Off (EPO) interface. LCD display reports UPS operating mode, line power availability, battery mode operation, inverter operation, ECO mode status and output power availability. LCD display panel easily rotates for viewing in rackmount or tower configurations. Audible alarm with push-button momentary alarm-cancel and silent-mode LCD configuration options. Programmable self-test. Fault-tolerant auto-bypass mode. Field-replaceable, hot-swappable internal batteries and external battery packs.

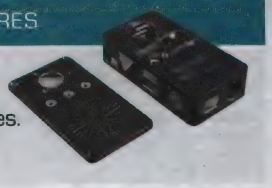
Mfg. Part No.	Capacity	Back-up Run-time Half/Full Load (min.)	Outlets (NEMA)	U	Dimensions (in.) H	W	D	Wt. lbs.	Stock No.	Price Each
● SU750RTXLCD2U *	750VA / 675W	14/3	6 5-15R	2U	3.5	17.5	12.5	28	93T1341	900.00
● SU1000RTXLCD2U	1kVA / 900W	14/4.8	6 5-15R	2U	3.5	17.5	12.5	29	92T5102	1078.20
● SU1500RTXLCD2U	1.5kVA / 1.35kW	14/4.2	6 5-15R	2U	3.5	17.5	18.5	45	93T1337	1438.20
● SU2200RTXLCD2U	2.2kVA / 1.8kW	12/4	6 5-15R, 1 L5-20R	2U	3.5	17.5	19	49	93T1339	2086.20
● SU3000RTXLCD3U	3kVA / 2.7kW	11/4	4 5-15R, 4 5-15/20R, 1 L5-30R	3U	5.2	17.5	26	74	93T1340	2601.00

(59080)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures



(212568)

SMARTONLINE™ INTELLIGENT TRUE ONLINE TOWER UPS SYSTEMS

RoHS Compliant Available

TRIPP·LITE POWER PROTECTION

True online system protects against blackouts, brownouts, spikes and line noise. Provides pure sine waveform, zero transfer time and premium voltage regulation. Diagnostic LEDs provide advance warning of potential power problems before equipment is affected. Includes PowerAlert® software that saves files automatically during unattended shutdown and provides unparalleled network power management.

Mfg. Part No.	Capacity (VA/W)	Back-up Run-time Half/Full Load (min.)	Outlets (NEMA5-15R)	Dimensions (in.) H	W	D	Wt. lbs.	Stock No.	Price Each 1-9
SU750XL	750/600	11/4	6	10	6.75	13.25	28.7	82K9298	672.34
● SU1000XLA	1000/800	14/4.5	6	10	6.75	13.25	29.8	16M3541	720.36
● SU1500XL	1500/1200	14/4.5	6	10.25	9	19.5	49.8	46M3748	958.88
● SU2200XLA	2200/1600	14/4.5	7	10.25	9	19.5	52.7	46M3749	1247.03
SU3000XL	3000/2400	14+/5+	9	10.25	9	20.5	69.8	96H7056	1788.10

+Extended backup times with external battery packs

(59171)

SMARTPRO® AND OMNISMART™ SERIES DIGITAL UPS SYSTEMS WITH LCD DISPLAY

RoHS Compliant Available

TRIPP·LITE POWER PROTECTION

TÜV Rheinland

- Large rotatable LCD screen shows power conditions and UPS correction sin real time
- 8 AC outlets plus tel/DSL, Ethernet (**SMART series** only)
- Built-in USB port and free PowerAlert Software for unattended shutdown
- Tower, shelf or 2U rackmount installation**

SMART1000LCD

SMART1500LCDXL

Line-interactive digital UPS system offers protection for personal computers, workstations, audio /video and media centers. Dimensions are listed in primary form factor. **Omnismart series** is CSA certified.

SMARTPRO® SERIES

Mfg. Part No.	Capacity	Backup Runtime Half/Full Load (min.)	Outlets (NEMA 5-15R)	Dimensions (in.) H	W	D	Wt. (lbs.)	Stock No.	Price Each
SMART1000LCD**	1kVA / 500W	9/3	8	3.66	11.9	7.2	15	65K4697	209.68
SMART1200LCD	1.2kVA / 700W	12/4	8	3.5	17.25	10.5	29	82K9294	287.53
SMART1500LCD	1.5kVA / 900W	13/3.5	8	3.5	17.25	10.5	29	82K9295	328.56
● SMART1500LCDXL	1.5kVA / 900W	12/4	8	3.5	17.3	10.5	29.4	64T5581	450.00
● SMART1300LCDT	1.3kVA / 720W	10/8	8	8	5.75	15.4	26.5	72W1449	246.60
● SMART1500LCDT	1.5kVA / 900W	10/10	10	8	5.75	15.4	27	62W0637	298.80
OMNISMART™ SERIES									
● OMNI1500LCDT	1.5kVA / 810W	7.5/10	10	8	5.75	15.4	26.8	72W1447	277.20
OMNI900LCD	900VA / 475W	10/3	8	11.8	3.7	7.2	15.5	82K9293	192.24
OMNI650LCD	650VA / 350W	12/3.5	8	12	3.7	7.2	15.5	82K6211	174.80

**SMART1000LCD requires optional shelf for rackmount installation.

(68045)

ALKALINE BATTERIES

DURACELL® ALKALINE BATTERIES

DURACELL COPPERTOP

TRUSTED EVERYWHERE

MN1500B8Z

MN1300R4Z

MN1400B2Z

- Long lasting, reliable power
- Individually dated coded to ensure freshness
- Performance guaranteed
- Date coding to ensure freshness

"COPPERTOP" - BLISTER PACKS

Mfg. Part No.	Size	Volage	Pkg. of	Stock No.	Price per Pkg. 1-4
MN1300B2Z	D	1.5	2	65W8044	9.00
MN1300R4Z	D	1.5	4	65W8045	17.71
MN1400B2Z	C	1.5	2	65W8047	9.00
MN1400R4ZX	C	1.5	4	65W8048	17.93
MN1500B4Z	AA	1.5	4	65W8050	9.11
MN1500B8Z	AA	1.5	8	65W8051	17.71
MN1604B1Z	9V	9	1	65W8053	9.00
MN1604B2Z	9V	9	2	65W8054	17.26
MN2400B4Z	AAA	1.5	4	65W8057	8.89
MN2400B8Z	AAA	1.5	8	67W2549	16.09
"ULTRA" - BLISTER PACK					
MX2500B2PK	AAAA	1.5	2	66W3102	4.94

"COPPERTOP" - BULK
Sold only in multiple package quantities listed in table below.

Mfg. Part No.	Size	Voltage	Pkg. of	Stock No.	Price per Pkg. Each
MN1300BKD	D	1.5	12	65W8043	37.58
MN1400BKD	C	1.5	12	65W8046	37.17
MN1500BKD	AA	1.5	24	65W8049	30.43
MN1604BKD	9V	9	12	65W8052	76.19
MN2400BKD	AAA	1.5	24	65W8056	30.10

(6878)

PROCELL® INDUSTRIAL ALKALINE BATTERIES

DURACELL PROCELL Professional Alkaline Battery

The Choice of Professionals

- Lasts up to 10X longer than zinc carbon batteries in power demanding applications
- Long shelf life—guaranteed fresh for seven years
- Date coding to ensure freshness
- Reliable performance at temperature extremes of -4°F to 129°F
- Economical bulk packaging for professional applications

Sold only in multiple quantities listed in table below. Priced individually.

Mfg. Part No.	Size	Voltage	Pkg. of	Stock No.	Price per Pkg. Each
PC1500	AA	1.5	24	66W2220	13.29
PC2400	AAA	1.5	24	66W2222	14.23
PC1400	C	1.5	12	66W2219	15.57
PC1604	9V	9	12	66W2221	27.16

(6975)

DEV KIT HQ™

Newest technology, Development Kits & Evaluation Boards from the best suppliers.

newark.com/dev-kits

(196525)

PROCELL® INDUSTRIAL ALKALINE LANTERN BATTERIES

RoHS Compliant Available

DURACELL PROCELL Professional Alkaline Battery

The Choice of Professionals

- Leakage resistance for critical applications
- Alkaline manganese oxide
- No added mercury
- Screw terminals
- Reliable performance at various temperature ranges
- Long shelf life -- date coding to ensure freshness

PC915

Mfg. Part No.	Voltage	Capacity (Ah)	Stock No.	Price Each
● PC903	7.5	40	65W8065	40.89
PC915	6	13	65W8066	15.38

(6880)

ALKALINE BATTERY VALUE PACKS

ULTRALAST

- Advanced Alkaline technology
- Choice of AA, AAA, C, D and 9V in economical bulk packs
- Perfect for all digital and electronic devices
- Long lasting to out perform other brands of Alkaline batteries

Reliable performance that is equal to or beats all major U.S. brands for a fraction of the cost.

UL100AAAB

Mfg. Part No.	Size	Volts	Capacity (mAh)	Pack of	Stock No.	Price per Pack Each
UL40AAVP	AA	1.5	2.2	40	01T1105	17.34
UL100AAB	AA	1.5	2.2	100	01T1104	39.48
UL40AAAVP	AAA	1.5	930	40	01T1106	18.73
UL100AAAB	AAA	1.5	930	100	01T1103	40.25
UL12CB	C	1.5	8.62	12	56T1923	15.65
UL12DB	D	1.5	12.98	12	56T1924	19.44
UL129VB	-999	9	570	12	56T1925	21.72

(190795)

ENERGIZER® ALKALINE BATTERIES

Energizer

Suffix BP in mfg. part no. indicates blister pack; **suffix FP** indicates family pack. **Sold in package quantities listed.**

Mfg. Part No.	Size	Voltage	NEDA	Pkg. of	Stock No.	Price per Pkg. 1-4
E-91	AA	1.5	15A	1	90F3321	2.70
E91BP-2	AA	1.5	15A	2	50F116	3.74
E91FP-12	AA	1.5	15A	12	50F2594	17.05
E92	AAA	1.5	24A	1	03F7111	2.73
E92BP-2	AAA	1.5	24A	2	50F117	3.52
E92FP-12	AAA	1.5	24A	12	27C4318	20.63
E96-BP-2	AAAA	1.5	25A	2	98F6050	3.77
E93BP-2	C	1.5	14A	2	50F118	5.98
E93FP-8	C	1.5	14A	8	50F2595	17.62
E95BP-2	D	1.5	13A	2	50F119	6.33
E95FP-8	D	1.5	13A	8	50F2596	17.62
522	9V	9.0	1604A	1	48F917	6.90
522BP-2	9V	9.0	1604A	2	17C5580	10.44

(61976)

ENERGIZER® INDUSTRIAL ALKALINE BATTERIES

EN91 EN92 EN93 EN95 EN22

Mfg. Part No.	Size	Voltage	Stock No.	Price Each 1-9
EN91	AA	1.5	81F158	0.74
EN92	AAA	1.5	87F4417	0.71
EN93	C	1.5	81F159	1.50
EN95	D	1.5	48F915	1.70
EN22	9V	9.0	81F157	2.49

(62071)

ADVANCED LITHIUM BATTERIES

EA91BP-4 EA92BP-4 LA522SPB

Delivers MORE* Power...

- Ideal for today's devices — hand-held games, wireless gaming and music devices, digital cameras, smoke alarms
- AA and AA — Lasts up to 4X longer* in digital cameras
- 9V — Up to 2X longer* storage life
- Work well in a wide range of temperatures (-40°C to +60°C)
- Lightweight

Energizer® Advanced Lithium batteries come in convenient multi-packs.

Mfg. Part No.	Size	Voltage	Pkg. Qty.	Stock No.	Price per Pkg. 1-4
EA91BP-4	AA	1.5	4	60R2382	12.07
EA92BP-4	AAA	1.5	4	60R2383	11.77
EA92BP-8	AAA	1.5	8	60R2384	21.80

Energizer® Advanced Lithium 9V battery meets ANSI 9V alkaline dimensional specs, eliminating device fit issues. Recommended for use in smoke alarms, home improvement, and professional audio devices.

LA522SBP	-999	9	1	60R2385	11.96

*vs Energizer® MAX®
(164670)

FB SERIES ENCAPSULATED LITHIUM COIN CELL BATTERIES AND BATTERY SOCKET

- Allow series or parallel interconnection between cells
- Withstand harsh manufacturing and user environments
- PCB mountable, wave solderable, and process tolerant
- Application flexibility
- Ideal for automated placement

FB2032H2-BA RH-23H2-B

FB series batteries consist of two lithium carbon-monofluoride coin cells encapsulated within a glass-filled polyester molded housing. Allows for series or parallel interconnection between the cells. Utilize Rayovac BR lithium carbonmonofluoride technology to provide the greatest reliability at very wide temperatures and the lowest self-discharge rate.

Mfg. Part No.	Nom. Voltage Series	Nom. Voltage Parallel	Capacity (mAh) Series	Capacity (mAh) Parallel	Dimensions (mm) W	L	H*	Stock No.	Price Each 1-24	25-49
FB-1225H2-B	3.0	6.0	100	50	15.9	15.9	10.3	87F3484	26.34	21.32
FB2032H2-BA	3.0	6.0	390	195	25.4	15.9	10.8	76R6401	22.68	18.37

*Height above circuit board

RELEX™ PCB MOUNTABLE BATTERY SOCKET

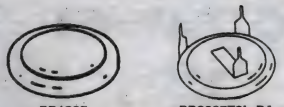
Mfg. part no. RH23H2-B printed circuit board mountable battery socket for use with **mfg. part nos. FB-1225H2-B** and **FB2032H2-BA** batteries; *ordered separately above*. This device provides excellent component retention and a gas tight, reliable electrical contact. It's wave solderable and process tolerant. Molded-in standoff for thorough post reflow cleaning. Its self-orienting design provides proper polarity installation without desoldering or the use of special tools.

RH-23H2-B	RELEX™ PCB Mountable Battery Socket	90F7362	9.51	8.15

(7018)

LIFEX™ 3-VOLT LITHIUM COIN-CELL BATTERIES

- High-Energy Density and Voltage
- Lithium System Offers Chemical & Thermal Stability
- Operating Temperature Range: -40°C to +85°C
- UL Recognized, CSA Certified

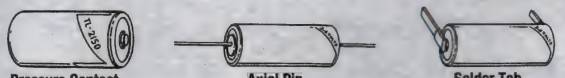


BR1225 BR2335T3L-BA

Mfg. Part No.	Capacity (mAh)	Maximum Pulse (mA)	Tab Configuration	Stock No.	Price Each 1-24	25-49
BR1225	39	8	None	44F6692	3.15	2.55
BR2335T3L-BA	300	10	3 Tabs	45P5746	5.27	4.27

(7019)

3.6-VOLT MEMORY BACK-UP BATTERIES



Pressure Contact Axial Pin Solder Tab

For CMOS memory back-up, industrial control equipment, utility meters, medical components, consumer electronics, and other applications. Bulk quantities available, *go online or call.*

Terminals = available cell terminations; pictured above.

3-Pin 2-Pin

Mfg. Part No.	Size	Capacity	D × H	Terminals	Stock No.	Price Each 1-24
TL-5101/S-BP	1/2AA	950mAh	0.58 × 1.00″ (14.73 × 25.40)	Pressure Contact	87F6401	7.16
TL-5101/T-BP	1/2AA	950mAh	0.58 × 1.00″ (14.73 × 25.40)	Solder Tab	87F6409	7.72
TL-5101/P-BP	1/2AA	950mAh	0.58 × 1.00″ (14.73 × 25.40)	Axial Pin	87F6410	7.58
TL-5155/T-BP	2/3AA	1450mAh	0.58 × 1.28″ (14.73 × 32.51)	Solder Tab	92F2486	8.54
TL-5155/P-BP	2/3AA	1450mAh	0.58 × 1.28″ (14.73 × 32.51)	Axial Pin	92F2487	8.46
TL-5104/S-BP	AA	2100mAh	0.58 × 2.00″ (14.73 × 50.80)	Pressure Contact	87F6411	8.54
TL-5104/T-BP	AA	2100mAh	0.58 × 2.00″ (14.73 × 50.80)	Solder Tab	87F6412	8.97
TL-5104/P-BP	AA	2100mAh	0.58 × 2.00″ (14.73 × 50.80)	Axial Pin	87F6413	8.97
TL-5135/SPBP	Coin	1700mAh	1.30 × 0.39″ (33.02 × 9.91)	3 Pin	27C7062	13.80
TL-5134/SPBP	Coin	1000mAh	1.30 × 0.26″ (33.02 × 6.60)	3 Pin	27C7050	10.86
TL-5186/P-BP	Coin	400mAh	0.89 × 0.26″ (33.02 × 6.60)	2 Pin	87F6414	7.58

(6866)

XTRA™ 3.6-VOLT LITHIUM BATTERIES

Suffix "BP" in mfg. part no. indicates blister pack.

Mfg. Part No.	Size	Capacity	D × H	Terminals	Stock No.	Price Each 1-24
TL-2150/S-BP	1/2AA	950mAh	0.58 x 1.00″ (14.73 × 25.40)	Pressure Contact	87F6402	7.30
TL-2150/T-BP	1/2AA	950mAh	0.58 x 1.00″ (14.73 × 25.40)	Solder Tab	87F6403	7.86
TL-2150/P-BP	1/2AA	950mAh	0.58 x 1.00″ (14.73 × 25.40)	Axial Pin	87F6404	7.86
TL-2155/S-BP	2/3AA	1450mAh	0.58 x 1.28″ (14.73 x 32.51)	Pressure Contact	92F2488	8.54
TL-2155/T-BP	2/3AA	1450mAh	0.58 x 1.28″ (14.73 x 32.51)	Solder Tap	92F2489	8.64
TL-2155/P-BP	2/3AA	1450mAh	0.58 x 1.28″ (14.73 x 32.51)	Axial Pin	92F2490	8.64
TL-2100/S-BP	AA	2100mAh	0.58 x 2.00″ (14.73 × 50.80)	Pressure Contact	87F6405	8.80
TL-2100/T-BP	AA	2100mAh	0.58 x 2.00″ (14.73 × 50.80)	Solder Tab	87F6406	9.36
TL-2100/P-BP	AA	2100mAh	0.58 x 2.00″ (14.73 × 50.80)	Axial Pin	87F6407	9.53
TL-2200/S-BP	C	7200mAh	1.02 x 1.98″ (25.91 × 50.29)	Pressure Contact	00Z1076	21.07

➤ CONTINUED ➤

LITHIUM BATTERIES

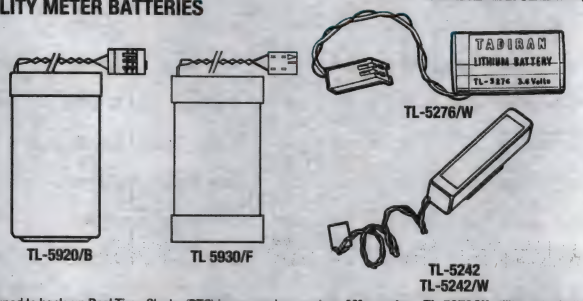
XTRA™ 3.6-VOLT LITHIUM BATTERIES (CONT.)

Mfg. Part No.	Size	Capacity	D × H	Terminals	Stock No.	Price Each 1-24
TL-2200/T-BP	C	7200mAh	1.02 x 1.98″ (25.91 × 50.29)	Solder Tab	00Z1072	22.01
TL-2200/P-BP	C	7200mAh	1.00 x 2.00″ (25.40 × 50.80)	Axial Pin	00Z1073	21.81
TL-2300/S-BP	D	16500mAh	1.30 x 2.43″ (33.02 × 61.72)	Pressure Contact	00Z1074	28.01
TL-2300/T-BP	D	16500mAh	1.30 x 2.43″ (33.02 × 61.72)	Solder Tab	00Z1075	28.55
XTRA™ 3.6-VOLT HIGH-CAPACITY CELLS						
TL-5902/S-BP	1/2AA	1200mAh	0.58 x 1.00″ (14.73 x 25.40)	Pressure Contact	50F1555	8.54
TL-5902/T-BP	1/2AA	1200mAh	0.58 x 1.00″ (14.73 x 25.40)	Solder Tab	50F1556	8.97
TL-5902/P-BP	1/2AA	1200mAh	0.58 x 1.00″ (14.73 x 25.40)	Axial Pin	50F1557	9.13
TL-5955/T-BP	2/3AA	1650mAh	0.58 x 1.28″ (14.73 x 32.51)	Solder Tab	92F2492	9.55
TL-5955/P-BP	2/3AA	1650mAh	0.58 x 1.28″ (14.73 x 32.51)	Axial Pin	92F2493	9.92
TL-5903/S-BP	AA	2400mAh	0.58 x 2.00″ (14.73 × 50.80)	Pressure Contact	50F1558	10.48
TL-5903/T-BP	AA	2400mAh	0.58 x 2.00″ (14.73 × 50.80)	Solder Tab	50F1559	11.10
TL-5903/P-BP	AA	2400mAh	0.58 x 2.00″ (14.73 × 50.80)	Axial Pin	50F1613	11.10

(6867)

COMPUTER CLOCK AND UTILITY METER BATTERIES

TADIRAN



Designed to back-up Real Time Clocks (RTC) in personal computers. **Mfg. part no. TL-5276/W** utility meter battery for "Time-of-Day" meters.

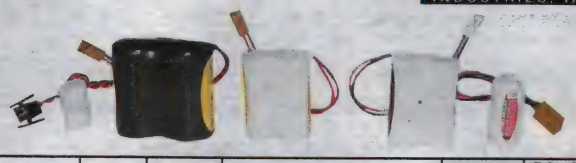
3.6-VOLT SINGLE CELL BATTERY PACKS

Mfg. Part No.	Dimensions	Primary US Usage	Stock No.	Price Each 1-24
TL5242	0.7 x 0.6 x 2.4″ (17.78 x 15.24 × 60.96)	AT&T 3B Series, 3 Pin Connector	87F6423	14.11
TL5242/W	0.7 x 0.6 x 2.4″ (17.78 x 15.24 × 60.96)	Acer, Hyundai, Wise & Most Clones, 4 Pin Connector	87F6425	13.85
TL5276/W	0.7 x 1.0 x 1.13″ (17.78 x 25.40 × 28.70)	Utility Meter, 2 Pin Method Connector	95F5073	10.96
2 CELL BATTERY PACKS				
TL-5930/F	1.378 Dia. x 2.441 L″ (35.0 x 62.5)	Utility Meter, 3.6 Volt	13C2730	32.42
TL-5920/B	1.102 Dia. x 2.008 L″ (28.0 x 51.0)	Utility Meter, 3.6 Volt	13C2729	26.80

(6868)

LITHIUM PLC BATTERIES

DANTONA INDUSTRIES, INC.



Mfg. Part No.	Voltage	Capacity (Ah)	Used In	Stock No.	Price Each 1-24
COMP-109	3	850mAh	Allen Bradley 1747-BA	15C6516	26.25
COMP- 172	3	1.2	Various Printed Logic Controls	34C6127	22.57
COMP-110	3	1.2	B9651T	15C6519	25.63
COMP-304	3	1.2	BR2/3-AB, 1756-BA2	14P5179	36.42
COMP-66	3	1.4	B9508	17C1986	46.35
COMP-105	3	1.4	GE1C600KD5100, 259A9532P1	15C6514	25.91
COMP-114	3	1.5	B9781T	42M1346	25.63
COMP-192	3	1.8	A98L-0031-0006	42M1348	31.47
COMP-212	3	1.8	B9670AB, 1756-BA1	63H2363	43.05

➤CONTINUED➤

LITHIUM PLC BATTERIES (CONT.)

Mfg. Part No.	Voltage	Capacity (Ah)	Used In	Stock No.	Price Each 1-24
COMP-113	3	1.8	PLC-5/11, 5/20, 5/30, 5/40 and 5/60	24C6653	37.88
LITH46	3	2.5	Various Printed Logic Controls	25C3891	46.55
COMP-177	3	5	Various Printed Logic Controls	25C3008	44.26
COMP-203	3.6	1.9	ER6-WK11	83H1619	49.59
COMP-153	3.6	2.1	B9670MC, A6BAT	46P7234	43.19
COMP-14	6	1.7	B9630T	42M1347	37.52
COMP-208	6	1.8	BR-AGCF2W	42M1349	94.02
LITH-49	6	2.5	Various Printed Logic Controls	25C5941	71.43
CUSTOM-107	6	2.9	BR2/3AGCT4A, A98L-0031-0025	64M0138	110.05
COMP-164	6	5	Various Printed Logic Controls	15C6521	65.54

(68304)

3.6V LITHIUM CYLINDRICAL BATTERIES

DANTONA INDUSTRIES, INC.

Ideal for use as computer battery replacements.

Mfg. Part No.	Size	Capacity (mAh)	Dia. x H (mm)		Terminals	Stock No.	Price Each 1-9
LS14250	1/2AA	1.2	14.5	25.2	Raised Positive and Flat Negative	30C1750	9.10
LS14250 AX	1/2AA	1.2	14.5	25.2	Axial Leaded	40C1847	12.62
LS14250W	1/2AA	1.2	14.5	24.5	Raised Positive and Flat Negative	93T9726	13.02
LS-17500	A	3.6	17.0	50.9	Raised Positive and Flat Negative	93K7889	14.05
LS14500 AX	AA	2.6	14.5	50.5	Axial Leaded	06H0748	11.33
LS14500	AA	2.6	14.6	50.3	Raised Positive and Flat Negative	23C2691	9.42
LS14500W	AA	2.6	14.6	50.3	Raised Positive and Flat Negative	92T7577	14.20
LSH14	C	5.8	26	50.4	Raised Positive and Flat Negative	54X1947	38.68
LSH20 BA	D	13.0	33.4	61.6	Raised Positive and Flat Negative	01N4920	54.68
LS33600	D	16.5.0	33.4	61.6	Raised Positive and Flat Negative	54X1948	32.15

(114891)

COIN CELL LITHIUM BATTERIES

Panasonic. BATTERIES

Coin cell lithium batteries are 3V high-energy, high-reliability batteries. Additional sizes and pin configurations are available; *go online or call.*

CARBON MONOFLUORIDE LITHIUM

Mfg. Part No.	Dia. x H (mm)	Cap. (mAh)	Description	Stock No.	Price Each 1-99	Price Each 100-249
BR1216	12.5 x 1.6	25	Pressure Contact	54X1945	1.98	1.62
BR1225	12.5 x 2.5	48	Pressure Contact	42M1340	2.49	2.12
BR1225-1HC	12.0 x 2.5	48	2 PC Pins Horizontal	31C2180	2.82	2.64
BR1225-1VC	12.5 x 2.5	48	2 PC Pins Vertical	42M1341	3.61	3.08
BR1225-HBN	12.5 x 2.5	48	2 PC Pins Vertical	54X3645	2.69	2.20
BR1616	16.0 x 1.6	48	Pressure Contact	15C6481	1.94	1.83
BR2032	20.0 x 3.2	190	Pressure Contact	15C6483	2.15	2.02
BR2032-F2N	20.0 x 3.2	190	2 PC Pins Vertical	54X3646	2.77	2.26
BR2032-VCN	20.0 x 3.2	190	2 PC Pins Vertical	54X3648	3.00	2.46
BR2032-GUFN	20.0 x 3.2	190	3 PC Pins Horizontal	54X3647	2.77	2.26
BR2032-1HE	20.0 x 3.2	200	2 PC Pins Horizontal	42M1342	3.81	3.25
BR2032-1HF	20.0 x 3.2	200	2 PC Pins Horizontal	42M1343	3.75	3.21
BR2032-1HG	20.0 x 3.2	200	3 PC Pins Horizontal	42M1344	3.75	3.21
BR2325	23.0 x 2.5	165	Pressure Contact	15C6484	2.17	2.05
BR2325-1HB	23.0 x 2.5	165	2 PC Pins Horizontal	22C5028	3.44	3.25
BR2325-1HC	23.0 x 2.5	165	2 PC Pins Horizontal	15C6485	2.86	2.70
BR2325-1VC	23.0 x 2.5	165	2 PC Pins Vertical	15C6486	2.90	2.73

➤CONTINUED➤

COIN CELL LITHIUM BATTERIES (CONT.)

Mfg. Part No.	Dia. x H (mm)	Cap. (mAh)	Description	Stock No.	Price Each 1-99	Price Each 100-249
BR2325-HGN	23.0 x 2.5	165	3 PC Pins Horizontal	54X3649	2.82	2.30
BR2325-VGN	23.0 x 2.5	165	3 PC Pins Vertical	54X3650	4.11	3.36
BR2330	23.0 x 3.0	255	Pressure Contact	15C6487	2.93	2.76
BR2330-1HE	23.0 x 3.0	255	2 PC Pins Horizontal	27C7453	3.44	3.25
BR2330-1VC	23.0 x 3.0	255	2 PC Pins Vertical	99M1138	4.54	3.88
BR2330-1GU	23.0 x 3.0	255	3 PC Pins Horizontal	42M1345	4.54	3.88
BR2330-1GV	23.0 x 3.0	255	3 PC Pins Vertical	83H0625	4.54	3.88
HIGH-TEMPERATURE CARBON MONOFLUORIDE LITHIUM						
BR1225A/FAN	12.5 x 2.5	48	2 PC Pins Flat	97H9272	3.84	3.27
BR1225A/HAN	12.5 x 2.5	48	2 PC Pins Horizontal	40T0039	9.72	8.30
BR1225A/HBN	12.5 x 2.5	48	2 PC Pins Horizontal	73C7228	3.84	3.27
BR1632A/ FAN	16.0 x 3.2	120	2 PC Pins Flat	01J2054	4.15	3.55
BR1632A/ HAN	16.0 x 3.2	120	2 PC Pins Horizontal	40T0041	3.89	3.32
BR1632A/ HBN	16.0 x 3.2	120	2 PC Pins Horizontal	40T0042	3.96	3.38
BR1632A/VAN	16.0 x 3.2	120	2 PC Pins Vertical	63K9910	3.51	3.00
BR1632A/GAN	16.0 x 3.2	120	3 PC Pins Horizontal	20J4907	4.21	3.59
BR2330A/ FAN	23.0 x 3.0	255	2 PC Pins Flat	92C1873	4.54	3.88
BR2330A/HDN	23.0 x 3.0	255	2 PC Pins Horizontal	66H6595	4.54	3.88
BR2330A/VAN	23.0 x 3.0	255	2 PC Pins Vertical	64K3409	3.96	3.38
BR2330A/GAN	23.0 x 3.0	255	3 PC Pins Horizontal	40T0043	9.72	8.30
BR2477A/FBN	24.5 x 7.7	1000	2 PC Pins Flat	40T0044	7.04	6.00
BR2477A/HB	24.5 x 7.7	1000	2 PC Pins Horizontal	92C1869	6.73	5.74
BR2477A/GAN	24.5 x 7.7	1000	3 PC Pins Horizontal	40T0045	7.12	6.08
MANGANESE DIOXIDE LITHIUM						
CR1025	10.0 x 2.5	30	Pressure Contact	15C6528	1.80	1.69
CR1216	12.5 x 1.6	25	Pressure Contact	15C6529	1.50	1.41
CR1220	12.5 x 2.0	35	Pressure Contact	15C6530	1.57	1.48
CR1616	16.0 x 1.6	55	Pressure Contact	15C6538	1.24	1.17
CR1620	16.0 x 2.0	75	Pressure Contact	15C6539	1.40	1.31
CR-1632	16.0 x 3.2	120	Pressure Contact	20C5701	2.15	2.02
CR2012	20.0 x 1.2	55	Pessure Contact	30C5361	2.14	1.72
CR2016	20.0 x 1.6	90	Pressure Contact	15C6544	0.79	0.74
CR2016/F2N	20.0 x 1.6	90	2 PC Pins Horizontal	42M1350	3.56	3.04
CR2025	20.0 x 2.5	165	Pressure Contact	15C6545	0.98	0.92
CR2032	20.0 x 3.2	225	Pressure Contact	13C1019	1.37	1.10
CR2032-1F2	20.0 x 3.2	220	2 PC Pins Vertical	42M1351	3.28	2.80
CR2032-1HF	20.0 x 3.2	220	2 PC Pins Horizontal	42M1352	3.51	3.00
CR2330	23.0 x 3.0	265	Pressure Contact	15C6551	2.34	2.20
CR2330-1HF	23.0 x 3.0	265	2 PC Pins Horizontal	42M1353	3.89	3.32
CR2354	23.0 x 5.4	560	Pressure Contact	15C6553	2.97	2.80
CR2354-1HE	23.0 x 5.4	560	2 PC Pins Horizontal	42M1355	4.54	3.88
CR2354-1GU	23.0 x 5.4	560	3 PC Pins Horizontal	42M1354	4.60	3.94
CR2450	24.5 x 5.0	550	Pressure Contact	14C3962	3.76	3.23
CR2450-H1A	24.5 x 5.0	620	2 PC Pins Horizontal	42M1357	4.21	3.59
CR2450-G1A	24.5 x 5.0	620	3 PC Pins Horizontal	42M1356	4.48	3.83
CR2477	24.5 x 7.7	1000	Pressure Contact	15C6561	4.57	4.30
CR2477-1HF	24.0 x 7.7	1000	2 PC Pins Horizontal	26C1276	8.87	7.56
CR3032	30.0 x 3.2	500	Pressure Contact	15C6562	4.79	4.51
CR3032-1F2	30.0 x 3.2	500	2 PC Pins Horizontal	42M1358	5.50	4.70
CR3032-VCN	30.0 x 3.2	500	2 PC Pins Vertical	54X1946	4.45	3.64

(6887)

CYLINDRICAL LITHIUM BATTERIES

Panasonic. BATTERIES

Leakproof 3V batteries offer high energy density, long shelf life, stable operation and wide operating temperatures.

Carbon Monofluoride Lithium

CARBON MONOFLUORIDE LITHIUM

Mfg. Part No.	Size	Capacity (mAh)	Terminals	Stock No.	Price Each 1-24	Price Each 25-99
BR-2/3ASSP	2/3A	1200	Pressure Contacts	15C6480	6.24	5.88
BR-2/3AE5SP	2/3A	1200	2 PC Pins	15C6479	11.47	10.79
BR-2/3AE2SP	2/3A	1200	3 PC Pins	15C6478	9.46	8.91
BR-2/3AT2SP	2/3A	1.2	Solder Tabs	11C1392	8.60	8.09
BR-2/3AGSSP	2/3A	1.45	Pressure Contact	99M1136	8.88	8.36
BR-2/3AGT2SP	2/3A	1.45	Solder Tabs	10R0203	10.49	9.61
BR-A	A	1800	Pressure Contacts	15C6474	16.27	15.31
BR-AG	A	2.2	Solder Tabs	99M1134	21.47	20.20
BR-AGT	A	2.2	Solder Tabs	99M1135	19.43	18.29

➤ CONTINUED ➤

CYLINDRICAL LITHIUM BATTERIES (CONT.)

Mfg. Part No.	Size	Capacity (mAh)	Terminals	Stock No.	Price Each 1-24	Price Each 25-99
BR-CSSP	C	5000	Pressure Contacts	15C6475	21.47	20.21
BR-CT2SP	C	5000	Solder Tabs	15C6476	23.60	22.21

(6886)

CR SERIES USER REPLACEABLE LITHIUM BATTERIES

Panasonic. BATTERIES

- Consumer replaceable
- High safety and reliability
- High current pulse discharge capability
- Superior shelf life/minimal discharge
- Wide temperature range (-40°C to +70°C)
- Lightweight
- High energy density

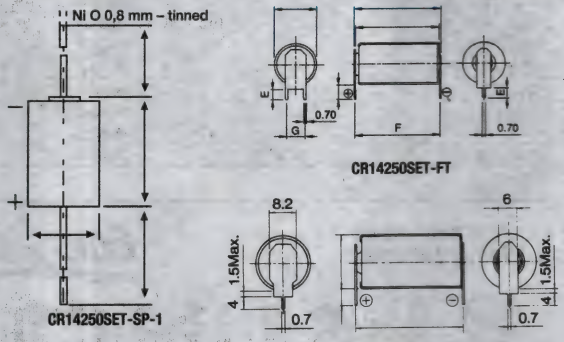
User replaceable lithium batteries offer high voltage and high energy density. They are available in two types: poly-carbonmonofluoride and manganese dioxide (CFn/Li and MnO2/Li).

Mfg. Part No.	Voltage (V)	Capacity (mAh)	Dimensions (mm)	Stock No.	Price Each 1-9
CR-123A/BE	3	1.4	34.5 x 17.0	13C2846	9.28
CR2	3	850	27.0 x 15.6	15R3550	6.19
CR-V3P	3	3.3	52.0 x 28.4 x 14.4	41T3174	20.22

(196199)

3V LITHIUM CYLINDRICAL CELLS (LASER-SEALED)

SANYO



Mfg. Part No.	Capacity (mAh)	Dimensions (In.) Dia. x H	Description	Stock No.	Price Each 1-24	Price Each 25-99
CR14250SE	850	0.57 x 0.98	Pressure Contacts	15C6534	7.13	6.71
CR14250SET-FT	850	0.57 x 0.98	3 Pin PC Mount	15C6535	9.28	8.74
CR14250SET-P1	850	0.57 x 0.98	2 Pin PC Mount	15C6536	7.66	7.21
CR14250SET-SP-1	850	0.57 x 0.98	Axial Leads	15C6537	7.66	7.21
CR17335SE	1800	0.67 x 1.32	Pressure Contacts	15C6540	6.83	6.43
CR12600SE	1500	0.47 x 2.36	Pressure Contacts	15C6533	9.51	8.95
CR17450SE	2500	0.67 x 1.76	Pressure Contacts	15C6542	18.39	17.31

(58975)

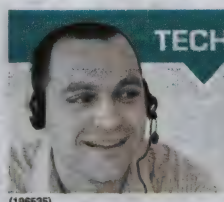
HIGH-POWER PHOTO LITHIUM BATTERIES

SANYO

Mfg. part No.	Voltage (V)	Capacity	Dimensions Dia. x H	Stock No.	Price Each 1-24	Price Each 25-99
CR1/3N	3	170mAh	0.45 x 0.43"	15C6527	5.63	5.31
2CR1/3N	6	170mAh	0.51 x 0.98"	16C0932	12.15	11.43

(58976)

TECHNICAL SUPPORT HOTLINE



Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

3V LITHIUM COIN CELLS WITH PC BOARD PINS

SANYO

Fig. 1

Fig. 2

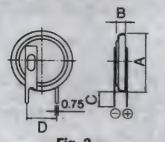


Fig. 3

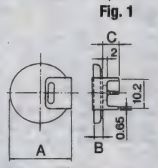


Fig. 4

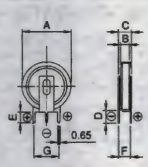


Fig. 5

Mfg. Part No.	Capacity (mAh)	Dimensions (mm) A	B	C	D	Fig.	Stock No.	Price Each 1-24	25-49
CR2430	270	24.0	3.0	...	...	1	12C8684	2.02	1.75
CR2450	550	24.0	5.0	...	...	1	14C3962	3.76	3.23
CR1220-P1	35	12.5	2.0	6.5	10.0	2	15C6531	2.63	2.48
CR2032-P5-1	200	21.0	3.2	9.0	15.2	2	15C6548	1.51	1.42
CR2032-T14-1	200	21.5	3.2	6.5	20.5	2	15C6549	1.52	1.43
CR2430-P1-2	270	25.5	3.0	6.5	20.3	2	15C6556	2.31	2.17
CR2450-P2	550	25.5	5.0	6.5	20.3	2	15C6560	2.79	2.63
CR2032-T9-2	200	20.5	3.2	4.5	10.5	3	15C6550	1.51	1.42
CR2430-P2-2	270	25.0	3.0	4.5	10.5	3	15C6557	2.38	2.24
CR2032-FT1	200	21.0	3.2	6.0	...	4	15C6546	1.49	1.40
CR2450-FT1	550	25.5	5.0	5.0	...	4	15C6558	2.74	2.58
CR2032-FT4-2	200	20.5	3.2	5.0	3.4	5	15C6547	1.49	1.40
CR2430-FT4-2	270	25.0	3.0	5.0	3.2	5	15C6555	2.31	2.17
CR2450-FT5-4	550	24.5	5.0	5.0	5.1	5	15C6559	2.74	2.58

(58977)

e²® RECHARGEABLE NICKEL-METAL HYDRIDE BATTERIES

Energizer

High-energy e²® rechargeable nickel-metal hydride batteries replace Nicads. Environmentally-safe, these NiMH batteries can be recharged up to 1000 times. Designed for high-drain, high-tech devices. Select from a wide assortment of Energizer® battery chargers; *order separately online.* **Suffix BP** in mfg. part no. indicates blister pack. **Sold in package quantities listed.**

Mfg. Part No.	Size	Voltage	Capacity	Pkg. of	Stock No.	Price per Pkg. 1-4
NH15BP-2	AA	1.2	2.3Ah	2	01C4688	10.87
NH15BP-4	AA	1.2	2.3Ah	4	03C7535	24.53
NH15BP-8	AA	1.2	2.3Ah	8	60K8572	31.40
NH12BP-2	AAA	1.2	850mAh	2	03C7534	10.73
NH12BP-4 700MAH	AAA	1.2	700mAh	4	82T4531	16.96
NH35BP-2	C	1.2	2.5Ah	2	03C7537	13.54
NH50BP-2	D	1.2	2.5Ah	2	95B1690	13.20
NH22NBP	-999	8.4	175mAh	1	03C7536	13.38

(62176)

element14 COMMUNITY

Get inspired, collaborate, design, research, ask experts questions.

element14.com

(196545)

EVERYDAY RECHARGEABLE NIMH BATTERIES

ULTRALAST Green

The Power of Green™ — Saves the Environment and Money!

- Pre-charged — ready-to-use right out of the pack
- Choice of AA and AAA in two, four and eight packs
- Long lasting performance
- Keeps charge up to 6+ months in low power consumption devices
- Holds 80% of charge after 12 months when not in use
- Charge as many as 500 times, or up to three years
- Ideal for household devices

ULGED8AA

Replace disposable batteries with UltraLast Green™ Everyday rechargeable nickel-metal hydride (NiMH) batteries in every application with sacrificing performance. Perfect for low-power consumption devices, such as remote controls, clocks, flashlights, and other common household applications. One UltraLast Green™ Everyday rechargeable battery can keep up to 1000 disposable alkaline batteries out of landfills. Packaged in eco-friendly materials. *Order UltaLast Green™ battery chargers separately on pages 1570-1571*

Mfg. Part No.	Size	Voltage	Capacity	Pkg. of	Stock No.	Price per Pkg. 1-9
ULGED2AA	AA	1.2	2.1Ah	2	01T1110	8.44
ULGED4AA	AA	1.2	2.1Ah	4	01T1112	14.14
ULGED8AA	AA	1.2	2.1Ah	8	01T1114	25.42
ULGED2AAA	AAA	1.2	750mAh	2	01T1111	5.94
ULGED4AAA	AAA	1.2	750mAh	4	01T1113	7.77
ULGED8AAA	AAA	1.2	750mAh	8	01T1115	14.14

(190898)

HIGH-POWER RECHARGEABLE NIMH BATTERIES

ULTRALAST Green

The Power of Green™ — Saves the Environment and Money!

- Long lasting performance for power-hungry devices
- Choice of AA and AAA in two, four and eight packs
- Up to four times the life of standard batteries on each charge
- Charge as many as 500 times, or up to three years

ULGHP8AA

Replace disposable batteries with UltraLast Green™ High-Power rechargeable nickel-metal hydride (NiMH) batteries in every application with sacrificing performance. Perfect for high-power consumption digital and electronic devices, such as digital cameras, flashes, hand-held games, remote-control toys, and other items that require high power or long-usage time. One UltraLast Green™ High-Power rechargeable battery can keep up to 1000 disposable alkaline batteries out of landfills. Packaged in eco-friendly materials. *Order UltaLast Green™ battery chargers separately on pages 1570-1571*

Mfg. Part No.	Size	Voltage	Capacity	Pkg. of	Stock No.	Price per Pkg. 1-9
ULGHP2AA	AA	1.2	2.4Ah	2	01T1118	8.80
ULGHP4AA	AA	1.2	2.4Ah	4	01T1120	17.11
ULGHP8AA	AA	1.2	2.4Ah	8	84R6528	30.93
ULGHP2AAA	AAA	1.2	800mAh	2	01T1119	6.00
ULGHP4AAA	AAA	1.2	800mAh	4	01T1121	11.81
ULGHP8AAA	AAA	1.2	800mAh	8	01T1122	21.67

(190899)

MEGA CHARGER™ STANDARD EIGHT-SLOT AA/AAA BATTERY CHARGER

RoHS Compliant Available

ULTRALAST Green

The Power of Green™

- Mega charging — can charge eight batteries at once
- Multi-channel design allows for charging AA or AAA NiMH batteries
- Charges in pairs of two, up to eight batteries at one time
- Charges batteries in two to five hours*
- LED indicator light on each channel illuminates charging status
- Easy to use

Mfg. part no. ULG8SLOT Mega Charger™ standard eight-slot AA/AAA rechargeable battery charger comes complete with one AC wall adapter Packaged in eco-friendly materials. Don't forget the batteries — *order UltraLast Green™ Everyday and High-Power rechargeable batteries separately on this page.*

Mfg. Part No.	Description	Stock No.	Price Each
● ULG8SLOT	Mega Charger™ Standard 8-Slot AA/AAA Battery Charger	01T1128	48.10

*Depending on how many batteries are loaded and actively charging

(190992)

SWIFT CHARGER™ FAST, HIGH-SPEED AA/AAA BATTERY CHARGER

RoHS Compliant Available

ULTRALAST green

The Power of Green™

- Quickly charge from home, office or auto
- High-speed — completely charges in 1 to 2 hours*
- LCD screen displays charge status for easy battery
- Charge while on the move — DC adapter included for charging in car, RV, boat
- Charges up to four NiMH AA or AAA rechargeable batteries
- Adjustable terminals adapt to battery size
- Compact design goes anywhere

Mfg. part no. ULGFAST Swift Charger™ AA/AAA high-speed battery charger features settings for two or four NiMH batteries to direct power to the charger terminals in use, allowing batteries to charge as fast as possible for the quantity loaded. LCD screen shows flashing bars in battery icon while charging and solid bars when charging is finished. Swift Charger™ comes complete with four AA UltraLast Green™ High-Power rechargeable batteries, one AC wall adapter, and one DC automotive adapter. Packaged in eco-friendly materials.

Mfg. Part No.	Description	Stock No.	Price Each
● ULGFAST	Swift Charger™ High-Speed 4 AA/AAA Battery Charger with 4 AA UltraLast Green™ High-Power Rechargeable Batteries	01T1117	53.28

*Depending on how many batteries are loaded and actively charging
(190979)

VALUE CHARGER™ STANDARD AA/AAA BATTERY CHARGER

RoHS Compliant Available

ULTRALAST green

The Power of Green™

- Easy-to-use overnight battery charger
- Multi-channel design allows for charging AA or AAA NiMH batteries
- Charges in pairs of two, up to four batteries at once
- AC plug folds into back of charger — no extra parts to keep track of
- Compact design for easy storage and travel use
- Charges batteries in eight to twelve hours*

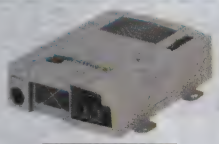
ULGVALUE2

Mfg. part no. ULGVALUE4 Value Charger™ 4 AA/2 AAA standard battery charger comes complete with choice of two or four AA UltraLast™ 1800 NiMH rechargeable batteries and one folding AC plug on back of charger. Packaged in eco-friendly materials.

Mfg. Part No.	Description	Stock No.	Price Each
● ULGVALUE4	Value Charger™ 4 AA/2 AAA Battery Charger with 4 AA UltraLast™ 1800 NiMH Rechargeable Batteries	01T1127	23.52

*Depending on whether AA or AAA batteries are loaded and actively charging
(190991)

TRUECHARGE2 SERIES BATTERY CHARGERS



TRUECHARGE2 Series

TRUECharge2 battery chargers feature low electrical interference and efficient, power factor corrected multistage charging. They can be mounted in a variety of positions given their drip-proof design and enable quick installation with easy-to-access AC and DC wiring compartments. Available in four 12V models, they are versatile enough to be used in a wide variety of conditions and locations. Auto-ranging AC input voltage capability (90 - 265 volts AC) makes traveling abroad and handling poor-quality power a breeze. The easy-to-read display can be augmented with an optional remote panel.

Mfg. Part No.	Output Voltage (V)	Output Current (A)	Stock No.	Price Each
804-1210	12	10	02P6992	227.79
804-1220-02	12	20	03P9691	416.48
804-1240-02	12	40	31T0805	525.74
804-1260-02	12	60	85T8579	836.29
804-2410	24	10	06W1864	482.63
804-2420	24	20	06W1865	589.88
804-2430	24	30	06W1866	836.56

(85045)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

LinkPRO / LinkLITE BATTERY MONITORS

xantrex Smart choice for power

Performance Features

- Read your battery bank like a fuel gauge
- Provides critical information about the status of your battery bank
- Displays voltage, current, consumed amphours and remaining battery capacity
- Secondary battery bank voltage monitoring
- Auto sensing battery voltage inputs
- Large backlit LCD Display
- Quick nut mounting construction
- Programmable alarm relay
- Shunt selection capability enables flexible system integration
- Splash proof frontpanel
- 500A shunt included
- CE and e-mark certified

LinkPRO LinkLITE

LinkPRO Additional Performance Features

- Displays time remaining
- Communication/expansion port
- Stores a wide range of history events in internal memory
- Advanced programmable alarm relay
- Battery temperature sensor input

Defining the amount of energy available in a battery is a complex task since battery age, discharge current and temperature all influence the actual battery capacity. High performance measuring circuits, along with complex software algorithms, are used to exactly determine the remaining battery capacity. A new shunt selection feature enables the **LinkPRO** and **LinkLITE** to measure currents up to 10,000 and 1,000 amps respectively. The **LinkPRO** and **LinkLITE** selectively displays voltage, charge and discharge current, consumed amphours, remaining battery capacity and the **LinkPRO** also displays the time remaining of your battery bank. Using a clear backlit LCD Display and an intuitive user interface, all parameters can be recalled with just a button press. A second battery input is also provided to monitor voltage on a second battery bank. The **LinkPRO** and **LinkLITE** are equipped with an internal programmable alarm relay, to run a generator when needed or to turn off devices when the battery voltage exceeds programmable boundaries.

Mfg. Part No.	Description	Stock No.	Price Each
84-2031-00	LinkPRO Battery Monitor	45P5751	392.27
84203000	LinkLITE Battery Monitor	11P0180	336.23

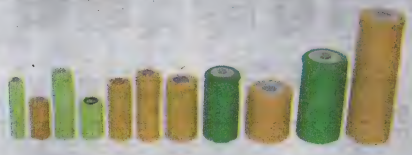
ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
854-2019-01	Communication Kit	64M1116	278.85
854-2021-01	Connection Kit - 50ft (15m)	45P5753	139.43
854-2022-01	Temperature Sensor - 32ft (10m)	45P5752	88.68

(196682)

CONSUMER-TYPE RECHARGEABLE BATTERIES

DANTONA INDUSTRIES, INC.



CONSUMER-TYPE NICAD/NIMH SINGLE CELLS

Mfg. Part No.	Size	Chem.	Capacity	Stock No.	Price Each 1-24
AA-600	AA	NiCd	600mAh	93C9868	1.12
AA-800	AA	NiCd	800mAh	93C9870	1.30
AA-1000	AA	NiCd	1Ah	93C9860	1.84
AA-1600NM	AA	NiMH	1.6Ah	93C9864	2.82
AA-1800NM	AA	NiMH	1.8Ah	29M9555	4.57
AA-2700NM	AA	NiMH	2.7Ah	69R7513	6.71
AAA-350	AAA	NiCd	350mAh	46P4598	1.84
AAA-750NM	AAA	NiMH	750mAh	54K3275	2.53
AAA-1000NM	AAA	NiMH	1Ah	50R7306	4.16
C-2000	C	NiCd	2Ah	83K3445	5.03
C2500	C	NiCd	2.5Ah	42H5271	7.92
D-5000	D	NiCd	5Ah	93C9885	10.65
D-9000NM	D	NiMH	9Ah	46M4706	26.40

FLAT TOP RECHARGEABLE NICAD/NIMH CELLS FOR ASSEMBLY

AA-600FT	AA	NiCd	600mAh	93C9869	1.13
AA-800FT	AA	NiCd	800mAh	93C9871	2.02
AA-1000FT	AA	NiCd	1Ah	93C9861	2.41
AA-1800NMFT	AA	NiMH	1.8Ah	93C9867	4.82
AA-2100NMFT	AA	NiMH	2.1Ah	69R7512	4.22
AAA-350FT	AAA	NiCd	350mAh	69R7514	1.95
AAA-750NM-FT	AAA	NiMH	750mAh	69R7515	2.23
1/2AA-400	1/2AA	NiCd	400mAh	69R4517	1.68
1/2AA-750NM	1/2AA	NiMH	750mAh	69R7517	3.65
2/3AF-700	2/3AF	NiCd	700mAh	99M1140	1.97
2/3AF-1100NMGP	2/3AF	NiMH	1.1Ah	69R7845	5.34
4/3AF-3800NM	BE 5/4AF-17MM	NiMH	3.8Ah	69R7518	6.68
4/3AF-4500NM	BE 5/4AF-18MM	NiMH	4.5Ah	69R7519	8.42
SC-1500	SC	NiCd	1.5Ah	93C9890	3.06
SC-1900	SC	NiCd	1.9Ah	93C9892	3.69

CONTINUED

NICKEL CADMIUM BATTERIES • SPECIAL APPLICATION BATTERIES

CONSUMER-TYPE RECHARGEABLE BATTERIES (CONT.)

FLAT TOP RECHARGEABLE NICAD/NIMH CELLS FOR ASSEMBLY

Mfg. Part No.	Size	Chem.	Capacity	Stock No.	Price Each 1-24
SC-2100	SC	NiCd	2.1Ah	98H4098	5.60
SCR-3300NM	SC	NiMH	3.3Ah	85M0076	8.90
AF-1500	AF	NiCd	1.5Ah	46P4599	4.31
AF-2700NM	AF	NiMH	2.7Ah	15C7034	8.90
D-5000FT	D	NiCd	5Ah	93C9886	10.58
1/2D-2400	1/2D	NiCd	2.4Ah	10C2971	13.57
F-13000NM	F	NiMH	13Ah	46M4707	43.23

(72588)

STANDARD/GENERAL USE NI-CAD BATTERIES

SANYO

Nickel-cadmium batteries may be used in cyclic, trickle or float charge.

Mfg. Part No.	Size	Capacity	Dimensions (IN.) Dia. x H (±.02)	Stock No.	Price Each 1-24	Price Each 25-99
N-700AAC	AA	700mAh	0.56 x 1.99	16C0042	3.49	3.29
N-650SC	1/2SC	650mAh	0.91 x 1.02	46M4582	8.81	8.29
KR-7000F	F	7Ah	1.69 x 3.58	15C7093	43.33	39.21

Operating Temperature Range: Charge; 0 to +45° C (Standard) 10 to +45° C (Quick), Discharge; -20 to +60° C, Storage -30 to +50° C

(58970)

SOLDER TABBED NI-CADS/NICKEL METALS

SANYO

Solder tabs are ideal for soldering wire to batteries.

Mfg. Part No.	Size	Capacity	Dimensions Dia. x H(±.02)	Stock No.	Price Each 1-24	Price Each 25-99
N-700AAC-ST	AA	700mAh	0.56" x 1.99"	16C0043	5.37	5.05
HR-AAAUT-ST	AAA	720mAh	0.41" x 1.75"	15C7031	5.33	5.02
HR-AAU-ST	AA	1.65Ah	0.56" x 1.99"	46M4595	7.25	6.83
HR-SCU-ST	SC	3Ah	0.91" x 1.69"	46M4598	14.44	13.59
HR-4/5AU-ST	4/5A	2.15Ah	0.67" x 1.69"	46M4601	8.70	8.20
HR-4/3AU3800-ST	4/3A	3.8Ah	0.67" x 2.64"	46M4599	12.56	11.82
HR-4/3AU4500-ST	4/3A	4.5Ah	0.71" x 2.64"	46M4600	14.16	13.33
HR-DU-ST	D	9Ah	1.34" x 2.42"	46M4597	45.73	43.04

*HR in. mfg. part no. denotes NiMH

(58973)

INDUSTRIAL LANTERN BATTERIES

Energizer

- Designed for heavy current or continuous use
- Operates well in extreme temperatures
- Excellent shelf life
- **Mfg. part no. EN529** features a 40% service improvement

EN529

Mfg. Part No.	Description	NEDA	Dimensions L x W x H (mm)	Stock No.	Price Each 1-4
EN529	Energizer Industrial 6V Alkaline Coil Spring Terminal	908AC	66.7 x 66.7 x 115.0	95F7738	12.38
1231	Eveready 6V CZ Inside Knurl Terminal	918D	136.5 x 73.0 x 125.4	44F968	16.81
1209	Eveready 6V Super Heavy Duty Coil Spring Terminal	908D	68.20 x 68.20 x 115.0	49F1222	4.76
510S	Energizer 6V CZ Knurl External Terminal	915	66.7 x 66.7 x 109.5	03F7083	5.97
732	Eveready 12V HD	926	135.7 x 72.2 x 125.4	03F7103	20.24
EN539	Energizer Industrial 6V Alkaline Flat Top	1412AP	35.6 x 9.18 x 48.5	16F1019	5.24

(62076)

NI-MH COMPUTER BATTERY PACKS (MEMORY BACKUP)

DANTONA INDUSTRIES, INC.

Mfg. Part No.	Termin-ation	Volts	Capacity	Cross Reference	Stock No.	Price Each 1-24
COMP21-3NMH	3-Pin PC Board Mount	2.4	150mAh	2/V100R, 2/V150R, 2/100DKO-PC, 2/150DKO-PC	20C8836	8.01
COMP24-2.4NMH	4-Pin PC Board Mount	2.4	150mAh	MEMPAC 55611-702-012 (NMH)	14C4478	14.16
COMP-16-1NMH	Solder Tab	3.6	80mAh	...	19C9524	7.92
COMP-16-2NMH	2-Pin PC Board Mount	3.6	80mAh	...	19C9477	4.76
COMP-16-3NMH	3-Pin PC Board Mount	3.6	80mAh	...	19C9527	4.76
COMP18-3NMH	3-Pin PC Board Mount	3.6	150mAh	3/V100R, 3/V150R, 3/100DKO-PC, 3/150DKO-PC	12C1554	13.16
COMP-39-2	2-Pin PC Board Mount	3.6	110mAh	P-01N-13P	15C6522	10.65
COMP-11SML	4-Circuit Connector	4.5	800mAh	840, 841, 844	15C6518	29.20

(59075)

LITHIUM PHOTO/ELECTRONIC BATTERIES

Energizer

L91BP-2 L91BP-4

Ideal for all photo and electronic applications. Operating range: -40°C to +60°C.

Mfg. Part No.	Size	Voltage	Capacity	Pkg. of	Stock No.	Price per Pkg. 1-4
L91BP-2	AA	1.5	2.9Ah	2	02C7152	7.71
L91BP-4	AA	1.5	2.9Ah	4	02C7153	13.52
L92BP-2	AAA	1.5	1.25Ah	2	83K9247	7.55
L92BP-4	AAA	1.5	1.25Ah	4	83K9248	13.52
EL1CR2BP	15.5mm dia.	3	800mAh	1	01C8673	8.79
EL123APBP	17mm dia.	3	1.5Ah	1	95F7740	8.68
EL223APBP	35 x 19.5 x 36mm	6	1.5Ah	1	01C8676	14.34
EL2CR5BP	34 x 17 x 45mm		1.5Ah	1	01C8675	14.01

(62074)

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Newest technology, Development Kits & Evaluation Boards from the best suppliers.

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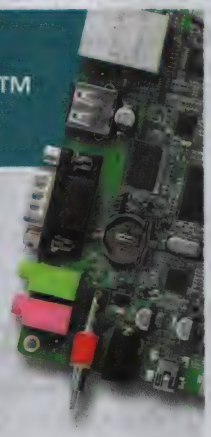


(196527)

DURACELL® SPECIALTY BATTERIES

DURACELL® MORE POWER. MORE LIFE.

TRUSTED EVERYWHERE™

DL1616

DL123A

MN9100

High Power Lithium (HPL) round cells
- Whether for a camera, an alarm system or memory back up, you can rely on the LiMn02 chemistry of HPL Duracell batteries. Using a spiral-wound construction, they offer ideal power supply for high-drain devices, with high energy density and excellent resistance to cold temperatures.

Electronic coin cells
- Our range of high-quality button cells are designed to power electronic devices such as calculators, remotes, memory backups, meters and electronic books. With lithium (3V) or alkaline (1.5V chemistries) these coin cells are ideal for all your devices that require quality long-lasting energy.

Security and medical cells
- Duracell power and reliability for important devices like key fobs, car alarms, GPS trackers, medical devices, security equipment and even child locators. Duracell power you can trust when it matters most.

Duracell silver oxide watch cells
- Our range of silver oxide button batteries provide dependable Duracell power for almost all watches, with high energy density and no self discharge when not in use.

Mfg. Part No.	IEC Size	Voltage	Pkg. of	Stock No.	Price per Pkg. 1-4
ELECTRONICS					
DL1616BPK	CR1616	3.1	1	65W8010	2.35
DL1620BPK	CR1620	3	1	65W8011	1.81
DL2016BPK	CR2016	3	1	65W8012	1.83
DL2025BPK	CR2025	3	1	65W8013	1.81
DL2032BPK	CR2032	3	1	65W8014	1.86
DL2430BPK	CR2430	3	1	65W8016	1.81
DL2450BPK	CR2450	3	1	65W8018	3.49
PX76A675PK	LR44	1.5	1	65W8078	1.65
PHOTO					
DL1/3NBPK	CR11108	3	1	65W8008	4.86
● PX28LBPK	2CR11108	6	1	66W3103	7.38
DL123ABPK	CR17345	3	1	65W8009	7.53
DL223ABPK	CR-P2	6	1	65W8015	14.18
DL245BPK	2CR5	6	1	65W8017	13.83
PX625ABPK	LR9	1.5	1	66W3104	3.25
DLCR2BPK	---	3	1	65W8007	7.11
DLCRV3BPK	---	3	1	65W8006	10.26
SECURITY					
MN21B2PK	3LR50	12	2	65W8055	2.74
MN9100B2PK	LR1	1.5	2	65W8059	4.01
MEDICAL					
PX28A	2CR11108	6	1	65W8077	4.88

(6892)

DURACELL® 1.5V SILVER OXIDE WATCH BATTERIES

DURACELL® MORE POWER. MORE LIFE.

Applications:
- Digital micrometers, calipers, display thermometers and pH testers

Duracell® zinc/silver oxide cell is noted for its high volumetric energy density and its ability to deliver this energy at relatively high current drains. Silver oxide cells are ideal for miniature devices where space is limited, such as small electronic and photographic equipment.

Mfg. Part No.	NEDA Size	Dimensions (mm) H x D	Stock No.	Price Each 1-4
MS76BPK09	1166A	5.4 x 11.6	66W3101	3.57
D301/386PK	1133SO	4.2 x 11.6	65W8021	2.74
D303/357PK	1131SO	5.4 x 11.6	65W8022	2.74
D361/362PK	1158SO	2.1 x 7.9	65W8023	1.95

CONTINUED

DURACELL® 1.5V SILVER OXIDE WATCH BATTERIES (CONT.)

Mfg. Part No.	NEDA Size	Dimensions (mm) H x D	Stock No.	Price Each 1-4
D377BPK	1176SO	2.6 x 6.8	65W8024	2.07
D384/392PK	1135SO	3.6 x 7.9	65W8025	2.05
D389/390PK	1138SO	3.1 x 11.6	65W8026	2.07

(6891)

MISCELLANEOUS BATTERIES

Energizer

539BP

All types feature flat terminals.

Mfg. Part No.	Volts	Chemical System	NEDA	Dim. (mm) L x W x H	Stock No.	Price Each 1-4
539BP	6	Alkaline	1412A	35.6 x 9 x 48.3	49F1214	4.56
A544BPZ	6	Manganese Dioxide	1414A	13Dia. x 25.2	83T0340	5.47
E90BP-2	1.5	Alkaline	910A	12Dia. x 30.2	50F115	4.01
2L76BP	3	Lithium Manganese Dioxide	5008LC	11.6Dia. x 10.8	90F3354	5.31
EPX76BPZ	1.55	Silver Oxide	1107SO	11.6Dia x 5.4	83T0913	3.94

(62079)

ENERGIZER® WATCH/ CALCULATOR BATTERIES

Energizer

ECR2430BP

Additional specialty batteries are available; *go online or call*

Mfg. Part No.	Volts	NEDA	Dimensions (mm)	Stock No.	Price Each 1-24
A76BPZ	1.5	1166A	11.6 Dia. x 5.40	61T7334	1.75
357BPZ	1.55	1131SO	11.6 Dia. x 5.35	83T1330	1.94
377BPZ	1.55	1176SO	6.80 Dia. x 2.60	83T1334	1.35
386BP	1.55	1133SO, 1132SO	11.6 Dia. x 4.20	49F1067	1.51
389BPZ	1.55	1138SO	11.6 Dia. x 3.00	61T7273	1.32
392BPZ	1.55	1135SO, 1134SO	7.90 Dia. x 3.60	61T7339	0.88
ECR2016BP	3	5000LC	20.0 Dia. x 1.60	44F969	2.03
ECR2025BP	3	5003LC	20.0 Dia. x 2.50	44F970	2.03
ECR2032BP	3	5004LC	20.0 Dia. x 3.20	44F971	2.27
ECR2430BP	3	5011LC	24.5 Dia. x 2.4	02H5205	2.43
ECR2450BP	3	5029LC	24.5 Dia. x 3.45	92B9282	4.04
A23BP-2*	12	1181A	10.3 Dia. x 28.5	95F7739	3.77
A544BPZ	6	1414A	12.95 Dia. x 25.15	83T0340	5.47
E625GBPZ	1.5	1124MP	15.5 Dia. x 6.10	83T0923	3.76
395BP	1.55	1162SO	9.5 Dia. x 2.70	46F4494	1.20
379BP	1.55	1191SO	5.8 Dia. x 2.15	90F3352	1.52
391BPZ	1.55	1160SO	11.6 Dia. x 2.10	83T1338	1.28
364BP	1.55	1175SO	6.8 Dia. x 2.15	81F165	1.05

*Sold in packages of two

(6944)

LEAD ACID BATTERIES

GENESIS® PURE LEAD XE SERIES LEAD ACID BATTERIES

- For extreme temperature applications
- 12V pure lead-tin VRLA AGM batteries
- Can be installed in any orientation except inverted
- Excels in demanding environmental and cycling applications such as: Alternative energy applications e.g. solar and wind power Hybrid electric vehicles (HEV)

Mfg. Part No.	Nom. Cap. @ 10 Hr. Rate (Ah)	H x L x W (in.)	Wt. (lbs.)	Brass Terminal (metric)	Stock No.	Price Each 1-4
XE13	13	5.13 x 6.99 x 3.37	12.3	Metric M6 w/ss Hardware	89C2920	287.81
XE13X	13	5.08 x 6.89 x 3.27	12.6	Metric M6 w/ss Hardware	89C2921	362.72
XE16	16	6.57 x 7.12 x 2.99	14.1	Metric M6 w/ss Hardware	89C2922	301.01
XE16X	16	6.62 x 7.22 x 2.99	15.3	Metric M6 w/ss Hardware	89C2923	375.92
XE30	28	4.92 x 6.53 x 6.89	23.4	Metric M6 w/ss Hardware	89C2924	447.15
XE30X	28	4.97 x 6.63 x 6.99	24.9	Metric M6 w/ss Hardware	89C2925	542.43
XE40	42	6.69 x 7.74 x 6.5	29.5	Metric M6 w/ss Hardware	89C2928	591.53
XE40X	42	6.74 x 7.84 x 6.6	31.3	Metric M6 w/ss Hardware	89C2929	696.96
XE60	62	7.12 x 10.85 x 6.76	49.4	Metric M6 w/ss Hardware	45M5963	700.54
XE70	68	6.85 x 12.94 x 6.54	54	Metric M6 w/ss Hardware	89C2930	835.95
XE70X	68	6.9 x 12.96 x 6.56	56.6	Metric M6 w/ss Hardware	89C2931	960.70
XE95	95	8.62 x 12.99 x 6.79	77.4	Metric M6 w/ss Hardware	45M5964	1109.57

(72409)

GENESIS® PURE LEAD ACID BATTERIES FOR HIGH PERFORMANCE AND HIGH RELIABILITY — ALL APPLICATIONS

- Non-Spillable-Use in Any Position
- Use in Float or Cyclic Applications
- Float Applications, 10-15 Year Float Design
- 400 Cycles at 100% DOD
- 2 Year Shelf Life at 25°C
- Capable of High Rate Discharges and Recharge
- All 12V

Mfg. Part No.	Nom. Cap.* (Ah)	H x L x W (in.)	Wt. (lbs.)	Terminals	Stock No.	Price Each 1-4
G12V13AH10EP	13	5.11 x 6.91 x 3.28	10.8	Brass Terminal Metric M6 w/ss Hardware	89C2821	251.45
G12V13AH10EPX	13	5.16 x 7.01 x 3.38	11.7	Brass Terminal Metric M6 w/ss Hardware	68H8654	303.39
G12V16EP	16	6.61 x 7.15 x 3	13.5	Brass Terminal Metric M6 w/ss Hardware	89C2823	232.04
G12V16EPX	16	6.66 x 7.25 x 3.1	14.7	Brass Terminal Metric M6 w/ss Hardware	89C2824	269.68
G12V26AH10EP	26	4.96 x 6.57 x 6.92	22.3	Brass Terminal Metric M6 w/ss Hardware	89C2825	361.36
G12V26EPX	26	5.01 x 6.67 x 7.02	23.8	Brass Terminal Metric M6 w/ss Hardware	89C2826	425.83
G12V42AH10EP	42	6.72 x 7.77 x 6.53	32.9	Brass Terminal Metric M6 w/ss Hardware	89C2827	494.64
G12V42EPX	42	6.77 x 7.87 x 6.63	35.1	Brass Terminal Metric M6 w/ss Hardware	89C2828	558.94
G12V70EP	71	6.93 x 13.02 x 6.62	53.5	Brass Terminal Metric M6 w/ss Hardware	89C2829	685.23
G12V70EPX	71	6.98 x 13.04 x 6.64	56	Brass Terminal Metric M6 w/ss Hardware	89C2830	735.45

*@ 10 hour rate
(72408)

GENESIS NP, NPH, NPX SERIES LEAD-ACID BATTERIES

Features:
- Non-Spillable, Use in any Position
- Use in Float or Cyclic Applications
- Long Life, 5-Year Float Design Life

Applications:
- UPS
- Security
- Electric Mobility
- Telecommunications
- Panels
- Emergency Lights
- Computers
- Medical
- Back-up Power Applications

Choose from a complete line of rechargeable batteries for a wide variety of applications.Use as a supply of backup energy, or as a portable power source. **NP series** can be stored, charged, or operated in any position without leakage. Qualified to non-spillable UN2800 standards. **B suffix** in mfg. part no. indicates bolt; **R suffix** indicates receptacle; **FR suffix** indicates flame-retardant case and cover, rated UL94-V0. Standard housing is ABS resin. Other flame-retardant versions are available; *go online or call.*

NP SERIES

Mfg. Part No.	V	Nom. Cap.* (Ah)	H x L x W (in.)	Wt. (lbs.)	Terminals	Stock No.	Price Each 1-4
NP1.2-6	6	1.2	2.2 x 3.82 x 0.98	0.67	Faston Tab 0.187″	44F7560	16.42
NP3-6	6	3	2.64 x 5.28 x 1.3	1.53	Faston Tab 0.187″	87F634	31.82
NP4-6	6	4	4.15 x 2.76 x 1.85	1.76	Faston Tab 0.187″, 0.25″ opt.	44F7562	12.67
NP4.5-6	6	4.5	4.15 x 2.76 x 1.85	860	Faston Tab 0.187″, 0.25″ opt.	10J0795	18.63
NP5-6	6	5	4.15 x 2.76 x 1.85	950	Faston Tab 0.187″, 0.25″ opt.	17M9094	25.98
NP7-6	6	7	3.94 x 5.95 x 1.3	2.83	Faston Tab 0.187″, 0.25″ opt.	44F7564	24.50
NP10-6	6	10	3.98 x 5.95 x 1.97	4.38	Faston Tab 0.187″, 0.25″ opt.	44F7566	33.55
NP12-6	6	12	3.98 x 5.95 x 1.97	2.05	Faston Tab 0.187″, 0.25″ opt.	45M5977	44.42
NP1.2-12	12	1.2	2.2 x 3.82 x 1.89	1.25	Faston Tab 0.187″	44F7567	22.67
NP2-12	12	2	3.50 x 5.91 x 0.79	1.54	Faston Tab 0.187″	84F1012	58.50
NP2.3-12FR	12	2.3	2.64 x 7.01 x 1.38	2.15	Faston Tab 0.187″	30C5418	41.19
NP2.6-12FR	12	2.6	2.6 x 5.28 x 2.64	3	Faston Tab 0.187″	15B5751	45.71
NP4-12	12	4	4.21 x 3.54 x 2.76	3.74	Faston Tab 0.187″, 0.25″ opt.	44F7570	25.79
NP5-12	12	5	4.21 x 3.54 x 2.76	4	Faston Tab 0.187″, 0.25″ opt.	29C7223	33.99
NP7-12	12	7	3.94 x 5.95 x 2.56	5.72	Faston Tab 0.187″, 0.25″ opt.	87F637	32.75
NP7-12FR/.250T	12	7	3.94 x 5.96 x 2.56	2.59	Faston Tab 0.25″	50B8591	35.36
NP12-12	12	12	3.94 x 5.95 x 3.86	8.95	Faston Tab 0.25″	87F638	78.50
NP18-12B	12	17.2	6.57 x 7.13 x 3	13.6	0.197″ Bolt, Receptacle opt.	91B9919	99.94
NP24-12BFR	12	24	4.92 x 6.54 x 6.89	20	0.197″ Bolt, Receptacle opt.	91B7339	138.60
NP24-12T	12	24	4.92 x 6.54 x 6.89	20	0.25″ Faston Tab	44F7552	131.80
NP33-12B	12	33	6.22 x 7.76 x 5.16	26	0.236″ Bolt, Receptacle opt.	71R4453	147.45
NP38-12B	12	38	6.77 x 7.76 x 6.5	32.16	0.236″ Bolt, Receptacle opt.	92B1830	191.71
NP55-12B	12	56.3	8.15 x 9.02 x 5.43	39.7	0.315″ Bolt, Receptacle opt.	89C2846	268.93
NP75-12	12	75	8.19 x 10.2 x 6.65	58.42	0.315″ Bolt, 0.236″ Receptacle opt.	89C2847	334.57
NP100-12	12	100	8.43 x 12.95 x 6.85	72.62	0.315″ Bolt, 0.236″ Receptacle opt.	89C2844	414.69

NPH SERIES

Mfg. Part No.	V	Nom. Cap.+ (Ah)	H x L x W (in.)	Wt. (lbs.)	Terminals	Stock No.	Price Each 1-9
NPH3.2-12FR	12	3.2	2.52 x 5.28 x 2.64	3.09	Faston Tab 0.187″	15B5742	46.90

CONTINUED

GENESIS NP, NPH, NPX SERIES LEAD-ACID BATTERIES (CONT.)

NPX SERIES

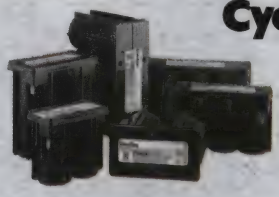
Mfg. Part No.	V	Nom. Cap.* (Ah)	H x L x W (in.)	Wt. (lbs.)	Terminals	Stock No.	Price Each 1-4
NPX-35-6	6	35	3.94 x 5.95 x 1.3	3.15	Faston Tab 0.25", 0.187" opt.	89C2843	40.83
NPX25	12	23	4.21 x 3.54 x 2.75	4.3	Faston Tab 0.25", 0.187" opt.	98B9807	48.67
NPX-35/.250	12	35	3.94 x 5.95 x 2.56	6.06	Faston Tab 0.25", 0.187" opt.	16C1856	48.95
NPX-80B	12	80	6.57 x 7.13 x 2.39	14	0.197" Bolt	01C4781	131.85
NPX-80R	12	80	6.57 x 7.13 x 2.39	14	0.197" Receptacle	45M5974	131.85
NPX-100B	12	95	6.89 x 6.54 x 4.92	21.38	0.197" Bolt	15B5744	211.91
NPX-150BFR	12	150	6.77 x 7.76 x 6.5	31.5	0.236" Bolt Fastened	88F5900	300.69

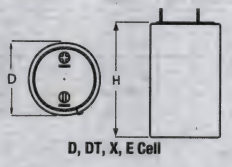
*@ 20 hour rate; + @ 10 hour rate; † @ 5 minute rate
(7049)

CYCLON PURE LEAD ACID BATTERIES FOR HIGH PERFORMANCE AND HIGH RELIABILITY — ALL APPLICATIONS

EnerSys. Power/Full Solutions™

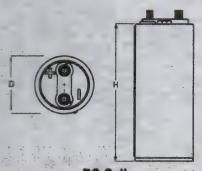
Cyclon.



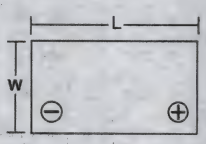


D, DT, X, E Cell

- Long service life
- Minimizes replacements (lowers associated costs)
- Higher reliability
- Lessens system failures
- Cases are UL 94V-0 rated material
- Shock and vibration resistant
- Classified as nonspillable
- Highest recharge efficiency
- Extended storage capability



BC Cell



4-Volt, 6-Volt

The Green Label indicates that this product undergoes additional QC testing to give the same performance at an even higher reliability.

CYCLON® BATTERY 2V SINGLE CELL

Mfg. Part No.	Cell Size	Nom. Cap.* (Ah)	Ht. x Dia. (in.)	Terminal Size (in.)	Wt. (lbs)	Stock No.	Price Each 1-4
0810-0004	D	2.5	2.68 x 1.35	0.187	178	42H5695	15.95
0810-2044	Green Label D	2.5	2.68 x 1.35	0.187	178.03	42H5698	20.32
0860-0004	DT	4.5	4.05 x 1.35	0.187	274.4	42H5696	24.06
0800-0004	X	5	3.21 x 1.75	0.250	0.362	89C2919	24.34
0850-0004	E	8	4.28 x 1.75	0.250	489.9	42H5697	36.03
0840-0004	J	12	5.34 x 2.04	0.312	839.2	89C2836	141.18
0820-0004	BC	25	6.82 x 2.57	M6 (-) and M8(+) Terminals	1.67	89C2813	95.53

CYCLON® BATTERY 4V MONOBLOCS

Mfg. Part No.	Cell Size	Nom. Cap.* (Ah)	H x L x W (in.)	Terminal Size (in.)	Wt. (lbs.)	Stock No.	Price Each 1-4
0819-0010	D	2.5	2.75 x 3.13 x 1.81	0.187	360	45H2924	31.98
0809-0010	X	5	3.02 x 3.8 x 2.12	0.250	740	59J2313	44.24
0859-0010	E	8	4 x 3.81 x 2.13	0.250	960	45H2925	49.59

CYCLON® BATTERY 6V MONOBLOCS

0819-0012	D	2.5	2.75 x 4.48 x 1.81	0.187	520	89C3018	38.55
0809-0012	X	5	3.02 x 5.48 x 2.12	0.250	980	59J2321	52.11
0859-0012	E	8	4 x 5.48 x 2.13	0.250	1.43	59J2318	61.80

*@10 hour rate
(72410)

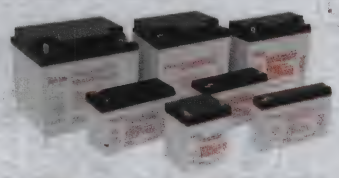
ENGINEERS START HERE
Research. Design. Prototype.
newark.com/design-resources
(212565)

DATASAFE HX SERIES LEAD ACID BATTERIES

EnerSys. Power/Full Solutions™

datasafe HX

- Designed for UPS applications



HX SERIES

Mfg. Part No.	Voltage (V)	W/Cell-1.67 End Volt. (15 Min. Rate)	H x L x W (in.)	Wt. (lbs.)	Terminals	Stock No.	Price 1-4
HX25		25	4.2 x 3.5 x 2.8	2	Faston Tab 0.25"	45M5970	51.85
12HX35-TFR		35	3.9 x 6 x 2.6	2.9	Faston Tab 0.25"	45M5971	85.49
HX50-6		50	3.9 x 6 x 2	2.2	Faston Tab 0.25"	45M5972	60.70
HX100		100	6.9 x 6.5 x 4.9	9.9	Receptacle	45M5967	199.37
HX135		135	7.1 x 7.7 x 5.1	11.5	Receptacle	45M5968	227.47
HX150		150	6.7 x 7.8 x 6.5	15	Receptacle	45M5969	271.25
HX205-12	12	204.1	8.2 x 9 x 5.5	43	Receptacle	89C2831	368.11
HX300-12	12	284.3	8.2 x 10.3 x 6.9	60	Receptacle	89C2832	444.97
HX330-12	12	330.2	8.4 x 12.04 x 6.8	71	Receptacle	89C2833	493.50
HX400-12	12	381.5	8.5 x 13.4 x 6.8	80	Receptacle	89C2834	546.10
HX500-12	12	506	10.9 x 13.4 x 6.8	110	Receptacle	89C2835	732.15

(72405)

POWERSAFE SBS SERIES LEAD ACID BATTERIES

EnerSys. Power/Full Solutions™

- Proven long and trouble-free service
- High energy density in a compact design
- Advanced, thin-plate, pure lead technology
- Impact-resistant jar material, flame retardant to UL94V-0
- Leak-resistant, patented, dual-seal terminals
- Up to two year shelf life
- Very low ventilation required
- Operating temperature range: -40°F (-40°C) to 122°F (50°C)

PowerSafe® **SBS series** lead-acid, valve-regulated batteries provide reliable power in all wireless and fixed-line communication installations, and serve as an integral part of a standby system due to its long life. Also widely used in cable TV, emergency lighting, power generation and offshore applications. Designed to cope with raised temperatures and harsh environments. Ideal for use in cabinets, or on stands, close to the point of use. Can be mounted in any orientation except inverted. Fully compliant with BS 6290 Part 4 (1997). Conforms to IED 60896-21 and Telcordia SR-4228. UL recognized (UL Std. 1989). NEBS certified.

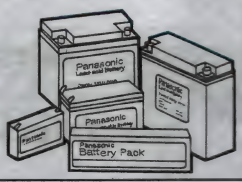
Mfg. Part No.	No. of Cells	Nom. V	Nom. Cap. @10 Hr. Rate (Ah)	Size H x W x D (in.)	Terminals	Wt. (lbs.)	Stock No.	Price Each
SBS15	6	12	14	5.5 x 7.9 x 3.0	M6 M	12.5	19K8899	278.05
SBS-30	6	12	26	6.1 x 9.8 x 3.8	M6 M	20.9	31M9920	298.28

(168156)

VALVE REGULATED LEAD-ACID RECHARGEABLE BATTERIES

Panasonic. BATTERIES

Maintenance-free, lead-acid batteries are designed as an absorbed electrolyte system, with exceptional leak resistance. May be used in any position. Applications: video, cellular phone, UPS and emergency lighting. Other 6V and 12V Panasonic batteries are available; *go online or call.*



Mfg Part No.	Rated Capacity Volts	Rated Capacity 20 Hr. Rate (Ah)	Dimensions L	Dimensions W	Dimensions H	Total Ht. (Incl. Term)	Wt. (lbs.)	Stock No.	Price Each 1-9
LC-R061R3P	6	1.3	3.82"	0.94"	1.97"	2.16"	0.66	15C9858	21.32
LC-R063R4P	6	3.4	5.28"	1.34"	2.36"	2.6"	600	46M4713	43.16
LC-R064R5P	6	4.5	2.76"	1.89"	...	4.02"	720	57K6186	26.41
LC-067R2P	6	7.2	5.95"	1.33"	3.70"	3.93"	2.78	15C9862	40.45
LC-R0612P	6	12	5.95"	1.96"	3.70"	3.93"	4.3	15C9857	49.49
LC-R0612P1	6	12	5.95"	1.96"	3.70"	3.94"	4.3	14C3446	51.41
LC-R121R3P	12	1.3	3.82"	1.87"	1.97"	2.16"	590	46M4714	46.54
LC-R122R2PU	12	2.2	6.97"	1.34"	2.36"	2.60"	1.76	98F4981	54.52
LC-R123R4PU	12	3.4	5.28"	2.64"	2.36"	2.56"	2.65	18C0624	74.65

➤CONTINUED➤

VALVE REGULATED LEAD-ACID RECHARGEABLE BATTERIES (CONT.)

Mfg Part No.	Rated Capacity Volts	Rated Capacity 20 Hr. Rate (Ah)	Dimensions L	Dimensions W	Dimensions H	Dimensions Total Ht. (Incl. Term)	Dimensions Wt. (lbs.)	Stock No.	Price Each 1-9
LC-R127R2PG	12	7.2	5.95″	2.53″	3.70″	3.93″	5.45	15C9864	50.12
LC-R127R2P1	12	7.2	5.95″	2.53″	3.70″	3.94″	5.45	14C4016	50.12
LC-WTP127R2	12	7.2	5.95″	2.53″	3.70″	3.94″	5.51	40T0004	78.25
LC-WTV127R2	12	7.2	5.95″	2.53″	3.70″	3.94″	5.51	40T0005	69.73
LCRA1212P1	12	12	5.95″	3.86″	3.70″	4.01″	8.36	72C7107	100.38
LC-1217P	12	17	7.12″	2.99″	6.57″	6.57″	14.3	15C9863	138.23
LCX1220P	12	20	7.13″	2.49″	6.97″	6.57″	14.56	29H3493	167.10
LC-X1228AP	12	28	6.5″	4.9″	6.90″	6.9″	11	46M4715	206.56
LC-X1228P	12	28	6.5″	4.9″	6.90″	7.1″	11	46M4716	196.94
LC-LA1233P	12	33	7.70″	5.11″	6.10″	7.08″	26.5	15C9855	252.52
UP-VW1220P1	12	-999W*	5.51″	1.52″	3.70″	3.99″	2.98	40T0006	46.57
UP-VW1228P1	12	28W*	5.95″	2.54″	3.70″	3.99″	4.07	40T0007	51.40
UP-VW1236P1	12	36W*	5.95″	2.54″	3.70″	3.99″	2.05	40T0008	56.06
UP-VW1245P1	12	45W*	5.95″	2.54″	3.70″	3.99″	2.60	40T0009	66.40

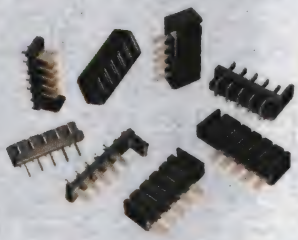
*10 minute rate
(59488)

ADVANCED BATTERY INTERCONNECTION SYSTEM

RoHS Compliant Available

TE connectivity

Authorized Distributor



- Multi-directional mating--all angles between 0° and 90°
- Choice of right-angle or vertical mount headers with left, right or keyless polarization
- Offered in a variety of key arrangement for different voltage batteries
- Headers available for 7.2, 10.8, and 12.0 volt rechargeable batteries
- Receptacle connectors with pcb tails or weld tabs
- Consumer-friendly mating/unmating of battery
- Reduces design cycle time
- Reduces overall costs
- Produced under a Quality Management System certified to ISO 9001.
- Blade Contacts for high durability
- Used industry wide for rechargeable battery I/O - in laptop computers
- 2.5mm, 3.0mm and 5.0mm contact pitch
- Up to 7 amps per contact
- Up to 2500 cycle durability
- Two pc tails per blade for better current distribution
- Operating Temperature: -30°C to +70°C

Single contacts are rated at 7 amperes with a 30°C T-Rise. Headers feature sturdy brass contacts with duplex plated tin or tin-lead solder tails and nickel on the mating area to ensure the life of the system and to provide high cycle mating/unmating. Housings are made of high temperature, UL 94V-0 rated thermoplastic and are available with left or right hand keying, or with keyless mounting configurations. Keyless headers are designed to minimize board space requirements, and require the battery manufacturer to provide voltage key in the battery pack compartment. Keyless headers accept all 3 voltage battery packs. Tyco Electronics "Drop-In" receptacle connectors fit securely within the battery pack compartment. They are offered in a choice of weld tab or solder tail versions for PC board mounting.

5.0mm BATTERY INTERCONNECTS

Mfg. Part No.	Positions	Gender	Terminal Type	Stock No.	Price Each 1-9	Price Each 10-49
● 787613-1	5	Receptacle	Weld Tab	16H5872	4.94	4.63
● 5787444-1	5	Header	Through Hole Pin	73K3641	6.93	6.65
2.5mm BATTERY INTERCONNECTS						
● 1674231-1	10	Receptacle	Through Hole Pins	97M9808	7.86	7.54

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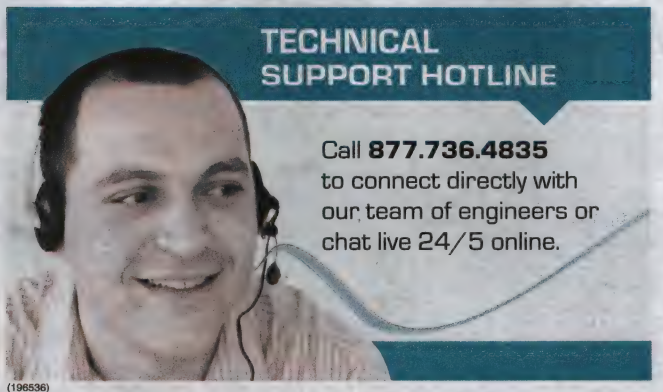

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PC BOARD COIN CELL RETAINER CONTACTS

RoHS Compliant Available

KEYSTONE ELECTRONICS CORP.

Fig. 1 Fig. 2 Fig. 3

Fig. 4 Fig. 5 Fig. 6

Compact retainer contacts hold cell securely and withstand shock and vibration. Designed for quick and easy battery installation and replacement. Suitable for memory backup applications, soldering and reflow operations. Balanced and lightweight with stable thru mount legs. Solder tail design for joint strength. Polarity is clearly marked. Surface and thru hole mount retainer contacts are available for 4.8mm to 24mm lithium coin cell batteries. Phosphor bronze with gold flash, tin nickel or matte tin plating. Tin nickel palted retainers are ideal for lead-free, high temperature soldering applications. Matte tine finish for lower soldering temperatures needed forother temperature sensitive components. Also available on tape and reel; *go online or call.*

POSITIVE SURFACE MOUNT

Mfg. Part No.	Fig.	Contact Plating	Cell Dia. (mm)	Battery Reference	Stock No.	Price Each 1-9
● 2994	1	Gold Flash	4.8	ML414+, SR416+	60R2402	0.14
● 2988	...	Gold Flash	7.9	DA13+, AZ13E+, PR13H+, V13AT+	25T0413	0.33
● 2998	2	Tin Nickel	6.8	MC621, V364, SC621	31C0589	0.34
● 3098	2	Matte Tin	6.8	MC621, V364, SC621	25T0450	0.47
● 2996	3	Tin Nickel	11.6	SR44, LR44, 357, MS76, PX76A, G-13, 303, V313	22M2620	0.35
● 3096	3	Matte Tin	11.6	SR44, LR44, 357, MS76, PX76A, G-13, 303, V313	25T0447	0.52
● 3000	3	Tin Nickel	12	BR1216, CR1216, BR1220, CL1220, CR1220, BR1225	66F5622	0.32
● 3080	3	Matte Tin	12	BR1216, CR1216, BR1220, CL1220, CR1220, BR1225	25T0433	0.52
● 3012	3	Tin Nickel	16	BR1616, CR1612, CR1616, CR1620, CR1632	31C0594	0.44
● 3092	3	Matte Tin	16	BR1616, CR1612, CR1616, CR1620, CR1632	25T0445	0.49
● 3026	3	Tin Nickel	20	BR2016, CR2016, DL2016	25T0424	0.53
● 3078	3	Matte Tin	20	BR2016, CR2016, DL2016	25T0431	0.50
● 3002	3	Tin Nickel	20	BR2016, CR2016, DL2016, BR2020, CL2020, BR2025, CR2025, DL2025, DR2032, CR2032, DL2032	66F5624	0.42
● 3082	3	Matte Tin	20	BR2016, CR2016, DL2016, BR2020, CL2020, BR2025, CR2025, DL2025, DR2032, CR2032, DL2032	25T0435	0.50
● 3004	3	Tin Nickel	23	BR2320, CL2330, CR2320, BR2325, CR2325, DL2325	66F5626	0.66
● 3084	3	Matte Tin	23	BR2320, CL2330, CR2320, BR2325, CR2325, DL2325	25T0437	0.51
● 3010	3	Tin Nickel	23	CR2354, DL2354	31C0592	0.69
● 3090	3	Matte Tin	23	CR2354, DL2354	25T0443	0.54
● 3006	3	Tin Nickel	24	CR2430, DL2430	66F5628	0.71
● 3086	3	Matte Tin	24	CR2430, DL2430	25T0439	0.55
● 3008	3	Tin Nickel	24	CR2450, DL2450	20C3591	0.79
● 3088	3	Matte Tin	24	CR2450, DL2450	25T0441	0.58

+Hearing aid cells

NEGATIVE SURFACE MOUNT

Economical, negative bottom SMT compact contacts feature space-saving design. For use with most coin cell retainer contacts. Ideal for self-contained battery compartments. Brass with tin nickel or matte tin plating.

Mfg. Part No.	Fig.	Contact Plating	Style	Stock No.	Price Each 1-9
● 2992	4	Tin Nickel	Miniature	95M2125	0.09
● 2982	4	Matte Tin	Miniature	25T0409	0.09
● 2981	4	Matte Tin	Compact	25T0407	0.09
● 2993	5	Tin Nickel	Spring	25T0415	0.12
● 2983	5	Matte Tin	Spring	25T0411	0.11

POSITIVE THRU HOLE MOUNT

Economical, positive bottom thru-hole retainer contacts. Phosphor bronze with tin nickel plating. **Mfg. part nos. 3021** and **3023** supplied with insulator to accommodate two 20mm diameter cells.

Mfg. Part No.	Fig.	Contact Plating	Cell Dia. (mm)	Battery Reference	Stock No.	Price Each 1-9
● 2999	6	Tin Nickel	6.8	D377, D364, D321, 43, SB-BW, 280, 377, 364, 321, V377, V364, V321, SB-AW, SB-AG, SB-AF, SR626, SR621, SR616	95M2127	0.27
● 2997	6	Tin Nickel	11.6	SR44, LR44, 357,MS76, PX76A, G-13, 303, V313	22M2622	0.35

➤CONTINUED➤

PC BOARD COIN CELL RETAINER CONTACTS (CONT.)

POSITIVE THRU HOLE MOUNT

Mfg. Part No.	Fig.	Contact Plating	Cell Dia. (mm)	Battery Reference	Stock No.	Price Each 1-9
3001	6	Tin Nickel	12	BR1216, CR1216, BR1220, CL1220, CR1220, BR1225	66F5623	0.40
3013	6	Tin Nickel	16	BR1616, CR1612, CR1616, CR1620, CR1632	31C0595	0.68
3003	6	Tin Nickel	20	BR2016, CR2016, DL2016, BR2020, CL2020, BR2025, CR2025, DL2025, DR2032, CR2032, DL2032	66F5625	0.51
3021	6	Tin Nickel	20	2 Ea.: BR2016, CR2016, DL2016	25T0420	0.98
3023	6	Tin Nickel	20	2 Ea.: BR2020, CL2020, BR2025, CR2025, DL2025	25T0423	1.05
3027	6	Tin Nickel	20	BR2012, CR2012, DL2012, BR2016, CR2016, DL2016	25T0426	0.50
3005	6	Tin Nickel	23	BR2320, CL2320, CR2320, BR2325, CR2325, DL2325, BR2330, CL2330	66F5627	0.66
3011	6	Tin Nickel	23	CR2354,DL2354	31C0593	0.74
3009	6	Tin Nickel	24	CR2450, DL2450	31C0590	0.75

*Supplied with insulator to accommodate two 20mm dia. cells
(7008)

BATTERY SPRING AND BUTTON CONTACTS

RoHS Compliant Available

KEYSTONE

- For molded cases
- Single and dual contact design
- Excellent mechanical construction
- Spacing saving

Economical and reliable contacts are ideal for molded cases with self-contained battery compartments. Solder tab design for versatile PC mounting or wire lead attachment. Spring contact design adjusts to varying battery lengths and provides low contact resistance and dependable connections. Constructed of nickel-plated 0.020″ thick steel. Spring contact constructed of nickel-plated spring steel.

FOR A, AA AND 2/3A CELL SIZES

Mfg. Part No.	Fig.	Description	Stock No.	Price Each 1-49
5223	1	(+) Positive Button with Tab	31C6771	0.18
5219	2	(+) Positive Button with Tab	25T0461	0.13
5224	3	(+) Positive Button	03C2727	0.16
5201	4	(-) Negative Spring with Tab	31C6766	0.26
5220	5	(-) Negative Spring with Tab	25T0462	0.21
5202	9	(-) Negative Spring	03C2726	0.31
5210	6	Dual Contact with Tab — Spring on Right/Button on Left	25T0458	0.31
5211	6	Dual Contact with Tab — Button on Right/Spring on Left	31C6768	0.42
5217	7	Dual Contact with Tab — Button on Right/Spring on Left	25T0459	0.33
5218	...	Dual Contact with Tab — Spring on Right/Button on Left	25T0460	0.31
5212	8	Dual Contact	03C2729	0.48

CONTINUED

BATTERY SPRING AND BUTTON CONTACTS (CONT.)

FOR AAA, N, 12V CELL SIZES

Mfg. Part No.	Fig.	Description	Stock No.	Price Each 1-49
5226	2	(+) Positive Button with Tab	31C6772	0.18
5225	3	(+) Positive Button	90B0729	0.11
5204	5	(-) Negative Spring with Tab	31C6767	0.26
5203	9	(-) Negative Spring	90B2547	0.40
5213	10	Dual Contact — Button on Right/Spring on Left	31C6769	0.41
5214	11	Dual Contact — Spring on Right/Button on Left	31C6770	0.38
FOR C CELL SIZES				
5240	3	(+) Positive Button	25T0463	0.22
5241	9	(-) Negative Spring	25T0464	0.34
5242	12	Dual Contact	25T0466	0.45
FOR D CELL SIZES				
5250	13	(+) Positive Button	25T0467	0.25
5251	14	(-) Negative Spring	25T0468	0.38
5252	15	Dual Contact Left Side	25T0469	0.57
PC BATTERY CONTACTS				
108-2	...	Leaf-Spring Contact — Single Leg	73H0152	0.19
109-2	16	Leaf-Spring Contact — Dual Leg	01C2849	0.42

Ideal for self-contained battery compartments. Constructed of nickel-plated 0.12″ thick spring steel.
(68300)

PC BOARD 9V BATTERY SNAP-ON CONTACTS

RoHS Compliant Available

KEYSTONE

HORIZONTAL

Space saving design installs direct onto the PC board. Suitable for 0.062″ (1.57mm) to 0.093″ (2.36mm) thick PC boards. Ideal for self-contained battery compartments. Tin-plated steel frame with nickel-plated steel contacts.

Mfg. Part No.	Contact	Battery Mounting	Stock No.	Price Each 1-49
635	Male	Off-board	38F1268	0.52
636	Female	Off-board	38F1269	0.62
593	Male	On-board	95F3282	0.51
594	Female	On-board	95F3283	0.59

VERTICAL

Mfg. part no. 967 space-saving, anti-wicking, vertical design offers excellent mechanical strength. Low contact resistance. Durable fiber base, nickel plated steel contacts and 0.12″ (3mm) long tin-plated brass PC pins.

967	Male/Female	On-board	25T0490	1.50

(6903)

400 SERIES MOLDED BATTERY HOLDERS

RoHS Compliant Available

CAMBION

All holders feature interlocking dovetails for grouping multiple batteries together. UL94V-0 rated plastic bodies.

Mfg. Part No.	Fits Battery	Stock No.	Price Each 1-49
400-2800-01-00-20	"C" size	13F3155	15.24
400-2801-01-00-20	"D" size	13F3156	17.03
400-2802-01-00-20	"AA" size	65F1801	9.60
400-1800-01-00-20	PP3-9V	81F3822	10.80

(4717)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures

(212568)

BATTERY HOLDERS

SNAP-ON BATTERY CONTACTS

RoHS Compliant Available

KEYSTONE ELECTRONICS CORP.

Fig. 1

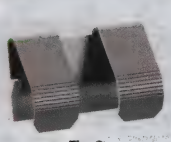
Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6

Fig. 7

Self-anchoring battery contacts fit over panels 0.06″ to 0.07″ thick. External solder ear simplifies soldering. Constructed of nickel-plated tempered spring steel.

Mfg. Part No.	Fig.	Battery Size	Stock No.	Price Each 1-49
● 210	1	AA, A	95F3296	0.53
● 288	1	AA, A	95B9618	0.52
● 202	1	AAAA, AAA, N	16F423	0.53
● 5206	2	AA	25T0457	0.75
● 5205	3	AA, A, CR2, PP3 (9V)	25T0456	0.43
● 209	4	AA, A	95F3294	0.35
● 204	4	AAAA, AAA, N	95F3293	0.36
● 238	5	AAAA, AAA, N	95B9609	0.24
● 228	5	AA, A	95F3295	0.27
● 290*	6	AA, A	95B9619	0.52
● 291+	6	AA, A	95B9620	0.53
● 296+	6	AAAA, AAA, N	25T0406	0.53
● 295*	...	AAAA, AAA, N	25T0405	0.53
● 292	7	AA, A	95B9621	0.53

*Left side; +Right side
(6905)

BATTERY CLIPS, CONTACTS AND ACCESSORIES

RoHS Compliant Available

KEYSTONE ELECTRONICS CORP.

Fig. 1

Fig. 3

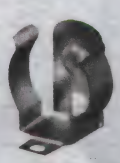
Fig. 4

Fig. 2

Fig. 5

Fig. 6

Fig. 7

Fig. 8

Fig. 9

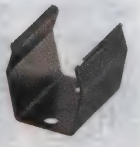
Fig. 10

Fig. 11

Fig. 12

Fig. 13

Fig. 14

Fig. 15

Also available on tape and reel; *go online or call.*

STEEL SNAP-IN THRU-HOLE MOUNT BATTERY CLIPS

Mfg. Part No.	Fig.	For Cells	Plating	Stock No.	Price Each 1-49
● 82	1	AAA, N	Tin Nickel	95F3281	0.45
● 92	1	AA, CR2	Tin Nickel	50F4684	0.45
STEEL THRU-HOLE MOUNT BATTERY CLIP					
● 54	2	18650	Tin Nickel	25T0475	0.84
STEEL SURFACE MOUNT BATTERY CLIPS					
● 50	3	AAAA	Tin Nickel	99H7474	0.43
● 550	3	AAAA	Matte Tin	25T0476	0.46
● 53	4	AA, A	Tin Nickel	56P4899	0.45
● 553	4	AA, A	Matte Tin	25T0478	0.49

➤CONTINUED➤

BATTERY CLIPS, CONTACTS AND ACCESSORIES (CONT.)

STEEL SURFACE MOUNT BATTERY CLIPS

Mfg. Part No.	Fig.	For Cells	Plating	Stock No.	Price Each 1-49
● 55	4	AAA, N	Tin Nickel	18C1819	0.45
● 555	4	AAA, N	Matte Tin	25T0480	0.49
STEEL SURFACE MOUNT BATTERY CONTACTS					
● 57	5	AA, A, CR2	Tin Nickel	25T0488	0.31
● 557	5	AA, A, CR2	Matte Tin	25T0484	0.29
● 56	6	AAA, N	Tin Nickel	25T0486	0.30
● 556	6	AAA, N	Matte Tin	25T0482	0.30
STEEL SURFACE MOUNT SPRING-LEAF BATTERY CONTACTS					
● 5330	7	AAAA, AAA, N	Matte Tin	25T0471	0.23
● 5331	8	AA, A, CR2, PP3 (9V)	Matte Tin	25T0473	0.23
RUGGED STEEL BATTERY END CLIPS Feature non-insulated contacts except **mfg. part no. 88** which is insulated with a tin-plated brass solder lug. Positive contact grips battery securely.					
● 99	9	AA	Nickel	35F1576	0.45
● 86	9	C	Nickel	90B0646	0.95
● 89	9	D	Nickel	35F1575	1.11
● 88	...	D	Nickel	35F1574	2.15
ALUMINUM BATTERY CLIPS					
● 91	10	AA	...	35F1579	0.52
● 95	11	PP3 (9V)	...	94F9912	1.36
STEEL BATTERY AND COMPONENT CLIPS					
● 71	12	PP3 (9V)	Nickel	94F1482	0.50
● 78	13	D	Nickel	97H7531	0.39
● 80	11	PP3 (9V)	Nickel	91B6138	0.65
● 217	12	-	Nickel	98F723	1.36

BATTERY RETAINER CLIPS

Mfg. Part No.	Fig.	Description	For Use With	Stock No.	Price Each 1-49
● 61	14	Retainer for ″AA″ cell with diameters of 0.532″ to 0.562″	AA Batteries	97H7528	0.53
● 62	14	Retainer for ″C″ cells or similar size batteries to 1.032″ diameter	C Batteries	97H7529	0.43
● 63	14	Retainer for ″D″ cells or similar batteries to 1.343″ diameter	D Batteries	97H7530	0.46

BATTERY SPRING CONTACT

Mfg. Part No.	Fig.	Description	For Use With	Stock No.	Price Each 1-49
● 211	15	0.025 Dia. Spring Steel, Nickel Plate	A, AA Cells	54H0610	0.14
● 211-D	15	0.04 Dia. Spring Steel, Nickel Plate	C, D Cells	91B8092	0.31

(6942)

NEW PRODUCTS ADDED DAILY

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(196561)

ALUMINUM BATTERY HOLDERS

RoHS Compliant Available

KEYSTONE ELECTRONICS CORP.

Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6 Fig. 7 Fig. 8 Fig. 9

Ideal for alkaline, carbon, zinc, mercury, Ni-Cad and lithium cells. Tin-plated brass terminal lugs. Moistureproof fiber insulating washers. Frame and clip 2024-ST4 aluminum, per QQ-A-362. Nickel-plated brass contact eyelets.

"AAA" CELL HOLDERS

Mfg. Part No.	Fig.	Fits These Batteries	Stock No.	Price Each 1-49
137	1	**Eveready**: E92, 912, CH12;**Duracell**: M24F, MN2400; **Ray-O-Vac**: 824; **NEDA**: 24A, 24F, 24P	59K0296	3.15
138	2		35F1586	5.62
169	3		58K2775	8.22
170	4		58K2776	11.23

"AA" CELL HOLDERS

139	1	**Eveready**: E9, EV15, EN91, CH15, E133, E133N, E177, 505, 523, 1015, 1215; **Duracell**: ZM9, RM12R, NC15AA, M15F, M15AA, TR133R, TR177, M505, MN1500, PC1500; **Ray-O-Vac**: 5AA, 615, 815, 7AA; **NEDA**: 15, 15A, 15C, 15D, 15F, 15M, 15NC, 221, 1101M, 1113M, 1306M, 1314M, 1606M	59K0297	3.05
140	2		59K0298	5.94
171	3		58K2777	6.51
182	4		59K0315	8.84
189	5		35F1593	3.51
192	6		58K2780	6.34
193	7		60K7093	11.16
2222*	1		59K0354	2.96
2223*	2		59K0355	6.00

"C" CELL HOLDERS

173	1	**Eveready**: CH35, E93, 935, 1235, EV35, EN93; **Duracell**: M14F, M14HD, NC14C, TR286, MN1400, PC1400; **Ray-O-Vac**: 1C, 614, 814; **NEDA**: 14A, 14C, 14D, 14F, 14NC, 1600M	59K0313	3.62
174	2		35F1598	6.38
185	5		35F1600	3.88
187	3		58K2778	9.95
196	6		60K7094	7.38
197	7		59K0316	13.20

"D" CELL HOLDERS

175	1	**Eveready**: CH50, E95, 950, 1250, EV50, E95; **Duracell**: M13F, NC13D, S42, M13HD, TR289, MN1300, PC1300; **Ray-O-Vac**: 2D, 6D, 613, 813; **NEDA**: 13A, 13C, 13D, 13F, 13NC, 1115M, 1810M	59K0314	4.27
176	2		60K7088	8.10
186	5		35F1607	4.42
190	3		58K2779	11.26
200	6		58K2888	8.88
201	7		58K2889	15.35
205	8		59K0317	16.32

"22 1/2 VOLT BATTERY HOLDERS

177	9	**Eveready**: 412; **Duracell**: M215; **NEDA**: 215	35F1629	2.75

* With PC lugs.

POLARITY INDICATING LABEL

No gluing or wetting needed. Pressure sensitive adhesive back. Adheres to all surfaces. Recommended where proper polarity of battery insertion or circuit polarity is to be shown. Labels are two color, (+) positive side red; arrow (-) negative side blue.

Mfg. Part No.	Pkg. of	Stock No.	Price Each 1-4999
58	1	62W5718	0.04

(6936)

NICKEL-PLATED STEEL BATTERY HOLDERS

RoHS Compliant Available

KEYSTONE ELECTRONICS CORP.

Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5

Corrosion-resistant holders with fully-insulated, nickel plated brass contacts recommended for shock or severe vibration environment. Resin-impregnated, fiber-insulating washers are moisture proof.

"AA" CELL HOLDERS

Mfg. Part No.	Fig.	Fits These Batteries	No. of Cells	Stock No.	Price Each 1-49
2139	1	**Eveready**: E9, EV15, EN91, CH15, E133, E133N, E177, 505, 523, 1015, 1215; **Duracell**: ZM9, RM12R, NC15AA, M15F, M15AA, TR133R, TR177, M505, MN1500, PC1500; **Ray-O-Vac**: 5AA, 615, 815, 7AA; **NEDA**: 15, 15A, 15C, 15D, 15F, 15M, 15NC, 221, 1101M, 1113M, 1306M, 1341M, 1606M	1	59K0342	2.32
2140*	2		2	59K0343	4.07
2171*	3		3	59K0344	6.04
2182*	4		4	58K2893	7.34

"C" CELL HOLDERS

2173	1	**Eveready**: CH35, E93, 935, 1235, EV35, EN93; **Duracell**: M14F, M14HD, NC14C, TR286, MN1400, PC1400; **Ray-O-Vac**: 1C, 614, 814; **NEDA**: 14A, 14C, 14D, 14F, 14NC, 1600M	1	59K0345	2.75
2174*	2		2	59K0346	5.08
2188	4		4	58K2894	10.19
2185*	5		2	61H7465	3.70
2198†	5		4	59K0353	4.74

"D" CELL HOLDERS

Mfg. Part No.	Fig.	Fits These Batteries	No. of Cells	Stock No.	Price Each
2175	1	**Eveready**: CH50, E95, 950, 1250, EV50, EN95; **Duracell**: M13F, NC13D, S42, M13HD, TR289, MN1300, PC1300; **Ray-O-Vac**: 2D, 6D, 613, 814; **NEDA**: 13A, 13C, 13D, 13F,13NC, 1115M, 1801M	1	59K0347	3.31
2176*	2		2	59K0348	6.06
2190*	3		3	60K7100	8.95
2192*	4		4	59K0352	13.44
2186	5		2	59K0349	4.18

*Clips mounted on 0.062" thick phenolic; †End-to-end model.

(6936)

PLASTIC BATTERY HOLDERS

RoHS Compliant Available

KEYSTONE ELECTRONICS CORP.

Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6 Fig. 7 Fig. 8

Hold batteries securely in place to provide a positive connection and maintain low contact resistance. Available with PC terminals or wire leads. Choice of solder lugs or male/female snap fasteners. Contact springs self-adjust to variations in battery length. Able to withstand shock and vibration. Holder material: polypropylene. Springs: spring steel, nickel-plated. PC pins: 0.031 brass, nickel-plated.

Mfg. Part No.	Fig.	Battery Size	No. of Cells	Mounting	Stock No.	Price Each 1-49
2460	1	AA	1	PC Board	16F1089	1.10
2461	1	AA	1	6" Wire Lead	16F1090	1.13
2466	4	AAA	1	PC Board	16F1095	1.11
2467	4	AAA	1	6" Wire Lead	16F1096	1.11
2471	6	N	1	6" Wire Lead	16F1100	1.07
2462	2	AA	2	PC Board	16F1091	1.18

➤CONTINUED➤

BATTERY HOLDERS

PLASTIC BATTERY HOLDERS (CONT.)

Mfg. Part No.	Fig.	Battery Size	No. of Cells	Mounting	Stock No.	Price Each 1-49
● 2463	2	AA	2	6" Wire Lead	16F1092	1.16
● 2470	6	N	1	PC Board	16F1099	1.09
● 2468	5	AAA	2	PC Board	16F1097	1.15
● 2469	5	AAA	2	6" Wire Lead	16F1098	1.18
● 2474	5	AA	2	Snap On	18C1021	1.15
● 2490*	5	AA	2	6" Wire Lead	31C0588	1.39
● 2464	3	AA	3	PC Board	16F1093	1.53
● 2465	3	AA	3	6" Wire Lead	16F1094	1.57
● 2475	3	AA	3	Snap On	24C8843	1.55
● 2487*	3	AA	3	6" Wire Lead	31C0587	1.76
● 2484*	3	AAA	3	6" Wire Lead	31C0586	1.78
● 2479	3	AAA	3	PC Board	17C7357	1.55
● 2480	3	AAA	3	6" Wire Lead	31C0583	1.55
● 2476	8	AA	4	Snap On	31C0581	1.73
● 2477	7	AA	4	PC Board	17C7400	1.68
● 2478	7	AA	4	6" Wire Lead	31C0582	1.66
● 2481	7	AAA	4	PC Board	31C0584	1.70
● 2482	7	AAA	4	6" Wire Lead	31C0585	1.70

* Densi-Pak snap-on plastic cover
(7027)

9V BATTERY HOLDERS

RoHS Compliant Available

KEYSTONE

1294 1295 1291 1290

- Terminals: Tin Plated Brass
- Contacts Nickel Plated

NYLON FRAME

Mfg. Part No.	Description	Stock No.	Price Each 1-49
● 1294	PC Terminals	59K0295	2.40
● 1295	Quick Disconnect Solder Terminals	58K2754	2.28
ALUMINUM FRAME			
● 1290	Solder Terminals	59K0294	3.57
● 1291	PC Terminals	60K7082	3.68

(6904)

9-VOLT BATTERY STRAPS

RoHS Compliant Available

KEYSTONE

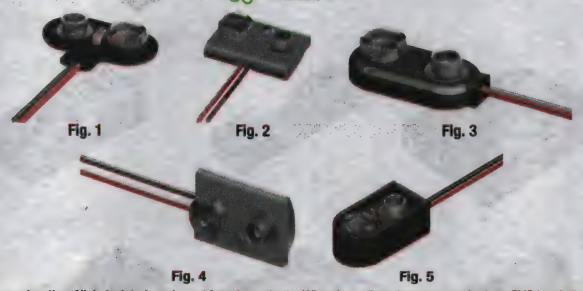


Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5

Rigid construction. Nickel-plated, male and female contacts. Wires have tinned copper conductors, PVC insulation and are stripped for easy connections. All straps insulated except **mfg. part nos. 72** and **72-8**. Wire leads soldered for increased reliability.

9-VOLT BATTERY STRAPS

Mfg. Part No.	Fig.	Material	Lead Length (in.)	Style	Stock No.	Price Each 1-49
● 235	1	Vinyl	4.00	T	52F3319	0.42
● 236	1	Vinyl	6.00	T	31C0580	0.46
● 237	1	Vinyl	8.00	T	30C1545	0.47
● 232	3	Vinyl	4.00	I	91B5445	0.41
● 233	3	Vinyl	6.00	I	22C4351	0.42
● 234	3	Vinyl	8.00	I	99F9979	0.42
● 2238	3	Molded Base	4.00	I	59K0356	0.79
● 2239	3	Molded Base	6.00	I	59K0357	0.83
● 2240	3	Molded Base	8.00	I	58K2897	0.82
● 2241	1	Molded Base	4.00	T	59K0358	0.84
● 2242	1	Molded Base	6.00	T	59K0359	0.86

➤CONTINUED➤

9-VOLT BATTERY STRAPS (CONT.)

Mfg. Part No.	Fig.	Material	Lead Length (in.)	Style	Stock No.	Price Each 1-49
● 2243	1	Molded Base	8.00	T	16F438	0.89
● 68	1	0.062" Fiber	No lead	...	38F1305	0.47
● 72	1	0.062" Fiber	7.00	...	35F1681	1.26
● 72-8	1	0.062" Fiber	8.00	...	16F441	1.33
● 83-4	4	Fiber	4.00	I	16F427	1.72
● 83	4	Fiber	6.50	I	16F428	1.83
● 83-8	4	Fiber	8.00	I	16F429	1.88
● 85-4	2	Fiber	4.00	T	16F430	2.16
● 85-8	2	Fiber	8.00	T	16F432	2.33
SHIELDED 9-VOLT BATTERY STRAPS						
● 81-6	5	Polypropylene	6.00	T	31C0662	0.49
● 84-4	5	Polypropylene	4.00	T	38H9326	0.48
● 84-6	5	Polypropylene	6.00	I	23C7324	0.49

(7034)

THRU-HOLE AND SURFACE MOUNT BATTERY HOLDERS FOR LITHIUM AND ALKALINE CELLS

RoHS Compliant Available

KEYSTONE

Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6 Fig. 7 Fig. 8 Fig. 9 Fig. 10 Fig. 11 Fig. 12

THRU-HOLE MOUNT BATTERY HOLDERS — LOW PROFILE

Snap-in PC contact design holds in position for wave solderability. Low profile housings constructed of PBT, rated UL94V-0. Tin-nickel plated stainless steel contacts for excellent solderability and durability. Polarity marked for orientation. Operating temperature range: -60°F to 290°F (-50°C to 145°C). *Order retainer covers separately below.*

Mfg. Part No.	Fig.	For Cell Size	Dimensions (in.) L	W	H	Use with Cover	Stock No.	Price Each 1-49
● 108	1	1/2AA	1.36	0.64	0.633	108C	50F4685	1.70
● 1028	1	AA	2.36	0.64	0.633	1024C, 1028C	95F3289	1.70
● 1029	1	2/3A	1.7	0.72	0.712	1029C, 1029LC	95F3291	1.70

THRU-HOLE MOUNT BATTERY HOLDERS — ULTRA LOW PROFILE

These ultra low profile battery holders feature a high-temperature nylon base, rated UL94V-0, and tin-nickel plated phosphor bronze contacts except **mfg. part no. 503** tin plated and **mfg. part no. 497** matte tin plated. Operating temperature range: -60°F to 290°F (-50°C to 145°C). *Order retainer covers separately below.*

● 1017	2	1/2AA	1.36	0.612	0.603	1024C	25T0378	1.79
● 1015	2	AA	2.36	0.612	0.603	1024C	25T0376	2.34
● 1021	2	AAA	2.14	0.5	0.445	1020C	25T0384	1.79
● 1023	3	Dual AAA	2.14	0.875	0.445	1022C	25T0388	3.67
● 1019	2	2/3A	1.69	0.72	0.682	1018C	25T0381	1.79
● 503	4	1/3N	0.57	0.54	0.506	...	25T0455	1.80
● 497	4	1/3N	0.57	0.54	0.475	...	25T0452	1.78

SURFACE MOUNT BATTERY HOLDERS — ULTRA LOW PROFILE

These ultra low profile SMT battery holders are ideal for cylindrical lithium and alkaline batteries. Feature heat-resistant nylon housings, rated UL94V-0, well suited for reflow soldering. Gold flash plated phosphor bronze contacts. Ideal for both lead-free and traditional solder processes. Easy battery installation required no tools. Securely holds battery in place. Polarity clearly marked for orientation. Operating temperature range: -60°F to 290°F (-50°C to 145°C). *Order retainer covers separately below.*

● 1016	5	1/2AA	1.723	0.612	0.603	1024C	57R3956	2.44
● 1024	5	AA	2.711	0.612	0.603	1024C	25T0389	2.73
● 1020	5	AAA	2.421	0.5	0.445	1020C	57R3959	2.44
● 1022	6	Dual AAA	2.421	0.875	0.445	1022C	57R3957	4.18
● 1018	5	2/3A	2.053	0.72	0.682	1018C	57R3958	2.44
● 498	7	1/3N	0.748	0.54	0.506	...	25T0453	2.13

RETAINER COVERS FOR BATTERY HOLDERS

Snap-on retainer covers retain battery securely to withstand shock and vibration. Helps protect against shorting and are tamperproof. Constructed of PBT, rated UL94V-0. For use with PC battery holders; *ordered separately above.*

➤CONTINUED➤

THRU-HOLE AND SURFACE MOUNT BATTERY HOLDERS FOR LITHIUM AND ALKALINE CELLS (CONT.)

Mfg. Part No.	Fig.	For Cell Size	Use with Battery Holder	Stock No.	Price Each 1-49
108C	8	1/2AA	108	50F4686	0.40
1024C	9	1/2AA, AA	1016, 1017, 1015, 1024, 1028	25T0390	0.63
1028C	8	AA	1028	95F3290	0.67
1020C	9	AAA	1020, 1021	25T0382	0.67
1022C	10	Dual AAA	1022, 1023	25T0385	0.63
1029C	11	2/3A	1029	95F3292	0.63
1029LC	8	2/3A	1029	78H1108	0.67
1018C	11	2/3A	1018, 1019	25T0379	0.67

LUG MOUNT LITHIUM BATTERY HOLDERS

Rugged metal constructed lithium cell holders are ideal for punishing applications. Choice of aluminum or nickel-plated steel housings with tin-plated brass lugs.

Mfg. Part No.	Fig.	Fits Cell Size	Lug Type	Housing	Dimensions (in.) L (ref)	W	H	Stock No.	Price Each 1-49
2103	12	1/2AA	PC Terminal	Steel	1.15	0.625	0.606	94F4531	3.05
131	12	2/3A	PC Terminal	Aluminum	1.47	0.625	0.625	97H7527	2.38
132	...	2/3A	Solder	Aluminum	1.47	0.625	0.625	98F9933	2.50

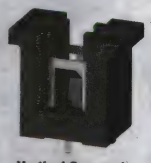
(6941)

PC BOARD MOUNT COIN CELL LITHIUM BATTERY HOLDERS

RoHS Compliant Available

KEYSTONE ELECTRONICS CORP.

Vertical Slimline



Vertical Compact

Horizontal

These PCB mount holders accommodate lithium coin cell batteries 12-30mm diameter, and provide long-term power for 3-volt memory backup applications. Reliable nickel-plated contacts provide spring tension, low contact resistance and solderability. Bases made of UL94V-0 approved materials. Holders are impervious to most solvents. Temperature range: –50°C to +145°C.

VERTICAL MOUNT

Mfg. Part No.	Fits Coin Cell Size	Base Style	Stock No.	Price Each 1-49
1065	20mm	Slimline	59K0293	2.57
1067	20mm	Compact	58K2752	2.57

HORIZONTAL MOUNT

Mfg. Part No.	Fits Coin Cell Size	No. of Cells	Stock No.	Price Each 1-49
500	12mm	1	95F3284	1.57
501	12mm	2	95F3285	2.80
502	16mm	1	95F3286	2.17
103	20mm	1	16F424	2.17
106	20mm	1	46F858	2.17
1026	20mm	2	87F3817	2.35
1066	20mm	1	58K2751	1.70
104	23mm	1	16F425	2.17
107	23mm	1	46F859	2.23
1027	23mm	2	87F3818	2.42
1025-7	24mm	1	31C0540	2.39
105	24mm	1	46F857	2.17
1025	24mm	2	87F3816	2.39
301	30mm	1	31C0591	2.07

(6939)

SURFACE MOUNT COIN CELL BATTERY HOLDERS

RoHS Compliant Available

KEYSTONE ELECTRONICS CORP.

SMT single and dual side-loading holders for 20mm and 23mm diameter, lithium coin cell batteries, designed to meet the stringent needs of surface mount applications. Steel contacts 0.015" (0.38) available tin nickel plated or gold flash plated. High-temperature nylon 46 base, UL 94V-0.

SMALL PAD PATTERN

Mfg. Part No.	Contact Plating	Cell Dia. (mm)	No. of Cells	Battery Reference	Stock No.	Price Each 1-49
1061	Tin Nickel	20	1	2016*, 2020, 2025, 2032	59K0291	2.25
1062	Tin Nickel	20	2	2016+, 2020, 2025, 2032	59K0292	2.28
1081	Gold Flash	20	1	2016*, 2020, 2025, 2032	25T0393	2.76
1082	Gold Flash	20	2	2016+, 2020, 2025, 2032	25T0395	2.76
1091	Gold Flash	23	1	2320, 2325, 2330	25T0399	2.59
LARGE PAD PATTERN						
1073	Tin Nickel	23	1	2320, 2325, 2330	99H4245	2.28
1093	Gold Flash	20	1	2016*, 2020, 2025, 2032	25T0401	2.76
1094	Gold Flash	20	2	2016+, 2020, 2025, 2032	25T0403	2.59
1083	Gold Flash	23	1	2320, 2325, 2330	25T0397	2.59

*1 or 2 cells; +3 cells

(6940)

BATTERY HOLDERS

RoHS Compliant Available

bulgin a brand of Elektron Technology

Fig. 1

Fig. 2

Fig. 3

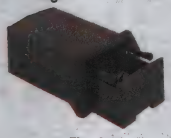


Fig. 4

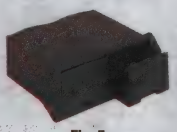


Fig. 5

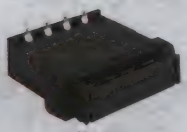


Fig. 6

- UL94V-0 flame retardant materials
- IP67 front panel sealed versions for AA, C, and D size cells
- Drawer style holder for AA, C, and 9-volt cells

Manufactured from quality moldings and metal components to provide a secure and reliable connection. Available for battery sizes AA, C, D and 9V for 1, 2, or 4 cells. Panel mounting versions are front panel sealed to IP67, extending the applications into harsher external environments where dust or waterproof seal is needed.

Mfg. Part No.	Fig.	Battery Size	No. of Cells	Dimensions (LxHxW mm)	Stock No.	Price Each 1-49
BXS001/1	1	C	1	61.4 x 42	50H3501	13.29
BXS002/1	1	C	2	108.7 x 42	50H3502	15.74
BXS011/1	2	AA	1	69.9 x 42 x 36	50H3504	11.30
BXS012/1	2	AA	2	120.4 x 42 x 36	50H3505	12.36
BXS016	3	D	1	83.5 x 50.3 x 50.3	50H3507	14.85
BXS017	3	D	2	143.8 x 50.3 x 50.3	50H3508	26.28
BX0023	4	PP3 (9V)	1	60 x 34	92C3807	6.67
BX0026	5	PP3 (9V)	2	60 x 56.8	92C3809	13.73
BX0027	6	AA	4	57.2 x 72	92C3810	18.60

(78907)

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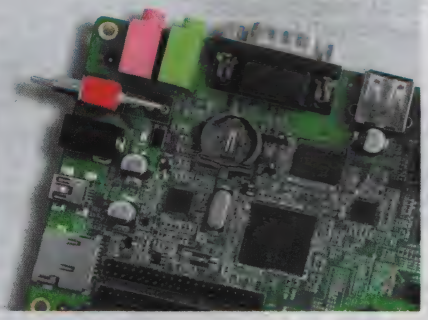
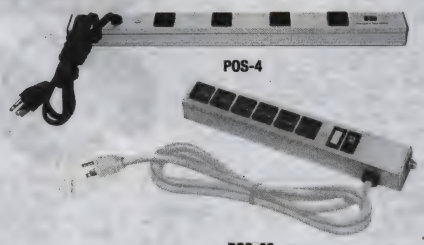


(196529)

POWER STRIPS – GENERAL PURPOSE • POWER STRIPS – HOSPITAL GRADE

POWER OUTLET STRIPS

Bud Industries, Inc.



POS-4

POS-66

POS series power outlet strips can be used in cabinets, on walls, or along work and test benches. Housing color: silver-gray. No loose wires can come into contact with conductor wires. Strips snap into adjustable mounting clips. Grounded receptacles rated 15A, 125V. Thermal-type 15A circuit breaker with reset. Cord: 6′ 14-gauge 3-wire. All components are UL approved.

Mfg. Part No.	Outlets	Surge Protector	Strip Length	Stock No.	Price Each 1-4	5-9	10-24
POS-4	4	No	17.50″	90F396	80.64	75.10	71.58
POS-6	6	No	12.25″	81F4472	56.90	52.99	50.51
POS-7	7	No	48.00″	90F397	76.08	70.85	67.53
POS-9	9	No	60.00″	90F398	87.12	81.13	77.32
POS-11	11	No	72.00″	90F399	96.67	90.03	85.80
SURGE PROTECTOR OUTLET STRIPS							
POS-4-S	4	Yes	17.50″	95F6381	132.61	123.49	117.69
POS-66	6	Yes	12.25″	81F4473	84.76	78.94	75.24
POS-9-S	9	Yes	60.00″	95F6383	108.09	100.66	95.94
POS-11-S	11	Yes	72.00″	95F6384	113.95	106.12	101.14

(7167)

COMPACT OUTLET STRIPS

multicomp

These outlet strips are extremely useful for limited space applications. Rated 15A, 120VAC, 60Hz, 1875W continuous duty. Black outlets are "U" grounded. Black power cord is 18/3 SJT with molded plug. Dimensions: 1.75H x 2.00W x 8.75″L.

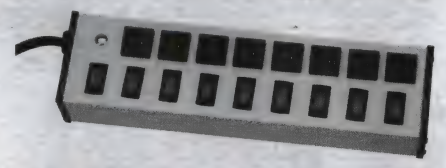
Mfg. Part No.	Outlets	Cord Length	Circuit Breaker Protected	Weight	Stock No.	Price Each
SPC11099	5	6′	Yes	2 lbs.	32C2076	45.36
SPC11100	5	15′	Yes	2.5 lbs.	32C2077	49.18

(3949)

SMALL FOOTPRINT OUTLET STRIPS

multicomp

- Rated at 15A, 120VAC, 60Hz
- Mounting: Keyhole Slots with 10.25″ Mounting Centers
- Outlet Component Colors: Black
- Resettable Overload Circuit Breakers
- On/Off Switch with Built-in Pilot Light
- UL Listed, CSA Certified



Provides 8 grounded outlets in a small area. Power cord is 18/3 SJT with molded plug. Dimensions: 1-1/2H x 4¼W x 13 7/16″ L.

Mfg. Part No.	No. of Outlets	Cord Length	Weight	Stock No.	Price Each
SPC11101	8	6′	2.25 lbs.	32C2078	80.82
SPC11102	8	15′	3.25 lbs.	32C2079	86.55

(3950)

15-AMP AND STANDARD 20-AMP OUTLET STRIPS

multicomp

- Aluminum Housing with Putty White or Gray Finish
- Resettable Overload Circuit Breaker
- On/Off Switch with Pilot Light
- UL listed

Outlet strips feature power cord with 3 conductors and molded plug. **Type SPC11096** is rated at 20A, 120VAC, 60Hz. and **SPC11098** is rated at 15A, 120VAC, 60Hz. Dimensions: 1½H x 2⅜W x 13¼″L.

Mfg. Part No.	No. of Outlets	Cord Length	Finish	Stock No.	Price Each
SPC11096	6	15′	Putty White	32C2073	105.61
SPC11098*	6	15′	Gray	32C2075	53.00

* CSA certified
(30772)

PLUG-IN MULTI-OUTLET POWER STRIPS

legrand® Wiremold

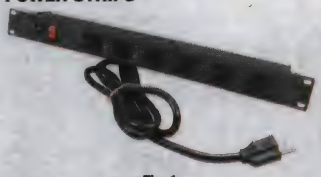


Fig. 1

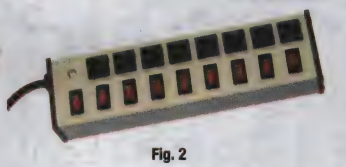


Fig. 2

- Rated 15A/120V
- Circuit breaker
- 14/3 SJT power cord
- Noncorrosive aluminum housing
- Impact-resistant end caps
- Snap-on/slide-off mounting clips
- UL and cUL listed
- 2-year warranty

Fig. 3

COMPACT POWER OUTLET STRIPS
Compact models feature gray housing except 10-outlet units which are putty white and have keyhole mounting.

Mfg. Part No.	Fig.	Number of Outlets	Case Lgth. (Inches)	Cord Lgth. (Ft.)	Stock No.	Price Each
UL100BC*	1	5	9.25	6	95F1269	48.55
UL100BD*	1	5	9.25	15	95F1270	39.65
UL104BC*	1	4	9.25	6	95F1225	36.85
UL104BD*	1	4	9.25	15	95F1226	44.93
UL204BC*	1	7	13.00	6	95F1271	45.56
UL204BD*	1	7	13.00	15	95F1272	55.50
UL205BC*	1	8	13.00	6	95F1273	44.50
UL205BD*	1	8	13.00	15	95F1274	51.69
UL207BC*	1	6	12.25	6	95F1275	44.46
UL207BD*	1	6	12.25	15	95F1276	53.18
UL210BC*	1	10	13.00	6	95F1277	61.76
UL210BD*	1	10	13.00	15	95F1278	68.05
P6*	1	6	12.00	6	95F1227	22.37
DELUXE CONTROL POWER STRIPS						
UL209BC	2	8	13.00	6	95F1279	101.43
UL209BD	2	8	13.00	15	95F1280	112.17
UL215BD	...	4	13.00	15	95F1231	64.96
90° RIGHT-ANGLE POWER STRIPS						
UL1090BC*	...	4	16.00	6	95F1214	43.78
UL1090BD*	...	4	16.00	15	95F1215	48.82
20-AMP POWER STRIPS						
ULB620-6	...	6	13.25	6	95F1267	115.29
ULB620-15	...	6	13.25	15	95F1268	124.96
MEDICAL/DENTAL GRADE PLUG-IN OUTLET STRIPS						
ULM4-15	3	4	10.75	15	95F1250	105.96
SPECIAL USE OUTLET STRIPS						
ULBH4-6	3	4	10.75	6	12N3185	73.27
ULBH4-15	3	4	10.75	15	12N3184	80.18
ULBH6-6	...	6	13.25	6	03P1876	89.09
ULBH6-15	...	6	13.25	15	66K7015	94.93

* No master pilot light/power switch
(3864)

Compact power outlet strips: Fig. 1 = UL100BC*, UL104BC*, UL204BC*, UL205BC*, UL207BC*, UL210BC*, P6*; Fig. 2 = UL100BD*, UL104BD*, UL204BD*, UL205BD*, UL207BD*, UL210BD*; Fig. 3 = UL209BC, UL209BD, UL215BD

MEDICAL DESIGN OUTLET STRIPS

multicomp

SPC11112

SPC11113

- Rated at 15A, 120VAC, 60Hz, 1875W
- 15′ Power Cord is 14/3 SJT with Molded Plug
- Resettable Overload Circuit Breakers
- Aluminum Housing with White Finish

These strips feature hospital-grade outlets. Ideal applications include work areas, lab and instrument carts, laboratory workbenches and more. UL listed. **NOTE: Not for critical care environments.**

Mfg. Part No.	No. of Outlets	Mounting Type	Stock No.	Price Each
SPC11112	4	Snap/Slide	32C2089	64.90
SPC11113	6	Snap/Slide	32C2090	79.90

(3894)

15 AMP - MEDICAL GRADE OUTLET STRIPS

RoHS Compliant Available

HAMMOND MANUFACTURING

Designed to meet the special requirements for institutional and chronic care use with "Hospital Grade" white receptacles, line cord and integral clear molded plug. Sturdy aluminum extruded case with black powder paint coated steel cover. Heavy duty 14 gauge cord - 14/3 SJT. Complete with 15 amp, 125 volt resettable circuit breaker. Additional grounding stud is provided on the case for any further external grounding requirements. Exceeds NEMA requirements for low leakage ground return and for withstanding impact or continuous physical shock without loss of grounding path continuity when plugged into properly grounded source receptacles. CSA certified, Standards C22.2 (No. 21-95 and No. 42-99), CSA Cord Sets No. 8 (Hospital Grade Powerbars) TUVus certified to UL60601-1 (medical grade) and UL1363 (relocatable power taps).

Mfg. Part No.	No. of Outlets	On-Off Switch	Cord Length	Case Length	Stock No.	Price Each
1584T4DH6	4	No	6′	11″	36C2908	76.57
1584T4DH	4	No	12′	11″	26M8332	65.59
1584T6DH6	6	No	6′	14″	36C2912	96.72
1584T6DH	6	No	12′	14″	26M8333	98.78
1584T8DH6	8	No	6′	17″	50H6010	113.45

(69188)

INDUSTRIAL/ COMMERCIAL GRADE POWER OUTLET STRIPS

RoHS Compliant Available

HAMMOND MANUFACTURING

Mfg. part no. 1584 outlet strips are built to meet the rugged requirements of industrial and commercial use. All-metal housing. Heavy-duty 14/3 SJTW wire for extreme temperature ranges. Integral molded plug with straight blade (NEMA 15-15P). Available with lighted on/off switch or red pilot light. Include 15A, 125VAC circuit breaker to prevent overload. UL listed, CSA certified.

Mfg. Part No.	No. of Outlets	On-Off Switch	Cord Length	Case Length	Stock No.	Price Each
1584H4A1	4	Yes	6′	11″	96F5506	33.74
1584H4B1	4	Yes	15′	11″	24B7563	38.30
1584H6A1	6	Yes	6′	14″	96F5490	41.68
1584H6B1	6	Yes	15′	14″	24B7564	45.96
1584H8A1	8	Yes	6′	17″	96F5491	45.96
1584H8B1	8	Yes	15′	17″	24B7565	48.76
1584T6A1	6	No	6′	14″	24B7569	41.24
1584T6B1	6	No	15′	14″	24B7570	45.47
1584T8A1	8	No	6′	17″	24B7572	45.00
1584T8B1	8	No	15′	17″	24B7573	48.76

(69187)

20A INDUSTRIAL/ COMMERCIAL GRADE POWER OUTLET STRIPS

RoHS Compliant Available

HAMMOND MANUFACTURING

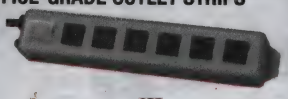
Type 1589 outlet strips are built to meet the rugged requirements of industrial and commercial use. All-metal housing. 6′ cord with heavy-duty 12/3 SJTW wire for extreme temperature ranges. Integral Twist-lock (NEMA L5-20P) molded plug. Available with lighted on/off switch or red pilot light. Include 20A, 125VAC circuit breaker to prevent overload. UL listed, CSA certified.

Mfg. Part No.	No. of Outlets	On-Off Switch	Case Length	Stock No.	Price Each 1-4
1589H4F1	4	Yes	14″	36C2933	60.25
1589H6F1	6	Yes	17″	36C2935	63.60
1589T4F1	4	No	14″	36C2939	60.25
1589H48F1	8	Yes	48″	36C2934	87.53
1589H60F1	10	Yes	60″	36C2936	91.41
1589H70F1	12	Yes	70″	36C2937	95.26
1589H77F1	14	Yes	77″	36C2938	94.46
1589T48F1	8	No	48″	36C2940	87.53
1589T60F1	10	No	60″	36C2941	91.41
1589T70F1	12	No	70″	36C2942	94.46
1589T77F1	14	No	77″	36C2943	94.46

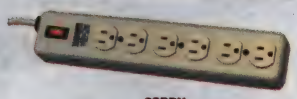
(69191)

INDUSTRIAL-GRADE AND OFFICE-GRADE OUTLET STRIPS

WABER - TRIPP-LITE



6SP



6SPDX

UL800CB-15

- Provide convenient multiple AC outlets for laboratories, offices and production environments
- Heavy-duty metal housings stand up to demanding environments
- Keyhole slots provide secure mounting for a variety of applications
- Locking switch safety cover options reduces risk of accidental shutoff
- Illuminated On/Off switch for one-touch control over connected equipment
- Resettable circuit breaker

All models rated to 120VAC, 50/60Hz. **NOTE:** Power strips do not provide surge or line noise protection. UL listed.

INDUSTRIAL-GRADE WITH KEYHOLE SLOT MOUNTING WITH FLANGES

Mfg. Part No.	Outlets	Cord Length (ft.)	Cord Type	Electrical Rating	Case Length/ Color	Stock No.	Price Each 1-4
3SP	3	6	14/3 SJT	1800W ()	7.38″ Blue/Gray	87F2851	29.18
UL603CB-6	4	6	14/3 SJT	1800W ()	7.38″ Blue/Gray	61F1662	38.66
602	5	6	14/3 SJT	1800W ()	7.38″ Blue/Gray	60F2420	33.36
602-15*	5	15	14/3 SJT	1800W ()	7.38″ Blue/Gray	60F2421	43.78
6SP	6	6	14/3 SJT	1800W ()	12.5″ Beige	87F2854	48.90
UL24CB-15	6	15	14/3 SJT	1800W ()	12.5″ Blue/Gray	61F1663	56.28
UL24RA-15	6	15	14/3 SJT	1800W ()	12.5″ Blue/Gray	50F2814	58.36
UL620-15	6 (15/20A)	15	12/3 SJT	2400W ()	12.5″ Blue/Gray	44F4292	130.12
UL17CB-15	9	15	14/3 SJT	1800W ()	12.5″ Blue/Gray	61F1661	62.52
UL800CB-15	10	15	14/3 SJT	1800W ()	17.5″ Blue/Gray	79W364	89.60
OFFICE/COMMERCIALGRADE+ WITH KEYHOLE SLOT							
4SPDX	4	6	14/3 SJT	1800W ()	7.38″ Beige	46F3878	31.28
6SPDX	6	6	14/3 SJT	1800W ()	12.5″ Beige	46F3879	34.91
6SPDX-15	6	15	14/3 SJT	()	12.5″ Beige	90F2097	44.42
6NX6	6	6	14/3 SJT	1800W ()	12.5″ Beige	81C9301	23.40
PS6	6	4	14/3 SJT	1800W ()	9.5″ Cool Gray	81C9214	10.08

*No switch or switch cover; +No switch cover

(72539)

SAFETY POWER STRIPS

RoHS Compliant Available

TRIPP-LITE POWER PROTECTION

- Safely distribute AC power to connected equipment in harsh environments
- Convenient transformer outlets accommodate multiple transformers without blocking other outlets
- Grounded cord with integrated cord clip reaches distant outlets
- Four safety covers shield unused outlets from debris and accidental contact
- Rugged metal case stands up to the harshest environments
- Complies with OSHA color guidelines outlined in Document 1910.145
- Lifetime limited manufacturer's warranty

A lighted on/off switch with integrated circuit breaker provides power control over connected equipment. **Mfg. part nos. TLM609GF, TLM812GF** and **TLM825GF** include a GFCI plug to protect users from electrical shock in wet or humid environments. Rugged, safe power distribution for industrial, automotive, and factory environments. UL listed.

PROTECT IT™ POWER STRIPS WITH GFCI PLUG

Mfg. Part No.	Outlets	Cord Length (ft.)	Strip Length (in.)	Amps	Stock No.	Price Each 1-4
TLM825GF*	8	25	10.26	15	75M1868	97.55
TLM812GF*	8	12	10.26	15	75M1865	84.18
TLM609GF*	6	9	15.97	15	75M1859	74.90
PROTECT IT™ POWER STRIPS						
TLM815NS*	8	15	10.26	15	75M1867	57.31
TLM609NS*	6	9	15.97	12	75M1860	44.78
TLM626NS	6	6	12.23	15	75M1863	27.77

*Cord wrap with hang holes provides convenient cord management

(105706)

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(196525)

POWER STRIPS – INDUSTRIAL • POWER STRIPS – EXTENDED LENGTH

INDUSTRIAL POWER OUTLET STRIPS

legrand® Wiremold

Heavy-duty units are rated 15A @ 120V with 15-amp circuit breaker. Gray housings constructed of noncorrosive aluminum, feature impact-resistant end caps, snap-on mounting clips, pilot light/power switch, and 14/3 SJT power cord. Strips are 2″ wide, 1.75″ high and available in 2′, 4′ and 6′ lengths, with up to 24 outlets. 2-year warranty. UL listed, CSA certified.

Mfg. Part No.	No. of Outlets	Case Length	Cord Length	Stock No.	Price Each
UL300BC	8	24″	6′	95F1216	68.78
UL300BD	8	24″	15′	95F1217	72.20
UL401BC	8	48″	6′	95F1218	73.42
UL401BD	8	48″	15′	95F1219	80.10
UL402BC	16	48″	6′	95F1220	89.35
UL402BD	16	48″	15′	95F1221	94.21
UL403BC	8	48″	6′	95F1222	67.34
UL404BC	16	48″	6′	95F1233	90.30
UL2062BC	10	72″	6′	95F1179	69.79
UL2063BC	24	72″	6′	95F1181	100.49
UL2063BD	24	72″	15′	95F1182	106.38
UL2064BC	12	72″	6′	95F1183	73.42
UL2064BD	12	72″	15′	95F1184	81.71
UL2065BD	24	72″	15′	95F1186	113.83

(3865)

INDUSTRIAL MULTIPLE OUTLET POWER STRIPS

legrand® Wiremold

Six outlet power strips rated 15A, 120V. Housing features putty-white finish with cross slots for mounting. Lighted on/off switch. 2-year warranty. UL and cUL listed.

Mfg. Part No.	Cord Length	Stock No.	Price Each
R610	6′	95F2899	34.83
R612	15′	95F2900	40.24

(3871)

VERTICAL RACK MOUNT OR WORK BENCH OUTLET STRIPS

RoHS Compliant Available

HAMMOND MANUFACTURING

1585 series outlet strips are designed for power distribution in equipment racks or work benches. Rugged extruded aluminum case with heavy-duty 14/3 SJTW straight power cord for extreme temperature ranges. Integral molded plug available in straight blade (NEMA5-15P). Available with lighted on/off switch. Include 15A 120VAC circuit breaker to prevent overload, plus hardware and brackets for mounting to rack Amhal struts or for wall or bench mounting. UL listed, CSA certified.

WITH ON/OFF SWITCH

Mfg. Part No.	No. of Outlets	Cord Length	Strip Length	Stock No.	Price Each 1-4
● 15853H6A1	6	6′	36″	92F010	66.24
● 15853H6B1	6	15′	36″	97B0238	73.38
● 15852H8A1	8	6′	24″	36C2923	64.36
● 15852H8B1	8	15′	24″	36C2924	67.00
● 1585H8A1	8	6′	48″	92F013	69.92
● 1585H8B1	8	15′	48″	29C3332	77.23
● 1585H10A1	10	6′	48″	36C2915	77.23
● 1585H10B1	10	15′	48″	36C2916	81.12
● 1585H15A1	15	6′	48″	36C2917	82.40
● 1585H15B1	15	15′	48″	36C2918	86.26
● 1586H10A1	10	6′	60″	92F016	73.59
● 1586H10B1	10	15′	60″	36C2927	81.08
● 1587H10A1	10	6′	70″	92F019	81.08
● 1587H19A1	19	6′	70″	36C2928	88.84
● 1587H19B1	19	15′	70″	36C2929	92.69
● 1588H12A1	12	6′	77″	92F021	84.97
● 1588H12B1	12	15′	77″	36C2932	84.63

(69166)

MID-LENGTH INDUSTRIAL OUTLET STRIPS

ISO 9002 Certified

multicomp

SPC11114

SPC11116

- Rated at 15A, 120VAC, 60Hz, 1875W
- Power Cord is 14/3 SJT, with Molded Plug
- Resettable Overload Circuit Breakers
- Gray Cast, Aluminum, with On/Off Switch

Mid-length strips can be used in a variety of applications, including: offices, factories, schools and labs. UL listed.

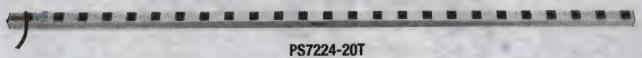
Mfg. Part No.	No. of Outlets	Cord Length	Stock No.	Price Each Each	Price Each 2-3
SPC11114	7	6′	32C2091	54.09	52.72
SPC11115	7	15′	32C2092	62.74	61.16
SPC11116	8	6′	32C2093	55.47	54.06
SPC11117	8	15′	32C2094	64.50	62.88
OSH66	6	6′	66N7723	106.06	103.37
OSH615	6	15′	66N7724	118.68	115.68

(69219)

GENERAL-PURPOSE AND HARDWIRED POWER STRIPS

TRIPP·LITE POWER PROTECTION

PS4816



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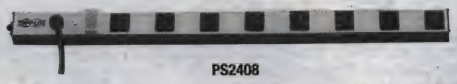


PS2408

- Provide Convenient Multiple AC Outlets for Laboratories, Offices and Production Environments
- Heavy-Duty Metal Housings Stand Up to the Most Demanding Environments
- Mount on Any Surface Including Walls, Workbenches and Inside Rack Enclosures
- Locking Switch Safety Cover Reduces the Risk of Accidental Shutoff
- Illuminated On/Off Switch for One-Touch Control Over Connected Equipment
- Resettable Circuit Breaker

GENERAL-PURPOSE

Mfg. Part No.	Outlets	Cord Length	Cord Type	Electrical Rating	Case Length	Stock No.	Price Each
PS2408	8	15′	14/3 SJT	1800W (15A)	24″	48F4314	67.39
PS3612	12	15′	14/3 SJT	1800W (15A)	36″	48F4315	72.85
PS4816	16	15′	14/3 SJT	1800W (15A)	48″	48F4316	84.93
PS6020	20	15′	14/3 SJT	1800W (15A)	60″	48F4318	96.54
PS7224	24	15′	14/3 SJT	1800W (15A)	72″	48F4319	102.28
PS7224-20	24	15′	12/3 SJT	2400W (20A)	72″	48F4320	149.90
PS7224-20T*	24	15′	12/3 SJT	2400W (20A)	72″	32C0205	132.80

HARDWIRED

Mfg. Part No.	Outlets	Description	Electrical Rating	Case Length	Stock No.	Price Each
PS3612-20HW	12	12-Gauge Insulated Solid Wire	2400W (20A)	36″	34C8225	72.51
PS7224-20HW	24	12-Gauge Insulated Solid wire	2400W (20A)	72″	72C8840	116.05

*Twist-lock plug
(37172)

CABINETMATE® SERIES POWER STRIPS AND SURGE SUPPRESSORS

legrand® Wiremold

- Multilength, low-profile
- 120V; Resettable overload circuit breaker
- Noncorrosive aluminum housing with gray finish
- Measure 1.5W x 1.18″D

Plug-in, vertical power outlet strips and surge suppressors suitable for relay racks, electronic cabinets, file server systems and other similar applications. Slim-line design allows easy mounting with enclosed spring clips. Surge suppressor units help protect sensitive electronics and offer a 5-year warranty. Non surge units have a 2-year warranty. Units are UL and cUL listed to 1363 standards. 15-amps models have 14/3 SJT black power cord; 20-amp models have 12/3 SJT black power cord with 20-amp receptacles and pilot light/power switch.

15-AMP OUTLET STRIPS

Mfg. Part No.	No. of Outlets	Length	Cord Length	Stock No.	Price Each
4810ULBC	10	48″	6′	95F1235	80.44
4810ULBD	10	48″	15′	95F1236	88.77
7011ULBC	11	70″	6′	95F1187	90.80

➤CONTINUED➤

POWER STRIPS – EXTENDED LENGTH, IEC 320 RECEPTACLES, RACK MOUNT

CABINETMATE® SERIES POWER STRIPS AND SURGE SUPPRESSORS (CONT.)

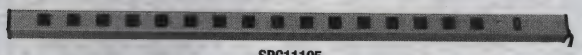
Mfg. Part No.	No. of Outlets	Length	Cord Length	Stock No.	Price Each
7011ULBD	11	70″	15′	95F1188	98.92
7712ULBC	12	77″	6′	95F1189	100.52
15-AMP SURGE SUPPRESSORS					
4810BCS	10	48″	6′	05C4101	164.14
7011BCS	11	70″	6′	05C4103	187.16
20-AMP POWER OUTLET STRIPS					
4810ULBC20R	10	48″	6′	30C8953	101.28
4810ULBD20R	10	48″	15′	30C8955	115.30
7011ULBC20R	11	70″	6′	30C8959	115.39
7011ULBD20R	11	70″	15′	30C8961	124.74
7712ULBD20R	12	77″	15′	30C8967	146.56
20-AMP SURGE SUPPRESSORS					
4810BCS20R	10	48″	6′	30C8951	135.90

(34491)

LONG, RACK MOUNT INDUSTRIAL OUTLET STRIPS

multicomp

SPC11103



SPC11105

- Rated at 15A, 120VAC, 60Hz, 1875W
- Power Cord is 14/3 SJT with Molded Plug
- Resettable Overload Circuit Breakers
- On/Off Switch with Pilot Light
- Gray Case

Versatile and rugged multiple outlet strips are ideal for production lines, workbenches and lab tables. No wiring required. UL listed.

Mfg. Part No.	Case Length	No. of Outlets	Cord Length	Stock No.	Price Each
SPC11103	4′	8	6′	32C2080	48.28
SPC11105	4′	16	6′	32C2082	58.91

(3895)

INTERNATIONAL PLUG-IN OUTLET STRIP

RoHS Compliant Available

legrand®

Wiremold

TUV Rheinland

Features five 220V IEC 320 plugs and 10A single-pole circuit breaker. Snap/slide mount. Dimensions: 11L x 2W x 1.75″D. Gray finish. Power cord not included; order appropriate adapter cord separately; *go online or call.* 2-year warranty. UL and cUL listed, CSA certified, TÜV approved.

Mfg. Part No.	Stock No.	Price Each
IEC5	95F1245	105.31

(34493)

INTERNATIONAL INDUSTRIAL/ COMMERCIAL GRADE POWER OUTLET STRIPS

RoHS Compliant Available

HAMMOND MANUFACTURING

TUV Rheinland

1581 series power outlet strips, designed for use with IEC power cords, are built to meet the rugged requirements of industrial and commercial use. All-metal housing. 1 IEC 320 inlet and 4, 5, 6, or 8 IEC 320 outlets. Available with lighted on/off switch or green pilot light. Include 10A, 220VAC circuit breaker to prevent overload. UL listed, CSA certified, TÜV certified.

Mfg. Part No.	No. of Outlets	On-Off Switch	Case Length	Stock No.	Price Each 1-4
1581H4	4	Yes	10″	83K4288	46.60
1581H5	5	Yes	11.75″	83K4289	49.61
1581H6	6	Yes	13.25″	36C2896	52.61
1581H8	8	Yes	17″	36C2897	55.60
1581T4	4	No	10″	36C2898	45.73
1581T5	5	No	11.75″	30C8771	48.43
1581T6	6	No	13.25″	36C2899	52.60
1581T8	8	No	17″	36C2900	54.57

(69189)

INTERNATIONAL 19″ RACK MOUNT POWER OUTLET STRIPS

RoHS Compliant Available

HAMMOND MANUFACTURING

Designed for use with IEC power cords. One IEC 320 - C14 inlet and 8 IEC 320 - C13 outlets. Available with a rocker type On/Off switch with green light or a green pilot light to indicate power on. CSA certified, UL listed, TÜV certified.

Mfg. Part No.	No. of Outlets	On-Off Switch	Receptacle Location	Inlet Location	Stock No.	Price Each
1582H8E1BK	8	Yes	Front	Rear	29C3904	99.88
1582T8E1BK	8	No	Front	Rear	36C2901	99.88
1583H8E1BK	8	Yes	Rear	Rear	27C5547	98.84
1583T8E1BK	8	No	Rear	Rear	36C2902	97.80

(69190)

ULTRA-SLIM RACK MOUNT POWER STRIPS

RoHS Compliant Available

TRIPP·LITE POWER PROTECTION

- Slim (1U) Cabinet Design Fits Any Standard 19″ Rack
- Versatile, Removable Mounting Brackets Adapt to Rack Mount, Wall Mount or Under-Counter Applications
- Features Master Switch Guard (to Eliminate Risk of Accidental Shutoff) and Snap-in Receptacle Covers to Control Usage

Rugged, all-metal construction. UL listed.

Mfg. Part No.	Outlets	Cord Length	Cord Type	Electrical Rating	Case Length	Stock No.	Price Each
RS-1215	12 (6 Front, 6 Rear)	15′	14/3 SJT	1800W (15A)	19″	48F4313	73.98
RS1215-HG*	12 (6 Front, 6 Rear)	15′	14/3 SJT	1800W (15A)	19″	31C1582	158.00
RS-1215-20	12 (6 Front, 6 Rear)	15′	12/3 SJT	2400W (15A)	19″	31C1583	97.08
RS-1215-RA**	12 (6 Front, 6 Rear)	15′	14/3 SJT	1800W (15A)	19″	31C1581	73.98
RS-0615-F	6 (Front)	15′	14/3 SJT	1800W (15A)	19″	81C9217	75.06
RS-0615-R	6 (Rear)	15′	14/3 SJT	1800W (15A)	19″	81C9218	75.06

* Hospital-grade receptacles and plug **Right angle receptacles to accommodate transformers

(72668)

POWER DISTRIBUTION UNITS FOR RACK ENCLOSURES

RoHS Compliant Available

TRIPP·LITE POWER PROTECTION

- Mount along outside edge of rack while occupying zero U space
- All outlets exposed on one side of unit
- No power switch — switchless design prevents accidental shutoff
- Built-in circuit breaker protection
- Up to 15 foot cord to reach the most distant outlets

Rugged, all-metal case construction. UL listed.

Mfg. Part No.	No. of Outlets	Length (in.)	Receptacle Type	Plug Type	Elec. Cap. (A) w/Circuit Breaker	Stock No.	Price Each
PDU1215	13	19	NEMA 5-15R	NEMA 5-15P	15	81C9209	106.20
PDU1220	13	19	NEMA 5-20R	NEMA 5-20P	20	81C9210	171.00
PDU2430	24	19	NEMA 5-15R	NEMA 5-30P	30+	81C9211	293.40
PDU12IEC	14	19	IEC-C13, IEC-C19	C20 Inlet	16	81C9208	237.60
PDU1220T	13	19	NEMA 5-15/ 20R	NEMA L5-20P	20	97H5752	176.40
PDU1415	14	24	NEMA 5-15R	NEMA 5-15P	15	24K7333	198.00
PDU1420T	14	24	NEMA 5-15/ 20R	NEMA L5-20P	20	24K7334	201.60
PDU1230	14	19	*	NEMA L6-30P	30‡	24K7332	293.40
SWITCHED PDU W/ AUTO TRANSFER SWITCH AND DIGITAL AMMETER							
PDUMH15ATNET	8	1U rackmt.	NEMA 5-15R	NEMA 5-15P	15	46M3742	763.20
PDUMH20ATNET	16	1U	NEMA 5-15/ 20R	NEMA 5-20P; NEMA L5-20P	20	46M3744	865.80
METERED PDU W/ AUTO TRANSFER							
PDUMH15AT	8	1U rackmt.		NEMA 5-15P	15	46M3741	466.20
PDUMH20AT	16	1U rackmt.	NEMA 5-15/ 20R	NEMA 5-20P; NEMA L5-20P	20	46M3743	599.40
METERED PDU							
PDUMH15	13	1U rackmt.	NEMA 5-15R	NEMA 5-15P	15	15R7779	142.20
PDUMV15	16	48″	NEMA 5-15R	NEMA 5-15P	15	46M3745	162.00

CONTINUED

POWER STRIPS – RACK MOUNT

POWER DISTRIBUTION UNITS FOR RACK ENCLOSURES (CONT.)

METERED PDU

Mfg. Part No.	No. of Outlets	Length (in.)	Receptacle Type	Plug Type	Elec. Cap. (A) w/Circuit Breaker	Stock No.	Price Each
● PDUMV20	20	60″	NEMA 5-15/20R	NEMA 5-20P; NEMA L5-20P	20	46M3746	196.20
● PDUMV40	32	71″	NEMA 5-15/20R	NEMA 5-20P; NEMA L5-20P	Dual 20	46M3747	392.40

*Two C19 front, twelve C13 rear receptacles; +two 15A circuit breakers; ‡two 15A (C19), three 10A (C13) circuit breakers
(72669)

19″ RACK MOUNT POWER STRIPS

c UL us — RoHS Compliant Available — Bud Industries, Inc.

POS-195-S

POS-201

Easily installed to mounting surface of any 19″ panel mount cabinet or rack to provide instant power distribution from either the front or the rear of the unit. 15'-14/3 SJT power cord. Combination on/off switch and pilot light on front panel. Steel housing with black finish; 1.75H x 19.00W x 2.37″D. UL listed.

125VAC

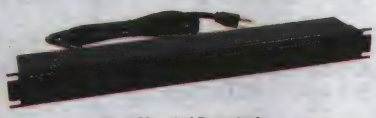
Mfg. Part No.	Capacity (A)	Surge Supressed	Outlets Number	Outlets Location	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-24
● POS-194-S	15	Yes	8	Rear	99B1509	72.25	67.28	64.11
● POS-195-S	15	Yes	8	Front	99B1510	72.25	67.28	64.11
● POS-201	20	No	8	Front	99B1511	100.23	93.34	88.96
● POS-202	20	No	8	Front	99B1512	98.54	91.76	87.46

(7168)

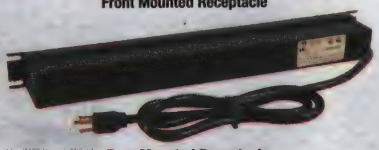
15A RACK MOUNT OUTLET STRIPS

UL CSA — RoHS Compliant Available — HAMMOND MANUFACTURING

- Designed for power distribution from the front of the unit
- Available with lighted on/off switch or red pilot light to indicate power on
- Heavy 14 gauge wire cord - 1⅓ SJTW for extreme temperature ranges and integral molded plug
- NEMA 5-15P straight blade plug type
- Includes 15A, 125VAC circuit breaker to prevent accidental overload
- 6 outlet models include 2 outlets with extra spacing for clearance of most plug in transformers
- Panel dimensions are 1.75" high (1U) and 19" rack width
- CSA certified, Standards C22.2 (No. 21-95 and No. 42-99)
- UL recognized, Standard UL1363 - file # E166039



Front Mounted Receptacle



Rear Mounted Receptacle

FRONT MOUNTED RECEPTACLES

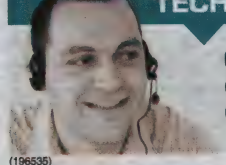
Mfg. Part No.	Outlets	On/Off Switch	Pilot Light	Cord Length (ft)	Stock No.	Price Each
● 1582H6A1BK	6	Yes	No	6	92F002	72.64
● 1582H6B1BK	6	Yes	No	15	92F003	74.29
● 1582T6A1BK	6	No	Yes	6	50H5904	73.41
● 1582T6B1BK	6	No	Yes	15	50H5906	77.97
● 1582H8A1BK	8	Yes	No	6	50H5897	78.70
● 1582H8B1BK	8	Yes	No	15	89C3322	83.25

REAR MOUNTED RECEPTACLES

● 1583H6A1BK	6	Yes	No	6	92F004	72.64
● 1583H6B1BK	6	Yes	No	15	92F005	78.80
● 1583T6A1BK	6	No	Yes	6	50H5947	73.41
● 1583T6B1BK	6	No	Yes	15	50H5950	77.97
● 1583H8A1BK	8	Yes	No	6	33C3369	80.37
● 1583H8B1BK	8	Yes	No	15	73C0783	85.01

(202498)

TECHNICAL SUPPORT HOTLINE



Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

15 & 20 AMP RACK MOUNT OUTLET STRIPS WITH DIGITAL AMMETER

c UL us — RoHS Compliant Available — HAMMOND MANUFACTURING

- Designed for power distribution from the rear of the unit
- Unit includes - easy to read 0.37″ high, red LED ammeter (1.38″ x 0.88″ display)
- Digital ammeter accuracy +/- 0.1 Amps
- Available with lighted on/off switch or red pilot light to indicate power on
- 20 Amp units have a multi-colored rocker switch
- Available in black powder coat finish
- The 15 amp. series uses heavy 14 gauge wire cord - 1⅓ SJTW for extreme temperature ranges and integral molded NEMA 5-15P straight blade plug
- The 20 amp. series uses heavy 12 gauge wire cord - 1⅔ SJTW for extreme temperature ranges and integral NEMA 5-20P straight blade or L5-20P locking type molded plug
- Includes 15 or 20 Amp, 125 VAC circuit breaker to prevent accidental overload
- Two of the six outlets include extra spacing for clearance of most plug in transformers
- Panel dimensions are 1.75" high (1U) and 19" rack width
- Units are cURus recognized to Standard UL1363 - file # E166039

Mfg. Part No.	Current (A)	Outlets	Outlet Location	On-Off Switch	Pilot Light	Cord Length	Plug Type	Stock No.	Price Each 1-4
● 1582H6A1BKAM	15	6	Front	Lighted	No	6	Straight	45T1522	291.82
● 1582H6B1BKAM	15	6	Front	Lighted	No	15	Straight	45T1523	289.89
● 1582T6A1BKAM	15	6	Front	No	Yes	6	Straight	45T1524	280.46
● 1582T6B1BKAM	15	6	Front	No	Yes	15	Straight	45T1525	289.89
● 1583H6A1BKAM	15	6	Rear	Lighted		6	Straight	51R4036	280.46
● 1589H6C1BKRFAM	20	6	Front	Yes	No	6	Locking	45T1526	303.76
● 1589H6F1BKRFAM	20	6	Front	Yes	No	6	Straight	45T1527	300.48
● 1589T6F1BKRFAM	20	6	Front	No	Yes	6	Straight	45T1528	312.85

(209605)

RACK MOUNT INDUSTRIAL OUTLET STRIPS

UL — ISO 9002 Certified — multicomp

- Rated at 15A, 120VAC, 60Hz, 1875W
- Power Cord is 1⅓ SJT with Molded Plug
- Resettable Overload Circuit Breakers
- Steel Housing with Matte Black Textured Finish
- On/Off Switch with Pilot Light
- Mounting Centers: 1.25

SPC11110

SPC11108

Outlet racks are perfect for desks, cabinets and other enclosures. UL listed.

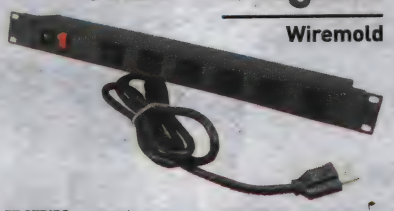
Mfg. Part No.	No. of Outlets	Cord Length	Stock No.	Price Each Each	Price Each 2-3
SPC11108	6 Front	6′	32C2085	52.68	50.99
SPC11109	6 Front	15′	32C2086	58.57	56.63
SPC11110	6 Back	6′	32C2087	71.98	69.67
SPC11111	6 Back	15′	32C2088	78.33	75.82

(69220)

19″ RACK MOUNT POWER STRIPS

c UL us — legrand — Wiremold

Fit all standard 19″ cabinets, carts, and racks. 120V, 60Hz with resettable circuit breaker. Dimensions: 19W x 1.75H x 2.75″ D (1.25″ mounting centers). 1.5″ receptacle center to center. 90° units (**suffix 90** in mfg. part no.) have outlets rotated for applications using plug-in power supplies (adjacent outlets are not covered up). Matte black steel housing with black 14/3 SJT cord. cULus recognized.



15-AMP 19″ RACK MOUNT POWER OUTLET STRIPS

Mfg. Part No.	No. of Outlets Front	No. of Outlets Back	On/Off Switch	Cord	Stock No.	Price Each
J60B0B-90	6	0	Yes	6′	66F9403	75.32
J60B2B-90	6	0	Yes	15′	66F9404	82.94
J06B0BX	0	6	No	6′	66F9401	71.70
J06B2BX	0	6	No	15′	66F9402	81.38
J06B0B	0	6	Yes	6′	95F1241	106.40
J06B2B	0	6	Yes	15′	94F7599	82.25
J24B2B	2	4	Yes	15′	95F2876	81.38
J60B0B	6	0	Yes	6′	95F2872	68.31
J60B2B	6	0	Yes	15′	95F2873	82.25
J24B0B	2	4	Yes	6′	95F2877	71.69

➤CONTINUED➤

19″ RACK MOUNT POWER STRIPS (CONT.)

20-AMP 19″ RACK MOUNT POWER OUTLET STRIPS

Mfg. Part No.	No. of Outlets Front	No. of Outlets Back	On/Off Switch	Cord	Stock No.	Price Each
J06B2B20	0	6	Yes	15′	83F8125	93.55
J06B2B20X	0	6	No	15′	83F8127	93.55
J60B0B20	6	0	Yes	6′	83F8128	83.91
J60B2B20	6	0	Yes	15′	83F8129	93.55
J60B0B20X	6	0	No	6′	83F8130	84.80
J60B2B20X	6	0	No	15′	83F8131	93.55

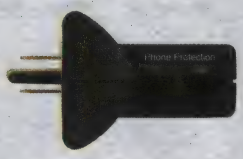
(3883)

SURGEARREST SERIES NETWORK SURGE PROTECTION

RoHS Compliant Available

APC by Schneider Electric

- < 40V Let-Through Rating
- Built-In Single Line (2-Wire) Protection
- Right Angle Plug
- Protection Working Indicator
- Building/Site Wiring Fault Indicator
- $100,000 Lifetime Equipment Protection Policy and Lifetime Product Warranty



The network **SurgeArrest series** provides maximum protection for network and business computer equipment including workstations and network modems. UL listed, CSA certified.

Mfg. Part No.	No. of Outlets	Cord Length	Modem/Fax/DSL Protection	Stock No.	Price Each 1-14
NET7	7	6′	No	49H9741	23.24
NET7T	7	6′	Yes	49H9742	40.21
NET8	8	6′	No	49H9743	36.60

NETWORK RACK MOUNT SURGE SUPPRESSOR

Mfg. part no. NET9RMBLK rack mount SurgeArrest 9-outlet surge suppressor features building wiring fault indicator, protection working indicator, catastrophic event protection, lightning and surge protection, noise filtering NEMA 5-15R outlets, NEMA 5-15P input connection, and cord management to help organize power cords. Nominal input: 120V, 15A max. Surge energy rated: 1700 joules. EMI/RFI noise rejection: 90 dB. Comes complete with cord management rails, plug pull protectors, rack mounting brackets, and user manual. Color: black. Dimensions: 44mmH x 483mmW x 146mmD. Cord length: 4.57 meters (15′) UL listed, CSA certified.

Mfg. Part No.	Description	Stock No.	Price Each 1-5
NET9RMBLK	SurgeArrest Rack Mount 9-Outlet Surge Suppessor	53M3783	112.91

(76231)

ESSENTIAL SURGEARREST SURGE PROTECTORS

RoHS Compliant Available

APC by Schneider Electric

Features:

- Building wiring fault indicator
- Catastrophic event protection (except **P1T**)
- Fail safe mode (except **P1T**)
- Lightning and surge protection
- Noise filtering (except **P1T**)
- Protection working indicator
- Status indicator LED's (except **P1T**)
- Transformer block spacing (except **P1T**)
- Data-line protection and phone line splitter (**P1T** only)
- UL 1449 compliance

P1T

Essential SurgeArrest surge protectors offer affordable surge protection ideal for office and home equipment. Nominal input voltage: 120V. Line current per phase: 15A max. Input NEMA 5-15P connection. and output NEMA 5-15R receptacle. UL listed, CSA certified. All have a $25,000 lifetime equipment protection policy.

Mfg. Part No.	No. of Outlets	Fax/Modem Protection	Surge Energy Rating (J)	Cord Length (ft.)	Color	Stock No.	Price Each 1-14
P1T	1	Yes	320	...	Charcoal	26K1361	16.37
P6B	6	No	490	6	Charcoal	18J0554	15.91

(84490)

SURGE PROTECTORS

RoHS Compliant Available

APC by Schneider Electric

Basic surge protection at an affordable price. Features include: building wire fault indicator, catastrophic event protection, lightning and surge protection, and transformer block spacing. UL listed and CSA certified. $10,000 lifetime warranty.

Mfg. Part No.	No. of Outlets	Surge Energy Rating	Cord Length	Stock No.	Price Each 1-14
P6B	6	320 Joules	6′	18J0554	15.91
P7T10*	7	420 Joules	10′	49H9830	20.83

*RJ-11 Modem/fax/DSL protection (two wire, single line)

(76228)

INDUSTRIAL-GRADE SURGE SUPPRESSORS

RoHS Compliant Available

HAMMOND MANUFACTURING

ZT series surge suppressors are designed for maximum surge protection. Use self-healing gas discharge protection for a 2,000-joule rating. 5 stages of protection in all 3 AC modes, complete with 3 diagnostic monitoring LEDs. Crowbar primary protection to 30,000A for sustained faults. Response time: <1ns. Telco-protected units feature delta protection with 3 long-life semiconductor suppressors. Also include voltage suppression at the outlet to guard against transients from equipment plugged into the unit. Rugged extruded aluminum case with a 6′ long, heavy-duty 14/3 SJTW power cord for extreme temperature ranges. Integral molded plug with on/off switch. Include 15A, 125VAC circuit breaker to prevent overload. UL listed, CSA certified.

Mfg. Part No.	No. of Outlets	EMI/RFI Min. Noise Attenuation (db)	Telephone Protection	Stock No.	Price Each
ZT1001-4	4	80	No	36C2878	143.93
ZT1001-6	6	80	No	01M9510	145.93
ZT1001-8	8	80	No	36C2880	150.48
ZT2001-4	4	80	Yes	36C2881	147.77
ZT2001	6	80	Yes	24B5825	153.27
ZT2001-8	8	80	Yes	36C2882	163.48

(69167)

PERMA POWER COMPUTER-GRADE SURGE PROTECTORS

legrand® Wiremold

Perma Power® computer-grade surge protectors feature high-energy metal oxide varistors (MOVs) to protect against surges and spikes. Units provide surge, noise and thermal protection on all 3 modes, L-N, L-G, N-G. Putty white aluminum housing with putty white 14/3 SJT cord. Manufacturer's five-year product warranty and $10,000 connected equipment warranty. UL listed.

Mfg. Part No.	Outlets	Length	Cord Length	Stock No.	Price Each
M6BZR	6	13.25″	6′	95F1257	84.88
M6BZR-15	6	13.25″	15′	95F1258	92.08
M6BZ	6	13.25″	6′	95F1261	62.45
M6BZ-15	6	13.25″	15′	95F1262	66.49
PR610	6	11.75″	6′	92F8690	28.08

(3810)

PROTECT IT!® TLP606RNET SURGE SUPPRESSOR

RoHS Compliant Available

TRIPP·LITE POWER PROTECTION

NEW

- 6 outlets - 4 rotate, 2 standard
- 6 ft cord
- 1440 joules
- 1 line tel/modem and 1-line gold coax (2.2GHz bandwidth) protection
- $150,000 Ultimate Lifetime Insurance (USA, Puerto Rico & Canada only)

Tripp Lite's **TLP606RNET** Surge Suppressor provides high-performance protection--1440 joules--stopping damaging surges and filtering disruptive line noise so components perform at their peak! 6 outlets - 4 that rotate, 2 that are standard, 1-line coaxial protection - that also rotates and 1-line tel/modem for maximum protection. $150,000 Ultimate Lifetime Insurance coverage (USA and Canada only). Includes two diagnostic LEDs, 6 ft. gold coaxial cable, 6ft network cable and 6 ft. phone cord.

Mfg. Part No.	Outlets	Stock No.	Price Each
TLP606RNET	6 - 4 rotate, 2 standard	05X0076	48.00

(212196)

PROTECT IT!® TLP608/TLP608TEL SURGE SUPPRESSORS

NEW

RoHS Compliant Available

TRIPP·LITE POWER PROTECTION

- 6 outlets / 8-ft. cord
- 990 joule rating
- Modem/fax surge protection (**TLP608TEL**)
- $20,000 Ultimate Lifetime Insurance (USA, Puerto Rico & Canada only)

TLP608

TLP608TEL

CONTINUED

SURGE SUPPRESSORS – MULT. OUTLET STRIP

PROTECT IT!® TLP608/TLP608TEL SURGE SUPPRESSORS (CONT.)

Tripp Lite's **TLP608/TLP608TEL** Surge Suppressors offers economical AC surge suppression for full protection of workstations, desktop PCs, telecom systems and other sensitive electronics. Built-in AC surge suppression shields connected equipment from damage and performance problems due to transient surges. **TLP608/TLP608TEL** offers 6 total outlets, 8 foot cord and diagnostic LED to warn of suppressor damage. AC suppression rated at 990 joules shields equipment from surges and line noise. **TLP608TEL** has a set of RJ11 telephone line suppression jacks protect dialup and DSL modem lines, fax machines, cordless phones and more. Attractive gray suppressor housing with keyhole mounting tabs and 1 designated transformer plug outlet offers convenient protection of desktop computer equipment and accessories. $20,000 Ultimate Lifetime Insurance (USA & Canada only).

Mfg. Part No.	Outlets	Joule Rating	Stock No.	Price Each
● TLP608	6	990	05X0077	19.20
● TLP608TEL	6	990	91T9805	21.20

(212197)

PROTECT IT!® TLP606USB/ TLP606DMUSB SURGE SUPPRESSORS

RoHS Compliant Available

TRIPP·LITE POWER PROTECTION

NEW

- 6 outlet / 6-ft. cord
- 990 joule rating (2100 joule rating for **TLP606DMUSB**)
- 2.1 amp dual port USB charger
- Clamps to attach to desk, workbench or table (**TLP606DMUSB**)
- $20,000 ($40,000 for **TLP606DMUSB**) Ultimate Lifetime Insurance (USA, Puerto Rico & Canada only)

TLP606USB

TLP606DMUSB

Tripp Lite's **TLP606USB/TLP606DMUSB** offers economical AC surge suppression for protection of workstations, desktop PCs, telecom systems and other sensitive electronics. Built-in AC surge suppression shields connected equipment from damage and performance problems due to transient surges. USB charging ports offer fast charging for smartphones, tablets, MP3 players and other portable devices. **TLP606USB/TLP606DMUSB** offers 6 total outlets, 6 foot cord, 2 USB charging ports and diagnostic LED to warn of suppressor damage. **TLP606USB** has attractive cool grey suppressor housing with keyhole mounting tabs offer convenient protection of desktop computer equipment and accessories. **TLP606DMUSB** has matte black housing with clamps that attach to the side of the desk, workbench or table (2 knobs easily clamp to desk for better accessibility).

Mfg. Part No.	Outlets	Joule Rating	Stock No.	Price Each
● TLP606USB	6	990	06X2937	26.00
● TLP606DMUSB	6	2100	06X2936	39.20

(212198)

SPIKESHIELD® SURGE PROTECTION PLUG STRIPS

NEW

RoHS Compliant Available

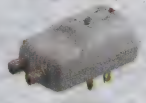
HUBBELL Wiring Device-Kellems

HBL6PS350YL

HBL6RSPS2100

HBL3PI750

- 1, 3, 4, 6, 7, and 8 outlet units available
- Down-line warranty on many units
- Good-Better-Best protection levels
- Non-metallic and Metallic housings
- Multiple cord length options
- Plug in versions



HBL1PI750C

SPIKESHIELD® SURGE PROTECTIVE DEVICES

Mfg. Part No.	Description	Outlets	Joule Rating	Peak AMP Rating	Stock No.	Price Each 1-99
● HBL1PI750	Single outlet plug-in SPD	1	750	13.5kA	01X3395	11.84
● HBL1PI750C	Single outlet plug-in SPD w/CATV protection	1	750	13.5kA	01X3396	11.97
● HBL1PI750M	Single outlet plug-in SPD w/phone line protection	1	750	13.5kA	01X3397	11.97
● HBL3PI750	Three outlet plug-in SPD	3	750	13.5kA	01X3398	12.50
SPIKESHIELD® SURGE PROTECTION PLUG STRIPS						
● HBL6PS350YL	SPD w/Wire Management	6	350	6.5kA	01X3400	37.63
● HBL8PS350YL	SPD w/Wire Management	8	350	6.5kA	01X3404	40.85
SPECIALTY NON-METALLIC SURGE STRIPS						
● HBL4PS1050USB	SPD w/Two USB Ports	4	1050	19.5kA	01X3399	34.40
● HBL6RSPS2100	Remote Switch SPD w/One Keychain Ring Control	6	2100	39kA	01X3401	45.15
● HBL8ESPS1050C	Energy Saving SPD Master/ Slave Design w/CATV Protection	8	1050	19.5kA	01X3402	45.15
● HBL8ESPS1050M	Energy Saving SPD w/Master/ Slave Design w/Fax/Modem	8	1050	19.5kA	01X3403	43.00

(212210)

ISOBAR® AND ISOTEL® SURGE/NOISE SUPPRESSORS WITH DIAGNOSTIC LEDs

RoHS Compliant Available

TRIPP·LITE POWER PROTECTION

- Premium Surge, Spike and Line Noise Protection for All Computers and Electronics
- Isolated Filter Banks Eliminate Interference Between Connected Equipment
- ULTRA Models Offer Diagnostic LEDs that Signal AC Power Problems
- ISOTEL Models Provide Premium Modem/Fax Surge Protection

Rugged all-metal housings stand up to the toughest working environments—won't burn, melt or crack. UL listed.

ISOBAR®

Mfg. Part No.	Outlets	Cord Length (ft.)	Joule Rating	Description	Stock No.	Price Each 1-2
● ISOBAR2-6	2	6	1410	1 Isolated Filter Bank	44F705	55.61
● IBAR4	4	6	3330	2 Isolated Filter Banks	44F706	72.58
● ISOBAR6	6	6	3330	3 Isolated Filter Banks	89F5056	88.40
● IB8RM	8	12	3840	4 Filter Banks with remote on/off switch	87F769	128.33
● ISOBAR4/220	4	6	330	230V Applications (4 NEMA 5-15R)	89F678	90.07
ISOBAR® ULTRA WITH DIAGNOSTIC LEDs						
● ISOBAR4ULTRA	4	6	3330	2 Isolated Filter Banks, Diagnostic LEDs	93F7761	81.02
● ISOBAR6ULTRA	6	6	3330	3 Isolated Filter Banks, Diagnostic LEDs	93F7762	92.07
● ISOBAR8ULTRA	8	12	3840	4 Isolated Filter Banks, Diagnostic LEDs	15R7704	105.42
● ISOBAR6ULTRAHG	6	15	3330	3 Filter Banks, LEDs, Hospital Grade	01F2171	126.99
● ISOBAR825ULTRA	8	25	3840	4 Isolated Filter Banks, Diagnostic LEDs	52M2279	121.00
ISOTEL® WITH MODEM/FAX PROTECTION						
● ISOTEL4ULTRA	4	6	3330	Modem/Fax Protection, Diagnostic LEDs	92F3244	100.87
● ISOTEL6ULTRA	6	6	3330	Modem/Fax Protection, Diagnostic LEDs	93F7767	106.37
● ISOTEL8ULTRA	8	12	3840	Modem/Fax Protection, Diagnostic LEDs	13B3722	122.92

(3918)

SAFETY SURGE SUPPRESSORS

c UL us

RoHS Compliant Available

TRIPP·LITE POWER PROTECTION

ULTIMATE LIFETIME INSURANCE

- Protect connected equipment against damaging surges, spikes and line noise
- Grounded cord with integrated cord clip on selected models reaches distant outlets
- Convenient transformer outlets accommodate multiple transformers without blocking other outlets
- Four safety covers shield unused outlets from debris and accidental contact
- Rugged metal case stands up to the harshest environments
- Complies with OSHA color guidelines outlined in Document 1910.145

A lighted on/off switch with integrated circuit breaker provides power control over connected equipment. Breaker protects against dangerous system overload. Protected LED confirms that connected equipment is being protected. Rugged, safe surge suppression for industrial, automotive and factory environments. UL listed.

Mfg. Part No.	Outlets	Cord Lgth. (ft.)	Joule Rating	Description	Stock No.	Price Each
● TLM825SA*	8	25	3900	8 outlets (including transformer outlets and 4 safety covers)	75M1869	85.73
● TLM615SA*	6	15	2700	6 outlets (including transformer outlets and 4 safety covers)	75M1862	61.95
● TLM812SA*	8	12	1500	8 outlets (including transformer outlets and 4 safety covers)	75M1866	59.28
● TLM609SA*	6	9	1500	6 outlets (including transformer outlets and 4 safety covers)	75M1861	48.43
● TLM626SA	6	6	900	6 outlets (including transformer outlets and 4 safety covers)	75M1864	32.98

*Cord wrap with hang holes provides convenient cord management

(105705)

POWER OUTLET STRIPS AND SURGE SUPPRESSORS WITH MEDICAL-GRADE PLUG AND RECEPTACLES

RoHS Compliant Available

TRIPP-LITE POWER PROTECTION

PS-415-HGULTRA | SPS415HGULTRA | SPS606HGRA | PS410HGOEMX

- Outlet Strips for use inside and outside patient care areas (UL60601-1 and UL1363a)
- All metal housings with flanges/ key holes for mounting

PS-410-HGOEMCC | PSCLAMP(shown with HG Power strip - *sold seperately*)

Special purpose Outlet strips and surge suppressors for applications requiring Hospital-grade plug and receptacles (UL1363 and UL1449).

POWER STRIPS — UL60601-1 / UL60950-1 - FOR USE IN PATIENT CARE AREAS

Mfg. Part No.	Outlets	Cord Length (ft.)	Strip Length (in.)	Amps	Stock No.	Price Each 1-2
PS-415-HGULTRA	4	15	13.75	15	19M1265	147.93
SURGE SUPPRESSION STRIP — UL60601-1 / UL60950-1 - FOR USE IN PATIENT CARE AREAS						
SPS415HGULTRA	4	15	13.75	15	46T3771	220.18
POWER STRIPS — UL 1363A - FOR USE ON MEDICAL MOBILE CARTS/DEVICES AND IN PATIENT CARE AREAS						
PS410HGOEMX	4	10	9.94	15	72W1448	153.50
PS-410-HGOEMCC	4	10	8.54	15	77T1004	136.00
PS-415-HG-OEM	4	15	8.65	15	01P2878	97.37
PS-615-HG-OEM	6	15	13.75	15	26P0945	107.30
POWER STRIPS — UL1363 - (NOT FOR USE IN PATIENT CARE AREAS)						
PS-602-HG	6	1.5	13.75	15	10J7352	76.85
PS-606-HG	6	6	13.75	15	10J7353	114.52
PS-615-HG	6	15	13.75	15	31C1579	126.44
RACK MOUNT POWER STRIP — UL1363 - (NOT FOR USE IN PATIENT CARE AREAS)						
RS1215-HG	12	15	17.3	15	31C1582	158.00

SURGE SUPPRESSORS — UL1363, UL1449 - (NOT FOR USE IN PATIENT CARE AREAS)

Mfg. Part No.	Outlets	Cord Length (ft.)	Joules	Amps	On/Off Switch	Stock No.	Price Each 1-2
SPS606HGRA	6	6	1050	15	Yes, Covered	91T9762	119.70
SPS610HGRA	6	10	1050	15	Yes, Covered	91T9763	135.25
ISOBAR6ULTRAHG	6	15	3330	15	Yes, Covered	01F2171	126.99
SPS-615-HG	6	15	1050	15	No	31C1610	110.22

ACCESSORY — UL60601-1/UL60950-1/UL1363A

Mfg. Part No.	Description	Stock No.	Price Each
PSCLAMP	Compatible with any Tripp Lite Patient Care Area Power Strip (sold separately). Mounting clamp fits a diameter from 3/4" to 2 1/4". Includes optional drip shield and cord management.	07W8429	156.00

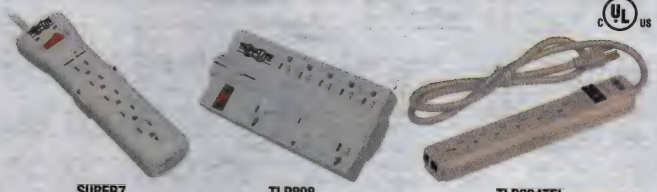
(72667)

PROTECT IT! ECONOMY SURGE SUPPRESSORS

ULTIMATE LIFETIME INSURANCE

RoHS Compliant Available

TRIPP-LITE POWER PROTECTION



SUPER7 | TLP808 | TLP604TEL

➤ CONTINUED ➤

PROTECT IT! ECONOMY SURGE SUPPRESSORS (CONT.)

- Reliable surge, spike and line noise protection for all computers and home/office electronics
- Versatile outlet design on select models accommodates bulky transformers
- Select models offer modem/fax and/or coaxial surge protection
- Diagnostic LEDs on most models alert you to potential power problems
- UL listed

TLP66NET

SURGE SUPPRESSOR

Mfg. Part No.	Outlets	Cord Length	Joule Rating	Features	Stock No.	Price Each 1-2
TLP404*	4	4'	450	...	09J4277	13.13
TLP602	6	2'	180	...	36C2868	10.13
TLP64*	6	4'	540	Integrated Safety Covers	40T5386	23.24
TLP604	6	4'	790	...	81C9234	13.62
TLP606*	6	6'	790	...	09J4278	15.80
TLP74R*	7	4'	1080	Right Angle Outlets	40T5389	16.05
TLP74RB*	7	4'	1080	Right Angle Outlets, Black	40T5390	16.85
STRIKER*	7	6'	1080	...	13B3761	24.10
SUPER7*	7	7'	2160	Side Outlets	27C4796	26.98
TLP712*	7	12'	1080	...	81C9235	28.73
TLP808*	8	8'	1440	...	36C2870	34.43
SURGE SUPPRESSOR WITH RJ11 (FAX / MODEM) PROTECTION						
TLP604TEL*	6	4'	790	...	15R7798	15.97
TLP66NET*	6	6'	1080	RJ45 Protection	40T5387	36.75
SUPER6TEL*	7	6'	1080	Side Outlets	36C2864	27.88
SUPER6TEL12*	7	12'	1080	Side Outlets	36C2865	40.54
TLP707TEL*	7	7'	1080	1 In / 1 Out Protection	09J4279	27.03
SUPER7TEL*	7	7'	2520	Side Outlets	36C2866	34.43
SUPER7TEL15*	7	15'	2520	Side Outlets	36C2867	53.55
TLP808TEL*	8	8'	2160	...	36C2871	43.92

* With diagnostic LED

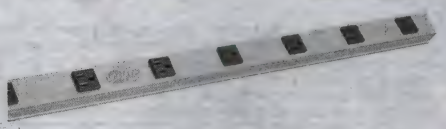
(3925)

ULTRA-SLIM OUTLET STRIPS WITH SURGE SUPPRESSION

RoHS Compliant Available

TRIPP-LITE POWER PROTECTION

- Heavy-Duty Metal Housings Ideal for Factory, Lab and Industrial/Manufacturing Environments
- Locking Switch Safety Cover Reduces the Risk of Accidental Shutoff
- Illuminated On/Off Switch
- Resettable Circuit Breaker



Keyhole slots provide secure mounting for a variety of applications. UL listed.

Mfg. Part No.	Outlets	Cord Length	Cord Type	Electrical Rating	Case Length	Stock No.	Price Each
SS7415-15	16 (450 joules)	15'	14/3 SJT	1800W (15A)	48"	16F657	115.60
SS7619-15	24 (450 joules)	15'	14/3 SJT	1800W (15A)	72"	81C9229	111.60

(69163)

OFFICE-GRADE METAL SURGE SUPPRESSORS

RoHS Compliant Available

WABER by TRIPP-LITE

- Perfect Surge Protection for Office Environments
- 6-Outlet Design Provides Surge Protected Outlets Wherever They Are Needed
- Keyhole Slots Provide Secure Mounting for a Variety of Application

DG206 | DG115-SI

Heavy-duty metal housings stand up to the most demanding environments. UL listed.

Mfg. Part No.	Outlets	Joule Rating	Cord Length	Description	Stock No.	Price Each
DG206	6	1050	6'	1 LED	87F2860	46.34
DG115-SI	6	2100	6'	1 LED	90F2090	70.30

(72542)

SURGE SUPPRESSORS – PLUG IN, RACK MOUNT, DATA

DIRECT PLUG-IN SURGE SUPPRESSORS

RoHS Compliant Available

TRIPP·LITE POWER PROTECTION

ULTRABLOK

SK6-0 (SPIKEBLOK)

TRAVELER100BT

PREMIUM

Include exclusive isolated filter banks and modem/fax/surge protection. UL listed.

Mfg. Part No.	Outlets	Interface Type	Joule Rating	Description	Stock No.	Price Each
● ISOBLOK2-0	2	...	1410	Economical Version	46F2621	59.21
● ISOBARULTRABLOK428	2	...	1410	Sine Wave Tracking, LEDs	93F7764	58.36
● ISOBARULTRA FAX	2	RJ-11	1410	Modem/Fax Protection	93F7765	54.40
ECONOMY						
● SK6-0(SPIKEBLOK)	6	...	540	Wall Mount	87F772	24.95
● SPIKECUBE	1	...	600	Wall Mount for Laptop Computer	97F9182	16.55
LAPTOP/NOTEBOOK						
● TRAVELER	2	RJ-11 (1-In/Out)	1050	Direct Plug-In	26C9910	20.00
● TRAVELCUBE	1	RJ-11 (1-In-2-Out)	540	Direct Plug-In	09J4245	12.00
● TRAVELER100BT	2	RJ-45 (1-In-2-Out)	1050	Direct Plug-In	68K1410	20.00

(3920)

PROTECT IT!® HOME/BUSINESS THEATER SURGE SUPPRESSORS

RoHS Compliant Available

TRIPP·LITE POWER PROTECTION

NEW

- 3 outlet - 2 fixed outlets, 1 rotating power outlet and rotating coax
- Direct plug-in design
- 1080 joule rating
- 1-line gold coax (2.2GHz bandwidth) protection
- $25,000 Ultimate Lifetime Insurance (USA, Puerto Rico & Canada only)

Tripp Lite's **TLP31SAT** Home/Business Theater Surge Suppressor provides high-performance protection--1080 joules--stopping damaging surges and filtering disruptive line noise so components perform at their peak! You can see and hear the difference: sharper, crisper video; deeper, fuller audio and longer component life spans. Perfect for small home/business theater installations: high-definition TVs, satellite and A/V receivers, DVD/CD players and more. 3 outlets, 1-line coaxial protection safeguard an entire home/business theater system. $25,000 Ultimate Lifetime Insurance coverage (USA and Canada only). Included 6 ft. gold coaxial cable.

Mfg. Part No.	Outlets	Stock No.	Price Each
● TLP31SAT	3 - 2 fixed and 1 rotating	08X7001	26.00

(212195)

ISOBAR® RACK MOUNT SURGE SUPPRESSORS

ULTIMATE LIFETIME INSURANCE

RoHS Compliant Available

TRIPP·LITE POWER PROTECTION

- All of the Benefits of the Isobar® Surgeline in a Space-Saving 1U Rack Mount Cabinet
- Fits Standard 19″ Rack Space
- Isolated Filter Banks Eliminate Interference Between Connected Equipment

Rugged all-metal housings stand up to the toughest working environments—won't burn, melt or crack. 15′ cord length. UL listed.

Mfg. Part No.	Outlets	Joule Rating	Description	Stock No.	Price Each
● IBAR12	12	3840	Rack Mount, 15A, Cascade Protection	50F813	191.49
● ISOBAR12ULTRA	12	3840	Rack Mount, 15A, LEDs, Cascade Protection	83C8036	186.82
● IBAR12-20ULTRA	12	3840	Rack Mount, 20A, LEDs	01F2187	208.90
● IBAR12-20T	12	3840	Rack Mount, 20A, Locking Plugs	81C8864	248.92
NON-ISOBAR SURGE SUPPRESSOR					
● DRS-1215	14	3000	Rack Mount, 15A, Economical Surge Protection	31C1554	100.38

(13736)

19″ RACK-MOUNT REAR OUTLET SURGE SUPPRESSORS

c UL us

legrand® Wiremold

Designed to fit all standard 19″ cabinets, carts, and racks. Rated: 15A, 120V with 15A resettable circuit breaker. Feature 6 outlets on back of unit. Available with or without switch. Offer 330V surge clamping voltage and 13,000A maximum surge current. Matte black steel housing; black 14/3 SJT cord. Dimensions: 19W x 1.75H x 2.75″D (1.25″ mounting centers). 1.5″ receptacle center-to-center. 20A units are rated 20A, 120V with 20A resettable circuit breaker. Feature 20A NEMA 5-20P plug and black 12/3 SJT cord. Manufacturer's five-year product warranty. cULus recognized.

COMPUTER-GRADE

Mfg. Part No.	Cord	Switch	Stock No.	Price Each
R5BZX	6′	No	27C3544	110.53
R5BZX-15	15′	No	27C3553	119.90
R5BZ	6′	Yes	52F9665	171.02
R5BZ-15	15′	Yes	52F9666	114.45
20-AMP MODELS				
R5BZ20	6′	Yes	73C2515	132.17
R5BZ20-15	15′	Yes	73C2372	143.44
R5BZ20X-15	15′	No	73C2379	137.85

(3882)

8-OUTLET RACK MOUNT SURGE PROTECTORS AND POWER STRIPS

UL CSA

legrand® Wiremold

- 8 Rear Outlets, Rotated 90 Degrees
- 4 Outlets Spaced For Transformers
- 15A, 120V
- Matte Black Steel Housing
- Surge Units Feature 330V UL 1449 Clamping Level
- Dimensions: 19L x 1.75W x 2.75″ D
- UL Recognized, CSA Certified

SURGE SUPPRESSORS

Mfg. Part No.	Cord Length	Stock No.	Price Each 1-4
R8BZ	6′	27C4079	101.92
R8BZ-15	15′	27C4080	112.66
POWER OUTLET STRIPS			
J08B0B	6′	27C4007	71.70
J08B2B	15′	27C4008	82.25

(69024)

LIGHTNING AND SURGE PROTECTORS

RoHS Compliant Available

L-com® Global Connectivity

AL-CAT5EJW

AL-CAT5W

AL-NFNFB-9

HGLN-CAT5-HP

COAXIAL LIGHTNING AND SURGE PROTECTOR

L-com's HyperLink brand coax surge protectors protect valuable communications equipment in both wired and wireless networks. 0-3 GHz and 0-6 GHz are available. Gas discharge tube protectors feature easily replaced gas tube elements and multi-strike capability. Bi-directional protection guarantees equipment is protected on both sides, high quality construction ensures durability. These coax surge protector and lightning protectors feature popular connectors including: Type N, TNC, RP-BNC, and Type F.

Mfg. Part No.	Connections	Frequency Range	Stock No.	Price Each 1-9
● AL-NMNFB-9	N Plug to N Jack Bulkhead	0-3 GHz	88M3552	24.78
● AL-NFNFB-9	N Jack to N Jack Bulkhead	0-3 GHz	50R4769	25.16
● AL-TMTFB-9	TNC Plug to TNC Jack Bulkhead	0-3 GHz	23T4272	31.10
WEATHERPROOF COAXIAL LIGHTNING AND SURGE SUPPRESSORS				
● AL6-NMNFBW-9	N Plug to N Jack Bulkhead	0-6 GHz	12T2765	46.97

➤CONTINUED➤

LIGHTNING AND SURGE PROTECTORS (CONT.)

DATA LINE LIGHTNING AND SURGE SUPRESSORS

HyperLink's Data Line Lightning and Surge Protectors are used to protect valuable datacomm products such as CAT5 10/100 Base-T Ethernet systems. Industrial grade construction ensures long product life. Metal housing suppresses EMI. Cisco® Reverse Polarity PoE compatible ensures design flexibility.

Mfg. Part No.	Compatibility	Connections	Features	Stock No.	Price Each 1-9
HGLN-CAT5-HP	CAT5	RJ45 Jacks	Indoor High Power	88M4444	87.69

WEATHERPROOF & WEATHER RESISTANT DATA LINE LIGHTNING AND SURGE SUPRESSORS

Used to protect datacomm equipment in outdoor environments. Gasketed cover and concealed mounting holes keep the elements out. Power over Ethernet (PoE) compatible. Removable terminal strips and modular RJ45 jacks provide design flexibility

AL-CAT5W	CAT5	RJ45 Jacks / Screw Terminals	Weatherproof	11R7882	70.78
AL-CAT5HPW	CAT5	RJ45 Jacks / Screw Terminals	Weatherproof High Power	73P7044	96.28
AL-CAT5EJW	CAT5, CAT5e	Shielded RJ45 Jacks	Outdoor	23T4222	60.69
AL-CAT5EJWP	CAT5, CAT5e	Shielded RJ45 Jacks	Weatherproof	23T4223	129.17
AL-CAT6JW	CAT5, CAT5e, CAT6	Shielded RJ45 Jacks	Outdoor	23T4234	52.36
AL-CAT6HPW	CAT5, CAT5e, CAT6	Shielded RJ45 Jacks	Compact Weatherproof High Power	23T4233	72.44

(110611)

1210/1250 SERIES AC SURGE PROTECTIVE DEVICES

RoHS Compliant Available

BOURNS®

NEW

- 100/50 kA max. discharge current rating
- Multi-pole uni-block design
- DIN Rail mountable
- UL 60691 compliant integrated thermal disconnect
- Visual fault indicator
- Remote signalling capability
- Compact design ideal for limited spaces
- Operating Temperature: -50°C to +85°C
- Connection: screw terminals, #6 AWG max.
- IP20

1210/1250 series is a heavy duty/general duty Surge Protective Device (SPD) designed to protect high risk electrical service entrance and branch panels. This SPD is intended to be installed at the front end of the installation, in the main switchboard, close to sensitive terminals or in installations without LPS (lightning rods). **1250 series** is a single-pole module that can be configured for both common mode and differential mode protection in single and three phase applications heavy duty up to 600V and general duty 480V.

1210 series 1250 series

Mfg. Part No.	Operating Voltage Max. (MCOV)	Dimensions (mm) L	W	H	Stock No.	Price Each 1-9	10-49
HEAVY DUTY, ONE PROTECTED POLE							
1210-1S-120	150	67	18	100.6	95W5518	95.42	85.98
1210-1S-230	275	67	18	100.6	95W5519	91.31	82.28
1210-1S-400	400	67	18	100.6	95W5520	93.42	84.19
1210-1S-600	840	67	18	100.6	95W5521	201.71	181.77
HEAVY DUTY, TWO PROTECTED POLES							
1210-2S-120	150	67	36	100.6	95W5522	201.71	181.77
1210-2S-230	275	67	36	100.6	95W5523	201.71	181.77
1210-2S-400	400	67	36	100.6	95W5524	201.71	181.77
HEAVY DUTY, THREE PROTECTED POLES							
1210-3S-120	150	67	54	100.6	95W5525	286.65	258.30
1210-3S-230	275	67	54	100.6	95W5526	286.65	258.30
1210-3S-400	400	67	54	100.6	95W5527	286.65	258.30
1210-3S-600	840	67	54	100.6	95W5528	373.70	336.75
HEAVY DUTY, FOUR PROTECTED POLES							
1210-4S-120	150	67	72	100.6	95W5529	354.59	319.53
1210-4S-230	275	67	72	100.6	95W5530	354.59	319.53
1210-4S-400	400	67	72	100.6	95W5531	354.59	319.53
GENERAL DUTY, ONE PROTECTED POLES							
1250-1S-120	150	67	18	100.6	95W5532	81.66	73.09
1250-1S-230	275	67	18	100.6	95W5533	81.66	73.09
1250-1S-400	400	67	18	100.6	95W5534	84.00	75.18
1250-1S-480	550	67	18	100.6	95W5535	84.00	75.18
GENERAL DUTY, TWO PROTECTED POLES							
1250-2S-120	150	67	36	100.6	95W5536	168.35	151.70
1250-2S-230	275	67	36	100.6	95W5537	157.12	141.59
1250-2S-400	400	67	36	100.6	95W5538	157.12	141.59
GENERAL DUTY, THREE PROTECTED POLES							
1250-3S-120	150	67	54	100.6	95W5539	252.67	227.69
1250-3S-230	275	67	54	100.6	95W5540	264.04	237.94
1250-3S-400	400	67	54	100.6	95W5541	252.67	227.69
1250-3S-480	550	67	54	100.6	95W5542	252.67	227.69

CONTINUED

1210/1250 SERIES AC SURGE PROTECTIVE DEVICES (CONT.)

GENERAL DUTY, FOUR PROTECTED POLES

Mfg. Part No.	Operating Voltage Max. (MCOV)	Dimensions (mm) L	W	H	Stock No.	Price Each 1-9	10-49
1250-4S-120	150	67	72	100.6	95W5543	335.48	302.31
1250-4S-230	275	67	72	100.6	95W5544	335.48	302.31
1250-4S-400	400	67	72	100.6	95W5545	335.48	302.31

ACCESSORIES

1200-BB series bus bar accessory provides a quick solution for combining the ground connection on two to four surge protective devices. **1200TAT** add-on adapter allows for efficient and safe parallel connections 2 x 16 mm^2 wire connection.

Mfg. Part No.	For Use With	Stock No.	Price Each 1-9	10-49
1200-BB-2P	Two single-pole model 1210 or 1250 series SPDs	95W5514	13.41	12.20
1200-BB-3P	Three single-pole model 1210 or 1250 series SPDs	95W5515	13.41	12.20
1200-BB-4P	Four single-pole model 1210 or 1250 series SPDs	95W5516	13.41	12.20
1200TA	Terminal adapter 1210 or 1250 series SPDs	95W5517	17.59	16.00

(211559)

1320 SERIES DC POWER SURGE PROTECTIVE DEVICES

NEW

RoHS Compliant Available

BOURNS®

- Matched high energy MOV
- Internal thermal disconnects
- Status indicator
- Replaceable modular design
- DIN Rail compatible base
- Remote signalling capability
- Applications: DC power supplies
- Operating Temperature: -40°C to +85°C
- Connection: screw terminals, cross-section 1.5-10 mm^2 (Active Wire) and 2.5-25 mm^2 (Grounding Wire)
- IP20

1320 series is a DC power Surge Protective Device (SPD) designed to protect power systems from damage due to lightning and power surges. **1320 series** is a DIN Rail mountable SPD targeted for systems ranging from 48 to 110VDC.

Mfg. Part No.	Voltage (VDC)	Operating Voltage Max.	Discharge Current (kA) Nominal	Max.	Dimensions (mm) L	W	H	Stock No.	Price Each 1-9	10-49
1320-S-48	48	65	15	30	67	18	99	95W5547	95.55	86.10
1320-S-75	75	100	20	40	67	18	99	95W5548	95.55	86.10
1320-S-110	110	150	20	40	67	18	99	95W5546	95.55	86.10

(211561)

1977 SERIES HIGH FREQUENCY COAXIAL SURGE PROTECTIVE DEVICES

RoHS Compliant Available

BOURNS®

NEW

- Heavy duty design
- High frequency DC-4 GHz
- DC Pass to ±48 V
- VSWR <1.2
- Low insertion loss <0.1 dB
- Bidirectional
- Water resistant
- Replaceable gas tube
- ipeak (8/20µs): 20kA
- Impedance: 50ohms[1]
- Grounding options: M6 screw, bulkhead, bracket
- Operating temperature: -50°C to +85°C
- IP65

1977 series coaxial Surge Protective Device (SPD) has been designed to provide heavy duty protection for antennas, broadband, microwave, GPS, cellular and CATV applications against surges caused by lightning and other electrical transients.

Mfg. Part No.	Max. Power (W)	DC Turn-(On) Breakdown	Connector Type	Dimensions (mm) L	W	H	Stock No.	Price Each 1-9	10-49
1977-09-A00	25	130	N, FF	64	13.8	26	95W5555	101.92	91.84
1977-09-A01	25	130	N, MF	68	13.8	26	95W5556	101.92	91.84
1977-09-A02	25	130	F, FF	51	8.7	26	95W5557	95.66	85.62
1977-09-A03	25	130	F, MF	57	8.7	26	95W5558	95.66	85.62
1977-25-A00	190	300	N, FF	64	13.8	26	95W5559	101.92	91.84
1977-25-A01	190	300	N, MF	68	13.8	26	95W5560	101.92	91.84
1977-25-A02	190	300	F, FF	51	8.7	26	95W5561	95.66	85.62
1977-25-A03	190	300	F, MF	57	8.7	26	95W5562	95.66	85.62
1977-50-A00	780	600	N, FF	64	13.8	26	95W5563	101.92	91.84
1977-50-A01	780	600	N, MF	68	13.8	26	95W5564	101.92	91.84
1977-50-A02	780	600	F, FF	51	8.7	26	95W5565	95.66	85.62
1977-50-A03	780	600	F, MF	57	8.7	26	95W5566	95.66	85.62

1 Impedance for F-Type Connector is 75 ohms.

(211565)

SURGE SUPPRESSORS – DATA • SURGE PROTECTION

1420 SERIES DC POWER SURGE PROTECTIVE DEVICES

NEW

RoHS Compliant Available

BOURNS®

- Hybrid MOV/GDT design
- No leakage over life
- DIN Rail mountable
- 40 kA maximum impulse current rating
- Minimal footprint within DC power system
- Uni-block design with replaceable modules
- Visual fault indicator
- Thermal disconnet
- Applications: photovoltaic
- Operating Temperature: -50°C to +85°C
- Connection: screw terminal, #4AWG max.
- IP20

1420 series is a DC power Surge Protective Device (SPD) designed to protect power systems operating up to 1200VDC. The unique hybrid MOV/GDT design provides an enhanced level of protection against the effects of direct or indirect lightning.

Mfg. Part No.	Network Voltage (VDC)	Operating Voltage Max.	Discharge Current (kA) Nominal	Dimensions (mm) L	W	H	Stock No.	Price Each 1-9	10-49
● 1420-PV-1000	1000	1.2	20	67	54	90	95W5549	231.14	208.28

(211564)

1500 SERIES GIGABIT ETHERNET SURGE PROTECTIVE DEVICES

NEW

RoHS Compliant Available

BOURNS®

- GDT/TBU® High-Speed Protector technology
- Low impulse let-through
- High surge current rating
- Available in isolated and grounded versions
- 10/100/1000 data compatibility
- 5 kV isolation
- Ground Connection: screw lug
- Operating temperature: -40°C to +65°C

1500 series Ethernet Surge Protective Device (SPD) incorporates multiple Bourns® circuit protection technologies. These technologies are designed to work together to provide an unmatched level of surge protection for exposed Ethernet applications. **1500 series** is designed to meet key surge and AC power cross requirements of GR-1089-Core Issue 6. **1500 series** is available as a wall mount unit with optional DIN Rail hardware.

Mfg. Part No.	Config.	DC Turn-(On) Breakdown	Ground Wire (optional)	Dimensions (mm) L	W	H	Stock No.	Price Each 1-9	10-49
● 1500-1S	Isolated*	360	...	25.1	65.1	107.1	95W5551	125.93	113.48
1500-2S-W	Grounded	360	14 AWG, 3ft.	41	65.1	107.1	95W5554	113.99	102.72

* Isolated unit requires no ground.

(211573)

PROTECT IT! SERIES MOBILE SURGE PROTECTORS

RoHS Compliant Available

TRIPP·LITE POWER PROTECTION

NEW

SK10TG
- 1 outlets/direct plug-in
- 350 joule rating
- Timer selection switch for 1, 3, or 6 hours
- Diagnostic LEDs
- $5,000 Ultimate Lifetime Insurance (USA & Canada only)

SK30USB
- 3 outlets/direct plug-in
- 540 joule rating
- 2.1 amp USB charging
- Diagnostic LED
- $5,000 Ultimate Lifetime Insurance (USA & Canada only)

SK120USB
- 3 outlets/direct plug-in
- 540 joule rating
- 2.1 amp USB charging
- Fold down plug
- Carrying pouch
- Diagnostic LED
- $5,000 Ultimate Lifetime Insurance (USA & Canada only)

SK10TG SK30USB SK120USB

Mfg. Part No.	Description	Joules	Stock No.	Price Each
● SK10TG	1 outlet, includes timer	350	01X2805	20.00
● SK30USB	3 outlets, inc. 2.1A USB charging	540	06X2935	25.20
● SK120USB	3 outlets, inc. 2.1A USB charging, fold down plug	540	08X7000	25.20

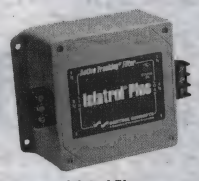
(212101)

ISLATROL® PLUS SINGLE-PHASE ACTIVE TRACKING FILTERS

RoHS Compliant Available

CONTROL CONCEPTS A Subsidiary of the Liebert Corporation

Series connected high-frequency noise filter with transient protection. Provides continuous sinewave Active Tracking® filtration plus high energy protection from spikes, transients, and noise on the AC power line. Offers the flexibility of either receptacle/line cold connection or hard-wired connection to critical loads (up to 30 amperes). These units are bi-directional, excellent EMI/RFI noise rejection, 50/60Hz, single phase. Applications include industrial or office equipment, computers placed in harsh environments. UL 1283 listed.



Islatrol Plus

120VAC, 0-135Vrms

Mfg. Part No.	Current (A)	Dimensions (in.)	Mounting Flange (in.) D	E	F	G	Term H	Stock No.	Price Each 1-2
● IC102	2.5	1.81H x 4.00W x 2.88D	4.38	2.12	4.81	5.31	#6	18P9306	125.91
● IC105	5.0	1.81H x 4.00W x 2.88D	4.38	2.12	4.81	5.31	#6	18P9307	178.26
● IC107	7.5	2.50H x 4.50W x 4.50D	5.25	3.50	5.77	6.12	#6	18P9308	235.84
● IC115	15	2.50H x 6.00W x 4.50D	6.75	3.50	7.27	7.75	#8	18P9309	390.17
● IC130	30	2.50H x 7.50W x 4.50D	8.25	3.50	8.77	9.00	#8	17C7802	674.44
240VAC, 0-260Vrms									
● IC202	2.5	1.81H x 4.00W x 2.88D	4.38	2.12	4.81	5.31	#6	18P9310	179.66
● IC205	5.0	2.35H x 4.75W x 4.75D	5.25	3.50	6.00	5.77	#6	17C7804	255.37
● IC215	15	2.35H x 7.75W x 4.75D	8.25	3.50	9.00	8.77	#8	16P8645	572.47
● IC230	30	2.35H x 7.75W x 4.75D	8.25	3.50	9.00	8.77	#8	18P9311	995.59

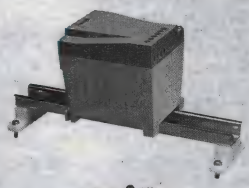
(17028)

ISLATROL® ELITE

RoHS Compliant Available

CONTROL CONCEPTS A Subsidiary of the Liebert Corporation

DIN/flange-mount high-frequency, single-phase noise filter/surge suppressors, Ideal applications include critical industrial loads drawing up to 20A of continuous current. Typical applications include any microprocessor-based products, including industrial PLCs, OEM applications, and motion control systems. LED status and form C dry contacts standard. UL 1449, 1283 listed; CE compliant.



Islatrol® Elite

SINGLE-PHASE 120VAC MODELS

Mfg. Part No.	Current (A)	Dimensions (in.)	Stock No.	Price Each 1-5
● IE103	3	3.83H x 3.06W x 4.06D	18P9312	200.42
● IE105	5	3.83H x 3.06W x 4.06D	18P9313	227.10
● IE110	10	3.83H x 3.06W x 4.06D	18P9314	301.44
● IE120	20	3.83H x 3.06W x 4.06D	16P8648	460.91
SINGLE-PHASE 240VAC MODELS				
● IE210	10	3.83H x 3.06W x 4.06D	16P8649	418.57
● IE220	20	3.83H x 3.06W x 4.06D	16P8650	561.22

(61877)

SURGELOGIC SERIES SURGE PROTECTION DEVICES

RoHS Compliant Available

SQUARE D by Schneider Electric

- Compact package can be mounted on an electrical panel, meter socket, or inside electrical control cabinets
- Individually fused MOVs
- Plastic enclosure (Type 4X NEMA rating)
- Green status LED
- 2-year warranty

SDS1175 SDSA3650

Square D brand Surgelogic surge protection devices utilize high-energy suppression circuitry that can be located at any point in the electrical system. As a Type 1 rated device, they have the flexibility to be used with or without an Overcurrent Protection Device (OCPD). SPDs provide surge suppression for equipment from severe transient activity. Products are suitable for installing indoors, outdoors, or in other harsh environments.

Mfg. Part No.	Voltage	Surge Current per Phase (kA)	Modes of Protection	Configuration	MCOV	SCCR (kA)	Stock No.	Price Each 1-9
SDSA1175	120V AC / 240V AC	36	...	Single-Phase, Wye, 3-Wire	150V L-N, 300V L-L	25	16B2308	93.70
● SDSA1175T	120V AC	36	...	Single-Phase, Wye, 2-Wire	150V	25	52T5018	95.08
● SDSA3650	600V AC / 347V AC	40	6	Three-Phase, Wye, 4-Wire	750V L-N, 1500V L-L	200	16B2309	247.82
● SDSA3650D	600V AC	40	3	Three-Phase, Delta, 3-Wire	1500V L-L	200	52T5019	251.44

(202113)

SURGELOGIC HARD WIRED SURGE PROTECTIVE DEVICES

RoHS Compliant Available

SQUARE D Schneider Electric

NEW

- NEMA 4X Rated
- Overvoltage technology
- EMI/RFI Noise Rejection
- LED Status Indication
- Suppression Status Alarm
- Coordinated Fuse Technology

Square D brand Surgelogic HWA Surge Protective Devices (SPDs) are surge suppressors and noise filters in compact and affordable packages. The compact designs allow surge suppression to be installed adjacent to power panels or directly on sensitive equipment in harsh electrical conditions. HWA systems are versatile and compact Surge Protective Devices (SPDs) designed to provide high-quality surge suppression for a wide variety of commercial, industrial or institutional applications. Square D brand Surgelogic HWA devices can be used in a network of surge suppression applications or as a stand-alone surge suppressor.

Mfg. Part No.	Surge Current per Phase	Voltage	Modes of Protection	Configuration	Stock No.	Price Each 1-9
TVS2HWA50X	50kA	208Y/120V	10	3 Ø, Wye, 4-wire+G	89H6053	761.17
TVS4HWA50X	50kA	480Y/277V	10	3 Ø, Wye, 4-wire+G	89H6203	789.89
TVS2HWA80X	80kA	208Y/120V	10	3 Ø, Wye, 4-wire+G	89H6054	859.68
TVS4HWA80X	80kA	480Y/277V	10	3 Ø, Wye, 4-wire+G	89H6204	869.78
TVS2HWA10X	100kA	208Y/120V	10	3 Ø, Wye, 4-wire+G	85R3575	1080.42
TVS4HWA10X	100kA	480Y/277V	10	3 Ø, Wye, 4-wire+G	85R3576	1152.82

(212201)

STV 100K SERIES SURGE SUPPRESSORS

c UL us

RoHS Compliant Available

SOLA HD

- 100,000 Amp Peak Current Rating To Provide Protection Against Severe Transients
- All Mode Protection
- Excellent Clamping Levels (600V @ 120V Lines) Provide Protection For Sensitive Microprocessor-based Equipment
- 65 kAIC Fault Current Fusing Levels Provides Safety and NEC Conformance While Preventing Damage to Electrical Panels Due to Short Circuits or Component Failure
- LED Status and Audible Alarms Provide Visual and Audible Indication of Surge Suppressor Status
- UL 1449 (3rd edition)
- Compact Design With NEMA 12 Enclosure
- 10 Year Warranty

Applications

- Distribution Panels (<1200A)
- Branch, Lighting and Control Panels
- Factory Automation Installations
- Dedicated Industrial Equipment

STV100K series is a hard wired surge suppressor designed to be installed at the service entrance, branch panels or dedicated sensitive electronic loads. These units feature all mode protection, LED and audible alarm status indication, sine wave tracking and Form C dry contacts.

Mfg. Part No.	Input Voltage	Input Configuration	Stock No.	Price Each 1-2
STV100K-10N	120	1 Phase (2 Wire + Ground)	34M8666	573.36
STV100K-24L	240	1 Phase (2 Wire + Ground)	95B9587	576.18
STV100K-10S	120/240	1 Phase (3 Wire + Ground)	95B9582	573.36
STV100K-10Y	208Y/120	3 Phase Wye (4 Wire + Ground)	34M8667	635.81
STV100K-23Y	380Y/220	3 Phase Wye (4 Wire + Ground)	95B9584	629.79
STV100K-27Y	480Y/277	3 Phase Wye (4 Wire + Ground)	95B9588	629.79
STV100K-24D	240	3 Phase Delta (3 Wire + Ground)	95B9585	643.96
STV100K-48D	480	3 Phase Delta (3 Wire + Ground)	95B9589	638.45
STV100K-10D4	240/120 CT	3 Phase Delta (4 Wire + Ground)	95B9580	633.98
STV100K-24D4	480/240 CT	3 Phase Delta (4 Wire + Ground)	95B9586	633.98

(52771)

STV25K SERIES DIN RAIL SURGE SUPPRESSORS

c UL us

RoHS Compliant Available

SOLA HD

- Compact and Narrow Design for Minimized Panel Space Requirements
- Compact Design Minimizes Connecting Lead Length While Reducing Impedance Ensuring a Superior Clamping Performance of 400V or Less
- Easy Access Terminal Screws for Quick Mounting and Installation
- 50,000 Amps of Surge Protection
- Sine Wave Tracking and All Mode Protection
- LED Status Indication
- 10 Year Warranty

Applications:

- Control Cabinets for Industrial Automation
- Point of Use Industrial/Service Equipment
- Remote Commercial or Industrial Equipment Instrumentation
- Commercial and Building Automation Systems

STV25K series DIN rail surge suppressors provide point-of-use protection against damaging transient at the dedicated equipment level. They are ideal for installation in electric control cabinets found on the factory floor or at remote locations. These devices provide protection for sensitive control and computer equipment from the effects of internally and externally generated transient found in harsh industrial environments. UL recognized to Standard 1449, 3rd edition.

➤ CONTINUED ➤

STV25K SERIES DIN RAIL SURGE SUPPRESSORS (CONT.)

Mfg. Part No.	Input Voltage	Maximum Continuous Operating Voltage	Stock No.	Price Each 1-2
STV25K-10S	120V, 0-135V RMS	120VAC, 150V RMS	30M9531	245.90
STV25K-24S	240V, 0-260V RMS	240VAC, 275V RMS	95B9591	254.60

(68368)

STFE ELITE SERIES ACTIVE TRACKING® FILTERS WITH SURGE PROTECTION

RoHS Compliant Available

SOLA HD

CE c UL us

Features:

- Series connected DIN Rail mounted filter
- Patented durable metal mount clip
- UL listed surge current capacity – 45,000A
- Transient protection in all modes (L-N, L-G, N-G)
- Single phase applications up to 20A
- Operating temperature: -40°C to +50°C
- Screw clamp connections accept 10-16 AWG and meet IP20 specifications
- LED status indication
- Form C contact for remote monitoring
- UL 1449 (3rd edition), UL 1283, cUL recognized component, CE compliant
- 5 year limited warranty

STFE Elite series DIN Rail Mount combines Active Tracking® technology with UL Listed surge protection to protect against the full spectrum of voltage transients and surges. It continuously tracks the input AC power line responding instantly into action upon detecting extraneous high frequency noise and high voltage transients caused by everyday events such as turning on machinery, motors, or equipment.

STFE Elite series attenuates or reduces the amplitude of normal mode noise to a minimum of 90dB that occurs in a frequency range of 100KHz to 50MHz, and of common mode noise to a minimum of 60dB that occurs in a frequency range of 5MHz to 50MHz. **STFE Elite series** provides the industry's best IEEE C62.41 Category "A & B" Ringwave protection.

SINGLE-PHASE MODELS (120 VAC)

Mfg. Part No.	Amps	Min. Wire Size (AWG Sug-gest)	Fuse/ Circuit Breaker Ampacity (A) Sug-gest	Fuse/ Circuit Breaker Ampacity (A) Max	Dimensions (in.) W	D	H	Wt. (lbs.)	Stock No.	Price Each 1-4
STFE030-10N	3	24	3	3.75	2.56	4.56	4.88	1.7	88M8296	211.26
STFE050-10N	5	22	5	6.25	2.56	4.56	4.88	1.7	88M8298	263.25
STFE100-10N	10	20	10	12.5	2.56	4.56	4.88	1.7	88M8300	325.91
STFE200-10N	20	12	20	25	2.56	4.56	4.88	1.7	88M8302	455.17
SINGLE-PHASE MODELS (240 VAC)										
STFE030-24L	3	24	3	3.75	2.56	4.56	4.88	1.7	88M8297	228.90
STFE050-24L	5	22	5	6.25	2.56	4.56	4.88	1.7	88M8299	325.91
STFE100-24L	10	20	10	12.5	2.56	4.56	4.88	1.7	88M8301	432.11
STFE200-24L	20	12	20	25	2.56	4.56	4.88	1.7	88M8303	676.28

(108791)

STFV PLUS SERIES DATA/SIGNAL LINE SURGE PROTECTION DEVICES FOR TRANSIENT DATA

RoHS Compliant Available

SOLA HD

UL

Features:

- Non degrading, series filter/TVSS technology for total durability
- Surge current capacity — 25,000 amps
- High impact plastic case, epoxy encapsulated enclosure
- Transient protection in all modes (L-N, L-G, and N-G)
- Single Phase applications up to 30 amp
- Operating temperature from -40°C to +60°C
- Hardwired connection
- LED power indication
- UL 1283
- 10 year warranty

STFV Plus series combines Active Tracking® filtration for low energy noise and surge suppression for high energy transients. It continuously tracks the input AC power line responding instantly into action upon detecting extraneous high frequency noise and high voltage transients caused by everyday events such as turning on machinery, motors, or equipment. These devices are designed to meet UL 1283. **STFV Plus series** attenuates or reduces the amplitude of high frequency noise to a maximum of 90dB that occurs in a range of 100 KHz to 50 MHz. **STFV Plus series** provides IEEE C62.41 Category "A & B" Ringwave protection.

SINGLE-PHASE MODELS (120 VAC)

Mfg. Part No.	Amps	Min. Wire Size (AWG Sug-gest)	Sc-rew Size #	Fuse/ Circuit Breaker Ampacity (A) Sug-gest	Fuse/ Circuit Breaker Ampacity (A) Max	Case Dimensions (in.) W	D	H	Wt. (lbs.)	Stock No.	Price Each
STFV025-10N	2.5	26	6	2.5	3.125	2.88	1.81	4	1	59M8130	122.54
STFV050-10N	5	22	6	5	6.25	2.88	1.81	4	1.3	59M8069	165.79
STFV075-10N	7.5	18	6	7.5	6.25	4.75	2.35	4.75	2	59M8071	221.15
STFV150-10N	15	14	8	15	18.75	4.75	2.35	6.25	3.5	59M8067	378.68
STFV300-10N	30	10	8	30	37.5	4.75	2.35	7.75	6	59M8074	650.78

➤ CONTINUED ➤

STFV PLUS SERIES DATA/SIGNAL LINE SURGE PROTECTION DEVICES FOR TRANSIENT DATA (CONT.)

SINGLE-PHASE MODELS (240 VAC)

Mfg. Part No.	Amps	Min. Wire Size (AWG Suggest)	Screw Size #	Fuse/ Circuit Breaker Ampacity (A) Suggest	Fuse/ Circuit Breaker Ampacity (A) Max	Case Dimensions (in.) W	Case Dimensions (in.) D	Case Dimensions (in.) H	Wt. (lbs.)	Stock No.	Price Each
● STFV025-24L	2.5	26	6	2.5	3.125	2.88	1.81	4	1.3	59M8068	176.32
● STFV050-24L	5	22	6	5	6.25	4.75	2.35	4.75	2	59M8070	259.90
● STFV075-24L	7.5	18	6	7.5	9.375	4.75	2.35	6.25	3.5	59M8072	337.66
● STFV150-24L	15	14	8	15	18.75	4.75	2.35	7.75	5.8	59M8073	561.53
● STFV300-24L	30	10	8	30	37.5	4.75	2.35	7.75	6	59M8075	955.53

(100562)

STABILINE DIN1 PLUS SERIES SURGE PROTECTION DEVICES

Superior Electric

10 Year Warranty

Small Case

Large Case

- Dual-purpose tabs for DIN-rail or wall mounting
- 20kA or 40kA surge amp capacity per phase for AC use
- 10kA or 20kA surge amp capacity per mode for DC use
- 15A or 30A max. continuous operating current
- 1∅, 2-wire plus ground for Series and Parallel applications
- Ultra compact, fail-safe design
- High-frequency noise filtering
- Responds reliably and repeatedly in less than 1 nanosecond
- LED visual protection status
- Simple and quick installation — hard-wired via screw terminal (barrier strips)
- 10-year manufacturer's warranty

Stabiline® **DIN1 Plus series** surge protective device and filter for instantaneous protection of sensitive electronics. All models provide surge protection against harmful transient voltage and high-frequency noise that exceed the nominal operating voltage of AC and DC critical dedicated control loads. The fail-safe design incorporates thermal fuse links and TMOVs, and dual Component-Level Fusing (CLF). Durable ABS plastic polycarbonate enclosure, rated UL94V-0, is available in two sizes: small case 3.94H x 1.4W x 2.28"D and large case 3.93H x 2.8W x 2.28"D. All 120V and 250V models are cETL recognized components per ANSI/UL 1449 3rd Edition (SPD) and are UL 1283 as electromagnetic filter.

Mfg. Part No.	Case Style	Service (V)	Service Range	Surge Amp Cap.* (kA)	Cont. Oper. Current Max. (A)	MCOV (AC)	Stock No.	Price Each 1-4
DIN1P-10-24-1G-15	Small	24	5-30 VAC, 5-38 VDC	10 per Mode	15	30	51R1603	175.00
DIN1P-10-24-1G-30	Small				30	30	51R1604	175.00
DIN1P-20-24-1G-15	Large	24	5-30 VAC, 5-38 VDC	20 per Mode	15	30	51R1606	190.00
DIN1P-20-24-1G-30	Large				30	30	51R1607	190.00
DIN1P-10-48-1G-15	Small	48	24-50 VAC, 24-65 VDC	10 per Mode	15	50	41R3781	218.05
DIN1P-10-48-1G-30	Small				30	50	51R1605	175.00
DIN1P-20-48-1G-15	Large	48	24-50 VAC, 24-65 VDC	20 per Mode	15	50	51R1608	190.00
DIN1P-20-48-1G-30	Large				30	50	50R9901	190.00
DIN1P-20-120-1G-15	Small	120	48-150 VAC, 48-200 VDC	20 per Phase	15	150	50R9898	175.00
DIN1P-20-120-1G-30	Small				30	150	50R9899	175.00
DIN1P-40-120-1G-15	Large	120	48-150 VAC, 48-200 VDC	40 per Phase	15	150	50R9902	190.00
DIN1P-40-120-1G-30	Large				30	150	50R9903	190.00
DIN1P-20-250-1G-15	Small	250	120-275 VAC, 120-300 VDC	20 per Phase	15	260	06R2349	175.00
DIN1P-20-250-1G-30	Small				30	260	50R9900	175.00
DIN1P-40-250-1G-15	Large	250	120-275 VAC, 120-300 VDC	40 per Phase	15	260	50R9904	190.00
DIN1P-40-250-1G-30	Large				30	260	50R9905	190.00

*Surge Amp Capacity — AC Voltage: L-N, L-G, and N-G; DC Voltage (per wire): L1-G and L2-G
(163662)

NETWORK SURGE SUPPRESSORS

RoHS Compliant Available

TRIPP·LITE POWER PROTECTION

- Protect Network Equipment with Up to 300% More Surge-Absorbing Power than Competitive Models
- The Industry's Most Complete Line of Network Cable Protection

DTEL2

Essential surge and line noise protection for data and communication lines.

Mfg. Part No.	Interface	Clamping	Lines Protected	Stock No.	Price Each
● DB25-ALL	DB-25	18V	1-25, Chassis	66F3953	28.06
● DNET1	RJ-45	7.5V	1-8	91B7932	38.66
● DTEL2	RJ-11/45	260V	2 Lines (Center 4 Wires)	66F3954	27.62
● DB9	DB-9	18V	1-9, Chassis	66F3951	20.40

(3927)

DIN2R-40 SERIES STABILINE TRANSIENT VOLTAGE SURGE SUPPRESSORS

10 Year Warranty

Superior Electric

DIN2R-40 series

Replacement Module for DIN2R-40-120-L1

- 120, 220, 240-277, 480 VAC and N-G models
- Low profile, DIN-rail (35mm symmetrical) mounting
- 40 kA surge amp capacity protection
- Replaceable plug-in surge protection module and fixed base
- Visual summary status of MOV element
- Internal thermal disconnect system
- Relay contacts for remote monitoring
- 10-year manufacturer's warranty
- Meet UL 1449, 2nd edition

DIN2R-40 series Stabiline® transient voltage surge suppressors are single pole, parallel-connected, MOV technology Class II, Category B surge protective devices suitable for use in AC electrical power systems for protection against surge and transient activity. **DIN2R-40 series** protectors provide 40 kA surge amp capacity protection in a maintenance free, low profile, DIN Rail mountable module. **DIN2R-40 series** feature a replaceable plug-in surge protection module and fixed base which allows for easy and fast maintenance. Ideal for protection of fire-alarm panels, control systems, and PLC's. L-N; L-G: L-L protectors use MOV technology and N-G protectors use Gas Tube. Wt.: 0.25 lbs.

DIN2R-40 SERIES TRANSIENT VOLTAGE SURGE SUPPRESSORS

Mfg. Part No.	Typical System Voltage/Service Configuration	Protection Mode	Protector Quantity Line V	Protector Quantity N-G	MCOV (VAC)	Stock No.	Price Each
DIN2R-40-120-L1	1 Phase, 120 VAC, 2-Wire, w/Ground;	L-N, N-G	1	1	150	88M0829	105.00
	Split Phase, 120/240 VAC, 3-Wire, w/Ground;	L-N / L-N, N-G	2	1			
	3 Phase, 208Y/120 VAC, 4-Wire WYE, w/Ground	L-N / L-N / L-N, N-G	3	1			
DIN2R-40-220-L1	1 Phase, 220 VAC, 2-Wire, w/Ground;	L-N, N-G	1	1	255	88M0831	105.00
	3 Phase 380Y/220 VAC, 4-Wire WYE, w/Ground;	L-N / L-N / L-N, N-G	3	1			
	3 Phase, 220 VAC, 3-Wire DELTA	L-L / L-L / L-L	3	N/A			
DIN2R-40-480-L1	1 Phase, 480 VAC, 2-Wire, w/Grounded Neutral;	L-L, N-G	1	1	550	88M0835	125.00
	3 Phase, 380 or 480 VAC, 3-Wire DELTA	L-L / L-L / L-L	3	N/A			
DIN2R-40-NG1	120, 120/240, 220, 277, 380, 480 VAC Neutral to Ground	N-G	N/A	1	600	88M0827	120.00

REPLACEMENT PLUG-IN SURGE PROTECTION MODULES

Mfg. Part No.	Description	MCOV AC Rating Each Mode	Stock No.	Price Each
DIN2R-40-120-MOD	Replacement Module for DIN2R-40-120-L1	150	88M0830	84.00

(108592)

DIN RAIL MOUNT DATA LINE SURGE SUPPRESSORS

WAGO®

UL

- Response time: <5ns
- Max. nominal current: 20A
- Temp. range: -40°C to +85°C
- Wire termination: CAGE CLAMP®
- Wiring configurations: L-L, L-N
- Wire range: 28-12 AWG
- UL listed

WAGO-PROTECT series surge suppressors are high-speed, high-current, solid-state devices designed to protect sensitive electronic equipment (PLCs, PCs, etc.) from transient over voltages present on AC/DC power lines. Powered by patented Silicon Avalanche Suppressor Diode technology from Transtector, these suppressors provide the utmost in protection without degradation - unlike MOV based technology. Feature LED fail mode indication as well as relay alarm output connection and built-in test points for easy troubleshooting and maintenance.

DC SURGE PROTECTION (82.5 x 73 x 31 mm)

Mfg. Part No.	Nominal Voltage	Clamping Voltage (V)	Peak Surge Current (kA)	Stock No.	Price Each 1-4	Price Each 5-9
51017375	24VDC	60	2	14M9229	122.70	116.15

(121111)

LINE-E POWER CONDITIONERS

APC by Schneider Electric

Automatically corrects brownouts and overvoltages, and stabilizes chronic line voltage variation. Also provides multi-stage surge suppression and full time EMI/RFI filters.

Mfg. Part No.	Description	Dimensions H x W x D (in.)	Stock No.	Price Each 1-14
LE600	600VA Automatic Voltage Regulator	6.90 x 10.75 x 8.15	85H2959	54.06
LE1200	1200VA Automatic Voltage Regulator	6.90 x 10.75 x 8.15	85H2925	67.76

(75509)

MCR SERIES PORTABLE FERRORESONANT POWER LINE CONDITIONERS

RoHS Compliant Available

SOLA HD

- Protects Systems from Surges, Spikes, Sags, Overvoltages, Brownouts, and Electrical Noise
- Automatic Overload Protection Eliminates Need for Circuit Breakers and Fuses
- Voltage Regulation: ±3% for Input Variation of +10%/-20%
- Overload: Output Current Limited to 1.65x Rated Current
- Harmonic Distortion: Less Than 3% Total RMS Content at Full Load
- MCR Portable is for 120V input/output only
- Average Continuous Life is 25 Years
- UL Listed, CSA Certified
- Limited 10-Year Warranty

MCR Portable

10 Year Warranty

PORTABLE MINI COMPUTER-POWER CONDITIONERS—OUTPUT: 60Hz/120V; INPUT: 95-130V
DIMENSIONS: 6.00 x 7.00 x 9.00″ (H x W x D)

Mfg. Part No.	Model No.	VA Rating	Receptacle/ Plug (NEMA)	Stock No.	Price Each 1-2
63-13-070-6	MCR070	70	(4) 5-15R/5-15P	93K6815	353.22
63-13-115-6	MCR150	150	(4) 5-15R/5-15P	93K6816	560.36
63-13-125-6	MCR250	250	(4) 5-15R/5-15P	93K6817	743.70
DIMENSIONS: 9.00 x 9.00 x 16.00″ (H x W x D)					
63-13-150-6	MCR500	500	(4) 5-15R/5-15P	93K6818	1033.76
63-13-175-6	MCR750	750	(4) 5-15R/5-15P	93K6820	1317.19
63-13-210-6	MCR1000	1000	(4) 5-15R/5-15P	93K6821	1520.06
DIMENSIONS: 11.00 x 11.00 x 17.00″ (H x W x D)					
63-13-215-6	MCR1500	1500	(6) 5-15R/5-20P	93K6822	2042.56
63-13-220-6	MCR2000*	2000	(4) 5-15R, (1) L5-30R/L5-30P	87F202	2555.63
63-13-230-6	MCR3000*	3000	(4) 5-15R, (1) L5-30R/5-50P	93K6823	3523.24

*This unit is not CSA certified
(3795)

MCR SERIES HARDWIRED FERRORESONANT POWER LINE CONDITIONERS

RoHS Compliant Available

SOLA HD

- Rugged Design
- Ideal for PLCs
- Excellent Protection for Machine Tools, Computer Loads, Robotics, Industrial Panels and Electronic Equipment
- Galvanic Isolation
- Acts as a Step-Up or Step-Down Transformer
- Noise Attenuation: 120dB Common Mode, 60dB Transverse Mode
- Surge Suppression Tested to ANSI/IEEE C63.41 Class A & B Waveform: <10V Let-Through Typical
- Hardwired
- 25-Year Typical MTBF
- No Maintenance Required
- 10-Year Warranty

10 Year Warranty

MCR series protects equipment from all power problems except total power loss. Suppresses transients, protects against overloads, sags, noise, brownouts and acts as a dedicated line. Neutralizes harmonics and SCR notches that can damage sensitive loads. Even with a heavily distorted or square-wave input, **MCR series** puts out a sine wave. To size the unit for your needs, simply multiply the Volts x Amps to obtain the VA load requirement. Then select the next larger size unit. If protection from severe brownouts is needed, the unit can be oversized for even greater input voltage window. If your load has an inductive inrush such as relays, coils, solenoids or motors, size the unit for the load inrush current. For 60Hz/600V models, 500 to 1500VA range, *go online or call.*

HARDWIRED MCR SERIES — 60Hz — UL LISTED

Mfg. Part No.	VA Rating	Output/Input Voltage	H x W x D (In.)	Weight (lbs.)	Stock No.	Price Each 1-2
63-23-112-4*	120	120/120, 208, 240, 480	9 x 4 x 5	15	80K6352	498.26
63-23-125-4*	250		10 x 6 x 8	27	80K6353	624.25

➤CONTINUED➤

MCR SERIES HARDWIRED FERRORESONANT POWER LINE CONDITIONERS (CONT.)

Mfg. Part No.	VA Rating	Output/Input Voltage	H x W x D (In.)	Weight (lbs.)	Stock No.	Price Each 1-2
63-23-150-8*	500	120,208, 240/120, 208, 240, 480	13 x 9 x 7	37	80K6354	925.66
63-23-175-8*	750		14 x 9 x 7	52	80K6355	1173.79
63-23-210-8†	1000		17 x 9 x 7	62	80K6356	1407.34
63-23-215-8†	1500		17 x 13 x 9	95	80K6357	1885.56
63-23-220-8†	2000		18 x 13 x 9	109	80K6358	2396.84
63-23-230-8†	3000		19 x 13 x 9	142	80K6359	3426.99
63-23-250-8†	5000		28 x 13 x 9	222	80K6360	5359.53
63-28-275-8**‡	7500	120,208,240/ 208, 240, 480	27 x 26 x 9	362	80W032	6992.19
63-28-315-8**‡	15,000		28 x 38 x 10	710	44F2028	13082.72

*cULus listed; †cULus listed verisons are available; **UL listed only. For cULus, order by changing -8 (UL only) to -C8.
‡For international 50Hz models larger than 5000VA, *go online or call.*

INTERNATIONAL HARDWIRED MCR SERIES — 50Hz — CE COMPLIANT; OUTPUT VOLTAGE: 110,120,220,240, INPUT VOLTAGE: 110,120,220,240,380,415

Mfg. Part No.	VA Rating‡	H x W x D (In.)	Weight (lbs.)	Stock No.	Price Each 1-2
63-23-612-8	120	9 x 6 x 8	24	80K8081	615.91
63-23-625-8	250	11 x 6 x 8	27	80K9325	770.67
63-23-650-8	500	13 x 9 x 7	40	80K7363	1142.38
63-23-710-8	1000	18 x 9 x 7	64	80K7364	1973.17
63-23-720-8	2000	18 x 13 x 10	113	80K7365	3119.48
63-23-750-8	5000	30 x 13 x 10	266	50F3009	6577.91

(3811)

LINE CONDITIONERS (LINE VOLTAGE REGULATORS)

TRIPP·LITE POWER PROTECTION

- Filters EMI/RFI Line Noise Up to 40dB @ 1MHz
- Provides Complete Protection Against Damaging Surges
- Diagnostic LEDs Indicate Incoming Voltage Status

Automatically regulates high and low incoming voltages, creating the optimal operating conditions for computerized equipment. All models except **LS606M** feature isolated filter banks which reduce interference between connected equipment.

Mfg. Part No.	Output Capacity (W)	Joule Rating	Outlets	Dimensions (in.) H	W	D	Stock No.	Price Each
LS606M	600	720	6	5.5	4.75	4.75	74C1164	126.00
LC1200	1200	1200	4	7.25	6	7	46F2615	174.60
LC1800	1800	1440	6	6.75	5.75	6.75	46F2616	259.20
LC2400	2400	1440	6**	6.75	5.75	5	50F5040	351.00
LCR2400*	2400	1440	14	5.25	19	7.25	50F814	475.20
LS604WM‡	600	720	4	4	5	5.75	83F6125	165.60

* Rackmount version; ‡ Wallmount version; **2@20Amp
(3915)

COAXIAL HERMETIC STYLE BUSHING MOUNT EMI FILTERS

api technologies corp.

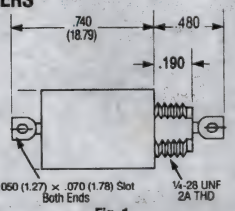


Fig. 1

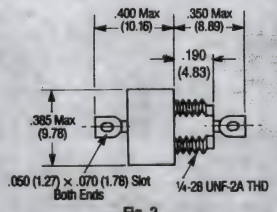


Fig. 2

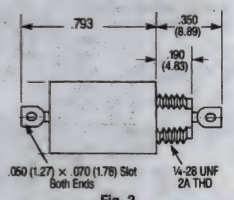


Fig. 3

➤CONTINUED➤

SOLDER-IN FILTERS • POWER LINE FILTERS – SINGLE-PHASE

COAXIAL HERMETIC STYLE BUSHING MOUNT EMI FILTERS (CONT.)

L SECTION

Mfg. Part No.	Fig.	VDC @ 85°C	Rated Current (A)	Min. Ins. Loss @ 25°C 300 kHz	Min. Ins. Loss @ 25°C 10 MHz	Stock No.	Price Each 1-4	Price Each 5-9
9200-300-0025	1	80	10	33	60	87F1351	50.36	47.78
9053-100-0001	2	80	15	34	60	93F2012	54.05	51.29

PI SECTION

Mfg. Part No.	Fig.	VDC @ 85°C	Rated Current (A)	Min. Ins. Loss (–55°C to +125°C) 1MHz	10 MHz	1GHz	Stock No.	Price Each 1-4	Price Each 5-9
9001-100-1010	3	150	0.5	80	80	80	10F8142	124.14	117.79
9001-100-1017	3	150	5.0	80	80	80	19F681	108.02	102.50
9001-100-1025	3	250	5.0	43	80	80	19F683	89.20	84.65

(7447)

RESIN-SEALED/SOLDER-IN FILTERS

RoHS Compliant Available

api technologies corp.

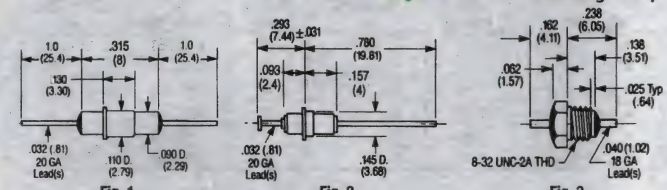


Fig. 1 Fig. 2 Fig. 3

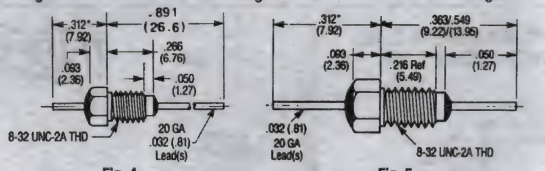


Fig. 4 Fig. 5

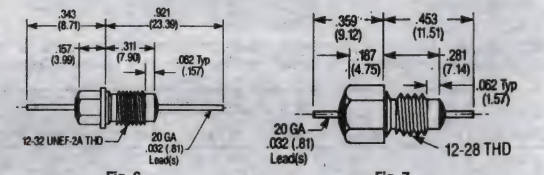


Fig. 6 Fig. 7

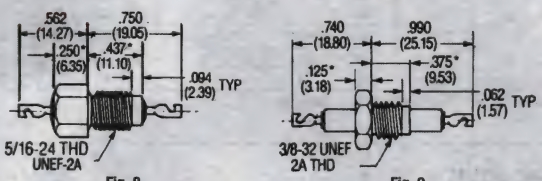


Fig. 8 Fig. 9

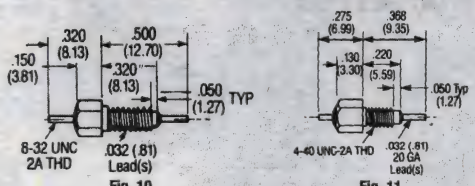


Fig. 10 Fig. 11

High-temperature solder prevents solder reflow during installation. Silver-plated eyelet assures mounted perpendicularity.

PI SECTION SOLDER-IN MOUNT

Mfg. Part No.	Fig.	Min. Cap. (pF)	VDC (85°C)	Min. Ins. Loss @ 25°C (dB) 10 MHz	1GHz	Stock No.	Price Each 1-4	Price Each 5-9
1251-001	1	1500	350	5	70	90F2247	6.90	6.58
1214-001	2	1750	250	5	70	19F687	4.70	4.48

PI SECTION BUSHING MOUNT

1250-059	3	1500	250	5	60	90F2250	9.95	9.49
● 1250F-003	4	3000	200	5	65	79K3816	8.81	8.40
1250-054	5	5000	100	20	70	90F2249	8.22	7.84
1270-025	6	5000	200	20	70	90F2246	8.67	8.26
1270-016	6	5000	200	20	70	19F2456	8.67	8.26
1201-066	7	5500	200	20	70	10F8145	7.48	7.14
1202-052	8	3000	500	10	70	19F2112	19.12	18.24

➤CONTINUED➤

RESIN-SEALED/SOLDER-IN FILTERS (CONT.)

PI SECTION BUSHING MOUNT

Mfg. Part No.	Fig.	Min. Cap. (pF)	VDC (85°C)	Min. Ins. Loss @ 25°C (dB) 10 MHz	1GHz	Stock No.	Price Each 1-4	Price Each 5-9
1202-054	8	3000	500	10	70	10F8149	12.61	12.03
1202-005	8	2000	1000	5	65	10F8148	17.14	16.35
1280-060	9	1500	2500	5	50	19F689	29.97	28.58
1293-001	10	28K	100	75	75	90F2243	16.13	15.38

C SECTION BUSHING MOUNT

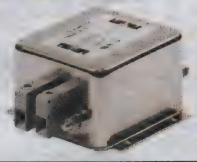
● 9900F-381-6004	11	5000	70	45	55	73K4326	10.17	9.70

(7446)

FN350 SERIES HIGH POWER FILTER FOR DRIVES

RoHS Compliant Available

SCHAFFNER



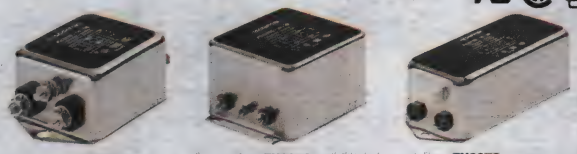
Mfg. Part No.	Current Rating (A)	L (mH)	C_x (µF)	C_y (µF)	Stock No.	Price Each
● FN350-55-33	55	1	4.4	33	85K8075	316.68
● FN350-12-29	12	7.5	2.2	10	85K8072	151.87

(79522)

FN2000 SERIES COMPACT SINGLE-PHASE FILTERS

RoHS Compliant Available

SCHAFFNER



FN2020 FN2070 FN2070

For general-purpose filtering requirements. Compact form factor for applications in which space is at a premium including precision instrumentation, switched-mode power supplies and motor drives. All are provided in chassis-mount metal housings. Mfg. part nos. ending in **-06** have industry-standard size fast-on connection; those ending in **-07** have wire leads.

COMPACT SINGLE X-CAPACITOR FILTER

Mfg. Part No.	Amps	L (mH)	Cx (µF)	Cy (nF)	Stock No.	Price Each 1-24
● FN2010-1-06	1	12	0.1	4.7	66F8733	14.49
● FN2010-3-07	3	2.5	0.1	4.7	94B5717	14.83
● FN2010A-6-06	6	1	0.1	4.7	60K9583	15.17
● FN2010-10-06	10	0.8	0.1	4.7	66F8736	13.79
● FN2010-12-06	12	0.7	0.1	4.7	66F8737	14.67
● FN2010-20-06	20	0.6	0.1	4.7	85K8035	20.44
● FN2010-30-08	30	0.7	0.47	10	66F8740	45.12

COMPACT DUAL X-CAPACITOR FILTER

Mfg. Part No.	Amps	L (mH)	Cx (µF)	Cy (nF)	Stock No.	Price Each 1-24
● FN2020-1-06	1	12	0.15	4.7	66F8741	18.32
● FN2020-3-06	3	2.5	0.15	10	66F8742	17.04
● FN2020-6-06	6	1	0.15	4.7	66F8743	17.19
● FN2020B-6-06	6	1	0.15	...	60K9602	17.40
● FN2020-10-06	10	0.8	0.15	4.7	01M7865	17.19
● FN2020-12-06	12	0.7	0.15	4.7	85K8038	17.45
● FN2020-16-06	16	0.65	0.15	4.7	85K8039	25.39
● FN2020-20-06	20	0.6	0.15	4.7	66F8747	25.66
● FN2020-30-08	30	0.67	0.47	10	04M4520	55.11

COMPACT DUAL X-CAPACITOR 2 INDUCTOR FILTER

Mfg. Part No.	Current (A)	L (mH)	Cx (µF)	Cy (nF)	Stock No.	Price Each 1-24
● FN2060-6-06	6	0.97	0.22	4.7	85K8045	22.92
● FN2060-12-06	12	0.58	0.47	4.7	93K6558	25.28
● FN2060-16-06	16	0.65	0.33	4.7	85K8042	53.37
● FN2060-20-06	20	0.6	1	4.7	66F8755	54.02
● FN2060-20-08	20	0.6	1	4.7	85K8043	60.28
● FN2060-30-08	30	0.6	1	10	85K8044	96.62

➤CONTINUED➤

FN2000 SERIES COMPACT SINGLE-PHASE FILTERS (CONT.)

HIGH-PERFORMANCE DUAL X-CAPACITOR 2 INDUCTOR FILTER

Mfg. Part No.	Current (A)	L (mH)	Cx (µF)	Cy (nF)	Stock No.	Price Each 1-24
FN2070-1-06	1	22	0.33	4.7	66F8757	27.26
FN2070-3-06	3	9.8	0.47	4.7	66F8758	24.90
FN2070-6-06	6	7.8	1	4.7	66F8759	34.40
FN2070B-6-06	6	7.8	1	...	97H8317	41.45
FN2070-6-07	6	7.8	1	4.7	27C0221	37.82
FN2070M-6-06	6	7.8	1	4.7	91B2287	35.84
FN2070-10-06	10	4.5	1	4.7	93K7561	54.59
FN2070-10-07	10	4.5	1	4.7	89M5169	52.43
FN2070-12-06	12	3.25	1	4.7	85K8046	53.68
FN2070-16-06	16	2.8	1	4.7	85K8047	80.88
FN2070-36-08	36	1.23	2.2	4.7	30C9764	109.21

MULTISTAGE FILTER WITH DIFFERENTIAL INDUCTOR

Mfg. Part No.	Amps	L (mH)	L1 (mH)	Cx (µF)	Cy (nF)	Stock No.	Price Each 1-24
FN2080-10-06	10	4.5	0.06	1	4.7	66F8765	42.16

(7562)

FN2030 SERIES GENERAL-PURPOSE EMI FILTER WITH HIGH ATTENUATION PERFORMANCE

RoHS Compliant Available

SCHAFFNER

Features
- Current ratings from 1 to 30A
- High performance filter attenuation
- High differential mode attenuation
- Optional medical versions (B type)
- Optional safety versions (A type)
- Optional overvoltage protection

COMMERCIAL VERSIONS

Mfg. Part No.	Current (A)	L (mH)	Cx (µF)	Cy (nF)	Stock No.	Price Each 1-24
FN2030-1-06	1	20	0.22	2.2	06M3247	18.20
FN2030-3-06	3	14	0.33	3.3	06M3252	19.37
FN2030-4-06	4	14	0.33	3.3	06M3254	18.45
FN2030-6-06	6	8	0.47	4.7	06M3255	18.20
FN2030-8-06	8	8	0.47	4.7	06M3256	19.86
FN2030-10-06	10	8	0.47	4.7	06M3248	23.10
FN2030-12-06	12	4	1	10	06M3249	22.77
FN2030-16-06	16	4	1	10	06M3250	26.13
FN2030-20-06	20	4	1	10	06M3251	28.67
FN2030-30-08	30	2	1	10	06M7271	58.27

MEDICAL VERSIONS

FN2030B-3-06	3	14	0.33	...	06M3258	18.45
FN2030B-6-06	6	8	0.47	...	06M3259	19.37
FN2030B-12-06	12	4	1	...	06M3257	22.77

(89356)

FN 2090 SERIES MULTISTAGE EMI FILTERS WITH HIGH ATTENUATION PREFORMANCE

RoHS Compliant Available

SCHAFFNER

Features
- Current ratings from 1 to 20A
- Two stage filter
- Very high differential and common mode attenuation
- Optional medical versions (B type)
- Optional overvoltage protection

COMMERCIAL VERSIONS

Mfg. Part No.	Amps	L (mH)	Cx (µF)	Cy (nF)	Stock No.	Price Each 1-24
FN2090-1-06	1	20	0.22	2.2	06M3260	29.70
FN2090-3-06	3	14	0.33	2.2	06M3266	28.20
FN2090-4-06	4	14	0.33	2.2	06M3267	28.56
FN2090-6-06	6	8	0.47	3.3	99K1473	32.18
FN2090-8-06	8	8	0.47	3.3	06M3268	33.86
FN2090-10-06	10	8	0.47	3.3	06M3261	44.43
FN2090-12-06	12	4	1	10	06M3262	47.75
FN2090-16-06	16	4	1	10	06M3263	84.50
FN2090-20-06	20	2.7	1	10	06M3265	99.25
FN2090-20-08	20	2.7	1	10	12P8984	137.51

CONTINUED

FN 2090 SERIES MULTISTAGE EMI FILTERS WITH HIGH ATTENUATION PREFORMANCE (CONT.)

MEDICAL VERSIONS

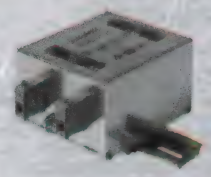
Mfg. Part No.	Amps	L (mH)	Cx (µF)	Cy (nF)	Stock No.	Price Each 1-24
FN2090B-3-06	3	14	0.33	...	06M3270	28.20
FN2090B-6-06	6	8	0.47	...	06M3271	32.90
FN2090B-12-06	12	4	1	...	06M3269	49.66

(89357)

SINGLE AND TWO PHASE EMC/RFI FILTERS FOR INDUSTRIAL ELECTRONICS

RoHS Compliant Available

SCHAFFNER



Features
- Excellent filter performance for appilcations with high interference levels
- Filters for two-phase supply up to 2x 520VAC (P-P) availabile
- Fast and comfortable snap-in installation on TS 35 DIN rails upto 45A
- Industrial grade terminal blocks for unsurpassed electrical safety

FLANGE MOUNT

Mfg. Part No.	Curent Rating (A)	Power Loss (W)	Stock No.	Price Each 1-9	Price Each 10-19
FN2410-8-44	8	2.6	52K7380	57.96	55.02
FN2410-16-44	16	3.5	52K7376	63.79	60.56
FN2410-25-33	25	5.5	52K7377	78.79	74.81
FN2410-32-33	32	5.6	60K9651	85.77	81.43
FN2410-45-33	45	7.4	60K0024	88.05	83.60
FN2410-60-34	60	5.5	60K9652	182.37	173.14
FN2410-80-34	80	9.9	60K9653	195.96	186.06
FN2410-100-34	100	15.4	60K9650	206.86	196.40

TS 35 DIN RAIL MOUNT

FN2412-8-44	8	2.6	55K4653	70.34	66.78
FN2412-16-44	16	3.5	57K2955	74.55	70.77
FN2412-25-33	25	5.5	57K2960	89.02	84.53
FN2412-32-33	32	5.6	60K9662	97.16	92.25
FN2412-45-33	45	7.4	60K9663	103.03	97.82

(85719)

CORCOM EF SERIES RFI FILTERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

EF Series are general purpose filters effectively providing RFI control of line-to ground noise. The design is compact and meets the very low leakage current requirements of VDE portable equipment as well as (120 Volt) UL544 non-patient medical equipment. Models with F suffix have .250" terminals on load side

Mfg. Part No.	Current Rating (A)	D x H x W	Stock No.	Price Each 1-24	Price Each 25-49
1EF2F	1	1.55 x 0.85 x 1.98"	17R2504	13.09	11.89
6EF2F	6	1.55 x 0.85 x 1.98"	99M1051	11.50	11.03
15EF1F	15	2.62 x 0.85 x 1.98"	52K4472	17.24	16.13

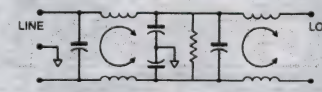
(60222)

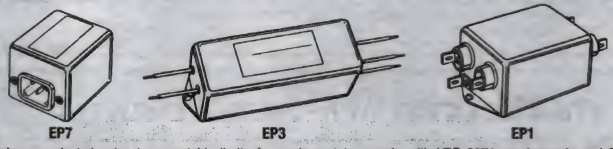
CORCOM EP/VP SERIES RFI FILTERS

RoHS Compliant Available

TE connectivity

Authorized Distributor





EP7 EP3 EP1

Reduce conducted noise to acceptable limits for equipment to comply with VDE 0871 requirements and FCC specifications. Filters provide high insertion losses for line-to-ground and line-to-line emissions throughout frequency range. 120/250V, 50/60Hz AC. UL recognized, CSA certified, VDE and SEV approved.

Mfg. Part No.	D x H x W	Amps	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99
3EP3	3.35 x 1.78 x 2.07"	3	52K3863	30.88	27.87	25.57
3EP1	3.85 x 1.78 x 2.07"	3	52K3862	31.98	28.66	26.43
3EP7	3.21 x 1.78 x 2.25"	3	52K3864	38.01	32.70	30.02
6EP3	6.03 x 2.28 x 2.07"	6	87K2509	56.44	54.74	52.78

CONTINUED

POWER LINE FILTERS – SINGLE-PHASE

CORCOM EP/VP SERIES RFI FILTERS (CONT.)

Mfg. Part No.	D x H x W	Amps	Stock No.	Price Each 1-24	25-49	50-99
● 6EP1	6.62 x 2.28 x 2.07″	6	52K4487	56.44	51.36	47.13
● 10EP1	6.62 x 2.78 x 2.07″	10	52K4488	71.46	66.93	61.35
● 20EP1	4.47 x 1.80 x 2.27″	20	52K3865	55.83	53.02	48.60
● 20EP6	5.09 x 2.25 x 1.78″	20	52K3307	53.55	51.81	50.07
● 20VP1	4.47 x 1.80 x 2.27″	20	52K4490	44.93	43.59	41.73

(7261)

CORCOM FED SERIES THREE-PHASE EXTERNAL POWER LINE FILTER FOR FREQUENCY CONVERTERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

FCD series filters provide three phase filtering for frequency inverters and variable speed motor drives. Designed for very noisy Delta applications, they attenuate conducted interference at low and high frequency ranges and better protect programmable logic controllers from RF noise on the AC power line. These filters perform best when installed on the line side of the motor drive. Prevents noise from returning to the line, enabling equipment to meet strict European regulations on RFI.

Mfg. Part No.	Current Rating (A)	Stock No.	Price Each 1-9	10-24
● 6FCD10	6	60R5699	168.48	163.41
● 16FCD10	16	52K4520	302.28	291.21
● 25FCD10	25	52K4521	275.11	244.63
● 36FCD10	36	52K4522	350.65	298.04

(79436)

CORCOM H SERIES RFI POWER LINE FILTERS FOR MEDICAL EQUIPMENT

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Minimal leakage current suitable for medical equipment
- Two element circuit provides basic EMI attenuation above 1MHz
- Designed for easy connection and installation
- Max. leakage current each line-to-ground: @120VAC 60Hz: 2μA @250VAC 50Hz: 5μA
- Hipot rating (one minute): Line-to-Ground: 2250VDC; 20A units 1500VAC Line-to-Line: 1450VDC
- Line currrent/voltage rated: 120/250VAC max.
- Operating frequency: 50/60Hz
- UL recognized, CSA certified, VDE approved

20EH1

20EH6

CHASSIS MOUNT STYLE WITH 0.25″ SPADE TERMINALS

Mfg. Part No.	Current (A) Rating	Dimensions (In.) H x W x D	Stock No.	Price Each 1-9	10-24
● 3EH1	3	0.66 x 2.53 x 2.25	18R3110	11.90	11.17
● 6EH1	6	0.66 x 2.53 x 2.25	52K4464	12.87	11.93
● 10EH1	10	0.66 x 2.53 x 2.25	52K4465	12.39	11.34
● 20EH1	20	1.31 x 2.07 x 3.35	19X9814	17.88	16.27
CHASSIS MOUNT STYLE WITH WIRE LEADS					
● 10EH3	10	0.66 x 2.53 x 0.96	23B4347	15.36	13.95
CHASSIS MOUNT STYLE WITH THREADED BOLTS					
● 20EH6	20	1.53 x 2.07 x 3.35	19X9815	22.41	20.39
POWER INLET STYLE* WITH 0.25″ SPADE TERMINALS ON BACK					
● 6EH4	6	0.81 x 1.98 x 2.20	52K4466	14.62	13.62
● 10EH4	10	0.81 x 1.98 x 2.62	52K3834	15.77	14.92
● 10EH4C+	10	0.81 x 1.98 x 2.62	74K4608	16.85	...
● 15EH4	15	0.81 x 1.98 x 2.62	52K4467	20.94	19.06
POWER INLET STYLE* WITH 0.25″ SPADE TERMINALS ON BOTTOM					
● 6EH9	6	0.85 x 1.98 x 1.55	52K3833	14.98	14.34

*IEC 50320-1 C14 inlet mates with C13 connector; +With ground circuit indicator

(7420)

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(212569)

CORCOM K, DK AND SK SERIES RFI FILTERS AND B SERIES GENERAL-PURPOSE FILTERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

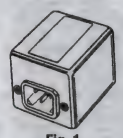


Fig. 1

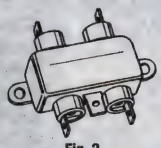


Fig. 2

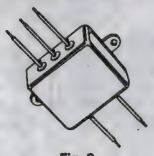


Fig. 3

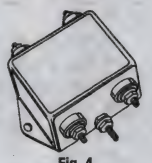


Fig. 4

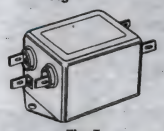


Fig. 5

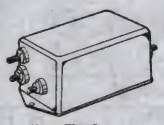
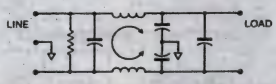


Fig. 6



K series general-purpose, common- and differential-mode filters effectively control line-to-line and line-to-ground RFI interference. Ideal for uses where pulsed, continuous, and/or intermittent RFI interference is present. Maximum leakage: **K series**: 0.5mA @ 120VAC/60Hz; 1.0mA @ 250VAC/50Hz; **EK series**: 0.25mA @ 120VAC/60Hz; 0.40mA @ 250VAC/50Hz. **DK series** provide higher line to line attenuation performance than the **K series**. DK series maximum leakage: 0.4mA @ 120VAC/60Hz; 0.7mA @ 250VAC/50Hz. **SK series** high-performance, power line filters significantly outperform **K series**. Ideal for equipment with high line-to-ground and line-to-line conducted emissions. **SK series** maximum leakage: for 3A, 6A and 10A units, 0.5mA @ 120VAC, 60Hz; 1.0mA @ 250VAC, 50Hz; for 20A and 30A units, 0.3mA @ 120VAC, 60Hz; 0.5mA @ 250VAC, 50Hz. Both **K, DK** and **SK series** are UL recognized, CSA certified, and VDE approved.

K SERIES GENERAL-PURPOSE RFI FILTERS

Mfg. Part No.	Fig.	Current Rated (A)	D x H x W (in.)	Stock No.	Price Each 1-9
● 1VK1	2	1	3.1 x 0.91 x 2.81	52K4481	16.70
● 2VK1	2	2	3.1 x 0.91 x 2.81	52K3850	14.79
● 2VK3	3	2	1.81 x 0.91 x 2.81	74K3517	15.40
● 3VK1	2	3	3.10 x 1.16 x 2.81	52K3851	17.05
● 3VK3	3	3	1.81 x 1.16 x 2.81	52K3852	16.37
● 5VK1	2	5	3.1 x 1.16 x 2.81	52K3853	14.93
● 5VK3	3	5	1.81 x 1.16 x 2.81	52K4257	15.87
● 5EK1	2	5	3.1 x 1.16 x 2.81	99M1050	16.32
● 6VSK7	1	6	3.21 x 1.78 x 2.25	52K3861	42.22
● 10VK1	2	10	3.35 x 1.16 x 2.81	52K3297	15.42
● 10VK3	3	10	2.07 x 1.16 x 2.81	80K7534	16.26
● 10VK6	2	10	3.46 x 1.16 x 2.81	73K4366	17.65
● 10VK7	1	10	3.71 x 1.28 x 2.25	85K9420	20.04
● 20VK1	2	20	3.35 x 1.53 x 3.35	52K3298	23.03
● 20EK1	2	20	3.35 x 1.53 x 3.35	52K4256	25.60
● 20VK6	4	20	3.46 x 1.53 x 3.35	52K4258	26.42
● 30ESK6	4	30	4.92 x 2.75 x 3.12	60K0004	57.57
● 30VK6	4	30	5.34 x 1.53 x 4.20	52K3472	47.13
● 40VK6	4	40	5.34 x 1.53 x 4.20	19P8055	56.34
● 40VSK6	4	40	6.00 x 2.18 x 3.12	52K4265	69.09
DK SERIES ENHANCED DIFFERENTIAL MODE PERFORMANCE RFI LINE FILTERS					
● 6VDK1	...	6	3.85 x 1.16 x 2.07	69K7129	25.72
SK SERIES HIGH-PERFORMANCE RFI POWER LINE FILTERS					
● 3VSK1	5	3	3.85 x 1.16 x 2.07	52K4485	30.22
● 6ESK1	5	6	4.34 x 1.28 x 2.25	52K3859	34.26
● 6VSK1	5	6	4.34 x 1.28 x 2.25	73K4359	36.36
● 10ESK1	5	10	4.97 x 1.78 x 2.25	52K4484	41.73
● 10VSK1	5	10	4.97 x 1.78 x 2.25	52K4486	42.82
● 10VSK7	1	10	4.33 x 1.78 x 2.25	52K4262	45.39
● 20VSK6	6	20	5.09 x 1.78 x 2.25	52K3306	51.08
● 30VSK6	4	30	4.92 x 2.75 x 3.12	52K4263	58.36
● 30VSK6C	4	30	4.92 x 2.75 x 3.12	52K4264	80.05
● 20ESK6	4	20	5.09 x 1.78 x 2.25	69K7155	49.59

B SERIES GENERAL-PURPOSE FILTERS

B series compact, common-mode filters economically provide effective RFI control of line-to-ground noise. Maximum leakage current: 0.5mA @ 120VAC/60Hz; 1.0mA @ 250VAC/50Hz. Hi-pot rating: 2250VDC line-to-ground; 1450VDC line-to-line; UL recognized, CSA certified, VDE approved.

● 1VB1	2	1	2.25 x 0.66 x 2.53	52K3845	12.91
● 1VB3	3	1	0.96 x 0.66 x 2.53	52K3846	12.70
● 2VB1	2	2	2.25 x 0.66 x 2.53	52K3847	11.28
● 2VB3	3	2	0.96 x 0.66 x 2.53	52K4477	12.39
● 3EB3	3	3	1.32 x 0.78 x 2.53	52K3844	15.26
● 3VB1	2	3	2.61 x 0.78 x 2.53	52K3848	13.26
● 3VB3	3	3	1.32 x 0.78 x 2.53	52K4478	13.77
● 5VB1	2	5	2.61 x 0.78 x 2.53	52K3849	12.07
● 5VB3	3	5	1.32 x 0.78 x 2.53	52K4479	12.78
● 10EB3	...	10	1.32 x 1.16 x 2.53	17R2516	18.32
● 10VB1	2	10	2.61 x 1.16 x 2.53	52K4480	13.47
● 10VB6	4	10	2.72 x 1.16 x 2.53	52K3294	16.36
● 20VB1	2	20	3.36 x 1.16 x 2.81	52K4255	20.77

CONTINUED

CORCOM K, DK AND SK SERIES RFI FILTERS AND B SERIES GENERAL-PURPOSE FILTERS (CONT.)

B SERIES GENERAL-PURPOSE FILTERS

Mfg. Part No.	Fig.	Current Rated (A)	D x H x W (in.)	Stock No.	Price Each 1-9
20VB6	4	20	3.46 x 1.16 x 2.81	52K3295	24.67
30VB6	4	30	5.34 x 1.53 x 4.20	52K3296	48.87

(7260)

CORCOM MV SERIES POWER LINE FILTER FOR MEDICAL EQUIPMENT

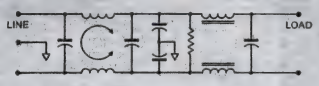
RoHS Compliant Available

TE connectivity

Authorized Distributor

6, 10 Amps

20 Amps



MV series power line filters aid compliance with requirements of UL2601, which limits leakage current for patient care equipment. These filters take advantage of the changed standard for leakage current and offers improved line-to-ground performance. Higher line-to-line performance is achieved through additional differential mode rod inductors. Max. leakage current (line to ground) @120VAC/60Hz, 0.07mA; @250VAC/50Hz, 0.15mA. UL recognized. CSA certified, VDE approved.

Mfg. Part No.	Amps	H x W x D	Stock No.	Price Each 1-9	10-24	25-49
6MV1	6	1.53 x 2.08 x 3.86″	52K3885	31.23	29.29	27.10
10MV1	10	1.53 x 2.08 x 3.86″	52K3886	37.08	34.11	31.55
20MV1	20	1.53 x 3.38 x 5.23″	52K3887	70.51	66.84	61.82

(7404)

CORCOM HZ SERIES HIGH-PERFORMANCE RFI POWER LINE FILTERS FOR MEDICAL APPLICATIONS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Provides good attenuation to RFI noise in the frequency range from 10kHz to 30MHz
- Size and cost-effective
- Designed for easy connection and installation
- New versions up to 30A
- Low leakage current (<0.5mA)
- Line currrent/voltage rated: 120/250VAC max.
- Operating frequency: 50/60Hz
- Operating temperature: -10°C to +40°C
- UL recognized, CSA certified, VDE approved

4EHS1

20EHZ6

Mfg. Part No.	Current (A) Rating	Dimensions L x W x H (In.)	Stock No.	Price Each 1-9	10-24
CHASSIS MOUNT STYLE WITH 0.25″ SPADE TERMINALS					
3EHZ1	3	3.54 x 2.08 x 1.31	52K3884	30.96	27.22
4EHZ1	4	3.07 x 1.82 x 1.16	45T0068	26.67	25.57
6EHZ1	6	3.07 x 1.82xX 1.28	45T0069	27.73	24.39
10EHZ1	10	3.54 x 2.047 x 1.805	45T0064	41.61	36.60
15EHZ1	15	3.54 x 2.047 x 1.805	45T0065	52.86	47.91
20EHZ1	20	3.54 x 2.047 x 1.805	45T0066	61.35	55.57
CHASSIS MOUNT STYLE WITH THREADED BOLTS					
20EHZ6	20	3.34 x 2.07 x 1.75	19X9812	53.30	48.38
30EHZ6	30	4.92 x 2.07 x 1.53	45T0067	81.78	71.94
POWER INLET STYLE WITH 0.25″ SPADE TERMINALS					
20EHZ7	20	4.504 x 3.134 x 2.18	19X9813	56.49	51.28

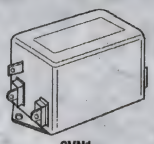
(195694)

CORCOM N SERIES RFI FILTERS FOR SWITCHING POWER SUPPLY

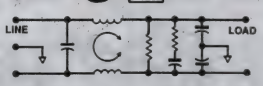
RoHS Compliant Available

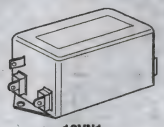
TE connectivity

Authorized Distributor

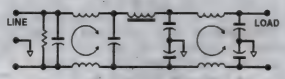


6VN1





10VN1



N series high-performance, common-mode, and differential-mode filters are ideal for digital equipment. Max. line-to-ground leakage @ 120VAC/60Hz: 1.25mA; @ 250VAC/50Hz: 2.10mA. Complies with emission limits of VDE0871 Level B and FCC Part 15J, Class B requirements. UL recognized. CSA certified. VDE approved.

Mfg. Part No.	H x W x D	Amps	Stock No.	Price Each 1-9	10-24	25-49
6VN1	1.81 x 2.15 x 3.56″	6	52K4508	45.86	39.00	36.00
10VN1	1.80 x 2.27 x 4.69″	10	52K3882	75.81	65.13	60.13

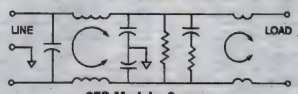
(33078)

CORCOM Q SERIES FILTERS

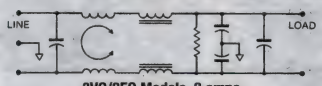
RoHS Compliant Available

TE connectivity

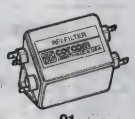
Authorized Distributor



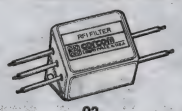
6EQ Models, 6 amps



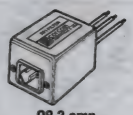
3VQ/3EQ Models, 3 amps



Q1



Q3



Q8 3 amp

Developed specifically for switching power supplies and to be all the power line filtering required to control conducted emissions down to 10kHz. High attenuation provided for both common mode and differential mode interference throughout the frequency range, with no degradation of performance due to the large peak current drawn by switching power supplies. Maximum leakage current, line-to-ground for **VQ models** at 120VAC/60Hz is 1mA; at 250VAC/50Hz is 1.25mA. For **EQ models** at 120VAC/60Hz is 0.30mA; at 250VAC/50Hz is .50mA. Hipot rating line-to-ground, 2250VDC; line-to-line, 1450VDC. UL recognized, CSA certified, VDE approved, and only **EQ types** are SEV approved. Medical version available; *go online or call.*

Mfg. Part No.	D x H x W	Amps	Stock No.	Price Each 1-9	10-24	25-49
3VQ1	3.85 x 1.78 x 2.07″	3	52K3880	48.41	42.83	39.53
3EQ1	3.85 x 1.78 x 2.07″	3	52K3878	46.73	42.83	39.55
3EQ8	3.07 x 1.78 x 2.25″	3	78K5141	52.32	44.94	41.47
6EQ1	4.98 x 1.80 x 2.27″	6	52K4502	70.16	62.09	57.32
6EQ3	3.69 x 1.80 x 2.27″	6	52K4503	70.83	62.68	57.86
6EQ8	5.47 x 1.78 x 2.07″	6	52K3879	76.16	65.42	60.39
20EQ1	6.66 x 2.07 x 2.28″	20	52K4504	89.66	79.36	73.26

(7282)

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(196549)

POWER LINE FILTERS – SINGLE-PHASE

CORCOM R SERIES DUAL T SECTION RFI POWER LINE FILTERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

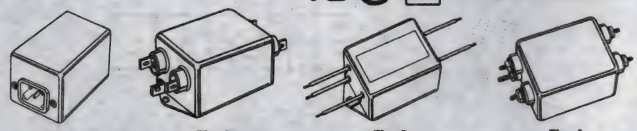
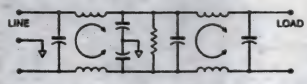


Fig. 1 Fig. 2 Fig. 3 Fig. 4

Well-suited for low impedance loads where noisy RFI environments are present. Units control pulsed, continuous and/or intermittent interference, assuring protection of equipment from power line noise while also protecting the line from equipment noise. In addition, these filters provide low leakage current without deterioration of insertion loss characteristics. 120/250V, 50/60Hz AC. All are UL recognized, CSA certified; VDE approved.



Mfg. Part No.	Fig.	D x H x W	Amp	Stock No.	Price Each 1-9	10-24	25-49
● 1VR1	2	3.35 x 1.16 x 1.81″	1	52K3854	23.92	21.19	19.02
● 1VR3	3	2.07 x 1.16 x 1.81″	1	52K4482	22.97	21.19	19.00
● 2VR1	2	3.35 x 1.16 x 1.81″	2	52K4483	20.64	19.06	18.11
● 2VR3	3	2.07 x 1.16 x 1.81″	2	52K3855	22.63	20.64	18.94
● 3VR1	2	3.85 x 1.16 x 2.07″	3	52K3856	22.13	19.42	18.22
● 5VR1	2	3.85 x 1.16 x 2.07″	5	52K3857	20.45	19.03	17.08
● 5VR3	3	2.56 x 1.16 x 2.07″	5	52K3300	23.72	22.01	20.86
● 5VR7	1	4.33 x 1.28 x 2.25″	5	96K4546	25.18	22.92	21.03
● 10VR1	2	3.85 x 1.53 x 2.07″	10	52K3301	21.62	19.94	17.88
● 10VR3	3	2.56 x 1.53 x 2.07″	10	52K3302	23.30	21.21	19.46
● 10VR6	4	3.96 x 1.53 x 2.07″	10	52K3303	26.95	23.85	21.39
● 10VR7	1	4.33 x 1.53 x 2.25″	10	81F4572	28.39	26.33	24.41
● 20ER1	2	3.35 x 1.16 x 1.81″	20	52K4260	53.52	50.62	48.51
● 20VR1	2	3.35 x 1.16 x 1.81″	20	52K4261	52.69	46.16	42.62
● 20VR6	4	5.34 x 1.53 x 4.20″	20	52K3304	51.19	49.33	44.23

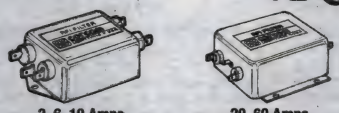
(7282)

CORCOM S, V, W SERIES RFI FILTERS

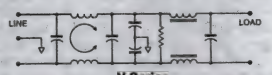
RoHS Compliant Available

TE connectivity

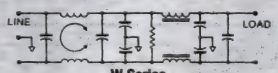
Authorized Distributor



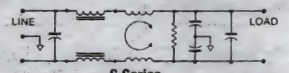
3, 6, 10 Amps 20, 60 Amps



V Series



W Series



S Series

These RFI filter series combine line-to-ground interference rejection filters with additional circuitry designed to reduce low frequency line-to-line noise and add a balance N = 3 ("PI") line-to-line filter with high rejection at low frequency to the N = 2 ("L") and N = 3 ("T") sections to eliminate line-to-ground. Particularly effective when applied in equipment using switching type power supplies. SCR and TTL circuits. Maximum leakage current, line-to-ground at 120VAC/60Hz, 0.5mA; at 250VAC/50Hz, 1.0mA. UL recognized, CSA certified, VDE approved.

Mfg. Part No.	H x W x D	Amps	Stock No.	Price Each 1-9	10-24	25-49	50+
S SERIES							
● 3VS1	1.16 x 1.82 x 3.36″	3	52K4491	26.61	25.24	23.79	22.15
● 6VS1	1.53 x 2.08 x 3.86″	6	52K3866	26.97	24.88	23.45	21.83
● 10VS1	1.53 x 2.08 x 3.86″	10	52K4492	31.72	29.30	27.60	25.68
● 20VS1	1.53 x 4.20 x 5.23″	20	52K4493	70.16	62.11	56.75	52.69
● 20VS6	1.53 x 4.20 x 5.34″	20	83K8184	64.83	60.53	55.83	51.88
● 60VS6	2.28 x 3.08 x 7.2″	60	73M8633	111.67	98.90	90.38	86.80
V SERIES							
● 3VV1	1.28 x 1.82 x 3.36″	3	52K4494	30.41	28.59	26.22	24.18
● 10VV1	1.53 x 2.08 x 3.86″	10	52K4495	33.73	31.71	29.15	26.98
● 20VV1	1.53 x 4.20 x 5.23″	20	52K3868	73.47	64.33	59.37	55.16
W SERIES							
● 3VW1	1.28 x 1.82 x 3.36″	3	52K3869	33.09	29.63	27.25	25.21
● 6VW1	1.53 x 2.08 x 3.86″	6	52K4496	32.10	29.63	27.25	25.21
● 10VW1	1.53 x 2.08 x 3.86″	10	52K3870	36.83	33.95	31.21	28.89
● 20VW1	1.53 x 4.20 x 5.23″	20	52K4497	75.09	66.45	61.32	56.97

(7374)

CORCOM SB SERIES HIGH PERFORMANCE POWER LINE FILTERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Enhanced performance version of **B Series** RFI power line filters
- Small size with enhanced performance
- 30A version half the size of other 30A filters
- Low leakage version available that meets current requirements of VDE portable equipment and non-patient care medical equipment

Mfg. Part No.	Current (A)	Leakage Current	Input / Output Style	Stock No.	Price Each 1-9
● 6ESB1	6	Low Leakage	.250″ (6.3mm) Spade Terminals	86R9389	14.52
● 6VSB1	6	Standard	.250″ (6.3mm) Spade Terminals	86R9390	14.01
● 10ESB1	10	Low Leakage	.250″ (6.3mm) Spade Terminals	86R9379	16.63
● 10ESB6	10	Low Leakage	Threaded Bolt	86R9380	20.74
● 10VSB1	10	Standard	.250″ (6.3mm) Spade Terminals	86R9381	15.58
● 10VSB6	10	Standard	Threaded Bolt	86R9382	18.90
● 20ESB1	20	Low Leakage	.250″ (6.3mm) Spade Terminals	86R9383	23.24
● 20ESB6	20	Low Leakage	Threaded Bolt	86R9384	29.57
● 20VSB1	20	Standard	.250″ (6.3mm) Spade Terminals	86R9385	23.42
● 20VSB6	20	Standard	Threaded Bolt	86R9386	26.32
● 30ESB6	30	Low Leakage	Threaded Bolt	86R9387	56.52
● 30VSB6	30	Standard	Threaded Bolt	86R9388	51.81

(195381)

CORCOM T SERIES POWER LINE RFI FILTERS FOR SWITCHING POWER SUPPLIES

RoHS Compliant Available

TE connectivity

Authorized Distributor

15/20 Amps, T1 3, 6 and 10 Amps T1 6 Amps, T3 15 Amps, T6

T series RFI power line filters for switching power supplies provide superior common-mode and differential-mode attenuation in a small package. They are effective for very noisy equipment that must meet the emission limits of FCC Parts 15 and 18, or VDE 0871 A-level. In some instances, these filters can help bring equipment into compliance with VDE 0871 B-level. Meets the low leakage current requirements of SEV, VDE portable equipment, and (120 volt) UL544 non-patient medical equipment. UL recognized, CSA certified, VDE approved.

T SERIES, ET MODEL RFI FILTERS

Maximum leakage current line-to-ground for **ET models** at 120VAC/60Hz is 0.30mA; at 250VAC/50Hz is 0.50mA. Use for both line-to-ground (2250VDC hipot rating) and line-to-line (1450VDC hipot rating) application.

Mfg. Part No.	Current (A) Rating	Dimensions (In.) L x H x W	Stock No.	Price Each 1-9
● 3ET1	3	3.56 x 1.81 x 2.15	52K4499	43.58
● 6ET1	6	3.56 x 1.81 x 2.15	52K4500	41.39
● 6ET3	6	2.55 x 1.81 x 2.15	52K3871	42.24
● 10ET1	10	4.69 x 1.80 x 2.27	52K4501	59.82
● 15ET6	15	5.95 x 2.18 x 3.96	52K3308	70.38

T SERIES, VT MODEL RFI FILTERS

Maximum leakage current line-to-ground for **VT models** at 120VAC/60Hz is 0.75mA (10A) and 1.25mA (15A); at 250VAC/50Hz is 1.25mA (10A) and 2.10mA (15A). Use for both line-to-ground (2250VDC hipot rating) and line-to-line (1450VDC hipot rating) application.

● 10VT1	10	4.69 x 1.80 x 2.27	52K3874	62.46
● 15VT1	15	5.45 x 2.18 x 3.96	52K3875	81.06
● 15VT6	15	5.95 x 2.18 x 3.96	52K3876	82.68
● 20VT1	20	5.95 x 2.18 x 3.96	52K3877	79.92

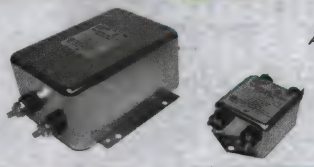
(7281)

CORCOM EMC SERIES DUAL STAGE RFI POWER LINE FILTERS

RoHS Compliant Available

TE connectivity

Authorized Distributor



Mfg. Part No.	Current Rating (A)	Terminal Type	Dimensions	Stock No.	Price Each 1-9	10-24
● 3EMC1	3	Straight 1/4″ Q.C.	3.35 x 1.81 x 1.16″	09J4732	19.14	17.75
● 3EMC3	3	Wire Leads	2.07 x 1.81 x 1.16″	65K4474	18.58	16.35

➤ CONTINUED ➤

CORCOM EMC SERIES DUAL STAGE RFI POWER LINE FILTERS (CONT.)

Mfg. Part No.	Current Rating (A)	Terminal Type	Dimensions	Stock No.	Price Each 1-9	Price Each 10-24
6EMC1	6	Straight 1/4" Q.C.	3.85 x 2.07 x 1.16"	09J4735	22.02	20.94
6EMC3	6	Wire Leads	2.56 x 2.07 x 1.16"	03P0813	19.73	18.10
10EMC1	10	Straight 1/4" Q.C.	3.85 x 2.07 x 1.53"	69K6666	20.15	19.22
15EMC1	15	Straight 1/4" Q.C.	4.97 x 2.25 x 1.78"	09J4727	37.33	35.47
15EMC3	15	Wire Leads	3.69 x 2.25 x 1.78"	09J4728	37.13	33.94
15EMC6	15	Stud	5.09 x 2.25 x 1.78"	03P0812	43.47	37.80
20EMC1	20	Straight 1/4" Q.C.	4.97 x 2.25 x 1.78"	65K8673	42.09	39.54
20EMC6	20	Stud	5.09 x 2.25 x 1.78"	73K1748	54.93	48.57

(80151)

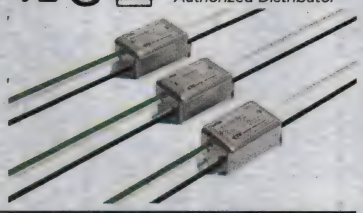
FB SERIES SINGLE PHASE POWER LINE FILTER FOR FLUORESCENT BALLASTS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Compact size
- 277 VAC/VDC
- Strong differential mode performance
- Solid lead wires at input and output
- Ambient temperature 50°C



Mfg. Part No.	Current Rating (A)	Stock No.	Price Each 1-9
HFB3	500mA	94T3722	15.18
2FB3	2A	94T3723	14.27
3FB3	3A	94T3724	14.32
5FB3	5A	94T3725	14.62

(203694)

AYC SERIES 3-PHASE RFI POWER LINE FILTERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features:
- For 3-phase, four wire, WYE applications
- Very high attenuation
- Low leakage current
- Ideal for EMC troubleshooting and refurbishing in the field
- Touch safe terminals provide easy connections and prevent inadvertent contact for safety in the most demanding applications

Specifications:
- Max. operating voltage: 277/120VAC, 50/60Hz
- Hipot rating (one minute): Line to Ground: 1850 VDC, Line to Line: 1850 VDC, Line to Neutral: 1450 VDC
- Operating temperature: -10°C to +40°C

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-4
63AYC10B	63	10M5413	339.38

(209582)

FC SERIES SINGLE PHASE POWER LINE FILTERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features:
- Designed for frequency inverters and variable speed motor drives
- Suitable for electronically noisy environments
- Protects programmable logic controllers from RF noise on the AC power line
- Side flanges for easy mounting
- Touch safe terminals provide easy connections and prevent inadvertent contact

Specifications:
- Max. operating voltage: 250/120VAC, 50/60Hz
- Hipot rating (one minute): Line to Ground: 2250 VDC, Line to Line: 1450 VDC
- Operating temperature: -10°C to +40°C
- DIN type terminal block

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-9
12FC10	12	69K7122	97.90
16FC10	16	16M4185	110.12
25FC10	25	52K4519	132.19
36FC10	36	52K3894	147.18

(209597)

WG SERIES HIGH PERFORMANCE LINE FILTERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features:
- Tubular design
- Designed to comply with leakage current requirements for appliances which may be easily moved from one place to another

Specifications:
- Max. operating voltage: 250VAC, 50/60Hz
- Hipot rating (one minute): Line to Ground: 2250 VDC; Line to Line: 1450 VDC
- Operating temperature: -10°C to +40°C

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-9
16WGF1	16	34M1820	7.84

(209599)

DC SERIES RFI LINE FILTERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features:
- General purpose line filters
- For DC applications up to 125VDC
- Flange or bulkhead mounting

Specifications:
- Max. operating voltage: 80 VDC
- Hipot rating (one minute): Line to ground: 2250 VDC, Line to line: 1450 VDC
- Operating temperature: -10°C to +55°C

Mfg. Part No.	Current (A)	Mounting Style	Input/Output Style	Stock No.	Price Each 1-9
15DCF6	15	Flange	Redundant Stud	29M8474	82.77
15DCF10	15	Flange	Phoenix Terminal	82K7932	102.32
30DCF6	30	Flange	Redundant Stud	52K4528	102.91
60DCF6	60	Flange	Redundant Stud	54H3664	147.96
100DCB10	100	Bulkhead	Phoenix Terminal	92C0721	206.26

(209607)

G SERIES HIGH PERFORMANCE RFI FILTERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features:
- Designed to provide excellent attenuation for most digital electronics equipment
- Broad frequency range of performance from 20kHz to 30MHz
- Designed to help comply with EN55022 Level A and FCC Part 15J Class B

Specifications:
- Max. operating voltage: 250VAC, 50/60Hz
- Hipot rating (one minute): Line to Ground: 2250 VDC, Line to Line: 1450 VDC
- Operating temperature: -10°C to +40°C

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-24
10EG1	10	19R7003	70.70

(209612)

CORCOM HT SERIES HIGH-PERFORMANCE RFI POWER LINE FILTERS

NEW

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Suitable for medical equipment
- Size and cost-effective
- Provides good attenuation to RFI noise in the frequency range from 10kHz to 30MHz
- Designed for easy connection and installation
- Max. leakage current each line-to-ground:
  @120VAC 60Hz: 2μA
  @250VAC 50Hz: 5μA
- Hipot rating (one minute):
  Line-to-Ground: 2250VDC; 20A units 1500VAC
  Line-to-Line: 1450VDC
- Line current/voltage rated: 120/250VAC max.
- Operating frequency: 50/60Hz
- UL recognized, CSA certified, VDE approved

20EHT1

20EHT6

CHASSIS MOUNT STYLE WITH 0.25" SPADE TERMINALS

Mfg. Part No.	Current (A) Rating	Dimensions L x W x H (in.)	Stock No.	Price Each 1-9	Price Each 10-24
6EHT1	6	3.56 x 2.15 x 1.81	52K4509	41.59	35.35
10EHT1	10	4.69 x 2.27 x 1.8	99M1046	61.49	52.32
15EHT1	15	5.45 x 3.12 x 2.18	52K4267	82.82	78.95
20EHT1	20	4.55 x 3.121 x 2.18	19X9809	86.20	78.56
CHASSIS MOUNT STYLE WITH THREADED BOLTS					
20EHT6	20	4.55 x 3.121 x 2.18	19X9810	85.78	78.06

➤ CONTINUED ➤

CORCOM HT SERIES HIGH-PERFORMANCE RFI POWER LINE FILTERS (CONT.)

POWER INLET STYLE WITH 0.25" SPADE TERMINALS

Mfg. Part No.	Current (A) Rating	Dimensions L x W x H (in.)	Stock No.	Price Each 1-9	Price Each 10-24
● 20EHT7	20	4.55 x 3.121 x 2.18	19X9811	92.33	84.14

(211880)

HIGH-CURRENT FILTERS

RoHS Compliant Available

SCHAFFNER

FN356 series filters for high-current applications. Fully compliant with IEC 950, ideal for mainframe computer systems. Single-stage LCR circuit for each phase, neutral line provides high attenuation of symmetrical and asymmetrical interference. Max. voltage: 440VAC @ 40°C. Operating frequency: DC to 60Hz @ 40°C. UL recognized, CSA certified, VDE approved, SEV approved.

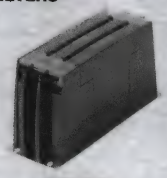
Mfg. Part No.	Amps	Power Loss	L (mH)	Cx (µF)	Cy (pF)	Stock No.	Price Each
● FN356-25-33	25	28	1.3	2	2	88F2319	351.88
● FN356-36-33	36	30	0.95	2	2	85K8088	384.68
● FN356-50-24	50	13	0.55	2	2	85K8089	498.73

(31173)

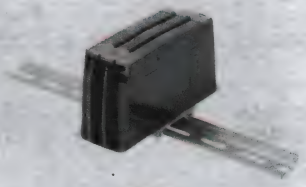
FN3025/26 SERIES COMPACT 3-PHASE LOW LEAKAGE PLASTIC FILTERS

RoHS Compliant Available

SCHAFFNER



FN3025 Type



FN3026 Type

FN3025/26 series offer a extremely compact 3-Phase filtering solution that is ideal for motor and servo drives. Terminals include captive hinged covers at no extra cost. They are also compatible with tough leakage and sensitive earth leakage detector requirements. Housed in a plastic without the use of potting compounds makes these units environmentally friendly. Rated 520VAC, 50/60Hz.

CHASSIS MOUNT

Mfg. Part No.	Current Rating (A) @ 50 °C	Current Rating (A) @ 40 °C	Power Rating (kW)	Leakage Current (mA)	Power Loss (W)	Stock No.	Price Each 1-4
● FN3025HL-20-71	20	21.9	11	0.4	5.2	33M8449	96.04
● FN3025HL-30-71	30	32.8	18.5	0.4	6.2	33M8450	118.66
● FN3025HL-50-72	50	54.7	30	0.4	9.4	33M8451	129.27
● FN3025HP-20-71	20	21.9	11	2.5	5.2	33M8452	108.77
● FN3025HP-30-71	30	32.8	18.5	2.5	6.2	33M8453	134.96
● FN3025HP-50-72	50	54.7	30	2.5	9.4	33M8454	150.92
DIN RAIL MOUNT							
● FN3026HL-20-71	20	21.9	11	0.4	5.2	33M8455	103.01
● FN3026HL-30-71	30	32.8	18.5	0.4	6.2	33M8456	132.51
● FN3026HP-20-71	20	21.9	11	2.5	5.2	33M8457	117.47

(90473)

FN3258 SERIES ULTRA-COMPACT 3-PHASE FILTER

RoHS Compliant Available

SCHAFFNER

Features

- 7 to 180A current ratings
- Exceptional attenuation from 150 kHz to 30 MHz
- Excellent saturation resistance to 50 m cable length
- Very compact footprint and low weight.

Mfg. Part No.	Current Rating (A)	Leakage Current (mA)	Power Loss (W)	I/O	Stock No.	Price Each 1-24
● FN3258-7-45	7	33.04	3.8	45	85K8070	140.95

(79520)

FN 3270 SERIES 3-PHASE FILTERS

RoHS Compliant Available

SCHAFFNER

- Compact, lightweight design
- Easy, time saving installation and contacting
- Optional protective safety covers available below
- Attenuation performance accoding to EN 61800-3/A11

FN 3270 series compact three-phase EMC/RFI filters offer 15 different filter models for choice and deployment in industrial motor drive applications.

Mfg. Part No.	Current Rating @ 50°C (A)	Typical Drive Power Rating (kW)	Leakage Current @ 480VAC/50Hz	Power Loss @ 25°C/50Hz	Wt. (kg)	Stock No.	Price Each 1-4
● FN3270H-10-29	10	5.5	26.4	2.4	0.4	26K1320	87.95
● FN3270H-10-44	10	5.5	26.4	2.4	0.4	06M7319	91.47
● FN3270H-20-29	20	11	29.4	4.1	0.5	85H0666	100.84
● FN3270H-20-44	20	11	29.4	4.1	0.5	02M8368	100.84
● FN3270H-35-33	35	22	29.4	6.8	0.7	97H4259	119.56
● FN3270H-50-34	50	30	29.4	12.8	1.2	84H0701	227.04
● FN3270H-65-34	65	37	29.4	13.5	1.3	60K9749	256.72
● FN3270H-80-35	80	45	29.4	13.5	2.2	60K9750	354.36
● FN3270H-100-35	100	55	29.4	17.1	2.6	26K1322	409.28
● FN3270H-150-99	150	75	59.5	7.5	6.1	60K9744	622.27
● FN3270H-200-99	200	110	59.5	13.2	6.1	60K9745	656.01
● FN3270H-250-99	250	132	59.5	20.6	6.1	60K9746	675.49
● FN3270H-320-99	320	160	59.5	12.2	7.2	60K9747	691.49
● FN3270H-400-99	400	220	59.5	12.2	7.2	58K5310	710.34

PROTECTIVE COVER

Mfg. Part No.	For Use With	Stock No.	Price Each 1-4
● 1151-047	FN 3270H-150-600-99 Series Filters	73J7933	107.49

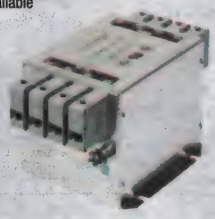
(146402)

FN 3280 SERIES 3-PHASE AND NEUTRAL LINE FILTERS

RoHS Compliant Available

SCHAFFNER

- Available up to 600A
- Compact, space saving design, optimized for industrial equipment
- Combines exceptional attenuation with low leakage current
- Suitable for machines in mixed/domestic environments (Class A/B)
- Increases also the immunity if operated directly on the mains input



FN 3280 series when used as a mains input filter provides enough performance to to ensure EMC compliance of machinery in mixed (Class A) or even domestic (Class B) environments. Typical applications include industrial equipment, machinery, machine tools and diverse process automation systems with three-phase and neutral electricity supply. Because of the relatively low leakage current, may even be used for some medical devices.

Mfg. Part No.	Current Rating @ 50°C (A)	Leakage Current @ 480VAC/50Hz	Power Loss @ 25°C/50Hz	Wt. (kg)	Stock No.	Price Each
● FN3280H-8-29	8	<1	2.7	0.8	53K1703	161.45
● FN3280H-16-29	16	<1	6.0	0.8	53K1701	174.32
● FN3280H-25-33	25	<1	11.6	1.3	88H2757	239.27
● FN3280H-36-33	36	<1	14.8	1.6	88H2759	260.22
● FN3280H-64-34	64	<1	18.4	2.7	88H2761	363.07
● FN3280H-80-35	80	<1	18.9	4.1	88H2763	461.79
● FN3280H-120-35	120	<1	28.5	5.9	88H2764	651.66
● FN3280H-160-40	160	<1	30.7	7.9	60K9757	829.95
● FN3280H-200-40	200	<1	46.8	8.5	99K2142	878.01
● FN3280H-300-99	300	<1	20.3	10	50R8700	1137.50
● FN3280H-600-99	600	<1	64.8	11	14R8165	1419.25

(146403)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures

(212568)

FN 3359 SERIES HIGH-CURRENT 3-PHASE FILTERS

RoHS Compliant Available

SCHAFFNER

- Off-the-shelf high-power filter for rated currents up to 2500A
- Max. leakage current @ 480VAC/50Hz: <6mA
- Busbar for convenient and universal electrical connection
- Optional protective safety covers available below

FN 3359 series are compact high-current three-phase EMC/RFI filters for Class A compliance. Typical applications include high power motor drives, inverters, converters, machinery and mining equipment. **FN 3359HV** versions designed for 690VAC IT power networks are also available; *go online or call.*

Mfg. Part No.	Current @ 50°C (A)	Typ. Drive Power Rating (kW)	Power Loss @ 25°C/50Hz (W)	Wt. (kg)	Stock No.	Price Each
FN3359-150-28	150	75	24	6.5	31C8318	733.24
FN3359-180-28	180	90	34	6.5	25H8780	852.49
FN3359-250-28	250	132	49	7	25H8017	916.56
FN3359-320-99	320	160	19	10.5	89M5171	1099.86
FN3359-400-99	400	220	29	10.5	85C1727	1283.17
FN3359-600-99	600	315	44	11	31C8317	1466.49

PROTECTIVE COVERS

Mfg. Part No.	For Use With	Stock No.	Price Each 1-24
ACCESSORIES-PLASTIC COVER 2.3	FN 3359-400-99 and other FN 3359 Series Filters	87H9387	81.97

(146404)

FN 258 SERIES THREE-PHASE EMC/RFI FILTERS

RoHS Compliant Available

SCHAFFNER

3-phase filter designed for variable frequency motor drives. 480VAC rated two-stage design is optimized for drives with output cable lengths to 150' (50m). Current ratings range from 7 to 180A. Use in applications to bring systems with variable frequency motor drives into compliance with EN55011 and EN55014. Last two digits indicates the connector output. Versions with low leakage currents available, *go online or call.*

FN258-16/07

Mfg. Part No.	I (A)	Power Loss	L (mH)	Cx (µF)	Cy (µF)	Stock No.	Price Each 1-9	10-19	20+
FN258-16-07	16	20	3	5.9	1.5	85K8055	226.55	215.10	210.01
FN258-16-29	16	20	3	5.9	1.5	88F3498	238.51	226.45	221.09
FN258-30/07	30	19	2	6.6	2.2	85K8057	263.35	250.03	244.11
FN258-30-33	30	19	2	6.6	2.2	85K8058	294.43	279.55	272.92
FN258-42-07	42	30	1.5	6.6	2.3	85K8060	467.70	444.05	433.54
FN258-55-07	55	31	1.1	6.6	2.3	85K8061	479.61	455.35	444.59
FN258-75-34	75	23	0.9	6.6	2.3	85K8064	596.86	566.68	553.27
FN258-100-35	100	41	0.9	6.6	2.3	85K8054	619.80	588.46	574.53
FN258-130-35	130	50	0.6	11	2.3	50B6991	684.80	560.99	...

(7563)

FN351 SERIES HIGH-PERFORMANCE 3-PHASE FILTERS

RoHS Compliant Available

SCHAFFNER

Ideal for variable frequency inverters and motor drives, these 3-wire filters feature high differential and common mode attenuation. Fully insulated safety contacts for blind installations. High leakage current to ground. Must be installed in a wired ground industrial environment. Rated 440VAC, 50/60Hz. UL recognized.

Mfg. Part No.	Amps	L (mH)	Cx (µF)	Cy (pF)	Stock No.	Price Each
FN351H-25-33	25	2.2	3	1.7	85K8083	283.36
FN351-25-33	25	2.2	4.4	1.8	85K8077	251.38
FN351-36-33	36	1.3	4.4	1.8	91F4407	257.08
FN351H-50-33	50	0.8	3.3	2	83F5424	292.56
FN351-64-33	64	0.65	4.4	2	07J1076	340.19
FN351-80-34	80	0.85	6.7	2.2	93K7565	520.92
FN351H-110-35	110	0.5	6.1	2.2	85K8080	856.36
FN351-110-35	110	0.5	6.1	2.2	83F5417	588.00

(15635)

FN355 SERIES LOW-CURRENT 3-PHASE FILTERS

RoHS Compliant Available

SCHAFFNER

Low current 3-phase filters for 4-wire applications to 440VAC. Filters have 3 phases plus neutral. Compact size unit is only 3.4 x 2.1 x 1.6". Low leakage current to ground.

Mfg. Part No.	Amps	L (mH)	Cx (µF)	Cy (pF)	Stock No.	Price Each 1-24
FN355-3-05	3	1	0.1	4700	91F4401	58.40

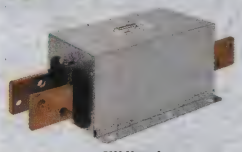
(15632)

FMER SOL SERIES 3-PHASE AC / DC FILTERS

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

- Compact DC filter for photovoltaic systems
- High symmetrical and asymmetrical attenuation
- In the frequency range from 150kHz up to 300MHz Standards
- IEC 60939
- UL 1283, Edition 5, CSA 22.2 No. 8-M1986, @ Ta 55 (75)°C
- UL File Number: E72928



2W Housing

FMER-G62x-xxxx: low leakage current version without capacitor to ground.

Mfg. Part No.	Rated Current @ Ta 55°C	Rated Voltage (DC)	Power Loss	Housing	Stock No.	Price Each 1-9
FMER-G62P-2517	25A	1.2kV	4.1W	2P	62W5944	122.49
FMER-G62Q-5017	50A	1.2kV	11.5W	2Q	62W5945	165.35
FMER-G62Q-7517	75A	1.2kV	11.3W	2Q	62W5946	195.26
FMER-G62R-J017	100A	1.2kV	12.6W	2R	62W5947	346.33
FMER-G62S-J517	150A	1.2kV	17.6W	2S	62W5948	549.93
FMER-G62T-K557	250A	1.2kV	7.8W	2T	62W5949	743.61
FMER-G62U-M057	400A	1.2kV	13.3W	2U1	62W5950	921.82
FMER-G62U-U057	600A	1.2kV	22.4W	2U2	62W5951	1049.51
FMER-G62V-Q057	800A	1.2kV	24.8W	2V	62W5952	1388.08
FMER-G62V-S057	1kA	1.2kV	38.8W	2V	62W5953	1578.61
FMER-G62W-S557	1.5kA	1.2kV	45W	2W	62W5954	1849.44
FMER-G62Z-T357	2.3kA	1.2kV	80.5W	2Z	62W5955	3042.96
FMER-G92P-2517	25A	1.2kV	4.1W	2P	75T5271	122.48
FMER-G92Q-5017	50A	1.2kV	11.5W	2Q	75T5272	165.33
FMER-G92Q-7517	75A	1.2kV	11.3W	2Q	75T5273	156.99
FMER-G92R-J017	100A	1.2kV	12.6W	2R	75T5274	257.26
FMER-G92S-J517	150A	1.2kV	17.6W	2S	75T5275	549.91
FMER-G92T-K557	250A	1.2kV	7.8W	2T	75T5276	743.60
FMER-G92U-M057	400A	1.2kV	13.3W	2U1	75T5277	921.82
FMER-G92U-U057	600A	1.2kV	22.4W	2U2	75T5278	783.90
FMER-G92V-Q057	800A	1.2kV	24.8W	2V	75T5279	968.80
FMER-G92V-S057	1kA	1.2kV	38.8W	2V	75T5280	1101.79
FMER-G92W-S557	1.5kA	1.2kV	45W	2W	75T5281	1849.44
FMER-G92Z-T357	2.3kA	1.2kV	80.5W	2Z	62W5956	3042.96

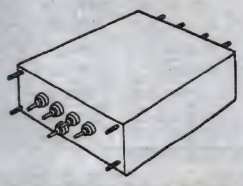
(209628)

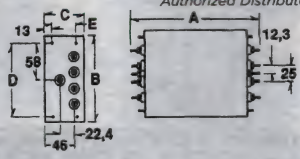
CORCOM A SERIES THREE-PHASE RFI POWER LINE FILTERS

RoHS Compliant Available

TE connectivity

Authorized Distributor





High attenuation in WYE/Delta applications for switching power supplies. Maximum operating voltage 440V, with a suppression range from 50Hz. Maximum leakage current line/ground: 3.4mA at 250VAC, 50Hz.

Mfg. Part No.	Amps	Dimensions (mm) A	B	C	D	E	Stock No.	Price Each 1-4	5-9
20AYP6C	20	224.0	141.5	65.0	117.2	38.1	52K4523	232.91	225.96
30AYP6C	30	224.0	141.5	65.0	117.2	38.1	52K4524	245.12	237.79
30AYT6C	30	224.0	141.5	65.0	117.2	38.1	52K3895	320.45	310.88
45AYT6C	45	351.3	175.8	122.4	151.1	95.3	70K8747	382.49	371.07
60AYP6C	60	239.5	175.8	122.4	151.1	95.3	52K4525	324.92	315.22
60AYT6C	60	351.3	175.8	122.4	151.1	95.3	52K4527	484.44	469.98

(7286)

POWER LINE FILTERS – THREE-PHASE • POWER LINE FILTERS – IEC INLETS

CORCOM BCF SERIES VERY COMPACT THREE-PHASE FILTERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- For current rating up to 180A
- Cost-effective, low-weight design
- Insulated, high-quality safety terminals for in- and output

BCF series very compact bookform EMI/RFI power line filters are ideal for all kinds of industrial three-phase applications requiring very high attenuation in the frequency range between 100KHz and 30MHz. Very high common and differential mode performance over the whole frequency range. Maximum leakage current @ 400VAC 50Hz: 30mA under normal circumstances. Hipot rating (one minute): line-to-ground 1850VDC, line-to-line 1850VDC. Operating frequency: DC to 60 Hz. Rated voltage (max.):480VAC. UL recognized, VDE approved.

Mfg. Part No.	Current Rating (A)	Inductance (mH)	H x W x D (mm)	Terminal Block Connection (mm²)	Stock No.	Price Each
● 7BCF10	7	2.44	70 x 40 x 160	4	14N8381	83.42
● 16BCF10	16	2.32	70 x 45 x 220	4	14N8382	103.93
● 30BCF10	30	1.61	85 x 50 x 240	10	14N8383	131.56
● 42BCF10	42	1.14	85 x 50 x 280	10	14N8384	164.35
● 55 BCF10	55	1.80	90 x 85 x 220	16	14N8385	178.88
● 75BCF10	75	1.08	135 x 80 x 240	25	14N8386	275.23
● 100BCF10	100	0.82	150 x 90 x 240	50	14N8387	369.73
● 130BCF10	130	0.56	150 x 90 x 240	50	14N8388	390.59
● 180BCF10	180	0.72	170 x 120 x 350	95	14N8389	524.20

(137274)

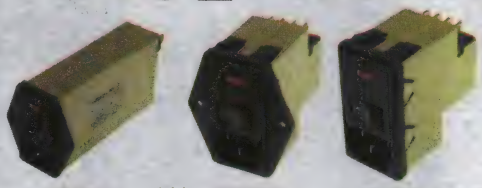
P SERIES POWER INLET RECEPTACLES

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features:
- Provide all five power entry functions in one compact design
- Chameleon module readily adapts to its environment
- Snap-in or flange mounting
- Standard IEC 60321-1 C14 power inlet
- Both North American and metric fusing capabilities
- Two voltage selection options
- Optional DPST on/off switch
- Filter options for general purpose, medical and high-performance EMI filtering



PE0S0DZ_C PE0S0DH_B PS0S0SS_B

Specifications:
- Max. operating voltage: 250VAC, 50/60Hz
- Line to Ground: 2250 VDC
- Line to Line: 1450 VDC
- Selectable or Fixed 115/230 VAC
- Rated Current: Non-Filtered ¡V 10A
- Filtered ¡V 3, 6 or 10A
- Fuseholder: Accepts one or two fuses
- 10,000 operations at 51A max. inrush

MOUNTING EARS - HORIZONTAL AXIS - SINGLE VOLTAGE

Mfg. Part No.	Current (A)	Switch Option	Filter Type	Shield Options	Stock No.	Price Each 1-24
● PE0S0DZ6C	6	DPST	High Performance	Complete Can	71K0080	41.10
● PE0S0DS6B	6	DPST	General Purpose	Complete Shield	40P5860	27.21
● PE0S0SS6B	6	DPST	General Purpose	Complete Shield	55K4968	26.30
● PE0S0DSXB	10	DPST	General Purpose	Complete Shield	29M6595	28.10
● PE0S0DZXC	10	DPST	High Performance	Complete Can	74K2578	44.16
● PE0S0SZXC	10	DPST	High Performance	Complete Can	52M7879	45.48
● PE0S0DBX0	10	DPST	Interconnection Block	No Shield	83K9001	20.12
● PE0S0SBX0	10	DPST	Interconnection Block	No Shield	40P5862	22.81
● PE0S0DHXB	10	DPST	Medical Filter	Complete Shield	40P5848	28.52
● PE0S0DHX0	10	DPST	Medical Filter	No Shield	58M2942	25.72
● PE0SSS000	...	DPST	No Filter	No Shield	79K2693	16.14
MOUNTING EARS - HORIZONTAL AXIS - DUAL VOLTAGE						
● PE0SXSH3B	3	DPST	Medical Filter	Complete Shield	40P5837	24.93
● PE0SXDS6B	6	DPST	General Purpose	Complete Shield	31M6915	26.32
● PE0SXDSXB	10	DPST	General Purpose	Complete Shield	67K7761	28.52
● PE0SSSSX0	10	DPST	General Purpose	No Shield	66K6937	25.20
● PE0SXSSX0	10	DPST	General Purpose	No Shield	40P5840	22.03
● PE0SXDHX0	10	DPST	Medical Filter	No Shield	40P5821	25.72
SNAP-IN MOUNTING - SINGLE VOLTAGE						
● PS0S0DS3A	3	DPST	General Purpose	Filter Shield	40P6169	25.09
● PS0S0DS6B	6	DPST	General Purpose	Complete Shield	40P6172	24.92
● PS0S0SS6B	6	DPST	General Purpose	Complete Shield	52M2578	24.57
● PS000DSXB	10	...	General Purpose	Complete Shield	40P6237	24.74
● PS0S0DSX0	10	DPST	General Purpose	No Shield	58K4187	22.81
● PS0S0DHXB	10	DPST	Medical Filter	Complete Shield	72M5739	27.42
● PS000D000	...	...	No Filter	No Shield	08P4208	11.26

➤ CONTINUED ➤

P SERIES POWER INLET RECEPTACLES (CONT.)

SNAP-IN MOUNTING - DUAL VOLTAGE

Mfg. Part No.	Current (A)	Switch Option	Filter Type	Shield Options	Stock No.	Price Each 1-24
● PS0SSDS30	3	DPST	General Purpose	No Shield	40P6123	20.08
● PS0SXDS30	3	DPST	General Purpose	No Shield	40P6148	19.66
● PS0SSDS60	6	DPST	General Purpose	No Shield	66K6750	21.74
● PS0SXSSX0	10	DPST	General Purpose	No Shield	40P6157	23.42
● PS0SXSSXB	10	DPST	General Purpose	Complete Shield	23M2579	27.54
● PS0SXSBX0	10	DPST	Interconnection Block	No Shield	40P6150	18.36
● PS0SXDHXB	10	DPST	Medical Filter	Complete Shield	59K0074	27.96
● PS00XD000	...	...	No Filter	No Shield	69K7486	12.96

(209584)

DA SERIES RFI LINE FILTERS WITH DC INLET CONNECTION

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features:
- General purpose line filters for DC applications up to 125VDC
- Compact with a 3-pin inlet connector
- Flange mount with ¼" or PCB terminals
- Mates with a standard MOLEX* connector (HCS Series)

Specifications:
- Max. operating voltage: 125 VDC
- Hipot rating (one minute): Line to ground: 2250 VDC, Line to line: 1450 VDC
- Operating temperature: -10°C to +55°C

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-9
● 3DAF1	3	87K0159	12.83
● 6DAF1	6	46P4074	11.95
● 15DAF1	15	84M8280	13.30

(209588)

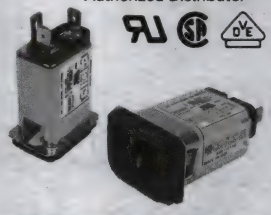
EBF SERIES ACCESSORY OUTLET FILTERS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features:
- Accessory IEC 60320-1 C13 filtered outlet
- Allows connection of accessories while filtering noise between a system and the accessory
- Enhanced performance across the frequency range
- Grounded connection
- Suitable for international usage



Specifications:
- Max. operating voltage: 250/120VAC, 50/60Hz
- Hipot rating (one minute): Line to Ground: 2250 VDC, Line to Line: 1450 VDC
- Operating temperature: -10°C to +40°C

Mfg. Part No.	Current (A)	Stock No.	Price Each 1-24
● 3EBF1	3	19M5228	15.68
● 6EBF1	6	52K4475	14.60
● 10EBF1	10	21M6662	16.70

(209609)

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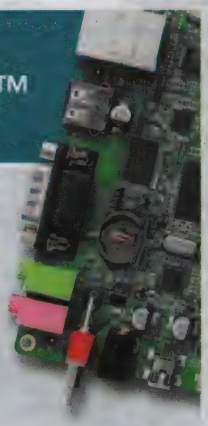


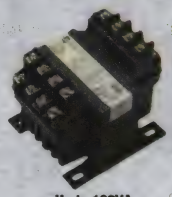
(196527)

HPS IMPERATOR® MACHINE TOOL INDUSTRIAL CONTROL TRANSFORMERS

RoHS Compliant Available

Hammond Power Solutions Inc.

- 600V class
- 50/60 Hz
- Superior insulation system
- Constructed with high quality silicon steel laminations
- Encapsulated coils protect against moisture, dirt and other contaminants
- Lifetime warranty (limited)
- UL listed for US and Canada, CE compliant



Up to 100VA

150VA and Up

HPS Imperator series unique terminal block design allows for the quick and easy installation of standard secondary or optional primary 13/32" x 1 1/2" midget/type CC fuse clips on every unit. Mfg. part nos. with suffix **-FK** indicates factory installed fuse kits; *go online or call.*

PRIMARY: 240/480, 230/460, 220/440V; SECONDARY: 120/240, 115/230, 110/220V

Mfg. Part No.	VA	Dimensions (mm) H	W	D	Weight (lbs.)	Stock No.	Price Each 1-9
PH50MQMJ	50	81.03	76.2	111.25	3.5	48M5027	45.06
PH75MQMJ	75	90.42	82.55	98.55	3.54	48M5042	48.56
PH100MQMJ	100	92.2	82.55	106.43	4.5	47M3425	55.90
PH150MQMJ	150	96.77	101.6	125.48	5.7	48M4999	73.64
PH250MQMJ	250	96.77	114.3	138.18	7.5	48M5010	97.27
PH350MQMJ	350	112.78	114.3	131.83	10.1	48M5020	109.72
PH500MQMJ	500	109.47	120.65	150.88	14.2	48M5033	139.18
PRIMARY: 240/480, 230/460, 220/440V; SECONDARY: 12/24, 11.5/23, 11/22V							
PH75QR	75	90.42	82.55	98.55	3.54	48M5044	57.70
PH100QR	100	92.2	82.55	106.43	4.5	48M4988	62.10
PH150QR	150	96.77	101.6	125.48	5.7	48M5001	84.86
PH250QR	250	96.77	114.3	138.18	7.5	48M5012	107.37
PRIMARY: 120/240, 115/230, 110/220V; SECONDARY: 12/24, 11.5/23, 11/22V							
PH50PG	50	81.03	76.2	111.25	3.5	42M3143	47.82
PH75PG	75	90.42	82.55	98.55	3.54	48M5043	49.43
PH100PG	100	92.2	82.55	106.43	4.5	48M4987	59.19
PH150PG	150	96.77	101.6	125.48	5.7	48M5000	75.41
PH250PG	250	96.77	114.3	138.18	7.5	48M5011	102.01
PH350PG	350	112.78	114.3	131.83	10.1	48M5021	113.84
PH500PG	500	109.47	120.65	150.88	14.2	48M5034	140.12
PRIMARY: 480/240, 460/230/208, 440/220/200V; SECONDARY: 120/25, 115/24, 110/23V							
PH50MLJ	50	90.42	82.55	103.12	4	48M5026	51.99
PH75MLJ	75	90.42	82.55	107.95	4.6	48M5041	57.70
PH100MLJ	100	92.2	82.55	119.13	5.2	48M4986	65.87
PH150MLJ	150	96.77	101.6	138.18	7.6	48M4998	80.85
PH250MLJ	250	112.78	114.3	131.83	10.1	48M5009	110.01
PH350MLJ	350	112.78	114.3	141.23	11	48M5019	129.22
PH500MLJ	500	109.47	120.65	169.93	16.3	46M4633	157.26
PH750MLJ	750	125.48	133.35	162.96	71	48M5048	220.75
PRIMARY: 415/400/380V; SECONDARY: 110/220V							
PH50MEMX	50	81.03	76.2	111.25	3.5	48M5024	54.47
PH75MEMX	75	92.2	82.55	103.12	4.1	48M5039	59.76
PH100MEMX	100	92.2	82.55	106.43	4.5	48M4984	69.60
PH150MEMX	150	96.77	101.6	125.48	5.7	48M4996	92.32
PH250MEMX	250	96.77	114.3	138.18	7.5	48M5007	121.14
PH350MEMX	350	112.78	114.3	131.83	10.1	48M5017	135.83

ACCESSORIES*

Mfg. Part No.	Description	Stock No.	Price Each 1-9
FGF1	Fused Finger Guard Kit	48M4911	3.02
FGF2	Fused Finger Guard Kit	48M4912	3.02
FG1	Unfused Finger Guard Kit	48M4913	2.56
FG2	Unfused Finger Guard Kit	48M4914	2.56
FG3	Fused Finger Guard Kit	48M4915	3.20
FG4	Fused Finger Guard Kit	48M4916	3.28
FG5	Fused Finger Guard Kit	48M4917	4.89
PFK1	Primary Fuse Kits	48M4976	3.60
PFK2	Primary Fuse Kits	48M4977	3.60
PFK3	Primary Fuse Kits	48M4978	3.60
PFK4	Primary Fuse Kits	48M4979	5.40
PFK5	Primary Fuse Kits	48M4980	5.40
PFK6	Primary Fuse Kits	48M4981	4.10
PFK7	Primary Fuse Kits	48M4982	4.10

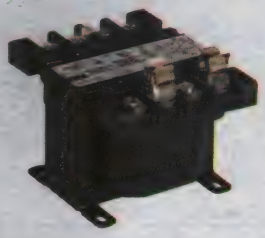
*For proper sizing of finger guard kit and fuse, *go online or call.*
(147225)

SBE ENCAPSULATED SERIES INDUSTRIAL CONTROL TRANSFORMERS

RoHS Compliant Available

SOLA/HD

- 50 - 1000 VA, 50/60 Hz – suitable for worldwide applications
- Interleaved copper windings reduce I2R losses and maximize efficiency
- 55°C Rise, 105°C insulation system to minimize heat
- Epoxy encapsulated to protect cores and coils against moisture, dirt, and other contaminants
- Meets or Exceeds NEMA Standard ST 1 and ANSI C89.1 for load inrush capability
- Integrally molded, flame retardant (IEC 707/ISO Class 1210) Terminal Blocks provide greater terminal contact area and improved conductivity
- Heavy gauge steel mounting plate
- Mounting dimensions are compatible with similar control transformers



SBE Encapsulated series encapsulated industrial control transformers are epoxy encapsulated to seal the transformer windings against moisture, dirt and industrial contaminants. Extra deep, molded terminal barriers reduce the chance of electrical failure as the result of arcing or frayed lead wires. The rugged construction and proven reliability of the **SBE** design is uniquely suited for all industrial environments. ***NOTE:** Call to special order transformers with factory-installed primary fuse holder Class "CC" and secondary fuse holder plus safety covers. When special ordering simply add **"WA" suffix** to mfg. part no. for ¼" x 1 ¼" glass or ceramic fuse type or add **"WB" suffix** to mfg. part no. for 13/32" x 1 ½" midget cartridge fuse type. Add only **"W"** suffix to part number for **"WB"** option without covers.

120 x 240V PRIMARY, 24V SECONDARY, 60Hz

Mfg. Part No.	VA	H x W x D (in.)	Shipping Weight (lbs)	Stock No.	Price Each 1-4
E050E	50	2.72 x 3.01 x 3.99	3	93K6542	50.75
E075E	75	2.96 x 3.39 x 4.36	4	33C0739	63.78
E100E	100	2.96 x 3.39 x 4.61	5	93K6546	68.86
E150E	150	3.89 x 4.5 x 4.48	8	15M9098	84.40
E200E	200	3.89 x 4.5 X 4.79	10	11J8682	107.50
E300E	300	4.53 x 5.25 x 4.66	12	93K6552	121.47
E500E	500	4.53 x 5.25 x 5.75	19	65H4388	154.01
220 x 440V PRIMARY, 110V SECONDARY, 50/60Hz; 230 x 460V PRIMARY, 115V SECONDARY, 50/60Hz; 240 x 480V PRIMARY, 120V SECONDARY, 60Hz					
E050	50	2.72 x 3.01 x 3.99	3	93K6541	45.91
E075	75	2.96 x 3.39 x 4.36	4	93K6544	51.29
E100	100	2.96 x 3.39 x 4.61	5	93K6545	55.10
E150	150	3.89 x 4.5 x 4.48	8	93K6548	64.73
E200	200	3.89 x 4.5 x 4.79	10	93K6549	78.30
E250	250	3.89 x 4.5 x 5.21	11	93K6550	92.79
E350	350	4.53 x 5.25 x 5.53	15	93K6553	108.01
E500	500	4.53 x 5.25 x 6.31	19	93K6554	131.87
E750	750	5.56 x 6.38 x 6.93	31	93K6556	178.55
E1000	1k	5.56 x 6.38 x 7.36	36	93K6547	230.32

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
FB2	Cartridge Fuse Holder, 1/4" x 1-1/4"	70C5730	9.39
FBP	Branch Circuit Cartridge Fuse Holder	70C5660	22.89
FBPC1	Branch Circuit Cartridge Fuse Holder	83C8313	44.06

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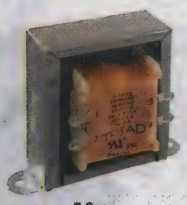
CONTROL TRANSFORMERS • POWER TRANSFORMERS

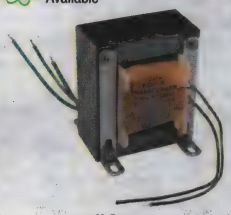
F SERIES POWER TRANSFORMERS FOR CONTROL CIRCUITS

RoHS Compliant Available

TRIAD



Z Case



U Case

Rated: primary 115/230V, 50/60Hz.

Mfg. Part No.	Case	Power VA	Secondary Series (VT)	Secondary Parallel	H x W x D	Stock No.	Price Each 1-9
● F-105Z	Z	12	12V CT @ 1A	6V @ 2A	2.375 x 2.875 x 1.750″	28M9237	17.82
● F-106Z	Z	24	12V CT @ 2A	6V @ 4A	2.750 x 3.125 x 2.000″	03F1032	17.29
● F-107Z	Z	48	24V CT @ 2A	12V @ 4A	3.125 x 3.625 x 2.375″	76K4965	18.19
● F-108U	U	96	24V CT @ 4A	12V @ 8A	3.406 x 2.813 x 3.187″	76K4966	31.69
● F-109U	U	192	24V CT @ 8A	12V @ 16A	4.187 x 3.436 x 3.563″	03F1035	44.92
F-211Z	Z	12	48V CT @ 0.25A	24V @ 0.5A	2.375 x 2.875 x 1.750″	02F1031	14.21
● F-212Z	Z	24	48V CT @ 0.5A	24V @ 1A	2.750 x 3.125 x 2.000″	02F1032	17.29
● F-213Z	Z	48	48V CT @ 1A	24V @ 2A	3.125 x 3.625 x 2.375″	69M3596	18.05
● F-214U	U	96	48V CT @ 2A	24V @ 4A	3.406 x 2.813 x 2.187″	28M9243	43.00
● F-215U	U	192	48V CT @ 4A	24V @ 8A	4.187 x 3.436 x 3.875″	76K4977	62.24

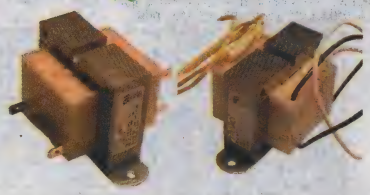
(6012)

TCT40 SERIES CONTROL TRANSFORMERS

RoHS Compliant Available

TRIAD

- Maximum Power: 40VA
- Input options: 120V, 240V, 120/240V, 208/240V, and 120/208/240V 50/60Hz
- Output: 24V @ 1.67A
- Mounting Center: 3.18″ ± 0.02″
- Stack Depth: 0.87″
- Other Dimensions: 2.22″ x 3.64″(H x W)



These transformers are designed with dual bobbin construction and insulated shrouds on the primary and secondary sides. Welded laminations have holes in each corner to allow direct mounting to panel.

QUICK CONNECT

Mfg. Part No.	Input Voltage (V)	Pin Connections Primary	Pin Connections Secondary	Stock No.	Price Each 1-9
● TCT40-01E07AB	120	1 and 2	5 and 6	89J9287	16.24

18 AWG STRANDED LEADS

Mfg. Part No.	Input Voltage (V)	Lead Configuration/Color Primary	Lead Configuration/Color Secondary	Stock No.	Price Each 1-9
● TCT40-01E07K	120	Black/White	Orange/Orange	28M9296	17.51

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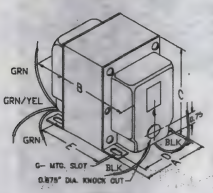
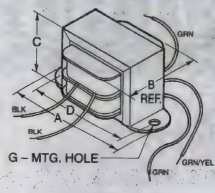
CHASSIS MOUNT POWER TRANSFORMERS

RoHS Compliant Available

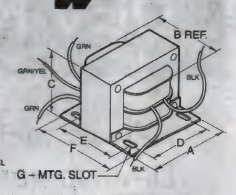
HAMMOND MANUFACTURING



Style X



Style C



Style H

Chassis mount, channel bracket, split bobbin power transformers do not require an electrostatic shield due to low primary-to-secondary coupling. Single primary: 115V, 60Hz. All secondaries are center tapped. 6″ leads minimum. Hi-pot tested at 2,000Vrms. UL listed, CSA certified.

Mfg. Part No.	Style	Secondary F.L. Volts	Secondary Amps	Case Dimensions (in.) A	B	C	Stock No.	Price Each 1-4
● 166F2	C	2.5ct	0.25	2.06″	1.25″	1.19″	66F7500	25.34
● 166L2	C	2.5ct	2.50	2.81″	1.50″	1.69″	92F1305	25.91
● 166Q2	C	2.5ct	6.00	3.25″	1.63″	2.00″	92F1306	25.91
● 166J5	C	5.0ct	1.00	2.38″	1.50″	1.38″	66F7488	25.30
● 166L5	C	5.0ct	2.00	2.81″	1.63″	1.69″	66F7489	23.54
● 166V5	C	5.0ct	20.0	4.50″	2.50″	2.88″	66F7493	57.82
● 166G6	C	6.3ct	0.60	2.38″	1.38″	1.38″	92F1307	17.66
● 166J6	C	6.3ct	1.00	2.81″	1.50″	1.69″	63M9514	18.84
● 166K6	C	6.3ct	1.20	2.81″	1.50″	1.69″	66F7496	17.80

CONTINUED

CHASSIS MOUNT POWER TRANSFORMERS (CONT.)

Mfg. Part No.	Style	Secondary F.L. Volts	Secondary Amps	Case Dimensions (in.) A	B	C	Stock No.	Price Each 1-4
● 166L6	C	6.3ct	2.00	2.81″	1.63″	1.69″	92F1309	12.57
● 166N6	C	6.3ct	4.00	3.25″	1.75″	2.00″	92F1310	14.67
● 166Q6	C	6.3ct	6.00	3.69″	2.00″	2.31″	66F7479	35.02
● 166S6	C	6.3ct	10.0	4.03″	2.25″	2.63″	66F7480	49.02
● 166G7	C	7.0ct	0.70	2.38″	1.50″	1.38″	66F7481	23.90
● 166G8	C	8.0ct	0.50	2.38″	1.38″	1.38″	66F7483	23.90
● 166J8	C	8.5ct	1.00	2.81″	1.50″	1.69″	63M9515	25.91
● 166L8	C	8.5ct	2.00	3.25″	1.63″	2.00″	92F1312	23.54
● 166M8	C	8.5ct	3.00	3.25″	1.75″	2.00″	66F7484	26.69
● 166N8	C	8.5ct	4.00	3.25″	2.00″	2.00″	66F7485	30.34
● 166G9	C	9.0ct	0.50	2.38″	1.38″	1.38″	63M9513	24.99
● 166F10	C	10.0ct	0.30	2.06″	1.38″	1.19″	66F7487	24.84
● 166G10	C	10.0ct	0.50	2.38″	1.50″	1.38″	92F1313	25.30
● 166J10	C	10.0ct	1.00	2.81″	1.63″	1.69″	92F1314	22.24
● 166L10	C	10.0ct	2.0	3.25″	1.75″	2.00″	66F7329	13.62
● 166M10	C	10.0ct	3.0	3.25″	2.00″	2.00″	92F1315	26.69
● 166N10	C	10.0ct	4.0	3.69″	2.00″	2.31″	10M5335	37.34
● 166P10	C	10.0ct	5.0	3.69″	2.13″	2.31″	10M5336	39.67
● 167R10	X	10.0ct	8.0	2.50″	3.00″	3.06″	66F7451	52.37
● 167S10	X	10.0ct	10.0	2.50″	3.25″	3.06″	66F7434	56.91
● 166K12	C	12.0ct	1.2	3.25″	1.63″	2.00″	93K7635	24.72
● 166F12	C	12.6ct	0.3	2.38″	1.38″	1.38″	96F5556	17.44
● 166G12	C	12.6ct	0.5	2.81″	1.50″	1.69″	92F1316	25.91
● 166J12	C	12.6ct	1.0	2.81″	1.63″	1.69″	96F5558	12.42
● 166L12	C	12.6ct	2.5	3.25″	2.00″	2.00″	92F1317	17.60
● 166N12	C	12.6ct	4.0	3.69″	2.13″	2.31″	92F1318	27.72
● 166Q12	C	12.6ct	6.0	4.03″	2.25″	2.63″	92F1319	36.95
● 166R12	C	12.6ct	8.0	4.50″	2.50″	2.88″	66F7456	60.68
● 165S12	H	12.6ct	10.0	3.00″	3.25″	2.56″	92F1320	72.89
● 165V12	H	12.6ct	20	3.75″	3.63″	3.13″	92F1321	91.35
● 166E14	C	14.0ct	0.15	2.06″	1.38″	1.19″	92F1322	25.64
● 166G14	C	14.0ct	0.5	2.81″	1.50″	1.69″	66F7457	10.48
● 166J14	C	14.0ct	1.0	2.81″	1.63″	1.69″	92F1324	23.54
● 166L14	C	14.0ct	2.0	3.25″	2.00″	2.00″	66F7458	16.77
● 166Q14	C	14.0ct	6.0	4.03″	2.50″	2.63″	66F7459	51.35
● 166F16	C	16.0ct	0.25	2.38″	1.38″	1.38″	92F1325	25.30
● 166G16	C	16.0ct	0.5	2.81″	1.50″	1.69″	92F1326	23.54
● 166J16	C	16.0ct	1.0	3.25″	1.63″	2.00″	92F1327	12.57
● 166L16	C	16.0ct	2.2	3.25″	2.00″	2.00″	96F5528	20.93
● 166K18	C	18.0ct	1.5	3.25″	1.75″	2.00″	96F5526	16.56
● 166M18	C	18.0ct	3.0	3.69″	2.13″	2.31″	92F1329	28.01
● 166P18	C	18.0ct	5.0	4.03″	2.50″	2.63″	96F6078	34.65
● 165S18	H	18.0ct	10	3.75″	3.13″	3.13″	92F1330	75.67
● 165V18	H	18.0ct	20	4.50″	4.38″	3.75″	66F7326	104.80
● 166D20	C	20.0ct	0.1	2.06″	1.38″	1.19″	92F1331	25.72
● 166F20	C	20.0ct	0.3	2.38″	1.50″	1.38″	66F7443	25.91
● 166G20	C	20.0ct	0.5	2.81″	1.63″	1.69″	92F1333	10.35
● 166J20	C	20.0ct	1.0	3.25″	1.75″	2.00″	92F1334	22.24
● 166L20	C	20.0ct	2.0	3.69″	1.88″	2.31″	83K4290	25.91
● 165V22	H	22.0ct	20	4.50″	4.38″	3.75″	66F7327	115.94
● 166C24	C	24.0ct	0.085	2.06″	1.38″	1.19″	66F7445	9.32
● 166L24	C	24.0ct	2.0	3.69″	2.13″	2.31″	96F5529	25.93
● 166N24	C	24.0ct	4.0	4.50″	2.50″	2.88″	92F1337	37.35
● 166G25	C	25.0ct	0.5	2.81″	1.63″	1.69″	96F5557	12.57
● 166J25	C	25.0ct	1.0	3.25″	1.75″	2.00″	96F5525	14.67
● 166K25	C	25.0ct	1.5	3.69″	1.88″	2.31″	96F5527	32.67
● 165S25	H	25.0ct	10	3.75″	3.63″	3.13″	92F1340	88.54
● 166G28	C	28.0ct	0.5	2.81″	1.63″	1.69″	92F1341	12.42
● 166J28	C	28.0ct	1.0	3.25″	2.00″	2.00″	92F1342	24.48
● 166L28	C	28.0ct	2.0	3.69″	2.13″	2.31″	83K4291	35.02
● 166J33	C	33.0ct	1.0	3.25″	2.00″	2.00″	92F1344	28.01
● 166K35	C	35.0ct	1.5	3.69″	2.13″	2.31″	63M9516	39.67
● 166E36	C	36.0ct	0.15	2.38″	1.50″	1.38″	92F1345	25.91
● 166F36	C	36.0ct	0.3	2.81″	1.63″	1.69″	63M9512	24.72
● 166J36	C	36.0ct	1.0	3.69″	1.88″	2.31″	10M5333	31.18
● 166L42	C	42.0ct	2.0	4.03″	2.50″	2.63″	10M5334	50.81
● 166G44	C	44.0ct	0.50	3.25″	1.75″	2.00″	66F7389	25.91
● 166J44	C	44.0ct	1.0	3.69″	2.00″	2.31″	66F7390	36.95
● 166J50	C	50.0ct	1	3.69″	2.13″	2.31″	66F7394	39.67
● 166L50	C	50.0ct	2	4.50″	2.50″	2.88″	66F7395	60.68
● 166G60	C	60.0ct	0.5	3.25″	2.00″	2.00″	66F7396	28.01
● 166G80	C	80.0ct	0.5	3.69″	1.88″	2.31″	66F7397	34.65

(6084)

CHASSIS MOUNT - GLOBAL USE POWER TRANSFORMERS

RoHS Compliant Available

HAMMOND MANUFACTURING

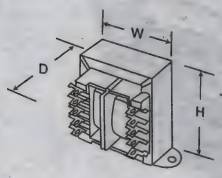


Fig. A

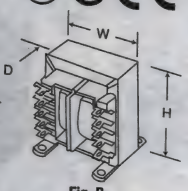


Fig. B

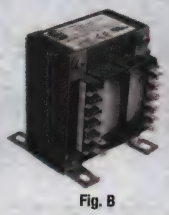


Fig. B

185 series chassis mount AC power transformers feature dual primary 115/230VAC, 50/60Hz, operation with dual secondaries for series or parallel connection. Each unit carries a 4,000Vrm Hi-pot test. Dual bobbin construction using terminals (solder lug or quick connect). UL listed, CSA certified. C22.2 #66 and CE certified to IEC 950.

Mfg. Part No.	VA	VAC Secondary (RMS) Series	VAC Secondary (RMS) Parallel	Dimensions (in.) W	D	H	Fig.	Stock No.	Price Each 1-4
185C10	25	10VCT @ 2.5A	5V @ 5.0A	2.81	2.22	2.31	A	83F8573	18.75
185D10	43	10VCT @ 4.3A	5V @ 8.6A	3.12	2.22	2.68	A	83F8580	24.11
185E10	80	10VCT @ 8.0A	5V @ 16.0A	2.50	2.61	3.00	B	83F8587	32.20
185F10	130	10VCT @ 13.0A	5V @ 26.0A	2.81	3.07	3.37	B	83F8594	43.35
185G10	175	10VCT @ 17.5A	5V @ 35.0A	3.12	3.20	3.75	B	83F8601	49.27
185C12	25	12.6VCT @2.0A	6.3V @ 4.0A	2.81	2.22	2.31	A	83F8574	17.71
185D12	43	12.6VCT @ 3.4A	6.3V @ 6.8A	3.12	2.22	2.68	A	83F8581	24.11
185E12	80	12.6VCT @ 6.3A	6.3V @ 12.6A	2.50	2.61	3.00	B	83F8588	32.20
185F12	130	12.6VCT @ 10.3A	6.3V @ 20.6A	2.81	3.07	3.37	B	10M5339	42.90
185G12	175	12.6VCT @ 14.0A	6.3V @ 28.0A	3.12	3.20	3.75	B	83F8602	50.19
185C16	25	16VCT @ 1.6A	8V @ 3.2A	2.81	2.22	2.31	A	63M9517	18.75
185D16	43	16VCT @ 2.7A	8V @ 5.4A	3.12	2.22	2.68	A	83F8582	22.78
185E16	80	16VCT @ 5.0A	8V @ 10.0A	2.50	2.61	3.00	B	83F8589	32.20
185F16	130	16VCT @ 8.1A	8V @ 16.2A	2.81	3.07	3.37	B	83F8596	43.35
185G16	175	16VCT @ 11.0A	8V @ 22.0A	3.12	3.20	3.75	B	83F8603	50.19
185C20	25	20VCT @ 1.25A	10V @ 2.5A	2.81	2.22	2.31	A	83F8576	17.71
185D20	43	20VCT @ 2.2A	10V @ 4.4A	3.12	2.22	2.68	A	83F8583	23.82
185E20	80	20VCT @ 4.0A	10V @ 8.0A	2.50	2.61	3.00	B	83F8590	34.80
185F20	130	20VCT @ 6.5A	10V @ 13.0A	2.81	3.07	3.37	B	83F8597	41.31
185G20	175	20VCT @ 8.8A	10V @ 17.6A	3.12	3.20	3.75	B	83F8604	50.19
185C24	25	24VCT @ 1.0A	12V @ 2.0A	2.81	2.22	2.31	A	83F8577	18.98
185D24	43	24VCT @ 1.8A	12V @ 3.6A	3.12	2.22	2.68	A	88K2114	24.41
185E24	80	24VCT @ 3.3A	12V @ 6.6A	2.50	2.61	3.00	B	83F8591	36.14
185F24	130	24VCT @ 5.4A	12V @ 10.8A	2.81	3.07	3.37	B	83F8598	42.90
185G24	175	24VCT @ 7.3A	12V @ 14.6A	3.12	3.20	3.75	B	83F8605	50.73
185C28	25	28VCT @ 0.9A	14V @ 1.86A	2.81	2.22	2.31	A	83F8578	18.98
185E28	80	28VCT @ 2.8A	14V @ 5.6A	2.50	2.61	3.00	B	93K7637	36.14
185F28	130	28VCT @ 4.6A	14V @ 9.2A	2.81	3.07	3.37	B	83F8599	43.35
185G28	175	28VCT @ 6.25A	14V @ 12.5A	3.12	3.20	3.75	B	83K4293	49.27
185C36	25	36VCT @ 0.7A	18V @ 1.4A	2.81	2.22	2.31	A	83F8579	18.75
185D36	43	36VCT @ 1.2A	18V @ 2.4A	3.12	2.22	2.68	A	83F8586	24.11
185E36	80	36VCT @ 2.2A	18V @ 4.4A	2.50	2.61	3.00	B	83F8593	36.14
185F36	130	36VCT @ 3.6A	18V @ 7.2A	2.81	3.07	3.37	B	83F8600	43.35
185G36	175	36VCT @ 4.8A	18V @ 9.6A	3.12	3.20	3.75	B	83K4294	50.73
185C230	25	230VCT @ 0.11A	115V @ 0.22A	2.81	2.22	2.31	A	24B8688	19.97
185E230	80	230VCT @ 0.35A	115V @ 0.7A	2.50	2.61	3.00	B	27C7142	33.92
185G230	175	230VCT @ 0.76A	115V @ 1.52A	3.12	3.20	3.75	B	24B8711	52.87

(37471)

162/164 SERIES LOW VOLTAGE, LOW PROFILE, POWER TRANSFORMERS

RoHS Compliant Available

HAMMOND MANUFACTURING

- 20 output voltages to choose from (5 - 120VAC R.M.S.)
- Six VA size models available from - 1.1 to 36VA; *go online or call*
- Both series operate on 50/60 Hz current
- Low profile, split bobbin design
- Dual winding secondaries, non-concentrically wound
- High insulation - Hipot of 2,500V RMS
- Class B insulation - 130°C

Fig. A

Fig. B

162/164 series low voltage transformers are designed so that all windings must be used. Electrostatic shield is not required due to low primary to secondary coupling. Choice of economical single primary 115V (**164 series**) or universal dual primary 115/230V (**162 series**). No mounting hardware required on 1.1 and 2.4 VA sizes, two hole mounting on 6, 12 and 20VA sizes, four hole mounting on 36VA size (mounting screws not provided). PC board mount with Industry standard pin spacing. cULus recognized.

SINGLE PRIMARY, 115V

Mfg. Part No.	VA	VAC Secondary (RMS) Series	VAC Secondary (RMS) Parallel	Dimensions (in.) W	D	H	Fig.	Stock No.	Price Each 1-4
164D10	1.1	10VCT @ 0.11A	5V @ 0.22A	1.13	1.38	1.31	A	24B8212	8.03
164F10	6	10VCT @ 0.6A	5V @ 1.2A	1.31	1.63	1.31	A	79R6761	9.18
164D12	1.1	12.6VCT @ .09A	6.3V @ .18A	1.13	1.38	1.31	A	52F9553	8.42
164E12	2.4	12.6VCT @ .2A	6.3V @ .4A	1.13	1.38	1.19	A	52F9536	9.00
164F12	6	12.6VCT @ .5A	6.3V @ 1A	1.31	1.63	1.31	A	52F9537	9.41
164E16	2.4	16VCT @ .15A	8V @ .3A	1.13	1.38	1.19	A	79R6758	8.50
164F16	6	16VCT @ .4A	8V @ .8A	1.31	1.63	1.31	A	52F9581	9.53
164E20	2.4	20VCT @ .12A	10 @ 2.4A	1.13	1.38	1.19	A	79R6759	9.00
164G20	12	20VCT @ .6A	10 @ 1.2A	1.56	1.88	1.5	A	75T9569	11.50
164E24	2.4	24VCT @ 0.1A	12 @ .2A	1.13	1.38	1.19	A	79R6760	9.00
164F24	6	24VCT @ .25A	12 @ .5A	1.31	1.63	1.31	A	52F9575	9.53
164G24	12	24VCT @ .5A	12 @ 1A	1.56	1.88	1.5	A	52F9576	11.11
164F28	6	28VCT @ .2A	14 @ .4A	1.31	1.63	1.31	A	79R6762	9.00
164G28	12	28VCT @ .42A	14 @ .84A	1.56	1.88	1.5	A	79R6764	10.50
164H28	20	28VCT @ .7A	14 @ 1.4A	1.88	2.25	1.44	A	52F9565	14.82
164E36	2.4	36VCT @ 0.065A	18V @ 0.13A	1.13	1.38	1.19	A	02E8674	8.50
164F36	6	36VCT @ 0.17A	18V @ 0.34A	1.31	1.63	1.31	A	24B8229	9.63
164G36	12	36VCT @ 0.35A	18V @ 0.7A	1.56	1.88	1.5	A	24B8239	11.09
DUAL PRIMARY, 115/230V									
162D12	1.1	12.6VCT @ .09A	6.3V @ .18A	1.13	1.38	1.31	B	79R6754	9.27
162E12	2.4	12.6VCT @ .2A	6.3V @ .4A	1.13	1.38	1.19	B	52F9544	10.06
162F12	6	12.6VCT @ .5A	6.3V @ 1A	1.31	1.63	1.31	B	52F9527	10.88
162G12	12	12.6VCT @ 1A	6.3V @ 2A	1.56	1.88	1.5	B	52F9528	12.17
162E16	2.4	16VCT @ .15A	8V @ .3A	1.13	1.38	1.19	B	52F9532	10.06
162F16	6	16VCT @ .4A	8V @ .8A	1.31	1.63	1.31	B	79R6755	10.59
162G16	12	16VCT @ .8A	8V @ 1.6A	1.56	1.88	1.5	B	52F9568	12.36
162H16	20	16VCT @ 1.25A	8V @ 2.5A	1.88	2.25	1.44	B	52F9569	15.88
162E20	2.4	20VCT @ .12A	10 @ 2.4A	1.13	1.38	1.19	B	52F9554	10.06
162G20	12	20VCT @ .6A	10 @ 1.2A	1.56	1.88	1.5	B	79R6756	13.34
162H20	20	20VCT @ 1A	10 @ 2A	1.88	2.25	1.44	B	52F9557	17.39
162E24	2.4	24VCT @ 0.1A	12 @ .2A	1.13	1.38	1.19	B	52F9560	10.06
162F24	6	24VCT @ .25A	12 @ .5A	1.31	1.63	1.31	B	52F9561	10.61
162G24	12	24VCT @ .5A	12 @ 1A	1.56	1.88	1.5	B	52F9562	12.53
162G28	12	28VCT @ .42A	14 @ .84A	1.56	1.88	1.5	B	79R6757	12.17
162H28	20	28VCT @ .7A	14 @ 1.4A	1.88	2.25	1.44	B	52F9551	15.88
162D36	1.1	36VCT @ 0.03A	18V @ 0.06A	1.13	1.38	1.31	B	24B8163	8.56
162E36	2.4	36VCT @ 0.065A	18V @ 0.13A	1.13	1.38	1.19	B	50H6405	10.17
162F36	6	36VCT @ 0.17A	18V @ 0.34A	1.31	1.63	1.31	B	24B8173	10.00
162G36	12	36VCT @ 0.35A	18V @ 0.7A	1.56	1.88	1.5	B	24B8183	12.31
162H36	20	36VCT @ 0.55A	18V @ 1.1A	1.88	2.25	1.44	B	24B8193	16.05

(175999)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

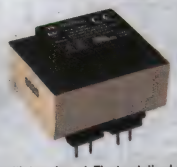
(196539)

POWER TRANSFORMERS

183 SERIES LOW VOLTAGE, LOW PROFILE, POWER TRANSFORMERS

RoHS Compliant Available

HAMMOND MANUFACTURING



- 14 output voltages to choose from (5 - 36 VAC R.M.S.)
- Six VA size models available from - 2.5 to 56VA
- Universal operation on 50/60 Hz current, 115 or 230V dual primary
- Dual winding secondaries, non-concentrically wound
- High insulation - Hipot of 4,000V RMS
- Class F insulation - 155°C

183 series low profile, transformers feature split bobbin design with top shroud. Electrostatic shield is not required due to low primary to secondary coupling. Two hole mounting on 2.5, 5, 10 and 20VA sizes, four hole mounting on 30 and 56VA size (mounting screws not provided). PC board mount with industry standard pin spacing. CSA certified (# LR3902) and UL recognized (# E50394).

Mfg. Part No.	VA	VAC Secondary (RMS) Series	VAC Secondary (RMS) Parallel	Dimensions (in.) W	D	H	Stock No.	Price Each 1-4
● 183E10	2.5	10VCT @ 0.25A	5V @ 0.5A	1.44	1.63	1.13	50H6486	10.00
● 183F10	5	10VCT @ 0.5A	5V @ 1A	1.44	1.63	1.38	24B8649	10.50
● 183G10	10	10VCT @ 1A	5V @ 2A	1.56	1.88	1.38	24B8656	12.84
● 183H10	20	10VCT @ 2A	5V @ 4A	1.88	2.25	1.63	24B8663	15.52
● 183J10	30	10VCT @ 3A	5V @ 6A	2.19	2.63	1.56	24B8670	18.19
● 183K10	56	10VCT @ 5.6A	5V @ 11.2A	2.50	3.00	1.81	24B8677	20.50
● 183F12	5	12.6VCT @ 0.4A	6.3V @ 0.8A	1.44	1.63	1.38	24B8650	11.24
● 183G12	10	12.6VCT @ 0.8A	6.3V @ 1.6A	1.56	1.88	1.38	24B8657	12.00
● 183J12	30	12.6VCT @ 2.4A	6.3V @ 4.8A	2.19	2.63	1.56	24B8671	18.19
● 183K12	56	12.6VCT @ 4.4A	6.3V @ 8.8A	2.50	3.00	1.81	24B8678	21.94
● 183F16	5	16VCT @ 0.31A	8V @ 0.62A	1.44	1.63	1.38	24B8651	11.24
● 183G16	10	16VCT @ 0.625A	8V @ 1.25A	1.56	1.88	1.38	24B8658	12.84
● 183K16	56	16VCT @ 3.5A	8V @ 7A	2.50	3.00	1.81	24B8679	21.94
● 183F20	5	20VCT @ 0.25A	10V @ 0.5A	1.44	1.63	1.38	24B8652	11.24
● 183G20	10	20VCT @ 0.5A	10V @ 1A	1.56	1.88	1.38	24B8659	12.84
● 183J20	30	20VCT @ 1.5A	10V @ 3A	2.19	2.63	1.56	24B8673	17.00
● 183K20	56	20VCT @ 2.8A	10V @ 5.6A	2.50	3.00	1.81	24B8680	21.94
● 183G24	10	24VCT @ 0.42A	12V @ 0.84A	1.56	1.88	1.38	24B8660	12.84
● 183H24	20	24VCT @ 0.83A	12V @ 1.66A	1.88	2.25	1.63	24B8667	14.50
● 183J24	30	24VCT @ 1.25A	12V @ 2.5A	2.19	2.63	1.56	24B8674	18.19
● 183K24	56	24VCT @ 2.33A	12V @ 4.66A	2.50	3.00	1.81	24B8681	21.65
● 183E28	2.5	28VCT @ 0.09A	14V @ 0.18A	1.44	1.63	1.13	50H6491	10.00
● 183F28	5	28VCT @ 0.18A	14V @ 0.36A	1.44	1.63	1.38	24B8654	11.24
● 183G28	10	28VCT @ 0.36A	14V @ 0.72A	1.56	1.88	1.38	24B8661	12.00
● 183E36	2.5	36VCT @ 0.07A	18V @ 0.14A	1.44	1.63	1.13	50H6492	10.70
● 183F36	5	36VCT @ 0.14A	18V @ 0.28A	1.44	1.63	1.38	24B8655	10.50
● 183G36	10	36VCT @ 0.28A	18V @ 0.56A	1.56	1.88	1.38	24B8662	12.84
● 183J36	30	36VCT @ 0.82A	18V @ 1.64A	2.19	2.63	1.56	24B8676	17.00
● 183K36	56	36VCT @ 1.56A	18V @ 3.12A	2.50	3.00	1.81	24B8683	21.94

(176000)

229 SERIES LOW VOLTAGE, LOW PROFILE, POWER TRANSFORMERS

c UL us

RoHS Compliant Available

HAMMOND MANUFACTURING

- Universal dual primary 115/230V - 50/60 Hz
- High insulation - Hipot of 1,750V RMS
- Class B insulation - 130°C

229 series low profile, power transformers feature dual - split bobbin design. Low primary to secondary coupling, balanced windings, no electrostatic shield required and low EMF radiation due to semi-toroidal design. cULus recognized.

Mfg. Part No.	VA	VAC Secondary (RMS) Series	VAC Secondary (RMS) Parallel	Dimensions (in.) W	D	H	Stock No.	Price Each 1-4
● 229E10	2	10VCT @ 250mA	5V @ 500mA	1.56	1.88	0.65	66F7655	11.13
● 229A16	6	16VCT @ 350mA	8V @ 700mA	1.56	1.88	0.85	96F5548	12.36
● 229B16	12	16VCT @ 700mA	8V @ 1.4A	2.00	2.50	1.07	96F5535	15.01
● 229A20	6	20VCT @ 300mA	10V @ 600mA	1.56	1.88	0.85	66F7635	12.51
● 229B20	12	20VCT @ 600mA	10V @ 1.2A	2.00	2.50	1.07	66F7636	14.18
● 229A24	6	24VCT @ 250mA	12V @ 500mA	1.56	1.88	0.85	96F5549	12.51
● 229B24	12	24VCT @ 500mA	12V @ 1A	2.00	2.50	1.07	96F5536	15.01
● 229A34	6	34VCT @ 170mA	17V @ 340mA	1.56	1.88	0.85	96F5533	12.51
● 229B34	12	34VCT @ 340mA	17V @ 680mA	2.00	2.50	1.07	96F5537	15.17
● 229B40	12	40VCT @300mA	20V @ 600mA	2.00	2.50	1.07	79R6773	15.01
● 229A230	6	230VCT @ 25mA	115V @ 50mA	1.56	1.88	0.85	66F7611	12.65

(176001)

HIGH-CURRENT REACTORS & CHOKES

RoHS Compliant Available

HAMMOND MANUFACTURING

195 series reactors for use in high-current DC power supplies, battery chargers, etc. Feature economical open-core and coil, 4-slot mounting and connectors made to screw terminal or heavy copper tabs with holes. Tolerance of 15% on both inductance and resistance.

Mfg. Part No.	Inductance (mH)	Current	Resistance (Ω)	Dimensions A	B	C	D	Weight (lbs.)	Stock No.	Price Each 1-4
● 195C20	1	20A	0.013	3.00″	3.06″	2.50″	2.50″	3	52F9533	67.51
● 195C30	1	30A	0.009	3.75″	3.85″	3.13″	3.13″	6	52F9534	102.29
● 195C50	1	50A	0.005	4.50″	5.25″	3.75″	3.75″	15	52F9535	174.76
● 195C75	1	75A	0.004	5.25″	6.00″	4.47″	4.38″	23	52F9518	292.09
● 195C100	1	100A	0.0036	5.25″	6.50″	4.47″	4.38″	26	52F9519	359.94
● 195E20	2.5	20A	0.022	3.75″	4.20″	3.13″	3.13″	7	52F9520	93.04
● 195G10	5	10A	0.04	3.75″	3.60″	3.13″	3.13″	6	52F9521	78.57
● 195G20	5	20A	0.025	4.50″	4.75″	3.75″	3.75″	11	52F9522	132.08
● 195J10	10	10A	0.07	3.75″	4.35″	3.13″	3.13″	8	52F9524	90.02
● 195J20	10	20A	0.045	5.25″	5.00″	4.47″	4.38″	18	52F9525	193.05
● 195J30	10	30A	0.037	6.00″	7.50″	5.00″	5.00″	36	52F9526	344.75
● 195M10	20	10A	0.013	4.50″	4.75″	3.75″	3.75″	10	52F9509	113.80
● 195M20	20	20A	0.075	6.00″	7.50″	5.00″	5.00″	34	52F9510	379.21
● 195M30	20	30A	0.045	6.00″	7.63″	5.16″	5.00″	41	52F9511	461.20

(6078)

CONTROL POWER, RECTIFIER, AND FILAMENT TRANSFORMERS

RoHS Compliant Available

multicomp

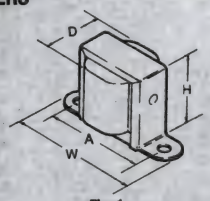


Fig. 1

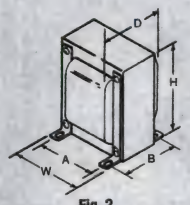


Fig. 2

Primary (input) voltage: 117VAC, 50/60Hz. Each unit is rated in ACrms. Feature single secondaries and lead terminals. High-quality commercial construction.

Mfg. Part No.	Fig.	Secondary Volts	Secondary Amps	RMS Test Volts	Case Dimensions (in.) H	W	D	Wt. (lbs.)	Stock No.	Price Each 1-9
● SPC20990	1	1 x 2.5V	6	1500	2.000	3.250	1.875	1	10M5594	30.26
● SPC20993	1	1 x 6.3V	1.2	2500	1.625	2.875	2.500	0.6	10M5597	28.64
● SPC20979	1	1 x 6.3V	3	2500	2.000	3.250	2.125	1.25	10M5583	38.01
● SPC20980	1	1 x 12V	0.7	1500	1.625	2.875	2.500	0.06	10M5584	24.54
● SPC20981	1	1 x 12V	2	1500	2.000	3.250	2.125	1.3	10M5585	35.96
● SPC20982	1	1 x 12V	4	1500	2.563	4.000	2.250	2.3	10M5586	41.85
● SPC20983	1	1 x 12.6V	2	1500	2.000	3.250	2.125	1.1	10M5587	36.71
● SPC20984	1	1 x 24V	1	1500	2.000	3.250	2.000	1.5	10M5588	35.57
● SPC20985	1	1 x 24V	2	1500	2.563	4.000	2.250	2.4	10M5589	53.01
● SPC20986	2	1 x 24V	4	1500	3.750	3.125	2.813	4.3	10M5590	99.33
● SPC20987	2	1 x 24V	8	1500	4.125	3.438	3.375	7.3	10M5591	108.61
● SPC20988	2	1 x 24V	12	1500	4.563	3.750	4.625	11.5	10M5592	154.00
● SPC20992	1	2 x 12.6V	2	1500	2.563	4.000	2.250	2.2	10M5596	53.58

(6022)

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(196545)

PC BOARD AND CHASSIS MOUNT POWER TRANSFORMERS

RoHS Compliant Available

TRIAD

Fig. 1

Fig. 2

Fig. 3

PC BOARD MOUNT FLAT PACK® 115/230 VOLT, 50/60Hz POWER TRANSFORMERS — FIG. 1
Meet the needs of low-clearance PC boards and solid state power designs. Can also be used for control and instrumentation applications. Voltages and currents are chosen for widely-used power applications, and can be used in single or dual-output supplies. Designed to pass 2,000V HiPot test.

Mfg. Part No.	VA	Secondary Series	Secondary Parallel	Stock No.	Price Each 1-9
FP12-475	6	12.6V CT @ 0.475A	6.3V @ 0.95A	81F2414	11.89
FP16-375	6	16V CT @ 0.375A	8V @ 0.75A	81F2415	11.74
FP20-300	6	20V CT @ 0.03A	10V @ 0.6A	78K8144	11.74
FP24-250	6	24V CT @ 0.25A	12V @ 0.5A	78K8146	11.89
FP30-200	6	30V CT @ 0.2A	15V @ 0.04A	81F2418	11.60
FP230-25	6	230V CT @ 0.025A	115V @ 0.05A	78K8145	11.74
FP12-950	12	12V CT @ 0.95A	6.3V @ 1.9A	81F2420	13.87
FP30-400	12	30V CT @ 0.4A	15V @ 0.8A	18M9086	13.87
FP230-50	12	230V CT @ 0.05A	115V @ 0.1A	44F3339	14.68

PC BOARD MOUNT SPLIT PACK 115/230 VOLT, 50/60Hz POWER TRANSFORMERS — FIG. 2
Dual primary, 8-pin split bobbin transformers are nonconcentrically wound—with primary and secondary wound side-by-side. Design permits 2,500V HiPot testing.

FS10-250	2.5	10V CT @ 0.25A	5V @ 0.5A	78K8147	8.04
FS12-200	2.5	12.6V CT @ 0.2A	6.3V @ 0.4A	16M1387	8.41
FS16-150	2.5	16V CT @ 0.15A	8V @ 0.3A	81F2426	8.51
FS24-100	2.5	24V CT @ 0.1A	12V @ 0.2A	93B7393	10.68
FS36-65	2.5	36V CT @ 0.065A	18V @ 0.13A	81F2428	8.51
FS24-250	6	24V CT @ 0.25A	12V @ 0.5A	81F2431	8.91
FS36-170	6	36V CT @ 0.17A	18V @ 0.34A	28M9250	8.80
FS12-1000	12	12.6V CT @ 0.1A	6.3V @ 2A	78K8149	10.46
FS16-800	12	16V CT @ 0.8A	8V @ 1.6A	78K8150	9.88
FS20-600	12	20V CT @ 0.6A	10V @ 1.2A	44F3333	13.13
FS24-500	12	24V CT @ 0.5A	12V @ 1A	81F2435	10.33
FS28-420	12	28V CT @ 0.42A	14V @ 0.84A	97B1702	13.13
FS36-350	12	36V CT @ 0.35A	18V @ 0.7A	81F2436	10.46

CHASSIS MOUNT QUICK PACK 115 VOLT, 50/60Hz POWER TRANSFORMERS — FIG. 3
Can offer significant reduction in size and weight for a given VA rating. Plus, these transformers come with a special quick connect or solder terminal. Available in 4 sizes. Split bobbin design permits 2500V HiPot testing. Available with single 115V or dual 115/230V, 50/60Hz primary.

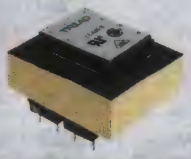
Mfg. Part No.	VA	Output Rating	Stock No.	Price Each 1-9
FD5-12	12	CT @ 1A	80K5846	11.27
FD5-24	12	CT @ 0.5A	76K4987	11.41
FD6-24	30	CT @ 1.25A	94F8646	15.24
FD7-24	56	CT @ 2.4A	76K4989	20.07
FD7-36	56	CT @ 1.5A	76K4990	20.07

(6048)

WORLD SERIES PC MOUNT 115/230V, 50/60Hz POWER TRANSFORMERS

RoHS Compliant Available

TRIAD



- Primary:115/230V, 50/60Hz
- VA Ranges: 2.5 to 56

World series PC mount transformers incorporate a dual bobbin construction with an insulating shroud, both made of a high temperature material that exceeds UL flammability requirements. Very high isolation between the primary and secondary, and between each winding and the core. Since the dual bobbin construction effectively reduces capacitance, electrostatic shielding is not required. UL recognized, CSA certified, VDE approved. CT = Center Tap.

Mfg. Part No.	VA	Secondary Series	Secondary Parallel	Dimensions (in.) H	W	D	Stock No.	Price Each 1-9
VPP10-250*	2.5	V CT @ 0.25A	5V @ 0.5A	1.125	1.625	1.313	37B9190	7.78
VPP10-5600	56	V CT @ 5.6A	5V @ 11.2A	1.813	3	2.5	37B9193	25.73
VPP12-200*	2.5	V CT @ 0.2A	6.3V @ 0.4A	1.125	1.625	1.313	93F8757	8.24
VPP12-400*	5	V CT @ 0.4A	6.3V @ 0.8A	1.375	1.625	1.313	93F8758	8.13
VPP12-800*	10	V CT @ 0.8A	6.3V @ 1.6A	1.375	1.875	1.563	93F8759	10.80
VPP12-1600*	20	V CT @ 1.6A	6.3V @ 3.2A	1.625	2.25	1.875	37B9194	14.54
VPP12-4400	56	V CT @ 4.4A	6.3V @ 8.8A	1.88	3	2.5	37B9196	24.31

CONTINUED

WORLD SERIES PC MOUNT 115/230V, 50/60Hz POWER TRANSFORMERS (CONT.)

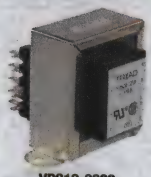
Mfg. Part No.	VA	Secondary Series	Secondary Parallel	Dimensions (in.) H	W	D	Stock No.	Price Each 1-9
VPP16-310*	5	V CT @ 0.31A	8V @ 0.62A	1.375	1.625	1.313	95M5334	8.13
VPP16-620*	10	V CT @ 0.62A	8V @ 1.25A	1.375	1.875	1.563	95M5335	10.21
VPP16-1250*	20	V CT @ 1.25A	8V @ 2.5A	1.625	2.25	1.875	99F2982	14.54
VPP16-1900*	30	V CT @ 1.9A	8V @ 3.8A	1.563	2.625	2.188	37B9197	17.27
VPP20-120*	2.5	V CT @ 0.12A	10V @ 0.24A	1.125	1.625	1.313	37B9200	7.78
VPP20-500*	10	V CT @ 0.5A	10V @ 1A	1.375	1.875	1.563	37B9204	10.21
VPP20-1000*	20	V CT @ 1A	10V @ 2A	1.625	2.25	1.875	37B9199	13.74
VPP20-1500*	30	V CT @ 1.5A	10V @ 3A	1.563	2.625	2.188	37B9201	17.27
VPP20-2800	56	V CT @ 2.8A	10V @ 5.6A	1.88	3	2.5	37B9203	24.31
VPP24-100*	2.5	V CT @ 0.1A	12V @ 0.2A	1.125	1.625	1.313	93F8763	7.78
VPP24-210*	5	V CT @ 0.21A	12V @ 0.42A	1.375	1.625	1.313	93F8764	8.13
VPP24-420*	10	V CT @ 0.42A	12V @ 0.84A	1.375	1.875	1.563	93F8765	10.67
VPP24-830*	20	V CT @ 0.83A	12V @ 1.66A	1.625	2.25	1.875	37B9206	13.74
VPP24-1250*	30	V CT @ 1.25A	12V @ 2.5A	1.563	2.625	2.188	88F3909	17.27
VPP24-2330*	56	V CT @ 2.33A	12V @ 4.66A	1.88	3	2.5	37B9205	25.73
VPP28-180*	5	V CT @ 0.18A	14V @ 0.36A	1.375	1.625	1.313	37B9209	8.61
VPP28-360*	10	V CT @ 0.36A	14V @ 0.72A	1.375	1.875	1.563	37B9211	10.21
VPP28-1060*	30	V CT @ 1.06A	14V @ 2.12A	1.563	2.625	2.188	37B9208	17.27
VPP28-2000*	56	V CT @ 2A	14V @ 4A	1.88	3	2.5	37B9210	24.31
VPP36-070*	2.5	V CT @ 0.07A	18V @ 0.14A	1.125	1.625	1.313	91B5866	7.78
VPP36-140*	5	V CT @ 0.14A	18V @ 0.28A	1.375	1.625	1.313	95M5336	8.13
VPP36-280*	10	V CT @ 0.28A	18V @ 0.56A	1.375	1.875	1.563	93F8768	10.21
VPP36-560*	20	V CT @ 0.56A	18V @ 1.12A	1.625	2.25	1.875	37B9214	14.54
VPP36-820	30	V CT @ 0.82A	18V @ 1.64A	1.563	2.625	2.188	37B9215	17.84
VPP36-1560*	56	V CT @ 1.56A	18V @ 3.12A	1.88	3	2.5	37B9213	24.31

*Units are Class 2/3
(113235)

WORLD SERIES CHASSIS MOUNT 115/230V, 50/60Hz TRANSFORMERS

RoHS Compliant Available

TRIAD



VPS12-2000

VPS12-6300

Feature dual-bobbin construction with an insulating shroud, keeping capacitance between the coils at a minimum. Very high isolation between primary and secondary, and between each winding and the core. HiPot tested at 4000 VRMS. Primary and secondary coils may be connected as either series or parallel, but both must be used simultaneously. Thru-hole mounting pins are square. Dimension "T" is 3/16" for all types listed. UL recognized, CSA certified, VDE approved.

Mfg. Part No.	VA	Secondary Series	Secondary Parallel	Case Dimensions (in.) H	W	D	Stock No.	Price Each
VPS12-2000	25	12.6V CT @ 2.00A	6.3V @ 4.00A	2.313	2.813	1.938	79K1708	12.54
VPS12-6300	80	12.6V CT @ 6.30A	6.3V @ 12.60A	3.000	2.500	2.313	93F8771	30.93
VPS12-10300	130	12.6V CT @ 10.30A	6.3V @ 20.60A	3.375	2.813	2.688	37B9221	38.76
VPS16-1600	25	16.0V CT @ 1.60A	8.0V @ 3.20A	2.313	2.813	1.938	93F8772	10.64
VPS16-8100	130	16.0V CT @ 8.10A	8.0V @ 16.20A	3.375	2.813	2.688	37B9224	38.76
VPS20-4000	80	20.0V CT @ 4.00A	10.0V @ 8.00A	3.000	2.500	2.313	37B9227	31.19
VPS20-8800	175	20.0V CT @ 8.80A	10.0V @ 17.60A	3.375	3.125	2.813	37B9229	51.69
VPS24-1000*	25	24.0V CT @ 1.00A	12.0V @ 2.00A	2.313	2.813	1.938	28M9311	11.12
VPS24-1800*	43	24.0V CT @ 1.80A	12.0V @ 3.60A	2.688	3.125	2.000	28M9312	15.87
VPS24-3300	80	24.0V CT @ 3.30A	12.0V @ 6.60A	3.000	2.500	2.313	79K0021	29.33
VPS24-5400	130	24.0V CT @ 5.40A	12.0V @ 10.80A	3.375	2.813	2.688	79K1712	38.03
VPS24-7300	175	24.0V CT @ 7.30A	12.0V @ 14.60A	3.375	3.125	2.813	88F3323	51.69
VPS28-900*	25	28.0V CT @ 0.90A	14.0V @ 1.80A	2.313	2.813	1.938	37B9234	15.26
VPS28-6250	175	28.0V CT @ 6.25A	14.0V @ 12.50A	3.375	3.125	2.813	88F4924	49.77
VPS36-700*	25	36.0V CT @ 0.70A	18.0V @ 1.40A	2.313	2.813	1.938	93F8778	16.15
VPS36-1200*	43	36.0V CT @ 1.20A	18.0V @ 2.40A	2.688	3.125	2.000	93F8779	15.49
VPS36-2200*	80	36.0V CT @ 2.20A	18.0V @ 4.40A	3.000	2.500	2.313	79K0023	29.33
VPS36-3600	130	36.0V CT @ 3.60A	18.0V @ 2.40A	3.375	2.813	2.688	37B9235	40.45
VPS230-110	25	230.0V CT @ 0.11A	115.0V @ 0.22A	2.313	2.813	1.938	79K0018	14.70
VPS230-190	43	230.0V CT @ 0.19A	115.0V @ 0.38A	2.688	3.125	2.000	93F8782	20.96
VPS230-350	80	230.0V CT @ 0.35A	115.0V @ 0.70A	3.000	2.500	2.313	28M9310	29.33
VPS230-570	130	230.0V CT @ 0.57A	115.0V @ 1.14A	3.375	2.813	2.688	84M8283	40.02

*Units are Class 2/3
(6011)

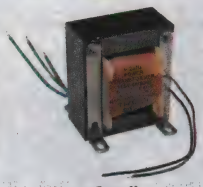
POWER TRANSFORMERS • PCB TRANSFORMERS • AUDIO TRANSFORMERS

115V PRIMARY-SINGLE SECONDARY 50/60Hz TRANSFORMERS

RoHS Compliant Available

TRIAD

Case A



Case U

Case X

† in mfg. part no. = tapped primary. # in mfg. part no. = 60Hz only

Mfg. Part No.	Case	Secondary Volts	Secondary Amps	RMS Test Volts	Case Dimensions (in.) H	W	D	Stock No.	Price Each 1-9
● F-6X#	X	2.5CT	6.0	2500	1.938	3.313	1.750	03F997	15.79
● F-16X	X	6.3CT	3.0	2500	1.938	3.313	2.000	03F960	15.25
● F-21A	A	6.3CT	10.0	1500	3.594	1.969	3.125	03F1000	32.23
● F-22A	A	6.3CT	20.0	2000	3.875	3.281	4.125	18M9089	48.06
● F-28U†	U	7-5/6.3CT	25.0	3000	4.625	3.813	3.625	18M9090	93.43
● F-113X	X	12	0.15	1500	1.375	2.375	1.375	02F479	9.52
● F-29U†	U	12/11/10CT	11.0	3000	4.375	3.500	3.375	28M9251	41.38
● F-44X#	X	12.6CT	2.0	1500	1.938	3.313	2.000	76K4983	15.63
● F-26X#	X	12.6CT	2.5	1500	2.281	3.688	2.000	03F996	20.24
● F-115X	X	24CT	0.085	1500	1.188	2.063	1.250	03F1009	11.97
● F-117X	X	24CT	0.4	1500	1.625	2.813	1.625	03F1011	8.83
● F-193U	U	24CT	4.0	1500	3.813	3.125	2.813	28M9239	48.15
● F-57X	X	25.2CT	1.0	1500	1.938	3.313	2.000	28M9245	17.26
● F-56X	X	25.2CT	2.8	1500	2.656	4.000	2.250	79K6496	27.89
● F-55X	X	26.8CT	1.7	1500	2.594	4.000	2.250	02F456	26.03
● F-187U	U	28CT	4.0	1500	3.500	2.875	3.063	18M9073	37.34
● F-59X	X	60CT	0.4	1500	1.938	3.313	2.000	03F1007	14.58

MULTIPLE SECONDARY/PRIMARY 115V, 50/60Hz TRANSFORMERS

Mfg. Part No.	Case	Secondary Volts	Secondary Amps	Qty.	RMW Test Volts	Case Dimensions (in.) H	W	D	Stock No.	Price Each 1-9
● F-241U	U	18CT	1.0	2	1500	2.500	3.000	2.500	02F1021	17.98

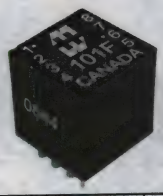
(6016)

MINIATURE EPOXY POTTED AUDIO TRANSFORMERS

RoHS Compliant Available

HAMMOND MANUFACTURING

- Pin type, P.C. board mount, net weight of only 0.1 oz.
- Rugged black epoxy potted construction produces a completely sealed unit withstanding severe environmental conditions.
- Secondary may be used as primary and primary as secondary.
- Power level: 100mw @ 300 Hz. to 100 Khz.
- -Freq. range @ +10 dbm is 200 Hz. to 100 Khz. +/- 0.5db
- -Freq. range @ +15 dbm is 200 Hz. to 100 Khz. +/- 0.5db
- -Freq. range @ +20 dbm is 300 Hz. to 100 Khz. +/- 0.5db
- -Freq. measurements with no D.C. saturation.



Mfg. Part No.	Nominal Impedance Primary	Nominal Impedance Secondary	Nominal Resistance Primary	Nominal Resistance Secondary	Stock No.	Price Each 1-4
● 101D	300 C.T.	600 C.T.	20.4	54	24B5834	19.84
● 101F	600 C.T.	600 C.T.	44	52	96F5496	17.37
● 101H	1200 C.T.	600 C.T.	80	53	72R6760	22.06
● 101J	2500 C.T.	600 C.T.	150	54	72R6761	20.62
● 101P	300 C.T.	50 C.T.	20.4	4.8	72R6762	22.06
● 101R	600 C.T.	50 C.T.	44	4.7	79R6735	21.86
● 101V	2500 C.T.	50 C.T.	150.7	4.9	72R6763	22.06

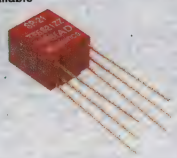
(163102)

SP SERIES "RED SPEC" AUDIO TRANSFORMERS

RoHS Compliant Available

TRIAD

Gold-plated nickel alloy leads spaced on 0.1" grid centers to fit PC boards. Base dimensions: 0.310" x 0.410". Lead length: 0.75". Height: 0.465". Meets military specification MIL-T-27D designation TF 5S21ZZ.



SP Case

Mfg. Part No.	Power (mW)	Application	Impedance Primary	Impedance Secondary	Stock No.	Price Each 1-9
● SP-4	10	Input	200k CT	1k CT	78K9545	21.60
● SP-20	50	Audio	10,000 CT	1,200 CT	07H9288	17.44
● SP-21	50	Audio	10k CT	2k CT	03F018	16.32
● SP-29	50	Driver	10k CT	500 CT	78K9543	16.52
● SP-33	50	Output	1000	50	80K6144	16.62
● SP-42	50	Audio	150 CT	12	21J7523	16.62
● SP-48	50	Audio	7,500 CT	12	88F4860	17.59
● SP-49	50	Audio	300 CT	600	35C5316	18.85
● SP-50	50	Audio	500 CT	600	92B6414	18.98
● SP-51	50	Audio	900 CT	600	04H0513	18.85
● SP-52	50	Output	1.5k CT	600	18M9334	16.34
● SP-66	50	Output/Isolation	10k CT	10k CT	03F292	17.65
● SP-67	50	Output/Isolation	600 CT	600 CT	78K9546	18.40
● SP-69	50	Output/Isolation	600	600 CT/150§	78K9547	17.64
● SP-70	50	Audio	600	600	94F8690	18.85
● SP-310	Magnetic Shield				78K9544	4.05

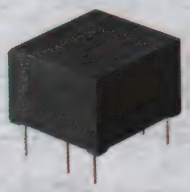
(6013)

IT SERIES PULSE TRANSFORMERS

RoHS Compliant Available

SCHAFFNER

- Galvanic separation
- Allows high potential difference voltage scaling
- Optional grounded shields
- Vacuum potting
- Very low partial discharge effects
- PCB through hole mounting



IT series pulse transformers are designed to offer you galvanic isolation for transformer coupled gate drives. The IT series provides negligible delays and the possibility of voltage scaling. They are available for single or double secondary winding for multiple gate drives. Choosing the IT product line brings you the rapid availability of a standard gate drive transformer. A wide selection on turns ratio, ignition current and voltages are designed to off you the desired standard product.

Mfg. Part No.	Turns Ratio	Ignition Current	Isolation Voltage (Peak)	Stock No.	Price Each 1-24
● IT245	1:1	100mA	4kV	11B3548	6.34
● IT237	1:1	250mA	2.5kV	11B3544	13.03
● IT255	1:1	250mA	4kV	19C0240	6.34
● IT258	1:1	1A	3.2kV	11B3554	11.35
● IT243	1:1:1	100mA	3.2kV	29C6469	6.69
● IT233	1:1:1	250mA	4kV	11B3542	8.69
● IT234	3:1:1	250mA	4kV	90C0517	9.39

(202235)

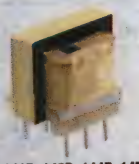
PLUG-IN PRINTED CIRCUIT AUDIO TRANSFORMERS

RoHS Compliant Available

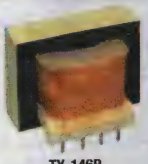
TRIAD

- Frequency response ranges: 200 - 15,000 Hz
- Impedance matching: 10% over frequency range

Audio printed circuit transformers are used in line matching, telephone coupling, pulse trigger, interstage, output, isolation and input applications.



TY-141P, 142P, 144P, 145P



TY-146P

Mfg. Part No.	Output (mW)	Primary Impedance	Secondary Impedance	Pri. DC Unbalanced (Ma)	Stock No.	Price Each 1-9
● TY-141P	100	10 CT	10 CT	4	80K6172	6.97
● TY-142P	100	10 CT	2 CT	4	78K9892	4.14
● TY-144P	100	15 CT	15 CT	4	78K9893	3.94
● TY-145P	100	600 CT	600 CT	15	02F477	7.38
● TY-146P	1 Watt	600 CT/150*	600 CT/150*	...	78K9894	10.91

CT = Center Tap, * = Split winding

(113237)

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(196560)

1-PHASE CURRENT TRANSFORMERS AND TRANSDUCERS

RoHS Compliant Available

CARLO GAVAZZI

DIA53 MI A82

- One of the widest ranges of CTs in the industry
- Transistor or analog output
- LED indications
- DIN-rail or chassis mounting
- Some are for use with Carlo Gavazzi set-point relays, which provide relay output and adjustable delays/hysteresis

MINI DIN RAIL MOUNT CT WITH ADJUSTABLE SETPOINT
Housed in a compact 3.2H x 0.7W x 2.4D″ housing. **DIA53 series** snaps directly onto DIN rail. Features and adjustable set point, LED and transistor output. Thru-hole: 0.47″. UL recognized, CE compliant.

Mfg. Part No.	Monitoring Range (Amps AC)	Max. Amps (AC)	Inside Diameter (mm)	Stock No.	Price Each
DIA53S72420A	2-20	40	12	05M4087	153.00

CHASSIS-MOUNT CTs FOR USE WITH DIB, DUA & PUA SERIES
Thru-hole for **Mfg. part nos. MI5** and **MI20:** 0.41″. **MI100** and **MI500:** For up to 100 or 500A are also available: 1.06″. CE compliant.

MI5	0.5-5	20	10.5	05M4234	103.00
MI20	2-20	50	10.5	05M4233	103.00

CHASSIS-MOUNT CTs WITH 4-20mA ANALOG OUTPUT
Proportional 2-wire sinking output. Thru-hole: 1.06″. CE compliant.

A82-2025	0-25	30	27	83F8777	398.00
A82-2050	0-50	60	27	05M6311	398.00
A82-20250	0-250	300	27	83F8778	398.00
A82-20500	0-500	600	27	96F1355	398.00

(2452)

"CROMPTON" AC CURRENT TRANSFORMERS

- For ammeters, wattmeters and cross current compensation **2SFT** prefix ammeter use only
- Frequency: 50-400Hz

FOOTED

Mfg. Part No.	Current Ratio (A)	Inside Diameter (inch)	Stock No.	Price Each
2SFT-500	50:5	1.13	32H7160	41.44
2SFT-600	60:5	1.13	92C2885	41.92
2SFT-750	75:5	1.13	10J7695	41.20
2SFT-800	80:5	1.13	14M4462	38.87
2SFT-101	100:5	1.13	10J7703	41.44
2SFT-1250	125:5	1.13	42M3902	41.20
2SFT-151	150:5	1.13	09J4235	40.74
2SFT-201	200:5	1.13	85C2390	41.92
2SFT-251	250:5	1.13	50B5769	40.74
2SFT-301	300:5	1.13	36K4145	40.74
2SFT-401	400:5	1.13	42M3903	41.20
56SFT-500	50:5	2.06	19M1536	45.51
56SFT101	100:5	2.06	42M3964	45.51
56SFT-151	150:5	2.06	42M3954	48.65
56SFT-201	200:5	2.06	42M3955	45.90
56SFT-251	250:5	2.06	42M3956	48.24
56SFT-301	300:5	2.06	42M3957	45.90
56SFT-401	400:5	2.06	42M3958	48.24
56SFT-501	500:5	2.06	42M3959	45.51
56SFT-601	600:5	2.06	42M3960	48.66
56SFT-801	800:5	2.06	42M3963	61.15
56SFT102	1000:5	2.06	42M3965	64.82
56SFT-122	1200:5	2.06	42M3953	61.15
5SFT-500	50:5	1.56	42M3936	48.11
5SFT-750	75:5	1.56	42M3938	48.24
5SFT-101	100:5	1.56	42M3930	48.11
5SFT-151	150:5	1.56	42M3933	45.51
5SFT-201	200:5	1.56	42M0679	48.11
5SFT-301	300:5	1.56	42M3934	48.11
5SFT-401	400:5	1.56	42M3935	49.50

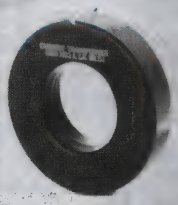
➤ CONTINUED ➤

"CROMPTON" AC CURRENT TRANSFORMERS (CONT.)

Mfg. Part No.	Current Ratio (A)	Inside Diameter (inch)	Stock No.	Price Each
5SFT-501	500:5	1.56	85C2465	45.90
5SFT-601	600:5	1.56	42M3937	48.11
5SFT-751	750:5	1.56	42M3939	61.44
5SFT-801	800:5	1.56	42M3940	65.13
5SFT-102	1000:5	1.56	42M3931	65.13
5SFT-122	1200:5	1.56	42M3932	61.44
6SFT-151	50:5	2.06	42M3980	72.42
6SFT-251	250:5	2.06	42M3982	72.64
6SFT-301	300:5	2.06	57K0491	77.00
6SFT-401	400:5	2.06	57K0495	77.45
6SFT-501	500:5	2.06	57K0497	72.42
6SFT-601	600:5	2.06	42M3983	72.64
6SFT-751	750:5	2.06	42M3984	97.33
6SFT-102	1000:5	2.06	42M3978	97.33
6SFT-122	1200:5	2.06	42M3979	103.17
76SFT-201	200:5	3.0	42M4057	56.41
76SFT-251	250:5	3.0	42M4059	59.79
76SFT-301	300:5	3.0	42M4060	56.41
76SFT-401	400:5	3.0	42M4061	56.41
76SFT-501	500:5	3.0	42M4062	56.10
76SFT-601	600:5	3.0	42M4063	56.41
76SFT-751	750:5	3.0	42M4064	56.41
76SFT-801	800:5	3.0	42M4065	56.41
76SFT-102	1000:5	3.0	42M4052	82.01
76SFT-122	1200:5	3.0	42M4053	82.01
76SFT-152	1500:5	3.0	42M4054	82.01
76SFT-162	1600:5	3.0	42M4055	86.93
76SFT-182	1800:5	3.0	42M4056	72.65
76SFT-202	2000:5	3.0	42M4058	88.16
7SFT-101	100:5	2.5	42M4011	59.50
7SFT-151	150:5	2.5	42M4014	59.50
7SFT-301	300:5	2.5	42M4019	59.50
7SFT-401	400:5	2.5	42M4020	59.50
7SFT-501	500:5	2.5	42M4021	56.13
7SFT-601	600:5	2.5	42M4022	59.50
7SFT-751	750:5	2.5	42M4023	59.50
7SFT-801	800:5	2.5	42M4024	59.50
7SFT-102	1000:5	2.5	42M4012	84.19
7SFT-122	1200:5	2.5	42M4013	84.19
7SFT-152	1500:5	2.5	42M4015	84.19
7SFT-162	1600:5	2.5	42M4016	84.19

(167155)

"CROMPTON" AC CURRENT TRANSFORMERS



- For ammeters, wattmeters and cross current compensation, **2RL** prefix ammeter use only, **8RL** prefix metering
- Frequency: 50-400Hz

DONUT

Mfg. Part No.	Current Ratio (A)	Inside Diameter (inch)	Stock No.	Price Each
2RL-500	50:5	1.05	09J4233	35.45
2RL-600	60:5	1.05	42M3900	34.60
2RL-750	75:5	1.05	09J4228	32.64
2RL-800	80:5	1.05	11J0251	32.88
2RL-101	100:5	1.05	09J4229	34.81
2RL-121	120:5	1.05	42M3896	34.85
2RL-1250	125:5	1.05	42M3897	32.88
2RL-151	150:5	1.05	09J4230	34.21
2RL-201	200:5	1.05	09J4231	35.19
2RL-251	250:5	1.05	42M3898	34.85
2RL-301	300:5	1.05	09J4232	35.45
2RL-401	400:5	1.05	42M3899	34.60
5RL-500	50:5	1.56	42M3926	48.24
5RL-750	75:5	1.56	42M3928	48.24
5RL-101	100:5	1.56	31M3604	48.24
5RL-201	200:5	1.56	42M3924	48.11
5RL-301	300:5	1.56	42M3925	48.11
5RL-401	400:5	1.56	73K5453	48.11
5RL-501	500:5	1.56	36K4183	49.06

➤ CONTINUED ➤

CURRENT TRANSFORMERS

"CROMPTON" AC CURRENT TRANSFORMERS (CONT.)

Mfg. Part No.	Current Ratio (A)	Inside Diameter (inch)	Stock No.	Price Each
5RL-601	600:5	1.56	42M3927	47.69
5RL-751	750:5	1.56	42M3929	65.13
5RL-801	800:5	1.56	17M9722	61.44
5RL-102	1000:5	1.56	42M3923	65.13
5RL-122	1200:5	1.56	16M5189	65.13
6RL-101	100:5	2.06	42M3966	72.64
6RL-151	150:5	2.06	42M3969	72.64
6RL-201	200:5	2.06	42M3971	77.00
6RL-251	250:5	2.06	42M3972	77.00
6RL-301	300:5	2.06	17M9160	72.42
6RL-401	400:5	2.06	42M3973	72.42
6RL-501	500:5	2.06	29M7813	77.00
6RL-601	600:5	2.06	42M3974	77.00
6RL-751	750:5	2.06	42M3975	97.33
6RL-801	800:5	2.06	42M3976	97.41
6RL-102	1000:5	2.06	42M3967	103.17
6RL-122	1200:5	2.06	42M3968	103.17
76RL-201	200:5	3.0	42M4044	56.41
76RL-251	250:5	3.0	42M4046	56.41
76RL-301	300:5	3.0	42M4047	56.10
76RL-401	400:5	3.0	31M6897	59.79
76RL-501	500:5	3.0	42M4048	59.79
76RL-601	600:5	3.0	42M4049	59.79
76RL-751	750:5	3.0	42M4050	56.41
76RL-801	800:5	3.0	42M4051	59.79
76RL-102	1000:5	3.0	42M4039	81.62
76RL-122	1200:5	3.0	42M4040	86.93
76RL-152	1500:5	3.0	42M4041	77.00
76RL-182	1800:5	3.0	42M4043	72.65
76RL-202	2000:5	3.0	42M4045	74.75
7RL-101	100:5	2.5	42M4000	59.50
7RL151	150:5	2.5	42M4010	56.13
7RL-201	200:5	2.5	42M4004	59.50
7RL-251	250:5	2.5	42M4005	56.13
7RL-301	300:5	2.5	42M4006	59.50
7RL-401	400:5	2.5	63K9302	59.50
7RL-501	500:5	2.5	42M4007	56.13
7RL-601	600:5	2.5	11J5710	59.50
7RL-751	750:5	2.5	42M4008	59.50
7RL-801	800:5	2.5	42M4009	56.13
7RL-122	1200:5	2.5	42M4001	89.24
7RL-152	1500:5	2.5	42M4002	84.19
7RL-162	1600:5	2.5	42M4003	84.19
8RL-201	200:5	3.25	42M4068	94.33
8RL-251	250:5	3.25	42M4070	99.99
8RL-301	300:5	3.25	42M4072	99.99
8RL-401	400:5	3.25	42M4075	94.33
8RL-501	500:5	3.25	42M4077	99.99
8RL-601	*600:5	3.25	42M4078	94.33
8RL-751	750:5	3.25	42M4079	99.99
8RL-801	800:5	3.25	42M4080	94.35
8RL-102	1000:5	3.25	06M4357	98.86
8RL-122	1200:5	3.25	42M4066	116.58
8RL-152	1500:5	3.25	42M4067	112.94
8RL-162	1600:5	3.25	12M6142	144.12
8RL-202	2000:5	3.25	42M4069	148.34
8RL-252	2500:5	3.25	42M4071	144.12
8RL-322	3200:5	3.25	42M4074	194.72

(167154)

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(212565)

"CROMPTON" AC CURRENT TRANSFORMERS

Designed to meet the requirements of IEEE C57.13 - 1993. This range of indoor single phase metering class voltage transformers has a metering burden capacity up to 0.3% class @ 75VA and a thermal rating up to 750VA. Some models available with up to two onboard fuses, *call*.

2RL and 5RL

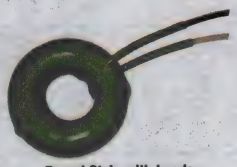
Mfg. Part No.	Voltage Ratio	Turns Ratio	Stock No.	Price Each
460-069	69.3:120	0.58:1	42M3915	317.35
460-120	120:120	1:1	42M3916	317.35
460-208	208:120	1.73:1	42M3917	317.35
460-240	240:120	2:1	42M3918	317.35
460-277	277:120	2.31:1	42M3919	331.63
460-288	288:120	2.4:1	67C2284	331.63
460-300	300:120	2.5:1	42M3920	350.76
460-346	346:120	2.88:1	42M3921	335.66
460-480	480:120	4:1	42M3922	345.48

(93121)

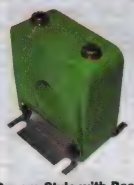
AC CURRENT TRANSFORMERS

RoHS Compliant Available

multicomp



Round Style with Leads



Square Style with Base

Designed for use with AC panel meters where external transformers are required. Secondary output signal: 0-5A for all units. Fully encapsulated rubber molded for indoor and outdoor applications. Insulation class: 0.6kV, 10kV BIL full wave. 50 to 400Hz. Linearity: ±1.5%. Thermal rating: 1.33VA at 30°C, 1.0VA at 55°C. Square style have brass or aluminum. #8-32 UNC terminals. Round style have 24"-long 16 AWG flexible leads. Inside diameter: 1 inch. UL recognized. Made in USA.

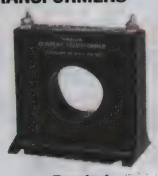
ROUND STYLE

Mfg. Part No.	Current Ratio	Stock No.	Price Each 1-4
● SPC21618	50:5	12M6831	59.35
● SPC21619	60:5	12M6832	55.04
● SPC21622	100:5	12M6835	55.04
● SPC21625	150:5	12M6838	55.04
● SPC21626	200:5	12M6839	55.04
● SPC21628	300:5	12M6841	75.14
● SPC21629	400:5	12M6842	67.47
● SPC21630	500:5	12M6843	67.47
SQUARE STYLE WITH BASE			
● SPC21633	50:5	12M6846	57.57
● SPC21637	100:5	12M6850	57.57
● SPC21641	200:5	12M6854	57.57

(38571)

AC CURRENT TRANSFORMERS

Simpson



Terminal

Donut

For use with panel AC ammeters where external transformers are required. All have 5A AC secondary current signal. Donut-type transformers are inserted 1 turn primary, rated at 2VA, and include 2' leads. Terminal-type transformers have #8-32 brass studs with washers for easy connection to meter. Leads not included.

DONUT TYPE

Mfg. Part No.	Primary Current	Window Diameter (in.)	Stock No.	Price Each
01293	50A	1.56	9886493	42.42
01306	75A	1.56	55F2575	40.40
01297	100A	1.56	12C2454	48.90
01298	150A	2.06	55F2576	43.90
01299	200A	2.06	55F2577	43.74
01300	300A	2.06	55F2578	43.76

➤CONTINUED➤

AC CURRENT TRANSFORMERS (CONT.)

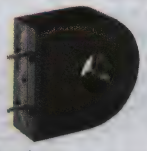
Mfg. Part No.	Primary Current	Window Diameter (in.)	Stock No.	Price Each
01305	400A	2.06	52F5897	41.70
01301	500A	2.06	55F2579	53.11
TERMINAL TYPE				
37020	100A	1.56	16F2267	37.57
37021	150A	1.56	16F2268	38.82
37022	200A	1.56	16F2269	52.36
37023	300A	1.56	16F2270	38.85
37024	500A	1.56	16F2271	49.83

(3467)

HIGH FREQUENCY CURRENT SENSE TRANSFORMERS

RoHS Compliant Available

TRIAD



- Derate ET product by 32% for 50 kHz, 52% for 100 kHz and 50% for unidirectional operation
- Rated primary current renders approximately 40°C temperature rise
- **CST206** models have maximum recommended terminating resistance of 1 ohm per turn
- Primary is inserted through hole in casing

Designed for switching power supply applications, TRIAD current sense transformers are used to detect the current passing through a conductor. These transformers are very reliable and operate effectively over the frequency range of 20 kHz-200 kHz. They are constructed of UL rated 130°C materials. Both models are available with a center tap option. 3 pin or center tapped (CT) models are designated with a **T** suffix. Non-centered tapped versions do not have a center pin.

Mfg. Part No.	ET VμSEC Ref. 20 kHz	Turns Count	Min Ind. mH	DCR Ohms Max.	Pri. Amps RMS	Stock No.	Price Each 1-9
CST206-1A	2000	100	14	0.58	110	89M4940	7.72
CST206-1T	2000	100CT	14	0.58	110	89M4941	7.29
CST206-2A	4000	1:200	56	3.5	80	89M4942	7.72
CST206-2T	4000	200CT	56	3.5	80	89M4943	7.29
CST206-3A	6000	300	130	12.4	70	89M4944	7.72
CST206-3T	6000	300CT	130	12.4	70	89M4945	7.29
CST306-1A	500	1:20	3.5	0.34	35	89M4946	5.67
CST306-1T	500	50CT	3.5	0.34	35	89M4947	5.67
CST306-2A	1000	100	14	1.55	25	89M4948	6.03
CST306-2T	1000	100CT	14	1.55	25	89M4949	5.67
CST306-3A	2000	1:200	55	3.75	25	89M4950	6.03
CST306-3T	2000	200CT	55	3.75	25	89M4951	5.67

(110537)

LOW FREQUENCY CURRENT SENSE TRANSFORMERS

RoHS Compliant Available

TRIAD

- Operate effectively between 50-60Hz
- Constructed of UL rated 130°C materials

Current sense transformers are used to detect currents passing through a conductor.

Mfg. Part No.	Primary Current Amps	Turns Ratio	DCR Ohms Nominal	Dimensions (mm) H	W	D	ID	Net Wt. (g)	Stock No.	Price Each 1-9
CST-1005	5	1000:1	40	24.8	23.5	12	8.5	20	89M4936	7.70
CST-1010	10	1000:1	40	24.8	23.5	12	8.5	20	89M4937	7.79
CST-1020	20	1000:1	40	24.8	23.5	12	8.5	20	89M4938	7.79
CST-1030	30	1CT:1CT	46	30.2	30.2	14.3	11.4	30	89M4939	10.56

(110540)

LINE AUTOTRANSFORMERS

RoHS Compliant Available

HAMMOND MANUFACTURING

170 series line autotransformers are for use where equipment is already isolated and step-up (115V to 230V) or step-down (230V to 115V) service is required. Chassis mount-enclosed, hardwired units. 50 or 60Hz. Minimum 8" leads. CSA certified.

Mfg. Part No.	VA (Max.)	Dimensions A	B	C	D	E	Weight	Stock No.	Price Each
170	50	2.19"	2.63"	2.63"	1.75"	1.56"	2 lbs.	96F5530	37.36
170A	100	2.50"	3.00"	3.06"	2.00"	1.94"	3 lbs.	96F5531	41.30
170B	200	3.13"	3.50"	3.81"	2.50"	2.19"	4.5 lbs.	83K4292	57.57
170C	300	3.13"	4.00"	3.81"	2.50"	2.69"	6 lbs.	96F5543	67.21

➤CONTINUED➤

LINE AUTOTRANSFORMERS (CONT.)

Mfg. Part No.	VA (Max.)	Dimensions A	B	C	D	E	Weight	Stock No.	Price Each
170D	500	3.75"	4.50"	4.56"	3.00"	3.31"	10 lbs.	66F7253	99.75
170G	1500	4.38"	6.63"	5.30"	3.50"	5.10"	22 lbs.	66F7231	195.72

(6079)

STEP DOWN, PLUG-IN AUTOTRANSFORMERS

RoHS Compliant Available

HAMMOND MANUFACTURING

World wide applications, 50 or 60Hz operation, step down (230VAC to 115VAC)
Input is circuit breaker protected
Hi-pot tested to 2 KV RMS

175 series single winding, does not provide isolation, for use where equipment is already isolated and only voltage change is required. Standard 3-wire, grounded plug (can also be used with adaptors for proper grounding). Input connected to a 5' cord and grounded North American 250V 3-wire plug (NEMA 6-15P). Output connected to standard North American 115V - 3 wire grounded receptacle (NEMA 5-15R). cUL and UL listed.

Mfg. Part No. *	VA (Max.)	Dimensions (in.) A	B	C	D	E	Wt. (lbs.)	Stock No.	Price Each
175A-NA	100	3.16	4.25	3.81	2.50	2.94	3.5	50H6421	73.15
175B-NA	200	3.16	4.50	3.81	2.50	3.19	4.5	50H6423	86.06
175C-NA	300	3.16	5.00	3.81	2.50	3.69	6	50H6425	102.50
175D-NA	500	3.80	6.00	4.68	3.00	4.38	10	50H6427	150.61
175E-NA	750	3.80	7.06	4.68	3.00	5.38	14	50H6429	169.17
175F-NA	1000	3.80	7.06	4.68	3.00	5.38	14.5	50H6431	213.31
175G-NA	1500	4.40	6.63	5.39	3.50	6.09	22	26H6479	300.27

*These units do NOT convert line frequency
(175992)

STEP UP, PLUG-IN AUTOTRANSFORMERS

RoHS Compliant Available

HAMMOND MANUFACTURING

World wide applications, 50 or 60Hz operation, step up (115VAC to 230VAC)
Input is circuit breaker protected
Hi-pot tested to 2 KV RMS

176 series single winding, does not provide isolation, for use where equipment is already isolated and only voltage change is required. Standard 3-wire, grounded plug (can also be used with adaptors for proper grounding). Input is connected to a 5' cord and standard grounded 125V North American plug (NEMA 5-15P). Output is connected to a grounded North American 250V receptacle (NEMA 6-15R). cUL and UL listed.

Mfg. Part No. *	VA (Max.)	Dimensions (in.) A	B	C	D	E	Wt. (lbs.)	Stock No.	Price Each
176A	120	3.16	4.25	3.81	2.50	2.94	3.5	50H6433	72.85
176B	200	3.16	4.50	3.81	2.50	3.19	4.5	50H6434	84.80
176C	300	3.16	5.00	3.81	2.50	3.69	6	02E2001	104.18
176D	500	3.80	6.00	4.68	3.00	4.38	10	50H6435	148.41
176F	1000	3.80	7.06	4.68	3.00	5.38	14.5	50H6436	210.19
176G	1500	4.40	6.63	5.39	3.50	6.09	22	73C3719	262.73

*These units do NOT convert line frequency
(175994)

STEP-UP/STEP-DOWN AUTOTRANSFORMERS

RoHS Compliant Available

TRIAD

Case Type X

Case Type M

Case Type U

Single-winding autotransformers in which the primary coil is a fraction of the entire winding for voltage step-up or the secondary coil is a fraction of the entire winding for voltage step-down. Part of the power is transferred conductively through the windings. All units are 50/60Hz line frequency except units with **U suffix** in mfg. part no. which is 60Hz. Hi-pot tested to 1500Vrms. Available in various configurations, case types and output watts (VA) ratings. Units with **X** or **U suffix** in mfg. part no. have leads; and **MG suffix** have 3-wire plug with ground, socket and 6' line cord.

Mfg. Part No.	Power VA	Primary Volts	Secondary Volts	Secondary Amps	Case Type	Dimensions (in.) MW	MD	Stock No.	Price Each 1-9
N-1X	50	230	115	0.435	X	3.125	...	78K8606	18.23
N-53MG	85	115	115	0.74	M	2.25	2.875	02F1043	88.32
N-2X	100	230	115	0.870	X	3.563	...	78K8607	26.90

➤CONTINUED➤

AUTO TRANSFORMERS • ISOLATION TRANSFORMERS

STEP-UP/STEP-DOWN AUTOTRANSFORMERS (CONT.)

Mfg. Part No.	Power VA	Primary Volts	Secondary Volts	Secondary Amps	Case Type	Dimensions (in.) MW	Dimensions (in.) MD	Stock No.	Price Each 1-9
● N150MG	150	115	230	0.650	M	2.250	2.125	81F2438	100.90
● N-4MG	150	230	115	1.300	M	2.250	2.375	96B6783	97.82
● N-6U	200	230	115	1.700	U	2.813	2.125	78K8614	47.15
● N250MG	250	115	230	1.100	M	2.500	2.438	81F2439	105.44
● N-5MG	250	230	115	2.170	M	2.500	3.500	02F1058	105.44
● N-500MG	500	115	230	2.200	M	3.000	3.625	69M4180	128.10
● N-7MG	600	230	115	5.220	M	3.000	3.875	78K8616	126.99
● N1000MG	1	115	230	4.350	M	3.500	4.125	81F2441	269.36
● N11-MG	2	230	115	17.400	M	3.500	6.875	66K9549	305.91

(85807)

LINE ISOLATION TRANSFORMERS

RoHS Compliant Available

HAMMOND MANUFACTURING

171 series transformers for use where equipment isolation is required (primary 115V, secondary 115V), 50/60Hz operation. Electrostatic shield between primary and secondary, with standard 3-wire plug and outlet receptacle. Chassis mount-enclosed, minimum 5ft/ cord with plug. Input (primary) connected to 5' long cord and Standard North American plug. Output (secondary) connected to 1' long 3-wire grounded receptacle. UL listed.

Mfg. Part No.	VA (Max.)	Wt. (lbs.)	Stock No.	Price Each 1-4
● 171A	100	6.5	66F7240	109.10
● 171B	200	8	96F5545	131.94
● 171C	300	11	93K7636	147.13
● 171E	500	14	96F5547	196.85
● 171G	1000	34.5	50H6418	385.47

(6080)

LINE ISOLATION, STEP DOWN, PLUG-IN TRANSFORMERS

RoHS Compliant Available

HAMMOND MANUFACTURING

- Primary 230VAC, 50/60Hz, secondary 115VAC
- Circuit breaker in primary
- Hi-pot tested to 2 KV RMS
- Electrostatic shield between primary and secondary

172 series tranformers provide circuit isolation and steps down primary voltage. Input (primary) connected to a 5' cord and North American 250V, 3-wire grounded plug (NEMA 6-15P). Output (secondary) connected to a 1' cord and standard North American 125V, 3-wire grounded receptacle (NEMA 5-15R). cUL and UL listed.

Mfg. Part No. *	VA (Max.)	Dimensions (in.) A	B	C	D	E	Wt. (lbs.)	Stock No.	Price Each
● 172A	100	3.80	5.06	4.68	3.00	3.38	6.5	66F7242	146.09
● 172B	200	3.80	5.56	4.68	3.00	3.88	8.5	66F7243	160.91
● 172D	300	3.80	7.06	4.68	3.00	5.38	18.5	66F7244	199.83
● 172F	1000	5.28	7.75	6.38	4.25	4.38	34.5	93C9671	321.83

*These units do NOT convert line frequency
(175990)

LINE ADJUSTING AND ISOLATION TRANSFORMERS AND FILTER CHOKES

RoHS Compliant Available

multicomp

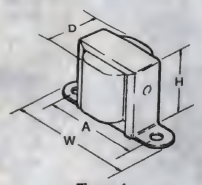


Figure 1

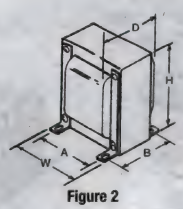


Figure 2

AT SERIES LINE ADJUSTING TRANSFORMER
Step-down and step-up autoformers. Input 50/60Hz with wire leads. Input voltage: 230V. Output voltage: 115V. Weight: 1.5lbs.

Mfg. Part No.	Fig.	VA	RMS Test Volts	Dimensions (inches) H	W	D	A	Stock No.	Price Each 1-9
● SPC20976	1	50	1500	2 5/16	3 11/16	1 7/8	3 1/8	10M5580	30.45

AT SERIES ISOLATION TRANSFORMER
50/60Hz wire-in type with lead wires for permanent installation (shielded). Input voltage: 115V. Output voltage: 115V. Weight: 1lb.

● SPC20977	1	15	1500	2	3 1/4	1 3/4	2 13/16	10M5581	31.88

CONTINUED

LINE ADJUSTING AND ISOLATION TRANSFORMERS AND FILTER CHOKES (CONT.)

C SERIES FILTER CHOKES
High current chokes for 1500Vrms. Lead terminals. Weight: 5.3 to 5.9 lbs. Inductance (nominal): 10mh.

Mfg. Part No.	Fig.	DC Amps	DC Res. Ohms	RMS Test Volts	Dimensions (inches) H	W	D	A	B	Stock No.	Price Each 1-9
● SPC20974	2	8.0	0.15	1500	3 1/4	3 3/4	3 3/16	3 1/8	2 1/2	10M5578	70.32
● SPC20975	2	12.5	0.11	1500	3 1/2	4 1/8	3 1/16	3 7/16	2 3/8	10M5579	99.60

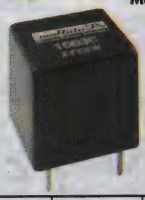
(6071)

1000 SERIES PULSE TRANSFORMERS

RoHS Compliant Available

muRata Ps Murata Power Solutions

- Up to 4kVrms isolation
- Compact footprint
- UL94 V-0 package materials
- PCB mounting
- Backward compatible with Sn/Pb soldering systems



1000 series are intended for wideband and pulse operations. They are suitable for signal isolation and use in small isolated power supplies. The compact footprint makes them ideal for applications where space is at a premium.

Mfg. Part No.	Turns Ratio ±2%	Primary Inductance Min. (mH)	Primary DC Resistance Max. (Ohm)	Isolation Voltage (Vrms)	ET Constant (Vμs)	Stock No.	Price Each 1-4
● 1001C	1:1	3	1.2	2000	200	61K4416	5.14
● 1002C	1:1:1	3	1.4	2000	200	61K4417	5.58
● 1003C	2:1:1	12	4	2000	400	61K4418	5.20
● 1017C	1:1	800	0.4	4000	130	70K7017	5.27

(155087)

ISOLATION TRANSFORMERS WITH STATIC-SHIELD

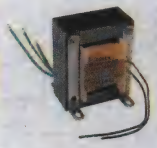
RoHS Compliant Available

TRIAD

Case Type X

Case Type M

Case Type A



Case Type U

- Primary: 115/230VAC, 50/60Hz
- Secondary: 115/230VAC
- Output watts: 15 to 1,000VA
- Hi-pot tested at 1500 Vrms

Ideal for isolating equipment from direct connection to the power line. Offered in a variety of voltages and case types. Constructed with nonconcentrically wound coils. The primary and secondary are wound on separate arbors, then assembled on a laminate core side-by-side separated by insulation. This prevents electrical connection, under normal or overload conditions, between the primary and secondary windings. Units with **X** or **A suffix** in mfg. part no. have leads; **M suffix** have 2-wire plug, socket and 6' cord and are UL listed and verified to meet federal specifications. These isolation transformers are also offered in a hospital type unit; *ordered separately below.*

Mfg. Part No.	Power VA	Primary Volts	Secondary Volts	Secondary Amps	Case Type	Dimensions (in.) MW	Dimensions (in.) MD	Stock No.	Price Each 1-9
● N-48X	15	115	115	0.130	X	2.813	...	78K8609	15.93
● N-51X	35	115	115	0.300	X	3.125	...	78K8611	17.78
● N68X	50	115/230	115	0.435	X	3.125	...	18M9252	18.73
● N77U†	100	115/230	115	0.86	U	2.250	2.500	18C5406	47.82
● N-67A	150	115/230	115	1.300	A	2.500	3.000	03F605	72.00
● N-66A	250	115/230	115	2.170	A	3.000	3.625	78K8615	82.32
● N-57MG	500	115	115	4.350	M	3.500	5.125	06C0741	262.86

†Unit does not include static shield

ISOLATION TRANSFORMERS FOR HOSPITAL/DENTAL APPLICATIONS
Designed and constructed to meet the low-leakage current requirements for today's medical equipment. Leakage current primary-to-secondary is rated less than 50 micro-amps and is measured at less than 10 micro-amps. Includes 6' line cord, plug and socket with a resettable circuit breaker to provide protection from overload and short circuit conditions. UL listed 544 File E102910 and verified to meet federal specifications W-C 596E.

Mfg. Part No.	Power VA	Primary Volts	Secondary Volts	Secondary Amps	Case Type	H × W × D (in.)	Stock No.	Price Each 1-9
● N-92MD	500	115	115	4.35	M	5.344 × 4.500 × 7.000	30M8908	346.39

(6003)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures

(212568)

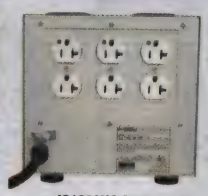
MEDICAL GRADE ISOLATION TRANSFORMERS

RoHS Compliant Available

TRIPP-LITE POWER PROTECTION

- UL 60601-1 listed, full isolation
- Reduce the cumulative leakage currents of all connected loads to <100µA leakage current
- Superior common mode and normal mode rejection
- Provides the highest level of EMI/RFI (up to 60dB @ 500 KHz)
- Protects electronics and healthcare equipment
- Hospital-grade plugs and receptacles

IS1800HG Front



IS1800HG Rear

Mfg. Part No.	Output Capacity	Hospital-Grade Outlets	Dimensions (in.) H	W	D	Stock No.	Price Each 1-4
IS250HG	250W	2	4.5	4.75	7.75	15R7707	281.65
IS500HG	500W	4	5.75	6.25	9.25	15R7708	426.96
IS1000HG	1kW	4	7.25	7.25	10.5	15R7705	580.53
IS1800HG	1.8kW	6 (20 Amp)	7.75	8.25	12.25	15R7706	1037.07

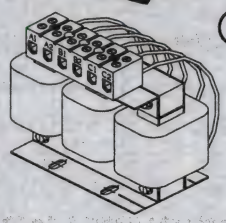
(50874)

RM SERIES 3-PHASE LINE REACTORS

RoHS Compliant Available

HPS Hammond Power Solutions Inc.

Designed to reduce or eliminate most line problems including nuisance tripping, harmonic distortion, line notching, etc. In addition, performance, life expectancy and efficiency of both the motor and drive components will be extended and enhanced. These line reactors feature core and coils of the highest quality and performance, a superior insulation system, full "VPI" impregnation using VT polyester resin and custom-brazed connections. Suffix "E" in mfg. part no. indicates enclosed style. **Note: Some mfg. part numbers appear in more than one table, depending on their application.** UL listed, CSA certified, CE compliant. Line reactors are available in both 3% and 5% impedances with HP ratings from 1 to 100/amperage from 2 to 1200; *go online or call.*



240 VOLT 3% IMPEDANCE

Mfg. Part No.	HP	Amps	H x W x D	Weight	Stock No.	Price Each 1-5
RM0004N65	0.5	4	3.40 x 4.40 x 2.83″	2.8 lbs.	91F4008	133.44
RM0004N30	1	4	3.40 x 4.40 x 2.83″	2.3 lbs.	91F3993	119.75
RM0008N30	1.5	8	3.40 x 4.40 x 2.83″	3.1 lbs.	91F3994	139.13
RM0008N15	2	8	3.40 x 4.40 x 2.83″	2.8 lbs.	91F3995	129.08
RM0012N13	3	12	3.40 x 4.40 x 2.83″	2.9 lbs.	91F3996	139.13
RM0018P80	5	18	4.80 x 6.00 x 3.30″	7.1 lbs.	91F4041	174.92
RM0025P50	7.5	25	5.70 x 6.00 x 3.09″	7.0 lbs.	91F3997	182.99
RM0045P30	15	45	5.70 x 6.00 x 3.84″	13 lbs.	31C9468	223.82
RM0055P25	20	55	5.70 x 6.00 x 3.84″	12 lbs.	31C9472	332.90
480 VOLT 3% IMPEDANCE						
RM0002M12	1	2	3.40 x 4.40 x 2.83″	2.3 lbs.	91F4020	118.41
RM0004N91	1.5	4	3.40 x 4.40 x 2.83″	2.7 lbs.	91F4036	133.21
RM0004N65	2	4	3.40 x 4.40 x 2.83″	2.8 lbs.	91F4008	133.44
RM0008N50	3	8	3.40 x 4.40 x 2.83″	4.3 lbs.	91F4009	154.73
RM0008N30	5	8	3.40 x 4.40 x 2.83″	3.1 lbs.	91F3994	139.13
RM0012N25	7.5	12	4.80 x 6.00 x 3.30″	7.5 lbs.	91F4010	195.10
RM0018N15	10	18	4.80 x 6.30 x 3.55″	9.1 lbs.	31C9457	229.87
RM0025N12	15	25	4.80 x 6.30 x 3.55″	10 lbs.	31C9460	223.99
RM0035P80	20	35	5.61 x 6.90 x 3.95″	12 lbs.	31C9466	302.05
RM0045P70	30	45	5.61 x 6.90 x 4.45″	22 lbs.	31C9470	337.20
600 VOLT 3% IMPEDANCE						
RM0002M20	1	2	3.40 x 4.40 x 2.83″	2.6 lbs.	91F4024	126.27
RM0002M12	1.5	2	3.40 x 4.40 x 2.83″	2.3 lbs.	91F4020	118.41
RM0004M12	2	4	3.40 x 4.40 x 2.83″	4.1 lbs.	91F4007	143.43
RM0004N91	3	4	3.40 x 4.40 x 2.83″	2.7 lbs.	91F4036	133.21
RM0008N50	5	8	3.40 x 4.40 x 3.39″	4.3 lbs.	91F4009	154.73
RM0012N25	10	12	4.80 x 6.00 x 3.30″	7.5 lbs.	91F4010	195.10
RM0018N15	15	18	4.80 x 6.00 x 3.55″	9 lbs.	31C9457	229.87

ENCLOSED 240 VOLT 3% IMPEDANCE

Mfg. Part No.	HP	Amps	Weight	Enclosure Style	Stock No.	Price Each 1-4
RM0004N65E	0.5	4	2.8 lbs.	3.40 x 4.40 x 2.83″	31C9449	219.70
RM0008N30E	1.5	8	3.1 lbs.	3.40 x 4.40 x 2.83″	31C9452	227.94
RM0008N15E	2	8	2.8 lbs.	3.40 x 4.40 x 2.83″	31C9451	215.58
RM0018P80E	5	18	7.1 lbs.	4.80 x 6.00 x 3.30″	31C9459	274.62
RM0045P30E	15	45	13 lbs.	5.70 x 6.00 x 3.84″	31C9469	326.80
RM0080P20E	25	80	26 lbs.	6.88 x 8.50 x 4.37″	31C9475	464.11
ENCLOSED 480 VOLT 3% IMPEDANCE						
RM0002M12E	1	2	2.3 lbs.	3.40 x 4.40 x 2.83″	31C9445	208.72
RM0004N65E	2	4	2.8 lbs.	3.40 x 4.40 x 2.83″	31C9449	219.70
RM0008N30E	5	8	3.1 lbs.	3.40 x 4.40 x 2.83″	31C9452	227.94

➤CONTINUED➤

RM SERIES 3-PHASE LINE REACTORS (CONT.)

ENCLOSED 480 VOLT 3% IMPEDANCE

Mfg. Part No.	HP	Amps	Weight	Enclosure Style	Stock No.	Price Each 1-4
RM0012N25E	7.5	12	7.5 lbs.	4.80 x 6.00 x 3.30″	31C9455	300.71
RM0025N12E	15	25	10 lbs.	4.80 x 6.30 x 3.55″	31C9461	317.19
RM0035P80E	20	35	12 lbs.	5.61 x 6.90 x 3.95″	31C9467	417.43
ENCLOSED 600 VOLT 3% IMPEDANCE						
RM0002M12E	1.5	2	2.3 lbs.	3.40 x 4.40 x 2.83″	31C9445	208.72
RM0008N50E	5	8	4.3 lbs.	3.40 x 4.40 x 3.39″	31C9453	244.42
RM0012N25E	10	12	7.5 lbs.	4.80 x 6.00 x 3.30″	31C9455	300.71
RM0025N12E	25	35	26 lbs.	6.88 x 8.50 x 4.37″	31C9461	317.19

(17130)

POWER TOROIDS

RoHS Compliant Available

HAMMOND MANUFACTURING

Low-profile toroidal design saves space and weight. Low EMF radiation. Dual primary, 117/234V, 50-60Hz. 4,000Vrms hipot test. Dual secondaries for series or parallel connection. UL recognized, CSA certified, CE compliant.

Mfg. Part No.	VA Rating	Secondary RMS Series V C.T./A	Parallel V/A	H x Dia. (″)	Stock No.	Price Each 1-4
182J15	30	30/1	15/2	2.95 x 1.60	95B5011	68.70
182H18	30	36/.83	18/1.66	2.95 x 1.60	95B5009	65.46
182G22	30	44/.68	22/1.36	2.95 x 1.60	95B5007	65.46
182L12	50	24/2.08	12/4.16	3.63 x 1.73	95B5018	75.24
182K15	50	30/1.67	15/3.34	3.63 x 1.73	95B5015	71.69
182J18	50	36/1.39	18/2.78	3.63 x 1.73	95B5012	71.69
182J22	50	44/1.14	22/2.28	3.63 x 1.73	95B5013	71.69
182G117	50	234/214*	117/428*	3.63 x 1.73	95B5003	75.24
182Q9	120	18/6.67	9/13.34	3.98 x 1.68	95B5030	85.07
182N15	120	30/4	15/8	3.98 x 1.68	95B5025	85.07
182M18	120	36/3.33	18/6.66	3.98 x 1.68	95B5021	85.07
182M22	120	44/2.73	22/5.46	3.98 x 1.68	95B5022	85.07
182J117	120	234/513*	117/1.02	3.98 x 1.68	04M4704	85.07
182S12	225	24/9.38	12/18.76	4.97 x 1.90	95B5032	99.76
182H15	225	30/7.5	15/15	4.97 x 1.90	95B5008	99.76
182G18	225	36/6.25	18/12.5	4.97 x 1.90	95B5006	104.70
182P22	225	44/5.11	22/10.22	4.97 x 1.90	95B5029	99.76
182L117	225	234/.96	117/1.92	4.97 x 1.90	95B5017	103.60
182S24	500	48/10.42	24/20.82	5.50 x 2.21	95B5033	152.45
182R30	500	60/8.33	30/16.66	5.50 x 2.21	95B5031	152.45
182N60	500	120/4.17	60/8.34	5.50 x 2.21	88K1351	146.52
182N117	500	234/2.14	117/4.28	5.50 x 2.21	95B5024	152.47

*mA
(49289)

115V/230V AC TWIN PRIMARY TOROIDAL TRANSFORMERS

RoHS Compliant Available

multicomp

- Very high quality construction
- High efficiency and smaller size compared to conventional EI transformers
- Extremely low radiated magnetic field, suitable for sensitive electronics
- Double insulated primary leadouts
- Flexible leadouts can be trimmed to any length without the need of removal of enamel
- Design, manufactured and tested in accordance with **EN60742**, **EN60065** and **EN60950**
- 100% electrical and flash tested
- Supplied with mounting dish, bolt and 2 foam pads
- Pri/Sec leads 0°C

A high quality range of open style toroidal transformers with flying leads. Featuring a dual 115V 50/60Hz primary winding for series (230V) or parallel (115V) connection only. Secondary windings can be connected in series or parallel or used independently.

SPECIFICATIONS

Load VA	Regulation (%)	Temperature Rise (°C)	Dimensions (mm) Diameter	Height	Weight (Kg.)	Fixing Bolt
15	14	27	64.5	30.5	0.3	M5 x 40
30	14	42	73	31	0.5	
50	13	50	81	34.5	0.6	
60	12	47	91.5	39	0.8	M6 x 50
80	11	52	87.5	39	1.0	
100	10	52	91	46	1.1	
120	9	54	95	47	1.3	

➤CONTINUED➤

TOROIDAL TRANSFORMERS

115V/230V AC TWIN PRIMARY TOROIDAL TRANSFORMERS (CONT.)

Load VA	Regulation (%)	Temperature Rise (°C)	Dimensions (mm) Diameter	Dimensions (mm) Height	Weight (Kg.)	Fixing Bolt
160	8	54	105	47	1.6	M6 x 60
225	7	56	110	51	2.2	
250	7	55	119.5	53.5	2.4	
300	6	56	125	54	2.8	
500	5	53	136	59	4.3	M8 x 75
625	5	59	139	71	5.2	M8 x 80
800	4	59	163	59	6.3	
1000	4	60	167	70.5	7.5	

Mfg. Part No.	Secondary Voltages (V)	Current Rating (A)	Stock No.	Price Each 1-24
15VA				
● MCTA015/06	0-6, 0-6	1.25	38K4868	24.56
● MCTA015/09	0-9, 0-9	0.83	38K4869	25.89
● MCTA015/12	0-12, 0-12	0.63	38K4870	25.67
● MCTA015/18	0-18, 0-18	0.42	38K4872	25.67
30VA				
● MCTA030/09	0-9, 0-9	1.67	38K4874	28.44
● MCTA030/12	0-12, 0-12	1.25	38K4875	28.44
● MCTA030/15	0-15. 0-15	1	38K4876	26.98
50VA				
● MCTA050/06	0-6, 0-6	4.17	38K4879	30.69
● MCTA050/12	0-12, 0-12	2.08	38K4881	31.14
● MCTA050/15	0-15. 0-15	1.67	38K4882	33.49
● MCTA050/18	0-18, 0-18	1.39	38K4883	33.49
● MCTA050/25	0-6, 0-6	1	38K4884	30.69
60VA				
● MCTA060/12	0-12, 0-12	2.5	38K4887	34.84
● MCTA060/15	0-15. 0-15	2	38K4888	33.65
● MCTA060/18	0-18, 0-18	1.67	38K4889	26.31
80VA				
● MCTA080/18	0-18, 0-18	2.22	38K4894	38.13
100VA				
● MCTA100/12	0-12, 0-12	4.17	38K4897	42.97
● MCTA100/15	0-15. 0-15	3.33	38K4898	43.98
● MCTA100/25	0-25, 0-25	2	38K4900	32.47
120VA				
● MCTA120/12	0-12, 0-12	5	38K4904	43.39
● MCTA120/15	0-15. 0-15	4	38K4905	44.51
● MCTA120/25	0-25, 0-25	2.4	38K4907	44.93
160VA				
● MCTA160/15	0-15. 0-15	5.33	38K4910	52.33
● MCTA160/25	0-25, 0-25	3.2	38K4912	54.07
225VA				
● MCTA225/18	0-18, 0-18	6.25	38K4917	70.96
● MCTA225/25	0-25, 0-25	4.5	38K4918	68.77
250VA				
● MCTA250/12	0-12, 0-12	10.42	38K4921	60.71
● MCTA250/25	0-25, 0-25	5	38K4923	72.02
● MCTA250/35	0-35, 0-35	3.57	38K4925	71.20
● MCTA250/50	0-50, 0-50		38K4928	71.20
300VA				
● MCTA300/25	0-25, 0-25		38K4929	84.38
● MCTA300/30	0-30, 0-30		38K4930	85.17

(138577)

VPT SERIES TOROIDAL POWER TRANSFORMERS

RoHS Compliant Available

TRIAD

- Power Range: 25VA to 2.5 kVA
- Primary: 115/230VAC, 50/60Hz
- Seconday:dual for parallel or series connection
- Insulation Class: Class B 130 °C
- Dielectric isolation (Pri to Sec): 4KV for 60 secs.
- High efficiency and low stray fields

Transformers are provided with one metal plate, two rubber pads, screw, nut and washer through 1kVA. Epoxied center and drilled hole for VA's larger than 1kVA. Stranded UL1015 leads stripped and tinned 0.25" (6mm). Standard lead length is 8" (200mm) for VA's up to and including 250VA; 12.0" (305mm) for 500VA and higher(these are stripped and tinned 0.5" (12.7mm)). CE compliant, UL recognized.

➤CONTINUED➤

VPT SERIES TOROIDAL POWER TRANSFORMERS (CONT.)

ELECTRICAL SPECIFICATIONS (@25C)

Mfr. Part No.	VA	Secondary Series	Secondary Parallel	Regulation %	O.D. (mm)	Height (mm)	Stock No.	Price Each 1-9
● VPT12-2080	25	12V CT @ 2.08	6 V @ 4.16	12	71	32	11R8043	26.98
● VPT18-1390	25	18V CT @ 1.39	9 V @ 2.78	12	71	32	11R8048	28.56
● VPT24-1040	25	V CT @	12 V @ 2.08	12	71		11R8060	28.56
● VPT30-830	25	30V CT @ 0.83	15 V @ 1.66	12	71	32	11R8068	26.98
● VPT36-690	25	36V CT @ 0.69	18 V @ 1.38	12	71	32	11R8072	26.98
● VPT48-520	25	V CT @	24 V @ 1.04	12	71		11R8079	28.21
● VPT230-110	25	V CT @	115 V @ 0.22	12	71		11R8054	28.56
● VPT12-4170	50	12V CT @ 4.17	6 V @ 8.34	12	80	33	11R8045	44.63
● VPT18-2780	50	18V CT @ 2.78	9 V @ 5.56	12	80	33	11R8049	44.63
● VPT24-2080	50	24V CT @ 2.08	12 V @ 4.16	12	80	33	11R8062	44.63
● VPT30-1670	50	30V CT @ 1.67	15 V @ 3.34	12	80	33	11R8065	44.63
● VPT36-1390	50	36V CT @ 1.39	18 V @ 2.78	12	80	33	11R8069	44.63
● VPT48-1040	50	48V CT @ 1.04	24 V @ 20.8	12	80	33	11R8074	42.53
● VPT230-220	50	230V CT @ 0.22	115 V @ 0.44	12	80	33	11R8056	44.17
● VPT12-8330	100	12V CT @ 8.33	6 V @ 16.66	9	87	47	11R8046	62.58
● VPT18-5560	100	18V CT @ 5.56	9 V @ 11.12	9	87	47	11R8050	62.58
● VPT24-4170	100	V CT @	12 V @ 8.34	9	87		11R8063	62.58
● VPT30-3330	100	30V CT @ 3.33	15 V @ 6.66	9	87	47	11R8066	59.63
● VPT36-2780	100	36V CT @ 2.78	18 V @ 5.56	9	87	47	11R8070	59.63
● VPT48-2080	100	V CT @	24 V @ 4.16	9	87		11R8076	61.93
● VPT230-430	100	230V CT @ 0.43	115 V @ 0.86	9	87	47	11R8057	62.58
● VPT12-13300	160	12V CT @ 13.3	6 V @ 26.6	8	103	48	11R8042	76.93
● VPT18-8800	160	18V CT @ 8.8	9 V @ 17.6	8	103	48	11R8051	80.74
● VPT24-6670	160	24V CT @ 6.67	12 V @ 13.34	8	103	48	11R8064	80.74
● VPT30-5330	160	30V CT @ 5.33	15 V @ 10.66	8	103	48	11R8067	80.74
● VPT36-4440	160	36V CT @ 4.44	18 V @ 8.88	8	103	48	11R8071	80.74
● VPT48-3300	160	48V CT @ 3.33	24 V @ 6.66	8	103	48	11R8078	76.93
● VPT230-700	160	230V CT @ 0.7	115 V @ 1.4	8	103	48	11R8059	76.93
● VPT12-20800	250	12V CT @ 20.8	6 V @ 41.6	7	112	54	11R8044	108.94
● VPT18-13800	250	18V CT @ 13.8	9 V @ 27.6	7	112	54	11R8047	103.80
● VPT24-10420	250	24V CT @ 10.42	12 V @ 20.84	7	112	54	11R8061	103.80
● VPT36-6940	250	36V CT @ 6.94	18 V @ 13.88	7	112	54	11R8073	103.80
● VPT48-5200	250	48V CT @ 5.2	24 V @ 10.4	7	112	54	11R8080	108.94
● VPT230-1090	250	V CT @	115 V @ 2.18	7	112		11R8053	107.80
● VPT48-10400	500	48V CT @ 10.4	24 V @ 20.8	5	140	60	11R8075	163.52
● VPT100-5000	500	100V CT @ 5	50 V @ 10	5	140	60	11R8041	158.53
● VPT230-2170	500	V CT @	115 V @ 4.34	5	140		11R8055	164.95
● VPT48-20830	1	48V CT @ 20.83	24 V @ 41.66	4	175	68	11R8077	239.75
● VPT100-10000	1	100V CT @ 10	50 V @ 20	4	175	68	11R8039	239.75
● VPT230-4350	1	230V CT @ 4.35	115 V @ 8.7	4	175	68	11R8058	239.75
● VPT100-25000	2.5	100V CT @ 25	50 V @ 50	2.5	208	112	11R8040	515.33
● VPT230-10870	2.5	230V CT @ 10.87	115 V @ 21.74	2.5	208	112	11R8052	536.20

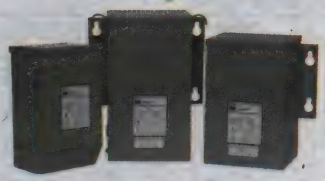
(149345)

GENERAL PURPOSE, BUCK-BOOST, CONSTANT VOLTAGE, & VARIABLE TRANSFORMERS

GENERAL-PURPOSE DISTRIBUTION TRANSFORMERS

RoHS Compliant Available

SOLA HD



General-purpose distribution transformers are available in single-phase units from 0.050 to 25kVA and 3-phase units from 15 to 75kVA in a wide range of primary and secondary voltage combinations. Benefits include free shielding on 1kVA and above, UL-3R enclosures standard, fast delivery, easy installation and the industry's only "10 + 2" factory warranty. Typical applications include: hospitals, industrial plants, schools, shopping centers, office, commercial, apartment, high rise and institutional buildings. UL listed. **NOTE:** all transformers are available in stainless steel NEMA 4X enclosures and copper windings; *go online or call*.

240/480V PRIMARY, 120/240V SECONDARY — SINGLE-PHASE, 60HZ

Mfg. Part No.	kVA	Height (in.)	Width (in.)	Depth (in.)	Weight (lbs.)	Stock No.	Price Each 1-4
HS1B50	0.05	6	4	3	3	93K6571	50.13
HS1B100	0.1	6	4	3	4	93K6568	62.07
HS1B150	0.15	8	4	4	5	93K6569	78.41
HS1B250	0.25	8	4	4	8	93K6570	95.46
HS1F500B	0.5	10	6	5	22	93K6575	131.73
HS1F750B	0.75	10	6	5	27	93K6576	158.29
HS1F1BS	1	10	6	5	28	93K6573	201.42
HS1F1.5AS	1.5	12	10	7	39	92F5240	233.97
HS1F2AS	2	12	10	7	47	93K6574	347.32
HS5F3AS	3	12	10	7	55	93K6585	394.16
HS5F5AS	5	17	14	9	131	93K6586	584.25
HS5F7.5AS	7.5	17	14	9	156	92F5244	767.61
HS5F10AS	10	17	14	9	156	98B8938	912.34
ES5H15S	15	30	29	12	549	11J8654	2052.64
ES5H25S	25	30	29	12	637	11J8656	2862.59

480V Δ PRIMARY, 208Y/120V SECONDARY — 3-PHASE, ENCAPSULATED, 60HZ
May also be used with a 480Y/277 VAC supply.

Mfg. Part No.	Shield*	kVA	Height (in.)	Width (in.)	Depth (in.)	Weight (lbs.)	Stock No.	Price Each 1-4
ET2H15S	WS-02	15	23	18	14	187	77C6328	2745.95
ET2H30S	WS-14	30	28	23	16	292	11J8663	3212.34
ET2H45S	WS-14	45	28	23	16	376	11J8665	3911.22
ET2H75S	WS-30	75	34	28	22	569	11J8667	4945.28
ET2H112S	WS-30	112.5	34	28	22	768	11J8660	7520.30
ET2H150S	WS-10	150	44	33	21	933	11J8661	9711.96

480V Δ PRIMARY, 240V Δ, 120V SECONDARY WITH REDUCED CAPACITY CENTER TAP — 3-PHASE, 60HZ

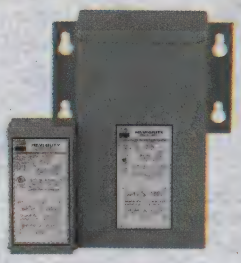
Mfg. Part No.	NEMA 3R Weather Shield*	kVA	Height (in.)	Width (in.)	Depth (in.)	Weight (lbs.)	Stock No.	Price Each 1-4
ET5H15S	WS-02	15	23	18	14	189	11J8669	2770.93
ET5H30S	WS-14	30	28	23	16	292	85H0064	3435.84
ET5H45S	WS-14	45	28	23	16	381	11J8673	3943.82
ET5H75S	WS-30	75	34	28	22	560	11J8675	5312.51
ET5H112S	WS-30	112.5	34	28	22	760	11J8668	7899.75
ET5H150S	WS-10	150	44	33	21	940	11J8670	9796.41

*Weather shields come in a set of two and need to be ordered separately; *go online or call.*
(5753)

BUCK-BOOST TRANSFORMERS

RoHS Compliant Available

SOLA HD



Buck-boost transformers are an ideal solution for economically changing line voltage by small amounts. These small, single-phase, dry-type distribution transformers have a dual voltage primary and secondary, making them unique in their ability to be connected in a wide range of voltage combinations. The most common use is to buck (lower) or boost (raise) the supply voltage a small amount, usually ±5 to 27%. Buck-boost transformers are UL-3R listed for outdoor service, compact in size, and are excellent for use in low voltage lighting and control applications, or any systems requiring 12, 16, 24, 32, or 48 volts. UL listed, CSA certified.

SINGLE PHASE, 120 x 240 PRIMARY 12/24 SECONDARY 60 HZ

Mfg. Part No.	kVA	Height	Width	Depth	Weight	Stock No.	Price Each 1-4
HS19B50	0.050	6″	4″	3″	2 lbs	93K6580	79.17
HS19B100	0.100	6″	4″	3″	4 lbs	93K6577	91.95
HS19B150	0.150	7.5″	4″	4″	5 lbs	93K6578	107.92
HS19B250	0.250	7.5″	4″	4″	8 lbs	93K6579	122.83

➤ CONTINUED ➤

BUCK-BOOST TRANSFORMERS (CONT.)

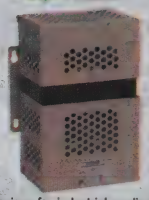
Mfg. Part No.	kVA	Height	Width	Depth	Weight	Stock No.	Price Each 1-4
HS19F500B	0.500	10″	6″	5″	22 lbs	93K6583	162.17
HS19F750B	0.750	10″	6″	5″	27 lbs	93K6584	211.04
HS19F1B	1	10″	6″	5″	28 lbs	93K6582	263.08
HS19F1.5A	1.5	12″	10″	7″	38 lbs	92F5253	317.53

(5648)

CVS SERIES HARDWIRED CONSTANT VOLTAGE TRANSFORMERS

RoHS Compliant Available

SOLA HD



10 Year Warranty

Specifications:
- Output Voltage Regulation: ±1% for Line Variation of +10% to –20%
- Output Voltage Remains within NEMA Specifications for Input of +20% to –35%
- Provides Galvanic Isolation with Common and Normal Mode Noise Attenuation of 40dB
- 6kV, 200-Amp ANSI/IEEE C62.45-1991 Powerline Surge is Attenuated to a Let-Through of 1%
- Regardless of Input Waveform, Output is a Sine Wave with Less than 3% THD

The **CVS series** are well-recognized voltage regulation devices for industrial applications where extremely precise voltage regulation is required. All types are 60Hz hardwired input/output with a terminal block accessible through concentric knockouts. Even with heavily distorted and/or notched input voltages, the **CVS series** outputs a sine wave. **CVS series** devices filter harmonics, thereby protecting facility wiring and sensitive electrical loads from over-heating. **CVS series** devices are ideal for protecting industrial automation equipment, PLCs, panelboard power supplies, photographic enlargers, analytical lab equipment, broadcasting equipment and marine navigation equipment. To size a Sola CVS, simply multiply the load Volts x Amps to obtain the load VA requirement. Then select the next larger size Sola CVS. Note: If protection from severe brownouts is needed, the **CVS series** can be oversized for even greater input voltage window. If the load has an inductive inrush, such as relays, coils, solenoids, or motors, size the **CVS series** for the load inrush current. Or, with high inductive inrush loads, load power factor correction capacitors can reduce the need to oversize the **CVS series** for inductive inrush currents. UL listed, CSA certified.

Mfg. Part No.	Voltage Output	Voltage 60Hz Input	VA	Overall Dimensions (mm) H	W	D	Stock No.	Price Each
23-13-030-2	120	120	30	177.8	101.6	127	93K6766	375.24
23-13-060-2	120	120	60	177.8	101.6	127	93K6767	421.50
23-22-112-2	120	240/240	120	203.2	101.6	127	93K6768	561.72
23-23-125-8	120	480/240/480	250	279.4	152.4	203.2	05F943	767.50
23-23-150-8	120/240	120/208/240/480	500	330.2	228.6	177.8	93K6769	1164.00
23-23-210-8	120/240	480/208/240/480	1000	431.8	228.6	177.8	93K6770	1802.28
23-23-220-8	120/240	480/208/240/480	2000	457.2	330.2	254	46F3371	3071.36
23-23-230-8	120/240	240/208/240/480	3000	482.6	330.2	254	93K6771	4241.32
23-23-250-8	120/240	480/208/240/480	5000	711.2	330.2	254	80W013	6563.61
23-28-275-6*	120/240	480/480	7500	685.8	635	228.6	93K6772	7827.78

*CSA not available.
(3847)

18T SERIES VARIABLE VOLTAGE CONTROLS

PAYNE ENGINEERING

Fig. 1

Fig. 2

Fig. 3

Features:
- AC Input and Infinitely Variable AC Output
- Replace Variable Transformers
- All Solid-State Construction
- Integral Heat Sink
- Self-Protecting Design for Long Life
- Lightweight (Less than 12 oz.)
- Easy to Wire and Use

Applications:
- Control Electric Heaters
- Hot Wire Cuttings
- Food Preparation

Mfg. part no. 18TBP is a door mounted unit that provides infinitely variable control of a single-phase AC voltage in a compact solid-state package. Variable voltage output controls the thermal output from electric heaters and the speed of single-phase shaded pole motors. Fast-acting "2 millisecond" fuse prevents damage from short-circuits. Integral chassis heat sink eliminates thermal derating. Output voltage: 0-95% of input. Overall efficiency: 99%. Control input: integral manual potentiometer (included). **Mfg. part no. 18TB** is a panel mount variable voltage control unit with control potentiometer that can be remotely mounted up to 100′ away. Control input: remotely mounted manual potentiometer (included with 2′ cable). **Mfg. part no. 18TP** includes 6′ power cord with three-prong plug, lighted On/Off rocker switch, three-prong case-mounted receptacle. Control potentiometer mounted in case. Control input: integral manual potentiometer (included).

120VAC INPUT, 0-118VAC OUTPUT

Mfg. Part No.	Fig.	Max. Amps	Fuse No.	H x W x D	Stock No.	Price Each 1-4
18TBP-1-5*	1	5	49C25-5	2.5 x 2.5 x 2.0″	95F7108	81.84
18TBP-1-10*	1	10	49C25-10	2.5 x 2.5 x 2.0″	95F7109	104.13
18TBP-1-15*	1	15	49C25-15	2.5 x 2.5 x 2.0″	92F2707	124.37
18TB-1-15	2	15	49C25-15	4.0 x 4.0 x 2.0″	95F7101	117.48
18TB-1-25	2	25	49C25-30	6.3 x 4.0 x 3.5″	95F7102	149.51

➤ CONTINUED ➤

VARIABLE TRANSFORMERS

18T SERIES VARIABLE VOLTAGE CONTROLS (CONT.)

Mfg. Part No.	Fig.	Max. Amps	Fuse No.	H x W x D	Stock No.	Price Each 1-4
18TP-1-5	3	5	49C25-5	2.5 x 4.7 x 2.5″	16F1147	177.94
18TP-1-10	3	10	49C25-10	2.5 x 4.7 x 2.5″	16F1148	175.10
18TP-1-15	3	15	49C25-15	4.0 x 5.12 x 2.74″	16F1149	235.21
208/220/240VAC INPUT, 0-203/215/235VAC OUTPUT						
18TBP-2-5*	1	5	49C25-5	2.5 x 2.5 x 2.0″	95F7097	89.55
18TBP-2-10*	1	10	49C25-10	2.5 x 2.5 x 2.0″	95F7098	101.03
18TBP-2-15*	1	15	49C25-15	2.5 x 2.5 x 2.0″	92F2706	132.65
18TB-2-15	2	15	49C25-15	4.0 x 4.0 x 2.0″	95F7099	128.04
18TB-2-25	2	25	49C25-30	6.3 x 4.0 x 3.5″	95F7100	147.69
18TP-2-5	3	5	49C25-5	2.5 x 4.7 x 2.5″	16F1150	168.79
18TP-2-10	3	10	49C25-10	2.5 x 4.7 x 2.5″	16F1151	181.11
18TP-2-15	3	15	49C25-15	4.0 x 5.12 x 2.74″	16F1152	211.58

*Available with variable DC output at 120VAC and 240VAC inputs in 5 and 10 amp sizes; *go online or call.*
(5773)

10A VARIABLE AUTOTRANSFORMER

multicomp

Specifications:
- Input 120VAC, 60Hz
- Output 0–130VAC
- Current: 10A 1.3KVA
- Fuse 10A AGC (Included)
- Non-Isolated
- 90 day Warranty

Gives you the ability to vary line voltage between 0-130VAC. Ideal for troubleshooting power supplies, regulators, output sections, etc. Fused design enables user to limit current by changing fuse value (10A maximum). 3-prong grounded cord and socket provide convenience and safety.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
72-110	10A Variable Autotransformer	66F3591	168.08

(32185)

50/60Hz VARIABLE TRANSFORMERS

RoHS Compliant Available

STACO ENERGY PRODUCTS CO.

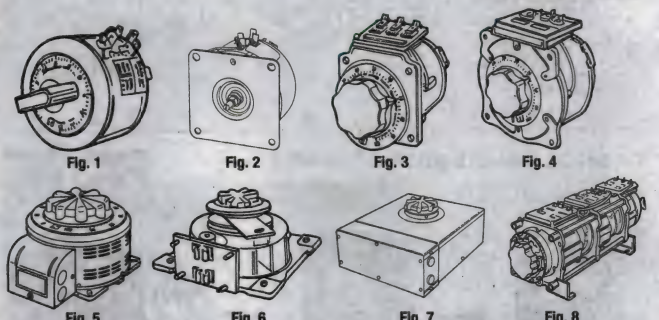


Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6 Fig. 7 Fig. 8

Models available to suit a wide variety of applications: automation equipment such as vibrating parts feeders and finishing controls, test equipment, and industrial equipment such as motor speed controls and voltage regulators. Units operate on either 120 or 240 volts input. Mfg. part nos. without suffixes are open styles. **"CT"** suffix have coils and terminals enclosed, for panel or conduit mounting. All are 50/60Hz except (*) 60Hz only, and † 60Hz on overvoltage. All models can be ordered clockwise or counterclockwise rotation. Additional ratings available including motor operated units, *go online or call.*

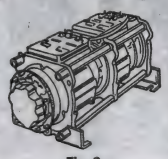


Fig. 9

120 VOLT, SINGLE PHASE MODELS

Mfg. Part No.	Fig.	Output Volts	Output Amps	Output KVA	Dimensions (in.) H	Dimensions (in.) W	Dimensions (in.) D	Stock No.	Price Each
● 171†	1	0-120/132	1.75	0.23	2.81	3.16	1.88	05F301	150.64
● 201†	1	0-120/132	2.0	0.26	2.81	3.16	1.88	79W028	138.07
● 221-B†	1	0-120/132	2.5	0.33	2.81	3.16	2.13	75M6082	157.45
● 291†	1	0-120/132	3.0	0.40	2.81	3.16	2.13	76M8673	201.79
● 511	2	0-120/140	5.0	0.70	3.94	4.16	2.38	74M8547	211.72
● 501C	3	0-120/140	5.0	0.70	3.75	4.25	2.92	75M6086	247.02
● 1010B	4	0-120/140	10.0	1.40	4.62	5.57	4.16	83F7357	291.23
● 1010BCT	5	0-120/140	10.0	1.40	5.50	4.62	6.31	74M8544	435.92
● 1210B*	3	0-120	12.0	1.44	4.62	5.57	4.16	83F7634	329.86
● 1510	4	0-120/140	15.0	2.10	6.81	6.13	4.25	74M8545	491.24
● 2510	4	0-120/140	25.0	3.50	8.25	7.63	4.13	05F330	699.89
● 2510CT	5	0-120/140	25.0	3.50	10.06	7.63	4.38	05F1319	941.47
● 5011	6	0-140	50.0	7.00	15.69	13.88	5.56	05F334	1499.09

➤CONTINUED➤

50/60Hz VARIABLE TRANSFORMERS (CONT.)

240 VOLT, SINGLE PHASE MODELS

Mfg. Part No.	Fig.	Output Volts	Output Amps	Output KVA	Dimensions (in.) H	Dimensions (in.) W	Dimensions (in.) D	Stock No.	Price Each
● 1020B	3	0-240/280	3.5	0.98	4.62	5.57	4.16	83F7360	387.39
1020B-3	3	0-240/280	3.5	0.98	4.62	5.57	4.16	92B6070	1354.57
● 1020BCT	5	0-240/280	3.5	0.98	5.50	4.62	6.31	83F7361	463.69
1220B*	3	0-240/280	5.0	1.2	4.62	5.57	4.16	50B7416	421.47
● 1520	4	0-240/280	9.5	2.66	6.81	6.13	4.63	05F310	481.67
● 1520CT	5	0-240/280	9.5	2.66	6.81	8.97	4.88	05F1318	672.95
● 5021	6	0-240/280	28.0	7.80	15.69	13.88	5.56	05F336	1499.09
● 6020	6	0-240/280	35.0	9.80	15.69	13.88	5.56	79W044	1787.81
480 VOLT, SINGLE PHASE MODEL									
● 1220B-2*	9	0-480	5.0	2.40	6.14	6.0	9.75	83F7363	981.51
480 VOLT, THREE PHASE MODELS									
● 1010B-3†	8	0-240/280	10.0	4.85	6.14	6.0	14.59	83F7358	1080.84
● 1510-3†	8	0-240/280	15.0	7.26	7.06	6.13	14.56	02F1092	1903.52
● 2510-3†	8	0-240/280	25.0	12.10	8.63	7.63	14.63	79W093	2752.23
480 VOLT, THREE PHASE MODELS									
● 1520-3†	8	0-480/560	9.5	9.21	6.13	7.25	15.68	02F1095	1760.84
● 6020-3Y†	8	0-480/560	35.0	33.90	17.63	13.88	25.38	50F6471	6221.19

(5607)

PORTABLE CORD AND PLUG VARIABLE TRANSFORMERS

STACO ENERGY PRODUCTS CO.

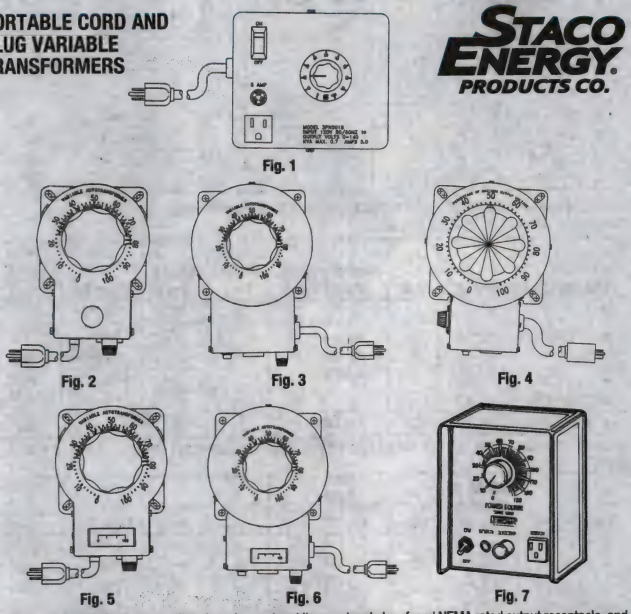


Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6 Fig. 7

Cased plug in models feature a ventilated steel case, input line cord and plug, fused NEMA rated output receptacle, and an illuminated on/off switch. They are connected for output voltage increase with a clockwise rotation, and the dials are graduated from 0-100% of the voltage setting. **"V"** suffix: Voltmeter; **"A"** suffix: Ammeter. Additional ratings available including motor operated units, (*) available in 60Hz only; *go online or call.*

Mfg. Part No.	Fig.	Input V	Output V	Output A	KVA	H x W x D	Stock No.	Price Each
3PN221B	1	120	0-132	2.50	0.23	5.31 x 6.06 x 4.10″	83F2016	368.25
3PN501B	1	120	0-140	5.00	1.20	5.31 x 6.06 x 4.10″	83F2019	414.85
3PN1010B	2	120	0-140	10.00	1.40	5.50 x 4.62 x 6.96″	83F2006	434.89
3PN1020B	2	240	0-280	3.50	0.98	5.50 x 4.62 x 6.96″	83F2009	494.28
3PN1210B*	2	120	0-120	12.00	14.40	5.50 x 4.62 x 6.96″	83F2011	480.41
3PN1510B	3	120	0-140	15.00	2.10	6.00 x 6.24 x 9.35″	83F2012	776.52
3PN1520B	3	240	0-280	9.50	2.66	6.00 x 6.24 x 9.35″	83F2015	742.26
3PN2210B	4	120	0-140	22.00	3.10	6.31 x 7.95 x 10.85″	83F2017	1056.75
3PN2520B	4	240	0-280	10.00	2.80	6.31 x 7.95 x 10.85″	83F2018	1065.87
3PN1010BV	5	120	0-140	10.00	1.40	5.50 x 4.62 x 6.96″	83F2008	676.48
3PN1010BA	5	120	0-140	10.00	1.40	5.50 x 4.62 x 6.96″	83F2007	714.43
3PN1510BV	6	120	0-140	15.00	2.10	6.00 x 6.24 x 9.35″	83F2014	1028.06

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
3PN-SK	Stop kit for types 3PN1000, 3PN1200, 3PN1500	83F7134	25.48

FULLY ENCLOSED PORTABLE VARIABLE TRANSFORMERS
Housing protects controls from abuse and hazards. Has no holes, to prevent entry of foreign objects. Ideal for lab applications. Can also be custom mounted. "VA" suffix: Voltmeter/ammeter.

➤CONTINUED➤

PORTABLE CORD AND PLUG VARIABLE TRANSFORMERS (CONT.)

Mfg. Part No.	Fig	InputV	Output V	Output A	KVA	H x W x D	Stock No.	Price Each
L501B	7	120	0-140	4.50	0.63	7.72 x 5.38 x 5.88″	97B3340	514.57
L1010B	7	120	0-140	10.00	1.40	9.41 x 6.50 x 6.25″	07C7947	578.12

(5680)

POWERSTAT® SERIES VARIABLE TRANSFORMERS

RoHS Compliant Available

Superior Electric

Fig. 1

Fig. 2

Fig. 3

Fig. 4

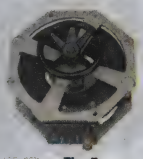


Fig. 5

Fig. 6

Fig. 7

Fig. 8

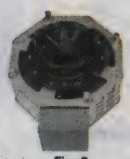


Fig. 9

Variable transformers provide continuously adjustable output voltage from utility line voltage. Movable brush-taps ride on commutators. Rotation of brush by manual or motor-driven means delivers any voltage in the range between zero and line voltage. Feature epoxy-coated POWERKOTE® coils for long life, greater ratings/overload capacities and better resistance to fungus, salt spray and other contaminants. All models available with motor drives except **mfg. part nos. 10C, 12C. Mfg. part nos. 1156DU, 1256DU** available with ratings to 365 kVA. **Prefix 3PN** denotes models with 3-wire cord/receptacle. **Suffix T** indicates terminal enclosure; **suffix U** indicates open construction. UL recognized, CSA certified. *For Powerstat® transformer enclosures go online or call.*

120V SINGLE-PHASE INPUT

Mfg. Part No.	Fig.	Hertz	Output Volts	Constant Current Load Max. Amps	Constant Current Load Max. kVA	Constant Impedance Load Max. Amps	Constant Impedance Load Max. kVA	Stock No.	Price Each 1-2
10C	4	50/60	0-120	2.25	0.27	3.00	0.36	32M1435	134.05
10C-40	4	50/60	0-40	7.00	0.28	9.00	0.36	32M1436	236.89
21*	2	50/60	0-140	5.00	0.70	7.00	0.84	32M1443	239.09
116CU*	2	50/60	0-140	10.00	1.40	...	...	60M3621	290.59
116CT	8	50/60	0-120	10.00	1.20	13.00	1.60	32M1438	439.67
3PN116C	1	50/60	0-140	10.00	1.40	...	...	32M1447	439.69
117CT	8	60	0-120	12.00	1.40	15.00	1.80	05F839	443.53
3PN117C	1	60	0-120	12.00	1.40	15.00	1.80	32M1448	501.74
126U*	2	50/60	0-140	15.00	2.10	...	...	05F767	550.71
126	3	50/60	0-140	15.00	2.10	...	...	05F766	620.01
136BT	8	50/60	0-120	22.00	2.60	28.00	3.40	94F316	1036.23
136BU*	2	50/60	0-140	22.00	3.10	...	...	06F158	840.68
136B	3	50/60	0-140	22.00	3.10	...	...	05F812	909.22
146T	8	50/60	0-120	30.00	3.60	35.00	4.20	92F2223	1610.79
146U*	2	50/60	0-140	30.00	4.20	...	...	32M1442	1329.56
146	3	50/60	0-140	30.00	4.20	...	...	05F1232	1493.86
1156D	6	50/60	0-140	50.00	7.00	...	...	05F808	1905.92
1156DU*	5	50/60	0-140	50.00	7.00	...	...	79W060	1810.29

240V SINGLE-PHASE INPUT

Mfg. Part No.	Fig.	Hertz	Output Volts	Constant Current Load Max. Amps	Constant Current Load Max. kVA	Constant Impedance Load Max. Amps	Constant Impedance Load Max. kVA	Stock No.	Price Each 1-2
12C	4	50/60	0-240	0.70	0.27	3.00	0.36	32M1440	195.22
22	2	50/60	0-240	0.70	0.27	3.00	0.36	05F895	312.64
216CU*	2	50/60	0-280	3.50	0.98	...	...	32M1444	382.83
3PN216C	1	50/60	0-280	3.50	0.98	...	...	32M1449	512.82
217CU*	2	60	0-240	5.00	1.20	7.00	1.70	32M1445	394.20
3PN217C	1	60	0-240	5.00	1.20	7.00	1.70	32M1450	588.59
226U*	2	50/60	0-280	7.50	2.10	...	...	32M1446	550.71
226	3	50/60	0-280	7.50	2.10	...	...	05F768	620.01
226T	8	50/60	0-280	7.50	2.10	...	...	36B8560	705.02
3PN226	1	50/60	0-280	7.50	2.10	...	...	79W062	817.74
236B	3	50/60	0-280	10.00	2.80	...	...	05F813	909.22
F236B	7	50/60	0-280	10.00	2.80	...	...	05F623	1136.02
236BU*	2	50/60	0-280	10.00	2.80	...	...	06F161	840.68

CONTINUED

POWERSTAT® SERIES VARIABLE TRANSFORMERS (CONT.)

240V SINGLE-PHASE INPUT

Mfg. Part No.	Fig.	Hertz	Output Volts	Constant Current Load Max. Amps	Constant Current Load Max. kVA	Constant Impedance Load Max. Amps	Constant Impedance Load Max. kVA	Stock No.	Price Each 1-2
246U*	2	50/60	0-280	15.00	4.20	...	...	79W063	1329.56
246	3	50/60	0-280	15.00	4.20	...	...	05F1234	1493.86
F246	7	50/60	0-280	15.00	4.20	...	...	79W064	1740.82
1256D	6	50/60	0-280	28.00	7.80	...	...	05F806	1905.92
1256DU*	5	50/60	0-280	28.00	7.80	...	...	79W065	1810.29
1296DT	9	50/60	0-240	35.00	8.40	39.00	9.40	92F2226	2650.71
1296DU*	5	50/60	0-280	35.00	9.60	...	...	50F3797	2309.71

*Motor version available. also stocks many replacement parts for Superior Electric products.
(5608)

L2M AND L SERIES POWERSTAT® VARIABLE TRANSFORMERS

RoHS Compliant Available

Superior Electric

L-Series

L2M-Series

L2M SERIES

Laboratory-type devices. Equipped with output voltage and current meters, binding post connections, on/off switch, and rocker style "on indicating" thermal magnetic circuit breaker. Input voltage: 120VAC single-phase. Output voltage: either 0-140VAC or 0-280VAC. Hertz: 50/60.

Mfg. Part No.	Hz	Output Volts	Constant Current Load Max. Amps	Constant Current Load Max. kVa	Stock No.	Price Each 1-2
L2M116C	50/60	0-140	10	1.4	91F5311	1243.71
L2M216C	50/60	0-280	1.5	0.49	91F5312	1355.51
L2M226C	50/60	0-280	3.1	1.05	91F5314	1670.60

L SERIES

Totally enclosed models designed to meet OSHA requirements. For maximum user protection and safety, all models are equipped with a grounded NEMA cord/plug assembly, on-off switch, pilot light, grounded output receptacle and fuse. All models have rear slots to accept wall hanger brackets for use in alternated locations. Input: 120VAC single-phase.

L10C	60	0-132	2.25	0.23	79W050	404.15
L21C	50/60	0-140	4.50	0.63	79W051	508.20
L116C	50/60	0-140	10.00	1.40	05F1271	595.06

(14135)

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(196537)

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Switches

Over 5,900 products
From 48 top brands including:
Honeywell
IDEC
Schneider Electric
Eaton
NKK

Temperature & Process Controllers

Over 360 products
From 23 top brands including:
Omron
Payne Engineering
Autonics

Connectors – Industrial

Over 16,000 products
From 20 top brands including:
Amphenol
Harting
TE Connectivity
Molex

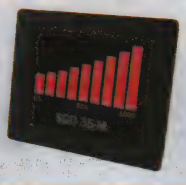
Wire/Cable & Wire Accessories

Over 23,400 products
From 20 top brands including:
Belden
Alpha
Panduit

Valves & Pneumatics

Over 98 products
From 10 top brands including:
Legris
Norgren
SMC

HMI

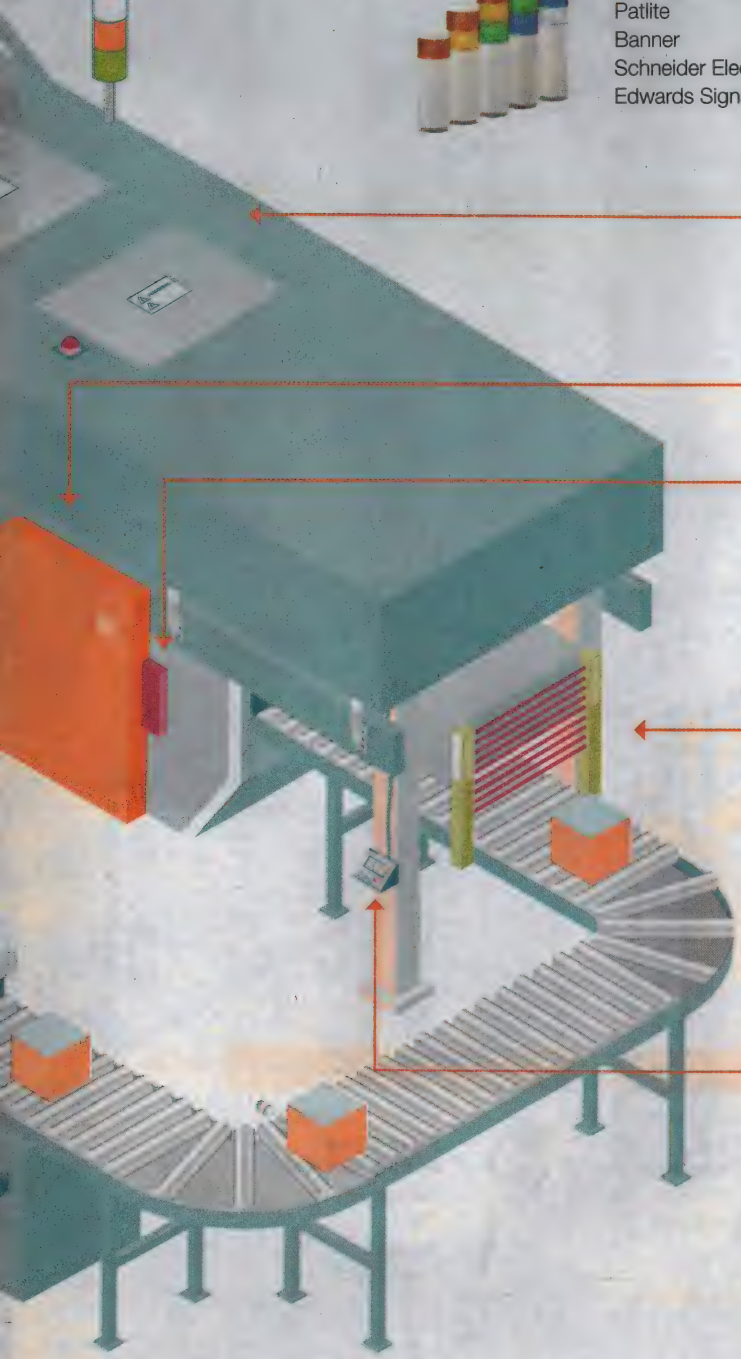


Over 190 products
From 17 top brands including:
IDEC
Schneider Electric
Omron
Red Lion

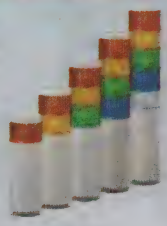
Sensors

Over 1,500 products
From 32 top brands including:
Honeywell
IDEC
Banner
Schneider Electric

ELECTROMECHANICAL

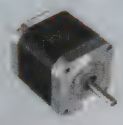


Signal Lights



Over 690 products
From 8 top brands including:
Patlite
Banner
Schneider Electric
Edwards Signaling

Motors



Over 530 products
From 22 top brands including:
Lin Engineering
Sanyo Denki
Trinamic

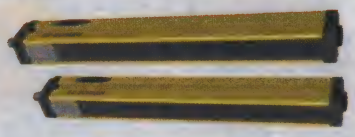
Circuit Breakers

Over 2,600 products
From 72 top brands including:
Airpax
Schneider Electric
Eaton
Carling

Safety Switches & Relays

Over 1,000 products
From 44 top brands including:
Schneider Electric
Eaton
Honeywell

Light Curtains



Over 450 products
From 8 top brands including:
Schneider Electric
IDEC
Carlo Gavazzi
Banner Engineering

Panel Instrumentation

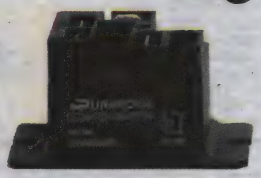
Over 18,200 products
From 151 top brands including:
Eaton-Cutler Hammer
Schneider Electric
Omron
Newport Electronics
Red Lion

DG34 SERIES AUTOMOTIVE INDUSTRIAL POWER RELAYS

DURAKOOL INC.

Features:
- High resistance to inrush current
- For PCB or chassis mounting
- Flat insert faston terminal options
- AC and DC coils

Specifications:
- Max. inrush current: 80A
- Contacts: SPST-NO
- Contact material: AgCdO
- Max switching voltage: 277VAC, 30VDC
- Min switching voltage: 10VAC/DC
- Min switching current: 10mA
- Insulated rated voltage: 250VAC
- Mechanical life: 10million cycles



Mfg. Part No.	Carry Current (A)	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Stock No.	Price Each 1-9
DG34-1021-36-1012-F	30	SPST-NO	12	144	59P3464	3.99

(145374)

DG36 SERIESINDUSTRIAL POWER RELAYS

DURAKOOL INC.

Features:
- 2-pole heavy duty power relays
- Up to 30A switching capacity
- Flat insert connectors - faston 6.35 x 0.8mm
- Optional PCB mounting
- 8mm creepage distance and 4kV dielectric

Specifications:
- Max. inrush current: 30A
- Contacts: DPST-2NO
- Contact material: $AgSnO^2$
- Max switching voltage: 277VAC
- Min switching voltage: 10VAC/DC
- Min switching current: 100mA
- Insulated rated voltage: 250VAC
- Mechanical life: 5million cycles

DC COIL VERSION

Mfg. Part No.	Carry Current (A)	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Stock No.	Price Each 1-24
DG36-3022-S6-1012	30	DPST-NO	12	86	59P3465	14.73

AC COIL VERSION

Mfg. Part No.	Carry Current (A)	Contacts	Coil Voltage (VAC)	Coil Resist. (Ω)	Stock No.	Price Each 1-24
DG36-3022-S6-6120	30	DPST-NO	120	950	59P3466	13.78
DG36-3022-S6-6240	30	DPST-NO	240	3.8	59P3467	13.05

(145373)

60-80A AUTOMOTIVE RELAYS

RoHS Compliant Available

DURAKOOL INC.

- High resistance to inrush current
- Ideal for DC motor control
- Industry standard size and footprint
- High continuous DC current capacity
- Contact material: AgNi0.15
- Power consumption: 1.6W (1.81W with resistor)

Mfg. part no. with suffix **"DR"** has diode option, suffix **"R"** has resistor option. Insulation dielectric strength coil contact: 500Vrms/1min. 30A versions available; *go online or call.*

PC Board

Plug-In

80A PC BOARD RELAYS

Mfg. Part No.	Contacts	Coil Volt. (VDC)	Coil Resist. (Ω)	Cover Protect.	Stock No.	Price Each 1-9
DG85C-8021-75-1012	SPST-NO	12	90	IP54	30M9205	5.15
DG85C-8021-75-1024	SPST-NO	24	330	IP54	30M9210	5.76
60A PC BOARD RELAYS						
DG85B-8021-75-1012	SPST-NO	12	90	IP54	30M9183	4.44
DG85B-8011-35-1012	SPDT	12	90	IP67	30M9187	4.69
DG85B-8011-75-1012	SPDT	12	90	IP54	30M9190	5.06
DG85B-8011-35-1024	SPDT	24	330	IP67	30M9188	5.15
DG85B-8011-75-1024	SPDT	24	330	IP54	30M9191	4.86
100A PLUG-IN RELAYS						
DG85D-7021-76-1012	SPST-NO	12	90	IP54	59P3469	7.27
80A PLUG-IN RELAYS						
DG85C-8021-76-1012	SPST-NO	12	90	IP54	30M9206	9.20
DG85C-8021-96-1012-M1	SPST-NO	12	90	IP40	30M9207	5.33
DG85C-8021-96-1024-M1	SPST-NO	24	330	IP40	30M9208	9.65
DG85C-8021-96-1024-M1DR	SPST-NO	24	330	IP40	30M9209	9.20
DG85C-7011-76-1012	SPDT	12	90	IP54	59P3468	6.22
60A PLUG-IN RELAYS						
DG85B-8021-76-1012-DR	SPST-NO	12	90	IP54	30M9184	4.44
DG85B-8021-96-1012-M1	SPST-NO	12	90	IP40	30M9198	4.51

➤ CONTINUED ➤

60-80A AUTOMOTIVE RELAYS (CONT.)

60A PLUG-IN RELAYS

Mfg. Part No.	Contacts	Coil Volt. (VDC)	Coil Resist. (Ω)	Cover Protect.	Stock No.	Price Each 1-9
DG85B-8011-96-1006-M1	SPDT	6	22	IP40	30M9197	4.76
DG85B-8011-76-1012	SPDT	12	90	IP54	30M9192	4.46
DG85B-8011-76-1012-DR	SPDT	12	90	IP54	30M9193	5.03
DG85B-8011-96-1012-M1	SPDT	12	90	IP40	30M9185	4.86
DG85B-8011-96-1012-M1R	SPDT	12	90	IP40	30M9199	4.37
DG85B-8011-96-1012-S1	SPDT	12	90	IP40	30M9200	4.08
DG85B-8011-96-1012-S1R	SPDT	12	90	IP40	30M9201	4.52
DG85B-8011-76-1024	SPDT	24	330	IP54	30M9194	5.13
DG85B-8011-76-1024-DR	SPDT	24	330	IP54	30M9195	4.41
DG85B-8011-96-1024-M1DR	SPDT	24	330	IP40	30M9186	4.08
DG85B-8011-36-1024-R	SPDT	24	330	IP67	30M9189	5.16
DG85B-8011-76-1024-R	SPDT	24	330	IP54	30M9196	7.67
DG85B-8011-96-1024-M1	SPDT	24	330	IP40	30M9202	4.82
DG85B-8011-96-1024-S1	SPDT	24	330	IP40	30M9203	4.57
DG85B-8011-96-1024-S1R	SPDT	24	330	IP40	30M9204	5.14

RELAY SOCKETS

Mfg. Part No.	Description/ For Use With	Stock No.	Price Each 1-9	10-24	25-49
DZ85AB-5-WH1	Wire Harness, 40A & 60A Relays	30M9213	0.86	0.82	0.80
DZ85AB-5-WH2	Wire Harness, 40A & 60A Relays	30M9214	1.72	1.64	1.58
DZ85-4-WH	Wire Harness, 80A & 100A Relays	30M9211	1.26	1.21	1.17
DZ85AB-5-PCB	40A & 60A Relays	30M9212	2.25	2.16	2.09

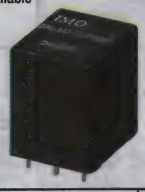
(90363)

SRL SERIES 2A AUTOMOTIVE RELAYS

RoHS Compliant Available

IMO

- Switching capacity up to 20A
- Six different contact arrangements
- Max. switching voltage: 75VD
- Max. switching power: 200W
- Ambient temperature: -40°C to 85°C
- PCB mounting
- Open and sealed types available
- Two terminal sizes



Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (ohm)	Contacts	Stock No.	Price Each 1-24
SRL-1CT3-SL-12VDC	12	120	SPDT-1NO, SPDT-NC	21T5087	2.63

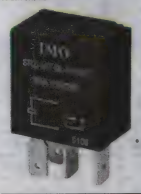
(177577)

SRZ SERIES 30A AUTOMOTIVE RELAYS

RoHS Compliant Available

IMO

- 30A switching capability
- Ambient temperature -40°C to 125°C
- SPNO and SPCO contacts
- Max. switching voltage: 27VDC
- Ambient temperature: -40°C to 125°C
- Sealed and Dust cover options
- Optional parallel diode or transient suppression resistor
- Contact gap ≥ 0.6mm



Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (ohm)	Contacts	Stock No.	Price Each 1-24
SRZ-1CT-DL-12VDC	12	123	SPDT	74R1555	4.06
SRZ-1CT-DL-24VDC	24	483	SPDT	74R1556	4.12

(177579)

SRK SERIES 45A AUTOMOTIVE RELAYS

RoHS Compliant Available

IMO

- Switching Capacity up to 45A
- SPNO and SPCO Contact Arrangement
- Max. switching power: 630 W
- Max. switching current: make: 100A (lamp inrush) break: 60A
- Operating temperature: -40°C to 155°C
- PC Board Terminals
- Two pin out choices
- Available as open frame or sealed relay

Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (ohm)	Contacts	Layout	Stock No.	Price Each 1-24
SRKE-1AT-SL-12VDC	12	90	SPST-NO	European	74R1546	3.61
SRKE-1AT-SL-24VDC	24	362	SPST-NO	European	74R1547	3.88

➤ CONTINUED ➤

AUTOMOTIVE RELAYS

SRK SERIES 45A AUTOMOTIVE RELAYS (CONT.)

Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (ohm)	Contacts	Layout	Stock No.	Price Each 1-24
● SRKE-1CT-SL-12VDC	12	90	SPDT	European	74R1548	3.88
● SRKE-1CT-SL-24VDC	24	362	SPDT	European	74R1549	3.61
● SRKU-1CT-SL-12VDC	12	90	SPDT	USA	74R1550	3.61
● SRKU-1CT-SL-24VDC	24	362	SPDT	USA	74R1551	3.83

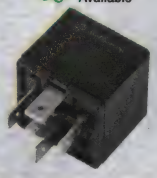
(177576)

40A AUTOMOTIVE RELAYS

RoHS Compliant Available

multicomp

Specifications:
- Nominal voltage: 6-24VC
- Max. switching voltage: 75VDC
- Max. switching current: 40A
- Max. switching power: 420mW
- Mechanical life: 10million operations
- Max. operate time: 10ms



TÜV Rheinland

Mfg. Part No.	Current (A)	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Features	Stock No.	Price Each 1-99
● MC25115	40	SPDT	12	90	No Diode or Shoulder	12P9616	4.12
● MC25116	40	SPDT	12	90	w/Diode and Shoulder	12P9617	5.86

(136128)

EV (AEVS) SERIES AUTOMOTIVE RELAYS

RoHS Compliant Available

Panasonic

- Contact rating: 60A
- Nominal coil voltage: 12 VDC
- Contact configuration: SPST-NO
- Nominal operating power: 4.5 W

Mfg. Part No.	Coil Terminal Structure	Installation Type	Stock No.	Price Each 1-24
● AEVS16012	Lead wire	Vertical	91T8074	261.35
● AEVS960122	Faston terminal	Horizontal	91T8075	255.90

(203465)

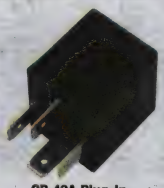
20-40A AUTOMOTIVE RELAYS

RoHS Compliant Available

Panasonic

- Low contact resistance (20A)
- Low temperature rise (20A low-profile, 40A high power)
- High shock resistance (40A high power)
- ISO type terminals

CB 40A PC Board



CB 40A Plug-In

CM 20A Plug-In

20A **CM series** relays have a 35A switching capacity. 40A **CB series** relays has a 20A switching capacity. **CB series** dimensions: 25H x 22W x 26.5Lmm, **CM series** dimensions: 22H x 15W x 20Lmm.

SEALED

Mfg. Part No.	Contacts	Coil Voltage (VDC)	Carry Current (A)	Mounting Type	Coil Resist. (Ω)	Stock No.	Price Each 1-24
● CB1A-M-12V	SPST-NO	12	40	Flange	103	93B1573	6.10
● CB1A-P-12V	SPST-NO	12	40	Through Hole	103	50B849	5.91
● CB1A-12V	SPST-NO	12	40	Quick Connect	103	52F9227	5.58
● CB1AF-P-12V	SPST-NO	12	40	Through Hole	103	50F4036	5.48
● CB1-12V	SPST-NO	12	40	Quick Connect	103	64K3088	6.29
● CB1-M-12V	SPDT	12	40	Flange	103	91B7680	6.32
● CB1-P-24V	SPDT	24	40	Through Hole	320	07C0827	6.48
● CM1-12V	SPDT	12	20	Quick Connect	96	52F9218	5.33
● CM1A-12V	SPST	12	20	Quick Connect	96	10C5494	5.15
FLUX-RESISTANT							
● CB1AHF-12V	SPST-NO	12	40	Quick Connect	80	21M9059	7.46
● CB1AHF-24V	SPST-NO	24	40	Quick Connect	320	30M2984	7.35
● CB1F-P-12V	SPDT	12	40	Through Hole	103	50F4024	6.07
● CB1F-R-12V*	SPDT	12	40	Quick Connect	103	50F4025	6.21
● CB1F-M-24V	SPDT	24	40	Flange	320	50B8978	6.75
● CB1F-P-24V	SPDT	24	40	Through Hole	320	94B6706	6.12
● CB1F-24V	SPDT	24	40	Quick Connect	320	98F7703	6.48
HEAT RESISTANT							
● CB1A-T-M-12V	SPST-NO	12	40	Flange	103	08N1773	8.20

* With resistor inside
(88570)

MINI K HV SERIES HIGH VOLTAGE PRECHARGE RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Benefits:
- The smallest precharge relay available in its class (PCB version)
- Vast majority of precharge applications in electrical vehicles can be served by the Mini K HV
- Mini K HV even covers fault break operations of up to 20A at 450VDC
- Available with PCB and plug-in terminals

Applications:
- DC high voltage precharge applications in:
  Hybrid
  Full battery electric vehicle
  Fuel-cell cars

V23700-F0002-A408

V23700-C0001-A408

Mfg. Part No.	Coil Resist. Ω	Limiting Current (A)	Contacts	Coil Voltage (VDC)	Stock No.	Price Each 1-24
● V23700-F0002-A408	41.6	20	SPST-NO	12	73W9214	79.77
● V23700-C0001-A408	50	20	SPST-NO	12	73W9213	56.40

(210092)

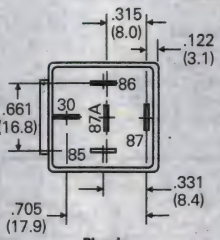
40A AUTOMOTIVE RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Plug-in



Plug-in

Continuous contact rating of 40A @ 23°C. Shrouded and weatherproof dust covers also available; *go online or call.*

PC BOARD

Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (Ω)	Contacts	Features	Stock No.	Price Each 1-24
● 1432872-1	6	22.5	SPDT	Epoxy Sealed	21M4887	3.55
● 1432866-1	12	90	SPST	Dust Cover	21M4807	3.52
● 1432867-1	12	90	SPST	Epoxy Sealed	21M4844	2.56
● 1432868-1	12	90	SPDT	Dust Cover	21M4882	3.60
● 1432869-1	12	90	SPDT	Epoxy Sealed	21M4883	3.10
● 1432870-1	24	360	SPDT	...	21M4885	3.00
● 1432871-1	24	360	SPDT	Epoxy Sealed	21M4886	3.85
PLUG-IN						
● 1432873-1	6	22.5	SPDT	With Metal Bracket	21M4888	4.83
● 1432782-1	12	90	SPST-NO	...	21M4719	3.92
● 1432772-1	12	90	SPST	With Metal Bracket	57K9734	3.47
● 1432785-1	12	90	SPDT	...	52K4826	2.73
● 1432786-1	12	79.5	SPDT	With Resistor	10M5433	3.03
● 1432790-1*	12	90	SPDT	With Diode	55K3124	3.27
● 1432791-1	12	90	SPDT	With Metal Bracket	52K6431	2.73
● 1432874-1	24	317.5	SPDT	Epoxy Sealed, With Resistor	21M4902	4.15
● 1432875-1	24	317.5	SPDT	Epoxy Sealed, With Resistor and Metal Bracket	21M4904	3.65
● 1432876-1	24	360	SPDT	With Diode and Metal Bracket	21M4905	2.27
● 1432795-1*	24	360	SPDT	With Diode	44K0222	2.49
● 1432797-1	24	360	SPDT	With Metal Bracket	17M3431	3.01

*Diode (cathode/banded side to pin #86)
(3273)

DEV KIT HQ™

Newest technology, Development Kits & Evaluation Boards from the best suppliers.

newark.com/dev-kits

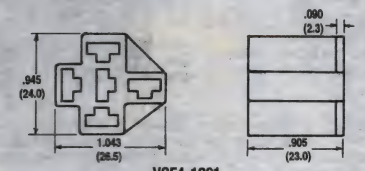
(196525)

P&B AUTOMOTIVE RELAY CONNECTORS AND ACCESSORIES

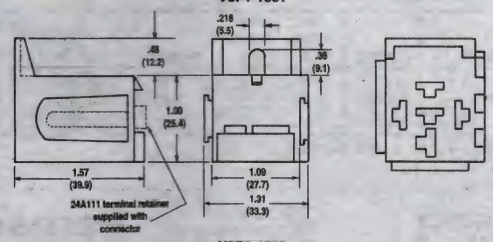
RoHS Compliant Available

TE connectivity

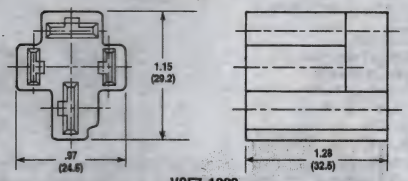
Authorized Distributor



VCF4-1001



VCF4-1002



VCF7-1000

For use with **VF4** and **VF7** quick-connect terminal relays. **Mfg. part no. VCF4-1001** on-harness plug is intended for use with bracket-mounted **VF4** relay. **Mfg. part no. VCF4-1002** wire harness sockets interlock to form a single row and include a molded-in plastic bracket for mounting. **Mfg. part no. VCF7-1000** on-harness plug is for use with **VF7** relays. *Order crimp terminals separately.*

Mfg. Part No.	Terminal(s)	Wire AWG	Qty. Req. Form A/C	Stock No.	Price Each 1-9
VCF4-1000	None	N/A	0/0	17M3156	1.94
VCF4-1001	60249-1	12-16	4/5	17M3157	0.83
	42281-1	14-18	4/5		
VCF4-1002	26A1348A	18-20	4/5	17M3158	4.93
	26A1348B	14-16	4/5		
	26A1348C	10-12	4/5		
VCF7-1000	280756-4	10-12	2 (Contact side)	17M3159	1.73
	280755-4	6-10			
	42281-1	14-18	2 (Coil)		

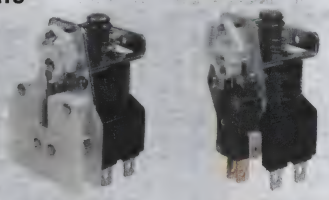
(3356)

P&B 15A-20A BI-STABLE, IMPULSE RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor



S89R S90R

Bi-stable impulse relays can effect power savings in applications where load is on for long time periods. Meet UL 508 energy management requirements. 9VA coil power. Class B coil insulation. Operate on rated voltage pulses as short as 150ms. Mechanical life expectancy: 100,000 cycles. Temperature range: –40°C to +60°C. Applications include industrial lighting control, motor starting and reversing of conveyor systems, or in air conditioning systems. Also available with octal plug-in base; *go online or call*.

15A

Mfg. Part No.	Coil Voltage	Coil Resist. (Ω)	Terminal Style	Stock No.	Price Each 1-9
S89R5AAC1-24	24VAC	8.7	0.187″ (4.75mm) Quick-Connect	28K0288	50.19
S89R5AAC1-120	120VAC	260	0.187″ Quick-Connect	17M2963	40.09
S89R11DAC1-12	12VDC	22.5	0.187″ (4.75mm) Quick-Connect	17M2962	48.78
S89R11DAC1-24	24VDC	92	0.187″ (4.75mm) Quick-Connect	93F3101	53.49
S89R11AAC1-24	24VAC	8.7	0.187″ (4.75mm) Quick-Connect	77B3060	45.98
S89R11APP1-24	24VAC	8.7	Octal-Style Base	98F2295	115.94
S89R11AAC1-120	120VAC	260	0.187″ (4.75mm) Quick-Connect	17M2959	47.76
S89R11APP1-120	120VAC	260	Octal-Style Base	17M2961	60.04

➤CONTINUED➤

P&B 15A-20A BI-STABLE, IMPULSE RELAYS (CONT.)

20A

Mfg. Part No.	Coil Voltage	Coil Resist. (Ω)	Terminal Style	Stock No.	Price Each 1-9
S90R11ABD1-24	24VAC	8.7	0.250″ (6.35mm) Quick-Connect	44F2174	53.02
S90R11ABD1-120	120VAC	260	0.250″ (6.35mm) Quick-Connect	18M9351	51.13

(3258)

P&B 20A POWER RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor

S86R S87R

Relays have .250″ quick-connect/solder coil terminal located perpendicular to .250″ quick connect terminals. Contacts rated at 20A @ 277VAC, with life expectancy of 50,000 operations. Coil breakdown voltage: 1560Vrms, 60HZ. **S87R series** relays are designed to operate with plunger in vertical or horizontal position, but not in upside-down position. Temperature range: -45°C to +65°C. **S87R series** width: 1.62″ (41.1). **S86R series** width: 1.92″ (48.77). UL recognized, CSA certified.

S86R

Mfg. Part No.	Contacts	Coil Voltage	Coil Resist. (Ω)	Coil Power	Stock No.	Price Each 1-24
S86R5A1B1D1-120	SPDT	120VAC	800	4VA	17M2955	36.65
S86R11A1B1D1120	DPDT	120VAC	800	4VA	44F2181	50.97

S87R

S87R5A2B1D1-120	SPDT	120VAC	800	4VA	17M2958	30.60
S87R5A2B1D1-240	SPDT	240VAC	3.2	4VA	20F767	38.21
S87R11D2B1D1110	DPDT	110VDC	...	4.5W	39C7342	45.04
S87R11A2B1D1120	DPDT	120VAC	800	4VA	17M2956	36.92
S87R11A2B1D1240	DPDT	240VAC	3.2	4VA	20F770	79.36

(3299)

DC POWER RELAYS

NEW

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

- Achieves improvement of inrush-withstand performance and long-life by adopting Omron's own contact driving system
- High capacity switching achieved through the use of a high-efficiency magnetic arc blowout circuit
- Small and lightweight
- Size: 30mm x 27 mm x 31 mm (H x W x L)
- Weight: approx. 50 g.

Mfg. Part No.	Coil Current (mA)	Coil Resist. (Ω)	Coil Voltage (VDC)	Contacts	Stock No.	Price Each 1-24
G9EJ-1-DC12	167	72	12	SPST-NO	97W1181	59.68

(211223)

TERMSERIES - RELAY MODULES

NEW

RoHS Compliant Available

Weidmüller

Specifications:

- Slim design with 6.4 mm or 12.8 mm width
- 1 CO and 2 CO contact versions
- Screw clamp and tension clamp technology
- Input voltages from 5 up to 230V
- Unique multi-voltage input version for 24V-230V AC/DC
- Distinctive fiber-optic illuminated status display
- 5 cross connection levels
- Clear marking
- Pluggable relays and SSRs
- Wide range of accessories

Mfg. Part No.	Contact Current (A)	Coil Voltage (VAC)	Coil Voltage (VAC)	Stock No.	Price Each 1-9
1122770000	6	...	SPDT	97W1182	16.19
1122780000	6	24	SPDT	97W1183	19.01
1122810000	6	120	SPDT	97W1184	22.98
1122820000	6	230	SPDT	97W1185	21.48
1122830000	6	120	SPDT	97W1186	26.88
1122840000	6	230	SPDT	97W1187	26.88
1122850000	6	230	SPDT	97W1188	30.88
1123490000	8	...	DPDT	97W1189	21.27
1123500000	8	24	DPDT	97W1190	20.98
1123530000	8	120	DPDT	97W1191	23.90
1123540000	8	230	DPDT	97W1192	22.34
1123550000	8	120	DPDT	97W1193	27.63

➤CONTINUED➤

TERMSERIES - RELAY MODULES (CONT.)

Mfg. Part No.	Contact Current (A)	Coil Voltage (VAC)	Coil Voltage (VAC)	Stock No.	Price Each 1-9
● 1123570000	8	230	DPDT	97W1194	27.63
● 1123580000	8	250	DPDT	97W1195	34.39

TERMSERIES ACCESSORIES

Mfg. Part No.	Number of poles / Pitch	Stock No.	Price Each 1-9
● 1193670000	2 / 6.4	97W1196	1.02
● 1193680000	10 / 6.4	69W7530	5.59
● 1193690000	19 / 6.4	70W2342	9.61
● 1193700000	10 / 12.8	69W7514	9.94
● 1240800000	Isolation plate 3.2 mm pitch	97W1197	1.88

(211221)

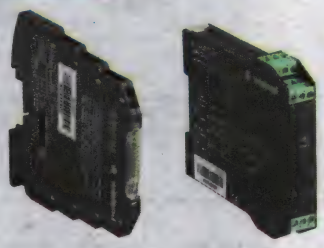
CORES SERIES UNIVERSAL INPUT/OUTPUT DIN RAIL MOUNT ANALOG SIGNAL ISOLATION/ CONVERSION MODULES

RoHS Compliant Available

wieland

NEW

Wieland's NEW cores universal signal converters & isolaters provide 3 or 4 way galvanic isolation between input, output and power source. Input and output ranges or types can be user configured based on application requirements. The cores c2 M2-A offers the user dual ouputs for the current loop so the signal can be used locally and transmitted to the control system. Small and convienent packaging,these products protect against signal degredation from ground loops and signal loss for reliable control system operation.



SPRING CLAMP TERMINATION - 6.2 mm WIDTH

Mfg. Part No.	Input	Output	Stock No.	Price Each 1-9
82.003.0110.0	Current or Voltage	Current or Voltage	47W1694	361.42
● 82.003.0120.0	PT100 RTD Devices	Current or Voltage	46X9367	355.05
● 82.003.0130.0	Thermocouple	Current or Voltage	46X9368	355.05
PLUGGABLE SCREW CLAMP TERMINATION - 17.5 mm WIDTH				
● 82.003.0210.0	Current	Current	46X9369	278.96
82.003.0200.0	" Voltage, Current, Thermocouple Potentiometer, RTD "	Current or Voltage	94T2874	534.03
82.003.0250.0	" Voltage, Current, Thermocouple Potentiometer, RTD "	Current or Voltage x 2	94T2477	534.07

(212167)

G6K-RF SERIES HIGH FREQUENCY RELAYS

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

- Contact configuration: DPDT
- Frequency: 3 GHz band
- Rated load: 0.3A at 125VAC, 1A at 30 VDC
- Low coil power consumption: 100 mW.
- Ideal for instrumentation and high-speed LAN network equipment

Mfg. Part No.	Coil Voltage (VDC)	Coil Current (mA)	Coil Resist. (Ω)	Packing Style	Stock No.	Price Each 1-4
● G6K-2F-RF-T DC12	12	9.1	1.315	300 Tray	82T6060	14.15
● G6K-2F-RF-T DC24	24	4.6	5.22	300 Tray	82T6061	13.66
● G6K-2F-RF-T DC3	3	33	91	300 Tray	82T6062	13.39
● G6K-2F-RF-T DC4.5	4.5	23.2	194	300 Tray	82T6063	13.39
● G6K-2F-RF-T DC5	5	21.1	237	300 Tray	82T6064	13.39

(202252)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

1A COMPACT HIGH-FREQUENCY RELAYS

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

- 1A, 30VDC discrete load; 1W @ 1GHz high-frequency load @ V.S.W.R. < 1.2
- Gullwing surface-mount terminals
- Low power consumption: 100mW
- Non-latching and single-coil latching available
- Ambient temperature range: -40° to +70°C

Contacts are silver alloy on gold base. Contact resistance: 100mΩ max. Must operate and release times are 3 ms max. Max. switching voltage: 60VDC, 125VAC. Max. switching current: 1A. Max. switching capacity: 37.5VA (AC); 30W (DC). Must operate/release voltages are 80%/10% of rated voltage, respectively. Units shown are non-latching. Single-coil latching units also available; *go online or call.*

Mfg. Part No.	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Termination	Stock No.	Price Each 1-24	Price Each 25-49
● G6K-2F DC3	DPDT	3	91	SMD	89C6442	4.65	4.19
● G6K-2F-RF-DC5	DPDT	5	237	SMD	73C8952	23.78	21.40
● G6K-2F-RF-DC12	DPDT	12	1.315	SMD	73C8948	23.78	21.40

* Single-side stable Bellcore: 2, 500 V for 2x10μs

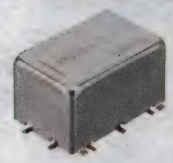
(72592)

HIGH FREQUENCY SMD RELAYS

RoHS Compliant Available

Panasonic

- Excellent high frequency characteristics
- V.S.W.R.: Max. 1.25
- Insertion loss: Max. 0.5dB
- Isolation: Min. 35dB (between open contacts); Min. 30dB (between contact sets)
- Max. switching current = 0.3A DC
- Max. switching voltage = 30VDC
- Surface mount terminals
- Small size: 14.00(L) x 9.00(W) x 8.20(H) mm



DPDT contacts rated: 1W at 5GHz, 50 ohms. Contact Material: gold alloy. Relays are packaged in **cartons.** To order **tape & reel** packaging picked from the 1-2-3 pin side, add **suffix "X"** to mfg. part no. To order **tape & reel** packaging picked from the 6-7-8 pin side, add **suffix "Z"** to mfg. part no.

SINGLE SIDE STABLE

Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (Ω)	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99	Price Each 100-499
● ARJ20A12	12	720	02E9085	151.36	138.74	123.33	105.11
2 COIL LATCHING							
● ARJ22A12	12	960	72J8160	151.36	138.74	123.33	105.11

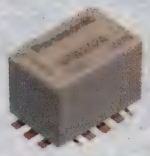
(83553)

RN (ARN) SERIES HIGH FREQUENCY RELAYS

RoHS Compliant Available

Panasonic

- Contact configuration: SPDT
- 150W carrying power at 2GHz
- Excellent high frequency characteristics up to 6GHz
- Compact dimensions and surface mount (SMD)
- Size: 9.6 (L) x 14.6 (W) x 10 (H) mm
- Ambient temperature: -40°C to +85°C



SINGLE SIDE STABLE TYPE STANDARD CONTACT TYPE

Mfg. Part No.	Coil Voltage (VDC)	Coil Current (mA)	Coil Resist. (Ω)	Packing Style	Stock No.	Price Each 1-24
● ARN10A12	12	26.7	450	Carton	71T6606	115.20
● ARN10A12X	12	26.7	450	TR 1pin side	71T6608	69.33
● ARN10A12Z	12	26.7	450	TR 13pin side	71T6609	69.33
● ARN10A24	24	13.3	1.8 kOhm	Carton	71T6610	115.20
● ARN10A24Z	24	13.3	1.8 kOhm	TR 13pin side	71T6612	69.33
● ARN10A4H	4.5	71.1	63.3	Carton	71T6613	119.86
● ARN10A4HX	4.5	71.1	63.3	TR 1pin side	71T6614	69.33
● ARN10A4HZ	4.5	71.1	63.3	TR 13pin side	71T6615	69.33
2 COIL LATCHING TYPE STANDARD CONTACT TYPE						
● ARN12A12	12	33.3	360	Carton	71T6616	115.20
● ARN12A12X	12	33.3	360	TR 1pin side	71T6617	115.20
● ARN12A12Z	12	33.3	360	TR 13pin side	71T6618	69.33
● ARN12A24	24	16.7	1.44 kOhm	Carton	71T6619	115.20
● ARN12A24X	24	16.7	1.44 kOhm	TR 1pin side	71T6620	69.33
● ARN12A24Z	24	16.7	1.44 kOhm	TR 13pin side	71T6621	69.33
● ARN12A4H	4.5	88.9	50.6	Carton	71T6622	117.53
● ARN12A4HX	4.5	88.9	50.6	TR 1pin side	71T6623	69.33
● ARN12A4HZ	4.5	88.9	50.6	TR 13pin side	71T6624	69.33
SINGLE SIDE STABLE TYPE REVERSED CONTACT TYPE						
● ARN30A12	12	26.7	450	Carton	71T6625	115.20
● ARN30A12X	12	26.7	450	TR 1pin side	71T6626	69.33
● ARN30A12Z	12	26.7	450	TR 13pin side	71T6627	69.33
● ARN30A24	24	13.3	1.8 kOhm	Carton	71T6628	115.20

➤ CONTINUED ➤

RN (ARN) SERIES HIGH FREQUENCY RELAYS (CONT.)

SINGLE SIDE STABLE TYPE REVERSED CONTACT TYPE

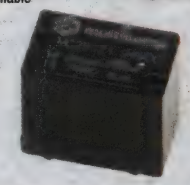
Mfg. Part No.	Coil Voltage (VDC)	Coil Current (mA)	Coil Resist. (Ω)	Packing Style	Stock No.	Price Each 1-24
ARN30A24X	24	13.3	1.8 kOhm	TR 1pin side	71T6629	69.33
ARN30A24Z	24	13.3	1.8 kOhm	TR 13pin side	71T6630	69.33
ARN30A4H	4.5	71.1	63.3	Carton	71T6631	115.20
ARN30A4HX	4.5	71.1	63.3	TR 1pin side	71T6632	69.33
ARN30A4HZ	4.5	71.1	63.3	TR 13pin side	71T6633	69.33

(197894)

1A LOW SIGNAL PCB RELAYS

RoHS Compliant Available

multicomp



Features:
- Sealed plastic enclosure

Specifications:
- Contact rating: 1A at 120VAC/30VDC
- Max. switching power: 125VA, 30W
- Max. switching voltage: 125VAC/30VDC
- Mechanical life: 5million operations
- Operate time: 5ms

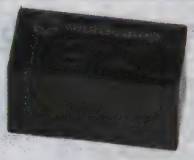
Mfg. Part No.	Current (A)	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Stock No.	Price Each 1-99
MC25120	1	SPDT	5	167	12P9621	2.29
MC25122	1	SPDT	12	960	12P9623	2.46
MC25121	1	SPDT	24	3.291	12P9622	2.69

(136134)

2A LOW SIGNAL PCB RELAYS

RoHS Compliant Available

multicomp



Features:
- Sealed plastic enclosure
- High sensitivity

Specifications:
- Contact rating: 1A at 120VAC/24VDC
- Max switching voltage: 250VAC/30VDC
- Max. switching power: 120VA/30W
- Mechanical life: 10million operations
- Operating temperature: -30°C to 70°C

Mfg. Part No.	Current (A)	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Stock No.	Price Each 1-24
MC25132	1	DPDT	5	166	12P9633	1.90
MC25133	1	DPDT	12	960	12P9634	1.90
MC25118	1	DPDT	24	3.84	12P9619	3.31
MC25134	2	DPDT	5	125	12P9635	2.21
MC25119	2	DPDT	12	720	12P9620	2.27
MC25135	2	DPDT	24	2.88	12P9636	2.21

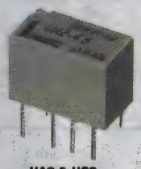
(136135)

UA/UB/UC/UD SERIES 1A SUBMINIATURE SIGNAL RELAYS

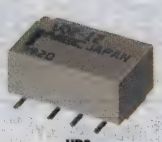
RoHS Compliant Available

NEC

Features:
- Compact and light weight
- Low power consumption
- Tube or taped packaging
- Super high density mounting
- PCB and surface mount
- Meets Bell-Core, FCC standards
- Meets IEC950/UL1950/EN60950 insulation distance



UA2 & UC2



UD2

Specifications;
- Contact rating: 1A at 30VDC / 0.3A at 125VAC
- Switching power: 30W / 37.5VA
- Max. carry current: 1A
- Initial Contact resistance max: 100mΩ
- Coil power: 140mW (230mW for 24VDC)
- Operating temperature: -40°C to +85°C

Mfg. Part No.	Contacts	Coil Voltage (VDC)	Coil Resist.	Termination	Stock No.	Price Each 1-24
UA2-5NU	DPDT	5	178	Through Hole	75R4571	4.04
UA2-12NU	DPDT	12	1.028	Through Hole	75R4569	4.08
UA2-24NU	DPDT	24	2.504	Through Hole	75R4570	3.85
UC2-5NU	DPDT	5	178	Through Hole	74R1583	4.04
UC2-12NU	DPDT	12	1.028	Through Hole	74R1582	4.14
UD2-5NU	DPDT	5	178	SMD	75R4574	4.14
UD2-12NU	DPDT	12	1.028	SMD	75R4573	3.85

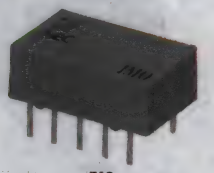
(142242)

EA2/EB2 SERIES 1A MINIATURE SIGNAL RELAYS

RoHS Compliant Available

NEC

Features:
- Surface Mount (L-lead) & DIL packages
- High sensitivity coil
- Ultra low profile, minimal board area
- Fully sealed for immersion cleaning
- Low magnetic interference
- FCC Part 68 compliant
- UL recognized (E73266), CSA Certified (LR46266)



EA2

Specifications:
- Contact rating: 1A at 30VDC / 0.5A at 125VAC
- Initial contact resistance: 50mΩ typical
- Contacts: DPDT
- Contact material: Silver alloy with gold overlay
- Max. switching voltage: 220VDC / 250VAC
- Max. switching current: 1A
- Insulation resistance: 1000MΩ @ 500VDC
- Dielectric strength: 1000VAC
- Operating temperature: -40°C to +85°C
- Unit weight: Approximately 1.5g

EA2 SERIES SIGNAL RELAY

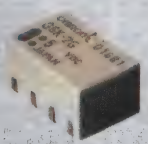
Mfg. Part No.	Contacts	Coil Voltage (VDC)	Coil Resist.	Termination	Stock No.	Price Each 1-24
EA2-5NU	DPDT	5	178	Through Hole	74R1567	3.01
EA2-24NU	DPDT	24	2.88	Through Hole	74R1566	3.01
EB2 SERIES SIGNAL RELAY						
EB2-5NU	DPDT	5	178	SMD	74R1570	2.80
EB2-24NU	DPDT	24	2.88	SMD	74R1569	3.13

(177581)

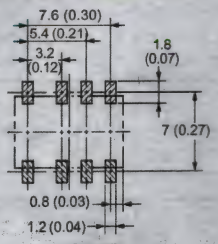
1A LOW-SIGNAL PC BOARD RELAYS

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS



Inside "L"



Gull-Wing

Gull-Wing

- For worldwide communications, computer peripherals, office automation equipment
- Offers excellent board space savings
- Available in PC board thru-hole, SMT gull-wing and SMT inside-L terminals
- Complies with UL1950 basic insulation at 125V

G6K series terminal design is based on **G6S series** relays. DPDT contacts. Power consumption: 100mW. Max. switching capacity: 37.5VA, 30W. Rated load: 0.3A at 125VAC, 1A at 30VDC. Contact material: Ag (Au clad). Nonlatching 3.2mm coil contact terminal spacing. Outside dimensions in inches (mm): .390(10.0)L x .260(6.5)W x .200(5.2)H. UL recognized, CSA certified. Coil voltages of 3VDC and 9VDC are also available; *go online or call..*

2.5MM COIL-CONTACT TERMINAL SPACING, STANDARD, NON-LATCHING

Mfg.Part No.	Coil Voltage (VDC)	Coil Resist. (Ω)	Terminals	Tape Cut Stock No.	Tape Cut Price Each 1-24	Tape and Reel Stock No.	Tape and Reel Reel Qty.	Tape and Reel Price Each 1-24
G6K-2F-DC5	5	237	SMD	20C8437	4.65	...	...	...
G6K-2F DC12	12	1.315	SMD	34K3627	4.77	...	...	...
G6K-2F DC24	24	5.22	SMD	36K7467	4.77	...	...	...
G6K-2G DC5	5	237	SMD	36K7468	4.65	93B5453	900	4.83
G6K-2P DC5	5	237	Through Hole	36K1951	4.65	...	...	...
G6K-2P DC12	12	1.315	Through Hole	36K3242	4.65	...	...	...
G6K-2P-DC24	24	5.22	Through Hole	36K7470	4.65	...	...	...
3.2MM COIL-CONTACT TERMINAL SPACING NON-LATCHING								
G6K-2F-Y-DC24	24	5.22	SMD	17C6940	4.65	...	...	...
G6K-2G-Y DC5	5	237	SMD	36K7469	4.83	...	...	...
G6K-2P-Y DC5	5	237	Through Hole	34C3467	4.65	...	...	...
G6K-2P-Y DC12	12	1.315	Through Hole	34C3464	4.65	...	...	...
G6K-2P-Y DC24	24	5.22	Through Hole	34C3465	4.65	...	...	...
3.2MM SPACING, SINGLE COIL-LATCHING								
G6KU-2F-Y DC3	3	91	SMD	89C6496	4.89	...	...	...
G6KU-2F-Y DC4.5	4.5	194	SMD	89C6497	4.89	...	...	...
G6KU-2FYDC5	5	237	SMD	23C9039	5.08	...	...	...
G6KU-2G-Y DC5	5	237	SMD	89C6505	4.89	...	...	...

(61883)

LOW-SIGNAL RELAYS

2A PC BOARD RELAYS

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

G5V-1

G5V-2

Suitable for handling low signals in computer peripherals, telecommunications, and security equipment. Maximum operating voltage: 125VAC, 125VDC. Maximum switching capacity: 62.5VA, 60W. Fully sealed construction. Bifurcated crossbar contacts. Standard models have a power consumption rating of 500mW, carry current: 2A. High sensitivity models have a power consumption rating of 150mW, carry current 1A, except for the **G5V-1 series** which have a carry current of 2A. Outside dimensions in inches (mm): G5V-1: .490(12.5)L x .300(7.50)W x .390(10.0)H, G5V-2: .807(20.5)L x .398(10.1)W x .453(11.5)H.

Mfg. Part No.	Contacts	Carry Current (A)	Coil Voltage (VDC)	Coil Resist. (Ω)	Stock No.	Price Each 1-24	25-49	50-99
ULTRA MINIATURE PACKAGE HIGH-SENSITIVITY								
● G5V-1-DC3	SPDT	2	3	60	**89C6068**	2.28	2.06	1.83
● G5V-1-DC5	SPDT	2	5	167	**36K7453**	2.22	2.00	1.78
● G5V-1-DC6	SPDT	2	6	240	**96B6185**	2.22	2.00	1.78
● G5V-1-DC9	SPDT	2	9	540	**89C6069**	2.31	2.08	1.85
● G5V-1-DC12	SPDT	2	12	960	**36K7451**	2.22	2.00	1.78
● G5V-1-2 DC12*	SPDT	2	12	960	**89C6070**	2.84	2.57	2.28
● G5V-1-DC24	SPDT	2	24	3.84	**36K7452**	2.59	2.34	2.08
STANDARD								
● G5V-2-DC3	DPDT	2	3	18	**89C6076**	3.34	3.01	2.68
● G5V-2-DC5	DPDT	2	5	50	**67K9351**	3.21	2.90	2.58
● G5V-2-DC12	DPDT	2	12	288	**36K1941**	3.21	2.90	2.58
● G5V-2-DC24	DPDT	2	24	1.152	**36K1942**	3.21	2.90	2.58
● G5V-2-DC48	DPDT	2	48	4	**67K9350**	3.95	3.56	3.17
HIGH-SENSITIVITY								
● G5V-2-H-DC5	DPDT	2	5	70	**36K7454**	3.59	3.24	2.87
● G5V-2-H-DC12	DPDT	2	12	960	**36K3237**	3.45	3.11	2.76
● G5V-2-H-DC24	DPDT	2	24	1.6	**36K1943**	3.54	3.19	2.83
ULTRA HIGH-SENSITIVITY								
● G5V-2-H1 DC5	DPDT	2	5	166.7	**35K4531**	3.63	3.28	2.91
● G5V-2-H1 DC12	DPDT	2	12	960	**67K9352**	3.63	3.28	2.91
● G5V-2-H1-DC48	DPDT	2	48	7.68	**92H2730**	4.24	3.83	3.40

* Special pickup
(3731)

2A LOW-SIGNAL RELAYS

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

G6A series are fully sealed PCB relays. 1500V impulse withstand voltage. Dielectric strength: 1000VAC. Maximum switching capacity under resistive load: 125VA, 60W. Maximum operating current: 2A. Maximum operating voltage: 250VAC, 220VDC. Contact material: silver/lead. Outside dimension in inches (mm): .800(20.2)L x .400(10.1)W x .330(8.4). UL recognized, CSA certified.

Mfg. Part No.	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Coil Power (mW)	Stock No.	Price Each 1-24	25-49
NON-LATCHING							
● G6A-274P-ST-US-DC3	DPDT	3	45	200	**72C4467**	6.10	5.49
● G6A-234P-ST15-US-DC5	DPDT	5	167	150	**93B6497**	6.47	5.83
● G6A-274P-ST40-US-DC5	DPDT	5	62.5	400	**89C6130**	5.35	4.82
● G6A-234P-ST-US-DC5	DPDT	5	125	200	**52F3888**	6.40	5.76
● G6A-234P-ST-US-DC9	DPDT	9	405	200	**52F3889**	5.71	5.14
● G6A-274P-ST40-US-DC9	DPDT	9	203	400	**89C6132**	5.79	5.21
● G6A-234P-ST40-US-DC12	DPDT	12	360	400	**89C6109**	5.79	5.21
● G6A-274P-ST40-US-DC12	DPDT	12	360	400	**89C6127**	5.35	4.82
● G6A-234P-ST-US-DC12	DPDT	12	720	200	**52F3890**	6.55	5.90
● G6A274P-ST40-US-DC24	DPDT	24	1.44	400	**01C4561**	5.82	5.24
● G6A-234P-ST-US-DC24	DPDT	24	2.88	200	**36K1944**	6.40	5.76
● G6A-274P-ST-US-DC24	DPDT	24	2.88	200	**52F3895**	5.71	5.14
● G6A274P-ST-US-DC48	DPDT	48	9.75	200	**07C8663**	6.96	6.26
● G6A-274P-ST40-US-DC48	DPDT	48	5.76	400	**89C6129**	6.65	5.98
DUAL COIL							
● G6AK-234P-ST-US-DC5	DPDT	5	139	180	**36K7458**	8.79	7.90
● G6AK274P-ST-USDC5	DPDT	5	139	180	**31C0971**	8.48	7.63
● G6AK-234P-ST-US-DC12	DPDT	12	800	180	**91B0510**	8.68	7.81
● G6AK-274P-ST-US-DC12	DPDT	12	800	180	**52F3900**	8.68	7.81
● G6AK-234P-ST-US-DC24	DPDT	24	3.2	180	**16C1810**	8.48	7.63
● G6AK-274P-ST-US-DC24	DPDT	24	3.2	180	**18C4127**	8.79	7.90

(3729)

2A LOW-SIGNAL RELAYS

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

- High dielectric withstand voltage of 2000VAC between coil and contacts (standard type) non-latching
- Contact form: DPDT
- Meet FCC part 68 and Telecordia 2.5 kV surge withstand requirements

Outside dimensions in inches (mm): .583(14.8)L x .287(7.3)W x .362(9.2). UL recognized, CSA certified. Art dimensions: inches (mm). Dual-coil latching models are also available; *go online or call.*

G6S2F Gull Wing

G6S2G Inside "L"

Mfg. Part No.	Coil Voltage (VDC)	Coil Current (mA)	Coil Resist. (Ω)	Terminals	Tape Cut Stock No.	Price Each 1-24
NON-LATCHING						
● G6S-2F-TR DC3	3	46.7	64.3	Gullwing	**70T7478**	4.26
● G6S-2F-DC5	5	28.1	178	Gullwing	**16F3652**	4.55
● G6S-2F-DC12	12	11.7	1.028	Gullwing	**16F3650**	4.29
● G6S-2F-DC24	24	8.3	2.88	Gullwing	**36K3245**	4.87
● G6S-2G DC12	12	11.7	1.028	Inside "L"	**35K3197**	4.20
● G6S-2-DC5	5	28.1	178	Thru-Hole	**83F5397**	3.93
● G6S-2-DC12	12	11.7	1.028	Thru-Hole	**17M6694**	3.88
● G6S-2-DC24	24	8.3	2.88	Thru-Hole	**36K1954**	4.94
SINGLE-COIL LATCHING						
● G6SU-2 DC3	3	33.3	90	Thru-Hole	**34K3629**	4.05
DUAL-COIL LATCHING						
● G6SK-2F DC5	5	40.0	125	Gullwing	**16F3657**	4.68
● G6SK-2F DC12	12	16.7	720	Gullwing	**16F3656**	5.17
● G6SK-2F-DC24	24	12.5	1.92	Gullwing	**52F3920**	5.63
● G6SK-2 DC5	5	40.0	125	Thru-Hole	**89C6579**	5.00
● G6SK-2 DC12	12	16.7	720	Thru-Hole	**89C6575**	4.76

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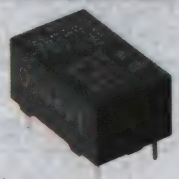
3A SUBMINIATURE LOW-SIGNAL RELAYS

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

- SPDT contact arrangement
- Sealed construction
- High sensitivity relays with pick-up coil power of 98mW
- Unique moving loop armature reduces relay size, magnetic interference, and contact bounce time
- Packaged for automatic insertion
- Meets Bellcore 2.5kV surge withstand requirement

Non-latching units feature bifurcated crossbar contacts for high reliability. Outside dimensions in inches (mm): .630(16.0)L x .390(9.91)W x .330(8.38)H. "L" in mfg. part no. indicates low sensitivity. UL recognized, CSA certified.



Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (Ω)	Coil Resist. (Ω)	Stock No.	Price Each 1-24	25-49	50-99
NON-LATCHING RELAYS							
● G6E-134P-ST-US-DC3	3	45	66.7	**89C6352**	6.00	5.40	4.80
● G6E-134PL-ST-US-DC5	5	63	79.4	**89C6357**	5.75	5.18	4.60
● G6E-134P-STUS-DC5	5	125	40.0	**52F3884**	5.79	5.21	4.63
● G6E-134P-ST-US-DC9	9	405	22.2	**12C1469**	5.79	5.21	4.63
● G6E-134PL-ST-US-DC12	12	360	33.3	**36K1950**	5.68	5.12	4.55
● G6E-134P-ST-US-DC12	12	720	16.7	**36K1949**	5.79	5.21	4.63
● G6E-134PL-ST-US-DC24	24	1.44	16.7	**89C6356**	5.55	5.00	4.44
● G6E-134P-ST-US-DC24	24	2.88	8.3	**52F3886**	5.93	5.34	4.74
DUAL COIL LATCHING STANDARD RELAYS							
● G6EK-134P-ST-US-DC5	5	125	40.0	**27C6993**	7.79	7.01	6.24

(3757)

1A LOW-SIGNAL RELAYS

RoHS Compliant Available

Panasonic

- Flat body signal relays allow mounting with a high-speed chip mounter
- DPDT contact arrangement
- Outstanding vibration and shock resistance

AGQ series relays switch 1A at 30VDC, and feature 1,500V surge withstand between open contacts (FCC Part 68) and 2,500V between contacts and coil. Operating temperature: -40°C to +85°C. Dimensions: .417(L) x .283(W) x .205(H) ", 10.6(L) x 7.2(W) x 5.2(H) mm.

Thru-Hole

SMD Gullwing

Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (Ω)	Coil Current (mA) (±10%)	Termination	Stock No.	Price Each 1-24	25-49	50-99
SINGLE SIDE STABLE TYPE RELAYS								
● AGQ200A03	3	64.2	46.7	Through Hole	**10C3334**	4.59	4.22	3.75
● AGQ2004H	4.5	145	31	Through Hole	**93B0517**	4.42	4.05	3.60

➤ CONTINUED ➤

1A LOW-SIGNAL RELAYS (CONT.)

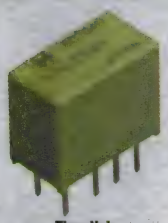
Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (Ω)	Coil Current (mA) (±10%)	Termination	Stock No.	Price Each 1-24	25-49	50-99
AGQ200A4H	4.5	145	31	SMD	93B0530	4.59	4.22	3.75
AGQ200A4HZ	4.5	145	31	SMD	10C3344	4.59	4.22	3.75
AGQ200A12Z	12	1.028	11.7	SMD	10C3342	4.88	4.48	3.98
AGQ200A12	12	1.028	11.7	SMD	93B0521	4.59	4.22	3.75
AGQ20024	24	2.504	9.6	Through Hole	93B0512	5.51	5.06	4.50
AGQ200A24	24	2.504	9.6	SMD	93B0525	5.36	4.92	4.37
1 COIL LATCHING TYPE RELAYS								
AGQ210A4HZ	4.5	202.5	22.2	SMD	10C3376	5.02	4.61	4.10
AGQ210S4HZ	4.5	202.5	22.2	SMD	10C3390	4.72	4.33	3.85
AQG22124	24	1600	20	Through Hole	11N2586	7.79	7.15	6.35
HIGH SENSITIVITY SINGLE SIDE STABLE TYPE RELAYS								
AGQ2604H	4.5	202.5	22.2	Through Hole	09R2876	6.05	5.55	4.93
AGQ26012	12	1.44	8.3	Through Hole	09R2874	6.05	5.55	4.93
AGQ26024	24	4.8	5	Through Hole	09R2875	7.09	6.51	5.79

(47078)

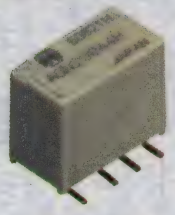
ULTRA-SMALL SIGNAL RELAYS

RoHS Compliant Available

Panasonic



Thru-Hole



SMT Gull Wing

AGN series ultrasmall PC board and surface mount relays feature ultra-slim design for high-density mounting. Withstand 2500V (Bellcore) surge resistance. Twin crossbar contacts provide high contact reliability. DPDT. Maximum switching power: 30W, 37.5VA. Dimensions in inches (mm): 0.354(9.00)H x 0.417(10.60)W x 0.224(5.70)D. Ambient temperature: -40°C to +85°C. Vibration/shock resistance. Single-side stable. **Tube packing standard**. Tape & reel available: add *"Z"* to end of mfg. part no. UL recognized, CSA certified. Surface mount and 1-coil latching version also available; *go online or call.*

SINGLE SIDE STABLE TYPE RELAYS

Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (Ω)	Power (mW)	Stock No.	Price Each 1-24	25-49	50-99
AGN20003	3	64.2	140	90B6864	4.42	4.05	3.60
AGN200A03	3	64.2	140	10C3246	4.59	4.22	3.75
AGN200A03Z	3	64.2	140	10C3248	4.59	4.22	3.75
AGN200A4HZ	4.5	145	140	10C3263	4.59	4.22	3.75
AGN200S4HZ	4.5	145	140	10C3278	4.31	3.96	3.52
AGN2004H	4.5	145	140	83F7122	4.69	4.31	3.83
AGN200A4H	4.5	145	140	83F7125	4.59	4.22	3.75
AGN200A12	12	1.028	140	83F7126	4.82	4.42	3.93
AGN20012	12	1.028	140	83F7123	4.69	4.31	3.83
AGN200A12Z	12	1.028	140	10C3259	4.82	4.42	3.93
AGN20024	24	2.504	230	83F7124	5.44	5.00	4.44
1 COIL LATCHING TYPE RELAYS							
AGN2104H	4.5	202.5	140	10C3332	4.62	4.24	3.77
AGN210A12	12	1.44	100	10C3303	5.02	4.61	4.10
HIGH SENSITIVITY SINGLE SIDE STABLE TYPE RELAYS							
AGN2604H	4.5	202.5	100	09R2870	6.05	5.55	4.93

(31773)

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(196546)

2A SENSITIVE MINIATURE PC BOARD RELAYS

RoHS Compliant Available

Panasonic

- High voltage breakdown: 1500V FCC surge between contacts 1000VAC between open contacts (500VAC for **DS1E-S series**)
- Switching power: 60W, 1VA
- Switching voltage: 220VDC, 250VAC

Applications include telecommunication equipment, office, security equipment and measuring instrumentation. Amber seal. Ambient temperature: –40°C to +70°C. Dimension: SPDT .386"H x .590"W x .390"D, DPDT .366"H x .787"W x .390"D, 4PDT .386"H x 1.387"W x .390"D.

SPDT

DPDT

SINGLE SIDE STABLE

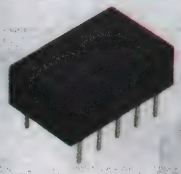
Mfg. Part No.	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Coil Power (mW)	Stock No.	Price Each 1-24	25-49	50-99
DS1E-M-DC5V	SPDT	5	62.5	400	64K3106	6.21	5.70	5.07
DS1E-M-DC12V	SPDT	12	360	400	64K3105	6.29	5.77	5.13
DS1E-M-DC24V	SPDT	24	1440	400	46F5598	6.29	5.77	5.13
DS1E-S-DC5V	SPDT	5	125	200	64K3108	8.88	8.15	7.25
DS1E-S-DC9V	SPDT	9	405	200	46F5608	8.29	7.61	6.76
DS1E-S-DC12V	SPDT	12	720	200	64K3107	8.88	8.15	7.25
DS1E-S-DC24V	SPDT	24	2880	200	46F5610	8.67	7.96	7.07
DS1E-S-DC48V	SPDT	48	11520	200	92B3292	10.92	10.02	8.91
DS2E-S-DC5V	DPDT	5	125	200	46F5628	5.99	5.50	4.89
DS2E-S-DC6V	DPDT	6	180	200	64K3120	5.59	5.13	4.56
DS2E-S-DC9V	DPDT	9	405	200	64K3121	5.59	5.13	4.56
DS2E-S-DC12V	DPDT	12	720	200	64K3115	5.99	5.50	4.89
DS2E-S-DC24V	DPDT	24	2880	200	64K3116	5.92	5.43	4.83
DS2E-S-DC48V	DPDT	48	11520	200	64K3118	7.58	6.95	6.18
2-COIL LATCHING								
DS1E-ML2-DC5V	SPDT	5	69.4	360	46F5600	6.56	6.02	5.35
DS1E-ML2-DC12V	SPDT	12	400	360	46F5603	6.56	6.02	5.35
DS1E-SL2-DC12V	SPDT	12	800	180	46F5614	9.45	8.67	7.71
DS2E-SL2-DC5V	DPDT	5	139	180	46F5634	6.63	6.09	5.41
DS2E-SL2-DC6V	DPDT	6	200	180	46F5635	7.02	6.44	5.73
DS2E-SL2-DC12V	DPDT	12	800	180	46F5637	7.11	6.52	5.80
DS2E-SL2-DC24V	DPDT	24	3200	180	46F5638	6.94	6.37	5.66

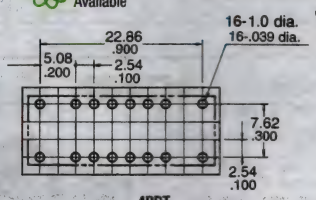
(3678)

1A LOW-PROFILE HIGH-SENSITIVITY RELAYS

RoHS Compliant Available

Panasonic





4PDT

Polarized units. Ambient temperature: –40°C to +70°C. Maximum switching power: 30W, 62.5VA. Withstand 1500V surge.Dimensions in inches (mm): DPDT: 0.280(7.1)H x 0.354(9)W x 0.551(14)L; 4PDT: 0.197(5)H x 0.354(9)W x 1.051(26.7)L. Sealed construction allows automatic dip-washing. Pre-soldered terminals provide improved solderability in automatic soldering process. UL recognized, CSA certified.

SINGLE-SIDE STABLE, DPDT

Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (Ω)	Power (mW)	Stock No.	Price Each 1-24	25-49	50-99
TQ2-3V	3	64.3	140	73K2455	3.78	3.47	3.08
TQ2-4.5V	4.5	144.6	140	64K3199	3.83	3.51	3.12
TQ2-5V	5	178	140	64K3200	3.88	3.56	3.16
TQ2-12V	12	1.028	140	64K3197	3.83	3.51	3.12
TQ2-24V	24	2.88	200	64K3198	4.61	4.23	3.76
2-COIL LATCHING, DPDT							
TQ2-L2-3V	3	45	200	64K3194	4.80	4.41	3.92
TQ2-L2-5V	5	125	200	64K3195	4.52	4.15	3.69
TQ2-L2-12V	12	720	200	64K3192	4.52	4.15	3.69
TQ2-L2-24V	24	1.92	300	64K3193	5.13	4.71	4.18
1-COIL LATCHING, DPDT							
TQ2-L-5V	5	250	100	64K3191	4.61	4.23	3.76
TQ2-L-12V	12	1.44	100	64K3190	4.61	4.23	3.76

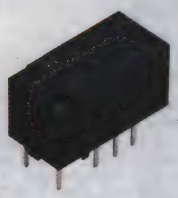
(3641)

LOW-SIGNAL RELAYS

2A PC BOARD RELAYS

RoHS Compliant Available

Panasonic



- DPDT contacts
- Breakdown voltage between contacts and coil: 2000V
- Outstanding surge resistance

Small in size, **TX series** relays have DPDT contacts. Contact material: gold-clad silver alloy. Nominal switching capacity: 2A @ 30VDC. Initial contact resistance, max.: 100mΩ. **TX series** relays are high-capacity relays with high surge voltage and high breakdown voltage.**TXS series** are small polarized relays with high sensitivity of 50mW. All are UL recognized, CSA certified. 1 and 2 coil latching versions also available *go online or call.*

THRU-HOLE, SINGLE-SIDE STABLE

Mfg. Part No.	Carry Current (A)	Coil Voltage (VDC)	Coil Current (mA)	Coil Resist. (Ω)	Stock No.	Price Each 1-24	25-49	50-99
● TX2-4.5V	2	4.5	31	145	64K3216	4.04	3.71	3.30
● TX2-5V	2	5	28.1	178	67K1296	4.10	3.76	3.34
● TX2-12V	2	12	11.7	1.028	67K1295	4.04	3.71	3.30
● TX2-24V	2	24	5.8	4.114	64K3215	4.84	4.44	3.95
● TX2-L-5V	2	5	20	250	11C0371	4.49	4.12	3.66
THRU-HOLE, 2-COIL LATCHING								
● TX2-L2-5V	2	5	40	125	64K3214	5.07	4.66	4.14
● TX2-L2-12V	2	12	16.7	720	64K3213	4.77	4.38	3.89
SURFACE MOUNT, SINGLE-SIDE STABLE								
● TXD2SA-5V	2	5	40	125	64K3211	5.05	4.63	4.12
● TX2SA-3V	2	3	46.7	64.3	11C0450	3.91	3.58	3.19
● TX2SA-4.5V-Z	2	4.5	31	145	11C0454	3.91	3.58	3.19
● TXS2-4.5V	1	4.5	11.1	405	69K7661	4.77	4.38	3.89
● TXS2SA-4.5V	1	4.5	11.1	405	11C0346	4.90	4.50	4.00
● TX2SA-5V-X	2	5	28.1	178	11C0460	3.91	3.58	3.19
● TX2SA-5V-Z	2	5	28.1	178	11C0461	3.91	3.58	3.19
● TX2SA-5V	2	5	28.1	178	64K3219	3.91	3.58	3.19
● TX2SA-12V-X	2	12	11.7	1.028	11C0447	4.15	3.81	3.39
● TX2SA-12V-Z	2	12	11.7	1.028	11C0448	3.91	3.58	3.19
● TX2SA-12V	2	12	11.7	1.028	64K3217	4.10	3.76	3.34
● TXS2SA-12V	1	12	4.2	2.88	64K3212	5.14	4.72	4.19
● TX2SA-24V	2	24	5.8	4.114	64K3218	4.94	4.53	4.03
● TX2SA-24V-Z	2	24	5.8	4.114	03C3542	4.94	4.53	4.03
SURFACE MOUNT, 1-COIL LATCHING								
● TX2SA-LT-1.5V-TH	2	1.5	133.9	11.2	08N1784	5.49	5.04	4.48
● TX2SA-LT-3V-TH	2	3	66.7	45	08N1788	5.82	5.34	4.75
● TX2SA-LT-5V-TH	2	5	40	125	08N1789	5.44	4.99	4.43
● TX2SA-LT-12V-TH	2	12	16.7	720	08N1785	5.82	5.34	4.75
● TX2SA-LT-24V-TH	2	24	8.3	2.88	08N1787	6.81	6.25	5.56

(68545)

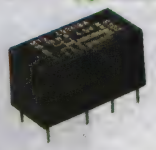
AXICOM SIGNAL RELAYS, FX2 SERIES

NEW

RoHS Compliant Available

TE connectivity

Authorized Distributor



- Slim line 15x7.3mm (.590x.287")
- 2 form C bifurcated contacts (2 CO), switching current 2A
- High sensitivity for low power consumption, 80mW/140mW
- High dielectric characteristic, up to 2100Vrms between open contact
- High surge capability (1.2/50μs and 10/700μs) meets Telcordia GR 1089 and FCC Part 68, up to 2900V between open contacts, up to 6000V between coil and contacts
- High mechanical shock, up to 1500g survival.
- Hermetically sealed (RT V)

Communications equipment, linecard application - analog, ISDN, xDSL, PABX, voice over IP, office and business equipment, measurement and control equipment, consumer electronics, set top boxes, HiFi, medical equipment

Mfg. Part No.	Coil Voltage (VDC)	Coil Resistance (Ω)	Coil Power (mW)	Stock No.	Price Each 1-9
● D3002	12	1.028	140	89C0868	2.54
● D3004	4.5	145	140	07H3844	3.62
● D3010	9	570	140	12H2727	3.37
● D3012	24	2.88	200	04H0674	2.88
● D3021	3	113	80	07H3849	3.72
● D3023	5	313	80	12H9475	4.07
● D3025	9	1.013	80	12H9476	3.68
● D3026	12	1.8	80	07H3851	3.63
● D3027	24	4.114	140	89M0112	4.42
● D3202	12	1.028	140	95C0008	3.48
● D3204	4.5	145	140	07H3860	3.48
● D3205	6	257	140	07H3861	3.44
● D3206	3	64	140	11H5192	3.44
● D3209	5	178	140	07H3862	3.17
● D3210	9	574	140	07H3863	3.44
● D3212	24	2.88	200	09H5565	3.85
● D3213	48	7.68	300	07H3864	4.74
● D3221	3	113	80	09H5566	4.41
● D3222	4.5	353	80	12H2728	4.62
● D3223	5	313	80	07H3865	4.31
● D3225	9	1.013	80	07H3866	4.74
● D3226	12	1.8	80	12H2730	4.10
● D3227	24	4.114	140	07H3867	4.63
● D3228	48	8.882	260	12H2731	5.88
● D3292	4.5	101	200	01X2810	3.54
● D3296	12	720	200	01X2811	3.54

(211448)

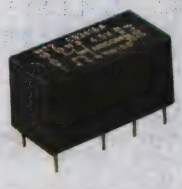
AXICOM SIGNAL RELAYS, FP2 SERIES

NEW

RoHS Compliant Available

TE connectivity

Authorized Distributor



- Telecom/signal relay (dry circuit, test access, ringing)
- Slim line 14x9mm (.551x.354")
- Switching current 2A
- 2 form C bifurcated contacts (2 CO)
- High sensitivity results in low nominal power consumption, 80mW for high sensitive, 140mW for sensitive version
- High mechanical shock resistance, up to 300g functional, up to 1500g survival

Communications equipment linecard application (ringing and test access), PABX, voice over IP, office equipment, measurement and control equipment, automotive equipment as CAN bus, keyless entry, speaker switch, medical equipment, consumer electronics, set top boxes, HiFi.

Mfg. Part No.	Coil Voltage (VDC)	Coil Resistance (Ω)	Coil Power (mW)	Stock No.	Price Each 1-9
● D3041	3	90	100	13H3420	3.61
● D3043	5	250	100	13H3422	3.28
● D3046	12	1.44	100	07H3854	3.65
● D3047	24	3.84	150	07H3855	3.99
● D3063	5	125	200	13H3425	4.21
● D3067	24	1.92	300	15H7980	4.08
● D3241	3	90	100	12H2732	3.68
● D3242	4.5	203	100	07H3868	3.68
● D3243	5	250	100	07H3869	3.99
● D3246	12	1.44	100	07H3872	3.68
● D3247	24	3.84	150	07H3873	3.96
● D3262	4.5	203	100	01X2809	3.96

(211449)

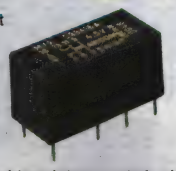
AXICOM 2A PC BOARD RELAYS

NEW

RoHS Compliant Available

TE connectivity

Authorized Distributor



- Standard telecom relay (ringing and test access)
- Slim line 15x7.5mm (.590x.295")
- Max. switching current 5A
- 2 form C bifurcated contacts (2 changeover contacts, 2 CO)
- Immersion cleanable
- High sensitivity for low power consumption 140mW/ 70mW
- Single coil version with surge voltage resistance between contact and coil: 2.5kV (2/10μs) meets the Telcordia Requirement GR-1089,
- 1.5kV (10/160μs) meets FCC Part 68
- Max. switched voltage: 220VDC, 250VAC
- Switching power 60W, 62.5VA

Communications equipment linecard application (ringing and test access), PABX, voice over IP, office equipment, measurement and control equipment, automotive equipment as CAN bus, keyless entry, speaker switch, medical equipment, consumer electronics, set top boxes, HiFi.

P2 RELAYS V23079

Mfg. Part No.	Coil Voltage (VDC)	Coil Resistance (Ω)	Coil Power (mW)	Stock No.	Price Each 1-9
● V23105A5002A201	6	240	150	16H6521	3.06
● V23105A5006A201	9	540	150	97C8762	2.59
● V23105A5302A201	6	180	300	08H5894	3.54
● V23105A5306A201	9	405	300	08H5896	3.06
● V23105A5476A201	12	280	515	08H5897	3.20
● V23105A5477A201	24	1.05	550	09H4927	3.26
● V23105A5478A201	48	4	575	08H5898	3.62
● V23105A5479A201	10	200	500	08H5899	3.19
● V23105A5501A201	5	36	695	37K7233	2.92
● V23105A5502A201	6	70	515	07H1924	2.34
● V23105A5506A201	9	140	580	12H2480	2.97
● V23105A5507A201	48	4	575	08H5901	3.88

(211433)

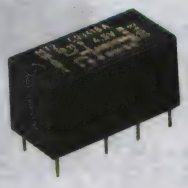
AXICOM 2A PC BOARD RELAYS

NEW

RoHS Compliant Available

TE connectivity

Authorized Distributor



- Standard telecom relay (ringing and test access)
- Slim line 15x7.5mm (.590x.295")
- Max. switching current 5A
- 2 form C bifurcated contacts (2 changeover contacts, 2 CO)
- Immersion cleanable
- High sensitivity for low power consumption 140mW/ 70mW
- Single coil version with surge voltage resistance between contact and coil: 2.5kV (2/10µs) meets the Telcordia Requirement GR-1089,
- 1.5kV (10/160µs) meets FCC Part 68
- Max. switched voltage: 220VDC, 250VAC
- Switching power 60W, 62.5VA

Communications equipment linecard application (ringing and test access), PABX, voice over IP, office equipment, measurement and control equipment, automotive equipment as CAN bus, keyless entry, speaker switch, medical equipment, consumer electronics, set top boxes, HiFi.

P2 RELAYS V23079

Mfg. Part No.	Coil Voltage (VDC)	Coil Resistance (Ω)	Coil Power (mW)	Stock No.	Price Each 1-9
V23079D2001B301	5	178	140	13H3193	3.25
V23079D2006B301	9	578	140	13H3194	2.56
V23079D2008B301	3	64	140	13H3195	2.91
V23079D2011B301	4.5	145	140	13H3196	3.54
V23079E1208B301	3	64	140	08H5838	4.38
V23079E1211B301	4.5	145	140	99W6352	3.16
V23079E1218B301	2.4	41	140	99W6353	3.09
V23079F1101B301	5	357	70	16H4396	4.11
V23079F1108B301	3	128	70	16H4397	3.80
V23079G1005B301	24	4.114	140	96B4203	3.73
V23079G2001B301	5	178	140	99W6354	3.47
V23079G2001X071	5	125	200	08H5839	2.94
V23079G2002B301	6	257	140	16R7893	2.70
V23079G2003X074	12	720	200	99W6355	2.96
V23079G2006B301	9	578	140	16R7894	2.32
V23079G2008B301	3	64	140	08H5841	3.23
V23079G2008X079	3	45	200	99W6356	3.37
V23079G2011B301	4.5	145	140	16R7895	3.23
V23079G2016B301	4	114	140	08H5842	3.23
V23079H1203B301	12	1.029	140	99W6357	3.28
V23079H1205B301	24	4.114	140	16R7897	4.45
V23079H1206B301	9	578	140	16R7898	4.02
V23079H1208B301	3	64	140	16R7899	4.02
V23079J1101B301	5	357	70	99W6358	2.73
V23079J1108B301	3	128	70	16R7901	4.09

(211432)

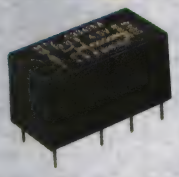
AXICOM 2A PC BOARD RELAYS

NEW

RoHS Compliant Available

TE connectivity

Authorized Distributor



- Standard telecom relay (ringing and test access)
- 2 form C contacts (2 CO, 2 changeover contacts)
- Rated current 2A
- Max. switched voltage: 220VDC, 250VAC

Communications equipment, linecard application – PABX, voice over IP, office and business equipment, measurement and control equipment, consumer electronics, set top boxes, HiFi, medical equipment, automotive Equipment.

MT2 RELAYS

Mfg. Part No.	Coil Voltage (VDC)	Coil Resistance (Ω)	Coil Power (mW)	Stock No.	Price Each 1-9
C93412	12	515	300	07H3831	3.34
C93421	4.5	50	400	13H3418	3.06
C93422	5	63	400	13H3419	2.72
C93424	12	360	400	07H3836	2.32
C93425	24	1.44	400	07H3837	3.43
C93431	24	1.05	550	07H3840	3.42
C93432	12	280	550	16H1018	3.31
C93435	24	2.06	300	16H4583	3.47
C93450	5	45	550	16H6684	3.06
P2 RELAYS					
V23079A1006B301	9	578	140	12H2474	2.38
V23079A2006B301	9	578	140	12H9261	3.32
V23079A2008B301	3	64	140	08H5831	3.09
V23079A2011B301	4.5	145	140	12H9262	3.09

CONTINUED

AXICOM 2A PC BOARD RELAYS (CONT.)

P2 RELAYS

SPAN ERROR	SPAN ERROR	SPAN ERROR	SPAN ERROR	SPAN ERROR	Price Each
V23079B1203B301	12	1.029	140	96B1753	3.75
V23079B1206B301	9	578	140	08H5833	3.91
V23079B1208B301	3	64	140	08H5834	4.08
V23079B1218B301	2.4	41	140	99W6350	3.42
V23079B2208B301	3	64	140	99W6351	3.13
V23079C1101B301	5	357	70	08H5835	3.11
V23079C1103B301	12	2.057	70	08H5836	4.58
V23079C1108B301	3	128	70	15H7770	2.49

(211427)

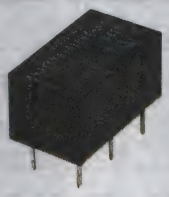
AXICOM 1A MINIATURE SEALED PC BOARD RELAYS

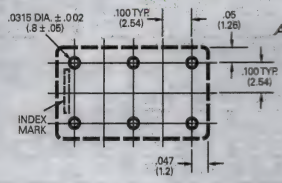
RoHS Compliant Available

TE connectivity

Authorized Distributor

SMD





Relays are designed for compact, high-density mounting. 108.5mm² surface area. Units switch loads from dry circuit to 1A. Contact type: bifurcated, SPDT. Dimensions for thru-hole: 0.138H x 0.272L x 0.512"W max.; pin length = 0.138" max. Suitable for data and communication systems. Expected mechanical life: 1 billion operations. **V23026B1** thru-hole dual-coil latching, **V23026C1** thru-hole single-coil latching and surface mount versions also available; *go online or call.* UL recognized, CSA certified.

Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (Ω)	Nom. Power (mW)	Stock No.	Price Each 1-24	25-49	50-99	100-249
V23026A1001B201	5	370	68	35K3232	5.82	5.15	5.05	3.98
V23026A1002B201	12	2.25	64	36K3721	5.82	5.15	5.05	3.98
V23026A1004B201	24	4.5	128	36K3722	5.64	5.17	4.68	3.69

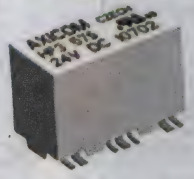
(3353)

RF SIGNAL RELAY HF3 SERIES

RoHS Compliant Available

TE connectivity

Authorized Distributor



Features

- Y-Design
- Rated current: 2A
- Frequency range DC to 3GHz
- Impedance 50Ω or 75Ω
- Small dimensions (14.6x7.2x10mm)
- 1 form C contact (1 changeover contact) SPDT-CO
- Immersion cleanable
- Low power consumption (≤140mW)

Applications

- Cable modems and linecards/ CATV, Tabs
- Measurement and test equipment ATE, satellite / audio / video tuners
- Wireless base stations and antennas
- Switching boards

Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (Ohm)	Coil Power (mW)	Coil Type	Stock No.	Price Each 1-24
HF3 02	4.5	145	140	DC	95M3908	14.98
HF303	5	178	140	DC	14T0461	11.66
HF353	5	178	140	DC	18K4887	9.31
HF393	5	178	140	DC	63R6100	14.39
HF395	9	574	140	DC	14T0457	17.07
HF306	12	1.028	140	DC	14T0462	9.53
HF356	12	1.028	140	DC	48M4468	13.05
HF3 S SERIES RELAYS						
HF3 92S	4.5	145	140	DC Bistable	14T0468	30.65
HF3 52	4.5	145	140	DC	14T0458	9.03
HF3 53S	5	178	140	DC Monostable	14T0466	38.14
HF3 93S	5	178	140	DC Bistable	14T0467	30.65
HF6 73	5	357	70	DC Bistable	14T0459	52.39
HF3 56S	12	1.028	140	DC Monostable	14T0470	33.88
HF3 57S	24	4.114	140	DC Monostable	14T0465	37.81
HF6 SERIES RELAYS						
HF301	3	64	140	DC	14T0460	11.04
HF6 53	5	178	140	DC Monostable	14T0463	40.15
HF6 56	12	1.028	140	DC Monostable	14T0464	40.15
HF6 96	12	1.028	140	DC Bistable	14T0469	44.14

(192086)

AXICOM 2A PC BOARD RELAYS

SMD RoHS Compliant Available

TE connectivity

Authorized Distributor

- Thru-hole and Gullwing SMT
- Siver nickel contacts
- DPDT
- Plastic sealed case
- Dimensions (inches): 0.39Hx 0.57L x 0.28W
- Pin length: 0.122″ max.

Surface Mount

Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (Ω)	Stock No.	Price Each 1-24	25-49	50-99	100-249
STANDARD COIL — NONLATCHING, THRU-HOLE							
● V23079A1001B301	5	178	22C6912	3.43	3.00	2.72	2.16
● V23079A1003B301	12	1.029	36K7697	2.92	2.58	2.47	2.28
● V23079A1005B301	24	4.114	35K5063	2.74	2.49	2.28	2.11
OVERMOLDED COIL — NONLATCHING, THRU-HOLE							
● V23079A2001B301	5	178	93B0726	2.64	2.55	2.46	1.94
STANDARD COIL — DUAL-COIL LATCHING, THRU-HOLE							
● V23079B1205B301	24	4.114	35K2062	3.71	3.57	3.41	2.70
● V23079D1005B301	24	4.114	36K2088	4.52	3.97	3.58	2.84
OVERMOLDED COIL — NONLATCHING, SURFACE MOUNT							
● V23079D1003B301	12	1.029	36K2087	2.66	2.42	2.22	2.05
● V23079D2003B301	12	1.029	93B0800	3.13	2.78	2.52	1.99
STANDARD COIL — DUAL-COIL LATCHING, SURFACE MOUNT							
● V23079E1203B301	12	1.029	36K2089	4.13	3.75	3.46	3.19

(3351)

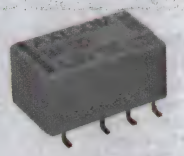
AXICOM 2A SLIMLINE LOW-PROFILE LOW-SIGNAL PC BOARD RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Thru-hole, SMT gullwing and SMT J-leg
- Contact material: palladium-ruthenium, gold covered
- Reflow solder capable to 260°C for SMT and 265°C for thru hole
- Non-Latching
- Meets Bellcore GR 1089, FCC Part 68 and ITU-T K20
- Immersion cleanable IP67, plastic sealed case
- Low.power consumption
- DPDT bifurcated contacts
- Max. switched voltage: 220VDC, 250VAC
- Max. switched power: 60W DC or 62.5VA AC.
- Expected mechanical life: 100 million operations



SMT Gullwing

For applications in telecommunications, office automation, consumer electronics, medical equipment, measurement and control equipment Capacitance: Between Open Contacts: 1pF, max. Between Coil and Contacts: 2pF, max. Between Poles: 2pF, max. RF Characteristics: Isolation at 100 / 900 MHz: -37.0 db / -18.8 db. Insertion loss at 100 / 900 MHz: -0.03 db / -0.33 db, V.S.W.R at 100 / 900 MHz: 1.06 / 1.49. Initial Dielectric Strength: Between Open Contacts: 1000 Vrms for 1 minute. Between Coil and Contacts: 1800 Vrms for 1 minute. Between Poles: 1000 Vrms for 1 minute. Temperature Range: -55°C to +85°C. Maximum Allowable Coil Temperature: 125°C. Continuous Duty Cycle.

Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (Ω)	Coil Power (mW)	Termination	Stock No.	Price Each 1-24	25-49
THT STANDARD NON-LATCHING 1 COIL							
● IM00TS	1.5	16	140	Through Hole	19K8726	3.11	2.82
● IM03TS	5	178	140	Through Hole	19K8735	3.85	3.37
● IM05TS	9	579	140	Through Hole	19K8741	3.11	2.82
● IM07TS	24	2.88	200	Through Hole	19K8747	3.71	3.18
● 2-1462039-8	4.5	405	50	Through Hole	41T2137	4.18	3.79
● 9-1462038-8	4.5	145	140	Through Hole	41T2140	3.39	3.07
SMT J-LEADS NON-LATCHING 1 COIL							
● IM01JR	3	64	140	SMD	19K8728	2.88	2.77
● IM02JR	4.5	145	140	SMD	19K8731	2.88	2.77
SMT GULL WINGS NON-LATCHING 1 COIL							
● IM01GR	3	64	140	SMD	19K8727	4.13	3.63
● IM02GR	4.5	145	140	SMD	19K8730	2.45	2.28
● IM06GR	12	1.029	140	SMD	19K8742	5.32	5.01
● IM06CGR	12	1.028	140	SMD	16R5632	3.72	3.26
● IM07GR	24	2.88	200	SMD	19K8745	3.67	3.51

(83938)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

CII 2A MIL SPEC PC BOARD RELAYS

TE connectivity

Authorized Distributor

- Hermetically sealed
- Up to 5A switching
- High shock and vibration ratings
- Excellent RF switching
- DPDT contacts

Pin

HFW SERIES HALF-SIZE HIGH PERFORMANCE RELAYS

Mfg. Part No.	MIL SPEC*	Coil Voltage (VDC)	Terminal Type	Stock No.	Price Each 1-9	10-49
HFW1201G01M	M39016/6-116M	12	Through Hole	20M7538	93.84	88.32
HFW1201D00	...	26.5	Through Hole	83R0234	114.26	107.54
HFW5A1106K00	...	26.5	Solder Hook	83R0236	169.97	...
HFW1201K45P	M39016/6-109P	26.5	Through Hole	80K7715	99.30	96.54
HFW1131K04M	M39016/6-107M	26.5	Solder Hook	20M7524	62.42	60.69
HFW1130K06	M39016/6-104L	26.5	Solder Hook	40P4467	77.27	73.15
HFW1201K00	...	26.5	Through Hole	96B1882	103.39	100.31
HFW1201K45	M39016/6-109L	26.5	Through Hole	20M7571	72.34	65.77
HFW1201K45M	M39016/6-109M	26.5	Through Hole	78H2224	83.26	76.66
HFW1230K06	M39016/6-105L	26.5	Through Hole	83R0235	79.45	73.15
HFW1201K46	M39016/6-209L	26.5	Through Hole	90B2919	83.38	69.08
HFW1201K46M	M39016/6-209M	26.5	Through Hole	78H2234	87.83	80.93
HFW4A1201K00	...	26.5	Through Hole	63K9796	141.58	130.47
HMB1130K01M	M39016/22-004M	26.5	Through Hole	96M0468	130.79	...
HMB1201K01M	M39016/22-009M	26.5	Through Hole	83R0237	129.52	122.22
HMS1201S111P	M39016/44-035P	26.5	Through Hole	83R0238	177.79	171.87

***L suffix** denotes M39016 qualified, level L; **M suffix** denotes M39016 qualified, level M.

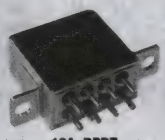
(89688)

CII 5-25A MIL SPEC PC BOARD RELAYS

TE connectivity

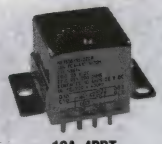
Authorized Distributor

5A, DPDT



10A, DPDT

5A, 4PDT



10A, 4PDT

- Hermetically sealed
- All welded construction
- Balanced force
- Permanent magnet drive
- Coil voltage: 28VDC

Polarized single-side stable design. Flux from a permanent magnet provides the armature holding force in the deactivated state. Flux path is switched and combined with the coil flux in the operated state which results in increased contact pressure in both states over that of a spring return non-polar design. Pin terminals except **mfg. part no. FCA-210-0923M** which has solder hook terminals. Bottom mount. MIL-R-83536 qualified.

Mfg. Part No.	MIL SPEC	Contacts	Carry Current (A)	Mounting Type	Stock No.	Price Each 1-9
FCB-205-0224M	M83536/2-024M	DPDT	5	Panel, Socket	20M7450	158.45
FCA-125-3	M6106/19-003	SPDT	25	Quick Connect	83R0225	166.16
FCA-125-5	M6106/19-005	SPDT	25	Quick Connect	79R1724	173.64
FCA-125-9	M6106/19-009	SPDT	25	Flange	83R0226	163.93
FCA-125-19	M6106/19-019	SPDT	25	Flange	83R0224	185.29
FCA-150-CY4	...	SPST-NO	50	Flange	83R0227	641.61
FCA-210-1024L	...	DPDT	10	Panel	83R0228	187.13
FCA-210-0923M	M83536/9-023M	DPDT	10	Panel	20M7002	171.93
FCA-210-0926M	M83536/9-026M	DPDT	10	Flange	78R5831	165.96
FCA-210-1027M	M83536/10-027M	DPDT	10	Panel	83R0229	152.64
FCB-205-0127M	M83536/1-027M	DPDT	5	Panel, Socket	78K6665	142.06
FCB-205-0222M	M83536/2-022M	DPDT	5	Panel, Socket	83R0232	159.91
FCB-205-0227M	M83536/2-027M	DPDT	5	Panel, Socket	83R0233	158.28
FCA-325-BZ4	...	3PDT	25	Panel, Socket	10R0824	261.12
FCB-405-0622M	M83536/6-022M	4PDT	5	Panel, Socket	20M7463	175.35
FCA-410-1522M	M83536/15-022M	4PDT	10	Panel, Socket	83R0231	155.63
FCA-410-1622M	M83536/16-022M	4PDT	10	Panel, Socket	21K5500	173.29
FCA-210-1026M	M83536/10-026M	DPDT	10	Panel	28M8759	159.58
FCA-325-AV8	...	3PDT	25	Panel	41T2118	302.40
FCA-325-CX2	...	3PDT	25	Panel	57K8641	251.69
FCA-410-1521M	M83536/2-024M	4PDT	10	Panel	67K3446	224.28
FCB-205-0119M	....	DPDT	5	Panel, Socket	41T2119	182.23

(89687)

CII 10A MIL SPEC PC BOARD RELAYS

Socket Mount

TE connectivity — Authorized Distributor

- Hermetically sealed
- Up to 10A switching
- High shock and vibration ratings
- DPDT contacts
- Coil voltage: 26.5VDC
- Coil resistance: 300Ω
- Coil power: 2341mW

Contact rating: 10A. Solder hook terminals except for **mfg. part no. B07D634BC2-0051** which has pin terminals. MIL-R-5757/23 qualified.

Mfg. Part No.	MIL SPEC	Mounting Type	Stock No.	Price Each 1-4	5-9	10+
B07D634BC2-0051	M5757/23-003	Through Hole	81C7448	181.10	176.07	172.47
B07D692BZ2-0011	M5757/23-001	Panel	16M1120	190.28	161.34	157.26
B07D932BC2-0348	M5757/23-031	Panel	81H0443	214.20	207.07	189.93
B07D034BB2-0120	M5757/23-001	Through Hole	83R0223	239.51	...	...

(89685)

PHOTOVOLTAIC RELAYS

RoHS Compliant Available — International IOR Rectifier

Fig. 1 8-Pin DIP

Fig. 2 14-Pin DIP

Fig. 3 6-Pin DIP

Fig. 4 8-Pin DIP

Photovoltaic relays switch general-purpose analog signals. Four terminal devices with an LED input which provides a photo-isolated signal for actuating the power ICs, which form the solid-state output contacts. 0.2µV maximum thermal offset voltage @ 5mA control. **"T" suffix** in mfg. part no. indicates Tape and Reel packaging.

Fig. 5 Surface Mount (Typical)

AC AND DC LOAD

Dielectric Strength Input/Output = 4000 V_{RMS}

Mfg. Part No.	Fig.	Oper. Volt. (V) (+/-)	Load Cur. Max. (mA) AC	DC	Off-St. Res. Min. (Ω)	Pkg.	Stock No.	Price Each 1-9
PVA1352NPBF	1	100/100	375	375	10^8	8-DIP	84K8939	7.26
PVA1354NPBF	1	100/100	375	375	10^8	8-DIP	84K8941	8.65
PVA3354NPBF	1	300/300	150	150	10^8	8-DIP	84K8952	8.61
PVAZ172NPBF	1	60/60	700	1000	10^8	8-DIP	84K8936	11.82
PVAZ172NSPBF	...	60/60	700	1000	10^8	8-DIP	84K8938	11.82
PVG612APBF	3	60/60	1000	2000	10^8	6-DIP	84K8965	10.81
PVG612SPBF	...	60/60	1000	2000	10^8	6-DIP	84K8970	7.09
PVG612ASPBF	...	60/60	2000	4000	...	6-DIP	84K8967	11.07
PVG612PBF	5	60/60	2000	4000	...	6-DIP	84K8968	7.82
PVN012APBF	3	20/20	2500	4500	.16 x 10^8	6-DIP	19M4584	11.18
PVN012PBF	3	20/20	2500	4500	.16 x 10^8	6-DIP	84K8986	7.67
PVN012SPBF	...	20/20	2500	4500	.16 x 10^8	6-DIP	84K8988	8.04
PVN012S-TPBF	...	20/20	2500	4500	.16 x 10^8	6-DIP	84K8987	8.06
PVN013SPBF	...	20/20	2500	4500	NA	6-DIP	84K8991	11.15
PVT312PBF	3	250/250	190	320	2.5 x 10^8	6-DIP	84K9006	3.52
PVT312LPBF	3	250/250	190	320	2.5 x 10^8	6-DIP	84K9004	3.30
PVT312LSPBF	...	250/250	190	320	2.5 x 10^8	6-DIP	19M4587	3.30
PVT312SPBF	...	250/250	190	320	2.5 x 10^8	6-DIP	19M4588	3.52
PVT322PBF	5	250/250	190	320	2.5 x 10^8	8-DIP	84K9011	6.34
PVT322APBF	4	250/250	170	170	2.5 x 10^8	8-DIP	84K9008	11.96
PVT322ASPBF	...	250/250	170	170	2.5 x 10^8	8-DIP	84K9010	12.28
PVT322SPBF	...	250/250	170	170	2 x 10^8	8-DIP	84K9013	6.86
PVT412PBF	3	400/400	140	210	4 x 10^8	6-DIP	84K9020	3.22
PVT412SPBF	...	400/400	140	210	4 x 10^8	6-DIP	84K9022	3.29
PVT422SPBF	...	400/400	120	230	3.2 x 10^8	8-DIP	84K9027	6.24
PVU414SPBF	5	400/400	140	210	10^{10}	6-DIP	84K9030	7.91
PVX6012PBF	2	400/400	1	1	0.4 x 10^8	14-DIP	84K9031	14.57

DC ONLY LOAD

Dielectric Strength Input/Output = 4000 V_{RMS}

PVD1352NPBF	1	100/100	550	550	10^{10}	8-DIP	84K8957	7.94
PVD1354NPBF	1	100/100	550	550	10^{10}	8-DIP	84K8959	8.72
PVDZ172NPBF	...	60/1500	1000	1500	10^8	8-DIP	84K8954	9.38
PVDZ172NSPBF	...	60/1500	1000	1500	10^8	8-DIP	84K8956	9.56

(3625)

PHOTOVOLTAIC ISOLATORS

RoHS Compliant Available — International IOR Rectifier

Ideally suited for applications requiring high-current and/or high-voltage switching with optical isolation between the low-level driving circuitry and high-energy or high-voltage load circuits.The **series PVI** photovoltaic isolator generates an electrically isolated DC voltage upon receipt of a DC input signal. It is capable of directly driving gates of power MOSFETs or IGBTs. The **PVI series** is available in thru-hole (N-Ending) and surface mount (NS-Ending). The PVI5033R photovoltaic isolator is a dual-channel, opto-isolated driver capable of directly driving gates of power MOSFETs or IGBTs. The PVI5033R series is available in thru-hole (R-Ending), surface mount (RS-Ending), and surface mount tape and reel (RS-Tending); *go online or call for tape and reel version.*

Mfg. Part No.	Number of Outputs	Output Volt. (VDC)	Short Circuit Current (µA)	Nom. Control Current (mA)	Dielectric Strength Input/Output (V_{RMS})	Stock No.	Price Each 1-9
PVI1050NPBF	2	5	5	10	2500	84K8974	7.94
PVI1050NSPBF	2	5	5	10	2500	84K8976	8.25
PVI5033RSPBF	5	5	5	5	3750	20M6178	14.69
PVI5080NSPBF	1	5	8	10	4000	84K8985	5.15

(3626)

SOLID-STATE PCB MOSFET RELAYS

RoHS Compliant Available — OMRON ELECTRONIC COMPONENTS

- low output Capacitance ON resistance
- Forward current: 7.5mA
- Isolation Voltage: 500 Vrms
- Package Case: USOP4
- Operating temperature: -40°C to +85°C

G3VM SERIES MOSFET RELAYS

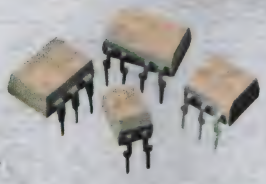
Mfg. Part No.	Load Current (mA)	Load Voltage Max (V)	On State Res. Max (ohm)	Stock No.	Price Each 1-24
G3VM-41PR12(TR05)	100	40	20	47W4198	9.26
G3VM-41PR10(TR05)	120	40	14	47W4193	9.08
G3VM-61PR1(TR05)	120	60	15	47W4204	12.80
G3VM-41PR11(TR05)	140	40	10	26W7541	12.06
G3VM-21PR10(TR05)	200	20	5	47W4188	11.64
G3VM-51PR(TR05)	300	50	1.5	47W4201	11.79
G3VM-21PR11(TR05)	900	20	0.22	45W6864	11.51

(210242)

LOW-SIGNAL SOLID-STATE MOSFET PC BOARD RELAYS

RoHS Compliant Available — OMRON ELECTRONIC COMPONENTS

- Extremely low input current
- Ideal for microprocessor and logic switching relays
- Input voltage: 1.15V
- Forward current: 50mA
- Reverse voltage: 5V
- Reverse current: 10µA
- Operating temperature: -40°C to +85°C
- New ultra sensitive, current/low on resistance options



Complete part number is not printed on the part.

Mfg. Part No.	Output Voltage (V)	Contacts	Load Current (mA)	Package	Stock No.	Price Each 1-24
G3VM-21GR	20	SPST-NO	160	4-SMT	04M9618	3.68
G3VM-21GR1	20	SPST-NO	300	4-SOP	84H0207	4.62
G3VM-41GR5	40	SPST-NO	300	4-SOP	30K6537	3.68
G3VM-21LR1	20	SPST-NO	450	4-SSOP	49H8382	11.11
G3VM-61ER	60	SPST-NO	2500	...	04M9688	10.70
G3VM-V	60	SPST-NO	300	6-DIP	83F5367	2.72
G3VM-VF	60	SPST-NO	300	6-SMT	69H0094	2.72
G3VM-61H1	60	SPST-NO	400	6-SOP	04M9695	2.71
G3VM-61A1	60	SPST-NO	500	...	73K1860	2.78
G3VM-61B1	60	SPST-NO	500	...	04M9682	2.82
G3VM-61D1	60	SPST-NO	500	...	21K5341	2.82
G3VM-61E1	60	SPST-NO	500	...	41J2925	2.81
G3VM-62J1	60	DPST-NO	400	...	73J7546	6.26
G3VM-62C1	60	DPST-NO	500	...	73K1861	4.37
G3VM-21HR	20	SPST-NO	2000	6-SOP	26R9862	13.67
G3VM-81HR	80	SPST-NO	2500	6-SOP	45P5527	13.67
G3VM81G1	80	SPST-NO	350	4-SOP	79J5854	6.41
G3VM-2	350	SPST-NO	120	4-DIP	83F5361	2.82
G3VM-3	350	SPST-NO	120	6-DIP	83F5363	2.67
G3VM-351A	350	SPST-NO	120	...	64J8803	2.35
G3VM-351D	350	SPST-NO	120	...	04M9631	2.39
G3VM-3F	350	SPST-NO	120	6-DIP	83F5364	2.71
G3VM-351G	350	SPST-NO	110	...	04M9633	2.97
G3VM-351G1	350	SPST-NO	80	4-SOP	74R7439	3.79
G3VM-353A1	350	SPST-NC	150	...	04M9639	3.43
G3VM-401D	400	SPST-NO	120	...	04M9655	2.42

➤ CONTINUED ➤

LOW-SIGNAL SOLID-STATE MOSFET PC BOARD RELAYS (CONT.)

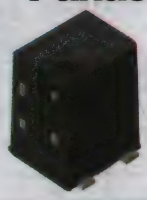
Mfg. Part No.	Output Voltage (V)	Contacts	Load Current (mA)	Package	Stock No.	Price Each 1-24
● G3VM-61G2	60	SPST-NO	320	4-SOP	74R7440	3.14
● G3VM-21GR1	20	SPST-NO	160	4-SOP	84H0207	4.62

(34092)

AQY VSSOP PHOTOMOS RELAYS

RoHS Compliant Available

Panasonic



- On resistance (Typ.): 0.8 ohm
- Output capacitance (Typ.): 14 pF
- LED forward current: 50mA
- LED reverse voltage: 5V
- Peak forward current: 1A
- Power dissipation: 75mW
- Ambient temperature: -40°C to +85°C

4.6 mm2 mounting area achieved. Approx. 29% less than previous product (SON type). Contributes to the miniaturization of instruments and higher density mounting.

Mfg. Part No.	Load Voltage	Load Current (mA)	Description	Stock No.	Price Each 1-24
● AQY221R2TW	40	250	Picked from the 1 and 4-pin side	52T9844	13.51
● AQY221R2TY	40	250	Picked from the 3 and 3-pin side	52T9845	13.51

(196586)

POWER PHOTOMOS RELAYS

RoHS Compliant Available

Panasonic

- Contacts: SPST
- Output power: 1.6W for AC/DC types, 1.35W for DC types only
- PC board layout is simplified
- No restriction on mounting direction

High capacity PhotoMOS relay in a compact and slim 4-pin SIL. Feature extremely low on resistance and extremely low closed circuit offset voltage to enable control of low-level analog signals without distortion. Eliminate the need for a counter electromotive protection diode in the drive circuit on the input side and the need for a power supply to drive the power MOSFET. Outside dimensions: 21mm(L) x 12.5mm (H) x 3.5mm (D).

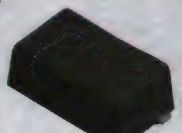
Mfg. Part No.	Output Rating: Load Voltage (VAC)	Output Rating: Load Voltage (VDC)	Output Rating: Load Current (A)	Stock No.	Price Each 1-24	25-49	50-99	100-499
● AQZ102	...	60	4.0	52F5584	12.08	11.08	9.84	8.37
● AQZ105	...	100	2.6	10C4041	12.08	11.08	9.84	8.37
● AQZ202	60	60	3.0	95F6437	12.94	11.87	10.54	8.97
● AQZ205	100	100	2.0	95F6438	12.94	11.87	10.54	8.97
● AQZ207	200	200	1.0	64K3058	13.26	12.16	10.81	9.19
● AQZ204	400	400	0.5	95F6440	12.94	11.87	10.54	8.97
● AQZ262	60	60	6	64K3059	39.45	36.19	32.15	27.34
● AQZ404	400	400	0.5	64K3060	16.23	14.89	13.23	11.25
● AQZ192	...	60	10	52W9151	46.76	42.90	38.11	32.40
● AQZ197	200	200	5.0	17X0513	43.14	39.57	35.16	29.89

(3325)

RF PHOTOMOS-SON RELAYS

RoHS Compliant Available

Panasonic



- C x R 5, C x R 10 versions avaible
- 4-pin SSOP package
- 40% less mounting space than 4-pin SOP packages
- Lower output capacitance and on resistance
- New flat lead terminal to reduce mounting space and improve output signals
- High-speed switching (0.02ms)
- SPST contacts
- Output capacitance: 1pF

Typical applications include test equipment, board testers, medical equipment, and multipoint recorders. Turn-on and turn-off time is 0.02ms. Power dissipation = 75mW (in), 250mW (out). Operating temperature = -40°C to +85°C. Dimensions: (4.45L x 2.65W x 1.80H)mm. Relays are packaged as each. For tape & reel picked from the 1-4 pin side, add **suffix "Y"** to mfg. part no.; for tape & reel picked from the 2-3 pin side, add **suffix "W"** to mfg. part no. **Reel qty: 3500**. For availability, *go online or call*

C x R 5

Mfg. Part No.	ON Resist. (Ω)	Load Voltage (VAC)	Load Current (mA)	Stock No.	Price Each 1-24	25-49
● AQY221R2V	0.75	40	250	94C1062	11.84	10.93
● AQY221R2SZ	1.250	40	250	11N2829	4.59	4.38
GU SOP4 HIGH_CAPACITY VOLTAGE SENSITIVE						
● AQY212FG2S	0.50	60	1250	09R2883	8.45	7.80

➤ CONTINUED ➤

RF PHOTOMOS-SON RELAYS (CONT.)

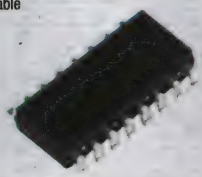
Mfg. Part No.	ON Resist. (Ω)	Load Voltage (VAC)	Load Current (mA)	Stock No.	Price Each 1-24	25-49
GU 4-DIP CURRENT LIMITING						
● AQY210HL	250	350	120	03C3471	6.81	6.29
GU 4-SOP CURRENT LIMITING						
● AQY210LS	250	350	120	31C7047	6.70	6.18
● AQY210SX	250	350	120	10C4004	5.68	5.24
CxR5 MICRO-MINIATURE SON PACKAGE						
● AQY221N3M	7.50	25	150	72R4461	10.23	9.45
● AQY221N3MY	7.50	25	150	11N2822	5.35	5.26
CxR10 MICRO-MINIATURE SON PACKAGE						
● AQY221N2M	12.50	40	120	72R4460	9.08	8.38
● AQY221R2M	1.25	40	250	72R4462	10.26	9.47
GU-E DIP 4-PIN						
● AQY210EHA	25	350	130	07C7193	3.63	3.35
● AQY214EH	35	400	120	11N2799	3.19	2.94
● AQY280EH	250	350	130	11N2838	1.83	1.69
● AQY284EH	350	400	120	11N2850	1.99	1.84
● AQY410EH	250	350	130	11N2857	5.00	4.62
● AQY414EH	350	410	120	10C4031	4.71	4.35
● AQY414EHA	350	410	120	10C4032	5.00	4.62
GU-E SOP 4-PIN						
● AQY280S	250	350	120	11N2842	1.60	1.47
● AQY284S	350	400	100	11N2854	1.92	1.78
● AQY410S	250	350	120	09J9863	6.52	6.02
● AQY414S	350	400	100	10C4035	5.92	5.47
DP 4-DIP HIGH CAPACITY						
● AQY272A	0.180	60	2	50B8975	14.11	13.03
● AQY275A	0.340	100	1.3	10C4024	14.94	13.79
● AQY277A	1.10	200	650	10C4028	14.76	13.62

(83582)

RF 4-CHANNEL PHOTOMOS RELAYS

RoHS Compliant Available

Panasonic



- 4PST contacts
- CxR: 33.4
- Miniature 16-pin SOP package
- Low-level off state leakage current
- Controls low-level analog signals
- 50% space savings over two 8-pin 2-channel relays
- Low capacitance between output terminals ensure high response speed

PhotoMOS relays feature extremely low closed-circuit offset voltage to enable control of low-level analog signals without distortion. Applicable for 4PST use, as well as 4 independent SPST. Typical applications: Telephone and data communication equipment, measuring equipment, medical equipment and industrial equipment. Dimensions: 10.37W x 4.4L x 2.1H mm. .408W x .173L x .083H inches. **Packaging is tape & reel.**

Mfg. Part No.	On-Resist. (Ω)	Load Voltage (V)	Load Current (mA)	Stock No.	Tape Cut Price Each 1-24	25-49	50-99
● AQS221FR2S	1.25	40	160	09R2882	33.86	31.01	27.69
● AQS221FN2S	12.50	40	60	09R2881	31.27	28.64	25.57
● AQS225R2S	21.00	80	70	32M6593	27.54	25.22	22.52

(84485)

PHOTOMOS RELAYS

RoHS Compliant Available

Panasonic

6-DIP Thru-Hole | 6-DIP SMT | 4-SOP | 8-DIP SMT

Directly drive a power MOSFET. Control current with low level input signals. Low thermal electromotive force: approx. 1μV. LED forward current: 50mA. Terminal thickness: 0.25mm. Operating temperature range: –20°C to +80°C. I/O isolation voltage: 1,500VAC. 0.300" (7.62) row spacing. **Packaged in 50-piece tubes. Tape & reel also available,** *go online or call.*

SPST-NO, 1-CHANNEL — 8-DIP Thru-Hole

Mfg. Part No.	Pack-age	Mounting Type	VAC/VDC	On Resist. (Ω)	Output Power (mW)	Stock No.	Price Each 1-24	25-49	50-99
● AQV101	6-DIP	Thru-Hole	40	0.5	360	94F8717	7.86	7.22	6.42
● AQV101A	6-DIP	SMD	40	0.5	360	99F9479	7.43	6.82	6.06

➤ CONTINUED ➤

PHOTOMOS RELAYS (CONT.)

Mfg. Part No.	Package	Mounting Type	VAC/VDC	On Resist. (Ω)	Output Power (mW)	Stock No.	Price Each 1-24	25-49	50-99
AQV202	6-DIP	Through Hole	60	1.4	360	98F7376	8.85	8.13	7.22
AQV251	6-DIP	Thru-Hole	40	1	360	93F6298	6.74	6.19	5.50
AQV201A	6-DIP	SMT	40	1	350	50F4049	8.36	7.68	6.82
AQV251A	6-DIP	SMT	40	1	360	95F6427	6.83	6.27	5.57
AQV212	6-DIP	Thru-Hole	60	2.5	500	01F1112	5.31	4.87	4.33
AQV252	6-DIP	Thru-Hole	60	1.4	360	95F6428	6.68	6.13	5.45
AQV212S	6-SOP	SMT	60	2.5	450	95F6434	5.61	5.16	4.58
AQV210E	6-DIP	Thru-Hole	350	35	500	16F9086	3.78	3.47	3.09
AQV210EH	6-DIP	Thru-Hole	350	35	500	93F3412	4.15	3.81	3.39
AQY210S	4-SOP	Thru-Hole	350	17	300	95B0003	5.36	4.95	4.40
AQV214	6-DIP	Thru-Hole	400	50	500	50F4050	5.31	4.87	4.33
AQV214H	6-DIP	Thru-Hole	400	50	500	50F4052	5.44	5.00	4.44
AQV414	6-DIP	Thru-Hole	400	50	500	93F6301	6.00	5.51	4.90
AQV258	6-DIP	Thru-hole	1.5	500	360	10C3859	7.26	6.66	5.92
AQV258A	6-DIP	SMT	1.5	500	360	10C3860	7.26	6.66	5.92
AQV259	6-DIP	Thru-Hole	1	200	360	91B9260	7.55	6.93	6.16
AQV259A	6-DIP	SMT	1	200	360	10C3867	7.55	6.93	6.16
AQY214S	4-SOP	SMT	400	35	300	10C4007	5.36	4.95	4.40
SPST-NC, 1-CHANNEL									
AQV414S	6-SOP	SMT	400	50	450	95F6436	6.03	5.54	4.92
AQW280EH	8-DIP	Through Hole	1.5	25	300	11N2739	4.34	3.98	3.54
DPST, 2-CHANNEL									
AQW210EH	8-DIP	Thru-Hole	350	23	850	10C3902	7.32	6.72	5.97
AQW210EHA	8-DIP	SMT	350	25	800	10C3903	7.32	6.72	5.97
AQW212	8-DIP	Thru-Hole	60	0.83	850	95B9352	9.26	8.49	7.55
AQW210	8-DIP	Thru-Hole	350	35	800	11N2716	8.85	8.12	7.22
AQW210A	8-DIP	SMT	350	35	800	99B2415	8.85	8.12	7.22
AQW210S	8-SOP	SMD	350	35	600	10C3909	10.02	9.19	8.17
AQW212A	8-DIP	SMT	60	2.5	800	50B843	9.49	8.71	7.74
AQW215	8-DIP	Thru-Hole	100	4	800	10C3926	8.85	8.12	7.22
AQW214	8-DIP	Thru-Hole	400	30	800	50F4057	9.26	8.49	7.55
AQW214A	8-DIP	SMT	400	30	850	50F4056	9.37	8.60	7.64
SPST-NO, SPST-NC, 2-CHANNEL									
AQW614EH	8-DIP	Thru-Hole	400	35	800	10C3990	7.59	6.96	6.19
AQW610EH	8-DIP	Through Hole	350	25	800	63K9770	8.26	7.58	6.74
AQW610S	8-SOP	SMD	350	25	600	97H1674	11.81	10.84	9.63
AQW614A	8-DIP	SMD	400	50	800	99F9147	11.07	10.16	9.03
AQW654A	8-DIP	SMD	400	16	900	10C3997	13.62	12.50	11.11
DPST-NC, 2 CHANNEL									
AQW414A	8-DIP	SMT	400	26	850	95B9350	11.07	10.16	9.03

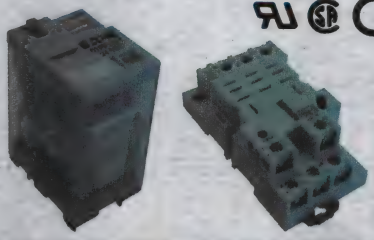
(3326)

D7 SERIES 15A GENERAL PURPOSE RELAYS

RoHS Compliant Available

EATON

- Panel and DIN Rail mounting
- Bipolar LED status lamp allows for reverse polarity applications
- Shows coil ON or OFF
- Ideal in low light conditions



D7PF

Mfg. Part No.	Contact Configuration	Coil Voltage	Coil Resistance (Ω)	Stock No.	Price Each 1-9
D7PF1AA	SPDT	120VAC	3.83	40T8630	17.91
D7PF1AT1	SPDT	24VAC	650	40T8631	16.74
D7PF2AA	DPDT	120VAC	3.83	40T8632	18.96
D7PF2AT1	DPDT	24VAC	650	40T8633	18.33
D7PF3AA	3PDT	120VAC	2.77	40T8634	24.24
D7PF3AT1	3PDT	24VAC	400	40T8635	24.24
D7PF4AA	4PDT	120VAC	2.2	84R3839	28.32
D7PF4AT1	4PDT	24VAC	388	40T8636	28.64

ACCESSORIES

Mfg. Part No.	For Use With	Mounting Style	Stock No.	Price 1-9
D7PAA	D7PF1 & D7PF2	DIN Rail/Panel	46K6612	8.09
D7PAB	D7PF3	DIN Rail/Panel	53M5861	12.78
D7PAD	D7PF4	DIN Rail/Panel	40T8629	13.86

(195397)

D3 SERIES 12A GENERAL PURPOSE RELAYS

RoHS Compliant Available

EATON

- Panel and DIN rail mounting
- 8- or 11-pin octal plug-in
- LED status lamp shows coil ON or OFF status - ideal for use in low light applications
- Temperature Range: -40°C to 85°C

D3PF - Full Featured Relay

Mfg. Part No.	Contacts	Coil Voltage	Coil Resistance	Stock No.	Price Each 1-9
D3PF2AA	DPDT	120VAC	1.7 kohm	46K6006	20.93
D3PF2AT1	DPDT	24VDC	470 ohm	46K6014	20.93
D3PF3AA	3PDT	120VAC	1.7 kohm	46K6015	24.66
D3PF3AT1	3PDT	24VDC	470 ohm	46K6020	23.49

(195396)

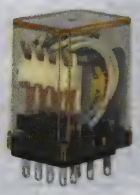
5A GENERAL-PURPOSE RELAYS

RoHS Compliant Available

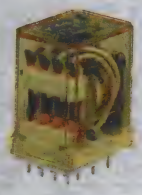
IDEC

- DPDT and 4PDT contact configurations
- Contact resistance: 50Ω
- Power consumption: 1.2VA (60Hz), 0.9W DC
- 0.110" solder/quick-connect or PC board terminals
- Options include indicator light, check button and top mounting bracket
- DIN socket, top mounting, PC board socket or panel mount socket

RY series relays satisfy applications for lower level switching needs such as pilot lights or logic level devices. Standard gold-plated contacts prevent contact oxidation from affecting circuit continuity. Temperature range: -22°F to +158°F. Operating time: 20 msec. max. UL recognized, CSA certified, CE compliant, TÜV approved.



Solder/Plug-In



PC Board Terminals

AC COIL RELAYS, SOLDER/PLUG-IN TERMINALS

Mfg. Part No.	Contacts	Coil Voltage (VAC)	Coil Resist. (Ω)	Indicator Light	Stock No.	Price Each 1-24	25-49
RY2S-UAC24V	DPDT	24	300	N	48M0905	10.54	9.47
RY2S-UAC120V	DPDT	120	8.1	N	66M8481	10.36	9.31
RY2S-UTAC120V	DPDT	120	8.1	N	31B3458	10.89	10.28
AC COIL RELAYS, PC BOARD TERMINALS							
RY4V-UAC110-120V	4PDT	120	4.29	N	74K3943	12.65	11.37
DC COIL RELAYS, SOLDER/PLUG-IN TERMINALS							
RY2S-UDC12V	DPDT	12	188	N	66M8482	9.51	8.55
RY2S-ULDC24V	DPDT	24	750	Y	14M8233	12.58	11.31
RY2S-UDC24V	DPDT	24	750	N	48M0906	9.35	8.39
DC COIL RELAYS, PC BOARD TERMINALS							
RY4V-UDC12V	4PDT	12	160	N	96F3988	10.83	9.72
RY4V-UDC24V	4PDT	24	650	N	74K3944	9.50	8.53

SOCKETS AND ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-49	50-99
SY2S-05	2-Pole Standard DIN Rail Mount Socket	13M3019	6.28	5.68
SY2S-02F1	Hold-Down Spring for Use with **SY2S-05**	96F6503	0.36	0.31
SY2S-05C	2-Pole Finger-Safe DIN Rail Mount Socket	13M3020	7.56	6.83
SY2S-61	2-Pole PC Board Mount Socket	13M3021	1.71	1.55
SY4S-05	4-Pole Standard DIN Rail Mount Socket	13M3022	10.48	9.46
SY4S-05C	4-Pole Finger-Safe DIN Rail Mount Socket	13M3023	13.02	11.75
SY4S-02F1	Hold-Down Spring for Use with **SY4S-05, -05C**	96F6504	0.36	0.31
SY4S-51	2-Pole Panel Mount Socket	13M3024	1.61	1.46
SY4S-61	2- or 4-Pole PC Board Mount Socket	13M3025	1.71	1.55
SY4S-51F1	Hold-Down spring for Use with **SY4S-51, 61**	96F6507	0.36	0.31
SY4S-62	2- or 4-Pole PC Board Mount Socket	13M3026	1.70	1.53
SFA-202	Hold-Down Clip with Top Notch, for Use with **SY2S-05C** and **SY4S-05C**	16F5300	0.33	0.29
SFA-302	Hold-Down Clip with Top Notch, for Use with **SY2S-51, 61** and **SY4S-51, 61**	16F5301	0.25	0.22
BNDN1000	35mm 1 Meter Low-Profile Aluminum DIN Rail with Holes	96F6501	7.88	7.47
BNL-5	DIN Rail Metal End Clip	66M8411	1.64	1.49

(4015)

PLUG-IN/INDUSTRIAL RELAYS – SQUARE

6-10A GENERAL-PURPOSE RELAYS

RoHS Compliant Available

IDEC

- No solder points or internal wires, for high reliability
- No lead, cadmium-free contacts
- AC or DC coil
- 14-blade solder tab/plug-in base
- Mechanical flag indicator
- LED indicator, green non-polarized
- Snap-on marking plate
- Color-coded manual latching lever
- IP40 protection

Contact material is silver tin oxide indium for 2-pole relays and gold-silver alloy on silver for 4-pole relays. Contact resistance: 50Ω max. Operating and release time: 20 msec max. Power consumption: 1.1—1.4VA (AC); 0.9—1.0W (DC). Operating temperature: -55° to +70°C. Items with "C" in the mfg. part no. are without check button. Relays with momentay check button also available *go online or call*

10A RELAYS WITH DPDT CONTACTS

Mfg. Part No.	Coil Voltage	Coil Resist. (Ω)	Stock No.	Price Each 1-24	25-49	50-99	100-249
● RU2S-A24	24VAC	164	**31C6507**	10.33	9.52	9.02	8.66
● RU2S-A110	110VAC	4550	**31C6506**	9.63	8.87	8.40	8.07
● RU2S-C-A110	110VAC	4550	**84C6295**	10.24	9.43	8.94	8.58
● RU2S-A220	220VAC	18230	**84C6294**	11.99	11.05	10.47	10.05
● RU2S-D12	12VDC	160	**84C6302**	8.96	8.26	7.82	7.51
● RU2S-D24	24VDC	605	**31C6508**	8.18	7.53	7.15	6.85
● RU2S-C-D24	24VDC	605	**84C6300**	7.55	6.95	6.59	6.33
6A RELAYS WITH 4PDT CONTACTS							
● RU4S-A24	24VAC	164	**18C3889**	11.35	10.46	9.91	9.51
● RU4S-C-A24	24VAC	164	**84C6306**	10.77	9.93	9.42	9.02
● RU4S-A110	110VAC	4550	**18C3890**	11.22	10.35	9.81	9.42
● RU4S-C-A110	110VAC	4550	**84C6304**	10.77	9.92	9.40	9.02
● RU4S-D12	12VDC	160	**84C6311**	9.28	8.55	8.09	7.77
● RU4S-C-D12	12VDC	160	**84C6308**	10.34	9.53	9.03	8.67
● RU4S-D24	24VDC	605	**18C3884**	9.29	8.55	8.11	7.78
● RU4S-C-D24	24VDC	605	**84C6309**	8.83	8.13	7.71	7.40

SOCKETS AND ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-49	50-99	100-249	250-499
● SM2S-05	2-Pole Standard DIN Rail Mount Socket	**13M2873**	6.92	6.27	5.81	5.44
● SY4S-05	4-Pole Standard DIN Rail Mount Socket	**13M3022**	10.48	9.46	8.80	8.23
● SY4S-05C	4-Pole Finger-Safe DIN Rail Mount Socket	**13M3023**	13.02	11.75	10.93	10.22
● SY4S-51	2-Pole Panel Mount Socket	**13M3024**	1.61	1.46	1.35	1.27
● SY4S-61	2- or 4-Pole PC Board Mount Socket	**13M3025**	1.71	1.55	1.44	1.35
● SY4S-62	2- or 4-Pole PC Board Mount Socket	**13M3026**	1.70	1.53	1.43	1.33
● SY4S-02F1	Springs and Clips for Use with SY4S-05, -05C, SM2S-05, -05C	**96F6504**	0.36	0.31	0.30	0.28
● SFA-202		**16F5300**	0.33	0.29	0.28	0.26
● SY4S-51F1	Springs and Clips for Use with SY4S-51, 61	**96F6507**	0.36	0.31	0.30	0.28
● SFA-302		**16F5301**	0.25	0.22	0.21	0.20
● BNDN1000	35mm 1 Meter Low-Profile Aluminum DIN Rail	**96F6501**	7.88	7.47	7.10	6.77
● BNL-5	DIN Rail End Clip	**66M8411**	1.64	1.49	1.35	1.24

(59286)

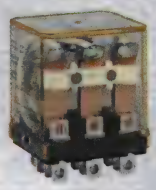
10A POWER RELAYS

RoHS Compliant Available

IDEC

TÜV Rheinland

DPDT



3PDT

RH series power relays feature a 10-amp capacity. Silver cadmium-oxide contacts have 50mΩ initial contact resistance. Operating time: 20 msec. max. (SPDT/DPDT); 25 msec. max. (3PDT/4PDT). Solder or PC terminals. Temperature range: –22°F to +158°F.

Case Dimensions

Contacts	Length (in)	Width (in)	Heigth (in)
SPDT	1.082	0.551	1.401 max.
DPDT		0.826	
3PDT		1.220	
4PDT		1.614	

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10A POWER RELAYS (CONT.)

AC COIL RELAYS

Mfg. Part No.	Contacts	Coil Volt. (VAC)	Mounting Style	Coil Resist. (Ω)	Stock No.	Price Each 1-9	10-24
● RH1B-UAC12V	SPDT	12	Solder/Plug-In	165	**31B2952**	11.05	9.74
● RH1B-UAC24V	SPDT	24	Solder/Plug-In	83	**14M8187**	10.51	9.36
● RH1B-UAC120V	SPDT	120	Solder/Plug-In	16.5	**66M8459**	10.32	9.18
● RH1B-UTAC120V	SPDT	120	Top Flange	16.5	**15M1940**	11.24	9.99
● RH2B-UAC12V	DPDT	12	Solder/Plug-In	39.3	**14M8198**	10.79	9.64
● RH2B-UAC24V	DPDT	24	Solder/Plug-In	153	**66M8465**	10.99	9.82
● RH2B-UTAC24V	DPDT	24	Top Flange	153	**14M8210**	11.73	10.48
● RH2B-UAC110-120V	DPDT	120	Solder/Plug-In	...	**66M8464**	10.81	9.64
● RH2B-UTAC110-120V	DPDT	120	Top Flange	...	**66M8469**	11.73	10.48
● RH2B-UAC220-240V	DPDT	240	Solder/Plug-In	18.82	**31B2971**	12.45	11.18
● RH3B-UAC120V	3PDT	120	Solder/Plug-In	10.8	**66M8471**	13.98	12.27
● RH3B-UAC240V	3PDT	240	Solder/Plug-In	12.1	**31B3040**	15.74	14.14
● RH4B-UAC24V	4PDT	24	Solder/Plug-In	84.5	**14M8223**	17.64	16.00
● RH4B-UAC120V	4PDT	120	Solder/Plug-In	7.36	**96F3962**	16.95	15.38
● RH4B-UTAC120V	4PDT	120	Top Flange	7.36	**14M8230**	18.47	16.75
AC COIL RELAYS w/INDICATOR LIGHT							
● RH1B-ULAC120V	SPDT	120	Solder/Plug-In	16.5	**66M8462**	13.40	11.93
● RH1B-ULAC24V	SPDT	24	Solder/Plug-In	83	**88H2686**	12.80	11.29
● RH2B-ULAC24V	DPDT	24	Solder/Plug-In	153	**14M8205**	13.68	12.21
● RH2B-ULCAC24V	DPDT	24	Solder/Plug-In	153	**31B2989**	15.78	14.18
● RH2B-ULCAC110-120V	DPDT	120	Solder/Plug-In	...	**48M0903**	15.37	13.74
● RH2B-ULAC110-120V	DPDT	120	Solder/Plug-In	...	**66M8467**	13.68	12.21
● RH3B-ULAC24V	3PDT	24	Solder/Plug-In	103	**66M8475**	17.22	15.11
● RH3BULCAC120V	3PDT	120	Solder/Plug-In	10.8	**16F299**	19.55	17.54
● RH3B-ULAC120V	3PDT	120	Solder/Plug-In	10.8	**66M8474**	16.92	14.85
● RH4B-ULAC24V	4PDT	24	Solder/Plug-In	84.5	**14M8227**	19.83	17.98
● RH4B-ULCAC120V	4PDT	120	Solder/Plug-In	7.36	**16P8992**	22.04	19.69
● RH4B-ULAC120V	4PDT	120	Solder/Plug-In	7.36	**96F3967**	19.75	17.64
● RH4B-ULAC240V	4PDT	240	Solder/Plug-In	9.12	**31B3098**	21.53	19.24

DC COIL RELAYS

Mfg. Part No.	Contacts	Coil Volt. (VDC)	Mounting Style	Coil Resist. (Ω)	Stock No.	Price Each 1-9	10-24
● RH1B-UDC6V	SPDT	6	Solder/Plug-In	47	**19P2783**	9.66	8.51
● RH1B-UDC12V	SPDT	12	Solder/Plug-In	188	**66M8460**	9.57	8.51
● RH1B-UTDC12V	SPDT	12	Top Flange	188	**14M8193**	11.32	10.07
● RH1V2-UDC12V	SPDT	12	PC Board	188	**14M8195**	10.30	9.47
● RH1B-UDC24V	SPDT	24	Solder/Plug-In	750	**66M8461**	9.39	8.35
● RH1B-UTDC24V	SPDT	24	Top Flange	750	**14M8194**	10.87	9.67
● RH2B-UDC12V	DPDT	12	Solder/Plug-In	160	**66M8466**	10.16	9.08
● RH2B-UTDC12V	DPDT	12	Top Flange	160	**14M8211**	11.82	10.55
● RH2B-UDC-24V	DPDT	24	Solder/Plug-In	650	**30H4934**	10.21	9.18
● RH2B-UTDC24V	DPDT	24	Top Flange	650	**66M8470**	11.82	10.55
● RH2V2-UDC24V	DPDT	24	PC Board	650	**15M1942**	11.11	10.22
● RH2B-UDC48V	DPDT	48	Solder/Plug-In	2.6	**31B2981**	10.41	9.34
● RH2B-UDC100-110V	DPDT	110	Solder/Plug-In	12.25	**14M8201**	12.47	11.15
● RH3B-UDC12V	3PDT	12	Solder/Plug-In	100	**14M8216**	13.33	11.70
● RH3B-UDC24V	3PDT	24	Solder/Plug-In	400	**66M8473**	13.58	11.93
● RH3B-UDC110V	3PDT	110	Solder/Plug-In	8.6	**14M8215**	15.41	13.53
● RH4B-UDC12V	4PDT	12	Solder/Plug-In	96	**66M8476**	16.47	14.94
● RH4B-UDC24V	4PDT	24	Solder/Plug-In	388	**66M8477**	16.78	15.21
● RH4B-UDC48V	4PDT	48	Solder/Plug-In	1.55	**66M8478**	17.14	15.55
DC COIL RELAYS w/INDICATOR LIGHT							
● RH1B-ULDC24V	SPDT	24	Solder/Plug-In	750	**66M8463**	12.47	11.09
● RH1B-ULDC12V	SPDT	12	Solder/Plug-In	188	**57J6027**	12.80	11.29
● RH2B-ULDC12V	DPDT	12	Solder/Plug-In	160	**66M8468**	13.27	11.87
● RH2B-ULDC24V	DPDT	24	Solder/Plug-In	650	**19P2785**	13.05	11.65
● RH2B-ULCDC24V	DPDT	24	Solder/Plug-In	650	**31B2993**	14.78	13.28
● RH3B-ULDC12V	3PDT	12	Solder/Plug-In	100	**14M8220**	16.94	14.88
● RH3B-ULDC24V	3PDT	24	Solder/Plug-In	400	**96F3956**	16.26	14.28
● RH4B-ULDC12V	4PDT	12	Solder/Plug-In	96	**14M8228**	19.33	17.53
● RH4B-ULDC24V	4PDT	24	Solder/Plug-In	388	**14M8229**	19.34	17.55
RH1B-ULCDC12V	SPDT	12	Solder/Plug-In	188	**29K8733**	15.39	13.58
● RH1B-ULCDC24V	SPDT	24	Solder/Plug-In	750	**29K8737**	14.27	12.57
● RH2B-ULCDC12V	DPDT	12	Solder/Plug-In	160	**31B2992**	15.33	13.78

SOCKETS

Mfg. Part No.	For Use With Relay Series	Description	Stock No.	Price Each 1-49	50-99	100-249
● SH1B-05	RH1B	1-Pole Standard DIN Rail Mount	**13M2859**	5.85	5.29	4.91
● SH1B-05C	RH1B	1-Pole Finger-Safe DIN Rail Mount	**13M2860**	7.19	6.51	6.05
● SH1B-51	RH1B	1-Pole Through Panel-Mount	**96F3996**	1.50	1.36	1.26
● SH1B-62	RH1B	2-Pole PC Board Mount	**13M2861**	1.61	1.46	1.36

➤CONTINUED➤

10A POWER RELAYS (CONT.)

Mfg. Part No.	For Use With Relay Series	Description	Stock No.	Price Each 1-49	50-99	100-249
SH2B-02	RH2B	2-Pole Surface-Mount	26M8309	7.41	6.69	6.23
SH2B-05	RH2B	2-Pole Standard DIN Rail Mount	13M2862	7.27	6.57	6.11
SH2B-05C	RH2B	2-Pole Finger-Safe DIN Rail Mount	13M2863	8.90	8.05	7.49
SH2B-51	RH2B	2-Pole Through Panel-Mount	96F3997	1.61	1.46	1.36
SH2B-62	RH2B	2-Pole PC Board Mount	13M2864	1.79	1.62	1.50
SH3B-05	RH3B	3-Pole Standard DIN Rail Mount	13M2865	8.10	7.30	6.79
SH3B-05C	RH3B	3-Pole Finger-Safe DIN Rail Mount	13M2866	9.66	8.73	8.12
SH3B-62	RH3B	3-Pole PC Board Mount	13M2867	1.86	1.68	1.57
SH4B-05	RH4B	4-Pole Standard DIN Rail Mount	13M2868	10.49	9.47	8.81
SH4B-05C	RH4B	4-Pole Finger-Safe DIN Rail Mount	13M2869	12.86	11.62	10.81
SH4B-51	RH4B	4-Pole Through Panel-Mount	13M2870	2.49	2.25	2.09
SH4B-62	RH4B	4-Pole PC Board Mount	13M2871	2.43	2.20	2.04

HOLD-DOWN SPRINGS

Mfg. Part No.	For Use With Socket Series	Stock No.	Price Each 1-24	25-49	50-99	100-249
SY2S-02F1	All SH_B-05, 05C	96F6503	0.36	0.31	0.30	0.28
SY4S-51F1	All SH_B-51, 62	96F6507	0.36	0.31	0.30	0.28
SY4S-02F1	SH2B-05, 05C	96F6504	0.36	0.31	0.30	0.28
SH3B-05F1	SH3B-05, 05C	96F6505	0.50	0.44	0.42	0.39
SH4B-02F1	SH4B-05, 05C	96F6506	0.50	0.44	0.42	0.39

CLIPS

SFA-101	All SH_B-05, 05C	68H3042	0.51	0.45	0.43	0.39
SFA-202	All SH_B-05, 05C	16F5300	0.33	0.29	0.28	0.26
SFA-302	All SH_B-51, 62	16F5301	0.25	0.22	0.21	0.20

COMBINATION I/O MODULES

FC4A-M24BR2	MicroSmart Series PLCs	35C2512	320.25	...	...	...

(4014)

10A GENERAL-PURPOSE POWER RELAYS

RoHS Compliant Available

IDEC

- High reliability and long service life
- DPDT or 3PDT pure silver contacts
- 11-blade plug-in terminals
- Options include check button for test operation and indicator light
- Mounting options include flange mounting, DIN socket, or panel mount socket

Contact material is silver. Operating time: 25ms. Release time: 25ms. Temperature range: -30°C to +70°C. Socket ordered separately, *below*. UL recognized, CSA certified.

AC COIL

Mfg. Part No.	Contacts	Coil Voltage	Coil Resist. (Ω)	Indicator Light	Stock No.	Price Each 1-9	10-24	25-49
RR2BA-UAC24V	DPDT	24VAC	79	N	91F5550	16.38	14.68	13.83
RR2BA-UAC120V	DPDT	120VAC	2100	N	91F5551	15.56	13.94	13.13
RR3B-UAC24V	3PDT	24VAC	79	N	91F5557	17.63	15.80	14.88
RR3B-ULAC24V	3PDT	24VAC	79	Y	91F5561	21.90	19.64	18.49
RR3B-USAC24V	3PDT	24VAC	79	N	31B3342	18.46	16.54	15.58
RR3B-UAC120V	3PDT	120VAC	2100	N	91F5558	17.17	15.39	14.50
RR3B-ULAC120V	3PDT	120VAC	2100	Y	91F5562	19.95	17.88	16.84

DC COIL

RR2BA-UDC12V	DPDT	12VDC	100	N	91F5552	14.49	12.99	12.24
RR2BA-ULDC24V	DPDT	24VDC	400	Y	88F1414	18.05	16.18	15.24
RR2BA-USDC24V	DPDT	24VDC	400	N	31B3244	16.45	14.74	13.89
RR3B-UDC12V	3PDT	12VDC	100	N	66M8480	16.17	14.45	13.62
RR3B-ULDC12V	3PDT	12VDC	100	Y	91F5563	20.55	18.42	17.35
RR3B-UDC24V	3PDT	24VDC	400	N	91F5560	15.89	14.21	13.38
RR3B-ULDC24V	3PDT	24VDC	400	Y	91F5564	19.41	17.34	16.36
RR3B-ULDC110V	3PDT	110VDC	8460	Y	31B3337	22.25	19.94	18.78

SOCKETS AND ACCESSORIES

Mfg. Part No.	For Use With Relay Series	Description	Stock No.	Price Each 1-49	50-99	100-249
SR3B-05	RR1BA, RR2BA,RR3B	2- or 3-Pole Standard DIN Rail Mount Socket	13M2994	8.97	8.12	7.55
SR3B-51	RR1BA, RR2BA, RR3B	2- or 3-Pole Panel Mount Socket	17M8212	1.96	1.77	1.65
SR3B-02F1	RR1BA,RR2BA, RR3B	Hold-Down Spring for Use with SR3B-05, SR3B-51	91F6258	0.53	0.47	0.45
BNDN1000	All	35mm 1 Meter Low-Profile Aluminum DIN Rail with Holes	96F6501	7.88	7.47	7.10
BNL-5	All	DIN Rail Metal End Clip	66M8411	1.64	1.49	1.35

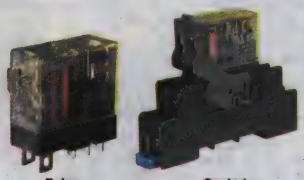
(85525)

8-16A POWER RELAYS

RoHS Compliant Available

IDEC

- Compact housing only 12.7 mm wide
- Large contact rating: RJ1 (1-pole) 16A (UL general use rating@250V AC), RJ2 (2-pole) 8A
- Non-polarized LED indicator available on blade type. IDEC unique light guide structure enables high visibility of coil status from and direction
- Excellent electrical and mechanical life
- Electrical life: 200,000 operations (AC load)
- Mechanical life: 30 million operations (AC coil)
- RoHS directive compliant (EU directive 2002/95/EC). Contains no lead, cadmium, mercury, hexavalent chromium, PBB or PBDE.
- Diode model: Diode reverse withstand voltage: 1000V
- UL recognized, CSA certified, EN compliant



Relay Socket

RJ series relays are available with optional green, non-polarized LED that provides enhanced visibility of power status from multiple directions. Unique light guide makes status indicator brighter and more noticeable. Compact blade relay saves space when used with compatible **SJ series** sockets. Using **RJ series** relay and **SJ series** socket, reduce DIN width mounting by 30 percent when compared to standard 2-pole relays. UL recognized, CSA certified, VDE approved, and CE marked in compliance with IEC 61810-1. PCB versions and 120V models also available; *go online or call*.

8A DPDT CONTACTS

Mfg. Part No.	Coil Voltage	Coil Resist. (Ω)	Indicator Light	Stock No.	Price Each 1-24	25-49	50-99
RJ2S-C-A24	24VAC	243 ohm	No	33K1051	8.72	7.75	7.40
RJ2S-CL-A24	24VAC	243 ohm	Yes	33K1057	12,69	11.29	10.78
RJ22S-C-A24	24VAC	243 ohm	No	65T0915	12.65	11.59	10.62
RJ22S-CL-A24	24VAC	243 ohm	Yes	56W4531	17.84	16.33	14.97
RJ2S-C-A120	120VAC	6.4 kohm	No	33K1050	8.47	7.53	7.20
RJ2S-CL-A120	120VAC	6.4 kohm	Yes	33K1056	12.65	11.25	10.75
RJ2S-C-A240	240VAC	25.57 ohm	No	33K1052	12.48	11.11	10.61
RJ2S-C-D12	12VDC	271 ohm	No	33K1054	6.42	5.70	5.45
RJ2S-CL-D12	12VDC	271 ohm	Yes	33K1060	12.05	10.72	10.25
RJ22S-C-D24*	24V DC	1.08 kohm	No	75T5172	11.07	10.13	9.28
RJ2S-CL-D24	24VDC	1.08 kohm	Yes	33K1061	11.10	9.86	9.42
RJ22S-CLD-D24	24VDC	1.08 kohm	Yes	56W4532	18.30	16.76	15.36
RJ2S-CLD-D24*	24VDC	1.08 kohm	Yes	01N5250	13.24	12.13	11.11
RJ22S-CL-A120*	120VAC	6.4 kohm	Yes	83T6483	17.80	16.30	14.94

12A SPDT CONTACTS

RJ1S-C-A24	24VAC	243 ohm	No	33K1039	7.54	6.71	6.39
RJ1S-CL-A24	24VAC	243 ohm	Yes	33K1045	8.55	7.62	7.26
RJ1S-C-A120	120VAC	6.4 kohm	No	33K1038	7.49	6.67	6.36
RJ1S-CL-A120	120VAC	6.4 kohm	Yes	33K1044	11.09	9.87	9.41
RJ1S-C-A240	240VAC	25.57	No	33K1040	10.97	9.77	9.31
RJ1S-CL-D12	12VDC	271 ohm	Yes	33K1048	9.25	8.23	7.85
RJ1S-CD-D24*	24VDC	1.08 kohm	No	01N5247	7.50	6.87	6.29
RJ1S-CL-D24	24VDC	1.08 kohm	Yes	33K1049	8.54	7.59	7.24
RJ1S-CLD-D24*	24VDC	1.08 kohm	Yes	01N5248	10.78	9.87	9.05

RELAY SOCKETS

1A DPDT CONTACTS

Mfg. Part No.	For Use With	Mounting	Termination	Stock No.	Price Each 1-49	50-99
SJ1S-61	Idec RJ1S Relays	PCB Mount	Through Hole	01N5251	1.87	1.69
SJ1S-05BW	IDEC RJ1S Series Slim Power Relays	DIN Rail	Screw	86T5791	4.27	3.85
SJ1S-07LW	IDEC RJ1S Series Slim Power Relays	DIN Rail	Screw	86T5800	4.35	3.93
SJ2S-05BW	IDEC RJ2S and RJ22S Series Slim Power Relays	DIN Rail	Screw	86T5806	6.94	6.25
SJ2S-07LW	IDEC RJ2S and RJ22S Series Slim Power Relays	DIN Rail	Screw	86T5813	7.06	6.37

Mfg. Part No.	Coil Voltage	Coil Res.	Stock No.	Price Each 1-9
RJ22V-C-A120	120 VAC	6.4 kohm	94T2706	12.12
RJ22V-C-A24	24 VAC	243 ohm	49X0353	11.48
RJ22V-C-D24	24 VAC	1.08 kohm	49X0354	9.56

ACCESSORIES

1A DPST CONTACTS

Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-24	25+
SJ9Z-JF10	10 pole jumper for SJ screw terminal socket	01N5253	3.51	3.30	3.15
BNDN1000	1m DIN Rail	96F6501	7.88	7.47	7.10
BNL-5	DIN Rail End Stop	66M8411	1.64	1.49	1.35
SJ9Z-PWPN10	Marking Plate	56W4533	2.67	2.53	2.44

Mfg. Part No.	Coil Voltage VAC	Coil Resistance	Stock No.	Price Each 1-9
RJ22V-A-A12	12	62.5 ohm	49X0348	10.11
RJ22V-A-A120	120	6.4 kohm	49X0349	10.94
RJ22V-A-A24	24	243 ohm	49X0350	10.11

CONTINUED

8-16A POWER RELAYS (CONT.)

Mfg. Part No.	Coil Voltage VAC	Coil Resistance	Stock No.	Price Each 1-9
● RJ22V-A-D12	12	271 ohm	49X0351	7.33
● RJ22V-A-D24	24	1.08 kohm	49X0352	7.33

* Contains surge suppression diode
(84845)

5 A MINIATURE GENERAL PURPOSE RELAYS HY SERIES

RoHS Compliant Available

IMO

- Arc barriers prevent flashover between contacts
- Manual operator for circuit testing with latch facility colour coded for AC/DC identification
- Mechanical flag indicator showing armature operation
- LED indicators showing coil energisation
- Max. switching voltage AC/DC: 250 V
- Ambient operating temperature: -55°C to 70°C
- Power consumption: 1.2 VA AC : 0.9 W DC

Mfg. Part No.	Coil Voltage	Coil Resist. (ohm)	Stock No.	Price Each 1-24
● HY41PN12DC	12 VDC	160	74R1597	8.27
● HY41PN24DC	24 VDC	650	75R7554	8.27
● HY41PN24AC	24 VAC	184	74R1599	8.27
● HY41PN120AC	110 VAC	4.55	74R1596	7.69

ACCESSORIES

Mfg. Part No.	Description	Voltage Rating	Stock No.	Price Each 1-24
● SRN4-C	RELAY SOCKET	300	74R1601	5.22
● SRN4-D	RELAY SOCKET	300	74R1602	5.16

(177868)

MAGNECRAFT 3A-15A MINIATURE POWER RELAYS

RoHS Compliant Available

Schneider Electric

Full Featured Cover:
- Flag indicator for relay status in manual or powered condition
- LED lamp for coil "on" or "off" status
- Pushbutton for manual operation of relay without need for coil power
- Lock-down door when activated to hold pushbutton and contacts in operate position
- ID tag for write-on surface
- Dimensions: 1.54"H x 1.06"W x 0.83"D
- Operating Temperature: -40°C to +70°C

Full Featured Cover

Plain Cover

Hermetically Sealed Relay

Plain Cover:
- Dimensions: 1.40H x 1.06W x 0.83"D
- Flag indicator for relay status in manual or powered condition
- Plastic i.d. tag/write label
- Operating temperature: -40°C to +70°C

Hermetically Sealed Relay:
- Class 1, Division 2 certification for hazardous locations
- Ideal for harsh environments
- Dimensions: 1.28"H x 0.91"W x 1.16"D
- Operating temperature: -40°C to +70°C

All relays below are UL listed when used with a Magnecraft socket.

15A DPDT PLUG-IN RELAYS

Full Featured Mfg. Part No.	Coil Input Volt.	Coil Res. (Ω)	Mating Socket	Full Featured Stock No.	Price Each 1-24
● 782XBXM4L-120A	120VAC	4.43	70-782 D8-1A	10M6525	13.82
● 782XBXM4L-12D	12VDC	160		18C1606	13.33
● 782XBXM4L-24D	24VDC	650		10M6528	10.43
● 782XBXM4L-240A	240VAC	15.72		10M6529	23.16
PLAIN COVER					
● 782XBXC-120A	120VAC	4.43	70-782 D8-1A	16M1128	10.55
● 782XBXC-12D	12VDC	160		72J4396	11.06
● 782XBXC-24D	24VDC	650		72J4399	8.66
3A 4PDT PLUG-IN RELAYS					
...	120VAC	4.43	70-782 EL14-1	16M1130	15.46
10A 4PDT PLUG-IN RELAYS					
● 782XDX2M4L-110/120A	120VAC	4.43	70-782 EL14-1	72J4451	19.71
● 782XDX2M4L-24A	24VAC	180		10M6550	19.71
● 782XDX2M4L-24D	24VDC	650		10M6551	19.36

➤CONTINUED➤

MAGNECRAFT 3A-15A MINIATURE POWER RELAYS (CONT.)

HERMERTICALLY SEALED RELAYS

3A 4PDT

Mfg. Part No.	Dusl Marking	Coil Input Volt.	Coil Res. (Ω)	Mating Socket	Stock No.	Price Each 1-24
● 782XDXH10-12D	KHS-17D11-12	12VDC	160	70-782 EL14-1	10M6533	72.73
● 782XDXH10-24D	KHS-17D11-24	24VDC	650		10M6536	72.73
● 782XDXH10-120A	KHS-17A11-120	120VAC	4.43		10M6531	83.54
5A 4PDT						
● 782XDXH21-12D	KHS-17D12-12	12VDC	160	70-782 EL14-1	18M9800	99.84
● 782XDXH21-24D	KHS-17D12-24	24VDC	650		10M9740	78.14
● 782XDXH21-120A	KHS-17A12-120	120VAC	4.43		10M6538	111.77

SOCKETS

Mfg. Part No.	Description	Contacts	Stock No.	Price Each 1-24
● 70-782D8-1A	8-pin, finger-safe, screw terminals, DIN/Panel mount	DPDT	46P3715	5.67
● 70-782EL11-1	11-pin, finger-safe, elevator terminals, DIN/Panel mount	3PDT	30M2639	9.58
● 70-782EL14-1	14-pin, finger-safe, elevator terminals, DIN/Panel mount	4PDT	69K5578	7.34

(60279)

MAGNECRAFT 20–30A GENERAL-PURPOSE RELAYS

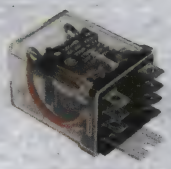
RoHS Compliant Available

Schneider Electric

389F Flange Cover:
- Flange-mount cover with flag standard
- ¼" quick-connect terminals
- Operating power: 1.5W, 3.5VA
- Dimensions: 1.40"L x 1.53"W x 2.90"H
- UL recognized file no. E43641, CSA certified file no. 168986

300 Flange Cover:
- Flange-mount cover with flag standard
- 30A at 300VAC/28VDC; 15A at 600VAC
- ¼" quick-connect terminals
- Operating temperature: -40°C to +55°C for DC coil
- Dimensions: 1.40"L x 1.53"W x 2.90"H
- UL recognized file no. E43641, CSA certified file no. 168986

389F Case



300 Flange Case

389F SERIES

Mfg. Part No.	Contact Carry Current (A)	Contacts	Coil Voltage	Coil Resist. (Ω)	Cover	Stock No.	Price Each 1-24
● 389FXCXC1-120A	20	3PDT	120VAC	1200	Flange	35M3535	26.92
● 389FXCXC1-240A	20	3PDT	240VAC	4600	Flange	35M3539	30.10
● 389FHXXC1-120A	30	SPST-NO	120VAC	1100	Flange	35M3521	30.29
● 389FXCXC1-12D	20	3PDT	12VDC	100	Flange	35M3534	26.38
● 389FXCXC1-24D	20	3PDT	24VDC	400	Flange	35M3538	12.45
● 389FHXXC1-24D	30	SPST-NO	24VDC	400	Flange	35M3524	20.90
300 SERIES							
● 300XBXC1-12D	30	DPDT	12VDC	75	Flange	46F5384	23.94
300XBXC1-24D	30	DPDT	24VDC	300	Flange	18C2148	18.73
300XBXC1-24A	30	DPDT	24VAC	54	Flange	46F5381	36.67
300XBXC1-240A	30	DPDT	240VDC	5400	Flange	12R3296	38.34
300XBXC1-120A	30	DPDT	120VAC	1270	Flange	18C1562	25.20
300XBXC4-24D	30	DPDT	24VDC	300	DIN	81C9290	25.46
300XBXC4-120A	30	DPDT	120VAC	1270	DIN	81C9288	38.79

(4027)

MAGNECRAFT 40A HEAVY-DUTY POWER RELAYS

RoHS Compliant Available

Schneider Electric

DPDT

SPDT

SPST-NO (DM)

5/16" (7.95) diameter, silver alloy gold-flashed contacts are rated at 40A at 300VAC/28VDC. Magnetic blowout versions rated up to 20A at 110VDC (SPDT-DM only); 10A at 110VDC (double through). All versions are rated 15A tungsten, NEMA A600 pilot duty and up to 2HP. Class B insulation system. Dielectric withstanding voltage between open contacts: 1500V; between mutually insulated conductive elements: 2200V. Combination screw terminals. Molded phenolic base. UL listed File No. E43641, CSA certified file no. 168986, CE compliant.

➤CONTINUED➤

MAGNECRAFT 40A HEAVY-DUTY POWER RELAYS (CONT.)

Contacts	Dimensions (inches) L	W	H
DPDT	3.12	2.50	2.31
SPDT	2.43	2.50	2.18
SPST-NO (DM)	2.43	2.50	2.25

AC OPERATED RELAYS

Mfg. Part No.	Contacts	Coil Voltage	Coil Resist. (Ω)	Stock No.	Price Each 1-9	10-24
199AX-13	DPDT	24VAC	12	28F1617	47.14	43.18
199AX-14	DPDT	120VAC	290	56F971	36.89	33.80
199ABX-14*	DPDT	120VAC	290	70B3279	53.77	49.25
199AX-15	DPDT	240VAC	1200	56F972	47.14	43.18
● 199AX-9	DPST-NO	120VAC	290	56F950	44.47	40.73
199AX-10	DPST-NO	240VAC	1200	56F951	45.36	41.54
199AX-4	SPDT	120VAC	290	56F955	41.59	38.10
199ADX-4	SPST-NO	120VAC	290	47F1103	36.29	33.24

DC OPERATED RELAYS

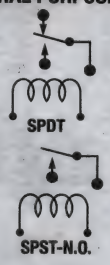
● 199X-12	DPDT	12VDC	70	56F641	38.68	35.43
199X-13	DPDT	24VDC	290	56F973	34.80	31.88
199X-14	DPDT	110VDC	6000	56F974	47.14	43.18
● 199BX-14*	DPDT	110VDC	6000	70B3223	53.77	49.25
199X-7	DPST-NO	12VDC	70	56F642	42.54	38.97
199X-8	DPST-NO	24VDC	290	56F952	36.26	33.22
199X-2	SPDT	12VDC	70	56F957	37.60	34.44
199X-3	SPDT	24VDC	290	28F1614	38.35	35.13
199DX-2	SPST-NO	12VDC	70	47F1104	34.42	31.54
199DX-3	SPST-NO	24VDC	290	47F1105	34.42	31.54

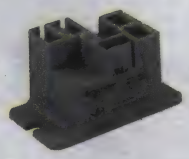
* with magnetic blowout for DC switching up to 500VDC
(4026)

9A SERIES MAGNECRAFT 30A GENERAL PURPOSE POWER RELAYS

RoHS Compliant Available

Schneider Electric





16-9ADIN-1

Class 9A flange mount relays are epoxy sealed. SPST-NO versions are rated 30A @ 240VAC/28VDC. SPDT versions are rated 30A (N.O.) and 15A (N.C.). Class F insulation is standard. Terminals are ¼" Q.C. Contact material: silver-cadmium oxide. Life expectancy: 10 million mechanical operations. Dimensions: 1.98L x 1.08W x 1.10"H. UL recognized, File No. E43641.

Mfg. Part No.	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Mounting	Stock No.	Price Each 1-24	25-49	50-99
9AS1D52-5	SPST-NO	5VDC	25	Flange	91F6493	7.48	6.92	6.41
● 9AS1D52-12	SPST-NO	12VDC	144	Flange	91F6494	10.56	9.77	9.06
9AS1A52-120	SPST-NO	120VAC	3000	Flange	74C3189	8.25	7.63	7.07
9AS5D52-5	SPDT	5VDC	25	Flange	91F6495	8.38	7.75	7.19
● 9AS5D52-12	SPDT	12VDC	144	Flange	91F6496	6.49	6.00	5.56
9AS5D52-24	SPDT	24VDC	576	Flange	09B8512	6.33	5.86	5.43
9AS5A52-120	SPDT	120VAC	3000	Flange	32C2652	7.72	7.14	6.62

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● 16-9ADIN-1	16-9A DIN-1 Adapter for Class 9A Flange Mount Relays	83C3058	1.03

(12441)

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(212564)

MAGNECRAFT POWER RELAYS 725 SERIES

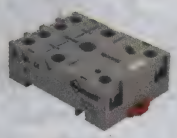
RoHS Compliant Available

Schneider Electric

Fig. 1 Full-feature Cover

Fig. 2 Quick Connect Terminals

Fig. 3 Screw Terminals



70-725-1

- Voltage range: 6 to 240VAC 50/60Hz
- Average consumption: 2.5VA; 1.9W
- Electrical life: 100,000 operations
- Mechanical life: 5,000,000 operations
- Dielectric strength: 4,000Vrms
- Operating temperature: -20 to 55°C
- Weight (average): 4.2 oz (120 g)

AC COIL RELAYS

Mfg. Part No.	Fig.	Contacts	Carry Current (A)	Coil Voltage (VAC)	Mounting	Stock No.	Price Each 1-24
● 725AXXBM4L-120A	1	SPST-NO	30	120	Quick Connect	63R5470	17.39
● 725AXXBC3ML-24A	2	SPST-NO	30	24	DIN Rail, Panel	25R4360	18.38
● 725AXXBC3ML-120A	2	SPST-NO	30	120	DIN Rail, Panel	25R4359	18.38
● 725AXXBC3ML-240A	2	SPST-NO	30	240	DIN Rail, Panel	25R4362	20.07
● 725BXXBC3ML-24A	2	DPST-NO	25	24	DIN Rail, Panel	25R4370	19.01
● 725BXXBC3ML-240A	2	DPST-NO	25	240	DIN Rail, Panel	25R4372	20.00
● 725AXXSC3ML-120A	3	SPST-NO	30	120	DIN Rail, Panel	25R4366	21.05
● 725AXXSC3ML-240A	3	SPST-NO	30	240	DIN Rail, Panel	25R4367	26.57
● 725BXXSC3ML-24A	3	DPST-NO	25	24	DIN Rail, Panel	25R4377	21.81
● 725BXXSC3ML-120A	3	DPST-NO	25	120	DIN Rail, Panel	25R4376	21.81
● 725BXXSC3ML-240A	3	DPST-NO	25	240	DIN Rail, Panel	25R4379	28.02

DC COIL RELAYS

Mfg. Part No.	Fig.	Contacts	Carry Current (A)	Coil Voltage (VDC)	Mounting	Stock No.	Price Each 1-24
● 725AXXBM4L-24D	1	SPST-NO	30	24	Quick Connect	25R4364	16.53
● 725AXXBC3ML-24D	2	SPST-NO	30	24	DIN Rail, Panel	25R4361	17.39
● 725BXXBC3ML-12D	2	DPST-NO	25	12	DIN Rail, Panel	25R4368	18.02
● 725BXXBC3ML-24D	2	DPST-NO	25	24	DIN Rail, Panel	25R4371	18.02
● 725BXXSC3ML-12D	3	DPST-NO	25	12	DIN Rail, Panel	25R4375	25.33
● 725BXXSC3ML-24D	3	DPST-NO	25	24	DIN Rail, Panel	25R4378	15.59

RELAY SOCKETS

Mfg. Part No.	Current (A)	Voltage Rating (V)	No. of Pins	Termination	Stock No.	Price Each 1-24
70-725-1*	30	300	6	Screw	25R4357	37.46

ACCESSORIES

Mfg. Part No.	Decription	Stock No.	Price Each 1-24
● 16-725SC-1	Hold Down Clip; For use with: 70-725 relay socket	25R4356	3.65

* Used with Fig. 1 Relays
(154945)

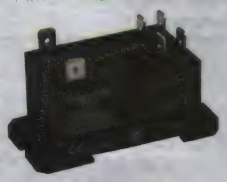
92 SERIES MAGNECRAFT 30A POWER RELAYS

RoHS Compliant Available

Schneider Electric

- Class F coil insulation
- 2HP switching capability
- Epoxy sealed package

30A switching, NC contacts rated 3A. Flange mount has ¼" QC terminals. Mechanical life: 5 million operations. Dimensions: 2.70L x 1.36W x 1.10"H, DIN/flange mount. UL listed, File No. E43641. Additional AC and DC voltages available; *go online or call.*



Flange / DIN Mount

Mfg. Part No.	Contacts	Coil Voltage	Coil Resist. (Ω)	Stock No.	Price Each 1-9	10-24	25-49
● 92S7D22D-12	DPST-NO	12VDC	86	45P2957	15.90	14.79	13.96
● 92S7D22D-24	DPST-NO	24VDC	350	45P2958	12.15	11.30	10.67
● 92S11D22D-12	DPDT	12VDC	86	45P2976	16.15	15.01	14.18
● 92S11D22D-24	DPDT	24VDC	1.6	71J8920	12.64	11.75	11.10
● 92S11A22D-120	DPDT	120VAC	1.6	10M6366	13.23	12.30	11.62

(12532)

MAGNECRAFT RELAY SOCKET USAGE GUIDE

Schneider Electric

70-750D5-1

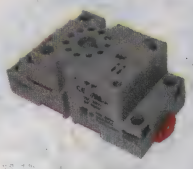
70-750D8-1

70-783D11-1

70-784D14-1

70-782D14-1

70-750DL8-1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70-782EL8-1

70-782EL11-1

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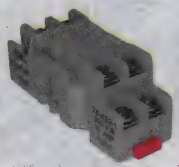
70-750EL11-1

70-750E8-1

70-750E11-1

70-78214-1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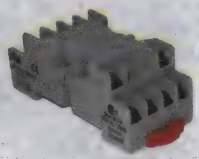
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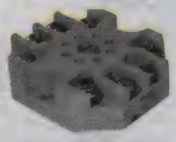
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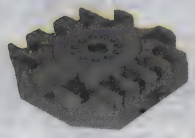
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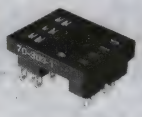
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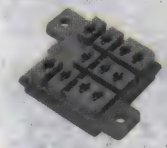
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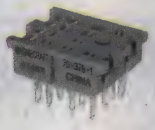
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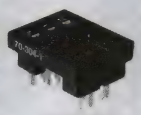
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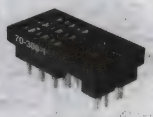
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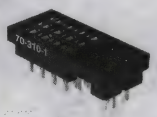
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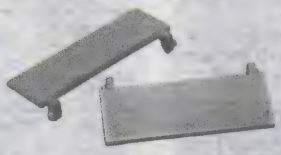
70-402-1

70-781T-1

16-700ST-1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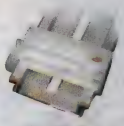
16-700DIN


16-DCLIP-1

Mfg. part no. 70-124-1 sockets have solder terminals, while **mfg. part no. 70-124-2** sockets have quick-connect terminals. **Mfg. part no. 70-178-1** sockets have printed circuit terminals with mounting tabs; **mfg. part no. 70-178-2** is without mounting tabs. **Mfg. part no. 70750E11-1** is a economical 11-pin socket with rising elevator box terminals mates with **mfg. part no. 750XCX** and **750XCXH** relays. For rating, dimensional information and volume pricing, *go online or call.*

RELAY TO SOCKET/SELECTOR GUIDE

Relay Series	DIN/Panel	US Style IP20 DIN/Panel	Euro Style	Euro Logic Style	Printed Circuit
67-2PDT	...	...	...	...	70-304-1
67-4PDT	...	...	...	...	70-306-1
67-6PDT	...	...	...	...	70-308-1
67-8PDT	...	...	...	...	70-310-1
211(A)CPSOX	70-464-1	70-750D8-1	70-750E8-1	...	...
211(A)CPSRX	70-465-1	70-750D11-1	70-750E11-1	...	...
W222	70-464-1	70-750D8-1	70-750E8-1	...	...
A283	70-463-1	...	...	70-788EL11-1	70-178-1
388J	70-463-1	...	...	70-788EL11-1	70-178-1
388ML	70-463-1	...	...	70-788EL11-1	70-178-1
711XBX	70-463-1	..	...	70-788EL11-1	70-178-1
750XBX	70-464-1	70-750D8-1	70-750E8-1	70-750EL8-1	...
750XCX	70-465-1	70-750D11-1	70-750E11-1	70-750EL11-1	...
755XBX	70-465-1	70-750D11-1	70-750E11-1	...	...
781XAX	...	70-781D5-1/70-70-781D-1	...	...	70-781T-1
782XAX	70-459-1	70-782D8-1/70-70-782D-1	...	...	70-402-1
782XBX	70-459-1	70-782D8-1/70-70-782D-1	...	...	70-402-1
783XCX	...	70-783D11-1/70-70-783D-1	..	...	...
784XDX	...	70-784D14-1/70-70-784D-1	...	...	...
782XBX(1, 2, 3)	70-461-1	70-782D14-1	70782E14-1	70-782EL8-1	70-402-1

➤CONTINUED➤

MAGNECRAFT RELAY SOCKET USAGE GUIDE (CONT.)

Relay Series	DIN/Panel	US Style IP20 DIN/Panel	Euro Style	Euro Logic Style	Printed Circuit
782XCX(1, 2, 3)	...	...	...	70-782EL11-1	70-402-1
782XDX(1, 2, 3)	70-461-1	70-782D14-1	70782E14-1	70-782EL14-1	70-402-1
788	70-463-1	...	...	...	70-178-1
TDRPRO-5000	70-465-1	70-750D11-1	70-750E11	...	...
TDRPRO-5001	70-464-1	70-750D8-1	70-750E8-1	70-EL11-1	...
TDRPRO-5002	70-464-1	70-750D8-1	70-750E8-1	...	...
TDRSOXB	70-463-1	...	...	...	70-178-1
TDRSOXP	70-464-1	70-750D8-1	70-750E8-1	...	...
TDRSRXB	70-463-1	...	...	...	70-178-1
TDRSRXP	70-465-1	70-750D11-1	70-750E11	...	...

SOCKETS AND HOLD-DOWN CLIPS

Sockets								Hold-Down Clips	
Mfg. Part No.	Terminals	Description	Pins	Amps	Voltage	Stock No.	Price Each 1-24	Mfg. Part No.	Stock No.
70-124-2	...	Spade Terminal DIN/Panel Mount	11	15	300	16M3420	1.59	...	...
70-169-1	DPDT	Octal/ DIN Panel Mount	8	15	300	10M6425	5.69	...	...
70-170-1	3PDT	Octal/ DIN Panel Mount	11	15	300	10M6426	8.52	...	...
70-178-1	...	Spade Terminal DIN/Panel Mount	11	15	300	18M9798	1.56	16-1351	69H8500
70-303-1	DPDT	Solder Terminal/Chassis Mount	...	10	300	10M6427	3.55	16-875-1	91B3156
70-304-1	DPDT	Printed Circuit Terminal	...	10	300	10M6428	3.55	16-875-1	91B3156
70-305-1	4PDT	Solder Terminal/Chassis Mount	...	10	300	10M6429	4.29	16-875-2	25C2810
70-306-1	4PDT	Printed Circuit Terminal	...	10	300	10M6430	4.29	16-875-1	91B3156
70-307-1	6PDT	Solder Terminal/Chassis Mount	...	10	300	15M4348	4.12	16-875-3	73C0019
70-308-1	6PDT	Printed Circuit Terminal	...	10	300	10M6431	3.97	16-875-3	73C0019
70-309-1	8PDT	Solder Terminal/Chassis Mount	...	10	300	10M6432	4.29	16-1120-8	69H8493
70-310-1	8PDT	Printed Circuit Terminal	...	10	300	10M6433	4.29	16-1120-8	69H8493
70-378-1	...	Solder Terminal/Chassis Mount	14	5	300	10M6434	2.84	16-1342-1	...
70-379-1	...	Printed Circuit Terminal	14	5	300	10M6435	2.80	16-1342-1	...
70-401-1	...	Solder Terminal/Chassis Mount	8	10	300	97C6632	2.73	16-1342-1	...
70-402-1	...	Printed Circuit Terminal	8	10	300	10M6436	1.57	16-1342-1	...
70-459-1	DPDT	Screw Terminal DIN/Panel Mount	8	10	300	10M6437	6.41	16-782SC	...
70-461-1	4PDT	Screw Terminal DIN/Panel Mount	14	10	300	10M6439	5.92	16-782SC	...
70-463-1	...	Screw Terminal DIN/Panel Mount	11	15	300	10M6440	5.78	16-1352-1	...
70-464-1	DPDT	Octal/ DIN Panel Mount	8	10/15	300/600	10M6441	3.57	16-750SC	...
70-465-1	3PDT	Octal/ DIN Panel Mount	11	15/5	300/600	10M6442	4.66	16-750SC	...
70-750E8-1	DPDT	Octal, Screw Terminal DIN/Panel Mount	8	10	300	72J4086	5.48	16-750SC	...
70-750E11-1	3PDT	Octal, Screw Terminal DIN/Panel Mount	11	10	300	72J4085	6.50	16-750SC	...
70-750EL8-1	DPDT	Octal, Screw Terminal DIN/Panel Mount	8	12	300	72J4084	7.01	...	...
70-750EL11-1	3PDT	Octal, Screw Terminal DIN/Panel Mount	11	12	300	72J4083	8.46	...	...
70-781F-1	SPDT	Solder Terminal/Panel Mount	5	15	300	10M6446	2.80	16-781SC	...
70-781T-1	SPDT	Printed Circuit/Terminal Mount	5	15	300	10M6447	2.09	16-781SC	...
70-782D14-1	4PDT	Screw Terminal DIN/Panel Mount	14	10	300	69K5576	5.04	16-782PC/16-782SC	..
70-782E14-1	4PDT	Screw Terminal DIN/Panel Mount	14	10	300	30M2640	9.58	16-782PC/16-782SC	...
70-782EL8-1	DPDT	Screw Terminal DIN/Panel Mount	8	12	300	69K5579	6.26	16-782PC/16-782SC	...
70-782EL11-1	3PDT	Screw Terminal DIN/Panel Mount	11	10	300	30M2639	9.58	16-782PC/16-782SC	...
70-782EL14-1	4PDT	Screw Terminal DIN/Panel Mount	14	10	300	69K5578	7.34	16-782PC/16-782SC	...
70-788EL11-1	3PDT	Screw Terminal DIN Mount	11	25	300	14M6823	6.62	...	...

DIN MOUNTING HARDWARE AND ADDITIONAL ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24	25-49	50-99	100-249
16-700ST-1	Write On Plastic ID Tag, For use with Magnecraft 70-782D14-1, 70-782EL8-1, 70-782EL11-1, 70-782EL14-1, 70-782E14-1 Sockets	69K4362	7.15	6.55	6.10	5.68
16-750/788FT-1	Write On Plastic ID Tag, For use with Magnecraft 70-750E8-1, 70-750E11-1, 70-750EL8-1, 70-750EL11-1, 70-788EL11-1 Sockets	69K4364	0.16	0.15	0.14	0.13
16-782FT-1	Write On Plastic ID Tag, For use with Magnecraft 70-782EL8-1, 70-782EL11-1, 70-782EL14-1, 70-782E14-1 Sockets	69K4366	0.16	0.15	0.14	0.13
16-750/788CBJ-1	Coil Bus Jumper for wireless socket connection. For use with Magnecraft 70-750DL11-1, 70-750EL8-1, 70-750EL11-1, & 70-788EL11-1 Sockets	69K4363	0.57	0.52	0.48	0.45
16-782CBJ-1	Coil Bus Jumper for wireless socket connection. For use with Magnecraft 70-782EL8-1, 70-782EL11-1, 70-782EL14-1 Sockets	69K4365	0.52	0.48	0.44	0.41
16-700DIN	DIN Rail Extruded Aluminum, 39.37" (1000 mm)	26H2340	8.34	7.63	7.06	6.66
70-784D-1	14 Pin, DIN/Panel Mount, With Screw Terminals And Clamping Plates	10M6450	10.81	10.44	9.93	8.91

(84574)

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DC POWER RELAYS

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

- Contact Form: SPST-NO
- Interrupt high-capacity loads
- Rated carry current: 60A
- Max. switching voltage: 400V

G9EN-1 SERIES RELAYS LEAD WIRE SCREW TERMINALS

Mfg. Part No.	Coil Res.(ohm)	Coil Voltage VDC Nom	Coil Current (mA)	Stock No.	Price Each 1-24
G9EN-1-UVD-DC12	28.8	12	417	90W1587	243.11
G9EN-1-UVD-DC24	115.2	24	208	90W1588	243.11

(210241)

PLUG-IN/INDUSTRIAL RELAYS – SQUARE

5A-10A ULTRA-HIGH SENSITIVITY RELAYS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- High reliability up to 500k operations
- Ultra-high sensitivity and quick response
- Ideal for switching multiple loads with one compact device
- Vibration and shock resistant

Standard Case

Flange mount, PC board mount and other coil voltages available; *go online or call.* All mfg. part no. shown below are plug-in/solder termination. **"S" suffix** indicates manufactured on automated production line. Items without **"S" suffix** are equivalent. **CR** in mfg. part no. indicates built-in surge suppression.

RELAYS

Mfg. Part No.	Carry Current (A)	Contacts	Coil Input Voltage	Coil Resist. (Ω)	LED Ind.	Stock No.	Price Each 1-24
● MY2 DC12(S)	10	DPDT	12VDC	160	N	36K3444	6.40
● MY2N DC12(S)	10	DPDT	12VDC	160	Y	36K7572	7.00
● MY2-02-DC24	10	DPDT	24VDC	636	N	96B2719	7.62
● MY2 DC24(S)	10	DPDT	24VDC	636	N	36K3445	6.40
● MY2N DC24(S)	10	DPDT	24VDC	636	Y	48F3641	7.10
● MY2N-AC24(S)	10	DPDT	24VAC	180	Y	48F3639	7.18
● MY2 AC110/120(S)	10	DPDT	110/120VAC	4.43	N	67K9437	6.54
● MY2 AC220/240(S)	10	DPDT	220/240VAC	18.79	N	48F3633	7.41
● MY2N AC110/120(S)	10	DPDT	110/120VAC	4.43	Y	36K2001	7.29
● MY2N-AC220/240(S)	10	DPDT	220/240VAC	18.79	Y	48F3638	8.12
● MY3-DC24	...	3PDT	24VDC	650	N	83F5411	8.77
● MY4 DC12(S)	5	4PDT	12VDC	160	N	36K7575	7.64
● MY4 DC24(S)	5	4PDT	24VDC	636	N	36K3446	7.55
● MY4N DC 24(S)	5	4PDT	24VDC	636	Y	36K2003	8.36
● MY4N AC24(S)	5	4PDT	24VAC	180	Y	48F3649	8.46
● MY4N DC100/110(S)	5	4PDT	100/110VDC	11.1	Y	35K4772	9.40
● MY4 AC110/120(S)	5	4PDT	110/120VAC	4.43	N	36K2002	7.72
● MY4-02-AC110/120	5	4PDT	110/120VAC	4.43	N	52F3753	8.17
● MY4N AC110/120(S)	5	4PDT	110/120VAC	4.43	Y	35K4771	8.52
● MY4 AC220/240(S)	5	4PDT	220/240VAC	18.79	N	36K7573	8.21
● MY4N AC220/240(S)	5	4PDT	220/240VAC	18.79	Y	48F3648	9.40
RELAYS WITH BUILT-IN CR (SURGE SUPPRESSION)							
● MY2N-CR AC110/120 (S)	10	DPDT	110/120VAC	4.43	Y	89C7499	16.92
RELAYS WITH BUILT-IN DIODE							
● MY2N-D2-DC24S	10	DPDT	24VDC	636	Y	67K9439	14.30
RELAYS WITH TEST BUTTON							
● MY4IN DC24 (S)	5	4PDT	24VDC	636	Y	36K7576	8.96
● MY4IN AC110/120 (S)	5	4PDT	110/120VAC	4.43	Y	96B9383	9.11
RELAYS WITH BUILT-IN DIODE							
● MY4N-D2-DC24S	5	4PDT	24VDC	636	Y	67K9443	15.66
RELAYS WITH BUILT-IN CR (SURGE SUPPRESSION)							
● MY4N-CR AC110/120 (S)	5	4PDT	110/120VAC	4.43	Y	36K7577	19.69
BIFURCATED RELAYS							
● MY4Z DC24(S)	5	4PDT	24VDC	636	Y	33K3876	13.25
● MY4ZN DC24(S)	5	4PDT	24VDC	636	Y	36K7578	15.85
● MY4Z-AC110/120	5	4PDT	110/120VAC	4.43	Y	52F3763	12.12
● MY4ZN AC110/120(S	5	4PDT	110/120VAC	4.43	Y	48F3653	15.97
BIFURCATED RELAYS WITH BUILT-IN DIODE							
● MY4ZN-D2 DC24(S)	5	4PDT	24VDC	636	Y	36K2004	19.33
BIFURCATED HERMETICALLY SEALED RELAYS							
● MY4H-US DC24	3	4PDT	24VDC	650	N	30C8279	54.65
● MY4H-US AC110/120	3	4PDT	110/120VAC	4.43	N	18M9249	55.23

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24	25-49
● PYF14A-E	DIN Track/Screw Mount Socket, Coil Screw Terminals on Bottom 4-Pole	52F3770	8.19	7.74
● PYF14A-N	DIN Track/Screw Mount Socket, Coil Screw Terminals on Top, 4-Pole	35K4859	8.24	7.78
● PYF08A-E	DIN Track/Screw Mount Socket, Coil Screw Terminals on Bottom, 2-Pole	36K2031	5.60	5.29
● PYF08A-N	DIN Track/Screw Mount Socket, Coil Screw Terminals on Top, 2-Pole	89C7783	5.49	5.18
● PYF08A	DIN-Track/Screw Mount Socket Front-Connecting Socket 2-pole	89C7782	6.01	5.68
● PY08-02	Back Connecting, PCB Terminal Socket, 2 Pole	35K4860	1.44	1.36
● PY14-02	Back Connecting, PCB Terminal Socket, 4 Pole	36K7593	2.02	1.91
● PYF14A	Track Mounting/Front Connecting Socket 4-pole	36K2032	9.67	9.13
● PYF14S	Screwless Clamp Terminal Socket, 4 Pole	89C7789	11.10	10.48
● PY14	Back-Mounting Socket Solder Terminals w/o Clip (4 Poles)	35K3221	2.11	1.99

➤ CONTINUED ➤

5A-10A ULTRA-HIGH SENSITIVITY RELAYS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each 1-24	25-49
● PYC-A1	Hold-Down Clip for PYF08A-E and PYF14A-E Sockets	36K7592	0.30	0.28
● PYC-P	Hold-Down Clip For Back Connecting, PCB Terminal Sockets	17M7537	0.28	0.25
DIN RAIL TRACK AND ACCESSORIES				
● PFP-50N	Mounting Rail (length = 50cm)	93B2043	6.49	6.05
● PFP-100N	Mounting Rail (length = 1m)	17M7511	7.88	7.35
● PFP-100N2	Mounting Rail (length = 1m)	34K8630	24.63	22.99
● PFP-M	End Plate	36K3451	0.88	0.81
● PFP-S	Spacer	17M7510	0.58	0.54

(3728)

10A GENERAL-PURPOSE PLUG-IN RELAYS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Interlocked frame-and-contact block prevents contact misalignment during plug-in
- Rugged power driver offers superior 3/16" through-air and 3/8" over-surface spacing
- ½HP motor controller applications @ 240, 480 and 600VAC or ⅓HP @ 120VAC

MJ series are 10A general-purpose plug-in relays. Plain case: 48.38(1.905)H x 38.73(1.525)W x 35.56"(1.400mm)L. Flange: 73.66(2.90)H x 38.73 (1.525)W x 35.56"(1.400mm)L. UL recognized, CSA certified. For use with **PTF series** sockets, *order separately below.* Latching versions and units with manual operator, push-to-operate button and LED indicator are also available; *go online or call.*

Plain Case

Flange Mount

AC COIL RELAYS

Mfg. Part No.	Contacts	Carry Current (A)	Coil Voltage (VAC)	Mounting	Stock No.	Price Each 1-24	25-49	50-99
● MJN2CF-AC24	DPDT	10	24	Quick Connect	14C4229	10.79	10.19	9.78
● MJN2C-AC120	DPDT	10	120	Quick Connect	14C4221	11.11	10.49	10.07
● MJN2C-E-AC120	DPDT	20	120	Quick Connect	89C7213	14.33	13.53	12.99
● MJN3C-AC24	3PDT	10	24	Quick Connect	14C4214	11.09	10.47	10.05
● MJN3C-AC120	3PDT	10	120	Quick Connect	14C4217	12.50	11.79	11.33
● MJN3CF-AC120	3PDT	10	120	Quick Connect	14C4227	12.71	11.99	11.52
● MJN3C-N-AC120	3PDT	10	120	Quick Connect	89C7262	14.03	13.24	12.71

DC COIL RELAYS

Mfg. Part No.	Contacts	Carry Current (A)	Coil Voltage (VDC)	Mounting	Stock No.	Price Each 1-24	25-49	50-99
● MJN2C-DC12	DPDT	10	12	Quick Connect	14C4220	10.62	10.03	9.63
● MJN2CF-DC12	DPDT	10	12	Quick Connect	14C4231	10.29	9.71	9.32
● MJN2C-DC24	DPDT	10	24	Quick Connect	14C4219	10.62	10.03	9.63
● MJN2CE-DC24	DPDT	20	24	Quick Connect	89C7236	12.27	11.58	11.12
● MJN2CF-DC24	DPDT	10	24	Quick Connect	14C4233	10.20	9.63	9.24
● MJN3C-DC12	3PDT	10	12	Quick Connect	14C4216	10.84	10.23	9.83
● MJN3C-DC24	3PDT	10	24	Quick Connect	14C4215	10.84	10.23	9.83
● MJN3CF-DC24	3PDT	10	24	Quick Connect	14C4224	11.81	11.15	10.70

SOCKETS

11-pin square sockets. Rated 300VAC @ 10A, 150VAC @ 15A. For use with hold-down springs **mfg. part nos. PYMJN-PCB** and **PYMJN-S**. UL recognized, CSA certified.

Mfg. Part No.	Terminals	Dimensions (L x W x D)	Stock No.	Price Each 1-24	25-49
● PTF11PC	Screw, DIN Mount	3.000 x 1.550 x 1.030"	26M8294	8.04	7.59
● PTF21PC	Screw	3.146 x 1.638 x 0.880"	17M7531	7.89	7.45
● PTFPCB	PC Board	2.030 x 1.50 x 0.317"	14C4251	1.60	1.51

(56270)

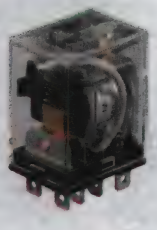
10A-15A PLUG-IN RELAYS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Available in 4 contact configurations
- Available in plug-in, flange mount and PC board mounting styles
- Arc barrier equipped
- Dielectric strength: 2,000VAC
- AgCdO contacts
- AC models: 50 million operations min.
- DC models: 100 million operations min.

UL recognized, CSA certified. Additional accessories available (**mfg. part no. PT14** back connecting solder terminal socket and **mfg. part no. PT14-0** back connecting PCP terminal socket); *go online or call.*



Plug-In

Flange Mount

10A PLUG-IN

➤ CONTINUED ➤

10A-15A PLUG-IN RELAYS (CONT.)

Mfg. Part No.	Contacts	Coil Input Voltage	Coil Resist. (Ω)	LED Indicator	Stock No.	Price Each 1-24
LY2-AC12	DPDT	12VAC	46	No	89C7012	7.73
LY2-AC24	DPDT	24VAC	46	No	36K7544	7.84
LY2N-AC24	DPDT	24VAC	180	Yes	35K3208	10.67
LY2-AC100/110	DPDT	100/110VAC	3.75 kohm	No	26C1908	7.73
LY2N-AC100/110	DPDT	100/110VAC	3.75	Yes	34K7878	10.52
LY2-AC110/120	DPDT	110/120VAC	4.43	No	36K7543	7.84
LY2N-AC110/120	DPDT	110/120VAC	4.43	Yes	36K1998	10.53
LY2N-AC200/220	DPDT	200/220VAC	12.95	Yes	84C9820	10.96
LY2-AC220/240	DPDT	220/240VAC	18.79	No	52F3792	8.21
LY2N-AC220/240	DPDT	220/240VAC	18.79	Yes	35K3207	10.83
LY2-DC6	DPDT	6VDC	40	No	67K9411	7.73
LY2-DC12	DPDT	12VDC	160	No	36K7546	7.84
LY2N-DC12	DPDT	12VDC	160	Yes	36K7550	10.39
LY2-DC24	DPDT	24VDC	650	No	35K4715	7.84
LY2N-DC24	DPDT	24VDC	650	Yes	67K9413	10.53
LY2-D-DC24	DPDT	24VDC	650	No	36K7545	11.51
LY2N-D2-DC24*	DPDT	24VDC	650	Yes	93B9478	17.28
LY2-DC48	DPDT	48VDC	2.6	No	51B758	7.73
LY3-AC24	3PDT	24VAC	100	No	35K3209	10.91
LY3-AC120	3PDT	120VAC	2.45	No	36K3430	10.84
LY3N-AC110/120	3PDT	120VAC	2.2	Yes	67K9414	13.74
LY3-DC12	3PDT	12VDC	107	No	35K3210	11.19
LY3-DC24	3PDT	24VDC	410	No	36K7551	11.06
LY4-AC24	4PDT	24VAC	78	No	36K7552	12.87
LY4-AC120	4PDT	120VAC	2.2	No	36K1999	12.62
LY4N-AC120	4PDT	120VAC	2.2	Yes	36K7555	17.35
LY4-AC240	4PDT	240VAC	9	No	36K7553	12.82
LY4-DC12	4PDT	12VDC	100	No	36K3431	13.03
LY4N-AC24	4PDT	24VAC	78	Yes	22C9544	17.13
LY4-DC24	4PDT	24VDC	350	No	36K7554	13.03
LY4N-DC24	4PDT	24VDC	650	Yes	91B9452	17.93
LY4N-D2-DC24*	4PDT	24VDC	650	Yes	93B3226	19.57
LY4-DC48	4PDT	48VDC	2.6	No	35K4717	12.87
15A PLUG-IN						
LY1-AC24	SPDT	24VAC	180	No	36K7540	7.21
LY1-AC110/120	SPDT	110/120VAC	4.46	No	36K7539	7.08
LY1N-AC110/120	SPDT	110/120VAC	4.46	Yes	10M5236	9.47
LY1-DC12	SPDT	12VDC	160	No	60K6197	6.89
LY1-DC24	SPDT	24VDC	650	No	36K1996	6.97
10A FLANGE MOUNT						
LY2F-AC24	DPDT	24VAC	180	No	36K7548	8.09
LY2F-AC110/120	DPDT	110/120VAC	4.43	No	35K4716	8.00
LY2F-AC220/240	DPDT	220/240VAC	18.79	No	36K3429	8.54
LY2F-DC12	DPDT	12VDC	160	No	67K9412	8.00
LY2F-DC24	DPDT	24VDC	650	No	36K7549	8.00
LY3F-AC24	3PDT	24VAC	180	No	92B4050	10.91
LY3F-DC24	3PDT	24VDC	410	No	25H9906	10.70
LY4F-DC12	4PDT	12VDC	100	No	89C7098	12.46
LY4F-DC24	4PDT	24VDC	350	No	89C7099	12.46
LY4FAC24	4PDT	24VAC	78	No	24C9738	12.46
LY4F-AC120	4PDT	120VAC	2.2	No	89C7096	12.46
15A FLANGE MOUNT						
LY1F-AC24	SPDT	24VAC	180	No	52F3780	7.22
LY1F-AC110/120	SPDT	110/120VAC	4.46	No	36K7542	7.09
LY1F-AC220/240	SPDT	220/240VAC	18.79	No	35K3204	7.40
LY1F-DC12	SPDT	12VDC	160	No	35K3205	7.31
LY1F-DC24	SPDT	24VDC	650	No	67K9410	7.22
10A PC BOARD						
LY2-0-AC24	DPDT	24VAC	180	No	36K7547	7.73
LY2-0-AC110/120	DPDT	110/120VAC	4.43	No	88M3299	7.92
LY2-0-DC12	DPDT	12VDC	160	No	36K1997	7.92
LY2-0-DC24	DPDT	24VDC	650	No	35K3206	7.92
LY2-0-DC100/110	DPDT	100/110VDC	11	No	27C1841	8.17
LY4-0-DC12	4PDT	12VDC	100	No	89C7092	11.77
LY4-0-DC24	4PDT	24VDC	350	No	93B6745	12.31
LY4-0-AC120	4PDT	120VAC	22.2	No	36K3432	12.46

➤ CONTINUED ➤

10A-15A PLUG-IN RELAYS (CONT.)

15A PC BOARD

Mfg. Part No.	Contacts	Coil Input Voltage	Coil Resist. (Ω)	LED Indicator	Stock No.	Price Each 1-24
LY1-D-DC24	SPDT	24VDC	650	No	89C6997	9.07
LY1-0-DC24	SPDT	24VDC	650	No	88M3298	6.98

* With diode surge suppression.

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24	25-49	50-99
PF113A-E	40" (101.60cm) DIN Rail Socket Mounting Track	36K2011	7.55	7.13	6.78
PFP-100N	20" (50.80cm) DIN Rail Socket Mounting Track	17M7511	7.88	7.35	7.09
PFP-50N	End Plate	93B2043	6.49	6.05	5.84
PT08-0	Back Connecting PCB Terminal Socket for SPDT or DPDT Relays	52F3807	2.05	1.94	1.85
PTF08A-E	Track Mounted Socket for SPDT or DPDT Relays	17M7530	5.48	5.18	4.93
PTF11A	Track Mount Socket for 3PDT Relays	36K2012	7.78	7.35	6.99
PTF14A-E	Track Mount Socket for 4PDT Relays	36K2013	8.39	7.92	7.55
PYC-A1	Hold-Down Clip (Standard) for SPDT or DPDT Track Mounted Sockets	36K7592	0.30	0.28	0.27
PYC-P	Hold-Down Clip (Standard) for SPDT or DPDT Back Connecting Sockets	17M7537	0.28	0.25	0.24

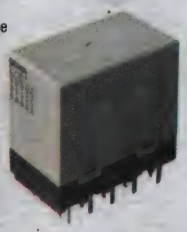
(3727)

25A GENERAL-PURPOSE RELAYS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Ideal for 3-phase resistive and inductive motor control applications
- No contact chattering for momentary voltage drops up to 50% of rated voltage
- Withstand more than 4 kV between contacts that are of different polarity and between the coil contacts
- Flame-resistant materials (UL94V-0) used for all insulation
- Push-to-test button on all models
- Termination configuration - screw terminal



Applications:

- Compressors for air conditioners and heater switching controllers
- Switching controllers for power tools or motors
- Lamp controls, motor drivers, and power supply switching controllers in copy machines, fax machines, and other office equipment
- Power controllers for packers, food processing equipment and inverters

Contains the relay and bracket packed together. The rated current and coil resistance are measured at a coil temperature of 23°C (73°F) with tolerances of +15%/-20% for AC rated current and ±15% for DC coil resistance.

Mfg. Part No.	Coil Voltage	Coil Res. (Ω)	Construction	Input Power/ Current	Stock No.	Price Each 1-9
G7J-2A2-B-B-W1-DC24	24VDC	288	Unsealed	2W	15C6994	32.86
G7J-3A1-B-B-W1-DC24	24VDC	288	Unsealed	2W	15C6997	32.17
G7J-4A-B-W1-AC100/120	100/120VAC	...	Unsealed	1.8-2.6 VA	88K1108	37.04
G7J-4A-B-W1-DC24	24VDC	288	Unsealed	2W	15C7000	32.86

*Per Omron technical support the coil resistance of the AC relays does not calculate into the function of the relay.
(75416)

5A-30A POWER RELAYS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Dielectric strength: 4,000VAC
- Max. switching voltage: 250VAC
- Contact material: AgCdO
- Push-to-test button
- UL class B coil insulation
- Conforms to IEC 950
- Quick-connect, screw and PC board terminals available

Quick-connect and screw-terminal relays available with E-brackets **mfg. part no. R99-07G5D** and track mounting adaptor **mfg. part no. P7LF-D** separately. Quick-connect relays available with front connecting socket **mfg. part no. P7LF-06** and cover **mfg. part no. P7LF-C**. PC board terminal versions and VDE approved versions also available; *go online or call.* UL recognized, CSA certified, TÜV approved.

Screw Terminal

Quick-Connect

SPST-NO, 30A

Mfg. Part No.	Coil Input Voltage	Coil Resist. (Ω)	Ter-minals*	Stock No.	Price Each 1-24	25-49
G7L-1A-TUB-J-CB-DC12	12VDC	75	Q.C.	36K3248	10.65	10.01
G7L-1A-BUB-J-CB-DC12	12VDC	75	Screw	52F3947	14.20	13.34
G7L-1A-TUB-J-CB-AC24	24VAC	303	Q.C.	67K9364	11.52	10.82
G7L-1A-BUB-J-CB-AC24	24VAC	...	Screw	52F3944	14.37	13.51
G7L-1A-TUB-J-CB-DC24	24VDC	303	Q.C.	35K4541	10.08	9.46
G7L-1A-BUB-J-CB-DC24	24VDC	303	Screw	36K1956	14.57	13.69
G7L-1A-BUB-J-CB-AC100/120	100/120VAC	5,260	Screw	35K3199	15.62	14.68

➤ CONTINUED ➤

5A-30A POWER RELAYS (CONT.)

Mfg. Part No.	Coil Input Voltage	Coil Resist. (Ω)	Ter-minals*	Stock No.	Price Each 1-24	Price Each 25-49
● G7L-1A-TUB-J-CB-AC100/120	100/120VAC	5,260	Q.C.	35K4540	11.52	10.82
● G7L-1A-TUB-J-CB-AC200/240	240VDC	21,000	Q.C.	36K3247	12.07	11.34
DPST-NO, 25A						
● G7L-2A-TUB-J-CB-DC12	12VDC	75	Q.C.	36K7474	10.92	10.26
● G7L-2A-TUB-CB-AC24	24VAC	303	Q.C.	89C6808	11.66	10.96
● G7L-2A-TUB-J-CB-AC24	24VAC	303	Q.C.	67K9366	12.23	11.50
● G7L-2A-BUB-J-CB-DC24	24VDC	303	Screw	67K9365	15.30	14.37
● G7L-2A-TUB-J-CB-DC24	24VDC	303	Q.C.	35K4544	10.92	10.26
● G7L-2A-TUB-J-CB-AC100	100VAC	5,260	Q.C.	52F3950	12.23	11.50
● G7L-2A-BUB-J-CB-AC100/120	100/120VAC	5,260	Screw	52F3955	16.55	15.54
● G7L-2A-T-J-CB-AC100/120	100/120VAC	5,260	Q.C.	51B757	12.07	11.34
● G7L-2A-TUB-CB-AC100/120	100/120VAC	5,260	Q.C.	35K4542	12.37	11.64
● G7L-2A-BUB-J-CB-AC200/240	200/240VAC	21,000	Screw	52F3956	17.27	16.22
● G7L-2A-TUB-80-CB AC200/240	200/240VAC	21,000	Q.C.	36K1957	12.93	12.15

*Q.C. = Quick-Connect
(3726)

30A HEAVY-DUTY POWER RELAYS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

SPST-NO Short Base

SPDT Short Base

DPST-NO Short Base

DPDT Long Base

- Contact rating: 30A
- Class F coil insulation
- Molded in DuPont Rynite® for environmental protection
- Rugged construction rivets terminal to base

Nominal coil power: 9.5VA (AC coil), 2W (DC coil). Operate time: 30ms. Release time: 30ms. Dielectric strength: 2200 Vrms. Dimensions: 55.88H x 63.50W x 63.50D mm (short base); 60.45H x 84.33W x 63.50L mm (long base).

Mfg. Part No.	Coil Input Voltage	Coil Resist. (Ω)	Contacts	Stock No.	Price Each 1-9	Price Each 10-24
AC COIL — SHORT BASE						
● MGN2A-AC24	24	11.5	DPST-NO	89C7162	45.99	43.10
● MGN1C-AC120	120	295	SPDT	89C7148	41.74	39.11
● MGN1X-AC120	120	295	SPST-NO	89C7156	33.80	31.67
● MGN2A-AC120	120	295	DPST-NO	89C7160	48.95	45.87
AC COIL — LONG BASE						
● MGN2C-AC24	24	11.5	DPDT	89C7167	58.96	55.25
● MGN2C-AC120	120	295	DPDT	89C7166	52.46	49.16
● MGN2CM-AC120*	120	295	DPDT	89C7171	66.20	62.04
● MGN2C-AC240	240	1170	DPDT	89C7168	53.00	49.67
DC COIL — SHORT BASE						
● MGN1C-DC24	24	290	SPDT	46M6746	35.83	33.57
● MGN2A-DC24	24	290	DPST-NO	89C7164	40.84	38.27
DC COIL — LONG BASE						
● MGN2C-DC12	12	72	DPDT	74C6904	61.18	57.33
● MGN2C-DC24	24	290	DPDT	89C7170	56.42	52.87

* Magnetic blow-out version
(79224)

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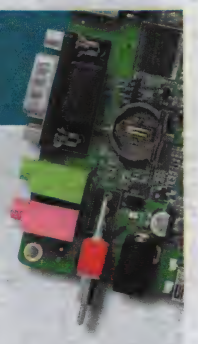

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30A - 200A SERIES DC POWER RELAYS

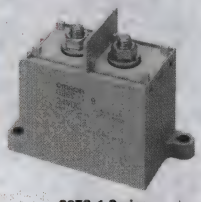
RoHS Compliant Available

OMRON ELECTRONIC COMPONENTS

- Contact Form: SPST-NO
- Interrupt high-capacity loads
- Consume less power than conventional relays
- Low noise level during switching

The switching section and driving section are gas-injected and hermetically sealed, allowing these compact relays to interrupt high-capacity loads and high-voltage circuits. The sealed construction also requires no arc space, saves space, and helps ensure safe applications. Operating temperature: -40°C to +70°C (**mfg. part nos. G9EA-**); -40°C to +50°C (**mfg. part nos. G9EC-**). UL/CSA approval pending.

G9EA-1 Series


G9EC-1 Series

Mfg. Part No.	Coil Voltage (VDC)	Carry/ Switching Current (A)	Coil Resistance (Ω)	Stock No.	Price Each 1-24	Price Each 25-49
G9EA-1 SERIES RELAYS M3.5 SCREW TERMINALS						
● G9EA-1 DC12	12	60/100	28.8	34K3631	176.52	161.94
● G9EA-1 DC24	24	60/100	115.2	36K1959	180.76	165.83
● G9EA-1-B-CA-DC24	24	100/30	115.2	09J1726	208.61	191.38
G9EC-1 SERIES RELAYS NUT TERMINALS						
● G9EC-1-B DC12	12	200/200	12.8	36K3253	494.25	453.42
● G9EC-1-B DC24	24	200/200	51.2	35K4546	353.04	323.87

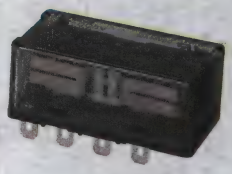
(60294)

10-15A HIGH-SENSITIVITY POWER RELAYS

RoHS Compliant Available

Panasonic

- Cadmium-free contacts
- High sensitivity in small size 150mW pick-up, 300mW nominal operating power
- Latching types available
- Wide switching range
- High vibration/shock resistance



Carrying current: 1mA to 15A (DPDT); 1mA to 10A (4PDT). Vibration resistance: 18G amplitude 3mm (10 to 55Hz). Shock resistance: 40G (11ms). Initial contact resistance, max. 30mΩ. Contact material: Stationary contact: Gold flashed silver alloy. Movable contact: Silver alloy. Ambient temperature: -50°C to +60°C. Initial insulation resistance 1000 MΩ.

Mfg. Part No.	Coil Voltage (VDC)	Contacts	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99
● SP2-DC5V	5	DPDT	46F5700	30.27	27.78	24.69
● SP2-DC12V	12	DPDT	46F5702	31.44	28.85	25.65
● SP4-DC12V	12	4PDT	46F5712	40.27	36.95	32.85
● SP2-DC24V	24	DPDT	46F5703	31.44	28.85	25.65
● SP2-P-DC24V	24	DPDT	64K3174	31.44	28.85	25.65
● SP4-DC24V	24	4PDT	46F5713	40.27	36.95	32.85
● SP4-P-DC24V	24	4PDT	99F4637	42.26	38.78	34.47
2-COIL LATCHING						
● SP2-L2-DC12V	12	DPDT	46F5707	35.89	32.94	29.28

SOCKETS AND HARDWARE

Mfg. Part No.	Description	For Use With	Stock No.	Price Each 1-24	Price Each 25-49
● SP2-SF	Screw terminal socket	DPDT Relays	46F5720	14.53	13.33
● SP4-SF	Screw terminal socket	4PDT Relays	64K3176	22.63	20.77
● SP-MA	Mounting Plate for DIN rail mounting	DPDT and 4PDT Relays	64K3173	3.00	2.75

(84519)

HN/AHN SERIES HIGH POWER DIFURCATED CONTACT RELAYS

RoHS Compliant Available

Panasonic

- Contact configuration: DPDT
- Continuous current max. 5A
- Slim and compact size
- High-capacity and high reliability

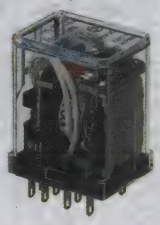
Mfg. Part No.	Coil Voltage	Coil Current (mA)	Coil Resist.	Stock No.	Price Each 1-24
AC COILS					
● AHN210X1	120	9.7	...	11N0361	9.19
DC COILS					
● AHN22012	12	44.4	270	18K8673	7.77
● AHN22024	24	22	1.09	11N0375	7.71
DC COILS WITH LED INDICATION					
● AHN22112	12	44.4	270	11N0381	8.81

(197912)

5-10A PLUG-IN RELAYS

RoHS Compliant Available

Panasonic



- High reliability - min. 10^8 mechanical operations (DC type)
- Low to high level loads (100µA to 10µA)
- LED and latching version available
- Sealed types and bifurcated contacts available

AC COIL RELAYS

Mfg. Part No.	Contacts	Carry Current (A)	Coil Voltage (VAC)	No. of Pins	LED	Stock No.	Price Each 1-24	25-49	50-99
HC2-H-AC24V-F	DPDT	7	24	8	No	45M7099	13.39	12.29	10.93
HC2-H-AC120V-F	DPDT	7	120	8	No	45M7098	15.17	13.93	12.38
HC2-HL-AC120V-F	DPDT	7	120	8	Yes	08N1779	18.34	16.83	14.95
HC2-H-AC240V-F	DPDT	7	240	8	No	78M7405	17.36	15.93	14.16
HC2-HP-AC115V-F	DPDT	7	115	8	No	11N4735	14.20	13.03	11.58
HC3-H-AC24V-F	3PDT	7	24	11	No	45M7102	13.60	12.48	11.09
HC4-H-AC24V	4PDT	5	24	14	No	64K3141	15.42	14.15	12.58
HC4-HP-AC115V	4PDT	5	115	14	No	97F1169	16.36	15.01	13.33
HC4-H-AC120V	4PDT	5	120	14	No	08N1782	16.36	15.01	13.33
HC4-HL-AC120V	4PDT	5	120	14	Yes	08N1783	17.48	16.04	14.25
HC4-H-AC240V	4PDT	5	240	14	No	51F3722	19.68	18.06	16.05

DC COIL RELAYS

Mfg. Part No.	Contacts	Carry Current (A)	Coil Voltage (VDC)	No. of Pins	LED	Stock No.	Price Each 1-24	25-49	50-99
HC1-H-DC12V-F	SPDT	10	12	5	No	45M7097	10.83	9.94	8.83
HC1-H-DC24V-F	SPDT	10	24	5	No	86K9350	10.36	9.50	8.45
HC2-H-DC12V-F	DPDT	7	12	8	No	45M7100	13.39	12.29	10.93
HC2-HP-DC12V-F	DPDT	7	12	8	No	11N4746	12.45	11.42	10.15
HC2-H-DC24V-F	DPDT	7	24	8	No	86K9354	13.07	11.99	10.66
HC2-HL-DC24V-F	DPDT	7	24	8	Yes	08N1780	18.37	16.85	14.97
HC2E-H-DC24V-F	DPDT	3	24	8	No	11N4769	18.93	17.37	15.43
HC3-H-DC24V-F	3PDT	7	24	11	No	45M7105	14.39	13.21	11.74
HC3-HP-DC24V-F	3PDT	7	24	11	No	11N4810	14.34	13.15	11.68
HC4-H-DC12V	4PDT	5	12	14	No	64K3142	15.42	14.15	12.58
HC4-HP-DC12V	4PDT	5	12	14	No	10C5971	15.36	14.09	12.52
HC4-H-DC24V	4PDT	5	24	14	No	64K3143	15.61	14.32	12.73
HC4-HL-DC24V	4PDT	5	24	14	Yes	50B859	20.27	18.60	16.52
HC4D-H-DC24V	4PDT	3	24	14	No	94B0726	20.16	18.49	16.43
HC4E-HP-DC24V	4PDT	5	24	14	No	97B4102	21.65	19.86	17.64
HC4-H-DC110V	4PDT	5	110	14	No	51F3717	16.36	15.01	13.33
HL2-HP-DC24V-F	DPDT	10	24	8	No	12N3680	14.81	13.57	12.10

(88572)

INDUSTRIAL SEQUENCING (STEPPER) RELAYS

STRUTHERS-DUNN

- 5A rated DPDT contacts
- Transfer-on-energize or transfer-on-release available
- Custom cam sequences available (up to 8 steps)
- Seismic qualified integral hold-down clip
- 5 million operations - mechanical
- Encapsulated coil

RELAYS

Mfg. Part No.	Contact Transfer	Coil Voltage	Coil Resist. (Ω)	Stock No.	Price Each 1-4
A311XBXP-120VAC	When Coil is Energized	120VAC	540	29F2873	248.98
A311XBXPR-120VAC	When Coil is De-energized	120VAC	540	29F2874	244.07

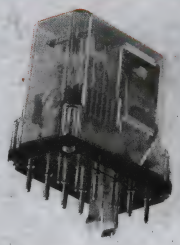
SOCKETS

Mfg. Part No.	Description	Stock No.	Price Each 1-24
27390	12-Pin Panel Mount with Screw Terminals & Clamping Plates	60F3117	22.34
27390D	12-Pin DIN Mount with Screw Terminals & Clamping Plates	69H8902	21.10

Lamp (L) and coil supperssion (V) among options available (example 311XBXPLV-24VDC)
(4038)

10A INDUSTRIAL RELAYS

STRUTHERS-DUNN



- 10A carry / 30A make
- Multiple / Custom contact configurations up to 6 pole
- Blowout magnets available for DC switching
- Seismic qualified integral hold-down clip
- Nuclear versions available
- Continuous duty rated

UL listed when used with mating sockets **27390(D)** for 12 pin or **33377(D)** for 14 pin.

Mfg. Part No.	Coil Input Voltage	Contacts	Coil Resist. (Ω)	Indicator Light	Stock No.	Price Each 1-4
219XBXP-120VAC	120VAC	DPDT	540	N	64K0659	208.16
219XBXP-115/125VDC	125VDC	DPDT	6.2	N	69H8830	178.98
219XBXPLM-125VDC	125VDC	DPDT	6.2	Y /Manual Actuator	90F1402	273.93
219XDXP-120VAC	120VAC	4PDT	540	N	60F3053	197.80
219XDXPLM-120VAC	120VAC	4PDT	540	Y /Manual Actuator	70B3891	229.40
219XDXP-115/125VDC	125VDC	4PDT	6.2	N	69H8832	205.60
219FXXP-120VAC	120VAC	6PST-NO	540	N	60F3054	291.43
219ABAP-120VAC	120VAC	DPST-NO, DPST-NC	540	N	60F3106	145.59
219ABAPL-120VAC	120VAC	DPST-NO, DPST-NC	540	Y	60F3193	273.68
219ABAP-115/125VDC	125VDC	DPST-NO, DPST-NC	6.2	N	60F3108	216.66
219BBXP 120VAC	120VAC	DPDT-NO	540	N	60F3103	129.87
219BBXPL-120VAC	120VAC	DPDT-NO	540	Y	60F3194	175.38
219BBXPLM-120VAC	120VAC	DPDT-NO	540	Y /Manual Actuator	94F1906	182.05
219BBXP-24VDC	24VDC	DPDT-NO	250	N	93K6399	168.71
219BBXP-115/125VDC	125VDC	DPDT-NO	6.2	N	60F3105	132.69
219DXBP-120VAC	120VAC	6PST-4NO, DPST-NC	540	N	60F3055	299.68
219DXBPLM-120VAC	120VAC	6PST-4NO, DPST-NC	540	Y /Manual Actuator	90F1403	313.67

Blow out magnet (69), lamp (L) and manual actuator (M) among options available (example 219XBX69PLM-24VDC)

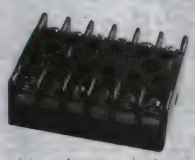
12 & 14 PIN PANEL MOUNTABLE SOCKETS

Mfg. Part No.	Description	Stock No.	Price Each 1-24
27390D ,	12 Pin Socket Panel Mount, with Screw Terminals & Clamping Plates	69H8902	21.10
33377D 219 SOCKET	14 Pin Socket Panel Mount, with Screw Terminals & Clamping Plates	69H9061	47.25

(4039)

12 & 14PIN INDUSTRIAL RELAY SOCKETS

STRUTHERS-DUNN



27390

27390D

33377D

- Rated 10A at 300V
- Single level wiring
- Polarized
- DIN or panel mount ("D" versions)
- Finger safe non-removable screws ("D" versions)
- Removable screws for ring terminals (Non "D" versions)
- Panel mounting (Non "D" versions)

Industrial sockets have front-connected wiring on one level with screw terminals. Mating relays have locking clip that snaps into socket. Dimensions for **27390**: 2.65L x 2.18W x 0.78"H; **33377**: 3.10L x 2.18W x 0.78"H. Sockets fit **219, 236, 237, B255, A311 series** relays; *sold separately on pages 1647-1648*. UL listed when used with **219** and **B255 series** relays; otherwise UL recognized file no. E70550.

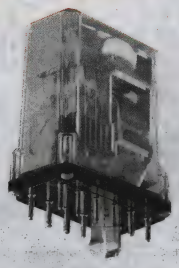
Mfg. Part No.	Style	Weight (g)	Stock No.	Price Each 1-24	25-49	50-99
27390	12-Pin	102	60F3117	22.34	21.32	19.78
27390D	12-Pin DIN	102	69H8902	21.10	20.16	18.69
33377D 219 SOCKET	14-Pin DIN	120	69H9061	47.25	45.11	41.82

(31684)

PLUG-IN/INDUSTRIAL RELAYS – SQUARE

10A INDUSTRIAL LATCHING RELAYS

STRUTHERS-DUNN



- Dual coil latch / un-latch
- Position maintained during power outages
- 10A carry / 30A make
- Seismic qualified integral hold down clip
- 10 million operations - mechanical
- Continuous duty rated

UL listed when used with 12-pin mating sockets **27390/Z7390D**. *on page 1647*

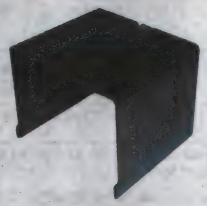
Mfg. Part No.	Coil Input Voltage	Contacts	Resistance (Ω) Latch/Unlatch	Stock No.	Price Each 1-4	Price Each 5-9
255XBXP-120VAC	120VAC	DPDT	540 / 1450	**60F3112**	452.54	415.64
B255XCXP-120VAC	120VAC	3PDT	540 / 1450	**60F3113**	218.20	200.41
255XCXP-24VDC	24VDC	3PDT	250 / 360	**94F4731**	464.57	426.69
255XCXP-115/125VDC	125VDC	3PDT	6200 / 8000	**29F2698**	240.79	221.15
255BXBP-120VAC	120VAC	DPST-1NO, SPST-NC	540 / 1450	**60F3114**	356.09	327.06
255BXBP-115/125VDC	125VDC	DPDT-2NO, DPDT-NC	6200 / 8000	**90F1404**	214.05	196.59

Blow out magnet (69), lamp (L) and manual actuator (M) among options available (example 255XBX60PLM-120VAC)
(4035)

25A POWER RELAYS

STRUTHERS-DUNN

- AC or DC operation up 480V
- 4PDT contacts
- 100,000 cycles @ load
- 35A @ 277VAC
- 20A @ 30VDC
- Screw terminations standard, QC available



35D203

Screw-terminal units have silver-cadmium oxide contacts rated 25A at 277VAC, 50/60Hz resistive, or 1HP per moveable arm at 120 or 240VAC single phase. Mount by one front key hole and two rear channel slots for 8-32 screws on 2 x 2.5″ (50,80 x 63.50) triangular centers. Plastic and metal covers available. Dimensions: 2.657L x 3.394W x 2.719″H. UL listed file no. E22575, CSA certified file no. 15374. Covered versions also available, *go online or call*

AC COIL VOLTAGE

Mfg. Part No.	Coil Voltage (VAC)	Coil Resist. (Ω)	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-24	Price Each 25-49
PM-17AY-24	24	5	**24F1432**	156.02	143.30	127.90	122.54
PM-17AY-120	120	120	**24F1433**	94.94	87.21	77.84	74.57
PM-17AY-240	240	587	**24F1434**	116.19	106.72	95.24	91.27
DC COIL VOLTAGE							
PM-17DY-12	12	33	**24F1427**	91.27	83.84	74.82	71.69
PM-17DY-24	24	132	**24F1428**	98.25	90.24	80.54	77.17
PM-17DY-110	110	2.76	**24F1429**	167.22	153.58	137.08	131.33

PM DUST COVER

Mfg. Part No.	L	W	H	Material	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99	Price Each 100-249
35D203	3.394″	2.657″	2.19″	Plastic	**57F3460**	10.62	10.09	9.58	8.67

(37873)

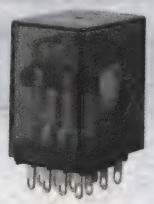
P&B KH SERIES SOCKET- AND PANEL-MOUNT RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor

4PDT relays available with AC or DC operation. **Suffix "N"** in mfg. part no. indicates neon lamp. **Suffix "L"** in mfg. part no. indicates LED indicator. **KHAU series** relays are the same as **KHU series**, but manufactured on an automated production line. Solder terminals. 1.281″H x 0.910″W x 1.156″D. *Order sockets separately*; see the Relay Socket Usage Guide. UL recognized , CSA certified.



KHAU Series

KHU Series

AC COIL

Mfg. Part No.	Carry Current (A)	Contacts	Coil Voltage (VAC)	Coil Resist. (Ω)	Stock No.	Price Each 1-24
● KHAU-17A16-24	1	4PDT	24	160	**16M9045**	85.20
● KHU-17A16-120	1	4PDT	120	3.9	**94F041**	51.07

➤CONTINUED➤

P&B KH SERIES SOCKET- AND PANEL-MOUNT RELAYS (CONT.)

Mfg. Part No.	Carry Current (A)	Contacts	Coil Voltage (VAC)	Coil Resist. (Ω)	Stock No.	Price Each 1-24
● KHAU-17A16-120	1	4PDT	120	3.9	**90F1129**	31.97
● KHAU-17A13-120	2	4PDT	120	3.9	**87F1108**	248.74
● KHAU-11A11-120	3	DPDT	120	3.9	**90F1128**	17.11
● KHU-17A11-12	3	4PDT	12	43	**16M9054**	36.71
● KHU-17A11-24	3	4PDT	24	160	**16M9056**	35.01
● KHU-17A18-120	3	4PDT	120	3.9	**16M9058**	45.54
● KHU-17A11-120	3	4PDT	120	3.9	**16M9055**	34.05
KHU-17A11N-120	3	4PDT	120	3.9	**62F3038**	44.76
● KHAU-17A11-12	3	4PDT	12	43	**16M9041**	15.80
● KHAU-17A11-24	3	4PDT	24	160	**16M9043**	13.27
● KHAU-17A11-120	3	4PDT	120	3.9	**16M9042**	13.44
KHAU-17A11N-120	3	4PDT	120	3.9	**87F1106**	17.29
● KHAU-17A18-120	3	4PDT	120	3.9	**16M9046**	10.96
KHAU-17A11H-120	3	4PDT	120	3.9	**94B6166**	35.62
● KHAU-17A12-24	5	4PDT	24	160	**76M7966**	16.23
● KHU-17A12-120	5	4PDT	120	3.9	**29M9947**	51.07
● KHAU-17A12-120	5	4PDT	120	3.9	**76M8681**	13.61
KHAU-17A12N-120	5	4PDT	120	3.9	**71C8374**	35.79

DC COIL

Mfg. Part No.	Carry Current (A)	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Stock No.	Price Each 1-9
● KHAU-17D16-12	1	4PDT	12	160	**18M9120**	25.73
● KHU-17D16-24	1	4PDT	24	690	**16M9062**	42.14
● KHAU-17D16-24	1	4PDT	24	690	**16M9053**	25.56
● KHAU-17D13-24	2	4PDT	24	690	**16M9052**	231.82
● KHAU-11D11-24	3	DPDT	24	690	**87F1101**	26.68
● KHU-17D11-6	3	4PDT	6	40	**16M9061**	31.35
● KHAU-17D11-6	3	4PDT	6	40	**16M9050**	14.33
● KHAU-17D11-12	3	4PDT	12	160	**16M9048**	11.84
● KHU-17D11-12	3	4PDT	12	160	**45F036**	29.55
● KHU-17D18-24	3	4PDT	24	690	**16M9063**	37.85
● KHU-17D11-24	3	4PDT	24	690	**16M9060**	10.65
● KHAU-17D11-24	5	4PDT	24	690	**87F1112**	12.41
● KHAU-17D18-24	3	4PDT	24	690	**08H1514**	32.16
● KHAU-17D11-48	3	4PDT	48	2.6	**16M9049**	11.48
● KHU17D11-90	3	4PDT	90	...	**62F3083**	36.93
● KHU-17D11-110	3	4PDT	110	11	**16M9059**	44.76
● KHAU-17D12B-24	5	4PDT	24	690	**92C8622**	35.08
● KHAU-17D11-110	3	4PDT	110	11	**16M9047**	13.69
● KHAU-11D12-12	5	DPDT	12	160	**18M9119**	10.20
● KHU-17D12-12	5	4PDT	12	160	**95F8880**	31.90
● KHAU-17D12-12	5	4PDT	12	160	**20M7019**	8.69
● KHU-17D12-24	5	4PDT	24	690	**45F040**	35.76
KHAE-17D12-24*	5	4PDT	24	690	**90F1127**	34.07
● KHAU-17D12-24	5	4PDT	24	690	**16M9051**	12.02
● KHAU-17D12-48	5	4PDT	48	2.6	**87F1119**	45.79
● KHAU-17D12-110	5	4PDT	110	11	**87F1120**	13.65

*PCB terminals
(3283)

P&B 2.0-7.5A SOCKET, PANEL MOUNT AND PC BOARD RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Dry circuit to 7.5A
- 2.2W power consumption max.
- AC or DC coil
- 1-pole thru 8-pole

R10-E1
#3-48 Mounting Stud

R10 series relays have DPDT contacts. **R10S series** are super-sensitive **R10s** (case and terminals E1 and E2 only). Solder terminals are 0.012″ (0.305) x 0.080″ (2.03) x 0.210″ (5.33) mm long with #3-48 mounting stud. Expected mechanical life: 100 million operations (except contact code W: 1 million operations, typical). Initial dielectric strength: Between open contacts - 500Vrms, for contact codes P and Z; 1,000Vrms for contact codes W, X and Y with coil code V. Between all other conductors - 1,000Vrms. All units are UL recognized, and all except 8PDT are CSA certified. **R10T series** relays with 8-pin or 11-pin octal base and sockets available. **R10L series** relays with LED indicator available (V or S coil adjustment only; to 48VDC only); *go online or call.*

➤CONTINUED➤

P&B 2.0-7.5A SOCKET, PANEL MOUNT AND PC BOARD RELAYS (CONT.)

ORDERING INFORMATION

Example		R10	-E	1	Y	4	-V700
Position		1	2	3	4	5	6

Package	E =	Nonsealed Polycarbonate Cover
	R =	Immersion Cleanable, Tape Sealed Plastic Case (**R10** Only)
Termination	1 =	Solder/Plug-In Terminal with #3-48 Mounting Stud
	2 =	Printed Circuit Terminal
	6 =	Side Mounting Plate With #6-32 Stud, Solder/Plug-In Terminals
	7 =	Narrow (0.4" Wide) Printed Circuit Terminals
	9 =	Non-Shouldered, Narrow Printed Circuit Terminals, Staggered Arrangement
Contact Material	W =	Silver Cadmium Oxide, Single-Contact, 7.5A Max. (**R10** Only)
	X =	Silver-Cadmium Oxide, Single-Contact, 5A Max. (**R10** Only)
	Y =	Fine Silver, Single Contact, 3A Max.
	Z =	Fine Silver, Bifurcated, Low Level Contacts, 2A Max.
	P =	Gold Overlay on Silver, Bifurcated Crossbar, Dry Circuit Contacts, 3A Max.
Coil		AC Coils: Specify Nominal Coil Voltage Followed by "V" DC Coils: Specify Coil Adjustment Code (Below) Followed by Coil Resistance
	Q =	Special DC Voltage Adjustment
	S =	Sensitive DC Voltage Adjustment
	SS =	Ultra-Sensitive DC Voltage Adjustment
	J =	Sensitive DC Current Adjustment
	JJ =	Ultra-Sensitive DC Current Adjustment

STANDARD AC COIL

Mfg. Part No.	Contact	Coil Voltage	Coil Resist. (Ω)	Stock No.	Price Each 1-9	Price Each 10-24
● R10-E1P2-115V	DPDT	115VAC	9	**29C2156**	37.03	36 62
R10-E1X2-115V	DPDT	115VAC	9	**45F117**	39.30	35 09
R10-E1Y2-115V	DPDT	115VAC	9	**20C3687**	33.18	30 40
R10-T1P2-115V	DPDT	115VAC	9	**50B6793**	54.03	49 52
R10-T2P3-115V	3PDT	115VAC	9	**94F1892**	74.09	67 88
R10E1P4115	4PDT	115VAC	9	**94F1888**	46.04	42 19
● R10-E1X4-115V	4PDT	115VAC	9	**14N7112**	50.23	44 84
R10-E1P6-115V	6PDT	115VAC	7.5	**08H3793**	57.23	52 43
● R10-E2Y2-J2.5K	DPDT	120VAC	2.5	**77B549**	24.34	22.30
● R10S-E1P1-J1.0K	SPDT	120VAC	1	**99F8466**	30.24	27.71

STANDARD DC COIL

● R10-E1Y1-SS220	SPDT	3VDC	220	**17M1799**	32.70	28.61
● R10-E1X2-V15.0K	DPDT	115VDC	15	**62F3050**	23.50	21.53
● R10-E1Y2-V2.5K	DPDT	48VDC	2.5	**62F3043**	20.41	18.25
● R10-E1X2-J1.0K	DPDT	...	1	**91B4146**	24.64	22.58
● R10-E1Y2-J5.0K	DPDT	...	5	**17M1801**	30.12	27.38
● R10-E1W2-V700	DPDT	24VDC	700	**67F1076**	21.58	19.28
● R10-E1X2-V700	DPDT	24VDC	700	**17M1796**	16.99	15.45
● R10-E1Y2-V700	DPDT	24VDC	700	**17M1803**	20.41	18.25
● R10-E1Z2-V700	DPDT	24VDC	700	**18M9312**	23.34	20.81
● R10-E2X2-V700	DPDT	24VDC	700	**67F1078**	20.54	18.35
● R10-E6X2-V700	DPDT	24VDC	700	**33F1627**	29.09	26.66
R10L-E1X2-V700	DPDT	24VDC	700	**67F1092**	36.46	33.41
● R10-T1Y2-J1.0K	DPDT	...	1	**17M1816**	39.12	36.58
R10-T1P2-V700	DPDT	24VDC	700	**94F1890**	32.26	30.07
● R10-E1Y2-J2.5K	DPDT	...	2.5	**45F131**	26.06	23.69
● R10-E1W2-V185	DPDT	12VDC	185	**06R3614**	21.58	19.26
● R10-E1X2-V185	DPDT	12VDC	185	**29K8666**	19.99	17.86
● R10-E1Y2-V185	DPDT	12VDC	185	**18M9310**	17.36	15.78
● R10-E1Z2-V185	DPDT	12VDC	185	**17M1806**	22.90	20.42
● R10-E2Y2-V185	DPDT	12VDC	185	**45F138**	20.41	19.05
● R10-E1X2-S800	DPDT	12VDC	800	**17M1792**	43.40	37.98
● R10-E1Z2-S800	DPDT	12VDC	800	**77B3045**	42.28	37.00
● R10-E1Y2-J1.0K	DPDT	...	1	**17M1800**	25.46	22.73
R10-T2W3-J30.0K	3PDT	...	30	**27C1007**	60.75	55.67
● R10-E1Y4-J10.0K	4PDT	...	10	**62F3066**	28.35	25.33
● R10-E1X4-V2.5K	4PDT	48VDC	2.5	**17M1797**	28.58	25.55
● R10-E1Y4-V2.5K	4PDT	48VDC	2.5	**17M1804**	28.33	25.34
R10-E1Z4-V2.5K	4PDT	48VDC	2.5	**62F3071**	27.96	24.90
● R10-E1P2-V700	DPDT	24VDC	700	**98F5103**	21.24	18.95
● R10-E1W4-V700	4PDT	24VDC	700	**17M1791**	33.89	30.24
● R10-E1X4-V700	4PDT	24VDC	700	**18M9308**	28.95	25.87
● R10-E1Y4-V700	4PDT	24VDC	700	**45F110**	26.36	23.96
● R10-E1Z4-V700	4PDT	24VDC	700	**45F128**	27.41	26.50
● R10-E2P4-V700	4PDT	24VDC	700	**90F1099**	25.23	...
● R10-E2Y4-V700	4PDT	24VDC	700	**17M1814**	27.46	25.61
R10L-E1X4-V700	4PDT	24VDC	700	**67F1094**	42.77	39.19
● R10-E1Z4-J1.0K	4PDT	...	1	**45F135**	31.95	27.41
● R10-E1P4-V185	4PDT	12VDC	185	**90F1105**	35.28	30.87
● R10E1P8V350	8PDT	24VDC	350	**50B6795**	48.34	44.29
● R10-E1X4-V185	4PDT	12VDC	185	**45F118**	24.52	22.29

➤ CONTINUED ➤

P&B 2.0-7.5A SOCKET, PANEL MOUNT AND PC BOARD RELAYS (CONT.)

STANDARD DC COIL

Mfg. Part No.	Contact	Coil Voltage	Coil Resist. (Ω)	Stock No.	Price Each 1-9	Price Each 10-24
● R10-E1Z4-V185	4PDT	12VDC	185	**17M1807**	27.96	24.47
● R10-E2P4-V185	4PDT	12VDC	185	**90F1098**	24.11	22.09
● R10-E1Y4-V52	4PDT	6VDC	52	**45F108**	27.35	23.98
● R10-E1Y6-V1.5K	6PDT	48VDC	1.5	**17M1805**	30.63	25.53
● R10-E1X6-V430	6PDT	24VDC	430	**18M9309**	36.75	33.69
● R10-E1Z6-V430	6PDT	24VDC	430	**45F130**	43.15	38.52

SENSITIVE DC COIL

● R10S-E1Y1-J1.0K	SPDT	...	1	**54F046**	22.80	21.85
● R10S-E1Y1-J5.0K	SPDT	...	5	**54F048**	41.10	35.97
● R10S-E1Y2-J1.0K	DPDT	...	1	**54F049**	36.36	31.82
● R10S-E1Y2-J5.0K	DPDT	...	5	**54F051**	35.52	32.62
● R10S-E2Y2-J2.5K	DPDT	...	2.5	**18M9314**	36.18	31.67
● R10S-E1Y4-J1.0K	4PDT	...	1	**54F052**	40.97	36.59
● R10S-E1Y2-J500	DPDT	...	500	**78B625**	35.64	31.82

SOCKETS FOR R10 AND R10S SERIES RELAYS

Rugged, molded socket body retains floating terminals or either solder or printed circuit pin configuration. Contacts are spring brass, tin-plated. PC sockets are available in 0.1" (2.54mm) staggered grid or in-line spacings. Solder terminal sockets are rated for 10A maximum. Molded phenolic socket retains floating pierced solder terminals. Solder slot: 0.045" x 0.090". *See also the Relay Socket Usage Guide.*

Mfg. Part No.	Poles	Terminal Type	Hold-Down Spring	Grounding Provision	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49
● 27E125	2	Solder	20C249	Strip	**57F3433**	1.67	1.44	1.32
● 27E162	2	Solder	20C249	None	**57F3444**	1.69	1.49	1.36
● 27E128	2	PC Stag.	20C249 20C259	Strip	**57F3436**	1.50	1.37	1.25
● 27E446	2	Solder	20C249	Strip	**77B3085**	2.41	2.16	1.96
● 27E193	2	PC Stag.	20C249 20C259	Terminal	**57F3448**	1.65	1.45	1.32
● 27E212	2	PC Stag.	20C249 20C259	None	**95F7965**	1.65	1.45	1.32
● 27E342	2	PC In-Line	20C249 20C259	None	**94F1893**	1.54	1.41	1.28
● 27E317	2	Solder/ Bkt. Mt.	20C249	Strip	**77B3082**	2.59	2.30	2.11
● 27E460	2	Screw	20C249 20C259	None	**98F040**	19.25	17.01	15.59
● 27E126	4	Solder	20C250	Strip	**57F3434**	2.14	1.87	1.72
● 27E163	4	Solder	20C250	None	**57F3445**	1.93	1.81	1.64
● 27E129	4	PC Stag.	20C250	Strip	**57F3437**	1.94	1.59	1.46
● 27E194	4	PC Stag.	20C250 20C259	Terminal	**57F3449**	1.92	1.86	1.69
● 27E213	4	PC Stag.	20C250 20C259	None	**95F7964**	2.12	1.82	1.65
● 27E629	4	PC In-Line	20C250 20C259	None	**94F1894**	2.21	2.06	1.94
● 27E461	4	Screw	20C250 20C259	None	**70B786**	21.72	20.81	19.91
● 27E127*	6	Solder	20C251	Strip	**57F3435**	2.52	2.30	2.10
● 27E130*	6	PC Stag.	20C251 20C259	Strip	**57F3438**	2.45	2.23	2.04
● 27E462*	6	Screw	20C251 20C259	None	**70B6149**	33.79	29.84	27.35

*For **R10 series** only
(3113)

P&B LIGHT POWER SOCKET AND PANEL MOUNT RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor

AC VOLTS, 5A OPEN

Highly efficient relays for light power loads such as small motors, solenoids, other relays and general automation work. Mechanical life expectancy: 10 million operations. Mfg. part nos. with **"Y" suffix** have silver contacts rated 5A @ 120VAC, **"G" suffix** have silver cadmium oxide contacts rated 10A @ 120VAC. Insulation material is molded phenolic. **KA series** is open version. Mounting: one no. 6-32 threaded stud and locating tab on 0.438" (11.13) centers. **KAP series** is enclosed model, protected by a clear polycarbonate dust cover. UL recognized, files E22575 and E29244, and CSA certified, file LR15734. 8- or 11- pin octal type plugs for socket mounting; *see Relay Socket Usage Guide.*

KA Series

➤ CONTINUED ➤

P&B LIGHT POWER SOCKET AND PANEL MOUNT RELAYS (CONT.)

Mfg. Part No.	Contacts	Coil Voltage	Coil Resist. (Ω)	Stock No.	Price Each 1-9	10-24	25-49
KA-11AY-120	DPDT	120	2.25	24F517	44.87	41.54	38.46
AC VOLTS, 5A ENCLOSED							
● KAP-11AY-24	DPDT	24	85	16M9027	79.14	73.26	67.83
● KAP-11AY-120	DPDT	120	2.25	24F2566	131.83	96.13	86.97
● KAP-14AY-120	3PDT	120	2.25	24F2577	124.85	109.24	98.85
AC VOLTS, 10A OPEN							
● KA-11AG-120	DPDT	120	2.25	24F1673	35.25	34.78	33.18
● KA-14AG-120	3PDT	120	2.25	16M9021	63.62	55.68	50.37
AC VOLTS, 10A ENCLOSED							
● KAP-5AG-120	SPDT	120	2.25	45F034	62.55	57.90	53.61
● KAP-11AG-24	DPDT	24	85	16M9026	85.30	78.96	73.11
● KAP-11AG-120	DPDT	120	2.25	16M9025	99.24	88.58	80.15
● KAP-14AG-120	3PDT	120	2.25	16M9030	111.31	97.40	88.13
DC VOLTS, 5A ENCLOSED							
● KAP-11DY-12	DPDT	12	120	24F2573	84.25	78.00	72.22
● KAP-11DY-24	DPDT	24	472	16M9029	99.27	86.86	78.59
● KAP-14DY-24	3PDT	24	472	16M9032	171.17	162.61	154.05
DC VOLTS, 10A OPEN							
● KA-11DG-24	DPDT	24	472	16M9020	41.46	38.38	35.54
● KA-11DG-110	DPDT	110	10	16M9019	36.25	33.57	31.07
● KA-14DG-24	3PDT	24	472	16M9023	46.83	43.36	40.14
DC VOLTS, 10A ENCLOSED							
● KAP-11DG-24	DPDT	24	472	24F2571	88.56	77.49	70.11
● KAP-11DG-110	DPDT	110	10	16M9028	34.95	31.41	28.96
● KAP-14DG-24	3PDT	24	472	16M9031	104.97	97.17	89.97

SOCKETS AND ACCESSORIES

Mfg. Part No.	Description	Hold Down Spring	Stock No.	Price Each 1-9	10-24
● 27E122	Screw Terminal 8-Pin Octal Socket	...	57F3431	5.80	5.10
● 27E891	Screw Terminal 8-Pin Octal Socket, DIN Mount	20C318	46F3587	5.39	4.91
● 27E123	Screw Terminal 11-Pin Octal Socket	...	57F3432	6.74	5.64
● 27E892	Screw Terminal 11-Pin Octal Socket, DIN Mount	20C318	46F3588	8.85	8.05

(3109)

P&B 5A - 30A SERIES GENERAL-PURPOSE RELAYS

RoHS Compliant Available

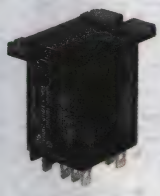
TE connectivity

Authorized Distributor

- Available in AC or DC coil
- 5, 10, 15, 20 and 30A ratings
- Silver contacts (5A); silver-cadmuim oxide contacts (10-30A)
- 5V through 240V
- Quick-connect solder terminals

Plain Case

Flange Mount



Top Flange Mount

KUIP and **KUGP series** relays have 8mm coil-to-contact spacing and 3mm contact gap. **KUHP** series have silver-cadmium oxide contacts and solder/push-on terminals. **KUEP series** relays feature wide contact gap and are equipped with a permanent magnet blowout to assist in interrupting DC current when the contacts are opened. Enclosed in a polycarbonate dust cover. UL recognized, CSA certified. **KUGP** and **KUIP series** relays are also VDE approved. *Order sockets and hold-down springs separately below. See also the Relay Socket Usage Guide.* See footnotes regarding push-to-test and neon indicating lamp options.

DIMENSIONS (L x W x H)

Series	Plain Case	Flange	Top Flange
KUEP, KUIP, KUP	1.406 x 1.531 x 1.968″	1.406 x 1.968 x 2.90″	N/A
KUMP		N/A	
KUHP	1.406 x 1.531 x 1.968″	1.406 x 1.531 x 2.90″	2.382 x 1.393 x 2.461″

KU SERIES OPEN RELAYS

Mfg. Part No.	Contact Rating (A)	Contacts	Coil Input Voltage	Mount Style	Stock No.	Price Each 1-9
● KUP14D11-110	5	DPDT	110VDC	Plain Case	78B593	18.81
KUP SERIES ENCLOSED RELAYS						
● KUP-11A11-120	10	DPDT	120VAC	Plain Case	18M9144	13.84
● KUP-11D11-24	10	DPDT	24VDC	Plain Case	10M5234	13.49
● KUP-17D55-12	10	4PDT	24VDC	Plain Case	55C4352	27.31
● KUP-5A55-24	10	SPDT	24VDC	Plain Case	17C1574	18.20
KUP-14A41-120	10	3PDT	120VAC	Plain Case	27C8364	28.18
● KUP-14A11F-120	10	3PDT	120VAC	Plain Case	91B6373	24.52
● KUP-14A11-120	10	3PDT	120VAC	Plain Case	67F1109	15.07
● KUP-5A15-24	10	SPDT	24VAC	Plain Case	24F2602	18.05

CONTINUED

P&B 5A - 30A SERIES GENERAL-PURPOSE RELAYS (CONT.)

KUP SERIES ENCLOSED RELAYS

Mfg. Part No.	Contact Rating (A)	Contacts	Coil Input Voltage	Mount Style	Stock No.	Price Each 1-9
● KUP-5A55-120	10	SPDT	120VAC	Flange	17M0273	15.05
● KUP-5A15-120	10	SPDT	120VAC	Plain Case	18M9148	16.55
● KUP-5A15-240	10	SPDT	240VAC	Plain Case	17M0272	19.29
KUP-14A45-24	10	3PDT	24VAC	Plain Case	85C2035	18.09
● KUP-5D55-12	10	SPDT	12VDC	Flange	18M9149	15.28
● KUP-5D55-24	10	SPDT	24VDC	Flange	17M0274	13.42
● KUP-5D15-24	10	SPDT	24VDC	Plain Case	24F2607	16.27
● KUP-11A15-12	10	DPDT	12VAC	Plain Case	24F2610	17.81
● KUP-11A55-24	10	DPDT	24VAC	Flange	17M0254	12.85
● KUP-11AA5-24‡	10	DPDT	24VAC	Plain Case	06R3603	26.76
● KUP-11A15-24	10	DPDT	24VAC	Plain Case	17M0252	13.14
● KUP-11A15-120	10	DPDT	120VAC	Plain Case	17M0251	12.77
KUP-11A35-120*	10	DPDT	120VAC	Plain Case	62F3031	14.74
● KUP-11A55-120	10	DPDT	120VAC	Flange	17M0253	13.33
● KUP-11A15-240	10	DPDT	240VAC	Plain Case	24F2613	12.55
● KUP-11A25-120	10	DPDT	240VAC	Plain Case	77B384	17.91
● KUP-11D15-5	10	DPDT	5VDC	Plain Case	17M0257	13.24
● KUP-11D55-6	10	DPDT	6VDC	Flange	24F3275	13.25
● KUP-11D55-12	10	DPDT	12VDC	Flange	24F3276	12.24
● KUP-11D55-24	10	DPDT	24VDC	Flange	17M0259	12.24
● KUP-11D55-125	10	DPDT	125VDC	Plain Case	08H1802	15.09
● KUP-11D15-24	10	DPDT	24VDC	Plain Case	17M0256	12.77
KUP-11D35-24*	10	DPDT	24VDC	Plain Case	62F3037	13.73
● KUP-11D15-48	10	DPDT	48VDC	Plain Case	30C9742	15.55
● KUP-11D55-48	10	DPDT	48VDC	Flange	17M0260	15.63
● KUP-11D15-110	10	DPDT	110VDC	Plain Case	17M0255	12.29
● KUP-11D55-110	10	DPDT	110VDC	Flange	17M0258	15.67
● KUP-14A15-12	10	3PDT	12VAC	Plain Case	18M9145	18.14
● KUP-14A55-12	10	3PDT	12VAC	Flange	24F2891	18.44
● KUP-14A15-24	10	3PDT	24VAC	Plain Case	18M9146	14.89
KUP-14A35-24*	10	3PDT	24VAC	Plain Case	25C5728	25.98
● KUP-14AE5-24††	10	3PDT	24VAC	Plain Case	06R3602	14.20
● KUP-14A55-24	10	3PDT	24VAC	Flange	17M0265	18.14
● KUP-14A15-120	10	3PDT	120VAC	Plain Case	19M1074	14.89
● KUP-14A25-120†	10	3PDT	120VAC	Plain Case	18M9147	19.18
● KUP-14A35F-120	10	3PDT	120VAC	Plain Case	06R3604	15.86
● KUP-14A35-120*	10	3PDT	120VAC	Plain Case	17M0262	16.15
● KUP-14A45-120**	10	3PDT	120VAC	Plain Case	17M0263	17.04
● KUP-14A55-120	10	3PDT	120VAC	Flange	17M0264	18.14
● KUP-14A15-240	10	3PDT	240VAC	Plain Case	17M0261	15.42
● KUP-14A55-240	10	3PDT	240VAC	Flange	24F3268	19.48
● KUP-14D15-6	10	3PDT	6VDC	Plain Case	24F2623	14.73
● KUP-14D15-12	10	3PDT	12VDC	Plain Case	17M0266	12.57
● KUP-14D55-12	10	3PDT	12VDC	Flange	17M0270	16.90
● KUP-14D25-24†	10	3PDT	24VDC	Plain Case	20M7024	17.91
● KUP-14D11-24	10	3PDT	24VDC	Plain Case	95F9230	14.21
● KUP-14D15-24	10	3PDT	24VDC	Plain Case	17M0267	12.24
KUP-14D35F-24	10	3PDT	24VDC	Socket	25C3463	16.58
● KUP-14D55-24	10	3PDT	24VDC	Flange	20M7025	16.24
KUP-14D35-24*	10	3PDT	24VDC	Plain Case	77B392	16.73
● KUP-14D15-48	10	3PDT	48VDC	Plain Case	17M0268	15.07
● KUP-14D35-110*	10	3PDT	110VDC	Plain Case	20M4356	16.22
● KUP-14D15-110	10	3PDT	110VDC	Plain Case	19M8444	14.37
● KUP-14D35F-110	10	3PDT	110VDC	Socket	08H1820	16.66
● KUP-17A55-24	10	4PDT	24VAC	Bracket Mount Case	77B3010	63.69
● KUP-17A19-120	10	4PDT	120VAC	Plain Case	77B3006	89.50
● KUP-17D19-24	10	4PDT	24VDC	Plain Case	19M1075	48.12
KUP93-14A11-24	5	3PDT	24VDC	Plain Case	08H1838	43.81
KUIP SERIES ENCLOSED RELAYS DESIGNED FOR GENERAL VDE 0435						
● KUIP-11D55-24	10	DPDT	24VDC	Flange	29M9949	17.71
● KUIP-14D15-12	10	3PDT	12VDC	Plain Case	93F3079	27.25
● KUIP-14D15-24	10	3PDT	24VDC	Plain Case	17M0240	25.59
● KUIP-14A15-120	10	3PDT	120VAC	Plain Case	17M0239	24.38
KUGP SERIES ENCLOSED RELAYS WITH 3mm OPEN SPACING						
● KUGP-7D55-24	10	DPST-NO	24VDC	Flange	90F1116	38.78
KUEP SERIES ENCLOSED RELAYS WITH MAGNETIC BLOWOUTS						
● KUEP-3A15-120	10	SPST-NO	120VAC	Plain Case	17M0224	18.25
KUEP-11A35-120	10	DPST	120VAC	Plain Case	89C0670	32.89
● KUIP-11A15-120	10	DPDT	120VAC	Plain Case	08H1727	21.92
● KUEP-3D15-12	10	SPST-NO	12VDC	Plain Case	20M7020	31.56
● KUEP-3D15-24	10	SPST-NO	24VDC	Plain Case	17M0226	18.97
KUEP-3D35-24	10	SPST-NO	24VDC	Socket	27C6194	18.91

CONTINUED

P&B 5A - 30A SERIES GENERAL-PURPOSE RELAYS (CONT.)

KUEP SERIES ENCLOSED RELAYS WITH MAGNETIC BLOWOUTS

Mfg. Part No.	Contact Rating (A)	Contacts	Coil Input Voltage	Mount Style	Stock No.	Price Each 1-9
KUEP-3D15-48	10	SPST-NO	48VDC	Plain Case	17M0227	27.50
KUEP-3D15-110	10	SPST-NO	110VDC	Plain Case	17M0225	20.86
KUEP-7D15-24	10	DPST-NO	24VDC	Plain Case	17M0229	21.42
KUEP-11A15-120	10	DPDT	120VAC	Plain Case	18M9141	23.85
KUEP-11D15-12	10	DPDT	12VDC	Plain Case	17M0222	21.30
KUEP-11D15-24	10	DPDT	24VDC	Plain Case	17M0223	21.51
KUEP-11D15-48	10	DPDT	48VDC	Plain Case	90B8438	29.82
KUEP-11D15-110	10	DPDT	110VDC	Plain Case	17M0221	28.18
KUMP SERIES ENCLOSED RELAYS						
KUMP-7D58-12	15	DPST-NO	12VDC	Flange	95C0222	15.00
KUMP-11D18-12	15	DPDT	12VDC	Plain Case	06R3601	14.67
KUMP-11A18-24	15	DPDT	24VAC	Plain Case	17M0247	18.35
KUMP-11A18-120	15	DPDT	120VAC	Plain Case	10M5233	15.59
KUMP-11D18-24	15	DPDT	24VDC	Plain Case	17M0249	14.26
KUMP-11D18-110	15	DPDT	110VDC	Plain Case	17M0248	18.40
KUMP-14A18-24	15	3PDT	24VAC	Plain Case	18M9143	19.29
KUMP-14A48-120	15	3PDT	120VAC	Plain Case	90B2393	24.08
KUMP-14A18-240	15	3PDT	240VAC	Plain Case	17C1420	19.79
KUMP-11A18-240	15	DPDT	240VAC	Plain Case	20M7021	18.75
KUMP-14D18-12	15	3PDT	12VDC	Plain Case	20M7023	16.97
KUMP-14D18-24	15	3PDT	24VDC	Plain Case	17M0250	18.12
KUMP-14A18-120	15	3PDT	120VAC	Socket	76M7970	16.91
KUMP-14D58-24	15	3PDT	24VDC	Socket	22C6366	17.34
KUHP SERIES POWER RELAYS						
KUHP-11A51-24	20	DPDT	24VAC	Flange	84F659	37.37
KUHP-11A51-120	20	DPDT	120VAC	Flange	17M0231	16.02
KUHP-11AT1-120	20	DPDT	120VAC	Top Flange	17M0230	16.74
KUHP-11A51-240	20	DPDT	240VAC	Flange	90B5918	20.23
KUHP-11D51-12	20	DPDT	12VDC	Flange	17M0233	15.46
KUHP-11DT1-12	20	DPDT	12VDC	Top Flange	17M0232	18.19
KUHP-11DT1-24	20	DPDT	24VDC	Top Flange	18M2418	33.44
KUHP-5A51-24	30	SPDT	24VAC	Flange	17M0236	29.71
KUHP-5A51-120	30	SPDT	120VAC	Flange	17M0235	32.63
KUHP-5AT1-120	30	SPDT	120VAC	Top Flange	18M9142	31.86
KUHP-5D51-12	30	SPDT	12VDC	Flange	17M0237	16.20
KUHP-5DT1-12	30	SPDT	12VDC	Top Flange	87F511	30.23
KUHP-5D51-24	30	SPDT	24VDC	Flange	90F1120	29.31
KUHP-5DT1-24	30	SPDT	24VDC	Top Flange	87F510	29.26

* With indicator lamp; ** With indicator lamp and test button; † With test button; ‡ With #6-32 Stud, locating tab; †† With tapped core, locating tab.

SOCKETS

Mfg. Part No.	Termination	Dimensions L x W x H (inches)	Hold-Down Spring	Stock No.	Price Each 1-24
27E043	Solder Eyelet	1.50 x 2.03 x 0.639	20C228 or 20C254	57F3424	2.09
27E046	PC Board, .144" (3.66mm) Terminals	1.50 x 2.03 x 0.464	20C228 or 20C254	57F3425	2.47
27E067	.187" (4.75mm) Quick Connect	1.50 x 2.03 x 0.639	20C228 or 20C254	57F3427	3.80
27E121	Screw Terminals	1.900 x 3.150 x 0.895	20C314 (2 Per Socket Required)	57F3430	8.12
27E396	PC Board, .184" (4.67mm) Terminals	1.375 x 1.260 x 0.635	20C228 or 20C254	57F3466	3.66
27E867	.187" (4.75mm) Quick Connect	1.750 x 2.750 x 0.832	20C254	95F9228	21.21
27E893	Screw Terminals, DIN Rail Mounting	1.703 x 3.000 x 1.030	20C318	46F3616	9.66

HOLD-DOWN SPRINGS

Mfg. Part No.	Stock No.	Price Each 1-24	25-49	50-99
20C228	57F3403	0.69	0.63	0.58
20C254	50F9528	0.31	0.28	0.26
20C314	95F7967	0.41	0.37	0.34
20C318	46F3619	0.27	0.24	0.22

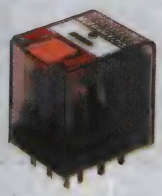
(3315)

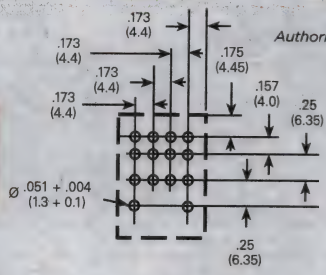
SCHRACK 6-12A LOW-PROFILE MINIATURE PLUG-IN RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor





- Low-profile height of 29mm
- DPDT, 3PDT, or 4DPT contacts

PT series miniature plug-in relays feature greater switching performance (up to 3,000VA), AC and DC coils, mechanical indicator and a manual test-tab with locking option. Nominal coil power is 750mW for DC and 1.0VA for AC mfg part no. Dimensions: 1.102H x 1.14W x 0.882"D. Solder terminal length is 0.236". UL recognized, CE compliant, VDE approved. PC board thru-hole mounting style is also available; *go online or call.* Sockets available below. *See also the Relay Socket Usage Guide.*

DC RELAYS

Mfg. Part No.	Current (A)	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Stock No.	Price 1-24
PT570012	6	4PDT	12	192	36K2014	7.81
PT570024	6	4PDT	24	777	96B1112	8.56
PT570048	6	4PDT	48	3.072	36K7591	8.23
PT370012	10	3PDT	12	192	35K3220	7.31
PT370024	10	3PDT	24	777	36K3458	12.99
PT270012	12	DPDT	12	192	36K7586	8.28
PT270024	12	DPDT	24	777	96B1035	6.90

AC RELAYS

Mfg. Part No.	Current (A)	Contacts	Coil Voltage (VAC)	Coil Resist. (Ω)	Stock No.	Price Each 1-24
PT570524	6	4PDT	24	192	36K3459	8.69
PT570615	6	4PDT	115	4.84	35K4840	9.51
PT570730	6	4PDT	230	19.465	96B1122	8.71
PT370524	10	3PDT	24	192	96B1104	9.44
PT370730	10	3PDT	230	19.465	36K7590	14.57
PT270524	12	DPDT	24	192	36K7587	7.79
PT270615	12	DPDT	115	4.84	36K7588	7.29
PT270730	12	DPDT	230	19.465	35K3219	8.24

SOCKETS

Mfg. Part No.	Socket Termination	Mounting Style	No. of Poles	Stock No.	Price Each 1-9	10-24	25-49
27E220	0.218" (5.54) Solder Terminals	PC Board	2	01C7962	1.65	1.45	1.32
27E894	Screw Terminals	DIN Rail	4	46F3589	10.75	8.48	7.77
27E023	0.218" (5.54) Solder Terminals	PC Board	4	95F7966	1.74	1.44	1.32
27E006	0.375" (9.53) Solder Terminals	Panel Cutout	4	57F3422	2.00	1.82	1.66

(65380)

P&B 10A SINGLE AND DUAL COIL MAGNETIC LATCHING RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor

KUL series magnetic latching relays require only half the space of mechanical latching relays. Designed for continuous duty in applications demanding good memory stability. Contacts are silver-cadmium oxide, 10A at 28VDC resistive or 240VAC, 80% PF. AC coil relays include diodes. Dimensions: 2.156"H x 1.531" x W1.406"D. See also the Relay Socket Usage Guide.

AC RELAYS

Mfg. Part No.	Coil Voltage (VAC)	Contacts	Coil	Coil Resist. (Ω)	Stock No.	Price 1-9
KUL-11A15S-24	24	DPDT	Single	176	17M0242	52.69
KUL5A-11S-120	120	SPDT	Single	15	50B6774	75.53
KUL-5A15S-120	120	SPDT	Single	3.7	24F3250	75.00
KUL-11A15S-120	120	DPDT	Single	3.7	17M9930	53.64

CONTINUED

P&B 10A SINGLE AND DUAL COIL MAGNETIC LATCHING RELAYS (CONT.)

DC RELAYS

Mfg. Part No.	Coil Voltage (VAC)	Contacts	Coil	Coil Resist. (Ω)	Stock No.	Price 1-9
● KUL-11D15S-12	12	DPDT	Single	120	17M0245	75.71
● KUL-11D15D-12	12	DPDT	Dual	90	06R3600	60.60
● KUL-5D15D-12*	12	SPDT	Dual	90	87K3011	41.36
● KUL-11D15S-24	24	DPDT	Dual	472	17M0246	76.67
● KUL-11D15D-24	24	DPDT	Dual	350	17M0243	60.60
● KUL-11D15D-48	48	DPDT	Dual	1.4	17M0244	71.88
● KUL-11D55D-12	12	DPDT	Dual	90	08H1743	40.50

SOCKETS

Mfg. Part No.	Description	Stock No.	Price Each 1-24	Price Each 25-49
● 27E121	Rectangular Screw Terminal Socket	57F3430	8.12	6.68
● 24A071	Retainer Clip (2 Required for Track Mounting)	20M7089	2.19	2.01

* Coil resistance is 2525Ω latch and 7800Ω reset.
(3257)

P&B 15A SOCKET OR PANEL MOUNT RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Socket Mount

Top Flange

K10 series relays offer reliable DPDT, 15 Amp switching capability in a compact, polycarbonate dust cover enclosed package. Silver cadmium oxide contacts rated 15 amps @ 120VAC resistive; 10 Amps @ 30VDC resistive or 277VAC; ½HP @ 250VAC; ⅓HP @ 120VAC. Nominal power: 0.9W for DC coil types and 1.2VAC for AC coil types. Mechanical life: 10 million operations. Electrical life: 100,000 operations. *Order sockets and hold-down spring separately below or see the Relay Socket Usage Guide.*

AC RELAYS

Mfg. Part No.	Mounting & Termination	Coil Voltage	Coil Resist. (Ω)	Stock No.	Price Each 1-9	Price Each 10-24
● K10P-11A15-6	Socket Mount; 0.187" (4.75mm) Quick-Connect/Solder Terminals	6	10.5	18M9150	11.48	10.75
● K10P-11A15-12		12	43	17M0324	11.26	9.86
● K10P-11A15-24		24	160	06R3605	9.57	8.70
● K10P-11A15-120		120	3.9	29M9953	9.57	8.70
● K10P-11A15-240		240	12	17M0325	11.64	10.17
● K10P-11AT5-24	Mounting Bracket on End of Covers; 0.187" (4.75mm) Quick-Connect/Solder Terminals	24	160	98F5557	29.09	25.46
● K10P-11AT5-120		120	3.9	17M0323	11.60	10.16

DC RELAYS

Mfg. Part No.	Mounting & Termination	Coil Voltage	Coil Resist. (Ω)	Stock No.	Price Each 1-9	Price Each 10-24
● K10P-11D55-12	PC Board Printed Circuit Terminals	12	160	17M0329	10.84	9.86
● K10P-11D55-24		24	650	17M0330	9.57	8.70
● K10P-11D55-110		110	11	90F1146	11.26	10.06
● K10P-11D15-6	Socket Mount; 0.187" (4.75mm) Quick-Connect/Solder Terminals	6	40	06R3606	11.48	10.25
● K10P-11D15-12		12	160	17M0327	8.96	8.70
● K10P-11D15-24		24	650	17M0328	9.57	8.70
● K10P-11D15-48		48	2.6	08H1892	23.37	21.09
● K10P-11D15-110		110	11	17M0326	11.26	9.86
● K10P-11DT5-12	Mounting Bracket on End of Covers; 0.187" (4.75mm) Quick-Connect/Solder Terminals	12	160	87F522	9.89	8.99
● K10P-11DT5-24		24	650	18M9151	21.64	19.68

SOCKETS AND ACCESSORIES

Mfg. Part No.	Product Description	Stock No.	Price Each 1-9	Price Each 10-24
● 27E488	Solder Terminal Relay Socket	67F3898	2.33	2.16
● 27E489	PCB Terminal Relay Socket	67F3899	2.14	1.95
● 27E895	Screw Terminal, DIN Rail Snap-Mount Relay Socket	46F3590	6.30	5.73
● 27E487	Screw Terminal Relay Socket	67F3897	6.00	5.45
● 20C217	Hold-Down Spring for 27E488 and 27E489	57F3402	0.29	0.24
● 20C426	Hold-Down Spring for 27E487	48F4087	0.80	0.72

MOUNTING HARDWARE

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49
● 24A110	DIN Rail Style Extruded Aluminum Meeting Track 36" (914mm) Long With Holes on 6" (152.4mm) Centers. Holes Accept # 8 Screws.	46F3617	11.97	10.89	9.98
● 37D633	Mounting Plate Strip - For Mounting of Up to 8 **mfg. part no. 27E488** Sockets in 1 Length of Aluminum Strip Measuring 10.97W x 2.25L x 0.62"H	57F3464	25.88	23.74	21.83

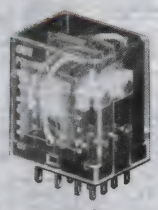
(3291)

OEG 15A MINIATURE RELAYS

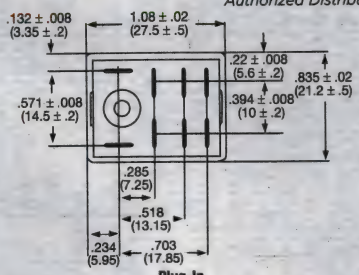
RoHS Compliant Available

TE connectivity

Authorized Distributor



Plug-In



Plug-In

- Compact, low cost 15A switching capacity available
- DPDT contact arrangement
- AC and DC coils
- Plug-in or PC board terminals
- UL Recognized File No. E58304, CSA Certified

Contact ratings: 15A @ 120VAC resistive; 10A @ 250VAC/24VDC. Max. switching current: 15A. Max. switching power: 3,168VA, 240W. Mfg. part nos. with **"P" suffix** have PC board terminals. 3, 5 and 10A relays also available; *go online or call.* Sockets available, *see below.*

PLUG-IN TERMINALS

Mfg. Part No.	Coil Voltage	Coil Resist. (Ω)	Contacts	Stock No.	Price Each 1-24
● PCLH-203A1S	24VAC	160	DPDT	33C0935	8.31
● PCLH-206A1S	110/120VAC	3,400	DPDT	33C0940	9.17
● PCLH-208A1S	220/240VAC	13,600	DPDT	33C0942	9.78
● PCLH-202D1S	12VDC	160	DPDT	33C0933	7.85

PC BOARD TERMINALS

SOCKETS

Mfg. Part No.	Termination	Hold Down Spring	Stock No.	Price Each 1-9
● 27E895	Screw Terminal, DIN Rail Snap-Mount	20C297	46F3590	6.30
● 27E488	Solder Terminal	27E488	67F3898	2.33

(68399)

SCHRACK POWER RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- For direct control of squirrel-cage motors, water heaters, and night storage heaters
- Used as power relays in electrical appliances
- Push-to-test button and mechanical indicator
- DC- or AC-coil
- 2 / 3 pole 10 / 16 A, 2 CO or 3 CO contacts
- RM8: 2 pole 25 A, 2 CO contacts
- Switching capacity: up to 6000VA
- Plug-in version, PCB terminals, chassis- or DIN-rail mount
- RoHS compliant (Directive 2002/95/EC) as per product date code 0415

RM2

RM2, 3, and **7 series** rated up to 16A @ 380VAC (440 max. breaking voltage). **RM8 series** rated up to 25A @ 250VAC (440 max. breaking voltage). Relays have a mechanical life of >20 x 10^6. Dielectric strength: coil-contact 2500VAC; contact-contact 2500VAC; pole-pole 2500VAC. UL recognized, CE compliant, VDE approved. Order sockets and hold down springs separately below. PC terminal versions and VDE approved with 3mm contact gap versions also available; *go online or call.* Models with 3mm contact gap (RM5/6) and models with 30A rating (RMC/D) also available.

DC RELAYS—SOCKET MOUNT WITH .187" (4.75) PLUG-IN TERMINALS

Mfg. Part No.	Contacts	Carry Current (A)	Coil Voltage (VAC)	Coil Resist. (Ω)	Stock No.	Price Each 1-9
● RM202012	DPDT	16	12	110	52F911	14.40
● RM202024	DPDT	16	24	475	52F912	13.33
● RM302024	3PDT	10	24	475	17M1759	18.56
● RM702012	3PDT	16	12	86	52F943	16.99
● RM702024	3PDT	16	24	345	52F944	16.43
● RM809024	DPDT	25	24	475	08H3541	21.51

DC RELAYS—SIDE FLANGE-MOUNT WITH .250" (6.35) PLUG-IN TERMINALS

● RM805012	DPDT	25	12	110	52F957	21.03
● RM805024	DPDT	25	24	475	52F958	19.16
● RM809024	DPDT	25	24	475	08H3541	21.51
● 1393146-2	SPST-NC, SPST-NO	30	48	2 kohm	11H3234	19.16
● RM 205 024	DPDT	16	24	475	52F921	16.28

AC RELAYS—SOCKET MOUNT WITH .187" (4.75) PLUG-IN TERMINALS

Mfg. Part No.	Contacts	Carry Current (A)	Coil Voltage (VAC)	Coil Resist. (Ω)	Stock No.	Price Each 1-9
● 5-1393146-5	3PDT	10	115	2 kohm	15H7681	24.65
● RM205615	DPDT	16	115	2 kohm	17M1758	18.85

➤ CONTINUED ➤

SCHRACK POWER RELAYS (CONT.)

AC RELAYS—SOCKET MOUNT WITH .187" (4.75) PLUG-IN TERMINALS

Mfg. Part No.	Contacts	Carry Current (A)	Coil Voltage (VAC)	Coil Resist. (Ω)	Stock No.	Price Each 1-9
RM702524	3PDT	16	24	80	52F945	18.14
RM702615	3PDT	16	115	1.85	52F946	17.86
AC RELAYS—SIDE FLANGE-MOUNT WITH .250" (6.35) PLUG-IN TERMINALS						
RM805615	DPDT	25	115	1.85	17M1760	22.46

SOCKETS

Mfg. Part No.	Termination	Hold Down Spring	Stock No.	Price Each 1-24	Price Each 25-49
RM78702	.142 (3.61) PCB Terminals	RM28802	36K3468	6.28	5.61
RM78705	Screw Terminals	...	17M1781	22.56	19.98

(4081)

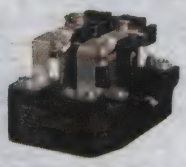
P&B 25A POWER RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor

PRD1, 3, 5, and 7



PRD11 and PRDA11

PRD series relays are designed for use in high inrush current applications such as motor starting, other inductive and incandescent lamp loads. Relay bobbin is contained in plastic housing for added protection. Units feature screw terminations. Operating temperature range: –55°C to +45°C for AC models; –55°C to +80°C for DC models. Dust cover **mfg. part no. 35D013** also available; *go online or call.* UL listed under file E22575 and CSA certified under file 15734.

AC COIL

Mfg. Part No.	Contacts	Coil Voltage (VAC)	Contact Current (A)	Coil Resist. Ω	Stock No.	Price Each 1-24	Price Each 25-49
PRD-1AY0-120	SPST-NO	120	25	290	18M9280	31.46	28.30
PRD-3AY0-120	SPST-NO	120	25	290	17M1540	28.05	25.58
PRD-3AG0-120	SPST-NO	120	30	290	06R3611	28.57	25.50
PRD-3AY0-240	SPST-NO	240	25	1.2 kohm	33F1510	49.29	35.95
PRD-5AY0-12	SPDT	12	25	3.2 kohm	33F1516	30.76	27.68
PRD-5AG0-120	SPDT	120	30	290	91B5823	36.74	33.00
PRD-5AY0-24	SPDT	24	25	12	18M9289	32.90	31.08
PRD-5AY0-120	SPDT	120	25	290	88F3903	27.79	26.17
PRD-5AY0-240	SPDT	240	25	1.2 kohm	17M1541	52.83	46.23
PRD-7AY0-24	DPST-NO	24	25	12	33F1528	35.33	30.89
PRD-7AY0-120	DPST-NO	120	25	290	17M1545	30.26	29.29
PRD-7AG0-120	DPST-NO	120	30	290	17M1543	29.91	26.58
PRD-7AY0-208	DPST-NO	208	25	1.2 kohm	33F1530	36.36	32.45
PRD-7AY0-240	DPST-NO	240	25	1.2 kohm	33F1531	38.09	34.29
PRD-11AY0-6	DPDT	6	25	860	39C6860	45.01	40.44
PRD-11AY0-24	DPDT	24	25	12	18M9283	35.75	33.18
PRDA-11AYA-24	DPDT	24	25	12	20M7042	65.78	58.70
PRD-11AG0-120	DPDT	120	30	290	33F1536	38.72	35.00
PRD-11AY0-120	DPDT	120	25	290	33F1540	37.98	33.18
PRDA-11AGA-120	DPDT	120	30	290	17M1549	58.71	50.76
PRDA-11AYA-120	DPDT	120	25	290	18M9290	67.79	62.14
PRDA-11AYB-120*	DPDT	120	25	290	90B3628	72.80	68.13
PRD-11AG0-240	DPDT	240	30	1.2 kohm	20M7038	42.63	38.83
PRD-11AY0-240	DPDT	240	25	1.2 kohm	18M9284	44.72	38.98
PRDA-11AYA-240	DPDT	240	25	1.2 kohm	85C1337	78.73	68.23
PRD-11AY0-480	DPDT	480	25	4.5 kohm	17M1536	54.55	51.14
AC COIL WITH MAGNETIC BLOWOUT For switching high voltage and high current DC loads. 2W. 20A.							
PRD-3AJ0-120	SPST-NO	120	20	290	17M1539	33.17	29.61
PRD-7AH0-120	DPST-NO	120	20	290	17M1544	41.01	36.61
PRD-11AH0-120	DPDT	120	20	290	18M9282	41.60	36.98
PRD-11AH0-240	DPDT	240	20	1.2 kohm	17M1535	49.32	43.16
DC COIL							
PRD-3DY0-12	SPST-NO	12	25	71	18M9288	30.68	27.61
PRD-3DY0-24	SPST-NO	24	25	288	33F1513	31.51	28.64
PRD-3DY0-110	SPST-NO	110	25	6.05	33F1514	32.06	28.63
PRD-5DY0-12	SPDT	12	25	71	17M1542	33.04	30.29
PRD-5DY0-24	SPDT	24	25	288	33F1523	31.92	29.26
PRD-5DY0-110	SPDT	110	25	6.05	33F1524	38.58	36.11
PRD-7DG0-24	DPST-NO	24	30	288	76M7973	29.85	28.24

CONTINUED

P&B 25A POWER RELAYS (CONT.)

DC COIL

Mfg. Part No.	Contacts	Coil Voltage (VAC)	Contact Current (A)	Coil Resist. Ω	Stock No.	Price Each 1-24	Price Each 25-49
PRD-7DY0-12	DPST-NO	12	25	71	34C3232	34.50	32.79
PRD-7DY0-24	DPST-NO	24	25	288	17M1548	33.48	29.93
PRD-7DY0-48	DPST-NO	48	25	1.15 kohm	29C4223	37.20	33.44
PRD-7DY0-110	DPST-NO	110	25	6.05 kohm	17M1547	40.35	36.01
PRD-11DY0-12	DPDT	12	25	71	17M1538	40.99	39.63
PRD-11DG0-12	DPDT	12	30	71	17M1537	40.27	39.54
PRD-11DY0-24	DPDT	24	25	288	18M9287	41.95	36.15
PRD-11DG0-24	DPDT	24	30	288	18M9285	34.27	32.96
PRDA-11DYA-24	DPDT	24	25	288	90B6316	75.28	65.25
PRD-11DY0-24	DPDT	24	25	288	18M9287	41.95	36.15
PRD-11DY0-48	DPDT	48	25	1.15 kohm	20M7040	44.74	41.37
PRD-11DY0-110	DPDT	110	25	6.05 kohm	29M9959	43.43	41.00
PRD-11DY3-110	DPDT	110	25	6.05 kohm	73C6543	54.37	47.12
DC COIL WITH MAGNETIC BLOWOUT For switching high voltage and high current DC loads. 2W. 20A.							
PRD-3DH0-24	SPST-NO	24	20	288	29M9960	33.50	31.32
PRD-11DH0-12	DPDT	12	20	71	18M9286	41.71	38.23
PRD-11DH0-24	DPDT	24	20	288	20M7039	38.94	35.73
PRD-11DJ0-24	DPDT	24	20	288	29M9958	45.12	41.04
PRD-11DH0-110	DPDT	110	20	6.05 kohm	29M9957	43.87	41.72

* 0.250" (6.35mm) Quick-connect termination.

(3288)

2A ENCLOSED CURRENT ACTUATED RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Specifications:
- Contact ratings: 2A at 120VAC
- Contact material: Silver
- Expected life: 15million operations
- Mechanical life: 100,000 operations
- Initial insulation resistance: 1000MΩ
- Operating temperature: -45°C to +70°C

Features:
- DC current sensitive relay
- Enclosed in a clear polycarbonate dust cover
- Operates on 125mW per movable arm
- 8--pin octal-style plugs

Mfg. Part No.	Current (A)	Contact Voltage (VAC)	Contacts	Coil Resist. (Ω)	Stock No.	Price Each 1-24
KCP-5-2500	2	120	SPDT	2.5	24F489	141.34

(142142)

D15 SERIES GENERAL PURPOSE RELAYS

RoHS Compliant Available

DURAKOOL INC.

Features:
- For plug-in sockets, 35 mm DIN rail mount, or on panel mounting
- Cadmium - free contacts - relays D15 2C/0, D15 3C/0
- *WT*: mechanical indicator + lockable front test button
- Relays may be provided with the test buttons type P (no latching) and plugs

Specifications:
- Max. inrush current: 20A
- Rated current: 10A
- Max. breaking capacity: 2500VA
- Resistance: less than 100milliohms
- Max. operating frequency (at rated load): 1200 cycle per second

AC COIL VERSION

Mfg. Part No.	Carry Current (A)	Contacts	Coil Voltage (VAC)	Coil Resist. (Ω)	Stock No.	Price Each 1-9
D15-2012-23-5024-WTL	10	DPST-CO	24	75	78M6806	9.80
D15-2013-23-5120-WTL	10	3PST-CO	120	1.91	78M6812	11.60

RELAY SOCKETS

Mfg. Part No.	Current (A)	For Use With	Mounting	Termination	Stock No.	Price Each 1-9
DZ8	10	D15 Series, DPDT Relays	DIN Rail, Panel	Screw	78M6803	7.70
DZ11	10	D15 Series, 3PDT Relays	DIN Rail, Panel	Screw	78M6801	7.66

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
DZ11-0031	Clip, For use with: DZ8 & DZ11 Relay Sockets	78M6802	0.44

(107905)

PLUG-IN/INDUSTRIAL RELAYS – OCTAL

10A GENERAL-PURPOSE RELAYS

RoHS Compliant Available

IDEC

- High reliability and long service life
- DPDT or 3PDT pure silver contacts
- Available with octal 8-pin and 11-pin terminals
- Worldwide approvals on octal models
- Options include check button for test operation and indicator light
- Mounting options include DIN socket, or panel mount socket

Contact material is silver. Operating time: 25ms. Release time: 25 ms. Temperature range: –25°F to +158°F for non-latching relays, -30°C to +70°C for dual-coil latching relays. Mount into standard 8- or 11-pin octal sockets. Sockets ordered separately, *below*. UL recognized, CSA certified, CE compliant, TÜV approved.

8-Pin

11-Pin

8-PIN TERMINATION

Mfg. Part No.	Contacts	Coil Voltage	Coil Resist. (Ω)	Indicator Light	Stock No.	Price Each 1-9	10-24	25-49
● RR2P-UAC24V	DPDT	24VAC	79	N	91F5535	19.61	17.48	16.60
RR2P-ULAC24V	DPDT	24VAC	79	Y	91F5539	21.77	19.42	18.44
● RR2P-UAC120V	DPDT	120VAC	2100	N	91F5536	18.81	16.77	15.93
● RR2P-ULAC120V	DPDT	120VAC	2100	Y	91F5540	21.77	19.43	18.44
● RR2P-UDC12V	DPDT	12VDC	100	N	91F5537	19.26	17.18	16.31
● RR2P-ULDC12V	DPDT	12VDC	100	Y	91F5541	23.46	20.92	19.87
● RR2P-UDC24V	DPDT	24VDC	400	N	91F5538	18.82	16.79	15.93
● RR2P-ULDC24V	DPDT	24VDC	400	Y	91F5542	21.37	19.05	18.10
11-PIN TERMINATION								
● RR3PA-UAC120V	3PDT	120VAC	2100	N	91F5544	23.32	20.80	19.76
● RR3PA-ULAC120V	3PDT	120VAC	2100	Y	91F5548	25.88	23.09	21.93
RR3PA-UDC12V	3PDT	12VDC	100	N	91F5545	24.99	22.29	21.17

➤ CONTINUED ➤

10A GENERAL-PURPOSE RELAYS (CONT.)

11-PIN TERMINATION

Mfg. Part No.	Contacts	Coil Voltage	Coil Resist. (Ω)	Indicator Light	Stock No.	Price Each 1-9	10-24	25-49
RR3PA-UDC24V	3PDT	24VDC	400	N	91F5546	22.74	20.28	19.26
● RR3PA-ULDC24V	3PDT	24VDC	400	Y	16F309	25.73	22.95	21.79
11-PIN TERMINATION, DUAL-COIL LATCHING								
RR2KP-UAC120V	DPDT	120VAC	2200	N	16F306	39.03	34.82	33.06
RR2KP-UDC12V	DPDT	12VDC	100	N	16F308	38.37	34.22	32.49
RR2KP-UDC24V	DPDT	24VDC	400	N	91F5566	37.80	33.71	32.01

SOCKETS AND ACCESSORIES

Mfg. Part No.	For Use With Relay Series	Description	Stock No.	Price Each 1-49	50-99
● SR3P-05	RR3PA, RR2KP	3-Pole Snap DIN Rail Mount Socket	13M2996	8.65	7.81
● SR3P-06	RR3PA, RR2KP	3-Pole Snap DIN Rail Mount Socket	18M9335	9.13	8.26
● SR3P-05C	RR3PA, RR2KP	3-Pole Finger-Safe DIN Rail Mount Socket	13M2997	10.95	9.89
● SR3P-51	RR3PA, RR2KP	3-Pole Panel Mount Socket	13M2998	1.74	1.57
● SR2P-51	RR2P	2-Pole Panel Mount Socket	13M2992	1.54	1.39
● SR2P-05	RR2P	2-Pole Standard DIN Rail Mount Socket	13M2990	5.71	5.16
● SR2P-05C	RR2P	2-Pole Finger-Safe DIN Rail Mount Socket	14M8237	6.77	6.12
● SR2P-06	RR2P	2-Pole Standard DIN Rail Mount Socket	13M2991	5.62	5.07
● SR2B-02F1	RR2P	Hold-Down Spring for Use with SR2P-05, -05C, -06	31B3692	0.28	0.24
● SR3B-02F1	RR3PA	Hold-Down Spring for Use with SR3B-05, SR3B-51	91F6258	0.53	0.47
● BNDN1000	All	35mm 1 Meter Low-Profile Aluminum DIN Rail with Holes	96F6501	7.88	7.47
● BNL-5 (14527)	All	DIN Rail Metal End Clip	66M8411	1.64	1.49

MAGNECRAFT 12-16A OCTAL PLUG-IN RELAYS

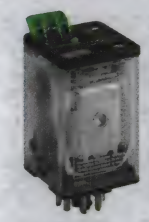
RoHS Compliant Available

Schneider Electric

Full Featured Cover:
- Flag indicator for relay status in manual or powered condition
- LED lamp for coil "on" or "off" status
- Manual push button for operation of relay without coil power
- Lock-down door holds contacts in operate position
- Removable ID tag for write-on surface
- Dimensions: 1.4"L x 1.4"W x 2.2"H
- Operating temperature: -40°C to +55°C

Hermetically Sealed Relay:
- Class 1, Division 2 certification for hazardous locations
- Ideal for harsh environments
- Dimensions: 1.44"L x 1.61"W x 2.1"H
- Operating temperature: -40°C to +55°C

Plain Cover:
- Flag indicator for relay status in manual or powered condition
- ID tag for write-on surface
- Dimensions: 1.4"L x 1.4"W x 2.1"H
- Operating temperature: -40°C to +55°C



Full Featured Cover

Plain Cover

Hermetically Sealed Relay

8-PIN DPDT OCTAL PLUG-IN RELAYS

Full Featured Mfg. Part No.	Plain Coverwith Flag Mfg. Part No.	Carry Current (A)	Coil Voltage	Coil Resist. (Ω)	Matching Sockets	Full Featured Stock No.	Full Featured Price Each 1-49	Stock No. Stock No.	Stock No. Price Each 1-49
750XBXRM4L-110/120A	750XBXRC-110/120A	10	120VAC	1.7	70-464-1 70-750DL8-1 70-750E8-1 70-750EL8-1	36X1963	23.91	36X1956	21.26
750XBXRM4L-110/125D	750XBXRC-110/125D	10	125VDC	10		36X1964	24.88	36X1958	22.35
● 750XBXRM4L-12D	● 750XBXRC-12D	10	12VDC	120		36X1965	23.48	36X1959	20.95
750XBXRM4L-220/240A	750XBXRC-220/240A	10	240VAC	72		36X1966	24.88	36X1960	22.35
● 750XBXRM4L-24A	● 750XBXRC-24A	10	24VAC	72		36X1967	23.91	36X1961	21.26
● 750XBXRM4L-24D	● 750XBXRC-24D	10	24VDC	470		36X1968	23.48	36X1962	20.95
11-PIN 3PDT OCTAL PLUG-IN RELAYS									
750XCXRM4L-110/120A	● 750XCXRC-120A	10	120VAC	1.7	70-465-1 70-750DL11-1 70-750E11-1 70-750EL11-1	36X1970	28.10	36X1969	22.79
● 750XCXRM4L-24A	...	10	24VAC	72		36X1971	28.10	...	...

8-PIN DPDT OCTAL HERMETICALLY SEALED RELAYS

Mfg. Part No.	Dual Marking	Carry Current (A)	Coil Voltage	Coil Resist. (Ω)	Mating Sockets	Stock No.	Price Each 1-24
● 750XBXH-12D	KR-11DGE-12	12	12VDC	120	70-464-1 70-750DL8-1 70-750E8-1	10M6480	143.59
● 750XBXH-24D	KR-11DGE-24	12	24VDC	470		10M6483	79.53
● 750XBXH-120A	KR-11AGE-120	12	120VAC	1.7		10M6481	150.47
11-PIN 3PDT OCTAL HERMETICALLY SEALED RELAYS							
● 750XCXH-24D	KR-14DGE-24	12	24VDC	470	70-465-1 70-750DL11-1 70-750E11-1	10M6499	108.10

OCTAL SOCKETS - ALL TOUCH SAFE AND DIN/PANEL MOUNTABLE

Mfg. Part No.	Decription	Contacts	Stock No.	Price Each 1-24
● 70-464-1	Screw terminals, hold-down clip compatible	DPDT	10M6441	3.57
● 70-465-1	Screw terminals, hold-down clip compatible	3PDT	10M6442	4.66
● 70-750DL8-1	Logic style, screw terminals, module and bus jumper compatible	DPDT	19M0188	7.88
● 70-750DL11-1	Logic style, screw terminals, module and bus jumper compatible	3PDT	29M8622	10.61
● 70-750E8-1	Elevator terminals, module and ID tag compatible	DPDT	72J4086	5.48
● 70-750E11-1	Elevator terminals, module and ID tag compatible	3PDT	72J4085	6.50

➤ CONTINUED ➤

MAGNECRAFT 12-16A OCTAL PLUG-IN RELAYS (CONT.)

Mfg. Part No.	Decription	Contacts	Stock No.	Price Each 1-24
70-750EL8-1	Logic style, elevator terminals, module, bus jumper and ID tag compatible	DPDT	72J4084	7.01
70-750EL11-1	Logic style, elevator terminals, module, bus jumper and ID tag compatible	3PDT	72J4083	8.46

(72356)

10A PLUG-IN RELAYS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

Features:
- Mechanical indicator standard on all models
- Optional lockable test button and/or LED indicator
- Octal base
- Wider operating temperature
- Versions with built-in varistors and diodes are also available; *go online or call*

Specifications:
- Contact rating: 10A at 250VAC
- Impulse withstand voltage: 4.5kV
- Nom. coil voltage: 1.4W
- Electrical life min: 100,000 ops
- Operating temperature: -40°C to 60°C

TUV Rheinland

Mfg. Part No.	Carry Current (A)	Contacts	Coil Voltage	Coil Resist. (Ω)	Stock No.	Price Each 1-24	25-49	50-99
MECHANICAL INDICATOR								
MKS2P AC120	10	DPDT	120VAC	1.13	04R7311	14.93	14.05	12.91
MECHANICAL INDICATOR AND PUSH-TO-TEST BUTTON								
MKS2PI AC12	10	DPDT	12VAC	13.7	04R7312	14.07	13.24	12.16
MKS2PI AC24	10	DPDT	24VAC	48.4	04R7314	13.90	13.08	12.01
MKS2PI AC120	10	DPDT	120VAC	1.13	04R7313	14.94	14.06	12.91
MKS2PI AC240	10	DPDT	240VAC	4.48	04R7315	16.64	15.66	14.38
MKS2PI DC12	10	DPDT	12VDC	107	04R7317	14.16	13.32	12.25
MKS2PI DC24	10	DPDT	24VDC	430	04R7318	14.16	13.32	12.25
MKS2PI DC110	10	DPDT	110VDC	8.96	04R7316	17.06	16.06	14.75
MKS3PI-5 AC24	10	3PDT	24VAC	48.4	04R7326	16.29	15.34	14.08
MKS3PI-5 AC120	10	3PDT	120VAC	1.13	04R7325	17.43	16.41	15.06
MKS3PI-5 AC240	10	3PDT	240VAC	4.48	04R7327	18.44	17.36	15.94
MKS3PI-5 DC12	10	3PDT	12VDC	107	04R7328	16.29	15.34	14.08
MKS3PI-5 DC24	10	3PDT	24VDC	430	04R7329	16.41	15.44	14.18
LED INDICATOR								
MKS2PN AC120	10	DPDT	120VAC	1.13	04R7323	18.36	17.28	15.87
MKS2PN DC110	10	DPDT	110VDC	8.96	04R7324	18.02	16.96	15.57
LED INDICATOR AND PUSH-TO-TEST BUTTON								
MKS2PIN AC24	10	DPDT	24VAC	48.4	04R7320	17.08	16.08	14.77
MKS2PIN AC120	10	DPDT	120VAC	1.13	04R7319	17.92	16.86	15.49
MKS2PIN AC240	10	DPDT	240VAC	4.48	04R7321	19.84	18.67	17.15
MKS2PIN DC24	10	DPDT	24VDC	430	04R7322	17.20	16.18	14.87
MKS3PIN-5 AC120	10	3PDT	120VAC	1.13	04R7330	18.48	17.39	15.98
MKS3PIN-5 DC24	10	3PDT	24VDC	430	04R7331	19.29	18.16	16.68

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24	25-49	50-99
PF083A-E	Track-Mounted Socket for SPDT or DPDT Relays (Conforming to DIN EN 50022)	52F3735	5.34	5.04	4.81
PL08	Back Connecting, Solder Terminal Socket for MK2	35K3218	2.57	2.42	2.31
PLE08-0	PCB Socket for MK2	17M7523	3.51	3.31	3.15
PL11	Back Connecting, Solder Terminal Socket for MK3	52F3746	2.62	2.47	2.35
PF113A-E	Track-Mounted Socket for 3PDT Relays	36K2011	7.55	7.13	6.78
PFP-100N	DIN Rail Track 1mm x 35mm x 7.3mm	17M7511	7.88	7.35	7.09
PFP-100N2	DIN Rail Track 1mm x 35mm x 16mm	34K8630	24.63	22.99	22.17
PFP-50N	DIN Rail Track 0.5m x 35mm x 7.3mm	93B2043	6.49	6.05	5.84
PFP-M	End Plate for All DIN Rail Tracks	36K3451	0.88	0.81	0.76
PFC-A1	Relay Hold-Down Clip	36K7584	0.97	0.90	0.87

(3755)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

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(212568)

POWER RELAYS MKS-X SERIES

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

Features:
- Mechanical indicator standard on all models
- Optional lockable test button and/or LED indicator
- Octal base
- Wider operating temperature
- Versions with built-in varistors and diodes are also available; *go online or call*

Specifications:
- Contact rating: 10A at 250VAC
- Impulse withstand voltage: 4.5kV
- Nom. coil voltage: 1.4W
- Electrical life min: 100,000 ops
- Operating temperature: -40°C to 60°C

TUV Rheinland

Fig. 1

Fig. 2

DC COIL RELAYS

Mfg. Part No.	Fig.	Carry Current (A)	Contacts	Coil Voltage (VDC)	Features	Stock No.	Price Each 1-24
MKS2XT-11 DC24	1	5	SPST-NO, SPST-NC	24	...	51R1745	24.73
MKS2XTI-11 DC24	1	5	SPST-NO, SPST-NC	24	Test Button	51R1747	26.97
MKS2XTIN-11 DC24	1	5	SPST-NO, SPST-NC	24	Indicator & Test Button	51R1749	30.39
MKS2XTN-11 DC24	1	5	SPST-NO, SPST-NC	24	Indicator Light	51R1751	26.97
MKS1XT-10 DC24	2	10	SPST-NO	24	...	51R1735	22.50

RELAY SOCKETS

Mfg. Part No.	Description	Stock No.	Price Each 1-24
P7MF-06	PCB Socket for MK2	51R1752	16.00

(163838)

HERMETICALLY SEALED PLUG-IN RELAYS

STRUTHERS-DUNN

- DPDT - 12A @ 120VAC, 10A @ 28VDC
- 3PDT - 10A @ 120VAC / 28VDC
- Hermetically sealed steel case
- Vacuum baked / nitrogen filled
- Socket mounted

Highly reliable, general purpose relays have glass melamine insulation for high dielectric strength and resistance to humidity or temperature change. Molded nylon bobbin and coil cover. Contacts: Silver-cadmium oxide, gold flash, rated 10A @ 120/240VAC/28VDC resistive. Steel enclosure filled with dry nitrogen and solder sealed to prevent contamination of internal parts. DPDT mates with socket **SK-CIR8-DS** *on this page*, 3PDT mates with socket **SK-CIR11-DS**.

Mfg. Part No.	Contacts	Coil Input Voltage	Coil Resist. (Ω)	Stock No.	Price Each 1-4	5-9	10-24	25-49
W88HPX-34	DPDT	24 VDC	400	88K2838	305.84	280.90	250.71	240.21
W88AHPX-36	3PDT	120 VAC	...	88K2836	167.02	153.40	136.91	131.18
W88HPX-51	3PDT	12 VDC	100	88K2839	310.99	285.63	254.93	244.25

(3967)

SOCKETS

RoHS Compliant Available

STRUTHERS-DUNN

8-Pin Octal

11-Pin Octal

11-Pin Square

DIN / PANEL MOUNT

Mfg. Part No.	Description	Stock No.	Price Each 1-24	25-49	50-99	100-249
SK-CIR8-DS	8-Pin Octal	88K2865	8.35	7.96	7.39	7.13
SK-CIR11-DS	11-Pin Octal	88K2864	10.16	9.69	8.99	8.66
SK-SQB11-DS	11-Pin Square	88K2868	14.03	13.40	12.41	11.95

(88709)

P&B 5-10A SERIES GENERAL-PURPOSE SOCKET-MOUNT RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor

KRP series relays are older version; built on manual line. **KRPA series** relays are newer version; built on automated, ISO certified line. *Order sockets separately; see the Relay Socket Usage Guide.*

KRP

KRPA

SPECIFICATIONS

Suffix	Contacts	Approvals
Y	Silver	UL Recognized, CSA Certified
G	Silver Cadmium Oxide	UL Recognized, CSA Certified
N	Silver Cadmium Oxide	UL Recognized and CSA Certified in 110, 120 and 240V Only
E	Silver	UL Recognized for Class 1 Div 2 Hazardous Locations

AC COIL RELAYS

Mfg. Part No.	Carry Current (A)	Contacts	Coil Voltage (VAC)	Indicator	Coil Resist. (Ω)	Stock No.	Price Each 1-24
● KRPA-5AY-120	5	SPDT	120	N	2.25	17M0213	23.43
● KRPA-11AY-12	5	DPDT	12	N	24	18M9135	29.36
● KRPA-11AY-24	5	DPDT	24	N	85	17M0195	15.43
KRP-11AN-24	10	DPDT	24	Y	85	24F1437	77.41
● KRP-11AY-120	5	DPDT	120	N	2.25	17M0181	68.72
KRP-11AN-120	10	DPDT	120	Y	2.25	24F1438	72.45
● KRPA-11AY-120	5	DPDT	120	N	2.25	21F1078	16.90
● KRPA-11AY-240	5	DPDT	240	N	9.11	21F1079	30.22
KRPA-14AY-24	5	3PDT	24	N	85	21F1106	19.58
KRP-14AN-120	10	3PDT	120	Y	2.25	24F1329	94.03
● KRPA-14AY-120	5	3PDT	120	N	2.25	21F1107	35.95
● KRPA-14AY-240	5	3PDT	240	N	9.11	21F1108	37.51
● KRPA-5AG-24	10	SPDT	24	N	85	18M9140	28.57
● KRP-5AG-120	10	SPDT	120	N	2.25	24F1332	62.25
● KRPA-5AG-120	10	SPDT	120	N	2.25	18M9139	21.71
● KRPA-11AY-6	5	DPDT	6	N	6	17M0196	29.36
● KRPA-11AG-6	10	DPDT	6	N	6	17M0191	17.86
● KRP-11AG-12	10	DPDT	12	N	24	24F1334	67.90
● KRPA-11AG-12	10	DPDT	12	N	24	17M0188	17.86
KRPA-11AN-12	10	DPDT	12	Y	24	21F1071	18.09
● KRP-11AG-24	10	DPDT	24	N	85	17M0180	77.20
KRPA-11AN-24	10	DPDT	24	Y	85	21F1072	15.68
● KRPA-11AG-24	10	DPDT	24	N	85	17M0190	15.36
● KRP-11AG-120	10	DPDT	120	N	2.25	17M0179	59.29
● KRPA-11AGP-120	10	DPDT	120	N	2.25	17M0192	30.00
● KRPA-11AG-120	10	DPDT	120	N	2.25	17M0189	16.24
● KRPA-11AN-120	10	DPDT	120	Y	2.25	17M9928	16.74
● KRP-11AG-240	10	DPDT	240	N	9.11	24F1696	56.45
● KRPA-11AG-240	10	DPDT	240	N	9.11	21F1069	20.33
● KRPA-11AN-240	10	DPDT	240	Y	9.11	17M0194	19.54
● KRPA-14AG-12	10	3PDT	12	N	24	06R3597	35.66
● KRPA-14AG-24	10	3PDT	24	N	85	17M0207	17.99
KRPA-14AN-24	10	3PDT	24	Y	85	21F1101	38.40
● KRP-14AG-120	10	3PDT	120	N	2.25	18M9134	90.72
● KRPA-14AG-120	10	3PDT	120	N	2.25	17M0206	17.80
● KRPA-14AN-120	10	3PDT	120	Y	2.25	17M0208	18.65
● KRP-14AG-240	10	3PDT	240	N	9.11	24F2947	67.41
● KRPA-14AG-240	10	3PDT	240	N	9.11	21F1098	19.46
● KRPA-14AN-240	10	3PDT	240	Y	9.11	18M9137	23.29

DC COIL RELAYS

Mfg. Part No.	Carry Current (A)	Contacts	Coil Voltage (VDC)	Indicator	Coil Resist. (Ω)	Stock No.	Price Each 1-9
● KRPA-5DY-12	5	SPDT	12	N	120	17M0217	25.36
● KRPA-5DY-24	5	SPDT	24	N	472	17M0218	25.51
KRP-11DN-12	10	DPDT	12	Y	120	24F1441	66.34
● KRPA-11DY-12	5	DPDT	12	N	120	18M9136	15.73
● KRP-11DY-24	5	DPDT	24	N	472	24F528	54.86
KRP-11DN-24	10	DPDT	24	Y	472	24F1442	66.34
● KRPA-11DY-24	5	DPDT	24	N	472	17M0205	15.43
● KRP-11DG-110	10	DPDT	110	Y	10	24F1348	66.78
● KRP-14DG-12	10	3PDT	12	N	120	17M0185	78.85
KRP-14DN-24	10	3PDT	24	Y	472	67F1119	76.31
● KRPA-14DY-24	5	3PDT	24	N	472	17M0212	20.19
● KRP-14DG-110	10	3PDT	110	N	10	17M0184	86.27
● KRP-14DG-125	10	3PDT	125	N	...	08H1579	79.03

➤CONTINUED➤

P&B 5-10A SERIES GENERAL-PURPOSE SOCKET-MOUNT RELAYS (CONT.)

DC COIL RELAYS

Mfg. Part No.	Carry Current (A)	Contacts	Coil Voltage (VAC)	Indicator	Coil Resist. (Ω)	Stock No.	Price Each 1-24
● KRPA-5DG-6	10	SPDT	6	N	32	17M0216	25.57
● KRPA-5DG-12	10	SPDT	12	N	120	17M0214	20.05
● KRPA-5DG-24	10	SPDT	24	N	472	17M0215	22.63
● KRPA-5DG-110	10	SPDT	110	N	10	21F1060	23.43
● KRP11DG-6VDC	10	DPDT	6	N	10	24F1345	59.27
● KRPA-11DG-6	10	DPDT	6	N	32	17M0202	17.49
● KRP-11DG-12	10	DPDT	12	N	120	29M9948	72.89
● KRPA-11DG-12	10	DPDT	12	N	120	17M0198	15.36
KRPA-11DN-12	10	DPDT	12	Y	120	21F1086	16.67
● KRP-11DG-24	10	DPDT	24	N	472	18M9133	58.50
● KRPA-11DGP-24	10	DPDT	24	N	472	17M0203	17.65
● KRPA-11DG-24	10	DPDT	24	N	472	17M0200	15.18
KRPA-11DN-24	10	DPDT	24	Y	472	21F1087	16.59
● KRPA-11DG-48	10	DPDT	48	N	1.8	17M0201	19.10
KRP-11DN-110	10	DPDT	110	Y	10	24F1443	62.23
● KRPA-11DG-110	5	DPDT	110	N	10	17M0197	16.24
KRPA-11DN-110	10	DPDT	110	Y	10	21F1088	26.46
● KRP-11DG-125	10	DPDT	125	N	...	76M7967	76.59
● KRPA-11DG-125	10	DPDT	125	N	10	17M0199	16.24
● KRPA-14DG-12	10	3PDT	12	N	120	17M0209	17.22
● KRP-14DG-24	10	3PDT	24	N	472	17M0186	62.43
KRPA-14DN-24	10	3PDT	24	Y	472	21F1114	17.56
● KRPA-14DG-24	10	3PDT	24	N	472	17M9929	17.04
● KRPA-14DG-48	10	3PDT	48	N	1.8	17M0210	32.23
● KRPA-14DG-110	10	3PDT	110	N	10	18M9138	20.44
● KRPA-14DG-125	10	3PDT	125	N	10	01C8539	33.89
● KRP-3DH-24	20	SPST	24	...	472	76M7968	75.50
● KRPA-11DY-110	5	DPDT	110	N	10	21F1093	27.61

SOCKETS AND HARDWARE

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 27E122	Rectangular Screw Terminal Socket Dimensions: 1.572″ (39.93) x 2.385″ (60.58)	57F3431	5.80
● 27E891	Octal Screw Terminal DIN Rail Mount Socket for use with hold-down spring **Mfg. Part No. 20C318**	46F3587	5.39
● 27E123	Rectangular Screw Terminal Socket Dimensions: 2.322″ (58.98) x 2.385″ (60.58)	57F3432	6.74
● 27E892	Octal Screw Terminal DIN Rail Mount Socket for use with hold-down spring **Mfg. Part No. 20C318**	46F3588	8.85
● 20C318	Hold-down spring for use with octal sockets accomodates machine screws or rivets for **KRPA** and **KRPA-N** series	46F3619	0.27

(3120)

P&B 20A KRP-3H SERIES GENERAL-PURPOSE RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor

KRP-3H series relays are enclosed in clear polycarbonate dust cover. Many uses in automation controls and other applications requiring high current switching. Heavy copper alloy movable contact arms. Twin silver-cadmium oxide contacts. Operating temperature: -40°C to +85°C. For use with **mfg. part no. 27E122** screw terminal socket or **mfg. part no. 27E891** screw terminal DIN mount socket and **mfg. part no. 20C206** hold down spring; *order separately, go online or call.*

Mfg. Part No.	Contacts	Coil Input Voltage (VDC)	Indicator Lamp	Coil Resist. (Ω)	Stock No.	Price Each 1-24
● KRP-3DH-110	SPST-NO-DM	110	N	10,000	96B8059	88.15
● KRP-3AH-120	SPST-NO-DM	120	N	2,250	17M0187	64.28

(72439)

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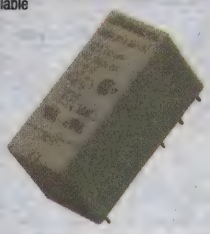
(212569)

DM84 SERIES INDUSTRIAL RELAYS

RoHS Compliant Available

DURAKOOL INC.



Features:
- Cadmium - free contacts
- Height 15.7mm
- 5000V / 10mm reinforced insulation
- For PCB and plug-in sockets
- AC and DC coils
- Recyclable packing

Specifications:
- Max. inrush current: 15A
- Rated current: 8A
- Max. breaking capacity: 2000VA
- Resistance: less than 100milliohms
- Max. operating frequency: 600cycles/hour
- Operating time: 7ms
- Release time: 3ms
- Mechanical life: 30million cycles
- Operating temperature: -40°C to 70°C

DC COIL VERSION

Mfg. Part No.	Carry Current (A)	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Stock No.	Price Each 1-9
DM84-2012-35-1012	8	DPST-CO	12	360	78M6763	5.92
DM84-2012-35-1024	8	DPST-CO	24	1.44	78M6764	5.27

AC COIL VERSION

Mfg. Part No.	Carry Current (A)	Contacts	Coil Voltage (VAC)	Coil Resist. (Ω)	Stock No.	Price Each 1-9
DM84-2012-35-5012	8	DPDT	12	100	78M6765	4.40
DM84-2012-35-5024	8	DPST-CO	24	400	78M6766	8.00
DM84-2012-35-5120	8	DPST-CO	120	10.2	78M6767	5.84

RELAY SOCKETS

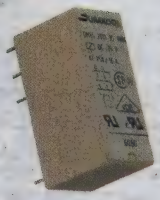
Mfg. Part No.	Current (A)	For Use With	Mounting	Termination	Stock No.	Price Each 1-9
DZM80	12	DM84, DM85, DM87L, DM87P Series Relays	DIN Rail, Panel	Screw	78M6796	4.37

(107901)

DM85 SERIES INDUSTRIAL RELAYS

RoHS Compliant Available

DURAKOOL INC.



Features:
- Cadmium - free contacts
- Height: 15.7 mm
- 5000V / 10mm reinforced insulation
- For PCB and plug-in sockets
- AC and DC coils
- Recyclable packing

Specifications:
- Max. inrush current: 30A
- Rated current: 16A
- Max. breaking capacity : 4000VA
- Resistance: less than 100milliohms
- Max. operating frequency (at rated load): 600cycles/hour
- Operating time: 7ms
- Release time: 3ms
- Mechanical life: 30million cycles
- Operating temperature: -40°C to 70°C

DC COIL VERSION

Mfg. Part No.	Carry Current (A)	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Stock No.	Price Each 1-9
DM85-2011-35-1012	16	SPST-CO	12	360	78M6768	5.40
DM85-2011-35-1024	16	SPST-CO	24	1.44	78M6769	4.97

AC COIL VERSION

Mfg. Part No.	Carry Current (A)	Contacts	Coil Voltage (VAC)	Coil Resist. (Ω)	Stock No.	Price Each 1-9
DM85-2011-35-5120	16	SPST-CO	120	10.2	78M6772	4.97

RELAY SOCKETS

Mfg. Part No.	Current (A)	For Use With	Mounting	Termination	Stock No.	Price Each 1-9
DZM80	12	DM84, DM85, DM87L, DM87P Series Relays	DIN Rail, Panel	Screw	78M6796	4.37

(107907)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

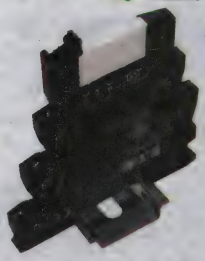
newark.com/custom-panel-meters

(212570)

XR SERIES TERMINAL BLOCK RELAYS

RoHS Compliant Available

EATON



- Pluggable relay allows for field replacement
- Functional plug-in bridges
- Screw connection
- LED status indication
- DIN Rail Mount
- Only 6.2 mm wide
- All common input voltages between 12VDC to 120VAC

Mfg. Part No.	Contact Current (A)	Contacts	Coil Voltage	Stock No.	Price Each 1-9
XRU1D24	6	SPDT	24 VDC	46P4591	27.57
XRU1D24U	6	SPDT	24 VDC/VAC	47T6265	30.45
XRU1D120U	6	SPDT	110 VDC/120 VAC	47T6264	38.05

(202254)

1 POLE 6A PC BOARD RELAY

NEW

RoHS Compliant Available

finder

- 1 Pole changeover contacts or
- 1 Pole normally open contact
- Ultra slim, 5 mm, package
- Sensitive DC coil - 170 mW (Dual AC/DC coil drive possible using 93 series sockets)
- Cadmium Free contact materials
- ⅜ mm clearance/creepage distance
- 6 kV (1.2/50 µs) insulation, coil-contacts

Mfg. Part No.	Coil Resistance	Coil Voltage	Stock No.	Price Each 1-9
34.51.7.005.0010	130	5	08X7056	5.43
34.51.7.012.0010	840	12	08X7057	4.48
34.51.7.024.0010	3.35	24	08X7058	4.54
34.51.7.024.5010	3.35	24	08X7059	6.44
34.51.7.060.0010	19.7	60	08X7060	7.00

(211643)

PC BOARD RELAY

NEW

RoHS Compliant Available

finder

- AC and DC coils
- 8 mm, 6 kV (1.2/50 µs) isolation, coil-contacts
- Cadmium Free contact materials
- Flux proof: RT II standard, (RT III option)

Mfg. Part No.	Contacts	Coil Resistance	Contact Current Max	Stock No.	Price Each 1-9
44.62.9.024.0000	DPDT	900 ohm	20	08X7132	6.03
44.52.9.024.5000	DPDT	900 ohm	10	08X7128	8.50
44.52.9.024.0000	DPDT	900 ohm	10	08X7127	4.65
40.61.9.024.0000	SPDT	900 ohm	30	08X7122	3.66
40.52.9.024.5000	DPDT	900 ohm	15	08X7117	9.27
40.52.9.024.0001	DPDT	900 ohm	15	08X7116	5.04
40.52.9.024.0000	DPDT	900 ohm	15	08X7115	4.32
40.51.9.024.0000	SPDT	900 ohm	20	08X7105	3.52
40.31.9.024.0000	SPDT	900 ohm	20	08X7102	3.52
40.52.8.012.0000	DPDT	80 ohm	15	08X7108	5.63
41.52.9.012.0010	DPDT	360 ohm	15	08X7123	3.26
46.61.8.024.0040	SPDT	320 ohm	25	08X7138	8.17
46.52.8.024.0054	DPDT	320 ohm	15	08X7133	10.93
40.61.8.024.0000	SPDT	320 ohm	30	08X7119	5.12
40.52.8.024.0000	DPDT	320 ohm	15	08X7109	5.63
40.51.8.024.0000	SPDT	320 ohm	20	08X7103	4.86
40.31.8.024.0000	SPDT	320 ohm	20	08X7098	4.86
46.61.9.012.0040	SPDT	300 ohm	25	08X7141	6.95
40.52.7.012.0000	DPDT	288 ohm	15	08X7106	4.32
44.62.9.012.0000	DPDT	220 ohm	20	08X7131	6.03
40.61.9.012.0000	SPDT	220 ohm	30	08X7121	3.66
40.52.9.012.0000	DPDT	220 ohm	15	08X7114	4.32
40.31.9.012.0000	SPDT	220 ohm	20	08X7101	3.52
46.61.9.024.0074	SPDT	1.2 kohm	25	08X7143	8.65
46.61.9.024.0040	SPDT	1.2 kohm	25	08X7142	6.95
46.52.9.024.0074	DPDT	1.2 kohm	15	08X7137	9.75
46.52.9.024.0040	DPDT	1.2 kohm	15	08X7136	8.04
44.62.7.024.0000	DPDT	1.2 kohm	20	08X7130	6.03
44.52.7.024.0000	DPDT	1.2 kohm	10	08X7126	4.65
40.61.7.024.0000	SPDT	1.15 kohm	30	08X7118	3.66
40.52.7.024.0000	DPDT	1.15 kohm	15	08X7107	4.32
40.31.7.024.0000	SPDT	1.15 kohm	20	08X7097	3.52
46.61.8.120.0054	SPDT	9 kohm	25	08X7140	11.74
46.61.8.120.0040	SPDT	9 kohm	25	08X7139	9.41

CONTINUED

PC BOARD RELAY (CONT.)

Mfg. Part No.	Contacts	Coil Resistance	Contact Current Max	Stock No.	Price Each 1-9
● 46.52.8.120.0054	DPDT	9 kohm	15	08X7135	12.98
● 46.52.8.120.0040	DPDT	9 kohm	15	08X7134	11.17
40.61.8.120.0000	SPDT	9 kohm	30	08X7120	6.00
● 40.52.8.120.5000	DPDT	9 kohm	15	08X7111	11.98
● 40.52.8.120.0000	DPDT	9 kohm	15	08X7110	7.01
● 40.51.8.120.0000	SPDT	9 kohm	20	08X7104	6.12
● 40.31.8.120.0000	SPDT	9 kohm	20	08X7099	6.12
● 40.52.8.240.0000	DPDT	31.5 kohm	15	08X7113	8.34
● 40.31.8.240.0000	SPDT	31.5 kohm	20	08X7100	7.46
● 40.52.8.230.0000	DPDT	28 kohm	15	08X7112	8.34
● 41.52.9.110.0010	DPDT	24.2 kohm	15	08X7125	5.26
● 44.52.9.110.0000	DPDT	18 kohm	10	08X7129	6.08
● 41.52.9.024.0010	DPDT	1.44 kohm	15	08X7124	3.22
● 55.34.8.024.0040	4PDT	190 kohm	15	08X7184	9.88
● 55.34.9.024.0040	4PDT	600 kohm	15	08X7197	10.46
● 56.32.9.024.0000	DPDT	600 kohm	20	08X7215	10.97

ACCESSARIES

Mfg. Part No	Description	Stock No.	Price Each 1-9
● 99.02.0.230.98	Varistor & LED Indicator Module 110-240V AC/DC coil	08X7368	4.36

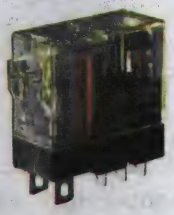
(211646)

RJ22 SERIES SLIM POWER RELAY PLUG-IN TERMINAL

NEW

RoHS Compliant Available

IDEC



- Compact and rugged power relays. Large switching capacity
- Compact housing only 12.7-mm wide.
- Large contact rating: RJ1 (1-pole): 16A (UL general use rating @250V AC), RJ2 (2-pole): 8A
- Non-polarized LED indicator available on blade type. IDEC's unique light guide structure enables high visibility of coil status from any direction.
- The smallest width for 2-pole/bifurcated contact relay
- Excellent electrical and mechanical life. Electrical life: 200,000 operations (AC load), Mechanical life: 30 million operations (AC coil)
- RoHS directive compliant (EU directive 2002/95/EC). Contains no lead, cadmium, mercury, hexavalent chromium, PBB or PBDE.
- Diode model: Diode reverse withstand voltage: 1000V
- UL recognized, CSA certified, EN compliant.

Mfg. Part No.	Coil Voltage	Coil Resistance (ohm)	Contact Configuration	Stock No.	Price Each 1-9
● RJ22V-A-A12	12VAC	62.5	DPST-NO	49X0348	10.11
● RJ22V-A-A120	120VAC	6.4	DPST-NO	49X0349	10.94
● RJ22V-A-A24	24VAC	243	DPST-NO	49X0350	10.11
● RJ22V-A-D12	12VDC	271	DPST-NO	49X0351	7.33
● RJ22V-A-D24	24VDC	1.08	DPST-NO	49X0352	7.33
● RJ22V-C-A24	24VAC	243	DPDT	49X0353	11.48
● RJ22V-C-D24	24VDC	1.08	DPDT	49X0354	9.56

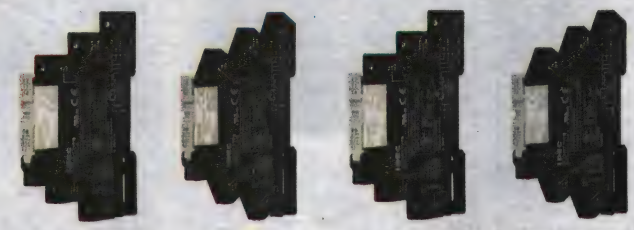
(212252)

RV8H SERIES 6MM INTERFACE RELAYS

NEW

RoHS Compliant Available

IDEC



- Class I, Division 2 environment
- Contact configuration: SPDT
- Contact rating: 6A
- Space-saving 6mm width.
- Only 70 mm in height from DIN rail
- Gold plated contacts
- Pre-assembled including DIN-rail and relay
- Universal screw terminals flat and Philips head
- Universal AC/DC socket with built-in surge protection and GREEN LED Indicator
- Lever for easy locking and removal of the relay
- Wide coil voltage range: 6 to 240V
- High dielectric strength and impulse withstand voltages.
- Sensitive coil 170 mW
- Reverse Polarity protected
- 400VAC maximum switching voltage
- 1500VA AC maximum switching power

RV8H SERIES

Mfg. Part No.	Coil Resistance	Coil Voltage	Stock No.	Price Each 1-9
● RV1H-G-D12-C1D2	820	12	23X4835	12.64
● RV1H-G-D24-C1D2	2.27	24	23X4837	12.64

➤CONTINUED➤

RV8H SERIES 6MM INTERFACE RELAYS (CONT.)

Mfg. Part No.	Coil Resistance	Coil Voltage	Stock No.	Price Each 1-9
● RV8H-L-AD110-C1D2	32.9	110	23X4842	28.80
● RV8H-L-AD48-C1D2	12.23	48	23X4847	31.01
● RV8H-L-D12-C1D2	820	12	23X4849	26.58
● RV8H-L-D24-C1D2	2.27	24	23X4851	22.15
● RV8H-S-AD110-C1D2	32.9	110	23X4854	28.80
● RV8H-S-AD48-C1D2	12.23	48	23X4859	31.01
● RV8H-S-D12-C1D2	820	12	23X4861	26.58
● RV8H-S-D24-C1D2	2.27	24	23X4863	22.15

REPLACEMENT RELAYS

Mfg. Part No.	Current Rating (A)	Voltage (V)	Resistance DC (ohm)	Stock No.	Price Each 1-9
● RV1H-G-D5-C1D2	6	6	170	23X4839	12.64
● RV1H-G-D9-C1D2	6	9	485	23X4841	12.64
● RV1H-G-D12-C1D2	6	12	820	23X4835	12.64
● RV1H-G-D18-C1D2	6	18	1.55	23X4836	13.95
● RV1H-G-D24-C1D2	6	24	2.27	23X4837	12.64
● RV1H-G-D48-C1D2	6	48	12.23	23X4838	15.62
● RV1H-G-D60-C1D2	6	60	17.91	23X4840	16.28

(211490)

RV8H SERIES 6MM INTERFACE RELAYS

RoHS Compliant Available

IDEC

- Contact configuration: SPDT
- Contact rating: 6A
- Space-saving 6mm width.
- Only 70 mm in height from DIN rail
- Gold plated contacts
- Pre-assembled including DIN-rail and relay
- Universal screw terminals flat and Philips head
- Universal AC/DC socket with built-in surge protection and GREEN LED Indicator
- Lever for easy locking and removal of the relay
- Wide coil voltage range: 6 to 240V
- High dielectric strength and impulse withstand voltages.
- Sensitive coil 170 mW
- Reverse Polarity protected
- 400VAC maximum switching voltage
- 1500VA AC maximum switching power

Relay and Socket

Replacement relay

IDEC RV8H Series 6mm wide slim interface relays provide a perfect solution for general purpose relay applications in compact spaces. The RV8H 6mm relays are ideal for PLC and electronic systems, industrial automation, panel builders, assembly machine applications and other applications that require a high switching capability. The RV8H relays can be used as a universal interface between the controller and the actuator to switch small and medium size loads. Pre-assembled relays and sockets reduce installation time. Replacement relays are also available. Optional accessories include jumpers, spacers and marking plates for wiring and marking solutions.

RV8H-L DC RELAYS AND SOCKETS SCREW TERMINALS

Mfg. Part No.	Current Rating (mA)	Voltage	Resistance (AC)	Resistance (DC)	Stock No.	Price Each 1-24
● RV8H-L-D6	35	6	...	170	72T0367	18.49
● RV8H-L-D9	18.6	9	...	485	72T0368	18.49
● RV8H-L-D12	14.6	12	...	820	65T7988	15.93
● RV8H-L-D18	11.6	18	...	1.55	72T0365	18.49
● RV8H-L-D24	10.6	24	...	2.27	72T0366	15.65
RV8H-S DC RELAYS AND SOCKET SPRING CLAMP						
● RV8H-S-D6	35	6	...	170	66W1017	18.04
● RV8H-S-D9	18.6	9	...	485	66W1018	14.72
● RV8H-S-D12	14.6	12	...	820	66W1014	14.72
● RV8H-S-D18	11.6	18	...	1.55	66W1015	17.18
● RV8H-S-D24	10.6	24	...	2.27	66W1016	14.55
RV8H-L AC/DC RELAYS AND SOCKET SCREW TERMINALS						
● RV8H-L-AD12	15.5	12	755	800	72T0359	16.93
● RV8H-L-AD18	13.3	18	1.365 kohm	1.345 kohm	72T0360	19.76
● RV8H-L-AD24	13.7	24	1.73 kohm	1.79 kohm	72T0362	17.03
● RV8H-L-AD48	4	48	11.88 kohm	12.23 kohm	72T0363	22.09
● RV8H-L-AD60	3.4	60	17.6 kohm	17.91 kohm	72T0364	23.43
● RV8H-L-AD110	3.4-3.9	110-125	31.79-31.89 kohm	32.45-32.9 kohm	72T0358	19.23
● RV8H-L-AD220	3.3-3.6	220-240	65.67-66.07 kohm	65.94-68.57 kohm	72T0361	19.11
RV8H-S AC/DC RELAYS AND SOCKET SPRING CLAMP TERMINALS						
● RV8H-S-AD12	15.5	12	755	800	66W1008	16.22
● RV8H-S-AD18	13.3	18	1.365 kohm	1.345 kohm	66W1009	18.93
● RV8H-S-AD24	13.7	24	1.73 kohm	1.79 kohm	66W1011	16.22
REPLACEMENT RELAYS						
● RV1H-G-D5	35	6	...	170	72T0355	7.65
● RV1H-G-D9	18.6	9	...	485	72T0357	7.65
● RV1H-G-D12	14.6	12	...	820	65T7986	8.03
● RV1H-G-D18	11.6	18	...	1.55	72T0352	8.72
● RV1H-G-D24	10.6	24	...	2.27	72T0353	7.15

➤CONTINUED➤

RV8H SERIES 6MM INTERFACE RELAYS (CONT.)

REPLACEMENT RELAYS

Mfg. Part No.	Current Rating (mA)	Voltage	Resistance (AC)	Resistance (DC)	Stock No.	Price Each 1-24
RV1H-G-D48	4	48	...	12.23 kohm	72T0354	10.05
RV1H-G-D60	3.4	60	...	17.91 kohm	72T0356	8.19

RELAY ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24
SV9Z-J20B	Jumper Black	72T0374	3.86
SV9Z-J20S	Jumper Blue	72T0375	3.81
SV9Z-J20W	Jumper Gray	72T0376	3.86
SV9Z-PW10	Marking Plate	72T0377	1.66
SV9Z-SAW	Spacer	72T0378	1.11

REPLACEMENT RELAY SOCKETS

SV1H-07L-1	Relay Socket	72T0369	10.16
SV1H-07L-2	Relay Socket	72T0370	10.69
SV1H-07L-3	Relay Socket	72T0371	11.22
SV1H-07L-4	Relay Socket	72T0372	11.22
SV1H-07L-5	Relay Socket	72T0373	10.10

(197963)

RF1V SERIES FORCE GUIDED RELAYS

RoHS Compliant Available

IDEC

PC board mount

DIN rail mount

- Voltage rating: 250V AC/DC
- Current rating: 6A
- Operating temperature: –40 to +85°C
- Force guided contact mechanism (EN50205 Type A TÜV approved)
- Contact configuration: 4-pole (2NO-2NC, 3NO-1NC), 6-pole (4NO-2NC, 5NO-1NC, 3NO-3NC)
- Built-in LED indicator available.
- Fast response time (8 ms maximum).
- High shock resistance (200 m/s^2 minimum)
- Finger-safe DIN rail mount socket and PC board mount socket.

RELAYS WITHOUT LED INDICATOR

Mfg. Part No.	Contacts	Coil Voltage (VDC)	Coil Resist. (ohm)	Coil Power (mW)	Stock No.	Price Each 1-9
RF1V-2A2B-D12	DPST-NO, DPST-NC	12	400	360	45T6740	22.96
RF1V-2A2B-D24	DPST-NO, DPST-NC	24	1.6 kohm	360	45T6741	24.57
RF1V-2A2B-D48	DPST-NO, DPST-NC	48	6.4 kohm	360	45T6742	24.18
RF1V-3A1B-D12	3PST-NO, SPST-NC	12	400	360	45T6745	22.96
RF1V-3A1B-D24	3PST-NO, SPST-NC	24	1.6 kohm	360	45T6746	24.25
RF1V-3A1B-D48	3PST-NO, SPST-NC	48	6.4 kohm	360	45T6747	24.18
RF1V-3A3B-D12	3PST-NO, 3PST-NC	12	288	500	45T6751	27.84
RF1V-3A3B-D24	3PST-NO, 3PST-NC	24	1.152 kohm	500	45T6752	27.84
RF1V-3A3B-D48	3PST-NO, 3PST-NC	48	4.608 kohm	500	45T6753	29.06
RF1V-4A2B-D12	4PST-NO, DPST-NC	12	288	500	45T6757	27.84
RF1V-4A2B-D24	4PST-NO, DPST-NC	24	1.152 kohm	500	25T1014	29.51
RF1V-4A2B-D48	4PST-NO, DPST-NC	48	4.608 kohm	500	45T6758	29.06
RF1V-5A1B-D12	5PST-NO, SPST-NC	12	288	500	45T6762	27.84
RF1V-5A1B-D24	5PST-NO, SPST-NC	24	1.152 kohm	500	45T6763	29.51
RF1V-5A1B-D48	5PST-NO, SPST-NC	48	4.608 kohm	500	45T6764	29.06

RELAYS WITH LED INDICATOR

RF1V-2A2BL-D12	DPST-NO, DPST-NC	12	400	360	45T6743	26.62
RF1V-2A2BL-D24	DPST-NO, DPST-NC	24	1.6 kohm	360	93R4962	28.22
RF1V-2A2BL-D48	DPST-NO, DPST-NC	48	6.4 kohm	360	45T6744	27.84
RF1V-3A1BL-D12	3PST-NO, SPST-NC	12	400	360	45T6748	26.62
RF1V-3A1BL-D24	3PST-NO, SPST-NC	24	1.6 kohm	360	45T6749	28.22
RF1V-3A1BL-D48	3PST-NO, SPST-NC	48	6.4 kohm	360	45T6750	27.84
RF1V-3A3BL-D12	3PST-NO, 3PST-NC	12	288	500	45T6754	31.51
RF1V-3A3BL-D24	3PST-NO, 3PST-NC	24	1.152 kohm	500	45T6755	31.51
RF1V-3A3BL-D48	3PST-NO, 3PST-NC	48	4.608 kohm	500	45T6756	32.73
RF1V-4A2BL-D12	4PST-NO, DPST-NC	12	288	500	45T6759	31.51

➤CONTINUED➤

RF1V SERIES FORCE GUIDED RELAYS (CONT.)

RELAYS WITH LED INDICATOR

Mfg. Part No.	Contacts	Coil Voltage (VDC)	Coil Resist. (ohm)	Coil Power (mW)	Stock No.	Price Each 1-9
RF1V-4A2BL-D24	4PST-NO, DPST-NC	24	1.152 kohm	500	45T6760	33.40
RF1V-4A2BL-D48	4PST-NO, DPST-NC	48	4.608 kohm	500	45T6761	32.73
RF1V-5A1BL-D12	5PST-NO, SPST-NC	12	288	500	45T6765	33.40
RF1V-5A1BL-D24	5PST-NO, SPST-NC	24	1.152 kohm	500	45T6766	33.40
RF1V-5A1BL-D48	5PST-NO, SPST-NC	48	4.608 kohm	500	45T6767	32.73

RELAY SOCKETS

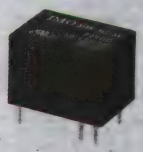
Mfg. Part No.	Description	Stock No.	Price Each 1-24
SF1V-4-07L	DIN Rail Mount Socket 4-Pole	25T1016	16.72
SF1V-4-61	PC Board Mount Socket 4-Pole	45T6768	8.53
SF1V-6-07L	DIN Rail Mount Socket 6-Pole	32T5011	18.87
SF1V-6-61	PC Board Mount Socket 6-Pole	45T6769	9.12

(196170)

SRF SERIES 2A SUBMINIATURE INTERMEDIATE POWER RELAYS

RoHS Compliant Available

IMO



Features:
- Low cost
- SPCO configuration
- Standard PC layout
- Sealed and flux-tight construction
- UL Approved
- RoHS Compliant

Specifications:
- Contact rating: 1A at 120VAC / 30VDC
- Initial contact resistance: 100mΩ Max.
- Contacts: SPST-NO, SPDT
- Max. switching voltage: 250VAC / 30VDC
- Max. switching current: 2A
- Max. switching power: 240VA / 30W
- Initial insulation resistance: 100MΩ @ 500VDC
- Dielectric strength: 1000VAC
- Operating temperature: -25°C to +70°C
- Unit weight: 5g

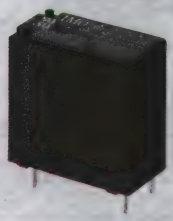
Mfg. Part No.	Current (A)	Contacts	Coil Voltage (VDC)	Coil Resist.	Stock No.	Price Each 1-24
SRF-1C-SL-5VDC	2	SPDT	5	120ohm	74R1530	1.89
SRF-1C-SL-12VDC	2	SPDT	12	700ohm	74R1528	1.89
SRF-1C-SL-24VDC	2	SPDT	24	2.8kohm	74R1529	1.76

(177830)

SRB SERIES 5A SUBMINIATURE INTERMEDIATE POWER RELAYS

RoHS Compliant Available

IMO



Features:
- SPNO or SPCO variants
- Standard and Sensitive Coils
- Sealed IP67
- UL/TUV Approved
- RoHS Compliant

Specifications:
- Contact rating: NO: 5A at 250VAC / 30VDC; NC: 3A at 250VAC / 30VDC
- Initial contact resistance: 100mΩ Max.
- Contacts: SPST-NO, SPDT
- Max. switching voltage: 250VAC / 30VDC
- Max. switching current: 5A
- Max. switching power: 1250VA / 150W
- Initial insulation resistance: 1000MΩ @ 500VDC
- Dielectric strength: 1000VAC
- Operating temperature: -40°C to +85°C
- Unit weight: 8g

Mfg. Part No.	Current (A)	Contacts	Coil Voltage (VDC)	Coil Resist.	Stock No.	Price Each 1-24
SRBN-1C-SL-12VDC	5	SPDT	12	575ohm	74R1524	2.19
SRBN-1C-SL-24VDC	5	SPDT	24	2.31kohm	74R1525	2.19

(177828)

ETS SERIES 6A SUBMINIATURE POWER RELAYS ETS SERIES

RoHS Compliant Available

IMO

- Slim size (width 5mm)
- High breakdown voltage 4kV (between coil and contacts)
- Surge voltage up to 6kV (between coil and contacts)
- Clearance/creepage distance: 8mm
- High sensitive: 170mW
- 1 Form A and 1 Form C configurations

Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (ohm)	Coil Power (mW)	Stock No.	Price Each 1-24
ETS-1CN-SL-12VDC	12	848	170	74R1592	3.00
ETS-1CN-SL-24VDC	24	3.39	170	74R1593	2.97
ETS-1CN-SL-48VDC	48	10.6	210	74R1594	4.88
ETS-1CN-SL-60VDC	60	16.6	210	74R1595	5.98

➤CONTINUED➤

POWER PCB RELAYS

ETS SERIES 6A SUBMINIATURE POWER RELAYS ETS SERIES (CONT.)

ACCESSORIES

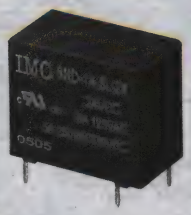
Mfg. Part No.	Description	Voltage (AC/DC)	Stock No.	Price Each 1-24
● SRSI-110AC/DC	RELAY SOCKET	110	74R1603	7.53
● SRSI-230AC/DC	RELAY SOCKET	230	74R1604	7.04
● SRSI-24AC/DC	RELAY SOCKET	24	74R1605	7.59
● SRSI-60AC/DC	RELAY SOCKET	60	74R1606	7.04

(177833)

SRD SERIES 10A SUBMINIATURE INTERMEDIATE POWER RELAYS

RoHS Compliant Available

IMO



Features:
- 5A, 10A switching capabilities
- SPNO & SPCO configurations
- Subminiature, standard PCB layout
- Sealed Construction

Specifications:
- Contact rating: 3A at 250VAC / 30VDC
- Initial contact resistance: 100mΩ Max.
- Contacts: SPST-NO, SPDT
- Max. switching voltage: 250VAC / 30VDC
- Max. switching current: 10A
- Max. switching power: 1250VA / 150W
- Coil power: Standard: 450 mW; Sensitive: 200mW
- Initial insulation resistance: 1000MΩ @ 500VDC
- Dielectric strength: 1000VAC
- Operating temperature: -40°C to +70°C
- Unit weight: Approximately 6g

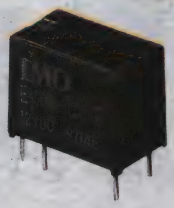
Mfg. Part No.	Current (A)	Contacts	Coil Voltage (VDC)	Coil Resist.	Stock No.	Price Each 1-24
● SRDH-1A-SL-12VDC	10	SPST-NO	12	720ohm	74R1526	1.72
● SRDH-1A-SL-24VDC	10	SPST-NO	24	1.28kohm	74R1527	1.85

(177829)

EV1N SERIES 2A SUBMINIATURE POWER RELAYS

RoHS Compliant Available

IMO



Features:
- Fully sealed for immersion cleaning
- Ultra small size
- High coil sensitivity 150-175mW
- Surface mount revision

Specifications;
- Contact rating: 0.5A at 125VAC / 1A at 30VDC
- Contact resistance: 100mΩ
- Contacts: SPDT
- Contact material: Silver alloy (Au clad)
- Max. switching voltage: 125VAC/60VDC
- Max. switching current: 2A
- Mechanical life: 10million ops
- Electrical life: 100,000 ops
- Insulation resistance: 1000MΩ
- Dielectric strength: 1000VAC
- Operating temperature: -30°C to +70°C
- Unit weight: 2.2g

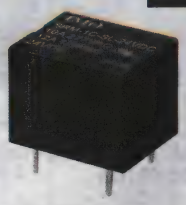
Mfg. Part No.	Contacts	Coil Voltage (VDC)	Coil Resist.	Termination	Stock No.	Price Each 1-24
● EV1N-CWL-5VDC	SPDT	5	167	Through Hole	74R1581	1.68
● EV1N-CWL-12VDC	SPDT	12	960	Through Hole	74R1580	1.70

(142244)

SRM SERIES 10A SUBMINIATURE HIGH POWER RELAYS

RoHS Compliant Available

IMO



Features:
- SPNO & SPCO configuration
- Subminiature, standard PCB layout
- Flux-Tight and Sealed Construction

Specifications:
- Contact rating: 7A at 250VDC / 10A at 277VAC
- Initial contact resistance: 100mΩ
- Contacts: SPST-NO, SPDT
- Max. switching voltage: 250VAC / 30VDC
- Max. switching current: SPST-NO: 15A; SPDT: 10A
- Max. switching power: 2770VA / 210W
- Initial insulation resistance: 100MΩ @ 500VDC
- Dielectric strength: 1500VAC
- Operating temperature: -40°C to +85°C
- Unit weight: Approximately 10g

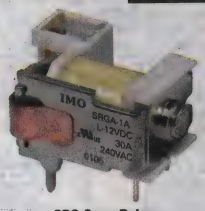
Mfg. Part No.	Current (A)	Contacts	Coil Voltage (VDC)	Coil Resist.	Stock No.	Price Each 1-24
● SRM-1C-SL-5VDC	10	SPDT	5	70ohm	74R1539	1.25
● SRM-1C-SL-12VDC	10	SPDT	12	400ohm	74R1537	1.25
● SRM-1C-SL-24VDC	10	SPDT	24	1.6kohm	74R1538	1.25

(177832)

SRG SERIES 30A MINIATURE HIGH POWER RELAYS

RoHS Compliant Available

IMO



SRG Open Relay

Features:
- 30A switching capabilities
- PCB coil terminals, ideal for heavy duty load
- 4K dielectric coil to contact
- Heavy load up to 7,200VA
- Open and Sealed types available
- AC Coil versions available

Specifications:
- Contact rating SPST- NO: 30A at 240VAC / 20A 28VDC
- Contact rating SPDT NO: 20A at 240VAC / 20A 28VDC
- Contact rating SPDT NC: 10A at 240VAC / 10A 28VDC
- Initial contact resistance: 50mΩ
- Contacts: SPST-NO, SPDT
- Max. switching voltage: 277VAC / 28VDC
- Max. switching current: SPST-NO: 40A; SPDT: NO 20A, NC 10A
- Max. switching power: 1250VA / 150W
- Initial insulation resistance: 1000MΩ @ 500VDC
- Dielectric strength: 1500VAC
- Operating temperature: -55°C to +85°C
- Unit weight: Approximately 36g

OPEN RELAYS

Mfg. Part No.	Current (A)	Contacts	Coil Voltage (VDC)	Coil Resist.	Stock No.	Price Each 1-24
● SRGA-1A-L-12VDC	40	SPST-NO	12	155	74R1531	2.95
● SRGA-1A-L-24VDC	40	SPST-NO	24	660	74R1532	2.95
SEALED RELAYS						
● SRGA-1A-SL-12VDC	40	SPST-NO	12	155	74R1533	2.95
● SRGA-1A-SL-24VDC	40	SPST-NO	24	660	74R1534	2.95
● SRGA-1C-SL-12VDC	20	SPDT	12	155	74R1535	3.32
● SRGA-1C-SL-24VDC	20	SPDT	24	660	74R1536	3.32

(177831)

30A PCB RELAYS

TÜV Rheinland

RoHS Compliant Available

multicomp

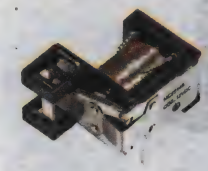


Fig. 1

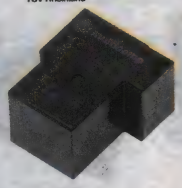


Fig. 2

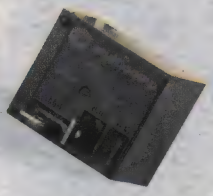


Fig. 3

Specifications:
- Nominal power: 900mW
- Contact material: AgAlloy
- Contact rating: A: 30A at 240VAC, 24VDC; C: 20A at 240VAC, 24VDC
- Mechanical life: 10,000 operations
- Operate time: 15ms

Features:
- Plastic sealed enclosure

PC BOARD MOUNT

Mfg. Part No.	Fig.	Current (A)	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Coil Resist. (Ω)	Stock No.	Price Each 1-24
● MC25149*	1	20	SPDT-1NO, SPDT-NC	24	640	900	12P9650	2.16
● MC25145*	1	30	SPST-NO	12	160	900	12P9646	4.00
● MC25148	2	20	SPDT-1NO, SPDT-NC	12	160	900	12P9649	2.42
● MC25146	2	20	SPDT-1NO, SPDT-NC	24	640	900	12P9647	2.19
● MC25147	2	30	SPST-NO	12	160	900	12P9648	4.45
PLUG-IN MOUNT								
● MC25154	3	30	SPST-NO	12	160	900	12P9655	3.58
● MC25155	3	30	SPST-NO	24	640	900	12P9656	2.79

* Unsealed relay
(136129)

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(196535)

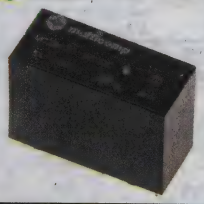
5A POWER PCB RELAYS

RoHS Compliant Available

multicomp

Features:
- Plastic sealed enclosure
- High sensitivity

Specifications:
- Contact rating: HRM1: 5A at 250VAC/24VDC; HRM: 10A at 250VAC/30VDC
- Mechanical life: 10million operations
- Operating temperature: -30°C to +70°C



Mfg. Part No.	Current (A)	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Stock No.	Price Each 1-99
MC25117	5	DPDT	12	267	12P9618	3.21
MC25123	5	DPDT	24	1.067	12P9624	3.42
MC25130	5	DPDT	48	4.267	12P9631	3.96
MC25131	10	SPDT	5	50	12P9632	3.04
MC25127	10	SPDT	12	270	12P9628	3.04
MC25126	10	SPDT	24	1.1	12P9627	3.49

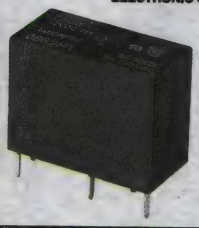
(136132)

5A PC BOARD RELAYS

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

- Environmentally friendly, Pb-free/cadmium-free
- SPDT contacts with high insulation between coil and contacts
- Up to 5A switching on the N.O. contacts
- Ensures an impulse withstand voltage of 8,000V between the coil and contacts



Fully sealed construction. Ideal for fan control of air conditioners and heating control of small appliances.

Mfg. Part No.	Contacts	Coil Input Voltage (VDC)	Coil Resist. (Ω)	Coil Current (mA)	Stock No.	Price Each 1-24	25-49	50-99
G5SB-1A4 DC5	SPST-NO	5	63	80	04M9818	2.26	2.02	1.80
G5SB-14-DC5	SPDT	5	63	80	09J1648	2.24	2.00	1.78
G5SB-14-DC9	SPDT	9	202	44.4	09J1649	2.18	1.95	1.73
G5SB-14-DC12	SPDT	12	360	33.3	09J1646	2.18	1.95	1.73
G5SB-14-DC24	SPDT	24	1.44	16.7	76K6156	2.33	2.09	1.85

(80266)

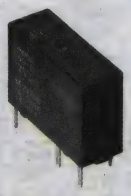
5A POWER PC BOARD RELAYS

TÜV Rheinland

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

- Rated load: 5A at 250VAC, 30VDC
- Max. operating voltage: 250VAC, 30VDC
- Max. operating current: 5A
- Max. switching capacity: 1250VA, 150W for resistive load, 500VA, 60W for inductive load
- Contact resistance: 100mΩ Max.
- Bounce time: 1.20ms
- Ambient operating temperature: -25°C to +70°C



G6D series features include: reduced board space ideal for high density mounting. Dimensions in mm(inches): 6.5(.260)W x 17.5(.690) L x 12.5(.490)H. Rated for D150 pilot duty by UL, CSA, and optional mounting socket simplifies relay installation and servicing of finished equipment.

Mfg. Part No.	Contacts	Coil Voltage (VDC)	Coil Current (mA)	Coil Resistance (Ω)	Stock No.	Price Each 1-24	25-49
G6D-1A-ASI-DC5	SPST-NO	5	40	125	37K5480	6.63	5.97
G6D-1A-ASI DC12	SPST-NO	12	16.7	720	17M6689	6.63	5.97
G6D-1A-ASI-DC24	SPST-NO	24	8.3	2.88	69K0924	7.13	6.41

(75483)

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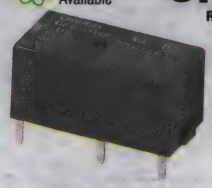
(196545)

5A-8A PC BOARD RELAYS

RoHS Compliant Available

OMRON. RONIC COMPONENTS

- 5-24V
- Low Power Consumption: 200mW
- Sealed Construction
- High-Capacity and Single- and Dual-Coil Latching Types Available
- Meets FCC Part 68 Requirements
- Reduced Magnetic Interference and Contact Bounce with Moving Magnet Armature



High-capacity versions have LED indicator and surge suppression diode. Dimensions in inches (mm): .39 (9.90)H x .79 (20.06)W x .39 (9.0)L **Mfg. part no. P6B-26P** back connecting socket for double-pole non-latching versions also available. Single-coil latching series **G6BU-1114P-US** also available; *go online or call.*

5A, NON-LATCHING

Mfg. Part No.	Coil Volt. (VDC)	Contacts	Coil Resist. (Ω)	Coil Current (mA)	Stock No.	Price Each 1-24
G6B-1114P-US-DC5	5	SPST-NO	125	40	36K7459	6.07
G6B-2114P-US-DC5	5	SPST-NO+SPST-NC	120	60	67K9357	7.65
G6B-2114P-1-US-DC5	5	SPST-NO+SPST-NC	125	40	89C6257	8.33
G6B-2214P-US-DC5	5	DPST-NO	125	40	67K9363	7.65
G6B-2214P-1-US-DC5	5	SPST-NO+SPST-NC	120	60	89C6265	8.04
G6B-1114P-US-DC6	6	SPST-NO	180	33.3	89C6227	6.29
G6B-2114P-US-DC6	6	SPST-NO+SPST-NC	180	33.3	67K9358	7.93
G6B-1114P-US-DC12	12	SPST-NO	720	16.7	36K3238	6.07
G6B-1114P-1-US-DC12	12	SPST-NO	720	16.7	03C3388	6.25
G6B-2114P-US-DC12	12	SPST-NO+SPST-NC	720	16.7	99F9312	7.65
G6B-2114P-1-US-DC12	12	SPST-NO+SPST-NC	720	16.7	67K9359	8.04
G6B-2214P-US-DC12	12	DPST-NO	720	16.7	67K9361	7.93
G6B-1114P-US-DC24	24	SPST-NO	2880	8.3	35K4532	5.86
G6B-1114P-FD-US-DC24	24	SPST-NO	2880	8.3	67K9353	8.02
G6B-2114P-US-DC24	24	SPST-NO+SPST-NC	2880	8.3	52F3718	8.00
G6B-2114P-1-US-DC24	24	SPST-NO+SPST-NC	2880	8.3	67K9360	8.34
G6B-2214P-US-DC24	24	DPST-NO	2880	8.3	67K9362	8.00
8A, NON-LATCHING, HIGH-CAPACITY						
G6B-1174P-US-DC5	5	SPST-NO	125	40	67K9355	7.48
G6B-1174P-US-DC12	12	SPST-NO	720	16.7	35K3192	7.48
G6B-1174P-US-DC24	24	SPST-NO	2880	8.3	36K1945	7.74
G6B-1174P-FD-US DC24	24	SPST-NO	2880	8.3	67K9354	10.68
5A, DUAL-COIL LATCHING						
G6BK-1114P-US-DC3	3	SPST-NO	...	...	89C6275	8.84
G6BK-1114P-US-DC5	5	SPST-NO	89.2	56	36K1946	8.45
G6BK-1114P-1-US-DC12	12	SPST-NO	720	16.7	89C6279	8.85
G6BK-1114P-US-DC12	12	SPST-NO	515	23.3	94B0859	8.57

BACK CONNECTING SOCKETS

Mfg. Part No.	For Use With	Stock No.	Price Each 1-24	25-49	50-99
P6B-04P	**G6B Series** Single-Pole, Non-Latching and Single-Coil Latching Relays	35K4863	2.76	2.49	2.21
P6C-06P	**G6B Series** Dual-Coil Latching Relays	17M7544	3.62	3.26	2.89

(3735)

G2R SERIES POWER RELAYS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

G2R series are slim-styled power PCB relays. Creepage distance of 0.31″ min. between coil and contact. Relays with **E** in mfg. part no. are high-capacity 16A; all others are general purpose. Relays with **N** in mfg. part no. include LED indicator; **ND** in mfg. part no. indicates LED indicator and surge suppression diode. Outside dimensions in inches (mm): 1.14(29)L x .510(13)W x 1.0(25.5)H. UL recognized, CSA certified. Also available: class B insulation, latching types and flange mount version with quick connects: order **mfg. part no. G2R-1-T-(voltage). Type P2R-P** connecting socket mounting plate, **Mfg. part no. P6C-08P** back-connecting PCB terminal, socket also available; *go online or call.*

Series	Lead Width - Inches (mm) 1	2	3	4
G2R-14	.012 (.30)	.02 (.50)	.006 (.16)	.02 (.50)
G2R-1A4	.012 (.30)	...	.006 (.16)	.02 (.50)
G2R-1-E	.012 (.30)	.02 (.50)	.006 (.16)	.012 (.30)
G2R-1A-E	.012 (.30)	...	.006 (.16)	.012 (.30)
G2R-2	.012 (.30)	.02 (.50)	.006 (.16)	.02 (.50)
G2R-24	.012 (.30)	.02 (.50)	.005 (.15)	.02 (.50)

AC COIL—SEMI-SEALED PCB

ACCESSORIES FOR G2R SERIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24
P2R-05P	Back-Connecting, PCB Terminal, Socket	35K3222	2.26
P2R-08P	Back-Connecting, PCB Terminal, Socket	35K4861	2.30

CONTINUED

G2R SERIES POWER RELAYS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● PFP-100N	Mounting Track for P2CF Sockets, DIN Rail, 3.28′ (1m) Length	17M7511	7.88
● PFP-50N	Mounting Track for P2CF Sockets, DIN Rail, 1.64′ (50cm) Length	93B2043	6.49
● PFP-M	Mounting Track for P2CF Sockets, End Plate	36K3451	0.88

Mfg. Part No.	Carry Current (A)	Contacts	Coil Voltage (VAC)	Coil Resis. (Ω)	Stock No.	Price Each 1-24
● G2R-2-AC24	5	DPDT	24	260	89C5303	9.02
● G2R-2-AC120	5	DPDT	120	6.5	51B745	11.05
● G2R-1-E-AC120	16	SPDT	120	6.5	17C6474	9.71
AC COIL—SEALED PCB						
● G2R-24-AC24	5	DPDT	24	260	36K3221	10.92
● G2R-24-AC120	5	DPDT	120	6.5	52F3689	11.79
● G2R-1A4-AC120	10	SPST-NO	120	6.5	36K7444	9.29
● G2R-14-AC24	10	SPDT	24	260	52F3682	8.77
● G2R-14-AC120	10	SPDT	120	6.5	36K1931	9.94
AC COIL—QUICK CONNECT						
● G2R-1A-T-AC24	10	SPST-NO	24	260	89C5220	7.07
● G2R-1A-TAC-120-	10	SPST-NO	120	6.5	22C5448	7.49
DC COIL—SEMI-SEALED PCB						
● G2R-2-DC12	5	DPDT	12	275	83F5358	5.15
● G2R-2-DC24	5	DPDT	24	1.1	36K3220	5.15
● G2R-2A-DC24	5	DPST-NO	24	1.1	89C5359	4.89
● G2R-1-DC12	10	SPDT	12	275	90B9506	4.63
● G2R-1-DC24	10	SPDT	24	1.1	34K3620	4.63
● G2R-1A-E-DC12	16	SPST-NO	12	275	36K7443	4.78
● G2R-1A-E-DC24	16	SPST-NO	24	1.1	36K3219	4.90
● G2R-1-E-DC5	16	SPDT	5	47	36K7442	5.53
● G2R-1-E-DC12	16	SPDT	12	275	36K1929	5.40
● G2R-1-E-DC24	16	SPDT	24	1.1	52F3693	5.40
DC COIL—SEALED PCB						
● G2R-2A4-DC12	5	DPST-NO	12	275	89C5380	6.09
● G2R-24-DC5	5	DPDT	5	47	37K6097	6.40
● G2R-24-DC12	5	DPDT	12	275	36K3222	6.18
● G2R-24-DC24	5	DPDT	24	1.1	36K3223	6.18
● G2R-1A4-DC12	10	SPST-NO	12	275	35K3188	5.31
● G2R-1A4-DC24	10	SPST-NO	24	1.1	36K1930	5.25
● G2R-14-DC5	10	SPDT	5	47	24C6438	5.13
● G2R-14-DC12	10	SPDT	12	275	36K1932	5.01
● G2R-14-DC24	10	SPDT	24	1.1	36K1933	5.01
DC COIL—QUICK CONNECT						
● G2R-1A-T-DC24	10	SPST-NO	24	1.1	25C7120	4.71
DC COIL—PLUG-IN w/LED INDICATOR AND DIODE w/ TEST BUTTON						
● G2R-2-SNDI DC24(S)	5	DPDT	24	1.113	08J0994	13.88
DC COIL—DOUBLE WINDING LATCHING						
● G2RK-2-DC24	5	DPDT	24	694	93B2797	10.73

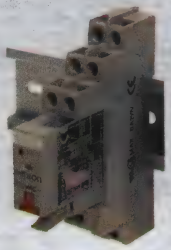
(3733)

PLUG-IN POWER RELAYS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Environmental friendly (Cd, Pb free)
- Lockable test button models now available
- Built-in mechanical operation indicator
- Provided with nameplate
- AC type is equipped with a coil-disconnection self-diagnostic function (LED type)
- High switching power (1-pole: 10A)
- LED indicators, test button, and diode available
- Wide range of sockets also available; *go online or call*



AC COIL, SPST, 10A

Mfg. Part No.	Coil Voltage (VAC)	Coil Resis. (Ω)	Features	Stock No.	Price Each 1-24	Price Each 25-49
● G2R-1-S-AC24(S)	24	253	...	08J0936	7.39	7.09
● G2R-1-SN-AC24(S)	24	253	LED Indicator	08J0953	9.25	8.89
● G2R-1-SN-AC110(S)	110	5.566	LED Indicator	08J0950	11.84	11.37
● G2R-1-S-AC120(S)	120	7.286	...	08J0934	7.94	7.63
● G2R-1-SN-AC-120(S)	120	7.286	LED Indicator	08J0949	11.71	11.25

➤CONTINUED➤

PLUG-IN POWER RELAYS (CONT.)

Mfg. Part No.	Coil Voltage (VAC)	Coil Resis. (Ω)	Features	Stock No.	Price Each 1-24	Price Each 25-49
● G2R-1-S-AC240(S)	240	30.36	...	08J0937	13.12	12.60
● G2R-1-SN-AC240(S)	240	30.36	LED Indicator	08J0954	17.39	16.70
AC COIL, DPDT, 5A						
● G2R-2-S-AC12(S)	12	253	...	08J0970	8.05	7.73
● G2R-2-S-AC24(S)	24	253	...	08J0973	8.05	7.73
● G2R-2-SN AC24(S)	24	253	Indicator Light	08J0985	11.77	11.30
● G2R-2-S-AC110(S)	110	5.566	...	08J0969	8.76	8.41
● G2R-2-SN-AC110(S)	110	5.566	Indicator Light	08J0989	12.16	11.68
● G2R-2-S-AC120(S)	120	7.286	...	08J0971	8.67	8.32
● G2R-2-SN AC120(S)	120	7.286	Indicator Light	08J0984	12.63	12.13
● G2R-2-S-AC240(S)	240	30.36	...	08J0974	14.04	13.48
● G2R-2-SN AC240(S)	240	30.36	Indicator Light	08J0986	19.42	18.65

DC COIL, SPDT, 10A

Mfg. Part No.	Coil Voltage (VDC)	Coil Res. (Ω)	Features	Stock No.	Price Each 1-24	Price Each 25-49
● G2R-1-S-DC6(S)	6	69	...	08J0943	5.54	5.31
● G2R-1-S-DC12(S)	12	278	...	08J0939	5.54	5.31
● G2R-1-SN-DC12(S)	12	278	LED Indicator	08J0957	8.87	8.51
● G2R-1-SND-DC12(S)	12	278	Indicator Light&Diode	08J0962	11.37	10.92
● G2R-1-S-DC24(S)	24	1.113	...	08J0940	5.33	5.12
● G2R-1-SD DC24(S)	24	1.113	Diode	08J0944	7.68	7.38
● G2R-1-SN-DC24(S)	24	1.113	LED Indicator	08J0958	8.88	8.52
● G2R-1-SNDI DC24(S)	24	1.113	Indicator Light&Diode	08J0966	12.20	11.71
● G2R-1-SNI DC24(S)	24	1.113	Indicator Light&Test Button	08J0967	8.74	8.39
DC COIL, DPDT, 5A						
● G2R-2-S-DC6(S)	6	69	...	08J0980	6.34	6.09
● G2R-2-S-DC12(S)	12	278	...	08J0976	6.34	6.09
● G2R-2-SND-DC12(S)	12	278	Indicator Light&Diode	08J0990	12.63	12.12
● G2R-2-S-DC24(S)	24	1.1	...	08J0977	6.23	5.98
● G2R-2-SD-DC24(S)	24	1.113	Diode	08J0981	8.58	8.23
● G2R-2-SND-DC24(S)	24	1.1	Indicator Light&Diode	08J0991	12.40	11.91
● G2R-2-SNDI DC24(S)	24	1.113	Indicator Light&Diode	08J0994	13.88	13.32
● G2R-2-SNI DC24(S)	24	1.113	Indicator Light&Test Button	08J0995	9.89	9.50

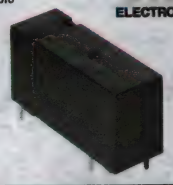
(79371)

8A POWER RELAYS

RoHS Compliant Available

OMRON ELECTRONIC COMPONENTS

- Max. switching voltage: 250VAC, 125VDC
- Max. switching capacity: 2000VA, 150W
- Contact resistance: 100mΩ Max.
- Insulation resistance:: 1000mΩ Min.
- Ambient operating temperature: -40°C to +85°C
- Dimensions: 0.39W x 1.12L x 0.59″ H



Mfg. Part No.	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99	Price Each 100-249
● G6RN-1 DC5	SPDT	5	114	96B9768	3.77	3.39	3.01	2.72
● G6RN-1 DC12	SPDT	12	655	94B4358	3.67	3.30	2.93	2.65
● G6RN-1 DC24	SPDT	24	2.62	36K3244	3.79	3.41	3.04	2.74
● G6RN-1A DC5	SPST-NO	5	114	89C3082	3.71	3.34	2.97	2.68
● G6RN-1A-DC12	SPST-NO	12	655	23C8326	3.71	3.34	2.97	2.68
● G6RN-1A DC24	SPST-NO	24	2.62	36K1953	3.77	3.39	3.01	2.72

(75464)

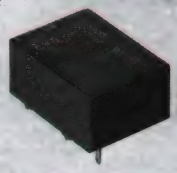
8A-10A POWER PC BOARD RELAYS

RoHS Compliant Available

OMRON ELECTRONIC COMPONENTS

- Moving loop armature reduces size, magnetic interference and bounce time
- Semi-sealed and sealed versions available
- Low power consumption: only 200mW
- Non-natching

Rated current and coil resistance are measured at a coil temperature of +23°C with tolerance of ±10%. Dimensions shown are in inches (mm): .790(20.06)L x .590(14.98)W x .390(9.9)H.



SEALED

Mfg. Part No.	Contacts	Carry Current (A)	Coil Voltage (VDC)	Coil Resist. (Ω)	Stock No.	Price Each 1-24	Price Each 25-49
● G6C-2114P-US-DC5	SPST-NO + SPST -NC	8	5	125	36K7462	8.79	7.91
● G6C-2114P-US-DC12	SPST-NO + SPST -NC	8	12	720	36K1948	8.79	7.91

➤CONTINUED➤

8A-10A POWER PC BOARD RELAYS (CONT.)

Mfg. Part No.	Contacts	Carry Current (A)	Coil Voltage (VDC)	Coil Resist. (Ω)	Stock No.	Price Each 1-24	Price Each 25-49
G6C-2114P-US-DC24	SPST-NO + SPST -NC	8	24	2880	35K4533	8.94	8.05
G6C-1114P-US-DC5	SPST-NO	10	5	125	36K7461	7.52	6.77
G6C-1114P-US-DC12	SPST-NO	10	12	720	36K3239	7.52	6.77
G6C-1114P-US-DC24	SPST-NO	10	24	2880	36K1947	7.76	6.98
SEMI-SEALED							
G6C-2117P-US-DC5	SPST-NO + SPST -NC	8	5	125	35K4534	7.82	7.04
G6C-2117P-US-DC8	SPST-NO + SPST -NC	8	8	...	34K3624	8.01	7.21
G6C-2117P-US-DC12	SPST-NO + SPST -NC	8	12	720	23C9970	8.45	7.61
G6C-1117P-US-DC12	SPST-NO	10	12	720	09J1689	7.20	6.48

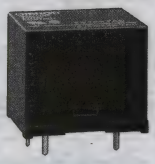
(3758)

10A POWER PC BOARD RELAYS

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

Subminiature "sugar cube" relays are rated 10A and are UL Class B insulation certified. Withstand impulses of up to 4,500V. Maximum switching voltage: 250VAC, 125VDC. Operating temperature: -25°C to +85°C. Dimensions in mm (inches): 19.05 (.75)H x 22.5(.89)L x 16.51(.65)"W. Ideal for security equipment, home electrical appliances, audio equipment, and remote control switched power. UL recognized, CSA certified.



FLUX-PROTECTION

Mfg. Part No.	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99
G5LE-1A-DC5	SPST-NO	5	63	83F5378	1.57	1.42	1.26
G5LE-1-DC5	SPDT	5	63	83F5381	1.57	1.42	1.26
G5LE-1-DC12	SPDT	12	360	35K4530	1.44	1.30	1.16
G5LE-1-DC24	SPDT	24	1440	83F5380	1.48	1.33	1.19
PLASTIC-SEALED							
G5LE-1A4-DC5	SPST-NO	5	63	83F5375	1.59	1.43	1.27
G5LE-1A4-DC12	SPST-NO	12	360	36K7449	1.47	1.32	1.18
G5LE-1A4-DC24	SPST-NO	24	1440	35K3189	1.47	1.32	1.18
G5LE-14-DC5	SPDT	5	63	36K7450	1.56	1.41	1.25
G5LE-14 DC6	SPDT	6	63	89C5991	1.56	1.41	1.25
G5LE-14 DC9	SPDT	9	200	89C5992	1.50	1.35	1.20
G5LE-14-DC12	SPDT	12	360	36K1937	1.44	1.30	1.16
G5LE-14-AP3 DC12	SPDT	12	360	70C4830	1.97	1.78	1.58
G5LE-14-DC24	SPDT	24	1440	83F5371	1.44	1.30	1.16
G5LE-14-AP3 DC24	SPDT	24	1.44	89C6006	2.12	1.91	1.70

(33970)

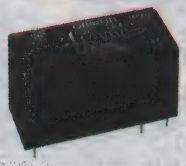
8-16A LOW-PROFILE RELAYS

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

- Low-profile 15.7mm (H) x 28.8mm (L) x 12.mm (W)
- Low power consumption: (400mW, DC48-430mW)
- Over 8mm creepage and clearance coil to contact spacing for very high isolation
- Tracking resistance (CTI) rated at 250
- Vented or sealed (with ventable nib)
- UL recognized, CSA certified, VDE approved

Units with "CF" in mfg. part no. class F coil insulation; others have class B.



SEALED — Thru-Hole

Mfg. Part No.	Carry Current (A)	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Stock No.	Price Each 1-24	Price Each 25-49
G2RL-14-CF-DC12	8	SPDT	12	360	33K9486	4.16	3.75
G2RL-24-CF-DC12	8	DPDT	12	360	36K3228	5.12	4.61
G2RL-24-CF-DC24	8	DPDT	24	1.44	17C6913	5.18	4.66
G2RL-24 DC5	8	DPDT	5	62.5	34K3622	4.81	4.33
G2RL-24-CF DC5	8	DPDT	5	62.5	89C5519	5.00	4.50
G2RL-24 DC12	8	DPDT	12	360	36K7446	4.69	4.22
G2RL-24DC24	8	DPDT	24	1.44	36K1935	4.69	4.22
G2RL-24 DC48	8	DPDT	48	5.358	89C5516	5.18	4.66
G2RL-1A4-DC12	12	SPST-NO	12	360	25C0886	3.28	2.95
G2RL-14 DC5	12	SPDT	5	62.5	34K0484	3.43	3.09
G2RL-14-CF DC5	12	SPDT	5	62.5	33K3864	3.52	3.16
G2RL-14 DC12	12	SPDT	12	360	34K3621	3.39	3.05
G2RL-14-DC24	12	SPDT	24	1.44	36K3226	3.39	3.05
G2RL-14-CF-DC24	12	SPDT	24	1.44	36K3225	3.57	3.22
G2RL-1A4-E-DC12*	16	SPST-NO	12	360	24C0595	3.76	3.39
G2RL-14-E-CF-DC24*	16	SPDT	24	1.44	43K5272	4.33	3.90

➤CONTINUED➤

8-16A LOW-PROFILE RELAYS (CONT.)

FLUX PROTECTION

Mfg. Part No.	Carry Current (A)	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Stock No.	Price Each 1-24	Price Each 25-49
G2RL-2-CF-DC12	8	DPDT	12	360	17C6910	4.27	3.85
G2RL-2-CF-DC24	8	DPDT	24	1.44	36K1934	4.27	3.85
G2RL-1A DC12	12	SPST-NO	12	360	36K7445	2.49	2.24
G2RL-1A DC24	12	SPST-NO	24	1.44	89C5453	2.60	2.34
G2RL-1-E DC12*	16	SPDT	12	360	89C5444	3.30	2.98
G2RL-1-E-CF-DC24*	16	SPDT	24	1.44	17C6905	4.05	3.64

* High capacity
(62179)

20A-30A PC BOARD AND FLANGE MOUNT RELAYS

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

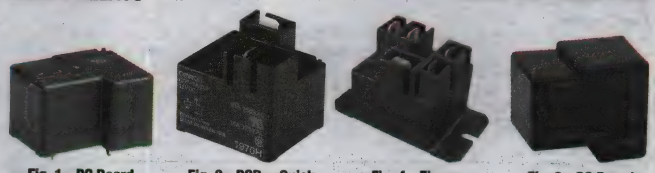


Fig. 1 - PC Board Mount | Fig. 3 - PCB + Quick Connect Terminals | Fig. 4 - Flange Mount | Fig. 2 - PC Board Mount Open Style

G8P series: industry standard 30A power relay. Class F coil insulation. Applications include HVAC and appliance controls. Meets UL873 column A spacing (¼" over surface ⅛" through air) and 6kV impulse surge coil to contacts. Dimensions in mm: PC board model = 32.1L x 27.7W x 20.1H; PC board + ¼" quick-connect terminals = 31.9L x 27.5W x 28.3H; flange mount = 50.3L x 27.7W x 28.3H. UL recognized, CSA certified.

Mfg. Part No.	Contacts	Carry Current (A)	Coil Voltage (VDC)	Seal Type	Coil Resist. (Ω)	Stock No.	Price Each 1-24
FIG. 1 - SEALED PC BOARD							
G8P-1A4P DC5	SPST-NO	30	5	Sealed with Ventable NIB	27	89C6867	4.21
G8P-1A4P-DC12	SPST-NO	30	12	Sealed with Ventable NIB	155	17C6951	4.08
G8P-1C4P-DC12	SPDT	20	12	Sealed with Ventable NIB	155	33K9489	4.20
G8P-1C4P-DC24	SPDT	20	24	Sealed with Ventable NIB	660	67K9371	4.20
FIG. 2 - OPEN PC BOARD							
G8P-1AP DC12	SPST-NO	30	12	Open Frame	155	35K4545	3.73
FIG. 3 - SEALED PC BOARD + QUICK-CONNECT TERMINALS							
G8P-1A4TP-DC12	SPST-NO	30	12	Sealed with Ventable NIB	155	36K3250	4.77
G8P-1A4TP-DC24	SPST-NO	30	24	Sealed with Ventable NIB	660	67K9370	4.94
G8P-1C4TP-DC12	SPDT	20	12	Sealed with Ventable NIB	155	67K9372	5.18
G8P-1C4TP-DC24	SPDT	20	24	Sealed with Ventable NIB	660	35K3200	5.27
FIG. 4 - FLANGE MOUNT + QUICK-CONNECT TERMINALS							
G8P-1A2T-F-DC12	SPST-NO	30	...	Vented	155	17C6949	5.00
G8P-1A2T-F DC24 BY OMZ	SPST-NO	30	24	Vented	660	17C6950	5.09
G8P-1C2T-F-DC5	SPDT	20	5	Vented	27	78K5974	5.40
G8P-1C2T-F-DC12	SPDT	20	12	Vented	155	17C6955	5.40
G8P-1C2T-F-DC24	SPDT	20	24	Vented	660	36K1958	5.63

(3736)

G7SA SERIES FORCE GUIDED RELAYS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- 4 pole or 6 pole models
- Track-mounting or Back-mounting Sockets
- Conforms to: EN50205, EN61810-1
- 6A resistive load
- Temperature -40° to 85°C

The G7SA relays with force guided contacts are compact, slim and conform to EN standards. DIN mountable sockets make these ideal for control panels with limited space. Ideal for use with Safety Interlock circuits.

Mfg. Part No.	Contacts	No. of Poles	Voltage Rating (VDC)	Stock No.	Price Each
G7SA-3A1B DC24	3PST-NO, SPST-NC	4	24	93K7580	41.02
G7SA-2A2B DC24	DPST-NO, DPST-NC	4	24	93K7579	38.18
G7SA-5A1B DC24	5PST-NO, SPST-NC	6	24	36K3249	50.39
G7SA-4A2B DC24	4PST-NO, DPST-NC	6	24	50M2047	50.39

SOCKETS

Mfg. Part No.	Description	Stock No.	Price Each
P7SA-10F	4 pole socket, track mounting, no LED	18M7557	27.08
P7SA-14F	6 pole socket, track mounting, no LED	27C4263	29.42

➤CONTINUED➤

G7SA SERIES FORCE GUIDED RELAYS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
● P7SA-10F-ND DC24	4 pole socket, back mounting, LED	40C2726	28.24
● P7SA-14F-ND DC24	4 pole socket, track mounting, LED	25C4297	38.42

(115477)

10A NOMINAL POWER LOW PROFILE PCB RELAYS

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

Features:
- Low profile: 12.3mm
- Max. switching capacity: 2,500 VA (NO)
- IEC 60947-5-1, AC-15, DC13
- Clearance and creepage distance: 10 mm
- Models with high shock resistance (250 m/s2) are available
- Fully sealed or flux protection

Specifications:
- Contact rating:10 A at 250VAC; 5A at 30VDC
- Carry current: 10A
- Switching voltage: 400VAC, 300VDC
- Switching current: NO: 10 A, NC: 8 A
- Contact resistance: 100mΩ
- Operate time: 10ms (SR Models: 15ms)
- Release time 5ms
- Insulation resistance: 1,000MΩ
- Dielectric strength: 5,000VAC
- Operating temperature: -40°C to 85°
- Weight Approx. 7.8 g

Mfg. Part No.	Contacts	No. of Poles	Coil Voltage	Coil Resistance	Stock No.	Price Each 1-24
FLUX PROTECTION						
● G6RL-1A-ASI-DC12	SPST-NO	1	12	654	59P3441	3.92
● G6RL-1A-ASI-DC24	SPST-NO	1	24	2.618	59P3442	3.88
● G6RL-1-ASI-DC12	SPDT	1	12	654	59P3438	3.88
● G6RL-1-SR-ASI-DC24*	SPDT	1	24	1.912	59P3440	5.21
● G6RL-1-ASI-DC24	SPDT	1	24	2.618	59P3439	4.01
FULLY SEALED						
● G6RL-1A4-ASI-DC5	SPST-NO	1	5	113	59P3445	3.84
● G6RL-1A4-ASI-DC12	SPST-NO	1	12	654	59P3443	3.69
● G6RL-1A4-ASI-DC24	SPST-NO	1	24	2.618	59P3444	3.83
● G6RL-14-ASI-DC5	SPDT	1	5	113	59P3448	3.90
● G6RL-14-ASI-DC12	SPDT	1	12	654	59P3446	4.04
● G6RL-14-ASI-DC24	SPDT	1	24	2.618	59P3447	4.03

* Shock resistance
(142252)

AEP SERIES 200A POWER RELAYS

RoHS Compliant Available

Panasonic

- High-voltage, high current control capable
- Compact and low operating sound
- Arc space unnecessary
- Contacts: SPST-NO
- Nominal operating power: 6W
- Contact rating: 200A
- Insulation resistance: 100MΩ

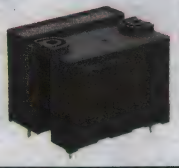
Mfg. Part No.	Coil Voltage (VDC)	Coil Current (mA)	Stock No.	Price Each 1-24	Price Each 25-49
● AEP17012	12	500	65W5789	668.47	613.64
● AEP17024	24	250	65W5790	668.47	613.64

(210180)

HE-V SERIES 20A POWER PCB RELAYS

RoHS Compliant Available

Panasonic



- Compact size: (L x W x H) 41 x 50 x 39.4mm
- Contacts: DPST-NO
- Nominal operating power: 1.92W
- Contact curent: 20A
- Contact material: AgNi
- Insulation restitance: 1,000MΩ

Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (Ω)	Coil Current (mA)	Stock No.	Price Each 1-24	Price Each 25-49
● HEV2AN-P-DC6V	6	18.8	320	72W3943	140.69	129.10
● HEV2AN-P-DC9V	9	42.2	213	72W3944	140.69	129.10
● HEV2AN-P-DC12V	12	75	160	72W3940	140.69	129.10
● HEV2AN-P-DC15V	15	117	128	72W3941	140.69	129.10
● HEV2AN-P-DC24V	24	300	80	72W3942	140.69	129.10

(210179)

DW SERIES 8A POWER RELAYS

RoHS Compliant Available

Panasonic

- Contact arrangement: SPST-NO
- Nominal switching capacity (resistive load): 8A 250V AC
- Max. switching power (resistive load): 2000 VA
- Max. switching voltage: 250V AC
- Max. switching current: 8A
- Nominal operating power: 200mW (1coil latching type), 400mW (2 coil latching type)
- Surge breakdown voltage (between contact and coil): 12000 V
- Breakdown voltage (between contact and coil): 5000 V

Type	Coil Voltage (VDC)	Nominal Operating Current (mA)	Coil Resistance (Ohms)	Coil Power (mW)	Stock No.	Price Each 1-24
REFLOW COMPATIBLE TYPE 1COIL LATCHING TYPE 200mW						
● ADW1103W	3	66.7	45	200	58T7747	8.90
● ADW1105W	5	40	125	200	58T7748	8.90
● ADW1106W	6	33.3	180	200	58T7749	8.90
● ADW1109W	9	22.2	405	200	58T7750	8.90
● ADW1112W	12	16.7	720	200	58T7751	8.90
● ADW1124W	24	8.3	2.88 kOhm	200	58T7752	8.90
REFLOW COMPATIBLE TYPE 2 COIL LATCHING TYPE 400mW						
● ADW1203W	3	133.3	22.5	400	58T7753	10.08
● ADW1205W	5	80	62.5	400	58T7754	10.08
● ADW1206W	6	66.7	90	400	58T7755	10.08
● ADW1209W	9	44.4	202.5	400	58T7756	10.08
● ADW1212W	12	33.3	360	400	58T7757	10.08
● ADW1224W	24	16.7	1.44 kOhm	400	58T7758	10.08
IEC60335-1 COMPLIANT TYPE 1 COIL LATCHING TYPE 200mW						
● ADW1103TW	3	66.7	45	200	55W5094	8.53
● ADW1105TW	5	40	125	200	55W5095	8.53
● ADW1106TW	6	33.3	180	200	55W5096	8.06
● ADW1109TW	9	22.2	405	200	55W5097	8.53
● ADW1112TW	12	16.7	720	200	55W5098	7.27
● ADW1124TW	24	8.3	2.88	200	55W5099	8.06
IEC60335-1 COMPLIANT TYPE 2 COIL LATCHING TYPE 400mW						
● ADW1203TW	3	133.3	22.5	400	55W5100	9.78
● ADW1205TW	5	80	62.5	400	55W5101	9.24
● ADW1206TW	6	66.7	90	400	55W5102	9.24
● ADW1209TW	9	44.4	202.5	400	55W5103	9.24
● ADW1212TW	12	33.3	360	400	55W5104	9.24
● ADW1224TW	24	16.7	1.44	400	55W5105	9.78

(197539)

JQ SERIES POWER RELAYS

RoHS Compliant Available

Panasonic

- Contact configuration: SPST-NO, SPDT-NO
- Contact current: 5A at 125VAC, 10A at 125VAC
- Operating power: 200mW, 400mW
- Ambient temperature: -40°C to +70°C

Mfg. Part No.	Contact Current (A)	Coil Current (mA)	Coil Voltage (VDC)	Coil Resist. (Ohm)	Stock No.	Price Each 1-24
SPST-NO RELAYS 200mW						
● JQ1A-12V-F	5	16.7	12	720	11N5072	4.71
● JQ1A-24V-F	5	8.3	24	2.88	11N5074	4.71
● JQ1A-5V-F	5	40	5	125	11N5075	4.43
● JQ1P-12V-F	10	33.3	12	360	11N5118	5.71
● JS1-B-24V-F	10	15	24	1.6	11N5131	2.10
SPDT-NO RELAYS 400mW						
● JQ1-12V	5	33.3	12	360	52F9211	4.87
● JQ1-12V-F	5	33.3	12	360	11N5053	5.18
● JQ1-24V-F	5	16.7	24	1.44	27M1600	5.18
● JQ1-24V-F	5	16.7	24	1.44	27M1600	5.18
● JQ1-5V-F	5	80	5	62.5	11N5056	4.87

(197917)

LQ SERIES SMALL POWER RELAYS

RoHS Compliant Available

Panasonic

Panasonic Electric Works Corporation of America

NEW

- Miniature size and small: 10(W) × 20(L) × 16(H) mm .394(W) × .787(L) × .630(H) inch
- Compact with high capacity: 1 Form A and 1 Form C, 10 A
- Ambient temperature: –40°C to +85°C –40°F to 185°F
- High surge voltage: 8,000 V between contacts and coil
- High breakdown voltage: 4,000 V between contacts and coil

Mfg. Part No.	Coil Res.	Contacts	Coil Current (mA)	Stock No.	Price Each 1-24
● ALQ105	62.5	SPDT	80	04X5183	2.58
● ALQ106	90	SPDT	66.7	04X5184	2.58
● ALQ109	202.5	SPDT	44.4	04X5185	2.58
● ALQ112	360	SPDT	33.3	04X5186	2.58
● ALQ118	810	SPDT	22.2	04X5187	2.91
● ALQ124	1.44	SPDT	16.7	04X5188	2.91

CONTINUED

LQ SERIES SMALL POWER RELAYS (CONT.)

Mfg. Part No.	Coil Res.	Contacts	Coil Current (mA)	Stock No.	Price Each 1-24
ALQ305	125	SPST-NO	40	04X5189	2.45
ALQ306	180	SPST-NO	33.3	04X5190	2.45
ALQ309	405	SPST-NO	22.2	04X5191	2.45
ALQ312	720	SPST-NO	16.7	04X5192	2.45
ALQ318	1.62	SPST-NO	11.1	04X5193	2.91
ALQ324	2.88	SPST-NO	8.3	04X5194	2.91

(211897)

LA/ALA SERIES POWER RELAYS

RoHS Compliant Available

Panasonic

- Contact configuration: DPST-NO
- Operating power: 530mW
- Ambient temperature: -40°C to +70°C
- 3A type and 5A TV type

Mfg. Part No.	Contact Current (A)	Coil Current (mA)	Coil Voltage (VDC)	Coil Resist. (Ohm)	Stock No.	Price Each 1-24
ALA2F05	3	106	5	47	10C3648	2.18
ALA2F12	3	44.2	12	272	10C3650	2.05
ALA2PF12	5	44.2	12	272	92B9604	2.51

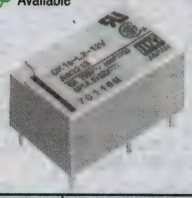
(197913)

10A MINIATURE POWER RELAYS

RoHS Compliant Available

Panasonic

- Large capacity in a small size
- 10A @ 250VAC
- High sensitivity 200mW nominal operating power
- Gold flash over silver alloy contact material
- Meets FCC Part 68
- Sealed construction and latching types available; *go online or call*



SPST-NO SINGLE-SIDE STABLE

Mfg. Part No.	Coil Voltage (VDC)	Coil Res. (Ω)	Stock No.	Price Each 1-24	25-49	50-99	100-499
DK1A-5V-F	5	125	27K6707	9.44	8.66	7.70	6.55
DK1A-12V-F	12	720	27K6704	10.11	9.28	8.25	7.02
DK1A-12V-F	12	720	27K6704	10.11	9.28	8.25	7.02
DK1A-24V-F	24	2.88	27K6706	9.87	9.06	8.05	6.85
SPST-NO, SPST-NC, SINGLE-SIDE STABLE							
DK1A1B-5V	5	125	91B5506	13.88	12.73	11.32	9.63
DK1A1B-12V	12	720	52F9204	14.51	13.31	11.83	10.07
DE1A1B-12V	12	720	10C5548	12.02	11.03	9.80	8.33
DK1A1B-24V	24	2.88	92B0031	13.88	12.73	11.32	9.63
SPST-NO, 2 COIL LATCHING							
DK1A-L2-12V-F	12	720	12N3657	12.09	11.10	9.86	8.39
SPST-NO, SPST-NC, 2 COIL LATCHING							
DK1A1B-L2-5V	5	125	10C5623	16.58	15.21	13.52	11.51
DK1A1B-L2-12V	12	720	66F5528	16.58	15.21	13.52	11.51
DK1A-L2-12V-F	12	720	12N3657	12.09	11.10	9.86	8.39
DPST-NO, SINGLE-SIDE STABLE							
DK2A-5V	5	125	97B3301	13.80	12.66	11.26	9.58
DK2A-12V	12	720	64K3100	14.51	13.31	11.83	10.07
DE2A-12V	12	720	64K3095	12.59	11.55	10.26	8.72
DK2A-24V	24	2.88	98B5189	13.88	12.73	11.32	9.63
DPST-NO, 2 COIL LATCHING							
DK2A-L2-5V	5	125	11N4476	15.79	14.49	12.88	10.96

RELAY ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24
DK2A-PS	DK relay sockets	10C5630	5.10

(60979)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

4A POLARIZED HIGH-DENSITY, HIGH-SENSITIVITY RELAYS

RoHS Compliant Available

Panasonic

- Amber sealed DIP package
- High shock / vibration resistance: 50G / 18G
- Switching range: 100μA at 100mVDC to 4A at 250VAC
- Contact rating: 4A at 250VAC; 3A at 30VDC
- Low thermal electromotive force: 3μV

Dimensions (H x W x L): 0.409″ (10.4) x 0.472″ (12.0) x 1.102″ (28.1). Row spacing: 0.300″ (7.62). *Order* **mfg. part no. S-PS** *socket separately below.*

DPST-NO, DPST-NC, SINGLE-SIDE STABLE

Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (Ω)	Coil Power (mW)	Stock No.	Price Each 1-24	25-49	50-99
S2EB-5V	5	130	192	46F5812	20.05	18.40	16.36
S2EB-12V	12	720	200	46F5814	20.30	18.63	16.56
S2EB-24V	24	2.85	202	46F5815	20.30	18.63	16.56
DPST-NO, DPST-NC, 2-COIL LATCHING							
S2EB-L2-12V	12	720	200	46F5819	21.71	19.92	17.71
S2EB-L2-24V	24	2.85	202	64K3178	21.33	19.54	17.42
3PST-NO, SPST-NC SINGLE-SIDE STABLE							
S3EB-24V	24	2.85	202	24C6424	21.70	19.88	17.72
4PST-NO, SINGLE-SIDE STABLE							
S4EB-5V	5	130	192	46F5822	21.33	19.58	17.40
S4EB-12V	12	720	200	46F5824	21.33	19.58	17.40
S4EB-24V	24	2.85	202	64K3180	21.92	20.08	17.90
4PST-NO, 2-COIL LATCHING							
S4EB-L2-5V	6	130	200	64K3179	23.74	21.75	19.39

SOCKET

Mfg. Part No.	Description	Stock No.	Price Each 1-24	25-49	50-99	100-499
S-PS	PC Terminal	46F5832	3.70	3.39	3.02	2.57

(3671)

MINIATURE POWER PC BOARD RELAYS

RoHS Compliant Available

Panasonic

- High sensitivity: 190mW pick-up power
- 0.300″ (7.62) row spacing
- Initial contact resistance: 30 milliohms
- Contact material: gold flash over silver alloy
- Nominal operating power: 300mW. 3,000Vrms between contact and coil; 1,000Vrms between open contact
- Dimensions: 0.413″H x 0.795″W x 0.433″D

TÜV Rheinland

SPST-NO, SPST-NC, SINGLE SIDE STABLE

Mfg. Part No.	Carry Current (A)	Coil Voltage (VDC)	Coil Resist. (Ω)	Stock No.	Price Each 1-24	25-49	50-99	100-499
DSP1-DC5V-F	5	5	83	86K9347	9.56	8.77	7.79	6.62
DSP1-DC12V-F	5	12	480	86K9345	9.44	8.66	7.70	6.54
DSP1-DC24V-F	5	24	1.92 kohm	86K9346	9.44	8.66	7.70	6.54
SPST-NO, SINGLE SIDE STABLE								
DSP1A-DC5V	8	5	83	50F4146	7.90	7.25	6.44	5.48
DSP1A-DC9V	8	9	270	64K3103	7.90	7.25	6.44	5.48
DSP1A-DC12V	8	12	480	64K3101	8.47	7.77	6.90	5.87
DSP1A-DC24V	8	24	1.92	64K3102	8.26	7.58	6.74	5.73
SPST-NO/SPST-NC, SINGLE SIDE STABLE								
SPST-NO/SPST-NC, 2 COIL LATCHING								
DSP1-L2-DC12V-F	5	12	480	11N4554	9.95	9.13	8.11	6.90
DSP1-L2-DC24V-F	5	24	1.92 kohm	11N4557	9.95	9.13	8.11	6.90
DPDT, SINGLE SIDE STABLE								
DSP2A-DC5V	5	5	83	64K3104	9.34	8.57	7.61	6.47
DSP2A-DC12V	5	12	480	99F7801	9.23	8.46	7.52	6.39
DSP2A-DC24V	5	24	1.92	52F9206	9.23	8.46	7.52	6.39
DPDT, 2 COIL LATCHING								
DSP2A-L2-DC5V	5	5	83	96B1839	9.76	8.95	7.95	6.76
DSP2A-L2-DC12V	5	12	480	10C5656	10.20	9.36	8.32	7.07
DSP2A-L2-DC24V	5	24	1.92	10C5657	10.33	9.48	8.42	7.16

SOCKETS FOR DSP RELAYS

Mfg. Part No.	For Use With	Stock No.	Price Each 1-24	25-49
DSP1A-PS	PC Board Mount DSP1A Relays	50F4152	3.27	3.00
DSP1A-PSL2	PC Board Mount DSP1A, DSP2A Relays	50F4153	4.10	3.76
DSP2A-PS	PC Board Mount DSP1A, DSP1, DSP2A Relays	50F4154	6.32	5.80
DSP2A-PSL2	PC Board Mount DSP1A, DSP1A-L2, DSP1, DSP1-L2, DSP2A, DSP2A-L2 Relays	50F4155	6.28	5.76

(3692)

POWER PCB RELAYS

ALZ SERIES 16A LOW PROFILE POWER RELAYS

RoHS Compliant Available

Panasonic

- Low profile type with height of 15.7mm
- High insulation resistance
- Ambient temperature: 0°C to 85°C
- Nominal operating power of 400mW

CLASS B COIL INSULATION

Mfg. Part No.	Contacts	Coil Voltage (VDC)	Coil Current (mA)	Coil Resist.	Stock No.	Price Each 1-24
ALZ11B12	SPDT	12	33.3	360	11N0813	3.20
ALZ11B24	SPDT	24	16.7	1.44	74C3118	3.42
ALZ12B12	SPDT	12	33.3	360	11N0841	3.20
ALZ12B24	SPDT	24	16.7	1.44	49H7498	3.42
CLASS F COIL INSULATION						
ALZ11F12	SPDT	12	33.3	360	11N0827	3.42
ALZ11F24	SPDT	24	16.7	1.44	70K9106	3.56
ALZ12F12	SPDT	12	33.3	360	99K1512	3.42
ALZ12F24	SPDT	24	16.7	1.44	11N0861	3.56

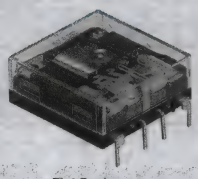
(190769)

5A HIGH-POWER PC BOARD RELAYS

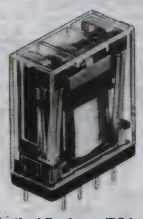
RoHS Compliant Available

Panasonic

- Space saving packages
- High contact reliability due to bifurcated contacts
- Latching types available
- Soldering flux inflow prevented by terminal location
- Amber sealed types available
- High breakdown voltage for transient protection: 1,000 Vrms between open contacts, contact sets



Flat Package



Vertical Package (PC board)

Contact rating: 5A @ 250VAC. Max. switching power standard: DPDT 1250VA 150W, 4PDT 1000VA 150W. Max. switching power amber sealed: DPDT 750VA 150W, 4PDT 500VA 150W. Initial contact resistance max: 50mΩ. Initial insulation resistance: Min. 100MΩ at 500VDC. Operating temperature: up to 48VDC -40°C to +70°C, 110VDC -40° to +55°C. EB in mfg. part no. indicates amber sealed type. **L2** in mfg. part no. indicates 2 coil latching. UL/CSA, approved type is standard.

FLAT PACKAGE

Mfg. Part No.	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Power (mW)	Terminal Type	Stock No.	Price Each 1-24	Price Each 25-49
NC2D-JP-DC5V	DPDT	5	69.4	360	PCB	94F910	14.39	13.18
NC2EBD-JP-DC5V	DPDT	5	69.4	360	PCB	10C8366	19.72	18.07
NC2D-JP-DC12V	DPDT	12	400	360	PCB	94F026	14.39	13.18
NC2EBD-JP-DC12V	DPDT	12	400	360	PCB	64K3162	19.30	17.68
NC2D-JP-DC24V	DPDT	24	1.6 Kohm	360	PCB	90F1863	15.23	13.95
NC2EBD-JP-DC24V	DPDT	24	1.6 Kohm	360	PCB	64K3163	18.63	17.07
NC4D-JP-DC24V	4PDT	24	800	720	PCB	94F3352	19.15	17.54
NC4EBD-JP-DC24V	4PDT	24	800	720	PCB	10C8512	22.54	20.64
NC4D-JP-DC12V	4PDT	12	200	720	PCB	94F8737	19.39	17.76
NC4EBD-JP-DC12V	4PDT	12	200	720	PCB	10C8511	22.54	20.64
VERTICAL PACKAGE								
NC2D-P-DC5V	DPDT	5	69.4	360	PCB	98F412	15.23	13.95
NC2D-P-DC12V	DPDT	12	400	360	PCB	92F6113	14.39	13.18
NC2D-DC12V	DPDT	12	400	360	Plug-in	50B880	15.23	13.95
NC2EBD-P-DC12V	DPDT	12	400	360	PCB	10C8381	19.72	18.07
NC2D-DC24V	DPDT	24	1.6 Kohm	360	Plug-in	94F909	14.50	13.31
NC4D-DC24V	4PDT	24	800	720	Plug-in	94F3262	19.39	17.76
NC2D-P-DC24V	DPDT	24	1.6 Kohm	360	PCB	70B9786	15.23	13.95
NC4D-P-DC5V	4PDT	5	34.7	720	PCB	50B881	18.32	16.78
NC4D-P-DC12V	4PDT	12	200	720	PCB	94F8633	19.39	17.76
NC4EBD-P-DC12V	4PDT	12	200	720	PCB	10C8529	22.54	20.64

(84575)

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(212564)

5-10A COMPACT PC BOARD RELAYS

RoHS Compliant Available

Panasonic

TÜV Rheinland

Sealed relays with 8mm spacing between coil and contacts. Universal terminal footprint. High dielectric withstanding for transient protection: 10,000V surge in microseconds between coil and contact. Nominal operating power: 530mW. Silver alloy contacts are 70% nominal voltage sealed. UL recognized, CSA certified, TÜV approved.

STANDARD CAPACITY

Mfg. Part No.	Contacts	Carry Current (A)	Coil Voltage (VDC)	Coil Res. (Ω)	Operating Current (mA)	Stock No.	Price Each 1-24	Price Each 25-49
JW2SN-DC5V	DPDT	5	5	47	106	64K3159	4.21	3.86
JW2SN-DC9V	DPDT	5	9	155	58	51F3943	4.21	3.86
JW2SN-DC12V	DPDT	5	12	270	44	51F3944	4.21	3.86
JW2SN-DC24V	DPDT	5	24	1.1	22	51F3945	4.45	4.08
JW2SN-DC48V	DPDT	5	48	4.4	11	51F3946	4.56	4.18
HIGH CAPACITY								
JW1AFSN-DC12V-F	SPST-NO	10	12	270	44	27K6712	3.47	3.19
JW1FSN-B-DC12V	SPDT	10	12	270	44	10C7769	3.69	3.39
JW1AFSN-DC24V-F	SPST-NO	10	24	1.1	22	27K6713	3.58	3.29
JW1FSN-DC5V	SPDT	10	5	47	106	51F3953	3.74	3.43
JW1FSN-DC9V	SPDT	10	9	155	58	31C9310	3.47	3.19
JW1FSN-DC12V	SPDT	10	12	270	44	64K3155	3.72	3.41
JW1FSN-DC24V	SPDT	10	24	1.1	22	64K3156	3.96	3.63
JW1FSN-DC48V	SPDT	10	48	4.4	11	51F3958	3.80	3.49
JW1FSN-B-DC5V	SPDT	10	5	47	106	50B8984	3.64	3.34
JW1FSN-B-DC9V	SPDT	10	9	155	58	64K3154	3.57	3.28

(3677)

HE SERIES 48A, 30A, 20A POWER RELAYS / INVERTER RELAYS

RoHS Compliant Available

Panasonic

Features:

- Ideal for Solar inverter
- Contributes to energy saving in devices due to reduced coil hold voltage
- High insulation resistance
- Conforms to various safety standards
- Compact size: (LxWxH) 33 × 38 × 36.3mm

Specifications:

- Contact rating: 48A at 250VAC
- Contacts: SPST-NO
- Contact gap: 2.5mm (.099")
- Surge breakdown voltage: 10kV
- Contact material: AgNi
- Contact carrying power: 12,000VA
- Operating power: 1,920mW
- Insulation resistance: 1,000MΩ

DC COIL RELAYS

Mfg. Part No.	Current (A)	Coil Voltage (VDC)	Coil Resist. (Ω)	Coil Current (mA)	Termination	Stock No.	Price Each 1-24	Price Each 25-49
HE1AN-P-DC12V-Y5	48	12	75	160	Through Hole	09R2888	41.96	38.50
HE1AN-P-DC24V-Y5	48	24	300	80	Through Hole	09R2889	41.96	38.50
HE1AN-DC12V	30	12	75	160	Quick Connect	64K3148	25.39	23.29
HE1AN-DC24V	30	24	300	80	Quick Connect	50B862	25.39	23.29
HE1AN-Q-DC12V	30	12	75	160	Quick Connect	98B9481	24.29	22.28
HE1AN-Q-DC24V	30	24	300	80	Quick Connect	50B864	24.29	22.28
HE1AN-S-DC24V	30	24	300	80	Screw	10C6217	36.55	33.53
HE2AN-Q-DC24V	25	24	300	80	Quick Connect	93B6780	25.61	23.49
HE2AN-S-DC24V	25	24	300	80	Screw	10C6283	36.15	33.16

AC COIL RELAYS

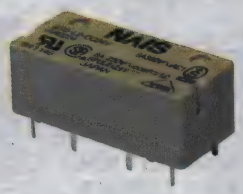
Mfg. Part No.	Current (A)	Coil Voltage (VAC)	Coil Resist. (Ω)	Coil Current (mA)	Termination	Stock No.	Price Each 1-24	Price Each 25-49
HE1AN-AC24V	30	24	...	74	Quick Connect	90B7726	30.96	28.40
HE2AN-Q-AC120V	25	120	...	18.7	Quick Connect	64K3150	31.87	29.23
HE1AN-AC240V	30	240	...	10.8	Quick Connect	90B7724	30.31	27.81
HE2AN-Q-AC240V	25	240	...	10.8	Quick Connect	10C6270	32.21	29.54
HE2AN-S-AC240V	25	240	...	10.8	Screw	10C6278	38.61	35.42

(148562)

8A IC DRIVEABLE PC BOARD RELAYS FOR FIELD LOAD SWITCHING

RoHS Compliant Available

Panasonic



- Amber sealed for automatic wave soldering and cleaning
- Initial contact resistance: 30 milliohms.
- 0.400" (10.16) row spacing
- Gold-flashed silver alloy contacts rated 8A, 2000VA
- 150W switching power
- 380VAC switching voltage
- Nominal operating power: 240mW
- Shock resistance: 20G
- Ambient temperature: -40°C to +60°C
- Dimensions: 0.445"(11.3)H x 0.551"(14)L x 1.220"(31.0)W
- DPST, 2-coil latching version also available

SPST-NO, SPST-NC, SINGLE-SIDE STABLE

Mfg. Part No.	Coil Voltage (VDC	Coil Resist. (Ω)	Stock No.	Price Each 1-24	25-49	50-99	100-499
ST1-DC12V-F	12	600	72R4740	16.85	15.43	13.76	11.71
ST1-DC24V-F	24	2.4	11N6019	14.93	13.68	12.20	10.38
ST1-DC5V-F	5	105	11N6021	14.93	13.68	12.20	10.38
SPST-NO, SPST-NC, 2 COIL LATCHING							
ST1-L2-DC5V-F	5	110	12N3824	18.48	16.92	15.09	12.84
DPST, 2 COIL LATCHING							
ST2-L2-DC5V	5	110	46F5851	17.09	16.52	13.95	13.23
ST2-DC12V-F	12	600	31M1489	15.12	13.85	12.35	10.50
ST2-DC24V-F	24	2.4	11N6022	14.93	13.68	12.20	10.38

Sockets for **ST** series relays. Maximum continuous current: 10A. Chassis cutout: 0.6 to 2.2mm thickness.

SOCKETS

Mfg. Part No.	Terminals	Stock No.	Price Each 1-24	25-49	50-99	100-499
ST-PS	PC Board	46F5665	3.34	3.06	2.72	2.32
ST-SS	Solder	64K3177	3.14	2.88	2.56	2.18

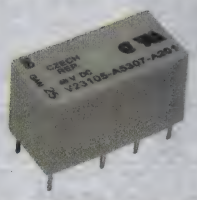
(3669)

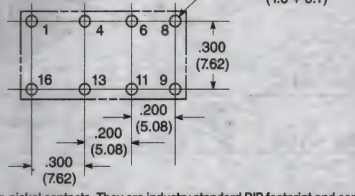
AXICOM 3A HIGH-SENSITIVITY DIP PC BOARD RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor





DIP PC board relays have DPDT gold-plated silver-nickel contacts. They are industry standard DIP footprint and come in an immersion-cleanable [IP67] plastic sealed case. Dimensions in inches (mm): 0.799 (20.3) L x 0.398 (10.1) W x 0.45 (11.43) H. Meet FCC Part 68 voltage surge. Mate with 16-pin socket. 3A switching and carrying current.

Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (Ω) ±10%	Nominal Power (mW)	Stock No.	Price Each 1-24	25-49	50-99
V23105A5401A201	5	62	400	36K7701	2.93	2.60	2.54
V23105A5301A201	5	125	200	35K5064	2.59	2.52	2.44
V23105A5001A201	5	167	150	91B4054	2.55	2.33	2.15
V23105A5403A201	12	360	400	36K2090	2.75	2.68	2.61
V23105A5303A201	12	720	200	35K5065	3.07	2.70	2.69
V23105A5003A201	12	960	150	36K7699	2.19	2.10	2.02
V23105A5505A201	24	1.05	500	36K3724	3.48	3.07	2.76
V23105A5405A201	24	1.44	400	36K7702	2.68	2.42	2.24
V23105A5305A201	24	2.88	200	35K2063	2.82	2.41	2.31
V23105A5005A201	24	3.84	150	36K7700	2.78	2.49	2.30
V23105A5407A201	48	5.76	400	35K3236	3.58	3.37	3.04
V23105A5307A201	48	11.52	200	34K0284	3.64	3.19	2.95

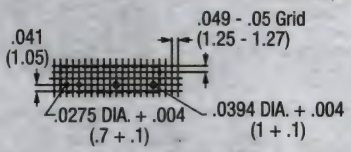
(48395)

OEG 3A SLIM LINE PC BOARD RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor



- 5mm wide, permitting high density spacing
- SPST contract arrangement
- Sensitive coil requires only 120mW coil power
- Well suited for HVAC controls, I/O panels, PLCs
- Bifurcated AgNi contacts
- Maximum switching rate: 12,000 ops./min/ (no load); 100 ops./min. (rated load)
- Expected mechanical life: 20 million operations (no load)
- Expected electrical life: 100,000 operations (rated load)
- Minimum load: 1mA @ 5 VDC
- Operate power: 58.8mW

Dimensions in inches (mm): 0.492 (12.5)H x 0.787 (20.0)W x 0.197 (5.0)L.

Mfg. Part No.	Coil Voltage (VDC)	Coil Resistance (Ω) ± 10%	Stock No.	Price Each 1-9	10-24	25-49	50-99
PCN-105D3MHZ	5	208	21M6845	1.73	1.66	1.51	1.36
PCN-112D3MHZ	12	1.2	20M7033	1.69	1.57	1.47	1.33
PCN-124D3MHZ	24	4.8	20M7034	2.22	2.07	1.93	1.77

(80130)

SCHRACK RTX SERIES POWER PCB RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Contact configuration: SPST-NO
- Voltage rating: 250VAC
- Current rating: 16A
- 5kV/10mm coil-contact
- Reinforced insulation

COIL VERSIONS, BISTABLE 1 COIL

Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (ohm)	Coil Power (mW)	Stock No.	Price Each 1-24
RTX3-1AT-B003	3	14	650	28W5712	11.81
RTX3-1AT-B005	5	38	650	28W5713	11.16
RTX3-1AT-B006	6	55	650	28W5714	11.16
RTX3-1AT-B009	9	120	665	28W5715	11.81
RTX3-1AT-B012	12	220	650	28W5716	11.16
RTX3-1AT-B024	24	890	650	28W5717	11.16
RTX3-1AT-B048	48	3.54 kohm	650	28W5718	11.30
COIL VERSIONS, BISTABLE 2 COILS					
RTX3-1AT-C012	12	150	950	28W5719	12.43
RTX3-1AT-C024	24	610	950	28W5720	11.74

(207939)

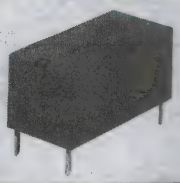
SCHRACK 5A PC BOARD RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Single contact relays, SPDT
- Cadmium free contact material
- Nominal coil power: 5A @ 250VAC
- Dimensions: iinches (mm): 0.787 (20.0)L x 0.394 (10.0)W x 0.394 (10.0)H
- Latching models also available, *go online or call.*



Mfg. Part No.	Coil Voltage (VDC)	Pull-in Voltage (VDC)	Drop-out Voltage (VDC)	Coil Resist. (Ω)± 10%	Stock No.	Price Each 1-9	10-24
PE014005	5	3.8	0.5	125	36K2009	5.02	4.58
PE014012	12	9.0	1.2	685	36K3449	6.90	6.33
PE014024	24	18.0	2.4	2.725	36K3450	7.00	6.42

(13027)

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(212565)

POWER PCB RELAYS

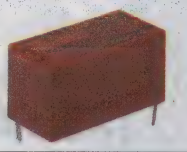
SCHRACK 6A MINIATURE PCB RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- 1 N/O single contact
- 6A at 250VAC
- Mechanical life: >30 x 10^6 operations
- Dimensions: inches (mm) 0.787 (20.0)L x 0.394(10.0)W x 1.417 (10.6)H



Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (Ω)	Coil Current (mA)	Stock No.	Price Each 1-9	10-24	25-49
● RE030005	5	125	40.0	52F908	4.37	4.12	3.80
● RE030012	12	720	16.7	17M1743	4.84	4.45	4.11
● RE030024	24	2.88	8.3	52F910	6.78	6.21	5.73

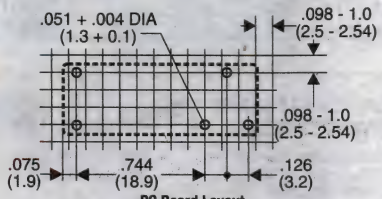
(3722)

SCHRACK 8A MINIATURE PC BOARD RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor



PC Board Layout
1-Form-C

RYII series are sealed 1-pole relays with silver-cadmium oxide single C/O contact rated 8A at 250VAC (440VAC max. breaking voltage). Mechanical life: >30 x 10^6 operations. Dielectric strength: coil-contact = 5,000VAC; contact-contact = 1,000VAC. Dimensions: 28.5 x 10.1 x 12.3mm. UL recognized, VDE approved. 6VDC version also available; *go online or call.*

1 C/O, PINNING 3.2mm, FLUX PROOF

Mfg. Part No.	Coil* Voltage (VDC)	Coil* Current (mA)	Coil* Resist. (Ω) ± 10%	Stock No.	Price Each 1-9	10-24
● RY210012	12	19.3	627	18C5386	4.82	4.16
● RY210024	24	10.2	2.35	17M1790	4.98	4.65
1 C/O PINNING, 3.2mm, WASH-TIGHT						
● RY610005	5	44	112	48F5539	4.32	3.80
● RY610012	12	19.3	627	52F1002	4.07	3.75
● RY610024	24	10.2	2.35	52F1003	3.35	3.06
● RY611024**	24	10.2	2.35	29C5433	4.53	4.23
● RY611005	5	...	112	08H3774	3.59	3.17
● RY212012	12	...	620	14M6920	4.64	4.52

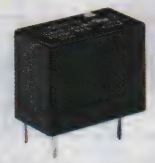
*All figures are given for cold coil (at ambient temperature +20°C/68°F).
**Contact material: Silver-nickel 0.15
(3725)

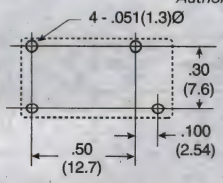
P&B 3A-10A SEALED MINIATURE PC BOARD RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor





Contacts are SPST-NO. Coil-to-contact spacing of 6.5mm provides 4000VAC dielectric. Dimensions in inches (mm): .716 (18.2)L x .40 (10.2)W x .57 (14.7)H. Sealed enclosure, immersion cleanable. Vented (fluxtight) models also available; *go online or call.*

3A, SILVER CONTACTS

Mfg. Part No.	Coil Voltage (VDC)	Coil Resistance (Ω)	Must Operate Voltage (VDC)	Must Release Voltage (VDC)	Stock No.	Price Each 1-24	25-49
● T77S1D3-05	5	45	2.25	0.15	17M3056	2.32	2.04
● T77S1D3-12	12	720	9	0.6	35K3228	2.08	1.88
10A, SILVER ALLOY CONTACTS							
● T77S1D10-05	5	55	3.75	0.25	91F2922	2.49	2.21
● T77S1D10-12	12	320	9	0.6	17M3054	2.28	2.00
● T77V1D10-12	12	320	9	0.6	66F7846	2.26	1.95

➤CONTINUED➤

P&B 3A-10A SEALED MINIATURE PC BOARD RELAYS (CONT.)

10A, SILVER ALLOY CONTACTS

Mfg. Part No.	Coil Voltage (VDC)	Coil Resistance (Ω)	Must Operate Voltage (VDC)	Must Release Voltage (VDC)	Stock No.	Price Each 1-24	25-49
● T77S1D10-24	24	1280	18	1.2	17M3055	2.14	1.88
● T77V1D10-24	24	1280	18	1.2	17M3057	2.26	1.98

(48471)

SCHRACK PT SERIES RELAY PACKAGES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Relay package consisting of of PT relay, DIN-rail socket, plastic retaining clip, module and marking tag
- 2 pole 12A, 3 pole 10A or 4 pole 6A
- DC- or AC coil
- Mechanical and electrical indicator
- Manual test tab, optionally lockable
- Contact material: AgNi 90/10

DC COIL RELAYS

Mfg. Part No.	Contact Current (A)	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Termination	Stock No.	Price Each 1-24
● PT5S7LB2	6	4PDT	12	192	Screw	35R0449	18.70
● PT5S8LB2*	6	4PDT	12	192	Screw	35R0453	24.32
● PT5S7LC4	6	4PDT	24	777	Screw	08H3370	22.03
● PT5S8LC4*	6	4PDT	24	777	Screw	35R0454	25.44
● 8-1419111-2*	6	4PDT	60	4.845	Quick Connect	16H6556	13.27
● PT571024*	6	4PDT	24	777	Quick Connect	08H3380	5.81
● PT3S7LB2	10	3PDT	12	192	Screw	35R0434	23.58
● PT3S7LC4	10	3PDT	24	777	Screw	35R0435	19.13
● PT2S7LB2	12	DPDT	12	192	Screw	35R0429	17.33
● PT2S7LC4	12	DPDT	24	777	Screw	35R0430	16.57
DC COIL RELAYS WITH LOGICAL ARRANGEMENT OF CONTROL / LOAD TERMINALS							
● PT5L7LB2	6	4PDT	12	192	Screw	35R0439	23.89
● PT5L8LB2*	6	4PDT	12	192	Screw	35R0445	27.34
● PT5L7LC4	6	4PDT	24	777	Screw	35R0440	23.84
● PT5L8LC4*	6	4PDT	24	777	Screw	35R0446	27.34
● PT2L7LB2	12	DPDT	12	192	Screw	35R0424	21.86
● PT2L7LC4	12	DPDT	24	777	Screw	35R0425	20.30

AC COIL RELAYS

Mfg. Part No.	Contact Current (A)	Contacts	Coil Voltage (VAC)	Coil Resist. (Ω)	Termination	Stock No.	Price Each 1-24
● PT5S7RC4	6	4PDT	24	.192	Screw	35R0450	21.14
● PT5S8RC4*	6	4PDT	24	192	Screw	35R0455	25.98
● PT5S7SB5	6	4PDT	115	4.845	Screw	35R0451	19.42
● PT5S8TD0*	6	4PDT	230	19.465	Screw	35R0456	26.90
● PT3S7RC4	10	3PDT	24	192	Screw	35R0436	24.12
● PT3S7SB5	10	3PDT	115	4.845	Screw	35R0437	24.38
● PT3S7TD0	10	3PDT	230	19.465	Screw	35R0438	24.43
● 2-1415529-1	10	3PDT	115	4.845	Quick Connect	41T2136	7.76
● PT2S7RC4	12	DPDT	24	192	Screw	35R0431	19.71
● PT2S7SB5	12	DPDT	115	4.845	Screw	35R0432	20.66
● PT2S7TD0	12	DPDT	230	19.465	Screw	35R0433	18.38
AC COIL RELAYS WITH LOGICAL ARRANGEMENT OF CONTROL / LOAD TERMINALS							
● PT5L7RC4	6	4PDT	24	192	Screw	35R0441	25.53
● PT5L8RC4*	6	4PDT	24	192	Screw	35R0447	29.03
● PT5L7SB5	6	4PDT	115	4.845	Screw	35R0443	25.64
● PT5L7TD0	6	4PDT	230	19.465	Screw	35R0444	28.08
● PT2L7RC4	12	DPDT	24	192	Screw	35R0426	22.27
● PT2L7SB5	12	DPDT	115	4.845	Screw	35R0427	22.35
● PT2L7TD0	12	DPDT	230	19.465	Screw	35R0428	23.52

* Gold plated
(161796)

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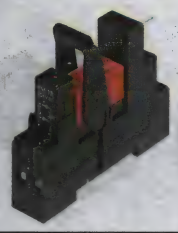
SCHRACK RT SERIES RELAY PACKAGES

RoHS Compliant Available

TE connectivity

Authorized Distributor



- Relay package consisting of RT relay, DIN-rail socket, plastic retaining clip, module and marking tag
- 1CO with 16A or 2CO with 8A rated load
- Sensitive DC- or AC coil
- Reinforced insulation (protection class II / VDE 0700), safe separation to VDE 0160
- Jumper bars for interconnection
- Contact material: AgNi 90/10

DC COIL RELAYS

Mfg. Part No.	Contact Current (A)	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Termination	Stock No.	Price Each 1-9
RT4S4LC4	8	DPDT	24	1.44	Screw	08H3748	9.41
RT4S5LC4*	8	DPDT	24	1.44	Screw	35R0467	23.76
3-1393243-1*	10	DPST	9	200	SMD	12H9145	2.91
RT3S4LC4	16	SPDT	24	1.44	Screw	35R0457	10.43

AC COIL RELAYS

Mfg. Part No.	Contact Current (A)	Contacts	Coil Voltage (VAC)	Coil Resist. (Ω)	Termination	Stock No.	Price Each 1-9
RT4S4S15	8	DPDT	115	8.1	Screw	35R0465	14.15
RT3S4R24	16	SPDT	24	350	Screw	35R0458	14.64
RT3S4S15	16	SPDT	115	8.1	Screw	35R0459	10.31
RT3S4T30	16	SPDT	230	32.5	Screw	35R0460	17.71

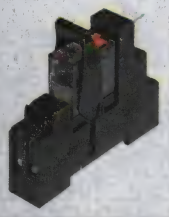
* Gold plated
(161798)

SCHRACK XT SERIES RELAY PACKAGES

RoHS Compliant Available

TE connectivity

Authorized Distributor



- Relay package consisting of XT relay, DIN-rail socket, plastic retaining clip and marking tag
- 1CO with 16A or 2CO with 8A rated load
- Sensitive DC- or AC coil
- Reinforced insulation (protection class II / VDE 0700), safe separation to VDE 0160
- Jumper bars for interconnection
- Manual test tab, optionally lockable
- Mechanical and electrical indicators
- Contact material: AgNi 90/10

DC COIL RELAYS

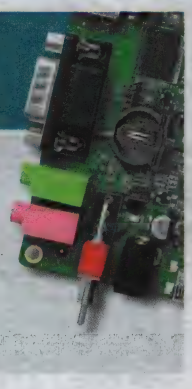
Mfg. Part No.	Contact Current (A)	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Termination	Stock No.	Price Each 1-9
XT4S4LC4	8	DPDT	24	1.44	Screw	35R0484	14.21
XT3S4LC4	16	SPDT	24	1.44	Screw	35R0480	13.29

AC COIL RELAYS

Mfg. Part No.	Contact Current (A)	Contacts	Coil Voltage (VAC)	Coil Resist. (Ω)	Termination	Stock No.	Price Each 1-9
XT4S4R24	8	DPDT	24	350	Screw	35R0485	13.58
XT4S4S15	8	DPDT	115	8.1	Screw	35R0486	13.27
XT4S4T30	8	DPDT	230	32.5	Screw	35R0487	14.89
XT3S4R24	16	SPDT	24	350	Screw	35R0481	12.60
XT3S4S15	16	SPDT	115	8.1	Screw	35R0482	14.20
XT3S4T30	16	SPDT	230	32.5	Screw	35R0483	14.79

(161797)

DEV KIT HQ™



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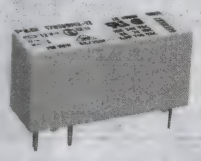
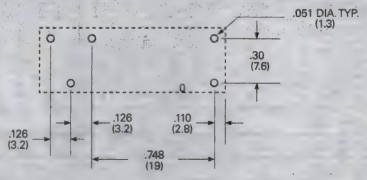
P&B 14A PC BOARD MINIATURE RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor





- High sensitivity-coil power as low as 212mW
- SPDT contacts
- Single coil, non-latching
- Immersion cleanable

Dimensions: 0.591H x 0.394W x 1.181"L (15mm x 10mm x 30mm). 3-60VDC types and SPST-NO contacts available; *go online or call*.

Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (Ω)	Stock No.	Price Each 1-9	10-24	25-49	50-99
T75S5D112-05	5	118	93F3105	4.48	4.23	4.07	3.73
T75S5D112-12	12	652	93F3106	4.46	3.97	3.57	3.35
T75S5D112-24	24	2.27	93F3108	5.68	4.69	4.37	4.06

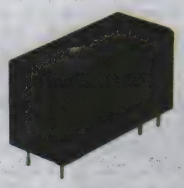
(38070)

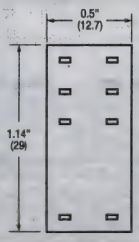
P&B 8-16A MINIATURE POWER PC BOARD RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor





- SPST through DPDT contacts
- Low-profile 15.7mm height
- Immersion cleanable and flux-tight versions available
- VDE 10mm spacing, 5kV dielectric, coil-to-contacts
- UL class F coil insulation system
- Conform to UL 508, 1873, 353 and 1950

8A-16A relays are miniature and low profile. Expected mechanical life: 30 million operations. Sensitive coil: 400mW. Dimensions: 0.62"H x 1.14"L x 0.50"W; pin length = 0.17". All units listed have contact material of silver-nickel 90/10. **Suffix "F"** in mfg. part no. indicates class F coil insulation. No type suffix indicates class B coil insulation. AC coil relays are Schrack brand. 10A, other contact styles, latching, high-temperature, and high-inrush and 200mW sensitive coil models also available; *go online or call.*

8A, DC COIL

Mfg. Part No.	Carry Current (A)	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Vented (V)/ Sealed (S)	Stock No.	Price Each 1-9	10-24
RTE24005	8	DPDT	5	62	S	83F2043	2.63	2.42
RTE44012F	8	DPST-NO	12	360	S	36K7604	4.53	3.97
RTE24024	8	DPDT	24	1.44	S	17M9933	2.75	2.51
RTE44024F	8	DPST-NO	24	1.44	S	36K7605	3.19	3.04
RT424024F	8	DPDT	24	1.44	V	36K2038	2.48	2.35
RT424024	8	DPDT	24	1.44	V	16F393	2.84	2.62
RTE24005F	8	DPDT	5	62	S	35K4865	3.10	2.82
RTE24006F	8	DPDT	6	90	S	17C7176	3.60	3.26
RT424012F	8	DPDT	12	360	V	94B9819	4.30	3.76
RTE24012	8	DPDT	12	360	S	16F397	2.71	2.55
RTE24012F	8	DPDT	12	360	S	36K2035	3.66	3.33
RT424F24	8	DPDT	24	886	V	93B6581	4.78	4.37
RTE24024F	8	DPDT	24	1.44	S	94B9941	3.62	3.32
12A, DC COIL								
RTB14005F	12	SPDT	5	62	S	94B9851	4.32	3.78
RT114012F	12	SPDT	12	360	V	36K3471	3.78	3.17
RTB14012F	12	SPDT	12	360	S	36K7601	3.14	2.99
RTB14024F	12	SPDT	24	1.44	S	36K2034	3.15	2.99
RTB34024F	12	SPST-NO	24	1.44	S	35K3224	3.84	3.36
RT114024F	12	SPDT	24	1.44	V	94B9803	3.76	3.32
16A, DC COIL								
RTD14005F	16	SPDT	5	62	S	36K7603	3.59	3.26
RT314012F	16	SPDT	12	360	V	36K2036	3.49	3.17
RTD14012F	16	SPDT	12	360	S	94B9891	3.31	3.01
RT314024	16	SPDT	24	1.44	V	36K2037	2.79	2.57
RT314024F	16	SPDT	24	1.44	V	36K7606	3.49	3.17
RTD14024F	16	SPDT	24	1.44	S	33K3674	3.15	2.99
RTD34012F	16	SPST-NO	12	360	S	36K3470	3.44	3.12
RT334024F	16	SPST-NO	24	1.44	V	17C6470	3.19	3.10
RTD34024F	16	SPST-NO	24	1.44	S	34K0187	3.78	3.43

CONTINUED

P&B 8-16A MINIATURE POWER PC BOARD RELAYS (CONT.)

8A, AC COIL

Mfg. Part No.	Carry Current (A)	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Vented (V)/ Sealed (S)	Stock No.	Price Each 1-9	Price Each 10-24
RTE24615	8	DPDT	115	8.1	S	48F3750	6.31	5.83
RT424615	8	DPDT	115	8.1	V	48F1292	4.74	4.54
RT424730	8	DPDT	230	32.5	V	85C0866	6.19	5.64
RT424524	8	DPDT	24	350	V	94C4293	5.28	4.62
12A, AC COIL								
RTB14615*	12	SPDT	115	8.1	S	48F3748	4.88	4.44
16A, AC COIL								
RTD14615*	16	SPDT	115	8.1	S	36K3469	7.13	6.51
RT314615	16	SPDT	115	8.1	...	08H3745	5.66	4.96

*Schrack brand
(48391)

SCHRACK 8-16A POWER PC BOARD RELAYS

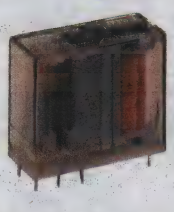
RoHS Compliant Available

TE connectivity

Authorized Distributor

- Contacts: SPST-NC, SPST-NO, DPDT
- 4 kV / 8 mm coil-contact
- Pinning 3.5 or 5 mm (8 / 12A) and 5 mm (16A)
- PC board sockets

Applications: power supplies, domestic appliances, heating control and installation. Dimensions: 25.5H x 29.0W x 12.6D mm. Refer to the relay socket usage guide for sockets and accessories.



RELAYS

Mfg. Part No.	Contacts	Carry Current (A)	Coil Voltage (VDC)	Coil Resist. (Ω)	Coil Current (mA)	Stock No.	Price Each 1-49	Price Each 50-99
RP418024	SPDT	12	24	1.1 kohm	21.8	17M1784	5.59	4.43
RP310024	SPDT	16	24	1.1 kohm	21.8	17M1783	6.53	5.91
RP710024	SPDT	16	24	1.1 kohm	21.8	17M1785	6.08	4.82
RP420012	DPDT	8	12	270	...	90B4410	5.69	5.17
RP821012	DPDT	8	12	270	...	08H3673	7.18	5.88
RP820012	DPDT	8	12	270	...	23C8588	5.31	4.25
RP420024	DPDT	8	24	1.1 kohm	...	51B969	7.46	6.84
RP421024	DPDT	8	24	1.1 kohm	...	01C0518	6.69	6.61
RP821024	DPDT	8	24	1.1 kohm	...	92B8192	5.36	4.79
RP820024	DPDT	8	24	1.1 kohm	...	90B8545	6.08	4.82
RP412012	SPDT	12	12	270	...	08H3590	5.08	4.61
RP412024	SPDT	12	24	1.1 kohm	...	74C0240	5.59	4.90
RP420048	DPDT	5	48	4.4 kohm	...	92C3381	7.03	6.15
RP421012	DPDT	8	12	270	...	90B5481	7.59	7.54
RP818024	SPDT	8	24	1.1 kohm	...	20C8802	6.01	5.46

SOCKETS AND ACCESSORIES

Mfg. Part No.	Description	For Use With	Stock No.	Price Each 1-9	Price Each 10-24
RP78602	PC board Socket 5mm pinning	RP, RT, RY Series Relays	48F1291	3.17	2.92

(84966)

12 - 16A POWER PCB RELAYS RZ SERIES

RoHS Compliant Available

TE connectivity

Authorized Distributor

Specifications
- 1 pole 12 / 16 A, 1 CO or 1 NO contact
- DC-coil 400 mW
- 5 kV / 10 mm coil-contact, reinforced insulation
- Ambient temperature 85°C, HOT version for 105°C
- Product in accordance to IEC60335-1

Applications
- Household appliances
- Boiler control
- Timers
- Garage door control
- POS automation

Mfg. Part No.	Contacts	Contact Current (A)	Coil Resist. (ohm)	Coil Voltage (VDC)	Stock No.	Price Each 1-24
RZ01-1C4-D012	SPDT	12	360	12	79R1649	2.88
RZ01-1C4-D024	SPDT	12	1.44	24	79R1650	2.56
RZ03-1A4-D012	SPST-NO	16	360	12	79R1651	2.56
RZ03-1C4-D005	SPDT	16	60	5	79R1652	2.91
RZ03-1C4-D012	SPDT	16	360	12	79R1653	2.84
RZ03-1C4-D024	SPDT	16	1.44	24	79R1654	3.07

(178858)

P&B PC BOARD/PANEL MOUNT RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Fig. 1

Fig. 2

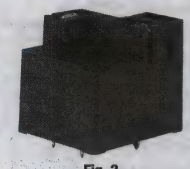


Fig. 3

Up to 30 amp switching in SPST and 20 amp in SPDT arrangements. Meets UL 873 and UL 508 spacing - ⅛″ through air, ¼″ over surface. Class F coil insulation standard. Silver-cadmium oxide contacts. Maximum coil paper: 2.8W. Nominal coil power: 1.0W. **"P"** in mfg. part no. indicates unsealed version with plastic dust cover. **"S"** in mfg. part no. indicates version that is immersion cleanable, has a knock-off nib and comes in a sealed plastic case. **"V"** in mfg. part no. indicates version that has a flux-proof plastic case. UL Class F insulation standard. UL recognized, CSA certified.

Figure	Fig. 1	Fig. 2	Fig. 3
Terminals	PC Board Mounting: PC Terminals for Coil and Contacts	Flanged Mounting: .187″ (4.75mm) Quick Connects for Coil and .250″ (6.35mm) Quick Connects for Contacts	PC Board Mounting: PC Terminals for Coil and Contacts, and .250″ (6.35mm) and Quick Connects for Contacts
Dimensions	.805 (20.4)H x 1.08 (27.43)W x 1.28″ (32.51)L	1.10 (27.94)H x 1.98 (50.29)W x 1.08″ (27.43)L	1.10 (27.94)H x 1.28 (32.51)W x 1.08″ (27.43)L

Mfg. Part No.	Fig.	Coil Voltage (VDC)	Coil Resist. (Ω)	Contacts	Stock No.	Price Each 1-9
T9AS1D12-5	1	5	25	SPST-NO	26M8314	3.64
T9AS1L12-24	1	24	660	SPDT	16F416	4.72
T9AS1D22-110	1	110	12.1 kohm	SPDT	66F6691	7.10
T9AS1D12-12	1	12	144	SPST-NO	17M3062	2.82
T9AS1D12-24	1	24	576	SPST-NO	17M3063	3.00
T9AS1D12-48	1	48	2.304 kohm	SPST-NO	17M3064	3.94
T9AS5D12-12	1	12	144	SPDT	17M3066	3.40
T9AS5D12-18	1	18	324	SPDT	17M3067	4.45
T9AS5D12-24	1	24	576	SPDT	17M3068	3.27
T9AS5D12-48	1	48	2.304 kohm	SPDT	17M3069	4.03
T9AP1D52-12	2	12	144	SPST-NO	17M3058	3.78
T9AP1D52-24	2	24	576	SPST-NO	17M3059	3.68
T9AP1D52-48	2	48	2.304 kohm	SPST-NO	66F6698	4.54
T9AP1D52-48-01	2	48	2.304 kohm	SPST-NO	17M3060	4.28
T9AP5D52-12	2	12	144	SPDT	92F3729	3.68
T9AP5D52-24	2	24	576	SPDT	17M3061	3.94
T9AS1D22-5	3	5	...	SPST-NO	66F6687	3.29
T9AS1D22-12	3	12	144	SPST-NO	92F3733	3.22
T9AS1D22-24	3	24	576	SPST-NO	17M3065	3.22
T9AS5D22-12	3	12	144	SPDT	92F3738	3.95
T9AS5D22-24	3	24	576	SPDT	92F3739	4.10

(3330)

P&B 30A PC BOARD RELAYS

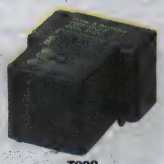
RoHS Compliant Available

TE connectivity

Authorized Distributor

- Class F coil insulation
- Max coil power: 2.8W
- Contacts: silver-cadmium oxide
- Operating temperature: -55°C to +85°C
- Continous duty cycle

T90N



T90S

T90N series relays are open with no cover (snap-on dust cover available as an option). **T90S series** relays are immersion cleanable, plastic sealed case available. Designed primarily for appliance industry and heating, ventilating and air conditioning markets. Mechanical life expectancy: 10 million operations. Electrical life expectancy: 100,000 operations.

30A SWITCHING

Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (Ω)	Contacts	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49
T90N1D12-12	12	155	SPST-NO	17M3071	3.02	2.74	2.52
T90N1D12-24	24	660	SPST-NO	17M3072	3.27	2.89	2.64
T90N1D42-24	24	660	SPST-NO	17M3073	3.54	3.30	3.07
T90S1D12-5	5	27	SPST-NO	46F3610	3.67	3.13	2.87
T90S1D12-12	12	155	SPST-NO	17M3075	3.50	2.83	2.58
T90S1D12-24	24	660	SPST-NO	20M7048	3.08	2.87	2.64

➤ CONTINUED ➤

P&B 30A PC BOARD RELAYS (CONT.)

Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (Ω)	Contacts	Stock No.	Price Each 1-9	10-24	25-49
T90S1D42-24	24	660	SPST-NO	17M3076	3.46	3.32	3.18
T90S5D12-48	48	2.56	SPDT	90F1151	4.19	3.78	3.54
20A/10A SWITCHING							
T90N5D12-12	12	155	SPDT	20M7047	3.14	2.96	2.72
T90N5D12-24	24	660	SPDT	17M3074	3.17	2.99	2.76
T90S5D12-5	5	27	SPDT	46F3613	3.74	3.48	3.16
T90S5D12-12	12	155	SPDT	17M3077	3.16	2.87	2.64
T90S5D12-24	24	660	SPDT	20M7049	3.18	2.89	2.65
T90S5D42-24	24	660	SPDT	97F8355	5.16	4.52	4.09

BLACK DUST COVER

Mfg. Part No.	For Use With	Stock No.	Price Each 1-9	10-24	25-49
35C620A	TE Connectivity T90N Series Open-Style Relays	44F1127	0.88	0.81	0.75

(3310)

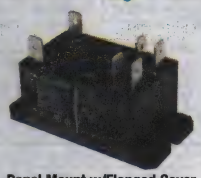
P&B 30A POWER RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- PCB and panel mount version
- "P" in mfg. part no. denotes plastic dust cover
- "S" in mfg. part no. denotes immersion - cleanable tape sealed plastic case
- Silver cadmuim oxide contacts
- Applications include appliances, heating and ventilating



Panel Mount w/Flanged Cover
2.700 (68.58)L x 1.360 (34.54)W x 1.04 max. (26.42)H

AC RELAYS — SEALED PC BOARD MOUNT

Mfg. Part No.	Contacts	Coil Voltage	Coil Resist. (Ω)	Coil Power	Stock No.	Price Each 1-9	10-24	25-49
T92S7A12-240	DPST-NO	240	3.8	4VA	66F3421	11.91	11.42	10.92
AC RELAYS — DUST COVER PANEL MOUNT								
T92P7A22-24	DPST-NO	24	36.6	4VA	17M3084	12.03	11.17	10.31
T92P7A52-120	DPST	120	950	4VA	16R7845	16.63	14.56	13.17
T92P7A22-120	DPST-NO	120	950	4VA	17M3083	11.81	10.55	9.67
T92P7A22-240	DPST-NO	240	3.8	4VA	17M3085	13.41	12.75	11.77
T92P11A22-24	DPDT	24	36.6	4VA	17M3079	13.59	13.19	11.75
T92P11A22-120	DPDT	120	950	4VA	17M3078	12.32	11.42	10.17
T92P11A22-240	DPDT	240	3.8	4VA	17M3080	16.54	14.86	13.24
AC RELAYS — SEALED PANEL MOUNT								
T92S7A22-24	DPST-NO	24	36.6	4VA	93F2958	12.85	12.10	11.17
T92S7A22-120	DPST-NO	120	950	4VA	17M3096	12.85	11.55	10.49
T92S7A22-240	DPST-NO	240	3.8	4VA	04F1209	13.68	12.42	11.80
T92P11A12-120	DPDT	120	950	4VA	08H5255	15.31	13.40	12.13
T92P11A22-12	DPDT	12	9.1	4VA	08H5256	15.14	13.26	11.99
T92S11A22-24	DPDT	24	36.6	4VA	17M3091	14.55	12.97	11.89
T92S11A22-120	DPDT	120	950	4VA	17M3090	14.55	12.97	11.89
T92S11A22-240	DPDT	240	3.8	4VA	17M3092	15.98	15.11	13.95
DC RELAYS — DUST COVER PC BOARD MOUNT								
T92P7D12-24	DPST-NO	24	350	1.7W	17M3086	22.28	21.81	19.29
DC RELAYS — SEALED PC BOARD MOUNT								
T92S7D12-12	DPST-NO	12	86	1.7W	17M3097	11.95	11.36	10.48
T92S7D12-24	DPST-NO	24	350	1.7W	17M3098	10.65	9.83	9.07
T92S11D12-12	DPDT	12	86	1.7W	17M3093	14.89	13.30	12.19
DC RELAYS — DUST COVER PANEL MOUNT								
T92P7D22-12	DPST-NO	12	86	1.7W	17M3087	9.84	9.23	8.52
T92P7D22-24	DPST-NO	24	350	1.7W	17M3088	11.62	9.23	8.52
T92P7D32-24	DPST	24	350	1.7mW	13P0283	15.03	12.51	10.92
T92P7D52-12	DPST	12	86	1.7mW	42M3698	18.38	16.80	15.19
T92P11D22-12	DPDT	12	86	1.7W	17M3081	11.53	10.93	9.74
T92P11D22-24	DPDT	24	350	1.7W	17M3082	13.52	12.33	11.98
DC RELAYS — SEALED PANEL MOUNT								
T92S7D22-18	DPST-NO	18	197	1.7W	17M3100	14.16	12.39	11.21
T92S11D22-12	DPDT	12	86	1.7W	17M3094	11.16	10.56	9.74
T92S11D22-24	DPDT	24	350	1.7W	17M3095	12.88	10.59	9.78
T92S7D12-18	DPST	18	197	1.7W	08H5277	14.08	12.32	11.14

(3282)

COTOMOS SOLID STATE MOSFET RELAYS

RoHS Compliant Available

COTO TECHNOLOGY

- Isolation voltage: 1.5kV
- Forward current: 50mA

6-PIN DIP

Mfg. Part No.	Load Voltage Max. (V)	Load Current	On State Resis. (Ω)	Contacts	Relay Terminals	Stock No.	Price Each 1-9
CS126	40	2A	0.5	SPST-NO	SMD	89W0566	9.14
CT126	40	2A	0.5	SPST-NO	Through Hole	89W0584	9.00
CS137	60	400mA	1.6	SPST-NO	SMD	89W0571	6.17
CT137	60	400mA	1.6	SPST-NO	Through Hole	89W0590	6.05
CS136	60	2.5A	0.14	SPST-NO	SMD	87W7943	8.78
CT136	60	2.5A	0.14	SPST-NO	Through Hole	89W0589	8.98
CS135	80	100mA	30	SPST-NO	SMD	89W0570	5.82
CT135	80	100mA	30	SPST-NO	Through Hole	89W0588	4.33
CS147	80	2A	0.16	SPST-NO	SMD	89W0573	8.81
CT147	80	2A	0.16	SPST-NO	Through Hole	89W0592	8.77
CS134	200	200mA	8	SPST-NO	SMD	89W0569	6.70
CT134	200	200mA	8	SPST-NO	Through Hole	89W0587	6.57
CS131	350	130mA	24	SPST-NO	SMD	89W0568	6.60
CT131	350	130mA	24	SPST-NO	Through Hole	89W0586	6.12
CS474	400	90mA	50	SPST-NC	SMD	89W0581	7.66
CT474	400	90mA	50	SPST-NC	Through Hole	89W0600	7.53
CS130	400	120mA	30	SPST-NO	SMD	89W0567	5.76
CT130	400	120mA	30	SPST-NO	Through Hole	89W0585	4.29
CS138	600	80mA	60	SPST-NO	SMD	89W0572	6.98
CT138	600	80mA	60	SPST-NO	Through Hole	89W0591	6.85
8-PIN DIP							
CS326	40	2A	0.5	DPST-NO	SMD	89W0574	12.15
CT326	40	2A	0.5	DPST-NO	Through Hole	89W0593	13.37
CS337	60	360mA	1.6	DPST-NO	SMD	89W0579	8.88
CT337	60	360mA	1.6	DPST-NO	Through Hole	89W0598	8.68
CS335	80	80mA	30	DPST-NO	SMD	89W0578	5.69
CT335	80	80mA	30	DPST-NO	Through Hole	89W0597	5.54
CS334	200	180mA	8	DPST-NO	SMD	89W0577	7.06
CT334	200	180mA	8	DPST-NO	Through Hole	89W0596	6.91
CS331	350	110mA	24	DPST-NO	SMD	89W0576	9.06
CT331	350	110mA	24	DPST-NO	Through Hole	89W0595	8.85
CS674	400	80mA	50	DPST-NC	SMD	89W0582	8.72
CT674	400	80mA	50	DPST-NC	Through Hole	89W0601	8.57
CS330	400	100mA	30	DPST-NO	SMD	89W0575	8.47
CT330	400	100mA	30	DPST-NO	Through Hole	89W0594	5.71
CS774	400	100mA	30	SPST-NO, SPST-NC	SMD	89W0583	8.37
CT774	400	100mA	30	SPST-NO, SPST-NC	Through Hole	89W0602	8.19
CS338	600	70mA	60	DPST-NO	SMD	89W0580	7.44
CT338	600	70mA	60	DPST-NO	Through Hole	89W0599	7.64
4-PIN SOP							
C226S	40	2A	0.5	SPST-NO	SMD	89W0603	6.20
C245S	60	100mA	14	SPST-NO	SMD	89W0610	4.45
C237S	60	350mA	1.6	SPST-NO	SMD	89W0608	4.45
C235S	80	80mA	30	SPST-NO	SMD	89W0607	3.73
C247S	80	1.25A	0.5	SPST-NO	SMD	89W0611	4.36
C234S	200	180mA	8	SPST-NO	SMD	89W0606	4.58
C231S	350	120mA	24	SPST-NO	SMD	89W0605	3.80
C574S	400	70mA	50	SPST-NC	SMD	89W0621	3.43
C230S	400	100mA	30	SPST-NO	SMD	89W0604	3.80
C238S	600	70mA	60	SPST-NO	SMD	89W0609	4.12
8-PIN SOP							
C326S	40	1.6A	0.5	DPST-NO	SMD	89W0612	13.08
C345S	60	100mA	14	DPST-NO	SMD	89W0619	8.80
C337S	60	320mA	1.6	DPST-NO	SMD	89W0617	8.78
C335S	80	70mA	30	DPST-NO	SMD	89W0616	7.12
C347S	80	1A	0.5	DPST-NO	SMD	89W0620	9.37
C334S	200	160mA	8	DPST-NO	SMD	89W0615	6.94
C331S	350	100mA	24	DPST-NO	SMD	89W0614	5.58
C674S	400	60mA	50	DPST-NC	SMD	89W0622	9.23
C774S	400	80mA	30	SPST-NO, SPST-NC	SMD	89W0623	8.95
C330S	400	85mA	30	DPST-NO	SMD	89W0613	5.58
C338S	600	60mA	60	DPST-NO	SMD	89W0618	7.28

(210159)

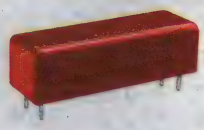
REED RELAYS

2270 SERIES REED RELAYS

NEW

features:
- Very small footprint (0.17 in2), high reliability reed relays
- High Insulation Resistance - 1012 Ω available with model 2274
- Long Life/High Reliability
- Hermetically sealed contacts for long life
- Epoxy coated steel shell provides magnetic shielding
- 125##UndefTag-786##C Operating Temperature
- Specifically engineered for OEM designs and maintenance of existing production fixtures

Specifications:
- Switching Current Max: 250 mA
- Relay Mounting: Through Hole

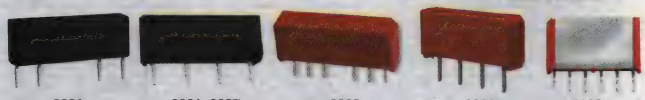


Mfg. Part No.	Coil Voltage (VDC)	Contacts	Coil Resist. (Ω)	Stock No.	Price Each 1-24
2271-05-001	5	SPDT	100	95W5120	18.11
2271-12-001	12	SPDT	550	96W6624	18.11
2274-05-021	5	SPST-NO	100	96W6626	12.24
2370 SERIES MULTI-POLE REED RELAYS					
2372-05-000	5	DPDT	90	96W6627	41.48
2372-12-000	12	DPDT	500	96W6629	39.88
2373-05-000	5	3PST	90	96W6630	14.95
2373-12-000	12	3PST	500	96W6632	14.95
2377-05-020	5	DPST-NO	90	96W6633	14.05
2377-12-020	12	DPST-NO	500	96W6635	14.05

(211298)

MOLDED SIP REED RELAYS

RoHS Compliant Available



9081 9001, 9007 9002 9091 9092

Series	Outside Package Dimensions in inches (mm)
9081	.890(22.60)L x .295(7.50)W x .315(8.00)H
9001, 9002, 9007	.760(19.34)L x .200(5.08)W x .300(7.62)H
9091	.600(15.24)L x .275(6.99)W x .150(3.81)H
9092	.600(15.24)L x .150(3.81)W x .350(8.89)H

- Contact carrying power: 10W
- Switching current: 0.5A
- Switching voltage: 200VAC
- Operating temperature: -20°C to +85°C

9001 series is engineered for low-level switching. **9002 series** is ideal for 50-ohm transmission line switching as found in automatic test equipment, instrumentation, RF, telecommunications, and other applications. Designed for mounting on 0.2″ (5.08) centers and automatic insertion using SIP equipment. Rugged, epoxy-molded, lead frame package is impervious to cleaning fluids and enables use in harsh, industrial environments. **-01 suffix** denotes internal diode option. Relays with a magnetic shield coil suppression diode are also available. **9091** and **9092 series** relays feature similar functional characteristics as **9001 series**, but require only 40% of the board area.

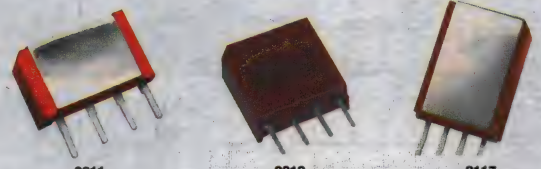
SPST

Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (Ω)	Must Operate/ Must Release Volt. (VDC)	Carry Current (A)	Stock No.	Price Each 1-9	Price Each 10-49
● 9001-05-00	5	500	3.75/0.4	1.5	62K1742	4.97	4.21
● 9001-05-01	5	500	3.75/0.4	1.5	62K1743	5.22	4.43
● 9001-05-02	5	500	8.75/0.4	1.5	62K1744	8.53	7.24
● 9001-12-00	12	1 kohm	9.1/1.0	1.5	62K1745	4.97	4.21
● 9001-12-01	12	1 kohm	9.1/1.0	1.5	62K1746	5.86	4.97
● 9002-05-00	5	350	3.75/0.4	1.5	62K1751	6.90	5.85
● 9002-05-01	5	350	3.75/0.4	1.5	62K1752	7.12	6.04
● 9002-12-01	12	750	9.1/1.0	1.5	62K1754	7.12	6.04
● 9007-05-00	5	500	3.75/0.4	1.0	62K1784	1.76	1.49
● 9007-05-01	5	500	3.75/0.4	1.0	62K1785	1.95	1.66
● 9007-12-00	12	1 kohm	9.1/1.0	1.0	62K1786	1.74	1.48
● 9007-12-01	12	1 kohm	9.1/1.0	1.0	62K1787	2.18	1.85
● 9081-24-10*	24	2 kohm	18/2.0	1.0	35K3120	4.63	3.92
● 9091-05-00	5	500	3.75/0.4	1.5	92F3372	5.30	4.49
● 9091-05-01	5	500	3.75/0.4	1.5	04C5189	6.21	5.26
● 9091-12-01*	12	1 kohm	9.0/1.0	1.5	96B2987	6.08	5.15
DPST							
● 9092-05-11	5	375	3.75/0.4	1.2	54K3729	12.27	10.61

* Magnetic shield
(3690)

MICRO-MINIATURE MOLDED SIP RELAYS

RoHS Compliant Available



9011 9012 9117

Series	Outside Package Dimensions in inches (mm)
9011	.400(10.16)L x .150(3.81)W x .265(6.73)H
9012	.400(10.16)L x .150(3.81)W x .400(10.16)H
9117	.275(6.85)L x .150(3.81)W x .385(9.77)H

- Hermetically sealed contacts for long life
- Magnetic shielding reduces interaction
- Optional coil suppression diode protects coil drive circuits
- High-speed switching
- High insulation resistance: $10^{12}\Omega$ Minimum ($10^{13}\Omega$ Typical)
- Molded thermoset body on integral lead frame design

Operating temperature: -20°C to +85°C. UL/cUL listed; File No. E67117.

3W 4-PIN SIP

Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (Ω)	Switching Voltage (VDC)	Switching Current (A)	Carry Current (A)	Stock No.	Price Each 1-9	Price Each 10-49
● 9011-05-10	5	500	100	0.25	0.5	31C8189	11.58	9.81
● 9011-05-11	5	500	100	0.25	0.5	39C3312	11.20	9.50
● 9011-12-11	12	750	100	0.25	0.5	39C3314	7.93	6.86
10W 4-PIN SIP								
● 9012-05-10	5	500	200	0.50	1.5	35K3115	10.17	8.62
● 9012-05-11	5	500	200	0.50	1.5	39C5427	9.31	7.88
● 9012-12-10	12	750	200	0.50	1.5	35K3116	10.17	8.62
● 9012-12-11	12	750	200	0.50	1.5	36K7758	9.13	7.73
3W 4-PIN SIP (NARROW PACKAGE)								
● 9117-05-11	5	400	100	0.25	0.5	20J6550	14.03	12.14

(68327)

SURFACE MOUNT REED RELAYS

RoHS Compliant Available

- Carry current: 0.5A
- Contact power: 3 W
- High reliability, hermetically sealed contacts for long life
- High insulation resistance: 10^{12} Ω minimum
- Coaxial shield for 50 Ω impedance
- 6.5 GHz bandwidth for RF and pulse switching
- External magnetic shield
- Available in axial, gull wing and J-lead configurations

Outside dimensions: 0.313″ (7.94mm)W x 0.142″ (3.60mm)H x 0.195″ (4.95mm)D.

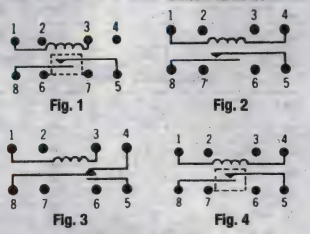
Type	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99
● 9903-05-20	SPST-NO	5	150	60M3627	13.69	11.84	10.00

(102129)

MICROMINIATURE REED RELAYS

RoHS Compliant Available

- Hermetically sealed contacts for long life
- Epoxy coated steel shell provides magnetic shielding
- Operating temperature: -20°C to +85°C



Microminiature reed relays occupy 0.17″ (4.32) square of PC board space and provide improved system to lock-in terminal pins. **2200-2301** and **-2302 series** are engineered to meet automatic test equipment specifications. Capable of 5ms must-operate time, 500 x 10^6 life expectancy. **2200-2301 & -2302 series** operate voltage: 3.6VDC; release voltage: 0.5VDC. **2204 & 2211 series** (5V version) operate voltage: 3.8VDC; release voltage: 0.4VDC. **2204 & 2211 series** (12V version) operate voltage: 9.0VDC; release voltage: 1.0VDC. Outside package dimensions in inches: .810L x .210W x .225H.

CONTINUED

MICROMINIATURE REED RELAYS (CONT.)

COAXIAL SHIELD

Mfg. Part No.	Fig.	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Contact Power (W)	Stock No.	Price Each 1-9	10-49	50-99
2200-2302	1	SPST-NO	5	150	10	36K3835	11.69	10.10	8.52
ELECTROSTATIC SHIELD									
2200-2301	4	SPST-NO	5	150	10	50F4926	11.85	10.24	8.63
2204-12-311	2	SPST-NO	12	1.5 kohm	10	62K0528	11.22	9.70	8.18
UNSHIELDED									
2211 05 301	3	SPDT	5	230	3	67K1586	18.84	16.28	13.75
2211-12-301	3	SPDT	12	1.5 kohm	3	36K2113	17.29	14.95	12.61

(3686)

MULTIPOLE MICROMINIATURE REED RELAYS

RoHS Compliant Available

TOTO TECHNOLOGY

2300 series relays occupy 0.17" (4.32) of PC board space – yet their additional height allows for SPDT, 3PST and DPDT. Operating temperature: -20°C to +85°C. Carrying current: 1.5A for **2332, 2333**, and **2341 series**; 0.5A for **2342 series**. Switching current: 0.5A for **2332, 2333**, and **2341 series**; 0.25A for **series 2342**. Must operate/Must release voltages: 3.8/0.4VDC for 5V relays; 9.0/1.0VDC for 12V relays. Outside package dimensions in inches(mm): .810(20.57)L x .210(5.30)W x 370(9.40)H. Contacts are hermetically sealed. Relays with electrostatic shield also available; specify **suffix -010** in mfg. part no.; *go online or call.*

UNSHIELDED

Mfg. Part No.	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Switching Voltage (VDC)	Contact Power (W)	Stock No.	Price Each 1-9	10-49
2341-05-000	SPDT	5	230	200	10	62K0569	15.37	13.28
2341-12-000	SPDT	12	1 kohm	200	10	95F1437	15.22	13.16
2332-05-000	DPST-NO	5	175	200	10	62K0562	11.03	9.53
2332-12-000	DPST-NO	12	1 kohm	200	10	62K0564	11.03	9.53
2342-05-000	DPDT	5	175	100	3	64K1822	18.93	16.38
2342-12-000	DPDT	12	1 kohm	100	3	95F1439	18.58	16.07
2333-05-000	3PST-NO	5	175	200	10	62K0565	13.49	11.66
2333-12-000	3PST-NO	12	1 kohm	200	10	62K0566	12.00	10.38
COAXIAL SHIELD								
2341-05-020	SPDT	5	230	200	10	90B3370	14.73	12.74

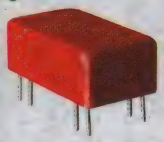
(3760)

MICROMINIATURE REED RELAYS

RoHS Compliant Available

TOTO TECHNOLOGY

- 0.20" board space
- Hermetically sealed contacts
- Epoxy coated steel shell for magnetic shielding
- Insulation resistance up to $10^{12}\Omega$
- Contact power: 3W



5V relays have 3.8VDC must operate voltage, 0.4VDC must release voltage. 12V relays have 9.0VDC must operate voltage, 1.0VDC must release voltage. **2904 series**: switching voltage: 200V, carrying current: 1.5A. **2911 series**: switching voltage: 150V, carrying current: 1.0A. Operating temperature: -20°C to +85°C. Outsided package dimensions in inches: .820L x .280W x .280H. Leads extend .125".

UNSHIELDED

Mfg. Part No.	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Stock No.	Price Each 1-9	10-49	50-99
2911-05-301	SPDT	5	230	62K0659	15.39	13.54	11.75
COAXIAL SHIELD							
2911-05-321	SPDT	5	230	62K0661	16.66	14.66	12.72
2911-12-321	SPDT	12	1.5 kohm	67K1689	14.92	13.12	11.39
ELECTROSTATIC SHIELD							
2904-12-311	SPST-NO	12	1.5 kohm	62K0657	10.31	9.07	7.87
2911-05-311	SPDT	5	230	62K0660	16.26	14.30	12.41
2911-12-311	SPDT	12	1.5 kohm	62K0664	15.84	13.93	12.09

(3687)

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Affordable, performance board level & box build components at

newark.com/multicomp

(212569)

SPARTAN DIP REED RELAYS

RoHS Compliant Available

TOTO TECHNOLOGY

- Utilize industry standard 14-pin molded DIP package
- Operating temp.: -20°C to +85°C

Switching voltages: **8L01** and **8L02 series** are 200V; **8L41 series** is 100V. Outside package dimensions in inches (mm): 0.750 (19.05)L x 0.260 (6.60)H.

ELECTROSTATIC SHIELD—W/COIL SUPPRESSION DIODE

Mfg. Part No.	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Contact Power (W)	Stock No.	Price Each 1-9	10-49
8L01-05-111	SPST-NO	5	500	10	62K1261	3.93	3.33
8L01-24-111	SPST-NO	24	2.15 kohm	10	62K1267	3.93	3.33
8L41-05-111	SPDT	5	200	3	65K1146	10.37	8.79
8L02-05-11	DPST-NO	5	200	10	62K1270	6.63	5.62
8L02-24-11	DPST-NO	24	2 kohm	10	62K1278	6.39	5.42
ELECTROSTATIC SHIELD—NO DIODE							
8L01-05-101	SPST-NO	5	500	10	31C0646	3.60	3.05
8L41-05-101	SPDT	5	200	3	65K1145	9.51	8.06
8L02-24-10	DPST-NO	24	2 kohm	10	62K1277	5.99	5.07
UNSHIELDED—W/COIL SUPPRESSION DIODE							
8L01-05-011	SPST-NO	5	500	10	62K1260	3.80	3.22
8L01-24-011	SPST-NO	24	2.15 kohm	10	62K1265	3.60	3.05
8L41-05-011	SPDT	5	200	3	65K1144	9.51	8.06
8L41-12-011	SPDT	12	500	3	65K1148	9.99	8.46
8L41-24-011	SPDT	24	2 kohm	3	83F4356	10.25	8.68
8L02-05-01	DPST-NO	5	200	10	62K1268	6.10	5.17
8L02-24-01	DPST-NO	24	2 kohm	10	62K1276	6.29	5.32
UNSHIELDED—NO DIODE							
8L01-05-001	SPST-NO	5	500	10	62K1259	3.51	2.97
8L01-12-001	SPST-NO	12	500	10	63K8478	3.44	2.92
8L01-24-001	SPST-NO	24	2.15 kohm	10	62K1264	3.31	2.80
8L41-12-001	SPDT	12	500	3	65K1147	9.64	8.17
8L02-05-00	DPST-NO	5	200	10	67K2324	5.86	4.97
8L02-12-00	DPST-NO	12	500	10	62K1271	5.79	4.91
8L02-24-00	DPST-NO	24	2 kohm	10	62K1275	5.86	4.97

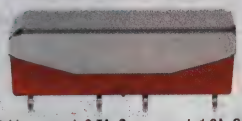
(13155)

HIGH-VOLTAGE SIP REED RELAY

RoHS Compliant Available

TOTO TECHNOLOGY

- High voltage switching up to 1000V
- High dielectric strength (2000VDC)
- High insulation resistance: $10^{11}\Omega$ min.
- High reliability, hermetically sealed contacts for long life
- High-speed switching compared to electromechanical relay
- Molded thermoset body on integral lead frame design
- Optional coil suppression diode - protects coil drive circuit
- Magnetic shield - reduces interaction



9104 series relays are 4-pin molded SIP. SPST-NO contacts. Switching current: 0.5A. Carry current: 1.3A. Contact power: 10W. Operating temperature: -20°C to 85°C. Outside package dimensions in inches (mm): .950(24.13)L x .245(6.22)W x .320(8.13)H.

NO DIODE

Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. Ω	Must Operate/ Must Release Voltage (VDC)	Stock No.	Price Each 1-9	10-49	50-99	100-249
9104-05-10	5	175	3.75/0.5	27K4212	13.70	11.86	10.01	8.69
9104-12-10	12	500	9.0/1.0	62K2056	13.03	11.26	9.50	8.26
w/COIL SUPPRESSION DIODE								
9104-05-11	5	175	3.75/0.5	62K2055	13.65	11.81	9.96	8.65
9104-12-11	12	500	9.0/1.0	27K4215	13.85	11.97	10.10	8.78

(84551)

S SERIES HIGH-VOLTAGE REED RELAYS

RoHS Compliant Available

cynergy3 components

- Designed specifically for high voltage
- Rhodium contacts for low resistance
- Contact form: SPST-NO
- 5kV isolation between contacts
- Max. switching power: 10W
- Max. switching voltage: 20V
- Max. switching current: 0.5A
- Max. carry current: 2A

The S series was developed for the high voltage ATE market, where printed circuit board (PCB) space is at a premium, the S series high voltage reed relay offers a 3 or 5* kV isolation performance in a 30mm size package. With low contact resistance, the S series is suitable for many high voltage applications at DC and low frequency, where performance and reliability are paramount.

➤ CONTINUED ➤

S SERIES HIGH-VOLTAGE REED RELAYS (CONT.)

Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (Ω)	Must Operate (V)	Must Release (V)	Isolation Voltage (kV)	Stock No.	Price Each 1-4
● SAR90503	5	140	3.7	0.5	3	99B1541	29.66
● SAR91205	12	600	9	125	5	89C7906	32.75
SAR92403	24	1000	20	3	3	99B1542	29.66

(133297)

HIGH-VOLTAGE REED RELAYS

RoHS Compliant Available

cynergy3 components

Flying Leads

PC Board Mount

PC Board Mount Spade Terminals

- 10kV or 15kV isolation
- Low contact resistance
- Switching power up to 50W 7kV

- PC board mount or Flying leads
- Contact material: Tungsten
- Excellent AC characteristics

D series relay is suitable for high reliability applications such as cardiac defibrillators, test equipment and high voltage power supplies. Low resistance rhodium contact option available; *go online or call.*

Mfg. Part No.	Contacts	Coil Voltage (VDC)	Coil Resist. (mΩ)	Stock No.	Price Each 1-4	5-14	15-24	25-49
10kV ISOLATION VOLTAGE - FLYING LEADS								
● DBT72410F	SPST-NC	24	350	89C4351	63.46	60.49	58.71	55.75
● DAT71210F	SPST-NO	12	150	89C4323	57.51	54.82	53.21	50.52
● DAT72410F	SPST-NO	24	780	89C4329	54.25	51.72	50.20	47.66
10kV ISOLATION VOLTAGE - PC BOARD MOUNT								
● DBT72410	SPST-NC	24	925	91F5756	56.58	53.93	52.35	49.70
● DAT70510	SPST-NO	5	28	18M2003	46.27	44.11	42.81	40.65
● DAR71210	SPST-NO	12	50	92F4680	41.88	39.93	38.75	36.80
● DAT71210	SPST-NO	12	150	92F4682	46.27	44.11	42.81	40.65
● DAR72410	SPST-NO	24	50	91F9752	44.39	42.33	41.08	39.01
● DAT72410	SPST-NO	24	780	91F9751	47.08	44.88	43.56	41.36
15kV ISOLATION VOLTAGE - PC BOARD MOUNT								
● DAT72415	SPST-NO	24	350	99B1225	68.17	64.99	63.07	59.89
10kV ISOLATION VOLTAGE - PC BOARD MOUNT SPADE TERMINALS								
● DAT71210S	SPST-NO	12	150	50M7785	54.25	51.72	50.20	47.66
● DAT72410S	SPST-NO	24	150	50M7787	57.51	54.82	53.21	50.52

(12931)

RF REED RELAYS MINIATURE SCREENED, OPEN FRAME 4 SERIES

RoHS Compliant Available

cynergy3 components

Features

- A highly flexible, low cost package for RF applications in the 1-30MHz band
- The use of vacuum reed switches with rhodium contacts offers high isolation voltages
- Low contact resistance and long operating lifetime
- Available as Form A (SPNO), Form B (SPNC) or latching (bistable) contact configurations with switch connections via either PCB or flying lead

Specifications

- 3.5A RF at 1-30MHz
- 3.5kV isolation
- Contacts Form A, B or latching
- Long lifetime

Mfg. Part No.	Contacts	Coil Resist (ohms)	Coil Voltage (VDC)	Stock No.	Price Each 1-9
● SAR405SD	SPST-NO	70	5	97J7502	35.64
● SAR405SU	SPST-NO	70	5	83R7607	35.64
● SAR412SD	SPST-NO	380	12	97J7503	35.64
● SAR412SU	SPST-NO	380	12	83R7608	35.64
● SAR424SD	SPST-NO	1.5 kohm	24	97J7504	35.64
● SAR424SU	SPST-NO	1.5 kohm	24	83R7609	35.64
● SBR405SD	SPST-NC	65	5	97J7508	46.82
● SBR412SD	SPST-NC	350	12	97J7509	46.82
● SBR424SD	SPST-NC	1.2	24	97J7510	46.82
● SLR405SD	SPST-NC, SPST-NO	188	5	97J7608	47.58
● SLR412SD	SPST-NC, SPST-NO	500	12	97J7609	47.58
● SLR424SD	SPST-NC, SPST-NO	....	24	97J7610	43.16

(188941)

RF REED RELAY SCREENED FRD12000 SERIES

RoHS Compliant Available

cynergy3 components

Features

- Used many HF radio system specifications, with applications in commercial maritime (GMDSS)
- The use of vacuum reed switches with rhodium contacts offers high isolation voltages, low contact resistance and long operating lifetime
- Available as Form A (SPNO) or Form B (SPNC) contact configurations

Specifications

- Up to 8kVDC Isolation between Contacts
- 6A Carry Current (up to 30MHz)
- Excellent RF Performance
- Ideal for Antenna Tuning Units
- Form A/B Contact Configuration

Mfg. Part No.	Contacts	Coil Resist (ohms)	Coil Voltage (VDC)	Stock No.	Price Each 1-9
● FRD12014	SPST-NO	340	12	89C5073	42.85
● FRD12015	SPST-NO	1 kohm	24	99B1310	44.88
● FRD12021	SPST-NC	380	12	99B1313	55.93
● FRD12049	SPST-NC	1.5 kohm	24	99B1315	49.36

(188937)

REED RELAYS

RoHS Compliant Available

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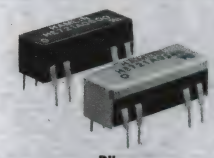

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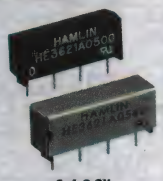
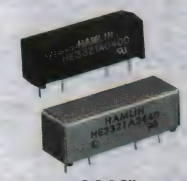


2-4-2 SIL



2-2-2 SIL

Relays are molded construction and compatible with automatic insertion and board washing. All contacts are run-in one million operations prior to testing. Operating temperature: -40°C to +85°C. Immune to 50G shock and 20G vibration. 10-2000Hz. Maximum contact resistance: 200 milliohms. Other voltages are also available. **721, 3321**, and **3621 series** reed relays are also available in a form B (normally closed) configuration in both 5-volt and 12-volt coil versions. Form B 24-volt coil not available on **3621 series.** All of the **721, 3321** and **3621 series** reed relays are available with an external magnetic shield; *go online or call.*

DIL PACKAGE

Mfg. Part No.	Contacts	Coil VDC	Coil Res. (Ω)	Power (W)	Carry Current (A)	Diode	Stock No.	Price Each 1-9	10-24
● HE721A0500	SPST-NO	5	500	10	1.2	No	28F2022	1.44	1.31
HE751A0510	SPST-NO	5	500	10	1.2	Yes	97K1327	3.33	3.01
● HE721A0510	SPST-NO	5	500	10	1.2	Yes	44F7456	1.55	1.41
● HE721A1200	SPST-NO	12	1 k	10	1.2	No	28F2023	1.43	1.30
● HE721A1210	SPST-NO	12	1 k	10	1.2	Yes	44F7457	1.83	1.66
● HE721A2410	SPST-NO	24	2.15 k	10	1.2	Yes	46F3897	1.97	1.79
● HE722A0500	DPST-NO	5	200	10	1.2	No	44F7461	3.15	2.86
● HE722A0510	DPST-NO	5	200	10	1.2	Yes	44F7462	3.32	3.02
● HE722A1200	DPST-NO	12	500	10	1.2	No	44F7463	3.12	2.83
● HE722A1210	DPST-NO	12	500	10	1.2	Yes	44F7464	3.25	2.96
● HE722A2400	DPST-NO	24	2.15 k	10	1.2	No	05M4145	3.54	3.30
● HE722A2410	DPST-NO	24	2.15 k	10	1.2	Yes	44F7466	3.50	3.26
● HE721C0500	SPDT	5	200	5	1.5	No	05M4141	3.32	3.10
● HE721C0510	SPDT	5	200	5	1.5	Yes	10M5193	3.49	3.25
● HE721C0530*	SPDT	5	200	5	1.5	Yes	05M4142	6.44	6.00
● HE721E0510	SPDT	5	200	5	1.5	YES	97K1321	8.67	7.84
HE721R0510	SPDT	5	200	5	1.5	Yes	97K1323	11.94	10.79
● HE721C1200	SPDT	12	500	5	1.5	No	05M4143	4.17	3.88
● HE721C1210	SPDT	12	500	5	1.5	Yes	44F7459	4.35	4.05
● HE721C2400	SPDT	24	2 k	5	1.5	No	05M4144	3.40	3.17
● HE721C2410	SPDT	24	2 k	5	1.5	Yes	44F7460	3.46	3.22
2-2-2 SIL PACKAGE									
● HE3321C0500	SPDT	5	125	5	1.5	No	05M4136	3.28	3.06
● HE3321C2400	SPDT	24	2 k	5	1.5	No	10M5192	4.47	4.16
● HE3321A0400	SPST-NO	5	500	10	1.2	No	28F2010	1.59	1.45
● HE3321A1200	SPST-NO	12	500	10	1.2	No	28F2011	3.16	2.87
● HE3321A2400	SPST-NO	24	2 k	10	1.2	No	28F2012	2.31	2.10
2-4-2 SIL PACKAGE									
● HE3621A0500	SPST-NO	5	500	10	1.2	No	87F1417	1.42	1.29
● HE3621A0510	SPST-NO	5	500	10	1.2	Yes	05M4138	1.52	1.39
● HE3621A1210	SPST-NO	12	1 k	10	1.2	Yes	05M4139	1.72	1.56
● HE3621A2410	SPST-NO	24	2.15	10	1.2	Yes	50F7993	2.41	2.19

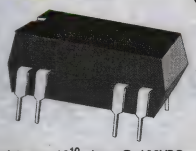
* Coil Diode and E.S. Shield

(3280)

SIP AND DIP DRY REED RELAYS

RoHS Compliant Available

Schneider Electric



- 8-Pin DIP or 4-Pin SIP Packages
- Contact rating: 0.5 A, except for W172: 0.25A
- Single, Double and 4-pole contact configurations
- Coil voltage: 5-24V

Contact resistance: 200 milliohms typical. Insulation resistance: 10^{10} ohms @ 100VDC minimum. Dielectric withstanding voltage between contacts 200VDC minimum, between coil and contacts 1000VDC minimum. Shock: 100 G's, 11 mS @ ½ sinewave. Vibration: 20 G's, 0 - 5000Hz operating. Ambient temperature: –15°C to 85°C.

Specifications		SPST-NO, SPST-NC	DPST-NO	SPDT	DPDT
Max. Switching Rating	Volt Amperes	10	10	4	10
	Voltage DC	100	100	100	100
	Current (A)	0.5	0.5	0.25	0.5
Max. Carry Current (A)		1.5	1.5	0.5	1.0

8-PIN DIP PACKAGE–W/CLAMPING DIODE

Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (Ω)	Contacts	Stock No.	Price Each 1-24	Price Each 25-49
W107DIP-5	5	500	SPST-NO	10M6254	3.83	3.53
W107DIP-7	12	1 k	SPST-NO	10M6255	6.06	5.59
W171DIP-25	5	500	DPST-NO	10M6270	8.17	7.67
W171DIP-17	5	500	SPST-NC	10M6264	11.42	10.72
W171DIP-7	5	500	SPST-NO	10M6275	3.53	3.24
W171DIP-27	12	1 k	DPST-NO	10M6271	8.30	7.65
W171DIP-10	24	2.2 k	SPST-NO	16M1407	5.96	5.58
W171DIP-28	24	2.2 k	DPST-NO	10M6272	6.71	6.19
W172DIP-147	5	200	SPDT	10M6278	10.71	9.86
W172DIP-5	5	200	SPDT	10M6290	8.65	7.97
W172DIP-7	12	500	SPDT	10M6291	9.34	8.61
W172DIP-149	12	1 k	SPDT	10M6279	14.37	13.24
W172DIP-8	24	2.2 k	SPDT	10M6292	11.81	10.88
W172DIP-150	24	3.2 k	SPDT	10M6280	10.96	10.10
8-PIN DIP PACKAGE–NO DIODE						
W107DIP-3	12	1 k	SPST-NO	10M6252	7.65	7.05
W171DIP-21	5	500	DPST-NO	10M6267	7.99	7.50
W171DIP-2	5	500	SPST-NO	10M6266	5.49	5.15
W171DIP-14	12	1.2 k	SPST-NC	10M6263	8.28	7.77
W172DIP-1	5	200	SPDT	10M6277	8.53	7.87
W172DIP-31	5	200	SPDT	10M6286	10.71	9.86
W172DIP-3	12	500	SPDT	10M6285	15.87	14.62
4-PIN SIP PACKAGE–W/CLAMPING DIODE						
W117SIP-6	5	500	SPST-NO	10M6260	4.78	4.48
W117SIP-18	5	500	SPST-NC	10M6258	7.28	6.82
4-PIN SIP PACKAGE–NO DIODE						
W117SIP-1	5	500	SPST-NO	10M6257	8.13	7.62

(4062)

HIGH-VOLTAGE RELAYS

STRUTHERS-DUNN

- 102V switches up to 5KV / 10mA
- 102HV switches up to 10KV / 5mA
- Fully enclosed
- Ideal for medical or hipot applications
- Tungsten contacts
- Dielectric 6000 Volts (V) / 12000 Volts (HV)

102V series = 50VA max switching load, 10mA max current, 5000 max voltage.
102 HV series= 50VA max switching load, 5mA max current, 10000 max voltage.

5KV SWITCHING

Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (Ω)	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-24	Price Each 25-49
W102VX-50	12	250	56F1031	174.58	163.99	157.83	124.32
W102VX-51	24	1000	56F1032	173.35	162.85	156.73	123.45

(3997)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

(212570)

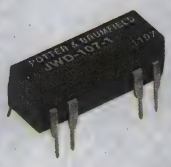
P&B DIP AND SIP DRY REED RELAYS

RoHS Compliant Available

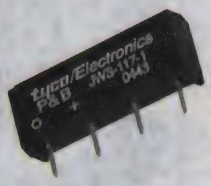
TE connectivity

Authorized Distributor

JWD series DIP units and **JWS series** SIP units are designed to accommodate automatic component insertion and permit high density packaging of components on printed circuit boards. Contact material: ruthenium. Mounted height is only 0.315″ (8.00), allowing PC board spacing on 0.500″ (12.70) centers. Molded epoxy package with terminals on 0.100″ (2.54) centers compatible with automatic wave soldering. Can be immersion or spray cleaned. Operating temperature range: –35°C to +85°C.



DIP



SIP

Mfg. Part No.	Coil Voltage (VDC)	Coil Resist. (Ω)	Max. Pick-Up Voltage (VDC)	Diode	Stock No.	Price Each 1-9	Price Each 10-24
DIP SPST-NO, 10W, 0.5A, 100VDC							
JWD-107-1	6	500	3.8	N	81F9286	5.36	4.87
JWD-107-5	6	500	3.8	Y	81F9287	7.70	6.75
JWD-107-3	12	1.2 k	9.6	N	81F9288	6.47	5.55
JWD-107-7	12	1.2 k	9.6	Y	81F9289	6.62	6.27
JWD-171-5	24	2.15 k	19.2	N	81F9290	10.67	10.33
SIP SPST-NO, 10W 0.5A, 100VDC							
JWS-117-1	5	500	3.8	N	46F3511	7.02	6.55
DIP DPST-NO, 10W, 0.5A, 100VDC							
JWD-171-25	6	200	3.8	Y	81F9293	10.18	9.00
JWD-171-27	12	500	9.6	Y	81F9295	11.83	10.38
JWD-171-28	24	2.2 k	19.2	Y	81F9297	12.07	10.31
DIP SPST-NC, 10W, 0.5A, 100VDC							
DIP SPDT, 3W, 0.5A, 28VDC							
JWD-172-1	6	200	3.8	N	81F9304	8.19	7.17
JWD-172-5	6	200	3.8	Y	81F9305	10.85	9.31
JWD-172-3	12	500	9.6	N	81F9306	12.15	10.65
JWD-172-4	24	2.2 k	19.2	N	81F9308	12.74	11.13
JWD-172-8	24	2.2 k	19.2	Y	81F9309	11.58	11.20

(3287)

KILOVAC 8A - 25A POWER RELAYS

TE connectivity

Authorized Distributor

- SPDT contacts
- Coil voltage: 26.5VDC
- Max. isolation voltage: 8000VDC

HC-1 and HC-3

HC-1 and HC-3 series relays have contacts sealed in a vacuum. **HC-1** relays are widely used in RF applications. Their copper contacts are not designed for load switching. **HC-3 series** relays have tungsten contacts, switch low current loads. **HC-5 series** relays have contacts sealed in SF-6 gas for make-only power switching in capacitive discharge applications. **HC-2 and HC-4 series** relays have contacts sealed in a vacuum and meet requirements of MIL-R-83725. **HC-2** has copper contacts not designed for load switching. **HC-4** relays have tungsten contacts, switch low level loads. **HC-6** series relays have contacts sealed in SF-6 gas for make only power switching in capacitive discharge applications. Each has a 0.5625″-32 threaded base with hex nut and lockwasher for mounting.

Mfg. Part No.	Max. Carry Current (A)	Power Switch	Switch Voltage (kV)	Stock No.	Price Each 1-4
HC-2	25	Carry Only	8	09J3881	533.01
HC-3	18	Make & Break	3.5	09J3882	451.03
HC-4	15	Make & Break	8	09J3883	556.10

(83662)

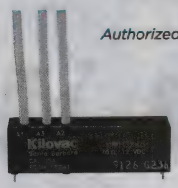
KILOVAC 5A - 30A POWER RELAYS

TE connectivity

Authorized Distributor

- Power switch: make & break
- Max isolation voltage: 12-10,000VDC
- Vacuum-sealed contacts for low-current load switching

K81B



K81C

K81 series relays switch up to 10kV. Carry current varies by model. Mfg. part no. ending in "57" is a panel mount relay with stud terminals; "35" designates PC board mount with only PC terminals; and "45" is PC board mount with flying leads for load connections.

➤CONTINUED➤

KILOVAC 5A - 30A POWER RELAYS (CONT.)

Mfg. Part No.	Max. Carry Current (A)	Contact Arrangement	Coil Voltage (VDC)	Stock No.	Price Each 1-2	3-4	5-9
K81A235	5	SPST-NO	12	09J3900	331.51	303.65	...
K81B235	5	SPST-NC	12	09J3902	372.95	345.59	...
K81C235	5	SPDT	12	09J3904	407.06	392.19	386.58
K81C335	10	SPDT	26.5	09J3906	367.91	333.81	...
K64C841	10	SPST-NC	26.5	25T0277	3101.23	...	...
K81AB57	30	SPST-NO	26.5	09J3899	406.13	394.02	377.13
K81A345	30	SPST-NO	26.5	09J3901	406.13	394.01	377.12
K81B245	30	SPST-NC	26.5	09J3903	390.32	378.67	362.44
K81C245	30	SPDT	12	09J3905	407.06	392.19	386.58

(83667)

SAFETY RELAYS

RoHS Compliant Available

CROUZET AUTOMATION

- Emergency stop" & "Gate monitoring" functions
- Single channel operation
- Security with redundancy and feedback circuit
- 3 "NO" security contacts
- 1 "NC" monitoring contact
- Security category 3 (according to EN 954-1)
- Performance Level (PL) d, safety category 3 to EN ISO 13849-1
- SIL Claimed Level (SIL CL) 2 to IEC/EN 62061
- Terminals : fixed screw terminals or plugin cage clamp terminals

Mfg. Part No.	Coil Voltage	Contacts	Terminals	Stock No.	Price Each 1-14
EMERGENCY STOP MODULE WITH WITH 1 CHANNEL - 22.5MM -KNA(C)-3YS					
● 85102031	24VDC	3PST-2NO, SPST-NC	Screws	24W9375	221.91
● 85102034	110VAC	3PST-2NO, SPST-NC	Screws	55W2106	375.27
● 85102035	230VAC	3PST-2NO, SPST-NC	Screws	55W2107	375.27
● 85103031	24	3PST-2NO, SPST-NC	Clamps	55W2119	362.97
● 85103034	110VAC	3PST-2NO, SPST-NC	Clamps	55W2120	420.61
● 85103035	230VAC	3PST-2NO, SPST-NC	Clamps	55W2121	420.61
EMERGENCY STOP MODULES WITH 1 OR 2 CHANNELS (22.5 MM) - KNE (C)3-YS					
● 85102434	115VAC	3PST-2NO, SPST-NC	Screws	55W2110	420.07
● 85102435	230VAC	3PST-2NO, SPST-NC	Screws	55W2111	420.07
● 85102436	24VAC	3PST-2NO, SPST-NC	Screws	55W2112	357.68
● 85103436	24VAC	3PST-2NO, SPST-NC	Clamps	55W2122	420.61
EXTENSION MODULE (22.5 MM) - KZE5-YS					
● 85102954	115VAC	5PST-NO	Screws	55W2116	355.76
● 85102955	240VAC	5PST-NO	Screws	55W2117	355.76
● 85102956	24VAC	5PST-NO	Screws	55W2118	310.83
STANDSTILL MONITOR (45 MM) - KSW3-JS					
● 85102331	24VDC	3PST-2NO, SPST-NC	Screws	55W2109	1100.70
TWO-HAND SAFETY RELAYS (22.5 MM) - KZH2-YS & KZH3-YS					
● 85102621	24VDC	DPST-NO	Screws	55W2113	353.25
● 85102631	24VDC	3PST-NO, SPST-NC	Screws	55W2114	353.25
● 85102632	24VAC	3PST-NO, SPST-NC	Screws	55W2115	353.25

POWER SUPPLY AC / DC to DC 24 V (22.5 MM) - KPS0-YS

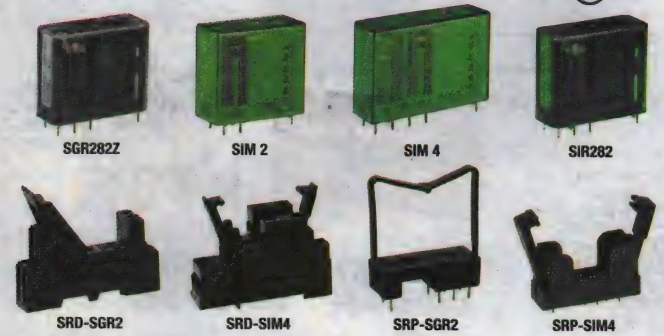
Mfg. Part No.	Input Voltage	Output Current	Output Power Max	Stock No.	Price Each 1-4
● 85102208	85V to 265V		4.8	55W2112	357.68

(209437)

SAFETY PC BOARD RELAYS

RoHS Compliant Available

ELESTA relays



SGR282Z SIM 2 SIM 4 SIR282

SRD-SGR2 SRD-SIM4 SRP-SGR2 SRP-SIM4

- Force-guided contacts
- Max. switching voltage: 250VAC
- Meet European safety standard EN50205

➤CONTINUED➤

SAFETY PC BOARD RELAYS (CONT.)

Mfg. Part No.	Package	Contacts	Coil Voltage (VDC)	Coil Resist. (Ohms)	Current Rating (A)	Stock No.	Price Each 1-9
● SGR282Z 12VDC	SGR282Z	DPDT	12	140	6	30M9885	19.47
● SGR282Z 24VDC	SGR282Z	DPDT	24	720	6	30M9886	20.20
● SIM112 12VDC	SIM 2	SPST-NO, SPST-NC	12	270	8	30M9893	21.77
● SIM222 12VDC	SIM 4	4PST-2NO, DPST-NC	12	140	8	30M9895	33.72
● SIM222 24VDC	SIM 4	4PST-2NO, DPST-NC	24	600	8	30M9896	33.16
● SIM312 24VDC	SIM 4	3PST-NO, SPST-NC	24	600	8	30M9898	33.35
● SIR282 12VDC	SIR282	DPDT	12	140	8	30M9899	24.02
● SIR282 24VDC	SIR282	DPDT	24	720	8	30M9900	23.72

RELAY SOCKETS

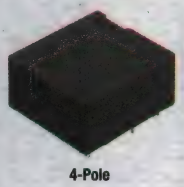
Mfg. Part No.	Mounting Type	Number of Contacts	Operating Current (A)	Operating Voltage (VAC)	Stock No.	Price Each 1-9	10-24
● SRD-SGR2	DIN Rail	8	16	300	30M9907	11.82	11.32
● SRD-SIM4	DIN Rail	10	6	250	30M9908	61.87	59.15
● SRP-SGR2	PC Board	8	16	300	30M9909	4.56	4.37
● SRP-SIM4	PC Board	10	7	250	30M9910	27.94	26.74

(90369)

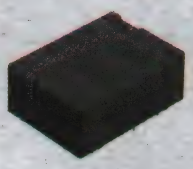
SF-Y SERIES COMPACT SAFETY RELAYS WITH FORCIBLY GUIDED CONTACTS

RoHS Compliant Available

Panasonic



4-Pole



6-Pole

Features:
- Forcibly guided contact structure (EN 50205, Type A)
- Small size
- Low profile: 14.5mm (0.571")
- Reinforced insulation: clearance and creepage 5.5mm (0.217")
- Basic insulation: clearance 3mm (0.118") and creepage 4mm (0.157") between all contacts and between contact NC3 and coil

Specifications:
- Nominal operating power: 670mW
- Max. switching voltage: 250VAC, 30VDC
- Max. switching current: 6A
- Contact material: gold-flashed silver nickel alloy

Mfg. Part No.	No. of Poles	Contacts	Coil Voltage (VDC)	Coil Resis. (Ω)	Stock No.	Price Each 1-24
● SFY2-DC5V	4	DPST-NO, DPST-NC	5	38	72W3949	44.42
● SFY2-DC12V	4	DPST-NO, DPST-NC	12	215	72W3945	44.42
● SFY2-DC18V	4	DPST-NO, DPST-NC	18	483	72W3946	44.42
● SFY2-DC21V	4	DPST-NO, DPST-NC	21	666	72W3947	44.42
● SFY2-DC24V	4	DPST-NO, DPST-NC	24	864	72W3948	44.42
● SFY3-DC5V	4	3PST-NO, SPST-NC	5	38	72W3954	44.42
● SFY3-DC12V	4	3PST-NO, SPST-NC	12	215	72W3950	44.42
● SFY3-DC18V	4	3PST-NO, SPST-NC	18	483	72W3951	44.42
● SFY3-DC21V	4	3PST-NO, SPST-NC	21	666	72W3952	44.42
● SFY3-DC24V	4	3PST-NO, SPST-NC	24	864	72W3953	44.42
● SFY4-DC5V	6	4PST-NO, DPST-NC	5	38	72W3959	49.84
● SFY4-DC12V	6	4PST-NO, DPST-NC	12	215	72W3955	52.30
● SFY4-DC18V	6	4PST-NO, DPST-NC	18	483	72W3956	49.84
● SFY4-DC21V	6	4PST-NO, DPST-NC	21	666	72W3957	49.84
● SFY4-DC24V	6	4PST-NO, DPST-NC	24	864	72W3958	49.84
● SFY5-DC5V	6	5PST-NO, SPST-NC	5	38	72W3964	49.84
● SFY5-DC12V	6	5PST-NO, SPST-NC	12	215	72W3960	49.84
● SFY5-DC18V	6	5PST-NO, SPST-NC	18	483	72W3961	49.84
● SFY5-DC21V	6	5PST-NO, SPST-NC	21	666	72W3962	49.84
● SFY5-DC24V	6	5PST-NO, SPST-NC	24	864	72W3963	49.84

(210175)

SF SERIES SLIM COMPACT SAFETY RELAYS

RoHS Compliant Available

Panasonic

TÜV Rheinland

Features:
- Forcibly guided contact structure (EN50205 ClassA TÜV recognized)
- Slim profile (mm inch)
- Built-in LED indication type available
- Fast response time is achieved (8 ms or less).
- High shock resistance (Functional: Min. 200m/s2)
- PC board sockets also available (4 and 6-pole)
- Lineup also includes DIN terminal socket with finger protect construction. (4 and 6-pole)

Specifications:
- Initial contact resistance: 100mΩ max.
- Contact material: Gold flashed silver tin oxide
- Nominal switching capacity: 6A / 250 VAC; 6A / 30 VDC
- Max. switching power: 1500VA / 180W
- Max. switching voltage: 250VAC / 30VDC
- Max. carrying current: 6A
- Min. switching capacity: 1mA 5VDC
- Nominal operating power: 4-pole: 360mW; 6-pole: 500 mW
- Initial insulation resistance: 1000MΩ @ 500VDC
- Operating temperature: -40°C to +85°C
- Unit weight: 4-pole: Approx. 20g; 6-pole: Approx. 23g

➤CONTINUED➤

SF SERIES SLIM COMPACT SAFETY RELAYS (CONT.)

Mfg. Part No.	Contacts	Coil Voltage (VDC)	Coil Resist.	Stock No.	Price Each 1-24
SFS2-DC12V	4PST-2NO, DPST-NC	12	400	11N5908	31.22
SFS2-DC24V	4PST-2NO, DPST-NC	24	1.6	11N5909	34.33
SFS3-DC24V	3PST-NO, SPST-NC	24	1.6	11N5911	35.65
SFS4-DC12V	4PST-NO, DPST-NC	12	288	11N5914	36.17
SFS4-DC24V	4PST-NO, DPST-NC	24	1.152	11N5915	37.37
SFS5-DC24V	5PST-NO, SPST-NC	24	1.152	11N5920	39.22
SFS6-DC24V	3PST-NO, 3PST-NC	24	1.152	11N5923	37.37

(177587)

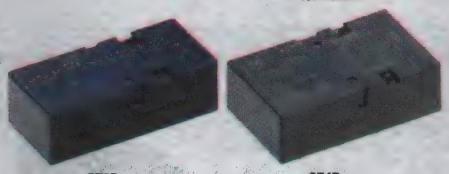
SF SERIES POLARIZED, MONOSTABLE SAFETY RELAYS

RoHS Compliant Available

Panasonic

TÜV Rheinland

Features:
- High contact reliability
- Forced operation contacts (2 Form A 2 Form B)
- Independent operation contacts (4 Form A 4 Form B)
- Separated chamber structure (2 Form A 2 Form B, 4 Form A 4 Form B)
- High breakdown voltage 2,500 Vrms between contacts and coil
- High sensitivity
- Complies with safety standards



SF2D SF4D

Specifications:
- Initial contact resistance: 30mΩ
- Contact material: Gold flashed silver alloy
- Nominal switching capacity: 6A / 250 VAC; 6A / 30 VDC
- Max. switching power: 1500VA / 180W
- Max. switching voltage: 440VAC / 30VDC
- Max. carrying current: 6A
- Nominal operating power: 500 mW
- Initial insulation resistance: 1000MΩ @ 500VDC
- Operating temperature: -40°C to +70°C
- Unit weight: 2 Form A: Approx. 38g; 4 Form A: Approx. 47g

Mfg. Part No.	Contacts	Coil Voltage (VDC)	Coil Resist.	Stock No.	Price Each 1-24
SF2D-DC12V	SPST-NO, SPST-NC	12	288	11N5927	40.82
SF2D-DC24V	DPST-NO, DPST-NC	24	1.152	90R0559	42.84
SF4D-DC12V	4PST-2NO, DPST-NC	12	288	90R0563	56.06
SF4D-DC24V	4PST-2NO, DPST-NC	24	1.152	90R0564	55.47

(177586)

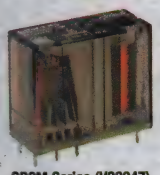
SCHRACK SAFETY RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Meet requirements of the "Employees Liability Insurance Asscociations" for the forcible acuation of contact pile-up
- Separate contact chambers so that the actuating system is reliably isolated from the contact spring set, even if the wire or spring breaks, clearance and creepage distances according to VDE 0110 insulation group C 250
- Maximum switching current 6-8A
- UL recognized file no. E214024



SR2M Series (V23047)

All are UL recognized file no., E214024. Sensitive versions, models with increased spacing and DIN mount modules also available; *go online or call.*

SR2M series (V23047) neutral monostable relays with two forcibly guided contacts are rated load voltage: 250VDC maximum. Continuous current: 6A. Nominal power: 700mW.

Mfg. Part No.	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Stock No.	Price Each 1-9	10-24	25-49
V23047-A1024-A511	SPST-NO, SPST-NC	24	823	81C8797	11.73	10.67	9.79
V23047-A1012-A501	DPDT	12	206	36K2083	11.18	10.47	9.99
V23047-A1024-A501	DPDT	24	823	36K2085	8.49	7.72	7.09
V23047-A1110-A511	DPST	110	206	92C8427	11.90	10.69	9.68
SR4 D/M series have four forcibly guided contacts rated 250VAC. Current rating: 8A. Nominal power: 800mW.							
SR4D4024	4PST-2NO, DPST-NC	24	720	36K3562	23.55	22.62	22.07
SR4M4024	3PST-NO, SPST-NC	24	720	07H6871	22.54	19.72	17.85
7-1415055-1	DPST	60	4.5	08N5523	19.82	17.12	16.12
SR6 series (V23050) neutral monostable relays with six forcibly guided contacts are rated 400 VAC/VDC. Current rating: 8A. Nominal power: 1.2W.							
V23050-A1024-A542	4PST-NO, DPST-NC	24	480	36K2086	24.11	19.86	19.28

(33997)

PRINTED CIRCUIT BOARD ZERO-CROSS SWITCHING RELAYS

RoHS Compliant Available

CARLO GAVAZZI

- 4 to 32VDC Input
- 3, 5, 10 and 25 Amp Versions
- 3A and 5A Versions Are Available Soldered into DIN Rail Mount Socket
- 10A Versions Feature Integrated Heat Sink (25A with Forced Air Cooling)

Zero switching PC board SSRs are ideal where mounting space is limited. 3A and 5A types with **suffix MI** in type number are soldered into a DIN rail mount socket with an LED indicator; *go online or call.*

Mfg. Part No.	Control Voltage Type	Control Voltage (V)	Load Current (A)	Load Voltage (VAC)	Stock No.	Price Each
RP1A23D3	DC	3V DC to 32V DC	3	12-265	05M4328	15.60
RP1A23D5	DC	3V DC to 32V DC	5	12-265	05M4329	17.00
RP1A23D10	DC	3V DC to 32V DC	10	12-265	05M4327	31.50
RP1A48D10	DC	4V DC to 32V DC	10	20-530	05M4330	24.00
RP1A23D5M1	DC	3V DC to 32V DC	5	12-265	93C3930	37.00

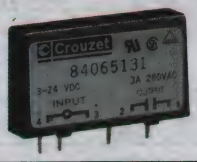
(73843)

PC BOARD MOUNT SOLID-STATE RELAYS

RoHS Compliant Available

CROUZET AUTOMATION

The **GA8 series** of SSRs have a high current thyristor for 100 amps surge capability in an industry standard SIP package. Height: 1.0" (25.4mm)



Mfg. Part No.	Control Voltage (VDC)	Output Current	Output Voltage (VAC)	Stock No.	Price Each 1-9	10-49	50-99
GA8-6B02	3-28	3A @ 40°C	24-280	20M5163	15.12	14.50	13.79
GA8-6D05	3-28	5A @ 30°C	24-280	17M6599	22.70	21.78	20.73

(12629)

1-2A PC BOARD MINI SIP SOLID-STATE RELAYS

RoHS Compliant Available

crydom

- SCR output for switching loads up to 2A @ 240VAC, or TRIAC output.
- Zero-cross (resistive loads) output
- Control voltage: 4-10VDC (15mA @ 5VDC)

Outside dimensions: .950 (24.1)L x .200 (5.1)W x .500 (12.7)H. Add "R" to mfg. part no. suffix for random-fire output. UL recognized, CSA certified.

TRIAC OUTPUT

Mfg. Part No.	Output Voltage (V_{RMS})	Load Current (A_{RMS})	One-Cycle Surge (A_{pk})	Switching	Stock No.	Price Each 1-9	10-49	50-99
A0241	24-280	0.02-1.0	40	Zero-Cross	93F4155	20.68	19.69	18.82
BACK-TO-BACK SCR OUTPUT								
AS0241	12-280	0.01-1.5	30	Zero-Cross	93F4157	12.99	12.31	11.80
AS0242	12-280	0.01-2.0	40	Zero-Cross	79K4298	16.25	15.40	14.74

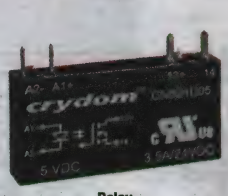
(3657)

MINI SIP SOLID STATE RELAYS CN SERIES

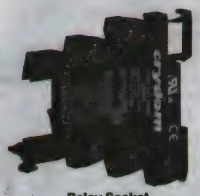
RoHS Compliant Available

crydom

- 5mm Mini SIP SSR
- Contact rating: 0.1A at 48VDC; 3.5A at 24VDC
- Control voltage: 5 and 24VDC
- 6.2mm DIN-rail (35mm) mount socket
- Yellow LED input status indicator



Relay



Relay Socket

RELAYS

Mfg. Part No.	Load Current (A)	Load Voltage	Control Voltage	Surge Current (A)	Stock No.	Price Each 1-9
CN048D05	0.1	0-48VDC	3-12VDC	300	68R0453	10.61
CN048D24	0.1	0-48VDC	3-12VDC	300	68R0454	10.61
CN024D05	3.5	0-24VDC	3-12VDC	9	68R0450	20.33
CN024D24	3.5	0-24VDC	3-12VDC	9	68R0451	19.68

CONTINUED

SOLID-STATE PCB RELAYS

MINI SIP SOLID STATE RELAYS CN SERIES (CONT.)

RELAY SOCKETS

Mfg. Part No.	Current (A)	For Use With	Stock No.	Price Each 1-9
● DRSCN05	6	3-12VDC Relay	68R0482	24.58
● DRSCN24	6	15-30VDC Relay	68R0484	23.69

(177841)

16-PIN, 1.0-1.5A DIP SOLID-STATE RELAYS

RoHS Compliant Available

crydom

- Load current ratings up to 1.5A @ 240VAC
- Low off-state leakage current
- SCR output
- Compact design for high-density PC boards

Other models available; *go online or call.* UL recognized, CSA approved, CE compliant, VDE approved.

CONTROL VOLTAGE RANGE: 3.5-10VDC (15mA @ 5VDC)

Mfg. Part No.	Output Voltage (V_{RMS})	Transient Over-Voltage	Stock No.	Price Each 1-9	10-49	50-99	100+
● SDV2415	12-280	600	79K4422	15.61	14.79	14.16	13.71
● DPA6119	20-280	600	79K4342	13.08	12.39	11.87	11.49
● DPA4119	20-140	400	79K4340	11.85	11.24	10.76	10.42
CONTROL CURRENT RANGE: 10-35mA							
● DPA4111	20-140	400	79K4339	12.94	12.27	11.75	11.37
● DPA6111	20-280	600	79K4341	12.69	12.03	11.52	11.15

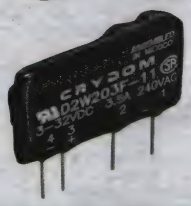
(3738)

2-3.5A PC BOARD AC SOLID-STATE RELAYS

RoHS Compliant Available

crydom

- Current ratings up to 3.5A @ 240VAC
- Industry standard I/O pinout
- Built-in RC snubber network
- Control voltage: 3-32VDC (3mA @ 5VDC)
- Output voltage: 24-280VAC



D2W series relays feature an epoxy coated package that provides exceptional environmental protection. Outside dimensions: 1.7 (43.2)L x 0.47 (11.9)W x 1.18 (29.9)H. UL recognized, CSA certified.

Mfg. Part No.	Load Current (Arms)	One-Cycle Surge (Apk)	Stock No.	Price Each 1-9	10-49	50-99	100+
● D2W202F	.06-2.0	28	80K5825	20.40	19.34	18.51	17.92
● D2W203F	.06-3.0	70	79K4343	21.17	20.07	19.22	18.61
● D2W203F-11	.06-3.5	80	79K4344	25.31	23.99	22.97	22.24

(3708)

5A PC BOARD AC SOLID-STATE RELAYS

RoHS Compliant Available

crydom

- Current rating up to 5A @ 480VAC
- SCR output for heavy industrial loads
- Zero-cross (resistive loads) or random-fire output (inductive/phase control loads)
- Standard digital I/O pinout
- Outside Dimensions: 1.00 (25.4)H x 1.70 (43.1)L x .300 (7.6)W

UL recognized, CSA certified, CE compliant, VDE approved.

DC CONTROL

Mfg. Part No.	Load Voltage (V_{AC})	Control Voltage (V_{DC})	Load Current (A)	Stock No.	Price Each 1-9	10-49	50-99	100+
● CX240D5	12-280	3V DC to 15V DC	5	76K3916	16.14	15.30	14.63	14.18
● CX240D5R	12-280	3V DC to 15V DC	5	98F4688	17.30	16.40	15.70	15.20
● CX241	12-280	4V DC to 10V DC	1.5	76K3917	12.25	11.62	11.12	10.77
● CX380D5	48-530	4V DC to 15V DC	5	76K3918	20.43	19.36	18.53	17.94
● CXE240D5	12-280	15V DC to 32V DC	5	79K6136	16.14	15.30	14.63	14.18
● CX480D5	48-660	4V DC to 15V DC	5	12N5707	22.94	21.74	20.81	20.14

(3654)

10A PC BOARD/DIN RAIL DC SOLID-STATE RELAYS

RoHS Compliant Available

crydom

- Control voltage 3-32VDC
- MOSFET output
- Low on-state impedance (.20Ω) for reduced power dissipation
- Low off-state leakage current (100μ Adc)
- Standard digital I/O
- Dimensions: 1.70 (43.1)L x 1.00 (25.4)H x .300 (7.6)W

PC Board Mount

PC BOARD MOUNT RELAYS DC OUTPUT

Mfg. Part No.	Load Voltage (VDC)	Control Voltage (VDC)	Load Current	Stock No.	Price Each 1-9	10-49	50-99	100+
● CMX60D5	0-60	3V DC to 10V DC	0-5	79K4324	33.26	31.53	30.16	29.19
● CMX60D10	0-60	3V DC to 10V DC	0-10	79K4323	41.04	38.88	37.21	36.01
● CMX60D20	0-60	3V DC to 10V DC	0.6-20	10M6690	67.58	64.04	61.30	59.34
● CMX100D6	0-100	3V DC to 10V DC	0-6	79K4322	41.49	39.32	37.63	36.43
● CMX200D3	0-200	3V DC to 10V DC	0-3	99B1189	42.81	40.58	38.83	37.59

(3652)

POWERFIN SCR AC OUTPUT RELAYS

RoHS Compliant Available

crydom

- Integral heat sink
- Current rating up to 25A @ 480VAC (forced air)
- SCR output for heavy industrial loads
- Zero-cross (resistive loads) or random-fire output (inductive/phase-control loads)
- Control voltage 240VDC
- Load current 25A

480VAC units also available. AC control available, *go online or call.* UL recognized, CSA certified, VDE approved.

Mfg. Part No.	Output Voltage (Vrms)	One-Cycle Surge (Apk)	Switching	Stock No.	Price Each 1-9	10-49	50-99
● PF240D25	12-280	250	Zero Crossing	79K4416	29.47	27.93	26.74
● PF240D25R	12-280	250	Random Turn On	79K4417	30.07	28.51	27.29
● PFE240D25	12-280	250	Zero Crossing	79K4415	29.47	27.93	26.74
● PF480D25	48-660	250	Zero Crossing	79K4418	31.89	30.23	28.95

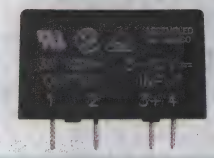
(3653)

AC/DC MINI-SIP SOLID-STATE RELAYS

RoHS Compliant Available

crydom

- AC or DC output available
- SCR or FET N.O. or N.C. outputs
- Industry standard I/O pinout
- Current rating up to 4A AC or 3A DC



Series MP1 and **MP2** have zero-cross turn-on and internal snubber. Control voltage range: 3-32VDC (3mA@5VDC). Outside dimensions: 1.70 (43.1)L x 1.00 (25.4)H x .401 (10.2)W. UL recognized, CSA certified, VDE approved.

TRIAC AC SWITCH OUTPUT

Mfg. Part No.	Load Current (Arms)	Output Volt. Range (Vrms)	Contacts	Stock No.	Price Each 1-9	10-49	50-99	100+
● MP120D3	0.02-3.0	12-240	SPST-NO	79K4409	22.93	21.73	20.81	20.14
● MP240D3	0.02-3.0	24-280	SPST-NO	79K4410	24.24	22.98	22.00	21.30
● MP240D4	0.02-4.0	24-280	SPST-NO	79K4411	25.30	23.99	22.97	22.24
DC, BIPOLAR TRANSISTOR OUTPUT								
● MPDCD3	0.02-3.0	3-60	SPST-NO	79K4408	25.96	24.61	23.56	22.83
● MPDCD3-B	0.02-3.0	3-60	SPST-NC	06M6638	35.21	33.40	31.97	30.97

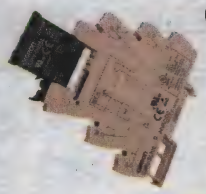
(3656)

G3RV SERIES SOLID STATE RELAYS

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

- Contacts: SPST-NO
- Operating temperatue: -30°C to +55°C
- Long electrical life and high speed switching
- Large plug-in terminals for reliable connection
- G3RV-D (DC load) models can manage resistive loads of 100 uA to 3.0 A
- LED indicator for visible operation checking
- Convenient quick electrical connections possible with G3RV push-in models and cross bar connectors
- Low power consumption for energy savings
- G3RV is cUL listed when correct relay is matched with the G3RV socket



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G3RV SERIES SOLID STATE RELAYS (CONT.)

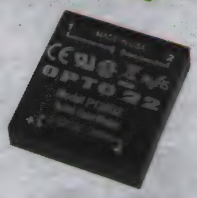
Mfg. Part No.	Input Voltage	Load Current (A)	Release Time (ms)	Stock No.	Price Each 1-24
G3RV-SL700-A AC110	110VAC	2	40	41T2025	49.90
G3RV-SL700-A AC230	230VAC	2	40	41T2026	47.41
G3RV-SL700-A DC24	24VDC	2	40	41T2027	38.67
G3RV-SL700-D AC/DC24	24VAC/VDC	3	60	41T2028	44.91
G3RV-SL700-D AC/DC48	48VAC/VDC	3	60	41T2029	42.42
G3RV-SL700-D AC110	110VAC	3	60	41T2030	51.90
G3RV-SL700-D AC230	230VAC	3	60	41T2031	47.41
G3RV-SL700-D DC12	12VDC	3	60	41T2032	44.91
G3RV-SL700-D DC24	24VDC	3	60	41T2033	39.92

(196047)

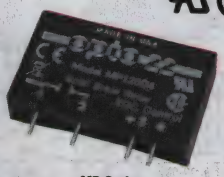
SOLID-STATE PCB RELAYS

RoHS Compliant Available

OPTO 22



P Series



MP Series

P series power relays provide low profile for 0.5" (12.7) center mounting on printed circuit boards. **MP series** provide small footprint. **Suffix 17** in type number indicates relay uses a VDE-approved Opto coupler. All relays are UL recognized, CSA certified, CE compliant.

MP SERIES

Mfg. Part No.	Line Voltage (V)	Current (A)	Description	Stock No.	Price Each 1-4	5-9
DC60MP	60 VDC	3	DC Switching	18M9067	17.08	16.29
DC200MP	200 VDC	1	DC Switching	18M9066	19.80	18.90
MP120D2	120 VAC	2	DC Control	18M9245	16.16	...
MP120D4	120 VAC	4	DC Control	18M9246	24.02	22.89
MP240D2	240 VAC	2	DC Control	96F1090	16.82	...
MP240D4	240 VAC	4	DC Control	96F1091	22.40	21.38
MP240D4-17	240 VAC	4	DC Control	71M0671	22.62	21.59
MP380D4	380 VAC	4	DC Control	96F6470	22.68	21.42

P SERIES

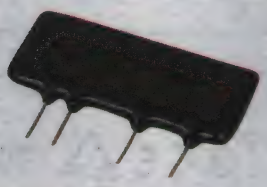
DC60P	60 VDC	3	DC Switching	96F6443	16.73	15.97
DC200P	200 VDC	1	DC Switching	96F6442	19.80	18.90
P120D2	120 VAC	2	DC Control	18M9301	19.80	18.90
P240D4	240AC	4	DC Control	18M9303	22.25	21.24
IAC5P	90-140	11 mA	AC Input	18M9106	17.00	...
IDC5P	10-32	25 mA	DC Input	18M9115	17.55	17.12
OAC5P	12-140	3	AC Output	18M9266	16.40	16.00
ODC5P	5-60	3	DC Output	18M9276	17.55	17.12

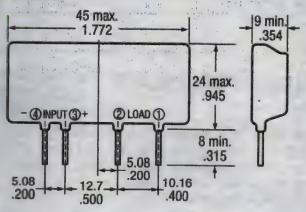
(3752)

SOLID-STATE PC RELAYS

RoHS Compliant Available

Panasonic





- Load Voltage: 75 to 125VAC
- Maximum load current: 2A
- Breakdown voltage: 3000VAC between input and output
- Input terminal distance 0.2" (5.08mm)
- Dielectric strength: 3000VAC

Maximum operating time: zero-cross type: ½ cycle of voltage sine wave +1ms; non-zero cross type: 1ms. Random turn-on type: 1ms max. release time: ½ cycle of voltage sine wave +1ms. Ambient temperature: -30°C to +80°C (-22°F to +176°F). Dimensions in mm: 45L x 24H x 9W (1.772 x 0.945 x 0.354")

Mfg. Part No.	Coil Voltage (VDC)	Switching Style	Stock No.	Price Each 1-24	25-49	50-99	100-499
AQ2A2-C1-T5VDC	5	Random	64K3066	13.42	12.31	10.93	9.34
AQ2A2-C1-ZT12VDC	12	Zero-Cross	64K3067	16.09	14.76	13.11	11.20
AQ2A1-C1-T24VDC	24	Random	64K3062	11.92	10.93	9.71	8.29

➤CONTINUED➤

SOLID-STATE PC RELAYS (CONT.)

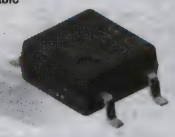
Mfg. Part No.	Coil Voltage (VDC)	Switching Style	Stock No.	Price Each 1-24	25-49	50-99	100-499
AQ2A2-C1-T24VDC	24	Random	67K3697	13.42	12.31	10.93	9.34
AQ2A2-C1-ZT24VDC	24	Zero-Cross	64K3068	16.09	14.76	13.11	11.20

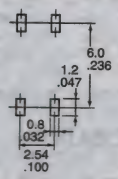
(75500)

CXR 10 RF PC BOARD RELAYS

RoHS Compliant Available

Panasonic





- C x R 10
- Super miniature 4-Pin SOP package
- Lower output capacitance or lower on resistance available
- High-speed switching (30µs)
- Low-level off state leakage current (10pA)
- SPST contacts

Typical applications include test equipment, board testers, medical equipment, and multi-point recorders. Turn-on and turn-off time is 30µs. Power dissipation = 75 mW (in), 300 mW (out). Operating temperature = -40°C to +85°C. Dimensions in mm (inches): 4.3(.169)W x 4.4(.173)L x 2.1(.083)H. **Relays are packaged as each.** For tape & reel picked from the 1-2 pin side, add **suffix "X"** to mfg. part no.; for tape & reel picked from the 3-4 pin side, add **suffix "Z"** to mfg. part no. **Reel qty: 1000 pieces.** For availability; *go online or call*.

Mfg. Part No.	Output Cap. (pF)	ON Resist. (Ω)	Load Voltage (V)	Load Current (mA)	Forward Current (mA)	Stock No.	Price Each 1-24	25-49	50-99
AQY221N2S	1.0	9.5	40	120	50	13C2728	7.73	7.13	6.34
AQY221R2S	13.0	0.8	40	250	50	84C9172	7.44	6.86	6.10
AQY222R1S	24.5	0.8	60	500	50	45M7093	8.37	7.73	6.87

(68472)

PCB MOUNT SOLID-STATE RELAYS SSRC SERIES

c UL us RoHS Compliant Available

TE connectivity

Authorized Distributor

Features:

- PC board mount in SIP configuration
- Paired SCR output
- Contacts: 1 Form A (SPST-NO)
- Rated up to 5A at 660VAC
- Isolation voltage: 4kV
- DC control input: 3-15VDC
- Pin-out compatible with standard I/O module boards
- Zero voltage or random voltage turn-on versions

Applications:

- Blood analysis equipment
- Portable vital sign monitors
- Lasers
- Scanners
- Baby warmers
- Elevator control panels
- LED's, dimmer ontrol, traffic control
- Industrial machinery and commercial equipment

Mfg. Part No.	Load Current (A)	Load Voltage (Vr)	Control Voltage (VDC)	Surge Current (A_{PK})	Stock No.	Price Each 1-9
SSRC-240D5R	5	12-280	3V DC to 15V DC	250	50R7451	22.18
SSRC-480D5	5	48-660	4V DC to 15V DC	250	50R7452	25.77
SSRC-480D5R	5	48-660	4V DC to 15V DC	250	50R7453	31.10
SSRC240D5	5	12-280	3V DC to 15V DC	250	50R7454	24.83

(163271)

7

PHASE ANGLE FIRED ANALOG SWITCHING RELAYS

RoHS Compliant Available

CARLO GAVAZZI

- For phase angle control of resistive loads
- Proportionate output to analog control signal
- Up to 100A, 660VAC switching
- LED indication

Fig. 1

Fig. 2

Ideally suited for "phase angle" control of resistive loads, such as heater bands or incandescent lamps. The relay switches off every time the current crosses zero and switches the load voltage proportionally with the applied analog control current. Back-to-back SCR output, up to 660VAC, controlled by 4-20mA DC or 0-10VDC signal. The 0-10VDC controlled models require a constant 24 VDC supply voltage. Contact your sales office.

Mfg. Part No.	Fig.	Line Voltage (VAC)	Output Current (A)	Control Input	Stock No.	Price Each
RM1E23AA25	1	90-280	25	4-20 mA	05M4313	106.00
RM1E23AA50	1	90-280	50	4-20 mA	88H2006	141.00
RM1E23AA100	1	90-280	100	4-20 mA	90H9100	212.00
RM1E48AA50	1	90-550	50	4-20 mA	71K9922	149.00

(73842)

SOLID-STATE PANEL-MOUNT RELAYS

SCR ZERO-CROSS SWITCHING RELAYS

RoHS Compliant Available

CARLO GAVAZZI

- Green LED indicator
- Protective touch-safe cover
- Built-in MOV protection
- SMD internal circuitry
- No internal mechanical stress (no potting)
- AC and/or DC control voltage
- Up to 100A switching capability
- Up to 660VAC switching

Zero switching solid-state relays offer up to 1400Vp non-repetitive peak voltage. Provide high current carrying capabilities for operational voltages up to 660VAC. Normally open, back-to-back SCR outputs are utilized in the output circuitry to reduce leakage current. UL recognized, CSA certified, CE compliant. 600VAC switching types also available; *go online or call.*

4.5-32VDC CONTROL VOLTAGE

Mfg. Part No.	Line Voltage (VAC)	Operational Current (A)	Stock No.	Price Each
● RM1A23D25	42-265	25	05M4304	43.00
● RM1A23D50	42-265	50	05M4305	49.00
● RM1A23D75	42-265	75	05M4306	78.00
● RM1A48D25	42-530	25	05M4308	51.00
● RM1A48D50	42-530	50	05M4309	58.00
● RM1A48D75	42-530	75	05M4310	86.00
● RM1A48D100	42-530	100	16C5580	125.00
24-180VDC OR 24-265VAC CONTROL VOLTAGE				
● RM1A23A25	42-265	25	05M4302	44.00
● RM1A23A50	42-265	50	05M4303	50.00
● RM1A48A75	42-530	75	16C5579	92.00

(60871)

TWO-POLE SCR ZERO-CROSS SWITCHING RELAYS

RoHS Compliant Available

CARLO GAVAZZI

- 25A or 40A SCR outputs
- 4.5 to 32VDC input
- 2 Outputs controllable separately, isolated from one another
- 2 LEDs, 1 for each input signal
- Easy installation via fast-on terminals

Zero switching solid-state relays offer 2 isolated outputs, which can be controlled by separate 4.5 to 32VDC control signals input via fast-on terminals. Up to 1200Vp non-repetitive peak voltage. 2 LEDs indicate the control status of each pole. Normally open, back-to-back SCR outputs are utilized in the output circuitry to reduce leakage current. UL recognized, CE compliant, VDE approved.

Mfg. Part No.	Line Voltage (VAC)	Operational Current (A)	Stock No.	Price Each
● RA2A23D25	24-265	25	05M4263	52.00
● RA2A23D40	24-265	40	05M4264	59.00
● RA2A48D40	42-530	40	05M4265	64.00

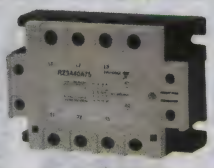
(73844)

3-PHASE ZERO SWITCHING SOLID STATE RELAYS

RoHS Compliant Available

CARLO GAVAZZI

- Built-in snubber network and protective cover
- Bright LED indication
- Unique raised back plate
- Optimum heat dissipation
- AC and/or DC control voltage
- Up to 75 A, 660 VAC switching
- Up to 1200 Vp non-repetitive voltage



Three phase zero switching solid state relays for resistive loads (heater bands) and inductive loads. Optional over temperature protection option with alarm output.

24-275 VAC or 24-50 VDC CONTROL

Mfg. Part No.	Line Voltage (VAC)	Current (A)	Stock No.	Price Each
● RZ3A60A25	42-660	25	05M4345	219.00
● RZ3A60A55	42-660	55	17M9318	290.00
● RZ3A60A75	42-660	75	05M4346	386.00
4-32 VDC CONTROL				
● RZ3A60D25	42-660	25	05M4347	214.00
● RZ3A60D55	42-660	55	17M9319	285.00
● RZ3A60D75	42-660	75	05M4349	381.00

(78970)

COOLTECH SOLID-STATE RELAYS

RoHS Compliant Available

CROUZET AUTOMATION

22.5mm 45mm 90mm

Crouzet's new CoolTech solid-state relays offer the latest in integral heat sink / SSR technology. Standard features include; an epoxy-free design, internal transient protection, DBC substrate, IP20 touch-safe housing, EMC compliance, and relay or contactor terminal configuration. The CoolTech is rated up to 30A @ 660Vac in a compact 22.5mm housing, or 45A in a 45mm housing.

22.5MM DIN RAIL

Mfg. Part No.	Control Voltage	Output Current (A)	Max. Output Voltage (VAC)	Terminal Configuration	Stock No.	Price Each 1-9	Price Each 10-49
● GNR10DHZ	4-32VDC	10	280	Relay	17M6639	62.53	59.74
● GNR10DCZ	4-32VDC	10	280	Contactor	17M6638	62.03	59.27
● GNR20DHZ	4-32VDC	20	600	Relay	68K4174	67.93	64.90
● GNR30DCZ	4-32VDC	30	660	Contactor	17M6644	76.30	72.89
● GNR30BCZ	90-140VAC	30	660	Contactor	17M6642	83.62	79.89
45MM DIN RAIL							
● GNR35DCZ	4-32VDC	35	660	Contactor	17M6647	104.53	99.87
● GNR45DCZ	4-32VDC	45	660	Contactor	17M6651	109.54	104.66
90MM THREE-PHASE DIN RAIL							
● GNR25DCZ	4-32VDC	25	660	Contactor	17M6641	236.85	226.28
● GNR25BCZ	90-140VAC	25	660	Contactor	17M6640	266.90	255.00

(84668)

SOLID-STATE SERIES RELAYS

RoHS Compliant Available

CROUZET AUTOMATION

TÜV Rheinland

Features:
- Current ratings from 10 to 125A
- Output voltage from 24 to 660Vac
- Back to back SCR's for severe inductive loads
- Direct bond copper substrate
- Improved power lead frame design
- LED input status indicator
- Feature same screw-terminal package as Crouzet's traditional solid-state relays *on page 1681*

Specifications:
- 4000Vac Optical Isolation
- Operating temperature: -40° to 80°C
- Operating Frequency: 47 to 63Hz
- Housing Material: UL94V-0

GNA5 SERIES, SCREW TERMINALS

Mfg. Part No.	Load Current (A)	Input Voltage (VDC)	Output Voltage (VAC)	Stock No.	Price Each 1-9
● 84134900	10	3-32VAC	24-280V	17M8487	44.89
● 84134910	25	3-32VDC	24-280V	17M8491	48.58
● 84134911	25	90-280VAC	24-280V	17M8492	56.79

(12928)

DC SOLID-STATE RELAYS

RoHS Compliant Available

CROUZET AUTOMATION

TÜV Rheinland

- Features same packages as Crouzet's traditional and touch-safe solid-state relays *on page 1681*
- Transistor output versions offer 4kV optical isolation
- Very low leakage current (<10µA)
- Milliohm on-resistance

TOUCH-SAFE IP20 - FET OUTPUT

Mfg. Part No.	Control Voltage (VDC)	Output Current (A)	Max. Output (VDC)	Stock No.	Price Each
● 84137850	3-32	10	1-200	21M5226	107.04
● 84137860	3-32	15	1-100	17M8514	90.56
● 84137870	3-32	30	1-50	17M8515	86.28
TRADITIONAL IP00 - FET OUTPUT					
● 84134850	3-32	10	1-200	17M8485	89.62
● 84134860	3-32	15	1-100	17M8486	84.48
● 84134870	3-32	30	1-50	64M0226	81.10
TOUCH-SAFE IP20 - TRANSISTOR OUTPUT					
● 84137750	3-32	10	1-60	20M3075	64.32

➤CONTINUED➤

DC SOLID-STATE RELAYS (CONT.)

TRADITIONAL IP00 - TRANSISTOR OUTPUT

Mfg. Part No.	Control Voltage (VDC)	Output Current (A)	Max. Output (VDC)	Stock No.	Price Each
84134750	3-32	10	1-60	17M8484	51.38

(79408)

SOLID-STATE RELAYS

RoHS Compliant Available

CROUZET AUTOMATION

Touch-Safe

Traditional

TÜV Rheinland

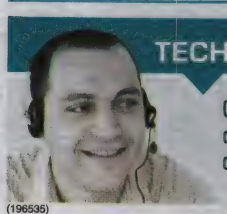
The **GN series** offers a built in IP20 "Touch-Safe" cover and traditional style case and offers current ranges from 10 to 125 amps. EMC compatibility to EN 50082-2 (Immunity), EN50081-2 (Emissions), C.I.S.P.R.22 (Radiated) Class B, (Conducted) Class A, EN60950 and IEC 947-4-2. UL recognized, CE compliant per LVD 73/23/EED and TÜV approved.

TOUCH-SAFE, ZERO VOLTAGE TURN-ON (ZERO CROSSING)

Mfg. Part No.	Control Voltage	Output Current (A)	Max. Output (VAC)	Stock No.	Price Each 1-9	Price Each 10-49
84137001	90-280VAC	10	24-280	17M8496	67.75	65.09
84137011	90-280VAC	25	24-280	17M8498	63.07	60.59
84137021	90-280VAC	50	24-280	17M8500	85.39	82.03
84137031	90-280VAC	75	24-280	17M8501	125.97	121.02
84137000	3-32VDC	10	24-280	17M8495	55.24	53.07
84137010	3-32VDC	25	24-280	17M8497	57.31	55.07
84137020	3-32VDC	50	24-280	17M8499	66.54	63.91
84137121	90-280VAC	50	48-660	17M8506	86.26	82.86
84137131	90-280VAC	75	48-660	18C2072	127.58	122.55
84137100	4-32VDC	10	48-660	17M8503	78.05	74.99
84137110	4-32VDC	25	48-660	17M8504	71.14	68.33
84137120	4-32VDC	50	48-660	17M8505	79.80	76.67
84137130	3-32VDC	75	48-660	67R9280	116.04	108.88
84137140	4-32VDC	100	48-660	17M8507	129.06	123.98
84137180	4-32VDC	125	48-660	17M8508	174.98	168.10
TRADITIONAL, ZERO VOLTAGE TURN-ON						
84134001	90-280VAC	10	24-280	17M8470	63.96	61.45
84134011	90-280VAC	25	24-280	17M8471	57.34	55.09
84134021	90-280VAC	50	24-280	18C2018	67.86	65.18
84134031	90-280VAC	75	24-280	18C2020	114.48	109.97
84134000	3-32VDC	10	24-280	17M8469	53.14	51.05
84134010	3-32VDC	25	24-280	18C2015	53.69	51.58
84134020	3-32VDC	50	24-280	18M4418	62.69	60.21
84134030	3-32VDC	75	24-280	18M9803	101.24	97.24
84134121	90-280VAC	50	48-660	20M7447	82.13	78.91
84134131	90-280VAC	75	48-660	17M8476	140.93	135.39
84134110	4-32VDC	25	48-660	17M8473	69.17	66.47
84134120	4-32VDC	50	48-660	17M8474	76.04	73.05
84134130	4-32VDC	75	48-660	17M8475	136.35	130.99
84134140	4-32VDC	100	48-660	17M8477	124.85	119.93
84134180	4-32VDC	125	48-660	17M8478	152.07	146.07
TRADITIONAL, RANDOM TURN-ON						
84134210	3-32VDC	25	24-280	17M8479	54.76	52.60
84134320	4-32VDC	50	48-660	17M8482	75.08	72.13
84134340	4-32VDC	100	48-660	17M8483	140.29	134.77
84134380	4-32VDC	125	48-660	19M1089	149.91	144.01

(32199)

TECHNICAL SUPPORT HOTLINE



Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

DP SERIES SOLID STATE CONTACTORS

RoHS Compliant Available

crydom

- Current rating: 20A, 40A and 60A
- Load voltage rating: 1 to 48VDC
- Optional soft start w/brake, soft start/ soft stop no brake
- UL and IEC ratings for general use and Motor loads
- LED input status indicator, green (forward), yellow (reverse)
- DC control
- Ambient operating temperature range: -30°C to +80°C

Mfg. Part No.	Control Voltage Range (VDC)	Operating Current (A)	Start Mode	Stock No.	Price Each 1-9
DP4R60D20	4.5V DC to 15V DC	20	Start	55T8497	294.26
DP4R60D20B	4.5V DC to 15V DC	20	Start	55T8498	328.14
DP4R60D60	4.5V DC to 15V DC	60	Start	55T8499	383.42
DP4R60D60B	4.5V DC to 15V DC	60	Start	55T8500	407.53
DP4R60E60	18V DC to 32V DC	60	Start	55T8501	330.80
DP4R60E60B	18V DC to 32V DC	60	Start	55T8502	407.53
DP4RSA60D20	4.5V DC to 15V DC	20	Soft Start/ Ramp Up,0.2 sec	55T8481	325.68
DP4RSA60D20B	4.5V DC to 15V DC	20	Soft Start/ Ramp Up,0.2 sec	55T8482	325.68
DP4RSA60E20	18V DC to 32V DC	20	Soft Start/ Ramp Up,0.2 sec	55T8483	325.68
DP4RSA60E20B	18V DC to 32V DC	20	Soft Start/ Ramp Up,0.2 sec	55T8484	325.68
DP4RSA60E60	18V DC to 32V DC	60	Soft Start/ Ramp Up,0.2 sec	55T8485	412.75
DP4RSA60E60B	18V DC to 32V DC	60	Soft Start/ Ramp Up,0.2 sec	55T8486	422.66
DP4RSB60D20	4.5V DC to 15V DC	20	Soft Start/ Ramp Up,0.5 sec	55T8487	325.68
DP4RSB60D20B	4.5V DC to 15V DC	20	Soft Start/ Ramp Up,0.5 sec	55T8488	325.68
DP4RSB60E20	18V DC to 32V DC	20	Soft Start/ Ramp Up,0.5 sec	55T8489	325.68
DP4RSB60E20B	18V DC to 32V DC	20	Soft Start/ Ramp Up,0.5 sec	55T8490	333.50
DP4RSB60E60	18V DC to 32V DC	60	Soft Start/ Ramp Up,0.5 sec	55T8491	412.75
DP4RSB60E60B	18V DC to 32V DC	60	Soft Start/ Ramp Up,0.5 sec	55T8492	419.35
DP4RSC60D60	4.5V DC to 15V DC	60	Soft Start/ Ramp Up,1 sec	55T8493	422.66
DP4RSC60D60B	4.5V DC to 15V DC	60	Soft Start/ Ramp Up,1 sec	55T8494	422.66
DP4RSC60E60	18V DC to 32V DC	60	Soft Start/ Ramp Up,1 sec	55T8495	412.75
DP4RSC60E60B	18V DC to 32V DC	60	Soft Start/ Ramp Up,1 sec	55T8496	412.75

(197429)

UNIVERSAL AC/DC INPUT SOLID-STATE RELAYS

RoHS Compliant Available

crydom

- Universal AC/DC input
- Ratings from 10A to 125A at 24 to 280VAC and 48 to 660VAC
- SCR output for heavy industrial loads
- Zero crossing (resistive loads) or random-fire (inductive loads) output
- EMC compliant design
- Removable touch-safe cover rated IP20
- LED input status indicator

Minimum turn-on voltage: 19VDC. Minimum turn-off voltage: 5VDC. Typical input current: 11mA at 48VDC, 19mA at $280V_{rms}$ **(CWU24 series)**; 10mA at 48VDC, 17mA at $280V_{rms}$ **(CWU48 series)**. Maximum turn-on time 17msec. Maximum turn-off time: 30msec. Dielectric strength: $4000V_{rms}$.

24-280VAC — ZERO CROSSING OUTPUT (RESISTIVE LOADS)

Mfg. Part No.	Load Current (A)	Surge Current (A)	Overvoltage Protection	Stock No.	Price Each 1-9	Price Each 10-49
CWU2410	10	400	No	72W3874	47.13	44.90
CWU2410P	10	400	Yes	72W3876	47.99	45.72
CWU2425	25	600	No	72W3882	48.09	45.81
CWU2425P	25	600	Yes	72W3884	50.40	48.02
CWU2450	50	850	No	72W3886	57.26	54.57
CWU2450P	50	850	Yes	72W3888	59.87	57.06
CWU2490	90	1350	No	72W3890	113.60	108.40
CWU2490P	90	1350	Yes	72W3892	111.32	106.08
CWU24125	125	2000	No	72W3878	113.40	107.43
CWU24125P	125	2000	Yes	72W3880	114.28	108.26

CONTINUED

SOLID-STATE PANEL-MOUNT RELAYS

UNIVERSAL AC/DC INPUT SOLID-STATE RELAYS (CONT.)

Mfg. Part No.	Load Current (A)	Surge Current (A)	Overvoltage Protection	Stock No.	Price Each 1-9	Price Each 10-49
48-660VAC — ZERO CROSSING OUTPUT (RESISTIVE LOADS)						
● CWU4810	10	400	No	72W3894	73.03	69.69
● CWU4810P	10	400	Yes	72W3896	75.04	71.61
● CWU4825	25	600	No	72W3902	73.63	70.26
● CWU4825P	25	600	Yes	72W3904	77.91	74.35
● CWU4850	50	850	No	72W3906	82.29	78.53
● CWU4850P	50	850	Yes	72W3908	87.67	83.82
● CWU4890	90	1350	No	72W3910	111.10	105.25
● CWU4890P	90	1350	Yes	72W3912	112.85	106.91
● CWU48125	125	2000	No	72W3898	138.24	131.66
● CWU48125P	125	2000	Yes	72W3900	139.93	133.27
24-280VAC — RANDOM FIRE OUTPUT (INDUCTIVE LOADS)						
● CWU2410-10	10	400	No	72W3875	47.99	45.72
● CWU2410P-10	10	400	Yes	72W3877	48.83	46.52
● CWU2425-10	25	600	No	72W3883	50.40	48.02
● CWU2425P-10	25	600	Yes	72W3885	49.79	47.44
● CWU2450-10	50	850	No	72W3887	58.13	55.40
● CWU2450P-10	50	850	Yes	72W3889	58.98	56.21
● CWU2490-10	90	1350	No	72W3891	111.32	106.08
● CWU2490P-10	90	1350	Yes	72W3893	112.10	106.83
● CWU24125-10	125	2000	No	72W3879	114.28	108.26
● CWU24125P-10	125	2000	Yes	72W3881	115.14	109.08
48-660VAC — RANDOM FIRE OUTPUT (INDUCTIVE LOADS)						
● CWU4810-10	10	400	No	72W3895	75.04	71.61
● CWU4810P-10	10	400	Yes	72W3897	77.06	73.53
● CWU4825-10	25	600	No	72W3903	75.64	72.18
● CWU4825P-10	25	600	Yes	72W3905	77.65	74.10
● CWU4850-10	50	850	No	72W3907	87.67	83.82
● CWU4850P-10	50	850	Yes	72W3909	89.77	85.82
● CWU4890-10	90	1350	No	72W3911	112.85	106.91
● CWU4890P-10	90	1350	Yes	72W3913	114.60	108.57
● CWU48125-10	125	2000	No	72W3899	139.93	133.27
● CWU48125P-10	125	2000	Yes	72W3901	141.62	134.88

(210138)

H16WD SERIES PANEL MOUNT SOLID STATE RELAYS

RoHS Compliant Available

crydom

- Current ratings from 25A to 90A @ 48-660 V AC
- Control voltage: 4VDC to 32VDC
- 1600 Volt Blocking
- SCR output for heavy industrial loads
- DC control
- Zero-crossing (resistive loads) or random-fire (inductive loads) output
- Optional LED Status Indicator

Mfg. Part No.	Load Current (A)	Switching Type	LED Status	Stock No.	Price Each 1-9
● H16WD6025	25	Zero Crossing	No	67T1274	71.59
● H16WD6025-10	25	Random Turn On	No	67T1275	70.43
● H16WD6025G	25	Zero Crossing	Yes	67T1276	68.68
● H16WD6025G-10	25	Random Turn On	Yes	67T1277	71.31
● H16WD6050	50	Zero Crossing	No	67T1278	75.29
● H16WD6050-10	50	Random Turn On	No	67T1279	77.92
● H16WD6050G	50	Zero Crossing	Yes	67T1280	76.17
● H16WD6050G-10	50	Random Turn On	Yes	67T1281	78.79
● H16WD6075	75	Zero Crossing	No	67T1282	120.31
● H16WD6075-10	75	Random Turn On	No	67T1283	122.94
● H16WD6075G	75	Zero Crossing	Yes	67T1284	123.13
● H16WD6075G-10	75	Random Turn On	Yes	67T1285	123.81
● H16WD6090	90	Zero Crossing	No	67T1286	124.67
● H16WD6090-10	90	Random Turn On	No	67T1287	127.29
● H16WD6090G	90	Zero Crossing	Yes	67T1288	125.54
● H16WD6090G-10	90	Random Turn On	Yes	67T1289	131.25

(198011)

HDC SERIES SOLID-STATE PANEL MOUNT RELAYS

RoHS Compliant Available

crydom

- Current rating: 120A and 160A
- LED status indicator
- Heavy duty stud terminals
- AC or DC control
- Microsecond Turn-On and Off times
- Low On-state voltage drop
- Ambient Operating Temperature range: -30°C to 80°C
- Suffix "H" thermal pad included

Mfg. Part No.	Control Voltage	Load Voltage	Load Current	Stock No.	Price Each
● HDC60A120	90V AC to 140V AC	7V DC to 48V DC	120	95T0202	158.82
● HDC60A120H	90V AC to 140V AC	7V DC to 48V DC	120	95T0203	163.92
● HDC60A160	90V AC to 140V AC	7V DC to 48V DC	160	95T0204	158.10
● HDC60A160H	90V AC to 140V AC	7V DC to 48V DC	160	95T0205	162.60
● HDC60D120	4.5V DC to 32V DC	7V DC to 48V DC	120	95T0206	127.16
● HDC60D120H	4.5V DC to 32V DC	7V DC to 48V DC	120	95T0207	152.15
● HDC60D160	4.5V DC to 32V DC	7V DC to 48V DC	160	95T0208	165.91
● HDC60D160H	4.5V DC to 32V DC	7V DC to 48V DC	160	95T0209	150.89
● HDC100A120	90V AC to 140V AC	7V DC to 72V DC	120	95T0186	153.30
● HDC100A120H	90V AC to 140V AC	7V DC to 72V DC	120	95T0187	157.80
● HDC100A160	90V AC to 140V AC	7V DC to 72V DC	160	95T0188	172.97
● HDC100A160H	90V AC to 140V AC	7V DC to 72V DC	160	95T0189	173.92
● HDC100D120	4.5V DC to 32V DC	7V DC to 72V DC	120	95T0190	160.88
● HDC100D120H	4.5V DC to 32V DC	7V DC to 72V DC	120	95T0191	165.98
● HDC100D160	4.5V DC to 32V DC	7V DC to 72V DC	160	95T0192	162.72
● HDC100D160H	4.5V DC to 32V DC	7V DC to 72V DC	160	95T0193	168.61
● HDC200A120	90V AC to 140V AC	7V DC to 150V DC	120	95T0194	185.47
● HDC200A120H	90V AC to 140V AC	7V DC to 150V DC	120	95T0195	189.88
● HDC200A160	90V AC to 140V AC	7V DC to 150V DC	160	95T0196	209.24
● HDC200A160H	90V AC to 140V AC	7V DC to 150V DC	160	95T0197	213.65
● HDC200D120	4.5V DC to 32V DC	7V DC to 150V DC	120	95T0198	175.23
● HDC200D120H	4.5V DC to 32V DC	7V DC to 150V DC	120	95T0199	176.14
● HDC200D160	4.5V DC to 32V DC	7V DC to 150V DC	160	95T0200	193.75
● HDC200D160H	4.5V DC to 32V DC	7V DC to 150V DC	160	95T0201	198.16

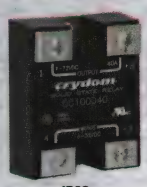
(204113)

POWERPLUS DC SOLID STATE PANEL MOUNT RELAYS

RoHS Compliant Available

crydom

- Optically isolated MOSFET output
- Ratings from 10A to 100A @ 72 VDC
- AC and DC control
- Relays are easily paralleled for higher-current applications
- LED status indicator
- Optional IP20 cover



IP00

IP20

Mfg. Part No.	Operating Voltage (VDC)	Control Voltage	Load Current (A)	Cover	Stock No.	Price Each 1-9
● DC100A40C	7V DC to 72V DC	90V AC to 140V AC	40	IP20	63T8304	114.19
● DC100D10	7V DC to 72V DC	4V DC to 32V DC	10	IP00	63T8305	72.92
● DC100D10C	7V DC to 72V DC	4V DC to 32V DC	10	IP20	63T8306	90.05
● DC100D100	7V DC to 72V DC	4V DC to 32V DC	100	IP00	63T8307	161.05
● DC100D100C	7V DC to 72V DC	4V DC to 32V DC	100	IP20	63T8308	164.62
● DC100D20	7V DC to 72V DC	4V DC to 32V DC	20	IP00	63T8309	93.03
● DC100D20C	7V DC to 72V DC	4V DC to 32V DC	20	IP20	63T8310	96.73
● DC100D40	7V DC to 72V DC	4V DC to 32V DC	40	IP00	63T8311	103.80
● DC100D40C	7V DC to 72V DC	4V DC to 32V DC	40	IP20	63T8312	107.48
● DC200D10	7V DC to 150V DC	4V DC to 32V DC	10	IP00	63T8313	90.22
● DC200D10C	7V DC to 150V DC	4V DC to 32V DC	10	IP20	63T8314	93.80
● DC200D40	7V DC to 150V DC	4V DC to 32V DC	40	IP00	63T8315	113.91
● DC200D40C	7V DC to 150V DC	4V DC to 32V DC	40	IP20	63T8316	117.50
● DC400D10	7V DC to 300V DC	4V DC to 32V DC	10	IP00	63T8317	99.55
● DC400D10C	7V DC to 300V DC	4V DC to 32V DC	10	IP20	63T8318	103.14
● DC60A20C	7V DC to 48V DC	90V AC to 140V AC	20	IP20	63T8319	99.40
● DC60A60C	7V DC to 48V DC	90V AC to 140V AC	60	IP20	63T8320	132.68
● DC60D100	7V DC to 48V DC	4V DC to 32V DC	100	IP00	63T8321	144.93
● DC60D100C	7V DC to 48V DC	4V DC to 32V DC	100	IP20	63T8322	148.60
● DC60D60	7V DC to 48V DC	4V DC to 32V DC	60	IP00	63T8323	119.56
● DC60D60C	7V DC to 48V DC	4V DC to 32V DC	60	IP20	63T8324	120.33

(197403)

LVD SERIES SOLID STATE PANEL MOUNT RELAYS

RoHS Compliant Available

crydom™

- Low voltage disconnect
- Output ratings from 40A to100A @ 3-75 VDC
- Low On-State resistance FET output
- Six DC control ranges available for 12 & 24VDC battery systems
- Compact encapsulated panel mount package

Mfg. Part No.	Control Voltage (VDC)	Output Current (A)	Thermal Pad	Stock No.	Price Each 1-9
LVD75A100	11V DC to 11.5V DC	100	N	12T9105	143.45
LVD75A100H	11V DC to 11.5V DC	100	Y	12T9107	145.24
LVD75A40	11V DC to 11.5V DC	40	N	12T9108	103.29
LVD75A40H	11V DC to 11.5V DC	40	Y	12T9109	105.07
LVD75A60	11V DC to 11.5V DC	60	N	12T9110	116.69
LVD75A60H	11V DC to 11.5V DC	60	Y	12T9111	118.48
LVD75A80	11V DC to 11.5V DC	80	N	12T9112	128.16
LVD75A80H	11V DC to 11.5V DC	80	Y	12T9113	133.06
LVD75B100	11.5V DC to 12V DC	100	N	12T9114	143.45
LVD75B100H	11.5V DC to 12V DC	100	Y	12T9115	145.24
LVD75B40	11.5V DC to 12V DC	40	N	12T9116	103.29
LVD75B40H	11.5V DC to 12V DC	40	Y	12T9117	107.59
LVD75B60	11.5V DC to 12V DC	60	N	12T9118	116.69
LVD75B60H	11.5V DC to 12V DC	60	Y	12T9119	118.48
LVD75B80	11.5V DC to 12V DC	80	N	12T9120	128.16
LVD75B80H	11.5V DC to 12V DC	80	Y	12T9121	129.94
LVD75C100	12V DC to 12.5V DC	100	N	12T9122	143.45
LVD75C100H	12V DC to 12.5V DC	100	Y	12T9123	145.24
LVD75C40	12V DC to 12.5V DC	40	N	12T9124	105.77
LVD75C40H	12V DC to 12.5V DC	40	Y	12T9125	105.07
LVD75C60	12V DC to 12.5V DC	60	N	12T9126	116.69
LVD75C60H	12V DC to 12.5V DC	60	Y	12T9127	118.48
LVD75C80	12V DC to 12.5V DC	80	N	12T9128	128.16
LVD75C80H	12V DC to 12.5V DC	80	Y	12T9129	129.94
LVD75D100	23V DC to 24V DC	100	N	12T9130	145.38
LVD75D100H	23V DC to 24V DC	100	Y	12T9131	147.16
LVD75D40	23V DC to 24V DC	40	N	83R7449	107.74
LVD75D40H	23V DC to 24V DC	40	Y	12T9132	107.00
LVD75D60	23V DC to 24V DC	60	N	12T9133	118.58
LVD75D60H	23V DC to 24V DC	60	Y	12T9134	120.39
LVD75D80	23V DC to 24V DC	80	N	82R4216	130.06
LVD75D80H	23V DC to 24V DC	80	Y	12T9135	131.87
LVD75E100	24V DC to 25V DC	100	N	12T9136	145.38
LVD75E100H	24V DC to 25V DC	100	Y	12T9137	147.16
LVD75E40	24V DC to 25V DC	40	N	12T9138	105.21
LVD75E40H	24V DC to 25V DC	40	Y	12T9139	107.00
LVD75E60	24V DC to 25V DC	60	N	12T9140	118.58
LVD75E60H	24V DC to 25V DC	60	Y	12T9141	120.39
LVD75E80	24V DC to 25V DC	80	N	12T9142	130.06
LVD75E80H	24V DC to 25V DC	80	Y	12T9143	131.87
LVD75F100	25.6V DC to 26.6V DC	100	N	12T9144	145.38
LVD75F100H	25.6V DC to 26.6V DC	100	Y	12T9145	147.16
LVD75F40	25.6V DC to 26.6V DC	40	N	12T9146	105.21
LVD75F40H	25.6V DC to 26.6V DC	40	Y	12T9147	109.57
LVD75F60	25.6V DC to 26.6V DC	60	N	12T9148	118.58
LVD75F60H	25.6V DC to 26.6V DC	60	Y	12T9149	120.39
LVD75F80	25.6V DC to 26.6V DC	80	N	12T9150	130.06
LVD75F80H	25.6V DC to 26.6V DC	80	Y	12T9151	131.87

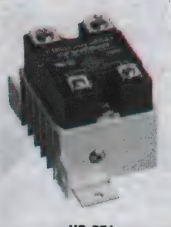
(196185)

PANEL MOUNT SOLID-STATE RELAY ASSEMBLIES

RoHS Compliant Available

crydom™

- Single Channel or 3 Phase output
- AC output current rated at 40°C
- Control voltage: 3 to 32VDC
- Dielectric strength: 4000Vrms
- Insulation resistance: 1090hms
- Capacitance: 8pF
- Operating temperature: -40 to 80°C
- Encapsulation: Themally conductive epoxy



HS-251

RELAY ASSEMBLIES — PANEL MOUNT

➤CONTINUED➤

PANEL MOUNT SOLID-STATE RELAY ASSEMBLIES (CONT.)

Mfg. Part No.	Load Current (A)	Load Voltage (Vr)	Control Voltage (VDC)	Surge Current (A_{PK})	Stock No.	Price Each 1-9
HS251-D2450	28	24-280	3-32VDC	625	50R4641	68.46
HS251-HD6050	28	48-660	3-32VDC	1200	50R4642	85.23

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
DRK1	**DIN Rail Adapter**; For use with: 35mm DIN Rail; HS301, HS202, HS201, HS151 and HS122 heat sinks; Includes Two 6-32x1/4 mounting screws	50R4605	10.30
TRM6	**Copper Lug Terminal**; For Use With:All Crydom screw terminal SSR's	50R4657	2.77
HK1	**Screws**; Thread Size:8-32 x 3/8; Screw Head Style:Combo; For Use With:All Crydom heat sinks (Except HS501DR)	50R4607	0.70

(163660)

CL SERIES SOLID-STATE PANEL MOUNT RELAYS

RoHS Compliant Available

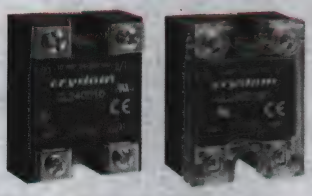
crydom™

Features

- Optimized for lighter duty applications in heating, lighting and motion control

Specifications

- Ratings of 5A and10A @ 24-280 VAC
- AC or DC control
- Zero-crossing (resistive loads) or random-fire (inductive loads) output



Mfg. Part No.	Control Voltage	Load Current	Relay Option	Stock No.	Price Each 1-9
CL240A05	90V AC to 250V AC	5	Zero Cross Turn-On	84R6310	41.42
CL240A05C	90V AC to 250V AC	5	Zero Cross Turn-On	84R6311	42.58
CL240A05R	90V AC to 250V AC	5	Random Turn-On	84R6312	42.36
CL240A05RC	90V AC to 250V AC	5	Random Turn-On	84R6313	43.50
CL240A10	90V AC to 250V AC	10	Zero Cross Turn-On	84R6314	37.75
CL240A10C	90V AC to 250V AC	10	Zero Cross Turn-On	84R6315	44.53
CL240A10R	90V AC to 250V AC	10	Random Turn-On	84R6316	43.08
CL240A10RC	90V AC to 250V AC	10	Random Turn-On	84R6317	46.81
CL240D05	3V DC to 32V DC	5	Zero Cross Turn-On	84R6318	28.15
CL240D05C	3V DC to 32V DC	5	Zero Cross Turn-On	84R6319	31.10
CL240D05R	3V DC to 32V DC	5	Random Turn-On	84R6320	33.29
CL240D05RC	3V DC to 32V DC	5	Random Turn-On	84R6322	35.63
CL240D10	3V DC to 32V DC	10	Zero Cross Turn-On	79R5363	29.85
CL240D10C	3V DC to 32V DC	10	Zero Cross Turn-On	84R6323	32.85
CL240D10R	3V DC to 32V DC	10	Random Turn-On	84R6324	31.56
CL240D10RC	3V DC to 32V DC	10	Random Turn-On	84R6325	37.58

(179661)

EL SERIES SOLID-STATE PANEL MOUNT RELAYS

RoHS Compliant Available

crydom™

Features/Specifications

- Ratings of 5A and 10A @ 3-100 VDC
- Ratings of 5A, 10A and 20A @ 24-280 VAC
- UL Recognized, CE and RoHS Compliant
- 5, 12 and 24VDC control
- Small outline panel mount "mini-puck" package
- Fast on terminal for easy wiring
- Mosfet Output
- Zero-crossing (resistive loads) or random-fire (inductive loads) output

Applications

- HVAC
- Panel builders
- Medical equipment
- Food/process control
- Theater lighting

Mosfet Output — Zero-crossing

➤CONTINUED➤

SOLID-STATE PANEL-MOUNT RELAYS

EL SERIES SOLID-STATE PANEL MOUNT RELAYS (CONT.)

Mfg. Part No.	Control Voltage (VDC)	Load Voltage	Load Current (A)	Stock No.	Price Each 1-9
MOSFET OUTPUT					
● EL100D5-05	4V DC to 8V DC	3V DC to 100V DC	5	12T9175	38.51
● EL100D5-12	10V DC to 14V DC	3V DC to 100V DC	5	12T9176	39.47
● EL100D5-24	21V DC to 27V DC	3V DC to 100V DC	5	12T9177	38.51
● EL100D10-05	4V DC to 8V DC	3V DC to 100V DC	10	12T9172	39.47
● EL100D10-12	10V DC to 14V DC	3V DC to 100V DC	10	12T9173	39.24
● EL100D10-24	21V DC to 27V DC	3V DC to 100V DC	10	12T9174	39.47
ZERO-CROSSING (RESISTIVE LOADS) OUTPUT					
● EL240A5-05	4V DC to 8V DC	24V AC to 280V AC	5	12T9190	29.85
● EL240A5-12	10V DC to 14V DC	24V AC to 280V AC	5	12T9191	30.80
● EL240A5-24	21V DC to 27V DC	24V AC to 280V AC	5	12T9192	29.56
● EL240A10-05	4V DC to 8V DC	24V AC to 280V AC	10	12T9178	30.86
● EL240A10-12	10V DC to 14V DC	24V AC to 280V AC	10	12T9179	31.78
● EL240A10-24	21V DC to 27V DC	24V AC to 280V AC	10	12T9180	32.73
● EL240A20-05	4V DC to 8V DC	24V AC to 280V AC	20	12T9184	34.64
● EL240A20-12	10V DC to 14V DC	24V AC to 280V AC	20	12T9185	34.59
● EL240A20-24	21V DC to 27V DC	24V AC to 280V AC	20	12T9186	34.30
RANDOM-FIRE (INDUCTIVE LOADS) OUTPUT					
● EL240A5R-05	4V DC to 8V DC	24V AC to 280V AC	5	12T9193	30.78
● EL240A5R-12	10V DC to 14V DC	24V AC to 280V AC	5	12T9194	31.72
● EL240A5R-24	21V DC to 27V DC	24V AC to 280V AC	5	12T9195	30.78
● EL240A10R-05	4V DC to 8V DC	24V AC to 280V AC	10	12T9181	32.66
● EL240A10R-12	10V DC to 14V DC	24V AC to 280V AC	10	12T9182	33.58
● EL240A10R-24	21V DC to 27V DC	24V AC to 280V AC	10	12T9183	34.59
● EL240A20R-05	4V DC to 8V DC	24V AC to 280V AC	20	12T9187	36.17
● EL240A20R-12	10V DC to 14V DC	24V AC to 280V AC	20	12T9188	37.49
● EL240A20R-24	21V DC to 27V DC	24V AC to 280V AC	20	12T9189	36.52

(190885)

LVD SERIES SOLID-STATE PANEL MOUNT RELAYS

RoHS Compliant Available

crydom

Specifications
- Low Voltage Disconnect
- Output Ratings from 40A to100A @ 3-75 VDC
- Low On-State Resistance FET Output
- Six DC control Ranges Available for 12 & 24VDC Battery Systems
- Compact Encapsulated Panel Mount Package

Mfg. Part No.	Control Voltage (VDC)	Load Voltage	Load Current (A)	Stock No.	Price Each 1-9
● LVD75A40	11V DC to 11.5V DC	3V DC to 75V DC	40	12T9108	103.29
● LVD75A80	11V DC to 11.5V DC	3V DC to 75V DC	80	12T9112	128.16
● LVD75B40	11.5V DC to 12V DC	3V DC to 75V DC	40	12T9116	103.29
● LVD75B60	11.5V DC to 12V DC	3V DC to 75V DC	60	12T9118	116.69
● LVD75D40	23V DC to 24V DC	3V DC to 75V DC	40	83R7449	107.74
● LVD75D80	23V DC to 24V DC	3V DC to 75V DC	80	82R4216	130.06

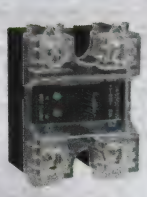
(190884)

EVOLUTION DUAL SOLID STATE RELAYS

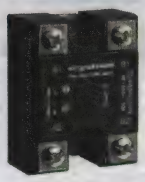
RoHS Compliant Available

crydom

Features:
- Improved mechanical and thermal design providing higher capacity output and significantly increased power density
- Screw termination suitable for rated load currents up to 50A at 660VAC per channel
- Each AC output channel features high power SCRs with high surge ratings and is available with either zero voltage or random turn on
- Four different input termination options (pin, locking connector, detachable barriers w/screws, and direct wire)
- For direct wire input termination; *go online or call*



IP20 - Cover



IP00 - No Cover

Specifications:
- Output rating (per channel): 25A and 50A
- Operating voltage rating: 120/240 and 480VAC
- Control input: 4-32VDC
- Left-right output screw connection
- Zero voltage turn-on
- SCR output for heavy industrial loads
- IP20 sealed

IP20 - COVER

Mfg. Part No.	Control Voltage (VDC)	Load Current (A)	Load Voltage (VAC)	Input Connector	Stock No.	Price Each 1-9
● CC2425W2V	4-32	25	24-280	Key Locking Connector	08R4276	86.60
● CC2425W3V	4-32	25	24-280	4-pin Screw Terminal	08R4277	89.20
● CC4825W1V	4-32	25	48-660	4-pin Standard	08R4280	104.05

➤CONTINUED➤

EVOLUTION DUAL SOLID STATE RELAYS (CONT.)

Mfg. Part No.	Control Voltage (VDC)	Load Current (A)	Load Voltage (VAC)	Input Connector	Stock No.	Price Each 1-9
● CC4825W2U*	4-32	25	48-660	Key Locking Connector	08R4281	109.04
● CC2450W2V	4-32	50	24-280	Key Locking Connector	08R4278	87.27
● CC4850W1V	4-32	50	48-660	4-pin Standard	08R4283	117.82
● CC4850W2V	4-32	50	48-660	Key Locking Connector	08R4284	120.27
● CC4850W3V	4-32	50	48-660	4-pin Screw Terminal	08R4285	104.58
IP00 - NO COVER						
● CD2425W2V	4-32	25	24-280	Key Locking Connector	08R4287	80.69
● CD2425W3V	4-32	25	24-280	4-pin Screw Terminal	08R4288	80.69
● CD4825W1V	4-32	25	48-660	4-pin Standard	08R4291	98.15
● CD4825W2V	4-32	25	48-660	Key Locking Connector	08R4292	100.60
● CD2450W2V	4-32	50	24-280	Key Locking Connector	08R4289	94.46
● CD4850W1V	4-32	50	48-660	4-pin Standard	08R4294	111.91

*U suffix indicates Channel A is at the top and Channel B is at the bottom.
(147887)

AC OUTPUT SOLID-STATE RELAYS WITH TOUCH-SAFE COVER

RoHS Compliant Available

crydom

- Integrated removable touch-safe cover rated IP20
- Broadened operating voltage range (24 to 280VAC)
- Low off-state leakage (1mA, snubberless)
- SCR AC switch output
- Zero cross and random voltage switching available
- LED status indicator
- Standard panel mount package
- User friendly, universal connectors
- EMC compliant design

Operating voltage: **(CW24 series)**: 24-280VAC, **(CW48 series)**: 48-660VAC. Max. turn-on and turn-off time: ½ cycle. Blocking voltage: 600V **(CW24 series)**, 1200V **(CW48 series)**. Operating Temperature: -40°C to 80°C. Dielectric strength: 4000V_{RMS}. Heatsinks, covers, thermal pads and noise filters available; *on page 1687.*

Add the following suffix to the end of the mfg. part no. to obtain the respective option:

Suffix	Option
-10	Random voltage switching
E	24VAC input (18-36VAC)
P	Internal overvoltage protection
S	Internal snubber

24-280VAC—AC CONTROL RELAYS

Mfg. Part No.	Load Current (A_{rms})	Surge Current (A)	Control Voltage (V_{rms})	Max. Turn-On/Turn-Off Voltage (V_{rms})	Stock No.	Price Each 1-9	Price Each 10-49
● CWA2410	0.15 to 10	400	90 to 280	90/10	80K5759	58.10	55.49
● CWA2425	0.15 to 25	600	90 to 280	90/10	78K5884	52.58	50.22
● CWA2450	0.15 to 50	850	90 to 280	90/10	78K5887	62.21	59.41
48-660VAC—AC CONTROL RELAYS							
● CWA4850	0.1 to 50	850	90 to 280	90/10	80K5791	74.60	71.25
● CWA4825	0.15 to 25	600	90 to 280	90/10	80K5787	76.76	73.31
● CWA4890	0.25 to 90	1350	90 to 280	90/10	80K5796	136.56	130.43
● CWA48125	0.25 to 125	2000	90 to 280	90/10	78K5889	171.58	163.87

24-280VAC—DC CONTROL RELAYS

Mfg. Part No.	Load Current (A_{rms})	Surge Current (A)	Control Voltage (VDC)	Max. Turn-On/Turn-Off Voltage (VDC)	Stock No.	Price Each 1-9	Price Each 10-49
● CWD2425	0.1 to 25	600	3 to 32	3/1	78K5895	48.26	46.09
● CWD2410	0.15 to 10	400	3 to 32	3/1	78K5891	47.76	45.62
● CWD2450	0.15 to 50	850	3 to 32	3/1	78K5899	56.34	53.81
● CWD2490	0.25 to 90	1350	3 to 32	3/1	69H6922	113.94	108.82
48-660VAC—DC CONTROL RELAYS							
● CWD4825	0.15 to 25	600	4 to 32	3/1	78K5903	70.78	67.60
● CWD4850	0.15 to 50	850	4 to 32	3/1	79K6123	68.36	65.28
● CWD4890	0.25 to 90	1350	4 to 32	3/1	78K5905	130.14	124.29
● CWD48125	0.25 to 125	2000	4 to 32	3/1	80K5808	160.97	153.73

(77703)

SERIES 1 SCR OUTPUT SPST-NO OR NC RELAYS

RoHS Compliant Available

crydom

- Current ratings up to 125A @ 530VAC
- SCR output for heavy industrial loads
- AC or DC control voltage
- Zero crossing (resistive loads) or random-fire output (inductive/phase-control loads) available
- N.O. or N.C. outputs

Control voltage for DC models is 3-32VDC. Control voltage for AC models is 90-280VAC. **-B suffix** in mfg. part no. indicates normally closed (NC) version. **-H suffix** in mfg. part no. indicates heat transfer pad version. All models have 4000 V_{RMS} opto-isolation. To gradually apply power to the load when energized by the control voltage, order **mfg. part**

➤CONTINUED➤

SERIES 1 SCR OUTPUT SPST-NO OR NC RELAYS (CONT.)

no. SST120 (120V) or **mfg. part no. SST240 (240V)** soft start modules driver only. Relays shown have zero-cross switching. To order random-fire add **"-10"** to mfg. part no. suffix. To order 24VAC (8-36VAC) control voltage, add **"E"** suffix. Outside dimensions in inches (mm): 1.87 (47.5) L x 1.80 (45.7) W x 0.9 (22.9) H. UL recognized, CSA certified, VDE approved, CE compliant.

Mfg. Part No.	Load Current Range (A_{RMS})	One-Cycle Surge (Apk)	Stock No.	Price Each 1-9	10-49	50-99	100+
AC CONTROL, 120VAC OUTPUT (24-140VAC)							
A1210	0.04-10	120	79K4302	43.76	41.79	39.82	38.84
A1225	0.04-25	250	79K4303	44.58	42.57	40.57	39.57
A1240	0.04-40	625	79K4304	49.33	47.11	44.89	43.79
AC CONTROL, 240VAC OUTPUT (48-280VAC)							
A2410	0.04-10	120	80K8075	45.95	43.88	41.82	40.78
A2425	0.04-25	250	79K4306	46.82	44.71	42.61	41.56
A2450	0.04-50	625	79K4310	53.01	50.63	48.25	47.06
A2475	0.04-75	1000	80K7297	85.37	81.54	77.70	75.78
A2490	0.04-90	1200	79K4313	107.66	102.82	97.98	95.56
AC CONTROL, 480VAC OUTPUT (48-530VAC)							
A4840	0.04-40	625	79K4316	66.68	63.63	60.96	59.06
A4850	-	625	79K4317	66.68	63.63	60.96	59.06
A4875	0.04-75	1000	79K4318	99.30	94.76	90.79	87.95
A4890	0.04-90	1200	79K4319	103.62	98.88	94.74	91.78
DC CONTROL, 120VAC OUTPUT (24-140VAC)							
D1210	0.04-10	120	93K7538	42.39	40.48	38.58	37.62
D1210-B	0.04-10	120	01M7403	52.25	49.89	47.53	45.76
D1225	0.04-25	250	88K1901	43.01	41.08	39.14	38.18
D1240	0.04-40	625	88K1903	47.76	45.60	43.46	42.39
DC CONTROL, 240VAC OUTPUT (24-280VAC)							
D2410	0.04-10	120	93K7539	43.40	41.45	39.50	38.52
D24110-10	0.04-10	1.5	95B8571	91.30	87.20	83.10	81.05
D2410-B	0.04-10	120	93K7540	53.58	51.17	48.77	47.56
D2425	...	...	93K7541	43.85	41.88	39.90	38.92
D2425-B	0.04-25	250	88K1907	54.04	51.61	49.18	47.96
D2440	0.04-40	625	88K1909	49.63	47.40	45.17	44.05
D2450	0.04-50	625	93K7542	51.21	48.91	46.61	45.46
D2450-B	0.04-50	625	92F4690	69.39	66.27	63.15	61.59
D2475	0.04-75	1000	88K1911	81.83	78.15	74.48	72.64
D2490	0.04-90	1200	88K1912	90.09	86.04	81.99	79.97
D24110	0.15-110	1500	88K1077	101.50	96.94	92.38	90.10
D24125	0.15-125	1750	88K1906	105.31	100.58	95.85	93.48
DC CONTROL, 480VAC OUTPUT (80-530VAC)							
D4825	-	250	79K4346	55.01	52.49	50.29	48.72
D4840	0.04-40	625	79K4348	61.08	58.29	55.84	54.10
D4850	-	625	79K4350	61.08	58.29	55.84	54.10
D4875	-	1000	79K4351	97.51	93.06	89.16	86.37
D4890	-	1200	79K4353	101.12	96.50	92.45	89.56

(3700)

HIGH-VOLTAGE AC OUTPUT SOLID-STATE RELAYS

RoHS Compliant Available

crydom

- Features same industrial standard surface-mount package as **Series 1** relays *on pages 1684-1685*
- Current rating up to 90A @ 660VAC
- SCR output for heavy industrial loads
- AC or DC control voltage
- Zero-cross (resistive loads) or random-fire (inductive/phase-control loads)
- SPST-NO contacts

Dual relays feature two totally independent AC output relays in a single standard panel-mount package. Control voltage: 4-32VDC (15mA @ 5VDC) for DC relays, 90-140VAC (15mA @ 120VAC) for AC relays. UL listed, CSA certified, VDE approved and CE compliant.

Mfg. Part No.	Load Current (A_{RMS})	One-Cycle Surge (Apk)	Output Voltage (VAC)	Stock No.	Price Each 1-9	10-49
DC CONTROL MODELS						
H12WD4850	0.15-50	625	48-660	80K8079	65.08	62.16
H12WD4890	0.15-90	625	48-660	79K4400	107.75	102.91
H12D4850	0.15-50	625	48-530	80K8078	65.08	62.16
H12D4890	0.15-90	1200	48-530	79K4399	104.50	99.80
DUAL RELAYS						
H12D4840D	0.15-40	625	48-530	80K8077	113.80	108.69

(3694)

AC OUTPUT SOLID-STATE RELAYS

RoHS Compliant Available

crydom

- Features same industrial standard surface-mount package as **Series 1** relays *on pages 1684-1685*
- Current rating up to 125A @ 660VAC
- Output: SCR AC switch for heavy industrial loads
- SPST-NO contacts
- Zero-cross (resistive loads) or random-fire output (inductive/phase-control loads)

DC control models have a 3-32VDC (3mA @ 5VDC) input. AC control models have a 90-280VAC (2mA @ 120VAC) input. Units shown have zero-cross output. Add **"-10"** to mfg. part no. suffix for random-fire output. UL recognized, CSA certified, VDE approved.

Mfg. Part No.	Load Current (A_{RMS})	One-Cycle Surge (Apk)	Output Voltage (VAC)	Stock No.	Price Each 1-9	10-49	50-99
18-36VRMS, AC CONTROL							
HA4850E	0.04-50	625	48-530	79K4375	81.03	77.39	73.75
90-280VRMS, AC CONTROL							
HA4825	0.04-25	250	48-530	79K4373	64.07	61.18	58.31
HA4850	0.04-50	625	48-530	79K4374	69.55	66.42	63.30
HA4890	0.04-90	1200	48-530	79K4376	108.05	103.19	98.34
HA48125	0.04-125	1750	48-530	79K4372	139.00	132.76	126.51
HA6050	0.04-50	625	48-660	79K4379	74.44	71.09	67.75
HA6090	0.04-90	1200	48-660	79K4380	111.68	106.66	101.64
HA60125	0.04-125	1750	48-660	79K4377	163.78	156.42	149.06
3-32VDC, DC CONTROL							
HD4812	0.04-12	140	48-530	79K4382	54.15	51.72	49.28
HD4825	0.04-25	250	48-530	79K4384	57.36	54.78	52.20
HD4850	0.04-50	625	48-530	79K4386	63.66	60.80	57.94
HD4875	0.04-75	100	48-530	79K4388	101.68	97.11	92.54
HD4890	0.04-90		48-530	79K4390	105.42	100.68	95.94
HD48125	0.04-125	1750	48-530	85K8112	127.33	121.61	115.88
HD6050	0.04-25	625	48-660	79K4394	65.22	62.29	59.36
HD6090	0.04-90	1200	48-660	79K4395	107.98	103.13	98.27
HD60125	0.04-125	1750	48-660	84K2729	140.61	134.29	127.98

(3855)

10-25 AMP, TRIAC OUTPUT RELAYS

RoHS Compliant Available

crydom

- Features same industry standard surface-mount package as Series 1 relays *on pages 1684-1685*
- Current ratings up to 25A @ 240VAC
- General purpose TRIAC output
- AC or DC control voltage
- SPSt-NO contacts

DC control models have a 3-32VDC (3mA @ 5VDC) input. AC control models have a 90-280VAC (2mA @ 120VAC) input. Units shown have zero-cross switching. Mfg. part no. suffix **-10** indicates random turn-on. UL listed, CSA certifed, VDE approved, CE compliant.

Mfg. Part No.	Load Current (A_{RMS})	One-Cycle Surge (Apk)	Stock No.	Price Each 1-9	10-49	50-99	100+
AC CONTROL MODELS							
TA1210	0.04-10	100	79K4425	111.11	106.03	101.59	98.41
TA1225	0.04-25	250	79K4426	111.39	106.30	101.84	98.66
TA2425	0.04-25	250	79K4428	117.03	111.68	107.00	103.65
DC CONTROL MODELS							
TD1210	0.04-10	100	79K4429	105.27	100.43	96.20	93.17
TD1225	0.04-25	250	79K4430	122.90	117.25	112.31	108.77
TD2410	0.04-10	100	79K4431	109.60	104.56	100.15	97.00
TD2425	0.04-25	250	79K4434	109.00	103.99	99.60	96.47

(3701)

10-90A, 120/240VAC RELAYS

RoHS Compliant Available

crydom

- Features same surface-mount package as **Series 1** relays *on pages 1684-1685*
- SPST-NO contacts
- IC driven, low leakage current

Relays are IC driven and feature low leakage. UL listed, CSA certified, CE compliant, VDE approved.

Mfg. Part No.	Load Current (A_{RMS})	One-Cycle Surge (Apk)	Control Voltage (VDC)	Stock No.	Price Each 1-9	10-49	50-99
CSD2410	0.15-10	120	3.5-15	79K4325	89.32	85.24	81.67
CSD2425	0.15-25	250	3.5-15	79K4326	109.48	104.48	100.10
CSD2425P	0.15-25	250	3.5-15	54M5685	115.77	110.56	105.36
CSD2440	0.15-40	625	3.5-15	79K4327	124.91	119.20	114.20
CSD2450	0.15-50	625	3.5-15	79K4328	128.61	122.73	117.59
CSD2475	0.15-75	1000	3.5-15	80K7300	208.24	198.72	190.39
CSE2425	0.15-25	250	15-32	79K4331	98.06	93.58	89.65

(3698)

SOLID-STATE PANEL-MOUNT RELAYS

DUAL 25A & 40A AC OUTPUT SOLID-STATE RELAYS

RoHS Compliant Available

crydom

- Dual SSR output in one industry standard package
- Current ratings up to 40A @ 480VDC
- SCR output for heavy industrial loads
- ¼" fast-on output terminals

Control voltage: 4-15VDC. Outside dimensions: 2.30 (58.4)L x 1.80 (45.7)W x .850 (21.6)H. Units shown are 240VAC(24-280VAC). 480VAC(48-530VAC) models are also available; *go online or call.*

Mfg. Part No.	Load Current (A)	Peak Surge Current (A)	Switching	Stock No.	Price Each 1-9	10-49	50-99
● D2425D	0.15-25	250	Zero Crossing	78K5914	82.86	79.14	75.42
● D2425D-10	0.15-25	250	Random Turn On	78K5915	97.39	93.01	88.63
● D2440D	0.15-40	625	Zero Crossing	78K5916	93.83	89.61	85.39
● D2440D-10	0.15-40	625	Random Turn On	78K5917	95.64	91.35	87.05

(3699)

53TP SERIES THREE PHASE SOLID STATE RELAYS

RoHS Compliant Available

crydom

- Rating: 25A, 50A per phase @ 48-530 VAC
- 2 package styles IP20 or IP00 (see IP00 spec sheet for more information)
- SCR output for heavy industrial loads
- AC or DC control
- Zero-crossing (resistive loads) or random-fire (inductive loads) output
- LED input status indicatior
- Transient protection built in
- IP20

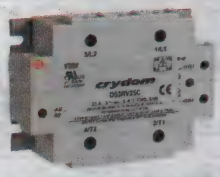
Mfg. Part No.	Control Voltage	Load Current (A)	Relay Option	Stock No.	Price Each 1-9
● B53TP25C	90 - 140 (VAC)	25	Zero-Cross	63R7690	192.31
● B53TP25C-10	90 - 140 (VAC)	25	Random	63R7691	193.10
● B53TP25CH	90 - 140 (VAC)	25	Zero-Cross/TP01 Thermal pad	63R7692	197.73
● B53TP25CH-10	90 - 140 (VAC)	25	Random Cross/TP01 Thermal pad	63R7693	198.41
● B53TP50C	90 - 140 (VAC)	50	Zero-Cross	63R7694	176.54
● B53TP50C-10	90 - 140 (VAC)	50	Random	63R7695	208.32
● B53TP50CH	90 - 140 (VAC)	50	Zero-Cross/TP01 Thermal pad	63R7696	208.32
● B53TP50CH-10	90 - 140 (VAC)	50	Random Cross/TP01 Thermal pad	63R7697	213.63
● C53TP25C	180 - 280 (VAC)	25	Zero-Cross	63R7698	187.80
● C53TP25C-10	180 - 280 (VAC)	25	Random	63R7699	193.10
● C53TP25CH	180 - 280 (VAC)	25	Zero-Cross/TP01 Thermal pad	63R7700	193.10
● C53TP25CH-10	180 - 280 (VAC)	25	Random Cross/TP01 Thermal pad	63R7701	198.41
● C53TP50C	180 - 280 (VAC)	50	Zero-Cross	63R7702	203.01
● C53TP50C-10	180 - 280 (VAC)	50	Random	63R7703	208.32
● C53TP50CH	180 - 280 (VAC)	50	Zero-Cross/TP01 Thermal pad	63R7704	213.32
● C53TP50CH-10	180 - 280 (VAC)	50	Random Cross/TP01 Thermal pad	63R7705	213.63
● D53TP25C	4 - 32 (VDC)	25	Zero-Cross	63R7716	190.62
● D53TP25C-10	4 - 32 (VDC)	25	Random	63R7717	195.93
● D53TP25CH	4 - 32 (VDC)	25	Zero-Cross/TP01 Thermal pad	63R7718	195.93
● D53TP25CH-10	4 - 32 (VDC)	25	Random Cross/TP01 Thermal pad	63R7719	201.23
● D53TP50C	4 - 32 (VDC)	50	Zero-Cross	63R7720	196.08
● D53TP50C-10	4 - 32 (VDC)	50	Random	63R7721	201.39
● D53TP50CH	4 - 32 (VDC)	50	Zero-Cross/TP01 Thermal pad	63R7722	201.39
● D53TP50CH-10	4 - 32 (VDC)	50	Random Cross/TP01 Thermal pad	63R7723	211.66
● E53TP25C	18 - 36 (VAC)	25	Zero-Cross	63R7724	187.80
● E53TP25C-10	18 - 36 (VAC)	25	Random	63R7725	193.10
● E53TP25CH	18 - 36 (VAC)	25	Zero-Cross/TP01 Thermal pad	63R7726	193.10
● E53TP25CH-10	18 - 36 (VAC)	25	Random Cross/TP01 Thermal pad	63R7727	198.41
● E53TP50C	18 - 36 (VAC)	50	Zero-Cross	63R7728	203.01
● E53TP50C-10	18 - 36 (VAC)	50	Random	63R7729	208.32
● E53TP50CH	18 - 36 (VAC)	50	Zero-Cross/TP01 Thermal pad	63R7730	208.32
● E53TP50CH-10	18 - 36 (VAC)	50	Random Cross/TP01 Thermal pad	63R7731	213.63

(168167)

53RV SERIES THREE PHASE MOTOR REVERSING SOLID-STATE RELAYS

RoHS Compliant Available

crydom



- Three-phase motor reversing solid-state relays
- Rating from 25A and 50A per phase @ 48-530 VAC
- SCR output for heavy industrial loads
- LED input status indicator

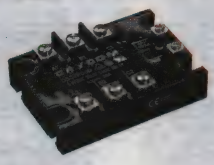
Mfg. Part No.	Control Voltage (VDC)	Load Current (A)	Relay Option	Stock No.	Price Each 1-9
● D53RV25C	4 - 32	25	...	63R7712	248.13
● D53RV25CH	4 - 32	25	TP01 Thermal pad	63R7713	253.31
● D53RV50C	4 - 32	50	...	63R7714	306.45
● D53RV50CH	4 - 32	50	TP01 Thermal pad	63R7715	304.47

(168168)

25-30A THREE-PHASE RELAYS

RoHS Compliant Available

crydom



- Load current ratings up to 50A
- SCR output for heavy industrial loads
- Zero-crossing or random-fire output
- For 3-phase loads in a Wye or Delta configuration where only one control signal is required
- Industry-standard panel mount package

Series 53TP solid state relays switch up to 530V_{RMS} directly to loads such as motors, transformers, heating elements etc. **A53- mfg. part nos.** have a 90-280VAC (2mA@120VAC) input. **D53- mfg. part nos.** have a 3-32VDC (10mA@5VDC) control. Outside dimensions: 4.09 (103.8)L x 2.89 (73.4)W x 0.94 (24.0)H. UL recognized, CSA certified, VDE approved.

Mfg. Part No.	Load Current (A_{RMS})	One-Cycle Surge (Apk)	Switching	Stock No.	Price Each 1-9	10-49	50-99
● A53TP25D	.05-25	250	Zero Voltage Turn On	50F8562	177.99	169.99	161.99
● A53TP50D	.05-50	250	Zero Voltage Turn On	03M5671	194.08	185.36	176.63
● A53TP50D-10	.05-50	625	Random Turn On	03M5672	204.33	195.15	185.97
● D53TP25D	.05-25	250	Zero Voltage Turn On	50F8564	170.67	163.00	155.33
● D53TP50D	.05-50	625	Zero Voltage Turn On	05M6384	186.76	178.37	169.97

(3705)

SERIES 1 DC OUTPUT SOLID-STATE RELAYS

RoHS Compliant Available

crydom

- Features same industry standard surface-mount package as **Series 1** relays *on pages 1684-1685*
- MOSFET output
- Load current up to 40A DC
- Output voltage up to 500VDC
- Easily paralleled for high-current applications

All models have 2500 volt DC isolation. Control voltage range is 3.5-32VDC (1.6mA@5VDC) (100 volt models). UL recognized, CE compliant.

Mfg. Part No.	Load Voltage (VDC)	Load Current (A)	Stock No.	Price Each 1-9	10-49	50-99	100+
● D1D07	0-100	0.02-7	80K9295	58.68	56.10	53.52	52.23
● D1D12	0-100	0.02-12	80K9296	64.85	62.00	59.15	57.72
● D1D20	0-100	0.02-20	80K9297	71.08	67.95	64.83	63.27
● D1D40	0-100	0.02-40	80K9298	88.27	84.39	80.51	78.57
● D1D60	0-100	0.02-60	04R7288	118.74	113.52	108.30	105.69
● D1D80	0-100	0.02-80	04R7289	134.78	128.85	122.93	119.97
● D1D100	0-100	0.02-100	04R7287	150.68	144.06	137.44	134.12
● D2D07	0-200	0.02-7	80K9299	67.76	64.78	61.81	60.32
● D2D12	0-200	0.02-12	80K9300	78.10	74.67	71.23	69.52
● D2D40	0-200	0.02-40	18M5003	111.42	106.53	101.63	99.18
● D4D07	0-400	0.02-7	80K9301	79.63	76.13	72.63	70.88
● D4D12	0-400	0.02-12	80K9302	107.29	102.58	97.86	95.50
● D5D07	0-500	0.02-7	80K9303	89.65	85.71	81.77	79.79
● D5D10	0-500	0.02-10	82K8436	116.12	111.02	105.91	103.36

(3696)

60 - 100A DC OUTPUT SOLID-STATE RELAYS

RoHS Compliant Available

crydom

- Features same surface-mount package as **Series 1** relays; *on pages 1684-1685*
- MOSFET output
- Easily paralleled for higher current applications
- Available in 60, 80 and 100A
- Low On-State Resistance
- Output Voltage: 0-60VDC
- Operating Temperature: -30°C to +80°C
- Dielectric Strength (60Hz): 2500 V_{RMS}

Mfg. Part No.	Max. Load Current (ADC)	Max. Surge Current (ADC)	Stock No.	Price Each 1-9	10-49	50-99	100+
D06D60	60	180	88K1898	105.06	100.34	95.62	93.26
D06D80	80	220	88K1899	120.91	115.23	110.24	106.69
D06D100	100	270	93K7537	137.44	131.26	125.08	122.00

(68275)

DC OUTPUT RELAYS

RoHS Compliant Available

crydom

- Features same surface-mount package as **Series 1** relays *on pages 1684-1685*
- MOSFET output
- Low on-state resistance
- Panel mount
- Optically coupled
- Paralleling capability for higher currents

MOSFET Technology assures easy paralleling and switching capabilities to 40A @ 100VDC. Lower current models also available up to 500VDC; *go online or call.*

Mfg. Part No.	Control Voltage (VDC)	Load Current (A)	Stock No.	Price Each 1-9	10-49	50-99	100+
D2D12L	200	0.02 - 12	88K1076	77.35	73.81	70.72	68.51
D1D40L	100	0.02 - 40	86H2639	84.88	81.00	77.60	75.18

(75517)

3-7A DC OUTPUT RELAYS

RoHS Compliant Available

crydom

- Features same industry standard surface-mount package as **Series 1** relays *on pages 1684-1685*
- Bi-polar transistor output
- Current rating up to 7A @ 60VDC
- 3-60VDC switching
- N.O. or N.C. outputs
- 4 kV optical isolation
- AC or DC control

Mfg. Part No.	Load Current (ADC)	Control Voltage	Contacts	Stock No.	Price Each 1-9	10-49	50-99	100+
DC60S3	0.02 - 3	3.5-32VDC	SPST-NO	93K7532	20.94	20.00	19.06	18.58
DC60S5	0.02 - 5	3.5-32VDC	SPST-NO	88K1895	31.71	30.28	28.86	28.14
DC60S7	0.02 - 7	3.5-32VDC	SPST-NO	88K1896	39.13	37.37	35.61	34.73
DC60SA3	0.02 - 3	90-280VAC	SPST-NO	01M7320	23.87	22.80	21.73	21.19
DC60SA5	0.02 - 5	90-280VAC	SPST-NO	88K1893	39.88	38.08	36.29	35.40
DC60SA7	0.02 - 7	90-280VAC	SPST-NO	88K1894	40.68	38.55	36.90	35.72
DC60S3-B	0.02 - 3	3.5-32VDC	SPST-NC	06M6633	27.35	26.17	25.16	24.14
DC60S5-B	0.02 - 5	3.5-32VDC	SPST-NC	06M6634	37.17	35.56	34.18	32.81
DC60S7-B	0.02 - 7	3.5-32VDC	SPST-NC	06M6635	44.79	42.85	41.19	39.54

(3662)

HIGH-VOLTAGE DC SOLID-STATE CONTACTORS

RoHS Compliant Available

crydom

- Features same surface-mount package as **Series 1** relays *on pages 1684-1685*
- IGBT technology for high-voltage DC switching
- Current load range: 0.2-25A DC
- Dielectric strength 60Hz: 2500 V_{rms}
- Insulation resistance (min.) @ 500 VDC: $10^9\Omega$
- Max. capacitance input/output: 50 pF
- Ambient operating temperature range: -30°C to 80°C
- Ambient storage temperature range: -40°C to 125°C
- Weight (typical): 3.0oz. (86.5g)

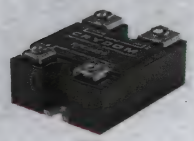
Mfg. Part No.	Operating Voltage (VDC)	Control Voltage (VDC)	Control Voltage (VDC)	Impedance Input (Ω)	Stock No.	Price Each 1-9	10-49
SSC800-25-24	0-800	24	20-28	1.5 K	88K1999	226.17	216.01
SSC1000-25-24	0-1000	24	20-28	1.5 K	88K1997	217.16	207.40
SSC800-25-12	0-800	12	8-16	780	88K1998	231.60	221.19

(77700)

PROPORTIONAL CONTROLLERS

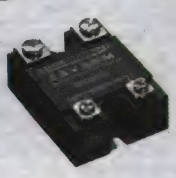
RoHS Compliant Available

crydom



RPC

PCV



LPCV

RPC series proportional controllers provide a stable yet economical method of controlling power. An inexpensive potentiometer connected to the input provides the proportional control. **Mfg. part nos. RPC12-** require potentiometer resistance of 150kΩ and potentiometer wattage: 1W. **Mfg. part nos. RPC24-** and **RPC48-** require a 1MΩ, ½W potentiometer.

➤CONTINUED➤

PROPORTIONAL CONTROLLERS (CONT.)

Mfg. Part No.	Load Current (A_{RMS})	One-Cycle Surge (A_{PK})	Stock No.	Price Each 1-9	10-49	50-99
RPC1215	15	150	80K9308	81.31	77.66	74.01
RPC1225	25	250	80K9309	105.15	100.42	95.70
RPC1240	40	625	03M5742	143.44	136.99	130.54
RPC2415	15	150	80K9310	90.96	86.87	82.78
RPC2425	25	250	80K9311	110.04	105.10	100.15
RPC2440	40	625	82K8614	153.03	146.15	139.28
RPC4825	25	250	80K9312	146.40	139.83	133.24
RPC4840	40	625	80K9313	167.32	159.80	152.28

PCV series proportional controllers are self-contained power control modules integrating a complete phase fired logic control system and solid state relays in the same standards package. Control voltage for **mfg. part no. 7CV2415** is 2-7VDC (4-7mA typ).Output voltage is 100-240VAC. Control voltage for **mfg. part nos. 10CV24XX** is 2-10VDC (4-7mA typ).

7PCV2415	15	150	03M5799	106.40	101.54	97.28
10PCV2415	15	150	03M5768	108.23	103.36	98.50
10PCV2425	25	250	03M5769	119.87	114.48	109.09
10PCV2440	40	625	03M5770	162.77	155.45	148.14
10PCV2450	50	625	91F5738	146.11	139.54	132.97

LPCV Series linear proportional controllers control loads up to 110A. Changes in the input signal linearly vary the firing angle of the thyristor load control device. Control circuitry and power switch are in the same package. **Mfg. part no. PS-240** power supply is designed to provide the 20VAC required in addition to the control voltage. Mfg. part nos. **5LPCV-** have a 0-5VDC control. Mfg. part nos. **10LPCV-** have a 0-10VDC control.

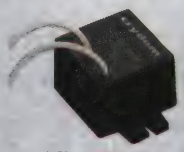
5LPCV2475	75	1000	80K9323	469.27	448.18	427.08
10LPCV2440	40	625	92F4739	430.82	411.46	392.09
10LPCV2425	25	250	80K9322	384.47	367.20	349.91

(2430)

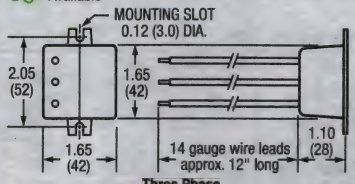
SOLID-STATE RELAY FILTERS — AC OUTPUT

RoHS Compliant Available

crydom



Single Phase



Three Phase

- Suppresses EMI noise
- Simple installation in new or existing equipment

Designed to significantly reduce EMI noise generated by solid-state relays to meet EMC regulations. All AC solid-state relays that use thyristor switching devices generate some low frequency noise, that may appear as conducted emissions on the main supply line connection. Current is not required to pass through the filter. The only connections required are across the incoming supply line.

Mfg. Part No.	Connection*	Output Voltage (V_{rms})	Attenuation 150 to 250Khz) (dBμV)	Maximum Current Drain (mA)†	Stock No.	Price Each 1-9	10-49
1F25	Single	275	30	40	03M5767	28.53	27.24
3F20	Three	475	25	35	52F6724	39.85	38.05

*Number of phases; †At V_{rms} max.

(75479)

PANEL MOUNT SOLID STATE RELAYS

c UL us CE

RoHS Compliant Available

IDEC

Features:
- Input status LED indicator
- Dual SCR output
- Direct bond copper substrate
- Internal transient protection - built-in snuber
- High surge capability
- Optional finger-safe terminal cover (RSS-CVR)

Specifications:
- Blocking voltage: 1200V
- Optical isolation: 4000V
- Zero cross
- Output voltage: 48-660VAC
- Contacts: SPST-NO

AC RELAYS

Mfg. Part No.	Control Voltage (VAC)	Load Current (A)	Stock No.	Price Each 1-9
RSSAN-10A	90-280	10	31B3391	35.07
RSSAN25A	90-280	25	80K6136	35.20
RSSAN-50A	90-280	50	80K6135	45.41
RSSAN-75A	90-280	75	31B3392	77.12

➤CONTINUED➤

SOLID-STATE PANEL-MOUNT RELAYS

PANEL MOUNT SOLID STATE RELAYS (CONT.)

DC RELAYS

Mfg. Part No.	Control Voltage (VAC)	Load Current (A)	Stock No.	Price Each 1-9
● RSSDN-10A	4-32	10	13M2780	25.17
● RSSDN-25A	4-32	25	80K6137	26.38
● RSSDN-50A	4-32	50	13M2781	40.57
● RSSDN-75A	4-32	75	31B3394	68.16
● RSSDN-90A	4-32	90	31B3395	79.50

ACCESSORIES

Mfg. Part No.	Description	For Use With	Stock No.	Price Each 1-24
● RSS-CVR	Finger-safe terminal cover	RSS series solid-state relays	31B3390	2.46

(105822)

MAGNECRAFT SERIES 70S2 MINIATURE SOLID-STATE RELAYS

RoHS Compliant Available

Schneider Electric

PCB Thru-Hole (Suffix "V")

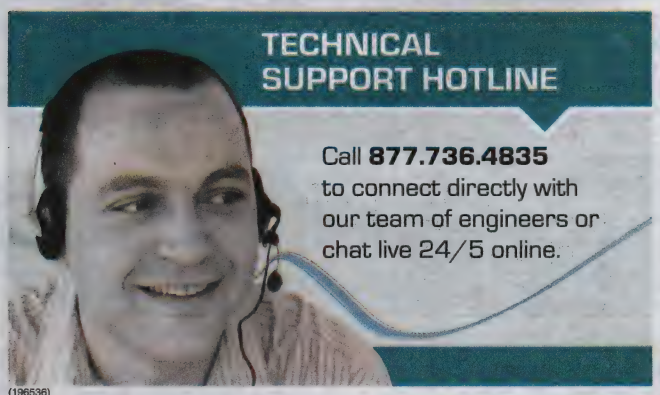
Screw Terminals w/Flange (Suffix "S")

SPST-NO relays provide 3750V_{RMS} optical isolation from sensitive logic circuits to field devices. PC terminal, screw, blade-style or socket compatible. **Suffix "N"** relays have quick connect terminals for push-on connectors which fit blade sizes 0.187" (4.75) and 0.250" (0.635) for the load size. Suffix **"M"** compact relay, panel or printed circuit mount. **Suffix "S"** relays have screw terminals with screws. Dimensions (inches): 1.70L x 0.40W x 1.00H **(Suffix V)**, 1.20L x 1.00W x 0.83H **(Suffix N)**, 2.00L x 1.00W x 0.864H **(Suffix S)**. UL recognized File No. E52197.

PC BOARD THRU-HOLE SIP

Mfg. Part No.	Max. Load Current (A)	Input Voltage (VDC)	Load Voltage	Stock No.	Price Each 1-24	25-49	50-99
● 70S2-04-D-03-V	3	3 - 32 VDC	8-50VAC	10M6467	34.87	31.69	29.52
● 70S2-01-A-03-V	3	3 - 15 VDC	3-60VDC	10M6451	23.52	21.37	19.91
● 70S2-04-B-03-V	3	3 - 32 VDC	24-140VAC	10M6459	24.30	22.09	20.58
● 70S2-04-C-03-V	3	3 - 32 VDC	24-280VAC	10M6462	23.52	21.37	19.91
PC BOARD THRU-HOLE W/FLANGE							
● 70S2-04-C-10-M	10	3 - 30 VDC	24-280VAC	10M6464	35.86	32.84	30.37
QUICK- CONNECT W/FLANGE							
● 70S2-01-A-05-N	5	3 - 15 VDC	3-60VDC	10M6452	33.04	30.16	28.01
● 70S2-04-B-06-N	6	3 - 30 VDC	24-140VAC	10M6461	29.63	27.06	25.12
● 70S2-04-C-06-N	6	3 - 30 VDC	24-280VAC	14M6826	29.05	26.53	24.63
● 70S2-04-B-12-N	12	3 - 30 VDC	24-140VAC	17M8461	43.78	39.97	37.12
● 70S2-04-C-12-N	12	3 - 30 VDC	24-280VAC	10M6465	29.05	26.53	24.63
SCREW TERMINALS W/FLANGE							
● 70S2-01-A-05-S	5	3 - 30 VDC	3-60VDC	10M6453	30.16	27.54	25.57
● 70S2-02-A-05-S	5	9 - 30 VDC	3-60VDC	10M6455	30.16	27.54	25.57
● 70S2-04-B-06-S	6	3 - 30 VDC	24-140VAC	17M8460	30.16	27.54	25.57
● 70S2-04-C-06-S	6	3 - 30 VDC	24-280VAC	10M6463	30.16	27.54	25.57
● 70S2-04-B-12-S	12	3 - 30 VDC	24-140VAC	14M6825	30.76	28.09	26.08
● 70S2-04-C-12-S	12	3 - 30 VDC	24-280VAC	10M6466	24.68	22.54	20.93
● 70S2-05-C-12-S	12	6 - 30 VDC	24-280VAC	10M6471	30.76	28.09	26.08
● 70S2-03-B-25-S	25	3 - 30 VDC	24-140VAC	10N9137	41.50	37.89	35.19
● 70S2-03-C-25-S	25	3 - 30 VDC	24-280VAC	10M6457	33.29	30.39	28.22

(3645)



(196536)

MAGNECRAFT PANEL MOUNT SOLID-STATE RELAYS

RoHS Compliant Available

Schneider Electric

High reliability, opto-isolated solid-state AC output relays enable switching of AC loads up to 125A and DC output models to switch loads up to 40A VDC. LED lamp indicators. AC output has back-to-back SCRs. Isolation voltage: 4000VAC std. (input to output). Temperature range: -30°C to +80°C. Input current DC: 14mA @ 5VDC. Input current AC: 8.5mA @ 120VAC, 22mA @ 240VAC. Leakage current: 8mA @ 120VAC, 10mA max. @ 240VAC. Dimensions: 2.250L x 1.750W x 0.996"H. UL recognized file No. E52197.

SCREW TERMINALS / SAFETY COVER

Mfg. Part No.	Dual Marked	Load Current (A)	Output Voltage	Control Voltage	Stock No.	Price Each 1-24
● 6210AXXSZS-AC90	W6210ASX-1	10	24-280VAC	90-280VAC	10M6324	48.60
● 6225AXXSZS-AC90	W6225ASX-1	25	24-280VAC	90-280VAC	10M6329	53.07
● 6240AXXSZS-AC90	W6240ASX-1	40	24-280VAC	90-280VDC	56R2708	80.07
● 6250AXXSZS-AC90	W6250ASX-1	50	24-280VAC	90-280VAC	10M6334	86.71
● 6275AXXSZS-AC90	W6275ASX-1	75	24-280VAC	90-280VDC	56R2753	134.55
● 6410AXXSZS-AC90	W6410ASX-1	10	48-480VAC	90-280VDC	56R5027	65.38
● 6425AXXSZS-AC90	W6425ASX-1	25	48-480VAC	90-280VDC	56R5029	53.09
● 6210AXXSZS-DC3	W6210DSX-1	10	24-280VAC	3-32VDC	10M6325	29.35
● 6210AXXTZS-DC3	W6210DTX-1	10	24-280VAC	3-32VDC	56R2335	43.36
● 6225AXXSZS-DC3	W6225DSX-1	25	24-280VAC	3-32VDC	10M6330	26.91
● 6225AXXTZS-DC3	W6225DTX-1	25	24-280VAC	3-32VDC	56R2607	54.68
● 6240AXXSZS-DC3	W6240DSX-1	40	24-280VAC	3-32VDC	56R2709	80.07
● 6410AXXTZS-DC3	W6410DTX-1	10	48-480VAC	3-32VDC	10R6242	28.57
● 6425AXXSZS-DC3	W6425DSX-1	25	48-480VAC	3-32VDC	56R5030	53.14
● 6450AXXSZS-DC3	W6450DSX-1	50	48-480VAC	3-32VDC	35R2822	104.10

MOSFET OUTPUT

Mfg. Part No.	Dual Marked	Load Current (A)	Output Voltage	Control Voltage	Stock No.	Price Each 1-24
● 6312AXXMDS-DC3	W6212DDX-1	12	3-200VDC	3.5-32VDC	10M6328	27.74
● 6325AXXMDS-DC3	W6225DDX-1	25	3-200VDC	3.5-32VDC	10M9738	95.09
● 6340AXXMDS-DC3	W6240DDX-1	40	3-200VDC	3.5-32VDC	17M8254	80.46

(3970)

SOLID-STATE RELAYS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Protective cover for greater safety
- Built-in varistor effectively absorbs external surges
- Operation indicator enables monitoring operation
- 5 to 90A output current
- Screw terminals

The **G3NA** is an industry standard "hockey puck" style, solid state relay. Ideal for industrial switching applications where long life, heavy duty loads and fast switching speed are required. Standard operation indicator. Output load current can be significantly increased with a **mfg. part no. Y92B** heat sink. Dimensions: 2.28 x 1.69 x 1.06" (58 x 43 x 27). **-UTU** models are also VDE (TÜV) approved. Additional models available; *go online or call.*

AC INPUT

Mfg. Part No.	Load Current (A)	Output Voltage (VAC)	Input Voltage (VAC)	Stock No.	Price Each 1-9	10-24
● G3NA-D210B-AC100-240	10	5-200	100-240	14R4367	63.01	60.65
● G3NA-210B-AC100-120	10	24-240	100-120	17M6659	47.22	45.45
● G3NA-225B DC5-24	25	24-240	5-24	17M6662	32.09	30.89
● G3NA-240B-AC100-120	40	100-120	100-120	90M0351	66.66	64.17

DC INPUT

Mfg. Part No.	Load Current (A)	Output Voltage (VAC)	Input Voltage (VDC)	Stock No.	Price Each 1-9	10-24
● G3NA-205B-DC5-24	5	24-240	5-24	02C6833	25.81	24.85
● G3NA-210B-UTU DC5-24	10	24-240	5-24	89C5635	27.94	26.90
● G3NA-210B-DC5-24	10	24-240	5-24	17M6660	24.99	24.05
● G3NA-D210B-DC5-24*	10	5-200	5-24	90M0350	54.17	52.15
● G3NA-220B-DC5-24	20	24-240	5-24	17M6661	30.64	29.49
● G3NA-225B-AC100-120	25	24-240	100-120	17M6663	40.29	38.78

*DC Output Voltage

HEATSINKS

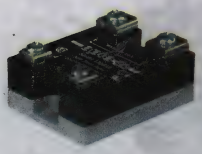
Mfg. Part No.	For Use With	Stock No.	Price Each 1-9	10-24
● Y92B-A100	G3NA Series 10 and 20A Relays	17M8256	16.71	16.17

(19927)

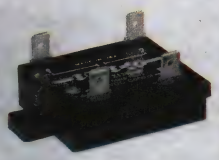
SOLID-STATE RELAYS

RoHS Compliant Available

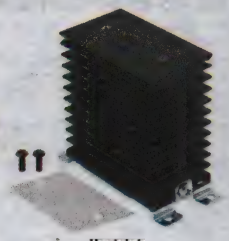
OPTO 22



AC and DC Controlled



Z Series



Heatsink

- 4,000V optical isolation input to output
- Zero voltage turn-on
- Turn-on/turn-off time: ½ cycle maximum
- Operating frequency: 25 to 65Hz (operates at 400Hz with six times off-state leakage)
- Coupling capacitance input to output: 8pF maximum
- DV/DT off-state: 200 volts per microsecond
- DV/DT commutating: snubbed for rated current at 0.5 power factor
- TTL compatible
- Operating temperature range: -40°C to +100°C
- Order IP20 touch safe cover for standard case separately below
- UL recognized, CSA certified, CE compliant

Thermal Conductive Pad

DC CONTROLLED

Mfg. Part No.	Control Voltage	Load Current (A)	1-Cycle Surge (A) Peak	Load Voltage (VAC)	Stock No.	Price Each
120D3	3-32VDC	3	85	12-140	96F1083	21.56
120D10	3-32VDC	10	110	12-140	96F1081	36.77
120D25	3-32VDC	25	250	12-140	18M9771	31.00
120D45	3-32VDC	45	650	12-140	18M9772	41.70
240D3	3-32VDC	3	85	24-280	18M9784	21.77
240D10	3-32VDC	10	110	24-280	96F1061	29.94
240D25	24-280VAC/DC	25	250	24-280	18M9782	34.22
240D!25*	3-32VDC	25	250	24-280	52M1720	43.26
240D25-17	3-32VDC	25	250	24-280	18M9783	45.41
240D25-18	3-32VDC	25	250	24-280	75K1885	43.26
575D30-HS	3-32VDC	30	300	100-600	06R5673	129.78
240D45	3-32VDC	45	650	24-280	18M9785	44.92
240D45-17	3-3VDC	45	650	24-280	18M9786	48.64
380D25	3-32VDC	25	250	24-420	18M9790	49.73
380D45	3-32VDC	45	650	24-420	96F6491	64.86
DC CONTROLLED - TRANSIENT PROOF						
480D10-12	3-32VDC	10	110	100-530	18M9793	47.56
480D25-12	3-32VDC	25	250	100-530	18M9794	52.45
480D45-12	3-32VDC	45	650	100-530	18M9795	48.64
575D45-12	3-32VDC	45	650	100-600	18M9796	52.49
AC CONTROLLED						
120A10	85-280VAC	10	110	12-140	18M9769	32.40
120A25	85-280VAC	25	250	12-140	18M9770	34.58
240A10	85-280VAC	10	110	24-280	18M9780	43.24
240A25	85-280VAC	25	250	24-280	96F1086	39.56
240A45	280-85VAC	45	650	24-280	18M9781	48.12
Z SERIES - PLASTIC CASE						
Z120D10	3-32VDC	10	110	12-140	18M9765	17.81
Z240D10	3-32VDC	10	110	24-280	18M9766	18.89

DC SWITCHING

Mfg. Part No.	Control Voltage	Load Current (A)	Load Current (A)	Load Voltage (VDC)	Stock No.	Price Each 1-9
DC60S3	3-32VDC	3	5	5-60	18M9068	19.67
DC60S5	3-32VDC	5	10	5-60	18M9069	30.42

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24
SAFETY COVER	Safety Cover for All AC and DC Series/Standard Case Solid-State Relays	51M9003	3.47
SSR-HS	Heat Sink for Power Series Standard Model	40T0080	44.10
SSR-THERMOPAD	Thermal Conductive Pad for Power Series SSR Heatsink, 10pk	40T0081	30.40

* Includes LED indicator
"HS" suffix: Heat sink included
(3749)

SOLID STATE PANEL MOUNT AQA SERIES RELAYS

RoHS Compliant Available

Panasonic

Features

- Input voltage: 4VDC to 32VDC
- Input current: 20 mA max.
- Load voltage: 75VAC to 250VAC
- Compact sze: W 40 x L 58 x H 25.5 mm (W 1.575 x L 2.283 x H 1.004 inch)
- Terminal cover for safety (output side only)) *Cover on input side is available as option
- Mounting pitch 47.5 mm (1.870 inch)
- Built-in varistor for excellent surge absorption
- LED indication for operation status verification

Applications

- Heater control
- Commercial: Cooking machine, vending machine, freezer and refrigerator
- Industrial: Molding machine, temperature controlled bath, printing machine and packing machine

Mfg. Part No.	Load Current (A)	Switch Mode	Stock No.	Price Each 1-24
AQA211VL	15	Zero Crossing	14T0579	28.74
AQA221VL	15	Random Turn On	14T0580	30.16
AQA411VL	25	Zero Crossing	14T0581	36.74
AQA421VL	25	Random Turn On	14T0582	36.74
AQA611VL	40	Zero Crossing	14T0583	57.03
AQA621VL	40	Random Turn On	14T0584	57.03
AQAD171DL	10	...	16X9713	91.02

RELAY ACCESSORIES

Mfg. Part No.	Accessory Type	Stock No.	Price Each 1-24
AQA801	Terminal Cover	14T0585	2.82

(192087)

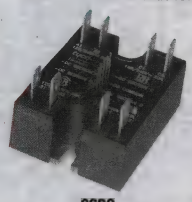
P&B DUAL AND QUAD AC OUTPUT SOLID-STATE RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor

SSRD



SSRQ

SSRD series relays comprise 2 totally independent, optically-isolated, inverse parallel SCR output solid-state relays in 1 standard package. Used as 2 On/Off switches for loads through 25 amps. 2 x SPST-NO. 2500Vrms isolation. Overall dimensions: 2.25" L x 1.75" W x 1.26" H. **SSRQ series** relay comprises 4 independent, optically-isolated, triac output solid-state relays in 1 package. Used as 4 On/Off switches for loads through 20A. 4 x SPST-NO. 250Vrms isolation. Overall dimensions: 2.3" L x 1.75" W x 1.225" H. Line voltage: 24-280VAC. Input voltage: 4-15VDC. Both are UL recognized for industrial applications.

SSRD SERIES - DUAL AC OUTPUT

Mfg. Part No.	Line Voltage (VAC)	Input Voltage (VDC)	Switching Current @ 25°C (A_{rms})	Stock No.	Price Each 1-9
SSRD-240D25	24-280	4-15	25	26M8311	103.38
SSRD-240D40	24-280	4-15	40	06R3619	126.36

(3303)

P&B SOLID-STATE RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor

SSRT series relays have TRIAC output and are controlled by an optoelectronic coupler. Intended for use as an On/Off switch for loads through 25 amps. EMI and RFI are greatly reduced due to zero voltage turn-on and zero current turn-off of the load. SPST-NO contacts. Plastic case is UL rated self-extinguishing. 400V rms isolation. Overall height: 0.87". Line voltage: 24-280VAC.

SSR series have medium/high power, 120/240VAC, 47-70Hz inverse parallel SCR output solid-state relay and are controlled by an opto electronic coupler. Intended for use as On/Off switch for loads through 110 amps. Line voltage: 24-280VAC. SPST-NO contacts. 400Vrms isolation. Zero voltage turn-on except **"R" suffix**, which is random voltage turn-on. UL recognized.

TRIAC OUTPUT

Mfg. Part No.	Control Voltage	Switching Current (A_{RMS})	Stock No.	Price Each 1-9	10-24	25-49
SSRT-240A10	90-280VAC	.05-10	18M9337	42.35	38.50	35.29
SSRT-240A25	80-280VAC	.05-25	18M9338	56.85	51.69	47.38
SSRT-240D10	3-32VDC	.05-10	29M9964	34.49	31.62	29.18
SSRT-240D25	3-32VDC	.05-25	76M8682	47.66	43.69	40.33

CONTINUED

P&B SOLID-STATE RELAYS (CONT.)

SCR OUTPUT

Mfg. Part No.	Control Voltage	Switching Current (A_{RMS})	Stock No.	Price Each 1-9	10-24	25-49
● SSR-240A50	90-280VAC	.05-25	29M9963	81.78	74.34	68.14
● SSR-240D25	3-32VDC	.05-25	89F948	44.53	40.82	37.68
● SSR-240D25R	3-32VDC	.05-25	18M9336	57.18	52.41	48.38
● SSR-240D50	3-32VDC	.05-50	26M8310	71.34	64.85	59.45
● SSR-480D125	3-32VDC	.05-125	06R3618	109.20	99.27	91.00

(3301)

PHOTOMOS SOLID STATE RELAYS

RoHS Compliant Available

VISHAY.

Mfg. Part No.	Load Current (A)	Load Voltage (V)	Switch Function	Iso Volt. (V)	On Resist. (ohm)	Pkg.	Stock No.	Price Each 1-9
● LH1500AAB	150	350	SPST-NO	5300	20	6-SMD	21H0651	2.59
● LH1500AT	150	350	SPST-NO	5300	20	6-DIP	58K1788	2.59
● LH1502BAC	150	350	DPST-1NO, DPST-NC	3750	20	8-SMD	21H0657	5.40
● LH1502BB	150	350	DPST-1NO, DPST-NC	3750	20	8-SMD	88K1960	5.71
● LH1510AAB	200	200	SPST-NO	5300	11.27	6-SMD	58K1789	3.27
● LH1520AAC	150	350	SPST-NO	5300	20	8-SMD	58K1795	5.74
● LH1522AAC	140	200	SPST-NO	5300	10	8-SMD	58K1797	5.36
● LH1522AB	140	200	SPST-NO	5300	10	8-DIP	61K0058	5.36
● LH1525AAB	125	400	SPST-NO	5300	26	6-SMD	21H0696	3.43
● LH1525AABTR	125	400	SPST-NO	5300	26	6-SMD	21H0697	3.96
● LH1525AT	125	400	SPST-NO	5300	26	6-DIP	58K1798	3.35
● LH1540AAB	120	350	SPST-NO	5300	20	6-SMD	58K1799	2.45
● LH1540AABTR	120	350	SPST-NO	5300	20	6-SMD	59K0219	2.90
● LH1540AT	120	350	SPST-NO	5300	20	6-DIP	59K0220	2.45
● V01400AEFTR	100	60	SPST-NO	1500	2.3	4-SOP	46M5888	1.38
● V014642AT	2	60	SPST-NO	3750	0.18	6-DIP	66M1368	3.01

DUAL PHOTOVOLTAIC MOSFET DRIVER

Mfg. Part No.	Forward Voltage (V)	Reverse Voltage (V)	Package	Stock No.	Price Each 1-9
● V01400AEFTR	1.4	5	4-SOP	46M5888	1.38

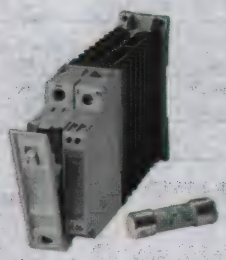
(94475)

RGC1F SOLID STATE RELAY CONTACTORS WITH INTEGRATED FUSE

RoHS Compliant Available

CARLO GAVAZZI

- Solid State Contactor with integrated fuse
- Zero Cross Switching
- Operational voltage: 230 VAC and 600 VAC
- 35mm width
- Control voltage: 3 - 32 VDC or 4 - 32 VDC
- Heater Break and SSR short circuit detection option
- Rated Load Currents of 20 AAC, 30 AAC and 40 AAC
- Alarm Signal Output
- 100 kA short circuit current rating



This solid state contactor includes three functions in one housing: power switching, short circuit protection by semi-condcutor fuse and system monitoring. RGC1FA is the version including the powerswitch and the fuse version with a fuse while the RGC1FS includes also the monitoring function which detects load, fuse and SSR faults.

The RGC1FA Series includes the powerswitch and the fuse version with a fuse.

Mfg. Part No.	Operating Voltage Range	Control Voltage Range	Current Rating (A)	Stock No.	Price Each
● RGC1FA23D20GGE	24V AC to 240V AC	3V DC to 32V DC	20	73T1936	118.00
● RGC1FA23D30GGE	24V AC to 240V AC	3V DC to 32V DC	30	73T1937	124.00
● RGC1FA23D40GGE	24V AC to 240V AC	3V DC to 32V DC	40	73T1938	146.00
● RGC1FA60D20GGE	42V AC to 600V AC	4.5V DC to 32V DC	20	73T1939	130.00
RGC1FA60D30GGE	42V AC to 600V AC	4.5V DC to 32V DC	30	73T1940	136.00
RGC1FA60D40GGE	42V AC to 600V AC	4.5V DC to 32V DC	40	73T1941	155.00

The RGC1FS includes includes the powerswitch and the fuse version with a fuse, along with the monitoring function which detects load, fuse and SSR faults.

● RGC1FS23D20GGE	24V AC to 240V AC	3V DC to 32V DC	20	73T1942	144.00
RGC1FS23D30GGE	24V AC to 240V AC	3V DC to 32V DC	30	73T1943	146.00
● RGC1FS23D40GGE	24V AC to 240V AC	3V DC to 32V DC	40	73T1944	173.00
● RGC1FS60D20GGE	42V AC to 600V AC	3V DC to 32V DC	20	73T1945	135.00
● RGC1FS60D30GGE	42V AC to 600V AC	3V DC to 32V DC	30	73T1946	153.00
RGC1FS60D40GGE	42V AC to 600V AC	3V DC to 32V DC	40	73T1947	181.00

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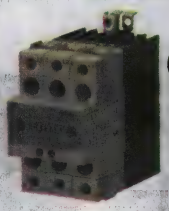
RGC2/RGC3 SERIES 3-PHASE SOLID STATE RELAYS W/ INTEGRATED HEATSINK

RoHS Compliant Available

CARLO GAVAZZI



- 2-pole & 3-pole AC switching solid state contactors
- Product width up to 70mm
- Rated operational voltage: up to 600VAC
- Rated operational current: up to 75AAC
- Control voltages: 5-32VDC, 20-275VAC (24-190 VDC)
- Up to 15,000A²s for I²t
- Motor ratings up to 11kW @ 400VAC, 25HP @ 600VAC
- Integrated varistor protection on output
- Controlled fan operation for versions with integrated fan
- UL, cUL Listing
- 100kA Short Circuit Current Rating according to UL508
- DIN or panel mount
- RoHS compliant

This product is intended to replace mechanical contactors especially when switching is frequent. The smallest product width in the **RGC2, RGC3** range is 54mm (3xDIN) and goes up to 70mm. 2-pole and 3-pole switching options are available. Switch ON occurs at the voltage zero cross and switch OFF occurs at the current zero cross. Apart from resistive and slightly inductive loads, the RGC is certified for motor switching with associated motor ratings. Varistors are integrated for output overvoltage protection. A green LED gives indication of control voltage presence. Fan operation is controlled for the versions which have an integrated fan.

2-POLE SWITCHING + 1-POLE DIRECT, ZERO CROSS SWITCHING

Mfg. Part No.	Operating Voltage Range	Control Voltage Range	Rated Current (A)	Stock No.	Price Each
● RGC2A60A25KKE	42VAC to 660VAC	20V AC to 275V AC / 24V DC to 190V DC	25	72W3053	193.00
● RGC2A60A40KGE	42VAC to 660VAC	20V AC to 275V AC / 24V DC to 190V DC	40	72W3054	292.00
● RGC2A60A75GGEAF	42VAC to 660VAC	20V AC to 275V AC / 24V DC to 190V DC	75	72W3055	434.00
● RGC2A60D25KKE	42VAC to 660VAC	5V DC to 32V DC	25	72W3056	169.00
● RGC2A60D40KGE	42VAC to 660VAC	5V DC to 32V DC	40	72W3057	265.00
● RGC2A60D75GGEDF	42VAC to 660VAC	5V DC to 32V DC	75	72W3058	398.00

3-POLE SWITCHING, ZERO CROSS SWITCHING

● RGC3A60A20KKE	42VAC to 660VAC	20V AC to 275V AC / 24V DC to 190V DC	20	72W3059	217.00
● RGC3A60A30KGE	42VAC to 660VAC	20V AC to 275V AC / 24V DC to 190V DC	30	72W3060	301.00
● RGC3A60A40GGEAF	42VAC to 660VAC	20V AC to 275V AC / 24V DC to 190V DC	40	72W3061	356.00
● RGC3A60A65GGEAF	42VAC to 660VAC	20V AC to 275V AC / 24V DC to 190V DC	65	72W3062	470.00
● RGC3A60D20KKE	42VAC to 660VAC	5V DC to 32V DC	20	72W3063	193.00
● RGC3A60D30KGE	42VAC to 660VAC	5V DC to 32V DC	30	72W3064	277.00
● RGC3A60D40GGEDF	42VAC to 660VAC	5V DC to 32V DC	40	72W3065	332.00
● RGC3A60D65GGEDF	42VAC to 660VAC	5V DC to 32V DC	65	72W3066	434.00

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3 PHASE SOLID STATE RELAYS

RoHS Compliant Available

CROUZET AUTOMATION

TÜV Rheinland

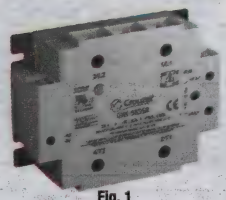

Fig. 1

Fig. 2

Features:
- Three-phase *(motor-reversing)* solid-state relay
- DBC substrate for superior thermal performance
- Epoxy-free design reduces internal component stress
- Back-to-Back dual SCR output for heavy industrial loads
- 100k-cycle UL508 endurance rating for enhanced reliability
- No external transient protection required (internal TVS)
- EMC Compliant for reliable operation in harsh environments
- Epoxy-free design reduces internal component stress

Specifications:
- Ratings up to 50A at 530Vac
- 4000Vac Optical Isolation
- Operating temperature: -40° to 80°C
- Operating Frequency: 47 to 63Hz
- Housing Material: UL94V-0

THREE-PHASE MOTOR REVERSING SOLID-STATE RELAYS

Mfg. Part No.	Fig.	Load Current (A)	Input Voltage	Output Voltage (VAC)	Stock No.	Price Each 1-9	10-49
● GN025DSR	1	25	4-32VDC	48-530	87K3748	289.26	276.32

THREE-PHASE SOLID-STATE RELAYS

● GN325DLZ	2	25	4-32VDC	48-600	87K3755	208.36	199.05
● GN350DLZ	2	50	4-32VDC	48-600	87K3765	231.50	221.13

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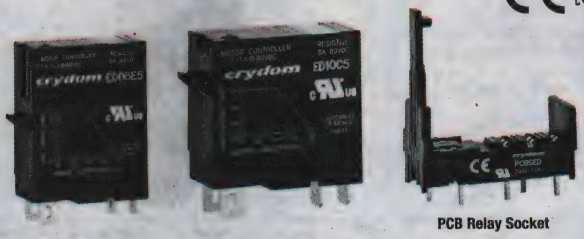
ED SERIES SOLID-STATE DIN RAIL MOUNT RELAYS

RoHS Compliant Available

crydom



PCB Relay Socket

- AC and DC output solid state relay in an industry standard
- EMR plug in package
- Current rating: 3 and 5 amps
- Load voltage range of 1-48 and 1-80 VDC
- Ambient operating temperature: -30°C to 80°C
- Fits standard DIN rail & PCB mountable sockets
- LED input status indicator
- AC or DC control
- Motor Controller Rated

DC SOLID-STATE RELAYS

Mfg. Part No.	Operating Voltage	Control Voltage	Current Rating	Switching Mode	Stock No.	Price Each 1-9
ED06B5	1V DC to 48V DC	90V AC to 140V AC	5	...	48T1032	21.96
ED06C5	1V DC to 48V DC	18V DC to 32V DC	5	...	48T1033	20.38
ED06D5	1V DC to 48V DC	5V DC to 15V DC	5	...	48T1034	19.72
ED06E5	1V DC to 48V DC	18V AC to 36V AC	5	...	48T1035	20.52
ED06F5	1V DC to 48V DC	48V DC to 72V DC	5	...	48T1036	20.38
ED10B5	1V DC to 80V DC	90V AC to 140V AC	5	...	48T1037	24.33
ED10C5	1V DC to 80V DC	18V DC to 32V DC	5	...	48T1038	22.35
ED10D5	1V DC to 80V DC	5V DC to 15V DC	5	...	48T1039	22.35
ED10E5	1V DC to 80V DC	18V AC to 36V AC	5	...	48T1040	22.74
ED10F5	1V DC to 80V DC	48V DC to 72V DC	5	...	48T1041	21.25
AC OUTPUT SOLID-STATE RELAYS						
ED24B5	24V AC to 280V AC	90V AC to 140V AC	5	Zero Crossing	48T1042	19.98
ED24B5R	24V AC to 280V AC	90V AC to 140V AC	5	Random Turn On	48T1043	20.67
ED24C3	24V AC to 280V AC	18V DC to 32V DC	3	Zero Crossing	48T1044	14.76
ED24C3R	24V AC to 280V AC	18V DC to 32V DC	3	Random Turn On	48T1045	15.72
ED24C5	24V AC to 280V AC	18V DC to 32V DC	5	Zero Crossing	48T1046	17.78
ED24C5R	24V AC to 280V AC	18V DC to 32V DC	5	Random Turn On	48T1047	18.96
ED24D3	24V AC to 280V AC	5V DC to 15V DC	3	Zero Crossing	48T1048	14.76
ED24D3R	24V AC to 280V AC	5V DC to 15V DC	3	Random Turn On	48T1049	14.69
ED24D5	24V AC to 280V AC	5V DC to 15V DC	5	Zero Crossing	48T1050	17.78
ED24D5R	24V AC to 280V AC	5V DC to 15V DC	5	Random Turn On	48T1051	17.72
ED24E5	24V AC to 280V AC	18V AC to 36V AC	5	Zero Crossing	48T1052	19.98
ED24E5R	24V AC to 280V AC	18V AC to 36V AC	5	Random Turn On	48T1053	20.94
ED24F3	24V AC to 280V AC	48V DC to 72V DC	3	Zero Crossing	48T1054	14.17
ED24F3R	24V AC to 280V AC	48V DC to 72V DC	3	Random Turn On	48T1055	15.06
ED24F5	24V AC to 280V AC	48V DC to 72V DC	5	Zero Crossing	48T1056	17.20
ED24F5R	24V AC to 280V AC	48V DC to 72V DC	5	Random Turn On	48T1057	18.10

SOCKETS RELAY ACCESSORIES

Mfg. Part No.	Current Rating (A)	Mounting	Stock No.	Price Each 1-9
PCBSED	12	PC Board	48T1488	5.48

(196468)

S1DR SERIES SOLID STATE RELAY TIMERS

RoHS Compliant Available

crydom

- 6 Amp AC and DC Rated output
- Compact Size (11mm wide)
- Dual SCR or MOSFET output
- AC/DC control
- Zero-crossing (resistive loads) or random-fire (inductive loads) AC output
- Timer Status LED Indicator
- UL Listed, HP rated
- 8 Industry standard functions (A/At, B, C, D/Di, H/Ht, L/Li, Ac and Bw)

Mfg. Part No.	Timing Function	Operating Voltage	Control Voltage	Switching Type	Stock No.	Price 1-9
DRTA06D06	A/At, Delay on Make	60VDC	12-24VAC/DC	Zero Crossing	47W5649	52.18
DRTA24A06	A/At, Delay on Make	280VAC	180-240VAC/DC	Zero Crossing	47W5650	48.25
DRTA24A06R	A/At, Delay on Make	280VAC	180-240VAC/DC	Random Turn On	47W5651	51.15
DRTA24B06	A/At, Delay on Make	280VAC	90-140VAC/DC	Zero Crossing	47W5652	49.70

➤CONTINUED➤

S1DR SERIES SOLID STATE RELAY TIMERS (CONT.)

Mfg. Part No.	Timing Function	Operating Voltage	Control Voltage	Switching Type	Stock No.	Price 1-9
DRTA24B06R	A/At, Delay on Make	280VAC	90-140VAC/DC	Random Turn On	47W5653	49.70
DRTA24D06	A/At, Delay on Make	280VAC	12-24VAC/DC	Zero Voltage Turn On	47W5654	60.68
DRTA24D06R	A/At, Delay on Make	280VAC	12-24VAC/DC	Random Turn On	47W5655	60.68
DRTB06D06	Single Shot	60VDC	12-24VAC/DC	Zero Crossing	47W5656	52.69
DRTB24A06	Single Shot	280VAC	180-240VAC/DC	Zero Crossing	47W5657	48.25
DRTB24A06R	Single Shot	280VAC	180-240VAC/DC	Random Turn On	47W5658	48.25
DRTB24B06	Single Shot	280VAC	90-140VAC/DC	Zero Crossing	47W5659	49.70
DRTB24B06R	Single Shot	280VAC	90-140VAC/DC	Random Turn On	47W5660	49.70
DRTB24D06	Single Shot	280VAC	12-24VAC/DC	Zero Crossing	47W5661	60.68
DRTB24D06R	Single Shot	280VAC	12-24VAC/DC	Random Turn On	47W5662	60.68
DRTC06D06	Delay on Break	60VDC	12-24VAC/DC	Zero Crossing	47W5663	52.69
DRTC24A06	Delay on Break	280VAC	180-240VAC/DC	Zero Crossing	47W5664	48.25
DRTC24A06R	Delay on Break	280VAC	180-240VAC/DC	Random Turn On	47W5665	48.25
DRTC24B06	Delay on Break	280VAC	90-140VAC/DC	Zero Crossing	47W5666	49.70
DRTC24B06R	Delay on Break	280VAC	90-140VAC/DC	Random Turn On	47W5667	49.70
DRTC24D06	Delay on Break	280VAC	12-24VAC/DC	Zero Crossing	47W5668	58.91
DRTC24D06R	Delay on Break	280VAC	12-24VAC/DC	Random Turn On	47W5669	58.91
DRTH06D06	H/Ht, Interval	60VDC	12-24VAC/DC	Zero Crossing	47W5670	52.69
DRTH24A06	H/Ht, Interval	280VAC	180-240VAC/DC	Zero Crossing	47W5671	49.70
DRTH24A06R	H/Ht, Interval	280VAC	180-240VAC/DC	Random Turn On	47W5672	49.70
DRTH24B06	H/Ht, Interval	280VAC	90-140VAC/DC	Zero Crossing	47W5673	49.70
DRTH24B06R	H/Ht, Interval	280VAC	90-140VAC/DC	Random Turn On	47W5674	48.25
DRTH24D06	H/Ht, Interval	280VAC	12-24VAC/DC	Zero Crossing	47W5675	60.68
DRTH24D06R	H/Ht, Interval	280VAC	12-24VAC/DC	Random Turn On	47W5676	58.91
DRTL06D06	L/Li, Repeat Cycle	60VDC	12-24VAC/DC	Zero Crossing	47W5677	60.38
DRTL24A06	L/Li, Repeat Cycle	280VAC	180-240VAC/DC	Zero Crossing	47W5678	56.58
DRTL24A06R	L/Li, Repeat Cycle	280VAC	180-240VAC/DC	Random Turn On	47W5679	54.93
DRTL24B06	L/Li, Repeat Cycle	280VAC	90-140VAC/DC	Zero Crossing	47W5680	56.58
DRTL24B06R	L/Li, Repeat Cycle	280VAC	90-140VAC/DC	Random Turn On	47W5681	56.58
DRTL24D06	L/Li, Repeat Cycle	280VAC	12-24VAC/DC	Zero Crossing	47W5682	57.57
DRTL24D06R	L/Li, Repeat Cycle	280VAC	12-24VAC/DC	Random Turn On	47W5683	55.89
DRTU06D06	Multifunction	60VDC	12-24VAC/DC	Zero Crossing	47W5684	55.73
DRTU24A06	Multifunction	280VAC	180-240VAC/DC	Zero Crossing	47W5685	54.80
DRTU24A06R	Multifunction	280VAC	180-240VAC/DC	Random Turn On	47W5686	53.20
DRTU24B06	Multifunction	280VAC	90-140VAC/DC	Zero Crossing	47W5687	54.80
DRTU24B06R	Multifunction	280VAC	90-140VAC/DC	Random Turn On	47W5688	54.80
DRTU24D06	Multifunction	280VAC	12-24VAC/DC	Zero Crossing	47W5689	54.17
DRTU24D06R	Multifunction	280VAC	12-24VAC/DC	Random Turn On	47W5690	55.80

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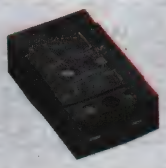
PROPAK™ AC OUTPUT RELAYS

RoHS Compliant Available

crydom



- Zero-cross (resistive loads) or random-fire (inductive/phase-control loads) output
- SCR output for heavy industrial loads
- LED input status indicator
- Optically isolated
- Box clamp terminals for easy installation

Relays feature status indicating LED and "fingerproof" easy-to-use input and output cage-type terminals. All types are panel mount and offer zero-cross switching. For random-fire output add "-10" to mfg. part no. suffix. **CMD series** have 3-32VDC control. **CMA series** have 10-140VAC control. ISO 9002 certified. Dimensions: 3.0 (76.2)L x 1.75 (44.5)W x 1.15 (29.2).

DC CONTROL 240VAC OUTPUT (24-280V_{RMS})

Mfg. Part No.	Load Current (A_{RMS})	1-Cycle Surge (Apk)	Stock No.	Price Each 1-9	10-49	50-99	100+
CMD2425	0.15-25	250	03M5685	126.88	120.28	115.15	111.48
DC CONTROL 480VAC OUTPUT (48-530V_{RMS})							
CMD4850	0.15-50	625	03M5687	173.79	164.75	157.72	152.70
CMD4890	0.15-90	1200	03M5688	269.25	255.24	244.35	236.57
CMD48125	0.15-125	1750	03M5686	302.04	286.33	274.11	265.38

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SOLID-STATE DIN MOUNT RELAYS

PROPAK™ AC OUTPUT RELAYS (CONT.)

DC CONTROL 600VAC OUTPUT (48-660V_{RMS})

Mfg. Part No.	Load Current (A_{RMS})	1-Cycle Surge (Apk)	Stock No.	Price Each 1-9	10-49	50-99	100+
● CMD6050	0.15-50	625	83F4391	177.42	168.19	161.01	155.88
AC CONTROL 240VAC OUTPUT (24-280V_{RMS})							
● CMA2425	0.15-25	250	03M5684	112.41	106.46	101.83	98.52

(28129)

COOLPAK™ AC OUTPUT RELAYS

RoHS Compliant Available

crydom

- Integral heat sink design
- SCR output for heavy industrial loads
- Zero-cross (resistive loads) or random-fire (inductive/phase-control loads) output
- LED input status indicator
- Finger-proof easy-to-use input and output cage-type terminals

Control voltage 90-140Vrms for **CMRA** and 4-32VDC for **CMRD**. All types are ISO 9002 certified.

AC CONTROL 240VAC OUTPUT (24-280V_{RMS})

Mfg. Part No.	Load Current (A_{RMS})	One-Cycle Surge (Apk)	Stock No.	Price Each 1-9	10-49	50-99	100+
● CMRA2435	0.15-35	0.25	03M5689	111.38	106.31	101.25	98.09
AC CONTROL 480VAC OUTPUT (48-530V_{RMS})							
● CMRA4845	0.15-45	0.625	03M5690	104.67	99.90	95.15	92.18
● CMRA4865	0.25-65	1.2	48F960	138.74	132.44	126.13	122.19
DC CONTROL 240VAC OUTPUT (24-280V_{RMS})							
● CMRD2435	0.15-35	0.25	03M5691	87.90	83.77	79.92	77.59
● CMRD2445	0.15-45	0.625	03M5692	95.26	90.93	86.60	83.89
● CMRD2455	0.25-55	1	03M5693	129.17	123.30	117.43	113.76
● CMRD2465	0.25-65	1.2	03M5694	129.62	123.73	117.84	114.16
DC CONTROL 480VAC OUTPUT (48-530V_{RMS})							
● CMRD4835	0.15-35	0.25	03M5695	96.66	92.27	87.88	85.13
● CMRD4845	0.15-45	0.65	03M5696	92.05	87.72	83.69	81.25
● CMRD4855	0.25-55	1	03M5697	106.02	101.04	96.40	93.59
● CMRD4865	0.25-65	1.2	03M5698	122.37	116.62	111.26	108.02
DC CONTROL 600VAC OUTPUT (48-660V_{RMS})							
● CMRD6055	0.25-55	1	83F4404	136.49	130.29	124.08	120.21

(32983)

MINI SIP SOLID STATE RELAY ASSEMBLIES CN SERIES

RoHS Compliant Available

crydom

- 6.2mm DIN-rail mount (35mm) SSR assembly
- Contact rating: 3.5A at 24VDC; 2A at 240V
- Control voltage: 5 and 24VDC; 120 and 240VAC
- Yellow LED input status indicator

Mfg. Part No.	Load Current (A)	Load Voltage	Control Voltage	Surge Current (A)	Stock No.	Price Each 1-9
● DRA-CN240A05	2	24-280VAC	3-12VDC	120	68R0478	34.96
● DRA-CN240A24	2	24-280VAC	15-30VDC	120	68R0480	34.45
● DRA-CN024D05	3.5	0-24VDC	3-12VDC	9	68R0470	38.06
● DRA-CN024D24	3.5	0-24VDC	15-30VDC	9	68R0472	37.55

(177842)

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(196545)

SOLID-STATE DIN-RAIL MOUNT RELAYS CKM SERIES

RoHS Compliant Available

crydom

- Ratings from 10A to 30A at 60VDC
- Slim 22.5mm (width) package
- Low Leakage
- LED input status indicator
- DC control
- DIN Rail and Panel Mount

Mfg. Part No.	Load Current (A)	Load Voltage (VAC)	Control Voltage	Surge Current (A_{PK})	Stock No.	Price Each 1-9
● CKM0620	20	0-60	4-4VDC	60	61M3762	86.79
● CKM0630	30	0-60	4-4VDC	90	53M0261	108.64

(163265)

DIN MOUNT SOLID-STATE RELAYS

RoHS Compliant Available

crydom

- Integral heat-sink eliminates need for thermal calculations
- 22.5mm DIN mount package
- Current ratings up to 30A at 660VAC
- SCR output for heavy industrial loads
- "Fingerproof" easy-to-use input and output cage-type terminals
- LED status indicator

The **CKRD** and **CKRA series** feature zero-cross switching. Options include: random turn-on, add **suffix "R"** to mfg. part no.. **CKRA series** have a 90 - 280VAC control and are also available with a 24VAC control; *go online or call.*

240VAC OUTPUT (24-280V_{RMS})

Mfg. Part No.	Load Current (A_{RMS})	One-Cycle Surge (Apk)	Stock No.	Price Each 1-9	10-49	50-99	100+
● CKRD2410	0.15-10	120	03M5677	46.46	44.27	42.23	41.00
● CKRD2420	0.15-20	250	03M5678	49.72	47.38	45.20	43.89
● CKRD2420P	0.15-20	250	03M5679	50.57	48.19	45.98	44.63
● CKRD2430	0.15-30	625	03M5680	57.10	54.50	51.91	50.29
● CKRD2430P	0.15-30	625	10M5142	53.87	51.34	48.98	47.55
480VAC OUTPUT (48-530V_{RMS})							
● CKRD4820	0.15-20	250	03M5682	64.31	61.38	58.47	56.64
● CKRD4830	0.15-30	625	03M5683	65.86	62.77	59.88	58.13
240VAC OUTPUT (24-280V_{RMS})							
● CKRA2410	0.15-10	120	03M5673	55.14	52.62	50.12	48.55
● CKRA2430P	0.15-30	625	03M5674	76.14	72.68	69.22	67.06
480VAC OUTPUT (48-530V_{RMS})							
● CKRA2420	0.15-20	250	18C4243	72.41	69.11	65.83	63.77
● CKRA4830	0.15-30	625	03M5675	75.91	72.46	69.01	66.86

(58671)

SERIES ONE DR SERIES SOLID-STATE RELAYS DIN RAIL MOUNT

RoHS Compliant Available

crydom

Features

- Single ratings of 3, 6 or 12 Amps
- Dual output with ratings of 6 Amps each channel
- Load voltage ratings of 2-60VDC, 2-100VDC, 24-280VAC and 48-600VAC
- Fits standard 35mm DIN-RAIL
- LED input status indicator
- AC or DC control
- Zero-crossing (resistive loads) or random turn-on (inductive loads) output
- SeriesOne DR Dual series feature dual output with ratings of 6 Amps each channel

SERIESONE DR SERIES, DC INPUT — 4-32VDC CONTROL VOLTAGE

Mfg. Part No.	Load Current (A)	Control Voltage	Surge Current (APK)	Switching Type	Stock No.	Price Each 1-9
● DR24D03	3	4VDC to 32VDC	300	Zero-Crossing	68W9993	34.11
● DR24D03R	3	4VDC to 32VDC	300	Random Turn-On	68W9994	35.03
● DR24D06	6	4VDC to 32VDC	300	Zero-Crossing	84R8854	46.17
● DR24D06R	6	4VDC to 32VDC	300	Random Turn-On	84R8855	47.10
● DR24D12	12	4VDC to 32VDC	750	Zero-Crossing	84R8856	56.83
● DR24D12R	12	4VDC to 32VDC	750	Random Turn-On	84R8857	58.33
SERIESONE DR SERIES, DC INPUT — 48-600VAC OUTPUT						
● DR48D03	3	4VDC to 32VDC	300	Zero-Crossing	68W9997	35.35
● DR48D03R	3	4VDC to 32VDC	300	Random Turn-On	68W9998	38.89

➤CONTINUED➤

SERIES ONE DR SERIES SOLID-STATE RELAYS DIN RAIL MOUNT (CONT.)

Mfg. Part No.	Load Current (A)	Control Voltage	Surge Current (APK)	Switching Type	Stock No.	Price Each 1-9
SERIESONE DR SERIES, DC INPUT — 48-600VAC OUTPUT						
DR48D06	6	4VDC to 32VDC	300	Zero-Crossing	84R8862	48.33
DR48D06R	6	4VDC to 32VDC	300	Random Turn-On	84R8863	49.23
DR48D12	12	4VDC to 32VDC	750	Zero-Crossing	84R8864	58.77
DR48D12R	12	4VDC to 32VDC	750	Random Turn-On	84R8865	61.46
SERIESONE DR SERIES, DC INPUT — 1-60VDC OUTPUT						
DR06D03	3	4VDC to 32VDC	60	Zero-Crossing	68W9945	38.98
DR06D06	6	4VDC to 32VDC	60	Zero-Crossing	84R8846	49.18
DR06D12	12	4VDC to 32VDC	100	Zero-Crossing	84R8847	59.01
SERIESONE DR SERIES, DC INPUT — 1-100VDC OUTPUT						
DR10D03	3	4VDC to 32VDC	60	Zero-Crossing	68W9988	40.67
DR10D06	6	4VDC to 32VDC	60	Zero-Crossing	84R8848	55.05
DR10D12	12	4VDC to 32VDC	100	Zero-Crossing	84R8849	65.72
SERIESONE DR SERIES, AC INPUT — 24-280VAC OUTPUT						
DR24E03	3	18VAC to 36VAC	300	Zero-Crossing	68W9995	37.85
DR24E03R	3	18VAC to 36VAC	300	Random Turn-On	68W9996	38.73
DR24E06	6	18VAC to 36VAC	300	Zero-Crossing	84R8858	51.11
DR24E12	12	18VAC to 36VAC	750	Zero-Crossing	84R8859	60.08
DR24B03	3	90VAC to 140VAC	300	Zero-Crossing	68W9991	36.31
DR24B03R	3	90VAC to 140VAC	300	Random Turn-On	68W9992	37.19
DR24B06	6	90VAC to 140VAC	300	Zero-Crossing	84R8852	50.61
DR24B12	12	90VAC to 140VAC	750	Zero-Crossing	84R8853	61.88
DR24A03	3	200VAC to 265VAC	300	Zero-Crossing	68W9989	36.31
DR24A03R	3	200VAC to 265VAC	300	Random Turn-On	68W9990	37.19
DR24A06	6	200VAC to 265VAC	300	Zero-Crossing	84R8850	51.11
DR24A12	12	200VAC to 265VAC	750	Zero-Crossing	84R8851	60.08
SERIESONE DR SERIES, AC INPUT — 48-600VAC OUTPUT						
DR48E12	12	18VAC to 36VAC	750	Zero-Crossing	84R8866	63.12
DR48B12	12	90VAC to 140VAC	300	Zero-Crossing	84R8861	63.12
DR48A12	12	200VAC to 265VAC	300	Zero-Crossing	84R8860	63.12
SERIESONE DUAL DR SERIES, DC INPUT — 24-280VAC OUTPUT (SERIESONE DUAL SR SERIES)						
DRD24D06	6	4VDC to 32VDC	750	Zero-Crossing	84R8842	76.63
DRD24D06R	6	4VDC to 32VDC	750	Random Turn-On	84R8843	78.36
SERIESONE DUAL DR SERIES, DC INPUT — 48-600VAC OUTPUT (SERIESONE DUAL SR SERIES)						
DRD48D06	6	4VDC to 32VDC	750	Zero-Crossing	84R8844	88.79
DRD48D06R	6	4VDC to 32VDC	750	Random Turn-On	84R8845	92.27

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
CNLN	ID Marker Strip; Pack of 10 Numbered Strips, 1 to 10	68R0448	44.02
CNL2	ID Marker Strip; Pack of 10 Numbered Strips, 11 to 20	68R0449	42.74
HK4	To Mount TRM1 Lug Terminals	04X5016	4.23
KS101	Crydom Single-Phase and Three-Phase Solid-State Relays	04X4226	4.09

(181240)

DRA DIN MOUNTED SOLID-STATE RELAYS AND DRS SOCKETS

RoHS Compliant Available

crydom

Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6 Fig. 7 Fig. 8 Fig. 9

- Ready-to-use SSR assemblies for either AC or DC output
- 10mm Single channel and 54mm Four channel DIN rail mount assemblies available
- 3 to 15 or 15 to 32VDC input versions include LED indicator

CONTINUED

DRA DIN MOUNTED SOLID-STATE RELAYS AND DRS SOCKETS (CONT.)

- 3 to 32VDC, 18 to 36 and 90 to 140VAC input control versions do not include LED indicator
- AC output ratings up to 300VAC at 8A
- Cage style screw terminals for easy and reliable wire connection
- Socket clip fits all standard 35mm DIN rail profiles

Mfg. Part No.	Fig.	Load Current (A)	Load Voltage (VDC)	Control Voltage (VDC)	Stock No.	Price Each 1-9
SINGLE CHANNEL ASSEMBLIES - DC OUTPUT RELAYS						
DRA1-CMX200D3	1	3	1-200	3-10	57R4087	68.24
DRA1-CMX100D6	1	6	1-100	3-10	57R4086	58.79
DRA1-CMX60D10	1		-	3-10	57R4088	57.64
FOUR CHANNEL ASSEMBLIES - DC OUTPUT RELAYS						
DRA4-CMX200D3	5	3	1-200	3-10	57R4118	246.07

SINGLE CHANNEL ASSEMBLIES - AC OUTPUT RELAYS

Mfg. Part No.	Fig.	Load Current (A)	Load Voltage (VAC)	Control Voltage (VDC)	Switching	Stock No.	Price Each 1-9
DRA1-MP240D4	2	4	24-280	-999--999	Zero Crossing	57R4106	53.19
DRA1-CXE240D5	2	5	12-280	-999--999	Zero Crossing	57R4090	37.12
DRA1-CXE240D5R	2	5	12-280	-999--999	Random Turn On	57R4091	43.59
DRA1-CX380D5	2	5	48-530	-999--999	Zero Crossing	57R4096	46.79
DRA1-CX240D5	3	5	12-280	-999--999	Zero Crossing	57R4093	37.12
DRA1-CX240D5R	3	5	12-280	-999--999	Random Turn On	57R4095	43.59
DRA1-MCX240D5	4	5	12-280	-999--999	Zero Crossing	57R4100	42.69
FOUR CHANNEL ASSEMBLIES - AC OUTPUT RELAYS							
DRA4-CX240D5	6	5	12-280	-999--999	Zero Crossing	57R4120	142.89
DRA4-CXE240D5	6	5	12-280	-999--999	Zero Crossing	57R4119	142.89

RELAY SOCKET KITS

Mfg. Part No.	Fig.	Description	Stock No.	Price Each 1-9
DRS1	8	Single Channel Socket; For use with: Crydom CMX, CX, MCX, MP & SP Series Solid State Relays	57R4123	29.35
DRS4	9	Four Channel Socket; For use with: Crydom CMX, CX, MCX, MP & SP Series Solid State Relays	57R4124	87.79

(164490)

DIN-RAIL MOUNT SOLID-STATE RELAYS SSRK SERIES

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features:
- DIN-rail or panel mount
- Integral heat sink design
- Space-saving narrow package
- Paired SCR output for reliability when switching heavy industrial AC loads
- 10A to 30A ratings at 480VAC
- Contacts: 1 Form A (SPST-NO)
- Isolation voltage: 4kV
- AC or DC control input options
- LED indicator
- Finger-safe load and control terminals

Applications:
- Blood analysis equipment
- Portable vital sign monitors
- Lasers
- Scanners
- Baby warmers
- Elevator control panels
- LED's, dimmer ontrol, traffic control
- Industrial machinery and commercial equipment

Mfg. Part No.	Load Current (A)	Load Voltage (VAC)	Control Voltage (VDC)	Surge Current (A_{PK})	Stock No.	Price Each 1-9
SSRK-600A10	10	48-660	90-280	120	50R7459	120.48
SSRK-600A20	20	48-660	90-280	250	50R7460	128.91
SSRK-600A30	30	48-660	90-280	625	50R7461	137.53
SSRK-600D10	10	48-660	4-32	120	50R7462	112.57
SSRK-600D20	20	48-660	4-32	250	50R7463	120.54
SSRK-600D30	30	48-660	4-32	625	50R7464	128.43

(163269)

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(196560)

SOLID-STATE DIN MOUNT RELAYS

MAGNECRAFT 861H SERIES CLASS 1, DIVISION 2 CERTIFIED SOLID STATE RELAYS

RoHS Compliant Available

Schneider Electric

Features:
- Class 1, Division 2 certification
- Solid state circuitry
- Optically coupled circuit
- Internal heat sink
- Finger-safe terminals
- DIN-rail or panel mounting
- Safety codes IP20

Benefits:
- Approved for use in hazardous locations
- Involves no moving parts
- Provides electrical isolation between input and output circuits
- Protects relay's output circuit from high voltage transients
- Internal heat sink
- Provides factory tested thermal management

The **861H** is the first complete solid state relay approved for use in hazardous locations. It is ideal for applications that demand frequent switching and reliability such as burner assemblies, chemical injections systems, extraction and refining machines, solenoid control, blower control, motorized duct and vent control, medical equipment and lighting in Class 1, Division 2 rated environments. Patent pending.

Mfg. Part No.	Input Voltage	Output Voltage	Contacts	Load Current (A)	Stock No.	Price Each 1-9
● 861HSSR115-DD	3.5-32VDC	3-50VDC	SPST-NO	15	**25R1108**	45.19
● 861HSSR208-DD	3.5-32VDC	3-150VDC	SPST-NO	8	**25R1109**	65.58
● 861HSSR210-AC-1	90-280VAC	24-280VAC	SPST-NO	10	**25R1110**	80.59
● 861HSSR210-DC-1	3-32VDC	24-280VAC	SPST-NO	10	**25R1111**	78.59
● 861HSSR410-DC-1	3-32VDC	48-480VAC	SPST-NO	10	**25R1113**	79.59
● 861HSSR610-AC-1	90-280VAC	48-600VAC	SPST-NO	10	**25R1114**	86.61
● 861HSSR610-DC-1	3-32VDC	48-600VAC	SPST-NO	10	**25R1115**	81.59

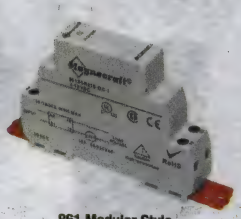
(153410)

MAGNECRAFT 8A-45A SOLID STATE DIN MOUNT RELAYS

RoHS Compliant Available

Schneider Electric

861 Modular Style:
- 100% solid-state circuitry
- Enclosed heat sink for thermal management
- Internal snubber protects from transients
- Isolation of input and output terminals ensures no interference between separate circuits
- Flexible mounting: Mount to din rail or panel
- Dimensions: 3.5"L x 0.7"W x 2.6"H



861 Modular Style

SSRDIN Style

SSRDIN Style:
- Integral heat sink for thermal management
- Internal snubber protects from transients
- Isolation of input and output terminals ensures no interference between separate circuits
- Flexible mounting: Mount to din rail or panel
- Dimensions: 3.15"L x 0.88"W x 3.8"H (10-45A); 3.1"L x 1.79"W x 4.2"H (45A)

861 MODULAR STYLE SCR OUTPUT, ZERO CROSS SWITCHING

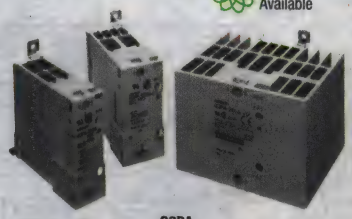
Mfg. Part No.	Input Voltage	Output Voltage	Contacts	Load Current (A)	Stock No.	Price Each 1-24
● 861SSR210-AC-1	90V AC to 280V AC	24-280VAC	SPST-NO	10	**30M2666**	46.34
● 861SSR210-DC-1	3V DC to 32V DC	24-280VAC	SPST-NO	10	**30M2667**	29.49
● 861SSRA208-DC-1	3V DC to 32V DC	24-280VAC	SPST-NO	8	**30M2663**	26.13
● 861SSR210-DC-2	3V DC to 32V DC	24-280VAC	SPST-NO	10	**35M3565**	55.60
● 861SSR210-DC-4	3V DC to 32V DC	24-280VAC	SPST-NC	10	**35M3566**	58.84
● 861SSR410-DC-1	3V DC to 32V DC	48-480VAC	SPST-NO	10	**35M3568**	56.15
● 861SSR115-DD	3.5V DC to 32V DC	3-50VDC	SPST-NO	15	**30M2664**	36.51
● 861SSR208-DD	3.5V DC to 32V DC	3-150VDC	SPST-NO	8	**30M2665**	43.33
SSRDIN STYLE SCR OUTPUT, ZERO CROSS SWITCHING						
● SSR220DIN-AC22	90V AC to 280V AC	24-280VAC	SPST-NO	20	**08R2598**	60.26
● SSR245DIN-AC45	90V AC to 280V AC	24-280VAC	SPST-NO	45	**08R2602**	92.15
● SSR210DIN-DC22	4V DC to 32V DC	24-280VAC	SPST-NO	10	**08R2597**	46.80
● SSR220DIN-DC22	4V DC to 32V DC	24-280VAC	SPST-NO	20	**08R2599**	55.58
● SSR230DIN-DC22	4V DC to 32V DC	24-280VAC	SPST-NO	30	**08R2601**	65.79
● SSR245DIN-DC45	4V DC to 32V DC	24-280VAC	SPST-NO	45	**08R2603**	89.50
● SSR630DIN-DC22	4V DC to 32V DC	48-660VAC	SPST-NO	30	**08R4272**	81.55
MOSFET OUTPUT, DC SWITCHING						
● SSR310DIN-DC22*	4V DC to 32V DC	0-60VDC	SPST-NO	10	**08R2604**	86.37
● SSR320DIN-DC22*	4V DC to 32V DC	0-60VDC	SPST-NO	20	**08R2605**	96.53
● SSR330DIN-DC22*	4V DC to 32V DC	0-60VDC	SPST-NO	30	**08R2606**	116.82

* UL and CSA not available on MOSFET versions.
(88871)

G3PA SOLID STATE RELAYS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY



G3PA

G3PA single-phase models feature built-in heat sink for increased service life and reliability for circuits that cycle frequently. Voltage turn-on at zero crossing reduces initial inrush and load currents. **G3PA** has replaceable triac output cartridge (order replacement cartridges below). Control power LED indicator. DIN rail mountable. Conforms to UL, CSA, and CE.

G3PA SINGLE-PHASE RELAYS

Mfg. Part No.	Output Volts	Load Current Max. (A)	Stock No.	Price Each
● G3PA-420B-VD DC12-24	180-480	20	**89H3731**	141.43
G32A TRIAC CARTRIDGES				
● G32A-A40VD DC524	...	40	**38B471**	80.97
● G32AA420VDDC1224	...	20	**66J9079**	135.99

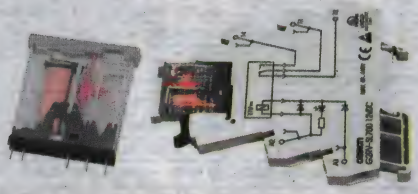
(88114)

6MM DIN MOUNT RELAYS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Mechanical indicator
- Transparent housing
- Strong mechanical pin
- Optional label
- Green LED indicator
- SPDT contacts
- Switching voltage max: 400VAC
- Switching current max: 6A
- Switching power: 1500VA/180W



Incorporates a strong mechanical pin to avoid bending during replacement, while large contact surface ensures reliable connection between socket and relay. Dimensions: 92.5W x 107H x 6.2T mm. Cross bars **series P2RV** available in various colors and number of poles; *go online or call.*

RELAYS

Mfg. Part No.	Coil Voltage	Terminal	Stock No.	Price Each 1-9	10-24	25-49
● G2RV-1-S-DC21	24VDC	Plug-In	**93K6106**	8.53	7.98	7.64
RELAY / SOCKET COMBINATION						
● G2RV-SL700-AC110	110VAC	Screw	**93K6101**	26.61	24.84	23.84
● G2RV-SL700-DC12	12VDC	Screw	**93K6103**	22.16	20.69	19.85
● G2RV-SL700-DC24	24VDC	Screw	**93K6104**	18.86	17.62	16.90
● G2RV-SL500-AC/DC24	24VAC/VDC	Push-In	**39M4639**	23.32	21.77	20.89
● G2RV-SL500-AC110	110VAC	Push-In	**39M4641**	26.32	24.57	23.57
● G2RV-SL500-DC12DC11	12VDC	Push-In	**39M4643**	21.48	20.06	19.24
● G2RV-SL500-DC24 (DC21)	24VDC	Push-In	**39M4644**	22.74	21.23	20.37

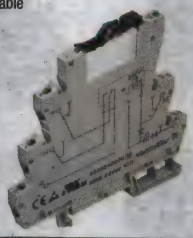
(88884)

MICROSERIES C1D2 RELAYS MRS SERIES

RoHS Compliant Available

Weidmüller

- C1D2 approved for use in hazardous locations
- Relay module interchangeable
- Space saving 6.1mm width
- Pluggable cross-connection at input and output minimizes the wiring workload
- Integrated RC circuit at input available, protecting from leakage current on control side
- Integrated polarity protection for quick and safe installation of the relays
- Integrated LED status indicators for easy and instant troubleshooting and minimized machine downtime



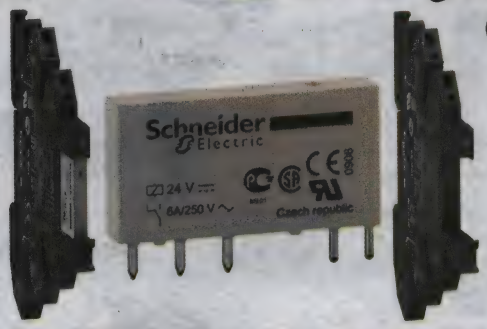
Mfg. Part No.	Contact Current (A)	Contact Voltage (VAC)	Contacts	Coil Voltage	Termination	Stock No.	Price Each 1-9
8967350000	6	250	SPDT	24VDC	Screw	**51P1628**	22.77
● 8967360000	6	250	SPST	24VAC/DC	Screw	**50R8852**	29.01
8967370000	6	250	SPST	120VAC	Screw	**50R8853**	28.57

(163126)

RSL SERIES SLIM INTERFACE PLUG-IN RELAYS

RoHS Compliant Available

Schneider Electric



- Contact configuration: SPDT
- Contact rating: 6A
- Space-saving 6mm width
- Wide coil voltage range: 6 to 300V
- Sensitive coil 170 mW
- Retention lever for easy removal of the relay from its socket
- Sockets: wire connection by screw connector or spring terminals
- All sockets have a built-in protection circuit and an LED indicator
- Wide range of operating voltages from 12 to 230 V

PRE-ASSEMBLED SLIM INTERFACE RELAYS - SCREW CONNECTOR TYPE

Mfg. Part No.	Current Rating (mA)	Control Circuit Voltage	Operating Voltage	Resistance (DC)	Stock No.	Price Each 1-24
RSL1PVJU	6	12	12	848	85R3419	18.34
RSL1PVBU	6	24	24	3.39 Kohm	85R3418	22.60
RSL1PVEU	6	48	48	10.6 Kohm	52T4867	21.54
RSL1PVFU	6	60	110	20.5 Kohm	52T4868	21.54
RSL1PVPU	6	60	230	20.5 Kohm	52T4869	21.54
PRE-ASSEMBLED SLIM INTERFACE RELAYS - SPRING TERMINAL TYPE						
RSL1PRJU	6	12	12	848	56T3483	18.34
RSL1PRBU	6	24	24	3.39 Kohm	52T4865	24.01
RSL1PREU	6	48	48	10.6 Kohm	56T3482	23.27
RSL1PRFU	6	60	110	20.5 Kohm	52T4866	23.27
RSL1PRPU	6	60	230	20.5 Kohm	56T3484	23.27
SLIM INTERFACE RELAYS FOR CUSTOM ASSEMBLY						
RSL1AB4JD	6	12	...	848	56T1735	8.96
RSL1AB4BD	6	24	...	3.39 Kohm	56T1733	11.93
RSL1AB4ED	6	48	...	10.6 Kohm	56T1734	11.41
RSL1AB4ND	6	60	...	20.5 Kohm	56T1736	12.08

RELAY SOCKETS WITH LED AND PROTECTION CIRCUIT

Mfg. Part No.	Operating Voltage	For Use with Relays	Terminals	Stock No.	Price Each 1-24
RSLZVA1	12 24	RSL1AB4JD RSL1AB4BD	Screw	52T4860	10.96
RSLZVA2	48 60	RSL1AB4ED RSL1AB4ND	Screw	52T4861	10.35
RSLZVA3	110	RSL1AB4N	Screw	56T3480	23.17
RSLZVA4	230	RSL1AB4N	Screw	56T3481	17.25
RSLZRA1	12 24	RSL1AB4JD RSL1AB4BD	Spring	52T4859	11.94
RSLZRA2	48 60	RSL1AB4ED RSL1AB4ND	Spring	56T3477	10.64
RSLZRA3	110	RSL1AB4N	Spring	56T3478	10.64
RSLZRA4	230	RSL1AB4N	Spring	56T3479	23.17

SOCKET ACCESSORIES

Mfg. Part No.	Description	For Use With	Stock No.	Price Each 1-24
RSLZ2	Bus Jumper	RSL Series Plug In Relay Sockets	52T4862	5.81
RSLZ3	Butterfly Isolator	RSL Series Plug In Relay Sockets	52T4863	5.36
RSLZ5	ID Tag	RSL Series Plug In Relay Sockets	52T4864	7.03

(203717)

RELAY INTERFACE MODULES

NEW

RoHS Compliant Available

finder

- Instant ejection of relay by plastic retaining clip
- Integral coil indication and protection circuit
- 35 mm rail (EN 60715) mounting

Mfg. Part No.	Contacts	Coil Voltage VDC Nom	Contact Current Max	Stock No.	Price Each 1-9
38.21.0.012.0060	SPDT	12	10	08X7063	35.80
38.21.0.024.0060	SPDT	24	10	08X7064	37.18
38.21.0.024.9024	SPDT	24	10	08X7065	53.77
38.31.7.024.8240	SPST-NO	24	40	08X7066	42.51
38.31.7.024.9024	SPST-NO	24	40	08X7067	43.72
38.51.0.012.0060	SPDT	12	10	08X7068	18.64
38.51.0.024.0060	SPDT	24	10	08X7069	18.64

CONTINUED

RELAY INTERFACE MODULES (CONT.)

Mfg. Part No.	Contacts	Coil Voltage VDC Nom	Contact Current Max	Stock No.	Price Each 1-9
38.51.0.125.0060	SPDT	125	10	08X7070	22.97
38.51.0.240.0060	SPDT	240	10	08X7071	22.97
38.51.3.125.0060	SPDT	...	10	08X7072	29.00
38.51.7.006.0050	SPDT	6	10	08X7073	18.39
38.51.7.012.0050	SPDT	12	10	08X7074	16.98
38.51.7.024.0050	SPDT	24	10	08X7075	17.97
38.51.7.024.5050	SPDT	24	10	08X7076	21.10
38.52.0.024.0060	DPDT	24	15	08X7077	22.69
38.52.0.125.0060	DPDT	125	15	08X7078	24.90
38.52.7.024.0050	DPDT	24	15	08X7079	22.57
38.61.0.024.0060	SPDT	24	10	08X7080	19.27
38.61.0.125.0060	SPDT	125	10	08X7081	24.72
38.61.7.024.0050	SPDT	24	10	08X7082	19.98
38.62.7.024.0050	DPDT	24	15	08X7083	23.67
38.81.3.125.8240	SPST-NO	...	40	08X7084	43.39
38.81.7.024.8240	SPST-NO	24	40	08X7085	38.36
38.81.7.024.9024	SPST-NO	24	40	08X7086	36.99
38.91.7.024.9024	SPST-NO	24	40	08X7087	36.91
39.11.0.024.0060	SPDT	24	10	08X7088	17.13
39.30.7.024.9024	SPST-NO	24	40	08X7089	38.56
39.31.0.024.0060	SPDT	24	10	08X7090	21.94
39.31.3.125.0060	SPDT	...	10	08X7091	27.19
39.81.0.024.0060	SPDT	24	10	08X7092	37.35
34.81.7.024.9024	SPST-NO	24	20	08X7062	21.95

(211644)

XT SERIES INTERFACE PLUG-IN RELAYS

RoHS Compliant Available

TE connectivity

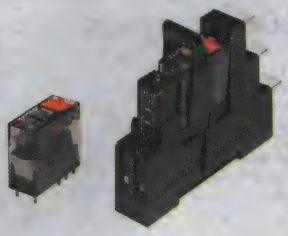
Authorized Distributor

Features:

- Compact design is only 0.54" (13.7mm) wide
- Aproximate size: 1.14x0.54x1.01in (29x13.7x25.6mm)
- Choice of SPDT rated 16A or DPDT rated 8A
- Plugs into same sockets as the RT series
- Sensitive DC coil (400mW) or AC coil (0.58VA @60 Hz)
- Test lever, mechanical indicator, LED and protection diode options
- 4kV (8mm) coil-to-contact isolation
- RoHS Compliant (Directive 2002/95/EC)
- Reinforced insulation, protection class II (VDE 0700)

Specifications:

- Contact Ratings: 1FormC (SPDT): 16A at 240VAC; 2FormC (DPDT): 8A at 240VAC
- Contact material: Silver Nickel 90/10
- Mechanical life (at rated load): 10million operations w/DC coil; 5million operations w/AC coil
- Coil voltage: 12 to 110VDC and 24 to 230VAC; others on request
- Coil Power: 400mW; 0.76VA at 50Hz / 0.58VA at 60Hz
- Dielectric strength: 5,000Vrms



AC COIL

Mfg. Part No.	Carry Current (A)	Contacts	Coil Voltage (VAC)	Coil Resist. (Ω)	LED	Stock No.	Price Each 1-24	Price Each 25-49
XT424524	8	DPDT	24	350	No	89M5665	5.69	5.09
XT484R24	8	DPDT	24	350	Yes	89M5660	9.44	8.36
XT424615	8	DPDT	115	8.1	No	89M5666	7.44	6.65
XT484S15	8	DPDT	115	8.1	Yes	89M5661	7.73	7.21
XT484T30	8	DPDT	230	32.5	Yes	89M5662	17.47	...
XT314524	16	SPDT	24	350	No	89M5653	5.95	5.36
XT374R24	16	SPDT	24	350	Yes	89M5657	8.90	7.87
XT314615	16	SPDT	115	8.1	No	89M5654	7.23	6.48
XT374S15	16	SPDT	115	8.1	Yes	89M5658	8.78	8.00

DC COIL

Mfg. Part No.	Carry Current (A)	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	LED & Diode	Stock No.	Price Each 1-24	Price Each 25-49
XT424012	8	DPDT	12	360	No	89M5663	6.18	5.51
XT484LB2	8	DPDT	12	360	Yes	89M5667	9.19	7.26
XT424024	8	DPDT	24	1.44	No	89M5664	6.43	5.64
XT484LC4	8	DPDT	24	1.44	Yes	89M5668	9.55	9.17
XT314012	16	SPDT	12	360	No	89M5651	5.98	5.35
XT374LB2	16	SPDT	12	360	Yes	89M5655	7.44	7.26
XT314024	16	SPDT	24	1.44	No	89M5652	5.62	5.02
XT374LC4	16	SPDT	24	1.44	Yes	89M5656	9.17	8.12

CONTINUED

XT SERIES INTERFACE PLUG-IN RELAYS (CONT.)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● RT78725	Screw terminal socket, DIN mount, conventional terminal arrangement	89M5648	4.65
● RT78726	Screw terminal socket, DIN mount, logical terminal arrangement	89M5649	5.35
● RT7872P	Poke-in (screwless) terminal socket, DIN mount, logical terminal arrangement	89M5647	6.42
● XT17017	Plastic retaining clip for use with XT relay and the above-listed sockets	89M5650	0.64
● RT17040	Marking tag for use with the above-listed sockets	89M5646	0.15
● RT170P1	Jumper bar for use with RT7872P sockets	89M5645	0.59

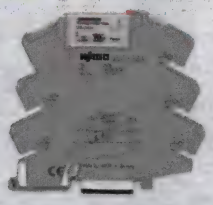
(112018)

857 SERIES PLUGGABLE RELAYS

RoHS Compliant Available

Features:
- Industries smallest pitch, reduces panel space
- Pluggable relays for easy placement
- Flexible jumpering system eliminates redundant wiring
- Safe operation with three-way isolation (2.5kV)

Specifications:
- Module width: 6.0mm
- Input voltage range: VN -15 % to +20 %
- Max. switching voltage: 250VAC
- Max. continuous current: 6A
- Ambient temperature: -25°C to +50°C



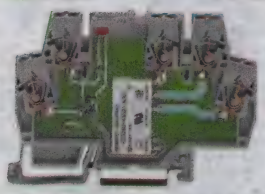
Mfg. Part No.	Coil Voltage	Stock No.	Price Each 1-24
● 857-303	12VDC	08N1396	31.15
● 857-304	24VDC	06R3631	22.99
● 857-354	24V AC/DC	59P3142	32.23
● 857-357	115V AC/DC	58P0634	26.32

(142241)

859 SERIES SLIM RELAYS

RoHS Compliant Available

DIN-rail mounted relays feature slim 6mm wide package, jumper system, marking system and switch status indication. 1 changeover contact, SPDT. Wire size: 28-14 AWG. Switching current/voltage up to 5A/250V.



Mfg. Part No.	Coil Voltage	Stock No.	Price Each 1-24	Price Each 25-99
● 859-302	5VDC	04M4817	31.35	29.55
● 859-303	12VDC	28K2321	31.70	29.89
● 859-304	24VDC	04M4818	26.14	24.66
● 859-354	24V AC/DC	04M4819	32.80	30.94
● 859-357	115V AC/DC	12M6719	40.54	38.24

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24	Price Each 25-99
● 859-525	End Plate	94H6992	0.64	0.60

(84734)

788 SERIES PLUGGABLE RELAY MODULES

RoHS Compliant Available

DIN-rail mount relays feature CAGE CLAMP® technology with up to 16A and 250V of switching power. Relays are 15mm pluggable. Allow for addition of switch status indication, free-wheeling diode. Dual jumper slots plus separation between coil and load side. Includes relay, terminal base and plug-in status indicator.

SPDT RELAYS w/TERMINAL BASE

Mfg. Part No.	Coil Voltage	Wire Size (AWG)	Stock No.	Price Each 1-24	Price Each 25-99
● 788-303	12VDC	22AWG to 12AWG	04M4794	17.60	16.62
● 788-304	24VDC	22AWG to 12AWG	28K2303	17.60	16.62

➤CONTINUED➤

788 SERIES PLUGGABLE RELAY MODULES (CONT.)

Mfg. Part No.	Coil Voltage	Wire Size (AWG)	Stock No.	Price Each 1-24	Price Each 25-99
● 788-506	24VAC	22AWG to 12AWG	04M4796	18.88	17.84
● 788-507	115VAC	22AWG to 12AWG	28K2305	23.40	22.10

ACCESSORIES

Mfg. Part No.	Description	Rating (A)	Stock No.	Price Each 1-24	Price Each 25-99
● 788-113	2-way Comb push-in jumper	...	79K2241	1.23	1.17

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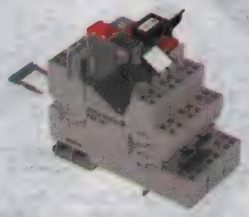
PLUGGABLE RELAYS

RoHS Compliant Available

Weidmüller

- Designed to Shorten Installation and Maintenance Time
- Robust Locking/Release Lever Provides Relay Retention



Jumping capability for common coil connections or contacts between relay modules.

FULLY ASSEMBLED SOCKET WITH RELAY

Mfg. Part No.	Coil Voltage	Contacts	Output Voltage (V)	Output Current (A)	Stock No.	Price Each 1-9
● 8530631001	24VDC	DPDT	250/2	8	67T2336	18.36

REPLACEMENT RELAYS

Mfg. Part No.	Coil Voltage	Contacts	Output Current (A)	Stock No.	Price Each 1-9
● 4058570000	24VDC	DPDT	8	45J3226	7.35

(72822)

6.1mm MICRO RELAYS

RoHS Compliant Available

Weidmüller

- Compact Design
- Pluggable

Use standard jumpers.

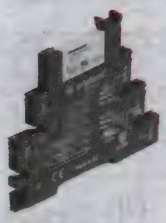
Mfg. Part No.	Coil Voltage	Contacts	Clamp	Stock No.	Price Each 1-9
● 8533640000	24VDC	SPDT	Screw	71C9332	16.92
● 8533660000	24VDC	SPDT	Tension	94C3839	16.92

(72823)

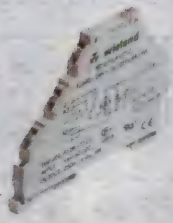
FLARE CONTROL MEASURING AND MONITORING RELAYS

RoHS Compliant Available

wieland



Flare Move Relays



Flare Relays

DIN rail mount **Flare series** terminal block relay combinations provide a means of isolating the PLC or controller from the process. **The Flare** series is available in mechanical and solidstate relays. Measuring and monitoring relays feature current, voltage and phase loss detection. DIP switch selection for operation (on-delay, one-shot, cycle-on, cycle off and-off-delay operation) and the time range settings (0.1-30sec. depending on module and configuration). Coil and contact wiring on opposite sides of the block for clear visual separation with pluggable screw clamp connections. 2kV electrical isolation. 12 AWG stranded max. wiring size. UL, UR, CE rated and approved.

MECHANICAL RELAYS WITH SCREW CLAMP

Mfg. Part No.	Input	Output Voltage Minimum	Output Voltage Maximum	Output Current	Stock No.	Price Each 1-24
● 80.010.4000.0	24VDC	24V/8mA	250V AC/DC	6A	02M0649	45.38
● 80.010.4131.0	110V AC/DC (+10%/–15%)	...	250V AC/DC	6A	02M0650	80.43

➤CONTINUED➤

FLARE CONTROL MEASURING AND MONITORING RELAYS (CONT.)

SOLID STATE RELAYS WITH SCREW CLAMP

Mfg. Part No.	Input	Output Voltage	Output Current	Stock No.	Price Each 1-24
● 80.020.4101.0	24VDC	48VDC	2A	02M0652	112.82
● 80.020.4100.0	24VDC	48VDC	0.5A	02M0651	75.51

TIMER AND MULTIFUNCTION RELAYS WITH SPRING CLAMP

Mfg. Part No.	Input	Output Voltage	Output Current	Function	Stock No.	Price Each 1-24
● 81.020.4100.0	24VDC	250V AC/DC	6A	Multifunction	02M0656	113.49

MECHANICAL RELAYS WITH REPLACEABLE RELAY MODULE, SCREW CLAMP WIRE TERMINATION

Mfg.Part No.	Type	Coil Voltage	Output V/A	Width	LED	Stock No.	Price Each 1-24
80.010.4501.0	SPDT	12 VDC	250VAC/6A	6.2mm	Green	11K8747	23.57
80.010.4522.0	SPDT	24V AC/DC	250VAC/6A	6.2mm	Green	11K8750	27.95
80.010.4526.0	SPDT	230 VAC	250VAC/6A	6.2mm	Green	11K8753	31.61
80.010.4915.3	SPDT	115 VAC	250VAC/16A	15.8mm	Green	11K8758	33.76
80.010.4916.3	SPDT	230 VAC	250VAC/16A	15.8mm	Green	11K8759	34.34
80.010.5102.2	DPDT	24 VDC	250VAC/8A	15.8mm	Green	11K8760	28.34
80.010.4902.3	SPDT	24 VDC	250VAC/16A	15.8mm	Green	21K5748	41.07
80.010.5316.2	DPDT	230 VAC	250VAC/8A	15.8mm	Green	40T6913	50.03
80.010.5315.2	DPDT	115 VAC	250VAC/8A	15.8mm	Green	79M5493	33.76

MEASURING AND MONITORING RELAYS

Mfg. Part No.	Coil Voltage	Output V/A	Time Delay	Stock No.	Price Each 1-9
81.020.0100.0	8/50/500 V	2 c/o contact 5A	0/.1/.5/2/10 s	46X9391	122.16
81.030.0020.0	.1/1/10 A	1 c/o contact 6A	Max .1 s	46X9392	133.35
81.030.0021.0	3 ø, 200 - 500 VAC	1 c/o contact 6A	.1 - 30s	46X9393	257.44
81.030.0110.0	3ø, 3 wire 380/400/415/480 VAC	2 c/o contact 5A	0/.1/.5/2/10 s	46X9394	238.53

SOLID-STATE RELAYS WITH FIXED MODULES, WITH SPRING CLAMP WIRE TERMINATION AND SUPPRESSION CIRCUIT

Mfg. Part No.	Coil Voltage	Output V/A	Width	LED	Type	Stock No.	Price Each 1-24
80.020.4150.0	24 VDC	230VAC/.5A	6.2	Yellow	1 NO	72C9452	55.89
80.020.4102.0	115 VAC	48 VDC/.5A	6.2	Yellow	1 NO	91F4911	57.55

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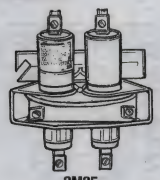
MERCURY DISPLACEMENT RELAYS

DURAKOOL INC.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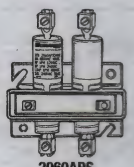
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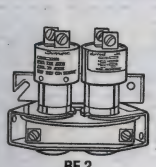
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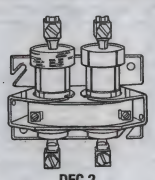
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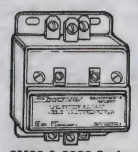
- All relays are normally-open
- Tubes are hermetically sealed
- Pull-In voltage is 85% of nominal; typical contact resistance is 4 milliohms
- Long life, quiet operation; self-renewing liquid mercury contacts are virtually immune to wear, pitting or corrosion

General-purpose, resistive, motor load, and tungsten ratings are available. Other control voltages available, 24VAC thru 480VAC.

AFM220


3M30 & 3030 Series

ELECTRICAL RATINGS

Mfg. Part No.	Alternating Current (A) @120V	@208V	@240V	Motor Load 3 Phase (Hp) @120V	@240V	Direct Current (A) @120VDC	@240VDC	Tungsten Lamp (A @ 120VAC)
AFM	20	20	20	...	1.5	10.0	8.0	10
BF	30	30	30	...	5.0	25.0	15.0	30
BFC	60	60	60	5.0	10.0	30	20	60
BFL	35	35	35	...	5.0	25.0	15.0	30
CFC	100	100	100	...	20.0	50.0	30.0	100
3M30	25	25	25	1.5	3.0	...	...	25
2030, 3030	30	30	30	...	...	...	...	25
1M, 2M, 3M35	35	35	35	3.0	7.5	17.0	10.0	35
1, 2, 3060	60	60	60	5.0	10.0	30.0	20.0	60

GENERAL PURPOSE

Mfg. Part No.	Contacts	Coil Voltage	Coil Resist. (Ω)	Power (W)	Stock No.	Price Each 1-2
AFM10-303-M	SPST-NO	120VAC	3510	1.70	92B3380	107.08
AFM220-310	DPST-NO	24VDC	144	3.84	93F2790	156.02
AFM20-303-M	SPST-NO	120VAC	3510	1.70	90F7071	111.36
AFM20-310-M	SPST-NO	24VDC	247	2.30	66F5530	112.06

➤CONTINUED➤

MERCURY DISPLACEMENT RELAYS (CONT.)

Mfg. Part No.	Contacts	Coil Voltage	Coil Resist. (Ω)	Power (W)	Stock No.	Price Each 1-2
AFM220-303	DPST-NO	120VAC	1196	3.60	90F7073	163.57
AFM320-303	3PST-NO	120VAC	470	7.26	90F7075	199.32
BF-7032	SPST-NO	120VAC	902	3.69	93F2791	109.46
BF-7046	SPST-NO	24VDC	230	2.50	90B7517	105.41
BF2-7027	DPST-NO	120VAC	350	7.10	98F4499	191.72
BF3-7024	3PST-NO	120VAC	135	9.20	93F2792	246.99
BFC3-708	3PST-NO	120VAC	4.5	3.65	98F4527	458.43
BFL2-7027	DPST-NO	120VAC	350	7.10	99F8644	174.63
BFL3-7024	3PST-NO	120VAC	135	9.20	50B2981	278.34
CFC-718	SPST-NO	120VAC	180	10.2	90F7095	304.12
CFC3-708	3PST-NO	120VAC	23	39.0	90F7099	860.42
DFC-301	SPST-NO	120VAC	180	8.8	98F6407	422.34
DFC3-301	3PST-NO	120VAC	18	42.9	98F7609	1184.12
RESISTIVE AND MOTOR LOADS						
1060APS120AC	SPST-NO	120VAC	902	3.47	90F7090	136.08
1M35A120AC	SPST-NO	120VAC	902	3.69	90F7083	106.69
2030APS120AC	DPST-NO	120VAC	340	6.45	88F4369	162.07
2035A120AC	DPST-NO	120VAC	350	7.10	99F7248	178.62
2035A24DC	DPST-NO	24VDC	90	6.40	50B2987	178.62
2060APS120AC	DPST-NO	120VAC	350	7.46	90F7091	228.48
2060APS24DC	DPST-NO	24VDC	90	6.00	50B2988	225.68
2M35A120AC	DPST-NO	120VAC	350	7.10	90F7085	159.90
3030APS24DC	3PST-NO	24VDC	96	6.00	93F2793	187.12
3030APS120AC	3PST-NO	120VAC	340	4.80	90F7081	193.77
3035A120AC	3PST-NO	120VAC	135	9.20	93F2794	240.15
3035A24DC	3PST-NO	24VDC	51	11.30	50B2990	240.15
3050A120AC	3PST-NO	120VAC	135	9.10	52F5589	320.80
3060APS120AC	3PST-NO	120VAC	122	9.54	90F7093	328.42
3060APS24DC	3PST-NO	24VDC	46	11.10	96B4733	328.42
3M30APS120AC	3PST-NO	120VAC	340	4.80	90F7078	183.52
3M35A120AC	3PST-NO	120VAC	135	9.20	90F7087	235.68

(4058)

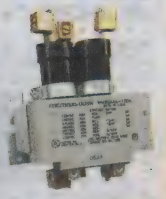
MERCURY DISPLACEMENT RELAYS

STRUTHERS-DUNN

- AC or DC coils
- 1 to 3 poles
- Normally open or normally closed contacts available
- Panel or DIN rail mounting
- Exceptional surge capability

1-Pole

2-Pole


3-Pole

Handle tungsten resistive and motor loads. Current range: 35A-100A, up to 600VAC or 250VDC at lower currents. Contactor tubes hermetically sealed in stainless steel tubes. Frequency of operation: 60 per minute max. Pull-in voltage: 80% of rated voltage typical for AC and DC models. Operate time typical: 50 milliseconds. Operating temperature: –35°C to +60°C. **WML series** relays for resistive and tungsten loads with AC power, optional DIN adapter **mfg. part no. BT5664** for 1-pole relays, **mfg. part no. B75665** for 2 and 3 pole relays, also available; *go online or call.* UL listed, CSA certified. Relays shown have normally open contacts. Replace **"A"** with **"B"** for normally closed contacts.

Number of Poles	Dimensions (inches) L	W	H
1-Pole/35-60A	2.3	2.0	5.1
2-Pole/35-60A	2.3	3.5	5.1
3-Pole/35-60A	3.4	3.8	5.1

DC COIL RELAYS, 24VDC

Mfg. Part No.	Contact Current (A)	Coil Resist. (Ω)	Contacts	Stock No.	Price Each 1-4	5-9	10-24	25-49
WM35AA-24D	35	98	DPST-NO	88K2812	208.26	199.62	193.15	186.68
WM60A-24D	60	186	SPST-NO	88K2820	113.80	109.08	105.54	102.01
AC COIL RELAYS, 120VAC								
WM35A-120A	35	700	SPST-NO	88K2807	126.96	121.70	117.75	113.80
WM35AA-120A	35	218	DPST-NO	88K2811	154.01	146.14	141.23	136.30
WM35AAA-120A	35	111	3PST-NO	88K2815	277.60	266.10	257.47	248.84
WM60A-120A	60	700	SPST-NO	88K2819	136.68	131.02	126.76	122.52
WM60AA-120A	60	218	DPST-NO	88K2823	188.95	181.10	175.24	169.37
WM60AAA-120A	60	111	3PST-NO	88K2827	275.88	264.45	255.87	247.29

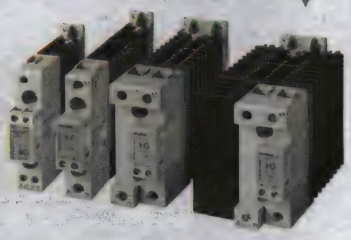
(3979)

CONTACTORS/MOTOR STARTERS/AC DRIVES

SLIM-LINE SOLID STATE CONTACTORS WITH INTEGRATED HEAT SINK

RoHS Compliant Available

CARLO GAVAZZI



- User friendly - just snap onto DIN rail
- Ideal alternative to mercury relays
- One pole switching
- Slimline design as small as 18mm wide
- Zero switching for resistive/motor loads
- Random switching available (RGC1B Series)
- Built-in snubber and MOV protection
- LED indication
- AC and/or DC control voltage
- Up to 60 amps output current
- Higher rated outputs available upon request
- Up to 660 VAC switching
- Up to 1200 Vp non-repetitive voltage
- Type-1 UL508 SCCR rating up to 100kA

Solid state relays with heat sinks integrated directly onto the relay provide an excellent alternative to (environmentally hazardous) mercury relays. The nominal current ratings are at 40oC. The smallest width is 18mm wide, while the largest is only 70mm. Higher rated relays (90A) with integrated cooling fan are also available.

SINGLE POLE SCR OUTPUT, 4-32 VDC CONTROL

Mfg. Part No.	Size in mm (h x w x d)	Current Rating (A)	Line Voltage	Stock No.	Price Each
● RGC1A23D20KGU	106 x 18 x 136	23	21-264 VAC	41T2598	48.00
● RGC1A23D30KGU	106 x 23 x 136	30	21-264 VAC	41T2599	64.00
● RGC1A23D40KGU	106 x 36 x 136	40	21-264 VAC	41T2600	84.00
● RGC1A23D60KGU	106 x 69 x 136	60	21-264 VAC	41T2601	119.00
● RGC1A60D20KGU	106 x 18 x 136	23	36-660 VAC	41T2606	53.00
● RGC1A60D30KGU	106 x 23 x 136	30	36-660 VAC	41T2607	79.00
● RGC1A60D40KGU	106 x 36 x 136	40	36-660 VAC	41T2608	91.00
● RGC1A60D60KGU	106 x 69 x 136	60	36-660 VAC	41T2609	124.00
SINGLE POLE SCR OUTPUT, 20-275 VAC OR 24-190 VDC CONTROL					
● RGC1A23A20KGU	106 x 18 x 136	23	21-264 VAC	41T2594	51.00
● RGC1A23A30KGU	106 x 23 x 136	30	21-264 VAC	41T2595	65.00
● RGC1A23A40KGU	106 x 36 x 136	40	21-264 VAC	41T2596	87.00
● RGC1A23A60KGU	106 x 69 x 136	60	21-264 VAC	41T2597	122.00
● RGC1A60A20KGU	106 x 18 x 136	23	36-660 VAC	41T2602	54.00
● RGC1A60A30KGU	106 x 23 x 136	30	36-660 VAC	41T2603	80.00
● RGC1A60A40KGU	106 x 36 x 136	40	36-660 VAC	41T2604	94.00
● RGC1A60A60KGU	106 x 69 x 136	60	36-660 VAC	41T2605	127.00

(196158)

SOLID STATE CONTACTORS AND OVERLOADS

RoHS Compliant Available

CARLO GAVAZZI

Features

- Instant-on solid state switching technology
- Reversing or standard contactors
- Control status LED indication
- One frame size for three current ratings
- Up to 5Hp motor rating
- 90-253 VAC or 24VDC control voltage
- Up to 600VAC switching
- Screw connections for load/line voltage
- DIN-Rail or Panel Mounting
- Pictured alone (left) and with overload relay (right)

REC Series Solid State Contactors and Reversing Contactors are ideal where you're looking for a fast switching, long lasting and much quieter alternative to standard electromechanical contactors. They are one of the only solid state contactors available on the market. Dimensions (H x W x D in mm): REC: 105 x 45 x 100mm. Also offered are a series of bi-metallic overload relays, type CGT-22: 46 x 44 x 85mm. Other Motor Protection Ranges are available upon request for the Thermal Overloads. cUL listed, RoHS compliant, CE compliant.

STANDARD SOLID STATE CONTACTORS

Mfg. Part No.	Motor Rating @480VAC	Control Voltage	Max. Load Voltage	Stock No.	Price Each
REC3B48D20GKE	3 Hp	24 VDC	530 VAC	74R7237	251.00
REC3B48A20GKE	3 Hp	90-253 VAC	530 VAC	74R7235	262.00
REC3B48D30GKE	3 Hp	24 VDC	530 VAC	74R7239	268.00
REC3B48A30GKE	3 Hp	90-253 VAC	530 VAC	74R7236	273.00
REC3B60D20GKE	3 Hp	24 VDC	530 VAC	74R7241	268.00
REC3B60A20GKE	3 Hp	90-253 VAC	530 VAC	74R7240	273.00
REVERSING SOLID STATE CONTACTORS					
REC2R48D30GKE	5 Hp	24 VDC	530 VAC	74R7232	444.00
REC2R48A30GKE	5 Hp	90-253 VAC	530 VAC	74R7230	449.00
REC2R60A30GKE	5 Hp	24 VDC	530 VAC	74R7233	492.00
REC2R60D30GKE	5 Hp	90-253 VAC	530 VAC	74R7234	487.00

THERMAL OVERLOADS FOR SOLID STATE CONTACTORS

Mfg. Part No.	Motor Current Protection Range	Stock No.	Price Each
CGT-22-4.0	2.5-4A	71K2103	44.00
CGT-22-6.0	4-6A	71K2104	44.00
CGT-22-9.0	6-9A	71K2106	44.00

Other ranges availiable upon request

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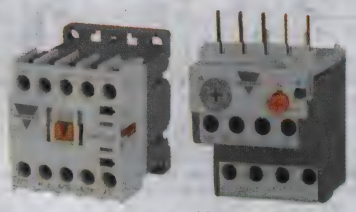
ELECTROMECHANICAL MINI-CONTACTORS AND OVERLOADS

CARLO GAVAZZI



Contactor Overload Relay

- Compact size / powerful performance ratio
- Approximately 2.25 cubic inches
- One frame size for three current ratings
- Up to 7.5HP motor rating
- Up to 20A resistive rating
- 120VAC coil voltage with other coil voltages available upon request
- Other auxiliary contact configurations/ types available upon request
- Captive screw clamp, but also available with cage clamp, fast-on or solder connections
- DIN rail or back panel mounting (PCB mounting for solder pin types)
- Manual motor starters and direct bridge adapters available upon request

CGMS Series Mini-Contactors and CGT-12M Mini-Overloads are ideal where you're looking for a compact and light contactor and/or overload solution. They are also amongst the most cost effective contactor on the market. Dimensions (H x W x D in mm): CGMS : 58 x 45 x 57mm; CGT-12M: 73 x 45 x 64mm. Other Motor Protection Ranges are available upon request for the Thermal Overloads. cUL listed, RoHS compliant, CE compliant.

120VAC COIL WITH 1NO AUXILIARY CONTACT

Mfg. Part No.	Continuous Current (A)	Motor Rating @ 480VAC (HP)	Stock No.	Price Each
CGMS-6A-120-10	20	3	71K2018	20.00
CGMS-9A-120-10	20	5	71K2028	21.00
CGMS-12A-120-10	20	7.5	71K2008	24.00

THERMAL OVERLOADS FOR MINI-CONTACTORS

Mfg. Part No.	Motor Protection Range (A)	Stock No.	Price Each
CGT-12M-6.0	4-6	08R0959	31.00
CGT-12M-9.0	6-9	08R0960	31.00
CGT-12M-13	9-13	71K2074	31.00

(147860)

SOLID STATE CONTACTORS

RoHS Compliant Available

crydom™

NEW

- 7.6 Amp Motor Controlier rated Solid State Contactor
- Load voltage range up to 530VAC
- Fits standard 35mm DIN-RAIL
- LED input status indicator
- AC or DC control
- Zero-crossing (resistive loads) or instantaneous turn-on (inductive loads) output
- C-UL-US Listed, IEC Rated, CE & RoHS Compliant, Horsepower Rated
- Built in Overvoltage Protection
- Ultra-efficient thermal management design (Patented)

Type	Contactor Terminals	Stock No.	Price Each 1-9
● DRC3P48A400R	Random Turn On	19X1538	109.38
● DRC3P48A400R2	Random Turn On	19X1539	90.13
● DRC3P48B400R	Random Turn On	19X1550	109.38
● DRC3P48B400R2	Random Turn On	19X1551	90.13
● DRC3P48D400R	Random Turn On	19X1562	109.38
● DRC3P48D400R2	Random Turn On	19X1563	90.13
● DRC3P48D411R2	Random Turn On	19X1567	120.53
● DRC3P48D420R2	Random Turn On	19X1571	109.23
● DRC3R40A400	Reversing	19X1573	178.45
● DRC3R40B400	Reversing	19X1575	177.74
● DRC3R40D400	Reversing	19X1577	177.74
● DRC3R48A420	Reversing	19X1580	242.26
● DRC3R48B420	Reversing	19X1582	242.26
● DRC3R48D420	Reversing	19X1584	242.26

(211895)

pro-POWER AT NEWARK ELEMENT14

Take control with quality, affordable Wire-Management Solutions.

newark.com/pro-power

(212564)

3-PHASE SOLID-STATE CONTRACTOR RELAYS

RoHS Compliant Available

crydom

SPECIFICATIONS
- Ratings 25A per phase @ 600 VAC
- DIN-RAIL or panel mount 90mm (width) package
- 100K-cycle UL 508 endurance rating for enhanced reliability
- SCR output for heavy industrial loads
- LED input status indicator
- AC or DC control
- Zero-crossing (resistive loads) or random-fire (inductive loads) output
- IP20 touch safe housing

APPLICATIONS
- Transportation (rail, back up power)
- Industrial automation
- Process control
- Machine tools (hydraulic pumps)
- Semiconductor equipment
- HVAC (heating, ventilation & air conditioning)
- Food processing
- Compressors
- Elevators & rolling shutters
- Plastics industry
- Material handling & packaging
- Oil services
- Paper & printing
- Lighting

Mfg. Part No.	Control Voltage	Stock No.	Price Each 1-9
CTRB6025	90 - 140 VAC	72R7199	201.90
CTRC6025	180 - 280 VAC	72R7200	232.19
CTRD6025	4 - 32 VDC	72R7201	189.50
CTRD6025-10	4 - 32 VDC	72R7202	236.13

Part# with -10 suffix random turn on DC control only
(176192)

DRA SERIES COMPACT DIN RAIL MOUNTED AC AND DC OUTPUT SOLID STATE CONTACTORS

RoHS Compliant Available

crydom

DRA3P Series

DRA3R Series

DRA4D Series

- Solid state contactors
- Three phase motor reversing contactor
- DC motor reversing contactors
- Ratings of 2.4 & 4.2 Amps
- Load voltage range of 48-510VAC, 3-Phase
- Fits standard 35mm DIN-RAIL
- LED input status indicator, Forward (green), Reverse (yellow)
- AC or DC control

Mfg. Part No.	Operating Voltage	Control Voltage	Switching Mode	Stock No.	Price Each 1-9
DRA3P SERIES					
DRA3P48B4	480VAC	90-140VAC	Zero	40T4667	75.91
DRA3P48B4R	480VAC	90-140VAC	Random	40T4668	73.71
DRA3P48D2	480VAC	4-6VDC	Zero	40T4673	61.86
DRA3P48D4	480VAC	4-6VDC	Zero	40T4675	70.72
DRA3P48E2R	480VAC	18-28VDC	Random	40T4678	61.15
DRA3P48E4R	480VAC	18-28VDC	Random	40T4680	70.00
DRA3R SERIES					
DRA3R48D2	480VAC	18-28VDC	Reversing	40T4687	130.78
DRA3R48E2	480VAC	18-28VDC	Reversing	40T4689	130.99
DRA4D SERIES					
DRA4D100D12	100VDC	5-15VDC	Reversing	40T4691	264.92
DRA4D250D6	250VDC	5-15VDC	Reversing	40T4693	252.87

(195841)

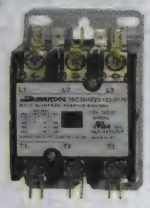
30C DEFINITE PURPOSE CONTACTORS

RoHS Compliant Available

DURAKOOL INC.

Features:
- 20FLA to 150FLA
- Robust 1 to 4-pole contactor
- Industry standard mounting
- Arc covers as standard

Specifications:
- Dielectric strength: 2200VAC
- Insulation system: 130°C class B
- Temperature range: -40°C to +65°C
- Wire size: Box lug 14-4, #10-32 screw 16-8*



Mfg. Part No.	Carry Current (A)	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Stock No.	Price Each 1-4
30C30-1023-155-5120	30	3PST-NO	120	180	59P3477	26.04
30C30-1023-155-5230	30	3PST-NO	240	720	59P3478	26.04

CONTINUED

30C DEFINITE PURPOSE CONTACTORS (CONT.)

Mfg. Part No.	Carry Current (A)	Contacts	Coil Voltage (VDC)	Coil Resist. (Ω)	Stock No.	Price Each 1-4
30C40-1023-144-5120	40	3PST-NO	120	180	59P3479	29.63
30C40-1023-144-5230	40	3PST-NO	240	720	59P3480	29.92
30C60-1023-166-5120	60	3PST-NO	120	180	59P3481	72.55

* Must use ring terminal
(107908)

DS7 SERIES SOFT START CONTROLLERS

RoHS Compliant Available

EATON

Features and Benefits
- Bypass mode reduces internal heating created by the power dissipation across the SCRs
- LED displays device status and provides fault indication
- Variable ramp times and voltage control (torque control) settings provide unlimited starting configurations, allowing for maximum application flexibility
- Soft stop control suits applications where an abrupt stop of the load is not acceptable
- 24 Vac/Vdc and 120/230 Vac control voltage enhances personnel and equipment safety
- Auxiliary relays (TOR and RUN) indicate status of the controllers

Certifications
- IEC 60947-4-2
- EN 60947-4-2
- C-Tick

4Amps to 12Amps

16Amps to 32Amps

Eaton's **DS7** line of reduced voltage solid-state soft start controllers is very compact, multi-functional, easy to install, and easy to commission. Designed to control the acceleration and deceleration of three-phase motors, the device is available for current ranges from 4–32A in four frame sizes.

Mfg. Part No.	Current (A)	Voltage	Motor Power (hp) @200V	@230V	@480V	Stock No.	Price Each 1-4
DS7-340SX004N0-N	4	24 Vac/Vdc	0.75	0.75	2	43W4739	248.43
DS7-342SX004N0-N	4	120/230 Vac	0.75	0.75	2	43W4746	287.88
DS7-340SX007N0-N	7	24 Vac/Vdc	1.5	2	3	43W4740	280.26
DS7-342SX007N0-N	7	120/230 Vac	1.5	2	3	43W4747	303.79
DS7-340SX009N0-N	9	24 Vac/Vdc	2	2	5	43W4741	322.90
DS7-342SX009N0-N	9	120/230 Vac	2	2	5	43W4748	319.02
DS7-340SX012N0-N	12	24 Vac/Vdc	3	3	7.5	43W4742	295.49
DS7-342SX012N0-N	12	120/230 Vac	3	3	7.5	43W4749	335.62
DS7-340SX016N0-N	16	24 Vac/Vdc	3	5	10	43W4743	311.40
DS7-342SX016N0-N	16	120/230 Vac	3	5	10	43W4750	377.66
DS7-340SX024N0-N	24	24 Vac/Vdc	5	7.5	15	43W4744	361.92
DS7-342SX024N0-N	24	120/230 Vac	5	7.5	15	43W4751	443.26
DS7-340SX032N0-N	32	24 Vac/Vdc	7.5	10	20	43W4745	377.84
DS7-342SX032N0-N	32	120/230 Vac	7.5	10	20	43W4752	480.75

(208036)

IEC NON-REVERSING MOTOR STARTERS

EATON

- AC control from 12V to 600V 50/60 Hz
- DC control from 12V to 220V
- Available with screw or spring cage terminals
- Reversing or non-reversing contactors and starters
- AC-3 contactor ratings to 1000A and AC-1 contactor ratings to 2000A
- Non-reversing starters to 650A
- Panel or DIN rail mounting to 65A
- IP20 finger and back-of-hand proof

Fig. 1

Fig. 2

Fig. 3

- Large ambient temperature range, -25 to 50°C [-13 to 122°F]
- AC and DC controlled contactors in the same compact frame
- Low power consumption DC coils
- Built-in NO or NC auxiliary contacts to 32A

Mfg. Part No.	Image	Horse Power 240V	480V	Current Rating	Coil Voltage	Stock No.	Price Each 1-4
ECX09C1AAA-R63/A	Fig. 1	1/2	...	9	120	41T2489	527.39
ECX09C1AAA-R63/B	Fig. 1	1/2	...	9	120	41T2490	527.39
ECX09C1AAA-R63/C	Fig. 1	1/2	...	9	120	41T2491	527.39
ECX09C1ACA-R63/A	Fig. 2	1/2	...	9	120	41T2492	1206.63
ECX09C1ACA-R63/B	Fig. 2	1/2	...	9	120	41T2493	1206.63
ECX09C1ACA-R63/C	Fig. 2	1/2	...	9	120	41T2494	1206.63
ECX09C1AJA-R63/A	Fig. 3	1/2	...	9	120	41T2495	1174.17
ECX09C1AJA-R63/B	Fig. 3	1/2	...	9	120	41T2496	1174.17
ECX09C1AJA-R63/C	Fig. 3	1/2	...	9	120	41T2497	1174.17
ECX09C1BAA-R63/A	Fig. 1	1-1/2	3	9	240	41T2498	527.39
ECX09C1BAA-R63/B	Fig. 1	1-1/2	3	9	240	41T2499	527.39
ECX09C1BAA-R63/C	Fig. 1	1-1/2	3	9	240	41T2500	527.39

CONTINUED

IEC NON-REVERSING MOTOR STARTERS (CONT.)

Mfg. Part No.	Image	Horse Power 240V	Horse Power 480V	Current Rating	Coil Voltage	Stock No.	Price Each 1-4
ECX09C1BCA-R63/A	Fig. 2	1-1/2	3	9	240	41T2501	1206.63
ECX09C1BCA-R63/B	Fig. 2	1-1/2	3	9	240	41T2502	1206.63
ECX09C1BCA-R63/C	Fig. 2	1-1/2	3	9	240	41T2503	1206.63
ECX09C1BJA-R63/A	Fig. 3	1-1/2	3	9	240	41T2504	1174.17
ECX09C1BJA-R63/B	Fig. 3	1-1/2	3	9	240	41T2505	1174.17
ECX09C1BJA-R63/C	Fig. 3	1-1/2	3	9	240	41T2506	1174.17
ECX09C1CAA-R63/A	Fig. 1	...	5	9	480	41T2507	527.39
ECX09C1CAA-R63/B	Fig. 1	...	5	9	480	41T2508	527.39
ECX09C1CAA-R63/C	Fig. 1	...	5	9	480	41T2509	527.39
ECX09C1CCA-R63/A	Fig. 2	...	5	9	480	41T2510	1206.63
ECX09C1CCA-R63/B	Fig. 2	...	5	9	480	41T2511	1206.63
ECX09C1CCA-R63/C	Fig. 2	...	5	9	480	41T2512	1206.63
ECX09C1CJA-R63/A	Fig. 3	...	5	9	480	41T2513	1174.17
ECX09C1CJA-R63/B	Fig. 3	...	5	9	480	41T2514	1174.17
ECX09C1CJA-R63/C	Fig. 3	...	5	9	480	41T2515	1174.17
ECX09G1AAA-R63/D	Fig. 1	2	...	25	120	41T2516	765.01
ECX09G1ACA-R63/D	Fig. 2	2	...	25	120	41T2517	1444.24
ECX09G1AJA-R63/D	Fig. 3	2	...	25	120	41T2518	1410.63
ECX09G1BAA-R63/D	Fig. 1	5	7-1/2	25	240	41T2519	765.01
ECX09G1BCA-R63/D	Fig. 2	5	7-1/2	25	240	41T2520	1444.24
ECX09G1BJA-R63/D	Fig. 3	5	7-1/2	25	240	41T2521	1410.63
ECX09G1CAA-R63/D	Fig. 1	...	10	25	480	41T2522	765.01
ECX09G1CCA-R63/D	Fig. 2	...	10	25	480	41T2523	1444.24
ECX09G1CJA-R63/D	Fig. 3	...	15	25	480	41T2524	1410.63
ECX09H1AAA-R63/D	Fig. 1	3	...	32	120	41T2525	816.01
ECX09H1ACA-R63/D	Fig. 2	3	...	32	120	41T2526	1495.24
ECX09H1AJA-R63/D	Fig. 3	3	...	32	120	41T2527	1462.79
ECX09H1BAA-R63/D	Fig. 1	5	10	32	240	41T2528	816.01
ECX09H1BCA-R63/D	Fig. 2	5	10	32	240	41T2529	1495.24
ECX09H1BJA-R63/D	Fig. 3	5	10	32	240	41T2530	1462.79
ECX09H1CAA-R63/D	Fig. 1	...	20	32	480	41T2531	816.01
ECX09H1CCA-R63/D	Fig. 2	...	20	32	480	41T2532	1495.24
ECX09H1CJA-R63/D	Fig. 3	...	20	32	480	41T2533	1462.79

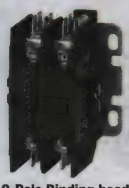
(196154)

COMPACT DEFINITE PURPOSE CONTACTORS

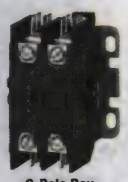
RoHS Compliant Available

- Insulation Voltage: 690V
- Magnet Coil Class F, 155°C
- Operating temperature: -25 to +70°C
- Coil Power VAC: 2.2kW
- Coil Terminals: Screw with Quick Connect
- Coil Voltage AC Max: 120V
- Coil Voltage AC Min: 110V
- Contacts: DPST-NO-DB
- Horsepower: 3hp
- Line Voltage: 230V

1-Pole Binding head screw/QC



2-Pole Binding head screw/QC



2-Pole Box Lugs/QC

C25 Series 20 - 40A single and double-pole contactors feature a compact, efficient design with a low VA coil and straight-through wiring. New contactor housing desigh effectively limits dust and other contaminants from magnet structure, reduces or eliminates noise.

1-POLE CONTACTORS BINDING HEAD SCREWS AND QUICK CONNECT TERMINALS

Mfg. Part No.	Inductive Current Rating (A)	Max HP Rating 115 V	Max HP Rating 230 V	Coil Voltage (VAC)	Stock No.	Price Each 1-9
● C25ANB125T	25	2	3	24	46K2670	24.09
● C25ANB125A	25	2	3	120	46K2667	23.77
● C25ANB130A	30	2	5	120	46K2671	28.14
● C25ANB140A	40	3	7.5	120	46K2676	32.91
2-POLE CONTACTORS BINDING HEAD SCREWS AND QUICK CONNECT TERMINALS						
● C25BNB220T	20	1.5	3	24	46K2693	26.77
● C25BNB220A	20	1.5	3	120	46K2689	28.82
● C25BNB220B	20	1.5	3	240	46K2690	26.77
● C25BNB225A	25	2	3	120	46K2694	30.64
● C25BNB230T	30	2	5	24	46K2707	35.68
● C25BNB230A	30	2	5	120	46K2699	38.05
● C25BNB230B	30	2	5	240	46K2702	37.40
● C25BNB240T	40	3	7.5	24	46K2713	46.00
● C25BNB240A	40	3	7.5	120	46K2709	42.83
2-POLE CONTACTORS BOX LUGS AND QUICK CONNECT TERMINALS						
● C25BNF240T	40	3	7.5	24	46K2725	50.01
● C25BNF240B	40	3	7.5	240	46K2723	49.44

(105807)

FREEDOM FULL VOLTAGE STARTERS

- Meet and exceed all NEMA, UL and CSA standards.
- Sized based on standard NEMA classifications.
- Designed and built for a variety of demanding applications.
- Easy coil change and inspectable/replaceable contacts.
- Adjustable/interchangeable heater packs for flexibility.
- Available in Open and NEMA 1, 3R, 4/4X and 12 enclosures.
- Adjustable Bimetallic Ambient Compensated Overload relays with interchangeable heater packs
- A full line of snap-on accessories common to both IEC and NEMA devices
- Horizontal or vertical mounting on upright panel for application freedom.
- Screw type power terminals have captive, backed-out self-lifting pressure plates with ± screws
- Accessible terminals for easy wiring.
- Optional fingerproof shields available to prevent electrical shock.
- Top located coil terminals convenient and readily accessible.
- Encapsulated dual voltage/frequency magnet coils
- Designed to meet or exceed NEMA, UL, CSA, IEC, VDE, BS and other international standards and listings.

The "Freedom Series" starters and contactors feature a compact, space-saving design, using state-of-the-art technology and the latest in high strength, impact and temperature-resistant insulating materials. Starters and contactors are available in two rating/configuration styles — NEMA (National Electrical Manufacturers' Association) and IEC (International Electrotechnical Commission).

NEMA SIZE 00 STARTERS

Mfg. Part No.	NEMA Rating	Overload Amps Min.	Overload Amps Max.	Power Rating (HP) 230V	Power Rating (HP) 460V	Coil Voltage	Stock No.	Price Each 1-4
ECN05A1AAA-R63/A	NEMA 1	0.33	1.65	1.5	2	120V	44T9313	240.82
ECN05A1AAA-R63/B	NEMA 1	1	5	1.5	2	120V	44T9314	240.82
ECN05A1AAA-R63/C	NEMA 1	4	20	1.5	2	120V	44T9315	240.82
ECN05A8AAA-R63/A	NEMA 12	0.33	1.65	1.5	2	120V	44T9358	309.43
ECN05A8AAA-R63/B	NEMA 12	1	5	1.5	2	120V	44T9359	309.43
ECN05A8AAA-R63/C	NEMA 12	4	20	1.5	2	120V	44T9360	309.43
ECN05A2AAA-R63/A	NEMA 3R	0.33	1.65	1.5	2	120V	44T9328	309.43
ECN05A2AAA-R63/B	NEMA 3R	1	5	1.5	2	120V	44T9329	309.43
ECN05A2AAA-R63/C	NEMA 3R	4	20	1.5	2	120V	44T9330	309.43
ECN05A4AAA-R63/A	NEMA 4X	0.33	1.65	1.5	2	120V	44T9343	455.58
ECN05A4AAA-R63/B	NEMA 4X	1	5	1.5	2	120V	44T9344	455.58
ECN05A4AAA-R63/C	NEMA 4X	4	20	1.5	2	120V	44T9345	455.58
ECN05A1EAA-R63/A	NEMA 1	0.33	1.65	1.5	2	208V	44T9322	240.82
ECN05A1EAA-R63/B	NEMA 1	1	5	1.5	2	208V	44T9323	240.82
ECN05A1EAA-R63/C	NEMA 1	4	20	1.5	2	208V	44T9324	240.82
ECN05A8EAA-R63/A	NEMA 12	0.33	1.65	1.5	2	208V	44T9367	309.43
ECN05A8EAA-R63/B	NEMA 12	1	5	1.5	2	208V	44T9368	309.43
ECN05A8EAA-R63/C	NEMA 12	4	20	1.5	2	208V	44T9369	309.43
ECN05A2EAA-R63/A	NEMA 3R	0.33	1.65	1.5	2	208V	44T9337	309.43
ECN05A2EAA-R63/B	NEMA 3R	1	5	1.5	2	208V	44T9338	309.43
ECN05A2EAA-R63/C	NEMA 3R	4	20	1.5	2	208V	44T9339	309.43
ECN05A4EAA-R63/A	NEMA 4X	0.33	1.65	1.5	2	208V	44T9352	455.58
ECN05A4EAA-R63/B	NEMA 4X	1	5	1.5	2	208V	44T9353	455.58
ECN05A4EAA-R63/C	NEMA 4X	4	20	1.5	2	208V	44T9354	455.58
ECN05A1BAA-R63/A	NEMA 1	0.33	1.65	1.5	2	240V	44T9316	240.82
ECN05A1BAA-R63/B	NEMA 1	1	5	1.5	2	240V	44T9317	240.82
ECN05A1BAA-R63/C	NEMA 1	4	20	1.5	2	240V	44T9318	240.82
ECN05A8BAA-R63/A	NEMA 12	0.33	1.65	1.5	2	240V	44T9361	309.43
ECN05A8BAA-R63/B	NEMA 12	1	5	1.5	2	240V	44T9362	309.43
ECN05A8BAA-R63/C	NEMA 12	4	20	1.5	2	240V	44T9363	309.43
ECN05A2BAA-R63/A	NEMA 3R	0.33	1.65	1.5	2	240V	44T9331	309.43
ECN05A2BAA-R63/B	NEMA 3R	1	5	1.5	2	240V	44T9332	309.43
ECN05A2BAA-R63/C	NEMA 3R	4	20	1.5	2	240V	44T9333	309.43
ECN05A4BAA-R63/A	NEMA 4X	0.33	1.65	1.5	2	240V	44T9346	455.58
ECN05A4BAA-R63/B	NEMA 4X	1	5	1.5	2	240V	44T9347	455.58
ECN05A4BAA-R63/C	NEMA 4X	4	20	1.5	2	240V	44T9348	455.58
ECN05A1TAA-R63/A	NEMA 1	0.33	1.65	1.5	2	24VAC	44T9325	240.82
ECN05A1TAA-R63/B	NEMA 1	1	5	1.5	2	24VAC	44T9326	240.82
ECN05A1TAA-R63/C	NEMA 1	4	20	1.5	2	24VAC	44T9327	240.82
ECN05A8TAA-R63/A	NEMA 12	0.33	1.65	1.5	2	24VAC	44T9370	309.43
ECN05A8TAA-R63/B	NEMA 12	1	5	1.5	2	24VAC	44T9371	309.43
ECN05A8TAA-R63/C	NEMA 12	4	20	1.5	2	24VAC	44T9372	309.43
ECN05A2TAA-R63/A	NEMA 3R	0.33	1.65	1.5	2	24VAC	44T9340	309.43
ECN05A2TAA-R63/B	NEMA 3R	1	5	1.5	2	24VAC	44T9341	309.43
ECN05A2TAA-R63/C	NEMA 3R	4	20	1.5	2	24VAC	44T9342	309.43
ECN05A4TAA-R63/A	NEMA 4X	0.33	1.65	1.5	2	24VAC	44T9355	455.58
ECN05A4TAA-R63/B	NEMA 4X	1	5	1.5	2	24VAC	44T9356	455.58
ECN05A4TAA-R63/C	NEMA 4X	4	20	1.5	2	24VAC	44T9357	455.58
ECN05A1CAA-R63/A	NEMA 1	0.33	1.65	1.5	2	480V	44T9319	240.82
ECN05A1CAA-R63/B	NEMA 1	1	5	1.5	2	480V	44T9320	240.82
ECN05A1CAA-R63/C	NEMA 1	4	20	1.5	2	480V	44T9321	240.82
ECN05A8CAA-R63/A	NEMA 12	0.33	1.65	1.5	2	480V	44T9364	309.43
ECN05A8CAA-R63/B	NEMA 12	1	5	1.5	2	480V	44T9365	309.43

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FREEDOM FULL VOLTAGE STARTERS (CONT.)

Mfg. Part No.	NEMA Rating	Overload Amps Min.	Overload Amps Max.	Power Rating (HP) 230V	Power Rating (HP) 460V	Coil Voltage	Stock No.	Price Each 1-4
ECN05A8CAA-R63/C	NEMA 12	4	20	1.5	2	480V	44T9366	309.43
ECN05A2CAA-R63/A	NEMA 3R	0.33	1.65	1.5	2	480V	44T9334	309.43
ECN05A2CAA-R63/B	NEMA 3R	1	5	1.5	2	480V	44T9335	309.43
ECN05A2CAA-R63/C	NEMA 3R	4	20	1.5	2	480V	44T9336	309.43
ECN05A4CAA-R63/A	NEMA 4X	0.33	1.65	1.5	2	480V	44T9349	455.58
ECN05A4CAA-R63/B	NEMA 4X	1	5	1.5	2	480V	44T9350	455.58
ECN05A4CAA-R63/C	NEMA 4X	4	20	1.5	2	480V	44T9351	455.58
NEMA SIZE 0 STARTERS								
ECN0501AAA-R63/B	NEMA 1	1	5	3	5	120V	44T9373	291.32
ECN0501AAA-R63/C	NEMA 1	4	20	3	5	120V	44T9374	291.32
ECN0508AAA-R63/B	NEMA 12	1	5	3	5	120V	44T9403	826.44
ECN0508AAA-R63/C	NEMA 12	4	20	3	5	120V	44T9404	826.44
ECN0502AAA-R63/B	NEMA 3R	1	5	3	5	120V	44T9383	376.33
ECN0502AAA-R63/C	NEMA 3R	4	20	3	5	120V	44T9384	376.33
ECN0504AAA-R63/B	NEMA 4X	1	5	3	5	120V	44T9393	376.04
ECN0504AAA-R63/C	NEMA 4X	4	20	3	5	120V	44T9394	376.04
ECN0501EAA-R63/B	NEMA 1	1	5	3	5	208V	44T9379	291.32
ECN0501EAA-R63/C	NEMA 1	4	20	3	5	208V	44T9380	291.32
ECN0508EAA-R63/B	NEMA 12	1	5	3	5	208V	44T9409	826.44
ECN0508EAA-R63/C	NEMA 12	4	20	3	5	208V	44T9410	826.44
ECN0502EAA-R63/B	NEMA 3R	1	5	3	5	208V	44T9389	376.33
ECN0502EAA-R63/C	NEMA 3R	4	20	3	5	208V	44T9390	376.33
ECN0504EAA-R63/B	NEMA 4X	1	5	3	5	208V	44T9399	376.04
ECN0504EAA-R63/C	NEMA 4X	4	20	3	5	208V	44T9400	376.04
ECN0501BAA-R63/B	NEMA 1	1	5	3	5	240V	44T9375	291.32
ECN0501BAA-R63/C	NEMA 1	4	20	3	5	240V	44T9376	291.32
ECN0508BAA-R63/B	NEMA 12	1	5	3	5	240V	44T9405	826.44
ECN0508BAA-R63/C	NEMA 12	4	20	3	5	240V	44T9406	826.44
ECN0502BAA-R63/B	NEMA 3R	1	5	3	5	240V	44T9385	376.33
ECN0502BAA-R63/C	NEMA 3R	4	20	3	5	240V	44T9386	376.33
ECN0504BAA-R63/B	NEMA 4X	1	5	3	5	240V	44T9395	376.04
ECN0504BAA-R63/C	NEMA 4X	4	20	3	5	240V	44T9396	376.04
ECN0501TAA-R63/B	NEMA 1	1	5	3	5	24VAC	44T9381	291.32
ECN0501TAA-R63/C	NEMA 1	4	20	3	5	24VAC	44T9382	291.32
ECN0508TAA-R63/B	NEMA 12	1	5	3	5	24VAC	44T9411	477.28
ECN0508TAA-R63/C	NEMA 12	4	20	3	5	24VAC	44T9412	331.13
ECN0502TAA-R63/B	NEMA 3R	1	5	3	5	24VAC	44T9391	331.13
ECN0502TAA-R63/C	NEMA 3R	4	20	3	5	24VAC	44T9392	331.13
ECN0504TAA-R63/B	NEMA 4X	1	5	3	5	24VAC	44T9401	477.28
ECN0504TAA-R63/C	NEMA 4X	4	20	3	5	24VAC	44T9402	331.13
ECN0501CAA-R63/B	NEMA 1	1	5	3	5	480V	44T9377	291.32
ECN0501CAA-R63/C	NEMA 1	4	20	3	5	480V	44T9378	291.32
ECN0508CAA-R63/B	NEMA 12	1	5	3	5	480V	44T9407	826.44
ECN0508CAA-R63/C	NEMA 12	4	20	3	5	480V	44T9408	826.44
ECN0502CAA-R63/B	NEMA 3R	1	5	3	5	480V	44T9387	376.33
ECN0502CAA-R63/C	NEMA 3R	4	20	3	5	480V	44T9388	376.33
ECN0504CAA-R63/B	NEMA 4X	1	5	3	5	480V	44T9397	376.04
ECN0504CAA-R63/C	NEMA 4X	4	20	3	5	480V	44T9398	376.04
NEMA SIZE 1 STARTERS								
ECN0511AAA-R63/C	NEMA 1	4	20	7.5	10	120V	44T9413	327.03
ECN0511AAA-R63/D	NEMA 1	9	45	7.5	10	120V	44T9414	327.03
ECN0518AAA-R63/C	NEMA 12	4	20	7.5	10	120V	44T9443	409.56
ECN0518AAA-R63/D	NEMA 12	9	45	7.5	10	120V	44T9444	409.56
ECN0512AAA-R63/C	NEMA 3R	4	20	7.5	10	120V	44T9423	409.56
ECN0512AAA-R63/D	NEMA 3R	9	45	7.5	10	120V	44T9424	409.56
ECN0514AAA-R63/C	NEMA 4X	4	20	7.5	10	120V	44T9433	588.83
ECN0514AAA-R63/D	NEMA 4X	9	45	7.5	10	120V	44T9434	588.83
ECN0511EAA-R63/C	NEMA 1	4	20	7.5	10	208V	44T9419	327.03
ECN0511EAA-R63/D	NEMA 1	9	45	7.5	10	208V	44T9420	327.03
ECN0518EAA-R63/C	NEMA 12	4	20	7.5	10	208V	44T9449	360.24
ECN0518EAA-R63/D	NEMA 12	9	45	7.5	10	208V	44T9450	360.24
ECN0512EAA-R63/C	NEMA 3R	4	20	7.5	10	208V	44T9429	409.56
ECN0512EAA-R63/D	NEMA 3R	9	45	7.5	10	208V	44T9430	409.56
ECN0514EAA-R63/C	NEMA 4X	4	20	7.5	10	208V	44T9439	518.38
ECN0514EAA-R63/D	NEMA 4X	9	45	7.5	10	208V	44T9440	518.38
ECN0511BAA-R63/C	NEMA 1	4	20	7.5	10	240V	44T9415	327.03
ECN0511BAA-R63/D	NEMA 1	9	45	7.5	10	240V	44T9416	327.03
ECN0518BAA-R63/C	NEMA 12	4	20	7.5	10	240V	44T9445	409.56
ECN0518BAA-R63/D	NEMA 12	9	45	7.5	10	240V	44T9446	409.56
ECN0512BAA-R63/C	NEMA 3R	4	20	7.5	10	240V	44T9425	409.56
ECN0512BAA-R63/D	NEMA 3R	9	45	7.5	10	240V	44T9426	409.56
ECN0514BAA-R63/C	NEMA 4X	4	20	7.5	10	240V	44T9435	588.83
ECN0514BAA-R63/D	NEMA 4X	9	45	7.5	10	240V	44T9436	588.83

➤CONTINUED➤

FREEDOM FULL VOLTAGE STARTERS (CONT.)

Mfg. Part No.	NEMA Rating	Overload Amps Min.	Overload Amps Max.	Power Rating (HP) 230V	Power Rating (HP) 460V	Coil Voltage	Stock No.	Price Each 1-4
NEMA SIZE 1 STARTERS								
ECN0511TAA-R63/C	NEMA 1	4	20	7.5	10	24VAC	44T9421	327.03
ECN0511TAA-R63/D	NEMA 1	9	45	7.5	10	24VAC	44T9422	327.03
ECN0518TAA-R63/C	NEMA 12	4	20	7.5	10	24VAC	44T9451	360.24
ECN0518TAA-R63/D	NEMA 12	9	45	7.5	10	24VAC	44T9452	360.24
ECN0512TAA-R63/C	NEMA 3R	4	20	7.5	10	24VAC	44T9431	360.24
ECN0512TAA-R63/D	NEMA 3R	9	45	7.5	10	24VAC	44T9432	360.24
ECN0514TAA-R63/C	NEMA 4X	4	20	7.5	10	24VAC	44T9441	518.38
ECN0514TAA-R63/D	NEMA 4X	9	45	7.5	10	24VAC	44T9442	518.38
ECN0511CAA-R63/C	NEMA 1	4	20	7.5	10	480V	44T9417	327.03
ECN0511CAA-R63/D	NEMA 1	9	45	7.5	10	480V	44T9418	341.75
ECN0518CAA-R63/C	NEMA 12	4	20	7.5	10	480V	44T9447	409.56
ECN0518CAA-R63/D	NEMA 12	9	45	7.5	10	480V	44T9448	409.56
ECN0512CAA-R63/C	NEMA 3R	4	20	7.5	10	480V	44T9427	409.56
ECN0512CAA-R63/D	NEMA 3R	9	45	7.5	10	480V	44T9428	409.56
ECN0514CAA-R63/C	NEMA 4X	4	20	7.5	10	480V	44T9437	588.83
ECN0514CAA-R63/D	NEMA 4X	9	45	7.5	10	480V	44T9438	588.83
NEMA SIZE 2 STARTERS								
ECN0521AAA-R63/D	NEMA 1	9	45	15	25	120V	44T9453	619.00
ECN0528AAA-R63/D	NEMA 12	9	45	15	25	120V	44T9468	618.83
ECN0522AAA-R63/D	NEMA 3R	9	45	15	25	120V	44T9458	618.83
ECN0524AAA-R63/D	NEMA 4X	9	45	15	25	120V	44T9463	1129.02
ECN0521EAA-R63/D	NEMA 1	9	45	15	25	208V	44T9456	619.00
ECN0528EAA-R63/D	NEMA 12	9	45	15	25	208V	44T9471	544.64
ECN0522EAA-R63/D	NEMA 3R	9	45	15	25	208V	44T9461	544.64
ECN0524EAA-R63/D	NEMA 4X	9	45	15	25	208V	44T9466	993.94
ECN0521BAA-R63/D	NEMA 1	9	45	15	25	240V	44T9454	619.00
ECN0528BAA-R63/D	NEMA 12	9	45	15	25	240V	44T9469	544.64
ECN0522BAA-R63/D	NEMA 3R	9	45	15	25	240V	44T9459	618.83
ECN0524BAA-R63/D	NEMA 4X	9	45	15	25	240V	44T9464	993.94
ECN0521TAA-R63/D	NEMA 1	9	45	15	25	24VAC	44T9457	619.00
ECN0528TAA-R63/D	NEMA 12	9	45	15	25	24VAC	44T9472	544.64
ECN0522TAA-R63/D	NEMA 3R	9	45	15	25	24VAC	44T9462	544.64
ECN0524TAA-R63/D	NEMA 4X	9	45	15	25	24VAC	44T9467	993.94
ECN0521CAA-R63/D	NEMA 1	9	45	15	25	480V	44T9455	619.00
ECN0528CAA-R63/D	NEMA 12	9	45	15	25	480V	44T9470	544.64
ECN0522CAA-R63/D	NEMA 3R	9	45	15	25	480V	44T9460	618.83
ECN0524CAA-R63/D	NEMA 4X	9	45	15	25	480V	44T9465	993.94
NEMA SIZE 3 STARTERS								
ECN0531AAA-R63/E	NEMA 1	20	100	30	50	120V	44T9473	1004.58
ECN0538AAA-R63/E	NEMA 12	20	100	30	50	120V	44T9488	1189.97
ECN0532AAA-R63/E	NEMA 3R	20	100	30	50	120V	44T9478	1189.97
ECN0534AAA-R63/E	NEMA 4X	20	100	30	50	120V	44T9483	1726.60
ECN0531EAA-R63/E	NEMA 1	20	100	30	50	208V	44T9476	1004.58
ECN0538EAA-R63/E	NEMA 12	20	100	30	50	208V	44T9491	1047.61
ECN0532EAA-R63/E	NEMA 3R	20	100	30	50	208V	44T9481	1047.61
ECN0534EAA-R63/E	NEMA 4X	20	100	30	50	208V	44T9486	1520.31
ECN0531BAA-R63/E	NEMA 1	20	100	30	50	240V	44T9474	1004.58
ECN0538BAA-R63/E	NEMA 12	20	100	30	50	240V	44T9489	1047.61
ECN0532BAA-R63/E	NEMA 3R	20	100	30	50	240V	44T9479	1189.97
ECN0534BAA-R63/E	NEMA 4X	20	100	30	50	240V	44T9484	1520.31
ECN0531TAA-R63/E	NEMA 1	20	100	30	50	24VAC	44T9477	884.33
ECN0538TAA-R63/E	NEMA 12	20	100	30	50	24VAC	44T9492	1047.61
ECN0532TAA-R63/E	NEMA 3R	20	100	30	50	24VAC	44T9482	1047.61
ECN0534TAA-R63/E	NEMA 4X	20	100	30	50	24VAC	44T9487	1520.31
ECN0531CAA-R63/E	NEMA 1	20	100	30	50	480V	44T9475	1004.58
ECN0538CAA-R63/E	NEMA 12	20	100	30	50	480V	44T9490	1047.61
ECN0532CAA-R63/E	NEMA 3R	20	100	30	50	480V	44T9480	1189.97
ECN0534CAA-R63/E	NEMA 4X	20	100	30	50	480V	44T9485	1520.31
NEMA SIZE 4 STARTERS								
ECN0541AAA-R61/J	NEMA 1	35	175	50	100	120V	44T9493	2208.76
ECN0548AAA-R61/J	NEMA 12	35	175	50	100	120V	44T9508	2482.85
ECN0542AAA-R61/J	NEMA 3R	35	175	50	100	120V	44T9498	2482.85
ECN0544AAA-R61/J	NEMA 4X	35	175	50	100	120V	44T9503	3031.48
ECN0541EAA-R61/J	NEMA 1	35	175	50	100	208V	44T9496	1945.06
ECN0548EAA-R61/J	NEMA 12	35	175	50	100	208V	44T9509	2482.85
ECN0542EAA-R61/J	NEMA 3R	35	175	50	100	208V	44T9501	2482.85
ECN0544EAA-R61/J	NEMA 4X	35	175	50	100	208V	44T9506	3031.48
ECN0541BAA-R61/J	NEMA 1	35	175	50	100	240V	44T9494	1945.06
ECN0542BAA-R61/J	NEMA 3R	35	175	50	100	240V	44T9499	2482.85
ECN0544BAA-R61/J	NEMA 4X	35	175	50	100	240V	44T9504	3031.48
ECN0541TAA-R61/J	NEMA 1	35	175	50	100	24VAC	44T9497	1945.06
ECN0542TAA-R61/J	NEMA 3R	35	175	50	100	24VAC	44T9502	2482.85

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FREEDOM FULL VOLTAGE STARTERS (CONT.)

NEMA SIZE 4 STARTERS

Mfg. Part No.	NEMA Rating	Overload Amps Min.	Overload Amps Max.	Power Rating (HP) 230V	Power Rating (HP) 460V	Coil Voltage	Stock No.	Price Each 1-4
ECN0544TAA-R61/J	NEMA 4X	35	175	50	100	24VAC	44T9507	3031.48
ECN0541CAA-R61/J	NEMA 1	35	175	50	100	480V	44T9495	1945.06
ECN0542CAA-R61/J	NEMA 3R	35	175	50	100	480V	44T9500	2482.85
ECN0544CAA-R61/J	NEMA 4X	35	175	50	100	480V	44T9505	3031.48
NEMA SIZE 5 STARTERS								
ECN0551AAA-R63/G	NEMA 1	60	300	100	200	120V	44T9510	5666.69
ECN0558AAA-R63/G	NEMA 12	60	300	100	200	120V	44T9525	5587.40
ECN0552AAA-R63/G	NEMA 3R	60	300	100	200	120V	44T9515	5587.40
ECN0554AAA-R63/G	NEMA 4X	60	300	100	200	120V	44T9520	6504.27
ECN0551EAA-R63/G	NEMA 1	60	300	100	200	208V	44T9513	4989.67
ECN0558EAA-R63/G	NEMA 12	60	300	100	200	208V	44T9528	5587.40
ECN0552EAA-R63/G	NEMA 3R	60	300	100	200	208V	44T9518	5587.40
ECN0554EAA-R63/G	NEMA 4X	60	300	100	200	208V	44T9523	6504.27
ECN0551BAA-R63/G	NEMA 1	60	300	100	200	240V	44T9511	4989.67
ECN0558BAA-R63/G	NEMA 12	60	300	100	200	240V	44T9526	6504.27
ECN0552BAA-R63/G	NEMA 3R	60	300	100	200	240V	44T9516	5587.40
ECN0554BAA-R63/G	NEMA 4X	60	300	100	200	240V	44T9521	5587.40
ECN0551TAA-R63/G	NEMA 1	60	300	100	200	24VAC	44T9514	4989.67
ECN0558TAA-R63/G	NEMA 12	60	300	100	200	24VAC	44T9529	5587.40
ECN0552TAA-R63/G	NEMA 3R	60	300	100	200	24VAC	44T9519	5587.40
ECN0554TAA-R63/G	NEMA 4X	60	300	100	200	24VAC	44T9524	6504.27
ECN0551CAA-R63/G	NEMA 1	60	300	100	200	480V	44T9512	4989.67
ECN0558CAA-R63/G	NEMA 12	60	300	100	200	480V	44T9527	5587.40
ECN0552CAA-R63/G	NEMA 3R	60	300	100	200	480V	44T9517	5587.40
ECN0554CAA-R63/G	NEMA 4X	60	300	100	200	480V	44T9522	6504.27
NEMA SIZE 8 STARTERS								
ECN0588BAA-R61/J	NEMA 12	35	175	450	900	240V	44T9530	2482.85
ECN0588TAA-R61/J	NEMA 12	35	175	450	900	24VAC	44T9532	2482.85
ECN0588CAA-R61/J	NEMA 12	35	175	450	900	480V	44T9531	2482.85

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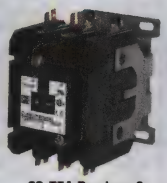
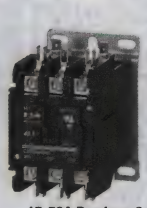
50MM DEFINITE PURPOSE CONTACTORS

RoHS Compliant Available

15-50A Screw/ Pressure & QC Side by Side



60-75A Box lugs & QC Side by Side



15-50A Box lugs & QC Side by Side

Side Mounted Auxiliary Contact

- Current rating: 15-75A
- Available in 2,3, and 4 pole configurations
- Universal mounting plate
- Contacts: Double Break
- Coil terminals: 10 - 14 AWG
- Magnet coil: Class F, 155°C
- Ambient temperature: 150°F (65°C)

Side Mounted Snap Switch Auxiliary Contact

Definite Purpose Contactors and Starters are electrically operated switching devices specifically designed for the heating, ventilation, air conditioning and refrigeration (HVAC) industry. They are typically controlled by automatic, i.e. thermostat, control or manual, i.e. pushbutton, interfaces. They are suitable for a wide range of other low-cycle duty applications requiring low cost switching of single- and three-phase loads. In addition to HVAC, these compact and relatively low cost devices can be found in the following applications: Elevators, Pool and spa, Food processing, Pumps and compressors, Lighting, Hoists and cranes, Welding, Battery chargers, Printing presses, Power supplies, Vending machines, Agricultural applications

3-POLE CONTACTORS WITH SCREW/PRESSURE PLATE & QUICK CONNECT TERMINALS SIDE BY SIDE

Mfg. Part No.	Current Rating (A)	Max HP 1 phase 115 V	Max HP 3 phase 230 V	Max HP 3 phase 480 V	Coil Voltage (VAC)	Stock No.	Price Each 1-4
● C25DND325T	25	2	7.5	10	24	46K2970	46.91
● C25DND325A	25	2	7.5	10	120	46K2961	56.43
● C25DND325B	25	2	7.5	10	208-240	46K2965	46.91
● C25DND330T	30	2	10	15	24	46K2993	49.09
● C25DND330A	30	2	10	15	120	46K2975	66.29
● C25DND330B	30	2	10	15	208-240	79R6246	65.17
4-POLE CONTACTORS WITH SCREW/PRESSURE PLATE AND QUICK CONNECT TERMINALS SIDE BY SIDE							
● C25END425T	25	2	7.5	10	24	79R6251	58.04
● C25END425A	25	2	7.5	10	120	79R6249	58.04
● C25END425B	25	2	7.5	10	208-240	79R6250	54.75

➤ CONTINUED ➤

50MM DEFINITE PURPOSE CONTACTORS (CONT.)

4-POLE CONTACTORS WITH SCREW/PRESSURE PLATE AND QUICK CONNECT TERMINALS SIDE BY SIDE

Mfg. Part No.	Current Rating (A)	Max HP 1 phase 115 V	Max HP 3 phase 230 V	Max HP 3 phase 480 V	Coil Voltage (VAC)	Stock No.	Price Each 1-4
● C25END430A	30	2	10	15	120	79R6252	65.80
● C25END430B	30	2	10	15	208-240	79R6253	65.80
3-POLE CONTACTORS WITH BOX LUGS & QC TERMINALS SIDE BY SIDE							
● C25DNF340T	40	3	10	20	24	46K3094	78.01
● C25DNF340A	40	3	10	20	120	79R6247	79.37
● C25FNF360T	60	5	20	40	24	79R6257	179.61
● C25FNF360A	60	5	20	40	120	79R6255	184.86
● C25FNF360B	60	5	20	40	208-240	79R6256	179.61
● C25FNF375T	75	5	20	50	24	79R6260	238.78
● C25FNF375A	75	5	20	50	120	79R6258	247.38
● C25FNF375B	75	5	20	50	208-240	79R6259	252.75

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price 1-9
C320KG1	Side Mount Auxiliary Contact -	46K3499	12.48
C320KG3	Side Mount Auxiliary Contact -	46K3506	20.59
C320KG4	Side Mount Auxiliary Contact -	46K3508	20.87

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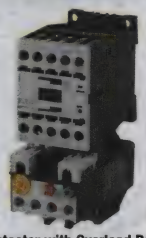
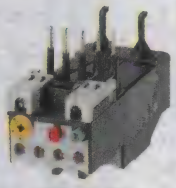
XT-IEC CONTACTORS AND OVERLOAD RELAYS

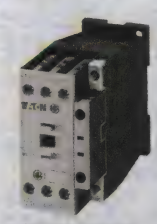
RoHS Compliant Available



Contactor with Overload Relay

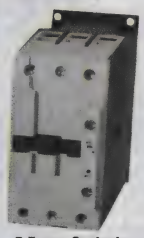


Overload Relay



C Frame Contactor

- IEC contactors available from 7 to 2500 amps
- Reversing contactors, FVNR and FVR starters, and CMC's (integrated Starters) available
- Low wattage coils are available in a wide range of both AC: 12V to 600V 50/60 Hz, DC: 12V to 220V
- DC coil has same physical dimensions as AC coil
- Panel or DIN rail mounting



D Frame Contactor

F Frame Contactor

The **XT series** is the perfect product solution for IEC applications all over the world. Compact, space saving, and easy to install (requires no tools). It is the efficient and effective solution for customer applications from 7A to 2000A. Eaton revolutionary design is the latest in leading edge technology combining space-savings with generations of IEC design experience tracing its origins to its engineering roots in 1899 in Bonn,Germany. The tool-less design allows contactors and overload relays to be combined easily into non-reversing and reversing contactors, starters, combination motor controllers. Manual Motor Protectors are also available on the website. Ambient temperature range: -25°C to +50°C.

45MM IEC CONTACTOR AND STARTERS

Mfg. Part No.	Current Rating AC-3 (A)	Max HP 230 VAC	Max HP 460 VAC	Max HP 575 VAC	Coil Voltage	Stock No.	Price Each 1-4
● XTCE007B10A*	7	2	3	5	120VAC	51M9135	81.03
● XTCE007B10TD	7	2	3	5	24VDC	51M9136	96.54
● XTCE009B10A*	9	3	5	7-1/2	120VAC	51M9137	63.48
● XTCE012B10A*	12	3	7-1/2	10	120VAC	51M9139	77.21
● XTCE015B10A*	15.5	3	10	10	120VAC	51M9141	88.13
● XTCE015B10TD	15.5	3	10	10	24VDC	51M9142	102.46
● XTCE032C10A	32	10	20	25	120VAC	74K2721	131.96
● XTCE032C10TD	32	10	20	25	24VDC	17M8808	183.52
55MM IEC CONTACTORS AND IEC STARTERS							
● XTCE065D00A	65	25	50	60	120VAC	51M9147	382.27

MOTOR OVERLOAD RELAYS - ELECTRONIC

Mfg. Part No.	Overload Release I_r (A)	For Use With Contactor Range (A)	Groung Fault Option	Stock No.	Price 1-4
● XTOE1P6BCS	0.33 - 1.65	7-15.5	No	65T8014	54.13
● XTOE1P6BGS	0.33 - 1.65	7-15.5	Yes	65T8015	84.73
● XTOE005BCS	1 - 5	7-15.5	No	65T7997	53.52
● XTOE005BGS	1 - 5	7-15.5	Yes	65T7998	89.81
● XTOE020BCS	4 - 20	7-15.5	No	65T8002	53.52
● XTOE020BGS	4 - 20	7-15.5	Yes	65T8003	84.73

➤ CONTINUED ➤

XT-IEC CONTACTORS AND OVERLOAD RELAYS (CONT.)

Mfg. Part No.	Overload Release I_r (A)	For Use With Contactor Range (A)	Groung Fault Option	Stock No.	Price 1-4
XT0E045CCS	9 - 45	15-32	No	65T8008	64.63
XT0E045CGS	9 - 45	15-32	Yes	65T8010	93.83
XT0E100DCS	20-100	40-65	No	46T8439	100.58
XT0E100DGS	20 - 100	40-65	Yes	65T8020	134.99

ACCESSORIES

Mfg. Part No.	Description	For Use With Contactor Range (A)	Stock No.	Price Each 1-9
XTCEXFAC11	Auxiliary Contact -1NO & 1NC	0-32	51M9114	21.38
XTCEXFAC20	Auxiliary Contact -2NO	0-32	51M9116	23.27
XTCEXFBG20	Auxiliary Contact -2NO	32-150	51M9125	23.27
XTCEXFBG22	Auxiliary Contact -2NO & 2NC	32-150	51M9126	44.31
ZEB-XCT1000	1000: 5 panel-mount CT kit	200-1000	65T8025	1139.40
ZEB-XCT1500	1500: 5 panel-mount CT kit	300-1500	65T8026	1319.06
ZEB-XCT300	300: 5 panel-mount CT kit	60-300	65T8027	258.74
ZEB-XCT600	600: 5 panel-mount CT kit	120-600	65T8028	949.31

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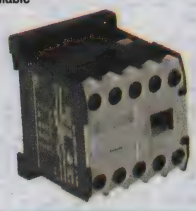
XT CONTROL RELAYS

RoHS Compliant Available

EATON

- DC coil has same physical dimensions as AC coil
- AC control from 12V to 550V 50Hz, 600V 60Hz
- DC control from 12V to 220V
- 4-pole configurations
- IP20 finger and back-of-hand proof



Mini frame control relays and auxiliary contacts for use in various applications. Is the perfect product solution for IEC applications all over the world. Compact, space saving, and easy to install, the **XT** line is efficient and effective solution for customer applications. Thermal current: 10A. Ambient temperature range: -25°C to +50°C. Available with screw or spring cage terminals.

Mfg. Part No.	Contact Configuration	Coil Voltage	Stock No.	Price Each 1-4	Price Each 5-9
XTRM10A22A	4PST-2NO, DPST-NC	120VAC	51M9249	59.54	57.90
XTRM10A22TD	4PST-2NO, DPST-NC	24VDC	51M9250	44.82	43.60
XTRM10A40TD	4PST-NO	24VDC	51M9253	43.57	42.37
XTRM10A40A	4PST-NO	120VAC	51M9252	37.78	36.74
XTRM10A31TD	4PST-3NO, SPST-NC	24VDC	51M9251	44.82	43.60

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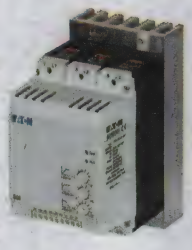
DS6 SERIES SOFT STARTERS

RoHS Compliant Available

EATON



- The smallest soft start controller in its class, the DS6 is the perfect option for upgrading existing systems that may currently be using wye-delta, autotransformers or across the line NEMA starters
- Run bypass mode greatly reduces the internal heating created by the power dissipation across the SCRs
- LED displays device status and provides fault indication
- Variable ramp times and voltage control (torque control) settings provide unlimited starting configurations, allowing for maximum application flexibility
- Soft stop control suits applications where an abrupt stop of the load is not acceptable
- Soft acceleration and deceleration reduces wear on belts, gears, chains, clutches, shafts and bearings
- Minimizes the peak inrush current's stress on the power system
- Minimizes peak starting torque to diminish mechanical system wear and damage
- 24Vdc control module enhances personnel and equipment safety
- Cost effective reduced voltage soft start
- Small size - replace motor starters in same panel
- Bypass contactor built-in
- Two phase controlled soft start
- LED's indicate Run and Fault status
- Start and stop ramp times: 1-30 seconds

Eaton's DS6 soft start eliminates the mechanical problems caused by the high initial inrush of traditional motor starters. This cost effective soft starter needs the C396 overload relay for motor overload protection.

Mfg. Part No.	Current (A)	Horse Power at 230V	Horse Power at 460V	Overload Relay	Stock No.	Price 1-4
DS6-34DSX041N0-N	41	10	30	C396A2A045SELAX	55R0976	615.24
DS6-34DSX068N0-N	68	20	50	C396B2A075SELAX	73R9359	914.30
DS6-34DSX081N0-N	81	25	60	C396B2A075SELAX	73R9360	1043.08

(177844)

M-MAX SERIES ADJUSTABLE FREQUENCY AC DRIVES

RoHS Compliant Available

EATON

- Cost Effective AC Drive
- Small size - can replace motor starters in the same panel
- EMI/RFI filter built in
- Easy to read menu
- DIN rail & screw mountable

Mfg. Part No.	Supply Voltage (VAC)	Power Rating (HP)	Input Current (A)	Stock No.	Price Each 1-4
MMX11AA2D8N0-0	120	3/4	2.8	74R1052	287.81
MMX11AA4D8N0-0	120	1 1/2	4.8	74R1054	440.42
MMX12AA1D7F0-0	200-240	1/4	1.7	74R1055	244.89
MMX12AA2D8F0-0	200-240	3/4	2.8	74R1057	346.61
MMX12AA4D8F0-0	200-240	1 1/2	4.8	74R1059	403.18
MMX34AA1D3F0-0	480	1/2	1.3	74R1064	419.94
MMX34AA1D9F0-0	480	3/4	1.9	74R1065	406.91
MMX34AA3D3F0-0	480	1 1/2	3.3	74R1067	418.95
MMX34AA7D6F0-0	480	4	7.6	74R1070	770.06

(177867)

MODULAR STEP RELAY

NEW

RoHS Compliant Available

finder

Features:
- 17.4 mm wide
- AC coils and DC coils
- 35 mm rail (EN 60715) mount
- Cadmium free contact material

Specification:
- Operating Voltage: 250V
- Relay Mounting: DIN Rail, Panel

16A RELAY

Mfg. Part No.	Contact Configuration	Stock No.	Price Each 1-4
20.21.8.120.0000	SPST-NO	08X7042	20.10
20.21.9.012.0000	SPST-NO	08X7043	20.10
20.21.9.024.0000	SPST-NO	08X7044	20.10
20.22.8.120.0000	DPST-NO	08X7045	22.52
20.22.9.024.0000	DPST-NO	08X7046	23.84
20.23.8.120.0000	SPST-NO, SPST-NC	08X7047	23.84
20.23.9.012.0000	SPST-NO, SPST-NC	08X7048	22.52
20.23.9.024.0000	SPST-NO, SPST-NC	08X7049	23.84
20A RELAY			
22.22.9.024.4000	DPST-NO	08X7051	23.67
22.23.9.024.4000	SPST-NO, SPST-NC	08X7052	23.67
25A RELAY			
22.32.0.120.4340	DPST-NO	08X7053	31.93

(211591)

JAGUAR CUB SERIES GENERAL PURPOSE AC VARIABLE SPEED DRIVES

RoHS Compliant Available

IMO

- IP20 side-by-side mounting
- DC injection braking for fast stopping
- Input and output phase-loss protection
- 7 user-configurable preset speeds
- 3-user defined skip frequencies
- Jaguar Loader diagnostic software

Mfg. Part No.	Supply Voltage (VAC)	Power Rating (HP)	Input Current (A)	Output Current (A)	Stock No.	Price Each 1-4
CUB3A-1	200-240	1/2	5.4	3	74R5773	300.02
CUB5A-1	200-240	1	9.7	5	74R5775	393.13
CUB8A-1	200-240	2	16.4	8	74R5776	578.85
CUB2A5-4	380-480	1	3.1	2.5	74R5772	662.12
CUB3A7-4	380-480	2	5.9	3.7	74R5774	734.53
CUB9A-4	380-480	5	13	9	74R5777	997.31

(177548)

CONTACTORS/MOTOR STARTERS/AC DRIVES

DOL STARTERS P1M

RoHS Compliant Available

IMO

- Power Rating: Up to 7.5kW
- IP65 enclosure
- Start-Stop pushbuttons
- Hand-Off-Auto selector
- Wired to accept overload
- Indicator
- Anti-condensation heater

Mfg. Part No.	Current Rating (A)	Coil Voltage (V)	Power Ratng (kW)	Stock No.	Price Each 1-24
● P1MT09110	9	100V to 120V	4	74R5431	78.13

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● P1M	Enclosure	74R5430	20.85

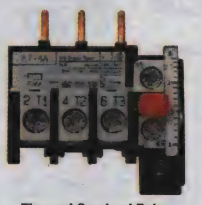
(195525)

MB SERIES MINI CONTACTORS AND OVERLOAD RELAYS

RoHS Compliant Available

IMO

MB Series Contactor



Thermal Overload Relay

Auxiliary Contacts

Features

- DIN rail mounting screw terminals
- AC or DC operation
- 3-pole, 4-5.5 kW
- Fingertouch protection
- Twin bifurcated auxiliary contacts
- Designed to En 60947-4-1

Mfg. Part No.	Coil Current (A)	Coil Voltage	Coil Power (kW)	Stock No.	Price Each 1-24
● MB09-S-10=24	9	24 VDC	4	74R5366	45.07
● MB09-S-10230	9	230 VAC	4	74R5367	32.37
● MB09-S-1024	9	24 VAC	4	74R5368	34.31
● MB12-S-10=24	12	24 VDC	5.5	74R5369	51.49
● MB12-S-10110	12	110 VAC	5.5	74R5370	44.69
● MB12-S-10230	12	230 VAC	5.5	74R5371	42.16
● MB12-S-1024	12	24 VAC	5.5	74R5372	42.16

THERMAL OVERLOAD RELAYS

Mfg. Part No.	Current Range	Stock No.	Price Each 1-9
● U12/16E1.2	800 - 1.2	74R5433	40.57
● U12/16E1.8	1.2 - 1.8	74R5434	40.57
● U12/16E11	8 - 11	74R5435	45.64
● U12/16E14	10 - 14	74R5436	45.64
● U12/16E18	14 - 18	74R5437	50.24
● U12/16E2.7	1.8 - 2.7	74R5438	40.57
● U12/16E30	26 - 30	74R5439	83.58
● U12/16E4	2.7 - 4	74R5440	40.57
● U12/16E6	4 - 6	74R5441	40.57
● U12/16E9	6 - 9	74R5442	45.64

AUXILIARY CONTACTS

Mfg. Part No.	Contacts	Stock No.	Price Each 1-9
● HKM11	1NO/1NC	74R5363	12.26
● HKM22	2NO/2NC	74R5364	21.85

(179317)

ENGINEERS START HERE
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(212565)

MC SERIES CONTACTORS AND OVERLOAD RELAYS

RoHS Compliant Available

IMO

Contactor

Contactor

Overload Relay

Auxiliary Contact

Features

- IEC/EN 60947-4-1
- Din-Rail mounting right up to 74A AC3
- Compact - only 45mm wide up to 40A AC3
- Large terminations: 6mm2 MC10 - MC22 25mm2, MC24 - MC40, 50mm2 MC50 - MC74
- Increased operational currents AC1 + AC3
- Resistant to high ambient temperatures (90oC) and humidity
- Made from halogen and CFC-free plastics
- Single auxiliary contacts color coded for easy identification
- 4 main pole versions available
- Capacitor switching versions
- AC and DC Coil versions

Mfg. Part No.	Coil Current (A)	Coil Voltage	Coil Power (kW)	Stock No.	Price Each 1-9
● MC10-S-1024	10	24 VAC	4	74R5402	32.84
● MC10-S-10110	10	110 VAC	4	74R5400	32.84
● MC10-S-10230	10	230 VAC	4	74R5401	32.84
● MC14-S-1024	14	24 VAC	5.5	74R5405	40.36
● MC14-S-10110	14	110 VAC	5.5	74R5403	42.78
● MC14-S-10230	14	230 VAC	5.5	74R5404	40.36
● MC18-S-1024	18	24 VAC	7.5	74R5408	47.29
● MC18-S-10110	18	110 VAC	7.5	74R5406	47.29
● MC18-S-10230	18	230 VAC	7.5	74R5407	47.29
● MC22-S-1024	22	24 VAC	11	74R5411	60.17
● MC22-S-10110	22	110 VAC	11	74R5409	60.17
● MC22-S-10230	22	230 VAC	11	74R5410	63.78
● MC24-S-0024	24	24 VAC	11	74R5414	68.91
● MC24-S-00110	24	110 VAC	11	74R5412	68.91
● MC24-S-00230	24	230 VAC	11	74R5413	73.04
● MC32-S-0024	32	24 VAC	15	74R5417	102.01
● MC32-S-00110	32	110 VAC	15	74R5415	102.01
● MC32-S-00230	32	230 VAC	15	74R5416	102.01
● MC40-S-0024	40	24 VAC	18.5	74R5420	118.26
● MC40-S-00110	40	110 VAC	18.5	74R5418	123.58
● MC40-S-00230	40	230 VAC	18.5	74R5419	118.26
● MC50-S-0024	50	24 VAC	22	74R5423	158.20
● MC50-S-00110	50	110 VAC	22	74R5421	158.20
● MC50-S-00230	50	230 VAC	22	74R5422	158.20
● MC62-S-0024	62	24 VAC	30	74R5426	196.01
● MC62-S-00110	62	110 VAC	30	74R5424	196.01
● MC62-S-00230	62	230 VAC	30	74R5425	196.01
● MC74-S-0024	74	24 VAC	37	74R5429	268.96
● MC74-S-00110	74	110 VAC	37	74R5427	268.96
● MC74-S-00230	74	230 VAC	37	74R5428	268.96

THERMAL OVERLOAD RELAYS

Mfg. Part No.	Current Range	Stock No.	Price Each 1-9
● MCOR-1-0.18	120 - 180	74R5375	44.65
● MCOR-1-0.27	180 - 270	74R5376	44.65
● MCOR-1-0.4	270 - 400	74R5377	44.65
● MCOR-1-0.6	400 - 600	74R5378	44.65
● MCOR-1-0.9	600 - 900	74R5379	44.65
● MCOR-1-1.2	800 - 1.2	74R5380	44.65
● MCOR-1-1.8	1.2 - 1.8	74R5381	44.65
● MCOR-1-11	8 - 11	74R5382	50.22
● MCOR-1-14	10 - 14	74R5383	50.22
● MCOR-1-18	13 - 18	74R5384	55.26
● MCOR-1-2.7	1.8 - 2.7	74R5385	44.65
● MCOR-1-24	17 - 24	74R5386	58.46
● MCOR-1-32	23 - 32	74R5387	91.96
● MCOR-1-4	2.7 - 4	74R5388	44.65
● MCOR-1-6	4 - 6	74R5389	47.33
● MCOR-1-9	6 - 9	74R5390	50.22
● MCOR-2-14	10 - 18	74R5391	101.39
● MCOR-2-20	14 - 20	74R5392	101.39
● MCOR-2-28	20 - 28	74R5393	101.39
● MCOR-2-42	28 - 42	74R5394	101.39

CONTINUED

MC SERIES CONTACTORS AND OVERLOAD RELAYS (CONT.)

Mfg. Part No.	Current Range	Stock No.	Price Each 1-9
MCOR-3-28	20 - 28	74R5395	164.04
MCOR-3-42	28 - 42	74R5396	164.04
MCOR-3-52	40 - 52	74R5397	164.04
MCOR-3-65	52 - 65	74R5398	164.04
MCOR-3-74	60 - 74	74R5399	164.04

AUXILIARY CONTACTS

Mfg. Part No.	Contacts	Stock No.	Price Each 1-9
MCA01	1 N/C	74R5373	6.77
MCA10	1 N/O	74R5374	6.77

(179318)

3G3MX2 SERIES AC DRIVERS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Current vector control
- High starting torque: 200% at 0.5Hz
- Double rating VT 120%/1min and CT 150%/1min
- Speed range up to 1000 Hz
- IM & PM motor control
- Torque control in open loop vector
- Positioning functionality
- Built-in application functionality (i.e. Brake control)
- User programmable as standard
- Safety embedded compliant with ISO13849-1 (double input circuit and external device monitor EDM)
- USB port for PC programming
- 24 VDC backup supply for control board
- Fieldbus communications: Modbus, DeviceNet, Profibus, Componet, Ethercat, ML-II and CanOpen

Mfg. Part No.	No. of Phases	Power Rating (W)	Voltage Rating	Stock No.	Price Each
3G3MX2-AB001-V1	Single	100	200	72R6776	350.60
3G3MX2-AB002-V1	Single	200	200	72R6777	372.86
3G3MX2-AB004-V1	Single	400	200	72R6778	410.90
3G3MX2-AB007-V1	Single	750	200	72R6779	495.29
3G3MX2-AB015-V1	Single	1.5kW	200	72R6780	584.33
3G3MX2-AB022-V1	Single	2.2kW	200	72R6781	678.93
3G3MX2-A2001-V1	Three	100	200	72R6782	317.21
3G3MX2-A2002-V1	Three	200	200	72R6783	317.21
3G3MX2-A2004-V1	Three	400	200	72R6784	345.26
3G3MX2-A2007-V1	Three	750	200	72R6785	402.80
3G3MX2-A2015-V1	Three	1.5kW	200	72R6786	512.13
3G3MX2-A2022-V1	Three	2.2kW	200	72R6787	573.20
3G3MX2-A2037-V1	Three	3.7kW	200	72R6788	684.50
3G3MX2-A2055-V1	Three	5.5kW	200	72R6789	1101.87
3G3MX2-A2075-V1	Three	7.5kW	200	72R6790	1268.82
3G3MX2-A2110-V1	Three	11kW	200	72R6791	1747.41
3G3MX2-A2150-V1	Three	15kW	200	72R6792	2047.92
3G3MX2-A4004-V1	Three	400	400	72R6793	539.81
3G3MX2-A4004-V1	Three	400	400	72R6793	539.81
3G3MX2-A4007-V1	Three	750	400	72R6794	567.63
3G3MX2-A4015-V1	Three	1.5kW	400	72R6795	639.98
3G3MX2-A4015-V1	Three	1.5kW	400	72R6795	639.98
3G3MX2-A4022-V1	Three	2.2kW	400	72R6796	762.41
3G3MX2-A4030-V1	Three	3kW	400	72R6797	834.75
3G3MX2-A4040-V1	Three	4kW	400	72R6798	907.10
3G3MX2-A4055-V1	Three	5.5kW	400	72R6799	1151.96
3G3MX2-A4075-V1	Three	7.5kW	400	72R6800	1357.86
3G3MX2-A4110-V1	Three	11kW	400	72R6801	1947.75
3G3MX2-A4150-V1	Three	15kW	400	72R6802	2392.95

(196045)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

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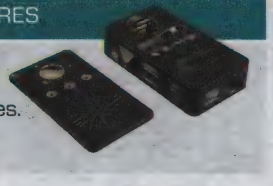


(212568)

ATS SERIES TORQUE LIMITING SOFT STARTS

RoHS Compliant Available

Schneider Electric

Features

- Maximum load voltage: 460 V
- Side-by-side mounting to minimize panel space
- Pass through wiring: input power on top, motor terminals on bottom
- Two indicator lights for quick status check
- Analog adjustment knobs

The Altistart® 01 soft start enhances starting performance by ensuring a smooth and controlled start for asynchronous motors, while providing torque surge suppression during both the starting and stopping operation. The Altistart 01 features simple installation through DIN rail mounting and a removable control wiring terminal.

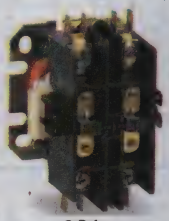
Mfg. Part No.	Full Load Current (A)	Power Rating, 3-Phase (kW)	Horsepower (hp)		Frame Size	Stock No.	Price Each
ATS01N103FT	3	1.1	0.25	1.5	22.5 mm	19K8986	114.54
ATS01N109FT	9	4	1	5	45 mm	19K8988	147.62
ATS01N206LU	6	1.1	...	1 / 1.5	45 mm	19K8989	129.27
ATS01N206RT	6	...	...	2 / 3	45 mm	19K8991	152.34
ATS01N209LU	9	1.5	...	2	45 mm	19K8992	147.73
ATS01N209RT	9	1.5	...	5	45 mm	19K8994	154.38
ATS01N212LU	12	3	...	3	45 mm	19K8995	177.76
ATS01N212RT	12	2.2	...	7.5	45 mm	19K8997	177.76
ATS01N222LU	22	5.5	...	5 / 7.5	45 mm	19K8998	222.44
ATS01N222RT	22	5.5	...	10 / 15	45 mm	19K9000	220.52
ATS01N232LU	32	7.5	...	10	45 mm	19K9002	304.71
ATS01N232RT	32	7.5	...	20	45 mm	19K9004	304.71

(105826)

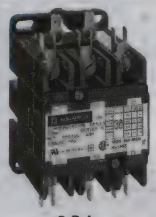
DEFINITE PURPOSE CONTACTORS

SQUARE D by Schneider Electric

2-Pole Compact



2-Pole



3-Pole

- 2-, 3-, and 4-pole versions 600VAC max
- Quick-connect terminals and binder head screws for easy wiring

Definite purpose contactors are ideal for heating, air conditioning, refrigeration, data processing and food service equipment. Includes box lugs on 40A contactors and larger. Coils may also be changed quickly without a tool. **Mfg. part no. 9999D** snap-on auxiliary contact modules for **8910DPA series** fasten on to either side of contactors; *ordered separately on this page. Other versions available; go online or call.*

2-POLE

Mfg. Part No.	Full Load (A)	Resistive Load (A)	Voltage 50Hz	Voltage 60Hz	HP 115V	Stock No.	Price Each
8910DPA12V02	20	25	110	120	1	50F4278	51.16
8910DP12V14	20	30	24	24	1	50F4267	34.04
8910DP12V02	20	30	110	120	1	50F4268	34.04
8910DP32V14	30	40	24	24	2	50F4273	56.29
8910DPA32V02	30	40	110	120	2	50F4296	72.66
8910DP32V02	30	40	110	120	2	50F4275	49.16
8910DP42V14	40	50	24	24	2	17C9487	66.52
8910DPA42V02	40	50	110	120	3	50F4305	80.84
8910DPA42V09	40	50	220	208-240	3	50F4304	79.92

3-POLE

Mfg. Part No.	Full Load (A)	Resistive Load (A)	Voltage 50Hz	Voltage 60Hz	HP 115V	Stock No.	Price Each
8910DPA13V02	20	25	110	120	1	50F4281	62.42
8910DPA23V02	25	35	110	120	2	50F4290	59.25
8910DPA23V09	25	35	220	208-240	2	50F4289	68.57
8910DPA33V14	30	40	24	24	2	50F4297	75.88
8910DPA33V02	30	40	110	120	2	50F4299	78.05
8910DPA33V09	30	40	220	208-240	2	50F4298	76.74
8910DPA43V14	40	50	24	24	3	50F4306	90.56
8910DPA43V02	40	50	110	120	3	50F4308	91.58
8910DPA43V09	40	50	220	208-240	3	50F4307	91.58
8910DPA53V02	50	62	110	120	3	50F4317	177.80
8910DPA63V02	60	75	110	120	5	50F4323	191.76

➤ CONTINUED ➤

DEFINITE PURPOSE CONTACTORS (CONT.)

3-POLE

Mfg. Part No.	Full Load (A)	Resistive Load (A)	Voltage 50Hz	Voltage 60Hz	HP 115V	Stock No.	Price Each
8910DPA63V09	60	75	220	208-240	5	50F4322	194.69
8910DPA93V02	90	120	110	120	7.5	50F4335	313.74
4-POLE							
8910DPA24V02	25	35	110	120	2	50F4293	88.01
8910DPA34V02	30	40	110	120	2	50F4302	101.30
8910DPA44V02	40	50	110	120	3	50F4311	115.00

(2305)

ALTIVAR 312 VARIABLE FREQUENCY DRIVES

RoHS Compliant Available

Schneider Electric

- Input voltage: 200 V -15% to 240 V +10%, 380 V -15% to 500 V +10%
- Input frequency: 50 Hz -5% to 60 Hz +5%
- Output frequency: 0.5 to 500 Hz
- Functions: 50
- Preset speeds: 16
- Analog inputs: 3
- Analog outputs: 1
- Operating temperature: -10°C to +50°C
- Enclosure rating: IP20 rating with optional conduit kits for UL Type 1

The Altivar 312 drive is designed to make industrial and commercial machines more energy efficient, while at the same time simplifying its integration into a single control system architecture. With the highest overtorque and the only drive with a remote graphic keypad in its class, the Altivar 312 drive is ideally suited to the needs of material handling, packaging, food & beverage, pump & fan, and other OEM machines. It also comes standard with integrated communications port for Modbus and CANopen networks, and optional cards for CANopen Daisy Chain, DeviceNet and Profibus DP.

208/240 VAC SINGLE-PHASE

Mfg. Part No.	Power Rating (HP)	Power Rating (kW)	Output Current (A)	Stock No.	Price Each 1-5
● ATV312H018M2	0.25	0.18	1.5	35R6570	415.92
● ATV312H037M2	0.5	0.37	3.3	35R6572	426.24
● ATV312H055M2	0.75	0.55	3.7	35R6575	454.44
● ATV312H075M2	1	0.75	4.8	35R6578	519.91
● ATV312HU11M2	1.5	1.1	6.9	35R6553	539.10
● ATV312HU15M2	2	1.5	8	35R6556	597.03
● ATV312HU22M2	2	2.2	11	35R6559	722.84
208/240 VAC THREE-PHASE					
● ATV312H018M3	0.25	0.18	1.5	35R6571	383.16
● ATV312H037M3	0.5	0.37	3.3	35R6573	426.24
● ATV312H055M3	0.75	0.55	3.7	35R6576	474.89
● ATV312H075M3	1	0.75	4.8	35R6579	482.67
● ATV312HU11M3	1.5	1.1	6.9	35R6554	539.10
● ATV312HU15M3	2	1.5	8	35R6557	625.23
● ATV312HU22M3	3	2.2	11	35R6560	709.89
● ATV312HU30M3	4	3	13.7	35R6562	822.77
● ATV312HU40M3	5	4	17.5	35R6564	965.33
● ATV312HU55M3	7.5	5.5	27.5	35R6566	1288.95
● ATV312HU75M3	10	7.5	33	35R6568	1504.43
● ATV312HD11M3	15	11	54	35R6549	1987.09
● ATV312HD15M3	20	15	66	35R6551	2555.89
380/500 VAC THREE-PHASE					
● ATV312H037N4	0.5	0.37	1.5	35R6574	560.66
● ATV312H055N4	0.75	0.55	1.9	35R6577	582.18
● ATV312H075N4	1	0.75	2.3	35R6580	650.24
● ATV312HU11N4	1.5	1.1	3	35R6555	666.83
● ATV312HU15N4	2	1.5	4.1	35R6558	767.63
● ATV312HU22N4	3	2.2	5.5	35R6561	852.47
● ATV312HU30N4	4	3	7.1	35R6563	965.33
● ATV312HU40N4	5	4	9.5	35R6565	1021.76
● ATV312HU55N4	7.5	5.5	14.3	35R6567	1328.30
● ATV312HU75N4	10	7.5	17	35R6569	1624.84
● ATV312HD11N4	15	11	27.7	35R6550	2058.37

(197406)

ALTIVAR® 12 VARIABLE SPEED DRIVES

RoHS Compliant Available

Schneider Electric

- Eliminate the need to oversize the drive or dynamic braking in most applications
- Simple rotary adjustment and navigation provides fingertip control.
- Drive can be programmed in package without power, providing easy and safe installation
- Adds to machine life, lowers maintenance costs, improves customer satisfaction
- Ten year service life
- Suitable for consumer and industrial markets.

VARIABLE SPEED DRIVES

Mfg. Part No.	Input Voltage (VAC)	Output Voltage (VAC)	Power Rating (HP)	Power Rating (kW)	Output Current (A)	Stock No.	Price Each
● ATV12H037F1*	115	230	1/2	0.37	2.4	11R1084	240.77
● ATV12H055M2*	230	240	3/4	0.55	3.5	11R1087	247.39
● ATV12H075M2*	230	230	1	0.75	4.2	11R1089	279.31
● ATV12H037M3	230	230	1/2	0.37	2.4	11R1086	212.93
● ATV12HU22M3	230	230	3	2.2	10	11R1078	386.47
● ATV12HU30M3	230	230	...	3	12.2	11R1079	448.01
● ATV12HU40M3	230	230	5	3.7	16.7	11R1080	525.56

ACCESSORIES

* Single Phase Input/Three Phase Output

Mfg. Part No.	Description	For Use on Drives	Stock No.	Price Each
● VW3A1006	Remote Keypad Display for ATV12 (IP54)	All	74R6840	67.57
● VW3A4417	EMC Filters for C1, C2, C3	ATV12H075F1, ATV12HU15M2, HU22M2	74R6843	150.84
● VW3A9805	Mounting Plate for 35mm DIN rail	ATV12HU22M3	74R6854	86.89
CONFIGURATON TOOLS				
● VW3A8121	Multi-loader	ATV12,ATV312,ATV61 AND ATV71	74R6847	439.44
● TCSMCNAM3M002P	USB to RJ45 Adapter	Compatible device families:Advantys OTB, Altistarts, Altivar serices incl. HMI,Altivar contr	74R6839	64.71

(177549)

ALTIVAR 212 VARIABLE SPEED DRIVES

RoHS Compliant Available

Schneider Electric

- Altitude ratings: Up to 3,300 ft (1,000 meters) without de-rating, de-rate nominal current by 1% for each additional 330 ft (100m) up to 10,000 ft (3,000 m) limit to 6,600 ft (2,000 m) if supplied by corner grounded distribution system
- Temperature ratings: 0 to + 40°C operational without de-rating, up to 60°C with de-rating (see installation manual for deratings)
- Humidity: Up to 95% non-condensing , IEC 60068-2-3
- Input frequency: 50 Hz -5% to 60 Hz +5%

The Altivar 212 drive is intended for use with three-phase asynchronous motors for variable torque pump and fan applications. Select the Altivar 212 drive using the nameplate voltage and full load ampere rating of the motor nameplate and the table below. The Altivar 212 drive includes 3 logic inputs, 2 analog inputs, 1 analog output and 2 relay outputs (with 1 NO and 1 NO/NC contacts). It includes integrated 4 digit, 7 segment LED dispay with 7 button keypad, as well as RJ45 Modbus™ port, plus a 4 screw removable terminal block for software selectable BACnet, Modbus, METASYS N2 or APOGEE P1 communication protocols. LonWorks is available in an option card.

208/240 VAC THREE-PHASE IP20

Mfg. Part No.	Power Rating (HP)	Power Rating (kW)	Output Current (A)	Stock No.	Price Each
● ATV212H075M3X	1	0.75	4.6	52T3453	451.25
● ATV212HU15M3X	2	1.5	7.5	52T3441	535.44
● ATV212HU22M3X	3	2.2	10.6	52T3443	623.87
● ATV212HU30M3X	4	3	13.7	52T3445	706.66
● ATV212HU40M3X	5	4	18.7	52T3447	731.91
● ATV212HU55M3X	7.5	5.5	24.2	52T3449	822.76
● ATV212HU75M3X	10	7.5	32	52T3451	972.16
● ATV212HD11M3X	15	11	46.2	52T3427	1411.29
● ATV212HD15M3X	20	15	61	52T3429	1822.18
● ATV212HD18M3X	25	18.5	74.8	52T3431	2336.01
● ATV212HD22M3X	30	22	88	52T3433	3154.73
● ATV212HD30M3X	40	30	117	52T3435	4051.17
380/480 VAC THREE-PHASE IP20					
● ATV212H075N4	1	0.75	2.2	52T3454	502.73
● ATV212HU15N4	2	1.5	3.7	52T3442	557.26

CONTINUED

ALTIVAR 212 VARIABLE SPEED DRIVES (CONT.)

380/480 VAC THREE-PHASE IP20

Mfg. Part No.	Power Rating (HP)	Power Rating (kW)	Output Current (A)	Stock No.	Price Each
ATV212HU22N4	3	2.2	5.1	52T3444	635.20
ATV212HU30N4	4	3	7.2	52T3446	681.43
ATV212HU40N4	5	4	9.1	52T3448	719.19
ATV212HU55N4	7.5	5.5	12	52T3450	802.57
ATV212HU75N4	10	7.5	16	52T3452	883.33
ATV212HD11N4	15	11	22.5	52T3428	1246.22
ATV212HD15N4	20	15	30.5	52T3430	1438.56
ATV212HD18N4	25	18.5	37	52T3432	1873.66
ATV212HD22N4	30	22	43.5	52T3434	2883.17
ATV212HD30N4	40	30	58.5	52T3436	3120.39
ATV212HD37N4	50	37	79	52T3437	3512.09
ATV212HD45N4	60	45	94	52T3438	4036.02
ATV212HD55N4	75	55	116	52T3439	4749.76
ATV212HD75N4	100	75	160	52T3440	5797.62
380/480 VAC THREEPHASE TYPE 12/IP54					
ATV212W075N4	1	0.75	2.2	52T3469	622.87
ATV212WU15N4	2	1.5	3.7	52T3463	700.60
ATV212WU22N4	3	2.2	5.1	52T3464	754.11
ATV212WU30N4	4	3	7.2	52T3465	799.54
ATV212WU40N4	5	4	9.1	52T3466	836.89
ATV212WU55N4	7.5	5.5	12	52T3467	1080.18
ATV212WU75N4	10	7.5	16	52T3468	1219.49
ATV212WD11N4	15	11	22.5	52T3455	1469.85
ATV212WD15N4	20	15	30.5	56T4857	1683.86
ATV212WD18N4	25	18.5	37	52T3456	2240.11
ATV212WD22N4	30	22	43.5	52T3457	3018.44
ATV212WD30N4	40	30	58.5	52T3458	3234.47

(197404)

ALTISTART 22 SOFT START/STOP UNITS

RoHS Compliant Available

SQUARE D by Schneider Electric

- Three-phase power supply voltage 208 to 600 V
- 220 V control power supply
- Save time on wiring (6 terminals instead of 12)
- Optimise the size of your enclosures (Altistart 22 is very compact)
- Keep temperature rises to a minimum (low heat dissipation)
- Reduce the number of components you need to manage (multifunction product)

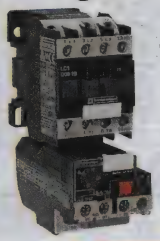
Mfg. Part No.	Control Voltage (VAC)	Current Rating (A)	Power (W)	Stock No.	Price Each 1-4
ATS22D17S6U	110	17	39	85R0207	974.67
ATS22D32S6U	110	32	44	85R0208	1039.86
ATS22D47S6U	110	47	48	85R0209	1249.74
ATS22D62S6U	110	62	59	85R0210	1502.55
ATS22D75S6U	110	75	63	85R0212	1721.97
ATS22D88S6U	110	88	86	85R0213	2014.53
ATS22C11S6U	110	110	73	85R0204	2334.12
ATS22C14S6U	110	140	82	85R0205	2913.39
ATS22C17S6U	110	170	91	85R0206	3269.04

(196177)

TESYS D-LINE 9-150A IEC CONTACTORS

Schneider Electric

- 45mm wide for panel space savings (up to 32A)
- Control motors up to 20HP @ 480VAC, 150A
- Finger-safe terminals and safety cover
- Reduced installation time with quickfit spring terminal system
- Low power consumption DC coils



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TESYS D-LINE 9-150A IEC CONTACTORS (CONT.)

60Hz contactors are 3-pole, AC coil, non-reversing. Side- and top-mount auxiliary contact modules give more design flexibility. Snap-mount on standard 35mm DIN rail. Mechanical life of up to 30 million operations. All coils have three leads to accommodate global wiring practices. Coil wire insulation is rated at 180°C. A choice of wiring connections including spring terminals, ring tounge terminals, slip-on terminals and screw clamps provides flexibility in meeting specific, application requirements. Auxilary contacts are 1NO and 1NC. To create a motor starter, choose a contactor and an overload relay. SEMI 47 low voltage ride through module, IP Class 20 overload relay, four pole contactor also available.

Mfg. Part No.	Maximum Inductive Current (A)	Maximum Resistive Current (A)	Coil Voltage (VAC)	Stock No.	Price Each
LC1D09B7	9	20	24	31C9326	106.65
LC1D09F7	9	20	110	79C9456	108.52
LC1D09G7	9	20	120	31C9327	107.58
LC1D09U7	9	20	240	31C9328	103.39
LC1D12B7	12	25	24	31C9333	137.38
LC1D12G7	12	25	120	31C9334	136.20
LC1D12U7	12	25	240	31C9335	135.01
LC1D18B7	18	32	24	31C9340	153.28
LC1D18G7	18	32	120	31C9341	155.65
LC1D18U7	18	32	240	31C9342	154.29
LC1D25B7	25	40	24	31C9347	169.44
LC1D25G7	25	40	120	31C9348	172.81
LC1D32B7	32	50	24	31C9354	196.84
LC1D32G7	32	50	120	31C9355	196.84
LC1D40G7	40	60	120	31C9362	312.42
LC1D40AG7	40	60	120	11R1498	273.63
LC1D50G7	50	70	120	31C9365	335.30
LC1D50AG7	50	80	120	11R1510	296.27
LC1D65AB7	65	80	24	11R1518	391.81
LC1D80G7	80	110	120	31C9371	399.24

(2364)

ACCESSORIES FOR D-LINE CONTACTORS

Schneider Electric

Side Mount 2 Contacts

Front Mount 2 Contacts

Front Mount 4 Contacts

Standard auxiliary contact blocks with rated operational voltage of up to 660V. Rated thermal current: 10A. Mechanical durability: 30 million operating cycles. UL listed, CSA certified, and CE compliant.

AUXILIARY CONTACTS FRONT SNAP-ON MOUNTING

Mfg. Part No.	For Use With	Contacts N.O.	Contacts N.C.	Stock No.	Price Each
LADN10	LC1D09 to D80	1	0	79C9277	18.25
LADN11	LC1D09 to D80	1	1	31C9311	28.90
LADN20	LC1D09 to D80	2	0	79C9279	28.30
LADN22	LC1D09 to D80	2	2	31C9312	57.94
LADN31	LC1D09 to D80	3	1	31C9313	56.74
LADN40	LC1D09 to D80	4	0	31C9314	56.74

AUXILIARY CONTACTS SIDE SNAP-ON MOUNTING

Mfg. Part No.	For Use With	Contacts N.O.	Contacts N.C.	Stock No.	Price Each
LAD8N11	LC1D09 to D80	1	1	31C9316	28.30
LAD8N20	LC1D09 to D80	2	0	79C9314	28.90

COIL SUPPRESSORS

Mfg. Part No.	Description	Mounting On	Operating Voltage (V) 50/60 Hz	Stock No.	Price Each
LAD4RCU	Resistor/Capacitor Circuit	LC1D09 toLC1D32 (3P)	110-120	79C9305	30.41

(2367)

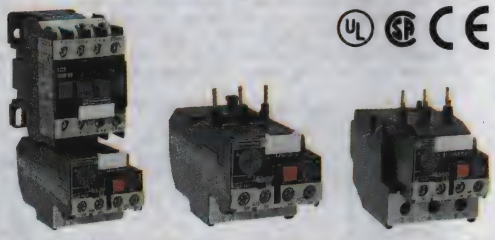
CONTACTORS/MOTOR STARTERS/AC DRIVES

IEC CLASS 10 TESYS D-LINE OVERLOAD RELAYS

RoHS Compliant Available

Schneider Electric

- Selectable manual/ auto reset
- Seperate "stop" and "reset" controls
- Ready-to-wire screw terminals
- Ambient compensated, bi-metallic



Designed for direct mounting on underside of D-Line contactors. To create a motor starter, choose a contactor and an overload relay *on page 1707*. Class 10 without single-phase sensitivity, class 20 with and without single-phase sensitivity also available; go online or call.

Mfg. Part No.	For Contactor Series LC1...	Adjustable Current (A)	Stock No.	Price Each
LRD05	D09 to D32	0.63 - 1.00	31C9377	78.47
LRD06	D09 to D32	1.00 - 1.70	31C9378	77.65
LRD07	D09 to D32	1.60 - 2.50	31C9379	77.65
LRD08	D09 to D32	2.50 - 4.00	31C9380	79.30
LRD10	D09 to D32	4.00 - 6.00	31C9381	77.65
LRD12	D09 to D32	5.50 - 8.00	31C9382	80.23
LRD14	D09 to D32	7.00 - 10.00	31C9383	80.23
LRD16	D12 to D32	9.00 - 13.00	31C9384	80.23
LRD21	D18 to D32	12.00 - 18.00	31C9385	80.23
LRD22	D25 to D32	16.00 - 24.00	31C9386	80.23
LRD32	D25 to D32	23.00 - 32.00	31C9387	90.98
LRD3355	D40-D80	30.00 - 40.00	31C9390	133.34
LRD3363	D65-D80	63.00 - 80.00	31C9394	164.67
● LR3D332	D40A-D65A	23 - 32	11R1570	107.68
● LR3D340	D40A-D65A	25 - 40	11R1571	107.68
● LR3D350	D40A-D65A	37 - 50	11R1572	112.04
● LR3D365	D40A-D65A	48 - 65	11R1573	107.68
● LRD332	D40A-D65A	23 - 32	11R1558	107.68
● LRD332L	D40A-D65A	23 - 32	11R1559	112.04
● LRD340	D40A-D65A	30 - 40	11R1560	107.68
● LRD340L	D40A-D65A	25 - 40	11R1561	107.68
● LRD350	D40A-D65A	37 - 50	11R1562	112.04
● LRD350L	D40A-D65A	37 - 50	11R1563	107.68
● LRD365	D40A-D65A	48 - 65	11R1564	107.68
● LRD365L	D40A-D65A	48 - 65	11R1565	107.68

(2366)

GV2 SERIES MANUAL MOTOR STARTERS

RoHS Compliant Available

Schneider Electric

- For Control of Motors With Full Load Current Up to 32A

GV2 series manual motor starters comprise a manual isolation switch, an overload relay, and an instantaneous magnetic trip mechanism in one compact device. Snap onto 35mm DIN rails. Rated voltage: 600. Rated thermal current is 25A. Interrupting current at 480V is 12kA. Shock resistance is 30g per IEC 600 68-2. Vibration resistance is 5g (5 to 150 Hz) per IEC 600 68. Available with spring terminal clamps-add "3" to end of type number. Conform to IEC standards. Dimensions: 1.77H x 1.73W x 3.42"D. UL listed, CSA certified, and CE compliant. Order auxiliary contact blocks and enclosures separately; *on page 1707. Go online or call.*

Mfg. Part No.	Current (A)	Stock No.	Price Each
● GV2ME06	1.00-1.60	18M2076	168.50
● GV2ME07	1.60-2.50	18M2077	167.03
● GV2ME08	2.50-4.00	18M2078	169.96
● GV2ME10	4.00-6.30	18M2079	167.03
● GV2ME14	6.00-10.00	31C9302	169.96
● GV2ME16	9.00-14.00	18M2080	207.86
● GV2ME20	13.00-18.00	31C9304	207.86
● GV2ME21	17.00-23.00	18M2081	209.67
● GV2ME32	24.00-32.00	18M2083	209.67

(2370)

80-AMP DC POWER CONTACTORS

RoHS Compliant Available

White Rodgers

- UL 583 Recognized
- Silver Alloy or Copper Contact
- Dust-Resistant
- Dimensions: SPNO: 2.5H x 3.5W x 2.5"D or SPDT: 3.375H x 3.563W x 2.5"D

4-Terminal 6-Terminal

70 series are bracket mounting with 2.109" (53.57) centers. Contact rating: 80A @ 6 and 12VDC, 50A @ 24 and 36VDC. 300A inrush @ 6VDC, 150A @ 12VDC, 50A inrush @ 24 and 36VDC. Coil rating: 9W.

Mfg. Part No.	Contacts	Coil Voltage (VDC)	Coil Circuit and No. of Terminals*	Stock No.	Price Each 1-9
● 70-902	SPNO	12	Isolated, 4	35M2084	25.91
● 70-914	SPNO	12	Grounded, 3A	35M2089	27.28
● 70-903	SPNO	24	Isolated, 4	60F2727	26.07
70-912	SPDT	36	Isolated, 6	60F2682	97.56
● 70-915	SPNO	24	Grounded, 3A	60F2693	27.42
● 70-904	SPNO	36	Isolated, 4	35M2085	25.45

*A = Coil ground to case; B = Coil common to load; **NOTE:** 3A Grounding coil wire supplied, 4 terminals. A back-up wrench must be used to hold the bottom nut stationary.
(3960)

100-AMP HEAVY-DUTY DC POWER CONTACTORS

RoHS Compliant Available

White Rodgers

- Dust-Resistant Cover
- Ideal for Mobile DC Equipment
- Silver Alloy Contacts

4-Terminal 6-Terminal (124-910)

124 series feature 100A continuous; 400A inrush. Maximum continuous coil watts: 12 at rated voltage. Maximum pick-up: 75% rated coil voltage, with design ambient from –40°C to +65°C. Contact termination: 5/16"-24 UNA-2A stud. Coil termination: #10-32 UNF-2A thread. 3-terminal versions have grounded coil; 4- and 6-terminal versions have isolated coil. Dimensions in inches.

Mfg. Part No.	Contacts	Coil Voltage (VDC)	Coil Circuit and No. of Terminals	Stock No.	Price Each 1-9
● 124-902	SPST-NO	12	Isolated, 4	35M0121	44.27
● 124-906	SPST-NO	12	Grounded, 3	35M0123	46.05
● 124-910	SPDT	12	Isolated, 6	02F1142	62.59
124-907	SPST-NO	24	Grounded, 3	02F1139	43.42
● 124-903	SPST-NO	24	Isolated, 4	35M0122	44.27
● 124-911	SPDT	24	Isolated, 6	35M0124	56.81
124-904	SPST-NO	36	Isolated, 4	02F1136	45.09

(3957)

100-AMP HEAVY-DUTY DC POWER CONTACTORS

RoHS Compliant Available

White Rodgers

120 series durable, water-resistant, continuous-duty contactors are ideal for high-temperature and high-vibration conditions. Isolated coil. Circuits: SPNO. Rated 100A full load, 400A inrush. Contacts: silver-alloy. Dimensions in inches. Copper contacts also available; *go online or call.*

Mfg. Part No.	Coil Voltage (VDC)	Coil Ohms	Stock No.	Price Each 1-9
● 120-901	12	16.0	50F3662	22.23
● 120-907*	12	16.0	35M0072	25.06
120-943*	12	16.0	71C9293	24.74
● 120-913	12	16.0	31C7926	22.90
120-912	12	6	50F3673	17.00
● 120-902	15	20.8	50F3663	22.23
120-908*	15	20.8	69H8282	23.37
● 120-904	24	64.0	50F3665	22.23
120-910	24	64.0	31C1726	25.06
● 120-905	36	160.0	17P5846	22.94

*L-bracket
(3959)

200 AND 500 AMP SEALED DC POWER CONTACTORS

RoHS Compliant Available

White Rodgers

586 Series
- Continuous duty, coil
- 200A cont., 600A inrush
- Silver alloy contacts
- Water and dust resistant
- Suited for high vibration applications

686 Series

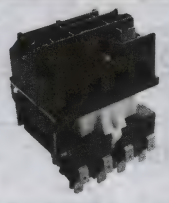
Mfg. Part No.	Contacts	Coil Voltage (VDC)	Coil Ohms	Coil Circuit and No. of Terminals	Stock No.	Price Each 1-9
586-901	SPNO	6	5.3	Isolated, 4	13B3891	61.06
● 586-902	SPNO	12	21.0	Isolated, 4	35M1913	62.91
● 586-911	SPDT	12	13.2	Isolated, 6	35M1916	78.61
● 586-903	SPNO	15	32.8	Isolated, 4	16C2038	56.03
● 586-905	SPNO	24	84.0	Isolated, 4	35M1914	56.03
● 586-914	SPDT	24	53.0	Isolated, 6	35M1917	78.61
● 586-906	SPNO	36	189.0	Isolated, 4	35M1915	61.06
586-907	SPNO	48	336	Isolated, 4	70B9190	56.61

(3961)

MOTOR REVERSING CONTACTORS

STRUTHERS-DUNN

- AC or DC operation
- One set of 3PST - NO contacts per coil
- Dual coils - mechanically interlocked
- Double make power contacts
- Up to 3 horsepower at 600VAC
- Up to 4 auxiliary contacts - 5A each



The **A275 series** relay is a 2-coil, compact motor reversing contactor. Rated 1.5HP, 240VAC (Phase 1); 3HP, 240VAC (Phases 2 & 3); 3HP, 480/600VAC. Dimensions: 2.98L x 2.73W x 3.62"H. UL recognized File No. E13224, CSA certified. 240VAC model and 7.5Hp 575 series also available; *go online or call*.

Mfg. Part No.	Coil Voltage	Coil Resist. (Ω)	Stock No.	Price Each 1-4	Price Each 5-9
AC COIL VOLTAGE					
A275KXX-24VAC	24	4.63	60F3177	94.56	88.71
A275KXX-120VAC	120	125	60F3178	70.23	65.87
A275KXX-240VAC	240	500	60F3179	152.16	142.75
AC WITH 1 SPDT AUXILIARY SWITCH PER COIL					
A275KXX90-24VAC	24	4.63	70B5424	73.96	69.23
A275KXX90-120VAC	120	125	89F1872	104.76	98.27
AC WITH 2 SPDT AUXILIARY SWITCH PER COIL					
A275KXX91-24VAC	24	4.63	60F3062	139.18	130.58
A275KXX91-120VAC	120	125	60F3063	99.49	93.33
A275KXX91-240VAC	240	500	98F4088	184.58	173.16
DC COIL VOLTAGE					
A275KXX-24VDC	24	125	99F4798	69.04	64.77

(3976)

KILOVAC SEALED POWER CONTACTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Designed to be the smallest, lightest weight, lowest cost sealed contactor in the industry with its current rating (500+A carry, 2000A interrupt at 320VDC)
- Built-in coil economizer - only 1.7W hold power @ 12VDC and it limits back EMF to 0V. Models requirin external economizer also available
- Optional auxiliary contact for easy monitoring of power contact position
- Hermetically sealed - intrinsically safe, operates in explosive/harsh environments with no oxidation or contamination of coils or contacts, including long periods of non-operation
- Versatile coil/power connections

Mfg. Part No.	Max. Isolation Voltage VDC	Max. Carry Current Amps	Power Switch	Contact Arrangement	Coil Voltage VDC	Stock No.	Price 1-2
● EV200AAANA	12-1800	500	Make & Break	SPST-NO	9-36	09J3878	215.75
● EV200HAANA	12-1800	500	Make & Break	SPST-NO+ SPST-NO Aux.	9-36	09J3879	256.24
● EV200A2ANA	12-1800	500	Make & Break	SPST-NO	32-96	64K2689	162.68
● EV200A1ANA	12-1800	500	Make & Break	SPST-NO	9-36	83H2817	167.10
EV200ADANA	12-900	500	Make Only	SPST-NO	32-95	27K6680	219.02

(80117)

KILOVAC LEV100 SERIES CONTACTORS

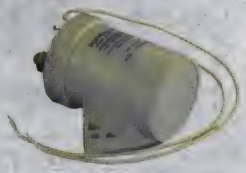
RoHS Compliant Available

TE connectivity

Authorized Distributor

Key Features
- Hermetically sealed — intrinsically safe
- Operates in explosive/harsh environments without oxidation or contamination of contacts, including long periods of non-operation
- 8kV isolation between open contacts permits use for high voltage isolation and carry
- 12, 24 and 48 Vdc coils
- Designed and built in accordance to AIAG QS9000

Bottom Mount



Side Mount

Specifications
- Voltage rating main contacts switching (max): 900 VDC
- 1 form X SPST-NO-DM contacts rated 100A continous
- Compact epoxy-sealed resin enclosure

Applications
- Power/motor control circuit isolation
- Circuit protection and safety in industrial machinery

Mfg. Part No.	Coil Voltage (VDC)	Mounting Type	Stock No.	Price 1-2
● LEV100A4ANG	12	Bottom	45M6262	131.37
● LEV100A4ANH	12	Side	45M6263	163.99
● LEV100A5ANG	24	Bottom	45M6264	115.05
● LEV100A5ANH	24	Side	45M6265	142.72
● LEV200A4ANF	12	Side	41T2128	105.09
● LEV200H4ANA	12	Bottom	41T2129	208.11
● LEV200H5ANA	24	Bottom	46P4241	191.09
● LEV200A5ANF	24	Side	55M6578	115.23
● LEV200A5NAA	24	Bottom	50M9238	122.44

(168163)

KILOVAC 500A CONTACTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Optional auxiliary contact for easy monitoring of power contact position
- Versatile coil/power connections
- Designed and built in accordance to AIAG QS9000
- Contacts: SPST-NO-DM

Bottom Mount

Side Mount

Intrinsically safe, operates in explosive/harsh environments with no oxidation or contamination of coils or contact, including lond periods or non-operation. Series LEV100 100A contactors also available; *go online or call*.

Mfg. Part No.	Coil Voltage (VDC)	Coil Wire Length in. (mm)	Coil Terminal Connector	Mounting & Power Terminals	Stock No.	Price 1-2
● LEV200A4ANA	12	15.3(390)	Wire Leads	Bottom & 10mm x M8	45M6266	125.37
● LEV200A4NAF	12	...	Stud	Side & 10mm x M8	45M6267	121.76
● LEV200A5ANA	24	15.3(390)	Wire Leads	Bottom & 10mm x M8	45M6268	125.37
● LEV200A5NAF	24	...	Stud	Side & 10mm x M8	45M6269	132.30
● LEV200A6NAA	48	...	Stud	Bottom & 10mm x M8	45M6270	126.96
● LEV200AKANA	72	...	Stud	Bottom	57P6467	122.67

(94467)

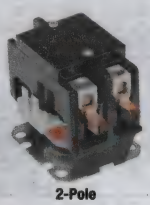
PRODUCTS UNLIMITED 1-3 POLE DEFINITE PURPOSE CONTACTORS

RoHS Compliant Available

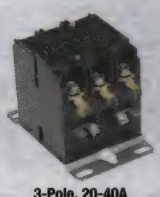
TE connectivity

Authorized Distributor

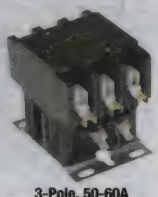
1-Pole



2-Pole



3-Pole, 20-40A



3-Pole, 50-60A

- 1-, 2- and 3-pole contactors
- Universal mounting plate
- Arc cover
- Shunt available on 1-pole models
- Optional interlock/auxilliary switches available on 3-pole models

Contact termination: #10-32 screw with quad 0.25" (6.35mm) quick connects or box lug with dual 0.25" (6.35mm) quick connects. Coil termination: dual 0.25" (6.35mm) quick connects. Model 98 - **3100 series** features standard manual test button, coil dust cover and double E magnet system. "Y" in mfg. part no. denotes individual pack.

➤CONTINUED➤

PRODUCTS UNLIMITED 1-3 POLE DEFINITE PURPOSE CONTACTORS (CONT.)

MODEL 93 - 3100 SERIES 1-POLE, SPST-NO-DM

Mfg. Part No.	Contact Carry Current (A)	Coil Voltage (VAC)	Relay Terminals	Torque (in.-lbs.)	Stock No.	Price Each 1-9
● 3100-15Q1999*	25	24	Screw w/Q.C.	25	29M9092	19.09
● 3100-15T1999*	25	120	Screw w/Q.C.	25	29M9096	14.31
● 3100-15Q2999*	30	24	Screw w/Q.C.	25	52M1798	20.90
● 3100-15Q2999C	30	24	Box Lug w/Q.C.	25	29M9095	21.64
● 3100-15T2999C	30	120	Screw w/Q.C.	25	29M9099	21.64

MODEL 93 - 3100 SERIES 2-POLE, DPST-NO-DM

Mfg. Part No.	Contact Carry Current (A)	Coil Voltage (VAC)	Relay Terminals	Torque (in.-lbs.)	Stock No.	Price Each 1-9
● 3100-20Q5999C	25	24	Screw w/Q.C.	25	29M9109	36.58
● 3100-20T5999C	25	120	Screw w/Q.C.	25	29M9115	36.58
● 3100-20U5999C	25	208/240	Screw w/Q.C.	25	29M9122	38.78
● 3100-20Q6999*	30	24	Screw w/Q.C.	25	29M9110	28.94
● 3100-20T6999*	30	120	Screw w/Q.C.	25	29M9116	37.89
● 3100-20T6999CL	30	120	Box Lug w/Q.C.	40	29M9118	46.15
● 3100-20V6999CL	30	277	Box Lug w/Q.C.	40	29M9126	43.54
● 3100-20Q18999C	40	24	Screw w/Q.C.	25	29M9106	43.48
● 3100-20Q18999CL	40	24	Box Lug w/Q.C.	40	29M9107	41.28
● 3100-20T18999CL	40	120	Box Lug w/Q.C.	40	29M9113	45.07
● 3100-20U18999CL	40	208/240	Box Lug w/Q.C.	40	29M9120	34.86

MODEL 98 - 3100 SERIES 3-POLE, 3PST-NO-DM

Mfg. Part No.	Contact Carry Current (A)	Coil Voltage (VAC)	Relay Terminals	Torque (in.-lbs.)	Stock No.	Price Each 1-9
● 3100-30Q8999CY	25	24	Screw w/Q.C.	25	72R3593	67.79
● 3100-30T8999CY	25	120	Screw w/Q.C.	25	29M9146	71.86
● 3100-30U8999CY	25	208/240	Screw w/Q.C.	25	29M9155	67.79
● 3100-30T9999CY	30	120	Screw w/Q.C.	25	29M9149	56.99
● 3100-30U9999CY	30	208/240	Screw w/Q.C.	25	29M9157	74.60
● 3100-30Q10999CG	40	24	Box Lug w/Q.C.	40	29M9136	84.08
● 3100-30T10999CG	40	120	Box Lug w/Q.C.	40	29M9143	79.18

MODEL 93 - 3100 SERIES, 3-POLE, 3PST-NO-DM

Mfg. Part No.	Contact Carry Current (A)	Coil Voltage (VAC)	Relay Terminals	Torque (in.-lbs.)	Stock No.	Price Each 1-9
● 3100-30J16999CJ+	50	120	Box Lug w/Q.C.	50	29M9131	171.89
● 3100-30T17999CJ+	60	120	Box Lug w/Q.C.	50	29M9145	168.10
● 3100-30K17999CJ+	60	208/240	Box Lug w/Q.C.	50	29M9135	146.88

* Without arc cover; + Coil termination: 0.25" quick connect with #6-32 screw; † With SEM screws; ‡ Without quick connect; ** With quad disconnects; †† Coil terminals down; ‡‡ ¼ x 20 screws
(90317)

P&B 25A-30A DEFINITE PURPOSE CONTACTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

TÜV Rheinland

- 3PST-NO-DM contacts
- AC or DC coil
- For controlling motors, power supplies, heating elements and lighting
- Switch 3-phase motor loads to 25A, 600VAC, and resistive loads to 30A, 600VAC
- Field replaceable, silver-cadmium oxide contact
- Life expectancy: 500,000 operations

Main contact terminals arranged for straight-through wiring. Coil terminals are combination #8-32 screw terminals and .250" quick connects. Dimensions: 3.75L x 2.50W x 3.47"H. Other options available: Auxiliary switch, dust cover, other voltages, dual .250" (6.35mm) quick-connect terminals, DPST-NO-DM and SPST-NC-DB contacts; *go online or call*.

Mfg. Part No.	Coil Input Voltage	Coil Resist. (Ω) ±10%	With Mounting Plate	Stock No.	Price Each 1-24	Price Each 25-49
● P25P42A22P1-120	120VAC	...	Y	10F7834	113.02	105.76
● P25P42A22P1-240	240VAC	...	Y	18M9304	134.13	125.21
● P25P42D22P1-12	12VDC	34	Y	17M1728	111.60	97.65
● P25P42D22P1-24*	24VDC	133	Y	18M9305	106.44	95.01

* No auxiliary switch
(2403)

P&B 30A-40A DC DEFINITE PURPOSE CONTACTORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

4-Pole 3-Pole

P30 series switch motor loads to 30A, 600VAC, and resistive loads to 40A, 600VAC; **P40 series** switch to 40A, 600VAC and resistive loads to 50A, 600VAC. Main contact terminals arranged for straight thru wiring. 10-32 binding head screw for use with solid wire or wires terminated with ring or spade terminals. Universal mount plate. **Mfg. part no. P40C42A12D1-120** has SPDT auxiliary snap switch with 10A, 120-250VAC, silver contacts and 0.187" quick connect terminals. Dimensions: 3.600L x 3.800W x 3.420"H (AC coil); 2.550L x 3.250W x 3.975"H (DC coil).

AC COIL

Mfg. Part No.	Contact Rating (A)	Coil Voltage	Main Contacts	Auxiliary Switch	Stock No.	Price Each 1-9
● P30P42A12P1-120	30	120	3PST-NO	None	17M1729	146.67
● P30P47A12P1-120	30	120	4PST-NO	None	17M1730	184.68
● P40P42A12P1-24	40	24	3PST-NO	None	17M1732	174.66
● P40P42A12P1-120	40	120	3PST-NO	None	17M1731	148.78
● P40P42A12P1-240	40	240	3PST-NO	None	10F7858	171.23
DC COIL						
● P30P42D12P1-24	30	24	3PST-NO	None	18M9306	127.79
P30P47D12P1-24	30	24	4PST-NO	None	93F1054	144.65
● P40P42D12P1-24	40	24	3PST-NO	None	17M1733	125.11
● P40C42D12C1-24	40	24	3PST-NO	SPDT	21J9571	158.28
● P40P48D12P1-12	40	12	DPST	None	08H3413	158.92

(2402)

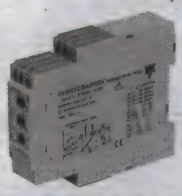
MONITORING RELAYS

RoHS Compliant Available

CARLO GAVAZZI

- 1-phase AC/DC voltage and current monitoring relays
- 3-phase AC current monitoring relay (with MP Series CT)
- 8A SPDT output
- Adjustable set-point, time delay and hysteresis
- For DIN-rail or 11-pin socket mounting

Plug-In



DIN Rail

Common specifications: 11-pin plug-in mount, 3.2H x 1.4W x 3.4"D (P type); DIN rail mount, 3.2H x 0.9W x 3.9"D (D type). Adjustable set point/hysteresis, diagnostic LEDs, latching function. 115/230VAC supply, other voltages are available; *go online or call*. UL recognized, CSA certified, CE compliant.

1-PHASE AC/DC VOLTAGE AND 1- OR 3-PHASE AC CURRENT MONITORS
Multifunction AC/DC over voltage or AC over current relay with 8A SPDT output, adjustable set point and hysteresis, latch function, and 2 diagnostic LEDs.

Mfg. Part No.	Monitoring Range	Stock No.	Price Each
● PUA01CB23500V	2-500VAC/DC, 0-5AAC (Direct Input) or 0.5-500AAC (with **Mfg. part no. MI** or **MP** CTs)	16C5112	136.00
● DUA01CB23500V		05M4100	136.00

1-PHASE TRUE RMS AC/DC VOLTAGE OR CURRENT MONITORS
AC/DC true RMS over or under voltage or current monitoring relays with 8A SPDT output, adjustable set point, hysteresis and 0.1-30-second time delay, selectable 1- or 6-second delay on "power-up," latch function, and 3 diagnostic LEDs.

● DUB01CB23500V	Up to 500VAC/DC (in 5 Sub-Ranges)	05M4101	201.00
● DIB01CB235A	Up to 1A, 2A and 5A AC	05M4089	201.00
● DIB02CB23150MV	Up to 60mV or 150mVAC/DC and 4VpAC Ideal for 4V Output CTs (**Types MI** and **MP**)	05M4090	201.00
● PUB02CT23		16C5121	177.00

(73845)

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(212569)

CURRENT CONTROL RELAYS

RoHS Compliant Available

CROUZET AUTOMATION

Features:
- Controls AC/DC currents, with or w/o memory
- When current reaches the set point the output changes state at the end of the selected time delay
- Once the current drops below the hysteresis (% of the threshold) the output changes instantly
- In memory mode the relay remains in the faulted condition until the unit is reset manually
- HDI & EI are over or under current monitors

Specifications:
- Display precision: ±10% of full scale
- Digital probe input circuit: Volt-free contact
- Min. pushbutton activation duration: 50ms
- Max. input current: 1mA
- Max. length of probe cables: 100m
- Outputs: 8A

EI SERIES

Mfg. Part No.	Supply Voltage	Mounting	Stock No.	Price Each 1-14
84871120	240VAC	DIN Rail	86K0428	168.62
84871033	120VAC	DIN Rail	73C4805	122.31

(31876)

CURRENT CONTROL RELAYS

RoHS Compliant Available

CROUZET AUTOMATION

Detect over or under current conditions. Model **HIH** detects AC or DC current with adjustable threshold and hystersis, and with or without latching function. The **MIC series** has a built-in current transformer and detects AC over or under current with adjustable threshold. Output: SPDT 5A. Supply voltage: 24 - 240VAC/DC.

CURRENT CONTROL RELAYS

Mfg. Part No.	Input Voltage (VDC)	Measurement Range	Stock No.	Price Each
84871030	24	0.100-10.0A	81C2841	120.96
84871130	240	0.100-10.0A	86K0430	194.89
84871122	240	2.000-20.0A	86K0429	160.49

ACCESSORIES

Mfg. Part No.	Type	Timing Range	Operating Pressure (psi)	Stock No.	Price Each
81507720	Adjustable Single impulse generator	0.1s to 30s	30-120	34B3523	169.90

(14030)

CAH SERIES CURRENT SENSING RELAYS

RoHS Compliant Available

MACROMATIC

- Monitors single phase AC current
- Can be used as either an overcurrent or undercurrent relay
- Three separate adjustable fault trip current ranges covering 0.5 – 50 amperes
- Built-in toroidal through-hole current transformer allows easy access & multiple loops for increased sensitivity
- Adjustable time delay on fault trip
- LED indicates fault condition
- 10A SPDT output contacts
- Encapsulated for protection in harsh environments

Mfg. Part No.	Fault Trip Current (A)	Input Voltage	Trip Delay (sec.)	Sensing Delay (sec.)	Stock No.	Price Each 1-14
CAH20A2BD	20	120VAC	0.5 - 50	1	40T0199	93.68
CAH20A8BD	20	24VAC/VDC	0.5 - 50	1	40T0227	94.43

(196179)

CURRENT SENSING RELAYS

STRUTHERS-DUNN

- Sensing 1.5 to 15A AC
- AC powered
- SPDT contacts - 10A @ 120VAC
- User adjustable trip point
- Socket mounting for 3/16″ terminals
- Side tapped hole for 1/4″ terminals

3/16″ terminals versions mate with **SK-SQR11-DS** sockets *on page 1655*
1/4″ terminals versions intended for direct connection of 1/4″ quick connect terminals without a socket

Mfg. Part No.	Terminals	Input Voltage	Current Range (A)	Stock No.	Price Each 1-4	5-9	10-24
W235ACX-2	1/4″	120VAC	1.5-15	89K7390	333.16	319.28	302.19
W235ACX-3	3/16″	120VAC	1.5-15	96K2647	269.63	258.39	244.58

(88737)

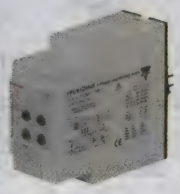
3-PHASE MONITORING RELAYS

RoHS Compliant Available

CARLO GAVAZZI

Mini DIN Rail

DIN Rail



Plug-In

- One of the widest offerings available in the industry
- For 3-phase voltages up to 660VAC
- For detection of phase loss, reversal and/or asymmetry errors
- Some models feature adjustable set-point, time delay and hysteresis
- Diagnostic LED indication
- For DIN-rail or 11-pin socket mounting

3-PHASE MONITORING RELAYS

DPA/PPA series monitors phase sequence/loss and regenerated voltages (up to 70%); additionally the **DPA53 series** protects against under voltage conditions. **DPB series** features an adjustable delay of 0.1 to 30 sec. **DPC series** additionally protects against phase asymmetry errors, offers a selectable 1 or 6 second delay upon power-up and two separate outputs and time delays for over and under voltage. **PPA series:** 3.2H x 1.4W x 3.4"D. **DPA01/DPB01** series: 3.2H x 0.9W x 3.9"D. **DPA51 and DPA53 types**: 3.2H x 0.7W x 2.6"D. DPC01 type: 3.2H x 1.6W x 3.9"D Powered by three phase mains voltage, 5A SPDT output and up to four diagnostic LEDs.

MINI DIN RAIL MOUNTING

Mfg. Part No.	Contacts	Mains Monitoring	Description	Stock No.	Price Each
DPA51CM44	SPDT	208-480V	3-ph. monitor for phase loss, sequence and regenerated voltages	67C0900	185.00
DPA53CM48	SPDT	320-480V	3-ph. monitor for under voltage, phase loss and sequence	05M4097	209.00

DIN RAIL MOUNTING

DPA01CM44	SPDT	208-480V	3-ph. monitor for phase loss, sequence and regenerated voltages	05M4095	153.00
DPA01CM60	SPDT	380-600V		89C4381	220.00
DPB01CM48	SPDT	380-480V	3-ph. monitor for under or over voltage conditions, phase loss and sequence	06M3827	273.00
DPC01DM48	SPDT	380-480V	3-ph. monitor for asymmetry errors, under or over voltage conditions, phase loss and sequence	16C3184	369.00
DPC01DM69	SPDT	600-690V		89C4384	369.00
DPA01DM23	DPDT	208-240V	3-ph. monitor for under or over voltage conditions, phase loss and sequence	16C3175	193.00
DPA01DM48	DPDT	320-480V		16C3176	193.00

PLUG-IN MOUNTING

PPA01CM44	SPDT	208-480V	3-ph. monitor for phase loss, sequence and regenerated voltages	05M4257	128.00

(90587)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

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(212570)

C-LYNX PHASE CONTROL RELAYS

RoHS Compliant Available

CROUZET AUTOMATION

Protect equipment from problems with 3-phase power. Models available to protect against phase loss, phase reversal, under and over voltage. All models are multi-voltage at 50 / 60 Hz. LED indication for power and output status. 5A output.

MWS/MWS2 SERIES - PHASE LOSS AND SEQUENCE

Mfg. Part No.	Supply Voltage (VAC)	Contacts	Stock No.	Price Each 1-14
● 84873020	208-480	SPDT	**86K0439**	94.76
● 84873021	208-480	DPDT	**86K0440**	132.27
MWU - PHASE LOSS/SEQUENCE, DETECTS REGENERATED VOLTAGE TO 70% AND UNDER VOLTAGE				
● 84873023	208-480	SPDT	**86K0442**	118.85
MWUA - PHASE LOSS/SEQUENCE/ASYMMETRY, DETECTS UNDER/OVER VOLTAGE (WINDOW)				
● 84873025	208-480	SPDT	**86K0444**	177.30
HWUA - PHASE LOSS/SEQUENCE/ASYMMETRY, DETECTS UNDER/OVER VOLTAGE				
● 84873026	220-480	DPDT	**86K0445**	179.54
H3US/M3US - PHASE LOSS, DETECTS UNDER/OVER VOLTAGE				
● 84873222	208-408	SPST-CO	**58T0811**	123.74
● 84873220	220-480	SPST-CO	**58T0810**	190.68
HSV - SPEED CONTROL				
● 84874320	24-240	SPDT	**87K6163**	171.90

(31879)

PHASE MONITOR RELAYS

RoHS Compliant Available

MACROMATIC

UL LISTED with Appropriate Macromatic Socket

PMPU AND PMDU SERIES

- Universal voltage range of 208 to 480VAC
- Protects against phase loss, phase reversal, phase unbalance, undervoltage and overvoltage
- User-adjustable settings for time delay on undervoltage dropout, percent unbalance, time delay on restart and undervoltage setting for the ultimate in three-phase protection
- Automatic or manual reset
- Multi-color LED indicates normal condition and defines fault to simplify troubleshooting
- 45mm DIN-style surface-mount case (PMDU)

PMDU SERIES

Output: SPDT and SPNC 10A resistive at 240VAC/30VDC, 1/2HP at 240VAC (NO only). Adjustable time-delay drop-out (0.1 to 20 seconds) on undervoltage prevents nuisance tripping. Temperature: -28°C to 65°C. Mechanical life: 10 mil. operations. Full load: 10 mil. operations. Dimensions: 4.5″ H x 2.7″ D x 1.8″ W. UL recognized, CE approved.

➤ CONTINUED ➤

PHASE MONITOR RELAYS (CONT.)

Mfg. Part No.	Mounting	Termination	Contacts	Stock No.	Price Each 1-14	15-24
● PMDU	PCB Surface Mount	8 Pin Octal	SPDT, SPST-NC	**29M7937**	148.96	141.89

PMPU SERIES

Output: SPDT 10A resistive at 240VAC/30VDC, 1/2HP at 240VAC. Adjustable time-delay drop-out (0.1 to 20 seconds) on undervoltage prevents nuisance tripping. Temperature: -28°C to 65°C. Mechanical life: 10 mil. operations. Full load: 100,000 operations. Dimensions: 3.0″ H x 1.7″ D x 2.4″ W. UL recognized, CE approved and UL listed when used with socket (**Mfg. part no. 70169-D**) rated 600V. *Order socket seperately on* [4088]

● PMPU	Plug In	8 Pin Octal	SPDT	**29M9956**	113.01	107.64

PAP SERIES

- PAP series protects against phase loss and phase reversal and has adjustable under voltage protection of 75 - 95% of normal.
- LED indicates both normal and fault conditions

Output: 10A resistive at 240VAC/30VDC. Temperature: -28°C to 65°C. Dimensions: 3.5″H x 1.7″D x 2.4″W. UL recognized an UL listed when used with appropriate socket. Requires 600V rated socket (**Type 70169-D**) when used on system voltages greater than 300V. *Order socket seperately on* [4088]

Mfg. Part No.	Voltage (VAC)	Contacts	Stock No.	Price Each 1-14	15-24	25-49
● PAP240	240	SPDT	**30C3079**	70.64	67.30	64.87
● PAP480	480	SPDT	**27C0651**	75.38	71.75	69.15

(4085)

VOLTAGE CONTROL RELAYS

RoHS Compliant Available

CROUZET AUTOMATION

Detect over or under voltage conditions. Models MUS and MUSF monitor the supply voltage to the unit. All models have threshold and hysteresis adjustment. LED indicators for input power and relay status. 5A outputs.

MUS SERIES - UNDER OR OVER VOLTAGE

Mfg. Part No.	Output	Supply Voltage	Monitored Voltage (V)	Stock No.	Price Each 1-14
● 84872140	SPDT	15	9-15	**86K0433**	111.16
● 84872141	SPDT	80	20-80	**86K0434**	143.62
MUSF SERIES - UNDER OR OVER VOLTAGE WINDOW					
● 84872152	SPDT	260	65-260	**86K0437**	119.89
HUL/HUH SERIES - UNDER OR OVER VOLTAGE					
● 84872120	DPDT	24-240 VAC/DC	0.2-60	**86K0431**	162.86
● 84872130	DPDT	24-240 VAC/DC	15-600	**86K0432**	186.71

(79349)

VOLTAGE MONITOR RELAYS

RoHS Compliant Available

MACROMATIC

UL LISTED with Appropriate Macromatic Socket

Over/under voltage relays and voltage band relays monitor either AC single-phase (50-60Hz) or DC voltages to protect equipment against voltage fault conditions. Output: DPDT 10A Resistive @240VAC/30VDC. Response time: 500ms for pick-up and adjustable 0.5 - 10 sec for drop-out. Voltage tolerance: +25%/-50% of nominal voltage. Temperature: +25° to 65°C. Dimensions: 2.4 x 1.7 x 3.5 inches. UL recognized for US and Canada. UL listed with relay socket **mfg. part no. 70169-D**; Order separately below.

RELAYS

Over/under voltage relays are designed to operate when the operating voltage reaches a pre-set value and drop-out when the operating voltage drops to a level below pre-set value.

Mfg. Part No.	Control Voltage	Pick-Up Voltage	Drop-Out Voltage	Stock No.	Price Each 1-14	15-24	25-49
● VAKP120A	120VAC	102-138VAC	97-133VAC	**43K4410**	90.21	85.84	81.91
● VAKP012D	12VDC	10-14VDC	8-13VDC	**43K4405**	88.33	84.05	80.19
● VAKP024D	24VDC	21-27VDC	16-26VDC	**43K4407**	88.33	84.05	80.19

Voltage band relays are designed to provide protection to equipment that is required to operate within an upper and lower limit. As longs as the operating voltage remains within an over and under voltage range, the internal relay stays energized. If the operating voltage falls outside this range, the relay will drop-out.

● VWKP120A	120VAC	120-150VAC	90-120VAC	**43K4430**	89.27	84.94	81.04
● VWKP024D	24VDC	24-30VDC	18-24VDC	**43K4427**	89.27	84.94	81.04

➤ CONTINUED ➤

VOLTAGE MONITOR RELAYS (CONT.)

Mfg. Part No.	Control Voltage	Pick-Up Voltage	Drop-Out Voltage	Stock No.	Price Each 1-14	15-24	25-49
Over/under voltage relays are designed to operate when the operating voltage reaches a pre-set value and drop-out when the operating voltage drops to a level below a pre-set value. Output: SPDT 10A Resistive @ 240VAC/30VDC. Response time: Adjustable 0.1 - 10 seconds pick-up and drop-out. Voltage tolerance: +25%/-50% of nominal voltage. Temperature: -25°C to 65°C. Dimensions: 2.4 x 1.7 x 3.1".							
VAKPU	240VAC	204-276VAC	198-267VAC	33M7490	103.42	98.40	93.88

(84570)

MAGNECRAFT CURRENT SENSING RELAYS

RoHS Compliant Available

Schneider Electric

831 Voltage Sensing Relay

831 Relay:
- Monitors and reacts to over/under voltage conditions
- 15A, SPDT
- Timing range: 0.1-10sec
- Input and output LED indication
- Mounts to DIN rail
- Dim.(HxWxL): 2.6" x 0.7" x 3.5"
- UL listed file no. E234203 and CE compliant

831 CURRENT SENSING RELAYS

Mfg. Part No.	Coil Voltage	Sensing Range	Stock No.	Price Each 1-24	25-49	50-99	100-249
831VS-120A	120VAC	80-150VAC	10M6581	93.73	90.03	86.32	83.86
831VS-240A	240VAC	160-276VAC	27K6783	84.27	80.95	77.62	75.40

(79167)

P&B 10A SOLID STATE VOLTAGE SENSORS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- DPDT contacts
- 10A @ 28VDC resistive, 120VAC resistive
- Molded nylon dust cover
- Temperating rating: -10°C to +55°C

Sound alarms, turn off equipment, or trigger auxiliary power source with voltage sensors which energize and de-energize internal relay at predetermined voltages. Solid-state sensors available with voltage levels fixed or knob-adjustable. Can be used as over-voltage or under-voltage sensor. Dimensions: 2.406L x 1.781W x 2.937"H (61.11 x 42.24 x 76.60). UL registered. CSA certified. *Order socket separately below.*

ADJUSTABLE PICK-UP AND DROP-OUT

Mfg. Part No.	Pick-Up Volts	Drop-Out Volts	Max. Volts	Stock No.	Price 1-4
CSJ-38-70010	92-140	90-138	150VAC	24F2952	210.59
CSL-38-30010	20-30	18-28	32VDC	24F2953	217.26
CSL-38-40010	40-58	38-56	60VDC	77B151	242.28
CSL-38-60010	92-140	90-138	150VDC	67F1021	255.59
FIXED PICK-UP AND ADJUSTABLE DROP-OUT					
CSJ-38-71010	105	90-103	140VAC	24F2954	224.57
CSL-38-31010	22	16-21	32VDC	24F2955	260.36

8-PIN SOCKET FOR CSJ AND CSL SERIES

Mfg. Part No.	Mounting	Stock No.	Price Each 1-9	10-24	25-49
27E122	Screw Terminal	57F3431	5.80	5.10	4.68
27E891	Screw Terminal, DIN Mount	46F3587	5.39	4.91	4.88

(2401)

DEV KIT HQ™

Newest technology, Development Kits & Evaluation Boards from the best suppliers.

newark.com/dev-kits

(196525)

MULTI-VOLTAGE CONTROL RELAYS

SPACE AGE ELECTRONICS, INC.

SSU-PAM-1

SSU-PAM-2

SSU-PAM-4

SSU-PAM-SD

Features
- 100% sealed with 12", 18 AWG flying leads
- SPDT dry form "C" configuration
- Pre-drilled mounting screw hole and self-tapping screw provided
- Double-sided tape and wire nuts provided
- Temp. range: -50°C to +85°C

Applications
- HVAC
- Temperature control
- Fire alarm and security
- Energy management
- Lighting control systems
- Building automation systems

Mfg. Part No.	Coil Voltage	Current (A)	Coil Energized LED Indicator	Stock No.	Price Each 1-4	5-9	10-24
SSU-PAM-1	24VAC/24VDC/120VAC	10	Yes	08N1907	18.31	17.36	16.41
SSU-PAM-2	12VDC/24VDC	7	Yes	08N1908	17.95	17.01	16.07
SSU-PAM-4	9 to 40VDC	10	No	08N1910	18.55	17.58	16.61
SSU-PAM-SD	18 to 32VDC	7	No	08N1906	17.95	17.01	16.07

(115451)

MULTI-VOLTAGE CONTROL RELAYS

SPACE AGE ELECTRONICS, INC.

Features
- DPDT dry form "C" configuration per position
- Red LED illuminates when coil is energized
- Metal cover with red finish
- #14 to #22 AWG terminals
- Temp. range: -50°C to +85°C

Applications
- HVAC
- Temperature control
- Fire alarm and security
- Energy management
- Lighting control systems

Mfg. Part No.	Module Positions	Coil Voltage	Current (A)	Stock No.	Price Each 1-4	5-9
SSU-MR-201/C/R	4	24VDC/24VAC/120VAC/230VAC	10	08N1905	34.73	32.59

(115452)

PUSH-AND-PULL-TYPE CYLINDRICAL DC SOLENOIDS

RoHS Compliant Available

GUARDIAN®

- Available in DC Voltage Only
- Mounting Brackets, Nuts and Washers Included
- Sizes Listed in Type Numbers
- Duty: C = Continuous; I = Intermittent
- UL Recognized

Pull Style

Push Style

PULL-TYPE, STANDARD LIFE

Mfg. Part No.	Coil Resis. (Ω)	L Length (in)	D Diameter (in)	Min Load Force Oz @ in	Max Load Force Oz @ in	Stock No.	Price Each 1-14
T3.5X9-I-12D	31.1	1.18	0.44	.5 @ 0.25	3 @ 0.05	67F5608	28.65
T3.5X9-I-24D	122	1.18	0.44	.5 @ 0.25	3 @ 0.05	24F2971	23.35
T4X12-C-12D	49.8	1.51	0.50	1 @ 0.25	4 @ 0.05	94F500	32.53
T4X12-C-24D	195	1.51	0.50	1 @ 0.25	4 @ 0.05	24F2982	34.48
T4X16-C-24D	173	2.01	0.50	1 @ 0.25	5 @ 0.05	03M5754	129.59
T4X7-I-24D	131	0.89	0.50	1 @ 0.50	6 @ 0.05	24F2972	45.67
T6X12-C-12D	31.7	1.54	0.75	2 @ .375	17 @ 0.05	20M0274	32.79
T6X12-I-12D	12.1	1.54	0.75	6 @ .375	24 @ 0.05	20M0275	36.56
T6X12-C-24D	121	1.54	0.75	2 @ .375	17 @ 0.05	51M9076	35.84
T6X12-I-24D	60.6	1.54	0.75	6 @ .375	24 @ 0.05	03M5757	34.89
T8X9-C-24D	135	1.17	1.00	.5 @ 0.50	20 @ 0.05	03M5760	37.96
T8X16-I-12D	9.3	2.04	1.00	8 @ 0.75	60 @ 0.05	20M0276	35.29
T8X16-C-12D	28.3	2.04	1.00	2 @ 0.75	30 @ 0.05	03M5758	34.41
T8X16-C-24D	110	2.04	1.00	2 @ 0.75	30 @ 0.05	24F2986	37.26

CONTINUED

SOLENOIDS

PUSH-AND-PULL-TYPE CYLINDRICAL DC SOLENOIDS (CONT.)

Mfg. Part No.	Coil Resis. (Ω)	L Length (in)	D Diameter (in)	Min Load Force Oz @ in	Max Load Force Oz @ in	Stock No.	Price Each 1-14
● T8X16-I-24D	36.1	2.04	1.00	8 @ 0.75	60 @ 0.05	03M5759	37.97
● T12X13-I-24D	28.4	1.68	1.50	7 @ 0.75	140 @ 0.05	24F2978	46.06
● T12X19-C-24D	68	2.43	1.50	8 @ 100	100 @ 0.05	03M5751	48.04
● T12X19-I-24D	22.1	2.43	1.50	20 @ 100	145 @ 0.05	03M5752	48.06
PULL-TYPE, LONG LIFE							
● LT6X12-C-12D	35	1.54	0.75	.5 @ 0.50	28 @ 0.05	03M5716	41.87
● LT8X16-C-24D	77.2	2.04	1.00	1 @ 0.75	45 @ 0.05	03M5717	55.56
● LT12X19-C-24D	71.8	2.38	1.50	3 @ 1.00	110 @ 0.05	03M5712	82.45

PUSH-TYPE, STANDARD LIFE
TP series push-type solenoids also available in 3.5 x 9, 4 x 7, 4 x 12 and 4 x 15 sizes.

Mfg. Part No.	Coil Resis. (Ω)	Length (in)	Diameter (in)	Min Load Force Oz @ in	Max Load Force Oz @ in	Stock No.	Price Each 1-4
● TP3.5X9-C-12D	60.2	1.18	0.44	.4 @ 0.25	2 @ 0.05	90B4421	48.54
● TP3.5X9-I-12D	31.1	1.18	0.44	.8 @ 0.25	4 @ 0.05	24C6583	39.04
● TP4X7-I-24D	131	0.89	0.50	1 @ 0.25	6 @ 0.05	03M5748	38.70
● TP4X16-C-24D	173	2.01	0.50	.8 @ 0.25	4 @ 0.05	03M5747	41.56
● TP4X16-I-12D	17.7	2.01	0.50	1.5 @ 0.25	6.5 @ 0.05	17C7179	41.52
● TP8X9-I-24D	44	1.17	1.00	4 @ .500	42 @ 0.05	20M0273	38.57
● TP6X12-C-24D	121	1.54	0.75	2 @ .375	13 @ 0.05	24F3441	25.58
● TP6X12-I-24D	60.6	1.54	0.75	5 @ .375	19 @ 0.05	24F3437	24.22
● TP8X9-C-24D	135	1.17	1.00	2 @ .500	20 @ 0.05	67F5617	41.00
● TP8X16-C-12D	28.3	2.04	1.00	1 @ 0.75	24 @ 0.05	20M0272	44.17
● TP8X16-C-24D	110	2.04	1.00	1 @ 0.75	24 @ 0.05	03M5749	37.35
● TP8X16-I-24D	36.1	2.04	1.00	6 @ 0.75	48 @ 0.05	03M5750	40.94
● TP12X13-I-24D	28.4	1.68	1.50	7 @ 0.75	140 @ 0.05	20M0270	48.38
● TP12X13-C-24D	90.4	1.68	1.50	5 @ 0.75	80 @ 0.05	67F5621	48.38
● TP12X19-C-24D	68	2.43	1.50	10 @ 1.00	100 @ 0.05	20M0271	50.55
● TP12X19-I-24D	22.1	2.43	1.50	16 @ 1.00	116 @ 0.05	03M5746	50.55

(3992)

LEDEX PULL TUBULAR SOLENOIDS

RoHS Compliant Available

JOHNSON ELECTRIC

STA PULL 0.5″ Dia. x 2.0″ | SIZE 102 1″ Dia. x 1.125″ | SIZE 155 1.5″ Dia. x 1.5″

- 6, 12 & 24 VDC continuous duty coils
- Simple DC On/Off operation
- 10″ leadwires
- Coils rated for 130° C
- Coil resistance: +/-5% tolerance

STA PULL SIZE 0.5″ DIA. x 2″

Mfg. Part No.	Coil Resist. (Ohms)	Voltage (VDC)	Max. Stroke (in)	Nominal Stroke (in)	Force @ Nominal Stroke (lbs)	Stock No.	Price Each 1-24
● 151092-229	6.3	6	0.7	0.3	0.12	58P0307	33.82
● 151092-232	30.45	12	0.7	0.3	0.12	58P0308	33.82
● 151092-235	118	24	0.7	0.3	0.12	58P0309	33.82
SIZE 102 1″ DIA. x 1.125″							
● 152099-227	5.33	6	0.5	0.1	1.8	58P0312	30.04
● 152099-230	22.81	12	0.5	0.1	1.8	58P0313	33.60
● 152099-233	93.19	24	0.5	0.1	1.8	58P0314	33.24
SIZE 155 1.5″ DIA. x 1.5″							
● 152097-226	17.53	12	0.8	0.4	1.1	58P0310	49.54
● 152097-230	110.74	35.7	0.8	0.4	1.1	58P0311	49.54

(142253)

LEDEX TUBULAR SOLENOIDS

RoHS Compliant Available

JOHNSON ELECTRIC

Features:
- Ideally suited for medium stroke linear motion applications
- Continuous or intermittent duty
- On/off operation
- Pull or push types available
- Operation life: 25million cycles for STA models

Mfg. Part No.	L x Dia. (in)	Coil Resist. Ω	Voltage (VDC)	Duty Cycle	Force @ Nominal Stroke (oz @ in)	Stock No.	Price Each 1-24
● 195200-237	0.55 x 0.52	45.7	12	C	2.9 @ 0.05	20M1802	24.94
● 195201-237	0.55 x 0.52	45.7	12	C	1.3 @ 0.05	20M1804	28.30

CONTINUED

LEDEX TUBULAR SOLENOIDS (CONT.)

Mfg. Part No.	L x Dia. (in)	Coil Resist. Ω	Voltage (VDC)	Duty Cycle	Force @ Nominal Stroke (oz @ in)	Stock No.	Price Each 1-24
● 195202-231	1.05 x.052	9.56	12	I	9.0 @ 0.10	20M1805	21.27
● 195202-234	1.05 x.052	37.41	12	C	3.0 @ 0.10	20M1806	26.71
● 195202-237	1.05 x.052	149.93	24	C	3.0 @ 0.10	20M1807	26.38
● 195203-234	1.05 x.052	37.41	12	C	2.1 @ 0.10	20M1809	27.56
● 195203-237	1.05 x.052	149.93	24	C	2.1 @ 0.10	20M1810	27.90
● 195204-230	1.56 x 0.77	20.7	12	C	8.0 @ 0.20	20M1812	22.62
● 195204-233	1.56 x 0.77	83.5	24	C	8.0 @ 0.20	20M1814	21.93
● 195205-230	1.56 x 0.77	20.7	12	C	6.1 @ 0.20	20M1816	26.13
● 195205-233	1.56 x 0.77	83.5	24	C	6.1 @ 0.20	20M1818	27.22
● 195206-224	2.05 x 1.02	2.69	12	I	48 @ 0.30	20M1819	25.03
● 195206-228	2.05 x 1.02	19.2	12	C	14 @ 0.30	20M1820	36.33
● 195206-231	2.05 x 1.02	77.4	24	C	14 @ 0.30	20M1821	23.03
● 195207-228	2.05 x 1.02	19.2	12	C	12 @ 0.30	20M1823	34.61
● 195207-231	2.05 x 1.02	77.4	24	C	12 @ 0.30	20M1824	35.35
● 174419-026	2.25 x 1.25	14.1	12	C	16 @ 0.40	20M1771	54.29
● 174419-029	2.25 x 1.25	55.1	24	C	16 @ 0.40	20M1772	51.92
● 174432-024	2.50 x 1.50	9.3	12	C	16 @ 0.40	20M1773	56.29

(90050)

LEDEX ROTARY SOLENOIDS

RoHS Compliant Available

JOHNSON ELECTRIC

Features:
- Snap acting engagement
- Clockwise or counterclockwise operation
- Very compact design
- Very high torque to size ration
- 9 standard sizes and 7 standard configurations per size
- Standard and long life models

SIZE 2E

Mfg. Part No.	L x Dia. (in)	Coil Resist. Ω	Voltage (VDC)	Duty Cycle	Force oz @ Nominal Stroke	Stock No.	Price Each 1-24
● H-1344-032	0.656 x 1.125	28.15	12	C	0.5 @ 45° CW	20M1257	114.86
SIZE 3B							
● 810-282-330	0.875 x 1.312	18.4	12	C	0.4 @ 45° CW	20M3066	85.90
SIZE 4E							
● H-15021-028	0.953 x 1.562	13.8	12	C	.25 @ 67.5° CW	20M1260	83.46
SIZE 5S							
● H-2414-029	1.047 x 1.875	30.48	24	C	26 @ 25° CW	20M1287	123.78

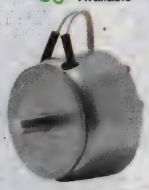
(90051)

LEDEX LOW PROFILE CONICAL AND FLAT FACE SOLENOIDS

RoHS Compliant Available

JOHNSON ELECTRIC

Features:
- Ideally suited for high force short stroke applications
- Force up to 80lbs
- On/off operation
- Push/pull operation
- Life: 1-5million operations



CONICAL PLUNGER

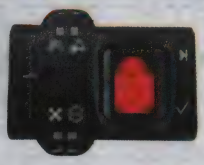
Mfg. Part No.	H x Dia. (in)	Coil Resist. Ω	Voltage (VDC)	Duty Cycle	Force @ Nominal Stroke (oz @ in)	Stock No.	Price Each 1-24
● 123421-033	0.53 x 1.00	30.6	12	C	4.0 @ 0.08	20M1682	67.27
● 123421-036	0.53 x 1.00	112	24	C	4.0 @ 0.08	20M1684	64.78
● 123422-032	0.58 x 1.125	28.15	12	C	4.0 @ 0.10	20M1686	67.99
● 123423-030	0.69 x 1.312	19.2	12	C	13 @ 0.12	20M1688	68.70
● 129409-028	0.835 x 1.562	13.8	12	C	16 @ 0.15	20M1695	77.94
● 129409-031	0.835 x 1.562	56.7	24	C	16 @ 0.15	20M1697	80.94
● 129415-025	1.035 x 1.875	6.66	12	C	40 @ 0.20	20M1699	88.71
● 129415-026	1.035 x 1.875	10.3	24	I	160 @ 0.20	20M1700	89.18
● 129415-029	1.035 x 1.875	38	24	C	40 @ 0.20	20M1701	81.29
● 173921-023	1.33 x 2.25	4.69	12	C	96 @ 0.20	20M1767	105.78
FLAT FACE PLUNGER							
● 129450-026	0.88 x 1.875	7.72	12	C	48 @ 0.15	20M1704	78.04

(90048)

HARMONY™ BIOMETRIC SWITCHES

RoHS Compliant Available

Schneider Electric



Features

- Protect access to your operators and equipment while lowering costs
- Compact and easy to install
- User-friendly as fingerprint is your key
- Quick and easy set-up using stand-alone programming
- Fingerprint processing assures operator anonymity

Specifications

- Rated supply voltage: 24 VDC with protection against reverse polarity
- Operating temperature: -5 to +50° C
- Housing material: polyamide PA66

Mfg. Part No.	Description	Connection	Stock No.	Price Each
XB5S1B2L2	Maintained biometric switch	2 m Cable	73R5297	544.15
XB5S1B2M12	Maintained biometric switch	M12 Connector	73R5298	558.52
XB5S2B2L2	Momentary biometric switch	2 m Cable	73R5299	544.15

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
ZB5SZ70	Protective cover, translucent and self-adhesive	73R5302	11.79
ZBY0101T	Legend plate, 28 x7 mm self-adhesive, blank, with black background for engraving	73R5301	2.25
ZB5SZ72	Stainless-steel protective cover	73R5304	259.22

(176958)

9001KY/SKY 30 MM CONTROL STATIONS AND ENCLOSURES

RoHS Compliant Available

Schneider Electric

9001KY and 9001SKY 30 mm control stations are available in two forms: pre-assembled control stations and empty enclosures. Control stations may include, non-illuminated operators, selector switches, pilot lights, illuminated operators, enclosure.

UL TYPES 1, 3, 4, AND 13/NEMA 1, 3, 4, AND 13 DIE CAST ZINC ENCLOSURES WITH INTEGRAL GUARD

Mfg. Part No.	Operator Style and Features	No. of Holes	Legend Plates	Stock No.	Price Each
9001KYG11	Guareded enclosure (grey) with 120V red LED pilot light	1	Order separately	93T7055	533.76
9001KYG12	Guareded enclosure (grey) with120V green LED pilot light	1	Order separately	93T7056	533.76
9001KYG1Y1	Guareded enclosure (yellow cover) with red push-pull mushroom	1	Emergency stop	52T6919	533.76
9001KYG1Y2	Guareded enclosure (yellow cover) with red turn-to-release mushroom	1	Emergency stop	82R4127	587.14
UL TYPES 1, 3, 4, AND 13/NEMA 1, 3, 4 AND 13 DIE CAST ZINC ENCLOSURE					
9001KYK111	Selector switch (3 pos maintained)	1	Hand-Off-Auto	16B9989	345.89
9001KYK117	Break glass operator (red enclosure)	1	Top Stop—Break Glass	16B9991	468.28
9001KYK14	Mushroom button (momentary)	1	Stop	16B9996	384.31
9001KYK21	2 Pushbuttons	2	Start-Stop	16B9998	468.28
9001KYK223	2 Pushbuttons (with sealed contacts)	2	Start-Stop	81C4946	750.11
9001KYK23	2 Pushbuttons (lockout on stop)	2	Start-Stop	17B004	529.49
9001KYK25	2 Pushbuttons	2	Up-Doen	17B006	468.28
9001KYK27	2 Pushbuttons (maintained/interlocked)	2	Start-Stop	17B008	468.28
9001KYK317	Red 120V piliot light, 2 push buttons	3	Start;Stop	17B010	670.42
9001KYK32	3 push buttons	3	Up;Down;Stop	17B011	627.72
9001KYK33	3 push buttons	3	Open;Close;Stoop	17B015	627.72
UL TYPES 1, 3, 4, 4X AND 13/NEMA 1, 3, 4, 4X AND 13 — STAINLESS STEEL					
9001KYSK201	2 Pushbuttons	2	Start; Stop	17B021	600.66
9001KYSK203	2 Pushbuttons (lockout on stop)	2	Start; Stop	17B022	698.88
9001KYSK205	2 Pushbuttons	2	Up; Down	17B023	627.72
9001KYSK210	2 Pushbuttons (maintained/interlock)	2	Start; Stop	35K3693	627.72
UL TYPES 1, 3, 4, AND 13/NEMA 1, 3, 4 AND 13—STAINLESS STEEL					
9001KYSS101	Pushbuttons (momentary)	1	Start	34M1453	486.79
9001KYSS103	Pushbuttons (momentary)	1	Stop	93T7057	435.82
UL TYPES 1, 3, 4, 4X AND 13/NEMA 1, 3, 4, 4X AND 13 — POLYMERIC (PLASTIC)					
9001SKY201	2 Pushbuttons	2	Start-Stop	17B635	498.18
9001SKY203	2 Pushbuttons (lockout on stop)	2	Start-Stop	17B636	600.66
9001SKY205	2 Pushbuttons	2	Up-Down	81C5327	529.49
9001SKY223	2 Pushbuttons (with sealed contacts)	2	Start-Stop	81C5329	811.32
9001SKY315A	Red 120V pilot light, 2 pushbuttons	3	Start-Stop	17B640	755.82

➤CONTINUED➤

9001KY/SKY 30 MM CONTROL STATIONS AND ENCLOSURES (CONT.)

EMPTY ENCLOSURES (FOR CUSTOMER ASSEMBLY)

UL TYPES 1, 3, 4 AND 13/NEMA 1, 3, 4 AND 13

Mfg. Part No.	No. of Holes	Material	Stock No.	Price Each
9001KY1	1	Die Cast Zinc	90B2490	176.29
9001KY2	2	Die Cast Zinc	02H4672	188.00
9001KY3	3	Die Cast Zinc	17B044	230.03
UL TYPES 1, 3 AND 13/NEMA 1, 3 AND 13				
9001KYAF1	1	Sheet Steel	93T7054	170.16
9001KYAF2	2	Sheet Steel	16B9981	188.00
9001KYAF3	3	Sheet Steel	16B9984	220.12
UL TYPES 1, 3, 4, 4X AND 13/NEMA 1, 3, 4. 4X AND 13				
9001KYSS1	1	Stainless Steel	17B024	305.79
9001KYSS2	2	Stainless Steel	17B026	332.18
9001KYSS3.	3	Stainless Steel	17B029	407.59
9001SKY1	1	Polymeric (Plastic)	17B628	203.48
9001SKY2	2	Polymeric (Plastic)	17B634	239.17
9001SKY3	3	Polymeric (Plastic)	17B638	271.29

EMPTY GUARDED ENCLOSURE (MUSHROOM HEAD OPERATOR NOT INCLUDED)

UL TYPES 1, 3, 4 AND 13/NEMA 1, 3, 4 AND 13 DIE CAST ZINC

Mfg. Part No.	Cover Color	Box Color	Conduit Opening	Stock No.	Price Each
9001KYG1	Grey	Grey	3/4in. - 14NPT	64M4389	178.48
9001KYG1Y	Yellow	Grey	3/4in. - 14NPT	64M4390	186.51

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9001BW PENDANT STATIONS

RoHS Compliant Available

Schneider Electric

- Double circuit blocks (SPST-NO / SPST-NC)
- Voltage rating: 120VAC, 240VAC, 480VAC, 600VAC
- Continuous carry current: 5A
- Easy to hold in one hand with contoured grip
- Single-speed or two-speed buttons
- Momentary or maintained contact
- Available with or without mechanical interlocks
- Yellow, black or red enclosure options
- High impact thermoplastic enclosure with self-extinguishing flammability rating (UL 94V)
- NEMA 1, 3, 3R, 4, 4X and 13 water-tight, dust-tight, oil-tight and corrosion-resistant
- UL listed, CSA approved, carries CE marking

SINGLE SPEED

Mfg. Part No.	Legend Insert Marking	Mechanical Interlock	Enclosure Color	Stock No.	Price Each 1-9
9001BW91YU	Without Inserts	No	Yellow	92T7555	148.90
9001BW92B	Up-Down	Yes	Black	92T7556	155.78
9001BW92R	Up-Down	Yes	Red	92T7557	155.78
9001BW92Y	Up-Down	Yes	Yellow	77R3323	147.34
9001BW93Y	Forward-Reverse	Yes	Yellow	85R4365	148.57
9001BW94Y	On-Off	Yes	Yellow	92T7558	213.18
9001BW95Y	Start-Stop	No	Yellow	52T6830	143.68
XACA2013	E-Stop Arrows Up/Down	Yes	Yellow	16B2762	165.03
TWO SPEED					
9001BW100YU	Without Inserts	Yes	Yellow	92T7554	223.35

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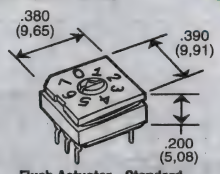
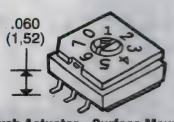
94 SERIES CODED ROTARY DIP SWITCHES

RoHS Compliant Available

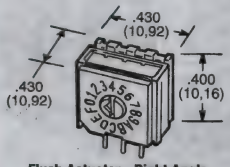
Grayhill



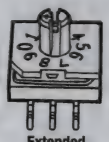
Flush Actuator - Standard



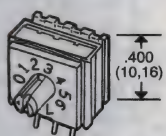
Flush Actuator -, Surface Mount



Flush Actuator - Right Angle



Extended Actuator - Standard



Extended Actuator - Right Angle

- Carrying Current: 100mA @ 50VDC
- Make and Break Rating: 30mA @ 30VDC for 10,000 Cycles of Operation (320,000 Switch Operations for a 16-Position Switch)
- Maximum Process Temperature: 250°C for 10 Seconds

➤CONTINUED➤

94 SERIES CODED ROTARY DIP SWITCHES (CONT.)

94 series actuator sealed rotary DIP switches have binary (octal, BCD, hexadecimal) output with 8-, 10- or 16-positions. Complement codes are also available. Perpendicular or right-angle mounting with flush or choice of two shaft lengths. Perpendicular and surface mount types have terminals on 0.1″ (2.54) by 0.3″ (7.62) grid. Right-angle mount on a 0.1″ (2.54) by 0.1″ (2.54) grid. Terminals are copper alloy, gold over nickel.

FLUSH ACTUATOR TYPE

Mfg. Part No.	Code and Positions	Mounting	Stock No.	Price Each 1-49	Price Each 50+
● 94HAB08T	Octal/8	Standard Thru-Hole	45K1424	3.17	2.96
● 94HAB08RAT	Octal/8	Right Angle Thru-Hole	30K6107	3.29	3.08
● 94HAB08WT	Octal/8	Surface Mount	63K8753	2.95	2.75
● 94HAB10T	BCD/10	Standard Thru-Hole	54K4788	3.13	2.92
● 94HAB10WT	BCD/10	Surface Mount	28K6428	2.95	2.75
● 94HAB16T	Hex/16	Standard Thru-Hole	57K1575	3.17	2.96
● 94HAB16RAT	Hex/16	Right Angle Thru-Hole	45K1423	3.29	3.08
● 94HAB16WT	Hex/16	Surface Mount	63K8757	3.17	2.96
EXTENDED ACTUATOR 0.270″ TYPE					
● 94HBB08T	BCD/8	Standard Thru-Hole	63K8764	2.95	2.75
● 94HBB08RAT	BCD/8	Right Angle Thru-Hole	30K6117	3.29	3.08
● 94HBB10T	BCD/10	Standard Thru-Hole	36K7909	5.72	5.35
● 94HBB16T	Hex/16	Standard Thru-Hole	36K8331	3.17	2.96
● 94HBB16RAT	Hex/16	Right Angle Thru-Hole	30K6120	3.29	3.08
EXTENDED ACTUATOR 0.170″ TYPE					
● 94HCB08T	BCD/8	Standard Thru-Hole	39K4038	2.95	2.75
● 94HCB10T	BCD/10	Standard Thru-Hole	30K6126	3.17	2.96

94 SERIES HIGH TEMPERATURE KNOBS—FOR SHAFT EXTENSIONS

Mfg. Part No.	Knob Type	Knob Arrow Cover	Stock No.	Price Each 1-24	Price Each 25+
● 947706-001	1A	Gray/N/A	91F3839	1.08	0.97
● 947705-001	1B	Black/N/A	91F3841	1.13	1.02
● 947705-012	1B	Gray/N/A	91F3842	1.07	0.97

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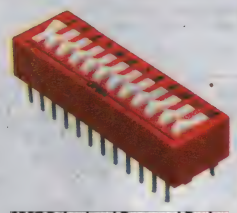
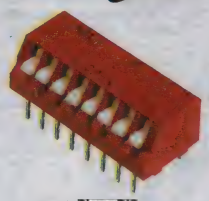
76 SERIES DIP SWITCHES

RoHS Compliant Available

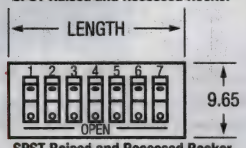
Grayhill



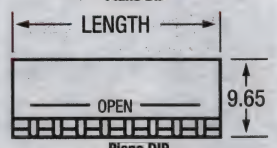
SPST Raised and Recessed Rocker



Piano DIP



SPST Raised and Recessed Rocker



Piano DIP

Feature high pressure spring-loaded ball contact system and standard epoxy-sealed bases. Each switch position makes and breaks 10,000 operations at 1mA, 5VDC or 50mA, 30VDC; 150mA, 30VDC. Contact resistance: 30 milliohms. Dielectric strength: 750VAC rms minimum. Terminals are copper alloy, tin-plated over nickel barrier.

SPST RAISED ROCKERS, UNSEALED

Mfg. Part No.	No. of Positions	Length	Stock No.	Price Each 1-49	Price Each 50-99	Price Each 100-249
● 76SB02T	2	0.28″ (7.11)	29K9388	2.12	2.01	1.93
● 76SB03T	3	0.38″ (9.65)	33K2687	2.20	2.09	2.01
● 76SB04T	4	0.48″ (12.19)	33K2688	2.25	2.13	2.05
● 76SB05T	5	0.58″ (14.73)	33K2690	2.34	2.23	2.13
● 76SB06T	6	0.68″ (17.27)	33K2692	2.39	2.27	2.17
● 76SB07T	7	0.78″ (19.81)	33K2694	2.30	2.18	2.09
● 76SB08T	8	0.88″ (22.35)	33K2696	2.59	2.45	2.36
● 76SB10T	10	1.08″ (27.43)	33K2699	2.70	2.55	2.46
● 76SB12T	12	1.28″ (32.51)	33K2700	2.80	2.66	2.55
SPST RAISED ROCKERS, SEALED						
● 76SB02ST	2	0.28″ (7.11)	33K2685	2.28	2.16	2.07
● 76SB03ST	3	0.38″ (9.65)	33K2686	2.34	2.23	2.13
● 76SB04ST	4	0.48″ (12.19)	60K0326	2.39	2.27	2.17
● 76SB05ST	5	0.58″ (14.73)	33K2689	2.52	2.39	2.29
● 76SB06ST	6	0.68″ (17.27)	55F5004	2.57	2.43	2.34
● 76SB07ST	7	0.78″ (19.81)	33K2693	2.42	2.30	2.21
● 76SB08ST	8	0.88″ (22.35)	33K2695	2.69	2.55	2.45
● 76SB10ST	10	1.08″ (27.43)	30K7351	2.76	2.62	2.51

CONTINUED

76 SERIES DIP SWITCHES (CONT.)

SPDT RAISED ROCKERS, UNSEALED

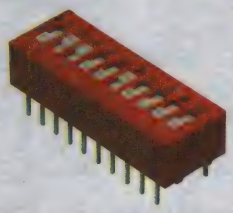
Mfg. Part No.	No. of Positions	Length	Stock No.	Price Each 1-49	Price Each 50-99	Price Each 100-249
● 76SC02T	2	0.38″ (9.65)	33K2702	5.19	4.62	4.25
● 76SC03T	3	0.58″ (14.73)	33K2704	5.60	4.96	4.57
● 76SC04T	4	0.78″ (19.81)	33K2706	5.99	5.33	4.90
SPST RAISED ROCKERS, SEALED						
● 76SC02ST	2	0.38″ (9.65)	33K2701	5.52	4.91	4.52
● 76SC04ST	4	0.78″ (19.81)	33K2705	6.15	5.46	5.03
SPST RECESSED ROCKERS, UNSEALED						
● 76RSB08T	8	0.88″ (22.35)	33K2679	2.35	2.26	2.18
SPST RECESSED ROCKERS, SEALED						
● 76RSB04ST	4	0.48″ (12.19)	33K2672	2.35	2.27	2.17
● 76RSB06ST	6	0.68″ (17.27)	30K6084	2.53	2.43	2.34
● 76RSB08ST	8	0.88″ (22.35)	33K2678	2.69	2.59	2.49
● 76RSB10ST	10	1.08″ (27.43)	30K6085	2.56	2.47	2.37
● 76RSB12ST	12	1.28″ (32.51)	33K2683	2.89	2.78	2.67
SPST PIANO-DIP, UNSEALED						
● 76PSB02T	2	0.28″ (7.11)	30K6080	2.27	2.20	2.13
● 76PSB04T	4	0.48″ (12.19)	33K2656	2.40	2.32	2.25
● 76PSB05T	5	0.58″ (14.73)	33K2658	2.43	2.35	2.28
● 76PSB08T	8	0.88″ (22.35)	33K2662	2.80	2.70	2.62
SPST PIANO-DIP, SEALED						
● 76PSB02ST	2	0.28″ (7.11)	33K2652	2.58	2.49	2.42
● 76PSB04ST	4	0.48″ (12.19)	33K2655	2.67	2.59	2.51
● 76PSB08ST	8	0.88″ (22.35)	33K2661	2.88	2.79	2.71
● 76PSB10ST	10	1.08″ (27.43)	33K2665	3.14	3.03	2.95

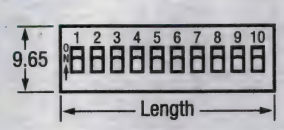
(5066)

78 SERIES DIP SWITCHES

RoHS Compliant Available

Grayhill





SPST switches feature high-pressure, spring-loaded ball contact system. Dielectric strength: 750V. Current: 3A. Operating temperature: -40°C to +85°C.

RAISED SLIDE SWITCH UNSEALED

Mfg. Part No.	No. of Pos.	Length	Stock No.	Price Each 1-49	Price Each 50-99	Price Each 100-249
● 78B02T	2	0.28″ (7.11mm)	36K2510	1.94	1.83	1.76
● 78B04T	4	0.48″ (12.19mm)	36K2514	2.23	2.11	2.02
● 78B08T	8	0.88″ (22.35mm)	36K2521	2.31	2.19	2.10
● 78B10T	10	1.08″ (27.43mm)	36K2525	2.43	1.21	1.16
RAISED SLIDE SWITCH SEALED						
● 78B02ST	2	0.28″ (7.11mm)	36K2509	2.23	2.11	2.02
● 78B04ST	4	0.48″ (12.19mm)	36K2513	2.21	2.09	2.01
● 78B06ST	6	0.68″ (17.27mm)	30K6088	2.52	2.39	2.29
● 78B07ST	7	0.78″ (19.81mm)	36K2518	2.56	2.42	2.32
● 78B08ST	8	0.88″ (22.35mm)	36K2520	2.60	2.46	2.36
● 78B09ST	9	0.98″ (24.89mm)	36K2522	2.70	2.56	2.46
RECESSED SLIDE SWITCH SEALED						
● 78RB08ST	8	0.88″ (22.35mm)	30K6096	2.39	2.29	2.18

(73914)

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(196525)

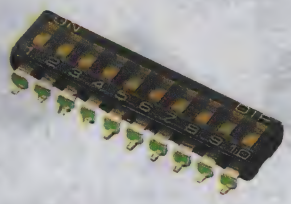
MCDMR SERIES DIP SWITCHES

RoHS Compliant Available

multicomp

Features:
- Single pole single throw DIL switch
- Surface mount

Specifications:
- Contact rating: 100mA at 50Vdc
- Operation force: 1000gf
- Stroke: 1.0mm
- Electrical life: 2000 operations
- Mechanical life: 2000 operations
- Contact resistance: 50mΩ
- Dielectric Strength : 500Vac
- Maximum capacitance: 5pF
- Circuit : SPST
- Operating temperature: -20°C to +85°C



Mfg. Part No.	No. of Positions	Length (mm)	Stock No.	Price Each 1-249
MCDM(R)-02-T	2	6.02	97K4362	1.30
MCDM(R)-04-T	4	11.10	97K4363	1.53
MCDM(R)-06-T	6	16.18	97K4364	1.11
MCDM(R)-08-T	8	21.26	97K4365	1.89
MCDM(R)-10-T	10	26.34	97K4366	1.71

(142182)

MCDHN SERIES DIP SWITCHES

RoHS Compliant Available

multicomp

Specifications:
- Contact rating: 100mA at 50Vdc
- Operation force: 500gf
- Stroke : 0.6mm
- Electrical life: 1000 cycles
- Mechanical life: 1000 cycles
- Contact resistance: 100mΩ
- Dielectric strength: 300Vac
- Circuitry: SPST
- Operating temperature: -40°C to +85°C

Features:
- Half-pitch (Terminal length 8.1mm)
- Top tape sealed
- Lead-free solderable

Mfg. Part No.	No. of Positions	Length (mm)	Stock No.	Price Each 1-99
TOP TAPE SEAL				
MCDHN-02F-T-V	2	3.77	11N5423	2.44
MCDHN-04F-T-V	4	6.31	11N5425	2.41
MCDHN-06F-T-V	6	8.85	11N5427	2.64
MCDHN-08F-T-V	8	11.39	11N5429	2.67
MCDHN-10F-T-V	10	13.93	11N5431	3.12
STANDARD				
MCDHN-02F-V	2	3.77	11N5424	2.46
MCDHN-04F-V	4	6.31	11N5426	2.34
MCDHN-06F-V	6	8.85	11N5428	2.75
MCDHN-08F-V	8	11.39	11N5430	2.81
MCDHN-10F-V	10	13.93	11N5432	3.00

(142181)

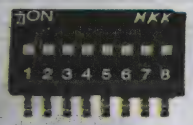
JS SERIES ULTRAMINIATURE DIP SLIDE SWITCHES

RoHS Compliant Available

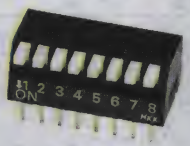
NEW

NKK SWITCHES

Features:
- Slide type and piano type actuators available
- Twin sliding contact mechanism with self-cleaning action provides smooth actuation and produces high contact reliability
- Gold plated contacts prevent oxidation and sulfide effect and provide stable contact resistance
- Use of self-extinguishing UL94V-0 certified material in cover and base provides high arc resistance and high insulation resistance
- Slanted and Gull-wing terminals ensure secure PCB mounting
- End-to-end stackable
- Terminal spacing
  JS01 & JS03: .100" (2.54mm) PCB grid
  JS02: .100" (2.54mm)
  JS04: .050" (1.27mm)



SMT



Through Hole

Mnf. Part No.	Poles	No. of Pos.	Stock No.	Price Each 1-24
JS03 PIANO DIP				
JS0308PP4-S	SPST	8	10X0294	2.57
JS02 EXTENDED ACTUATOR				
JS0208AP4-S	SPST	8	10X0290	2.70
JS04 FLUSH ACTUATOR				
JS0404FP4-S	SPST	4	10X0297	3.41
JS0408FP4-S	SPST	8	10X0300	3.87

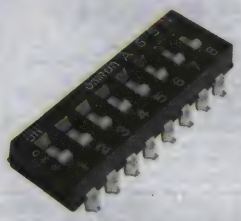
(211954)

A6SN SERIES DIP SWITCHES (SLIDE TYPE) SMT

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

- Voltage rating: 24VDC
- Current rating: 25mA
- Operating force: 0.98 to 7.9 N
- Contact resistance: 200 mΩ max.
- Ambient operating temperature: -30 to 85 °C at 60% max. (with no icing or condensation)
- Knife-edge high pressure mechanics will ensure high reliability
- Knife-edge high pressure mechanics will ensure washing without seal tape
- Embossed taping models available for automatic mounting
- Temperature-resistance resin allows at peak reflow temperature of 260 °C



Mfg. Part No.	No. of Poles	Actuator Style	Package Type	Stock No.	Price Each 1-24
A6SN-1101	1	Flush Slide	Stick	40T8854	2.07
A6SN-1104	1	Raised Slide	Stick	40T8855	2.07
A6SN-2101	2	Flush Slide	Stick	40T8856	2.13
A6SN-2101-P	2	Flush Slide	Embossed taping	58T7856	1.96
A6SN-2102-P	2	Flush Slide	Embossed taping/Seal	58T7857	1.96
A6SN-2104	2	Raised Slide	Stick	40T8859	1.98
A6SN-2104-P	2	Raised Slide	Embossed taping	58T7858	1.96
A6SN-3101	3	Flush Slide	Stick	40T8861	2.11
A6SN-3101-P	3	Flush Slide	Embossed taping	58T7859	2.44
A6SN-3102-P	3	Flush Slide	Embossed taping/Seal	58T7860	2.44
A6SN-3104	3	Raised Slide	Stick	40T8864	2.40
A6SN-3104-P	3	Raised Slide	Embossed taping	58T7861	2.60
A6SN-4101	4	Flush Slide	Stick	40T8866	2.70
A6SN-4101-P	4	Flush Slide	Embossed taping	58T7862	2.61
A6SN-4102-P	4	Flush Slide	Embossed taping/Seal	58T7863	2.61
A6D-4100	4	Flush Slide	Tube	36M3173	4.15
A6SN-4104	4	Raised Slide	Stick	40T8869	2.70
A6SN-4104-P	4	Raised Slide	Embossed taping	58T7864	2.79
A6SN-5101	5	Flush Slide	Stick	40T8871	2.82
A6SN-5101-P	5	Flush Slide	Embossed taping	58T7865	2.92
A6SN-5102-P	5	Flush Slide	Embossed taping/Seal	58T7866	2.92
A6SN-5104	5	Raised Slide	Stick	40T8874	3.03
A6SN-5104-P	5	Raised Slide	Embossed taping	58T7867	3.12
A6SN-6101	6	Flush Slide	Stick	40T8876	3.09
A6SN-6101-P	6	Flush Slide	Embossed taping	58T7868	3.18
A6SN-6102-P	6	Flush Slide	Embossed taping/Seal	58T7869	3.18
A6SN-6104	6	Raised Slide	Stick	40T8879	3.09
A6SN-6104-P	6	Raised Slide	Embossed taping	58T7870	3.41
A6SN-7101	7	Flush Slide	Stick	40T8881	3.38
A6SN-7101-P	7	Flush Slide	Embossed taping	58T7871	3.71
A6SN-7102-P	7	Flush Slide	Embossed taping/Seal	58T7872	3.71
A6SN-7104	7	Raised Slide	Stick	40T8884	3.38
A6SN-7104-P	7	Raised Slide	Embossed taping	58T7873	3.97
A6SN-8101	8	Flush Slide	Stick	40T8886	3.87
A6SN-8101-P	8	Flush Slide	Embossed taping	58T7874	3.85
A6SN-8102-P	8	Flush Slide	Embossed taping/Seal	58T7875	3.85
A6SN-8104	8	Raised Slide	Stick	40T8889	3.87
A6SN-8104-P	8	Raised Slide	Embossed taping	58T7876	4.12
A6SN-9101	9	Flush Slide	Stick	40T8891	4.02
A6SN-9101-P	9	Flush Slide	Embossed taping	58T7877	4.06
A6SN-9102-P	9	Flush Slide	Embossed taping/Seal	58T7878	4.07
A6SN-9104	9	Raised Slide	Stick	40T8894	4.02
A6SN-9104-P	9	Raised Slide	Embossed taping	58T7879	4.35
A6SN-0101	10	Flush Slide	Stick	40T8849	4.39
A6SN-0101-P	10	Flush Slide	Embossed taping	58T7853	4.24
A6SN-0102-P	10	Flush Slide	Embossed taping/Seal	58T7854	4.24
A6SN-0104	10	Raised Slide	Stick	40T8852	4.39
A6SN-0104-P	10	Raised Slide	Embossed taping	58T7855	4.53

(197157)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(198535)

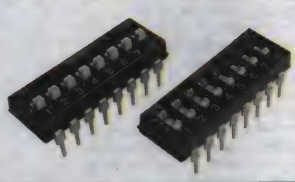
SWITCHES – DIP

A6TN SERIES DIP SWITCHES (SLIDE TYPE)

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

- Voltage rating: 24VDC
- Current rating: 25mA
- Operating force: 0.98 to 7.9 N
- Contact resistance: 200 mΩ max.
- Ambient operating temperature: -30 to 85 °C at 60% max. (with no icing or condensation)
- Knife-edge high pressure mechanics will ensure high reliability
- Knife-edge high pressure mechanics will ensure washing without seal tape
- Temperature-resistance resin allows at peak soldering temperature of 265 °C



Mfg. Part No.	No. of Poles	Actuator Style	Package Type	Stock No.	Price Each 1-24
● A6TN-1101	1	Flush Slide	Stick	40T8899	1.34
● A6TN-1104	1	Raised Slide	Stick	40T8900	1.34
● A6TN-2101	2	Flush Slide	Stick	40T8901	1.38
● A6TN-2104	2	Raised Slide	Stick	40T8902	1.38
● A6TN-3101	3	Flush Slide	Stick	40T8903	1.73
● A6TN-3104	3	Raised Slide	Stick	40T8904	1.61
● A6TN-4101	4	Flush Slide	Stick	40T8905	1.38
● A6TN-4104	4	Raised Slide	Stick	40T8906	1.38
● A6TN-5101	5	Flush Slide	Stick	40T8907	1.67
● A6TN-5104	5	Raised Slide	Stick	40T8908	1.80
● A6TN-6101	6	Flush Slide	Stick	40T8909	1.85
● A6TN-6104	6	Raised Slide	Stick	40T8910	1.85
● A6TN-7101	7	Flush Slide	Stick	40T8911	1.78
● A6TN-7104	7	Raised Slide	Stick	40T8912	1.78
● A6TN-8101	8	Flush Slide	Stick	40T8913	2.03
● A6TN-8104	8	Raised Slide	Stick	40T8914	2.03
● A6TN-9101	9	Flush Slide	Stick	40T8915	2.42
● A6TN-9104	9	Raised Slide	Stick	40T8916	2.42
● A6TN-0101	10	Flush Slide	Stick	40T8897	2.57
● A6TN-0104	10	Raised Slide	Stick	40T8898	2.76

(197159)

ALCOSWITCH DR SERIES ROTARY DIP SWITCHES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Gold-flashed brass contacts rated 0.4VA @ 20VDC max.
- Dielectric strength: 300VAC rms.
- PC and right angle PC (**"RA"** suffix) terminals.
- **DRD** are flush actuators with 0.236"H x 0.394"W x 0.394"D.
- **DRM** are mini-shaft actuators with 0.523"H x 0.394"W x 0.394"D.
- **DRW** are wheel actuator versions with 0.366"H x 0.394"W x 0.394"D.

DRD

Mfg. Part No.	Positions	Actuator Style	Stock No.	Price Each 1-24	Price Each 25-49
● DRD10E04	10	Flush	69K7028	4.74	4.29
● DRM10RA04	10	Mini-Plastic Shaft	06M3803	8.24	7.32
● DRW1004	10	Wheel	16M3777	9.25	8.68
● DRD10RAE04	10	Flush	52K3434	5.24	5.02
● DRD10CE04	10	Flush	96K4921	3.09	2.84
● DRD16CE04	16	Flush	69K7009	4.24	4.16
● DRW10RA04	10	Wheel	17M9614	11.38	10.49
● 1825008-3	16	Flush	69K7029	13.59	12.75
● DRD16E04	16	Flush	69K7010	7.92	7.26
● DRM1604	16	Mini-Plastic Shaft	16M2422	10.48	9.27

(4783)

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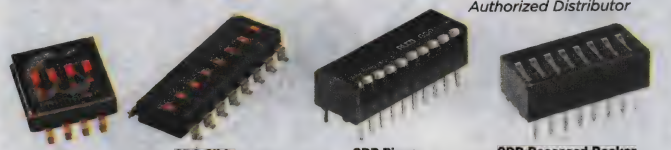
(196545)

ALCOSWITCH GD SERIES SEALED DIP SWITCHES MACHINE INSERTABLE

RoHS Compliant Available

TE connectivity

Authorized Distributor



GDH | GDS Slide | GDP Piano | GDR Recessed Rocker

- Conventional gold wiping contact system (0.25 micron)
- Withstands wave soldering temperature of 245°C for 60 seconds.
- Base, cover and actuator materials are high temperature thermoplastic.
- Terminals are tin lead over nickel over copper alloy over brass.
- **TR** in mfg part no. indicates tape and reel.

LOW-PROFILE SLIDE ACTUATORS 0.244" WIDTH

End-stackable, auto-insertable. Vacuum pick-and-place-compatible. Also available in 2-, 6- and 10-positions; *go online or call*.

Mfg. Part No.	Positions	L	W	Stock No.	Price Each 1-99	Price Each 100-249	Price Each 250-499
● GDS0204	2	0.194"	0.106"	87K2003	2.35	2.30	2.23
● GDS0404	4	0.394"	0.106"	87K3153	3.63	3.17	2.90
● GDS04S04*	4	0.394"	0.106"	46M3507	2.87	2.79	2.73
● 1-1825006-1*	6	0.500"	0.594"	21R1928	6.26	5.80	5.66
● 1571998-5	4	0.438"	0.300"	21R4344	5.94	5.50	5.37
● GDP0204	2	0.238"	0.343"	23M1144	3.93	3.79	3.47
● GDP0804	8	0.838"	0.343"	16M2429	7.18	6.87	6.07
CLASSIC PROFILE RECESSED ROCKER ACTUATORS 0.378" WIDTH							
● GDR0404	4	0.438"	0.270"	16M2430	4.10	3.83	3.48
● GDR0804	8	0.838"	0.270"	16M2431	6.30	6.02	5.32
HALF-PITCH, 0.050" TERMINAL SPACING 0.244" WIDTH Vacuum pick-and-place-compatible. Surface mount.							
● GDH02S04	2	0.144"	0.091"	78K7411	4.18	3.82	3.64
● GDH02STR04	2	0.144"	0.091"	20M6185	1.65	1.34	1.23
● GDH02SATR04	2	0.144"	0.091"	73W9203	2.01	1.87	1.82
● GDH02SA04	2	0.144"	0.091"	73W9204	2.02	1.87	1.83
● GDH04S04	4	0.244"	0.091"	69K7027	1.73	1.60	1.43
● GDH04STR04	4	0.244"	0.091"	52K3426	2.10	1.72	1.57
● GDH04SA04	4	0.244"	0.091"	73W9212	2.33	2.16	2.10
● GDH04SATR04	4	0.244"	0.091"	73W9205	2.23	2.07	2.01
● GDH06S04	6	0.344"	0.091"	67K2684	2.77	2.69	2.61
● GDH06SA04	6	0.344"	0.091"	73W9207	2.32	2.15	2.10
● GDH06SATR04	6	0.344"	0.091"	73W9206	2.22	2.06	2.01
● GDH08S04	8	0.444"	0.091"	69K7007	5.25	5.09	4.90
● GDH08STR04	8	0.444"	0.091"	52K3252	2.28	1.87	1.71
● GDH08SATR04	8	0.444"	0.091"	73W9208	2.29	2.12	2.07
● GDH08SA04	8	0.444"	0.091"	73W9209	2.67	2.48	2.42
● GDH10S04	10	0.544"	0.091"	69K7008	6.02	5.26	4.82
● GDH10SA04	10	0.544"	0.091"	73W9211	3.63	3.36	3.28
● GDH10SATR04	10	0.544"	0.091"	73W9210	3.27	3.03	2.95
● GDH10SA04	10	0.544"	0.091"	73W9211	3.63	3.36	3.28

*GDS Slide

(4731)

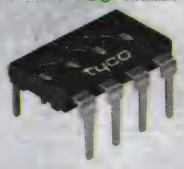
ALCOSWITCH 7600 SERIES DIP SHUNTS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Shunts comprise conductive straps in 0.100 x 0.300" (2.54 x 7.62) DIP spacing.
- Straps remain intact for closed circuit, or broken for open circuit.
- UL recognized, 94V-0 rated, glass-filled thermoplastic housing.



STANDARD PRESSURE—2A FOR +20°C RISE ABOVE AMBIENT

Mfg. Part No.	Positions	Dimension A in. (mm)	Mounting Style	Stock No.	Price Each 1-9
● 1825190-3	4	0.400 (10.16)	Through Hole	32M6114	0.91
● 1825190-5	6	0.600 (15.24)	Through Hole	23R8965	1.08
● 1825190-6	7	0.700 (17.78)	Through Hole	14M4075	1.06
● 1825190-7	8	0.800 (20.32)	Through Hole	65K3397	0.96
● 1825190-9	10	1.000 (25.40)	Through Hole	01P5241	1.41

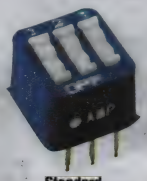
(7983)

7100 SERIES SPST DIP SWITCHES

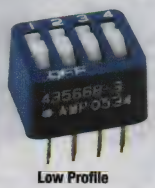
RoHS Compliant Available

TE connectivity

Authorized Distributor



Standard



Low Profile

Standard and low profile DIP switches are designed for life of 2000 cycles per pole. Spring contacts and leads are copper alloy with gold over nickel plating in contact area. Rated 60mA at 5VDC. Dielectric strength: 500VDC. Operating temperature: -55°C to +105°C. Low-profile version has recessed cams to prevent accidental change of rocker position. Blue polyester housing and white thermoplastic rockers are rated 94V-0. Available sealed or unsealed.

STANDARD PROFILE — UNSEALED

Mfg. Part No.	Positions	Dimension A	Stock No.	Price Each 1-9	Price Each 10-49
5435640-2	4	0.48″ (12.19)	69K6897	1.02	0.92
3-5435668-5	5	.58″ (14.73)	23R8980	3.88	3.73
5-435640-3	8	0.58″ (14.73)	18H3149	1.21	1.18
9-435626-2	8	0.88″ (22.35)	46F8074	2.01	1.86
5435640-5	8	0.88″ (22.35)	52K3775	1.05	0.95
5-435640-7	9	0.98″ (24.89)	15H8370	1.79	1.69
5-435640-7	9	1.08″ (27.43)	15H8370	1.79	1.69
5435640-6	9	.98″ (24.89)	23R9009	1.72	1.62
2-5435802-2	12	1.28″ (33.51)	23R8973	2.97	2.85
STANDARD PROFILE — PLASTISOL SEALED					
3-5435640-9	8	0.48″ (12.19)	69K7053	1.35	1.24
3-5435640-7	6	0.68″ (17.27)	07M8401	1.42	1.35
3-5435640-9	8	0.88″ (22.35)	69K7053	1.35	1.24
LOW PROFILE — UNSEALED					
435668-4	5	0.58″ (14.73)	46F1074	3.26	3.13
435668-7	8	0.88″ (22.35)	46F1077	2.01	1.91
LOW PROFILE — TAPE SEALED					
3-5435668-4	4	0.48″ (12.19)	18M5941	2.76	2.26

(7985)

PX/PA SERIES FOOTSWITCHES

RoHS Compliant Available

IMO

- Heavy duty footswitches with shrouded pedal to prevent accidental operation
- Large shroud to allow operators to wear industrial protective footwear
- Pedal interlock lever to prevent operation unless the operator's foot is fully inside the pedal shroud
- 10A 500VAC/600VDC rated
- Bifurcated contacts for low resistance and high reliability – suitable for switching low-level electronic currents
- Double insulated for electrical safety
- IP65

MOMENTARY PUSHBUTTON SWITCHES

Mfg. Part No.	Description	Contacts	Stock No.	Price Each 1-24
PX10111	Snap-Action	SPDT-1NO/1NC	74R5784	67.72
PX10311	Slow-Action	SPDT-1NO/1NC	74R5786	65.35
PX10121	Latching, Snap-Action	SPDT-1NO/1NC	74R5785	66.69
PA20101	Snap-Action	SPDT-1NO/1NC	74R5782	51.92
PA20701	Slow-Action	DPDT-2NC	74R5783	51.92

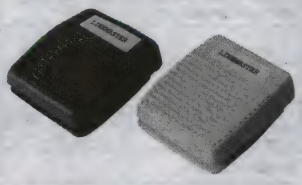
(178399)

AQUILINE FOOT SWITCHES

RoHS Compliant Available

LINEMASTER

Composed of engineered polymeric material that will not rust or corrode. **Mfg. part no. 972-S** housing is die cast metal. 4 x 3 7/16 x 1 5/32″ switches accommodate cord sizes from 0.250 to 0.400 diameter. All types are rated 15A, ½HP, 125-250VAC. All mfg. part nos. have momentary action except **Mfg. part no. 972-S** which has two-stage momentary action.



MOMENTARY ACTION

Mfg. Part No.	Color	Circuitry	Stock No.	Price Each 1-14	Price Each 15-24
971-SB	Blue	SPDT	04M4828	21.95	21.05
971-SO	Orange	SPDT	04M4829	21.95	21.05
971-SY	Yellow	SPDT	04M4830	22.22	21.31
971-S	Gray	SPDT	04M4827	21.11	20.57

CONTINUED

AQUILINE FOOT SWITCHES (CONT.)

Mfg. Part No.	Color	Circuitry	Stock No.	Price Each 1-14	Price Each 15-24
972-S	Black	SPDT	04M4831	64.84	62.21
974-S	Gray	DPDT	04M4832	31.65	30.37

(47274)

CLIPPER FOOT SWITCHES

RoHS Compliant Available

LINEMASTER

642-S

632-S, -DA
632-SC3, 634-DA,
63x-S, 642-S

Twin Divider

Protective vinyl boot

4.500L x 3.500W x 1.500″H except **mfg. part no. 632-S TWIN**, which is 4.500L x 8.375W x 1.500″H with strain relief connector in right side switch. All mfg. part nos. are momentary except **mfg. part no. 632-DA** which is maintained and features push-on/push-off action. **Mfg. part no. 632-SC3** is pre-wired. Includes # 14/3 SJT cable with molded-on, three-prong series plug. Wired normally open with green lead grounded. All mfg. part nos. have SPDT circuits except **mfg. part no. 635-S** which is DPDT. **Mfg. part no. 636-S** is two stage momentary, each stage SPDT. **Mfg. part no. 642-S** is the wide treadle version of **mfg. part no. 632-S**. UL listed, UL recognized, CSA certified, CE compliant. **Mfg. part no. 522-N30** protective boot is available for standard version Clipper series only.

Mfg. Part No.	Description	Stock No.	Price Each 1-14
632-S	20A, 1 hp, 125-250VAC	04M4757	50.56
632-DA	20A, 1 hp, 125-250VAC	04M4756	87.74
632S TWIN DIVIDER	20A, 1 hp, 125-250VAC	04M4759	140.92
632-SC3	15A, 3/4 hp, 125VAC	04M4758	83.90
634-DA	10A, 125-250VAC; 1/8 hp, 125VAC; 1/4 hp, 250VAC	22C7756	123.53
635-S	15A, 125VAC: 10A, 250VAC; 1/2 hp, 125-250VAC	04M4760	79.49
636-S	15A, 125VAC: 10A, 250VAC; 1/2 hp, 125-250VAC	70B7056	88.77
642-S	20A, 1 hp, 125-250VAC	04M4761	94.53

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-14
522-N30	Protective vinyl boot, bright orange, Plastisol PVC	83H2024	8.58

(3454)

TREADLITE II FOOT SWITCHES

RoHS Compliant Available

LINEMASTER

- Utilize V-type snap switch with 0.187″ quick disconnect tab terminals
- Light-press treadle alleviates operator fatigue
- Formed steel case has skid-proof base pad

T-91-S is a momentary SPDT unit. 15A, ½ hp, 125-250VAC. UL recognized. No cordset. **T-91-SC3** is a momentary SPST wired normally open unit. 10A, ½ hp, 125VAC. 6′ 18/3 cord and three-prong series plug. Green lead grounded. UL listed, CSA certified. **T-91-SC36** is identical to **T-91-SC3** but rated 10A, ½ hp, 125-250VAC and supplied with 6′. 18/3 cord without plug. Green lead grounded. UL listed, UL recognized, CSA certified, CE compliant.

Mfg. Part No.	Circuitry	Function	Cordset	Stock No.	Price Each 1-14	Price Each 15-24
T-91-S	SPDT	(On)	None	04M4609	22.13	21.61
T-91-SC3	SPDT-1NO/1NC	(On)	6′ 18/3 cord w/3-prong plug	04M4610	36.22	34.75
T-91-SC36	SPDT-1NO/1NC	(On)	6′ 18/3 cord without plug	04M4611	31.63	30.35

(3385)

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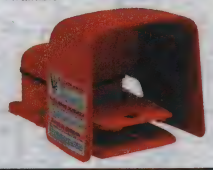
(196560)

SWITCHES – FOOT • SWITCHES – JOYSTICKS

HEAVY-DUTY FOOT SWITCH

RoHS Compliant Available

LINEMASTER



This foot switch is driptight, dusttight, watertight and oiltight. Snap action - SPDT. Electrical rating: 20A, 1 hp, 125-250VAC. Heavy pilot duty: 250VAC max. Size: 9⅛″ x 6″ x 5²⁹⁄₃₂″. Weight: 4½ lbs. UL listed, CSA certified.

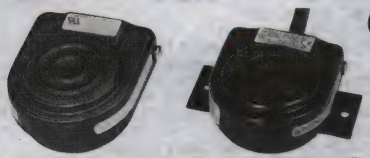
Mfg. Part No.	Description	Stock No.	Price Each 1-2	3-4	5-9
● 531-SWHOX	"OX" Shield Foot Switch	04M4748	236.91	216.49	198.80

(47273)

491 SERIES COMPACT FOOT SWITCHES

RoHS Compliant Available

LINEMASTER



Steel housing with skid-proof base pad. Dimensions: 2.87L x 2.50W x 1.12″D. **Mfg. part no. 491-S** is a momentary SPDT unit. 10A, ½ hp, 125-250VAC. UL recognized, CSA certified. **Mfg. part no. 491-SC3** is a momentary SPDT wired normally open unit. 10A, ½ hp, 125VAC. Includes 8′ 16⅔ cord and three-prong series plug. Green lead grounded. UL listed, CSA certified. **Mfg. part no. 491-SC36** is identical to **mfg. part no. 491-SC3** but 125-250VAC and has a 6″ 16⅔ cord without a plug. Green lead grounded. **Mfg. part no. 491-SC36MP** is identical to **mfg. part no. 491-SC36**, except it is provided with a mounting bracket. UL listed, CSA certified. **Mfg. part no. 491-DA** is a maintained SPST unit. 10A, ½ hp, 125-250VAC. UL listed, CSA certified.

Mfg. Part No.	Circuitry	Function	Cord	Stock No.	Price Each 1-14	15-24
● 491-S	SPDT	(On)	No	04M4740	39.25	37.78
● 491SC3	SPDT-1NO/1NC	(On)	8′ 16/3 cord w/3-prong plug	04M4743	57.25	54.93
● 491-SC36	SPDT-1NO/1NC	(On)	8′ 16/3 cord w/o plug	04M4741	71.39	60.47
● 491-SC36MP	SPDT-1NO/1NC	(On)	8′ 16/3 cord w/o plug	04M4742	76.75	65.00

(3386)

AIR-SEAL FOOT SWITCHES

RoHS Compliant Available

LINEMASTER

Combines a foot-operated air bulb mounted in a strong steel compact housing and a remotely located air-operated electric snap switch. Electrical ratings: 20A 125-250VAC, 1HP @ 125VAC, 2HP @ 250VAC. Operating temperature: 10°F to 120°F. A 10′ ⅛″ ID PVC tubing connects the foot pedal to the remote air switch, which is equipped with a ⁹⁄₁₆″ UNF bulkhead mount. UL recognized.

Mfg. Part No.	Description	Circuit	Stock No.	Price Each 1-4	5-9
● 41SH12	Momentary	SPDT	04M4737	103.93	90.19
● 41DH12	Maintained	SPDT	04M4736	104.14	89.57

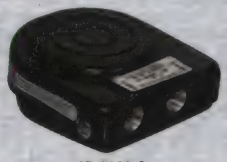
(3391)

AIRVAL AIR -ACTUATED FOOT SWITCHES

RoHS Compliant Available

LINEMASTER

3C-30A2-S



3B-30A2-S

Air flows when the plunger is depressed, stops flowing when plunger is released and exhausts back pressure on output side. **Mfg. part no. 3C-30A2-S** is made of a rugged cast iron housing. ⅛-27 NPT inside port; 30cfm air flow at 100psi; 25cfm exhaust at 100psi. Operating force: 10lbs. **Mfg. part no. 3B-30A2-S** is steel, ⅛-27 NPT exposed port, 30cfm air flow at 100psi; 25cfm exhaust at 100psi. Operating force: 7lbs. Both can use switch guard **mfg. part no. 522-B14** sold separately.

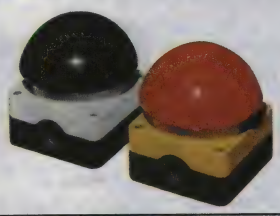
Mfg. Part No.	Description	Dimensions	Port	Stock No.	Price Each 1-14	15-24
● 3C-30A2-S	Clipper 3-Way	4½ x 3½ x 1½″	1/8-27 NPT	04M4724	94.08	90.26
● 3B-30A2-S	Compact 3-Way	2⅞ x 2½ x 1⅛″	1/8-27 NPT	04M4723	75.12	72.07

(78511)

PALM/FOOT SWITCHES

RoHS Compliant Available

MOELLER



For use where high visibility and large operating surface is required. High-impact design features 94mm operating surface, positive opening contacts. Emergency stop units have yellow base, maintained position contacts, pull-to-release action, and are tamper proof (EN418). Enclosures rated NEMA 4X, 13, IP67, IP69K. Momentary units have gray/black bases. UL listed, CSA certified, CE compliant.

MOMENTARY PUSHBUTTON SWITCHES

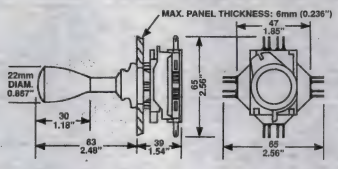
Mfg. Part No.	Operator Color	Contacts	Stock No.	Price Each 1-2
● FAK-S/KC11/I	Black	1 N.O., 1 N.C.	41M3229	190.34
● FAK-R/KC11/I	Red	1 N.O., 1 N.C.	41M3227	179.79
EMERGENCY STOP PUSHBUTTON SWITCH				
● FAK-R/V/KC11/IY	Red	1 N.O., 2 N.C.	41M3228	275.62

(59381)

SERIES 44 OIL & WATERTIGHT JOYSTICK CONTROLLERS

RoHS Compliant Available

eao



Features:
- Compact and sealed momentary positioning device
- Ideal for hoists and other machinery
- Feature short-throw, rugged momentary switch elements, and self-centering actuation for positive control

Specifications:
- Rating: 6A at 250VAC, 0.5A at 250VDC, 2A at 110VDC, 5A at 75VDC
- Gold-plated silver-nickel alloy contacts
- Contact configuration: 1NO/1NC per position
- Q.C. (0.110 x 0.020″) combination push-on or solder terminals
- Sealed to NEMA 4 & 13 and IP65 standards
- 2 million operations in each direction
- Operating temperature: -12 to +158°F
- Zinc-coated, high-manganese steel stems, suitable for certain marine applications

Mfg. Part No.	Description	Action	Stock No.	Price 1-24
● 44-800.2	2x 1N.C.+1N.O.	2-Position w/o Latch Position	30C8521	51.21
● 44-800.4	4x 1N.C.+1N.O.	4-Position w/o Latch Position	30C8522	59.59
● 44-800.8	4x 1N.C.+1N.O.	8-Position w/o Latch Position	30C8523	87.06

(68184)

M22 22mm JOYSTICK SWITCHES AND BUZZERS

RoHS Compliant Available

EATON

Specifications:
- Contact rating: 4A at 230VAC; 3A at 24VDC
- Rated to max 500VAC and 220VDC
- Action: On = Maintained; (On) = Momentary

Features:
- Joysticks, buzzers, 4-way pushbuttons
- Quick installation with modular construction
- Mounting base includes operators
- Heavy duty construction UL NEMA type 4X/13 and IP66 and IP40 (Buzzers) on front panel
- Notched hole mounting with anti-rotation tab

Joystick

Potentiometer

JOYSTICK OPERATORS

Mfg. Part No.	No. of Positions	Action	Orientation	Bezel	Stock No.	Price 1-4
● M22-WJ2H	2	Off-(On)	Horizontal	Silver	10R1869	94.33
● M22-WJ2V	2	Off-(On)	Vertical	Silver	10R1870	93.50
● M22-WJ4	4	Off-(On)	...	Silver	10R1871	104.02
● M22-WRJ4	4	On-Off	...	Silver	10R1876	95.50

POTENTIOMETERS

Mfg. Part No.	Resistance (Ω)	Bezel	Stock No.	Price 1-4
● M22-R1K	1	Silver	10R1861	96.36
● M22-R4K7	4.7	Silver	10R1865	101.34
● M22-R10K	10	Silver	10R1862	102.43
● M22-R100K	100	Silver	10R1863	91.83

➤ CONTINUED ➤

M22 22mm JOYSTICK SWITCHES AND BUZZERS (CONT.)

THROUGH-THE-DOOR OPERATOR

Mfg. Part No.	Description	Stock No.	Price 1-4
M22-DZ-B-GB14	Blue Button, "RESET" inscription	10R1820	20.26

BUZZERS

Mfg. Part No.	dB/10cm	Tone	Voltsge (VAC/DC)	Stock No.	Price 1-9
M22-XAMP	83	Pulsed	18-30	10R1884	25.55
M22-XAM	83	Continuous	18-30	10R1883	26.81

FOUR-WAY PUSHBUTTON OPERATORS

Mfg. Part No.	Button Color	Button Style	Inscription	Bezel	Stock No.	Price 1-4
M22-D4-S	Black	Non-Interlocked	...	Silver	10R1821	71.45
M22-D4-S-X7	Black	Non-Interlocked	Directional Arrows	Silver	10R1822	74.94
M22-DI4-S	Black	Interlocked	...	Silver	10R1808	111.27

PALM SWITCH

Mfg. Part No.	Circuitry	Acuator Color	Action	Illumination	Stock No.	Price 1-4
FAK-R-V-KC12-IY	3PST-2NC/1NO	Red	On-Off	Non Illuminated	10R1767	185.50

CONTACT BLOCKS

Mfg. Part No.	Circuitry	Termination	Stock No.	Price Each 1-4
M22-K10	1NO	Screw	10R1831	7.69
M22-K01	1NC	Screw	10R1830	7.69

LEGEND PLATES

Mfg. Part No.	For Use With	Inscription	Stock No.	Price 1-9
M22-XCK	Eaton M22 Series Modular Pushbutton Switches	...	10R1888	6.57
M22-XCK1		4 Directional Arrows	10R1889	7.54
M22-XCK2		0-1-0-2-0-3-0-4	10R1890	7.54
M22-XCK3		2 Directional Arrows	10R1891	7.54

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price 1-9
M22-USB-SA	Bulkhead Interface, USB 2.0 Type A Socket w/ 2-ft Cable	10R1868	69.02
M22-RJ45-SA	Bulkhead Interface, RJ45 Ethernet Connector	10R1860	35.88

(148567)

J1 LOW PROFILE "SWITCH STICK" JOYSTICK

RoHS Compliant Available

ETI SYSTEMS

Features
- Spring return to center
- Tapered knob
- Four 5 amp/250VAC SPST directional switches (N.O and N.C contacts)
- Capable of 4-way or 8-way directional switching
- Four point mounting with hardware
- Protective rubber boot (IP65 rating above panel)
- Single axis and plus (+) pattern limiter plates included

Specifications
- Two axis control
- 1.73" handle height
- 24° deflection angle (± 12°)

Mfg. Part No.	Description	Stock No.	Price Each
J1-00105	J1 Low Profile "Switch Stick" Joystick	83H7201	43.66

(80021)

J3L WIDE ANGLE RESISTIVE JOYSTICK

RoHS Compliant Available

ETI SYSTEMS

Features
- Single axis control
- Cylindrical knob
- Spring return to center
- 10K ohm precision potentiometer
- Protective rubber boot (IP65 rating above panel)

Specifications
- 1.71" rocker handle height
- 40° deflection angle (± 20°)

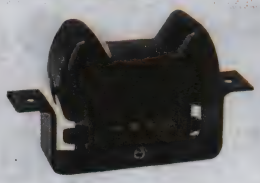
Mfg. Part No.	Description	Stock No.	Price Each 1-4	Price Each 5-9
J3L-IA10-SB	J3L Wide Angle Resistive Joystick	83H7202	177.07	165.88

(80026)

J3R "ROCKER POT" SINGLE AXIS JOYSTICK

RoHS Compliant Available

ETI SYSTEMS



Features
- Fingertip control
- Single axis control
- Spring return to center
- 10K ohm precision potentiometer
- IP54 rating
- Mounting bracket included

Specifications
- 0.72" rocker handle height
- 30° deflection angle (± 15°)
- Rated for 2 Million operations

Mfg. Part No.	Description	Stock No.	Price Each 1-4	Price Each 5-9
J3R-I-10K	J3R "Rocker Pot" Single Axis Joystick	83H7203	150.95	139.65
J3R-IT-10K	Spring return to center w/ center tap	83H7204	176.94	163.69

(80027)

MONO LEVER SWITCHES

RoHS Compliant Available

IDEC

TÜV Rheinland

HW series lever switches are rated 600VAC/DC, 10A. Mechanical life: 500,000 operations. Meets IEC. UL listed, CSA certified, CE compliant, and TÜV approved.

HW1M STANDARD LEVER

Mfg. Part No.	Positions	Description	Bezel	Stock No.	Price Each 1-24	Price Each 25-49
HW1M-F1010-20	2	Maintained Up & Down	Plastic	84C4800	96.19	91.33
HW1M-F2020-20	2	Spring Return Up & Down	Plastic	39C5582	95.26	90.45
HW1M-F0101-20	2	Maintained Right & Left	Plastic	84C4799	92.49	87.82
HW1M-F0202-20	2	Spring Return Right & Left	Plastic	86H3789	96.19	91.33
HW1M-F0121-30	3	Maintained Right & Left, Spring Return Down	Plastic	05N7425	102.50	97.32
HW1M-F1111-22N9	4	Maintained all positions	Plastic	84C4803	114.44	108.65

HW1M-L INTERLOCKING LEVER

HW1M-LF1010-20	2	Maintained Up & Down	Plastic	18M7189	108.02	102.57
HW1M-LF2020-20	2	Spring Return Up & Down	Plastic	84C4816	121.95	115.79
HW1M-LF0101-20	2	Maintained Right & Left	Plastic	84C4813	121.95	115.79
HW1M-LF0202-20	2	Spring Return Right & Left	Plastic	05N7432	121.95	115.79

(196366)

JD SERIES KEYLOCK SWITCHES

RoHS Compliant Available

APEM

Features:
- 4-tumbler lock
- Multi key-pull positions
- Chrome finish with solid detent
- 2-keys supplied with code stamped on case

Specifications:
- Contact rating: 4A at 125VAC, 2A at 250VAC
- Single pole or double pole
- 45° and 90° indexing
- On = Maintained action; (On) = Momentary action

Mfg. Part No.	Number of Poles	Angle of Throw	Function	Key Pull Position	Stock No.	Price Each 1-24	Price Each 25-99
JD7509N	1	90°	On-(On)	1	73J0626	17.73	15.86
JD7510A	1	90°	(On)	1	73J0632	21.57	19.28
JD7509R	1	90°	On-(On)	1, 2	73J0630	18.10	16.18
JD7510E	1	90°	(On)	1	73J0634	20.12	17.99
JD7509O	2	90°	On-(On)	1	73J0627	18.33	16.40
JD7509S	2	90°	On-(On)	1, 2	73J0631	17.88	15.99
JD7509B	2	45°	On-(On)	1	73J0616	18.29	16.36

(90821)

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(212564)

SWITCHES – KEYLOCK & SELECTOR

14 SERIES 22mm KEYLOCK, AND ROTARY SWITCHES

NEMA

RoHS Compliant Available

eao

Keylock

Short Lever

Specifications:
- Switch ratings: 5A at 250VAC, 2A at 24VDC
- Mount in a 22.5mm (0.885") diameter hole
- Sealed to NEMA 4&13 standards; IP67 rated

Features:
- 2 position keylock and selector switches
- Self-cleaning snap action or low level contacts
- 2 high-security flat keys included with each keylock
- Over 690 keycodes exist for increased security
- Solder and QC terminals available
- Anodized aluminum bezel
- On = Maintained; (On) = Momentary

SHORT LEVER ACTUATOR

Mfg. Part No.	Circuitry	No. of Positions	Function	Stock No.	Price Each 1-24
● 14-506.0250	SPDT	2	On-On	84F560	35.05
● 14-507.0250	DPDT	2	On-On	30B3942	47.96

KEYLOCK ACTUATOR

Mfg. Part No.	Circuitry	Function	No. of Postions	Key Removal Position	Stock No.	Price Each
● 14-235.025K	SPDT	On-On	2	A	84F558	53.39
● 14-141.025K	SPDT	(On)-(On)	2	A	30B3876	54.99
● 14-236.025K	DPDT	On-On	2	A	84F559	65.16

(5095)

704 SERIES TWO- AND THREE-POSITION KEYLOCK AND ROTARY LEVER ACTUATORS

RoHS Compliant Available

eao

UL CE

Features:
- Keylock and rotary selector actuators come in round and square bezel; plastic or anodized aluminum
- Keylocks include 2 keys and lever actuator is black
- Middle position is neutral/ unactuated in standard 3 position actuator
- Key removable (Rmv) and position codes are left (L), center (C) , and right (R)
- Other position/functions exist
- Additional key codes available

STEP 1: Rotary

STEP 1: Keylock

Specifications:
- Switch rating: 10A at 600VAC
- Standard mount in 22.5mm (0.885") round hole
- Flush mount in 30.5mm (1.2") round hole
- Sealed to NEMA 13 and 14 standards; (IP65 standard)
- ISO 9001 certified

Use 2-Step Component Process to Assemble Complete Switch:
- STEP 1: Choose keylock or selector switch front section
- STEP 2: Choose contact block separately *on page 1762*

SHORT LEVER ACTUATOR

Mfg. Part No.	Switch Function	No. of Pos.	Bezel Style	Stock No.	Price Each 1-24
● 704.402.0	On-Off-On	3	Round Gray Plastic	50F7333	18.69
● 704.403.0	On-On-On	3	Round Natural Aluminum	19C6728	24.35
● 704.404.0	On-(On)-On	3	Round Gray Plastic	50F7336	18.25
● 704.405.0	(On)-Off-(On)	3	Round Natural Aluminum	23C9639	23.50
● 704.409.0	(On)-Off-On	3	Round Natural Aluminum	07J0812	23.50
● 704.410.0	On-On	2	Round Gray Plastic	50F7327	18.25
● 704.411.0	On-On	2	Round Natural Aluminum	18C5342	24.06
● 704.510.0	On-On	2	Square Gray Plastic	50F7328	18.69

KEYLOCK ACTUATOR

Mfg. Part No.	Switch Function	No. of Pos.	Key Removal Position	Stock No.	Price Each 1-24
● 704.113.0	On-On-On	3	L, C, and R	50F7331	41.78
● 704.115.0	(On)-(On)-(On)	3	C	50F7335	42.19
● 704.117.0	On-Off-(On)	3	L	50F7337	40.96
● 704.121.0	On-On	2	L	50F7325	41.78
● 704.122.0	On-On	2	L and C	50F7329	40.96
● 704.123.0	(On)-None-(On)	2	C	27C0125	42.19
● 704.341.0	On-On	2	L	50F7326	40.96

(5091)

C22 SERIES NON-ILLUMINATED SELECTOR SWITCHES

RoHS Compliant Available

EATON

UL CSA CE

With over 20 variations of operation and 8 varieties of key codes, the C22 line offers a very complete line of selector switches.

NON-ILLUMINATED SELECTOR SWITCHES - KNOB TYPE, 2 POSITION, MOMENTARY

Mfg. Part No.	Contacts	Bezel Color	Stock No.	Price Each 1-9
● C22-WK-K01	SPST-NC	Silver	44T9760	24.99
● C22-WK-K02	DPST-NC	Silver	44T9761	34.20
● C22-WK-K10	SPST-NO	Silver	44T9762	26.74
● C22-WK-K11	SPST-NO, SPST-NC	Silver	44T9763	34.20
● C22-WK-K20	DPST-NO	Silver	44T9764	34.20
● C22S-WK-K01	SPST-NC	Black	44T9891	23.50
● C22S-WK-K02	DPST-NC	Black	44T9892	32.90
● C22S-WK-K10	SPST-NO	Black	44T9893	23.50
● C22S-WK-K11	SPST-NO, SPST-NC	Black	44T9894	32.90
● C22S-WK-K20	DPST-NO	Black	44T9895	32.90
NON-ILLUMINATED SELECTOR SWITCHES - KNOB TYPE, 2 POSITION, MOMENTARY, "V" POSITION				
● C22-WKV-K01	SPST-NC	Silver	44T9765	21.24
● C22-WKV-K02	DPST-NC	Silver	44T9766	30.45
● C22-WKV-K10	SPST-NO	Silver	44T9767	16.38
● C22-WKV-K11	SPST-NO, SPST-NC	Silver	44T9768	30.45
● C22-WKV-K20	DPST-NO	Silver	44T9769	30.45
● C22S-WKV-K01	SPST-NC	Black	44T9896	20.10
● C22S-WKV-K02	DPST-NC	Black	44T9897	29.13
● C22S-WKV-K10	SPST-NO	Black	44T9898	20.10
● C22S-WKV-K11	SPST-NO, SPST-NC	Black	44T9899	29.13
● C22S-WKV-K20	DPST-NO	Black	44T9900	29.13
NON-ILLUMINATED SELECTOR SWITCHES - KNOB TYPE, 2 POSITION, MAINTAINED				
● C22-WRK-K01	SPST-NC	Silver	44T9773	21.24
● C22-WRK-K02	DPST-NC	Silver	44T9774	30.45
● C22-WRK-K10	SPST-NO	Silver	44T9775	21.24
● C22-WRK-K11	SPST-NO, SPST-NC	Silver	44T9776	30.45
● C22-WRK-K20	DPST-NO	Silver	44T9777	30.45
● C22S-WRK-K01	SPST-NC	Black	44T9903	20.10
● C22S-WRK-K02	DPST-NC	Black	44T9904	29.13
● C22S-WRK-K10	SPST-NO	Black	44T9905	20.10
● C22S-WRK-K11	SPST-NO, SPST-NC	Black	44T9906	29.13
● C22S-WRK-K20	DPST-NO	Black	44T9907	29.13
NON-ILLUMINATED SELECTOR SWITCHES - KNOB TYPE, 2 POSITION, MAINTAINED, "V" POSITION				
● C22-WRKV-K01	SPST-NC	Silver	44T9778	21.24
● C22-WRKV-K02	DPST-NC	Silver	44T9779	30.45
● C22-WRKV-K10	SPST-NO	Silver	44T9780	22.37
● C22-WRKV-K11	SPST-NO, SPST-NC	Silver	44T9781	30.45
● C22-WRKV-K20	DPST-NO	Silver	44T9782	30.45
● C22S-WRKV-K01	SPST-NC	Black	44T9908	20.10
● C22S-WRKV-K02	DPST-NC	Black	44T9909	29.13
● C22S-WRKV-K10	SPST-NO	Black	44T9910	20.10
● C22S-WRKV-K11	SPST-NO, SPST-NC	Black	44T9911	29.13
● C22S-WRKV-K20	DPST-NO	Black	44T9912	29.13
NON-ILLUMINATED SELECTOR SWITCHES - KNOB TYPE, 3 POSITION, MOMENTARY				
● C22-WK3-K02	DPST-NC	Silver	44T9770	34.20
● C22-WK3-K11	SPST-NO, SPST-NC	Silver	44T9771	34.20
● C22-WK3-K20	DPST-NO	Silver	44T9772	36.25
● C22S-WK3-K11	SPST-NO, SPST-NC	Black	44T9901	32.90
● C22S-WK3-K20	DPST-NO	Black	44T9902	34.87
NON-ILLUMINATED SELECTOR SWITCHES - KNOB TYPE, 3 POSITION, MAINTAINED				
● C22-WRK3-K02	DPST-NC	Silver	44T9783	32.28
● C22-WRK3-K11	SPST-NO, SPST-NC	Silver	44T9784	30.45
● C22-WRK3-K20	DPST-NO	Silver	44T9785	30.45
● C22S-WRK3-K02	DPST-NC	Black	44T9913	29.13
● C22S-WRK3-K11	SPST-NO, SPST-NC	Black	44T9914	29.13
● C22S-WRK3-K20	DPST-NO	Black	44T9915	30.88

(196363)

C22 SERIES NON-ILLUMINATED KEYLOCK SWITCHES

RoHS Compliant Available

EATON

With over 20 variations of operation and 8 varieties of key codes, the C22 line offers a very complete line of keylock switches.

NON-ILLUMINATED SELECTOR SWITCHES - KEY OPERATED, 2 POSITION, MOMENTARY

Mfg. Part No.	Contacts	Bezel Color	Stock No.	Price Each 1-9
C22S-WRK-K02	DPST-NC	Silver	44T9904	29.13
C22-WS-MS1-K01	SPST-NC	Silver	44T9804	62.42
C22-WS-MS1-K02	DPST-NC	Silver	44T9805	71.97
C22-WS-MS1-K10	SPST-NO	Silver	44T9806	66.17
C22-WS-MS1-K11	SPST-NO, SPST-NC	Silver	44T9807	76.29
C22-WS-MS1-K20	DPST-NO	Silver	44T9808	71.97
C22-WS-MS2-K01	SPST-NC	Silver	44T9809	62.42
C22-WS-MS2-K02	DPST-NC	Silver	44T9810	71.97
C22-WS-MS2-K10	SPST-NO	Silver	44T9811	66.17
C22-WS-MS2-K11	SPST-NO, SPST-NC	Silver	44T9812	71.97
C22-WS-MS2-K20	DPST-NO	Silver	44T9813	71.97
C22S-WS-MS1-K01	SPST-NC	Black	44T9934	61.24
C22S-WS-MS1-K02	DPST-NC	Black	44T9935	70.78
C22S-WS-MS1-K10	SPST-NO	Black	44T9936	61.24
C22S-WS-MS1-K11	SPST-NO, SPST-NC	Black	44T9937	70.78
C22S-WS-MS1-K20	DPST-NO	Black	44T9938	70.78
C22S-WS-MS2-K01	SPST-NC	Black	44T9939	61.24
C22S-WS-MS2-K02	DPST-NC	Black	44T9940	70.78
C22S-WS-MS2-K10	SPST-NO	Black	44T9941	61.24
C22S-WS-MS2-K11	SPST-NO, SPST-NC	Black	44T9942	70.78
C22S-WS-MS2-K20	DPST-NO	Black	44T9943	70.78

NON-ILLUMINATED SELECTOR SWITCHES - KEY OPERATED, 2 POSITION, MAINTAINED

C22-WRS-MS1-K01	SPST-NC	Silver	44T9791	58.06
C22-WRS-MS1-K02	DPST-NC	Silver	44T9792	68.40
C22-WRS-MS1-K10	SPST-NO	Silver	44T9793	61.54
C22-WRS-MS1-K11	SPST-NO, SPST-NC	Silver	44T9794	68.40
C22-WRS-MS1-K20	DPST-NO	Silver	44T9795	71.68
C22-WRS-MS2-K01	SPST-NC	Silver	44T9796	58.06
C22-WRS-MS2-K02	DPST-NC	Silver	44T9797	68.40
C22-WRS-MS2-K10	SPST-NO	Silver	44T9798	58.06
C22-WRS-MS2-K11	SPST-NO, SPST-NC	Silver	44T9799	68.40
C22-WRS-MS2-K20	DPST-NO	Silver	44T9800	68.40
C22S-WRS-MS1-K01	SPST-NC	Black	44T9921	56.86
C22S-WRS-MS1-K02	DPST-NC	Black	44T9922	66.40
C22S-WRS-MS1-K10	SPST-NO	Black	44T9923	56.86
C22S-WRS-MS1-K11	SPST-NO, SPST-NC	Black	44T9924	70.38
C22S-WRS-MS1-K20	DPST-NO	Black	44T9925	66.40
C22S-WRS-MS2-K01	SPST-NC	Black	44T9926	56.86
C22S-WRS-MS2-K02	DPST-NC	Black	44T9927	66.40
C22S-WRS-MS2-K10	SPST-NO	Black	44T9928	56.86
C22S-WRS-MS2-K11	SPST-NO, SPST-NC	Black	44T9929	66.40
C22S-WRS-MS2-K20	DPST-NO	Black	44T9930	66.40

NON-ILLUMINATED SELECTOR SWITCHES - KEY OPERATED, 2 POSITION, MAINTAINED, KEY REMOVAL LEFT

C22-WRS-MS1-A1-K02	DPST-NC	Silver	44T9787	68.40
C22-WRS-MS1-A1-K01	SPST-NC	Silver	44T9786	58.06
C22-WRS-MS1-A1-K02	DPST-NC	Silver	44T9787	68.40
C22-WRS-MS1-A1-K10	SPST-NO	Silver	44T9788	61.54
C22-WRS-MS1-A1-K11	SPST-NO, SPST-NC	Silver	44T9789	68.40
C22-WRS-MS1-A1-K20	DPST-NO	Silver	44T9790	68.40
C22S-WRS-MS1-A1-K01	SPST-NC	Black	44T9916	56.86
C22S-WRS-MS1-A1-K02	DPST-NC	Black	44T9917	66.40
C22S-WRS-MS1-A1-K10	SPST-NO	Black	44T9918	62.05
C22S-WRS-MS1-A1-K11	SPST-NO, SPST-NC	Black	44T9919	66.40
C22S-WRS-MS1-A1-K20	DPST-NO	Black	44T9920	70.38

NON-ILLUMINATED SELECTOR SWITCHES - KEY OPERATED, 3 POSITION, MOMENTARY

C22-WS3-MS1-K02	DPST-NC	Silver	44T9814	71.97
C22-WS3-MS1-K11	SPST-NO, SPST-NC	Silver	44T9815	71.97
C22-WS3-MS1-K20	DPST-NO	Silver	44T9816	71.97
C22S-WS3-MS1-K02	DPST-NC	Black	44T9944	70.78
C22S-WS3-MS1-K11	SPST-NO, SPST-NC	Black	44T9945	70.78
C22S-WS3-MS1-K20	DPST-NO	Black	44T9946	75.03

➤CONTINUED➤

C22 SERIES NON-ILLUMINATED KEYLOCK SWITCHES (CONT.)

NON-ILLUMINATED SELECTOR SWITCHES - KEY OPERATED, 3 POSITION, MAINTAINED

Mfg. Part No.	Contacts	Bezel Color	Stock No.	Price Each 1-9
C22-WRS3-MS1-K02	DPST-NC	Silver	44T9801	68.40
C22-WRS3-MS1-K11	SPST-NO, SPST-NC	Silver	44T9802	68.40
C22-WRS3-MS1-K20	DPST-NO	Silver	44T9803	68.40
C22S-WRS3-MS1-K02	DPST-NC	Black	44T9931	66.40
C22S-WRS3-MS1-K11	SPST-NO, SPST-NC	Black	44T9932	66.40
C22S-WRS3-MS1-K20	DPST-NO	Black	44T9933	70.38

(196364)

RMQ-16 SERIES ILLUMINATED SELECTOR SWITCHES WITHOUT BULB

EATON

- Momentary or maintained operation
- 18mm square operator
- VS anti-rotation feature
- 3 million mechanical operations
- Contact voltage: 24VAC
- IP65 rated

Mfg. Part No.	No. of Positions	Bezel	Function	Stock No.	Price Each
Q18LWK1-GN	2	Green	Momemtary	26C6674	21.90
Q18LWK1-RT	2	Red	Momemtary	26C6676	21.90
Q18LWK1R-GN	2	Green	Maintained	26C6680	21.90
Q18LWK1R-RT	2	Red	Maintained	26C6682	21.90
Q18LWK3-GN	3	Green	Momemtary	26C6686	23.00
Q18LWK3-RT	3	Red	Momemtary	26C6688	23.00
Q18LWK3R-GN	3	Green	Maintained	26C6691	23.00
Q18LWK3R-RT	3	Red	Maintained	26C6693	23.00
Q18LWK3R1-GN	3	Green	Maintained/Momemtary	26C6697	23.00
Q18LWK3R1-RT	3	Red	Maintained/Momemtary	26C6699	23.00
Q18LWK3R2-GN	3	Green	Momentary/Maintained	26C6703	23.00
Q18LWK3R2-RT	3	Red	Momentary/Maintained	26C6705	23.00

(210202)

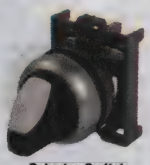
KEYLOCK AND ROTARY SELECTOR SWITCH MODULES

RoHS Compliant Available

EATON

Features:
- Quick installation with modular construction
- Mounting base included with operators
- Field convertible from momentary to maintained
- Heavy duty construction UL NEMA type 4X/13 and IP66 on front of panel
- Notched hole mounting with anti-rotation tab

Specifications:
- Contact rating: 4A at 230VAC; 3A at 24VDC
- Rated to max 500VAC and 220VDC
- Action: On = Maintained; (On) = Momentary



Selector Switch

Key Selector Switch

SELECTOR SWITCHES

Mfg. Part No.	No. of Positions	Actuator Style	Action	Turning Radius	Bezel	Stock No.	Price 1-4
M22S-WKV	2	Lever	On-Off	90°	Black	10R1963	23.82
M22-WKV	2	Lever	On-Off	90°	Silver	10R1872	23.40
M22-WRK	2	Rotary	On-Off	45°	Silver	10R1877	23.40
M22-WK3	3	Lever	Off-(On)	45°	Silver	10R1873	23.40
M22S-W3	3	Rotary	On-Off	45°	Black	10R1966	13.55
M22-WRK3	3	Lever	On-Off	45°	Silver	10R1878	23.40
M22-WRK4	4	Lever	On-Off	90°	Silver	10R1879	33.72

KEYLOCK SWITCHES

M22S-WS	2	Keylock	Off-(On)	45°	Black	10R1964	41.94
M22-WS	2	Keylock	Off-(On)	45°	Silver	10R1880	55.27
M22S-WS3	3	Keylock	Off-(On)	45°	Black	10R1965	41.94
M22-WS3	3	Keylock	Off-(On)	45°	Silver	10R1881	54.68

FLUSH MOUNTING CONTACT BLOCKS

Mfg. Part No.	Circuitry	Termination	Stock No.	Price Each 1-4
M22-K10	1NO	Screw	10R1831	7.69
M22-K01	1NC	Screw	10R1830	7.69

REAR MOUNTING CONTACT BLOCKS

M22-KC10	SPST-NO	Screw	26C5890	13.21

LEGEND PLATES

Mfg. Part No.	Inscription	Stock No.	Price 1-9
M22-XST-GB10	OFF ON	10R1901	2.16
M22-XST-X88	O I	10R1908	2.03

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price 1-9
M22S-ST-X	Legend Plate Holder	10R1957	1.34
M22-XW	Plunger Bridge for Pushbuttons	10R1910	1.20

➤CONTINUED➤

KEYLOCK AND ROTARY SELECTOR SWITCH MODULES (CONT.)

ACCESSORIES

Mfg. Part No.	Inscription	Stock No.	Price 1-9
● M22-XWS	Key Cover for Pushbuttons	10R1911	8.48
● M22-XC-R	Key Withdraw Adapter for Pushbuttons	10R1886	3.40

(148566)

30MM SELECTOR SWITCHES 10250T SERIES

EATON

- Heavy-duty zinc die cast construction
- Enclosed silver contacts with reliability nibs
- Reliability nibs improve contact reliability even under dry circuit and fine dust conditions
- Drainage holes prevent buildup of liquid inside the operator which can prevent operation in freezing environments
- Grounding nibs bite through paint and other coatings to secure grouding

The 10250T 30.5 mm selector line features a zinc die cast construction with chrome-plated housing and mounting nut. The same durable construction is also available with the corrosive resistant E34 line of pushbuttons.

Knob Selector

Keylock

OPERATORS WITH CAPS

Mfg. Part No.	No. of Positions	Selector Type	Stock No.	Price 1-4
10250T1311	2	Knob	44K1639	59.52
10250T1323	3	Knob	44K1676	57.86
10250T3011	2	Lever	44K2876	57.86
OPERATORS WITH CAM				
10250T15112	2	Keylock	44K1769	118.42

2-POSITION SELECTOR SWITCHES

Mfg. Part No.	Circuitrt	Selector Type	Stock No.	Price 1-4
10250T20LB	SPDT-1NO/1NC	Lever	44K2473	117.31
3-POSITION SELECTOR SWITCHES				
10250T21LB	SPST-NO/1NO	Lever	44K2578	118.33

SWITCH ACCESSORIES CONTACTS BLOCK - WITH SCREW TERMINALS

Mfg. Part No.	Circuit	Stock No.	Price Each 1-4
10250T1	SPDT-1NO/1NC	44K1497	36.43
10250T2	DPDT-2NO	44K2440	36.43
10250T3	DPDT-2NC	44K2854	46.55
10250T51	SPST-NC	44K3626	23.31
10250T53	SPST-NO	44K3639	23.91

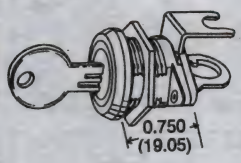
(136542)

HEAVY-DUTY ROTARY KEYLOCK SWITCH AND BRACKET

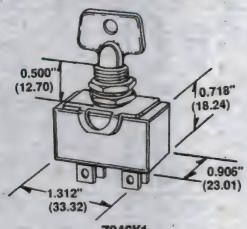
RoHS Compliant Available

EATON

Heavy-Duty



8980P28



7846K1

Mfg. part no. 7846K1 multiposition switch with quick-connect terminals. 20A @ 125V. Action is Off-On, DPST. Key can be removed when switch is in off postion. **Mfg. part no. 8980P28** rotary keylock switch and bracket converts 1- and 2-pole toggle switches with 15/32" dia. bushing to security lock switches. 2 nuts. 2 keys.

Mfg. Part No.	Description	Stock No.	Price Each 1-24	Price Each 25-49
● 7846K1	Heavy-Duty	46F1440	52.82	48.38
● 8980P28	Security Tumbler	46F1881	71.50	64.50

(5006)

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(212565)

CW SERIES 22MM FLUSH MOUNT SELECTOR AND KEYLOCK SWITCHES

RoHS Compliant Available

IDEC

- Only 39.9mm depth behind the panel. Space-saving design.
- ø22.3mm mounting hole compliant with IEC 60947-5-1
- Black and metallic bezels available
- Direct opening NC contact
- 10A contact rating
- UL Type 4X rating

Selector Switch

Key Operated Switch

SELECTOR SWITCHES (2 POSITIONS)

Mfg. Part No.	Contacts	Bezel	Spring Return Action	Stock No.	Price Each 1-9
● CW1S-2E11	SPST-NO, SPST-NC	Black	Maintained	59T4351	40.70
● CW4S-2E20	DPDT-NO	Metallic	Maintained	59T4377	43.92
● CW1S-21E01	SPST-NC	Black	From right	59T4352	34.01
● CW4S-21E11	SPST-NO, SPST-NC	Metallic	From right	59T4378	48.17
SELECTOR SWITCHES (3 POSITIONS)					
● CW1S-3E11	SPST-NO, SPST-NC	Black	Maintained	59T4353	41.09
● CW4S-3E20	DPDT-NO	Metallic	Maintained	59T4379	43.92
● CW1S-31E11N3	SPST-NO, SPST-NC	Black	From right	59T4354	45.33
● CW4S-31E11N3	SPST-NO, SPST-NC	Metallic	From right	59T4380	48.17
● CW1S-32E02	DPDT-NC	Black	From left	59T4355	45.33
● CW4S-32E11N4	SPST-NO, SPST-NC	Metallic	From left	59T4381	48.17
● CW1S-33E20	DPDT-NO	Black	Two-way	59T4356	45.33
● CW4S-33E11N4	SPST-NO, SPST-NC	Metallic	Two-way	59T4382	46.32
KEY OPERATED SELECTOR SWITCHES (2 POSITIONS)					
● CW1K-2AE11	SPST-NO, SPST-NC	Black	Maintained	59T4335	71.75
● CW4K-2AE20	DPDT-NO	Metallic	Maintained	59T4361	73.01
● CW1K-21BE01	SPST-NC	Black	From right	59T4336	74.27
● CW4K-21BE11	SPST-NO, SPST-NC	Metallic	From Right	59T4362	86.85
KEY OPERATED SELECTOR SWITCHES (3 POSITIONS)					
● CW1K-3AE11	SPST-NO, SPST-NC	Black	Maintained	59T4337	68.99
● CW4K-3AE20	DPDT-NO	Metallic	Maintained	59T4363	70.20
● CW1K-31DE11N3	SPST-NO, SPST-NC	Black	From right	59T4338	84.33
● CW4K-31DE11N3	SPST-NO, SPST-NC	Metallic	From right	59T4364	83.51
● CW1K-32DE02	DPDT-NC	Black	From left	59T4339	81.09
● CW4K-32DE11N4	SPST-NO, SPST-NC	Metallic	From left	59T4365	83.51
● CW1K-33DE20	DPDT-NO	Black	Two-way	59T4340	84.33
● CW4K-33DE11N4	SPST-NO, SPST-NC	Metallic	Two-way	59T4366	83.51
● CW1K-33DE40	4PST-NO	Black	Maintained	19X1185	82.48

(202391)

16mm SELECTOR AND KEYLOCK SWITCHES

RoHS Compliant Available

IDEC

Selector Switch

Compact units fit into 0.630" (16.00) mounting holes and have back panel mounting depth of less than 1.25" (31.75). Contacts can switch 1A maximum down to a low-level 1mA AC/DC, 5V. Contacts: gold-clad silver. Meet IEC enclosure IP65 classification as waterproof and oil-tight. Solder tab terminals. DPDT contacts. UL recognized, CSA certified, CE marked.

SELECTOR SWITCHES

Mfg. Part No.	Turning Radius	Positions	Shape	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-24	Price Each 25-49
● AS6M-2Y2P	90°	2	Round	74K3684	24.15	23.27	22.25	21.23
● AS6M-3Y2P	45°	3	Round	74K3685	24.57	23.69	22.65	21.63
● AS6Q-2Y2P	90°	2	Square	76K1008	24.42	23.54	22.51	21.48
AS6Q-3Y2P	45°	3	Square	96F4092	30.45	28.70	26.96	25.21
● AS6H-2Y2P	90°	2	Rectangular	74K3683	24.13	23.26	22.24	21.23
● AS6H-3Y2P	45°	3	Rectangular	96F4094	24.42	23.54	22.51	21.48
KEYLOCK SWITCHES								
● AS6M-2KT2PA	90°	2	Round	66M8381	39.11	34.94	33.20	31.64

➤CONTINUED➤

16mm SELECTOR AND KEYLOCK SWITCHES (CONT.)

PUSHBUTTON SWITCHES

Mfg. Part No.	Description	Color	Stock No.	Price Each 1-9	10-24	25-49
AB6M-M1-W	18mm Round	White	30B5596	12.04	11.73	11.34

(3413)

22mm SELECTOR SWITCHES

RoHS Compliant Available

IDEC

Knob Operated

Key Operated

Illuminated

HW series selector switches are rated 600VAC/DC, 10A. Mechanical life: 500,000 operations. All units listed are maintained action. Metal bezels are nickel-plated aluminum. Meets IEC IP65 and NEMA 4/4x/13 ratings. May be mounted in IDEC's one-to-five hole enclosures.

22mm SELECTOR SWITCHES

Mfg. Part No.	Circuitry	Pos.	Bezel	Operation	Stock No.	Price Each 1-24
HW1S-2TF11	SPDT-1NO/1NC	2	Plastic	Knob	26K1272	24.86
HW1S-2TF20	DPST-2NO	2	Plastic	Knob	74K3782	24.98
HW1S-2TF22	DPDT-2NO/2NC	2	Plastic	Knob	05N7545	54.58
HW1S-3TF11	SPDT-1NO/1NC	3	Plastic	Knob	05N7561	33.00
HW1S-3TF20	DPST-2NO	3	Plastic	Knob	78K5983	27.55
HW1S-3TF02	DPST-2NC	3	Plastic	Knob	05N7559	33.00
HW4S-2LF11	SPDT-1NO/1NC	2	Metal	Lever	06N0554	39.03
HW4S-2TF20	DPST-2NO	2	Metal	Knob	74K3799	29.08
HW4S-3TF20	DPST-2NO	3	Metal	Knob	74K3800	28.64
HW4S-3LF02	DPST-2NC	3	Metal	Lever	06N0573	38.42
22mm ILLUMINATED SELECTOR SWITCHES						
HW1F-2LF11QD-W-12V	SPST-1NO/1NC	2	Plastic	Knob	73R4794	66.09
HW1F-2F11QD-R-24V	SPST-1NO/1NC	2	Plastic	Knob	30B6710	62.49
HW1F-2F20QD-R-24V	DPST-2NO	2	Plastic	Knob	30B6753	62.49
HW1F-3LF11QD-W-12V	SPST-1NO/1NC	3	Plastic	Knob	73R4795	66.09
HW1F-3F11QD-R-24V	SPDT-1NO/1NC	3	Plastic	Knob	30B7050	60.09
HW1F-3F11QD-G-24V	SPST-1NO/1NC	3	Plastic	Knob	30B7046	62.49
HW1F-3F02QD-R-24V	DPST-2NC	3	Plastic	Knob	30B6982	60.09
HW4F-2F11QD-G-24V	SPDT-1NO/1NC	2	Metal	Knob	05N8272	63.74
HW1F-2F20QD-G-24V	DPST-2NO	2	Metal	Knob	30B6749	62.49
HW4F-3F02QD-G-24V	DPST-2NC	3	Metal	Knob	05N8491	61.88
HW4F-3F22QD-G-24V	DPDT-2NO/2NC	3	Metal	Knob	05N8599	82.09
22mm KEYED SWITCHES - MAINTAINED						
HW1K-2AF10	SPST-NO	2	Plastic	Key	74K3764	40.41
HW1K-2AF20	DPST-2NO	2	Plastic	Key	74K3765	47.19
HW1K-3AF11	SPDT-1NO, SPDT-NC	3	Plastic	Key	45T6930	63.00
HW1K-3AF20	DPST-2NO	3	Plastic	Key	74K3766	47.19
HW4K-2AF20	DPST-2NO	2	Metal	Key	74K3789	47.11
HW4K-3AF11	SPST-NO, SPST-NC	3	Metal	Key	45T6931	58.01
HW4K-3AF20	DPST-2NO	3	Metal	Key	74K3790	48.99
HW4K-3AF02	DPST-2NC	3	Metal	Key	05N9239	64.78

(13237)

22mm SELECTOR SWITCHES

RoHS Compliant Available

IDEC

Screw terminal units include insert, handle, operator, contact blocks. Black knob. Rated NEMA 1, 2, 3, 3R, 4, 4X, 5, 12, 13; IP65. Keylock only NEMA 1, 2, 3, 5, 13. UL listed, CSA certified.

KNOB ACTUATOR

Mfg. Part No.	Positions	Action	Circuitry	Stock No.	Price Each 1-9	10-24	25-49	50-99
ASW220	2	On-(On)	DPDT-2NO	74K3680	31.75	28.33	26.90	25.46
ASW320	3	On-(On)	2 SPST-NO	74K3681	31.75	28.33	26.90	25.46
ASW211	2	On-(On)	DPST-1NO/1NC	74K3679	31.75	28.33	26.90	25.46
ASW210	2	On-(On)	SPST-NO	74K3678	23.63	21.09	20.02	18.94
ASW3320	3	...	2 SPST-NO	74K3682	34.03	30.37	28.83	27.28

➤CONTINUED➤

22mm SELECTOR SWITCHES (CONT.)

LEVER ACTUATOR

Mfg. Part No.	Positions	Action	Circuitry	Stock No.	Price Each 1-9	10-24	25-49	50-99
ASW2L11	2	On-(On)	DPST-1NO/1NC	95B0329	31.60	28.19	26.76	25.32
KEYLOCK ACTUATOR								
ASW2K10	2	On-(On)	SPST-NO	15C5572	52.13	46.52	44.27	41.80
ACCESSORIES								
ASWHHY-B	Selector Knob, Black			95B0449	1.89	1.76	1.65	1.58

(3431)

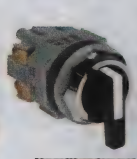
30mm SELECTOR SWITCHES

RoHS Compliant Available

IDEC

Knob Operator

Key Operator



Non-Illuminated Selector Switches

Illuminated Selector Switches

Standard size screw terminal units. Maintain posion. Key operator comes with 2 keys. Rated 600V/10A. Rated NEMA 1, 2, 3, 3R, 4, 4X, 5, 12, 13; IP65. UL listed, CSA certified and CE compliant.

NON-ILLUMINATED SELECTOR SWITCHES

Mfg. Part No.	Style	Circuitry	Stock No.	Price Each 1-9
ASD211N	Maintained, 2 position, knob	DPST-1NO/1NC	91F6264	41.51
ASD220N	Maintained, 2 position, knob	DPST-NO	74K3677	41.51
ASD2K20N	Maintained, 2 position, key	DPST-NO	74K3676	78.04
ASD2L10N	Maintained, 2 position lever	SPST-NO	15C3003	30.45
ASD2L11N	Maintained, 2 position lever	SPST-1NO/1NC	15C3004	39.22
ASD31L20N	Spring return from right, 3 position lever	SPDT	15C3119	51.42
ASD3L02N	Maintained, 3 position lever	DPDT-2NC	15C3086	39.60
ASD3L20N	Maintained, 3 position lever	DPDT-2NO	15C3091	51.22
ASD32L02N	Spring return from left, 3 position lever	DPDT-2NC	73R4771	49.44
ASD33L22N	Spring return two-way, 3 position lever	DPDT-2NO/2NC	15C3189	69.16
ILLUMINATED SELECTOR SWITCHES				
ASLD29911DN-G-24V	Maintained, 2 Position, full-voltage	SPST-1NO/1NC	15C3680	74.59
ASLD29911DN-R-24V	Maintained, 2 Position, full-voltage	SPST-1NO/1NC	15C3684	74.59
ASLD219920DN-R-24V	Spring return from right, 2 position, full-voltage	DPDT-2NO	73R4773	86.42
ASLD219920DN-G-24V	Spring return from right, 2 position, full-voltage	DPDT-2NO	73R4772	86.42
ASLD39920DN-R-24V	Maintained, 3 Position, full-voltage	DPDT-2NO	15C4103	74.59
ASLD39920DN-G-24V	Maintained, 3 Position, full-voltage	DPDT-2NO	15C4099	74.59
ASLD3312602DN-R	Spring return two-way, 3 position, full-voltage	DPDT-2NC	73R4775	103.01
ASLD3312602DN-G	Spring return two-way, 3 position, full-voltage	DPDT-2NC	73R4774	103.01

(3441)

2 POSITION - SRL SERIES ROTARY KEYLOCK SWITCHES

RoHS Compliant Available

LORLIN

Features:
- Silver plated brass contacts
- Spare keys are available for common key profile
- Each keyswitch is provided with two keys, random or common profile

Specifications:
- Switch rating: 5A at 115VAC
- Lock type: 5 disc
- Indexing: 90°
- Switch chamber: Polyester (PBT) V0 rated
- Keys: Nickel plated steel

KEYLOCK SWITCHES

Mfg. Part No.	Circuitry	Key Removal Position	Key Type	Stock No.	Price Each 1-49	50-99
SRL-5-D-D-2	SPDT-1NO/1NC	0, 1	Random	24M7805	8.77	7.94
SRL-5-D-S-2	SPDT-1NO/1NC	0, 1	Common	24M7806	8.94	8.09
SRL-5-E-D-2	SPDT-1NO/1NC	0	Random	24M7807	9.35	8.45
SRL-5-E-S-2	SPDT-1NO/1NC	0	Common	24M7808	8.94	8.09
SRL-5-L-D-2	DPDT-2NO/2NC	0, 1	Random	24M7809	9.35	8.45
SRL-5-L-S-2	DPDT-2NO/2NC	0, 1	Common	24M7810	8.77	7.94

➤CONTINUED➤

2 POSITION - SRL SERIES ROTARY KEYLOCK SWITCHES (CONT.)

Mfg. Part No.	Circuitry	Key Removal Position	Key Type	Stock No.	Price Each 1-49	Price Each 50-99
● SRL-5-M-D-2	DPDT-2NO/2NC	0	Random	24M7811	8.89	8.04
● SRL-5-M-S-2	DPDT-2NO/2NC	0	Common	03M4728	8.77	7.94

KEYS

Mfg. Part No.	Description	Stock No.	Price Each 1-49
● 901	Spare common keys (pair)	26M7868	4.77

(90618)

WRL SERIES SEALED KEYLOCK SWITCHES

RoHS Compliant Available

LORLIN

Features:
- Miniature key-operated Lock switch
- Single or Double pole
- Up to 200 key combinations
- Common keys available – keys to pass
- Keys are double entry
- Occupies small panel area
- Easily assembled through front of equipment panel
- Rear projection less than 30mm from panel
- Suitable for Marine Environment exposure to Severity 1(EN60068-2-52)

Specifications:
- Switch Rating: 5A at 115Vac; 3A at 50Vdc
- IP67 rating/waterproof
- Life: more than 10,000 cycles
- Operating temperature: -20##UndefTag-786##C to +65 ##UndefTag-786##C
- Proof voltage: 750Vdc (initial)
- Insulation resistance: 999MΩ at 500Vdc
- Contact resistance: 20mΩ (initial)
- Lock type: 5 disc
- Std. qty. of keys per lock: 2 brass - Ni plated
- Contact material: Brass CZ108 Ag plated
- Moulding material: Polyamide 6.6 UL94V0 rated
- Lock housing: Zinc-alloy bright Cr plated

Mfg. Part No.	No. of Poles	Indexing	Key Removal	Key Options	Stock No.	Price Each 1-24
● WRL-5-D-S-2	1	90°	1, 4	Same Key no. 901	50M5344	19.18
● WRL-5-M-S-2	2	60°	1	Same Key no. 901	95M0276	18.93

(116604)

A22R SEIRES SELECTOR / KEYLOCK SWITCHES

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Rated current: 10A
- Rated voltage: 240V
- Ambient temperature: Non-lighted type: -20 to +60##UndefTag-786##C , Lighted type: -20 to +50##UndefTag-786##C

SELECTOR SWITCHES

Mfg. Part No.	Contacts	Switch Position (°)	Stock No.	Price Each 1-9
● A22RS-2M-10	SPST-NO	28	86T5926	11.80
ILLUMINATED SELECTOR SWITCHES				
● A22RW-2MG-24A-10	SPST-NO	28	86T5929	42.53
● A22RW-2MR-24A-11	SPST-NO, SPST-NC	28	86T5931	51.58
KEYLOCK SWITCHES				
● A22RK-2M-10	SPST-NO	Left	86T5905	38.79
● A22RK-2ML-10	SPST-NO	Left or Right	86T5906	38.79

(202063)

CUSTOM ELECTRONIC ENCLOSURES

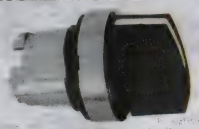
Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures

(212568)

XB4 SERIES 22mm NON-ILLUMINATED SELECTOR AND KEYLOCK OPERATORS

Schneider Electric



ZB4BD2

ZB4BG3

Quick installation. Operator locks into mounting collar and secures the operator in the enclosure. Contact blocks clip-on, up to 9 circuits. Self-grounding, tamper-proof, and anti-rotating.

STANDARD BLACK LEVER

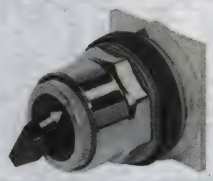
Mfg. Part No.	No. of Positions	Pos. 1	Pos. 2	Pos. 3	Stock No.	Price Each
ZB4BD2	2	Left, 45° Maint.	Right, 45° Maint.	...	17C7074	29.69
ZB4BD3	3	Left, 45° Maint.	Vert. Maint.	Right, 45° Maint.	17C7075	29.69
ZB4BD5	3	Left, 45° Mom.	Vert. Maint.	Right, 45° Mom.	17C8398	36.39
EXTENDED BLACK LEVER						
ZB4BJ2	2	Left, 45° Maint.	Right, 45° Maint.	...	17C8405	28.83
ZB4BJ3	3	Left, 45° Maint.	Vert. Maint.	Right, 45° Maint.	17C8406	29.98
ZB4BJ5	3	Left, 45° Mom.	Vert. Maint.	Right, 45° Mom.	17C8408	36.75
KEYLOCK OPERATORS						
ZB4BG2	2	Left, 45° Maint.	Right, 45° Maint.	...	17C7076	109.93
ZB4BG4	2	Left, 45° Maint.	Right, 45° Maint.	...	17C8403	109.93
ZB4BG3	3	Left, 45° Maint.	Vert. Maint.	Right, 45° Maint.	17C7077	107.20

(59681)

30mm NON-ILLUMINATED SELECTOR SWITCHES

SQUARE D by Schneider Electric

30mm round NEMA 4, 13, selector switches. 2 or 3 position maintained. Black knobs. *Order contact blocks separately on pages*



2 POSITION

Mfg. Part No.	No. of Poles	No. of Pos.	Contacts	Config.	Stock No.	Price Each Each	Price Each 2-4
9001KS11B	...	2	NO NC	X0 0X	97F9987	62.01	58.10
3 POSITION							
9001KS43B	1	3	NO NC	X00 00X	97F9988	61.12	57.27
9001KS45B	2	3	NO NC	0X0 X00	16B9561	70.14	65.72

(3396)

ALCOSWITCH COMMAND 164 SERIES SELECTORS & KEYLOCKS

RoHS Compliant Available

TE connectivity

Authorized Distributor

164P Selector

164J Keylock w/2 Keys

- Feature snap-acting double break gold plate over silver-clad contacts
- Rated 0.4VA at 20VDC or peak AC, 5A at 250VAC or 24VDC resistive
- 90° throw
- Contacts provide reliable operation at logic levels and for power switching applications
- Contacts electrically isolated from one another
- Life: 100,000 operations
- Temperature range: –20° to +70°C
- UL recognized

COMMAND 164 SERIES SELECTOR SWITCHES

Mfg. Part No.	No. of Poles	No. of Positions	Contacts	Description	Stock No.	Price Each 1-9	Price Each 10-24
● 164P2B11	2	2	1NO/1NC	...	30M8922	129.33	124.33
● 164P2B22	4	2	2NO/2NC	...	26M8341	68.28	65.46
● 164P3B22	4	3	2NO/2NC	Center Off	30M8923	151.99	146.11

➤ CONTINUED ➤

ALCOSWITCH COMMAND 164 SERIES SELECTORS & KEYLOCKS (CONT.)

COMMAND SERIES 164 KEYLOCK SWITCHES

Mfg. Part No.	No. of Poles	No. of Positions	Contacts	Description	Stock No.	Price Each 1-9	Price Each 10-24
164J2A11	2	2	1NO/1NC	Left	30M8919	203.31	195.45
164J2A22	4	2	2NO/2NC	Left	26M8340	126.92	122.01
164J2B22	4	2	2NO/2NC	Both	30M8920	215.29	206.96
164J3C22	4	3	2NO/2NC	All	30M8921	215.29	206.96

(4908)

ALCOSWITCH SKF AND SKT SERIES KEYLOCK SWITCHES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- **SKF-13 series** are 4-tumbler, SPST, medium-security switches
- Contacts: 1A at 120VAC resistive. Screw terminals
- Life: 10,000 cycles
- **SKT-33 series** are DPDT models
- Gold-plated contacts rated 0.4VA max. at 20VDC or peak AC
- Dielectric strength: 1000Vrms
- Solder lug terminals
- Two brass keys included.

SKF-13

SKT-33

Mfg. Part No.	No. of Poles	Positions	Key Removal	Stock No.	Price Each 1-24	Price Each 25-49
2SKF131AEL01	1	Off-On	Off	11F445	53.11	46.93
2SKF132AEL01	1	Off-On	Off or On	11F446	45.73	41.91
SKT331AEL01	2	On-None-On	On Posit. 1	11F450	65.00	58.00
SKT332AEL01	2	On-None-On	On or On	11F451	110.91	106.90

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
SK1323AEL01	Spare Key	11F440	13.08	12.60

(4912)

ALCOSWITCH SWK SERIES SECURITY KEYLOCK SWITCHES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- 2 Brass Keys Included
- **SWK-12** are 8-tumbler, SPST, high security models
- Contacts: 5A @ 115VAC resistive, 15A @ 24VDC resistive
- Life: 20,000 cycles
- **SWK-13/23** 5-tumbler, SPST, medium security
- Silver contacts rated 1A @ 120VAC; 4A @ 110VAC/28VDC.

SWK-12

SWK-13/23

Mfg. Part No.	No. of Positions	No. of Poles	Action	Key Removal	Stock No.	Price Each 1-24	Price Each 25-49
SWK12F315	2	1	On-Off	On or Off	57F2159	60.17	56.39
SWK121F315	2	1	On-Off	Off	61F845	55.72	51.34
SWK123F315	2	1	On-Off	On	61F846	55.35	50.98
2SWK131AL101	2	1	Off-On	Off	61F847	43.31	38.77
2SWK132AL101	2	1	Off-On	Off or On	61F848	32.37	29.68
2SWK231AL101	2	1	Off-(On)	Off	11F452	45.28	41.85

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-14	Price Each 15-24
SWK12KF315	Spare Key Fits All SWK-12	11F454	15.90	15.21
SWK1323AL101	Spare Key Fits All SWK-13	11F455	6.03	5.77

(4911)

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Affordable, performance board level & box build components at

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(212569)

LS-TITAN™ MINIATURE DIN LIMIT SWITCHES

RoHS Compliant Available

EATON

Features

- Modular, plug-in system (head and body components)
- Positive opening NC contacts for safety applications
- Wide variety of economical plastic and rugged metal versions available
- Operating heads can be rotated 90 degrees to suit specific direction of operation
- Unique electronic safety position switches (LSE models) provide analog (0–10 Vdc or 4–20 mA) outputs proportional to the actuator position and allow for easy configuration of a custom trip point
- Safety function by positive opening contacts per IEC/EN 60947-5-1 up to Category 4 per EN 954-1

MINI-PLASTIC SCREW TERMINATION 2NO

Mfg. Part No.	Actuator Type	Circuitry	Stock No.	Price 1-4
LS-S20A-S	Wobble Rod	DPDT-NO	84R6973	58.06
LS-S20A-RRM	Adjustable Rod	DPDT-NO	84R6972	55.80
LS-S20A-RR	Adjustable Rod	DPDT-2NO	84R6971	61.04
LS-S20A-RLA40R	Adjustable Roller	DPDT-NO	84R6970	79.38
LS-S20A-RLA40	Adjustable Roller	DPDT-NO	84R6969	58.63
LS-S20A-RLA	Adjustable Roller	DPDT-NO	84R6968	58.56
LS-S20A-RL	Rotary Lever	DPDT-NO	84R6967	52.49
LS-S20A-P	Top Roller Plunger	DPDT-NO	84R6966	47.13
LS-S20A-OR	Rod	DPDT-NO	84R6965	71.86
LS-S20A-LA	Angled Roller	DPDT-NO	84R6964	45.15
LS-S20A-L	Long Roller Lever	DPDT-NO	84R6963	44.66
LS-S02-S	Wobble Rod	2NC	84R6950	46.10
LS-S02-RRM	Adjustable Rod	2NC	84R6949	46.57
LS-S02-RR	Adjustable Rod	2NC	84R6948	49.18
LS-S02-RLA40R	Adjustable Roller	2NC	84R6947	67.14
LS-S02-RLA40	Adjustable Roller	2NC	84R6946	50.13
LS-S02-RLA	Adjustable Roller	2NC	84R6945	46.57
LS-S02-RL	Rotary Lever	2NC	84R6944	43.49
LS-S02-P	Top Roller Plunger	2NC	84R6943	35.93
LS-S02-OR	Rod	2NC	84R6942	66.50
LS-S02-LA	Angled Roller	2NC	84R6941	34.29
LS-S02-L	Long Roller Lever	2NC	84R6940	35.72
MINI-PLASTIC SCREW WITH 1NO & 1NC				
LS-S11S-S	Wobble Rod	SPDT-1NO/1NC	84R6962	45.14
LS-S11S-S	Wobble Rod	SPDT-1NO/1NC	84R6962	45.14
LS-S11S-RRM	Adjustable Rod	SPDT-1NO/1NC	84R6961	45.15
LS-S11S-RR	Adjustable Rod	SPDT-1NO/1NC	84R6960	45.63
LS-S11S-RLA40R	Adjustable Roller	SPDT-1NO/1NC	84R6959	66.99
LS-S11S-RLA40	Adjustable Roller	SPDT-1NO/1NC	84R6958	46.33
LS-S11S-RLA	Adjustable Roller	SPDT-1NO/1NC	84R6957	44.68
LS-S11S-RL	Rotary Lever	SPDT-1NO/1NC	84R6956	40.19
LS-S11S-P	Top Roller Plunger	SPDT-1NO/1NC	84R6955	34.25
LS-S11S-OR	Rod	SPDT-1NO/1NC	84R6953	59.58
LS-S11S-LA	Angled Roller	SPDT-1NO/1NC	84R6952	32.75
LS-S11S-L	Long Roller Lever	SPDT-1NO/1NC	84R6951	32.26
MINI-PLASTIC SCREW WITH 0-10 VDC ANALOG OUTPUT				
LSE-AU-S	Wobble Rod	Analog 0-10 V	84R6998	153.19
LSE-AU-RRM	Adjustable Rod	Analog 0-10 V	84R6997	153.19
LSE-AU-RR	Adjustable Rod	Analog 0-10 V	84R6996	156.02
LSE-AU-RLA40R	Adjustable Roller	Analog 0-10 V	84R6995	172.09
LSE-AU-RLA40	Adjustable Roller	Analog 0-10 V	84R6994	156.02
LSE-AU-RLA	Adjustable Roller	Analog 0-10 V	84R6992	153.19
LSE-AU-RL	Rotary Lever	Analog 0-10 V	84R6991	150.35
LSE-AU-P	Top Roller Plunger	Analog 0-10 V	84R6989	142.79
LSE-AU-OR	Rod	Analog 0-10 V	84R6988	169.25
LSE-AU-LA	Angled Roller	Analog 0-10 V	84R6987	141.85
LSE-AU-L	Long Roller Lever	Analog 0-10 V	84R6986	140.88
MINI-PLASTIC SCREW WITH 4-20 mA ANALOG OUTPUT				
LSE-AI-S	Wobble Rod	Analog 4-20 mA	84R6985	153.19
LSE-AI-RRM	Adjustable Rod	Analog 4-20 mA	84R6984	153.19
LSE-AI-RR	Adjustable Rod	Analog 4-20 mA	84R6983	156.02
LSE-AI-RLA40R	Adjustable Roller	Analog 4-20 mA	84R6981	172.09
LSE-AI-RLA40	Adjustable Roller	Analog 4-20 mA	84R6980	156.02
LSE-AI-RLA	Adjustable Roller	Analog 4-20 mA	84R6979	159.39
LSE-AI-RL	Rotary Lever	Analog 4-20 mA	84R6978	150.35
LSE-AI-P	Top Roller Plunger	Analog 4-20 mA	84R6977	142.79
LSE-AI-OR	Rod	Analog 4-20 mA	84R6976	169.25
LSE-AI-LA	Angled Roller	Analog 4-20 mA	84R6975	141.85
LSE-AI-L	Long Roller Lever	Analog 4-20 mA	84R6974	140.88

CONTINUED

LS-TITAN™ MINIATURE DIN LIMIT SWITCHES (CONT.)

MINI-METAL CAGE CLAMP TERMINATION WITH 1NO & 1NC

Mfg. Part No.	Actuator Type	Circuitry	Stock No.	Price 1-4
● LSM-11S-S	Wobble Rod	SPDT-1NO/1NC	84R7008	97.40
● LSM-11S-RRM	Adjustable Rod	SPDT-1NO/1NC	84R7007	98.34
● LSM-11S-RR	Adjustable Rod	SPDT-1NO/1NC	84R7005	97.40
● LSM-11S-RLA	Adjustable Roller	SPDT-1NO/1NC	84R7004	101.18
● LSM-11S-RL	Rotary Lever	SPDT-1NO/1NC	84R7002	103.21
● LSM-11S-P	Top Roller Plunger	SPDT-1NO/1NC	84R7001	93.29
● LSM-11S-LA	Angled Roller	SPDT-1NO/1NC	84R7000	89.32
● LSM-11S-L	Long Roller Lever	SPDT-1NO/1NC	84R6999	85.11

ACCESSORIES

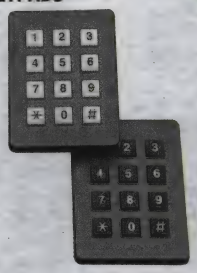
Mfg. Part No.	Description	Stock No.	Price Each 1-4
● M12A	12mm 4-Pin Male Receptacle	84R7009	30.99
● M12A5	12mm 5-Pin Male Receptacle	84R7010	48.99

(180410)

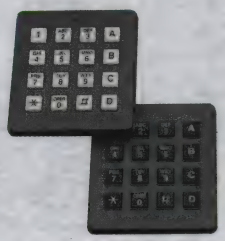
96 SERIES CONDUCTIVE RUBBER KEYPADS

RoHS Compliant Available

Grayhill



3 x 4



4 x 4

96 series are economical 3 x 4 and 4 x 4 conductive rubber keypads. 3 million operations per button. Compatible with high resistance logic circuitry and excellent operator feedback. Matrix circuitry. Rated for 5mA @ 12VDC for 0.5 sec. –30°C to +80°C operating temperature. Front (top) panel or rear (flush) panel mounting. Mfg. part nos. with **-102** and **-006** feature black-on-white legends. Mfg. part nos. **-152** and **-056** feature white-on-black legends. 4x4 legends are alphanumeric telephone plus A thru D; 3x4 are numeric telephone. Shielded versions also available. Also available with backlight; *go online or call.*

3 x 4 (2.7″ x 2.0″)

Mfg. Part No.	Mounting	Stock No.	Price Each 1-9	Price Each 10-24
● 96AB2-102-F	Front	14M6876	16.12	14.98
● 96AB2-102-R	Rear	14M6877	13.41	12.75
● 96AB2-152-F	Front	97F9127	15.17	13.97
4 x 4 (3.0″ x 2.2″)				
● 96BB2-006-F	Front	14M6878	18.33	17.03
● 96BB2-006-R	Rear	14M6879	17.73	16.34
● 96BB2-056-R	Rear	14M6880	17.27	16.41
● 96BB2-056-F	Front	97F9131	16.89	15.56

(5043)

PIEZO KEYPADS

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

12 and 16 Keypad Features
- Totally rugged with completely sealed metallic surface
- Water and dust proof, degree of protection IP 69K
- High lifetime of more than 20 million actuations
- Point illumination and flexible lettering layout possible

Specifications
- Max. switching voltage / current: 50VDC / 200mA
- Contact resistance ON / OFF: <7.5Ω / >5MΩ
- Dielectric strength: 2500V
- Duration of bounce: <1ms
- Breaking capacity: 600mW
- Operating temperature: -25°C to +85°C

Mfg. Part No.	Description	No. of Keys	Stock No.	Price Each
● 1068.1012.1110001	Non-Illuminated	12	53R0816	155.95
● 1068.1016.1110001	Non-Illuminated	16	53R0818	174.84
● 1068.1016.1112001	Point Illumination	16	53R0819	265.49

MOUNTING KITS

Mfg. Part No.	For Use With	Stock No.	Price Each
● 1068.1012.340	12-Key Keypad	53R0817	83.54
● 1068.1016.340	16-Key Keypad	53R0820	90.01

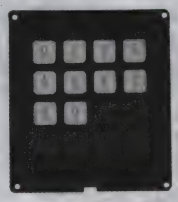
(178389)

88 SERIES SEALED FLANGE MOUNTED STANDARD KEYPADS

RoHS Compliant Available

Grayhill

-143



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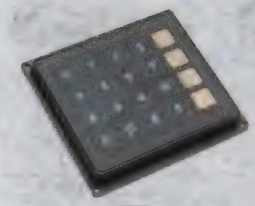

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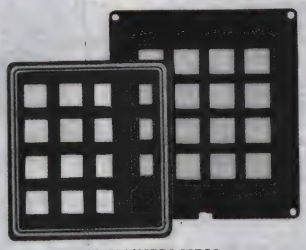


88-001/88BB2,88BC2

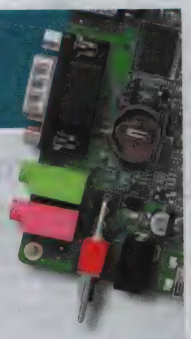
Specifications
- Rating at 24 Vdc: 10 milliamps, resistive
- Contact Resistance: Compatible with MOS, TTL and DTL (10 ohms maximum)
- Voltage Breakdown: 250 Vac between mutually insulated parts
- Life Expectancy: 3,000,000 operations per button
- Contact Bounce: Less than 4 milliseconds at make, 10 milliseconds at break
- Temperature: -40°C to +80°C
- Button Travel: 0.015″(0,38 mm) nominal total travel
- Typical Operating Force: 350 grams

Features
- Sealed keyboard
- Colorful graphic overlay
- Audible, snap-dome contact
- User legendable styles
- 3,000,000 operations per button
- Optional panel Seal gasket to protect your equipment
- Housing: ABS polycarbonate, black
- Graphic Overlay: Polyester
- Contact Dome: Stainless steel, selectively goldplated
- Terminals: Phosphor bronze

Mfg. Part No.	Keypad Array	Description	Stock No.	Price Each 1-14
● 88AB2-143	3 x 4	Telephone legend, Black on White buttons	11C9926	33.27
● 88AB2-152	3 x 4	Numeric legend, blue on white buttons	94F1298	33.27
● 88AB2-172	3 x 4	Numeric legend, white on blue buttons	14M6867	27.46
● 88BB2-082	4 x 4	Alpha-Numeric legend, white on red buttons	70B4266	38.43
● 88BB2	4 x 4	Blank Keypad	14M6869	29.35
● 88JB2	5 x 4	Blank Keypad	14M6870	40.97
88-101	3 x 4	Clear window overlay	92B3754	22.80
● 88-001	4 x 4	Clear window overlay	14M6866	20.16
88-201	5 x 4	Clear window overlay	94F6689	20.72
● 87AC2046	...	Legend sheet insert	81F2099	7.26
● 88M2001-2	3 x 4	Subpanel mounting seal gasket	94F1858	3.84
● 88M2009-2	4 x 4	Subpanel mounting seal gasket	94F1305	3.92
● 88M2019-1	5 x 4	Subpanel mounting seal gasket	94F1307	4.08
● 88M2012-1	3 x 4	Topsied mounting seal gasket	94F1859	5.08
● 88M2015-1	4 x 4	Topsied mounting seal gasket	94F1860	5.03
● 88M2018-1	5 x 4	Topsied mounting seal gasket	94F1306	5.16

(192370)

DEV KIT HQ™



Newest technology, Development Kits & Evaluation Boards from the best suppliers.

newark.com/dev-kits

(196526)

720GFX/ 720GFX-i SERIES SEALED AND RUGGED KEYPADS

RoHS Compliant Available

NEW

Features
- Keytop graphics can be easily configured / customised
- Supplied with numeric legend tiles (Set A)
- IP65 - sealed for use in wet or dirty environments
- Impact, shock and vibration resistant
- Available with integral, white light LED illumination (Storm 720GFX-i version)
- Keys are arranged on an X-Y matrix circuit
- Directly compatible with the Storm 450 and 450i USB keypad Interface

Specifications
- Insulation Resistance: 50 Mohms (min)
- Breakdown Voltage: 500 V AC (max 60 secs.)
- Switch Rating: 24V DC 50mA (max)
- Connector: 0.1″pitch, gold plated square pin
- Illumination: 5V +/- 10% at 13mA per key

Storm's 720TFX/ 720TFX-i Series keypads are tough, water resistant, & made with industrial grade polymer. These keypads feature tactile keys with 'snap-on' key caps. Keytop graphics can be easily customised by the location of thin plastic tiles under 'snap-on' transparent keycaps. Once snapped into place the tamper resistant keycaps encapsulate and protect the keytop graphics. The keypads are designed for use in harsh industrial environments. These keypads are also available with integral white light LED illumination for use in dark or partially lit locations. Available in standard 4,12 and 16 key formats.

720GFX SERIES

Mfg. Part No.	No. of Keys	Array	Stock No.	Price Each 1-9
7207-0410203	4	1 x 4 Matrix	18X9878	23.43
7207-1210203	12	3 x 4 Matrix	18X9880	33.68
7207-1610203	16	4 x 4 Matrix	18X9882	47.75
720GFX-i SERIES ILLUMINATED				
7207-041W203	4	1 x 4 Matrix	18X9877	28.11
7207-121W203	12	3 x 4 Matrix	18X9879	49.74
7207-161W203	16	4 x 4 Matrix	18X9881	63.92

ACCESSORIES

Mfg. Part No.	No. of Keys	Stock No.	Price Each 1-9
4500-003	Storm 450 Series USB Interface	08X3772	58.16
4500-103	Storm 450i USB Interface with audio control	08X3774	70.82
4500-013	USB Cable (USB A to 90° USB mini-B)	08X3773	5.40

(211967)

720TFX/ 720TFX-i SERIES SEALED AND RUGGED KEYPADS

RoHS Compliant Available

NEW

Features
- High contrast white keytops permanently laser engraved with black characters
- IP65 - sealed for use in wet or dirty environments
- Impact, shock and vibration resistant
- High contrast laser marked keytop characters
- Available with integral, white light LED illumination
- Raised 'home pip' to aid tactile navigation of the numeric keypads
- Keys are arranged on an X-Y matrix circuit
- Directly compatible with the Storm 450 and 450i USB keypad Interface

Specifications
- Contact Bounce: 5 ms (max)
- Contact Resistance: 100 ohms (max)
- Insulation Resistance: 50 Mohms (min)
- Breakdown Voltage: 500 V AC (max 60 secs.)
- Switch Rating: 24V DC 50mA (max)
- Connector: 0.1″pitch, gold plated square pin
- Illumination: 5V +/- 10% at 13mA per key

Storm's 720TFX/ 720TFX-i Series keypads are tough, water resistant, & made with industrial grade polymer. These keypads feature moving, tactile keys with a responsive 'over-centre' action. The keypads are designed for use in harsh industrial environments. High contrast white keytops are permanently laser engraved with black characters. These keypads are also available with integral white light LED illumination for use in dark or partially lit locations. Available in standard 4,12 and 16 key formats.

➤CONTINUED➤

720TFX/ 720TFX-i SERIES SEALED AND RUGGED KEYPADS (CONT.)

720TFX SERIES

Mfg. Part No.	No. of Keys	Array	Stock No.	Price Each 1-4
7203-04C0203	4	1 x 4 Matrix	18X9872	20.28
7203-12T0203	12	3 x 4 Matrix	18X9874	29.18
7203-16T0203	16	4 x 4 Matrix	18X9876	35.04
720TFX-i SERIES ILLUMINATED				
7203-04CW203	4	1 x 4 Matrix	18X9871	24.32
7203-12TW203	12	3 x 4 Matrix	18X9873	43.04
7203-16TW203	16	4 x 4 Matrix	18X9875	53.72

ACCESSORIES

Mfg. Part No.	No. of Keys	Stock No.	Price Each 1-9
4500-003	Storm 450 Series USB Interface	08X3772	58.16
4500-103	Storm 450i USB Interface 4500-10 with audio control	08X3774	70.82
4500-013	USB Cable (USB A to 4500-01 90° USB mini-B)	08X3773	5.40

(211966)

720 BLK SERIES SEALED AND RUGGED KEYPADS

RoHS Compliant Available

NEW

Features
- Top-Surface or Under-Panel Mountable
- High contrast laser marked keytop characters and colour coded function keys
- IP65 – sealed for use in wet or dirty environments
- Impact, shock and vibration resistant
- Directly compatible with the Storm 450 and 450i USB keypad Interface

Specifications
- Contact Bounce: 5 ms (max)
- Contact Resistance: 100 ohms (max)
- Insulation Resistance: 50 Mohms (min)
- Breakdown Voltage: 500 V AC (max 60 secs.)
- Switch Rating: 24V DC 50mA (max)
- Operational Life: 2 million cycles (min) per key
- Keytop Travel: 1.4mm nominal
- Actuation Force: 150 grams nominal
- Connector: 0.1″pitch, gold plated square pin

These tough, water resistant keypads feature moving, tactile keys with a responsive 'over-centre' action. High contrast white keytop characters are permanently laser marked on black polymer keys. Function keys are in an easily recognizable colour coded format to present a contemporary and visually striking keypad. Available in standard 4, 12 and 16 key formats.

Mfg. Part No.	No. of Keys	Array	Stock No.	Price Each 1-9
7202-0400203	4	1 x 4 Matrix	18X9868	21.30
7202-12T0203	12	3 x 4 Matrix	18X9869	32.16
7202-16T0203	16	4 x 4 Matrix	18X9870	43.43

ACCESSORIES

Mfg. Part No.	No. of Keys	Stock No.	Price Each 1-9
4500-003	Storm 450 Series USB Interface	08X3772	58.16
4500-103	Storm 450i USB Interface 4500-10 with audio control	08X3774	70.82
4500-013	USB Cable (USB A to 4500-01 90° USB mini-B)	08X3773	5.40

(211964)

INTEGRATED KEYPAD AND DISPLAY MODULE

RoHS Compliant Available

- Can be supplied with or without 20-character, 4-line illuminated LCD securely located behind a scratch-resistant polycarbonate window
- Available with engraved, chromed metal keys or laser-engraved, high-impact polymer keys
- Compatible with the STORM **420 series** RS-232 keypad interface

Developed for use in a wide range of industrial and commercial applications, this integrated keypad and display module is extremely tough. Ideal for manufacturing and heavy industries where data entry is required in harsh, dirty or outdoor environments.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
FT4K1003	Robust Without Display	88K1935	129.35
FT1K0803	Vandal-Resistant With Display	93K7576	239.14

➤CONTINUED➤

INTEGRATED KEYPAD AND DISPLAY MODULE (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● FT2K0503	Vandal-Resistant Polymer Keys, Without Display	20M6664	146.96
● FT2K0803	Vandal-Resistant Polymer Keys, With Display	20M6677	213.32

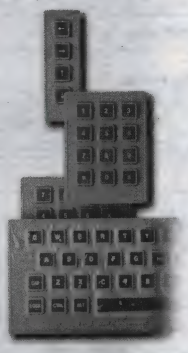
(69338)

700/900 SERIES KEYPADS FOR WET OR DIRTY ENVIRONMENTS

RoHS Compliant Available

Storm Interface

- Illuminated (900 Series) or Non-Illuminated (700)
- Interchangeable Keytop Legends
- Fast, Reliable Data Entry, Even When Keys are Struck Off Center
- Positive Tactile Response
- Easy to Clean and Decontaminate
- Top-Surface or Under-Panel Mountable
- Connector: 0.1″ Pitch Gold Plated, Square Pin Male with Locking Ramp
- Contact Circuit: Gold on Nickel Plated FR4 PC Board



A range of high-specification sealed keypads offering rapid and reliable data entry in extreme wet, dirty, or sterile environments. Storm® **700 and 900 series** keypads can be used individually or in combination to create more complex key panel layouts. **900 Series** illuminated keypads incorporate twin diode, dual color LEDs.

Mfg. Part No.	Description	Array	Stock No.	Price Each 1-9
● 70040203	4 Key	Black 1 x 4 Matrix	79K4503	32.24
● 70120103	12 Key	Gray 3 x 4 Matrix	50F9593	43.08
● 70120203	12 Key	Black 3 x 4 Matrix	50F9592	42.96
● 70160103	16 Key	Gray 4 x 4 Matrix	79K4504	55.70

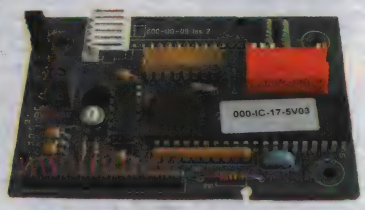
(6645)

420 SERIES RS-232 KEYPAD INTERFACE

RoHS Compliant Available

Storm Interface

- Overall dimensions: 89 x 66mm
- Input power: +5V ±0.25VDC
- RS232 output via 6 pin Molex 2.54mm (0.100″) Pitch KK® Series Connector
- Drives Powertip's 80 character LCD display from keypad



Storm **420 series** encoders provide an interface between keypads and host systems. Converting the matrix output from Storm keypads, the encoder sends RS232 output to a host system, via 6 pin (0.1″ pitch) connector. The **420 series** encoder can also be used to drive the LCD on Storm's integrated keypad and display unit. Alphanumeric data can be sent from the keypad to the display via the encoder. Additionally, data can be sent from a host system to the display via the encoder. The encoder board can be mounted directly onto Storm 12 and 16 way keypads, as well as Storm's integrated keypad/display unit.

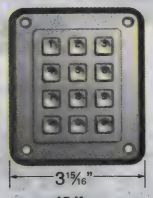
Mfg. Part No.	Description	Stock No.	Price Each 1-4
● 4200-003	RS-232 Keypad Interface	93K7640	89.60

(83943)

1000 SERIES KEYPADS FOR PUBLIC AND OUTDOOR ENVIRONMENTS

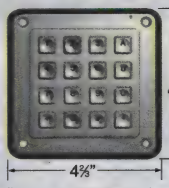
RoHS Compliant Available

Storm Interface



3 15/16″

12 Key (Telephone Format)



4 3/8″

4 3/8″

16 Key (Calculator Format)

IP67 SEALED

VANDAL RESISTANT

ESD PROTECTED

- Vandal Resistant
- Metal Casing and Keytops (Chromed)
- Fully Sealed to Meet IP67 Standards for Use in Exposed Outdoor Applications
- Engraved Keytop Characters
- Gold on Nickel Plated FR4 Contact PCB
- Operational Life >4 Million Cycles per Key
- –40°C to +100°C Operational Temperature

Case color is silver; keytop color is silver. Connector is 0.1″ pitch, gold plated, square pin, male with locking ramp. Accessories available below.

➤ CONTINUED ➤

1000 SERIES KEYPADS FOR PUBLIC AND OUTDOOR ENVIRONMENTS (CONT.)

Mfg. Part No.	Array	Description	Stock No.	Price Each 1-4
● 1K120103	3 x 4 Matrix	12 Key (Calculator Format)	79K4470	84.38
● 1K12T103	3 x 4 Matrix	12 Key (Telephone Format)	79K4469	82.71
● 1K16T103	4 x 4 Matrix	16 Key (Telephone Format)	10M8463	99.55

(6537)

6000 SERIES ALPHA-NUMERIC, ADA COMPLIANT KEYPADS

RoHS Compliant Available

Storm Interface

- Rugged, reliable and responsive data entry keypads
- Vandal resistant
- Weather resistant to IP65
- Large buttons for clarity and ease of use
- High contrast, laser engraved keytop graphics will not wear off over time
- Overall dimensions: 124 x 118 x 17mm
- Front plate: Brushed stainless steel
- Keys: Super high impact polymer

The **6000 series** keypad is perfectly suited for vending applications, access control devices, or any public data entry device. Large, brightly colored keys with raised tactile symbols ensure maximum usability by those with visual or mobility impairments. The **6000 series** features Storm's patented weather and vandal resistant switch technology, which allows these devices to be confidently deployed in the harshest outdoor/public environments. Available with integrated key illumination.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● 6000-MK0003	Mount Kit for 6000 Series	56J6124	9.81
KEYPAD CABLES			
● 1200-001003	Cable, PS2	29C7730	13.28
● 1200-002003	Cable, USB	29C7731	13.10

(83953)

STRIKEMASTER™ AXS KEYPADS FOR ACCESS CONTROL

RoHS Compliant Available

Storm Interface

- One- or two-door control
- Weather resistant for outdoor use (vandal resistant and robust spec.)
- Operational life >4 million cycles per key
- Indexing permits the secure allocation and re-allocation of PIN codes
- Forced door, anti-tamper and duress alarms
- Timed lockout for repeated invalid code input
- LED and audible tone status indication

DE1KT103

Secure, self-contained keypad and controller for electrically operated door locks and strikes. Authorized personnel use their PIN code to open either one or two normally locked doors. Up to 50 different 4-, 5-, or 6-digit codes can be individually programmed. Each code can be set to trigger an electric lock or strike for a pre-set time (allowing just one person to access); or to "latch" the door in an unlocked condition (requiring the code to be re-entered to "unlatch" or re-lock the door).

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● DE1KT103	Strike Master™, Vandal Resistant	93K7534	229.40
● DR2KT203	Strike Master™, Single Door Control	88K1897	195.77

(6543)

E50 SERIES HEAVY-DUTY ASSEMBLED LIMIT SWITCHES

UL CSA TÜV Rheinland

EATON

- Operator must be ordered separately
- Viton gasket seals
- Rugged zinc die-cast housing
- Conduit, cable and connector wiring options
- Dozens of operators available
- Rotary, top and side push, wobble and specialty operating heads

E50 series modular plug-in limit switches have standard Viton® gaskets, seals and boots and a zinc die cast enclosure to provide exceptional chemical resistance to the common coolants, cleansing agents, and hydraulic fluids. Super bright 24 to 120VAC/DC LED indicating light versions available. Mounting dimensions accommodate both U.S. and DIN standards. The switches have terminal identification on the nameplate for visual wiring checkout without guesswork. Heads and switch bodies can be replaced without rewiring. Keyed, four direction head positioning. Rotary heads are field convertible CW, CCW, or both, without special tools. Epoxy filled, pin connector or pigtail connector receptacles also available. Standard force to operate contact is 3in-lbs. Meets IEC.947.5.1 requirements. UL listed, CSA certified, TÜV approved. NEMA 4X, 6, 6P, 13, IP67 rated. *Order operators separately online or call.* Low force spring return (1.5in-lbs.) also available; *go online or call.*

HEAVY-DUTY LIMIT SWITCHES

Mfg. Part No.	Circuitry	Actuator Type	Connection	LED	Stock No.	Price 1-4
E50AR1	DPST-1NO/1NC	Side Rotary	1/2-in NPT Conduit	No	31K6171	200.28
E50BR1	4PST-2NO/2NC	Side Rotary	1/2-in NPT Conduit	No	31K6175	245.71

➤ CONTINUED ➤

E50 SERIES HEAVY-DUTY ASSEMBLED LIMIT SWITCHES (CONT.)

SPECIAL-PURPOSE HEAVY-DUTY LIMIT SWITCHES

Mfg. Part No.	Actuator Type	Features	Operating Force Max. (in.-lbs.)	Return Force Min. (in.-oz.)	Stock No.	Price 1-4
E50NN1	Side Rotary	Neutral Position	1.8	2.5	31K6208	248.93

(64793)

E50 SERIES LIMIT SWITCH COMPONENTS

EATON

Operator | Operating Head | Switch Body | Switch Receptacle

- Wide variety of operator types for rotary and wobble style limit switches
- Rollers and rods available in metal and nonmetal contact surfaces
- NEMX, 4X, 6, 6P, 13, IP67

Cutler-Hammer® operators are used with Eaton's **E50 series** plug-in and 6P+ limit switches and 10316 rotary type limit switches. Complete switch consists of an operator, operating head, body and receptacle. Standard force to operate is 3in-lbs. Low force spring return (1.5in-lbs.) also available; *go online or call*.

LIMIT SWITCH OPERATORS

Mfg. Part No.	Description	Dimensions in.(mm) Length	Dimensions in.(mm) Width	Stock No.	Price Each 1-9
E50KL200	Standard Nylatron Roller	1.5 (38.1)	0.32 (8.1)	31K6193	17.40
E50KL355	Standard Metal Roller	1.5 (38.1)	0.32 (8.1)	31K6199	17.19
E50KL201	Nylatron Adjustable Roller	1-3.75 (25.4-95.2)	0.32 (8.1)	31K6194	28.30
E50KL538	Metal Adjustable Roller	1-3.75 (25.4-95.2)	0.32 (8.1)	31K6205	28.90
E50KL537	Nylatron Adjustable Roller	1-3.75 (25.4-95.2)	1 (25.4)	31K6204	39.77
E50KL202	Metal Adjustable Rod	5.5 (140)	...	31K6195	27.25
E50KL220	Adjustable Rod	9 (229)	...	31K6196	28.60
E50KL226	Adjustable Rod	12 (305)	...	31K6197	28.60
E50KL556	Spring Rod	12.12 (308)	...	31K6206	27.30
E50KL421	Spring Rod	11.62 (295)	...	31K6202	28.60
E50KW2	Nylon Wobble Rod	3.1 (78)	...	31K6207	17.40

LIMIT SWITCH OPERATING HEADS

Mfg. Part No.	Description	Spring Return	Stock No.	Price 1-4
E50DL1	Side Rotary	Low Force	31K6177	99.73
E50DN1	Neutral Position	...	31K6178	87.33
E50DR1	Side Rotary	Standard	31K6179	76.87
E50DS2	Side Pushbutton	Adjustable	31K6180	126.85
E50DS3	Side Push Roller	Standard	31K6181	130.65
E50DT2	Top Pushbutton	Standard	31K6182	111.07
E50DT3	Top Push Roller	Standard	31K6183	120.25
E50DW1	Standard Wobble Head	Standard	31K6184	86.42

HEAVY-DUTY LIMIT SWITCH BODIES

Mfg. Part No.	Description	Circuitry	Mounting Type	Stock No.	Price 1-4
E50SA	Single Pole, Full Size	DPST-1NO/1NC	Panel	31K6213	103.23
E50SB	Double Pole, Full Size	4PST-2NO/2NC	Panel	31K6217	134.17
E50SN	Neutral Position	...	...	31K6221	146.54

HEAVY-DUTY LIMIT SWITCH RECEPTACLES

Mfg. Part No.	Description	No. of Terminals	Connection Type	Conduit Entrance	Stock No.	Price 1-4
E50RA20	Single Pole, Full Size	5	Screw Terminals	20mm	31K6210	24.10
E50RB	Double Pole, Full Size	9	Screw Terminals	1/2-in NPT	31K6211	35.19
E50RBS	Double Pole, Full Size	9	8' Pre-wired Cable	1/2-in NPT	31K6212	189.49

(84797)

MICRO SWITCH™ LIMIT SWITCHES 914CE SERIES MINIATURE PREWIRED ENCLOSED

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features:
- Rugged switch in miniature package
- Rugged zinc housing
- Sealed for use in indoor or outdoor applications

Applications:
- Machine tools
- Plastic molding equipment
- Off-road equipment
- Dock locks/leveling

Specifications:
- SPDT. UL Rating: 5 Amps, 1/10HP, 125 or 250VAC
- Last Digit in mfg. part no. = Cable length in ft.
- Dimensions: 1.74H x 0.63W x 1.58"D
- NEMA 1, 3, 4, 6, 6P, 13, IP65,66,67

Mfg. Part No.	Actuator Type	O.F. (lb)	Stock No.	Price Each 1-9
914CE1-3	Plunger	2.75	05M3035	79.07
914CE1-6	Plunger	2.75	05M3036	77.49
914CE1-9	Plunger	2.75	05M3037	84.18
914CE2-3	Roller Plunger	2.65	05M3046	85.95
914CE2-6	Roller Plunger	2.75	16M3470	83.65
914CE2-9	Roller Plunger	2.75	05M3047	99.63
914CE3-3	Cross Roller Plunger	2.75	23F2350	85.95
914CE3-6	Cross Roller Plunger	2.75	05M3052	92.67
914CE3-9	Cross Roller Plunger	2.75	23F2352	87.56
914CE16-3	Side Rotary	3 IN lb	16M3469	101.22
914CE16-6	Side Rotary	3 IN lb	05M3038	110.88
914CE16-9	Side Rotary	3 IN lb	05M3039	116.55
914CE18-3	Booted Plunger	5	05M3040	83.94
914CE18-6	Booted Plunger	5	05M3042	98.66
914CE18-9	Booted Plunger	5	99F7668	98.00
914CE20-3	Spring Wire Wobble	0.125	05M3048	103.26
914CE2-3A	Roller Plunger	2.75	05M3049	84.59
914CE2-Q	Roller Plunger	2.75	52F8849	82.10
914CE31-3L1	Top Roller Plunger	3.82	40B723	117.76

(2951)

MICRO SWITCH™ LIMIT SWITCHES EN SERIES ENVIRONMENT-PROOF

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

EN series limit switches offer environment-proof versatility for military, aerospace and commercial aircraft applications. Meet MIL-S-8805.

1EN1-6

622EN1-6

Mfg. Part No.	Current (A)	Circuitry	Operating Force (N)	Overtravel (mm)	Actuator Style	Termination	Stock No.	Price Each 1-9
1EN1-6	4	DPDT	53.38	6.35	Top Plunger	Wire Leaded	23F1831	243.25
1EN1-S	4	DPDT	53.38	6.35	Top Plunger	Screw	88F3731	504.18
1EN61-6	4	DPDT	53.38	6.35	Top Plunger	Wire Leaded	97B2434	462.16
622EN1-6	7	DPDT	53.38	3.18	Top Roller Plunger	Wire Leaded	23F2320	399.38
602EN109RB	...	SPDT	12	0.210	Plunger	...	39B8743	1010.20

(3411)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196538)

MICRO SWITCH™ LIMIT SWITCHES LS SERIES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features:
- Mode of operation is field adjustable
- Meets NEMA 1, 3, 4, 6 and 13 standards
- Wide choice of heads and actuators
- Captive screws

Specifications:
- Electrical Ratings: 10A at 120, 240, or 480VAC; ½HP at 120VAC; ¾HP a 240VAC
- Resistive Ratings: 0.8A @ 115VDC; 0.1A @ 550VDC
- Pilot Duty, 600VAC Max.

Mfg. Part No.	O.F.	P.T.	O.T.	Description	Stock No.	Price Each 1-5
● 1LS23	30in-oz	20°	30°	Side Rotary(Low-Torque)	23F1849	142.65
● 1LS1	4.5IN- lbs.	20°	30°	Side Rotary with 1.5″ Fixed Length Lever	53K5920	165.31
● 1LS1-L	4.5 IIN-bs.	20°	30°	Side Rotary with 1.5″ Fixed Length Lever	53K5921	165.31
● 1LS2	4.5 lbs.	20°	30°	Side Rotary with No Lever	53K5924	140.80
● 1LS9	4.5 lbs.	5°	30°	Side Rotary	23F1846	153.42
● 1LS19	4.5 lbs.	5°	30°	Side Rotary with 1.5″ Fixed Length Lever	53K5923	166.59
● 1LS56	15 IN-oz	5°	30°	Side Rotary with No Lever	53K5926	151.56
● 3LS1	9 lbs.	0.109	0.219	Side Roller Plunger	53K5932	190.13
● 2LS1	7 lbs.	0.065	0.25	Top Plunger Actuator	53K5928	153.59
● 5LS1	7 lbs.	0.065	0.219	Top Roller Plunger	23F2019	155.38
● 8LS1	5 oz.	1.125	...	Wobble Actuated Flexible Cable	23F4162	148.78
● 8LS3	5 oz.	1.125	...	Spring Rod	53K5970	156.28
● 208LS152	5 oz.	1.125	...	Coil Spring Wobble Lever Actuator	23F2277	160.85
● 1LS10	1.7 IN- lbs.	20°	30°	Adjustable Rod Actuator	23F1847	166.59
● 1LS3	4.5 lbs.	20°	30°	Side Rotary with 1.5″ Adj. Length Lever	53K5925	171.03

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-5
● 18PA1	Terminal Block for Plug-in Compact Limit Switches	53K5927	41.68
● 6PA121	1.5″ Standard Steel Roller Lever	23F2055	16.86
● 6PA63	13″ Adjustable Stainless Steel Rod Lever	23F2051	41.86
● 9PA15	Operating Head, Side Rotary, 1.5″ Lever	53K5971	88.50
● 9PA16	Operating Head, Side Rotary, No Lever	53K5972	66.92
● 9PA42	Operating Head, Wobble..Spring replacement for 8L5152	53K5973	117.86

(3409)

MICRO SWITCH™ LIMIT SWITCHES SL1 SERIES COMPACT

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features:
- Compact limit switches
- Long-life, small size
- Ideal for machine or equipment miniaturization
- Rugged zinc diecast housing
- Snap-in terminal enclosure
- Easy mounting and wiring

Specifications:
- Circuitry: SPDT
- Meet NEMA Enclosure Types 3, 4 and 13 and IEC Enclosure IP67
- Dimensions: 1.27H x 0.70W x 1.78″D (32.4 x 18 x 45.4)
- Operating temperature Range: -10°C to +70°C
- Electrical rating: 5A, 125/250VAC
- Gold plated contacts are rated at 0.1 A, 125VAC/30VDC and are denoted by a "K" in mfg. no. suffix

Mfg. Part No.	Actuator Style	Operating Force (g)	Over Travel (mm)	Stock No.	Price Each 1-9
● SL1-EK	Extended Top Roller Plunger	1200	3	05M1275	120.44
● SL1-H	Top Plunger	1200	3	05M1276	87.07
● SL1-A	Top Roller Plunger	1200	3	15M1945	98.83
● SL1-D	Cross Roller Plunger	1200	3	48F2821	110.76
● SL1-KK	Extended Cross Roller Plunger	1200	3	31M8020	147.01
● SL1-P	Short Roller Lever	400	4	05M1277	104.97

(3053)

MICRO SWITCH™ LIMIT SWITCHES GLL SERIES MINIATURE

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features:
- Double break, direct opening snap action contacts conform to IEC 60947-5-1-3
- EN50047 mounting
- Double insulated plastic housing
- Integral contact block
- Hinge cover for easy wiring access
- Sealing to IP66, NEMA 1, 12, 13

Specifications:
- Circuitry: 1NO/1NC direct opening snap action
- Electrical: AC15,A600, DC13 Q300: 10Amp Thermal
- Threaded conduit termination

Mfg. Part No.	Operating Force (N)	Pre-Travel	Conduit Thread	Actuator	Stock No.	Price Each 1-9
● GLLA01B	9.8	2.8mm	½″ NPT	Pin Plunger	16M4444	16.37
● GLLA01C	9.8	2.8mm	½″ NPT	Roller Plunger	16M4445	16.10
● GLLA01A1B	12	30°	½″ NPT	Roller Lever	16M4441	21.57
● GLLA01A2B	12	30°	½″ NPT	Adjustable Roller Lever	84K8710	18.45

(89496)

MICRO SWITCH™ LIMIT SWITCHES GLS SERIES MINIATURE GLOBAL

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features:
- Double break, direct opening contacts conform to IEC 60947-5-1-3
- EN50047 globally accepted mounting standard
- Sealing up to IP67/NEMA 4
- Suitable for most industrial applications and outdoor environments
- Full range of actuator heads and levers
- Snap action + slow action contact available
- Gold contacts are available for low energy switching

Specifications:
- Electrical; AC15, A300: DC13 Q300, 10 Amp Thermal
- Temperature; -40C to 85C (-40F to 185F) except wobble actuators -25C to 85C (-13F to 185F)
- Mechanical Life; 10 million operations except wobble actuators 0.5 million
- Vibration: 10g conforming to IEC 68-2-6
- Shock: 50g conforming to IEC 68-2-27
- ½' NPT conduit thread

Pin Plunger

Top Roller Plunger

GLS miniature global switches are designed to provide a complete range of globally approved products. Side rotary versions offer a unique dual bearing design, preventing side loading during application. Compact housing size is ideal for mounting where space is at a premium.

EN50047 METAL STANDARD

Mfg. Part No.	Circuitry	Operating Force (N)	Actuator Type	Stock No.	Price Each 1-5
● GLCA01E7B	SPDT-1NO/1NC	1.3	Wobble Coil Actuator	38B6288	47.34
● GLCA01A2B	SPDT-1NO/1NC	0.12	Adjustable Metal Roller Lever	38B6283	51.81
● GLCA01A2A	SPDT-1NO/1NC	0.12	Adjustable Nylon Roller Lever	38B6282	53.11
● GLCA01A4J	SPDT-1NO/1NC	0.12	Adjustable Metal Rod	38B6284	47.80
● GLCA01A1B	SPDT-1NO/1NC	0.12	Metal Roller Lever	38B6281	46.01
● GLCA01A1A	SPDT-1NO/1NC	0.12	Nylon Roller Lever	38B6280	46.01
● GLCA01D	SPDT-1NO/1NC	10	Top Roller Lever	38B6287	60.90
● GLCA01B	SPDT-1NO/1NC	16	Top Pin Plunger	38B6286	44.90
● GLCA01K8A	SPDT-1NO/1NC	0.9	Wobble Cat Whisker	38B6289	46.29
EN50047 DOUBLE INSULATED PLASTIC STANDARD					
● GLDA01E7B	SPDT-1NO/1NC	1.3	Wobble Coil Actuator	38B6431	37.86
● GLDA01A2A	SPDT-1NO/1NC	2	Adjustable Nylon Roller Lever	38B6422	34.47
● GLDA01A4J	SPDT-1NO/1NC	2	Adjustable Metal Rod	38B6425	40.97
● GLDA01A1A	SPDT-1NO/1NC	2	Nylon Roller Lever	38B6420	26.34
● GLDA01D	SPDT-1NO/1NC	10	Top Roller Plunger	38B6430	46.87
● GLDA01B	SPDT-1NO/1NC	16	Top Pin Plunger	38B6428	28.99
● GLDA01C	SPDT-1NO/1NC	16	Top Roller Lever	38B6429	34.40

(67047)

MICRO SWITCH™ LIMIT SWITCHES SZL-VL SERIES COMPACT

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6 Fig. 7

Features:
- Ideal for OEM machinery
- Rugged and reliable
- Capable of being mounted in space restricted applications
- Choose from a wide range of actuators to add additional flexibility.

Specifications:
- Diecast base and plastic cover
- Current rating: 5.0A / 0.4A
- Supply voltage: 250VAC / 125VDC
- SPDT-1NC/1NO; Double break
- Gold plated silver contacts
- Termination: Cable gland
- IP64 rated

Mfg. Part No.	Fig.	Circuitry	Operating Force (N)	Actuator	Stock No.	Price Each 1-9	Price Each 10-24
SZL-VL-A	1	SPDT-1NO/1NC	5.88	Standard Roller Lever	86C1107	23.66	23.04
SZL-VL-B	2	SPDT-1NO/1NC	3.35-7.84	Adjustable Roller Lever	72C9881	23.66	23.04
SZL-VL-D	3	SPDT-1NO/1NC	8.83	Top Plunger	86C1108	21.22	20.27
SZL-VL-H	5	SPDT-1NO/1NC	8.83	Roller Plunger	86C1112	25.01	24.32
SZL-VL-F	6	SPDT-1NO/1NC	0.88	Plastic Rod Coil Spring	58K9745	23.72	23.07
SZL-VL-G	7	SPDT-1NO/1NC	0.88	Coil Spring	86C1111	28.09	22.44

(85536)

MICRO SWITCH™ LIMIT SWITCHES E6/V6 COMPACT ENCLOSED

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features:
- Original Micro Switch over 50 years of installed base
- Precision switching mechanism
- Boot versions meet IP66, NEMA 1, 3, 4 for use in harsh applications
- Multiple actuators for design versatility
- Applications: Off road equipment, industrial machinery, refuse vehicles, balers\compactors

Specifications:
- SPDT switches are 15A @ 125, 250, or 480VAC and 2A @ 600VAC; 0.5A @ 125VDC and 0.25A @ 250VDC; ½ Hp @ 125VAC; ¼ Hp @ 250VAC
- DPDT switches are rated 10A @ 125 and 250VAC; 0.3A @ 125VDC and 0.15A @ 250VDC
- Switch body dimensions: 3.04L x 1.00W x 1.75"H
- Boot versions: NEMA 1, 3, 4; IP66
- Without seal boot: NEMA 1; 1P40
- Venpt Conduit
- Temperature: -32C to 71C (-24F to 160F)

Mfg. Part No.	Circuitry	Operating Force max. (N)	Over Travel in.(mm)	Features	Stock No.	Price Each 1-9
BZE6-2RN	SPDT	6.7	0.219 (5.56)	Side Mount w/Seal Boot	04M8405	55.03
BZE6-2RN-S	SPDT	6.7	0.219 (5.56)		38B3846	65.02
BZE6-2RN7	SPDT	6.7	0.219 (5.56)	1/e NPSM Conduit	04M8410	58.46
BZE6-2RN34	SPDT	10.9	0.219 (5.56)	#8 Mounting screws	04M8409	64.75
DTE6-2RN	DPDT	16.5	0.110 (2.80)	Low Temp -40C	23F4220	111.27
BZE6-2RQ	SPDT	3.7	0.219 (5.56)	Side Mount w/o Seal Boot	04M8412	54.06
BZE6-RQ8X2	SPDT-1NO/1NC	6.7	0.140 (3.55)	Side Mount Roller Plunger w/o Seal Boot	23F4292	123.40
BZE6-2RQ8*	SPDT	3.7	0.140 (3.55)		04M8415	60.96
BZE6-2RQ9†	SPDT	3.7	0.140 (3.55)		04M8417	78.66
DTE6-2RQ9	DPDT	13.4	0.125 (3.18)		23F5068	140.85
BZE6-2RN80	SPDT	6.7	0.219 (5.56)	Side Mount Roller Plunger w/Seal Boot	04M8411	78.05
BZE6-2RQ2	SPDT	5	0.219 (5.56)	Side Mount Roller Lever w/o Seal Boot	04M8413	66.65

CONTINUED

MICRO SWITCH™ LIMIT SWITCHES E6/V6 COMPACT ENCLOSED (CONT.)

Mfg. Part No.	Circuitry	Operating Force max. (N)	Over Travel in.(mm)	Features	Stock No.	Price Each 1-9
BZE6-2RN2	SPDT	5.6	0.219 (5.56)	Side Mount Roller Lever w/Seal Boot	04M8407	80.62
DTE6-2RN2	DPDT	13.4	0.219 (5.56)		04M8783	154.31
BZV6-2RN2‡	SPDT	5.6	0.219 (5.56)	Flange Mount Roller Lever w/Seal Boot	23F4219	94.47
BZE6-2RQ81	SPDT	3.7	0.140 (3.55)	Side Mount Cross Roller Plunger w/o Seal Boot	04M8416	78.66
BZE6-2RN28+	SPDT	5.6	0.219 (5.56)	Side Mount One-Way Roller w/Seal Boot	04M8408	98.03
BZE6-2RN18+	SPDT-1NO/1NC	2	UNL	Side Mount Coil Spring Wobble w/Seal Boot	04M8406	95.96
BZE6-2RN4+	SPDT	5.6	0.219 (5.56)	Side Mount Manual w/Seal Boot	23F4295	88.08

* Low temperature construction to -32°C; † Not CE compliant
‡ 8 mounting screws; + Push to reset
(2949)

MICRO SWITCH™ LIMIT SWITCHES BAF1 AND DTF2 SERIES HIGH-CAPACITY ENCLOSED PRECISION

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features:
- Meets NEMA 1,3,4 and 13 requirements
- Up to 20A capacity
- Zinc housing with 3-hole mounting

With Seal Boot, Left-Hand Actuator BAF1

Elastomer boot protects actuating mechanism and internal switch. Seal gasket between cover plate and the enclosures. Actuator position is "right" (**suffix-RH**) or "left" (**suffix-LH**) when looking at name plate. 4.00"L x 1.30"W x 2.16"H + actuator.

Mfg. Part No.	Circuitry	Current Rating (A)	Operating Force (N)	Mounting	Stock No.	Price Each 1-5	Price Each 6-14
PIN PLUNGER ACTUATOR							
BAF1-2RN-RH	SPDT	20	11.2	Flange	23F5036	121.74	116.05
DTF2-2RN-RH	DPDT-2NC/2NO	10	11.2	Screw Terminal	04M8785	192.03	165.66
DTF2-2RN-LH	DPDT-2NC/2NO	10	11.2	Screw Terminal	04M8784	192.03	170.37
TOP ROLLER PLUNGER ACTUATOR							
BAF12RQ9RH	SPDT	20	11.1	Screw Terminal	04M8338	150.90	...
ROLLER LEVER ACTUATOR							
BAF1-2RN2-LH	SPDT	20	8.9	Flange	23F5037	159.34	135.19
BAF1-2RN2-RH	SPDT	20	8.9	Flange	23F5038	159.34	129.94
COIL SPRING WOBBLE ACTUATOR — 15° PRE-TRAVEL							
BAF13CN18X1	SPDT-1NO/1NC	20	6.67	Flange	04M8339	240.11	...
BAF1-2RN18-RH	SPDT	20	...	Flange	53K5622	172.04	166.39
BAF1-2RN18-LH	SPDT	20	...	Flange	23F5039	146.04	137.77

(2952)

element14 COMMUNITY

Get inspired, collaborate, design, research, ask experts questions.

element14.com

(196546)

MICRO SWITCH™ LIMIT SWITCHES GL SERIES GLOBAL

RoHS Compliant Available

Honeywell
Sensing and Control

SELECTION, SPEED, SERVICE.
All Found Here.

Features

- Double break, direct opening normally closed contacts conform to IEC 60947-5-1-3
- EN50041 globally accepted mounting standard
- Suitable for industrial, indoor and outdoor applications
- Full range of actuator heads and levers
- Snap action or slow action contacts
- Gold contacts are available for low energy switching

Specifications

- Certified with Global Agencies for worldwide use
- Electrical; AC15, A600: DC13 Q300: 10 Amp Thermal
- Normally closed contacts are positive break
- Temperature range; -25C to 85C (-13F to 185F)
- Weather sealed to IP 67, NEMA 1, 4, 12, & 13
- Mechanical Life; 15 million operations
- Vibration; 10g conforming to IEC 68-2-6
- Mechanical Shock; 50g conforming to IEC 68-2-27
- ½ NPT conduit thread

Side Rotary

Mfg. Part No.	Fig.	Description	Stock No.	Price 1-9
● GLAA01B	1	Top Rod Plunger	95F9321	84.54
● GLAA01C	2	Top Roller Plunger	95F9322	89.99
● GLAA01D	3	Pin Plunger	95F9323	86.14
● GLAA01A	4	Side Rotary (less lever)	38B6212	84.54

*Levers not included with GLAA01A switch, choose a lever from GLZ lever chart

GLZ LEVERS FOR GLAA01A SWITCH

Mfg. Part No.	Roller Material	Roller Size	Radius	Mounting	Stock No.	Price Each 1-9
● GLZ51A	Nylon	0.75″ DIA x 0.28″ W	1.50″	Back	38B6881	18.13
● GLZ51B	Steel	1.59″ DIA x 0.28″ W	1.50″	Back	38B6882	13.04
● GLZ52A	Nylon	0.75″ DIA x 0.28″ W	1.5″ - 3.70″	Back	38B6884	18.44

(3546)

MICRO SWITCH™ LIMIT SWITCHES - HEAVY DUTY

RoHS Compliant Available

Honeywell
Sensing and Control

SELECTION, SPEED, SERVICE.
All Found Here.

Features:

- Robust switch
- Wide variety of actuators circuitry and body styles allows for design flexibility
- Low temp seals can be used outdoors
- Exceeds IP67 for harsh duty applications
- Applications: Material handling, agric. euip., off-road equip., industrial machinery
- Gold contacts are available for low energy switching

Specifications:

- Electrical: 10 Amp Thermal
- Single Pole: AC15, A600; DC13 R300
- Double Pole: AC15, B600; DC13 R300
- Size: 4.69 ″(H) x 1.88″ (W) x 1.78″ (D)
- (On) = Momentary; On = Maintained
- Sealing; IP 65, 66, 67; NEMA 1, 3, 4, 4X, 6, 6P, 12, 13

Side rotary limit switch heads can be field-adjusted in four positions and actuators can be field-adjusted for CW, CCW or both operations. Corrosion-resistant zinc head and body are epoxy-finished. Stainless steel side rotary shaft . NEMA 1,3,4,4X, 6,6P,13. *Order levers for rotary actuated switches separately online or call.* Manifold-mount, low temperature, fully-potted, preleaded, gravity-return stainless steel, quick connect, viton steel, wobble, and other limit switch versions available; *go online or call.*

Mfg. Part No.	Circuitry	Function	Operating Force (N)	Pre-Travel	Actuator Style	Stock No.	Price Each 1-14
● LSA1A	SPDT-1NO/1NC	(On)	0.45	15°	Side Rotary	23F4784	105.59
● LSA1E	SPDT-1NO/1NC	(On)	0.45	15°	Side Rotary	23F4788	136.28
● LSA3K	SPDT-1NO/1NC	(On)	0.45	15°	Side Rotary	53K5743	128.87
● LSA5A	SPDT-1NO/1NC	(On)	0.45	15°	Side Rotary	05M0535	150.52
● LSB1A	SPDT-1NO/1NC	(On)	0.28	25°	Top Rotary	53K5746	170.36
● LSH1A	SPDT-1NO/1NC	(On)	0.19	9°	Side Rotary	05M0539	137.48
● LSN1A	SPDT-1NO/1NC	On-(On)	0.45	65°	Side Rotary	23F4824	149.50
● LSP1A	SPDT-1NO/1NC	(On)	0.45	9°	Side Rotary	53K5753	132.55
● LSP3K	SPDT-1NO/1NC	(On)	0.45	9°	Side Rotary	53K5754	135.58
● LSM6D	DPDT-2NO/2NC	(On)	0.45	18°	Side Rotary	53K5752	149.58
● LSM7N	DPDT-2NO/2NC	(On)	0.45	18°	Side Rotary	23F4823	161.87
● LSM2D	DPDT-2NO/2NC	(On)	0.45	18°	Side Rotary	53K5751	157.53
● LSA2B	DPDT-2NO/2NC	(On)	0.45	15°	Side Rotary	23F4790	144.74
● LSA6B	DPDT-2NO/2NC	(On)	0.45	15°	Side Rotary	53K5745	163.86
● LSA7L	DPDT-2NO/2NC	(On)	0.45	15°	Side Rotary	23F4795	181.67
● LSC1A	SPDT-1NO/1NC	(On)	17.79	0.07in	Plungerin	53K5747	142.61
● LSW1A	SPDT-1NO/1NC	(On)	26.69	0.10in	Plungerin	23F4839	172.07
● LSD1A	SPDT-1NO/1NC	(On)	17.79	0.07in	Plungerin	53K5748	155.65
● LSF1A	SPDT-1NO/1NC	(On)	26.69	0.10in	Plungerin	23F4807	168.12

(3503)

MICRO SWITCH™ LEVERS FOR ROTARY-ACTUATED SWITCHES

RoHS Compliant Available

Honeywell
Sensing and Control

SELECTION, SPEED, SERVICE.
All Found Here.

Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5

Mfg. Part No.	Fig.	Description	Radius	Mounting	Stock No.	Price Each 1-9
● LSZ52D	1	Adjustable Radius, Steel Roller Lever (0.75″ Diameter; 0.25″ Width)	1.5″-3.5″	Front	53K5770	19.44
● LSZ52A	1	Adjustable Radius, Nylon Roller Lever (0.75″ Diameter; 0.25″ Width)	1.5″-3.5″	Back	23F4867	19.00
● LSZ52C	1	Adjustable Radius, Nylon Roller Lever (0.75″ Diameter; 0.25″ Width)	1.5″-3.5″	Front	53K5769	18.93
● LSZ52B	1	Adjustable Radius, Steel Roller Lever (0.75″ Diameter; 0.25″ Width)	1.5″-3.5″	Back	53K5768	24.08
● LSZ54	1	Adjustable Radius Roller Lever (Hub Only)	...	...	23F4874	17.11
● LSZ52J	1	Adjustable Radius, Nylon Roller Lever (1.0″ Diameter; 0.25″ Width)	1.5″-3.5″	Front	23F4871	34.83
● LSZ52K	1	Adjustable Radius, Nylon Roller Lever (1.5″ Diameter; 0.25″ Width)	1.5″-3.5″	Front	23F4872	28.47
● LSZ68	2	Delrin Rod with Spring (0.25″ Diameter)	12″	...	53K5772	26.99
● LSZ54N	3	Stainless Steel Rod Actuator	13″	...	23F4876	24.08
● LSZ54R	3	Spring Wire Actuation Lever	12″	...	23F4877	19.01
● LSZ54M	3	Aluminum Rod Actuation Lever	5.5″	...	23F4875	24.08
● LSZ51B	4	Standard Steel Roller Lever (0.75″ Diameter; 0.25″ Width)	1.5″	Front	23F4862	13.82
● LSZ51A	4	Standard Nylon Roller Lever (0.75″ Diameter; 0.25″ Width)	1.5″	Front	53K5766	18.08
● LSZ51D	4	Standard Steel Roller Lever (0.75″ Diameter; 0.25″ Width)	1.5″	Back	53K5767	15.41
● LSZ51C	4	Standard Nylon Roller Lever (0.75″ Diameter; 0.25″ Width)	1.5″	Back	23F4863	13.30
● LSZ61	5	Flexible Nylon Loop	6″	...	53K5771	19.00

OPERATING HEADS

Mfg. Part No.	For Use With	Stock No.	Price Each 1-9	Price Each 10-49
● LSZ1JGN	Honeywell HDLS Series Limit and Enclosed Switches	39B462	96.80	78.95
● LSZ7A6B	Honeywell HDLS Series Limit and Enclosed Switches	23F4857	144.94	118.19

(3504)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196562)

ENCLOSED LIMIT SWITCHES

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

ZE series enclosed limit switches feature large switching capacity and long service life, with a mechanical life of 10 million operations minimum. Rated: 15A @ 125 and 250VAC, and 10A @ 480VAC. Sealed die-cast housing with side mounting design. Operating temperature range: –14°F to +176°F. Dimensions 3.4W × 1.0"D (86W × 25.4mmD); for height, *see table below*. Meets IEC enclosure IP65 classification and NEMA enclosure types 1, 2, 3, 4, and 5. UL recognized, CSA certified.

Coil Spring

* O.F. = Operating Force

Mfg. Part No.	Height	Actuator Type	O.F.*	Stock No.	Price Each 1-9
ZE-N-2S	2.8" (71)	Pin Plunger	800g	52F4216	67.45
ZE-N22-2S	2.9" (74)	Roller Plunger	500g	52F4217	87.19
ZE-NA2-2S	2.9" (74)	Roller Lever	640g	52F4218	84.46
ZE-NJ-2S	4.0" (101)	Coil Spring	150g	18M7860	87.19

(3033)

COMPACT PRE-WIRED ENCLOSED SWITCHES

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

D4C series limit switches feature rugged die-cast housing and triple-sealed construction for harsh environments. Accept loads of up to 5A @ 250VAC. Units come pre-wired with 9.8' (3M) of SJTO cable. Slim profile body: 1.96H × 1.57W × 0.62"D (50H × 40W × 16mmD) for easy gang-mounting. Mechanical life: 10 million cycles minimum. Meets IP67 and NEMA types 3, 4, and 13. UL listed, CSA certified.

Roller Lever

Mfg. Part No.	Actuator Type	Operating Force	Stock No.	Price Each 1-9
D4C-1601	Pin Plunger	1.2kg	18M7247	108.98
D4C-1602	Roller Plunger	1.2kg	18M7248	108.98
D4C-1603	Cross Roller Plunger	1.2kg	18M7249	107.83
D4C-1620	Roller Lever	580g	18M7250	131.00
D4C-1631	Sealed Pin Plunger	580g	37B9883	95.23

(3025)

WL SERIES ROBUST GENERAL-PURPOSE LIMIT SWITCHES

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Rugged Diecast Housing
- High Mechanical Strength
- Oiltight, Waterproof, Dustproof Construction

Roller Lever

UL listed, CSA certified, CE compliant, TÜV and Swiss approved.

Mfg. Part No.	Actuator	Stock No.	Price Each 1-9
WLCA2-TS	Roller Lever, Short (38mm Radius)	18M7818	113.45
WLCA12-TS	Adjustable Roller Lever	35C0654	133.50
WLCL-TS	Adjustable Rod Lever (140mm)	35C0656	123.16
WLD-TS	Top Plunger	35C0657	113.44

(69560)

DIVERSE GENERAL PURPOSE LIMIT SWITCHES

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Oiltight, Watertight Construction Meets NEMA 3, 4, 4x, 6P and 13
- Convenient Front Mounting, Easy Installation and Maintenance
- Wide Temperature Range: -40°C to 100°C (-40°F to 212°F)
- UL Listed, CSA Certified

Standard Side Rotary

Mfg. Part No.	Description	Contacts	Stock No.	Price Each 1-9
D4A-1101N	Standard Side Rotary	SPDT Double Break	35C0456	104.89
D4A-2501-N	Standard Side Rotary	DPDT Double Break	92B4196	174.03
D4A-2918-N	Center Neutral Operation	DPDT Double Break	50B6285	190.70

LEVERS FOR D4A-N SIDE ROTARY SWITCHES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
D4A-A00	Standard Roller Levers, Front Mount	18M7236	22.81
D4A-C00	Adjustable Roller Lever, Front Mount	35C0454	28.60
D4A-D00	Adjustable Rod Lever	18M7237	26.77

(69561)

9007MS SERIES LIMIT SWITCHES MINIATURE POTTED 39MM METAL BODY

RoHS Compliant Available

SQUARE D by Schneider Electric

- Contact Configuration: SPDT-1NO/1NC
- Current rating: 10A
- Voltage rating: 240VAC, 28VDC
- NEMA Types: 1, 2, 4, 6, 6P, 12, 13
- IEC Types: IP67
- -40°F to +221°F (-40°C to +105°C)
- Extended temp range version available
- Bottom or side cable entry and strain relief. Connector options available. Full range of 12 operating heads

9007 (MS) miniature switches meet the need for very small, enclosed switches with environmental sealing. Housings are rugged diecast zinc construction. Excellent sealing is achieved with an epoxy compound encapsulation of the electrical cable connections and switch housing. The 9007 MS limit switches have a full range of styles available, including top push plunger, parallel roller plunger, cross roller plunger, rotary lever and omni-directional whisker. Factory pre-wiring with industrial grade cable (type SJTO) eliminates the need to remove the cover to wire the switch. Bottom or side entrance cable connections and bottom or side connectors are available along with a symmetrical design and top mounting holes for easy gang mounting of several switches for multiple switching.

Mfg. Part No.	Actuator Style	Switch Terminal/ Length	Actuation	Stock No.	Price Each
9007MS01S0100	Top Plunger	/3ft/18AWG	Vertical	17B1637	118.51
9007MS01S0300	Top Plunger	/9ft/18AWG	Vertical	17B1639	138.12
9007MS01S0500	Top Plunger	/18ft/18AWG	Vertical	17B1641	166.22
9007MS02S0100	Parallel Roller Plunger	/3ft/18AWG	Horizontal/ Parallel	17B1643	133.58
9007MS02S0102	Parallel Roller Plunger	/3ft/16AWG	Horizontal/ Parallel	17B1644	147.43
9007MS02S0300	Parallel Roller Plunger	/9ft/18AWG	Horizontal/ Parallel	17B1647	158.53
9007MS03S0100	Parallel Roller Plunger	/3ft/18AWG	Horizontal/ Cross	17B1649	138.12
9007MS04S0202	Rotary Lever Arm	/6ft/16AWG	CW/CCW	20K6879	186.10
9007MS04S0400.	Rotary Lever Arm	/12ft/18AWG	CW/CCW	17B1655	223.56
9007MS10S0300	Top Plunger	/9ft/18AWG	Vertical	50B7873	152.37

ACCESSORIES LEVER ARMS

Mfg. Part No.	Description	Stock No.	Price Each
7A1	Cast metal lever arm 1.50 inches long, with 0.75 dia. X 0.25" wide steel roller	16B6210	21.72
7A1N	Cast metal lever arm 1.50 inches long, with 0.75 dia. X 0.25" wide nylon roller	16B6211	20.68
7A3N	Cast metal lever arm 1.38 inches long, with 0.75 dia. X 0.25" wide nylon roller	16B6213	21.72
7A4N	Cast metal lever arm 2.00 inches long, with 0.75 dia. X 0.25" wide nylon roller	16B6214	35.91
7B1N	Cast metal lever arm 1.50 inches long, with 0.75 dia. X 0.50" wide nylon roller	16B6218	20.68
7D	Adjustable length1.38-3.38 inches long cast metal lever arm with 0.75 dia. X 0.25" wide steel roller	16B6221	34.30
7DN	Adjustable length1.38-3.38 inches long cast metal lever arm, with 0.75 dia. X 0.25" wide nylon roller	16B6222	34.53
7E	Adjustable clamp with Stainless steel rod 10 inches long, 0.125" dia.	16B6223	34.53

CONTINUED

9007MS SERIES LIMIT SWITCHES MINIATURE POTTED 39MM METAL BODY (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
● 7S	Nylon spring rod 6 inches long, 0.30″ dia.	16B6230	35.91
● 7XA1	Cast metal lever arm 1.50 inches long, with 0.75 dia. X 0.25″ wide steel roller	81C2012	20.68

(197160)

XCS SERIES SAFETY LIMIT SWITCHES

RoHS Compliant Available

Schneider Electric

- Tamper resistant cover prevents tampering with mounting, wiring, and repositioning of the operating head
- Red color makes them easily identifiable as a safety related component
- 2 N.C. contacts provide electrical redundancy
- Small size allows easy installation even in cramped spaces

Safety limit switches are for use on gates and guards for safety related applications. They can also be used for end of travel or overtravel notification to the safety related system, as well as for positioning prior to allowing a machine or process to start.

XCSM

XCSD

XCS M SERIES MINIATURE SAFETY LIMIT SWITCHES - METAL BODY WITH 2M CABLE

Mfg. Part No.	Actuator	Contacts	Stock No.	Price Each
● XCSM3702L2	Steel Roller Plunger	1 N.O. + 2 N.C.	41T3198	191.64
● XCSM3715L2	Plastic Roller Lever	1 N.O. + 2 N.C.	20K4652	175.68
● XCSM3716L2	Metal Roller lever	1 N.O. + 2 N.C.	41T3199	178.76
XCS D SERIES COMPACT SAFETY LIMIT SWITCHES - METAL BODY WITH 1/2″ NPT CONDUIT CONNECTION				
● XCSD3702N12	Steel Roller Plunger	1 N.O. + 2 N.C.	20K4642	132.53
● XCSD3718N12	Plastic Roller Lever	1 N.O. + 2 N.C.	20K4643	120.20
● XCSD3719N12	Metal Roller lever	1 N.O. + 2 N.C.	34M0382	132.53
XCS D SERIES COMPACT SAFETY LIMIT SWITCHES - PLASTIC BODY WITH 1/2″ NPT CONDUIT CONNECTION				
● XCSP3710N12	Metal Plunger	1 N.O. + 2 N.C.	41T3201	89.38
● XCSP3702N12	Steel Roller Plunger	1 N.O. + 2 N.C.	41T3200	104.79
● XCSP3719N12	Metal Roller lever	1 N.O. + 2 N.C.	41T3202	104.79

(196173)

9007C LIMIT SWITCHES

Schneider Electric

- Rated NEMA 6P and UL Type 6P
- Heavy-Duty Industrial SPDT Double-Break Contacts
- Rated 10A @ 600VAC/DC Continuous Current
- 4-Position Indexing Head
- Plungers Have a Pre-Travel of 0.08″ and a Total Travel of 0.25″
- Standard Lever Arm Units Have a Pre-Travel of 10° and Total Travel of 90°
- Low differential units have a pre-travel of 5° and a total travel of 90°
- Lever arms and replacement parts ordered separately

Standard Box Switch with 2½″ Roller Lever

STANDARD BOX PLUG-IN TYPES

Mfg. Part No.	Circuitry	Style	Actuator	Stock No.	Price Each
9007C54A2	SPDT-1NO/1NC	Lever Actuator	Low Differential	17B1398	267.61
9007C54B2	SPDT-1NO/1NC	Lever Actuator	Std. Pre-Travel	16F2866	253.07
9007C54D	SPDT-1NO/1NC	Side Push Rod Plunger	Roller Plunger	96F3437	251.24
9007C62B2	DPDT-2NO/2NC	Lever Actuator	Std. Pre-Travel	16F2867	304.37
9007C68T10	4PST-2NO/2NC	Lever Actuator	Std. Pre-Travel	17B1475	318.75
COMPACT BOX PLUG-IN TYPES					
9007C52B2	SPDT-1NO/1NC	Lever Actuator	Std. Pre-Travel	17B1379	252.04

* Neutral Position
(2734)

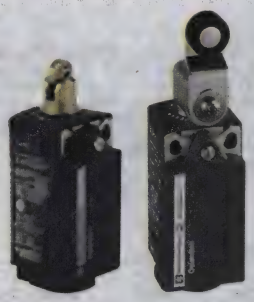
IEC OSISENSE LIMIT SWITCHES XCKP COMPACT MODULAR 31MM WIDE PLASTIC BODY

RoHS Compliant Available

Telemecanique Sensors

Features
- Product types include miniature, compact, and industrial switches for general, medium, and heavy-duty applications
- Offering Metal and Plastic enclosures for the most demanding applications
- Small enclosure styles for mounting in tight spaces
- Multiple head and lever types to fit a wide variety of application requirements
- Meet the International Electrotechnical Commission (IEC) standards , NEMA, UL, CSA, VDE and more.

Specifications
- Enclosure Rating: NEMA 1/2/4/6/6P/12/13, IP66, IP67
- Contact Configuration: 1 N.O./1 N.C.
- Contact operation: snap action
- Body material: zinc alloy
- Operating temperature range: -25°C to 70°C



OsiSense® XC Limit Switches detect objects by physical contact. Limit Switches are placed in the application such that an object moves an operating head, or lever. Depending on the position of the lever, the switch contacts will be actuated or not. Advantages of OsiSense® XC Limit Switches are they are suitable for targets that will not deform, regardless of shape, type, composition, or color. XC Limit Switches are rugged products that are intuitive and easy to install.

Mfg. Part NO.	Actuator Style	Contact Current (A)	O. F max. (N)	Termination	Stock No.	Price Each
● XCKP2106N12	Wobble Cat Whisker	10	0.13	Screw Clamp	89H6577	89.39
● XCKP2110N12	Top Plunger	10	15	Screw Clamp	89H6578	69.06
XCKP2118N12	Roller Lever	10	0.1	Screw Clamp	89H6580	76.42
● XCKP2127N12	Roller Lever Plunger	10	6	Screw Clamp	89H6582	93.71
● XCKP2145N12	Adjustable Roller	10	0.1	Screw Clamp	89H6584	86.51

(179651)

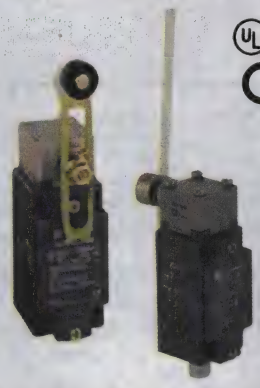
IEC OSISENSE LIMIT SWITCHES XCKJ HEAVY DUTY SEMIMODULAR 40MM METAL BODY

RoHS Compliant Available

Telemecanique Sensors

Features
- Product types include miniature, compact, and industrial switches for general, medium, and heavy-duty applications
- Metal and Plastic enclosures for rugged and demanding applications
- Small enclosure styles for mounting in tight spaces
- Multiple head and lever types to fit a wide variety of application requirements
- Meet the International Electrotechnical Commission (IEC) standards , NEMA, UL, CSA, VDE and more.

Specifications
- Enclosure Rating: NEMA 1/2/4/12; IP66
- Contact Configuration: 1 N.O./1 N.C.
- Contact operation: snap action
- Body material: zinc alloy
- Operating temperature range: -25°C to 70°C



OsiSense® XC Limit Switches detect objects by physical contact. Limit Switches are placed in the application such that an object moves an operating head, or lever. Depending on the position of the lever, the switch contacts will be actuated or not. Advantages of OsiSense® XC Limit Switches are they are suitable for targets that will not deform, regardless of shape, type, composition, or color. XC Limit Switches are rugged products that are intuitive and easy to install.

Mfg. Part No.	Actuator Style	Contact Current (A)	Conduit Thread	Min. Force for tripping	Stock No.	Price Each
● XCKJ10511H7	Rotary	10	1/2″ NPT	0.5	80C6639	147.82
● XCKJ10541H7	Adjustable Roller	10	1/2″ NPT	0.25	16B3056	149.36
● XCKJ10553H7	Round Rod Lever	10	1/2″ NPT	0.25	16B3057	147.82
● XCKJ10559D	Round Rod Lever	4	M12 5-Pin	0.25	64M3352	167.30
● XCKJ161H7	Top Plunger	10	1/2″ NPT	2	84R3941	129.34
● XCKJ167H7	Roller Plunger	10	1/2″ NPT	16	84R3942	132.18

(179655)

DEV KIT HQ™

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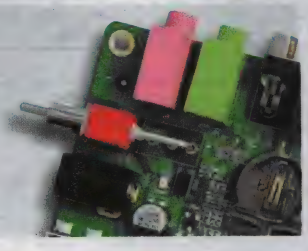
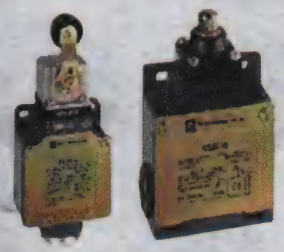


(196528)

IEC OSISENSE LIMIT SWITCHES XCKL COMPACT SEMI-MODULAR 52MM METAL BODY

RoHS Compliant Available

Telemecanique Sensors



Features

- Product types include miniature, compact, and industrial switches for general, medium, and heavy-duty applications
- Metal and Plastic enclosures for rugged and demanding applications
- Small enclosure styles for mounting in tight spaces
- Multiple head and lever types to fit a wide variety of application requirements
- Meet the International Electrotechnical Commission (IEC) standards , NEMA, UL, CSA, VDE and more.

Specifications

- Contact Configuration: 1 N.O./1 N.C.
- Contact operation: snap action
- Body material: zinc alloy
- Operating temperature range: -25°C to 70°C
- Termination: screw clamp
- Contact current: 10A

OsiSense® XC Limit Switches detect objects by physical contact. Limit Switches are placed in the application such that an object moves an operating head, or lever. Depending on the position of the lever, the switch contacts will be actuated or not. Advantages of OsiSense® XC Limit Switches are they are suitable for targets that will not deform, regardless of shape, type, composition, or color. XC Limit Switches are rugged products that are intuitive and easy to install.

Mfg. Part NO.	Actuator Style	Conduit Thread	Min. force for tripping	Enclosure Rating	Stock No.	Price Each
XCKL106H7	Wobble Cat Whisker	1/2" NPT	0.13	NEMA 1/2/4/6/ 6P/12/13; IP66	80C6651	204.67
XCKL115H7	Roller Lever	1/2" NPT	0.1	NEMA 1/2/4/6/ 6P/12/13; IP66	93R4449	182.14
XCKL102H7	Roller Plunger	1/2" NPT	12	NEMA 1/2/4/6/ 6P/12/13; IP66	93R4447	190.92
XCKL121H7	Roller Lever Plunger	1/2" NPT	8	NEMA 1/2/4/6/ 6P/12/13; IP66	41R2246	191.78
XCKM102H7	Roller Plunger	3 entries PG11/ 0.5" conduit adpt.	12	NEMA 1, 2, 4, 6, 6P, 12, 13	41R2248	143.55
XCKM106H7	Wobble Rod	3 entries PG11/ 0.5" conduit adpt.	0.13	NEMA 1, 2, 4, 6, 6P, 12, 13	84R3944	141.45
XCKM110H7	Top Plunger	3 entries PG11/ 0.5" conduit adpt.	12	NEMA 1, 2, 4, 5, 6P, 12, 13	84R3945	107.45
XCKM115H7	Roller Lever	3 entries PG11/ 0.5" conduit adpt.	14.16	NEMA 1, 2, 4, 6, 6P, 12, 13	80C6666	127.92

(179654)

LIMITLESS™ WLS HEAVY-DUTY WIRELESS LIMIT SWITCHES

RoHS Compliant Available

Honeywell Sensing and Control

SELECTION, SPEED, SERVICE. All Found Here.

Features

- Enables wireless presence/absence detection in applications/ machinery where wiring is challenging or not feasible
- Integration of existing wireless technology with the superior reliability of Honeywell MICRO SWITCH™ limit switch series
- Ability to reconfigure and network multiple switches or point-to-point personalized addresses, thus easily allowing adding, subtracting, or relocating Limitless™ switches
- Reduced installation/maintenance costs with no wires, conduit, strain relief, clips, connectors, or connection boxes
- Output options
- - Panel mount monitor: visual, audible (buzzer), NPN output
- - DIN-mount receiver: visual, NPN/PNP (relay, CAN, Ethernet, Profibus available in the future)
- Consumes ultra-low power to prolong battery life (replaceable)
- Long-range signal of 305 m/1000 ft line-of-sight in North America
- RF board operating in 2.4 GHz globally license-free frequency band; WPAN 802.15.4
- EN 50041 metal enclosure; IP67;NEMA 1, 3, 4, 6, 6P, 12, 13
- Full complement of operating heads and levers, as well as monitor/receivers and accessories
- Metal and plastic construction

Applications

- May be used in applications that are currently wired, new applications where wired devices are not economical or feasible, where wiring and connections cause reliability issues, and where increased functionality can be realized by eliminating wires.
- **Industrial:**
- Door position
- Grain diverters or flaps
- Hose attachment verification
- Lifts
- Material handling
- Presses/conveyors
- Specialty machines
- Valve position

2.2 dBi ANTENNA, STRAIGHT DESIGN, DIRECT MOUNT CONNECTOR

Mfg. Part No.	Country Use	Operating Head	Roller (mm)	Stock No.	Price Each 1-9
WLS1A01AA1A	US, Canada, Mexico	Side rotary, momentary	19x6.35, Nylon	91R0359	385.65
WLS1A01AA1B	US, Canada, Mexico	Side rotary, momentary	19x6.35, Steel	91R0360	400.85

➤ CONTINUED ➤

LIMITLESS™ WLS HEAVY-DUTY WIRELESS LIMIT SWITCHES (CONT.)

2.2 dBi OMNI W/ SWITCH MOUNT, STRAIGHT DESIGN

Mfg. Part No.	Country Use	Operating Head	Roller (mm)	Stock No.	Price Each 1-9
WLS1A01AA2A	US, Canada, Mexico	Side rotary, momentary	19x6.35, Nylon	17T7928	393.13
WLS1A01AD	US, Canada, Mexico	Top plunger, roller	38.1x6.35, Steel	40T2677	423.36
NO ANTENNA, RP-SMA CONNECTOR JACK					
WLS1A00AQ-4P01	US, Canada, Mexico	Eyelet-pull operating head	...	55W4801	418.41
WLS1A00AQBT1	US, Canada, Mexico	Internal battery w/micro-connector on top of head	...	55W4868	442.77
WLS1A00AQBT3	US, Canada, Mexico	Internal battery w/cable grip on top of head	...	55W4869	431.39
WLS1A00BQBT1	All other approved countries	Internal battery w/micro-connector on top of head	...	55W4870	442.77
WLS1A00BQBT3	All other approved countries	Internal battery w/cable grip on top of head	...	55W4871	431.39
0 dBi OMNI W/ SWITCH MOUNT, STRAIGHT DESIGN					
WLS1A11AQ-4P01	US, Canada, Mexico	Eyelet-pull operating head	...	55W4802	433.16
WLS1A11AQBT1	US, Canada, Mexico	Internal battery w/micro-connector on top of head	...	55W4872	410.71
WLS1A11AQBT3	US, Canada, Mexico	Internal battery w/cable grip on top of head	...	55W4873	410.71
WLS1A11BQBT1	All other approved countries	Internal battery w/micro-connector on top of head	...	55W4874	421.69
WLS1A11BQBT3	All other approved countries	Internal battery w/cable grip on top of head	...	55W4875	411.14

MONITORS

Mfg. Part No.	Antenna Type	Stock No.	Price Each 1-5
WPMM1A03A	3.0 dBi Omnidirectional w/ Remote Adhesive Mount; 9.8ft Cable	74R0965	283.82
WPMM1A05A	5.5 dBi Omnidirectional w/ Remote Mag. Mount; Tilt & Swivel; 9ft. Cable	74R0966	329.80

(190006)

WDRR SERIES LIMITLESS™ DIN-RAIL RECEIVERS

RoHS Compliant Available

Honeywell Sensing and Control

SELECTION, SPEED, SERVICE. All Found Here.

- Supply voltage: 10VDC to 28VDC
- Supply current: 500mA max.
- Operating temperature: -20°C to 85°C [-4°F to 185°F]
- Load current: 10mA
- Selectable NPN or PNP-type output
- Signal range: Up to 1000 ft [305 m]
- Accommodate up to 14 limitless digital inputs
- Housing type: DIN or screw mount design

Mfg. Part No.	Description	Stock No.	Price 1-9
WDRR1A00A0A	Din-Rail receiver, no antenna	46T8444	664.16
WDRR1A02A0A	Din-Rail receiver, 2.2 dBi omni antenna with integral mount (tilt/swivel)	48T3909	698.94
WDRR1A03A0A	Din-Rail receiver, 3.0 dBi omni antenna with remote adhesive mounting with 9.8 ft cable	48T3910	698.94
WDRR1A05A0A	Din-Rail receiver, 5.5 dBi omni antenna (tilt/swivel design) with remote magnetic mounting with 10 ft cable	48T3911	744.93

(196508)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

(212570)

ESE22 SERIES 2N DETECTOR SWITCHES

RoHS Compliant Available

Panasonic

Features:
- Easy-to-use
- Can be operated with different actuation angles (horizontally and vertically)
- Reflow soldering
- Rated: 50µA 3VDC to 10mA 5VDC (resistive load)
- Contact resistance: 500mohm max. (initial)
- Insulatation resistance: 100Mohms min. (100VDC)
- Dielectric withstanding voltage: 100VAC for 1 minute
- Light operating force: 300mN max.
- Operating life: 50,000 cycles min.
- Temperature range: -10°C to +70°C

Applications:
- Detection of media in portable electronic equipment

Mfg. Part No.	Contact Configuration	Full Travel (mm) (Pushing Distance)	Mounting Ht. (mm)	Stock No.	Price Each 1-9
● ESE-22MH22	SPST-NO	1.2 (2)	2.1	83T2707	0.83
● ESE-22MH24	SPST-NO	1.2 (2)	2.1	83T2708	0.83
● ESE-22MV21T	SPST-NO	4.25 (2.05)	4.1	83T2712	0.82

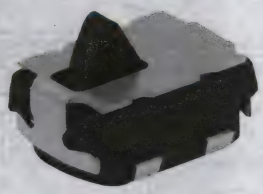
(208962)

ESE16 SERIES 1VR DETECTOR SWITCH

RoHS Compliant Available

Panasonic

Features:
- Rated: 50µA 3VDC to 10mA 5VDC (resistive load)
- Contact resistance: 500mohm max. (initial)
- Insulatation resistance: 100Mohms min. (100VDC)
- Dielectric withstanding voltage: 100VAC for 1 minute
- Light operating force: 250mN max.
- Full travel: 1.5mm (1mm pushing distance)
- Operating life: 50,000 cycles min.
- Temperature range: -10°C to +60°C
- Size: 2.2mmL x 3.35mmW x 1.5mmH



Applications:
- Detection of media in portable electronic equipment — mobile phones, digital still cameras, camcorders

Mfg. Part No.	Contact Configuration	Soldering Type	Stock No.	Price Each 1-9
● ESE-16J001	SPST-NO	Reflow	83T2677	1.90

(208959)

ESE13 SERIES 1VL DETECTOR SWITCHES

RoHS Compliant Available

Panasonic

Features:
- Rated: 50µA 3VDC to 10mA 5VDC (resistive load)
- Contact resistance: 500mohm max. (initial)
- Insulatation resistance: 100Mohms min. (100VDC)
- Dielectric withstanding voltage: 100VAC for 1 minute
- Operating force: 300mN max (full travel)
- Mounting height: 1.2mm
- Full travel: 2.15mm (2.15mm pushing distance)
- Operating life: 50,000 cycles min.
- Temperature range: -10°C to +60°C

Applications:
- Detection of media in portable electronic equipment — mobile phones, digital still cameras, camcorders

Mfg. Part No.	Contact Configuration	Positioning	Terminal Type	Stock No.	Price Each 1-9
● ESE-13V01A	SPST-NO	Without Boss	J-Bent	83T2674	1.06
● ESE-13V01B	SPST-NO	With Boss	J-Bent	83T2675	1.17
● ESE-13V01D	SPST-NO	With Boss	Straight	05W3969	1.19

(208958)

ESE11 SERIES 5N DETECTOR SWITCHES

RoHS Compliant Available

Panasonic

Features:
- Rated: 50µA 3VDC to 10mA 5VDC (resistive load)
- Contact resistance: 500mohm max. (initial)
- Insulatation resistance: 100Mohm min. (100VDC)
- Dielectric withstanding voltage: 100VAC for 1 minute
- Operating force: 350mN max (full travel)
- Operating life: 50,000 cycles min.
- Temperature range: -10°C to +70°C

Applications:
- Detection of media in portable electronic equipment

Mfg. Part No.	Contact Configuration	Full Travel (mm)*	Soldering Type	Mounting Height (mm)	Stock No.	Price Each 1-9
● ESE-11SV1	SPST-NO	6.1	Wave	4.9	83T2668	0.65
● ESE-11MV1	SPST-NO	6.1	Reflow	4.9	52W2184	0.69
● ESE-11SH1C	SPST-NO	3.0	Reflow	5.25	83T2666	0.69
● ESE-11SH2C	SPST-NO	3.0	Wave	5.25	83T2667	0.69
● ESE-11MH1T	SPST-NO	1.7	Wave	4.25	83T2662	0.78
● ESE-11MH2T	SPST-NO	1.7	Reflow	4.25	83T2664	0.78
● ESE-11HS1	SPST-NO	6.3	Reflow	3.6	83T2659	0.69
● ESE-11HS2	SPST-NO	6.3	Reflow	3.6	83T2660	0.69

*Pushing distance 2.4mm
(208957)

MICRO SWITCH™ SWITCHES AC SERIES DOOR SWITCHES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE. All Found Here.

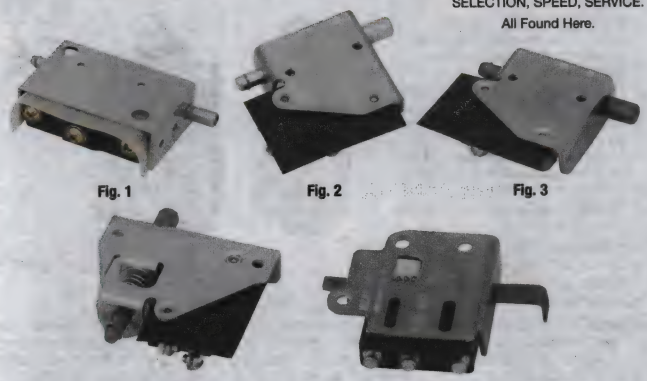


Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5

Switches enable circuit testing with power on by manually pulling rod actuator to maintained-on position. Automatically cut power when service door or drawer is opened.

WITH STEEL ROD ACTUATORS

Mfg. Part No.	Fig.	Description	Free Position Max.	Operate. Position Max.	Depressed Position Max.	Stock No.	Price Each 1-9
● 1AC2	1	15 Amps, SPDT	0.438″ (11.13)	0.250″ (6.35)	0.125″ (3.18)	23F1821	60.87
● 2AC6	2	5 Amps, 4 SPDT	0.375″ (9.53)	0.203″ (5.16)	0.125″ (3.18)	23F1922	104.31
● 13AC1	2	5 Amps, 4 SPDT	0.625″ (15.88)	0.485″ (12.32)	0.263″ (6.68)	23F2161	41.77
● 22AC1D8	2	15 Amps, SPDT	0.375″ (9.53)	0.203″ (5.16)	0.125″ (3.18)	39B6825	104.62
● 22AC2-UL	2	15 Amps, SPDT	0.375″ (9.53)	0.203″ (5.16)	0.125″ (3.18)	39B6828	41.61
● 2AC59	3	15 Amps, SPST-NO‡	0.375″ (9.53)	0.203″ (5.16)	0.125″ (3.18)	23F1923	47.44
● 3AC6	3	5 Amps, SPST-NO	0.375″ (9.53)	0.203″ (5.16)	0.125″ (3.18)	23F1996	46.64
● 17AC1-T	5	5 Amps, SPDT	0.375″ (9.53)	0.220″ (5.59)	0.175″ (4.45)	05M2384	32.45
17AC18-T	5	5 Amps, SPDT†	0.375″ (9.53)	0.220″ (5.59)	0.175″ (4.45)	23F2172	44.39
● 4AC54	...	15 Amps, SPDT, DB (2 CKT DB)	0.375″ (9.53)	0.188″ (4.78)	0.125″ (3.18)	23F2005	557.00
8AC9	...	5 Amps, 4 SPDT	0.375″ (9.53)	0.203″ (5.16)	0.125″ (3.18)	39B9105	185.09
WITH HIGH STRENGTH THERMOPLASTIC ROD ACTUATORS							
● 22AC1	3	5 Amps, SPDT	0.375″ (9.53)	0.203″ (5.16)	0.125″ (3.18)	23F2186	39.19
● 22AC2	3	5 Amps, SPDT	0.375″ (9.53)	0.203″ (5.16)	0.125″ (3.18)	23F2187	36.17
● 23AC2	4	15 Amps, SPDT	0.375″ (9.53)	0.203″ (5.16)	0.125″ (3.18)	23F2193	31.60

- Electrical Rating: 15A at 125 or 250VAC; 1/2A at 125VDC; 1/4A at 125VDC or 250VDC
- (†) Meets Military Specifications MS16106-4
- (‡) Meets Military Specifications MS16106-1

(3488)

MICRO SWITCH™ DM SERIES PANEL-MOUNT DOOR SWITCHES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE. All Found Here.

- Momentary action
- Electrical rating: 10A, 1/2Hp; 125, 250 or 277VAC
- Gold Contacts, 1A, 125VAC
- Snap-in mounting
- Rugged

Bullet

Pull-to-Cheat

Switches have integral operating plungers and may be used in manual and door applications. 16A versions available; *go online or call*

Mfg. Part No.	Rating (A)	Circuitry	Plunger	Color Case/ Plunger	Stock No.	Price Each 1-9
● 1DM437	1	SPDT	Pull-to-Cheat	Black	39B3288	7.90
● 1DM1	10	SPDT	Bullet	White	05M2266	5.97
● 1DM3	10	SPST-NO	Bullet	White	05M2269	26.83
● 1DM57	10	SPDT	Bullet	Silver	05M2271	7.00

➤CONTINUED➤

MICRO SWITCH™ DM SERIES PANEL-MOUNT DOOR SWITCHES (CONT.)

Mfg. Part No.	Rating (A)	Circuitry	Plunger	Color Case/ Plunger	Stock No.	Price Each 1-9
1DM18	10	SPDT	Concave	Grey/Black	05M2267	9.61
1DM21	10	SPDT	Convex	White	05M2268	7.16
1DM401	10	SPDT	Pull-to-Cheat	White	05M2270	10.39
1DM301	10	SPDT	Finger Grip	Grey/Black	23F1829	9.78
1DM79	1	SPDT	Bullet	White	39B3293	16.36
2DM409	10	DPDT	Pull-to-Cheat	White	05M2521	9.55
2DM1	10	DPDT	Bullet	White	05M2519	11.30
2DM4	10	DPDT	Bullet	Black	05M2520	11.23

(4927)

SWITCHES LIMIT

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features:
- Compliant to ASME A17.1 and UL 104
- Manual override for easy actuation with out user hazard
- Two separate mechanical actions to indicate door closure
- Metal key
- Internal solenoid control

Specifications:
- Universal voltage for AC and DC applications
- Dim. WxHxD in mm: 51.44 x 247.65 x 49.23

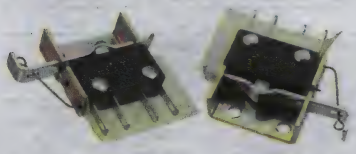
Mfg. Part No.	Description	Stock No.	Price Each 1-9
RDI-G-L	Left-hand door interlock	24R2765	196.64
RDI-G-R	Right-hand door interlock	24R2766	196.64

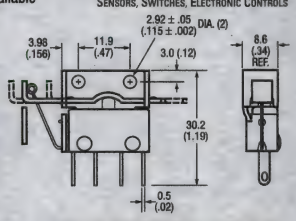
(153584)

LICON DOOR INTERLOCK SWITCH

RoHS Compliant Available

ITW Switches
SENSORS, SWITCHES, ELECTRONIC CONTROLS





- Butterfly® Double-Break Switching Mechanism
- Designed for Service Door or Cabinet Drawer Applications
- Automatic Interruption of Power
- SPDT (Form Z) Circuit
- Rated 5A @ 125/250VAC, 3A @ 28VDC
- Terminals Accept 0.110" Quick Disconnect Type Receptacles
- UL Recognized

Mfg. Part No.	Description	Stock No.	Price Each 1-9
76-6005	Door Interlock Switch	28F2535	81.55

(5126)

XT SERIES DOOR SWITCHES

RoHS Compliant Available

JOHNSON ELECTRIC
burgess

Features:
- 8mm contact gap, creepage, and air-gaps
- Safe mechanical separation by reset springs
- Optional insulation accessory and key for maintenance purposes

Specifications:
- Contact rating: 16.5A at 400VAC
- Dimensions (mm): 30 x 32 x 12
- Housing: Glass fiber reinforced polyester
- Temperature range: -20°C to +85°C
- Protection IP40 (enclosure)
- Mounting: Snap-on or screw mounting

Mfg. Part No.	Current (A)	Operating Force (N)	Actuator Style	Termination	Stock No.	Price Each 1-24
XTD22AZ1	15.5	13.6	Plunger	Quick Connect, Solder	51P3643	9.87

(142166)

MICRO SWITCH™ LSX SERIES - HAZARDOUS LOCATION SWITCHES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features:
- Sealed construction with diverse conduit selection for a wide range of applications
- Silver and gold contacts
- Ideal for use in control valve and actuators in petro chemical, and other potentially explosive environments

Specifications:
- Electrical: 10A Thermal, Single Pole: AC15, A600; DC13, R300; Double pole: AC15, B600, DC13, R300
- NEMA Division 1 & 2 for both clase 1 & 2
- UL listed, file #E61730
- CSA certified, file #LR57327
- -12°C to 121°C [10°F to 250°F], -40°C (-40°F) available
- Lever not included, except where noted
- Use only nylon rollers or other non-sparking material; *order separately online or call*

ACTUATORS

Mfg. Part No.	Actuator Syle	Circuitry	Conduit	Pre-Travel	Stock No.	Price Each 1-14	Price Each 15-24
LSXA3K	Side Rotary	SPDT-1NO/1NC	1/2" NPT	15°	53K5757	193.19	181.99
LSXYAB3K	Side Rotary	SPDT-1NO/1NC	1/2" NPT	15°	39B141	207.91	195.86
LSXA3K1A	Side Rotary	SPDT-1NO/1NC	1/2" NPT	15°	51M8858	228.43	216.41
LSXM4N	Side Rotary	DPDT-2NO/2NC	3/4" NPT	18°	23F4843	246.71	234.90
LSXA4L	Side Rotary	DPDT-2NO/2NC	3/4" NPT	15°	53K5758	253.02	243.45
LSXD4L	Top Roller Plunger	DPDT	3/4" NPT	1.78mm	88F4381	266.34	...
LSXC3K	Top Plunger	SPDT-1NO/1NC	1/2" NPT	1.78mm	39B091	229.82	...

(90377)

MICRO SWITCH™ BX2 SERIES HAZARDOUS AREA SWITCHES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Side Rotary

Top Plunger

Features and Benefits
- Stainless steel housing can provide corrosion resistance up to four times longer than standard housing switches
- Tracking interchangeable with MICRO SWITCH™ BX Series for drop-in replacement
- Variety of heads and non-sparking actuators allows for a wide range of product choices
- Electrical; 10 Amp Thermal. Single Pole: AC15, A600; DC13 R300. Double Pole: AC15, B600; DC13 R300
- Gold contacts available for low energy switching
- Both internal and external grounding screw to comply with international standards
- UL, CSA, ATEX, and IEC Ex certified for global use
- IP67

Potential Applications
- Control valves and actuators
- Offshore drilling
- Gas recovery units
- Petrochemical plants
- Grain eleators
- Waste treatment
- Paint booths
- Mining conveyors
- Pulp and paper handling
- Hazardous waste handling

Mfg. Part No.	Actuator	Circuitry	Switch Terminals	Stock No.	Price Each Each	Price Each 2-4
BX24A3K	Side Rotary	SPDT-1NO/1NC	Wire Wrap	74R0959	898.92	852.42
BX2A3K	Side Rotary	SPDT-1NO/1NC	Cable	74R0956	792.07	...
BX24P4L	Side Rotary	DPDT-2NO/2NC	Cable	74R0962	1013.64	961.09
BX2P4L	Side Rotary	DPDT-2NO/2NC	Cable	74R0958	984.85	932.99
BX24C4L	Top Plunger	DPDT-2NO/2NC	Cable	74R0961	998.83	947.16
BX2C4L	Top Plunger	DPDT-2NO/2NC	Cable	74R0957	984.84	933.00

BX2 LEVERS

Mfg. Part No.	Roller Material	Roller Size (D x W)	Radius	Mounting	Stock No.	Price Each 1-9
LS2Z52A	Nylon	0.75" x 0.28"	1.5" - 3.70"	Back	39B880	91.65

(177416)

pro-POWER AT NEWARK ELEMENT14

Take control with quality, affordable Wire-Management Solutions.
newark.com/pro-power

(212564)

SWITCHES LIMIT

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE. All Found Here.

Features:
- Multi use explosion proof sealed switch
- Small package size
- Housing mounts from 4 sides
- Compact for multiple applications ideal for use in valves and valve actuator

Specifications:
- Contact rating: 10A/15A at 125VAC or 250VAC
- Explosion-proof switches have smallest UL listed housings for hazardous locations
- Meet NEMA 1, 7 and 9. Housing mounts from 4 sides
- Body Dim.: 3.66"L x 2.02"W x 2.56"H
- Temperature range: -40°C to 71°C (-40°F to 160°F)
- UL, CSA, ATEX, IEC EX certified

EX-AR

Mfg. Part No.	Current Rating (A)	Actuator	Circuitry	Operating Force max. (N)	Over Travel	Stock No.	Price Each 1-5
● EXD-AR-3	10	CW Roller Lever	DPDT	1.5 - 6.75	25°	23F5084	317.06
● EX-AR	15	CW Roller Lever	SPDT	1.25 - 5.6	90°	23F5075	228.22
● EX-AR30	15	CCW Roller Lever	SPDT	2.5 - 11.2	25°	23F5077	231.14
● EX-Q	15	Pin Plunger	SPDT	3 - 13.4	0.188"	04M9040	212.42

(2953)

22mm PILOT LIGHTS

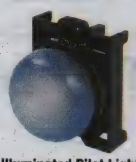
NEMA

RoHS Compliant Available

EATON

Features:
- Quick installation with modular construction
- Mounting base included with operators
- Notched hole mounting with anti-rotation tab

Specifications:
- LED rating: 100,000 hours of expected life in high vibration environments
- Heavy duty construction UL NEMA type 4X/13 and IP67 and IP69K on front of panel



Illuminated Pilot Light

LED Light Unit

NOTE: LED light unit and optional legend plate must be added to illuminated pilot lights.

ILLUMINATED PILOT LIGHTS

Mfg. Part No.	Lens Color	Stock No.	Price 1-4
● M22-L-W	White	10R1835	10.59
● M22-L-R	Red	10R1834	10.72
● M22-L-G	Green	10R1833	10.59
● M22-L-Y	Yellow	10R1836	10.13
● M22-L-B	Blue	10R1832	10.72

LED LIGHT UNITS

Mfg. Part No.	Description	Stock No.	Price 1-9
● M22-LED-W	White, 12-30VAC/VDC	10R1840	16.71
● M22-LED-R	Red, 12-30VAC/VDC	10R1839	16.29
● M22-LED-G	Green, 12-30VAC/VDC	10R1838	16.71
● M22-LED230-W	White, 85-264VAC/VDC, 50/60Hz	10R1852	24.38
● M22-LED230-R	Red, 85-264VAC/VDC, 50/60Hz	10R1851	23.79
● M22-LED230-G	Green, 85-264VAC/VDC, 50/60Hz	10R1850	24.38

(148565)

CW SERIES 22MM FLUSH MOUNT PILOT LIGHTS

RoHS Compliant Available

IDEC

Features:
- Sleek flush mount design
- Black or metallic bezels
- Waterproof

Specifications:
- Round Bezel
- Mounting hole dia.: 22mm
- UL 4X approval

BLACK BEZEL

Mfg. Part No.	Forward Voltage (V)	Color	Stock No.	Price Each 1-9
● CW1P-1EQ3A	12	Amber	60T2884	27.27
● CW1P-1EQ3S	12	Blue	60T2887	32.51
● CW1P-1EQ3G	12	Green	60T2885	28.62
● CW1P-1EQ3Y	12	Yellow	60T2888	27.27
● CW1P-1EQ3PW	12	White	60T2886	27.27
● CW1P-1EQ4A	24	Amber	60T2889	27.27
● CW1P-1EQ4S	24	Blue	60T2892	32.51
● CW1P-1EQ4Y	24	Yellow	60T2893	27.27
● CW1P-1EQ4PW	24	White	60T2890	28.62

➤CONTINUED➤

CW SERIES 22MM FLUSH MOUNT PILOT LIGHTS (CONT.)

Mfg. Part No.	Forward Voltage (V)	Color	Stock No.	Price Each 1-9
● CW1P-1EQHS	120	Blue	60T2864	34.61
● CW1P-1EQHY	120	Yellow	60T2865	29.36
● CW1P-1EQHPW	120	White	60T2862	29.36
METALLIC BEZEL				
● CW4P-1EQ3A	12	Amber	60T5429	29.36
● CW4P-1EQ3G	12	Green	60T5430	29.36
● CW4P-1EQ3R	12	Red	60T5432	29.36
● CW4P-1EQ3Y	12	Yellow	60T5433	29.36
● CW4P-1EQ3PW	12	White	60T5431	29.36
● CW4P-1EQ4S	24	Blue	60T5438	34.61
● CW4P-1EQ4PW	24	White	60T5436	30.81
● CW4P-1EQHS	120	Blue	60T5409	36.71
● CW4P-1EQHY	120	Yellow	60T5410	31.46
● CW4P-1EQHPW	120	White	60T5408	31.46

(209504)

LB SERIES PILOT LIGHTS

RoHS Compliant Available

IDEC

Features:
- Sleek flush mount design
- Bright LED illumination
- Metallic or black plastic bezels

Specifications:
- Lens Shape: Dome
- Mounting Hole Dia: 16mm, 18.2mm

METALLIC BEZEL

Mfg. Part No.	Forward Voltage (V)	Color	Mounting Hole Dia. (mm)	Stock No.	Price Each 1-9
● LB6MP-2T03G	12	Green	18.2	65W5942	24.85
● LB6MP-2T03R	12	Red	18.2	65W5944	24.85
● LB6MP-2T04G	24	Green	18.2	65W5954	24.85
● LB6MP-2T04R	24	Red	18.2	65W5956	24.85
● LB6MP-2T04PW	24	White	18.2	65W5955	32.68
PLASTIC BEZEL					
● LB1P-2T03G	12	Green	16	65W5906	16.36
● LB6P-2T03G	12	Green	18.2	65W5978	16.36
● LB1P-2T03R	12	Red	16	65W5908	16.36
● LB6P-2T03R	12	Red	18.2	65W5980	16.36
● LB1P-2T04G	24	Green	16	65W5918	17.32
● LB6P-2T04G	24	Green	18.2	65W5990	16.36
● LB1P-2T04R	24	Red	16	65W5920	17.32
● LB6P-2T04R	24	Red	18.2	65W5992	16.36
● LB6P-2T04PW	24	White	18.2	65W5991	26.36
● LB1P-2T04PW	24	White	16	65W5919	26.36

(209292)

CW SERIES 22MM FLUSH MOUNT LED PILOT LIGHTS

RoHS Compliant Available

IDEC

- Only 39.9mm depth behind the panel. Space-saving design.
- ø22.3mm mounting hole compliant with IEC 60947-5-1
- Black and metallic bezels available
- UL Type 4X rating

Mfg. Part No.	Bezel	Voltage	Color	Shape/ Lens	Stock No.	Price Each 1-24
● CW1P-1EQ3R	Black	12V AC/DC	Red	Round Flush	59T4346	28.03
● CW1P-1EQ4R	Black	24V AC/DC	Red	Round Flush	60T2891	28.62
● CW1P-1EQ4G	Black	24V AC/DC	Green	Round Flush	59T4347	29.42
● CW1P-1EQHG	Black	100/120 VAC	Green	Round Flush	60T2861	30.49
● CW1P-1EQHR	Black	100/120 VAC	Red	Round Flush	60T2863	30.81
● CW1P-1EQHA	Black	100/120V AC	Amber	Round Flush	59T4345	30.19
● CW4P-1EQ3S	Metallic	12V AC/DC	Blue	Round Flush	59T4372	37.34
● CW4P-1EQ4G	Metallic	24V AC/DC	Green	Round Flush	60T5435	30.81

➤CONTINUED➤

CW SERIES 22MM FLUSH MOUNT LED PILOT LIGHTS (CONT.)

Mfg. Part No.	Bezel	Voltage	Color	Shape/ Lens	Stock No.	Price Each 1-24
CW4P-1EQ4R	Metallic	24V AC/DC	Red	Round Flush	60T5437	30.49
CW4P-1EQ4A	Metallic	24V AC/DC	Amber	Round Flush	60T5434	30.81
CW4P-1EQ4Y	Metallic	24V AC/DC	Yellow	Round Flush	59T4373	31.68
CW4P-1EQHG	Metallic	100/120 VAC	Green	Round Flush	60T5407	33.02
CW4P-1EQHR	Metallic	100/120 VAC	Red	Round Flush	59T4371	33.94
CW4P-1EQHA	Metallic	100/120 VAC	Amber	Round Flush	60T5406	33.02
CW1P-2EQ3R	Black	12V AC/DC	Red	Round Dome	59T4349	28.03
CW4P-2EQ3S	Metallic	12V AC/DC	Blue	Round Dome	59T4375	35.58
CW1P-2EQ4G	Black	24V AC/DC	Green	Round Dome	59T4350	28.03
CW4P-2EQ4G	Metallic	24V AC/DC	Green	Round Dome	60T5468	30.83
CW4P-2EQ4R	Metallic	24V AC/DC	Red	Round Dome	60T5470	30.83
CW4P-2EQ4A	Metallic	24V AC/DC	Amber	Round Dome	60T5467	30.81
CW4P-2EQ4Y	Metallic	24V AC/DC	Yellow	Round Dome	59T4376	31.68
CW4P-2EQHG	Metallic	100/120 VAC	Green	Round Dome	60T5440	33.02
CW4P-2EQHR	Metallic	100/120 VAC	Red	Round Dome	59T4374	33.94
CW4P-2EQHA	Metallic	100/120 VAC	Amber	Round Dome	60T5439	33.02
CW1P-2EQHA	Black	100/120 VAC	Amber	Round Dome	59T4348	30.19

BLACK BEZEL

Mfg. Part No.	Forward Voltage (V)	Color	Stock No.	Price Each 1-9
CW1P-1EQ3A	12	Amber	60T2884	27.27
CW1P-1EQ3S	12	Blue	60T2887	32.51
CW1P-1EQ3G	12	Green	60T2885	28.62
CW1P-1EQ3Y	12	Yellow	60T2888	27.27
CW1P-1EQ3PW	12	White	60T2886	27.27
CW1P-1EQ4A	24	Amber	60T2889	27.27
CW1P-1EQ4S	24	Blue	60T2892	32.51
CW1P-1EQ4Y	24	Yellow	60T2893	27.27
CW1P-1EQ4PW	24	White	60T2890	28.62
CW1P-1EQHS	120	Blue	60T2864	34.61
CW1P-1EQHY	120	Yellow	60T2865	29.36
CW1P-1EQHPW	120	White	60T2862	29.36

METALLIC BEZEL

CW4P-1EQ3A	12	Amber	60T5429	29.36
CW4P-1EQ3G	12	Green	60T5430	29.36
CW4P-1EQ3R	12	Red	60T5432	29.36
CW4P-1EQ3Y	12	Yellow	60T5433	29.36
CW4P-1EQ3PW	12	White	60T5431	29.36
CW4P-1EQ4S	24	Blue	60T5438	34.61
CW4P-1EQ4PW	24	White	60T5436	30.81
CW4P-1EQHS	120	Blue	60T5409	36.71
CW4P-1EQHY	120	Yellow	60T5410	31.46
CW4P-1EQHPW	120	White	60T5408	31.46

(202390)

30mm PILOT LIGHTS

RoHS Compliant Available

IDEC

- Dome lens
- Screw terminal
- Full-voltage type
- Incandescent lamp
- Include lens, lamp, operator, plus transformer
- Rated NEMA 1, 2, 3, 3R, 4, 4X, 5, 12, 13, IP65

Mfg. Part No.	Primary Type	Voltage	Color	Stock No.	Price Each 1-24	25-49	50-99
APD199N-G-24V	Full Voltage	24VAC/DC	Green	74K3666	45.82	41.13	38.58
APD199N-A-24V	Full Voltage	24VAC/DC	Amber	83C9018	46.89	42.20	39.85
APD199N-R-24V	Full Voltage	24VAC/DC	Red	74K3668	48.09	43.17	40.49
APD199N-S-24V	Full Voltage	24VAC/DC	Blue	15C2582	46.89	42.20	39.85
APD199N-G-120V	Full Voltage	120VAC	Green	74K3665	47.21	42.37	39.75
APD199N-R-120V	Full Voltage	120VAC	Red	74K3667	47.58	42.71	40.07

(3440)

22mm PILOT LIGHTS

RoHS Compliant Available

IDEC

- Dome lens
- Screw terminal
- Full voltage
- Include lens, lamp and operator

Mfg. Part No.	Voltage	Style	Color	Stock No.	Price Each 1-9	10-24	25-49
APW299-R-24V	24VDC	Incandescent	Red	74K3670	25.20	22.58	21.37
APW299-A-24V	24VDC	Incandescent	Amber	15C2773	20.82	18.63	17.65
APW299-G-24V	24VDC	Incandescent	Green	74K3669	25.20	22.58	21.37
APW299D-G-24V	24VAC/DC	LED	Green	74K3673	24.21	21.65	20.50
APW299D-R-24V	24VAC/DC	LED	Red	74K3675	23.61	21.12	20.00
APW299D-R-120V	120VAC/DC	LED	Red	74K3674	25.45	22.77	21.56
APW299D-G-120V	120VAC/DC	LED	Green	74K3672	25.13	22.49	21.30
APW299D-A-120V	120VAC/DC	LED	Amber	74K3671	24.82	22.21	21.03

(3429)

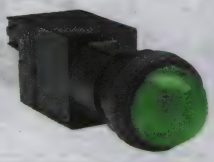
22mm LED PILOT LIGHTS

RoHS Compliant Available

IDEC

TÜV Rheinland

Flush Style, Plastic Bezel



Dome Style w/Transformer, Plastic Bezel

Jumbo Dome

- LED or incandescent lamps
- Round flush or domed lenses
- Meets IEC IP65 and NEMA 4, 4x, 13 ratings
- Plastic or nickel-plated aluminum bezel

All units shown are for use with LED lamps. May be mounted in IDEC's one-to-five hole enclosures; *go online or call.* Incandescent lamps also available; *go online or call.* UL listed, CSA certified, CE compliant, and TÜV approved.

120VAC TRANSFORMERS

Mfg. Part No.	Style	Color	Bezel	Stock No.	Price Each 1-24	25-49	50-99
HW1P-1FH2D-G	Flush	Green	Plastic	74K3773	40.69	38.36	37.01
HW4P-1FH2D-G	Flush	Green	Metal	74K3791	40.01	37.72	36.39
HW4P-1FH2D-R	Flush	Red	Metal	74K3792	41.99	39.59	38.19
HW4P-1FH2D-A	Flush	Amber	Metal	92C3163	40.01	37.72	36.39

24VAC/DC FULL VOLTAGES

HW1P-2FQD-G-24V	Dome	Green	Plastic	74K3780	21.57	20.33	19.61
HW1P-2FQD-R-24V	Dome	Red	Plastic	74K3781	21.57	20.33	19.61
HW1P-2FQD-A-24V	Dome	Amber	Plastic	78K8185	21.84	20.59	19.86
HW1P-1FQD-G-24V	Flush	Green	Plastic	74K3776	22.12	20.86	20.11
HW1P-1FQD-R-24V	Flush	Red	Plastic	74K3777	21.57	20.33	19.61
HW1P-1FQD-A-24V	Flush	Amber	Plastic	74K3775	22.12	20.86	20.11
HW4P-1FQD-G-24V	Flush	Green	Metal	74K3793	23.17	21.85	21.07
HW4P-1FQD-R-24V	Flush	Red	Metal	74K3794	23.17	21.85	21.07

24VAC/DC FULL VOLTAGE JUMBO DOME

HW1P-5Q4-G	Dome	Green	Plastic	79K3741	99.48	93.93	89.69
HW1P-5Q4-R	Dome	Red	Plastic	79K3748	99.48	93.93	89.69
HW1P-5Q4-A	Dome	Amber	Plastic	79K3737	99.48	93.93	89.69

(13242)

ENGINEERS START HERE
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(212565)

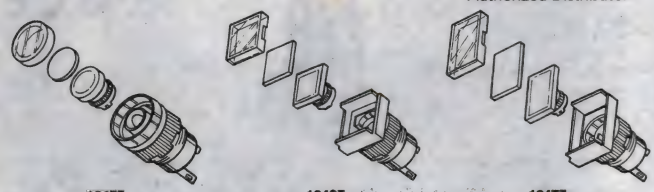
SWITCHES – PILOT LIGHTS • SWITCHES – PUSHBUTTON SUBMINIATURE

ALCOSWITCH COMMAND SERIES 164 INDUSTRIAL PANEL MOUNT PILOT LIGHTS

RoHS Compliant Available

TE connectivity

Authorized Distributor



164EZ 164SZ 164TZ

- Lamp dissipation: 1.2W max.
- Contact rating: 6A
- Panel hole: 0.625"D (15.8)
- Dielectric strength: 1,500VAC
- Insulation resistance: greater than 100MΩ
- Temperature range: –20°C to +50°C
- UL recognized
- Order cap separately; *on page 1760*

Mfg. Part No.	Description	Stock No.	Price Each 1-24	25-49	50-99	100-249
● 164EZ	Round Pilot Light	46F3128	9.22	8.92	8.51	8.25
● 164TZ	Rectangular Pilot Light	57M9999	12.87	11.78	10.66	10.03
● 164SZ	Square Pilot Light	46F3129	10.07	9.23	8.52	8.27

(4700)

ALCOSWITCH TP SERIES SUBMINIATURE PUSHBUTTONS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- All are momentary, normally open
- Available in straight or right angle PC terminals
- Gold-plated contacts rated 0.4VA max. @ 20VDC or peak AC
- Dielectric strength: 1000Vrms. –30°C to +65°C
- Life expectancy: 1 pole, 100,000 operations; 2 pole, 80,000 operations.

STRAIGHT PC TERMINALS

Mfg. Part No.	Circuitry	Bushing Dia.	Color	Actuator Style	Stock No.	Price Each 1-24	25-49
● TP11CGPC004	SPST-NO	...	Black	Rectangular	69K7043	3.58	3.38
● TPA11CGPC004	SPST-NO	...	Black	Round-Flush	69K7045	3.82	3.27
● TPB11CGPC004	SPST-NO	.188"	Black	Round-Extended	69K7046	4.23	3.84
● TPC11CGPC004	SPST	...	Black	Round-Extended	23R8835	7.26	6.55
● TPB11FGPC004	SPDT	.188"	Black	Round-Extended	16M2483	7.04	6.81
TPC13F0	SPDT	19/48	Black	Round-Extended	77B9154	12.70	11.57
● TPD11CGPC004	SPST-NO	.250"	Black	Round-Extended	16M2486	8.40	6.79
● TPF11CGPC004	SPST-NO	¼ -40	Black	Round-Extended	16M2488	20.92	20.33
● TPF11FGPC004	SPDT	¼ -40	Black	Round-Extended	16M2490	19.06	17.35
RIGHT ANGLE PC TERMINALS							
● TP11CGRA204	SPST-NO	...	Red	Rectangular	69K7044	4.90	3.98
● TPA11CGRA004	SPST-NO	...	Black	Round-Extended	16M2481	5.83	5.08
TPA11CGRA2	SPST-NO	...	Red	Round-Extended	77B9063	3.45	3.14
● TPA11FGRA204	SPDT	...	Red	Round-Extended	23R8815	5.64	4.83
● TPB11CGRAES004	SPST	...	Black	Round-Extended	23R8823	9.29	8.46
● TPB11FGRA004	SPDT	.188"	Black	Round-Extended	16M2484	6.17	5.59
TPB11FGVRA0	SPDT	.188"	Black	Round-Extended	15H0454	17.18	15.23
● TPC11CGRA004	SPST-NO	19/48	Black	Round-Extended	16M2485	14.45	13.70
● TPD11CGRA004	SPST-NO	.250"	Black	Round-Extended	16M2487	5.82	5.28
● TPF11CGRA004	SPDT	¼ -40	Black	Round-Extended	16M2489	18.94	16.54
TPB11FG-RA-2	SPDT	...	Red	Round-Extended	77B9104	7.63	6.95
TPF13C0	SPST-NO	¼ -40	Black	Round-Extended	13F3660	22.31	21.69

(4763)

800 SERIES SUB-MINIATURE PUSHBUTTON SWITCHES

RoHS Compliant Available

E•SWITCH®

- **800 Series**
- Contact Rating: 1A @ 250 VAC, 3A @ 120 VAC or 28 VDC
- Life Expectancy: 50,000 cycles typical
- Contact Resistance: 10mOhms max. typical @ 2-4 VDC, 100mA for both silver and gold plated contacts
- Insulation Resistance: 1,000MOhms min.
- Actuation Force: 200 ± 50 gf
- Operating Temperature: -30°C to +85°C
- **800A Series**
- Contact Rating: 1A @ 120 VAC
- Life Expectancy: 50,000 cycles typical
- Contact Resistance: 10mOhms 1 max. typical @ 2-4 VDC, 100mA for both silver and gold plated contacts
- Insulation Resistance: 1,000MOhms 1 min.
- Actuation Force: 200 ± 50 gf
- Operating Temperature: -30°C to +85°C
- **800B Series**

➤CONTINUED➤

800 SERIES SUB-MINIATURE PUSHBUTTON SWITCHES (CONT.)

- Contact Rating: 0.4 VA max. @ 20 VAC or DC max. (gold), 3A @ 120 VAC or 28 VDC (silver), 1A @ 250 VAC (silver)
- Life Expectancy: 50,000 make-and-break cycles at full load
- Contact Resistance: 20 mOhms1 typical initial @ 2-4 VDC, 100 mA
- Insulation Resistance: 1,000 MOhms1 min.
- Operating Temperature: -30°C to 85°C

800 SERIES STANDARD SUB-MINIATURE PUSHBUTTON SWITCHES

Mfg. Part No.	Contacts	Switch Function	Termination	Stock No.	Price Each 1-9
● 800SP9B5M2QEH	SPST	Off-(On)	Vertical P.C. Mount	16N1727	5.66
● 800SP9B6M6RE	SPST	Off-(On)	Horizontal Right Angle P.C. Mount	16N1742	5.63
● 800SP9B7M6RE	SPST	Off-(On)	Horizontal Right Angle P.C. Mount	16N1754	5.11
800A SERIES SEALED SUB-MINIATURE PUSHBUTTON SWITCHES					
● 800AWSP9M2QE	SPDT	Off-(On)	Vertical P.C. Mount	16N1651	6.43
● 800AWSP9M2RE	SPDT	Off-(On)	Vertical P.C. Mount	16N1652	6.31
800B SERIES SEALED SUB-MINIATURE PUSHBUTTON SWITCHES					
● 800BWSP9SM6RE	SPST	Off-(On)	SMD	16N1660	7.62

SWITCH ACCESSORIES

Type	Description	Stock No.	Price Each 1-9
● 800C1BLK	Black Nylon Switch Cap	58T3437	0.34

(197703)

P26 SERIES PUSHBUTTON SWITCHES

RoHS Compliant Available

Carling Technologies™ Innovative Designs. Powerful Solutions.

Features
- SPST contacts
- Slow make, slow break contacts

Specifications
- Operating temperature: 32°F to 85°F (0°C to +85°C)
- On = Maintained action; ( ) = Momentary action

Rated 3A/250VAC, 6A/125VAC, 3/4A/125V. Mounting hole: 0.500" (12.70). Bushing: 0.468" (11.89) length and diameter. Round metal cap. UL recognized, CSA certified. ( ) = momentary.

Mfg. Part No.	Function	Button	Stock No.	Price Each 1-24	25-49	50-99
● P26A-1D-RND-MTL	Off-(On)	Metal	76K1055	6.98	5.97	5.82
● P26F-1D-RND MTL	Off-(On)	Metal	26C0188	9.97	8.52	8.32
● P26L-1D-RND MTL	On-(Off)	Metal	12R2928	8.12	6.94	6.77

(5122)

HB SERIES SUBMINIATURE PUSHBUTTON SWITCHES

NEW

NKK SWITCHES

Specifications:
- Bushing Mount, Round or Square Cap
- Contact Resistance: 50 milliohms max.
- Dielectric Strength: 500V AC min for 1 minute min
- Silver Contacts
- Solder Lug Terminals
- 0.1A @ 30V AC/DC
- Operating Temperature: Nonilluminated: -25°C to +70°C Illuminated: -25°C to +50°C

STANDARD SWITCH

Mfg. Part No.	Poles	Circuit	Shape	Stock No.	Price Each 1-24
● HB15CKW01	SPDT	On-(On)	Round	09X9851	6.38
● HB15SKW01	SPDT	On-(On)	Square	09X9866	5.96
● HB16CKW01	SPDT	On-On	Round	09X9886	6.39
● HB16SKW01	SPDT	On-On	Square	09X9900	6.39
● HB15CKW01-5C-CB	SPDT	On-(On)	Round	09X9857	8.58
● HB15CKW01-5C-JB	SPDT	On-(On)	Round	09X9858	8.58
● HB15CKW01-5D-DB	SPDT	On-(On)	Round	09X9859	8.58
● HB15CKW01-5F-FB	SPDT	On-(On)	Round	09X9861	8.58
● HB15CKW01-5F-JB	SPDT	On-(On)	Round	09X9862	8.58
● HB15SKW01-5C-AB	SPDT	On-(On)	Square	09X9874	9.01
● HB15SKW01-5C-CB	SPDT	On-(On)	Square	09X9875	8.58
● HB15SKW01-5D-DB	SPDT	On-(On)	Square	09X9878	8.58
● HB15SKW01-5F-FB	SPDT	On-(On)	Square	09X9881	8.58
● HB15SKW01-5F-JB	SPDT	On-(On)	Square	09X9882	8.58
● HB16CKW01-5C-CB	SPDT	On-On	Round	09X9891	9.01
● HB16CKW01-5C-JB	SPDT	On-On	Round	09X9892	9.01
● HB16CKW01-5D-DB	SPDT	On-On	Round	09X9893	9.01

➤CONTINUED➤

HB SERIES SUBMINIATURE PUSHBUTTON SWITCHES (CONT.)

Mfg. Part No.	Poles	Circuit	Shape	Stock No.	Price Each 1-24
HB16CKW01-5F-FB	SPDT	On-On	Round	09X9895	9.01
HB16CKW01-5F-JB	SPDT	On-On	Round	09X9896	9.01
HB16CKW01-6G-JB	SPDT	On-On	Round	09X9899	15.66
HB16SKW01-5C-CB	SPDT	On-On	Square	09X9906	9.01

SWITCH WITH OPTIONAL CAP

Mfg. Part No.	Poles	Circuit	Shape	Cap Color	Stock No.	Price Each 1-24
HB15CKW01-B	SPDT	On-(On)	Round	White	09X9853	7.05
HB15CKW01-C	SPDT	On-(On)	Round	Red	09X9854	7.05
HB15SKW01-A	SPDT	On-(On)	Square	Black	09X9867	7.05
HB16SKW01-B	SPDT	On-On	Square	White	09X9902	7.48

ILLUMINATED SWITCHES

Mfg. Part No.	Poles	Circuit	Shape	LED Color	Lens/ Diffuser Color	Stock No.	Price Each 1-24
HB15CKW01-5C-CB	SPDT	On-(On)	Round	Red	Red/White	09X9857	8.58
HB15CKW01-5C-JB	SPDT	On-(On)	Round	Red	Clear/White	09X9858	8.58
HB15CKW01-5D-DB	SPDT	On-(On)	Round	Amber	Amber/White	09X9859	8.58
HB15CKW01-5F-FB	SPDT	On-(On)	Round	Green	Green/White	09X9861	8.58
HB15CKW01-5F-JB	SPDT	On-(On)	Round	Green	Clear/White	09X9862	8.58
HB15SKW01-5C-AB	SPDT	On-(On)	Square	Red	Black/White	09X9874	9.01
HB15SKW01-5C-CB	SPDT	On-(On)	Square	Red	Red/White	09X9875	8.58
HB15SKW01-5D-DB	SPDT	On-(On)	Square	Amber	Amber/White	09X9878	8.58
HB15SKW01-5F-FB	SPDT	On-(On)	Square	Green	Green/White	09X9881	8.58
HB15SKW01-5F-JB	SPDT	On-(On)	Square	Green	Clear/White	09X9882	8.58
HB16CKW01-5C-CB	SPDT	On-On	Round	Red	Red/White	09X9891	9.01
HB16CKW01-5C-JB	SPDT	On-On	Round	Red	Clear/White	09X9892	9.01
HB16CKW01-5D-DB	SPDT	On-On	Round	Amber	Amber/White	09X9893	9.01
HB16CKW01-5F-FB	SPDT	On-On	Round	Green	Green/White	09X9895	9.01
HB16CKW01-5F-JB	SPDT	On-On	Round	Green	Clear/White	09X9896	9.01
HB16CKW01-6G-JB*	SPDT	On-On	Round	Blue	Clear/White	09X9899	15.66
HB16SKW01-5C-CB	SPDT	On-On	Square	Red	Red/White	09X9906	9.01
HB215SKG03CF-JB	SPST	Off-(On)	Square	Green/Red	Clear/White	09X9920	7.48

*Super Bright LED

(211886)

GB2 SERIES ULTRA THIN PUSHBUTTON SWITCHES

RoHS Compliant Available

NEW

NKK SWITCHES

Specifications:
- 2.7mm Long Plunger
- Contact Resistance: 80 milliohms Max.
- Dielectric Strength: 500VAC for 1 minute
- Operating Temperature:Non-Illuminated: -25°C to +70°C
- 0.4VA Logic Level @ 28V AC/DC max
- PCB Mount

STANDARD SWITCH

Mfg. Part No.	Poles	Circuit	PC Terminals	Stock No.	Price Each 1-24
GB215A2H	SPST	Off-(On)	Right Angle (1 Switch)	09X9483	3.54
GB215AH	SPST	Off-(On)	Right Angle (2 Switches)	09X9475	3.22
GB215AP	SPST	Off-(On)	Straight	09X9479	2.79

SWITCH WITH OPTIONAL CAP

Mfg. Part No.	Poles	Circuit	PC Terminals	Cap Color	Stock No.	Price Each 1-24
GB215AH-A	SPST	Off-(On)	Right Angle	Black	09X9476	3.54
GB215AH-C	SPST	Off-(On)	Right Angle	Red	09X9478	3.54

(211885)

GB SERIES ULTRA MINIATURE PUSHBUTTON SWITCHES

RoHS Compliant Available

NEW

NKK SWITCHES

Specifications:
- 3.3mm Long Plunger
- Process Sealed
- Contact Resistance: 80 milliohms Max.
- Dielectric Strength: 500VAC for 1 minute
- Operating Temperature: Non-Illuminated: -30°C to +85°C; Illuminated: -25°C to +55°C
- 0.4VA Logic Level @ 28V AC/DC max
- PCB Mount

STANDARD SWITCH

Mfg. Part No.	Poles	Circuit	PC Terminals	Stock No.	Price Each 1-24
GB15AH	SPDT	On-(On)	Right Angle	09X9452	5.71
GB15AP	SPDT	On-(On)	Straight	09X9456	4.74
GB15AV	SPDT	On-(On)	Vertical	09X9459	5.34
GB25AP	DPDT	On-(On)	Straight	09X9492	5.43

CONTINUED

GB SERIES ULTRA MINIATURE PUSHBUTTON SWITCHES (CONT.)

SWITCH WITH OPTIONAL CAP

Mfg. Part No.	Poles	Circuit	PC Terminals	Cap Color	Stock No.	Price Each 1-24
GB15AH-XA	SPDT	On-(On)	Right Angle	Black	09X9453	5.65
GB15AH-XC	SPDT	On-(On)	Right Angle	Red	09X9455	5.65
GB15AP-XC	SPDT	On-(On)	Straight	Red	09X9458	5.06
GB15AV-XC	SPDT	On-(On)	Vertical	Red	09X9461	5.65
GB25AP-XC	DPDT	On-(On)	Straight	Red	09X9494	5.74
GB25AV-XC	DPDT	On-(On)	Vertical	Red	09X9497	6.88

ILLUMINATED SWITCHES

Mfg. Part No.	Poles	Circuit	PC Terminals	LED Color	Stock No.	Price Each 1-24
GB15JHF	SPDT	On-(On)	Right Angle	Green	09X9465	7.48
GB15JPC	SPDT	On-(On)	Straight	Red	09X9466	6.77
GB15JPD	SPDT	On-(On)	Straight	Amber	09X9467	6.77
GB15JPF	SPDT	On-(On)	Straight	Green	09X9468	6.77
GB15JVF	SPDT	On-(On)	Vertical	Green	09X9471	7.48

(211594)

G3B SERIES ULTRA MINIATURE SMT PUSHBUTTON SWITCHES

RoHS Compliant Available

NEW

NKK SWITCHES

Upright Mount | Upright with Bracket Mount | With Cap Upright with Bracket Mount

Specifications:
- 3.3mm Long Plunger
- Process Sealed
- Contact Resistance: 80 milliohms Max.
- Dielectric Strength: 500VAC for 1 minute
- Operating Temperature: -30°C to +85°C
- 0.4VA Logic Level @ 28V AC/DC max
- Surface Mount

STANDARD SWITCH

Mfg. Part No.	Poles	Circuit	PC Terminals	Stock No.	Price Each 1-24
G3B15AP	SPDT	On-(On)	Upright	09X9766	6.56
G3B15AB	SPDT	On-(On)	Upright with Bracket	09X9751	6.79
G3B15AH-R*	SPDT	On-(On)	Right Angle	09X9759	5.50

SWITCH WITH OPTIONAL CAP

Mfg. Part No.	Poles	Circuit	PC Terminals	Cap Color	Stock No.	Price Each 1-24
G3B15AP-S-YA**	SPDT	On-(On)	Upright	Black	09X9769	6.88
G3B15AB-XA	SPDT	On-(On)	Upright w/ Bracket	Black	09X9756	7.10
G3B15AH-R-YA*	SPDT	On-(On)	Right Angle	Black	09X9762	5.76
G3B15AH-XC	SPDT	On-(On)	Right Angle	Red	09X9765	7.19
G3B25AH-R-XC*	DPDT	On-(On)	Right Angle	Red	09X9782	7.03

*Tape & Reel Packaging, **Stick Tube Packaging

(211593)

9000 SERIES MINIATURE MOMENTARY PUSHBUTTON SWITCHES

RoHS Compliant Available

APEM

Contact ratings: Gold-plated brass - 100mA @ 30VDC; Silver - 0.3A @ 250VAC, 0.6A @ 125VAC or 1A @ 30VDC. Operating temperature range: -30°C to +65°C. Diallyl phthalate case. Nickel-plated brass bushing. Epoxy terminal seal. Supplied with 2 hex nuts .314" (8mm) across flats and 1 lockwasher.

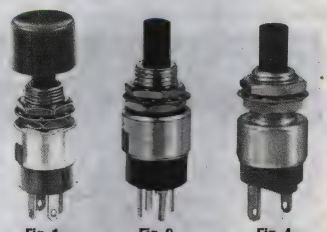


Fig. 1 | Fig. 2 | Fig. 4

Mfg. Part No.	Action	Fig.	Termination	Stock No.	Price Each 1-24
9635AB	NC/NO	1	Solder Lug	96C7698	16.92
9432CDB	NC	2	PC	96C7653	19.74
9433CDB	NO	2	PC	96C7660	9.31
9633NAB	NO	4	Solder Lug	96C7697	10.49

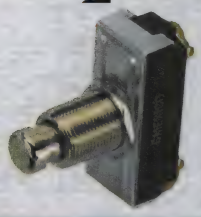
(72944)

SWITCHES – PUSHBUTTON MINIATURE

170 SERIES PUSHBUTTON SWITCHES

RoHS Compliant Available

Carling Technologies
Innovative Designs. Powerful Solutions.



High-amp, AC pushbutton switches are suitable for shallow back panel applications. Mounting hole: 0.500″ (12.70). Silver slow-make, slow-break contacts and rated 15A/125VAC. Screw terminals, metal cap. UL recognized, CSA certified.

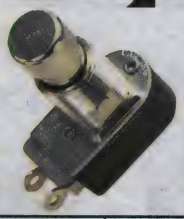
Mfg. Part No.	Switch Action	Stock No.	Price Each 1-24	25-49	50-99
● 170	SPNC On-(Off)	73K1395	9.27	6.39	5.60
● 172	SPNO Off-(On)	73K4049	8.53	5.99	5.09

(5123)

110 SERIES PUSHBUTTON SWITCHES

RoHS Compliant Available

Carling Technologies
Innovative Designs. Powerful Solutions.



- Quick-make, quick-break contact mechanism
- Rated 6A/125VAC, 3A/250VAC
- SPST On-Off action
- Metal cap

Mfg. Part No.	Terminals	Stock No.	Price Each 1-24	25-49	50-99
● 110-SP	Screw	76K1099	13.35	9.02	7.70
● 111-16-P	Wire	76K1100	10.70	7.39	6.47

(5124)

E SERIES PANEL MOUNT PUSHBUTTON SWITCHES

RoHS Compliant Available

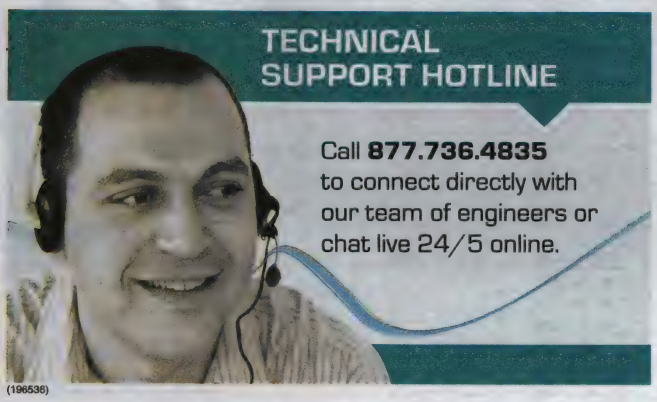
CHERRY

- Applications: Door and drawer light/interlock switch, test function switch, EDP and business machine start switch, photocopy machines
- Panel mount
- SPDT or DPDT
- 0.187″ (4.75) quick-connect terminals
- (On) = Momentary action

E68 series is 0.1A, 125VAC with gold crosspoint contacts. **E69 series** is 10 amps, 125/250VAC, ⅓HP. Both series 1.01L x 0.540W x 1.05″H (25.65 x 13.72 x 26.67). **E79 series** panel mount, rating: 10 amps, 125/250VAC, ⅓HP. 1.24L x 0.540W x 1.05″H (31.50 x 13.72 x 26.67). UL recognized, CSA certified, VDE versions available.

Mfg. Part No.	Circuitry	Function	Termination	Stock No.	Price Each 1-9	10-24	25-49
● 0E6830A0	SPDT	(On)	Panel	84F507	9.03	8.63	7.91
● 0E6900A0	SPDT	(On)	Panel	29F2920	4.22	4.07	3.72
● 0E6930A0	SPDT	(On)	Panel	30M8004	7.18	6.86	6.29
● 0E6940A0	SPDT	(On)	Panel	84F1105	6.08	5.81	5.32
● 0E7900A0	DPDT	(On)	Panel	94F6219	12.80	12.23	11.21
● 0E7930A0	DPDT	(On)	Panel	29F2923	12.80	12.23	11.21
● 0E7940A0	DPDT	(On)	Panel	84F508	13.56	12.95	11.87

(5079)

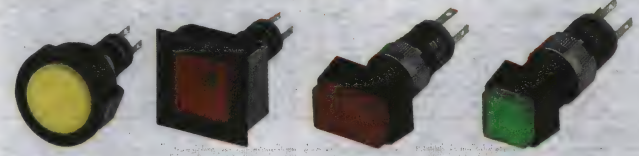


(196536)

18 SERIES MINIATURE PUSHBUTTON SWITCHES

RoHS Compliant Available

eao



Rectangular Square

Features:
- Available in both standard and flush mount styles
- For illuminated versions, LED is directly integrated into lens
- Minimum behind-panel depth — 0.906″ for standard mount, 1.20″ for flush
- Solder terminals

Round

Specifications:
- Sealed to IP40 standards
- Maximum switch rating of 100mA at 42VAC/DC
- Standard switches and indicators mount in 8mm dia. hole
- Flush units mount in a 16mm dia. or 15.8 x 15.8mm cut-out

Use 2-Step Component Process to Assemble Complete Switch:
- STEP 1A: Choose standard or flush mount pushbutton or indicator
- STEP 1B: For flush mount choose flush mount adapter kit
- STEP 2: Choose lens standard or flush (For pushbutton only)

STEP 1A: PUSHBUTTON SWITCH STANDARD MOUNT

Mfg. Part No.	Circuitry	Action	Bezel Style	Stock No.	Price Each
● 18-137.035	SPST-NO	(On)	Round	97F7712	10.27
● 18-147.035	SPST-NO	(On)	Rectangular	97F7710	10.52
● 18-157.035	SPST-NO	(On)	Square	97F7711	10.27
● 18-237.035	SPST-NO	On	Round	97F7696	11.63
● 18-257.035	SPST-NO	On	Square	99F9365	11.63
● 18-138.035	SPST-NC	(On)	Round	88F5286	10.64

STEP 2: LENS STANDARD MOUNT

Mfg. Part No.	Bezel Style	Lens Color	LED	Stock No.	Price Each 1-24	25-49
● 18-931.2	Round	Red	2.2VDC	97F7689	3.72	3.55
● 18-931.4	Round	Yellow	2.2VDC	97F7690	3.77	3.59
● 18-931.5	Round	Green	2.2VDC	97F7691	3.72	3.55
● 18-941.2	Rectangular	Red	2.2VDC	97F7701	3.77	3.59
● 18-941.4	Rectangular	Yellow	2.2VDC	97F7702	3.77	3.59
● 18-951.2	Square	Red	2.2VDC	97F7704	3.77	3.59
● 18-951.5	Square	Green	2.2VDC	97F7688	3.77	3.59
● 18-932.2	Round	Red	N/A	97F7670	1.38	1.32
● 18-952.4	Square	Yellow	N/A	97F7685	1.33	1.27
● 18-952.5	Square	Green	N/A	97F7686	1.33	1.27

STEP 1A: COMPLETE STANDARD MOUNT INDICATOR (INCLUDES LENS AND LED)

Mfg. Part No.	Bezel Style	Color	LED	Stock No.	Price Each
● 18-030.0052	Round	Red	2.2VDC	95B1679	8.35
● 18-030.0055	Round	Green	2.2VDC	97F7707	8.35
● 18-052.0055	Square	Green	24VDC	82K9039	8.35
● 18-032.0052	Round	Red	24VDC	02E8874	8.35
● 18-032.0055	Round	Green	24VDC	30C9158	8.73

STEP 1A: COMPLETE FLUSH MOUNT INDICATORS (INCLUDES LENS AND LED)

Mfg. Part No.	Bezel Style	Color	LED	Stock No.	Price Each
● 18-060.0054	Round	Yellow	2.2VDC	90B0029	9.37

STEP 1A: FLUSH MOUNT PUSHBUTTONS

Mfg. Part No.	Circuitry	Action	Bezel Style	Stock No.	Price Each
● 18-187.035	SPST-NO	(On)	Square	30B3996	10.52
● 18-167.035	SPST-NO	(On)	Round	30B3994	10.27
● 18-287.035	SPST-NO	On	Square	30B4000	11.23
● 18-267.035	SPST-NO	On	Round	90B0031	11.50
● 18-188.035	SPST-NC	(On)	Square	30B3997	10.27

STEP 1B: FLUSH MOUNT ADAPTER KIT

Mfg. Part No.	Bezel Style	Mounting Hole	Stock No.	Price Each 1-24	25+
● 18-920.1	Square	Square	30B4002	3.29	3.07
● 18-920.3	Round	Round	90B0032	3.21	2.99

STEP 2: LENS FLUSH MOUNT (PUSHBUTTON ONLY)

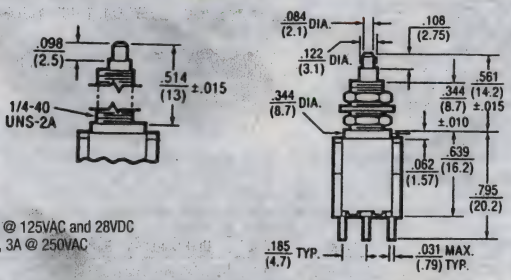
Mfg. Part No.	Bezel Style	Color	LED	Stock No.	Price Each 1-24	25-49
● 18-981.2	Square	Red	2.2VDC	97F7692	4.05	3.88
● 18-981.5	Square	Green	2.2VDC	97F7694	3.90	3.73
● 18-961.2	Round	Red	2.2VDC	97F7695	4.00	3.83
● 18-961.4	Round	Yellow	2.2VDC	97F7678	3.90	3.73
● 18-961.5	Round	Green	2.2VDC	18C0478	4.05	3.88

(5175)

PB SERIES MINIATURE PUSHBUTTON SWITCHES

RoHS Compliant Available

ELECTROSWITCH
UNIT OF ELECTRO SWITCH CORP.



- Rated 6A @ 125VAC and 28VDC Resistive, 3A @ 250VAC

Panel-mount units have solder lug terminals and coin silver contacts. Base diallyl phthalate, bushing nickel-plate brass. Include 2 hex nuts, 1 lockwasher, black cap. UL recognized. Cap included.

Mfg. Part No.	Action	Cap Diameter	Stock No.	Price Each 1-49	Price Each 50-99
PB-12331ZQ	On-None-On	0.375″	06M4742	16.49	15.05
PB-12631ZQ	On-None-(On)	0.375″	06M4744	9.86	9.00
PB-12611ZQ	On-None-(On)	0.200″	06M4743	12.22	11.15

(4993)

SERIES 39 MINIATURE LIMIT BUTT CONTACT PUSHBUTTON SWITCHES

RoHS Compliant Available

Grayhill

- Circuitry: SPST, Normally Open (Normally Closed for Sealed, No Overtravel)
- Contact Resistance: 25 Milliohms Maximum on a New Switch
- Voltage Breakdown: 1000VAC Between Mutually Insulated Parts
- Insulation Resistance: 1000 Megohms Minimum
- Operating Temperature: -40°C to +85°C
- Rated to 1/2A at 115VAC Resistive, with Up to 500,000 Operations; 1/4A Resistive at 115VAC for Sealed

39 series have an adjustable location setting and are available in a plunger-sealed version. Dimensions: switch diameter is 0.287″ (7.29) max. across single "**b**" flat, threaded.

Mfg. Part No.	Description	Height	Stock No.	Price Each 1-49	Price Each 50-99
39-101	N.O. Overtravel (0.60)	0.450″ ± 0.015″	17M8444	8.52	8.01
39-102	N.O. Extended Overtravel (0.200)	0.600″ ± 0.015″	91F3834	15.20	14.26
39-103	N.O. Extd. Overtravel Sealed (0.200)	0.600″ ± 0.015″	14M6744	16.29	15.29
39-701	N.O. Overtravel Sealed	0.600″ ± 0.015″	14M6754	13.12	12.32
39-702	N.C. Sealed (0.60)	0.410″ ± 0.015″	14M6755	15.48	14.53

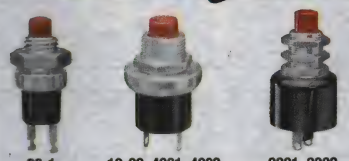
(11826)

23, 4000/10 SERIES WIPING CONTACT, AND 2200 SERIES SNAP ACTION SWITCHES

RoHS Compliant Available

Grayhill

- For Low Voltage and High Current Applications
- Rated to Make and Break at 115VAC



23-1 | 10-09, 4001, 4002 | 2201, 2202

Mfg. part no. 23-1 clean wiping contact N.O. switches have consistent contact resistance for low voltage applications. Rating: 250mA, 100,000 operations. **Mfg. part nos. 10-09, 4001** and **4002** clean wiping contact N.O. and N.C. switches rated 1A, 100,000 operations; or 3A, 6,000 (UL) operations. **Mfg. part nos. 2201** and **2202** have audible click and rapid spring action for switching high currents. Rating: 10A, 25,000 operations. *Order hardware separately on page 1746.*

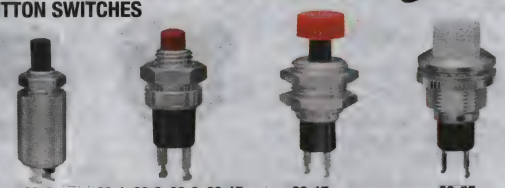
Mfg. Part No.	Max. Body Dia. (Inches)	Button (Mtg. Hole)	Circuits	Stock No.	Price Each 1-49	Price Each 50-99
23-1	0.468″	Red (0.328″ Dia.)	SPST-N.O.	24F204	10.86	10.19
10-09*	0.800″	Black (0.48″ Dia.)	SPST-N.O.	14M6603	5.66	5.32
10-09UL*	0.800″	Black (0.48″ Dia.)	SPST-N.O.	14M6604	8.48	7.96
4001*	0.800″	Red (0.48″ Dia.)	SPST-N.O.	24F202	5.72	5.38
4002*	0.800″	Black (0.48″ Dia.)	SPST-N.C.	24F203	5.72	5.38
2201	0.880″	Red (0.484″ Dia.)	SPST-N.O.	24F200	19.74	18.51
2202	0.880″	Black (0.484″ Dia.)	SPST-N.C.	24F201	25.43	23.86

*Available in UL recognized style; *go online or call.*
(5071)

39 SERIES ½A AND 30 SERIES 1A MINIATURE SPST BUTT CONTACT PUSHBUTTON SWITCHES

RoHS Compliant Available

Grayhill



39-2 | 30-1, 30-2, 30-3, 30-15 | 30-17 | 30-05

Gold contact switches provide low level switching. **Mfg. part nos. 39-1** and **39-3** are rated 1/2A res. at 115VAC and 1/4A res. at 220VAC, 1,000,000 operations. Behind panel: 0.315″ (8.00); diameter 0.25″ (6.35). **Mfg. part no. 39-2** is rated 1/4A at 115VAC and 1/8A at 220VAC. Behind panel: 0.490″ (12.45); diameter 0.25″ (6.35). **Mfg. part nos. 30-1** and **30-3**. Behind panel: 0.592″ (15.04); diameter 0.375″ (9.53). Mounting hole 0.266″ (6.76). Rated 1A at 115VAC, 1,000,000 operations. **Mfg. part no. 30-2** behind panel: 0.605″ (15.37). Rated 1A at 115VAC, 1,000,000 operations. **Mfg. part no. 30-15** has .02″ (0.51) overtravel. Behind panel 0.677″ (17.2). Rated 1A at 115VAC, 500,000 operations. **Mfg. part no. 30-17 RED** and **Mfg. part no. 30-17 BLK** have overtravel and positive feel. Behind panel: 0.631″/0.864″ (16.03/21.95) adjustable, diameter 0.468″ (11.89), mounting hole 0.484″ (12.30), cap diameter 0.390″ (9.91). **Mfg. part no. 30-05-01** behind panel: 0.930″ (23.62), diameter 0.625″ (15.88), mounting hole 0.516″ (13.10). **Mfg. part no. 30-05-04** has overtravel and positive feel. Behind panel 1.130″ (28.7). Round bezel. Decorative mounting . *Order hardware for* **30 series** *switches separately on page 1746.*

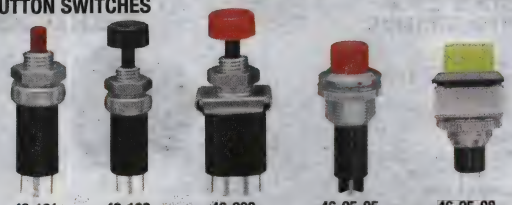
Mfg. Part No.	Button	Circuitry	Stock No.	Price Each 1-49	Price Each 50-99
39-1	Red	SPST-NO	24F209	3.78	3.56
39-2	Black	SPST-NC	14M6745	5.93	5.58
39-3	Black	SPST-NO	14M6748	3.94	3.70
30-1	Red	SPST-NO	24F205	2.57	2.41
30-2	Black	SPST-NC	14M6740	3.35	3.14
30-3	Black	SPST-NO	57F2616	2.63	2.47
30-15	Red	SPST-NO	14M6737	3.26	3.06
30-17 RED	Red	SPST-NO	14M6739	6.44	6.04
30-17 BLK	Black	SPST-NO	14M6738	6.42	6.03
30-05-01-502-0707	Black	SPST-NO	14M6733	25.25	23.70

(5073)

46 SERIES SPDT AND DPDT ¼ AMP WIPING CONTACT PUSHBUTTON SWITCHES

RoHS Compliant Available

Grayhill



46-101 | 46-102 | 46-200 | 46-05-05 | 46-05-08

Clean wiping contact switches have consistent contact resistance for low-voltage applications. **46 series** rated to make and break 250mA at 115VAC, 250,000 operations. All switches have break-before-make contacts. *Order hardware separately on page 1746.*

Mfg. Part No.	Max. Body Dia. (Inches)	Button (Mtg. Hole)	Circuits	Stock No.	Price Each 1-49
46-101 RED	0.437″	Red (0.266″ Dia.)	SPDT	58M3272	5.67
46-101 BLK	0.437″	Black (0.266″ Dia.)	SPDT	58M3271	5.56
46-102 RED	0.437″	Red (0.266″ Dia.)	SPDT	58M3274	5.58
46-102 BLK	0.437″	Black (0.266″ Dia.)	SPDT	58M3273	5.57
DPDT, BEHIND PANEL: 0.921″ x 0.625″W, 0.266″ HOLE					
46-200 RED	0.625″	Red (0.266″ Dia.)	DPDT	58M3276	10.71
46-200 BLK	0.625″	Black (0.266″ Dia.)	DPDT	58M3275	10.71
SPDT, BEHIND PANEL: 1.179″ x 0.640″ NUT DIA., 0.516″ HOLE					
46-05-05-502-0707	0.640″	Black (0.516″ Dia.)	SPDT	16M3106	24.61
46-05-05-502-0303	0.640″	Red (0.516″ Dia.)	SPDT	16M3105	22.80
DPDT, BEHIND PANEL: 1.188″ x 0.76″ NUT DIA., 0.641″ HOLE					
46-05-08-502-0707*	0.76″	Black (0.641″ Dia.)	DPDT	16M3108	32.51
46-05-08-502-03*	0.76″	Red (0.641″ Dia.)	DPDT	16M3107	31.56

*Available in UL recognized style; *go online or call.*
(5072)

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(212568)

SWITCHES – PUSHBUTTON MINIATURE

SERIES 30 SNAP-IN PANEL MOUNTING PUSHBUTTON SWITCHES

RoHS Compliant Available

Grayhill

- Contact rating: 150mA at 24VDC
- Travel: 0.90 nominal
- Travel before make: 0.035 nominal
- Gold plated contacts
- Sealed
- .690″ diameter switch (.596″/.602″ mounting hole
- Operating temperature: -40°C to +80°C
- (On) = Momentary action

Red & Black

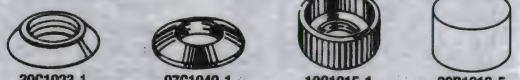
Mfg. Part No.	Circuitry	Function	Button Color	Stock No.	Price Each 1-49	Price Each 50-99
● 30-100	SPST	(On)	Black	35K5739	4.62	4.32
● 30-101	SPST	(On)	Red	35K5740	5.23	4.91
● 30-102	SPST	(On)	Green	35K5741	6.12	5.75
● 30-103	SPST	(On)	Yellow	14M8290	6.81	6.39

(84936)

PUSHBUTTON SWITCH ACCESSORIES

RoHS Compliant Available

Grayhill



30C1023-1 07C1040-1 10C1015-1 30B1012-5

Mfg. Part No.	Description	Fits Series	Stock No.	Price Each 1-49	Price Each 50-99
● 07C1040-1	.77″ OD Nut	7, 10, 4000, 2200	17M8288	1.42	1.40
● 10C1015-1	.89″ OD Button Guard	7, 10, 4000, 2200	51M9274	1.37	1.25
● 30B1012-5	.25″ OD Red Cap	30, 39*	94F2263	0.92	0.84
● 30B1012-9	.25″ OD Black Cap	30, 39*	18M6492	0.92	0.84
● 30C1023-1	.46″ OD Nut	30, 46	14M6743	1.58	1.55

* Does not fit 39-101
(5074)

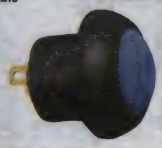
MCPAS SERIES 12mm PUSHBUTTON SWITCHES

RoHS Compliant Available

multicomp

Features:
- Eight plunger colours
- Flat plunger top allowing marking
- Antirotation bushing.
- New solder lug terminal

Specifications:
- Contact rating: 400mA at 32Vac; 100mA at 50Vdc; 125mA at 125Vac
- Contact resistance: 50mΩ
- Dielectric strength: 1000Vrms.
- Electrical life: 500,000 cycles
- Operating force: 2N to 5N
- Contact bounce: 10ms
- Mechanical life : 1,000,000 cycles



SNAP-IN BUSHING

Mfg. Part No.	Current (A)	Circuitry	Action	Actuator Color	Termination	Stock No.	Price Each 1-99
● MCPAS6B1M1CE2	125	SPST	Off-(On)	Black	Solder	12P7695	3.94
● MCPAS6B1M1CE7	125	SPST	Off-(On)	Blue	Solder	12P7699	3.99
● MCPAS6B1M1CE6	125	SPST	Off-(On)	Green	Solder	12P7698	3.92
● MCPAS6B1M1CE3	125	SPST	Off-(On)	Red	Solder	12P7696	3.94
● MCPAS6B1M1CE5	125	SPST	Off-(On)	Yellow	Solder	12P7697	3.80
THREADED BUSHING							
● MCPAS6B2M1CE2	125	SPST	Off-(On)	Black	Solder	12P7700	4.04
● MCPAS6B2M1CE7	125	SPST	Off-(On)	Blue	Solder	12P7704	3.99
● MCPAS6B2M1CE3	125	SPST	Off-(On)	Red	Solder	12P7701	3.94
● MCPAS6B2M1CE6	125	SPST	Off-(On)	Green	Solder	12P7703	3.94
● MCPAS6B2M1CE5	125	SPST	Off-(On)	Yellow	Solder	12P7702	4.04

(142183)

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(212569)

UB & UB2 SERIES LOW PROFILE MINIATURE PUSHBUTTON SWITCHES

RoHS Compliant Available

NEW

NKK SWITCHES

Specifications:
- Snap-in and PCB Mount, Rectangular or Square Cap
- Contact Resistance: 50 milliohms Max. Silver, 100 milliohms Max. Gold
- Contact Rating:
  Silver: 5A @ 125/250V AC
  Gold: 0.4VA max @ 28V AC/DC max
- Dielectric Strength: 1000VAC for 1 minute
- Operating Temperature:
  Non-Illuminated: -20°C to +70°C
  Illuminated: -25°C to +50°C

NONILLUMINATED SWITCHES
SPDT SNAP-IN

Mfg. Part No.	Circuit	Contact Plating	Cap Color	Stock No.	Price Each 1-24
● UB15KKG01N-A	On-(On)	Gold	Black	11X3962	7.38
● UB15KKG01N-C	On-(On)	Gold	Red	11X3964	7.38
● UB15KKG01N-F	On-(On)	Gold	Green	11X3967	7.38
● UB15KKW01N-A	On-(On)	Silver	Black	11X4003	6.83
● UB15KKW01N-B	On-(On)	Silver	White	11X4004	6.83
● UB15KKW01N-C	On-(On)	Silver	Red	11X4005	7.31
● UB15KKW01N-F	On-(On)	Silver	Green	11X4007	6.83
● UB15NBKW01N-A*	On-(On)	Silver	Black	11X4058	6.83
● UB16KKW01N-A	On-On	Silver	Black	11X4246	7.65
● UB16KKW01N-B	On-On	Silver	White	11X4247	7.65
● UB16KKW01N-C	On-On	Silver	Red	11X4248	7.65
● UB16KKW01N-F	On-On	Silver	Green	11X4250	7.65
SPDT PCB					
● UB15SKG03N-C	On-(On)	Gold	Red	11X4148	6.01
● UB15SKW03N-B	On-(On)	Silver	White	11X4183	6.01
● UB15SKW03N-C	On-(On)	Silver	Red	11X4184	6.01
DPDT PCB					
● UB26SKW03N-C	On-On	Silver	Red	11X5205	8.96

ILLUMINATED SWITCHES
SPDT SNAP-IN

Mfg. Part No.	Circuit	Contact Plating	LED Color	Lens/ Diffuser Color	Stock No.	Price Each 1-24
● UB15KKG015F-JJ	On-(On)	Gold	Green	Clear/Clear	11X3993	8.57
● UB15KKW015C-CC	On-(On)	Silver	Red	Red/Red	11X4011	8.63
● UB15KKW015C-JC	On-(On)	Silver	Red	Clear/Red	11X4013	8.63
● UB15KKW015D-DD	On-(On)	Silver	Amber	Amber/Amber	11X4018	8.63
● UB15KKW015F-FF	On-(On)	Silver	Green	Green/Green	11X4025	8.63
● UB15NKW015D-DB*	On-(On)	Silver	Amber	Amber/White	11X4107	9.49
● UB16KKW015C-CC	On-On	Silver	Red	Red/Red	11X4255	8.83
● UB16KKW015D-DD	On-On	Silver	Amber	Amber/Amber	11X4261	8.83
● UB16KKW015F-FF	On-On	Silver	Green	Green/Green	11X4267	9.45
SPDT PCB						
● UB15SKG035C-CC	On-(On)	Gold	Red	Red/Red	11X4156	8.36
● UB15SKG035D-DD	On-(On)	Gold	Amber	Amber/Amber	11X4163	8.36
● UB15SKG035D-JB	On-(On)	Gold	Amber	Clear/White	11X4165	8.36
● UB15SKG035F-FF	On-(On)	Gold	Green	Green/Green	11X4171	8.36
● UB15SKW035F-JF	On-(On)	Silver	Green	Clear/Green	11X4206	7.81
DPDT PCB						
● UB25SKW035C-JB	On-(On)	Silver	Red	Clear/White	11X5052	10.10
● UB25SKW035F-JF	On-(On)	Silver	Green	Clear/Green	11X5065	9.44
● UB26SKW035F-JF	On-On	Silver	Green	Clear/Green	11X5223	10.05
DPDT SNAP-IN						
● UB25KKW015C	On-(On)	Silver	Red		11X4925	9.64
● UB25KKW015C-CC	On-(On)	Silver	Red	Red/Red	11X4928	10.20
● UB25KKW015D-DD	On-(On)	Silver	Amber	Amber/Amber	11X4935	10.20
● UB25KKW015F-FF	On-(On)	Silver	Green	Green/Green	11X4942	10.20
● UB26KKW015C-CC	On-On	Silver	Red	Red/Red	11X5105	10.82
● UB26KKW015F-FF	On-On	Silver	Green	Green/Green	11X5118	11.58
DPDT SNAP-IN WITH SUPER BRIGHT LED						
● UB26KKW016B-JB	On-On	Silver	White	Clear/White	11X5123	23.16

ILLUMINATED SWITCHES W/ SCULPTURED CAP
SPDT SNAP-IN

Mfg. Part No.	Circuit	Contact Plating	LED Color	Lens/ Diffuser Color	Stock No.	Price Each 1-24
● UB215KKW015C-1JC	On-(On)	Silver	Red	Clear/Red	11X4453	11.12
● UB215KKW015F-1JF	On-(On)	Silver	Green	Clear/Green	11X4465	11.12
ILLUMINATED SWITCHES WITH SCULPTURED CAP & SUPER BRIGHT LED SPDT SNAP-IN						
● UB215KKG016CF-1JB	On-(On)	Gold	White	Clear/White	11X4434	16.07
● UB215KKW016CF-1JB	On-(On)	Silver	White	Clear/White	11X4474	15.56

➤CONTINUED➤

UB & UB2 SERIES LOW PROFILE MINIATURE PUSHBUTTON SWITCHES (CONT.)

DPDT SNAP-IN

Mfg. Part No.	Circuit	Contact Plating	LED Color	Lens/ Diffuser Color	Stock No.	Price Each 1-24
UB226KKW016G-1JB	On-On	Silver	Blue	Clear/White	11X4845	26.12
UB226KKW016CF-4J01	On-On	Silver	Red/Green	Clear Lens ON/OFF	11X4834	24.08
DPDT PCB						
UB226SKG036CF-4J02	On-On	Gold	Red/Green	Clear Lens START/STOP	11X4868	24.99

*Rectangular
(211894)

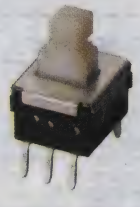
ESB33 SERIES VERTICAL PUSHBUTTON SWITCH

RoHS Compliant Available

Panasonic

Specifications:
- Rated: 50µA 3VDC to 0.2A 14VDC (resistive load)
- Travel: Full 2.3mm; Lock 1.5mm
- Operating mode: self-lock
- Switching mode: non-shorting
- Operating force: 3N±1N
- Low profile — mounting height: 6mm
- Lever color: light yellow

Applications:
- Autos — heater control operation switches
- Consumer electronic equipment — secondary power switches for lower voltage and mode switches



Mfg. Part No.	Switch Action	Actuator Style	Termination	Stock No.	Price Each 1-9
ESB-33133	DPDT	Rectangular	Solder	83T2658	2.28

(208956)

ESE20C AND ESE20D SERIES MOMENTARY PUSHBUTTON SWITCHES

RoHS Compliant Available

Panasonic

Specifications:
- User-friendly tactile feedback when operated
- Long over-travel — full travel: 2.5mm
- Rated: 0.01A 5VDC to 0.1A 14VDC (resistive load)
- Mounting height 8.9mm
- Operating mode: non-lock

Applications:
- **ESE20C series** for automotive use — heater controls, overdrive, steering operation switches
- **ESE20D series** for consumer electronic equipment — secondary power switches for lower voltage and mode switches

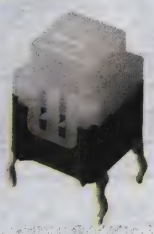


Fig. 1

Fig. 2

Mfg. Part No.	Fig.	Switch Action	Operating Force	Lever Ht. (mm)	Terminal Type	Termin-ation	Stock No.	Price Each 1-9
ESE-20C323	1	SPST	2N±1N	12.5	Straight	Solder	83T2695	1.99
ESE-20C321	1	SPST	2N±1N	12.5	Formed	Solder	83T2694	2.02
ESE-20D321	1	SPST	2N±1N	12.5	Formed	Solder	83T2702	2.02
ESE-20C421	2	SPST	2N±1N	17.5	Formed	Solder	83T2698	2.02
ESE-20C343	1	SPST	4N±1.5N	12.5	Straight	Solder	83T2697	2.02
ESE-20C441	2	SPST	4N±1.5N	17.5	Formed	Solder	83T2700	1.99

(208961)

ESB32 SERIES MIDDLE CURRENT PUSHBUTTON SWITCH

RoHS Compliant Available

Panasonic

Features:
- Long travel
- Can be fitted to a PC board

Specifications:
- Rated: 0.1A 12VDC to 3A 12VDC (resistive load)
- Travel: Full 4.5mm
- Operating mode: self-lock
- Switching mode: non-shorting
- Operating force: 3.5N±1.5N
- Lever height 25mm
- Mounting height: 12.8mm

Applications:
- Autos — overdrive, hazard, map/lamp operation switches
- Relay and solenoid controls to detect function

Mfg. Part No.	Switch Action	Actuator Style	Termination	Stock No.	Price Each 1-9
ESB-32101N	DPST-ND	Rectangular	Solder	83T2657	2.56

(208955)

ESB30 SERIES PUSHBUTTON SWITCH

RoHS Compliant Available

Panasonic

Features:
- Reduced interlock operation switching noise (-10dB compared to the current value)
- Simultaneous locking prevention mechanism

Applications:
- Autos — air conditioners and hazard operation switches
- Consumer electronic equipment — secondary power switches for lower voltage and mode switches

Specifications:
- Rated: 50µA 3VDC to 0.2A 14VDC (resistive load)
- Travel: Full 3.5mm; Lock 2.5mm
- Operating mode: self-lock
- Switching mode: non-shorting
- Operating force: 2N±1N
- Formed terminals
- Lever height 20.5mm
- Mounting height: 12.5mm

Mfg. Part No.	Switch Action	Actuator Style	Termination	Stock No.	Price Each 1-9
ESB-30B102	DPDT	Rectangular	Solder	83T2656	2.02

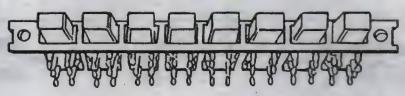
(208954)

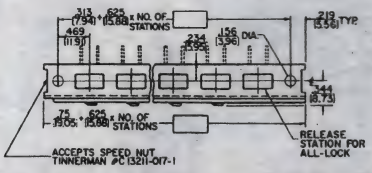
65000 AND 67000 SERIES DOUBLE WIPE MULTI-STATION SWITCHES

RoHS Compliant Available

Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company

MADE IN USA





Factory assembled and tested, these switches are DPDT modules with solder lug terminals. U-shaped bifurcated contacts, rated 3 amps AC or 0.5 amps DC, 125 volts. All interlock with lockout. Panel cutout: 0.313″ (7.94) + 0.625″ (15.88) x number of stations = hole-to-hole distance. **67000 series** switches accept T-1¾ flange base lamps in 6V, 6.3V and 28V sizes. One lamp per station. *Order lamps separately; go online or call.*

65000 SERIES NON-ILLUMINATED SWITCHES

Mfg. Part No.	Stations	Stock No.	Price Each 1-9
65041K206X	4	89K7677	28.59
65121K206X	12	70M8681	63.60
67000 SERIES ILLUMINATED SWITCHES			
67041K506X	4	89K7679	38.27
67081K506X	8	89K7681	99.66

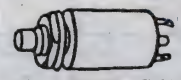
(4994)

MINIATURE MOMENTARY PUSHBUTTON SWITCHES

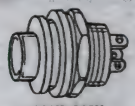
RoHS Compliant Available

Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company

MADE IN USA



923, 933



903X, 913X

Molded red or black plastic pushbutton enclosed in metal housing. Solder lug terminals. Integral nickel silver contacts rated 250mA, 30 watts maximum AC non-inductive. SPDT, break before make. **Mfg. part nos. 903, 913** are front mount in 0.469″(11.91) mounting hole for panel up to 0.297″(7.54) thick. **Mfg. part nos. 923, 933** are rear mount in 0.250″(6.35) mounting hole for panel up to 0.156″(3.96) thick. All are bushing mount.

Mfg. Part No.	Mount	Button Color	Stock No.	Price Each 1-9
913X	Front	Black	89K7684	7.44
933	Rear	Black	22F235	10.00
903X	Front	Red	89K7683	7.44
923	Rear	Red	22F231	5.55

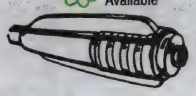
(4998)

PUSHBUTTON PENDANT/ CORD SWITCH

RoHS Compliant Available

Switchcraft® Harsh Environment Connectivity Solutions A HEICO Company

MADE IN USA



Cordette® pendant switch features 1-piece gray molded plastic housing that protects integral brass, hard gold-plated contacts, rated 500mA, 50 watts maximum AC non-inductive. SPST momentary action. 6-ft.(72.0) of 2-conductor unshielded cable molded to body with other end leads stripped and tinned. Small, lightweight 1.188″ (30.18) wide x 2.938″ (74.63) long. Sealed Cordette® version also available; *go online or call.*

Mfg. Part No.	Stock No.	Price Each 1-9
921KX	89K7685	30.47

(5001)

SWITCHES – PUSHBUTTON MINIATURE

ALCOSWITCH BLUE SERIES PUSHBUTTON SWITCHES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Contact configuration: SPDT or DPDT
- Contact rating: 3A @ 125VAC, 60mA @ 30VDC
- Operating temperature: -20°C to 80°C

Mfg. Part No.	Contact Configuration	Switch Function	Contact Rating	Stock No.	Price Each 1-49
● MPS1004F	SPDT	On-(On)	60mA @ 30VDC	75T9136	16.87
● MPS2004N	DPDT	On-On	60mA @ 30VDC	75T9139	28.46
● MPS2004R	DPDT	On-(On)	60mA @ 30VDC	75T9141	29.44
● MPS1004DPC	SPDT	On-On	60mA @ 30VDC	75T9135	16.87
● MPS1004FPC	SPDT	On-(On)	60mA @ 30VDC	75T9137	18.78
● MPS2004NPC	DPDT	On-On	60mA @ 30VDC	75T9140	28.46
● MPS2004RPC	DPDT	On-(On)	60mA @ 30VDC	75T9142	29.44
● MPS-103F	SPDT	On-(On)	3A @ 125VAC	26T4489	12.62
● MPS-203R	DPDT	On-(On)	3A @ 125VAC	61T5606	19.25
● 1977740-2	SPDT	On-(On)	3A @ 125VAC	27T2359	16.04

(203490)

ALCOSWITCH MPE SERIES SEALED PUSHBUTTONS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Solid silver contacts rated 6A @ 125VAC, 3A @ 250VAC, 4A @ 28VDC
- Gold flash solder terminals
- Life expectancy: 50,000 operations
- High-torque bushing shoulder, 0.280"L, ¼-40 UNS-2A.

Order **C-22** *or* **C-23 series** *switch caps separately; go online or call.*

Mfr. Part No.	Circuitry	Action	Dimensions (W x L)	Stock No.	Price Each 1-24	25-49
● MPE-106F	SPDT	(ON)	0.320 x 0.510"	61F957	14.30	13.37
● MPE-206R	DPDT	(ON)	0.510 x 0.510"	61F958	15.72	14.68
● MPE-406N	4PDT	Push-On/Off	0.890 x 0.510"	61F961	23.25	22.73

(4767)

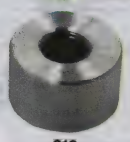
ALCOSWITCH ACCESSORIES FOR MPA & MPE SERIES SWITCHES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- For toggle, pushbutton switching applications.
- Protect against contaminants such as dirt, dust, gas, liquids
- Sealing boots are flexible black neoprene
- Type number suffix = color: **A** = natural aluminum, **B** = black aluminum, **C** = chromed brass.



G12

PLAIN FINISH GUARDS

Mfg. Part No.	Matching Button	Stock No.	Price Each 1-24	25-49	50-99	100-249
● G12A	C22	57F2113	2.05	1.94	1.76	1.69
● G12B	C22	57F2114	1.40	1.35	1.18	1.13
● G12C	C22	57F2112	3.42	3.30	3.24	3.20
● G13B	C23	57F2120	2.43	2.26	2.23	2.20
● G15	Series MSPF	77B7707	4.98	4.79	4.72	4.65

KNURLED FINISH GUARDS

● G12KA	C22	57F2110	1.49	1.43	1.38	1.33
● G12KB	C22	57F2111	1.89	1.65	1.62	1.60
● G12KC	C22	25F2035	1.73	1.65	1.60	1.58
● G13KB	C23	57F2117	2.96	2.74	2.71	2.67

BOOT SEALS

Mfg. Part No.	Thread Size	Use With Series:	Stock No.	Price Each 1-24	25-49	50-99	100-249
● B1048004	10-48	TT	12M5966	5.37	5.07	4.79	4.48
● BP1048004	10-48	TP	14M4319	4.98	4.84	4.77	4.71
● BPA1440004	...	...	39M3352	5.42	4.86	4.24	3.86
● BP1532004	15/32-32	MPG, MSPF	42M1199	5.12	4.59	4.18	3.83
● B1532004	15/32-32	...	22M4844	5.49	5.35	5.28	5.21

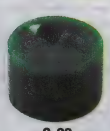
(4931)

ALCOSWITCH COLOR CAPS FOR MPE & MPA SERIES SWITCHES

RoHS Compliant Available

TE connectivity

Authorized Distributor



C-23

Mfg. Part No.	Color	Stock No.	Price Each 1-24	25-49
● C22004	Black	96K4424	0.58	0.50
● C23004	Black	01M5345	1.15	1.05
● C23204	Red	10M9328	1.06	0.98
● C22504	Green	29M8991	0.93	0.85

(4769)

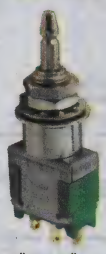
ALCOSWITCH MPA SERIES MINIATURE PUSHBUTTONS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Solid silver with gold flash contacts rated 6A @ 125VAC, 3A @ 250VAC, 4A @ 28VDC
- Gold flash solder terminals
- Dielectric strength: 1,500Vrms
- Life expectancy: 50,000 operations
- High-torque bushing shoulder, 0.280"L, ¼-40 UNS 2A. SPDT W x L: 0.320 x 0.510". DPDT W x L: 0.510 x 0.510".



Order **C-22** *or* **C-23 series** *switch caps separately, go online or call.*

Mfg. Part No.	Circuitry	Action	Stock No.	Price Each 1-24	25-49	50-99
● MPA106D	SPDT	Push-On/Off	61F752	13.63	12.65	11.60
● MPA106F	SPDT	Momentary	61F753	17.06	15.49	14.33
● MPA-206N	DPDT	Push-On/Off	61F754	16.17	15.12	14.05
● MPA206R	DPDT	Momentary	61F755	15.17	13.92	13.18
● MPA-306F	3PDT	Momentary	77B7993	22.66	22.02	20.42
● MPA-406R	4PDT	Momentary	77B7995	26.98	26.22	24.29

(4770)

ALCOSWITCH MPG SERIES MUSTANG PUSHBUTTON SWITCHES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Includes cap
- Solid silver with gold flash contacts rated 6A @ 125VAC, 3A @ 250VAC, 4A @ 28VDC
- Gold flash wire/lug terminals
- Bushing: 0.470"L; 15/32-32UNS-2A
- Dielectric strength: 1,500Vrms
- Life expectancy: 50,000 operations
- Caps sold seperately C9 series
- Electrical life: Push-on/push-off 30,000, momentary 20,00

Mfg. Part No.	Circuitry	Terminals	Stock No.	Price Each 1-24	25-49
● MPG-106D	SPDT	Wire lug	61F756	13.80	12.89
● MPG106F	SPDT	Wire lug	61F757	12.90	10.87
● MPG-206N	DPST	Wire lug	61F993	16.25	15.81
● MPG-206R	DPDT	Wire lug	61F994	16.96	16.71
● MPG206RPC	DPDT	PC	61F759	18.87	18.34
● MPG306D	3PDT	Wire lug	50B6863	22.63	22.00
● MPG306F	3PDT	Wire lug	94F211	24.05	22.64
● MPG-406R	4PDT	Wire lug	61F758	24.97	24.27
● MPG406N	4PDT	Wire lug	96B5028	32.85	31.91

(4771)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

(212570)

ALCOSWITCH MSPM SERIES MAGNETIC-REED MOMENTARY LONG LIFE PUSHBUTTON SWITCHES

RoHS Compliant Available

TE connectivity

Authorized Distributor

Glass-to-metal hermetically-sealed gold contacts rated 1.0VA optimum (100mA max., 100VDC max.). Bushing length: 0-320"L. ¼-40 UNS-2A. Dia.: 0.510". Life expectancy: 5,000,000 cycles @ 0.1VA; 50,000 cycles @ 5VA. With cap.

Mfg. Part No.	Action	Cap Color	Term.	Stock No.	Price Each 1-9	10-24	25-49
MSPM101B004	N.C.	Black	Pin	86K9443	29.24	28.83	28.41
MSPM101B104	N.C.	Black	Lug	02M5779	24.73	24.38	24.02
MSPM101C204	N.O.	Red	Pin	16M2800	40.60	39.10	34.90
MSPM101C104	N.O.	Red	Lug	02M5780	28.54	26.13	23.76
MSPM101CS104	N.O.	Red	Lug	15M6259	27.22	24.96	23.04

(4772)

ALCOSWITCH MSP-3/MSPS SERIES SPST PUSHBUTTONS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Include Cap

Silver-plated brass contacts rated 3A @ 125VAC, for over-travel **type MSP**; 0.5A @ 125VAC for butt contact **MSPS**. Life expectancy: 10,000 cycles @ rated current. Silver plate solder terminals. **MSP series** Dia.: 0.410". **MSPS series** Dia.: 0.310". Bushing ¼-40 UNS-2A.

MSPS103C

Mfg. Part No.	Action	Plunger	Bushing L	Stock No.	Price Each 1-24	25-49
MSP-3 SERIES MOMENTARY PUSHBUTTON SWITCHES						
MSP103B04	N.C.	Black	0.235"	16M2449	5.37	4.88
MSP103C04	N.O.	Red	0.235"	84K8087	4.39	4.22
MSP103C204	N.O.	Red	0.374"	06M4169	7.56	7.01
MSPS SERIES MOMENTARY PUSHBUTTON SWITCHES						
MSPS103B	N.C.	Black	0.245"	57F2072	2.25	2.06
MSPS103C	N.O.	Red	0.245"	61F1215	2.85	2.53
MSPS103C0	N.O.	Black	0.245"	98F181	2.27	1.89

(4773)

ALCOSWITCH MSPF SERIES MOMENTARY PUSHBUTTONS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Silver-plated brass contacts rated 0.5A @ 125VAC. Dielectric strength: 1000Vrms. Life expectancy: 10,000 operations at rated current. SPST, but **mfg. part no. MSPF-101BC0** is 2-circuit contact. Silver plate solder terminals. Bushing length is 0.370" 15/32-32 UNS2A. Complete with cap and decorative nut.

Mfg. Part No.	Action	Plunger	Stock No.	Price Each 1-24	25-49	50-99
MSPF101B	N.C.	Black	11F402	6.64	6.00	5.82
MSPF101C	N.O.	Red	11F403	5.46	4.97	4.84
MSPF101BC0	N.O./N.C.	Black	11F404	6.78	6.16	5.65

(4765)

1200 SERIES MOMENTARY PUSHBUTTON SWITCHES

RoHS Compliant Available

APEM

- Momentary Action Contact: SPST
- Contact Rating: 4A @ 250VAC or 8A @ 125VAC or 4A @ 24VDC
- Actuator Color: Black Polyamide
- Silver Contacts and Terminals
- Mounting Hardward Included
- Carrying Case: Black Polyamide
- Dimensons: 0.551W x 0.6691L x 0.834"D
- X209 Type is UL Recognized, CSA Certified, VDE Approved

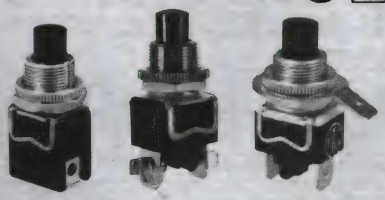


Fig. 1 Fig. 2 Fig. 3

Mfg. Part No.	Fig.	Action	Terminals	Stock No.	Price Each 1-24
1212A2	1	NC	Solder Lug/Quick Connect	96C6176	13.04
1213A2ULCSA	1	NO	Solder Lug/Quick Connect	89C2441	17.06
1222A2	1	NC	Screw Type	96C6179	25.90

➤ CONTINUED ➤

1200 SERIES MOMENTARY PUSHBUTTON SWITCHES (CONT.)

Mfg. Part No.	Fig.	Action	Terminals	Stock No.	Price Each 1-24
1223A2ULCSA	1	NO	Screw Type	86C8133	12.77
1202A2	2	NC	Screw Type w/Clamp	96C6174	12.65
1203A2UL	2	NO	Screw Type w/Clamp	96C6175	18.90
1233A2X209UL	3	NO	Solder Lug/Quick Connect	96C6180	27.32

(72940)

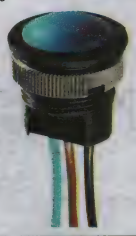
IA SERIES LOW PROFILE PUSHBUTTON SWITCHES

RoHS Compliant Available

APEM

- Resistant to frost, sand and hydrocarbons
- Front panel sealed to IP67 standards
- Tactile feedback
- Current/voltage rating: 2A 24VDC
- Contacts: silver
- Electrical life: 1 million cycles
- Operating temperature: -20°C to +65°C

IA series pushbutton switches are recommended for applications requiring protection from dust, sand, water and other contaminants. Potential applications include off road vehicles, farm equipment, machine tools, food processing equipment and medical instrumentation.



Mfg. Part No.	Style	Function	Color	Stock No.	Price Each 1-24
IAR3F1200	Round	SPST-NO	Black	33K4568	27.23
IAR3F1300	Round	SPST-NO	Green	34K0594	31.70
IAR3F1500	Round	SPST-NO	White	34K0596	40.37
IAR3F1600	Round	SPST-NO	Red	34K0597	31.38
IAR3F1900	Round	SPST-NO	Orange	34K0598	42.37

(84598)

IP SERIES PUSHBUTTON SWITCHES FOR HARSH ENVIRONMENTS

RoHS Compliant Available

APEM

- Single-Pole N.O. Momentary Action with Double Break
- Totally Sealed Compact Construction
- Ergonomically Sculptured Bezels

Fig. 1 Fig. 2 Fig. 3

Contact rating: 500mA @ 48VAC, 200mA @ 50VDC or 200mA @ 250VDC. Dielectric strength: 1500Vrms min. Operating temperature: -40°C to +125°C. Contacts: gold-plated silver. Actuator colors available include: blue, black, green, yellow, red and orange; *go online or call.* Meets IEE enclosure IP67 classification.

Mfg. Part No.	Fig.	Circuitry	Function	Actuator Color	Stock No.	Price Each 1-24
ROUND-SOLDER LUG TERMINALS						
IPR3SAD2	1	SPST-NO	Off-(On)	Black	19C7988	21.60
IPR3SAD6	1	SPST-NO	On-(On)	Red	19C7989	25.99
ROUND SHORTER BODY SOLDER LUG TERMINALS						
ISR3SAD200	1	SPST-NO	On	Black	73C8901	18.13
ISR3SAD300	1	SPST-NO	On	Red	49H6584	23.53
ROUND ILLUMINATED 20AWG WIRE LEADS						
IPR3FAD2L0S	2	SPST-NO	On	Black/Red LED	84C8865	66.65
IPR3FAD2L0G	2	SPST-NO	On	Black/Green LED	07J1337	64.69
ROUND-STRANDED 20 AWG WIRE LEADS						
IPR3FAD2	2	SPST-NO	On-(On)	Black	04M6171	31.26
IPR3FAD3	2	SPST-NO	On	Black	72C7935	36.89
IPR3FAD6	2	SPST-NO	On-(On)	Red	78M7408	30.67
IPR3FAD7/1	2	SPST-NO	On	Red	72C7340	39.91
SQUARE-SOLDER LUG TERMINALS						
IPC3SAD2	3	SPST-NO	On-(On)	Black	19C7982	29.64
IPC3SAD3	3	SPST-NO	On-(On)	Green	19C7983	27.64
IPC3SAD6	3	SPST-NO	On-(On)	Red	19C7985	29.90

(64377)

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(196525)

SWITCHES – PUSHBUTTON STANDARD

EZ-LIGHT® K30L / K50L SERIES PUSHBUTTON INDICATORS

BANNER more sensors, more solutions

- Rugged, cost-effective and easy-to-install multicolor indicator light with pushbutton
- Waterproof IP65 construction for washdown environments
- Excellent for panel mounting or as a stand-alone device
- Immune to EMI and RFI interference
- 10 to 30V dc operation (**K30L series**), 12 to 30V dc operation (**K50L series**)
- Cabled and Quick Disconnect models available

K50LGRXPPB2Q

K30LGRXPPB2Q

K30L SERIES

Mfg. Part no.	No. of LED Colors	LED Indicators	Connection	Stock No.	Price 1-2
K30LGRXPPB2Q	2	Green, Red	5-pin Euro integral QD Connector	65W9093	81.62
K50L SERIES					
K50LGRXPPB2Q	2	Green, Red	5-pin Euro integral QD Connector	61T9245	108.90

(210170)

554 SERIES COMPUTER GRADE SINGLE AND DUAL LAMP SWITCH AND INDICATOR BASES

RoHS Compliant Available

Dialight

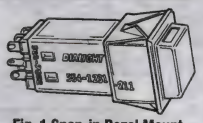


Fig. 1 Snap-in Bezel Mount

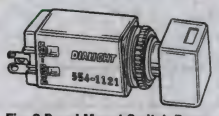


Fig. 2 Panel Mount Switch Base

Choice of snap-in bezel mount or rear panel mount with hardware. Contact rating is indicated by 4th digit of **mfg. part no.** in tables below: "1", "5" = snap-action silver contacts rated at 30VDC or 125VAC max.; "2", "6" = snap-action gold contacts rated 30VDC or 125VAC max.; and "3" = wiping-action gold contacts rated 30VDC max. All have 50mΩ contact resistance. Life expectancy: momentary-750,000/alternate-250,000 operations. Solder/quick connect terminals. UL listed, CSA certified. *Units accept scratch-resistant plastic pushbutton caps; go online or call.* Order T-1¾ midget flanged base lamps separately; *go online or call.*

MOMENTARY ACTION 0.5 TO 7 AMP POWER SWITCH, SPDT

Mfg. Part No.	Accepts Cap Size	Fig.	Stock No.	Price Each 1-24	Price Each 25-99
554-1121	All*	2	57F3000	51.92	45.56
● 554-1121-211	⅝"sq.	1	57F3035	38.88	37.31
● 554-1121-411	¾"sq.	1	25F1006	39.09	34.30
MOMENTARY ACTION 0.5 TO 7 AMP POWER SWITCH, DPDT					
● 554-1221-211	⅝" sq.	1	57F3039	55.06	52.84
● 554-1221-411	¾" sq.	1	25F1007	40.37	38.74
MOMENTARY ACTION, .015 TO 1 AMP SWITCH, SPDT					
● 554-2121-411	¾" sq.	1	52M1880	41.41	39.75
MOMENTARY ACTION, .015 TO 1 AMP SWITCH, DPDT					
● 554-2221-311	⅝" x ¾"	1	14M6786	47.08	45.19
ALTERNATE ACTION 0.5 TO 7 AMP POWER SWITCH, DPDT					
554-1231	All*	2	57F3003	56.43	54.15
● 554-1231-311	⅝" x ¾"	1	57F3042	70.63	67.79

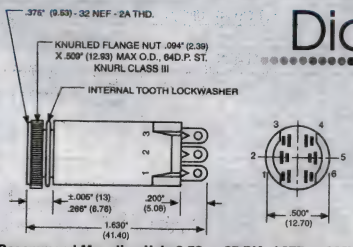
* All single lamp cap **types 324, 325, 326, 327, 328.**

(5096)

922 SERIES MOMENTARY ILLUMINATED PUSHBUTTON SWITCH

Dialight

T-1 ¾ midget flange base. Uses 908 Series caps. Incandescent lamp or LED lamp.



Recommend Mounting Hole 9.58 ± .05 DIA. (.377 ± .002)

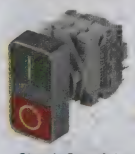
Mfg. Part No.	Switch Forms	Stock No.	Price Each 1-24	Price Each 25-99
922-1524-525	Normally Open	45F733	47.76	41.91

(13030)

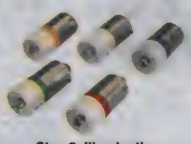
SERIES 44 OIL AND WATERTIGHT DUAL PUSHBUTTON

eao

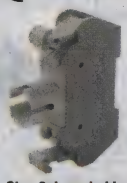
RoHS Compliant Available



Step 1: Complete Switch



Step 2: Illumination



Step 3: Lampholder

Step 4: Tool

Features:
- Combines On and Off momentary pushbuttons plus indicator in a single unit
- 2 1NO/1NC contact blocks included with switch units
- Large buttons for easy operation
- Chrome-plated front bezel
- Green plus red lens
- Blue and white LEDs available; *go online or call*

Specifications:
- Rating: 10A/660VAC
- Silver-Nickel Alloy Contacts
- Recessed Screw Terminals
- Mount in a 22.5mm dia. cut-out (0.885")
- NEMA 4 & 13 and IP65 rated
- Operating Temperature: -12 to +140°F

Use 4-Step Component Process to Assemble Complete Switch:
- STEP 1: Choose switch
- STEP 2: Choose illumination (optional)
- STEP 3: Choose lampholder (required for illumination)
- STEP 4: Choose tools (optional)

STEP 1: SWITCH UNITS WITH CONTACT BLOCK

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● 44-771.2/003	Lens Marked I + 0	30C8262	44.98

STEP 2: ILLUMINATION

INCANDESCENT BULBS

Mfg. Part No.	Voltage (V)	Stock No.	Price Each 1-24
● 10-1409.1329	12	19C2536	2.58
● 10-1412.1279	24	76K1090	2.62
● 10-1422.1179	110	01M9805	6.06

SINGLE CHIP LEDS

Mfg. Part No.	Voltage	Color	Stock No.	Price Each 1-24
● 10-2512.1142	24VAC/DC	Red	76K1096	14.95
● 10-2512.1144	24VAC/DC	Yellow	76K1097	14.95
● 10-2512.1145	24VAC/DC	Green	76K1098	15.33
● 10-2H24.2052	130VAC	Red	73K3636	17.47
● 10-2H24.2054	130VAC	Yellow	73K3639	17.47
● 10-2H24.2055	130VAC	Green	97J9860	14.95

STEP 3: LAMP HOLDER

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● 44-524	Lamp Holder	30C8520	5.74

STEP 4: TOOLS

● 44-935	Mounting Tool and Lamp/LED remover	01H3894	10.53

(68183)

8400 SERIES GENERAL PURPOSE AC RATED PUSHBUTTON SWITCHES

RoHS Compliant Available

EATON

- Slow-Make, Slow-Break Contact Mechanism
- Mfg. part no. 8442K4 is rated 6A @ 125V, and 3A @ 250V
- Mfg. part no. 8444K4 is rated 15A @ 125V, and 10A @ 250V

Light-duty momentary contact switches. Mounting hardware consists of one hexagon nut and one nickel-plated facenut. UL recognized, CSA certified except **mfg. pat no. 8440K2** and **8440K3**. 15/32" bushings except **mfg. part no. 8411K13** (¼"). **Mfg. part no. 8411K11 and 8411K13** also feature combination spade/solder lug terminals.

SPST-1NC MOMENTARY

Mfg. Part No.	Terminals	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99
● 8411K7	Screw	20M3072	4.71	4.54	4.34
● 8411K8	S. Lug	20M3073	4.04	3.89	3.72
SPDT-1NO/1NC MOMENTARY					
● 8434K2	Screw	11M1851	10.43	9.82	9.15
SPST-1NO MOMENTARY					
● 8442K4	Screw	11M1855	8.14	7.84	7.50
● 8444K2	Spade	20M3077	8.60	8.28	7.92
● 8444K4	Screw	11M1856	8.90	8.57	8.20
● 8411K11	Comb.	11M1850	4.96	4.35	4.10
● 8411K12	Screw	20M3070	5.40	4.73	4.46

➤CONTINUED➤

8400 SERIES GENERAL PURPOSE AC RATED PUSHBUTTON SWITCHES (CONT.)

SPST-1NO MOMENTARY

Mfg. Part No.	Terminals	Stock No.	Price Each 1-24	25-49	50-99
8411K13	Comb.	20M3071	5.22	4.57	4.31
8440K2	S. Lug	11M1852	12.61	12.15	11.62
8440K3	Screw	11M1853	13.76	13.25	12.68

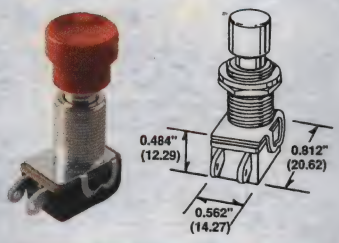
(5013)

MOMENTARY PUSHBUTTON SWITCHES

RoHS Compliant Available

EATON

- Slow-Make/Slow-Break Wiping Action
- Amps: 3A, 125VAC; 1A, 250VAC



Suit instrumentation applications. AC switch (SPST); 1 circuit model with solder lugs. 1/10HP. Bushing length: 0.562". Hardware included. *Order* **mfg. part nos. 53-3338** (black) *or* **53-3338-2** (red) *snap-on switch caps separately; go online or call.* UL recognized, CSA certified.

Mfg. Part No.	Action	Button	Stock No.	Price Each 1-24	25-49	50-99
7835K11A	On-(Off)	Metal	11M1824	17.43	16.78	16.06
7836K11A	Off-(On)	Metal	11M1827	17.02	16.39	15.68
7835K11C	On-(Off)	Black nylon	11M1825	18.69	18.00	17.22
7836K11C	Off-(On)	Black nylon	11M1828	18.54	17.85	17.08
7835K11D	On-(Off)	Red nylon	11M1826	18.69	18.00	17.22
7836K11D	Off-(On)	Red nylon	11M1829	17.43	16.40	15.29
7206K104	Off-(On)	Red nylon	12M6717	16.96	16.33	15.63

(5002)

MOMENTARY PUSHBUTTON AC/DC SWITCHES

RoHS Compliant Available

EATON

- Quick-Make/Quick-Break Wiping Action
- Amps: 6A,125VAC; 3A, 250VAC
- Bushing: 0.500"

Hardware supplied. 15/32" diameter. **894 series** listed have solder lug terminals. UL recognized.

Mfg. Part No.	Circuits	Action	Stock No.	Price Each 1-24	25-49	50-99
8943K29	DPST	Off-(On)	11M1868	39.50	38.04	36.40
8943K28	SPDT	On-(On)	11M1867	40.65	39.15	37.46

(5003)

LIMITLESS™ WOI SERIES WIRELESS OPERATOR INTERFACE

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

- Radio code: WPAN 802.15.4; 2.4GHz
- Communication range: Up to 305 m (1000ft) when used with wireless monitor or receiver module *on page 1737*
- Battery: 3.6 Vdc Lithium Thionyl Chloride; 2/3 AA size
- Operating temperature: -25°C to 50°C
- Sealing: IP65
- Housing material: Powder coated aluminum
- Offers flexibility for users to choose and install desired operator type such as 22mm rotary switch, 22mm key switch, etc.
- Ability to reconfigure and network multiple WOI inputs or point-to-point with personalized addresses
- Eliminates issues with wire connection integrity on moving equipment
- Consumes ultra-low power to prolong battery life

Mfg. Part No.	Antenna Type	Actuator Type	Operating Force +/-2 (N)	Actuator Color	Stock No.	Price Each 1-9
WOI1A00APAG	None/ RP-SMA Connector	22mm round flush button, momentary	6.2	Green	24W8563	542.06
WOI1A00APAR	None/ RP-SMA Connector	22mm round flush button, momentary	6.2	Red	24W8564	542.06

➤CONTINUED➤

LIMITLESS™ WOI SERIES WIRELESS OPERATOR INTERFACE (CONT.)

Mfg. Part No.	Antenna Type	Actuator Type	Operating Force +/-2 (N)	Actuator Color	Stock No.	Price Each 1-9
WOI1A00APBY	None/ RP-SMA Connector	29mm mushroom momentary	6.2	Yellow	24W8565	576.03
WOI1A00APCY	None/ RP-SMA Connector	40mm mushroom maintained/push-pull	7.0	Yellow	24W8566	563.15
WOI1A11APAG	0 dBi omni w/ switch mount; str. design	22mm round flush button, momentary	6.2	Green	24W8567	576.92
WOI1A11APAR	0 dBi omni w/ switch mount; str. design	22mm round flush button, momentary	6.2	Red	24W8568	576.92
WOI1A11APBY	0 dBi omni w/ switch mount; str. design	29mm mushroom momentary	6.2	Yellow	24W8569	587.91
WOI1A11APCY	0 dBi omni w/ switch mount; str. design	40mm mushroom maintained/push-pull	7.0	Yellow	24W8570	598.91

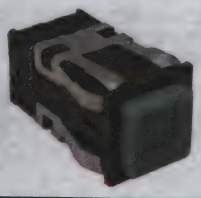
(207776)

AML21 SERIES INCANDESCENT AND NON-LIGHTED ELECTRONIC CONTROL PUSHBUTTON SWITCHES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

- Mfg. part nos. with 10th Digit "A": Silver Contacts Rated 2A, 250VAC and 24VDC Resistive; 3A, 125VAC
- Mfg. part nos. with 10th Digit "B": Gold Contacts Rated 100mA, 12VAC/DC Resistive



Meet CEE requirements. Terminals are solder or quick-connect, except those with ninth digit **"3"**, which are PC board or push-on. Panel cutout: 0.75" square. Lighted units use incandescent T-1¾ wedge base lamp nos. 73, 85, 86 *ordered separately on page 1753. Order* **AML51** *switch buttons separately on page 1752.*

Mfg. Part No.	Circuitry	Action	Stock No.	Price Each 1-9	10-49	50-99
SQUARE DISPLAY NON-LIGHTED						
AML21BBA2AA	SPDT	(On)	23F4409	16.71	12.17	11.40
AML21BBA2AC	DPDT	(On)	23F4325	16.09	14.77	13.66
AML21BBA2BA	SPDT	(On)	23F4410	13.64	12.52	11.58
AML21BBA2AB	SPDT	On	50F9237	14.33	13.16	12.16
SQUARE DISPLAY LIGHTED, SINGLE LAMP CIRCUIT						
AML21CBA2AA	SPDT	(On)	23F4411	31.25	23.39	22.41
AML21CBA2BA	SPDT	(On)	23F4328	41.63	31.16	29.86
AML21CBA3AA	SPDT	(On)	23F4331	25.77	18.77	17.58
AML21CBA3BA	SPDT	(On)	23F4333	44.01	32.95	31.57
AML21CBA2AB	SPDT	On	23F4412	32.21	24.11	23.10
AML21CBA2AC	DPDT	(On)	23F4413	22.20	20.37	18.83
AML21CBA2AD	DPDT	On	23F4414	23.98	22.01	20.34
AML21CBA3AC	DPDT	(On)	23F4332	24.24	22.26	20.57
RECTANGULAR DISPLAY LIGHTED, SINGLE LAMP CIRCUIT						
AML21FBA2AA	SPDT	(On)	23F4417	20.50	18.83	17.41
AML21FBA2BA	SPDT	(On)	23F4339	46.27	34.63	33.18
AML21FBA3BA	SPDT	(On)	23F4342	38.17	28.57	27.37
AML21FBA2AB	SPDT	On	23F4337	23.70	21.76	20.11
AML21FBA2AC	DPDT	(On)	23F4418	25.81	19.32	18.51
AML21FBA2AD	DPDT	On	23F4338	42.97	32.17	30.82
RECTANGULAR DISPLAY NON-LIGHTED						
AML21EBA2AA	SPDT	(On)	23F4334	14.27	13.10	12.12
AML21EBA2BA	SPDT	(On)	23F4336	31.51	23.58	22.60
AML21EBA2AC	DPDT	(On)	23F4335	19.93	18.30	16.91
RECTANGULAR LIGHTED, 2 LAMP CIRCUIT						
AML21GBA2AC	DPDT	Push On-Push Off	23F4344	26.86	24.66	22.79
AML21GBA2AD	DPDT	On	23F4345	43.12	34.30	30.75
AML21GBE2AC	DPDT	Push On-Push Off	22C8655	53.16	42.27	40.62
AML21GBE2AD	DPDT	On	50B5408	55.08	37.10	34.29
AML21GBA2AA	SPDT	(On)	23F4343	25.50	23.41	21.64
AML21GBA2BA	SPDT	(On)	50F9238	44.49	33.30	31.90

(4864)

SWITCHES – PUSHBUTTON STANDARD

AML22 SERIES ELECTRONIC CONTROL LED DISPLAY SWITCHES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

- Momentary Action

Identical to **AML21 series** except with high-efficiency LED display. Quick-connect terminals. UL recognized, CSA certified. *Order* **AML52** *buttons separately; go online or call.*

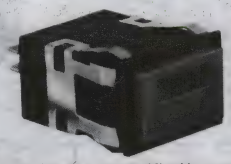
Mfg. Part No.	LED Color	LED Voltage	Circuitry	Stock No.	Price Each 1-9	10-49	50-99
● AML22CBB2AA	Red	5	SPDT	84F652	57.26	42.86	41.07
● AML22CBB2AC	Red	5	DPDT	38B2725	50.27	39.97	38.42
● AML22CBC2AA*	Red	5	SPDT	23F4347	54.46	49.99	46.19
● AML22CBE2AD*	Red	15	DPDT	51F2621	53.63	36.12	33.39
● AML22CBF2AC*	Red	24	DPDT	51F2622	37.58	34.50	31.88
● AML22CBJ2AA*+	Yellow	5	SPDT	23F4348	49.62	37.14	35.58
● AML22CBM2AA	Yellow	24	SPDT	38B2786	57.68	52.94	48.94
● AML22CBM2AC	Yellow	24	DPDT	50B5421	35.65	32.72	30.23
● AML22CBS2AA*	Green	5	SPDT	23F4349	49.62	37.14	35.58
● AML22CBX2AC	Green	24	DPDT	92B6125	37.58	34.50	31.88

*Internal resistor to maintain LED drive current 20mA; +Alternate Action
(4865)

AML31 SERIES POWER DUTY PUSHBUTTON SWITCHES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.



- 2PST, Normally-Open, Form X
- 10A @ 125/250VAC

Rectangular units with black bezel. 0.187 x 0.020″ (4.75 x 0.508) solder or quick-connect terminal. 2-pole 2 form A silver contacts. *Order* **AML91 series** *incandescent lamps separately on page 1753.* UL recognized, CSA certified. *Order* **AML51 series** *buttons separately on this page.*

Mfg. Part No.	Description	Circuits	Stock No.	Price Each 1-9	10-49
● AML31EBA4AD	Non-Lighted	Alternate Action	23F2444	28.40	26.07
● AML31FBA4AD	Incandescent	Alternate Action	23F4285	34.29	25.66
● AML31FBA4AC	Incandescent	Momentary	50F9242	49.03	33.03
● AML31FBE4AD	28V, Incandescent	Alternate Action	51F2624	67.63	62.10

(4921)

AML32 SERIES PUSHBUTTON SWITCHES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

AML32

- Alternate Action, DPST, Normally Open, Form X

AML32 series switch is a rectangular pushbutton unit with black bezel. Neon lamp (included), and 0.187 x 0.020″ (4.75 x 0.508) solder/quick connect terminals with integral lamp circuit. UL recognized. CSA certified. *Order switch buttons separately below.*

PUSHBUTTON SWITCHES

Mfg. Part No.	Description	Neon Lamp Voltage/Color	Stock No.	Price Each 1-9	10-49	50-99
● AML32FBB7AD	Red Neon	125VAC Red	23F4354	40.50	37.19	34.38
● AML32FBB4AD	Red Neon*	125VAC Red*	23F4426	42.59	39.10	36.15
● AML32FBC7AD	Clear Neon	125VAC Clear*	23F4355	70.56	56.14	50.34
● AML32FBK4AD	Red Neon	250VAC Red	23F4356	39.81	29.80	28.55

SWITCH BUTTONS

Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-49	50-99
● AML52N10R	Red Switch Button	23F4452	2.24	2.04	1.88
● AML52-N10K	Black Switch Button	23F4434	2.40	2.21	2.04
● AML52-N10G	Green Switch Button	50F5208	5.64	3.51	3.29
● AML52-N10W	White Switch Button	23F4435	5.64	3.51	3.29

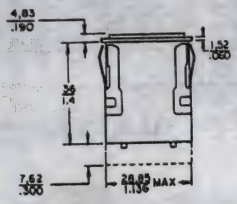
*Isolated lamp circuit
(4924)

AML11 SERIES LIGHTED SOLID-STATE PUSHBUTTON DISPLAY SWITCHES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

- 4.5-24VDC Sinking Momentary Action
- Max. Supply Current: 3.5mA (Released)



Rectangular

Hall-effect reliability and low-volt signals interface with nearly all DC logic level loads. Black bezel. Mfg. part nos. with 9th digit **"2"** have 0.110″ x 0.020″ (2.79 x 0.508) solder/QC terminals; **"3"** have 0.025″ (0.635) sq. PC terminals. Alternate action units are also available; *replace* **"A" suffix** *in mfg. part no. with* **"E" suffix.** Panel cutout: 1.14″ x 0.750″. Lighted units use incandescent T-1 ¾ wedge base lamp nos. 73, 85, 86, *ordered separately on this page. Order* **AML51** *switch buttons separately on this page.*

LIGHTED

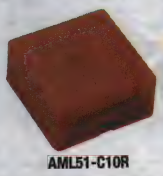
Mfg. Part No.	Terminal	Bezel	Stock No.	Price Each 1-9
● AML11EBA2EA	Q-C	Rectangle	24C9274	39.98

(4860)

AML SERIES SWITCH BUTTONS AND PANEL PLUGS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.



AML51-C10R

For **AML11**, **AML21**, and **AML31** series incandescent and non-lighted pushbuttons and **AML41** indicators. 0.19″ thick. Panel plug for use with **AML11**, **AML12**, **AML21**, **AML22**, **AML23**, **AML24**, **AML27**, **AML31**, **AML32**, **AML33**, **AML34**, **AML35**, **AML36**, **AML41**, **AML42** and **AML45** series.

SQUARE PUSHBUTTON STYLE

Mfg. Part No.	Color	Stock No.	Price Each 1-9	10-49	50-99
● AML51-C10A	Amber	23F4382	1.43	1.31	1.22
● AML51-C10W	White	23F4300	1.22	1.11	1.03
● AML51-C10Y	Yellow	23F4384	1.33	1.21	1.11
● AML51-C10R	Red	23F4443	1.21	1.11	1.03
● AML51-C10G	Green	23F4441	2.58	1.55	1.42

RECTANGULAR PUSHBUTTON STYLE

● AML51-F10A	Amber	23F4398	5.65	3.52	3.30
● AML51-F10W	White	23F4401	2.09	1.92	1.77
● AML51-F10Y	Yellow	23F4449	5.65	3.52	3.30
● AML51-F10R	Red	23F4447	5.60	3.49	3.27
● AML51-F10G	Green	23F4446	2.09	1.92	1.77
● AML51G11WW	White	99F6272	10.48	9.62	8.89

PANEL PLUGS

Mfg. Part No.	Type	Color	Dimensions (in)	Stock No.	Price Each 1-9	10-49	50-99
● AML78CB	Square	Black	0.8 X 0.8 x 0.36	90B3532	5.81	5.33	4.93

(4861)

AML75 PANEL SEALS/ AML76 SWITCH GUARDS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Protect displays from contamination by dust, dirt, or spills. No effect on color, light intensity, or legend quality. Fit both 0.19″ (4.83) standard-height square or rectangular pushbuttons.

Seal

Guard

AML75 PANEL SEALS

Mfg. Part No.	Pushbutton Shape	Stock No.	Price Each 1-9	10-49	50-99
● AML75ABC	Square	23F4468	8.75	5.54	5.12
● AML75BBC	Rectangular	23F4469	5.60	5.14	4.75

CONTINUED

AML75 PANEL SEALS/AML76 SWITCH GUARDS (CONT.)

AML76 SWITCH GUARDS

For square and rectangular pushbuttons, these clear, polycarbonate thermoplastic guards prevent accidental pushbutton operation. The word "LIFT" is molded into top front edge of guard. Bracket bright-finished stainless steel.

Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-49	50-99
AML76C10T01P	Square	23F4474	19.89	14.49	13.57
AML76F10T01P	Rectangular	23F5001	8.71	7.99	7.39

(4925)

AML91 INCANDESCENT LAMPS

RoHS Compliant Available

Honeywell Sensing and Control

SELECTION, SPEED, SERVICE. All Found Here.

T-1¾ wedge base lamps for **AML 11/21/24/31/34/41 series** incandescent pushbutton switches as shown *on pages 1751-1752.*

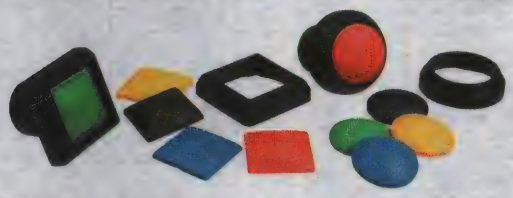
Mfg. Part No.	Lamp Number	Lamp Voltage	Stock No.	Price Each 1-9	10-49
AML91LA86	86	6.3	23F4473	6.59	4.55
AML91LA73	73	14.0	23F4471	2.68	2.45
AML91LA85	85	28.0	23F4472	6.81	5.02

(4923)

48 SERIES SEALED PUSHBUTTON SWITCHES

RoHS Compliant Available

ITW Switches — Sensors, Switches, Electronic Controls



- Meets IP67 standards
- Modular components can make over 1000 distinct parts
- Lighted or non-illuminated
- Solder Terminals
- Contact Rating: 400mA, 32VAC

Series 48 Flex-Tech sealed pushbutton is ideal for: medical equipment, instrumentation, datacom, transportation, recreational vehicles, outdoor controls, and mass transit controls. Available in momentary or alternate action with a variety of colors in keycaps; (On) = Momentary, On = Maintained.

Mfg. Part No.	Style	Circuit	Color	Stock No.	Price Each 1-9	10-24
48-1-RB-N-BK-B	Round	(On)	Black	21K5012	10.09	9.58
48-1-RB-N-RD-B	Round	(On)	Red	21K5013	10.08	9.58
48-1-RB-R-BK-B	Round	(On)	Black	26M8625	10.28	9.80
48-2-RB-N-BK-B	Round	On	Black	21K5016	9.75	9.27
48-2-RB-N-RD-B	Round	On	Red	21K5017	15.34	14.57
48-2-SB-N-BK-B	Square	On	Black	21K5018	15.34	14.57

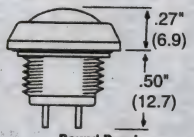
(84003)

49 SERIES SEALED PUSHBUTTON SWITCHES

RoHS Compliant Available

ITW Switches — Sensors, Switches, Electronic Controls

Round Bezels



Round Bezel

- SPST-NO-DB
- Momentary Action 400mA @ 32VAC Resistive; 100mA @ 50VDC Resistive, 125mA @ 125VAC Resistive.

High-environment pushbutton switches designed for compact applications and protection from electrostatic discharge. Panel sealed IP67. Thermoplastic case. Gold-plated contacts.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
49111	Round Bezel, Black Button	01F986	13.98
49112	Round Bezel, Red Button	01F987	16.41
49113	Round Bezel, Green Button	01F988	13.98
49411G	Round Bezel, Black, Green LED	01F989	19.14

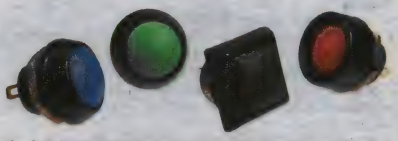
(13057)

59 SERIES SEALED PUSHBUTTON SWITCHES

RoHS Compliant Available

ITW Switches — Sensors, Switches, Electronic Controls

- Zinc alloy housing
- Circuit: SPST-NO,Form X
- Dielectric strength: 1000VAC @ 125°C
- Current rating: 400mA @ 32VAC resistive; 100mA @ 50VDC resistive; 125mA @ 125VAC resistive
- Operating temperature: -55°C to 125°C (-67°F to +257°F)



59 series is sealed to IP67. Mounts into panels of minimum .0625" (1.5mm) and maximum 0.118" (3.00). Button material: PBT. Contacts: gold-plated palladium nickel. Terminals: gold-plated brass.

Mfg. Part No.	Bezel	Color	Stock No.	Price Each 1-9
59-111	Standard Round	Black	50F1487	10.75
59-112	Standard Round	Red	50F1488	10.75
59-113	Standard Round	Green	50F1489	10.75
59-211	Standard Square	Black	84F1008	10.75
59-212	Standard Square	Red	50F1490	10.56
59-213	Standard Square	Green	50F1491	11.74
59-311	High Round	Black	50F1492	14.50
59-312	High Round	Red	50F1494	14.50
59-313	High Round	Green	50F1493	14.50

(5100)

WB SERIES ENVIRONMENTALLY SEALED PUSHBUTTON SWITCHES

RoHS Compliant Available

NEW

NKK SWITCHES

Features:

- Environmentally Sealed
- Available in 10A toggles, 6A pushbuttons and in 15A rockers
- Antijamming design on toggle switches protects contacts from damage due to excessive downward force on the actuator
- Solder lug and screw terminal models meet IP67 of IEC60529 Standards at front panel (dust tight and water protected for temporary immersion)
- Behind panel standard is IP60 (dust tight but not water protected).

Wire Lead — Solder Lug — Screw Lug

- Single unit construction of the bushing and CASE gives added protection from environmental elements
- Specially designed CONTACT mechanism for breaking light welds.
- Sealed actuator area and epoxy sealed base prevent entry of contaminants
- Minimal contact bounce is achieved with specially designed interlocked switching mechanism
- Outer housing of heat resistant resin meets UL 94V-0 flammability standard and provides high arc and tracking resistance

Mfg. Part No.	Poles	Circuit	Terminals	Cap Size	Cap Color	Stock No.	Price Each 1-24
WB12L-DA	SPDT	On-On	Wire Lead	13.2mm	Black	10X9687	29.09
WB12S-DA	SPDT	On-On	Solder Lug	13.2mm	Black	10X9692	18.33
WB15L-DA	SPDT	On-(On)	Wire Lead	13.2mm	Black	10X9700	29.84
WB15S-DA	SPDT	On-(On)	Solder Lug	13.2mm	Black	10X9707	19.08
WB15T-DA	SPDT	On-(On)	Screw Lug	13.2mm	Black	10X9713	20.01

(211955)

JP SERIES STANDARD PUSHBUTTON SWITCHES

RoHS Compliant Available

NKK SWITCHES

NEW

Features:

- Internationally Approved Pushbutton Switch
- Industry's first molded pushbutton with TV rating
- Designed to handle large inrush current:
  JPM models certified for TV-5 rating
  JPL models for TV-8 rating
- Prominent external insulating barriers increase insulation resistance and dielectric strength
- Constructed for dust resistance with interior seal of polyphenylene sulfide (PPS) between actuator and contact area
- Specially designed to break light contact welds
- Snap-action contact mechanism
- Terminals are molded in and epoxy sealed to lock out flux, dust, and other contaminants
- Outer case of heat resistant resin meets UL's 94V-0 flammability standard

TV-5 RATED
10A @ 125/250V AC

Mfg. Part No.	Poles	Circuit	Actuator	Cap Color	Stock No.	Price Each 1-24
JPM16B-C	SPST	Off-On	Flat Cap	Red	10X0273	8.74
JPM26B	DPST	Off-On	Flat Cap	...	10X0275	10.99
JPM26B-C	DPST	Off-On	Flat Cap	Red	10X0278	11.70

TV-8 RATED
16A @ 125/250V AC

JPL26B-A	DPST	Off-On	Flat Cap	Black	10X0263	12.48

(211952)

SWITCHES – PUSHBUTTON STANDARD

OLED SMARTSWITCH™ PUSHBUTTON SWITCHES

NEW

NKK SWITCHES

Features:
- Viewing area: 15.5mm x 11.6mm
- High reliability and long life of three million actuations minimum
- High resolution of 64RGB x 48 pixels
- Epoxy sealed straight PC terminals
- Snap-in standoff for easy, secure mounting and alignment
- Organic LED technology; now with 30,000 hours life and 30% less power consumption
- Range of 65,536 colors in 16 bit mode, 256 colors in 8 bit m ode
- Full viewing angle of 180°
- Exceptional contrast: 50 times greater than previous LCD pro ducts
- Four times more enhanced resolution
- High resolution provides sharp, clear images of ver y small characters
- Operated by commands and data supplied via serial communicat ions (SPI)
- Distinct, long travel of 4.5mm (same as KP01 Series)
- Dust tight construction
- Stylish, translucent black housing design

The **OLED Pushbutton** is a pushbutton switch with a built-in color OLED display. Enhance your designs with a switch that runs video or image sequences. Ideal for control rooms with real-time data, operator training equipment, broadcast panels, kiosks, etc. OLED display life is 60K hours at 50 cd/m² with 40% pixels on (typical for many applications).

Mnf. Part No.	Viewing Area	Display Mode	Interface	Stock No.	Price Each
ISC15ANP4	15.5mm x 11.6mm	Passive matrix	SPI	09X9992	65.99

DEVELOPMENT KITS

Mnf. Part No.	Description	Stock No.	Price Each
IS-DEV KIT-7	OLED Pushbutton Development Kit	09X9981	276.70

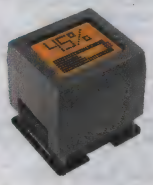
(211892)

LCD PUSHBUTTON SWITCHES

NEW

NKK SWITCHES

Features:
- Broad and even light distribution
- Consistent bright backlighting
- Lower energy consumption
- Programmable LC Display
- Rubber Dome
- Epoxy Sealed Straight PC Terminals
- Programmable to display graphics, alphanumeric characters, and animated sequences
- Wide viewing area 15.0mm x 10.8mm



The LCD pushbutton product family combines a LCD display and pushbutton switch in one device. Use the display for graphics, animations, and alphanumeric messages. Backlighting options are single color, bi-color, or RGB. Design engineers have full control of the backlight through software. Some products are compatible with 3D glasses. Ideal for control panels and keyboards.

36X24 LCD PUSHBUTTONS

Mnf. Part No.	Backlight LED	Viewing Area	Display Mode	Display Condition	Stock No.	Price Each 1-24
IS15AACP4CF	Red, Green	15mm x 10.8mm	STN	Transflective	09X9999	38.08
IS15ABFP4RGB	Red, Green, Blue	15mm x 10.8mm	FSTN	Transflective	10X0008	46.95

Features:
- High resolution of 64 x 32 pixels
- 64 colors of backlighting can be controlled dynamically
- Pushbutton switch with LCD, RGB LED backlighting
- General brightness of backlight is dynamically controlled in eight steps from dark to bright
- Operated by commands and data supplied via serial communications (SPI)
- Can display as many as four lines of text with ten characters each
- Incorporates bitmap display function
- Programmable display graphics for alphanumeric characters and animated sequences
- Dual image VRAM for quick change of displayed images
- Low energy consumption
- Dust tight construction

64X32 LCD PUSHBUTTONS

Mnf. Part No.	Backlight LED	Viewing Area	Display Mode	Display Condition	Stock No.	Price Each
IS15DBFP4RGB	Red, Green, Blue	15mm x 10.8mm	FSTN	Transflective	10X0009	59.97
IS15DSBFP4RGB*	Red, Green, Blue	13mm x 10.7mm	FSTN	Transflective	10X0010	56.58

*Compact - 28% smaller than standard LCD 64 x 32 pushbutton

DEVELOPMENT KITS

Mnf. Part No.	Description	Stock No.	Price Each
IS-DEV KIT-6	64 x 32 Pushbutton Development Kit	09X9978	225.46

(211890)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

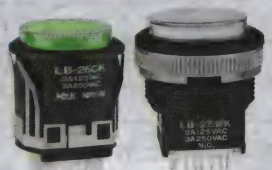
LB SERIES PUSHBUTTON SWITCHES

RoHS Compliant Available

NEW

NKK SWITCHES

Specifications:
- Contact Resistance: 50 milliohms Max.
- Dielectric Strength: 1000VAC for 1 minute
- Contact Rating: Silver Contact: 3A @ 125VAC or 3A @ 250VAC or 3A @ 30VDC
- Gold Contact: 0.4VA @ 28V AC/DC



0.4A RATED PUSHBUTTON SWITCHES

Mfg. Part No.	Contact Configuration	Actuator Style	Stock No.	Price Each 1-24
● LB26RKG01	DPDT	Rectangular	10X2861	14.49
● LB26CKG01-05-GJ	DPDT	Round	10X2804	17.91
● LB26RKG01-12-FJ	DPDT	Rectangular	10X2866	17.91
● LB26RKG01-5C-JB	DPDT	Rectangular	10X2868	17.96
● LB26SKG01-05-EJ	DPDT	Square	10X2935	17.91
● LB26SKG01-12-JG	DPDT	Square	10X2937	17.91
● LB26SKG01-5C24-JB	DPDT	Square	10X2941	27.29
● LB26SKG01-5D24-JB	DPDT	Square	10X2943	27.29
● LB26SKG01-6B-JB	DPDT	Square	10X2947	24.74

3A RATED PUSHBUTTON SWITCHES

● LB26CKW01	DPDT	Round	10X2808	12.30
● LB26RKW01	DPDT	Rectangular	10X2877	12.30
● LB26SKW01	DPDT	Square	10X2948	12.30
● LB26CKW01-5C-JC	DPDT	Round	10X2833	15.76
● LB26CKW01-5F-JF	DPDT	Round	10X2844	15.76
● LB26RGW01-12-CJ	DPDT	Rectangular	10X2854	15.71
● LB26RKW01-5C-JC	DPDT	Rectangular	10X2897	15.76
● LB26RKW01-5F-JF	DPDT	Rectangular	10X2910	15.76
● LB26SKW01-05-CJ	DPDT	Square	10X2956	15.71
● LB25WKW01-6F-JB	DPDT	Round Panel Seal	10X2789	24.43

(211566)

UNDERVOLTAGE PROTECTION PUSHBUTTON SWITCHES

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

- 2-pole switch with undervoltage release and restart protection
- Remote trip version
- Snap-in or screw-on version
- Protection covers for IP 54 or IP 65

UP1-3TF UP1-5TF UP1-7/8TF

Mfg. Part No.	Rated Voltage (V)	Frequency (Hz)	Protection Cover	Stock No.	Price Each 1-9
● 4431.1007	230	50	Yes	41T1941	24.03
● 4431.1043	230	50	Yes	41T1975	28.46
● 4431.1044	120	60	Yes	41T1976	28.46
● 4431.1047	115	60	Yes	41T1979	24.03
● 4431.1009	230	50	No	41T1943	20.41
● 4431.1011	230	50	Yes	41T1945	20.54
● 4431.1015	115	60	Yes	41T1949	20.54
● 4431.1016	230	50	No	41T1950	20.41
● 4431.1034	230	50	Yes	41T1966	27.65
● 4431.1039	230	60	Yes	41T1971	27.65
● 4431.1038	115	50	Yes	41T1970	27.65
● 4431.1029	240	50-60	No	41T1962	20.41
● 4431.1005	230	50	No	41T1939	20.41
● 4431.1024	230	50	Yes	41T1958	27.65
● 4431.1017	230	60	Yes	41T1951	27.65
● 4431.1030	120	60	No	41T1963	21.84
● 4431.1028	115	50	No	41T1961	20.41
● 4431.1018	115	50	Yes	41T1952	27.65
● 4431.1006	115	60	No	41T1940	20.41
● 4431.1025	115	60	Yes	27T7306	27.65
● 4431.1008	230	50	No	41T1942	20.41
● 4431.1041	230	50	No	41T1973	20.41
● 4431.1013	230	50	Yes	41T1947	27.65
● 4431.1045	230	60	Yes	41T1977	28.46
● UP1-3TFU51-UZZ31	115	60	Yes	41T1965	24.03

CONTINUED

UNDERVOLTAGE PROTECTION PUSHBUTTON SWITCHES (CONT.)

PROTECTION COVERS

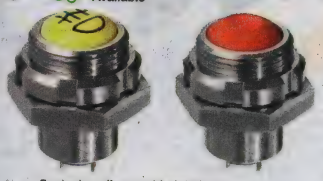
Mfg. Part No.	Description	Stock No.	Price Each 1-9
4431.1019	IP 65 for types UP1-5TF/Black	41T1953	6.22
4431.1020	IP 65 for types UP1-5TF/Yellow	41T1954	6.00
4431.1021	IP 65 for types UP1-7TF or Up1-8TF/Black	41T1955	6.43
4431.1022	IP 65 for types UP1-7TF or Up1-8TF/Yellow	41T1956	6.78
4431.1023	Frontside IP 65, backside Ip 40 for types UP1-7TF or Up1-8TF/Black	41T1957	2.50

(196226)

IZ SERIES REAR MOUNTED SEALED PUSHBUTTON SWITCHES

RoHS Compliant Available

APEM



Features
- Rear mounting for easier installation
- Latching action metal models
- Fixed or variable panel thickness
- Illuminated or non-illuminated
- Flat actuator for optional marking
- Sealed to IP67

Specifications
- Max. current/voltage rating with resistive load : 100mA 24VDC - 200.000 cycles
- Case : thermpoplastic UL94-V0
- Bushing/bezel : brass, nickel plated
- Contacts : silver, gold plated
- Temperature range : -40°C to +85°C
- Degree of protection : IP67

Mfg. Part No.	Electrical Function	Bezel Style	Termination	Actuator Color	Stock No.	Price Each 1-24
IZMP1Z45NL0S	Off-On	Round, flat	Quick Connect	Yellow	82R3936	63.38
IZNR1S42N	Off-On	Round, curved	Solder	Black	82R3937	46.54
IZNR3P422	(NO)	Round, curved	PCB / Solder	Black	82R3938	34.55
IZPP1F462	Off-On	Round, flat	Wire Leaded	Red	82R3939	44.54
IZPP3S432L0G	(NO)	Round, flat	Solder	Green	82R3940	39.34
IZPP3V272	(NO)	Round, flat	Screw	Black	82R3941	39.32
IZPR1S462L0S	Off-On	Round, curved	Solder	Red	82R3942	49.35
IZPR3P422	(NO)	Round, curved	PCB / Solder	Black	82R3943	30.25
IZPR3P462	(NO)	Round, curved	PCB / Solder	Red	82R3944	28.82
IZPR3S422	(NO)	Round, curved	Solder	Black	63R9672	28.82

(179347)

IR SERIES SEALED MOMENTARY PUSHBUTTON SWITCHES

RoHS Compliant Available

APEM

Features
- Sealed to IP67
- Illuminated or non-illuminated
- Tactile feedback
- Square or round actuator
- Wide choice of bezel and actuator colours
- Wide choice of illumination colours

Specifications
- Operating force : 2N to 5N
- Mechanical life : 1.000.000 cycles
- Torque : 0,8 Nm max.
- Case : thermoplastic UL94-V0
- Plunger : polyamide %
- Bushing/bezel : polyamide %
- Contacts : 4 : silver, gold plated 2 : silver (screw terminals)
- Operating temperature : -40°C to +85°C

Mfg. Part No.	Electrical Function	Bezel Style	Termination	Actuator Color	Stock No.	Price Each 1-24
IRR1S422L0S	On -Off	Round, curved	Solder lug	Black	82R3927	46.96
IRR3F4B2	NO	Round, curved	Wire Leaded	Blue	82R3928	32.90
IRR3F422000	NO	Round, curved	Wire Leaded	Black	82R3929	31.27
IRR3F462000	NO	Round, curved	Wire Leaded	Red	82R3930	32.47
IRR3S422000	NO	Round, curved	Solder lug	Black	82R3931	26.09
IRR3V222000	NO	Round, curved	Screw	Black	82R3932	36.96
IRR3V262000	NO	Round, curved	Screw	Red	82R3933	35.59
IRR8Z222L0S	NC/NO	Round, curved	Solder lug/QC	Black	82R3934	51.26
IRR8Z222000	NC/NO	Round, curved	Solder lug/QC	Black	82R3935	40.73
IRR3S422L0S	NO	Round, curved	Solder lug	Black	15R9250	40.04
IRR7Z232L0G	NC+NO	Round, curved	Solder lug/QC	Green	15R9254	45.18

(179346)

element14 COMMUNITY

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element14.com

(196545)

16mm STAINLESS STEEL PUSHBUTTON SWITCHES

RoHS Compliant Available

bulgin
a brand of Elektron Technology

Fig. 1: Low Button | Fig. 2: Domed Button | Fig. 3: Prominent Button | Fig. 4: Low Button

Fig. 5: Prominent Button | Fig. 6: Dot Illuminated | Fig. 7: Ring Illuminated

Features:
- MP0042 and MP0044 available with flush, domed, or prominent button profile
- MP0045 available with flush, or prominent button profile
- Depth behind panel: 20.3 (MP0042 and MP0044); 36.5mm (MP0045)
- Available as non-illuminated or with dot or ring LED illumination

Specifications:
- LED operating voltage: 12VDC
- Mounting type: Front panel/ single hole
- Switch material: Stainless steel

18mm OVERALL DIAMETER

Mfg. Part No.	Fig.	Circuitry	Function	Illumination	Color	Stock No.	Price Each 1-9
MP0042/1	1	SPST	Off-(On)	...	...	95M9939	9.66
MP0044/1*	1	SPST	Off-(On)	...	...	95M9942	11.71
MP0042/2	2	SPST	Off-(On)	...	...	95M9940	9.54
MP0042/3	3	SPST	Off-(On)	...	...	95M9941	9.54
MP0044/3*	3	SPST	Off-(On)	...	...	95M9944	12.40
18mm OVERALL DIAMETER							
MP0045/1D0NN000	4	DPDT	Off-(On)	...	...	95M9945	13.81
MP0045/1E0NN000	4	DPDT	On-Off	...	...	95M9954	14.26
MP0045/3D0NN000	5	DPDT	Off-(On)	...	...	95M9964	13.99
MP0045/3E0NN000	5	DPDT	On-Off	...	...	95M9965	14.63
MP0045/1D1RD012	6	DPST-CO	Off-(On)	Dot	Red	95M9949	16.25
MP0045/1D1GN012	6	DPST-CO	Off-(On)	Dot	Green	95M9948	16.25
MP0045/1D1BL012	6	DPST-CO	Off-(On)	Dot	Blue	95M9947	16.25
MP0045/1E1RD012	6	DPST-CO	On-Off	Dot	Red	95M9958	17.11
MP0045/1E1BL012	6	DPST-CO	On-Off	Dot	Blue	95M9956	17.11
MP0045/1D2AM012	7	DPST-CO	Off-(On)	Ring	Amber	95M9950	16.25
MP0045/1D2RD012	7	DPST-CO	Off-(On)	Ring	Red	95M9953	16.46
MP0045/1D2GN012	7	DPST-CO	Off-(On)	Ring	Green	95M9952	16.46
MP0045/1D2BL012	7	DPST-CO	Off-(On)	Ring	Blue	95M9951	16.46
MP0045/1E2AM012	7	DPST-CO	On-Off	Ring	Amber	95M9959	16.90
MP0045/1E2RD012	7	DPST-CO	On-Off	Ring	Red	95M9963	17.33
MP0045/1E2GN012	7	DPST-CO	On-Off	Ring	Green	95M9962	16.90
MP0045/1E2BL012	7	DPST-CO	On-Off	Ring	Blue	95M9961	17.33

* Gold plated Brass
(113654)

01 SERIES 16mm LIGHTED PUSHBUTTON SWITCHES AND INDICATORS

RoHS Compliant Available

eao

Rectangular Switch | Square Switch | Round Switch

Features:
- Front panel replaceable illumination and lens
- Minimum behind panel depth
- Extended lens w/ tapered bezel
- Available in up to a 4-pole form Z contact configuration
- Blue and white LEDs available; *go online or call*

LEDs

Specifications:
- 250VAC/5A, 220VDC/0.1A, 24VDC/2A Snap-Action
- 42VAC/0.1A, 42VDC/0.1A Low Level
- Minimum Depth: 1.34"
- Use T-5.5 slide base single chip high intensity LED for illumination
- (On) = Momentary action; On = Maintained action

Use 4-Step Component Process to Assemble Complete Switch:
- STEP 1: Choose indicator or pushbutton
- STEP 2: Choose lens
- STEP 3: Choose optional LED illumination
- STEP 4: Choose optional accessories and tools

➤CONTINUED➤

01 SERIES 16mm LIGHTED PUSHBUTTON SWITCHES AND INDICATORS

(CONT.)

STEP 1: PUSHBUTTON SWITCHES

Mfg. Part No.	Circuit	Action	Bezel Style	Switch Element	Termination	Stock No.	Price Each 1-24
● 01-121.025	SPDT	(On)	Rectangular	Snap-Action	Solder	30B3642	24.06
● 01-122.025	DPDT	(On)	Rectangular	Snap-Action	Solder	30B3644	35.97
● 01-261.025	SPDT	On	Rectangular	Snap-Action	Solder	30B3671	26.54
● 01-262.025	DPDT	On	Rectangular	Snap-Action	Solder	30B3673	37.77
● 01-151.025	SPDT	(On)	Square	Snap-Action	Solder	30B3661	24.06
● 01-152.025	DPDT	(On)	Square	Snap-Action	Solder	30B3663	36.32
● 01-282.025	DPDT	On	Square	Snap-Action	Solder	27C2003	37.77
● 01-131.025	SPDT	(On)	Round	Snap-Action	Solder	30B3651	24.06
● 01-271.025	SPDT	On	Round	Snap-Action	Solder	88F3322	27.34
● 01-272.025	DPDT	On	Round	Snap-Action	Solder	99F8434	38.90

STEP 1: INDICATORS

Mfg. Part No.	Description	Termination	Stock No.	Price Each 1-24
● 01-040.005	Illuminated Indicator, Rectangular	Solder	30B3616	8.21
● 01-050.005	Illuminated Indicator, Square	Solder	30B3619	8.50
● 01-030.005	Illuminated Indicator, Round	Solder	88F3924	8.31

STEP 2: LENSES

Mfg. Part No.	Shape	Color	Stock No.	Price Each 1-24
● 01-901.2	Rectangular	Red	50B3010	2.26
● 01-901.4	Rectangular	Yellow	96B8821	2.29
● 01-901.5	Rectangular	Green	90B0028	2.26
● 01-901.6	Rectangular	Blue	50B3012	2.29
● 01-951.2	Square	Red	91B2351	2.29
● 01-951.4	Square	Yellow	91B2358	2.29
● 01-951.5	Square	Green	90B5364	2.29
● 01-951.6	Square	Blue	17C6557	2.29
● 01-931.2	Round	Red	66F9717	2.26
● 01-931.4	Round	Yellow	92B0719	2.29
● 01-931.5	Round	Green	91B0536	2.26
● 01-931.6	Round	Blue	31C1874	2.29

STEP 3: ILLUMINATION (OPTIONAL)

Mfg. Part No.	Forward Voltage	Color	Description	Stock No.	Price Each 1-24
● 10-1106.1369	...	...	Incandescent Bulb	40C1788	2.62
● 10-1109.1329	...	...	Incandescent Bulb	76K1087	2.99
● 10-1112.1279	...	...	Incandescent Bulb	76K1088	2.48
● 10-2106.3145	6 VDC	Green	Single Chip LED	79K3559	11.22
● 10-2109.1062	12 VAC/DC	Red	Single Chip LED	79K3562	9.26
● 10-2109.1064	12 VAC/DC	Yellow	Single Chip LED	79K3563	11.22
● 10-2112.1062	24 VAC/DC	Red	Single Chip LED	78K6783	9.61
● 10-2112.1064	24 VAC/DC	Yellow	Single Chip LED	76K1091	10.60
● 10-2112.1065	24 VAC/DC	Green	Single Chip LED	76K1092	9.61

STEP 4: ACCESSORIES AND TOOLS (OPTIONAL)

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● 02-905	Lens Remover	50F8269	5.70
● 01-907	Mounting Tool	50F8271	5.58
● 02-906	Lamp Remover	50F8270	2.55
● 31-924.2	Rectangular Spray Cover	50F8272	5.86
● 01-927	Rectangular Protection Cover	50F8273	6.54
● 31-925	Switch Guard	50F8274	4.49
● 31-940	PCB Connector	66F9730	5.61

(5093)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

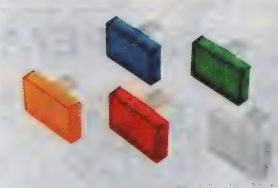
(196560)

31 SERIES LIGHTED PUSHBUTTON SWITCHES AND INDICATORS

RoHS Compliant Available

"Complete" Switch

Rectangular Switch



Lenses

Illumination

Features:
- Mount in 16mm round hole
- Uses a T-1¾ midget "groove" illumination in either incandescent, or LED style
- IP40 rated
- Solder or Q.C. terminals
- Front replaceable lens and illumination
- Blue and white LEDs available; *go online or call*

Specification:
- 5A at 250VAC (Snap-action)
- 0.1A at 42VAC/DC (Low level)
- Minimum Depth: 1.14"

Use 4-Step Component Process to Assemble Complete Switch:
- STEP 1: Choose pushbutton or indicator
- STEP 2: Choose lens
- STEP 3: Choose optional illumination
- STEP 4: Choose optional accessories and tools

STEP 1: PUSHBUTTON SWITCHES

SNAP-ACTION

Mfg. Part No.	Circuitry	Function	Bezel Style	Termination	Stock No.	Price Each 1-24
● 31-121.022	SPDT	(On)	Rectangular	0.110" QC/Solder	92F5783	21.65
● 31-121.025	SPDT	(On)	Rectangular	Solder	50F8257	21.34
● 31-122.025	DPDT	(On)	Rectangular	Solder	50F8258	31.39
● 31-261.022	SPDT	On	Rectangular	0.110" QC/Solder	92F5782	24.24
● 31-261.025	SPDT	On	Rectangular	Solder	50F8259	24.24
● 31-262.025	DPDT	On	Rectangular	Solder	50F8260	33.68
● 31-151.022	SPDT	(On)	Square	0.110" QC/Solder	92B8191	23.10
● 31-151.025	SPDT	(On)	Square	Solder	52F1835	21.34
● 31-152.025	DPDT	(On)	Square	Solder	30B4130	31.39
● 31-281.022	SPDT	On	Square	0.110" QC/Solder	30B4158	25.63
● 31-281.025	SPDT	On	Square	Solder	30B4159	24.82
● 31-282.025	DPDT	On-On	Square	Solder	30B4160	36.53
● 31-131.022	SPDT	(On)	Round	0.110" QC/Solder	92B8819	21.65
● 31-131.025	SPDT	(On)	Round	Solder	88F4824	21.34
● 31-132.025	DPDT	(On)	Round	Solder	30B4122	33.97
● 31-272.025	DPDT	On	Round	Solder	30B4151	37.63
LOW-LEVEL						
● 31-421.036	DPST-NO	(On)	Rectangular	0.79x0.020" QC/Solder	98F8313	21.65
● 31-451.036	DPST-NO	(On)	Square	0.79x0.020" QC/Solder	30B4171	22.17
● 31-433.036	DPST-1NO/1NC	(On)	Round	0.79x0.020" QC/Solder	66F9680	23.37

STEP 1: INDICATORS

Mfg. Part No.	Description	Termination	Stock No.	Price Each 1-24
● 31-040.005	Illuminated Indicator, Rectangular	Solder	50F8263	7.51
● 31-050.005	Illuminated Indicator, Square	Solder	88F2612	7.60
● 31-030.005	Illuminated Indicator, Round	Solder	30B4105	7.60

STEP 2: LENSES (TRANSLUCENT)

Mfg. Part No.	Shape	Color	Stock No.	Price Each 1-24
● 31-901.2	Rectangular	Red	50B9690	2.01
● 31-901.4	Rectangular	Yellow	16C7429	2.06
● 31-901.5	Rectangular	Green	90B0024	2.01
● 31-901.6	Rectangular	Blue	90B8745	2.06
● 31-951.2	Square	Red	91B9741	2.06
● 31-951.4	Square	Yellow	91B9614	2.09
● 31-951.5	Square	Green	66F9726	2.06
● 31-951.6	Square	Blue	50B3049	2.09
● 31-931.2	Round	Red	66F9696	2.09
● 31-931.4	Round	Yellow	12C0340	2.09
● 31-931.5	Round	Green	31C1875	2.01
● 31-931.6	Round	Blue	17C1555	2.09

➤CONTINUED➤

31 SERIES LIGHTED PUSHBUTTON SWITCHES AND INDICATORS (CONT.)

CONCAVE LENSES

Mfg. Part No.	Shape	Color	Stock No.	Price Each 1-24
31-904.3	Rectangular	Orange	99F8420	2.01
31-904.5	Rectangular	Green	99F8307	2.06

FLUSH LENSES

31.903.2	Rectangular	Red	68C5057	2.93
31.903.5	Rectangular	Green	68C5060	2.90

STEP 3: ILLUMINATION (OPTIONAL)

INCANDESCENT BULBS

Mfg. Part No.	Voltage (V)	Stock No.	Price Each 1-24
10-1307.1369	6.3	10C2740	2.79
10-1310.1319	14	01M9804	2.31
10-1313.1249	28	76K1089	2.37

SINGLE CHIP LEDS

Mfg. Part No.	Forward Voltage	Color	Stock No.	Price Each 1-24
10-2J06.3142	6VDC	Red	82K8958	10.37
10-2J06.3144	6VDC	Yellow	82K8959	12.12
10-2J06.3145	6VDC	Green	82K8960	10.37
10-2J09.1062	12VAC/DC	Red	82K8963	10.21
10-2J09.1064	12VAC/DC	Yellow	82K8964	10.88
10-2J09.1065	12VAC/DC	Green	82K8965	10.88
10-2312.1062	24VDC	Red	76K1093	10.41
10-2312.1064	24VDC	Yellow	76K1094	10.37
10-2312.1065	24VDC	Green	76K1095	10.14
10-2J13.1062	28VAC/DC	Red	80K6966	10.61
10-2J13.1064	28VAC/DC	Yellow	27M9673	10.61
10-2J13.1065	28VAC/DC	Green	82K8969	10.61

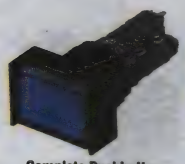
STEP 4: ACCESSORIES AND TOOLS (OPTIONAL)

Mfg. Part No.	Description	Stock No.	Price Each 1-24
02-905	Lens Remover	50F8269	5.70
01-907	Mounting Tool	50F8271	5.58
02-906	Lamp Remover	50F8270	2.55
61-9740.0	LED Remover	29H3481	2.22
31-924.2	Rectangular Spray Cover	50F8272	5.86
01-927	Rectangular Protection Cover	50F8273	6.54
31-925	Switch Guard	50F8274	4.49
31-940	PCB Connector	66F9730	5.61

(5094)

SERIES 51 16mm LIGHTED PUSHBUTTON SWITCHES

NEMA RoHS Compliant Available e a o



Complete Pushbutton

Step 1: Choose Actuator or Indicator

Step 2: Lenses

Step 3: Illumination

Features:
- Switches and indicators available in round, square, or rectangular shape
- Mounts in panels of approximately ¼" thick (max of 0.255")
- Illuminated by a T-1 ¾" midget groove incandescent bulb or high intensity "daylight readable" LED
- Illuminated selector switches offered within this series
- Blue and white LEDs available; *go online or call*

Specifications:
- Oil and watertight to IP65 standards
- Snap action switch ratings: 5A at 250VAC, 2A at 24VDC, 0.1A at 220VDC
- Mounting in a 16mm diameter cut-out
- Low level contact rating: 100mA at 42VAC/DC
- QC, solder, or PCB terminals available
- On = Maintained; (On) = Momentary

Use 4-Step Component Process to Assemble Complete Switch:
- STEP 1: Choose pushbutton or indicator
- STEP 2: Choose lens
- STEP 3: Choose illumination (optional)
- STEP 4: Choose acessories and tools (optional)

CONTINUED

SERIES 51 16mm LIGHTED PUSHBUTTON SWITCHES (CONT.)

STEP 1: SNAP ACTION PUSHBUTTONS

Mfg. Part No.	Circuitry	Function	Shape	Termination	Stock No.	Price Each 1-24
51-261.025	SPDT-1NO/1NC	On	Rectangular	Solder	66F9701	24.55
51-261.022	SPDT-1NO/1NC	On	Rectangular	0.110" QC/Solder	30B4419	25.14
51-281.025	SPDT-1NO/1NC	On	Square	Solder	30B4439	24.73
51-271.025	SPDT-1NO/1NC	On	Round	Solder	30B4428	25.43
51-121.025	SPDT-1NO/1NC	(On)	Rectangular	Solder	66F9706	21.38
51-121.022	SPDT-1NO/1NC	(On)	Rectangular	0.110" QC/Solder	90B0160	21.38
51-151.025	SPDT-1NO/1NC	(On)	Square	Solder	88F2245	21.89
51-151.022	SPDT-1NO/1NC	(On)	Square	0.110" QC/Solder	30B4343	21.38
51-131.025	SPST-1NO/1NC	(On)	Round	Solder	30B4280	21.38
51-262.025	DPDT-2NO/2NC	On	Rectangular	Solder	66F9702	32.18
51-282.025	DPDT-2NO/2NC	On	Square	Solder	30B4441	32.62
51-122.025	DPDT-2NO/2NC	(On)	Rectangular	Solder	66F9690	29.57
51-152.025	DPDT-2NO/2NC	(On)	Square	Solder	27C8764	30.46

STEP 1: LOW LEVEL PUSHBUTTONS

51-465.036	SPST-NO	On	Rectangular	.79x.02"QC/Solder	30B4596	20.51
51-425.036	SPST-NO	(On)	Rectangular	.79x.02"QC/Solder	66F9705	16.72
51-463.036	DPST-1NO/1NC	On	Rectangular	.79x.02"QC/Solder	30B4595	24.55
51-423.036	DPST-1NO/1NC	(On)	Rectangular	.79x.02"QC/Solder	30B4557	21.38

STEP 1: INDICATORS

Mfg. Part No.	Shape	Termination	Stock No.	Price Each 1-9
51-040.002	Rectangular	0.110" QC/Solder	91B7087	8.77
51-040.005	Rectangular	Solder	30B4245	8.88
51-050.005	Square	Solder	30B4249	8.88
51-030.002	Round	0.110" QC/Solder	99F4070	8.88
51-030.005	Round	Solder	30B4242	8.88

STEP 2: LENSES

Mfg. Part No.	Shape	Color	Stock No.	Price Each 1-24
51-903.2	Rectangular	Red	66F9713	2.42
51-903.3	Rectangular	Orange	50B3065	2.48
51-903.4	Rectangular	Yellow	66F9714	2.42
51-903.5	Rectangular	Green	66F9715	2.42
51-903.6	Rectangular	Blue	66F9716	2.48
51-903.7	Rectangular	White	66F9699	2.42
51-953.2	Square	Red	27C1247	2.48
51-953.4	Square	Yellow	93B9386	2.51
51-953.5	Square	Green	91B1809	2.48
51-953.7	Square	Clear	90B0077	2.48
51-933.2	Round	Red	90B7646	2.42
51-933.4	Round	Yellow	01C6557	2.51
51-933.5	Round	Green	94B4468	2.48
51-933.6	Round	Blue	86H7347	2.51
51-933.7	Round	Clear	01C8113	2.51

STEP 3: ILLUMINATION INCANDESCENT BULB

Mfg. Part No.	Forward Voltage	Color	Stock No.	Price Each 1-9
10-1307.1369	6.3 VAC/DC	...	10C2740	2.79

SINGLE CHIP LED

10-2J06.3142	6 VDC	Red	82K8958	10.37
10-2J06.3144	6 VDC	Yellow	82K8959	12.12
10-2J06.3145	6 VDC	Green	82K8960	10.37
10-2J09.1062	12 VAC/DC	Red	82K8963	10.21
10-2J09.1064	12 VAC/DC	Yellow	82K8964	10.88
10-2J09.1065	12 VAC/DC	Green	82K8965	10.88
10-2312.1062	24 VAC/DC	Red	76K1093	10.41
10-2312.1064	24 VAC/DC	Yellow	76K1094	10.37
10-2312.1065	24 VAC/DC	Green	76K1095	10.14
10-2J13.1062	28 VAC/DC	Red	80K6966	10.61
10-2J13.1065	28 VAC/DC	Green	82K8969	10.61

STEP 4: ACCESSORIES AND TOOLS

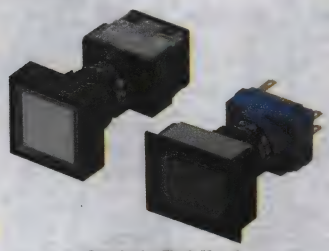
Mfg. Part No.	Description	Stock No.	Price Each 1-24
01-907	Mounting Wrench	50F8271	5.58
31-946	Female Tab, 0.110"x0.020"	30B4196	0.61
31-929	Insulator Sleeve, 0.110"x0.020"	30B4193	0.42
02-905	Lens Remover	50F8269	5.70
61-9740.0	Lamp/LED Remover	29H3481	2.22

(47174)

61 SERIES 16mm LIGHTED PUSHBUTTON SWITCHES

RoHS Compliant Available

eao



Standard + Flush Mount Complete Switch

Illumination

Tools

Specifications:
- Max rating: 5A at 250VAC
- Raised mounting into 16mm cut out
- Flush mounting into 22.5mm, 21x21mm and 21x27mm cut out
- Illumination using midget-grooved T-1¾ lamps or single chip LEDs
- Sealed to IP65 standards
- On = Maintained; (On) = Momentary

Features:
- High quality modular switch range
- Standard and flush mount styles available
- Illuminated selector/rotary switches available
- Keylock with 135 different key codes exists
- Blue and white LEDs available; *go online or call*

Use 4-Step Component Process to Assemble Complete Switch:
- STEP 1A: Choose standard or flush mount actuator or indicator
- STEP 1B: Choose flush mount adapter (for flush mount actuator only)
- STEP 2: Choose lens
- STEP 3: Choose contact block separately *on page 1762*
- STEP 4: Choose illumination (optional)

STEP 1A: STANDARD MOUNT PUSHBUTTON ACTUATORS

Mfg. Part No.	Function	Shape	Dim.	Stock No.	Price Each 1-24
● 61-1130.0	(On)	Rectangular	18x24mm	30B4693	9.98
● 61-1230.0	On	Rectangular	18x24mm	30B4701	12.34
● 61-1120.0	(On)	Square	18x18mm	30B4692	10.34
● 61-1220.0	On	Square	18x18mm	30B4700	12.05
● 61-1110.0	(On)	Round	18mm	30B4691	10.34
● 61-1210.0	On	Round	18mm	30B4699	12.48

STEP 1A: STANDARD MOUNT INDICATORS

● 61-0030.02	...	Rectangular	18x24mm	14C3963	7.32

STEP 1A: FLUSH MOUNT ACTUATORS

Mfg. Part No.	Function	Description	Stock No.	Price Each 1-24
● 61-1100.0	(On)	Universal Actuator	97B2939	9.98
● 61-1200.0	On	Universal Actuator	96B1613	11.57
● 61-0000.02	...	Universal Indicator	19C9561	7.23

STEP 1B: FLUSH MOUNT ADAPTERS

Mfg. Part No.	Shape	Color	Material	Stock No.	Price Each 1-24	25+
● 61-9930.0	Square	Black	Plastic	48F3716	3.36	3.08
● 61-9933.0	Round	Natural	Anodized Aluminum	10C2530	8.78	...
● 61-9933.10	Round	Black	Plastic	48F3717	3.71	3.40

STEP 2: LENSES STANDARD MOUNT

Mfg. Part No.	Shape	Color	Stock No.	Price Each 1-24	25+
● 61-9331.2	Rectangular	Red	29C2988	2.04	1.90
● 61-9331.3	Rectangular	Orange	02J7267	2.04	1.90
● 61-9331.4	Rectangular	Yellow	01C2396	2.04	1.90
● 61-9331.5	Rectangular	Green	23C8001	2.01	1.88
● 61-9331.6	Rectangular	Blue	23C8003	2.04	1.90
● 61-9331.7	Rectangular	White	23C8005	2.04	1.90
● 61-9321.2	Square	Red	09C9732	2.04	1.90
● 61-9321.4	Square	Yellow	29C5643	1.96	1.83
● 61-9321.5	Square	Green	02C6555	2.04	1.90
● 61-9311.3	Round	Orange	70C5291	1.96	1.83
● 61-9311.5	Round	Green	70C5286	2.04	1.90
● 61-9311.7	Round	White	02J7257	1.96	1.83

STEP 2: LENSES FLUSH MOUNT

● 61-9681.2	Rectangular	Red	95B8272	2.19	2.05
● 61-9681.5	Rectangular	Green	95B8273	2.28	2.13
● 61-9681.6	Rectangular	Blue	97H5999	2.28	2.13
● 61-9681.7	Rectangular	White	13C3191	2.28	2.13
● 61-9671.2	Square	Red	48F3719	2.28	2.13
● 61-9671.4	Square	Yellow	95B8269	2.28	2.13
● 61-9671.5	Square	Green	48F3720	2.28	2.13

➤CONTINUED➤

61 SERIES 16mm LIGHTED PUSHBUTTON SWITCHES (CONT.)

STEP 2: LENSES FLUSH MOUNT

Mfg. Part No.	Shape	Color	Stock No.	Price Each 1-24	25+
● 61-9671.7	Square	White	95B8271	2.28	2.13
● 61-9642.2	Round	Red	48F3721	4.38	4.09
● 61-9642.4	Round	Yellow	97B2958	4.55	4.25
● 61-9642.5	Round	Green	14C7519	4.49	4.20
● 61-9642.6	Round	Blue	10C2527	4.55	4.25
● 61-9642.7	Round	White	03H8418	4.55	4.25

STEP 4: ILLUMINATION

Mfg Part No.	Forward Voltage	Description	Stock No.	Price Each 1-24
● 10-2J06.3142	6VDC	Red	82K8958	10.37
● 10-2J06.3144	6VDC	Yellow	82K8959	12.12
● 10-2J06.3145	6VDC	Green	82K8960	10.37
● 10-1307.1369	6.3VDC	Lamp	10C2740	2.79
● 10-2J09.1062	12VAC/DC	Red	82K8963	10.21
● 10-2J09.1064	12VAC/DC	Yellow	82K8964	10.88
● 10-2J09.1065	12VAC/DC	Green	82K8965	10.88
● 10-1310.1319	14VAC	Lamp	01M9804	2.31
● 10-2312.1062	24VAC/DC	Red	76K1093	10.41
● 10-2312.1064	24VAC/DC	Yellow	76K1094	10.37
● 10-2312.1065	24VAC/DC	Green	76K1095	10.14
● 10-1313.1249	28VDC	Lamp	76K1089	2.37
● 10-2J13.1062	28VAC/DC	Red	80K6966	10.61
● 10-2J13.1064	28VAC/DC	Yellow	27M9673	10.61
● 10-2J13.1065	28VAC/DC	Green	82K8969	10.61
● 10-2J13.1066	28VAC/DC	Blue	82K8970	12.39

STEP 5: ACCESSORIES AND TOOLS

Mfg. Part No.	Description	Stock No.	Price Each 1-24	25+
● 61-9711.0	Contact Block Remover	30B4862	7.24	6.72
● 61-9740.0	LED/Lamp Remover	29H3481	2.22	2.05
● 02-905	Standard Lens Remover	50F8269	5.70	5.29
● 31-946	Female Tab, 0.110"x0.020"	30B4196	0.61	...
● 31-929	Insulator Sleeve, 0.110"x0.020"	30B4193	0.42	...
● 01-907	Mounting Wrench	50F8271	5.58	5.17
● 61-9730.0	Flush Lens Remover	97F7715	5.00	4.54

KITS

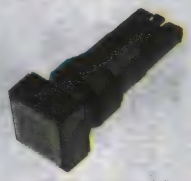
Mfg. Part No.	Circuitry	Action	Shape	Stock No.	Price Each 1-24	25-249
● 61-1330.022X	DPST-NO	Convertible	Rectangular	84F1505	32.35	28.77

(5021)

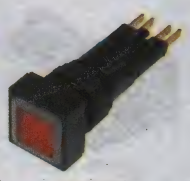
RMQ-16 SERIES PUSHBUTTON SWITCHES

EATON

- Momentary or maintained operation
- Customizable or laser etched pushbutton operators
- 18mm square operator
- 3 million mechanical operations
- LED or incandescent (illuminated)
- IP65 rated



Non-Illuminated



Illuminated

NON-ILLUMINATED

Mfg. Part No.	Button Color	Function	Stock No.	Price Each
Q18D-GN	Green	Momentary	26C6618	9.80
Q18D-SW	Black	Momentary	26C6620	9.80
Q18D-WS	White	Momentary	26C6621	9.80
Q18D-X	Without	Momentary	26C6622	9.80
Q18DR-GN	Green	Maintained	26C6629	10.00
Q18DR-RT	Red	Maintained	26C6630	11.50

ILLUMINATED — WITHOUT BULB

Q18LT-GN	Green	Momentary	26C6658	12.70
Q18LT-RT	Red	Momentary	26C6660	12.70
Q18LTR-GN	Green	Maintained	26C6668	14.40
Q18LTR-RT	Red	Maintained	26C6670	14.40

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
Q18D-10	Legend Plate, 18 x 18mm Spring Return, Red with White Circle	26C6623	11.50
Q18D-11	Legend Plate, 18 x 18mm Spring Return, Red with White Line	26C6624	11.50
Q18D-19	Legend Plate, 18 x 18mm Spring Return, Black with White Circle	26C6625	11.50
E01	Contact Element, (N/C)	26C4137	16.07

➤CONTINUED➤

RMQ-16 SERIES PUSHBUTTON SWITCHES (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
SRA10	Screw Adapter, (N/O)	26C7433	8.48
SRA01	Screw Adapter, (N/C)	26C7432	6.94
SRAL	Screw Adapter, Lamp Sockets	26C7431	8.01

(210215)

R13 SERIES MINIATURE PUSHBUTTON SWITCHES

RoHS Compliant Available

multicomp

Fig. 1

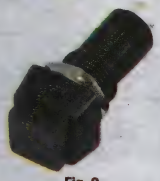


Fig. 2

Fig. 3

Fig. 4

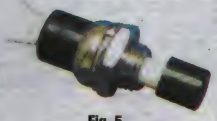


Fig. 5

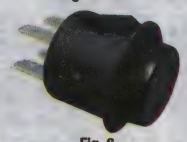


Fig. 6

Features:
- Illuminated actuators are moulded in PC
- Snap-in mounting, easy to install switch into panel
- Water proof and dust proof to fit IP-66
- R13-527, R13-548: Nylon frame and silver plated brass terminals
- R13-24: PBT actuators, nickel plated metal frame and phenolic base
- R13-509: Nylon actuator and frame and silver plated brass terminals
- R13-23: ABS actuator and phenolic base
- R13-502: Nylon frame and silver plated brass terminals; M types are nickel plated brass metal frame

Specifications:
- Contact rating: 3A at 125Vac; 1.5A at 250Vac; R-13-527: 10A at 125Vac; 6A at 250Vac
- Maximum contact resistance : 50mΩ
- Minimum insulation resistance : 500Vdc, 100MΩ
- Dielectric strength : 1000Vac for 1 minute

Mfg. Part No.	Fig.	Current (A)	Circuitry	Action	Actuator Color	Termination	Stock No.	Price Each 1-99
R13-502A-05-B	1	3		Off-(On)	...	Solder	03P2485	1.65
R13-502A-05-R	1	3	SPST	Off-(On)	...	Solder	03P2486	1.65
R13-502MA-05-B	1	3	SPST	Off-(On)	...	Solder	03P2487	2.93
R13-502MA-05-R	1	3	SPST	Off-(On)	...	Solder	03P2488	3.01
R13-502MC-05-B	1	3	SPDT	On-(On)	...	Solder	03P2489	3.58
R13-502MC-05-R	1	3	SPDT	On-(On)	...	Solder	03P2490	3.62
R13-23A-05-BB	2	3	SPST	Off-(On)	Black	Solder	03P2459	2.13
R13-23A-05-BG	2	3	SPST	Off-(On)	Green	Solder	03P2460	2.21
R13-23A-05-BR	2	3	SPST	Off-(On)	Red	Solder	03P2461	2.16
R13-23A-05-BW	2	3	SPST	Off-(On)	White	Solder	03P2462	2.13
R13-23B-05-BB	2	3	SPST	On-Off	Black	Solder	03P2463	2.06
R13-23B-05-BG	2	3	SPST	On-Off	Green	Solder	03P2464	2.06
R13-23B-05-BR	2	3	SPST	On-Off	Red	Solder	03P2465	2.06
R13-23B-05-BW	2	3	SPST	On-Off	White	Solder	03P2466	2.06
R13-548A-05-BB	3	3	SPST	Off-(On)	Black	Solder	03P2503	2.24
R13-548B-05-BB	3	3	SPST	On-Off	Black	Solder	03P2504	2.06
R13-548CL-05-BG	3	3	SPST	...	Green	Solder	03P2505	2.20
R13-548CL-05-BR	3	3	SPST	...	Red	Solder	03P2506	1.75
R13-548DL-05-BG	3	3	SPST	...	Green	Solder	03P2507	2.08
R13-548DL-05-BR	3	3	SPST	...	Red	Solder	03P2508	2.08
R13-509A-05-BB	4	3	SPST	Off-(On)	Black	Solder	03P2491	1.73
R13-509A-05-BR	4	3	SPST	Off-(On)	Red	Solder	03P2492	1.73
R13-509B-05-BB	4	3	SPST	On-(Off)	Black	Solder	03P2493	1.73
R13-509B-05-BR	4	3	SPST	On-(Off)		Solder	03P2494	1.82
R13-24A-05-BB	5	3	SPST	Off-(On)	Black	Solder	03P2471	1.77
R13-24A-05-BR	5	3	SPST	Off-(On)	Red	Solder	03P2472	1.82
R13-24AL-05-BB	5	3	SPST	Off-(On)	Black	Solder	03P2473	1.86
R13-24AL-05-BR	5	3	SPST	Off-(On)	Red	Solder	03P2474	1.86
R13-24B-05-BB	5	3	SPST	On-(Off)	Black	Solder	03P2475	1.86
R13-24B-05-BR	5	3	SPST	On-(Off)		Solder	03P2476	1.80
R13-24BL-05-BB	5	3	SPST	On-(Off)		Solder	03P2477	1.86
R13-24BL-05-BR	5	3	SPST	On-(Off)		Solder	03P2478	1.23
R13-527C-02-BB	6	10	SPST	Off-(On)	Black	Quick Connect	03P2499	2.60
R13-527C2-02-BB	6	10	SPST	Off-(On)	Black	Quick Connect	03P2500	3.47
R13-527A-02-BB	6	10	DPST	Off-(On)	Black	Quick Connect	03P2495	2.99
R13-527A2-02-BB	6	10	DPST	Off-(On)	Black	Quick Connect	03P2496	2.99
R13-527B-02-BB	6	10	DPST	On-Off	Black	Quick Connect	03P2497	3.45

CONTINUED

R13 SERIES MINIATURE PUSHBUTTON SWITCHES (CONT.)

Mfg. Part No.	Fig.	Current (A)	Circuitry	Action	Actuator Color	Termination	Stock No.	Price Each 1-99
R13-527B2-02-BB	6	10	DPST	On-Off	Black	Quick Connect	03P2498	4.20
R13-527D-02-BB	6	10	SPST	On-Off	Black	Quick Connect	03P2501	2.50
R13-527D2-02-BB	6	10	DPST	On-Off	Black	Quick Connect	03P2502	3.43

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XB6 SERIES 16mm ILLUMINATED PUSHBUTTONS

RoHS Compliant Available

Schneider Electric

The **XB6 series** offer direct-acting contacts and tactile/audible feedback in the same unit. Utilize integrated, maintenance-free, protected LED's which operate at 12 to 24VAC/VDC. Reverse polarity protection, spike and surge protection, and EMI protection. Complete units with quick connectors/solder tabs. Contacts: 1 N/O, 1 N/C. Contacts rated 3A, 300V. NEMA 4X rating. UL listed, CSA certified, CE compliant.

Mfg. Part No.	Description	Type of Push	Stock No.	Price Each Each	Price Each 2-4
XB6AF3B5B	Green	Flush, Maintained	17C6990	76.82	73.09
XB6AF4B5B	Red	Flush, Maintained	17C6991	73.86	70.28
XB6AF6B5B	Blue	Flush, Maintained	17C6993	73.86	70.28
XB6AW1B5B	White	Flush, Spring Return	17C7001	76.82	73.09
XB6AW3B5B	Green	Flush, Spring Return	17C7002	76.82	73.09
XB6AW4B5B	Red	Flush, Spring Return	17C7003	76.08	72.39
SQUARE					
XB6CF3B5B	Green	Flush, Maintained	17C7013	73.86	70.28
XB6CW3B5B	Green	Flush, Spring Return	17C7023	76.82	73.09
XB6CW4B5B	Red	Flush, Spring Return	17C7024	76.82	73.09
XB6CW6B5B	Blue	Flush, Spring Return	17C7026	76.82	73.09
RECTANGULAR					
XB6DF1B5B	White	Flush, Maintained	17C7034	73.86	70.28
XB6DF3B5B	Green	Flush, Maintained	17C7035	77.19	73.45
XB6DF4B5B	Red	Flush, Maintained	17C7036	73.86	70.28
XB6DF6B5B	Blue	Flush, Maintained	17C7038	73.86	70.28
XB6DW1B5B	White	Flush, Spring Return	17C7046	76.82	73.09
XB6DW3B5B	Green	Flush, Spring Return	17C7047	76.82	73.09
XB6DW4B5B	Red	Flush, Spring Return	17C7048	73.86	70.28
XB6DW5B5B	Yellow	Flush, Spring Return	17C7049	73.86	70.28
XB6DW6B5B	Blue	Flush, Spring Return	17C7050	73.86	70.28

(61086)

ZB6 SERIES 16mm CONTACT BLOCKS

Schneider Electric

For use with **XB6 series** illuminated and non-illuminated pushbuttons (maximum of 3 contact blocks per mounting base). Contact material: silver alloy. Direct-acting contacts have a failure rate of less than 1 failure in 100,000,000 electrical operations (5V-1mA). Contacts rated 3A, 300V. UL listed, CSA certified, CE compliant.

Mfg. Part No.	Contacts	Stock No.	Price Each Each	Price Each 2-4
ZB6E1B	1 N/O	93B0763	9.56	9.13
ZB6E2B	1 N/C	97B9476	9.68	9.24

(61187)

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(212564)

COMMAND SERIES 16mm LIGHTED PUSHBUTTON SWITCHES

RoHS Compliant Available

TE connectivity

Authorized Distributor

164EL 164SL 164TL

Instrument-grade switches feature snap-acting double-break, gold-plated, silver-clad contacts that satisfy logic level and power switching requirements. Electrically independent of one another and isolated from the lamp circuit, contacts are rated 0.4VA at 20VDC or peak AC, 5A at 250VAC or 24VDC resistive. Dielectric strength: 1,500Vrms. Life: 100,000 operations. Fit 0.625" (15.8) D panel hole. UL recognized E-51302. Units accept T-1¾ midget flanged base lamp. *Order lens button sets separately on this page.*

NON-OILTIGHT SWITCHES
1 N.O. AND 1 N.C. CONTACTS

Mfg. Part No.	Action	Shape	Stock No.	Price Each 1-9	Price Each 10-24
● 164EL11	Momentary	Round	54M6086	25.50	24.59
● 164EL511	Push-On/Off	Round	52M8858	84.39	81.55
● 164TL11	Momentary	Rect.	52M8861	26.05	23.45
2 N.O. AND 2 N.C. CONTACTS					
● 164EL22	Momentary	Round	30M8917	33.80	32.66
● 164EL522	Push-On/Off	Round	52M8859	83.45	80.64
● 164SL22	Momentary	Square	46F3135	62.99	58.13
● 164SL522	Push-On/Off	Square	52M8860	42.30	40.63
● 164TL22	Momentary	Rect.	46F3125	38.27	34.79
● 164TL522	Push-On/Off	Rect.	52M8862	96.50	89.07
3 N.O. AND 3 N.C. CONTACTS					
● 164SL33	Momentary	Square	92F2880	56.10	54.21
2 N.O. AND 2 N.C. CONTACTS					
● 165TL22	Momentary	Rectangular	31M6444	102.67	99.21

(4699)

COMMAND SERIES LENS BUTTONS

RoHS Compliant Available

TE connectivity

Authorized Distributor

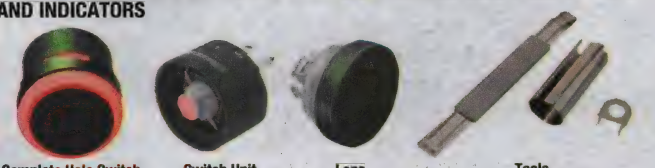
Mfg. Part No.	Color	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99	Price Each 100-249
ROUND						
● 64E9	White	94F3301	1.38	1.25	1.15	1.06
● 64E2	Red	46F3148	1.62	1.56	1.50	1.48
● 64E3	Orange	46F3149	2.56	2.44	2.25	2.08
● 64E4	Yellow	46F3150	5.29	4.86	4.78	4.65
● 64E5	Green	46F3151	2.76	2.56	2.41	2.24
SQUARE						
● 64S9	White	94F3303	3.40	3.09	2.83	2.62
● 64S2	Red	46F3143	2.32	1.96	1.79	1.57
● 64S3	Orange	46F3144	2.46	2.33	2.14	1.97
● 64S4	Yellow	46F3145	3.89	3.45	3.11	3.01
● 64S5	Green	46F3146	1.83	1.62	1.46	1.33
RECTANGULAR						
● 64T9	White	94F3306	1.57	1.44	1.28	1.19
● 64T2	Red	46F3138	1.94	1.60	1.44	1.31
● 64T3	Orange	46F3139	1.58	1.44	1.34	1.25
● 64T4	Yellow	46F3140	1.94	1.69	1.51	1.36
● 64T5	Green	46F3141	1.94	1.83	1.63	1.51

(4701)

84 SERIES OIL AND WATERTIGHT "HALO" PUSHBUTTON SWITCHES AND INDICATORS

RoHS Compliant Available

eao



Complete Halo Switch Switch Unit Lens Tools

Features:
- Fresh new design for both industrial and commercial applications
- Glowing light emitted around edges of a raised aluminum lens by high intensity LED
- Low back-of-panel depth solution - 23mm to 31mm
- "Halo style illumination provides high visibility of status indication

➤CONTINUED➤

84 SERIES OIL AND WATERTIGHT "HALO" PUSHBUTTON SWITCHES AND INDICATORS (CONT.)

- Ideal for dimly lit applications - quickly attracts attention primary control or function
- Enhanced durability offered by required use of raised aluminum lens
- Other lens colors and styles offered

Specifications:
- 100mA at 42VAC/DC
- Circuitry: 1NO
- Power rating: 2W max
- ≤100mΩ resistance in a new state
- Mechanical life: ≥ 1 million operations
- Operating temperature: -13°F to +158°F/-25°C to +70°C
- Front dimension (bezel): 25mm
- Mounting hole diameter 22.5mm
- Oil and watertight - meet the IP67 standard

Use 4-step component process to create your "Halo" pushbutton switch or indicator:
- STEP 1: Choose housing
- STEP 2: Choose switching/indicator unit
- STEP 3: Choose lens
- STEP 4: Choose tools (optional)

STEP 1: HOUSINGS

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● 84-1091.7	Momentary illuminated pushbutton actuator, translucent "Halo" plastic	08N6158	14.06
STEP 2: SWITCH UNITS			
● 84-8511.2620	Illuminated 1NO switch element, 24VDC, single chip red LED, solder/plug-in terminals	08N6128	14.70
● 84-8511.3620	Illuminated 1NO switch element, 24VDC, single chip orange LED, solder/plug-in terminals	08N6130	14.70
● 84-8511.4620	Illuminated 1NO switch element, 24VDC, single chip yellow LED, solder/plug-in terminals	08N6132	14.70
● 84-8511.5620	Illuminated 1NO switch element, 24VDC, single chip green LED, solder/plug-in terminals	08N6134	19.08
● 84-8511.6620	Illuminated 1NO switch element, 24VDC, single chip blue LED, solder/plug-in terminals	33M8053	30.50
STEP 3: LENSES			
● 84-7205.200A	Red aluminum lens, raised for "Halo" illumination	08N6123	7.08
● 84-7205.500A	Green aluminum lens, raised for "Halo" illumination	08N6125	7.08
STEP 4: TOOLS			
● 61-9730.0	Flush mount lens remover	97F7715	5.00
● 84-997	Mounting tool	93B9431	3.77

(116599)

84 SERIES OIL AND WATERTIGHT MOMENTARY PUSHBUTTON SWITCHES

RoHS Compliant Available

eao

Complete Switch Complete Indicator w/Window Lens Housing Lens Aluminum lens w/Window

Features:
- Attractive, low-profile, momentary switching units give fresh, modern appearance
- Low back-of-panel depth solution – 23mm to 31mm
- Ideal for applications which require durability and longevity of much larger, heavy-duty pushbuttons
- Other lens colors and styles offered
- "Halo" style lens illuminate outer edges of lens providing high visibility of status indication

Tools

Specifications:
- 100mA at 42VAC/DC
- Circuitry: 1NO
- Power rating: 2W max
- ≤100mΩ resistance in a new state
- Mechanical life: ≥ 1 million operations
- Operating temperature: -13°F to +158°F/-25°C to +70°C
- Front dimension (bezel): 25mm
- Mounting hole diameter 22.5mm
- Oil and watertight - meet the IP67 standard

Use 4-step component process to create your "Halo" pushbutton switch or indicator:
- STEP 1: Choose housing
- STEP 2: Choose switching/indicator unit
- STEP 3: Choose lens
- STEP 4: Choose tools (optional)

STEP 1: HOUSINGS

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● 84-1101.0	Momentary illuminated pushbutton actuator, black plastic	52F472	6.29
● 84-1201.7	Momentary illuminated pushbutton actuator, natural aluminum	52F473	13.02
STEP 2: SWITCH UNITS			
● 84-8511.6620	Illuminated 1NO switch element, 24VDC, blue single-chip LED, solder/plug-in terminals	33M8053	30.50
● 84-8510.0020	Non-Illuminated 1NO switch element, solder/plug-in terminals	76K1163	9.04
● 84-8515.8640	Illuminated 1NO switch element, 24VDC, red/green single chip LED, cable termination	08N8004	22.94

➤CONTINUED➤

84 SERIES OIL AND WATERTIGHT MOMENTARY PUSHBUTTON SWITCHES (CONT.)

STEP 3: LENSES

Mfg. Part No.	Description	Stock No.	Price Each 1-24
84-7111.200	Red plastic lens, white diffuser, flush	52F474	2.05
84-7111.400	Yellow plastic lens, white diffuser, flush	52F476	2.02
84-7111.500	Green plastic lens, white diffuser, flush	52F477	1.97
84-7111.600	Blue plastic lens, white diffuser, flush	52F478	2.05
84-7111.700	Clear plastic lens, white diffuser, flush	91B1779	2.02
84-7111.501	Green plastic lens, white diffuser, flush - "Halo" style with silver/gray lacquer	08N7996	5.44
84-7111.601	Blue plastic lens, white diffuser, flush - "Halo" style with silver/gray lacquer	08N7997	5.25
84-7111.701	Clear plastic lens, white diffuser, flush - "Halo" style with silver/gray lacquer	08N7998	5.44
84-7124.200A	Red plastic lens, mushroom	08N8000	11.70
84-7124.500A	Green plastic lens, mushroom	08N8002	11.70
84-7201.200	Red anodized aluminum lens, flush	12C1579	5.64
84-7201.400	Yellow anodized aluminum lens, flush	52F504	5.64
84-7201.500	Green anodized aluminum lens, flush	52F505	5.78
STEP 4: TOOLS			
61-9730.0	Flush mount lens remover	97F7715	5.00
84-997	Mounting tool	93B9431	3.77

(116600)

84 SERIES ILLUMINATED OIL AND WATERTIGHT INDICATORS

RoHS Compliant Available

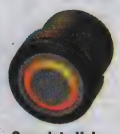
eao

Specifications:
- 100mA at 42VAC/DC
- Circuitry: 1NO
- Power rating: 2W max
- ≤100mΩ resistance in a new state
- Mechanical life: ≥ 1 million operations
- Operating temperature: -13°F to +158°F/-25°C to +70°C
- Front dimension (bezel): 25mm
- Mounting hole diameter 22.5mm
- Oil and watertight - meet the IP67 standard

Features:
- Sleek contemporary look
- Functionally flush by being just 2.0mm above the front panel
- Low back-of-panel depth solution – 23mm to 31mm
- Complement Series 84 pushbuttons
- Assurance, confidence, and quality of EAO
- "Halo" style lens illuminate outer edges of lens providing high visibility of status indication
- Other lens colors and styles offered

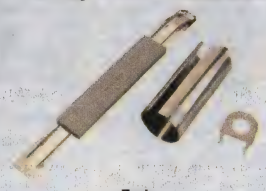
Use 4-step component process to create your "Halo" pushbutton switch or indicator:
- STEP 1: Choose housing
- STEP 2: Choose switching/indicator unit
- STEP 3: Choose lens
- STEP 4: Choose tools (optional)

Complete Indicator w/Window lens


Complete Halo Diffused Indicator

Housing

Switch Unit


Tools

STEP 1: HOUSINGS

Mfg. Part No.	Description	Stock No.	Price Each 1-24
84-0100.0	Indicator body, black plastic	52F470	6.55
STEP 2: SWITCH UNITS			
STEP 3: LENSES			
84-7111.200	Red plastic lens, white diffuser, flush	52F474	2.05
84-7111.400	Yellow plastic lens, white diffuser, flush	52F476	2.02
84-7111.500	Green plastic lens, white diffuser, flush	52F477	1.97
84-7111.600	Blue plastic lens, white diffuser, flush	52F478	2.05
84-7111.700	Clear plastic lens, white diffuser, flush	91B1779	2.02
84-7111.501	Green plastic lens, white diffuser, flush - "Halo" style with silver/gray lacquer	08N7996	5.44
84-7111.601	Blue plastic lens, white diffuser, flush - "Halo" style with silver/gray lacquer	08N7997	5.25
84-7111.701	Clear plastic lens, white diffuser, flush - "Halo" style with silver/gray lacquer	08N7998	5.44
STEP 4: TOOLS			
61-9730.0	Flush mount lens remover	97F7715	5.00
84-997	Mounting tool	93B9431	3.77

(116601)

14 SERIES 22mm PUSHBUTTON AND MUSHROOM SWITCHES

NEMA

RoHS Compliant Available

eao

STEP 1: Round Pushbutton

STEP 1: Mushroom Pushbutton

STEP 1: Extreme-Duty Mushroom Pushbutton

Features:
- Front panel replaceable lens and illumination
- Flush mount version available
- Legends are possible by engraving and hot stamping
- Low level switching elements offered
- Blue and white LEDs available; *go online or call*

Specifications:
- Contact rating: 5A at 250VAC; 2A at 24VDC
- Standard mounting in 22.5mm diameter hole (0.875")
- Oil watertight to NEMA 4 and 13 standards (IP67)
- Flush style mount in 30.5mm diameter hole (1.20")
- Utilizes T-5.5 slide base lamps and LEDs

STEP 2: Illumination

Use 2-Step Component Process to Assemble Complete Switch:
- STEP 1: Choose pushbutton
- STEP 2: Choose illumination (optional)

STEP 1: ROUND PUSHBUTTON SWITCHES

Mfg. Part No.	Circuitry	Function	Color	Stock No.	Price Each 1-24
14-131.025-1192X	SPDT	(On)	Red	45C7054	37.09
14-131.025-1194X	SPDT	(On)	Yellow	79K3543	34.33
EUS-14-131.025-1195X	SPDT	(On)	Green	79K3544	37.09
14-131.025-1196X	SPDT	(On)	Blue	84F567	36.36
14-132.025-1192X	DPDT	(On)	Red	84F568	45.87
STEP 1: MUSHROOM PUSHBUTTON — NON-ILLUMINATED					
14-131.025-4612X	SPDT	(On)	Red	84F571	37.74
STEP 1: EXTREME-DUTY MUSHROOM PUSHBUTTON — NON-ILLUMINATED					

STEP 2: ILLUMINATON

Mfg. Part No.	Forward Voltage	Bulb Type	Color	Stock No.	Price Each 1-24
10-1106.1369	6VAC/DC	Incandescent Bulb	...	40C1788	2.62
10-1109.1329	12VAC/DC	Incandescent Bulb	...	76K1087	2.99
10-1112.1279	24VAC/DC	Incandescent Bulb	...	76K1088	2.48
10-2106.3145	6VDC	Single Chip LED	Green	79K3559	11.22
10-2109.1062	12VAC/DC	Single Chip LED	Red	79K3562	9.26
10-2109.1064	12VAC/DC	Single Chip LED	Yellow	79K3563	11.22
10-2112.1062	24VAC/DC	Single Chip LED	Red	78K6783	9.61
10-2112.1064	24VAC/DC	Single Chip LED	Yellow	76K1091	10.60
10-2112.1065	24VAC/DC	Single Chip LED	Green	76K1092	9.61

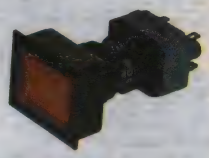
(87538)

61 SERIES 22mm FLUSH MOUNT SWITCHES, LENSES, AND ADAPTERS

RoHS Compliant Available

eao

61 series has the over-hanging lens feature with the convertible actuator. Used with flush mount adapters for flush panel appearance. Dimensions: (**round bezel - 22.5mm**); (**rectangular bezel - 27 x 21mm**); and (**square bezel - 21 x 21mm**). Round pushbutton also available; *go online or call.*



SWITCHES

Mfg. Part No.	Description	Stock No.	Price Each 1-24	Price Each 25+
LENSES				
61-9681.5	Rectangular Green Lens	95B8273	2.28	2.13
61-9671.2	Square Red Lens	48F3719	2.28	2.13
61-9671.5	Square Green Lens	48F3720	2.28	2.13
FLUSH MOUNT ADAPTER				
61-9930.0	Square, Black Plastic	48F3716	3.36	3.08
61-9931.0	Rectangular, Black Plastic	95F7138	3.50	3.27

(5022)

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(212565)

704 SERIES 22.5mm PUSHBUTTON SWITCHES AND INDICATORS

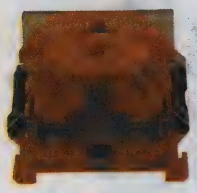
RoHS Compliant Available

eao

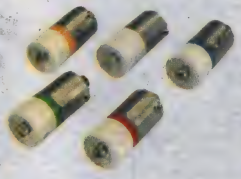
STEP 1: Indicator

STEP 1: Flush-mount Pushbutton

STEP 1: Illuminated Pushbutton



STEP 2: Contact Block



STEP 3: Illumination

STEP 4: Accessory/Tool

Specifications:
- Raised mounting into 22.5mm cutout
- Flush mounting into 30.5mm cutout
- Standard transparent lenses and translucent diffusers
- Max switch rating: 10A at 600VAC
- Suffix "BX" indicates black anodized aluminum
- Suffix "NX" indicates natural anodized aluminum

Features:
- Modular construction for easy assembly
- IP65 protection
- NEMA 4 and 13 rating
- Screw termination; quick connect also available
- Blue and white LEDs also available; *go online or call*

Use 4-Step Component Process to Assemble Complete Switch:
- STEP 1: Choose indicator or pushbutton front section
- STEP 2: Choose contact block separately *on this page*
- STEP 3: Choose optional illumination
- STEP 4: Choose optional accessories and tools

STEP 1: PUSHBUTTON

Mfg. Part No.	Action	Lens Color	Bezel Material	Shape	Illuminated	Stock No.	Price Each 1-24
● 704 01 1692X	(On)	Red	Gray Plastic	Round	Yes	50F7288	19.40
● 704 01 1694X	(On)	Yellow	Gray Plastic	Round	Yes	50F7289	19.74
● 704 01 1695X	(On)	Green	Gray Plastic	Round	Yes	50F7290	19.51
● EUS-704.01-1696X	(On)	Blue	Gray Plastic	Round	Yes	79K1966	19.23
● 704.02-1692X	(On)	Red	Gray Plastic	Round	Yes	78H1972	11.59
● 704.02-1695X	(On)	Green	Gray Plastic	Round	No	78H1973	11.59
● 704.02-1697X	(On)	White	Gray Plastic	Round	No	50F7291	11.73
● 704.01-5692X	On	Red	Gray Plastic	Round	Yes	79K1968	20.44
● 704 01 5694X	On	White	Gray Plastic	Round	Yes	50F7293	21.35
● 704 01 5695X	On	Green	Gray Plastic	Round	Yes	50F7294	20.61
● 704.03-1162X	(On)	Red	Gray Plastic	Square	Yes	50F7298	22.51
● 704.03-1164X	(On)	Yellow	Gray Plastic	Square	Yes	50F7299	22.51
● 704.03-1165X	(On)	Green	Gray Plastic	Square	Yes	50F7300	22.25
● 704.03-1167X	(On)	White	Gray Plastic	Square	Yes	02J6359	21.73
● 704.03-3067X	(On)	White	Gray Plastic	Square	No	50F7301	14.14
● 704.03-5164X	On	White	Gray Plastic	Square	Yes	50F7303	24.13
● 704.03-5165X	On	Green	Gray Plastic	Square	Yes	50F7304	23.52
STEP 1: FLUSH MOUNT PUSHBUTTON							
● 704.01-1892 NX	(On)	Red	...	Round	Yes	92F7661	33.58
● 704.01-1895NX	(On)	Green	...	Round	Yes	79K4199	32.28
● 704.01-5895NX	On	Green	...	Round	Yes	79K1971	34.54
● 704.01-5892BX	On	Red	...	Round	Yes	79K4200	33.10

STEP 1: INDICATOR

Mfg. Part No.	Bezel	Color	Stock No.	Price Each
● 704.000.2X	Round	Red	50F7306	18.30
● 704.000.4X	Round	Yellow	79K1965	18.00
● 704.000.5X	Round	Green	50F7308	18.37
● 704.200.2X	Square	Red	50F7309	19.29
● 704.200.5X	Square	Green	50F7311	19.80

STEP 3: ILLUMINATION (OPTIONAL)

Mfg. Part No.	Voltage	Bulb Type	Color	Stock No.	Price Each 1-24
● 10-1409.1329	12V	Incandescent Bulb	...	19C2536	2.58
● 10-1412.1279	24V	Incandescent Bulb	...	76K1090	2.62
● 10-1422.1179	110V	Incandescent Bulb	...	01M9805	6.06
● 10-2512.1142	24VAC/DC	Single Chip LED	Red	76K1096	14.95
● 10-2512.1144	24VAC/DC	Single Chip LED	Yellow	76K1097	14.95
● 10-2512.1145	24VAC/DC	Single Chip LED	Green	76K1098	15.33
● 10-2H24.2052	130VAC	Single Chip LED	Red	73K3636	17.47
● 10-2H24.2054	130VAC	Single Chip LED	Yellow	73K3639	17.47
● 10-2H24.2055	130VAC	Single Chip LED	Green	97J9860	14.95

➤ CONTINUED ➤

704 SERIES 22.5mm PUSHBUTTON SWITCHES AND INDICATORS (CONT.)

STEP 4: ACCESSORIES AND TOOLS (OPTIONAL)

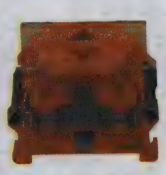
Mfg. Part No.	Description	Stock No.	Price Each 1-24
● 700.006.0	Lens, LED, and Lamp Remover	01H5134	15.26
● 704.950.0	Lamp Holder, Screw Terminals	66F9750	9.07
● 704.925.0	Round Hinged Protective Cover for Pushbuttons	19C6692	12.88
● 704.927.9	E-Stop Protective Shroud, Yellow, 50mm, IP65	20T0409	20.03
● 704.927.8	E-Stop Protective Shroud, Yellow, 50mm, IP65, SEMI S2-93/ 12.4.c	25T3665	16.92

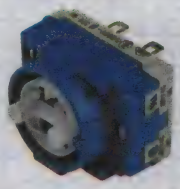
(5089)

704 AND 61 SERIES CONTACT BLOCKS

RoHS Compliant Available

eao





Feature hard silver contacts; available in 10-amp snap action (SA) or slow make/slow break (SM) configurations. Offer screw terminations, and up to four contact blocks may be connected to any actuator. ISO 9001 certified. Gold and palladium contacts also available, *go online or call.*

Mfg. Part No.	Circuitry	Switch Element	Termination	Stock No.	Price Each 1-24
● 704.900.1	SPST-NO	Snap-Action	Screw	50F7315	7.13
● 704.900.2	SPST-NC	Snap-Action	Screw	50F7316	7.13
● 704.900.3	DPST-NO	Snap-Action	Screw	19C0344	10.41
● 704.900.4	DPDT-2NC	Snap-Action	Screw	50F7318	10.41
● 704.900.5	SPDT-1NO/1NC	Snap-Action	Screw	50F7319	10.41
● 704.907.1	SPST-NO	Snap Action	Push-In	45T6976	21.09
● 704.907.2	SPST-NC	Snap-Action	Push-In	45T6977	21.09
● 704.907.3	DPST-NO	Snap-Action	Push-In	45T6978	43.73
● 704.907.4	DPST-NC	Snap-Action	Push-In	45T6979	42.46
● 704.907.5	SPDT-1NO/1NC	Snap-Action	Push-In	45T6980	42.46
● 704.908.1	SPST-NO	Snap-Action	Push-In	45T6981	12.67
● 704.908.2	SPST-NC	Snap-Action	Push-In	45T6982	12.23
● 704.908.3	DPST-NO	Snap-Action	Push-In	45T6983	20.28
● 704.908.4	DPST-NC	Snap-Action	Push-In	45T6984	21.01
● 704.908.5	SPDT-1NO/1NC	Snap-Action	Push-In	45T6985	20.28
● 704.910.1	SPST-NO	Slow-Make	Screw	50F7323	7.49
● 704.910.2	SPST-NC	Slow-Make	Screw	50F7324	7.13
● 704.910.3	DPST-NO	Slow-Make	Screw	50F7320	10.85
● 704.910.4	DPDT-2NC	Slow-Make	Screw	50F7321	10.41
● 704.910.5	SPDT-1NO/1NC	Slow-Make	Screw	50F7322	10.60
● 704.917.1	SPST-NO	Slow-Make	Push-In	45T6986	20.74
● 704.917.2	SPST-NC	Slow-Make	Push-In	45T6987	21.49
● 704.917.3	DPST-NO	Slow-Make	Push-In	45T6988	38.98
● 704.917.4	DPST-NC	Slow-Make	Push-In	45T6989	37.84
● 704.917.5	SPDT-1NO/1NC	Slow-Make	Push-In	45T6990	38.98
● 704.918.1	SPST-NO	Slow-Make	Push-In	45T6991	11.79
● 704.918.2	SPST-NC	Slow-Make	Push-In	45T6992	11.79
● 704.918.3	DPST-NO	Slow-Make	Push-In	45T6993	19.86
● 704.918.4	DPST-NC	Slow-Make	Push-In	45T6994	19.86
● 704.918.5	SPDT-1NO/1NC	Slow-Make	Push-In	45T6995	19.86
● 61-8410.22	SPST-NO	Snap-Action	0.110" QC/Solder	97B0336	9.33
● 61-8470.22	SPDT-1NO/1NC	Snap-Action	0.110" QC/Solder	83F3621	12.17
● 61-8490.22	3PST-2NO/1NC	Snap-Action	0.110" QC/Solder	77C5701	15.28
● 61-8610.11	SPST-NO	Slow-Make	Screw	30B4822	13.37
● 61-8755.11	DPDT-2NC	Slow-Make	Screw	30B4847	18.26

704 SERIES ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-49
● 704.950.0	Lamp Holder, Screw Terminals	66F9750	9.07
● 704.950.1	Lamp Holder, QC Terminals	27C1102	7.58
● 704.950.3	Lamp Holder, Push-In-Terminals	31T0710	14.52
● 704.955.0	Flush Mount Bezel - Black Aluminum	29C4192	13.36

(5092)

EAO SWITCH LAMPS, LEDS AND TOOLS

RoHS Compliant Available

eao

Features:
- New Single chip LEDs offer high intensity "daylight readable" illumination
- LEDs offer high reliability and durability often needed for volatile applications and hazardous environments
- LEDs are available in custom colors, voltages and styles; *go online or call*
- LEDs have a low current consumption and a virtually unlimited life
- EAO single chip LEDs can now handle both AC and DC current

Specifications:
- Both incandescent and LEDs are offered in a range of voltages from 6V to 230V
- Industry standard bases

INCANDESCENT LAMPS

Mfg. Part No.	EAO Series	Voltage Rating	Stock No.	Price Each 1-24
10-1106.1369	14, 01	6V	40C1788	2.62
10-1109.1329	14, 01	12V	76K1087	2.99
10-1112.1279	14, 01	24V	76K1088	2.48
10-1307.1369	31, 51, 61	6.3V	10C2740	2.79
10-1310.1319	31, 51, 61	14V	01M9804	2.31
10-1313.1249	31, 51, 61	28V	76K1089	2.37
10-1409.1329	44, 04	12V	19C2536	2.58
10-1412.1279	44, 04	24V	76K1090	2.62
10-1422.1179	44, 04	110V	01M9805	6.06

SINGLE CHIP LEDS

Mfg. Part No.	EAO Series	Voltage Rating	Color	Stock No.	Price Each 1-24
10-2106.3145	14, 01	6VDC	Green	79K3559	11.22
10-2109.1062	14, 01	12VAC/DC	Red	79K3562	9.26
10-2109.1064	14, 01	12VAC/DC	Yellow	79K3563	11.22
10-2109.1065	14, 01	12VAC/DC	Green	27M9674	9.26
10-2109.1069	14, 01	12VAC/DC	White	11J1699	13.09
10-2112.1062	14, 01	24VDC	Red	78K6783	9.61
10-2112.1064	14, 01	24VDC	Yellow	76K1091	10.60
10-2112.1065	14, 01	24VDC	Green	76K1092	9.61
10-2112.1069	14, 01	24VDC	White	97C8088	10.92
10-2512.1142	44, 04	24VDC	Red	76K1096	14.95
10-2512.1144	44, 04	24VDC	Yellow	76K1097	14.95
10-2512.1145	44, 04	24VDC	Green	76K1098	15.33
10-2H24.2052	44, 04	130VAC	Red	73K3636	17.47
10-2H24.2054	44, 04	130VAC	Yellow	73K3639	17.47
10-2H24.2055	44, 04	130VAC	Green	97J9860	14.95
10-2H24.2059	44, 04	130VAC	White	73K3642	18.92
10-2H12.314A	44, 04	24VDC	Green / Red	73W9161	25.18
10-2H12.314B	44, 04	24VDC	Red / Yellow	73W9162	23.71
10-2H12.314C	44, 04	24VDC	Green / Yellow	73W9163	25.18
10-A312.314A	31, 51, 61	24VDC	Green / Red	73W9160	23.26
10-2J06.3142	31, 51, 61	6VDC	Red	82K8958	10.37
10-2J06.3144	31, 51, 61	6VDC	Yellow	82K8959	12.12
10-2J06.3145	31, 51, 61	6VDC	Green	82K8960	10.37
10-2J09.1062	31, 51, 61	12VAC/DC	Red	82K8963	10.21
10-2J09.1064	31, 51, 61	12VAC/DC	Yellow	82K8964	10.88
10-2J09.1065	31, 51, 61	12VAC/DC	Green	82K8965	10.88
10-2J09.1066	31, 51, 61	12VAC/DC	Blue	82K8966	12.39
10-2J09.1069	31, 51, 61	12VAC/DC	White	82K8967	11.93
10-2J12.1062	31, 51, 61	24VDC	Red	10M8600	10.37
10-2J12.1064	31, 51, 61	24VDC	Yellow	96K5724	10.50
10-2J12.1065	31, 51, 61	24VDC	Green	99K5332	10.37
10-2J13.1062	31, 51, 61	28VAC/DC	Red	80K6966	10.61
10-2J13.1064	31, 51, 61	28VAC/DC	Yellow	27M9673	10.61
10-2J13.1065	31, 51, 61	28VAC/DC	Green	82K8969	10.61
10-2J13.1066	31, 51, 61	28VAC/DC	Blue	82K8970	12.39
10-2J13.1069	31, 51, 61	28VAC/DC	White	82K8971	12.07

TOOLS

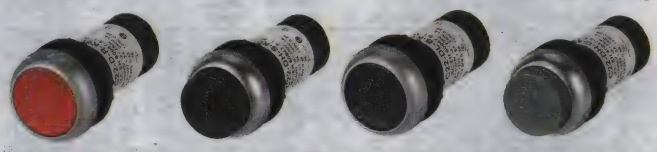
Mfg. Part No.	EAO Series	Description	Stock No.	Price Each 1-24
02-906	14, 01, 31, 51, 61	Lamp Remover	50F8270	2.55
700.006.0	04, 44	Lamp Remover	01H5134	15.26
61-9740.0	...	LED Remover	29H3481	2.22

(78980)

C22 SERIES COMPACT NON-ILLUMINATED AND ILLUMINATED PUSHBUTTON SWITCHES

RoHS Compliant Available

EATON



- Field convertible maintained pushbuttons from maintained to momentary
- Field convertible selector switches from momentary to maintained operation and vice versa
- LED offering only for all illuminated operators
- Laser engraved pushbuttons and lenses
- Heavy-duty construction with a minimum of IP65 and UL NEMA® Type 4X/13 on front of panel operators
- Many operators even carry IP67 and IP69K, for the toughest applications

NON-ILLUMINATED SWITCHES - FLUSH, MOMENTARY

Mfg. Part No.	Contacts	Button Color	Bezel Color	Stock No.	Price Each 1-9
C22-D-G-K20	DPST-NO	Green	Silver	44T9672	26.80
C22-D-R-K02	DPST-NC	Red	Silver	44T9674	27.10
C22-D-S-K02	DPST-NC	Black	Silver	44T9676	24.24
C22-D-S-K11	SPST-NO, SPST-NC	Black	Silver	44T9677	27.10
C22-D-W-K10	SPST-NO	White	Silver	44T9678	16.23
C22-D-W-K11	SPST-NO, SPST-NC	White	Silver	44T9679	27.10
C22-D-W-K20	DPST-NO	White	Silver	44T9680	25.57
C22S-D-G-K20	DPST-NO	Green	Black	44T9818	25.94
C22S-D-R-K01	SPST-NC	Red	Black	44T9819	14.89
C22S-D-R-K11	SPST-NO, SPST-NC	Red	Black	44T9821	25.94
C22S-D-S-K11	SPST-NO, SPST-NC	Black	Black	44T9822	27.17
C22S-D-W-K10	SPST-NO	White	Black	44T9823	14.89
C22S-D-W-K11	SPST-NO, SPST-NC	White	Black	44T9824	24.24
C22S-D-W-K20	DPST-NO	White	Black	44T9825	24.24
C22S-D-X-K10	SPST-NO	Buttonless	Black	44T9826	15.59
C22S-D-X-K11	SPST-NO, SPST-NC	Buttonless	Black	44T9827	23.13
C22S-D-X-K20	DPST-NO	Buttonless	Black	44T9828	23.13

NON-ILLUMINATED SWITCHES - FLUSH, MAINTAINED

C22-DR-G-K10	SPST-NO	Green	Silver	44T9706	18.49
C22-DR-G-K11	SPST-NO, SPST-NC	Green	Silver	44T9707	27.62
C22-DR-G-K20	DPST-NO	Green	Silver	44T9708	29.28
C22-DR-R-K11	SPST-NO, SPST-NC	Red	Silver	44T9709	27.62
C22-DR-S-K11	SPST-NO, SPST-NC	Black	Silver	44T9710	27.62
C22-DR-W-K20	DPST-NO	White	Silver	44T9711	27.62
C22S-DR-G-K10	SPST-NO	Green	Black	44T9854	18.34
C22S-DR-G-K11	SPST-NO, SPST-NC	Green	Black	44T9855	26.50
C22S-DR-G-K20	DPST-NO	Green	Black	44T9856	28.09
C22S-DR-R-K11	SPST-NO, SPST-NC	Red	Black	44T9857	29.70
C22S-DR-S-K11	SPST-NO, SPST-NC	Black	Black	44T9858	26.50
C22S-DR-W-K11	SPST-NO, SPST-NC	White	Black	44T9859	26.50
C22S-DR-X-K10	SPST-NO	Buttonless	Black	44T9860	16.32
C22S-DR-X-K11	SPST-NO, SPST-NC	Buttonless	Black	44T9861	25.57
C22S-DR-X-K20	DPST-NO	Buttonless	Black	44T9862	25.57

NON-ILLUMINATED SWITCHES - EXTENDED, MOMENTARY

C22-DH-G-K10	SPST-NO	Green	Silver	44T9681	17.06
C22-DH-G-K20	DPST-NO	Green	Silver	44T9683	20.29
C22-DH-S-K02	DPST-NO	Black	Silver	44T9686	26.31
C22-DH-S-K11	SPST-NO, SPST-NC	Black	Silver	44T9687	27.89
C22-DH-W-K10	SPST-NO	White	Silver	44T9688	17.06
C22-DH-W-K11	SPST-NO, SPST-NC	White	Silver	44T9689	26.31
C22-DH-W-K20	DPST-NO	White	Silver	44T9690	26.31
C22S-DH-G-K10	SPST-NO	Green	Black	44T9829	16.82
C22S-DH-G-K11	SPST-NO, SPST-NC	Green	Black	44T9830	26.69
C22S-DH-G-K20	DPST-NO	Green	Black	44T9831	25.18
C22S-DH-R-K02	DPST-NC	Red	Black	44T9832	25.18
C22S-DH-R-K11	SPST-NO, SPST-NC	Red	Black	44T9833	26.69
C22S-DH-S-K02	DPST-NC	Black	Black	44T9834	25.18
C22S-DH-S-K11	SPST-NO, SPST-NC	Black	Black	44T9835	25.18
C22S-DH-W-K10	SPST-NO	White	Black	44T9836	15.72
C22S-DH-W-K11	SPST-NO, SPST-NC	White	Black	44T9837	25.18
C22S-DH-W-K20	DPST-NO	White	Black	44T9838	25.18

NON-ILLUMINATED SWITCHES - EXTENDED, MAINTAINED

C22-DRH-G-K10	SPST-NO	Green	Silver	44T9712	18.49
C22-DRH-G-K11	SPST-NO, SPST-NC	Green	Silver	44T9713	27.62
C22-DRH-G-K20	DPST-NO	Green	Silver	44T9714	27.62
C22-DRH-R-K02	DPST-NC	Red	Silver	44T9715	27.62
C22-DRH-R-K11	SPST-NO, SPST-NC	Red	Silver	44T9716	27.62
C22-DRH-S-K02	DPST-NC	Black	Silver	44T9717	27.62

CONTINUED

C22 SERIES COMPACT NON-ILLUMINATED AND ILLUMINATED PUSHBUTTON SWITCHES (CONT.)

NON-ILLUMINATED SWITCHES - EXTENDED, MAINTAINED

Mfg. Part No.	Contacts	Button Color	Bezel Color	Stock No.	Price Each 1-9
● C22-DRH-S-K11	SPST-NO, SPST-NC	Black	Silver	44T9718	29.28
● C22-DRH-W-K10	SPST-NO	White	Silver	44T9719	18.49
● C22-DRH-W-K11	SPST-NO, SPST-NC	White	Silver	44T9720	27.62
● C22-DRH-W-K20	DPST-NO	White	Silver	44T9721	27.62
● C22S-DRH-G-K10	SPST-NO	Green	Black	44T9863	17.14
● C22S-DRH-G-K11	SPST-NO, SPST-NC	Green	Black	44T9864	26.50
● C22S-DRH-G-K20	DPST-NO	Green	Black	44T9865	26.50
● C22S-DRH-R-K01	SPST-NC	Red	Black	44T9866	18.34
● C22S-DRH-R-K02	DPST-NC	Red	Black	44T9867	26.50
● C22S-DRH-R-K11	SPST-NO, SPST-NC	Red	Black	44T9868	26.50
● C22S-DRH-S-K01	SPST-NC	Black	Black	44T9869	17.14
● C22S-DRH-S-K02	DPST-NC	Black	Black	44T9870	26.50
● C22S-DRH-S-K11	SPST-NO, SPST-NC	Black	Black	44T9871	26.50
● C22S-DRH-W-K10	SPST-NO	White	Black	44T9872	17.14
● C22S-DRH-W-K11	SPST-NO, SPST-NC	White	Black	44T9873	26.50
● C22S-DRH-W-K20	DPST-NO	White	Black	44T9874	26.50

ILLUMINATED SWITCHES - FLUSH, MOMENTARY

Mfg. Part No.	Contacts	Voltage	LED Color	Bezel	Stock No.	Price Each 1-4
● C22-DL-B-K10-120	SPST-NO	120 VAC	Blue	Silver	44T9691	42.85
● C22-DL-B-K10-230	SPST-NO	230 VAC	Blue	Silver	44T9692	42.85
● C22-DL-G-K10-230	SPST-NO	230 VAC	Green	Silver	44T9695	42.85
● C22-DL-G-K10-24	SPST-NO	24 VAC/VDC	Green	Silver	44T9696	41.40
● C22S-DL-B-K10-120	SPST-NO	120 VAC	Blue	Black	44T9839	41.34
● C22S-DL-B-K10-24	SPST-NO	24 VAC/VDC	Blue	Black	44T9840	43.82
● C22S-DL-G-K10-120	SPST-NO	120 VAC	Green	Black	44T9841	43.82
● C22S-DL-R-K01-120	SPST-NC	120 VAC	Red	Black	44T9843	43.82
● C22S-DL-W-K10-120	SPST-NO	120 VAC	White	Black	44T9845	41.34

ILLUMINATED SWITCHES - FLUSH, MAINTAINED

● C22-DRL-B-K10-120	SPST-NO	120 VAC	Blue	Silver	44T9722	39.32
● C22-DRL-B-K10-24	SPST-NO	24 VAC/VDC	Blue	Silver	44T9723	51.00
● C22-DRL-W-K10-120	SPST-NO	120 VAC	White	Silver	44T9726	48.11
● C22S-DRL-B-K10-120	SPST-NO	120 VAC	Blue	Black	44T9875	46.60
● C22S-DRL-B-K10-24	SPST-NO	24 VAC/VDC	Blue	Black	44T9876	46.60
● C22S-DRL-G-K10-120	SPST-NO	120 VAC	Green	Black	44T9877	49.40
● C22S-DRL-G-K10-24	SPST-NO	24 VAC/VDC	Green	Black	44T9878	46.60
● C22S-DRL-R-K01-120	SPST-NC	120 VAC	Red	Black	44T9879	46.60
● C22S-DRL-R-K01-24	SPST-NC	24 VAC/VDC	Red	Black	44T9880	48.42
● C22S-DRL-W-K10-120	SPST-NO	120 VAC	White	Black	44T9881	46.60
● C22S-DRL-W-K10-24	SPST-NO	24 VAC/VDC	White	Black	44T9882	46.60

ILLUMINATED SWITCHES - EXTENDED, MOMENTARY

● C22-DLH-B-K10-120	SPST-NO	120 VAC	Blue	Silver	44T9697	43.97
● C22-DLH-B-K10-230	SPST-NO	230 VAC	Blue	Silver	44T9698	43.97
● C22-DLH-B-K10-24	SPST-NO	24 VAC/VDC	Blue	Silver	44T9699	43.97
● C22-DLH-G-K10-120	SPST-NO	120 VAC	Green	Silver	44T9700	43.97
● C22-DLH-G-K10-24	SPST-NO	24 VAC/VDC	Green	Silver	44T9702	43.97
● C22-DLH-W-K10-120	SPST-NO	120 VAC	White	Silver	44T9703	43.97
● C22-DLH-W-K10-230	SPST-NO	230 VAC	White	Silver	44T9704	43.97
● C22-DLH-W-K10-24	SPST-NO	24 VAC/VDC	White	Silver	44T9705	43.97
● C22S-DLH-B-K10-120	SPST-NO	120 VAC	Blue	Black	44T9846	42.48
● C22S-DLH-B-K10-24	SPST-NO	24 VAC/VDC	Blue	Black	44T9847	42.48
● C22S-DLH-G-K10-120	SPST-NO	120 VAC	Green	Black	44T9848	42.48
● C22S-DLH-R-K01-120	SPST-NC	120 VAC	Red	Black	44T9850	42.48
● C22S-DLH-R-K01-24	SPST-NO	24 VAC/VDC	Red	Black	44T9851	42.48
● C22S-DLH-W-K10-120	SPST-NO	120 VAC	White	Black	44T9852	42.48
● C22S-DLH-W-K10-24	SPST-NO	24 VAC/VDC	White	Black	44T9853	42.48

ILLUMINATED SWITCHES - EXTENDED, MAINTAINED

● C22-DRLH-B-K10-120	SPST-NO	120 VAC	Blue	Silver	44T9728	49.23
● C22-DRLH-B-K10-24	SPST-NO	24 VAC/VDC	Blue	Silver	44T9729	49.23
● C22-DRLH-G-K10-120	SPST-NO	120 VAC	Green	Silver	44T9730	49.23
● C22-DRLH-G-K10-24	SPST-NO	24 VAC/VDC	Green	Silver	44T9731	49.23
● C22-DRLH-W-K10-120	SPST-NO	120 VAC	White	Silver	44T9732	49.23
● C22-DRLH-W-K10-24	SPST-NO	24 VAC/VDC	White	Silver	44T9733	49.23
● C22S-DRLH-B-K10-120	SPST-NO	120 VAC	Blue	Black	44T9883	47.37
● C22S-DRLH-B-K10-24	SPST-NO	24 VAC/VDC	Blue	Black	44T9884	47.37
● C22S-DRLH-G-K10-120	SPST-NO	120 VAC	Green	Black	44T9885	47.37
● C22S-DRLH-G-K10-24	SPST-NO	24 VAC/VDC	Green	Black	44T9886	47.37
● C22S-DRLH-R-K01-120	SPST-NC	120 VAC	Red	Black	44T9887	47.37
● C22S-DRLH-R-K01-24	SPST-NC	24 VAC/VDC	Red	Black	44T9888	47.37
● C22S-DRLH-W-K10-120	SPST-NO	120 VAC	White	Black	44T9889	47.37
● C22S-DRLH-W-K10-24	SPST-NO	24 VAC/VDC	White	Black	44T9890	47.37

➤CONTINUED➤

C22 SERIES COMPACT NON-ILLUMINATED AND ILLUMINATED PUSHBUTTON SWITCHES (CONT.)

INDICATING LIGHTS

Mfg. Part No.	Voltage	LED Color	Lens Color	Stock No.	Price Each 1-4
● C22-L-B-120	120 VAC	Blue	Blue	44T9734	38.40
● C22-L-B-24	24 VAC/VDC	Blue	Blue	44T9735	38.40
● C22-L-G-120	120 VAC	Green	Green	44T9736	40.70
● C22-L-G-24	24 VAC/VDC	Green	Green	44T9737	37.10
● C22-L-R-120	120 VAC	Red	Red	44T9738	40.70
● C22-L-R-24	24 VAC/VDC	Red	Red	44T9739	37.10
● C22-L-W-120	120 VAC	White	White	44T9740	38.40
● C22-L-W-24	24 VAC/VDC	White	White	44T9741	38.40
● C22-L-Y-120	120 VAC	Yellow	Yellow	44T9742	40.70

(148487)

22mm ILLUMINATED PUSHBUTTONS

NEMA

RoHS Compliant Available

EATON

Features:
- Quick installation with modular construction
- Mounting base included with operators
- Notched hole mounting with anti-rotation tab

Specifications:
- LED rating: 100,000 hours of expected life in high vibration environments
- Contact rating: 4A @ 230VAC, 3A @ 24VDC
- Rated to max. 500VAC and 220VDC
- Heavy duty construction UL NEMA type 4X/13 and IP66, IP67 and IP69K on front of panel

Pushbutton

Double Pushbutton

NOTE: LED light unit, contact block and optional legend plate must be added to all illuminated pushbuttons.

ILLUMINATED PUSHBUTTONS

Mfg. Part No.	Color	Style	Bezel	Stock No.	Price Each 1-4
● M22S-DL-W	White	Off-(On)	Black	10R1931	6.21
● M22S-DL-R	Red	Off-(On)	Black	10R1930	6.21
● M22S-DL-G	Green	Off-(On)	Black	10R1929	15.20
● M22-DL-W	White	Off-(On)	Silver	10R1813	17.21
● M22-DL-R	Red	Off-(On)	Silver	10R1812	17.21
● M22-DL-G	Green	Off-(On)	Silver	10R1811	16.79
● M22-DL-B	Blue	Off-(On)	Silver	10R1810	16.79
● M22-DGL-W	White	Off-(On)	Silver w/ Guard	10R1803	13.03
● M22-DGL-R	Red	Off-(On)	Silver w/ Guard	10R1802	12.20
● M22-DGL-G	Green	Off-(On)	Silver w/ Guard	10R1801	13.79
● M22S-DRLH-W	White	On-Off	Black	10R1945	12.10
● M22S-DRLH-R	Red	On-Off	Black	10R1944	12.10

ILLUMINATED DOUBLE PUSHBUTTONS

● M22S-DDL-GR	Green, Red		Black	10R1923	23.35
● M22-DDL-GR-GB1-GB0	Green, Red		Black	10R1793	24.21
● M22-DDL-WS	White, Black	Off-(On)	Silver	10R1794	18.75
● M22-DDLF-WS	White, Black	Off-(On)	Silver	10R1796	24.75
● M22-DDLM-GR	Green, Red		Silver	10R1797	24.75
● M22-DDLM-WS	White, Black	Off-(On)	Silver	10R1798	24.13

ILLUMINATED EMERGENCY STOPS

Mfg. Part No.	Description	Stock No.	Price 1-4
● M22-PVL-K12-R	Red Push-Pull Button and Red 12-30VAC/VDC LED, 1NO-2NC Contact Blocks	10R1857	62.98

LED LIGHT UNITS

● M22-LED-W	White, 12-30VAC/VDC	10R1840	16.71
● M22-LED-R	Red, 12-30VAC/VDC	10R1839	16.29
● M22-LED-G	Green, 12-30VAC/VDC	10R1838	16.71
● M22-LED230-W	White, 85-264VAC/VDC, 50/60Hz	10R1852	24.38
● M22-LED230-R	Red, 85-264VAC/VDC, 50/60Hz	10R1851	23.79
● M22-LED230-G	Green, 85-264VAC/VDC, 50/60Hz	10R1850	24.38

(148563)

22mm PUSHBUTTONS

RoHS Compliant Available

EATON

Features:
- Quick installation
- Mounting base included with operators
- Field convertible from momentary to maintained
- Notched hole mounting with anti-rotation tab

Pushbutton w/Black Bezel

Pushbutton w/Silver Bezel

Emergency Stop

Specifications:
- Contact rating: 4A at 230VAC; 3A at 24VDC
- Rated to max 500VAC and 220VDC
- Heavy duty construction UL NEMA type 4X/13 and IP67 and IP69K on front of panel

➤CONTINUED➤

22mm PUSHBUTTONS (CONT.)

FLUSH MOUNTED PUSHBUTTONS

Mfg. Part No.	Actuator Color	Bezel	Action	Stock No.	Price Each 1-4
M22S-D-S	Black	Black	Off-(On)	10R1918	12.15
M22S-D-R	Red	Black	Off-(On)	10R1917	4.87
M22S-D-G	Green	Black	Off-(On)	10R1915	8.49
M22S-D-Y	Yellow	Black	Off-(On)	10R1922	4.87
M22S-D-B	Blue	Black	Off-(On)	10R1914	11.15
M22S-D-G-GB1	Green	Black	Off-(On)	10R1916	5.33
M22S-D-X-SWRGYB	Black, White, Red, Green, Yellow, Blue	Black	Off-(On)	10R1921	8.08
M22-D-S	Black	Silver	Off-(On)	10R1789	12.24
M22-D-R	Red	Silver	Off-(On)	10R1788	11.55
M22-D-G	Green	Silver	Off-(On)	10R1787	12.24
M22-D-X-SRG	Black, Red Green	Silver	Off-(On)	10R1790	6.87
M22-D-X-SWRGYB	Black, White, Red, Green, Yellow, Blue	Silver	Off-(On)	10R1791	9.34
M22-DG-X-SRG	Black, Red Green	Silver w/Guard	Off-(On)	10R1799	13.34
M22-DG-X-SWRGYB	Black, White, Red, Green, Yellow, Blue	Silver w/Guard	Off-(On)	10R1800	15.30
M22S-DR-S	Black	Black	On-Off	10R1938	6.89
M22S-DR-G	Green	Black	On-Off	10R1936	6.89

EXTENDED PUSHBUTTONS

M22S-DH-S	Black	Black	Off-(On)	10R1927	5.33
M22S-DH-R	Red	Black	Off-(On)	10R1925	13.19
M22S-DH-G	Green	Black	Off-(On)	10R1924	5.64
M22S-DH-W	White	Black	Off-(On)	10R1928	5.33
M22S-DH-R-GB0	Red	Black	Off-(On)	10R1926	6.46
M22S-DRH-X-SRG	Black, Red Green	Black	On-Off	10R1941	9.54
M22-DH-S	Black	Silver	Off-(On)	10R1806	6.51
M22-DH-G	Green	Silver	Off-(On)	10R1804	7.70
M22-DRH-X-SWRGYB	Black, White, Red, Green, Yellow, Blue	Siver	On-Off	10R1819	14.45
M22-DRH-X-SRG	Black, Red Green	Siver	On-Off	10R1818	10.66

MUSHROOM HEAD PUSHBUTTONS

M22S-DP-R	Red	Black	Off-(On)	10R1933	17.72
M22S-DP-G	Green	Black	Off-(On)	10R1932	11.14
M22S-DP-Y	Yellow	Black	Off-(On)	10R1935	11.14
M22-DP-S	Black	Silver	Off-(On)	10R1816	12.98
M22-DP-R	Red	Silver	Off-(On)	10R1815	13.11
M22-DP-G	Green	Silver	Off-(On)	10R1814	19.79
M22-DP-Y	Yellow	Silver	Off-(On)	10R1817	16.76
M22-PV	Red	...	Push-Pull	10R1855	41.58
M22-PVT	Red	...	Turn to Release	10R1859	42.42
M22-PVS	Red	...	Pushlock Key Reset	10R1858	81.09

CONTACT BLOCKS

Mfg. Part No.	Circuitry	Termination	Stock No.	Price Each 1-4
M22-K10	1NO	Screw	10R1831	7.69
M22-K01	1NC	Screw	10R1830	7.69

LEGEND PLATES

Mfg. Part No.	Inscription	Stock No.	Price 1-9
M22S-ST-GB0	STOP	10R1948	2.29
M22S-ST-GB1	START	10R1949	2.29
M22S-ST-GB5	OFF	10R1953	2.29
M22S-ST-GB6	ON	10R1954	2.15
M22S-ST-GB7	RUN	10R1955	2.15
M22S-ST-GB8	FAULT	10R1956	2.29
M22S-ST-X52	1	10R1958	3.49
M22S-ST-X53	2	10R1959	3.28
M22-XAK5	For use with E-Stop, 90mm, Yellow	10R1882	5.63
M22-XBK5	For use with E-Stop, 60mm, Yellow	10R1885	5.22

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
M22-XGWK	Guard Ring for Pushbuttons, Black	10R1893	13.05
M22-XGPV	Guard Ring for Pushbuttons, Yellow	10R1892	23.65
M22G-XGPV	Guard Ring for Pushbuttons, Gray	10R1912	14.63
M22-IVS	DIN Rail Mounting Adapter for Pushbuttons	10R1823	10.77
M22-MS	Mounting Ring Tool for Pushbuttons	10R1853	10.54
M22-T-DD	Protective Diaphragm for Double Pushbuttons	10R1867	4.22
M22-ADC	Dust Cover for maximum of 3 Pushbutton Contact Blocks	10R1768	15.46
M22-ADC4	Dust Cover for maximum of 4 Pushbutton Contact Blocks	10R1769	15.46

CONTINUED

22mm PUSHBUTTONS (CONT.)

ACCESSORIES

Mfg. Part No.	Inscription	Stock No.	Price 1-9
M22-IY1-PG	Surface enclosure, 1 hole, yellow	17W5670	31.97
M22-I4-PG	Surface enclosure, 4 holes, grey	17W5671	39.25
M22-I6-PG	Surface enclosure, 6 holes, grey	17W5672	63.46

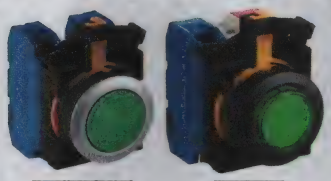
(148561)

CW SERIES 22MM FLUSH MOUNT PUSHBUTTON SWITCHES

RoHS Compliant Available

IDEC

- Rated insulation voltage: 300V
- Rated thermal current: 10A
- Operating temperature: non-illuminated -25 to +60°C, LED illuminated -25 to +55°C
- Contact resistance: 50 mohm maximum (initial value)
- 22.3mm mounting hole compliant with IEC 60947-5-1
- 3.5-mm operator travel for pushbuttons ensures comfortable and reliable operation
- Black and metallic bezels available
- UL Type 4X rating with optional boot



Non-Illuminated Pushbutton — Illuminated Pushbutton

NON-ILLUMINATED PUSHBUTTON SWITCHES MOMENTARY FUNCTION — ROUND-FLUSH ACTUATOR

Mfg. Part No.	Bezel	Contacts	Colors	Stock No.	Price Each 1-9
CW1B-M1E02G	Black	DPST-NC	Green	59T4331	22.10
CW1B-M1E01S	Black	SPST-NC	Blue	60T0546	18.58
CW1B-M1E01G	Black	SPST-NC	Green	60T0544	18.58
CW1B-M1E01R	Black	SPST-NC	Red	60T0545	18.82
CW1B-M1E01Y	Black	SPST-NC	Yellow	60T0548	18.58
CW1B-M1E11G	Black	SPST-NO, SPST-NC	Green	59T4332	22.10
CW4B-M1E01R	Metallic	SPST-NC	Red	59T4357	15.79
CW4B-M1E10S	Metallic	SPST-NO	Blue	60T3110	21.17
CW4B-M1E10G	Metallic	SPST-NO	Green	60T3108	22.23
CW4B-M1E10R	Metallic	SPST-NO	Red	60T3109	21.17
CW4B-M1E10Y	Metallic	SPST-NO	Yellow	60T3112	20.91
CW4B-M1E11R	Metallic	SPST-NO, SPST-NC	Red	59T4358	23.95

NON-ILLUMINATED PUSHBUTTON SWITCHES MOMENTARY FUNCTION — ROUND-EXTENDED ACTUATOR

CW1B-M2E02G	Black	DPST-NC	Green	59T4333	21.05
CW1B-M2E01S	Black	SPST-NC	Blue	60T0604	18.58
CW1B-M2E01G	Black	SPST-NC	Green	60T0602	18.58
CW1B-M2E01R	Black	SPST-NC	Red	60T0603	18.58
CW1B-M2E01Y	Black	SPST-NC	Yellow	60T0606	18.58
CW1B-M2E11G	Black	SPST-NO, SPST-NC	Green	59T4334	22.10
CW4B-M2E01R	Metallic	SPST-NC	Red	59T4359	15.79
CW4B-M2E10S	Metallic	SPST-NO	Blue	60T3168	20.91
CW4B-M2E10G	Metallic	SPST-NO	Green	60T3166	22.23
CW4B-M2E10R	Metallic	SPST-NO	Red	60T3167	20.91
CW4B-M2E10Y	Metallic	SPST-NO	Yellow	60T3170	20.91
CW4B-M2E11R	Metallic	SPST-NO, SPST-NC	Red	59T4360	22.81

NON-ILLUMINATED PUSHBUTTON SWITCHES MAINTAINED FUNCTION — ROUND-FLUSH ACTUATOR

CW1B-A1E11B	Black	SPST-NO, SPST-NC	Black	92T1771	24.56
CW1B-A1E11G	Black	SPST-NO, SPST-NC	Green	92T1772	25.79
CW1B-A1E11R	Black	SPST-NO, SPST-NC	Red	92T1773	25.79
CW4B-A1E11S	Metallic	SPST-NO, SPST-NC	Blue	92T1774	26.32
CW4B-A1E11G	Metallic	SPST-NO, SPST-NC	Green	92T1775	26.32
CW4B-A1E11R	Metallic	SPST-NO, SPST-NC	Red	92T1776	26.32
CW4B-M2E22G	Metallic	DPST-NO, DPST-NC	Green	19X1237	32.34
CW4B-M2E22R	Metallic	DPST-NO, DPST-NC	Red	19X1238	32.34

ILLUMINATED PUSHBUTTON SWITCHES MOMENTARY FUNCTION (LED 24V AC/DC) — ROUND-FLUSH ACTUATOR

CW1L-M1E02Q4G	Black	DPST-NC	Green	59T4341	52.05
CW1L-M1E01Q4A	Black	SPST-NC	Amber	60T2532	41.09
CW1L-M1E01Q4G	Black	SPST-NC	Green	60T2533	41.09
CW1L-M1E01Q4PW	Black	SPST-NC	White	60T2534	41.09
CW1L-M1E01Q4R	Black	SPST-NC	Red	60T2535	41.09
CW1L-M1E01Q4S	Black	SPST-NC	Blue	60T2536	46.36
CW1L-M1E01Q4Y	Black	SPST-NC	Yellow	60T2537	41.09
CW1L-M1E11Q4G	Black	SPST-NO, SPST-NC	Green	59T4342	54.13
CW4L-M1E01Q4R	Metallic	SPST-NC	Red	59T4367	45.41
CW4L-M1E10Q4A	Metallic	SPST-NO	Amber	60T5148	43.20
CW4L-M1E10Q4G	Metallic	SPST-NO	Green	60T5149	60.88
CW4L-M1E10Q4PW	Metallic	SPST-NO	White	60T5150	43.20
CW4L-M1E10Q4R	Metallic	SPST-NO	Red	60T5151	60.88
CW4L-M1E10Q4S	Metallic	SPST-NO	Blue	60T5152	48.47

CONTINUED

CW SERIES 22MM FLUSH MOUNT PUSHBUTTON SWITCHES (CONT.)

ILLUMINATED PUSHBUTTON SWITCHES MOMENTARY FUNCTION (LED 24V AC/DC) — ROUND-FLUSH ACTUATOR

Mfg. Part No.	Bezel	Contacts	Colors	Stock No.	Price Each 1-9
● CW4L-M1E10Q4Y	Metallic	SPST-NO	Yellow	60T5153	60.88
● CW4L-M1E11Q4R	Metallic	SPST-NO, SPST-NC	Red	59T4368	56.44
● CW1L-M1E22Q4G	Black	DPST-NO, DPST-NC	Green	19X1199	65.62
● CW1L-M1E22Q4R	Black	DPST-NO, DPST-NC	Red	19X1201	65.62

ILLUMINATED PUSHBUTTON SWITCHES MOMENTARY FUNCTION (LED 24V AC/DC) — ROUND-EXTENDED ACTUATOR

● CW1L-M2E02Q4G	Black	DPST-NC	Green	59T4343	52.05
CW1L-M2E01Q4A	Black	SPST-NC	Amber	60T2711	41.09
CW1L-M2E01Q4G	Black	SPST-NC	Green	60T2712	41.09
CW1L-M2E01Q4PW	Black	SPST-NC	White	60T2713	41.09
CW1L-M2E01Q4R	Black	SPST-NC	Red	60T2714	41.09
CW1L-M2E01Q4S	Black	SPST-NC	Blue	60T2715	46.36
CW1L-M2E01Q4Y	Black	SPST-NC	Yellow	60T2716	41.09
● CW1L-M2E11Q4G	Black	SPST-NO, SPST-NC	Green	59T4344	54.13
● CW4L-M2E01Q4R	Metallic	SPST-NC	Red	59T4369	45.41
CW4L-M2E10Q4A	Metallic	SPST-NO	Amber	60T5327	43.20
CW4L-M2E10Q4G	Metallic	SPST-NO	Green	60T5328	43.20
CW4L-M2E10Q4PW	Metallic	SPST-NO	White	60T5329	43.20
● CW4L-M2E10Q4R	Metallic	SPST-NO	Red	60T5330	60.88
CW4L-M2E10Q4S	Metallic	SPST-NO	Blue	60T5331	48.47
● CW4L-M2E10Q4Y	Metallic	SPST-NO	Yellow	60T5332	60.88
● CW4L-M2E11Q4R	Metallic	SPST-NO, SPST-NC	Red	59T4370	54.27

(197025)

22mm ILLUMINATED PUSHBUTTONS

RoHS Compliant Available

IDEC

Transformer Type

Full Voltage Type

Screw terminal units include lens, lamp, operator, lamp holder, contact block, and transformer or direct voltage adapter. 1N.O.-N.C. contacts. Momentary action. Non-marking extended round lens. Rated NEMA 1, 2, 3, 3R, 4, 4X, 5, 12, 13; IP65. UL listed, CSA certified, CE compliant.

TRANSFORMER TYPES

Mfg. Part No.	Lens Color	Lens	Style	Stock No.	Price Each 1-24	25-49	50-99
● ALW212611-G	Green	Incandescent	120VAC	74K3640	68.96	62.00	58.68

FULL VOLTAGE TYPES

● ALW29911-G-24	Green	Incandescent	24V Lamp	74K3641	41.68	37.48	35.47
● ALW29911D-R-120	Red	LED	120V LED	74K3644	38.57	34.44	32.80
● ALW29911D-G-120	Green	LED	120V LED	74K3643	41.66	37.20	35.42
● ALW29911D-A-120	Amber	LED	120V LED	74K3642	41.44	37.01	35.25

LENSES

Mfg. Part No.	Lens Color	Shape	Stock No.	Price Each 1-24	25-49
● ALW2LU-A	Amber	Round	74K3639	2.34	2.10
● ALW2LU-G	Green	Round	84C9081	2.31	2.07
● ALW2LU-R	Red	Round	74C0743	2.34	2.10

(3430)

22mm ILLUMINATED PUSHBUTTON SWITCHES

RoHS Compliant Available

IDEC

- LED lamp, full voltage, rated 24VAC/VDC
- Momentary action
- SPST-NO, SPST-NC contacts
- IP65 and NEMA 4/4x/13

TÜV Rheinland

Extended w/ Full Shroud

Mushroom Head

Operating temperature range: -25°C to +50°C. Mechanical life: 5,000,000 operations. Meets IEC. UL listed, CSA certified, CE compliant, and TÜV approved. May be mounted in IDEC's one-to-five hole enclosures.

Mfg. Part No.	Shape	Head Style	Lens Color	Bezel	Stock No.	Price Each 1-24	25-49
● HW1L-M1F11QD-R-24V	Round	Flush	Red	Plastic	74K3769	39.56	37.38
● HW1L-M1F11QD-G-24V	Round	Flush	Green	Plastic	74K3768	40.14	37.94

➤CONTINUED➤

22mm ILLUMINATED PUSHBUTTON SWITCHES (CONT.)

Mfg. Part No.	Shape	Head Style	Lens Color	Bezel	Stock No.	Price Each 1-24	25-49
● HW1L-M1F11QD-A-24	Round	Flush	Amber	Plastic	74K3767	39.56	37.38
● HW1L-M2F11QD-R-24V	Round	Extended	Red	Plastic	74K3771	39.56	37.38
● HW1L-M2F10QD-G-24V	Round	Extended	Green	Plastic	84C4686	46.26	43.83
● HW1L-M2F11QD-G-24V	Round	Extended	Green	Plastic	74K3770	39.95	37.74
● HW1L-M4F10QD-R-24V	Round	40mm Mushroom	Red	Plastic	84C4766	45.36	42.97
● HW1L-M4F11QD-R-24V	Round	40mm Mushroom	Red	Plastic	76K6256	34.98	31.23
● HW1L-M4F11QD-G-24V	Round	40mm Mushroom	Green	Plastic	74K3772	40.58	38.33
● HW2L-M1F10QD-R-24V	Square	Flush	Red	Plastic	84C5162	40.79	38.63
● HW4L-M1F10QD-G-24V	Round	Flush	Green	Metal	41J3732	46.30	43.86
● HW4L-M2F10QD-R-24V	Round	Extended	Red	Metal	72J7051	46.30	43.86
● HW4L-M2F11QD-G-24V	Round	Extended	Green	Metal	53K7637	55.45	52.53

(13247)

22mm NON-ILLUMINATED PUSHBUTTON SWITCHES

RoHS Compliant Available

IDEC

- Plastic or nickel-plated aluminum bezels
- Momentary action
- Slow-break SPST-NO or SPST-NO - SPST-NC contacts
- Meet IEC IP65 and NEMA 4/4x/13
- Available in red, black, green, blue, white and yellow

TÜV Rheinland

Rated 600VAC/DC, 10A. Operating temperature range: –25°C to +50°C. Mechanical life: 5,000,000 operations. May be mounted in IDEC's one-to-five hole enclosures. Mushroom head also available; *go online or call.*

Flush Head Plastic Bezel

Extended Head Metal Bezel

22mm NON-ILLUMINATED PUSHBUTTON SWITCHES - MOMENTARY - PLASTIC BEZEL

Mfg. Part No.	Shape	Head Style	Circuitry	Color	Stock No.	Price Each 1-24
● HW1B-M1F10-B	Round	Flush	SPST-NO	Black	74K3746	13.62
● HW1B-M1F10-S	Round	Flush	SPST-NO	Blue	74K3749	13.37
● HW1B-M1F10-G	Round	Flush	SPST-NO	Green	74K3747	13.62
● HW1B-M1F10-R	Round	Flush	SPST-NO	Red	74K3748	13.37
● HW1B-M1F10-Y	Round	Flush	SPST-NO	Yellow	74K3750	13.38
● HW1B-M1F11-B	Round	Flush	DPST-1NO/1NC	Black	74K3751	20.62
● HW1B-M1F11-G	Round	Flush	DPST-1NO/1NC	Green	74K3752	20.24
● HW1B-M1F11-R	Round	Flush	DPST-1NO/1NC	Red	74K3753	20.24
● HW2B-M2F11-R	Round	Extended	DPST-1NO/1NC	Red	78K5982	20.24
● HW2B-M1F10-G	Square	Flush	SPST-NO	Green	91F5593	23.10
● HW2B-M2F10-G	Square	Extended	SPST-NO	Green	91F5595	22.43
● HW1B-M3F10-R	Round	29mm Mushroom	SPST-NO	Red	30B6597	27.73
● HW1B-M3F10-G	Round	29mm Mushroom	SPST-NO	Green	30B6596	27.73
● HW1B-M3F11-R	Round	29mm Mushroom	SPDT-1NO/1NC	Red	30B6603	36.97
● HW1B-M3F11-G	Round	29mm Mushroom	SPDT-1NO/1NC	Green	30B6602	36.97
● HW1B-M4F10-R	Round	40mm Mushroom	SPST-NO	Red	91F5587	27.73
● HW1B-M4F10-G	Round	40mm Mushroom	SPST-NO	Green	91F5597	28.84
● HW1B-M4F11-G	Round	40mm Mushroom	SPDT-1NO/1NC	Green	91F5598	38.45
● HW1B-M4F11-R	Round	40mm Mushroom	DPST-1NO/1NC	Red	91F5588	27.54

22mm NON-ILLUMINATED PUSHBUTTON SWITCHES - MOMENTARY - METAL BEZEL

● HW4B-M1F10-R	Round	Flush	SPST-NO	Red	74K3783	14.17
● HW4B-M3F10-R	Round	29mm Mushroom	SPST-NO	Red	05N8047	30.73
● HW4B-M3F10-G	Round	29mm Mushroom	SPST-NO	Green	05N8046	29.55
● HW4B-M3F11-R	Round	29mm Mushroom	SPDT-1NO/1NC	Red	05N8053	38.79
● HW4B-M3F11-G	Round	29mm Mushroom	SPDT-1NO/1NC	Green	05N8052	38.79
● HW4B-M4F10-R	Round	40mm Mushroom	SPST-NO	Red	92H6438	29.55
● HW4B-M4F10-G	Round	40mm Mushroom	SPST-NO	Green	05N8117	29.55
● HW4B-M4F11-R	Round	40mm Mushroom	SPDT-1NO/1NC	Red	92H6439	38.79
● HW4B-M4F11-G	Round	40mm Mushroom	SPDT-1NO/1NC	Green	05N8122	38.79

22mm NON-ILLUMINATED PUSHBUTTON SWITCHES - MOMENTARY - PLASTIC BEZEL

Mfg. Part No.	Shape	Head Style	Circuitry	Color	Stock No.	Price Each 1-24
● HW2B-A1F10-G	Square	Flush	SPST-NO	Green	30B9753	30.43
● HW2B-A1F11-R	Square	Flush	SPDT-1NO/1NC	Red	30B9760	39.70
● HW2B-A2F10-G	Square	Extended	SPST-NO	Green	30B9789	32.08
● HW2B-A2F11-R	Square	Extended	SPDT-1NO/1NC	Red	30B9796	40.12
● HW1B-A3F11-R	Round	29mm Mushroom	SPDT-1NO/1NC	Red	30B6481	46.97
● HW1B-A3F11-G	Round	29mm Mushroom	SPDT-1NO/1NC	Green	30B6480	46.97
● HW1B-A4F11-R	Round	40mm Mushroom	SPDT-1NO/1NC	Red	30B6517	46.97
● HW1B-A4F11-G	Round	40mm Mushroom	SPDT-1NO/1NC	Green	30B6516	46.97

➤CONTINUED➤

22mm NON-ILLUMINATED PUSHBUTTON SWITCHES (CONT.)

22mm NON-ILLUMINATED PUSHBUTTON SWITCHES - MOMENTARY - METAL BEZEL

Mfg. Part No.	Shape	Head Style	Circuitry	Color	Stock No.	Price Each 1-24
HW4B-A3F11-R	Round	29mm Mushroom	SPDT-1NO/1NC	Red	05N7795	48.79
HW4B-A3F11-G	Round	29mm Mushroom	SPDT-1NO/1NC	Green	05N7794	48.79
HW4B-A4F11-R	Round	40mm Mushroom	SPDT-1NO/1NC	Red	05N7861	48.79
HW4B-A4F11-G	Round	40mm Mushroom	SPDT-1NO/1NC	Green	05N7860	48.79

(13028)

LED LAMPS

RoHS Compliant Available

IDEC

Contains a current-limiting resistor and a protection diode. Available in 24V and 120V versions in a range of colors. Also available in blue; *go online or call.*

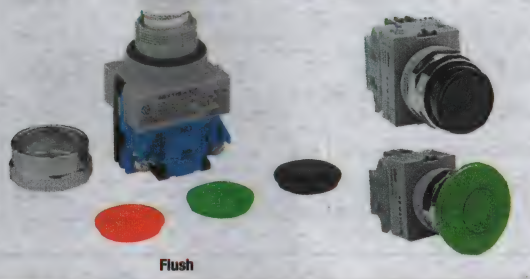
Mfg. Part No.	Voltage (V)	Color	Stock No.	Price Each 1-24	25-49	50-99	100+
LSTD-6R	6	Red	74K3876	7.09	6.82	6.53	6.31
LSTD-6G	6	Green	84C6114	7.16	6.88	6.59	6.37
LSTD-2A	24	Amber	74K3870	7.16	6.88	6.59	6.37
LSTD-2G	24	Green	74K3871	7.34	7.07	6.77	6.54
LSTD-2R	24	Red	74K3872	7.16	6.88	6.59	6.37
LSTD-2W	24	White	74K3874	7.34	7.07	6.77	6.54
LSTD-H2A	120	Amber	74K3866	11.01	10.56	10.12	9.79
LSTD-H2G	120	Green	74K3867	11.01	10.56	10.12	9.79
LSTD-H2R	120	Red	74K3868	11.01	10.56	10.12	9.79
LSTD-H2W	120	White	74K3869	11.01	10.56	10.12	9.79

(3604)

22mm PUSHBUTTON SWITCHES

RoHS Compliant Available

IDEC



Flush

Screw terminal units include button, operator, contact blocks. Mount 0.875" (22.23) hole. Momentary action. Caps included (R=Red, B=Black, G=Green). UL listed, CSA certified, CE compliant. NEMA 1, 2, 3, 4, 4X, 5, 12, 13.

Mfg. Part No.	Style	Circuitry	Color	Stock No.	Price Each 1-24	25-49	50-99	100+
ABW110-B,G,R	Flush	SPST-NO	...	74K3606	14.95	14.12	13.37	12.95
ABW110-R	Flush	SPST-NO	Red	09C9432	15.85	14.98	14.17	13.52
ABW101 BGR	Flush	SPST-NC	...	74K3605	15.85	14.98	14.17	13.74
ABW111 BGR	Flush	DPST-1NO/1NC	...	74K3607	23.73	22.43	21.21	20.57
ABW210-BGR	Extended	SPST-NO	...	74K3609	16.15	15.27	14.43	13.99
ABW201 BGR	Extended	SPST-NC	...	74K3608	16.04	15.16	14.34	13.90
ABW211 BGR	Extended	DPST-1NO/1NC	...	74K3610	23.30	22.02	20.83	20.19
ABW310-G	Mushroom	SPST-NO	Green	14C8221	23.09	21.82	20.64	19.69
ABW410-R	Mushroom	SPST-NO	Red	74K3613	23.30	22.02	20.83	20.19
ABW410-B	Mushroom	SPST-NO	Black	96F3635	23.58	22.28	21.08	20.43
ABW410-G	Mushroom	SPST-NO	Green	74K3612	23.73	22.43	21.21	20.57
ABW401-R	Mushroom	SPST-NC	Red	74K3611	23.58	22.28	21.08	20.43
ABW411-R	Mushroom	DPST-1NO/1NC	Red	74K3614	30.73	29.04	27.48	26.63
ABW411-G	Mushroom	DPST-1NO/1NC	Green	96F3640	29.62	27.99	26.49	25.67

(3427)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

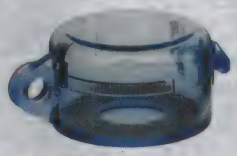
newark.com/custom-enclosures

(212568)

16mm AND 22mm SWITCH ACCESSORIES

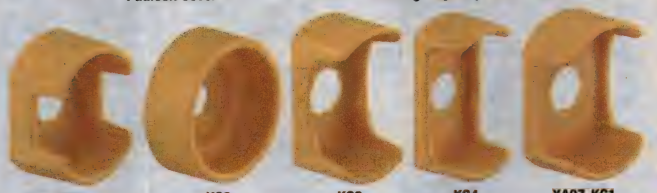
RoHS Compliant Available

IDEC



Padlock Cover

Emergency Stop Name Plate



KG1 KG2 KG3 KG4 XA9Z-KG1

Individual buttons, spring-up terminal contacts and 22mm to 30mm adapter **mfg. part no. HW9Z-A30** also available; *go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each 1-9
HAAV4-27	16mm Yellow Emergency Stop Nameplate, 60mm Diameter	43J1425	12.56
HW9Z-KL1	Padlock Cover For 22mm Switches	74K3803	16.39
HWAV-27	22mm Yellow Emergency Stop Nameplate, 60mm Diameter	74K3745	5.34
HWAV5-27	22mm Yellow Emergency Stop Nameplate, 80mm Diameter	43J1426	6.00
HW-C01	Exposed Screw Terminal Contacts, 1NC	74K3741	7.00
HW-C10	Exposed Screw Terminal Contacts, 1NO	74K3742	7.00
HW-CB2C	Contact Block Mounting Adapter for Mounting of Contact Blocks to Operator (First Pair Only)	74K3740	1.29
HW-F01	Standard Fingersafe Contacts (IP20), 1NC	74K3743	7.00
HW-F10	Standard Fingersafe Contacts (IP20), 1NO	74K3744	6.86
HW9Z-KG3	E-Stop Shroud Yellow for 22mm XW & HW E-stops with 29mm & 40mm mushroom heads	34M2040	20.67
HW9Z-KG4	E-Stop Shroud Yellow for 22mm XW & HW E-stops with 29mm & 40mm mushroom heads	34M2041	23.38
XA9Z-KG1	E-Stop Shroud Yellow for 16mm XA E-stops with 29mm & 40mm mushroom heads	34M2077	26.30
HW9Z-KG1	E-Stop Shroud Yellow for 22mm XW & HW E-stops with 29mm & 40mm mushroom heads	32M7404	17.76
HW9Z-KG2	E-Stop Shroud Yellow for 22mm XW & HW E-stops with 29mm & 40mm mushroom heads	20M7930	18.08
HW9Z-SKP	Replacement Keys for HW Series Switches	28C7212	1.29

(15326)

A22R/M22R SERIES PUSHBUTTON SWITCHES

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

A22R-FG-10A A22RL-TR-24A-10A

A22RK-2M A22RL-TW-M M22R-EW-24A A22R-12AR

- Rated current: 10A
- Rated voltage: 240V
- Ambient temperature: Non-lighted type: -20 to +60°C , Lighted type: -20 to +50°C

NON-ILLUMINAT SWITCHES - FLUSH

Mfg. Part No.	Contacts	Switch Operation	Button Color	Stock No.	Price Each 1-9
A22R-FG-10A	SPST-NO	Alternate	Green	86T5870	24.17
A22R-FG-10M	SPST-NO	Momentary	Green	86T5871	17.59
A22R-FR-01A	SPST-NC	Alternate	Red	86T5874	22.84
A22R-FR-01M	SPST-NC	Momentary	Red	86T5875	17.81
A22R-FR-10A	SPST-NO	Alternate	Red	86T5876	22.84
A22R-FR-10M	SPST-NO	Momentary	Red	86T5877	17.81
A22R-FW-10M	SPST-NO	Momentary	White	86T5878	16.83
A22R-FG-A	SPST-NO, SPST-NC	Alternate	Green	86T5868	12.63
A22R-FG-M	SPST-NO, SPST-NC	Momentary	Green	86T5869	6.57

CONTINUED

A22R/M22R SERIES PUSHBUTTON SWITCHES (CONT.)

Mfg. Part No.	Contacts	Switch Operation	Button Color	Stock No.	Price Each 1-9
● A22R-FR-A	SPST-NO, SPST-NC	Alternate	Red	86T5872	12.63
● A22R-FR-M	SPST-NO, SPST-NC	Momentary	Red	86T5873	6.21
NON-ILLUMINAT SWITCHES - EXTENDED TYPE ACTUATOR					
● A22R-TG-10A	SPST-NO	Alternate	Green	86T5881	23.44
● A22R-TG-10M	SPST-NO	Momentary	Green	86T5882	17.81
● A22R-TR-01A	SPST-NC	Alternate	Red	86T5885	23.25
● A22R-TR-01M	SPST-NC	Momentary	Red	86T5886	17.81
● A22R-TR-10A	SPST-NO	Alternate	Red	86T5887	23.44
● A22R-TR-10M	SPST-NO	Momentary	Red	86T5888	16.83
ILLUMINAT SWITCHES - PROJECTION ACTUATOR					
● A22RL-TA-24A-10A	SPST-NO	Alternate	Blue	86T5907	38.20
● A22RL-TG-24A-10A	SPST-NO	Alternate	Green	86T5910	40.09
● A22RL-TG-24A-10M	SPST-NO	Momentary	Green	86T5911	36.98
● A22RL-TR-24A-10A	SPST-NO	Alternate	Red	86T5914	40.09
● A22RL-TR-24A-10M	SPST-NO	Momentary	Red	86T5915	36.98
● A22RL-TW-24A-10A	SPST-NO	Alternate	White	86T5918	43.59
● A22RL-TW-24A-10M	SPST-NO	Momentary	White	86T5919	38.60
● A22RL-TG-A	SPST-NO, SPST-NC	Alternate	Green	86T5908	10.06
● A22RL-TG-M	SPST-NO, SPST-NC	Momentary	Green	86T5909	7.55
● A22RL-TR-A	SPST-NO, SPST-NC	Alternate	Red	86T5912	10.06
● A22RL-TR-M	SPST-NO, SPST-NC	Momentary	Red	86T5913	7.55
● A22RL-TW-A	SPST-NO, SPST-NC	Alternate	White	86T5916	10.06
● A22RL-TW-M	SPST-NO, SPST-NC	Momentary	White	86T5917	7.55
NON-ILLUMINAT SWITCHES - PROJECTION ACTUATOR					
● A22R-TG-M	SPST-NO, SPST-NC	Momentary	Green	86T5880	6.80
● A22R-TR-A	SPST-NO, SPST-NC	Alternate	Red	86T5883	13.04
● A22R-TR-M	...	Momentary	Red	86T5884	6.80
● A22R-TG-A	SPST-NO, SPST-NC	Alternate	Green	86T5879	13.04

M22R INDICATORS

Mfg. Part No.	Contact Voltage AC Nom	Indicator Color	Stock No.	Price Each 1-9
● M22R-EW-24A	240	Transparent	86T5934	13.13
● M22R-EG-24A	240	Green	86T5932	10.77
● M22R-ER-24A	240	Red	86T5933	10.77

LAMP UNITS

Mfg. Part No.	Operating Voltage	Lighting Color	Stock No.	Price Each 1-9
● A22R-12AR	12	Red	86T5895	5.55
● A22R-12AA	12	Blue	86T5893	5.25
● A22R-12AG	12	Green	86T5894	5.25
● A22R-12AW	12	White	86T5896	7.94
● A22R-12AY	12	Yellow	86T5897	5.25
● A22R-24AR	24	Red	86T5901	7.39
● A22R-24AA	24	Blue	86T5899	7.39
● A22R-24AG	24	Green	86T5900	7.39
● A22R-24AW	24	White	86T5902	9.53
● A22R-24AY	24	Yellow	86T5903	6.98

SWITCH UNITS

LIGHTED

Mfg. Part No.	Type	Contact Form	Stock No.	Price Each 1-9
● A22RL-10M	Standard	SPST-NO	86T5922	16.45
● A22RL-01M	Standard	SPST-NC	86T5920	16.45
● A22RL-20M	Standard	DPST-NO	86T5924	22.61
● A22RL-02M	Standard	DPST-NC	86T5921	22.61
● A22RL-11M	Standard	SPST-NO / SPST-NC	86T5923	25.59
NON-LIGHTED				
● A22R-10M	Socket	SPST-NO	86T5891	9.40
● A22R-01M	Socket	SPST-NC	86T5889	9.52
● A22R-20M	Socket	DPST-NO	86T5898	17.00
● A22R-11M	Socket	SPST-NO / SPST-NC	86T5892	16.06
● A22R-02M	Socket	DPST-NC	86T5890	15.90

SELECTOR UNITS

Mfg. Part No.	Number of Notches	Color	Stock No.	Price Each 1-4
● A22RW-2MA	2	Blue	86T5927	12.35
● A22RW-2MR	2	Red	86T5930	12.35
● A22RW-2MG	2	Green	86T5928	12.35
NON-LIGHTED				
● A22RS-2M	2	Black	86T5925	5.61

➤CONTINUED➤

A22R/M22R SERIES PUSHBUTTON SWITCHES (CONT.)

KEY SELECTOR UNIT

Mfg. Part No.	Number of Notches	Stock No.	Price Each 1-24
● A22RK-2M	2	86T5904	24.04

(202060)

ZB4 SERIES DOUBLE HEADED PUSH BUTTONS

RoHS Compliant Available

Schneider Electric

Mfg. Part No.	Desc.	Color and Marking	Stock No.	Price Each 1-24
● ZB4BA7120	2 flush black pushes	White background + black background, unmarked	85R3831	41.93
● ZB4BA7340	2 flush black pushes	Green background + red background, unmarked	85R3832	40.32
● ZB4BA7341	2 flush black pushes	White "I" on green background White "O" on red background	85R3833	44.87
● ZB4BL7340	1 flush black push 1 projecting red push	Green background + red background, unmarked	85R3837	40.32
● ZB4BL7341	1 flush black push 1 projecting red push	White "I" on green background White "O" on red background	85R3838	44.87
● ZB5AA7340	2 flush black pushes	Green background + red background, unmarked	85R3844	38.46
● ZB5AA7341	2 flush black pushes	White "I" on green background White "O" on red background	85R3845	42.81
● ZB5AL7341	1 flush black push 1 projecting red push	White "I" on green background White "O" on red background	85R3849	44.52
DOUBLE-HEADED PUSHBUTTONS + 1 WHITE CENTRAL PILOT LIGHT BLOCK				
● ZB4BW7A3740	2 flush black pushes	Green background + red background, unmarked	85R3840	52.02
● ZB4BW7A3741	2 flush black pushes	White "I" on green background White "O" on red background	85R3841	58.60
● ZB4BW7L3740	1 flush black push 1 projecting red push	Green background + red background, unmarked	85R3842	52.02
● ZB4BW7L3741	1 flush black push 1 projecting red push	White "I" on green background White "O" on red background	85R3843	56.35
● ZB5AW7A3740	2 flush black pushes	Green background + red background, unmarked	52T6115	51.40
● ZB5AW7A3741	2 flush black pushes	White "I" on green background White "O" on red background	85R3852	53.65
● ZB5AW7L3741	1 flush black push 1 projecting red push	White "I" on green background White "O" on red background	85R3853	53.65

(208200)

XB4 SERIES 22mm PUSH BUTTONS

RoHS Compliant Available

Schneider Electric

Mfg. Part No.	Desc.	Color	Stock No.	Price Each 1-24
● XB4BW35G5	Flush complete illum	Orange	80C6545	122.32
● XB4BW34B5	Flush complete illum	Red	22C9262	99.91
● XB5AVG3	Pilot Light LED	Green	80C6595	71.58
● XB4BVB5	Pilot Light LED	Orange	72C4473	74.44
● XB4BVG5	Light Module	Yellow	80C6518	74.44
● XB4BVG4	Light Module	Red	11R7[illegible]7	74.44
● XB5AVG4	Pilot Light LED	Red	80C6596	71.58
● XB4BVG1	Complete pilot light	White	80C6516	74.44
● XB4BA42	Flush Complete Non-Illum	Red	80C6474	35.29
● XB4BL42	Projecting Complete Non-Illum	Red	80C6499	43.39
● XB5AA42	Flush Complete Non-Illum	Red	94B9971	43.39

(208201)

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Affordable, performance board level & box build components at

newark.com/multicomp

(212569)

XB7 SERIES 22mm PUSHBUTTON

NEW

RoHS Compliant Available

Schneider Electric

Specifications:
- IP65 rated
- Contact rating: 600mA at 240VAC; 750mA at 250VDC
- Screw terminal or plug-in connections

Features:
- Monolithic design — easy to select and quick to install by eliminating the need for components
- Separate N.O. and N.C. contacts — increase wiring flexibility
- Seamless integration with Harmony accessories and legend plates

PB SPRING

Mfg. Part No.	Actuator / Cap Color	Actuator Style	Stock No.	Price Each 1-24
XB7NA11	White	Round-Flush	96W0563	20.87
XB7NA15	White	Round-Flush	96W0568	30.35
XB7NA21	Black	Round-Flush	96W0573	20.87
XB7NA23	Black	Round-Flush	96W0578	30.35
XB7NA25	Black	Round-Flush	96W0579	30.35
XB7NA31	Green	Round-Flush	96W0584	21.91
XB7NA3131	Green	Round-Flush	96W0585	24.23
XB7NA3133	Green	Round-Flush	96W0586	24.23
XB7NA33	Green	Round-Flush	96W0588	30.35
XB7NA42	Red	Round-Flush	96W0593	20.87
XB7NA4232	Red	Round-Flush	96W0594	24.23
XB7NA4234	Red	Round-Flush	96W0595	24.23

PB PROJ SPRING

Mfg. Part No.	Actuator / Cap Color	Actuator Style	Stock No.	Price Each 1-24
XB7NL42	Red	Round-Extended	96W0634	21.91
XB7NL44	Red	Round-Extended	96W0637	30.35
XB7NL45	Red	Round-Extended	96W0638	30.35

(211216)

XB5 SERIES 22mm PUSH BUTTONS, SWITCHES, PILOT LIGHTS

RoHS Compliant Available

Schneider Electric

DOUBLE HEADED PUSHBUTTON

Mfg. Part No.	Desc.	Stock No.	Price Each 1-9
XB5AL73415	Green flush/Red projecting	85R3662	78.15

Triple Headed Pushbutton

XB5AA731327	Green flush/Red projecting/Green flush	52T5814	110.33

PILOT LIGHTS

Mfg. Part No.	Desc.	Color	Stock No.	Price Each 1-24
XB5AVG3	Pilot Light LED	Green	80C6595	71.58
XB5AVG4	Pilot Light LED	Red	80C6596	71.58

E-STOPS/MUSHROOM OPERATORS

Mfg. Part No.	Reset Type	Color	Stock No.	Price Each 1-24
XB5AT42	Latching push-pull	Red	31C1335	70.31
XB5AS542	Latching turn release	Red	97B9447	113.08

SELECTOR SWITCH

Mfg. Part No.	Desc.	Color	Stock No.	Price Each 1-24
XB5AD33	3-position stay put 2NO	Black	27C1442	70.31

(208205)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

(212570)

ZB4 SERIES 22mm PUSHBUTTON COMPONENTS – NON-ILLUMINATED

RoHS Compliant Available

Schneider Electric

Flush Head Operator

Extended Head Operator

Booted Operator

Push/Pull E-Stop Operator

Double-Head Operator

Mounting Base Non-Illuminated

Quick assembly components easily combine to provide custom switches to meet your specific requirements. **Complete Pushbutton Assembly = Operator + Mounting Base + Contact Block.** Operator locks into mounting collar, securing the operator in the enclosure. Screw clamp terminal contact blocks clip-on, up to 9 circuits. Operators are self-grounding, tamperproof, and antirotating. NEMA 4X, 13 IP65. Contact blocks are rated A600/Q600 (10A continuous). On = Maintained action; (On) = Momentary action. UL listed, CSA certified, CE compliant.

FLUSH HEAD OPERATORS

Mfg. Part No.	Color/Marked	Stock No.	Price Each Each	Price Each 2-4
ZB4BA1	White	17C7066	16.35	15.32
ZB4BA2	Black	17C7067	16.06	15.04
ZB4BA3	Green	17C7068	16.35	15.32
ZB4BA4	Red	17C7071	16.06	15.04
ZB4BA5	White	17C7072	16.25	15.22
ZB4BA6	Blue	17C7073	16.25	15.22
ZB4BA333	Green/Start	17C7070	24.45	22.90

EXTENDED HEAD OPERATORS

ZB4BL1	White	17C7078	17.10	16.02
ZB4BL3	Green	17C7080	16.25	15.22
ZB4BL4	Red	17C7081	16.06	15.04

BOOTED HEAD OPERATORS

ZB4BP3	Green	17C7089	32.30	30.27

PILOT LIGHT HEAD

ZB5AV033	Green	17C8470	10.00	9.54

PUSHBUTTON LIGHT MODULES

ZBVB1	White	17C8353	61.67	58.72

PUSHBUTTON HEAD OPERATORS WITH METAL BEZEL

Mfg. Part No.	Function	Color/Marked	Marking	Stock No.	Price Each 1-24
ZB4BC180	(On)	White	Unmarked	32X6370	38.23
ZB4BC18023	(On)	White	I	32X6371	41.39
ZB4BC280	(On)	Black	Unmarked	32X6372	38.23
ZB4BC28021	(On)	Black	O	32X6373	41.39
ZB4BC380	(On)	Green	Unmarked	32X6374	38.23
ZB4BC38023	(On)	Green	I	32X6375	41.39
ZB4BC38031	(On)	Green	START	32X6376	41.39
ZB4BC480	(On)	Red	Unmarked	32X6377	38.23
ZB4BC48007	(On)	Red	STOP	32X6378	41.39
ZB4BC48021	(On)	Red	O	32X6379	41.39
ZB4BC580	(On)	Yellow	Unmarked	32X6380	38.23

PUSHBUTTON HEAD OPERATORS WITH PLASTIC BEZEL

ZB5AC180	(On)	White	Unmarked	32X6381	35.97
ZB5AC280	(On)	Black	Unmarked	32X6382	35.97
ZB5AC28043	(On)	Black	Up Arrow	32X6383	39.13
ZB5AC380	(On)	Green	Unmarked	32X6384	35.97
ZB5AC480	(On)	Red	Unmarked	32X6385	35.97
ZB5AC580	(On)	Yellow	Unmarked	32X6386	35.97

SELECTOR SWITCH OPERATORS

Mfg. Part No.	No. of Positions	Color/Marked	Stock No.	Price Each Each	Price Each 2-4
ZB5AD2	2	Black	17C8457	29.90	28.47
ZB5AD3	3	Black	17C8458	29.45	28.09

CONTINUED

ZB4 SERIES 22mm PUSHBUTTON COMPONENTS – NON-ILLUMINATED (CONT.)

E-STOPS/MUSHROOM OPERATORS

Mfg. Part No.	Description	Stock No.	Price Each Each	Price Each 2-4
ZB4BT4	40mm Metal, Red E-Stop, Push/Pull	17C7097	50.29	47.12
MOUNTING BASES				
ZB4BZ101	Base with 1 N.O. Block	17C7144	27.56	26.31
ZB4BZ102	Base with 1 N.C. Block	17C7145	27.56	26.31
● ZB4BZ103	Base with 2 N.O. Block	11R7920	48.53	46.34
ZB4BZ105	Base with 1 N.O. and 1 N.C. Block	12C2264	44.98	42.95
CONTACT BLOCKS				
ZBE101	1 N.O. Block	17C7051	20.68	19.74
ZBE102	1 N.C. Block	17C7052	20.68	19.74
ZBE203	2 N.O. Blocks, Dual-Circuit	16C1756	41.60	39.72
ZBE204	2 N.C Blocks, Dual-Circuit	17C7053	41.60	39.72
ZBE205	1 N.O. and 1 N.C. Block, Dual-Circuit	17C7054	42.21	40.30

ACCESSORIES

Mfg. Part No.	Description	For Use With	Stock No.	Price Each Each	Price Each 2-4
● ZBZ1604	Metal Guard	Schneider ZB4, ZB5 and ZBE Series Pushbutton Switches	17C8378	136.91	130.50
● ZBZ33	Legend holder	XB4 Series Pushbutton Switches	17C8380	2.84	2.32
● ZBY2330	Legend E-Stop	XB4 Series Pushbutton Switches	31C6415	4.84	3.95
● ZBY2387	Legend Hand-Off-Auto	XB4 Series Pushbutton Switches	70C4664	4.84	3.95
● ZBZ28	Bellow	XB4 Series Pushbutton Switches	11R2164	14.74	13.37
● ZBZ32	Legend holder	XB4 Series Pushbutton Switches	17C8379	2.84	2.32

(59671)

ZB4 SERIES 22mm PUSHBUTTON COMPONENTS – ILLUMINATED

RoHS Compliant Available

Schneider Electric

Extended Head

Flush Head

Light Module

Quick installation. Screw-clamp terminals. Operator locks into mounting collar, securing the operator in the enclosure. Protected LED reduces the effects of lightning, inductive spikes generated by coil de-energization and reverse polarity. Complete pushbutton assembly: operator and mounting base and contact blocks. Contact blocks clip-on, up to 9 circuits. Self-grounding, tamperproof, and anti-rotating. 100,000 hours average LED life. Contacts rated 6A @ 120VAC, 600VAC/DC Max. UL listed, CSA certified, CE compliant.

FLUSH HEAD OPERATOR

Mfg. Part No.	Color	Stock No.	Price Each Each	Price Each 2-4
ZB4BW313	White	17C7138	23.27	21.80
ZB4BW333	Green	17C7139	23.41	21.93
ZB4BW343	Red	17C7140	22.99	21.54
ZB4BW353	Yellow	17C7141	23.27	21.80
ZB4BW363	Blue	17C7142	23.27	21.80
EXTENDED HEAD OPERATOR				
ZB4BW113	White	17C7133	15.47	14.50
ZB4BW133	Green	17C7134	16.25	15.22

24V LED LIGHT MODULES

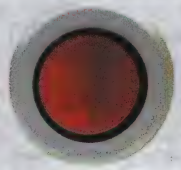
Mfg. Part No.	Contacts	Color	Stock No.	Price Each Each	Price Each 2-4
ZB4BW0B11	1 N.O.	White	17C7113	83.58	79.40
ZB4BW0B31	1 N.O.	Green	17C7115	82.78	78.64
ZB4BW0B41	1 N.O.	Red	17C7117	83.58	79.40
ZB4BW0B51	1 N.O.	Yellow	17C7119	80.37	76.35
120VAC LED LIGHT MODULES					
ZB4BW0G31	1 N.O.	Green	17C7125	82.18	78.07
● XB5AVG5	1 N.O.	Orange	80C6597	71.58	67.79
● XB5AW34G5	1 N.O. / 1 N.C.	Red	97B8226	122.32	115.85
● XB5AW33G5	1 N.O. / 1 N.C.	Orange	97B8218	122.32	115.85

(59674)

704 SERIES 30MM FLUSH PANEL MOUNT SWITCH

RoHS Compliant Available

eao



Pushbutton

704 series mount in a standard 30.5mm hole. These updated flush mount switches meet NEMA enclosure types 4, 13, and meet IEC enclosure IP65 classification. Compatible with T-3¼ bayonet lamps, neon lamps, or LEDs. NOTE: The last numeral in the mfg. part no. indicates lens color: **2** = red, **4** = yellow. UL recognized, CSA certified, VDE approved, SEV approved, and ISO9001 certified. *Order* **04 series** *contact blocks separately on page 1762.*

Mfg. Part No.	Description	Stock No.	Price Each 1-24	Price Each 25-49
● 704.01-1892 NX	Momentary Lighted	92F7661	33.58	31.11
● 7049605	Mounting flange	52F1833	4.50	...
● 704.955.1	Front bezel	97F7714	12.83	11.98

(5053)

30MM PUSHBUTTONS 10250T SERIES

EATON

- Heavy-duty zinc die cast construction
- Enclosed silver contacts with reliability nibs
- Reliability nibs improve contact reliability even under dry circuit and fine dust conditions
- Drainage holes prevent buildup of liquid inside the operator which can prevent operation in freezing environments
- Grounding nibs bite through paint and other coatings to secure grouding

10250T1xx

10250T411

10250T597LRD2A-1X

The 10250T 30.5 mm pushbutton line features a zinc die cast construction with chrome-plated housing and mounting nut. The same durable construction is also available with the corrosive resistant E34 line of pushbuttons.

NON-ILLUMINATED MOMENTARY PUSHBUTTON OPERATORS
FLUSH BUTTON (CHOOSE CONTACT BLOCK BELOW)

Mfg. Part No.	Color	Stock No.	Price 1-4
10250T101	Black	44K1511	33.11
10250T103	Green	44K1540	33.11
EXTENDED BUTTON (CHOOSE CONTACT BLOCK BELOW)			
10250T112	Red	44K1608	42.77
MUSHROOM BUTTON (CHOOSE CONTACT BLOCK BELOW)			
10250T122	Red	44K1624	70.95
JUMBO MUSHROOM BUTTON (CHOOSE CONTACT BLOCK BELOW)			
10250T172	Red	44K2130	82.98
10250T17213	Red (EMERG. STOP)	44K2136	116.52

ILLUMINATED MOMENTARY PUSHBUTTON (CHOOSE COLOR LENS BELOW)

Mfg. Part No.	Light Unit Type	Type	Voltage	Stock No.	Price 1-4
10250T411	Incandescent	Transformer AC Only	120	44K3175	156.46
PRES-TO-TEST ILLUM. PUSHBUTTON (CHOOSE COLOR LENS BELOW)					
10250T231N	Incandescent	Resistor AC/DC	120	44K2668	191.44
INDICATING LIGHT OPERATORS (CHOOSE COLOR LENS BELOW)					
10250T181N	Incandescent	Transformer; AC Only	120	44K2176	133.76

INDICATING LIGHTS - LED

Mfg. Part No.	Type	Voltage	Color	Stock No.	Price 1-4
10250T197LRP2A	Full Voltage	120V AC	Red	44K2396	185.38
INDICATING LIGHTS - INCANDESCENT					
10250T201NC1N	Resistor	120V AC/DC	Red	44K2495	154.88
10250T201NC2N	Resistor	120V AC/DC	Green	44K2506	154.88
10250T206NC2N	Full Voltage	24V AC/DC	Green	44K2551	154.88

2-POSITION NON-ILLUMINATED MAINTAINED PUSH-PULL SWITCHES

Mfg. Part No.	Contact Type	Button Type	Color	Stock No.	Price 1-4
10250T5B62-1X	SPDT-1NO/1NC	40 mm	Red	44K3573	153.55
10250T5J63-1X	SPDT-1NO/1NC	65 mm Engraved E-STOP	Red (EMERG. STOP)	44K3612	227.15
NON-ILLUMINATED MOMENTARY PUSHBUTTON					
10250T23B	SPST-NO	Flush	Black	44K2654	69.95
10250T29	SPST-NC	Jumbo Mushroom	Red	44K2792	162.29

➤ CONTINUED ➤

30MM PUSHBUTTONS 10250T SERIES (CONT.)

CONTACTS BLOCK - WITH SCREW TERMINALS

Mfg. Part No.	Circuit	Stock No.	Price Each 1-4
10250T1	SPDT-1NO/1NC	44K1497	36.43
10250T2	DPDT-2NO	44K2440	36.43
10250T3	DPDT-2NC	44K2854	46.55
10250T51	SPST-NC	44K3626	23.31
10250T53	SPST-NO	44K3639	23.91

PLASTIC LENSES

Mfg. Part No.	Color/For Use With	Stock No.	Price Each 1-4
10250TC1N	Red/Eaton 10250T Series Pushbutton Switches	44K1098	11.21
10250TC19N	Amber/Eaton 10250T Series Pushbutton Switches	44K1113	11.36
10250TC21	Red/Eaton 10250T Series Pushbutton Switches	44K1115	8.90
10250TC22	Green/Eaton 10250T Series Pushbutton Switches	44K1116	11.36
10250TC2N	Green/Eaton 10250T Series Pushbutton Switches	44K1114	11.59
10250TC6N	White/Eaton 10250T Series Pushbutton Switches	44K1142	11.36

GLASS LENSES

10250TC12N	White/Eaton 10250T Series Pushbutton Switches	44K1101	19.01
10250TC13N	Red/Eaton 10250T Series Pushbutton Switches	44K1102	19.01
10250TC14N	Green/Eaton 10250T Series Pushbutton Switches	44K1104	19.01
10250TC15N	Amber/Eaton 10250T Series Pushbutton Switches	44K1106	19.01
10250TC8N	Green/Eaton 10250T Series Pushbutton Switches	44K1152	20.34

LEGEND PLATES

Mfg. Part No.	Description/ For Use With	Stock No.	Price Each 1-4
10250TM33	START-Round Legend Plate	44K1269	5.11
10250TM36	BLANK-Round Legend Plate	44K1272	5.41

ENCLOSURES

10250TN11	1-Hole 2-Contact Block Depth Enclosure	44K1321	167.24
10250TN12	2-Hole 2-Contact Block Depth Enclosure	44K1322	190.37
10250TN14	4-Hole 2-Contact Block Depth Enclosure	44K1324	261.73

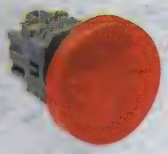
(136333)

30mm PUSHBUTTON SWITCHES

RoHS Compliant Available

IDEC

Flush



Mushroom

Illuminated Pushbutton

Standard size screw terminal units include button, operator, contact blocks. Mount 1.20" (30.00) hole. Rated 600V/10A. Momentary action. Rated NEMA 1, 2, 3, 3R, 4, 4X, 5, 12, 13; IP65. UL listed, CSA certified and CE compliant.

Mfg. Part No.	Style	Circuitry	Color	Stock No.	Price Each 1-9
ABD110N-B,G,R	Flush	SPST-NO	Black,Green,Red	74K3599	22.66
ABD310N-G	1.58"Mushroom	SPST-NO	Green	74K3601	40.88
ABD310N-Y	1.58"Mushroom	SPST-NO	Yellow	75K6446	41.48
ABD301N-R	1.58"Mushroom	SPST-NC	Red	74K3600	41.28
ABD410N-R	2.56"Mushroom	SPST-NO	Red	74K3604	46.99
ABD410N-G	2.56"Mushroom	SPST-NO	Green	74K3603	45.18
ABD401N-R	2.56"Mushroom	SPST-NC	Red	96F3774	45.18
ILLUMINATED PUSHBUTTON SWITCHES					
ALD29911DN-G-120V	Extended Lens	SPST-1NO/1NC	Green	14C8391	61.47
ALD29911DN-G-24V	Extended Lens	SPDT-1NO/1NC	Green	14C8392	61.80
ALD29911DN-R-120V	Extended Lens	SPDT-1NO/1NC	Red	14C8395	63.68
ALD29911DN-R-24V	Extended Lens	SPDT-1NO/1NC	Red	14C8396	62.40
ALD29920DN-G-120V	Extended Lens	DPDT	Green	14C8425	61.23
ALD29920DN-G-24V	Extended Lens	DPDT	Green	14C8426	62.40
ALD29920DN-R-120V	Extended Lens	DPDT	Red	14C8428	63.68
ALD29920DN-R-24V	Extended Lens	DPDT	Red	14C8429	60.00
ALD39911DN-G-120V	Mushroom	SPDT-1NO/1NC	Green	14C8559	63.33
ALD39911DN-G-24V	Mushroom	SPDT-1NO/1NC	Green	14C8560	62.10
ALD39911DN-R-120V	Mushroom	SPDT-1NO/1NC	Red	14C8563	63.33
ALD39911DN-R-24V	Mushroom	SPDT-1NO/1NC	Red	73R4770	64.58
ALD39920DN-G-120V	Mushroom	DPDT	Green	14C8591	63.33
ALD39920DN-G-24V	Mushroom	DPDT	Green	14C8592	62.10
ALD39920DN-R-120V	Mushroom	DPDT	Red	14C8595	63.33
ALD39920DN-R-24V	Mushroom	DPDT	Red	14C8596	62.10

CONTINUED

30mm PUSHBUTTON SWITCHES (CONT.)

ILLUMINATED PUSHBUTTON SWITCHES

Mfg. Part No.	Style	Circuitry	Color	Stock No.	Price Each 1-9
ALFD29911DN-G-120V	Extended Lens/ Full Shroud	SPDT-1NO/1NC	Green	95B1666	68.83
ALFD29911DN-G-24V	Extended Lens/ Full Shroud	SPST-1NO/1NC	Green	14C8741	60.93
ALFD29911DN-R-120V	Extended Lens/ Full Shroud	SPDT-1NO/1NC	Red	14C8744	66.18
ALFD29911DN-R-24V	Extended Lens/ Full Shroud	SPDT-1NO/1NC	Red	14C8745	67.55
ALFD29920DN-G-120V	Extended Lens/ Full Shroud	DPDT	Green	14C8776	68.83
ALFD29920DN-G-24V	Extended Lens/ Full Shroud	DPDT	Green	14C8777	67.55
ALFD29920DN-R-120V	Extended Lens/ Full Shroud	DPDT	Red	14C8780	66.18
ALFD29920DN-R-24V	Extended Lens/ Full Shroud	DPST-2NO	Red	14C8781	64.95

ACCESSORIES

Mfg. Part No.	Description	Color	Stock No.	Price Each 1-9	10-24	25-49
ABD4BN-Y	2.56" Jumbo Mushroom Button	Yellow	74K3602	13.77	12.85	12.06

(3438)

30mm SPECIAL FUNCTION SWITCHES

RoHS Compliant Available

IDEC

Pushlock Turn Reset

Push-pull

Push-pull (3position)

Screw terminal units include button, operator, contact blocks. Rated NEMA 1, 2, 3, 4, 4X, 5, 12, 13. Color: red. UL listed, CSA certified, and CE compliant.

Pushlock Turn Reset (Unibody)

Mfg. Part No.	Description	Circuitry	Stock No.	Price Each 1-24	25-49
AVD310N-R	Pushlock Turn Reset, Non-Illuminated	SPST-NO	74K4800	59.16	52.61
AVD301N-R	Pushlock Turn Reset, Non-Illuminated	SPST-NC	74K3686	58.59	52.12
AVD311N-R	Pushlock Turn Reset, Non-Illuminated	DPST-1NO/1NC	74K3688	66.79	59.42
AYD301N-R	Push-Pull, Non-Illuminated	SPST-NC	74K3696	56.14	50.14
AYD311N-R	Push-Pull, Non-Illuminated	SPST-NO, SPST-NC	74K3697	64.07	56.99
AVD302N-R	Pushlock Turn Reset, Non-Illuminated	DPST-NC	74K3687	66.79	59.42
AVD311N-R	Pushlock Turn Reset, Non-Illuminated	DPST-1NO/1NC	74K3688	66.79	59.42
AYLD229911DN-G-24V-TK962	Push-Pull (3position), Illuminated	SPDT-1NO/1NC	05N3396	82.26	73.71
HN1E-BV4F11-R	Pushlock Turn Reset (Unibody), Non-Illuminated	SPDT-1NO/1NC	84C2750	57.74	51.73
HN1E-LV4F11QD-R-24V	Pushlock Turn Reset (Unibody), Illuminated	SPDT-1NO/1NC	84C2762	81.47	73.01

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-24	25-49
AVN3B-R	Replacement Button for Pushlock Turn Reset Switches, 1 37/64" (40mm) Diameter	74K3689	15.12	14.13	13.25

(3439)

SWITCHES – PUSHBUTTON 30MM

30mm NON-ILLUMINATED MOMENTARY PUSHBUTTON OPERATORS

RoHS Compliant Available

SQUARE D by Schneider Electric

9001KR3U 9001KR1U 9001KR2U

30mm round, pushbuttons are oiltight/watertight and meet NEMA 4, 13. Include one each black, red, green, yellow, orange, blue, white button inserts. *For complete assembly, see contact blocks on pages 1772-1773.* Complete pushbutton = operator + contact block(s). UL listed, CSA certified, CE compliant.

NEMA 4, 13 CHROME BEZEL

Mfg. Part No.	Guard	Stock No.	Price Each Each	Price Each 2-4
9001KR1U	Full	93F2969	44.67	41.85
9001KR3U	None	97F9982	44.02	41.24
9001KR2U	Extended	97F9981	45.10	42.26
NEMA 4X BLACK BEZEL (CORROSION RESISTANT)				
9001SKR1U	Full	16F4046	48.32	44.72
9001SKR2U	Extended	16F4047	47.86	44.29

(3392)

HARMONY™ XB5R WIRELESS BATTERYLESS PUSH BUTTON

RoHS Compliant Available

Schneider Electric

- Easy and quick to install
- Maintenance-free
- Reduce cost and time during installation
- No cable damage or screw terminal issues
- Eco-friendly green technology
- Flexibility and mobility (up to 25 m range in a factory)
- Robust design for industrial environments
- UL, CSA, CE marked

COMPLETE TRANSMITTER AND RECEIVER

Mfg. Part No.	Description	Stock No.	Price Each 1-5
● XB5RFB01	Pack XB5R 22 mm metal transmitter non-programmable receiver 24 VDC	48T3171	199.73
● XB4RFB01	Pack XB5R 22 mm metal transmitter non-programmable receiver 24 VDC	48T3169	199.73
● XB5RFA02	Pack XB5R 22 mm plastic transmitter programmable receiver AC/DC	48T3170	485.05
● XB4RFA02	Pack XB4R 22 mm metal transmitter programmable receiver AC/DC	48T3168	485.05
● XB5RMB03	Pack XB5R plastic handheld transmitter non-programmable receiver 24 VDC	48T3173	275.82
● XB5RMA04	Pack XB5R plastic handheld transmitter programmable receiver AC/DC	48T3172	542.69
COMPONENTS TRANSMITTER			
● ZBRT1	Transmitter wireless batteryless (without head)	48T3178	104.62
● ZBRP1	Rope pull switch, wireless and batteryless	86W6714	174.77
ZBRA2	Passive Antenna for ZBRN1 & ZBRN2	38X5866	85.58
ZBRCETH	Communication Module for ZBRN1 w/ Modbus TCP/IP	38X5867	151.00
ZBRN1	XB5R I/O Module for Modbus Ethernet w/ empty slot for communication module ZBRCETH	38X5868	372.01
ZBRN2	XB5R I/O Module for Modbus Serial Protocol	38X5869	418.51
COMPONENTS TRANSMITTERS PLASTIC HEAD			
● ZB5RTA1	Transmitter with ZB5R head, white cap without marking	48T3188	123.65
● ZB5RTA2	Transmitter with ZB5R head, black cap without marking	48T3189	123.65
● ZB5RTA3	Transmitter with ZB5R head, green cap without marking	48T3190	123.65
● ZB5RTA331	Transmitter with ZB5R head, green cap marking I white	48T3191	123.65
● ZB5RTA4	Transmitter with ZB5R head, red cap without marking	48T3192	123.65
● ZB5RTA432	Transmitter with ZB5R head, red cap marking O white	48T3193	119.58
● ZB5RTA5	Transmitter with ZB5R head, yellow cap without marking	48T3194	122.63
● ZB5RTA6	Transmitter with ZB5R head, blue cap without marking	48T3195	119.58
● ZB5RTC2	Transmitter with 40mm ZB5R mustroom head, without marking, spring return	86W6716	148.22
● ZB5RZA0	ZB5R push button head spring return without cap	48T3196	17.10
● ZB5RZC2	ZB5R 40mm black mushroom head, with transmitter, spring return	86W6717	35.75

➤ CONTINUED ➤

HARMONY™ XB5R WIRELESS BATTERYLESS PUSH BUTTON (CONT.)

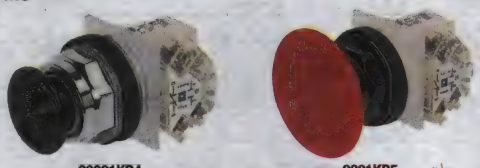
COMPONENTS TRANSMITTERS METAL HEAD

Mfg. Part No.	Description	Stock No.	Price Each 1-5
● ZB4RTA1	Transmitter with ZB4R head, white cap without marking	48T3179	123.65
● ZB4RTA2	Transmitter with ZB4R head, black cap without marking	48T3180	123.65
● ZB4RTA3	Transmitter with ZB4R head, green cap without marking	48T3181	123.65
● ZB4RTA331	Transmitter with ZB4R head, green cap marking I white	48T3182	119.58
● ZB4RTA4	Transmitter with ZB4R head, red cap without marking	48T3183	123.65
● ZB4RTA432	Transmitter with ZB4R head, red cap marking O white	48T3184	119.58
● ZB4RTA5	Transmitter with ZB4R head, yellow cap without marking	48T3185	123.65
● ZB4RTA6	Transmitter with ZB4R head, blue cap without marking	48T3186	123.65
● ZB4RZA0	ZB4R push button head spring return without cap	48T3187	17.10
ACCESSORIES			
● ZBA79	Caps, set of 10 different colors	48T3174	3.23
● ZBRM01	Mobile control station, empty, 1 hole	48T3175	85.03
● 8930XB5RDEM0	Demo Kit	48T3197	900.00
● ZBRA1	Relay Antenna 5m cable	87T7250	165.06
RECEIVERS			
● ZBRRA	Receiver programmable AC/DC – two relay outputs, momentary/maintained/start-stop	48T3176	386.74
● ZBRRC	Receiver programmable DC – four PNP outputs	48T3177	389.94
● ZBRRD	Receiver programmable AC/DC - two relay outputs, momentary/maintained	86W6715	349.53

(196577)

30mm NON-ILLUMINATED MOMENTARY MUSHROOMS

SQUARE D by Schneider Electric



90001KR4 9001KR5

Switches have same performance specifications as **9001KR** pushbuttons. All include red knob. *For complete assembly, see contact blocks on pages 1772-1773.* UL listed, CSA certified, CE compliant.

Mfg. Part No.	Diameter	Stock No.	Price Each Each	Price Each 2-4
9001KR4R	1.375"(34.93)	97F9983	101.02	93.49
9001KR5R	2.250"(57.15)	97F9985	102.00	94.40

(3393)

30mm NON-ILLUMINATED PUSH-PULL SWITCHES

SQUARE D by Schneider Electric

Same as **9001KR series** pushbuttons except maintained action and offers legend plate marked "Pull to Start", "Push to Stop". Includes 1 NO & 1 NC contacts. Red knob. Contact blocks accept two 12-24AWG solid or stranded wires. NEMA A600 rated @ 120VAC, 60A make/6A break/10A continuous; @ 240VAC, 30A make/3A break/10A continuous. **9001SKR series** has NEMA 4X corrosion-resistant black bezel. UL listed, CSA certified, CE compliant.

Mfg. Part No.	Stock No.	Price Each Each	Price Each 2-4
9001KR9RH13	50F4630	211.82	196.04
9001SKR9RH13	16F4051	210.51	194.82

(3394)

CONTACT BLOCKS

RoHS Compliant Available

SQUARE D by Schneider Electric

KA1, KA4 KA2 KA3

Contact blocks accept two 12-24AWG solid or stranded wires. NEMA A600 rated 120VA 60A make/6A break/10A continuous; @ 240VAC, 30A make/3A break/10A continuous. **9001KA** contact blocks are for use with all **9001K**, **9001SK** and **9001KX** pushbuttons and selector switches. Terminals are Fingersafe® (meet VDE 0106 part 100). Color-coded. **9001KA1** and **KA4** are clear. **9001KA2** is green. **9001KA3** is red. UL listed, CSA certified. CE compliant. *EC = Early Closing. Additional NO, EC version is available. *Go online or call.*

➤ CONTINUED ➤

CONTACT BLOCKS (CONT.)

Mfg. Part No.	Contacts	Stock No.	Price Each Each	Price Each 2-4
9001KA1	NO & NC**	93F2966	50.71	48.42
9001KA2	NO	93F2964	25.52	24.36
9001KA3	NC**	93F2965	25.98	24.80
9001KA4	NO EC* & NC	16F4057	51.21	48.89

** Positive Opening
(3453)

VANDAL RESISTANT PUSHBUTTON SWITCHES

RoHS Compliant Available

APEM

- Push on/push off
- SPST-NO, momentary and latching
- (On) = Momentary action
- 16mm compact design
- Long life
- Multi terminal options
- Curved or flat actuator

FLAT ACTUATOR

Mfg. Part No.	Circuitry	Function	Termination	Stock No.	Price Each 1-9	Price Each 10-24
AV0630C900	SPST-NO	(On)	Screw	72J8711	15.87	14.21
AV0611A200	SPST-NO	Off-On	Solder Lug	75K6889	24.91	22.31
CURVED ACTUATOR						
AV1630C900	SPST-NO	(On)	Screw	37J1566	47.96	42.95
AV1611A200	SPST-NO	Off-On	Solder Lug	75K6908	57.36	51.36

(90823)

VANDAL–RESISTANT SWITCHES

RoHS Compliant Available

bulgin a brand of Elektron Technology

Fig 1

Fig 2

Fig 3

Fig 4

An extensive range of vandal-resistant switches designed with high resistance to wear and tear, corrosion and harsh use in potentially hostile environments. Manufactured from marine grade stainless steel, prominent, domed and low profile buttons, front and rear panel mounting options, front panel sealing option. All versions: (On) = Momentary action

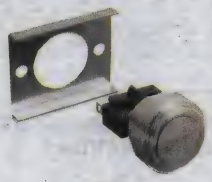


Fig 6

FRONT PANEL MOUNTING

Mfg. Part No.	Fig.	Circuitry	Function	Rating	Overall Dia (mm)	Mtg. Hole Dia. (mm)	Stock No.	Price Each 1-9
MP0027/2	1	SPDT	(On)	5A at 250V	28	26	91C6847	23.56
MP0027/3	1	SPDT	(On)	5A at 250V	28	26	91C6848	22.26
MP0038	1	SPDT	(On)	5A at 250V	28	26	48F2533	21.20
MPL038	1	SPDT	Latching	2A at 50V	28	26	33K3582	28.58
MP0031	2	SPDT	(On)	5A at 250V	22	19.2	48F2530	19.11
MP0031/2	2	SPDT	(On)	5A at 250V	22	19.2	91C6849	22.40
MP0037	3	SPST	(On)	1A at 250V	22	19.2	48F2532	14.53
MP0037/2	3	SPST	(On)	1A at 250V	22	19.2	91C6852	16.75
MP0037/3	3	SPST	(On)	1A at 250V	22	19.2	32C5776	16.55
MP0013	4	SPST	(On)	1A at 250V	22	19.2	48F2526	9.12
MP0033	4	SPST	(On)	1A at 250V	22	19.2	48F2527	15.02

REAR PANEL MOUNTING

Mfg. Part No.	Fig.	Circuitry	Function	Rating	Overall Dia (mm)	Stock No.	Price Each 1-9
MP0034/3	6	SPDT	(On)	5A at 250V	19	91C6851	21.16
MPL034	6	SPDT	Latching	2A at 50V	19	33K3581	26.32

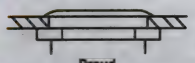
(33387)

VANDAL-RESISTANT INDICATORS

RoHS Compliant Available

bulgin a brand of Elektron Technology

DX0505


Proud

Bezel Profiles

Tough vandal-resistant indicators designed to complement Bulgin's vandal-resistant switches. Stainless steel bodies with front panel sealing to IP67. Shock- and vibration-resistant. 15mm diameter. Single-hole mounting (12.1mm). Red, Green Yellow or Blue LEDs. Wide viewing angle. Operating voltage: 24VDC.

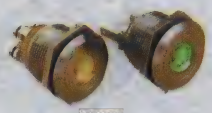
Mfg. Part No.	Bezel	LED Color	Termination	Stock No.	Price Each 1-9
DX0505/RD/24	Proud	Red	2.8mm Tag	91C6492	19.00
DX0505/GN/24	Proud	Green	2.8mm Tag	91C6491	19.00
DX0505/YL/24	Proud	Yellow	2.8mm Tag	91C6493	18.63
DX0505/BL/24	Proud	Blue	2.8mm Tag	91C6490	25.21

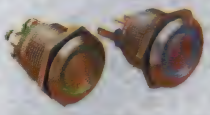
(72419)

ILLUMINATED VANDAL RESISTANT SWITCHES

RoHS Compliant Available

bulgin a brand of Elektron Technology


MPI001


MPI002

Illuminated vandal resistant security switches styled to match **mfg. part nos. MP0031** and **MP0037** switches. Manufactured from stainless steel with tough polycarbonate lenses. Single pole push to make contacts. Bright daylight LEDs, dot or ring illumination, 2.8mm solder tags or screw terminations, front panel sealed to IP66, single hole mounting (19mm dia.).

Mfg. Part No.	Overall Dia (mm)	Mounting Diameter (mm)	Illumination	Color	Termination	Stock No.	Price Each 1-9
MPI001/TERM/AM	22	19	Dot	Amber	Screw	50H4762	25.55
MPI001/28/BL	22	19	Dot	Blue	Connector	91C6842	26.06
MPI001/TERM/GN	22	19	Dot	Green	Screw	18C5581	24.28
MPI001/28/GN	22	19	Dot	Green	Connector	18C5579	24.89
MPI001/TERM/RD	22	19	Dot	Red	Screw	18C5580	25.38
MPI001/28/RD	22	19	Dot	Red	Connector	18C5565	24.89
MPI002/28/AM	22	19	Ring	Amber	Connector	50H4765	24.79
MPI002/TERM/BL	22	19	Ring	Blue	Screw	91C6843	28.16
MPI002/28/BL	22	19	Ring	Blue	Connector	91C6844	27.35
MPI002/TERM/WH	22	19	Ring	White	Screw	87K6406	30.85
MPI002/TERM/GN	22	19	Ring	Green	Screw	18C5588	24.28
MPI002/28/GN	22	19	Ring	Green	Connector	18C5584	25.20
MPI002/TERM/RD	22	19	Ring	Red	Screw	18C5587	25.71
MPI002/28/RD	22	19	Ring	Red	Connector	18C5582	24.90
MPI002/TERM/D4	22	19	Ring	Red/Blue	Screw	75M3523	29.08
MPI002/28/D4	22	19	Ring	Red/Blue	Connector	75M3520	30.53
MPI002/TERM/D1	22	19	Ring	Red/Green	Screw	75M3522	29.08
MPI002/28/D1	22	19	Ring	Red/Green	Connector	75M3519	30.20
MPI002/28/WH	22	19	Ring	White	Connector	75M3525	30.20

(72390)

PV8 SERIES 25MM ILLUMINATED SEALED ANTI-VANDAL SWITCHES

RoHS Compliant Available

E•SWITCH®

Features
- Vandal and water resistant
- Long life expectancy
- Many function and illumination options

Specifications
- Contact rating: 2A 36VDC
- Illumination base rating: Red, yellow and orange: 20mA 1.8V, Blue, green, and white: 20mA 2.8V
- Operating temperature: -20°C to 70°C
- Electrical life: 200,000 cycles
- Contact resistance; 50mohm max.
- Insulation resistance: 1000mohm min.
- Dielectric strength: 2000VAC

Mfg. Part No.	Contacts	Function	Termination	Color	Stock No.	Price Each
PV8F2Y0SS-344	DPDT	Off-(On)	Solder	Blue	24R3636	39.15
PV8F2V0SS-331	DPDT	Off-(On)	Solder	Green	24R3631	40.83
PV8F2Y0SS-225	DPDT	Off-(On)	Solder	Orange	24R3632	37.14

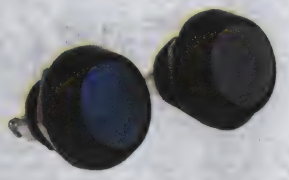
(194859)

SWITCHES – PUSHBUTTON VANDAL RESISTANT

PV5 SERIES 12MM SEALED ANTI-VANDAL SWITCHES

RoHS Compliant Available

E•SWITCH®



Features
- Vandal resistant
- Water resistant
- Long life expectancy

Specifications
- Contact rating: 2A 48VDC
- Operating temperature: -20°C to 70°C
- Electrical life: 200,000 cycles
- Contact resistance; 50mohm max. at 1A 12VDC
- Insulation resistance: 1000mohm min. at 500VDC
- Dielectric strength: 2000VAC for 1 minute
- Intrusion protection: IP65

Mfg. Part No.	Contacts	Function	Termination	Color	Stock No.	Price Each 1-9
● PV5S64011	SPST	Off-(On)	Screw	Black	24R3604	9.06
● PV5S64018	SPST	Off-(On)	Screw	Green	24R3609	8.95
● PV5S64019	SPST	Off-(On)	Screw	Red	24R3610	8.95

(194856)

PV4 SERIES 19MM ILLUMINATED SEALED ANTI-VANDAL SWITCHES

RoHS Compliant Available

E•SWITCH®

Features
- Vandal and water resistant
- Long life expectancy
- Colored bezel and actuator options

Specifications
- Contact rating: 2A 48VDC
- Illumination base rating: Red, yellow and orange: 20mA 1.8V, Blue, green, and white: 20mA 2.8V
- Operating temperature: -20°C to 70°C
- Electrical life: 50,000 cycles
- Contact resistance; 50mohm max. at 1A 12VDC
- Insulation resistance: 1000mohm min. at 500VDC
- Dielectric strength: 2000VAC for 1 minute
- Intrusion protection: IP65

Mfg. Part No.	Contacts	Function	Termination	Stock No.	Price Each
● PV4F230SS-344	SPST	On-On	Solder	24R3599	43.06
● PV4F230SS-314	SPDT	On-On	Solder	24R3592	44.72
● PV4F2Y0SS-341	DPDT	Off-(On)	Solder	24R3587	47.45

(194855)

PV3 SERIES 16MM ILLUMINATED ANT-VANDAL SWITCHES

RoHS Compliant Available

E•SWITCH®

Features
- Vandal and water resistant
- Many function, illumination, and materials
- Long life expectancy

Specifications
- Contact rating: 2A 48VDC
- Illumination base rating: Red, yellow and orange: 20mA 1.8V, Blue, green, and white: 20mA 2.8V
- Operating temperature: -20°C to 70°C
- Electrical life: 50,000 cycles
- Contact resistance; 50mohm max. at 1A 12VDC
- Insulation resistance: 1000mohm min.
- Dielectric strength: 2000VAC for 1 minute
- Intrusion protection: IP40 / IP65

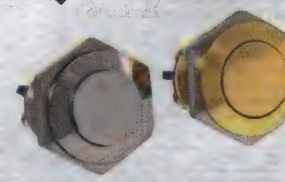
Mfg. Part No.	Contacts	Function	Termination	Actuator Style	Stock No.	Price Each
● PV3F2B0SS-343	SPDT	On-(On)	Solder	Flat	24R3504	18.82
● PV3F2H0NN-334	DPDT	On-(On)	Solder	Flat	24R3519	20.37

(194854)

PV2 SERIES 16MM WATER RESISTANT ANTI-VANDAL SWITCHES

RoHS Compliant Available

E•SWITCH®



Features
- Vandal resistant
- Water resistant
- Long life expectancy

Specifications
- Contact rating: 2A 48VDC
- Operating temperature: -20°C to 70°C
- Electrical life: 200,000 cycles
- Contact resistance; 50mohm max. at 1A 12VDC
- Insulation resistance: 1000mohm min.
- Dielectric strength: 2000VAC for 1 minute
- Intrusion protection: IP65

Mfg. Part No.	Contacts	Function	Termination	Actuator Style	Stock No.	Price Each
● PV2F640NN	SPST	Off-(On)	Screw	Flat	24R3493	7.31
● PV2F640SS	SPST	Off-(On)	Screw	Flat	24R3494	10.96

➤ CONTINUED ➤

PV2 SERIES 16MM WATER RESISTANT ANTI-VANDAL SWITCHES (CONT.)

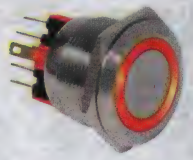
Mfg. Part No.	Contacts	Function	Termination	Actuator Style	Stock No.	Price Each
● PV2H640SS	SPST	Off-(On)	Screw	High	24R3497	13.67
● PV2S640SS	SPST	Off-(On)	Screw	Flat	24R3500	11.35

(194853)

PV7 SERIES 22MM ILLUMINATED SEALED ANTI-VANDAL SWITCHES

RoHS Compliant Available

E•SWITCH®



Features
- Vandal and water resistant
- Long life expectancy

Specifications
- Contact rating: 2A 48VDC
- Illumination base rating: Red, yellow and orange: 20mA 1.8V, Blue, green, and white: 20mA 2.8V
- Operating temperature: -20°C to 70°C
- Electrical life: 50,000 cycles
- Contact resistance; 50mohm max.
- Insulation resistance: 1000mohm min.
- Dielectric strength: 2000VAC

Mfg. Part No.	Contacts	Function	Termination	Stock No.	Price Each
● PV7F2T0SS-344	DPDT	Off-On	Solder	24R3620	33.01
● PV7F2Y0SS-341	DPDT	Off-(On)	Solder	27T5546	29.40
● PV7F2Y0SS-351	SPST	Off-(On)	Solder	24R3627	29.40

(194858)

PV1 SERIES 19MM WATER RESISTANT ANTI-VANDAL SWITCHES

RoHS Compliant Available

E•SWITCH®

Features
- Vandal and water resistant
- Long life expectancy
- Custom laser engraved markings

Specifications
- Contact rating: 2A 48VDC
- Operating temperature: -20°C to 70°C
- Electrical life: 200,000 cycles
- Contact resistance; 50mohm max. at 1A 12VDC
- Insulation resistance: 1000mohm min.
- Dielectric strength: 2000VAC for 1 minute
- Intrusion protection: IP65

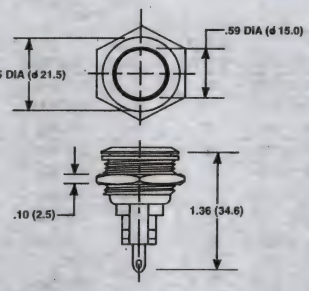
Mfg. Part No.	Contacts	Function	Termination	Actuator Style	Stock No.	Price Each 1-9
● PV1F640SS	SPST	Off-(On)	Screw	Flat	10R6945	12.73
● PV1S640NN	SPST	Off-(On)	Screw	Dome	24R3488	7.73
● PV1S640SS	SPST	Off-(On)	Screw	Dome	24R3489	10.20

(194852)

76-95 SERIES VANDAL-RESISTANT PUSHBUTTON SWITCHES

RoHS Compliant Available

ITW Switches
SENSORS, SWITCHES, ELECTRONIC CONTROLS



76-95 Series

- Momentary Action
- Operating Temperature Range: -30°C to +105°C (-22°F to 221°F)
- Form Z: 5A @ 125/250VAC, 3A @28VDC Ind.

The **76-95 series** pushbutton switches are designed to withstand impacts of significant force. The main switch body and button are created by using rugged stainless steel with front mount styling. The bezel protrudes a maximum of 0.10" (2.5m) from the front panel, including sealing washer. The low profile makes it difficult for vandals to pry the switch from its mounting. Panel thickness: .06" - .3" (1.5 to 8). Panel sealed to IP67. All measurements in inches (mm).

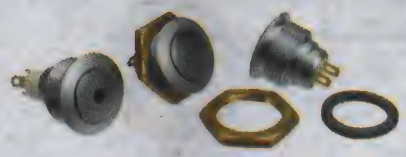
Mfg. Part No.	Contacts	Contact Arrangement	Stock No.	Price Each 1-9
● 76-9510/530004	Silver	SPDT-DB	31C7636	43.07
● 76-9510/810	Enchanced Gold	DPDT-DB	31C7637	77.95

(68324)

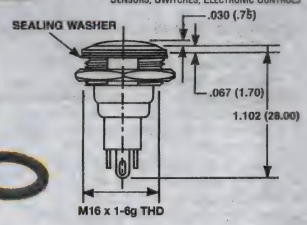
57 SERIES MINIATURE VANDAL-RESISTANT PUSHBUTTON SWITCHES

RoHS Compliant Available

ITW Switches
SENSORS, SWITCHES, ELECTRONIC CONTROLS



57 Series



Illuminated

- Momentary Action
- Travel (Nom): .09" (2.3)
- Current Rating: 400mA @ 32VAC Resistive, 100mA @ 50VDC Resistive, 125mA @ 125VAC Resistive
- Operating Temperature Range: -40°C to +125°C Illuminated (-40°F to 257°F), 35°C to +85°C (-31°F to 185°F)

The **57 series** pushbutton switches are miniature, rugged panel sealed with a round button and bezel. Available with or without LED status illumination. A lockout is supplied with each switch. Manufactured of non-spark zinc alloy and chrome velour plated. Panel is sealed to IP67 and is designed to be impact resistant. The small size, robustness and panel sealing makes these switches ideal in a harsh environment. The illuminated version is available with a choice of 2 high brightness LED colors: red LED or green LED. All measurements in inches (mm).

Mfg. Part No.	Description	LED Color	Stock No.	Price Each 1-9
57-111	Non-Illuminated	...	31C7633	20.77
57-112G	Illuminated	Green	31C7634	32.74
57-112R	Illuminated	Red	31C7635	38.28

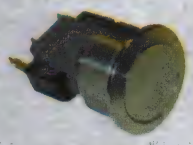
(68323)

VANDAL-PROOF MSM SWITCHES

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

- Stainless steel housing and actuator
- Flat construction of 1.7mm provides nearly flush mounting to the panel surface
- Quick-connect terminals
- SPST-NO+SPST-NC contacts
- Momentary switching action



Non-Illuminated

Red Ring Illumination

MSM series switches are built for tough environments where the switch can be subject to heavy use or impact. Ideal for use in equipment exposed to liquid spills, drips, leaks or wash-downs. Actuating force: 3.7N. Actuating travel: 0.8mm. Operating temperature: -25°C to +85°C. IP 67 degree of protection. Shock resistance according to DIN EN 50102 of IK 06 for 16mm mounting diameter and IK 07 for 19 and 22mm mounting diameters.

NON-ILLUMINATED

Mfg. Part No.	Mounting Hole Dia. (mm)	Current Rating	Stock No.	Price Each 1-9
1241.6621.1110000	19	100mA	73J8448	17.17
1241.6612.1120000	16	5A	73J8444	23.97
1241.6621.1120000	19	5A	73J8449	16.80
1241.6631.1120000	22	5A	73J8464	19.23
1241.6611.1130000	16	10A	88K1316	16.39
GREEN POINT ILLUMINATION				
1241.6623.1122000	19	5A	73J8457	29.93
1241.6633.1122000	22	5A	88K1328	32.57
GREEN RING ILLUMINATION				
1241.6624.1122000	19	5A	73J8462	47.67
1241.6634.1122000	22	5A	73J8476	49.54
RED RING ILLUMINATION				
1241.6624.1121000	19	5A	73J8461	50.53
1241.6634.1121000	22	5A	88K1331	49.54

(83998)

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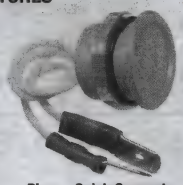
(196525)

PUSHBUTTON VANDAL-RESITANT SWITCHES

CE

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS



Piezo - Quick Connect

Piezo - PC Pins

Selector Switch

VANDAL-PROOF SWITCHES

Piezo, capacitive and electro-mechanical switches are for heavy-duty use in highly exposed areas and extreme environments. Piezo types meet MIL STD 202 and European Railway Standards, Ex type for explosion-proof environments. Seal (IP Rating) IP67, except **MCS19 series** which is IP65 (switching unit). Lifetime >20 x 10^6. Operating temperature: -20°C +60°C. Panel hole mounting dimensions (mm) indicated by series. All switches are CE certified.

M19 PIEZO — FET OUTPUT

Mfg. Part No.	Mounting Hole Dia. (mm)	Current Rating	Actuation	Termination	Stock No.	Price Each 1-9
1241.5003*	19 mm	2.6A	Pulse	Quick Connect	05M2321	35.59
MCS19 WITH ELECTROMECHANICAL CONTACTS**						
1241.2800*	19 mm	125mA	Momentary	PC Pins	18C9112	11.17
1241.2858*	19 mm	125mA	Momentary	PC Pins	05M2320	19.35

SWA SERIES VOLTAGE SELECTOR SWITCHES

SWA series 2-position voltage selector switch available in panel mount or PCB versions. Both feature series-parallel connections and are easily set by screwdriver or coin. Rated: 6.3A/23=50V. Black thermoplastic socket housing, rated UL94V-0. Meet standards: IEC/EN 61058-2-5, UL 508, CSA C 22.2/55. UL recognized, CSA certified, VDE approved, SEV approved, SEMKO approved.

Mfg. Part No.	Current Rating	Mounting Hole Dia. (mm)	Stock No.	Price Each 1-24
0033.4504	6.3A	Solder	90B3254	6.72
0033.4601	6.3A	Solder	90C1166	6.72

*Lifetime is >10 x 10^6. **Mfg. part no. 1241.2858 is point illuminated with Red/Green LED. ‡With electromechanical contacts.

(69563)

VANDAL-PROOF LATCHING ACTION SWITCHES

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

Specifications:
- Contact rating: MSM DP 3A at 250 VAC and 5A at 125 VAC MSM LA 12A at 30VDC or 250VAC
- Circuitry: *MSM DP* DPST; *MSM LA* SPST
- Temperature range: -25°C to +85°C

Standard

Ring Illuminated

Features:
- The new MSM LA has a push-on push-off latching function
- In the OFF state, the actuator position protrudes; in the ON state, it is depressed
- This provides a user-friendly actuating function and also prevents inadvertent switching, e.g. caused by objects leaning on the switch
- The new MSM DP switch is designed with two separate switching contacts and may thus be used as normally open, normally closed or as change-over
- Point and ring illuminated versions in different colors are available
- IP67 sealed

MSM SINGLE-POLE MOMENTARY ACTION SWITCHES

Mfg. Part No.	Current (A)	Circuitry	Dia. (mm)	Illumination	Stock No.	Price Each 1-9	Price Each 10-24
1241.6621.1180000	5	SPST	19	Standard	64M3845	19.57	18.05
1241.6624.1181000	5	SPST	19	Red Ring	64M3846	54.82	50.57
1241.6631.1180000	5	SPST	22	Standard	64M3847	20.67	19.06
1241.6634.1181000	5	SPST	22	Red Ring	64M3848	56.98	52.55
MSM DP DOUBLE-POLE MOMENTARY ACTION SWITCHES							
1241.6921.1120000	5	DPST	19	Standard	66M4577	20.68	19.07
1241.6924.1122000	5	DPST	19	Green Ring	66M4583	54.82	50.57
1241.6931.1120000	5	DPST	22	Standard	66M4585	25.00	23.05
1241.6934.1124000	5	DPST	22	Blue Ring	66M4591	61.04	56.30
1241.6964.1121000	5	DPST	30	Red Ring	66M4596	64.84	59.80
1241.6934.1122000	5	DPST	22	Green Ring	77M9419	56.98	52.55
1241.6964.1122000	5	DPST	30	Green Ring	66M4597	64.84	59.80
MSM LA SINGLE-POLE LATCHING ACTION SWITCHES							
1241.6821.1120000	12	DPST	19	Standard	66M4569	25.20	23.24
1241.6824.1121000	12	DPST	19	Red Ring	66M4570	60.64	55.93
1241.6824.1122000	12	DPST	19	Green Ring	66M4571	57.21	52.76
1241.6824.1124000	12	DPST	19	Blue Ring	66M4572	64.21	59.22
1241.6831.1120000	12	DPST	22	Standard	66M4573	28.57	26.34
1241.6834.1121000	12	DPST	22	Red Ring	66M4574	64.10	59.12

CONTINUED

VANDAL-PROOF LATCHING ACTION SWITCHES (CONT.)

MSM LA SINGLE-POLE LATCHING ACTION SWITCHES

Mfg. Part No.	Current (A)	Circuitry	Dia. (mm)	Illumination	Stock No.	Price Each 1-9	Price Each 10-24
● 1241.6834.1122000	12	DPST	22	Green Ring	66M4575	64.10	59.12
● 1241.6834.1124000	12	DPST	22	Blue Ring	66M4576	67.52	62.28

(106371)

MSM CS SERIES 19mm / 22mm VANDAL-PROOF PUSHBUTTON SWITCHES

RoHS Compliant Available

SCHURTER ELECTRONIC COMPONENTS

- Meets vandal-proof demands due to the low profile of the front structure (1.7 mm), the IP 69K protection class and the high level of impact resistance
- Equipped with quick connect terminals to allow for fast connections
- Wires are connected to the switching element which is subsequently snapped onto the switch housing

Equipped with an actuator made of highly durable ceramic which is resistant to scratches, abrasion, impact and chemicals. The non-illuminated version has a translucent white actuating surface. Lettering is black and applied directly onto the ceramic material. The illuminated version illuminates uniformly across the entire actuator surface. Lettering and symbols can also be applied. The standard black lettering provides a positive effect against the illuminated actuator, while negative lettering provides an inverse effect.

Mfg. Part No.	Diameter	Color	Features	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49
0.1 A / 30 VDC							
● 1241.7021.1110000	19mm	Chrome	Standard	53R0868	32.76	30.22	27.68
● 1241.7022.1110000	19mm	Chrome	Lettered	53R0871	33.75	31.13	28.51
● 1241.7026.1111000	19mm	Red	Backlit	53R0874	50.09	46.19	42.30
● 1241.7026.1112000	19mm	Green	Backlit	53R0875	47.25	43.58	39.91
● 1241.7026.1114000	19mm	Blue	Backlit	53R0876	53.58	49.43	45.26
● 1241.7031.1110000	22mm	Chrome	Standard	53R0886	36.04	33.24	30.44
● 1241.7032.1110000	22mm	Chrome	Lettered	53R0889	37.12	34.24	31.36
● 1241.7036.1111000	22mm	Red	Backlit	53R0892	50.11	46.22	42.33
● 1241.7036.1112000	22mm	Green	Backlit	53R0893	50.11	46.22	42.33
● 1241.7036.1114000	22mm	Blue	Backlit	53R0894	53.62	49.46	45.29
5 A / 125 VAC or 3 A / 250 VAC							
● 1241.7021.1120000	19mm	Chrome	Standard	53R0869	31.81	29.34	26.87
● 1241.7022.1120000	19mm	Chrome	Lettered	53R0872	33.40	30.81	28.21
● 1241.7026.1121000	19mm	Red	Backlit	53R0877	46.76	43.13	39.50
● 1241.7026.1122000	19mm	Green	Backlit	53R0878	46.76	43.13	39.50
● 1241.7026.1124000	19mm	Blue	Backlit	53R0879	53.03	48.92	44.80
● 1241.7031.1120000	22mm	Chrome	Standard	53R0887	34.99	32.27	29.56
● 1241.7032.1120000	22mm	Chrome	Lettered	53R0890	36.04	33.24	30.44
● 1241.7036.1121000	22mm	Red	Backlit	53R0895	48.66	44.88	41.10
● 1241.7036.1122000	22mm	Green	Backlit	53R0896	50.11	46.22	42.33
● 1241.7036.1124000	22mm	Blue	Backlit	53R0897	53.62	49.46	45.29
10 A / 250 VAC							
● 1241.7021.1130000	19mm	Chrome	Standard	53R0870	32.76	30.22	27.68
● 1241.7022.1130000	19mm	Chrome	Lettered	53R0873	33.75	31.13	28.51
● 1241.7026.1131000	19mm	Red	Backlit	53R0880	47.25	43.58	39.91
● 1241.7026.1132000	19mm	Green	Backlit	53R0881	47.25	43.58	39.91
● 1241.7026.1134000	19mm	Blue	Backlit	53R0882	50.55	46.63	42.70
● 1241.7031.1130000	22mm	Chrome	Standard	53R0888	36.04	33.24	30.44
● 1241.7032.1130000	22mm	Chrome	Lettered	53R0891	37.12	34.24	31.36
● 1241.7036.1131000	22mm	Red	Backlit	53R0898	50.11	46.22	42.33
● 1241.7036.1132000	22mm	Green	Backlit	53R0899	50.11	46.22	42.33
● 1241.7036.1134000	22mm	Blue	Backlit	53R0900	53.62	49.46	45.29
5A / 250VAC							
● 1241.7026.1181000	19mm	Red	Backlit	53R0883	49.10	45.28	41.47
● 1241.7026.1182000	19mm	Green	Backlit	53R0884	49.10	45.28	41.47
● 1241.7026.1184000	19mm	Blue	Backlit	53R0885	52.53	48.45	44.37
● 1241.7036.1181000	22mm	Red	Backlit	53R0901	54.16	49.95	45.74
● 1241.7036.1182000	22mm	Green	Backlit	53R0902	51.09	47.12	43.15
● 1241.7036.1184000	22mm	Blue	Backlit	53R0903	54.66	50.42	46.17

(178373)

ILLUMINATED EMERGENCY STOP PUSHBUTTON, 30MM MOUNT

RoHS Compliant Available

BANNER® more sensors, more solutions

- Highly visible illumination with simple installation
- When button is actuated base Flashes Red
- When unactuated, base is yellow or green
- Push to stop, Twist or pull to release
- Multiple buttons can be connected in series with splitter to easily show stop condition on all bases
- Safe-Break Contact action ensures NC contacts open when actuated
- Rugged 30mm mount, rated IP65
- 8-pin Euro-style quick disconnect
- Emergency Stop legend included
- Meets applicable IEC, ANSI, NFPA standards

Mfg. Part No.	Contact Configuration	Indicators	Stock No.	Price 1-2
SSA-EB1PLYR-12ECQ8	DPST-NC, SPST-NO	Yellow/Red (flashing/solid)	94T4379	203.15
SSA-EB1PLGR-12ECQ8	DPST-NC, SPST-NO	Green/Red (flashing/solid)	47W8680	194.40
SSA-EB1PLXR-12ECQ8	DPST-NC, SPST-NO	Red (Flashing/Solid)	94T4378	183.60

ACCESSORIES CORDSETS

8-PIN THREADED M12/EURO-STYLE CORDSETS WITH OPEN-SHIELD/FLYING LEADS

Mfg. Part No.	Length	Style	Stock No.	Price 1-2
MQDC2S-806	1.83 m (6ft)	Straight	99H0295	40.00
MQDC2S-815	4.57 m (15ft)	Straight	99H0296	48.24
MQDC2S-830	15.2 m (50ft)	Straight	99H0297	57.65

8-PIN THREADED M12/EURO-STYLE CORDSETS-DOUBLE ENDED

DEE2R-88D	2.44 m (8ft)	Female Straight/ Male Straight	34K3300	32.19
DEE2R-815D	4.57 m (15ft)	Female Straight/ Male Straight	34K3295	37.74
DEE2R-825D	7.62 m (25ft)	Female Straight/ Male Straight	34K3296	47.73
DEE2R-850D	15.2 m (50ft)	Female Straight/ Male Straight	34K3298	72.15

8-PIN M12 QUICK DISCONNECT SPLITTER CORDSET

CSS-M12F81M12M81M12F81	1ft	SPLITTER	47W8677	72.15

MOUNTING BRACKETS

Mfg. Part No.	Description	Stock No.	Price 1-2
SSA-MBK-EEC1	Single 30mm hole	47W8683	32.94
SSA-MBK-EEC2	Two 30mm hole	47W8684	38.85
SSA-MBK-EEC3	Three 30mm hole	47W8685	46.62

(208442)

SSA-EB SERIES ILLUMINATED EMERGENCY STOP PUSHBUTTON SWITCHES

RoHS Compliant Available

BANNER® more sensors, more solutions

- Rugged design; easy installation with no assembly or individual wiring required
- Push-to-stop, twist-to-release (standard and lockable), or pull-to-release (standard) operation per IEC60947-5-5
- Latching design complies with ISO 13850; direct (positive) opening operation per IEC 60947-5-1
- Compliant with ANSI B11.19, ANSI NFPA79, and IEC/EN 60204-1 Emergency
- Safe Break Action ensures NC contacts will open if the contact block is separated from the actuator
- 8-pin M12/Euro-style Quick Disconnect
- Models with highly visible indication of actuation (armed or depressed/latched button)
- Emergency Stop legend included

Mfg. Part No.	Contacts	Pushbutton Style	Stock No.	Price 1-2
SSA-EB1PLYR-12ED1Q8	DPST-NC, SPST-NO	Standard	47W8682	203.15
SSA-EB1PLGR-12ED1Q8	DPST-NC, SPST-NO	Standard	47W8681	194.40
SSA-EB1MLYRP-12ED1Q8	DPST-NC, SPST-NO	Lockable	47W8679	248.40
SSA-EB1MLGRP-12ED1Q8	DPST-NC, SPST-NO	Lockable	47W8678	248.40

ACCESSORIES CORDSETS

8-PIN THREADED M12/EURO-STYLE CORDSETS WITH OPEN-SHIELD

Mfg. Part No.	Length	Style	Stock No.	Price 1-2
MQDC2S-806	1.83 m (6ft)	Straight	99H0295	40.00
MQDC2S-815	4.57 m (15ft)	Straight	99H0296	48.24
MQDC2S-830	15.2 m (50ft)	Straight	99H0297	57.65

8-PIN THREADED M12/EURO-STYLE CORDSETS-DOUBLE ENDED

DEE2R-88D	2.44 m (8ft)	Femake Straight/ Male Straight	34K3300	32.19
DEE2R-815D	4.57 m (15ft)	Femake Straight/ Male Straight	34K3295	37.74
DEE2R-825D	7.62 m (25ft)	Femake Straight/ Male Straight	34K3296	47.73
DEE2R-850D	15.2 m (50ft)	Femake Straight/ Male Straight	34K3298	72.15

8-PIN M12 QUICK DISCONNECT SPLITTER CORDSET

CSS-M12F81M12M81M12F81	1ft	SPLITTER	47W8677	72.15

➤ CONTINUED ➤

SSA-EB SERIES ILLUMINATED EMERGENCY STOP PUSHBUTTON SWITCHES (CONT.)

MOUNTING BRACKETS

Mfg. Part No.	Description	Stock No.	Price 1-2
SSA-MBK-EEC1	Single 30mm hole	47W8683	32.94
SSA-MBK-EEC2	Two 30mm hole	47W8684	38.85
SSA-MBK-EEC3	Three 30mm hole	47W8685	46.62

(208443)

61 SERIES 16mm "FOOLPROOF" EMERGENCY STOP PUSHBUTTON SWITCHES

RoHS Compliant Available

eao

Features:
- Kit comes complete with contact block and 43mm emergency stop legend plate
- Actuators meet EN418 "tease-proof" directive
- Actuator design prevents blocking by foreign objects
- For higher security applications key release versions available

Specifications:
- IP65 rated; oil and watertight
- Mount in 16mm diameter cut-out
- Maximum rating: 5A at 250VAC
- Gold contacts available

16mm "TEASE-PROOF" EMERGENCY STOP

Mfg. Part No.	Circuitry	Release	Stock No.	Price Each 1-24	Price Each 25-249
EUS-61-3440.414511LX	SPST-1NC	Twist	95F7140	88.06	78.32
EUS-61-3440.415511LX	DPST-2NC	Twist	95F7141	92.95	82.66

(5135)

51 SERIES EMERGENCY STOP SWITCHES

CE RoHS Compliant Available eao

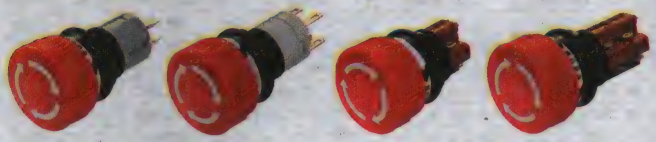


Fig.1 Fig.2 Fig.3 Fig.4

- Switching current: 5A max snap-action contact/100mA max low level contact
- Mounting cut-out: 16mm diameter
- Front dimension: 24.5mm diameter
- Mounting style: raised mounting
- Operating temperature: -25°C to +55°C
- Sealing: IP65 from the front panel
- Action: Maintained/twist-to-release
- Actuation indicator
- Panel depth of just 18.8mm for 51-256.025 (SPST-NO/SPST-NC snap-action)

Mfg. Part No.	Contacts	Switching Voltage (V)	Terminals	Image	Stock No.	Price Each
51-252.026	DPST-NC	100mA/42V	Universal	Fig.1	72T0262	27.37
51-253.022	SPST-NC, SPST-NO	5A/250V	QC/Solder 2.8 x 0.5 mm	Fig.2	72T0263	27.10
51-253.026	SPST-NC, SPST-NO	100mA/42V	Universal	Fig.1	72T0264	27.37
51-256.025	SPST-NC, SPST-NO	5A/250V	Solder	Fig.3	72T0265	24.80
51-256.026	SPST-NC	100mA/42V	Universal	Fig.1	72T0266	25.69
51-259.025	DPST-NC, DPST-NO	5A/250V	Solder	Fig.4	72T0267	29.19

(197942)

04 SERIES 22.5MM EMERGENCY STOP PUSHBUTTON SWITCHES

RoHS Compliant Available eao

STEP 1: EN418 Emergency Stop Actuator

STEP 1: Key Release Emergency Stop Actuator

STEP 2: Contact Block

Specifications:
- IP65 rated; oil and watertight
- Contact rating: 10A at 600VAC; 10A at 24VDC
- Screw terminal or plug-in connections

STEP 3: Legend Plates

CONTINUED

04 SERIES 22.5MM EMERGENCY STOP PUSHBUTTON SWITCHES (CONT.)

Features:
- Stays in "off" position when actuated
- Released when twisted in direction of arrows
- 37mm versions rated to EN418 tease-proof directive
- Mounts in 22.5mm round hole
- Key release versions available for higher security applications
- Non-mushroom styles designed to prevent blocking of actuation
- *Order SM contact blocks on page 1762 and legend plate separately below.*

Use 3-Step Component Process to Assemble Complete Switch:
- STEP 1: Choose actuator
- STEP 2: Choose contact block separately *on page 1762*
- STEP 3: Choose emergency stop legend plate (optional)

STEP 1: 22.5mm "TEASE-PROOF" EMERGENCY STOP ACTUATOR

Mfg. Part No.	Release	Description	Stock No.	Price Each 1-24
704.064.2	Twist	37mm w/White Arrows	52F6442	28.53
STEP 1: 22.5mm MUSHROOM EMERGENCY STOP ACTUATOR				
704.074.2	Twist	50mm w/White Arrows	98F9617	22.64
704.075.2	Twist	50mm w/White Arrows	98F9504	24.40
704.076.0	Key	50mm w/White Arrows	72C7211	43.56

STEP 3: EMERGENCY STOP LEGEND PLATES

Mfg. Part No.	Diameter (mm)	For Use With Series	Stock No.	Price Each 1-24	Price Each 25+
704.963.6	60	04, 84	52F6443	7.14	6.43
704.963.1	90	04, 84	28C7175	6.84	6.16

(5153)

04 SERIES 22mm STOP SWITCH PUSHBUTTON ACTUATOR

RoHS Compliant Available eao

Actuators stay in "off" maintained position when actuated and can only be released when twisted in direction of arrows. Include red mushroom cap with arrows. **Mfg. part no. 704-0742LX** includes a yellow, "emergency stop" legend plate. Mount in 0.875" (22.5) round hole. 40mm diameter actuator. *To assure separation in an emergency, order slow make/break* **704 series** *contact blocks separately on page 1762.* ISO 9001 certified.

Mfg. Part No.	Shroud	Stock No.	Price Each 1-24
704.074.2	Plastic	98F9617	22.64
704.074.2LX	Plastic	50F7339	31.49
704.075.2	Metal	98F9504	24.40

(85090)

84 SERIES 22.5mm ILLUMINATED LOW PROFILE EMERGENCY STOP SWITCHES

c UL us RoHS Compliant Available eao

Specifications:
- Foolproof: Conforms to EN418, EN60947-5-1, EN60947-5-5
- Electrical and mechanical life: 50,000 operations
- AC 15 B300: 3A at 120V; 1.5A at 240V
- DC 13 R300: 0.22A at 120V; 0.1A at 240V

E-Stop w/Plug-In Terminals

E-Stop w/Ribbon Cable

Features:
- Robust: single piece "monoblock" construction sealed to IP65
- Bright: LED illumination visible (including side view)
- Versatile Illumination: Powered by any voltage from 5 to 30 VDC
- Complete unit; no additional parts needed
- Compact shallow panel depth
- 22.5mm diameter mounting hole
- Illumination color: Red (custom colors available)
- Color of status indication ring: Black

ILLUMINATED - PLUG-IN TERMINATION

Mfg. Part No.	Circuitry	Release	Stock No.	Price Each 1-9	Price Each 10+
84-5041.2B20	2NC	Twist	76K1161	41.57	39.60
84-5031.2B20	1NC/1NO	Twist	76K1160	42.97	40.93
ILLUMINATED - RIBBON CABLE TERMINATION					
84-5031.2B40	2NC	Twist	21M6856	57.64	54.91
NON-ILLUMINATED - PLUG-IN TERMINATION					
84-5020.0020	1NC	Twist	01J2166	22.00	20.96
84-5040.0020	2NC	Twist	01J2174	28.40	27.05
84-5030.0020	1NC/1NO	Twist	01J2170	29.47	28.08
NON-ILLUMINATED - RIBBON CABLE TERMINATION					
84-5020.0040	1NC	Twist	01J2167	33.47	31.88
84-5030.0040	2NC	Twist	01J2171	42.90	40.87
84-5040.0040	1NC/1NO	Twist	01J2175	36.85	35.10

(78975)

EMERGENCY STOP SWITCHES

RoHS Compliant Available

EATON

- Push/pull operation
- Suitable for use in safety applicatons
- 25 x 25mm faceplate
- Rated IP65

Q25PV

Mfg. Part No.	Button Color	Stock No.	Price Each 1-2	3-4	5+
● Q25PV	Red	26C6841	24.50	22.36	20.79
Q25PV-S	Black	66W0704	32.88	29.98	27.89

LEGEND PLATE

Mfg. Part No.	Description	Stock No.	Price Each
Q25TS-X	25 x 28mm Legend Plate, Black	26C6874	2.90

(210216)

10250T SERIES EMERGENCY STOP PUSHBUTTON SWITCHES

EATON

- Heavy-duty zinc die cast construction
- Enclosed silver contacts with reliability nibs
- Reliability nibs improve contact reliability even under dry circuit and fine dust conditions
- Drainage holes prevent buildup of liquid inside the operator which can prevent operation in freezing environments
- Grounding nibs bit through paint and other coatings to secure groud

The 10250T 30.5 mm pushbutton line features a zinc die cast construction with chrome-plated housing and mounting nut. The same durable construction is also available with the corrosive resistant E34 line of pushbuttons.

MOMENTARY PUSHBUTTON OPERATORS, NON-ILLUMINATED

Mfg. Part No.	Color	Stock No.	Price 1-4
10250T17213	Red (EMERG. STOP)	44K2136	116.52

MOMENTARY PUSHBUTTON SWITCHES - NON-ILLUMINATED

Mfg. Part No.	Circuitry	Color	Stock No.	Price 1-4
10250T29	SPST-NC	Red	44K2792	162.29

2-POSITION PUSH-PULL SWITCHES NON-ILLUMINATED

10250T5J63-1X	SPDT-1NO/1NC	Red (EMERG. STOP)	44K3612	227.15

SWITCH ACCESSORIES CONTACTS BLOCK - WITH SCREW TERMINALS

Mfg. Part No.	Circuit	Stock No.	Price Each 1-4
10250T1	SPDT-1NO/1NC	44K1497	36.43
10250T2	DPDT-2NO	44K2440	36.43
10250T3	DPDT-2NC	44K2854	46.55
10250T51	SPST-NC	44K3626	23.31
10250T53	SPST-NO	44K3639	23.91

ROUND LEGEND PLATES

Mfg. Part No.	Description/ For Use With	Stock No.	Price Each 1-4
10250TM13	E-STOP/Eaton 10250T Series Pushbutton Switches	44K1249	5.41

ENCLOSURES

10250TN11	1-Hole 2-Contact Block Depth Enclosure	44K1321	167.24
10250TN12	2-Hole 2-Contact Block Depth Enclosure	44K1322	190.37
10250TN14	4-Hole 2-Contact Block Depth Enclosure	44K1324	261.73

(136527)

22mm EMERGENCY STOP MUSHROOM SWITCHES

RoHS Compliant Available

IDEC

Turn Reset | Push Pull | Key Reset

Screw terminal units include button, operator, contact blocks. Caps included, Red only. 1.58". UL listed, CSA certified, and CE compliant.

➤CONTINUED➤

22mm EMERGENCY STOP MUSHROOM SWITCHES (CONT.)

Mfg. Part No.	Mushroom Style	Circuitry	Stock No.	Price Each 1-24	25-49	50-99	100-249
● AVW410-R	Turn Reset	SPST-NO	74K3692	45.98	40.90	38.99	37.09
● AVW401-R	Turn Reset	SPST-NC	74K3690	45.32	40.32	38.43	36.55
● AVW411-R	Turn Reset	DPST-1NO/1NC	74K3693	52.72	46.88	44.70	42.52
● AVW402-R	Turn Reset	DPST-NC	74K3691	52.72	46.88	44.70	42.52
● AYW410-R	Push-Pull	SPST-NO	74K3699	41.73	37.27	35.32	33.77
● AYW401-R	Push-Pull	SPST-NC	74K3698	37.85	33.96	32.23	30.68
● AYW411-R	Push-Pull	DPST-1NO/1NC	74K3700	49.39	44.12	41.82	39.98
● AXW401-R	Key Reset	SPST-NC	96F3667	61.51	55.36	52.28	49.76
AXW411-R	Key Reset	DPST-1NO/1NC	96F3668	69.08	62.17	58.72	55.89

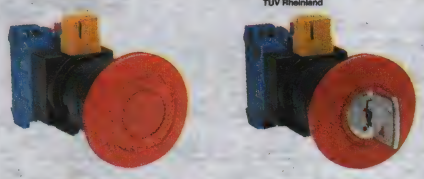
(3428)

22mm EMERGENCY STOP SWITCHES

TÜV Rheinland

IDEC

RoHS Compliant Available



Pushlock Turn Reset | Pushlock Key Reset

HW series 22mm emergency stop switches have 40mm mushroom heads. Rated 600VAC/DC, 10A. Meets IEC and NEMA 4/4x/13 ratings. Metal bezels are nickel-plated aluminum. UL listed, CSA certified, CE compliant, and TÜV approved. IP65 units with SPDT-1NO/1NC contact arrangement are also available; *go online or call.* May be mounted in IDEC's one-to-five hole enclosures.

Mfg. Part No.	Description	Circuity	Bezel	Stock No.	Price Each 1-24	25-49
● HW1B-Y2F01-R	Push-Pull	SPST-NC	Plastic	74K3760	36.88	35.68
● HW1B-V4F01-R	Pushlock Turn Reset	SPST-NC	Plastic	74K3755	38.22	36.98
● HW1B-V4F10-R	Pushlock Turn Reset	SPST-NO	Plastic	74K3756	37.09	35.89
● HW1B-V4F11-R	Pushlock Turn Reset	DPST-1NO/1NC	Plastic	74K3757	45.68	44.21
● HW1B-X4F11-R	Pushlock Key Reset	DPST-1NO/1NC	Plastic	74K3759	59.70	57.78
● HW1B-V4F02-R	Pushlock Turn Reset	DPDT-2NC	Plastic	30B6648	45.04	43.57
● HW4B-Y2F01-R	Push-Pull	SPST-NC	Metal	74K3787	37.09	35.89
● HW4B-V4F01-R	Pushlock Turn Reset	SPST-NC	Metal	74K3786	38.37	37.13

OPERATOR ASSEMBLY

Mfg. Part No.	Description	Bezel	Stock No.	Price Each 1-24	25-49
● HW1B-V4R	40mm Head Pushlock Turn Reset	Plastic	30B6651	25.32	24.06

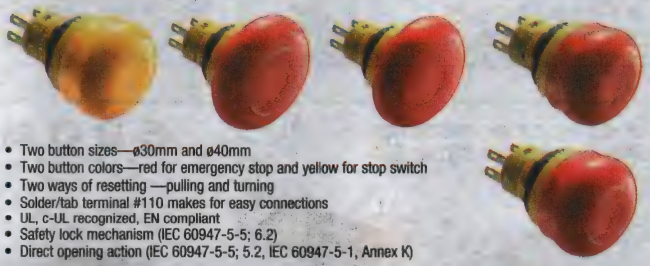
(13235)

16MM X6 SERIES EMERGENCY STOP SWITCHES

NEW

RoHS Compliant Available

IDEC



- Two button sizes—ø30mm and ø40mm
- Two button colors—red for emergency stop and yellow for stop switch
- Two ways of resetting —pulling and turning
- Solder/tab terminal #110 makes for easy connections
- UL, c-UL recognized, EN compliant
- Safety lock mechanism (IEC 60947-5-5; 6.2)
- Direct opening action (IEC 60947-5-5; 5.2, IEC 60947-5-1, Annex K)

30mm MUSHROOM

Mfg. Part No.	Contact Configuration	Actuator Color	Actuator Color	Stock No.	Price Each 1-24
● AB6E-3BV01PTRH	1NC	Pushlock Turn Reset /Push-Pull	Red (unmarked)	19X1140	37.22
● AB6E-3BV01PTRM	1NC	Pushlock Turn Reset /Push-Pull	Red (Marked with Arrow)	19X1141	39.32
● AB6E-3BV01PTY	1NC	Pushlock Turn Reset /Push-Pull	Yellow	19X1142	37.22
● AB6E-3BV02PTRH	2NC	Pushlock Turn Reset /Push-Pull	Red (unmarked)	19X1143	43.53

➤CONTINUED➤

16MM X6 SERIES EMERGENCY STOP SWITCHES (CONT.)

Mfg. Part No.	Contact Configuration	Actuator Color	Actuator Color	Stock No.	Price Each 1-24
AB6E-3BV02PTRM	2NC	Pushlock Turn Reset /Push-Pull	Red (Marked with Arrow)	19X1144	45.64
AB6E-3BV02PTY	2NC	Pushlock Turn Reset /Push-Pull	Yellow	19X1145	43.53
40mm MUSHROOM					
AB6E-4BV01PTRH	1NC	Pushlock Turn Reset /Push-Pull	Red (unmarked)	19X1146	37.22
AB6E-4BV01PTRM	1NC	Pushlock Turn Reset /Push-Pull	Red (Marked with Arrow)	19X1147	39.32
AB6E-4BV01PTY	1NC	Pushlock Turn Reset /Push-Pull	Yellow	19X1148	37.22
AB6E-4BV02PTRH	2NC	Pushlock Turn Reset /Push-Pull	Red (unmarked)	19X1149	43.53
AB6E-4BV02PTRM	2NC	Pushlock Turn Reset /Push-Pull	Red (Marked with Arrow)	19X1150	45.64
AB6E-4BV02PTY	2NC	Pushlock Turn Reset /Push-Pull	Yellow	19X1151	43.53

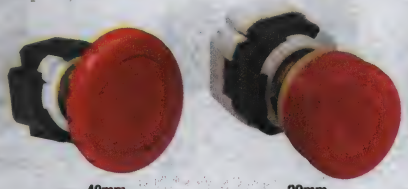
(211493)

16mm EMERGENCY STOP SWITCHES

RoHS Compliant Available

IDEC

- "Safe Break Action" ensures all NC contacts open if the contact block is separated from the operator
- Pushlock turn reset and push-pull functions built into same unit
- 40mm and 29mm mushroom button size
- Electrical life: 100,000 operations min.
- IP65 protection
- Rated thermal current: 5A



40mm 29mm

"Safe Break Action" design reverses the energy direction and uses the spring-pressure to assure that the NC contacts will open if the emergency switch is damaged or the contact blocks separate due to excessive force. EN compliant. **XA1E-LV** illuminated versions and 22mm sizes also available; *go online or call.*

Mfg. Part No.	Circuitry	Terminals	Actuator Color	Stock No.	Price Each 1-4
40mm MUSHROOM					
XA1E-BV4U01-R	SPST-NC	Solder	Red	05R0259	42.81
XA1E-BV411-R	DPST-1NO/1NC	Solder	Red	43J1431	37.93
XA1E-BV402-R	DPST-NC	Solder	Red	43J1427	37.56
29mm MUSHROOM					
XA1E-BV3U01K-R	SPST-NC	Solder	Red	05R0250	38.15
XA1E-BV311-R	DPST-1NO/1NC	Solder	Red	82K9263	37.56
XA1E-BV3U02K-R	DPST-NC	Solder	Red	05R0256	44.52
40mm MUSHROOM—EMO					
XA1E-BV411-RH-EMO	DPST-1NO/1NC	Solder	Red	05R0270	44.02

(83058)

22mm EMERGENCY STOP SWITCHES

RoHS Compliant Available

IDEC

40mm Mushroom Button 60mm Jumbo Mushroom Button

- "Safe Break Action" ensures all NC contacts open if contact block is separated from operator
- Pushlock turn reset and push-pull functions built into same unit
- Behind the panel depth is only 48.7mm for 4 contacts
- Electrical life: 100,000 operations min.
- IP65 protection
- Rated thermal current: 5A
- Screw terminals

"Safe Break Action" design reverses the energy direction and uses the spring-pressure to assure that the NC contacts will open if the emergency switch is damaged or the contact blocks separate due to excessive force. EN compliant. May be mounted in IDEC's one-to-five hole enclosures.

CONTINUED

22mm EMERGENCY STOP SWITCHES (CONT.)

Mfg. Part No.	Contacts	Termination	Actuator Color	Stock No.	Price Each 1-4	Price Each 5-9
40mm MUSHROOM BUTTON WITH BUILT-IN 24V LED						
XW1E-LV411Q4M-R	DPST-1NO/1NC	Screw	Red	43J1445	41.57	38.66
XW1E-LV402Q4M-R	DPST-NC	Screw	Red	43J1443	42.19	39.22
XW1E-LV413Q4M-R		Screw	Red	43J1446	48.68	45.25
40mm MUSHROOM BUTTON						
XW1E-BV411M-R	DPST-1NO/1NC	Screw	Red	43J1437	32.45	30.17
XW1E-BV402M-R	DPST-NC	Screw	Red	43J1435	31.99	29.73
XW1E-BV413M-R	4PST-3NC/1NO	Screw	Red	43J1438	38.94	36.20
XW1E-BV404M-R	4PST-4NC	Screw	Red	43J1436	38.94	36.20
XW 22MM EMERGENCY STOP SWITCH, MUSHROOM BUTTONS						
XW1E-BV4TG01MR	1NC	Screw	Red	19X1285	37.78	35.68
XW1E-BV4TG02MR	2NC	Screw	Red	19X1287	39.21	37.03
XW1E-BV4TG03MR	3NC	Screw	Red	19X1289	42.77	40.40
XW1E-BV4TG04MR	4NC	Screw	Red	19X1291	47.05	44.44
XW1E-BV4TG11MR	1NC/1NO	Screw	Red	19X1293	39.21	37.03
XW1E-BV4TG12MR	2NC/1NO	Screw	Red	19X1295	42.77	40.40
XW1E-BV4TG13MR	3NC/1NO	Screw	Red	19X1297	47.05	44.44
XW1E-BV4TG22MR	2NC/2NO	Screw	Red	19X1299	47.05	44.44
XW1E-BV4TG03MFR	3PST-NC	Screw	Red	19X1288	42.77	40.40
LED ILLUMINATED 38MM SMOOTH MUSHTROOM BUTTON WITH MECHANICAL INDICATOR						
XW1E-LV4TG01Q4MR	1NC	Screw	Red	19X1301	49.19	46.45
XW1E-LV4TG02Q4MR	2NC	Screw	Red	19X1303	50.98	48.15
XW1E-LV4TG03Q4MR	3NC	Screw	Red	19X1305	54.89	51.84
XW1E-LV4TG04Q4MR	4NC	Screw	Red	19X1307	58.82	55.55
XW1E-LV4TG11Q4MR	1NC/1NO	Screw	Red	19X1309	50.98	48.15
XW1E-LV4TG12Q4MR	2NC/1NO	Screw	Red	19X1311	54.89	51.84
XW1E-LV4TG13Q4MR	3NC/1NO	Screw	Red	19X1313	58.82	55.55
XW1E-LV4TG22Q4MR	2NC/2NO	Screw	Red	19X1315	58.82	55.55
60mm JUMBO MUSHROOM BUTTON						
XW1E-BV511M-R	DPST-1NO/1NC	Screw	Red	43J1441	40.04	37.22
XW1E-BV502M-R	DPST-NC	Screw	Red	43J1439	40.04	37.22
40mm MUSHROOM—EMO						
XW1E-BV411M-RH-EMO	DPST-1NO/1NC	Screw	Red	05R0272	34.77	33.14

(83170)

EMERGENCY STOP SWITCHES

RoHS Compliant Available

IDEC

40mm Plastic Bezel - XN1E 60mm Plastic Bezel - XN1E Padlock - XN4E

Features:

- Plastic bezel, metallic padlock and flush bezel available
- Install up to 12 padlocks (XN4E)
- ø40, ø44 or ø60mm Mushroom heads available
- IDEC's original "safe break action" ensures that the contacts stay open when the contact block is detached from the operator
- Safety-lock mechanism (IEC60947-5-5, 6.2)
- 2-in-1: Push-to-lock, Pull/Turn-to-Reset (XN4E: Turn to Reset only)
- Push-ON LED model allows E-Stops to be illuminated only when latched
- Direct Opening Action mechanism (IEC60947-5-5, 5.2, IEC60947-5-1, Annex K)
- Only 47.7mm depth behind the panel for up to 4 contacts (XN1E)
- RoHS compliant (EU directive 2002/95/EC)

Flush Bezel - XN5E

Specifications:

- Min. Force for Direct Opening Action: 80N
- Contact rating: 5A at 125VAC
- Contact resistance: 50mΩ max
- Mechanical life: 250,000 operations
- Terminal type: M3.0 screw terminal
- Degree of protection IP65 (IEC60529)
- XN4E series complies with OSHA and ISO 12100-2:2003 standards

XN1E 30MM EMERGENCY STOP SWITCHES

Mfg. Part No.	Actuator Diameter (mm)	Contacts	Illumination	Stock No.	Price Each 1-4
XN1E-BV422MR	40	4PST-2NO/2NC	Non Illuminated	75M3626	79.97
XN4E PADLOCK EMERGENCY STOP SWITCHES					
XN4E-BL402MR	44	DPST-NC	Non Illuminated	70M9745	102.69

CONTINUED

SWITCHES – EMERGENCY STOP

EMERGENCY STOP SWITCHES (CONT.)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● HNAV-27	Nameplate; Legend: "EMERGENCY STOP"	84C2748	4.89

(105921)

UNIBODY 22MM E-STOP™ SWITCHES

RoHS Compliant Available

IDEC

- Finger-safe IP20 contacts
- Tamperproof non-removable buttons
- Meet EN418
- IEC-style mounting
- Contacts rated 10A thermal current, 600V max.
- Screw terminal connectors

Operator cannot remove switch from exterior of control panel. LED types are 24VAC/DC. UL listed, CSA certified, CE compliant, and TÜV approved.

Mfg. Part No.	Circuitry	Description	Stock No.	Price Each 1-24	Price Each 25-49
● HW1E-BV4F11R	DPST-1NO/1NC	Pushlock Turn Reset, Non-Illuminated	74K3761	44.37	42.94
● HW1E-LV4F11QD-R-24V	DPST-1NO/1NC	Illuminated (LED)	74K3763	57.40	55.54
● HW1E-BV412R-TK2093-1	3PST-2NC/1NO	Pushlock Turn Reset, Non-Illuminated	74K3762	66.55	64.41

(59285)

40mm FB ENCLOSURE HW E-STOP ASSEMBLIES

RoHS Compliant Available

IDEC

Features:

- Meet EN418 and are compliant with SEMI S2 standards
- Worldwide approvals
- Choice of black plastic or metallic front bezels
- Positive action operation

Specifications:

- Max. inrush current: 40A
- Insulation voltage: 600V
- Switching over-voltage: Less than 4kV
- Impulse withstanding voltage: 4kV
- Thermal current: 10A
- Min. Switching Capacity: 5mA at 3VAC/DC

Mfg. Part No.	Current (A)	Circuitry	Function	Bezel	Stock No.	Price Each 1-4
● FB1W-HW1B-V411R	10	DPST-1NO/1NC	Pushlock Turn Reset	Plastic	05N0128	66.23
● FB1W-HW4B-V411R-EMO-2	10	DPST-1NO/1NC	Pushlock Turn Reset	Metal	05N0129	77.27
● FB1W-HW1B-V402R	10	DPST-NC	Pushlock Turn Reset	Plastic	05N0127	66.23
● FB1W-HW4B-Y202-R	10	DPST-NC	Push-Pull	Metal	05N0130	66.23

(114895)

69 SERIES ISOLATORS

IP65

RoHS Compliant Available

IMO

- 3 and 4 pole
- On load 20A - 80A rated at 415V
- Red/yellow handle
- 3 padlock positions
- Lightweight extension shafts
- Side mounted auxiliary contacts
- UL approval

IP65 Enclosed

IP65 ENCLOSED

Mfg. Part No.	No. of Poles	Current (A)	Power (kW)	Stock No.	Price Each 1-24	25-49	50-99	100+
● PE69-3020	3	20	5.5	74R5519	42.03	40.44	39.04	37.99
● PE69-3025	3	25	7.5	74R5520	44.56	42.89	41.39	40.28
● PE69-3032	3	32	11	74R5521	45.83	44.11	42.57	41.42
● PE69-3040	3	40	15	74R5522	52.93	50.93	49.16	47.84
● PE69-3063	3	63	18.5	74R5523	91.89	88.44	85.35	83.05
● PE69-4020	4	20	5.5	74R5524	52.93	50.93	49.16	47.84
● PE69-4032	4	32	11	74R5525	59.54	57.30	55.30	53.81
● PE69-4063	4	63	18.5	74R5526	115.32	110.98	107.11	104.22
BASE MOUNT DOOR INTERLOCK								
● LB69-3020	3	20	5.5	74R5510	33.42	32.16	31.05	30.20
● LB69-3025	3	25	7.5	74R5511	36.83	35.44	34.22	33.28

➤CONTINUED➤

69 SERIES ISOLATORS (CONT.)

BASE MOUNT DOOR INTERLOCK

Mfg. Part No.	No. of Poles	Current (A)	Power (kW)	Stock No.	Price Each 1-24	25-49	50-99	100+
● LB69-3032	3	32	11	74R5512	39.20	37.73	36.41	35.43
● LB69-3040	3	40	15	74R5513	40.39	38.87	37.51	36.50
● LB69-3063	3	63	18.5	74R5514	55.08	53.01	51.16	49.78
● LB69-3080	3	80	22	74R5515	57.79	55.62	53.68	52.23
● LB69-4020	4	20	5.5	74R5516	39.42	37.93	36.61	35.62
● LB69-4040	4	40	15	74R5517	48.70	46.86	45.23	44.01
● LB69-4063	4	63	18.5	74R5518	61.71	59.39	57.32	55.78

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24	25-49	50-99
● H69-0001	Red / Yellow Handle - 64 x 64mm	74R5508	7.51	7.21	6.99
● H69-0003	Red / Yellow Handle - 48 x 48mm	74R5509	7.51	7.21	6.99
● E69-0003	Extension Shaft - 300mm	74R5506	1.95	1.87	1.81
● E69-0004	Extension Shaft - 400mm	74R5507	4.95	4.76	4.61
● A69-0001	Auxiliary Contact - 1 N/O + 1 N/C	74R5505	13.25	12.72	12.33

(178392)

A22E SERIES EMERGENCY STOP SWITCHES

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

A22E-MP-0x | A22E-M-xx, A22E-S-xx | A22E-MK-xx | A22E-M-xxB

- Direct opening mechanism to open the circuit if the contact fuses
- Safety lock mechanism prevents operating errors
- Easy mounting and removal of switch blocks using a lever
- Install using either round, or forked crimp terminals
- Illuminated models are 24 VAC/VDC

A22E-3466-1 | A22Z-EG1

The A22E Emergency stop switches offer a full line of contact configurations. Available with 30mm and 40mm heads, illuminated and non-illuminated. Push with pull to reset or push with twist to reset options. Emergency off shroud is available for SEMI S2 applications. The emergency stop switch with integrated control box, can simplify installation.

NON-ILLUMINATED EMERGENCY STOP SWITCHES

Mfg. Part No.	Description	Circuitry	Stock No.	Price Each 1-24
● A22EMP01	Push-pull reset	SPST-NC	66J1394	35.84
● A22EMP02	Push-pull reset	DPST-NC	66J1395	43.81
● A22E-M-01	Push-lock, turn reset	SPST-NC	15N7086	26.12
● A22E-M-11	Push-lock, turn reset	SPST-NO / SPST-NC	01N5267	29.56
● A22E-M-02	Push-lock, turn reset	DPST-NC	55C4473	30.19
● A22ES01	Push-lock, turn reset	SPST-NC	66J1401	32.86
● A22ES11	Push-lock, turn reset	SPST-NO / SPST-NC	66J1403	28.87
● A22E-MK-02	Push-lock, key reset	DPST-NC	01N5270	42.69
ILLUMINATED EMERGENCY STOP SWITCHES				
● A22EL-M-24A-01	Push-lock, turn reset	SPST-NC	87H8522	42.36
EMERGENCY STOP SWITCHES WITH INTEGRATED CONTROL BOX				
● A22E-M-01B	Push-lock, turn reset	SPST-NC	01N5266	62.07
● A22EM11B	Push-lock, turn reset	SPST-NO / SPST-NC	74K2297	69.94
● A22E-M-02B	Push-lock, turn reset	DPST-NC	50M1990	71.44

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● A22-24AR	Standard Red LED Lamp; 24VAC/VDC	01N5265	27.02
● A22Z-3466-1	Legend Plate For Emergency Stop Switch	07H9788	4.04
● A22Z-EG1	Emergency Off Shroud; SEMI S2 Compatible	01N5276	32.78

(115464)

MOLDED DRY REED SWITCHES

RoHS Compliant Available

TOTO TECHNOLOGY

Gull Wing

J-Lead

- 5W power
- Rugged encapsulation
- SPST-NO contacts
- Actuation by electromagnetic, permanent magnet or combination of both
- Tape & reel packaging

Operating Range (AT)	25 to 50	Switched Current (VDC max.)	350
Release Range (AT)	5 to 45	Carrying Current (A max.)	0.5
Switched Power (W max.)	5	Contact Resist. (Ω Initial max.)	160
Switched Voltage (VDC max.)	140	Insulation Resistance (M Ω min.)	10^6

Operating temperature: -40°C to +125°C. Shock withstand: 10G. Vibration withstand: 100G. Custom operating ranges available; *go online or call*.

Mfg. Part No.	Ampere Turns ON	Termination	Stock No.	Tape Cut Price Each 1-9	10-49	50-99
CT05-1535-G1	15-35	Gull Wing	65K1023	4.43	3.79	3.29
CT05-1535-J1	15-35	J-Lead	78H1413	4.43	3.79	3.29

(78007)

EMERGENCY STOP SWITCHES

OMRON AUTOMATION & SAFETY

- Voltage rating: 5A@125VAC, 3A@250VAC, 3A@30VDC
- Operating temperature: -10°C to 55°C
- Degree of protection: IP65 Oil-resistant

Mfg. Part No.	Circuitry	Diamter (mm)	Stock No.	Price Each Each	2-4
A165E-S-02	DPST-NC	16	34C6295	48.25	47.13

(107602)

XB6 SERIES 16mm MUSHROOM EMERGENCY STOP PUSHBUTTONS

RoHS Compliant Available

Schneider Electric

Trigger action emergency stop. Complete unit features red key or red turn release. Direct-acting contacts and tactile/audible feedback. Diameter of head: 1.17" (30mm). 1 N/O and 1 N/C. Contacts rated 3A, 300V. NEMA 4X rating. UL listed, CSA certified, CE compliant.

XB6AS8345B

Mfg. Part No.	Description	Stock No.	Price Each Each	2-4
XB6AS8345B	Red, Turn to Release	17C6994	104.57	99.09
XB4BS542	Red, Turn to Release	80C6507	112.15	103.25

(61170)

ULTRA-MICRO SEALED SURFACE-MOUNT DRY REED SWITCHES

RoHS Compliant Available

COMUS International

Short Gull Wing

Long Gull Wing

J-Lead

- Body length: 0.196" (5mm)
- Hermetically sealed in gas-filled envelope
- SPST-NO contact configuration
- Actuation by electromagnet, permanent magnet or combination of both
- Contact layers: gold, sputtered ruthenium
- Superior glass-to-metal seal and blade alignment
- Life expectancy: 100,000,000 operations minimum

SPECIFICATIONS

Operating Range (AT)*	5 to 15	Switching Power (W max.)	5
Release Range (AT)*	2 to 13	Switching Voltage (VDC max.)	175
Operating Time Including Bounce (ms typ.)	0.35 (20AT)	Switching Current (VDC max.)	350
Bounce Time (ms typ.)	0.1 (20AT)	Carrying Current (A max.)	0.5
Release Time (max.)	20 (20AT)	Contact Resist. (Ω Initial max.)	160 (20AT)
Resonant Frequency (Hz. Typ.)	21.3	Insulation Resistance (M Ω min.)	106

* AT values of switches are before SMD forming in PSC coil.
Operating temperature: -55°C to +125°C. Shock-tested to IEC 68-2-27. Vibration tested to IEC 68-2-6. Terminal strength tested to IEC 68-2-21. Custom operating ranges available; *call*.

CONTINUED

ULTRA-MICRO SEALED SURFACE-MOUNT DRY REED SWITCHES (CONT.)

Mfg. Part No.	Surface Mount Termination	Stock No.	Tape Cut Price Each 1-9	10-49	50-99	100+
RI-80SMD0515-G1	Short Gull Wing	65K1070	3.70	3.19	2.81	2.42
RI-80SMD0515-G2	Long Gull Wing	56K5673	2.38	2.05	1.80	1.56

(78009)

CT10 SERIES ENCAPSULATED MOLDED SWITCH

RoHS Compliant Available

NEW

TOTO TECHNOLOGY

Specifications:

- Contact Configuration: SPST-NO
- Contact Current Max: 500 mA
- Switching Voltage Max: 200 VDC
- Ideal for SMD pick and place
- Tape and reel packaging
- 10W rating
- Rugged encapsulation
- Excellent life and reliability

The CT10 is an encapsulated molded dry reed switch. It is single-pole, single throw (SPST) type, having normally open ruthenium contacts. The sensor is a double-ended type and may be actuated with an electromagnet, a permanent magnet or a combination of both. The device is designed for SMD mounting and is available in three lead configurations.

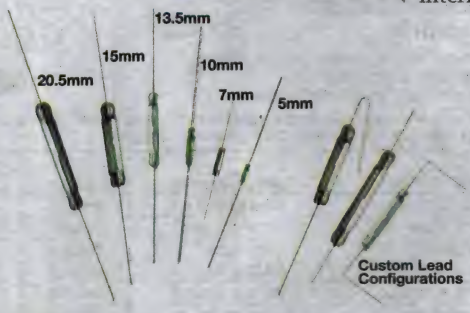
Mfg. Part No.	Contact Resist. (Ω)	Operation Ampere Turns Range	Stock No.	Price Each 1-9
CT10-1030-G1	0.2	10AT to 30AT	98H3468	1.53
CT10-1030-G2	0.2	10AT to 30AT	99W2154	1.44
CT10-1040-G1	0.2	10AT to 40AT	33K3522	1.46
CT10-1040-G2	0.2	10AT to 40AT	99W2155	1.46

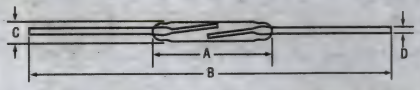
(211299)

DRY REED SWITCHES

RoHS Compliant Available

COMUS International





- Contact layers: gold, sputtered ruthenium
- Superior glass-to-metal seal and blade alignment
- Hermetically sealed in a gas-filled envelope
- Life expectancy of at least 10 million operations

SPST type have normally open contacts and contain two magnetically actuated reeds. Switches are double ended and may be actuated by an electromagnet, a permanent magnet, or a combination of both. Additional versions in stock. Operate ranges to customer specifications as well as preformed leads are available; *go online or call*.

MICRO DRY-REEDS

Mfg. Part No.	Amp. Turns (On)	Switching Current (A)	Voltage (VDC)	Power (W)	Stock No.	Price Each 1-9	10-49	50-99
RI-23A*	18-32	0.5	200	10	65K1045	1.69	1.45	1.28
RI-23AA*	14-23	0.5	200	10	65K1046	1.59	1.37	1.21
RI-23AAA*	8-16	0.5	200	10	65K1047	0.71	0.61	0.54
RI-23B*	28-52	0.5	200	10	65K1048	0.71	0.61	0.54
RI-23C*	46-70	0.5	200	10	65K1049	1.59	1.37	1.21
RI-25AAA	8-16	0.75	200	10	65K1052	1.52	1.31	1.15
RI-25C	46-70	1	200	25	65K1054	1.52	1.31	1.15
RI-46A	15-28	1	200	30	65K1063	1.59	1.37	1.21
RI-46AA	10.5-19	0.75	200	30	65K1064	1.59	1.37	1.21
RI-48A	15-28	1	200	70	65K1067	1.74	1.50	1.32
CLOSE DIFFERENTIAL MICRO DRY-REEDS								
PICO DRY-REEDS								
RI-27AAA	10-19	0.5	180	10	65K1060	1.59	1.37	1.21
RI-29A+	20-34	1	200	20	65K1061	1.59	1.37	1.21
RI-29AA+	16-25	1	200	10	65K1062	1.59	1.37	1.21
ULTRA-MINIATURE DRY-REEDS								
RI-60GP1520	15-20	0.5	200	10	34K9823	1.72	1.48	1.31
RI-70GP0715	7-15	0.5	170	10	35K4864	1.71	1.47	1.30

CONTINUED

SWITCHES – REED • SWITCHES – ROCKER

DRY REED SWITCHES (CONT.)

ULTRA-MINIATURE DRY-REEDS

Mfg. Part No.	Amp. Turns (On)	Switching Current (A)	Switching Voltage (VDC)	Switching Power (W)	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99
● RI-80GP0515	5-15	0.35	200	5	36K7598	3.00	2.59	2.28
● RI-90GP1020*	10-30	0.4	175	5	34K9825	4.42	3.81	3.35

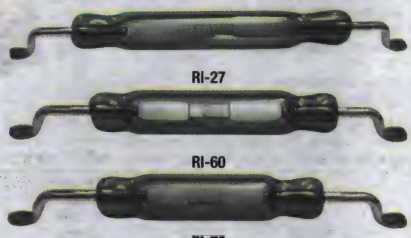
*Contact layers: gold, plated ruthenium; +Contact layers: gold, copper, sputtered ruthenium
(72141)

RI-27, RI-60, RI-70 SMD SERIES DRY REED SWITCHES

RoHS Compliant Available

COMUS International

- Contact configuration: SPST
- Switched power max: 10W
- Ideal for ATE switching
- Contact layers: gold, sputtered ruthenium
- Superior glass-to-metal seal and blade alignment
- Excellent life expectancy and reliability



Mfg. Part No.	Operate Range (AT)	Contact Resist. mOhm	Switche Voltage DC max.	Switche Voltage AC max.	Stock No.	Price Each 1-9
RI-27SMD1015	10 - 34	115	200	140V	87T7275	0.78
RI-60SMD1015	7 - 21	125	200	140V	87T7276	0.75
RI-70SMD1015	7 - 21	150	170	120V	87T7277	0.80

(203438)

RI-80 SMDH SERIES HOUSED DRY REED SWITCH

RoHS Compliant Available

COMUS International

NEW

- Ideal for proximity sensors, telecom & medical applications
- Contact layers: gold, sputtered ruthenium
- Superior glass-to-metal seal and blade alignment

Ultra-micro dry-reed switch hermetically sealed in a gas-filled glass envelope. Single-pole, single-throw (SPST) type, having normally open contacts, and containing two magnetically actuated reeds.

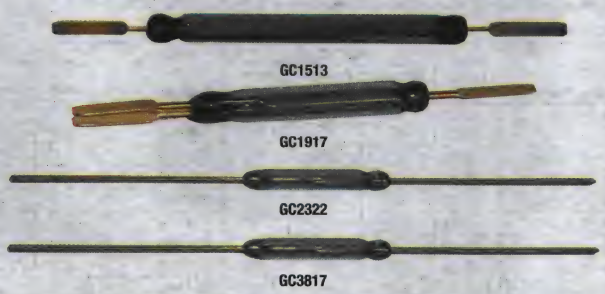
Mfg. Part No	Lead Configuration	Stock No.	Price Each 1-9
● RI-80SMDH0510-G1	Gull Wing version 1	08X6526	2.21
● RI-80SMDH0510-G2	Gull Wing version 2	08X6527	2.21
● RI-80SMDH0510-J	J-Lead version	08X6528	2.38
● RI-80SMDH0515-G1	Gull Wing version 1	08X6529	2.21
● RI-80SMDH0515-G2	Gull Wing version 2	08X6530	2.21
● RI-80SMDH0515-J	J-Lead version	08X6531	2.21
● RI-80SMDH1015-G2	Gull Wing version 2	08X6533	2.21
● RI-80SMDH1015-J	J-Lead version	08X6534	2.38

(211917)

GC SERIES REED SWITCHES

UL RoHS Compliant Available

COMUS International



- Operating temperature: -40°C to 125°C
- Contact material: Rhodium

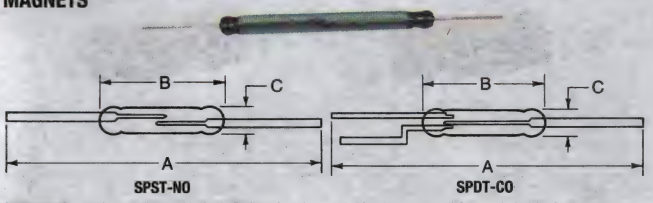
Mfg. Part No.	Contact Form	Switching Capacity (VA)	Switching Voltage (VAC/VDC)	Switching Current (A)	Stock No.	Price Each 1-99
● GC1513 80/120	SPST-NO	120	1500	3	73R7788	5.07
● GC1917 80/120	SPDT	60	400	1	73R7789	6.71
● GC2322 10/30	SPST-NO	10	150	500mA	73R7790	0.76
● GC3817 30/50	SPST-NO	60	400	3	73R7791	1.90

(197839)

MAGNETIC REED SWITCHES AND MAGNETS

UL RoHS Compliant Available

HAMLIN // NOW PART OF Littelfuse Expertise Applied | Answers Delivered



SWITCHES

Switches are activated by a magnetic field from either a magnet or coil. Contacts are hermetically sealed in inert gas to provide long life with stable electrical and operating characteristics. NO = Normally Open; CO = Changeover. Combination of switching voltage and current should not exceed wattage rating.

Mfg. Part No.	Contacts	Pull-In Amp Turns	Power (W)	Switching Volt. (VDC)	Stock No.	Price Each 1-9
● DRR-129 42-83	SPST-NO	42-83	100	400	50B3784	4.18
● DRR-129 62-68	SPST-NO	62-68	100	400	97B0871	7.08
● DRR-129 67-73	SPST-NO	67-73	100	400	50B3783	7.08
● DRR-129 72-78	SPST-NO	72-78	100	400	50B3785	7.08
● DRR-DTH 75-80	SPDT-CO	75-80	30	500	33F1080	19.13
● DRT-DTH-50-65	SPDT-CO	50-80	50	500	33F1081	22.21
● MARR-5-17-33	SPST-NO	17-38	10	1000	94B5551	4.47
● MDCG-4	SPST-NO	12-38	10	200	50F7985	0.68
● MDRR-DT-15-30-F	SPDT-CO	15-30	5	175	94B5552	5.31
● MDRR-DT 25-30 F	SPDT-CO	25-30	5	175	88F2984	5.24
● MDRR-DT 15-20 F	SPDT-CO	15-20	5	175	24C6463	2.77
● MDRR-DT 20-35 F	SPDT-CO	20-35	5	175	34C2416	4.99
● MDSR-4-12-23	SPST-NO	12-23	10	200	88F5171	1.56
● MDSR-4 22-38	SPST-NO	22-38	10	200	01C1811	1.56
● MDSR-7-10-25	SPST-NO	10-25	10	200	50F7984	0.75
● MITI-3V1-6-15	SPST-NO	6-15	10	170	95H6901	1.24
● MLRR-4-17-28	SPST-NO	17-38	20	200	87F2919	1.79
● MRPR-8-22-38	SPST-NO	22-43	50	250	95F5875	1.87

MAGNETS

These interchangeable magnets are for use with above reed switches. *For proper selection, use dimensions and A.T. range as a guide.* Magnet should be positioned parallel to the switch for proper activation. Not UL Recognized

Mfg. Part No.	Dimensions	Gauss at Pole Reference	Pull-In Amp Turns	Stock No.	Price Each 1-9	Price Each 10-24
● 315	0.12 Diameter/0.59″	1000	10-38	10M8484	2.11	1.92
● H31	0.062 Square″ x 0.500″	1300	10-38	33F1090	0.94	0.86
● H32	0.19 Square″ x 1.00″	1400	10-38	33F1091	5.06	4.72
● H33	0.12 Square″ x 0.750″	1200	10-38	33F1092	2.06	1.87
● H34	0.24 Square″ x 1.00″	1300	10-68	33F1093	5.57	5.19
H36	0.182 Diameter/1.00″	1600	10-68	92F2576	3.30	3.08
● 420	0.15 Diameter/0.78″	1150	10-38	10M8486	1.60	1.45
● 625	0.23 Diameter/0.98″	1500	10-68	10M8502	7.37	6.86

(5218)

621 SERIES SUB-MINIATURE SNAP-IN ROCKER SWITCHES

RoHS Compliant Available

Carling Technologies Innovative Designs. Powerful Solutions.

Features
- Double insulated
- Cost effective solution for appliance, audio visual, power supply, telecom markets

Specifications
- Operating Temperature: 0°C to 85°C
- Nylon base actuator
- Black rockers have no legends
- Visi rockers with "9" suffix have vertical I-O legend

8A/125VAC, 4A/250VAC. Dielectric strength: 1000V. UL recognized, CSA certified, VDE, SEV, and SEMKO approved.

BLACK ROCKER

Mfg. Part No.	Circuitry	Function	Terminals	Stock No.	Price Each 1-24	Price Each 25-49
● 62111421-0-0-N	SPDT	On-None-On	0.080 Solder Lugs	79K4495	1.79	1.50
● 62112421-0-0-N	DPDT	On-None-On	0.080 Solder Lugs	76K1153	2.42	2.04
● 62112926-0-0-N	DPDT	On-None-On	0.187 Solder Lugs	76K1154	2.71	2.28
● 62116919-0-0-N	SPST	On-None-Off	0.187 Tabs	76K1158	1.64	1.56
● 62115919-0-0-N	DPST	On-None-Off	0.187 Tabs	94B6841	3.66	3.30
VISI-ROCKER SWITCHES BLACK/RED ROCKER						
● 62115919-0-9-V*	DPST	On-None-Off	0.187 Tabs	76K1155	1.72	1.65
● 62115929-0-0-V	DPST	On-None-On	0.187 Tabs	76K1156	2.47	2.06
● 62116919-0-9-V*	SPST	On-None-Off	0.187 Tabs	76K1157	1.58	1.35

CONTINUED

621 SERIES SUB-MINIATURE SNAP-IN ROCKER SWITCHES (CONT.)

VISI-ROCKER SWITCHES BLACK/GREEN ROCKER

Mfg. Part No.	Circuitry	Function	Terminals	Stock No.	Price Each 1-24	Price Each 25-49
6211691909G*	SPST	On-None-Off	0.187 Tabs	02M0498	1.96	1.77

*I-O Imprint (vertical).
(5116)

R/LRA SERIES CURVETTE MINIATURE SNAP-IN ROCKER SWITCHES

RoHS Compliant Available

Carling Technologies
Innovative Designs. Powerful Solutions.

Miniature rocker switches are 1-pole, slow-make and break action. 0.250″ (6.35) quick connect terminals. Ratings: 10A/125VAC, 10A/250VAC; **mfg. part no. RD221** is 8A/250VAC, 12A/125VAC. Rated life 50M cycles @ rated load. Base is black; available with Visi-Rocker two-color molded with "on" indication. For neon illuminated switches: **RS** in type number indicates rocker is solid red; **CR** indicates clear red; **CA** indicates clear amber. UL recognized, CSA certified, VDE, SEV, and SEMKO approved; **mfg. part no. RD221** is UL recognized, CSA certified.

BLACK ROCKER

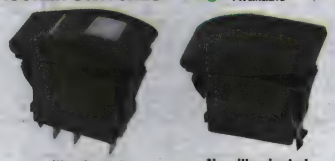
Mfg. Part No.	Circuitry	Switch Function	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-99
RA911-RB-B-0-N	SPST	On-None-Off	73K1301	1.83	1.22	1.08
RB911-RB-B-0-N	SPDT	On-None-On	73K1304	4.17	3.78	3.38
RC911-RB-B-0-N	SPDT	On-Off-On	73K1305	1.54	1.45	1.34
RD221-MB-B-0-N	SPST	Off-(On)	74K2468	1.61	1.31	1.16
VISI-ROCKERS, BLACK/RED ROCKER						
RA911-VB-B-0-V	SPST	On-None-Off	73K1302	1.18	0.96	0.84
RA911-VB-B-1-V*	SPST	On-None-Off	73K1303	1.18	0.96	0.84
RA901-VB-B-9-V*	SPST	Off-None-On	50B1616	1.21	1.09	1.03
125V NEON ILLUMINATED SWITCHES						
LRA211-RS-B/125N	SPST	On-None-Off	73K1000	2.46	2.23	2.00
LRA211-CR-B/125N	SPST	On-None-Off	73K0999	2.82	2.55	2.29

*Features On/Off legend.
(5113)

V SERIES CONTURA II SEALED ROCKER SWITCHES

RoHS Compliant Available

Carling Technologies
Innovative Designs. Powerful Solutions.



Illuminated Non-illuminated

V-series snap-in rocker switches offer countless unique options including choices for ratings, circuits, colors, illuminations and symbols. Sealed front panel components are certified to IP66 and IP68, signifying complete protection against dust and prolonged spray and submersion under pressure. Recognized to UL1500 - Ignition Protection for Marine Products. LED lighted switches have 12VDC green and 12VDC amber lamps with a white square base lens. Ratings: 20A @ 12V. Dielectric strength: 2,000Vrms opposite polarity; 4,000Vrms between live parts and operator accessible surface. Terminal options: .250 QC tabs. Mounting method: snap-in. UL recognized, CSA certified, VDE, DEMKO, NEMKO, SEMKO, FIMKO and BEAB aproved.

LED LIGHTED ROCKER SWITCHES

Mfg. Part No.	Circuitry	Function	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99
V1D2GHNB-AAC00-000	SPST	On-None-Off	76K1075	8.29	7.39	7.03
V6D2GHNB-AAC00-000	SPST	On-Off-On	78K0427	18.77	17.70	16.73
V2D2GHNB-AAC00-000	SPST	(On)-None-Off	76K1077	18.54	17.46	16.53
VLD2UHNB-AAC00-000	DPST	(On)-Off-(On)	76K1072	16.08	14.35	13.64
NON-LIGHTED (BLACK ROCKER)						
V1D2S00B-AZC00-000	SPST	On-Off	76K1076	5.62	4.56	4.03
V2D2S00B-AZC00-000	SPST	(On)-None-Off	76K1078	7.13	5.75	5.11
V6D2S00B-AZC00-000	SPST	On-Off-On	76K1079	10.06	9.10	8.15
VLD2S00B-AZC00-000	DPDT	(On)-Off-(On)	76K1071	8.77	6.49	6.06
VGD2S00B-AZC00-000	SPST	Off-On-On	76K1069	12.68	11.33	10.80

ACCESSORIES

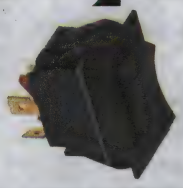
Mfg. Part No.	Description	Stock No.	Price Each 1-49	Price Each 50-99	Price Each 100-499
VPS	Panel Seal	76K1074	1.33	1.21	1.08
VC1-01	10-Terminal Connector/Socket	76K1067	1.39	1.26	1.12
VH1-01	Hole Plug	76K1070	2.01	1.82	1.63
VM3-01	Mounting Bracket 3 Gang	76K1073	11.22	10.50	10.09

(69506)

HEAVY DUTY SNAP-IN ROCKER SWITCHES

RoHS Compliant Available

Carling Technologies
Innovative Designs. Powerful Solutions.



Constructed with a snap-in bracket system that provides front panel dust/moisture protection. Action is On-None-Off. Ratings: 15A/125VAC, 28VDC; 10A/250VAC, ¾ H.P. Dielectric strength: 1000V. Available in lighted and non-lighted versions. 125V neon models: **"RC"** in mfg. part no. designates red; **"AM"** designates amber.

NON-LIGHTED ROCKER SWITCHES

Mfg. Part No.	Circuitry	Terminals	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99
TIGA50-6S-BL-NBL	DPST	Solder	89F5565	7.56	6.75	6.44
TIGA51-6S-BL-NBL	DPST	0.250″ QC	76K1061	5.20	4.36	4.15
TIGK50-6S-BL-NBL	DPST	Solder	76K1062	11.71	10.59	9.48
TIGK51-6S-BL-NBL	DPST	0.250″ QC	76K1063	6.17	5.28	4.67
TIGK91-6S-BL-NBL	DPST	0.250″ QC	25H6466	13.33	11.90	11.34

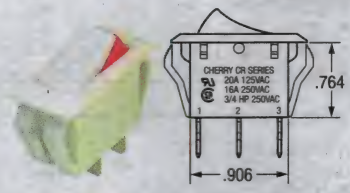
(5117)

CR SERIES POWER ROCKER SWITCHES

RoHS Compliant Available

CHERRY

- Rugged Design with Current Switching Up to 20A
- 2-Color Molded Button Available for Maximum Visibility
- Lighted and Non-Lighted Versions
- Splash-Proof Option Available
- Ratings: 20A 125VAC/16A 250VAC (UL Listed, CSA Certified)
- 3/4HP 250VAC (UL Listed), 16A 250VAC (VDE approved)
- Temp. Range: -20°C to +85°C
- 0.250″ QC Terminals
- Single Pole



Mfg. Part No.	Action	Rocker	Actuator Markings	Stock No.	Price Each 1-9
CRE22F2BBRLE	On-Off	Red Lighted	...	01M7233	1.78
CRE22F2FBBNE	On-Off	Black	0 -	01M7234	1.35
CRE22F4BBBNE	On-Off	Black w/Red Mold	...	01M7235	1.45
CRE23F2BBBNE	On-On	Black	...	61H9267	1.82
CRE24F2HBBNE	On-Off-On	Black	I O II	01M7236	1.78

* 13.8mm width and washable; conforms to IP42
(72217)

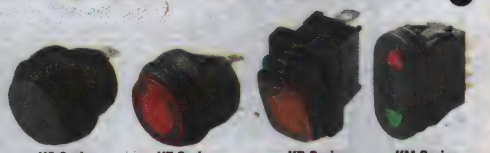
K SERIES ROCKER SWITCHES

RoHS Compliant Available

CHERRY

Features:

- KD, KS, and KC comply with IP56, All others comply with IP65
- Lighted and non-lighted versions
- Multiple terminal options
- Variety of actuator and lens color options



KC Series KF Series KR Series KM Series

Specifications:

- Dielectric strength: 1500VAC
- Insulation resistance: 1,000MΩ
- Initial contact resistance: 0.05Ω
- Mechanical life: 100,000cycles
- Temperature rating: -25°C to +85°C
- Termination: 0.187″ Quick-connect

Mfg. Paert No.	Current (A)	Circuitry	Switch Operation	Illumination	Stock No.	Price Each 1-9
KFB2ALA2RBB	10	SPST	On-Off	Illuminated	07P8622	5.74
KFB3ALA2RBB	10	DPST	On-Off	Illuminated	07P8625	7.57
KFB2DNA1BBB	10	SPST	Off-(On)	Non Illuminated	07P8624	4.73
KFB2ANA1BBB	10	SPST	On-Off	Non Illuminated	07P8623	5.40
KFB3ANA1BBB	10	DPST	On-Off	Non Illuminated	07P8626	6.66
KDH3ANA1BBB	16	DPST	On-Off	Non Illuminated	07P8619	5.58
KDH3CNA1BBB	16	DPDT	On-Off-On	Non Illuminated	07P8621	7.67
KDH3BNA1BBB	16	DPDT	On-On	Non Illuminated	07P8620	7.29
KDH3ALA2RBB	16	DPST	On-Off	Illuminated	07P8618	6.10
KRE2DNA1BBB	16	SPST	Off-(On)	Non Illuminated	07P8637	3.64
KRE2ANA1BBD	16	SPST	On-Off	Non Illuminated	07P8635	2.97
KRE2BNA1BBB	16	SPDT	On-On	Non Illuminated	07P8636	4.07
KCA2ALA2RBB	16	SPST	On-Off	Illuminated	07P8616	4.66
KCA2ANA1BBB	16	SPST	On-Off	Non Illuminated	07P8617	3.64
KRE2ALA2RBB	16	SPST	On-Off	Illuminated	07P8634	3.61
KGC2BNB1BBB	20	SPST	On-On	Non Illuminated	07P8628	8.49
KGC2CNB1BBN	20	SPDT	On-Off-On	Non Illuminated	07P8629	9.00
KGC2ANB1BBD	20	SPST	On-Off	Non Illuminated	07P8627	6.94
KGC3ANB1BBD	20	DPST	On-Off	Non Illuminated	07P8630	10.63

CONTINUED

K SERIES ROCKER SWITCHES (CONT.)

Mfg. Paert No.	Current (A)	Circuitry	Switch Operation	Illumination	Stock No.	Price Each 1-9
● KMD2AMB7BBBNR1	21	SPST	On-Off	Illuminated	07P8631	11.31
● KMD2CNB1BBNNNN	21	SPDT	On-Off-On	Non Illuminated	07P8632	8.13
● KMD3CMB8BBBRG2	21	DPDT	On-Off-On	Illuminated	07P8633	17.78

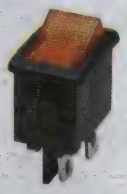
(133585)

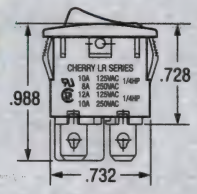
LR SERIES MINIATURE ROCKER SWITCHES

RoHS Compliant Available

CHERRY

- Black housing
- Ratings: 10A 125VAC/8A 250V
- Temperature range: -20°C to 65°C
- QC terminals: 0.187″
- Typical panel cut-out: 0.760″ x 0.508″.





Mfg. Part No.	Circuitry	Action	Rocker	Rocker Markings	Stock No.	Price Each 1-9
● LRA22H2FBBNN	SPST	On-Off	Black	0 -	01M8187	1.42
● LRA22H2BBRLN	SPST	On-Off	Red Lighted	...	01M8186	1.62
● LRA32H2BBBNN	DPST	On-Off	Black	...	85C0999	1.58
● LRA32H2FBBNN	DPST	On-Off	Black	0 -	01M8189	1.68
● LRA32H2FBGLN	DPST	On-Off	Green Lighted	0 -	88H9536	1.81
● LRA32H2BBRLN	DPST	On-Off	Red Lighted	...	01M8188	1.74

(72219)

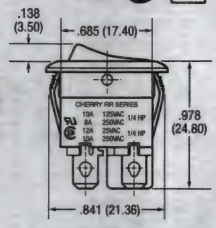
RR SERIES MINIATURE ROUND ROCKER SWITCHES

RoHS Compliant Available

CHERRY

- Typical Panel Cut-Out: 20mm Diameter
- Actuator: Nylon 66 (Nonlighted), Polycarbonate (Lighted)
- Nylon 66 Base, Rated UL94V-2
- Silver Alloy Contacts
- Copper Alloy Movable Arm
- 0.187″ (4.75mm) Quick-Connect, Tin-Plated Copper Alloy Terminals

Provide high-current switching in a compact round package. Self-locking tabs fit industry-standard panel cut-outs. Temperature range: -20°C to +65°C. Rated: 10A, 125VAC/8A, 250VAC ¼HP (UL recognized, CSA certified); 10A (4) 250V ~ µ T125/55 (VDE approved).



Mfg. Part No.	Circuitry	Function	Actuator/ Housing Color	Stock No.	Price Each 1-9
● RRA22H3BBBNN	SPST	On-Off	Black/Black	01M8713	1.59
● RRA22H3FBRNN	SPST	On-Off	Red/Black*	01M8716	1.62
● RRA22H3BBRLN	SPDT	On-Off/Lighted	Red/Black	01M8714	2.01
● RRA32H3FBBNN	DPST	On-Off	Black/Black*	01M8718	2.37
● RRA32H3BBRLN	DPST	On-Off/Lighted	Red/Black	01M8717	2.52

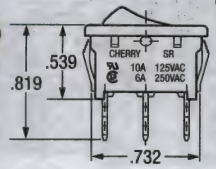
*Have 0 - actuator marking
(74793)

SR SERIES MINIATURE ROCKER SWITCHES

RoHS Compliant Available

CHERRY

- Black housing and non-lighted rocker
- Ratings: 10A, 125VAC/6A, 250VAC
- Temperature range: -20°C to +65°C
- QC Terminals: 0.187″
- Typical panel cut-out: 0.760″ x 0.508″.



Mfg. Part No.	Circuitry	Action	Rocker Markings	Stock No.	Price Each 1-9
● SRB22A2BBBNN	SPST	On-Off	...	01M9105	1.24
● SRB22A2DBBNN	SPST	On-Off	Off On	01M9106	1.24
● SRB22A2FBBNN	SPST	On-Off	0 -	10M5262	1.08
● SRB23A2BBBNN	SPDT	On-On	...	01M9107	1.35

(72218)

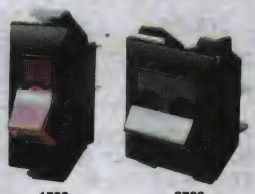
1500/2500 SERIES MINIATURE ROCKER SWITCHES

RoHS Compliant Available

EATON

- Slow-make, slow-break action
- Mechanical life: 50,000 cycles
- Illuminated switches have lamp life of 5,000 hours minimum
- 15A, 125VAC; 10A, 250VAC
- Panel openings: Series 1500: 1.070L x 0.483″ x 0.118″; series 2500: 1.075″ x 0.876″ x 0.118″

Miniature snap-in AC rocker switches. Quick-connect terminals. Feature rounded bezel in black matte finish with contoured black or lighted rocker lever. Lighted models feature 125V neon lamps. **11E suffix** designates black base and lever. UL recognized, CSA certified and ENEC 19 approved.



1500 2500

NON-ILLUMINATED SWITCHES

Mfg. Part No.	Action	Circuit	Stock No.	Price Each 1-24	25-49	50-99
● 1500-11E	On-None-Off	SPST	87F2624	2.57	2.41	2.25
● 1501-11E	(On)-None-Off	SPST	87F2625	3.11	2.91	2.73
● 1504-11E	On-Off-On	SPDT	87F2627	3.27	3.05	2.86
● 1506-11E	(On)-Off-(On)	SPDT	95F4248	3.94	3.68	3.44
● 2500-11E	On-None-Off	DPST	87F2628	3.11	2.91	2.73

ILLUMINATED SWITCHES
All units feature On-None-Off action.

Mfg. Part No.	Lens	Circuit	Stock No.	Price Each 1-49	50-99	100-249
● 1500R11E	Red	SPST	87F2634	5.00	4.66	3.98
● 2500R11E	Red	DPST	87F2637	5.76	5.51	5.23
● 1500G11E	Green	SPST	87F2633	5.73	5.33	4.56

(4869)

NEW GENERATION ROCKER SWITCHES

NEW

EATON

- Mounting Hole Dia: 22
- Differential Travel Max: 8.76

Type	Differential Travel Max	Stock No.	Price Each 1-24
3CAFA1GAEA1G0	EATON NGR Series Rocker Switches	97W6616	4.39
3CBEA1GBEA1G0	EATON NGR Series Rocker Switches	78K3780	5.16
3CBEA2GATA1G0	EATON NGR Series Rocker Switches	78K3781	3.49
3CDXA1GDYA1G0	EATON NGR Series Rocker Switches	64K2992	5.26
3CPHA1GPIA1G0	EATON NGR Series Rocker Switches	97W6634	5.45

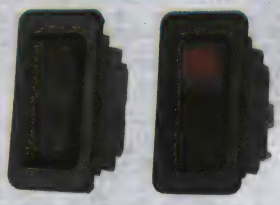
(211603)

FULL SIZE EURO ROCKER SWITCHES

NEW

EATON

Specifications:
- Contact Ratings: 15A @ 125VAC
- Actuator / Cap Color: Black
- Switch Mounting: Panel



Full Size Euro, Non-Illuminated

Mfg Part No.	Circuitry	Action	Lens Color	Stock No.	Price Each 1-99
8004K22N1V2	SPDT	On-Off-On	...	85C5060	12.02
8004K25N1V2	SPST	On-None-Off	...	97W6706	10.88
8004K26N1V2	SPDT	On-None-On	...	94C9021	7.76
8004K28N1V2	SPDT	On-None-On	...	94C9023	11.23
8004K34N1V2	SPDT	(On)-Off-(On)	...	04X5106	11.97
8004K54N1V2	DPDT	(On)-Off-(On)	...	04X5107	15.41
Full Size Euro, Illuminated					
8005K23N113V22	SPST	Off-None-On	Red	94C9084	10.66
8005K23N113V32	SPST	Off-None-On	Green	04X5108	15.17
8005K23N113V42	SPST	Off-None-On	Amber	94C9085	13.42
8005K23N313V22	SPST	Off-None-On	Red	90C0581	13.37
8005K23N313V32	SPST	Off-None-On	Green	93B0936	9.70
8005K23N313V42	SPST	Off-None-On	Amber	30C2141	10.05
8005K25N113V22	SPST	Off-None-On	Red	04X5109	21.07
8005K25N113V32	SPST	Off-None-On	Green	94C9115	10.97

CONTINUED

FULL SIZE EURO ROCKER SWITCHES (CONT.)

Full Size Euro, Illuminated

Mfg Part No.	Circuitry	Action	Lens Color	Stock No.	Price Each 1-99
8005K25N113V42	SPST	Off-None-On	Amber	04X5110	15.57
8005K35N113V22	SPST	None-Off-(On)	Red	04X5111	15.65
8005K35N113V32	SPST	None-Off-(On)	Green	04X5112	15.65
8005K35N113V42	SPST	None-Off-(On)	Amber	04X5113	15.65
8005K35N313V22	SPST	None-Off-(On)	Red	04X5114	14.30
8005K35N313V32	SPST	None-Off-(On)	Green	52K5635	12.67
8005K35N313V42	SPST	None-Off-(On)	Amber	94C9141	13.94
8005K37N113V22	SPST	None-Off-(On)	Red	04X5115	16.19
8005K37N113V32	SPST	None-Off-(On)	Green	04X5116	14.62
8005K37N113V42	SPST	None-Off-(On)	Amber	04X5117	14.62
8005K37N113V52	SPST	None-Off-(On)	No Lense	04X5118	16.19

(211602)

1600/2600 SERIES MINIATURE ROCKER SWITCHES

RoHS Compliant Available

- Slow-Make, Slow-Break Action
- Illuminated Switches Have Lamp Life of 5,000 Hours Minimum
- Mechanical Life: 50,000 Cycles
- Rated: 16A, 125VAC; 16A, 250VAC
- Panel Openings — **1600 Series**: 1.075″ x 0.483″ x 0.118″; **2600 Series**: 1.075″ x 0.876″ x 0.118″

1600 Series 2600 Series

Miniature snap-in AC rocker switches feature rectangular bezel in black gloss finish with black, white or lighted 2 face rocker lever. Illuminated models feature 125V neon lamps except **mfg. part nos. 1600R21E** and **2600A21E** which are 250V neon. For non-illuminated switches, **11E suffix** in mfg. part nos. designate black base and lever and **12E suffix** designates black base, white lever. **21E suffix** in mfg. part nos. designate white base, black lever. **-E suffix** in mfg. part nos. denotes 0.250″ (6.3mm) tabs "quick-connect terminations". (On) or (Off) position status indicates momentary action. UL recognized, CSA certified, ENEC 19 approved.

NON-ILLUMINATED SWITCHES

Mfg. Part No.	Action	Circuit	Stock No.	Price Each 1-49	50-99	100-249
160011E	On-None-Off	SPST	23F001	2.58	2.41	2.21
160411E	On-Off-On	SPDT	23F004	3.73	3.49	3.20
260011E	On-None-Off	DPST	23F032	3.00	2.83	2.64
2602-11E	On-None-On	DPDT	23F033	5.30	4.95	4.63
2606-11E	(On)-Off-(On)	DPDT	94F8150	6.00	5.65	5.27
2604-11E	On-Off-On	DPDT	23F034	4.69	4.39	4.11
2602-12E	On-None-On	DPDT	46F1839	4.43	4.15	3.88

ILLUMINATED SWITCHES
All switches feature On-None-Off action.

Mfg. Part No.	Lens Color	Circuit	Stock No.	Price Each 1-49	50-99	100-249
1600R11E	Red	SPST	44F1243	4.93	4.61	4.22
1600R21E	Red	SPST	46F1835	5.38	5.03	4.61
2600A11E	Amber	DPST	44F1250	6.40	6.10	5.38
2600A21E	Amber	DPST	95F4250	6.40	6.10	5.38
2600G11E	Green	DPST	44F1251	5.92	5.64	4.97
2600R11E	Red	DPST	44F1252	6.40	6.10	5.38

(4870)

1600H/2600H SERIES HIGH-INRUSH MINIATURE ROCKER SWITCHES

RoHS Compliant Available

- Rated: 22A, 125VAC; 16A, 250VAC; 10A, 14V(T)
- On-None-Off Lever Action
- Mechanical Life: 50,000 Cycles Minimum
- Panel Openings: Series 1600 1.079L x 0.486W x 0.118″D (27.40 x 12.34 x 2.99); Series 2600H (Rectangular Cutout): 1.079L x 0.880W x 0.118″D (27.40 x 22.35 x 2.99)

1600H 2600H

Switches are designed to handle high-inrush currents up to 100A peak inrush for 10 milliseconds at 125VAC for 10,000 cycles minimum. Available in illuminated and non-illuminated snap-in models. Illuminated models feature 125V neon lamps. "H" in type number indicates black gloss base and lever. "HM" in mfg. part no. indicates black matte base and lever. UL recognized, CSA certified and ENEC 19 approved.

➤CONTINUED➤

1600H/2600H SERIES HIGH-INRUSH MINIATURE ROCKER SWITCHES (CONT.)

NON-ILLUMINATED SWITCHES

Mfg. Part No.	Circuitry	Stock No.	Price Each 1-24	25-49	50-99
1600H11E	SPST	46F1854	2.51	2.36	2.12
1600HM11E	SPST	46F1855	3.07	2.87	2.64
2600H11E	DPST	46F1439	2.96	2.77	2.59
2600HM11E	DPST	46F1857	3.37	3.17	2.96
ILLUMINATED SWITCH WITH RED LIGHT & BLACK BASE					
2600HR11E	DPST	46F1858	5.53	5.20	4.66

(4871)

NEW GENERATION ROCKER SWITCHES

RoHS Compliant Available

- Ratings: 15A @ 125VAC, 10A @ 250VAC, 15A @ 28VDC
- Slow-Make/Slow-Break Contact Mechanism
- Mechanical Life: 250,000 Operations Min.
- Terminals: Standard 0.250″ Spade
- Silver-Plated Copper Alloy
- Dielectric: 1,000V_{RMS} Min
- Gang Mounting System
- Pad-Printed Legends on Lens Rocker and Bezel

Full-size rugged switches feature ergonomic design and are sealed to resist splashing and dust. ( ) in table denotes momentary contact. Circuits available: SPST, SPDT, DPST, and DPDT, maintained and momentary action. Switches have thermoplastic base and rocker. Units featured are black frame, rocker and paddle style. Illuminated switches listed have 2 14VDC incandescent lamps, except **mfg. part no. NGR25011**, which has one lamp. Standard rocker actuator is two face, matte black, and snaps on and off the switch. Fits in panel cutouts 1.734 x 0.867″. *Rockers, lenses and connectors must be ordered separately.* Other colors available.

NEW GENERATION ROCKER SWITCHES, ILLUMINATED

Mfg. Part No.	Action	Stock No.	Price Each 1-24	25-49	50-99
NGR25011BNAON	Off-None-On	16F8142	14.54	13.60	12.72
NGR25481BNAAN	On-None-On	16F8143	16.70	15.62	14.62
NGR25681BNAAN	On-Off-On	16F8141	17.45	16.32	15.27
NGR25881BNAAN	(On)-Off-(On)	16F8144	16.47	15.41	14.42
NGR15481BNAAN	On-None-On	94C6348	13.43	12.64	11.78
NGR15681BNAAN	On-Off-ON	94C6355	14.76	13.80	12.91
NGR15881BNAAN	(On)-Off-(On)	94C6363	13.79	12.98	12.10
NEW GENERATION ROCKER SWITCHES, NON-ILLUMINATED					
NGR20011BN00N	Off-None-On	16F8146	9.59	8.96	8.39
NGR20051BN00N	(On)-Off-(On)	16F8148	11.77	11.30	10.74
NGR15011BNA0N	Off-None-On	41T0224	11.28	10.15	9.74
NGR10011BN00N	Off-None-On	94C6308	7.26	6.79	6.35
NGR10051BN00N	(On)-Off-(On)	94C6317	8.64	8.08	7.56

NGR ROCKER ACTUATORS, BLACK

Mfg. Part No.	Description	Stock No.	Price Each 1-24	25-49	50-99
1D00000000000	No Lens	25C1398	1.34	1.21	1.05
2B00000000500	Lens Hole, Bottom	16F8140	1.18	1.06	0.92
2B00050000000	Lens Hole, Top	16F8139	1.25	1.12	0.97
2B00050000500	Lens Hole, Top & Bottom	16F8138	1.32	1.19	1.03

NGR SNAP-IN LENSES

Mfg. Part No.	Color	Stock No.	Price Each 1-24	25-49	50-99
28-5863	Green	16F8163	0.45	0.41	0.38
28-5863-2	Red	16F8162	0.40	0.37	0.34
28-5863-3	Amber	16F8164	0.49	0.44	0.41

NGR CONNECTOR

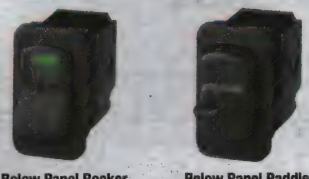
Mfg. Part No.	Stock No.	Price Each 1-24	25-49	50-99
28-5637-2	90B6942	1.19	1.11	1.08

(4989)

SVR SERIES SEALED VEHICLE ROCKER SWITCHES

RoHS Compliant Available

- Illuminated versions have a 14V Green LED
- 50K Operations at Full Load
- 12A @ 28VDC to 10mA @ 14VDC
- IP68 sealed: complete protection from dust and water immersion



Below Panel Rocker Below Panel Paddle

Below panel versions now come assembled with the actuators. Switches incorporate automotive styling and LED lighting in a 10-terminal design. Standard IP68 sealing on the front and back of the switch, including at the switch/connector interface. Snap-in lens rocker provides option for backlighting. Mounting hole size: 1.45 x 0.83 x 1.9″ depth behind including the connector. Other circuit configurations and LED combinations available.

➤CONTINUED➤

SVR SERIES SEALED VEHICLE ROCKER SWITCHES (CONT.)

ROCKER ACTUATOR

Mfg. Part No.	Circuitry	Action	Illuminated	Stock No.	Price Each 1-24
● SA4SKK4GXXGXXXX	DPDT	On-None-On	Yes	08J5555	18.80
● SARSXX1XXXXXXXX	DPDT	On-None-On	No	96H7185	15.35
PADDLE ACTUATOR					
● SFRSXX5XXXXXXXX	DPDT	(On)-Off-(On)	No	08J5559	17.04

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24	Price Each 25-49
● 25-13936	Connector	25C4470	1.36	1.24
● 17-22145	Panel Plug	25C4467	1.70	1.52
● 17-22146	Gang Mount System	25C4468	1.75	1.68

(68027)

EURO-LOOK ROCKER SWITCHES

RoHS Compliant Available

EATON

- Ratings: 15A at 125VAC
- Slow-Make/Slow-Break; Butt-Action
- Standard Brass 0.250″ Spade Terminals

Standard and full-size rugged rocker switches are snap-mount with matte finish and easy actuation. Designed for AC and low voltage DC applications. Featured units are sealed, with black mounting frame. Switches and actuators are black. Full and standard size switches featured have two lenses and a 14VDC bulb, except switch **mfg. part nos. 8005K23**, which has one lens and a 14VDC bulb; Thermoset base; thermoplastic rocker actuators. Dielectric: 1,000Vrms min. ( ) in table denotes momentary action. *Other color lens, contact, configuration and rocker versions available; go online or call.* Order lenses and connector separately for illuminated switches. UL recognized, CSA certified.

FULL SIZE NON-ILLUMINATED (1.734″ x 0.867″ CUTOUT)

Mfg. Part No.	Circuitry	Function	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99
● 8004K20N1V2	SPDT	On-Off-On	11M1833	9.33	8.73	8.17
● 8004K23N1V2	SPST	On-None-Off	11M1834	7.67	7.18	6.72
● 8004K32N1V2	SPDT	(On)-Off-(On)	11M1835	10.28	9.61	8.99
● 8004K43N1V2	DPST	On-None-Off	11M1837	9.97	9.32	8.72
● 8004K40N1V2	DPDT	On-Off-On	11M1836	10.62	10.00	9.32
● 8004K52N1V2	DPDT	(On)-Off-(On)	11M1838	11.95	11.17	10.46
FULL SIZE ILLUMINATED						
● 8005K23N313V52	SPST	Off-None-On	11M1839	11.54	10.57	9.81
● 8005K32N324V52	SPDT	(On)-Off-(On)	11M1840	14.68	12.73	11.70
STANDARD SIZE NON-ILLUMINATED (1.450″ x 0.830″ CUTOUT)						
● 8006K43N1V2	DPST	On-None-Off	11M1842	8.59	8.09	7.54
● 8006K40N1V2	DPDT	On-Off-On	11M1841	10.38	9.71	9.08
● 8006K52N1V2	DPDT	(On)-Off-(On)	11M1843	10.98	10.27	9.61
STANDARD SIZE ILLUMINATED						
● 8007K20N324V52	SPDT	On-Off-On	11M1844	12.11	11.38	10.98

FULL SIZE LENSES

Mfg. Part No.	Description	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99
● 28-3425	Green	16F8149	0.47	0.43	0.40
● 28-3425-2	Amber	16F8150	0.48	0.44	0.40
● 28-3425-3	Red	16F8151	0.45	0.41	0.38
STANDARD SIZE LENSES					
● 28-5415	Green	16F8159	0.32	0.29	0.26
● 28-5415-2	Amber	16F8160	0.46	0.41	0.38
● 28-5415-3	Red	16F8161	0.44	0.40	0.37

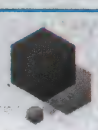
CONNECTOR

Mfg. Part No.	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99
● 28-3426	88F2464	1.08	1.02	0.97

(4990)

STANDARD & HIGH INRUSH SWITCHES

RoHS Compliant Available



arcolectric
a brand of Elektron Technology

HIGH INRUSH

Mfg. Part No.	Contacts	Switch Function	Color	Stock No.	Price Each 1-24
● C1300AABB	SPST	On-Off	Black	94T5528	2.66
● C1350AABB	DPST	On-Off	Black	94T5529	4.54
● C1350AABB-602AW	DPST	On-Off	Black	94T5530	3.63
● C1350ABBB-602AW	DPST	On-Off	Black	94T5531	4.54
● C1350ALBB-602AW	DPST	On-Off	Black	94T5532	4.54

➤CONTINUED➤

STANDARD & HIGH INRUSH SWITCHES (CONT.)

Mfg. Part No.	Contacts	Switch Function	Color	Stock No.	Price Each 1-24
● C1350ARBB-602AW	DPST	On-Off	Black	94T5533	4.54
● C1353AABR2	DPST	On-Off	Red	94T5534	9.79
STANDARD					
● C1250APBB-085W	DPST	On-Off	Black	94T5527	4.34
● C1500WABB	SPST	On-Off	Black	94T5535	3.72
● C1510AABB	SPDT	On-On	Black	94T5536	3.99
● C1520AABB	SPDT	On-Off-On	Black	94T5537	4.29
● C1522AABB	SPDT	(On)-Off-(On)	Black	94T5538	6.62
● C1522ARBB	SPDT	(On)-Off-(On)	Black	94T5539	6.54
● C1560AABB	DPDT	On-On	Black	94T5540	7.53
● C1572AABB	DPDT	(On)-Off-(On)	Black	94T5541	10.63

(208203)

RVW SERIES 20 AMP FULL SIZE ROCKER SWITCHES

RoHS Compliant Available

E•SWITCH®

Features
- Heavy Duty Ratings with cULus Approval
- Full Size Rocker Switch
- Internal Dust and Water Protection to IP54
- Glossy Finish Option

Specifications
- Contact rating: 20A 125VAC
- Operating temperature: -20°C to 55°C
- Electrical life: 6,000 Cycles
- Contact resistance: 50mohm max.
- Insulation resistance: 800Mohm min. at 500VAC
- Dielectric strength: 1,500VAC for 1 minute
- Ingress protection: IP54 standard

Mfg. Part No.	Contacts	Function	Color/ Marking	Stock No.	Price Each 1-9
● RVW4GD1100	DPST	On-On	Black/None	24R3896	8.43
● RVW42D1123	DPST	Off-On	Black/ON/OFF Vert.	24R3902	9.01

(194838)

WB2 SERIES 20 AMP POWER ROCKER SWITCHES

RoHS Compliant Available

E•SWITCH®

Features
- High Ratings with UL and TUV Approvals
- Industry Standard 22mm x 30mm Cutout
- Internal Dust and Water Protection to IP55

Specifications
- Contact rating: 20A 125VAC [cULus]
- Operating temperature: -20°C to 65°C Mmn.
- Contact resistance: 50mohm max.
- Insulation resistance: 500Mohm min. at 500VDC
- Dielectric strength: 1,500VAC for 1 minute
- Ingress protection: IP55 Standard

TÜV Rheinland

Mfg. Part No.	Contacts	Function	Color/ Marking	Stock No.	Price Each
● WB242D1100	DPST	Off-On	Black/None	24R4230	4.09
● WB242D1121	DPST	Off-On	Black/I/O Vert.	24R4232	5.36
● WB246D1929	DPDT	On-Off-On	Red/I/O/II Horiz.	24R4237	6.08

(194836)

RBW2 SERIES ROCKER SWITCHES

RoHS Compliant Available

E•SWITCH®

- Electrical Rating: 16(16)A 125VAC 5E4 T85 [cURus]
- 1/3HP 125VAC IP66 [cURus]
- 10(10)A 250VAC 5E4 T85 [VDE]
- Electrical Life: 50,000 Cylces
- Mechanical Life: 50,000 Cycles
- Contact Resistance: <30mΩ Max.
- Insulation Resistance: 500Mohm Min. at 500VDC
- Dielectric Strength: 1000VAC for 1 Minute
- Operating Temperature: -20°C to 85°C Min.
- Ingress Protection: IP66
- Panel Cutout: 22mm x 30mm

NON-ILLUMINATION SWITCHES

Mfg. Part No.	Contacts	Switch Operation	Actuator Color	Stock No.	Price Each 1-9
● RBW2ABLKBLKEF0	DPST	Off-On	Black	41T5380	11.70
● RBW2ABLKBLKFF0	DPST	Off-On	Black	41T5381	10.64
● RBW2ABLKREDIF0	DPST	Off-On	Red	41T5383	10.51
● RBW2BBLKBLKEF0	DPDT	On-On	Black	41T5385	12.68
● RBW2BBLKREDEF0	DPDT	On-On	Red	41T5386	13.42

➤CONTINUED➤

RBW2 SERIES ROCKER SWITCHES (CONT.)

ILLUMINATED SWITCHES

Mfg. Part No.	Contacts	Switch Operation	Actuator Color	Stock No.	Price Each 1-9
RBW2ABLKGILEF1	DPST	Off-On	Green	41T5382	11.90
RBW2ABLKRILEF1	DPST	Off-On	Red	41T5384	11.59

(196352)

AML24/34/36 SERIES POWER ROCKER SWITCHES

RoHS Compliant Available

Honeywell
Sensing and Control

SELECTION, SPEED, SERVICE.
All Found Here.

Rectangular rocker units with black bezels. The **AML24 series** is 0.110″ x 0.020″ solder or QC terminals. The **AML34/36 series** switch is 0.187″ x 0.020″ solder or QC terminals. Illuminated versions that do not include lamp available; *go online or call.* UL recognized, CSA certified. *Order rockers operators separately below.*

NON-ILLUMINATED

Mfg. Part No.	Circuitry	No. of Positions	Action	Contact Material	Termination	Stock No.	Price Each 1-9	Price Each 10-49
AML24EBA2AA01	SPDT	2	On-On		Solder/Q.C	92B5294	19.94	18.32
AML24EBA2BA01	SPDT	2	On-On		Solder/Q.C	91B3408	23.64	17.69
AML34EBA4AC01	DPST	2	On-Off		Solder/Q.C	23F4357	29.94	27.49
AML24EBA2AC01	DPDT	2	On-On		Solder/Q.C	90B2597	44.99	33.68
AML24EBA2AC05	DPDT	3	(On)-Off-(On)		Solder/Q.C	97B0740	24.63	22.61
AML24EBA2AC04	DPDT	3	On-On-On		Solder/Q.C	88F5856	34.41	23.18

ILLUMINATED-SILVER CONTACTS

Mfg. Part No.	Action	Circuitry	Lamp Sockets	Features	Stock No.	Price Each 1-9
AML24GBA2CA04	On-On-On	DPDT	2	No Lamp Installed	90B8996	68.50
AML24GBE2DA01*	On-On	DPDT	2	28V Lamp	85C6006	91.02
AML34FBA4AC01	On-On	DPST	1	No Lamp Installed	23F4358	52.67
AML36FBB4AC01	On-Off	DPST	1	125VAC Lamp	23F4359	58.89
AML36FBB7AC01	On-Off	DPST	1	125VAC Lamp	23F4429	63.20
AML36FBC7AC01	On-Off	DPST	1	125VAC Lamp	38B3084	62.98

*Gold contact material

ROCKER OPERATORS

Mfg. Part No.	For Use With	Color	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99
AML54-F10W	AML24/34	White	23F4461	2.27	2.07	1.93
AML54-F10Y	AML24/34	Yellow	50F5206	4.41	4.06	3.75
AML54-F10R	AML24/34	Red	23F4458	3.73	2.35	2.16
AML54-F10K	AML24/34	Black	23F4457	6.61	4.12	3.86
AML56-N10RR	AML36	Red	98B6453	11.80	8.15	7.70
AML56-N10RK	AML36	Black	23F4459	12.47	8.62	8.14

(68326)

MINIATURE ROCKER SWITCHES

RoHS Compliant Available

multicomp

Features:
- Compact range of rocker switches
- Fit standard panel cut-out

Specifications:
- Contact rating: 4A at 250Vac
- Insulation Resistance :>50MR
- Contact Resistance : 20mR
- Dielectric Strength : 3.5KV ac
- Inrush Current :100A
- Operating Temperature : 0°C to +85°C
- Mechanical Life : >100000 ops

NON-ILLUMINATED

Mfg. Part No.	Rating	Stock No.	Price Each 1-249
MC36328-001-01	SPST	38K4976	1.61
MC36328-011-01	SPDT	97K4688	1.82
MC3813-011-01	DPST	97K4691	2.68
MC3813-011-021	DPST I/O marking	97K4692	2.85

ILLUMINATED

MC3811-091-02	DPST Red	97K4689	3.50
MC3811-091-05	DPST Green	97K4690	3.38

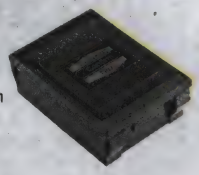
(116495)

OLED SMARTSWITCH™ ROCKER SWITCHES

NEW

NKK SWITCHES

Features:
- White monochrome OLED featuring sharp contrast and high resolution with 96 x 64 pixels
- Wide viewing angle of 180° and large 0.92" display with exceptional contrast
- Organic LED technology in display rocker (patent pending)
- Multifunction programmable device: select with rocker, push for activation
- All-in-one solution: replaces multiple switches and displays with one device in a small package
- Easy navigation through structured menus, both forward and reverse and up and down
- Waterprotected and dust tight; conforms to IP64 of IEC60529 Standards on panel surface
- Displays up to 8 lines with 16 characters 5 x 7 each, or 5 lines with 12 characters 7 x 10 each
- Graphics and animations
- Long life OLED with 52,000 hours at 30% illumination
- Panel mount with easy snap-in installation
- Short 14.6mm (.575") behind-panel depth for compact spaces
- Commands and data supplied via serial communications protocol (SPI)
- Stylish black housing design with matte finish complements any application
- High reliability and long mechanical and electrical life of one million actuations minimum



The **OLED Rocker** is a SP3T Switch with (ON) (ON) (ON) action, and Normally OFF configuration. The IS-DEV Kit-8 is a complete kit for demonstration with pre-programmed options to be operated with customized graphics.

Mnf. Part No.	Viewing Area	Display Mode	Interface	Stock No.	Price Each
IS18WWC1W	13.22mm x 19.16mm	Passive matrix	SPI	10X0016	71.81

DEVELOPMENT KITS

Mnf. Part No.	Description	Stock No.	Price Each
IS-DEV KIT-8	OLED Pushbutton Development Kit	09X9983	230.58

(211893)

GW SERIES ULTRA THIN FULLY ILLUMINATED ROCKER SWITCHES

RoHS Compliant Available

NKK SWITCHES

NEW

Specifications:
- PCB Mount
- Fully Illuminated Actuator
- Contact Resistance: 80 milliohms Max.
- Dielectric Strength: 500VAC for 1 minute
- Operating Temperature: -25°C to +55°C
- Terminal Spacing: .100″ x .100″
- 0.4VA Logic Level @ 28V AC/DC max

Mfg. Part No.	Poles	Circuit	Lens Color	PC Terminals	Stock No.	Price Each 1-24
GW12LJPF	SPDT	On-None-On	Green	Straight	09X9616	5.41
GW12LJVF	SPDT	On-None-On	Green	Vertical	09X9620	5.52
GW12LJPCF	SPDT	On-None-On	Red/Green	Straight	09X9614	6.50
GW12LJVCF	SPDT	On-None-On	Red/Green	Vertical	09X9618	6.61

(211592)

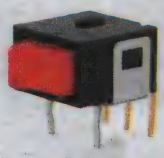
GW SERIES ULTRA-THIN ROCKER SWITCHES

RoHS Compliant Available

NEW

NKK SWITCHES

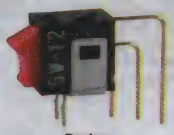
Paddle
Straight PC Terminals



Rocker
Right Angle PC Terminals

Rocker
Straight PC Terminals

Specifications:
- PCB Mount
- Contact Resistance: 80 milliohms max.
- Dielectric Strength: 500V AC min for 1 minute min
- Operating Temperature: -30°C to +85°C
- Terminal Spacing: .100″ x .100″
- Logic Level: 0.4VA max @ 28V AC/DC ma



Rocker
Vertical PC Terminals

Mfg. Part No.	Poles	Circuit	Actuator	Actuator Color	PC Terminals	Stock No.	Price Each 1-24
GW12LCP	SPDT	On-None-On	Paddle	Red	Straight	09X9604	2.79
GW12LCV	SPDT	On-None-On	Paddle	Red	Vertical	09X9605	2.89
GW12LHV	SPDT	On-None-On	Paddle	Gray	Vertical	09X9608	2.89
GW12RBP	SPDT	On-None-On	Rocker	White	Straight	09X9622	2.79
GW12RCH	SPDT	On-None-On	Rocker	Red	Right Angle	09X9624	2.89

CONTINUED

GW SERIES ULTRA-THIN ROCKER SWITCHES (CONT.)

Mfg. Part No.	Poles	Circuit	Actuator	Actuator Color	PC Terminals	Stock No.	Price Each 1-24
● GW12RCP	SPDT	On-None-On	Rocker	Red	Straight	09X9625	2.79
● GW12RCV	SPDT	On-None-On	Rocker	Red	Vertical	09X9626	2.89
● GW12RHH	SPDT	On-None-On	Rocker	Gray	Right Angle	09X9627	2.89
● GW12RHP	SPDT	On-None-On	Rocker	Gray	Straight	09X9628	2.79
● GW22LBP	DPDT	On-None-On	Paddle	White	Straight	09X9631	3.35
● GW22LCH	DPDT	On-None-On	Paddle	Red	Right Angle	09X9633	3.45
● GW22LCP	DPDT	On-None-On	Paddle	Red	Straight	09X9634	3.35
● GW22LHP	DPDT	On-None-On	Paddle	Gray	Straight	09X9637	3.35
● GW22RBP	DPDT	On-None-On	Rocker	White	Straight	09X9640	3.35
● GW22RCP	DPDT	On-None-On	Rocker	Red	Straight	09X9643	3.35
● GW22RHP	DPDT	On-None-On	Rocker	Gray	Straight	09X9646	3.35

(211590)

A SERIES ROCKER SWITCHES

RoHS Compliant Available

NEW

NKK SWITCHES

Specifications:
- Contact Resistance: 50 milliohms Max.
- Dielectric Strength: 500VAC for 1 minute
- Operating Temperature: -30°C to +85°C
- Terminal Spacing: .100″ x .100″

Mfg. Part No.	Circuitry	Circuit	PC Terminals	Rocker Width	Stock No.	Price Each 1-24
● A12K1V1-DA	SPDT	On-None-On	Vertical	6.35mm	09X8095	5.92
● A13KW-CA	SPDT	On-Off-On	Straight	6.6mm	09X8141	5.52

(211581)

JWL SERIES ROCKER SWITCHES

RoHS Compliant Available

NEW

NKK SWITCHES

Specifications:
- Contact Rating: 16A @ 125 / 250VAC
- Contact Resistance: 20 milliohms Max.
- Dielectric Strength: 2000VAC for 1 minute
- Operating Temperature: -25°C to +70°C

16A RATED ROCKER SWITCHES

Mfg. Part No.	Circuitry	Actuator / Cap Color	Stock No.	Price Each 1-24
● JWL11RA1A	SPST	Black	10X0315	7.87
● JWL11RA2A	SPST	Black	10X0318	7.87
● JWL21BA2A-A	DPST	Black	10X0344	11.41
● JWL21RAA	DPST	Black	10X0350	8.84
● JWL21RA1A	DPST	Black	10X0353	9.73
● JWL21RA2A	DPST	Black	10X0356	9.73
● JWL21RA2A/UCV	DPST	Black	10X0358	9.73
● JWL21RC1A	DPST	Red	10X0365	9.73
● JWL21RC2A	DPST	Red	10X0368	9.73
● JWL21RC2A/UCV	DPST	Red	10X0370	9.73
● JWL22RAA	DPDT	Black	10X0375	11.72

(211562)

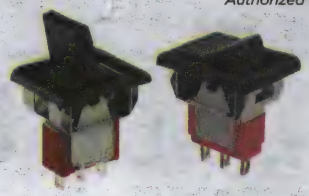
ALCOSWITCH GEMINI A SERIES ROCKER/PADDLE SWITCHES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Contact rating: gold 0.04VA at 20VDC; silver 2A at 250VAC, 5A at 125VAC or 28 VDC
- Epoxy sealed terminals
- Dielectric strength: 1,000Vrms
- Contact resistance: 30mΩ. –30°C to +85°C
- Hardware supplied with toggle models includes 2 hex nuts, 1 lockwasher, 1 locking ring
- Types with **Q suffix** are UL recognized, CSA certified
- Wire lug terminals, silver contacts



ROCKER ACTUATOR

Mfr. Part No.	Circuitry	Action	Stock No.	Price Each 1-9	10-24	25-49
● A201J51ZQ0004	DPST	On-On	76K0637	5.11	4.99	4.75
● A105J51ZQ0004	SPST	(On)-Off-(On)	84K8093	4.51	4.10	3.77
● A203J51ZQ0004	DPDT	On-Off-On	94M5031	5.42	5.16	4.91
● A101J1AQ004	SPST	On-None-On	67R6629	3.54	3.23	3.22
● A101J1AV2Q004	SPST	On-None-On	67R6630	3.29	2.84	2.60
● A101J1V3Q004	SPST	On-None-On	69R7583	3.25	2.96	2.71
● A103J1ZQ004	SPST	On-Off-On	69R7584	5.37	4.88	4.47

➤ CONTINUED ➤

ALCOSWITCH GEMINI A SERIES ROCKER/PADDLE SWITCHES (CONT.)

Mfr. Part No.	Circuitry	Action	Stock No.	Price Each 1-9	10-24	25-49
● A103J51ZQ0004	SPST	On-Off-On	69R7585	5.15	4.68	4.30
● A108J51ZQ0004	SPST	On-(On)	69R7586	4.43	4.02	3.70
● A201J1AQ004	DPST	On-None-On	69R7587	4.08	3.71	3.41
● A201J1AV2Q004	DPST	On-None-On	69R7588	3.51	3.19	2.93
● A205J51ZQ0004	DPST	(On)-Off-(On)	69R7590	5.50	4.99	4.58
● A207J51ZQ0004	DPST	On-Off-(On)	88M3394	4.90	4.46	4.08
PADDLE ACTUATOR						
● A101J61ZQ0004	SPST	On-None-On	67R6631	4.09	3.71	3.40
● A105J61ZQ0004	SPDT	(On)-Off-(On)	73K4129	5.18	4.71	4.33
● A201J61ZQ0004	DPST	On-None-On	69R7589	3.82	3.47	3.18

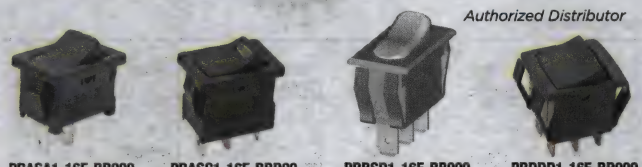
(87065)

ALCOSWITCH PRA, PRB, PRD SERIES MINIATURE POWER ROCKER SWITCHES

RoHS Compliant Available

TE connectivity

Authorized Distributor



PRASA1-16F-BB000 PRASC1-16F-BBR00 PRBSD1-16F-BB000 PRDDD1-16F-BR000

Panel cutout size: A = .514″ x .754″ (13mm x 19.2mm). Terminal type: FASTON™ Tab. Frame and rocker color: black. Prefix **PR ″X″ S** in Alcoswitch mfg. part no. denotes single pole, prefix **PR ″X″ D** in Alcoswitch mfg. part no. denotes double pole.

Mfg. Part No.	Switch Functions	Panel Cutout Size	Contact Rating (A @ 125VAC)	Stock No.	Price Each 1-9
● PRASA1-16F-BB000	On-Off; Opaque, Single-Color Rocker Button	A	16	89C8962	1.20
● PRASB2-16F-BBR00	On-Off; Opaque, w/Lamp Window, Lamp-Illuminated Rocker Button	A	16	89C8963	1.81
● PRASD1-16F-BB000	On-On; Opaque, Single-Color Rocker Button	A	16	89C8964	1.63
● PRASD3-16F-BB000	On-Off-On; Opaque, Single-Color Rocker Button	A	16	89C8965	1.67
● PRASC1-16F-BBR00	On-Off; Opaque, w/LED Window, LED-Illuminated Rocker Button	A	16	89C8966	2.12
● PRBSA1-16F-BB000	On-Off; Opaque, Single-Color Rocker Button	B	16	89C8970	1.40
● PRBSB1-16F-BR000	On-Off; Transparent, Lamp-illuminated Rocker Button	B	16	85C2087	3.39
● PRBSA1-16F-BB0BW	On-Off; Transparent, Rocker Button	B	16	09H1710	1.80
● PRDDA1-16F-BB000	On-Off; Opaque, Single-Color Rocker Button	D	16	89C8973	3.28
● PRDDD1-16F-BB000	On-On; Opaque, Single-Color Rocker Button	D	16	89C8974	3.87
● PRDDD3-16F-BB000	On-Off-On; Opaque, Single-Color Rocker Button	D	16	89C8975	4.04

(72367)

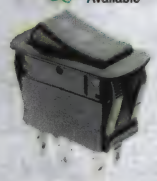
ALCOSWITCH PRC SERIES POWER ROCKER SWITCHES

RoHS Compliant Available

TE connectivity

Authorized Distributor

Features:
- Designed for snap in panel mounting
- 21.2x36.6mm panel cut-out
- Sealed to IP66 standards
- Various rocker markings standard
- Ideal for us in industrial machinery, vacuum cleaners, HVAC equipment, etc



Specifications:
- Current rating: 20A at 125VAC
- Contact resistance: 50mΩ
- Mechanical life: 1000,000 operations min
- Actuating force: 400 to 2900g
- On = Maintained action

ILLUMINATED

Mfg. Part No.	Current Rating (A)	Circuitry	Function	Stock No.	Price Each 1-24	25-49
● PRCSA1-20F-BB0BW	20	SPST	On-Off	11H7240	3.61	3.36
● PRCSD1-20F-BB0DW	20	SPDT	...	11H7258	5.63	5.09
● PRCDA1-20F-BB0BW	20	DPST	On-Off	11H7267	4.96	4.49
● PRCDD1-20F-BB0EW	20	DPDT	On-On	11H7250	9.86	9.03

(103039)

TRD SERIES ROCKER SWITCHES

RoHS Compliant Available

TE connectivity

Authorized Distributor

Panel mount rocker uniquely fits in 15/32" round hole. Contact rating: gold 0.4VA at 20VDC, silver 3A at 125VAC or 28VDC. Contact timing: break-before-make. Dielectric strength: 500Vrms at sea level. Operating temp.: -20°C to +80°C. Case material: thermoplastic.

GOLD CONTACTS—0.4VA at 20VDC

Mfg. Part No.	Circuitry	Action	Illumination	Stock No.	Price Each 1-24	Price Each 25-49
TRD11D10WL	SPDT	On-None-On	Non Illuminated	94F9972	8.71	7.88
TRD11H10WL	SPDT	On-Off-(On)	Non Illuminated	92F2905	16.72	14.96
TRD21N10WL	DPDT	On-None-On	Non Illuminated	88F3747	16.32	15.24
SILVER CONTACTS—3A at 125VAC						
TRD13D10WL04	SPDT	On-None-On	Non Illuminated	16M2494	8.18	7.73
TRD13D10WLLR204	SPDT	On-None-On	Illuminated	16M3846	12.56	10.99
TRD23N10WL04	DPDT	On-None-On	Non Illuminated	16M2495	11.84	10.94

(4704)

C4, C5 and C7 SERIES NON-SHORTING ROTARY SWITCHES

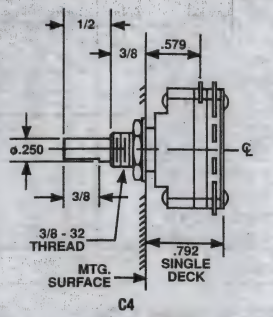
RoHS Compliant Available

ELECTROSWITCH UNIT OF ELECTRO SWITCH CORP.

C4 Series;
- Current and Voltage Ratings: 0.5A @28VDC; 0.3A @ 125VAC
- Current Carrying Capacity: 15A
- IP67 Rated Switches are Available; *Go online or call*

C5 Series
- Current and Voltage Ratings: 1A @28VDC; 01A @ 125VAC
- Current Carrying Capacity: 5A

C7 Series
- Current and Voltage Ratings: 1.0A @28VDC; 0.5A @ 125VAC
- Current Carrying Capacity: 25A
- Dielectric Strength: 1,000VAC Between Current Carrying Parts and Ground



C4

The **C4 series** rotary switches fully enclosed design helps keep dirt and moisture out of the contact area while locking in lifetime lubricants. Terminals and contacts: brass with silver plating. Index life: 25,000 cycles minimum. Insulation: Diallyl phthalate. Index angles: standard 30°. *Order knob separately.* Mounting nut and lockwasher are shipped fully assembled. *Shorting type switches are also available; go online or call.*

Mfg. Part No.	No. of Poles	No. of Positions	Stock No.	Price Each 1-14	Price Each 15-24
C4D0112N-A	1	12	06M4591	19.81	19.21
C4D0206N-A	2	6	06M4593	20.05	19.45
C4D0304N-A	3	4	06M4595	20.68	20.07
C4D0212N-A	2	12	06M4594	26.66	25.87
C4D0406N-A	4	6	06M4597	27.22	26.41
C4D0604N-A	6	4	06M4599	28.57	27.72
C4D0312N-A	3	12	06M4596	43.28	42.00
C4D0606N-A	6	6	06M4600	55.32	53.67
C4D0904N-A	9	4	06M4602	60.97	59.15
C4D0412N-A	4	12	06M4598	40.73	39.52
C4D0806N-A	8	6	06M4601	55.44	53.78
C4D1204N-A	12	4	92F2760	71.94	69.79

C5 series non-shorting rotary switches have an economical and lightweight design. Features include 30°indexing up to 12 positions, solder lug terminals, fixed stops, and both internal and external seals for washability. For convenience, mounting nut and washer are shipped assembled. Insulation: polyester. Index life: 25,000 cycles minimum. Terminals and contacts: brass with silver plating. Index: molded live spring detent. *Order knob separately; go online or call.*

Mfg. Part No.	No. of Poles	No. of Positions	Stock No.	Price Each 1-14	Price Each 15-24
C5P0206N-A	2	6	06M4604	9.50	9.21
C5P0304N-A	3	4	06M4605	10.34	10.03
C5P0403N-A	4	2	06M4606	10.51	10.19
C5P0112N-A	1	12	06M4603	8.63	8.37

The **C7 series** provides a fully enclosed, modular design which enables switching up to 24 positions. All parts utilizes non-corrosive materials. Terminals and contacts: brass with silver plating. Insulation: Diallyl phthalate. Index life: 25,000 cycles minimum. Index angles: 15°. Mounting nut and lockwashers are shipped assembled.

Mfg. Part No.	No. of Poles	No. of Positions	Stock No.	Price Each 1-14	Price Each 15-24
C7D0123N	1	23	06M4607	46.35	44.96
C7D0323N	3	23	06M4608	121.73	118.09

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24	Price Each 25-49
P2300	Black Pointer Knob for 0.250" Shafts	06M4897	2.20	2.06

(5050)

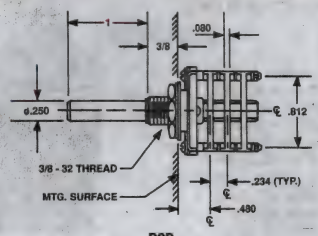
D2D AND D4 SERIES NON-SHORTING ROTARY SWITCHES

RoHS Compliant Available

ELECTROSWITCH UNIT OF ELECTRO SWITCH CORP.

D2D Series
- Current and voltage rating: 0.55A at 28VDC; 0.25A at 115VAC
- Current carrying capacity: 7A

D4 Series:
- Current and voltage rating: 1.5A at 28VDC; 0.5A at 115VAC
- Current carrying capacity: 9A



D2D

The **D2 series** switches are used where space is at a premium. Dual-ball side thrust index offers exceptional torque control. All parts utilize non-corrosive materials. Clips and rotors: brass with silver plating. Insulation: Diallyl phthalate, glass or ceramic. Index life: 25,000 cycles minimum. Index angles: +30°. *Order pointer knob separately below.*

Mfg. Part No.	Poles	Positions	Stock No.	Price Each 1-14	Price Each 15-24
D2D0112N	1	2-12	06M4618	29.76	28.87
D2D0206N	2	2-6	06M4619	41.33	40.10
D2D0212N	2	2-12	06M4620	50.26	48.76
D2D0305N	3	2-5	06M4621	51.80	50.26
D2D0312N	3	2-12	06M4622	90.29	87.59
D2D0406N	4	2-6	06M4623	71.51	69.38
D2D0605N	6	2-5	06M4624	68.35	66.31

D4 series switch is economical and versatile. Offers the quality feel of a ball and spring index mechanism and is available with up to 12 positions and 30° or 60° indexing. All parts are made of non-corrosive materials. Clips and rotors: brass with silver plating. Insulation: glass epoxy, ceramic or diallyl phthalate. Index: single-ball, hill and valley. Index life: 25,000 cycles minimum. *Order knob separately below.*

D4G SERIES GLASS EPOXY INSULATED SWITCHES

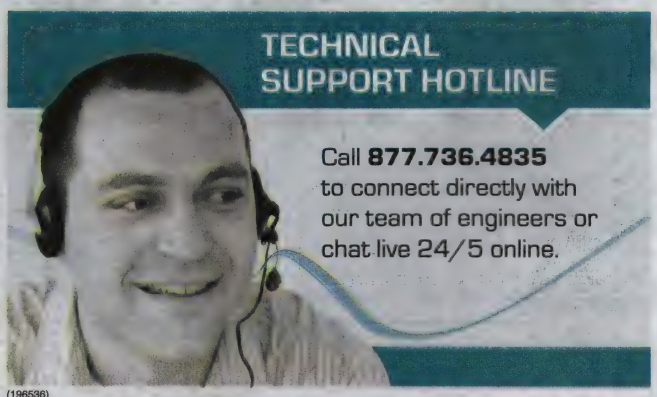
**60° indexing

Shorting Mfg. Part No.	Shorting Stock No.	Non-Shorting Mfg. Part No.	Non-Shorting Stock No.	Poles	Sections	Positions	Price Each 1-14	Price Each 15-24
D4G0111S	06M4658	D4G0111N	06M4657	1	1	2-11	33.82	32.81
D4G0205S	06M4660	D4G0205N	06M4659	2	1	2-5	22.84	22.16
D4G0211S	06M4663	D4G0211N	06M4662	2	2	2-11	33.13	32.15
...	...	D4G0303N	06M4664	3	1	2-3	33.82	32.81
D4G0311S	06M4667	D4G0311N	06M4666	3	3	2-11	43.88	42.57
...	...	D4G0405N	06M4668	4	2	2-5	33.47	32.49
...	...	D4G0411N	06M4670	4	4	2-11	87.40	84.78
...	...	D4G0511N	06M4672	5	5	2-11	94.72	91.89
...	...	D4G0603N	06M4673	6	2	2-3	33.48	32.49
...	...	D4G0605N	06M4674	6	3	2-5	71.09	68.97
...	...	D4G0611N	06M4675	6	6	2-11	142.44	138.19

D4C SERIES CERAMIC INSULATED SWITCHES

Shorting Mfg. Part No.	Shorting Stock No.	Non Shorting Mfg. Part No.	Non Shorting Stock No.	Poles	Sections	Positions	Price Each 1-14	Price Each 15-24
D4C0112S	06M4636	D4C0112N	06M4635	1	1	2-12	58.66	56.91
D4C0206S	06M4638	D4C0206N	22F603	2	1	2-6	38.82	37.64
...	...	D4C0212N	06M4639	2	2	2-12	83.14	80.66
...	...	D4C0305N	06M4641	3	1	2-5	65.39	63.44
...	...	D4C0312N	06M4643	3	3	2-12	136.89	132.80
...	...	D4C0412N	06M4647	4	4	2-12	186.28	180.72
...	...	D4C0503N	06M4649	5	1	2-3	53.08	51.51
...	...	D4C0605N	06M4651	6	2	2-5	110.22	106.93
...	...	D4C0606N	06M4652	6	3	2-6	151.22	146.70
...	...	D4C0612N	06M4653	6	6	2-12	272.52	264.38

(5070)



(196536)

SERIES 71 ¼-AMP, 0.5-0.75″ DIAMETER MULTI-DECK ROTARY SWITCHES

RoHS Compliant Available

Grayhill

- Multi-Deck, Single Shaft Adjustable Switches
- Make/Break: 250mA, 115VAC or 30VDC Resisting 20,000 Cycles
- Insulation Resistance: 1,000 Megohms Minimum
- Voltage Breakdown: 500VAC Minimum

71AD36 Solder Lug Terminals

71ADF36 PC Terminals

Meet moisture, shock, salt spray, explosion and stop strength requirements of MIL-S-3786. **71AD** are standard style with solder lug terminals and 0.125″ (3.18) diameter shaft; **71BD** same but have 0.250″ (6.35) diameter shaft. **71ADF** are PC mount with 0.125″ (3.18) diameter shaft; **71BDF** same but have 0.250″ (6.35) diameter shaft. Behind-panel depth: 1-deck, 0.75″ (19.05); 2-deck, 1″ (25.4).

SOLDER LUG TERMINALS

Mfg. Part No.	Max. Positions	Poles	Decks	Angle of Throw	Stock No.	Price Each 1-14	Price Each 15-24
● 71AD36-01-2-AJN	5	2	1	36	14M6833	20.06	18.90
● 71BD36-01-2-AJN	5	2	1	36	14M6848	20.81	19.61
● 71AD36-02-2-AJN	5	2	2	36	14M6835	26.56	25.03
● 71BD36-02-2-AJN	5	2	2	36	17M8462	27.62	26.03
● 71AD30-01-2-AJN	6	2	1	30	16M3421	20.53	19.35
● 71BD30-01-2-AJN	6	2	1	30	14M6843	21.19	19.97
● 71AD30-02-2-AJN	6	2	2	30	14M6831	27.62	26.03
● 71BD30-02-2-AJN	6	2	2	30	14M6845	27.62	26.03
● 71AD36-01-1-AJN	10	1	1	36	14M6832	20.29	19.12
● 71BD36-01-1-AJN	10	1	1	36	14M6847	20.03	18.88
● 71AD36-02-1-AJN	10	1	2	36	14M6834	26.00	24.51
● 71BD36-02-1-AJN	10	1	2	36	14M6849	26.00	24.51
● 71AD30-01-1-AJN	12	1	1	30	14M6829	20.28	19.11
● 71BD30-01-1-AJN	12	1	1	30	14M6842	20.40	19.23
● 71AD30-02-1-AJN	12	1	2	30	14M6830	26.00	24.51
● 71BD30-02-1-AJN	12	1	2	30	14M6844	25.75	24.28
PRINTED CIRCUIT TERMINALS							
● 71BDF36-02-2-AJN	5	2	2	36	16M3422	30.48	28.73
● 71ADF30-01-2-AJN	6	2	1	30	57F3765	22.96	21.65
● 71BDF30-01-2-AJN	6	2	1	30	14M6837	30.77	29.00
● 71ADF30-02-2-AJN	6	2	2	30	57F3767	31.39	29.59
● 71BDF36-02-1-AJN	10	1	2	36	14M6841	28.95	27.29
● 71BDF30-02-1-AJN	12	1	2	30	14M6838	28.95	27.29
● 71ADF30-01-1-AJN	12	1	1	30	57F3764	21.10	19.88
● 71BDF30-01-1-AJN	12	1	1	30	14M6836	22.16	20.87
● 71ADF30-02-1-AJN	12	1	2	30	14M6827	30.11	28.38

(5058)

SERIES 19 SINGLE DECK 15A ROTARY SWITCHES

RoHS Compliant Available

Grayhill

- Single-Pole, Single-Deck Units
- 30° Indexing
- Contacts are Non-Shorting
- Contact Resistance: 10 Milliohms at 2VDC and 100mA
- Insulation Resistance: 100,000 Megohms
- Voltage Breakdown: 2500VAC

¼″ dia. shaft. Available in solder lug terminal with 0.125″ (3.18) wire hole or Faston® terminal with 0.080″ (2.03) wire hole. 15 amps, 120VAC, noninductive load. UL recognized.

Faston® Terminals

Solder Terminals

SOLDER TERMINALS

Mfg. Part No.	No. of Poles	No. of Decks	No. of Taps	Stock No.	Price Each 1-14	Price Each 15-24
● 19001-03UL	1	1	3	14M6633	41.75	39.35
● 19001-04UL	1	1	4	14M6634	43.87	41.36
● 19001-05UL	1	1	5	14M6635	56.21	52.97
● 19001-06UL	1	1	6	14M6636	47.46	44.73
● 19001-07UL	1	1	7	14M6637	61.08	57.57
● 19001-08UL	1	1	8	14M6638	63.73	60.07
● 19001-10UL	1	1	10	14M6639	68.87	64.91
● 19001-11UL	1	1	11	14M6640	70.70	66.63
FASTON® TERMINAL						
● 19101-03UL	1	1	3	57F1501	50.99	48.04
● 19101-04UL	1	1	4	14M6641	43.87	41.36
● 19101-05UL	1	1	5	14M6642	56.21	52.97
● 19101-06UL	1	1	6	14M6643	47.46	44.73
● 19101-08UL	1	1	8	14M6645	63.12	59.49

CONTINUED

SERIES 19 SINGLE DECK 15A ROTARY SWITCHES (CONT.)

FASTON® TERMINAL

Mfg. Part No.	No. of Poles	No. of Decks	No. of Taps	Stock No.	Price Each 1-14	Price Each 15-24
● 19101-10UL	1	1	10	14M6646	69.20	65.22
● 19101-11UL	1	1	11	14M6647	70.70	66.63

(5055)

SERIES 42D/44D MULTI-DECK ROTARY SWITCHES

RoHS Compliant Available

Grayhill

- Fully Enclosed, Adjustable Stop Switches Interchange with Fixed Stop Models
- Rated Make/Break 1A, Carry 10A at 115VAC Resistive
- Non-Shorting Contacts
- Insulation Resistance: 50,000 Megohms Initial, 1,000 Megohms Minimum

¼″ dia. shaft. ⅜-32UNEF bushing. Behind-panel depth: 1-deck, 1.025″ (26.04); 2-deck, 1.371″ (34.82). **42D series**; 10-position. 36° indexing. 1″ (25.4) diameter. **44D series**; 12-position. 30° indexing. 1.162″ (29.51) diameter.

Mfg. Part No.	Poles	Decks	Max. Positions	Angle of Throw	Stock No.	Price Each 1-14	Price Each 15-24
● 42D36-01-1-AJN	1	1	10	36°	14M6757	48.04	45.28
● 42D36-02-1-AJN	1	2	10	36°	14M6759	63.50	59.85
● 42D36-01-2-AJN	2	1	5	36°	14M6758	50.08	47.20
● 42D36-02-2-AJN	2	2	5	36°	14M6760	66.71	62.88
● 44D30-01-1-AJN	1	1	12	30°	57F1545	48.93	46.11
● 44D30-02-1-AJN	1	2	12	30°	14M6764	65.49	61.73
● 44D30-01-2-AJN	2	1	6	30°	14M6763	51.37	48.41
● 44D30-02-2-AJN	2	2	6	30°	14M6765	70.27	66.24
● 44D30-03-2-AJN	2	3	6	30°	14M6767	118.03	111.25
● 44D30-04-1-AJN	1	4	12	30°	14M6768	131.47	123.92

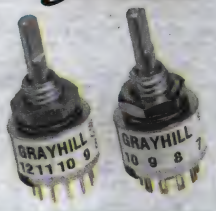
(5056)

SERIES 56 SINGLE DECK ROTARY SWITCHES

RoHS Compliant Available

Grayhill

- 0.5″ (12.70) diameter, 200mA, 0.480″ behind panel
- Single deck adjustable stops (AJ) non-shorting contacts (N)
- Life - 10,000 cycles at 200mA, 300VDC or 115VAC resistive
- Mfg. part nos. with "P" have PC terminals
- Mfg. part nos. with "S" have shaft and panel seal
- Shorting contacts available; *go online or call.*



Bushing: ¼-28 UNF - 2A thread, 0.25″ (6.35) long. Shaft: 0.125″ (3.18) dia., 0.375″ (9.53) long. Panel to PC board: 0.377″ (9.58). Circle of terminal centers is 0.340″ (8.64) for 10-position switches and 0.366″ (9.30) for 12-position switches.

Mfg. Part No.	Poles	Max. Positions	Angle of Throw	Stock No.	Price Each 1-14	Price Each 15-24
● 56D30-01-1-AJN	1	12	30°	14M6789	14.21	13.40
● 56D30-01-2-AJN	2	6	30°	14M6790	15.75	14.83
● 56D36-01-1-AJN	1	10	36°	14M6791	13.75	12.94
● 56D36-01-2-AJN	2	5	36°	14M6792	15.30	14.41
● 56SD30-01-1-AJN	1	12	30°	14M6796	15.11	14.24
● 56SD36-01-1-AJN	1	10	36°	14M6797	14.93	14.06
● 56SD36-01-2-AJN	2	5	36°	14M6798	16.19	15.26
● 56DP30-01-1-AJN	1	12	30°	14M6787	14.40	13.55
● 56DP30-01-2-AJN	2	6	30°	16M1417	16.11	15.18
● 56DP36-01-1-AJN	1	10	36°	17M3809	14.20	13.39
● 56DP36-01-2-AJN	2	5	36°	14M6788	15.46	14.58
● 56SDP30-01-1-AJN	1	12	30°	14M6793	15.86	14.95
● 56SDP30-01-2-AJN	2	6	30°	14M6794	16.47	15.53
● 56SDP36-01-1-AJN	1	10	36°	16M3306	15.39	14.52
● 56SDP36-01-2-AJN	2	5	36°	14M6795	16.83	15.87

(5057)

element14 COMMUNITY

Get inspired, collaborate, design, research, ask experts questions.

element14.com

(196545)

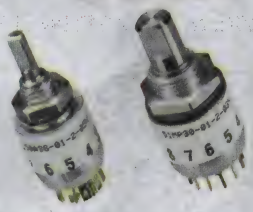
SERIES 50 AND 51 SINGLE DECK ROTARY SWITCHES

RoHS Compliant Available

Grayhill

Features:
- ½" diameter rotary switch
- Adjustable stops (AJ) with non-shorting contacts (N)
- Solder or PCB terminals

Specifications:
- Current rating: 200mA
- Life: 10,000 cycles
- ¼-28 UNF-2A bushing thread, ¼" shaft
- Behind panel: 0.658" (solder), 0.537" (panel to PCB)
- For shaft and panel seal, shorting contacts; *go online or call*
- Mfg. part nos. with C = military style (panel seal)



SOLDER TERMINALS

Mfg. Part No.	Poles	Pos.	Angle of Throw	Stock No.	Price Each 1-14	Price Each 15-24
51CD30-01-1-AJN	1	12	30°	14M6783	27.53	25.95
51D30-01-1-AJN	1	12	30°	95F9486	27.36	25.79
51CD30-01-2-AJN	2	6	30°	14M6784	33.33	31.42
50CD36-01-1-AJN	1	10	36°	14M6774	26.16	24.66
50D36-01-1-AJN	1	10	36°	14M6777	18.55	17.48
50CD36-01-2-AJN	2	5	36°	14M6775	31.01	29.23
50D36-01-2-AJN	2	5	36°	14M6778	24.07	22.69
50D45-01-1-AJN	1	8	45°	96B4821	22.42	21.12
50D45-01-2-AJN	2	4	45°	11C5078	33.17	31.26
50D60-01-1-AJN	1	6	60°	11C5079	20.56	19.98
50D60-01-2-AJN	2	3	60°	11C5080	33.49	31.56
50D90-01-1-AJN	1	4	90°	11C5081	22.01	20.74
50D90-01-2-AJN	2	2	90°	11C5082	33.49	31.56
PCB TERMINALS						
51CDP30-01-1-AJN	1	12	30°	14M6782	28.26	26.63
51DP30-01-1-AJN	1	12	30°	14M6785	21.86	20.60
51DP30-01-2-AJN	2	6	30°	95F9491	33.53	31.60
50CDP36-01-1-AJN	1	10	36°	14M6772	26.64	25.10
50DP36-01-1-AJN	1	10	36°	14M6776	19.39	18.28
50CDP36-01-2-AJN	2	5	36°	14M6773	31.86	30.03
50DP45-01-2-AJN	2	4	45°	11C5074	34.65	32.67
50DP60-01-1-AJN	1	6	60°	11C5075	22.97	21.65

(5014)

CONTROL KNOBS

RoHS Compliant Available

Grayhill

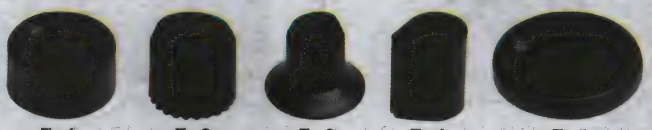


Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5

- Ideally suited for encoder and rotary switches
- Standard fit for Grayhill encoders and rotary switches
- Custom materials, styles, colors and markings available
- Standard color: Black
- Choice of spring clip (press-on) or metal insert w/set screw versions

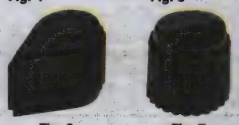


Fig. 6 Fig. 7

Mfg. Part No.	Fig.	Shaft Diameter (in)	Material	Spring Clip	Set Screw	Stock No.	Price Each 1-24
11K5013-KMNB	1	0.250	Nylon	No	Yes	11C3963	3.60
11K5014-KCNB	2	0.250	Nylon	Yes	No	05C2120	0.63
11K5015-JMNB	3	0.125	Nylon	No	Yes	18C4128	3.54
11K5015-KMNB	3	0.250	Nylon	No	Yes	11C3970	3.61
11K5017-JCNB	4	0.125	Nylon	Yes	No	26C2509	1.52
11K5020-KCAB	5	0.250	ABS	Yes	No	11C3975	0.77
11K5028-KCNB	6	0.250	Nylon	Yes	No	11C3976	1.94
11K5028-KMNB	6	0.250	Nylon	No	Yes	03C3484	4.51
11K5029-JCNB	7	0.125	Nylon	Yes	No	11C3977	0.64
11K5029-KCNB	7	0.250	Nylon	Yes	No	11C3979	0.70

(138958)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

SERIES 77 SINGLE DECK ROTARY SWITCHES

RoHS Compliant Available

Grayhill

NEW

Features:
- Small Size - Minimal Space Required Behind Panel
- Available with Continuous Rotation or a Fixed Stop
- High Stop Strength
- Shaft and Panel Seal
- Single Deck with 1 or 2 Poles

Specifications:
- Low Level Circuit Rating: 10 ma
- Contact Resistance: 50 mΩ max
- Operating Temperature: -40°C to +85°C
- Rotational Torque: 3 in-oz min. to 7 in-oz max
- Stop Strength: 7.5 inch pounds min

Mfg. Part No.	Poles	Pos.	Angle of Throw	Stock No.	Price Each
77P36-01-1-02N	1	2	36°	97W1257	40.93
77P36-01-1-03N	1	3	36°	97W1258	40.93
77P36-01-1-04N	1	4	36°	97W1259	40.93
77P36-01-1-05N	1	5	36°	97W1260	40.93
77P36-01-1-06N	1	6	36°	97W1261	40.93
77P36-01-1-07N	1	7	36°	97W1262	40.93
77P36-01-1-08N	1	8	36°	97W1263	40.93
77P36-01-1-09N	1	9	36°	97W1264	40.93
77P36-01-1-10N	1	10	36°	97W1265	39.90
SHAFT & PANEL SEALED					
77SP36-01-1-02N	1	2	36°	97W1277	44.47
77SP36-01-1-03N	1	3	36°	97W1278	44.47
77SP36-01-1-04N	1	4	36°	97W1279	44.47
77SP36-01-1-05N	1	5	36°	97W1280	44.47
77SP36-01-1-06N	1	6	36°	97W1281	44.47
77SP36-01-1-07N	1	7	36°	97W1282	44.47
77SP36-01-1-08N	1	8	36°	97W1283	44.47
77SP36-01-1-09N	1	9	36°	97W1284	44.47
77SP36-01-1-10N	1	10	36°	97W1285	43.44
77SP36-01-1-10N-F*	1	10	36°	97W1286	44.47
77SP36-01-2-05N	2	5	36°	97W1287	47.32
SHAFT & PANEL SEALED; PROCESS SEALED					
77SPT36-01-1-02N	1	2	36°	97W1266	47.99
77SPT36-01-1-03N	1	3	36°	97W1267	47.99
77SPT36-01-1-04N	1	4	36°	97W1268	47.99
77SPT36-01-1-05N	1	5	36°	97W1269	47.99
77SPT36-01-1-06N	1	6	36°	97W1270	47.99
77SPT36-01-1-07N	1	7	36°	97W1271	47.99
77SPT36-01-1-08N	1	8	36°	97W1272	47.99
77SPT36-01-1-09N	1	9	36°	97W1273	47.99
77SPT36-01-1-10N	1	10	36°	97W1274	46.96
77SPT36-01-1-10N-F*	1	10	36°	97W1275	47.99
77SPT36-01-2-05N	2	5	36°	97W1276	58.56

*Fixed Stop

(211956)

LB SERIES ILLUMINATED SELECTOR SWITCHES

RoHS Compliant Available

IDEC

- Round Bezel
- 24V AC/DC LED operating voltage
- DPDT Contacts (SPDT also available)
- Bright illumination makes switches clearly visible

Mfg. Part No.	Contact	Bezel	Color	Stock No.	Price Each 1-9
LB6MF-2T64R	DPDT	Flush (Metallic)	Red	65W5145	50.31
LB6MF-2T64G	DPDT	Flush (Metallic)	Green	65W5143	50.31
LB6MF-2T64PW	DPDT	Flush (Metallic)	White	65W5144	59.82
LB6F-2T64R	DPDT	Flush (Black)	Red	65W4983	42.39
LB6F-2T64G	DPDT	Flush (Black)	Green	65W4981	42.39
LB6F-2T64PW	DPDT	Flush (Black)	White	65W4982	51.89
LB1F-2T64R	DPDT	Standard (Black)	Red	65W4343	42.39
LB1F-2T64G	DPDT	Standard (Black)	Green	65W4341	42.39
LB1F-2T64PW	DPDT	Standard (Black)	White	65W4342	51.89

(209291)

HS SERIES STANDARD ROTARY SWITCHES

RoHS Compliant Available

NEW

NKK SWITCHES

Specifications:
- Up To 30A Power Level
- Bushing Mount
- Contact Resistance: 10 milliohms Max.
- Dielectric Strength: 1500VAC for 1 minute
- Operating Temperature: -10°C to +70°C

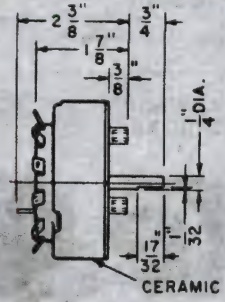
6 AMP

Mfg. Part No.	No. of Poles	No. of Positions	Throw Angle	Shorting	Shaft	Stock No.	Price Each 1-24
HS13X	1	2	45	No	Round	09X9931	6.56
● HS13X-D	1	2	45	No	D-Flat	09X9932	6.56
● HS13Y	1	3	45	No	Round	09X9933	7.02
● HS13Y-D	1	3	45	No	D-Flat	09X9934	6.56
● HS13Z	1	4	45	No	Round	09X9935	6.56
12 AMP							
● HS16-1	1	11	30	No	Knurled	09X9937	18.89
● HS16-1SN	1	11	30	Yes	D-Flat	09X9940	18.89
● HS16-2SN	2	11	30	Yes	D-Flat	09X9944	27.12
● HS16-3N	3	11	30	No	D-Flat	09X9947	35.91
● HS16-3SN	3	11	30	Yes	D-Flat	09X9951	35.91
● HS16-4N	4	11	30	No	D-Flat	09X9953	50.23
● HS16-5N	5	11	30	No	D-Flat	09X9957	61.87
● HS16-6N	6	11	30	No	D-Flat	09X9961	89.76

(211595)

312 SERIES 30-AMP 300VAC ROTARY TAP SWITCHES

UL RoHS Compliant Available OHMITE



- Ratings: 30 Amps, 300VAC (150VAC Between Taps), 20VDC Non-inductive
- Shaft Torque: 3-7 in./lbs.
- Diameter: 3.13" (79.5mm)

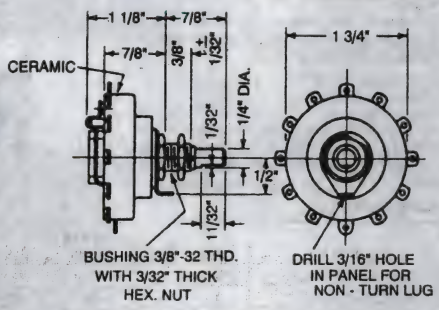
Slow-break, quick-make action for switching AC current, and all-soldered, all-riveted metal and ceramic construction for reliable operation. Self-cleaning silver alloy contacts, rounded common contact. Arc-proof ceramic body. Mount in 1/4" panels (maximum) with three no. 10-32 flat-head, 3/8" long machine screws, included. Soldering type terminals. UL listed file no. E14245. *Order knobs separately; on this page.*

Mfg. Part No.	No. of Taps	Total Rotation	Stock No.	Price Each 1-9	10-49
● 312-3E	3	60°	64K8432	150.67	140.01
● 312-6E	6	150°	64K8441	168.69	156.75
● 312-8E	8	210°	64K8447	180.70	167.91
● 312-10E	10	270°	64K8423	188.94	175.56
● 312-11E	11	300°	64K8426	187.65	174.37
● 312-12E	12	330°	64K8429	189.64	176.22

(5010)

111 SERIES 15-AMP 125VAC ROTARY TAP SWITCHES

UL RoHS Compliant Available OHMITE



- Ratings: 15 Amps, 125VAC, 20VDC Noninductive
- Shaft Torque: 1.5-3.8 in. lbs.
- Diameter: 2.0" (50.8mm)

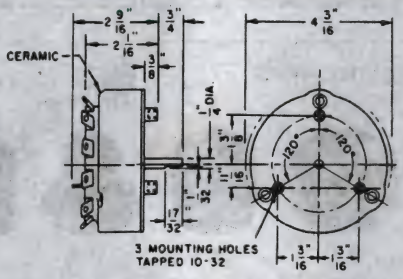
Slow-break, quick-make action for switching AC current, and all-soldered, all-riveted metal and ceramic construction to provide reliable operation. Self-cleaning silver alloy contacts, rounded common contact. Arc-proof ceramic body. Use 3/8-32 bushing and hex nut for 1/4" thick maximum panel mounting. A 3/16" hole is required for the non-turn washer. Soldering type terminals. UL listed, file no. E14245. *Order mounting hardware kit and knobs separately on this page.*

Mfg. Part No.	No. of Taps	Total Rotation	Stock No.	Price Each 1-9	10-49
● 111-3E	3	60°	64K7840	60.59	56.30
● 111-4E	4	90°	64K7842	58.91	54.74
● 111-5E	5	120°	64K7844	63.31	58.83
● 111-6E	6	150°	64K7846	69.94	65.00
● 111-7E	7	180°	64K7848	74.14	68.89
● 111-8E	8	210°	64K7850	66.95	62.22
● 111-10E	10	270°	64K7836	76.27	70.88
● 111-11E	11	300°	64K7838	86.47	80.36

ROHS COMPLIANT PARTS
(5009)

412 SERIES 50-AMP 300VAC ROTARY TAP SWITCHES

UL RoHS Compliant Available OHMITE



- Ratings: 50 Amps, 300VAC (150VAC Between Taps), 20VDC Noninductive Load
- Shaft Torque: 3-8 in./lbs.
- Diameter: 3.32" (84.3mm)

Slow-break, quick-make action for switching AC current, and all-soldered, all-riveted metal and ceramic construction to provide reliable operation. Self-cleaning silver alloy contacts, rounded common contact. Arc-proof ceramic body. Mount in 1/4" panels (maximum) with three no. 10-32 flat-head, 3/8" long machine screws, which are included. Must drill 5/16" hole in panel for shaft. Soldering lugs/#10 screw terminal. UL listed, file no. E14245. *Order knobs separately on this page.*

Mfg. Part No.	No. Taps	Total Rotation	Stock No.	Price Each 1-9	10-49
● 412-6E	6	150°	64K8813	193.04	179.38
● 412-7E	7	180°	64K8816	192.92	179.27
● 412-8E	8	210°	64K8819	198.33	184.30
● 412-12E	12	330°	64K8801	231.81	215.41
NON-ROHS COMPLIANT PARTS					
● 412-7E	7	180°	64K8816	192.92	179.27

(5008)

MOUNTING HARDWARE AND KNOBS FOR ROTARY TAP SWITCHES

RoHS Compliant Available OHMITE

MOUNTING HARDWARE KIT

Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-49
● 7091E	Contains 25 each, nuts and lock washers for **111**, **212**, and **711** series	64K3003	48.80	44.08
KNOBS				
● 5103AE	For **711 Series** Switches	64K9286	7.51	6.98
● 5104AE	For **608 Series** Switches	64K9288	34.81	32.35
● 5109AE	For **312 Series** Switches	64K9295	35.42	32.92
● 5111AE	For **412 Series** Switches	64K9299	37.69	35.02
● 5116AE	For **111, 212 Series** Switches	64K9304	18.14	16.85

(5012)

608 SERIES 100-AMP 300VAC ROTARY TAP SWITCHES

RoHS Compliant Available

OHMITE

- Ratings: 100 Amps, 300VAC, 20VDC Noninductive
- Shaft Torque: 25-32 in./lbs.
- Diameter: 4.88" (124.0mm)

Slow-break, quick-make action for switching AC current, and all-soldered, all-riveted metal and ceramic construction to provide reliable operation. Self-cleaning silver alloy contacts, rounded common contact. Arc-proof ceramic body. Mount in 1" panels (maximum) with three flat-head, 1/4-20, 1 1/4" long machine screws, which are included. Must drill 7/16" hole in panel for shaft. Soldering lug or 1/4" bolt terminals. *Order knobs separately on page 1792.*

Mfg. Part No.	No. Taps	Total Rotation	Stock No.	Price Each 1-9	Price Each 10-49
608-8E	8	280°	64K9365	597.72	555.41

(5011)

ALCOSWITCH 3100 SERIES MULTI-LAYER ROTARY SWITCHES

TE connectivity

Authorized Distributor

- For logic level circuitry
- Can control electrical circuits that operate at 2A, 115VAC (nonswitching) and to 125mA, 115VAC (switching)
- Positive detent action for error-free operation
- Black polyester housing with thermoplastic operating shaft and detent rated 94V-0
- Enclosed gold-over-nickel plate phosphor bronze contacts

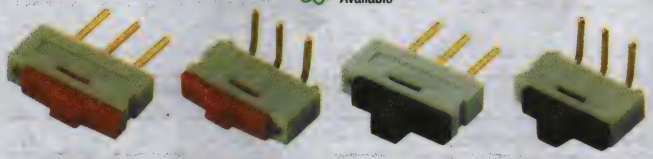
Mfg. Part No.	No. of Positions	Output Code	Stock No.	Price Each 1-24	Price Each 25-49
435984-1	10	BCD	50F2424	124.94	113.59
436037-1	12	BCD	50F2425	81.90	76.65
435986-1	16	Hexadecimal	50F2426	120.54	109.58
435987-1	16	Hexadecimal	50F2429	132.82	126.43
436028-1	24	BCD	50F2430	233.67	222.44

(7982)

1K2 SLIDE SWITCHES

RoHS Compliant Available

eao



Standard | Standard Right-Angle | Extended Actuator | Extended Actuator Right-Angle

Features:
- Recommended for PCB applications
- One of the most compact miniature single-pole changeover switches available
- Ideal as a jumper replacement
- Offered in straight or right angled versions
- Raised actuator version suitable for through-panel operation

Specifications:
- Gold over nickel contacts offer high reliability
- Sealed base for solvent cleaning; *contact for details*
- Clear actuated position indicator
- Operating life of 10,000 operations
- Stackable at 0.1" pitch
- SPDT contact

Mfg. Part No.	Actuator	Stock No.	Price Each 1-24	Price Each 25-249
09.03201.02	Standard	52F516	2.42	2.32
09.10201.02	Standard, Right-Angle	52F517	2.48	2.37
09.03290.01	Extended	52F518	2.42	2.32
09.10290.01	Extended, Right-Angle	52F519	2.59	2.48

(5144)

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(196526)

MINI AND SUBMINIATURE SLIDE SWITCHES

RoHS Compliant Available

Grayhill

Fig. 1 | Fig. 2 | Fig. 3 | Fig. 4

48A SERIES MINIATURE SLIDE SWITCHES

- Suffix QE in Mfg. part no.: Silver Contacts Rated for 5A @ 125VAC, 3A @ 250VAC
- Suffix RE in Mfg. part no.: Gold Contacts Rated for 0.4VA Max. @ 20V Max. (AC or DC)
- Epoxy Sealed
- Housing: Diallyl Phthalate UL94V-0
- Actuator: Nylon
- Operating Temperature: -35° to +85°C
- UL Recognized

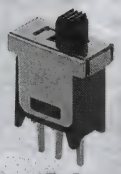


Fig. 5

48B SERIES SUBMINIATURE SLIDE SWITCHES

- Suffix QE in Mfg. part no.: Silver Contacts Rated for 3A @ 125VAC, 1.5A @ 250VAC
- Suffix RE in Mfg. part no.: Gold Contacts Rated for 0.4VA Max. @ 20V Max. (AC or DC)
- Epoxy Sealed
- Housing: Diallyl Phthalate UL94V-0
- Actuator: Nylon
- Operating Temperature: -35° to +85°C

Mfg. Part No.	Fig.	Circuitry	Function	Stock No.	Price Each
MINIATURE SLIDE SWITCHES					
48ASSP1S1M1QAT	1	SPDT	On-None-On	14M8318	2.96
48ASSP1S1M2QBT	2	SPDT	On-None-On	14M7460	2.77
48ASSP3S1M2RBT	2	SPDT	On-Off-On	14M7466	3.06
48ASSP1S1M7QBT	3	SPDT	On-None-On	04M2923	3.01
48ASSP1S1M6QBT	4	SPDT	On-None-On	14M7462	3.00
SUBMINIATURE SLIDE SWITCHES					
48BFSP1M2QT	5	SPDT	On-None-On	04M2935	3.78

(72348)

STS SERIES CONSUMER GRADE MINIATURE SLIDES

RoHS Compliant Available

TE connectivity

Authorized Distributor

PC mount units have silver-plated, bifurcated contacts rated 300mA at 125VAC/30VDC. Initial contact resistance: 20mΩ maximum. 2.5mm pin spacing, wave solderable and washable.

Mfg. Part No.	Circuit	Stock No.	Price Each 1-14	Price Each 15-49	Price Each 50-99	Price Each 100+
STS121PC04	SPDT	16M2477	1.07	0.95	0.83	0.77
STS220PC04	DPDT	16M2479	1.74	1.68	1.54	1.42
STS2400PC04	DP4T	10M9121	3.48	3.41	3.23	3.08

(4747)

DG SERIES SUBMINIATURE SNAP-ACTION SWITCHES

RoHS Compliant Available

CHERRY

c UL us

- SPDT
- Wave Solderable Printed Circuit Terminals
- UL and cUL recognized

Mfg. Part No.	Actuator	Stock No.	Price Each 1-9	Price Each 10-24
DG13B1AA	Button	48F5774	2.57	2.34
DG13B1LA	Lever	48F5775	2.72	2.48
DG13B1RA	Roller	98B1158	5.20	4.73
DG23B1LA	Lever	13C5639	2.68	2.43
DG23B1RA	Roller	89F2388	5.59	5.08
DG23B3LA	Lever	98B1166	2.79	2.53

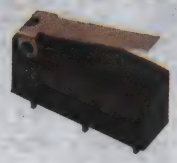
(7494)

DB SERIES SUBMINIATURE SNAP-ACTION SWITCHES

RoHS Compliant Available

CHERRY

- Terminals are brass silver-plated
- Base, cover and actuator are thermoplastic polyester
- DB1 and DB2 Series have silver-nickel contacts; DB3 Series has gold crosspoint contacts
- Temperature Rating: -40°C to +120°C
- Pretravel: 0.039 Max.
- Overtravel: 0.024 Min. on AA Series
- Operating Force: DB1 and DB3 Series 150 gms Max.; DB2 Series 250 gms Max. on AA Series
- UL Recognized, CUL Certified, VDE Approved



5A RATED SWITCHES

Mfg. Part No.	Actuator Length	Description	Stock No.	Price Each 1-9	Price Each 10-24
● DB1CA1AA	...	.110 Solder Terminals, Button Only	98B1155	2.53	2.43
● DB1C-A1LB	0.189	.110 Solder Terminals, Straight Lever	07C0838	3.50	3.12
● DB1CC1AA	...	.051 PCB Terminals, Button Only	98B1156	2.07	1.99
10A RATED SWITCHES					
● DB2CA1AA	...	.110 Solder Terminals, Button Only	28C0414	2.53	2.43
● DB2CA1RC	0.185	.110 Solder Terminals, Roller Lever	50H7632	2.85	2.74
● DB2C-C1AA	...	.051 PCB Terminals, Button Only	24C7162	3.18	2.83
0.1A RATED SWITCHES					
● DB3CA1AA	...	.110 Solder Terminals, Button Only	08H1209	2.76	2.65
● DB3CB1LB	0.189	.110 QC Terminals, Straight Lever	23H0142	2.95	2.84

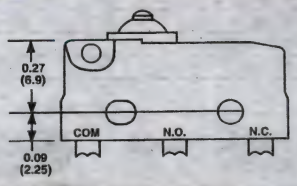
(75438)

SEALED SUB-MINIATURE SNAP-ACTION SWITCHES

RoHS Compliant Available

CHERRY

- Dust and Waterproof in Accordance with IP67
- Temperature Rating: -40°C to +120°C w/o Wire Leads
- Overtravel: AA suffix: 0.02", LB & RB suffix: 0.06"



DC series subminiature SPDT switches have long life stainless steel. Thermoplastic case and cover. Available in three current ratings: **DC1** 5A, **DC2** 10.1A and **DC3** 0.1A. UL recognized, CSA certified. *Go online or call for information on bulk purchase price breaks.*

Mfg. Part No.	O.F. (CN)	Max P.T. (in)	Termination	Actuator	Stock No.	Price Each 1-9
● DC1CA1AA	200	0.04	Short Solder, 30° twisted	Button	46F5540	4.86
● DC1C-A1LB	80	0.18	Short Solder, 30° twisted	0.189" Lever	46F5543	7.49
● DC1CA1RB	90	0.18	Short Solder, 30° twisted	0.098" Roller	95F9728	8.30
● DC2C-A1LB	150	0.2	Short Solder, 30° twisted	0.189" Lever	46F5544	8.89
● DC2CA1RB	160	0.2	Short Solder, 30° twisted	0.098" Roller	95F9730	6.95
● DC2C-A1AA	200	0.04	Short Solder, 30° twisted	Button	90B5088	7.59
● DC3CA1AA	200	0.04	Short Solder, 30° twisted	Button	46F5542	4.39
● DC3CA1LB	80	0.18	Short Solder, 30° twisted	0.189" Lever	46F5545	6.44

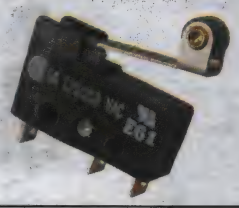
(5016)

E61, E62 AND E63 SUBMINIATURE SNAP-ACTION SWITCHES

RoHS Compliant Available

CHERRY

- SPDT
- Switch Body: 0.781L x 0.0250W x 0.375"H



UL recognized, CSA certified.

Series	Rating
E61	5A @ 125/250VAC
E62	10.1A @ 125/250VAC, ¼HP @ 125VAC
E63	0.1A @ 125VAC, Gold Crosspoint Contacts

Mfg. Part No.	Terminal	Actuator Style	Actuation Length†	Stock No.	Price Each 1-9	Price Each 10-24
● 0E6100A0	.093 QC	Button	...	29F2908	4.40	4.24
● 0E6100K0	.093 QC	Roller Standard Ratio	0.203"	29F2910	6.82	6.57
● 0E6110K0	SS	Roller Standard Ratio	0.203"	29F2913	6.70	6.45
● 0E6130A0	.110 QC	Button	...	44F660	4.40	4.24
● 0E6160H0	SS	Lever High Ratio	0.396"	84F513	6.33	6.10
● 0E6200H0	.093 QC	Lever Standard Ratio	0.271"	29F2915	6.10	5.88
● 0E6200K0	.093 QC	Standard Ratio	0.203"	29F2916	7.39	7.12
● 0E6210H0	SS	Lever Standard Ratio	0.271"	94F3235	6.45	6.21
● 0E6210K0	SS	Roller Standard Ratio	0.203"	29F2918	7.26	6.99

➤CONTINUED➤

E61, E62 AND E63 SUBMINIATURE SNAP-ACTION SWITCHES (CONT.)

Mfg. Part No.	Terminal	Actuator Style	Actuation Length†	Stock No.	Price Each 1-9	Price Each 10-24
● 0E6230K0	.110 QC	Roller Standard Ratio	0.203"	50F7457	7.00	6.74
	.093 QC	Lever Standard Ratio	0.396"			
● 0E6300A0	.093 QC	Button	...	94F3237	5.45	5.25
● 0E6300K0	.093 QC	Roller Standard Ratio	0.203"	84F517	7.16	6.90
● 0E6310K0	SS	Roller Standard Ratio	0.203"	94F3208	6.56	6.32

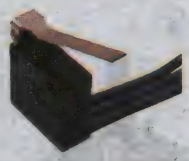
†Actuation length is distance from centerline of the round switch mounting hole to tip of actuator.
(5105)

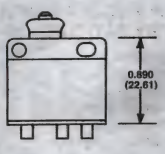
E72 SERIES WEATHERPROOF SNAP-ACTION SWITCHES

RoHS Compliant Available

CHERRY

- Rated 10.1A, ¼HP, 125/250VAC
- Temperature range: -40°C to +85°C





Weatherproof switches with 10" leads. Silver alloy contacts. Stainless steel actuator. **E73 series** gold crosspoint versions for low-energy applications also available; *go online or call.*

Mfg. Part No.	Style	O.F. (grms.)	P.T. (in.)	O.T. (in.)	Stock No.	Price Each 1-9	Price Each 10-24
● 0E7240AT	Button	300	0.04	0.035	04M4652	16.46	15.86
● 0E7240HT	Lever	67	0.275	0.100	31C9477	17.21	16.58
● 0E7240KT	Roller	75	0.240	0.125	04M4654	19.49	18.77

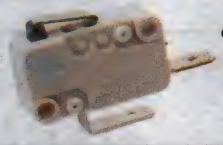
(5099)

D4 SERIES MINIATURE SNAP-ACTION SWITCHES

RoHS Compliant Available

CHERRY

- Switch Body: 0.875 L x 0.406W x 0.625" H (22.23 x 15.88 x 10.31)
- SPDT; Contact Rating: 0.181"
- Temperature Rating: -40° to +85°C
- Flammability Rating: UL94V-0



Series	Rating
D41	0.1A @ 125VAC, Gold Crosspoint Contacts
D42	3A @ 125/250VAC, Silver Alloy

STANDARD OPERATING FORCE

Mfg. Part No.	Operating Force (g)	Actuator Style	Actuation Length (in.)	Stock No.	Price Each 1-9	Price Each 10-24
● D41CR1AA	170	Button Actuator	...	89C0540	5.38	5.18
● D44C-R1AA	285	Button Actuator	...	87F3040	3.78	3.02
● D45CR1AA	400	Button Actuator	...	87F3057	3.56	3.43
● D459-V3RA	100	Roller Lever	...	74M1047	2.59	2.34
LIGHT OPERATING FORCE						
● D42LR1AA	45	Button Actuator	...	12C8657	3.47	3.35
● D42L-R1XL	2	Lever High Ratio Actuator	2.92	36H3808	5.87	4.68
● D44L-R1AA	75	Button Actuator	...	71M0400	3.51	2.80
● D44LR1LD	40	Lever Standard Ratio Actuator	1.4	93B5484	3.66	3.52
● D44LR1ML	10	Lever High Ratio Actuator	2.92	87F3039	3.69	3.55
● D45L-R1ML	13	Lever High Ratio Actuator	2.92	17B5886	4.55	3.65

(75188)

E51 AND E53 SERIES MINIATURE LOW-TORQUE SNAP-ACTION SWITCHES

RoHS Compliant Available

CHERRY

- Contact rating: E53 series: 0.1A at 125VAC; E51 series: 6A at 125/250VAC
- 4.0" Gram Operating Force
- 1.218L x 0.687W x 0.875"H (30.94 x 17.45 x 22.23)

Low-torque switches feature combination quick-connect/solder terminals. UL recognized, CSA certified. *Order wireform actuator separately below.*

Mfg. Part No.	Solder/Q.C. Terminals	Direction of Actuator	Stock No.	Price Each 1-9	Price Each 10-24
● 0E5300R0	Std. Parallel, 0.187"	Clockwise	05M6452	14.83	14.28
● 0E51-50E0	Vertical Twist, 0.205"	Counter-Clockwise	71M0411	12.81	10.43

➤CONTINUED➤

E51 AND E53 SERIES MINIATURE LOW-TORQUE SNAP-ACTION SWITCHES (CONT.)

ACCESSORIES

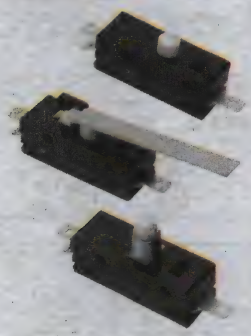
Mfg. Part No.	Description	Stock No.	Price Each 1-9
0014-0645	Wireform Actuator	46F5561	0.23

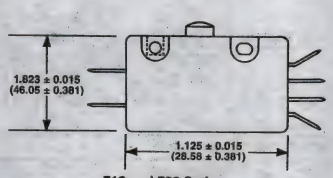
(5080)

E13, E14, E19, AND E20 SERIES GENERAL PURPOSE SWITCHES

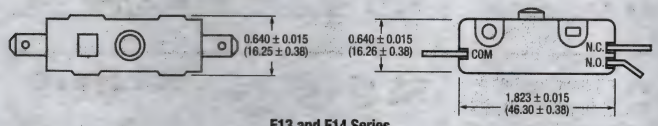
RoHS Compliant Available

CHERRY





E19 and E20 Series



E13 and E14 Series

- E13/E14 SPDT contacts
- E19/E20 DPDT contacts
- E13/E19 rated at 15A 125/250VAC
- E14 rated 25A 125/250VAC
- E20 rated 20A 125/250VAC

0.250″ quick-connect terminals are standard. Temperature rating to 105°C standard. Silver cadmium oxide contacts.

BUTTON ACTUATOR

Mfg. Part No.	O.F. (grms.)	P.T. (in.)	O.T. (in.)	Actuator Length (in.)	Stock No.	Price Each 1-9	Price Each 10-24
0E1300E0	425	0.050	0.100	...	29F2875	4.12	3.97
0E1300M0	425	0.050	0.218	...	29F2879	5.16	4.97
0E1400M0	850	0.100	0.168	...	85C0862	7.17	6.91
0E1900A0	850	0.050	0.080	...	29F2881	9.11	8.77
0E19-00J0	850	0.050	0.080	...	50F7473	14.70	14.08
0E1900M0	850	0.050	0.218	...	29F2883	11.20	10.78
0E2000A0	1280	0.100	0.050	...	94F388	12.90	12.43
0E2000M0	1280	0.100	0.188	...	98B1412	15.11	14.56
0E1300J0	425	0.050	0.108	...	29F2877	4.78	4.61
LEVER ACTUATOR, STANDARD RATIO POSITION							
0E1300H0	100	0.250	0.187	1.500	29F2876	5.82	5.61
0E1900H0	205	0.275	0.187	1.500	29F2882	10.66	10.27
LEVER ACTUATOR, HIGH RATIO POSITION							
0E1350H0	65	0.343	0.187	1.750	94F6205	5.82	5.61
0E1950H0	130	0.400	0.187	1.750	29F2884	9.61	9.26
ROLLER ACTUATOR, STANDARD RATIO POSITION							
0E1300K0	100	0.250	0.187	1.391	29F2878	7.19	6.92
0E1900K0	212	0.250	0.187	1.391	84F509	12.49	12.02
0E1400K0	285	0.348	0.130	0.652	33C3674	7.49	7.20
0E2000K0	425	0.348	0.156	0.652	78B2127	16.03	15.44
ROLLER ACTUATOR, HIGH RATIO POSITION							
0E19-50K0	150	0.312	0.187	1.645	71M0408	16.15	15.47
0E20-50K0	312	0.525	0.146	1.645	94F1285	22.49	21.55

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
12-0023	Brass Hex Nut	17B6070	0.34	0.32

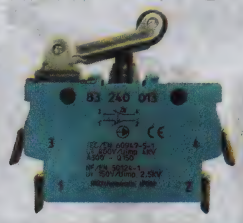
(5082)

PBX 83240 SEREIS SECURE STANDARD SNAP-ACTION SWITCHES

RoHS Compliant Available

CROUZET SWITCHES

- Conforming to standard DIN 41 636 type F
- Double break electrically-isolated changeover circuit (form Zb)
- IP 40 or IP 67 versions
- Operating temperature between -50 and +85°C
- Long overtravel
- Standard or Low level version
- Positive break mechanism according to IEC 60947-5-1



Mfg. Part No.	Actuator Type	Operating Force (N)	Current (A)	Stock No.	Price Each
83240000	Button	4.5	6	61T6892	50.06
83240003	Roller Lever	4.5	6	61T6893	56.05
83240004	Roller Lever	4.5	6	61T6894	57.55
83240005	Roller Lever	4.5	6	61T6895	57.55
83240020	Button	4.5	6	61T6898	51.54
83240023	Roller Lever	4.5	6	61T6899	57.55
83240030	Button	4.5	6	61T6901	54.55
83240200	Button	4.5	6	61T6906	62.56
83240203	Roller Lever	4.5	6	61T6907	68.57
83240213	Roller Lever	4.5	6	61T6908	69.06
83240220	Button	4.5	6	61T6909	64.05
83240223	Roller Lever	4.5	6	61T6910	70.07
83240224	Roller Lever	4.5	6	61T6911	71.57
83241000	Button	4.5	0.1	61T6912	68.87
83241004	Roller Lever	4.5	0.1	61T6914	72.68
83241020	Button	4.5	0.1	61T6917	66.56
83241034	Roller Lever	4.5	0.1	61T6921	77.07
83241200	Button	4.5	0.1	61T6922	77.58

(203429)

83139 SERIES SEALED DOUBLE BREAK MICROSWITCHES

CROUZET SWITCHES

- IP 67 protection against hydrocarbons and detergents
- Form C SPDT contact
- Double break switching
- Double insulated or Atex flameproof casing
- Choice of actuators

With snap-action double break, the **83139** microswitch provides an even higher degree of safety. Depending on the model, it has double insulation for additional protection against electric shocks. For industrial environments where there is a risk of explosion, there is an ATEX certified flameproof version (EEx d II CT6). With a wide choice of actuators, the **83139** is ideal for safety applications such as the control of valves in industrial environments.

STANDARD

Mfg. Part No.	Mounting Holes	Lead Position	Lead Length	Actuator	Stock No.	Price Each 1-24
831390CAB.5.0	4	Bottom	0.5m	None	25R6723	40.30
831390CAB.6.A	4	Bottom	0.5m	Flat 161A	28C5345	39.13
831390CAB.5.A2X	4	Bottom	0.5m	Flat 161A	28C5346	41.03
831390CAB.5.D	4	Bottom	0.5m	...	19K5800	39.13
831390CAB.5.E	4	Bottom	0.5m	Roller 161 E	28C5347	39.13
831390CAB.5.EX2	4	Bottom	0.5m	Roller 161 E	28C5348	41.03
831390CAB.5.F	4	Bottom	0.5m	Flat 161F	19K5801	39.13
831390CAB.5.G	4	Bottom	0.5m	Roller 161 E	28C5349	39.13
831390CAB.5.P	4	Bottom	0.5m	Flat 139 AX	05J1324	41.03
831390CAB.5.P2	4	Bottom	0.5m	Flat 139 AX	05J1325	41.03
831390CAB.5.R	4	Bottom	0.5m	Roller 139 EX	28C5350	41.03
831390CAB1.0	4	Bottom	1m	None	24R2638	40.60
831390CAB3.0	4	Bottom	3m	None	75R7484	50.79
831390CAL2.E	4	Left	2m	Roller 161 E	75R7485	45.11
LOW TEMPERATURE						
831395CAB.5.0	4	Bottom	0.5m	None	34B4003	49.04
831395CBB.5.A	2	Bottom	0.5m	Flat 161A	28C5358	54.06
831395CAB.5.E	4	Bottom	0.5m	Roller 161 E	28C5355	50.39
831395CAB.5.R	4	Bottom	0.5m	Roller 139 EX	28C5356	53.23
831395CAB4.0	4	Bottom	4m	None	28C5357	64.11
DOUBLE INSULATION TO NFC 20030 STANDARD CLASS II						
831392CBB.5.0	2	Bottom	0.5m	None	81C2713	67.50
831392CBB.5.A	2	Bottom	0.5m	Flat 161A	28C5354	69.26
EXPLOSION PROOF EEX d 11C T6						
831391CBB.5.R	2	Bottom	0.5m	Roller 139 EX	14C3964	55.41
831391CBB.5.P	2	Bottom	0.5m	Flat 139 AX	28C5352	55.41
831391CBR.5.0	2	Right	0.5m	None	22T8857	52.43

(210248)

SWITCHES – SNAP-ACTION

HERMETICALLY SEALED SWITCHES

CROUZET SWITCHES

- Temperature range from -55 to +150 °C
- Numerous fixing and command accessories
- Mounting Type: Flange
- Connections: W2 Solder
- Switching power from 1 mA to 7 A
- Hermetic switch that combines a snap-action switching system with high resistance to shock and vibration
- Threaded barrel for precise fitting and adjusting

LATERAL FLANGE

Mfg. Part No.	Operating Force Max	Contact Configuration	Actuator Style	Stock No.	Price Each 1-9
83151012	10	SPDT	Plunger	43W4786	429.69
83151201	10	SPDT	Plunger	43W4787	479.47
LATERAL FIXING + ROLLER LEVER					
83560012	5	...	Roller Lever	43W4790	571.18
TWO POLES LEVER					
83560014	8	...	Lever	43W4791	521.40
83560311	15	...	Lever	43W4792	872.49

(210263)

V4 SEALED 8318 SERIES, SNAP-ACTION SWITCHES

RoHS Compliant Available

CROUZET SWITCHES

- Nominal ratings 0.1 A to 10 A / 250 VAC
- Minimum rating 1 mA / 4 VDC
- Operating temperature -40°C to +125°C
- Choice of actuators with 2 possible fixing positions
- IP 67 protection

Mfg. Part No.	Actuator Type	Operating Force (N)	Current (A)	Stock No.	Price Each
831800C2.0	Pin Plunger	3.4	10	28C5717	6.62
831810C1.BL	Flat	2.5	6	73H5384	6.98
831810C1.EL	Roller Lever	2.5	6	73H5385	7.45
831810C1.FL	Simulated Roller Lever	2.5	6	73H5386	6.98
831810C2.0	Pin Plunger	2.5	6	28C5745	6.25
831810C2.BL	Flat	2.5	6	61T6887	6.98
831810C2.EL	Roller Lever	2.5	6	61T6888	6.98
831810C2.FL	Simulated Roller Lever	2.5	6	28C5744	6.98
831810CFD0.0	Simulated Roller Lever	2.5	6	28C5733	11.45
831810CFD0.BL	Flat	2.5	6	28C5729	12.16
831810CFD0.EL	Roller Lever	2.5	6	28C5731	12.63
831810CFG0.0	Pin Plunger	2.5	6	28C5738	11.45
831860CFG0.FL	Flat	2.5	6	61T6890	11.24
831860C1.BL	Flat	2.5	6	28C5781	6.49
831860C1.EL	Roller Lever	2.5	6	28C5783	7.09
831860C1.FL	Simulated Roller Lever	2.5	6	28C5784	6.49
831860C2.0	Pin Plunger	2.5	6	28C5787	6.18
831860C2.BL	Flat	2.5	6	73H5396	6.49
831860C2.EL	Roller Lever	2.5	6	28C5786	7.09
831860C2.FL	Simulated Roller Lever	2.5	6	61T6889	6.49
831860CFD0.0	Pin Plunger	2.5	6	28C5777	11.25
831860CFD0.FL	Simulated Roller Lever	2.5	6	28C5776	11.22
831860CFG0.0	Pin Plunger	2.5	6	28C5778	10.51
831860CFG0.EL	Roller Lever	2.5	6	73H5392	11.69

(203428)

MICRO SWITCH™ AUXILIARY ACTUATORS FOR SM AND SX STYLE BASIC SWITCHES

RoHS Compliant Available

Honeywell Sensing and Control

SELECTION, SPEED, SERVICE. All Found Here.

Straight Leaf — Roller Lever — Simulated Roller Leaf

Provide basic switches (not included) with an easier means of operation and adjustment. Auxiliary actuators adapt switches to different operating motions by supplying supplemental overtravel. Mounting hardware included.

ACTUATORS FOR SM SERIES

Mfg. Part No.	Description	Actuator Length	Operating Force Max. (oz.)	Over Travel Min.	Stock No.	Price Each 1-9
● JS-2	Straight Leaf	0.66″ (16.76)	10	0.015″ (0.38)	23F4053	5.07
● JS-5	Bronze Roller Leaf	0.59″ (14.99)	10	0.015″ (0.38)	23F4054	7.83
● JS-7	Simulated Roller Leaf	0.58″ (14.73)	10	0.031″ (0.79)	23F4750	5.48
● JS-220	Straight Lever	1.03″ (26.2)	10	0.030″ (0.76)	23F4059	7.09
ACTUATORS FOR SX SERIES						
● JX-20	Straight Lever	0.72″ (18.3)	1	0.030″ (0.76)	23F4773	9.48
● JX-25	Roller Lever	0.65″ (16.5)	1.5	0.020″ (0.51)	23F4774	15.69
● JX-40	Straight Leaf	0.37″ (9.4)	7	0.015″ (0.38)	94F5337	2.56
● JX-44	Hinge Lever	0.37″ (9.4)	7	0.015″ (0.38)	23F4777	4.17
● JX-45	Roller Leaf	0.24″ (6.1)	7	0.015″ (0.38)	23F4779	7.26

(4918)

MICRO SWITCH™ PREMIUM SM SERIES SUBMINIATURE BASIC SWITCHES

RoHS Compliant Available

Honeywell Sensing and Control

SELECTION, SPEED, SERVICE. All Found Here.

Features:
- Premium subminiature switch precision applications
- Small size, light weight
- Covered case construction with molded-in terminals
- Applications: Aerospace, valve control

Specifications:
- Circuitry: SPDT
- Operating temperature: -65°F to +250°F
- Wear-resistant phenolic base and cover
- Contacts: Silver, gold
- Mechanical life 10 million cycles

Pin Plunger

PIN PLUNGERS

Mfg. Part No.	Current (A)	Operating Force (oz)	Over Travel (mm)	Termination	Stock No.	Price Each 1-9
● 11SM1077-T	0.1	1.39	0.13	Solder	90B7749	9.52
● 12SM604-T	1	5	0.076	Solder	86C3586	22.13
● 12SM4-T	1	5	0.076	Solder	23F2142	24.17
● 11SM23-T	1	5	0.13	Solder	73K2463	14.45
● 11SM23-H2	1	1.39	0.13	Solder	91B6128	18.87
● 11SM23-H4	1	5	0.13	Solder	91B9462	15.43
● 11SM701	5	56	0.13	Solder	23F2107	10.70
● 11SM701-T	4	0.56	0.13	Solder	23F2108	9.93
● 11SM144	5	3	0.13	Solder	23F2101	11.89
1SM1	5	5	0.127	Solder	23F4086	7.69
● 1SM1-T	5	5	0.127	Solder	20M8581	10.32
● 11SM1	5	5	0.127	Solder	73K2460	5.81
● 11SM1-T	5	5	0.127	Solder	10M5315	6.89
● 11SM1-T2	5	5	0.127	Solder	73K2462	7.18
● 1SM3	5	5	0.13	Solder	23F1883	12.28
● 11SM3-T*	5	5	0.13	Solder	05M2286	4.24
● 11SM244-H4*	5	5	0.13	Solder	96B4125	12.17
● 11SM401-T	5	3.5	0.127	Solder	73K2465	16.48
● 11SM1-H2	5	5	0.127	Through Hole	73K2461	9.22
11SM244	5	5	0.13	Solder	23F2102	14.93
● 11SM601-H4	5	5	0.13	Quick Connect	23F2106	8.10
● 11SM3	5	5	0.13	Solder	23F2095	9.06
● 1SM3-T	5	5	0.76	Solder	23F1884	12.35
● 22SM22-T	5	5	0.13	Solder	23F2189	11.77
● 411SM1	5	7.5	0.127	Solder	73K2507	14.83
● 11SM608-H4	5	1.39	0.13	Quick Connect	25C0192	8.00
● 41TB53	10	10	0.25	Solder	88F5522	110.92
● 1TB25-D8	10	3.61	0.51	Quick Connect	98F4909	40.20
FIXED LEVER ARM						
● 311SM703-T	4	6	1.45	Solder	78K5282	11.48

➤CONTINUED➤

MICRO SWITCH™ PREMIUM SM SERIES SUBMINIATURE BASIC SWITCHES (CONT.)

SIMULATED ROLLER LEVER

Mfg. Part No.	Current (A)	Operating Force (oz)	Over Travel (mm)	Termination	Stock No.	Price Each 1-9
311SM5-T	5	30	0.66	Solder	73K2490	6.60
311SM605-H4	5	30	0.66	Solder	18C1070	11.06
311SM4-T	5	40	0.48	Solder	73K2489	6.08
INTEGRAL LEAF						
311SM23-T	1	40	0.51	Solder	73K4053	20.75
311SM1-T	5	40	0.51	Solder	23F4375	6.62
311SM2-T	5	30	0.66	Solder	23F2289	5.71
311SM2-H58	5	30	...	Quick Connect, Solder	23F2288	8.09
311SM3-T	5	15	1.45	Solder	73K2488	6.07
111SM1-T	5	7	0.76	Solder	73K2467	7.23
111SM1T2	5	7	0.76	Solder	50B5569	15.10
111SM1	5	7	0.76	Solder	73K2466	7.30
311SM3	5	0.15	2.79	Solder	73K2487	10.20
311SM4H58	1	40	0.66	Quick Connect	39B7546	12.80
ROLLER LEVER						
311SM68T	1	40	0.48	Solder	05M2826	14.48
311SM68H4	1	0.39	0.46	Quick Connect	39B7558	21.32
311SM706-T	4	16	0.48	Solder	73K2497	8.55
311SM6	5	40	0.46	Solder	39B7553	12.04
311SM6-T	5	40	0.46	Solder	73K2492	11.61
311SM6-H58	5	40	0.46	Solder	97B9230	15.75
111SM2-T	5	7	0.76	Solder	10M5316	10.94
111SM23T	5	7	0.76	Solder	91B2776	26.39
111SM2	5	7	0.76	Solder	73K2468	14.55
122SM44T2	1	1.98	0.76	Solder	39B4975	27.18
141SM2T2	...	...	0.76	Solder	39B5174	17.72

(4917)

MICRO SWITCH™ PREMIUM SX SERIES SUBMINIATURE BASIC SWITCHES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features:
- Premium sub-miniature switch for premium applications
- Small size, light weight
- Covered case construction
- Applications: Aerospace, valve control, medical/dental equipment

Specifications:
- Circuitry: SPDT, SPNO
- Temperature tolerance: -67°F to +250°F standard
- Contacts: silver, gold
- Mechanical life: up to 10 million cycles
- Wear resistant phenolic base and cover
- Elongated mounting hole for easier, more accurate mounting
- Long-life beryllium-copper spring
- Cover securely cemented to base

PIN PLUNGER ACTUATOR

Mfg. Part No.	Amps	O.F. (oz)	D.T. Max. (in.)	O.P.	Termination	Stock No.	Price Each 1-9	Price Each 10-24
12SX1-T	1	5	0.003	8.13 mm	Solder	23F2143	25.28	23.81
411SX21T	2	5	...	8.13 mm	Solder	39B8351	16.28	15.33
11SX1-T	5	3.5	0.001	8.13 mm	Solder	23F2110	16.34	15.59
11SX21-T	5	5	0.002	8.13 mm	Solder	23F4180	9.21	8.79
2SX1-T	7	3	0.005	8.13 mm	Solder	23F1975	22.23	16.19
1SX1-T	7	5	0.005	8.13 mm	Solder	73K1391	12.51	11.89
1SX48-T	7	5	0.005	8.13 mm	Solder	23F1888	17.71	16.92
21SX39-T	7	5	0.005	8.13 mm	Solder	23F2184	7.82	7.47
1SX1-H58	7	5	...	8.13 mm	Quick connect	23F1886	22.07	16.06
21SX39-T2	7	5	...	8.13 mm	Solder	23F2185	13.14	9.58
1SX74T	7	5	...	8.13 mm	Solder	98B6163	18.89	17.80
21SX1-T	7	5	...	8.13 mm	Solder	23F2183	19.61	13.38
91SX39T	7	5	0.005	7.37 mm	Solder	39B9695	20.88	16.09
11SX96T	5	1.7	0.001	8.13 mm	Solder	39B4474	20.26	14.59
12SX12T	1	1.39	0.003	8.13 mm	Solder	39B4771	33.25	23.95
13SX1T	1	3.5	0.001	8.13 mm	Solder	39B5069	40.53	29.17
13SX96-T	1	1.7	0.001	8.13 mm	Solder	86C3642	34.87	25.11
412SX22T	1	1.39	0.003	8.13 mm	Solder	39B8357	34.60	24.90
4SX19T	7	1.39	0.002	8.13 mm	Solder	01C3913	22.87	16.40
4SX37H58	7	1.39	0.005	8.13 mm	Quick Connect	90B1917	26.57	19.13
6SX7T	1	1.39	0.002	8.13 mm	Solder	39B8733	39.63	28.54
LEVER ACTUATOR								
311SX1-T	5	50	0.02	8.43 mm	Solder	23F2298	16.02	12.25
311SX2-T	5	30	0.035	8.26 mm	Solder	23F4193	21.63	16.67

CONTINUED

MICRO SWITCH™ PREMIUM SX SERIES SUBMINIATURE BASIC SWITCHES (CONT.)

LEVER ACTUATOR

Mfg. Part No.	Amps	O.F. (oz)	D.T. Max. (in.)	O.P.	Termination	Stock No.	Price Each 1-9	Price Each 10-24
311SX3-T	5	20	0.06	7.75 mm	Solder	23F4194	21.01	15.72
313SX1T	1	1.76	0.02	8.43 mm	Solder	39B7615	28.82	20.75
313SX3T	1	0.2	0.06	7.75 mm	Solder	50B5592	29.76	21.43
ROLLER LEVER ACTUATOR								
313SX30-T	1	68	...	14.15 mm	Solder	26R1432	35.21	25.25
311SX64H58	5	0.67	0.015	14.15 mm	Quick Connect	39B7601	21.63	20.37
SIMULATED ROLLER LEVER ACTUATOR								
313SX5-T	1	30	...	14.86 mm	Solder	26R1433	28.96	20.77
311SX4-T	5	60	0.015	14.15 mm	Solder	23F2299	13.49	12.30
311SX5-T	5	30	0.035	14.86 mm	Solder	23F2300	15.67	14.79

(4919)

MICROSWITCH™ STANDARD MINIATURE AND SUBMINIATURE SNAP-ACTION ZM/ZX/ZW SERIES BASIC SWITCHES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features:
- Small, Size with Power Duty or Low Energy Power Ratings
- Similar Size and Mounting as SX & SM Series
- Variety of Termination and Lever Options

Applications:
- Vending machines
- Communication equipment
- HVAC equipment

Specifications:
- Termination: Solder or PC mount
- Contact rating: 0.1A or 3A at 125VAC
- Operating temperature: -25°C to +85°C
- ZX contact rating: up to 3A at 125 VAC
- ZM/ZV contact rating: up to 10A at 125 VAC

PIN PLUNGER ACTUATOR

Mfg. Part No.	Circuitry	Current Rating (A)	Operating Force (g)	Termination	Stock No.	Price Each 1-9	Price Each 10-99
ZM90G20A01	SPDT	10.1.0	8.78	PCB S.S.	05M2166	2.86	1.57
ZM10B10A01	SPDT	0.1.0	2.12	Solder	86C1660	3.24	1.89
ZX10C10A01	SPDT	0.1.0	3.17	Solder	86C1709	2.29	1.76
STRAIGHT LEVER							
ZX10E10C01	SPDT	0.1	50	Solder	35C2236	3.73	2.17
ZX40E10C01	SPDT	3.0	50	Solder	05M2206	3.19	1.86
ZM50E10C01	SPDT	5.0	1.16	Solder	05M2163	3.47	1.91
SIMULATED ROLLER LEVER							
ZX40E10E01	SPDT	3.0	50	Solder	05M2207	3.26	2.03
ZM50E10E01	SPDT	5.0	1.23	Solder	05M2164	3.36	2.02
ZW50F90AW1	SPDT	5.0	3.35	Cable	16M4261	7.08	4.84
ZM10B70E01	SPDT	0.1.0	0.60	Quick Connect	86C1663	3.72	2.55
ROLLER LEVER ACTUATOR							
ZW10E70FD1	SPDT	100.0	2	Quick Connect	71J8984	11.64	7.95
ZW10E90FW1	SPDT	100.0	2.29	20" Wire Leads	86C1708	15.60	12.88
ZM90G20F01	SPDT	10.1.0	2.12	PCB	86C1690	3.04	1.89

PCB S.S. = PC Board self supporting
(69585)

WATERPROOF ZD/ZW SERIES MICROSWITCH SNAP=ACTION BASIC SWITCHE

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

- Contact configuration: SPDT
- Voltage rating: ZD series 125Vac, 12Vdc
- Current rating: ZD series 100mA, 3A
- Voltage rating: ZW series 125Vac, 250Vac
- Current rating: ZW series 100mA, 5A
- Operating temperature: -40°C to 120°C

ZD SERIES

Mfg. Part No.	Current Rating	Voltage Rating	Actuator Type	Stock No.	Price Each 1-9
ZD30S60A05-Z	3A	125VAC 12VDC	Pin Plunger	48T3301	4.12
ZD30S60C02-Z	3A	125VAC 12VDC	Straight Lever	48T3302	4.66
ZD30S60H02-Z	3A	125VAC 12VDC	Simulated Roller Lever	48T3303	4.65
ZW SERIES					
ZW50F92AW1-B-Z	5A	250VAC	Pin Plunger	48T3304	12.46
ZW10F15CD1-Z	100mA	250VAC	Straight Lever	48T3305	6.48

CONTINUED

WATERPROOF ZD/ZW SERIES MICROSWITCH SNAP=ACTION BASIC SWITCHE (CONT.)

ZW SERIES

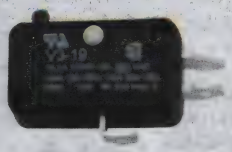
Mfg. Part No.	Current Rating	Voltage Rating	Actuator Type	Stock No.	Price Each 1-9
● ZW50F15AD1-Z	5A	250VAC	Pin Plunger	48T3306	4.83
● ZW50F15CD1-Z	5A	250VAC	Straight Lever	48T3307	6.90
● ZW50F15FD1-Z	5A	250VAC	Roller Lever	48T3308	5.86
● ZW50F91AW1-Z	5A	250VAC	Straight Lever	48T3309	6.88

(196510)

MICRO SWITCH™ BASIC SWITCHES V3 SERIES SNAP-ACTION

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.



- SPDT
- Overtravel: .040″ min.

Switches feature high electrical capacity, long life, beryllium copper springs, and silver contacts. Size and shape meet design requirements for all types of applications. Wear-resistant phenolic case and plunger. Mounting hole diameter is 0.114″, except **mfg. part no. V3-19M**, which is 0.122″. UL recognized, CSA certified.

PIN PLUNGER

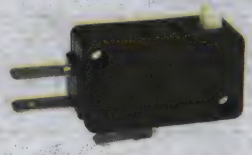
Mfg. Part No.	Amps	O.F. (Ounces)	Stock No.	Price Each 1-9
V3-1001	10	14	23F1769	9.19
● V3-245	10	25	23F1765	55.34
● V3-129	11	8	23F1764	23.42
● V3-119	11	8	23F1761	7.00
● V3-19	15	14	23F1752	6.94
● V3-19M	15	14	94B7347	5.06
● V3-15	15	14	23F1751	6.63
ROLLER LEVER				
● V3L-22	15.1	14	39B2460	17.67
● V3L-3339	15.1	150	39B2533	12.16
STRAIGHT LEVER				
● V3L-3296	15.1	88	39B2526	11.57

(4872)

MICRO SWITCH™ V-BASIC PREMIUM BASIC SWITCHES V7 SERIES SNAP-ACTION

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.



Features:
- Reliability and accuracy
- World wide package acceptance
- 100K operations at full load
- Applications: Appliances, medical/dental equip, test instruments

Specifications:
- Circuitry: SPDT
- Operating temperature: -40°C to 85°C
- Physically interchangeable with V3 series miniature basic switches; on this page
- All existing V3 lever options available
- 0.114″ (2.90mm) mounting holes + 0.122″ (3.1mm) holes
- **D8 suffix** denotes 0.187″ x 0.020″ quick-connect termination
- **E9 suffix** denotes 0.250″ x 0.032″ quick-connect termination
- Also available in high-temperature (to 350°F), high -current (to 25 amps), and ENEC approved and CE compliant versions; *go online or call*

SPECIFICATIONS

A	B	C*	D
5A, 125, 250 or 277VAC; 1/10Hp, 250VAC	11A and 1/3HP, 125, 250 or 277VAC; 1/2A, 125VDC; 1/4A, 250VDC; 4A, 125VAC "L"	15.1A and 1/2HP, 125, 250 or 277VAC; 1/2A, 125VDC; 1/4A, 250VDC; 5A, 120VAC "L"	1A, 125VAC
E	**F**	**S**	**W**
10A and 1/3HP 125 or 250VAC; 1/2A, 125VDC; 1/4A, 250VDC; 4A, 125VAC "L"	3A, 125, 250 or 277VAC 1/10hp, 250VAC	0.1A, 125VAC	15.1A, 125, 250 or 277VAC

*Available only when specifying 150 gram operating force. L denotes lamp load.

PIN PLUNGER

Mfg. Part No.	Current	Circuitry	Operating Force	Stock No.	Price 1-9
● V7-3S17E9	100mA	SPDT	1.7ozf	50F5121	7.74
● V71S17D8	100mA	SPDT	150gf	39B2842	7.20
● V7-1D10D8	1A	SPDT	150gf	86C1325	4.93
● V7-5F17D8-336	3A	SPDT	2.3gf	90B2676	13.44
● V7-5F17D8	3A	SPDT	15gf	86C1377	5.30

➤ CONTINUED ➤

MICRO SWITCH™ V-BASIC PREMIUM BASIC SWITCHES V7 SERIES SNAP-ACTION (CONT.)

Mfg. Part No.	Current	Circuitry	Operating Force	Stock No.	Price 1-9
● V7-1A17D8	5A	SPDT	150gf	26R1422	4.72
● V7-3A17DB	5A	SPDT	0.49N	39B2934	5.77
● V7-3E19E9	10A	SPDT	50gf	86C1364	3.36
● V7-3E17E9	10A	SPDT	50gf	50F5111	5.18
● V7-3E17D8	10A	SPDT	50gf	50F5109	5.38
● V71B37D8	11A	SPST-NC	150gf	39B2785	5.34
● V7-7B27D8	11A	SPST-NO	8ozf	26R1426	5.52
● V7-2B17D8	11A	SPDT	75gf	50F5132	2.36
● V7-2B17E9	11A	SPDT	75gf	86C1353	5.21
● V7-1B17D8	11A	SPDT	150gf	39B2765	5.18
● V7-7B19E9	11A	SPDT	8ozf	39B3026	5.52
● V7-7B17D8	11A	SPDT	8ozf	86C1386	5.47
● V7-6B19D8	11A	SPDT	14ozf	39B2999	5.98
● V7-1C27E9	15A	SPST-NO	150gf	86C1316	5.28
● V71C37D8	15A	SPST-NO	150gf	96B0546	5.17
● V7-1C17E9	15A	SPDT	150gf	50F5146	3.22
● V7-1C17D8	15A	SPDT	150gf	50F5157	2.81
● V7-6C17D8	15A	SPDT	14ozf	39B3001	2.61
● V7-1C17D844	15A	SPDT	150gf	54H4037	6.15
● V71V29E9	21A	SPST-NO	175gf	39B2867	3.37
● V7-1V19E9	21A	SPDT	175gf	50B5552	4.55
● V7-1Z29E9	25A	SPST-NO	225gf	39B2885	3.03
● V7-1Z19E9	25A	SPDT	225gf	39B2883	3.22
STRAIGHT LEVER					
● V7-3E17D8-148	10A	SPDT	8gf	21J9486	5.70
● V7-1C27D80-481	15A	SPST-NO	46gf	39B2799	6.17
● V7-6C17D8-057	15A	SPDT	4ozf	39B3002	5.79
● V7-1C17D8-002	15A	SPDT	160gf	50F5158	7.00
● V7-6C18D8-002	15A	SPDT	413gf	86C1383	3.19
EXTENDED STRAIGHT LEVER					
● V7-2S17D8-022	100mA	SPDT	0.44N	50F5079	4.27
● V7-3S17D8-022	100mA	SPDT	30gf	50F5099	6.22
● V7-1S17D8022	1A	SPDT	85gf	39B2843	4.74
● V7-3E17E9-022	10A	SPDT	30gf	50F5094	2.99
● V7-6B19E9-022	11A	SPDT	215gf	73C7189	7.06
● V7-1B17D8-022	11A	SPDT	82gf	91B8366	2.99
● V7-1B17D8-122	11A	SPDT	43gf	26R1423	6.04
● V7-1B19D8-022	11A	SPDT	82gf	39B2773	6.30
● V7-2B17D8-022	11A	SPDT	41gf	50F5134	4.68
● V7-2B17D8-162	11A	SPDT	10gf	39B2900	6.91
● V7-2B17D8-165-1	11A	SPDT	9gf	71J8881	3.84
● V7-2B27D8-022	11A	SPST-NO	0.54N	39B2914	5.34
● V7-6C18D8-048	15A	SPDT	1.39N	30C5402	9.24
● V7-1C17D844-429	15A	SPDT	130gf	78H2156	12.65
● V7-6C13D8-132	15A	SPDT	93gf	71J8892	7.00
● V7-9W1AE9-022	15A	SPDT	162gf	71J8899	8.69
LONG STRAIGHT LEVER					
● V7-3S17D8-048	100mA	SPDT	16gf	50F5100	6.32
● V7-1A17D8-048	5A	SPDT	46gf	39B2744	2.67
● V7-1B17D8048	11A	SPDT	50gf	39B2766	3.45
● V7-2B17D8-048	11A	SPDT	20gf	50F5135	2.66
● V7-1B17D8-048-S	11A	SPDT	50gf	39B2767	7.12
● V7-6B19D8-057	11A	SPDT	55gf	86C1379	6.36
● V7-1C17D8-048	15A	SPDT	45gf	50F5160	3.36
● V7-9W1AE9-048	15A	SPDT	90gf	39B3038	7.29
● V7-1V19E9-048	21A	SPDT	55gf	39B2859	3.80
SIMULATED ROLLER LEVER					
● V7-1S17D8-263	1A	SPDT	90gf	39B2848	7.09
● V7-5F17D8-289	3A	SPDT	8gf	26R1425	8.43
● V7-3E19E9-263	10A	SPDT	33gf	86C1365	7.92
● V7-1B17D8263	11A	SPDT	90gf	39B2770	2.65
● V77B19D8263	11A	SPDT	5ozf	39B3023	3.30
● V7-1C17D8-263	15A	SPDT	91gf	50F5163	3.36
● V7-6C17D8263	15A	SPDT	8ozf	39B3004	6.54
● V7-1C17D8-294	15A	SPDT	0.89N	97C8698	4.25
● V7-7H15D8-263-1	...	SPDT	4ozf	26R1427	5.95
● V7-7H25D8-263-1	...	SPST-NO	4ozf	26R1428	6.06
ROLLER LEVER					
● V7-2S17D8-201	100mA	SPDT	90gf	50F5080	7.86
● V7-1S17D8-201	100mA	SPDT	170gf	39B2846	4.75
● V7-7B17D8201	11A	SPDT	10ozf	39B3019	3.38
● V7-2B17D8-201	11A	SPDT	88gf	50F5136	4.58
● V7-1C17D8-201	15A	SPDT	175gf	50F5161	3.19

➤ CONTINUED ➤

MICRO SWITCH™ V-BASIC PREMIUM BASIC SWITCHES V7 SERIES SNAP-ACTION (CONT.)

ROLLER LEVER

Mfg. Part No.	Current	Circuitry	Operating Force	Stock No.	Price 1-9
V7-1C13D8-201	15A	SPDT	175gf	45H3039	3.42
V71B10E9-207	11A	SPDT	0.83N	93B0263	7.27
LONG ROLLER LEVER					
V7-7D17D8-207	1A	SPDT	5ozf	39B3030	11.75
V7-1A17D-8057	5A	SPST-NO	38gf	39B2745	7.22
V7-1A27D8-207	5A	SPST-NO	86gf	39B2752	3.31
V7-2A17D8-207	5A	SPDT	43gf	50F5070	7.26
V7-1B17D8207	11A	SPDT	85gf	39B2769	3.71
V7-2B17D8-207	11A	SPDT	45gf	50F5137	2.81
V7-1C17D8-207	15A	SPDT	90gf	50F5162	4.51

AUXILIARY ACTUATORS FOR V3 AND V7 STYLE SWITCHES

Mfg. Part No.	Description	Actuator Length (in.)	O.F. Max (oz.)	O.T. Min (in.)	Stock No.	Price Each 1-9
JV-7	Straight Lever	1.27	9	0.05	23F4764	31.10
JV-26	Long Straight Lever	1.75	1.4	0.141	23F4767	20.12
JV-5	Roller Leaf	0.81	12	0.031	23F5010	16.84
JV-20	Roller Lever	0.75	3	0.062	23F4224	43.03
JV-82	Roller Lever	0.81	28	0.89	23F4770	28.15

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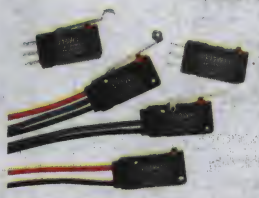
V15W SERIES WATERTIGHT MINIATURE BASIC SWITCHES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

- Contact configuration: SPDT
- Operating speed:.01mm to 1m/s (at plunger)
- Wide current range: 0.1 A, 5 A, 10 A
- Voltage rating: 125/250VAC, 30 or 48VDC
- Operating force: 200 g
- Temperature rating: -40 °C to 85 °C [-40 °F to 185 °F]
- Insulation resistance: 100MOhm min. at 500VDC
- Terminals: 4,8 mm x 0.8 mm or 4,8 mm x 0.5 mm or 300mm wire
- Meets IP67 standards for sealing (wired versions)



Mfg. Part No.	Contact Current	Operating Force (gf)	Actuator Style	Stock No.	Price Each 1-9
V15W11-DZ200-AW1	100mA	200	Pin Plunger	65T3230	8.28
V15W11-DZ200A02-AW1	100mA	120	Straight Lever	65T3231	5.76
V15W11-DZ200A02-W2	5A	120	Straight Lever	65T3232	5.41
V15W11-DZ200A04-W2	5A	120	Simulated Roller Lever	65T3233	5.56
V15W11-DZ200A05-AW1	100mA	240	Roller Lever	65T3234	6.01
V15W11-DZ200A06-AW1	100mA	120	Long Roller Lever	65T3235	6.44
V15W11-DZ200A06-W2	5A	120	Long Roller Lever	65T3236	5.74
V15W11-EZ200-W3	10A	200	Pin Plunger	65T3237	9.82
V15W11-WZ200-W3	10A	200	Pin Plunger	65T3238	12.35
V15W11WZ200A02-AW1	100mA	120	Straight Lever	65T3239	8.48
V15W11-WZ200A02-W2	5A	120	Straight Lever	65T3240	11.67
V15W11-WZ200A06-AW1	100mA	120	Long Roller Lever	65T3241	8.24

(197704)

MICRO SWITCH™ V-BASIC STANDARD V15 SERIES SNAP-ACTION

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features:
- Most suitable for most applications
- Matches product performance to customer design expectations
- Unique push-in terminal option
- Rating: 16A, 22A and 26A
- Accurate repeatability and long life at great value
- Ideal for use with: HVAC, office business machines, vending machines

Specifications:
- Insulation resistance: less than 100mΩ
- Dielectric strength: 1000VAC (50/60Hz)
- Operating frequency: 30ops per minute
- Electrical rating: 16A at 250VAC; 22A at 250VAC
- Temperature rating: T=125°C, H= 150°C

Pin Plunger

PIN PLUNGER

Mfg. Part No.	Current (A)	Circuitry	Operating Force	Stock No.	Price Each 1-9
V15T16-CC100-K	16	SPST-NC	100gf	01N5054	1.11
V15T16-CC300-K	16	SPST-NC	300gf	01N5057	1.11

CONTINUED

MICRO SWITCH™ V-BASIC STANDARD V15 SERIES SNAP-ACTION (CONT.)

Mfg. Part No.	Current (A)	Circuitry	Operating Force	Stock No.	Price Each 1-9
V15H16-CZ100-K	16	SPDT	100gf	01N5044	2.95
V15T16-CZ100-K	16	SPDT	100gf	01N5060	2.31
V15T16-CZ300-K	16	SPDT	300gf	01N5065	2.38
V15T26-CZ300-K	26	SPDT	300gf	01N5070	2.92
STRAIGHT LEVER					
V15T16-CC300A01-K	16	SPST-NC	300gf	01N5058	1.13
V15H16-CZ100A02-K	16	SPDT	100gf	01N5045	3.08
V15T16-CZ100A02-K	16	SPDT	100gf	01N5061	2.30
V15T16-CZ300A02-K	16	SPDT	300gf	01N5066	2.37
V15H22-CZ100A02-K	22	SPDT	100gf	01N5050	2.22
LONG STRAIGHT LEVER					
V15H16-CZ100A03-K	16	SPDT	100gf	01N5046	3.09
V15T16-CZ100A03-K	16	SPDT	100gf	01N5062	2.37
V15T16-CZ300A03-K	16	SPDT	300gf	01N5067	2.30
V15H22-CZ100A03-K	22	SPDT	30gf	01N5051	2.22
ROLLER LEVER					
V15T16-CC100A05-K	16	SPST-NC	100gf	01N5056	1.80
V15T16-CC300A05K	16	SPST-NC	300gf	01N5059	1.18
V15H16-CZ100A05-K	16	SPDT	100gf	01N5047	3.11
V15T16-CZ100A05-K	16	SPDT	100gf	01N5063	2.42
V15H22-CZ100A05-K	22	SPDT	100gf	01N5052	2.25
LONG ROLLER LEVER					
V15H16-CZ100A06-K	16	SPDT	100gf	01N5048	3.05
V15T16-CZ100A06-K	16	SPDT	100gf	01N5064	2.45
V15T16-CZ300A06-K	16	SPDT	300gf	01N5069	2.38
V15H22-CZ100A06-K	22	SPDT	100gf	01N5053	2.27

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MICRO SWITCH™ PREMIUM LARGE SNAP ACTION BZ/BA/BM/BE SERIES BASIC SWITCHES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features:
- Accepted as the worldwide standard
- Low operating force and differential travel
- Variety of actuator configurations
- Enhanced mechanical life up to 20 million cycles
- Ideal for use in brake assemblies, building controls , door latches, sprinkler systems, elevators, HVAC, industrial kitchen equipment, timing devices and value positions

Mfg. Part No. Suffix Descriptions:
- -A2 = Bottom-Facing Screw Terminals (6-32 Screws)
- -P4 = Side-Facing Screw Terminals
- No Suffix = Solder Terminals
- D5 = Quick connect

Specifications:
- Meet ML-S-8805 standards
- Circuitry: SPDT
- Rated: 125, 250, and 480VAC
- Operating temperature: -55°C to 85°C upt to 200°C

ROLLER LEAF

Mfg. Part No.	Amps	O.F. (Oz.)	Stock No.	Price Each 1-9	Price Each 10-24
BZ-2RL2-A2	15	5	23F4097	14.36	13.60
BA-2RL2-A2	20	9	23F5022	20.98	16.17
LEVER					
BZ-2RW8244-A2	5	2.5	23F4161	13.57	12.74
BZ-2RW80233-A2	5	2.5	99F3757	10.75	10.27
BZ-RW8435-A2	10	7	23F4062	17.68	12.87
BZ-2RW8435-A2	10	0.5	38B4289	19.35	14.91
BZ-RW8435	10	0.25	04M8379	15.81	...
BZ-2RW80-A2	15	2.5	23F4026	11.08	8.54
BZ-2RW863-A2	15	1	23F4034	13.69	10.54
BZ-2RW824-A2	15	2.5	50B5477	15.78	14.71
BZ-2RW80	15	2.5	73K2373	15.03	11.58
BZ-2RW84-A2	15	1	23F4149	13.87	10.69
BZ-2RW855-A2-S	15	2.5	23F4156	18.45	17.54
BZ-RW84-A2	15	0.75	23F4056	18.26	13.30
BZ-2RW899-A2	15	2.5	23F4159	13.96	13.11
BZ-2RW805551-A2	15	2.5	23F4203	18.70	17.53
BZ-2RW53-A2	15	...	23F4141	19.73	15.40
BZ-2RW84118-A41	15	1	51B458	18.86	13.73
BZ-2RW80147-A2	15	6	23F4166	17.77	13.69
BZ-RW84414-A2	15	10	91B0057	16.20	11.80
BZ-2RW8024	15	2.5	71J3481	14.53	9.91
BZ-2RW80161-A2	15	0.97	31C7248	12.06	10.70
BZ-2RW80288-A2	15	0.83	71J3482	14.79	10.09
BZ2RW8072A2	15	0.7	92B2637	17.29	16.41

CONTINUED

MICRO SWITCH™ PREMIUM LARGE SNAP ACTION BZ/BA/BM/BE SERIES BASIC SWITCHES (CONT.)

Mfg. Part No.	Amps	O.F. (Oz.)	Stock No.	Price Each 1-9	Price Each 10-24
LEVER					
● BZ-2RW-80198T	15	0.83	04C5180	28.21	20.76
● BZ2RW82444A2	15	0.7	38B4261	17.41	16.45
● BZ-2RW8405-A2	15	0.28	88F2022	17.39	11.86
● BZ-2RW84467-A2	15	0.22	38B4302	12.63	8.61
● BZ-2RW855-TS	15	0.7	50B5488	21.65	20.53
● BZ-2RW86324-A2	15	0.28	38B4310	53.20	42.49
● BZ-2RW876-PC2	15	1.67	97B0031	11.82	10.50
● BZ-2RW876T	15	1.67	94F5365	15.87	11.56
● BZ-2RW896-A2	15	...	26C1417	20.87	17.01
● BZ-2RWT80	15	0.7	23F5057	14.15	9.65
● BZ-3RW8055-A2S	15	0.83	38B4371	27.45	...
● BZ-7RW8055151-A2S	15	1.25	22C7238	16.63	11.35
● BZ-7RWT80	15	0.97	88F3745	27.33	20.07
● BZ-RW53-A2	15	...	38B3993	19.52	18.53
● BZ-RW84	15	0.22	85C6618	14.04	13.31
● BZ-RW8405-A2	15	0.22	38B4001	16.71	13.92
● BZ-RW85X2	15	0.83	94F5356	20.54	15.38
LEAF LEVER					
● BZ-2RL-A2	15	5	23F4284	13.38	12.63
● BZ-2RL	15	5	23F4094	17.45	13.44
● BZ-2RL5551-A2	15	7	38B4130	21.71	15.81
● BZ-2RL-P4	15	5	23F4095	13.27	...
● BZ-2RL99	15	...	38B4133	13.45	11.85
● BZ-2RLT04	15	1.39	85C6628	11.43	10.06
● BZ-RLX	15	0.83	23F4035	19.58	18.02
● BA-2RL-A2	20	9	23F5020	12.52	...
RIGID LEVER					
● BA-1RV543510-A2	20	1.39	39C5735	19.14	13.06
● BA-1RV5435241-A2	20	0.42	67C1446	14.16	...
● BA-1RV5435-246	20	0.42	38B3711	19.25	13.13
● BA-2RV-A2	20	2.5	23F5027	15.81	12.18
● BA-2RV6-A2	20	1	23F5029	19.72	15.20
● BA-2RV136-A2	20	8	23F5032	23.64	17.69
● BA-2RVT	20	2.5	23F5033	17.73	12.91
● BA-2RV	20	2.5	04M8335	18.28	13.32
● BA-2RV-P4	20	0.72	23F5028	13.38	...
● BA2SV22T	20	8	38B3741	32.23	24.13
● BE-2RV-A2	25	0.72	23F5050	14.72	10.04
REVERSE ACTUATING LEVER					
● BZ-2RM22	15	5.28	23F4102	17.08	14.23
● BZ-2RM-A2	15	1.67	23F4100	14.55	...
● BZRMX	15	2.78	38B3974	26.07	19.51
ROLLER LEVER					
● BA-2RV22T	20	6	23F5031	16.80	...
● BZ-2RW82272-A2	1	6	26R1418	18.17	...
● BZ-3YWT82	5	4.5	23F4286	29.96	28.71
● BZ-RW922-A2	10	12	23F4060	53.01	42.14
● BZ-3RW8221555513T	10	6.5	30C9529	21.97	20.58
● BZ-2RW82-A2	15	3.5	23F4136	12.41	11.83
● BZ-2RW822-A2	15	6	23F4029	12.83	11.77
● BZ-2RW825-A2	15	8	23F4032	25.37	23.92
● BZ-2RW822	15	6	04M8399	16.91	13.03
● BZ-2RW822T	15	6	04M8400	16.12	15.19
● BZ-2RW8225-A2-S	15	6	23F4160	24.14	18.08
● BZ-2RW8225551-A2	15	6	23F4209	11.17	...
● BZ-2RW82T	15	3.5	04M8398	18.28	13.32
● BZ-2RW822-P4	15	6	23F4151	14.92	14.31
● BZ-2RW82276T	15	6	04M8402	15.12	13.95
● BZ-2RW82212T	15	6	23F4169	19.50	14.20
● BZ-2RW825551-D6	15	3.5	52K9683	23.80	17.81
● BZ-RW842214-P4	15	2	30C8639	12.50	...
● BZ-2RW82113T	15	3.5	23F4167	22.66	16.96
● BA-2RV22-A2	20	6	23F4005	16.15	15.08
● BA-2RV22-D81	20	6	19C8933	23.70	17.73
● BA-2RV2-A2	20	3.5	23F4004	18.45	17.20
● BA-2RV2223-A2	20	2.27	38B3732	12.48	...
● BE-2RV22-A4	25	6	23F5053	21.03	15.74
● BM1RW822A2	22	1.6	38B3810	13.61	12.88
● BZ-2GW822	15	1.81	38B4095	26.01	24.37
● BZ-2RW8221-5T	15	1.67	38B4237	17.17	16.08
● BZ-2RW8223312	15	1.67	04M8401	20.26	16.19
● BZ-2RW82244-A2	15	0.7	85C6644	38.03	28.46

➤ CONTINUED ➤

MICRO SWITCH™ PREMIUM LARGE SNAP ACTION BZ/BA/BM/BE SERIES BASIC SWITCHES (CONT.)

Mfg. Part No.	Amps	O.F. (Oz.)	Stock No.	Price Each 1-9	Price Each 10-24
ROLLER LEVER					
● BZ2RW8225551	15	1.67	38B4245	23.18	21.97
● BZ-2RW8225551-D6	15	1.67	27C4247	13.63	12.03
● BZ-2RW8225551-W103	15	1.67	85C6645	33.65	31.88
● BZ-2RW82255T-S	15	1.67	18M8543	31.14	29.54
● BZ3RW822158-A46	15	1.81	19C9256	18.02	12.30
● BZ-3RW822-A2	15	6.5	85C6656	17.04	14.19
● BZ3RW822T	15	1.81	38B4377	17.54	11.97
● BZ-7RW82255518T	15	1.95	85C6660	20.05	19.02
● BZ-7RW822A2	15	1.95	50B5478	17.93	12.24
● BZRW822P4	15	1.53	03C2861	16.75	15.69
● BZ-RW9221	15	3.34	23F4063	57.81	54.83
● BZRW9223312	15	3.34	38B4017	36.87	...
● BZRW922P4	15	3.34	38B4016	41.12	...
● BZ2AW84223T	15	0.97	38B4091	26.28	24.90
● BZ-2RW8422-A2	15	0.7	12C1521	13.86	12.21
● BZ-RW842214-P5	15	0.56	71J3472	13.16	11.33
● BZRW8422P4	15	0.56	14C8021	15.92	15.06
● BZ2AW825551T	15	2.36	38B4087	42.50	33.96
● BZ2RW8219A2	15	0.97	51B456	18.41	12.57
● BZ2RW826T	15	1.67	90B9612	20.48	19.42
● BZ-2RW82725551-D6	15	0.97	85C6650	24.78	22.53
● BZ3YWT-822	15	1.95	93B2526	37.67	28.20
BZ7RW2T04	15	1.25	38B4411	16.76	15.89
ROLLER PANEL MOUNT PLUNGER					
● BZ-2RQ18-A2	15	9-13	23F4014	27.05	25.71
● BZ-2RQ181-A2	15	9-13	23F4019	24.58	23.46
● BZ-2RQ784	15	13	04M8395	38.94	35.79
● BZ-2AQ18T1	15	24	23F4065	45.57	...
● BZ-2RQ181	15	13	23F4120	35.76	28.57
● BZ-2RQ18-P4	15	3.61	90B8230	27.98	...
● BZ2RQ9A2	15	3.61	93B7252	24.65	23.09
● BZ3YQ18T	15	7.23	38B4390	52.83	43.85
● BZ3YQ8T	15	7.23	38B4394	49.97	47.38
● BZ7RQ18T	15	7.78	91B1897	41.06	37.76
● BZ7RW82132TS	15	5	38B4417	15.96	15.09
● BZ7RQ181T	15	7.78	14C3902	32.17	...
SIMULATED ROLLER LEVER					
● BZ-2RW80147-P4	15	6	93B9355	12.57	11.67
● BZ-2AW855T1	15	2.36	18M8542	23.38	...
● BZ2RW80196-A2	15	0.97	50B5487	19.31	14.06
● BZ7RW80189A2	15	4.73	38B4413	16.74	11.42
PANEL MOUNT PLUNGER					
● BZ-RQ66	15	9.5	04M8378	22.56	...
● BZ-RQ1-A2	15	9.5	23F4037	22.60	18.05
● BZ-2RQ1-A2	15	13	23F4013	12.81	11.75
● BZ-2RQ66	15	13	04M8391	20.49	17.10
● BZ-2RN702	15	13	04M8386	26.44	25.03
● BZ-2RQ68	15	13	04M8392	26.03	24.69
● BZ-2RQ69	15	13	04M8393	39.48	29.55
● BZ-2RQ1T	15	13	04M8389	22.85	18.26
● BZ-2RQ1	15	13	04M8388	18.79	17.37
● BZ-2RN770	15	13	04M8387	32.66	29.07
● BZ-2RQ77	15	13	04M8394	25.34	24.35
● BZ-3RD-A2	15	20	23F4272	15.99	15.11
● BA-2RQ1-A2	20	22	23F5024	18.07	16.52
● BA-2RB-P4	20	22	23F5018	16.47	12.01
● BE2RQ1A2	25	22	38B3766	17.25	16.69
● BZ-2RQ-A2	15	13	23F4107	24.23	22.36
● BZ-RQX167	15	9.5	23F4041	47.20	39.17
● BA-2RQ1	20	22	23F5023	18.61	...
● BM-1RQ1-A2	22	2.78	96B0657	27.47	26.05
● BZ-2RQ	15	3.61	50F5118	19.89	15.32
● BZ-2RQ1008-A2	15	1.39	85C6632	29.13	21.81
● BZ2RQ115-A2	15	3.61	18C2103	20.45	19.15
● BZ-2RQ128T	15	3.61	85C6634	22.52	20.73
● BZ2RQ1331	15	3.61	38B4152	22.93	20.28
● BZ-2RQ174-A2	15	3.61	38B4155	22.12	15.09
● BZ-2RQ1824-A2	15	3.61	25C5765	35.79	25.67
● BZ2RQ1-D6	15	3.61	99F3539	27.76	20.78
● BZ2RQ7722	15	3.61	38B4179	34.44	32.66
● BZ-3YQ1T	15	7.23	23F4280	33.81	32.06
● BZ-3YQ69T	15	7.23	23F4281	62.29	...

➤ CONTINUED ➤

MICRO SWITCH™ PREMIUM LARGE SNAP ACTION BZ/BA/BM/BE SERIES BASIC SWITCHES (CONT.)

Mfg. Part No.	Amps	O.F. (Oz.)	Stock No.	Price Each 1-9	Price Each 10-24
PANEL MOUNT PLUNGER					
BZ7RQ1	15	7.78	38B4405	21.15	19.81
BZ-2RN-A2	15	13	23F4104	24.04	22.72
PIN PLUNGER					
BZ2R244A2	5	13	38B4330	15.90	11.58
BZ-R88-A2	10	9	23F4007	14.83	13.81
BZ-3AT	15	26	04M8403	17.46	16.89
BZ-RX	15	9	04M8380	21.17	16.91
BZ-2R-P4	15	13	23F4072	10.12	9.65
BZ-2R-A2	15	13	23F4009	7.91	7.49
BZ-2R-P1	15	13	23F4071	22.35	17.22
BZ-2RD331	15	13	04M8384	18.21	13.27
BZ-2R55-A2-S	15	15	23F4073	18.61	17.65
BZ-R31	15	28	23F4020	12.29	8.95
BZ-2RT	15	13	23F4132	15.29	11.14
BZ-2RT04	15	13	23F4133	13.97	10.18
BZ-7RT04	15	28	23F4288	15.03	13.47
BZ-R2411-A4	15	9	27C0146	11.73	...
BZ-R	15	9	73K2363	11.63	8.48
BA-R358-A2	15	10	26R1415	12.68	8.66
BZ-2R291-P4	15	13	26R1420	10.72	8.79
BA-2R-A2	20	22	23F5013	12.24	11.49
BA-2R708-P7	20	22	23F5015	36.57	34.46
BA-2RT	20	6.12	95B1209	11.35	9.77
BA-2R-A4	20	22	38B3720	14.52	10.58
BA-2R	20	22	23F5012	9.51	8.87
BA-2R-P4	20	22	26R1416	22.27	16.67
BA-3RX717	20	2.78	85C6587	47.70	39.59
BE-2R-A4	25	22	23F5047	8.95	...
BE-2RB-A2	25	22	23F5048	16.51	12.02
BA-3ST	25	38	04M8337	23.38	22.17
BA-3RX717	20	2.78	85C6587	47.70	39.59
BM1R2420	22	2.78	38B3819	12.34	8.42
BM-1R373	22	2.78	85C6603	11.32	9.50
BZ-2R244-P1	15	3.61	38B4331	17.99	15.93
BZ-2R24-A2	15	3.61	38B4329	12.71	8.30
BZ-2R258	15	3.61	97B2810	10.74	7.01
BZ-2R53-A2	15	3.61	72C4591	11.80	7.70
BZ-2R5551-P4	15	4.17	23F4083	12.67	11.33
BZ-2R708-P7	15	3.61	98B6627	35.23	33.01
BZ-2R710-PC2	15	3.61	38B4341	10.83	10.30
BZ-R330-P4	15	5.56	73K2378	12.70	10.35
BZ-7R55T-S	15	5.28	23F4287	20.80	19.71
BZ-R178	15	2.5	94F5357	12.76	9.29
BZ-R179	15	2.5	94F5358	13.24	9.04
BZ-R19-A2	15	3.34	23F4008	20.66	19.35
BE-2R-P4	15	2.5	24C2183	13.55	11.64
BZ-R21	15	1.13	23F4011	19.20	14.79
BZR330P4	15	2.78	38B4040	12.93	8.82
BZ-R55-A2-S	15	2.78	23F4021	19.43	18.42
BE2RP4	25	6.12	38B3764	11.74	10.44
BM-1R-A2	22	2.78	23F5054	13.91	9.49
BM-1R-A4	22	2.78	93B7866	11.08	9.54
BZ-2G-A2	15	5.56	90B4984	17.34	16.39
BZ-2R-D5	15	3.61	07C1030	15.20	10.37
BZ-2R-P5	15	3.61	30C3120	15.07	10.28
BZ-2R284449-A2	15	5.56	38B4356	11.10	10.46
BA-2CB708-A2	15	3.61	38B4300	13.06	12.30
BA-2RT	20	6.12	95B1209	11.35	9.77
BZ7RQ1T	15	7.78	29M7920	19.86	18.60
BZ-RQ1T04	15	2.78	85C6615	33.85	31.87
BZRQA2	15	2.67	38B3981	18.92	17.72
BZ2RN730	15	3.61	96B5685	32.10	29.55
BZ-3A55T	15	28	40C1991	32.11	25.65
LOW OVERTRAVEL PLUNGER					
BA-2RB-A2	20	22	23F4003	10.96	10.12
BA2SBT	20	8.34	50B5472	19.49	18.25
BA2CB708A2	20	6.12	38B3719	18.94	12.93
BZ-2RD244T1	5	13	25R6371	32.55	30.43
BZ-2RD244T1	5	13	25R6371	32.55	30.43
BZ2ADT1	15	6.67	90B9894	18.98	...
BZ2RD24-A2	15	3.61	14C7371	16.87	11.51
BZ-2RD42-P4	15	3.61	07C8038	16.52	11.27

CONTINUED

MICRO SWITCH™ PREMIUM LARGE SNAP ACTION BZ/BA/BM/BE SERIES BASIC SWITCHES (CONT.)

Mfg. Part No.	Amps	O.F. (Oz.)	Stock No.	Price Each 1-9	Price Each 10-24
LOW OVERTRAVEL PLUNGER					
BZ-2RD-D5	15	3.61	38B4099	15.46	11.26
BZ-2RDST-S	15	5.28	88F6133	29.36	21.97
BZ-3RDS15-TS	15	5.56	38B4358	20.92	19.59
BZ3YDT	15	7.23	38B4387	24.91	23.63
BZ-7RD-A2	15	7.78	91B4797	13.97	13.21
BZ-2RD-A2	15	13	23F4010	10.78	10.03
BZ-2RDT	15	13	04M8383	13.62	12.90
BZ-3YST	5	26	23F4282	39.11	29.27
BZ-2RDS-A2-S	15	19	23F4090	27.24	21.77
MEDIUM OVERTRAVEL PLUNGER					
BZ-2RS-A2	15	13	23F4212	12.40	11.64
BZ-2RS	15	13	04M8396	20.21	15.57
BZ-RSX	15	9.5	23F4050	24.03	17.99
BZ-2RS5551-A2	15	15	23F4130	14.63	14.06
BZ-3AST	15	26	26R1421	23.45	22.20
BZ-2RS55-A2-S	15	4.17	23F4128	28.43	26.17
BZ2RSP1	15	13	38B4184	22.55	16.44
BZ-RS	15	2.64	23F4044	21.63	15.76
ONE WAY ROLLER LEVER					
BZ-2RW826-A2	15	6	23F4215	23.48	21.98
WOBBLE COIL SPRING LEVER					
BFL1-AW1	5	7	91F5333	48.17	34.54

O.F. = Operating Force; D.T. = Differential Travel; O.P. = Operating Position
(15028)

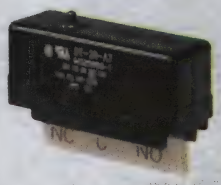
MICRO SWITCH™ ACTION DPDT BASIC SWITCHES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features
- Same size as the MICRO SWITCH™ BZ Series, but with two circuits
- Ideal for HVAC, irrigation systems, manually operated devices, medical/dental equipment, test instruments, timing devices, valves

Specifications
- Current rating: 10A
- Circuitry: DPDT
- Termination: screw
- Voltage: 125VAC, 250VAC, 28 VDC
- Operating temperature: -55 °C to 85 °C [-67 °F to 185 °F]



Mfg. Part No.	Current	Actuator Style	Operating Force O.F. (N)	Over Travel (mm)	Stock No.	Price Each 1-9
DT-2R4-A7	10	Pin Plunger	5.56	0.38	92B1420	101.09
DT-2R711-A7	10	Pin Plunger	5.56	0.13	98F9953	72.48
DT2RV216A7	10	Roller Lever	11.1	0.13	96B5444	142.50
DT2RV239A7	10	Roller Lever	2.64	0.25	38B4893	157.23
DT2RV3B6	10	Straight Lever	1.95	0.25	38B4894	82.50
DT-2RV49-B6	10	Straight Lever	3.97	0.25	85C7004	85.66

(181238)

MICRO SWITCH™ PREMIUM LARGE SNAP-ACTION MN SERIES BASIC SWITCHES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features:
- Accepted as the worldwide standard
- Low operating force and differential travel
- Variety of actuator configurations
- Ideal for use in limit or control mechanisms

Specifications:
- DPDT-DB (double-break)
- Rated 15A @ 480VAC
- Pin Plunger Actuator
- Motor Handling Capacity of 1HP @ 240VAC
- Mechanical Life to 10,000,000 Cycles
- Arc Resistant Plastic
- Screw Termination

Mfg. Part No.	Current Rating (A)	Operating Force (oz.)	Pretravel (in.)	Differential Travel (in.)	Operating Position (in.)	Stock No.	Price Each 1-9
3MN1	15	20	0.060	0.025	0.085	23F4126	34.41
3MN6	15	11	0.060	0.025	0.085	23F2001	55.23

(80246)

MICRO SWITCH™ PREMIUM LARGE SNAP-ACTION BASIC SWITCHES DT SERIES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features:
- Two independent single-pole double-throw circuits in one housing
- Same size as the MICRO SWITCH™ BZ Series, but with two circuits
- Enhance mechanica life up to 20 million cycles
- Low operating force and differential travel
- Variety actuator configurations
- Ideal for use in HVAC, irrigation systems, manually operated devices, medical/dental equipment, test instruments, timing devices, valves

Specifications:
- Circuitry: DPDT
- Termination: screw
- Voltage: 125VAC, 250VAC, 28 VDC
- Contacts: silver
- Operating temperature: -55 °C to 85 °C

Mfg. Part No.	Current	Actuator Style	Operating Force O.F. (N)	Over Travel (mm)	Stock No.	Price Each 1-9
DT-2R-A7	10	Pin Plunger	2.78	0.13	23F4046	55.51
● DT-2RV212-A7	10	Roller Lever	4.17	0.13	73K2383	87.28
● DT-2RV3-A7	10	Straight Lever	1.95	0.25	23F4049	72.97
● DT-2RV22-A7	10	Roller Lever	3.89	0.8	73K2384	81.38
● DT-2RV23-A7	10	Roller Lever	2.64	0.25	73K2385	69.52
● DT-2RV-A7	10	Straight Lever	1.7	15.9	73K2381	106.88
● DT-2RV-B6	10	Lever	1.66	1.57	88F2406	74.33
● DT-2R4-B6	10	Pin Plunger	5.56	0.38	04M8782	98.96
● DT-2R4-A7	10	Pin Plunger	5.56	0.38	92B1420	101.09
● DT-2R711-A7	10	Pin Plunger	5.56	0.13	98F9953	72.48
● DT2RV216A7	10	Roller Lever	11.1	0.13	96B5444	142.50
● DT2RV239A7	10	Roller Lever	2.64	0.25	38B4893	157.23
● DT2RV3B6	10	Straight Lever	1.95	0.25	38B4894	82.50
● DT-2RV49-B6	10	Straight Lever	3.97	0.25	85C7004	85.66

(4914)

MICRO SWITCH™ PREMIUM LARGE SNAP-ACTION TANDEM BASIC SWITCH ASSEMBLY 6AS SERIES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features
- 6AS Series consists of two large premium BZ/BA/BM/BE snap-action switches ganged together and actuated by a single actuator
- Field adjustable operating point on one or both basic switches
- Solder, A2, and T-type terminations available, along with straight, roller, and leaf levers
- Mounting holes accept pins or screws of 3,53 mm [0.139 in] diameter
- Often used for boiler controls or anywhere two circuits need to be controlled by one actuator

Specifications
- Circuitry: 2 CKT SPDT
- Voltage: 250 VAC
- Switch Terminals: Screw

Mfg. Part No.	Current	Actuator Style	Operating Force O.F. (N)	Over Travel (mm)	Stock No.	Price Each 1-11
● 6AS34	15	Roller Lever	2.22	0.51	39B8585	71.30
● 6AS36	15	Roller Lever	2.22	0.51	23F2031	72.21

(180512)

MICRO SWITCH™ LARGE PREMIUM SNAP-ACTION SWITCHES MT SERIES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features
- Contains a magnet for very high dc loads
- Ideal for dc motors, solenoids
- 100,000 operations

Specifications
- Current rating: 10A
- Circuitry: SPDT
- Termination: solder, screw
- Voltage: 125VDC, 250VDC
- Operating temperature: -55 °C to 82 °C [-67 °F to 180 °F]

CONTINUED

MICRO SWITCH™ LARGE PREMIUM SNAP-ACTION SWITCHES MT SERIES (CONT.)

Mfg. Part No.	Current	Actuator Style	Operating Force O.F. (N)	Over Travel (mm)	Stock No.	Price Each 1-9
● MT-4RL	10	Leaf Lever	3.34	1.52	39B1462	62.59
● MT-4RL2	10	Roller Lever	3.34	1.52	39B1467	81.30
● MT-4RL2-A28	10	Leaf Roller	3.34	1.52	23F4920	98.89
● MT-4R-A28	10	Pin Plunger	5	0.13	23F4918	89.44
● MT-4RL-A28	10	Leaf Lever	3.34	1.52	23F4919	92.25
● MT-4RV34A28	10	Lever	3.34	1.19	39B1472	72.68

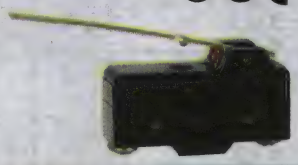
(180515)

MICRO SWITCH™ LARGE SNAP-ACTION SPNC BASIC SWITCHES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features
- Ideal for high cost-of-failure applications
- Communication systems, elevator/lifts, HVAC, irrigation systems, semi-trailer trucks, and valves
- Up to 20,000,000 cycles at 95% survival



Specifications
- Circuitry: SPNC
- Termination: quick connect, solder, screw
- Voltage: 115VAC, 125VAC, 250VAC
- Contacts: silver, silver cadmium oxide
- Operating temperature: -55 °C to 85 °C [-67 °F to 185 °F]

Mfg. Part No.	Current	Actuator Style	Operating Force O.F. (N)	Over Travel (mm)	Stock No.	Price Each
● WZ-2RW822-A2	15	Roller Lever	1.67	2.39	91B0980	14.79
● WA2RV313A22	20	Straight Lever	6.12	0.25	39B3065	12.46
● WA2RA2	20	Pin Plunger	6.12	0.25	39B3059	12.19
● WA-1RX12-A4	20	Pin Plunger	4.45	1.02	95B0830	19.14

(180513)

MICRO SWITCH™ LARGE SNAP-ACTION SPNO BASIC SWITCHES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Specifications
- Circuitry: SPNC
- Termination: quick connect, solder, screw
- Voltage: 115VAC, 125VAC, 250VAC
- Contacts: silver, silver cadmium oxide
- Operating temperature: -55 °C to 85 °C [-67 °F to 185 °F]

Features
- Ideal for high cost-of-failure applications
- Communication systems, elevator/lifts, HVAC, irrigation systems, semi-trailer trucks, and valves
- Up to 20,000,000 cycles at 95% survival

Mfg. Part No.	Current	Actuator Style	Operating Force O.F. (N)	Over Travel (mm)	Stock No.	Price Each 1-9
● YZRSX351	10	Plunger	0.56	0.64	05M2108	26.60
● YZRX58D5	15	Pin Plunger	1.11	0.38	96B8150	17.86
● YZ-2R-A2	15	Pin Plunger	3.61	0.13	98F4905	11.38
● YZ-2RDS4	15	Overtravel Plunger	5.28	1.52	96B4876*	22.96
● YZ2RSA2	15	Overtravel Plunger	6.12	1.52	39B3186	20.69
● YZ2RW812A2	15	Straight Lever	0.63	6.76	39B3196	78.13
● YA2R-A2	20	Pin Plunger	6.12	0.25	23C6561	8.03
● YA2RB18A21	20	Overtravel Plunger	6.12	2.39	39B3141	12.71
● YA-2RB19-A64	20	Overtravel Plunger	6.12	2.39	61N4702	13.48
● YA-2RB-A2	20	Pin Plunger	6.12	2.39	11C1287	12.13
● YA2RBA64	20	Overtravel Plunger	6.12	2.39	39B3139	20.54
● YA2RQ1-A2	20	Overtravel Plunger	6.12	5.56	90B0959	21.37

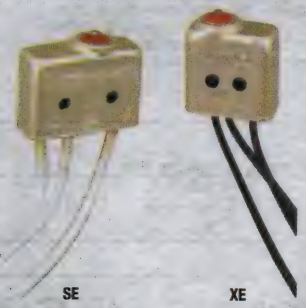
(180514)

MICROSWITCH™ SNAP ACTION SEALED SE/XE SERIES BASIC SWITCHES

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features:
- Epoxy potted in corrosion-resistant aluminum housing to seal precision switch contacts from contamination
- Watertight seal per enclosure design symbol 3
- Pin plunger actuator
- Qualified to MIL-S-8805

Specifications:
- SE switches include an SM basic switch
- XE switches include the smaller SX basic switch
- Mfg. part nos. with "T" suffix have solder terminals
- Mfg. part nos. with out suffix have 1' wire leads
- Contacts: silver gold, bifurcated gold



SE XE

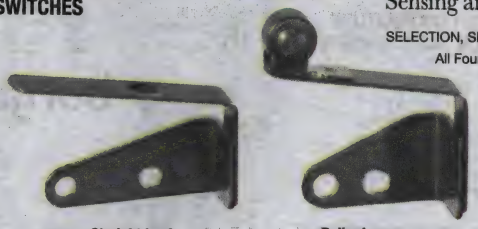
Mfg. Part No.	Current (A)	O.F. (oz)	Circuitry	Differential Travel (max.)	Termination	Stock No.	Price Each 1-9	Price Each 10-24
1SE3	5	5-17	SPST-NO	0.004" (0.10)	Wire Leaded	23F1878	82.76	79.59
1SE3-3	5	5-17	SPST-NO	0.004" (0.10)	Wire Leaded	23F1879	87.64	82.99
1SE1	5	5-17	SPDT	0.004" (0.10)	Wire Leaded	23F1873	88.27	84.89
1SE1-T	5	5-17	SPDT	0.004" (0.10)	Solder	23F1874	63.27	52.51
1SE1-3	5	5-17	SPDT	0.004" (0.10)	Solder	23F1875	93.57	79.39
1XE1-T	5	5-17	SPDT	0.004" (0.10)	Solder	23F1910	93.32	76.10
1XE1	5	5-17	SPDT	0.004" (0.10)	Wire Leaded	23F1909	109.54	89.33
5SE1*	5	5-17	SPDT	0.004" (0.10)	Wire Leaded	23F2025	69.92	66.31

*Oil-resistant fluorosilicone
(4920)

MICRO SWITCH™ AUXILIARY ACTUATORS FOR SE/XE STYLE SWITCHES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.



Straight Leaf Roller Lever

Provide sealed switches (not included) with an easier means of operation and adjustment. Auxiliary actuators adapt switches to different operating motions by supplying supplemental overtravel. Mounting hardware included.

JE AUXILIARY ACTUATORS FOR SE SWITCHES

Mfg. Part No.	Description	Length	O.F.	O.T.	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99	Price Each 100-199
JE-1	Straight Leaf	0.66"	12 oz.	0.15	23F4747	11.32	7.82	7.39	6.93
JE-5	Roller Leaf	0.56"	12 oz.	0.15	23F4223	10.52	...	...	...
JM AUXILLIARY ACTUATORS FOR XE SWITCHES									
JM-1	Straight Leaf	0.45"	21 oz.	0.009	93F6651	14.70	...	...	...
JM-5	Roller Leaf	0.38"	21 oz.	0.009	93F6652	18.11	13.19	12.36	11.84

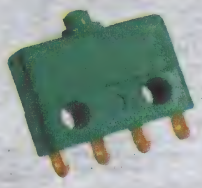
(33784)

LICON 18 SERIES SUBMINIATURE SNAP-ACTION SWITCHES

RoHS Compliant Available

ITW Switches
Sensors, Switches, Electronic Controls

- SPDT, double-break
- Gold-plated contacts
- Terminals: Solder lug
- Ratings: 7A at 125/250VAC 75-80% PF
- Operating force: 5 ± 3 oz.
- Release force: 1½ oz. min. 0.510L × 0.124W × 0.350"H
- UL recognized. **Mfg. part no. 18488051** is MIL-S-8805QPL listed as MIL-S-8805/76.



18 SERIES SWITCHES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
18-40421	Solder	60F1952	44.23
18-488051	Solder	98B5835	54.96

CONTINUED

LICON 18 SERIES SUBMINIATURE SNAP-ACTION SWITCHES (CONT.)

ACTUATORS FOR 18 SERIES SWITCH

Mfg. Part No.	Style	Overtravel	Stock No.	Price Each 1-9
78-3000	Spring Lever	0.030" min.	61F1856	9.71
78-3100	Pivot Roller	0.030" min.	61F2027	19.00

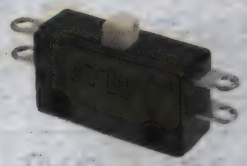
(5125)

LICON 16 SERIES SUBMINIATURE SNAP ACTION SWITCHES

RoHS Compliant Available

ITW Switches
Sensors, Switches, Electronic Controls

- Double-break, momentary mechanism
- Rating: 10.1A @ 125/250VAC
- Operating force: 5 oz. + 3 oz. – 2 oz.
- Release force: 2 oz. min.
- Overtravel: 0.012" min.
- All are SPDT (form Z) circuits
- Pretravel: 0.050 Max.
- UL recognized, CSA certified



16-104

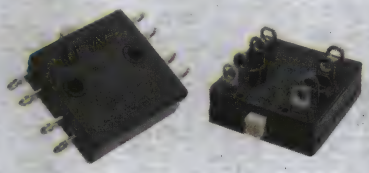
Mfg. Part No.	Terminals	Stock No.	Price Each 1-9
16-104	End Solder	23F179	31.60
16-304	Side Solder	23F182	26.75
16-404	Bottom Solder	23F183	18.46
16-4044*	Bottom Solder	95F7256	18.26

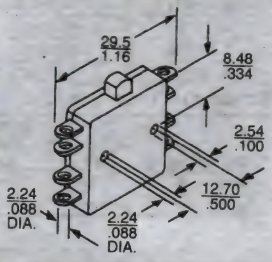
* Thermoplastic case and cover
(5131)

26 SERIES SUBMINIATURE SNAP-ACTING SWITCHES

RoHS Compliant Available

ITW Switches
Sensors, Switches, Electronic Controls





26 series allows control up to 4 isolated circuits. DPDT (Form ZZ), double-break. Functions simultaneously within 0.004" (0.102) of plunger travel. Ratings: 8A @ 125/250VAC 75-80% PF. Overtravel: 0.012min. Operating force: 12 ± 4 oz. Release force: 5 oz. min. Contacts: silver. UL recognized. *Order actuators separately; go online or call.*

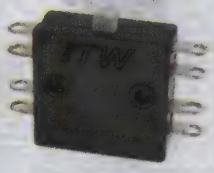
Mfg. Part No.	Terminals	Stock No.	Price Each 1-9
26-804	End Solder	60F1961	58.33

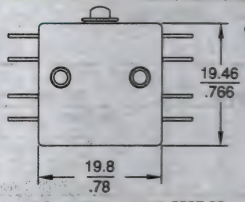
(5128)

LICON 26 SERIES SUBMINIATURE SNAP-ACTION SWITCH

RoHS Compliant Available

ITW Switches
Sensors, Switches, Electronic Controls





Features
- Sealed thermoplastic case, meets requirements of MIL-S-8805/77
- Enhanced gold contacts for high or low power applications
- Ambient temperature range: -65°C to +125°C
- Contact arrangement: DPDT-DB
- Operating force: 18±5 ounces
- Release force: 5 ounces min.
- Can be specified for aerospace applications
- UL recognized, CSA certified

Mfg. Part No.	Terminals	Stock No.	Price Each 1-9
26-810	End Solder	95B9261	68.49

(47670)

ACTUATORS FOR 16 AND 26 SERIES SWITCHES

RoHS Compliant Available

ITW Switches
Sensors, Switches, Electronic Controls

Mfg. Part No.	For Switch Type	Style	Operating Force (oz.)	Release Force (oz.)	Overtravel	Stock No.	Price Each 1-9
76-1200	16 26	Roller Lever	4 Max. 8 Max.	1 Min. 1½ Min.	0.025" Min. 0.026" Min.	23F188	8.07

(5129)

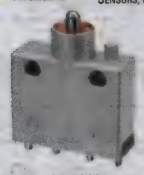
SWITCHES – SNAP-ACTION

LICON 65 SERIES SUBMINIATURE SEALED SWITCHES

RoHS Compliant Available

ITW Switches — Sensors, Switches, Electronic Controls

- Meets MIL-S-8805 watertight requirements
- Circuit: SPDT-DB (Form Z)
- Ratings: 10A @ 125/250VAC; 5A ind. @ 28VDC
- Solder lug terminals
- Temperature range: -85°C to +85°C (-65°F to +65°F)
- Gold contacts.



65-2010

Mfg. Part No.	Actuator	Operating Force (oz.)	Release Force (oz.)	Overtravel	Stock No.	Price Each 1-9
● 65-201000	Pin Plunger	24 ± 8	8 Min.	0.012″ Min.	90F8376	98.90
● 65-301000	Roller Lever	16 Max.	5 Min.	0.025″ Min.	25F2137	142.88
● 65-401000	Overtravel	36 Max.	8 Min.	0.187″ Min.	25F2138	141.92

(5127)

LICON 11 SERIES MINIATURE SWITCHES

RoHS Compliant Available

ITW Switches — Sensors, Switches, Electronic Controls

- SPDT-DB N.O. (Form X)
- Contacts: silver
- Electrical characteristics: 10A (75-80% PF), ½HP 125VAC, ¾HP 250VAC
- Pretravel 0.050″ (1.27) max.
- Overtravel 0.015″ (0.38) min.
- Operating force: 8 ± 3 oz. Release force: 4 oz min.
- UL recognized, CSA certified.
- **Mfg. part no. 11-504** same as **mfg. part no. 11-104**, except overall length is 2.01″ (51.1).
- *Order actuators separately below.*

11-504

Mfg. Part No.	Terminal	Stock No.	Price Each 1-9
● 11-104	End solder	23F161	18.46
● 11-204	#4 Screw	23F162	19.08
● 11-304	Side Solder	23F163	18.84
● 11-504	Quick Disconnect 0.250″ (6.35)	61F1830	17.83

ACTUATORS FOR 11 SERIES SWITCHES

Mfg. Part No.	Style	Operating Force (oz.)	Release Force (oz.)	Over-travel	Stock No.	Price Each 1-9
● 71-1040	Roller Lever	3.5 max.	2	0.062″	23F168	9.51
● 71-2010	Overtravel	8 oz. ± 3	4	0.215″	23F169	24.98

(5133)

LICON 22 SERIES MINIATURE SNAP-ACTING SWITCHES

RoHS Compliant Available

ITW Switches — Sensors, Switches, Electronic Controls

- 2 switching elements function simultaneously (within 0.004″ (0.102) of plunger travel)
- Circuit: DPDT (Form ZZ), double-break
- Ratings: 10A @ 125/250VAC, 75-80% PF ½HP @ 125VAC, ¾HP @ 250VAC
- Operating force: 17 ± 5 oz. Release force: 4 oz min.
- Overtravel: 0.015 min. 1.61L × 0.50W × 0.890″H. UL recognized.
- *Order actuator separately below.*

22-504, 22-104 & 22-204

Mfg. Part No.	Terminals	Stock No.	Price Each 1-9
● 22-104	End Solder	61F1979	65.10
● 22-204	#4 Screw	90F8377	71.43
● 22-304	Side Solder	23F185	79.59
● 22-504	¼″ Quick Disconnect	61F1802	59.55

ACTUATOR FOR 22 SERIES SWITCHES

Mfg. Part No.	Style	Operating Force (oz.)	Release Force (oz.)	Over-travel	Stock No.	Price Each 1-9
● 72-1160	Roller	10 Max.	1.5 Min.	0.035″ Min.	61F1875	8.74

(5130)

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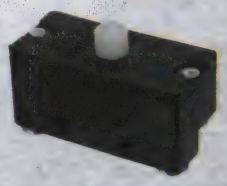
(212564)

LICON 14 SERIES SNAP-ACTION SWITCHES

RoHS Compliant Available

ITW Switches — Sensors, Switches, Electronic Controls

Features Butterfly® double-break mechanism. Standard mounting. Terminal: #6 screw with cup washer. Circuitry: SPDT-DB (Form Z). Ratings: 20A @ 125/250/480VAC 75-80% PF; UL recognized, CSA certified. **Mfg. part no. 14-324** is overtravel panel mount.



Mfg. Part No.	Actuator Style	Operating Force (oz.)	Release Force (oz.)	Over-travel Min.	Stock No.	Price Each 1-9
● 14-124	Standard Button	12 ± 3	4 Min.	0.030″	61F1953	55.79
● 14-324	Panel Mount	12 ± 3	4 Min.	0.219″	61F2041	82.95
● 14-724	Roller Level	5 ± 2	2 Min.	0.060″	61F1900	93.05

(5132)

BVM3F SERIES MINIATURE SNAP-ACTION BASIC SWITCHES

RoHS Compliant Available

JOHNSON ELECTRIC burgess

Features:
- Positive action momentary switch
- Forced break contacts
- Internationally recognized V3 housing
- Faston terminals

Specifications:
- Contact rating: 10A at 250VAC
- Dimensions (mm): 28 x 16 x 10.5
- 3mm contact gap at full travel

Mfg. Part No.	Current (A)	Operating Force (oz)	Actuator Style	Termination	Stock No.	Price Each 1-9
● BVM3FULS	10	16.2	Plunger	Quick Connect	51P3595	4.30
● BVM3FYRULS	10	18	Roller Lever	Quick Connect	51P3596	5.47

(142167)

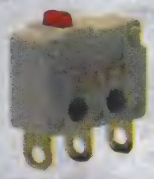
F4 SERIES ULTRAMINIATURE SNAP-ACTION BASIC SWITCHES

RoHS Compliant Available

JOHNSON ELECTRIC burgess

Specifications:
- Contact rating: 5A at 250VAC
- Dimensions (mm): 12.8 x 10 x 5
- Housing: Glass fiber reinforced nylon
- Mechanism Snap-action, single pole
- Circuitry: Change-over, NO, NC
- Temperature range: -40°C to +85°C
- Protection IP40 (enclosure)

Features:
- High electrical rating from a very small switch
- Long mechanical and electrical life
- Gold-plated contact option
- Side mounting



Mfg. Part No.	Current (A)	Operating Force (N)	Actuator Style	Termination	Stock No.	Price Each 1-9
● F4T7UL	5	5	Plunger	Solder	14N3995	8.75
● F4T7GPUL*	5	5	Plunger	Solder	16P3372	10.80

* Gold-plated contacts

(142161)

V4N SERIES SUBMINIATURE SNAP-ACTION BASIC SWITCHES

RoHS Compliant Available

JOHNSON ELECTRIC burgess

Specifications:
- Dimensions (mm): V4N: 20x10x6;V4NS: 20x17.5x6.4
- Housing Flame-retardant glass-fibre reinforced nylon
- Mechanism: Snap-action stainless steel coil spring
- Circuitry: Change-over, NC or NO
- Temperature range: -40°C to +85°C
- Protection IP40

Features:
- Side mounting - Peg mounting option
- 2.8 mm faston (quick connect) terminals
- Pre-wired option
- Snap-on terminal covers

Mfg. Part No.	Current (A)	Operating Force (N)	Actuator Style	Termination	Stock No.	Price Each 1-24
● V4NT9UL	5	5	Plunger	Through Hole	51P3633	4.90
● V4NST7UL	5	9	Plunger	Solder	48M4426	4.90
● V4NS-UL	5	9	Plunger	Wire leaded	51P3632	11.93

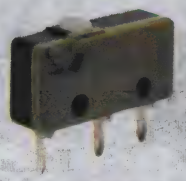
(142164)

XC SERIES SUBMINIATURE SNAP-ACTION BASIC SWITCHES

RoHS Compliant Available

JOHNSON ELECTRIC

burgess



Features:
- Wide range of actuating forces
- Long mechanical and electrical life
- Solder, PCB, faston (quick connect) terminals

Specifications:
- Contact rating: 10A at 250V
- Dimensions (mm): 19.9 x 9.5 x 6.4
- Housing Phenolic-Melamine, Thermosetting
- Circuitry: Change-over, NO, NC
- Temperature range: -40°C to +85°C
- Mechanical life: 5–107 cycles
- Protection enclosure IP40
- Actuator material: Stainless steel

Mfg. Part No.	Current (A)	Operating Force (N)	Actuator Style	Termination	Stock No.	Price Each 1-9
XCG3-J1-Z1	5	2.14	Lever	Solder	08P3895	4.56
XCG3-S1Z1	5	2.49	Roller Lever	Solder	12P9466	5.20

(142163)

V3S SERIES MINIATURE SEALED SNAP-ACTION BASIC SWITCHES

RoHS Compliant Available

JOHNSON ELECTRIC

burgess

Features:
- IEC IP67 sealed mechanism
- Industry standard miniature switch mounting hole positions
- Pre-wired - horizontal leads
- Side mounting

Specifications:
- Contact rating: 5A at 250VAC
- Dimensions (mm): 31.7 x 24.2 x 10.5
- Housing: Glass fiber reinforced nylon
- Circuitry: Change-over
- Temperature range: -40°C to +85°C

Mfg. Part No.	Current (A)	Operating Force (N)	Actuator Style	Termination	Stock No.	Price Each 1-24
V3SUL	5	14	Plunger	Wire Leaded	51P3623	27.38
V3SY1UL	5	7.5	Lever	Wire Leaded	51P3624	27.54

(142156)

D2FD SERIES DUST PROOF ULTRA SUBMINIATURE BASIC SWITCHES

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

- Contact configuration: SPDT
- Sealing by using rubber packing means the switch can be used in dust-proof environments (IEC IP6X).
- Switch rating of 2 A at 125 VAC possible with a single-leaf movable spring. Models for micro loads are also available
- Ambient operating temperature: -20°C to +70°C
- Operating speed: 1 mm to 500 mm/s

PCB Terminals

Solder Terminals

Mfg. Part No.	Actuator Style	Terminals	Current Rating (A)	Voltage Rating	Stock No.	Price Each 1-24
D2FD-01L1-1H	Hinge Lever	Solder	100mA	125VAC / 30VDC	94T5586	2.94
D2FD-01L1-1T	Hinge Lever	Solder	100mA	125VAC / 30VDC	94T5587	2.91
D2FD-2L1-1H	Hinge Lever	Solder	2	125VAC / 30VDC	94T5592	2.59
D2FD-2L1-1T	Hinge Lever	Solder	2	125VAC / 30VDC	94T5593	3.23

(203574)

D2FS SERIES ULTRA SUBMINIATURE BASIC SWITCH

NEW

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

Features:
- Developed for a few number of operations during a long period of use such as door-detection to avoid sabotage on meters.
- Simple construction with a single-leaf movable spring realizes reasonable cost.
- Self-clinching, right-angled and left-angled PCB terminals are also available.

Specifications:
- Ambient temperature: 20 ± 2°C
- Ambient humidity: 65 ± 5%
- Operating frequency: 20 operations/min
- Rated voltage: 6VDC
- Resistive load: 0.1A

PIN PLUNGER

Mfg. Part No.	Contact Configuration	Operating Force Max	Stock No.	Price Each 1-99
D2FS-F-N	SPST-NO	0.85	29X1342	1.39
D2FS-F-N-T	SPST-NO	0.85	29X1345	1.39

➤CONTINUED➤

D2FS SERIES ULTRA SUBMINIATURE BASIC SWITCH (CONT.)

HINGE LEVER

Mfg. Part No.	Contact Configuration	Operating Force Max	Stock No.	Price Each 1-99
D2FS-FL-N	SPST-NO	0.25	29X1346	1.42
D2FS-FL-N-T	SPST-NO	0.25	29X1349	1.42

(211971)

D2QW SERIES SEALED ULTRA SUBMINIATURE BASIC SWITCHES

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

- Ratings: 1 mA at 5 VDC to 0.1 A at 30 VDC
- Operating speed: 1 mm to 500 m/s
- Operating frequency: 30 operations/min
- Insulation resistance: 100 Mohm min. (at 500 VDC)
- Contact resistance: (initial value) 100 mohm max.
- Ambient operating temperature: -40°C to 85 °C (with no icing)
- Ambient operating humidity: 95% max. (for 5°C to 35°C)

Mfg. Part No.	Actuator Style	Contacts	Stock No.	Price Each 1-24
D2QW-C003H	Pin Plunger	SPST-NO	55T8518	4.61
D2QW-C073H	Simulated Roller Lever	SPST-NO	55T8519	4.86

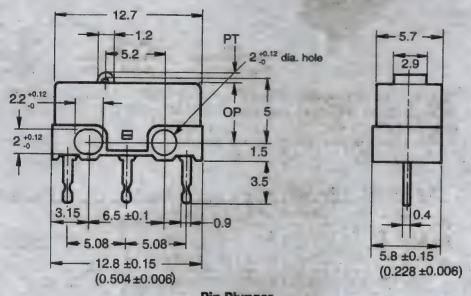
(197537)

SUBMINIATURE SNAP-ACTION SWITCHES

RoHS Compliant Available

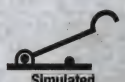
OMRON. ELECTRONIC COMPONENTS

Hinge Lever

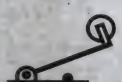


Pin Plunger

Hinge Lever



Simulated Roller Lever



Roller Lever

D2F series are subminiature, snap-action switches. SPDT contacts. Suitable for a wide range of applications such as household appliances, office equipment, and audio equipment. High-precision, dual-spring, reverse-action mechanism supports long life. Models shown have PC board terminals. Also available with self-supporting terminals (add suffix **"-T"** to end of mfg. part no.), soldered terminals (suffix **"-D"**), right-angle (suffix **"-A"**), and left-angle (suffix **"-A1"**); *go online or call*.

Mfg. Part No.	Current (A)	Operating Force (g)	Actuator	Stock No.	Price Each 1-24	25-49	50-99
D2F-01F	0.1	75	Pin Plunger	35K3177	1.71	1.54	1.37
D2F-01	0.1	150	Pin Plunger	36K7259	1.74	1.57	1.39
D2F	3	150	Pin Plunger	36K7257	1.68	1.51	1.35
D2F-01FL	0.1	25	Hinge Lever	36K7260	1.91	1.72	1.53
D2F-01L	0.1	80	Hinge Lever	36K7261	1.93	1.74	1.55
D2F-01L-A*	0.1	80	Hinge Lever	95B5371	2.41	2.17	1.93
D2F-FL	1	25	Hinge Lever	34K3566	1.93	1.74	1.55
D2F-L	3	80	Hinge Lever	36K7258	2.45	2.20	1.96
D2F-01L3	0.1	80	Hinge Lever	36K7262	1.94	1.74	1.55
D2F-L3	3	80	Simulated Roller Lever	31C2288	3.09	2.78	2.47
D2F-L2	3	80	Roller Lever	31C2287	6.36	5.71	5.08

*Right-angle
(4974)

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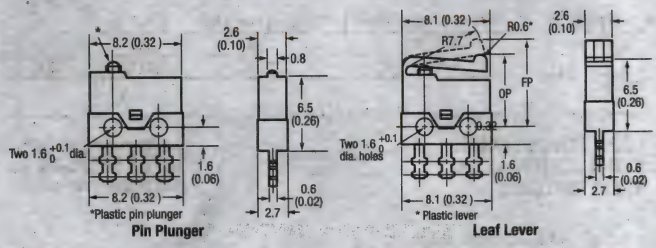
(212565)

SWITCHES – SNAP-ACTION

SUBMINIATURE BASIC SWITCHES

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS



- Weight: 0.3g
- SPDT silver contacts

Mfg. Part No.	Current Rating (A)	Operating Force (g)	Description	Stock No.	Price Each 1-24	25-49	50-99	100-249
● D2MQ-1L	0.5	60	Leaf Plunger	92B1082	4.14	3.73	3.32	3.00
● D2MQ-1	0.5	120	Pin Plunger	90B5323	3.97	3.58	3.18	2.87

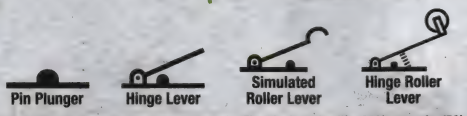
(75285)

SUBMINIATURE SNAP-ACTION SWITCHES

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

TÜV Rheinland



Pin Plunger | Pin Plunger | Hinge Lever | Simulated Roller Lever | Hinge Roller Lever

Set easily; no overtravel restrictions. Mechanical service life: 30 mil ops min. Electrical service life: 200k ops min. (50k for SS-10 series). SPDT models are shown. SPST-NO and SPST-NC contact forms also available; *go online or call*. UL recognized, CSA certified.

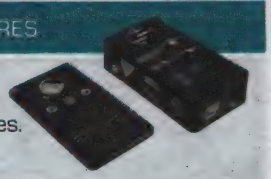
Mfg. Part No.	Current	Circuitry	Actuator	Termination	Stock No.	Price Each 1-24
● SS-01	100mA	SPDT	Pin Plunger	Solder	35K4902	3.34
● SS-01-FT	100mA	SPDT	Pin Plunger	Quick Connect	52F3625	3.65
● SS-01GL	100mA	SPDT	Hinge Lever	Solder	52F3626	3.65
● SS-01GL13	100mA	SPDT	Simulated Roller Lever	Solder	52F3627	3.60
● SS-5	5A	SPDT	Pin Plunger	Solder	36K7635	1.86
● SS-5D	5A	SPDT	Pin Plunger	Solder	36K7636	2.04
● SS-5-F	5A	SPDT	Pin Plunger	Solder	95B0523	2.13
● SS-5-FT	5A	SPDT	Pin Plunger	Quick Connect, Solder	35K3226	2.17
● SS-5GL-F	5A	SPDT	Hinge Lever	Solder	89C8030	2.31
● SS-5GL	5A	SPDT	Hinge Lever	Solder	35K4907	2.03
● SS-5GLD	5A	SPDT	Hinge Lever	Solder	43K7680	2.46
● SS-5GLT	5A	SPDT	Hinge Lever	Quick Connect, Solder	36K7637	2.14
● SS-5GL13	5A	SPDT	Simulated Roller Lever	Quick Connect, Solder	36K3563	2.13
● SS-5GL13D	5A	SPDT	Simulated Roller Lever	Solder	35K0928	2.67
● SS-5GL13-F	5A	SPDT	Simulated Roller Lever	Solder	89C8055	2.09
● SS-5GL13T	5A	SPDT	Simulated Roller Lever	Quick Connect, Solder	35K3227	2.12
● SS-5T	5A	SPDT	Pin Plunger	Quick Connect, Solder	52F3639	2.35
● SS-5GL2	5A	SPDT	Hinge Roller Lever	Solder	36K7638	2.57
● SS-5GLD2	5A	SPDT	Hinge Roller Lever	Through Hole	89C8036	3.03
● SS-5GL2-F	5A	SPDT	Hinge Roller Lever	Solder	89C8071	2.56
● SS-5GL2-FT	5A	SPDT	Hinge Roller Lever	Quick Connect, Solder	85C1346	3.14
● SS-5GL2T	5A	SPDT	Hinge Roller Lever	Quick Connect, Solder	33K3886	3.08
● SS-10	10A	SPDT	Pin Plunger	Solder	36K7634	2.54
● SS-10D	10A	SPDT	Pin Plunger	Solder	35K4904	3.30
● SS-10GL	10A	SPDT	Hinge Lever	Through Hole	35K4905	2.80
● SS-10GL13T	10A	SPDT	Simulated Roller Lever	Quick Connect, Solder	89C8016	3.32
● SS-10GL2T	10A	SPDT	Hinge Roller Lever	Quick Connect, Solder	89C8019	3.85

(4979)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures



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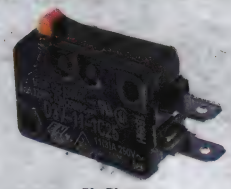
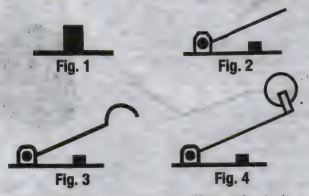
MINIATURE SNAP-ACTION SWITCHES

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS





Pin Plunger | Fig. 1 | Fig. 2 | Fig. 3 | Fig. 4

Ideal switches for home appliances, vending machines and office automation. Internal/external actuator with two operating position options. Environment-friendly, free of beryllium copper. Self-cleaning contacts. Operating temperature: 105°C. Resistant load: 11A or 16A @ 125/250VAC. SPDT. UL recognized, CSA certified, VDE approved.

11A MODELS

Mfg. Part No.	Fig.	Circuitry	Actuator	Stock No.	Price Each 1-24	25-49
● D3V-11G-1C25-K	1	SPDT	Pin Plunger	67K9324	2.56	2.30
● D3V-11G2-1C25-K	2	SPDT	Internal Hinge Lever	25C4083	3.13	2.81
● D3V-11G4-1C25-K	3	SPDT	Internal Sim. Roller Lever	25C4085	2.94	2.64
● D3V-11G6-1C25-K	4	SPDT	Internal Hinge Roller Lever	25C4087	3.77	3.39
● D3V-11G6M-1C25-K	4	SPDT	External Hinge Roller Lever	25C4088	3.48	3.11
16A MODELS						
● D3V-16G-1C25-K	1	SPDT	Pin Plunger	25C4089	2.69	2.41
● D3V-16G2-1C25-K	2	SPDT	Internal Hinge Lever	35K3181	3.13	2.81
● D3V-16G2M-1C25-K	2	SPDT	External Roller Lever	35K3182	2.89	2.60
● D3V-16G4-1C25-K	3	SPDT	Internal Sim. Roller Lever	35K3183	3.08	2.77

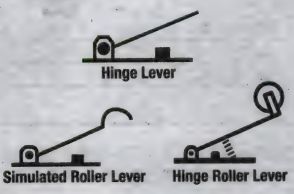
(68293)

WATERTIGHT MINIATURE SNAP ACTION SWITCH

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

- High-quality watertight miniature snap-action switch
- Meets IP67 (for lead wires) and IP50 (for terminal types) requirements
- Operating temperature range: -40°C to +85°C
- Rating: 3A at 250VAC



Hinge Lever | Hinge Lever | Simulated Roller Lever | Hinge Roller Lever

Switches with PC board terminals also available; *go online or call*.

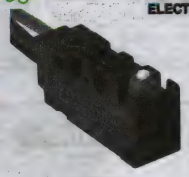
Mfg. Part No.	Operating Force (g)	Actuator	Terminals	Stock No.	Price Each 1-24	25-49	50-99
● D2SW-3HS	180	Pin Plunger	Solder	36K1918	4.24	3.82	3.39
● D2SW-3L1HS	60	Hinge Lever	Solder	83C8224	4.51	4.05	3.60
● D2SW-3L1MS	60	Hinge Lever	Lead Wires	36K3208	7.30	6.57	5.84
● D2SW-3L2HS	60	Hinge Roller Lever	Solder	34K3567	5.08	4.56	4.06
● D2SW-3L2MS	60	Hinge Roller Lever	Lead Wires	36K7263	7.82	7.03	6.26
● D2SW-3L3HS	60	Simulated Roller Lever	Solder	89C4660	4.51	4.05	3.60
● D2SW-3L3MS	60	Simulated Roller Lever	Lead Wires	35K3180	7.21	6.49	5.77

(75286)

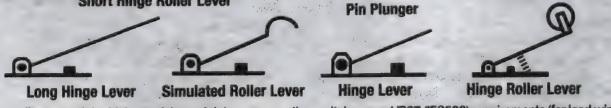
WATERTIGHT MINIATURE BASIC SWITCHES

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS



Short Hinge Roller Lever | Pin Plunger



Long Hinge Lever | Simulated Roller Lever | Hinge Lever | Hinge Roller Lever

High-quality, watertight, high-precision, miniature snap-action switches meet IP67 (IEC529) requirements (for lead wire types) and IP50 (for terminal types). Monoblock construction provides high sealing capability and is ideal for dusty places or where water is sprayed. Operating temperature: –40°C to +90°C.

0.1A

Mfg. Part No.	Actuator	Terminals	Stock No.	Price Each 1-24	25-49	50-99
● D2VW-01-1HS	Pin Plunger	Solder/Tab (#187)	91B0488	7.44	6.71	5.97
● D2VW-01-1MS	Pin Plunger	Lead Wires	36K1919	12.78	11.51	10.24

➤ CONTINUED ➤

WATERTIGHT MINIATURE BASIC SWITCHES (CONT.)

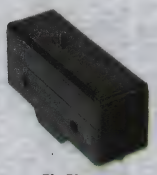
Mfg. Part No.	Actuator	Terminals	Stock No.	Price Each 1-24	25-49	50-99
D2VW-01L1-1HS	Hinge Lever	Solder/Tab (#187)	36K7264	7.26	6.54	5.82
D2VW-01L2-1MS	Hinge Roller Lever	Lead Wires	35K4490	12.85	11.57	10.30
5A						
D2VW-5-1HS	Pin Plunger	Solder/Tab (#187)	83F5341	6.04	5.45	4.85
D2VW-5-1MS	Pin Plunger	Wire Leaded	36K7266	9.31	8.38	7.46
D2VW-5L1B-1MS	Long Hinge Lever	Lead Wires	36K1920	10.41	9.37	8.35
D2VW-5L2A-1HS	Hinge Roller Lever	Solder/Tab (#187)	36K3209	6.65	5.99	5.34
D2VW-5L2A-1MS	Short Hinge Roller Lever	Lead Wires	36K7267	10.21	9.19	8.19
D2VW-5L3-1HS	Simulated Roller Lever	Solder	83F5351	5.83	5.26	4.68
D2VW-5L3-1MS	Simulated Roller Lever	Wire Leaded	83F5352	9.64	8.68	7.71

(33975)

SNAP-ACTION SWITCHES

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

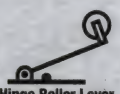


Pin Plunger

Pin Plunger

Panel Mount Plunger

Hinge Lever



Hinge Roller Lever

Short Hinge Roller Lever

- High-Capacity Switches Handle Up to 20A Loads with Large Inrush Currents
- Resistive Load: 20A, 250VAC

Typical applications include halogen lamps, motors, and solenoids. Mechanical service life: 1,000,000 operations min. UL recognized, CSA certified, SEV approved.

SWITCHES

Mfg. Part No.	Actuator	Operating Force (g)	Stock No.	Price Each 1-24	25-49
A-20G-B	Pin Plunger	400-625	17M6496	11.27	10.72
A-20GQ-B	Panel Mount Plunger	400-625	22C7638	16.89	16.07
A-20GQ-B7-K	Panel Mount Plunger	400-625	17M6497	17.33	16.48
A-20GV-B	Hinge Lever	70	22C7648	11.32	10.77
A-20GV-B7-K	Hinge Lever	70	52F3599	11.32	10.77
A-20GV2-B	Hinge Roller Lever	90	17M6498	11.17	10.63
A-20GV22-B	Short Hinge Roller Lever	160	22C7680	11.84	11.26

ACCESSORIES

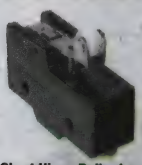
Mfg. Part No.	Description	Stock No.	Price Each 1-24	25-49
AP-B	Phenolic Terminal Cover	36K1871	1.07	1.03
AP-Z	Terminal Cover with Strain Relief	17M6566	5.29	5.14

(4977)

GENERAL PURPOSE SNAP-ACTION SWITCHES

RoHS Compliant Available

OMRON AUTOMATION & SAFETY



Short Hinge Roller Lever

Panel Mount Plunger

Panel Mount Roller Plunger

Panel Mount Cross Roller Plunger

Hinge Lever

Hinge Roller Lever

Flexible Rod

- Rated Current: 15A
- Resistive Load: 0.5, 125VDC

Z series are high-precision basic switches. Wide margins of operating conditions and broad operating speed range. UL recognized, CSA certified.

Mfg. Part No.	Operating Force (g)	Actuator	Stock No.	Price Each 1-24	25-49	50-99
Z15HW24B7K	6	Low Force Lever	27M9672	13.83	12.60	11.53
Z-15HW24-B	6	Hinged Lever	52F3676	13.66	12.44	11.39
Z-15GW4-B	28	Hinge Lever	97B2874	15.58	14.18	12.98
Z-15GNJ55-B7-K	50	Flexible Rod	93B6742	25.26	23.00	21.05
Z-15GW-B	70	Hinge Lever	52F3668	13.25	12.07	11.04
Z-15GW-B7-K	70	Hinge Lever	93B4431	13.42	12.23	11.19
Z-15GW2-B	100	Hinge Roller Lever	52F3669	13.59	12.37	11.33
Z-15GW2-B7-K	100	Hinge Roller Lever	27M9667	13.42	12.23	11.19
Z-15GW22	160	Hinge Roller Lever	92B0737	12.43	11.32	10.36
Z-15GW22-B7-K	150	Short Hinge Roller Lever	27M9668	12.54	11.42	10.45
Z-15GW22-B	160	Short Hinge Roller Lever	52F3670	12.54	11.42	10.45
Z-15G-B	350	Pin Plunger	52F3660	9.88	9.00	8.24
Z-15GD-B	350	Short Spring Plunger	52F3661	12.26	11.16	10.21

CONTINUED

GENERAL PURPOSE SNAP-ACTION SWITCHES (CONT.)

Mfg. Part No.	Operating Force (g)	Actuator	Stock No.	Price Each 1-24	25-49	50-99
Z-15GQ-B	350	Panel Mount Plunger	52F3665	16.73	15.24	13.95
Z-15GQ-B7-K	350	Panel Mount Plunger	98B9758	16.73	15.24	13.95
Z-15GQ21-B	350	Panel Mount Cross Roller Plunger	52F3666	19.97	18.19	16.65
Z-15GQ21-B7-K	350	Panel Mount Cross Roller Plunger	93B0864	19.97	18.19	16.65
Z-15GQ22-B	350	Panel Mount Roller Plunger	52F3667	19.72	17.97	16.44
Z15GQ22B7K	350	Panel Mount Roller Plunger	48F1599	19.72	17.97	16.44
Z-15G-B7-K	350	Pin Plunger	06C1037	10.14	9.23	8.45
Z-15GQ	350	Plunger	27M9666	16.72	15.23	13.94
Z-15GD-B7-K	350	Short Spring Plunger	27M9665	12.09	11.01	10.08
Z-15GS-B	350	Spring Plunger	94B9415	12.87	11.72	10.72
ZE-Q22-2S	3.43	Roller Plunger	38B1433	83.84	76.34	69.86
Z-15GQ22	350	Roller Plunger	26C0594	19.72	17.97	16.44
Z-15GQ22A55-B5V	540	Roller Plunger	27C0022	35.15	32.01	29.30

(4976)

10A - 15A GENERAL-PURPOSE SNAP-ACTION SWITCHES

RoHS Compliant Available

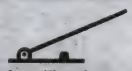
OMRON. ELECTRONIC COMPONENTS

Pin Plunger

Pin Plunger Fig. 1

Short Hinge Lever Fig. 2

Hinge Lever Fig. 3



Long Hinge Lever Fig. 4

Formed Hinge Lever Fig. 5

Short Hinge Roller Lever Fig. 6

Hinge Roller Lever Fig. 7

- SPDT contacts
- Rated 10A and 15A @ 250VAC
- Thermoplastic material available
- 7 lever styles available

Tested to 125VDC/250VAC. To order thermoplastic material, replace -10 or -15 in mfg. part no. with -11 or -16, respectively. Pin plunger style illustrated. Other lever-style switches are same size. Service life: 50,000 operations. UL recognized, CSA certified.

10A

Mfg. Part No.	Operating Force (g)	Actuator	Fig.	Stock No.	Price Each 1-24	25-49
V-10G-1C24-K	100	Pin Plunger	1	35K5059	3.00	2.71
V-10G-1C25-K	200	Pin Plunger	1	36K7692	3.04	2.75
V-10G2-1C24-K	100	Hinge Lever	3	52F3642	3.00	2.71
V-10G2-1C25-K	200	Hinge Lever	3	89C8151	3.14	2.83
V-10G3-1C24-K	100	Hinge Lever	4	52F3643	3.26	2.93
V-10G4-1C24-K	100	Simulated Roller Lever	5	52F3644	3.27	2.95
V-10G6-1C24-K	100	Hinge Roller Lever	6	52F3648	3.50	3.17
V-10G4-1C25-K	200	Simulated Roller Lever	5	36K2079	2.95	2.66
V-10G5-1C24-K	100	Hinge Roller Lever	6	36K7693	3.60	3.25
V-10G5-1C25-K	200	Hinge Roller Lever	6	52F3647	3.61	3.25
15A						
V-15-1B6	400	Pin Plunger	1	35K2035	5.07	4.57
V-15-3B6-K	400	Pin Plunger	1	68K0131	4.93	4.45
V-15G-1C26-K	400	Pin Plunger	1	36K2080	3.04	2.75
V-15G-1C25-K	200	Pin Plunger	1	36K3716	3.00	2.71
V15G1A5K	200	Pin Plunger	1	97B9375	2.74	2.47
V-15G-1C5-K	200	Pin Plunger	1	89C8206	3.08	2.79
V-15G-3C25-K	200	Pin Plunger	1	10M9737	2.54	2.29
V-15G2-1C25-K	200	Hinge Lever	3	35K5060	3.05	2.76
V-15G2-1C26-K	400	Hinge Lever	3	52F3652	3.04	2.75
V-15G3-1C25-K	200	Hinge Lever	4	36K2081	3.33	3.00
V-15G3-1C24-K	100	Hinge Lever	4	89C8233	3.38	3.05
V-15G3-1C26-K	400	Hinge Lever	4	35K3231	3.19	2.87
V-15G4-1C25-K	200	Simulated Roller Lever	5	52F3655	3.27	2.95
V-15G5-1C25-K	200	Hinge Roller Lever	6	36K7694	3.65	3.30
V-15G5-1C26-K	400	Hinge Roller Lever	6	36K7695	3.60	3.25
V-15G6-1C25-K	200	Hinge Roller Lever	7	36K3717	3.70	3.34
V-15G6-1C26-K	400	Hinge Roller Lever	7	36K7696	3.83	3.45

(4975)

MJTP SERIES TACTILE SWITCHES

RoHS Compliant Available

APEM

- SPST Momentary Action
- Electrical Life: 100,000 Cycles Min.
- Through-Hole Mounting
- Silver-Plated Brass Terminals; Contact Rating: 50mA @ 12VDC
- Operating Temp.: -20°C to +70°C
- Black Thermoplastic Actuator

Fig. 1

Fig. 2

Fig. 3

Mfg. Part No.	Figure	Actuator Style	Length	Stock No.	Price Each 1-24
● MJTP1230	1	Round	0.170″ (4.3)	19C7994	0.16
● MJTP1230A	1	Round	0.197″ (5.0)	19C7995	0.29
● MJTP1230E	1	Round	0.287″ (7.3)	19C7998	0.31
● MJTP1230C	1	Round	0.315″ (8.0)	19C7996	0.33
● MJTP1230B	1	Round	0.374″ (9.5)	19C8258	0.31
● MJTP1230D	1	Round	0.512″ (13.0)	19C7997	0.38
● MJTP1234	2	Square	0.094″ (2.4)	19C8270	0.43
● MJTP1236	3	Flush Round	0.124″ (3.1)	19C8000	0.43
● MJTP1236A	3	Flush Round	0.152″ (3.9)	19C8001	0.43
● MJTP1236B	3	Flush Round	0.329″ (8.4)	19C8002	0.44
● MJTP1236E	3	Flush Round	0.244″ (6.2)	19C8005	0.44

(64585)

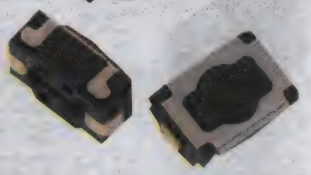
SERIES TL 1015 TACTILE SWITCHES TACTILE SWITCHES

RoHS Compliant Available

E•SWITCH®

Features:
- Ultra-miniature design
- SMT technology

Specifications:
- Contact rating: 50mA at 12VDC
- Life expectancy: 50,000 cycles min.
- Contact resistance: 100mΩ max.
- Insulation resistance: 100MΩ min
- Contact material: Stainless steel
- Teminals: Brass
- Dielectric strength: 250 VAC
- Operating temperature: -20°C to +70°C
- Travel: 0.20mm



Mfg. Part No.	Operating Force (g)	Features	Tape Cut Stock No.	Tape Cut Price Each 1-9
● TL1015AF160QG	160	No Boss	15N4458	1.10

(121338)

TL3700 SERIES ULTRA MINIATURE TACTILE SWITCHES

RoHS Compliant Available

E•SWITCH®

Markets
- Audio/Visual
- Computer peripherals
- Consumer electronics
- Handheld devices
- Medical equipment
- Telecommunication

Features:
- 3.0mm (W) x 2.6mm (L) x 0.65mm (H) dimensions
- Up to 100,000 cycle life expectancy
- 100gf and 160gf options

Specifications:
- Electric rating: 20mA @ 15VDC
- Contact resistance: 500 Mohm min. at 500VDC
- Dielectric strength: 250VAC for 1 minute
- Operating temperature: -40°C to 85°C
- Travel: 0.15 mm

Mfg. Part No.	Contacts	Operating Force (gf)	Stock No.	Price Each 1-9
● TL3700AF100QG	SPST	100	29T6119	0.78
● TL3700AF160QG	SPST	160	29T6120	0.73

(194766)

SERIES TL1105 TACTILE SWITCHES

RoHS Compliant Available

E•SWITCH®

Features:
- Reliable dome contact technology
- Strong tactile/audible feedback
- Multiple operating force options

Specifications:
- Contact rating: 50mA at 12VDC
- Life expectancy: 100,000 cycles
- Contact resistance: 100mΩ max
- Insulation resistance: 100MΩ min
- Contact material: Silver-clad phoshor bronze
- Terminals: Silver plated brass
- Dielectric strength: 250VAC
- Operating temperature: -20°C to +70°C

Right-Angle PCB

CONTINUED

SERIES TL1105 TACTILE SWITCHES (CONT.)

Mfg. Part No.	Current (mA)	Operating Force (g)	Actuator Length (mm)	Mounting Type	Stock No.	Price Each 1-9
● TL1105SPF100Q	50	100	2.8	Straight PCB	15N4489	0.36
● TL1105AF100Q	50	100	5	Straight PCB	15N4464	0.33
● TL1105F100Q	50	100	7	Straight PCB	15N4475	0.24
● TL1105SF100Q	50	100	8.35	Right-Angle PCB	15N4486	0.41
● TL1105JAF160Q	50	160	2.4	Right-Angle PCB	15N4478	0.61
● TL1105SPF160Q	50	160	2.8	Straight PCB	15N4490	0.39
● TL1105WF160Q	50	160	3.15	Right-Angle PCB	15N4493	0.44
● TL1105VF160Q	50	160	3.85	Right-Angle PCB	15N4492	0.44
● TL1105F160Q	50	160	4.3	Straight PCB	15N4476	0.21
● TL1105AF160Q	50	160	5	Straight PCB	15N4465	0.39
● TL1105RF160Q	50	160	6.15	Right-Angle PCB	15N4484	0.41
● TL1105FF160Q	50	160	7	Straight PCB	15N4474	0.26
● TL1105EF160Q	50	160	7.3	Straight PCB	15N4473	0.24
● TL1105SF160Q	50	160	8.35	Right-Angle PCB	15N4487	0.44
● TL1105PF160Q	50	160	8.5	Straight PCB	15N4483	0.24
● TL1105BF160Q	50	160	9.5	Straight PCB	15N4468	0.19
● TL1105DF160Q	50	160	13	Straight PCB	15N4471	0.24
● TL1105JAF250Q	50	250	2.4	Right-Angle PCB	15N4479	0.61
● TL1105SPF250Q	50	250	2.8	Straight PCB	15N4491	0.38
● TL1105WF250Q	50	250	3.15	Right-Angle PCB	15N4494	0.41
● TL1105AF250Q	50	250	5	Straight PCB	15N4466	0.33
● TL1105RF250Q	50	250	6.15	Right-Angle PCB	15N4485	0.44
● TL1105F250Q	50	250	7	Straight PCB	15N4477	0.24
● TL1105SF250Q	50	250	8.35	Right-Angle PCB	15N4488	0.39
● TL1105BF250Q	50	250	9.5	Straight PCB	15N4469	0.24
● TL1105DF250Q	50	250	13	Straight PCB	15N4472	0.24
● TL1105LF250Q	50	250	17	Straight PCB	15N4482	0.35

(121133)

TL3210 SERIES TACT SWITCHES

RoHS Compliant Available

E•SWITCH®

- Electrical Rating: 50mA @ 12VDC
- Life Expectancy: 100,000 Cycles
- Contact Resistance: 500mΩ Max.
- Insulation Resistance: 100 MΩ Min. at 100VDC
- Dielectric Strength: 250VAC for 1 min.
- Operating Temperature: -20°C to 70°C
- Storage Temperature: -30°C to 80°C
- Operating Force: 160 gf +/- 50 gf
- Travel: 0.2mm +/- 0.1mm
- Contact Arrangement: SPST, Normally Open

Mfg. Part No.	Opeating Force (gf)	LED Color	Stock No.	Price Each 1-9
● TL3210AF160BQ	160	Blue	92T1734	7.20
● TL3210AF160GQ	160	Green	92T1735	7.25
● TL3210AF160RQ	160	Red	92T1736	6.77

(202518)

TL3240 SERIES TACT SWITCHES

RoHS Compliant Available

E•SWITCH®

- Electrical Rating: 50mA @ 12VDC
- Life Expectancy: 200,000 Cycles
- Contact Resistance: 100mΩ Max.
- Insulation Resistance: 100 MΩ Min. at 500VDC
- Dielectric Strength: 250VAC for 1 min.
- Operating Temperature: -25°C to 70°C
- Storage Temperature: -30°C to 80°C
- Operating Force: 100 gf +/- 50 gf; 160 gf +/- 50 gf;
- 260 gf +/- 50 gf
- Travel: 0.2mm +/- 0.1mm
- Contact Arrangement: SPST, Normally Open

Mfg. Part No.	Opeating Force (gf)	LED Color	Stock No.	Price Each 1-9
● TL3240F100B	100	Blue	92T1737	4.11
● TL3240F100G	100	Green	92T1738	2.51
● TL3240F100R	100	Red	92T1739	2.51
● TL3240F100Y	100	Yellow	92T1740	2.51
● TL3240F160B	160	Blue	92T1741	4.42
● TL3240F160G	160	Green	92T1742	2.51
● TL3240F160R	160	Red	92T1743	2.51
● TL3240F160Y	160	Yellow	92T1744	2.51
● TL3240F260B	260	Blue	92T1745	4.22
● TL3240F260G	260	Green	92T1746	2.63

CONTINUED

TL3240 SERIES TACT SWITCHES (CONT.)

Mfg. Part No.	Opeating Force (gf)	LED Color	Stock No.	Price Each 1-9
TL3240F260R	260	Red	92T1747	2.63
TL3240F260Y	260	Yellow	92T1748	2.63

(202519)

PCB THRU HOLE TACTILE SWITCHES

RoHS Compliant Available

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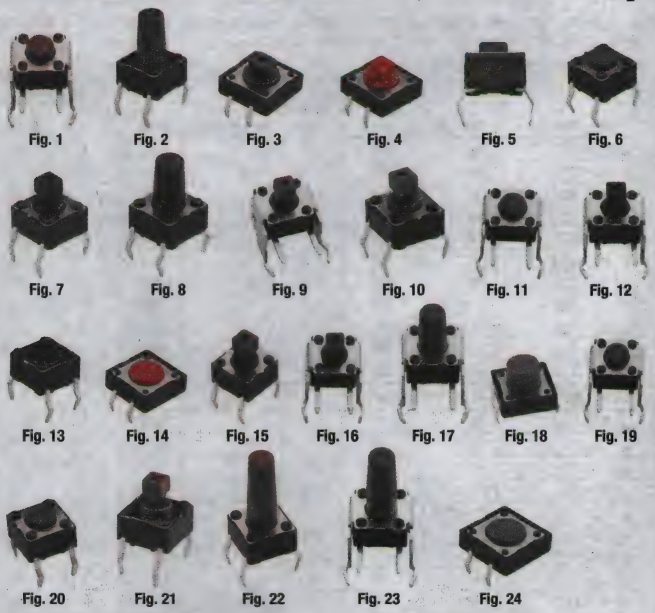

- Contact rating: 50mA at 12VDC
- Circuitry: SPST-NO
- Electrical life: 300,000 cycles
- Contact resistance: 100mΩ
- Operating temperature: -25°C to 70°C

DIMENSIONS: 6 x 6mm

Mfg. Part No.	Fig.	Current (mA)	Operating Force (g)	Circuitry	Actuator Style	Stock No.	Price Each 1-24
MC32830	2	50	160	SPST	Flat Plunger	67P3615	0.16
MC32874	3	50	130	SPST-NO	Extended Plunger	67P3653	0.35
MC32875	4	50	260	SPST-NO	Extended Plunger	67P3654	0.36
MC32857	5	50	1.3N	SPST-NO	Button	67P3636	0.24
MC32865	7	50	100	SPST-NO	Extended Plunger	67P3644	0.23
MC32867	8	50	100	SPST-NO	Flat Plunger	67P3646	0.24
MC32838	9	50	160	SPST	Flat Plunger	67P3623	0.18
MC32862	13	50	100	SPST-NO	Flat Plunger	67P3641	0.23
MC32833	15	50	160	SPST	Extended Plunger	67P3618	0.15
MC32836	17	50	160	SPST	Flat Plunger	67P3621	0.19
MC32829	20	50	160	SPST	Flat Plunger	67P3614	0.16
MC32832	21	50	160	SPST	Flat Plunger	67P3617	0.15
MC32831	22	50	160	SPST	Flat Plunger	67P3616	0.17
DIMENSIONS: 6 x 6mm—RIGHT-ANGLE							
MC32835	1	50	160	SPST	Flat Plunger	67P3620	0.18
MC32866	10	50	150	SPST-NO	Extended Plunger	67P3645	0.23
MC32870	12	50	100	SPST-NO	Extended Plunger	67P3649	0.26
MC32860	13	50	100	SPST-NO	Flat Plunger	67P3639	0.22
MC32871	16	50	150	SPST-NO	Extended Plunger	67P3650	0.26
MC32856	18	50	...	SPST-NO	...	67P3635	0.37
MC32828	20	50	160	SPST	Flat Plunger	67P3613	0.15
MC32837	23	50	160	SPST	Flat Plunger	67P3622	0.20
DIMENSIONS: 12 x 12mm							
MC32861	6	50	150	SPST-NO	Flat Plunger	67P3640	0.23
MC32863	6	50	150	SPST-NO	Flat Plunger	67P3642	0.23
MC32873	14	50	260	SPST-NO	Flat Plunger	67P3652	0.35
MC32834	19	50	160	SPST	Flat Plunger	67P3619	0.16
MC32872	24	50	130	SPST-NO	Flat Plunger	67P3651	0.35
DIMENSIONS: 3.5 x 6mm							
MC32864	6	50	260	SPST	Flat Plunger	67P3643	0.25

(147274)

TACTILE SWITCHES

RoHS Compliant Available

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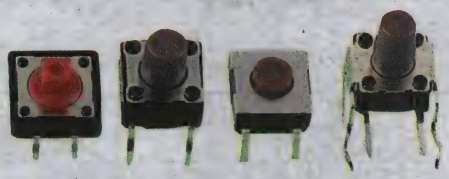
Specifications:
- Current rating: 50mA
- Contact resistance: 100mR max.
- Dielectric strength: 250VAC/1 minute
- Operating temperature: -25°C to +70°C
- Electrical life: 100000 operations min.
- PCB Hole dia.: 1.0 +/- 0.05mm
- Voltage rating: 12VDC min.
- Insulation resistance: 10MR @ 500VDC
- Stop strength: 3kgf 15S
- Wave solder: 260°C max 5S 1.6mm PCB
- Hand solder: 320°C 2S 30W iron



(12MM X 12MM) - PCB DRILLING 12.5MM X 5.0MM

Mfg. Part No.	Fig.	Actuator Style	Operating Force (gf)	Stock No.	Price Each 1-249
MCDTS2-4N	1	Raised	160	26M1119	0.37
MCDTS2-1N	...	Flat	160	26M1117	0.34
MCDTS2-4R	1	Raised	260	26M1120	0.37

(6MM X 6MM) - PCB DRILLING 6.5MM X 4.5MM

Mfg. Part No.	Fig.	Overall Height (mm)	Operating Foce (gf)	Stock No.	Price Each 1-249
MCDTS6-1K	2	4.3	100	26M1121	0.21
MCDTS6-1N	2	4.3	160	26M1122	0.20
MCDTS6-2N	2	5	160	80K0985	0.20
MCDTS6-2R	2	5	260	26M1124	0.22
MCDTS6-3K	2	7	100	26M1125	0.22
MCDTS6-3N	2	7	160	26M1126	0.22
MCDTS6-5K	2	9.5	100	26M1127	0.26
MCDTS6-5N	2	9.5	160	26M1128	0.25
MCDTS6-5R	2	9.5	260	26M1129	0.27
(6MM X 6MM) WASHABLE - PCB DRILLING 6.5MM X 4.0MM					
MCDTSHW6-9N-B	3	3.8	160	13M5921	0.57

(6MM X 6MM) RIGHT ANGLED - PCB DRILLING ABOUT C/L OF ACTUATOR
4.5mm & 7.0mm row seperation 2.5mm

Mfg. Part No.	Fig.	Overall Length* (mm)	Operating Force (gf)	Stock No.	Price Each 1-249
MCDTSA6-5K	4	8.35	100	80K8276	0.29
MCDTSA6-5N	4	8.35	160	26M1113	0.27
MCDTSA6-5R	4	8.35	260	26M1114	0.27
MCDTSA6-2K	4	3.85	100	26M1110	0.23
MCDTSA6-2R	4	3.85	260	26M1112	0.24

* Length of switch body and actuator
(116606)

ILLUMINATED ULTRA-THIN TACTILES

NEW

RoHS Compliant Available

NKK SWITCHES

- Bright, full face illumination with choice of red, green, or amber LEDs.
- Multiple LED arrays and interior reflectors enhance illumination of the large, .75" (19mm) square actuator surface.
- Distinctive design allows full face illumination in extra low profile of 0.31" (7.85mm) from PCB to top of switch.
- Dome contact gives crisp tactile and audible feedback with short stroke and assures high reliability and long life of 1,000,000 operations.
- Crimped terminals provide a spring type action to ensure secure mounting and prevent dislodging during the soldering process.
- Streamlined housing dimensions provide for compact, side-by-side mounting on a standard grid.
- Terminal spacing conforms to standard .100" (2.54mm) PCB grid.

Mfg.Part No.	Contact Voltage (VDC)	Contact Current (mA)	Stock No.	Price Each 1-24
JL15SKSCCP2	24	50	10X0254	19.50

(212420)

HP02 & HP03 SERIES 6MM ULTRA-MINIATURE TACTILE SWITCHES

NEW

NKK SWITCHES

Specifications:
- Silver Contacts Rated 3VA max DC
- Gold Contacts Rated 0.4VA max @ 28V AC/DC max
- Contact Resistance: 100 milliohms max.
- Dielectric Strength: 250V AC min for 1 minute min between contact & between contacts & case
- Operating Temperature: -20°C to +70°C
- SMT switches have gull-winged terminals

PCB Mount

PCB SWITCHES

CONTINUED

HP02 & HP03 SERIES 6MM ULTRA-MINIATURE TACTILE SWITCHES (CONT.)

Mfg. Part No.	Contact Material	Packaging	Stock No.	Price Each 1-24
HP0215AFKP2	Silver	Bulk	09X9921	0.62
HP0215AFKP2-S	Silver	Stick-Tube	09X9922	0.66
HP0215AFKP4-S	Gold	Stick-Tube	09X9924	1.06
SMT SWITCHES				
HP0315AFKP2-R	Silver	Tape-Reel	09X9926	0.56
HP0315AFKP2-S	Silver	Tape-Reel	09X9927	0.71
HP0315AFKP4-R	Gold	Tape-Reel	09X9929	0.97
HP0315AFKP4-S	Gold	Tape-Reel	09X9930	1.14

(211888)

B3AL SERIES LONG STROKE TACTILE SWITCHES

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

- Switching capacity: 1 to 50 mA at 5 to 16 VDC (resistive load)
- Ambient operating temperature: -40°C to 90°C at 60% max
- Ambient operating humidity: 35% to 85% (at 5°C to 35 °C)
- Contact configuration: SPST-NO
- Contact resistance: 100 mohm max.
- Insulation resistance: 100 Mohm min. (at 100 VDC)
- Dielectric strength: 250 VAC, 50 / 60 Hz for 1 min.
- Bounce time: 5 ms max.
- Pretravel (PT): 1.3

Mfg. Part No.	Operating Force (N)	Releasing Force (N)	Colour	Stock No.	Price Each 1-24
● B3AL-1000P	1.96	0.24	Red	55T8509	1.79
● B3AL-1001P	2.45	0.49	Green	55T8510	1.79
● B3AL-1002P	3	0.60	Black	55T8511	1.79
● B3AL-1003P	3.5	0.70	White	55T8512	1.79

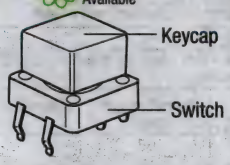
(197536)

KEYCAPS FOR TACTILE SWITCHES

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

Keycaps are available in different sizes and colors for exclusive use of the 6x6 mm and 12x12 mm projected plunger versions of **B3F** and **B3W Series** *on this page.*



Mfg. Part No.	Cap Size (mm) (H x W x L)	Keycap Color	Stock No.	Price Each 1-24	25-49	50-99
SQUARE CAPS FOR USE WITH 6 x 6mm SWITCHES						
● B32-1000	4 x 4 x 5.5	Gray	33K4362	0.34	0.31	0.28
● B32-1010	4 x 4 x 5.5	Black	52F3564	0.34	0.31	0.28
● B32-1030	4 x 4 x 5.5	Yellow	89C4235	0.34	0.31	0.28
● B32-1040	4 x 4 x 5.5	Blue	89C4236	0.32	0.29	0.26
● B32-1060	4 x 4 x 5.5	White	89C4238	0.34	0.31	0.28
● B32-1080	4 x 4 x 5.5	Red	36K7144	0.34	0.31	0.28
SQUARE CAPS FOR USE WITH 12 x 12mm SWITCHES						
● B32-1200	9 x 9 x 5.5	Gray	52F3565	0.32	0.29	0.26
● B32-1210	9 x 9 x 5.5	Black	35K3176	0.34	0.31	0.27
● B32-1220	9 x 9 x 5.5	Orange	89C4241	0.32	0.29	0.26
● B32-1230	9 x 9 x 5.5	Yellow	89C4242	0.32	0.29	0.26
● B32-1240	9 x 9 x 5.5	Blue	89C4243	0.32	0.29	0.26
● B32-1260	9 x 9 x 5.5	White	89C4245	0.34	0.31	0.27
● B32-1300	12 x 12 x 5.5	Gray	52F3567	0.32	0.29	0.26
● B32-1310	12 x 12 x 5.5	Black	52F3568	0.34	0.31	0.28
● B32-1340	12 x 12 x 5.5	Blue	84C9533	0.34	0.31	0.28
● B32-1360	12 x 12 x 5.5	White	84C9539	0.32	0.29	0.26
● B32-1380	12 x 12 x 5.5	Red	84C9528	0.32	0.29	0.26
ROUND CAPS FOR USE WITH 12 x 12mm SWITCHES						
● B32-1610	9.5 dia.	Black	89C4253	0.48	0.43	0.38
● B32-1620	9.5 dia.	Orange	89C4254	0.45	0.41	0.36
● B32-1630	9.5 dia.	Yellow	89C4255	0.45	0.41	0.36

(75288)

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(212569)

TACTILE SWITCHES

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

- Contact form: SPST-NO
- Contact resistance: 100 milliohms max (at 5VDC, 1mA; initial value)
- Insulation resistance: 100 megaohms min (at 250VDC)
- Dielectric strength: 500VAC, 50/60Hz for 1 minute
- Bounce time: 5ms max.
- Switching capacity: 5 to 24VDC, 1 to 50mA (resistive load)
- Insulation voltage: 30VDC
- Taped radial type, vertical type, high-force available
- **Suffix "-P"** indicates embossed tape packaging

Reset force: 20g (**B3F-1, B3F-3, B3F-6** and **B3FS**); 30g (**B3F-4**). Pretravel: 0.25 +0.2/-0.1 (**B3F-1, B3F-3, B3F-6** and **B3FS**); 0.3 +0.2/-0.1 (**B3F-4**). Order keycaps separately *on this page.*

Mfg. Part No.	Plunger	Operating Force (g)	Height (mm)	Termination	Stock No.	Price Each 1-24	25-49
6 x 6mm WITHOUT GROUND TERMINALS							
● B3F-1000	Flat	100	4.30	Solder	36K7138	0.34	0.30
● B3F-1005	Flat	100	4.30	Solder	89C4130	0.38	0.35
● B3F-1020	Flat	100	5.00	Solder	52F3547	0.39	0.36
● B3F-1022	Flat	150	5.00	Solder	36K7140	0.40	0.36
● B3F-1022G**	Flat	150	5.00	Through Hole	89M6976	3.13	2.82
● B3F-1025	Flat	260	5.00	Solder	89C4134	0.44	0.40
● B3F-1006	Flat	500	4.30	Solder	89C4132	0.71	0.64
● B3F-1050	Projected	100	7.30	Solder	36K7141	0.40	0.36
● B3F-1052	Projected	150	7.30	Solder	52F3550	0.39	0.35
● B3F-1055	Projected	260	7.30	Through Hole	89C4137	0.64	0.57
● B3F-1070	Extended	100	9.50	Solder	52F3551	0.44	0.40
6 x 6mm MODELS WITH GROUND TERMINALS							
● B3F-1100	Flat	100	4.30	Solder	89C4142	0.37	0.34
● B3F-1102	Flat	150	4.30	Solder	89C4143	0.37	0.34
● B3F-1120	Flat	100	5.00	Solder	89C4145	0.37	0.34
● B3F-1150	Projected	100	7.30	Solder	89C4149	0.37	0.34
● B3F-1152	Projected	150	7.30	Solder	90B2972	0.37	0.34
● B3F-3100	Flat	100	3.15	Solder	89C4153	0.54	0.49
● B3F-3102	Flat	150	3.15	Solder	89C4154	0.55	0.50
● B3F-3120	Flat	100	3.85	Solder	52F3552	0.55	0.50
● B3F-3122	Flat	150	3.85	Solder	52F3553	0.55	0.50
● B3F-3150	Projected	100	6.15	Solder	52F3554	0.54	0.49
● B3F-3152	Projected	150	6.15	Solder	52F3555	0.54	0.49
● B3F-3155	Projected	260	6.15	Solder	23C2739	0.62	0.56
6 x 6mm RADIAL MODELS WITHOUT GROUND TERMINALS							
● B3F-6000BYOMZ	Flat	100	4.30	Through Hole	89C4167	0.45	0.40
● B3F-6002	Flat	150	4.30	Through Hole	39P9780	0.45	0.40
● B3F-6020*	Flat	100	5.00	Solder	89C4170	0.48	0.43
● B3F-6022*	Flat	150	5.00	Solder	89C4171	0.46	0.41
● B3F-6050	Projected	100	7.30	Solder	89C4173	0.55	0.49
6 x 6mm SURFACE MOUNT MODELS							
● B3FS-1000	Flat	100	3.10	Solder	36K3106	0.67	0.60
● B3FS-1002	Flat	150	3.10	Solder	36K1873	0.67	0.60
● B3FS-1000P	Flat	100	3.10	Solder	34K1328	0.68	0.61
● B3FS-1002P	Flat	150	3.10	Solder	09J1583	0.66	0.59
● B3F-S1010	Flat	100	4.30	Solder	89M6972	0.69	0.62
12 x 12mm MODELS WITHOUT GROUND TERMINALS							
● B3F-4000	Flat	130	4.30	Solder	36K3105	0.56	0.51
● B3F-4005	Flat	260	4.30	Solder	52F3557	0.54	0.49
● B3F-5000	Flat	130	4.30	Solder	93B2941	0.65	0.59
● B3F-5051	Projected	130	7.30	Solder	89C4165	3.12	2.81
● B3F-5050	Projected	130	7.30	Solder	88F4982	0.67	0.61
● B3F-4050	Projected	130	7.30	Solder	36K7142	0.56	0.51
12 x 12mm MODELS WITH GROUND TERMINALS							
● B3F-5151	Projected	130	7.30	Solder	91B7507	3.16	2.85
● B3F-4150	Projected	130	7.30	Solder	94B1326	0.66	0.59
● B3F-4155	Projected	260	7.30	Solder	25C4356	0.61	0.55

* Height is 5mm.
** Gold plated contacts

(75289)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

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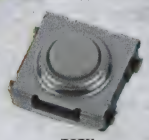
(212570)

TACTILE SWITCHES

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

B3S



B3SN

B3S series are surface mount switches ideal for high-density packaging. Sealed construction allows tactile switches to be mounted and soldered to a PC board. SPST contacts. Ideal for applications such as audio, office, and communications equipment, measuring instruments, industrial robots, VCRs, TVs, and vending machines. Switching capacity: 50mA 240VDC (resistive load). Permissible load: 1mA 5VDC (resistive load). **"P" suffix** denotes embossed tape packaging.

WITHOUT GROUND TERMINALS

Mfg. Part No.	Operating Force (N)	Stock No.	Price Each 1-24	25-49	50-99
B3S-1000	1.57	52F3560	0.80	0.72	0.64
B3S-1000P	1.57	50B6363	0.83	0.75	0.66
B3S-1002	2.26	52F3561	0.77	0.70	0.62
B3S-1002P	2.26	89C4217	0.94	0.85	0.75
WITH GROUND TERMINALS					
B3S-1100	1.57	36K7143	0.73	0.66	0.58
B3S-1100P	1.57	89C4218	0.77	0.69	0.62

B3SN series surface-mount mechanical key switches have a sealed construction for dusty or humid environments. J-lead style SMT. Compact and more than 1 mm thinner than conventional mechanical tactile switches. SPST-NO contacts. Rated 0.1A, 30VDC (resistive load). Switching capacity: 5 - 24VDC, 1 - 30mA. **"P" suffix** denotes embossed tape packaging.

WITHOUT GROUND TERMINALS

Mfg. Part No.	Operating Force (N)	Stock No.	Price Each 1-24	25-49	50-99
B3SN-3012	1.57	34K1329	1.15	1.03	0.92
B3SN-3012P	1.57	20C3997	1.19	1.07	0.95
WITH GROUND TERMINALS					
B3SN-3112P	1.57	34K1331	1.19	1.07	0.95
B3SN-3112	1.57	89C4220	1.07	0.96	0.85

(11927)

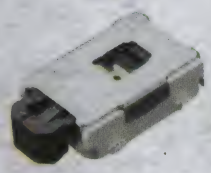
EVQPS SERIES 6.1MM X 4.0MM SIDE-OPERATIONAL SMD LIGHT TOUCH SWITCHES

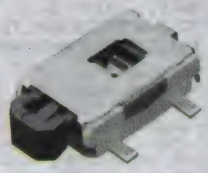
RoHS Compliant Available

Panasonic

Features:
- External dimensions: 6.0mm x 3.5mm, height 4.3mm, 5.0mm
- Wave soldering availabel

Applications:
- Operating switches for other electronic equipment





Specifications:
- Snap action/push-on SPST
- Rating: 10µA 2VDC to 50mA 12VDC (resistive load)
- Contact resistance: 100mohm (max.)
- Insulation resistance: 100Mohm
- Dielectric withstanding voltage: 250VAC for 1 minute
- Operating temperature: -30°C to +85°C
- Operating Life (Cycles): 50000 for 1N, 1.6N operating force
- Operating Life (Cycles): 30000 for 2.4N operating force

Mfg. Part No.	Operating Force (N)	Height (mm)	Push Plate Color	Stock No.	Price Each 1-9
EVQ-PSD02K	1.6	1.8	Black	83T2786	0.92
EVQ-PSG02K	2.2	1.8	Black	83T2787	0.97
EVQ-PSH02K	2.2	1.8	Black	83T2788	1.03
EVQ-PSL02K	1.6	1.8	Black	83T2789	0.93
EVQ-PSM02K	1.6	1.8	Black	83T2790	0.93
EVQ-PSQ02K	2.2	1.8	Black	83T2791	0.93
EVQ-PSR02K	2.2	1.8	Black	83T2792	1.03

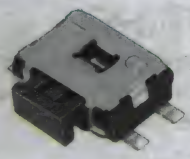
(209136)

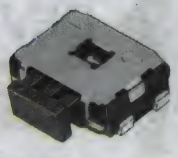
EVQPU SERIES SMALL SIDE-OPERATIONAL SMD LIGHT TOUCH SWITCHES

RoHS Compliant Available

Panasonic

Applications:
- Operating switches for portable electronic equipment such as mobile phones, digital still cameras, camcorders, audio players





Specifications:
- Snap action/push-on SPST
- Straight terminals
- Black push plate
- Rating: 10µA 2VDC to 50mA 12VDC (resistive load)
- Contact resistance: 500mohm (max.)
- Insulation resistance: 100Mohm (at 100VDC)
- Dielectric withstanding voltage: 250VAC for 1 minute
- Boucing: ON/OFF 10ms (max.)
- Travel: 0.3mm
- Operating life: 100000 cycles (min.)
- Operating temperature: -20°C to +70°C
- Size: 4.7mm x 3.5mm; Height 1.65mm

➤CONTINUED➤

EVQPU SERIES SMALL SIDE-OPERATIONAL SMD LIGHT TOUCH SWITCHES (CONT.)

Mfg. Part No.	Operating Force (N)	Boss	Stock No.	Price Each 1-9
EVQ-PUJ02K	1.6	Without	52W2508	0.98
EVQ-PUL02K	1.6	With	52W2509	0.97
EVQ-PUA02K	2.2	Without	52W2506	0.98
EVQ-PUC02K	2.2	With	52W2507	0.98
EVQ-PUB02K	2.2	Without	83T2793	1.02
EVQ-PUD02K	2.2	With	83T2794	1.10

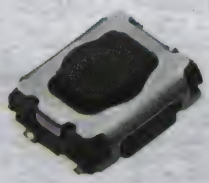
(208964)

EVPAA SERIES 3.5MM X 2.9MM SMD LIGHT-TOUCH SWITCHES

RoHS Compliant Available

Panasonic

Specifications:
- Snap action/push-on SPST
- J-bent terminals (without ground)
- Rating: 10µA 2VDC to 20mA 15VDC (resistive load)
- Contact resistance: 100mohm (max.)
- Insulation resistance: 100Mohm (at 100VDC)
- Dielectric withstanding voltage: 250VAC for 1 minute
- Boucing: ON/OFF 10ms (max.)
- Travel: 0.15mm
- Operating temperature: -40°C to +85°C
- Height: 1.7mm



Applications:
- Operation switches for portable electronic equipment such as mobile phones, digital still cameras
- Operating switches for keyless entry systems

Mfg. Part No.	Operating Force (N)	Push Plate Color	Operating Life (Cycles)	Stock No.	Price Each 1-9
EVP-AA002K	1.0	Black	1000000	83T2734	1.63
EVP-AA202K	1.6	Black	200000	83T2735	1.61
EVP-AA402W	2.4	White	200000	83T2736	1.63
EVP-AA602W	3.5	White	200000	83T2737	1.43

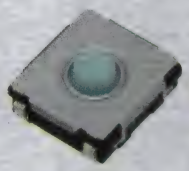
(208983)

EVQP0, EVQQ2 SERIES 6MM SQUARE THIN SMD LIGHT-TOUCH SWITCHES

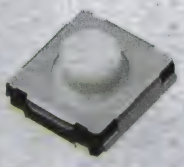
RoHS Compliant Available

Panasonic

Features:
- Overstroke travel (**EVQP0**) or short push travel (**EVQQ2**)
- J-bent terminals
- With or without ground terminal



EVQP0



EVQQ2

Specifications:
- Snap action/push-on SPST
- Rating: 10µA 2VDC to 20mA 15VDC (resistive load)
- Contact resistance: 100mohm (max.)
- Insulation resistance: 100Mohm (at 100VDC)
- Dielectric withstanding voltage: 250VAC for 1 minute
- Boucing: ON/OFF 10ms (max.)
- Operating temperature: -40°C to +85°C
- Size: 6.5 mm x 6mm, Height 1.8 mm (excluding push plate)

Applications:
- Operating switches for electronic equipment
- Operation switches for PC mouse
- Car audio systems

EVQP0 SERIES — OVERSTROKE TRAVEL: 0.35MM, J-BENT TERMINALS

Mfg. Part No.	Operating Force (N)	Height (mm)	Ground Terminal	Operating Life (Cycles)	Tape Cut Stock No.	Tape Cut Price Each 1-9
EVQ-P0N02B*	0.6	2.5	Without	2000000	53W5023	0.65
EVQ-P0Q02Q+	1.0	2.5	Without	1000000	53W5024	0.65
EVQ-P0S02Q+	1.0	2.5	With	1000000	53W5025	0.65

*Blue push plate; + Grey push plate

EVQQ2 SERIES — SHORT PUSH TRAVEL: 0.25MM, J-BENT TERMINALS, WHITE PUSH PLATE

EVQ-Q2B03W	0.5	3.1	Without	2000000	96K9625	0.72
EVQ-Q2B01W	0.5	2.0	Without	2000000	52W2519	0.61
EVQ-Q2B02W	0.5	2.5	Without	2000000	52W2520	0.60
EVQ-Q2D03W	0.5	3.1	With	2000000	78R8950	0.70
EVQ-Q2F03W	1.0	3.1	Without	1000000	96K9626	0.71
EVQ-Q2F01W	1.0	2.0	Without	1000000	52W2521	0.61
EVQ-Q2F02W	1.0	2.5	Without	1000000	53W5027	0.70
EVQ-Q2H03W	1.0	3.1	With	1000000	78R8953	0.71
EVQ-Q2K01W	1.3	2.0	Without	1000000	52W2523	0.61
EVQ-Q2K02W	1.3	2.5	Without	1000000	53W5028	0.71
EVQ-Q2K03W	1.3	3.1	Without	1000000	52W2525	0.60
EVQ-Q2P02W	1.6	2.5	Without	1000000	52W2527	0.61
EVQ-Q2P03W	1.6	3.1	Without	1000000	96K9627	0.71

➤CONTINUED➤

EVQP0, EVQQ2 SERIES 6MM SQUARE THIN SMD LIGHT-TOUCH SWITCHES (CONT.)

EVQQ2 SERIES — SHORT PUSH TRAVEL: 0.25MM, J-BENT TERMINALS, WHITE PUSH PLATE

Mfg. Part No.	Operating Force (N)	Height (mm)	Ground Terminal	Operating Life (Cycles)	Tape Cut Stock No.	Price Each 1-9
● EVQ-Q2S02W	1.6	2.5	With	1000000	78R8958	0.61
● EVQ-Q2S03W	1.6	3.1	With	1000000	78R8959	0.61
● EVQ-Q2U01W	2.6	2.0	Without	200000	52W2528	0.61
● EVQ-Q2U02W	2.6	2.5	Without	200000	52W2529	0.61
● EVQ-Q2U03W	2.6	3.1	Without	200000	96K9629	0.71
● EVQ-Q2W03W	2.6	3.1	With	200000	53W8284	0.61
● EVQ-Q2Y01W	3.5	2.0	Without	100000	52W2530	0.60
● EVQ-Q2Y02W	3.5	2.5	Without	100000	53W5029	0.70
● EVQ-Q2Y03W	3.5	3.1	Without	100000	96K9631	0.70
● EVQ-Q2203W	3.5	3.1	With	100000	78R8965	0.60

(206981)

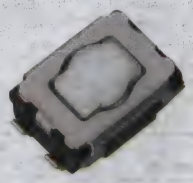
EVQP2 SERIES 4.7MM X 3.5MM SMD LIGHT-TOUCH SWITCHES

RoHS Compliant Available

Panasonic

Features:
- High operating force and long operational life
- High mountability with 4 J-bent terminals

Specifications:
- Snap action/push-on SPST
- Rating: 10µA 2VDC to 20mA 15VDC (resistive load)
- Contact resistance: 100mohm (max.)
- Insulation resistance: 100Mohm
- Dielectric withstanding voltage: 250VAC for 1 minute
- Boucing: ON/OFF 10ms (max.)
- Operating temperature: -40°C to +85°C



Short Push Travel

Applications:
- Operation switches for portable electronic equipment such as mobile phones, digital still cameras, camcorders, audio players
- Car keyless entry systems
- Car audio equipment

MIDDLE PUSH TRAVEL 0.7MM — J-BENT TERMINALS

Mfg. Part No.	Ground Terminal	Operating Force (N)	Ht. (mm)	Operating Life (Cycles)	Push Plate Color	Stock No.	Price Each 1-9
● EVQ-P2B02B	With	2.5	2.5	1000000	Blue	83T2805	1.40
● EVQ-P2D02Q	With	3.5	2.5	500000	Grey	83T2806	1.34
● EVQ-P2F02K	With	5	2.5	200000	Black	83T2807	1.50
● EVQ-P2H02B	Without	2.5	2.5	1000000	Blue	83T2808	1.50
● EVQ-P2K02Q	Without	3.5	2.5	500000	Grey	83T2809	1.34
SHORT PUSH TRAVEL 0.25MM — J-BENT TERMINALS							
● EVQ-P2T02M	With	2.4	2.1	500000	Natural	83T2814	1.50
● EVQ-P2T02W	With	2.4	2.5	500000	Natural	83T2815	1.50
● EVQ-P2002M	Without	1	2.1	1000000	Natural	83T2818	1.34
● EVQ-P2202W	Without	1.6	2.5	1000000	Natural	83T2821	1.34
● EVQ-P2202M	Without	1.6	2.1	1000000	Natural	83T2820	1.34
● EVQ-P2402M	Without	2.4	2.1	500000	Natural	83T2822	1.34
● EVQ-P2402W	Without	2.4	2.5	500000	Natural	83T2823	1.34
● EVQ-P2602W	Without	3.5	2.5	200000	Natural	83T2825	1.34

(208978)

EVQPE1, EVQPN, EVQ5P SERIES 6MM X 3.5MM SMD LIGHT-TOUCH SWITCHES

RoHS Compliant Available

Panasonic

Specifications:
- Snap action/push-on SPST
- Rating: 10µA 2VDC to 50mA 15VDC (resistive load)
- Contact resistance: 100mohm (max.)
- Insulation resistance: 100Mohm (at 100VDC)
- Dielectric withstanding voltage: 250VAC for 1 minute
- Boucing: ON/OFF 10ms (max.)
- Travel: 0.25mm
- Operating temperature: -30°C to +85°C

Applications:
- Operating switches for electronic equipment

With Black Push Plate

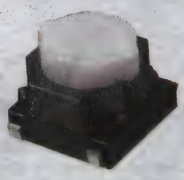
Mfg. Part No.	Operating Force (N)	Height (mm)	Push Plate Color	Operating Life (Cycles)	Stock No.	Price Each 1-9
● EVQ-PE104K	1.0	4.3	Black	50000	83T2745	1.06
● EVQ-PNF04M	1.6	4.3	Natural	50000	83T2781	1.04
● EVQ-PNF05M	1.6	5.0	Natural	50000	83T2782	1.06
● EVQ-5PN04K	2.4	4.3	Black	30000	83T2844	1.04
● EVQ-5PN05K	2.4	5.0	Black	30000	83T2845	1.06

(208977)

EVQP1, EVQ9P SERIES 6MM SQUARE LONG TRAVEL SMD LIGHT-TOUCH SWITCHES

RoHS Compliant Available

Panasonic



Specifications:
- Snap action/push-on SPST
- Rating: 10µA 2VDC to 50mA 12VDC (resistive load)
- Insulation resistance: 100Mohm (at 100VDC)
- Dielectric withstanding voltage: 250VAC for 1 minute
- Boucing: ON/OFF 10ms (max.)
- Operating temperature: 40°C to +85°C
- Size: 6mm x 6.1mm; Height: 5mm (incl. push plate)

Features:
- Steady and low contact resistance (100mohm max.)
- Excellent solderability (J-bent-type terminals)

Applications:
- Car electronics equipment

Mfg. Part No.	Operating Force (N)	Travel (mm)	Push Plate Color	Operating Life (Cycles)	Stock No.	Price Each 1-9
● EVQ-P1K05M	2.2	1.0	Natural	100000	83T2804	1.50
● EVQ-P1F05M	2.0	1.3	Natural	100000	83T2803	1.50
● EVQ-P1D05M	2.5	1.3	Natural	100000	83T2802	1.50
● EVQ-9P105M	3.5	1.3	Natural	30000	83T2847	1.50

(208974)

EVQPE SERIES 6MM X 3.5MM LIGHT-TOUCH SWITCHES

RoHS Compliant Available

Panasonic

Specifications:
- Snap action/push-on SPST
- Rating: 10µA 2VDC to 50mA 12VDC (resistive load)
- Contact resistance: 100mohm (max.)
- Insulation resistance: 100Mohm (at 100VDC)
- Dielectric withstanding voltage: 250VAC for 1 minute
- Boucing: ON/OFF 10ms (max.)
- Travel: 0.25mm
- Operating temperature: -30°C to +85°C

Applications:
- Operating switches for electronic equipment

Mfg. Part No.	Operating Force (N)	Height (mm)	Push Plate Color	Operating Life (Cycles)	Stock No.	Price Each 1-9
● EVQ-PE404Q	1	4.3	Grey	50000	83T2747	0.65
● EVQ-PE405Q	1	5	Grey	50000	83T2748	0.65
● EVQ-PE504K	1.6	4.3	Black	50000	83T2749	0.65
● EVQ-PE505K	1.6	5	Black	50000	83T2750	0.65

(208972)

EVQP7, EVQ9P7 SERIES SIDE-OPERATIONAL SMD LIGHT-TOUCH SWITCHES

RoHS Compliant Available

Panasonic

Specifications:
- Snap action/push-on SPST
- Rating: 10µA 2VDC to 50mA 12VDC (resistive load)
- Contact resistance: 500mohm (max.)
- Insulation resistance: 100Mohm (at 100VDC)
- Dielectric withstanding voltage: 250VAC for 1 minute
- Boucing: ON/OFF 10ms (max.)
- Push travel: 0.22mm
- Operating life: 100000 cycles (min.)
- Operating temperature: -20°C to +70°C
- Size: 3.5mm x 2.9mm
- Mounting height: 1.35mm
- Black push plate

Features:
- Excellent light-touch operational feel
- Choice of terminal type: straight, J-bent, or L-shape,
- High mountability

Applications:
- Operating switches for portable electronic equipment such as mobile phones, digital still cameras, camcorders, audio players

Mfg. Part No.	Operating Force (N)	Terminal Type	Boss	Stock No.	Price Each 1-9
● EVQ-P7A01P	2.2	Straight	Without	83T2830	1.07
● EVQ-P7J01P	1.6	Straight	Without	83T2834	1.08
● EVQ-P7C01K	2.2	Straight	With	83T2832	1.11
● EVQ-P7L01P	1.6	Straight	With	83T2836	1.08
● EVQ-P7B01P	2.2	J-Bent	Without	83T2831	1.08
● EVQ-P7K01P	1.6	J-Bent	Without	83T2835	0.90
● EVQ-P7D01P	2.2	J-Bent	With	83T2833	1.01
● EVQ-P7M01P	1.6	J-Bent	With	83T2837	1.08
● EVQ-9P701K	1.6	L-Shape	Without	83T2849	1.25

(208971)

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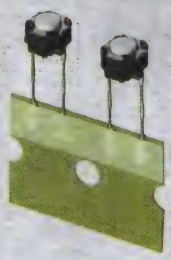
(196525)

EVQ11 SERIES TYPE 2R ROUND LIGHT-TOUCH SWITCHES

RoHS Compliant Available

Panasonic



Features:
- Excellent light-touch operational feel
- Cast-processed terminals improve mountability

Specifications:
- Snap action/push-on SPST
- Rating: 10µA 2VDC to 20mA 15VDC (resistive load)
- Contact resistance: 50mohm (max.)
- Insulation resistance: 50Mohm (at 100VDC)
- Dielectric withstanding voltage: 250VAC for 1 minute
- Boucing: ON 3ms (max.); OFF 8ms (max.)
- Travel: 0.25mm ±0.10mm
- Operating temperature: -20°C to +70°C
- Size: 6mm L x 6mm W

Applications:
- Operating switches for electronic equipment

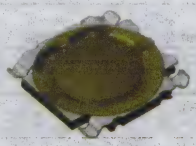
Mfg. Part No.	Operating Force (N)	Height (mm)	Push Plate Color	Operating Life (Cycles)	Stock No.	Price Each 1-9
EVQ-11A04M	1	4.3	White	100000	53W3096	0.44
EVQ-11A05R	1	5	Red	100000	53W3097	0.44
EVQ-11A07K	1	7	Black	100000	53W3098	0.41
EVQ-11A09K	1	9.5	Black	100000	53W3099	0.44
EVQ-11G05R	1.3	5	Red	100000	53W3100	0.44
EVQ-11G07K	1.3	7	Black	100000	53W3101	0.41
EVQ-11G09K	1.3	9.5	Black	100000	53W3102	0.44
EVQ-11L04M	1.6	4.3	White	100000	53W3103	0.44
EVQ-11L05R	1.6	5	Red	100000	53W3104	0.44
EVQ-11L07K	1.6	7	Black	100000	53W3105	0.44
EVQ-11L09K	1.6	9.5	Black	100000	53W3106	0.44
EVQ-11U04M	2.6	4.3	White	50000	53W3107	0.44
EVQ-11U05R	2.6	5	Red	50000	53W3108	0.43
EVQ-11U07K	2.6	7	Black	50000	53W3109	0.41
EVQ-11U09K	2.6	9.5	Black	50000	53W3110	0.44

(208969)

EVQPQ SERIES 4.5MM SQUARE SMD LIGHT TOUCH SWITCHES

RoHS Compliant Available

Panasonic



Features:
- Lightweight: 20mg (½ compared with coventional type)

Specifications:
- Snap action/push-on SPST
- Rating: 10µA 2VDC to 20mA 15VDC (resistive load)
- Contact resistance: 100mohm (max.)
- Insulation resistance: 50Mohm
- Dielectric withstanding voltage: 250VAC for 1 minute
- Operating temperature: -20°C to +70°C

Applications:
- Operation switches for portable electronic equipment, such as camcorders, audio players

Mfg. Part No.	Operating Force (N)	Height (mm)	Operating Life (Cycles)	Stock No.	Price Each 1-9
EVQ-PQHB55	1.6	0.55	200000	83T2783	0.45
EVQ-PQMB55	2.4	0.55	50000	83T2784	0.53

(209132)

EVQPL SERIES 4.9MM SQUARE SMD LIGHT TOUCH SWITCHES

RoHS Compliant Available

Panasonic

Features:
- External dimensions: 4.9mm x 4.9mm, height 0.8mm (without push plate), 1.5mm (with push plate)

Applications:
- Operation switches for portable electronic equipment (Notebook PC, Camcorders, Portable audio players, etc.)
- Operation switches for car audio systems

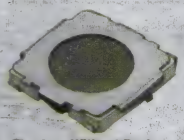


Fig. 1 — Without Push-Plate

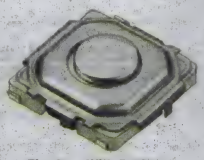


Fig. 2 — With Push-Plate

Specifications:
- Snap action/push-on SPST
- Rating: 10µA 2VDC to 20mA 15VDC (resistive load)
- Contact resistance: 50mohm (max.)
- Insulation resistance: 50Mohm
- Dielectric withstanding voltage: 250VAC for 1 minute
- Operating temperature: -20°C to +70°C
- Operating Life (Cycles): 500000 for 1N, 1.6N operating force
- Operating Life (Cycles): 200000 for 2.6N, 3.5N operating force

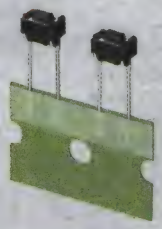
Mfg. Part No.	Fig.	Operating Force (N)	Height (mm)	Stock No.	Price Each 1-9
EVQ-PLFA08	1	1.6	0.8	83T2777	0.95
EVQ-PLDA15	2	1	1.5	83T2776	1.00
EVQ-PLHA15	2	1.6	1.5	83T2778	0.92
EVQ-PLMA15	2	2.6	1.5	83T2780	1.23

(209131)

EVQPJ SERIES 6.0MM X 3.5MM 2R LIGHT TOUCH SWITCHES

RoHS Compliant Available

Panasonic



Features:
- External dimensions: 6.1mm x 4.0mm, height 1.8mm
- Terminal shapes: straight, J-bent

Specifications:
- Snap action/push-on SPST
- Rating: 10µA 2VDC to 50mA 12VDC (resistive load)
- Contact resistance: 500mohm (max.)
- Insulation resistance: 100Mohm
- Dielectric withstanding voltage: 250VAC for 1 minute
- Operating temperature: -30°C to +85°C
- Operating Life (Cycles): 100000

Applications:
- Operating switches for other electronic equipment

Mfg. Part No.	Operating Force (N)	Height (mm)	Push Plate Color	Stock No.	Price Each 1-9
EVQ-PJG04Q	1	4.3	Grey	83T2769	0.68
EVQ-PJG05Q	1	5	Grey	83T2770	0.68
EVQ-PJJ04T	2.4	4.3	Brown	83T2773	0.63

(209130)

EVQPF SERIES 5N TYPE SIDE-OPERATIONAL LIGHT TOUCH SWITCHES

RoHS Compliant Available

Panasonic

Features:
- Wealth of product types: Horizontal type, snap-in terminals, etc.
- Can be automatically dip-soldered: Integral molding of the terminals and main body prevents the escape of fl ux.

Specifications:
- Snap action/push-on SPST
- Rating: 10µA 2VDC to 20mA 15VDC (resistive load)
- Contact resistance: 50mohm (max.)
- Insulation resistance: 50Mohm
- Dielectric withstanding voltage: 250VAC for 1 minute
- Operating temperature: -20°C to +70°C
- Operating Life (Cycles): 1000000 for 1N, 1.3N, 1.6N operating force
- Operating Life (Cycles): 50000 for 2.6N operating force

Applications:
- Operating switches for other electronic equipment

Mfg. Part No.	Operating Force (N)	Height (mm)	Push Plate Color	Stock No.	Price Each 1-9
EVQ-PF003M	1	3.15	White	83T2753	0.49
EVQ-PF006K	1	5.85	Black	83T2755	0.49
EVQ-PF008K	1	8.35	Black	83T2756	0.49
EVQ-PF103M	1.3	3.15	White	83T2757	0.49
EVQ-PF104R	1.3	3.85	Red	83T2758	0.49
EVQ-PF106K	1.3	5.85	Black	83T2759	0.49
EVQ-PF108K	1.3	8.35	Black	83T2760	0.46
EVQ-PF203M	1.6	3.15	White	83T2761	0.46
EVQ-PF204R	1.6	3.85	Red	83T2762	0.49
EVQ-PF206K	1.6	5.85	Black	83T2763	0.49
EVQ-PF208K	1.6	8.35	Black	83T2764	0.49
EVQ-PF303M	2.6	3.15	White	83T2765	0.49
EVQ-PF304R	2.6	3.85	Red	83T2766	0.49
EVQ-PF306K	2.6	5.85	Black	83T2767	0.49
EVQ-PF308K	2.6	8.35	Black	83T2768	0.49

(209129)

EVQPA/EVQPB SERIES LIGHT TOUCH SWITCHES

RoHS Compliant Available

Panasonic

Features:
- Wealth of product types: With or without a ground terminal, vertical type, snap-in terminals, etc.
- Can be automatically dip-soldered: Integral molding of the terminals and main body prevents the escape of fl ux.

Specifications:
- Snap action/push-on SPST
- Rating: 10µA 2VDC to 20mA 15VDC (resistive load)
- Contact resistance: 50mohm (max.)
- Insulation resistance: 50Mohm
- Dielectric withstanding voltage: 250VAC for 1 minute
- Operating temperature: -20°C to +70°C
- Operating Life (Cycles): 1000000 for 4.3mm/5mm height
- Operating Life (Cycles): 50000 for 7mm/9.5mm

Applications:
- Operating switches for other electronic equipment

WITHOUT GROUND TERMINAL

Mfg. Part No.	Operating Force (N)	Height (mm)	Push Plate Color	Stock No.	Price Each 1-9
EVQ-PAC04M	1	4.3	White	52W2465	0.46
EVQ-PAC05R	1	5	Red	52W2466	0.46
EVQ-PAC07K	1	7	Black	52W2467	0.46
EVQ-PAC09K	1	9.5	Black	52W2468	0.46
EVQ-PAD04M	1.3	4.3	White	52W2469	0.45

➤CONTINUED➤

EVQPA/EVQPB SERIES LIGHT TOUCH SWITCHES (CONT.)

Mfg. Part No.	Operating Force (N)	Height (mm)	Push Plate Color	Stock No.	Price Each 1-9
EVQ-PAD05R	1.3	5	Red	52W2470	0.46
EVQ-PAD07K	1.3	7	Black	52W2471	0.46
EVQ-PAD09K	1.3	9.5	Black	52W2472	0.46
EVQ-PAE04M	1.6	4.3	White	52W2473	0.46
EVQ-PAE05R	1.6	5	Red	52W2474	0.46
EVQ-PAE07K	1.6	7	Black	52W2475	0.46
EVQ-PAE09K	1.6	9.5	Black	52W2476	0.46
EVQ-PAG04M	2.6	4.4	White	52W2477	0.46
EVQ-PAG05R	2.6	5	Red	83T2739	0.46
EVQ-PAG07K	2.6	7	Black	52W2478	0.46
EVQ-PAG09K	2.6	9.5	Black	52W2479	0.46
WITH GROUND TERMINAL					
EVQ-PBC05R	1	5	Red	52W2481	0.49
EVQ-PBC07K	1	7	Black	52W2482	0.49
EVQ-PBC09K	1	9.5	Black	52W2483	0.46
EVQ-PBC04M	1	4.3	White	52W2480	0.49
EVQ-PBE05R	1.6	5	Red	52W2489	0.49
EVQ-PBE09K	1.6	9.5	Black	52W2491	0.46

(209128)

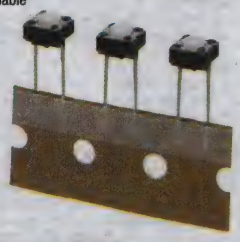
5N TYPE 2R LIGHT TOUCH SWITCHES

RoHS Compliant Available

Panasonic

Features:
- Wealth of product types: With or without a ground terminal, vertical type, snap-in terminals, etc.
- Can be automatically dip-soldered: Integral molding of the terminals and main body prevents the escape of flux.

Recommended Applications:
- Operating switches for electronic equipment



Mfg. Part No.	Operating Force (N)	Height (mm)	Color	Operating Life (Cycles)	Stock No.	Price Each 1-9
EVQ-21305R	1	5	Red	100000	52W2556	0.42
EVQ-21307K	1	7	Black	100000	52W2557	0.41
EVQ-21309K	1	9.5	Black	100000	52W2558	0.42
EVQ-21404M	1.3	4.3	White	100000	52W2559	0.42
EVQ-21405R	1.3	5	Red	100000	52W2560	0.42
EVQ-21407K	1.3	7	Black	100000	52W2561	0.42
EVQ-21409K	1.3	9.5	Black	100000	52W2562	0.42
EVQ-21504M	1.6	4.3	White	100000	52W2563	0.42
EVQ-21505R	1.6	5	Red	100000	52W2564	0.39
EVQ-21507K	1.6	7	Black	100000	52W2565	0.42
EVQ-21509K	1.6	9.5	Black	100000	52W2566	0.42
EVQ-22704M	2.6	4.3	White	50000	52W2567	0.42
EVQ-22705R	2.6	5	Red	50000	52W2568	0.39
EVQ-22707K	2.6	7	Black	50000	52W2569	0.42
EVQ-22709K	2.6	9.5	Black	50000	52W2570	0.42

(208899)

ALCOSWITCH FSM SERIES TACTILE SWITCHES

RoHS Compliant Available

TE connectivity

Authorized Distributor

Fig. 1 Fig. 2 Fig. 3 Fig. 4

- Circuitry: SPST
- Contact rating: 50mA
- Switch operation: Off-(On)
- (On) = Momentary action

Mfg. Part No.	Fig.	Actuator Style	Actuator Profile	Actuator Length (mm)	Termination	Stock No.	Price Each 1-9
FSM1LPATR	1	Round	Extended	0.27	PCB SMD	14H0904	0.29
FSM1LP	...	Round	Extended	2	PCB	02E8904	0.57
FSM101	...	Round	Extended	3.59	SMD	11H4185	0.60
FSM102	1	Round	Extended	8.02	PCB Through Hole	14H0907	0.46
FSM4JRT	2	Round	Extended	1.40	PCB Through Hole	14H0928	0.18

CONTINUED

ALCOSWITCH FSM SERIES TACTILE SWITCHES (CONT.)

Mfg. Part No.	Fig.	Actuator Style	Actuator Profile	Actuator Length (mm)	Termination	Stock No.	Price Each 1-9
FSM2JSMA	3	Round	Extended	0.70	Solder	92F2864	0.30
FSM2JSMATR	3	Round	Extended	0.70	SMD	14H0923	0.29
FSM100	4	Round	Flush	...	PCB Through Hole	14H0906	0.38
FSM104	...	Round	Extended	7.20	PCB Through Hole	14H0908	0.51
FSMRACD	...	Square	Extended	2.89	Straight PCB	90B1602	0.23
FSM2JART	...	Round	Extended	0.70	Straight PCB Through Hole	14H0917	0.29
FSMSM	...	Rectangular	Extended	1.07	-	92F2863	0.22
FSM103	...	Square	Extended	1.80	PCB Through Hole	11H4186	0.39
FSMH	...	Round	Extended	1.52	PCB Through Hole	40P4335	0.43
FSMRA4JH04	...	Round	Extended	5.74	PCB Solder	40P4336	0.22
FSM4JSMATR	...	Round	Extended	1.40	PCB Solder	54M3408	0.25
FSM4JSMA	...	Round	Extended	1.40	PCB Solder	92F2865	0.20
147873-2	...	Rectangular	Extended	0.8	SMD	23R8897	0.43
3-1825910-1	....	Round-Flush	Extended	13.40	Through Hole	61M0374	0.20
FSMCH	...	Rectangular	Extended	0.8	Through Hole	41T2120	0.43
FSMCT	...	Round-Flush	Extended	0.4	SMD	14H0888	0.72
FSMRA6JH04	...	Extended Lever	Extended	4.24	Through Hole	41T2121	0.25
1571218-6	....	Round	Extended	0.8	SMD	41T2133	1.63

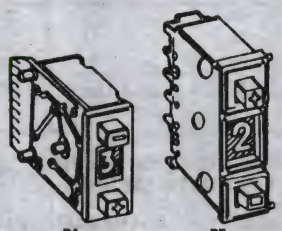
(106000)

P SERIES PUSHWHEELS

RoHS Compliant Available

CHERRY

P series pushwheel switches are rated 100mA @ 50V AC/DC. Contact resistance: 0.1 ohm max. Insulation resistance: 1000Mohms. Switches are front mount, snap-in.



PA PE

Mfg. Part No.	Output Code	Pos.	Readout	Stock No.	Price Each 1-9	Price Each 10-24
PB - 0.236"W x 0.709"H						
PBC1E015*	BCD w/PC Pins	10	0-9	19C9819	11.25	10.76
PE - 0.300"W x 0.945"H						
PECA3000	BCD	10	0-9	19C9809	20.25	18.44
PEHA3000	Hexadecimal	16	0-9, A-F	19C9816	27.76	25.29
PA - 0.300"W x 0.591"H						
PACA3000	BCD	10	0-9	19C9780	19.30	18.02
T-10 - 0.500"W X 1.88"H						

* Not illustrated. † Extended Board for Diodes

ACCESSORIES AND CONNECTORS FOR ASSEMBLY

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
06090799	Right-End Caps for PA Switches	17B6076	1.06	0.94
06090801	Left-End Caps for PA Switches	17B6077	1.11	0.97
C2K0P107	Connector for **PA Series** BCD/HEX, PC Mount Terminal	88F2678	5.53	5.33
C2RFN116	Connector for **PE Series** BCD/HEX, Solder Lug Terminal	17B5850	6.13	5.91

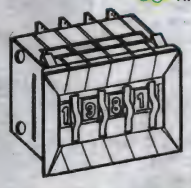
(5034)

MF SERIES MINIATURE FRONT MOUNT THUMBWHEEL SWITCHES

RoHS Compliant Available

MEC

- MF Series Snap-In Panel Mounts in 1.22"H (30.99) Cutout
- No Mounting Hardware Required
- Available in 10- and 16-Position Codes
- Matte Black with White Legend on Black Wheel
- 1.3"H x 0.312"W (33.02 x 7.92)



Order **MCN series** connector and **MFH series** hardware separately *; go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each 1-24
MF-21	10-Position BCD	39F3305	65.78
MF-21A	10-Position BCD Extended Board	39F3306	76.97
MF-57(0/15)	16-Position BCD Comp. 0-15	28F1649	65.10
MF-EP	Pair End Plates	39F3311	25.44

(2499)

IF SERIES INTERMEDIATE FRONT MOUNT THUMBWHEEL SWITCHES

RoHS Compliant Available

MLEC

- Larger Version of MF Series
- Front Mount Switch with Large Digits
- Requires Snap-In Mounts in 1.9″ (48.26) High Cutout
- Requires No Mounting Hardware
- 2.125″H x 0.5″W (53.98 x 12.7)

Order **ICN series** *connector and* **IH series** *hardware separately; go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each 1-24
IF-21	10-Position BCD	39F3261	75.65
IF-21A	10-Position BCD Extended Board	39F3262	78.64
IF-EP	Pair End Plates	39F3267	48.54

(2500)

ALCOSWITCH PUSHWHEEL CODE SWITCHES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- **PICO series** are sub-mini with 0.130″ (3.30) characters, 0.300W″ x 0.590H″ x 0.950D″. (7.62 x 14.99 x 24.13)
- **DPS8** are mini, bi-directional with 0.200″ (5.08) characters, 0.314W″ x 0.940″ x 1.39D″. (7.98 x 23.88 x 35.31)
- **DPS9** are bi-directional with 0.275″ (6.99) characters, 0.315W″ x 1.30H″ x 1.54D″ (8.00 x 33.02 x 39.12)
- **SMC** are mini, bi-directional with 0.200″ (5.08) characters
- All have gold-plated contacts rated 0.4VA @ 20VDC
- All except **DPS8** have snap-in mounting.

Mfg. Part No.	Description	Wheel Marks	Stock No.	Price Each 1-9	10-49	50-99
PICOD137AK2	BCD Complement	0-9	92F2935	21.76	20.29	19.70
DPS8131AK	BCD, 1-2-4-8	0-9	50B6859	23.95	22.07	21.43
DPS8PW	End Plate Pair	...	06R6439	4.36	4.18	4.04
DPS9111AK	Decimal (1 of 10)	0-9	81F696	28.52	27.31	26.40
DPS9131AK	BCD, 1-2-4-8	0-9	81F697	22.08	20.46	18.89
DPS9-SG-902	Hexadecimal (16 pos.)	0-15	81F700	32.09	30.72	29.70
DPS910P	End Plate, Pair	...	81F702	4.61	4.41	4.24
DPS10131AK	BCD, 1-2-4-8	0-9	77B7621	24.75	23.21	22.17
SMCPK	End Plate, Pair	...	87F1841	3.35	3.07	2.83
SMCD301AK	Hexadecimal	0-9, A-F	12C0491	30.49	27.95	25.80

(4928)

TILT SWITCHES — NON-MERCURY CONTACT

COMUS International

- ABS case material
- Switches operate when tilted from the horizontal position
- Switch movement required to cause contact change is called the differential angle
- Differential angle must be considered when designing a tilt switch
- When in the horizontal position the switch contact may be open or closed

Fig. 1

Fig. 2

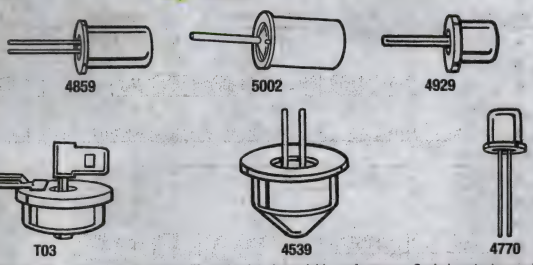
Mfg. Part No.	Fig.	Switching Voltage Max.	Switching Current Max.	Differential Angle	Stock No.	Price Each 1-499	500+
PD5005-7TC	1	280VAC	2.5A	15°	73R7796	23.33	19.16
PD6010	2	16VDC	2A	10°	73R7798	64.13	52.65
PD5009	...	10VDC	10A	30°	73R7797	42.46	34.87

(178378)

TILT AND G FORCE SWITCHES

RoHS Compliant Available

DURAKOOL INC.



Tilt and position switches provide long contact life and quiet, dependable performance. Sealed contacts are closed to external contaminants. Self renewing, liquid mercury contacts. **A series** switches "make" when the electrode is tilted below horizontal, and "break" when tilted above horizontal. Angle specifications are dependent on rotation rates and load parameters. **Mfg. part no. 4380** is a wide angle tilt switch that is combined non-insulated A1S and G5 switch. Tip-over switches are specified by the angle of travel away from the vertical required to make or break the contact. The operating angle designed for the installation must be larger than this specification to ensure proper switch application. **Mfg. part no. T03-1015** has ¼″ male quick-connect center electrical mounting terminal. **Mfg. part no. T03-1026** has ¼″ male quick-connect center electrical, ¼″ male 180°. **G Force** switch has a 50 ohm contact resistance.

TILT AND POSITION SWITCHES-NON INSULATED

Mfg. Part No.	Must Make/ Must Break Angle	Current (A@120VDC)	Contact Resist. (MΩ)	Stock No.	Price Each 1-2	3-4
4859	2°/+15°	...	150	99F5659	8.50	8.07
5002	Max Included Angle 15°	0.5	80	82H9632	6.84	6.48
4929	-7°/+7°	0.5*	...	82H9627	7.18	6.79

TILT AND POSITION SWITCHES-INSULATED

Mfg. Part No.	Max. Make/Break Included Angle	Amps @120VAC	Contact Resist. (MΩ)	Stock No.	Price Each 1-2	3-4
A1/2-001	15°	0.5	30	95F9636	36.34	34.46
A1-003	15°	0.5	30	93F2796	20.94	19.85
A1/2-001	15°	0.5	30	95F9636	36.34	34.46
G10Z-003	9°	13	3	90B2776	53.15	50.37

TIP OVER AND MOTION SWITCHES

T03-1015	10°/45°	12.5	...	95F9627	10.98	10.41
20176	10°/35°	1.7	Varies	01C6702	7.19	6.82
4539	25°/72°	1.7	2	82H9622	10.58	10.03
4770	15°/130°	...	20	88F4572	7.30	6.93

*@ 12VDC max.

HARDWARE MOUNTING CLIPS

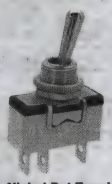
Mfg. Part No.	For Use With	Description	Stock No.	Price Each 1-2	3-4
0122	A1-001, G10Z-001 A1-002, A1-003, G10Z-003	Single	90B7560	1.11	1.05
2023	A1-001 A1-002 A1-003	Double	93F2797	1.15	1.09

(4007)

600 SERIES INDUSTRIAL TOGGLE SWITCHES — 12MM BUSHING

RoHS Compliant Available

APEM



Nickel Bat Toggle

Flat Nylon Toggle

Contact rating: 15A @ 120VAC; 10A @ 250VAC; 5A @ 25VDC; 10A, 1/2HP, 125/250VAC. Operating temperature: -20°C to 55°C. Nickel-plated brass or black nylon toggle. Nickel-plated brass bushing. Silver/nickel alloy contacts. Melamine/polyester case. Mounting hardware included. Single Pole dimensions: 0.551W x 1.161H x 0.590″D. Double Pole dimensions: 0.846W x 1.169H x 0.846″D. Solder lug terminals. UL recognized, CSA certified.

NICKEL BAT TOGGLES

Mfg. Part No.	Circuit	Action	Stock No.	Price Each 1-24
631H/2	SPST	On-None-Off	96C7295	11.97
635H/2	SPDT	(On)-None-On	96C7297	21.04
636H/2		On-None-On	90C0882	17.51
637H/2		(On)-Off-(On)	96C7301	11.56
638H/2		On-Off-(On)	96C7303	14.46
639H/2		On-Off-On	96C7304	21.86
641H/2	DPST	On-None-Off	96C7306	24.84
644H/2	DP3T	On-On-On	96C7308	27.20

CONTINUED

SWITCHES – TOGGLE

600 SERIES INDUSTRIAL TOGGLE SWITCHES — 12MM BUSHING (CONT.)

Mfg. Part No.	Circuit	Action	Stock No.	Price Each 1-24
● 645H/2	DPDT	On-None-On	96C7310	26.92
● 646H/2		On-None-On	96C7312	29.45
● 647H/2		(On)-Off-(On)	96C7314	24.69
● 648H/2		On-Off-(On)	96C7316	43.98
● 649H/2		On-Off-On	96C7318	37.05
FLAT NYLON TOGGLES				
● 631NH/2	SPST	On-None-Off	96C7296	14.51
● 637NH/2		(On)-Off-(On)	96C7302	24.54
● 639NH/2		On-Off-On	96C7305	21.86
● 641NH/2	DPST	On-None-Off	96C7307	23.76
● 646NH/2	DPDT	On-None-On	96C7313	22.31
● 647NH/2	DPDT	(On)-Off-(On)	96C7315	41.91
● 648NH/2	DPDT	On-Off-(On)	96C7317	41.91

(72931)

5000 SERIES MINIATURE TOGGLE SWITCHES—PANEL MOUNT

RoHS Compliant Available

APEM

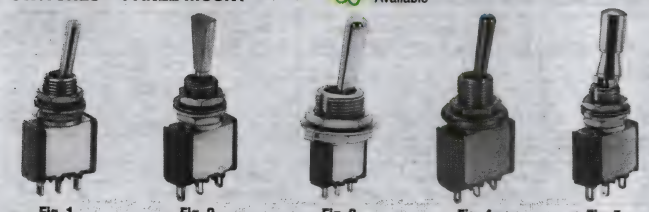


Fig. 1 SPDT Version | Fig. 2 SPDT Version | Fig. 3 SPDT Version | Fig. 4 SPDT Version | Fig. 5 SPDT Version

Contact rating: 6A @ 120VAC or 3A @ 250VAC or 4A @ 30VDC. Operating temperature range: -40°C to +85°C. Chrome-plated brass toggle. Silver contacts. Epoxy terminal seal. Mounting hardware included. Single Pole dimensions: .275″W x .519″H x .472″D. Double Pole dimensions: .519″W x .472″H x .472″D.

STANDARD ACTUATOR, ¼-40″ THREADED BUSHING, SOLDER LUG TERMINALS - FIG. 1

Mfg. Part No.	Description	Action	Stock No.	Price Each 1-24
● 5636AB	SPDT	On-None-On	96C7243	9.05
● 5639AB	SPDT	On-Off-On	96C7248	10.18
● 5637AB	SPDT	(On)-Off-(On)	96C7247	9.98
● 5646AB	DPDT	On-None-On	30C9982	11.95
● 5649AB	DPDT	On-Off-On	96C7257	23.50
● 5647AB	DPDT	(On)-Off-(On)	96C7256	14.51
FLATTED TOGGLE HANDLE, SOLDER LUG TERMINALS - FIG 2				
● 5636AB9	SPDT	On-None-On	96C7245	13.63
● 5639AB9	SPDT	On-Off-On	96C7250	20.82
● 5646AB9	DPDT	On-None-On	96C7253	28.36
● 5649AB9	DPDT	On-Off-On	96C7259	27.87
15/32″ BUSHING, LONG ROUND HANDLE, SOLDER LUG TERMINALS - FIG. 3				
● 5636MAB	SPDT	On-None-On	89C3345	24.20
● 5639MAB	SPDT	On-Off-On	89C3363	26.38
● 5646MAB	DPDT	On-None-On	96C7255	81.43
● 5649MAB	DPDT	On-Off-On	96C7261	77.76
1/4″ SPLASHPROOF BUSHING, STANDARD ROUND HANDLE, SOLDER LUG TERMINALS - FIG. 4				
● 5636AKB	SPDT	On-None-On	96C7246	32.86

LOCKING LEVER, SOLDER LUG TERMINALS - FIG. 5

Mfg. Part No.	Description	Action	Positions	Stock No.	Price Each 1-24
● 5636AB-2V	SPDT	On-None-On	2	96C7244	24.84
● 5646AB2V	DPDT	On-None-On	2	96C7252	27.03

(72929)

4600 SERIES INDUSTRIAL TOGGLE SWITCHES

RoHS Compliant Available

APEM

Single Pole | Double Pole

Contact rating: 6A @ 120VAC, 4A @ 250VAC. Operating temperature: -20°C to +55°C. Black nylon toggle and bushing. Silver contacts. Solder/quick-connect terminals. Melamine phenolic case. Includes 1 hex. nut and 1 insulated knurled nut. Dimensions: 0.472W x 0.748H x 0.610″D (SP) or 0.649W x 0.826H x 0.610″D (DP).

Mfg. Part No.	Circuit	Action	Stock No.	Price Each 1-24
● 4631A22UU	SPST	On-None-Off	96C7187	9.93
● 4636A22UU	SPDT	On-None-On	96C7188	19.15
● 4639A22UU	SPDT	On-Off-On	96C7189	20.71
● 4641A22UU	DPST	On-None-Off	27C7511	18.63
● 4646A22UU	DPDT	On-None-On	96C7190	17.29
● 4649A22UU	DPDT	On-Off-On	96C7191	29.20

(72933)

3600 SERIES SEALED TOGGLES FOR OUTDOOR APPLICATIONS

UL

RoHS Compliant Available

APEM

Features:
- Sealed to IP67 standards
- O-ring between lever and bushing
- Half-length boot and nylon washer supplied
- Elastomer gasket between cover and case
- Molded-in terminal inserts
- Solid silver contacts

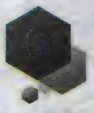
Specifications:
- Contact rating: 12A at 28VDC; 6A at 250VAC
- 12mm bushing
- Screw or solder lug/quick connect terminals
- On = Maintained action; (On) = Momentary action

Mfg. Part No.	Circuitry	Function	Termination	Stock No.	Price Each 1-24	Price Each 25-99
● 3631NF	SPST	On-Off	Screw	73J3903	63.16	50.65
● 3636NF	SPDT	On-On	Screw	73J3906	64.83	51.98
● 3639NF	SPDT	On-Off-On	Screw	73J3911	66.55	53.36
● 3641NF	DPST	On-Off	Screw	73J3913	76.37	61.24
● 3645NF	DPDT	(On)-On	Screw	73J3918	102.46	82.15
● 3646NF	DPDT	On-On	Screw	73J3920	86.64	69.47
● 3649NF	DPDT	On-Off-On	Screw	73J3926	93.14	74.68
● 3631NF/2	SPST	On-Off	Solder	73J3904	63.26	50.72
● 3641NF/2	DPST	On-Off	Solder	73J3914	74.91	60.06
● 3646NF/2	DPDT	On-On	Solder	73J3921	79.20	63.51

(90822)

TOGGLE SWITCHES

RoHS Compliant Available



arcolectric
a brand of Elektron Technology

Mfg. Part No.	Contacts	Terminals	Stock No.	Price Each 1-24
● C1700H	SPST	Quick Connect	94T5542	4.62
● C3900BA	SPST	Quick Connect	94T5543	4.46
● S3900BA	SPST	Screw	94T5558	5.79

(208321)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196538)

HEAVY-DUTY AC RATED TOGGLE SWITCHES

RoHS Compliant Available

Carling Technologies™ Innovative Designs. Powerful Solutions.

2F/6F 2G I Series, H Series

General-purpose switches rated 15A @ 125VAC/28VDC, 10A @ 250VAC. All feature bat style toggle with 0.688″ (17.48) toggle length and 0.465″ (11.81) bushing length. Mounting hole: 0.500″ (12.70). **6F** and **6G Series** are momentary action. UL recognized, CSA certified.

Mfg. Part No.	Switch Action	Terminals	Stock No.	Price Each 1-24	25-49	50-99
SPST						
2FA53-73	On-None-Off	Solder	73K1399	3.62	3.10	2.72
2FA53-73-TABS	On-None-Off	Spade	73K1400	3.63	2.88	2.51
2FB53-73	On-None-On	Solder	73K1402	5.06	4.86	4.61
2FB53-73/TABS	On-None-On	Spade	73K1403	5.43	4.64	4.09
2FB54-73	On-None-On	Screw	73K1404	6.40	5.48	4.81
2FC53-73	On-Off-On	Solder	73K1405	4.77	4.58	4.43
2FC53-73/TABS	On-Off-On	Spade	73K1406	5.35	4.56	4.01
2FC54-73	On-Off-On	Screw	73K1407	6.79	5.80	5.30
6FC54-73	(On)-Off-(On)	Screw	73K1473	8.73	7.45	6.81
6FA53-73 TABS	(On)-None-Off	Solder	72R6965	16.55	13.71	12.68
6FA54-73	(On)-None-Off	Screw	91B2132	8.56	8.11	7.70
6FC53-73 TABS	(On)-Off-(On)	Solder	72R6966	10.26	9.66	9.12
	(On)-Off-(On)	Spade				
DPST						
2GK50-73	On-None-Off	Solder	73K1408	7.68	7.39	7.07
2GK51-73	On-None-Off	Spade	73K1409	5.42	4.63	4.07
2GK54-73	On-None-Off	Screw	73K1410	11.30	11.05	10.92
DPDT						
2GL50-73	On-None-On	Solder	73K1411	8.28	7.81	6.86
2GL51-73	On-None-On	Spade	73K1412	7.91	7.57	6.48
2GL54-73	On-None-On	Screw	73K1413	10.06	8.61	7.87
2GM50-73	On-Off-On	Solder	86K9805	8.92	8.15	7.00
2GM51-73	On-Off-On	Spade	73K1414	5.97	5.11	4.50
2GM54-73	On-Off-On	Screw	73K2473	10.06	8.61	7.87
3PST						
HK254-73	On-None-Off	Screw	74K2460	20.09	18.93	17.91
3PDT						
HL251-73	On-None-On	Spade	73K0988	15.19	13.65	12.23
HL254-73	On-None-On	Screw	73K0989	20.08	15.17	13.91
HM251-73	On-Off-On	Spade	73K0990	15.17	11.48	10.51
HM254-73	On-Off-On	Screw	73K0991	19.48	14.73	13.43
4PST						
IK251-73	On-None-Off	Spade	74K2462	20.70	17.77	16.63
4PDT						
IL254-73	On-None-On	Screw	73K0996	30.41	26.08	24.24
IM254-73	On-Off-On	Screw	73K0997	35.33	33.28	31.46
SPECIAL CIRCUITS						
2GE51-73	On-On-On	Spade	24C1006	9.95	9.43	8.95
2GG51-73	2 On-On-Off	Spade	54H0425	8.19	7.75	7.37
2GO53-73 TABS	On-Off-On	Spade	72R6963	19.10	16.38	14.92
2GX53-73 TABS	On-None-On	Spade	72R6964	18.19	15.60	14.21
6GG5B-73	(On)-On-Off	Spade	12R2942	9.96	8.54	7.78
6GO53-73 TABS	(On)-Off-(On)	Spade	72R6968	29.60	25.39	23.12

(5119)

GENERAL-PURPOSE AC/DC TOGGLE SWITCHES

RoHS Compliant Available

Carling Technologies™ Innovative Designs. Powerful Solutions.

Features
- Suitable for high voltage applications
- 110 series popular in small application and floor maintenance
- DK/EK series popular in industrial motor control markets

Specifications
- -73 suffix bat style unsealed toggle
- Operating temperature: 0°F to 150°F (-17.8°C to + 65°C)
- All 6A @ 125V, 3A @ 250V, except DK and EK
- DK284 8A @ 250V, 16A @ 125V
- EK 20A @ 125V, 10A @ 250V
- Mounting hole: 0.500″ (12.70 mm)

CONTINUED

GENERAL-PURPOSE AC/DC TOGGLE SWITCHES (CONT.)

Mfg. Part No.	Circuitry	Switch Function	Terminals	Stock No.	Price Each 1-24	25-49	50-99
110 SERIES							
110-73	SPST	On-None-Off	Lugs (End)	73K4048	5.80	4.97	4.53
110-S-73	SPST	On-None-Off	Screw	73K1392	7.91	6.78	6.22
111-16-73	SPST	On-None-Off	Wire Leads	73K1393	7.77	6.66	5.85
110-B-63	SPST	On-None-Off	Solder	01M9814	4.42	3.98	3.66
DK / EK / EA SERIES							
DK284-73	DPST	On-None-Off	Screw	73K0927	9.82	8.41	7.67
EK204-73	DPST	On-None-Off	Screw	73K0928	15.66	11.83	10.87

(5121)

G SERIES TOGGLE SWITCHES

RoHS Compliant Available

Carling Technologies™ Innovative Designs. Powerful Solutions.

Features:
- Easy to integrate into a variety of applications
- Also appropriate for low voltage DC applications

Specifications:
- 10A at 250VAC; 15A at 125VAC; ¾ HP at 125-250VAC
- Operating temperature: 32F° to 185°F (0° to 85°C)
- Bat actuator styles listed
- Paddle actuator style also available; *go online or call.*

Mfg. Part No.	Circuitry	Function	Termination	Stock No.	Price Each 1-49	50-99
6GA5M-73	SPST	On-None-(Off)	.250″ QC	96K4204	13.12	11.88
6GA5B-73	SPDT	(On)-None-Off	.250″ QC	73K1474	8.13	5.60
6GK5B-73	DPDT	On-None-Off	.250″ QC	73C6279	24.97	21.42
6GL5B-73	DPDT	On-None-(On)	.250″ QC	96K4205	17.35	12.51
6GM5M-73	DPDT	(On)-Off-(On)	.250″ QC	96K4207	14.82	13.70
6GM5B-73	DPDT	On-Off-(On)	.250″ QC	94F7184	17.05	14.96

(88958)

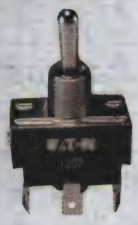
XT SERIES TOGGLE SWITCHES

RoHS Compliant Available

EATON

Features:
- High standard horsepower rating
- Industry standard 0.480″ diameter mounting hole
- For use with: Household appliances, industrial machinery, medical equipment, rail systems, and lab equipment

Specifications:
- Contact rating: 20A at 125VAC; 10A at 277VAC
- Contact resistance: 50
- Operating temperature: 0°C – 65°C
- UL recognized component for Canada (cUR marked): File E2702



Mfg. Part No.	Circuitry	Action	Termination	Stock No.	Price Each 1-24	25-49
XTD1A1A2	SPST	On-None-Off	Spade	06P9769	2.80	2.63
XTD1A2A2	SPST	On-None-Off	Screw	06P9770	3.33	3.19
XTD1A3A2	SPST	On-None-Off	Solder	06P9771	2.96	2.84
XTD1F1A2	SPST	Off-(On)	Spade	06P9772	5.06	4.84
XTD1F2A2	SPST	Off-(On)	Screw	06P9773	5.00	4.71
XTD1F3A2	SPST	Off-(On)	Solder	06P9774	4.93	4.72
XTD2B1A	SPDT	On-Off-On	Spade	06P9775	3.76	3.61
XTD2B2A	SPDT	On-Off-On	Screw	06P9776	4.20	4.02
XTD2B3A	SPDT	On-Off-On	Solder	06P9777	3.86	3.69
XTD2C1A	SPDT	On-On	Spade	06P9778	3.57	3.42
XTD2C2A	SPDT	On-On	Screw	06P9779	4.20	4.02
XTD2C3A	SPDT	On-On	Solder	06P9780	3.57	3.42
XTD2D1A	SPDT	On-(On)	Spade	06P9781	5.08	4.87
XTD2D2A	SPDT	On-(On)	Screw	06P9782	5.68	5.45
XTD2D3A	SPDT	On-(On)	Solder	06P9783	5.26	5.05
XTD2E1A	SPDT	(On)-Off-(On)	Spade	06P9784	5.20	4.99
XTD2E2A	SPDT	(On)-Off-(On)	Screw	06P9785	5.82	5.58
XTD2E3A	SPDT	(On)-Off-(On)	Solder	06P9786	5.08	4.87
XTD2G1A	SPDT	On-Off-(On)	Spade	06P9787	5.26	5.05
XTD2G2A	SPDT	On-Off-(On)	Screw	06P9788	5.82	5.58
XTD2G3A	SPDT	On-Off-(On)	Solder	06P9789	5.08	4.87

(133298)

ECONOSWITCH SEALED TOGGLE SWITCHES

- Current Ratings (Maintained): 20A Res., 15A Ind.
- 5A Lamp Load @ 28VDC
- 18A, 1/2hp @ 125VAC
- 9A, 1hp @ 250VAC; Circuits Only
- Temperature Range: –50°F to +150°F

Environmentally-sealed; positive detent action provides good tactile feedback. Choice of screw or 0.25" spade terminals. 15/32"-32 threaded bushing, 0.076" keyway slot. *Can be used with switch guards on this page.*

Series 8530 Series 8531

SCREW TERMINALS (SPDT)

Mfg.Part No.	Switch Action	Stock No.	Price Each 1-9	10-24	25-49
8530K1	On-Off-On	50F1564	17.84	16.77	15.79
8530K2	(On)-Off-(On)	50F1565	13.10	12.32	11.60
8530K4	On-None-On	50F1566	14.28	13.43	12.64
SCREW TERMINALS (SPST)					
8530K9	On-None-Off	50F1567	14.28	13.43	12.64
8530K11	Off-None-(On)	95F4253	18.18	17.09	16.09
SCREW TERMINALS (DPDT)					
8531K1	On-Off-On	50F1568	25.06	23.56	22.18
8531K2	(On)-Off-(On)	50F1569	26.38	24.80	23.35
8531K4	On-None-On	50F1570	25.06	23.56	22.18
SCREW TERMINALS (DPST)					
8531K9	On-None-Off	50F1571	26.91	25.30	23.82
8531K11	Off-None-(On)	95F4258	26.90	25.29	23.81
SPADE TERMINALS (SPDT)					
8530K31	On-Off-On	95F4254	19.60	18.43	17.35
8530K32	(On)-Off-(On)	95F4255	14.56	13.69	12.89
8530K34	On-None-On	95F4256	14.91	14.02	13.20
SPADE TERMINALS (SPST)					
8530K39	On-None-Off	95F4257	14.56	13.69	12.89
8530K311	Off-None-(On)	95F9233	19.60	18.43	17.35
SPADE TERMINALS (DPDT)					
8531K31	On-Off-On	95F4259	26.90	25.29	23.81
8531K32	(On)-Off-(On)	95F4260	25.56	24.03	22.62
8531K34	On-None-On	95F4261	26.08	24.51	23.08
SPADE TERMINALS (DPST)					
8531K39	On-None-Off	95F4262	27.71	26.05	24.52

(4878)

8500 SERIES MIL-S-3950 SEALED SWITCHES

- Current Ratings (Maintained): 20A Res., 15A Ind.
- 5A Lamp Load 28VDC
- 18A, 1/4hp @ 125VAC
- 9A, 1/2hp @ 250VAC
- Temperature Range: -85°F to 160°F

One Pole Two Pole Four Pole

Offer highest degree of environmental seal. Fine silver stationary contacts provide lower level current performance. Silver-plated cadmuim oxide moveable contacts for improved higher current performance. Screw terminals. 15/32"-32 threaded bushing, with 0.076" keyway slot. Self-extinguishing base material. *Can use w/ switch guards, order online or call.*

ONE POLE

Mfg. Part No.	MIL-SPEC	Action	Stock No.	Price Each 1-9	10-24	25-49
8500K1	24523-21	On-Off-On	23F1077	23.24	21.85	20.57
8500K9	24523-22	On-None-Off	23F1078	18.58	17.47	16.45
8500K4	24523-23	On-None-On	23F1079	18.58	17.47	16.45
8500K2	24523-27	(On)-Off-(On)	23F1081	18.58	17.47	16.45
8500K11	24523-30	Off-None-(On)	23F1082	23.70	22.28	20.98
TWO POLE						
8501K1	24524-21	On-Off-On	23F1083	31.16	29.29	27.58
8501K9	24524-22	On-None-Off	23F1084	31.16	29.29	27.58
8501K4	24524-23	On-None-On	23F1085	31.16	29.29	27.58
8501K5	24524-26	On-None-(On)	23F1087	31.78	29.88	28.13
8501K2	24524-27	(On)-Off-(On)	23F1088	31.16	29.29	27.58
8501K3	24524-31	On-Off-(On)	23F1089	33.44	31.44	29.60
FOUR POLE						
8502K1	24525-21	On-Off-On	23F1091	52.70	49.54	46.64
8502K4	24525-23	On-None-On	23F1093	50.08	47.08	44.32

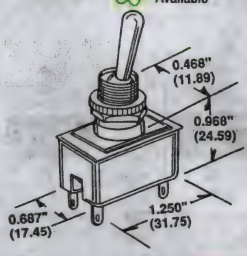
(4904)

8928 SERIES GENERAL PURPOSE AC/DC TOGGLE POWER SWITCHES

RoHS Compliant Available

Features:
- Quick-Make/Quick-Break Switches
- Bronze silver-plated contacts

Specifications:
- 6A at 125VAC/VDC; 3A at 250VDC
- Bushing Length: 0.468"
- Diameter: 15/32" (0.468)



Mfg. Part No.	Circuitry	Function	Termination	Actuator	Stock No.	Price Each 1-24	25-49
● 8928K479	SPDT	On-On	Screw	Bat Lever	11M1864	13.68	12.67
● 8928K481	DPST	(On)-None-Off	Screw	Bat Lever	11M1865	25.21	23.36

(4855)

SWITCH GUARDS FOR TOGGLE SWITCHES

Fig. 1 Fig. 2 Fig. 3 Fig. 4

MIL-G-7703 approved. **Fig. 1** flush mount; **Fig. 4** flush or one-hole mount; **Figs. 3** and **4** one-hole mount. Switch positions refer to type of switch accommodated. All guards red phenolic except **Fig. 4** black metal. **Fig. 1** returns switch to OFF position. **Fig. 2** permits operation from first position to center on 3 position switches. **Fig. 3** returns switch to center position. **Fig. 4** permits locking toggle in extreme up position.

Mfg. Part No.	Position	Fig.	MIL-SPEC	Stock No.	Price 1-14
8497K2	2	2	MS25224-2	41F675	15.43
8497K7	2	1	N/A	94F4652	18.89
8495K1	2 or 3	4	MS25221-1	41F676	15.52
8496K2	3	3	MS25223-2	41F677	13.41
8497K1	2	1	MS25224-1	23F145	13.09
8497K3	2	1	MS25224-3	41F678	13.87
8498K1*	3	1	MS25225-1	97F9067	20.75
8492K1	2 or 3	4	MS24417-1	23F140	6.44

*Returns from "up" to "center" position. Will not change toggle position when "down".

(4907)

GENERAL-PURPOSE AC RATED TOGGLE SWITCHES

RoHS Compliant Available

AC toggle switches are ideal for power applications. All are one hole mount. One hexagon locknut and one knurled facenut included. Bushing length: 0.469" (11.91). Toggle guards available; *on this page.* UL recognized, CSA certified.

Single-Pole Screw Terminal Double-Pole Spade Terminal Three- and Four-Pole Solder Terminal

SPST

Mfg. Part No.	Action	Rating	Term.	Stock No.	Price Each 1-24	25-49
● 7500K14	On-None-Off	15A, 125VAC 10A, 250VAC 3/4HP, 250VAC 1/2HP, 125V-250VAC	Screw	04M4763	6.68	5.80
● 7501K13	On-None-Off		Solder	04M4764	4.88	4.54
● 7501K15	On-None-Off		Spade	04M4765	4.63	4.30
● 7546K36	On-None-Off	20A, 125VAC 10A, 250VAC 1/2HP, 125VAC 3/4, 250VAC	Screw	91B1818	5.55	5.08
● 7546K38	On-None-Off		Solder	93C9541	6.33	5.86
● 7546K40	On-None-Off		Spade	20M2952	6.18	5.72
● 7580K4	On-None-Off	6A, 125VAC 6A, 250VAC	Screw	10M8503	4.69	4.34
● 7580K7*	On-None-Off		Solder	11M1797	4.35	4.03
● 7580K6	On-None-Off		Solder	17M8463	4.44	4.11
SPDT						
● 7582K4	On-None-On	6A, 125VAC 3A, 250VAC	Screw	04M4779	5.68	5.26
● 7582K6	On-None-On		Solder	04M4780	5.66	5.25
● 7581K4	On-Off-On		Screw	10M5078	6.30	5.83
● 7581K6	On-Off-On		Solder	05M4602	6.01	5.57

➤CONTINUED➤

GENERAL-PURPOSE AC RATED TOGGLE SWITCHES (CONT.)

Mfg. Part No.	Action	Rating	Term.	Stock No.	Price Each 1-24	Price Each 25-49
SPDT						
7504K4	On-None-On	15A, 125VAC 10A, 250VAC 1/2HP, 250VAC, 1/4HP, 125V-250VAC	Screw	04M4767	6.46	5.99
7505K4	On-None-On		Solder	04M4768	5.03	4.60
7502K13	On-Off-On		Screw	04M4766	5.60	5.13
7503K13	On-Off-On		Solder	04M6771	5.31	4.92
7509K5	(On)-Off-(On)	10A, 250VAC 1/2HP, 250VAC	Screw	04M4769	9.41	8.74
DPST						
7560K5	On-None-Off	15A, 125VAC 10A, 250VAC 3/4HP, 250VAC 1/2HP, 125VAC	Screw	04M4770	6.82	6.25
7561K4	On-None-Off		Solder	04M4771	6.69	6.20
7561K6	On-None-Off		Spade	04M4772	6.58	6.11
7630K36	On-None-Off	20A, 125VAC 10A,250VAC 3/4HP, 250VAC 1/2HP, 125VAC	Screw	12C0408	9.52	8.72
7630K38	On-None-Off		Solder	11M1798	8.84	8.19
7630K40	On-None-Off		Spade	11M1799	7.19	6.59
7590K4	On-None-Off	6A, 125VAC 3A, 250VAC 2A, 277VAC 2.5A, L @ 125VAC	Screw	04M4781	6.50	6.02
7590K6	On-None-Off		Solder	04M4782	6.10	5.66
DPDT						
7564K6	On-None-On	15A, 125VAC 10A, 250VAC 3/4HP, 125-250VAC	Screw	04M4776	8.84	8.19
7565K5	On-None-On		Solder	04M4777	6.37	5.84
7565K7	On-None-On		Spade	04M4778	8.92	8.29
7562K4	On-Off-On		Screw	04M4773	10.98	10.20
7563K4	On-Off-On		Solder	04M4774	8.05	7.46
7563K6	On-Off-On		Spade	04M4775	8.84	8.21
7632K36	On-None-On	20A, 125VAC 10A,250VAC 3/4HP, 250VAC 1/2HP, 125VAC	Screw	20M2968	8.18	7.58
7632K38	On-None-On		Solder	20M2969	7.72	7.15
7632K40	On-None-On		Spade	94C8847	11.34	10.50
7592K4	On-None-On	6A, 125VAC 3A, 250VAC 2.5A, L @ 125VAC	Screw	04M4785	6.38	5.84
7592K6	On-None-On		Solder	04M4786	7.58	7.04
7591K4	On-Off-On		Screw	04M4783	9.85	9.13
7591K6	On-Off-On		Solder	04M4784	7.70	7.14
3PST						
7700K1	On-None-Off	15A, 125VAC 10A, 250VAC 3/4HP, 250VAC 1HP, 2PH 125-600VAC 1HP 1 & 2PH 125-400VAC	Solder	11M1802	14.10	13.07
7700K2	On-None-Off		Screw	12M6718	11.99	10.98
7700K3	On-None-Off		Spade	11M1803	13.50	12.51
3PDT						
7701K1	On-Off-On	15A, 125VAC 10A, 250VAC 3/4HP, 250VAC 1HP, 3PH 125-600VAC 1HP 1 & 2PH 125-480VAC	Solder	11M1804	17.10	15.84
7701K2	On-Off-On		Screw	21M3303	19.21	17.80
7701K3	On-Off-On		Spade	11M1805	16.13	14.94
7702K1	On-None-On		Solder	11M1806	16.52	15.30
7702K2	On-None-On		Screw	11M1807	19.21	17.80
7702K3	On-None-On		Spade	11M1808	16.13	14.94
4PST						
7690K8	On-None-Off	15A, 125VAC 10A, 250VAC 3/4HP, 250VAC	Screw	11M1800	17.67	16.37
7691K14	On-None-Off		Solder	11M1801	13.80	12.79
4PDT						
7692K13	On-Off-On	15A, 125VAC 10A, 250VAC 3/4HP, 250VAC	Screw	04M4787	15.88	14.55
7693K2	On-Off-On		Solder	04M4788	19.56	18.12
7694K4	On-None-On		Screw	04M4789	25.29	23.48
7695K5	On-None-On		Solder	04M4790	22.35	20.75

*Bushing length is 0.344" (8.74)
(4852)

GENERAL-PURPOSE AC/DC TOGGLE SWITCHES

RoHS Compliant Available

- Quick-Make, Quick-Break Contact Mechanism
- Non-Teasable, Self-Cleaning, Wiping Contact Action
- Threaded Bushing: 0.468"-32

Solder Screw Wire

One-hole mounting. Solder lug terminal. Wire leads: 18-gauge, 6" (152.4), stripped 0.750" (19.05). Hardware included. UL recognized, CSA certified.

CONTINUED

GENERAL-PURPOSE AC/DC TOGGLE SWITCHES (CONT.)

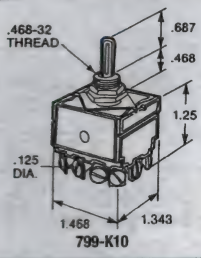
Mfg. Part No.	Amps 125VAC-DC	Amps 250VDC	Dim. "A" Bushing Length	Term.	Stock No.	Price Each 1-24	Price Each 25-49
SPST ON-NONE-OFF							
8280K115	...	3A	0.344"	Solder	04M4797	12.43	11.09
8280K116	...	3A	0.469"	Solder	04M4798	8.25	7.65
8290K115	...	3A	0.344"	Wire	04M4799	10.98	10.17
8290K116	...	3A	0.469"	Wire	04M4800	9.61	8.90
8295K107	...	3A	0.344"	Screw	04M4801	10.56	9.79
8381K107	6A	3A	0.344"	Solder	04M4806	8.41	7.79
8381K108	6A	3A	0.469"	Solder	04M4807	7.72	7.15
8391K107	6A	3A	0.344"	Wire	04M4808	9.45	8.44
8391K108	6A	3A	0.469"	Wire	04M4809	9.71	8.99
8396K107	6A	3A	0.344"	Screw	04M4810	10.73	9.82
8396K108	6A	3A	0.469"	Screw	04M4811	8.84	8.10
SPDT ON-NONE-ON							
8282K113	3A	1A	0.344"	Solder	10M6580	15.46	14.33
8282K114	3A	1A	0.469"	Solder	11M1848	10.54	9.77
DPST ON-NONE-OFF							
8370K107	7A	3A	0.469"	Solder	04M4802	14.69	13.11
8372K107	7A	3A	0.469"	Screw	04M4803	17.84	16.53
DPDT ON-NONE-ON							
8373K107	6A	3A	0.469"	Solder	04M4804	14.35	13.32
8375K107	6A	3A	0.469"	Screw	04M4805	21.44	19.87

(4853)

HESITATION TOGGLE SWITCHES

RoHS Compliant Available

- Slow-Make, Slow-Break Butt-Action Contact Mechanism
- Designed for AC and Low-Voltage DC Applications
- Contact Ratings: 125VAC or 28VDC @ 15A or 250VAC @ 10A



799-K10

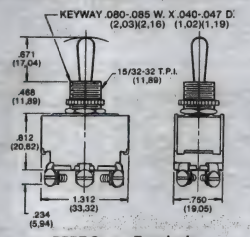
Units feature interlock mechanism that prevents operation of lever through center position until pressure momentarily relieved. Hardware included. UL recognized. CSA certified.

Mfg. Part No.	Action	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99
7992K10	DPDT On-Off-On	11M1832	30.08	27.87	25.29
7991K10	3PDT On-Off-On	11M1831	30.82	28.23	26.21
7990K10	4PDT On-Off-On	11M1830	43.74	40.52	36.78

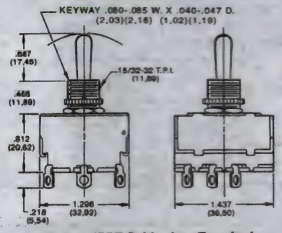
(4854)

GENERAL PURPOSE AC-ONLY BAT LEVER TOGGLE SWITCHES

RoHS Compliant Available



DPDT Screw Terminals



3PDT and 4PDT Solder Lug Terminals

- 7800 and 7801 series: Rated 6A, 125VAC; 3A, 250VAC, ⅛ Horsepower, 120-240VAC
- 7803 series: Rated 20A, 125VAC; 10A, 250VAC; 1HP, 120-240VAC
- 7804 series: Rated 20A, 125VAC; 10A, 250VAC; 1HP, 120VAC
- 7805 series: Rated 10A, 250VAC; 20A, 125VAC; 1HP, 120-240VAC

UL recognized, CSA certified. Types ending with **suffix K32** are not CSA certified.

Mfg. Part No.	Circuit	Action	Terminal	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99
7800/7801 SERIES							
7800K11	SPST	On-None-Off	Solder	11M1809	5.40	5.01	4.54
7801K11	DPST	On-None-Off	Solder	46F1864	6.59	6.10	5.54
7803 SERIES							
7803K31	DPST	On-None-Off	Screw	11M1813	8.49	7.87	7.14
7803K11	DPST	On-None-Off	Solder	11M1810	7.13	6.60	5.99
7803K33	DPDT	On-None-On	Screw	11M1815	10.38	9.62	8.73
7803K13	DPDT	On-None-On	Solder	11M1812	8.61	7.98	7.24

CONTINUED

GENERAL PURPOSE AC-ONLY BAT LEVER TOGGLE SWITCHES (CONT.)

7803 SERIES

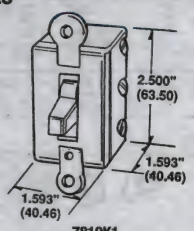
Mfg. Part No.	Circuit	Action	Terminal	Stock No.	Price Each 1-24	25-49	50-99
● 7803K32	DPDT	On-Off-On	Screw	11M1814	10.70	9.92	9.00
● 7803K12	DPDT	On-Off-On	Solder	11M1811	5.97	5.53	5.01
7804 SERIES							
● 7804K31	3PST	On-None-Off	Screw	11M1819	17.33	16.05	14.57
● 7804K32	3PDT	On-Off-On	Screw	11M1820	22.49	20.83	18.90
● 7804K33	3PDT	On-None-On	Screw	11M1821	25.21	23.36	21.20
● 7804K13†	3PDT	On-None-On	Solder	11M1818	14.93	13.84	12.56
7805 SERIES							
● 7805K12	4PDT	On-Off-On	Solder	11M1822	22.21	20.59	18.68
● 7805K13	4PDT	On-None-On	Solder	11M1823	19.32	17.90	16.25

†Also rated 1HP, 240-480VAC or 2 phase; and 1HP, 240-600VAC 3 phase.
(4859)

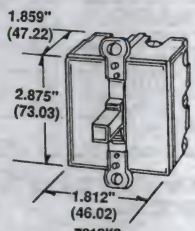
EXTRA HEAVY-DUTY SCREW TERMINAL AC/DC TOGGLE POWER SWITCHES

RoHS Compliant Available

- Quick-Make/Quick-Break
- Mfg. Part No. 7810K1 Rated: 20A @ 125VAC/VDC; 10A @ 250VAC/VDC
- Mfg. Part No. 7812K2 Rated: 30A @ 125VAC/VDC; 20A @ 250VAC/VDC



7810K1



7812K2

UL recognized.

Mfg. Part No.	Circuit	Action	Stock No.	Price Each 1-24	25-49
● 7810K1	DPDT	On-On	46F1865	92.88	85.07
● 7812K2	3PDT	On-Off-On	46F8145	197.23	182.74

(4858)

AC/DC TOGGLE POWER SWITCHES

RoHS Compliant Available

- Quick-Make/Quick-Break Wiping Action
- Maintained
- Operating Temperature Range: 0°F to +150°F

8980K5

8980K1

8980K14

Switches are all UL recognized, CSA certified except **type 8980K14** (UL recognized only). DPST circuit, Off-On action. **Mfg. part no. 8980K5** is 30A @ 250VAC/VDC; 20A @ 600VAC/VDC. **Mfg. part no. 8980K1** is 60A @ 250VAC/VDC; 2HP @ 125-250VAC/VDC. **Mfg. part no. 8980K14** is 30A @ 250VAC/VDC; 2HP @ 120-240VAC; 1HP @ 480VAC.

SQUARE LEVER TYPES

Mfg. Part No.	Mounting	Terminal	Stock No.	Price Each 1-24	25-49
● 8980K5	Panel Type Strap	Screw	23F017	63.90	59.21
● 8980K1	...	Bus	46F1871	85.39	78.21
● 8980K14	Panel Type Strap (binding screws assembled)	Screw	46F1867	73.05	67.69

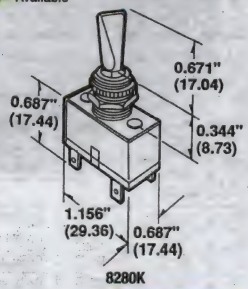
(4857)

DESIGNER LINE GENERAL-PURPOSE AC/DC RATED TOGGLE SWITCHES

RoHS Compliant Available

- Quick-Make, Quick-Break Contact Mechanism With Nonteasable, Self Cleaning, Wiping Contact Action
- All Switches Listed Are Rated 6A @ 125VAC/DC, 3A @ 250VDC, Except type 8282K, Which is Rated 3A @ 125VAC/DC @ 250VDC
- 8280K Series Has No Rating @ 125VAC/DC
- Threaded Black Bushing: 0.468″ -32
- Solder Lug Terminals

Come with "C" style lever. Units are one-hole mounting and are UL recognized, CSA certified. Thermoplastic lever and black mounting hardware included. On/off plates and hardware available for designer line switches; *contact your representative for pricing.*



8280K

SPST ON-NONE-OFF

➤ CONTINUED ➤

DESIGNER LINE GENERAL-PURPOSE AC/DC RATED TOGGLE SWITCHES (CONT.)

Mfg. Part No.	Lever Color	Stock No.	Price Each 1-24	25-49	50-99
● 8280K127C	Black	41F463	9.41	8.72	7.92
● 8381K121C	White	23F450	8.93	8.28	7.51
● 8381K122C	Red	23F451	8.42	7.80	7.09
● 8381K127C	Black	23F454	9.36	8.68	7.87
SPDT ON-NONE-ON					
● 8282K127C	Black	23F469	11.32	10.49	9.52
DPST ON-NONE-OFF					
● 8370K122C	Red	23F481	9.71	8.99	8.16
● 8370K127C	Black	23F484	15.92	14.75	13.39
DPDT ON-NONE-ON					
● 8373K121C	White	23F501	24.87	23.05	20.92
● 8373K122C	Red	23F502	15.20	13.92	12.93
● 8373K127C	Black	23F505	18.27	16.93	15.36

(4875)

7600, 8800 SERIES MIL-S-83731 STANDARD SWITCHES WITH LEVER SEAL

RoHS Compliant Available

- Bushing: 15/32-32 Thread
- Rated: 20A @ 28VDC and 10A @ 115VAC
- Keyway: 0.035″ (0.889)D by 0.068″ (1.73)W

One-Pole

Two-Pole

Four-Pole

Silicone rubber lever seal stops contaminants. Hot tin-dipped #6-32 screw terminals facilitate soldering when used as lug. Phenolic and metal housing. Meet Military Specification. MIL-S-83731. (On) = Momentary action; On = Maintained action.

ONE-POLE

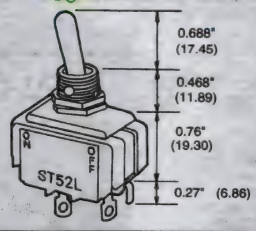
Mfg. Part No.	Action	Stock No.	Price Each 1-24	25-49	50-99
● 8800K16	On-Off-On	23F307	24.36	22.57	20.48
● 8801K22	On-None-Off	20M3079	17.98	16.47	15.29
● 8810K15	On-None-On	23F306	23.59	21.58	19.66
● 8801K23	On-Off-None	11M1858	23.50	21.77	19.76
● 8812K14	(On)-Off-(On)	11M1860	24.91	23.41	20.99
● 8811K17	Off-None-(On)	11M1859	24.31	22.23	20.26
TWO-POLE					
● 8820K16	On-Off-On	11M1861	29.81	27.31	25.36
● 8822K20	On-None-Off	11M1862	26.07	23.88	22.17
● 8824K14	On-None-On	11M1863	28.77	26.35	24.46
● 8830K13	On-None-(On)	41F646	43.49	40.30	36.57
● 8834K5	(On)-Off-(On)	95M4920	46.37	40.62	34.17
● 8832K6	On-Off-(On)	23F318	35.36	32.38	30.07
FOUR-POLE					
● 7662K7	On-Off-On	20M2973	68.67	63.62	57.73
● 7664K5	On-None-On	23F319	67.32	62.37	56.60

(4905)

AC RATED, HEAVY-DUTY, MILITARY TOGGLE SWITCHES

RoHS Compliant Available

- Bushing Length: 0.468″ (11.89)
- Lever Length: 0.688″ (17.45)



Heavy-duty general purpose switches conform to military (Jan-S-23 equivalents) information. Units featured have solder lug terminals. Screw terminals available; *go online or call for information.*

Mfg. Part No.	Circuitry	Action	Termination	Stock No.	Price Each 1-24	25-49
● 7300K38	SPST	On-None-Off	Solder	11M1789	15.03	13.92
● 7310K36	DPST	On-None-Off	Screw	11M1790	19.21	17.80
● 7311K38	DPDT	On-Off-On	Solder	11M1792	27.79	25.75
● 7312K38	DPDT	On-None-On	Solder	11M1793	23.01	21.32

(4988)

FULL SIZE POWER TOGGLE SWITCHES

RoHS Compliant Available

ELECTROSWITCH
UNIT OF ELECTRO SWITCH CORP.

7100 Series 7200 Series 9200 Series 660 Series

- Standard 15/32" diameter bushing
- Standard Bat length is .562"
- Optional .687" bat and seals are available

7100 SERIES SLOW MAKE / SLOW BREAK BUTT CONTACTS

Mfg. Part No.	Current Rating	Contacts	Switch Operation	Switch Termination	Stock No.	Price Each 1-24
7105B	6A - 125VAC	SPST	On-None-On	Screw	48T6998	3.70
7105C	6A - 125VAC	SPST	On-None-Off	.250" Quick Connect	12T9448	3.45
7105D	6A - 125VAC	SPST	On-None-On	Solder	48T6999	3.19
7101B	6A - 125VAC	SPDT	On-None-On	Screw	48T6993	4.05
7101C	6A - 125VAC	SPDT	On-None-On	.250" Quick Connect	12T9447	3.70
7101D	6A - 125VAC	SPDT	On-None-On	Solder	48T6994	3.28
7102B	6A - 125VAC	SPDT	On-Off-On	Screw	48T6995	3.96
7102C	6A - 125VAC	SPDT	On-Off-On	.250" Screw	48T6996	3.85
7102D	6A - 125VAC	SPDT	On-Off-On	Solder	48T6997	3.20
7152C	6A - 125VAC	SPDT	(On)-Off-On	.250" Quick Connect	48T7000	4.05
7162C	6A - 125VAC	SPDT	(On)-Off-(On)	.250" Quick Connect	48T7001	4.36
7200 SERIES SLOW MAKE / SLOW BREAK BUTT CONTACTS						
7205B	20A - 125VAC	SPST	On-None-Off	Screw	48T7008	4.42
7205C	20A - 125VAC	SPST	On-None-Off	.250" Quick Connect	48T7009	2.68
7205D	20A - 125VAC	SPST	On-None-Off	Solder	48T7010	4.00
7235C	20A - 125VAC	SPST	(On)-None-Off	.250" Quick Connect	48T7011	4.21
7201B	20A - 125VAC	SPDT	On-None-On	Screw	48T7002	5.28
7201C	20A - 125VAC	SPDT	On-None-On	.250" Quick Connect	48T7003	4.74
7201D	20A - 125VAC	SPDT	On-None-On	Solder	48T7004	4.28
7202B	20A - 125VAC	SPDT	On-Off-On	Screw	48T7005	4.79
7202C	20A - 125VAC	SPDT	On-Off-On	.250" Quick Connect	48T7006	4.76
7202D	20A - 125VAC	SPDT	On-Off-On	Solder	48T7007	3.74
7251B	20A - 125VAC	SPDT	(On)-None-On	Screw	48T7012	5.50
7262B	20A - 125VAC	SPDT	(On)-Off-(On)	Screw	48T7013	5.81
9200 SERIES SLOW MAKE / SLOW BREAK BUTT CONTACTS						
9201C	20A - 125VAC	DPDT	On-None-On	.250" Quick Connect	48T7014	7.83
9202C	20A - 125VAC	DPST	On-Off-On	.250" Quick Connect	48T7015	7.88
9203C	20A - 125VAC	DPST	On-None-Off	.250" Quick Connect	48T7016	5.89
6600 SERIES QUICK MAKE / QUICK BREAK WIPING ACTION POWER TOGGLE SWITCH						
6600	10A - 125VAC	SPST	Off-On	6" Wire Leaded	48T6991	2.59
6601-100	10A - 125VAC	SPST	Off-On	6" Wire Leaded	48T6992	4.56

TOGGLE BOOTS
High strength silicon rubber. Seals against corrosive environments / protects against moisture, dust, air, dirt, and sand. Mountint nut: corrosion-resistant, nickel plated brass. Temperature range: -93 F to +400 F. Pressure range: 15 psi internal and 15 psi external. For bushing thread size/ 15/32-32 UNS-2B. Hex diameter: 0.625".

Mfg. Part No.	Max. Throat Height above the bushing	ID (")	Height (")	Color	Stock No.	Price Each 1-49
TH606B	0.640	0.209	0.885	Black	48T6982	1.66
TH606G	0.640	0.209	0.885	Gray	48T6983	1.57
TH609B	0.730	0.200	0.945	Black	48T6984	1.57
TH609G	0.730	0.200	0.945	Gray	48T6985	1.57
TH601B	N/A	0.100	0.412	Black	48T6980	1.57
TH601G	N/A	0.100	0.412	Gray	48T6981	1.57

TOGGLE HARDWARE THAT FITS A 15/32-32 BUSHING

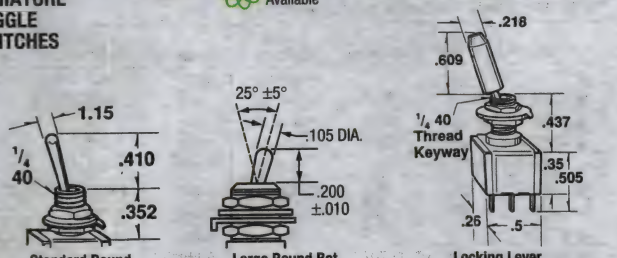
Mfg. Part No.	Description	Specifications	Material	Stock No.	Price Each 1-24
52-08	ON-OFF Plate	.025" thick	Nickel	48T6989	0.19
52-30	HI-LO Plate	.025" thick	Nickel	48T6990	0.19
42-06	Hex Nut	.562 O.D. .074" thick	Nickel	48T6988	0.19
34-08	Lockwasher	.600 O.D. .018" thick	Nickel	48T6986	0.19
34-13	Locing Ring	.718 O.D. .040" thick	Nickel	48T6987	0.19

(196513)

A SERIES MINIATURE TOGGLE SWITCHES

RoHS Compliant Available

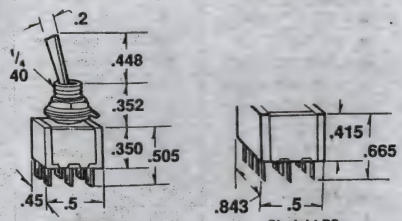
ELECTROSWITCH
UNIT OF ELECTRO SWITCH CORP.



Standard Round Fig. 1 | Large Round Bat Fig. 2 | Locking Lever Fig. 3

- Contacts Rated 6A @ 125VAC, 3A @ 250VAC (UL Recognized, CSA Certified) or 6A @ 28VDC Resistive

Contacts are coin silver. Base (body): 1- and 2-pole are dialiyl phthalate; 3- and 4-pole are high-strength phenolic. Lever is brass, chrome-plated. ( ) denotes momentary action.



Flatted Bat Fig. 4 | Straight PC Fig. 5

Mfg. Part No.	Figure	Action	Stock No.	Price Each 1-24	25-49	50-99
SPST, SOLDER LUG						
A121S1YZQ	1	On-Off-On	06M4427	5.76	5.28	4.95
A123S1YZQ	1	On-None-On	65F1651	5.65	5.17	4.84
A127S1YZQ	1	(On)-Off-(On)	06M4441	6.16	5.65	5.29
A131S1YZQ	1	On-Off-(On)	65F1654	9.05	8.29	7.77
A121K12KZQ	3	On-Off-On	06M4425	17.49	16.01	15.00
A123K12KZQ	3	On-None-On	06M4430	12.23	11.19	10.49
A123P32YZQ	4	On-None-On	06M4433	10.66	9.77	9.15
DPDT, SOLDER LUG						
A221S1YZQ	1	On-Off-On	65F1656	9.14	8.37	7.84
A223S1YZQ	1	On-None-On	65F1657	8.76	8.04	7.52
A226S1YZQ	1	On-None-(On)	06M4450	10.19	9.33	8.74
A227S1YZQ	1	(On)-Off-(On)	65F1659	9.58	8.77	8.22
A232S1YZQ	1	On-On-On	06M4451	12.47	11.42	10.70
A221K12KZQ	3	On-Off-On	06M4443	29.11	26.67	24.98
A223K12KZQ	3	On-None-On	65F1732	16.29	14.93	13.99
A223P32YZQ	4	On-None-On	06M4447	25.34	23.21	21.74
3PST, SOLDER LUG						
A321S1YZQ	1	On-Off-On	65F1662	29.71	27.21	25.49
A323S1YZQ	1	On-None-On	06M4452	15.28	14.00	13.12
4PDT, SOLDER LUG						
A432S1YZQ	1	On-On-On	89C3329	30.40	27.84	26.08
A421S1YZQ	1	On-Off-On	06M4454	35.10	32.15	30.11
SPDT, PCB TERMINAL OPTIONS						
A121S1YCQ	5	On-Off-On	65F1681	10.46	9.58	8.98
A123S1YCQ	5	On-None-On	06M4435	6.11	5.61	5.24
A127S1YCQ	5	(On)-Off-(On)	65F1684	10.46	9.58	8.98
DPDT, PCB TERMINAL						
A223S1YCQ	5	On-None-On	06M4449	9.53	8.74	8.19

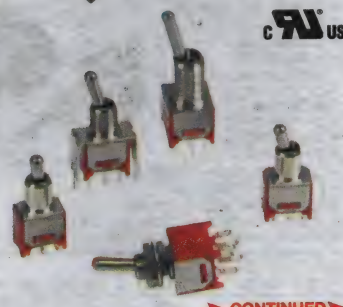
(4851)

100 SERIES MINIATURE TOGGLE SWITCHES

RoHS Compliant Available

E-SWITCH

- Voltage rating: 120VAC, 28VDC
- Current rating: 5A
- Mechanical life: 40,000 Make-and-Break Cycles
- Electrical life: 6,000 at Full Power
- Contact resistance: 10mOhms Max. Initial
- Insulation resistance: 1,000MOhms Min.
- Operating temperature: -30°C to 85°C
- Torque: Max. 5kg-cm (70 ounce-inch)



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100 SERIES MINIATURE TOGGLE SWITCHES (CONT.)

100 SERIES STANDARD MINIATURE TOGGLE SWITCHES

Mfg. Part No.	Contacts	Swtich Function	Terminals	Stock No.	Price Each 1-9
● 100SP1T1B1M1QEH	SPDT	On-None-On	Soder	15N9971	4.21
● 100SP1T1B1M1REH	SPDT	On-None-On	Solder	15N9972	2.79
● 100SP1T1B1M2QEH	SPDT	On-None-On	Solder	15N9973	4.38
● 100SP1T1B1M2REH	SPDT	On-None-On	Solder	15N9974	2.79
● 100SP1T1B4M2QE	SPDT	On-None-On	Solder	15N9997	4.21
● 100SP1T2B1M1QEH	SPDT	On-None-On	Solder	16N0013	4.21
● 100SP1T2B3M1QEH	SPDT	On-None-On	Solder	16N0024	4.21
● 100SP1T2B3M2QEH	SPDT	On-None-On	Solder	16N0026	4.21
● 100SP1T2B4M6QE	SPDT	On-None-On	Solder	16N0031	5.45
● 100SP1T2B4M6RE	SPDT	On-None-On	Solder	16N0032	5.80
● 100SP1T2B4M7RE	SPDT	On-None-On	Solder	16N0034	6.22
● 100SP1T2B4VS2QE	SPDT	On-None-On	V Bracket	16N0035	5.51
● 100SP1T6B11M1QEH	SPDT	On-None-On	Solder	16N0059	5.47
● 100SP1T6B11M2QEH	SPDT	On-None-On	Solder	16N0061	5.47
● 100SP1T8B13M1QEH	SPDT	On-None-On	Solder	16N0078	5.96
● 100SP2T1B1M1QEH	SPDT	On-None-(On)	Solder	16N0086	2.76
● 100SP2T6B11M1QEH	SPDT	On-None-(On)	Solder	24R4255	5.77
● 100SP3T1B1M1QEH	SPDT	On-Off-On	Solder	16N0109	5.04
● 100SP3T1B1M1REH	SPDT	On-Off-On	Solder	16N0110	3.19
● 100SP3T1B1M2QEH	SPDT	On-Off-On	Solder	16N0111	4.74
● 100SP3T1B4M6RE	SPDT	On-Off-On	Solder	16N0119	6.30
● 100SP3T1B4VS2RE	SPDT	On-Off-On	V Bracket	16N0122	6.36
● 100SP3T2B4M6RE	SPDT	On-Off-On	Solder	16N0129	7.26
● 100SP3T2B4VS2QE	SPDT	On-Off-On	V Bracket	16N0132	6.01
● 100SP3T8B13M1QEH	SPDT	On-Off-On	Solder	16N0149	6.46
● 100SP4T1B1M1QEH	SPDT	(On)-Off-(On)	Solder	16N0151	5.40
● 100SP4T1B1M2QEH	SPDT	(On)-Off-(On)	Solder	16N0152	5.10
● 100SP5T1B1M1QEH	SPDT	On-Off-(On)	Solder	16N0186	5.41
● 100DP1T1B1M1QEH	DPDT	On-None-On	Solder	15N9837	5.85
● 100DP1T1B1M1REH	DPDT	On-None-On	Solder	15N9838	5.90
● 100DP1T1B1M2QEH	DPDT	On-None-On	Solder	15N9839	5.35
● 100DP1T1B1M2REH	DPDT	On-None-On	Solder	15N9840	5.90
● 100DP1T2B3M1QEH	DPDT	On-None-On	Solder	15N9861	5.35
● 100DP1T2B4M6QE	DPDT	On-None-On	Solder	15N9864	6.91
● 100DP1T4B1M1QEH	DPDT	On-None-On	Solder	24R4244	5.55
● 100DP1T6B11M1QEH	DPDT	On-None-On	Solder	15N9875	4.81
● 100DP1T8B13M1QEH	DPDT	On-None-On	Solder	15N9886	5.16
● 100DP3T1B1M1QEH	DPDT	On-Off-On	Solder	15N9896	5.84
● 100DP3T1B1M2QEH	DPDT	On-Off-On	Solder	15N9897	6.26
● 100DP4T1B1M1QEH	DPDT	(On)-Off-(On)	Solder	15N9927	6.65
● 100DP5T1B1M1QEH	DPDT	On-Off-(On)	Solder	15N9938	4.84
● 1003P1T1B1M1QEH	3PDT	On-None-On	Solder	16N0202	9.68
● 1003P1T1B1M2QEH	3PDT	On-None-On	Solder	16N0205	9.68
● 1003P3T1B1M1QEH	3PDT	On-Off-On	Solder	16N0244	10.30
● 1004P1T1B1M1QEH	4PDT	On-None-On	Solder	16N0265	11.00
● 1004P3T1B1M1QEH	4PDT	On-Off-On	Solder	16N0287	11.78
100A SERIES SEALED MINIATURE TOGGLE SWITCHES					
● 100AWSP3T1B4M2RE	SPDT	On-Off-On	Solder	15N9804	6.76
● 100AWDP1T2B4M7RE	DPDT	On-None-On	Solder	15N9754	8.77

(197692)

ST SERIES 20 AMP POWER TOGGLE SWITCHES

RoHS Compliant Available

E•SWITCH®

Features
- Heavy Duty Rating with UL Approvals
- Many Functions Available
- Tab, Screw, and Solder Terminal Options
- Rubber Boot for Water and Dust Protection

ST1 Series ST2 Series ST3 Series

Specifications
- 20A 125VAC [cULus]
- 15A 250VAC [cULus]
- 2HP 125-250VAC [cULus]
- Operating temperature: -20°C to 85°C
- Electrical life: 6,000 Cycles
- Contact resistance: 50 mohm Max.
- Insulation resistance: 800 Mohm Min. at 500VDC
- Dielectric strength: 1,500VAC for 1 Minute

Mfg. Part No.	Contacts	Function	Terminals	Stock No.	Price Each 1-9
● ST141D00	SPST	Off-On	Quick Connect	24R3971	8.16
● ST143D00	SPST	On-On	Quick Connect	24R3972	8.06

➤ CONTINUED ➤

ST SERIES 20 AMP POWER TOGGLE SWITCHES (CONT.)

Mfg. Part No.	Contacts	Function	Terminals	Stock No.	Price Each 1-9
● ST145D00	SPDT	On-Off-On	Quick Connect	24R3974	8.64
● ST161D00	SPST	Off-On	Screw	24R3977	8.16
● ST165D00	SPDT	On-Off-On	Screw	24R3980	6.29
● ST24GD00	DPDT	On-On	Quick Connect	24R3986	9.64
● ST24KD00	DPDT	(On)-Off-(On)	Quick Connect	24R3988	9.99
● ST26KD00	DPDT	(On)-Off-(On)	Screw	24R3994	9.56
● ST34RE00	3PST	Off-On	Quick Connect	24R3997	15.41

(194839)

MINIATURE TOGGLE SWITCHES

RoHS Compliant Available

Grayhill

Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5

- Suffix QE in Mfg. Part No.: Silver Contacts Rated for 5A @ 125VAC, 3A @ 250VAC, Epoxy Sealed
- Suffix RE in Mfg. Part No.: Gold Contacts Rated for 0.4A @ 20V Max (AC or DC), Epoxy Sealed
- Actuator: Brass, Chrome Plated
- Operating Temperature Range: -35°C to +85°C

Series 34A unsealed miniature toggle switches are UL Recognized. Housing: Diallyl phthalate UL94V-0. **Series 34B** sealed miniature toggle switch: IP67 degree of protection. Housing: glass-filled nylon UL94V-0.

PANEL MOUNT MINIATURE TOGGLE SWITCHES

Mfg. Part No.	Fig.	Circuitry	Function	Stock No.	Price Each 1-49	Price Each 50-99
● 34ASP11B1M1QT	1	SPDT	On-None-On	89C9918	4.23	4.02
● 34ASP41B1M1QT	1	SPDT	(On)-Off-(On)	89C9926	4.08	3.90
● 34ASP51B1M1QT	1	SPDT	On-Off-(On)	89C9927	4.08	3.90
● 34ADP11B1M1QT	1	DPDT	On-None-On	04M2561	5.38	5.14
● 34ADP31B1M1QT	1	DPDT	On-Off-On	89C9916	5.45	5.21
● 34ASP31B1M1QT	1	SPDT	On-Off-On	73K2217	4.06	3.88
PC MOUNT MINIATURE TOGGLE SWITCHES						
● 34ASP31B1M2QT	2	SPDT	On-Off-On	04M2592	4.14	3.96
● 34ADP11B1M2QT	2	DPDT	On-On	89C9913	5.33	5.10
● 34ADP31B1M2QT	2	DPDT	On-Off-On	89C9917	5.45	5.21
RIGHT ANGLE PC MOUNT MINIATURE TOGGLE SWITCHES						
● 34ASP12B4M6RT	3	SPDT	On-None-On	04M2583	4.50	4.31
VERTICAL RIGHT ANGLE PC MOUNT MINIATURE TOGGLE SWITCHES						
● 34ASP12B4M7QT	4	SPDT	On-None-On	88K4410	4.36	4.17
SEALED MINIATURE TOGGLE SWITCHES						
● 34BWSP12B4M6QT	5	SPDT	On-None-On	04M2618	5.11	4.88

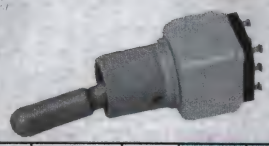
(72345)

TW SERIES MINIATURE TOGGLE SWITCHES MILITARY QUALIFIED TO MS-83731

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

- MIL-S-83731 Qualified
- Rated: For Use @ 5A-125VAC
- Operating Temperature: -65°C to +71°C



Solder terminals. UL recognized, CSA certified. *Letter suffix in **mfg. part no.** denotes pull switches. Locks in extreme position on the keyway side.

Mfg. Part No.	Current (A)	Circuitry	Action	MS-Number	Bushing	Termination	Stock No.	Price Each 1-9
● 1TW1-2	5	SPST	On-Off	...	...	Solder	26R2020	67.91
● 11TW1-8	5	SPDT	On-(On)	...	...	Solder	50F5248	49.30
1TW1-3	5	SPDT	On-On	27716-23-1	¼" Unsealed	Solder	23F1906	58.31
● 11TW12	5	SPST	On-Off	27718-22-1	15/32" Sealed	Solder	39B4529	49.11
11TW1-3	5	SPDT	On-On	27718-23-1	15/32" Sealed	Solder	23F2130	44.02
11TW1-7	5	SPDT	(On)-Off-(On)	27718-27-1	15/32" Sealed	Solder	23F2131	28.56
● 11TW8-3G*	5	SPDT	On-On	...	15/32" Sealed	Solder	50F5249	90.86
12TW1-1	5	DPDT	On-Off-On	27719-21-1	15/32" Sealed	Solder	23F2157	29.03
12TW1-3	5	DPDT	On-On	27719-23-1	15/32" Sealed	Solder	23F2158	27.80
12TW1-7	5	DPDT	(On)-Off-(On)	27719-27-1	15/32" Sealed	Solder	23F2159	32.02
● 12TW1-3D	5	DPDT	On-On	...	...	Solder	51F4026	83.46
● 12TW1-8	5	DPDT	On-(On)	...	...	Solder	23F2160	50.82

➤ CONTINUED ➤

TW SERIES MINIATURE TOGGLE SWITCHES MILITARY QUALIFIED TO MS-83731 (CONT.)

ACCESSORIES

Mfg. Part No.	Description	For Use With	Stock No.	Price Each 1-9
10PA4	Sealing Boot, 15/32-32	Honeywell AT, NT, TL, TS and TW Series Toggle Switch	23C9282	4.30
15PA87	Panel Seal, 15/32	Honeywell AT, NT, TL, TS and TW Series Toggle Switch	23F2167	8.21
15PA258	Sealing Ring (M5423/16-01)	Honeywell AT, NT, TL, TS and TW Series Toggle Switch	86C3709	7.69

(4868)

MICRO SWITCH NT SERIES SEALED TOGGLE SWITCHES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

- Available with raised panel standoff and "O"-ring seal
- Screw terminals
- Meets NEMA 3, 3R, 4 and 13 as well as IP67 and IP68
- Step-design case for added space between terminals preventing shorting
- Spring-loaded actuating mechanism provides excellent tactile feedback
- High-impact strength, non-tracking case enhances electrical stability
- Temperature Range: –40°C to 71°C (–40°F to 160°F)
- UL Recognized, CSA Certified, CE Compliant

Designed to meet severe environment application needs for a rugged, cost-effective toggle switch. Quality construction features include a one-piece seal between the toggle lever and bushing, and between the cover and case. Terminal inserts are molded into the high-impact strength thermoplastic case. Includes mounting hardware. "NONE" in table indicates toggle lever is blocked from these positions. Toggle becomes 2-position with center being one extreme position. See table below for electrical ratings. 15/32"-32 UNS thread. Mfg. part nos. with **prefixes 61** and **62** denote new version with raised panel standoff and "O"-ring seal.

UL RECOGNIZED AND CSA CERTIFIED ELECTRICAL RATINGS FOR NT SERIES

Rating Code	Electrical Rating
L191	15A, 125, 250, 277VAC; ½HP, 125VAC, 1HP, 250, 277VAC; 5A, 120VAC "L"
L192	10A, 125, 250, 277VAC; ¼HP, 125VAC, ½HP, 250, 277VAC; 3A, 120VAC "L"

2-POSITION SWITCHES

Mfg. Part No.	Circuitry	Current (A)	Action	Termination	UL Code	Stock No.	Price Each 1-14
1NT1-4	SPST	10	On-(Off)	Screw	L192	95F5210	24.22
1NT1-6	SPST	10	(On)-None-Off	Screw	L192	73K1389	15.32
61NT1-6	SPST	10	(On)-Off	Screw	L192	73K1475	31.60
1NT1-2	SPST	15	On-Off	Screw	L191	73K1387	16.35
61NT1-2	SPST	15	On-Off	Screw	L191	32H3395	23.57
1NT1-8	SPDT	10	On-On	Screw	L192	95F5212	18.95
1NT1-3	SPDT	15	On-None-On	Screw	L191	95F5209	17.46
62NT1-2	DPST	15	On-Off	Screw	L191	32H3416	33.82
2NT1-3	DPDT	10	On-On	Screw	L191	95F5214	43.16
4NT1-8	4PDT	10	(On)-None-On	Screw	L192	39B8018	41.60
4NT13	4PDT	15	On-On	Screw	L191	39B8007	41.60
4NT91-3	4PDT	20	On-None-On	Quick Connect	L191	26R2026	86.84

3-POSITION SWITCHES

Mfg. Part No.	Circuitry	Current (A)	Action	Termination	UL Code	Stock No.	Price Each 1-14
1NT1-5	SPDT	10	On-Off-(On)	Screw	L192	73K1388	16.51
61NT1-7	SPDT	10	(On)-Off-(On)	Screw	L192	32H3398	24.22
1NT1-1	SPDT	15	On-Off-On	Screw	L191	73K1386	15.32
1NT1-7	SPDT	15	(On)-Off-(On)	Screw	L192	73K1390	17.09
2NT1-5	DPDT	10	(On)-Off-On	Screw	L192	95F5226	23.61
2NT1-7	DPDT	10	(On)-Off-(On)	Screw	L192	73K1415	26.76
2NT1-50	DPDT	10	(On)-On-On	Screw	L192	95F5233	32.09
2NT1-70	DPDT	10	(On)-On-(On)	Screw	L192	95F5234	26.53
2NT1-1	DPDT	15	On-Off-On	Screw	L191	95F5225	23.68
62NT1-1	DPDT	15	On-Off-On	Screw	L191	73K1477	33.00
2NT1-12	DPDT	15	On-On-On	Screw	L191	95F5232	28.05
2NT1-10	DPDT	20	On-On-On	Screw	L191	19C1911	49.97
4NT1-7	4PDT	10	(On)-Off-(On)	Screw	L192	39B8016	69.40
4NT1-1	4PDT	15	On-Off-On	Screw	L191	39B7998	43.16

ACCESSORIES

Mfg. Part No.	Description	For Use With	Stock No.	Price Each 1-9
10PA4	Sealing Boot, 15/32-32	Honeywell AT, NT, TL, TS and TW Series Toggle Switch	23C9282	4.30
15PA87	Panel Seal, 15/32	Honeywell AT, NT, TL, TS and TW Series Toggle Switch	23F2167	8.21
15PA258	Sealing Ring (M5423/16-01)	Honeywell AT, NT, TL, TS and TW Series Toggle Switch	86C3709	7.69

(4880)

MICRO SWITCH NT SERIES FLAT BASE, SEALED TOGGLE SWITCHES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features

- Quick-Connect
- Meets NEMA 3, 3R, 4 and 13 as well as IP67 and IP68
- Flat Base With Quick-Connect Terminals Mating Connectors are Available Separately; *go online or call*
- Spring-Loaded Actuating Mechanism Provides Tactile Feedback
- High-Impact Strength, Non-Tracking Case Enhances Electrical Stability
- Temperature Range: –40°C to +71°C (–40°F to +160°F)
- UL recognized, CSA certified, CE Compliant

Designed to meet severe environment application needs for rugged cost-effective manual switches. Identical to the stepped base style in construction and features. Allows for PC Board or connector use for easy wiring/connection. See table below for electrical ratings. 15/32"-32 UNS thread. Mounting hardware included.

UL AND CSA ELECTRICAL RATINGS FOR NT SERIES

Rating Code	Electrical Rating
L192	10A, 125, 250, 277VAC; ¼HP, 125VAC, ½HP, 250, 277VAC; 3A, 125VAC "L"
L191	15A, 125, 250, 277VAC; ½HP, 125VAC, 1HP, 250, 277VAC; 5A, 125VAC "L"

2-POSITION

Mfg. Part No.	Poles	Circuits Made At: Keyway Position	Circuits Made At: Opposite Keyway	Center Position	UL Code	Stock No.	Price Each 1-14
31NT91-2	1	OFF	2-3	...	L191	92F2951	15.20
31NT91-3	1	1-2	2-3	...	L191	92F2952	15.36
31NT91-6	1	1-2*	Off	...	L192	92F2954	29.02
32NT91-2	2	Off	2-3, 5-6	...	L191	92F2956	33.95
32NT91-3	2	1-2,4-5	2-3,5-6	...	L191	73K1449	39.28

3-POSITION

Mfg. Part No.	Poles	Keyway Position	Opposite Keyway	Center Position	UL Code	Stock No.	Price Each 1-14
31NT91-1	1	1-2	2-3	OFF	L191	92F2961	16.65
31NT91-7	1	1-2*	2-3*	OFF	L192	92F2963	35.92
32NT91-1	2	1-2,4-5	2-3,5-6	OFF	191	92F2968	45.98
32NT91-7	2	1-2,4-5*	2-3,5-6*	OFF	192	92F2970	25.92
32NT91-70	2	1-2,4-5*	2-3,5-6*	1-2,5-6	L192	73K1450	31.66

* Momentary positions. All other maintained.

ACCESSORIES

Mfg. Part No.	Description	For Use With	Stock No.	Price Each 1-9
10PA4	Sealing Boot, 15/32-32	Honeywell AT, NT, TL, TS and TW Series Toggle Switch	23C9282	4.30
15PA87	Panel Seal, 15/32	Honeywell AT, NT, TL, TS and TW Series Toggle Switch	23F2167	8.21
15PA258	Sealing Ring (M5423/16-01)	Honeywell AT, NT, TL, TS and TW Series Toggle Switch	86C3709	7.69

(4903)

TS SERIES INDUSTRIAL TOGGLE SWITCHES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

- Electrical Ratings: 15A @ 125, 250, 277VAC; ½HP @ 125VAC; 1HP @ 250/277VAC; 5A @ 125VAC Lamp Load
- 1-Pole Versions are 1.08H x 0.62W x 1.13L" (27.40 x 15.70 x 28.70)
- 2-Pole Versions are 1.06H x 0.75W x 1.31L" (27.00 x 19.00 x 33.30)

For use in light industrial applications. Provided with lever-to-bushing seals. UL recognized. CSA certified. ( ) in type column indicates momentary action. Listings with **-5** or **-7** suffix are 10A @ 125/250/277VAC.

Mfg. Part No.	Action	Circuitry	Terminal	Stock No.	Price Each 1-9
11TS15-1	On-Off-On	SPDT	Screw	23F2113	6.05
11TS15-2	On-None-Off	SPST	Screw	23F2114	7.09
11TS15-3	On-None-On	SPST	Screw	23F2115	7.41
11TS15-6	Off-(On)	SPST	Screw	23F2117	6.77
11TS115-3	On-None-On	SPDT	Solder	23F2126	8.66
11TS15-7	(On)-Off-(On)	SPDT	Screw	23F2118	11.17
11TS95-1	On-Off-On	SPST	Quick Connect	23F2120	7.80
11TS95-7	(On)-Off-(On)	SPST	Quick Connect, Solder	23F2124	5.92
12TS15-2	Off-None-On	DPST	Screw	23F2146	8.40
12TS15-1	On-Off-On	DPDT	Screw	23F2145	12.87
12TS115-1	On-Off-On	DPST	Solder	23F2153	11.47
12TS115-2	Off-None-On	DPST	Solder	23F2154	10.26
12TS115-3	On-None-On	DPST	Solder	23F2155	9.65
12TS115-5	(On)-Off-On	DPDT	Solder	50F5244	12.75

CONTINUED

SWITCHES – TOGGLE

TS SERIES INDUSTRIAL TOGGLE SWITCHES (CONT.)

Mfg. Part No.	Action	Circuitry	Terminal	Stock No.	Price Each 1-9
● 12TS95-3	On-None-On	DPST	Quick Connect, Solder	23F2151	9.34
● 12TS95-7	(On)-Off-(On)	DPDT	Quick Connect	23F2152	26.50
● 12TS95-70	(On)-On-(On)	DPDT	Quick Connect	39B4838	27.85

ACCESSORIES

Mfg. Part No.	Description	For Use With	Stock No.	Price Each 1-9
● 10PA4	Sealing Boot, 15/32-32	Honeywell AT, NT, TL, TS and TW Series Toggle Switch	23C9282	4.30
● 15PA87	Panel Seal, 15/32	Honeywell AT, NT, TL, TS and TW Series Toggle Switch	23F2167	8.21
● 15PA258	Sealing Ring (M5423/16-01)	Honeywell AT, NT, TL, TS and TW Series Toggle Switch	86C3709	7.69

(4867)

MICRO SWITCH TL SERIES 2-POSITION ENVIRONMENTAL SEALED TOGGLE SWITCHES, MILITARY APPROVED TO MIL-S-3950

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

- Operating Temperature Range: –65°C to +71°C
- L191 UL/CSA Rating Code: 15A-125/250/277VAC; ½HP-125VAC; 1HP-250/277VAC; 5A-120VAC Lamp Load
- L192 UL/CSA Rating Code: 10A-125/250/277VAC; ¼HP-125VAC; ½HP-250/277VAC; 3A125VAC Lamp Load

Sealed switches feature strong non-tracking case, screw terminals, silver-cadmium oxide contacts. **D** suffix in mfg. part no. denotes pull switches and locks out of center position. **G** suffix in mfg. part no. denotes pull switches and locks out of extreme position. Lever operates on direct-action, spring-loaded mechanism. ( ) indicates momentary action. CE certified.

1 POLE

Mfg. Part No.	Current (A)	Circuitry	Mil No. MS-	Action	Termination	Stock No.	Price Each 1-9
● 101TL2-3	15	SPDT	...	On-None-On	...	51F4035	100.85
● 1TL1-6	10	SPDT	24523-30	Off-(On)	Screw	23F1900	18.94
● 1TL1-8	10	SPDT	24523-26	(On)-On	Screw	23F1901	14.43
● 1TL1-4	10	SPDT	24523-29	On-(Off)	Screw	94F5341	22.19
● 1TL1-2	15	SPST	24523-22	On-Off	Screw	23F1895	25.35
● 1TL1-8F	15	SPDT	...	On-On	Screw	26R2019	51.58
● 1TL1-2D	15	SPST	24658-22D	Off-None-On	Screw	23F1896	37.02
● 1TL1-3	15	SPDT	24523-23	On-On	Screw	23F1897	21.48
● 1TL1-3D	15	SPDT	24658-23D	On-On	Screw	23F1898	37.12
● 1TL1-21	20	SPST	...	None-Off-On	Screw	24C1831	29.49
● 1TL1-3F	20	SPDT	...	On-On	Screw	90B1889	78.49
● 1TL1-3G	20	SPDT	...	On-On	Screw	90B4636	58.86
● 1TL11L	20	SPDT	...	On-Off-On	Screw	39B3816	27.80
● 1TL151	10	SPDT	...	None-On-(On)	Screw	39B3870	50.98
2 POLE							
● 102TL2-3	15	DPDT	...	On-On	...	51F4037	138.63
● 2TL1-6	10	DPST	24524-30	(On)-None-Off	Screw	23F1982	19.30
● 2TL1-8	10	DPDT	24524-26	(On)-On	Screw	23F1985	43.57
● 2TL1-4	10	DPST	24524-29	On-(Off)	Screw	50F5255	38.97
● 2TL1-3	15	DPDT	24524-23	On-On	Screw	23F1979	30.44
● 2TL1-2	15	DPST	24524-22	On-Off	Screw	23F1978	38.52
● 2TL1-3D	15	DPDT	24659-23D	On-On	Screw	23F1980	31.76
● 2TL1-21	20	DPST	...	On-Off	Screw	86C3928	62.27
● 12TL1-3	20	DPDT	...	On-On	Solder	86C3587	78.86
● 2TL172	18	DPDT	...	(On)-Off-(On)	Screw	51B487	63.18
4 POLE							
● 4TL1-8	10	4PDT	24525-26	On-On	Screw	23F2017	58.97
● 4TL1-2	15	4PST	24525-22	Off-None-On	Screw	23F2014	54.04
● 4TL1-3	15	4PDT	24525-23	On-None-On	Screw	23F2015	64.02
● 4TL1-3D	15	4PDT	24525-23D	On-None-On	Screw	50F5256	110.74
● MS24660-23D	20	4PDT	MS24660-23D	On-On	Screw	48J6070	110.74

ACCESSORIES

Mfg. Part No.	Description	For Use With	Stock No.	Price Each 1-9
● 10PA4	Sealing Boot, 15/32-32	Honeywell AT, NT, TL, TS and TW Series Toggle Switch	23C9282	4.30
● 15PA87	Panel Seal, 15/32	Honeywell AT, NT, TL, TS and TW Series Toggle Switch	23F2167	8.21
● 15PA258	Sealing Ring (M5423/16-01)	Honeywell AT, NT, TL, TS and TW Series Toggle Switch	86C3709	7.69

(4866)

MICRO SWITCH TL SERIES 3-POSITION ENVIRONMENTAL SEALED TOGGLE SWITCHES, MILITARY APPROVED TO MIL-S-3950

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Sealed switches feature strong non-tracking case, screw terminals, silver-cadmium oxide contacts. Operating temperature range: –65°C to +71°C. **A** and **E suffixes** in mfg. part nos. denote pull switches: **Suffix A** locks in 3-positions and **Suffix E** locks in center position. Lever operates on direct-action, spring-loaded mechanism. ( ) indicates momentary action.

UL RECOGNIZED AND CSA CERTIFIED ELECTRICAL RATINGS FOR TL SERIES

Rating Code	Electrical Rating
L191	15A, 125, 250, 277VAC; ½HP, 125VAC, 1HP, 250, 277VAC; 5A, 120VAC "L"
L192	10A, 125, 250, 277VAC; ¼HP, 125VAC, ½HP, 250, 277VAC; 3A, 120VAC "L"

1-POLE

Mfg. Part No.	Current (A)	Circuitry	Mil. No. MIL-	Action	Termination	UL/CSA Code	Stock No.	Price Each 1-14
● 1TL1-7	10	SPDT	24523-27	(On)-Off-(On)	Screw	L192	23F4232	18.30
● 1TL1-5	10	SP3T	24523-31	(On)-Off-On	Screw	L192	23F1899	20.55
● 1TL1-1E	15	SP3T	24658-21E	On-Off-On	Screw	L191	50F5254	20.42
● 1TL1-1A	15	SPDT	24658-21A	On-Off-On	Screw	L191	24C7899	36.13
● 1TL1-1	20	SPDT	24523-21	On-Off-On	Screw	L191	23F1894	26.65
2-POLE								
● 2TL1-5	10	DPDT	24524-31	(On)-Off-On	Screw	L192	23F1981	49.97
● 2TL1-7	10	DPDT	24524-27	(On)-Off-(On)	Screw	L192	23F1983	27.47
● 2TL1-7E	10	DPDT	24659-7E	(On)-Off-(On)	Screw	L191	23F1984	82.54
● 2TL1-50	10	DPDT	27407-5	(On)-On-On	Screw	L192	23F1988	57.42
● 2TL1-70	10	DPDT	27407-6	(On)-On-(On)	Screw	L192	23F1989	45.20
● 2TL1-1	15	DPDT	24524-21	On-Off-On	Screw	L191	23F1977	43.73
● 2TL1-10	15	DPDT	27407-4	On-On-On	Screw	L191	23F1986	30.89
● 2TL1-10A	15	DPDT	27408-4	On-On-On	Screw	L191	23F1987	77.63
● 2TL1-56	18	DPDT	...	On-On-(On)	...	...	98F7689	28.50
● 2TL1-12A	20	DPDT	...	On-On-On	...	L191	01C0371	100.88
● 102TL2-10	15	DPDT	...	On-On-On	...	L191	86C3311	168.97
4-POLE								
● 4TL1-7	10	4PDT	24525-27	(On)-Off-(On)	Screw	L192	23F2016	91.02
● 4TL1-5	10	4PDT	24525-31	(On)-Off-On	Screw	L192	50F5257	70.06
● 4TL1-1	15	4PDT	24525-21	On-Off-On	Screw	L191	23F2013	74.10
● 4TL1-12	15	4PDT	27406-1	On-On-On	Screw	L191	91B2311	60.79
● 4TL1-50	18	4PDT	...	On-Off-On	...	...	50F5258	106.58
● 4TL1-12A	20	4PDT	...	On-On-On	...	L191	27C8004	77.42

ACCESSORIES

Mfg. Part No.	Description	For Use With	Stock No.	Price Each 1-9
● 10PA4	Sealing Boot, 15/32-32	Honeywell AT, NT, TL, TS and TW Series Toggle Switch	23C9282	4.30
● 15PA87	Panel Seal, 15/32	Honeywell AT, NT, TL, TS and TW Series Toggle Switch	23F2167	8.21
● 15PA258	Sealing Ring (M5423/16-01)	Honeywell AT, NT, TL, TS and TW Series Toggle Switch	86C3709	7.69

(12432)

SERIES 19A TOGGLE SWITCH GUARDS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features:
- Rugged spring-loaded design provides protection against accidental actuation
- Perfect for a variety of applications: Mil-Spec 19PA184-NT for aviation and military, cost effective 19PA217-NT for applications such as industrial work platforms and auto racing

Specifications:
- Designed for use with 2 position standard toggle switches
- Base faceplate is black steel
- Mounting hole accepts 15/32" mounting stems

Mfg. Part No.	Position	Mil-Spec	Stock No.	Price Each 1-9	Price Each 10-24
● 19PA184-NT	2	MS25224-1	39B5427	76.11	70.30
● 19PA217-NT	2	...	72J1820	11.70	10.52

(88584)

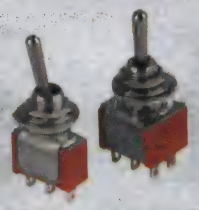
MINIATURE SWITCHES PANEL MOUNTING

RoHS Compliant Available

multicomp

Features:
- Silver plated copper contacts
- Solder tag connections

Specifications:
- Electrical life: 40000 ops.
- Contact resistance: <10mR @4V, 100mA
- Operating temperature: -30°C to +85°C
- Bush thread: ¼-40 UNS-2A
- Lever length: 10.25mm
- Panel cut out=6.35, H=12.7, W=6.9mm



Mfg. Part No.	Circuitry	Action	Stock No.	Price Each 1-99
1MS1T1B5M1QE	SPDT	On-On	98K4965	2.09
1MS3T1B5M1QE	SPDT	On-Off-On	98K4976	2.62
1MS2T1B5M1QE	SPDT	On-(On)	95M7734	2.71
1MS4T1B5M1QE	SPDT	(On)-Off-(On)	95M4612	2.89
1MS5T1B5M1QE	SPDT	On-Off-(On)	95M4613	2.67
1MD1T1B5M1QE	DPDT	On-On	98K4949	2.53
1MD3T1B5M1QE	DPDT	On-Off-On	98K4956	2.93
1MD2T1B5M1QE	DPDT	On-(On)	95M4606	2.71
1MD4T1B5M1QE	DPDT	(On)-Off-(On)	95M4607	2.72
1MD5T1B5M1QE	DPDT	On-Off-(On)	95M4608	2.90
1MD6T1B5M1QE	DPDT	On-On-On	95M4609	3.47
1M32T1B5M1QE	3PDT	On-(On)	95M4615	3.74
1M31T1B5M1QE	3PDT	On-On	95M4614	3.54
1M34T1B5M1QE	3PDT	(On)-Off-(On)	95M4617	4.67
1M33T1B5M1QE	3PDT	On-Off-On	95M4616	4.72
1M35T1B5M1QE	3PDT	On-Off-(On)	95M4618	4.98
1M42T1B5M1QE	4PDT	On-(On)	95M4620	5.06
1M41T1B5M1QE	4PDT	On-On	95M4619	5.12
1M44T1B5M1QE	4PDT	(On)-Off-(On)	95M4622	6.29
1M43T1B5M1QE	4PDT	On-Off-On	95M4621	6.07
1M46T1B5M1QE	4PDT	On-On-On	95M4624	7.04

(116508)

TOGGLE SWITCHES

UL

RoHS Compliant Available

multicomp

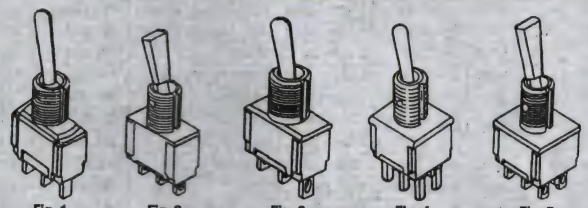


Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5

- Rating: 5A @ 120VAC or 28VDC; 2A @ 250VAC
- Operating Temperature: -30°C to +85°C
- UL Listed

Actuator: chrome-plated brass. Bushing: nickel-plated brass. Stainless steel housing. Case rated UL 94V-0. End contacts: silver-plated coin silver. Center contact and terminals: Silver-plated brass, epoxy seal. Hardware: 2 hex nuts, locking ring, lock washer. Panel mounting: Figs. 1 and 2: 0.250″ (6.35) diameter hole; Fig. 3: 0.469″ (11.91) diameter hole.

SPDT — STANDARD ROUND TOGGLE, ¼″-40 THREADED 0.350″L BUSHING WITH KEYWAY, WIRE LUG TERMINALS — FIG. 1

Mfg. Part No.	Action	Stock No.	Price Each 1-24	25-99	100-249	250-499
SPC21516	On-None-On	11M0712	5.51	4.73	4.27	3.89
SPC21256	On-Off-On	11M0451	8.07	6.92	6.26	5.68
SPC21257	(On)-Off-(On)	11M0452	7.00	6.01	5.45	4.94
SPC21258	On-Off-(On)	11M0453	6.69	5.74	5.19	4.71
SPC21259	On-None-On	11M0454	5.10	4.38	3.96	3.60
SPDT — FLAT TOGGLE, 1/4″-40 THREADED 0.350″L BUSHING WITH KEYWAY, WIRE LUG TERMINALS — FIG. 2						
SPC21269	On-None-On	11M0464	7.52	6.45	5.84	5.30
SPC21271	On-Off-On	11M0466	8.00	6.87	6.22	5.64
SPC21273	On-Off-(On)	11M0468	9.16	7.86	7.12	6.45
SPDT — LARGE ROUND TOGGLE, 15/32″-32 THREADED 0.448″L BUSHING WITH KEYWAY, WIRE LUG TERMINALS — FIG . 3						
SPC21277	(On)-Off-(On)	11M0472	9.53	8.18	7.40	6.73
SPC21278	On-Off-(On)	11M0473	9.64	8.27	7.49	6.79
DPDT — STANDARD ROUND TOGGLE, 1/4″-40 THREADED 0.350″L BUSHING WITH KEYWAY, WIRE LUG TERMINALS — FIG. 4						
SPC21284	On-None-On	11M0479	.7.42	6.37	5.77	5.23
SPC21288	On-Off-(On)	11M0483	9.04	7.76	7.02	6.37

➤ CONTINUED ➤

TOGGLE SWITCHES (CONT.)

DPDT — FLAT TOGGLE, 1/4″-40 THREADED 0.350″L BUSHING WITH KEYWAY, WIRE LUG TERMINALS — FIG. 5

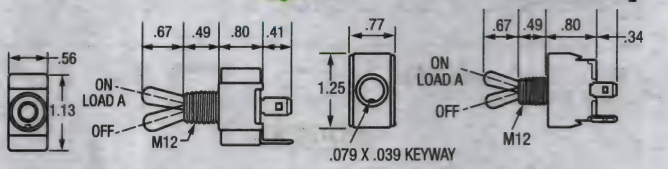
Mfg. Part No.	Action	Stock No.	Price Each 1-24	25-99	100-249	250-499
SPC21299	On-None-On	11M0494	9.95	8.54	7.73	7.01
DPDT — LARGE ROUND TOGGLE, 15/32″-32 THREADED, 0.448″L BUSHING WITH KEYWAY, WIRE LUG TERMINALS — FIG. 4						
SPC21304	On-None-On	11M0499	9.40	8.07	7.30	6.62
SPC21305	On-None-(On)	11M0500	10.00	8.59	7.77	7.05
SPC21307	(On)-Off-(On)	11M0502	10.23	8.79	7.95	7.21
SPC21308	On-Off-(On)	11M0503	10.61	9.11	8.24	7.48
1P3WAY — STANDARD ROUND TOGGLE, 1/4″-40 THREADED 0.350″L BUSHING WITH KEYWAY, WIRE LUG TERMINALS — FIG. 4						
SPC21314	On-On-On	11M0509	9.28	7.96	7.20	6.54
3PDT — STANDARD ROUND TOGGLE, 1/4″-40 THREADED 0.350″L BUSHING WITH KEYWAY, WIRE LUG TERMINALS						
SPC21317	On-None-On	11M0512	14.34	12.30	11.13	10.10
4PDT — STANDARD ROUND TOGGLE, 1/4″-40 THREADED 0.350″L BUSHING WITH KEYWAY, WIRE LUG TERMINALS						
SPC21322	On-None-On	11M0517	19.32	16.57	14.99	13.60

(34965)

TOGGLE SWITCHES

RoHS Compliant Available

multicomp



Contact rating: 20A @ 125VAC terminals. Brass terminals. Mounts in a standard ½″ diameter hole.

METAL CASE

Mfg. Part No.	Circuits	Action	Terminal	Stock No.	Price Each 1-24
SPC21157	SPST	On-Off	Flat	11M0351	10.02
SPC21158	SPDT	On-OFF-On	Flat	11M0352	11.32
SPC21159	SPST	On-OFF	Screw	11M0353	9.81
SPC21160	SPST	(On)-OFF	Screw	11M0354	10.63
SPC21161	SPDT	On-On	Screw	11M0355	11.32
SPC21162	SPDT	On-OFF-On	Screw	11M0356	10.58
SPC21522	SPST	On-OFF	Regular Solder	11M0718	9.81
SPC21164	SPDT	On-OFF-On	Regular Solder	11M0358	10.58
SPC21167	DPDT	On-OFF-On	Flat	11M0361	15.45
SPC21168	DPST	On-None-OFF	Screw	11M0362	13.44
SPC21170	DPDT	On-OFF-On	Screw	11M0364	15.65
SPC21172	DPST	On-None-OFF	Regular Solder	11M0366	12.31

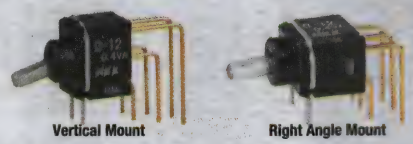
(5158)

G SERIES FULLY ILLUMINATED ULTRA MINIATURE TOGGLE SWITCHES

RoHS Compliant Available

NKK SWITCHES

NEW



Vertical Mount Right Angle Mount

Specifications:
- Fully Illuminated Toggle
- SPDT
- Contact Resistance: 80 milliohms Max.
- Dielectric Strength: 500VAC for 1 minute
- Operating Temperature: -25°C to +55°C
- Terminal Spacing: .100″ x .100″
- 0.4VA Logic Level @ 28V AC/DC max
- PCB Mount

Mfg. Part No.	Circuit	PC Terminals	Lens Color	Stock No.	Price Each 1-24
G12JPC	On-None-On	Straight	Red	09X9658	5.68
G12JPF	On-None-On	Straight	Green	09X9660	5.68
G12JVC	On-None-On	Vertical	Red	09X9661	6.39
G12JHC	On-None-On	Right Angle	Red	09X9654	6.39
G12JPCF	On-None-On	Straight	Red/Green	09X9659	6.77
G12JVCF	On-None-On	Vertical	Red/Green	09X9662	7.48
G12JHCF	On-None-On	Right Angle	Red/Green	09X9655	7.48
G13JPCF	On-Off-On	Straight	Red/Green	09X9674	7.10
G13JVCF	On-Off-On	Vertical	Red/Green	09X9675	7.81

(211589)

SWITCHES – TOGGLE

G SERIES ULTRA-MINIATURE SMT TOGGLE SWITCHES

RoHS Compliant Available

NEW

NKK SWITCHES

Upright Mount

Upright with Bracket Mount

Right Angle Mount

Specifications:
- 3.8mm Column Toggle
- Process Sealed
- Contact Resistance: 80 milliohms max.
- Dielectric Strength: 500V AC min for 1 minute min
- Operating Temperature: -30°C to +85°C
- Logic Level: 0.4VA max @ 28V AC/DC max
- Surface Mount

Mfg. Part No.	Poles	Circuit	PC Terminals	Stock No.	Price Each 1-24
G3T12AB	SPDT	On-None-On	Upright with Bracket	09X9795	5.01
G3T13AH-R*	SPDT	On-Off-On	Right Angle	09X9800	4.47
G3T13AP	SPDT	On-Off-On	Upright	09X9801	5.15
G3T22AB	DPDT	On-None-On	Upright with Bracket	09X9812	6.79
G3T23AH	DPDT	On-Off-On	Right Angle	09X9816	7.56

*Tape & Reel Packaging

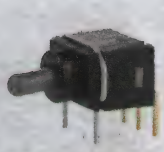
(211588)

G SERIES ULTRA-MINIATURE TOGGLE SWITCHES

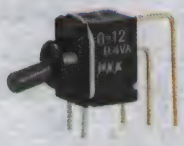
RoHS Compliant Available

NEW

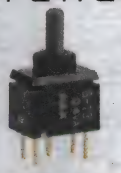
NKK SWITCHES



Right Angle PC Terminals



Vertical PC Terminals



Straight PC Terminals

Specifications:
- 3.8mm Column Toggle
- Process Sealed
- Contact Resistance: 80 milliohms max.
- Dielectric Strength: 500V AC min for 1 minute min
- Operating Temperature: -25°C to +85°C
- Terminal Spacing: .100" x .100"
- Logic Level: 0.4VA max @ 28V AC/DC max
- PCB Mount

Mfg. Part No.	Poles	Circuit	PC Terminals	Stock No.	Price Each 1-24
G12AH	SPDT	On-None-On	Right Angle	09X9652	4.52
G12AV	SPDT	On-None-On	Vertical	09X9653	4.52
G13AH	SPDT	On-Off-On	Right Angle	09X9669	4.65
G13AP	SPDT	On-Off-On	Straight	09X9670	4.15
G13AV	SPDT	On-Off-On	Vertical	09X9671	4.65
G18AP	SPDT	(On)-Off-(On)	Straight	09X9687	4.74
G18AV	SPDT	(On)-Off-(On)	Vertical	09X9688	5.34
G19AP	SPDT	On-Off-(On)	Straight	09X9694	4.74
G22AH	DPDT	On-None-On	Right Angle	09X9725	6.52
G22AV	DPDT	On-None-On	Vertical	09X9726	6.52
G23AP	DPDT	On-Off-On	Straight	09X9731	5.88
G23AV	DPDT	On-Off-On	Vertical	09X9732	7.50
G29AP	DPDT	On-Off-(On)	Straight	09X9748	6.97

(211587)

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(196545)

B SERIES SUBMINIATURE TOGGLE SWITCHES

RoHS Compliant Available

NKK SWITCHES

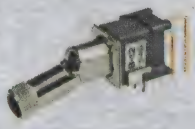
NEW

Bat Toggle
Straight PC Terminals

Bat Toggle
Straight PC Terminals
With Bracket

Bat Toggle
Vertical PC Terminals
With Bracket

Bat Toggle
Right Angle PC Terminals
With Bracket



Specifications:
- Process Sealed
- Antistatic Bushing IP65
- Contact Resistance: 50 milliohms max.
- Dielectric Strength: 500V AC minimum for 1 minute minimum
- Operating Temperature: -30°C to +85°C
- Terminal Spacing: .100" x .100"
- Logic Level: 0.4VA max @ 28V AC/DC max
- PCB Mount

Mfg. Part No.	Poles	Circuit	Toggle	PC Terminals	Stock No.	Price Each 1-24
B12A1P**	SPDT	On-None-On	8mm Bat	Straight	09X8549	7.92
B12AB	SPDT	On-None-On	10mm Bat	Staight w/ Bracket	09X8537	3.78
B12AP	SPDT	On-None-On	10mm Bat	Straight	09X8543	3.45
B12AV	SPDT	On-None-On	10mm Bat	Vertical w/ Bracket	09X8545	4.36
B12JB	SPDT	On-None-On	6.3mm Bat	Staight w/ Bracket	09X8556	3.78
B12JH	SPDT	On-None-On	6.3mm Bat	Right Angle w/ Bracket	09X8557	4.06
B12JJPC*	SPDT	On-None-On	6.3mm Bat	Straight	09X8562	6.45
B12JJVCF*	SPDT	On-None-On	6.3mm Bat	Vertical w/ Bracket	09X8567	8.57
B12JP	SPDT	On-None-On	6.3mm Bat	Straight	09X8570	3.45
B12JV	SPDT	On-None-On	6.3mm Bat	Vertical w/ Bracket	09X8573	4.06
B12LB	SPDT	On-None-On	Locking Lever	Staight w/ Bracket	09X8590	6.14
B12LV	SPDT	On-None-On	Locking Lever	Vertical w/ Bracket	09X8595	6.01
B13AB	SPDT	On-Off-On	10mm Bat	Staight w/ Bracket	09X8597	3.91
B13AP	SPDT	On-Off-On	10mm Bat	Straight	09X8603	3.59
B13EH	SPDT	On-Off-On	10mm Flatted	Right Angle w/ Bracket	09X8608	4.55
B13JH	SPDT	On-Off-On	6.3mm Bat	Right Angle w/ Bracket	09X8615	4.19
B13JP	SPDT	On-Off-On	6.3mm Bat	Straight	09X8619	3.59
B13LB	SPDT	On-Off-On	Locking Lever	Staight w/ Bracket	09X8629	5.88
B15AP	SPDT	On-None-(On)	10mm Bat	Straight	09X8634	3.69
B18AP	SPDT	(On)-Off-(On)	10mm Bat	Straight	09X8655	4.10
B18JP	SPDT	(On)-Off-(On)	6.3mm Bat	Straight	09X8665	4.10
B19AB	SPDT	On-Off-(On)	10mm Bat	Staight w/ Bracket	09X8674	4.43
B22A1P**	DPDT	On-None-On	8mm Bat	Straight	09X8696	8.92
B22AB	DPDT	On-None-On	10mm Bat	Staight w/ Bracket	09X8690	5.06
B22AH	DPDT	On-None-On	10mm Bat	Right Angle w/ Bracket	09X8691	5.25
B22AP	DPDT	On-None-On	10mm Bat	Straight	09X8692	4.47
B22JH	DPDT	On-None-On	6.3mm Bat	Right Angle w/ Bracket	09X8703	5.25
B22JP	DPDT	On-None-On	6.3mm Bat	Straight	09X8706	4.47
B22JV	DPDT	On-None-On	6.3mm Bat	Vertical w/ Bracket	09X8707	5.25
B22LP	DPDT	On-None-On	Locking Lever	Straight	09X8718	6.43
B23AB	DPDT	On-Off-On	10mm Bat	Staight w/ Bracket	09X8719	5.37
B23AP	DPDT	On-Off-On	10mm Bat	Straight	09X8722	4.70
B23JH	DPDT	On-Off-On	6.3mm Bat	Right Angle w/ Bracket	09X8730	5.56

*Illuminated

**A1P = 8mm Bat + Panel Seal Thrd Bushing

(211586)

A SERIES SUBMINIATURE TOGGLE SWITCHES

RoHS Compliant Available

NEW

NKK SWITCHES

Specifications:
- Contact Resistance: 50 milliohms maximum
- Dielectric Strength: 500V AC min between contacts for 1 minute min
- Operating Temperature: -30°C to +85°C
- Terminal Spacing: .100" x .100"
- Logic Level: 0.4VA max @ 28V AC/DC max
- Process Sealed
- PCB Mount

Mfg. Part No.	Configuration	Circuit	Toggle	PC Terminals	Stock No.	Price Each 1-24
A11AH	SPST	Off-None-On	10mm Bat	Right Angle	09X7983	4.90
A11JP	SPST	Off-None-On	6.3mm Bat	Straight	09X7997	4.16
A12AH	SPDT	On-None-On	10mm Bat	Right Angle	09X8019	4.61

CONTINUED

A SERIES SUBMINIATURE TOGGLE SWITCHES (CONT.)

Mfg. Part No.	Configuration	Circuit	Toggle	PC Terminals	Stock No.	Price Each 1-24
A12AP	SPDT	On-None-On	10mm Bat	Straight	09X8023	4.30
A12JH	SPDT	On-None-On	6.3mm Bat	Right Angle	09X8047	4.61
A12JV1	SPDT	On-None-On	6.3mm Bat	Vertical	09X8055	4.61
A13AH	SPDT	On-Off-On	10mm Bat	Right Angle	09X8101	4.74
A13AP	SPDT	On-Off-On	10mm Bat	Straight	09X8103	4.15
A13AV1	SPDT	On-Off-On	10mm Bat	Vertical	09X8106	4.74
A13JP	SPDT	On-Off-On	6.3mm Bat	Straight	09X8120	4.15
A19AP *	SPDT	On-Off-(On)	10mm Bat	Straight	09X8259	4.65

(211580)

S SERIES TOGGLE SWITCHES

RoHS Compliant Available

NEW

NKK SWITCHES

Specifications:
- Contact Resistance: 10 milliohms Max.
- Dielectric Strength: 1500VAC for 1 minute
- Operating Temperature: -30°C to +70°C
- Panel Seal / Splashproof models

5A RATED TOGGLE SWITCHES

Mfg. Part No.	Circuitry	Voltage	Stock No.	Price Each 1-24
S114	DPST	125	10X9364	5.17
S116	DPDT	125	10X9366	5.57
S116R	DPDT	125	10X9367	6.52
10A RATED TOGGLE SWITCH				
S1B	SPST	125	10X9362	3.95
20A RATED TOGGLE SWITCHES				
S1AL	SPST	125	10X9359	11.65
S1AW	SPST	125	10X9360	8.74
S1AWF	SPST	125	10X9361	9.12
S1F	SPST	125	10X9363	4.92

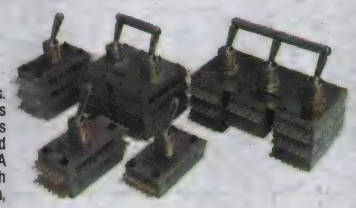
(211572)

TOGGLE SWITCHES AND ACCESSORIES

TBAR® A Division of Olympic Controls Corp.

- Dust-Tight Seal
- Rated 1A-5A
- Form C Contacts
- Available in 12 to 144 Pole, Double Throw, Maintained Action
- Connector Packages and Pre-Wired Connectors Available

Protect against normal ambient dust conditions. Designed for use in a controlled environment such as test areas, computer control rooms, broadcast studios and network management centers. **802 series** is used for control and indicator circuits and has a 1A to 5A switching capacity. **902 series** is designed to switch dry circuits to a maximum of 1A for use in data, thermocouple and instrumentation circuits.



Mfg. Part No.	Poles	Contacts	Style	Stock No.	Price Each Each	Price Each 2-4
802-12C	12	Button	Single Stack Toggle	59F726	520.13	476.21
902-12C	12	Bifurcated	Single Stack Toggle	23F1161	524.16	479.90

CONNECTOR PACKAGES

Mfg. Part No.	Plating	Contains Components	Stock No.	Price Each Each	Price Each 2-4
88601	Gold	1 Connector Block 1 Identification Label **8601-006-1** 1 Identification Label **8601-006-2** 1 Retainer **8601-3** 20 Contacts, Either **8601-1** (Tin-Plated) or **8601-1-G76** (Gold-Plated)	59F741	40.44	36.88

➤ CONTINUED ➤

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(196560)

TOGGLE SWITCHES AND ACCESSORIES (CONT.)

PREWIRED CONNECTORS

Mfg. Part No.	Plating	Description	Stock No.	Price Each Each	Price Each 2-4
88601-18C	Gold	1 Connector Block 1 Identification Label **8601-006-1** 1 Identification Label **8601-006-2** 1 Retainer **8601-3** 20 Contacts, Either **8601-1** (Tin-Plated) or **8601-1-G76** (Gold-Plated) 18″ Pre-Wired Cable, #22 AWG Wire, Color Coded: Common, Normally Open and Normally Closed. End Stripped 3/16″	44F2076	113.20	103.15

(73442)

F SERIES TOGGLE SWITCHES

RoHS Compliant Available

TE connectivity

Authorized Distributor

Specifications
- Contact rating : 6 A @250 VAC, 6 A @125 VAC
- Gold contact : 0.4 VA max. 20 V AC/DC
- Electrical life : 25,000 to 50,000 cycles
- Mechanical life : 50,000 to 100,000 cycles
- Contact resistance : Max. 10 mOhm
- Insulation resistance : Min. 1,000 MOhm
- Dielectric strength : 1,000 VAC for 1 min.
- Actuation force : Max. 19.6 N
- Panel cut-out : 6.2 mm

Features
- Wide choice of toggles, rockers, and paddles
- Wide range of switch functions
- Terminals are gold-flashed to prevent oxidation and for ease of soldering

Applications
- Industrial
- Instrumentation
- Medical equipment

Mfg. Part No.	Circuitry	Action	Contact Plating	Stock No.	Price Each 1-49
FTD09G04	SPDT	On-On	Gold	25M9530	10.19
FTN09G04	DPDT	On-None-On	Gold	21M6178	16.34
FTD0904	SPDT	On-None-On	Silver	91K9915	8.76
FTE0904	SPDT	On-Off-On	Silver	25M9532	8.32
FTF0904	SPDT	(On)-None-On	Silver	25M9533	11.26
FTN0904	DPDT	On-On	Silver	25M9534	12.03
FTR0904	DPDT	On-(On)	Silver	25M9537	15.58
FTS0904	DPDT	(On)-Off-(On)	Silver	24M2264	13.63

(192095)

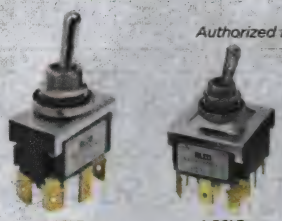
AW SERIES TOGGLE SWITCHES

RoHS Compliant Available

TE connectivity

Authorized Distributor

Specifications
- Contact rating : 20 A @250 VAC, 20 A @125 VAC, 20 A @30 VDC
- Electrical life : 20,000 cycles
- Mechanical life : 40,000 cycles
- Contact resistance : Max. 10 mOhm
- Insulation resistance : Min. 1,000 MOhm
- Dielectric strength : 1,500 VAC for 1 min.
- Actuation Force : Max. 29.4 N
- Panel cut-out : D-cut, 12.5 mm



2-POLE 4-POLE

Features
- IP67 panel mounting seal
- Sleeve and Frame perfect sealed
- Fixed contact molded-inserting construction
- Wide range switch functions available
- Meets requirements of industrial and outdoor environments

Applications
- Industrial equipment
- Heavy machinery
- Construction equipment
- Transportation vehicles
- Outdoor concert and lighting equipment
- Portable power tools

Mfg. Part No.	Circuitry	Action	Stock No.	Price Each 1-49
AWTD1504	SPDT	On-None-On	58M3885	23.03
AWTE1504	SPDT	On-Off-On	58M3886	47.14
AWTF1504	SPDT	On-None-(On)	58M3887	25.03
AWTG1504	SPDT	(On)-Off-(On)	58M3888	25.03
AWTN1504	DPDT	On-On	13M4592	22.15
AWTR1504	DPDT	On-None-(On)	13M4593	49.49
AWTS1504	DPDT	(On)-Off-(On)	13M4620	34.67
AWTT1504	DPDT	On-Off-(On)	13M4610	55.00
A4TK15W04	4PDT	On-None-Off	03P2067	84.47
A4TN15W04	4PDT	On-On	03P2068	89.59
A4TP15W04	4PDT	On-Off-On	03P2069	62.01

(192094)

SWITCHES – TOGGLE

ALCOSWITCH TT SERIES SUBMINIATURE TOGGLES

RoHS Compliant Available

TE connectivity

Authorized Distributor

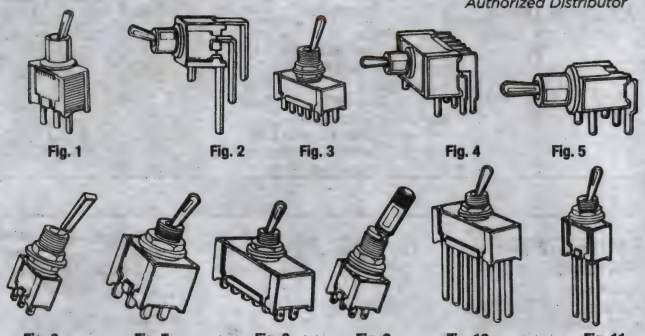


Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5

Fig. 6 Fig. 7 Fig. 8 Fig. 9 Fig. 10 Fig. 11

TT Series fit 0.100″ grid PC. Units indicating letter **"G"** in mfg. part no. have gold contacts rated 0.4VA max. @ 20VDC or peak AC; other **TT** units have silver contacts rated 3A, 125VAC or 28VDC resistive. Mfg. part no. code for PC terminal table below: **PC** = straight terminals, **RA** = right angle, **VRA** = vertical right angles. Mfg. part no. suffix indicates actuator dimension and bushing: **1** =0.21″, **2** =.29″, **3** =.37″, **6** =.590″, **7** =.485″, **8**=.530″, **9**=.415″. **T** = 10-48 bushing, **T1/4** = ¼-40 bushing.

PC TERMINALS

Mfg. Part No.	Fig.	Circuitry	Action	Stock No.	Price Each 1-9	10-24	25-49	50-99
● TT11AGPC104	1	SPST	On-None-Off	16M2504	11.13	10.14	9.55	8.78
● TT11DGPC104	1	SPDT	On-None-On	69K7048	5.95	5.52	5.36	5.22
● 1825219-6	1	SPDT	On-Off-On	10M8676	10.97	9.77	8.92	8.57
● TT21NGPC104	1	DPDT	On-On	36K2418	10.75	10.19	9.63	9.34
● TT21NGPC9T1/404	1	DPDT	On-On	16M2513	11.72	10.44	9.53	9.15
● TT21NGRA104	1	DPDT	On-On	29M8707	11.68	10.40	9.49	9.12
● TT11DGVRA104	2	SPDT	On-None-On	16M2505	9.99	9.47	8.95	8.68
● TT41NGPC9T1/4	3	4PDT	On-On	46F2270	30.44	27.67	25.37	23.42
● TT41NGRA1	4	4PDT	On-On	46F2267	26.11	23.84	22.16	20.26
● TT11DGRA104	5	SPDT	On-None-On	69K7049	9.57	8.33	7.66	7.23
TT11DGRA9T1/4	5	SPDT	On-None-Off	13F4050	12.44	11.08	10.11	9.72
TT21NG-RA-7T-1/4	5	DPDT	On-None-On	14F3153	29.44	27.17	25.35	23.53
SOLDER TERMINALS								
● TT13A2T04	7	SPST	On-None-Off	16M2507	12.10	11.21	10.62	9.45
● TT13A3T04	7	SPST	On-None-Off	16M2508	12.47	11.10	10.13	9.73
TT13A6T0	6	SPST	On-None-Off	13F3990	31.26	27.83	25.40	24.41
● TT13D2T04	8	SPDT	On-None-On	16M2510	9.16	8.68	8.20	7.96
● TT13D3T04	8	SPDT	On-None-On	16M2511	12.33	10.98	10.03	9.63
● TT13D7T1/404	6	SPDT	On-On	16M2512	25.52	22.72	20.74	19.93
● TT23K9T1/404	7	DPST	On-Off	16M2514	17.91	15.95	14.56	13.98
● TT43N2T04	9	4PDT	On-On	16M2515	27.14	24.16	22.06	21.19
WIRE WRAP TERMINALS								
● TT11DGWW2T04	11	SPDT	On-None-On	16M2506	10.78	9.60	8.76	8.42
● TT21NGWW2T04	10	DPDT	On-On	14M4074	23.17	20.64	18.84	18.10
● TT23N2T04	10	DPDT	On-None-On	74K3508	13.54	12.95	12.42	11.90

(4726)

ALCOSWITCH GEMINI A SERIES MINIATURE TOGGLE SWITCHES

RoHS Compliant Available

TE connectivity

Authorized Distributor

- Contact rating: gold 0.04VA at 20VDC; silver 2A at 250VAC, 5A at 125VAC
- Epoxy sealed terminals
- Dielectric strength: 1,000Vrms
- Contact resistance: 30mΩ. –30°C to +85°C
- Hardware supplied with toggle models includes 2 hex nuts, 1 lockwasher, 1 locking ring
- Mfg. part nos. with **Q suffix** are UL recognized, CSA certified
- Wire lug terminals, silver contacts
- **B suffix** = gold.

LONG PC TERMINAL, BAT TOGGLE, ¼-40 THREADED, 0.35″ L, SLOTTED BUSHING, GOLD CONTACTS

Mfg. Part No.	Circuitry	Action	Stock No.	Price Each 1-24	25-49	50-99
● A101SYCB04	SPDT	On-On	69K7054	3.40	3.09	2.83
● A103SYCB04	SPDT	On-Off-On	88K0511	3.86	3.51	3.22
● A101SCWZQ04	SPDT	On-On	72R6939	4.12	3.75	3.44
● A101SYCQ04	SPDT	On-On	72R6942	2.85	2.59	2.39
● A103SYCQ04	SPDT	On-Off-On	72R6943	3.37	3.05	2.81
● A105SYCQ04	SPDT	(On)-Off-(On)	72R6947	4.26	3.92	3.61
● 5-1825137-1	SPDT	On-Off-(On)	25R3493	4.53	4.00	3.61
● A201SYCB04	DPDT	On-None-On	51M8533	2.96	2.68	2.46

➤CONTINUED➤

ALCOSWITCH GEMINI A SERIES MINIATURE TOGGLE SWITCHES (CONT.)

Mfg. Part No.	Circuitry	Action	Stock No.	Price Each 1-24	25-49	50-99
● A201SYCQ04	DPDT	On-On	72R6952	3.27	2.97	2.74
● A203SYCQ04	DPDT	On-Off-On	72R6956	3.45	3.14	2.88
● A205SYCQ04	DPDT	(On)-Off-(On)	72R6957	3.87	3.24	2.99
● A208SYCB04	DPDT	(On)-On	16M2409	3.91	3.47	3.13
LONG BAT TOGGLE, ¼-40 THREADED, 0.35″ L, SLOTTED BUSHING						
● A101SYZQ04	SPDT	On-On	69K7055	2.80	2.56	2.35
● 2-1825137-0	SPDT	On-Off-On	69K7051	3.86	3.43	3.13
● A107SYZQ04	SPDT	On-Off-(On)	16M2405	4.15	3.62	3.39
● A101SD9AB04	SPDT	On-On	72R6940	3.06	2.78	2.56
● A101SD9V30B04	SPDT	On-On	72R6941	3.45	3.14	2.90
● A101SYZB04	SPDT	On-On	06R5528	3.68	3.36	3.08
● A103SYWB04	SPDT	On-Off-On	72R6944	5.07	4.51	4.17
● A103SYWQ04	SPDT	On-Off-On	72R6945	4.76	4.24	3.92
● A103SYZB04	SPDT	On-Off-On	72R6946	3.77	3.51	3.22
● A108SYZQ04	SPDT	On-None-(On)	74K2681	2.78	2.53	2.45
● A201SYZB04	DPDT	On-On	72R6953	3.81	3.46	3.17
● A201TZQ04	DPDT	On-On	72R6954	6.17	5.87	5.70
● A101SD9V30Q04	SPDT	On-None-On	53W3015	3.63	3.29	3.04
● A101SYAB04	SPDT	On-None-On	89M4692	4.13	3.96	3.79
● A105SYZB04	SPDT	(On)-Off-(On)	08R0900	4.32	3.93	3.60
● A207SYCQ04	DPDT	On-Off-(On)	83R0405	5.07	4.51	4.17
● A105T1ZQ04	SPDT	(On)-Off-(On)	50T4340	7.22	6.43	5.95
SHORT BAT TOGGLE						
● A101MD9AB04	SPDT	On-On	52M8765	3.21	2.78	2.56
● A101MD9AQ04	SPDT	On-On	72R6937	3.45	3.14	2.87
● A101MD9AV2B04	SPDT	On-On	72R6938	3.06	2.78	2.56
● A201MD9AB04	DPDT	On-On	72R6949	3.04	2.77	2.54
● A201MD9AQ04	DPDT	On-On	72R6950	4.94	4.45	4.30
● A201MD9AV2Q04	DPDT	On-On	72R6951	3.02	2.74	2.53
● A203MD9AB04	DPDT	On-Off-On	72R6955	3.55	3.23	2.96
● A101MD9AG04	SPDT	On-None-On	75R0189	3.56	3.23	2.99
● A201MYZQ04	DPDT	On-None-On	58M0052	3.08	2.97	2.89
● A203SYZQ04	DPDT	On-Off-On	02M1076	3.81	3.60	3.31
● A207SYZQ04	DPDT	On-Off-(On)	02M5938	3.82	3.50	3.24
● A208SYZQ04	DPDT	On-(On)	69K6661	3.18	2.88	2.64
● A211SYZQ04	DP3T	On-On-On	16M2410	5.92	5.63	5.50
● A213SYZQ04	DPDT	On-On-(On)	16M2411	7.43	6.75	6.19
● A215SYZQ04	DPDT	(On)-On-(On)	16M2412	6.63	6.31	6.14
FLATTED TOGGLE, ¼-40 THREADED, 0.35″L, SLOTTED BUSHING						
● A101P3ZQ04	SPDT	On-On	04M7050	4.35	3.96	3.63
● A107P3ZQ04	SPDT	(On)-Off-On	88K2786	5.44	4.95	4.55
● A108P3ZQ04	SPST	On-(On)	80K0975	4.42	4.00	3.67
● A105P3ZQ04	SPDT	(On)-Off-(On)	80K9391	4.15	3.78	3.46
● A211P3ZQ04	DPDT	On-On-On	55T0877	5.41	4.92	4.51
● A201P3ZQ04	DPDT	On-None-On	85K8698	4.49	3.96	3.63
● A205P3ZQ04	DPDT	(On)-Off-(On)	16M2407	4.66	4.24	3.88
● A207P3ZQ04	DPDT	(On)-Off-On	06M5116	5.27	4.80	4.39
LOCKING TOGGLE						
● A101KZQ04	SPDT	On-On	28M8136	5.96	5.41	4.97
● A201KAB04	DPDT	On-On	72R6948	8.04	7.15	6.62
● A201KZQ04	DPDT	On-On	14M9102	4.92	4.56	4.18

(4780)

ALCOSWITCH INDUSTRIAL-RATED AC/DC TOGGLE SWITCHES

RoHS Compliant Available

TE connectivity

Authorized Distributor

Quick-make, quick-break action switches feature nonteasable, self-cleaning, wiping action contacts. All feature On-None-Off switching action *except* **Mfg. Part No. 8690K2** which is On-None-On. Units are one-hole mounting and have screw terminals. Mounting hardware, consisting of one hexagon locknut and one nickel-plated facenut, and terminal hardware are furnished unassembled. 0.071″ wide x 0.038″ deep keyway provides anti-rotation feature.

BATON TOGGLE

Mfg. Part No.	TE Part#	Circuitry	Current Rating (A)	Toggle Length (mm)	Bushing Length (mm)	Stock No.	Price Each Each
● 7361K5	1520228-5	SPST	10	16.66	11.91	41F524	26.09
● 8910K207	1-1520237-1	DPST	8	16.28	8.74	93C9995	28.86

➤CONTINUED➤

ALCOSWITCH INDUSTRIAL-RATED AC/DC TOGGLE SWITCHES (CONT.)

Mfg. Part No.	TE Part#	Circuitry	Current Rating (A)	Toggle Length (mm)	Bushing Length (mm)	Stock No.	Price Each Each
7320K3	1520237-2	DPST	8	16.66	11.91	23F251	14.08
8910K223	1520213-4	DPST	8	17.48	11.91	07H8931	16.91
7320K50*	1520281-1	DPST	8	19.25	11.91	46F1870	13.01
8910K94	1520117-1	DPST	10	16.12	11.91	94C1115	58.52
7360K7	1520228-3	DPST	10	16.66	8.74	23F270	22.03
7360K8	1520228-4	DPST	10	17.04	11.5	23F253	22.04
8910K158	1520270-1	DPST	10	18.64	11.91	07H8918	34.85
7410K4	1520231-1	DPST	20	19.45	5.2	07H8542	87.32
8910K202	1520230-9	DPST	20	20.62	11.91	07H8922	58.39
7402K4	1520230-2	DPST	20	20.65	11.91	23F255	33.50
8910K201	1-1520237-0	DPST	8	17.07	11.91	07H8921	26.31
8690K2	1520204-1	DPDT	10	20.65	11.91	23F229	52.80
2-1520204-1	2-1520204-1	DPDT	10	...	...	13T7997	77.97

* Double Insulated

BATON WITH BALL TOGGLE

7320K13	1520135-2	DPST	8	12.7	11.5	23F039	41.71
7402K5	1520137-1	DPST	20	12.7	10.41	23F020	80.69
7360K13	1520136-2	DPST	10	12.7	11.5	23F016	33.11
8337K2	1520192-3	3P3T	20	24.74	...	96B0458	215.92

(4874)

PUSHBUTTON SWITCH BOOTS

RoHS Compliant Available

APM HEXSEAL

Fig. 1

Fig. 2

Fig. 3

Silicone rubber boot completely covers actuator. Tolerant to sunlight, weather, salt spray, ozone, most acids/cleaning solvents. Units with **"RFI" suffix** are EMI-shielded. Meet MIL-B-5423. UL recognized, CSA certified.

Mfg. Part No.	Thread Size	Flats	Plunger Heights	Color	Fig.	Stock No.	Price Each 1-49	50-99
N3030	15/32-32NS-2B	0.625"	0.281"	Gray	1	30F006	4.05	3.76
N3030 2605	15/32-32NS-2B	0.625"	0.281"	Green	1	95B1094	6.18	5.74
N3030 2619	15/32-32NS-2B	0.625"	0.281"	Yellow	1	95B1095	6.18	5.74
N3030 2508	15/32-32NS-2B	0.625"	0.281"	Red	1	95B1096	6.54	6.08
NC3030	15/32-32NS-2B	0.625"	0.438"	Gray	1	30F007	4.05	3.76
NC3030-4	15/32-32NS-2B	0.625"	0.438"	Clear	1	94B4760	5.74	5.34
NH3030	1/2-32NS-2B	0.625"	0.281"	Gray	1	30F008	5.32	4.94
N5040	1/4-40NS-2B	0.375"	0.141"	Gray	1	30F012	6.14	5.69
N-5040-G	1/4-32NS-2B	0.375"	0.203"	Gray	1	30F065	5.80	5.38
N5040R	1/4-40NS-2B	0.375"	0.203"	Gray	1	30F066	4.82	4.48
1221/12	3/8-27NS-2B	0.641"ø	0.609"	Gray	2	18C2994	3.08	2.86
N3030RFI	15/32-NS-2B	0.625"	0.281"	Gray	1	97F9122	20.26	18.82
1221/15	15/32-32NS-2B	0.766"ø	0.400"	Gray	2	14C7323	3.78	3.52
C1221/21/4	3/8-27NS-2B	0.641"ø	0.330"	Clear	2	20C7788	3.18	2.95
C1221/23	3/8-32NEF-2B	0.641"ø	0.330"	Clear	2	20C7789	3.18	2.95

ARMORED PUSHBUTTON SWITCH BOOT

1238-1	15/32-32NS-2B	0.750"	0.438"	Armored	3	51F3906	33.24	30.87

(5076)

TOGGLE SWITCH BOOTS

RoHS Compliant Available

APM HEXSEAL

Half-Toggle

Full-Toggle

Armored

Silicone rubber boots contain molded-in hex mounting nut. Units seal both switch and panel-cutout in which switch is mounted. Tolerant to sunlight, weather, salt spray, ozone, most acids/cleaning solvents. Units with RFI suffix are EMI-shielded. UL recognized, CSA certified.

Mfg. Part No.	Thread Size	Throat Size (I.D.)	Height	Color	Stock No.	Price Each 1-49	50-99
N10301	15/32-32NS-2B	0.219"	0.844"	Gray	30F000	3.92	3.64
N1030 37	15/32-32NS-2B	0.219"	0.844"	Green	95B1097	6.18	5.74
N1030 2503	15/32-32NS-2B	0.219"	0.844"	Yellow	95B1098	6.54	6.08
N1030 2508	15/32-32NS-2B	0.219"	0.844"	Red	95B1099	6.63	6.17
N1030A†	15/32-32NS-2B	0.219"	0.875"	Gray Cap*	30F001	12.67	11.77
N1030B††	15/32-32NS-2B	0.078"	0.437"	Gray	30F002	3.92	3.64
N5030	1/4-40NS-2B	0.104"	0.422"	Gray	30F011	6.06	5.62

CONTINUED

TOGGLE SWITCH BOOTS (CONT.)

Mfg. Part No.	Thread Size	Throat Size (I.D.)	Height	Color	Stock No.	Price Each 1-49	50-99
N5030L	1/4-40NS-2B	0.062"	0.500"	Gray	30F005	5.46	5.08
N5032B††	1/4-40NS-2B	0.047"	0.250"	Gray	30F003	4.88	4.54
C1131/27	15/32-32NS-2B	0.219"	0.937"	Black	83F8121	3.82	3.56
C1131/28	15/32-32NS-2B	0.219"	0.937"	Black	16F4923	3.82	3.54
50154	15/32-32NS-2B	0.280"	1.094"	Gray	31C1093	5.45	5.03
1131/26 2501	15/32-32NS-2B	0.219"	1.093"	Gray	90B0141	4.68	4.33
N5030S	1/4-40NS-2B	0.062"	0.594"	Gray	14C7320	4.82	4.48
IN1030RFI	15/32-32NS-2B	0.219"	0.844"	Gray	97F9121	11.64	10.81
N5030LBLACK	1/4-40NS-2B	0.062"	0.500"	Black	36H4783	7.66	7.11
N5030LRED	1/4-40NS-2B	0.062"	0.500"	Red	90B6214	7.24	6.72

*Nickel-plated brass; † Armored; †† Half-Toggle

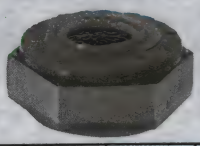
(5077)

ROTARY SHAFT SEALS

RoHS Compliant Available

APM HEXSEAL

For standard rotary switch/potentiometer shafts passing through panel cutouts or housings. Seal both shaft and panel cutout. Silicone rubber is tolerant to sunlight, weather, salt spray, ozone, most acids/cleaning solvents. **"RFI suffix"** in mfg. part no. indicates seals are EMI-shielded. Meet MIL-B-5423. UL recognized, CSA certified.



Mfg. Part No.	Thread Size	Max. Shaft Size	Hex Nut Flat	Color	Stock No.	Price Each 1-49	50-99
N9030 X 1/4	3/8-32NEF-2B	0.250"	0.500"	Gray	30F013	3.88	3.60
N9030X1/4RFI	3/8-32NEF-2B	0.250"	0.500"	Gray	97F9123	15.03	13.95
N9040 X 1/8	1/4-32NEF-2B	0.125"	0.375"	Gray	30F014	4.50	4.18
N9042 X 1/8	1/4-32NEF-2B	0.125"	0.500"	Gray	92B2259	4.50	4.18

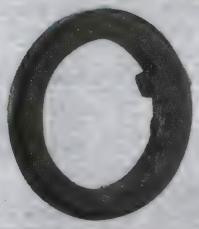
(55370)

SEALED-SWITCH BUSHING SEAL

RoHS Compliant Available

APM HEXSEAL

Self-sealing washer for use with standard panel mount, internally-sealed switches having 15/32-32 threaded bushings. Use for behind panel mounting. Seals panel cutout through which the switch bushing passes. Silicone rubber is tolerant of sunlight, ozone, weather, salt spray, and most acids/cleaning solvents. Meets military specification MIL-B-5423.



Mfg. Part No.	Compatible Switch Bushing	Washer Diameter	Washer Thickness	Color	Stock No.	Price Each 1-49	50-99
60064	15/32-32	0.677"	0.120"	Gray	31C1094	2.82	2.63

(68219)

SWITCH OPERATOR AND BASE

NEW

RoHS Compliant Available

EATON

- Oversized operator in black, red and yellow color options
- Button integrated directly into an enclosure
- Base mounting contact blocks allow for simple wiring and installation

Mfg. Part No.	For Use With	Operating Force Max	Stock No.	Price Each 1-4
FAK-R	FAK Series Palm Switches	40	17W5666	91.60
FAK-R-V-Y	FAK Series Palm Switches	60	17W5667	136.01
FAK-S	FAK Series Palm Switches	40	17W5668	96.13
FAK-Y	FAK Series Palm Switches	40	17W5669	96.13

ASSEMBLY HARDWARE

Mfg. Part No.	Description	Stock No.	Price Each 1-9
FAK-IU	FAK Series Palm Switches	17W5665	32.05

(211951)

SWITCHES – ACCESSORIES

EH SERIES ABS KNOBS

RoHS Compliant Available

EHC America's Largest Selection of Knobs For Over 45 Years
Electronic Hardware Corporation

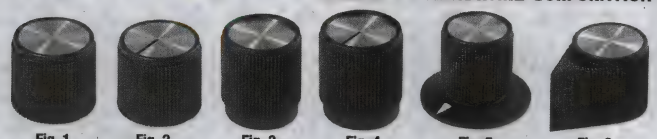


Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6

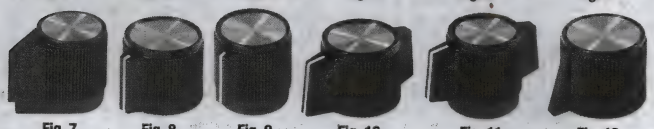


Fig. 7 Fig. 8 Fig. 9 Fig. 10 Fig. 11 Fig. 12

EH71-0 SERIES 0.500″ (12.70) DIAMETER FOR 0.125″ (3.18) SHAFTS

Mfg. Part No.	Description	Fig.	Stock No.	Price Each 1-49
● EH71-0N1S	Round	1	95F6979	2.56
● EH71-0C1S	Round with Line	2	95F6980	2.77
● EH710D1S	Ring-Skirted	3	95F6981	2.59
● EH71-0E1S	Ring-Skirted with Line	4	95F6982	2.69
● EH71-0F1S	Dial with Arrow	5	95F6983	4.12
● EH71-0P1S	Pointer	6	95F6984	2.81
● EH71-0K1S	Ring-Skirted Pointer	7	95F6985	2.81
● EH710NP1S	Round with Pointer	12	95F6986	2.85
EH71-1 SERIES 0.700″ (17.78) DIAMETER FOR 0.250″ (6.35) SHAFTS				
● EH71-1N2S	Round	1	95F6987	2.77
● EH71-1C2S	Round with Line	2	95F6988	2.83
● EH71-1D2S	Ring-Skirted	3	95F6989	2.77
● EH711E2S	Ring-Skirted with Line	4	95F6990	2.80
● EH71-1F2S	Dial with Arrow	5	95F6991	2.83
● EH71-1P2S	Pointer	6	95F6992	2.93
● EH71-1K2S	Ring-Skirted Pointer	7	95F6993	2.97
● EH71-1SB2S	Single Bar	8	95F6994	3.01
● EH71-1DSB2S	Ring-Skirted Single Bar	9	95F6995	3.25
● EH71-1GG2S	Double Bar	10	95F6996	3.26
● EH711HH2S	Ring-Skirted Double Bar	11	95F6997	3.20
EH71-2 SERIES 0.900″ (22.86) DIAMETER FOR 0.250″ (6.35) SHAFTS				
● EH712N2S	Round	1	95F6999	3.02
● EH71-2C2S	Round with Line	2	95F7000	3.11
● EH712F2S	Dial with Arrow	5	95F7003	4.51
● EH71-2P2S	Pointer	6	95F7004	3.16
● EH71-2GG2S	Double Bar	10	95F7008	3.34
EH71-3 SERIES 1.250″ (31.75) DIAMETER FOR 0.250″ (6.35) SHAFTS				
● EH71-3N2S	Round	1	95F7011	3.14
● EH71-3C2S	Round with Line	2	95F7012	3.28
● EH71-3F2S	Dial with Arrow	5	95F7015	4.72
EH71-4 SERIES 1.750″ (44.45) DIAMETER FOR 0.250″ (6.35) SHAFTS				
● EH71-4N2S	Round	1	95F7016	3.48
● EH71-4C2S	Round with Line	2	95F7017	3.36
● EH71-4E2S	Ring-Skirted with Line	4	95F7019	3.57

(5213)

SHAFT LOCKS

RoHS Compliant Available

EHC America's Largest Selection of Knobs For Over 45 Years
Electronic Hardware Corporation

Prevent control shaft from rotating under shock, vibration, or accidental contact. Tapered nylon collar grips control shaft tightly and exerts even, frictional drag. All are shaft-type locks except **SL-110B**. **Mfg. part no. SL-110B** is a knob-type lock, and should be used with **90 series** or larger knobs. **Mfg. part no. SL-105B** has a shaft diameter of ⅛″; all others ¼″. Mount in place of nut and washer on most potentiometers.

Shaft Lock Knob Lock

Mfg. Part No.	Thread NEF2	Stock No.	Price Each
● SL-100B	⅜-32	26F314	5.15
● SL101R	⅜-32	26F937	9.34
● SL-105B	¼-32	26F315	5.23
● SL110B	⅜-32	26F938	4.77

(5255)

KNOB LOCKS

RoHS Compliant Available

EHC America's Largest Selection of Knobs For Over 45 Years
Electronic Hardware Corporation

Hold precise, critical control settings under shock or vibration. Mount directly on threaded bushing, replacing nuts and washers. ⅛ turn of skirt locks shaft. A suffix of **G** in the mfg. part no. indicates a matte finish; others have a mirror finish. Can be used with **70, 90** or **125 series** unskirted round knobs; *order separately on page 1831.*

Mfg. Part No.	Fits Series	Dia.	Stock No.	Price Each Each
● KL701	70	1.000″	26F308	20.27
● KL701G	70	1.000″	26F309	13.34
● KL901	90	1.313″	26F310	24.72
● KL901G	90	1.313″	26F311	24.46
● KL1251	125	1.625″	26F312	62.85
● KL1251G	125	1.625″	26F313	28.17

(5253)

DESIGNER SERIES KNOBS

RoHS Compliant Available

EHC America's Largest Selection of Knobs For Over 45 Years
Electronic Hardware Corporation

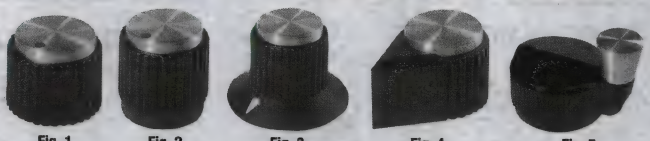


Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5

70 SERIES 0.70″ DIAMETER

Mfg. Part No.	Description	Fig.	Stock No.	Price Each 1-49	50-99	100+
● PC1N2B	Round, Plain Aluminum Cap	1	34C8820	2.84	2.60	2.38
● DC1N2B	Ring Skirt, Aluminum Cap*	2	34C8795	3.35	3.06	2.82
● PC1F2B	Dial w/Arrow, Aluminum Cap	3	29C0178	4.70	4.30	3.95
● PC1P2B	Pointer, Aluminum Cap	4	34C8821	3.08	2.82	2.59
90 SERIES 0.90″ DIAMETER						
● DC2D2B	Ring Skirt, Aluminum Cap*	2	34C8796	17.13	9.43	5.99
● PC2F2B	Dial w/Arrow, Aluminum Cap	3	27C7094	4.91	4.49	4.11
125 SERIES 1.25″ DIAMETER						
● PC3F2B	Dial w/Arrow, Aluminum Cap	3	29C0179	5.24	4.78	4.40
● DS125-6-2G	Crank w/Metal Handle	5	83F7392	18.77	17.14	15.74

*With black dot
(32203)

3000 SERIES FINE KNURL INSTRUMENT KNOBS

RoHS Compliant Available

EHC America's Largest Selection of Knobs For Over 45 Years
Electronic Hardware Corporation

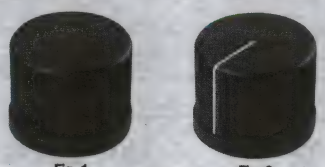
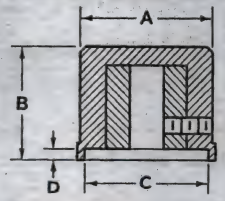


Fig. 1 Fig. 2



3000 series ABS very fine knurl plastic knob was designed for high quality instrument requirements. Nickel-plated insert, two set screws and a black matte finish.

Mfg. Part No.	Fig.	Dimensions (in.) A dia.	B dia.	C dia.	D dia.	Shaft	Stock No.	Price Each Each
● 3008-1-B	1	0.500	0.625	0.430	0.070	0.125	91F2233	4.24
● 3008-2-B	1	0.500	0.625	0.430	0.070	0.250	91F2234	4.26
● 3440-1-B	2	0.500	0.625	0.430	0.070	0.125	91F2235	4.76
● 3440-2-B	2	0.500	0.625	0.430	0.070	0.250	91F2236	4.68
● 3489-1-B	2	0.720	0.620	0.625	0.030	0.125	91F2239	5.00
● 3489-2-B	2	0.720	0.620	0.625	0.030	0.250	91F2240	5.01
● 3009-2-B	1	0.850	0.600	0.680	0.125	0.250	91F2242	4.76
● 3441-1-B	2	0.850	0.600	0.680	0.125	0.125	91F2243	5.58
● 3441-2-B	2	0.850	0.600	0.680	0.125	0.250	91F2244	5.66
● 3010-1-B	1	0.975	0.750	0.810	0.225	0.125	91F2245	5.01
● 3010-2-B	1	0.975	0.750	0.810	0.225	0.250	91F2246	5.01
● 3442-2-B	2	0.975	0.750	0.810	0.225	0.250	91F2248	5.75

(13145)

400 SERIES CONTROL KNOBS

RoHS Compliant Available

EHC — America's Largest Selection of Knobs For Over 45 Years — Electronic Hardware Corporation

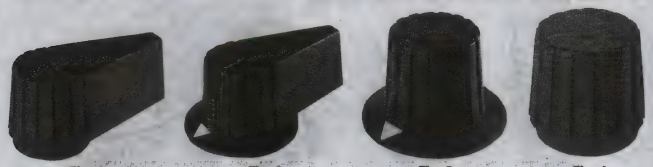


Fig. 1 Fig. 2 Fig. 3 Fig. 4

High-impact acrylonitrile-styrene (ABS), with lusterless black finish. Supplied with metal bushings and two set screws.

Mfg. Part No.	Fig.	Stock No.	Price Each Each
407 SERIES 0.72" DIAMETER ⅛" SHAFTS			
407D1B	3	34C9067	6.74
407 SERIES 0.72" DIAMETER 1/4" SHAFTS			
407D2B	3	34C9068	6.92
407PD2B	2	34C9069	7.71
407R2B	4	40C2144	4.36
409 SERIES 0.875" DIAMETER 1/4" SHAFTS			
409D2B	3	34C9070	7.32
409P2B	1	26C9858	7.14
409PD2B	2	30C9114	9.37
409R2B	4	34C9071	4.83
412 SERIES 1.25" DIAMETER 1/4" SHAFTS			
412D2B	3	34C9072	7.56
412P2B	1	34C9073	6.17

(5254)

MS91528 STYLE BLACK KNOBS

RoHS Compliant Available

EHC — America's Largest Selection of Knobs For Over 45 Years — Electronic Hardware Corporation

Fig. 1 Fig. 2 Fig. 3 Fig. 4

Fig. 5 Fig. 6 Fig. 7 Fig. 8

High-impact polycarbonate with corrosion-resistant nickel-plated brass inserts and 2 steel set screws. Suffix "S" indicates black knob with gloss finish. Suffix "B" indicates black knob with matte finish. *Order optional knob lock for* **70, 90** *and* **125 series** *separately on page 1830.*

Mfg. Part No.	Description	Fig.	Stock No.	Price Each Each
0.50" DIAMETER FOR ¼" SHAFT				
MS91528-0N1S	Unskirted	1	98B9786	5.27
MS91528-0N1B	Unskirted	1	98B9785	5.51
MS91528-0D1S	Ring-Skirted	2	98B9784	5.58
MS91528-0D1B	Ring-Skirted	2	98B9783	5.66
MS91528-0F1B	Dial-Skirted with Arrow	3	13C3046	7.58
0.70" DIAMETER FOR 1/8" SHAFT				
MS91528-1D1B	Ring-Skirted Without Dot	2	98B9789	5.69
MS91528-1F1B	Dial-Skirted With Arrow	3	98B9791	7.54
MS91528-1P1B	Pointer	4	98B9799	6.02
MS91528-1K1S	Skirted Pointer	5	98B9795	5.82
MS91528-1K1B	Skirted Pointer	5	98B9794	6.08
0.70" DIAMETER FOR 1/4" SHAFT				
MS91528-1N2S	Round Without Dot	1	98B9798	5.59
MS91528-1N2B	Round Without Dot	1	98B9797	5.93
MS91528-1D2S	Ring-Skirted Without Dot	2	98B9790	5.90
MS91528-1D2B	Ring-Skirted Without Dot	2	36C2687	5.85
MS91528-1F2S	Dial-Skirted With Arrow	3	98B9793	7.57
MS91528-1F2B	Dial-Skirted With Arrow	3	98B9792	7.45
MS91528-1P2S	Pointer	4	98B9801	6.05
MS91528-1P2B	Pointer	4	98B9800	6.14
MS91528-1K2B	Ring-Skirted Pointer	5	88F4325	12.51
MS91528-1K2S	Ring-Skirted Pointer	5	98B9796	6.08
MS91528-1B2S	Dial-Skirted Bar Pointer	7	98B9788	8.82

➤CONTINUED➤

MS91528 STYLE BLACK KNOBS (CONT.)

Mfg. Part No.	Description	Fig.	Stock No.	Price Each Each
0.70" DIAMETER FOR 1/4" SHAFT				
MS91528-1B2B	Dial-Skirted Bar Pointer	7	98B9787	8.94
MS91528-1E2B	Round Skirted with Indicator Dot	...	50B6899	12.03
0.90" DIAMETER FOR 1/4" SHAFT				
MS91528-2N2B	Round Without Dot	1	98B9804	6.01
MS91528-2D2B	Ring-Skirted Without Dot	2	98B9802	6.14
MS91528-2F2B	Dial-Skirted With Arrow	3	88F4383	8.01
MS91528-2P2B	Pointer	4	98B9805	6.41
MS91528-2K2B	Ring-Skirted Pointer	5	98B9803	6.43
MS91528-2E2B	Round Skirted with Indicator Dot	...	88F1283	32.21
SERIES 1.25" DIAMETER FOR 1/4" SHAFT				
MS91528-3F2B	Dial-Skirted With Arrow	3	99B1590	8.11
MS91528-3R2B	Long Bar Pointer	8	51B1016	13.21
1.75" DIAMETER FOR 1/4" SHAFT				
MS91528-4F2B	Dial-Skirted With Arrow	3	98B9806	10.46
MS91528-4S2B	Spinner	6	99B1591	33.39

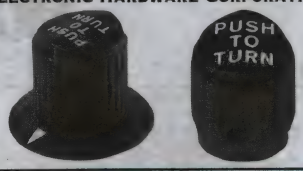
(47481)

SELF-LOCKING PUSH-TO-ENGAGE KNOBS

RoHS Compliant Available

EHC — America's Largest Selection of Knobs For Over 45 Years — Electronic Hardware Corporation

Designed for applications in which control setting must be maintained under conditions of shock and vibration. Setting can't be changed accidentally, since knobs must be depressed before movement.



Mfg. Part No.	Description	Stock No.	Price Each 1-49	Price Each 50-99
PTE 70 SERIES FOR ¼" (6.35) SHAFT				
PTE70-2-2G	Ring-skirted, Matte	95F6976	27.11	24.78
PTE70-3-2G	Dial-skirted with Arrow, Matte	95F6978	33.99	31.06

(5212)

LB SERIES MINIATURE BUZZER SWITCHES

RoHS Compliant Available

IDEC

- 80 dB Steady Sound
- 24V DC supply voltage
- Solder / tab terminals
- Black or metallic bezels available
- Also available in 12V DC version
- Also available with PC board terminal

Mfg. Part No.	Shape	Mounting	Bezel Style	Stock No.	Price Each 1-9
LB6Z-1T04	Round	Flush	Black	65W5313	48.92
LB8Z-1T04	Rectangular	Flush	Black	65W5489	48.92
LB6MZ-1T04	Round	Flush	Metallic	65W5246	58.59
LB8MZ-1T04	Rectangular	Flush	Metallic	65W5443	58.59
LB3Z-1T04	Rectangular	Standard	Black	65W4874	50.88

(209442)

INSTRUMENTATION KNOBS

RoHS Compliant Available

KEYSTONE

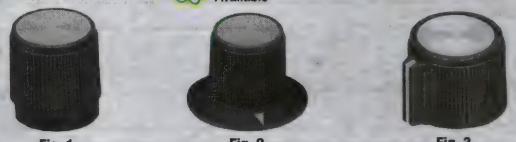


Fig. 1 Fig. 2 Fig. 3

- Material: ABS with Aluminum Inlay

Mfg. Part No.	Knob Diameter	Shaft Diameter	Screw Size	Hole Depth	Stock No.	Price Each 1-49
SKIRTED ROUND INSTRUMENTATION KNOBS — FIG. 1						
8554	12.7"	3.175	4-40	0.405"	01C6590	8.24
8555	17.78"	6.35	4-40	0.405"	65H7867	8.62
ROUND WITH DIAL INSTRUMENTATION KNOBS — FIG. 2						
8558	12.7"	3.175	4-40	0.405"	86C7260	10.48
SINGLE BAR INSTRUMENTATION KNOBS — FIG. 3						
8567	12.7"	3.175	4-40	0.405"	51B262	12.34

(78697)

SWITCHES – ACCESSORIES

PLASTIC KNOBS

RoHS Compliant Available

multicomp

Knobs feature durable ABS plastic cover with light decorative top, metal insert, and 2 setscrews. All knobs listed have a 0.250″ (6.4) diameter shaft. Color: black.

Mfg. Part No.	Diameter	Height	Stock No.	Price Each 1-49
● MC21050	0.78″	0.48″	10M7568	1.60
● MC21051	1.05″	0.63″	10M7569	2.04
● MC21052	1.30″	0.65″	10M7570	2.29
● MC21053	1.80″	0.80″	10M7571	3.09

(13458)

CONTROL KNOBS

RoHS Compliant Available

OHMITE

- Material: Thermoset
- Insert diameter: ¼″
- Set screw: 8-32

5940, 5920, 5930

5941, 5921, 5931

Mfg. Part No.	Knob Dia. (in)	Knob Height (in)	Knob Height (in)	Stock No.	Price Each 1-24
INSTRUMENT KNOBS					
● 5200E	0.781	0.469	Fluted with Indicator Line	61R9659	1.70
● 5205E	1	0.578	Fluted with Indicator Line	61R9660	2.15
● 5210E	1.281	0.656	Fluted with Indicator Line	61R9661	2.42
● 5220E	1.75	0.813	Fluted with Indicator Line	61R9662	2.92
● 5240E	1.281	0.547	Fluted with Indicator Dot	61R9663	2.28
● 5250E	1.313	0.78125	Fluted with Indicator Dot	61R9664	2.28
● 5300E	0.531	0.625	Round	61R9665	3.40
● 5302E	0.781	0.625	Round with Indicator Line	61R9666	3.56
● 5450E	0.688	0.406	Round Ribbed	61R9669	1.83
● 5475E	1	0.5	Round Ribbed	61R9671	1.86
POINTER KNOBS					
● 5400E	0.844	0.406	Round Ribbed with Pointer	61R9668	1.73
● 5470E	1.125	0.5	Round with Pointer	61R9670	2.67
● 5500E	1.125	0.563	Bar Skirted with Indicator Line	61R9672	2.15
● 5510E	0.75	0.563	Bar Skirted with Indicator Line	61R9673	2.24
● 5511E	0.75	0.563	Bar Skirted with Indicator Line	61R9674	2.43
● 5520E	1.5	0.75	Bar Skirted with Indicator Line	61R9675	2.49
● 5521E	1.5	0.75	Bar Skirted with Indicator Line	61R9676	2.96
● 5522E	1.125	0.625	Pointer Bar Skirted	61R9677	2.80
● 5600E	1.219	0.625	Pointer Bar Skirted	61R9678	2.35
● 5601E	1.219	0.625	Pointer Bar Skirted	61R9679	2.53
● 5602E	1.219	0.625	Pointer Bar Skirted	61R9680	2.46
SKIRTED KNOBS					
● 5700E	0.5	0.625	Bar Skirted with Indicator Line	61R9682	2.35
● 5701E	0.5	0.625	Bar Skirted with Indicator Line	61R9683	2.81
● 5730E	1.5	0.875	Round Fluted Skirted with Indicator Line	61R9687	3.83
● 5740E	2.031	0.938	Round Fluted Skirted with Indicator Line	61R9688	4.93
● 5800E	1.5	0.688	Round Ribbed Skirted with Indicator Line	61R9689	2.20
TRANSILLUMINATED KNOBS					
● 5940E	1.375	0.844	Bar Skirted with Indicator Line	63R1515	5.09
● 5941E	1.375	0.844	Bar Skirted with Indicator Line	63R1516	4.76
● 5920E	1.625	0.953	Bar Skirted with Indicator Line	61R9690	5.42

(146388)

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(212564)

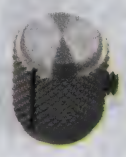
ANODIZED ALUMINUM KNOBS

RoHS Compliant Available

TE connectivity

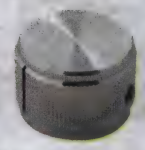
Authorized Distributor

KB-500



KD-500

KFS-400



KN-900

KLN

KN-1751

KS-500

KPN

Mfg. part no. suffix = shaft diameter in inches.

KNOBS

Mfg. Part No.	Diameter	Height	Stock No.	Price Each 1-24	Price Each 25-49
● KB500A1/8	0.500″	0.787″	57F2321	13.80	11.94
● KB500B1/8	0.500″	0.787″	57F2323	8.05	6.49
● KB500B1/4	0.500″	0.787″	57F2419	12.44	9.86
● KD500A1/8	0.500″	0.630″	61F1172	11.16	10.15
● KD500B1/8	0.500″	0.630″	57F2423	6.37	5.79
● KD500A1/4	0.500″	0.630″	61F1171	9.65	9.39
● KD500B1/4	0.500″	0.630″	57F2284	5.22	4.75
● KD700A1/4	0.750″	0.630″	61F1173	11.77	10.70
● KD700B1/4	0.750″	0.630″	57F2285	5.82	5.30
● KD900A1/4	0.940″	0.630″	61F1174	12.36	11.24
● KD1250B1/4	1.250″	0.750″	57F2286	17.52	14.94
● KFS400B1/8	0.500″	0.590″	44F1941	9.88	8.99
● KFS500B1/4	0.630″	0.630″	44F1942	9.77	9.51
● KFS600B1/4	1.000″	0.810″	44F1943	21.19	19.27
● KLN500A1/8	0.500″	0.625″	77B7780	7.18	6.87
● KLN500B1/8	0.500″	0.625″	77B7781	5.54	5.21
● KLN700A1/4	0.740″	0.625″	20F949	9.12	8.63
● KLN700B1/4	0.740″	0.625″	20F950	6.94	6.32
● KLN900B1/4	0.937″	0.625″	20F952	10.14	8.06
● KLN-900A-1/4	0.937″	0.625″	20F951	13.88	12.62
● KLN1250B1/4	1.250″	0.625″	20F954	17.33	15.43
● KN500A1/8	0.500″	0.625″	61F1177	8.02	7.29
● KN500B1/8	0.500″	0.625″	57F2287	5.95	5.52
● KN500A1/4	0.500″	0.625″	61F1176	6.71	5.96
● KN500B1/4	0.500″	0.625″	57F2288	6.74	6.12
● KN501BA1/8	0.500″	0.625″	57F2307	5.63	5.12
● KN501BA1/4	0.500″	0.625″	57F2418	10.61	10.32
● KN700A1/4	0.750″	0.625″	61F1178	7.26	6.60
● KN700B1/4	0.750″	0.625″	57F2289	10.32	9.60
● KN700BA1/4	0.750″	0.625″	57F2413	15.62	14.20
● KN900A1/4	0.949″	0.625″	61F1179	10.09	9.82
● KN900AB1/4	0.949″	0.625″	61F1183	12.94	12.58
● KN900B1/4	0.949″	0.625″	57F2290	10.05	9.78
● KN900BA1/4	0.949″	0.625″	57F2300	10.36	9.42
● KN1250A1/4	1.250″	0.625″	61F1180	14.39	12.49
● KN1250B1/4	1.250″	0.625″	57F2292	17.36	15.79
● KN1251B1/4	1.250″	0.625″	57F2411	13.26	12.74
● KN1751AS1/4	1.750″	0.620″	57F2295	32.90	28.72
● KN1751BS1/4	1.750″	0.620″	57F2296	32.22	28.97
● KN5700B1/4	0.750″	0.625″	57F2306	15.36	15.04
● KNS501BA1/8	0.750″	0.625″	57F2310	13.57	12.34
● KNS501BA1/4	0.750″	0.625″	57F2311	12.81	10.89
● KNS701BA1/4	0.750″	0.625″	57F2312	14.76	13.20
● KPN500B1/8	0.500″	0.625″	77B7812	20.51	17.48
● KPN500A1/4	0.500″	0.625″	57F2313	27.80	25.28
● KPN500B1/4	0.500″	0.625″	57F2314	16.82	16.37
● KPN700B1/4	0.750″	0.625″	57F2316	13.24	12.04
● KPN900A1/4	0.937″	0.625″	77B7815	28.58	27.78
● KPN900B1/4	0.937″	0.625″	57F2319	23.65	23.00
● KS500A1/8	0.750″	0.620″	57F2272	16.75	15.24
● KS500B1/8	0.750″	0.620″	57F2273	13.84	13.47
● KS500A1/4	0.750″	0.620″	61F920	15.55	14.14
● KS500B1/4	0.750″	0.620″	61F921	10.58	10.45
● KS700B1/4	1.120″	0.620″	61F942	11.97	11.21

(5211)

PLASTIC KNOBS WITH ALUMINUM INLAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor

Mfg. Part No.	Diameter	Height	Stock No.	Price Each 1-24
PK50B1/8	0.748″	0.550″	57F2333	1.89
PK50B1/4	0.748″	0.590″	57F2334	1.61
PK70B1/4	0.984″	0.590″	57F2335	2.64
PK90B1/4	0.125″	0.595″	57F2336	3.45
PK1100B1/4	0.700″	0.530″	57F2354	2.39
PKG40B1/8	0.437″	0.472″	57F2368	1.37
PKG50B1/4	0.551″	0.512″	57F2370	1.86
PKG50B1/8	0.551″	0.512″	57F2369	1.83
PKG70B1/8	0.74″	0.559″	14H7710	4.55
PKG70B1/4	0.740″	0.559″	57F2371	5.27
PKG90B1/4	0.862″	0.550″	44F1944	3.55
PKG100B1/4	1.055″	0.550″	57F2372	3.65
PKGP70B1/4	0.740″	0.550″	57F2374	3.67
PKE60B1/4	0.626″	0.472″	57F2343	2.25
PKE90B1/4	0.890″	0.512″	57F2344	3.25
PKES60B1/4	0.748″	0.470″	57F2346	2.06
PKES60B1/8	0.748″	0.470″	57F2345	2.29
PKES70B1/4	0.855″	0.526″	57F2347	2.13
PKES90B1/4	1.012″	0.570″	57F2348	2.11
PKES120B1/4	1.296″	0.628″	57F2349	1.97
PKA50B1/4	0.795″	0.590″	57F2357	2.04
PKA50B1/8	0.795″	0.590″	57F2356	1.64
PKA70B1/4	0.980″	0.750″	57F2358	2.29
PKA90B1/4	1.380″	0.840″	57F2359	3.44
PKB70B1/4	1.120″	0.600″	57F2341	3.19
PKB90B1/4	1.500″	0.820″	57F2342	3.40
PKD60B1/4	0.800″	0.520″	57F2337	5.14
PKD70B1/4	1.020″	0.610″	57F2338	2.81
PKD60B101/8	0.800″	0.520″	57F2339	2.90
PKD70B101/4	1.020″	0.610″	57F2340	2.59
PKS1104B1/4	1.120″	0.670″	57F2364	6.90
PKS1103B101/4	1.165″	0.670″	57F2365	5.54
PKS1106B1/4	1.170″	0.670″	57F2366	4.05
PKS1105B101/4	1.170″	0.670″	57F2367	3.51
PKS90B1/4	1.420″	0.596″	57F2362	4.40
PKS90B101/4	1.420″	0.596″	57F2363	5.52
PKF50B1/8	0.670″	0.650″	57F2424	2.96
PKX-60B-1/4	0.570″	0.598″	26F795	5.17
PKX-110B-1/4	1.200″	0.750″	26F797	12.93

(5250)

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(212565)

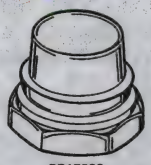
SPLASHPROOF TOGGLE AND PUSHBUTTON SWITCH SEALS

RoHS Compliant Available

TE connectivity

Authorized Distributor

- For toggle, pushbutton switching applications.
- Protect against contaminants such as dirt, dust, gas, liquids
- Sealing boots are flexible black neoprene
- **Mfg. part no. BP5890** mount color is nickel
- **Mfg. part no. BP5900** mount color is black.



BP15320

Mfg. Part No.	Thread Size	Use With Series:	Stock No.	Price Each 1-24	25-49	50-99	100-249
B1048004	10-48	TT	12M5966	5.37	5.07	4.79	4.48
BP1048004	10-48	TP	14M4319	4.98	4.84	4.77	4.71
BPA1440004	...	...	39M3352	5.42	4.86	4.24	3.86
BP1532004	15/32-32	MPG, MSPF	42M1199	5.12	4.59	4.18	3.83
B1532004	15/32-32	...	22M4844	5.49	5.35	5.28	5.21

(4930)

ALUMINUM SWITCH PLATES AND NUTS

RoHS Compliant Available

TE connectivity

Authorized Distributor

SPA-42

10264-00-120

ON/OFF SWITCH PLATES

Mfg. Part No.	Dimensions	Stock No.	Price Each 1-24	25-49	50-99	100-249
SPA42	1.125″L x 0.680W, 0.469″ dia.	77B8956	4.20	3.84	3.49	3.17
SPA32	0.880″L x 0.375W, 0.250″ dia.	77B8952	3.55	3.25	3.06	2.92

BRIGHT NICKEL FINISH SWITCH NUTS

Mfg. Part No.	Description	Stock No.	Price Each 1-24	25-49	50-99	100-249
N1-AG	¼-40 Knurled nut	61F913	0.35	0.33	0.29	0.28
10264-00-120	¼-40 Hex Nut	61J4556	0.35	0.33	0.29	0.28

(4932)

1-AXIS ACCELEROMETER - GF1 SERIES

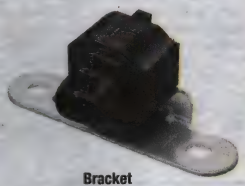
RoHS Compliant Available

Panasonic

Features

- IP67 enclosure
- Electrostatic capacitance detection
- High reliability: superior offset voltage charecteristics
- Fast response: 15ms (typ.)
- Compact size: 58mm x 36.5mm x 33mm (2.283″ x 1.437″ x 1.299″) for direct mount

Direct Mount



Bracket

Applications

- Inclination detection (for improved safety and operability) in agricultral machines, construction machines, and mobility vehicles
- Photovoltaic station power plant, solar tracking for panels
- Automotive: 4WD ABS control and idling stop system

DIRECT MOUNT SENSOR

Mfg. Part No.	Detection Range (g)	Sensitivity (V/g)	Supply Voltage (VDC)	Stock No.	Price Each 1-24
AGF10321	± 1.2	1.333	12	83T1992	135.17
AGF10331	± 1.2	1.333	24	83T1993	135.17
AGF10711	± 0.5	3	5	83T1994	117.58
AGF10721	± 0.5	3	12	83T1995	135.17
AGF10731	± 0.5	3	24	83T1996	135.17

BRACKET MOUNT SENSOR

AGF11311	± 1.2	1.333	5	83T1997	117.58

(201251)

SENSORS – AIRFLOW

AWM SERIES HIGH-FLOW MASS AIRFLOW SENSOR

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

- 200 SLPM Flow Range
- 8-15VDC Excitation Voltage, 60mW Power Consumption
- 5VDC Ratiometric Output (@ 10VDC Supply)
- Low Pressure Drop: 1" H_2O Typical
- 6ms Response Time
- Provided With Amp 103956-3 Connector
- 22mm Diameter Tapered Inlet/Outlet Ports

AWM series flow sensors feature extremely low hysteries and repeatability error (less than 0.35% of reading) and are inherently accurate over the life of the sensor. SLPM = Standard Liters Per Minute.

Mfg. Part No.	Stock No.	Price Each 1-9
● AWM720P1	04M8266	134.68

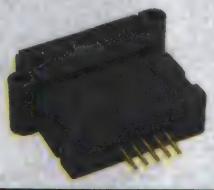
(68355)

AWM 40000 SERIES MICROBRIDGE MASS GAS-FLOW SENSORS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Provides mass gas-flow sensing in a unique manifold mount package. Provides highly accurate, stable, and repeatable performance. Features: precision ceramic flow tube resulting in a non-outgassing flow channel, high common mode pressure capability (250 PSI max.), high operating temperature (to +125°C), and hydrogen compatibility. Recommended excitation: 10VDC. Dimensions: 1.2H x 0.5W x 1.3"D. Response time: 1 msec. typ. Additional flow ranges available; SLPM = Standard Liters Per Minute; SCCM = Standard Cubic Centimeters Per Minute *; go online or call.*



NON-AMPLIFIED

Mfg. Part No.	Flow Range	Output	Stock No.	Price Each 1-5
● AWM42150VH	0-25 SCCM	8.5mV	04M8262	150.34
● AWM42300V	-1000 to +1000 SCCM	54.7mV	16F3168	112.87
AMPLIFIED				
AWM3150V	0-30 SCCM	3.4VDC	90B2851	111.05
● AWM43300V	0-1000 SCCM	5.0VDC	04M8263	111.25

(5163)

AWM 5000 SERIES MICROBRIDGE HIGHFLOW AIRFLOW SENSORS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Sensors feature a venturi-type flow housing. The microbridge chip is in direct contact with the flow stream, greatly reducing error possibilities due to orifice or bypass channel clogging. Maximum pressure drop of 2.25" H_2O. Maximum output voltage: 5.0VDC. Supply voltage (recommended excitation): 10VDC. Common mode pressure 50PSI max. Gas calibration: CO_2 and Argon are available. Weight: 30 grams. Operating temperature range: –20°C to +70°C. Response time 60 msec max. Dimensions: 1.4H x 1.3W x 6.4" L. SLPM = Standard Liters Per Minute.

Mfg. Part No.	Gas Calibration	Flow Range	Stock No.	Price Each
● AWM5101VN	Nitrogen, N_2	0-5SLPM	92F2998	125.74
● AWM5102VN	Nitrogen, N_2	0-10SLPM	04M8264	123.76
● AWM5104VN	Nitrogen, N_2	0-20SLPM	04M8265	150.60

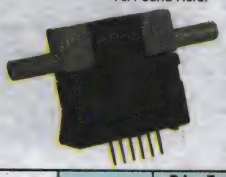
(5138)

MICROBRIDGE MASS AIRFLOW SENSORS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Operates on theory of heat transfer due to mass airflow directed across surface of a micromachined silicon sensing element. Output voltage mV or V varies in proportion to mass air or other gas flow through inlet and outlet ports of package. Supply voltage (recommended excitation): 10VDC. Common mode pressure: 25PSI max. Weight: 10.8 grams. Operating temperature range: –25°C to +85°C. Response time: 1.0 msec typ. Dimensions: 1.2H x 0.6W x 1.2"D. SCCM = Standard Cubic Centimeters Per Minute.



AMPLIFIED OUTPUTS

Mfg. Part No.	Measurement	Flow Range	Output	Stock No.	Price Each 1-9
● AWM3100V	Massflow	0-200 SCCM	5.0VDC	04M8260	128.53
● AWM3300V	Massflow	0-1000 SCCM	5.0VDC	04M8261	109.74

➤ CONTINUED ➤

MICROBRIDGE MASS AIRFLOW SENSORS (CONT.)

NON-AMPLIFIED OUTPUTS

Mfg. Part No.	Measurement	Flow Range	Output	Stock No.	Price Each 1-9
● AWM2100V	Massflow	0-200 SCCM	44.5mV	04M8259	110.30
● AWM2300V	Massflow	0-1000 SCCM	55.5mV	92F2997	101.25

(5139)

HONEYWELL ZEPHYR™ DIGITAL AIRFLOW HAF SERIES HIGH ACCURACY SENSORS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Long Port, Fastener Mount

22mm O.D. Tapered Male Fitting Port

Manifold Mount Port

Features

- Full calibration and temperature compensation typically allow customers to remove additional signal conditioning components from the PCB, reducing PCB size and costs often associated with those components (e.g., acquisition, inventory, assembly)
- Fast response time allows a customer's application to respond quickly to airflow change, important in medical (i.e., anesthesia) and industrial (i.e., fume hood) applications
- High 12-bit resolution increases ability to sense small airflow changes, allowing customers to more precisely control their application
- Bidirectional flow sensing capability eliminates the need for two airflow sensors, helping customers reduce production costs and implementation time
- Insensitivity to mounting orientation allows customers to position sensor in the most optimal point in the system, eliminating concern for positional effects
- Insensitivity to altitude eliminates customer-implemented altitude adjustments in the system, easing integration and reducing production costs by not having to purchase additional sensors for altitude adjustments
- RoHS-compliant materials meet Directive 2002/95/EC

G ⅜ Female Threaded Fitting Port

Mfg. Part No.	Flow Direction	Port Style	Housing Style	Flow Range (l/min)	Stock No.	Price Each 1-9
● HAFBLF0050CAAX5	Bidirectional	Long	Fastener Mount	50	82T2801	111.19
● HAFBLF0050C4AX5	Bidirectional	Long	Fastener Mount	50	82T2802	114.97
● HAFBLF0750CAAX5	Bidirectional	Long	Fastener Mount	750	82T2803	85.50
● HAFBLF0750C4AX5	Bidirectional	Long	Fastener Mount	750	82T2804	100.59
● HAFBLF0200C2AX3	Bidirectional	Long	Fastener Mount	200	80R9329	87.20
● HAFBLF0200C2AX5	Bidirectional	Long	Fastener Mount	200	73R1094	90.69
● HAFBSS0200C2AX3	Bidirectional	Short	Snap Mount	200	73R1095	88.41
HAFUHH0020L4AXT	Unidirectional	22mm O.D. Tapered Male Fitting	...	20	56W4818	166.80
HAFUHH0200L4AXT	Unidirectional	22mm O.D. Tapered Male Fitting	...	200	56W4820	166.80
HAFUHM0020L4AXT	Unidirectional	Manifold Mount	...	20	56W4821	166.80
HAFUHM0200L4AXT	Unidirectional	Manifold Mount	...	200	56W4822	166.80
HAFUHT0020L4AXT	Unidirectional	G 3/8 Female Threaded Fitting	...	20	56W4823	166.80
HAFUHT0200L4AXT	Unidirectional	G 3/8 Female Threaded Fitting	...	200	56W4824	172.47
HAFUHH0010L4AXT	Unidirectional	22mm O.D. Tapered Male Fitting	...	10	29X1294	144.20
HAFUHH0015L4AXT	Unidirectional	22mm O.D. Tapered Male Fitting	...	15	29X1295	144.20
HAFUHH0050L4AXT	Unidirectional	22mm O.D. Tapered Male Fitting	...	50	29X1296	144.20
HAFUHH0100L4AXT	Unidirectional	22mm O.D. Tapered Male Fitting	...	100	29X1297	144.20
HAFUHH0300L4AXT	Unidirectional	22mm O.D. Tapered Male Fitting	...	300	29X1298	144.20
HAFUHM0010L4AXT	Unidirectional	Manifold Mount	...	10	29X1299	144.20
HAFUHM0015L4AXT	Unidirectional	Manifold Mount	...	15	29X1300	144.20
HAFUHM0050L4AXT	Unidirectional	Manifold Mount	...	50	29X1301	144.20

➤ CONTINUED ➤

HONEYWELL ZEPHYR™ DIGITAL AIRFLOW HAF SERIES HIGH ACCURACY SENSORS (CONT.)

Mfg. Part No.	Flow Direction	Port Style	Housing Style	Flow Range (l/min)	Stock No.	Price Each 1-9
HAFUHM0100L4AXT	Unidirectional	Manifold Mount	...	100	29X1302	144.20
HAFUHM0300L4AXT	Unidirectional	Manifold Mount	...	300	29X1303	144.20
HAFUHT0010L4AXT	Unidirectional	G 3/8 Female Threaded Fitting	...	10	29X1304	144.20
HAFUHT0015L4AXT	Unidirectional	G 3/8 Female Threaded Fitting	...	15	29X1305	144.20
HAFUHT0050L4AXT	Unidirectional	G 3/8 Female Threaded Fitting	...	50	29X1306	144.20
HAFUHT0100L4AXT	Unidirectional	G 3/8 Female Threaded Fitting	...	100	29X1307	144.20
HAFUHT0300L4AXT	Unidirectional	G 3/8 Female Threaded Fitting	...	300	29X1308	100.08

(176221)

MEMS FLOW SENSORS

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

Specifications:
- Applicable gas: Air
- Supply voltage: 26.4VDC, 5-10VDC
- Output voltage: 6VDC, 0.5-1.5VDC
- Current consumption: 15mA
- Operating humidity: 85% RH
- Operating temperature: -10°C to 60°C

Features:
- Stable output across full scale
- Low power consumption
- Dust resistant design

D6F-W D6F-V D6F-P

D6F-10, -20, -50 D6F-P D6F-W

MASS AIRFLOW SENSORS

Mfg. Part No.	Flow Range (LPM)	Termination	Stock No.	Price Each 1-24	Price Each 25-49
D6F-50A6-000	0 - 50	Built-in Straight Connect	23M4663	338.93	305.03
D6F-P0010AM2	0 - 1	Cable with Connector	84R6923	68.52	61.66

AIRFLOW SENSORS

Mfg. Part No.	Flow Range (m/s)	Termination	Stock No.	Price Each 1-24	Price Each 25-49
D6F-W04A1	0 - 4	Q.D. Cable	04M8972	115.44	103.89
D6F-P0010A2	0 - 1	Cable with Connector	88M3810	64.63	58.17
D6F-W10A1	0 - 10	Cable with Connector	84R6925	110.47	99.42

CABLE CONNECTOR ASSEMBLIES

Mfg. Part No.	For Use With	Stock No.	Price Each 1-24	Price Each 25-49
D6F-W CABLE	D6F-W sensors	04M8970	5.72	5.16

(89844)

MEMS DIFFERENTIAL PRESSURE SENSOR

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

- High accuracy of ±3% R.D.
- Linearized and temperature compensated
- Digital output (I2C communication)
- High flow impedance to reduce the influence of bypass configuration

D6F-PH SERIES AIR MASS FLOW SENSORS

Mfg. Part No.	Flow Rate Max l/min	Pressure Max (Pa)	Supply voltage Range	Stock No.	Price Each 1-24
D6F-PH0505AD3	0.000023	50	2.3 to 3.6	90W1019	34.45
D6F-PH0025AD1	0.000063	250	2.3 to 3.6	90W1018	34.45
D6F-PH5050AD3	0.0001	500	2.3 to 3.6	90W1020	34.45

(210244)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures

(212568)

ASF1400/ASF1430 DIGITAL MASS FLOW SENSORS FOR GASES

RoHS Compliant Available

SENSIRION THE SENSOR COMPANY

- Fully calibrated and temperature compensated
- Linear digital output signal (RS-232)
- Fast response time (**ASF1400**: 150ms / **ASF1430**: 5ms) § Rugged chemically innert PBT housing
- CE-certified / FCC (CFR 47)
- Leading CMOSens® Technology for superior performance
- Unbeatable price-performance ratio
- Easy-to-use due to calibration & standard digital interface

The **ASF1400** and **ASF1430** gas flow sensors enable extremely accurate bidirectional measurement of fast changing gas flow over four orders of magnitude. They are fully calibrated and temperature compensated and provide fast response time at lowest power consumption. The leading performance is based on Sensirion's CMOSens® Technology. Mounted in rugged, chemically inert PBT housing the **ASF1400/1430** is suitable for a wide range of applications. Such include mass flow metering for process control, medical and HVAC applications.

Mfg. Part No.	Calibrated for Gas Type	Range	Stock No.	Price Each 1-9
ASF1400	Air	± 400 sccm	88T7786	393.42
ASF1430	Air	± 400 sccm	88T7787	393.42

(210205)

CURRENTWATCH SENSORS

RoHS Compliant Available

EATON

- AC current sensing up to 2000 amps, DC current sensing up to 300 amps
- Solid or split-core housings for easy installation in new or retrofit applications
- Field adjustable current ranges allow for increased flexibility and reduced stock
- Discrete or analog outputs (4 - 20 mA, 0 - 5 V, 0 - 10 V)
- Five-year warranty, UL and CE approvals

These devices are ideal for providing status information or protection for electrified equipment. CurrentWatch products are available in both switch and sensor variety. Current switches are set to trip at an over or undercurrent condition, are designed with fixed or adjustable trip points and are ideal for providing information on AC electrified equipment. Current sensors operate by monitoring current flow in equipment. The current magnitude is converted into a linear and proportional analog signal (4 - 20 mA, 0 - 5 V or 0 - 10 V). DIN-rail mountable housing and DIN-rail mounting accessory. Visual LED indicators for easy setup and status. Self-powered models available, normally-closed or normally-open configurations.

EAC SERIES SENSORS

Mfg. Part No.	Power Supply	Current Sensing Range (A)	Output Type	Housing Style	Stock No.	Price Each 1-4
EAC1420SC	24V DC Loop-Powered	10,20,50	Current	Solid	08N7296	181.90
EAC1420SP	24V DC Loop-Powered	10,20,50	Current	Split	08N7297	221.84
EAC2420SC	24V DC Loop-Powered	100,150,200	Current	Solid	08N7300	181.90
EAC2420SP	24V DC Loop-Powered	100,150,200	Current	Split	08N7301	212.29
EAC205SP	Self-Powered	100,150,200	Voltage	Split	08N7298	167.72
EAC210SP	Self-Powered	100,150,200	Voltage	Split	08N7299	169.71
EACP2429USP	24V AC/DC	100,150,200	Current	Split	08N7295	297.21
ECS SERIES CURRENT SWITCHES						
ECSN0ASC	Self-Powered	1 - 150	Current	Solid	08N7305	122.01
ECSN0ASP	Self-Powered	1.5 - 150	Current	Split	08N7306	138.55
ECSJ SERIES CURRENT SWITCHES						
ECSJ400SC	Self-Powered	1,40,175	Voltage	Solid	08N7302	119.33
ECSJ404SC	Self-Powered	1,40,175	Voltage	Solid	08N7304	145.37
ECSJ402SP	Self-Powered	1.75,40,200	Voltage	Split	08N7303	137.78
ECS7 SERIES CURRENT SWITCHES						
ECS701SC	Self-Powered	1.5 - 150	Current	Solid	08N7307	196.20
EGF SERIES GROUND FAULT SENSOR						
EGF3N0ACNET3	120V AC	5,10,30 mA	Current Solid-State	Solid	08N7313	274.43

(116651)

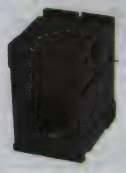
CSD SERIES HALL-EFFECT DIGITAL OUTPUT CURRENT SENSORS

RoHS Compliant Available

Honeywell Sensing and Control

SELECTION, SPEED, SERVICE. All Found Here.

CSD series solid-state sensors detect absence/presence of DC or AC current with digital current sink output. Response time: 100µsec. Output voltage: 0.4VDC. Changes from Vs to 0.4V at operating current. Output current: 20mA, except **mfg. part no. CSDB1CC**: 100mA. NOTE: Thru-hole design does not require electrical connection to sensed current. Max. Sensed current is only limited by the conductor size.



CSDA, CSDC

➤CONTINUED➤

CSD SERIES HALL-EFFECT DIGITAL OUTPUT CURRENT SENSORS (CONT.)

Mfg. Part No.	Terminal Type	Supply Voltage (VDC)	Operate Current (nom)*	Release Current (min)*	Stock No.	Price Each
● CSDA1BA	Solder Pins	6-16	0.50/Turn	0.08/Turn	04M8744	32.40
● CSDA1BC	Solder Pins	6-16	3.50/Turn	0.6/Turn	51F2597	41.91
● CSDC1BA	Solder Pins	5 ± 0.2	0.50/Turn	0.08/Turn	04M8748	38.73
● CSDA1AA	Solder and PCB Mount Pins	6-16	0.50/Turn	0.08/Turn	04M8742	50.64
● CSDA1AC	Solder and PCB Mount Pins	6-16	3.50/Turn	0.6/Turn	04M8743	53.88
● CSDC1DA	PCB Mount Pins	5 ± 0.2	0.50/Turn	0.08/Turn	04M8749	50.96
● CSDA1DA	Amp® Connector	6-16	0.50/Turn	0.08/Turn	04M8745	47.52
● CSDA1DC	Amp® Connector	6-16	3.50/Turn	0.6/Turn	04M8746	49.15

* at +25°C
(3478)

MINIATURE OPEN-LOOP/WIRED OPEN-LOOP CURRENT SENSORS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

CSLS Series **CSLT Series** **CSLW Series**

- Sensed current type: AC or DC
- Output tyype: Sink/Source
- Supply current: 9mA max.
- Supply voltage: 4.5 Vdc to 10.5 Vdc
- Response time: 3 µs
- Operating temperature: -25°C to 100°C

Open-loop current sensors incorporate our SS490 Series miniature ratiometric linear Halleffect sensor (MRLTM). The sensing element is encapsulated in a printed circuit board-mountable plastic package.

OPEN-LOOP CURRENT SENSORS

Mfg. Part No.	Sensed Current Range	Package Type	Sensitivity	Stock No.	Price 1-49
CSLS6B60	-60A to 60A	PCB Right Angle Mount	15 mV/AT	62M4096	15.83
CSLT6B100	-100A to 100A	PCB Right Angle Mount	15 mV/AT	62M4097	12.10
WIRED OPEN-LOOP CURRENT SENSORS					
CSLW6B1	-1A to 1A	PCB Bottom Mount	1020 mV/AT	62M4098	21.48
CSLW6B200M	-200mA to 200mA	PCB Bottom Mount	5.1 mV/AT	62M4099	29.16
CSLW6B40M	-40mA to 40mA	PCB Bottom Mount	15 mV/AT	62M4100	21.62

(197690)

CSLA SERIES HALL-EFFECT LINEAR OUTPUT CURRENT SENSORS

RoHS Compliant Available

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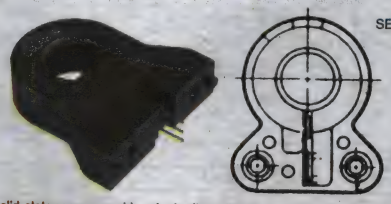
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.



CSLA series solid-state sensors provide output voltage directly proportional to current flow. AC or DC sensing. 8-16VDC supply for **CSLA1 series**. 6-12VDC supply for **CSLA2 series**. **CSLA2 series** feature temperature compensation circuitry. Offset voltage: Vs/2. Output voltage swings from 25% of Vs to 75% of Vs. **NOTE:** Thru-hole design does not require electrical connection to sensed current. Max. sensed current is only limited by the conductor size. 3µsec. response time. Sensors with 57A to 950A capabilities also available; *go online or call.*

BOTTOM MOUNT w/9SS SENSOR, SOURCE OUTPUT

Mfg. Part No.	Sensed Current (A)	Sensitivity mV*N at 12VDC	Stock No.	Price Each 1-9	Price Each 10-49
● CSLA1CD	0-57	49.6	10M8406	23.27	22.13
● CSLA1CF	0-100	29.7	16M2414	29.09	21.78
● CSLA1DJ	0-225	13.2	10M8407	26.74	24.30
BOTTOM MOUNT w/SS9 SENSOR, SINK/SOURCE OUTPUT					
● CSLA2CD	0-72	32.7	10M8409	20.23	19.63
● CSLA2CF	0-125	19.6	10M8410	22.97	17.19
● CSLA2DH	0-235	9.8	16M2415	46.88	35.08
● CSLA2DJ	0-225	8.7	48F2802	49.00	36.67

➤CONTINUED➤

CSLA SERIES HALL-EFFECT LINEAR OUTPUT CURRENT SENSORS (CONT.)

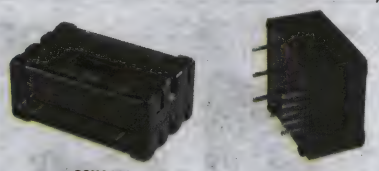
Mfg. Part No.	Sensed Current (A)	Sensitivity mV*N at 12VDC	Stock No.	Price Each 1-9	Price Each 10-49
BOTTOM MOUNT w/SS9 SENSOR, SINK/SOURCE OUTPUT					
● CSLA2EL	0-550	4.3	16M2417	51.53	38.57
CSLA2CE	0-550	4.3	50F5296	33.67	25.20
SIDE MOUNT w/SS9 SENSOR, SINK/SOURCE OUTPUT					
● CSLA2GE	0-92	26.1	16M2418	25.45	23.84
● CSLA2GF	0-125	19.6	16M2419	31.01	23.22

(3477)

CSN SERIES HALL-EFFECT NULL-BALANCE LINEAR CURRENT SENSORS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.



CSNA111 **CSNE151**

CSN series solid-state sensors measure AC, DC, and impulse currents. Operation based on the Hall-effect principle and the null-balance or zero magnetic flux method (feedback system). The magnetic field on the sensor is constantly controlled at zero. The amount of current required to balance zero flux is the measure of primary current flowing through conductor multiplied by the ratio of the primary to secondary windings. ±0.5% accuracy. Response time: 1µsec. NOTE: Thru-hole design does not require electrical connection to the sensed current. Max. sensed current is only limited by the conductor size. Sensors with up to 1200A of sensed current also available; *go online or call.*

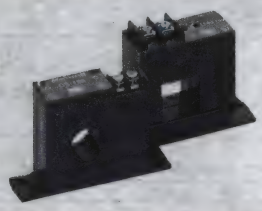
Mfg. Part No.	Supply Voltage	Sensed Current (peak)	Nominal Output	Stock No.	Price Each
● CSNA111	±15VDC	±70A	50mA	10M8411	41.88
● CSNE151	±15VDC	±5-36A	25mA	10M8412	25.70
● CSNX25	±15VDC	±56A	12.5mA	08J4923	41.43
● CSNE151100	±15VDC	±90A	25mA	38B4697	49.72
● CSNP661	±15VDC	±90A	50mA	38B4718	53.54
● CSNK500M	±15VDC	±1275A	100mA	71J3561	172.03

(3410)

AC AND DC CURRENT SENSORS AND SWITCHES

UL

F.W. BELL



Mfg. part nos. 155125 thru 155128 sensors provide 4-20mA output proportionate to AC current. **SCC series** provide either a 4-20mA or a 0-20mA unipolar output proportional to AC or DC current. **SCV series** provides either a 0-5V or 0-10V unipolar output proportional to AC or DC current. **CS/CSS series** detects AC current from 1A to 150A and provides a switched output when the current exceeds the adjustable switch point. Adjustment is made via multi-turn trim pot. **Mfg. part nos. 115127, 115128,** as well as **CSS, SCC,** and **SCV series** clamp around existing wiring for easy installation. **Mfg. part nos. 115125** thru **155128** and **CS/CSS series** feature simple 2-wire connection and interface to PLCs. **SCC** and **SCV series** require 24VAC/VDC operating voltage. All models are panel-mounted, feature jumper range selection. UL listed. Higher current units are available. *Go online or call.*

Mfg. Part No.	Range AC (A)	Output	Aperture	Stock No.	Price Each
155125	10-20-50	4-20mA	0.73″	92F4429	224.13
155127	10-20-50	4-20mA	0.85″	92F4431	260.57
155128	100-150-200	4-20mA	0.85″	92F4432	293.15
CS-150	1-150	Switch	0.73″	01F816	162.40
CSS-150	1.5-150	Switch	0.85″	01F817	159.27
SCV-100H	50-75-100*	0-10V	0.85″	48F4358	215.87

*AC(A) or DC(A)
(3460)

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Affordable, performance board level
& box build components at
newark.com/multicomp

(212569)

IHA SERIES HIGH FREQUENCY CURRENT SENSORS

RoHS Compliant Available

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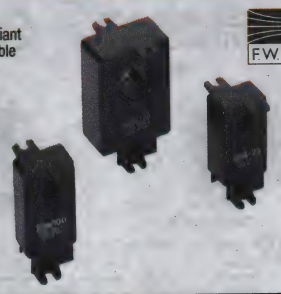


Response <1µs. Frequency range DC to 50kHz. Linearity ±1%. Operating voltage ±12VDC to ±15VDC. Temperature range 0°C to +75°C. Case design allows for either panel or PCB mounting by use of appropriate connector; *go online or call.* Mounting tabs accept No.6 screws for placement on PCB or panel. Ideal for use in solid-state circuits.

Mfg. Part No.	Current Range	Full Scale Output	Aperture	Stock No.	Price Each
IHA-25	±25A	±1V	0.38″	92F4411	185.35
IHA-100	±100A	±5V	0.38″	92F4412	208.68

(3459)

CLOSED LOOP CURRENT SENSORS

F.W. BELL

CLN-25

CLN-50

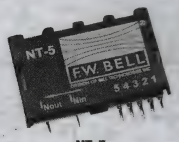
Closed loop sensors null out the flux produced by the current through the aperture. Output is a current that is proportionate to the aperture current divided by the number of turns on the coil. **Mfg. part nos. CLN-25/50/100** mount directly on PCB. **Mfg. part nos. CLN-200/1000** mounts on the panel. Response time less than 1µs. Linearity 0.2%. Frequency range: DC to 100kHz min.

Mfg. Part No.	Nom. Current (A_{RMS})	Output (mA/A)	Operating Voltage (±VDC)	Aperture	Stock No.	Price Each
CLN-25*	25	1	15	PCB	83F2354	44.27
CLN-50	50	1	15	0.39 x 0.53″	83F2355	41.94
CLN-100	100	1	15	0.39 x 0.53″	83F2357	104.31
CLSM-25M	25	1	18	PCB	64J9088	22.82
CLSM-50LA	50	1	18	0.402″ x 0.795″	84J2272	35.02
CLSM-200LA	200	0.5	18	0.402″ x 0.795″	84J2268	45.63
CLSM-1000	1000	0.2	18	1.58″ dia.	22J0781	174.00

***CL-25** offers choice of ranges via connection to pins on sensor: 5, 6, 8, 12 or 25 Arms.
(3458)

NT SERIES AND MS-15 CURRENT SENSORS

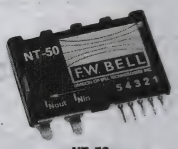
F.W. BELL



NT-5

NT-15

NT-25



NT-50

MS-15

NT series thin footprint current sensors mount directly to PC Board. All electrical connections are via thru-hole pins. Small size (less than 0.25″ wide) allows placement in applications with limited board space. Measure AC and DC currents. Frequency Response DC to 50kHz. Linearity ±1%. Response time <2µs. Sensors operate from +0°C to +70°C. Ideal replacement for shunts where electrical isolation is required.

Mfg. Part No.	Nom. Current (Arms)	Full Scale Output	Voltage (VDC)	Stock No.	Price Each
NT-5	5	2.5V	±15	16F6749	39.51
NT-15	15	2.5V	±15	16F6750	35.55
NT-25	25	2.5V	±15	16F6751	37.08
NT-50	50	2.5V	±15	16F6752	45.12

MS-15 CURRENT SENSOR
The miniature MS sensor measures DC and AC currents and provides electrical isolation between the circuit being measured and the output. The unipolar power source, small size and low cost make it the most cost effective solution for Hall effect current sensing in the industry. Supply voltage is +5VDC.

Mfg. Part No.	Measurement Range	Output	Stock No.	Price Each
MS-15	(± 15A)	0.08 - 0.15 V/A	49H8118	11.39

(3586)

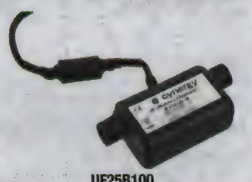
ULTRASONIC FLOW METERS

RoHS Compliant Available

cynergy3 components

- Non-invasive sensor technology
- Fully electronic, no moving parts
- Automatic viscosity and temperature compensation
- Pulse or analog output selectable
- Low pressure drop
- LED indication of no liquid & flow rate

UF08B100



UF25B100

Supply voltage: 8-24VDC. Response time: better than 0.1s. Flow tube material: glass-filled plastic. Connection thread: 0.375″ straight tube. Case material: ABS black. Connection: 8 core, PVC sheathed, 100cm long standard.

Mfg. Part No.	Pipe Size (mm)	Flow Range (L/min.)	Max. Pressure	Max. Temp. (°C)	Stock No.	Price Each 1-4
UF08B100	7	0-8	10 bar	85	72W4042	341.34
UF25B100	10	0-25	10 bar	85	72W4043	331.64

(210192)

FS-550 SERIES HIGH PRESSURE PADDLE TYPE FLOW SWITCHES

Gems Sensors & Controls — Our Experience • Your Solution

- Pipe Line Size: 1¼″ and Up
- Maximum Operating Pressure: 2000 PSIG
- Pressure Drop: 3 PSIG Maximum
- Operating Temperature: -30°F to +300°F (-34.4°C to +148.9°C)
- Switch: SPDT, 20VA

Standard **FS-550** switches sense liquid flow in either direction to monitor flow/no-flow conditions. They are supplied in two paddle lengths. The paddle is trimmed during installation to permit switch actuation at the desired flow rate. As flow increases in a pipe, the paddle of the switch pivots to move out of the liquid path, producing less than 3 PSIG of pressure drop regardless of pipe size.

Mfg. Part No.	Paddle Length	Housing Material	Switch Operation	Stock No.	Price Each 1-9
29609	Long	Brass	N.O. or N.C.	92C8765	252.93
29608		316 SS		92C8764	384.79

(72580)

FS-927 SERIES COMPACT FLOW SWITCHES

RoHS Compliant Available

Gems Sensors & Controls — Our Experience • Your Solution

- Measuring only 1″ x 2¾″
- Brass Housing and Piston
- 316 Stainless Steel Spring
- Operating Pressure: 1000 PSIG Max.
- Operating Temperature: -20°F to +200°F (-29°C to 93.3°C)
- Switch: SPST-NO @ No Flow, 20VA
- Inlet/Outlet Ports: ¼″ NPT
- Designed for us with water and oil
- Ideal for coolant or lubricant monitoring in portable equipment and many other applications with space constraints

Mfg. Part No.	Flow Settings GPM	Stock No.	Price Each 1-9
70820	0.10	92C8782	114.85
70821	0.25	92C8783	119.75
70822	0.50	92C8784	116.09
70824	1.00	92C8786	119.75

(72577)

FS-925 SERIES GENERAL PURPOSE FLOW SWITCHES

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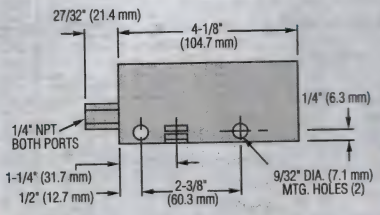


- Brass Housing
- Piston in Brass Housing: Polysulfone for Water, Brass for Oil and Air
- 316 Stainless Steel Spring
- Max. Operating Pressure Rating: 1000 PSIG
- Operating Temperature with Brass: -20°F to +300°F (-29°C to +148.9°C)
- Switch: SPDT, 20VA
- Inlet/Outlet Ports: ¼″ NPT

➤CONTINUED➤

FS-925 SERIES GENERAL PURPOSE FLOW SWITCHES (CONT.)

FS-925 series switches provide accurate detection of excessive or insufficient flow rates in such applications as protecting against loss of fluid flow in hydraulic systems, assuring proper coolant flow in semiconductor processing equipment, monitoring high pressure lubrication systems and ensuring proper air flow in water/waste systems.

Mfg. Part No.	Flow Settings GPM, ±10%	Stock No.	Price Each 1-9
26914	0.10	92C8758	229.70
26915	0.25	92C8759	231.71

(72576)

FS-150 SERIES FLOW SWITCHES

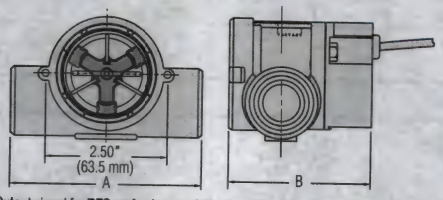
- Port Size: ½″ NPT
- Primary Construction Material: Polypropylene
- Ryton® -R4, 316 Stainless Steel Piston
- 316 Stainless Steel Spring
- Maximum Operating Pressure: 200 PSIG @ +70°F to +150°F (+21.1°C to +65.5°C); 150 PSIG @ +150°F to +212°F (+65.5°C to +100°C)
- Operating Temperature: 0°F to 212°F (-17.8°C to +100°C)
- Length: 5 29/32″
- Quick connect terminals: ¼″
- Switch: SPST, 20VA

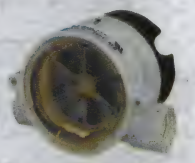
These slim, inline switches reduce pressure drop to a minimum. Liquids are able to smoothly pass around the piston and flow through the switch with little pressure loss to the down stream line.

Mfg. Part No.	Flow Settings GPM	Stock No.	Price Each 1-9
129660	0.5	92C8689	124.50
129661	1.0	92C8690	107.26

(72574)

RFO SERIES FLOW RATE MONITORING SENSORS





Output signal for **RFO series** is an on/off pulse of the DC voltage supplied to the unit, it is compatible with all digital logic families. Input voltage range is 4.5 to 24VDC. Frequency of the output pulse is proportional to the flow rate and ranges from approximately 25Hz at low flow to 225Hz at high flow.

Mfg. Part No.	Body Material	Port Size NPT	Flow Range GPM	Dimensions A	Dimensions B	Stock No.	Price Each 1-9
155421	Polypropylene	0.25″	0.5-5.0 (±7%)	3.06″ (77.7mm)	2.38″ (60.5mm)	92C8701	135.59
155481		0.50″	4.0-20.0 (±15%)			92C8704	135.59
156261	Brass	0.25″	0.5-5.0 (±7%)	3.01″ (76.4mm)	2.32″ (58.9mm)	92C8708	240.35
194762		1.00″	8.0-60.0 (±15)			92C8746	238.27

(72581)

FS-380P SERIES - INDUSTRIAL STRENGTH INLINE PLASTIC FLOW SWITCHES

The FS-380P flow switch offers the same superior performance to non-clogging as its metal cousin (FS-380). The fixed set point and simple design make it a dependable switch. The FS-380P is an ideal choice for coolant applications requiring reliable flow detection in HVAC, semiconductor, welding, medical, and other indsutries.

Mfg. Part No.	Flow Setting GPM	Stock No.	Price Each 1-9
209876	0.15	06R2341	71.07
197081	0.25	02H2973	62.77
197082	0.5	02H2974	109.18
197083	1	02H2975	86.01
197084	1.5	02H2976	81.89
197085	2	02H2977	85.94

(147210)

RFA SERIES ANALOG FLOW RATE MONITORING SENSORS

Polypropylene

Brass

The Gems RFA Series is a paddlewheel flow monitoring sensor with analog output and integral visual confirmation. The sensor provides a 0-10 Vdc analog output that is proportional to flow rate.

Mfg. Part No.	Body Material	Port Size NPT	Flow Rate GPM	Stock No.	Price Each 1-9
230206	Polypropylene	0.25″	0.1 to 1.0 (±7%)	22M4294	302.40
170291	Polypropylene	0.50″	1.5 to 12.0 (±7%)	18M4615	235.41
170281	Polypropylene	0.50″	4.0 to 20.0 (±7%)	23K2525	295.10
230209	Brass	0.25″	0.1 to 1.0 (±7%)	08N7884	400.16
230202	Brass	0.25″	0.5 to 5.0 (±7%)	45J3621	400.16
170293	Brass	0.50″	1.5 to 12.0 (±7%)	64M6754	400.16
170283	Brass	0.50″	4.0 to 20.0 (±15%)	06R2340	400.16
182098	Brass	1.00″	8.0 to 60.0 (±15%)	12M6072	347.63

(147209)

MODEL 41 PRECISION LOAD CELLS

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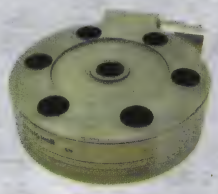
Features:
- Two stabilizing diaphragms reduce side-loading effects
- Stainless steel welded construction
- Measures wide range of both tension and compression load forces from 50lb to 50000lb
- Shunt calibration data included
- Applications include tube mills, extruding processes and weighing



Specifications:
- Low profile, "pancake" type load cell
- Threaded hole runs completely through center of cell
- Bonded foil strain gage type
- Infinite resolution
- Operating temperature: -65°F to 250°F
- Mating connector and cable assemblies not included; order separately below

Mfg. Part No.	Range (lbf)	Stock No.	Price Each 1-5
AL111BN	50	27M1712	1225.73
AL111CV	1000	27M1715	1225.73
AL111DR	5000	27M1716	1167.56
AL111DV	10000	27M1717	1300.14
AL111EL	20000	27M1718	1596.43
AL111EP	50000	27M1719	1596.43

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
AA111	PT06A-10-6S mating connector up to 5000lbs	27M1708	60.71
AA121	MS3106A-14S-6S mating connector 10000lbs and above	27M1710	57.27

(90231)

MODEL 13 SUBMINIATURE LOAD CELLS

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Features:
- Stainless steel construction
- Measure load ranges from 1000g to 1000lbs
- mV/V output
- Subminiature dimensions, with height ranging from 0.13 to 0.25in, allow easy incorporation into limited applications

Specifications:
- Infinite resolution
- Electrical termination: Integral 5ft twisted cable with balance board included 2ft from load cell
- Foil strain gage
- Shunt calibration data included
- Operating temperature: -65°F to 250°F

Mfg. Part No.	Range	Stock No.	Price Each 1-5
AL322AR	1000g	27M3390	738.69
AL322BR	100lbf	27M3394	886.24
AL322CV	1000lbf	27M3396	685.92

(90228)

MODEL 53 LOW COST LOAD CELLS

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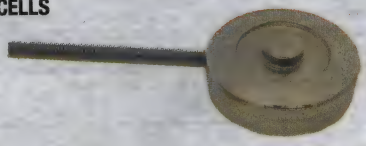

Features:
- Designed for low cost production and testing applications
- Stainless steel welded construction
- Excellent long-term stability and reliability under severe operating conditions
- Integral load button machined as part of the load cell

Specifications:
- ±0.25% non-linearity
- Infinite resolution
- Output: 2mV/V
- Operating temperature: -65°F to 250°F
- Bonded foil strain gage
- Shunt calibration data included
- Integral 5ft teflon cable termination

Mfg. Part No.	Range (lbf)	Stock No.	Price Each 1-5
AL131CR	500	27M2018	557.40
AL131CV	1000	27M2019	553.79
AL131DL	2000	27M2020	557.40
AL131DR	5000	27M2021	634.51
AL131DV	10000	27M2022	801.96
AL131EL	20000	27M2023	763.04
AL131EP	50000	27M2024	892.92

(90229)

UNIVERSAL IN-LINE AMPLIFIERS

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
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Features:
- For applications where transducer must be located away from the display
- Long signal transmission with minimal signal loss
- Compatible with any strain gage sensor
- Meets NEMA 4 and IP66 ratings for water resistance

Specifications:
- Operating voltage: 18-32VDC
- Linearity: 0.02% F.S.

Mfg. Part No.	Model	Output	Stock No.	Price Each 1-5
BE125	U3W	4-20mA	29M9216	614.52
BE127	UV10	±10VDC	29M9217	516.66

(90545)

MODEL 31 PRECISION LOW AND MID RANGE LOAD CELLS

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features:
- Stainless steel welded construction
- Miniature design
- Measure wide range of both tension and compression load forces from 250g to 1,000lbs
- Shunt calibration data included
- Other applications include cable tension and electromechanical parts testing

Specifications:
- Male threads
- Infinite resolution
- Foil or semiconductor strain gage type
- Integral 5ft. teflon cable termination
- Operating temperature range: -65°F to 250°F
- Call for higher ranges greater than 2,000lbs

Mfg. Part No.	Range	Stock No.	Price Each 1-5
LOW RANGE			
AL311AN 4A	250 gm	27M1580	1202.73
AL311AR	1000 gm	27M1581	955.36
MID RANGE			
AL311AV	10 lbs	27M1583	955.36
AL311 BN	50 lbs	27M1579	918.62

(90038)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

(212570)

LCGD SERIES MINIATURE INDUSTRIAL COMPRESSION LOAD CELLS

NEW

NEWPORT

MADE IN USA

Features:
- Miniature size, low-profile package
- Excellent long-term stability, high accuracy
- Rugged all stainless steel construction withstands severe industrial environments
- 5-Point NIST traceable calibration with 59k ohm shunt cal data
- For mounting on a flat surfaces
- Load button machined is integral part of design
- Electrical connection: 1.5m (5') shielded cable
- IP65 Protection class

Specifications:
- Excitation: 10VDC
- Output: 2mV/V (nom.)
- 5-Point calibration: 0%, 50%, 100%, 50%, 0%
- Linearity: ±0.25% FSO
- Hysteresis: ±0.20% FSO
- Repeatability: ±0.10% FSO
- Zero balance: ±2% FSO
- Operating temperature range: -54 to 121°C (-65 to 250°F)
- Thermal effects: Span ±0.018% rdg./°C / Zero: ±0.009% FSO/°C
- Safe overload: 150% of capacity
- Ultimate overload: 300% of capacity
- Bridge resistance: 350Ω min.

Mfg. Part No.	Capacity (lbs.)	Dia. (in.)	Stock No.	Price Each
LCGD-25/N	25	1.00	04X5594	600.00
LCGD-50/N	50	1.00	04X5598	600.00
LCGD-100/N	100	1.00	04X5592	600.00
LCGD-250/N	250	1.25	04X5595	500.00
LCGD-500/N	500	1.25	04X5600	470.00
LCGD-1K/N	1000	1.25	04X5590	470.00
LCGD-2K/N	2000	1.25	04X5593	470.00
LCGD-5K/N	5000	1.50	04X5597	535.00
LCGD-10K/N	10000	1.50	04X5591	535.00
LCGD-30K/N	30000	2.00	04X5596	635.00
LCGD-50K/N	50000	3.00	04X5599	705.00

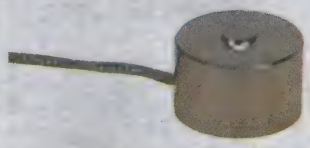
(211626)

LC302 SERIES 0.75" DIA. STAINLESS STEEL COMPRESSION LOAD CELLS

NEW

NEWPORT

MADE IN USA



Features:
- Low 0.5" (13mm) profile, small 0.75" (19mm) dia.
- Rugged all stainless steel construction for long life
- High-quality strain gage proivides long term reliability
- 5-Point calibration with 59kohm shunt cal data
- Built in load button for easy installation
- Ideal for robotic and test bench applications
- IP5 Protection class
- 1.5m (5') 4-Conductor shielded cable

Specifications:
- Excitation: 5VDC (15VDC max.)
- Output: 1mV/V nominal
- Accuracy (FSO): ±0.5% (linearity, hysteresis, repeatability combined)
- 5-Point calibration: 0%, 50%, 100%, 50%, 0%
- Zero balance: ±2% of FSO
- Operating temperature range: -54 to 125°C (-65 to 250°F)
- Thermal effects: Zero 0.009%/Span 0.036% FSO°/F
- Safe overload: 150% of capacity
- Ultimate overload: 300% of capacity
- Deflection: 0.03 to 0.08mm (0.001 to 0.003")
- Bridge resistance: 350Ω min.

Mfg. Part No.	Capacity (lbs.)	Stock No.	Price Each
LC302-25/N	25	04X5671	305.00
LC302-50/N	50	04X5672	305.00
LC302-100/N	100	04X5670	305.00
LC302-250/N	250	40T7297	305.00
LC302-500/N	500	73R8921	305.00
LC302-1K/N	1000	04X5669	305.00

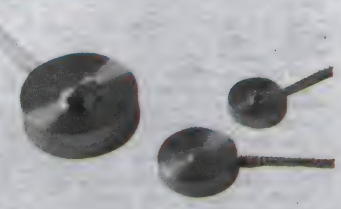
(211618)

LCKD SERIES SUBMINIATURE INDUSTRIAL LOAD CELLS

NEW

NEWPORT

Features:
- Miniature size, low profile design
- Rugged all stainless steel construction
- High-performance strain gauges provide superior linearity and stability
- Temperature compensation through a miniature circuit board in load cell's cable
- 5-Point NIST traceable calibration included for accurate installation
- Designed to mount on smooth, flat surfaces
- Measures load ranges from 1kg to 1000 lb.



Specifications:
- Excitation: 5VDC (7VDC max.)
- Output: 2mV/V nominal
- 5-Point calibration (in tension): 0%, 50%, 100%, 50%, 0%
- Linearity (FSO): ±0.25%
- Hysteresis (FSO): ±0.25%
- Repeatability (FSO): ±0.10%
- Zero balance: ±2% of FSO
- Operating temperature range: -54 to 121°C (-65 to 250°F)
- Thermal effects: Zero 0.009%/Span 0.018% FSO/°C
- Safe overload: 150% of capacity
- Ultimate overload: 300% of capacity
- Bridge resistance: 350Ω min.
- Full scale deflection: 0.001 to 0.003"

CONTINUED

LCKD SERIES SUBMINIATURE INDUSTRIAL LOAD CELLS (CONT.)

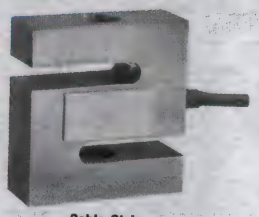
Mfg. Part No.	Capacity (lbs.)	Stock No.	Price Each
LCKD-1KG/N	2.2	34C3637	595.00
LCKD-5/N	5	20C3976	560.00
LCKD-10/N	10	04X5613	560.00
LCKD-25/N	25	04X5615	560.00
LCKD-50/N	50	04X5616	560.00
LCKD-100/N	100	04X5614	560.00
LCKD-250/N	250	79M5857	560.00
LCKD-500/N	500	04X5617	560.00
LCKD-1000/N	1000	53R1512	470.00

(211568)

LC101 AND LC111 SERIES "S" BEAM LOAD CELLS

NEW

NEWPORT



Cable-Style

Features:
- High accuracy at economical price
- Choice of cable- or connector-style
- All stainless steel construction ideal for harsh industrial applications
- 0.25% interchangeability for multiple load cell applications
- 5-point NIST-traceable calibration with 59K shunt data included
- Measures wide range of tension load forces

Specifications:
- Excitation: 10VDC, (15VDC max.)
- Output: 3mV/V ±0.0075mV/V
- Linearity (FSO): ±0.03%
- Hysteresis (FSO): ±0.02%
- Repeatability (FSO): ±0.01%
- Zero balance (FSO): ±1%
- Safe / Ultimate overload: 150% / 300% of capacity
- Input/output resistance: 350 ±10Ω
- Full scale deflection: 0.25 to 0.5mm
- Operating temperature: -40°C to 93°C (-40°F to 200°F)

Mfg. Part No.	Style	Capacity (kgf)	Stock No.	Price Each
LC101-25/N	Cable	25	04X5637	315.00
LC101-50/N	Cable	50	04X5642	315.00
LC101-100/N	Cable	100	04X5633	315.00
LC101-200/N	Cable	200	04X5636	315.00
LC101-250/N	Cable	250	79T9187	315.00
LC101-500/N	Cable	500	04X5643	315.00
LC101-1K/N	Cable	1000	04X5631	315.00
LC101-2K/N	Cable	2000	04X5634	315.00
LC101-3K/N	Cable	3000	04X5638	375.00
LC101-5K/N	Cable	5000	04X5641	455.00
LC101-10K/N	Cable	10000	04X5632	475.00
LC101-20K/N	Cable	20000	04X5635	685.00
LC101-30K/N	Cable	30000	04X5639	835.00
LC101-40K/N	Cable	40000	04X5640	885.00
LC111-25/N	Connector	25	04X5645	315.00
LC111-100/N	Connector	100	04X5644	315.00
LC111-500/N	Connector	500	04X5646	315.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
CA-4PC24-2-015/N	Cable Assembly with Twist-Lock Connector for **LC111 Series** Load Cells — 4.6m (15 ft.)	04X5549	90.00
CA-4PC24-2A-015	Cable Assembly for **LC111 Series** Load Cells < 250 lbs. — 4.6m (15 ft.)	08X1042	90.00
PT06F8-4S	Mating Connector for LC111 ranges ≤200 lb (not included)	96B7612	24.00

(211558)

GE's HUMIDITY CHIPCAP2 TEMPERATURE SENSOR

RoHS Compliant Available

Amphenol Advanced Sensors

Features:
- Fully calibrated and temperature compensated
- Digital or analog output with alarm function
- Free operating voltage
- Low current consumption
- SMD package for automated assembly
- Reliable in harsh environments
- Sleep mode option available for reducing power consumption

Applications:
- Energy saving HVAC control: air conditioning, refrigeration, indoor air quality, vent fans, home appliances, humi/dehumidifiers
- Process control and instrumentation: medical instruments, hand-held devices, weather stations, food processing, printers, RFIDs
- Automobile and transportation: cabin climate control, defogging control condensing preventive device
- Medical: Nebulizers, oxygen air, CPAP/Sleep Apnea devices

Specifications:
- Accuracy: ±2% or ±3% RH, ±0.3°C
- Resolution: 14 bit — 0.01% RH, 0.01°C
- Repeatability: ±2% RH, ±0.1°C
- Supply voltage: 2.7V to 5.5V
- Supply current (IDD): 750 µA (typical)
- Operating temperature range: -40°C to +125°C
- Operating RH range: 0 to 100% RH (non-condensing)
- Package size : (4mm x 6mm x 1.9 mm high)

➤CONTINUED➤

GE's HUMIDITY CHIPCAP2 TEMPERATURE SENSOR (CONT.)

ChipCap 2™ is a capacitive polymer sensor chip and a CMOS integrated circuit with EEPROM that are integrated into one embedded system in a reflow solderable SMD package. Individually calibrated and tested, ChipCap 2™ performs at ±2% from 20% to 80% RH (±3% over entire humidity range), and is simple and ready-to-use without further calibration or temperature compensation. ChipCap 2™ provides linear output signals in various interfaces: I²C interface, PDM convertible to analog signal, and alarm function for preset control at min./max. humidity.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
ANALOG OUTPUT			
● CC2A23	ChipCap2, 2%, 3.3V	84W8913	13.26
● CC2A25	ChipCap2, 2%, 5V	84W8914	13.26
● CC2A33	ChipCap2, 3%, 3.3V	84W8915	10.68
● CC2A35	ChipCap2, 3%, 5V	84W8916	10.68
DIGITAL OUTPUT			
● CC2D23	ChipCap2, 2%, 3.3V	84W8917	14.19
● CC2D25	ChipCap2, 2%, 5V	84W8919	14.19
● CC2D23S	ChipCap2, Sleep Mode, 2%, 3.3V	84W8918	13.26
● CC2D25S	ChipCap2, Sleep Mode, 2%, 5V	84W8920	14.19
● CC2D33	ChipCap2, 3%, 3.3V	84W8921	11.43
● CC2D35	ChipCap2, 3%, 5V	84W8923	10.68
● CC2D33S	ChipCap2, Sleep Mode, 3%, 3.3V	84W8922	11.43
● CC2D35S	ChipCap2, Sleep Mode, 3%, 5V	84W8924	11.43

(209514)

HIH-4000 SERIES HUMIDITY SENSORS

RoHS Compliant Available

Honeywell Sensing and Control

SELECTION, SPEED, SERVICE. All Found Here.

FEATURES
- Molded thermoset plastic housing
- Linear voltage output vs %RH
- Laser trimmed interchangeability
- Low power design
- High accuracy
- Fast response time

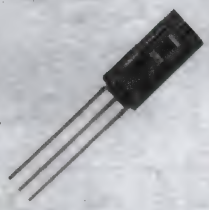


Fig. 1

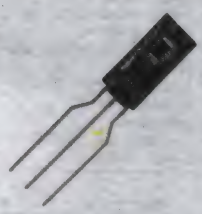


Fig. 2

A more robust version of the **HH 3610 series, HIH-4000 series** humidity sensors typically draw only 200µA of current, ideally suited for low drain, battery operated systems. Delivers instrumentation-quality RH (Relative Humidity) sensing performance in a competitively priced, solderable SIP (Single In-Line Package). Available in two lead spacing configurations, the RH sensor is a laser trimmed, thermostet polymer capacitive sensing element with on-chip integrated signal conditioning. The sensing element's multilayer construction provides excellent resistance to most application hazards such as wetting, dust, dirt, oils and common environmental chemicals.

Mfg. Part No.	Fig.	Description	Lead Pitch (in.)	Stock No.	Price Each 1-9
● HIH4000-002	1	Integrated circuitry	0.050	71J4531	19.53
● HIH4000-004	1	Integrated circuitry with calibration and data printout	0.050	31M9177	20.15
● HIH4000-001	2	Integrated circuitry	0.100	12M6693	19.53
● HIH4000-003	2	Integrated circuitry with calibration and data printout	0.100	15M0250	34.59

(85461)

HIH-4030/31 HUMIDITY SENSORS

RoHS Compliant Available

Honeywell Sensing and Control

SELECTION, SPEED, SERVICE. All Found Here.

- Molded thermoset plastic housing, Laser trimmed interchangeability
- Near linear voltage output vs %RH
- Low power design, Enhanced accuracy, Fast response time
- Stable, low drift performance
- Chemically resistant

Direct input to a controller or other device is made possible by this sensor's near linear voltage output. With a typical current draw of only 200 uA, the HIH-4030/4031 Series is often ideally suited for low drain, battery operated systems. Tight sensor interchangeability reduces or eliminates OEM production calibration costs. The HIH-4030/4031 Series delivers instrumentation-quality RH (Relative Humidity) sensing performance in a competitively priced, solderable SMD. The HIH-4030 is a covered integrated circuit humidity sensor. The HIH-4031 is a covered, condensation-resistant, integrated circuit humidity sensor that is factory-fitted with a hydrophobic filter allowing it to be used in condensing environments including industrial, medical and commercial applications. The RH sensor uses a laser trimmed, thermoset polymer capacitive sensing element with on-chip integrated signal conditioning. The sensing element's multilayer construction provides excellent resistance to most application hazards such as condensation, dust, dirt, oils and common environmental chemicals. POTENTIAL APPLICATIONS Refrigeration equipment, HVAC (Heating, Ventilation and Air Conditioning), equipment, Medical equipment, Drying, Metrology, Battery-powered systems, OEM assemblies

➤CONTINUED➤

HIH-4030/31 HUMIDITY SENSORS (CONT.)

Mfg. Part No.	Description	Accuracy (+/-%)	Stock No.	Price Each 1-9	Price Each 10-24
HIH4030-001	Integrated circuit	3.5	62M4608	12.41	9.56
HIH4030-003	Integrated circuit w/calibration and data printout	3.5	61M2125	15.41	12.56
HIH4031-001	Filtered Integrated circuit	3.5	62M4609	16.48	12.70
HIH4031-003	Filtered integrated circuit w/calibration and data printout	3.5	62M4610	17.13	13.20

(109390)

HIH SERIES HUMIDITY SENSORS NEW

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

- Industry-leading long-term stability
- True temperature-compensated digital I2C or SPI output
- Industry-leading reliability
- Energy efficiency
- Lowest total cost solution
- Ultra-small package size and options
- Other accuracies available: ±1.7 %RH (HIH9000 Series), ±2.0 %RH (HIH8000 Series), ±3.0 %RH (HIH7000 Series), and ±4.0 %RH (HIH6100 Series)

Mfg. Part No.	Output	Accuracy %	Stock No.	Price Each 1-9
HIH6030-021-001	Digital	4.5	04X4278	11.65
HIH7131-000-001	Digital	3	04X4281	22.85
HIH8120-021-001	Digital	2	04X4284	29.88
HIH9131-000-001	Digital	1.7	04X4287	29.59

(211649)

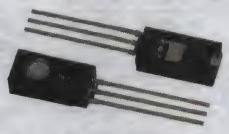
HIH 4010/4020/4021 SERIES HUMIDITY SENSORS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

HIH-4020-001,003 HIH-4020-002,004 HIH-4021-001,003

- Molded thermoset plastic housing, chemically resistant
- Near linear voltage output vs %RH
- Low power design
- Enhanced accuracy, Fast response time
- Stable, low drift performance
- Humidity range: 0% to 100% RH
- Max. supply voltage: 5.8 VDC
- Max. supply voltage: 500 uA
- Output signal: Analog voltage
- Operating temperature: -40°C to 85°C



HIH-4021-002,004

The HIH-4010/4020/4021 series delivers instrumentation-quality RH (Relative Humidity) sensing performance in a competitively priced, solderable SIP (Single-In-line Package). Direct input to a controller or other device is made possible by this sensor's near linear voltage output. With a typical current draw of only 200 uA, the HIH-4010/4020/4021 series is often ideally suited for low drain, battery operated systems. The sensing element's multilayer construction provides excellent resistance to most application hazards such as wettin, dust, dirt, oils and common environmental chemicals. Products are available in two lead spacing configurations, as well as with or without calibration and data printouts.

Mfg. Part No.	Description	Lead Pitch (mm)	Includ Calibration/ Data	Stock No.	Price Each 1-9
HIH-4010 SERIES					
HIH4010-001	Intergrated circuitry	2.54	No	62M4597	20.52
HIH4010-002	Intergrated circuitry	1.27	No	62M4598	19.71
HIH4010-003	Intergrated circuitry, calibration data and printout	2.54	Yes	62M4599	23.02
HIH4010-004	Intergrated circuitry, calibration data and printout	1.27	Yes	62M4600	21.92
HIH-4020 SERIES					
HIH4020-001	Covered Intergrated circuitry	2.54	No	62M4601	16.91
HIH4020-002	Covered Intergrated circuitry	1.27	No	62M4602	22.94
HIH4020-003	Covered Intergrated circuitry, calibration data and printout	2.54	Yes	62M4603	25.17
HIH4020-004	Covered Intergrated circuitry, calibration data and printout	1.27	Yes	62M4604	25.17
HIH-4021 SERIES					
HIH4021-001	Covered, Filtered Intergrated circuitry	2.54	No	62M4605	26.20
HIH4021-002	Covered, Filtered Intergrated circuitry	1.27	No	62M4606	26.20

➤CONTINUED➤

HIH 4010/4020/4021 SERIES HUMIDITY SENSORS (CONT.)

HIH-4021 SERIES

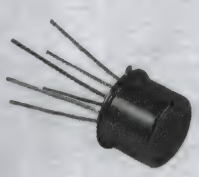
Mfg. Part No.	Description	Lead Pitch (mm)	Includ Calibration/ Data	Stock No.	Price Each 1-9
HIH4021-003	Covered, Filtered Intergrated circuitry, calibration data and printout	2.54	Yes	34M4507	29.32
HIH4021-004	Covered, Filtered Intergrated circuitry, calibration data and printout	1.27	Yes	62M4607	29.04

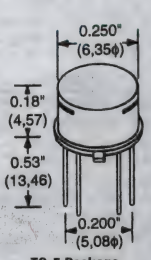
(121383)

HIH-4602 SERIES HUMIDITY SENSORS

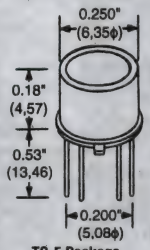
RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.





TO-5 Package



TO-5 Package

Features:
- Linear voltage output vs. %RH
- Laser trimmed interchangeability
- High accuracy, fast response
- Chemically resistant
- Stable, low drift performance
- Built-in static protection
- Ideal for dew point and absolute moisture measurements
- TO-5 can housings

Applications:
- Refrigeration
- Drying
- Meterology
- Battery-Powered Systems

Specifications:
- Rh range: 0-100%RH
- Temperature range: –40°C to +85°C
- Accuracy: ±3.5%RH
- Voltage output: V_{OUT} = 0.00003(Sensor RH)^2+0.0281(Sensor RH)+0.820 Typical @ 25°C
- Temperature compensation: V_{OUT} = (0.0305+0.000044T-0.0000011T^2)(Sensor RH)+(0.9237-0.0041T+0.000040T^2) T = Temperature in °C

Replacement for the HIH-3602 series humidity sensor. TO-5 package provides hydrophobic sintered SST filtered for maximum protection in harsh or splash-prone environments. TO-5 slotted package provides gross mechanical protection and faster response time.

Mfg. Part No.	Temp. Sensor	Interchange-ability	Data Included	Package	Stock No.	Price 1-9
HIH4602-A	100kΩ	+/-3.5 % RH	Yes	TO-5	14M5850	78.98
HIH4602-C	1k PRTD	+/-3.5 % RH	Yes	TO-5	17M6711	58.62
HIH4602-L	None	+/-3.5 % RH	No	TO-5	68K0554	43.46

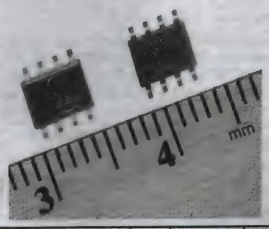
(85848)

HUMIDICON™ DIGITAL HUMIDITY/ TEMPERATURE SENSORS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

- Supply voltage: 2.3 Vdc to 5.5 Vdc
- Humidity range: 10 to 90 %RH
- Temperature range: 5°C to 50°C
- Resolution: 14 bit ADC
- Total error band: +/- 5 %RH
- Response time: 6s tp 8s
- Operating temperature: -25°C to 85°C



Mfg. Part No.	Description	Pkg. of	Stock No.	Price per Pkg. 1-14
HIH6120-021-001	I2C, ±5 %RH total error band, SIP 4 Pin, no filter, non-condensing	1	06W1612	16.93
HIH6120-021-001S	I2C, ±5 %RH total error band, SIP 4 Pin, no filter, non-condensing	5	06W1613	70.00
HIH6121-021-001	I2C, ±5 %RH total error band, SIP 4 Pin, hydrophobic filter, condensation-resistant	1	06W1614	20.77
HIH6121-021-001S	I2C, ±5 %RH total error band, SIP 4 Pin, hydrophobic filter, condensation-resistant	5	06W1615	58.86
HIH6130-021-001	I2C, ±5 %RH total error band, SOIC-8 SMD, no filter, non-condensing	1	55T1168	11.63
HIH6130-021-001S	I2C, ±5 %RH total error band, SOIC-8 SMD, no filter, non-condensing	5	55T1169	61.67
HIH6131-021-001	I2C, ±5 %RH total error band, SOIC-8 SMD, hydrophobic filter, condensation-resistant	1	55T1170	14.01
HIH6131-021-001S	I2C, ±5 %RH total error band, SOIC-8 SMD, hydrophobic filter, condensation-resistant	5	55T1171	61.67

(196687)

SENSORS – HUMIDITY • SENSORS – LIQUID LEVEL

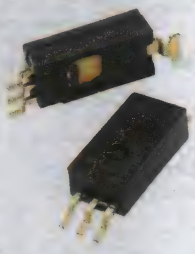
HIH-5030/31 SERIES HUMIDITY SENSORS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features:

- Surface Mount Device
- Complement our existing HIH-4030/4031 line of SMD humidity sensors by operating at lower supply voltage (down to 2.7 VDC)
- Supports demanding system performance, accuracy and response time over the entire humidity range of 0-100% RH
- Allows for application flexibility due to its small, space-saving housing profile
- Provides enhanced resistance to condensation, contaminants due to its multi-layer construction and hydrophobic filter
- Provides instrumentation-quality performance due to its near linear output
- Supply voltage: 3.3 V



Potential Applications:

Industrial:

- Air compressors
- Battery-powered systems
- HVAC
- OEM assembiles
- Process equipment
- Telecommunications cabinets

Medical:

- Infant incubators
- Microenvironments
- Sleep apnea equipment

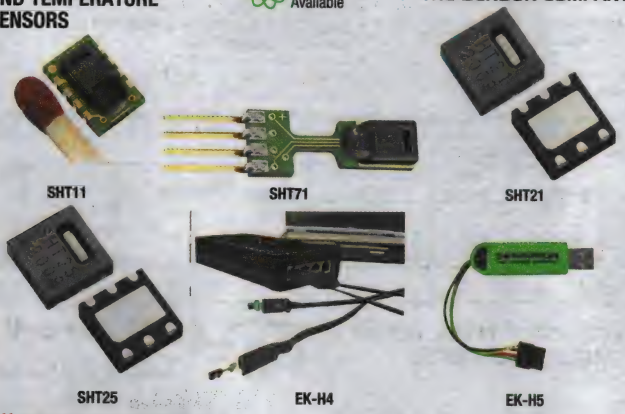
Mfg. Part No.	Description	Stock No.	Price 1-9
● HIH5030-001	Covered integrate circuit humidity sensor, SMD, 1000 units on tape & reel	11R0670	9.58
● HIH5030-001S	Covered integrate circuit humidity sensor, SMD, 5 units on tape & reel	11R0671	31.65
● HIH5031-001	Sample pack: covered filter integrate circuit humidity sensor, SMD, 1000 units on tape and reel	11R0672	15.43
● HIH5031-001S	Sample pack; covered filter integrate circuit humidity sensor, SMD five units on tape	11R0673	35.54

(148724)

SHT SERIES HUMIDITY AND TEMPERATURE SENSORS

RoHS Compliant Available

SENSIRION
THE SENSOR COMPANY



- Measurement range: 0-100%RH
- Response time: 8 sec.
- Temperature range: -40°C to +123.8°C

Single chip relative humidity and temperature sensor is fully calibrated and offers excellent long-term stability with ultra-low power consumption. The digital CMOSens technology integrates two sensors and readout circuitry on one single chip. The **EK-H2 Evaluation Kit** offers a "plug and play" solution for test and evaluation. Kit contains a set of two **mfg. part no. SHT11**, two **mfg. part no. SHT15**, two **mfg. part no. SHT75** sensors, the ASD11 microprocessor board (with LCD), a serial interface cable, a sensor interface cable and a power supply.

Mfg. Part No.	Humidity Accuracy (%RH)	Temperature Accuracy (°C)	Package	Stock No.	Price Each
● SHT11	±	± 0.4 @ 25°C	LCC-10	69C4848	21.83
● SHT15	± 2	± 0.3 @ 25°C	4-LCC SMD	18M2986	29.44
● SHT21	± 2	± 0.3 @ 25°C	DFN	20T1172	6.07
● SHT21P	± 2	± 0.3 @ 25°C	DFN	41T3224	6.06
● SHT21S	± 2	± 0.3 @ 25°C	DFN	41T3225	6.07
● SHT25	± 1.8	± 0.2 @ 25°C	DFN	20T1173	11.26
● SHT71	± 3	± 0.4 @ 25°C	4-SIP	18M2987	30.35
● SHT75	± 1.8	± 0.3 @ 25°C	4-SIP	18M2988	37.45

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
● SF1	Filter Cap for Types **SHT11** and **SHT15** Sensors	09J2305	1.65
● EK-H4	Evaluation Kit EK-H4	20T1170	639.83
● EK-H5	Evaluation Kit EK-H5	20T1171	83.46

(79350)

OPTICAL LEVEL SENSORS FOR LIQUIDS

CE RoHS Compliant Available CARLO GAVAZZI

- Ideal for dectection of acids and bases
- Transistor or SCR output
- LED indication
- Housing material: Polysulphone

Infrared probe for liquid level detection based on refraction principle. Resistant to most acids and bases. LED indication for sensor on. Works well with: oil, wine, waste water, hydraulic fluid. Not recommended for use in environments with high ambient light (i.e., flourescent light or sunlight), or for use with any material which may coat or adhere to the tip of the sensor. **E** or **EP suffix**: 10-40VDC, 200mA, transistor output; **110TB suffix**: 115VAC, 100mA, SCR output. Thread: ⅜" ISO 228. 6' cable. Operating temperature: Max. +176°F. CE compliant.

Mfg. Part No.	Output Type	Stock No.	Price Each
● VP01E	NPN, N.C.	05M4438	146.00
VP02E	NPN, N.O.	96F1243	146.00
VP02EP	PNP, N.O.	96F1244	146.00
VP02-110TB	SCR, N.O.	96F1242	169.00

(3500)

VERTICAL FLOAT SWITCHES

RoHS Compliant Available

COMUS International

Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5

POLYPROPYLENE BODY

Mfg. Part No.	Fig.	Contact Form	Switching Voltage Max.	Switching Current Max. (A)	Switching Capacity Max. (VA)	Stock No.	Price Each 1-49
● VFP11	1	NO / NC	125VAC	500	10	45T0670	11.85
● VFP21	2	NO / NC	240VAC/200VDC	500	50	45T0671	10.32
STAINLESS STEEL BODY							
● VFS30	3	NO / NC	240VAC/200VDC	500	50	73R7810	51.45
● VFS50	4	NO / NC	240VAC/200VDC	1	50	73R7811	113.61
VFS75.	5	NC	240VAC/200VDC	2	40	73R7812	142.35

(178388)

STAINLESS STEEL HORIZONTAL MOUNT FLOAT SWITCH

RoHS Compliant Available

cynergy3 components

- Internal or external mount
- Short float version
- Float & stem material: 316/304 grade SS
- Switching voltage AC max: 24V
- Switching voltage DC max: 24V
- Switching current max: 0.1A
- N/O or N/C switching action
- Float: 0.7SG
- Minimum fluid: 0.75SG

Mfg. Part No.	Max. Power (VA)	Max. Pressure	Max. Temp. (°C)	Leadouts	Stock No.	Price Each 1-4
● SSH66TU12N100S	1	10 bar	120	100cm XLPE	53W6902	214.91

(210190)

SSF212 SERIES STAINLESS STEEL HORIZONTAL MOUNT FLOAT SWITCH

RoHS Compliant Available

cynergy3 components

- External mount via ½" NPT thread
- Compact switch design
- Float & stem material: 316/304 grade SS
- User configurable N/O (make on rise) or N/C (make on fall)
- Switching voltage AC max: 300V
- Switching voltage DC max: 300V
- Switching current max: 0.5A
- Float: 0.7SG
- Minimum fluid: 0.8SG

➤CONTINUED➤

SSF212 SERIES STAINLESS STEEL HORIZONTAL MOUNT FLOAT SWITCH (CONT.)

Mfg. Part No.	Max. Power (VA)	Max. Pressure	Max. Temp. (°C)	Leadouts	Stock No.	Price Each 1-4
SSF212XPM12	50	5 bar	120	M12 Socket	53W6876	167.83

(210188)

RSF100 SEREIES MINIATURE EXTERNAL MOUNT LIQUID LEVEL SENSORS

RoHS Compliant Available

cynergy3 components

- External mount via compression seal
- Compact design with small diameter float
- Material: Polypropylene
- Min. fluid: 0.8SG
- Switching voltage AC max: 240V
- Switching voltage DC max: 120V
- Switching current max: 0.6A
- Contact form: N/O (N/C)

Mfg. Part No.	Max. Power (VA)	Max. Temp. (°C)	Leadouts	Stock No.	Price Each 1-4
RSF104Y100JN	25	100	100cm PVC 2 Core 7/0.2	27T4546	25.02

(210187)

RSF124 SEREIES MINIATURE HORIZONTAL MOUNT LIQUID LEVEL SENSORS

RoHS Compliant Available

cynergy3 components

- Short insertion length (52mm)
- M12 internal mount
- Reversible switch action
- Float material: Polypropylene (foamed)
- Min. fluid: 0.8SG
- Switching power max: 25VA
- Switching voltage AC max: 240V
- Switching voltage DC max: 120V
- Switching current max: 0.6A
- Contact form: N/O (N/C)

Mfg. Part No.	Stem Material	Must Close (mm)	Must Open (mm)	Max. Temp (°C)	Stock No.	Price Each 1-4
RSF124Y030KC	Nylon	7	20	80	53W6850	43.51

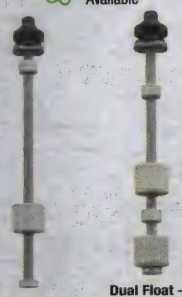
(210186)

RSF66P SERIES LIQUID LEVEL SENSORS

RoHS Compliant Available

cynergy3 components

- High and low level switching
- M12 4-pin connection
- Switching power max: 25VA
- Switching voltage AC max: 240V
- Switching voltage DC max: 120V
- Switching current max: 0.6A
- Minimum liquid: 0.85SG
- Material: PPS



Single Float — Dual Float - Emptying Control

SINGLE FLOAT

Mfg. Part No.	Upper Switch Level (mm)	Lower Switch Level (mm)	Total Length (mm)	Stock No.	Price Each 1-4
RSF66A25B75P	30	75	102	53W6855	50.49
RSF66A25B100P	30	100	127	53W6851	53.52
RSF66A25B125P	30	125	152	53W6852	50.49
RSF66A25B150P	30	150	177	53W6853	50.49
RSF66A25B175P	30	175	202	53W6854	50.49
DUAL FLOAT — EMPTYING CONTROL					
RSF66A50A100P	50	100	134	53W6856	56.93
RSF66A50A150P	50	150	184	53W6857	56.93

CONTINUED

RSF66P SERIES LIQUID LEVEL SENSORS (CONT.)

DUAL FLOAT — FILLING CONTROL

Mfg. Part No.	Upper Switch Level (mm)	Lower Switch Level (mm)	Total Length (mm)	Stock No.	Price Each 1-4
RSF66B50B100P	50	100	127	53W6858	60.35
RSF66B50B150P	50	150	177	53W6859	56.93

(210185)

SV66A-1G SERIES LIQUID LEVEL SENSORS

RoHS Compliant Available

cynergy3 components

- External mount via G1″ (1″BSP) thread
- High buoyancy float (0.55 SG)
- 20 bar max working pressure
- Reversible switch action
- DIN 43650 connection
- Maximum Temperature 120##UndefTag-786##C
- Minimum fluid SG: 0.6
- Contact Form: SPST-NO / SPST-NC
- Switching Power Max: 50 VA
- Switching Voltage AC Max: 300V
- Switching Voltage DC Max: 300V
- Switching Current Max: 0.5A

Mfg. Part No.	Switch Level	Switch Action	Stock No.	Price Each 1-4
SSV66A100E1GP	100 mm	Make on rise	27T4609	142.88
SSV66A150E1GP	150 mm	Make on rise	27T4611	142.33
SSV66A200E1GP	200 mm	Make on rise	27T4612	154.46

(203536)

LIQUID LEVEL SENSORS — VERTICAL MOUNT

RoHS Compliant Available

cynergy3 components

- Compact design, miniature single switch
- User configurable SPST-NO or SPST-NC operation
- Reliable reed switch contacts
- WRAS approval
- Many variants are UL recognized, components file number E171218

Mounting is in the top or bottom of the tank from the inside. Switch action may be reversed by removing the float, inverting it and then refitting it to the stem. PPS type gives good chemical absorption resistance, withstands continuous exposure to boiling water. Switching power max: 25VA. Switching voltage max: 240VAC; 120VAC. Switching current max. 0.6A.

Mfg. Part No.	Body Mat'l.	Must Close (mm)	Must Open (mm)	Max. Temp. (°C)	Stock No.	Price Each 1-4
M12 THREAD 25 WATTS						
RSF53Y100RC	Nylon	11.5	22.5	75	31B4771	21.56
RSF56Y100RC	PPS*	9.5	20.5	120	89C7875	25.65
⅛″ NPT TAPERED THREAD 25 WATTS						
RSF53Y100R1/8	Nylon	11.5	22.5	75	45M5560	21.56
RSF56Y100R1/8	PPS*	9.5	20.5	120	72C5815	25.65
RSF58Y100R1/8	Polypropylene	15	26	100	45M5561	24.45
M12 THREAD 100 WATTS						
RSF53H100RC	Nylon	11.5	22.5	75	06R1522	26.68
RSF56H100RC	PPS*	9.5	20.5	120	06R1526	30.02
RSF58H100RC	Polypropylene	11.5	26	100	06R1528	26.77
RSF56H050TB	PPS*	9.5	20.5	120	06R1524	33.10
RSF56H100RB	PPS*	9.5	20.5	120	06R1525	26.00
⅛″ NPT 100 WATTS						
RSF53H100R1/8	Nylon	11.5	22.5	75	06R1523	25.17
RSF56H100R1/8	PPS*	9.5	20.5	120	06R1527	30.02
RSF58H100R1/8	Polypropylene	15	26	100	06R1529	26.77
RSF54H100R1/8	Polypropylene	15	26	100	27T4554	28.38

*Polyphenylene Sulphide
(94477)

SENSORS – LIQUID LEVEL

LIQUID LEVEL SENSORS — HORIZONTAL MOUNT

RoHS Compliant Available

cynergy3 components

- Quick installation
- Ideal for tanks with inaccessible tops or bottoms
- Many UL recognized components, file number E171218

RS70 series is designed for external fitting, achieving liquid tightness with high grade compression seal and **RS80 series** is designed for external mounting, achieving a seal with a ½″ NPT taper thread. Avoids need for access to inside of chamber. Ideally suited to uses where space or fitting time are prime considerations. Manufactured in a variety of materials with nitrite gaskets to suit most commonly used liquids. SPST-NO contacts. Switch action may be reversed by mounting the device with the orientation arrow pointing downwards, instead of the normal upwards direction. Minimum fluid SG: 0.85. Cable length: 1.0m. Cable size: 16/0.2 20AWG. Switching power max: 25VA. Switching current max: 0.6A. Switching voltage: 240VAC, 120VDC.

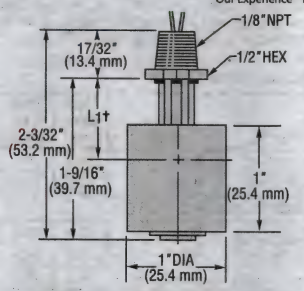
Mfg. Part No.	Body Mat'l.	Must Close (mm)	Must Open (mm)	Max. Temp. (°C)	Stock No.	Price Each 1-4	5-14	15-24
COMPRESSION SEAL 25 WATTS								
● RSF73Y100RN	Nylon	7	20	75	**99B1523**	22.69	21.77	21.15
● RSF78Y100RN	Polypropylene	8	20	100	**99B1525**	23.61	22.65	22.02
● RSF76Y100RN	PPS*	9	24	120	**99B1528**	25.45	24.41	23.73
● TSF73Y100DN	Nylon	7	20	75	**27T4658**	28.27	26.91	26.10
● TSF74Y100DN	Polypropylene	8	20	100	**27T4660**	29.89	28.46	27.59
● TSF76Y050TV	PPS*	9	24	120	**27T4663**	37.28	35.49	34.41
● TSF76Y100DN	PPS*	9	24	105	**27T4664**	33.95	32.32	31.34
COMPRESSION SEAL 100 WATTS								
● RSF73H100RN	Nylon	7	20	75	**06R1530**	24.76	23.57	22.85
● RSF76H050TV	PPS*	9	24	120	**06R1531**	32.68	31.11	30.17
● RSF76H100RN	PPS*	9	24	120	**06R1532**	31.56	30.04	29.13
● TSF73H100DN	Nylon	7	20	75	**27T4657**	33.95	32.32	31.34
● TSF74H100DN	Polypropylene	8	20	100	**27T4659**	35.88	34.16	33.12
● TSF76H050TV	PPS*	9	24	120	**27T4661**	44.79	42.63	41.34
● TSF76H100DN	PPS*	9	24	100	**27T4662**	40.77	38.81	37.64
1/2″ NPT TAPER THREAD SEAL								
● RSF83Y100R	Nylon	7	20	75	**31B4778**	19.46	18.67	18.15
● RSF86Y100R	PPS*	9	24	120	**91B1442**	24.59	23.60	22.94

*Polyphenylene Sulphide
(94469)

LS-3 SERIES PLASTIC LIQUID LEVEL SWITCHES

RoHS Compliant Available

Gems Sensors & Controls — Our Experience • Your Solution



- SPST, 20VA, 120-240VAC

Polysulfone float for water based liquids with limited use in oils and chemicals. Polypropylene float (hollow) features a low specific gravity float offering broad chemical compatibility. Mounting type: ⅛″ NPT. UL recognized, CSA certified, CE compliant.

Mfg. Part No.	Material: Stem and Mounting	Material: Float	Min. Liq. Sp. Gr.	Pressure** PSI/Bar Max.	Stock No.	Price Each 1-9
● 42295	Polysulfone	Polysulfone	0.75	50/3	**92C8773**	40.61
● 142505	Polypropylene	Polypropylene (Hollow)	0.60		**92C8697**	40.28
● 116826		Polypropylene (Solid)	0.90	150/10	**92C8681**	41.05

**Maximum Pressure @ 70°F (30°C)
(72568)

DEV KIT HQ™

Newest technology, Development Kits & Evaluation Boards from the best suppliers.

newark.com/dev-kits

(196525)

LS-7 SERIES PLASTIC SIDE MOUNT LIQUID LEVEL SWITCHES

RoHS Compliant Available

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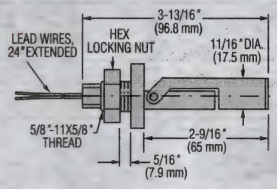
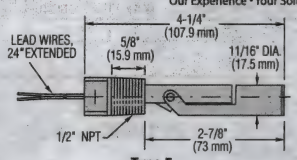
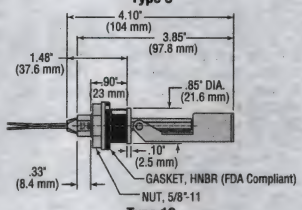


Type 3

Type 7



Type 5



Type 10

- Switch Type SPST, Rated 130VAC, 20VA
- Operating Pressure: 100 psi @ 70°F (Except Mounting Type 10, 50 psi @ 70°F)
- Ideal for High Volume Use in Small Tanks and Vessels

Mfg. Part No.	Mounting Type	Materials: Stem and Mounting	Materials: Float	Min. Liq. Sp. Gr.	Operating Temperature	Stock No.	Price Each 1-9
165570	3	Nylon (13% Glass)		0.65	-40°F to +250°F	**92C8718**	45.24
164520		Polypropylene (20% Glass)		0.55	-40°F to +225°F	**92C8716**	45.24
131100	5	Polypropylene (20% Glass)		0.55	-40°F to +225°F	**92C8695**	43.54
140620		Nylon (13% Glass)		0.65	-40°F to +250°F	**92C8696**	43.98
160450	7	Polypropylene		0.55	-40°F to +225°F	**92C8714**	43.98
160460		Nylon		0.65	-40°F to +250°F	**92C8715**	43.07
165800	10	Polypropylene (20% Glass)		0.55	-40°F to +225°F	**92C8719**	45.54

(72563)

LS-1700 SERIES ALLOY LIQUID LEVEL SWITCHES

RoHS Compliant Available

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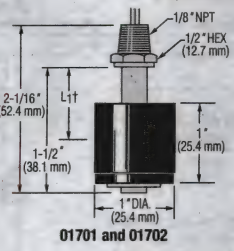
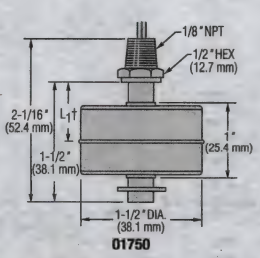


01701 and 01702



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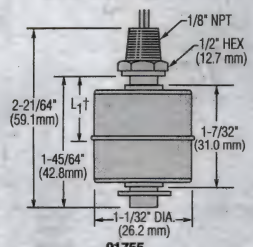


01755

- Switch: SPST, 20VA
- UL Recognized, CSA Certified, CE Compliant

Ideal for shallow tanks or restricted spaces. **LS-1700 series** offers broad chemical compatibility for general purpose use. Ideal for oils and water. The **LS-1750** and **LS-1755 series** are rugged construction suitable for most corrosive liquids and for high temperatures and pressures.

Mfg. Part No.	Material: Stem and Mounting	Material: Float	Material: Other Wetted	Min. Liq. Sp. Gr.	Operating Temperature	Stock No.	Price Each 1-9
● 01701	Brass	Buna N	316 SS, Epoxy	0.45	Water: to 180°F Oil: -40°F to +230°F	**92C8672**	50.99
● 01702	316 SS					**92C8673**	84.89
● 01750	316 SS	316 SS	316 SS	0.70	-40°F to +300°F	**92C8674**	97.17
● 01755				0.90	-40°F to +300°F	**92C8675**	99.24

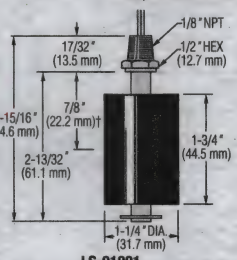
(72565)

LS-1800 AND LS-1900 SERIES ALLOY LIQUID LEVEL SWITCHES

RoHS Compliant Available

Gems Sensors & Controls — Our Experience • Your Solution

LS-01807



LS-01801

- Buna N Float
- Pressure, psi, Max.: 150
- Operating Temperature: Water to 180°F, Oil -40°F to +230°F
- Electrical Termination: No. 18AWG, 24"L., Polymetric Lead Wires
- UL Recognized, Except Where Noted Below

LS-1800 and **LS-1900 series** switches offer excellent stability for general use in oils and waters. Along with their large float displacement, these switches withstand rough service and are suitable for high viscosity liquids.

LS-1800 SERIES

Mfg. Part No.	Material: Stem and Mounting	Material: Float	Material: Other Wetted	Min. Liq. Sp. Gr.	Switch SPST	Stock No.	Price Each 1-9
01801	Brass	Buna N	316 SS, Hysol	0.75	20VA	92C8676	58.46
35651					100VA**	92C8770	72.59
01807	316 SS				20VA	92C8677	93.25
LS-1900 SERIES							
01907	316 SS	Buna N	316 SS	0.55	20VA	92C8679	101.94
35682		Buna N	316 SS	0.55	100VA**	92C8772	115.21

** 100VA switches are not UL recognized
(72566)

LS-1950 SERIES ALLOY LIQUID LEVEL SWITCHES

RoHS Compliant Available

Gems Sensors & Controls — Our Experience • Your Solution

- Stem and Mounting Material: 316 Stainless Steel
- Minimum Liquid Sp. Gr.: 0.80
- Pressure, Maximum: 750 psi
- 2 1/16" diameter (52.4mm)
- 1/4" NPT port

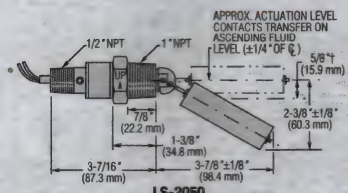
For high performance applications, these models provide high temperature and pressure capabilities. Construction materials comply with FDA food contact regulations. Exceptionally accurate for higher temperatures and in pressurized or corrosive liquids. For oils, water and chemicals. UL recognized, CSA certified, CE compliant.

Mfg. Part No.	Operating Temperature	Switch	Stock No.	Price Each 1-9
01950	-40°F to +300°F	SPST, 20VA	92C8680	103.37
26717	-40°F to +300°F	SPST, 100VA**	92C8756	112.17
79999	-40°F to +480°F	SPST, 20VA	92C8795	148.09

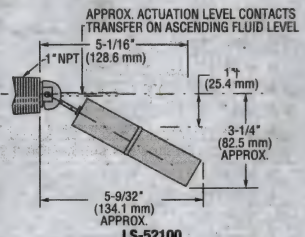
**100VA switches are not UL recognized or CSA certified
(72567)

LS2050/52100 SERIES ALLOY SIDE MOUNT LIQUID LEVEL SWITCHES

Gems Sensors & Controls — Our Experience • Your Solution



LS-2050



LS-52100

These units solve the problem of point level sensing in tanks with inaccessible tops or bottoms or at intermediate locations in larger tanks. Operation is positive and dependable. The float pivots with changing liquid level, displacing a shuttle which magnetically actuates a hermetically sealed switch within the unit. Installation is through the tank side at the detection point.

➤CONTINUED➤

LS2050/52100 SERIES ALLOY SIDE MOUNT LIQUID LEVEL SWITCHES (CONT.)

LS-2050 SERIES

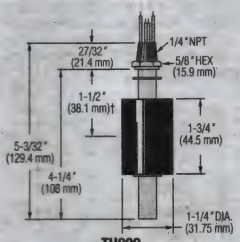
Mfg. Part No.	Material: Stem and Mounting	Material: Float	Min. Liq. Sp. Gr.	Switch	Stock No.	Price Each 1-9
30288	Brass	Buna N	0.80	SPDT, 20VA	92C8766	247.69
LS-52100 SERIES						
52100	316 SS	304 SS	0.85	SPDT, 20VA	92C8779	357.44

(72569)

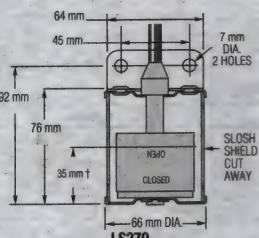
TH800 AND LS-270 SERIES SPECIALTY LEVEL SWITCHES

RoHS Compliant Available

Gems Sensors & Controls — Our Experience • Your Solution



TH800



LS270

LS270

- Maximum Pressure: 150 psi
- UL Recognized, CSA Certified

TH800 series temperature level switch is a level monitoring and temperature switch in a single unit. It is intermediate in size and has a single-setting temperature sensor at the bottom of its stem. **LS-270 series** bracket mounting slosh shield is small, lightweight and extremely stable in nonstatic, highly contaminated liquids. Slosh shielding minimizes effects of turbulence and helps prevent interference by foreign material. Bracket-mounted to any convenient surface.

TH800 SERIES — SPST - 20VA, N.O.

Mfg. Part No.	Material: Stem and Mounting	Material: Float	Min. Liq. Sp. Gr.	Temperature Logic	Stock No.	Price Each 1-9
57143	Brass	Buna N	0.75	N.C., Open on +150°F	92C8780	117.11

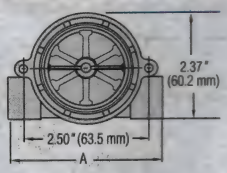
LS-270 SERIES

Mfg. Part No.	Material: Stem and Mounting	Material: Float	Min. Liq. Sp. Gr.	Switch Level SPST	Stock No.	Price Each 1-9
43765	304 SS	Buna N	0.55	20VA, N.O.	92C8775	159.70
43760				20VA, N.C.	92C8774	159.70

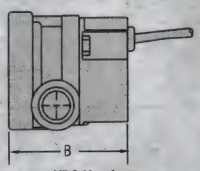
(72570)

RFS TYPE FLOW SET POINT SWITCHES

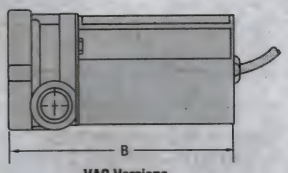
Gems Sensors & Controls — Our Experience • Your Solution



- Combines Visual Confirmation of Flow with Dynamic, Electronic Switch Operation
- Adjustable Switch Point Calibration: A Local LED Signals When Set Point Is Reached
- Operating Temperature: Polypropylene - 20 - +180°F; Brass - 20 - +212°F



VDC Versions



VAC Versions

Mfg. Part No.	Body Material	Port Size NPT	Flow Range GPM	Dimensions (Inches) A	Dimensions (Inches) B	Stock No.	Price Each 1-9
155425	Polypropylene	0.25"	0.1 to 5.0	3.06	2.38	92C8702	246.51
155485		0.50"	1.5 to 20.0	3.06	2.38	92C8705	248.63
156268	Brass	0.50"	1.5 to 20.0	3.01	2.32	92C8712	332.35

(72571)

LLE SERIES LIQUID LEVEL SENSORS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features:
- Accurate Repeatable Switching Point
- Microprocessor Compatible
- Reverse Polarity, Over Voltage, Short Circuit and Transient Protection

Specifications:
- Termination: 250mm Flying Leads
- Operating Temperature: -25°C to 80°C (standard); -40°C to 125°C (high temperature)
- Supply Voltage (V_{CC}): +5VDC to +12VDC ±5%
- Supply Current (mA): 15mA Nominal (standard temperature) 5mA Nominal (high temperature)

Liquid level sensors incorporate a phototransistor trigger which provides a digital output that denotes the presence or absence of liquid. LED and phototransistor are housed within a plastic dome at the head of the device. When no liquid is present, light from the LED is internally reflected from the dome to the phototransistor. When liquid covers the dome, the effective refractive index at the dome-liquid boundary changes, allowing some light from the LED to escape. Therefore, the amount of light received by the phototransistor is reduced and the output switches, indicating the presence of liquid, making this method of liquid level sensing very fast, and almost instantaneous for water.

STANDARD TEMPERATURE

Mfg. Part No.	Description	Stock No.	Price Each
● LLE101000	Screw-In M12 Thread (Type 1)	31H9782	36.08
● LLE102000	Screw-In M12 Thread (Type 2)	19M9540	50.46
● LLE103000	Screw-In M12 Thread (Type 3)	10M8430	51.24
● LLE105000	Push-In (Type 5)	05M0500	48.94
LLN8651721	3/8 inch BSP Thread	61H4634	254.96

HIGH TEMPERATURE

Mfg. Part No.	Description	Stock No.	Price Each
● LLE102101	Screw-In M12 Thread (Type 2)	37K6789	52.18
● LLE103101	Screw-In M12 Thread (Type 3)	65K8990	65.30
● LLN8651722	3/8 inch BSP Thread	28M8242	240.54

(74823)

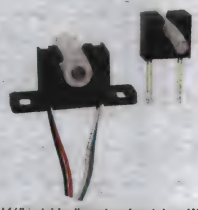
TUBE FLUID SENSORS

RoHS Compliant Available

TT electronics
OPTEK Technology

Features:
- Can identify if liquid is present in clear tubes that have a 1/16", 1/8", 3/16" or 1/4" outside diameter
- Opaque plastic housing enhances ambient light rejection
- Printed circuit board mounting or 24" wires

Applications:
- Non-contact fluid sensing
- IV fluid
- Oils and other petroleum products
- Colored fluids
- Toner fluids
- Water



OPB350 series liquid sensor is designed to work with 1/16", 1/8", 3/16" and 1/4" outside diameter clear tubes. When output reference circuitry is added, multiple output states such as "fluid present," "no fluid present" and "no tube present" can be recognized.

Mfg. Part No.	I_F(mA)	V_{BRCEO} (V)	$I_{C(ON)}$ Min. (mA)	Tube Size O.D. (in.)	On/ Off Ratio	Mount Type	Stock No.	Price Each 1-99
● OPB350	5	30	1	1/8	3	PCB	73H3201	4.69
● OPB350W062Z	5	24	0.3	1/16	3	24" 26 AWG Wires	30M5162	6.48
● OPB350L250	5	24	0.75	1/4	2.3	PCB	27K2373	5.22
● OPB350W250Z	5	24	0.75	1/4	2.3	24" 26 AWG Wires	69K8440	6.82

(85508)

TUBE LIQUID SENSOR SELF CALIBRATING MODULES

RoHS Compliant Available

TT electronics
OPTEK Technology

Features:
- Can identify if liquid is present in clear tubes that have an outside diameter of 1/16" [1.6mm], 1/8" [3.2mm], 3/16" [4.8mm], or 1/4" [6.3mm]
- Opaque plastic housing enhances ambient light rejection
- Printed circuit board mounting

Specifications:
- Operating temperature: -40°C to +85°C
- LED forward DC current: 15 mA Max.
- Output Phototransistor collector-emitter voltage: 24 to 30 V
- Input LED forward voltage 1.7V, reverse current 100 uA

The OPB350 series liquid sensor is designed to work with 1/16" [1.6mm] 1/8" [3.2mm], 3/16" [4.8 mm] and 1/4" [6.3 mm] outside diameter clear tubes. The **OCB350** series is configured to optimize the design effort needed to use a fluid sensor with the addition of self calibration circuitry. The **OCB350** series are easy to use requiring only a power supply.

➤ CONTINUED ➤

TUBE LIQUID SENSOR SELF CALIBRATING MODULES (CONT.)

Mfg. Part No.	Tube Size (inch)	On-State Collector Current Typ. (mA)	Stock No.	Price 1-99
● OCB350L062Z	1/16	0.8	45P7966	18.85
● OCB350L125Z	1/8	2.6	45P7967	19.91
● OCB350L250Z	1/4	1.5	45P7969	19.91

(152518)

LG01 FLOW SWITCH AND BUBBLE DETECTOR SENSORS FOR LIQUIDS

RoHS Compliant Available

SENSIRION
THE SENSOR COMPANY

- Maximum flow rate up to 220 ml/min (valid for H2O)
- Standard Switch Limit at 4.5 ml/min or 0.25 ml/min (valid for H2O)
- Air-/bubble detection enabled
- Fluid connections: 1/4-28 standard fittings for OD 1/8" (3.2 mm) or 1/6" (1.6 mm) plastic tubing
- Fast response below 100 ms
- Wetted materials: inert, bio-compatible (glass, PEEKTM, Teflon®)
- Supply voltage of 5....12V

The **LG01** Flow Switch sensor detects ultra-low liquid flow rates or the presence of air in fluidic systems and therefore makes them more reliable. The detection of liquid flows is possible within the range of a few ml/min and less. The sensor's output signal of either 0 or 5 volts indicates whether the current flow rate is above or below the specified flow switch level. At flow rates above this limit the identification of air bubbles within the flow channel is equally consistent. The non-invasive measurement principle of the liquid flow sensor **LG01** allows detecting the current state of fluid through the wall of the internal glass capillary. Thus, the sensor provides highest bio-compatibility and chemical resistance. Measurements of the liquid flow detector are performed with a response time of less than 100ms.

Mfg. Part No.	Maximum Flow Rate	Flow Switch Limit	Stock No.	Price Each 1-9
● LG01-2000A090	50ml/min	4.5ml/min	88T9611	184.76
● LG01-2000A005	220ml/min	0.25ml/min	88T9610	183.16

CONNECTIVITY KIT

The optional **LG01** connectivity kit contains material for electrical and fluidic connections: Assembled flat ribbon cable, 30 mm (1-100482-01); 2x barb adapter to connect ID 1.6 mm (1/16") tubing (Value Plastics ABR004-J1A-2); 2x barb adapter to connect ID 3.2 mm (1/8") tubing (Value Plastics ABR013-J1A-1).

Mfg. Part No.	Description	Stock No.	Price Each
● LG01 CONNECTIVITY KIT	Connectivity Kit	88T9609	30.56

(210208)

PaPIRs PASSIVE INFRARED MOTION SENSORS

RoHS Compliant Available

Panasonic

EKMA Series

EKMB/EKMC Series

Applications
- **Security & Wireless Devices**
- Security sensors and cameras
- Wireless occupancy sensors driven by photovoltaic cells or battery to extend battery life.
- **Housing & Commercial equipment**
- Lighting fixtures and wiring devices
- Video intercoms, HA control panels
- Vending machines etc.
- **Home appliances (Energy savings)**
- Television and PC monitors
- PC, Air-Conditioners
- Air Purifiers
- Wireless and Battery operated monitoring sensing devices

Specifications
- Operating voltage: 3 to 5 VDC
- Output current: 100 uA (max.)
- Operating temperature: -20°C to 50°C
- Mounting: TO-5

Benefits
- Low profile achieved with fitted lens and embedded sensing circuit
- Motion detection with 3mm diameter miniature flat lens
- 1uA low current consumption possible based on Panasonic's proprietary design
- Robust design against false starts

EKMA SERIES LOW PROFILE

Mfg. Part No.	Lens Type	Current Consumption (uA)	Lens Color	Stock No.	Price Each 1-9
● EKMA1202120	Silicon	2	...	91R0370	37.33
● EKMA1101111	Polyethylene	1	White	91R0365	28.60
● EKMA1201111	Polyethylene	2	White	91R0368	28.60
● EKMA1201112	Polyethylene	2	Black	91R0369	28.60
● EKMA1301112	Polyethylene	6	Black	91R0372	23.13
EKMB SERIES LOW CURRENT CONSUMPTION STANDARD DISTANCE DETECTION 5M					
● EKMB1101111	Polyethylene	1	White	14T0552	25.63
● EKMB1101112	Polyethylene	1	Black	14T0553	27.17
● EKMB1101113	Polyethylene	1	Pearl White	14T0554	25.63
● EKMB1201111	Polyethylene	2	White	14T0555	24.42
● EKMB1201112	Polyethylene	2	Black	14T0556	26.13
● EKMB1201113	Polyethylene	2	Pearl White	14T0557	24.42
● EKMB1301113	Polyethylene	6	Pearl White	14T0560	18.33
EKMB SERIES LOW CURRENT CONSUMPTION LONG DISTANCE DETECTION 12M					
● EKMB1103111	Polyethylene	1	White	26T3936	26.88
● EKMB1103112	Polyethylene	1	Black	26T3937	26.88
● EKMB1103113	Polyethylene	1	Pearl White	26T3938	26.88

➤ CONTINUED ➤

PaPIRs PASSIVE INFRARED MOTION SENSORS (CONT.)

EKMB SERIES LOW CURRENT CONSUMPTION LONG DISTANCE DETECTION 12M

Mfg. Part No.	Lens Type	Current Consumption (uA)	Lens Color	Stock No.	Price Each 1-9
EKMB1203111	Polyethylene	2	White	26T3939	25.69
EKMB1203112	Polyethylene	2	Black	26T3940	25.69
EKMB1203113	Polyethylene	2	Pearl White	26T3941	25.69
EKMB1303111	Polyethylene	6	White	26T3942	19.24
EKMB1303112	Polyethylene	6	Black	26T3943	20.59
EKMB1303113	Polyethylene	6	Pearl White	26T3944	19.24
EKMC SERIES STANDARD CURRENT CONSUMPTION STANDARD DISTANCE DETECTION 5M					
EKMC1601111	Polyethylene	170	White	14T0561	8.62
EKMC1601112	Polyethylene	170	Black	14T0562	8.51
EKMC1601113	Polyethylene	170	Pearl White	14T0563	8.62
EKMC SERIES STANDARD CURRENT CONSUMPTION LONG DISTANCE DETECTION 12M					
EKMC1603111	Polyethylene	170	White	26T3945	8.92
EKMC1603112	Polyethylene	170	Black	26T3946	8.92
EKMC1603113	Polyethylene	170	Pearl White	26T3947	9.04

(190008)

SS360NT/SS360ST/SS460S HIGH SENSITIVITY BIPOLAR LATCHING DIGITAL HALL-EFFECT SENSOR ICs

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE. All Found Here.

- Fastest response time in its class: Provides more efficiency in commutating a brushless dc motor
- No chopper stabilization: Results in a clean output signal
- High sensitivity: Operates from only 30 Gauss typical, at 25°C [77 °F] and 55 Gauss maximum over the full -40 °C to 150 °C [-40 °F to 302 °F] temperature range, allowing for the use of smaller, magnets or a wider air gap
- Bipolar latching magnetics: Makes these products well-suited for accurate speed sensing and RPM (revolutions per minute) measurement
- Sub-miniature, SOT-23 surface mount package (**SS360NT/SS360ST**) supplied on tape and reel: Allows for compact design with automated component placement
- Small, leaded, flat TO-92-style package (**SS460S**): Allows for a compact PC board layout
- Wide operating voltage range of 3 Vdc to 24 Vdc: Allows for potential use in a wide range of applications
- Built-in reverse voltage: Enhances the protection of the sensor and the circuits
- Durable design: Allows operation up to 150 °C [302 °F] RoHS-compliant material meets Directive 2002/95

The **SS360NT/SS360ST/SS460S** High Sensitivity Bipolar Latching Digital Hall-Effect Sensor ICs are small, sensitive and versatile devices that are operated by the magnetic field from a permanent magnet or an electromagnet. They are designed to respond to alternating North and South poles. The **SS360NT** is turned ON by a North pole while the **SS360ST** and **SS460S** are turned ON by a South pole.

Mfg. Part No.	Package	Operate Point Typ.	Release Point Typ.	Activation Pole	Stock No.	Price Each 1-9
SS360NT	SOT-23	3.0 mT [30 G]	-3.0 mT [-30 G]	North	94T7223	1.29
SS360ST	SOT-23	3.0 mT [30 G]	-3.0 mT [-30 G]	South	94T7224	0.73
SS460S	TO-92	3.0 mT [30 G]	-3.0 mT [-30 G]	South	94T7225	0.75

(210212)

3-AXIS MAGNETOMETERS

NEW

Honeywell

Features:
- Measure both magnetic field intensity and direction
- Small size and high sensitivity
- Ideal for compassing and navigation, security systems and lab instrumentation

Specifications:
- HMR2300 development kit includes one magnetometer module in aluminum enclosure, cabling with power supply, Windows demonstration software for remote PC, and users guide

HMC2003

HMR2300

Mfg. Part No.	Field Range (gauss)	Output	Resolution	Package	Stock No.	Price Each 1-9
HMC2003	±2	Analog	40	20-DIP	16F5425	317.85
HMR2300 DEMO KIT	±2	RS232	67	...	34C2812	743.75
HMR2300-D21-232	±2	RS232	67	...	16F5423	880.76

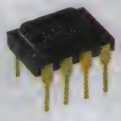
(211478)

HMC100x AND 102x SERIES LOW FIELD LINEAR MAGNETIC SENSORS

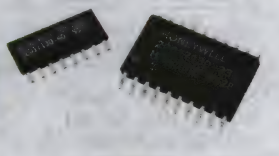
RoHS Compliant Available

Honeywell

- Small, low cost, high sensitivity and high reliability, solution for low field magnetic sensing
- Solid state devices reduce board assembly costs
- HMC102x family used for automotive and handheld compassing
- HMC100x family for vertical axis sensing and altitude reference



HMC1021D



HMC1002-RC

1-AXIS

Mfg. Part No.	Field Range (gauss)	Resolution (µgauss)	Sensitvity (mV/V)	Package	Stock No.	Price Each
HMC1021D	±6	85	1	8-DIP	30K6321	305.69
HMC1021S	±6	85	1	8-SIP	91B5181	6.56
2-AXIS						
HMC1002-RC	±2	27	3	20-SOIC	14M8111	29.74

(90091)

VF401 2-WIRE MR FINE-PITCH RING MAGNET SENSOR

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE. All Found Here.

Features and Benefits
- Not damaged by reverse polarity voltages when customer-supplied sense resistor is installed, enhancing protection.
- Enhanced sensitivity, ±7 Gauss typical, allows for larger air gaps (up to 2,5 mm [0.098 in]) and higher pole density (up to 50-pole pairs depending on ring diameter).
- Wide speed capability provides application flexibility with true zero speed sensing and operation up to 3000 Hz.
- Output pattern independent of gap between target and sensor.

Potential Applications

Transportation
- Speed encoding using a multipole ring magnet
- Enhanced accuracy rotational position sensing
- Wheel speed sensing
- Window lift applications
- Speed and direction sensing

Medical
- Shaft speed encoding using a multipole ring magnet

Industrial
- Shaft speed encoding using a multipole ring magnet
- Enhanced accuracy rotational position sensing
- Precision motor speed measurement
- Speed control in machine tools
- Elevator speed sensing
- Speed control in motorized industrial equipment

The VF401 is a high performance, digital, 2-wire, MR (magnetoresistive) sensor in a miniature, flat, TO-92-style, plastic package with a current output, designed for sensing fine pitch ring magnets.

Mfg. Part No.	Supply Voltage	Supply Current (mA)	Stock No.	Price Each 1-9
VF401	3.8V to 24V	18	05N0658	6.11

(166290)

APS00B HIGH RESOLUTION MAGNETIC DISPLACEMENT SENSOR

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE. All Found Here.

Medical
- High accuracy angular position sensing
- Rotary speed and angle detection
- Non-contact precision displacement sensing

Features and Benefits
- Dual Wheatstone bridges provide a passive, low-noise design, enhancing system performance.
- Small, 8-pin surface-mount package saves room on the PC board when compared to larger IC packages and components.
- Tape and reel configuration allows use with automated pick-and-place equipment, potentially reducing assembly costs (178 mm [7 in] and 330 mm [13 in] reels available).
- Typical 0 MHz to 5 MHz frequency response with 190 G minimum magnetic field applied makes this saturated mode sensor potentially suitable for high speed applications.
- Typically requires only 5 V at 4 mA to operate (20 mW), promoting energy efficiency
- Dual bridges with outputs 45° out of phase make it possible to use outputs as speed and direction signals
- Honeywell APS00A instrumentation amplifier is available separately for additional signal processing
- RoHS-compliant materials meet Directive 2002/95/EC

Potential Applications

Transportation
- High accuracy angular position sensing
- Rotary speed and angle detection
- Non-contact precision displacement sensing
- Speed and direction sensing

Industrial
- High accuracy angular position sensing
- Rotary speed and angle detection
- Non-contact precision displacement sensing
- Valve position
- Robotics control

APS00B is a miniature surface mount sensor for linear, angular, or rotary displacement designed for magnetic saturating field sensing. This sensor is a cost-effective and space-efficient solution for high-volume OEM designs.

➤CONTINUED➤

APS00B HIGH RESOLUTION MAGNETIC DISPLACEMENT SENSOR (CONT.)

Mfg. Part No.	Supply Voltage	Output Type	Supply Current (mA)	Stock No.	Price Each 1-9
APS00B	5V to 12V	Sin(28), Cost(28)	7	05N0305	3.43

(166287)

SS30AT, SS40A, SS50AT BIPOLAR HALL-EFFECT MAGNETIC POSITION SENSORS

RoHS Compliant Available

Honeywell

Sensing and Control

SELECTION, SPEED, SERVICE.
All Found Here.

Features:
- Subminiature package size often allows for use in applications with tight PCB space where a compact design is needed
- Built-in reverse voltage protection simplifies installation and protects device from damage when mounted on PCB
- Thermally balanced integrated circuit provides stable operation over a full temperature range
- 4.5 Vdc to 24 Vdc supply voltages enhance application flexibility
- Ability to operate up to 125 °C [257 °F] provides application flexibility

SS30AT

Potential Applications:
- **Transportation motion Controll:**
- Tachometer, counter pickup
- Motor and fan control
- Electric vehicle control
- **Industrial:**
- Speed and RPM sensing
- Flow-rate sensing
- Robotics control

The **SS30AT/SS40A/SS50AT** series sensor build upon Honeywell's popular magnetic position sensors and offer severa advantages. These sensors have been designed with the latest technologies to provide reliable, cost-effective solutions to many commercial, computer, medical, and/or consumer applications requiring motor control and RPM sensing. These products are available in three package styles to suit a variety of applications. The **SS40A** in the leaded, flat TO-92 style package. The **SS30AT** in the subminiature SOT-23 surface-mount package, and the **SS50AT** in the small SOT-89B surface-mount package.

Mfg. Part No.	Field Range (gauss)	Package Type	Stock No.	Price Each 1-9
● SS30AT	+/- 170	SOT-23	25R2291	1.02
● SS40A	+/- 170	TO-92	71J7819	1.08
● SS50AT	+/- 170	SOT-89B	71J7829	2.79

(153583)

SS361RT/SS461R SERIES BIPOLAR LATCH HALL-EFFECT MAGNETIC POSITION SENSORS

RoHS Compliant Available

Honeywell

Sensing and Control

SELECTION, SPEED, SERVICE.
All Found Here.

Features
- Enhanced sensitivity
- Subminiature package size (SOT-23)
- Low voltage capability: 3 V operation
- Low cost
- Built-in reverse voltage protection
- Robust design: will operate up to 150°C [302°F]

Applications
Transportation:
- Speed and RPM sensing
- Motor and fan control
- Convertible roof position
- Automotive transmission position

Industrial:
- Flow-rate sensing
- Robotics control

Medical:
- Medication dispense control

SS461R SS361RT

Specifications:
- Operating temperature: -40 to 150°C
- Supply current: 6mA max.
- Typical operate point: 50 gauss at 25°C

Mfg. Part No.	Supply Voltage	Magnetic Char. (gauss) Operate Max.	Release Min.	Package	Stock No.	Price Each 1-9
● SS361RT	3 to 18 V (1)	120	-120	SOT-23	11R0676	1.15
● SS461R	3 to 18 V	120	-120	TO-92	11R0677	1.16

(1) Note: The SS361RT will operate from 3 to 18 V up to 125°C. Max. supply voltage is reduced to 12V at 150°C
(148726)

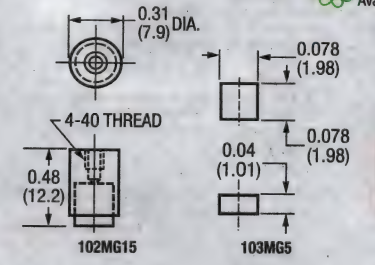
MG SERIES BAR MAGNETS

RoHS Compliant Available

Honeywell

Sensing and Control

SELECTION, SPEED, SERVICE.
All Found Here.



102MG15 103MG5

101 MG7 102MG11 106MG10

➤CONTINUED➤

MG SERIES BAR MAGNETS (CONT.)

Bar magnets are ideal for sensors with unipolar magnetic characteristics. Gauss level given is @ 25°C. Other threaded bushing, bar, ring magnets, and ring magnets with alternate North and South poles for use with bipolar magnetic sensors are available; *go online or call.*

Mfg. Part No.	Dimensions Length	Outside Diameter	Gauss Level @ 0.050″	0.100″	Stock No.	Price 1-9
● 101MG7	0.25″ (6.35)	0.25″ (6.35)	755	480	23F2226	6.18
● 102MG11	0.67″ (17.02)	0.31″ (7.87)	755	480	23F2229	9.49
● 102MG11BP	0.67″ (17.02)	0.31″ (7.87)	755	470	39B4198	4.36
● 102MG15	0.48″ (12.2)	0.31″ (7.9)	755	480	23F2230	11.90
● 103MG5	0.04″ (1.01)	0.078″ (1.98)	225	100	23F2429	1.88
● 106MG10	0.93″ (23.62)	0.40″ (10.16)	1600	940	23F2237	13.06

(5177)

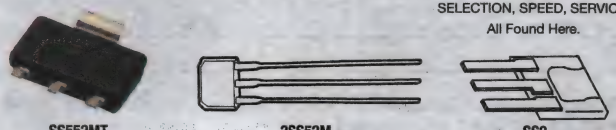
SS2/2SS SERIES ULTRA-SENSITIVE MAGETRORESISTIVE SENSORS

RoHS Compliant Available

Honeywell

Sensing and Control

SELECTION, SPEED, SERVICE.
All Found Here.



SS552MT 2SS52M SS2

Feature magneto-resistive sensor with digital current sink output. Can be operated with either north or south magnetic pole. 3-pin, in-line PC board terminals on 0.100″ (2.54) mounting centers except **mfg. part no. 2SS52M**, which is 0.050″(1.27). For **mfg. part nos. SS21** and **SS22** output voltage: 0.4V max. Typical OP @ 25°C: 15 gauss. Typical RL @ 25°C: 11 gauss. Typical differential @ 25°C: 4. Gauss 0.3″ × 0.3″ (7.62 × 7.62), with epoxy chip protection. **Mfg. part no. 2SS52M:** 0.18″ × 0.18″ (4.57 × 4.57) plastic package.

Mfg. Part No.	Operate Gauss	Supply Voltage	Supply Current	Stock No.	Price Each 1-9	10-24
● 2SS52M	15	3.8-30VDC	6mA	48F2833	3.47	3.16
● SS552MT *	25	3.8-30VDC	6mA	89H9137	2.17	...

* MT suffix surface mount SOT-89 package.
(5178)

3-AXIS MAGNETOMETERS

Honeywell

Features:
- Measure both magnetic field intensity and direction
- Small size and high sensitivity
- Ideal for compassing and navigation, security systems and lab instrumentation

Specifications:
- HMR2300 development kit includes one magnetometer module in aluminum enclosure, cabling with power supply, Windows demonstration software for remote PC, and users guide

HMC2003

HMR2300

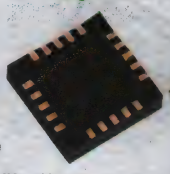
Mfg. Part No.	Field Range (gauss)	Output	Resolution	Package	Stock No.	Price Each 1-9
HMC2003	±2	Analog	40	20-DIP	16F5425	317.85
HMR2300 DEMO KIT	±2	RS232	67	...	34C2812	743.75
HMR2300-D21-232	±2	RS232	67	...	16F5423	880.76

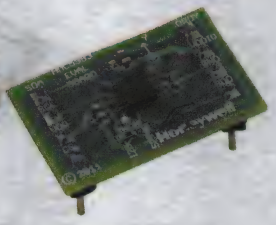
(91176)

HMC5983 3-AXIS DIGITAL COMPASS IC

RoHS Compliant Available

Honeywell





- Temperature compensated data output and temperature output
- Automatic offset compensation
- 12-Bit ADC coupled with low noise AMR sensors achieves 2 milli-gauss field resolution
- I²C (standard, fast, high-speed modes) or SPI digital interface
- Fast 220 Hz maximum output rate
- Built-in self test
- Low voltage operations (2.16 to 3.6V) and low power consumption (100 uA)
- Built-in strap drive circuits
- Lead free package construction
- Wide magnetic field range (+/-8 Oe)

Temperature compensated three-axis integrated circuit e-compass. This surface-mount, multi-chip module is designed for low-field magnetic sensing for applications such as mobile phones, tablets, netbooks, consumer electronics, automotive navigation systems, and personal navigation devices. Includes our state-of-the-art, high-resolution HMC118X series magnetoresistive sensors plus an ASIC containing amplification, automatic degaussing strap drivers, offset cancellation, and a 12-bit ADC that enables 1° to 2° compass heading accuracy. The I²C or SPI serial bus allows for easy interface.

➤CONTINUED➤

HMC5983 3-AXIS DIGITAL COMPASS IC (CONT.)

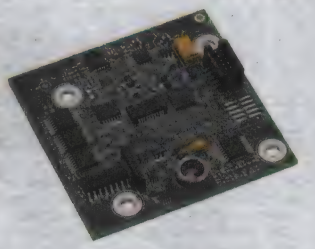
Mfg. Part No.	Description	Stock No.	Price Each 1-24
HMC5983 -TR	HMC5983 Magnetic Sensor 3.0x3.0x0.9mm	76T9066	1.94
HMC5983-DEMO	HMC5983 Demo Kit	76T9067	332.50
HMC5983-EVAL	HMC5983 Eval Kit	76T9068	131.25

(201296)

DRM 4000 DEAD RECKONING MODULE

Honeywell

The Dead Reckoning Module (DRM™) 4000 is a miniature, electronic device for personnel on foot that provides the user's position relative to an initialization point. Dead Reckoning (DR) data and external GPS NMEA data are blended by an internal Kalman filter. When GPS data is available the dead reckoning sensors are automatically calibrated continuously and the two data sources are blended into a composite real-time position data output. When GPS data is unavailable, dead reckoning takes over. DRM™4000 position error characteristics are independent of time, and depend primarily on distance traveled.Patented motion classification algorithms analyze walking motion, and compensate when the user is running, or just "fidgeting" in place.

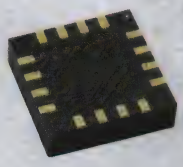


Mfg. Part No.	Output	Product	Stock No.	Price Each 1-24
DRM4000L-N00-232	RS 232	Dead Reckoning Module	76T9065	659.86
DRM4000L-N00-USB DEMO	USB	Dead Reckoning Module Development Kit*	76T9064	1068.60

* The Development Kit includes an enclosure with an internal I/O adapter board with a USB interface, GPS receiver, rechargeable lithium battery, Windows™ Host software, carrying case, GPS antenna, baseball cap and 6-foot USB adapter cable. The mini-USB jack accommodates 38.4kbps data transfer as well as trickle charging the battery when required. An illuminated power on/off doubles as a momentary "event" marker button to help in data collection processing.
(201295)

3-AXIS DIGITAL COMPASS IC

Honeywell



Demo-board

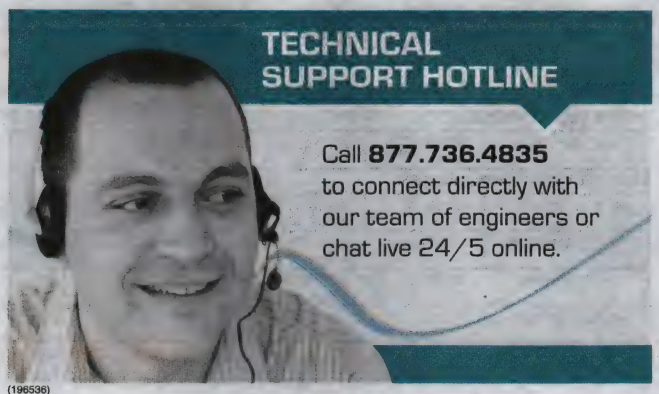
Features

- 3-Axis magnetoresistive sensors and ASIC in a 3.0x3.0x0.9mm LCC surface mount package
- 12-bit ADC coupled with low noise AMR sensors achieves 5 milli-gauss resolution in +/- gauss fields
- Built-in self test
- Low voltage operations (2.16 to 3.6V) and low power consumptio (100uA)
- Built-in strap drive circuits
- I2C digital interface
- Wide magnetic field range (+/-8 Oe)
- Software and algorithm support
- Fast 160 Hz maximum output rate

The HMC5883L is a magnetic sensor in a 3.0x3.0x0.9 mm surface-mount 16-pin leadless chip carrier (LCC) that includes Honeywell's state-of-the-art, high-resolution magneto-resistive sensors with automatic degaussing (demagnetizing) strap drivers, offset cancellation and a 12-bit ADC for high resolution earth field sensing.

Mfg. Part No.	Description	Stock No.	Price Each
HMC5883L-TR	MAGNETIC SENSOR ON TAPE AND REEL	20T0699	1.90
HMC5883L-EVAL	MAGNETIC SENSOR EVALUATION BOARD	20T0698	131.25
HMC5883L-DEMO	MAGNETIC SENSOR DEMONSTRATION BOARD	20T0697	309.70

(192322)



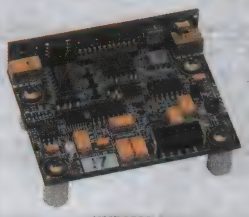
(196536)

HMR SERIES DIGITAL COMPASS SOLUTIONS

Honeywell

Specifications:

- HMR Development kits includes HMR digital compass, circuit card with RS232 output, cabling with power supply, Windows demonstration software for remote PC, and users guide
- HMR3500 Development kits includes DB9 data and power cable, RS232 interface, Windows CompassHost software, and manual with software protocol message descriptions



HMR3500

Mfg. Part No.	Description	Size	Tilt Range	Stock No.	Price Each 1-24
HMR3000-D00-485	3-Axis, Tilt Compensated, RS485 Output	1.5"x4.2"x0.88"	±40°	49H6711	784.38
HMR3000 DEMO KIT	3-Axis, Tilt Compensated, RS232 Output with Development Kit	1.5"x4.2"x0.88"	±40°	34C2814	989.00
HMR3300	3-Axis, Tilt Compensated, PCB Module only	1"x1.45"x0.4"	±60°	34C2817	447.20
HMR3300-D00-232	3-Axis, Tilt Compensated, PCB Module and RS232 Motherboard	1"x1.45"x0.4"	±60°	92H7099	433.68
HMR3400	3-Axis, Tilt Compensated, PCB Module only	0.6"x1.5"	±60°	84K2741	326.65
HMR3500	3-Axis, Tilt Compensated, PCB Module only	2"x1.5"x0.5"	±80°	74K2363	731.14
HMR3300 DEMO KIT	3-Axis, Tilt Compensated, PCB Module with Development Kit	1"x1.45"x0.4"	±60°	34C2818	467.32
HMR3500 DEMO	3-Axis, Tilt Compensated, PCB Module with Development Kit	2"x1.5"x0.5"	±80°	84K2742	775.00

DEMONSTRATION BOARDS

Mfg. Part No.	Description	Stock No.	Price Each
HMR2300-D21-232-DEMO	Extended-Base Enclosure, RS-232 I/O	65R5093	793.75

(91177)

FX-300 SERIES DIGITAL FIBER OPTIC SENSORS

RoHS Compliant Available

Panasonic

- Supply voltage: 12 to 24V DC
- Ambient temperature: -10 to +55 °C (-14 to +131 °F)
- Ambient humidity: 35 to 85 % RH, Storage: 35 to 85 % RH

The FX-300 series of digital fiber optic sensors offers a wide range of sensing possibilities in a compact, high-performance unit. Three types are available for optimal application coverage including the standard type (FX-301), high-function type (FX-305), and the high-speed type (FX-301-HS).

STANDARD TYPE

Mfg. Part No.	Output Configuration	Rmitting Element	Stock No.	Price Each 1-9
FX-301	Standard	Red LED	29H2674	162.97
FX-301P	Standard		73H3610	160.50
FX-301B	Standard	Blue LED	96H2913	240.36
FX-301BP	Standard		96H2914	240.36
FX-301G	Standard	Green LED	96H2915	240.36
FX-301GP	Standard		96H2916	240.36
FX-301H	Standard	Infrared LED	96H2917	240.36
FX-301HP	Standard		96H2918	240.36
HIGH-SPEED TYPE				
FX-301-HS	High Speed	Red LED	73K8045	224.61
FX-301P-HS	High Speed		73K8046	215.87
HIGH-FUNCTION TYPE				
FX-305	Standard	Red LED	73K8047	221.42
FX-305P	Standard		73K8048	221.42

SENSOR ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
CN-73-C1	3-Core Main cable, 1m length	96H2211	12.39
CN-73-C2	3-Core Main cable, 2m length	29H2681	13.88
CN-74-C2	4-Core Main cable, 2m length	73K7618	20.54
MS-DIN-E	End plates	96H4028	5.86

➤CONTINUED➤

FX-300 SERIES DIGITAL FIBER OPTIC SENSORS (CONT.)

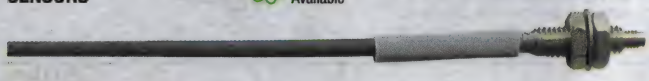
Mfg. Part No.	Description	Stock No.	Price Each 1-9
● FT-WKV8	Narrow beam side-view fiber,700mm	96H2866	215.87
● CN-70	Non-Line Quick Disconnect Connector	96H2207	17.64

(196461)

FIBER OPTIC SENSORS

RoHS Compliant Available

Panasonic



STANDARD FIBER OPTIC SENSORS

Mfg. Part No.	Sensor Type	Sensing Range	Stock No.	Price Each 1-9
● FD-31	Reflective	0mm to 125mm	40T7767	48.49
● FD-S31	Reflective	0mm to 125mm	40T7765	48.49
● FD-41	Reflective	0mm to 125mm	40T7768	48.49
● FD-61	Reflective	0mm to 400mm	40T7769	46.20
● FT-S21	Thrubeam	0mm to 315mm	40T7785	48.49
● FT-31	Thrubeam	0mm to 315mm	40T7788	46.20
● FT-42	Thrubeam	0m to 1.13m	40T7790	47.98
● FD-42G	Reflective	0mm to 200mm	92T1206	76.37
● FD-61G	Reflective	0mm to 420mm	92T1208	35.16
● FD-61S	Reflective	0mm to 420mm	92T1209	40.78
● FD-62	Reflective	0mm to 520mm	92T1211	52.13
● FD-AL11	Reflective	0mm to 320mm	92T1169	170.65
● FD-EG30	Reflective	0mm to 50mm	92T1171	89.70
● FD-R60	Reflective	0mm to 290mm	92T1189	65.46
● FD-S32	Reflective	0mm to 420mm	92T1191	60.61
● FT-43	Thrubeam	0m to 1.4m	92T1261	49.67
● FT-A11	Thrubeam	0m to 3.6m	92T1227	169.71
● FT-A32	Thrubeam	0m to 3.6m	92T1229	446.99
● FT-AL05	Thrubeam	0mm to 860mm	92T1226	177.52
● FT-KS40	Thrubeam	0m to 3.6m	92T1232	166.32
● FT-KV26	Thrubeam	0mm to 710mm	92T1233	308.86
● FT-R40	Thrubeam	0mm to 930mm	92T1236	80.00
● FT-V25	Thrubeam	0mm to 240mm	92T1245	160.55
● FT-Z30	Thrubeam	0m to 2.1m	92T1249	89.70
● FT-Z30E	Thrubeam	0m to 3.5m	92T1250	88.76

(202665)

FX-100 SERIES DIGITAL FIBER OPTIC SENSORS

RoHS Compliant Available

Panasonic

- Supply voltage: 12 to 24V DC
- Ambient temperature: -25 to +55 °C (-13 to +131 °F)
- Ambient humidity: 35 to 85 % RH, Storage: 35 to 85 % RH

The FX-100s ultra-slim design features a 9mm width and integrated mounting holes for installation in any application. The four chemical, visible red LED used for the emitter ensures long life operation and high-powered sensing. The connection options for the FX-100 series consist of an industry standard M8 quick disconnect along with an option that utilizes the same quick connect cable found in the Panasonic DP-100 and PM series.

STANDARD TYPE

Mfg. Part No.	Output Configuration	Output Operation	Stock No.	Price Each 1-9
● FX-101	Standard	Light-ON/Dark-ON	08N9558	102.67
● FX-101-Z	Standard	Light-ON/Dark-ON	08N9559	126.43
● FX-101P	Standard	Light-ON/Dark-ON	08N9560	102.67
● FX-101P-Z	Standard	Light-ON/Dark-ON	08N9562	121.51
● FX-101-CC2	Standard	Light-ON/Dark-ON	46M5099	101.18
● FX-101P-CC2	Standard	Light-ON/Dark-ON	08N9561	105.28
LONG SENSING RANGE TYPE				
● FX-102	Standard	Light-ON/Dark-ON	08N9563	97.83
● FX-102-Z	Standard	Light-ON/Dark-ON	08N9565	121.51
● FX-102P	Standard	Light-ON/Dark-ON	08N9566	97.83
● FX-102P-Z	Standard	Light-ON/Dark-ON	08N9568	126.43
● FX-102-CC2	Standard	Light-ON/Dark-ON	08N9564	101.18
● FX-102P-CC2	Standard	Light-ON/Dark-ON	08N9567	101.18

➤CONTINUED➤

FX-100 SERIES DIGITAL FIBER OPTIC SENSORS (CONT.)

SENSOR ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● CN-14A-C1	Connector attached cable, 1m length	73K7605	5.93
● CN-14A-C2	Connector attached cable, 2m length	73K7606	7.74
● CN-14A-C3	Connector attached cable, 3m length	73K7607	9.34
● CN-14A-C5	Connector attached cable, 5m length	73K7608	11.85
● CN-24A-C2	Straight Mating Cable, 2m length	96H2181	26.25
● CN-24A-C5	Straight Mating Cable, 5m length	96H2182	31.29
● CN-14A	Connector, set of 10 housing and 40 contacts	08N8765	18.67
● MS-DIN-4	Mounting bracket for amplifier	09N0673	2.99
● MS-DIN-E	End plates	96H4028	5.86

(196428)

TURBIDITY SENSOR

NEW

Amphenol® RF

The TSD-10 module measures the turbidity (amount of suspended particles) of the wash water in washing machines and dishwashers. An optical sensor for washing machines is a measuring product for a turbid water density or an extraneous matter concentration using the refraction of wavelength between photo transistor and diode. By using an optical transistor and optical diodes, an optical washing machine sensor measures the amount of light coming from the source of the light to the light receiver, in order to calculate water turbidity.

Mfg. Part No	Voltage Differential	Stock No.	Price Each 1-9
TSD-10	3.0V ± 10%	18X9859	6.12
TST-10	2.7V ± 20%	18X9860	6.43

(212439)

WORLD-BEAM® QS18 UNIVERSAL COMPACT SENSORS

RoHS Compliant Available

BANNER®

more sensors, more solutions

- Easily Fits (or Retrofits) Almost Any Mounting Situation
- Exceptional Optical Performance, Comparable to Larger "Mini-Style" or Barrel Sensors
- Bright LED Operating Status Indicators Are Visible from 360°
- Rugged Sealed Housing, Protected Circuitry
- Supply Voltage: 10 - 30VDC
- All Models Less than 1ms Output Response for Excellent Sensing Repeatability
- Temperature: -20°C to +70°C (except lasers: -10°C to +50°C)

Mfg. Part No. Suffix	Height (mm)	Width (mm)	Depth (mm)
D, E, R, FF, LV, LP	35.0	15.0	31.0
DB, EB, RB, W	35.0	15.0	21.1
FP	35.0	15.0	27.5
F	35.0	15.0	36.9

OPPOSED MODE EMITTER (E) AND RECEIVER (R) - INFRARED LED

Mfg. Part No.	Range	Cable	Output Type	Stock No.	Price Each 1-2
POLARIZED RETROREFLECTIVE MODE - VISIBLE RED LED					
● QS18VN6LP	3.5m (12')	2m (6.5') 4-Wire	NPN	02H6896	78.05
● QS18VP6LP	3.5m (12')	2m (6.5') 4-Wire	PNP	02H6903	78.05
DIFFUSE MODE - CLASS 1 LASER					
● QS18VN6LD	300mm (12")	2m (6.5') 4-Wire	NPN	34K9447	123.61
● QS18VP6LD	300mm (12")	2m (6.5') 4-Wire	PNP	34K9474	118.80
POLARIZED RETROREFLECTIVE MODE - CLASS 1 LASER					
● QS18VN6LLP	0.1 to 10m (0.33 to 33')	2m (6.5') 4-Wire	NPN	78K9075	137.50
● QS18VP6LLP	0.1 to 10m (0.33 to 33')	2m (6.5') 4-Wire	PNP	39K6104	137.50
DIFFUSE MODE - INFRARED LED					
● QS18VP6D	450mm (18")	2m (6.5') 4-Wire	PNP	02H6901	74.37
FIXED-FIELD MODE - VISIBLE RED LED					
● QS18VN6FF50	50mm (2")	2m (6.5') 4-Wire	NPN	99H1088	82.50
● QS18VN6FF100	100mm (4")	2m (6.5') 4-Wire	NPN	99H1082	82.50
● QS18VP6FF50	50mm (2")	2m (6.5') 4-Wire	PNP	99H1107	86.58
● QS18VP6FF100	100mm (4")	2m (6.5') 4-Wire	PNP	99H1101	82.50

➤CONTINUED➤

WORLD-BEAM® QS18 UNIVERSAL COMPACT SENSORS (CONT.)

658 nm VISIBLE RED CLASS 2 LASER

Mfg. Part No.	Range	Cable	Output Type	Stock No.	Price Each 1-2
QS18VN6LAF250Q5	20mm (0.8")	2m (6.5') 4-Wire	NPN	51M6132	238.07
QS18VP6LAF250Q5	20mm (0.8")	2m (6.5') 4-Wire	PNP	51M6155	238.07

MOUNTING BRACKETS

Mfg. Part No.	Description	Stock No.	Price Each 1-2
SMB18A	90°, Stainless Steel 2-Axis, 18mm	02H7579	4.76
SMB18SF	18mm Plastic, Swivel Mount Bracket	02H7580	9.37

(73570)

WORLD-BEAM® QS18 SERIES ADJUSTABLE-FIELD SENSORS

RoHS Compliant Available

BANNER® more sensors, more solutions

Features:

- High-performance, low-cost adjustable-field sensors
- Adjustable-field sensing based on optical triangulation for applications where a bright background must be ignored
- Excellent optical performance throughout 30 - 250mm sensing range
- Narrow effective beam provides small-object detection and precise position control
- Crosstalk rejection algorithm protects against optical disturbances from adjacent sensors
- Visible Red LED or laser sensing beam
- 10 to 30VDC operation
- Bright LED operating status indicators are visible from 360°
- Compact, rugged sealed housing, protected circuitry

ADJUSTABLE-FIELD MODE - CLASS 1 LASER

Mfg. Part No.	Range	Cable	Output	Stock No.	Price Each 1-2
QS18VP6LAFQ5	1mm to cutoff point (adjustable between 30-150mm)	4-pin Euro-style QD	PNP	34K9473	190.49

ADJUSTABLE-FIELD MODE - VISIBLE RED LED

QS18VN6AF100	1mm (0.04") to Cutoff Point (adjustable between 20-100mm)	4-wire, 2m integral cable	NPN	02H6891	97.98
QS18VP6AF100		4-wire, 2m integral cable	PNP	02H6898	99.02
QS18VP6AF100Q5		4-pin Euro-style QD	PNP	21H6040	112.33

QUICK-DISCONNECT CABLES

Mfg. Part No.	Description	Length (m)	Stock No.	Price Each 1-2
MQDC-406	4-pin Euro-style Straight, Threaded Connecter	2	02H6726	23.15
MQDC-415		5	02H6728	26.31
MQDC-430		9	02H6730	41.25

(88874)

WORLD-BEAM® QS30 UNIVERSAL SENSORS

RoHS Compliant Available

BANNER® more sensors, more solutions

IP67 NEMA

- Advanced one-piece photoelectric sensors with exceptional long-range optical performance
- 10 to 30V dc operation with bipolar discrete outputs, NPN and PNP
- Selectable Light or Dark Operate, depending on hookup
- Tough ABS/polycarbonate blend housing is rated to IEC IP67; NEMA 6
- Two sensor status LED indicators visible from 360°
- Output indicator on back of sensor housing (except emitters) visible from long distance
- Polarized retroreflective and diffuse models have potentiometer on back of housing for easy sensor range adjustment

OPPOSED — 875nm INFRARED

Mfg. Part No.	Connection	Range	Stock No.	Price Each 1-2
QS30E	5-wire 2 m (6.5') cable	60m	34K9502	57.20
QS30EQ	5-pin integral Euro-style QD	60m	34K9504	57.20
QS30R	5-wire 2 m (6.5') cable	60m	34K9533	78.10
QS30RQ	5-pin integral Euro-style QD	60m	34K9535	78.10
POLARIZED RETROREFLECTIVE — 630nm VISIBLE RED LED				
QS30LP	5-wire 2 m (6.5') cable	8m	34K9525	91.20
QS30LPQ	5-pin integral Euro-style QD	8m	34K9527	90.25
DIFFUSE-MODE — 940nm INFRARED				
QS30D	5-wire 2 m (6.5') cable	1m	34K9498	91.20
QS30DQ	5-pin integral Euro-style QD	1m	34K9500	91.20

➤CONTINUED➤

WORLD-BEAM® QS30 UNIVERSAL SENSORS (CONT.)

FIXED-FIELD — 680nm VISIBLE RED LED

Mfg. Part No.	Connection	Range	Stock No.	Price Each 1-2
QS30FF200	5-wire 2 m (6.5') cable	200mm	34K9509	93.50
QS30FF200Q	5-pin integral Euro-style QD	200mm	34K9511	97.10
QS30FF400	5-wire 2 m (6.5') cable	400mm	34K9512	93.50
QS30FF400Q	5-pin integral Euro-style QD	400mm	34K9514	98.13
QS30FF600	5-wire 2 m (6.5') cable	600mm	34K9515	93.50
QS30FF600Q	5-pin integral Euro-style QD	600mm	24K3810	98.13

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WORLD-BEAM® QS30 EXPERT UNIVERSAL SENSORS

RoHS Compliant Available

BANNER® more sensors, more solutions

IP67 NEMA

- Tough ABS housing is rated IEC IP67; NEMA 6 (non-polarized retroreflective is rated for 1200 psi washdown per NEMA PW12)
- Easy-to-read operating status indicators
- Bipolar discrete outputs, PNP and NPN
- Selectable 30 millisecond OFF-delay

QS30LL models offer push-button SET options: Maximum Excess Gain plus Manual Adjust. **QS30ELV models** provide reliable detection of clear, translucent, or opaque targets (including mirror-like surfaces), as well as automatic compensation algorithm for dust or contamination on the sensor or reflector and for ambient temperature changes. **QS30EDV models** have automatic Expert-style Static and Dynamic TEACH options, multiple Single-Point SET options, plus manual adjustment for fine tuning. Smart power-control algorithm maximizes performance in low-contrast applications. Selectable normal mode (1.8 ms sensing response) and high-speed mode (300-microsecond response. Easy push-button Dark Operate/Light Operate select, output OFF-delay, and operating speed setup. **QS30LD models** include Expert-style TEACH options including Static, Dynamic, and Single-Point programming plus manual adjustment for fine-tuning. **QS30AF models** contain cutoff point push-button SET options: Background Suppression SET, Object Detection SET and Dynamic SET, plus manual adjustments, push-button N.O./N.C. and output OFF-delay setup.

POLARIZED REFLECTIVE — 650nm VISIBLE RED CLASS 1 LASER

Mfg. Part No.	Connection	Range Max.	Stock No.	Price Each 1-2
QS30LLP	2 m (6.5') 5-wire Cable	18m	99H1136	193.43
QS30LLPQ	Integral 5-pin Euro-style QD	18m	97H7676	195.11
NON-POLARIZED RETROREFLECTIVE — 660nm VISIBLE RED LED				
QS30ELVC	2 m (6.5') 5-wire Cable	2m	11R0614	202.40
QS30ELVCQ	Integral 5-pin Euro-style QD	2m	11R0615	210.60
DIFFUSE-MODE — 660nm VISIBLE RED LED				
QS30EDV	2 m (6.5') 5-wire Cable	1400mm	51M6178	158.24
QS30EDVQ	Integral 5-pin Euro-style QD	1400mm	51M6180	161.38
DIFFUSE-MODE — VISIBLE RED CLASS 2 LASER				
QS30LDL	2 m (6.5') 5-wire Cable	800mm	21H6122	215.60
QS30LDLQ	Integral 5-pin Euro-style QD	800mm	21H6124	220.94
ADJUSTABLE-FIELD — 660nm VISIBLE RED LED				
QS30AF	2 m (6.5') 5-wire Cable	300mm	99H1130	161.38
QS30AFQ	Integral 5-pin Euro-style QD	300mm	99H1132	161.38

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MINI-BEAM® DC PHOTOELECTRIC SENSORS

RoHS Compliant Available

BANNER® more sensors, more solutions

- Rear-Panel Light/Dark Operate Switch
- DC Models Include Patented Alignment Indicating Device Signal Strength Monitoring Indicator
- Integral Quick-Disconnect (QD) Fitting or attached cable
- Sensing Mode Options: Opposed, Diffuse, Retroreflective, Convergent, and Glass and Fiber Optic
- Temperature Rating: -20°C to +70°C (-4°F to +158°F)
- Bipolar NPN/PNP Output
- Supply Voltage: 10-30VDC
- UL Listed, CSA Certified, CE Compliant

Mfg. Part No.	Mode	Sensing Range	Termination	Stock No.	Price Each 1-2
SM312CV2	Convergent	43mm	2m Cable	02H7606	117.93
SM312CV	Convergent	0mm to 16mm	2m Cable	21H9764	109.92
SM312CV2QD	Convergent	43mm	4-Pin Euro QD	02H7607	117.93
SM312D	Diffuse	380mm	2m Cable	02H7608	102.53
SM312DQD	Diffuse	380mm	4-Pin Euro QD	02H7609	102.53
SM312F	Glass Fiber	Varies	2m Cable	02H7610	97.91
SM312FQD	Glass Fiber	Varies	4-Pin Euro QD	02H7613	99.75
SM312FV	Glass Fiber Optic	Varies	2m Cable	21H9894	102.52
SM312FP1H	Plastic Fiber Optic	Varies	2m Cable	21H9885	106.95
SM31E	Opposed Emitter	3m	2m Cable	02H7602	60.58
SM31EQD	Opposed Emitter	3m	4-Pin Euro QD	02H7603	61.23

➤CONTINUED➤

MINI-BEAM® DC PHOTOELECTRIC SENSORS (CONT.)

Mfg. Part No.	Mode	Sensing Range	Termination	Stock No.	Price Each 1-2
● SM31R	Opposed Receiver	3m	2m Cable	02H7604	88.76
● SM31RQD	Opposed Receiver	3m	4-Pin Euro QD	02H7605	90.66
● SM31ELQD	Opposed Emitter	30m	4-Pin Euro QD	21H9686	60.58
● SM31RL	Opposed Receiver	30m	2m Cable	21H9721	89.70
● SM31RLQD	Opposed Receiver	30m	4-Pin Euro QD	21H9731	88.76
● SM312FP	Plastic Fiber	Varies	2m Cable	02H7611	106.95
● SM312FPQD	Plastic Fiber	Varies	4-Pin Euro QD	02H7612	106.95
● SM312LP	Polarized Retroreflective	3m	2m Cable	02H7614	110.88
● SM312LPQD	Polarized Retroreflective	3m	4-Pin Euro QD	02H7615	110.88
● SM312LV	Retroreflective	5m	2m Cable	02H7616	103.59
● SM312LVQD	Retroreflective	5m	4-Pin Euro QD	02H7617	102.53
● SM312WQD	Divergent Diffuse	0mm to 130mm	QD	21H9960	103.59
● SM312LVMHS	Non-Polarized Retroreflective	0m to 5m	2m Cable	21H9945	102.53

MOUNTING BRACKETS

Mfg. Part No.	Description	Stock No.	Price Each 1-2
● SMB18A	90°, Stainless Steel 2-Axis, 18mm	02H7579	4.76
● SMB18SF	18mm Plastic, Swivel Mount Bracket	02H7580	9.37
● SMB312S	90°, Stainless Steel Bracket, Side Mount	02H7583	5.93

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MINI-BEAM® AC PHOTOELECTRIC SENSORS

RoHS Compliant Available

BANNER more sensors, more solutions

Features:
- Signal strength or output indicator
- Solid state outputs
- 2m integral cable or 3-pin Micro-style QD
- Mfg. part nos. with suffix "QD" requires a mating cable; *order separately on* [73584]
- For 9m cable add suffix "W/30" to the mfg. part no.

Specifications:
- Supply voltage: 24-240VAC
- Output configuration: SPST solid-state, 2-wire (light operate, dark operate selectable)
- Operating temperature: -20°C to +70°C

INTEGRAL CABLE

Mfg. Part No.	Mode	Range	LED	Stock No.	Price Each 1-2
● SM2A312D	Diffuse	380 mm	Infrared LED	21H9532	124.75
● SM2A312LVAG	Polarized Retro	2 m	Visible Red LED	21H9566	129.38
● SM2A312LV	Retro	5 m	Visible Red LED	21H9564	125.83
3-PIN MICRO-STYLE QUICK DISCONNECT CABLE					
● SM2A312DQD	Diffuse	380 mm	Infrared LED	21H9538	122.85
● SM2A312FQD	Glass Fiber	Variable	Infrared LED	21H9550	124.74
● SM2A312LVAGQD	Polarized Retro	2 m	Visible Red LED	21H9568	130.51
● SM2A312LVQD	Retro	5 m	Visible Red LED	21H9570	125.83

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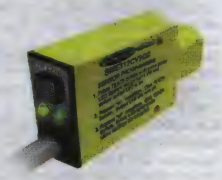
MINI-BEAM® EXPERT™ SENSORS

RoHS Compliant Available

BANNER more sensors, more solutions

- TEACH-Mode Sensors in the Popular MINI-BEAM Package
- Easy Pushbutton Programming Automatically Adjusts Sensitivity to Optimal Setting
- 500 Microsecond Output Response
- Bipolar NPN (Sinking)/PNP (Sourcing) Outputs
- Supply Voltage: 10 - 30VDC
- Easy Output Programming Eliminates the Need for Light or Dark Operate Selection
- Separate TEACH Input Allows Remote Programming by an External Device Such as a Switch or a Process Controller
- Temperature: -20°C to +70°C (-4°F to +158°F)
- CE Compliant, Canadian/US Recognized



POLARIZED RETROREFLECTIVE MODE - VISIBLE RED LED

Mfg. Part No.	Range	Cable	Stock No.	Price Each 1-2
● SME312LPQD	10mm - 3m	5-Pin Euro-Style QD	02H7593	113.31
DIFFUSE MODE - INFRARED LED				
● SME312D	380mm (15")	2m (6.5') 5-Wire	02H7586	103.25
● SME312DQD	380mm (15")	5-Pin Euro-Style QD	02H7587	104.15
DIFFUSE MODE - VISIBLE RED LED				
● SME312DV	110mm (43")	2m (6.5') 5-Wire	21H8936	106.92
● SME312DVQD	110mm (43")	5-pin Euro-style QD	21H8939	113.31
PLASTIC FIBER-OPTIC - VISIBLE RED LED				
● SME312FP	Varies	2m (6.5') 5-Wire	02H7588	111.25

(73568)

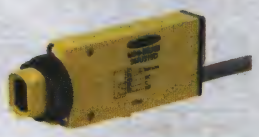
MINI-BEAM® UNIVERSAL VOLTAGE SENSORS

RoHS Compliant Available

BANNER more sensors, more solutions

- Universal Supply Voltage: 24 to 240VAC or 24 to 240VDC
- Easy-to-Install with Few Necessary Adjustments
- 3A SPDT Electromechanical Relay
- Temperature: -20°C to +55°C (-4°F to +131°F)

Exclusive (U.S. Patent No. 4356393) alignment indicating device system (AID™) lights a rear panel LED whenever sensing light is detected. Superimposed pulse rate indicates received light signal strength.



Mfg. Part No.	Description	Range	Cable	Stock No.	Price Each 1-2
● SMU31E	Opposed Mode Emitter	3m (10')	2m (6.5') 2-Wire	02H7594	79.22
● SMU31R	Opposed Mode Receiver	3m (10')	2m (6.5') 5-Wire	02H7595	113.19
● SMU315D	Diffuse Mode	380 mm (15')	2m (6.5') 5-Wire	02H7597	131.66
● SMU315LV	Non-Polarized Retroreflective Mode	5m (15')	2m (6.5') 5-Wire	02H7601	131.66
● SMU315LP	Polarized Extended Range Retroreflective Mode	10mm - 3m (0.4" - 10')	2m (6.5') 5-Wire	02H7600	139.75

(73569)

M12 — 12mm BARREL SENSORS

RoHS Compliant Available

BANNER more sensors, more solutions

- Sensors housed in a compact 12 mm threaded metal barrel
- 4-pin integral Euro-style M12 connector
- Background suppression on fixed-field models; an excellent alternative to proximity sensors
- Two signal indicator LEDs for easy operating status monitoring from any direction
- 10 to 30V dc operation
- Complementary solid-state outputs (1 normally open, 1 normally closed)

OPPOSED - 660nm VISIBLE RED LED

Mfg. Part No.	Range	Output Type	Stock No.	Price Each 1-2
● M12EQ8	5m	...	51M5718	54.75
● M12NRQ8	5m	NPN	51M5753	76.59
● M12PRQ8	5m	PNP	51M5788	76.59
POLARIZED RETROREFLECTIVE — 660nm VISIBLE RED LED				
● M12NLPQ8	1.5m	NPN	51M5743	85.04
● M12PLPQ8	1.5m	PNP	51M5778	78.81
DIFFUSE-MODE — 660nm VISIBLE RED LED				
● M12NDQ8	400mm	NPN	51M5723	85.04
● M12PDQ8	400mm	PNP	51M5758	85.04
FIXED-FIELD — 680nm VISIBLE RED LED				
● M12NFF25Q8	25mm	NPN	51M5728	105.45
● M12PFF25Q8	25mm	PNP	51M5763	109.72
● M12NFF50Q8	50mm	NPN	51M5733	105.45
● M12PFF50Q8	50mm	PNP	51M5768	109.72
● M12NFF75Q8	75mm	NPN	51M5738	105.45
● M12PFF75Q8	75mm	PNP	51M5773	105.45

(148728)

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(196546)

S18 SERIES EZ-BEAM® SENSORS

RoHS Compliant Available

BANNER® more sensors, more solutions

- 18mm Thermoplastic Polyester-Threaded Barrel Sensor
- Advanced Self-Diagnostics with Separate Alarm Output
- Dual LED System Indicates Sensor Performance
- Solid-State Switch Output, Maximum Load 300mA
- -10°C to +50°C (+14°F to +122°F)
- CE Compliant, CSA certified, UL listed

OPPOSED MODE EMITTER (E) AND RECEIVER (R) - INFRARED LED

Mfg. Part No.	Range	Cable	Supply Voltage	Output Type	Stock No.	Price Each 1-2
S186E	20m (66')	2m (6.5')	10-30VDC	...	02H7663	30.28
S186EQ		4-Pin Euro QD			02H7664	30.60
S18SN6R		2m (6.5')		NPN	02H7652	42.65
S18SP6R		2m (6.5')		PNP	02H7660	42.65
S18SP6RQ		4-Pin Euro QD			02H7661	43.10
S183E		2m (6.5')	20-250VAC	...	02H7662	38.13
S18RW3R		2m (6.5')		DO	02H7645	55.92
RETROREFLECTIVE MODE, POLARIZED - VISIBLE RED LED						
S18SN6LP	2m (79")	2m (6.5')	10-30VDC	NPN	02H7650	87.37
S18SP6LPQ		4-Pin Euro QD		DO	02H7659	86.46
S18 DIFFUSE MODE - INFRARED LED						
S18SN6D	100mm (4")	2m (6.5')	10-30VDC	NPN	02H7646	47.76
S18SN6DQ		4-Pin Euro QD			02H7647	52.42
S18SP6D		2m (6.5')		PNP	02H7654	47.26
S18SP6DQ		4-Pin Euro QD			02H7655	51.87
S18AW3D		2m (6.5')		LO	02H7642	64.55

S18 FIXED-FIELD MODE - INFRARED LED

Mfg. Part No.	Cutoff Point	Cable	Supply Voltage	Output Type	Stock No.	Price Each 1-2
S18SN6FF100Q	100mm (4")	4-Pin Euro QD	20-250VAC	LO	02H7649	99.02
S18SP6FF100Q					02H7657	100.06

MOUNTING BRACKETS

Mfg. Part No.	Description	Stock No.	Price Each 1-2
SMB18A	90° Stainless Steel 2-Axis, 18mm	02H7579	4.76
SMB18SF	18mm Plastic, Swivel Mount Bracket	02H7580	9.37

(73571)

T18 SERIES EZ-BEAM® SENSORS

RoHS Compliant Available

BANNER® more sensors, more solutions

- Patented Right-Angle Thermoplastic Polyester Housing with 18mm Threaded Lens
- Advanced Self-Diagnostics with Separate Alarm Output
- Dual LED System Indicates Sensor Performance
- Choose (Complementary) NPN or PNP Outputs (150mA Max. Each)
- Solid-State Switch Output, Maximum Load 300mA
- -40°C to +70°C (-40°F to +158°F)

UL listed, CSA certified, CE compliant.

OPPOSED MODE EMITTER (E) AND RECEIVER (R) - INFRARED LED

Mfg. Part No.	Range	Cable	Supply Voltage	Output Type	Stock No.	Price Each 1-2
T186E	20m (66')	2m (6.5')	10-30VDC	...	02H7704	41.94
T186EQ		4-Pin Euro QD			02H7705	41.94
T18SN6R		2m (6.5')		NPN	02H7693	60.58
T18SN6RQ		4-Pin Euro QD			02H7694	57.72
T18SP6RQ		4-Pin Euro QD			02H7702	61.23
RETROREFLECTIVE MODE, POLARIZED - VISIBLE RED LED*						
T18SN6LPQ	2m (79")	4-Pin Euro QD	10-30VDC	NPN	02H7692	89.70
T18SP6LPQ				PNP	02H7700	90.66

Use polarized models when shiny objects will be sensed

DIFFUSE MODE WITH GAIN CONTROL (DC) - INFRARED LED

T18SP6DQ	500mm (20")	4-Pin Euro QD	10-30VDC	PNP	02H7696	71.82
T18AW3D	300mm (12")	2m (6.5')	20-250VAC	LO	02H7683	85.04
FIXED-FIELD MODE - INFRARED LED						
T18SP6FF100Q					02H7698	102.53

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T18 SERIES EZ-BEAM® SENSORS (CONT.)

MOUNTING BRACKETS

Mfg. Part No.	Description	Stock No.	Price Each 1-2
SMB18A	90°, Stainless Steel 2-Axis, 18mm	02H7579	4.76
SMB18SF	18mm Plastic, Swivel Mount Bracket	02H7580	9.37

(73572)

Q45 SERIES SENSORS

RoHS Compliant Available

BANNER® more sensors, more solutions

- Retroreflective Models Include Laser Versions for Very Long Range or Precise Sensing
- -40°C to +70°C (except universal voltage: -25°C to +55°C)

Internal light/dark operate switch and multi-turn sensitivity (gain) control accessible beneath hinged, o-ring sealed top cover. UL listed, CSA certified, CE compliant.

OPPOSED MODE EMITTER (E) AND RECEIVER (R)

Mfg. Part No.	Range	Cable	Supply Voltage	Output Type	Stock No.	Price Each 1-2
Q453E	60m (200')	2-Wire 2m (6.5')	Universal 12-250VDC or 24-250VAC	None	02H6933	74.81
Q45VR3R		5-Wire 2m (6.5')		SPDT	02H6932	104.72
RETROREFLECTIVE MODE (POLARIZED)						
Q45BB6LPQ5	6m (20')	4-Wire Euro QD	10 to 30VDC	Relay	02H6924	104.72
Q45VR3LP			Universal 12-250VDC or 24-250VAC	PNP	02H6931	119.12
DIFFUSE MODE, LONG RANGE						
Q45BB6DLQ5	500mm (20")	4-Pin Euro QD	Universal 12-250VDC or 24-250VAC	SPDT e/m Relay	02H6918	98.61
Q45VR3DL	300mm (12")	5-Wire 2m (6.5')			02H6928	113.35

MOUNTING BRACKETS

Mfg. Part No.	Description	Stock No.	Price Each 1-2
SMB30MM	90° Stainless Steel, 30mm	02H7581	7.03
SMB30SC	30mm Plastic, Swivel Mount	02H7582	9.37

QUICK-DISCONNECT CABLES

Mfg. Part No.	Description	Length (m)	Stock No.	Price Each 1-2	Price Each 3-4
MQDC-406	4-pin Straight Euro-style	2	02H6726	23.15	22.73
MQDC-415	4-pin Straight Euro-style	5	02H6728	26.31	25.81
MQDC-430	4-pin Straight Euro-style	9	02H6730	41.25	40.47

(73573)

Q60 ADJUSTABLE-FIELD SENSORS

NEMA RoHS Compliant Available

BANNER® more sensors, more solutions

- Detects objects within a defined sensing field, while ignoring objects located beyond the sensing field cutoff
- Two-turn, logarithmic cutoff point adjustment for easy setting of cutoff point at long range
- Rotating pointer indicates relative cutoff point setting
- Easy push-button or remote setting of light/dark operate and output timing; continuous status indicators verify all settings at a glance
- Output ON and/or OFF delays adjustable from 8 milliseconds to 16 seconds
- ABS/polycarbonate blend housing is rated IEC IP67; NEMA 6

Q60BB6 models powered by 10 to 30V dc. **Q60VR3 models** powered by 12-250V dc or 24-250V ac, 50/60 Hz.

665nm VISIBLE RED LED

Mfg. Part No.	Range	Connection	Output Type	Stock No.	Price 1-2
Q60VR3AFV1000Q1	1000mm	4-pin Micro-style QD	SPST-NO	21H6951	201.77
650nm VISIBLE RED CLASS 1 LASER					
Q60BB6LAF2000Q	2000mm	5-pin Euro-style QD	NPN, PNP	97H8688	353.10

➤CONTINUED➤

Q60 ADJUSTABLE-FIELD SENSORS (CONT.)

650nm VISIBLE RED CLASS 2 LASER

Mfg. Part No.	Range	Connection	Output Type	Stock No.	Price 1-2
● Q60VR3LAF2000Q1	2000mm	4-pin Micro-style QD	SPST-NO	99H1180	388.00

(148730)

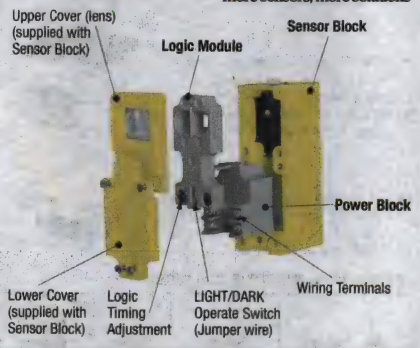
MULTI-BEAM® SENSORS

RoHS Compliant Available

BANNER® more sensors, more solutions

Selection of Components For MULTI-BEAM® Sensors

- 1. Choose a sensor block for the required sensing mode
- 2. Choose a power block for the required sensor power (AC or DC) and interface
- 3. Choose a logic module (not required for opposed emitters)
- 4. Simply plug components together without interwiring to create a complete self-contained photoelectric sensor that is tailored to your exact needs



MULTI-BEAM® sensors are compact *modular* self-contained photoelectric switches. The *scanner block* contains the complete modulated photoelectric amplifier as well as the emitter and receiver optoelements. It also contains the sensing optics and the housing for the other two modules. The *power block* provides the interface between the scanner block and external circuit. It contains a power supply for the MULTI-BEAM® plus a switching device to interface with the circuit to be controlled. The *logic module* interconnects the power block and scanner block both electrically and mechanically. It provides the ability to program the output for either light- or dark-operate. The emitters of MULTIBEAM® emitter-receiver pairs do not require a logic module. Emitter scanner blocks are supplied with a blade-pin to interconnect the scanner block and power block. This modular design, with field power block and logic module, permits over 5,000 sensor configurations, resulting in exactly the right sensor for any photo-electric application. Three- and four-wire sensors permit either AC or DC operation and offer the fastest response times and the greatest ranges. The circuitry of all MULTI-BEAM® components is encapsulated within rugged, corrosion VALOX® housings, which meet or exceed NEMA 1, 2, 12, and 13 ratings. Scanner blocks include an Alignment Indicating Device (AID™) which lights a top-mounted LED when the sensor sees its own modulated light source and pulses the LED at a rate proportional to the received light signal.

MULTI-BEAM® 3- AND 4-WIRE SCANNER BLOCKS

Mfg. Part No.	Description	Range	Response (ms)	Stock No.	Price Each 1-2	Price Each 3-4
● SBE	Opposed Mode Emitter, high speed infared 940 nm	6 to 30-ft with BRT-3 reflector"	on/off	21H7420	107.88	105.88
● SBR1	Opposed Mode Receiver for use with SBE Emitter	150-ft with SBE Emitter	on/off	21H7448	147.21	144.48
● SBL1	Retroreflective Mode Scanner Block, high speed infrared 940 nm	150-ft with SBE Emitter	on/off	21H7440	148.16	145.42
● SBLV1	Retroreflective Mode Scanner Block, high speed visible red 650 nm	1 to 30-ft with BRT-3 reflector"	on/off	21H7438	149.46	146.69
● SBF1	Glass Fiber Optic Scanner Block, high speed infrared 940 nm	varies by type of fiber optic cables used	on/off	21H7433	180.36	177.02
● SBFX1	Glass Fiber Optic Scanner Block, high power infrared 880 nm	varies by type of fiber optic cables used	on/off	21H7431	195.53	191.91

MULTI-BEAM® 3- AND 4-WIRE POWER BLOCKS

Mfg. Part No.	Output Type	Output Capacity	Supply Voltage	On-State V Saturation	Stock No.	Price Each 1-2	Price Each 3-4
● PBA	Relay	250	130 VAC	2.5VAC	21H4237	58.79	57.73
● PBAT	Relay	222	130 VAC	<3VAC	21H4242	59.41	58.34
● PBA-1	...	...	130 VAC	<3VAC	21H4238	47.76	46.90

MULTI-BEAM® 3-AND 4-WIRE LOGIC MODULES

Mfg. Part No.	Timing Function	Timing Range	Stock No.	Price Each 1-2	Price Each 3-4
● LM1	On-Delay and Off-Delay	None (Light Operate Only)	21H0811	22.32	21.92
● LM3	OIn-Delay and Off-Delay	None (Light or Dark)	21H0817	38.04	37.35
● LM5-14	On-Delay and Off-Delay	1.5 sec. to 15 sec.	21H0833	104.85	102.96

(78055)

D10 EXPERT™ SERIES FIBER-OPTIC SENSORS

RoHS Compliant Available

BANNER® more sensors, more solutions

- 4-Mode Power and Speed Selection with Automatic Crosstalk Avoidance Circuitry
- Gate Input Wire Can Be Used to Selectively Inhibit Sensor Outputs from Switching
- Sleek, Ultra-Slim 10mm Housing Mounts to a Standard 35mm DIN Rail, or Use Mounting Bracket Included

Easy-to-set automatic Expert-style TEACH options including static, dynamic and single-point programming plus a manual adjustment for fine-tuning. 16-bit microcontroller and 12-bit analog-to-digital converter for high-performance, low-contrast sensing. Easy-to-read 4-digit display TEACH and signal strength readout, plus indicators for a continuous readout or operating status (user configurable).

DUAL DISCRETE OUTPUTS (VISIBLE RED 680 NM)

Mfg. Part No.	Cable	Supply Voltage	Output Type	Stock No.	Price Each 1-2
● D10DNFP	2m (6.5') Cable	12-24VDC	NPN (Sinking)	02H6487	195.53
● D10DPFP	2m (6.5') Cable	12-24VDC	PNP (Sourcing)	02H6489	187.92
● D10DPFPQ	6-Pin Pico-Style QD	12-24VDC		02H6490	195.53

(73575)

PLASTIC AND GLASS FIBER-OPTIC ASSEMBLIES

RoHS Compliant Available

BANNER® more sensors, more solutions

PLASTIC FIBER-OPTIC ASSEMBLIES

- PBT Versions Are Diffused Mode; PIT and PIL Are Opposed Mode
- Unterminated Control Ends Which Allow the User to Cut to the Required Length
- Available in Individual or Bifurcated Styles
- Limited to a Minimum Bend Radius of 1mm
- Fiber Core Size: 1mm
- For Use with the Following Series: D10, SM, SME, SMU, Q45 and QS18

Mfg. Part No.	Style	Construction	Stock No.	Price Each 1-2
● PBT46U	Bifurcated Threaded	Cut to Length Cable, M6 Threaded End Tip	02H6806	40.75
● PIT46U	Individual Threaded	M4 and M2.5 Threaded End Tip	02H6810	46.57
● PIT66U	Individual Threaded	M4 and M2.5 Threaded End Tip	21H5057	61.21

GLASS FIBER OPTIC ASSEMBLIES

- Final Assembly Length: 36"
- Stainless Steel Sheathing Material
- Bundle Size: 0.125"
- Sheath Diameter: 0.25"

DIFFUSED SENSING MODE ASSEMBLIES

Mfg. Part No.	Style	Sensing End Tip Style	Stock No.	Price Each 1-2
● BT23S	Bifurcated	Threaded 5/16x24x1.5", Brass End Tip	02H6400	95.57
● BT13S	Bifurcated	Threaded, .062"	20H3288	93.09
OPPOSED SENSING MODE ASSEMBLIES				
● IA23S	Individual	Angled Tip (90°)	02H6626	85.86
● IAT23S	Individual	Angled 90° and Threaded Brass Tip	02H6625	99.60
● IT23S	Individual	Threaded 5/16-24 x 1.5", Brass End Tip	02H6658	70.17
● IT26S	Individual	Threaded 72, 0.125"	20H9957	98.61

(73585)

R58 SERIES EXPERT REGISTRATION MARK SENSOR

RoHS Compliant Available

BANNER® more sensors, more solutions

Features:

- Ultra-fast 10kHz switching frequency
- Sensor automatically selects red, green or blue LED during TEACH to optimize application contrast
- Outstanding color contrast sensitivity, detects contrasts as low as 2% over a wide range of colors
- Rugged zinc alloy die-cast housing with high-quality acrylic lens suitable for food processing applications; rated IP67, NEMA 6

Specifications:

- Focus: 10mm (0.39")
- Supply voltage: 10 to 30VDC
- Output type: Bipolar NPN/PNP

Right-angle bracket

CONTINUED

R58 SERIES EXPERT REGISTRATION MARK SENSOR (CONT.)

SENSOR

Mfg. Part No.	Sensing Image Orientation	Cable	Stock No.	Price Each 1-2
R58ECRGB1Q	Parallel to sensor length	5-pin Euro-style QD pigtail	93K6148	286.77

QUICK-DISCONNECT CABLE

Mfg. Part No.	Description	Length (m)	Stock No.	Price Each 1-2
MQDEC2-515	5-pin Euro-Style Straight, with shield	5	21H2313	36.67

BRACKET

Mfg. Part No.	Description	Stock No.	Price Each 1-2
SMB55RA	Right-angle bracket, 12-gauge stainless steel	21H8851	30.56

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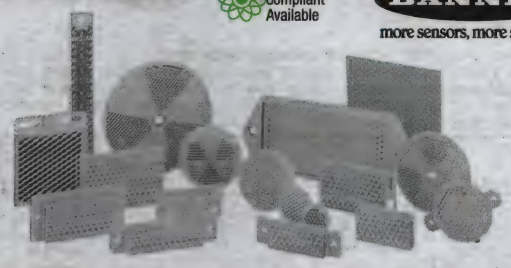
RETROREFLECTIVE TARGETS

RoHS Compliant Available

BANNER® more sensors, more solutions



High-quality acrylic targets, high-temperature targets, and adhesive-backed retro tapes.

Mfg. Part No.	Description	Reflectivity Factor	Maximum Temperature	Stock No.	Price Each 1-2
BRT-1	1" Round Retroreflective Target	1.0	65°C (150°F)	02H6397	3.57
BRT-3	3" Round Retroreflective Target	1.0	65°C (150°F)	02H6399	6.01
BRT-32X20AM	20mm x 32mm Rect. Retroreflective Target	1.2	65°C (150°F)	20H2814	4.65
BRT-40X20AM	40mm x 20mm Rect. Retroreflective Target	1.2	50°C (120°F)	20H2822	8.30
BRT-51X51BM	51mm x 51mm Square Retroreflective Target	1.5	50°C (122°F)	98H5288	17.56
BRT-92X92C	92mm x 92mm Square Retroreflective Target	3.0	50°C (120°F)	20H2845	19.91
BRT-2X2	2" x 2" Square Retroreflective Target	1.0	50°C (120°F)	02H6398	6.01
BRT-THG-1-100	Retroreflective Tape, 25mm Wide, 2.5m length	0.7	60°C (140°F)	02H6396	29.14
BRT-THG-2-100	Retroreflective Tape, 50mm Wide, 2.5m length	0.7	60°C (140°F)	20H2785	56.51
BRT-THG-3-100	Retroreflective Tape, 75mm Wide, 2.5m length	0.7	60°C (140°F)	20H2789	87.11

(73583)

TOUCH-ACTIVATED OPTOELECTRONIC SENSORS

RoHS Compliant Available

BANNER® more sensors, more solutions

- Operating Temperature: -20°C to +50°C
- Polysulfone Upper Housing
- Black Sensor Field Cover is Supplied

Output is a 7A SPDT electromechanical relay. All models are supplied with a black polypropylene field cover designed to prevent inadvertent switch activation.

MOMENTARY ACTION OTB'S

Mfg. Part No.	Cable	Supply Voltage	Output	Stock No.	Price Each 1-2
OTBA5	2m (6.5')	120VAC	SPDT Electromechanical Relay	02H6802	121.37
OTBB5QD	5-Pin Mini QD	220/240VAC	SPDT Electromechanical Relay	21H4147	116.64
OTBVP6	2m (6.5')	10 - 30VDC	Complementary PNP	02H6805	121.37
OTBVP6QDH	4-Pin Euro QD	10 - 30VDC	Complementary PNP	21H4195	116.64
OTBVP6QD	4-Pin Euro QD	10 - 30VDC	Complementary PNP	21H4191	122.43
OTBVN6	2m (6.5')	10 - 30VDC	Complementary NPN	02H6804	121.37
OTBVN6QDH	4-Pin Euro QD	10 - 30VDC	Complementary NPN	21H4172	116.64
OTBVN6QD	4-Pin Euro QD	10 - 30VDC	Complementary NPN	21H4168	122.43
OTBVR81	2m (6.5')	20 - 30VDC	SPDT Electromechanical Relay	21H4196	121.37
OTBVR81QD	4-Pin Euro QD	20 - 30VDC	SPDT Electromechanical Relay	21H4211	121.37

CONTINUED

TOUCH-ACTIVATED OPTOELECTRONIC SENSORS (CONT.)

CONTROL RELAYS

Mfg. Part No.	Description	Stock No.	Price Each 1-2
AT-AM-2A	115VAC, Redundant Safety Relay (Force-Guided) Contacts, 4A Maximum Each, One N.C. Reed Relay	02H6390	313.25
AT-FM-2A	24VAC/VDC, Redundant Safety Relay (Force-Guided) Contacts, 4A Maximum Each, One N.C. Reed Relay	02H6391	290.17
AT-FM-10K	24VAC/VDC, 6A, 2 dual NO/NC inputs, 2 safety outputs	20H0848	315.11

QUICK-DISCONNECT CABLES

MQDC-406	4-Pin Euro Straight QD Cable - 2 Meters	02H6726	23.15
MQDC-415	4-Pin Euro Straight QD Cable - 5 Meters	02H6728	26.31
MQDC-430	4-Pin Euro Straight QD Cable - 9 Meters	02H6730	41.25
MBCC-406	4-Pin Mini-Style Straight QD Cable - 2 Meters	21H1177	45.34
MBCC-412	4-Pin Mini-Style Straight QD Cable - 4 Meters	21H1178	51.55

MOUNTING BRACKETS

SMB30MM	90°, Stainless Steel, 30mm	02H7581	7.03
SMB30SC	30mm Plastic, Swivel Mount	02H7582	9.37

WARNING: OTB Series Touch Buttons are not themselves safety devices. For two-hand control safety applications, see safety modules (**mfg. part no. ATGMK-VP6** two-hand control kit) online or call.

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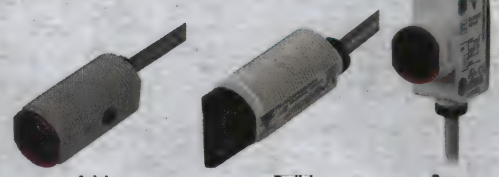
PA18C & PH18C SERIES PHOTOELECTRIC SENSORS

CARLO GAVAZZI



Axial Radial Square

- Miniature sensor range
- Sensitivity adjustment by potentiometer
- Supply voltage: 10 to 30 VDC
- Output: 100 mA, NPN or PNP, N.O + N.C.
- Degree of protection: IP67, IP69K
- LED indication for output, stability and power ON
- Protection: reverse polarity, short circuit and transients
- All cable connections
- Excellent EMC performance

The **PA18C & PH18C** series is part of a family of general purpose diffuse reflective, retro-reflective, and through-beam sensors in industrial standard 18 mm cylindrica (sqaure for PH18C)I ABS housing. The sensors are useful in applications where high accuracy detection as well as small size is required. Compact housing and high power LED for excellent performance-size ratio. The potentiometer used for adjustment of the sensitivity makes the sensors highly flexible. The output type is NPN or PNP and the output switching function is NO and NC.

PA18C AXIAL TYPE

Mfg. Part No.	Sensing Type	Sensing Range	Output	Stock No.	Price Each
PA18CAD10NASA	Diffuse-Reflective	0m to 1m	NPN	73T1046	63.00
PA18CAD10PASA	Diffuse-Reflective	0m to 1m	PNP	73T1048	63.00
PA18CAP50NASA	Retroreflective, Polarized	0m to 5m	NPN	73T1050	65.00
PA18CAP50PASA	Retroreflective, Polarized	0m to 5m	PNP	73T1052	65.00
PA18CAR65NASA	Retroreflective	0m to 6.5m	NPN	73T1054	63.00
PA18CAR65PASA	Retroreflective	0m to 6.5m	PNP	73T1056	63.00
PA18CAT20	Through-Beam	0m to 20m	Emitter	73T1057	49.00
PA18CAT20NASA	Through-Beam	0m to 20m	NPN	73T1060	69.00
PA18CAT20PASA	Through-Beam	0m to 20m	PNP	73T1062	69.00
PA18C RADIAL TYPE					
PA18CRD08NASA	Diffuse-Reflective	0mm to 800mm	NPN	73T1064	66.00
PA18CRD08PASA	Diffuse-Reflective	0mm to 800mm	PNP	73T1066	66.00
PA18CRP40NASA	Retroreflective, Polarized	0m to 4m	NPN	73T1068	68.00
PA18CRP40PASA	Retroreflective, Polarized	0m to 4m	PNP	73T1070	68.00
PA18CRR50NASA	Retroreflective	0m to 5m	NPN	73T1072	66.00
PA18CRR50PASA	Retroreflective	0m to 5m	PNP	73T1074	66.00
PA18CRT16	Through-Beam	0m to 16m	Emitter	73T1075	52.00
PA18CRT16NASA	Through-Beam	0m to 16m	NPN	73T1078	72.00
PA18CRT16PASA	Through-Beam	0m to 16m	PNP	73T1080	72.00
PH18C SQUARE TYPE					
PH18CND10NASA	Diffuse-Reflective	0m to 1m	NPN	73T1155	72.00
PH18CND10PASA	Diffuse-Reflective	0m to 1m	PNP	73T1158	72.00
PH18CNP50NASA	Retroreflective, Polarized	0m to 5m	NPN	73T1161	74.00
PH18CNP50PASA	Retroreflective, Polarized	0m to 5m	PNP	73T1164	74.00
PH18CNR65NASA	Retroreflective	0m to 6.5m	NPN	73T1167	72.00
PH18CNR65PASA	Retroreflective	0m to 6.5m	PNP	73T1170	72.00
PH18CNT20NASA	Through-Beam	0m to 20m	NPN	73T1175	71.00
PH18CNT20PASA	Through-Beam	0m to 20m	PNP	73T1178	71.00

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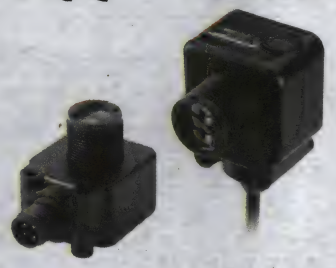
SM SERIES MINIATURE PHOTOELECTRIC SENSORS



- Miniature size measures just 1.7″ tall, 1.29″ wide and 1.63″ deep
- Visible sensing beams and TargetLock™ marginal gain LED for easy install and alignment
- Multiple mounting options including industry-standard 18mm threads
- Available in AC/DC or DC-only voltages
- DC models feature both NPN and PNP outputs
- Perfect Prox® models offer the most reliable background rejection
- Reverse polarity, overload and short circuit protection
- Available with 6 ft. (2m) cable or 4-pin Euro quick-disconnect

Mfg. Part No.	Input Voltage	Range	Connection	Output Type	Stock No.	Price 1-4
THRU-BEAM MODE - SOURCE						
E65-SMTS15-HA	10-30 VDC	15 ft. (15m)	6.5 ft. (2m) Cable	N/A	47K7725	44.12
E65-SMTS15-HAD	10-30 VDC	15 ft. (15m)	4-Pin Micro Connector	N/A	47K7726	41.62
THRU-BEAM MODE - DETECTOR						
E65-SMTD15-HDD	10-30 VDC	15 ft. (15m)	4-Pin Micro Connector	NPN, PNP , 100 mA	47K7722	63.23
RETROREFLECTIVE MODE (POLARIZED)						
E65-SMPR3-HDD	10-30 VDC	3 ft. (3m)	4-Pin Micro Connector	NPN, PNP , 100 mA	47K7710	83.22
E65-SMPR3-GDD	18-50 VDC/ 18-264 VAC	3 ft. (3m)	4-Pin Micro Connector	NPN , 200 mA	47K7706	105.72
RETROREFLECTIVE (DIFFUSE MODE WITH ADJUSTABLE GAIN)						
E65-SMSD200-HL	10-30 VDC	200 in. (200mm)	6.5 ft. (2m) Cable	NPN, PNP , 100 mA	47K7719	70.16
E65-SMSD200-HLD	10-30 VDC	200 in. (200mm)	4-Pin Micro Connector	NPN, PNP , 100 mA	47K7720	74.37
E65-SMSD200-GL	18-50 VDC/ 18-264 VAC	200 in. (200mm)	6.5 ft. (2m) Cable	NPN , 200 mA	47K7715	83.22
E65-SMSD200-GLD	18-50 VDC/ 18-264 VAC	200 in. (200mm)	4-Pin Micro Connector	NPN , 200 mA	47K7716	83.22
PERFECT PROX BACKGROUND REJECTION MODE						
E65-SMPP100-HLD	10-30 VDC	100 in. (100mm)	4-Pin Micro Connector	NPN, PNP , 100 mA	47K7704	117.67
E65-SMPP100-GL	18-50 VDC/ 18-264 VAC	100 in. (100mm)	6.5 ft. (2m) Cable	NPN , 200 mA	47K7699	136.26
E65-SMPP100-GLD	18-50 VDC/ 18-264 VAC	100 in. (100mm)	4-Pin Micro Connector	NPN , 200 mA	47K7700	142.39

MOUNTING BRACKETS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
6161AS6501	Right Angle Mounting Bracket for SM Series, Aluminum with Chromate Finish	44K9636	7.72
RETROREFECTORS AND RETROREFLECTIVE TAPE			
6200A-6502	2.18 in. Diameter Corner Cube Retroreflector, Adhesive Backed	44K9651	7.76
6200A-6506	3 in. Diameter Corner Cube Retroreflector, Metal Backed with Mounting Hole	44K9654	22.00
MICRO CONNECTOR CABLES			
CSDS4A4CY2202	4-Pin, 4-Wire DC Micro Connector Cable, 22 AWG, PVC Jacket, 6.5 ft. (2m)	46K1910	25.50
● CSAS4F4CY2202	4-Pin, 4-Wire AC Micro Connector Cable, 22 AWG, PVC Jacket, 6.5 ft. (2m)	46K1843	33.45

(142270)

HARSH DUTY PHOTOELECTRIC SENSORS

30 mm

Connector Version

- Thru-beam sensors operating voltage: 20-132VAC, 15-30VDC
- Optimum range: 0.1 to 300ft, (0.03 - 90m)
- 30 mm diameters
- Tempered glass lens cover
- 360° output indicator
- High temperature, high pressure washdown (1200 psi)
- Thru-beam component source

Design to withstand the harshest physical, chemical and optical environments. Ideal for automotive applications where exposure to lubricants, cutting fluids, coolants and glycols is common. Withstands the use of sanitizers, surfactants, and cleaning agents including diluted bases and acids.

THRU-BEAM SENSORS

Mfg. Part No.	Sensing Range (m)	Connector Type	Thru-Beam Component	Stock No.	Price 1-4
E58-30TS250-GA	250	2-meter Cable	Source	47K7456	297.03
E58-30TS250-GAP	250	4-pin Micro AC Connector	Source	47K7459	328.43

➤CONTINUED➤

HARSH DUTY PHOTOELECTRIC SENSORS (CONT.)

Mfg. Part No.	Sensing Range (m)	Connector Type	Thru-Beam Component	Stock No.	Price 1-4
E58-30TD250-GD	250	2-meter Cable	Detector	47K7423	347.82
E58-30TD250-GL	250	2-meter Cable	Detector	47K7428	347.82
E58-30TD250-GLP	250	4-pin Micro AC Connector	Detector	47K7431	372.31

(88692)

SA1U HEAVY DUTY PHOTOELECTRIC SENSORS

RoHS Compliant Available

- Long range sensing distance from 1 meter to 50 meters
- 3 A relay contact SPDT
- Time delay functions
- Spring up screw terminals
- 12-240 VDC / 24-240 VAC universal voltage
- Response time: 20 ms max.

These sensors are assembled in a fully automated robotic process and are UL/c-UL listed, CE marked and IP67 rated, making them ideal for use in wet environments such as bottling and food processing industries. Built-in 3 amp relay contacts (NO/NC) and time delay functions give customers the ability to configure the sensor for their specific needs. There are four timing delay functions to choose from: one shot, ON delay, OFF delay and normal mode, as well as a 0.1 to 5 second time range.

Mfg. Part No.	Sensing Mode	Sensing Range (m)	Time Delay Functions	Stock No.	Price Each 1-9
● SA1U-T50MW	Through-Beam	50	Without	46T9541	140.86
● SA1U-T50MWT	Through-Beam	50	With	46T9542	151.69
● SA1U-P07MW	Polarized Retroreflective	7	Without	46T9539	124.55
● SA1U-P07MWT	Polarized Retroreflective	7	With	46T9540	130.02
● SA1U-D01M	Diffuse	1	Without	14P9727	124.61
● SA1U-D01MT	Diffuse	1	With	14P9728	135.44
● SA1U-D01MW	Diffuse	1	Without	46T9537	112.10
● SA1U-D01MWT	Diffuse	1	With	46T9538	119.19
● SA1U-B02MW	Background Suppression	2	Without	46T9536	145.93
● SA1U-B02MWT	Background Suppression	2	With	25T0240	147.84

(136224)

SA1E MINIATURE PHOTOELECTRIC SENSORS

RoHS Compliant Available

- Seven sensing methods
- IP67 waterproof design
- Compact size (31.5 x 19.5 x 10.8 mm)
- Choose NPN output, PNP output, light ON, or dark ON
- Long sensing ranges, high-speed response
- Rated operational voltage: 12 to 24VDC
- Operating temperature: -25°C to +55°C (no freezing)

Cable Type

SA1E sensors are UL listed, CE marked and IP67 rated. With advanced interference protection circuity (except for the through-beam type), sensors can be mounted very close together without affecting their performance. Each model has several options: NPN or PNP outputs, and light ON or dark ON sensing modes. Cable included.

CABLE TYPE SENSORS

Mfg. Part No.	Sensing Mode	Output	Operation Mode	Sensing Range Max.	Cable Length	Stock No.	Price Each 1-4
● SA1E-DN1-2M	Diffuse-Reflective	NPN	light On	700mm	2m	07N7785	45.94
● SA1E-DN2-2M	Diffuse-Reflective	NPN	dark On	700mm	2m	07N7788	45.94
● SA1E-DP1-2M	Diffuse-Reflective	PNP	light On	700mm	2m	07N7791	43.34
● SA1E-DP2-2M	Diffuse-Reflective	PNP	dark On	700mm	2m	07N7794	43.34
● SA1E-PN1-2M	Retro-reflective	NPN	light On	5m	2m	07N7823	45.94
● SA1E-PN2-2M	Retro-reflective	NPN	dark On	5m	2m	07N7825	45.94
● SA1E-PP1-2M	Retro-reflective	PNP	light On	5m	2m	07N7827	45.94
● SA1E-PP2-2M	Retro-reflective	PNP	dark On	5m	2m	07N7830	45.94
● SA1E-TN1-2M	Through-Beam	NPN	light On	20m	2m	07N7833	51.69
● SA1E-TN2-2M	Through-Beam	NPN	dark On	20m	2m	07N7835	51.69
● SA1E-TP1-2M	Through-Beam	PNP	light On	20m	2m	07N7838	48.76
● SA1E-TP2-2M	Through-Beam	PNP	dark On	20m	2m	07N7841	48.76
● SA1E-BN1-2M	Background Suppression	NPN	light On	200mm	2m	34M2065	93.04

➤CONTINUED➤

SA1E MINIATURE PHOTOELECTRIC SENSORS (CONT.)

Mfg. Part No.	Sensing Mode	Output	Operation Mode	Sensing Range Max.	Cable Length	Stock No.	Price Each 1-4
SA1E-BN2-2M	Background Suppression	NPN	dark On	200mm	2m	34M2067	93.04
SA1E-BP1-2M	Background Suppression	PNP	light On	200mm	2m	34M2069	93.04
SA1E-BP2-2M	Background Suppression	PNP	dark On	200mm	2m	34M2071	93.04
SA1E-GN1-2M	Convergent	NPN	light On	35mm	2m	94M5849	45.94
SA1E-GN2-2M	Convergent	NPN	dark On	35mm	2m	07N7800	43.34
SA1E-GP1-2M	Convergent	PNP	light On	35mm	2m	89M4212	43.34
SA1E-GP2-2M	Convergent	PNP	dark On	35mm	2m	07N7807	43.34
SA1E-LBN3-2M	Laser Background Suppression	NPN	light On/ dark On	300mm	2m	93T9815	153.23
SA1E-LBP3-2M	Laser Background Suppression	PNP	light On/ dark On	300mm	2m	93T9817	153.23
SA1E-LPN3-2M	Retroflective	NPN	light On/ dark On	10m	2m	93T9819	148.69
SA1E-LPP3-2M	Retroflective	PNP	light On/ dark On	10m	2m	93T9821	142.29
SA1E-LTN3-2M	Through-Beam	NPN	light On/ dark On	30m	2m	93T9823	175.12
SA1E-LTP3-2M	Through-Beam	PNP	light On/ dark On	30m	2m	93T9825	175.12
SA1E-XN1-2M	Clear Object Detector	NPN	light On	2mm	2m	46T9528	107.27
SA1E-XN2-2M	Clear Object Detector	NPN	dark On	2mm	2m	46T9530	107.27
SA1E-XP1-2M	Clear Object Detector	PNP	light On	2mm	2m	46T9532	107.27
SA1E-XP2-2M	Clear Object Detector	PNP	dark On	2mm	2m	46T9534	107.27
CONNECTOR TYPE SENSORS							
SA1E-BP1C	Background Suppression	PNP	light On	200mm	...	34M2070	93.04
SA1E-BP2C	Background Suppression	PNP	dark On	200mm	...	34M2072	93.04
SA1E-DN1C	Diffuse-Reflective	NPN	light On	700mm	...	07N7787	48.76
SA1E-DN2C	Diffuse-Reflective	NPN	dark On	700mm	...	07N7790	48.76
SA1E-DP1C	Diffuse-Reflective	PNP	light On	700mm	...	07N7793	48.76
SA1E-DP2C	Diffuse-Reflective	PNP	dark On	700mm	...	07N7796	48.76
SA1E-GN1C	Convergent	NPN	light On	35mm	...	46T9527	48.76
SA1E-GN2C	Convergent	NPN	dark On	35mm	...	07N7802	48.76
SA1E-GP1C	Convergent	PNP	light On	35mm	...	07N7805	48.76
SA1E-GP2C	Convergent	PNP	dark On	35mm	...	07N7809	48.76
SA1E-PN1C	Retroreflective	NPN	light On	5m	...	52M2124	48.76
SA1E-PN2C	Retroreflective	NPN	dark On	5m	...	42K7998	51.69
SA1E-PP1C	Retroreflective	PNP	light On	5m	...	07N7829	51.69
SA1E-PP2C	Retroreflective	PNP	dark On	5m	...	07N7832	51.69
SA1E-TN1C	Through-Beam	NPN	light On	20m	...	99K1607	54.18
SA1E-TN2C	Through-Beam	NPN	dark On	20m	...	07N7837	54.18
SA1E-TP1C	Through-Beam	PNP	light On	20m	...	07N7840	57.43
SA1E-TP2C	Through-Beam	PNP	dark On	20m	...	42M3259	54.18
SA1E-XN1C	Clear Object Detector	NPN	light On	2mm	...	46T9529	119.19
SA1E-XN2C	Clear Object Detector	NPN	dark On	2mm	...	46T9531	119.19
SA1E-XP1C	Clear Object Detector	PNP	light On	2mm	...	46T9533	119.19
SA1E-XP2C	Clear Object Detector	PNP	dark On	2mm	...	46T9535	119.19
SA1E-LBN3C	Background Suppression	NPN	light On/ dark On	300mm	...	93T9816	153.23
SA1E-LBP3C	Background Suppression	PNP	light On/ dark On	300mm	...	93T9818	153.23
SA1E-LPN3C	Retro-reflective	NPN	light On/ dark On	10m	...	93T9820	142.29
SA1E-LPP3C	Retro-reflective	PNP	light On/ dark On	10m	...	93T9822	142.29
SA1E-LTN3C	Through-Beam	NPN	light On/ dark On	30m	...	93T9824	186.07
SA1E-LTP3C	Through-Beam	PNP	light On/ dark On	30m	...	93T9826	186.07

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
IAC-R5	R5 Standard Reflector	15C7070	10.03

(84847)

NEXT GENERATION MINIATURE PHOTOELECTRIC SENSORS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

Convergent

Thru-Beam

- Pin-Point Beam for Detecting Extremely Small Objects
- Thru-Beam, Retro-Reflective and Diffuse Models
- IP67
- 12-24VDC Input Voltage
- 50mA Max.
- Prewired with 6.6' (2m) of Cable
- Utilizes Omron's "Hyper LED" Technology to Achieve Industry's Smallest Visible Red Beam
- Self-Contained Sensor Ideal for Compact Applications
- Convergent-Beam Model Spot Diameter: 0.15mm
- CE Compliant

Mfg. Part No.	Sensing Method	Operation Mode	Sensing Range (mm)	Dimensions Inches (mm)	Stock No.	Price Each 1-4
E3T-FD11	Diffuse Flat	Light-On, NPN	5 - 30	0.82 x 0.47 x 0.15 (20.8 x 12 x 3.7)	88K1921	110.45
E3T-SL11	Convergent Beam	Light-On, NPN	5 - 30	0.82 x 0.47 x 0.15 (20.8 x 12 x 3.7)	88K1922	135.24
E3T-ST11	Thru-Beam	Light-On, NPN	1000	0.57 x .028 x .037 (14.6 x 7 x 9.5)	88K1923	133.29
E3T-ST12	Thru-Beam	Dark-On, NPN	1000	0.57 x .028 x .037 (14.6 x 7 x 9.5)	91F9324	133.29

(12926)

CYLINDRICAL PHOTOELECTRIC SENSORS

NEW

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Universal M18 cylindrical plastic or nickel-plated brass housing in straight or 90° angled (radial) models
- Rugged IP67, IP69K housing withstands highpressure and high-temperature wash down
- Bright LED indicators provide status visibility from almost any angle
- High power red LED for easy sensor alignment and dependable outputs in dusty environments
- All retro reflective models are polarized to prevent false reads on mirrored surfaces
- High EMC protection and ambient light immunity for detection stability in environments with excess noise or background light
- Compact size and shape for increased installation flexibility

Mfg. Part No.	Sensing Range Max	Sensor Output	Stock No.	Price Each 1-9
E3RA-DN22	300	NPN	46X9671	112.06
E3RA-DP22	300	PNP	46X9676	112.06
E3RA-TP11 2M	15	PNP	46X8064	171.20
E3RB-DN22	300	NPN	46X9681	126.06
E3RB-DP22	300	PNP	46X9686	126.06

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E3FA & E3FB CYLINDRICAL PHOTOELECTRIC SENSORS

RoHS Compliant Available

NEW

OMRON AUTOMATION & SAFETY

The E3FA/E3FB series includes special models to solve challenging applications: Background Suppression, Limited Distance Detection and Transparent Object Detection.

Mfg. Part No.	Sensing Range	Output Type	Stock No.	Price Each 1-9
E3FA-BN21	500	NPN NO	46X9598	115.17
E3FA-BN22	2000	NPN NO	46X9599	115.17
E3FA-BP21	500	PNP-NO	46X9602	115.17
E3FA-BP22	2000	PNP-NO	46X9603	115.17
E3FA-DN22	300	NPN NO	46X9607	87.16
E3FA-DP21	100	PNP-NO	46X9611	87.16
E3FA-DP22	300	PNP-NO	46X9612	87.16
E3FA-LN22	200	NPN NO	46X9617	115.17
E3FA-LP22	200	PNP-NO	46X9621	115.17
E3FA-RN22	500	NPN NO	46X9623	91.83
E3FA-RP22	500	PNP-NO	46X9627	91.83
E3FB-BN22	2000	NPN NO	46X9636	136.96
E3FB-BP22	2000	PNP-NO	46X9640	136.96
E3FB-DN22	300	NPN NO	46X9644	94.94
E3FB-LN22	200	NPN NO	46X9652	132.29
E3FB-LP22	200	PNP-NO	46X9656	132.29
E3FB-RN22	500	NPN NO	46X9658	105.83
E3FB-RP22	500	PNP-NO	46X9662	105.83

(212173)

E3X-HD FIBER OPTIC SENSORS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Long-term stable detection with no maintenance
- Smart Power Control function detects the decrease in light intensity due to LED aged deterioration and the decrease in incident level due to dirt, then automatically compensates the optimum detection condition
- Maintenance-free operation that withstands the ambient environments
- Detect workpieces without concern for color and size
- Reduces wiring work for fiber amplifiers with zero-line connection

Power supply voltage: 12 to 24VDC ±10%, ripple (p-p) 19% max. Light source (wavelength): Red, 4-element LED (625nm). Load power supply voltage: 26.4VDC max., open-collector output (varies with the model depending on whether the output is PNP or NPN). Load current: 50mA max. OFF current: 0.5mA max.

Mfg. Part No.	Sensor Output	Connection	Stock No.	Price Each 1-4
● E3X-HD11 2M	NPN	Pre-Wired (2m)	86W6679	250.28
● E3XHD41-2M	PNP	Pre-Wired (2m)	24W8605	258.79
● E3X-HD6	NPN	Wire-Saving Connector	86W6680	250.28
● E3X-HD8	PNP	Wire-Saving Connector	86W6681	250.28

(210169)

LONG-RANGE PHOTOELECTRIC SENSORS WITH PLUG-IN BASE

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

UL CSA NEMA

- Universal AC/DC Supply Voltage
- Sensing Head Replaceable Without Rewiring
- Built-In ON- and OFF-Delay Timers Available
- Switch Selectable Light-ON and Dark-ON Operation
- Mutual Interference Protection
- Ready-to-Use: Includes 3A Relay, Mounting Bracket and Reflector
- Power consumption: 2VA (AC), 1.5W (DC)
- Supply Voltage: 24 to 240VSC, 50/60Hz; 12 to 240VDC
- SPDT Contacts
- Min. Load: 10mA, 5VDC
- NEMA 1, 3, 4, 12, 13, IP66

Replacement mounting bracket **mfg. part no. E39-L35** also available; *go online or call.* Dimensions: 90.3H x 73W x 36mm (3.56 x 2.87 x 1.42"). UL listed, CSA certified.

SENSORS

Mfg. Part No.	Sensing Method	Sensing Range	Detectable Object Type	Stock No.	Price Each 1-4
● E3B2-R5M4-US	Retroflective	16.40' (5m)	Shiny and Opaque, 3.15" (80mm) Min. Distance	27M2383	410.66

(73258)

E3FA/E3RA/E3FB/E3RB CYLINDRICAL PHOTOELECTRIC SENSORS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Universal M18 cylindrical plastic or nickel-plated brass housing
- IP67, IP69K housing withstands high-pressure and high-temperature wash down
- High power red LED for easy sensor alignment
- Compact and robust housing
- Retro-reflective models are polarized to prevent false reads on mirrored surfaces
- EMC protections and ambien light immunity for detection stability in environments with excess noise or background light

Supply voltage: 10-30VDC. Response time: 0.5ms. Light-ON/Dark-ON selectable by wiring. Pre-wired 2m cable length.

E3FA STRAIGHT TYPE — PLASTIC HOUSING

Mfg. Part No.	Sensing Distance	Sensing Method	Sensor Output	Connection	Stock No.	Price Each 1-9
● E3FA-DN13 2M	1m	Diffuse Reflective	NPN	Pre-Wired	86W6656	91.14
● E3FA-DN23	1m	Diffuse Reflective	NPN	M12 Connector	86W6657	91.14
● E3FA-RN11 2M	4m	Retro-Reflective	NPN	Pre-Wired	86W6658	96.02
● E3FA-RN21	4m	Retro-Reflective	NPN	M12 Connector	86W6659	96.02
● E3FA-TN11 2M	20m	Through-Beam	NPN	Pre-Wired	86W6660	131.82
● E3FA-TN21	20m	Through-Beam	NPN	M12 Connector	86W6661	131.82
E3RA RADIAL TYPE — PLASTIC HOUSING						
● E3RA-DN13 2M	700mm	Diffuse Reflective	NPN	Pre-Wired	86W6668	117.18
● E3RA-DN23	700mm	Diffuse Reflective	NPN	M12 Connector	86W6669	117.18
● E3RA-RN21	3m	Retro-Reflective	NPN	M12 Connector	86W6670	126.94
● E3RA-TN11 2M	15m	Through-Beam	NPN	Pre-Wired	86W6671	179.02
● E3RA-TN21	15m	Through-Beam	NPN	M12 Connector	86W6672	179.02
E3RA-RN11 2M	3m	Retro-Reflective	NPN	Pre-wired	95W5462	126.94

➤ CONTINUED ➤

E3FA/E3RA/E3FB/E3RB CYLINDRICAL PHOTOELECTRIC SENSORS (CONT.)

E3FB STRAIGHT TYPE —METAL HOUSING

Mfg. Part No.	Sensing Distance	Sensing Method	Sensor Output	Connection	Stock No.	Price Each 1-9
● E3FB-DN13 2M	1m	Diffuse Reflective	NPN	Pre-Wired	86W6662	99.28
● E3FB-DN23	1m	Diffuse Reflective	NPN	M12 Connector	86W6663	99.28
● E3FB-RN11 2M	4m	Retro-Reflective	NPN	Pre-Wired	86W6664	110.67
● E3FB-RN21	4m	Retro-Reflective	NPN	M12 Connector	86W6665	110.67
● E3FB-TP11 2M	20m	Through-Beam	PNP	Pre-Wired	86W6667	154.61
● E3FB-TN21	20m	Through-Beam	NPN	M12 Connector	86W6666	154.61
E3RB RADIAL TYPE —METAL HOUSING						
● E3RB-DN13 2M	700mm	Diffuse Reflective	NPN	Pre-Wired	86W6673	131.82
● E3RB-DN23	700mm	Diffuse Reflective	NPN	M12 Connector	86W6674	131.82
● E3RB-RN11 2M	3m	Retro-Reflective	NPN	Pre-Wired	86W6675	143.22
● E3RB-RN21	3m	Retro-Reflective	NPN	M12 Connector	86W6676	143.22
● E3RB-TN11 2M	15m	Through-Beam	NPN	Pre-Wired	86W6677	195.29
● E3RB-TN21	15m	Through-Beam	NPN	M12 Connector	86W6678	195.29

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● E39-L183	Mounting Bracket	86W6683	12.09
● E39-L182	Flush mounting bracket	86W6682	12.09

(210165)

E3T-C SERIES MINIATURE PHOTOELECTRIC SENSORS

IP65 RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Axial and radial M5 sized through beam sensors
- Axial M6 sized diffuse reflective sensors
- Pre-wired models in stainless steel housing
- NPN output
- M5 housings have a Red Light while M6 housings have Infared
- Protection: IP65 (IEC 60529)

M5 CYLINDRICAL HOUSING

Mfg. Part No.	Sensor Type	Sensing Distance	Operation Mode	Size	Stock No.	Price Each 1-4
● E3T-CT12M	Through Beam	1m	Dark-ON	Axial	94T7192	139.44
● E3T-CT22S	Through Beam	500mm	Dark-ON	Radial	94T7193	141.69
M6 CYLINDRICAL HOUSING						
● E3T-CD11	Diffuse-reflective	3mm to 50mm	Light-ON	Axial	94T7191	127.74

(208432)

COMPACT LASER PHOTOELECTRIC SENSOR W/BUILT IN AMPLIFIER - E3Z-LT/LR/LL SERIES

CE RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Safety and reliability with laser class 1 (JIS and IEC)
- Product lineup includes models wit distance setting without influence of color
- Maximum ambient operating temperature of 55°C and water-proof construction in E3Z class
- Response time: 1 ms

NPN OUTPUT

Mfg. Part No.	Sensor Type	Sensing Distance	Connection	Stock No.	Price Each 1-4
● E3Z-LR66	Retro-reflective w/ MSR function	7 m (200mm)	Pre-wired (2m)	40M9098	321.52
● E3Z-LL61 2M	Distance-settable (BGS Models)	20mm to 40mm	Pre-wired (2m)	40M9088	376.02
● E3Z-LL66	Distance-settable (BGS Models)	20mm to 300mm	Connector (M8, 4 pins)	40M9090	355.00
● E3Z-LT61	Through-beam (Emitter + Receiver)*	60 m	Pre-wired (2m)	48T2537	509.14
● E3Z-LT66	Through-beam (Emitter + Receiver)*	60 m	Connector (M8, 4 pins)	40M9105	343.32

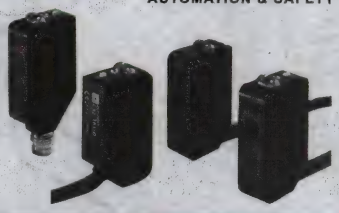
*Through-beam sensors are normally sold in sets that include both the Emitter and Receiver.
(208433)

MINIATURE PHOTOELECTRIC SENSORS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Long Sensing Distance
- High Noise Immunity
- NPN Output
- IP67 Water and Dust Rating
- Switch Selectable Light-On/Dark-On Operation
- 12 - 24VDC Supply Voltage
- Response Time: 1MS
- Pre-Wired 6.56′ (2m) Cable Length



Dimensions: 1.2 x 0.66 x 0.4″ (31 x 17 x 10.4mm). M8 connector type and PNP output models also available; *go online or call.* CE compliant.

Mfg. Part No.	Sensing Method	Sensing Distance	Connection	Stock No.	Price Each 1-4
E3Z-R61	Polarized Reflective	3.9″ to 9.8′	Pre-wired	93K7548	104.42
E3Z-D62	Diffuse-Reflective	0.2″ to 3.9″	Pre-wired	93K7547	99.93
E3Z-D61	Diffuse-Reflective	0.2″ to 3.9″	Pre-wired	88K1924	93.19
E3Z-D67	Diffuse-reflective	3 ft	Connector	81C8133	101.36
E3Z-D82	Diffuse-reflective	3 ft	Pre-wired	85C4974	99.19
E3Z-T86	Through-beam	45 ft	Pre-wired	32H5109	148.07

(60874)

PLASTIC-BODY CYLINDRICAL PHOTOELECTRIC SENSORS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Threaded M18 size
- Built-in amplifier
- Chemical-resistant, ABS resin case type
- Polarized models available
- Compact and space-saving
- Long detection distance -- up to 7m
- Light-on / Dark-on selectable by wiring
- DC switching types with connectors for easy maintenance
- Wide operating voltage range (10 to 30VDC, or 24 to 240VAC)
- Short-circuit and reverse connection protection (DC switching type)
- Light source: infrared LED

Dimensions: through-beam and retro-reflective: 90 x 16.8mm; diffuse reflective: 65 x 16.8mm. Pre-wired 2m (6.56′) cable length. Power and light receive status indicators. Additional stainless and nickel-plated brass versions, polarized and connector versions and NPN types also available; *go online or call.* UL recognized, CSA certified, CE compliant, NEMA approved.

Mfg. Part No.	Sensing Method	Supply	Output	Sensing Range	Stock No.	Price Each 1-4
E3F2-7B4	Through-Beam	10-30VDC	PNP	22.96′ (7m)	92B2751	158.04
E3F27C4M	Through-Beam	10-30VDC	PNP, LO/DO	22.96′ (7m)	66J6927	160.02
E3F2-DS10Z1-N	Diffuse	24-240VAC	SCR Light-On	3.94″ (10cm)	52F4363	141.76
E3F2-DS10Z2-N	Diffuse	24-240VAC	SCR Dark-On	3.94″ (10cm)	27M2386	140.01
E3F2-R2Z1	Retro-Reflective*	24-240VAC	SCR Light-On	6.56′ (2m)	52F4360	154.00
E3F2-R4C4-M†	Retro-Reflective*	10-30VDC	NPN, LO/DO	0.32′ to 13.12′ (0.1 to 4m)	08R8450	100.28
E3F2R4C4M1M†	Retro-Reflective*	10-30VDC	NPN, LO/DO	0.32′ to 13.12′ (0.1 to 4m)	80K1702	122.58
E3F2-R4C4-P1	Retro-Reflective*	24-240VAC	NPN	13.12′ (4m)	10R5223	100.53

*Includes Reflector †Nickel-plated brass body

(3543)

HEAVY-DUTY, LONG-RANGE REFLECTIVE PHOTOELECTRIC SENSORS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Universal AC/DC Supply Voltage: 42-240VAC, 24-240VDC
- DPDT 10A, 240VAC Output Standard
- Easy-to-Wire Terminal Strip
- Plug-In Replaceable Relay Outputs
- Light-ON/Dark-ON Operation, Switch Selectable
- Mutual Interference Protection
- Adjustable Sensitivity With Operation And Stability Indicators
- NEMA b4, 4X, 12, 13 and IP67
- Light Source: Infrared LED
- ¾″-14NPT Conduit Entry

Dimensions: 7.32H x 3.50W x 2.48″D (186 x 89 x 63 mm). Mounting bracket and reflector are included. UL recognized, CSA certified.

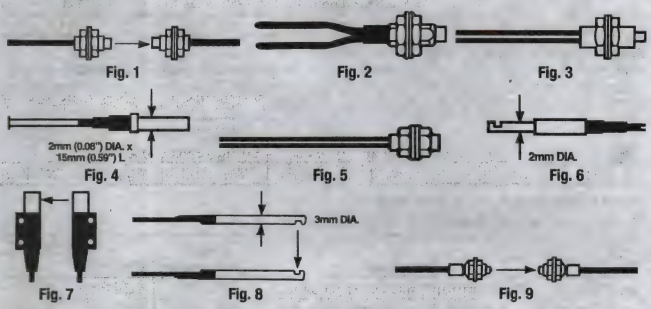
Mfg. Part No.	Description	Sensing Range	Supply Voltage (VAC)	Stock No.	Price 1-4
E3K-R10K4	Non-Polarized Retroreflective	32.81′ (10M)	42	27M2392	337.29

(3541)

E32 SERIES FIBER-OPTIC CABLE SETS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY



- Extensive Selection of Fiber-Optic Sensing Heads Offers Many Unique Solutions for Tough Problems
- Fiber-Optic Sensors Detect Small, Fast-Moving Objects in Space-Confined Installations and Harsh Environments
- For a Customer Fit in the Field, Most Plastic Filament Cables Can Be Cut to Length
- For Detection in Hard-to-Reach Places, sensing heads With Bendable Stainless Steel Tubing Retain Complex Shapes
- Coiled and Ultra-Flexible Cables - Ideal for Flexing and Reciprocating Machinery Such as Robots
- Side-View Sensing Heads or Accessories Save Space in Right-Angle Detection
- Convergent Beam Sensing Heads Allow Accurate Positioning and Background Suppression Even for Shiny Objects
- Narrow Detection Zone of Concentric Beam Sensing Heads Help Eliminate Background Object and Gives Consistent Sensing, Regardless of Object Direction
- High Flexible Fibers With Minimum 1mm Bending Radius Allows Cable to Conform to Machine Contours
- Most Fiber Cables Offer IP67 Protection
- Temperature Range: -40°C to 70°C (-40°F to 158°F)

Fiber-optic photoelectric sensor cables are provided as a complete set. Cable length: 2M. Sensing distance and object detection are typical when used with a general purpose amplifier. Most cable can be cut to fit. **Sold as a package of 2 cables.**

Mfg. Part No.	Fig.	Configuration	Sensing Distance (cm)	Min. Object Detection (mm)	Stock No.	Price Each 1-4
E32-TC200	1	Thru-Beam, General-Purpose	12	0.2	52F4370	76.02
E32-T11L	1	Thru-Beam	250 mm	0.3	88F4147	112.89
E32-DC200	2	Diffuse General Purpose	7.5	0.015	52F4379	78.50
E32-D51	2	Diffuse High Temp	60 mm	0.03	90B7954	262.40
E32-DC200C	...	Diffuse General Purpose	22 mm	0.03	96B4600	100.01
E32-CC200	3	Diffuse, M6 Threaded Head	7.5	0.03	52F9257	88.50
E32-D61	3	Diffuse, M6 Compact Threaded Head, High Temperature	4.5	0.03	92F635	349.14
E32-D11L	3	Diffuse, M6 Compact Threaded Head	10	0.015	50B6316	104.22
E32-D32	4	Diffuse	2	0.03	19C7909	113.82
E32-DC200E	5	Diffuse M3 Threaded	1.8	0.03	27M2399	96.08
E32-T14	7	Thru-Beam	90	1	27M2401	150.72
E32-T14L	8	Thru-Beam	90	1	27M2402	130.25
E32-TC200A	9	Thru-Beam	12	0.2	27M2400	82.18
E32-TC500	9	Thru-Beam	200 mm	0.2	90B7139	158.82
E32-R16	...	Retroreflective	...	0.2	12C0980	186.99
E32-R21	...	Retroreflective	30 to 200 mm	0.3	50B6318	246.54
E32-T12L	...	Thru-Beam	350 mm	0.5	93B7704	121.54
E32-G14	...	Thru-Beam	10 mm	0.8 mm	09C9350	269.30
E32-T16P	...	Thru-Beam	200 mm	0.8 mm	90B6059	333.90

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
E39-F1	Focusing Lens Pair	88K1927	45.42

(69341)

FIBER-OPTIC PHOTOELECTRIC SENSORS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

Omron fiber-optic sensor amplifier units come prewired with a 2m cable. DIN rail mountable. **E32 series** fiber-optic sensing cables ordered seperately *on this page.*

E3X-A SERIES GENERAL-PURPOSE

High performance with quick response time and self-diagnostics. 8 turn sensitivity adjustment with position indicator. IP66 enclosure rating.

Mfg. Part No.	Output Configuration	Stock No.	Price Each 1-4
E3X-NA11	NPN LO/DO	92C2195	204.68
E3X-NA41	PNP LO/DO	74C1459	204.68

E3X-DA SERIES WITH DIGITAL DISPLAY

High performance amplifier with 3 user selectable sensing modes; standard, long distance, and high speed. Display is user-selectable for digital level, percentage or analog. Teach or manual sensitivity adjustment. Adjustment off-delay. IP50 enclosure rating. Supply voltage: 12-24VDC.

➤ CONTINUED ➤

FIBER-OPTIC PHOTOELECTRIC SENSORS (CONT.)

Mfg. Part No.	Output Configuration	Stock No.	Price Each 1-4
● E3X-DA41-N	PNP LO/DO	19C7907	237.64

E3X-DA-S SERIES POWER TUNING, DIGITAL DISPLAY

Power tuning function addresses saturation, insufficient light and sensor variation. Dual display allows simultaneous viewing of current and preset values. 4-element LED and auto power control. 2 independent outputs for area detection, remote input function, counter function. Supply voltage: 12-24VDC.

Mfg. Part No.	Description	Output Configuration	Stock No.	Price Each 1-4
● E3XDA11S	Standard Model, pre-wired cable, red LED	NPN LO/DO	97H5080	241.89

E3XNA SERIES MANUAL FIBER AMPLIFIER

Adjuster type standard for true ease and simplicity. Supply voltage: 12-24VDC.

Mfg. Part No.	Description	Output Configuration	Stock No.	Price Each 1-4
● E3X-NA11	Standard Model, pre-wired cable, red LED	NPN LO/DO	92C2195	204.68
● E3X-NA11	High-speed Detection Model, pre-wired cable, red LED	NPN LO/DO	92C2195	204.68

(64071)

CX-400 SERIES COMPACT PHOTOELECTRIC SENSORS

RoHS Compliant Available

Panasonic

- Supply voltage: 12 to 24VDC
- Current consumption: 10 to 25mA
- Ambient temperature: - 25 to +55°C (-13 to +131 °F)
- Response time: 1ms or less

The CX-400 series of photoelectric sensors is a wide-ranging lineup of 116 different models. Whatever your application entails, Panasonic has covered it with this series. Built to IP-67 standards, the CX-400 series is designed for the most demanding environments.

STANDARD TYPE

Mfg. Part No.	Sensing Type	Sensing Range	Sensing Output	Stock No.	Price Each 1-9
● CX-411	Through-Beam	0m to 10m	NPN	96H2293	95.31
● CX-411-P	Through-Beam	0m to 10m	PNP	96H2297	95.31
● CX-412	Through-Beam	0m to 15m	NPN	96H2303	94.31
● CX-413	Through-Beam	0m to 30m	NPN	40T7668	90.81
● CX-413-P	Through-Beam	0m to 30m	PNP	40T7672	90.81
● CX-421	Diffuse-Reflective	0mm to 300mm	NPN	96H2313	87.23
● CX-422	Diffuse-Reflective	0mm to 800mm	NPN	96H2323	83.12
● CX-423	Diffuse-Reflective	70mm to 300mm	NPN	96H2332	140.17
● CX-424	Diffuse-Reflective	0mm to 100mm	NPN	73K7672	110.43
● CX-441	Adjustable-Field	2mm to 50mm	NPN	96H2342	117.18
● CX-442	Adjustable-Field	20mm to 300mm	NPN	96H2346	117.18
● CX-443	Adjustable-Field	2mm to 50mm	NPN	73K7683	112.62
● CX-444	Adjustable-Field	15mm to 100mm	NPN	73K7687	112.62
● CX-481	Retroreflective	50mm to 500mm	NPN	73K7691	193.33
● CX-482	Retroreflective	100mm to 2m	NPN	73K7701	193.33
● CX-483	Retroreflective	50mm to 1m	NPN	40T7678	193.33
● CX-483-P	Retroreflective	50mm to 1m	PNP	40T7682	193.33
● CX-491	Retroreflective	0m to 3m	NPN	96H2350	92.53
● CX-493	Retroreflective	0m to 5m	NPN	96H2370	92.53
BASIC TYPE WITHOUT OPERATION MODE SWITCH AND SENSITIVITY ADJUSTER					
● CX-411A-C05	Through-Beam	0m to 10m	NPN	40T7660	63.14
● CX-411A-P-C05	Through-Beam	0m to 10m	PNP	40T7661	63.14
● CX-411B-C05	Through-Beam	0m to 10m	NPN	40T7662	63.14
● CX-411B-P-C05	Through-Beam	0m to 10m	PNP	40T7663	63.14
● CX-412A-C05	Through-Beam	0m to 15m	NPN	40T7664	63.14
● CX-412A-P-C05	Through-Beam	0m to 15m	PNP	40T7665	63.14
● CX-412B-C05	Through-Beam	0m to 15m	NPN	40T7666	63.14
● CX-412B-P-C05	Through-Beam	0m to 15m	PNP	40T7667	63.14
● CX-491A-C05-Y	Retroreflective	0m to 3m	NPN	40T7688	74.62
● CX-491A-P-C05-Y	Retroreflective	0m to 3m	PNP	40T7689	74.62
● CX-491B-C05-Y	Retroreflective	0m to 3m	NPN	40T7690	74.62
● CX-491B-P-C05-Y	Retroreflective	0m to 3m	PNP	40T7691	74.62

SENSOR ACCESSORIES

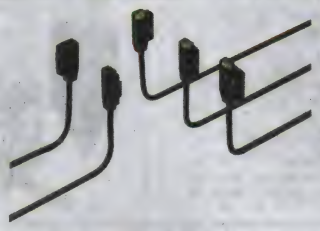
Mfg. Part No.	Description	Stock No.	Price Each 1-9
● CN-24A-C2	Straight Mating Cable, 2m length	96H2181	26.25
● CN-24A-C5	Straight Mating Cable, 5m length	96H2182	31.29
● CN-24-C2	4-Core Mating Cable, 2m length	25H8975	28.08
● CN-24-C5	4-Core Mating Cable, 5m length	25H8976	34.36

(196419)

EX-10 SERIES ULTRA-SLIM PHOTOELECTRIC SENSORS

RoHS Compliant Available

Panasonic



- Supply voltage: 12 to 24V DC
- Ambient temperature: -25 to +55 °C (-13 to +131 °F)
- Ambient humidity: 35 to 85 % RH, Storage: 35 to 85 % RH

The EX-10 series is one of the smallest sensors on the market today. The ultra small size allows for mounting in the smallest areas. The size is achieved by locating all of the electronics and controls in an in-line amplifier. A bright 2-color indicator on the sensor head allows for quick determination of the sensor state. The EX-10 series is also equipped with a 0.5ms response time for high-speed detection and an IP-67 rated housing for wash-down environments. The mounting options available include a front sensing type as well as a side sensing type. Each type has two, metal reinforced M3 mounting holes for stable sensor placement. All types are available as either Light ON or Dark ON and PNP or NPN.

FRONT SENSING SENSORS

Mfg. Part No.	Sensing Type	Sensing Range	Sensing Output	Stock No.	Price Each 1-9
● EX-11A	Through-Beam	0mm to 150mm	NPN	25H9036	102.93
● EX-11B	Through-Beam	0mm to 150mm	NPN	25H9037	103.76
● EX-13A	Through-Beam	0mm to 500mm	NPN	25H9041	104.86
● EX-13B	Through-Beam	0mm to 500mm	NPN	25H9042	103.76
● EX-14A-PN	Convergent	2mm to 25mm	PNP	25H9048	89.73
● EX-14B-PN	Convergent	2mm to 25mm	PNP	96H2542	90.68
● EX-15	Through-Beam	0mm to 150mm	NPN	96H2545	186.19
● EX-17	Through-Beam	0mm to 500mm	NPN	96H2547	186.19
● EX-19A	Through-Beam	0m to 1m	NPN	96H2549	121.51
● EX-19B	Through-Beam	0m to 1m	NPN	96H2552	121.51
SIDE SENSING SENSORS					
● EX-13EA-PN	Through-Beam	0mm to 500mm	PNP	96H2535	104.86
● EX-13EA	Through-Beam	0mm to 500mm	NPN	25H9044	103.76
● EX-15E	Through-Beam	0mm to 150mm	NPN	96H2546	186.19
● EX-17E	Through-Beam	0mm to 500mm	NPN	96H2548	186.19

(196425)

EX-20 SERIES ULTRA-COMPACT PHOTOELECTRIC SENSORS

RoHS Compliant Available

Panasonic

- Supply voltage: 12 to 24V DC
- Ambient temperature: -25 to +55 °C (-13 to +131 °F)
- Ambient humidity: 35 to 85 % RH, Storage: 35 to 85 % RH

The EX-20 series reaches the pinnacle of sensor miniaturization. By fabricating the photodiode and the A/D conversion circuit on the same chip, Panasonic has achieved one of the smallest built-in amplifier sensors in the world. With integrated sensitivity adjustment, the EX-20 series is great for use as an all-purpose sensor. Even though the sensor is extremely small, the sensing distance is not compromised. Up to a 2m detection distance is possible with the thrubeam type, 200mm with the retro-reflective type, and 160mm for the diffuse reflective type.

FRONT SENSING SENSORS

Mfg. Part No.	Sensing Type	Sensing Range	Sensing Output	Stock No.	Price Each 1-9
● EX-21A	Through-Beam	0m to 1m	NPN	96H2555	126.43
● EX-21B	Through-Beam	0m to 1m	NPN	96H2557	126.43
● EX-24A	Convergent	2mm to 25mm	NPN	25H9051	94.48
● EX-24B	Convergent	2mm to 25mm	NPN	25H9053	94.48
SIDE SENSING SENSORS					
● EX-22A	Diffuse-Reflective	5mm to 160mm	NPN	96H2558	102.07
● EX-22B	Diffuse-Reflective	5mm to 160mm	NPN	96H2560	97.26
● EX-26A	Convergent	6mm to 14mm	NPN	25H9054	115.13
● EX-26B	Convergent	6mm to 14mm	NPN	25H9055	110.65
● EX-28A	Reflective	45mm to 115mm	NPN	96H2567	116.08
● EX-28B	Reflective	45mm to 115mm	NPN	96H2569	116.08
● EX-29A	Retroreflective	30mm to 200mm	NPN	96H2571	120.12
● EX-29B	Retroreflective	30mm to 200mm	NPN	96H2573	120.12

(196426)

EX-30 SERIES THREADED MINIATURE PHOTOELECTRIC SENSORS

RoHS Compliant Available

Panasonic

- Supply voltage: 12 to 24V DC
- Ambient temperature: -25 to +55 °C (-13 to +131 °F)
- Ambient humidity: 35 to 85 % RH, Storage: 35 to 85 % RH

The EX-30 series of photoelectric sensors offers a fresh new alternative to traditional fiber optic sensors. Unparalleled in its ease of installation, this sensor is highly effective for basic production line sensing. The design of this sensor has been simplified to offer a fully integrated solution in a package that only needs one anchor point. The sensing element is threaded to allow mounting through a 4 or 6mm size hole by utilizing a "nut and bolt" type screw mount. The sensing axis is the same as the center of the mounting hole, making placement on your assembly line incredibly easy.

Mfg. Part No.	Sensing Type	Sensing Range	Sensing Output	Stock No.	Price Each 1-9
EX-31A	Through-Beam	0mm to 500mm	NPN	96H2575	132.25
EX-31B	Through-Beam	0mm to 500mm	NPN	96H2577	137.61
EX-32A	Diffuse-Reflective	0mm to 50mm	NPN	25H9056	121.51
EX-32B	Diffuse-Reflective	0mm to 50mm	NPN	96H2580	121.51
EX-32A-PN	Diffuse-Reflective	0mm to 50mm	PNP	96H2579	125.34

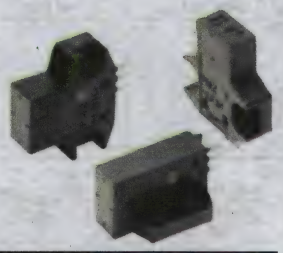
(196427)

PM2 SERIES CONVERGENT REFLECTIVE MICRO PHOTOELECTRIC SENSORS

RoHS Compliant Available

Panasonic

- Supply voltage: 5 to 24 VDC
- Average current consumption: 25mA or less
- Ambient temperature: - 10 to +55°C (-14 to +131 °F)
- Response time: 0.8ms or less



The PM2 series of micro photoelectric sensors offers a convergent reflective sensing solution for incredibly stable sensing. Because the sensor only detects in a limited area, it is not affected by background objects, color, or reflectivity. Small objects down to 0.05mm can be detected reliably as well. Three sensor head styles are available in both connector and cable types. One control output is provided (NPN).

Mfg. Part No.	Sensing Type	Sensing Range	Sensing Output	Stock No.	Price Each 1-9
PM2-LF10	Convergent	2.5mm to 8mm	NPN	02H5855	44.50
PM2-LF10-C1	Convergent	2.5mm to 8mm	NPN	96H4866	73.51
PM2-LF10B	Convergent	2.5mm to 8mm	NPN	25H9299	42.39
PM2-LF10B-C1	Convergent	2.5mm to 8mm	NPN	96H4867	73.51
PM2-LH10	Convergent	2.5mm to 8mm	NPN	25H9300	44.02
PM2-LH10-C1	Convergent	2.5mm to 8mm	NPN	96H4868	73.51
PM2-LH10B	Convergent	2.5mm to 8mm	NPN	25H9301	44.49
PM2-LH10B-C1	Convergent	2.5mm to 8mm	NPN	96H4869	73.51
PM2-LL10	Convergent	2.5mm to 8mm	NPN	25H9302	42.39
PM2-LL10-C1	Convergent	2.5mm to 8mm	NPN	96H4870	73.51
PM2-LL10B-C1	Convergent	2.5mm to 8mm	NPN	96H4871	73.51

(196458)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196561)

OSISENSE® XU SERIES PHOTOELECTRIC SENSORS

RoHS Compliant Available

Telemecanique Sensors

XUB Cable

XUB Connector

Features

- Increased ranges in all sensing modes, sensing distance easy to adjust
- All standard product enclosures (complete range, cylindrical, minature and compact rectangular)
- Output LEDs on the sensors for easier alignment during installation
- DC and AC/DC versions available for maximum flexibility
- Meet the International Electrotechnical Commission (IEC) standards , NEMA, UL, CSA, VDE and more.
- High operating rates
- Fast response

Specifications

- Voltage rating: 12VDC to 24VDC
- Long sensing distances: up to 14 m (46 ft) retroreflective,
- 40 m (131 ft) thru-beam, and 2 m (6.5 ft) diffuse
- High insensitivity to light sources: withstands up to 40,000 lux natural light/10,000 lux incandescent light
- Good resistance to severe environments: -30 to 60 °C (-22 to 140 °F)
- IP67 degree of protection rating"

XUK, NO/NC

XUK, NO

XUM

XUX

XUB SERIES SENSORS

Mfg. Part No.	Sensing Range	Circuit Type	Sensor Terminals	Stock No.	Price Each 1-4
XUB1ANANL2	0m to 4m	NPN	2m Cable	34M0477	111.96
XUB1ANBNM12	0m to 4m	NPN	4-pin M12	89H6837	111.96
XUB1APANL2	0m to 4m	PNP	2m Cable	89H6839	107.14
XUB1APANM12	0m to 4m	PNP	4-pin M12	89H6840	111.96
XUB1BPANM12	0m to 4m	PNP	4-pin M12	89H6849	117.42
XUB2ANBNM12R	0m to 15m	NPN	4-pin M12	89H6856	95.38
XUB2APANM12R	0m to 15m	PNP	4-pin M12	89H6858	95.38
XUB2BPBNM12R	0m to 15m	PNP	4-pin M12	89H6869	107.14
XUB4APANL2	0mm to 100mm	PNP	2m Cable	11R2120	111.96
XUB4APANM12	0mm to 100mm	PNP	4-pin M12	89H6875	111.96
XUB4APBNL2	0mm to 100mm	PNP	2m Cable	94H6773	107.14
XUB5ANANM12	0mm to 600mm	NPN	4-pin M12	89H6887	117.42
XUB5APANL2	0mm to 600mm	PNP	2m Cable	20K4770	112.36
XUB5APANM12	0mm to 600mm	PNP	4-pin M12	89H6891	112.36
XUB9APANM12	0m to 2m	PNP	4-pin M12	89H6907	122.88
XUB9APBNM12	0m to 2m	PNP	4-pin M12	89H6909	117.59
XUB9BPBNM12	0m to 2m	PNP	4-pin M12	89H6917	122.82
XUM SERIES SENSORS					
XUM2ANCNL2	0m to 15m	NPN	2m Cable	11R2125	150.05
XUM2ANCNM8	0m to 15m	NPN	M8	11R2126	150.05
XUM2APCNL2	0m to 15m	PNP	2m Cable	11R2127	150.05
XUM2APCNM8	0m to 15m	PNP	M8	11R2128	150.05
XUM9ANCNL2	0m to 5m	NPN	2m Cable	11R2129	108.66
XUM9ANCNM8	0m to 5m	NPN	M8	11R2130	108.66
XUM9APCNL2	0m to 5m	PNP	2m Cable	11R2131	108.66
XUM9APCNM8	0m to 5m	PNP	M8	11R2132	113.55
XUK SERIES SENSORS					
XUK1ARCNL2	0m to 7m	Relay	2m Cable	67H6250	128.73
XUK5APANL2	0m to 1m	PNP	2m Cable	89H6944	103.11
XUK5ARCNL2	0m to 1m	Relay	2m Cable	89H6947	128.73
XUX SERIES SENSORS					
XUX0AKSAT16T	0m to 40m	Solid State Relay	Screw Clamp	05H7173	110.84
XUX0ARCTT16T	0m to 40m	...	Screw Clamp	05H7175	113.83
XUX1ARCNT16	0m to 14m	Relay	Screw Clamp	89H7014	156.79
XUX5ARCNT16	0m to 2.1m	Relay	Screw Clamp	89H7025	164.91
XUX9APBNT16.	0m to 11m	PNP	Screw Clamp	64M3687	160.84
XUX9ARCNT16	0m to 11m	Relay	Screw Clamp	89H7030	173.02

PHOTOELECTRIC SENSORS ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
XUZ2001	M12 rod for mounting	89H7039	10.98
XUZ2003	Support for M12 rod	89H7040	10.98

CONTINUED

OSISENSE® XU SERIES PHOTOELECTRIC SENSORS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
● XUZA118	Stainless steel mounting bracket (right angle)	80C7222	9.25
● XUZA218	Plastic mounting bracket with adjustable ball-joint	16B4314	13.66
● XUZA51	Mounting bracket (right angle)	89H9555	12.47
XUZAM01	Base mounting bracket	11R2140	4.02
● XUZK2003	3D mounting kit for use on M12 rod, for XUK or XUZ C50	89H7032	12.86
● XUZX2004	3D mounting kit for use on M12 rod, with protective cover for XUX	89H7038	21.43

(192093)

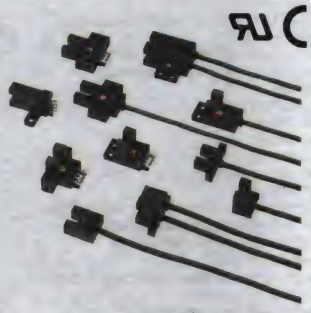
PM SERIES U-SHAPED MICRO PHOTOELECTRIC SENSORS

RoHS Compliant Available

Panasonic

- Supply voltage: 5 to 24 VDC
- Average current consumption: 15mA or less
- Ambient temperature: - 25 to +55°C (-13 to +131 °F)
- Response time: light received condition: 20 ms or less; light interrupted condition: 100 ms or less

The ultra-small PM series of u-shaped photoelectric sensors provides a wide range of 29 different models to suit any of your application needs. With the industry's smallest size, the PM series plays a key role in the miniaturization of your equipment. All models are equipped with two outputs, one for Light-ON and the other for Dark-ON sensing. The PM series conforms to the European EMC Directive and carries UL Recognition. *"PNP types also available, go online or call"*.



ULTRA-SMALL PHOTOELECTRIC SENSORS

Mfg. Part No.	Type	Sensing Range	Sensing Output	Stock No.	Price Each 1-9
● PM-K24	K	0mm to 5mm	NPN	25H9269	19.25
● PM-F24	F	0mm to 5mm	NPN	97C5619	19.74
● PM-R24	R	0mm to 5mm	NPN	28M9269	19.25
● PM-U24	U	0mm to 5mm	NPN	28M9272	19.49
SMALL PHOTOELECTRIC SENSORS - WITH CABLE					
● PM-K44	K	0mm to 5mm	NPN	25H9270	19.25
● PM-T44	T	0mm to 5mm	NPN	28M9271	19.74
● PM-L44	L	0mm to 5mm	NPN	25H9277	19.25
● PM-Y44	Y	0mm to 5mm	NPN	25H9297	19.49
● PM-F44	F	0mm to 5mm	NPN	28M9265	18.41
● PM-R44	R	0mm to 5mm	NPN	25H9286	19.49
SMALL PHOTOELECTRIC SENSORS - WITH CONNECTOR					
● PM-K54	K	0mm to 5mm	NPN	25H9276	16.61
● PM-L54	L	0mm to 5mm	NPN	88K1159	16.41
● PM-Y54	Y	0mm to 5mm	NPN	25H9298	16.41
● PM-F54	F	0mm to 5mm	NPN	28M9266	15.50
● PM-R54	R	0mm to 5mm	NPN	28M9270	15.50
● PM-K64	K	0mm to 5mm	NPN	09N0923	18.08
● PM-T64	T	0mm to 5mm	NPN	09N0931	18.08
● PM-L64	L	0mm to 5mm	NPN	09N0926	17.08
● PM-Y64	Y	0mm to 5mm	NPN	09N0934	17.44
● PM-F64	F	0mm to 5mm	NPN	09N0920	17.44
● PM-R64	R	0mm to 5mm	NPN	09N0929	17.44

SENSOR ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● CN-13-C3	Connector with 3m Cable (3-Pin For PM/PM2)	25H8970	13.88
● CN-14H-C1	Crimping Style Connector with 1M Cable (4-Pin FOR PM)	96H2176	7.64

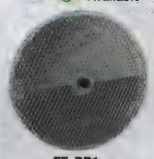
(196459)

RETRO-REFLECTIVE TARGETS

RoHS Compliant Available

PEPPERL+FUCHS SENSING YOUR NEEDS

- For all retro-reflective and photoelectric sensors. All corner-cube reflective type.



FE-RR1

Mfg. Part No.	Dimensions	Description	Stock No.	Price Each 1-2
FE-RR1	3"	Diameter Molded Acrylic Disc.	23F4252	14.32
● REF-H32	2.6 x 1"	Rectangular Molded Acrylic Reflector, w/2 Mounting Holes	41M0534	18.61

➤ CONTINUED ➤

RETRO-REFLECTIVE TARGETS (CONT.)

Mfg. Part No.	Dimensions	Description	Stock No.	Price Each 1-2
● REF-H50	2.17 x 2.17"	Rectangular Reflector, w/ Mounting Holes and Fixing Strap	20K2541	8.90
● REF-A25	1"	Circular, Self Adhesive	35C4232	8.25
● RT1 X 100	...	Reflective Tape Roll, 1" x 100"	24C4034	38.47
● RT3 X 100	...	Reflective Tape Roll, 3" x 100"	24C4036	94.32

(69333)

MODEL 600 LINEAR MOTION POSITION SENSOR

RoHS Compliant Available

BEI SENSORS

- Infinite Resolution
- Insulation Resistance at 500 VDC: 1000 Megohms
- Dielectric Strength: 500 VDC
- Temperature Range: -55°C to +125°C
- Output Smoothness: 0.1%
- Actuation Force: 2 oz (.56 Newtons) max.
- Life: 10 x 10^6 Cycles
- Resistance Tolerance: +/-20%
- Power Rating: 0.25 Watts at 70°C
- 16mm Diameter

600 series linear motion position sensors provide extremely accurate measurements in applications that require a rugged instrument operating in a tight area. Long life, infinite resolution and smooth output deliver high reliability in critical measurements. Floating shaft design allows for shaft/interface misalignments up to 0.010". Repeatablity within .0005 inch. Supplied with #29 AWG Teflon insulated wire 12 inches min. length.

Mfg. Part No.	Electrical Travel (mm)	Active Electrical Travel (mm)	Mechanical Travel (mm)	Length (mm)
601R1KL.7	25	23	28	57
602R2KL.35	51	48	53	89
603R3KL.25	76	74	79	114
604R4KL.15	102	99	104	140
606R6KL.12	152	150	155	190
610R10KL.09	254	251	257	292
612R12KL.08	305	302	307	343

Mfg. Part No.	Resistance Ohms +/-20%	Linearity (+/-)	Stock No.	Price Each 1-4	5-9	10-24
601R1KL.7	1K	0.70	86H6847	274.86	263.93	256.12
602R2KL.35	2K	0.35	86H6848	297.44	285.61	277.15
603R3KL.25	3K	0.25	86H6849	293.18	281.52	273.20
604R4KL.15	4K	0.15	86H6850	305.40	293.25	284.58
606R6KL.12	6K	0.12	86H6851	335.95	322.59	313.05
610R10KL.09	10K	0.09	86H6852	366.49	351.91	341.50
612R12KL.08	12K	0.08	86H6853	453.11	435.09	422.22

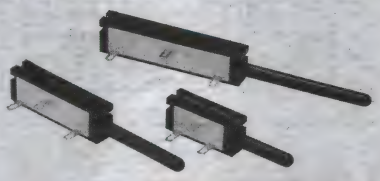
(77682)

MODEL 9600 MINIATURE SPRING RETURN LINEAR MOTION POSITION SENSORS

RoHS Compliant Available

BEI SENSORS

- Linearity: ±2%
- Actuation Force: 14.4 (4.0) Newtons max.
- Temperature Range: -40°C to +135°C
- Mechanical Life: 2,000,000 Full Cycles; 5,000,000 Dither Cycles
- Spring return design allows for interface-free installation.



9600 series spring return linear motion position sensors are ideal for a variety of applications requiring a highly miniaturized solution. Plastic housing and shaft. Plated brass eyelet style terminals. 4.8mm diameter shaft. Supplied with internal spring to return actuator to extended position. Ideally suited for use with microprocessor-based systems including joystick controls, robotics and industrial automation and controls.

Mfg. Part No.	Electrical Travel (mm)	Active Electrical Travel (mm)	Mechanical Travel (mm)	Power Rating at 70°C (Watts)
● 9605R1.7KL2.0	12.7	10.0	14.2	0.25
● 9610R3.4KL2.0	25.4	22.8	26.9	0.5
● 9615R5.1KL2.0	38.1	35.6	39.6	0.75

Mfg. Part No.	Resistance Ohms +/-25%	Length (mm)	Terminal Spacing (mm)	Stock No.	Price Each 1-4	5-9	10-24
● 9605R1.7KL2.0	1.7 K	26.9	0.300	86H6854	37.21	34.81	30.51
● 9610R3.4KL2.0	3.4 K	39.6	12.7	86H6855	38.20	35.76	31.35
● 9615R5.1KL2.0	5.1 K	52.3	20.3	86H6856	39.61	37.07	32.50

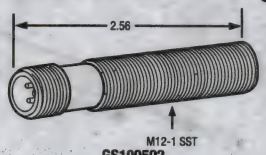
(77683)

SOLID-STATE SPEED SENSORS

RoHS Compliant Available

CHERRY

- Hall-Effect Technology with High Speed and Near-Zero Speed Capabilities
- Sense Rotation of Ferrous Target Such as Gearwheel, Sprocket or Chain
- Digital Sinking Output
- Maximum Supply Current: 6mA except Type SD100203: 20mA



GS100502

Mfg. part no. SD100203 provides two separate digital outputs for speed and direction. All except **mfg. part no. GS100701** provide additional circuit protection for immunity against electrical interference. **Mfg. part no. SD100203** includes 12″ 20AWG leads. **Mfg. part no. GS100101** meets all IEC requirements for heavy industrial environments.

INDUSTRIAL-GRADE

Mfg. Part No.	Description	Supply Voltage	Operating Temp. Range	Stock No.	Price Each 1-9
GS100101	M12-1 Aluminum Barrel	4.5 - 24VDC	-40° - 105°C	05M6387	53.67
COMMERCIAL-GRADE					
GS100502	M12-1 Aluminum Barrel	4.5 - 24VDC	-40° - 125°C	05M6388	29.21
GS100701	15/32″ Aluminum Barrel	4.5 - 24VDC	-40° - 125°C	95B6032	27.87

(69350)

SMART ROTARY POSITION SENSORS

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

- Non-contact design: Eliminates mechanical failure mechanisms, reducing wear, which improves reliability and durability, and minimizes downtime
- Combined patented MR sensor and ASIC technology provides absolute position sensing: Helps OEMs reduce warranty costs because they don't have to replace worn or broken component parts, helps end-users reduce downtime due to fewer calibration requirements
- No internal moving parts: Automotive-grade potting makes the sensor more resistant to vibration, shock, and extreme temperatures, improving reliability
- Repeatable output: Occurs within a 3.0 mm ±2.0 mm [0.118 in ±0.079 in] air gap between the sensor and magnet collar, expanding application opportunities
- High accuracy: Measures values down to 0.01°; better sensor accuracy can provide better system accuracy in the application
- IP67 and IP69K sealing: Allows for use in harsh environments such as dust, immersion up to 1 m [39.37 in] of water for 30 minutes, and high pressure water sprays
- High shock and vibration resistance: Allows for use in a wide variety of tough applications
- Minimal signal error: Exists up to 2.50 mm [0.10 in] of radial error, simplifying design-in
- RoHS-compliant: Materials meet Directive 2002/95/EC

Honeywell's **SMART** Position Sensors are some of the most durable, adaptable, and lightweight absolute position sensors available in the industry, enabling highly accurate motion control and improving operation efficiency and safety.

Mfg. Part No.	Sensing Range	Resolution	Output	Stock No.	Price Each 1-5
SPS-R360D-NBMS0101	360°	0.01°	4 mA to 20 mA	06W1611	393.69

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-5
SPS-MAG-002	Magnet collar for 25.4 mm [1 in] corresponding shaft diameter	06W1610	119.66
SPS-AUX-AS100-1	Assembly tool, one piece, 25.4 mm [1 in], aluminum	06W1608	106.67
SPS-AUX-AS100-2	Assembly tool, two piece, 25.4 mm [1 in], aluminum	06W1609	355.51

(207461)

HALL-EFFECT ROTARY POSITION SENSORS - RTY SERIES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features and Benefits

- 12M Cycles
- Rugged IP67-sealed package w/integral connector
- Automotive-grade EMI/EMC testing
- Industry standard AMP termination
- 32mm mounting pitch
- North American and European pinout styles
- Eight operating ranges up to 360°

Potential Applications

Transportation

- Position and movement detection of pedals, throttles, gear shift, levers, steering, linkages, and hitches (trucks, buses, off-road vehicles, industrial/construction/agricultural vehicles and equipment, cranes)
- Suspension displacement/kneeling (buses, trucks)
- Tilt/trim position (boat engines, tilling equipment)

Industrial

- Valve control
- HVAC damper control
- Irrigation pivot control

CONTINUED

HALL-EFFECT ROTARY POSITION SENSORS - RTY SERIES (CONT.)

RTY series Hall-effect rotary position sensors provide angle monitoring in harsh transportation and industrial applications. These products use a magnetically biased, Hall-effect integrated circuit (IC) to sense rotary movement of the actuator shaft over a set operating range. Rotation of the actuator shaft changes a magnet's position relative to the IC. The resulting flux density change is converted to a linear output. The IC, together with conditioning and protection circuitry, and the permanent magnet, is sealed in an IP67-qualified rugged package for durability in most harsh environments. Eight operating ranges are tolerant to over-travel and allow use in most common applications. Low voltage and high voltage versions cover an input voltage range of 4.5 Vdc to 30 Vdc.

Pinout

North America	European
Pin 1 = VCC Pin 2 = GND Pin 2 = GND	Pin 1 = GND Pin 2 = VCC Pin 2 = VCC

NORTH AMERICAN LAYOUT - 10V to 30V

Mfg. Part No.	Output Configuration	Sensing Angle Range	Stock No.	Price Each 1-4
RTY050HVNAX	Non Ratiometric	50°	82T2724	43.73
RTY060HVNAX	Non Ratiometric	60°	82T2727	69.83
RTY070HVNAX	Non Ratiometric	70°	82T2731	73.29
RTY090HVNAX	Non Ratiometric	90°	82T2735	72.52
RTY120HVNAX	Non Ratiometric	120°	82T2739	73.29
RTY180HVNAX	Non Ratiometric	180°	82T2743	69.83
RTY270HVNAX	Non Ratiometric	270°	82T2747	69.83
RTY360HVNAX	Non Ratiometric	360°	82T2751	72.52
NORTH AMERICAN LAYOUT - 4.5V to 5.5V				
RTY050LVNAX	Ratiometric	50°	82T2725	55.19
RTY060LVNAX	Ratiometric	60°	82T2729	52.59
RTY070LVNAX	Ratiometric	70°	82T2733	52.59
RTY090LVNAX	Ratiometric	90°	82T2737	52.59
RTY120LVNAX	Ratiometric	120°	82T2741	55.36
RTY180LVNAX	Ratiometric	180°	82T2745	55.19
RTY270LVNAX	Ratiometric	270°	82T2749	52.59
RTY360LVNAX	Ratiometric	360°	82T2753	57.04
EUROPEAN LAYOUT - 4.5V to 5.5V				
RTY050LVEAX	Ratiometric	50°	82T2722	52.59
RTY060LVEAX	Ratiometric	60°	82T2728	52.59
RTY070LVEAX	Ratiometric	70°	82T2732	52.59
RTY090LVEAX	Ratiometric	90°	82T2736	55.19
RTY120LVEAX	Ratiometric	120°	82T2740	55.36
RTY180LVEAX	Ratiometric	180°	82T2744	52.59
RTY270LVEAX	Ratiometric	270°	82T2748	52.59
RTY360LVEAX	Ratiometric	360°	82T2752	55.36
EUROPEAN LAYOUT - 10V to 30V				
RTY050HVEAX	Non Ratiometric	50°	82T2723	73.29
RTY060HVEAX	Non Ratiometric	60°	82T2726	77.15
RTY070HVEAX	Non Ratiometric	70°	82T2730	46.18
RTY090HVEAX	Non Ratiometric	90°	82T2734	73.29
RTY120HVEAX	Non Ratiometric	120°	82T2738	69.83
RTY180HVEAX	Non Ratiometric	180°	82T2742	77.15
RTY270HVEAX	Non Ratiometric	270°	82T2746	73.29
RTY360HVEAX	Non Ratiometric	360°	82T2750	69.83

(200539)

HALL-EFFECT ROTARY POSITION SENSORS - RTY SERIES

NEW

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features:

- 35 M cycle PRODUCT LIFE
- Solid-state Hall-effect technology
- Rugged IP67-sealed package with integral connector

Transportation

- Position and movement detection of pedals, throttles, gear shift, levers, steering, linkages, and hitches (trucks, buses, off-road vehicles, industrial/construction/agricultural vehicles and equipment)
- Suspension Kneeling Position (buses, trucks)
- Tilt/trim position (boat engines, tilling equipment)

Industrial

- Valve control
- HVAC damper control
- Irrigation pivot control

The RTY Series Hall-Effect Rotary Position Sensors provide angle monitoring in harsh transportation and industrial applications at a competitive cost. These products use a magnetically biased, Hall-effect integrated circuit (IC) to sense rotary movement of the actuator shaft over a set operating range. Rotation of the actuator shaft changes a magnet's position relative to the IC. The resulting flux density change is converted to a linear output. The IC, together with conditioning and protection circuitry, and the permanent magnet, is sealed in an IP67-qualified rugged package for durability in most harsh environments. Eight operating ranges (50°, 60°, 70°, 90°, 120°, 180°, 270° and 360°) are tolerant to over-travel and allow use in most common applications. Low voltage and high voltage versions cover an input voltage range of 4.5 Vdc to 30 Vdc. Although most applications require no lever, a lever version is available. The lever may allow customers to reduce the number of mechanical linkages required for their application, which may reduce the cost of the overall customer solution. No brackets are necessary.

CONTINUED

HALL-EFFECT ROTARY POSITION SENSORS - RTY SERIES (CONT.)

WITHOUT LEVER

Mfg. Part No.	Output Configuration	Supply Voltage (VDC)	Stock No.	Price Each
RTY090HVEBX	Non Ratiometric	10 - 30	17X0361	41.77
RTY090HVNBX	Non Ratiometric	10 - 30	17X0364	41.77
RTY090LVEBX	Ratiometric	4.5 - 5.5	17X0367	35.59
RTY090LVNBX	Ratiometric	4.5 - 5.5	17X0370	35.49
RTY180HVEBX	Non Ratiometric	10 - 30	17X0373	41.77
RTY180HVNBX	Non Ratiometric	10 - 30	17X0376	41.77
RTY180LVEBX	Ratiometric	4.5 - 5.5	17X0379	35.59
RTY180LVNBX	Ratiometric	4.5 - 5.5	17X0382	35.59
RTY360HVEBX	Non Ratiometric	10 - 30	17X0385	41.77
RTY360HVNBX	Non Ratiometric	10 - 30	17X0388	41.77
RTY360LVEBX	Ratiometric	4.5 - 5.5	17X0391	35.59
RTY360LVNBX	Ratiometric	4.5 - 5.5	17X0394	35.59
WITH LEVER				
RTY090HVEAA	Non Ratiometric	10 - 30	17X0359	47.18
RTY090HVEBA	Non Ratiometric	10 - 30	17X0360	47.18
RTY090HVNAA	Non Ratiometric	10 - 30	17X0362	47.18
RTY090HVNBA	Non Ratiometric	10 - 30	17X0363	47.06
RTY090LVEAA	Ratiometric	4.5 - 5.5	17X0365	40.99
RTY090LVEBA	Ratiometric	4.5 - 5.5	17X0366	40.99
RTY090LVNAA	Ratiometric	4.5 - 5.5	17X0368	43.02
RTY090LVNBA	Ratiometric	4.5 - 5.5	17X0369	40.89
RTY180HVEAA	Non Ratiometric	10 - 30	17X0371	47.18
RTY180HVEBA	Non Ratiometric	10 - 30	17X0372	47.18
RTY180HVNAA	Non Ratiometric	10 - 30	17X0374	47.18
RTY180HVNBA	Non Ratiometric	10 - 30	17X0375	47.18
RTY180LVEAA	Ratiometric	4.5 - 5.5	17X0377	40.99
RTY180LVEBA	Ratiometric	4.5 - 5.5	17X0378	40.99
RTY180LVNAA	Ratiometric	4.5 - 5.5	17X0380	40.99
RTY180LVNBA	Ratiometric	4.5 - 5.5	17X0381	40.99
RTY360HVEAA	Non Ratiometric	10 - 30	17X0383	47.18
RTY360HVEBA	Non Ratiometric	10 - 30	17X0384	47.18
RTY360HVNAA	Non Ratiometric	10 - 30	17X0386	47.04
RTY360HVNBA	Non Ratiometric	10 - 30	17X0387	47.18
RTY360LVEAA	Ratiometric	4.5 - 5.5	17X0389	40.99
RTY360LVEBA	Ratiometric	4.5 - 5.5	17X0390	40.99
RTY360LVNAA	Ratiometric	4.5 - 5.5	17X0392	40.99
RTY360LVNBA	Ratiometric	4.5 - 5.5	17X0393	40.99

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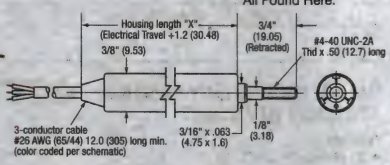
MLT SERIES LINEAR POSITION TRANSDUCERS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.



- Anodized Extruded Aluminum Housing
- 0.375″ Diameter
- Stainless Steel Shaft
- Absolute Continuous Measurement
- 4-40 Thread Shaft
- Operating Temperature: -40°C to +80°C (-40°F to +176°F)

Rugged enough to withstand the hostile environment of the factory, the **MLT series** linear position transducers are small in diameter. By using a proprietary dual wiper, internal ball joint and the MystR® conductive plastic film, the **MLT series** transducers provide usable output at high vibration levels for long periods of time. The use of precious metal wipers further enhances reliability. V max = 30V, I max = 100mA, Ci = 0, µF, Li = 0 mH. Intrinsically safe for Class I, II and III Division 1, Groups A, B, C, D, E, F, and G for Hazardous (indoor/outdoor) NEMA 4 locations.

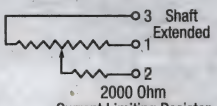
Mfg. Part No.	Electrical Travel (in.)	Res. (Ohms)	Linearity (%)	Housing Length "X" (in.)	Wt. (g)	Stock No.	Price Each
● MLT0R5N0750F5C	0.5	750	1	1.7	11	49H7056	263.09
● MLT002N3000B5C	2	3000	0.1	3.2	20	07H4154	285.36
● MLT006N9000B5C	6	9000	0.1	7.2	31	10M8431	288.68

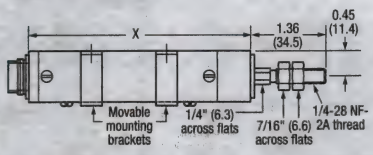
(77660)

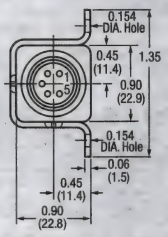
SLF SERIES LINEAR POSITION TRANSDUCERS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.







- 0.081″ Thick Housing with 0.25″ Shaft
- ¼ -28 Thread Shaft
- Operating Temperature: -65° to +105°C

SLF series transducers are frequently used for measuring linear position or displacement up to 6″ on a wide variety of manufacturing and process equipment. The mechanical design of the unit's front and rear bearings, anodized extruded aluminum housing, stainless steel shaft and precious metal wipers are suitable for a factory's harsh environment. Based on the proprietary MystR® conductive plastic film, it provides a high resolution, absolute position measurement without external signal conditioners. V max. = 30V, I max. = 100mA, Ci = 0, µF, Li = 0 mH. Instrinsically Safe for Class I, II, and III Division I, Groups A, B, C D, E, F, and G for Hazardous (indoor/outdoor) NEMA 4 locations.

Mfg. Part No.	Electrical Travel (in.)	Res. (Ohms)	Mecb-anical Travel (in.)	Linearity (%)	Housing Length "X" (in.)	Stock No.	Price Each 1-9
● SLF01N1500F6A	1	1.5	1.2	1	4.05	67H4215	383.87
● SLF01N1500B6A	1	1.5	1.2	0.1	4.05	81H2506	362.65
● SLF02N3000F6A	2	3	2.2	1	5.05	10M5261	350.29
● SLF04N6000F6A	4	6	4.15	1	6.95	10M8451	419.23
● SLF04N6000B6A	4	6	4.15	0.1	6.95	03H3356	496.53
● SLF06N9000F6A	6	9	6.15	1	8.95	94C2857	386.52
● SLF06N9000B6A	6	9	6.15	0.1	8.95	06H0953	470.15

(77664)

SL353 SERIES MICROPOWER OMNIPOLAR DIGITAL HALL-EFFECT SENSOR ICS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features and Benefits

- Supply voltage as low as 2.2 Vdc, combined with very low average current (1.8 uA typ. for SL353LTthe lowest in its class), reduces power consumption, provides extended battery life, and promotes energy efficiency.
- Non-chopper stabilized design: Does not utilize chopper stabilization, eliminating the noise generated by products using this technique.
- Omnipolar capability with high and low duty cycle options allows for use in a variety of potential applications with low power requirements and/or battery operation, including motion control, lid closure detection, presence-absence, metering, and displacement sensing
- Thermally balanced integrated circuit provides for stable operation over a wide temperature range, from -40° to 85 °C [-40° to 185 °F]
- The SOT-23 subminiature package size requires less PCB space

Potential applications

- Battery-operated, mobile equipment such as:
- Door or lid closure detection in computer notebooks, scanners, hand-held industrial computers and instrumentation
- Mobile printer head position sensing
- Small, hand-held medical and dental equipment
- Trigger switch for battery-operated hand tools (i.e., drills, drivers)
- Reed switch replacement in battery operated security systems
- Magnetic encoder for building access (array)
- Power switch or open-close detection in small battery-operated appliances (vacuum cleaners, fan. etc.)
- Gas or water consumption measurement in remote, battery-operated utility meters

VALUE PROPOSITIONS SL353LT: For device manufacturers who need ultra low power sensing for battery-operated, mobile applications, Honeywell's SL353LT Omnipolar Hall-Effect Sensor IC provides an ultra low power (1.8 uA, 2.8 Vdc) sensor IC and helps minimize PCB (Printed Circuit Board) space, part count and cost for the entire application.

Mfg. Part No.	Description	Current (uA)	Stock No.	Price Each 1-9
● SL353HT	High duty cycle, SOT-23 package	330	29T6155	1.25
● SL353LT	Low duty cycle, SOT-23 package	1.8	29T6156	1.34

(194825)

SS4/SS5 HALL-EFFECT POSITION MAGNETIC SENSORS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

- Operating speed: 0 to over 100kHz
- Supply voltage: 3.8-24VDC
- Output voltage: 0.4V max
- SOT89 package
- Built-in timing circuit

Digital position sensors have current sink output. Feature temperature compensation. **SS4 series** dimensions: 0.160 × 0.118″ (4.06 × 3.00). **SS5 series** are SOT89 packages. **SS42R series** features digital dual complementary sink/source outputs. Operate/release points are trimmed for zero symmetry. Reverse voltage polarity protection for full supply range. Operate temp. range: -40 to +105° C. **SS421 series** feature an operate temp. range of -40 to +105° C. Bipolar operation for easy RPM counting using ring magnets. Built-in timing circuit greatly simplifies and reduces the cost of PC board design. Speed trip point adjustable with external resistor and capacitor. "L" version is active low, "H" version is active high.

SS5

MINIATURE DIGITAL SENSORS

Mfg. Part No.	Magnetics	Supply Current (mA)	Gauss Level @ 25°C Max. OP	Min. RL	Min. DIF.	Stock No.	Price 1-9
SS41	Bipolar	8.7	150	-140	50	73K1376	1.15
SS40A	Bipolar	10	170	0	90	71J7819	1.08
SS411A	Bipolar	10	60	-60	10	73K4040	2.97
SS443A	Unipolar	10	180	75	25	73K1377	2.44
SS441A	Unipolar	10	115	20	20	93F6654	1.42
SS461A	Latch	10	85	-85	50	93F9228	2.61
SS466A	Latch	10	180	-180	200	73K4041	1.96
COMPLEMENTARY OUTPUT							
SS42R	Latch	11	185	-185	200	01J0382	3.47
SS421H	Bipolar	15	250	-250	50	05M1362	2.53
SURFACE MOUNT DIGITAL SENSORS (SOT 89)							
SS511AT	Bipolar	8.7	60	-60	10	33K8454	2.68
SS541AT	Unipolar	10	115	20	20	86C1047	1.83
SS543AT	Unipolar	10	180	75	25	72C8940	2.68
SS549AT	Unipolar	10	390	235	30	86C1048	3.96
SS561AT	Latching	8.7	85	-85	50	86C1049	2.62

MINIATURE LINEAR SENSORS

Mfg. Part No.	Supply Voltage (VDC)	Supply Current (mA)	Sensitivity* MV/Gauss	Stock No.	Price Each 1-9
SS39ET	2.7-6.5	1.5	1.4	82T2800	1.20
SS49E	3-6.5	6	1.4	09J1786	2.49
SS495A	4.5-10.5	7	3.125 ± 0.125	73K4042	1.72
SS495A1	4.5-10.5	7	3.125 ± 0.094	73K4043	4.41
SS495A2	4.5-10.5	7	3.125 ± 0.156	73K1378	3.70
SS496A1	4.5-10.5	7	2.50 ± 0.075	73K1379	3.25
SS496A	4.5-10.5	7	2.50 ± 0.100	48F2831	2.76
SS495ASP	4.5-10.5	8.7	3.125 ± 0.125	39B1839	3.76

*Nominal @ 5.0VDC supply
(5179)

SR13/SR15 SERIES HALL-EFFECT POSITION SENSORS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

- Snap-In or Flat Mount Packages
- Digital Output (Current Sinking)
- Operating Temperature: -40°C to +150°C
- Temperature Compensated Magnetics
- 24 AWG Radox Wire Leads

SR13C–A1

SR15C–A3

SR13 and **SR15 series** position sensors are not susceptible to common occurrences of humidity, vibration or dust contamination yet provide easy installation. Devices can be installed without additional hardware, using the pre-leaded snap-in or flat-pack housings. Sensors utilize time-proven **SS400 series** position sensors, which have a thermally balanced integrated Hall–effect circuit providing predictable performance over a wide operating temperature range. Snap-in mount feature accepts a panel thickness up to 0.135″. Supply voltage: 3.8–30VDC. Supply current: 13mA. Output voltage: 400mV. Sinking current: 20mA continuous, 50mA cycled. Dimensions: 0.80L x 0.30W x 0.20″D. *Magnets available on page 1848.*

SPECIFICATIONS

Mfg. Part No.	Magnetics	Gauss Level @ 25°C Max. OP	Min. RL	Min. DIF
SR13C-A1	Unipolar	180	75	25

➤CONTINUED➤

SR13/SR15 SERIES HALL-EFFECT POSITION SENSORS (CONT.)

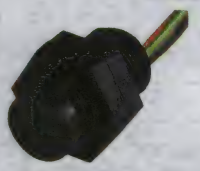
Mfg. Part No.	Lead Length	Mounting Style	Stock No.	Price Each 1-49	50-99	100-499	500+
SR13C-A1	6.0″	Snap-in	05M1292	6.25	5.70	5.30	4.73
SR13D-A1	6.0″	Snap-in	86C0988	15.61	11.37	10.65	10.20
SR15C-A3	10.0″	Flat Pack	05M1293	7.26	6.90	6.54	...

(51471)

103SR AND SR4 SERIES HALL-EFFECT SENSORS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.



103SR series have adjustable mounting, threaded aluminum housing contains Hall-effect sensor operated by proximity to external magnet. Sealed housing meets NEMA enclosure types 3, 3R, 3S, 4, 4X, 12, and 13. 24-gauge, 6″ stranded, color-coded lead wires at termination. Mfg. part nos. with "2" suffix are supplied with one meter, 22AWG, PVC jacketed cable. **Mfg. part nos. 103SR13** are digital current sinking output. **Mfg. part nos. 103SR12** are current sourcing. Magnetics type for **mfg. part nos. 103SR:** unipolar. Dimensions: 1⅝-32NS x 1″L. Operating temperature range: –40°C to +100°C. *Magnets available on page 1848.* SR4 series are very sensitive magnetoresistive sensors. Call for details.

Mfg. Part No.	Supply Voltage	Supply Current	Voltage Output	Stock No.	Price Each 1-9
103SR12A-2	6-24VDC	10.0mA	Vs-1.5VDC	05M2282	72.75
103SR13A-1	4.5-24VDC	10.0mA	0.4VDC	14M6607	26.15
103SR13A-2	4.5-24VDC	10.0mA	0.4VDC	50F5281	53.78
103SR12A4	6-24VDC	10.0mA	Vs-1.5VDC	39B4306	43.75
103SR19A-1	4.5-10.5VDC	10.0mA	0.4 Vdc to Vs - 0.4 Vdc	70C3922	41.16

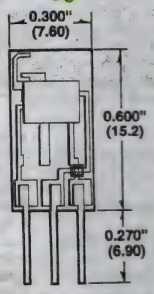
(3486)

SS94A SERIES LINEAR HALL-EFFECT TRANSDUCERS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Operated by a magnetic field, the output voltage varies proportionally to the field strength. All sensors feature temperature compensation circuitry. **Mfg. part no. SS94A2** features silver back for improved noise immunity. Gauss range of –500 to +500 except **mfg. part no. SS94A1F** at -100 to +100. **Mfg. part no. SS94A1F** is high sensitivity.



Mfg. Part No.	Supply VDC	Supply mA	MV/Gauss Output @ 25°C*	Linearity % of Span	Stock No.	Price Each 1-9	10-49
SS94A1	6.6-12.6	30.0	5.000	1.5% max	05M1372	29.76	27.12
SS94A1F	6.6-12.6	30.0	25.000		05M1376	39.20	29.35
SS94A2	6.6-12.6	30.0	5.000		50F5182	28.00	26.37

*Nominal at 8VDC supply *except* **SS94A1B** at 5VDC
(5087)

SMART POSITION SENSOR, 75M LINEAR CONFIGURATION

RoHS Compliant Available

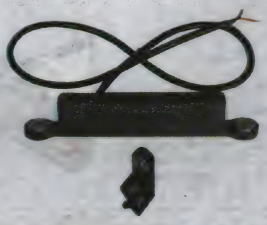
Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Potential applications

Aerospace
- Aircraft ram door

Medical
- Syringe pumps

Industrial
- Cutting and slitting machinery
- Elevator level position
- Material handling
- Packaging
- Plastic molding machines
- Valve position
- Wafer handling equipment
- Woodworking machinery



Features
- Resolution of up to 16 bits provides enhanced accuracy
- Non-contacting technology can provide enhanced product life and durability with less downtime
- Combined patented MR sensor and ASIC technology provide enhanced differentiation and performance
- Air gap of up to 3,0 ±2,5 mm [0.118 ±0.098 in] between sensor and magnet expands application

➤CONTINUED➤

SMART POSITION SENSOR, 75M LINEAR CONFIGURATION (CONT.)

opportunities
- Other output options (CAN bus, RS232) available upon request
- Self-diagnostics feature can reduce equipment downtime
- Small size, taking up less space than most competitive technologies, allows for use where space is at a premium
- IP67 and IP69K sealing allow use in a variety of harsh applications

Superior Measurement. Accurate. Reliable. Thinking. SMART means that this is a sensor that can essentially think for itself. The SMART Position Sensor has the ability to self-calibrate because it uses a patented combination of an ASIC and an array of magnetoresistive (MR) sensors to accurately and reliably determine the position of a magnet attached to a moving object (e.g., elevator, valve, machinery, etc.) so that the object's position can be determined. Honeywell has utilized MR technology through the ASIC at a level never before accomplished.

Mfg. Part No.	Sensing range (mm)	Supply voltage (VDC)	Sensor Output	Stock No.	Price Each 1-5
SPS-L075-HALS	0 - 75	6 to 24	0 to 5 V analog	34R2840	199.74
SPS-L225-HALS	0 - 225	6 to 24	0 to 5 V analog	91R2001	164.74
SPS-L225-HDLS	0 - 225	6 to 24	RS232-type digital output/ 57.6 kbits/s baud rate	91R2002	331.04

(159805)

SMART POSITION SENSORS, 100° AND 180° CONFIGURATIONS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE. All Found Here.

Specifications
- Supply current: 45 mA
- Output: 0.5 Vdc to 4.5 Vdc (10% to 90% of 5 Vdc)
- Linearity: +/- 0.4% full scale output
- Measurement frequency: 312 Hz typ.
- Termination: 4-pin, M12 connector
- Operating temperature: -40°C to 85°C

100° 180°

Features
- Reliable, durable: Non-contact design reduces wear and tear, improving reliability and durability, minimizing downtime
- Easy to install: Installation takes 4 steps (1: position device; 2: drill holes 3: mount sensor; 4: locate magnet/ connect sensor) vs. up to 14 steps some competitive products require, simplifying installation and reducing set-up costs
- Rugged: As there are no moving parts within sensor, Honeywell utilizes unique packaging materials that make it resistant to vibration, shock, and extreme temperatures
- Flexible: Air gap tolerance of 7,8 ±2,5 mm [0.307 ±0.098 in] (100°) and 8,5 ±2,5 mm [0.338 ±0.098 in] (180°) between sensor and magnet expands application use
- Cost effective: Adaptable, non-contacting design allows customers to eliminate unnecessary connections for installation, thereby reducing installation steps/time and components

Potential applications
- **Transportation**
- Aerial work lift platform, front end loader and digger/ excavator boom position
- Scissor lift position
- Refuse truck lift and automatic reach arm position
- Mobile crane steering
- Timber harvester/processor equipment cutter arm angle
- On-board loader weighing system position
- **Industrial**
- Telescoping conveyor elevation
- Power generation contact angle
- Rail-road crossing arms position
- **Military**
- Remote weapon systems elevation
- Chassis suspension systems position height
- Military vehicle door position
- **Aerospace**
- Ground-based solar panels elevation and azimuth
- Ground-based satellite dish elevation and azimuth
- **Medical**
- Robotically-assisted surgery equipment position
- Patient bed elevation

Mfg. Part No.	Sensing Range (°)	Supply Voltage (VDC)	Stock No.	Price Each
● SPS-A100D-HAMS	0 to 100	6V to 24V	40T2024	264.93
● SPS-A100D-VAMS	0 to 100	18V to 40V	40T2025	290.35
● SPS-A180D-HAMS	0 to 180	6V to 24V	40T2026	333.26
● SPS-A180D-VAMS	0 to 180	18V to 40V	40T2027	336.00

(195393)

GT SERIES HALL-EFFECT GEAR-TOOTH SENSOR

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE. All Found Here.

- EMI Resistant
- Fast Operating Speed: Over 100kHz

Mfg. part no. 1GT101DC gear-tooth sensor uses a magnetically-biased, Hall-effect integrated circuit to accurately sense movement of ferrous metal targets. Units will function from a 4.5 to 24VDC power supply and have reverse polarity protection. Current sinking output. Dimensions: 0.70W x 1.43"D.

Mfg. Part No.	Stock No.	Price 1-14
● 1GT101DC	92F3009	32.58

(3457)

SIX DEGREE OF FREEDOM INERTIAL MEASUREMENT UNITS - 6DF SERIES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE. All Found Here.

Features
- IP67 and IP69k ratings provide resistance to weather
- Test to mechanical shock, thermal shock, and random vibration
- Voltage input flexibility (7 V to 32 V)

Honeywell's 6DF (degrees of freedom) Inertial Measurement Unit (IMU), 6-D Motion Variant, is designed to provide 6-dimensional motion sensing from a single device over six degrees of freedom by sensing motion in the forward/ backward, up/down, left/right accelerations and inclination angles, combined with rotation rates about three perpendicular axes (pitch, yaw, roll). Because the movements and the rotation along the three axes are independent of each other, such motion is said to have "six degrees of freedom". The 6DF IMU measures the motion of the equipment onto which it is attached and delivers the data to the equipment's control module using CAN communications protocol, allowing the operator to focus on other equipment functions, enabling more precise control than can be achieved by using only the human eye, and increasing safety, stability and productivity. The CAN baud rate and CAN 29 bit IDs are according to J1939.

Mfg. Part No.	Variant	Range (m/s^2)	Stock No.	Price Each Each
● 6DF-1N6-C2-HWL	6g	-58.86 to 58.86	93T8004	1965.71

(203460)

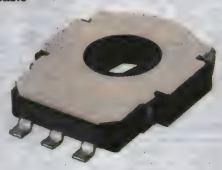
EVWAE SERIES 10MM GS POSITION SENSORS

RoHS Compliant Available

Panasonic

Features:
- Voltage rating: 5V
- Power rating: 0.05W
- Low profi le (H=2.2 mm), shaft hole diameters of up to 4 mm are available.
- Long operation life: 1 million operation cycles.
- A wide electrical output angle of a maximum 343°, ready for SMDs

Recommended Applications:
- Detection of air conditioner damper angles
- Detection of various control unit angles



Mfg. Part No.	Operating Life (Cycles)	Linearity (%)	Operating Force (mN-m)	Stock No.	Price Each 1-9
● EVW-AE4001B14	1000000	+/-2	3	52W2734	2.21

(209137)

EVAW7 SERIES TYPE LINEAR POSITION SENSORS

RoHS Compliant Available

Panasonic

Features:
- A wide variety of operation strokes
- Long life and high resolution

Recommended Applications:
- Car headlight angle detection sensor

Mfg. Part No.	Operating Life (Cycles)	Linearity (%)	Operating Force (N)	Stock No.	Price Each 1-9
● EVA-W7XR04B34	10000	2	2	52W2221	1.83

(209135)

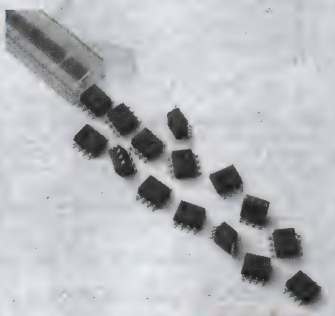
GE's NOVASENSOR NPP-301 SERIES SURFACE MOUNT PRESSURE SENSORS

RoHS Compliant Available

Amphenol
Advanced Sensors

Features:
- Ultra-small Silicon Fusion Bonded (SFB) SO-8 surface mount package
- Non-ported
- Wide operating temperature range: -40°F to 257°F (-40°C to 125°C)
- Four element Wheatstone bridge configuration for circuit design flexibility
- Wide range of applications, including pneumatic controls, altimeters and barometers, cable leak, detection, portable gauges

Specifications:
- 10VDC maximum input excitation
- Compatible with most non-corrosive gases and dry air



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GE's NOVASENSOR NPP-301 SERIES SURFACE MOUNT PRESSURE SENSORS (CONT.)

Mfg. Part No.	Pressure Range (psi)	Pressure Measuring Type	Stock No.	Price Each 1-4
NPP-301A-100AT	0 to 15	Absolute	46M2631	9.53
NPP-301A-200AT	0 to 30	Absolute	46M2632	9.53
NPP-301A-700A	0 to 100	Absolute	59P7117	12.93

(94401)

GE's NOVASENSOR NPI-15 SERIES CURRENT DRIVEN MEDIA ISOLATED HIGH PRESSURE SENSORS"

RoHS Compliant Available

Amphenol
Advanced Sensors

Features

- Solid state, high reliability
- High sensitivity, 200 mV typical FSO with 1.0 mA excitation
- 316 L stainless steel, IsoSensor design
- Linearity 0.1% FSO typical
- Three standard ranges: 0 psi to 500 psi to 0 psi to 5,000 psi (0 bar to 34 bar to 0 bar to 345 bar) available, sealed gage or absolute
- Standard configurations include:
- —1/2–20 UNF threaded male port with 1.0 in (25.40 mm) flange
- —0.59 in (15 mm) diameter x 0.87 in (22 mm) long cylinder with o-ring seals
- —1/4–18 NPT male port with ⅞ in flange
- —1/8–27 NPT male port with ⅞ in flange

Mfg. Part No.	Pressure Range	Pressure Type	Stock No.	Price Each 1-4
NPI-15A-353AH	0kPa to 35000kPa	Absolute	21T9255	64.44
NPI-15A-353SH	0kPa to 35000kPa	Sealed Gauge	21T9256	64.44
NPI-15J-702AH	0kPa to 7000kPa	Absolute	21T9257	83.31

(192356)

GE's NOVASENSOR NPA SERIES SURFACE MOUNT PRESSURE SENSORS

RoHS Compliant Available

Amphenol
Advanced Sensors

- Differential, gauge, absolute & low pressure
- 10" H2O to 30 psi full scale
- 60 psi proof pressure on all ranges
- Output options: Amplified analog, digital serial (14bit), digital I2C, uncalibrated mV
- Dual pressure and temperature output in digital mode
- On chip temperature sensor in digital mode
- 3.3VDC or 5VDC supply
- Operating temperature range of -40 to 125°C
- Total error band < ±1.5% FSO

The NPA product series is provided in a miniature size as a cost effective solution for applications that require calibrated performance. Packaged in a SOIC14 pin surface mount, the NPA series is available in gauge, absolute or differential pressure ranges with either mV, amplified analog or digital outputs. The sensor is intended for printed circuit board mounting and delivered in tape and reel form to simplify manufacturing handling.

mV OUTPUT, RATIOMETRIC UNCALIBRATED SENSORS

Mfg. Part No.	Pressure Range	Pressure Measuring type	Stock No.	Price Each 1-4
NPA-100B-001D	0psi to 1psi	Differential	87R1100	19.40
NPA-100B-001G	0psi to 1psi	Gauge	58T3082	19.40
NPA-100B-005D	0psi to 5psi	Differential	87R1102	19.40
NPA-100B-005G	0psi to 5psi	Gauge	58T3084	19.40
NPA-100B-10WD	0inch-H2O to 10inch-H2O	Differential	87R1104	22.30
NPA-100B-10WG	0inch-H2O to 10inch-H2O	Gauge	58T3086	20.84
NPA-100B-015A	0psi to 15psi	Absolute	58T3088	20.76
NPA-100B-015D	0psi to 15psi	Differential	87R1106	19.40
NPA-100B-015G	0psi to 15psi	Gauge	58T3090	19.40
NPA-100B-030A	0psi to 30psi	Absolute	58T3092	19.40
NPA-100B-030D	0psi to 30psi	Differential	87R1108	19.40
NPA-100B-030G	0psi to 30psi	Gauge	58T3094	22.06
ANALOG AMPLIFIED OUTPUT, 3.3VDC EXCITATION, CALIBRATED SENSORS				
NPA-300B-001D	0psi to 1psi	Differential	87R1112	29.74
NPA-300B-001G	0psi to 1psi	Gauge	58T3110	29.74
NPA-300B-005D	0psi to 5psi	Differential	87R1114	29.74
NPA-300B-005G	0psi to 5psi	Gauge	58T3112	29.74
NPA-300B-10WD	0inch-H2O to 10inch-H2O	Differential	87R1116	36.15
NPA-300B-10WG	0inch-H2O to 10inch-H2O	Gauge	58T3114	36.15
NPA-300B-015A	0psi to 15psi	Absolute	58T3116	29.74
NPA-300B-015D	0psi to 15psi	Differential	87R1118	29.74
NPA-300B-015G	0psi to 15psi	Gauge	58T3118	29.74
NPA-300B-030A	0psi to 30psi	Absolute	58T3120	29.74
NPA-300B-030D	0psi to 30psi	Differential	87R1120	29.74
NPA-300B-030G	0psi to 30psi	Gauge	58T3122	29.74

➤ CONTINUED ➤

GE's NOVASENSOR NPA SERIES SURFACE MOUNT PRESSURE SENSORS (CONT.)

Mfg. Part No.	Pressure Range	Pressure Measuring type	Stock No.	Price Each 1-4
ANALOG AMPLIFIED OUTPUT, 5VDC EXCITATION, CALIBRATED SENSORS				
NPA-500B-001D	0psi to 1psi	Differential	87R1134	29.74
NPA-500B-001G	0psi to 1psi	Gauge	58T3138	29.74
NPA-500B-005D	0psi to 5psi	Differential	87R1136	29.74
NPA-500B-005G	0psi to 5psi	Gauge	58T3140	29.74
NPA-500B-10WD	0inch-H2O to 10inch-H2O	Differential	87R1138	37.56
NPA-500B-10WG	0inch-H2O to 10inch-H2O	Gauge	58T3142	36.15
NPA-500B-015A	0psi to 15psi	Absolute	58T3144	31.52
NPA-500B-015D	0psi to 15psi	Differential	87R1140	29.74
NPA-500B-015G	0psi to 15psi	Gauge	58T3146	29.74
NPA-500B-030A	0psi to 30psi	Absolute	58T3148	29.74
NPA-500B-030D	0psi to 30psi	Differential	87R1142	29.74
NPA-500B-030G	0psi to 30psi	Gauge	58T3150	29.74
ZACWIRE DIGITAL SERIAL OUTPUT, CALIBRATED SENSORS, 2 BYTE				
NPA-600B-001D	0psi to 1psi	Differential	87R1146	30.63
NPA-600B-001G	0psi to 1psi	Gauge	58T3166	30.63
NPA-600B-005D	0psi to 5psi	Differential	87R1148	30.63
NPA-600B-005G	0psi to 5psi	Gauge	58T3168	30.63
NPA-600B-10WD	0inch-H2O to 10inch-H2O	Differential	87R1150	37.23
NPA-600B-10WG	0inch-H2O to 10inch-H2O	Gauge	58T3170	37.23
NPA-600B-015A	0psi to 15psi	Absolute	58T3172	30.63
NPA-600B-015D	0psi to 15psi	Differential	87R1152	30.63
NPA-600B-015G	0psi to 15psi	Gauge	58T3174	30.63
NPA-600B-030A	0psi to 30psi	Absolute	58T3176	30.63
NPA-600B-030D	0psi to 30psi	Differential	87R1154	30.63
NPA-600B-030G	0psi to 30psi	Gauge	58T3178	30.63
I2C DIGITAL OUTPUT, CALIBRATED SENSORS, 2 BYTE				
NPA-700B-001D	0psi to 1psi	Differential	58T3194	31.23
NPA-700B-001G	0psi to 1psi	Gauge	58T3196	31.23
NPA-700B-005D	0psi to 5psi	Differential	58T3198	31.23
NPA-700B-005G	0psi to 5psi	Gauge	58T3200	31.23
NPA-700B-10WD	0inch-H2O to 10inch-H2O	Differential	58T3202	37.95
NPA-700B-10WG	0inch-H2O to 10inch-H2O	Gauge	58T3204	37.95
NPA-700B-015A	0psi to 15psi	Absolute	58T3206	31.23
NPA-700B-015D	0psi to 15psi	Differential	58T3208	31.23
NPA-700B-015G	0psi to 15psi	Gauge	58T3210	31.23
NPA-700B-030A	0psi to 30psi	Absolute	58T3212	31.23
NPA-700B-030D	0psi to 30psi	Differential	58T3214	31.23
NPA-700B-030G	0psi to 30psi	Gauge	58T3216	31.23

(196698)

GE's NOVASENSOR NPH SERIES LOW/MEDIUM PRESSURE SENSORS

RoHS Compliant Available

Amphenol
Advanced Sensors

Features

- Solid state, high reliability
- Standard TO-8 package suitable for PC board mount
- Low cost, small size
- Available in gauge, absolute, and differential pressure versions
- Media compatible with non-corrosive gases and dry air
- Thermal accuracy FSO 0.5% typical
- Overpressure capability to five times maximum rated pressure
- Three standard ranges: 0 to 10 inH2O (0 to 25 mbar), 0 to 1 psi (0 to 0.06 bar), and 0 to 5 psi (0 to 0.34 bar)
- Three standard ranges: 15, 30 and 100 psi (1, 2 and 7 bar)
- Nonlinearity 0.05% FSO typical
- Standard 3/16 in OD pressure port
- Ceramic substrate with temperature compensation resistors

LOW PRESSURE SENSORS

Mfg. Part No.	Pressure Range	Pressure Type	Stock No.	Price Each 1-4
NPH-8-002.5DH	0kPa to 2.5kPa	Differential	59P7063	156.13
NPH-8-002.5GH	0kPa to 2.5kPa	Gauge	59P7064	122.55
NPH-8-007DH	0kPa to 7kPa	Differential	59P7065	150.64
NPH-8-007GH	0kPa to 7kPa	Gauge	59P7066	117.22
MEDIUM PRESSURE SENSORS				
NPH-8-100AH	0kPA to 100kPa	Absolute	59P7070	93.52
NPH-8-100DH	0kPA to 100kPa	Differential	59P7071	106.84
NPH-8-100GH	0kPA to 100kPa	Gauge	59P7072	89.24
NPH-8-200DH	0kPa to 200kPa	Differential	59P7074	102.24
NPH-8-200GH	0kPa to 200kPa	Gauge	59P7075	96.20
NPH-8-700DH	0kPa to 700kPa	Differential	59P7077	102.24
NPH-8-700GH	0kPa to 700kPa	Gauge	59P7078	79.48

(192348)

GE's NOVASENSOR NPI-19 SERIES LOW PRESSURE SENSORS

Amphenol
Advanced Sensors

Features
- Solid state, high reliability
- 316L stainless steel, ISO sensor design
- ±0.5% static accuracy
- Temperature compensated 32°F to 158°F (0°C to 70°C)
- 125 mV typical FSO on current version
- 75 ±1 mV FSO on voltage version
- Thermal errors less than 2% FSO
- Two standard ranges: 0 to 2.5 psig (0 to 1 bar), 0 to 5 psig (0 to 17.24 bar)
- Standard configurations include: _ 0.74 in (19 mm) diameter x 0.28 in (7.1 mm) long cylinder with o-ring seals
- Custom configurations and other pressure ranges available. Please consult the factory.

Mfg. Part No.	Pressure Range	Pressure Type	Port Style	Stock No.	Price Each 1-4
NPI-19A-701AH	0kPa to 700kPa	Absolute	...	21T9258	58.16
NPI-19A-701GH	0kPa to 700kPa	Gauge	...	21T9259	58.16
NPI-19B-172GH	0kPa to 1700kPa	Gauge	UNF	21T9260	76.23
NPI-19B-201AH	0kPa to 200kPa	Absolute	UNF	21T9261	76.23
NPI-19B-201GH	0kPa to 200kPa	Gauge	UNF	21T9262	76.23
NPI-19H-101AH	0kPA to 100kPa	Absolute	NPT	21T9263	79.89
NPI-19H-101GH	0kPA to 100kPa	Gauge	NPT	21T9264	76.23
NPI-19H-701AH	0kPa to 700kPa	Absolute	NPT	21T9265	76.23
NPI-19J-030AV	0psi to 30psi	Absolute	NPT	21T9266	78.58

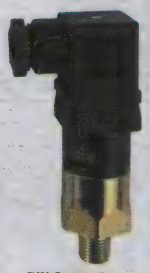
(192357)

ADJUSTABLE MINIATURE PRESSURE AND VACUUM SWITCHES

Gems Sensors & Controls
Our Experience • Your Solution

Featuures:
- Low pressure and vacuum switches have brass ports
- High pressure units are zinc plated carbon steel
- Available with either 18" flying leads or DIN electrical connections

Wire Leads



DIN Connector

Specifications:
- Contact rating: 5A at 12/24VDC and 120/240VAC
- Repeatability: 2%
- Circuitry: SPDT
- Port: ¼ NPT
- NEMA 4 rated; IP65 rated
- Electrical termination: DIN 43605A w/ 9mm cable clamp (HC) or flying leads (FL)

LOW PRESSURE

Mfg. Part No.	Pressure Range (psi)	Stock No.	Price Each
PS41-10-4MNB-C-HC	3-7	42M0460	58.85
PS41-20-4MNB-C-HC	5-30	42M0462	56.22
PS41-20-4MNB-C-FL18	5-30	42M0461	42.06
PS41-30-4MNB-C-HC	25-100	42M0464	56.81
PS41-30-4MNB-C-FL18	25-100	42M0463	41.62
HIGH PRESSURE			
PS71-20-4MNZ-C-FL18	25-75	42M0466	78.23
PS71-30-4MNZ-C-HC	65-300	42M0469	93.17
PS71-40-4MNZ-C-HC	250-1000	42M0471	93.17
PS71-50-4MNZ-C-HC	1000-3000	42M0473	91.22
VACUUM			
Mfg. Part No.	**Pressure Range (Hg)**	**Stock No.**	**Price Each**
PS82-20-4MNB-C-HC	12-30"	42M0479	88.44
PS82-20-4MNB-C-FL18	12-30"	42M0478	65.19

(91191)

BASIC BOARD MOUNT PRESSURE SENSORS: NBP SERIES UNCOMPENSATED/UNAMPLIFIED

Honeywell

DIP - DAN | DIP - DLN | Leadless SMT - LAN | Leadless SMT - LLN | SMT - MAN

➤ CONTINUED ➤

BASIC BOARD MOUNT PRESSURE SENSORS: NBP SERIES UNCOMPENSATED/UNAMPLIFIED (CONT.)

- Small Size 7mm x 7mm (0.276in x 0.276in)
- Durablility which allows using in a tough evironment
- Operating Temperature Range: -40°C to 125°C
- Supply Voltage: 12 VDC
- Non-gel coating
- Measures absolute and gage pressures
- Package Type: DIP, Leadless SMT, & SMT

SMT - MLN

NBP Series Uncompensated/Unamplified are designed for customers who require a simple, basic performance, mV output, high quality, high resolution for medical and industrial applications. These sensors offer infinite resolution of the pressure signal. They will operate as specified from -40 °C to 125 °C [-40 °F to 257 °F]. This series is ideal for those customers who want to do their own compensation, calibration, and amplification in order to make use of the maximum resolution of the bare sensor output, leveraging a custom algorithm required for the application. Several package styles and mounting options, making it easier for device manufacturers to integrate the product into their applications. The NBP Series measures absolute and gage pressures. The absolute versions have an internal vacuum reference and an output value proportional to absolute pressure. Gage versions are referenced to atmospheric pressure and provide an output proportional to pressure variations from atmosphere. This series sensors are intended for use with noncorrosive, non-ionic gases, such as air and other dry gases and for non-corrosive, non-ionic liquids. All products are designed and manufactured according to ISO 9001.

DIP LEADS

Mfg. Part No.	Pressure Range	Port Style	Pressure Type	Stock No.	Price Each Each
NBPDPNG001PGUNV	0psi to 1psi	Low Profile	Gauge	56W4830	8.08
NBPDLNN005PGUNV	0psi to 5psi	Single Axial Barbless	Gauge	56W4829	12.62
NBPDPNG005PGUNV	0psi to 5psi	Low Profile	Gauge	56W4831	8.08
NBPDLNN015PAUNV	0psi to 15psi	Single Axial Barbless	Absolute	05W9666	11.38
NBPDLNN015PGUNV	0psi to 15psi	Single Axial Barbless	Gauge	05W9667	11.38
NBPDLNN030PAUNV	0psi to 30psi	Single Axial Barbless	Absolute	05W9668	12.63
NBPDLNN030PGUNV	0psi to 30psi	Single Axial Barbless	Gauge	05W9669	10.84
NBPDLNN060PAUNV	0psi to 60psi	Single Axial Barbless	Absolute	05W9670	11.38
NBPDANN150PAUNV	0psi to 150psi	Single Axial Barbed	Absolute	05W9664	11.38
NBPDANN150PGUNV	0psi to 150psi	Single Axial Barbed	Gauge	05W9665	12.63
LEADLESS SMT					
NBPLLNG001PGUNV	0psi to 1psi	Single Axial Barbless	Gauge	56W4832	7.52
NBPLPNN001PGUNV	0psi to 1psi	Low Profile	Gauge	56W4834	10.73
NBPLLNN005PGUNV	0psi to 5psi	Single Axial Barbless	Gauge	56W4833	10.69
NBPLLNN015PAUNV	0psi to 15psi	Single Axial Barbless	Absolute	05W9676	10.12
NBPLLNN015PGUNV	0psi to 15psi	Single Axial Barbless	Gauge	05W9677	9.64
NBPLANN030PAUNV	0psi to 30psi	Single Axial Barbed	Absolute	05W9671	9.64
NBPLANN030PGUNV	0psi to 30psi	Single Axial Barbed	Gauge	05W9672	10.12
NBPLLNN030PGUNV	0psi to 30psi	Single Axial Barbless	Gauge	05W9678	9.64
NBPLLNN060PGUNV	0psi to 60psi	Single Axial Barbless	Gauge	05W9679	10.12
NBPLANN100PAUNV	0psi to 100psi	Single Axial Barbed	Absolute	05W9673	9.64
NBPLANN100PGUNV	0psi to 100psi	Single Axial Barbed	Gauge	05W9674	9.64
NBPLANN150PAUNV	0psi to 150psi	Single Axial Barbed	Absolute	05W9675	10.12
SMT					
NBPMANN001PGUNV	0psi to 1psi	Single Axial Barbed	Gauge	56W4835	12.02
NBPMANN005PGUNV	0psi to 5psi	Single Axial Barbed	Gauge	56W4836	12.62
NBPMPNG005PGUNV	0psi to 5psi	Low Profile	Gauge	56W4837	8.08
NBPMLNN015PAUNV	0psi to 15psi	Single Axial Barbless	Absolute	05W9681	11.38
NBPMLNN030PGUNV	0psi to 30psi	Single Axial Barbless	Gauge	05W9682	10.84
NBPMLNN060PGUNV	0psi to 60psi	Single Axial Barbless	Gauge	05W9683	10.84
NBPMANN150PGUNV	0psi to 150psi	Single Axial Barbed	Gauge	05W9680	11.38

(208426)

BOARD MOUNT PRESSURE SENSORS

NEW | RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE. All Found Here.

Features:
- Temperature compensated and unamplified.
- Compensation makes it easier to integrate the sensor into a system by eliminating the need to calibrate the system over temperature and also offers reduced part-to-part variation.
- Compensated temperature range is 0 °C to 85 °C [-32 °F to 185 °F].
- Operating temperature range is -40 °C to 85 °C [-40 °F to 185 °F].
- Measures differential or gage pressures

Specification:
- Sensor Output: Analogue
- Supply Current: 600 µA
- Voltage Rating: 5 VDC

Mfg. Part No.	Operating Pressure Max	Port Style	Pressure Measurement Type	Stock No.	Price Each 1-9
● TSCDANN150PGUCV	150	Single Axial Barbed	Gauge	38X5844	10.64
● TSCDANT030PGUCV	30	Single Axial Barbed	Gauge	38X5845	10.91
● TSCDJJN001PDUCV	1	Dual Radial Barbless	Differential	38X5846	32.00
● TSCDJJT100PDUCV	100	Dual Radial Barbless	Differential	38X5847	10.91
● TSCDJJT150PDUCV	150	Dual Radial Barbless	Differential	38X5848	10.91
● TSCDLNN001PGUCV	1	Single Axial Barbless	Gauge	38X5849	32.00
● TSCDLNN100PGUCV	100	Single Axial Barbless	Gauge	38X5850	10.64

➤ CONTINUED ➤

BOARD MOUNT PRESSURE SENSORS (CONT.)

Mfg. Part No.	Operating Pressure Max	Port Style	Pressure Measurement Type	Stock No.	Price Each 1-9
TSCDRRN001PGUCV	1	Dual Radial Barbed	Gauge	38X5851	32.00
TSCDRRN015PDUCV	15	Dual Radial Barbed	Differential	38X5852	32.00
TSCDRRT001PDUCV	1	Dual Radial Barbed	Differential	38X5853	10.91
TSCDRRT005PDUCV	5	Dual Radial Barbed	Differential	38X5854	10.91
TSCDRRT015PDUCV	15	Dual Radial Barbed	Differential	38X5855	10.91
TSCDRRT030PDUCV	30	Dual Radial Barbed	Differential	38X5856	10.91
TSCDRRT160MDUCV	160	Dual Radial Barbed	Differential	38X5857	10.91
TSCDRRT600MDUCV	600	Dual Radial Barbed	Differential	38X5858	10.91
TSCSNBN005PDUCV	5	Dual Axial Ports	Differential	38X5859	41.32
TSCSNBN015PDUCV	15	Dual Axial Ports	Differential	38X5860	12.32
TSCSNBN030PGUCV	30	Dual Axial Ports	Gauge	38X5861	41.32

(211887)

BASIC BOARD MOUNT PRESSURE SENSORS

RoHS Compliant Available

NEW

Honeywell
Sensing and Control

SELECTION, SPEED, SERVICE.
All Found Here.

Specifications:
- Port Style: Single Axial Barbed
- Pressure Measurement Type: Gage
- Sensor Output: Analogue
- Supply Current: 600 µA
- Voltage Rating: 5 VDC

Features:
- Provides a cost-effective, highvolume solution with a variety of options
- Ideal for customers who want a temperature-compensated sensor with the maximum possible resolution
- Package and pressure port options simplify integration into the application
- Wide operating temperature range and media compatibility options
- Six Sigma standards provide the highest level of product quality, performance, and consistency
- Dependable supply chain is there throughout your development cycle
- Fast response to orders and sample requests

Honeywell's Basic Board Mount Pressure Sensors, TBP Series, Compensated/Unamplified, are piezoresistive silicon pressure sensors designed for customers who require a simple, high quality, cost-effective, mV output, unamplified, temperaturecompensated sensor for use in medical and industrial applications. These unamplified and temperature-compensated sensors offer infinite resolution of the pressure signal. They will operate as specified from -40 °C to 125 °C [-40 °F to 257 °F]. The TBP Series is often ideal for those customers who want to do their own amplification in order to make use of the maximum resolution of the bare sensor output, leveraging any algorithm needed for the application. They are available with several package styles and mounting options, making it easier for device manufacturers to integrate the product into their applications. The TBP Series measures gage pressures. Gage pressure sensors are referenced to atmospheric pressure and provide an output proportional to pressure variations from atmosphere. They are intended for use with non-corrosive, non-ionic gases, such as air and other dry gases, and for non-corrosive, nonionic liquids when the silicone gel coating option is selected. All products are designed and manufactured according to ISO 9001.

Mfg. Part No.	Operating Pressure Max	Stock No.	Price Each 1-9
TBPDANN150PGUCV	150	38X5817	6.60
TBPDANS001PGUCV	1	38X5818	11.40
TBPDANS005PGUCV	5	38X5819	11.40
TBPDANS015PGUCV	15	38X5820	11.40
TBPDANS030PGUCV	30	38X5821	6.90
TBPDLNN005PGUCV	5	38X5822	10.90
TBPDLNN015PGUCV	15	38X5823	6.60
TBPDLNN030PGUCV	30	38X5824	10.90
TBPDPNS001PGUCV	1	38X5825	11.02
TBPDPNS005PGUCV	5	38X5826	11.02
TBPDPNS100PGUCV	100	38X5827	11.02
TBPDPNS150PGUCV	150	38X5828	6.65
TBPLANN030PGUCV	30	38X5829	9.82
TBPLANN100PGUCV	100	38X5830	9.82
TBPLLNN005PGUCV	5	38X5831	7.03
TBPLLNN015PGUCV	15	38X5832	9.82
TBPLLNN030PGUCV	30	38X5833	9.82
TBPLLNN060PGUCV	60	38X5834	7.03
TBPLLNS001PGUCV	1	38X5835	6.23
TBPLPNN001PGUCV	1	38X5836	9.44
TBPLPNN100PGUCV	100	38X5837	9.44
TBPMANN001PGUCV	1	38X5838	10.90
TBPMANN005PGUCV	5	38X5839	10.90
TBPMANN150PGUCV	150	38X5840	6.60
TBPMLNN030PGUCV	30	38X5841	10.90
TBPMLNN060PGUCV	60	38X5842	10.90
TBPMPNS005PGUCV	5	38X5843	11.02

(211882)

PX2 HEAVY DUTY PRESSURE TRANSDUCER

NEW

RoHS Compliant Available

Honeywell
Sensing and Control

SELECTION, SPEED, SERVICE.
All Found Here.

Features:
- The PX2 Series is a precise pressure measurement solution that optimizes system performance at a competitive cost.
- With over 15,000 standard configurations, the PX2 Series easily meets our customers' specific application needs.
- Knowledgeable application engineers are available to answer customers' specific design questions during the development of their product.
- Honeywell's global presence offers customers immediate product and application support throughout the development cycle, from design to global manufacturing.

Specifications:
- Voltage Rating: 5 V
- Supply Current: 5 mA
- Sensor Output: Ratiometric
- Pressure Measurement Type: Absolute

Honeywell's PX2 Series Heavy Duty Pressure Transducer is a portfolio of highly configurable pressure sensors that use piezoresistive sensing technology with ASIC (Application Specific Integrated Circuit) signal conditioning in a stainless steel housing. The PX2 Series is fully calibrated and compensated for offset, sensitivity, temperature effects and non-linearity using the on-board ASIC. This provides a Total Error Band of ±2% over the operating temperature range of -40 ##UndefTag-786##C to 125 ##UndefTag-786##C [-40 °F to 257 °F].The PX2 Series is compatible with a variety of harsh media including brake fluid, refrigerants, engine oil, tap water, hydraulic fluids, and compressed air. The wide operating temperature range, ingress protection up to IP69K, and 100 V/m radiated immunity allow for reliable performance in tough environments.These transducers measure absolute or sealed gage pressure. The absolute versions have an internal vacuum reference and an output value proportional to absolute pressure. The sealed gage versions have an internal pressure reference of one atmosphere at sea level.

Mfg. Part No.	Operating Pressure Max	Pressure Measurement Type	Stock No.	Price Each 1-9
PX2AF1XX050PAAAX	50	1/4 - 45° Flare Female Schrader	39X0793	66.18
PX2AG2XX002BAAAX	2	G1/8	39X0794	89.53
PX2AM1XX001BAAAX	1	M12	39X0795	89.53
PX2AN1XX030PAAAX	30	1/4 in - 18 NPT	39X0796	89.53
PX2AN1XX050PAAAX	50	1/4 in - 18 NPT	39X0797	89.53
PX2EF1XX030PAAAX	30	1/4 - 45° Flare Female Schrader	39X0798	84.34
PX2EF1XX050PAAAX	50	1/4 - 45° Flare Female Schrader	39X0799	84.34
PX2EG1XX001BAAAX	1	G1/4	39X0800	107.70
PX2EN1XX015PAAAX	15	1/4 in - 18 NPT	39X0801	107.70
PX2EN1XX050PAAAX	50	1/4 in - 18 NPT	39X0802	117.64

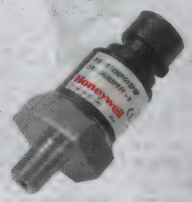
(211881)

ST SERIES PRESSURE TRANSDUCERS

RoHS Compliant Available

Honeywell
Sensing and Control

SELECTION, SPEED, SERVICE.
All Found Here.



The **ST series** are temperature compensated (-40°C to 100°C), calibrated, and have amplified outputs from a silicon sensing element. Applications include: pneumatic equipment, air compressors, air filtration monitoring, and industrial controls. Less than 500 microseconds response time. Port size: ⅛ NPT, stainless steel (¼ NPT and brass port options.) Pressure ranges down to 5 psi are available. Reverse polarity and EMI/RFI protection. Meet IEC enclosure IP65 classifications. Accuracy: ±1.0% FSO. Operating temperature: -40°C to 100°C (-40°F to 212°F). Connection: Packard Electric Metri-Pack™ Connector (**mfg. part no. 3685302**) 3M Leads.

Mfg. Part No.	Pressure Range (PSI)	Zero Output	Full Scale Output	Excitation	Stock No.	Price 1-24
ST100PG1SPCF	100	0.5VDC	4.5VDC*	5VDC	30C4631	235.39
ST100PG1SPGF	100	4mA	20mA	9.5-35VDC	30C4632	245.98
ST250PG1SPRF	250	0.5VDC	4.5VDC	7-35VDC	30C4636	235.39

* = Ratiometric Output

CONNECTION

Mfg. Part No.	Description	Stock No.	Price 1-9
3685302	Packard Electric Female Metri-Pack™ Connector with 3m Leads	72M5174	67.80

(60983)

SENSORS – PRESSURE

SPT SERIES STAINLESS STEEL PRESSURE SENSORS

Honeywell
Sensing and Control
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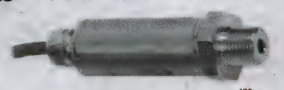
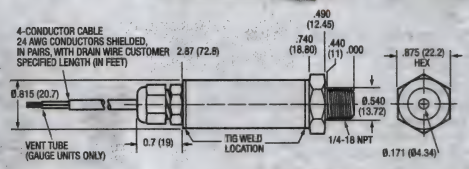
All Found Here.





- Supply Voltage: +12 to +30VDC
- Response Time: 100msec
- Operating Temperature: -40°C to +125°C
- Pressure Connection: Steel 1/4-18 NPT Port
- Cable Length: 2' Standard (Pigtail Cable Connection)

Designed for pressure applications that involve measurement of hostile media in harsh environments. Will accommodate any media that will not adversely attack 304 or 316 stainless steel wetted parts. Calibrated and temperature compensated. Feature NEMA 4 design. Ideal for industrial automation and flow control, pressure instrumentation, hydraulic systems and process control applications.

Mfg. Part No.	Pressure	Pressure Type	Output Type	Stock No.	Price Each 1-9
SPT4V0005PG5W02	0-5 Psi	Gauge	1-5VDC	78H1506	322.31
SPT4V0015PG5W02	0-15 Psi	Gauge	1-5VDC	78H1507	322.31
SPT4V0030PG5W02	0-30 Psi	Gauge	1-5VDC	78H1508	316.16
SPT4V0100PG5W02	0-100 Psi	Gauge	1-5VDC	78H1509	316.16
SPTMA0100PG5W02	0psi to 100psi	Gauge	1-5VDC	42J9681	303.28
SPTMV0100PG5W02	0psi to 100psi	Gauge	1-5VDC	18M3082	268.57
SPT4V0300PG5W02	0-300 Psi	Gauge	1-5VDC	78H1510	316.16
SPTMA0300PG5W02	0psi to 300psi	Gauge	1-5VDC	14M9137	303.28
SPT4V0500PG5W02	0-500 Psi	Gauge	1-5VDC	78H1511	330.39
SPT4V1000PS5W02	0-1000 Psi	Gauge	1-5VDC	78H1512	316.16
SPT4V2000PS5W02	0-2000 Psi	Gauge	1-5VDC	78H1513	322.31
SPT4V3000PS5W02	0-3000 Psi	Gauge	1-5VDC	78H1514	348.28
SPT4V5000PS5W02	0-5000 Psi	Gauge	1-5VDC	78H1515	322.31

(80260)

MLH SERIES ALL METAL PRESSURE SENSORS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

- All metal wetted parts
- No internal elastomeric seals – no o-ring compatibility issues
- Amplified outputs – eliminates cost of external amplifiers
- Reverse polarity and overvoltage protection
- Less than 2ms response time – accurate high speed measurement

Combines the latest in ASIC technology with a proven media isolating, steel diaphragm design. Exceeds CE heavy industrial EMC allowing for use in areas of high EMI/RFI. Accuracy: +/- 0.25% FSO. Compensated operating and storage temperature range: -40°C to +125°C. Gauge parts <300 psi, -40 to 85°C +/- 3%, 85 to 125°C +/- 105. Connection: Packard Electric Metri Pack™ Connector (**mfg. part no. 3685302**) 3M leads.

¼"-18 NPT PRESSURE CONNECTION

Mfg. Part No.	Pressure Range (PSI)	Output	Stock No.	Price Each
● MLH150PSB01A	150	0.5-4.5VDC, Ratiometric	71M5256	106.91
● MLH500PSB01A	500	0.5-4.5VDC, Ratiometric	42J5752	115.24
● MLH05KPSB01A	5000	0.5-4.5VDC, Ratiometric	95M4336	121.26
● MLH150PSB01B	150	4-20mA, Current Loop	71M5257	119.16
● MLH500PSB01B	500	4-20mA, Current Loop	42J5753	104.25
● MLH01KPSB01B	1000	4-20mA, Current Loop	42J5733	113.16
● MLH03KPSB01B	3000	4-20mA, Current Loop	71M5254	115.24
● MLH03KPSL01B	3000	4-20mA, Revers Polarity	62M4898	137.07
● MLH05KPSB01B	5000	4-20mA, Current Loop	42J5741	121.26

⅛"-27 NPT PRESSURE CONNECTION

MLH100PGB06A	100	0.5-4.5VDC, Ratiometric	71J5891	118.87
MLH100PGL06A	100	0.5-4.5VDC, Ratiometric	71J5892	120.64
MLH150PGB06A	150	0.5-4.5VDC, Ratiometric	71J5894	109.42
● MLH500PSB06A	500	0.5-4.5VDC, Ratiometric	71M5261	115.24
● MLH02KPSB06A	2000	0.5-4.5VDC, Ratiometric	71J5885	139.64
● MLH03KPSB06A	3000	0.5-4.5VDC, Ratiometric	51M8880	115.24
● MLH05KPSB06A	5000	0.5-4.5VDC, Ratiometric	71M5255	113.43
● MLH250PSB06B	250	4-20mA, Current Loop	71M5260	104.25
● MLH500PSB06B	500	4-20mA, Current Loop	71M5262	93.98

CONNECTION

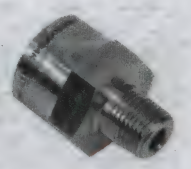
Mfg. Part No.	Description	Stock No.	Price 1-9
● 3685302	Packard Electric Female Metri-Pack™ Connector with 3M leads	72M5174	67.80

(82505)

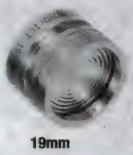
13MM AND 19MM SERIES ISOLATED PRESSURE SENSOR

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

- Supply Voltage: 15VDC
- Operating temperture: -40°C to 125°C
- Response time: 0.1ms
- Thermal hysteresis: +/- 0.1% FSS
- Rugged, isolated stainless steel package
- Reliable semiconductor technology



13mm



19mm

Mfg. Part No.	Pressure Range (psi)	Pressure Measurement Type	Port Style	Stock No.	Price Each 1-9
13MM SERIES					
13C1000PA4K	0psi to 1000psi	Absolute	1/8 in - 27 NPT	18M3633	137.89
19MM SERIES					
19C015PV4K	0psi to 15psi	Vacuum Gauge	1/8 in - 27 NPT	18M3767	131.91
19C015PA4K	0psi to 15psi	Absolute	1/8 in - 27 NPT	98H2345	136.68
19C100PG4K	0psi to 100psi	Gauge	1/8 in - 27 NPT	18M3854	132.52
19C200PG4K	0psi to 200psi	Gauge	NPT	18M3885	126.88
19C300PG4K	0psi to 300psi	Gauge	1/8 in - 27 NPT	90H0229	131.91
19C500PA4K	0psi to 500psi	Absolute	1/8 in - 27 NPT	18M3914	132.52

(197680)

HEAVY DUTY PRESSURE TRANSDUCERS - PX2 SERIES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features and Benefits
- Broad compensated temperature range allows customers to design the same transducer into a broad set of apps
- EMC protection means that the transducer will not be damaged by environmental electromagnetic interference

Potential Applications
- HVAC/R
- Air Compressors
- Injection molding knock-out valves
- Pumps
- Valves

PX2 series heavy duty pressure transducers are highly configurable pressure transducers that use piezoresistive sensing technology with ASIC (Application Specific Integrated Circuit) signal conditioning in a stainless steel housing that is compatible with a variety of harsh media. The PX2 Series is fully calibrated and compensated for transducer offset, sensitivity, temperature effects and non-linearity using an on-board ASIC. This provides a Total Error Band of ±2% over the operation temperature range of -40 °C to 125 °C [-40 °F to 257 °F].

PORT STYLE: 1/4 - 45° FLARE FEMALE SCHRADER

Mfg. Part No.	Connector Type	Pressure	Pressure Type	Sensor Output	Stock No.	Price Each 1-9
PX2AF1XX150PAAAX	Packard Metripak 150	0psi to 150psi	Absolute	Voltage	82T2696	65.34
● PX2AF1XX300PAAAX	Packard Metripak 150	0psi to 300psi	Absolute	Voltage	82T2698	62.92
PX2AF1XX667PSAAX	Packard Metripak 150	0psi to 667psi	Sealed Gauge	Voltage	66W2304	62.47
PORT STYLE: 1/4" - 18 NPT						
● PX2AN1XX100PAAAX	Packard Metripak 150	0psi to 100psi	Absolute	Voltage	82T2702	85.13
● PX2AN1XX200PSAAX	Packard Metripak 150	0psi to 200psi	Sealed Gauge	Voltage	82T2704	88.41
PORT STYLE: 1/8" - 27 NPT						
● PX2AN2XX150PAAAX	Packard Metripak 150	0psi to 150psi	Absolute	Voltage	82T2707	88.41
● PX2AN2XX300PSCHX	Packard Metripak 150	0psi to 300psi	Sealed Gauge	Current	82T2710	85.13
PX2BN2XX100PAAAX	Micro M12 IEC 61076-2	0psi to 100psi	Absolute	Voltage	66W2305	84.52
PX2BN2XX100PACHX	Micro M12 IEC 61076-2	0psi to 100psi	Absolute	Current	66W2306	88.01
PX2BN2XX250PSAAX	Micro M12 IEC 61076-2	0psi to 250psi	Sealed Gauge	Voltage	66W2307	84.52
PX2BN2XX250PSCHX	Micro M12 IEC 61076-2	0psi to 250psi	Sealed Gauge	Current	66W2308	88.70
PX2BN2XX500PSAAX	Micro M12 IEC 61076-2	0psi to 500psi	Sealed Gauge	Voltage	66W2309	84.52
PX2BN2XX500PSCHX	Micro M12 IEC 61076-2	0psi to 500psi	Sealed Gauge	Current	66W2310	84.52
PX2CN2XX100PAAAX	DIN EN 175301-803C	0psi to 100psi	Absolute	Voltage	66W2311	84.52
PX2CN2XX100PACHX	DIN EN 175301-803C	0psi to 100psi	Absolute	Current	66W2312	88.70

CONTINUED

HEAVY DUTY PRESSURE TRANSDUCERS - PX2 SERIES (CONT.)

PORT STYLE: 1/8" - 27 NPT

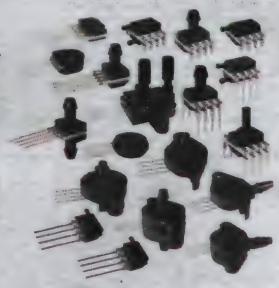
Mfg. Part No.	Connector Type	Pressure	Pressure Type	Sensor Output	Stock No.	Price Each 1-9
PX2CN2XX250PSAAX	DIN EN 175301-803C	0psi to 250psi	Sealed Gauge	Voltage	66W2313	84.52
PX2CN2XX250PSCHX	DIN EN 175301-803C	0psi to 250psi	Sealed Gauge	Current	66W2314	84.52
PX2CN2XX500PSAAX	DIN EN 175301-803C	0psi to 500psi	Sealed Gauge	Voltage	66W2315	84.52
PX2CN2XX500PSCHX	DIN EN 175301-803C	0psi to 500psi	Sealed Gauge	Current	66W2316	84.52

(201253)

TRUSTABILITY BOARD MOUNT PRESSURE SENSORS HSC AND SSC SERIES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.



- Supply voltage: 3.3VDC or 5VDC
- Supply current: 2.1mA or 3mA
- Operating temperature: HSC series -20°C to 85°C
- Operating temperature: SSC series -40°C to 85°C
- Output resolution: analog 0.03%FSS, digital 12 bits

HSC SERIES HIGH ACCURACY

Mfg. Part No.	Voltage Rating (VDC)	Pressure Range	Output Type	Pressue Type	Stock No.	Price Each 1-9
HSCDANN004MGSA5	5	0mbar to 4mbar	Digital	Gauge	55T1172	64.51
HSCDANN004NG2A3	3.3	0inch-H20 to 4inch-H20	Digital	Gauge	55T1173	71.31
HSCDLNN006MGAA5	5	0mbar to 6mbar	Analogue	Gauge	55T1174	71.31
HSCDRRN001ND2A5	5	-1inch-H20 to 1inch-H20	Digital	Differential	55T1175	64.51
HSCDRRN002NDAA3	3.3	-2inch-H20 to 2inch-H20	Analogue	Differential	55T1176	64.51
HSCDRRN010MD2A3	3.3	-10mbar to 10mbar	Digital	Differential	55T1177	53.66
SSC SERIES STANDARD ACCURACY						
SSCDANN010NG2A3	3.3	0inch-H20 to 10inch-H20	Digital	Gauge	55T1178	45.16
SSCDANN020NG2A3	3.3	0inch-H20 to 20inch-H20	Digital	Gauge	55T1179	37.42
SSCDLNN040MGSA5	5	0mbar to 40mbar	Digital	Gauge	55T1180	44.14
SSCDRRN005ND2A5	5	-5inch-H20 to 5inch-H20	Digital	Differential	55T1181	46.97
SSCDRRN020NDAA5	5	-20inch-H20 to 20inch-H20	Analogue	Differential	55T1182	30.97
SSCDRRN025MDAA3	3.3	-25mbar to 25mbar	Analogue	Differential	55T1183	37.42

(196688)

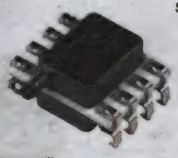
TRUSTABILITY PRESSURE SENSORS LIQUID MEDIA OPTION

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Specifications

- Output options: ratiometric analog output or digital I2C or SPI compatible digital output
- Total error band: +/-1% of full scale for HSC series, +/-2% of full scale SSC series
- Operating temperature: HSC series 0°C to 50°C, SSC series -20°C to 85°C
- Supply voltage: 3.3VDC or 5VDC



Potential applications

- **Industrial:**
- Barometry
- Flow calibrators
- Gas chromatography
- Gas flow instrumentation
- HVAC
- Life sciences
- Pneumatic
- **Medical:**
- Airflow monitors
- Gas flow instrumentation
- Hospital diagnostics (gas chromatograph, blood analysis machines)
- Kidney dialysis machines
- Oxygen concentrotors
- Pneumatic controls
- Respiratory devices/machines (ventilators, anesthesia machines, patient monitoring
- Sleep apnea equipment

The new single sid Liquid Media Option allows the end customer to use port of the sensor with condensing humidity or non-corrosive liquid media (i.e. de-ionized water). eliminating the complexity or added expense of having to protect the sensor from this type of media.

Mfg. Part No.	Pressure Range	Sensor Output	Supply Voltage (VDC)	Package	Stock No.	Price Each 1-9
HSCDANT001PGSA3	0psi to 1psi	Digital	3.3	DIP	29T6123	45.19
HSCDANT005PG2A5	0psi to 5psi	Digital	5	DIP	29T6124	43.87
HSCDRRT001PD2A3	-1psi to 1psi	Digital	3.3	DIP	29T6125	48.49

➤CONTINUED➤

TRUSTABILITY PRESSURE SENSORS LIQUID MEDIA OPTION (CONT.)

Mfg. Part No.	Pressure Range	Sensor Output	Supply Voltage (VDC)	Package	Stock No.	Price Each 1-9
SSCDANT005PGAA5	0psi to 5psi	Analogue	5	DIP	29T6126	37.42
SSCDANT015PGAA3	0psi to 15psi	Analogue	3.3	DIP	29T6127	44.14
SSCDANT030PG2A3	0psi to 30psi	Digital	3.3	DIP	29T6128	39.27
SSCDANT150PGAA5	0psi to 150psi	Analogue	5	DIP	29T6129	39.27

(194893)

TruStability™ SILICON PRESSURE SENSORS HSC AND SSC SERIES

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features:

- HSC (High Accuracy Silicon Ceramic) Series
- SSC (Standard Silicon Ceramic) Series
- Stability: These sensors are the most stable silicon pressure sensors availiable.
- Accuracy: They are designed to provide an extremely tight accuracy specification.
- Flexibility: Their modular and flexible design offer customers a variety of package styles and options, all with the same industry-leading performance specifications.
- **Applications:**
- **Medical:**
- Airflow monitors
- Anesthesia machines
- Blood analysis machines
- Gas chromatography
- Gas flow instrumentation
- Kidney dialysis machines
- Oxygen concentrators
- Pneumatic controls
- Respiratory machines
- Sleep apnea equipment
- Ventilators
- **Industrial:**
- Barometry
- Flow calibrators
- Gas chromatography
- Gas flow instrumentation
- HVAC
- Life sciences
- Pneumatic controls

Specification:

- Output options: ratiometric analog output or digital I2C or SPI compatible digital output
- Total error band: HSC +/-1% of full scale span max. , SSC +/-2% full scale span max.
- Compensated temp range: HSC 0 to 50°C (32 to 122 °F), SSC -20 to 85°C (-4 to 185°F)
- Pressure types: absolute, differential, gage, compound
- Pressure ranges: 1 psi to 150 psi [60 mbar to 10 bar]
- Standard calibration units: psi, mbar, bar, kPa
- Supply voltage: 3.3 Vdc or 5.0 Vdc
- Mounting: lead through SIP or SMT

Mfg. Part No.	Pressure Range	Mounting	Sensor Output	Supply Voltage (Vdc)	Stock No.	Price Each 1-9
HSCDANN150PG2A5	0psi to 150psi	DIP	Digital	5	72R7102	44.14
HSCDRRN005PD2A5	-5psi to 5psi	DIP	Digital	5	72R7103	37.42
HSCMAND015PASA5	0psi to 15psi	SMT	Digital	5	72R7104	47.19
HSCMAND030PGAA5	0psi to 30psi	SMT	Analogue	5	72R7105	47.19
HSCMRNN001BGAA5.	0bar to 1bar	SMT	Analogue	5	23R9207	40.26
HSCMRNN001BG2A5.	0bar to 1bar	SMT	Digital	5	23R9208	40.26
HSCMRNN001PG2A3.	0psi to 1psi	SMT	Digital	3.3	23R9209	38.71
HSCSAAN001PDAA5	-1psi to 1psi	SIP	Analogue	5	72R7133	37.42
HSCSANN015PA2A3	0psi to 15psi	SIP	Digital	3.3	72R7107	37.42
HSCSMNN001PDAA3	-1psi to 1psi	SIP	Analogue	3.3	72R7110	52.60
HSCSSNN001PD2A3	-1psi to 1psi	SIP	Digital	3.3	72R7134	52.60
SSCDANN015PG2A3	0psi to 15psi	DIP	Digital	3.3	72R7111	30.97
SSCDANN030PAAA5	0psi to 30psi	DIP	Analogue	5	72R7112	30.97
SSCDANN060PAAA5	0psi to 60psi	DIP	Analogue	5	72R7113	30.97
SSCDRNN015PAAA5	0psi to 15psi	DIP	Analogue	5	72R7115	30.97
SSCDRRN015PDAA5	-15psi to 15psi	DIP	Analogue	5	72R7116	37.63
SSCDRRN030PDAA5	-30psi to 30psi	DIP	Analogue	5	72R7117	30.97
SSCMANN060PG2A3	0psi to 60psi	SMT	Digital	3.3	72R7118	32.25
SSCMRNN001PG2A3	0psi to 1psi	SMT	Digital	3.3	72R7135	42.17
SSCMRRN005PDAA3	-5psi to 5psi	SMT	Analogue	3.3	72R7119	32.54
SSCSANN001BGAA5	0bar to 1bar	SIP	Analogue	5	23R9210	36.53
SSCSANN001PGAA5.	0psi to 1psi	SIP	Analogue	5	23R9211	36.53
SSCSSNN015PGAA5	0psi to 15psi	SIP	Analogue	5	26R3579	49.86
SSCSSNN100PGAA5	0psi to 100psi	SIP	Analogue	5	26R3580	51.36
SSCSANN005PGAA3	0psi to 5psi	SIP	Analogue	3.3	72R7120	40.50
SSCSMNN010BGAA5	0bar to 10bar	SIP	Analogue	5	72R7121	44.97
SSCSMNN030PGAA3	0psi to 30psi	SIP	Analogue	3.3	72R7122	49.86
SSCSMNN060PGAA3	0psi to 60psi	SIP	Analogue	3.3	72R7123	44.97
SSCSMNN100PGAA5	0psi to 100psi	SIP	Analogue	5	72R7124	51.36
SSCSNBN001PDAA5	-1psi to 1psi	SIP	Analogue	5	72R7125	73.23
SSCSNBN005PDAA5	-5psi to 5psi	SIP	Analogue	5	72R7126	81.74
SSCSNBN015PDAA5	-15psi to 15psi	SIP	Analogue	5	72R7127	83.87
SSCSNBN030PDAA5	-30psi to 30psi	SIP	Analogue	5	72R7128	87.22
SSCSNBN060PDAA5	-15psi to 15psi	SIP	Analogue	5	72R7129	71.10
SSCSNBN100PDAA5	-100psi to 100psi	SIP	Analogue	5	72R7130	78.59
SSCSNBN150PDAA5	-150psi to 150psi	SIP	Analogue	5	72R7131	83.87

(152795)

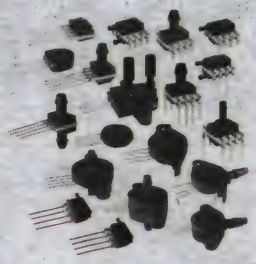
SENSORS – PRESSURE

TRUSTABILITY BOARD MOUNT PRESSURE SENSORS NSC SERIES UNCOMPENSATED/UNAMPLIFIED

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

- Supply voltage: -12VDC to 12VDC
- Supply current: 1.5mA to 2mA
- Operating temperature: -40°C to 85°C



Mfg. Part No.	Voltage Rating (VDC)	Pressure Range	Output Type	Pressue Type	Stock No.	Price Each 1-14
● NSCDANN015PAUNV	5	0psi to 15psi	Analogue	Absolute	56T3536	22.42
● NSCDANN150PGUNV	5	0psi to 150psi	Analogue	Gauge	56T3537	23.54
● NSCDRRN001PDUNV	5	-1psi to 1psi	Analogue	Differential	56T3538	23.54
● NSCDRRN005PDUNV	5	-5psi to 5psi	Analogue	Differential	56T3539	30.79
● NSCDRRN015PDUNV	5	-15psi to 15psi	Analogue	Differential	56T3540	22.42
● NSCDRRN030PGUNV	5	0psi to 30psi	Analogue	Gauge	56T3541	29.32
● NSCDRRN100PDUNV	5	-100psi to 100psi	Analogue	Differential	56T3542	22.42
● NSCDRRN160MGUNV	5	0mbar to 160mbar	Analogue	Gauge	56T3543	29.32
● NSCSANN060MGUNV	5	0mbar to 60mbar	Analogue	Gauge	56T3544	22.42
● NSCSANN600MGUNV	5	0mbar to 600mbar	Analogue	Gauge	56T3545	22.42
● NSCSRRN004BGUNV	5	0bar to 4bar	Analogue	Gauge	56T3546	22.42
● NSCDJJN005NDUNV	5	5 Inch-H2O	Analogue	Differential	38X5812	36.64
● NSCDJJN010NDUNV	5	10 Inch-H2O	Analogue	Differential	38X5813	14.17
● NSCDJJN040MDUNV	5	40 mbar	Analogue	Differential	38X5814	28.89
● NSCDRRN001NDUNV	5	1 Inch-H2O	Analogue	Differential	38X5815	49.56
● NSCDRRN002NDUNV	5	2 Inch-H2O	Analogue	Differential	38X5816	49.56

(197184)

26PC SERIES TEMPERATURE COMPENSATED PRESSURE SENSORS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

- Differential and Gage Pressure Measurement
- Miniature Package
- Silicon Piezoresistive Sensor Chip
- Can be Used to Measure Vacuum or Positive Pressure
- Temperature Compensated for Interchangeability from 0°C to 50°C

Differential Gage

Contain straight port, compensated circuitry and fluorosilicone seals. Temperature compensated from 0°C to +58°C. Null and full-scale output are calibrated. .600″ long 4-pin SIP termination. Operating temperature: –40°C to +85°C. Recommended excitation voltage: 10VDC ratiometric (16VDC max.). Sensors are available with threaded, barbed, luer, and needle pressure port options. Other seal materials for media compatability are available. DIP termination option is available.

Mfg. Part No.	Pressure Range	Measurement	Full Scale Output	Sensitivity (mV/psi)	Stock No.	Price Each 1-9
● 26PCAFA6D	0 to1 psi	Differential	16.7mV	16.7	52F7256	41.59
● 26PCAFA6G	0 to1 psi	Gage/Vac	16.7mV	16.7	52F7257	43.26
● 26PCBFA6D	0 to 5 psi	Differential	50mV	10.0	93B0356	32.92
● 26PCBFA6G	0 to 5 psi	Gage/Vac	50mV	10.0	39B7194	34.98
● 26PCCFA6D	0 to 15 psi	Differential	100mV	6.67	16F3198	33.41
● 26PCCFA6G	0 to 15 psi	Gage/Vac	100mV	6.67	16F3206	41.59
● 26PCCFA2G	0 to 15 psi	Differential/Gage	100mV	6.67	39B7219	34.21
● 26PCDFA6D	0 to 30 psi	Differential	100mV	3.33	16F3209	27.74
● 26PCFFA6G	0 to100 psi	Gage/Vac	100mV	1.0	16F3210	32.92
● 26PCGFA6G	0 to 250 psi	Vac Gage/Gage	150mV	0.6	86C4963	44.98
26PC150GW	-150 to +150 psi	Vac Gage/Gage	150mV	0.4	88F3096	568.45
● 26PCCFG6G	-15 to +15 psi	Vacuum Gage	100mV	6.67	39B7227	41.34
● 26PCGNM6G	-250 to +250 psi	Differential/Gage	150mV	0.6	72J3706	34.32

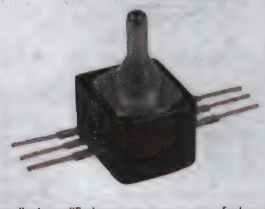
(5169)

40PC SERIES MINIATURE SIGNAL CONDITIONED PRESSURE SENSORS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features
- Smallest amplified sensor package
- Operating temperature range from -45 °C to +125 °C
- Supply voltage: 5 VDC +/- 0.25
- Supply current: 10 mA max.
- Silicon piezoresistive technology
- Monolithic design
- 6 Pin DIP package
- Port designed for O-ring interface
- Excellent media compatibility
- Accuracy of 0.2%



The cost-effective 40PC Series miniature pressure sensor is the smallest amplified pressure sensor manufactured by Honeywell. The fully calibrated and temperature-compensated sensor is very robust, covering a wide range of temperature extremes. Additionally, the 40PC Series is compatible with a broad array of media, from dry air and water to refrigerant coolants and engine fuel. The 0.5 Vdc to 4.5 Vdc analog output voltage signal is linearly proportional to input pressure. These devices operate on a single end supply voltage of 5.0 Vdc.

Type	Pressure Range (psi)	Overpressure max. (psi)	Pressure Type	Stock No.	Price Each 1-9
● 40PC150G2A	0 - 150	300	Gauge	39B8264	51.88
● 40PC250G2A	0 - 250	500	Gauge	39B8266	51.86

(155305)

140PC AND 160PC SERIES PRESSURE SENSORS

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

140PC series sensors are for use in applications where high accuracy is desired. Supply current is 20mA max. Full-scale output: 5V. Shock specs meet MIL-STD-202, Method 213. Temperature range: –40°C to 85°C. **160PC series** pressure sensors are for use in low-pressure measurement applications. Recommended supply voltage: 8VDC. Input current: 8mA. Differential styles have two ports that allow connection to two pressure sources, and differential style functions same as gage when Port 1 is left open to atmospheric pressure. *Single port* **142PC** gauge types may be ordered by *substituting a "G" for the* **suffix** *"D."* Product to be used for service parts only. Not to be considered for new designs or applications.

Mfg. Part No.	Pressure Range	Measurement	Stock No.	Price Each
● 142PC01D	0-1 PSI	Differential	51F2590	226.79
● 142PC05D	0-5 PSI	Differential	20M8994	241.21
● 142PC05G	0-5 PSI	Gage	23F2250	305.69
● 142PC15D	0-15 PSI	Differential	51F2591	361.60
● 142PC15G	0-15 PSI	Gage	20M8996	311.58
● 142PC15A	0-15 PSI	Absolute	20M8995	308.11
● 142PC30D	0-30 PSI	Differential	20M8998	352.59
● 163PC01D36	-5-5″ H_2O	Differential	20M9483	431.37
● 163PC01D75	-2.5-2.5″ H_2O	Differential	20M9485	412.79
● 164PC01D76	0-5″ H_2O	Differential	20M9499	431.37
● 164PC01D37	0-10″ H_2O	Differential	20M9498	295.95

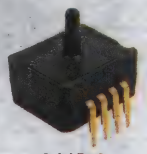
(5136)

ASDX SERIES ULTRA-LOW SILICON PRESSURE SENSORS

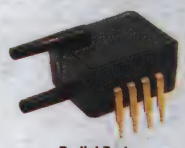
RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Specifications
- Ultra-low pressure products: 0 to 10 in H2O gage, +/-10 in H2O differentil, +/-5 in H2O differential
- Output options: ratiometric 12-bit analog or 14-bit I2C or SPI digital
- Temperature range: precision ASIC conditioning and temperature compensated over 0 °C to 85°C [32°F to 185°F]
- Pressure ranges: 10 inches H2O to 5 psi
- Power supply: 5 Vdc



Axial Port



Radial Port

Benefits
- Digital ASIC output provides faster performance through reduced conversion requirements and the convenience of direct interface to microprocessors or microcontrollers
- On-board signal conditioning allows for removal of signal conditioning components from the printed circuit board
- Custom calibration ranges for ASDX sensors combined with digital output options provide support for many applications
- Achieves tight total error band, providing enhanced sensitivity and accuracy even at ultra-low pressure ranges

Potential applications
- Barometry
- Flow calibrators/gas flow instrumentation
- Sleep apnea equipment
- Pneumatic controls
- Ventilation/air flow monitors

➤CONTINUED➤

ASDX SERIES ULTRA-LOW SILICON PRESSURE SENSORS (CONT.)

AXIAL PORT

Mfg. Part No.	Pressure Range (in. H_2O)	Pressure Type	Sensor Output	Stock No.	Price Each 1-9
ASDXAVX010NGAA5	0 to 10	Gauge	Analogue	34R2285	53.05
ASDXAVX010NG2A5	0 to 10	Gauge	Digital	34R2286	53.05
ASDXAVX010NG7A5	0 to 10	Gauge	Digital	34R2287	53.05
RADIAL PORT					
ASDXRRX005NDAA5	-5 to 5	Differential	Analogue	34R2288	53.05
ASDXRRX005ND2A5	-5 to 5	Differential	Digital	34R2289	53.05
ASDXRRX005ND7A5	-5 to 5	Differential	Digital	34R2290	53.05
ASDXRRX010NDAA5	-10 to 10	Differential	Analogue	12T9315	44.97
ASDXRRX010ND2A5	-10 to 10	Differential	Digital	34R2292	53.05
ASDXRRX010ND7A5	-10 to 10	Differential	Digital	34R2293	53.05
ASDXRRX010NGAA5	0 to 10	Gauge	Analogue	34R2294	46.32
ASDXRRX010NG2A5	0 to 10	Gauge	Digital	34R2295	53.05
ASDXRRX010NG7A5	0 to 10	Gauge	Digital	34R2296	52.65

(159798)

ASDX SERIES 15, 30, 100 PSI SILICON PRESSURE SENSORS

RoHS Compliant Available

Honeywell
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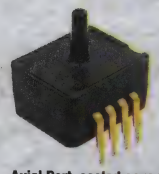
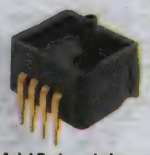
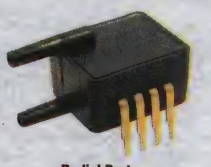
All Found Here.



Axial Port, sealed cover



Axial Port, vented cover



Radial Port

Features
- Ratiometric 12-bit analog output
- Precision ASIC conditioning and temperature compensated over 0 °C to 85 °C [32 °F to 185 °F] temperature range
- Low operating voltage: 3.3V or 5V
- Absolute, differential and gage types
- Pressure ranges from 10 inches H20 to 100 psi
- Standard calibrations in inches H20, cm H20, psi, mbar, bar, kPa
- Total error band of ±2.0% of full scale span maximum

Potential applications
- Barometry
- Flow calibrators
- Ventilation and air flow monitors
- Gas flow instrumentation
- Sleep apnea monitoring and therapy equipment
- Pneumatic controls
- HVAC

Benefits
- Digital ASIC output provides faster performance through reduced conversion requirements and the convenience of direct interface to microprocessors or microcontrollers
- On-board signal conditioning allows for removal of signal conditioning components from the printed circuit board
- Custom calibration ranges for ASDX sensors combined with digital output options provide support for many applications
- Achieves tight total error band, providing enhanced sensitivity and accuracy even at ultra-low pressure ranges

AXIAL PORT, SEALED COVER

Mfg. Part No	Pressure Range (psi)	Pressure Type	Sensor Output	Stock No.	Price Each 1-9
ASDXACX015PAAA5	0 - 15	Absolute	Analogue	34R2745	35.22
ASDXACX015PA2A5	0 - 15	Absolute	Digital	34R2746	44.70
ASDXACX030PAAA5	0 - 30	Absolute	Analogue	34R2748	35.56
ASDXACX030PA2A5	0 - 30	Absolute	Digital	34R2749	43.82
ASDXACX030PA7A5	0 - 30	Absolute	Digital	34R2750	43.82
ASDXACX100PAAA5	0 - 100	Absolute	Analogue	34R2751	34.19
ASDXACX100PA2A5	0 - 100	Absolute	Digital	34R2752	43.82
AXIAL PORT, VENTED COVER					
ASDXAVX015PGAA5	0 - 15	Gauge	Analogue	34R2754	43.82
ASDXAVX015PG2A5	0 - 15	Gauge	Digital	34R2755	43.82
ASDXAVX015PG7A5	0 - 15	Gauge	Digital	34R2756	43.82
ASDXAVX030PGAA5	0 - 30	Gauge	Analogue	34R2757	45.57
ASDXAVX030PG2A5	0 - 30	Gauge	Digital	34R2758	43.82
ASDXAVX100PGAA5	0 - 100	Gauge	Analogue	34R2760	34.85
RADIAL PORT					
ASDXRRX015PDAA5	0 - 15	Differential	Analogue	34R2763	44.81
ASDXRRX015PD7A5	0 - 15	Differential	Digital	34R2765	43.82
ASDXRRX015PGAA5	0 - 15	Gauge	Analogue	34R2766	43.82
ASDXRRX015PG2A5	0 - 15	Gauge	Digital	34R2767	43.82
ASDXRRX015PG7A5	0 - 15	Gauge	Digital	34R2768	43.82
ASDXRRX030PDAA5	0 - 30	Differential	Analogue	34R2769	45.14
ASDXRRX030PGAA5	0 - 30	Gauge	Analogue	34R2770	46.04
ASDXRRX030PG7A5	0 - 30	Gauge	Digital	34R2772	37.76
ASDXRRX100PD2A5	0 - 100	Differential	Digital	34R2773	43.82
ASDXRRX100PD7A5	0 - 100	Differential	Digital	34R2774	43.82

CONTINUED

ASDX SERIES 15, 30, 100 PSI SILICON PRESSURE SENSORS (CONT.)

RADIAL PORT

Mfg. Part No	Pressure Range (psi)	Pressure Type	Sensor Output	Stock No.	Price Each 1-9
ASDXRRX100PGAA5	0 - 100	Gauge	Analogue	34R2775	34.19
ASDXRRX100PG7A5	0 - 100	Gauge	Digital	34R2777	45.57

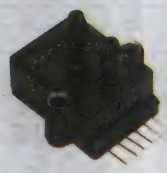
(159801)

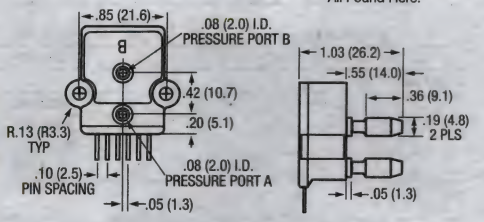
SCX AND SCXL SERIES PRECISION COMPENSATED PRESSURE SENSORS

RoHS Compliant Available

Honeywell
Sensing and Control

SELECTION, SPEED, SERVICE.
All Found Here.





- *SCX series* response time: 100msec
- Operating temperature: -40°C to +85°C
- SIP Package
- *SCXL series* response time: 500msec
- Operating temperature: 0 to +70°C

Provide a very cost-effective solution for pressure applications that require high accuracy over a wide temperature range. Feature an integrated sensor element and laser-trimmed thick film ceramic housed in a compact nylon case. All devices are calibrated for span to within +/-1% and provide a very low pressure output of +/-300 microvolts maximum. Ideal for medical equipment, computer peripherals and pneumatic control applications.

SCX SERIES

Mfg. Part No.	Pressure	Pressure Type	Output/ Span (mV)	Supply Voltage (VDC)	Stock No.	Price Each 1-9	Price Each 10-49
SCX01DNC	0-1 Psi	Differential / Gauge	19	20	23K1087	88.44	70.63
SCX05DN	0-5 Psi	Differential / Gauge	60	20	78H1478	91.30	86.00
SCX05DNC	0-5 Psi	Differential / Gauge	62.5	20	95H7744	78.37	73.82
SCX15AN	0-15 Psi	Absolute	90	20	10M5247	95.41	89.89
SCX15DN	0-15 Psi	Differential / Gauge	90	20	10M5248	94.95	89.44
SCX15ANC	0-15 Psi	Absolute	95	20	23K1097	91.98	76.34
SCX15DNC	0-15 Psi	Differential / Gauge	95	20	23K1100	74.98	70.63

(78210)

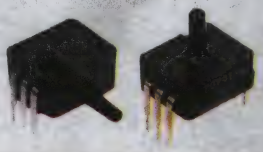
SDX SERIES PRECISION COMPENSATED PRESSURE SENSORS

RoHS Compliant Available

Honeywell
Sensing and Control

SELECTION, SPEED, SERVICE.
All Found Here.

- Supply Voltage: +20VDC
- Response Time: 100msec
- Operating Temperature: -40°C to +85°C
- DIP Package



Provide a very cost-effective solution for pressure applications that require small size plus performance. Feature an integrated circuit sensor element and laser-trimmed thick film ceramic housed in a compact, solvent-resistant case. Double wide (0.600" lead spacing) dual-inline package. The PC board area used by each DIP is approximately 0.26 square inches, enabling the use of multiple sensors in limited board space. Thru-hole mounting. Ideal for medical equipment, computer peripherals, HVAC and pneumatic control applications.

Mfg. Part No.	Pressure	Pressure Type	Output/ Span	Stock No.	Price Each 1-9
SDX05D4	0-5 Psi	Differential / Gauge	Voltage	10M5254	52.72
SDX100A4	0psi to 100psi	Absolute	Voltage	10M8448	48.75
SDX100D4	0-100 Psi	Differential / Gauge	Voltage	10M5257	48.75
SDX01G2	0-1 Psi	Gauge	Voltage	78H1489	42.98
SDX15A2	0-15 Psi	Absolute	Voltage	78H1497	41.33
SDX15A4-A	0-15 Psi	Absolute	Voltage	23K1121	62.95
SDX15D4-A	0-15 Psi	Differential / Gauge	Voltage	23K1122	62.95

(80257)

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Take control with quality, affordable Wire-Management Solutions.
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(212564)

M5100 INDUSTRIAL PRESSURE SENSORS

RoHS Compliant Available

measurement SPECIALTIES

Features:
- Heavy industrial CE approval
- Reverse polarity protection
- Leak proof: No o-rings, organics, or welds exposed to the pressure media
- Over 10million pressure cycles without failure

Specifications:
- 1/4 NPT male connection
- Termination: Series M5146: DIN 43650 C connector with mate; Series M5131: 24" cable
- Media compatibility: Fluids compatible with 17-4 PH stainless steel
- 1% total error band

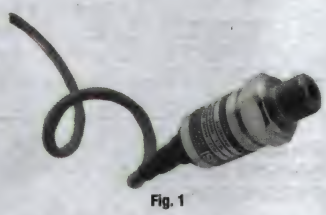


Fig. 1

0.5 - 4.5VDC OUTPUT

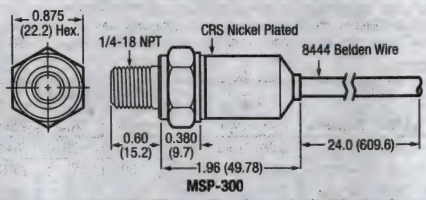
Mfg. Part No.	Fig.	Range (psi)	Stock No.	Price Each 1-9	Price Each 10-99
● M5131-000005-100PG	1	100	35M4446	189.42	167.27
4 - 20mA OUTPUT					
● M5151-000005-100PG	1	100	35M4466	214.86	189.73
● M5151-000005-200PG	1	200	35M4467	213.46	188.50
● M5151-000005-500PG	1	500	35M4469	216.72	191.38
● M5151-000005-05KPG	1	5000	35M4463	216.72	191.38

(90542)

MSP-300 MICROFUSED STAINLESS STEEL ISOLATED PRESSURE TRANSDUCERS

measurement SPECIALTIES

- Accuracy: < 1% FS
- Zero/span and thermal error: <±2% FS
- Operating temperature: -20°C to +85°C
- Compensated temp range: 0°C to +55°C
- Connection: 2 feet cable



MSP-300

Suitable for measurement liquid or gas pressure, even for difficult media such as contaminated water, steam, and mildly corrosive fluids or gases. Machined from a solid piece of 17-4 PH stainless steel. Includes a ¼ NPT pipe thread allowing a leak-proof, all metal sealed system. There are no o-rings, welds or organics exposed to the pressure media.

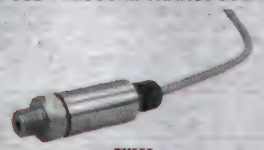
MSP-300 ¼" NPT PRESSURE PORT

Mfg. Part No.	Supply Voltage	Pressure Range	Outputs	Stock No.	Price Each 1-9
MSP-300-100-P-4-N-1	10-30VDC	0-100 Psi	1-5VDC	96H0163	171.43
M3041-000005-250PG		0-250 Psi	1-5VDC	96H0171	171.43
MSP-300-2K5-P-4-N-1		0-2500 Psi	1-5VDC	96H0167	171.43
M3041-000005-05KPG		0-5000 Psi	1-5VDC	96H0159	179.14
M3051-000005-100PG		0-100 Psi	4-20mA	96H0164	187.83
MSP-300-250-P-5-N-1		0-250 Psi	4-20mA	96H0172	179.74

(78722)

PX309 SERIES HIGH PERFORMANCE GENERAL PURPOSE PRESSURE TRANSDUCERS

NEWPORT



PX309

PX319

- Long-Term Stability (1 Year): ±0.25% typical
- Typical Life: 10 million cycles
- Operating Temperature: -40 to 85°C (-40 to 185°)
- Proof Pressure:
- All psia and <50 psig Ranges: 3x capacity or 20 psi, whichever is greater
- 100 psig Ranges: 2x capacity
- Burst Pressure: 500% of capacity or 25 psi, whichever is greater (exclusive of fitting)
- Response Time: <1 ms
- Shock: 50 g, 11 ms half-sine
- Vibration: ±20 g
- Protection Class: IP 65
- Wetted Parts: 316 SS for all psia ranges and 1 to 50 psig; 17-4 PH SS for ranges 100 to 10,000 psig
- Pressure Port: 1/4-18 MNPT
- Other Electrical Connections Available :
- **PX309**: 1.5 m (5') 3-conductor cable
- **PX319**: 9.4 mm Mini DIN connector with mating connector included
- **PX329**: Twist-lock connector, mating connector sold separately (**PT06V-10-6S**)

NEWPORT's **PX309 Series** high performance general purpose pressure transducers use two state-of-the-art silicon technologies. Pressure ranges below 100 psi use a high-accuracy silicon sensor protected by a fluid filled stainless steel diaphragm. Ranges 100 psi and above use high-accuracy silicon strain gages molecularly bonded to the stainless steel diaphragm. Both systems provide a rugged sensor with high accuracy and excellent long term stability.

➤ CONTINUED ➤

PX309 SERIES HIGH PERFORMANCE GENERAL PURPOSE PRESSURE TRANSDUCERS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
PX309-015G5V/N	15 psi, 5 Vdc Output Transducer with 1.5 m (5 ft cable)	72W2991	225.00
PX309-015GI/N	15 psi, mA Output Transducer with 1.5 m (5 ft cable)	72W2990	225.00
PX309-030G5V/N	30 psi, 5 Vdc Output Transducer with 1.5 m (5 ft cable)	72W2993	225.00
PX309-030GI/N	30 psi, mA Output Transducer with 1.5 m (5 ft cable)	72W2992	225.00
PX309-100G5V/N	100 psi, 5 Vdc Output Transducer with 1.5 m (5 ft cable)	72W2997	225.00
PX309-100GI/N	100 psi, mA Output Transducer with 1.5 m (5 ft cable)	72W2996	225.00
PX309-1KG5V/N	1000 psi, 5 Vdc Output Transducer with 1.5 m (5 ft cable)	72W2995	225.00
PX309-1KGI/N	1000 psi, mA Output Transducer with 1.5 m (5 ft cable)	72W2994	225.00
PX309-300G5V/N	300 psi, 5 Vdc Output Transducer with 1.5 m (5 ft cable)	72W3001	225.00
PX309-300GI/N	300 psi, mA Output Transducer with 1.5 m (5 ft cable)	72W3000	225.00
PX309-3KG5V/N	3000 psi, 5 Vdc Output Transducer with 1.5 m (5 ft cable)	72W2999	225.00
PX309-3KGI/N	3000 psi, mA Output Transducer with 1.5 m (5 ft cable)	72W2998	225.00
PX309-500G5V/N	500 psi, 5 Vdc Output Transducer with 1.5 m (5 ft cable)	72W3003	225.00
PX309-500GI/N	500 psi, mA Output Transducer with 1.5 m (5 ft cable)	72W3002	225.00
PX319-001GI/N	1 psi, mA Output Transducer with Mini-DIN Connector	72W3004	345.00
PX319-100GI/N	100 psi, mA Output Transducer with Mini-DIN Connector	72W3005	225.00
PX319-150GI/N	150 psi, mA Output Transducer with Mini-DIN Connector	72W3006	225.00
PX319-150GV/N	150 psi, 100mV Output Transducer with Mini-DIN Connector	72W3007	175.00
PX319-3KG5V/N	3000 psi, 5 Vdc Output Transducer with Mini-DIN Connector	72W3009	225.00
PX319-3KGI/N	3000 psi, mA Output Transducer with Mini-DIN Connector	72W3008	225.00
PX319-5KG5V/N	5000 psi, 5 Vdc Output Transducer with Mini-DIN Connector	72W3010	225.00

(209538)

HIGH PERFORMANCE CURRENT OUTPUT PRESSURE TRANSMITTERS

NOSHOK

- Accuracy up to +/- 0.25 % Full Scale (Best fit straight line)
- Welded stainless steel pressure chamber, High overpressure protection
- Advanced diffused semiconductor and sputtered thin film sensor for maximum stability
- High alternating load resistance
- CE compliant to suppress RFI, EMI and ESD noise interference
- Output: 4 mA to 20 mA
- Power Supply: 10 Vdc to 30 Vdc

NOSHOK 100 Series Current Output Pressure Transmitters are designed to provide a previously unequalled level of performance, utilizing diffused semiconductor and sputtered thin film strain gage technology. 100 Series transmitters are highly repeatable, shock resistant and are extremely stable over long periods of time. CE compliance which includes substantial levels of RFI, EMI and ESD noise protection combined with reverse polarity and over-voltage protection hardens the product so it performs well in the most demanding applications. Advanced manufacturing techniques combined with technologically advanced standard features allow NOSHOK to offer a level of performance previously found only on transducers costing hundreds of dollars more. Final calibration tests performed on all NOSHOK transmitters prior to shipment ensures 100% "out of the box" reliability.

Mfg. Part No.	Pressure Range (psig)	Stock No.	Price Each
100-15-1-1-2-7	0 - 15	34P2810	360.32
100-30-1-1-2-7	0 - 30	34P2814	382.26
100-60-1-1-2-7	0 - 60	34P2818	360.32
100-100-1-1-2-7	0 - 100	01P2770	371.13
100-150-1-1-2-7	0 - 150	34P2811	382.26
100-200-1-1-2-7	0 - 200	34P2812	360.32
100-300-1-1-2-7	0 - 300	34P2815	382.26
100-500-1-1-2-7	0 - 500	34P2817	349.82
100-750-1-1-2-7	0 - 750	34P2820	336.37
100-1000-1-1-2-7	0 - 1000	34P2809	360.32
100-2000-1-1-2-7	0 - 2000	34P2813	349.82
100-3000-1-1-2-7	0 - 3000	34P2816	371.13
100-6000-1-1-2-7	0 - 6000	34P2819	360.32

(136943)

MEMS GAUGE PRESSURE SENSOR

RoHS Compliant Available

OMRON ELECTRONIC COMPONENTS

Features
- Ultra-miniature 6.1 × 4.7 × 8.2 mm (L × W × H).
- Piezo Resistive element provides electrical characteristics that are superior to capacitive type pressure sensors.
- 0 to 37 kPa pressure range.
- Low Power consumption of 0.2 mW
- Low Temperature Influence

Mfg. Part No.	Supply Current (uA)	Package	Stock No.	Price Each 1-24
● 2SMPP-02	100	SOP	16T8356	4.85

(192059)

DP-100 SERIES DIGITAL PRESSURE SENSORS

RoHS Compliant Available

Panasonic

- Supply voltage: 12 to 24 VDC
- Ambient temperature: -10 to +50 °C (14 to +122 °F)

An industry first dual, three-color digital display enhances ease of use of pressure sensors. The user can concurrently view the real-time pressure reading and threshold value for quick changes during routine machine maintenance. The highly readable display offers the setting of two colors to indicate the output state (red and green) as well as a third (orange) to indicate the menu settings. Also, both displays feature 12 segment characters, which allow for the display of letters in addition to numbers. This enables easy on screen labeling of sensors in large arrays, for instantaneous identification.

STANDARD SENSORS

Mfg. Part No.	Pressure Range	Pressure Port	Output Type	Stock No.	Price Each 1-9
DP-101-N	-100 to + 100 kPa	M5 female thread + NPT 1/8 male thread	NPN	73K7746	107.80
DP-101-N-P			PNP	73K7747	109.46
DP-102-N	-100 to + 100 MPa		NPN	73K7758	109.46
DP-102-N-P			PNP	73K7759	109.46
MULITI-FUNCTION SENSORS					
DP-101A-N	-100 to + 100 kPa	M5 female thread + NPT 1/8 male thread	NPN	73K7750	116.84
DP-102A-N	-100 to + 100 MPa		NPN	73K7763	116.84

SENSOR ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
CN-14A-C1	Connector attached cable, 1m length	73K7605	5.93
CN-14A-C2	Connector attached cable, 2m length	73K7606	7.74
CN-14A-C3	Connector attached cable, 3m length	73K7607	9.34
CN-14A-C5	Connector attached cable, 5m length	73K7608	11.85
CN-14A-R-C1	Connector attached flexible cable, 1m length	08N8766	11.85
CN-14A-R-C2	Connector attached flexible cable, 2m length	08N8767	16.13
CN-14A-R-C3	Connector attached flexible cable, 3m length	08N8768	20.54
CN-14A-R-C5	Connector attached flexible cable, 5m length	08N8769	26.46
CN-24A-C2	Straight Mating Cable, 2m length	96H2181	26.25
CN-24A-C5	Straight Mating Cable, 5m length	96H2182	31.29
CN-14A	Connector, set of 10 housing and 40 contacts	08N8765	18.67
MS-DP1-1	Sensor Mounting Bracket, flooring/ceiling	73K9069	3.71
MS-DP1-2	Panel Mounting Bracket	73K9070	5.94
MS-DP1-3	Front Protection Cover	73K9071	3.58

(196421)

DPC-L100 SERIES DUAL DISPLAY DIGITAL PRESSURE SENSOR CONTROLLERS

RoHS Compliant Available

Panasonic

- Supply voltage: 12 to 24 VDC
- Ambient temperature: -10 to +50 °C (14 to +122 °F)

For the detection of air and liquid pressure, the DPC/DPH-L100 series has been developed to achieve complete application coverage for all your pressure sensing needs. With one sensor head, you can now accurately detect the pressure of gases as well as liquids such as water and oil. The separate amplifier design allows for the panel mounting of the amplifier while the sensor head is mounted remotely.

Mfg. Part No.	Rated Pressure Range	Output Type	Stock No.	Price Each 1-4
DPC-L101	Positive pressure: 0 to 50 MPa Compound pressure: -0.1 to 1.0 MPa	NPN open-collector	40T7692	123.90
DPC-L101-P		PNP open-collector	40T7694	123.90

SENSOR ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
MS-DP1-2	Panel Mounting Bracket	73K9070	5.94
MS-DP1-3	Front Protection Cover	73K9071	3.58

(196423)

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(212565)

9016 SERIES INDUSTRIAL VACUUM SWITCHES / 9012G SEREIS PRESSURE SWITCHES

RoHS Compliant Available

SQUARE D by Schneider Electric

Features

- Maximum allowable positive pressure: 100 psig
- NEMA type 4, 4X & 13 enclosure
- Diaphragms are oil resisting, nitrile butadiene rubber (BUNA N)
- Pipe tap (NPTF): 1/4 - 18

9012GAR

9012GAW

GAW types are provided with double throw contacts; normally open and normally closed circuits allow these controls to be used for standard or reverse action applications. Standard controls can be mounted from the front with the bracket provided. Two mounting screws will be required for a firm attachment to any smooth, flat surface. Range and differential adjustments are internal and exposed by removal of the front cover.

9016G SERIES INDUSTRIAL VACUUM SWITCHES

Mfg. Part No.	Range on Decreasing Vacuum (Ins. of Hg.)	Contact Arrangement	Stock No.	Price Each 1-9	Price Each 10-24
9016GAW1	0-28.7	SPDT	17B2122	332.30	306.59
9016GAW2	0-25	SPDT	17B2125	294.01	271.27
9016GAW21	0-28.3	DPDT	17B2126	351.69	324.49
9016GAW22	0-25	DPDT	17C9988	343.20	316.65

9012G SERIES PRESSURE SWITCHES

Mfg. Part No.	Range on Decreasing Pressure (psig.)	Contact Arrangement	Stock No.	Price Each 1-9	Price Each 10-24
9012GAR4	1.5–75	SPDT	17B1729	1344.89	1240.86
9012GAR5	3–150	SPDT	17B1730	1309.72	1208.42
9012GAW1Z	0.2–10	SPDT	81C5870	404.81	373.50
9012GAW5G17	3–150	SPDT	17B1751	412.01	380.15
9012GAW5G18	3–150	SPDT	17B1755	449.92	415.12
9012GAW5K1	3–150	SPDT	17B1762	428.85	395.68
9012GDW2	1–40	SPDT	17B1794	322.94	297.97
9012GDW4	1.5–75	SPDT	17B1802	352.90	325.60
9012GDW5	3–150	SPDT	17B1803	314.85	290.50
9012GDW5E3	3–150	SPDT	17B1804	420.81	388.26
9012GDW5G22	3–150	SPDT	17C9945	428.09	394.98
9012GDW6	5–250	SPDT	17B1809	344.41	317.77
9012GGW4	0–175	SPDT	17B1831	774.92	714.98

(105824)

OSISENSE XM XMLP SERIES PRESSURE TRANSMITTERS

RoHS Compliant Available

Schneider Electric

- Simple installation
- Compact design, great for use in confined spaces
- Rugged 304 SS enclosure
- Pressure ranges from 0 to 3000psi
- M12, electrical connection
- Repeat accuracy: 0.1% of the measuring range
- 4-20mA, analog output
- Operating temperatures: -22°F to +212°F
- IP65 and IP69K rated
- Thin film gasket free technology suitable for use with most fluids including hydraulic fluids, refrigerent fluids, fresh water and air

OsiSense™ XLMP, a new range of compact pressure transmitters for industrial operations and use in thin film technology to reduce noise levels, reduce temperature coefficients and achieve high accuracy. This technology makes the transmitter particularly compact while offering impressive precision and long term stability.

Mfg. Part No.	Pressure Range (psi)	Stock No.	Price Each 1-4
XMLP100PD23	0 - 100	63W5489	155.06
XMLP150PD23	0 - 150	63W5490	162.04
XMLP200PD23	0 - 200	63W5491	155.06
XMLP300PD23	0 - 300	63W5493	155.06
XMLP600PD23	0 - 600	63W5494	162.04
XMLP1K0PD23	0 - 1000	63W5488	155.06
XMLP3K0PD23	0 - 3000	63W5492	155.06

(209443)

CYLINDRICAL INDUCTIVE PROXIMITY SENSORS

RoHS Compliant Available

Autonics Sensors & Controllers

- Improved noise resistance with dedicated IC DC 3-wire
- Reverse power polarity, surge, overcurrent protection (Except PR08 Series)
- Long life cycle and reliable simple operation
- Connector types shorten maintenance time
- Red LED status indication
- IP67 rated waterproof structure (IEC standard)

INDUCTIVE PROXIMITY SENSORS - WITH PIGTAIL CABLE

Mfg. Part No.	Body Dia. (mm)	Sens. Dist. (mm)	Output Type	Supply Voltage	Connection Type	Stock No.	Price Each
● PR08-1.5DN	8	1.5	NPN, NO	12-24 VDC	2 Meter - 3 Wire Cable	10R6725	25.95
● PR08-1.5DP	8	1.5	PNP, NO	12-24 VDC	2 Meter - 3 Wire Cable	10R6726	25.95
● PR12-2AC	12	2	NC	100-240VAC	2 Meter - 2 Wire Cable	22T2692	34.95
● PR08-2DN	8	2	NPN, NO	12-24 VDC	2 Meter - 3 Wire Cable	10R6727	25.95
● PR08-2DP	8	2	PNP, NO	12-24 VDC	2 Meter - 3 Wire Cable	10R6728	25.95
● PR12-2DN	12	2	NPN, NO	12-24 VDC	3 Meter - 2 Wire Cable	10R6730	22.95
● PR12-2DP	12	2	PNP, NO	12-24 VDC	2 Meter - 3 Wire Cable	10R6731	22.95
● PR12-2AO	12	2	NO	100-240 VAC	2 Meter - 2 Wire Cable	10R6729	34.95
● PR12-4AC	12	4	NC	100-240 VAC	2 Meter - 2 Wire Cable	22T2693	34.95
● PR12-4DN	12	4	NPN, NO	12-24 VDC	2 Meter - 3 Wire Cable	10R6733	22.95
● PR12-4DP	12	4	PNP, NO	12-24 VDC	2 Meter - 3 Wire Cable	10R6734	22.95
● PR12-4AO	12	4	NO	100-240 VAC	2 Meter - 2 Wire Cable	10R6732	34.95
● PR18-5AC	18	5	NC	100-240 VAC	2 Meter - 2 Wire Cable	22T2694	34.95
● PR18-5AO	18	5	NO	100-240 VAC	2 Meter - 2 Wire Cable	10R6735	34.95
● PR18-5DN	18	5	NPN, NO	12-24 VDC	2 Meter - 3 Wire Cable	10R6736	22.95
● PR18-5DP	18	5	PNP, NO	12-24 VDC	2 Meter - 3 Wire Cable	10R6737	22.95
● PR18-8AC	18	8	NC	100-240 VAC	2 Meter - 2 Wire Cable	69R7947	34.95
● PR18-8AO	18	8	NO	100-240 VAC	2 Meter - 2 Wire Cable	82R4247	34.95
● PR18-8DN	18	8	NPN, NO	12-24 VDC	2 Meter - 3 Wire Cable	10R6738	22.95
● PR18-8DP	18	8	PNP, NO	12-24 VDC	2 Meter - 3 Wire Cable	10R6739	22.95
● PR30-10AC	30	10	NC	100-240 VAC	2 Meter - 2 Wire Cable	22T2695	36.95
● PR30-10AO	30	10	NO	100-240 VAC	2 Meter - 2 Wire Cable	22T2696	36.95
● PR30-10DN	30	10	NPN, NO	12-24 VDC	2 Meter - 3 Wire Cable	22T2697	26.95
● PR30-10DP	30	10	PNP, NO	12-24 VDC	2 Meter - 3 Wire Cable	22T2698	26.95
● PR30-15AC	30	15	NC	100-240 VAC	2 Meter - 2 Wire Cable	22T2699	36.95
● PR30-15AO	30	15	NO	100-240 VAC	2 Meter - 2 Wire Cable	22T2700	36.95
● PR30-15DN	30	15	NPN, NO	12-24 VDC	2 Meter - 3 Wire Cable	22T2701	26.95
● PR30-15DP	30	15	PNP, NO	12-24 VDC	2 Meter - 3 Wire Cable	22T2702	26.95

INDUCTIVE PROXIMITY SENSORS - WITH M12 CONNECTOR

PRCM12-2AC	12	2	NC	100-240 VAC	4-Pin M12 Disconnect	22T2667	43.95
PRCM12-2AO	12	2	NO	100-240 VAC	4-Pin M12 Disconnect	22T2668	43.95
PRCM12-2DN	12	2	NPN, NO	12-24 VDC	3-Pin M12 Disconnect	10R6710	25.95
PRCM12-2DP	12	2	PNP, NO	12-24 VDC	3-Pin M12 Disconnect	10R6711	25.95
PRCM12-4AC	12	4	NC	100-240 VAC	3-Pin M12 Disconnect	22T2669	43.95
PRCM12-4DN	12	4	NPN, NO	12-24 VDC	3-Pin M12 Disconnect	10R6713	25.95
PRCM12-4DP	12	4	PNP, NO	12-24 VDC	3-Pin M12 Disconnect	10R6714	25.95
PRCM18-5AC	18	5	NC	100-240 VAC	4-Pin M12 Disconnect	22T2670	43.95
PRCM18-5AO	18	5	NO	100-240 VAC	4-Pin M12 Disconnect	22T2671	43.95
PRCM18-5DN	18	5	NPN, NO	12-24 VDC	3-Pin M12 Disconnect	10R6715	25.95
PRCM18-8AC	18	8	NC	100-240 VAC	4-Pin M12 Disconnect	22T2672	43.95
PRCM18-8AO	18	8	NO	100-240 VAC	4-Pin M12 Disconnect	22T2673	43.95
PRCM18-8DN	18	8	NPN, NO	12-24 VDC	4-Pin M12 Disconnect	22T2674	25.95
PRCM18-8DP	18	8	PNP, NO	12-24 VDC	4-Pin M12 Disconnect	22T2675	25.95
PRCM30-10AC	30	10	NO	100-240 VAC	4-Pin M12 Disconnect	22T2676	47.95
PRCM30-10AO	30	10	NC	100-240 VAC	4-Pin M12 Disconnect	22T2677	47.95
PRCM30-10DN	30	10	NPN, NO	12-24 VDC	4-Pin M12 Disconnect	22T2678	31.95
PRCM30-10DP	30	10	PNP, NO	12-24 VDC	4-Pin M12 Disconnect	22T2679	31.95
PRCM30-15AC	30	15	NO	100-240 VAC	4-Pin M12 Disconnect	22T2680	47.95
PRCM30-15AO	30	15	NC	100-240 VAC	4-Pin M12 Disconnect	84R8834	47.95
PRCM30-15DN	30	15	NPN, NO	12-24 VDC	4-Pin M12 Disconnect	22T2681	31.95
PRCM30-15DP	30	15	PNP, NO	12-24 VDC	4-Pin M12 Disconnect	22T2682	31.95

(148691)

LONG SENSING DISTANCE CYLINDRICAL INDUCTIVE PROXIMITY SENSORS

Autonics Sensors & Controllers

- Longer sensing distance up to 25mm
- Improved noise resistance with dedicated IC DC 3-wire)
- Reverse power polarity, surge, overcurrent protection (Except PR08 Series)
- Long life cycle and reliable simple operation
- Red LED status indication
- IP67 rated waterproof structure (IEC standard)
- Replacer for micro switches and limit switches

Mfg. Part No.	Body Dia. (mm)	Sensing Distance (mm)	Output Type	Supply Voltage	Connection Type	Stock No.	Price Each
PRD12-4DN	12	4	NPN, NO	12-24 VDC	2 Meter - 3 Wire Cable	10R6717	31.95
PRD12-4DP	12	4	PNP, NO	12-24 VDC	2 Meter - 3 Wire Cable	10R6718	31.95
PRD12-8DN	12	8	NPN, NO	12-24 VDC	2 Meter - 3 Wire Cable	10R6719	31.95
PRD12-8DP	12	8	PNP, NO	12-24 VDC	2 Meter - 3 Wire Cable	10R6720	31.95
PRD18-7DN	18	7	NPN, NO	12-24 VDC	2 Meter - 3 Wire Cable	10R6723	29.95
PRD18-7DP	18	7	PNP, NO	12-24 VDC	2 Meter - 3 Wire Cable	10R6724	29.95
PRD18-14DN	18	14	NPN, NO	12-24 VDC	2 Meter - 3 Wire Cable	10R6721	29.95
PRD18-14DP	18	14	PNP, NO	12-24 VDC	2 Meter - 3 Wire Cable	10R6722	29.95

(148692)

ELECTRIC CAPACITIVE PROXIMITY SENSORS

RoHS Compliant Available

Autonics Sensors & Controllers

- Able to detect iron, metal, plastic, water, stone, wood, etc.
- Long life cycle and high reliability
- Reverse power polarity, surge, overcurrent protection
- Easy to adjust the sensing distance with sensitivity adjuster
- Red LED status indication
- Easy to control of level and position

18mm HOUSING

Mfg. Part No.	Body Dia. (mm)	Sensing Distance (mm)	Output Type	Supply Voltage	Connection Type	Stock No.	Price Each
● CR18-8DP	18	8	PNP, NO	12-24 VDC	2 Meter - 3 Wire Cable	10R6706	49.95
● CR18-8AC	18	8	NC	100-240 VAC	2 Meter - 2 Wire Cable	10R6704	59.95
● CR18-8AO	18	8	NO	100-240 VAC	2 Meter - 2 Wire Cable	10R6705	59.95
30mm HOUSING							
● CR30-15DP	30	15	PNP, NO	12-24 VDC	2 Meter - 3 Wire Cable	10R6709	59.95
● CR30-15AC	30	15	NC	100-240 VAC	2 Meter - 2 Wire Cable	10R6707	66.95
● CR30-15AO	30	15	NO	100-240 VAC	2 Meter - 2 Wire Cable	10R6708	66.95

(148689)

CAPACITIVE PROXIMITY SENSORS

RoHS Compliant Available

CARLO GAVAZZI

- For sensing of granulates, plastics and other ferrous and non-ferrous materials
- Featuring patented TRIPLESHIELD™ protection from noise interference caused by ESD, GSM or transient bursts
- Newer types feature "teach-in' pushbutton programming for sensing range, material detection and N/O or N/C output programming; humidity, dirt and moisture compensation; and automatic detection of NPN or PNP loads
- 12, 18 and 30 mm diameters and compact flat pack housing
- Rugged and cost effective polyester housings
- Adjustable sensitivity, up to 30mm
- 3 or 4 Wire DC, 2 wire AC/DC or 2 wire AC
- Easy to View LED Indication
- 2 meter PVC cable (except types ending with -6)

Cylindrical Housing

18mm HOUSING

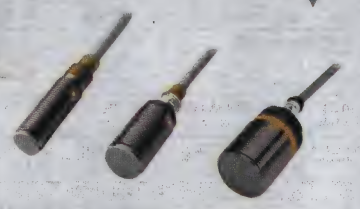
Mfg. Part No.	Sensing Distance (mm)	Supply Voltage	Output Type	Max. Current (mA)	Stock No.	Price Each
CA18CLN12PA	3-12	10-40VDC	PNP N/O	200	16C2342	139.00
CA18CLN12NA	3-12	10-40VDC	NPN N/O	200	16C2340	139.00
30mm HOUSING						
● CA30CLF16CP	2-16	20-250VAC/DC	MOSFET N/O or C	250	05M4033	256.00
EC3016TBAPL	4-16	20-250VAC	SCR N/O or C	500	16F2855	322.00
● CA30CLN25CP	2-25	20-250VAC/DC	MOSFET N/O or C	250	05M4034	256.00
EC3025NPAPL	4-25	10-40VDC	NPN N/O & C	200	16F2853	219.00
● EC3025PPAPL	4-25	10-40VDC	PNP N/O & C	200	05M4107	219.00
● EC3025TBAPL	4-25	20-250VAC	SCR N/O or C	500	05M4108	294.00
EC3025TBAPL-6*	4-25	20-250VAC	SCR N/O or C	500	16C1378	315.00

* With M12 disconnect plug, Part#s with ** are Teach-in pushbutton all others are "Potentiometer" adjustment.
(3585)

ICB SERIES - INDUCTIVE PROXIMITY SENSORS

CARLO GAVAZZI

- Environmentally friendly design and construction
- For sensing metal parts and materials
- Advanced microprocessor
- 12, 18 and 30mm diameter housings
- Rugged and cost effective nickel plated brass housings
- Standard and extended sensing range options
- Easy to view LED indication
- 3 wire sensors
- *Compact housing length
- *6.6 feet (2m) PVC cable
- *NPN or PNP, NO or NC outputs
- 10-36VDC supply with 200mA maximum output
- Common Applications Include: Detection of moving parts in construction equipment, Object position detection on conveying equipment, and Detecting parts and tools in CNC equipment



M12, M18, & M30 Short Barrel Housing

M12 DIAMETER INDUCTIVE SENSORS WITH 2M PVC CABLE

Mfg. Part No.	Sensing Range	Overall Length	Shielded (Flush Mount)	Switching Speed (Hz)	Output	Stock No.	Price Each
ICB12SF02NO	2mm	50mm	Yes	2,000	NPN, NO	73T0386	40.00
ICB12SF02PO	2mm	50mm	Yes	2,000	PNP, NO	73T0390	40.00
ICB12SN04NO	4mm	50mm	No	2,000	NPN, NO	73T0402	40.00
ICB12SN04POM1	4mm	50mm	No	2,000	PNP, NO	63T7932	40.00
ICB12SF04NO	4mm	50mm	Yes	2,000	NPN, NO	73T0394	50.00
ICB12SF04PO	4mm	50mm	Yes	2,000	PNP, NO	73T0398	50.00
ICB12SN08NO	8mm	50mm	No	2,000	NPN, NO	73T0409	50.00
ICB12SN08PO	8mm	50mm	No	2,000	PNP, NO	73T0413	50.00
M18 DIAMETER INDUCTIVE SENSORS WITH 2M PVC CABLE							
ICB18SF05NO	5mm	54mm	Yes	1,500	NPN, NO	94T6179	48.07
ICB18SF05PO	5mm	54mm	Yes	1,500	PNP, NO	94T6181	48.07
ICB18SN08NO	8mm	54mm	No	1,500	NPN, NO	94T6187	48.07
ICB18SN08PO	8mm	54mm	No	1,500	PNP, NO	94T6189	48.07
ICB18SF08NO	8mm	54mm	Yes	1,500	NPN, NO	94T6183	59.05
ICB18SF08PO	8mm	54mm	Yes	1,500	PNP, NO	94T6185	59.05
ICB18SN14NO	14mm	54mm	No	1,500	NPN, NO	94T6191	59.05
ICB18SN14PO	14mm	54mm	No	1,500	PNP, NO	94T6193	59.05
M30 DIAMETER INDUCTIVE SENSORS WITH 2M PVC CABLE							
ICB30SF10NO	10mm	59mm	Yes	1,000	NPN, NO	94T6195	54.04
ICB30SF10PO	10mm	59mm	Yes	1,000	PNP, NO	94T6197	54.04
ICB30SN15NO	15mm	71mm	No	1,000	NPN, NO	94T6203	54.04
ICB30SN15PO	15mm	71mm	No	1,000	PNP, NO	94T6205	54.04
ICB30SF15NO	15mm	59mm	Yes	1,000	NPN, NO	94T6199	64.06
ICB30SF15PO	15mm	59mm	Yes	1,000	PNP, NO	94T6201	64.06
ICB30SN22NO	22mm	71mm	No	1,000	NPN, NO	94T6207	64.06
ICB30SN22PO	22mm	71mm	No	1,000	PNP, NO	94T6209	64.06

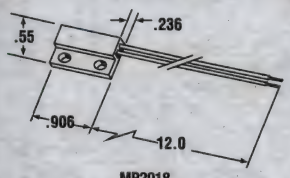
* Upon request, the sensors shown above are also available with an M12 plug (by adding M1 suffix), a normally closed output (C instead of O in the part number) and/or in longer length housings
(208159)

MAGNETIC PROXIMITY SENSORS

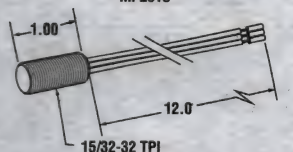
RoHS Compliant Available

CHERRY

MP2007



MP2018



MP2007

- Zero Power Consumption
- Hermetically Sealed for Resistance Against Moisture and Dirt
- Can be Activated by North or South Pole of Approaching Magnet
- Operating Temperature: -40°C to +105°C
- Reliable Reed Switch Technology

Mfg. Part No.	Description	Switching Max. Voltage	Supply Max. Current	Stock No.	Price Each 1-9
AS101001	Threaded Magnetic Actuator	...	...	98B0564	6.29
AS201701	Smooth Barrel Actuator	...	...	35C0243	4.12
AS201801	Mini Flange Mount Actuator	...	...	35C0239	3.95
AS201901	Flange Mount Actuator	...	...	35H8626	4.60
MP200701	SPST-N/O Threaded Barrel	100VDC	0.5A	10M6194	10.27
MP200702	SPST-N/C Threaded Barrel	30VDC	0.2A	05M6405	12.37
MP200703	SPDT-C/O Threaded Barrel	30VDC	0.2A	05M6406	12.51

➤CONTINUED➤

MAGNETIC PROXIMITY SENSORS (CONT.)

Mfg. Part No.	Description	Switching Max. Voltage	Supply Max. Current	Stock No.	Price Each 1-9
MP201701	SPST-N/O Smooth Barrel	100VDC	0.5A	05M6407	4.27
MP201801	SPST-N/O Mini Flange Mount	100VDC	0.5A	05M6409	4.47
MP201802	SPST-N/C Mini Flange Mount	30VDC	0.2A	05M6410	6.57
MP201901	SPST-N/O Flange Mount	100VDC	0.5A	05M6411	3.63

(69349)

GLOBAL PLUS INDUCTIVE PROXIMITY SENSORS

EATON

Proximity Sensors

Connector Cable

- Most cost-effective inductive proximity sensor on the market
- Choose from cable or connector versions
- 4 LED indicators on all connector versions, single LED indicator on cable versions
- Short-circuit protection on all DC models

The Cutler-Hammer® Global Plus Proximity Sensor Family was designed by Eaton's Electrical business as the optimal solution for high volume OEM customers. It has been optimized to include the basic functions for high sensing reliability, at the price you need. The Global Plus line offers 12mm diameter connectorized and cable versions with a bright LED indicator to show output status. Nickel-plated brass housing, IP67 degree of protection. CE certified.

SPECIFICATIONS	AC MODELS	DC MODELS
Max. Output Current	500mA	12mm: 200mA
Max. Switching Frequency	10Hz	12mm: 800Hz (Shielded)

3-WIRE, UNSHIELDED, 10-30VDC OPERATING VOLTAGE

Mfg. Part No.	Sensing Face Dia (mm)	Sensing Range (mm)	Output Type	Connection Type	Stock No.	Price 1-4
E57-12PBU04-CD	12	4	NPN, NC	4-Pin Micro DC Connector	30K7294	62.25
2-WIRE, SHIELDED, 20-250VAC OPERATING VOLTAGE						
E57-12PBS02-A	12	2	NC	2-Meter Cable	30K7285	89.10

CABLES FOR MICRO-CONNECTOR OR QUICK-DISCONNECT SENSORS
PVC jacket. UL listed, c-UL recognized.

Mfg. Part No.	Description	Cable Length (m)	Wire Size (AWG)	Stock No.	Price 1-9
CSAS3F3CY2202	3-pin Micro AC	2	22AWG	30K7253	27.87
CSAS3F3CY2205	3-pin Micro AC	5	22AWG	30K7254	40.98
CSDS4A3CY2202	4-pin Micro DC	2	22AWG	30K7255	24.86
CSDS4A3CY2205	4-pin Micro DC	5	22AWG	30K7256	29.69

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GLOBAL SERIES INDUCTIVE SENSORS

RoHS Compliant Available

EATON

- Cost effective inductive sensor for high volume use
- Available in industry-standard 8, 12, 18 or 30mm diameters
- DC models available in 2-wire or 3-wire (NPN or PNP) operate on 10-30 VDC
- AC models operate on 20-250 VAC
- Switching frequence of 2 kHz for DC models
- Shielded and unshielded models available
- Models available in either 6.5 ft. (2m) cable or 4-pin euro quick-disconnect

The Cutler-Hammer Global Series inductive proximity sensor family was designed by Eaton's electrical business as the optimal solution for high volume OEM customers. It has been developed to include the basic functions for high sensing reliability, at the price you need. The Global Series line offers 8, 12, 18 and 30mm diameter connectorized and cable versions with a bright LED indicator to show output status. Nickel-plated brass housing, IP67 degree of protection, CE and cCSAus certified.

3-WIRE, SHIELDED, 10-30 VDC OPERATING VOLTAGE

Mfg. Part No.	Sensing Face Diameter (mm)	Sensing Range (mm)	Output Type	Connection Type	Stock No.	Price 1-4
E57-08GE03-C	8	3	NPN	6.5 ft. (2m) Cable	63P9094	96.10
E57-08GE03-CDB	8	3	NPN	4-Pin Micro QD	63P9095	99.85
E57-08GE03-G	8	3	PNP	6.5 ft. (2m) Cable	63P9096	95.56
E57-08GE03-GDB	8	3	PNP	4-Pin Micro QD	63P9097	98.72
E57-12GS02-GDB	12	2	PNP	4-Pin Micro QD	47K6742	66.67

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GLOBAL SERIES INDUCTIVE SENSORS (CONT.)

Mfg. Part No.	Sensing Face Diameter (mm)	Sensing Range (mm)	Output Type	Connection Type	Stock No.	Price 1-4
● E57-12GE05-G	12	5	PNP	6.5 ft. (2m) Cable	63P9104	84.06
● E57-12GE05-GDB	12	5	PNP	4-Pin Micro QD	63P9105	96.05
● E57-18GS05-CDB	18	5	NPN	4-Pin Micro QD	47K6790	66.67
● E57-18GS05-G	18	5	PNP	6.5 ft. (2m) Cable	47K6800	66.67
● E57-18GS05-GDB	18	5	PNP	4-Pin Micro QD	47K6801	66.67
● E57-18GE08-C	18	8	NPN	6.5 ft. (2m) Cable	63P9111	96.07
● E57-18GE08-CDB	18	8	NPN	4-Pin Micro QD	63P9112	98.24
● E57-30GS10-C	30	10	NPN	6.5 ft. (2m) Cable	47K6859	90.73
● E57-30GS10-CDB	30	10	NPN	4-Pin Micro QD	47K6860	92.86
● E57-30GS10-G	30	10	PNP	6.5 ft. (2m) Cable	47K6867	85.59
● E57-30GE15-GDB	30	15	PNP	4-Pin Micro QD	63P9122	118.52
3-WIRE, UNSHIELDED, 10-30 VDC OPERATING VOLTAGE						
● E57-08GE06-C	8	6	NPN	6.5 ft. (2m) Cable	63P9098	85.89
● E57-08GE06-CDB	8	6	NPN	4-Pin Micro QD	63P9099	87.60
● E57-08GE06-G	8	6	PNP	6.5 ft. (2m) Cable	63P9100	85.89
● E57-08GE06-GDB	8	6	PNP	4-Pin Micro QD	63P9101	92.86
● E57-12GE10-C	12	10	NPN	6.5 ft. (2m) Cable	63P9106	76.68
● E57-12GE10-G	12	10	PNP	6.5 ft. (2m) Cable	63P9109	82.54
● E57-12GE10-GDB	12	10	PNP	4-Pin Micro QD	63P9110	96.07
● E57-18GE18-CDB	18	18	NPN	4-Pin Micro QD	63P9116	103.06
● E57-18GE18-G	18	18	PNP	6.5 ft. (2m) Cable	63P9117	89.64
● E57-30GE29-C	30	29	NPN	6.5 ft. (2m) Cable	63P9123	110.07
● E57-30GE29-CDB	30	29	NPN	4-Pin Micro QD	63P9124	117.47
2-WIRE, SHIELDED, 10-30 VDC OPERATING VOLTAGE						
● E57-12GE08-D1DB	12	8	NPN / PNP / SPST-NC	4-Pin Micro QD	47K6728	121.52
● E57-18GS05-D	18	5	NPN / PNP / SPST-NO	6.5 ft. (2m) Cable	47K6791	107.36
● E57-18GS05-DDB	18	5	NPN / PNP / SPST-NO	4-Pin Micro QD	47K6792	115.36
● E57-18GE16-D1DB	18	16	NPN / PNP / SPST-NC	4-Pin Micro QD	47K6785	146.86
● E57-30GS10-D	30	10	NPN / PNP / SPST-NO	6.5 ft. (2m) Cable	47K6861	118.52
● E57-30GE25-D1	30	25	NPN / PNP / SPST-NC	6.5 ft. (2m) Cable	47K6852	149.89
2-WIRE, SHIELDED, 20-250 VAC OPERATING VOLTAGE						
● E57-12GS02-A	12	2	SPST-NO	6.5 ft. (2m) Cable	47K6730	95.42
● E57-12GS02-AAB	12	2	SPST-NO	3-Pin Micro QD	47K6731	110.22
● E57-18GS05-A	18	5	SPST-NO	6.5 ft. (2m) Cable	47K6787	83.02
● E57-30GS10-A	30	10	SPST-NO	6.5 ft. (2m) Cable	47K6856	142.87
2-WIRE, UNSHIELDED, 20-250 VAC OPERATING VOLTAGE						
● E57-12GU04-A	12	4	SPST-NO	6.5 ft. (2m) Cable	47K6743	95.42
● E57-18GU08-A	18	8	SPST-NO	6.5 ft. (2m) Cable	47K6802	78.32
● E57-18GU08-AAB	18	8	SPST-NO	3-Pin Micro QD	47K6803	88.92

MOUNTING BRACKETS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
E57KM12	Right Angle Mounting Bracket for 12mm Diameter Sensors, Stainless Steel	47K6985	7.76
E57KM18	Right Angle Mounting Bracket for 18mm Diameter Sensors, Stainless Steel	47K6986	7.76
CONNECTOR CABLES			
CSDS4A4CY2202	4-Pin Micro DC Cordset, 6.5 ft. (2m), 22 AWG	46K1910	25.50
CSAS3F3CY2202	3-Pin Micro AC Cordset, 6.5 ft. (2m), 22 AWG	30K7253	27.87
CSAS3F3CY2205	3-Pin Micro AC Cordset, 16 ft. (5m), 22 AWG	30K7254	40.98

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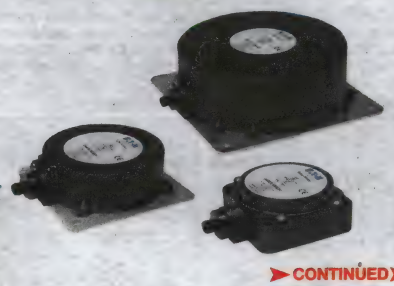
PANCAKE STYLE INDUCTIVE PROXIMITY SENSORS

CE RoHS Compliant Available EATON

- Auto configures to sinking (NPN) or sourcing (PNP) when wired
- Available in AC/DC 2-Wire or DC 4-Wire varieties
- Dual LEDs indicate both power and output status
- Operating temperature: -40°C to 70°C
- Repeatability: <3%
- Hysteresis (max): 15%



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PANCAKE STYLE INDUCTIVE PROXIMITY SENSORS (CONT.)

Mfg. Part No.	Output Type	Sensing Range (mm)	Stock No.	Price Each 1-4
AC/DC 2-WIRE 400mA LOAD CURRENT, 20-250VAC, 20-60VDC, SMALL DIAMETER (79 X 79 X 39MM)				
E56AAL40SA	SPDT-1NO/1NC	40	89M0222	203.28
E56AAL50UA	SPDT-1NO/1NC	50	89M0228	207.60
E56AAL50UAB01	SPDT-1NO/1NC	50	89M0230	224.90
AC/DC 2-WIRE 400mA LOAD CURRENT, 20-250VAC, 20-60VDC, MEDIUM DIAMETER (110 X 110 X 41MM)				
E56BAM70UAA01	SPST-NO	70	89M0240	341.68
E56BAM70UAB01	SPST-NO	70	89M0241	346.00
E56BAN70UAA01	SPST-NC	70	89M0242	341.68
E56BAN70UAB01	SPST-NC	70	89M0243	346.00
E56BDL70UAD01	SPDT-1NO/1NC	70	89M0244	389.20
E56BDL70UAE01	SPDT-1NO/1NC	70	89M0245	394.67
AC/DC 2-WIRE 400mA LOAD CURRENT, 20-250VAC, 20-60VDC, LARGE DIAMETER (172 X 172 X 4168MM)				
E56CAM100UAA01	SPST-NO	100	89M0246	683.35
E56CAM100UAB01	SPST-NO	100	89M0247	687.68
DC 4-WIRE 300mA 10-48VDC, SMALL DIAMETER (79 X 79 X 39MM)				
E56ADL40SAD01	SPDT-1NO/1NC	40	89M0232	246.91
E56ADL40SAE01	SPDT-1NO/1NC	40	89M0233	241.30
E56ADL50UA	SPDT-1NO/1NC	50	89M0237	236.63
E56ADL50UAD01	SPDT-1NO/1NC	50	89M0238	251.27
E56ADL50UAE01	SPDT-1NO/1NC	50	89M0239	256.22
DC 4-WIRE 300mA 10-48VDC, MEDIUM DIAMETER (110 X 110 X 41MM)				
E56BDL70UAD01	SPDT-1NO/1NC	70	89M0244	389.20
E56BDL70UAE01	SPDT-1NO/1NC	70	89M0245	394.67
DC 4-WIRE 300mA 10-48VDC, LARGE DIAMETER (172 X 172 X 68MM)				
E56CDL100UAD01	SPDT-1NO/1NC	100	89M0250	778.42
E56CDL100UAE01	SPDT-1NO/1NC	100	89M0251	808.15

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iPROX INTELLIGENT INDUCTIVE PROXIMITY SENSORS

CE EATON

Fig. 3

Fig. 1

Fig. 2

- Auto configures to sinking (NPN) or sourcing (PNP) when wired
- Stainless steel tubes with shock resistant front caps
- Bright dual color 360° status LED, green for power, red for output
- Extended sensing ranges, double that of standard proximity sensors

This full featured proximity sensor combines extended ranges with ruggedness to solve even the toughest applications. It's high vibration absorbing potting compound ensures a longer sensor life and superior resistance to high pressure wash downs and corrosive environments. The DC models make installation easy by sensing whether it needs to NPN or PNP, then auto configuring to that mode. This allows for one sensor to be used in either application. Superior temperature range of -40°C to 70°C. High noise immunity level of 10 v/m.

2-WIRE SENSORS 20 - 132 VAC

Mfg. Part No.	Fig. 1	Output Type	Sensing Range Max (mm)	Connector Type	Stock No.	Price Each 1-4
E59-M18C118C02-A2	1	SPST-NC	18	2-meter Cable	47K7644	138.75
E59-M30A115A01-A1	2	SPST-NO	15	3-Pin Micro	47K7645	135.68
E59-M30A115A01-A2	2	SPST-NC	15	3-Pin Micro	47K7646	159.83
E59-M30A115C02-A1	2	SPST-NO	15	2-meter Cable	47K7651	135.82
E59-M30A115C02-A2	2	SPST-NC	15	2-meter Cable	47K7652	143.13
E59-M30C129A01-A1	2	SPST-NO	29	3-Pin Micro	47K7659	129.20
E59-M30C129A01-A2	2	SPST-NC	29	3-Pin Micro	47K7660	159.83
3-WIRE SENSORS 6 - 48VDC						
E59-M12A105D01-D1	3	SPST-NO	4	4-Pin Micro	47K7601	115.22
E59-M12A105C02-D2	3	SPST-NC	4	2-meter Cable	51M4857	98.36
E59-M12C110D01-D2	3	SPST-NC	10	4-Pin Micro	47K7616	126.63
E59-M18C116D01-D1	1	SPST-NO	16	4-Pin Micro	51M4881	114.79
E59-M18C116C02-D2	1	SPST-NC	18	2-meter Cable	51M4878	105.65
E59-M30A115D01-D1	2	SPST-NO	15	4-Pin Micro	47K7655	122.38
E59-M30A115D01-D2	2	SPST-NC	15	4-Pin Micro	47K7656	144.99
E59-M30C129D01-D1	2	SPST-NO	29	4-Pin Micro	47K7670	132.14

STANDARD CABLE - MICRO STYLE PVC JACKET

Mfg. Part No.	Voltage Style	Number of Pins	Gauge	Length	Stock No.	Price 1-9
CSDS4A4CY2202	DC	4-pin 4-wire	22 AWG	6.0ft. (2m)	46K1910	25.50

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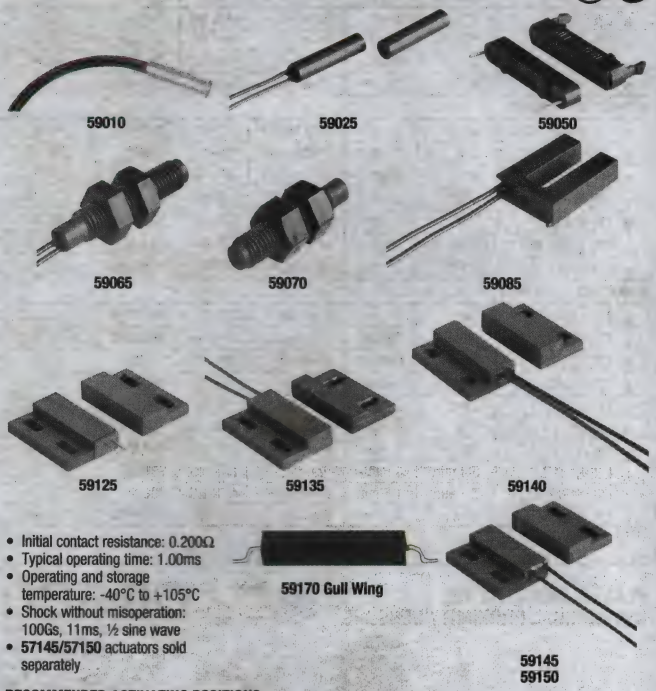
MAGNETIC PROXIMITY SENSORS

RoHS Compliant Available

HAMLIN // NOW PART OF Littelfuse Expertise Applied | Answers Delivered



- Initial contact resistance: 0.200Ω
- Typical operating time: 1.00ms
- Operating and storage temperature: -40°C to +105°C
- Shock without misoperation: 100Gs, 11ms, ½ sine wave
- **57145/57150** actuators sold separately

RECOMMENDED ACTIVATING POSITIONS

Sensor contacts are activated by an approaching magnetic actuator or selected magnet and released as it is withdrawn. Sensors are connected in series with the load. No additional power is required for operation. They are unaffected by any non-ferrous material placed between sensor and actuator. Contacts are hermetically sealed for protection from hostile environments. Operating Characteristics: Typical operate time: 1ms. Operation and storage temperature: –40°C to +105°C. Shock without false operation: 50G's 11ms, ½ sine wave. Typical life @ 5Vdc, 10 ma. 50×10^6. **59150 series** are identical to **59145 series** except leads exit from opposite ends of package. Notes: **59085 series** contains both sensor and magnet. Actuation is obtained by inserting a ferrous vane between them. Operate and release positions depend on thickness of vane. (See position B.) **59050 series** PINS 0.0185D x 0.130"L, 0.8" spacing. **59125 series** terminals 0.025", 0.240"L, 0.100" spacing. **Mfg. part no. 59135-12"** Flying leads, 20 AWG, 19 x 32 teflon-insulat. 200°C, 300V, UL 1180. All others-12" Flying leads, 24 AWG, 7/32 PVC, 105°C, UL 1430 or UL 1569, 59135 Series CSA certified. **59030** and **59050 series** are not UL listed.

SPST-NO CONTACTS

Mfg. Part No.	Sensor Stock No.	Price Each 1-9
59010-1-S-02-A*	89K7537	14.06
59010-1-S-02-F	34M0785	8.85
59010-1-T-02-F	34M0786	9.92
59021-1-S-02-A	34M0793	21.14
59025-010*	05M4561	3.07
59025-020*	05M4562	3.67
59050-010	89F1394	1.48
59065-010	05M4565	3.95
59065-1-T-02-E	45T6776	4.70
59065-020*	19M8515	4.18
59070-010	05M4567	3.99
59070-020*	05M4568	4.38
59075-1-U-03-A	90R7508	17.45
59085-010	05M4570	8.35
59125-010	05M4575	4.17
59135-010	05M4577	7.47
59135-020*	05M4578	5.28
59140-010	05M4580	3.14
59140-020*	05M4581	3.37
59145-010	05M4584	3.17
59145-020*	05M4585	3.38
59150-010	17M8454	3.20
59165-1-S-00-C	34M1101	2.01
59165-1-T-00-C	34M1104	2.01
59165-1-U-00-C	34M1107	2.01
59170-1-S-00-C	89K7541	1.22
SPST-NC CONTACTS		
59025-040*	05M4563	5.00
59065-040	05M4566	5.58
59085-040	05M4572	6.92

CONTINUED

MAGNETIC PROXIMITY SENSORS (CONT.)

SPST-NC CONTACTS

Mfg. Part No.	Sensor Stock No.	Price Each 1-9
59140-040	05M4583	4.76
59145-040	05M4587	4.74
SPDT-CO CONTACTS		
59025-030*	17M8453	5.43
59050-030	50F7991	3.61
59065-030	11M1788	5.84
59070-030	05M4569	5.71
59135-030	10M9205	8.96
59140-030	05M4582	5.69
59145-030	05M4586	5.59
59150-030	05M4589	5.26

Series 59085 contains both sensor and magnet. Actuation is obtained by inserting a ferrous vane between them. Operate and release positions depend on thickness of vane. **NO** = Normally Open; **NC** = Normally Closed; **CO** = Changeover.

* High Voltage

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CABLE AMPLIFIER PROXIMITY SENSORS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Shielded sensor heads for 3-mm to M12 diameters that can be embedded in metal.
- Robotics cables provided as a standard feature (DC 2-Wire Models).
- Indicator provided in Amplifier cable for easy confirmation of operation.
- Power supply range of 12 to 24 VDC (10 to 30 VDC) for DC 2-Wire Models.
- Power supply range of 5 to 24 VDC (4.75 to 30 VDC) for DC 3-Wire Models.

DC 2-WIRE MODLES

Mfg. Part No.	Sensing Diameter	Sensing Range	Connector Type	Output Type	Stock No.	Price Each 1-9
E2EC-CR8D1	3 mm	0.8 mm	Cable	NO	38B016	211.42
E2EC-C1R5D1	5.4 mm	1.5 mm	Cable	NO	63M8708	215.35

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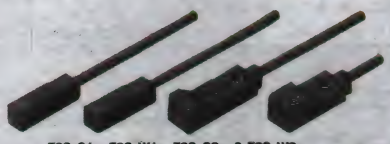
SUPER COMPACT PROXIMITY SENSORS - E2S SERIES

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

IP67 CE

- Maximum sensing distance: 2.5 mm
- Response frequency: 1 kHz
- Low current consumption: 50 mA
- Unshielded 5mm x 5mm and 8mm x 8mm sizes available
- Top and front sensing versions match mounting needs
- Cable Length: 1M
- Operating Voltage Range: 10 to 30 VDC
- IEC 60529 IP67



E2S-Q1x, E2S-W1x, E2S-Q2x, & E2S-W2x

DC 2-WIRE MODELS

Mfg. Part No.	Sensing Surface	Sensing Distance	Size	Output Type	Stock No.	Price Each 1-9
E2SQ111M	Front	1.6mm	5.5 x 5.5mm	NO	66J6770	64.26
E2S-Q21-1M	Front	2.5mm	5.5 x 5.5mm		28C0386	66.84
E2S-W111M	Top	1.6mm	8 x 8mm		21J8571	66.84
E2S-W21-1M	Top	2.5mm	8 x 8mm		28C0385	67.17
DC 3-WIRE MODELS						
E2S-Q13 1M	Front	1.6mm	5.5 x 5.5mm	NPN NO	95C0563	58.97
E2S-Q23 1M	Front	2.5mm	5.5 x 5.5mm		30H5490	61.59
E2SW131M	Top	1.6mm	8 x 8mm		66J6785	56.70
E2S-W23-1M	Top	2.5mm	8 x 8mm		30C4329	58.97

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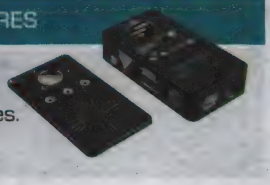
CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures



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LONG BODY INDUCTIVE PROXIMITY SENSORS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

Increased tightening strength. Cable protectors provided as a standard feature. Increased indicator visibility. A milled section for wrench grip on all models.

Mfg. Part No.	Sensing Diameter	Sensing Range	Connection Type	Output Type	Stock No.	Price Each 1-9
AC- 2 WIRE						
● E2E2-X2Y1-US	M12	2 mm	Prewired	NO	91F5948	132.70
● E2E2-X5Y1-US	M18	5 mm	Prewired	NO	91F5949	129.70
● E2E2-X10Y1-US	M30	10 mm	Prewired	NO	10R5217	152.15
AC CONNECTOR VERSION						
DC-2 WIRE						
● E2E2-X7D1	M18	7 mm	Prewired	NO	91F5954	159.27
DC-3 WIRE						
● E2E2-X2B1	M12	2 mm	Prewired	PNP-NO	38B160	99.27
● E2E2-X2C1	M12	2 mm	Prewired	NPN-NO	38B161	99.27
● E2E2-X5B1	M18	5 mm	Prewired	PNP-NO	38B170	101.91
● E2E2-X5MB1	M18	5 mm	Prewired	PNP-NO	38B175	98.31
● E2E2-X5MC1	M18	5 mm	Prewired	NPN-NO	50B6296	99.27
● E2E2-X10C1	M30	10 mm	Prewired	NPN-NO	38B131	107.17
● E2E2-X10MB1M1	M18	10 mm	Prewired	PNP-NO	38B136	106.59
DC CONNECTOR VERSION						
● E2E2-X2C1-M1	M12	2 mm	M12 MICRO	NPN-NO	91F5950	103.24
● E2E2-X2B1-M1	M12	2 mm	M12 MICRO	PNP-NO	91F5951	101.50
● E2E2-X5C1-M1	M18	5 mm	M12 MICRO	NPN-NO	27M2362	106.59
● E2E2-X5B1-M1	M18	5 mm	M12 MICRO	PNP-NO	10R5218	109.91

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SHORT BODY INDUCTIVE PROXIMITY SENSORS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

E2E proximity sensors detect ferrous metal objects. Packaged in threaded, cylindrical nickel-plated housing. All are normally open. All are shielded for reliable sensing even when mounted near metal housings. All feature operation indicators include mounting nuts. Rated NEMA 1, 4, 6, 12, 13 and IP67. Mounting accessories and protective silicone covers are also available; *go online or call.*

Input voltage: 24-240VAC, switching to 300mA. Mfg. part numbers with **-53-US suffix** are short-circuit protected. Prewired with 6.5 feet (2 meters) cable. UL recognized. **-US suffix** are CSA certified. Dimensions and sensing ranges are in inches and (mm).

Mfg. Part No.	Sensing Diameter	Sensing Range	Connection Type	Output Type	Stock No.	Price Each 1-9
AC-2 WIRE						
● E2E-X1R5Y1	M8	1.5 mm	Prewired	NO	07H1889	107.65
● E2E-X2D1-M3G	M8	2 mm	Prewired	NO	24C1808	115.80
AC- 2 WIRE SCP						
E2E-X5Y1-53-US	M18	5 mm	Prewired	SCR-NO	52F4310	137.04
E2E-X10Y1-53-US	M30	10 mm	Prewired	SCR-NO	52F4311	197.39
DC- 2 WIRE						
● E2E-X2D1-N	M8	2 mm	Prewired	NO	09J1469	95.70
● E2EX3D2N	M8	2 mm	Prewired	NC	27K4515	97.94
● E2E-X3D1-N	M12	3 mm	Prewired	NO	09J1476	97.01
E2EX3D1N5M	M12	3 mm	Prewired	NO	66J6546	113.17
● E2E-X7D1-N	M18	7 mm	Prewired	NO	09J1483	102.41
● E2E-X10D1-N	M30	10 mm	Prewired	NO	18M7318	105.53
DC- CONNECTOR VERSION						
● E2E-X2D1-M1G	M8	2 mm	M12 MICRO	NO	09J1468	103.56
● E2E-X3D1M1G	M12	3 mm	M12 MICRO	NO	27C1520	104.41
● E2E-X3D2-M1G	M12	3 mm	M12 MICRO	NC	33C9772	104.41
● E2E-X7D1-M1G	M18	7 mm	M12 MICRO	NO	09J1482	106.35
● E2E-X10D1-M1G	M30	10 mm	M12 MICRO	NO	83H5116	92.63
DC- 3 WIRE						
● E2EX1R5E1	M8	1.5 mm	Prewired	NPN-NO	52F4299	92.39
● E2E-X1R5F1	M8	1.5 mm	Prewired	PNP-NO	83C8553	92.16
● E2E-X2E1	M12	2 mm	Prewired	NPN-NO	52F4302	90.32
● E2E-X2F1	M12	2 mm	Prewired	PNP-NO	52F4301	91.63
● E2EX2E2	M12	2 mm	Prewired	PNP-NC	66J6510	93.07

➤CONTINUED➤

SHORT BODY INDUCTIVE PROXIMITY SENSORS (CONT.)

Mfg. Part No.	Sensing Diameter	Sensing Range	Connection Type	Output Type	Stock No.	Price Each 1-9
DC- 3 WIRE						
● E2EX5ME1	M12	5 mm	Prewired	NPN-NO	65M0753	93.07
● E2E-X5E1	M18	5 mm	Prewired	NPN-NO	52F4304	94.05
● E2E-X5F1	M18	5 mm	Prewired	PNP-NO	52F4303	96.62
● E2E-X10E1	M30	10 mm	Prewired	NPN-NO	09J1459	99.27
CONNECTOR VERSION						
● E2E-X1R5E1-M1	M8	1.5 mm	M12 MICRO	NPN-NO	09J1458	98.43
● E2E-X1R5F1-M1	M8	1.5 mm	M12 MICRO	PNP-NO	90B2813	97.01
● E2E-X2E1-M1	M12	2 mm	M12 MICRO	NPN-NO	09J1470	94.12
● E2E-X2F1-M1	M12	2 mm	M12 MICRO	PNP-NO	09J1471	98.43
● E2E-X5F1-M1	M18	5 mm	M12 MICRO	PNP-NO	09J1479	100.93
● E2E-X10E1-M1	M30	10 mm	M12 MICRO	NPN-NO	09J1460	107.04
● E2E-X10F1-M1	M30	10 mm	M12 MICRO	PNP-NO	27M2359	106.59
MINIATURE DC- 3 WIRE						
● E2E-CR6B12M	3mm	0.6mm	Prewired	PNP-NO	94T7179	234.52
● E2E-CR6C1 2M	3mm	0.6mm	Prewired	NPN-NO	08R8277	241.03
● E2E-CR8C1	4mm	0.8mm	Prewired	NPN-NO	92F629	137.04
● E2EC-R8C2	4mm	0.8mm	Prewired	PNP-NO	38B022	133.63
● E2E-CR8B1	4mm	0.8mm	Prewired	PNP-NO	88K1920	138.75
● E2E-X1C1	M5	1 mm	Prewired	NPN-NO	52F9256	128.18
● E2E-X1B1	M5	1 mm	Prewired	PNP-NO	93K7546	126.60
● E2E-C1B1	5.4 mm	1 mm	Prewired	PNP-NO	38B023	135.68
E2E-X1R5E1M3	5.4 mm	1.5 mm	Prewired	NPN-NO	38B031	111.85
● E2E-X10MF1-M1	M18	10 mm	Prewired	PNP-NO	88F1620	101.91

(3534)

PLASTIC INDUCTIVE DC, CYLINDRICAL PROXIMITY SENSORS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

E2F series detects metal objects and offer excellent resistance to chemical and water washdown environments. Shielded for mounting near metal. Features operation indicators and is prewired with 6.5' of cable and 2 mounting nuts. Meets NEMA enclosure types 1, 3, 4, 6, 12, 13, IEC IP68 classification. UL recognized, CSA certified, CE compliant.

2-WIRE AC SENSORS
Input voltage: 20-264VAC, switch up to 100mA; except circuit protected type with **53-US suffix**, which is 90-140VAC, 300mA. CSA certified (**53-US** version only).

Mfg. Part No.	Sensing Diameter	Sensing Range	Connector Type	Output Type	Stock No.	Price Each 1-9
● E2F-X1R5Y1	M8	1.5 mm	Prewired	NO	52F4293	148.86
● E2F-X2Y1	M12	2 mm	Prewired	NO	52F4292	126.00
● E2F-X10Y1-53-US	M30	10 mm	Prewired	NO	52F4291	157.25
3-WIRE DC SENSORS Input voltage: 10-30VDC, switch up to 200mA.						
● E2F-X1R5E1	M8	1.5 mm	Prewired	NPN-NO	27M2363	143.32
● E2F-X1R5F1	M8	1.5 mm	Prewired	PNP-NO	38B192	140.45
● E2F-X2F1	M12	2 mm	Prewired	PNP-NO	38B193	115.92
● E2F-X5E1	M18	5 mm	Prewired	NPN-NO	52F4296	135.68
● E2F-X5F1	M18	5 mm	Prewired	PNP-NO	38B194	132.30
● E2F-X10F1	M30	10 mm	Prewired	PNP-NO	10R5220	145.16

(51879)

E2B SERIES CYLINDRICAL PROXIMITY SENSOR

RoHS Compliant Available

NEW

OMRON AUTOMATION & SAFETY

- Four sizes: M8, M12, M18 and M30
- Single and double sensing distance
- Normally open (NO), Normally closed (NC)
- IP67 for protection in wet environments
- 360° visible LED for operation control
- Standard temperature range –25°C to 70°C
- A choice of Short or Long bodies in Connector or Pre-wired designs

Mfg. Part No.	Sensing Range	Sensing Distance	Stock No.	Price Each 1-24
● E2B-M30KS15-M1-C1	15	M30	46X9515	44.17
● E2B-M30KS15-M1-C2	15	M30	46X9516	44.17
● E2B-S08KN04-MC-B1	4	M8	46X9549	30.58
● E2B-S08KN04-MC-B2	4	M8	46X9550	30.58
● E2B-S08KN04-MC-C1	4	M8	46X9551	30.58
● E2B-S08KN04-MC-C2	4	M8	46X9552	30.58
● E2B-S08KS02-MC-B1	2	M8	46X9561	30.58
● E2B-S08KS02-MC-B2	2	M8	46X9562	30.58
● E2B-S08KS02-MC-C1	2	M8	46X9563	30.58
● E2B-S08KS02-MC-C2	2	M8	46X9564	30.58
● E2B-S08LN04-MC-B1	4	M8	46X9573	37.37

➤CONTINUED➤

E2B SERIES CYLINDRICAL PROXIMITY SENSOR (CONT.)

Mfg. Part No.	Sensing Range	Sensing Distance	Stock No.	Price Each 1-24
E2B-S08LN04-MC-B2	4	M8	46X9574	37.37
E2B-S08LN04-MC-C1	4	M8	46X9575	37.37
E2B-S08LN04-MC-C2	4	M8	46X9576	37.37

(212172)

E2B SERIES CYLINDRICAL PROXIMITY SENSOR

NEW

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Four sizes: M8, M12, M18 and M30
- Single and double sensing distance
- Normally open (NO), Normally closed (NC)
- IP67 for protection in wet environments
- 360° visible LED for operation control
- Standard temperature range –25°C to 70°C
- A choice of Short or Long bodies in Connector or Pre-wired designs

Mfg. Part No.	Sensing Range	Sensing Distance	Stock No.	Price Each 1-24
E2B-M12KS04-M1-B1	4	M12	46X9429	27.18
E2B-M12KS04-M1-B2	4	M12	46X9430	27.18
E2B-M12KS04-M1-C1	4	M12	46X9431	27.18
E2B-M12KS04-M1-C2	4	M12	46X9432	27.18
E2B-M12LS04-M1-B1	4	M12	46X9453	33.97
E2B-M12LS04-M1-B2	4	M12	46X9454	33.97
E2B-M12LS04-M1-C1	4	M12	46X9455	33.97
E2B-M12LS04-M1-C2	4	M12	46X9456	33.97
E2B-M18KS08-M1-B1	8	M18	46X9477	30.58
E2B-M18KS08-M1-B2	8	M18	46X9478	30.58
E2B-M18KS08-M1-C1	8	M18	46X9479	30.58
E2B-M18KS08-M1-C2	8	M18	46X9480	30.58
E2B-M30KS15-M1-B1	15	M30	46X9513	44.17
E2B-M30KS15-M1-B2	15	M30	46X9514	44.17

(212171)

EXTENDED RANGE INDUCTIVE PROXIMITY SENSOR

CE

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

E2EM Series DC 2-wire and 3-wire models provide greater sensing distance and design flexibility. Prewired 2m (6.56′) cable. Voltage supply: 12 to 24VDC. 100mA output. Enclosure rating IP67. 2-wire models have no polarity, eliminating reverse wiring. Models below are normally open; PNP models also available; *go online or call.* CE compliant.

2-WIRE MODELS

Mfg. Part No.	Size	Description	Sensing Distance	Stock No.	Price Each 1-9
E2EM-X30MX1 2M	M30	Unshielded	30mm (1.18″)	19C7889	261.02

(60570)

EXTENDED RANGE DC 3-WIRE PROXIMITY SENSORS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

E2A DC 3-wire proximity sensors provide a sensing distance approximately 1.5 to 2 times longer than standard proximity sensors. Choice of prewired cable or M12 connector. Voltage supply: 12 to 24VDC. Normally open NPN output.

SENSORS WITH M12 CONNECTOR

Mfg. Part No.	Size	Sensing Distance (mm)	Overall Length (mm)	Stock No.	Price Each 1-9	Price Each 10-24
E2AS08KS02M1C1	M8	2	43	41M3223	82.19	74.65
E2AM08LS02M1C1	M8	2	65	41M3218	82.74	75.14
E2AS08KS02M1B1	M8		43	66J6049	83.89	76.83
E2AS08KS02M5B1	M8		43	66J6052	91.33	83.64
E2AM12LS04M1B1	M12	4	70	66J5995	87.19	79.85
E2AM12LN08M1B1	M12	8	70	66J5992	82.72	75.76
E2AM18KS08M1B1	M18		39	66J6006	93.08	85.25
E2AM18KS08M1C1	M18	8	53	41M3219	87.67	79.62
E2AM18LS08M1C1	M18	8	75	41M3220	91.38	82.99
E2AM30KS15M1C1	M30	15	58	41M3221	98.89	89.81
E2AS08LS02M1C1	M8	2	65	41M3224	85.21	77.38
PRE-WIRE SENSORS						
E2A-S08KS02-WP-B1-2M	M8	2	40	10R5211	82.87	77.56
E2A-S08KS02-WP-C1-2M	M8	2	40	32T1370	81.68	76.45
E2A-M12KS04-WP-B1-2M	M12	4	50	10R5205	80.21	75.07
E2A-M12KS04-WP-C1-2M	M12	4	50	10R5206	79.81	74.70
E2A-M18KS08-WP-B1-2M	M18	8	59	10R5207	92.23	86.33
E2A-M18KS08-WP-C1-2M	M18	8	59	10R5208	90.90	85.08

(88425)

TL-W SUBMINIATURE, FLAT-PACK PROXIMITY SENSORS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

Fit tight spaces as small as 0.39″ x 1.06″ (10mm x 27mm). Watertight construction conforms to IEC enclosure type IP67 classification. Ideal for conveyor mounting. Mount directly onto metal base or rail. Rugged, low-profile plastic housing. Prewired with 2m (6.56′) cable length. Mounting bracket included. Inductive, 3-wire DC, 10-30VDC supply, 100mA switching, unshielded. PNP output models also available; *go online or call.* UL registered, CSA certified, CE compliant.

Mfg. Part No.	Sensing Range	Output	Stock No.	Price Each 1-9
TL-W1R5MC1	0.06″ (1.5mm)	NPN	88K2005	85.66
TL-W3MB1	0.12″ (3mm)	PNP	38B1181	90.86
TL-W3MC1	0.12″ (3mm)	NPN	52F4280	90.86
TL-W5MB1	0.19″ (5mm)	PNP	27M2897	77.88
TL-W5MC1	0.19″ (5mm)	NPN	27M2898	78.63

(51877)

E2K-F FLAT-PACK CAPACITIVE PROXIMITY SENSORS

CE

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Flat-pack, thin rectangular plastic DC sensor fits space-confined installations
- Non-contact detection of metallic and non-metallic targets including water, oil, glass, plastic and wood
- Detect level inside non-metallic containers
- 10mm (0.39″) plastic body is ideal for conveyor wall mounting
- Unshielded sensor has LED indicator and fixed sensitivity for simple installation

Built-in DC amplifier provides NPN switching of loads up to 100mA. Supply voltage: 10-30VDC. Prewired with 2m 3-conductor cable. Enclosure ratings include IEC IP66, NEMA 1, 4, 12 and 13.

Mfg. Part No.	Sensing Range (mm)	Output Type	Stock No.	Price 1-4
E2K-F10MC1	10	NPN, NO	27M2369	109.47
E2K-F10MC2	10	NPN, NC	38B202	108.78

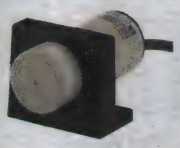
(90316)

CAPACITIVE PROXIMITY SENSORS

NEMA

RoHS Compliant Available

OMRON AUTOMATION & SAFETY



E2K-X standard and **E2K-C series** adjustable range capacitive proximity sensors detect metallic and non-metallic objects such as glass, wood, paper, water, oil, and plastic. Switching up to 200mA. Both versions are unshielded, feature operation indicators, come pre-wired with 6.5′ of cable, and operate in temperatures from -13°F to +158°F. **E2K-C series** adjustable versions have plastic body construction, are 3.23″ (82) long, and include mounting brackets. **E2K-X series** standard versions have threaded plastic body construction and are 3.15″ (80) long with mounting nuts. Diameters are listed in description column. All sensors are CSA certified. **E2K-C series** are UL listed. **E2K-X series** are UL recognized. All meet IEC enclosure IP66 classification and NEMA enclosure types 1, 4, 12, and 13.

ADJUSTABLE RANGE VERSIONS

Mfg. Part No.	Sensing Range	Supply Voltage	Output	Dia. (mm)	Stock No.	Price 1-4
E2K-C25ME1	3-25 mm	10-40VDC	NPN (NO)	34	52F4322	210.02
E2K-C25ME2	3-25 mm	10-40VDC	NPN (NC)	34	52F4323	208.70
E2K-C25MF2	3-25 mm	10-40VDC	NPN (NC)	34	38B200	207.64
E2K-C25MY1	3-25 mm	90-250VAC	SCR (NO)	34	52F4320	260.92
E2K-C25MY2	3-25 mm	90-250VAC	SCR (NO)	34	27M2368	259.30
STANDARD VERSIONS						
E2K-X4ME1	4 mm	10-30VDC	NPN (NO)	M12	41M3226	159.10
E2K-X4ME2	4 mm	10-30VDC	NPN (NC)	M12	52F4329	159.10
E2K-X4MF1	4 mm	10-30VDC	PNP (NO)	M12	38B205	160.42
E2K-X4MY1	4 mm	90-250VAC	SCR (NO)	M12	27M2373	216.37
E2K-X8MF1	8 mm	10-30VDC	PNP (NO)	M18	38B207	172.37
E2K-X8MY1	8 mm	90-250VAC	NPN (NO)	M18	38B208	191.40

CONTINUED

CAPACITIVE PROXIMITY SENSORS (CONT.)

STANDARD VERSIONS

Mfg. Part No.	Sensing Range	Supply Voltage	Output	Dia. (mm)	Stock No.	Price 1-4
● E2K-X15MY1	15 mm	90-250VAC	SCR (NO)	M30	27M2371	216.37
● E2K-X15MY2	15 mm	90-250VAC	SCR (NO)	M30	27M2372	215.03
● E2K-X15ME1	15 mm	10-30VDC	NPN (NO)	M30	27M2370	164.43
● E2K-X15MF1	15 mm	10-30VDC	NPN (NO)	M30	38B204	165.99

(3533)

LIMIT SWITCH STYLE PROXIMITY SENSORS

OMRON AUTOMATION & SAFETY

E2Q2 series offers flexibility with a sensing face that easily changes to any of 5 positions. Installation uses same mounting dimensions as a standard limit switch. Conduit opening: ½-NPT. **E2QWN series** are weld field and noise immune, 9-way configurable with 3-pin micro-connector. Both are shielded except 30mm sensing distance versions. Rugged plastic body and stainless steel screws. Enclosure rating IP67. NO=normally open; NC=normally closed. CE compliant.

Mfg. Part No.	Output Type	Sensing Distance	Supply	Stock No.	Price Each 1-9
E2Q2-N15Y4-51*	SCR (NO or NC)	0.59" (15mm)	20-250VAC	19C7898	284.28
E2Q2N15Y4-U	SCR (NO or NC)	0.59" (15mm)	20-250VDC	98B7939	269.67
E2Q2-N30MF3-U	PNP (NO + NC)	1.18" (30mm)	10-60VDC	19C7902	226.80

*Weld field immune.
(60470)

GX-U/FU 2-WIRE CYLINDRICAL INDUCTIVE PROXIMITY SENSORS

RoHS Compliant Available

Panasonic

- Supply Voltage: 12 to 24VDC +10/-15% Ripple P-P 10% or less
- Current: 800mA or less
- Ambient Temperature: -25°C to +70°C

The GX-U/FU series of cylindrical proximity sensors is a high-performance, easy to use solution for your metal detection needs. It features a robust mounting area that has been improved to accept approx. four times greater tightening torque than that of conventional models. Because the sensor can be securely tightened, it is suitable for use in applications that are susceptible to vibration or shock.

Mfg. Part No.	Sensing Range (mm)	Sensor Output	Stock No.	Price Each 1-9
● GX-5SU	1.5	DC 2 Wire NO	29H2643	78.87
● GX-5SUB	1.5	DC 2 Wire NC	96H3107	78.87
● GX-8MLU	4	DC 2 Wire NO	96H3110	66.10
● GX-8MLUB	4	DC 2 Wire NC	96H3111	66.10
● GX-8MU	2	DC 2 Wire NO	96H3112	69.37
● GX-8MUB	2	DC 2 Wire NC	96H3113	66.10
● GX-12MLU	8	DC 2 Wire NO	25H7975	69.37
● GX-12MLU-J	8		96H3084	80.07
● GX-12MU	3		25H9170	66.10
● GX-12MU-J	3		96H3086	80.07
● GX-12MUB	3	DC 2 Wire NC	25H9171	66.10
● GX-12MUB-J	3		96H3088	80.07
● GX-18MLU	15	DC 2 Wire NO	25H9172	76.10
● GX-18MLU-J	15		96H3090	95.60
● GX-18MLUB	15	DC 2 Wire NC	25H9173	76.10
● GX-18MLUB-J	15		96H3091	95.60
● GX-18MU	7	DC 2 Wire NO	25H9174	76.10
● GX-18MU-J	7		96H3093	95.60
● GX-18MUB	7	DC 2 Wire NC	25H9175	76.10
● GX-18MUB-J	7		96H3095	95.60
● GX-30MLU	22	DC 2 Wire NO	25H9180	90.06
● GX-30MLU-J	22		96H3096	104.15
● GX-30MLUB	22	DC 2 Wire NC	25H9181	90.06
● GX-30MLUB-J	22		96H3097	104.15
● GX-30MU	10	DC 2 Wire NO	25H9182	90.06
● GX-30MU-J	10		96H3098	104.15

➤ CONTINUED ➤

GX-U/FU 2-WIRE CYLINDRICAL INDUCTIVE PROXIMITY SENSORS (CONT.)

Mfg. Part No.	Sensing Range (mm)	Sensor Output	Stock No.	Price Each 1-9
● GX-30MUB	10	DC 2 Wire NC	25H9183	90.06
● GX-30MUB-J	10		96H3100	104.15

(196429)

GX SERIES COMPACT INDUCTIVE PROXIMITY SENSORS

RoHS Compliant Available

Panasonic

- Supply Voltage for GX-4S & GX-5M: 12 to 24VDC +10% Ripple P-P 10% or less
- Supply Voltage for GX-5S, GX-8MB, & GX-8ML: 10 to 30VDC Ripple P-P 10% or less
- Current:15mA or less
- Ambient Temperature: -25°C to +70°C

The GX series of compact inductive proximity sensors is a high-performance, easy to use solution for your metal detection needs. It features a robust mounting area that has been improved to accept a higher tightening torque than that of conventional models. The series features simple a 3-wire DC hookup for quick integration.

Mfg. Part No.	Sensing Range (mm)	Sensor Output	Stock No.	Price Each 1-9
● GX-4S	0.8	NPN NO	25H9184	118.12
● GX-4SB	0.8	NPN NC	25H9185	118.12
● GX-5M	0.8	NPN NO	25H9186	97.91
● GX-5MB	0.8	NPN NC	25H9187	94.28
● GX-5S	1	NPN NO	25H9188	112.58
● GX-5SB	1	NPN NC	25H9189	112.58
● GX-8MB	1	NPN NC	25H9191	95.60
● GX-8ML	2	NPN NO	25H9192	95.60
● GX-8MLB	2	NPN NC	25H9193	95.60

(196430)

GX-F/H SERIES RECTANGULAR INDUCTIVE PROXIMITY SENSORS

RoHS Compliant Available

Panasonic

- Supply voltage: 12 to 24VDC
- Current consumption: 15 mA or less
- Ambient temperature: -25 to +70°C (-13 to +131°F)
- Ambient humidity: 45 to 85 % RH, Storage: 35 to 95 % RH

Introducing the newest member of the rectangular proximity sensor line, the GX-F/H series. This exciting new series offers an unprecidented level of stability, durability, and workability. Using advanced manufacturing techniques, Panasonic is able to create sensors that are minimize part to part variance and offer a detection distance that only varies by a maximum of 0.4mm! The result is an incredibly stable detection that is suitable for usage in high volume applications where precision from installation to installation is imperative.

FRONT SENSING SENSORS

Mfg. Part No.	Sensing Range Max. (mm)	Sensor Output	Stock No.	Price Each 1-9
● GX-F8A	2.5	NPN NO	08N9894	33.88
● GX-F8AI	2.5	NPN NO	08N9896	32.27
● GX-F8B	2.5	NPN NC	08N9898	33.51
● GX-F8BI	2.5	NPN NC	08N9900	32.27
● GX-F8A-P	2.5	PNP NO	08N9895	33.87
● GX-F8AI-P	2.5	PNP NO	08N9897	32.27
● GX-F8B-P	2.5	PNP NC	08N9899	32.27
● GX-F8BI-P	2.5	PNP NC	08N9901	32.27
● GX-F12A	4	NPN NO	08N9886	33.51
● GX-F12AI	4	NPN NO	08N9888	32.27
● GX-F12B	4	NPN NC	08N9890	33.87
● GX-F12BI	4	NPN NC	08N9892	32.27
● GX-F12A-P	4	PNP NO	08N9887	34.24
● GX-F12AI-P	4	PNP NO	08N9889	33.87
● GX-F12B-P	4	PNP NC	08N9891	33.51
● GX-F12BI-P	4	PNP NC	08N9893	32.27
TOP SENSING SENSORS				
● GX-H8A	2.5	NPN NO	08N9910	34.24
● GX-H8AI	2.5	NPN NO	08N9912	32.27
● GX-H8B	2.5	NPN NC	08N9914	32.27
● GX-H8BI	2.5	NPN NC	08N9916	32.27
● GX-H8A-P	2.5	PNP NO	08N9911	32.27
● GX-H8AI-P	2.5	PNP NO	08N9913	32.27
● GX-H8B-P	2.5	PNP NC	08N9915	32.27
● GX-H8BI-P	2.5	PNP NC	08N9917	32.27
● GX-H12A	4	NPN NO	08N9902	32.27

➤ CONTINUED ➤

GX-F/H SERIES RECTANGULAR INDUCTIVE PROXIMITY SENSORS (CONT.)

TOP SENSING SENSORS

Mfg. Part No.	Sensing Range Max. (mm)	Sensor Output	Stock No.	Price Each 1-9
GX-H12AI	4	NPN NO	08N9904	32.27
GX-H12B	4	NPN NC	08N9906	32.27
GX-H12BI	4	NPN NC	08N9908	32.27
GX-H12A-P	4	PNP NO	08N9903	32.27
GX-H12AI-P	4	PNP NO	08N9905	32.27
GX-H12B-P	4	PNP NC	08N9907	32.27
GX-H12BI-P	4	PNP NC	08N9909	32.27

(196456)

CYLINDRICAL RELAY OUTPUT INDUCTIVE PROXIMITY SENSORS

RoHS Compliant Available

PEPPERL+FUCHS SENSING YOUR NEEDS

Specifications

- Supply Voltage: 10-30 VDC, 20-132 VAC
- Max. Relay Switching Voltage: 30 VDC/250 VAC
- Max. Relay Switching Load (Resistive): 6 Amps
- Output Circuit: Form C relay (SPDT)
- Operating Temperature: –14°F to +158°F
- Terminal style: 3 meter cable

Rugged P+F relay output sensors switch load currents to 6 amps. Designed for demanding applications, these products withstand severe mechanical shocks and operate reliably at temperatures down to –40°F.

INDUCTIVE RELAY OUTPUT — DC SUPPLY

Mfg. Part No.	Sensing Range (mm)	Housing Style	Supply Voltage	Stock No.	Price Each 1-2
NBB10-30GK60-AR-3M		M30 x 1	10V to 30V	40K7887	161.63
NBN15-30GK60-AR-3M		M30 x 1	10V to 30V	40K7902	168.18
INDUCTIVE RELAY OUTPUT — AC SUPPLY					
NBN15-30GK60-UR-3M		M30 x 1	20V to 132V	71J6396	203.69

(177027)

PILE DRIVER™ INDUCTIVE PROXIMITY SENSORS FOR HARSH ENVIRONMENTS

RoHS Compliant Available

PEPPERL+FUCHS SENSING YOUR NEEDS

PILE DRIVER

- One piece stainless steel housing
- Last 20x longer than traditional proximity sensors
- Power + output LED indicators
- Ferrous-only setting
- Operating temperature: -14°F to 158°F
- **Extended range models now available**

Additional output and termination styles available; *go online or call*.

3 WIRE NPN & PNP DC OUTPUT TYPES - SUPPLY VOLTAGE: 10-30VDC

Mfg. Part No.	Face Dia. (mm)	Sensing Range (mm)	Load Current (mA)	Termi-nation	Stock No.	Price Each 1-2
NMB1.5-8GM50-E2-FE-V3	8	1.5	100	Pico DC Connector	08J9517	115.06
NMB1.5-8GM35-E0-FE-150MM-V1	8	1.5	100	Micro DC Connector	30M8890	129.54
NMB2-12GM65-E2-FE-V1	12	2	200	Micro DC Connector	70K3914	103.16
NMB8-30GM65-E2-FE-V1	30	8	200	Micro DC Connector	24C3950	120.14
2 WIRE AC/DC OUTPUT TYPE - SUPPLY VOLTAGE: 20-250VAC / 20-300VDC						
NMB5-18GM85-US-FE-V12	18	5	8-300	Dual Key Micro AC Connector	24C3940	198.86
NMB8-30GM85-US-FE-V12	30	8	8-300	Dual Key Micro AC Connector	24C3962	200.56

(69227)

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CYLINDRICAL INDUCTIVE PROXIMITY SENSORS

RoHS Compliant Available

PEPPERL+FUCHS SENSING YOUR NEEDS

- Single LED output status indicator
- Sealing to IP67
- Operating temperature: -14°F to +158°F
- Shielded (embeddable)
- 3-wire PNP output, suffix: -E2
- 3-wire NPN output, suffix: -E0

2 WIRE DC OUTPUT TYPE - SUPPLY VOLTAGE: 5-60 VDC

Mfg. Part No.	Face Dia. (mm)	Range (mm)	Load Current (mA)	Termi-nation	Stock No.	Price Each 1-2
NBB2-12GM40-Z0	12	2	2-100	PVC Cable	22C9477	73.48
NBB2-12GM40-Z0-V1	12	2	2-100	Micro DC Connector	24C2530	74.26
3 WIRE DC NPN AND PNP OUTPUT TYPES - SUPPLY VOLTAGE: 10-30VDC						
NBB2-8GM50-E0	8	2	100	PVC Cable	24C2557	86.76
NBB2-8GM50-E2	8	2	100	PVC Cable	24C2558	85.86
NBB2-8GM40-E2-V1	8	2	100	Micro DC Connector	24C2556	84.96
NBB2-12GM50-E0	12	2	200	PVC Cable	23C1491	73.48
NBB2-12GM50-E2-V1	12	2	100	Micro DC Connector	24C2539	75.05
NBB4-12GM50-E0	12	4	200	PVC Cable	24C2565	90.50
NBB4-12GM50-E0-V1	12	4	200	Micro DC Connector	24C2566	90.50
NBB4-12GM50-E2-V1	12	4	200	Micro DC Connector	24C2568	90.50
NBB4-12GM50-E2	12	4	200	PVC Cable	24C2567	89.55
NBB5-18GM50-E0	18	5	200	PVC Cable	23C1506	82.08
NBB5-18GM50-E2	18	5	100	PVC Cable	23C1512	81.24
NBB5-18GM50-E2-V1	18	5	100	Micro DC Connector	24C2591	80.37
NBB8-18GM50-E0	18	8	200	PVC Cable	24C2622	100.94
NBB10-30GM50-E2	30	10	100	PVC Cable	24C2640	88.44
2 WIRE AC OUTPUT TYPE - SUPPLY VOLTAGE: 20-250 VAC						
NBB2-12GM60-WS	12	2	5-200	PVC Cable	23C1517	133.43
NBB2-12GM60-WS-V12	12	2	5-200	Dual Key Micro AC Connector	24C2549	133.43
NBB5-18GM60-WS	18	5	5-200	PVC Connector	23C1553	146.09
NBB10-30GM50-WS	30	25	5-200	PVC Cable	20K1862	169.91

(69211)

LIMIT SWITCH STYLE INDUCTIVE PROXIMITY SENSORS

RoHS Compliant Available

PEPPERL+FUCHS SENSING YOUR NEEDS

- Input voltage: 20-250 VAC; 45-65 Hz
- Max. load current: 500 mA
- Operating temperature: -14°F to +158°F
- 5 position head style for easy mounting
- Conduit opening: ½" NPT
- Dimensions: 118 x 40 x 40 mm
- Screw terminal termination
- Dual LED status indicators for power and output
- IP67/68 sealing

P+F limit switch style inductive sensors mount in the same footprint as traditional mechanical limit switches. Their sensing ranges extend from 15 mm to 40 mm. They are available in multiple output configurations. P+F sensors utilize state-of-the-art technology to achieve unparalleled product reliability. Replace mechanical limit switches with solid-state sensing and switching.

2 WIRE AC FULL SIZE LIMIT SWITCH N.O. OR N.C. OUTPUT - SUPPLY VOLTAGE 20-250VAC

Mfg. Part No.	Sensing Face Size (mm)	Sensing Range (mm)	Load Current (mA)	Stock No.	Price Each 1-2
NJ15+U4+W*	40 x 40	15	8-500	24C3549	210.23
NJ20+U4+W	40 x 40	20	8-500	23C1556	207.04
NJ30+U4+W	40 x 40	30	8-500	24C3720	219.36
NBN40-U4-E2	40 x 40	40	200	74R1042	147.73
4 WIRE DC FULL SIZE LIMIT SWITCH PNP N.O. OR N.C. OUTPUT - SUPPLY VOLTAGE 10-60VDC					
NBB20-U4-A2	40 x 40	20	200	74R1040	159.09
NBN40-U4-A2	40 x 40	40	200	74R1041	159.09

*Shielded

(69228)

SENSORS – PROXIMITY

CAPACITIVE PROXIMITY SENSORS

FM

RoHS Compliant Available

PEPPERL+FUCHS SENSING YOUR NEEDS

3-Wire DC

2-Wire AC

- Operating temperature: -14 °F to +140 °F
- Max. Load Current: 100 mA
- Sensor Protection: Short-Circuit, Overload, Reverse Polarity
- Detects both conductive and nonconductive objects, such as liquids, plastics, wood, glass and other materials

3-WIRE DC OUTPUT TYPES — NORMALLY OPEN PNP VERSIONS

Mfg. Part No.	Sensing Face Diameter	Sensing Range	Load Current (mA)	Supply Voltage (VDC)	Stock No.	Price Each 1-4
CJ 8-18GM-E2	18mm	8mm	300	10-30	34C2330	264.52
● CBN10-F46-E0	...	10mm	...	10-10	08J5921	111.36

2-WIRE AC OUTPUT TYPES — SUPPLY VOLTAGE 20-250VAC/45-60HZ

Mfg. Part No.	Sensing Face Diameter	Sensing Range	Load Current (mA)	Housing	Stock No.	Price Each 1-2
● CJ10-30GK-WS	30mm	10mm	200	Plastic	27C9511	197.14
CJ10-30GM-WS	30mm	10mm	200	Nickel-Plated Brass	25C4030	314.90

3-WIRE DC OUTPUT TYPES - NORMALLY OPEN NPN VERSION

Mfg. Part No.	Sensing Distance (mm)	Supply Voltage (VDC)	Max. Current (mA)	Max. Frequency (Hz)	Stock No.	Price Each 1-2
CBN5-F46-E0	10	10-30	100	5	03H4153	107.03

3-WIRE DC OUTPUT TYPES - NORMALLY OPEN PNP VERSION

CBN5-F46-E0	5	10-30	100	10	03H4153	107.03
CBN5-F46-E2	5			10	03H4154	107.03
CBN10-F46-E2	10			5	08J5922	107.03

15MM NON-FLUSH TYPES - NORMALLY OPEN/NORMALLY CLOSED NPN VERSION

Mfg. Part No.	Supply Voltage (VDC)	Max. Current (mA)	Max. Frequency (Hz)	Stock No.	Price Each 1-2
CBN15-30GK60-A0	10-30	200	10	73T6390	131.06

15MM NON-FLUSH TYPES - NORMALLY OPEN/NORMALLY CLOSED PNP VERSION

CBN15-30GK60-A2	10-30	200	10	40P4069	131.06
CCN15-30GS60-A2-V1	10-60	200	10	73T6397	180.20

(73252)

SENSOR MOUTNING BRACKETS

RoHS Compliant Available

PEPPERL+FUCHS SENSING YOUR NEEDS

- Brackets available for all diameter cylindrical sensors
- Simplifies mounting and sensor adjustment
- Secure fastening and durable

UNIVERSAL BRACKET

Mfg. Part No.	Sensor Diameter (mm)	Stock No.	Price Each 1-2
● BF5-30	5-30	24C2396	31.83

RIGHT ANGLE BRACKET

● AB-12	12	24C2378	7.07
● AB-18	18	24C2379	7.79
● AB-30	30	24C2380	9.42

CUSHION MOUNTING BRACKET

● CM-08	8	24C2419	57.84
● CM-12	12	24C2420	70.04
● CM-18	18	24C2422	64.51
● CM-30	30	24C2424	75.63

(67084)

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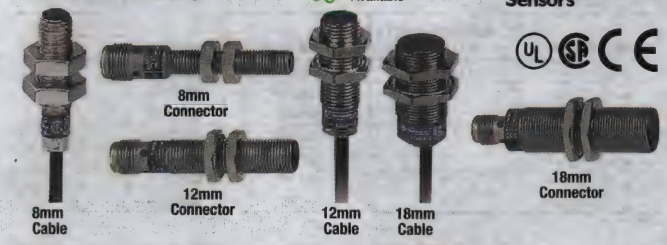
(212570)

OSISENSE® XS INDUCTIVE PROXIMITY SENSORS

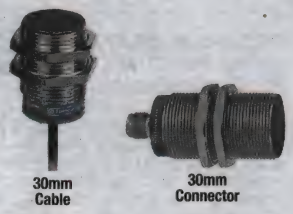
RoHS Compliant Available

Telemecanique Sensors



Features

- Increased range (x2), sensing distance easier to adjust
- All standard diameters (complete range, from ∅ 6 to ∅ 30 mm)
- Long and short product lengths to meet the most demanding dimension standards on the market
- DC and AC/DC versions available for maximum flexibility
- Meet the International Electrotechnical Commission (IEC) standards , NEMA, UL, CSA, VDE and more
- Nickel plated brass housing
- Short barrel body style



Specifications

- Voltage range: 12 to 24 VDC
- Load current max.: 200 mA
- Temperature range: -20°C to 70°C
- Cable size: 2m (6.56ft)
- NEMA 4X (indoor use only)
- M12 connector type

Enable sensing, without physical contact, of metal objects. Their range of applications is very extensive and includes:monitoring the position of machine parts (cams, end stops, etc.), counting the presence of metal objects, etc. Advantages of OsiSense® XS Inductive proximity sensors: High operating rates. Fast response. Excellent resistance to industrial environments (robust products, fully encapsulated in resin). Solid-state technology: no moving parts, therefore service life of sensor not related to number of operating cycles.

8MM SENSORS

Mfg. Part No.	Circuit Type	Output Mode	Detecting Distance (mm)	Operating Frequency (kHz)	Sensor Terminals	Stock No.	Price Each
XS508B1NAL2	NPN	NO	1.5	5kHz	Cable	20K4733	107.62
● XS508B1NAM12	NPN	NO	1.5	5kHz	M12	11R8090	123.71
● XS508B1PAL2	PNP	NO	1.5	5kHz	Cable	20K4735	108.55
● XS508B1PAM12	PNP	NO	1.5	5kHz	M12	48M6088	123.71
● XS508B1PAM8	PNP	NO	1.5	5kHz	M8	89H6703	123.71

12MM DIAMETER SENSORS

● XS512B1NAL2	NPN	NO	2	5kHz	Cable	20K4739	87.09
● XS512B1PAL2	NPN	NO	2	5kHz	M12	83H5072	87.09
● XS512B1NAM12	PNP	NO	2	5kHz	Cable	89H6707	94.21
● XS512B1PAM12	PNP	NO	2	5kHz	M12	89H6709	99.86

18MM DIAMETER SENSORS

● XS518B1NAL2	NPN	NO	5	2kHz	Cable	20K4744	101.28
● XS518B1PAL2	NPN	NO	5	2kHz	M12	20K4746	102.44
● XS518B1NAM12	PNP	NO	5	2kHz	Cable	89H6713	116.15
● XS618B1NAL2	NPN	NO	8	1kHz	Cable	58T0770	113.90

30MM DIAMETER SENSORS

● XS530B1NAL2	NPN	NO	10	1kHz	Cable	20K4750	105.08
● XS530B1PAL2	NPN	NO	10	1kHz	M12	20K4752	105.08
● XS530B1NAM12	PNP	NO	10	1kHz	Cable	89H6719	119.59
● XS530B1PAM12	PNP	NO	10	1kHz	M12	89H6721	119.59

(192091)

OSISENSE™ XS INDUCTIVE PROXIMITY SENSORS

NEW

RoHS Compliant Available

Telemecanique Sensors

Type	Sensing Range Max (mm)	Voltage Range	Stock No.	Price Each 1-24
● XS7C4A1MPP20	15	24 - 240	19X7181	225.23
● XS8C4A1MPP20	20	24 - 240	19X7187	230.69
● XS8C4A1NCP20	20	12 - 48	19X7189	178.82
● XS8C4A1PCM12	20	12 - 48	19X7191	178.82
● XS8C4A1PCP20	20	12 - 48	19X7192	178.82
● XS8C4A4NCP20	40	12 - 48	19X7194	197.93
● XS8C4A4PCM12	40	12 - 48	19X7196	197.93
● XS8C4A4PCP20	40	12 - 48	19X7197	197.93

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OSISENSE™ XS INDUCTIVE PROXIMITY SENSORS - CYLINDRICAL

Telemecanique Sensors

OsiSense® XS9 stainless steel inductive proximity sensors are tough enough for your harsh industrial application and environment. Manufactured with unique one-piece stainless steel housing they are highly resistant to mechanical shock and vibration. OsiSense XS9 stainless steel inductive sensors are offered in 303 stainless for harsh duty industrial environment and corrosion resistant 316L for Food & Beverage applications. Both 303 and 316L versions meet IP69K for high pressure chemical and water wash down applications. Thanks to Factor 1 sensing feature, both ferrous and non-ferrous material can be detected from the same distance. They are offered in both flush and non-flush versions to fulfill all application mounting requirements. With a sensing distance up to 40mm, **OsiSense XS9** ensures reliable detection in most critical applications. This "3 times" sensing distance also provides a fast and simple set-up and reduces potential exposure to impact. With a high switching frequency this sensor allows you to detect rapidly and precisely fast moving metal parts. Operating frequency is 3 to 6 times higher than standard inductive sensors to give more accuracy to small objects detection.

Mfg. Part No.	Diameter (mm)	Connection	Sensing Distance	Discrete Output	Wiring Technique	Stock No.	Price 1-24
FLUSH MOUNTABLE - STAINLESS STEEL 303							
XS908R1PAM12	8	M12 Connector	3mm	NO/PNP	3-wire	48W7410	187.01
XS912R1PAM12	12	M12 Connector	6mm	NO/PNP	3-wire	48W7412	176.09
XS918R1PAM12	18	M12 Connector	10mm	NO/PNP	3-wire	48W7416	187.01
XS930R1PAM12	30	M12 Connector	20mm	NO/PNP	3-wire	48W7420	200.66
FLUSH MOUNTABLE - STAINLESS STEEL 316L							
XS912S1PAM12	12	M12 Connector	6mm	NO/PNP	3-wire	48W7414	181.55
XS918S1PAM12	18	M12 Connector	10mm	NO/PNP	3-wire	48W7418	189.74
XS930S1PAM12	30	M12 Connector	20mm	NO/PNP	3-wire	48W7422	203.39
NON FLUSH MOUNTABLE - STAINLESS STEEL 303							
XS908R4PAM12	8	M12 Connector	6mm	NO/PNP	3-wire	48W7411	206.84
XS912R4PAM12	12	M12 Connector	10mm	NO/PNP	3-wire	48W7413	187.01
XS918R4PAM12	18	M12 Connector	20mm	NO/PNP	3-wire	48W7417	197.93
XS930R4PAM12	30	M12 Connector	40mm	NO/PNP	3-wire	48W7421	221.10
NON FLUSH MOUNTABLE - STAINLESS STEEL 316L							
XS912S4PAM12	12	M12 Connector	10mm	NO/PNP	3-wire	48W7415	189.74
XS918S4PAM12	18	M12 Connector	20mm	NO/PNP	3-wire	48W7419	203.39
XS930S4PAM12	30	M12 Connector	40mm	NO/PNP	3-wire	48W7423	211.58

(210239)

OSISENSE™ XS INDUCTIVE PROXIMITY SENSORS - RECTANGULAR

RoHS Compliant Available

Telemecanique Sensors

- Simple installation, easier maintenance: One-click concept makes operation and servicing easier
- Robustness and compliance with SIL2: The first general purpose proximity sensor with SIL2 certification (Safety Integrity Level 2)
- Selection guide: Easily select the product best suited to your application

A sensor that adapts quickly and easily to your machines. With unique one-click mounting and a rotating detection head, the new **OsiSense™ XS** cubic sensor can be installed quickly and easily on your machines or equipment. The orientation of the head can be adjusted manually and quickly without any special tools. Maintenance is simplified thanks to quick mounting and removal, as well as LED indicators of sensor status that are clearly visible from a long distance and from any direction.

Mfg. Part No.	Dimensions (mm)	Cable Entry	Sensing Distance	Output Signal Type	Wiring Technique	Stock No.	Price 1-24
FLUSH MOUNTABLE IN METAL							
XS7C2A1MAU20	40x40x70	M20	15mm	NO	2-wire	47W9324	146.06
XS8C2A1MAU20	40x40x70	M20	20mm	NO	2-wire	47W9327	156.98
XS8C2A1PCM12	40x40x70	1/2" NPT	20mm	PNP NO+NC	4-wire	47W9328	108.68
XS7C4A1MPN12	40x40x117	1/2" NPT	15mm	NO or NC	2-wire	47W9325	225.23
XS8C4A1MPN12	40x40x117	1/2" NPT	20mm	NO or NC	2-wire	47W9332	241.07
XS8C4A1PCN12	40x40x117	1/2" NPT	20mm	PNP NO+NC	4-wire	47W9333	192.47
NON-FLUSH MOUNTABLE IN METAL							
XS9C2A2A1M12	40x40x70	M12	25mm	0-10V	3-wire	47W9337	234.78
XS9C2A2A2M12	40x40x70	M12	25mm	4-20mA	2-wire	47W9338	234.78
XS8C2A4MAU20	40x40x70	M20	40mm	NO	2-wire	47W9329	163.80
XS8C2A4NCM12	40x40x70	M12	40mm	NPN NO+NC	4-wire	47W9330	108.68
XS8C2A4PCM12	40x40x70	M12	40mm	PNP NO+NC	4-wire	47W9331	108.68
XS9C4A2A1N12	40x40x117	1/2" NPT	25mm	0-10V	3-wire	47W9339	257.99
XS9C4A2A1P20	40x40x117	M20	25mm	0-10V	3-wire	47W9340	257.99
XS9C4A2A2N12	40x40x117	1/2" NPT	25mm	4-20mA	2-wire	47W9341	257.99
XS9C4A2A2P20	40x40x117	M20	25mm	4-20mA	2-wire	47W9342	257.99
XS8C4A4MPN12	40x40x117	1/2" NPT	40mm	NO or NC	2-wire	47W9334	256.76
XS8C4A4NCN12	40x40x117	1/2" NPT	40mm	NPN NO+NC	4-wire	47W9335	200.66
XS8C4A4PCN12	40x40x117	1/2" NPT	40mm	PNP NO+NC	4-wire	47W9336	200.66

(210234)

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XS6 INDUCTIVE PROXIMITY SENSORS

RoHS Compliant Available

Schneider Electric

Telemecanique Sensors

- Increased range (x2), sensing distance easier to adjust
- All standard diameters (complete range, from ∅ 8 to ∅ 30 mm)
- Long product lengths to meet the most demanding dimension standards on the market
- DC and AC/DC versions available for maximum flexibility
- Subjected to climatic cycle tests: -25°C to +70 °C (-13°F to 158°F) cycle, 95% RH
- Solid-State Output with Yellow LED state indicator
- Flush mountable / shielded
- Switching capacity: 200mA with overload and short-circuit protection
- Resistance to environment– IP 67 and IP 68 for pre-cabled versions

XS Inductive proximity sensors enable sensing, without physical contact, of metal objects. Their range of applications is very extensive and includes: monitoring the position of machine parts (cams, end stops, etc.), counting the presence of metal objects, etc. Advantages of OsiSense XS Inductive proximity sensors: High operating rates. Fast response. Excellent resistance to industrial environments (robust products, fully encapsulated in resin). Solid-state technology: no moving parts, therefore service life of sensor not related to number of operating cycles.

Mfg. Part No.	Detecting Distance	Circuit Type	Output Mode	Connector Type	Stock No.	Price Each 1-24
3-WIRE DC 12 TO 48V						
XS608B1NAL2	2.5mm	NPN	NO	2M Cable	89H6723	118.56
XS608B1NAM12	2.5mm	NPN	NO	M12	89H6724	134.81
XS608B1PAL2	2.5mm	PNP	NO	2M Cable	89H6726	118.56
XS608B1PAM12	2.5mm	PNP	NO	M12	89H6727	135.99
XS612B1NAL2	4mm	NPN	NO	2M Cable	89H6733	88.98
XS612B1NAM12	4mm	NPN	NO	M12	89H6734	106.93
XS612B1NBL2	4mm	NPN	NC	2M Cable	20K4756	94.32
XS612B1PAL2	4mm	PNP	NO	2M Cable	89H6736	93.25
XS612B1PAM12	4mm	PNP	NO	M12	89H6737	106.01
XS612B1PBM12	4mm	PNP	NC	M12	89H6738	106.93
XS618B1NAM12	8mm	NPN	NO	M12	89H6743	129.02
XS618B1PAL2	8mm	PNP	NO	2M Cable	89H6745	114.41
XS618B1PAM12	8mm	PNP	NO	M12	89H6746	129.02
XS618B1PBM12	8mm	PNP	NC	M12	89H6747	123.46
XS618B1MAL5	8mm	PNP	NO	5M Cable	34M0468	126.78
XS630B1NAL2	15mm	NPN	NO	2M Cable	81H4071	122.02
XS630B1NAM12	15mm	NPN	NO	M12	89H6752	139.48
XS630B1PAL2	15mm	PNP	NO	2M Cable	20K4762	120.19
XS630B1PAM12	15mm	PNP	NO	M12	89H6754	139.48
2-WIRE AC-DC 24 TO 240 VAC						
XS612B1MAL2	4mm	AC/DC	NO	2M Cable	89H6729	100.52
XS612B1MAU20	4mm	AC/DC	NO	U20	89H6730	117.37
XS612B1MBL2	4mm	AC/DC	NC	2M Cable	89H6731	102.56
XS618B1MAL2	8mm	AC/DC	NO	2M Cable	89H6740	120.97
XS618B1MBL2	8mm	AC/DC	NC	2M Cable	20K4758	122.02
XS630B1MAL2	15mm	AC/DC	NO	2M Cable	89H6748	132.77
XS630B1MAU20	15mm	AC/DC	NO	1/2-20 unf	89H6749	146.81
XS630B1MBL2	15mm	AC/DC	NC	2M Cable	89H6750	129.00

(196509)

UPROX+ INDUCTIVE PROXIMITY SENSORS

TURCK

Industrial Automation

BI4U

Features:
- Replaces conventional wound coil system used in previous generation of sensors
- Sensing distances up to 250% higher than conventional ferrite core
- 4-pin M12 Eurofast Q.D. termination
- Short-circuit and overload protection incorporated
- Reverse polarity and wire-break protection
- LEDs indicate: Output energized and short circuit warning

Specifications:
- Environmental rating: NEMA 1, 3, 4, 4x, 6, 13; IP68
- Operating temperature: -13°F to 167°F ("WD style" 32°F to 185°F)
- Continuous load current: 200mA
- Voltage drop: 1.8VDC at 200mA
- Input voltage: 10-30VDC
- Normally open output
- Threaded barrel style

Mfg. Part No.	Sensing Distance (mm)	Sensing Face Dia. (mm)	Output Type	Housing Material	Stock No.	Price Each
EMBEDDABLE						
BI4U-EM12WD-AN6X-H1141*	4	12	NPN	Stainless Steel	41M2086	119.60
BI4U-EM12WD-AP6X-H1141*	4	12	PNP	Stainless Steel	41M2087	119.60

CONTINUED

UPROX+ INDUCTIVE PROXIMITY SENSORS (CONT.)

Mfg. Part No.	Sensing Distance (mm)	Sensing Face Dia. (mm)	Output Type	Housing Material	Stock No.	Price Each
BI4U-MT12-AP6X-H1141	4	12	PNP	Teflon Coated	41M2089	98.40
BI8U-EM18-AP6X-H1141	8	18	PNP	Stainless Steel	41M2133	100.50
BI15U-EM30WD-AP6X-H1141*	15	30	PNP	Stainless Steel	41M2181	135.30
BI15U-MT30-AN6X-H1141	15	30	NPN	Teflon Coated	41M2182	101.00

* Washdown - IP67, IP68, IP69K
(91197)

4-30 MM BARREL DC INDUCTIVE PROXIMITY SENSORS 3-WIRE

RoHS Compliant Available

TURCK works
Industrial Automation

Specifications:
- Environmental rating: NEMA 1, 3, 4, 6, 13; IP67
- Operating temperature: -13°F to 158°F
- Voltage Drop: 1.8 VDC at Max. Load Current

EH, EG and G Barrel with Potted-In Cable

M Barrel with Quick Disconnect

EG and G Barrel with Quick Disconnect

Features:
- Choice of Barrer with Potted-In Cable, M8 (picofast), M12 (eurofast), Quick-Disconnect or Terminal Chamber
- Short-Circuit and Overload Protected
- Reverse Polarity and Wire Break Protection
- LED Indicator: Output Energized (Additional Power on LED, Terminal Chamber Versions)
- Normally Open Output

G SK Barrel with Terminal Chamber

M Barrel with Potted-In Cable

Solve space problems with picprox miniature inductive proximity sensors. Perfect for positioning control, small parts placement, robotic grippers, counting, inspecting, and other applications where space is a problem. Self contained DC units switch 100 mA loads with tiny 4 mm, 5 mm, 6.5 mm and 8 mm diameter housings with built-in LEDs.

Mfg. Part No.	Sensing Distance (mm)	Sensing Face Dia. (mm)	Output Type	Max. Load Current (mA)	Termination	Stock No.	Price Each
BI 1-EH04-AP6X	1	4	PNP	100	2 m Cable	41M2041	128.70
BI 1-EH04-AN6X	1	4	NPN	100	2 m Cable	41M2039	128.70
BI 1-EH04-AN6X-V1331	1	4	NPN	100	3-pin picofast	41M2040	128.70
BI 1-EG05-AP6X	1	5	PNP	100	2 m Cable	41M2037	128.70
BI 1-EG05-AN6X	1	5	NPN	100	2 m Cable	41M2035	128.70
BI 1-EG05-AP6X-V1331	1	5	PNP	100	3-pin picofast	41M2038	128.70
BI 1-EG05-AN6X-V1331	1	5	NPN	100	3-pin picofast	41M2036	128.70
● BI 1.5-EH6.5-AP6X	1.5	6.5	PNP	150	2 m Cable	41M2027	98.90
● BI 1.5-EH6.5-AN6X	1.5	6.5	NPN	150	2 m Cable	41M2025	98.90
● BI 1.5-EH6.5-AP6X-V1131	1.5	6.5	PNP	150	3-pin picofast	41M2028	98.90
● BI 1.5-EH6.5-AN6X-V1131	1.5	6.5	NPN	150	3-pin picofast	41M2026	98.90
● BI 1.5-EH6.5-AP6X	1.5	6.5	PNP	150	2 m Cable	41M2027	98.90
● BI 1.5-EH6.5-AN6X	1.5	6.5	NPN	150	2 m Cable	41M2025	98.90
● BI 1.5-EH6.5-AP6X-V1131	1.5	6.5	PNP	150	3-pin picofast	41M2028	98.90
● BI 1.5-EH6.5-AN6X-V1131	1.5	6.5	NPN	150	3-pin picofast	41M2026	98.90
● BI 2-EG08-AP6X	2	8	PNP	150	2 m Cable	99M0979	113.20
● BI 2-EG08-AP6X-V1131	2	8	PNP	150	3-pin picofast	64M0775	113.20
● BI 2-EG08-AN6X-V1131	2	8	NPN	150	3-pin picofast	99M0978	113.20
● BI 2-EG08-AP6X-H1341	2	8	PNP	150	4-pin picofast	55M3552	113.20
● BI 2-EG08-AN6X-H1341	2	8	NPN	150	4-pin picofast	64M5010	113.20
● NI 3-EG08-AN6X	3	8	NPN	170	2 m Cable	99M1010	98.90
● NI 3-EG08-AP6X-V1131	3	8	PNP	170		84M4053	98.90
● NI 3-EG08-AP6X-H1341	3	8	PNP	170	4-pin eurofast	99M1013	98.90
● NI 3-EG08-AN6X-H1341	3	8	NPN	170	4-pin eurofast	99M1011	98.90
● BI 4-M12-AP6X	4	12	PNP	200	2 m Cable	41M2078	93.10
● BI 4-M12-AN6X	4	12	NPN	200	2 m Cable	41M2076	93.10
● BI4-M12-AP6X-H1141	4	12	PNP	200	4-pin eurofast	41M2079	93.10
● NI5-G12-AN6X-H1141	5	12	NPN	200	4-pin eurofast	41M3630	84.30
● NI8-M12-AP6X-H1141	8	12	PNP	200	4-pin eurofast	01N3955	93.10

➤ CONTINUED ➤

4-30 MM BARREL DC INDUCTIVE PROXIMITY SENSORS 3-WIRE (CONT.)

Mfg. Part No.	Sensing Distance (mm)	Sensing Face Dia. (mm)	Output Type	Max. Load Current (mA)	Termination	Stock No.	Price Each
● NI8-M12-AN6X-H1141	8	12	NPN	200	4-pin eurofast	41M3640	93.10
● BI5-M18-AP6X-H1141	5	18	PNP	200	4-pin eurofast	41M2104	100.70
BI 5-G18SK-AN6X2	5	18	NPN	200	Terminal Chamber	41M2099	118.40
● BI8-M18-AP6X-H1141	8	18	PNP	200	4-pin eurofast	41M2127	109.30
● NI10-M18-AP6X-H1141	10	18	PNP	200	4-pin eurofast	41M3662	100.70
● NI10-G18SK-AP6X2	10	18	PNP	200	Terminal Chamber	41M3660	118.40
NI10-G18SK-AN6X2	10	18	NPN	200	Terminal Chamber	41M3659	118.40
NI10-G18-AN6X 50MM	10	18	NPN	200	2m Cable	41M3837	100.70
NI14-M18-AN6X	14	18	NPN	200	2 m Cable	41M3682	109.30
● NI14-M18-AP6X-H1141	14	18	PNP	200	4-pin eurofast	41M3685	109.30
NI14-M18-AN6X-H1141	14	18	NPN	200	4-pin eurofast	41M3683	109.30
● BI10-M30-AP6X-H1141	10	30	PNP	200	4-pin eurofast	41M2151	100.70
● BI10-G30SK-AP6X2	10	30	PNP	200	Terminal Chamber	41M2147	119.40
BI10-G30SK-AN6X2	10	30	NPN	200	Terminal Chamber	41M2146	119.40
BI15-M30-AP6X-H1141	15	30	PNP	200	4-pin eurofast	41M2171	109.30
● NI15-G30-AP6X	15	30	PNP	200	2 m Cable	41M3691	100.70
● NI15-G30SK-AP6X2	15	30	PNP	200	Terminal Chamber	41M3693	119.40

(113752)

8-30 MM UPROX+ BARREL DC INDUCTIVE PROXIMITY SENSORS 3-WIRE

RoHS Compliant Available

TURCK works
Industrial Automation

EG Barrel with Potted-In Cable

EG Barrel with Quick Disconnect

M Barrel with Potted-In Cable

M Barrel with Quick Disconnect

Features:
- Choice of Barrel with Potted-In Cable or M8 (picofast), M12 (eurofast) Quick Disconnect
- Short-Circuit and Overload Protected Incorporated
- Reverse Polarity and Wire-Break Protection
- LED Indicator: Output Energized and Short-Circuit Warning
- Normally Open Output

Specifications:
- Environmental rating: NEMA 1, 3, 4, 4x, 6, 13; IP67
- Operating temperature: -13°F to 158°F
- Continuous load current: 200mA
- Voltage drop: 1.8VDC at 200mA
- Input voltage: 10-30VDC

Mfg. Part No.	Sensing Distance (mm)	Sensing Face Dia. (mm)	Output Type	Termination	Stock No.	Price Each
● BI 2U-EG08-AP6X	2	8	PNP	2m Cable	99M0983	93.80
● BI 2U-EG08-AN6X	2	8	NPN	2m Cable	99M0980	97.10
● BI 2U-EG08-AP6X-V1131	2	8	PNP	3-pin picofast	99M0985	97.10
● BI 2U-EG08-AN6X-V1131	2	8	NPN	3-pin picofast	03P2076	97.10
● BI 2U-EG08-AP6X-H1341	2	8	PNP	4-pin eurofast	99M0984	97.10
● BI 2U-EG08-AN6X-H1341	2	8	NPN	4-pin eurofast	99M0981	97.10
● NI 6U-EG08-AP6X	6	8	PNP	2m Cable	99M1023	102.00
● NI 6U-EG08-AN6X	6	8	NPN	2m Cable	99M1020	108.80
● NI 6U-EG08-AP6X-V1131	6	8	PNP	3-pin picofast	99M1025	108.80
● NI 6U-EG08-AN6X-V1131	6	8	NPN	3-pin picofast	99M1022	108.80
● NI 6U-EG08-AP6X-H1341	6	8	PNP	4-pin eurofast	99M1024	102.00
● NI 6U-EG08-AN6X-H1341	6	8	NPN	4-pin eurofast	99M1021	105.60
BI 4U-M12-AP6X	4	12	PNP	2m Cable	99M0989	81.50
BI 4U-M12-AN6X	4	12	NPN	2m Cable	99M0986	76.00
BI 4U-M12-AP6X-V1131	4	12	PNP	3-pin picofast	99M0991	81.50
BI 4U-M12-AN6X-V1131	4	12	NPN	3-pin picofast	99M0988	76.00
BI 4U-M12-AP6X-H1141	4	12	PNP	4-pin eurofast	99M0990	81.50
BI 4U-M12-AN6X-H1141	4	12	NPN	4-pin eurofast	99M0987	76.00
NI 10U-M12-AP6X	10	12	PNP	2m Cable	99M1003	76.00
NI 10U-M12-AN6X	10	12	NPN	2m Cable	99M1000	76.00
NI 10U-M12-AP6X-V1131	10	12	PNP	3-pin picofast	99M1005	76.00

➤ CONTINUED ➤

8-30 MM UPROX+ BARREL DC INDUCTIVE PROXIMITY SENSORS 3-WIRE (CONT.)

Mfg. Part No.	Sensing Distance (mm)	Sensing Face Dia. (mm)	Output Type	Termination	Stock No.	Price Each
NI 10U-M12-AN6X-V1131	10	12	NPN	3-pin picofast	99M1002	76.00
BI 8U-M18-AP6X	8	18	PNP	2m Cable	99M0996	89.00
BI 8U-M18-AN6X	8	18	NPN	2m Cable	99M0994	89.00
BI 8U-M18-AP6X-H1141	8	18	PNP	4-pin eurofast	99M0997	98.40
BI 8U-M18-AN6X-H1141	8	18	NPN	4-pin eurofast	99M0995	95.50
NI 15U-M18-AP6X	15	18	PNP	2m Cable	99M1008	89.00
NI15U-M18-AN6X	15	18	NPN	2m Cable	99M1006	98.40
NI15U-M18-AP6X-H1141	15	18	PNP	4-pin eurofast	41M3709	98.40
NI 15U-M18-AN6X-H1141	15	18	NPN	4-pin eurofast	99M1007	89.00
BI 15U-M30-AP6X	15	30	PNP	2m Cable	99M0975	89.00
BI 15U-M30-AN6X	15	30	NPN	2m Cable	99M0973	102.00
BI 15U-M30-AP6X-H1141	15	30	PNP	4-pin eurofast	99M0976	89.00
BI 15U-M30-AN6X-H1141	15	30	NPN	4-pin eurofast	99M0974	92.20
NI 30U-M30-AP6X	30	30	PNP	2m Cable	99M1016	89.00
NI 30U-M30-AN6X	30	30	NPN	2m Cable	99M1014	96.43
NI 30U-M30-AP6X-H1141	30	30	PNP	4-pin eurofast	99M1017	89.00
NI 30U-M30-AN6X-H1141	30	30	NPN	4-pin eurofast	99M1015	89.00

(113758)

12-30 MM BARREL AC/DC INDUCTIVE PROXIMITY SENSORS - 2-WIRE

RoHS Compliant Available

TURCK works

Industrial Automation

Features:
- Choice of Barrel with Potted-In Cable or ⅞-16 (minifast) or ½-20 (microfast) Quick Disconnect
- Short-Circuit and Overload Protected
- LED Indicator: Output Energized, Short-Circuit and Power-On (For M12 Only Output Energized)

Specifications:
- Environmental rating: NEMA 1, 3, 4, 6, 13; IP67
- Operating temperature: -13°F to 158°F;
- Voltage drop: 6.0 VDC at Full Rated Current
- Max. Leakage Current: 1.7 mA
- Input voltage: 20-250 VAC, 10-300 VDC
- Max. Load Current: AC 400mA, DC 300mA
- Output type: AC/DC

G Barrel with Quick Disconnect — G Barrel with Potted-In Cable

Mfg. Part No.	Sensing Distance (mm)	Sensing Face Dia. (mm)	Max. Load Current (mA, AC/DC)	Termination	Stock No.	Price Each
BI 4-G12-ADZ32X	4	12	400/300	2 m Cable	41M2074	140.00
● BI4-G12-ADZ32X-B3131	4	12	400/300	3-pin micofast	41M2075	140.00
NI 8-G12-ADZ32X	8	12	400/300	2 m Cable	41M3635	140.00
NI 8-G12-ADZ32X-B3131	8	12	400/300	3-pin micofast	41M3636	140.00
● BI 8-G18-ADZ30X2	8	18	400/300	2 m Cable	41M2122	140.00
● BI 8-G18-ADZ30X2-B3331	8	18	400/300	3-pin micofast	41M2123	140.00
● NI14-G18-ADZ30X2	14	18	400/300	2 m Cable	41M3678	140.00
● NI14-G18-ADZ30X2-B3331	14	18	400/300	3-pin micofast	41M3679	140.00
● BI15-G30-ADZ30X2	15	30	400/300	2 m Cable	41M2166	147.60
● BI15-G30-ADZ30X2-B3131	15	30	400/300	3-pin micofast	41M2167	147.60
● NI20-G30-ADZ30X2	20	30	400/300	2 m Cable	41M3710	147.60
● NI20-G30-ADZ30X2-B3131	20	30	400/300	3-pin micofast	41M3712	147.60

(113754)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

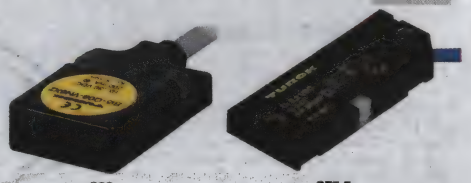
RECTANGULAR DC CAPACITIVE PROXIMITY SENSORS 3-WIRE

RoHS Compliant Available

TURCK works

Industrial Automation

Specifications:
- Environmental rating: NEMA 1, 3, 4, 6, 13; IP67
- Operating temperature: -13°F to 158°F
- Continuous load current: 200mA
- Voltage drop: 1.8VDC at 200mA
- Input voltage: 10-30VDC



Q08 — QF5.5

Features:
- Short-Circuit and Overload Protected Incorporated
- Choice of Potted-In Cable or M8 (picofast) Quick Disconnect Termination
- Reverse Polarity and Wire Break Protection
- LED Indicator: Output Energized and Power On
- Normally Open Output

Turck's compensation electrode technology prevents false triggers. In practice, sensors can be effected by water droplets, humidity, dust, etc., causing false outputs. To combat this effect, each Turck capacitive sensor incorporates a compensating electrode which forms part of a negative feedback circuit. When contaminants are on the sensor face, they affect the sensor's main field, as well as its compensation field. The negative feedback circuit detects the increase in both fields and can filter out the effect of contaminants.

Mfg. Part No.	Sensing Range (mm)	Output Type	Termination	Stock No.	Price Each
● BC 5-Q08-AP6X2	5	PNP	2 m Cable	41M2205	143.00
BC 5-Q08-AN6X2	5	NPN	2 m Cable	41M2203	143.00
● BC 5-Q08-AP6X2-V1131	5	PNP	3-pin picofast	41M2206	143.00
BC 5-Q08-AN6X2-V1131	5	NPN	3-pin picofast	41M2204	143.00
● BC10-QF5.5-AP6X2	10	PNP	2 m Cable	41M2214	109.00
● BC10-QF5.5-AN6X2	10	NPN	2 m Cable	41M2212	109.00
● BC10-QF5.5-AP6X2/S250	10	PNP	2 m Cable	41M2215	92.70
● BC10-QF5.5-AN6X2/S250	10	NPN	2 m Cable	03P2075	92.70

Part number with suffix S250 has no potentiometer

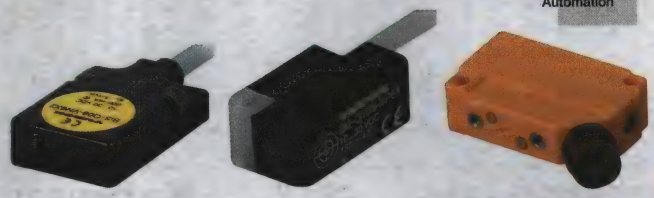
(113760)

RECTANGULAR DC INDUCTIVE PROXIMITY SENSORS - 3 AND 4-WIRE

RoHS Compliant Available

TURCK works

Industrial Automation



Q08 — Q10S — Q12

Features:
- Choice of Potted-In Cable or M8 (picofast), M12 (eurofast) Quick Disconnect
- Short-Circuit and Overload Protected
- Reverse Polarity and Wire Break Protection
- LED Indicator: Output Energized and Power On (Both on Q08 and CK40 only)
- Normally Open or Complementary Output (1 N.O. and 1 N.C.)

Specifications:
- Environmental rating: NEMA 1, 3, 4, 4x, 6, 13; IP67
- Operating temperature: -13°F to 158°F; Except Bi 7 +32°F to 140°F
- Continuous load current: 200mA
- Voltage drop: 1.8VDC at 200mA
- Input voltage: 10-30VDC
- Max. load current: 200mA

Turck Q-pak sensors are changing the shape of sensing, They fit in confined sensing areas where other sensors won't work their superior 2-50 mm ranges in packages up to 10 times narrower than the competition.

Mfg. Part No.	Sensing Distance (mm)	Sensing Face Dia. (mm)	Output Type	Termination	Stock No.	Price Each
● BI 5-Q08-AP6X2-V1131	5	8	PNP	3-pin picofast	41M2110	103.40
BI 5-Q08-AN6X2-V1131	5	8	NPN	3-pin picofast	41M2109	103.40
● BI 5-Q08-VP6X2	5	8	PNP	2 m Cable	41M2112	103.40
● BI 5-Q08-VN6X2	5	8	NPN	2 m Cable	41M2111	103.40
● BI 7-Q08-VP6X2	7	8	PNP	2 m Cable	41M2121	103.40
● BI 7-Q08-VN6X2	7	8	NPN	2 m Cable	41M2120	103.40
● BI 2-Q10S-AP6X	2	10	PNP	2 m Cable	41M2064	75.90
● BI 2-Q10S-AN6X	2	10	NPN	2 m Cable	41M2063	75.90
BI 5U-Q12-AP6X2-H1141	5	12	PNP	4-pin eurofast	99M0993	95.00
BI 5U-Q12-AN6X2-H1141	5	12	NPN	4-pin eurofast	99M0992	97.90

(113753)

SENSORS – TEMPERATURE

CYLINDRICAL WIRE LEADED PLATINUM RESISTANCE TEMPERATURE DETECTORS (RTDs)

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Small cylindrical ceramic bodies are designed for drill holes and probe assemblies. Applications include HVAC room, duct and refrigerant equipment, temperature compensation in instrument and probe assemblies, and temperature regulation in process control. RTD type: 1000Ω/375 Alpha or 100Ω/385 Alpha. Interchangeability: ±0.1% (±0.3°C) or ±0.2% (±0.5°C) @ 0°C. Temperature range: –200°C to +260°C, Teflon®, –75°C to +540°C fiberglass. **HEL-705** have Teflon® insulated wire; **HEL-707** have fiberglass insulated wire.

Mfg. Part No.	Resistance @ 0°C	Resistance Inter-changeability	Temperature Coefficient of Resistance* 0-100°C	Stock No.	Price 1-9
● HEL-705-U-0-12-00	1000Ω	±0.2%	0.00375	91F7129	29.31
● HEL-705-U-1-12-00	1000Ω	±0.1%	0.00375	15M0243	28.13
● HEL-705-T-0-12-00	100Ω	±0.2%	0.00385	15M0242	43.34
● HEL-707-U-0-12-00	1000Ω	±0.2%	0.00375	15M0245	32.28
● HEL-707-U-1-12-00	1000Ω	±0.1%	0.00375	15M0246	31.60
● HEL-707-T-0-12-00	100Ω	±0.2%	0.00385	15M0244	45.01

*Average TCR
(15545)

T23 SERIES THERMAL SWITCHES

RoHS Compliant Available

multicomp

- Operation temperature: One fixed point in the range of 50°C to 205°C
- Temperature tolerance: +/- 5 °C
- Differential (difference between On point and Off point) normal 10°C - 30°C
- Contatc rating: 15A/125VAC, 10A/250VAC, 15A/250VAC
- Contact resistance: 50 mohm or less

Mfg. Part No.	Contact Configuration	Action Temp.	Reset Temp.	Stock No.	Price Each 1-99
● T23A050ASR2-15	SPST-NC	50°C	35°	98K1988	2.61
● T23A070ASR2-15	SPST-NC	70°C	55°	98K1989	2.61
● T23A090ASR2-20	SPST-NC	90°C	70°	74K2960	2.61
● T23A100ASR2-15	SPST-NC	100°C	85°	98K1990	2.61
● T23A125BSR2-15	SPST-NC	125°C	110°	98K1992	2.72
● T23B050ASR2-15	SPST-NO	50°C	35°	98K1994	2.76
● T23B060ASR2-15	SPST-NO	60°C	45°	98K1995	2.76

(202673)

EWS SERIES WALL MOUNT ENVIRONMENTAL SENSORS

RoHS Compliant Available

NEWPORT

NEW

Features:

- Interfaces with most process meters, controllers, recorders, dataloggers and data acquisition systems
- Solid state
- Output: 4-20mA or 1-5VDC (user selectable)
- Max. loop resistance: Ω = (V supply – 8 V)/0.02A
- Stylish design blends in well with office, computer room or lab decor
- For indoor applications only
- Miniature size: 3.12″ (79mm) L x 2.12″ (54mm) W x 1.78″ (45mm) H
- One-year manufacturer's warranty
- CE compliant

EWS-TX/N

EWS-BP-A

WALL MOUNT TEMPERATURE SENSOR

Mfg. part no. EWS-TX/N wall mount temperature sensor features temperature range of -18 to 57°C (0 to 135°F). Accuracy in still air: ±0.7°C (±1.2°F) @ 25°C; ±1.4°C (2.5°F) @ 25°C across full range. Accuracy in moving air: ±1.4°C (2.5°F); ±1.7°C (3°F) across full range. Repeatability: ±0.3°C (0.5°F). Temp. time constant: 9 sec. in moving air (1m/sec), 30 sec. in still air (for 63.2% response). Power: 12 to 24VDC.

Mfg. Part No.	Description	Stock No.	Price Each
● EWS-TX/N	Wall Mount Temperature Sensor	48M6129	80.00

WALL MOUNT BAROMETRIC PRESSURE SENSOR

Mfg. part no. EWS-BP-A wall mount barometric pressure sensor features range of 20.8 to 32 in Hg (10.20 to 15.72 psi). Accuracy: ±1% FSO. Repeatability: ±0.2% FSO. Pressure hystersis: ±0.15% FSO. Long-term stability: ±0.1% FSO/Yr. Operating temperature range: 0 to 60°C (32° to 140°F). Temperature compensation across full range. Output: user-selectable 4 to 20mA, 1 to 5VDC. Power: 12 to 24VDC.

Mfg. Part No.	Description	Stock No.	Price Each
EWS-BP-A	Wall Mount Barometric Pressure Sensor	04X5554	149.00

(211761)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
EWS-MB	Conduit Box Mounting Bracket/Wall Plate Adapter Kit	06R3038	15.00

TYPES RSJ AND RMJ ROUND-HOLE PANEL JACKS

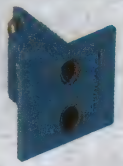
RoHS Compliant Available

NEWPORT

NEW

MADE IN USA

RSJ-K-R/N



RSJ-T-S/N

RMJ-U-R/N

Features:

- **Type RSJ** standard size accepts all industry standard size connectors
- **Type RMJ** miniature size accepts all industry miniature size connectors
- Mounts in round or "D" punch holes
- Choice of round or square bezel
- Heavy-duty glass-filled nylon, rated to 220°C (425°F)
- Thermocouple-grade alloy formed contacts preserve accuracy of circuit even in changing ambient temperatures
- Polarity keyed
- Color-coded
- Front mount hardware and dust cap included; *order an extra supply separately below*
- Easy to install -- no special tools needed
- Ideal for single circuit applications

Mfg. Part No.	Alloy Code	Color	Bezel	Cut-Out Dia.	Stock No.	Price Each
RSJ-K-R/N	K	Yellow	1.13″ Dia. Round	0.88″	31K8608	2.40
RSJ-K-S/N	K	Yellow	1.13″ Square	0.88″	94B4475	2.40
RSJ-J-S/N	J	Black	1.13″ Square	0.88″	91C5529	2.40
● RSJ-J-R/N	J	Black	1.13″ Dia. Round	0.88″	04X9776	2.40
● RSJ-T-R/N	T	Blue	1.13″ Dia. Round	0.88″	04X9777	2.40
● RSJ-T-S/N	T	Blue	1.13″ Square	0.88″	04X9778	2.40
● RSJ-U-S/N	U	White	1.13″ Square	0.88″	04X9779	2.40
RMJ-K-R/N	K	Yellow	0.81″ Dia. Round	0.63″	29C5176	2.10
RMJ-T-R/N	T	Blue	0.81″ Dia. Round	0.63″	98B9549	2.10
RMJ-J-R/N	J	Black	0.81″ Dia. Round	0.63″	50B5928	2.10
● RMJ-U-R/N	U	White	0.81″ Dia. Round	0.63″	04X9775	2.10

ACCESSORIES

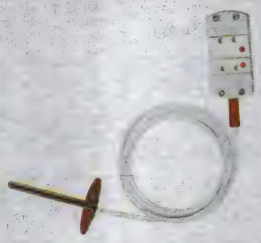
Mfg. Part No.	Description	Pkg. of	Stock No.	Price Each
● MPJ-CAP-12	Dust Caps	12	08R4659	5.00
MH-RSJ-5/N	Standard Size Mounting Nuts	5	83H2755	3.00
MH-RMJ-5/N	Miniature Size Mounting Nuts	5	83C7853	2.00

(211639)

RTD-800 SERIES PRECISION RTD PROBES SPECIALIZED FOR LABORATORY APPLICATIONS

NEWPORT

RTD-830



RTD-860

RTD-830

- Housing Made From Aluminum for Fast Thermal Response
- Small Housing Size Allows for Installation on Most Flat Surfaces
- Housing Includes a 0.115″ Diameter Mounting Hole (Clearance Hole for a #4 Bolt), Can Also Be Cemented Into Place
- Sensor Contains a High-Accuracy, 100 Ohm, Class "A" DIN Platinum Element and 1 Meter (40″) of PFA Insulated & Jacketed Cable and 3-Pin Miniature Connector
- Temperature Coefficient (Alpha) = .00385 ohm/ohm/°C
- Temperature Range -60 to 230##UndefTag-786##C

RTD-860

- High-Accuracy Class "A" 100 Ohm DIN Platinum Element Standard
- Temperature Coefficient (Alpha) = .00385 ohm/ohm/°C
- Temperature Range Is -200 to 230##UndefTag-786##C
- Includes Stainless Steel Sheath and Flange with Pre-Drilled Mounting Holes for Easy Installation
- 3-Wire PFA Insulated & Jacketed Cable with Miniature 3-Pin Connector for Connecting to Most Instruments

The **RTD-830** is designed for use as a surface temperature sensor. The aluminum housing allows for fast transfer of heat to/from the sensing element. The housing contains a clearance hole for a #4 mouting screw so the sensor can be bolted or cemented into place. If bolt mounted, a small amount of High Conductive Paste placed between the housing and surface can improve thermal response. The sensor includes a 100 ohm Class A DIN Platinum element connected to 1 meter (40″) of PFA insulated & jacketed cable and a 3-pin miniature connector. The **RTD-860** sensor is designed for easy installation into air ducts, laminar flow booths or other applications where temperature measurements must be taken through thin walls or structures. The sensor features an all stainless steel welded construction consisting of a closed-end tube and mounting plate. The platinum RTD sensor is housed in the tip of the ⅛″ diameter tube for fast response. The 1″ dia. mounting plate has two (2) 0.15″ diameter holes for convenient mounting, and the sensor is supplied with 1 meter (40″) of PFA insulated & jacketed cable and miniature 3-pin connector.

➤ CONTINUED ➤

RTD-800 SERIES PRECISION RTD PROBES SPECIALIZED FOR LABORATORY APPLICATIONS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
RTD-830/N	Bolt-Down or Cement Down Surface Sensor with Aluminum Housing, 100 Ohm Class A DIN Platinum Element, 1meter (40") of PFA Insulated & Jacketed Cable and 3-Pin Miniature Connector	72W3011	71.00
RTD-860/N	Duct Mountable 100 Ohm Class A DIN Platinum RTD Sensor with Tube and Mounting Plate, 1Meter (40") of PFA Insulated & Jacketed Cable and Miniature Connector	72W3012	92.00

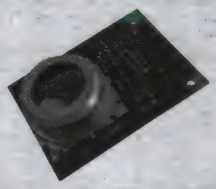
(209539)

D6T SERIES MEMS THERMAL SENSORS

RoHS Compliant Available

OMRON. ELECTRONIC COMPONENTS

- OMRON's unique MEMS and ASIC technology achieve a high SNR
- High sensitivity enables detection of stationary human presence
- Superior noise immunity with a digital output
- High-precision area temperature detection with low cross-talk field of view characteristics
- Power supply voltage: 4.5 to 5.5 VDC



Mfg. Part No.	Element Type	View Angle X	View Angle Y	Stock No.	Price Each 1-24
D6T44L06	4x4	44.2°	45.7°	47W2971	69.57
D6T8L06	1x8	62.8°	6.0°	47W2972	62.10

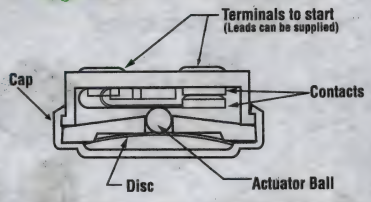
(210214)

5003 SERIES THERMAL SWITCHES

RoHS Compliant Available

AIRPAX

- Overall Depth: 0.250" (Without Projecting Terminals)
- Contact Rating for 100,000 Life Cycles: 5A Resistive, 120VAC; 3A Resistive, 240VAC
- Temperature Settings: +35°F to +325°F



Thin, lightweight, water-type thermal switches, for use when space is at a premium. The basic switch assembly is operated by a bimetal disc with positive, reinforced snap-action. Excellent shock and vibration resistance. Dielectric: 1500Vrms, 60Hz, 1min. Terminals to case. Loads under 100mA. 5VDC will require gold-plated contacts, with recommended minimum load of 10mA, 5VDC. UL recognized to 130°C operating temperature. CSA certified to 168°C.

CLOSE ON RISE CONTACT OPERATION

Mfg. Part No.	Operating Temp. Min. (°F)	Operating Temp. Max. (°F)	Stock No.	Price Each 1-9	10-24	25-49
C53GAB105A-090Y	90	105	34C8787	26.92	24.28	23.02
C53GAB115A-100Y	100	115	34C8788	26.46	23.86	22.63
C53GAB120A-105Y	105	120	34C8789	26.92	24.28	23.02
C53GAB175A-160Y	160	175	34C8790	26.46	23.86	22.63
C53GAB195A-180Y	180	195	34C8791	26.46	23.86	22.63
OPEN ON RISE CONTACT OPERATION						
053GAB120A-105Y	105	120	34C9058	26.92	24.28	23.02
053GAB140A-125Y	125	140	34C9059	26.46	23.86	22.63
053GAB165A-150Y	150	165	34C9060	26.77	24.14	22.89
053GAB175A-160Y	160	175	34C9061	27.22	24.56	23.28
053GAB195A-180Y	180	195	34C9062	26.46	23.86	22.63
053GAB210B-185Y	185	210	34C9063	26.77	24.14	22.89
053GAB250A-225Y	225	250	34C9064	25.25	22.77	21.59
053GAB265B-240Y	240	265	73C3788	25.25	22.77	21.59

(69343)

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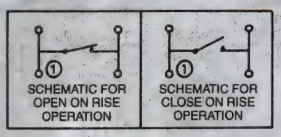
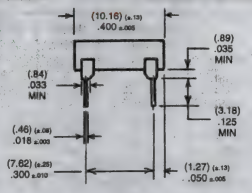
(196545)

6600 SERIES PC BOARD THERMOSTATS

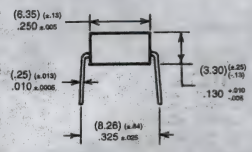
RoHS Compliant Available

AIRPAX





6600 series is a miniature bimetallic snap-acting thermostat that provides sensing and switching in a single device. Lamp switching capability at 48VDC over its operating temperature range of 40°C to 120°C. Designed around the standard 8-pin N8A dual inline package, it is ideal for use on printed circuit boards, and can be installed using auto-insertion equipment.



CLOSE ON RISE CONTACT OPERATION

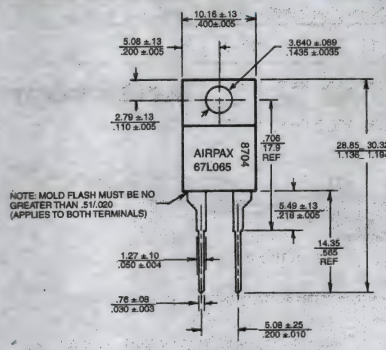
Mfg. Part No.	Operating Temp. (°C)	Reset Temp. (°C)	Differential Min. (°C)	Stock No.	Price Each 1-24	25-99	100-249
66F040	120	20	4	91F9372	13.94	11.84	10.48
66F045	45	20	4	91F9374	13.94	11.84	10.48
66F050	50	30	4	91F9376	13.94	11.84	10.48
66F080	80	55	6	91F9388	13.94	11.84	10.48
66F085	85	55	6	91F9390	14.57	12.38	10.96
66F090	90	60	6	91F9392	13.94	11.84	10.48
OPEN ON RISE CONTACT OPERATION							
66L050	50	30	4	91F9377	16.39	13.92	12.32
66L060	60	40	4	91F9381	15.32	13.01	11.51
66L075	75	50	4	91F9387	16.39	13.92	12.32
66L080	80	55	6	91F9389	15.32	13.01	11.51
66L090	90	60	6	91F9393	15.32	13.01	11.51
66L100	100	70	6	91F9397	15.32	13.01	11.51
66L120	120	90	9	91F9405	15.32	13.01	11.51

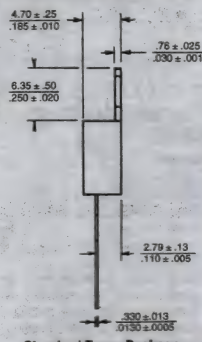
(69342)

6700 SERIES PC BOARD THERMOSTATS

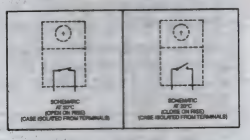
RoHS Compliant Available

AIRPAX





Standard Tozzo Package



6700 series is a miniature, bimetallic, snap-acting thermostat that provides sensing and switching in a single device. It was developed for thermal management applications on power supplies but is also suited for use on crowded PC boards. Switching capability: 1A @ 48VDC. Operating temperature: 40°C to 130°C. The single-pole/single-throw switch assembly features a bimetallic element that is rated 100,000 cycles @ 5VDC 20mA resistive load.

CLOSE ON RISE CONTACT OPERATION

Mfg. Part No.	Operating Temp. (°C)	Reset Temp. (°C)	Differential Min. (°C)	Stock No.	Price Each 1-24	25-99	100-249
67F040	40	20	4	79K1558	14.46	12.89	11.34
67F045	45	20	4	72K9971	9.76	8.70	7.66
67F050	50	30	4	72K9972	8.47	7.57	6.65
67F065	65	40	4	29M7971	14.80	13.19	11.61
67F080	80	55	6	72K9973	9.97	8.89	7.82
67F090	90	60	6	72K9974	8.47	7.55	6.66
67F100	100	70	6	29M7972	10.09	8.99	7.93
67F110	110	80	6	29M7973	13.83	12.33	10.85
OPEN ON RISE CONTACT OPERATION							
67L050	50	30	6	78K7116	10.28	9.16	8.07
67L055	55	30	6	72K9975	15.45	13.77	12.14
67L060	60	40	6	72K9976	8.65	7.72	6.79
67L075	75	50	6	72K9977	10.14	9.04	7.95
67L080	80	55	6	72K9978	8.65	7.72	6.79

➤CONTINUED➤

6700 SERIES PC BOARD THERMOSTATS (CONT.)

OPEN ON RISE CONTACT OPERATION

Mfg. Part No.	Operating Temp. (°C)	Reset Temp. (°C)	Differential Min. (°C)	Stock No.	Price Each 1-24	25-99	100-249
● 67L085	85	55	6	29M7974	10.28	9.16	8.07
● 67L090	85	55	6	73K3598	8.77	7.82	6.88
● 67L100	100	70	6	72K9979	10.28	9.16	8.07
● 67L120	120	85	9	72K9980	10.07	8.98	7.90
● 67L130	130	90	9	72K9981	14.16	12.62	11.11

(16029)

SNAP-ACTION DISC THERMOSTATS

RoHS Compliant Available

White-Rodgers.

- Automatic Reset
- ¼" Quick-Connect Terminals
- ½" Bimetal Disc Thermostat
- Loose Ring
- Stainless Steel Mtg. Bracket
- Load Rating: 15A @ 120V, 10A @ 240V
- UL recognized, CSA certified, VDE approved #40012575
- 1.23" L x 1.32" Case W x 0.37" H and 2 Holes .145" Dia.

Positive, instantaneous opening or closing of electrical circuits. All have differential of 30°F, except **mfg. part no. STO-60**, which has a differential of 20°F and **STO-85 and STO-175**, which have a differential of 15°F.

Mfg. Part No.	Set Point	Function	Stock No.	Price Each 1-9	10-24	25-49
● 3L11-60	60°F ±5°F	Opens	16M4628	8.65	8.28	7.91
● 3L11-110	110°F ±5°F	Opens	16M4630	8.95	8.55	8.17
● 3L11-120	120°F ±5°F	Opens	16M4631	8.95	8.55	8.17
● 3L11-140	140°F ±5°F	Opens	16M4632	8.85	8.43	8.07
● 3L11-150	150°F ±5°F	Opens	16M4633	8.65	8.28	7.91
● 3L11-160	160°F ±5°F	Opens	16M4634	8.66	8.26	7.90
● 3L11-170	170°F ±5°F	Opens	16M4635	8.85	8.43	8.07
● ST0-175	175°F ±5°F	Opens	16M4636	8.85	8.43	8.07
● 3L11-190	190°F ±5°F	Opens	97F7515	8.85	8.43	8.07
● 3L11-210	210°F ±6°F	Opens	16M4637	8.85	8.43	8.07
3L11-250	250°F ±6°F	Opens	98F2818	8.95	8.55	8.17
● 3F11-100	100°F ±7°F	Closes	16M4626	8.65	8.28	7.91
3F11-120	120°F ±7°F	Closes	46F6507	8.65	8.28	7.91
● 3F11-140	140°F ±7°F	Closes	46F6509	8.95	8.55	8.17

(4004)

TC-x-NPT SERIES PIPE PLUG THERMOCOUPLE PROBES

NEW

RoHS Compliant Available

NEWPORT

Features:

- Choice J, K, T or E thermocouple types
- Rugged 304SS design with strain relief spring
- ¼ NPT mounting thread
- Fiberglass insulated thermocouple-grade lead wires are stranded 20 AWG
- Leads protected with stainless steel overbraiding – resists abrasions and cuts, yet remains flexible
- Withstands pressures up to 2500 psi
- Grounded or ungrounded junction
- Stripped leads at end
- Probe temperature range to 650°C (1200°F)
- Transition joint/cable temperature range to 480°C (900°F)

TC-K-NPT-U-72/N

These high-pressure thermocouple plug sensors are ideal for vessel applications, pressurized containers and applications requiring mounted NPT security. The 304SS sheath has a 6.4mm (0.25") dia. that extends 0.5" from the end of the ¼ NPT pipe plug. To tighten mounting threads, there is a hex section that is 22mm (0.56") across flats that are 5.8mm (0.23") wide.

Mfg. Part No.	Thermocouple Type	Junction Type	Lead Lgth. (In.)	Stock No.	Price Each
● TC-J-NPT-G-72/N	J	Grounded	72	04X9788	38.00
● TC-J-NPT-U-72	J	Ungrounded	72	46M2470	43.00
● TC-K-NPT-G-72/N	K	Grounded	72	04X9789	38.00
TC-K-NPT-U-72/N	K	Ungrounded	72	82H2593	43.00
● TC-T-NPT-G-72/N	T	Grounded	72	65T6975	38.00
● TC-E-NPT-G-72/N	E	Grounded	72	04X9786	38.00
● TC-E-NPT-U-72/N	E	Ungrounded	72	04X9787	43.00

(211630)

ULTRA HIGH TEMPERATURE THERMOCOUPLE CONNECTORS RATED TO 560°C (1200°F)

RoHS Compliant Available

NEWPORT

High Purity Alumina body connectors used for high temperature Thermocouple connections. Extra heavy-duty construction, color dot coded for applications such as high vacuum furnaces where contamination would adversely affect the process. Available in types J (iron-constantan), K (chromel-alumel) and T (copper-constantan). Types E,R,S,G,C,D,U and N are available upon request. Type **SHX** connector is miniature flat pin. Type **NHX** connector is standard size round pins.

Mfg. Part No.	T/C Type	Connector	Stock No.	Price Each
SHX-K-M/N	K	Male	48F5069	5.50
SHX-K-F/N	K	Female	48F5070	6.50
SHX-J-M/N	J	Male	48F5071	6.50
SHX-J-F/N	J	Female	48F5072	6.50
● SHX-T-M/N	T	Male	05R5316	5.50
● SHX-T-F/N	T	Female	05R5315	6.50
NHX-K-M/N	K	Male	72C8638	9.75
NHX-K-F/N	K	Female	72C8637	8.75
NHX-J-M/N	J	Male	48F5079	9.75
NHX-J-F/N	J	Female	48F5080	8.75
● NHX-T-M/N	T	Male	05R5314	9.75
● NHX-T-F/N	T	Female	05R5313	8.75

(147108)

THERMOCOUPLE CONNECTORS

NEWPORT

SMPW OSTW HMPW

- Type SMPW connector has miniature flat pins. Rated to 220°C (425 °F)
- Type OSTW connector has standard size round pins. Rated to 220°C (425 °F)
- Type HMPW connector has miniature flat pins, high temp Rated 260°C (500F)
- Type HSTW connector has standard size round pins, high temp Rated 260°C (500F)

HSTW

Color Coded, Glass-filled nylon shell connectors used for accurate thermocouple connections. Available in types J (iron-constantan), K (chromel-alumel) and T (copper-constantan). Types E,R,S,G,C,D,U and N are available upon request.

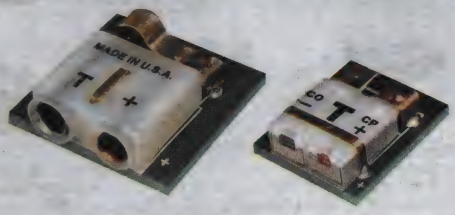
Mfg. Part No.	T/C Type	Connector	Stock No.	Price Each
SMPW-K-M/N	K	Male	50B5932	1.95
SMPW-K-F/N	K	Female	93B0462	2.40
SMPW-J-M/N	J	Male	20C5613	1.95
SMPW-J-F/N	J	Female	20C3726	2.40
SMPW-T-F/N	T	Female	05C3547	2.40
OSTW-K-M/N	K	Male	08J4424	2.50
OSTW-K-F/N	K	Female	91B2051	3.60
OSTW-J-M/N	J	Male	19C9787	2.50
OSTW-J-F/N	J	Female	73P7373	3.60
OSTW-T-M/N	T	Male	53K6283	2.50
OSTW-T-F/N	T	Female	53K6290	3.60
HMPW-K-F/N	K	Female	89C1914	2.60
HSTW-K-M/N	K	Male	72C9334	2.70
HSTW-K-F/N	K	Female	88M3224	3.80

(6614)

CIRCUIT BOARD THERMOCOUPLE CONNECTORS

NEWPORT

- Attaches Directly to Circuit Board
- Perfect for Handheld Thermometers
- J, K, T and E Calibrations
- Optional Retainer Clip for Transistor Providing Cold Junction Compensation
- Accepts Either Standard or Miniature Size Male Connectors



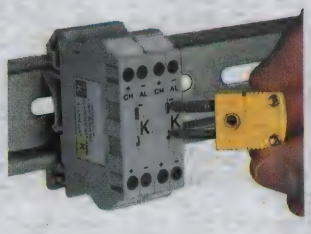
Mfg. Part No.	Description	Stock No.	Price Each
PCC-SMP-J	SMP Miniature Size, Type J	01H0904	2.05
PCC-SMP-K	SMP Miniature Size, Type K	01H0905	2.05
PCC-SMP-T	SMP Miniature Size, Type T	01H0906	2.05

(73334)

THERMOCOUPLE TERMINAL BLOCKS WITH AUDIT CAPABLE FEMALE CONNECTOR

NEWPORT

- Screw type terminal for secure and maintenance free connections
- Type K, J, T, E, N, R/S and U calibrations
- Built in miniature female thermocouple connector for auditing and troubleshooting
- Fully enclosed - no end plates required
- DIN rail mountable - narrow 10.7 mm width
- Identified with calibration and "+, -" connections
- Write-on window included
- Terminal width: 10.7 mm (0.422 in)
- Terminal length/height: 51 mm (2.008 in)/42.3 mm (1.666 in)
- Installed height to 35 x 7.5 mm/35 x 15 mm DIN rail: 43.5 mm (1.713 in)/51 mm (2.009 in)
- Maximum wire size: 12 AWG/2.5 mm²
- Stripping length: 8 mm (0.31 in)
- Torque in Nm (in-lb): 0.6 to 0.8 (5.3 to 7.1)
- Temperature rating: -40 to 85°C (-40 to 185°F)



The new DRTB Series thermocouple terminal blocks are manufactured with thermocouple alloys to guarantee accurate readings. A built-in SMP compatible female receptacle accepts a miniature thermocouple connector. The female connector allows the user to connect to a handheld meter for applications such as data collection, quality assurance compliance, capability studies and troubleshooting installation or repairs. The plastic housing is made from gray polyamide 6.6 thermoplastic resin with a UL 94 V0 rating for 85°C. These thermocouple terminal blocks are fully enclosed and require no end plates. The screws and clamps are zinc plated, and together they provide an excellent vibration, maintenance free and corrosion resistant connection. DRTB terminal blocks mount on standard 35 mm DIN rails or 32 mm G-type rails, and are identified with calibration type and positive (+) and negative (-) connections. Wire entry is funneled to allow quick wire insertion even with stranded wire.

Mfg. Part No.	Description	Stock No.	Price Each
DRTB-J	Thermocouple terminal block, type J	39T9902	9.50
DRTB-T	Thermocouple terminal block, type T	39T9906	9.50
DRTB-E	Thermocouple terminal block, type E	39T9901	9.50
DRTB-R/S	Thermocouple terminal block, types R/S	39T9905	9.50
DRTB-N	Thermocouple terminal block, type N	39T9904	10.69
DRTB-U	Thermocouple terminal block, uncompensated copper	39T9907	8.00

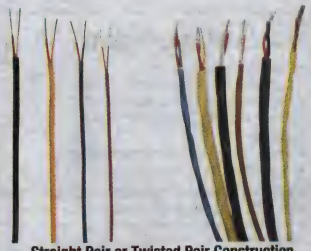
(196205)

EXTENSION-GRADE DUPLEX INSULATED MULTICONDUCTOR OR TWISTED PAIR THERMOCOUPLE WIRE

RoHS Compliant Available

NEWPORT

Extension-grade two-conductor thermocouple wire is insulated and jacketed in PFA (perfluoroalkoxy), polyvinyl or FEP (fluorinated ethylene propylene) material. Available in Types J (iron-constantan solid conductor), K (chromel-alumel solid conductor) and T (copper-constantan solid conductor). Choice of straight multiconductor or twisted pair construction. Outer jacket color: black (Type J), yellow (Type K) and blue (Type T). Other jacket/insulation materials and colors, thermocouple types, wire gauges and spool sizes are available; *go online or call.*



Straight Pair or Twisted Pair Construction

STRAIGHT MULTICONDUCTOR

Mfg. Part No.	Thermocouple Type	AWG	Jacket/ Insulation	Spool Size (Ft.)	Stock No.	Price per Spool
EXTT-J-24-25/N	J	24	PFA	25	05R4109	22.00
EXTT-J-24-100/N	J	24	PFA	100	39T9916	60.00
EXTT-K-20-100/N	K	20	PFA	100	96B8240	109.00
EXTTK20500/N	K	20	PFA	500	91B0860	313.00
EXTT-K-20-1000/N	K	20	PFA	1000	99W6438	625.00
EXTT-K-24-25/N	K	24	PFA	25	05R4110	27.00
EXTT-T-16-100/N	T	16	PFA	100	05R4111	190.00
EXTT-T-20-25/N	T	20	PFA	25	05R4112	28.00
EXPP-J-16-25/N	J	16	Polyvinyl	25	05R4106	27.00
EXPP-J-20-25/N	J	20	Polyvinyl	25	39T9911	13.00
EXPP-J-20-50/N	J	20	Polyvinyl	50	39C5258	22.00
EXPP-K-20-50/N	K	20	Polyvinyl	50	01C8395	44.00

CONTINUED

EXTENSION-GRADE DUPLEX INSULATED MULTICONDUCTOR OR TWISTED PAIR THERMOCOUPLE WIRE (CONT.)

Mfg. Part No.	Thermocouple Type	AWG	Jacket/ Insulation	Spool Size (Ft.)	Stock No.	Price per Spool
EXPP-K-20-100/N	K	20	Polyvinyl	100	30C4289	77.00
EXPP-K-20-1000	K	20	Polyvinyl	1000	24C8815	440.00
● EXPP-K-24S-1000	K	24*	Polyvinyl	1000	94T8554	445.00

*Stranded 7x32

(147095)

DUPLEX INSULATED THERMOCOUPLE WIRE

NEWPORT

Thermocouple Type K

Two-conductor thermocouple wire is insulated and jacketed in PFA (perfluoroalkoxy) or glass material. Available in Types J (iron-constantan solid conductor), K (chromel-alumel solid conductor) and T (copper-constantan solid conductor). Outer jacket color: brown. Other jacket/insulation materials and colors, thermocouple types, wire gauges and spool sizes are available; *go online or call.*

Mfg. Part No.	Thermocouple Type	AWG	Jacket/ Insulation	Spool Size (Ft.)	Stock No.	Price per Spool Each
TT-K-20-25/N	K	20	PFA	25	93F9302	40.00
TT-K-24-25/N	K	24	PFA	25	93F9303	28.00
TT-K-24-500/N	K	24	PFA	500	83H6214	223.00
TT-K-30-SLE-500/N*	K	30	PFA	500	78H4663	220.00
GG-K-20-25/N	K	20	Glass	25	93F9304	33.00
TT-J-20-25/N	J	20	PFA	25	93F9306	29.00
TT-J-20-100/N	J	20	PFA	100	51B611	82.00
TT-J-24-25/N	J	24	PFA	25	93F9307	23.00
GG-J-20-25/N	J	20	Glass	25	51B582	23.00
GG-J-24-25/N	J	24	Glass	25	93F9291	17.00
TT-T-24-SLE-100/N*	T	24	PFA	100	81H2001	73.00
TT-T-30-SLE-1000/N*	T	30	PFA	1000	59K9467	520.00

*SLE (Special Limits of Error Wire) in mfg. part no. denotes ANSI MC96.1 (1975)

(6810)

FAST RESPONSE THERMOCOUPLES

NEWPORT

Self-adhesive thermocouples are designed for fast temperature measurements. Manufactured from 30AWG Teflon-coated thermocouple wire with a flattened bead secured between a high-temperature polymer and a high-temperature, fiber-reinforced polymer for thermal conductivity and fast response. **Sold in packages of 5.**

Mfg. Part No.	T/C Type	Stock No.	Price per Pkg. Each
SA1-J/N	J	12K5541	63.00
SA1-K/N	K	66F5598	63.00
SA1-E/N	E	48F5576	63.00
SA1-T/N	T	48F5577	63.00

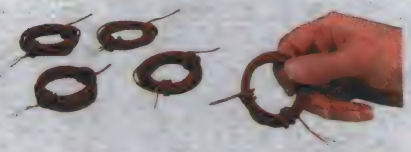
(36976)

READY-MADE INSULATED THERMOCOUPLES

RoHS Compliant Available

NEWPORT

- 1M (36") Length with stripped-end termination
- Type J: Iron-Constantan
- Type K: Chromel-Alumel
- PFA or glass braid insulation
- **Sold in packages of 5**



Also available in 2M (72") length and in Types T or E; *go online or call.*

Mfg. Part No.	T/C Type	AWG	Dia. (mm)	Insul-ation	Stock No.	Price per Pkg. Each
5TC-TT-K-24-36/N	K	24	0.51	PFA	93F9309	41.00
5TC-TT-K-30-36/N	K	30	0.25	PFA	93F9310	46.00
● 5TC-TT-K-36-36/N	K	36	0.13	PFA	11J5224	53.00
5TC-TT-J-24-36/N	J	24	0.51	PFA	93F9311	41.00
5TC-TT-J-30-36/N	J	30	0.25	PFA	93F9312	46.00
5TC-GG-K-24-36/N	K	24	0.51	Glass Braid	93F9313	35.00

CONTINUED

READY-MADE INSULATED THERMOCOUPLES (CONT.)

Mfg. Part No.	T/C Type	AWG	Dia. (mm)	Insul-ation	Stock No.	Price per Pkg. Each
5TC-GG-K-30-36/N	K	30	0.25	Glass Braid	93F9314	35.00
5TC-GG-J-24-36/N	J	24	0.51	Glass Braid	93F9315	35.00

(6615)

WORLD-BEAM QS18U ULTRASONIC SENSORS

RoHS Compliant Available

BANNER more sensors, more solutions

Features:
- Fast, easy-to-use TEACH-mode programming; no potentiometer adjustments
- Ultra-compact, rugged housing for harsh environments
- Two bi-colored LEDs
- Temperature compensation
- Fast response time: 15ms
- Supply protection: Protected against reverse polarity and transient voltages

Specification:
- Sensing range: 50 to 500mm (2″ to 20″)
- Supply voltage: 12 to 30Vdc
- Temperature range: -20°C to +60°C (-4°F to +140°F)
- Leakproof design rated IEC IP67, NEMA6P,or DIN40050 (depending on model)

Low cost, compact ultrasonic sensor for harsh environments in the versatile WORLD-BEAM standing housing. Ideal when the sensing target is made of clear or transparent materials, or the target surface varies.

ULTRASONIC SENSORS

QUICK DISCONNECT CABLES

Mfg. Part No.	TEACH Options	Cable Connection	Output	Stock No.	Price Each 1-2
● QS18UNA	Integral pushbutton or remote TEACH	4-wire, shielded cable, 2m	NPN	69K7353	120.18
● QS18UPA			PNP	69K7357	120.18
● QS18UPAQ8		4-pin integral Euro-style QD		69K7360	121.23

Mfg. Part No.	Length	Description	Stock No.	Price Each 1-2
● MQDEC2-415	5m	Straight, 4-pin Euro-style	34K8139	36.27

MOUNTING BRACKETS

Mfg. Part No.	Description	Stock No.	Price Each 1-2
● SMB18A	12-gauge, stainless steel right-angle bracket, clearance for M4 (#8) hardware	02H7579	4.76
● SMB18SF	18mm swivel bracket, black thermoplastic polyester with stainless steel hardware	02H7580	9.37

(87031)

S18U — 18mm BARREL ULTRASONIC SENSORS

RoHS Compliant Available

BANNER more sensors, more solutions

- Fast, easy-to-use TEACH-Mode programming; no potentiometer adjustments
- Short dead zone
- Two bi-colored status LEDs
- Rugged encapsulated design for harsh environments
- Wide operating range of -20°C to +60°C (-4°F to +140°F)
- Temperature compensation
- 10 to 30V dc operation

Straight Housing

Right Angle Housing

S18UB series is configurable for normally open or normally closed operation and has a fast response time (5 milliseconds). **S18UI** and **S18UU series** has a scalable output that automatically distributes the output signal over the width of the programmed sensing window and has selectable response times of 2.5 or 30 ms.

Mfg. Part No.	Connection	Output Type	Housing	Stock No.	Price Each 1-2
● S18UBA	5-wire, 2 m (6.5') cable	NPN, PNP	Straight	99H2741	224.33
● S18UBAQ	5-pin Euro-style QD	NPN, PNP	Straight	86H7371	220.94
● S18UBARQ	5-pin Euro-style QD	NPN, PNP	Right Angle	99H2745	236.92
● S18UIA	5-wire, 2 m (6.5') cable	Current	Straight	99H2746	275.00
● S18UIAQ	5-pin Euro style QD	Current	Straight	99H2748	286.14
● S18UIAR	5-wire, 2 m (6.5') cable	Current	Right Angle	99H2749	287.10
● S18UIARQ	5-pin Euro style QD	Current	Right Angle	99H2751	287.10
● S18UUA	5-wire, 2 m (6.5') cable	Voltage	Straight	99H2752	286.14
● S18UUAQ	5-pin Euro style QD	Voltage	Straight	99H2754	275.00
● S18UUARQ	5-pin Euro style QD	Voltage	Right Angle	99H2757	298.73

(148723)

ULTRASONIC SENSORS

RoHS Compliant Available

PEPPERL+FUCHS SENSING YOUR NEEDS

Specifications
- Input voltage: 10-30 VDC
- Operating temperature: -14 °F to +158 °F
- Sensing face: Epoxy resin/silica composite
- Housing material: Nickel-plated brass (UB), stainless steel (UC)
- Sensor protection: Short-circuit, overload, reverse polarity
- Protection: IP65
- Standard target: 100 mm x 100 mm flat plate
- Connection type V15: 5-pin micro DC
- Connection type V1:4-pin micro DC

Ultrasonic sensors use sound waves for measurement, making them ideal for consideration in applications that are difficult to solve with photoelectric devices. They are available with adjustable single or dual switch points, or with analog outputs.They're often used for web detection or level control.

Mfg. Part No.	Sensing Range	Output	Stock No.	Price Each 1-2
● UB200-12GM-E5-V1	15mm to 200mm	PNP. 1/NO/NC 1switch	29M6027	316.71
● UB200-12GM-I-V1	15mm to 200mm	4-20 mA analog	13M6119	333.09
● UB300-18GM40-E5-V1	30mm to 300mm	1 PNP NO/NC	20K4263	210.22
● UB300-18GM40-I-V1	30mm to 300mm	4-20 mA analog	20K4264	255.68
● UB300-18GM40-U-V1	30mm to 300mm	0-10 V analog	20K4265	245.73
● UB500-18GM75-E5-V15	50mm to 500mm	1PNP NO/NC	73R7549	301.13
● UB800-18GM40-E5-V1	50mm to 800mm	1PNP NO/NC	29M6053	232.95
● UC2000-30GM-IUR2-V15	0.08mm to 2m	4-20 mA	65H6306	619.99
● UB2000-30GM-E5-V15	0.08mm to 2m	1PNP NO/NC	03H6735	338.56
● UC6000-30GM-IUR2-V15	350mm to 6m	4-20 mA	70H8603	725.84

(177009)

OSISENSE™ XX ULTRASONIC SENSORS

RoHS Compliant Available

Telemecanique Sensors

- Connection: M12
- Nominal Sensing Distance: 2 mm to 50.8 mm (0.08 in. to 2.0 in.)
- 18 mm Ultrasonic Sensor

A technology suited to your needs. Ultrasonic sensors provide detection without physical contact for all objects, regardless of: material (such as metal, plastic, wood, or cardboard), nature (such as solid, liquid, powder, or paste), color and degree of transparency.

Optimize detection with OsiSense XX. With detection range of up to 50 mm (2.0 in.) and ability to detect all types of objects, the OsiSense XXV18 is ideally suited for industrial proximity sensor applications!

DIFFUSE SYSTEM - FIXED SENSING

Mfg. Part No.	Discrete Output	Connection	Wiring Technique	Stock No.	Price Each
XXV18B1NAM12	NO/NPN	M12 Connector	3-Wire	48W7382	133.77
● XXV18B1PAM12	NO/PNP	M12 Connector	3-Wire	48W7384	139.79
XXV18B1NBM12	NC/NPN	M12 Connector	3-Wire	48W7383	133.77
XXV18B1PBM12	NC/PNP	M12 Connector	3-Wire	48W7385	133.77

(210238)

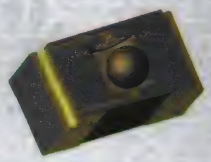
MICRO VIBRATION SENSOR

RoHS Compliant Available

COMUS International

- Operating voltage: +15 V
- Operating temperature: -20°C to 70°C
- Reaction point: approx. 50 mg
- Size 2.45 mm x 2.85 mm x 1.7 mm
- Noiseless
- Protected against environmental stress
- Automated SMD-mounting

The micro vibration switch detects vibrations by means of a micro ball (d=0.8mm). The ball bridges two contacts reducing the resistance between the two external connection pads from several mega ohms (>30MOhm) to below 100 ohms.



Mfg. Part No.	Stock No.	Price Each 1-499
● MVS060802	73R7795	2.76

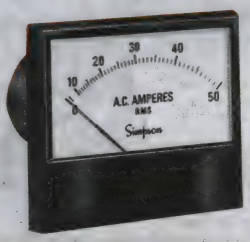
(177854)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

CENTURY PANEL METERS



Attractive, easy-to-read meters in black plastic case with glass window. All models shown have black knife-edge pointer and ±2% accuracy. UL recognized. Many other ranges available; *go online or call. Order external shunts separately on page 1897.*

DC VOLTMETERS WITH SELF-SHIELDING METER MOVEMENT

Range	Ohms	Model 2121 1.5″ Stock No.	Model 2121 1.5″ Price Each	Model 2122 2.5″ Stock No.	Model 2122 2.5″ Price Each	Model 2123 3.5″ Stock No.	Model 2123 3.5″ Price Each
0-10	1KΩ Per V	...	...	55F5358	92.23	98F6026	92.95
0-100	1KΩ Per V	...	...	55F5363	92.09	...	...
0-150	1KΩ Per V	...	...	55F5364	92.09	55F5373	92.90

DC AMMETERS WITH SELF-SHIELDING METER MOVEMENT

Range	Ohms	Model 2122 2.5″ Stock No.	Model 2122 2.5″ Price Each	Model 2123 3.5″ Stock No.	Model 2123 3.5″ Price Each	Model 2124 4.5″ Stock No.	Model 2124 4.5″ Price Each
0-3	00.0166	55F5252	87.86	55F5259	92.06	...	...
0-10	00.0050	55F5254	87.86	...	...	...	...
0-25	00.0020	55F5256	87.86	55F5263	92.06	...	...

DC MICROAMMETERS WITH SELF-SHIELDING METER MOVEMENT

		Stock No.	Price Each	Stock No.	Price Each	Stock No.	Price Each
0-200	1100	...	...	55F5313	94.33	...	...

DC MILLIAMMETERS WITH SELF-SHIELDING METER MOVEMENT

Range	Ohms	Model 2122 2.5″ Stock No.	Model 2122 2.5″ Price Each	Model 2123 3.5″ Stock No.	Model 2123 3.5″ Price Each
0-5	2.00	...	...	55F5342	88.17
0-25	4.00	...	...	55F5344	92.02
0-100	1.00	55F5337	87.81	...	...

AC VOLTMETERS WITH IRON-VANE METER MOVEMENT

Range	Ohms	Model 2153 3.5″ Stock No.	Model 2153 3.5″ Price Each	Model 2154 4.5″ Stock No.	Model 2154 4.5″ Price Each
0-150	25000	55F5387	91.46	55F5392	98.84
0-250	41166	55F5388	91.08	...	...

AC AMMETERS WITH IRON-VANE METER MOVEMENT

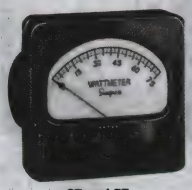
Range	Ohms	Model 2152 2.5″ Stock No.	Model 2152 2.5″ Price Each	Model 2153 3.5″ Stock No.	Model 2153 3.5″ Price Each	Model 2154 4.5″ Stock No.	Model 2154 4.5″ Price Each
0-10	0.0040	55F5276	79.47	55F5285	83.64	55F5292	89.89
0-15	0.0025	55F5277	79.58	55F5286	83.72	...	...
0-25	0.0020	55F5278	81.75	55F5287	85.93	...	...
0-50	0.0010	55F5280	81.75	55F5288	85.93	55F5295	92.18

(2405)

(196527)

ROUND AND RECTANGULAR PANEL METERS

25 and 55



27 and 57

29, 59 and 79

Popular replacement meters feature black plastic case, glass window, and black spade pointer. Accuracy for all models shown: ±2% f.s. UL recognized (except wattmeters). Other ranges available; *go online or call. Order external shunts separately on page 1897 and current transformers separately online or call.*

DC VOLTMETERS WITH SELF-SHIELDING METER MOVEMENT

Range	Resist. (Ω)	Model 25 3.5″ Stock No.	Model 27 3.5″ Stock No.	Price Each	Model 29 4.5″ Stock No.	Price Each
0-5	1000 Ohms Per Volt	...	55F039	92.62	...	...
0-15		...	...	...	55F251	100.19
0-25		...	55F038	92.62	...	...
0-30		55F1112	...	92.54	55F145	100.32
0-50		55F1015	55F043	92.62	55F183	100.29
0-100		62F3253	...	92.54	55F252	100.31
0-150		...	55F045	92.62	55F170	100.29
0-250		55F1018	...	92.54	...	...
0-300		...	...	...	55F184	100.30
0-3000+	2000	...	...	...	55F255	131.69

+External multiplier furnished with meter

DC AMMETERS WITH SELF-SHIELDING METER MOVEMENT

Range	Resist. (Ω)	Model 25 3.5″ Stock No.	Model 27 3.5″ Stock No.	Price Each	Model 29 3.5″ Stock No.	Price Each
0-2	0.025	...	...	...	55F259	99.28
0-3	0.0166	55F1057	...	91.66	55F260	99.28
0-5	0.010	...	...	...	55F210	99.29
0-10	0.005	...	55F064	91.76	...	...
0-25	0.0020	55F1060	...	91.70	...	...
0-30	0.0017	...	55F4828	91.76	...	...
0-50	0.001	...	...	...	55F212	99.28
0-200*	10.0	62F3268	...	91.57	...	...
0-300*	10.0	...	...	...	62F3279	99.21
0-500*	10.0	...	...	...	62F3280	99.21
30-0-30	0.0017	55F1062	...	95.43	...	...

*Require external shunt; *order separately on page 1897.*

DC MICROAMMETERS WITH SELF-SHIELDING METER MOVEMENT

0-50	1800	55F1031	55F071	110.00	55F176	118.97
0-100	1800	...	55F072	101.49	...	...

AC VOLTMETERS WITH IRON-VANE TYPE METER MOVEMENT

Range	Resist. (Ω)	Type 55 3.5″ Stock No.	Type 57 3.5″ Stock No.	Price Each	Type 59 4.5″ Stock No.	Price Each
0-10	133	55F1067	...	89.37	...	...
0-50	3,333	55F1069	...	87.63	...	...
0-150	25,000	55F1071	55F115	91.17	55F181	97.17
0-250	41,166	...	55F273	90.85	62F3296	96.86
0-300	50,000	55F1072	62F3291	90.85	55F191	96.86
0-500+	83,333	...	...	...	55F192	122.11
0-1000+	166,666	...	55F275	132.18	...	...

+External multiplier furnished with meter

AC AMMETERS WITH IRON-VANE TYPE METER MOVEMENT

0-3	0.028	...	...	...	55F194	88.03
0-5	0.008	55F1088	...	83.01	55F195	88.06
0-10	0.004	55F1089	55F134	83.45	55F196	88.31
0-15	0.0025	55F1119	55F156	83.56	55F282	88.67
0-25	0.002	55F1090	55F135	86.00	55F197	90.87
0-50	0.001	55F1091	55F136	86.00	55F219	90.86
0-100**	0.008	55F1121	...	83.02	55F284	88.07

**Requires external transformer; *order separately online or call.*

WATTMETERS WITH DYNAMOMETER MOVEMENT

Range	Volts	Amps	Model 79 4.5″ Stock No.	Price Each
0-75	150	1.0	55F232	272.08
0-150	150	2.0	55F233	271.47
0-300	150	4.0	55F234	271.31
0-750	150	10.0	55F235	271.34
0-1500	300	10.0	55F236	271.34
0-3000	300	20.0	55F1140	271.57

(2393)

ANALOG (2%)

WIDE-VUE PANEL METERS

Simpson

Black plastic case with clear acrylic window for wide-angle visibility. 1½" models have black knife-edge pointer; 2½", 3½", 4½" models have black spade pointer. Accuracy for all models show: ±2% f.s. *Other ranges available; go online or call. For Wide-Vue bezel kits, external shunts and current transformers, go online or call.*

DC VOLTMETERS WITH SELF-SHIELDING METER MOVEMENT

Range	Res. (Ω)	Model 1212 1-1/2" Stock No.	Model 1212 1-1/2" Price Each	Model 1227 2-1/2" Stock No.	Model 1227 2-1/2" Price Each	Model 1327 3-1/2" Stock No.	Model 1327 3-1/2" Price Each	Model 1329 4-1/2" Stock No.	Model 1329 4-1/2" Price Each
0-200	1kV	...	...	...	...	55F1148	103.06	...	...
0-500	2k	...	...	...	...	55F1558	97.49	...	...
DC AMMETERS WITH SELF-SHIELDING METER MOVEMENT									
0-1	50m	55F447	87.87	55F1172	87.78	...	...	...	...
0-2	25m	55F448	88.20	...	...	55F1560	92.37	...	...
0-3	16.6m	55F449	87.85	...	...	55F1561	92.37	...	...
0-50	1m	...	...	55F1178	87.85	55F1566	92.37	...	...
DC MILLIAMMETERS WITH SELF-SHIELDING METER MOVEMENT									
0-1	43	55F481	94.81	55F1517	87.20	55F1567	88.46	55F1617	94.80
0-3	2	...	...	55F1198	87.21	55F2501	88.45	...	...
0-15	6.6 (2.2)**	...	...	...	...	55F2502	88.59	...	...
0-50	2 (3)**	55F486	87.78	55F1521	87.80	55F1571	92.35	...	...
0-250	0.4	...	...	55F2500	87.85	...	...	...	...

Resistance shown in parenthesis for **model 1212 only.

DC MICROAMMETERS WITH SELF-SHIELDING METER MOVEMENT

25-0-25	1.8k	55F477+	107.16	...	...	...	...	...	...
50-0-50	1.8k	55F478	95.81	55F1533	99.75	55F1583	102.35	55F1633	113.38
100-0-100	1.1k	55F479	88.73	55F4850	91.80	55F2513	95.01	...	...

+Resistance is 5500Ω.

TAUT BAND DC MICROAMMETERS WITH SELF-SHIELDING METER MOVEMENT

Range	Resist. (Ω)	Model 1227T 2-1/2" Stock No.	Model 1227T 2-1/2" Price Each	Model 1327T 3-1/2" Stock No.	Model 1327T 3-1/2" Price Each	Model 1329T 4-1/2" Stock No.	Model 1329T 4-1/2" Price Each
0-10	4900	...	...	55F2228	173.96	...	...
0-100	500	...	...	...	...	55F2237	120.81

AC VOLTMETERS WITH IRON VAN METER MOVEMENT

Range	Resist. (Ω)	Model 1257 2-1/2" Stock No.	Model 1257 2-1/2" Price Each	Model 1357 3-1/2" Stock No.	Model 1357 3-1/2" Price Each	Model 1359 4-1/2" Stock No.	Model 1359 4-1/2" Price Each
0-50	3,333	...	...	55F2527	87.86	55F2534	96.54
0-300	50,000	55F1536	85.31	55F1586	90.91	55F1636	96.66

AC AMMETERS WITH IRON VANE METER MOVEMENT

Range	Resist. (Ω)	Model 1257 2-1/2" Stock No.	Model 1257 2-1/2" Price Each	Model 1357 3-1/2" Stock No.	Model 1357 3-1/2" Price Each	Model 1359 4-1/2" Stock No.	Model 1359 4-1/2" Price Each
0-1	0.213	...	...	55F1537	83.19	55F1587	87.82
0-2	0.065	...	...	55F2589	83.41	55F2596	88.04
0-5	0.008	55F2582	79.07	55F1538	83.25	55F1588	87.85
0-10	0.004	55F2583	79.19	55F1539	83.48	55F1589	88.10
0-10†	0.008	...	...	48F5566	83.24	...	...
0-25†	0.008	...	...	48F5567	83.24	48F5571	87.86
0-50†	0.008	...	...	48F5568	83.24	...	...
0-75	0.0002	...	...	55F1008	95.83	...	...
0-100†	0.008	...	...	...	...	55F2598	87.86
0-200†	0.008	...	...	55F2593	83.24	55F2600	87.86

AC MILLIAMMETERS WITH IRON VANE METER MOVEMENT

0-50	80.0	...	...	55F2539	83.25	...	...
0-500	0.9	55F2538	78.93	...	...	...	...

†Requires external current transformer, *order separately.*
(2417)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

TRU-VUE PANEL METERS

Simpson

Modern, clear acrylic lens to update your panel design. All models shown have black knife-edge pointer and ±2% f.s. accuracy. Available in 5 sizes: 1½", 2½", 3½", 4½", 4"x 6"; *go online or call for sizes and ranges not shown. Order external shunts separately on page 1897 and current transformers separately online or call.*

DC MICROAMMETERS (PIVOT AND JEWEL)

Range	Resistance (ohms)	Model 921 1-1/2" Stock No.	Model 921 1-1/2" Price Each	Model 922 2-1/2" Stock No.	Model 922 2-1/2" Price Each
0-100	1800	95F5675	95.41	95F5676	98.99
0-200	1100	95F5679	88.27	95F5680	90.23
100-0-100	1100	95F5683	88.27	95F5684	91.85
DC MILLIAMMETERS (PIVOT AND JEWEL)					
0-1	43 (43)*	95F5696	82.53	95F5697	86.98
0-5	2.0 (20)*	95F5700	82.59	95F5701	86.98
0-25	4.0 (6.0)*	95F5704	86.53	95F5705	87.54
0-100	1.0 (1.5)*	95F5708	86.45	95F5709	87.54

*Resistance of 1-1/2" size DC milliammeters are shown in parentheses.

DC AMMETERS (PIVOT AND JEWEL)

0-1	0.05	95F5712	86.55	95F5713	88.24
0-5	0.01	95F5716	86.54	95F5717	88.24
0-10	0.005	95F5720	86.53	95F5721	88.24
0-50†	0.001*	95F5724	86.46	95F5725	88.24
0-100‡	10.0*	95F5728	86.46	95F5729	87.49
0-500‡	10.0*	95F5732	86.46	95F5733	87.47

*1-1/2 size only — 10 ohms † **Model 921 1-1/2"** requires external shunt *order separately online or call.* ‡ Requires external shunt *order separately online or call.*

DC MILLIVOLTMETERS (PIVOT AND JEWEL)

0-50	10	95F5736	86.46	95F5737	87.49
50-0-50	20	95F5740	86.35	95F5741	87.47
DC VOLTMETERS (PIVOT AND JEWEL)					
0-15	1000 Ohms per Volt	95F5744	89.38	95F5745	91.86
0-30		95F5748	89.37	95F5749	91.85
0-50		95F5752	89.37	95F5753	91.85
0-150		95F5756	89.37	95F5757	91.85
0-500*	2000	95F5760	89.40	95F5761	94.29

***Model 921 1- 1/2"** requires external multiplier; *order separately. Go online or call.*

DC MICROAMMETERS (PIVOT AND JEWEL)

Range	Resistance (ohms)	Model 923 3-1/2" Stock No.	Model 923 3-1/2" Price Each	Model 924 4-1/2" Stock No.	Model 924 4-1/2" Price Each
0-100	1800	95F5677	102.26	95F5678	113.18
0-200	1100	95F5681	94.80	95F5682	102.79
100-0-100	1100	95F5685	95.45	95F5695	103.28
DC MILLIAMMETERS (PIVOT AND JEWEL)					
0-1	43	95F5698	88.63	95F5699	95.32
0-5	2.0	95F5702	88.64	95F5703	95.33
0-25	4.0	95F5706	92.44	95F5707	99.13
0-100	1.0	95F5710	92.44	95F5711	99.13
DC AMMETERS (PIVOT AND JEWEL)					
0-1	0.05	95F5714	92.46	95F5715	99.64
0-5	0.01	95F5718	92.44	95F5719	99.64
0-10	0.005	95F5722	92.47	95F5723	99.65
0-50	0.001	...	...	95F5727	99.65
0-100†	10.0	...	...	95F5731	99.57
0-500†	10.0	95F5734	92.39	95F5735	99.57

†Requires external shunt; *Order external shunts separately online or call.*

DC MILLIVOLTMETERS (PIVOT AND JEWEL)

0-50	10	95F5738	92.39	95F5739	99.57
50-0-50	20	95F5742	92.37	95F5743	99.55
DC VOLTMETERS (PIVOT AND JEWEL)					
0-15	1000 Ohms per Volt	95F5746	95.22	95F5747	100.69
0-30		95F5750	93.34	95F5751	100.68
0-50		95F5754	93.34	95F5755	100.68
0-150		95F5758	93.34	95F5759	100.68
0-500	2000	95F5762	97.88	95F5763	104.74

AC AMMETERS (IRON VANE)

Range	Resistance (ohms)	Model 953 3-1/2" Stock No.	Model 953 3-1/2" Price Each	Model 954 4-1/2" Stock No.	Model 954 4-1/2" Price Each
0-5	0.008	95F5776	86.03	95F5777	89.93
0-15	0.0025	95F5778	85.12	95F5779	89.04
0-25	0.002	95F5780	87.44	95F5542	88.20
0-50	0.001	95F5543	87.43	95F5544	88.63
0-75‡	0.008	95F5545	85.26	95F5546	89.93
0-100‡	0.008	95F5547	85.26	95F5548	89.94
0-300‡	0.008	95F5549	85.26	95F5550	89.93

➤ CONTINUED ➤

TRU-VUE PANEL METERS (CONT.)

Range	Resistance (ohms)	Model 953 3-1/2" Stock No.	Model 953 3-1/2" Price Each	Model 954 4-1/2" Stock No.	Model 954 4-1/2" Price Each
‡Requires external 5A current transformer; *sold separately online or call.*					
AC MILLIAMMETERS (IRON VANE)					
0-50	80	95F5764	83.95	95F5765	88.61
0-100	17.2	95F5766	84.69	95F5767	89.45
AC VOLTMETERS (IRON VANE)					
0-50	3333	95F5768	88.51	95F5769	99.20
0-150	25000	95F5770	91.82	95F5771	97.64

➤CONTINUED➤

TRU-VUE PANEL METERS (CONT.)

AC VOLTMETERS (IRON VANE)

Range	Resistance (ohms)	Model 953 3-1/2" Stock No.	Model 953 3-1/2" Price Each	Model 954 4-1/2" Stock No.	Model 954 4-1/2" Price Each
0-300	50000	95F5772	91.51	95F5773	97.32
0-500*	25000	95F5774	93.66	95F5775	97.64

* Requires external multiplier; available separately; *go online or call.*
(2411)

NEW BIG LOOK PANEL METERS

YOKOGAWA

- Accuracy: ± 2% of full scale
- Meet ANSI specifications C-39.1
- Elements: taut band or pivot jewel
- Front panel surface mount

Meter Range	Meter Movement	1.5 inches Mfg. Part No.	1.5 inches Stock No.	1.5 inches Price Each	2.5 inches Mfg. Part No.	2.5 inches Stock No.	2.5 inches Price Each	3.5 inches Mfg. Part No.	3.5 inches Stock No.	3.5 inches Price Each	4.5 inches Mfg. Part No.	4.5 inches Stock No.	4.5 inches Price Each
DC VOLTMETERS — ZERO-LEFT													
0-1 VDC	Taut Band	250 120 LALA	63K2380	68.00	250 220 LALA	63K2396	65.00	...	...	...	...	...	...
0-10 VDC	Taut Band	...	...	...	...	...	...	250 320 MTMT	65K3145	66.00	250 420 MTMT	65K3167	68.00
0-50 VDC	Taut Band	...	...	...	250 220 NTNT	65K3125	65.00	250 320 NTNT	65K3146	66.00	...	...	...
0-100 VDC	Taut Band	...	...	...	250 220 PKPK	65K3126	65.00	250-320-PKPK	65K3147	66.00	250 420 PKPK	65K3169	68.00
0-300 VDC	Taut Band	250 120 RXRX	63K2384	68.00	250 220 RXRX	63K2400	65.00	...	...	...	...	...	...
DC MICROAMMETERS — ZERO-LEFT													
0-100 µADC	Taut Band	...	...	...	250 200 DRDR	63K2387	66.00	...	...	...	...	...	...
0-200 µADC	Taut Band	250 100 EAEA	63K2373	69.00	250 200 EAEA	63K2388	66.00	...	...	...	...	...	...
0-500 µADC	Taut Band	250 100 EMEM	63K2374	69.00	250 200 EMEM	63K2389	63.00	...	...	...	...	...	...
DC MILLIAMMETERS — ZERO-LEFT													
0-1 mADC	Taut Band	...	...	...	250 200 FAFA	65K3122	66.00	250 300 FAFA	65K3142	68.00	...	...	...
DC AMMETERS — ZERO-LEFT													
0-1 ADC	Taut Band	250 100 LALA	63K2378	69.00	250 200 LALA	63K2393	66.00	...	...	...	...	...	...
0-5 ADC	Taut Band	250 100 LSLS	65K3118	66.00	250-200-LSLS	63K2394	66.00	...	...	...	...	...	...
0-10 ADC	Taut Band	...	...	...	250 200 MTMT	65K3123	63.00	250 300 MTMT	65K3143	67.00	250 400 MTMT	65K3165	69.00
0-20 ADC	Taut Band	...	...	...	...	...	...	...	...	...	250 400 NGNG	65K3166	69.00
0-30 ADC	Taut Band	...	...	...	250 200 NLNL	63K2395	66.00	...	...	...	...	...	...
AC VOLTMETERS — SELF-CONTAINED, IRON VANE TYPE, 60Hz													
0-150 VAC	Pivot and Jewel	...	...	...	250 244 PZPZ	65K3140	66.00	250 344 PZPZ	65K3160	67.00	250 444 PZPZ	65K3181	69.00
0-300 VAC	Pivot and Jewel	...	...	...	250 244 RXRX	65K3141	66.00	250 344 RXRX	65K3161	67.00	250 444 RXRX	65K3182	69.00
0-500 VAC	Pivot and Jewel	...	...	...	...	...	...	250 344 SFSF	65K3162	67.00	...	...	...
0-600 VAC	Pivot and Jewel	...	...	...	...	...	...	250-344-SJSJ	65K3163	67.00	250 444 SJSJ	65K3184	69.00
AC AMMETERS — SELF-CONTAINED, 25-400Hz, IRON VANE													
0-5 AAC	Pivot and Jewel	...	...	...	250 240 LSLS	65K3127	66.00	250 340 LSLS	65K3148	67.00	250 440 LSLS	65K3170	69.00
0-10 AAC	Pivot and Jewel	...	...	...	250 240 MTMT	65K3139	66.00	...	...	...	...	...	...
AC AMMETERS — TRANSFORMER-RATED, 0-5A, 25-500Hz, IRON VANE													
0-50 AAC	Pivot and Jewel	...	...	...	250 240 LSNT	65K3128	66.00	250 340 LSNT	65K3149	67.00	250 440 LSNT	65K3171	69.00
0-75 AAC	Pivot and Jewel	...	...	...	250 240 LSPB	65K3129	66.00	250 340 LSPB	65K3150	67.00	250 440 LSPB	65K3172	69.00
0-100 AAC	Pivot and Jewel	...	...	...	250 240 LSPK	65K3130	66.00	250 340 LSPK	65K3151	68.00	250 440 LSPK	65K3173	69.00
0-150 AAC	Pivot and Jewel	...	...	...	250 240 LSPZ	65K3131	66.00	250 340 LSPZ	65K3152	67.00	250 440 LSPZ	65K3174	69.00
0-200 AAC	Pivot and Jewel	...	...	...	250 240 LSRL	65K3134	66.00	250 340 LSRL	65K3155	67.00	250 440 LSRL	65K3175	69.00
0-300 AAC	Pivot and Jewel	...	...	...	250 240 LSRX	65K3135	66.00	250 340 LSRX	65K3156	67.00	250 440 LSRX	65K3176	69.00
0-400 AAC	Pivot and Jewel	...	...	...	250 240 LSSC	65K3136	66.00	250-340-LSSC	65K3157	67.00	250 440 LSSC	65K3177	69.00
0-500 AAC	Pivot and Jewel	...	...	...	250 240 LSSF	65K3137	66.00	...	...	...	250 440 LSSF	65K3178	70.00
0-800 AAC	Pivot and Jewel	...	...	...	...	...	...	...	...	...	250 440 LSSN	65K3179	69.00
0-1 kAAC	Pivot and Jewel	...	...	...	250 240 LSVA	65K3138	66.00	250-340-LSVA	65K3159	67.00	250 440 LSVA	65K3180	69.00

(87060)

element14 COMMUNITY

Get inspired, collaborate, design, research, ask experts questions.

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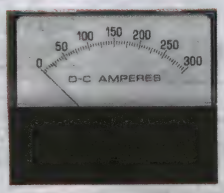
(196548)

HORIZON LINE PANEL METERS

YOKOGAWA



- Accuracy: ± 2% of full scale
- Meet ANSI specifications C-39.1
- Elements: taut band or pivot jewel
- Front panel surface mount
- Rear panel mounting available; *go online or call*

Meter Range	Meter Movement	1.5 inches Mfg. Part No.	1.5 inches Stock No.	1.5 inches Price Each	2.5 inches Mfg. Part No.	2.5 inches Stock No.	2.5 inches Price Each	3.5 inches Mfg. Part No.	3.5 inches Stock No.	3.5 inches Price Each	4.5 inches Mfg. Part No.	4.5 inches Stock No.	4.5 inches Price Each
DC VOLTMETERS — ZERO-LEFT													
0-10 VDC	Taut Band	251 120 MTMT	65K3186	68.00	251-220-MTMT	65K3192	65.00	...	...	...	251 420 MTMT	65K4615	69.00
0-50 VDC	Taut Band	...	...	...	251 220 NTNT	65K3193	65.00	251-320-NTNT	65K3204	66.00	251 420 NTNT	65K4616	69.00
0-100 VDC	Taut Band	251 120 PKPK	65K3188	68.00	251 220 PKPK	65K3194	65.00	251 320 PKPK	65K3205	66.00	251-420-PKPK	65K4617	68.00
DC MILLIAMMETERS — ZERO-LEFT													
0-1 mADC	Taut Band	...	...	...	251 200 FAFA	65K3189	66.00	...	...	...	251 400 FAFA	65K4612	69.00
DC AMMETERS — ZERO-LEFT													
0-5 ADC	Taut Band	...	...	...	251 200 LSLS	65K3190	66.00	251 300 LSLS	65K3202	67.00	251 400 LSLS	65K4613	69.00
0-10 ADC	Taut Band	...	...	...	251 200 MTMT	65K3191	66.00	251 300 MTMT	65K4611	67.00	251 400 MTMT	65K4614	69.00
AC VOLTMETERS — SELF-CONTAINED, IRON VANE TYPE, 60Hz													
0-150 VAC	Pivot and Jewel	...	...	...	251 244 PZPZ	65K3199	66.00	251-344-PZPZ	19M0127	67.00	251-444-PZPZ	19M0135	69.00
0-300 VAC	Pivot and Jewel	...	...	...	251 244 RXRX	65K3200	66.00	251-344-RXRX	19M0131	67.00	251-444-RXRX	19M0144	69.00
AC AMMETER — SELF-CONTAINED, 25-400Hz, IRON VANE													
0-5 AAC	Pivot and Jewel	...	...	...	251 240 LSLS	65K3195	66.00	251-340-LSLS	87K2506	67.00	251-440-LSLS	19M0149	69.00
AC AMMETERS — TRANSFORMER-RATED, 0-5a, 25-400Hz, IRON VANE													
0-50 AAC	Pivot and Jewel	...	...	...	251 240 LSNT	65K3196	66.00	251-340-LSNT	03M5322	67.00	251-440-LSNT	89K7891	69.00
0-150 AAC	Pivot and Jewel	...	...	...	251 240 LSPZ	65K3197	66.00	251-340-LSPZ	19M0154	67.00	251-440-LSPZ	19M0163	70.00
0-500 AAC	Pivot and Jewel	...	...	...	251 240 LSSF	65K3198	66.00	251-340-LSSF	19M0159	67.00	251-440-LSSF	19M0546	69.00
AC FREQUENCY METERS — SELF-CONTAINED, ACCURACY ±3% OF SPAN													
55-65 HzAC	Pivot and Jewel	...	...	...	254250ANAN	64K0359	138.00	254-350-ANAN	81C7474	139.00	254-450-ANAN	74K0694	143.00
AC LOAD INDICATORS — 5A CURRENT TRANSFORMER RATED, 60Hz, IRON VANE TYPE													
0-150 AAC	Pivot and Jewel	...	...	...	251 240 LSPZ7AAA	65K3132	96.00	251 340 LSPZ7AAA	65K3153	97.00	...	...	...
0-150 AAC	Pivot and Jewel	...	...	...	251 240 LSPZ7AAB	65K3133	96.00	...	...	...	...	...	...
0-150 AAC	Pivot and Jewel	...	...	...	...	...	...	251-340-LSPZAAAJ	18M1367	97.00	251-440-LSPZ7AAJ	19M0596	99.00
0-150 AAC	Pivot and Jewel	...	...	...	...	...	...	251-340-LSPZ7AAK	19M1351	97.00	251-440-LSPZ7AAK	19M0600	99.00

(87062)

3300 SERIES RUGGED SEAL METER RELAYS

Simpson

- Wide Variety of Control, Alarm, and Limit Use
- Calibration Not Affected by Steel Panel Mounting
- Rugged Metal Case for Rigorous Environments
- Commercially-Sealed, Moisture and Dust Proof
- + Use with 5A current transformers; *order separately online or call*
- Use with **Model 186** current transformer

AC VOLTMETERS RECTIFIED

Mfg. Part No.	Size (in.)	Input (AC Volts)	Set Points	Stock No.	Price Each
21642	4.5	300	2	01B7059	607.30

DC MICROAMMETERS

Mfg. Part No.	Size (in.)	Input (DC Amps)	Set Points	Stock No.	Price Each
21659	3.5	50	1	03B7920	480.13

AC AMMETERS RECTIFIER

Mfg. Part No.	Size (in.)	Input (AC Amps)	Set Points	Stock No.	Price Each
21637	4.5	5	2	98F1133	643.41

PERCENT MOTOR LOAD

Mfg. Part No.	Size (in.)	Input (AC Amps)	Set Points	Stock No.	Price Each
21643 +	4.5	0-5	2	01B7060	644.01
21683 +	4.5	0-5	1	01B7070	545.21
21684 +	4.5	0-10	1	01B7071	507.99

TEMPERATURE METERS

Mfg. Part No.	Size (in.)	Range	Set Points	Stock No.	Price Each
21615	4.5	0 to 1500°F (0°C to +815°C)	2	01B7044	680.68

(79266)

SYNCHROSCOPES — PIVOT & JEWEL

YOKOGAWA

- Scale: "Slow-Fast"
- Zero center
- Black cover

Mfg. Part No.	Voltage (V)	Normal Frequency (Hz)	Model Type	Stock No.	Price Each
120 452 ADAA	120	50/60	AB16	13T0978	1187.00
106 452 ACAA	120	400	AB40	13T0973	906.00
120 452 ACAA	120	400	AB16	13T0977	1164.00
106 452 DDAA	240	50/60	AB40	13T0976	950.00
120 452 DDAA	240	50/60	AB16	13T0980	1130.00
106 452 DCAA	240	400	AB40	13T0975	933.00
120 452 DCAA	240	400	AB16	13T0979	1164.00

(191686)

"CROMPTON" EXTERNAL SWITCHBOARD AND PORTABLE SHUNTS

Crompton INSTRUMENTS

Features:

- Accuracy +/- ¼% (0.25%)
- Temperature coefficient of resistance: +/- 0.000015 between 40-60° C
- Standard 50mV drop

FN 100-50mV

DC Shunts are a separately mounted device for extending the measured current beyond the limits of selfcontained DC ammeters. Switchboards non-insulated style, are for use on Busbar in Switchgear applications. Base-mounted insulated types are for light control panels, educational and laboratory application. Lightweight insulated units are for Industrial application where strength and applications where space savings are needed, or for Military applications where dimension to MIL 10304 is required. For use with BUS. Standard 50mV drop; 60A, 70A, 100A, and 150mV units also available online .

SWITCHBOARD TYPE

Mfg. Part No.	Amp	Stock No.	Price Each
FH-20-50	20	42M3820	25.00
FH-30-50	30	42M3822	24.30
FH-50-50	50	42M3825	25.00

➤CONTINUED➤

"CROMPTON" EXTERNAL SWITCHBOARD AND PORTABLE SHUNTS (CONT.)

Mfg. Part No.	Amp	Stock No.	Price Each
FH-100-50	100	42M3815	24.30
FH-200-50	200	09J4219	24.30
FH-500-50	500	09J4221	35.00
FI-600-50	600	42M3830	52.66
FI-1000-50	1000	11J6979	116.11
FL-3000-50	3000	23H0204	315.00
FL-5000-50	5000	42M3837	465.81
BASE MOUNT PORTABLE TYPE			
FN-1-50	1	09J4222	25.00
FN-2-50	2	26H1403	25.00
FN-5-50	5	92F5447	25.00
FN-10-50	10	93B9571	25.00
FN-20-50	20	42M3843	25.00
FN-25-50	25	92F5449	24.30
FN-50-50	50	92F5450	25.00
FN-100-50	100	92F5451	25.00
FN-150-50	150	04H6680	25.00
FN-200-50	200	92F5452	25.00
FN-250-50	250	42M3844	25.00
FN-300-50	300	42M3845	25.00
FN-400-50	400	42M3846	25.00
LIGHTWEIGHT BASE MOUNT PORTABLE TYPE			
TM-1-50	1	67H6015	31.96
TM-5-50	5	67H6016	25.00
TM-10-50	10	72C5232	25.47
TM-15-50	15	42M3849	25.47
TM-20-50	20	66H8067	25.47
TM-30-50	30	04M7566	25.00
TM-200-50	200	04M7560	35.00
TM-400-50	400	42M3853	37.81
TM-600-50	600	04M6932	35.00
TM-800-50	800	42M3856	54.77

(80397)

EXTERNAL PORTABLE AND SWITCHBOARD SHUNTS

Simpson

Switchboard Shunts

Portable Shunts

Use with analog or digital DC ammeter panel or switchboard meters requiring external shunts. Available in 50mV or 100mV drop. Accuracy: ±1%. 5' leads included.

Mfg. Part No.	Amps	Stock No.	Price Each
50mV SWITCHBOARD SHUNTS			
06500	100	94C6989	55.47
06504	200	55F2572	58.44
06506	300	55F2573	58.44
06508	500	98F6076	81.82
50mV PORTABLE SHUNTS			
06700	1	12C2429	63.26
06703	5	12C2431	54.89
06704	10	12C2432	54.89
06705	15	12C2435	54.89
06707	25	12C2437	54.89
06709	50	12C2438	54.89
06711	75	55F267	54.89
06713	100	55F2569	55.44
06715	200	55F2570	54.89
100mV PORTABLE SHUNTS			
06716	10	90B8694	61.37
06717	100	94F8780	74.60

(3466)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

NANOMETER SERIES DMR20-1-ACV LED DISPLAY LINE MONITOR

NEW

RoHS Compliant Available

muRata Ps Murata Power Solutions

IP67 NEMA

- Universal 85 to 264Vac measurement range
- Self-powered directly from the AC supply
- Installs in "oiltight"1.20 inch (30.5mm) round cutouts
- Four-digit LED display with overvoltage indication
- Reads true-rms value to 0.1V resolution
- Knockout punches and tooling available
- Digital replacement for analog panel meters
- Screw-style terminal block simplifi es installation
- Self-resetting internal fuse for long-term reliability
- Provides moisture resistance to IP67/NEMA 6
- Supplied with EPDM rubber gasket and plastic hex nut
- Approvals to UL/cUL/IEC/ 61010-1

Murata Power Solutions' new **DMR20-1-ACV** self-powered, AC line-voltage monitors are designed to measure and display the true-rms voltage of AC power systems. Simply con nect any 85 to 264Vac 50/60Hz power source and these meters are fully operational—no additional components or power sources are required. The unit can also measure distorted AC power sources including triangle, square, and the quasi-sine output of many DC to AC power inverters. The **DMR20-1-ACV** is housed in a rugged, round polycarbonate case that provides excellent protection against moisture, dust, shock and vibration. Panel installation is straightforward: Using readily available tooling, simply drill and punch a 1.2 inch (30.5mm) diameter hole and anti-rotation notch, insert the meter and gasket, and securely fasten the meter using the supplied hex nut. The supplied hardware is designed to provide protection to IP67/NEMA 6. Their large, 0.30"/7.6mm, bright LED displays can be easily read from 10 feet away (3 meters). These meters accurately display ac voltages with 0.1V resolution. A built-in reset-table fuse assures long term reliability. All DMR20-1-ACVs employ a 13-bit A/D converter and precision metal-film resistors to achieve outstanding performance over an operating temperature range of –25 to +60°C.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
DMR20-1-ACV-R-C	85 to 264Vac voltage monitor (Red LED)	06X9603	53.87

KNOCKOUT PUNCHES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
DMR20-1-KP	1.2" (30.5mm) Round knockout punch (no keying notch)	08X3508	121.50
DMR20-2-KP	1.2" (30.5mm) Round knockout punch (with four keying notches)	08X3510	411.53
DMR20-3-KP	1/8" and 3/16" (3.2 and 4.7mm) key-notch nibbler tool	08X3511	493.83

(212226)

NANOMETER SERIES DMR20-10-DCM AUTO-RANGING DC VOLTAGE MONITOR

RoHS Compliant Available

muRata Ps Murata Power Solutions

NEW

IP67 NEMA

- Self-powered, requires only two connections
- Auto-ranging 6 to 75Vdc input range
- Installs in round "oiltight" 1.20 inch (30.5mm) cutouts
- Reverse polarity protected to –100Vdc
- Four-digit LED display with overvoltage indication
- Digital replacement for analog panel meters
- Screw-style terminal block simplifi es installation
- Self-resetting internal fuse for long-term reliability
- Provides moisture resistance to IP67/NEMA 6
- Supplied with EPDM rubber gasket and plastic hex nut
- Panel knockout punches and tooling available

Murata Power Solutions' new **DMR20-10-DCM** self-powered, auto-ranging DC voltage monitors are designed to measure and display the outputs the most popular DC power systems. Simply connect any 6 to 75V DC power source and these meters are fully operational—no additional components or power sources are required. Their large, 0.30"/7.6mm, bright LED displays can be easily read from 10 feet away (3 meters). These auto-ranging meters accurately display DC voltages with 0.01V in the LO Range (below 51V), or 0.1V resolution in the HI Range (above 51 V). A built-in resettable fuse assures long term reliability. All **DMR20-10-DCM's** employ a 13-bit A/D converter and precision metal-fi lm resistors to achieve outstanding performance over an operating temperature range of –25 to +60°C. The **DMR20-10-DCM** is housed in a rugged, round polycarbonate case that provides excellent protection against moisture, dust, shock and vibration. Panel installation is straightforward: using readily available tooling, simply drill and punch a 1.2 inch (30.5mm) diameter hole and anti-rotation notch, insert the meter and gasket into the panel, and securely fasten the meter using the supplied hex nut. The supplied hardware is designed to provide protection to IP67/NEMA 6.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
DMR20-10-DCM-R-C	6 to 75Vdc voltage monitor (Red LED)	08X3509	49.48

KNOCKOUT PUNCHES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
DMR20-1-KP	1.2" (30.5mm) Round knockout punch (no keying notch)	08X3508	121.50
DMR20-2-KP	1.2" (30.5mm) Round knockout punch (with four keying notches)	08X3510	411.53
DMR20-3-KP	1/8" and 3/16" (3.2 and 4.7mm) key-notch nibbler tool	08X3511	493.83

(212227)

POWER MONITORS

GIMA® SERIES 3-PHASE METERS

Simpson's GIMA® series replaces ammeters, voltmeters, switches, power factor and kW indicators, and kWh meters. Provides a single source of instrumentation for all measurement and metering requirements. Offers accurate, high-speed, continuous measurement, regardless of harmonics and waveform interruptions. "Auto-Commissioning" ensures that a reverse current transformer connection will not cause reading errors. Per phase kW and power factor allow cross-phase connection errors to be quickly and easily detected. Full 4-digit resolution of single-phase values and 5-digit resolution of 3-phase values. Offers maximum visibility with a custom backlit LCD display. The display is fully visible under most conditions and from all angles. Clear display legends ensure simple reading with no multipliers required. Power: 115VAC. Input current: 5A. Also available with 230VAC power; *go online or call.* CE compliant.

MEASUREMENT CAPABILITIES

Parameter	Type G100	Type G200	Type G400
Phase Amps	Yes	Yes	Yes
Phase Volts	Yes	Yes	Yes
Line Volts	Yes	Yes	Yes
Per Phase PF	Yes	Yes	Yes
Per Phase kW	Yes	Yes	Yes
Per Phase kvar	No	No	Yes
Per Phase kva	No	No	Yes
3-Phase PF	Yes	Yes	Yes
3-Phase kW	Yes	Yes	Yes
3-Phase kvar	No	No	Yes
3-Phase kva	No	No	Yes
Frequency	Yes	Yes	Yes
kWh	No	Yes	Yes
Capacitive kvarh	No	No	Yes
Inductive kvarh	No	No	Yes
Total kvarh	No	No	Yes
Import kvarh	No	No	Yes
Current Demand	Yes	Yes	Yes
Voltage Demand	Yes	Yes	Yes
kW Demand	No	No	Yes
Peak Amps	No	No	Yes
Peak Phase Volts	No	No	Yes
Peak Current Demand	Yes	Yes	Yes
Peak Voltage Demand	Yes	Yes	Yes
Neutral Current	No	No	Yes

GIMA® SERIES 3 PHASE METERS

Mfg. Part No.	Voltage Input	Features	Stock No.	Price Each
G100-1-1-1-0	120/208V	None	25C4129	477.53
G100-1-1-1-1	120/208V	Modbus (RS485/422) Communication	31T9219	731.69
G100-1-3-1-0	277/480V	None	25C4130	479.63
G100-1-3-1-1	277/480V	Modbus (RS485/422) Communication	31T9220	731.69
G200-1-3-1-0	277/480V	None	20C3986	533.77
G400-1-1-1-0	120/208V	None	20C3978	676.51
G400-1-1-1-1	120/208V	Modbus (RS485/422) Communication	26R3673	921.02
G400-1-3-1-0	277/480V	None	20C3981	666.85

(61276)

GIMA® ACCESSORIES

370xx

3-PHASE CURRENT TRANSFORMERS

Can be used to monitor AC current when the current level is too high for the meter.

Mfg. Part No.	Current Ratio	Stock No.	Price Each
37026	50:5	20C3988	128.19
37027	100:5	25C2456	114.11
37029	200:5	20C3991	122.50
37030	300:5	27C0306	100.41

(72388)

POWERLOGIC® POWER METERS AND DIGITAL PANEL METERS

RoHS Compliant Available

SQUARE D by Schneider Electric

PM800
- Cost-effective, modular design
- Easy installation
- High-visibility display
- High accuracy measurements
- Power quality analysis
- Extensive data logging, trending and forecasting
- Custom alarming with time stamping
- Expandable I/O
- Multi-port serial and Ethernet communications

PM800

PM1000 / DM6000

PM1000 / DM6000
- Easy-to-read display
- Analog load bar
- Turbo Key access to information
- Quick and easy installation
- Color-keyed terminal board labeling
- Secure settings

Model	PM800	PM1000 / DM6000
Input Voltage	347VAC (l-n), 600VAC (l-l)	44 to 277VAC/VDC
Load Burden:	15VA or 10W w/ All Options	3VA max.
Ride Through Time:	45ms at 120VAC or 125VDC	100ms at 50V
Frequency Range:	45 to 67Hz, 350 to 450Hz	45 to 65Hz

PowerLogic® PM800 series power meters combine accurate, 3-phase energy and power measurement with data logging, power quality analysis, alarm and I/O capabilities not typically available in a compact meter. **PowerLogic PM1000 and DM6000 series** meters are easy-to-use, cost-effective meters that offer the basic measurement capabilities required to monitor an electrical installation. These state-of-the-art multi-function meters are characterized by their rugged construction, compact size and low installation costs.

POWER METERS

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● PM820	Power Meter w/ Integrated Display, THD, Alarming	89H5544	3196.10
● METSEPM1200	Power Meter w/ Basic Readings, Energy and Demand Parameters, Summary Screens, RS485 Communication Port	41T0294	738.38

DIGITAL PANEL METER

● METSEDM6200	Digital Meter w/ Basic Readings, RS485 Communication Port	41T0293	523.40

(90756)

ACM20 SERIES FOUR-FUNCTION AC POWER METERS

RoHS Compliant Available

Murata Power Solutions

Features
- Displays AC volts, amps, watts, and power factor
- User-selectable display modes: continuous auto cycling, or fixed reading
- Universal 85-264Vac (47-63Hz) operating range
- Built-in current transformers simplify installation
- Ideal for power distribution units (PDUs) and power strips
- True-rms readings of complex voltage and current waveforms
- Low-power consumption: less than 1/4watt from 120Vac
- One-piece polycarbonate housing fits 0U and 1U racks
- Surface mount design occupies minimal panel space
- Bright red LED-display with four annunciators
- Optional frequency reading models (0.1Hz resolution)

ACM20 series AC power meters display the most critical measurements in mains-powered equipment: voltage, amperage, active power (watts), and power factor. A front panel selector-switch provides two modes of operation: a fixed reading of any of the four parameters, or a continuous cycling through all four measurements. An optional model displays line frequency with 0.1Hz resolution. All ACM20 multi-function power meters include built-in current transformers—no other user-supplied components are required. **ACM20 series** AC power meters are available in a choice of two input ranges: 0-32A (with 0.01A resolution, 9999 watts max.); 0-100A (0.1A resolution, 26.4kW max.). An 85-264Vac (47-63Hz) operating supply range makes these power meters perfect for worldwide power monitoring applications. And, unlike conventional, average-responding products, ACM20 power meters can accurately display the true-rms voltage and current values of triangle waves, square waves, and other irregularly shaped waveforms, with an accuracy of ±1% of full scale.

Mfg. Part No.	Measurement Range	Reading	Stock No.	Price Each 1-4
● ACM20-2-AC1-R-C	0A to 9.999A / 85V to 264V / 47Hz to 63Hz / 0W to 999.9W	Power Factor	99R9661	73.74
● ACM20-2-AC1-R-F-C	0A to 9.999A / 85V to 264V / 47Hz to 63Hz / 0W to 999.9W	Frequency	24T2830	72.49
● ACM20-5-AC1-R-C	0A to 32A / 85V to 264V / 47Hz to 63Hz / 0W to 9999W	Power Factor	29R0785	73.74
● ACM20-5-AC1-R-F-C	0A to 32A / 85V to 264V / 47Hz to 63Hz / 0W to 9999W	Frequency	29R0786	71.67
● ACM20-4-AC1-R-C	0A to 100A / 85V to 264V / 47Hz to 63Hz / 0W to 26.4kW	Power Factor	29R0783	71.67
● ACM20-4-AC1-R-F-C	0A to 100A / 85V to 264V / 47Hz to 63Hz / 0W to 26.4kW	Frequency	29R0784	73.74

(156279)

OPERATOR INTERFACES

RoHS Compliant Available

IDEC

High Performance Series: 5.7″ HG2G, 8.4″/10.4″ HG3G, 12.1″ HG4G TFT LCD Touchscreen

- 65,536 Colors
- Mount Landscape or Portrait
- Remote Access, Monitor and Control
- Video In and Audio In/Out (Except HG2G)
- Support USB Flash Drive, SD Card
- USB, Serial and Ethernet Ports
- UL , c-UL, ANSI/ISA 12.12.01-2007 Haz. Loc.,
- Type 4/4x, ABS, LR, NK, and CE

Basic Series: 4.6″ HG1F STN LCD Mono Touchscreen

- Power Voltage: 24 VDC
- Super Bright LCD Screens with 500 cd/m2
- Mount Landscape or Portrait
- RS232, RS485 or RS422 Compatible
- UL , c-UL, Type 13, IP65, ANSI/ISA-12.12.01-2007

Basic Series: 5.7″ HG2G Mono STN or Color TFT LCD Touchscreen

- Power Voltage: 24 VDC Mono and 12-24 VDC (Color)
- 256 Color or Monochrome
- Super Bright Screens with 500 cd/m2 (Mono), 400 cd/m2 (Color)
- Serial Port, Ethernet Port as an Option
- UL, c-UL, ANSI 12.12.01-2007 Haz. Loc., Type 13, IP65, CE

IDEC touchscreens create an efficient interaction between the user and the equipment. All touchscreens come with high pixel resolution and super bright LCD display for sharp quality images. The 5.7″, 10.4″ and 12.1″ TFT LCD color screens have an Ethernet port to allow for remote programming, monitor, and control over the Ethernet network. User can monitor application right from the office. The 5.7″ STN LCD screens are available in monochrome or color. The entire touchscreen family works with all of IDEC's PLCs, and drivers are available to make them compatible with PLCs from other manufacturers.

HIGH PERFORMANCE SERIES

Mfg. Part No.	Description	Stock No.	Price Each Each
HG4G-CJT22MF-B	12.1″ 65K Color TFT, High-Performance OI Touchscreen with Video In, Audio In/Out, Black bezel	48T2892	2201.79
HG3G-AJT22MF-B	10.4″ 65K Color TFT, High-Performance OI Touchscreen with Video In, Audio In/Out, Black bezel	48T2890	1838.97
HG3G-8JT22MF-B	8.4″ 65K Color TFT, High-Performance OI Touchscreen wtih Video In, Audio In/Out, Black bezel	48T2891	1335.07
HG2G-5FT22TF-B	5.7″ 65K Color TFT, High-Performance OI Touchscreen with Serial, Ethernet, USB Ports, Black Bezel	48T2887	1025.91
BASIC SERIES			
HG2G-5ST22TF-B	5.7″ 256 Color TFT LCD OI Touchscreen with Ethernet Port, 12-24VDC, Black Bezel	48T2888	749.43
HG2G-5ST22TF-W	5.7″ 256 Color TFT LCD OI Touchscreen with Ethernet Port, 12-24VDC, Light Gray Bezel	60T5878	867.57
HG2G-5ST22VF-B	5.7″ 256 Color TFT LCD OI Touchscreen without Ethernet Port, Black Bezel (Does not support power failure backup data)	48T2889	664.75
HG2G-SB21TF-B	5.7″ Monochrome STN LCD OI Touchscreen, Ethernet Port, 12 VDC , Black Bezel	60T5871	614.46
HG2G-SB21VF-B	5.7″ Monochrome STN LCD OI Touchscreen, RS232C/485/422 (9-pin terminal), 12 V black bezel	73R4792	502.74
HG2G-SB22TF-B	5.7″ Monochrome STN LCD OI Touchscreen, RS232C/485/422connector, Ethernet Port, Black bezel	10R5639	614.46
HG2G-SB22TF-W	5.7″ Monochrome STN LCD OI Touchscreen, RS232C/485/422 Connector, Ethernet Port, Light gray bezel	10R5641	614.46
HG2G-SB22VF-B	5.7″ Monochrome STN LCD OI Touchscreen, RS232C/485/422 connector, Black bezel	10R5642	502.74
HG2G-SB22VF-W	5.7″ Monochrome STN LCD OI Touchscreen, RS232C/485/422 connector, Light gray bezel	10R5644	502.74
HG1F-SB22BF-W	4.6″ Monochrome OI Touchscreen, RS232 Type, Light Gray Bezel	29M9603	407.46
HG1F-SB22BF-B	4.6″ Monochrome OI Touchscreen, RS232 Type, Black Bezel	34M2286	389.91
HG1F-SB22YF-W	4.6″ Monochrome OI Touchscreen, RS-485 / RS-422 Type, Light Gray Bezel	46M3218	389.91
HG1F-SB22YF-B	4.6″ Monochrome OI Touchscreen, RS-485 / RS-422 Type, Black Bezel	46M3104	407.46
TOUCHSCREEN STARTER KITS			
SMARTTOUCH-1F	4.6″ Monochrome STN, RS232 Comm, Black Bezel, software and programming cable included	29M8420	411.77
SMARTTOUCH-2G-EM	5.7″ Monochrome, 24VDC, Ethernet, Black Bezel, software and programming cable included	73R4798	789.19
SMARTTOUCH-2GTE	5.7″ 256 Color TFT LCD, 12-24VDC, Black Bezel, software and programming cable included	61T3418	599.00
SMARTTOUCH-2GHP	5.7″ 65K Color TFT, Black Bezel, software and programming cable included	61T3417	849.00
SMARTTOUCH-3G8HP	8.4″ 65K Color TFT , Video In, Audio In/Out, Black Bezel, software and programming cable included	61T3422	1099.00
SMARTTOUCH-3GAHP	10.4″ 65K Color TFT, Video In, Audio In/Out, Black Bezel, software and programming cable included	61T3421	1499.00
SMARTTOUCH-4GHP	12.1″ 65K Color TFT, Video In, Audio In/Out, Black Bezel, software and programming cable included	61T3423	1699.00

CONTINUED

OPERATOR INTERFACES (CONT.)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each Each
SW1A-W1C	Automation Organizer SoftwareSuite	10R5635	388.05
HG9Z-XCM2A	USB Programming Cable for 5.7″ HG2G-5FT/HG2G-5ST, 8.4″ and 10.4″ HG3G, and 12.4″ HG4G High Performance Series	60T5977	12.20
HG9Z-XCM1A	Serial Programming Cable for 4.6″ HG1F or 5.7″ HG2G-SB	15C7023	28.49
FC4A-USB	FC4A-USB USB to RS232 Converter for PCs without Serial Port	96H8075	38.88

(72440)

MULTIFUNCTIONAL CAPACITIVE CUSTOMIZABLE TOUCHSCREEN GRAPHICS METER

NEW

LASCAR

- Eight digital input/output pins
- Two alarm outputs (max current sink 10mA)
- RS232 serial interface
- Four 16-bit bi-polar analog inputs (scalable in software to ±40V)
- I2C, SPI, RS485 and Ethernet support

PanelPilot ACE is a software and hardware platform that makes development of industrial user-interfaces a simple matter of dragging and dropping elements on a screen. The design software provides a number of building blocks to allow users to quickly add elements to their project. From background images to text elements, analog style meters, touch-screen navigation elements and even complex logic statements, users can build up multi-screen interfaces without needing to write a line of code. The **SGD 43-A** is the first in a range of **PanelPilot ACE** compatible displays. The low-profile display features a 4.3″ capacitive touch-screen pwoered by a Freescale ARM 9 processor running Linux. The display is powered by a 5V to 30V DC supply and offers users a wealth of connections.

Mfg. Part No.	Description	Range	Stock No.	Price Each 1-9
SGD 43-A	Multi-function 4.3″ Color TFT Display	4 x ±40V 4-20mA	54X1821	300.30

(212264)

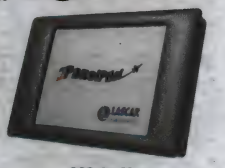
MULTIFUNCTIONAL TOUCHSCREEN GRAPHICS METERS

RoHS Compliant Available

LASCAR

SGD 24-M-IP

SGD 24-M



SGD 28-M

- Use FREE Windows-based Lascar software to program displays
- Multiple customizable meter styles available to choose from
- Upload programmed app to meter via USB
- Measures voltage of 0-40VDC
- Wide operating voltage of 4-30VDC
- NEMA 6 and 4-20mA options
- Optional thermocouple add-on board

SGD 35-M

Customize PanelPilot-compatible displays in seconds with a simple click of the mouse. Using a Windows-based software supplied free with the display, select a meter style (digital and analog), choose colors, text labels, scaling and even display a company logo on power-up. Once programming is complete, the user can save all selections to the meter via USB, detach and mount in panel. Available in 2.4″, 2.8″ and 3.5″ sizes with NEMA 6 and 4-20mA measurement options.

Mfg. Part No.	Description	Range	Stock No.	Price Each 1-9
SGD 24M	Multi-function 2.4″ Color TFT Display with 3 1/2 digit	0 to 40 VDC	70R1235	132.00
SGD 28-M	Multi-function 2.8″ Color TFT Display with 3 1/2 digit	0 to 40 VDC	74R1021	153.85
SGD 35-M	Multi-function 3.5″ Color TFT Display with 3 1/2 digit	0 to 40 VDC	78T6454	180.63
SGD 24-M-IP	NEMA 6 Rated 2.4" Color TFT Display with 3 1/2 Digit	0 to 40 VDC	89T8031	259.20
SGD 24-M-420	Multi-function 2.4″ Color TFT Display with 3 1/2 digit	4-20mA	60W1974	148.50
SGD 28-M-420	Multi-function 2.8″ Color TFT Display with 3 1/2 digit	4-20mA	60W1975	183.40
SGD 35-M-420	Multi-function 3.5″ Color TFT Display with 3 1/2 digit	4-20mA	60W1976	218.67
SGD ADPT-TC	Thermocouple conditioning module for PanelPilot	...	60W1973	46.44

(175920)

OPERATOR INTERFACES (HMI)

KADET 2 OPERATOR INTERFACE WITH TFT DISPLAY

NEW

RoHS Compliant Available

red lion®

IP65 NEMA

G304K200

G307K200

- Configured using Crimson® 3 software
- Serial communication ports (RS-485 and RS-323/422/485)
- 10 Base-T/100 Base-TX Ethernet port communicates with up to four protocols simultaneously
- Unit's configuration is stored in non-volatile flash memory
- SD card socket for loading database in field (**G307K200**)
- Bright 4.3" TFT active matrix 32K color 480x272 pixel display (**G304K200**)
- 7" TFT LCD 32K color 800x480 pixel display (**G307K200**)
- Three front panel LED indicators
- NEMA 4/IP65 front panel
- Power unit with 24VDC ± 20%
- Resistive analog touchscreen

The **G3 Kadet 2** performs the functions of a multiple protocol converter, using high-speed RS-232/422/485 communications ports and a 10 Base-T/100 Base-TX Ethernet port. The Ethernet port supports up to four protocols simultaneously, allowing dissimilar Ethernet based products to communicate with one another. The **G3 Kadet 2** range of HMIs is programmed with Red Lion's free Crimson 3 software. Crimson 3 offers easy to use drag and drop communications configuration, while the embedded image library allows the programmer to create intuitive screens and prompts for the operator.

Mfg. Part No.	Description	Stock No.	Price Each
● G304K200	4.3" TFT Operator Interface	85W3453	411.00
● G307K200	7" TFT Operator Interface	90W4109	839.46

(212206)

MAGELIS™ GTO OPTIMIZED ADVANCED PANEL TOUCH SCREEN TERMINALS

IP65

Schneider Electric

- Energy Savings
- State of the art display
- Open and robust communication
- Easy installation and a sustainable offer
- Simple adaptation to your environment
- Rugged design for industrial applications

The **Magelis GTO** is the ideal optimized terminal that does not compromise features or performance. The energy efficient LED backlight uses 55% less energy compared to HMI using compact fluorescent. Additional dimming and screen saver can save even more. The 65 K color TFT screen provides excellent color and a wide viewing angle for a clear picture of your machine or process. LED backlight allows energy savings and dimming functionality. Embedded Ethernet provides easy integration into your IT structure as well as remote viewing and control. USB 2.0 and Mini USB allow easy connection to peripherals, expanded storage, screen updates, and maintenance.

WITH ETHERNET

Mfg. Part No.	Pixels	Display Size	Stock No.	Price Each 1-4
● HMIGTO1310	320x240	3.5"	86W5692	874.04
● HMIGTO2310	320x240	5.7"	86W5693	1887.15
● HMIGTO3510	800x480	7.0"	86W5694	2382.29
● HMIGTO4310	640x480	7.5"	86W5695	2905.46
● HMIGTO5310	640x480	10.4"	86W5696	3657.52
● HMIGTO6310	800x600	12.1"	86W5697	3923.77

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each Each
VJDSNDTGSV61M	HMI Configuration Software, Single License	05W7221	1121.91

(210194)

MAGELIS SCU SMALL HMI CONTROLLERS

NEW

RoHS Compliant Available

Schneider Electric

- LED backlight offers low energy and brilliant color display
- Compact All-In-One Unit (Controller is included, so no need to purchase a PLC)
- Made with Recycled Plastic toreduce overall environmental impact
- 22mm mounting system with quick installation
- USB ports for easy field updates
- USB mini B port to download HMI program with standard cable

The **Magelis small SCU** range includes 2 sizes of 65k color TFT screen displays to deliver superior quality visualization. LED backlight allows dimming and energy efficiency. The **Magelis SCU** Small HMI controllers integrate full HMI functionality combined with PLC and on-board I/O. Serial, Ethernet, CanOpen and USB communications ports provide class leading connectivity to control systems and peripherals. They feature the same innovative 22mm mounting system as the **Magelis STU** Small panels.

FOR SIMPLE MACHINE (DIGITAL: 16 INPUTS / 10 OUTPUTS)

Mfg. Part No.	Capacity	Stock No.	Price Each 1-4
HMISCU6A5	3.5" (65k colors)	24X0061	996.16
HMISCU8A5	5.7" (65k colors)	24X0063	1349.62
FOR SIMPLE PROCESS (DIGITAL: 8 INPUTS / 8 OUTPUTS, ANALOG: 4 INPUTS / 2 OUTPUTS)			
HMISCU6B5	3.5" (65k colors)	24X0062	1124.70
HMISCU8B5	5.7" (65k colors)	24X0064	1542.42

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● HMIS65	Replacement Screen Module for 3.5"	24X0067	382.38
● HMIS85	Replacement Screen Module for 5.7"	24X0068	624.46
● HMISAC	Simple Machine Controller Rear Module	24X0065	744.88
● HMISBC	Simple Process Controller Rear Module	24X0066	931.10
HMIZG65	Remote USB port location for mini type B terminal	24X0069	136.56
HMIZSDIO	Terminal blocks for Panel SCU	24X0070	74.49
HMIZSURDP	Remote Cable 3m for separate mounting of the controller module and Screen module on DIN rail	24X0071	192.44
HMIZSURDP5	Remote Cable 5m for separate mounting of the controller module and Screen module on DIN rail	24X0072	235.88
MSDCHLLMUV31S0	SoMachine Single License	33X1771	1202.99

(211513)

MAGELIS STU SERIES COLOR TOUCH PANEL SCREENS

RoHS Compliant Available

Schneider Electric

- 320x240 (QVGA) 65,000 color touch screen
- Energy efficient, long life (50,000 hours) LED backlight
- Multiprotocol serial communications (RS485/232 RJ45 serial port, 10/100 BaseT RJ45 Ethernet port
- 16MB flash internal memory (64KB backup FRAM)
- 24VDC power supply voltage with removable connector
- Mini USB port for programming with standard USB cable
- USB A port allows for external memory with USB stick or remote drives, interface with barcode readers & printers
- Extensive font library & multilanguage support for use globally
- 22mm hole mounting
- Rear module dimenions (L x H x D): 118 x 98 x 30mm

Magelis STU color touch screens allow intelligent and intuitive graphical operator interface with high end features and capabilities and easy mounting through a 22mm push button hole.

Mfg. Part No.	Display Size	Front Module Dimensions (L x H x D)	Stock No.	Price Each 1-4
● HMISTU655S	3.5"	98 x 81 x 16mm	85R1323	685.09
● HMISTU855S	5.7"	163 x 129.5 x 17.5mm	41T3197	1146.80

(194479)

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(196529)

MAGELIS GOT GRAPHICAL TOUCH SCREENS TERMINALS

RoHS Compliant Available

Schneider Electric

Features
- Integrates Ethernet and can be simultaneously connected on Uni-Telway/Modbus® TCP/IP
- Embedded FTP server
- Memory Type: Flash
- Long-life LED backlight

Specifications
- Operating temperature: 0 to +55°C
- Front face IP65 conforms to IEC 60529. NEMA 4X (indoor)
- Rear IP20 conforming to IEC 60529
- Supply voltage: 24VDC

The Magelis Advanced Panels consists of touch screen terminals GOT available with a wide choice of screen sizes in TFT LCD Color.

TOUCH SCREENS

Mfg. Part No.	Size	Touch Panel Resolution	Communication	Dimensions (W x H x D)	Stock No.	Price Each 1-2
XBTGT6340	12.1"	800 x 600 Pixels	RJ45 / RS232C RS485 / Serial USB	313 x 239 x 56	34M0313	4502.99
XBTGT7340	15"	1024 x 768 Pixels	RJ45 / RS232C RS485 / Serial USB	395 x 294 x 60	27M1745	5015.88
XBTGT2430	5.7"	640 x 480 Pixels	RJ45 / RS232C RS485 / Serial USB	167.5 x 135 x 59.5	85R3650	2272.98
XBTGT4340	7.5"	320 x 240 Pixels	RJ45 / RS232C RS485 / Serial USB	215 x 170 x 60	34M0311	3325.86
XBTGT5340	10.4"	640 x 480 Pixels	RJ45 / RS232C RS485 / Serial USB	270.5 x 212.5 x 57	34M0312	4142.38

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24
XBTZ9780	Mini Din to Rj45 Cable for Magelis Display Unit	72K1454	53.96
XBTZ9980	RJ45 Cable for Magelis Display Unit	09P7491	54.63
VW3A8306R10	RJ45 to RJ45 Cable, 1 meter	89H6462	37.50

(202155)

COMPACT LCD COUNTERS & TIMERS

RoHS Compliant Available

Autonics Sensors & Controllers

LA8N

LE8N

- Compact size indicators
- Internal lithium battery (over 10 years)
- LCD display
- Built-in Microprocessor

- IP66 rated (front panel only)
- LE8N series display options: 9999.59.59 (h.m.s), 99999.59.9 (h.m.s), 999999.59 (h.m), 9999H59.9 (h.m), 99999H59 (h.m), 999999H.9 (h)

LA8N SERIES COUNTERS

Mfg. Part No.	Input Type	No. of Digits	Stock No.	Price Each
LA8N-BF	Universal Voltage	8	10R5265	57.95
LA8N-BN	No-Voltage	8	10R5266	53.95

LE8N SERIES TIMERS

LE8N-BF	Universal Voltage	8	10R5267	57.95
LE8N-BN	No-Voltage	8	10R5268	53.95

(148668)

TOTALIZING COUNTERS AND ELAPSED TIME INDICATORS

CROUZET AUTOMATION

- DIN 24x48mm enclosure
- Remote or front-panel reset (can be disabled)
- Powered by lithium battery
- IP65 watertight seal on front panel

The **87622 Series** has built-in modules to accept voltage inputs.

➤ CONTINUED ➤

TOTALIZING COUNTERS AND ELAPSED TIME INDICATORS (CONT.)

Mfg. Part No.	Description	Voltage	Stock No.	Price Each 1-9
87622162	999999.99 hrs	10V AC to 260V AC, 10V DC to 260V DC	22T9812	78.64
99792810	100,000 hrs (99,999.99 hrs)	4,5 to 35 VDC	55W2167	66.72

(2784)

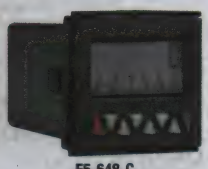
TOTALIZERS, COUNT CONTROLS, TIMERS, DIGITAL PANEL METERS & PRESET COUNTERS

RoHS Compliant Available

EATON

E5-024-C / E5-224-C

E5-148-C



E5-648-C

E5-024-C series display counters are battery powered and are controlled by contact or voltage pulses. They may be used in various applications, like totalizing, parts counting, position acquisition, differential counting, etc. In addition, the various models with specific input types may be extended using control inputs to select operating modes. **E5-148-C series** count control counters that provide output signal(s) at preset count value(s). Typical applications include cut-to-length, batching, filling, mixing and dispensing. **E5-024-C series** timers have a non-replaceable battery (min. 8-yr. life) and include a manual or electricall reset. **E5-324-E series** digital panel meters allows for programmable scaling of inputs, has input for Display-Hold and is run with 24VDC power. **E5-648-C series** preset counters have a two-line LCD with optional two-color display, are programmable as impulse counters, frequency meters or time meters with sign and zero blanking, have a batch mode and add/subtract/ratio functions.

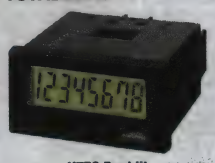
Mfg. Part No.	Description	No. of Digits	Supply Voltage	Dis-play	DIN Size	Stock No.	Price Each 1-4
E5-024-C0400	Totalizer	8	4V DC to 30V DC, 0V DC to 0.07V DC	LCD	1/32	53M4776	53.10
E5-024-C0410	Totalizer (Count Up/Down)	8	10V AC to 260V AC, 10V DC to 260V DC	LCD	1/32	13T1658	69.25
E5-148-C1400	Count Control	6	12V AC to 240V AC, 12V DC to 240V DC	LCD	1/16	52M9178	116.13
E5-224-C0440	Timer (Hours/Minutes)	8	10V AC to 260V AC, 10V DC to 260V DC	LCD	1/32	04P1831	53.75
E5-224-C0450	Timer (Minutes/Seconds)	8	10V AC to 260V AC, 10V DC to 260V DC	LCD	1/32	73R4520	55.08
E5-224-C0458	Timer (Minutes/Seconds)	8	10V AC to 260V AC, 10V DC to 260V DC	LCD	1/32	34P0439	70.63
E5-324-E0402	Digital Panel Meter	5	10V DC to 30V DC	LED	1/32	13T1660	163.92
E5-648-C2421	Preset Counter (2 Presets)	6	90V AC to 260V AC	LCD	1/16	90R7450	260.40
E5-648-C2422	Preset Counter (2 Presets)	6	10V DC to 30V DC	LCD	1/16	12T2477	260.38
E5-648-C4461	Preset Counter (4 Presets)	6	90V AC to 260V AC	LCD	1/16	13T1664	385.01
E5-648-C4462	Preset Counter (4 Presets)	6	10V DC to 30V DC	LCD	1/16	13T1665	385.01

(6627)

COMPACT COUNT/TIME/RPM TOTALIZERS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY



H7EC Backlit

H7ER Backlit

H7ET

H7 series digital compact totalizers offer up, up/down, cumulative count, time, and rpm functions in self-powered (replaceable battery) or 100-240VDC supply voltage modes. Feature large easy-to-read displays, selectable input range and speeds. Color: black. Front meets NEMA enclosure type 4 and IEC enclosure IPC66. All feature screw terminals for quick installation and a variety of inputs. UL recognized, CSA certified, CE compliant.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
H7EC-N-B	8-Digit Self-Powered, Totalizer, No-Voltage Input, Selectable Between 30cps or 1Kcps.	94B7609	82.96
H7EC-NV-B	8-Digit Self-Powered, Totalizer, NPN/PNP DC Voltage Input, Selectable Between 30cps or 1Kcps.	94B2566	101.09
H7EC-NFV-B	8-Digit Self-Powered, Totalizer, AC/DC Multi-Voltage Input, Max. Count Speed: 20Hz	93K7587	103.69
H7EC-NV-BH	8-Digit LCD Backlit Display, Self-Powered Totalizer, PNP/NPN Universal DC Voltage Input, Selectable Count Speed: 30 Hz/KHz	88K1951	102.68
H7ET-N-B	7-Digit Self-Powered, Time Totalizer, No Voltage Input, Selectable Between 999999.9h and 3999d23.9h	88K1111	107.37

➤ CONTINUED ➤

COMPACT COUNT/TIME/RPM TOTALIZERS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● H7ET-NV-B	7-Digit Self-Powered, Time Totalizer, NPN/PNP DC Voltage Input, Selectable Between 999999.9H and 3999d23.9h	88K1953	109.38
● H7ET-NV-BH	7-Digit LCD Backlit Display, Self Powered Hour Meter, PNP/NPN Universal Voltage (DC). Input, Selectable Time Range 999999.9 and 3999d23.9h.	95B4029	108.73
● H7ER-NV1-B	7-Digit LCD Display, Self Powered Tachometer, PNP/NPN Universal Voltage (DC) Input. Selectable RPM Range 1000-10,000. Selectable RPS Range of 0- 1000 RPS.	08H0619	129.95
● H7ER-NV1-BH	7-Digit LCD Backlit Display, Self Powered Tachometer, PNP/NPN Universal Voltage (DC) Input. Selectable RPM Range 1000-10,000. Selectable RPS Range of 0-1000 RPS.	81C7942	138.03

(51871)

94 SERIES ELECTRONIC COUNTERS

RoHS Compliant Available

REDINGTON® COUNTERS INC.

9415-001 9415-003 9415-005

Battery-powered 6-digit LCD counters feature 6-240VAC or VDC inputs. Interchangeable with most electromechanical counters. Digits are 0.50″ high. Base-mount unit dimensions in inches: 1.65(H) x 3.81(W) x 2.97(D). Panel mount unit dimensions in inches: 1.50(H) x 4.44(W) x 2.90(D). Rated 2400cpm with sensor input. Load resistor (1500 ohms, 10 watts) across input terminals required when using AC sensors. Weight: 1.1 lbs. Hour Meter versions also available, *go online or call.*

Mfg. Part No.	Mounting Type	Reset	Stock No.	Price Each 1-9
● 9415-001	Base	Manual	48M1363	176.12
● 9415-003	Panel	Manual	81F474	185.13
● 9415-005	Panel	Lock & Key	81F475	204.95

(2941)

A103 SERIES TOTALIZERS, RATE INDICATORS, PRESET COUNTERS, TACHOMETERS, AND PRESET TIMERS

VEEDER-ROOT

Eagle Signal Controls

A103 series totalizing and preset counters are compact and cost-efficient. Accepts input signals from dry contact, PNP, or NPN sensors and encoders. High and low speed count inputs. Reset on front panel or remotely. Tachometers provide readout of motor, machine shaft or other RPM. Rate indicators provide a readout of virtually any rate: gallons/minute, parts/hour, feet/minute, etc. Features include a supertwist LCD with .47″ (12mm) high digits and green illumination display backlight capability. 3-volt lithium battery eliminates need for external power. Magnetic input is capacitative coupled; 10kHz (50% duty cycle); 0.2V peak (28VDC max.). Fits 68 × 33 mm cutout. Input scale multipliers for rate (0,001 to 9,999) and total (0.0001 to 99,99999). Weight: 2.25 oz. (64 g). Front panel is rated NEMA 4/IP65 for use in washdown environments. *Order matching elapsed time indicators, and quick-action option modules separately, go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each
A103-000	Totalizer	52F1232	106.57
A103-001	Add/Subtract Totalizer	52F1233	183.86
A103-002	Position Indicator	52F1234	185.46
A103-003	Tachometer	52F1235	185.19
A103-004	Programmable Rate Meter	52F1236	139.17
A103-005	Rate Meter & Totalizer	52F1237	212.02
A103-007	Preset Counter	52F1239	157.45

(2844)

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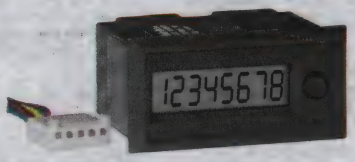
(212565)

VEEDER-ROOT BRAND MITE SERIES ELECTRONIC TOTALIZING COUNTERS, RATE INDICATORS, AND TIME METERS

VEEDER-ROOT

Eagle Signal Controls



MITE series 7mm high (8-digit) LCD displays feature compact overall size. Fit 45 x 22mm panel cut-out. Totalizers are powered by an internal lithium cell. **Model 79998D-110** is unidirectional and capable of count speeds to 10kHz. Self-powered timer **model 79998D-510** has timing ranges for seconds or minutes and seconds; **model 79998D-610** has timing ranges for hours or hours and 1/100ths. All units rated NEMA-4/IP65. *Order input adaptors; go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each
79998D-110	Totalizer-add	63K9812	93.00
079998D-510	Timer-seconds or minutes & seconds	27C4586	112.65
079998D-610	Timer-hours or hours and 100ths	27C7532	153.70

(2918)

C342 SERIES LCD AND LED COUNTERS, TIMERS AND TACHOMETERS

VEEDER-ROOT

Eagle Signal Controls

DIN-sized family of count totalizing, elapsed-time totalizing, and speed meters with LCD or LED displays. Self-powered models contain long-life lithium battery. Externally powered models accept 12-24VDC power supply and nonvolatile RAM to provide data memory. Counters and timers have panel and remote reset. Display: 7mm-high, 8-digit LCD, or 7.6mm-high, 6-digit LED. Dimensions: 0.94H x 1.9W x 1.25″D (24 x 48 x 32). Operating temperature: –10°C to +50°C. Front panel meets IEC enclosure IP65 classification.

Mfg. Part No.	Description	Display	Power Source	Stock No.	Price Each 1-14
COUNT TOTALIZERS					
C342-0462	Contact or Logic-Count Input	LCD	External DC	01B2159	102.79
C342-0464	Contact or Logic-Count Input	LCD	Battery	48F2149	65.30
C342-0474	High-Voltage (12-250VAC/VDC) Count Input	LCD	Battery	48F2150	86.71
C342-0562	Contact or Logic-Count Input	LED	External DC	48F2157	261.91
TIME TOTALIZERS					
C342-1464	Hours:Minutes:Seconds Resolution; Contact or Logic Input	LCD	Battery	48F2151	74.15
C342-1474	Hours:Minutes:Seconds Resolution; High-Voltage (12-250VAC/VDC) Count Input	LCD	Battery	48F2153	120.36
C342-2474	Hours and 1/100 Resolution. High-Voltage (12-250VAC/VDC) Count Input	LCD	Battery	48F2154	121.41
C342-1562	Hours:Minutes:Seconds Resolution; Contact or Logic Input	LED	External DC	48F2158	256.20
TACHOMETERS					
C342-3464	Contact or Logic-Count Input	LCD	Battery	48F2155	134.39
C342-3462	Contact or Logic-Count Input	LCD	External DC	48F2156	160.79

(33785)

TOUCH TYPE COUNTER/TIMER

Autonics Sensors & Controllers

- Selectable Counter or Timer function
- Multi-functional Counter/Timer (Includes 829,728 functions)
- Prescale function
- High speed counting of 10kcps
- Selectable Voltage input (PNP) or No voltage input (NPN)
- Supply voltage: 100-240VAC @ 50/60Hz, 24VAC @ 50/60Hz, 24-60VDC (option)
- Able to set ON/OFF time individually in Flicker (FLK) mode
- Key Lock function

CT4S CT6S

Mfg. Part No.	No. of Digits	Dim. (mm) H x W	Features	Stock No.	Price Each
CT4S-1P4	4	48 x 48	Single Preset	67T2460	110.95
CT4S-2P	4	48 x 48	Dual Preset	22T1000	132.95
CT6Y-2P4	6	36 x 72	Single Preset	79R9079	141.95
CT6Y-2P4	6	36 x 72	Dual Preset	79R9079	141.95
CT6Y-I4	6	36 x 72	Indicator	22T1030	100.95
CT6S-1P4	6	48 x 48	Single Preset	47W2311	116.95
CT6S-2P-24VDC	6	48 x 48	Dual Preset, 24VDC	22T1024	141.95
CT6S-I	6	48 x 48	Indicator	22T1023	100.95
CT6	6	72 x 72	Single Preset	18T1891	144.95

➤CONTINUED➤

TOUCH TYPE COUNTER/TIMER (CONT.)

Mfg. Part No.	No. of Digits	Dim. (mm) H x W	Features	Stock No.	Price Each
CT6-2P-24VDC	6	72 x 72	Dual Preset, 24VDC	22T1007	170.95
CT6-I	6	72 x 72	Indicator	22T1002	122.95

(148667)

MULTIFUNCTION DIGITAL COUNTER

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Advanced 1/16 DIN Preset Counter with Enhanced Features
- Configure as 1- or 2-Stage, Total, Batch, or Dual Counter or Tachometer, Depending on Model
- High-Speed Response up to 5kHZ, Can Be Scaled to 10kHZ
- All Parameters Set Via Front Panel or DIP Switch Settings
- PNP/NPN Selectable Input
- Key Protection Function
- NEMA4/IP66 Front Panel
- Programmable Display Color Alerts Any Output Status Change

All units have 12VDC sensor power supply, contact output type and black case. UL listed, CE compliant. Units with no power supply, transistor output and light gray case are also available; *go online or call.*

STANDARD COUNTERS (1-STAGE)

Mfg. Part No.	Supply Voltage	No. of Digits	Termination	Stock No.	Price Each
H7CX-A11-N AC100-240	100-240VAC	4	11-Pin Socket	72R9460	271.84
H7CX-A11D1-N DC12-24/AC24	12-24VDC or 24VAC	6	11-Pin Socket	72R9461	274.21
H7CX-A-N AC100-240	100-240VDC or 24VAC	6	Screw Terminal	34R2178	250.88
H7CX-A114-N AC100-240	100-240VDC or 24VAC	4	11-Pin Socket	70R0963	270.06
H7CX-A114D1-N DC12-24/AC24	12-24VDC or 24VAC	4	11-Pin Socket	72R9465	274.21
H7CX-A4-N AC100-240	100-240VDC or 24VAC	4	Screw Terminal	34R2177	247.17
H7CX-AW-N AC100-240	100-240VDC or 24VAC	6	Screw Terminal	70R1570	303.38

ADVANCED COUNTERS (2-STAGE)

H7CX-AWD1-N DC12-24/AC24	12-24VDC or 24VAC	6	Screw Terminal	72R9456	303.38
H7CX-A4W-N AC100-240	100-240VAC	4	Screw Terminal	72R9470	300.75
H7CX-AWSD-N DC12-24	12-24DC	6	Screw Terminal	72R9458	274.21

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24	Price Each 25-49
Y92F-30	Flush Mounting Adapter, Supplied with Screw Terminal Units	88K2030	11.68	11.13
Y92S-29	Waterproof Packing, Supplied with Screw Terminal Units	88K1287	7.72	7.41
Y92A-48F1	Soft Cover	90B9875	26.01	24.95
P2CF-11	11-Pin Track Mounting Front Connecting Socket	85F300	11.95	11.14
P2CF-11-E	11-Pin Track-Mounting, Front-Connecting Socket with Finger-Safe Terminals	98B1828	15.60	14.64
P3GA-11	11-Pin Track-Mounting, Back-Connecting Socket	88K1976	22.70	21.30
PFP-100N	DIN Rail Mounting Track, 1m x 7.3 in	17M7511	7.88	7.35
PFP-100N2	DIN Rail Mounting Track, 1M x 16mm	34K8630	24.63	22.99
PFP-50N	DIN Rail Mounting Track, 50cm x 7.3mm	93B2043	6.49	6.05
PFP-M	End Plate	36K3451	0.88	0.81
PFP-S	Spacer	17M7510	0.58	0.54

(73802)

VERSACOUNT XP PROGRAMMABLE ELECTRONIC COUNTERS

NEW

VEEDER-ROOT

VersaCount™ XP

The Veeder-Root VersaCount 1/16 DIN size multifunction counter is the most versatile counter on the market today. Whatever your application, timing, counting, rate measuring, position indicating, volume measurement, speed monitoring, length cutting or batch, shift, pulse or piece counting – the VersaCount is the only device you need when Versatility Counts.

USB

Mfg. Part No.	Display	Description	Relay	Stock No.	Price Each 1-9
VC773-101	LCD Reflective	12V DC to 30V DC	1	48W7079	271.95
VC773-102	LCD Reflective	12V DC to 30V DC	2	48W7080	295.64
VC773-141	LCD Reflective	100V AC to 240V AC	1	48W7081	283.23

CONTINUED

VERSACOUNT XP PROGRAMMABLE ELECTRONIC COUNTERS (CONT.)

Mfg. Part No.	Display	Description	Relay	Stock No.	Price Each 1-9
VC773-142	LCD Reflective	100V AC to 240V AC	2	48W7082	306.93
VC773-201	LCD Transflective Positive	12V DC to 30V DC	1	48W7083	283.23
VC773-202	LCD Transflective Positive	12V DC to 30V DC	2	48W7084	306.93
VC773-241	LCD Transflective Positive	100V AC to 240V AC	1	48W7085	295.64
VC773-242	LCD Transflective Positive	100V AC to 240V AC	2	48W7086	319.34
VC773-301	LCD Transmissive White	12V DC to 30V DC	1	48W7087	283.23
VC773-302	LCD Transmissive White	12V DC to 30V DC	2	48W7088	306.93
VC773-341	LCD Transmissive White	100V AC to 240V AC	1	48W7089	283.23
VC773-342	LCD Transmissive White	100V AC to 240V AC	2	48W7090	306.93
VC773-401	LCD Transmissive Red	12V DC to 30V DC	1	48W7091	283.23
VC773-402	LCD Transmissive Red	12V DC to 30V DC	2	48W7092	319.36
VC773-441	LCD Transmissive Red	100V AC to 240V AC	1	48W7093	283.23
VC773-442	LCD Transmissive Red	100V AC to 240V AC	2	48W7094	306.93
VC773-501	LCD Transmissive Green	12V DC to 30V DC	1	48W7095	271.95
VC773-502	LCD Transmissive Green	12V DC to 30V DC	2	48W7096	306.93
VC773-541	LCD Transmissive Green	100V AC to 240V AC	1	48W7097	295.64
VC773-542	LCD Transmissive Green	100V AC to 240V AC	2	48W7098	329.40

RS232

VC774-101	LCD Reflective	12V DC to 30V DC	1	48W7099	248.25
VC774-102	LCD Reflective	12V DC to 30V DC	2	48W7100	271.95
VC774-141	LCD Reflective	100V AC to 240V AC	1	48W7101	248.25
VC774-142	LCD Reflective	100V AC to 240V AC	2	48W7102	271.95
VC774-201	LCD Transflective Positive	12V DC to 30V DC	1	48W7103	271.95
VC774-202	LCD Transflective Positive	12V DC to 30V DC	2	48W7104	295.64
VC774-241	LCD Transflective Positive	100V AC to 240V AC	1	48W7105	271.95
VC774-242	LCD Transflective Positive	100V AC to 240V AC	2	48W7106	295.64
VC774-301	LCD Transmissive White	12V DC to 30V DC	1	48W7107	271.95
VC774-302	LCD Transmissive White	12V DC to 30V DC	2	48W7108	295.64
VC774-341	LCD Transmissive White	100V AC to 240V AC	1	48W7109	271.95
VC774-342	LCD Transmissive White	100V AC to 240V AC	2	48W7110	295.64
VC774-401	LCD Transmissive Red	12V DC to 30V DC	1	48W7111	271.95
VC774-402	LCD Transmissive Red	12V DC to 30V DC	2	48W7112	295.64
VC774-441	LCD Transmissive Red	100V AC to 240V AC	1	48W7113	271.95
VC774-442	LCD Transmissive Red	100V AC to 240V AC	2	48W7114	295.64
VC774-501	LCD Transmissive Green	12V DC to 30V DC	1	48W7115	271.95
VC774-502	LCD Transmissive Green	12V DC to 30V DC	2	48W7116	295.64
VC774-541	LCD Transmissive Green	100V AC to 240V AC	1	48W7117	271.95
VC774-542	LCD Transmissive Green	100V AC to 240V AC	2	48W7118	295.64

(212190)

VEEDER-ROOT BRAND C346 PRESET COUNTERS

VEEDER-ROOT

Eagle Signal Controls

Simple button per digit setting and choice of single-line 6-digit LED or LCD display allow optimum operator interface. Very flexible input circuit with scaling feature accepts signals from encoders, NPN (sinking), PNP (sourcing), and contact-closure inputs. Suitable for most preset counting applications. Size: 1/16 DIN (48W x 48mmH) Display: 6 digit. LED or LCD. Power: 120VAC standard; optional 240VAC, 24VDC. Preset levels: 1 or 2.5 amp relay and NPN transistor per output. Input scaling: x0.001 to 9.999. Input: sinking, sourcing, contact closure, add/subtract, add/add, quadrature. Maximum count speed: 5kHz.

Mfg. Part No.	Type	Stock No.	Price Each
C346-0411	LCD/Single Preset/115VAC	16F4072	277.01
C346-0412	LCD/Single Preset/12-24VDC	01B2178	436.21
C346-0511	LED/Single Preset/115VAC	16F4074	336.45
C346-0521	LED/Dual Preset/115VAC	16F4075	491.69

(3061)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures

(212568)

COUNTERS – 1/16 DIN • COUNTERS – 36 X 72

VEEDER-ROOT BRAND V4545 SERIES PRESET COUNTERS

VEEDER-ROOT
Eagle Signal Controls

V45450-1 Counter, Single Preset

V4545 series counters are suited for applications such as cut-to-length and filling. Dual input channels accept input from a variety of sources, including encoders, dry contact, and PNP and NPN sensors. Prescale function translates signals into useful units of measure. Can be used for reversible or quadrature counting. Models available with single or dual preset, and the ability to direct batching operations. Each preset value features a transistor and a relay output. Outputs can be programmed for latching or timed operation. Large dual line LED. Scale function allows display of engineering units. High speed counting up to 10kHz. 48W × 48mm H. Panel mount (bracket supplied), fits 45 × 45mm cutout. 7 ounces (198 g).

Mfg. Part No.	Description	Stock No.	Price Each
V45450-1	Single Preset	52F1253	454.25
V45450-2	Dual Preset	52F1254	799.51
V45450-3	Single Preset, w/Batch	52F1255	771.38

(2989)

VERSACOUNT 1/16 DIN MULTIFUNCTION COUNTERS

VEEDER-ROOT
Eagle Signal Controls

- Functions include Timing, Rate measurement, Batch counting, Shift counting and Preset counting
- Fast input frequency up to 60kHz allows for high speed counting and measuring applications
- 3 presets with 3 outputs (3 solid state outputs standard); options include 1 or 2 outputs as relays
- Relay hold times programmable up to 10 minutes for a variety of application requirements
- Prescaler adjustable from 0.0001 to 99.9999
- Fast installation and replacement with plug in terminals
- View two separate parameters at the same time with the large two line LCD display

Mfg. Part No.	Supply Voltage Range	Relays	Stock No.	Price Each
VC772-101	12V DC to 30V DC	1	01T1202	244.16
VC772-102	12V DC to 30V DC	2	01T1203	301.99
VC772-111	21.6V AC to 26.4V AC	1	01T1204	234.66
VC772-112	21.6V AC to 26.4V AC	2	01T1205	290.24
VC772-121	103.5V AC to 126.5V AC	1	01T1206	244.16
VC772-131	207V AC to 253V AC	1	01T1208	234.66
VC772-132	207V AC to 253V AC	2	01T1209	290.24

(190432)

DITAK 8 - ADJUSTABLE TIMEBASE 5-DIGIT RATE INDICATORS

CE RoHS Compliant Available red lion

- Adjustable timebase from 4 msec to 32 sec
- Internal lithium battery provides over 7 years of continuous operation
- NEMA 4X/IP65 sealed front panel bezel
- Accepts magnetic or logic type signal inputs
- Wire connections made via screw clamp type terminals

Self-powered rate indicators that feature selectable timebase increments by setting the appropriate DIP switches on the rear of the unit. 5-digit LCD display with 0.6″ high digits. Displays are available in positive image reflective (black digits, reflective background) or negative image transmissive (illuminated digits, dark background). Backlight versions require power from an external 9-28VDC power supply. CE compliant. Yellow/Green backlight available; *go online or call.*

Mfg. Part No.	Display Type	Backlight Color	Stock No.	Price Each
● DT800000	Positive Reflective	...	84K7447	87.00
● DT800020	Negative Image Transmissive	Red	84K7448	113.00

(88721)

multicomp AT NEWARK ELEMENT14
Affordable, performance board level & box build components at
newark.com/multicomp
(212569)

MODEL CUB5 36 x 72mm

UL RoHS Compliant Available red lion

- LCD reflective or red/green LED backlighting display
- NEMA 4X/IP65 sealed front bezel
- Operates from 9 to 28VDC power source
- Display color change capability at preset output
- Optional serial communications module (RS232 or RS485)

5-Digit

8-Digit

SPECIFICATIONS

Display Options	LCD, Reflective or Green/Red LED Backlighting*
No. of Digits	5 or 8
Digit Height	0.48″ or 0.46″
Input Voltage	9-28VDC
Current Meters Input Range	200µADC, 2mADC, 20mADC, 200mADC
Voltage Meters Input Range	200mVDC, 2VDC, 20VDC, 200VDC
Count Modes (Counters and Rate Indicators)	Count with Direction, Rate/Counter, Dual Counter, Quadrature x 1, Quadrature x 2, Quadrature x 4, 2 Input Add/Add, 2 Input Add/Subtract
Quadrature Sensing (Counters and Rate Indicators)	1x, 2x, 4x

*Backlight versions require an external 9-28VDC power supply

CUB5 CURRENT AND VOLTAGE METERS
Four selectable DC ranges. 0.48″ high digits. Minimum and maximum display capture. Optional setpoint output modules. Front panel or crimson programmable.

CURRENT METER

Mfg. Part No.	No. of Digits	Display Type	Backlight Color	Stock No.	Price Each
CUB5IB00	5	Selectable Transmissive	Red or Green	17M9129	145.00

VOLTAGE METERS

● CUB5VR00	5	Positive Reflective	...	18M8514	133.00
● CUB5VB00	5	Selectable Transmissive	Red or Green	14P9744	145.00

CUB5 MINIATURE DUAL COUNTERS AND RATE INDICATORS
Optional relay output module. Count speeds up to 20KHz. Can be programmed as a single or dual counter with rate indication capability. Programmable for one of eight different count modes. When programmed as a dual counter, each counter has a separate scale factor and decimal points. In the counter/rate indicator mode, each have their own scaling and decimal point read-outs in different engineering units. Two separate inputs provide different functions depending on which operating mode is selected.

Mfg. Part No.	No. of Digits	Display Type	Backlight Color	Stock No.	Price Each
● CUB5B000	8	Selectable Transmissive	Red or Green	84K7434	117.00
● CUB5R000	8	Protective Reflective	...	84K7438	105.00

OPTIONAL PLUG-IN CARDS

Mfg. Part No.	Description	Stock No.	Price Each
● CUB5RLY0	Single Relay Option Card	14P9743	21.00

(88577)

MODEL CUB7 COUNTERS AND MODEL CUB7T PROGRAMMABLE ELECTRONIC TIMERS

RoHS Compliant Available red lion CE

CUB7

CUB7T

- Count speeds up to to 10KHz (counter)
- Replaceable internal lithium battery provides up to 6 years (timer) and 7 years (counter) of uninterrupted operation
- 10 programmable timer ranges (timer)
- Front panel program and reset buttons are individually enabled (timer)
- Front panel and remote reset input (counter)

SPECIFICATIONS

Type	Counter	Timer
LCD Display Options	Reflective or Transmissive with Yellow/Green or Red LED Backlighting*	Reflective, Red Transmissive, Yellow/Green Transmissive with "Timer Active" Annunciator
No. of Digits	8	8
Digit Height	0.35″	0.35″
Wire Connection	Screw clamp type terminals	Screw clamp type terminals
Casing	NEMA 4X/IP65 Sealed Front Bezel	NEMA 4X/IP65 Sealed Front Bezel

*Backlight versions require an external 9-28VDC power supply

CUB7 MINIATURE ELECTRONIC 8-DIGIT COUNTERS
Low speed input: 30Hz from switch contact to open collector transistor with 50% duty cycle. High speed input: 10KHz max. from 3.0V bipolar output with 50% duty cycle.

Mfg. Part No.	Signal Input	Display Type	Backlight Color	Stock No.	Price Each
● CUB7CCS0	Contact	Positive Reflective	...	63R2606	49.00
● CUB7CCR0	Contact	Positive Reflective	Red	63R2605	69.00
● CUB7CVG0	Contact	Positive Reflective	Green	63R2607	73.00

CONTINUED

MODEL CUB7 COUNTERS AND MODEL CUB7T PROGRAMMABLE ELECTRONIC TIMERS (CONT.)

CUB7T PROGRAMMABLE ELECTRONIC TIMERS

Contact versions operate from a switch or an open collector NPN transistor. Contact burden 15µA. A maintained closed switch to COM will actuate the timer. Voltage versions operate from a signal voltage of 10-300V (AC 50/60Hz or DC). 150V max. for backlight versions. Any offstate leakage current may activate the timer. Constant voltage applied to the input will actuate the timer. Due to the internal digital filtering to this input, up to 30 msec. of error may be added per activation of the signal input.

Mfg. Part No.	Signal Input	Display Type	Backlight Color	Stock No.	Price Each
CUB7TCS0	Contact	Positive Reflective	...	63R2618	46.00
CUB7TCG0	Contact	Negative Image Transmissive	Yellow Green	63R2616	66.00
CUB7TCR0	Contact	Negative Image Transmissive	Red	63R2617	66.00
CUB7TVS0	Voltage	Positive Image Reflective	...	63R2621	46.00
CUB7TVR0	Voltage	Negative Image Transmissive	Red	63R2620	66.00

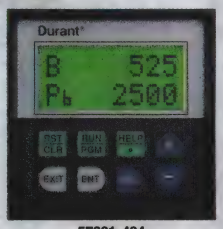
(88579)

AMBASSADOR™ SERIES LCD MULTIFUNCTION COUNT CONTROLS

RoHS Compliant Available

EATON

Compact controls feature 8 decade totalizing counter, 6 decade 1/TAU rate indicator, 9 programmable count input modes, 4 control inputs, programmable count and rate scalers, programmable decimal point for count and rate display, 2 programmable open collector transistor outputs, and programmable RS-485 half-duplex serial interface. NEMA 4 rated sealed front panel has full alpha-numeric, 16 character, 0.3" (7) high dot matrix LCD backlit display with 8-position tactile feel keyboard. 74x74mm DIN package. Input power: 115VAC. Units have 12VDC (±25%) 100mA maximum DC power output for input device. Space-saving 2.677" x 2.677" (68 x 68) panel cut-out; 0.500" (12.7) maximum panel thickness. **Mfg. part nos. 57601401** thru **57601404** have 6 decade main counter with 1 or 2 preset levels. **Mfg. part nos. 57601402** and **57601404** also have 6 decade batch counter with 1 preset level. **Mfg. part no. 57601405** has 6 decade batch counter with 4 preset levels.



57601-404

GREEN LCD DISPLAY

Mfg. Part No.	Description	Stock No.	Price Each 1-4
57601400	Totalizer & Rate Indicator	50F927	449.74
57601401	Single Preset Counter & Rate Indicator	89M5408	516.30
57601402	Single Preset Counter, Rate Indicator, Batch Counter & Totalizer	89M5409	566.14
57601403	Dual Preset Counter & Rate Indicator	50F930	566.14
57601404	Dual Preset Counter, Rate Indicator, Batch Counter & Totalizer	50F931	649.08
57601405	Quad (4) Preset Counter w/Batch, Rate, Totalizer	83F7295	700.57

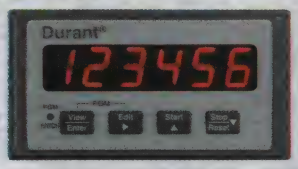
(2704)

ECLIPSE SERIES COUNT, RATE, TEMPERATURE AND PROCESS INDICATORS

RoHS Compliant Available

EATON

Full-featured DPM/process meter offers simple front panel programming and calibration, universal input power and NEMA 4 rated front panel for installation in wet areas. AC (85-265VAC) power supply. ⅛ DIN cutout. LED display. Tactile keypad. Removable connectors. Panel depth: 3.6".



Mfg. Part No.	Description	Stock No.	Price Each 1-4
57701450	Process (4-20mA, 0-10V, 1-5V), No Output	89M5411	350.41
57701451	Process Meter, 2 Alarms, Relay Out, 85-265VAC Power	16C1111	441.97
57701461	Temperature Indicator, 2 Alarms, Relay Out, 85-265VAC Power	94B7223	696.54
57701470	Ratemeter, No Outputs	90B7449	323.08
57701480	Count/Totalizer, No Outputs	50B3002	577.92
57701481	6-digit, 1 or 2 Preset Count Control, Relay Output	90B7451	466.30

(68932)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

(212570)

ELECTRONIC MULTIFUNCTION TOTALIZERS/TIMERS/RATEMETERS

RoHS Compliant Available

EATON

E5-x24-E

- Display counter adding and subtracting
- Position display
- Frequency counter/ratemeter
- Timer
- Display Range: -199.999 – 999.999 with zero blanking
- Screw terminal
- Locking SET-Key

E5-024-E

E5-496-E

E5-496-E

- LED displays counter adding and subtracting
- Position display
- Frequency counter/ratemeter
- Timer, res. up to 0.001 sec.
- Programmable mode
- Display Range: -199.999 – 999.999 with zero blanking
- Connection with screw terminal
- Locking SET-Key for reset

Mfg. Part No.	Description	Supply Voltage	Size	Features	Stock No.	Price Each 1-4
E5-024-E0402	Totalizer	10V DC to 30V DC	1/32 DIN	Single Channel	14N7793	120.86
E5-024-E0432	Totalizer	10V DC to 30V DC	1/32 DIN	w/ Quadrature	13T1659	167.21
E5-424-E0402	Timer/ Totalizer/ Ratemeter	10V DC to 30V DC	1/32 DIN	Multifunction	13T1661	148.34
E5-524-E0402	Timer/ Totalizer/ Ratemeter	10V DC to 30V DC	1/32 DIN	Double Function	13T1663	160.24
E5-496-E0402	Timer/ Totalizer/ Ratemeter	10V DC to 30V DC	1/8 DIN	Multifunction	13T1662	249.64
E5-496-E0401	Timer/ Totalizer/ Ratemeter	90V AC to 260V AC	1/8 DIN	Multifunction	56P5633	262.93

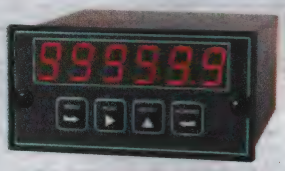
(194876)

LAUREATE™ FREQUENCY, RATE, TOTALIZER, TIMER AND PERIOD COUNTERS

CE RoHS Compliant Available

LAUREL ELECTRONICS

- Two pulse input channels independently scalable for frequency, rate or, total.
- Frequency or rate from 0.005 Hz to 1 MHz at update rates to 25/s
- Stopwatch operation from 1 µs to 999,999 hours
- Selectable "count by" of 10 or 100 with rounding
- ⅛ DIN case sealed to NEMA 4X (IP65) from front



Two channels (A or B) may be independently scaled for frequency, rate, or period, or be combined for A-to-B timing. Frequency and rate are determined with quartz crystal accuracy by timing an integral number of periods over a specified gate time and then taking the inverse of period. The inverse period allows greater accuracy and faster update times than conventional counters. Isolated 5, 10 or 24VDC excitation supply to power sensors. Green or red LED display. Totalizer display will flash and go into 4-digit XXXEX scientific notation when count exceeds 999,999. Square root extraction is standard and can be applied to rate or total. ⅛ DIN case meets NEMA 4X (IP65) from front. Choice of isolated plug-in options for control and data I/O: dual 8A relays, 16-bit analog output, Ethernet, USB, RS232, RS485 I/O, 12-32 Vac or 10-48 Vdc supply voltage; *go online or call*. CE certified.

STANDARD MAIN BOARD

Scalable to ±999,999 for frequency, rate, square root of rate, up or down total, period, or stopwatch. Selectable H, M or S decimal format or HH.MM.SS clock format for timing.

Mfg. Part No.	Analog Output	Stock No.	Price Each
L60000FR	...	84K0401	240.00
L60010FR	Isolated 0-20mA and 0-10V	84K0402	330.00

EXTENDED MAIN BOARD

All features of Standard Main Board plus rate and total simultaneously, up/down counting, arithmetic functions (A/B, A+B, A-B, A/B-1), phase angle, power factor, duty cycle, batching, custom curve linearization.

L80000FR	...	84K0404	270.00

CABLE ACCESSORIES

Mfg. part no. CBL01 cable connects meter RS232 port to a PC RS232 port. **Mfg. part no. CBL02** adapter needs to be added to connect meter RS232 port to a PC USB port. **Mfg. part no. CBL05** cable connects meter USB port to a PC USB port.

Mfg. Part No.	Cable Length (ft.)	Connector Type A	Connector Type B	Stock No.	Price Each
CBL01	7	D Sub 9 Position Plug	RJ11 Plug	87K0754	19.00
CBL02	2	D Sub 9 Position Plug	...	87K0755	39.00
CBL05	7	USB B Plug	USB A Plug	14R9955	15.00

(88534)

UNIVERSAL COUNTER/TIMER/TOTALIZER

NEWPORT

Universal 6-digit 0.56" (14.22) LED display is a frequency meter, tachometer, rate meter, timer, or totalizer with RS-232 interface. 7MHz maximum frequency. Fast low-frequency measurements, such as power-line monitoring to 5-digit accuracy every 150 micro-seconds. Selection of operating mode, scaling and setpoints via front-panel push-buttons (with selectable hardware lockout). Units capable of handling TTL, NPN, PNP sensors, contact closures and passive magnetic pickups (not included). Fit ⅛ DIN panel cutout. Screw terminals for signal and power. 115VAC, 50/60Hz or non-isolated 9.5-32VDC power optional. Relay output provides dual 10A relays for ON/OFF control or alarm applications, with latched or unlatched modes.

P5000 SERIES WITH NEMA4-RATED INFINITY STYLE BEZEL

Mfg. Part No.	Signal Input	Relay Output	Analog Output	Stock No.	Price Each
P5001	±10mV to 240Vrms, 1-Channel-Pulse	No	No	71C8326	475.00
P5004	1-5V, 0-10V, 4-20mA, 1-Channel-Analog	No	No	94B3715	515.00
P6000 SERIES WITH FRONT-REMOVABLE LENS ASSEMBLY					
P6000A	TTL/5V CMOS-level, 2 Channel	No	No	89F1797	380.00
P6021A	±10mV to 240Vrms, 1 Channel	Yes	No	89F1799	555.00
P6031A	±10mV to 240Vrms, 1 Channel	No	Yes	28M8311	660.00

(2303)

INFCTRA SERIES ⅛ DIN 6-DIGIT RATEMETER/TOTALIZER

NEWPORT

- Measures Rate from 0.5Hz to 30kHz
- Totalizes Up or Down from -99999 to 999999
- Optional HI and LO Setpoints for Control or Alarm
- ⅛ DIN Case with 5 Programming Keys
- Functions: rate and totalize selected by menu
- Display: 6-digit, 7-segment red LED display
- Universal Input choices, selectable by dip switches

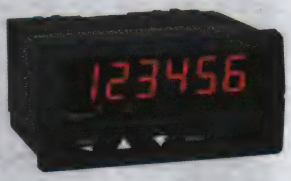
INFCTRA Series ratemeter/totalizer offers user programming via 5 front panel keys. Programs are stored in non-volatile memory. Selectable sensor excitation of 12.5VDC @ 50mA, 8.2VDC @ 40mA or 5.0VDC @ 30mA. Wide selection of signal inputs such as TTL compatible with protection to 25VDC, low level (25mVrms), high level signals protected to 115VAC, NAMUR or open collector PNP or NPN. Accuracy: 0.01%. Power: 115VAC. Other configurations are available; go online or call.

Mfg. Part No.	Description	Stock No.	Price Each
INFCTRA-0000-R	Ratemeter	96F6826	280.00
INFCTRA-0000-T	Totalizer	96F6832	280.00
INFCTRA-0100-T	Totalizer, Dual Relay Output	96F6833	360.00
INFCTRA-0110-R	Ratemeter, Dual Relay Output, Analog retranmission output	96F6830	467.00

(2352)

PRESET COUNTERS

UL CE Simpson



The **S660** series of counters are capable of handling count speeds of up to 20kHz (30kHz S661). Simple menu-driven programming features word prompts, not difficult codes. The rugged NEMA 4X case fits standard ⅛ DIN cutouts, and is equipped with large tactile buttons that can be pressed easily even when the user has gloves on. The counters feature a 6-digit LED display and 120VAC power. Optional features include quadrature inputs, two 5-amp mechanical relays and 12VDC excitation output @ 100mA (220VAC power upon request). **Mfg. Part No. S660** is an up/down, add/subtract totalizing counter, **mfg. part no. S661** is a rate counter, and **mfg. part no. S662** is a totalizer/batch counter.

UP/DOWN, ADD/SUBTRACT TOTALIZER (S660 SERIES)

Mfg. Part No.	Input	Relay/Excitation	Stock No.	Price Each
S660-1-1-0-0-0	Pulse Input	None/None	83F8782	215.38
S660-1-1-1-0-0	Pulse Input	One/None	83F8783	247.69
S660-1-1-2-0-0	Pulse Input	Two/None	83F7506	267.80
S660-1-1-2-1-0	Pulse Input	Two/12VDC	83F7507	300.87
S660-1-2-0-0-0	Quad Input	None/None	83F8780	243.88
S660-1-2-1-0-0	Quad Input	One/None	83F8781	276.18
S660-1-2-2-0-0	Quad Input	Two/None	83F7508	295.94
S660-1-2-2-1-0	Quad Input	Two/12VDC	83F7509	329.15
RATE (S661 SERIES)				
S661-1-1-0-0-0	Pulse Input	None/None	83F7510	215.38
S661-1-1-1-0-0	Pulse Input	One/None	83F7511	247.69
S661-1-1-2-0-0	Pulse Input	Two/None	83F7512	267.80
S661-1-1-2-1-0	Pulse Input	Two/12VDC	83F7513	300.87
S661-1-2-0-0-0	Quad Input	None/None	83F7514	243.88
S661-1-2-1-0-0	Quad Input	One/None	83F7515	276.18
S661-1-2-2-0-0	Quad Input	Two/None	83F7516	295.94
TOTALIZER/BATCH (S662 SERIES)				
S662-1-1-0-0-0	Pulse Input	None/None	83F7518	249.91
S662-1-1-1-0-0	Pulse Input	One/None	83F7519	282.22
S662-1-1-2-0-0	Pulse Input	Two/None	83F7520	302.33
S662-1-1-2-1-0	Pulse Input	Two/12VDC	83F7521	335.40

➤CONTINUED➤

PRESET COUNTERS (CONT.)

TOTALIZER/BATCH (S662 SERIES)

Mfg. Part No.	Input	Relay/Excitation	Stock No.	Price Each
S662-1-2-0-0-0	Quad Input	None/None	83F7522	278.41
S662-1-2-1-0-0	Quad Input	One/None	83F7523	310.72
S662-1-2-2-0-0	Quad Input	Two/None	83F7524	330.47
S662-1-2-2-1-0	Quad Input	Two/12VDC	83F7525	363.68

(33380)

DYNAPAR BRAND MAX JR TACH 1 & 2 PROGRAMMABLE RATE CONTROLLERS

VEEDER-ROOT

Eagle Signal Controls

Choose from two compact, economical models, both offering high-accuracy measurement techniques and simple programming. **Mfg. part no. MTJR1S00** MAXjr Tach 1 rate indicator/controller is ideal for basic rate or speed measurement functions. **Mfg. part no. MTJR2S00** MAXjr Tach 2 rate/ratio/time interval controller provides a choice of operating modes: rate of input A, as in the MAXjr Tach 1 model; ratio of two independent inputs A and B; and time interval, which can be the period of A or the elapsed time between inputs A and B; and time interval, which can be the period of A or the elapsed time between inputs A (start) and (stop). Both MAXjr Tach 1 and 2 models feature programmable 0.0001 to 99999 calibration high/low setpoint alarm capability with outputs and built-in diagnostics. Large 5-digit 0.56" (14.22) red LED display, 0.01% accurate time interval measurement and programmable decimal point position. Sealed NEMA-4 rated front panel with panel mounting in ⅛ D 1.78x3.56" (45.21x90.42) cutout; 5.68" (144.27) depth. 115/230VAC, 50/60Hz.

Mfg. Part No.	Description	Stock No.	Price Each
MTJR1S00	MAXjr Tach Rate Controller	84F765	976.16
MTJR2S00	MAXjr Tach Rate/Ratio/Time/Controller	04F804	1322.00

(2920)

DYNAPAR BRAND MAX® JR. ELECTRONIC TOTALIZING AND PRESET COUNTERS

VEEDER-ROOT

Eagle Signal Controls

Mfg. part no. MCJR1S00 8-digit totalizing counter features bidirectional operation, with ± polarity indicator and reference preset function. **Mfg. part no. MCJR2S00** is 5-digit predetermining counter for cut-to-length, filling, batching, locating, and similar applications. Features two presets with programmable output action. Programmable features include independent calibration and decimal point location for count and rate, allowing totals and speed to be displayed in different units, such as: totals in feet; speed in RPM. All models have bright, high-contrast red LED displays, NEMA-4 front panel rating with panel mounting in 1/8 DIN cut-out. Calibrator scales input signal for display in engineering units. Selectable decimal point positioning. Non-volatile memory retains count and program during power loss. 115/230VAC; 50/60Hz.

Mfg. Part No.	Description	Stock No.	Price Each
MCJR1S00	Count 1 Totalizing Counter	50F2679	905.46
MCJR2S00	Count 2 Predetermining Counter	87F1084	1067.72

(10625)

EPAX, LPAX AND MPAX LARGE DISPLAYS

RoHS Compliant Available

red lion®

EPAX AND LPAX DISPLAYS

Versatile displays that can increase productivity by offering the plant floor or production area a large visual display of their status. Supply voltage: 85-250VAC. 5-digit displays accept various analog inputs through the use of input modules (MPAX) which allow the unit to adapt to almost any application. 6-digit displays accept various digital inputs through the use of input modules (MPAX) which allow the unit to adapt to almost any application. NEMA 4X/IP65 casing. Additional plug-in cards; *ordered separately below*, can add alarms, analog output and communications/bus capabilities.

Mfg. Part No.	No. of Digits	Digit Height	Readable Distance (ft.)	Stock No.	Price Each
● EPAX0500	5	4	180	84K7449	566.00
● EPAX0600	6	4	180	14P9745	591.00
● LPAX0500	5	1.5	70	14P9748	309.00
● LPAX0600	6	1.5	70	84K7466	335.00

➤CONTINUED➤

EPAX, LPAX AND MPAX LARGE DISPLAYS (CONT.)

MPAX INPUT MODULES

Serve as the input to the EPAX or LPAX display. There are several different modules to cover a variety of inputs. The MPAX module provides input scaling which allows the EPAX and LPAX to display most any engineering unit. Once the MPAX is inserted into the EPAX or LPAX, the unit has the same functions and capabilities of the PAX Series intelligent panel meters. A full set of PAX programming instructions are included with the MPAX module. **NOTE:** The MPAX provides the operating power for the EPAX or LPAX display.

MPAX MODULES INPUT RANGES

Signal Type	Input Ranges
Universal DC Inputs	DC Voltage: 200mV, 2V, 20V, 300V DC Current: 200µA, 2mA, 20mA, 200mA, 2A Resistance: 100Ω, 1000Ω, 10KΩ
Process Inputs	0-20mA or 0-10VDC
Temperature Inputs	Thermocouples: T, E, J, K, R, S, B, N, C, or Custom Scaling RTDs: 100Ω Pt (platinum) 385/392, 120Ω Nickel 672, or 10Ω Copper 427
True RMS AC Voltage/Current	AC Voltage: 200mV, 2V, 20V, 300V AC Current: 200µA, 2mA, 20mA, 200mA, 5A

MPAX MODULES FOR EPAX AND LPAX 5-DIGIT DISPLAYS (ANALOG UNITS)

Mfg. Part No.	Signal Type	For Use With Display EPAX	For Use With Display LPAX	Stock No.	Price Each
MPAXD000	Universal DC Inputs	EPAX0500	LPAX0500	84K7470	240.00
MPAXP000	Process Inputs	EPAX0500	LPAX0500	14P9798	229.00
MPAXT000	Termperature Inputs	EPAX0500	LPAX0500	84K7476	229.00
MPAX MODULES FOR EPAX AND LPAX 6-DIGIT DISPLAYS (DIGITAL UNITS)					
MPAXC000	Count	EPAX0600	LPAX0600	84K7469	190.00
MPAXCK00	Clock/Timer	EPAX0600	LPAXCK00	14P9796	202.00

OPTIONAL PLUG-IN CARDS

Mfg. Part No.	Descripton	Stock No.	Price Each
PAXCDS10	Dual Setpoint Relay Output Card	84K7483	40.00
PAXCDS20	Quad Setpoint Relay Output Card	84K7484	51.00
PAXCDC20	RS232 Serial Communications Output Card with Terminal Block	84K7478	51.00
PAXCDL10	Analog Output Card	84K7482	78.00

(88706)

LD LARGE DISPLAYS AND TIMER AND CYCLE COUNTERS

RoHS Compliant Available

red lion®

- 2.25″ or 4″ high red LED digits
- Readable up to 130ft (2.25″ high models) or 180ft (4″ high models)
- Supply voltage: 85-250VAC/11-16VDC
- Constructed of NEMA 4 enclosure in lightweight aluminum

LARGE DISPLAYS

Versatile displays that can be configured as a single or dual counter with rate indication, scaling, serial communications and a relay output. The 6-digit programmable model has two signal inputs and a choice of eight different count modes including bi-directional, quadrature and anticoincidence counting as well as a dual counter mode. When programmed as a dual counter, each counter has separate scaling and decimal point selection. The meter display can be toggled either manually or automatically between the count and rate values. Programmable models come with 5A SPDT relay output and jumper selectable RS232 or RS485 communications.

Mfg. Part No.	Function	Output Signal	No. of Digits	Digit Height (mm)	Stock No.	Price Each
LD200400	Counter	...	4	57	84K7457	389.00
LD200600	Counter	...	6	57	84K7459	451.00
LD400400	Counter	...	4	101	84K7461	546.00
LD400600	Counter	...	6	101	84K7463	660.00
LD2006P0	Programmable Counter/Rate Indicator	Relay	6	57	84K7458	507.00
LD4006P0	Programmable Counter/Rate Indicator	Relay	6	101	84K7462	716.00

LARGE DISPLAY TIMER AND CYCLE COUNTERS

Versatile displays that function as an elapsed timer or preset timer, with full-featured programmability. Includes a built-in cycle counter, 5A SPDT relay output and serial communications capability, two signal inputs and eight input operating modes. These modes provide level active or edge triggered stop/start operation. The timer features 18 selectable timer ranges. Built-in cycle counter can be linked to timer operation to count timing cycles, or function as a totally independent counter, accepting count speeds up to 500Hz. The display can be toggled either manually or automatically between the timer and counter values. DIP switches are used to configure the inputs for current sinking (active low) or current sourcing (active high) operation. Setpoint output can be assigned to the timer or counter value, and configured to a variety of control and alarm requirements. The meter also includes jumper selectable RS232 or RS485 serial communications.

LD2T06P0	Timer/Cycle Counter	Relay	6	57	14P9746	507.00
LD4T06P0	Timer/Cycle Counter	Relay	6	101	84K7460	716.00

(88711)

Y-RMF AND Y-MF HEAVY-DUTY TOTALIZING COUNTERS

RoHS Compliant Available

EATON

6-Y-1-MF-120A

6-Y-1-2-RMF-PM-115A

Mfg. part nos. 32651400 and **32654400** are shaded pole electric counters with straight AC operation. They feature a non-rectified, shaded pole coil designed to withstand transient and high voltage spikes. This, combined with a simplified, hinged escapement drive, also eliminates the possibility of miscounts and greatly adds to the life of the counter. Tallies at speeds up to 750 cpm. **Mfg. part nos. 31155402, 31066416** and **31083403** provide accurate counts through a wide range of speeds up to 1000 cpm. Feature fast, silent DC electromagnetic drive with built-in, higher capacity rectifier for dependable AC operation. Moving parts never need lubrication under normal operating conditions. 0.188″H (4.78) 6-digit readout. 115VAC operating voltage with 7 watt count coil. Available with knob reset in base, panel mounting, or panel mount key reset. Panel models fit 3.703W × 1.250H × 2.469″D (94.06 × 31.75 × 62.71) opening. UL recognized.

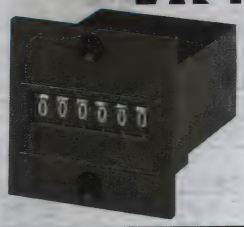
Mfg. Part No.	Reset	Mounting	Stock No.	Price Each 1-4
6-Y-1-RMF-115A	Knob	Base	87F6150	254.36
6-Y-1-RMF-PM-115A	Knob	Panel	87F6149	299.47
6-Y-1-2-RMF-PM-115A	Key	Panel	87F6151	378.98
6-Y-1-MF-120A	Knob	Base	18C1644	284.40
6-Y-12-MF-PM-120A	Key	Panel	94F3855	652.05

(2695)

MINIATURE ELECTRIC COUNTERS

EATON

Compact panel-mount 120VAC counters feature 0.188″H (4.78) 4- and 6-digit readout and tamperproof sealed window. Stainless steel self-lubricating shaft, nylatron pinions and synchronous electromagnetic drive assures accuracy and long-life. Speed: up to 1000 cpm. Power: count coil 3 watts. Available non-reset or pushbutton reset. Includes 10″ (254) wire leads.



Mfg. Part No.	Description	Cut-Out	Stock No.	Price Each 1-4
41314-406	4-Digit Panel Mount, 120VAC, Pushbutton Reset	1.72W × 1.11″H	94F3858	140.30
41346406	6-Digit Panel Mount, 120VAC, Non Reset	1.72W × 1.11″H	94F7375	92.01

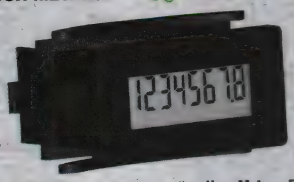
(2694)

MODEL 63 DUAL LCD TOTALIZERS AND HOUR METERS

RoHS Compliant Available

REDINGTON COUNTERS INC.

- NEMA 4/4X, 12, & IP66 rated when used with the appropriate gasket
- 15 year battery
- Switch (no voltage). 3-30VDC, 20-300VAC, 10-300VDC input choice



Totalizer – Features include 8 LCD digits, single input up counting. **Hour Meter** – Electronic Hour Meter has 8 LCD digits. 40Hz input speed available; *go online or call.*

LCD TOTALIZERS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
6300-0000-0000	40/150Hz Dry Contact Input w/ Remote Reset	74R7463	30.35
6300-0500-0000	Dry Contact Input Front Panel Reset w/ Programming	05N0096	30.65
6300-0600-0000	40/150Hz Dry Contact Input w/ Front Panel Reset Only	41T0103	36.54
6300-1000-0000	40/150Hz Dry 3-30 VDC Input w/ Remote Reset	74R5331	36.94
6300-1500-0000	3-30VDC Input Front Panel Reset w/ Programming	05N0097	30.65
6301-2000-0000	10-300VDC/20-300VAC Input w/ Remote Reset	75R7351	37.32
6300-2500-0000	10-300VDC/20-300VAC Input Front Panel Reset w/ Programming	05N0098	30.35

LCD HOUR METERS

6320-0000-0000	Dry Contact Input w/ Remote Reset	74R7465	32.28
6320-0500-0000	Dry Contact Input Front Panel Reset w/ Programming	05N0099	32.28
6320-0600-0000	Dry Contact Input w/ Front Panel Reset Only	41T0106	31.94
6320-1000-0000	3-30VDC Input w/ Remote Reset	74R7466	32.28
6320-1500-0000	3-30VDC Input Front Panel Reset w/ Programming	05N0100	31.94
6320-1600-0000	3-30VDC Input w/ Front Panel Reset Only	41T0007	31.60

➤ CONTINUED ➤

COUNTERS – ELECTROMECHANICAL • COUNTERS – MECHANICAL STROKE

MODEL 63 DUAL LCD TOTALIZERS AND HOUR METERS (CONT.)

LCD HOUR METERS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 6320-2000-0000	10-300VDC/20-300VAC Input w/ Remote Reset	74R7467	31.94
● 6320-2500-0000	10-300VDC/20-300VAC Input Front Panel Reset w/ Programming	05N0101	31.60

(115441)

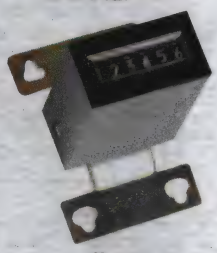
ELECTROMECHANICAL COUNTERS

RoHS Compliant Available

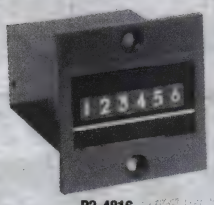
REDINGTON® COUNTERS INC.

Model 10 Panel Mount

Model 10 Base Mount



Model 44



P2-4816

Model 49

Model 10 6-figure electromechanical counter with heavy-duty rectifier, transient protection, convenient reset, 1000 cpm capability. **Mfg. part no. 2-1006** dimensions in inches: 3.68(H) x 1.74(W) x 2.51(D). Panel cutout in inches: **Mfg. part no. P2-1006**, 3.85 x 1.75; **Mfg. part no. P32-1206**, 4.88 x 1.75. 8″ wire leads, 22AWG. UL recognized, CSA certified, CE compliant. 7-figure counters available, *go online or call.*

Mfg. Part No.	Voltage	Mount	Reset	Stock No.	Price Each 1-9
2-1006	115VAC	Base	Manual	57F3501	152.47
P2-1006	115VAC	Panel	Manual	57F3502	169.68
P32-1026	115VAC	Panel	Lock & Key	44F3109	210.60

Model 44 rugged, low cost 6-figure non-resettable electromechanical counter in a variety of mounting styles. 0.18″ high characters. Dimensions in inches: 1.4(H) x 0.8(W) x 2.4(D). 10″ wire leads, 22AWG. UL recognized, CE compliant.

● RV2-4416	115VAC	Combination	None	71M0095	53.79
● RV8-4416	24VDC	Combination	None	44F3126	34.02
● RV23-4416	115VDC	Combination	None	71M0096	50.64

Model 48 compact, economical 6-figure non-resettable electromechanical counter designed for general purpose industrial and commercial counting applications. Dimensions in inches: Panel mount , 1.80 (H) x 1.80 (W) x 2.25 (D); base mount , 2.96(H) x 1.63(W) x 2.25(D). 12″ wire leads, 22AWG. UL recognized, CSA certified, CE compliant.

● P2-4816	115VAC	Panel	None	90F1624	51.26
● P8-4816	24VDC	Panel	None	27B4540	46.80
● V2-4816	115VAC	Base	None	51M9084	49.28

Model 49 4- or 6-figure panel mount electromechanical counter with pushbutton reset. 0.16″ high characters. **Mfg. part no. 4904** panel cutout in inches: 1.46(H) x 1.01(W). **Mfg. part no. 4906** panel cutout in inches: 2.00(H) x 1.01(W). 10″ wire leads, 22AWG. UL recognized, CE compliant. Other mounting styles available, *go online or call.*

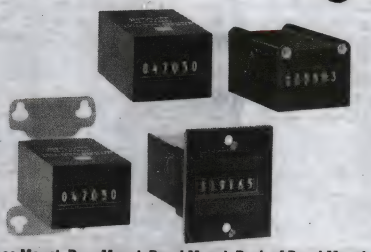
Mfg. Part No.	Voltage	Mount	Figures	Stock No.	Price Each 1-9
● P2-4904	115VAC	Panel	4	48M0898	55.41
● P8-4904	24VDC	Panel	4	48M0900	49.35
● P2-4906	115VAC	Panel	6	48M0899	72.90
● P8-4906	24VDC	Panel	6	48M0901	64.19

(2926)

ECONOMICAL ELECTRIC COUNTERS

VEEDER-ROOT

Eagle Signal Controls



Base Mount, Rear Mount, Panel Mount, Back of Panel Mount

7790 series (6-digit, nonreset) offers excellent performance and reliability characteristics for a minimal price. Body size: 1.0″ x 1.3″. Capable of speeds up to 600 counts/minute. UL recognized, CSA certified. Its count coil can be continuously energized without damage. 115VAC, 5W. Other AC and DC models also available; *go online or call.*

NONREST

Mfg. Part No.	Description	Stock No.	Price Each 1-14
0779086-001	Base Mount	87F1086	107.80
0779086-201	Panel Mount	99F6253	61.09
0779086-401	Rear Mount	01B3985	91.19

(52082)

TYPE 5H11R HEAVY-DUTY MECHANICAL STROKE COUNTER

EATON

High-speed, heavy-duty unit delivers 800 counts per minute. Features 5-digit readout, right-hand lever drive, wing nut reset, stainless steel shaft, and oil-less bearings. Steel plate adjusts for bottom or back mounting.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
40205400	Heavy-duty mechanical stroke counter	87F6146	273.67

(2699)

MECHANICAL STROKE COUNTERS

RoHS Compliant Available

REDINGTON® COUNTERS INC.

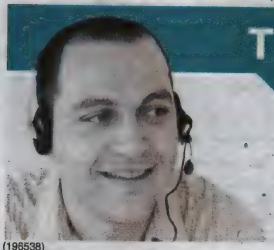
1-4635

1-2035

46 series mechanical stroke counter for limited space applications in office, vending and other small machinery. Speed: 1000cpm. Right hand, 5-digit, manual reset. Operating lever and spring assembly. Shaft diameter: 0.156″. **20 series** mechanical stroke counter for use in machinery. Speed: 1000cpm. Right hand, 5-digit, manual reset. With operating lever and spring assembly. Shaft diameter: 0.125″.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 1-4635	5 Figures, 0.19″ H., .81″ x 1.20″ Mounting Slots	57F3516	63.70
● 1-2035	5 Figures, 0.19″ H., .83″ x 1.20″ Mounting Slots	67P3135	97.02

(2937)



TECHNICAL SUPPORT HOTLINE

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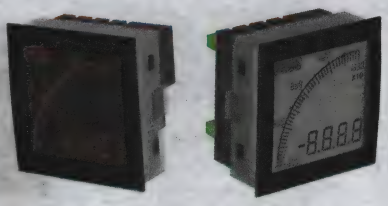
(196538)

APM SERIES ADVANCED PANEL METERS

NEW

trumeter
innovation by design



- 40 segment bar graph display
- Large 4 digit display
- Separate Starburst display area for annunciators, custom messages and alarm information
- Dynamic backlight color
- Scale (offset and gain) and Range (min and max)
- Custom annunciators
- Two independent alarm set-points
- Two independent outputs (output models only)
- 4-20mA Analog monitor output (output models only)
- User adjustable backlight brightness and color
- High contrast LCD screen
- Large display
- Wide viewing angle (both horizontal and vertical)
- Custom annunciators

The Trumeter **APM** is the most visible, easy to use, multi-format, programmable panel meter on the market. Providing you with the highest level of accuracy and an immediate visual indication of your critical parameters. The **APM** has been specifically designed for engineers requiring a more effective way of monitoring and displaying data. The Trumeter **APM** is a cost-effective alternative to the traditional moving coil and expensive digital panel meters.

MEASUREMENT	Voltage	Current	Frequency
Input Range (DC)	0-600V	0-5A	0-400Hz
Input Range (AC)	0-528V	0-5A	0-400Hz
OUTPUT MODELS			
Max Voltage	24V		
Max Current	50mA		
Analog Output	4-20mA		

Mfg. Part No.	Description	Stock No.	Price Each
APM-VOLT-APN	Volt Meter, Positive LCD	51X2412	65.00
APM-VOLT-APO	Volt Meter, Positive LCD w/ Outputs	51X2413	85.00
APM-VOLT-ANN	Volt Meter, Negative LCD	51X2410	65.00
APM-VOLT-ANO	Volt Meter, Negative LCD w/ Outputs	51X2411	85.00
APM-AMP-APN	Ammeter, Positive LCD	51X2404	65.00
APM-AMP-APO	Ammeter, Positive LCD w/ Outputs	51X2405	85.00
APM-AMP-ANN	Ammeter, Negative LCD	51X2402	65.00
APM-AMP-ANO	Ammeter, Negative LCD w/ Outputs	51X2403	85.00
APM-FREQ-APN	Frequency Meter, Positive LCD	51X2408	65.00
APM-FREQ-APO	Frequency Meter, Positive LCD w/ Outputs	51X2409	85.00
APM-FREQ-ANN	Frequency Meter, Negative LCD	51X2406	65.00
APM-FREQ-ANO	Frequency Meter, Negative LCD w/ Outputs	51X2407	85.00

(212203)

DIGITAL MULTI PANEL METERS

RoHS Compliant Available

Autonics
Sensors & Controllers

- Super version panel meter
- Various output options (Default: Indicator): Current (4-20mA) output, relay output
- Max. measuring input specification : 500VDC, 500VAC, 5ADC, 5AAC
- Max. display range : -1999 ~ 9999
- Prescale function
- AC frequency measurement (0.1 ~ 9999Hz)
- Various functions: Monitoring for max./min. display value function, Display cycle delay function, Zero adjustment function, High display correction function, Current output scale function, etc.
- Wide range of power supply : 100-240VAC

Mfg. Part No.	Measuring Input	Main Output	Sub Output	Stock No.	Price Each
MT4Y-AA-4N	AC Current	Indication Type	...	22T2538	103.95
MT4Y-AA-40	AC Current	Relay Contact	PV Transmission (DC 4-20mA)	22T2539	201.95
MT4Y-AV-4N	AC Voltage	Indication Type	...	22T2540	103.95
MT4Y-AV-40	AC Voltage	Relay Contact	PV Transmission (DC 4-20mA)	22T2541	201.95
MT4Y-DA-4N	DC Current	Indication Type	...	22T2542	97.95
MT4Y-DA-40	DC Current	Relay Contact	PV Transmission (DC 4-20mA)	22T2543	189.95
MT4Y-DV-4N	DC Voltage	Indication Type	...	22T2544	97.95
MT4Y-DV-40	DC Voltage	Relay Contact	PV Transmission (DC 4-20mA)	22T2545	189.95

(195421)

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(196525)

DIGITAL MULTI PANEL METERS

RoHS Compliant Available

Autonics
Sensors & Controllers

- Max. measuring input specification: 500VDC, 500 VAC, DC 5A, AC 5A
- Max. display range: -1999 ~ 9999
- High/Low scale function
- AC frequency measurement function: 0.1 ~ 9999 Hz
- Various functions: Monitoring function for max. and min. display value function, display cycle delay function, zero function, high display correction function, current output scale funtion
- Wide range of power supply: 100 - 240 VAC and 12 - 24 VDC
- Output types include (3) SPST relay contacts

Mfg. Part No.	Measuring Input	Supply Voltage	Power	Output Type	Stock No.	Price Each
MT4W-DV-1N	DC Voltage	12V DC to 24V DC	5W	None - Indication Only	22T2535	94.95
MT4W-DV-11	DC Voltage	12V DC to 24V DC	5W	Relay Contact	22T2536	163.95
MT4W-DV-4N	DC Voltage	100V AC to 240V AC	5VA	None - Indication Only	10R5272	94.95
MT4W-DV-41	DC Voltage	100V AC to 240V AC	5VA	Relay Contact	22T2537	163.95
MT4W-DA-1N	DC Current	12V DC to 24V DC	5W	None - Indication Only	22T2532	94.95
MT4W-DA-11	DC Current	12V DC to 24V DC	5W	Relay Contact	22T2533	163.95
MT4W-DA-4N	DC Current	100V AC to 240V AC	5VA	None - Indication Only	10R5271	94.95
MT4W-DA-41	DC Current	100V AC to 240V AC	5VA	Relay Contact	22T2534	163.95
MT4W-AV-1N	AC Voltage	12V DC to 24V DC	5W	None - Indication Only	22T2529	100.95
MT4W-AV-11	AC Voltage	12V DC to 24V DC	5W	Relay Contact	22T2530	173.95
MT4W-AV-4N	AC Voltage	100V AC to 240V AC	5VA	None - Indication Only	10R5270	100.95
MT4W-AV-41	AC Voltage	100V AC to 240V AC	5VA	Relay Contact	22T2531	173.95
MT4W-AA-1N	AC Current	12V DC to 24V DC	5W	None - Indication Only	22T2527	100.95
MT4W-AA-11	AC Current	12V DC to 24V DC	5W	Relay Contact	22T2528	173.95
MT4W-AA-4N	AC Current	100V AC to 240V AC	5VA	None - Indication Only	10R5269	100.95
MT4W-AA-41	AC Current	100V AC to 240V AC	5VA	Relay Contact	14R8537	173.95

(148670)

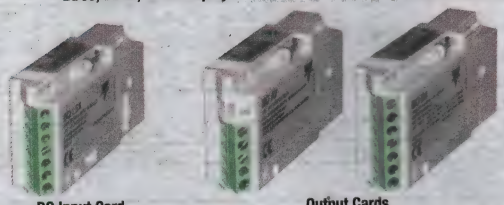
MODULAR DIGITAL PANEL METERS

RoHS Compliant Available

CARLO GAVAZZI

BD35, BD40, BD60 Displays

BP Power Supply Card



BQ Input Card

Output Cards

- ⅛ DIN, 3.5, 4 or 6 digit digital indicators and controllers
- Selectable display color on DB40: red, amber or green
- Dual (analog/digital) backlit LCD display on DB60
- Modular design facilitates many different inputs/outputs
- Rugged IP67 / NEMA4x splash-proof front cover
- AC/DC voltage/current, frequency, tachometer, counter, temperature, rate and resistance inputs
- T_{rms} AC current and voltage measurements
- Microprocessor-based design
- Up to four optional alarm outputs
- Optional analog, excitation, serial output
- MODBUS, JBUS communication protocol

UDM series µP-based indicators/controllers feature a rugged ⅛ DIN housing, rated IP67 / NEMA4x. The **UDM40's** unique display can be programmed in one of three colors (red, amber or green), or it can be programmed to display in a different color should an alarm setting be eclipsed, (i.e., green: OK, amber: caution, red: trouble.) Indicator's features include min/max recording, data hold, display/input range scaling and password protection. When a power supply card and multirange configurable input card are slid into a **BD** type display, a **UDM** indicator is the end result. Output cards are easily inserted into the back of the **UDM** indicator, thus making them controllers. It is possible to obtain one or two relay output(s) (not both) and/or a proportional analog or excitation output (not both); output cards are listed separately at the bottom of this page. Controllers feature up to four alarms, with adjustable hysteresis, delay and high/low/input fault alarms. All parameter settings are controlled by the front keypad via easy-to-use menu-driven format. 120VAC supply; other voltages are available.

DISPLAYS - A REQUIRED COMPONENT

Mfg. Part No.	Description	Max. Value	Stock No.	Price Each
BD35	3.5 digit, red display	1999	27K4038	148.00
BD40	4.0 digit, 3-color display	9999	27K4039	226.00
BD60	Dual 6.0 digit, backlit LCD display	999999	08P0908	244.00

POWER SUPPLY CARDS - A REQUIRED COMPONENT

Mfg. Part No.	Description	Supply Voltage Range	Stock No.	Price Each
BPH	UNIVERSAL SUPPLY CARD	90-260 VAC/DC	27K4045	74.00
BPL	UNIVERSAL SUPPLY CARD	18-60 VAC/DC	27K4046	110.00

CONTINUED

MODULAR DIGITAL PANEL METERS (CONT.)

PRE-CALIBRATED INPUT CARDS - A REQUIRED COMPONENT

Mfg. Part No.	Description	Input Range	Stock No.	Price Each
● BQHSX	High signal input	-200mA to +5A -20V to +500V AC/DC	05M6312	170.00
● BQLSX	Low signal output	-200µA to +20mA -200mV to +20V AC/DC	27K4049	170.00
● BQLSE	Low signal input with excitation output	-200µA to +20mA -200mV to +20V AC/DC	05M3950	231.00
● BQTF1	Tachometer/freq. input	0.001Hz to 50kHz DC	08P0916	232.00
● BQTF2	Tachometer/freq. input	0.001Hz to 50kHz AC	08P0917	203.00
● BQTRX	Ohm/temperature input	0-20KΩ, J, K, E, S & T RTDs Pt100, Pt250, Pt500, Pt1000, & Ni100 RTDs	27K4050	208.00

PRE-CALIBRATED OUTPUT CARDS - OPTIONAL COMPONENT

Mfg. Part No.	Description	Output	Stock No.	Price Each
● BOR1	One relay output	One 8A SPDT	05M3935	57.00
● BOR2	Two relay outputs	Two 8A SPDT	05M3936	88.00
● BOR4	Two relay outputs and two transistor outputs	Two 8A SPDT and two 100mA Transistor	27K4043	125.00
● BOR5	Four relay outputs	Four 5A SPST	05M3938	139.00
● BRSY	Serial output card	RS232	05M3954	194.00
● BRSX	Serial output card	RS485	05M3953	194.00
● BOAV	Analog output module	0-20mA or 0-10VDC	05M3934	159.00

(84547)

SENSOTEC MODEL GM SINGLE-CHANNEL SIGNAL CONDITIONERS

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE.
All Found Here.

Features:
- Versatile full function signal conditioner, amplifier, and power supply
- Large 0.56" readout display size
- Short circuit protected
- 20,000 count resolution
- 14+ bit accuracy (20,000 steps)

Specifications:
- 4 ½ digit LED display
- ±0.03% accuracy
- Supply voltage: 115VAC
- Operating temperature range: 32°F to 130°F
- Panel mount bracket included
- Bench mount bracket and NEMA 4 splash cover also available; *order separately below*

AE213 (shown with Bench Mount Bracket)

SIGNAL CONDITIONERS

Mfg. Part No.	Description	Input (mV/V)	Output (V)	Stock No.	Price Each 1-5
AE213	Model GM	0.5-5	±5	27M1753	720.42
AE213 58C	Model GM w/Peak Hold	0.5-5	±5	27M1754	1217.16

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
AA924	Bench mount bracket	29M9215	49.15

(90235)

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(196547)

LAUREATE™ CURRENT, VOLTAGE, STRAIN GAGE AND LOAD CELL PANEL METERS

CE RoHS Compliant Available

LAUREL ELECTRONICS

- Full-scale voltage ranges from 20 mV to 600V
- Full-scale current ranges from 2 mA to 5A
- 0.01% FS ± 2 count DC error, 0.1% FS AC RMS error
- Scalable 5-digit displays to ±99,999
- User scalable for use with current shunts and transformers
- 1 GΩ input resistance on scales from 20 mV, 200 mV, 2V DC scales
- Up to 60 conversions per second
- Programmable adaptive digital filter

Supply voltage: 85-264 Vac or 90-300 Vdc. Up to 60 conversions per second while integrating over a full power cycle for fast relay response and peak/valley capture. Red or green LEDs. ⅛ DIN case meets NEMA 4X (IP65) standards from the front. All ranges factory calibrated. 99.99% full-scale accuracy for DC signals, 99.9% accuracy for AC RMS. Selectable fixed zero or active least significant digit. 5, 10 or 24VDC sensor excitation supply. External controls for reset, meter hold and decimal points. Panel meters have a DC signal conditioner board, high accuracy, high read rate and isolated output options. Can be used with external shunts. Selectable signal filtering: unfiltered selection, batch average filter or adaptive moving average filter which provides a choice of 8 time constants from 80ms to 9.6s. Choice of isolated plug-in options for control and data I/O: dual 8A relays, 16-bit analog output, Ethernet, USB, RS232, RS485 I/O, 12-32 Vac or 10-48 Vdc supply voltage; *go online or call.* CE certified.

AC AMMETERS

Mfg. Part No.	Signal Input Current	Output Type	Stock No.	Price Each
L20000RMA4	5.000 A	...	84K0376	270.00
L20100RMA4	5.000 A	2 Relays	84K0394	350.00

AC MILLIVOLTMETERS

Mfg. Part No.	Signal Input Voltage	Output Type	Stock No.	Price Each
L20000RMV1	200.00 mV	...	84K0377	270.00
L20100RMV1	200.00 mV	2 Relays	84K0395	350.00

AC VOLTMETERS

L20000RMV4	200.00 V	...	84K0378	270.00
L20100RMV4	200.00 V	2 Relays	84K0396	350.00
L20000RMV5	600.0 V	...	84K0379	270.00
L20100RMV5	600.0 V	2 Relays	84K0397	350.00

DC MILLIAMMETERS

Mfg. Part No.	Signal Input Current	Output Type	Stock No.	Price Each
L20000DCA1	± 2.0000 mA	...	84K0367	230.00
L20100DCA1	± 2.0000 mA	2 Relays	84K0385	310.00
L20000DCA3	± 200.00 mA	...	84K0368	230.00
L20100DCA3	± 200.00 mA	2 Relays	84K0386	310.00

DC AMMETERS

L20000DCA4	± 5.000 A	...	84K0369	230.00
L20100DCA4	± 5.000 A	2 Relays	84K0387	310.00

DC MILLIVOLTMETERS

Mfg. Part No.	Signal Input Voltage	Output Type	Stock No.	Price Each
L20000DCV1	± 200.00 mV	...	84K0370	230.00
L20100DCV1	± 200.00 mV	2 Relays	84K0388	310.00

DC VOLTMETERS

L20000DCV2	± 2.0000 V	...	84K0371	230.00
L20100DCV2	± 2.0000 V	2 Relays	84K0389	310.00
	± 20.0000 V	...		
L20100DCV3	± 20.000 V	2 Relays	84K0390	310.00
L20000DCV4	± 200.00 V	...	84K0373	230.00
L20100DCV4	± 200.00 V	2 Relays	84K0391	310.00
L20000DCV5	± 600.0 V	...	84K0374	230.00
L20100DCV5	± 600.0 V	2 Relays	84K0392	310.00

DC STRAIN GAGE DC MILLIVOLTMETERS WITH SCALABLE DISPLAY

L20000SG	0-200 mV	...	84K0381	230.00
L20100SG	0-200 mV	2 Relays	84K0398	310.00

DC LOAD CELL MILLIVOTMETERS

L20000WM	0-20 mV	...	84K0383	290.00
L20100WM	0-20 mV	2 Relays	84K0399	345.00

DC PROCESS CONTROLLERS

Mfg. Part No.	Signal Input Current	Scalable Display	Retransmit Input	Display Alarm Type	Stock No.	Price Each
L20000P	4-20 mA	0-100.0	...	...	84K0375	230.00
L20010P	4-20 mA	0-100.0	Isolated 0-20mA and 0-10V	...	84K0384	320.00
L20100P	4-20 mA	0-100.0	...	Relay	84K0393	310.00
L20110P	4-20 mA	0-100.0	Isolated 0-20mA and 0-10V	Relay	84K0400	400.00

CABLE ACCESSORIES

Mfg. part no. CBL01 cable connects meter RS232 port to a PC RS232 port. **Mfg. part no. CBL02** is used on computers without an RS232 port but have a USB port. **CBL05** cable connects meter USB port to a PC USB port.

➤CONTINUED➤

LAUREATE™ CURRENT, VOLTAGE, STRAIN GAGE AND LOAD CELL PANEL METERS (CONT.)

Mfg. Part No.	Cable Length (ft.)	Connector Type A	Connector Type B	Stock No.	Price Each
CBL01	7			87K0754	19.00
CBL02	2		USB Type A	87K0755	39.00
CBL05	7	USB Type B	USB Type A	14R9955	15.00

(88554)

AC AMMETERS

NEWPORT

3½-digit units feature bright 0.56"(14.22) LED displays, screw terminal barrier strip for power and signal connections, operate on 120VAC, fit standard ⅛ DIN panel cut-out. Decimal point programmable at barrier strip. Factory-calibrated precision op-amp rectifier circuit to read true RMS values of sinusoidal waves. 5A signal input range for direct connection to current transformer with 5A secondary without a step-down transformer.

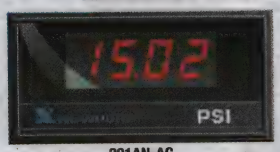
Mfg. Part No.	Display Range	Stock No.	Price Each
Q2000-DCR7-1	1-10/100/1000	89F1835	290.00
Q2000-DCR7-3	0-20/200	89F1823	290.00
Q2000-DCR7-4	0-30/300	92B9012	290.00
Q2000-DCR7-5	0-40/400	95B0627	290.00
Q2000DCR7-6	0-50/500	89F1826	290.00
Q2000-DCR7-7	0-60/600	04R7903	290.00
Q2000-DCR7-8	0-80/800	04R7904	290.00

(37270)

AC POWER-LINE MONITORS

NEWPORT

3½-digit units feature bright 0.56" (14.22) LED displays, screw terminal barrier strip for power and signal connections, operate on 120VAC and fit standard ⅛ DIN panel cut-out. Decimal point programmable at barrier strip. **201AN-AC** series AC power-line monitors use factory-calibrated half-wave rectifier to read RMS values of sinusoidal signals. Provide AC voltmeter performance for AC ranges.



201AN-AC

Mfg. Part No.	Signal Input Range, VAC	Display Range	Stock No.	Price Each
201AN-AC5	20-199.9	±1,999	89F1833	190.00
201AN-AC6	20-650	±1,999	89F1834	190.00

(2297)

QUANTA PROCESS INDICATORS AND CONTROLLERS

NEWPORT

The QUANTA process indicators and controllers feature 0.56" (14.22) LED displays, screw terminal barrier strip for power and signal connection. Units are standard ⅛ DIN panel cutout. Input signal is selectable via jumpers for 0-1mA, 4-20mA, 10-50mA, ±200mV to ±20VDC and pot adjustable to display engineering units. Dual set point option includes 2 internal Form C relays rated at 10A at 20VDC or 240VAC resistive. 2 LED lamps indicate on/off status of either relay. Set points are screwdriver adjustable over entire display range or over narrower ranges selected by jumpers on screw terminal strip. Analog output is adjustable for 4-20mA or 0-10VDC. Factory scaling available for different display range (FS), other input signal and outputs are available.

INPUT SIGNAL CURRENT

Mfg. Part No.	Description	Display Range	Stock No.	Price Each
Q2000-P	Process Monitor	4-20mA = 0-100.0	50B5920	285.00
Q2001-P	Process Controller, 2 Relay (10A) Output	4-20mA = 0-100.0	50B5921	480.00
INPUT SIGNAL VOLTS				
Q9000-P	Process Monitor	4-20mA = 0-99.99	98B5720	350.00
Q9040-P	Process Meter, Analog Output 4-20mA	4-20mA = 0-99.99	02E6855	395.00

(37373)

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(212565)

IDP SERIES PROCESS METER

NEWPORT

4-digit LED process meter that has user-selectable inputs of 4-20mA, 20-4mA, 0-5V, 1-5V or 0-10V ⅛ DIN case 4" deep. Removable screw terminals for easy connections. CE compliant. UL listed.

Mfg. Part No.	Power	Display	Stock No.	Price Each
IDP-0	115VAC	Red LED	88F1042	199.00
IDP-2	115VAC	Green LED	92B7223	199.00
IDP-4	10-32 VDC	Red LED	16F1116	259.00

(2387)

INFCAC SERIES TRUE RMS VOLTAGE AND CURRENT METERS

NEWPORT

The Newport INFCAC true RMS meters compute the true root-mean-square value of complex signals. Both DC + AC and AC coupled connections are included. AC coupling allows the measurement of the AC component (or ripple) from a signal with both AC and DC components. True RMS meters are especially useful in monitoring voltage and current supplied to motors or heaters controlled by an SCR or Triac circuit. Optional user scalable analog output of 4-20mA or 0-10V allows either control or recorder interface. Optional dual 5A relays give additional control capability. The optional plug-in communication options can be added at any time allowing the instrument to grow with your application.

Mfg. Part No.	Signal Inputs	Description	Stock No.	Price Each
INFCAC-0000-C5	0-1mA, 0-10mA, 0-100mA, 0-1A, 05A ac	True RMS Ammeter, No Output	90B6647	360.00
INFCAC-0100-C5		True RMS Ammeter, Dual Relay Output	31C2009	430.00
INFCAC-0110-C5		True RMS Ammeter, Dual Relay and Analog Output	11C0687	510.00
INFCAC-0000-V5	0-1V, 0-10V, 0-100V, 0-750V ac	True RMS Voltmeter, No Output	88F6316	360.00
INFCAC-0110-V5		True RMS Voltmeter, Dual Relay and Analog Output	93B5745	510.00

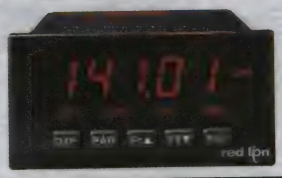
(73302)

PAX LITE DIGITAL PANEL METERS

RoHS Compliant Available

red lion

- NEMA 4X/IP65 sealed front bezel
- Selectable decimal points
- Over-range indication
- 0.56" (14.2mm) LED readout



MODEL PAXLPV — PAX LITE PROCESS VOLTMETER

Wide span and offset scaling range (covers 1-5VDC process input). 24VDC excitation supply. Optional custom units overlay with backlight available; *go online or call.*

Mfg. Part No.	No. of Digits	Supply Voltage	Signal Input	Stock No.	Price Each
PAXLPV00	3½	85-250VAC	Selectable Voltage	84K7502	162.00

MODEL PAXLCL — PAX LITE CURRENT LOOP METER

Dual range, 4-20mA or 10-50mA. 24VDC excitation supply. Wide span and offset scaling range.

PAXLCL00	3½	85-250VAC	Selectable Current	84K7495	162.00

MODEL PAXLI — PAX LITE CURRENT METERS

Multi-range units cover 199.9µA to 1.999A. Built-in scaling provisions. Auto zeroing circuits. Optional custom units overlay with backlight available; *go online or call.*

PAXLIA00	3½	115/230VAC	Selectable AC Current	84K7499	149.00
PAXLID00	3½	115/230VAC	Selectable DC Current	84K7500	124.00

MODEL PAXLIT — PAX LITE 5AMP AC CURRENT METER

5A AC current input. Built-in scaling provisions. Auto zeroing circuits. Optional custom units overlay with backlight available; *go online or call.*

PAXLIT00	3½	115/230VAC	Current	84K7501	162.00

MODEL PAXLHV — PAX LITE AC VOLTAGE MONITOR

Auto zeroing circuit. Up to 600VAC max. Optional custom units overlay with backlight available; *go online or call.*

PAXLHV00	3	115/230VAC	Selectable Voltage	84K7498	162.00

MODEL PAXLV — PAX LITE VOLTMETER

Multi-range units cover 199.9mV (AC or DC), 1.999 to 300V (AC or DC). Built-in scaling provisions. Auto zeroing circuits. Optional custom units overlay with backlight available; *go online or call.*

PAXLVD00	3½	115/230VAC	Selectable DC Voltage	84K7507	118.00

MODEL PAXLSG — PAX LITE STRAIN GAGE METER/MILLIVOLT METER

High sensitivity, 10mV full scale. Wide range gain and offset adjustments. Built-in excitation 5 or 10VDC. Applicable as regular millivolt indicator (single-ended or differential input). Optional custom units overlay with backlight available; *go online or call.*

PAXLSG00	3½	85-250VAC	Strain Gage	84K7505	229.00

CONTINUED

PAX LITE DIGITAL PANEL METERS (CONT.)

Mfg. Part No.	No. of Digits	Supply Voltage	Signal Input	Stock No.	Price Each
Programmable TC type (T, E, J, K, R, S, B, N or mV scale). Conforms to ITS-90 standards. Selectable °F or °C. Programmable temperature offset. Programmable digital filtering enhances stability. Peak/valley (Hi/Lo reading) memory. Custom units overlay with backlight available; *go online or call.*					
PAXLTC00	4	85-250VAC	Selectable Thermocouple	84K7506	202.00
MODEL PAXLRT — PAX LITE RTD METER Accepts standard 3-wire 100Ω RTD sensors (alpha = 0.00385 or alpha = 0.00392). Conforms to ITS-90 standards. Selectable °F or °C. Programmable temperature offset. Programmable digital filtering. Peak/valley (Hi/Lo reading) memory. Custom units overlay with backlight available; *go online or call.*					
PAXLRT00	4	85-250VAC	Selectable Thermocouple and RTD	84K7503	202.00
MODEL PAXLC — PAX LITE COUNTERS Available in 6- or 8-digit versions. Accepts input count rates up to 25KHz. Bi-directional counting. Remote reset capability. Display store. Programmable scale factor.					
● PAXLC600	6	115/230VAC	Pulse	84K7496	156.00
PAXLC800	8	115/230VAC	Pulse	84K7497	167.00
MODEL PAXLR — PAX LITE RATE METER Input rates up to 25KHz. Accepts a wide variety of sensors. Programmable scaling. Programmable update time.					
● PAXLR000	6	115/230VAC	Pulse	84K7504	156.00

(88717)

PAX 1/8 DIN DIGITAL PANEL METERS

RoHS Compliant Available

red lion®

- Process, voltage, current, temperature and strain gage inputs
- 5- or 6-digit variable intensity 0.56" red sunlight readable display
- 16 point scaling for non-linear processes
- Four setpoint alarm outputs, communication and bus capabilities and retransmitted analog output (with option card)
- NEMA 4X/IP65 sealed front bezel

PAX analog panel meters offer many features and performance capabilities to suit a wide range of industrial applications. Provides a MAX and MIN reading memory with programmable capture time. The signal totalizer (integrator) can be used to compute a time-input product. This can be used to provide a readout of totalized flow, calculate service intervals of motors or pumps, etc. The totalizer can also accumulate batch weighing options. Once the meters have been initially configured, the user interface may be completely protected leaving only the setpoints accessible. Accept digital inputs from a variety of sources including switch contacts, outputs from CMOS or TTL circuits, magnetic pickups and all standard RLC sensors. Can accept directional, uni-directional or quadrature signals simultaneously. Maximum input signal varies up to 34KHz depending on the count mode and function configurations programmed. Each input signal can be independently scaled to various process values.

INPUT SPECIFICATIONS

Model PAXC Dual Counter	Active: Sinking (Vin < 0.9VDC), Sourcing (Vin > 2.4VDC) Inactive: Sinking (Vin > 2.4VDC), Sourcing (Vin < 0.9VDC)
Model PAXD Universal DC Input	±200µADC, ±2mADC, ±20mADC, ±200mADC, ±2ADC, ±200mVDC, ±2mVDC, ±20VDC, ±300VDC, 100Ω, 1000Ω, 10kΩ
Model PAXP Process Input	20mA (-2 to 26mA), 10VDC (-1 to 13VDC)
Model PAXH AC True RMS Volt and Current	200mV, 2V, 20V, 300V, 200µA, 2mA, 20mA, 200mA, 5A
Model PAXS Strain Gage Input	±24mVDC, ±240mVDC
Model PAXT Thermocouple Input	T (-200°C to +400°C, -270°C to -200°C), E (-200°C to +871°C, -270°C to -200°C) J (-200°C to +760°), K (-200°C to +1372°C, -270°C to -200°C) R (-50°C to +1768°C), S (-50°C to +1768°C), B (+100°C to +300°C, +300°C to +1820°C), N (-200°C to +1300°C, -270°C to -200°C) C (W5/W26) (0 to +1215°C)
Model PAXT RTD Input	100Ω Pt, alpha = 0.00385 (-200°C to +850°C) 100Ω Pt, alpha = 0.03919 (-200°C to +850°C) 120Ω Nickel, alpha = 0.00672 (-80°C to +260°C) 10Ω Copper, alpha = 0.00427 (-100°C to +260°C
Model PAXT Custom Range Input	-10 to 65mV, 0 to 400Ω (high range), 0-25Ω (low range)

MODEL PAXD — UNIVERSAL DC INPUT
Selectable 24Vm 2C, 1.75mA excitation output

Mfg. Part No.	No. of Digits	Supply Voltage	Signal Input	Stock No.	Price Each
● PAXD0000	5	85-250VAC	Selectable DC Current and Voltage	84K7490	267.00
PAXD0010	5	11-36VDC/24VAC	Selectable DC Current and Voltage	84K7491	297.00
MODEL PAXP — PROCESS INPUT Dual range input. 24VDC transmitter power.					
● PAXP0000	5	85-250VAC	Selectable Current and Voltage	84K7508	256.00
PAXP0010	5	11-36VDC/24VAC	Selectable Current and Voltage	84K7509	284.00
MODEL PAXH — AC TRUE RMS VOLT AND CURRENT Accepts AC or DC coupled inputs. Three-way isolation: power, input and outputs.					
PAXH0000	5	85-250VAC	Selectable AC Current and Voltage	84K7492	333.00
MODEL PAXS — STRAIN GAGE INPUT Selectable 5VDC or 10VDC bridge excitation. Programmable auto-zero tracking.					
● PAXS0000	5	85-250VAC	Strain Gage	84K7512	379.00
PAXS0010	5	11-36VDC/24VAC	Strain Gage	84K7513	408.00

➤CONTINUED➤

PAX 1/8 DIN DIGITAL PANEL METERS (CONT.)

Mfg. Part No.	No. of Digits	Supply Voltage	Signal Input	Stock No.	Price Each
Conforms to ITS-90 standards. Custom scaling for non-standard probes. Time-temperature integrator.					
PAXT0000	5	85-250VAC	Selectable Thermocouple and RTD	84K7516	256.00
PAXT0010	5	11-36VDC/24VAC	Selectable Thermocouple and RTD	84K7517	284.00
MODEL PAXC — 1/8 DIN COUNTERS Dual count quad inputs. Up to 3 count displays. Setpoint alarm outputs (with plug-in card).					
● PAXC0010	6	11-36VDC/24VAC	Pulse	84K7489	244.00
PAXC0020	6	85-250VAC	Pulse	28W5384	235.63
MODEL PAXR — 1/8 DIN RATE METERS Rate indication. Minimum/maximum rate displays. Setpoint alarm outputs (with plug-in card).					
● PAXR0000	6	85-250VAC	Pulse	84K7510	215.00
● PAXR0010	6	11-36VDC/24VAC	Pulse	84K7511	244.00
MODEL PAX 1/8 DIN PRESET TIMER (PAXTM) AND REAL-TIME CLOCK (PAXCK) Both can function as an elapsed timer or preset timer, while the PAXCK also offers real-time clock with date capability. Both units can function as an elapsed time indicator. By using two separate signal inputs and 23 selectable timer ranges, the meters can be programmed to meet most any timing application. With the addition of a plug-in setpoint card, they can easily become a dual or quad output preset timer					
● PAXTM000	6	85-250VAC	Pulse	84K7514	178.00

OPTIONAL PLUG-IN CARDS

Mfg. Part No.	Descripton	Stock No.	Price Each
● PAXCDS10	Dual Setpoint Relay Output Card	84K7483	40.00
● PAXCDS20	Quad Setpoint Relay Output Card	84K7484	51.00
● PAXCDC20	RS232 Serial Communications Output Card with Terminal Block	84K7478	51.00
● PAXCDL10	Analog Output Card	84K7482	78.00

(88660)

1/8 DIN DIGITAL PANEL METER

RoHS Compliant Available

red lion®

- Universal process inputs, DC Current, DC voltage, process signal, resistance, thermocouple or RTD inputs
- 50 to 250 VAC or 21.6 to 250 VDC universal power supply
- .59 digit dual line/color display with 0.7" and 0.35" digits
- Programmable units display
- Variable contrast and intensity display
- Up to 160 samples per second conversion rate
- Built-in USB programming port enabling unit configuration with Crimson programming software

Mfg. Part No.	Description	Stock No.	Price Each
● PAX2A000	1/8 DIN Digital Panel Meter	90R8368	332.00

(189994)

MODEL DP5 1/8 DIN ANALOG INPUT PANEL METERS

RoHS Compliant Available

red lion®

- 5-digit 0.56" high LED display
- Programmable function keys/ user input
- 9-digit totalizer (integrator) with batching
- NEMA 4X/IP65 sealed front bezel

INPUT SPECIFICATIONS

Model	Input Range
DP5D0010	±200µADC, ±2mADC, ±20mADC, ±200mADC, ±2ADC ±200mVDC, ±2VDC, ±20VDC, ±300VDC
DP5P0000	20mA (-2 to 26mA) 10VDC (-1 to 13VDC)

Meters provide a MAX and MIN reading memory with programmable capture time which is used to prevent detection of false max or min readings which may occur during start-up or unusual process events. The signal totalizer (integrator) can be used to compute a time-input product that can be used to provide a readout of totalized flow, calculate service intervals of motors or pumps, etc. The totalizer can also accumulate batch weighing operations. Once the meters have been initially configured, the parameter list may be locked out from further modification.

Mfg. Part No.	Meter Function	Supply Voltage	Stock No.	Price Each
● DP5D0010	Current/Voltage	11-36VDC, 24VAC	20M0569	247.00
● DP5P0000	Process	85-250VAC	16M3716	208.00

(94366)

CUSTOM ELECTRONIC ENCLOSURES

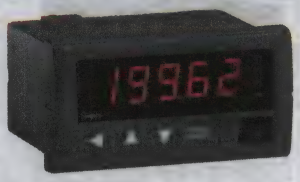
Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures

(212568)

HAWK III MICROPROCESSOR CONTROLLERS

- 1/8 DIN and 3.24" Depth Behind Panel
- 7 Segment, Bright Red 3½ or 4½ Digit Display
- Green LED Display Available At No Additional Charge
- 120VAC Power, Optional 9-32VDC Power
- Versatile Configurations to Suit Your Applications
- All Parameters Set From Front Panel
- Screw Terminal Connectors for Easy Installation
- Peak/Valley and Password Lockout
- Optional Output and Excitation Range
- Optional One, Two or Four 5 Amp Relays
- Model H335 Indicates 3½-Digit, Model H340 Indicates 4-Digit, Model H345 Indicates 4½- Digit



Many other ranges and configurations available. *Go online or call.*

Mfg. Part No.	Input	Outputs/Relays	Stock No.	Price Each
DC VOLTAGE CONTROLLERS				
H3351-11-000	200mV	None	90C1349	237.39
H3351-13-000	20V	None	90C1354	237.39
H3351-11-010	200mV	One	90C1350	290.23
H3351-12-010	2V	One	90C1352	296.04
H3351-13-010	20V	One	90C1355	290.23
H3351-14-010	200V	One	90C1357	290.23
H3351-11-0-2-0	200mV	Two	23M9665	316.31
H3351-12-020	2V	Two	90C1353	316.31
H3351-13-020	20V	Two	90C1356	316.31
H3351-14-020	200V	Two	90C1358	316.31
H335-1-15-020	600V	Two	90C1359	316.31
DC CURRENT CONTROLLERS For higher DC current levels use Simpson external shunt and scale display.				
H3351-21-020	200µA	Two	05J2192	317.01
H3351-22-020	2mA	Two	05J2193	317.01
DC PROCESS CONTROLLERS				
H3351-71-000	4-20mA	None	90C1365	238.09
H3351-71-010	4-20mA	One	90C1366	290.93
H3351-71-020	4-20mA	Two	90C1367	317.01
H3452-71-640	4-20mA	RS485/Four	90C1378	573.18
H345-2-71-140	4-20mA	4-20mA/Four	90C1377	519.15
AC VOLTAGE CONTROLLERS				
H3351-34-010	200V	One	90C1360	305.94
H3351-34-020	200V	Two	90C1361	330.40
AC CURRENT CONTROLLERS For higher AC current levels, use with Simpson ® current transformers.				
H3351-46-000	5A	None	90C1362	260.97
H3351-46-010	5A	One	90C1363	309.63
H3351-46-020	5A	Two	02M2070	334.27
H3452-46-040	5A	Four	90C1372	488.73
AC TRMS CONTROLLERS				
H3452-53-040	20V TRMS	Four	90C1373	546.25
H3452-65-120	2A TRMS	4-20mA/Two	90C1375	571.30
H345-2-66-120	5A TRMS	4-20mA/Two	90C1376	571.30
RESISTANCE CONTROLLERS				
H3351-81-010	200 ohm	One	90C1368	343.32
H3351-82-010	2 Kohm	One	90C1369	343.32
H3351-83-010	20 Kohm	One	90C1370	343.32
H3351-84-010	200 Kohm	One	90C1371	343.32
TEMPERATURE CONTROLLERS				
H3401-91-000	Type J(C/F)	None	05J2195	289.68
H3401-91-020	Type J(C/F)	Two	05J2196	365.69
H3401-92-020	Type K(C/F)	Two	05J2197	362.09
H3401-93-020	RTD PT 100	Two	05J2198	375.04

(2444)

NEMA 4X COVER

NEMA-4 (IP-65) splash-proof lens cover fits all Simpson® ⅛ DIN controllers and indicators, providing protection against dust, falling dirt, salt spray, dripping water, and non-corrosive liquids. 4.30W × 2.41H × 0.96"D (109.22mm × 61.21mm × 24.38mm).

Mfg. Part No.	Description	Stock No.	Price Each
45003	NEMA-4 Lens Cover	92F4277	44.43

(42170)

1/8 DIN FALCON SERIES DIGITAL PANEL METERS

The **Falcon series** indicators are premium quality meters for industrial applications. These 1/8 DIN (92mm x 45mm) meters require only 2.94" (74.7mm) behind panel. All units feature jumper selectable decimal points, display scaling and 120VAC power. The **Falcon** has 0.56" bright red LED display for high visibility. **Mfg. part nos. beginning with F35-** are 3½-digit; **F45-** are 4½-digit. Screw terminal connector for easy wiring. Optional excitation output, 220VAC or 9-32VDC available; *go online or call.*

Mfg. Part No.	Input	Stock No.	Price Each
AC VOLTAGE INDICATORS (AC AND AC TRUE RMS)			
F35-1-31-0	200mV	93F9500	179.50
F35-1-32-0	2V	93F9501	179.50
F35-1-33-0	20V	93F9502	179.50
F35-1-34-0	200V	93F9503	179.83
F35-1-51-0	200mV True RMS	93F9511	215.84
F35-1-52-0	2V True RMS	93F9512	215.95
F35-1-53-0	20V True RMS	93F9513	215.84
F35-1-54-0	200V True RMS	93F9514	215.84
F45-1-33-0	20V	95F5560	290.76
F45-1-34-0	200V	95F5561	290.76
DC VOLTAGE INDICATORS			
F35-1-11-0	200mV	93F9480	136.45
F35-1-12-0	2V	93F9481	136.45
F35-1-13-0	20V	93F9482	136.45
F35-1-14-0	200V	93F9483	136.45
F45-1-11-0	200mV	95F5529	247.84
F45-1-12-0	2V	95F5530	247.84
F45-1-13-0	20V	95F5531	247.84
F45-1-14-0	200V	95F5532	247.84
AC CURRENT INDICATORS			
F35-1-45-0	2A	93F9498	179.42
F35-1-46-0†	5A	93F9499	179.89
F351-66-0†	5A True RMS	93F9510	215.91

† Scale display, requires use with Simpson current transformer for higher AC current levels; *go online or call.*

DC CURRENT INDICATORS			
F35-1-11-0‡	200mV	93F9480	136.45
F35-1-21-0	200µA	93F9475	137.53
F35-1-22-0	2mA	93F9476	136.34
F35-1-23-0	20mA	93F9477	136.34
F35-1-24-0	200mA	93F9478	136.34
F35-1-25-0	2A	93F9479	136.37
F35-1-26-0	5A	91B3594	136.14
F45-1-11-0‡	200mV	95F5529	247.84
F45-1-22-0	2mA	95F5535	247.84
F45-1-23-0	20mA	95F5536	247.84
F45-1-25-0	2A	95F5538	246.60

‡ Scale display, requires use with Simpson external shunt for higher DC current levels; *go online or call.*

FREQUENCY INDICATORS			
F35-1-91-0	20-199.9Hz RMS	91F9700	138.36
F35-1-92-0	20-1999Hz RMS	91F9701	138.39
TEMPERATURE INDICATORS			
F45-1-80-0-C	J T/C	95F5692	246.43
F45-1-81-0F	K T/C	13C3536	246.43
F45-1-810C	K T/C	23C1953	246.43
DC PROCESS INDICATORS			
F35-1-71-0	4-20mA	93F9485	175.45
F35-1-73-0	0-10V	93F9487	175.45
F35-3-71-0*	4-20mA	52F5891	274.53
F45-1-71-0	4-20mA	95F5539	247.84
F45-1-73-0	0-10V	95F5541	247.84
DC PROCESS INDICATORS WITH 24VDC EXCITATION OUTPUT			
F45-1-71-2	4-20mA	95F5689	312.68

* 9-32VDC power.
(16728)

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Affordable, performance board level & box build components at newark.com/multicomp

(212569)

1/8 DIN FALCON SERIES (AC AND AC TRUE RMS) AND 2800 SERIES AC VOLTAGE INDICATORS

Simpson

Falcon Series

2800 Series

Mfg. part nos. F35 3½-digit and **F45** 4½-digit 1/8 DIN Falcon series indicators with red LED display. Rugged splash proof case only 3.12″ deep. User-selectable decimal point and display scaling. 120VAC power. Optional excitation output and 220VAC or 9-32VDC power available; *go online or call.* **Mfg. part no. 2869** 3½-digit indicator with red LED display. Jumper-selectable decimal point. Fits 1.682 x 3.622″ cutout. Input/output edge connector included. 120VAC power.

1/8 DIN FALCON SERIES

Mfg. Part No.	Input	Stock No.	Price Each
F35-1-31-0	200mV	93F9500	179.50
F35-1-32-0	2V	93F9501	179.50
F35-1-33-0	20V	93F9502	179.50
F35-1-34-0	200V	93F9503	179.83
H335-1-35-0-0-0	750V	08P5094	257.99
F35-1-51-0	200mV True RMS	93F9511	215.84
F35-1-52-0	2V True RMS	93F9512	215.95
F35-1-53-0	20V True RMS	93F9513	215.84
F35-1-54-0	200V True RMS	93F9514	215.84
H335-1-55-0-0-0	750V True RMS	08P5095	316.74
F45-1-33-0	20V	95F5560	290.76
F45-1-34-0	200V	95F5561	290.76
F45-1-53-0	20V True RMS	95F5571	282.93
F45-1-54-0	200V True RMS	95F5572	282.93
H345-1-55-0-0-0	750V True RMS	52M9486	354.30
2800 SERIES			
24633 2869	200V	89F3533	294.46

(16736)

2800 SERIES DIGITAL PANEL METERS

Simpson

2800 series digital panel meters offer high accuracy and a two piece edge connector for easy wiring of the input signal. Fits 1.682″ x 3.662″ cutout. 3½-digit LED display. Jumper selectable decimal points.

DC VOLTAGE INDICATORS

Mfg. Part No.	Input	Input	Stock No.	Price Each
24500 2865	200mV	120VAC	55F1688	184.66
24501 2865	2V	120VAC	55F1689	184.66
24502 2865	20V	120VAC	55F1690	211.21
24503 2865	200V	120VAC	55F1691	184.66
24600 2866	200mV	5VDC	55F1697	161.30
24601 2866	2V	5VDC	55F1698	164.25
24602 2866	20V	5VDC	55F1699	187.98
24603 2866	200V	5VDC	55F1700	161.30
AC VOLTAGE INDICATOR				
24633 2869	200V	120VAC	89F3533	294.46
DC CURRENT INDICATORS				
24504 2865	20uA	120VAC	55F1692	181.05
24505 2865	200uA	120VAC	55F1693	190.20
24506 2865	2mA	120VAC	55F1694	209.83
24507 2865	20mA	120VAC	55F1695	178.00
24508 2865	200mA	120VAC	55F1696	184.66

(16734)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

(212570)

2000 SERIES UNIVERSAL SELECTABLE METERS

Jewell Instruments MODUTEC

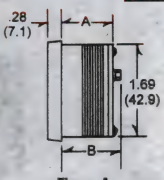


Figure A

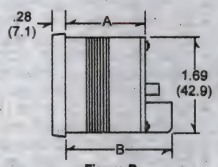


Figure B

- High-Impact Polycarbonate Case
- NEMA 4, 12, and IPC 55 (Splash-Proof / Hose Down) Standards
- DIN Industry Standard Cutout

Universal selectable true RMS AC voltage and current model or Process DC voltage/DC current meters allow you to select different inputs, scale in engineering units, select decimal point and calibrate from the rear of the instrument without opening the case. Surface mount and special design features result in unit that is only 1″ deep behind the panel (1½″ for **mfg. part no. 2153-3419-04**) and is splash- and hose-down proof. Screw terminals eliminate added cost of plug-on screw terminals or solder connectors. Operating temperature: –20° to +60°C. Over-range indication.

DIMENSIONS

Input Type	Figure	A	B
AC	A	0.99″ (25.1)	1.15″ (29.2)
DC	A	0.99″ (25.1)	1.15″ (29.2)
4-20mA Process	B	1.49″ (37.8)	2.00″ (50.8)

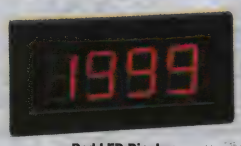
UNIVERSAL SELECTABLE: PROCESS, DC VOLTAGE OR DC CURRENT TYPE, 115VAC

Mfg. Part No.	Input	Scaled	Stock No.	Price Each
2153-3406-04	10VDC	0-10.00	93F7500	220.00
2153-3419-04	4-20mADC	0-100.0	93F7502	220.00

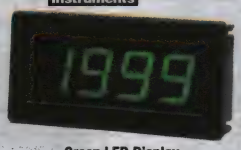
(3469)

1/8 DIN BIG-DIGIT PANEL METERS

Jewell Instruments MODUTEC



Red LED Display



Green LED Display

- 3½ Digits with 0.8″ LED or 0.98″ LCD for Easy, Precise Viewing
- Requires Only 1.37″ (35) Depth Behind Panel

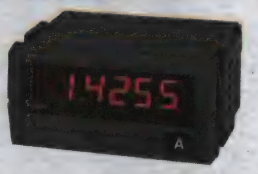
Universal panel meters with large LCD or red or green LED displays for voltage or current. Standard ⅛ DIN industry panel cutout. Snap-in panel mount design for easy installation and secure mounting. Fit panels up to 0.08″ thick. Standard 4-20mA input is displayed as 0-100.0. Decimal point selectable by solder jumpers. Overrange and polarity indication. Surface mount design. DCV power: +5VDC. DCA power: loop (4-20mA DC).

Mfg. Part No.	Display	Input	Stock No.	Price Each
1801111	Red LED	2VDC	83F8113	178.86
1802111	Green LED	2VDC	83F8114	147.30
180500	LCD	4-20mA DC	83F8116	140.00

(32678)

1/8 DIN FALCON SERIES AC CURRENT INDICATORS

Simpson



Types F35 3½-digit and **F45** 4½-digit indicators with red LED display. Rugged splash proof case only 2.94″ deep. User-selectable decimal point and display scaling. 120VAC power. Optional excitation output and 220VAC or 9-32VDC power available; *go online or call.*

Mfg. Part No.	Input	Stock No.	Price Each
F35-1-45-0	2A	93F9498	179.42
F35-1-46-0*	5	93F9499	179.89
F351-66-0*	5A True RMS	93F9510	215.91
F45-1-46-0*	5	95F5557	289.64
F45-1-66-0*	5A True RMS	95F5568	325.98

*Scale display, requires use with Simpson current transformer for higher AC current levels; *go online or call.*
(16730)

FLEX® PANEL METERS

NEW

VEEDER-ROOT

- Sunlight readable,.56" red 5-digit display allows for High visibility in a wide variety of operating environments
- Wide selection of output and communication modules allows for configuring the FLEX® to your exact process requirements
- Available in universal AC input supply or DC models which allows for installation with all popular control panel voltages

A family of 1/8 DIN size analog input panel meters with a wide range of input capabilities. **-10 suffix** indicates 11-36VDC, 24VAC input (others 85-250VAC).

Mfg. Part No.	Description	Stock No.	Price 1-9
RFXD00	1//8 Din Universal DC Input	23X8792	317.08
RFXD10	1//8 Din Universal DC Input	23X8793	352.06
RFXP00	1//8 Din Process Input (0-10VDC, 0/4-20mA)	23X8795	303.54
RFXP10	1//8 Din Process Input (0-10VDC, 0/4-20mA)	23X8796	336.27
RFXH00	1//8 Din AC True RMS Voltage and Current	23X8794	394.94
RFXS00	1//8 Din Strain Gauge Input	23X8797	449.11
RFXS10	1//8 Din Strain Gauge Input	23X8798	486.75
RFXT00	1//8 Din Thermocouple and RTD Input	23X8799	303.54
RFXT10	1//8 Din Thermocouple and RTD Input	23X8800	336.27

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price 1-24
RFXDS10	Dual Setpoint Relay Output Card	23X8790	51.30
RFXDS40	Quad Setpoint Sourcing Open Collector Output Card	23X8791	51.30
RFXDC10	RS485 Serial Communications Output Card with Terminal Block	23X8787	65.96
RFXDC40	Modbus Communications Card	23X8788	81.84
RFXDL10	Analog Output Card	23X8789	100.16

(212189)

DC VOLTMETERS

RoHS Compliant Available

NEWPORT

201AN

2001

215

Factory calibrated for DC input range indicated. Bright, 0.56" (14.22) LED display. Decimal point programmable at connector. **201AN** and **2001 series** are 120VAC and fit standard ⅛ DIN panel cutout. Mfg. part numbers with **D4 suffix** feature screw-terminal barrier strip standard for signal and power; with **suffix BL** feature lens without Newport logo. **215 series** are 5VDC and fit half-height ⅙ DIN panel cutout; solder-tab board edge connector standard. Display range is 3½-digits (±1,999 counts) or 4½-digits (±19,999 counts).

Mfg. Part No.	Signal Input Range, VDC	Display Range	Operating Voltage	Stock No.	Price Each
201AN-2,D4	0.1999	±1,999	120VAC	89F1836	171.00
201AN-3D4	1.999	±1,999	120VAC	89F1837	171.00
• 201AN-3,BL	1.999	±1,999	120VAC	07C7741	170.00
201AN-4,D4	19.99	±1,999	120VAC	89F1838	171.00
201AN-5,D4	199.9	±1,999	120VAC	89F1839	171.00
2001A-3,D4	1.9999	±19,999	120VAC	89F1840	221.00
2001A-4,D4	19.999	±19,999	120VAC	89F1841	221.00
2001A-5,D4	199.99	±19,999	120VAC	89F1842	221.00
215-3	1.999	±1,999	5VDC	89F1830	110.00

(2296)

DEV KIT HQ™

Newest technology, Development Kits & Evaluation Boards from the best suppliers.

newark.com/dev-kits

(196525)

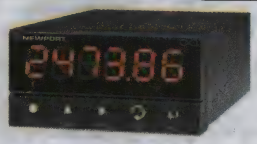
INF-B ULTRA HIGH PERFORMANCE METER

RoHS Compliant Available

NEWPORT

NEMA

- Universal Inputs: DC Voltage/Current, T/C, RTD, Strain
- Accuracy: ±0.005% rdg
- Up to 142 Readings per Second
- 6-Digit Color Changing LED Display, 9-Segment (0.68")
- 10-Point Linearization
- 4 Isolated Open-Collector Ouputs
- Isolated Analog Output (Optional)
- 4 Relays (Optional)
- RS232/RS485 or Ethernet Communications (Optional)
- Power: 90 to 240VAC or 10 to 32VDC
- NEMA 4 (IP65) Protection from front bezel
- Five-year manufacturer's warranty
- CE compliant



INF-B ⅛ DIN ultra high-performance digital panel meter can measure a broad spectrum of DC voltage and current, 9 thermocouple types, variety of RTDs, inputs from pressure transducers, load cells, strain gauges, as well as potentiometer inputs. Also features 10 point linearization of input signals, programmable by the user for custom applications. Built-in excitation to power virtually any sensor or transmitter, and 4 isolated open collector outputs for control or alarms are standard. Output options include isolated programmable analog voltage or current and four relays. Serial communications option is selectable by user for RS-232, RS-485 and either a straightforward ASCII protocol or MODBUS. The Ethernet option enables direct connection to the network and transmits data in TCP/IP protocol. It is possible to monitor and control a process through a web browser from anywhere on the Internet.

METERS

Mfg. Part No.	Description	Stock No.	Price Each
INF-B	Universal Digital Meter — Basic Model	89C1801	525.00
INF-B-A	Universal Digital Meter with Isolated 14-Bit Analog Output Board	24K0587	705.00
INF-B-A-4R	Universal Digital Meter with Isolated 14-Bit Analog Output Board and 4 Form-C SPDT Relay Output Board	04X5556	815.00
• INF-B-C24	Universal Digital Meter with Serial Communications, RS232 + RS485 + MODBUS	80K7677	705.00

OPTION CARDS FOR INF-B METER

Mfg. Part No.	Description	Stock No.	Price Each
TC-B	Thermocouple Temperature Compensation Card	02E7096	25.00
REL4-B	Four SPDT Relay Board (two 5A, two 3A)	02E6858	110.00
AN03-B	Isolated 14-Bit Analog Output Board	02E2634	110.00
RS24	Serial Communications RS-232 + RS-485 + MODBUS Output Board	72C6177	110.00
EI-B	Ethernet/Internet Output Board	02E2699	100.00

(73300)

INFINITY® SERIES ⅛ DIN METER/CONTROLLERS

RoHS Compliant Available

NEWPORT

NEMA

- Six-digit, 14-segment digital display
- Four isolated open collector outputs
- Digital tare
- Peak and valley detection and memory
- Accuracy: ±0.005% rdg
- Sensor excitation: 10V @ 30mA, 24V @ 25mA
- NEMA 4 (IP65) protection from front bezel
- Five-year manufacturer's warranty
- UL listed, CE compliant

INFINITY® family of digital panel meter/controllers are high-quality, highly accurate instruments designed for Process (DC voltage and current), Strain Guage measurements, Temperature (thermocouple and RTD) or Weight (NTEP certified). These meters feature six full digits making them ideal for demanding process control applications. On-board excitation is included to power virtually any sensor or transmitter, and four standard setpoints give the flexibility to control or alarm the system completely.

INFT SERIES — INFINITY® TEMPERATURE (THERMOCOUPLE/RTD) METERS

Mfg. Part No.	Description	Stock No.	Price Each
INFT-0000-KF	115VAC power, red LED display, open collector transistors, configured for type K thermocouple and °F display	84F866	595.00
INFT-0000-TC	115VAC power, red LED display, open collector transistors, configured for type T thermocouple and °C display	04X5560	595.00
INFT-0210-KF	115VAV power, red LED display, two 7A relays, isolated analog output, configured for type K thermocouple and °F display	84F868	780.00
INFT-0200-RTD2F	115VAC power, red LED display, two 7A relays, configured for 100 ohm Pt RTD (0.00385 alpha) and °F display	84F870	670.00

INFS SERIES — INFINITY® STRAIN GUAGE METERS

INFS-0000-DC1	115VAC power, red LED display, 4 NPN open collector transistors, 0-100mV input range	84F872	570.00
INFS-0210-DC1	115VAC power, red LED display, two 7A relays, isolated analog output, 0-100mV input range	84F874	755.00
INFS-0001-DC1	115VAC power, red LED display, 4 NPN open collector transistors, isolated RS-232, 0-100mV input range	88F6386	680.00
• INFS-0002-DC1	115VAC power, red LED display, 4 NPN open collector transistors, isolated RS-485, 0-100mV input range	68K9935	680.00
INFS-0100-DC1	115VAC power, red LED display, isolated parallel BCD, 0-100mV input range	81C8413	645.00
• INFS-0310-DC1	115VAC power, red LED display, two 7A and two 1A relays, isolated analog output, 0-100mV input range	41M0732	855.00

➤CONTINUED➤

INFINITY® SERIES ⅛ DIN METER/CONTROLLERS (CONT.)

INFS SERIES — INFINITY® STRAIN GUAGE METERS

Mfg. Part No.	Description	Stock No.	Price Each
INFS-1000-DC1	230VAC power, red LED display, 4 NPN open collector transistors, 0-100mV input range	35C0290	570.00
● INFS-1310-DC1	230VAC power, red LED display, two 7A and two 1A relays, isolated analog output, 0-100mV input range	66W1256	855.00
INFP SERIES — INFINITY® PROCESS METERS			
INFP-0000-C2	115VAC power, red LED display, 4 NPN open collector transistors, 4-20mA input	24C5184	570.00
INFP-0200-C2	115VAC power, red LED display, two 7A relays, 4-20mA input	96B0765	645.00
INFP-0210-C2	115VAC power, red LED display, two 7A relays, isolatedanaiog output, 4-20mA input	18C0417	755.00
● INFP-4000-C2	10-32VDC power, red LED display, 4 NPN open collector outputs, 4-20mA input	39M3666	680.00
INFW SERIES — INFINITY® SCALE METERS			
INFW-4000-DC3,BL	10-32VDC power, red LED display, 4 NPN open collector transistors, 0-5VDC input, blank lens	04X5561	720.00
INFW-4001-DC4,BL	10-32VDC power, red LED display, 4 NPN open collector transistors, isolated RS-232, 1-5VDC input, blank lens	04X5562	830.00

(2457)

INFINITY® "C" SERIES INDICATORS/CONTROLLERS

RoHS Compliant Available NEWPORT®

Common Specifications:

- Display: 4-Digit, 9-Segment, 21mm (0.83") Color-Selectable (Red, Green, Amber) LED
- Analog-To-Digital Technique: Dual Scope
- Internal Resolution: 15 Bits
- Polarity: Automatic
- Read Rate: 3/Sec.
- Step Response: 2 Seconds
- Power: 115VAC, 230VAC or 10-32VDC
- Operating Temperature: 0°C to 50°C
- Dimensions: 48H x 96W x 152mm D (1.89 x 3.78 x 6.0")
- Five-year manufacturer's warranty
- UL listed, CE compliant

The **Infinity® C Series** features the biggest and brightest ⅛ DIN panel meter display. Red, green or amber LED color is menu-selectable. Options include dual 5A Form C relays for alarm or control, plus a choice of isolated or non-isolated analog output scalable from 0-10VDC, 0-20mA, or 4-20mA. Covers many signal inputs including: process (DC voltage and current), strain gauge, thermocouple, RTD, dual-differential thermocouple, RTD, PH, ORP, and AC voltage and current.

INFCR SERIES RTD TEMPERATURE PANEL METERS

Standard features include 100ohm Pt (0.00385 curves) 2, 3 and 4 wire selectable, resolution of 0.1° or 1.0°, °F or °C indication, dual setpoints, 115VAC power and menu selectable color display: Red, Amber or Green.

Mfg. Part No.	Signal Input	Meter Power	Control Output	Analog Output	Stock No.	Price Each
INFCR-010B	0.00385 or 0.00392 RTD 100ohm Pt (0.00385 curves)	115VAC	Yes	No	92F6552	320.00
INFCR-011B		115VAC	Yes	Yes	93F9334	400.00

Optional Power: 26-56VDC and 10-32VDC are available on all models; *go online or call.*

INFCT SERIES THERMOCOUPLE INPUT TEMPERATURE METERS

Standard features include 0.1° or 1.0° resolution and dual setpoints. Rated 115VAC. Red, green or amber LED color display is menu selectable. Dual setpoint, analog output and DC power optional.

Mfg. Part No.	Signal Input	Meter Power	Control Output	Analog Output	Stock No.	Price Each
INFCT-010B	J,K,T,J-DIN	115VAC	Yes	No	67C1808	320.00
INFCT-011B	J,K,T,J-DIN	115VAC	Yes	Yes	67C1850	400.00

INFCP SERIES PROCESS PANEL METERS

Accepts a wide range of DC voltage and current inputs to cover any typical process application. Features easy front panel scaling to virtually any engineering units, selectable excitation of four voltages to work with most transducers and transmitters. Red, green or amber LED color is menu selectable. Signal Input: 0-100mV (±50mV), 0-10V ±(5V), 0-20mA, 4-20mA.

Mfg. Part No.	Meter Power	Control Output	Analog Output	Stock No.	Price Each
INFCP-000B	115VAC	No	No	24C7158	250.00
INFCP-010B	115VAC	Yes	No	25C3532	320.00
INFCP-001B	115VAC	No	Yes	25C2386	330.00
● INFCP-410B	10-32VDC	Yes	No	62K3560	415.00
INFCP-411B	10-32VDC	Yes	Yes	23K2315	495.00

INFCS SERIES STRAIN PANEL METERS

The Newport Infinity C Strain meter accepts a wide range of DC voltage and current inputs to cover any typical application. Easy front scaling to virtually any engineering units. Selectable excitation of 4 voltages. Front panel and remote tare function for weighing applications and a hardware lockout to prevent unauthorized changes in setup. Red, green or amber LED color is menu selectable. Input ranges: 0-100mV, ±50mV, 0-10V, ±5V, 0-20mA, 4-20mA. Excitation voltage: 24V at 25mA or 12V at 50mA; 10V at 120mA or 5V at 60mA. Max. error strain/process: ±0.03% rdg.

Mfg. Part No.	Meter Power	Control Output	Analog Output	Stock No.	Price Each
INFCS-000B	115VAC	No	No	39C1940	250.00
INFCS-001B	115VAC	Yes	Yes	81C7707	330.00
INFCS-012B	115VAC	Yes	Yes	11J5589	410.00
INFCS-110B,BL	230VAC	Yes	No	04X5558	345.00
INFCS-410B	10-32 VDC	Yes	No	04X5559	415.00

(2473)

DPI1701 SERIES1/8 DIN GRAPHIC DISPLAY PANEL METER AND DATA LOGGER FOR TEMPERATURE AND PROCESS MEASUREMENT

RoHS Compliant Available NEWPORT® NEW CE

- Monochrome, High Resolution Graphic Display
- Universal Input Accepts Thermocouples, RTD, and Process (Voltage and Current)
- Displays Process Input in Horizontal Bar Graph, Line Graph Charting, or Standard Digital Format
- Records 85,000 Data Points with Time Stamping
- Data Logging Based on Time and Date, Alarm 1 or 2, or Key Press
- Monitors and Displays Minimum and Maximum Process Values
- Universal Power Input from 90 to 240 Vac
- Isolated 24 Vdc Excitation to Power External Transmitters

⅛ DIN **DPI1701 Series** graphic display panel meter and data logger provides unmatched display functionality and performance. The high intensity, backlit, graphic display (240 x 64 dots) provides powerful display features such as horizontal bar graph, line graph, and data logging in real time. The unit can be configured to accept Thermocouples (J, K, T, E, R, S), RTDs (2- or 3-wire), Voltage (0 to 10 Vdc), or Current (0 to 20 mA). Optional features are two Form C relays, isolated USB or RS232 PC interface, isolated analog output, isolated 24 Vdc excitation, and wireless receiver.

Mfg. Part No.	Description	Stock No.	Price Each
● DPI1701/N	Graphic panel meter and logger with isolated RS232 interface	04X5553	300.00
● DPI1701-USB-R/N	Graphic panel meter and logger with 2 relays, isolated USB and 24 Vdc excitation	04X5552	375.00
● DPI1701-USB-AR/N	Graphic panel meter and logger with 2 relays, isolated USB interface, and analog output	04X5550	425.00
● DPI1701-USB-ARW/N	Graphic panel meter and logger with 2 relays, isolated USB interface, analog output, and wireless receiver	04X5551	475.00

(211527)

⅛ DIN PROCESS INDICATORS

RoHS Compliant Available NEWPORT®

2002B

202A

Indicators, when integrated with sensors or transducer, reflect changes in voltage or current by displaying calibrated engineering units for pressure, loads or distance (depending on transducer) once indicator is scaled in the field. All units feature 0.56" (14.22) LED displays, screw terminal barrier strip for power, signal connections, and a standard ⅛ DIN panel cut-out (45 × 92mm). Signal range: 4-20mA, 1-5V, 0-10V. Default calibration: 4-20mA = 00.0 - 100.0. Models with excitation output provide voltage supply (10-24VDC) to power transmitters, active transducers or passive networks. Mfg. part no. with **suffix FS** features custom calibration, specify volts or mA: min./max. input, min./max. display.

3½ DIGIT

Mfg. Part No.	Display Range	Transmitter Excitation	Stock No.	Price Each Each
202A-P	±1,999	No	98F9201	195.00
● 202A-P,FS	±1,999	No	96B6813	240.00
202A-E	±1,999	Yes	19C9684	255.00
4½ DIGIT				
2002B-P	±19,999	No	90B7044	280.00
2002B-E	±19,999	Yes	19C9687	295.00

(2298)

INFCP PROCESS PANEL METERS

RoHS Compliant Available NEWPORT®

Accepts a wide range of DC voltage and current inputs to cover any typical process application. Features easy front panel scaling to virtually any engineering units, selectable excitation of four voltages to work with most transducers and transmitters. Red, green or amber LED color is menu selectable. Signal Input: 0-100mV (±50mV), 0-10V ±(5V), 0-20mA, 4-20mA.

Mfg. Part No.	Control Output	Analog Output	Stock No.	Price Each Each
INFCP-000B	No	No	24C7158	250.00
INFCP-010B	Yes	No	25C3532	320.00
INFCP-001B	No	Yes	25C2386	330.00

(2480)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

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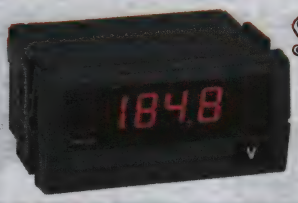
1/8 DIN FALCON SERIES DC VOLTAGE INDICATORS



Simpson

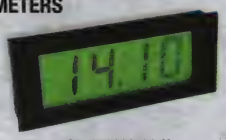
F35 series 3½-digit and **F45 series** 4½-digit red LED display. Rugged splash-proof case only 3.12″ deep. User-selectable decimal point and display scaling. 120VAC power. Optional excitation output and 220VAC or 9-32VDC power; *go online or call.*

Mfg. Part No.	Input	Stock No.	Price Each
F35-1-11-0	200mV	93F9480	136.45
F35-1-12-0	2V	93F9481	136.45
F35-1-13-0	20V	93F9482	136.45
F35-1-14-0	200V	93F9483	136.45
F45-1-11-0	200mV	95F5529	247.84
F45-1-12-0	2V	95F5530	247.84
F45-1-13-0	20V	95F5531	247.84
F45-1-14-0	200V	95F5532	247.84

(16041)

BIG-LITTLE LCD 3½-DIGIT PANEL METERS

Jewell Instruments MODUTEC



BL-300202-01-U

BL100202-U

- High-Contrast LCD Readout
- User-Selectable Decimal Point
- Low Power Consumption
- Auto-Polarity (–) Displayed

BL series digital panel meters feature 0.5″ (12.70) high digits on high-contrast LCD. 1999-count maximum. Accuracy: ±0.1% reading +2 count. Resolution: one art in 2000. User-selectable decimal point. Automatic polarity (–) displayed. **BL-100** is surface/window mount. **BL-130** is bezel mount. Both types have a 13-pin terminal. **BL-176** is flat pack DPM with solder pad connections. *Order* **176-BK** *bezel kit with mounting hardware separately below.* **BL-300** and **BL-500** are LCD digital panel meters with LED backlighting. Easily read in dark or bright sunlight. Digits are 0.5″ (12.70) high. 1999-count maximum. Decimal point user-selectable. Auto polarity. Red or green backlight. Backlight power: 5VDC. Voltage range: 4.7V to 5.25V maximum. Red current: 130mA to 200mADC, 165mA nominal. Green current: 75mA to 160ADC, 115mA nominal. 13-pin terminal. Operating temperature range: -20° to +60°C. **BL-300** positive image dark on green background; **BL-500** negative image, red segments on dark background.

Mfg. Part No.	Power	Input	Stock No.	Price Each
WINDOW-MOUNT DIGITAL PANEL METERS				
BL100202-U	+5V and –5VDC	2VDC	46F164	74.93
BL-100-301-U	+5VDC	200mVDC	46F165	74.15
BL-100-302-U	+5VDC	2VDC	46F166	74.95
BL-100-303-U	+5VDC	20VDC	90F9684	74.93
BEZEL-MOUNT DIGITAL PANEL METERS				
BL-130-301-U	+5VDC	200mVDC	46F171	75.26
BL-130-302-U	+5VDC	2VDC	46F172	76.27
BL130303U	+5VDC	20VDC	90F9686	73.44
FLAT-PACK DIGITAL PANEL METERS				
BL176201-U	+5V and –5VDC	200mVDC	46F175	62.71
BL-176-202	+5V and –5VDC	2VDC	46F176	51.00
BL176301-U	+5VDC	200mVDC	46F177	61.20
BL-176-302	+5VDC	2VDC	46F178	51.00
GREEN BACKLIGHT, BEZEL-MOUNT DPMs				
BL330302-01U	+5VDC	2VDC	87F2562	104.52
RED BACKLIGHT, BEZEL-MOUNT DPMs				
BL530302-01U	+5VDC	2VDC	87F2536	106.08

BEZEL KIT

Mfg. Part No.	Description	Stock No.	Price Each
176BK	Bezel kit	89F4226	15.00

(3468)

DATEL® 2-WIRE AC LINE FREQUENCY METERS

RoHS Compliant Available

muRata Ps Murata Power Solutions

- Self-powered, no external supplies required
- Screw terminals simplify panel mounting
- Ideal for emergency power equipment
- Expoxy encapsulated for harsh environments

SPECIFICATIONS:

Accuracy:	± 0.01V
Display:	3 digit, Red , 0.40″ high
Dimensions:	1.38 x 0.88 x 1.00″

➤ CONTINUED ➤

DATEL® 2-WIRE AC LINE FREQUENCY METERS (CONT.)

Mfg. Part No.	Frequency Range (Hz)	Voltage Range (Vac)	Stock No.	Price Each 1-4
DMS-20PC-1-FM-C	47.0-99	85-140	87K3646	62.53
DMS-20PC-3-FM-C	47.0-99	170-264	87K3659	63.19
DMS-20PC-1-FM-F-C	47.0-99	85-140	16M5676	64.62
DMS-20PC-2-FM-C	350-450	85-140	16M5684	59.58

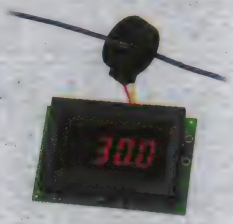
(83958)

DATEL ACA-20 SERIES AC AMMETERS WITH BUILT-IN CURRENT TRANSFORMERS

RoHS Compliant Available

muRata Ps Murata Power Solutions

ACA-20PC



ACA-20RM

SPECIFICATIONS:

Model:	ACA-20PC	ACA-20PC
Accuracy:	±0.15%FS ±6 Counts	±0.4%FS ±3 Counts
Measurement Type:	RMS Responding, Crest Factors of 1-5	Sine Wave Input, Full-Wave Averaging, RMS Calibrated
Sampling Rate:	2.5 Samples per Second	
Display:	3.1/2 Digit LED, 0.37″/9.4mm High	

Mfg. Part No.	Input Range	Supply Voltage Range	Stock No.	Price Each 1-4
DIGITAL LED DISPLAY				
ACA-20PC-1-AC1-RL-C	0A to 1.999A	85V AC to 264V AC	39M6189	82.98
ACA-20PC-2-AC1-RL-C	0A to 19.99A	85V AC to 264V AC	39M6191	87.09
ACA-20PC-3-AC1-RL-C	0A to 50A	85V AC to 264V AC	39M6193	93.79
ACA-20PC-4-AC1-RL-C	0A to 100A	85V AC to 264V AC	39M6195	93.79
TRUE RMS				
ACA-20RM-2-AC3-RL-C	0A to 19.99A	85V AC to 140V AC	39M5929	103.01
ACA-20RM-5-AC3-RL-C	0A to 30A	85V AC to 140V AC	39M6202	103.84

(83941)

DATEL® ACA5-20PC SERIES 5AMP INPUT AC AMMETERS

RoHS Compliant Available

muRata Ps Murata Power Solutions

- Scales and displays the output of 50:5A to 2000:5A current transformers
- On-board 5A current transformers
- Scaling/interface circuitry
- Precision A/D converters
- Bright red LED displays
- Subminiature, 1.38″ x 0.88″ package
- Digital replacements for analog ammeters

SPECIFICATIONS:

Accuracy:	± 0.15%
Input:	85-264VACac @ 50/60Hz
Display:	0.37″/9.4mm 3-1/2 digit Red
Isolation:	2000V

Mfg. Part No.	Input Range (A)	Stock No.	Price Each 1-4
ACA5-20PC-1-AC1-RL-C	50.0A	39M6234	79.54
ACA5-20PC-3-AC1-RL-C	100.0A	39M6241	80.40
ACA5-20PC-5-AC1-RL-C	199.9A	39M6243	80.40
ACA5-20PC-9-AC1-RL-C	500A	39M6247	78.91

5A current transformers for all **ACA5-20PC series** AC ammeters are available, *go online or call*.

Mfg. Part No.	Current Ratio	Accuracy	Current Transformer for	Stock No.	Price Each 1-9
7020-01036-0	50:5 A	± 2%	Use with ACA5-20PC-1 ammeter	40M4740	51.34
7020-01040-0	200:5 A	± 1%	Use with ACA5-20PC-5 ammeter	40M4744	48.99

(83942)

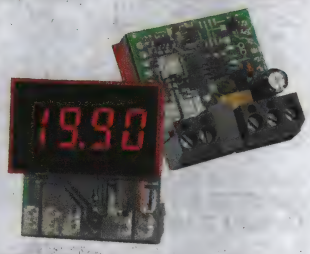
METERS MINI

DATEL® DCA-20PC SERIES DC AMMETERS WITH BUILT-IN SHUNTS

RoHS Compliant Available

Murata Power Solutions

- Built-in shunts for digitally measuring DC currents from 200µA to 20A
- Functionally complete, no additional components required
- 20mV internal shunt minimizes power loss
- Includes load connections for easy 3- or 4-wire operation
- Available with red, blue or green LED displays
- Subminiature, 1.38" x 0.88" package



SPECIFICATIONS:

Accuracy:	± 0.1%
Input:	8-36Vdc, isolated power
Display:	0.37"/9.4mm 3-1/2 digit

Mfg. Part No.	Input Range (A)	Display Color	Stock No.	Price Each 1-4
● DCA-20PC-4-DC4-RL-C	199.9mA	Red	87K3618	69.91
● DCA-20PC-5-DC4-RL-C	1.999A Voltage	Red	87K3619	70.65
● DCA-20PC-6-DC4-RL-C	19.99A	Red	87K3620	69.91
● DCA-20PC-4-DC1-RL-C	199.9mA	Red	16M5573	57.12
● DCA-20PC-5-DC1-RL-C	1.999A Voltage	Red	16M5576	60.21
● DCA-20PC-6-DC4-BS-C	19.99A	Blue	16M5580	81.04

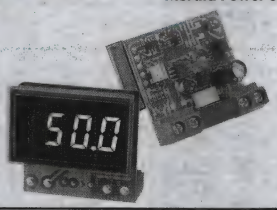
(83946)

DATEL® DCA5-20PC SERIES DC AMMETERS AND EXTERNAL SHUNTS

RoHS Compliant Available

Murata Power Solutions

- Scales and displays the output of 5A to 2000A, 50mV AND 100mV shunts
- Wide power supply inputs: 5 to 40Vdc for 12V/24V/28V
- 48V option for telecom supplies
- Isolated-supply models for high-side shunts
- Available in red, blue or green LED displays
- Subminiature, 1.38" x 0.88" package with screw-style terminal blocks
- Digital upgrade for analog meters



SPECIFICATIONS:

Accuracy:	± 0.1%
Input:	8-36VDCdc, isolated power
Display:	0.37"/9.4mm 3-1/2 digit Red

Mfg. Part No.	Input Range (A)	Stock No.	Price Each 1-4
● DCA5-20PC-1-DC4-RL-C	50mV shunt: 5.00A/50.0A/500A 100mV shunt: 10.00A/100.0A/1000A	29M7392	65.84
● DCA5-20PC-2-DC4-RL-C	50mV shunt: 1.000A/10.00A/100.0A/1000A 100mV shunt: 1.999A/19.99A/199.9A/1999A	39M7983	65.84
● DCA5-20PC-6-DC4-RL-C	50mV shunt: 1.999A/19.99A/199.9A/1999A	39M7987	64.46
● DCA5-20PC-1-DC1-RL-C	50mV shunt: 5.00A/50.0A/500A 100mV shunt: 10.00A/100.0A/1000A	16M5582	56.71
● DCA5-20PC-2-DC4-GS-C	50mV shunt: 1.000A/10.00A/100.0A/1000A 100mV shunt: 1.999A/19.99A/199.9A/1999A	16M5594	62.07
● DCA5-20PC-4-DC4-RL-C	50mV shunt: 75.0A/750A 100mV shunt: 15.00A/150.0A/1500A	39M7985	62.07

50mV and 100mV base-mounted current shunts are designed for measuring DC currents from 5A to 1200A. These precision shunts (±0.25% accuracy) connect directly to **DCA5-20PC series** DC ammeters.

Mfg. Part No.	Rated Current/Output	Resistance (Ohms @ 25°C)	Stock No.	Price Each 1-4
● 3020-01096-0	50A/50mV	0.001	40M4326	24.75
● 3020-01097-0	5A/50mV	0.01	40M4327	24.75
● 3020-01098-0	20A/50mV	0.0025	40M4328	25.19
● 3020-01099-0	100A/50mV	0.0005	40M4329	24.13
● 3020-01101-0	200A/50mV	0.00025	40M4331	31.49
● 3020-01103-0	500A/50mV	0.0001	40M4333	30.82
● 3020-01107-0	10A/100mV	0.01	33M7180	25.91
● 3020-01108-0	100A/100mV	0.001	40M4337	26.39

(83948)

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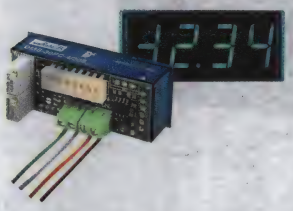
(196545)

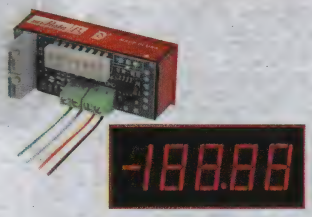
DATEL® LOCALLY POWERED 4-20mA INPUT PANEL METERS

RoHS Compliant Available

Murata Power Solutions



DMS-30PC



DMS-40PC

- 3½ and 4½ digit resolutions; LED/LCD displays
- 4 LED options including low-current and high-intensity red
- 3 power supply options: +5, +24V "I" or 7.5-32V
- 24V "I" models isolate loop inputs from power ground
- DIP-switch selectable span/offset/decimal points
- On-board gain/span and zero/offset trim pots
- Vibration-resistant package; reliable screw-terminal input connections
- Miniature size: 2.17 x 0.92 x 1.02"

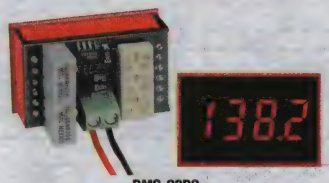
Mfg. Part No.	Display	Description	Stock No.	Price Each 1-4
● DMS-30PC-4/20S-24BS-I-C	3-1/2 digit 0.56" high Blue	+24V isolated supply, high-intensity LED	87K3682	103.84
● DMS-30PC-4/20S-24RS-I-C	3-1/2 digit 0.56" high Red	+24V isolated supply, high-intensity LED	87K3683	93.79
● DMS-40PC-4/20S-24RS-I-C	4-1/2 digit 0.52" high Red	+24V isolated supply, standard-intensity LED	87K3694	127.30
● DMS-30PC-4/20S-24RL-C	3-1/2 digit 0.56" high Red	+7.5V to +32V, 3.5 digit low-power red LED	16M5736	89.05
● DMS-30PC-4/20S-5RS-C	3-1/2 digit 0.56" high Red	+5V supply, standard-intensity red LED's	16M5740	80.38

(83955)

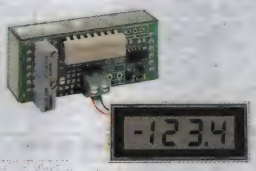
DATEL® LOOP-POWERED 4-20mA PROCESS MONITORS

RoHS Compliant Available

Murata Power Solutions



DMS-20PC



DMS-30LCDA

- Self-powered, no separate supply required
- 3½ and 4½ digit resolutions; LED/LCD displays
- Industry's only loop-powered, full-size LED readouts
- Small packages; Large digits: 0.37"/9.4mm
- DIP-switch selectable span/offset/decimal points
- On-board gain/span and zero/offset trim pots
- Hundreds of different input/readout combinations
- Vibration-resistant package; reliable screw-terminal input connections

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● DMS-20PC-4/20S-C	Unipolar reading, 3.5-digit, loop-powered LED meter	16M5699	80.40
● DMS-20LCD-4/20S-C	Unipolar reading, 3.5-digit, loop-powered LCD meter	87K3634	60.29
● DMS-30LCDA-4/20S-C	Unipolar reading, 3.5-digit, loop-powered LCD meter	87K3667	79.54
● DMS-20PC-4/20B-C	Bipolar reading, 3.5-digit, loop-powered LED meter	16M5697	80.38
● DMS-20LCD-4/20P-C	Positive reading, loop-powered LCD meter	16M5667	59.65
● DMS-20PC-4/20P-C	Positive reading, loop-powered LED meter	16M5698	81.24
● DMS-30LCDA-4/20B-C	Bipolar reading, loop-powered LCD meter	16M5713	80.38
● DMS-40LCD-4/20S-C	4.5-digit, loop-powered LCD meter	87K3686	117.02

(83949)

DATEL® 2-WIRE AC LINE VOLTAGE MONITORS

UL CSA RoHS Compliant Available

Murata Power Solutions

- Plugs directly into 120V wall outlet
- Screw terminals for panel mounting
- Large easy to read, red, green or blue LED displays
- Fully encapsulated for harsh environments
- Half-wave averaging, rms calibrated
- UL, CSA and IEC1010-1 certified

SPECIFICATIONS:

Accuracy:	± 1V
Input Range:	-999--999Vrms
Frequency Range:	47-63Hz

➤CONTINUED➤

DATEL® 2-WIRE AC LINE VOLTAGE MONITORS (CONT.)

SPECIFICATIONS:

Display:	3 digit, , 0.37″ high
Dimensions:	1.38 x 0.88 x 1.00″

Mfg. Part No.	Description	Stock No.	Price Each 1-4
DMS-20PC-1-LM-C	LED AC Voltmeter with threaded terminations and screws	87K3649	62.53
DMS-20PC-1-LM-B-C	LED AC Voltmeter with threaded terminations and screws	87K3648	71.25
DMS-20PC-1-LM-F-C	LED AC Voltmeter with blade terminals (installed)	87K3650	61.87

(83957)

DATEL® 3½ DIGIT, SUBMINIATURE LED/LCD PANEL METERS

RoHS Compliant Available

muRata Ps Murata Power Solutions

Green LED Display — **LCD Display**

- Large 0.37″ display
- Expoxy-encapsulated, 12-pin DIP package
- 4 differential input voltage ranges
- High accuracy, ±1 count
- User-selectable decimal point placement
- 0 to 60°C temperature rating

The **DMS-20PC series**, includes built-in color filter and bezel, high-intensity or low-power red LED options, a "DISPLAY ENABLE", "DISPLAY TEST" and an optional "DISPLAY HOLD". LED subminiature size: 1.38 x 0.88 x 0.48″. The **DMS-20LCD series** is panel or pc-board mountable, provides low-battery annunciator, and optional backlit display and 9V battery power. LCD Subminiature size: 1.38 x 0.88 x 0.48″.

Mfg. Part No.	Power Supply (V)	Input Range	Display Intensity	Stock No.	Price Each 1-4
3½ DIGIT, RED LED					
DMS-20PC-0-RS-C	5.00	± 200mV	Standard	87K3640	46.89
DMS-20PC-0-RL-C	5.00	± 200mV	Low-Power	87K3639	50.43
DMS-20PC-1-RS-C	5.00	± 2V	Standard	87K3653	46.91
DMS-20PC-1-RL-C	5.00	± 2V	Low-Power	87K3652	50.83
DMS-20PC-1-RH-C	5.00	± 2V	High-Intensity	87K3651	48.95
DMS-20PC-2-RS-C	5.00	± 20V	Standard	87K3657	47.39
DMS-20PC-2-RS-H-C*	5.00	± 20V	Standard	16M5688	50.58
DMS-20PC-3-RS-C*	5.00	± 200V	Standard	16M5693	48.46
DMS-20PC-2-RL-C	5.00	± 20V	Low-Power	87K3656	51.37
DMS-20PC-3-RL-C	5.00	± 200V	Low-Power	87K3660	50.83
31/2 DIGIT, BLUE LED					
DMS-20PC-1-BS-C	5.00	± 2V	Standard	87K3643	53.19
DMS-20PC-2-BS-C	5.00	± 20V	Standard	87K3654	55.82
DMS-20PC-3-BL-C	5.00	± 200V	Low-Power	51P3825	60.28
31/2 DIGIT, GREEN LED					
DMS-20PC-0-GS-C	5.00	± 200mV	Standard	87K3638	46.89
DMS-20PC-1-GS-C	5.00	± 2V	Standard	87K3647	46.40
DMS-20PC-2-GS-C	5.00	± 20V	Standard	87K3655	44.68
31/2 DIGIT, LCD					
DMS-20LCD-0-5-C	5.00	± 200mV	LCD	87K3628	35.72
DMS-20LCD-1-5-C	5.00	± 2V	LCD	87K3631	35.35
DMS-20LCD-2-5-C	5.00	± 20V	LCD	87K3633	35.73
DMS-20LCD-0-9-C	9.00	± 200mV	LCD	87K3629	33.50
DMS-20LCD-1-9-C	9.00	± 2V	LCD	87K3632	33.50
DMS-20LCD-0-9B-C	9.00	± 200mV	LCD	16M5654	35.18
DMS-20LCD-1-5B-C	5.00	± 2V	LCD	16M5655	36.17
DMS-20LCD-2-5B-C	5.00	± 20V	LCD	16M5658	38.81
DMS-20LCD-2-9-C	9.00	± 20V	LCD	16M5659	34.61

*H suffix calls out DISPLAY HOLD option
(83962)

NEW PRODUCTS ADDED DAILY
See the newest products, technologies and suppliers on our website.
(196560)

DATEL® 3½ DIGIT, MINIATURE LED/LCD PANEL METERS

RoHS Compliant Available

muRata Ps Murata Power Solutions

Red LED Display — **LCD Display**

- Expoxy-encapsulated, 12-pin DIP package
- 4 differential input voltage ranges
- High accuracy, ±1 count
- User-selectable decimal point placement
- Numerous "plug-on" application boards
- 0 to 60°C temperature rating

The **DMS-30PC series** includes built-in color filter and bezel, is panel or pc-board mountable and optional high-intensity or low-power red LED. LED miniature size: 2.17 x 0.92 x 0.56″. The **DMS-30LCD series** provides autopolarity changeover and overrange indication, consumes power as low as 3.2mW, and offers optional backlit display and 9V battery power. LCD miniature size: 2.17 x 0.92 x 0.43″.

Mfg. Part No.	Power Supply (V)	Input Range	Display Intensity	Stock No.	Price Each 1-4
3½ DIGIT, 0.56″ RED LED					
DMS-30PC-0-RS-C	5.00	± 200mV	Standard	87K3671	60.28
DMS-30PC-0-RL-C	5.00	± 200mV	Low-Power	87K3670	64.09
DMS-30PC-1-RS-C	5.00	± 2V	Standard	87K3676	59.18
DMS-30PC-1-RL-C	5.00	± 2V	Low-Power	87K3675	63.24
DMS-30PC-1-RH-C	5.00	± 2V	High-Intensity	87K3674	63.58
DMS-30PC-2-RS-C	5.00	± 20V	Standard	87K3680	57.44
DMS-30PC-2-RL-C	5.00	± 20V	Low-Power	87K3679	64.78
DMS-30PC-3-RL-C	5.00	± 200V	Low-Power	87K3681	64.09
31/2 DIGIT, 0.56″ BLUE LED					
DMS-30PC-1-BS-C	5.00	± 2V	Standard	87K3672	69.16
DMS-30PC-2-BS-C	5.00	± 20V	Standard	87K3677	72.58
31/2 DIGIT, 0.56″ GREEN LED					
DMS-30PC-0-GS-C	5.00	± 200mV	Standard	87K3669	60.28
DMS-30PC-1-GS-C	5.00	± 2V	Standard	87K3673	60.28
DMS-30PC-2-GS-C	5.00	± 20V	Standard	87K3678	60.28
31/2 DIGIT, 0.56″ AQUA LED					
DMS-30PC-1-QS-C	5.00	± 2V	Standard	16M5722	59.65
31/2 DIGIT, 0.40″ LCD					
DMS-30LCD-1-5-C	5	± 2V	LCD	87K3664	51.07
DMS-30LCD-2-5B-C	5	± 20V	LCD	16M5707	54.97
DMS-30LCD-1-5B-C	5	± 2V	LCD	16M5705	53.19

(83964)

DATEL® 4½ DIGIT, MINIATURE LED/LCD PANEL METERS

RoHS Compliant Available

muRata Ps Murata Power Solutions

Red LED Display — **LCD Display**

- Expoxy-encapsulated, 12-pin DIP package
- Panel or board mountable
- Display HOLD function standard
- 3 differential, dual, input voltage ranges
- Scientific-grade accuracy, ±2 counts
- 0 to 50°C temperature rating

The **DMS-40PC series** includes built-in color filter and bezel, precision, autozeroing, factory calibrated A/D converter, and optional high-intensity or low-power red LED's and BCD data outputs for CPU interface. LED miniature size: 2.17 x 0.92 x 0.56″. The **DMS-40LCD series** includes user-selectable decimal point placement, low-battery annunciator, consumes typically 12.5mW, and offers optional backlit display and 9V battery power. LCD miniature size: 2.17 x 0.92 x 0.43″.

Mfg. Part No.	Power Supply (V)	Input Range	Display Intensity	Stock No.	Price Each 1-4
4½ DIGIT, 0.52″ RED LED					
DMS-40PC-1-RH-C	5.00	± 2V	High-Intensity	87K3688	89.87
DMS-40PC-1-RL-C	5.00	± 2V	Low-Power	87K3690	90.59
DMS-40PC-1-RS-C	5.00	± 2V	Standard	87K3691	86.17
DMS-40PC-2-RL-C	5.00	± 20V	Low-Power	87K3692	92.52
DMS-40PC-2-RS-C	5.00	± 20V	Standard	87K3693	88.01
41/2 DIGIT, 0.52″ GREEN LED					
DMS-40PC-1-GS-C	5.00	± 2V	Standard	87K3687	87.09
DMS-40PC-2-GS-C	5.00	± 20V	Standard	16M5754	82.98
41/2 DIGIT, 0.40″ LCD					
DMS-40LCD-1/2-5-C	5.00	± 2V / ± 20V	LCD	87K3685	85.49
DMS-40LCD-0/1-5B-C	5.00	± 200mV/2V	LCD	16M5742	94.60

CONTINUED

DATEL® 4½ DIGIT, MINIATURE LED/LCD PANEL METERS (CONT.)

41/2 DIGIT, 0.52" BCD INPUT, SLAVE LED DISPLAY

Mfg. Part No.	Power Supply (V)	Input Range	Display Intensity	Stock No.	Price Each 1-4
● DSD-40BCD-RS-C	5.00	+0.8V/0.4mA	BCD	16M5782	29.82

(83967)

DATEL® SELF-POWERED 2-WIRE DC VOLTMETERS

RoHS Compliant Available

muRata Ps Murata Power Solutions

LCD Display

Red LED Display

- Self-powered, only two connections required
- Low power consumption
- -25 to +60°C operating temperature
- Subminiature 1.38 x 0.88 x 1.0" package

DMS-20LCD-0/1 and **DMS-20PC-3/7** are reverse polarity protected and epoxy-encapsulated. **DMS-20LCD-0 and 1** has built-in "Vdc" annunciator and constructed with rugged ABS plastic. **DMS-30PC-0/1/3** provide ideal digital replacements for analog panel meters. Accessories available, *go online or call*.

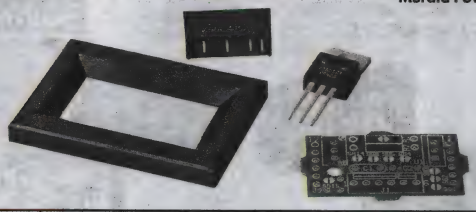
Mfg. Part No.	Input Range (Vdc)	Display	Stock No.	Price Each 1-4
● DMS-20LCD-0-DCM-C	6.5 to 18	3-1/2 digit 0.37" high	87K3627	33.15
● DMS-20LCD-1-DCM-C	8 to 50	3 digit 0.37" high	87K3630	33.87
● DMS-20PC-0-DCM-C	-999 to -999	3-1/2 digit 0.37" high Red	87K3637	55.84
● DMS-20PC-0-DCM-B-C	-999 to -999	3-1/2 digit 0.37" high Blue	87K3636	62.77
● DMS-20PC-1-DCM-C	-999 to -999	3-1/2 digit 0.37" high Red	87K3645	55.84
● DMS-20PC-1-DCM-B-C	-999 to -999	3-1/2 digit 0.37" high Blue	87K3644	64.32
● DMS-20PC-3-DCM-C	-999 to -999	3 digit 0.37" high Red	87K3658	55.24
● DMS-20PC-7-DCM-C	-999 to -999	3 digit 0.37" high Red	87K3661	53.19
● DMS-20PC-1-LM-BF-C	-999 to -999	3 digit Blue	16M5678	71.82
● DMS-20PC-2-DCM-C	-999 to -999	3-1/2 digit	16M5683	55.24
DMS-20PC-8-DCM	-999 to -999	3-1/2 digit	01K5608	54.97
● DMS-20PC-8-DCM-C	-999 to -999	3-1/2 digit	16M5702	58.30

(83956)

DATEL® DMS PANEL METER ACCESSORIES

RoHS Compliant Available

muRata Ps Murata Power Solutions



Mfg. Part No.	Description	Stock No.	Price Each 1-4
● 7805SR-C	High-Efficiency Switch Regulator	87K6146	12.40
DMS-20-CP	DMS-20 Panel Cutout Punch	01K5530	470.05
● DMS-BZL3C	DMS-20 Bezel Assembly	28M9623	4.82
● DMS-BZL4-C	DMS-20 Bezel Assembly with EPDM Rubber Gasket	28M0113	6.90
● DMS-BZL1-C	DMS-30/40 Bezel Assembly	27M1862	4.65
● DMS-BZL2-C	DMS-30/40 Bezel Assembly with EPDM Rubber Gasket	39M8063	6.98
● DMS-EB2-C	Multi-Purpose Application Board for DMS-20	16M5642	17.12
● DMS-EB-C	Multi-Purpose Application Board for DMS-30 and DMS-40 Series Meters	16M5635	17.12
● 4320-01074-0	SIP socket 6 contacts 1 row	35M5019	0.82
● 4320-01072-0	DIP socket 12 contacts 2 rows	40M4427	1.64
● 4400-01032-0	Crimp terminal 22-26 AWG, 2.5A	40M4429	0.18
4320-01069-0	6-position connector housing	35M5018	1.79

(83969)

ENGINEERS START HERE
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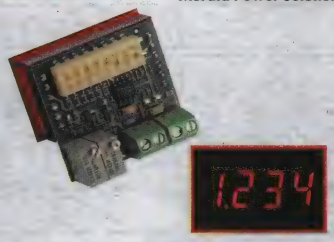
(212565)

DATEL® 0-5V AND 0-10V PROCESS MONITORS

RoHS Compliant Available

muRata Ps Murata Power Solutions

- Accepts 0-5V and 0-10V inputs
- Easy to read 0.37"/9.4mm LED display
- High input impedance
- DIP-switch selectable span/offset/ decimal points
- On-board gain/span and zero/offset trim pots
- Vibration-resistant package
- Reliable screw-terminal input connections
- Miniature size: 1.38 x 1.25 x 0.95"



Mfg. Part No.	Display	Description	Stock No.	Price Each 1-4
● DMS-20PC-0/5-24RL-C	3-1/2 digit, Red , 0.37" high	+5.00V to +40V supply	87K3641	87.09
● DMS-20PC-0/5-5BS-C	3-1/2 digit, Blue , 0.37" high	+5.00V supply	87K3642	87.23
● DMS-20PC-0/5-5GS-C	3-1/2 digit, Green, 9.4, high	+5.00V supply	16M5672	80.38

(83960)

MODEL CUB4V DC VOLTAGE METER

CE c UL us RoHS Compliant Available red lion®

- Four selectable DC voltage ranges
- Fits DIN standard cut-out 2.68 x 1.30" (68 x 33mm)
- NEMA 4X/IP65 sealed front panel bezel
- 9 to 28VDC powered
- Auto zeroing circuit and built-in scaling provided

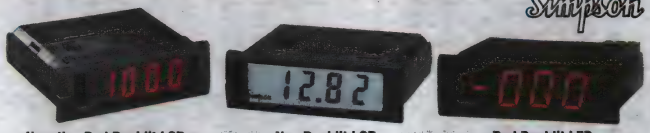
3½-digit LCD, positive reflective display with 0.6" high digits and a DIP switch selectable decimal point. Wire connections are made with screw clamp type terminals. LCD negative transmissive with yellow/green or red backlighting also available; *go online or call.*

Mfg. Part No.	DC Selectable Voltage Ranges	Stock No.	Price Each
● CUB4V-000	0-199.9mV, 1.999V, 19.99V, 199.9V	17M6444	114.00

(94359)

3/64 DIN MINI-MAX SERIES DIGITAL PANEL METERS

Simpson



Negative Red Backlit LCD | Non Backlit LCD | Red Backlit LED

Mini-Max indicators have 0.5" (12.7mm) high LCD, negative image red backlit LCD, or red LED display, user selectable decimal point and display scaling. Indicator fits 3/64 DIN cutout (22mm x 68mm) and requires only 2.36" (60mm) behind front panel. Mounting bracket provided to allow vertical or horizontal stacking of multiple indicators. Screw terminal connectors and 85-250VAC power standard. Optional excitation output and 9-32VDC power available; *go online or call.*

AC VOLTAGE INDICATORS

Mfg. Part No.	No. of Digits	Function/ Range	Display	Stock No.	Price Each
M235-0-0-33-0	3-1/2	20V	Non Backlit LCD	95F5651	161.25
M235-0-0-34-0	3-1/2	200V	Non Backlit LCD	95F5652	161.25
M235-1-0-34-0	3-1/2	200V	Negative Red Backlit LCD	95F5659	185.38
M235-2-0-35-0	3-1/2	600V	Red LED	24T5825	187.02
M245-0-0-34-0	4-1/2	200V	Non Backlit LCD	92F4227	218.87

DC VOLTAGE INDICATORS

Mfg. Part No.	No. of Digits	Function/ Range	Display	Stock No.	Price Each
M235-0-0-12-0	3-1/2	2V	Non Backlit LCD	95F5629	116.57
M235-0-0-13-0	3-1/2	20V	Non Backlit LCD	95F5630	116.57
M235-0-0-14-0	3-1/2	200V	Non Backlit LCD	95F5631	116.57
M235-1-0-11-0	3-1/2	200mV	Negative Red Backlit LCD	95F5634	140.70
M235-2-0-11-0	3-1/2	200mV	Red LED	29T6078	147.83
M235-1-0-12-0	3-1/2	2V	Negative Red Backlit LCD	95F5635	140.70
M235-1-0-13-0	3-1/2	20V	Negative Red Backlit LCD	95F5636	140.70
M235-1-2-13-0*	3-1/2	20V	Negative Red Backlit LCD	90B5878	176.79
M235-1-0-14-0	3-1/2	200V	Negative Red Backlit LCD	95F5637	137.65
M235-0-2-14-0*	3-1/2	200V	Non Backlit LCD	90B2969	152.67
M235-2-0-15-0	3-1/2	600V	Red LED	29T6091	147.83
M245-0-0-11-0	4-1/2	200mV	Non Backlit LCD	92F4239	173.20
M245-0-0-12-0	4-1/2	2V	Non Backlit LCD	92F4240	173.20
M245-0-0-13-0	4-1/2	20V	Non Backlit LCD	92F4241	173.20
M245-0-0-14-0	4-1/2	200V	Non Backlit LCD	92F4242	173.20
M245-1-0-13-0	4-1/2	20V	Negative Red Backlit LCD	92F4247	197.11
M245-1-0-14-0	4-1/2	200V	Negative Red Backlit LCD	92F4221	197.11

➤ CONTINUED ➤

3/64 DIN MINI-MAX SERIES DIGITAL PANEL METERS (CONT.)

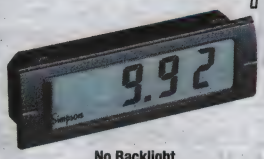
Mfg. Part No.	No. of Digits	Function/ Range	Display	Stock No.	Price Each
* 9-32VDC power.					
AC CURRENT INDICATORS					
M235-0-0-45-0	3-1/2	2A	Non Backlit LCD	95F5654	161.26
M235-0-0-46-0†	3-1/2	5A	Non Backlit LCD	95F5655	161.26
M235-1-0-46-0†	3-1/2	5A	Negative Red Backlit LCD	95F5662	185.38
M235-2-0-46-0†	3-1/2	5A	Red LED	23T4117	187.13
M245-0-0-45-0	4-1/2	2A	Non Backlit LCD	92F4229	219.38
M245-0-0-46-0†	4-1/2	5A	Non Backlit LCD	92F4230	219.38
M245-1-0-45-0	4-1/2	2A	Negative Red Backlit LCD	92F4236	243.29
M245-1-0-46-0†	4-1/2	5A	Negative Red Backlit LCD	92F4237	243.29
† Scale display needs Simpson current transformer for higher current levels; *go online or call.*					
DC CURRENT INDICATORS					
M235-0-0-24-0	3-1/2	200mA	Non Backlit LCD	95F5632	116.60
M235-0-0-25-0	3-1/2	2A	Non Backlit LCD	95F5633	116.57
M235-0-0-26-0	3-1/2	5A	Non Backlit LCD	88F1583	116.57
M235-1-0-24-0	3-1/2	200mA	Negative Red Backlit LCD	95F5638	140.69
M235-1-0-25-0	3-1/2	2A	Negative Red Backlit LCD	95F5639	137.65
M245-0-0-11-0‡	4-1/2	200mV	Non Backlit LCD	92F4239	173.20
M245-0-0-24-0	4-1/2	200mA	Non Backlit LCD	92F4243	172.93
M245-0-0-25-0	4-1/2	2A	Non Backlit LCD	92F4244	173.20
M245-1-0-24-0	4-1/2	200mA	Negative Red Backlit LCD	92F4222	196.84
M245-1-0-25-0	4-1/2	2A	Negative Red Backlit LCD	92F4223	197.11
‡ Scaled display requires Simpson external shunt for higher DC current levels.					
FREQUENCY INDICATORS (LED DISPLAY)					
M235-0-0-81-0	3-1/2	20-199.9Hz RMS	Non Backlit LCD	91F9696	118.16
M235-0-0-82-0	3-1/2	20-1999Hz RMS	Non Backlit LCD	91F9697	118.20
M235-1-0-81-0	3-1/2	20-199.9Hz RMS	Negative Red Backlit LCD	91F9698	142.29
M235-1-0-82-0	3-1/2	20-1999Hz RMS	Negative Red Backlit LCD	91F9699	142.33
TEMPERATURE INDICATORS					
M2400-910F	4	J T/C	...	52F6604	212.22
M2400-920F	4	K T/C	...	52F6605	212.22
DC PROCESS INDICATORS					
M235-0-0-71-0	3-1/2	4-20mA	Non Backlit LCD	95F5663	134.88
M235-0-0-73-0	3-1/2	0-10V	Non Backlit LCD	16F2260	134.88
M235-1-0-71-0	3-1/2	4-20mA	Negative Red Backlit LCD	95F5665	159.01
M235-0-2-71-0*	3-1/2	4-20mA	Non Backlit LCD	95F5667	170.98
M235-1-2-71-0*	3-1/2	4-20mA	Negative Red Backlit LCD	95F5669	195.10
M245-0-0-71-0	4-1/2	4-20mA	Non Backlit LCD	92F4238	191.59
M245-1-0-71-0	4-1/2	4-20mA	Negative Red Backlit LCD	92F4213	215.50
M245-0-2-71-0*	4-1/2	4-20mA	Non Backlit LCD	92F4215	229.21

*9-32VDC power
(16738)

3/64 DIN MINI SERIES DIGITAL PANEL METERS

Simpson

Red Backlight



No Backlight

Mfg. part no. M135 is 3½-digits and **Mfg. part no. M145** is 4½-digits. Provides high quality accuracy and reliability in a compact, shallow 1.25″ (31.75mm) deep case. Fits 3/64 DIN cutout (22mm x 68mm). The 0.5″ high LCD display is available with a negative image, bright red backlit option. User selectable decimal point and display hold. Includes a 12 pin mating connector with 6″ wire leads. +9VDC power option available; *go online or call.*

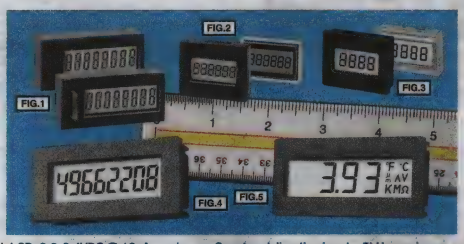
DC VOLTAGE INDICATORS (5 VDC POWER)

Mfg. Part No.	Input	Backlight	Stock No.	Price Each
M135-0-0-11-0	200mV	None	95F5604	82.34
M135-0-0-14-0	200V	None	95F5607	77.73
M135-1-0-13-1	20V	Negative Red	95F5618	107.96
M135-1-0-14-1	200V	Negative Red	95F5619	107.97
M145-0-0-11-0	200mV	None	92F4197	128.70
M145-0-0-13-0	20V	None	92F4199	128.70
M145-0-0-14-0	200V	None	92F4200	124.77
M145-1-0-12-1	2V	Negative Red	92F4192	149.16
M145-1-0-13-1	20V	Negative Red	92F4193	155.20
M145-1-0-14-1	200V	Negative Red	92F4194	149.16
DC CURRENT INDICATORS (5VDC POWER)				
M135-0-0-24-0	200mA	None	95F5609	77.76

(16729)

MICROMITE SERIES PC BOARD MOUNT COUNTERS, TIMERS AND PANELMETERS

VEEDER-ROOT
Eagle Signal Controls



8-digit, 8mm-high LCD. 2.6-3.4VDC @ 10µA maximum. Count and direction inputs, 5kHz maximum count speed. 20Hz switch bounce filter. Operating temperature: –10°C to +60°C.

TOTALIZING COUNTERS

Mfg. Part No.	Fig.	Description	H x W x D	Stock No.	Price Each 1-14
0799988-412	1	Panel and Remote Reset	0.83 x 1.85 x 0.53″ (21 x 47 x 13.5)	48F2119	71.33
0799988-402	1	Remote Reset Only	0.83 x 1.85 x 0.53″ (21 x 47 x 13.5)	48F2120	70.59
6-digit, 6mm-high LCD. 2.6-3.4VDC @ 10µA maximum. 10kHz maximum count speed. Remote reset. With supplied bezel, fits 1.16 x 0.87″ cutout. Operating temperature –10°C to +60°C.					
0799986-302	2	Count Up Only	0.70 x 1.09 x 0.26″ (17.7 x 27.6 x 6.5)	48F2123	70.72
4-digit, 6mm-high LCD. Powered by replaceable internal 1.5V button cell, 4 years expected life. 12kHz maximum count speed from contact input, reset by removing battery. With supplied bezel, fits 1.16 x .87″ cutout. Operating temperature: –10°C to +60°C.					
0799984-322	3	Count Up Only	0.70 x 1.09 x 0.42″ (17.7 x 27.6 x 10.7)	48F2125	69.98

(33786)

4-20mA LOOP POWERED UNITS AND BEZELS

RoHS Compliant Available

LASCAR

DPM 342

DPM 742-BL

DPM 942

NEMA 4X Bezel

This range of LCD 4-20mA loop powered meters is available in three sizes. Optional NEMA 4X rated bezels for the **DPM 742-BL** and **DPM 942** are available.

Mfg. Part No.	Description	W x H (in)	Digit Height (in)	Stock No.	Price Each 1-9
DPM 342	Loop Powered	1.75 x 0.79	0.43	36C2799	113.01
DPM 742-BL	Loop Powered	2.36 x 1.18	0.5	02H6481	117.44
DPM 942	Loop Powered	2.99 x 1.73	0.75	02H6483	126.37
BEZ 700-IP	Nema 4X Bezel	2.57 x 1.39	...	02H6394	22.40
BEZ 900-IP	Nema 4X Bezel	3.17 x 1.91	...	02H6395	29.30

(73562)

(196526)

SPLASHPROOF ROUND-HOLE FITTING PANEL METERS

LASCAR

The **EM Series** is a splashproof range of LCD meters each fitted with a threaded stud, allowing users to mount the product through a 7/32 hole. A rubber seal (supplied) provides splashproof protection when fitted between the meter and mounting panel. The **EM32 Series** is designed to be panel mounted with 1.28″ diameter hole, is NEMA 4-x protected and available in LCD and LED 3 ½ digit format.

Mfg. Part No.	Description	Digits	Digit Ht.	Stock No.	Price Each 1-9	Price Each 10-24
● EMA 1710	9-Segment Analog Style Voltmeter	...	..	36C2800	35.49	33.96
● EMV 1200	2-wire, 4-25VDC Self-Powered Voltmeter	3	0.5″	36C2804	45.81	43.64
● EMV 1200-40	2-wire, 4-40VDC Self-Powered Voltmeter	3	0.5″	28K2619	45.81	43.64
● EMV 1125	User Set Voltmeter	3½	0.5″	73C7319	53.56	51.02
● EMV 1025S-01	Preset Voltmeter	3½	0.5″	36C2803	44.64	42.53
● EMC 1500	Hour Meter	5	0.35″	36C2801	46.33	44.14
● EMT 1900	Thermometer	3	0.5″	36C2802	44.61	42.66
● EM32-1B	Round, 31/2 digit, NEMA 4X LCD Voltmeter	3½	0.31″	50H3922	91.49	87.16
● EM32-1B-LED	Round, 31/2 digit, NEMA 4X LED Voltmeter	3½	0.31″	50H3923	95.06	90.56
● EM32-1900	Round, 31/2 digit, NEMA 4X LCD Thermometer	3½	0.31″	23T2642	107.65	102.94

ACCESSORIES

Mfg. Part No.	Accessory Type	For Use With	Stock No.	Price Each 1-9
● NTC-PROBE-1900	10K NTC Thermistor	EMT 1900	23T2957	26.51

(89456)

⅛ DIN 3½-DIGIT PANEL MINI-METERS

RoHS Compliant Available

NEWPORT

CE

Indicators have 0.56″ (14.22) LED display. 115VAC, 50-60Hz. Panel space 37.5% of standard ⅛ DIN meter. Process meters provide zero and span adjustments for readout in engineering units. Thermocouple meters include cold junction compensation, linearization, jumper selection of C or F, thermocouple break detection and analog output (1mV/count). Connection to sensor can be 2, 3 or 4 wire (RTD). Other power options available; *go online or call.*

PROCESS

Mfg. Part No.	Signal Input	Display Span	Display Color	Stock No.	Price Each
205-PA1-R-C0	4-20mA DC	±1,999	Red	90F8938	150.00
205-PV3,R,C0	1-5VDC	±1,999	Red	90F8939	150.00
205-PV4,R,C0	0-10VDC	±1,999	Red	90F8940	150.00
TEMPERATURE/THERMOCOUPLE					
205-JF1,R,C0	"J" T/C	–346° to +1400°F	Red	90F8941	199.00
205-KF1,R,C0	"K" T/C	–157° to +1999°F	Red	90F8943	199.00
● 205-TC2,G,C8	"T" T/C	-199.9° to +199.9°C	Green	73J4838	199.00

(2301)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures

(212568)

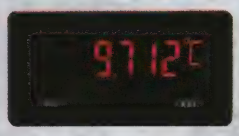
MODEL CUB5RT MINIATURE ELECTRONIC 5-DIGIT RTD METER

RoHS Compliant Available

NEW

red lion®

IP65 NEMA



- Minimum and maximum display capture
- LCD, reflect or green/red LED backlighting
- 0.48″ (12.2mm) high digits
- Optional setpoitn output card
- Optional seral communication card (RS232 or RS485)
- Optional USB programming card
- Operates from 9 to 28VDC power source
- Front panel or crimson programmable
- Display color change capability at setpoint output
- NEMA 4X/IP65 sealed front bezel

The **CUB5RT** accepts an RTD input and provides a temperature display in Celcius or Farenheit. The meter also features minimum and maximum display capture, display offset, °F or °C indicator, and programmable user input. The display can be toggled either manually or automatically between the selected displays. The CUB5 display has 0.48″ (12.2 mm) high digits. The LCD is available in two versions, reflective and red/green backlight. The backlight version is user selectable for the desired color and also has variable display intensity. The capability of the CUB5 can be easily expanded with the addition of option cards. Setpoint capability is field installable with the addition of the setpoint output cards. Serial communications capability for RS232 or RS485 is added with a serial option card. The **CUB5** can be powered from an optional Red Lion Micro-Line/Sensor Power Supply (MLPS), which attaches directly to the back of a **CUB5**. The MLPS is powered from 85 to 250 VAC and provides up to 400 mA to drive the unit and sensors.

Mfg. Part No.	Description	Stock No.	Price Each
● CUB5RTB0	RTD Meter with Backlight Display	63R2601	145.00

(212205)

FLEX MINI® PANEL METERS

NEW

VEEDER-ROOT

- Compact 39 x 75mm front panel allows for more metering in the same size or smaller panel
- Wide selection of output and communication modules available allows for configuring the FLEX MINI® to your exact process requirements
- Available in standard DC plus optional AC universal power supply allows for installation with all popular control panel voltages

A family of low cost, compact analog input panel meters with a full array of features for any industrial application. **-R suffix** indicates reflective display (others backlit red or green).

Mfg. Part No.	Type	Range	Stock No.	Price 1-9
RFMV00	DC Volt	0-200 mV, 2V, 20V, 200V	23X8785	185.66
RFMV00R	DC Volt	0-200 mV, 2V, 20V, 200V	23X8786	171.00
RFMI00	DC Current	0-200uA, 2mA, 20mA, 200mA	23X8774	185.66
RFMI00R	DC Current	0-200uA, 2mA, 20mA, 200mA	23X8775	171.00
RFMP00	Process Input	0-10VDC, 0/4-20mA, 0-50mA	23X8777	185.66
RFMP00R	Process Input	0-10VDC, 0/4-20mA, 0-50mA	23X8778	171.00
RFMT00	Thermocouple Input	T, E, J, K, R, S, B, N, or mV	23X8783	179.55
RFMT00R	Thermocouple Input	T, E, J, K, R, S, B, N, or mV	23X8784	166.11
RFMR00	RTD Input	Pt 385, Pt 392, Ni 672, Cu 427	23X8780	185.66
RFMR00R	RTD Input	Pt 385, Pt 392, Ni 672, Cu 427	23X8781	171.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price 1-24
RFMRL00	Single Relay Output Card	23X8779	29.33
RFMSK00	Dual Sinking Output Card	23X8782	29.33
RFMCOMM	RS485 Serial Communications Card	23X8773	43.99
RFMPS1	Flex Mini Power Supply, 85-250VAC	23X8776	51.99

(212188)

MODEL MDMU MINIATURE DISPLAY MODULE COUNTER/TIMERS

RoHS Compliant Available

red lion®

NEW

- LCD, positive reflective or negat0ive transmissive with yellow/green or red backlighting
- Counter and timer all in a single unit
- Count positive or negative edge
- 9 ranges in timer mode
- Selectable decimal points
- 5VDC powered
- Panel mount or PC board mount

The **MDMU** is a complete 6 digit Counter/Timer in a small panel or printed circuit board mounted package. It is designed to operate from a 5 VDC power supply. It has a 6 digit LCD, with 0.35″ high digits, and 3 selectable decimal points. In the timer modes, a flashing annunciator is supplied to indicate that the signal input of the **MDMU** is active. The displays are available in positive image reflective (black digits, reflective background) or negative image transmissive (illuminated digits, dark background) with red or yellow/green backlighting. The **MDMU** has four Mode Select and two Decimal Point Select inputs available for determining the basic operation. In most applications, the MS and DP inputs are hard wired to select the appropriate function (counter or timer) and counter decimal point position. The COUNTER mode is selected by setting the Mode select inputs to the appropriate levels (Hardware selection). Decimal points may also be set using the DP Inputs (Hardware selection). The TIMER mode and range is selected by setting the Mode Select inputs to the appropriate levels (Hardware selection). The timing range increments available are 1 msec, 10 msec, 100 msec, 1 sec, 0.1 min, 1 min, 0.01 hr, 0.1 hr, and 1 hr. The TIMER ACTIVE annunciator will flash at a 1 Hz rate when the input to the timer is activated.

Mfg. Part No.	Description	Stock No.	Price Each
● MDMU0000	Panel Mount W/Reflective Display	28M9667	38.00
● MDMU0010	Panel Mount W/Yel-Grn Backlighting	63R3898	49.00

CONTINUED

MODEL MDMU MINIATURE DISPLAY MODULE COUNTER/TIMERS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
MDMU0020	Panel Mount W/Red Backlighting	98M0087	49.00
MDMU0100	PC Board Mount W/Reflective Display	63R3899	35.00

(212204)

HANDHELD STRAIN GAGE INDICATOR

NEW

NEWPORT

- Portable, hand held indicator for bridge type transducers
- 9 Volt battery powered
- Scalable display with dummy zero
- Built-in transducer excitation
- Track/peak modes available
- Selectable decimal point
- Low battery indication
- Blanking overrange

The hand held calibrator is a digital indicator for strain gage type transducers such as load cells, torque sensors, or millivolt pressure sensors. It provides excitation voltage for the transducer and displays the readings on a liquid crystal display (LCD). The LCD has a 3 ½ active digits (0-1999 counts) and an additional dummy zero if needed. The calibrator can display either the actual value of the signal (tracking mode) or the peak value (peak mode). It operates on a standard 9 Volt battery and provides an indication of low battery. It has two internal reference voltages for powering the bridge. The 1.24 Volt reference is used with the 1K Ohm bridge and below whereas the 2.5 Volt with the 2.5K/5K Ohm bridges and above. Failure to properly select the excitation voltage can result in the calibrator drawing excessive current. The calibrator provides amplification, common-mode rejection and controls the LCD Display. The calibrator is designed for 0.5 to 4.0 mV/V bridge sensitivity range. A ZERO POT and SPAN POT is provided for calibration.

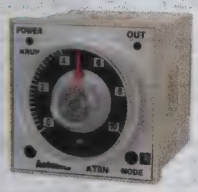
Mfg. Part No.	Description	Stock No.	Price Each
HHP-SG/N	Handheld Strain Gage Indicator	86C7995	575.00

(212208)

UNIVERSAL VOLTAGE MULTI-FUNCTION TIMERS

Autonics Sensors & Controllers

- Realization of wide range of power supply: 100-240VAC / 24-240VDC
- Various output operations (6 modes)
- Multi time range (16 different time ranges)
- Wide control time range (0.05 sec ~ 100 hour)
- Easy setting of time, time range, output operation mode
- Easy to check output status by LED indicator



Mfg. Part No.	Pins	Time Range	Contact Type	Stock No.	Price Each
AT8N-24-240	8	0.05s to 100h	DPDT	10R5262	38.95
AT11DN-24-240	11	0.05s to 100h	DPDT	10R5261	41.95
AT11EN-24-240	11	0.05s to 100h	SPDT	22T0643	41.95

(148669)

1/16 DIN DIGITAL LCD TIMERS

Autonics Sensors & Controllers

LE3S / LE3SA / LE3SB

- Wide range of power supply: 24-240VAC @ 50/60Hz, 24-240VDC
- Easy to switch Up/Down mode
- 10 programmable output modes and timing ranges
- Selectable function by front digital switches
- Graphic output contact status display (NO/NC)
- BAR graph display of time progressing in 5% increments

LE4S

LE3S

LE4S / LE4SA

- Wide range of power supply: 24-240VAC @ 50/60Hz, 24-240VDC
- Set each value and time range separately when choosing Flicker (FK, FK I) or ON-OFF Delay (ON OFF D, ON OFF D I) output mode
- Add Flicker 1 mode (**LE4SA**)
- Set one-shot output time (0.01-99.99sec)
- Choose min. input signal: 1ms or 20ms (**LE4S**)
- Improved return time: 100ms
- Easy function setting modes
- Lock setting function for saving setting value
- Function setting with soft touch
- High visibility display with back light ON/OFF function

DIGITAL LCD TIMER (48 x 48 x 74mm)

Mfg. Part No.	Digits	Time Range	Control Output Contact Type	Timing Operation	Stock No.	Price Each
LE3S-24-240	3	0.01sec to 9.99hr	Time Limit SPDT	Signal ON	79R2471	85.95
LE3SA-24-240	3	0.01sec to 9.99hr	Time Limit DPDT	Power ON	22T2129	85.95
LE3SB-24-240	3	0.01sec to 9.99hr	Time Limit SPDT / Instantaneous SPDT	Power ON	22T2130	85.95

➤CONTINUED➤

1/16 DIN DIGITAL LCD TIMERS (CONT.)

DIGITAL LCD TIMER W/ BACKLIGHT (48 x 48 x 76mm)

Mfg. Part No.	Digits	Time Range	Control Output Contact Type	Timing Operation	Stock No.	Price Each
LE4S-24-240	4	0.01sec to 9999hr	Time Limit SPDT	Signal ON Start	79R2472	93.95
LE4SA-24-240	4	0.01sec to 9999hr	Time Limit DPDT / Time Limit SPDT + Instantaneous SPDT	Power ON Start	22T2132	93.95

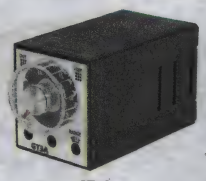
(194794)

MULTI-MODE TIMERS

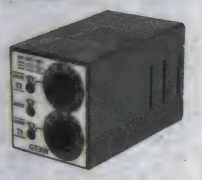
RoHS Compliant Available

IDEC

- Delayed DPDT or delayed SPDT plus instantaneous SPDT
- 8- or 11-pin termination
- Dimensions: 1.57H x 1.42W x 2.53"D (40 x 36 x 64.2mm)
- UL listed, CE



GT3A



GT3W

GT3A is analog set type, has contacts rated 250VAC/5A, 30VDC/5A max. POWER indicator flashes during time-delay operation, OUT indicator remains on while output on. Life expectancy: 20,000,000 operations mechanical, 100,000 electrical. **GT3W** is analog set type with two time settings and 8 selectable operation modes in each timer. They come with power and output status LEDs and time ranges up to 300 hours. Other time ranges available; *go online or call.*

ANALOG MODELS

Mfg. Part No.	Contacts	Time Range	Voltage	Pins	Stock No.	Price Each 1-9
GT3A-2AF20	Delayed SPDT	0.05sec to 180hr	100-240VAC	8	96F3881	84.74
GT3A-3AF20	Delayed DPDT	0.05sec to 180hr	100-240VAC	8	96F3884	75.01
GT3F-2AF20	Delayed DPDT	0.05 sec. to 600 sec.	100-240VAC	8	50B4190	97.04
GT3A-4AF20	Delayed DPDT	0.05sec to 180hr	100-240VAC	11	96F3887	75.78
GT3A-4AD24	Delayed DPDT	0.05 sec. to 180 hr.	24VAC/VDC	11	92B4668	77.96
ANALOG DUAL TIME ADJUSTMENT MODELS						
GT3W-A11AF20N	Delayed DPDT	0.1 sec. to 6 hr.	100-240VAC	8	26H1600	95.96
GT3W-A11AD24N	Delayed DPDT	0.1 sec. to 6 hr.	24VAC/VDC	8	73H5759	98.04
GT3W-A33AF20N	Delayed DPDT	0.1 sec. to 300 hr.	100-240VAC	8	65R5058	99.16
GT3W-A33AD24N	Delayed DPDT	0.1 sec. to 300 hr.	24VAC/VDC	8	54K3305	97.06

SOCKETS AND ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-49	Price Each 50-99
SR2P-06	8-Pin Snap-Mount DIN Rail Socket	13M2991	5.62	5.07
SR3P-06	11-Pin Snap-Mount DIN Rail Socket	18M9335	9.13	8.26
SR6P-M08G	8-Pin Wiring Socket Adapter	13M3003	8.98	8.65
SR6P-M11G	11-Pin Wiring Socket Adapter	13M3004	18.77	18.09
RTB-G01	Panel Mount Adapter	96F3910	4.65	4.13

(2738)

10A MULTIFUNCTION TIMERS

IDEC

- Time range: 0.1 sec-600 hrs
- DPDT (delayed outputs) contacts
- Reset time: 0.1 sec. max
- Mechanical life expectancy: 50,000,000 operations

Feature ON-delay/interval or signal OFF-delay/single shot and high-repeat accuracy of ±0.25%. Contacts rated 10A resistive at 240VAC/30VDC; 7A inductive at 240VAC/30VDC. 1.575"(40)H x 1.417"(36)W x 2.362"(60)D. Use socket **SR3B-05** for 11-blade terminals. Use socket **SR2P-06** for 8-pin terminals. Use sockets **SR3P-05** and **SR3P-05C** for 11-pin terminals.

Mfg. Part No.	Timing Function	Input Voltage	Termination	Stock No.	Price Each 1-9
RTE-P2AF20	ON/OFF delay, OFF-delay, 1-shot	100-240VAC	11-pin	83H4153	77.61
RTE-P2D12	ON/OFF delay, OFF-delay, 1-shot	12VDC	11-pin	82H8176	79.28
RTE-P2AD24	ON/OFF delay, OFF-delay, 1-shot	24V AC/DC	11-pin	83H4152	77.61
RTE-B2AF20	ON/OFF delay, OFF-delay, 1-shot	100-240VAC	11-blade	83H4147	79.28
RTE-B2AD24	ON/OFF delay, OFF-delay, 1-shot	24V AC/DC	11-blade	78H1740	78.48
RTE-P1AF20	On-Delay, Interval, cycle OFF, cycle ON	100-240VAC	8-pin	83H4150	62.76
RTE-B1AF20	On-Delay, Interval, cycle OFF, cycle ON	100-240VAC	11-blade	82H2304	72.68
RTE-P1D12	On-Delay, Interval, cycle OFF, cycle ON	12VDC	8-pin	83H4151	63.48
RTE-P1AD24	On-Delay, Interval, cycle OFF, cycle ON	24V AC/DC	8-pin	83H4149	62.76

➤CONTINUED➤

10A MULTIFUNCTION TIMERS (CONT.)

Mfg. Part No.	Timing Function	Input Voltage	Termination	Stock No.	Price Each 1-9
RTE-B1D12	On-Delay, Interval, cycle OFF, cycle ON	12VDC	11-blade	83H4146	77.91
RTE-B1AD24	On-Delay, Interval, cycle OFF, cycle ON	24V AC/DC	11-blade	83H3624	74.23

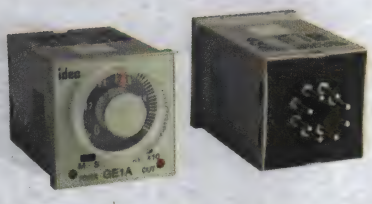
(2740)

ON-DELAY TIMERS

RoHS Compliant Available

IDEC

- Delay-on-make (ON delay) function
- DPDT or SPDT + instantaneous SPDT contacts
- Contact rating: 24VDC/120VAC 5A, 240VAC 3A
- 8 time ranges
- Adjustable from 0.1 sec. to 10 min. or 0.1 min. to 10 hours
- Large, clear knob for easy setting
- Repeat error ±0.2% maximum
- Instant monitoring of operational status by LED indicators
- 8-pin, octal base



GE1A series timers are single-function (On Delay) time-delay relays. Extremely easy to configure for a wide variety of set times, the **GE1A series** serves as a simple "plug-and-play" timing solution. Handles settings up to 10 hours. 2 different contact configurations are designed to meet most application requirements. With IDEC's accessories, DIN rail, socket or through-panel (with a clear plastic protective cover) mounting configurations are available.

TIMERS

Mfg. Part No.	Contacts	Time Range	Rated Voltage	Stock No.	Price Each 1-9
GE1A-B10HA110	Del. SPDT and Inst. SPDT	0.1sec. to 10hr.	110-120VAC	83C9524	35.95
GE1A-C10HA110	Delayed DPDT	0.1sec. to 10hr.	110-120VAC	83C9530	36.99

ACCESSORIES

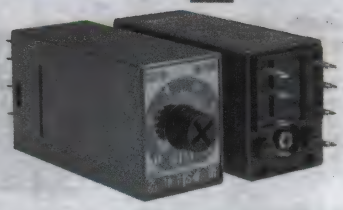
Mfg. Part No.	Description	Stock No.	Price Each 1-24	Price Each 25-49
● SR6P-M08G	Screw Terminal Socket Adapter for Panel Mounting	13M3003	8.98	8.65
● GE9Z-AD	Panel Mount Adapter	83C9534	3.36	3.19
● GE9Z-C48	Clear Plastic Dust Cover	83C9535	3.28	3.01
● SR2P-06	8-Pin Snap Mount DIN Rail Socket	13M2991	5.62	5.07
● SY4S-05	Standard DIN Rail, for use with Optional Mounting Clip **SFA-202**	13M3022	10.48	9.46
● SY4S-05C	Finger-Safe DIN Rail, for use with Optional Mounting Clip **SFA-202**	13M3023	13.02	11.75
● SFA-202	Mounting Clip for use with DIN Rails	16F5300	0.33	0.29

(72441)

ON-DELAY TIMERS

RoHS Compliant Available

IDEC



GT5Y series on-delay timers with four selectable time ranges feature control setting set by hand or screwdriver. Power ON and timing and LED indicators. Operating temperature :–10°C to +50°C.

100-120VAC

Mfg. Part No.	Time Range	Contacts	Stock No.	Price Each 1-9	Price Each 10-24
● GT5Y-4SN1A100	0.1sec to 10min	4PDT	66F4213	47.80	42.67
● GT5Y-4SN3A100	0.1 sec. to 30 min.	4PDT	16F281	46.46	41.48
GT5Y-4SN6A100	0.1 sec. to 60 min.	4PDT	16F5291	50.68	45.24
● GT5Y-2SN1A100	0.1 sec. - 10 min.	DPDT	16F280	47.26	42.21
GT5Y-2SN3A100	0.1 sec. to 30 min.	DPDT	30B6301	47.80	42.67
GT5Y-2SN6A100	0.1 sec. to 60 min.	DPDT	30B6306	50.68	45.24
24VDC					
● GT5Y-4SN1D24	0.1 sec. to 10 min.	4PDT	16F5292	47.26	42.21
GT5Y-4SN3D24	0.1 sec. to 30 min.	4PDT	16F5293	47.81	42.68
GT5Y-4SN6D24	0.1 sec. to 60 min.	4PDT	16F5294	48.27	43.09
12VDC					
GT5Y-2SN1D12	0.1 sec. to 10 min.	DPDT	30B6300	50.10	44.73

SOCKETS AND ACCESSORIES
Snap on to 1.38" (35mm) DIN rails.

➤ CONTINUED ➤

ON-DELAY TIMERS (CONT.)

Mfg. Part No.	Description	Mounting Clip (Opt.)	Stock No.	Price Each 1-49	Price Each 50-99
● SY4S-51	Panel Mt. Socket w/Solder Terms.	SFA-302	13M3024	1.61	1.46
● SY4S-61	PC Board Mount Socket	SFA-302	13M3025	1.71	1.55
● SY4S-62	PC Board Mount Socket	SY4S-51F1	13M3026	1.70	1.53
● SFA-302	Mounting Clip for SY4S-51, SY4S-61 Sockets		16F5301	0.25	0.22

(3071)

1/16 DIN MULTIFUNCTION DIGITAL TIMER

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- ON-Delay, Twin Timer, Repeat Cycle, Interval and Cumulative Timing Functions Available
- Large Backlit Negative LCD Display for Dim Lighting Conditions and Wide Angles
- Wide Variety of Timing Ranges from 0.0015 to 9999h
- Finger-Safe Terminal Sockets and Cover Available
- Supply Voltage: 100 to 240VAC, 50/60Hz
- Operating Voltage: 85% to 110% VAC or 90% to 110% VDC
- Power Consumption: Approx. 6.2VA at 264VAC
- Display: 11.5mm High Characters (Present Value); 6mm High Characters (Set Value); 7-Segment Negative Transmissive LCD
- Input Signals: Start, Gate (H5CX-A) and Reset; 1 or 20 ms Input Signal Width

Use the external DIP switch to configure the timer for simple jobs and the front panel switches for more complex settings. 5A at 250VAC, SPDT contact output. Control output: SPDT contact, rated 5A@250VAC resistive load. Twin timer available on all models. Units with transistor output also available; Go online or call. UL listed, UL recognized, CE compliant.

TIMERS

Mfg. Part No.	Supply Voltage	Termination	Stock No.	Price Each
● H5CX-A-N AC100-240	-240VAC		50R9064	206.50
● H5CX-AD-N AC24/DC12-24	12-24VDC or 24VAC	Screw Terminal	55R0460	206.50
● H5CX-A11-N AC100-240	100-240VAC		53R1665	206.50
● H5CX-L8-N AC100-240	100-240VAC	8-Pin Socket	63R6158	184.48
● H5CX-L8D-N AC24/DC12-24	12-24VDC or 24VAC	8-Pin Socket	52R7884	172.98

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-24	Price Each 25-49
● Y92F-30	Flush Mounting Adapter, Supplied with Screw Terminal Units	88K2030	11.68	11.13
● P2CF-08-E	8-Pin Track or Flush-Mount Socket	84C9861	12.54	11.77
● P2CF-11-E	11-Pin Track-Mounting, Front-Connecting Socket with Finger-Safe Terminals	98B1828	15.60	14.64
● P3G-08	8-Pin Panel-Mount Socket	88K1975	20.22	18.98
● P3GA-11	11-Pin Track-Mounting, Back-Connecting Socket	88K1976	22.70	21.30
● Y92A-48G	Finger-safe Terminal Cover for P3G-08 or P3GA-11 Socket	88K1286	6.41	6.05

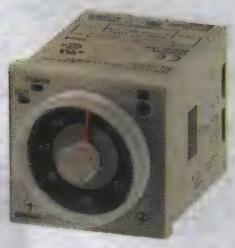
(72211)

1/16 DIN ANALOG SET ON-DELAY TIMERS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Analog-Set Dial
- Field-Selectable Time Ranges from 0.05 Second to 300 Hours or 0.1 Second to 600 Hours
- Select 2-, 4-, or 6-Function Models to Handle Most Applications
- Wide-Range AC/DC Supply Voltage Models (AC100-240/DC100-125 or AC24-48/DC12-24)
- NPN Input; PNP Available
- Short, 80mm (3.15") Panel Mounting Depth with Socket Allows Space-Efficient Control Panel Design
- 8- or 11-Pin Mounting
- DPDT 5A@240VAC/30VDC Relay Output
- Choice of Light Gray, Medium Gray, or Black Panel Covers to Match Panel Aesthetics



Choose ON-delay, Repeat Cycle, Interval, and One-shot timing functions with 8-pin model and these functions plus Signal ON/OFF delay, Signal OFF-delay with 11-pin model. Universal supply voltage (AC100-240/DC100-125) OR (AC24-48/DC12-24), short, 80mm (3.15 in) panel depth with socket. Socket for mounting, *ordered separately online or call.* UL recognized, CSA certified, CE compliant.

100-120VAC SUPPLY VOLTAGE

Mfg. Part No.	Pins	No. of Timing Functions	Time Range	Stock No.	Price Each 1-9	Price Each 10-24
● H3CR-H8L AC100-120 S	8	2	0.05sec to 12sec	52F4142	110.14	102.80
100-240VAC/100-125VDC SUPPLY VOLTAGE						
● H3CR-A8-AC100-240/DC100-125	8	4	0.05sec to 300hr	94B1633	99.99	93.32
● H3CR-A8E AC100-240/DC100-125	8	4	0.05sec to 300hr	88K1948	101.03	94.30
● H3CR-A AC100-240/DC100-125	11	6	0.05sec to 300hr	95B5375	99.99	93.32

➤ CONTINUED ➤

1/16 DIN ANALOG SET ON-DELAY TIMERS (CONT.)

24-48VAC/12-48VDC SUPPLY VOLTAGE

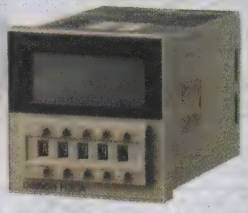
Mfg. Part No.	Pins	No. of Timing Functions	Time Range	Stock No.	Price Each 1-9	Price Each 10-24
H3CR-A AC24-48/DC12-48	11	6	0.05sec to 300hr	93B4352	99.99	93.32
H3CR-A8 AC24-48/DC12-48	8	4	0.05sec to 300hr	94B1639	97.03	90.57

(3013)

1/16 DIN DIGITAL SET TIMER WITH BAR GRAPH DISPLAY

RoHS Compliant Available

OMRON AUTOMATION & SAFETY



H3CA timer offers accurate digital thumbwheel setting and easy-to-read LCD bar graph display for time remaining and LCD indicator of output status. Eight field-selectable operation modes include ON-delay, signal interval/OFF-delay I, repeat cycle, signal OFF-delay (I and II), interval, cycle, and signal ON-delay/OFF-delay. Seven selectable timing ranges from 0.1 second to 9990 hours. Universal voltage 24-240VAC or 12-240VDC, control output SPST 3A, 250VAC. Includes three no-voltage inputs for start, reset, and gate. Dimensions: 1.89H × 1.89W × 3.50"D (48 × 48 × 89). Requires 11-pin socket, *ordered separately; go online or call.* UL recognized, CSA certified.

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
H3CA-A	Digital Set Multi-Mode Timer	18M7364	172.58	161.96

(3015)

P&B 10A MULTIFUNCTION, DIGITAL TIME-DELAY RELAY/COUNTER

RoHS Compliant Available

TE connectivity

Authorized Distributor

- 1/16 DIN enclosure
- 10 programmable timing modes
- 2 counting modes
- Thumbwheel switches for digital programming
- LCD digital readout
- 11-pin octal plug-in base
- Time-delay from 0.1sec to 9990 hr.

CNT Series are multi-functional, digitally programmable, time-delay relays/counters. DPDT, silver-cadmium oxide alloy contacts, rated 10A @ 240VAC/30VDC. Temperature range: –10°C to +55°C. Outline dimensions in inches (mm): 2.83 (71.9)L x 1.88 (48.8)H x 1.88 (47.8)W. UL recognized, CSA certified.

RELAYS

Mfg. Part No.	Input Voltage	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10+
CNT-35-26	12VDC	90F7642	160.75	146.14	133.96
CNT-35-76	120VAC	90F7643	170.26	152.37	139.67
CNT-35-96	24-240VAC/VDC	90F7644	157.88	151.30	144.72

11-PIN OCTAL SOCKETS

For use with mounting clip **mfg. part no. SSA-24C667** for securing relay in panel-mount applications.

Mfg. Part No.	Dimensions (in)	Mounting	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49
27E123	2.322 x 2.385 x .925	Screw-Terminal	57F3432	6.74	5.64	5.17
27E892	2.035 x 2.332 x .970	Screw Terminal, DIN Rail	46F3588	8.85	8.05	7.38

(3089)

EAGLE SIGNAL BRAND B856 SERIES MULTIFUNCTION TIMERS

VEEDER-ROOT

Eagle Signal Controls

Feature a compact 1/16 DIN housing, precise digital setting, versatile functionality, and straightforward button-per-digit interface. Programmable to perform On-Delay, Off-Delay, Interval, or Repeat Cycle timing functions. Capable of performing the function of 2 separate timers. DPDT relay contact output. All programming is done from the front panel. Display: dual-line LCD.

Mfg. Part No.	Description	Stock No.	Price Each 1-5
B856-500	Timed DPDT Output	91F3079	210.82
B856-511	1 Timed, 1 Instantaneous SPDT Output	91F3080	173.30

(15427)

DIGITAL DAILY TIMERS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Precise Control of Both Regular and Special (e.g., Half-day Operation) ON/OFF Times
- Can be Set for Timed or Pulsed Operation and for Multiple-day Operation
- 2 Mounting Types Available: Panel or Track Mounting
- Timing Chart Displayed for At-a-glance Confirmation
- DIN-sized 1/16 (48 x 48mm)
- SPST-NO 15A Relay Output
- Supply Voltage: 100-240VAC, 50/60Hz
- Power Consumption: Approximately 5VA

Panel Mount

NEMA 4 cover **mfg. part no. Y92A-48N** available; *go online or call.* UL recognized, CSA approved, SEV approved.

Mfg. Part No.	Mounting	Outside Dimensions H x W x L" (mm)	Stock No.	Price Each 1-4
H5FB	Panel	1.89 x 1.89 x 3.41 (48 x 48 x 86.7)	88K1950	219.65
H5F-KB	Surface/Track	3.93 x 1.97 x 2.87 (99.8 x 50 x 73)	88K1110	234.58

(51887)

PROGRAMMABLE AM/PM WEEKLY TIMER

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- AM/PM Display
- 24 Program Steps
- A Different Program Possible Each Day
- Over Midnight Setting Possible
- 2 Independent 15A Control Circuits with Manual Mode
- Automatic or Manual Operation Following Power Failure
- Field-adjustable ON/OFF, Cycle, and Pulse Input
- Easy-to-use Prompted Programming
- Wide Supply Voltage Range
- 10-year Battery Backup for Memory Protection
- DIN Size 72 x 72mm
- Contact Type: 2 SPST-NO Time-limit Contacts with Manual Override Switches
- Cycle Length: 1-minute to a Full Week

Surface/Track Mount

Ideal for HVAC, lighting, and other system operations in commercial or industrial environments. UL recognized, CSA certified, SEV approved. Hard plate cover **Y92A-72C**, track mounting adapter **Y92F-90**, and NEMA 4 cover **Y92A-72N** available; *go online or call.*

Mfg. Part No.	Mount	Outside Dimensions H x W x D (mm)	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-24
H5SWFB2	Surface / Track	96 x 72 x 55	80K0833	345.99	323.84	310.21
H5S-WB2	Flush	72 x 72 x 59.2	83K3461	327.77	306.46	293.36

(3042)

PROGRAMMABLE 24-HOUR TIMER

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

H5L series programmable 24-hour weekly timer features easy front-panel set-up, 24-hour (military time), 7-day programming, and large, easy-to-read LCD display. Unit offers 2 independent SPST 15-amp circuits (with manual override switches) and wide operating voltage: 100-240VAC. Ideal for HVAC, lighting, and other system operations in commercial or industrial environments. Programs may be tailored to daily routines within single 24-hour periods. Built-in 10-year battery protects programming. Unit may be panel, surface or DIN rail mounted. Dimensions: 3.8H × 3.8W × 2.25"D (96 × 96 × 57mm). UL recognized, CSA certified.

Mfg. Part No.	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-24	Price Each 25-49
H5L-A	52F4158	318.72	303.38	289.75	274.41

(3040)

CHRONOS 2 TIMERS - 22.5MM

NEW

CROUZET AUTOMATION

- Same position of terminal blocks for a perfect alignment between the 17.5mm and 22.5mm timer versions.
- Same appearance in design than the 17.5mm versions.
- A 45mm "nose height" on the front of the product to allow the mounting of the 22.5mm versions in modular panels.
- Slightly longer than the 17.5mm versions to allow the 2 relays SPDT 8A / 250VAC.

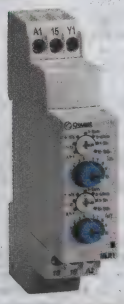
Mfg. Part. No	Product Range	Stock No.	Price Each 1-4
88866175	CROUZET - RQR1 Series	47X2117	106.00
88866176	CROUZET - RQR6 Series	47X2118	116.55
88866215	CROUZET - RA2R1 Series	47X2119	99.96
88866300	CROUZET - RU2R4 Series	47X2120	124.01
88866303	CROUZET - RU2R3 Series	47X2121	122.84
88866305	CROUZET - RU2R1 Series	47X2122	134.27
88866385	CROUZET - RX2R1 Series	47X2123	134.27

(212255)

CHRONOS II TIMERS DIN RAIL MOUNT

RoHS Compliant Available

CROUZET AUTOMATION



- Relay or solid state output
- Multi-function or mono-function
- Multi-range
- Multi-voltage
- Screw or spring terminals
- LED status indicator (relay version)
- Option of connecting an external power supply to the control input
- 3-wire sensor control option

Mfg. Part No.	Supply Voltage	Current Rating (A)	Output	Stock No.	Price Each 1-9
88827004	24V AC to 240V AC	700mA	Solid state	60W2059	67.06
88827014	24V AC to 240V AC, 24V DC to 240V DC	700mA	Solid state	60W2060	58.32
88827044	24V AC to 240V AC	700mA	Solid state	60W2061	46.65
88827054	24V AC to 240V AC	700mA	Solid state	60W2062	77.81
88827100	12V AC, 12V DC	8	Relay	60W2063	70.33
88827103	12V AC to 240V AC, 12V DC to 240V DC	8	Relay	60W2064	83.32
88827105	24V AC to 240V AC, 24V DC	8	Relay	60W2065	67.13
88827115	24V AC to 240V AC, 24V DC	8	Relay	60W2066	58.35
88827125	24V AC to 240V AC, 24V DC	8	Relay	60W2067	55.00
88827135	24V AC to 240V AC, 24V DC	8	Relay	60W2068	55.58
88827145	24V AC to 240V AC, 24V DC	8	Relay	60W2069	49.85
88827150	12V AC, 12V DC	8	Relay	60W2070	65.50
88827155	24V AC to 240V AC, 24V DC	8	Relay	60W2071	67.92
88827185	24V AC to 240V AC, 24V DC	8	Relay	60W2072	74.30
88827503	12V AC to 240V AC, 12V DC to 240V DC	8	Relay	60W2073	85.22

(209439)

PM SERIES ANALOG TIMERS

RoHS Compliant Available

Panasonic

- Multiple time ranges — 1 s to 500 h (Max.)
- Built-in Screw terminals
- 0 setting instantaneous output operation
- **PM4H:**
- 100-240V AC free-voltage input, 48-125V DC type available
- Short body — 62.5mm 2.461 inch (screw terminal type)
- Front panel of IP65 type is protected against water-splash and dust
- Screw terminal type is used for easy wiring and reducing additional cost for accessories
- 8 different operation modes: (PM4H-A)

DIN48

DIN48 SIZE TIMERS

Mfg. Part No.	Time Range	Operating Voltage	Operation Mode	Stock No.	Price Each 1-9
● PM4HA-H-24V	1 sec. to 500 hr.	24VAC	Multiple	16F1376	53.05
● PM4HA-H-AC240V	1 sec. to 500 hr.	100-240VAC	Multiple	10C8923	58.26
● PM4HS-H-AC240V	1 sec. to 500 hr.	100-240VAC	Power ON-delay	10C9027	55.52

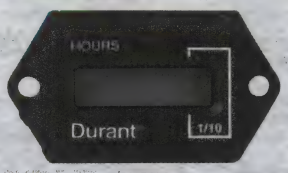
(115548)

LCD ELAPSED TIMERS/ HOUR METERS

RoHS Compliant Available

EATON

E42DIR



E42DI24

The **E42DIR** (round) and **E42DI24 series** (rectangular) are solid-state hour meters that record and display up to 99,999.9 hours, roll over and continue timing. Feature an EEPROM that can retain data for 25+ years. Operating temperature: 40°F to 185°F (-40°C to 85°C). Able to function in harsh conditions of vibration, shock, moisture and dust. Feature minimal power consumption, compact behind-panel depth and operating indicator (hourglass icon). Size: 2.30W x 1.125"D (round); 0.89H x 2.09W x 0.86"D (rectangular).

Mfg. Part No.	Shape	Supply Voltage	Features	Stock No.	Price Each 1-4
● E42DIR1260	Round	12-48VDC / 20-60VAC	...	03C3338	57.38
● E42DIR48230	Round	48-150VDC / 100-230VAC	...	89M5166	57.40
● E42DI241260	Rectangular	12-48VDC / 20-60VAC	...	89M5167	57.94

➤ CONTINUED ➤

LCD ELAPSED TIMERS/HOUR METERS (CONT.)

Mfg. Part No.	Shape	Supply Voltage	Features	Stock No.	Price Each 1-4
● E42DI2448230	Rectangular	48-150VDC / 100-230VAC	...	18C2536	58.22
● E42DI2448230R	Rectangular	48-150VDC / 100-230VAC	Reset	89M5168	57.38

(60973)

ELECTROMECHANICAL HOUR METERS

RoHS Compliant Available

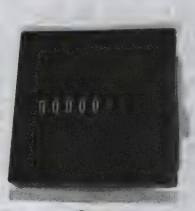
EATON

- 6-digit hour meter for round panel cut-out
- Quartz timing method
- Low cost
- Waterproof
- Type 4X protection

1/16 DIN (48x48 mm) Square

- High shock-resistance
- Synchronous motor timing method
- Without reset
- Data retention if power is lost
- IP65 protection

Round



Square

Mfg. Part No.	No. of Digits	Shape	Supply Voltage	Stock No.	Price Each 1-4
● 6-T-3H-508RPM-402	6	Round (50.8mm)	10VDC to 80VDC	13T1666	64.03
● 6-T-3H-508RPM-406	6	Round (50.8mm)	115VAC	13T1667	63.42
● 7-T-65-4848PM-406	7	Square (48x48mm)	100VAC to 130VAC	67R4462	21.74
● 8-T-65-4848PM-402	8	Square (48x48mm)	10VDC to 30VDC	12N1183	37.20

(194869)

HONEYWELL 20000 SERIES AC HOUR METERS

Honeywell Sensing and Control

SELECTION, SPEED, SERVICE. All Found Here.

Features:

- Polycarbonate, shock resistant, tamper proof case
- Totally sealed
- Single phase, synchronous, permanently lubricated motor

Specification:

- Accuracy: 0.02%
- Records up to 99,999 hours
- Automatic recycle to zero
- Operating frequency: 60Hz
- Power rating: 3.0W
- Operating temperature: -54°C to 68°C
- Weight: 3oz
- Lens material: 3-screw mount: Glass, 2-screw mount: Polycarbonate
- Number size: 0.12" (3mm)

Fig. 1

Fig. 2

These deluxe AC meters are totally sealed and benefit from a design which integrates the motor and frame into substructure.

Mfg. Part No.	Fig.	Operating Voltage (VDC)	Number of Digits	Termination	Stock No.	Price Each 1-14
020001 17	1	108-132	6	Screw	64K2417	32.58
020017 14	2	108-132	6	Screw	64K2418	35.96

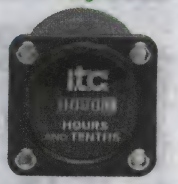
(85745)

AC ELAPSED TIME INDICATOR

RoHS Compliant Available

itc Industrial Timer Company

This non-resettable running time meter features a 5-digit readout enclosed in a glass and metal housing. Indicates hours and tenths. Tamperproof no-reset feature. Dust and moisture resistant. Panel mount with 4 holes; 1.670" diameter panel cutout. Voltage: 120V/60Hz, –12°C to +55°C. **Mfg. part no. ED7212** is UL recognized; **mfg. part no. ED7112** is UL recognized and CSA certified. **Series 7010** hermetically sealed versions also available; *go online or call.*



Mfg. Part No.	Lead Configuration	Stock No.	Price Each 1-24
● ED7212	11¼"	31C7201	313.26
● ED7112	Glass-Fused Solder Terminals	40C1626	333.13

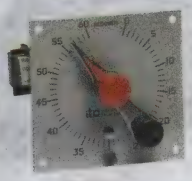
(3084)

H/CH SERIES TIME DELAY TIMERS

RoHS Compliant Available

Industrial Timer Company

External wiring is connected to terminal strip. Isolated SPDT load switch rated 10A non-inductive, 120VAC. **H series** have clutch motor, repeat accuracy ±1 full scale, and reset time 5% of dial setting. **CH series** have external clutch, repeat accuracy ±1-1/2% full scale, and reset time 0.5 second at max. setting. Both provide automatic reset upon removal of power and are panel-mounted. UL recognized, CSA certified.



CH Series

Mfg. Part No.	Time Cycle	Dial Div.	Stock No.	Price Each 1-2
H-15S	15 sec.	0.25 sec.	24F296	334.27
CH-1M	1 min.	1 sec.	24F297	386.53

(2901)

90 SERIES DELAY TIMERS

Industrial Timer Company

For applications requiring infrequent adjustment. Isolated SPDT load switch, rated 10A, non-inductive, 120V/60Hz. Repeat accuracy: +1% full scale. Reset time: 5% of set time delay. Auto-reset upon power removal. UL recognized, CSA certified. 6, 30 and 60 second time cycles versions are available; *go online or call.*

Mfg. Part No.	Setting Max.	Setting Min.	Stock No.	Price Each 1-2
90-15S	15 sec.	1.5 sec.	24F1844	188.32

(2903)

MODEL 722 AND 732 ELECTROMECHANICAL TOTALLY SEALED HOUR METERS

RoHS Compliant Available

REDINGTON® COUNTERS INC.

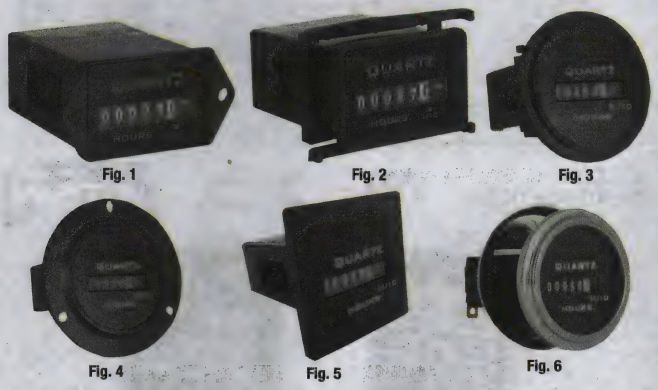


Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6

- Model 722 operating range: 90-240VAC 50/60Hz
- Model 732 operating range: 18-30VDC
- Totally Sealed
- UL/cUL Recognized, CE & RoHS Compliant
- 6 Figure, 99999.9

The Reding Model 722 (AC Hour Meter) no longer requires two separate meters, one for 115VAC and one for 230VAC. The Redington Model 732 (DC Hour Meter) are protected for 2x battery voltage and/or reverse polarity. A quartz time base insures accurate long-term time keeping. Models have a square front panel dimension of 1.90″ [48mm x 48mm]. Three adapter panels are also available for fitting additional panel dimensions.

AC HOUR METERS

Mfg. Part No.	Fig.	Operating Voltage (VAC)	Mounting	Meter Shape	Stock No.	Price Each 1-9
722-0001	1	90-264	2-Hole Panel	Rectangular	78H0980	20.97
722-0002	2	90-264	Flush-Panel	Rectangular	52M1956	20.70
722-0003	3	90-264	Flush-Round	Round	97H1577	20.70
722-0004	4	90-264	3-Hole Panel	Round	97H1578	20.97
722-0030	5	90-264	Flush-Panel with Clip	Square	05N0105	20.96

DC HOUR METERS

Mfg. Part No.	Fig.	Operating Voltage (VDC)	Mounting	Meter Shape	Stock No.	Price Each 1-9
732-0004	1	10-80	2-Hole Panel	Rectangular	88H4282	21.23
732-0001	4	10-80	3-Hole Panel	Round	82H1901	21.23
732-0013	6	10-80	Cup-Panel	Round	05N0106	20.96

➤CONTINUED➤

MODEL 722 AND 732 ELECTROMECHANICAL TOTALLY SEALED HOUR METERS (CONT.)

ACCESSORIES

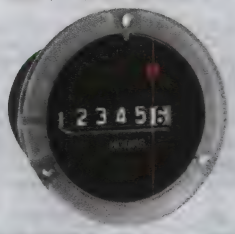
Mfg. Part No.	Description	Stock No.	Price Each 1-24
5003-008	Sealing Gasket for 732-0013, 732-0014, 732-0023, 732-0024	05N0093	2.05
5003-009	Sealing Gasket for 722-0002, 732-0002	05N0094	2.05
5003-010	Sealing Gasket for 722-0001, 732-0004	05N0095	2.05
5003-011	Sealing Gasket for 722-0004, 732-0001	66M8751	2.08

(89428)

710 AC HOURMETERS

RoHS Compliant Available

REDINGTON® COUNTERS INC.



Widely used in panel applications where number size and visibility are critical. Tough Lexan bezel and distinctive styling enhance appearance and durability. 6-digit non-reset, 0.19″ numerals, 6 oz., 3 watt (nominal). 2.84″ diameter bezel. 230, 115 or 24VAC versions. Temperature range: –20°F to +160°F; panel cutout 2.21″ dia., 2.44 to 2.53″ slotted mounting holes. All are 99,999.99 hrs. UL recognized, CSA certified, CE compliant.

NON-RESET

Mfg. Part No.	Voltage (VAC)	Termination	Stock No.	Price Each 1-9	Price Each 10-24
710-0001	115	8″ Leads	90F8434	66.96	63.42
710-0002	115	Terminal Block	48M1312	83.13	78.63

(2771)

HOURMETERS

RoHS Compliant Available

REDINGTON® COUNTERS INC.

711-0130 711-0113 711-0020 711-0150 711-0160 711-0190

7 digit, numerals magnified to 0.14″, 2 oz., 2 watts (nominal AC), 0.4 watts (DC). Temperature range –13°F to +185°F, mounting by retaining clip or 2-screw mounting kit not included, 1.45″ x .87″ panel cutout. ¼″ spade terminals obtainable by removing screws from clamp. All are 99,999.99 hrs. AC models UL recognized, CSA certified, CE compliant. DC models CE compliant only.

AC HOURMETERS

Mfg. Part No.	Voltage Max. (VAC)	Mount	Style	Stock No.	Price Each 1-9
711-0130	115	2-Hole	Rectangular	48M1317	37.72
711-0131	230	2-Hole	Rectangular	48M1318	37.72
711-0113	115	Panel	Rectangular	48M1316	37.72

DC HOURMETERS

731-0040	28	2-Hole	Rectangular	48M1323	35.11

FLUSH MOUNT AC HOURMETER

Flush mount, AC hourmeter, 15″ leads, 2 watts (nominal), 1.98 x0.99″ panel cutout. **711-0019** is 6 figures with bracket retainer for mounting. **711-0020** is 7 figures with snap-in mounting. UL recognized, CSA certified, CE compliant.

711-0020	115	Panel	Rectangular	48M1315	49.17
711-0019	115	Panel	Rectangular	48M1314	128.54

AC ROUND AND SQUARE HOURMETERS

7 digit, 0.14″ numerals, 4 oz, 3 watts (nominal), temperature range –22°F to +158°F; panel cutout 1.99″ dia. or 1.81″ sq; incorporates retaining clip or 3-screw mounting kit included. ¼″ spade terminals obtainable by removing screws from clamp. All are 99,999.99 hrs. UL recognized, CSA certified, CE compliant.

Mfg. Part No.	Voltage Max. (VAC)	Mount	Style	Stock No.	Price Each 1-9
711-0160	115	3-Hole	Round	48M1320	33.17
711-0162	230	3-Hole	Round	48M1321	34.20
711-0150	115	Panel	Round	48M1319	32.76
711-0190	115	Panel	Square	48M1322	36.14

(2772)

MODEL 34 LCD COUNTERS AND HOUR METERS

RoHS Compliant Available

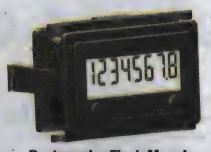
REDINGTON® COUNTERS INC.

Two Hole Mount

Three Hole Mount

Round Flush Mount

- AC or DC voltage input in the same unit
- Hour Meter or Counter versions
- Front face totally sealed from moisture or dirt when used with proper gasket



Rectangular Flush Mount

The Redington Model 34 LCD provides a large, always ON display, with 0.28" [7mm] high characters, in the standard industry size housings (1.45 x 0.95" [36.8 x 24.1mm]). The hour meters and counters are available in 7 different housings. All models are totally sealed. A wide operating voltage, 10-300VDC and 20-300VAC make the Model 34 versatile for all indoor and outdoor applications. All models are NEMA 4/4X, 12, & IP66 rated when used with the optional gasket and have a polarized lens which assures high visibility in an outdoor environment.

LCD COUNTERS

Mfg. Part No.	Mounting Type	No. of Digits	Stock No.	Price Each 1-9
● 3400-0000	Two Hole Mount	8	05N0078	20.44
● 3400-1000	Three Hole Mount	8	05N0079	35.05
LCD HOUR METERS				
● 3410-0000	Two Hole Mount	8	05N0085	33.40
● 3410-1000	Three Hole Mount	8	05N0086	33.40
● 3410-2000	Rectangular Flush Mount	8	05N0087	18.95
● 3410-3000	Round Flush Mount	8	05N0089	18.95

(115440)

ELAPSED TIME METERS

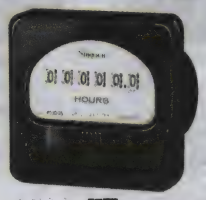
Simpson

1357ET

109ET

55ET

2153ET



57ET

Style 55ET 3.5" size, 120VAC or 240VAC input power. Accuracy synchronous with AC power. **Styles 57ET, 1357ET** and **2153ET** 3.5", 120VAC input power. Accuracy synchronous with AC power. **Style 112ET** 1.5" size, 120VAC input power. Accuracy ≤0.01% /24 hrs. **Style 109ET** 1.5" size, 10-80VDC input power (100-265VAC with optional **style 03619** adapter; *go online or call*). Accuracy ≤0.01% /24 hrs. All styles totalizing, non-resettable.

Mfg. Part No.	Style	Stock No.	Price Each
03580	55ET/120VAC	55F4359	119.47
03600	55ET/240VAC	55F4363	132.78
03590	57ET	55F4361	116.35
03595	1357ET	55F4360	121.49
17720	2153ET	57F2473	113.45
03622 (112ET)	112ET	12C8566	41.28
03618	109ET	46F1399	51.98

(2378)

ELAPSED AND PRESET TIMERS

VEEDER-ROOT

Eagle Signal Controls

A103 series elapsed time indicators and preset timers can be programmed to meet your needs. They display in seconds, minutes, hours, or hours: minutes: seconds. All units use an internal 3-volt single or dual battery. Features include a 7-digit supertwist LCD with .47" (12mm) high digits and green illumination display backlight capability. Accepts input signals from dry contact, PNP, or NPN sensors. Timing start/stop can be initiated by solid-state signals or mechanical switches. Reset on front panel or remotely. Ranges and resolution: seconds, minutes to 1/10, hours to 1/10, hours: minutes: seconds. Connections made at screw terminals. Weight: 2.25 oz. (64 g). Front panel rated NEMA 4/IP65 for use in washdown environments. *Order matching counters, rate indicators, and quick-attach option modules separately; go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each
A103-006	Elapsed Time Indicator	52F1238	105.96
A103-008	Preset Timer	52F1240	246.66

(2848)

VEEDER-ROOT BRAND HOURMETERS

VEEDER-ROOT

Eagle Signal Controls

Round, Rectangular

Series 7795 rugged and reliable electric hourmeters fit 2" diameter round or 0.95 x 1.45" rectangular panel cutouts. 1/10 hour increments with capacity to 99999.9 hours (DC models: 9999.9) and 1% accuracy. Models for 120VAC or 10 to 32VDC operation. Compact, easy to install. Sealed against dirt and moisture and non-resettable. Ideal for use on any equipment to determine usage, maintenance and warranty periods. Temperature range: AC models: –65° to +154°F (–18° to +68°C); DC models: –40° to +185°F (–40° to +85°C).

Mfg. Part No.	Description	Stock No.	Price Each
0779555-216	Round, DC, Spade Terminals	87F1090	207.01
0779565-216	Rectangular, DC, Spade Terminals	87F1091	204.75
0779516-201	Round, AC, Screw Terminals	71C9395	98.29
0779526-201	Round, AC, 7" Leads	27C7866	160.52
0779536-201	Rectangular, AC, Screw Terminals	87F1089	97.03

(2758)

INTERVAL COUNTDOWN TIMERS

RoHS Compliant Available

ARTISAN

4972

4970-2

Series 4970 and 4972 are microcontroller-based interval countdown timers offering a digital display of time. Feature four time base codes; tenths-of-seconds, seconds, minutes and seconds and hours and minutes. UP/DOWN buttons allow for setting the countdown time period. Preset time kept in non-volatile memory. **Mfg. part no. 4970-2** offers SPDT power contacts rated for 20A operating @ 115VAC. *Additional operating voltages available, call or go online.* **Mfg. part no. 4972** features operation of a customer-supplied remote control switch for the start/stop and reset functions and a voltage switch selector of 115VAC or 230VAC with SPST power contacts rated 20A. **Mfg. part no. 4970-2** is UL/cUL approved.

Mfg. Part No.	Output Contacts	Output Current (A)	Operating Voltage	Stock No.	Price Each 1-5	Price Each 6-14
● 4970-2	Relay	20	125VAC	88K2164	199.30	196.11

(2841)

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Affordable, performance board level & box build components at

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(212569)

FUSION™ SERIES COUNT CONTROL MODULES

- Combines high speed counter with micro PLC
- 10 digital and 4 analog inputs
- 7 digital and 2 analog outputs
- Built-in user configurable operator interface
- Modbus RS485 serial communication

The Fusion™ is a high-speed count control module and a logic controller capable of processing up to 100 rungs of ladder logic. Configuration can be done using the input display keys or utilizing the programming software, (available at no charge from www.durant.com). The Fusion™ has three form C and two form A relay output and two NPN transistor outputs. The 6kHz speed counter consists of a 5-digit ratemeter with high/low presets, a main counter with five presets, a totalizer and a batch counter (both pre-settable). The NEMA 4X operator interface can display counter data, alarms, operator prompts and ladder logic information. The display includes 18 pushbuttons for operator input. In addition to the 10 control inputs and three high-speed count inputs, the logic inputs also include: one power up signal, eight analog comparators for use with the four analog inputs, eight real time clock comparators, eight counters and eight timers. UL listed, cUL listed, CE certified.

Mfg. Part No.	Display	No. of Digits	Supply Voltage	Stock No.	Price Each 1-4
57550400		126	10-30VDC	**27K6024**	914.63
57551400		126	85-265VAC	**27K6025**	969.61

(84753)

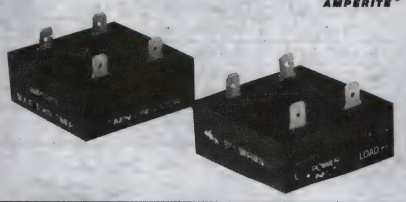
GLASS TUBE TIME-DELAY RELAYS

Standard octal or miniature 9-pin relays. Power consumption is 2.3 watts. Temperature operating range –55°C to +80°C. Contact rating: 3 amps @ 115VAC. Relays listed have a voltage of 115VAC/DC. UL recognized. Other time-delays and voltages are available; *go online or call.* **Mfg. part no. Octal** (chassis mount) and **mfg. part no. 8-Pin SM** (surface mount) sockets are available; *go online or call.* **Mfg. part no. 9-Pin-SM** (chassis mount) and **mfg. part no. 9-Pin PC** (PC mount) sockets are available; *go online or call.*

Mfg. Part No.	Contacts	Delay Time (sec)	Stock No.	Price Each 1-9	10-24	25-49	50-99
115N02	SPST-NO	1 - 2	**28B254**	164.51	158.17	151.20	140.73
115N05	SPST-NO	0.1 - 5	**28B330**	164.51	158.17	151.20	140.73
115N010	SPST-NO	0.1 - 10	**28B208**	149.55	143.79	137.45	127.94
115N015	SPST-NO	1 - 15	**28B229**	164.51	158.17	151.20	140.73
115N020	SPST-NO	1 - 20	**28B264**	164.51	158.17	151.20	140.73
115N030	SPST-NO	0.1 - 30	**28B290**	164.51	158.17	151.20	140.73
115N060	SPST-NO	0.1 - 60	**28B345**	149.55	143.79	137.45	127.94
115N060T	SPST-NO	0.1 - 60	**28B349**	164.51	158.17	151.20	140.73
115N0120	SPST-NO	0.1 - 120	**28B224**	164.51	158.17	151.20	140.73
115C2	SPST-NC	1 - 2	**24F2342**	149.55	143.79	137.45	127.94
115C5	SPST-NC	0.1 - 5	**24F2344**	149.55	143.79	137.45	127.94
115C10	SPST-NC	0.1 - 10	**24F2345**	164.51	158.17	151.20	140.73
115C30	SPST-NC	0.1 - 30	**24F2348**	164.51	157.18	151.20	140.73
115C60	SPST-NC	0.1 - 60	**24F2350**	149.55	143.79	137.45	127.94

(4070)

ST1 SERIES SOLID-STATE DELAY-ON-MAKE TIMERS

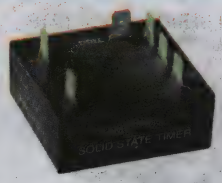


100% solid-state circuitry - no moving parts. SPST contact arrangement. Two terminal series connections to load. Fixed or field adjustable delays from milliseconds to hours. Up to 1A continuous load current. CMOS digital circuitry. Applications include blower motors, compressors, burglar and intrusion alarms, ovens, and cooling fans. UL listed, CSA certified.

Mfg. Part No.	Input Voltage	Delay Secs./Min.	Stock No.	Price Each 1-9	10-24	25-49	50-99
120A.1-10SST1	120VAC	.1-10 Sec.	**93B0651**	31.91	30.47	28.88	26.47
120A1-100SST1	120VAC	1-100 Sec.	**28B910**	31.91	30.47	28.88	26.47
12D.1-10SST1	12VDC	.1-10 Sec.	**28B466**	31.91	30.47	28.88	26.47
24D.1-10SST1	24VDC	.1-10 Sec.	**93B0659**	31.91	30.47	28.88	26.47
12D1-100SST1	12VDC	1-100 Sec.	**28B693**	31.91	30.47	28.88	26.47
24D1-100SST1	24VDC	1-100 Sec.	**28B1295**	31.91	30.47	28.88	26.47

(47176)

STB SERIES SOLID-STATE TRIGGERED DELAY-ON-RELEASE TIMERS



- 100% solid-state circuitry
- CMOS digital timing circuitry
- Fixed- or field- adjustable delays from milliseconds to hours
- 2A continuous load current

Solid-state triggered delay-on-release timers are solid state switching devices with SPST; normally-open series connection. Epoxy-sealed, center mount, black plastic 2 x 2 x ¾" enclosure, 4 or 6¼" quick-connect male terminals. Continuous current rating: 2A. Maximum inrush: 20A. Voltage drop: 2.5Vrms or less @ 2A. Timing: factory-fixed, or adjustable with range from milliseconds to hours. Other voltages and timing and custom voltages also available; *go online or call.*

Mfg. Part No.	Delay (Sec.)	Input Voltage	Stock No.	Price Each 1-9	10-24	25-49	50-99
120A1-100SSTB	1-100	120VAC	**16C1881**	38.84	37.09	35.13	32.20
12D1-100SSTB	1-100	12VDC	**28B692**	38.84	37.09	35.13	32.20
24D.1-10SSTB	0.1-10	24VDC	**16C1883**	38.84	37.09	35.13	32.20
24D1-100SSTB	1-100	24VDC	**98B9254**	38.84	37.09	35.13	32.20

(55271)

C10/CR10 SERIES TIME-DELAY RELAYS

Economical, octal-style plug-in models with solid state analog circuitry have 10 amp DPDT relay output. Models are knob adjustable. **C10 series** are delay-on-operate, white case. **CR10 series** are delay-on-release, black case. Operating range: –45°C to +70°C. Mfg. part no. prefix denotes input voltage. 11-pin spade terminal style available. Other time-delays and voltages available; *go online or call.* UL recognized, CSA certified.

Mfg. Part No.	Delay (Seconds)	Stock No.	Price Each 1-9	10-24	25-49	50-99
C10 SERIES DELAY-ON-OPERATE w/8-PIN BASE						
24AP.1-60C	0.1-60	**93F2721**	63.87	60.98	57.77	52.95
120AP.1-60C	0.1-60	**93F2723**	63.87	60.98	57.77	52.95
12DP.1-60C	0.1-60	**93F2725**	63.87	60.98	57.77	52.95
24DP.1-60C	0.1-60	**93F2727**	63.87	60.98	57.77	52.95
CR10 SERIES DELAY-ON-RELEASE w/11-PIN BASE						
120APR1-120C	1-120	**93F2737**	64.51	61.58	58.35	53.50
12DPR1-120C	1-120	**93F2739**	64.51	61.58	58.35	53.50
24DPR1-120C	1-120	**93F2741**	64.51	61.58	58.35	53.50

(4069)

SWDC SERIES DELAY-ON-MAKE TIMERS

Widely specified for use in power supply sequencing as well as in industrial and process control equipment. Ideally suited for any application where specific operations need be delayed or sustained for precise intervals. Feature 3 standard timing ranges that each covers a 1023:1 span), +/- 1% repeatability and rated 10A at 240VAC (resistive). Relay operating temperature range: -45°C to +70°C. Contact arrangement is DPDT, with 8-pin octal plug-in base. 11-pin spade terminals style available; *go online or call.*

Mfg. Part No.	Input Voltage	Delay (secs.)	Stock No.	Price Each 1-9	10-24	25-49	50-99
12D1-1023SSWDC	12VDC	1-1023	**28B695**	81.91	78.54	76.19	68.14
120A.1-102SSWDC	120VAC	.1-102	**28B826**	61.43	58.65	55.57	50.93
120A1-1023SSWDC	120VAC	1-1023	**28B911**	61.43	58.65	55.57	50.93
12D.1-102SSWDC	12VDC	.1-102	**28B467**	61.43	58.65	55.57	50.93
24D.1-102SSWDC	24VDC	.1-102	**28B1162**	61.43	58.65	55.57	50.93
24D1-1023SSWDC	24VDC	1-1023	**28B1297**	61.43	58.65	55.57	50.93

(47177)

CUSTOM PANEL METERS

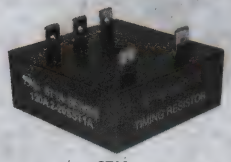
Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

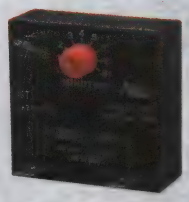
(212570)

ST1A AND SST1 SERIES SOLID-STATE DELAY-ON-MAKE TIMERS

AMPERITE



ST1A



SST1 Adjustable

- 100% solid-state circuitry—no moving parts
- CMOS digital timing circuitry
- SPST-NO contacts
- 2 x 2 x ¾" black plastic epoxy sealed enclosure

Maximum inrush: 20A. Voltage drop: 2.5VRMS or less @ 2A (10A load current available, *go online or call*). Maximum current rating for 110VDC is 2A (heat sink required).

ST1A SERIES TIME-DELAY RELAYS

Mfg. Part No.	Voltage	Delay	Stock No.	Price Each 1-9	10-24	25-49	50-99
120A1-100SST1A	120VAC	1 sec. to 100 sec.	73C0546	32.81	31.32	29.68	27.18
12D.2-20SST1A	12VDC	0.2 sec. to 20 sec.	98H1016	32.81	31.32	29.68	27.18
24D.2-20SST1A	24VDC	0.2 sec. to 20 sec.	98H1019	32.81	31.32	29.68	27.18
120A.2-20SST1A	120VAC	0.2 sec. to 20 sec.	98H1017	32.81	31.32	29.68	27.18
120A1-100MST1A	120VAC	1 to 100 min.	98H1018	32.81	31.32	29.68	27.18
SST1 SERIES ADJUSTABLE TIME-DELAY RELAYS							
SST1-1A288AD01	19-288 VAC/VDC	0.1 to 8 min.	29K8888	20.08	19.74	18.15	16.65

(78743)

DC10 TIME-DELAY RELAYS

AMPERITE

- CMOS digital TDR's have an 8-pin octal base
- Rated 10A@240VAC; 15A @ 30VDC
- Contacts: DPDT
- Dimensions: 2⅝L x 1¾W x 2⅜"
- Temperature range: -45° to +70° C.
- Mfg. part no. prefix denotes input voltage

11-pin spade terminal style available. Other time delays and voltages available; *go online or call*. UL recognized, CSA certified.

DC10 SERIES DELAY-ON-OPERATE w/8-PIN BASE

Mfg. Part No.	Delay (Seconds)	Stock No.	Price Each 1-9	10-24	25-49	50-99
120AP.1-6SDC	0.1-6	95F1618	65.11	62.17	58.89	54.00
120AP1-60SDC	1-60	95F1619	62.01	59.21	56.09	51.43
120AP5-300SDC	5-300	95F1620	65.11	62.17	58.89	54.00
12DP.1-6SDC	0.1-6	95F1621	65.11	62.17	58.89	54.00

SOCKETS

Mfg. Part No.	Pins	Stock No.	Price Each 1-14	15-24	25-49	50-99
8-PIN-SM	8	66F4140	12.17	11.47	11.09	11.01
11-PIN-SM	11	66F6769	14.95	14.28	13.53	12.40

(3986)

438 SERIES UNIVERSAL TIME CAPSULES

RoHS Compliant Available

ARTISAN

Fig. 1

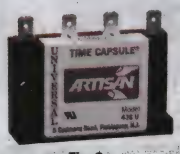


Fig. 2

Fig. 3

438 series "Universal Voltage" in-line solid-state timers for delay-on-make and interval control of load devices such as motors, relays, solenoids up to 1A max. **Mfg. part nos. 438USA, 438USA-4,** and **438U** operate from 19-288VAC/VDC. **Mfg. part no. 438USA-1** operates from 18-50VAC/VDC, **Mfg. part no. 438USA-3** operates from 100-288VAC/VDC, and the **Mfg. part no. 438USA-INT** interval timer operates from 24-240VAC. Operating temperature range: –20°C to +85°C. **Mfg. type no. 438U** is adjustable by putting a resistor across middle two terminals – 10K/second. **Mfg. part nos. 438USA, 438USA-, -3, -4** and **438USA-INT** are DIP switch adjustable. **Mfg. part nos. 438USA, 438U** and **438UP** UL/cUL recognized.

Mfg. Part No.	Fig.	Time Range	Stock No.	Price Each 1-4	5-9
● 438USA	1	1 to 1024 sec	93K7646	50.03	47.44
● 438USA-1	1	0.1 to 102.4 sec	96B3851	47.02	44.58
● 438USA-3	1	0.1 to 102.4 sec	86K9983	44.48	43.29
● 438USA-4	1	2 to 2048 sec	88K1409	41.96	40.84
● 438U	2	1 to 1000 sec	88K2159	48.17	45.68

➤CONTINUED➤

438 SERIES UNIVERSAL TIME CAPSULES (CONT.)

Mfg. Part No.	Fig.	Time Range	Stock No.	Price Each 1-4	5-9
● 438A-115-1	2	0.1 to 30 sec	14M6762	46.33	45.48
● 438-USA-INT	3	1 to 1024 sec	93K7645	60.03	58.43

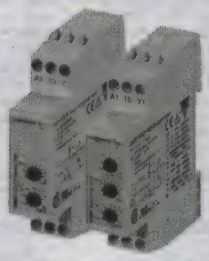
(2887)

MINI DIN RAIL MOUNT TIME-DELAY RELAYS

RoHS Compliant Available

CARLO GAVAZZI

- Compact DIN rail mount housing
- Economically priced
- Universal power supply
- 0.1 seconds to 100 hours



Mini **D-Series** housed in 3H x 0.7W x 2"D housing (except the **DMB71**, which is 1.4W"). Snaps onto DIN rail. Provides an 8A SPDT output (with the exception of the **DMB71**, which provides a 5A DPDT output). All timers (with the exception of the **DBB series**) provide 6-switch selectable timing ranges from 0.1 seconds to 100 hours. Timing functions are listed below. The **DMB series** multifunction timers offer the following switch selectable choice of delays: delay-on-operate, interval, interval with external trigger, double interval, delay on release, and symmetrical recycler. Repeat accuracy: ≤0.2%. UL recognized, CSA certified, CE compliant.

Mfg. Part No.	Timing Function	Supply Voltage	Stock No.	Price Each
● DAA51CM24	On Delay	24-230VAC or 24VDC	05M4078	67.00
● DBB51CM2410S	Off Delay (1 to 10 Seconds)	24-230VAC or 24VDC	89C4336	101.00
● DMB51CM24	Multi-Function	24-230VAC or 24VDC	05M4092	78.00
● DMB51CW24	Multi-Function (12VDC)	24-230VAC or 12VDC	05M4093	93.00
DCB51CM24	Asymmetrical Recycler	24-230VAC or 24VDC	89C4354	142.00
DMB71DW24	Multi-Function	12-240VAC/DC	26K5686	135.00

(60577)

MULTI-FUNCTION AND MULTI-RANGE TIMERS

RoHS Compliant Available

CARLO GAVAZZI

- Universal 24-240VAC/DC Supply Voltage
- 100mS to 100 hour range, split into several sub-ranges
- Each timer has multiple switch selectable delay functions
- 8A SPDT output
- For DIN-rail or 11-pin socket mounting

DIN Rail

Plug-In

8A output. Universal power supply: 24VDC and 24-240VAC (DBB, PBB and all DPDT types can be powered by 24-240VAC/DC). Two LED indicators: output on and supply voltage applied. Multi-function models have 7 timing modes: delay-on-operate (on-delay), delay-on-release (off-delay), 3 interval modes and 2 symmetrical (repeat cycle) modes. The asymmertical model (repeat cycle) has two separately adjustable timed outputs, one for on-time and one for off-time. Except where noted, timing range is 0.1 sec to 100 hrs. Dimensions in inches: DIN rail models: 3.6H x 0.9W x 3.7D; Plug-In models: 3.2H x 1.4W x 3.7D. Repeat accuracy: ≥0.2%. UL recognized, CSA certified, CE compliant.

Mfg. Part No.	Function	Mounting	Contacts	Stock No.	Price Each
● DAA01CM24	On-Delay	DIN Rail	SPDT	05M4076	79.00
● DAA01DM24	On-Delay	DIN Rail	DPDT	05M4077	101.00
● DBB01CM24	True Off-Delay	DIN Rail	SPDT	05M4079	118.00
● DBB01DM24	True Off-Delay	DIN Rail	DPDT	05M4080	135.00
● DCB01DM24	Asymmertrical	DIN Rail	DPDT	05M4083	184.00
● DMB01DM24	Asymmertrical	DIN Rail	DPDT	05M4091	122.00
● PAA01DM24	On-Delay	11-Pin Plug-In	DPDT	05M4247	101.00
● PCB01DM24	Asymmertrical	11-Pin Plug-In	DPDT	93C3438	184.00
● PMB01DM24	Multi-Function	11-Pin Plug-In	DPDT	05M4256	122.00

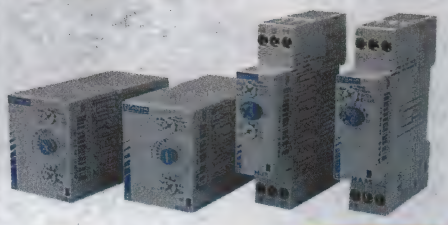
(90586)

CHRONOS II TIMERS

RoHS Compliant Available

CROUZET AUTOMATION

- Multi-function or mono-function
- Multi-range (7 ranges, available options)
- SPDT relay output: 10A - 250V, or DPDT (Octal Plug-In Style)
- Screw or spring terminals (17.5 and 22.5 mm)
- LED status indicator
- 3-wire sensor control option



8- and 11-pin plug-in models are 35 x 35 x 79mm. 22.5mm DIN rail models are 22.5 x 78 x 99mm. All Chronos II timers rated at 10A@250VAC. Time range is selectable from 0.1 seconds to 100 hours.

➤CONTINUED➤

CHRONOS II TIMERS (CONT.)

22.5mm DIN MOUNT

Mfg. Part No.	Supply Voltage	Function	Contacts	Current Rating (A)	Stock No.	Price Each 1-14
88 865 115	24VDC, 24-240VAC	On-Delay	SPDT	10	**17M8533**	81.51
88 865 215	24VDC, 24-240VAC	On-Delay	DPDT	10	**91B6332**	102.38
88865155	24VDC, 24-240VAC	Repeat Cycle	SPDT	10	**17M8551**	122.81
88865265	24VDC, 24-240VAC	True Off-Delay	DPDT	10	**17M8552**	201.20
8-PIN OCTAL PLUG-IN						
88 867 135	24VDC, 24-240VAC	Delay-On-Break	SPDT	10	**17M8537**	105.79
88867215	24VDC, 24-240VAC	Multifunction	DPDT	10	**17M8553**	92.61
88 867 105	24VDC, 24-240VAC	Multifunction	SPDT	10	**17M8536**	101.82
88 867 100	12VAC/DC	Multifunction	SPDT	10	**91B6339**	85.83
88867801	24VDC, 24-240VAC	Off-On Repeat Cycle	SPDT	8	**28C6621**	132.36
88867155	24VDC, 24-240VAC	Multifunction	SPDT	10	**68K9127**	96.51
11-PIN OCTAL PLUG-IN						
88867435	24VDC, 24-240VAC	Multifunction	DPDT	10	**90B2436**	77.67
88 867 415	24VDC, 24-240VAC	Multifunction	DPDT	10	**17M8540**	122.16
88 867 305	24VDC, 24-240VAC	Multifunction	DPDT	10	**17M8539**	142.29
88 867 455	24VDC, 24-240VAC	Asymmetrical Recycling	DPDT	10	**17M8541**	131.79

(52485)

MODULAR TIMERS

NEW

RoHS Compliant Available

finder

Mfg. Part No.	Description	Stock No.	Price Each 1-4
80.01.0.240.0000	0.1 - 24	**08X7283**	64.91
80.11.0.240.0000	0.1 - 24	**08X7284**	51.61
80.41.0.240.0000	0.1 - 24	**08X7285**	52.16
80.61.0.240.0000	0.05 - 3	**08X7286**	96.07
80.91.0.240.0000	0.1 - 24	**08X7287**	81.50
81.01.0.230.0000	0.1 - 10	**08X7288**	86.92
83.01.0.240.0000	0.05 - 240	**08X7289**	66.17
83.02.0.240.0000	0.05 - 240	**08X7290**	102.85
83.11.0.240.0000	0.05 - 240	**08X7291**	54.51
83.41.0.240.0000	0.05 - 240	**08X7292**	51.94
83.91.0.240.0000	0.05 - 240	**08X7293**	83.35
85.02.0.012.0000	0.05 - 100	**08X7294**	55.33
85.02.0.024.0000	0.05 - 100	**08X7295**	55.33
85.02.0.125.0000	0.05 - 100	**08X7296**	55.33
85.02.8.240.0000	0.05 - 100	**08X7297**	52.72
85.03.0.125.0000	0.05 - 100	**08X7298**	52.72
85.04.0.024.0000	0.05 - 100	**08X7299**	52.72
85.04.0.125.0000	0.05 - 100	**08X7300**	55.33
86.00.0.240.0000	0.05 - 100	**08X7301**	58.27
86.30.0.024.0000	0.05 - 100	**08X7302**	29.43
86.30.8.120.0000	0.05 - 100	**08X7303**	31.89
88.02.0.230.0002	0.05 - 100	**08X7304**	85.97
88.12.0.230.0002	0.05 - 100	**08X7305**	90.23

(211879)

TIME RANGER™ PROGRAMMABLE TIME-DELAY RELAYS

RoHS Compliant Available

MACROMATIC

UL LISTED with Appropriate Macromatic Socket

Single Time

Dual Time

- 16 timing ranges in a single time-delay relay
- User selects desired range by setting a rotary switch, no math required or DIP switches to set
- Adjust within selected range using potentiometer
- Covers 0.1S-2H (0.6S-24H on TR-631, TR-651 and TR-661 and 0.05S-30M on TR-606
- Repeat cycle and delayed interval units have independently selectable and adjustable ON and OFF times

Output: DPDT 10A resistive 240VAC/28VDC, 1/2hp @ 240VAC. Repeat accuracy: ±0.1%. Temperature: –28° to 65°C (–20° to 150°F). Power required: 3VA. Dimensions: 3.5″ H x 1.7″ D x 2.4″ W. *Order 8-pin and 11-pin sockets separately on page 1932.*

➤CONTINUED➤

TIME RANGER™ PROGRAMMABLE TIME-DELAY RELAYS (CONT.)

ON-DELAY (8-Pin)
Upon application of input voltage, a preset time begins. At the end of the preset time, the relay contacts transfer. Input voltage must be removed and reapplied to reset the time delay relay.

Mfg. Part No.	Control Voltage	Socket	Stock No.	Price Each 1-14	15-24	25-49
TR-60222	120VAC/DC	70169-D	**04M6606**	71.12	67.79	65.37
TR-60221	240VAC	70169-D	**28B4847**	94.76	90.33	87.11
TR-60228	24VAC/DC	70169-D	**04M6608**	71.86	68.49	66.05
TR-60226	12VAC/DC	70169-D	**04M6607**	71.86	68.49	66.05

INTERVAL-ON (8-Pin)
Upon application of input voltage, the relay contacts transfer and a preset time begins. At the end of the preset time, the contacts return to their normal condition. Input voltage must be removed and reapplied to reset the time delay relay.

TR-60522	120VAC/DC	70169-D	**04M6609**	71.84	68.47	66.03
TR-60528	24VAC/DC	70169-D	**04M6610**	71.84	68.47	66.03

OFF-DELAY (11-Pin)
Input voltage must first be applied. Upon closure of the control switch, the relay contacts transfer and hold. Upon opening of the control switch, a preset time begins. At the end of the preset time, the relay contacts will return to their normal condition. Any application of the control switch will reset the time. The time delay relay is reset by closing the control switch.

TR-61622	120VAC/DC	70170-D	**04M6614**	80.63	76.86	74.11
TR-61628	24VAC/DC	70170-D	**04M6615**	78.33	74.66	71.99
TR-61621	240VAC	70170-D	**28B4859**	101.12	96.39	92.95

OFF-DELAY – POWERED TRIGGER (11-Pin)
Action. Same as **616 series.**

TR-61922	120VAC/DC	70170-D	**04M6617**	83.86	79.93	77.08
TR-61928	24VAC/DC	70170-D	**04M6618**	84.75	80.78	77.89

MOMENTARY INTERVAL – SINGLE SHOT (11-Pin)
Input voltage must first be applied. Upon closure of the control switch, the relay contacts transfer and the preset time begins. During the time-out, the trigger input is ignored. The time delay relay is reset by applying the trigger when the relay is not energized.

TR-61522	120VAC/DC	70170-D	**04M6611**	78.96	75.26	72.57
TR-61528	24VAC/DC	70170-D	**04M6613**	79.79	76.06	73.34

WATCHDOG – POWER TRIGGER (11-Pin)
Input voltage must first be applied. Upon closure of the control switch, the relay contacts transfer and the preset time begins. At the end of the preset time, the relay contacts return to their normal condition unless the control switch is opened and closed before the preset time elapses. Continuous cycling of the trigger at a rate faster than the preset time will cause the relay contacts to remain closed.

TR-61822	120VAC/DC	70170-D	**04M6616**	85.64	81.64	78.73
TR-61828	24VAC/DC	70170-D	**48F5939**	85.64	81.64	78.73

TRUE OFF DELAY (8-Pin)
Upon application of input voltage, the relay is energized. When the input voltage is removed, the preset time begins. At the end of the preset time, the relay is de-energized. No external trigger switch is required.

TR-60622	120 VAC/VDC	70169-D	**01N5003**	119.02	113.44	109.39
TR-60628	24 VAC/VDC	70169-D	**01N5004**	117.49	111.99	107.99

REPEAT CYCLE -OFF FIRST (8-Pin)
Upon application of input voltage, OFF time begins. When the OFF time is completed, the ON time begins. The sequence repeats until the input voltage is removed. The OFF time and ON time are independently adjustable.

TR-63122	120VAC/DC	70169-D	**04M6619**	98.09	93.50	90.18
TR-63128	24VAC/DC	70169-D	**04M6620**	98.09	93.50	90.18

REPEAT CYCLE-ON FIRST (8-Pin)
Upon application of input voltage, ON time begins. When the ON time is completed, the OFF time begins. The sequence repeats until the input voltage is removed. The ON time and OFF time are independently adjustable.

TR-65122	120VAC/DC	70169-D	**04M6621**	98.09	93.50	90.18
TR-65128	24VAC/DC	70169-D	**04M6622**	97.06	92.52	89.22

DELAYED INTERVAL (8-Pin)
Upon application of input voltage, OFF time begins. When the OFF time is completed, the ON time begins. When ON time is completed, sequence stops. Input voltage must be removed and reapplied to initiate action again. The ON time and OFF time are independently adjustable.

TR-66122	120VAC/DC	70169-D	**04M6623**	98.09	93.50	90.16

(47371)

DIGITAL-SET PROGRAMMABLE TIME-DELAY RELAYS

RoHS Compliant Available

MACROMATIC

UL LISTED with Appropriate Macromatic Socket

- TD-781 series has 10 functions in one unit: On Delay, Interval, Off Delay, Single Shot, Flasher (On 1st) On Delay/ Off Delay, Single Shot Trailing Edge, Watchdog and Triggered On Delay
- The TD-702 Series is an On Delay only
- Pushbutton thumbwheels for digitally setting time range and function
- 0.05 second to 999 hour timing range

Output: DPDT 10A @ 240VAC/28VDC. Repeat accuracy: ±1%. Temperature range: -28° to 65°C. Dimensions in inches: 3.0″ H x 1.7″ D x 2.4″ W. UL listed when used with manufacturer's socket. Order separately *on page 1932.*

Mfg. Part No.	Control Voltage	Function	Terminal Type	Socket	Stock No.	Price Each 1-14	15-24
TD-78122	120VAC/VDC	5 Functions	11 Pin Octal	70170-D	**30M2626**	112.03	105.69
TD-78128	24VAC/DC	5 Functions	11 Pin Octal	70170-D	**30M8002**	111.05	104.76

➤CONTINUED➤

DIGITAL-SET PROGRAMMABLE TIME-DELAY RELAYS (CONT.)

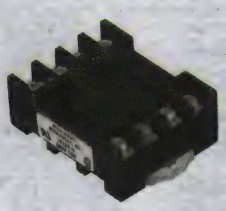
Mfg. Part No.	Control Voltage	Function	Terminal Type	Socket	Stock No.	Price Each 1-14	Price Each 15-24
● TD-70222	120VAC/VDC	On-delay	8 Pin Octal	70169-D	43K4120	88.09	83.10
● TD-70228	24VAC/VDC	On-delay	8 Pin Octal	70169-D	43K4121	88.79	83.77

(78683)

SOCKETS

RoHS Compliant Available

MACROMATIC



8-Pin

11-Pin

Units are made for use with all Macromatic plug-in products. Sockets feature pressure wire clamps and can be either DIN track or direct panel-mounted. UL recognized, CSA certified.

Mfg. Part No.	Termination	Operating Voltage (V)	Stock No.	Price Each 1-14	Price Each 15-24	Price Each 25-49
● 70169-D	8-Pin Octal	600	04M6767	8.44	8.08	7.72
● 70170-D	11-Pin Octal	300	04M6768	14.64	14.02	13.39

SOCKET ACCESSORY

Mfg. Part No.	Description	For Use With	Stock No.	Price Each 1-14	Price Each 15-24
● 70166	Hold-down spring	All sockets	11J2112	6.14	5.92

(4088)

COMPACT TIME-DELAY RELAYS

RoHS Compliant Available

MACROMATIC

UL LISTED with Appropriate Macromatic Socket

Compact, economical design. Timing is adjustable with low-profile knob. Output: 5A resistive @ 120VAC/28VDC, ⅙ hp @ 120VAC. Repeatable accuracy: ±2%. Temperature: 0°C to +60°C (32°F to +140°F) Power required: 2.5VA. Dimensions: 2.4″H x 1.4″D x 1.4″W. UL listed when used with **mfg. part no. 70169-D** sockets. Order separately *on this page.*

ON-DELAY PLUG-IN

Mfg. Part No.	Control Voltage	Timing Range (sec.)	Stock No.	Price Each 1-14	Price Each 15-24	Price Each 25-49
● SS-6262-06	120VAC	0.5-15	29M7944	42.36	39.96	37.77
● SS-6262-08	120VAC	2-60	29M7945	42.36	39.96	37.77
● SS-6266-06	12VAC/DC	0.5-15	29M7946	54.25	51.18	48.36
● SS-6268-06	24VAC/DC	0.5-15	29M7948	42.36	39.96	37.77
OFF-DELAY PLUG-IN						
● SS-8562-06	120VAC	0.5-15	29M7949	52.87	49.87	47.13
● SS-8568-06	24VAC/DC	0.5-15	29M7951	53.43	50.40	47.63

(4105)

MULTI-FUNCTION TIME DELAY RELAYS

RoHS Compliant Available

MACROMATIC

Fig. 1

Fig. 2

Fig. 3

- Digital or Analog Set
- 50ms to 100 Hours programmable timing range
- Universal 24-240V AC/DC input voltage
- Panel, track or surface mounting
- ⅙ DIN style case (comes with panel-mounting adapter)

Output: DPDT 3A at 240VAC/DC, Temperature: -28°C to +65°C. Dimensions in (mm): 1.9″x2.4″x2.9″ (48x60x74).

➤CONTINUED➤

MULTI-FUNCTION TIME DELAY RELAYS (CONT.)

Mfg. Part No.	Fig.	Function	Socket	Stock No.	Price Each 1-14	Price Each 15-24
● TAA1U	1	On Delay, Delayed Interval/Pulse, On Delay-Timed & Instantaneous, Flasher (OFF 1st), Flasher (ON 1st) & Interval On-Timed & Instantaneous	SR6P-M08G	46P3262	57.10	54.39
● TAA2U	2	On Delay-Triggered, Off Delay, On/Off Delay, Flasher (OFF 1st)-Triggered, Flasher (ON 1st)-Triggered & Watchdog	SR6P-M11G	46P3263	61.55	58.63
● TAD1U	3	10 field-selectable functions	SR6P-M08G	09P2412	100.78	96.02

(142119)

MAGNECRAFT UNIVERSAL INPUT MULTIFUNCTION TIME DELAY RELAYS

RoHS Compliant Available

Schneider Electric

821 and 822 Relays:

- Universal voltage input: 12-240VAC/DC
- Multifunction
- 15A at 240VAC; 1/2HP at 120VAC; 1HP at 240VAC
- Timing range: 0.1s to 10days
- Dimensions: 2.6″H x 0.7″W x 3.5″L
- DIN rail mountable
- UL recognized file no. E234203, CE compliant

TDRPRO Relays:

- Universal voltage input: 12-240VAC/DC
- Multifunction
- 12A at 240VAC; 1/3HP at 120VAC; 1/2HP at 240VAC
- Timing range: 0.1s to 9990hrs
- Dimensions: 1.9″H x 1.9″W x 3″L
- UL recognized file no. E43641, CSA certified
- Mates with socket mfg. part no.: 8-pin (70-464-1, 70-750L8-1); 11-pin (70-465-1, 70-750DL11-1)

822 Relay

TDRPRO Relay

820 SERIES MODULAR DIN MOUNT RELAYS

Mfg. Part No.	Contacts	Load Current (A)	Pins	No. of Functions	Stock No.	Price Each 1-9
● 821TD10H-UNI	SPDT	15	DIN-mount	10	10M6579	62.19
● 822TD10H-UNI	DPDT	15	DIN-mount	10	99K5587	52.02
TDRPRO OCTAL PLUG-IN TIME DELAY RELAYS						
● TDRPRO-5100	DPDT	12	11	10	93K5594	109.70
● TDRPRO-5101	SPDT	12	8	10	93K5595	123.91
● TDRPRO-5102	DPDT	12	8	3	93K5596	163.51

(88936)

MAGNECRAFT PLUG-IN TIME-DELAY RELAYS

RoHS Compliant Available

Schneider Electric

TDRSOX/SRX Relays:

- Dual function
- Octal or square base
- Removable knob prevents tampering
- Dual LEDs
- Timing range: 0.1s to 10hrs
- Dimensions: 2.73″H x 1.4″W x 1.73″L
- UL recognized file no. E43641, CE compliant

TDR782 Relays:

- Single function
- Miniature size
- Dual LEDs
- Timing range: 0.1s to 100hrs
- Dimensions: 1″L x 0.8″W x 2.44″H
- UL recognized file no. E191122, CSA certified and CE compliant

TDRS Relay Square Base

TDRS Relay Octal Base

TDR782 Relay

8-PIN SQUARE BASE — ON DELAY/ INTERVAL

Mfg. Part No.	Contacts	Load Current (A)	Input Voltage	Mating Socket	Stock No.	Price Each 1-9	Price Each 10-24
● TDRSOXB-12V	DPDT	12	12VAC	70-463-1	10M6236	83.71	71.55
● TDRSOXB-24V	DPDT	12	24VAC		10M6237	83.71	71.55
● TDRSOXB-120V	DPDT	12	120VAC		69H7949	56.66	48.43
10-PIN SQUARE BASE — OFF DELAY/ RETRIGGERABLE ONE SHOT							
● TDRSRXB-12V	DPDT	12	12VAC	70-463-1	10M6242	88.21	75.40
● TDRSRXB-24V	DPDT	12	24VAC		10M6244	85.64	73.20
● TDRSRXB-120V	DPDT	12	120VAC		10M6243	69.87	59.72

➤CONTINUED➤

MAGNECRAFT PLUG-IN TIME-DELAY RELAYS (CONT.)

Mfg. Part No.	Contacts	Load Current (A)	Input Voltage	Mating Socket	Stock No.	Price Each 1-9	Price Each 10-24
8-PIN OCTAL BASE — ON DELAY/ INTERVAL							
TDRSOXP-12V	DPDT	12	12VAC	70-464-1 70-750DL8-1 70-750E8-1	10M6239	68.30	58.37
TDRSOXP-24V	DPDT	12	24VAC		10M6240	56.66	48.43
TDRSOXP-120V	DPDT	12	120VAC		69H7951	46.36	39.62
11-PIN OCTAL BASE — OFF DELAY/ RETRIGGERABLE ONE SHOT							
TDRSRXP-12V	DPDT	12	12VAC	70-464-1 70-750DL11-1 70-750E11-1	10M6246	68.50	58.55
TDRSRXP-24V	DPDT	12	24VAC		10M6248	69.87	59.72
TDRSRXP-120V	DPDT	12	120VAC		10M6247	57.96	49.54
14-PIN SQUARE BASE — ON DELAY							
TDR782XBXA-12D	DPDT	5	12VDC	70-782D8-1 70-782EL8-1	35M3510	31.90	28.52
TDR782XBXA-110A	DPDT	5	110VAC		35M3509	47.12	42.12
8-PIN SQUARE BASE — ON DELAY/ INTERVAL							
TDR782XDXA-12D	4PDT	3	12VDC	70-782E14-1 70-782EL14-1	35M3515	48.10	43.00
TDR782XDXA-24D	4PDT	3	24VDC		35M3518	49.54	44.29
TDR782XDXA-24A	4PDT	3	24VAC		35M3517	48.10	43.00
TDR782XDXA-110A	4PDT	3	110VAC		35M3514	49.54	44.29
TDR782XDXA-230A	4PDT	3	230VAC		35M3516	49.58	44.32

DIN/PANEL MOUNT SOCKETS
SQUARE BASE

Mfg. Part No.	Description	Stock No.	Price Each 1-24	Price Each 25-49
70-463-1	11-pin, screw terminals	10M6440	5.78	5.58
70-782EL8-1	8-pin, logic style, elevator terminals, finger-safe	69K5579	6.26	6.04
70-782E14-1	14-pin, elevator terminals, finger-safe	30M2640	9.58	9.26
70-782EL14-1	14-pin, logic style, elevator terminals, finger-safe	69K5578	7.34	7.09
OCTAL BASE				
70-464-1	8-pin, screw terminals	10M6441	3.57	3.45
70-465-1	11-pin, screw terminals	10M6442	4.66	4.50
70-750DL8-1	8-pin, logic style, finger-safe	19M0188	7.88	7.61
70-750DL11-1	11-pin, logic style, finger-safe	29M8622	10.61	10.24
70-750E8-1	8-pin, elevator terminals, finger-safe	72J4086	5.48	5.29
70-750E11-1	11-pin, elevator terminals, finger-safe	72J4085	6.50	6.28

(90589)

SOCKETS AND ACCESSORIES FOR TIMERS, COUNTERS, AND TOTALIZERS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

Sockets and hold-down clips listed are for time-delay relays listed *on this page*.

Mfg. Part No.	Description	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99	Price Each 100-249
PYF08A-E	Track Mounting Socket w/Front Templates for **H3YN-2 series**	36K2031	5.60	5.29	5.04	4.87
PYF08A-N	Track Mounting Socket w/Front Templates for **H3YN-2 series**	89C7783	5.49	5.18	4.93	4.77
PYF14A-E	Track Mounting Socket w/Front Terminals for **H3YN-4 series**	52F3770	8.19	7.74	7.36	7.11
PY14	Connecting Socket w/Solder Terminals for **H3YN-4 series**	35K3221	2.11	1.99	1.87	1.77

Brackets and sockets for timers and counters listed below.

Mfg. Part No.	Description	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99	Price Each 100-249
Y92F-30	Panel Mount Bracket for 1/16 DIN Timers and Counters	88K2030	11.68	11.13	10.63	10.14
PF085A	8-pin Track or Surface Mount Socket w/ Top Terminals	88K1970	12.96	12.17	11.68	10.94
P3G-08	8-pin Back Mount Socket w/ Bottom Terminals	88K1975	20.22	18.98	18.21	17.06
P3GA-11	11-pin Back Mount Socket w/ Bottom Terminals	88K1976	22.70	21.30	20.45	19.17

(3038)

DIN RAIL MULTI-RANGE / MULTI-MODE SOLID-STATE TIMERS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- A wide AC/DC power supply range (24 to 240 VAC/DC)
- All sub-series include models with 12-VDC power supply
- UL, CSA, and CCC certification and EN 61812-1 compliance, CE Marking
- EMC (EN 61812-1) compliance for application in heavy industrial, residential, commercial, or light industrial environments
- Finger-safe terminal block and captive screws according to EN 50274

CONTINUED

DIN RAIL MULTI-RANGE / MULTI-MODE SOLID-STATE TIMERS (CONT.)

	Eight-Mode	Four-Mode
Operating Modes	A: ON Delay B: Flicker OFF start B2: Flicker ON start C: Signal ON/OFF Delay D: Signal OFF Delay E: Interval G: Signal ON/OFF Delay J: One-shot Output	A: ON Delay B2: Flicker ON start E: Interval J: One-shot Output

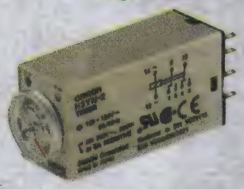
Mfg. Part No.	Time Range	Type	Control Output	Stock No.	Price Each
H3DK-M1 AC/DC24-240	0.1sec to 1200hr	Eight-Mode	SPDT	41T0088	75.76
H3DK-M2 AC/DC24-240	0.1sec to 1200hr	Eight-Mode	DPDT	41T0089	87.60
H3DK-S1 AC/DC24-240	0.1sec to 1200hr	Four-Mode	SPDT	41T0090	69.10
H3DK-S2 AC/DC24-240	0.1sec to 1200hr	Four-Mode	DPDT	41T0091	81.67

(195472)

MINIATURE SOLID-STATE TIME-DELAY RELAYS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY



H3YN series miniature solid-state time-delay relays combine 4 switch-selectable operation modes and time ranges into a single compact unit. Selectable operation modes include ON-delay, interval, or repeat cycle (ON-start or OFF-start). Choose long-range or short-range versions, each with 4 switch-selectable sub-ranges to meet your application requirements and improve accuracy (1% FS max.). Analog set dial lets users fine-tune timing for their specific applications. Dimensions: 1.10H x 0.85W x 2.50"D (28 x 21.5x 63). Requires mounting socket, *ordered separately*. UL recognized, CSA certified and CE compliant. Other supply voltages and DC models are available; *go online or call.*

Mfg. Part No.	Supply Voltage (VAC)	Range	Output Configuration	Stock No.	Price Each 1-9	Price Each 10-24
H3YN-2 AC100-120	100-120	Short: 0.1 sec. to 10 min.	DPDT (5A @ 250VAC)	88K1949	72.37	67.40
H3YN-4 AC100-120	100-120		4PDT (3A @ 250VAC)	88K1109	73.43	68.38
H3YN21AC100120	100-120	Long: 0.1 min. to 10 hr.	DPDT (5A @ 250VAC)	18M7367	73.07	68.04

(3037)

P&B 10A OUTPUT TIME-DELAY RELAYS

RoHS Compliant Available

TE connectivity

Authorized Distributor

CL-41, CU-41
Plain Case

CL-42, CU-42
Bracket Mount Case

CL-51, CU-51
Plain Case w/Knob

CB, CD, CG, CH, CK

CR

- Contacts rated 10A
- Contact configuration: DPDT
- Power consumption: 3VA (AC relays), 3W (DC relays)
- 8-pin and 11-pin mounting configurations available

Dimensions: 2.937H x 1.781L x 2.406"W for **CB**, **CD**, **CG**, **CH** and **CK** models; 2.937H x 1.781L x 2.406"W for **CR** model; 2.156H x 1.531L x 1.406"W for **CU** and **CL** models. UL recognized, CSA certified.

CMOS IC TIME-DELAY RELAY, FIXED OR KNOB ADJUSTABLE

Mfg. Part No.	Input Voltage	Operation	Mtg.	Time Delay	Stock No.	Price Each 1-24
CB-1047D-20	12VDC	Delay-On-Make	8-pin	0.1-10 sec.	90F1212	156.96
CB-1038D-38	24VDC	Delay-On-Break	11-pin	0.1-10 sec.	90F1190	162.45
CB-1039D-38	24VDC	Delay-On-Break	11-pin	1.8-180 sec.	90F1191	167.63
CB-1046B-38	24VAC	Delay-On-Break	11-pin	1.8-180 sec.	90F1211	152.02
CB-1028D-30	24VDC	Delay-On-Make	8-pin	0.1-10 sec.	44F1134	162.52
CB-1042B-30	24VAC	Delay-On-Make	8-pin	1.8-180 sec.	90F1193	148.20
CB-1001B-70	120VAC	Delay-On-Make	8-pin	0.1-1 sec.	44F1128	148.20
CB-1011B-79	120VAC	Interval	8-pin	0.1-5 sec.	90F1198	167.63

CONTINUED

P&B 10A OUTPUT TIME-DELAY RELAYS (CONT.)

Mfg. Part No.	Input Voltage	Operation	Mtg.	Time Delay	Stock No.	Price Each 1-24
CB-1003B-70	120VAC	Delay-On-Make	8-pin	0.1-10 sec.	44F1130	152.02
CB-1021B-78	120VAC	Delay-On-Break	11-pin	0.1-10 sec.	44F1136	162.45
CB-1022B-78	120VAC	Delay-On-Break	8-pin	0.1-10 sec.	44F1137	159.66
CB-1002B-70	120VAC	Delay-On-Make	8-pin	0.1-5 sec.	44F1129	131.81
CB-1004B-70	120VAC	Delay-On-Make	8-pin	0.6-60 sec.	44F1131	162.86
CB-1023B-78	120VAC	Delay-On-Break	11-pin	0.6-60 sec.	44F1138	171.63
CB-1006B-70	120VAC	Delay-On-Make	8-pin	0.1-10 min.	44F1133	164.85
CB-1007B-70	120VAC	Delay-On-Make	8-pin	10-100 min.	90F1195	165.70
CB-1005B-70	120VAC	Delay-On-Make	8-pin	1.8-180 sec.	44F1132	173.98
CB-1024B-78	120VAC	Delay-On-Break	11-pin	1.8-180 sec.	44F1139	131.81
CHD-38-30001	24VDC	Delay-On-Make	8-pin	1-10 sec.	24F2885	165.04
CHD-38-30003	24VDC	Delay-On-Make	8-pin	1-180 sec.	24F2886	170.41
CHD-38-30021	24VDC	Interval	8-pin	1-10 sec.	67F1175	195.01
CHB-38-30001	24VAC	Delay-On-Make	8-pin	1-10 sec.	24F2881	189.23
CHB-38-30003	24VAC	Delay-On-Make	8-pin	1-180 sec.	24F2882	175.09
CHA-38-70001	120VAC	Delay-On-Make	8-pin	10 sec.	67F1138	181.71
CHB-38-70013	120VAC	Delay-On-Break	11-pin	1-180 sec.	24F2888	237.92
CHB-38-70001	120VAC	Delay-On-Make	8-pin	1-10 sec.	24F2883	171.40
CHB-38-70011	120VAC	Delay-On-Break	11-pin	1-10 sec.	24F2887	186.08
CHB-38-70003	120VAC	Delay-On-Make	8-pin	1-180 sec.	24F2884	183.01
CHB-38-70002	120VAC	Delay-On-Make	8-pin	1-60 sec.	67F1159	204.68
CHB-38-80001	240VAC	Delay-On-Make	8-pin	1-10 sec.	67F1160	189.23
CHB-38-70021	120VAC	Interval	8-pin	1-10 sec.	67F1172	209.56
CHB-38-70022	120VAC	Interval	8-pin	1-60 sec.	67F1173	189.23
CHB-38-70023	120VAC	Interval	8-pin	1-180 sec.	67F1174	189.23
CMOS IC TIME-DELAY RELAY, FIXED, KNOB, OR RESISTOR ADJUSTABLE, 1% REPEATABILITY						
CDD-38-30003	24VDC	Delay-On-Make	8-pin	0.1-10 sec.	24F1878	552.13
CDD-38-30014	24VDC	Delay-On-Break	11-pin	0.1-10 sec.	67F1167	355.26
CDD-38-30004	24VDC	Delay-On-Make	8-pin	0.6-60 sec.	24F1879	364.93
CDD-38-30012	24VDC	Delay-On-Break	8-pin	0.6-60 sec.	24F1888	326.48
CDD-38-30008	24VDC	Delay-On-Break	8-pin	1.8-180 sec.	67F1168	301.36
CDB-38-70001	120VAC	Delay-On-Make	8-pin	0.1-1 sec.	67F1156	364.93
CDB-38-70003	120VAC	Delay-On-Make	8-pin	0.1-10 sec.	24F1875	334.99
CDB-38-70014	120VAC	Delay-On-Break	11-pin	0.3-30 sec.	67F1164	328.61
CDB-38-70002	120VAC	Delay-On-Make	8-pin	0.1-5 sec.	67F1157	328.61
CDB-38-70006	120VAC	Delay-On-Make	8-pin	0.3-30 sec.	33F1664	326.48
CDB-38-70004	120VAC	Delay-On-Make	8-pin	0.6-60 sec.	24F1876	334.99
CDB-38-70012	120VAC	Delay-On-Make	8-pin	0.6-60 sec.	24F1887	301.36
CDB-38-70005	120VAC	Delay-On-Make	8-pin	1.8-180 sec.	24F1877	369.26
CDB-38-70015	120VAC	Delay-On-Break	8-pin	1.8-180 sec.	67F1165	330.48
CDB-38-70016	120VAC	Delay-On-Break	11-pin	0.1-1 sec.	95F9220	326.48
CDB-38-70091	120VAC	Delay-On-Break	11-pin	0.1-5 sec.	95F9223	326.48
CMOS IC TIME-DELAY RELAY, KNOB ADJUSTABLE, .05% REPEATABILITY						
CGB-38-78010M*	120VAC	Delay-On-Make	11-pin	1-10 min.	95F9222	321.33
CGB-38-70010M	120VAC	Delay-On-Make	8-Pin	10-100 min.	94B8815	442.40
CGB-38-70050M	120VAC	Delay-On-Make	8-pin	5-50 min.	33F1598	330.69
CMOS IC TIME-DELAY RELAY, KNOB OR RESISTOR ADJUSTABLE						
CKD-38-20010	12VDC	Delay-On-Make	8-pin	0.1-10 sec.	67F1161	183.76
CKB-38-77010	120VAC	Delay-On-Break	8-pin	0.1-10 sec.	70B8786	223.58
CKF-38-70010	120VAC	Delay-On-Make	11-pin	0.1-10 sec.	24F3361	201.89
CKB-38-70010	120VAC	Delay-On-Make	8-pin	0.1-10 sec.	24F3364	177.24
CKB-38-78010	120VAC	Delay-On-Break	11-pin	1-10 sec.	24F3260	188.54
CKF-38-78010	120VAC	Delay-On-Break	11-pin	0.1-10 sec.	66F3430	184.12
CKB-38-77060	120VAC	Delay-On-Break	8-pin	0.6-60 sec.	95F9232	244.99
CKB-38-70060	120VAC	Delay-On-Make	8-pin	0.6-60 sec.	67F1158	183.76
● CKB-38-70180	120VAC	Delay-On-Release	8-pin	1.8s - 180s	77B2870	204.68
CKB-38-70120	120VAC	Delay-On-Make	8-pin	1.2-120 sec.	24F3365	192.72
COMPACT TIME-DELAY RELAY, FIXED, KNOB, OR RESISTOR ADJUSTABLE, NO TIMING CYCLE INTERRUPT						
CLH-41-30010	24VDC	Delay-On-Make	11-pin	0.1-10 sec.	24F3358	169.78
CLB-51-30010	24VAC	Delay-On-Make	8-pin	0.1-10 sec.	24F3354	149.47
CLF-41-70010	120VAC	Delay-On-Make	11-pin	0.1-10 sec.	24F3357	139.55
CLB-51-70030	120VAC	Delay-On-Make	8-pin	0.3-30 sec.	77B2871	122.04
CLB-51-70010	120VAC	Delay-On-Make	8-pin	0.1-10 sec.	24F3355	183.14
CLB-51-70120	120VAC	Delay-On-Make	8-pin	1.2-120 sec.	24F3356	174.44
● CLH-45-30010	24VDC	Delay-On-Operate	8-pin	0.1s - 10s	08H1264	159.33
CLF-42-70010	120VAC	Delay-On-Make	**Q.C.	0.1-10 sec.	67F1142	161.64
CUH-41-30010	24VDC	Delay-On-Make	11-pin	1-10 sec.	24F2939	159.25
CUH-42-30010	24VDC	Delay-On-Make	**Q.C.	1-10 sec.	24F2944	184.85
CUH-41-30120	24VDC	Delay-On-Make	11-pin	1-120 sec.	24F2940	181.78
CUA-41-70001	120VAC	Delay-On-Make	8-pin	1 sec.	67F1137	141.17
CUA-41-70005	120VAC	Delay-On-Make	8-pin	5 sec.	33F1665	163.42
CUB-51-70010	120VAC	Delay-On-Make	8-pin	1-10 sec.	24F3350	142.49

➤CONTINUED➤

P&B 10A OUTPUT TIME-DELAY RELAYS (CONT.)

Mfg. Part No.	Input Voltage	Operation	Mtg.	Time Delay	Stock No.	Price Each 1-24
COMPACT TIME-DELAY RELAY, FIXED, KNOB, OR RESISTOR ADJUSTABLE, NO TIMING CYCLE INTERRUPT						
CUB-51-70120	120VAC	Delay-On-Make	8-pin	1-120 sec.	24F3351	138.01
CUF-41-70010	120VAC	Delay-On-Make	11-pin	1-10 sec.	24F2937	169.83
CUF-42-70010	120VAC	Delay-On-Make	11-pin	1-10 sec.	24F2942	150.85
CUF-41-70120	120VAC	Delay-On-Make	11-pin	1-120 sec.	24F2938	176.06
CUF-42-70120	120VAC	Delay-On-Make	11-pin	1-120 sec.	24F2943	184.85
CUF-41-70030	120VAC	Delay-On-Make	11-pin	1-30 sec.	67F1143	163.42
CUB-51-70060	120VAC	Delay-On-Make	**Q.C.	1-60 sec.	77B2875	212.83
CUA-41-70003	120VAC	Delay-On-Make	**Q.C.	3 sec.	95F9231	156.46
CUA-41-70010	120VAC	Delay-On-Make	**Q.C.	10 sec.	24F2927	285.37
CUA-41-71034	...	Delay-On-Make	...	...	91B3143	174.88
CUA-41-70010	120VAC	Delay-On-Make	...	10 sec.	24F2927	285.37
RECYCLE TIME-DELAY RELAY, INTERVAL ON AND OFF TIME ADJUSTMENT KNOBS						
CRD-48-30180	24VDC	Repeat Cycle	8-pin	1.8-180 sec.	67F1171	402.48
CRB-48-70010	120VAC	Interval	8-pin	0.1-10 sec.	33F1668	387.82
CRB-48-70060	120VAC	Repeat Cycle	8-pin	0.6-60 sec.	77B2872	366.28

SOCKETS

Mfg. Part No.	For Use With Series Relays	No. of Pin/ Blades	Terminal Type and Mounting	Hold-Down Spring	Stock No.	Price Each
● 27E122	CB, CD, CG, CH, CK, CN1, CNS, CR, CS	8	Screw	...	57F3431	5.80
● 27E123	CB, CD, CG, CH, CK, CNM5, CNS, CNT	11	Screw	...	57F3432	6.74
● 27E891	CB, CD, CG, CH, CK, CN1, CNS, CR, CS	8	Screw, DIN Rail Snap-Mount	...	46F3587	5.39
● 27E892	CB, CD, CG, CH, CK, CNM5, CNS, CNT	11	Screw, DIN Rail Snap-Mount	...	46F3588	8.85
● 27E043	CL-41, CL-44, CL-51, CU-51, CU-41, CU-44	11	Screw, Solder	20C228 20C254	57F3424	2.09
● 27E046	CL-41, CL-44, CL-51, CU-51, CU-41, CU-44	11	PC Board	20C228 20C254	57F3425	2.47
● 27E067	CL-41, CL-44, CL-51, CU-51, CU-41, CU-44	11	QC & Solder	20C228 20C254	57F3427	3.80
● 27E121	CL-41, CL-44, CL-51, CU-51, CU-41, CU-44	11	Screw	20C314	57F3430	8.12
● 27E396	CL-41, CL-44, CL-51, CU-51, CU-41, CU-44	11	QC & Solder	20C254	57F3466	3.66
● 27E893	CL-41, CL-44, CL-51, CU-51, CU-41, CU-44	11	Screw, DIN Rail Snap-Mount	20C318	46F3616	9.66

(2924)

AGASTAT INDUSTRIAL ELECTROPNEUMATIC TIMING RELAYS

TE connectivity

Authorized Distributor

- Available in On-delay, true Off-delay and On/Off-delay
- Timing from 0.1 s to 60 min., fully calibrated in linear increments
- Operating voltages: 6 to 550VAC and 12 to 550VDC with special voltages available
- Available in 2-pole or 4-pole models
- Many enclosure options: explosion proof, dust tight, watertight, hermetically-sealed, NEMA 1
- Mounting options: surface mount, panel mount, octal plug-in mounting
- Options and accessories: quick-connect terminals, dial stops and transient protection module
- Front terminals: easy-to-reach screw terminals

Initiate, delay, sequence and program equipment actions over wide range of applications. **7000 series** dielectric withstands 1500Vrms 60Hz between terminals and ground. Normal mounting in vertical position, from back of panel. A front mounting bracket is also supplied with each basic unit. Standard screw terminals (8-32 truss head screws supplied) located on front of unit, with permanent schematic markings. Barrier isolation accommodates spade or ring tongue terminals. Seismic and radiation tested E700 models available; *go online or call.* UL listed, CSA certified, CE compliant.

DPDT, ON-DELAY, 120V 60Hz, 110V 50Hz

Mfg. Part No.	Timing Range	Stock No.	Price Each 1-4	5-9	10+
7012AB	0.5 to 5 sec.	57F1550	391.96	328.55	305.40
7012AK	1 to 300 sec.	28F1929	357.33	328.55	305.40
7012AD	5.0 to 50 sec.	57F1551	395.34	331.41	308.04
7012AE	20 to 200 sec.	57F1583	399.80	328.55	305.40
7012AF	1 to 10 min.	57F1585	322.11	317.22	307.89
7012AH	3 to 30 min.	57F1552	526.96	497.89	487.73
DPDT, OFF-DELAY, 120V 60Hz, 110V 50Hz					
7022AB	0.5 to 5 sec.	57F1556	391.96	328.55	305.40
7022AK	1 to 300 sec.	28F1931	343.37	328.55	305.40
7022AC	1.5 to 15 sec.	57F1582	399.86	328.55	305.40
7022AD	5.0 to 50 sec.	57F1557	403.26	331.41	308.04
7022AF	1 to 10 min.	57F1586	322.11	317.22	307.89

➤CONTINUED➤

AGASTAT INDUSTRIAL ELECTROPNEUMATIC TIMING RELAYS (CONT.)

DPDT, OFF-DELAY, 120V 60Hz, 110V 50Hz

Mfg. Part No.	Timing Range	Stock No.	Price Each 1-4	5-9	10+
7022AH	3 to 30 min.	57F1558	392.78	374.81	348.40
7022BK	1 to 300 sec.	28F1932	368.53	328.19	317.96
DPDT, ON-DELAY, 125VDC					
7012PB	0.5 to 5 sec.	50F3837	433.62	349.28	333.40
7012PK	1 to 300 sec.	50F3840	393.53	355.43	339.27
7012PF	1 to 10 min.	50F3615	419.80	381.12	369.90

(2706)

P&B 10A ON-DELAY TIME-DELAY RELAY

RoHS Compliant Available

TE connectivity

Authorized Distributor

- DPDT contacts
- Plug-in or panel mount
- 0.1 sec to 9,990 hr. timing range
- Thumbwheel switches for programming delay time
- 1/16 DIN enclosure

Fixed input type (120VAC ±15%). Rated 10A @ 30VDC/277VAC resistive. UL recognized E22575, CSA certified LR15734. Dimensions: 2.83L x 1.88W x 1.88"H (71.90 x 47.80 x 47.80mm).

RELAY

Mfg. Part No.	Nominal Voltage	Power Consumption	Stock No.	Price Each 1-4	5-9	10+
CN1	120VAC	3VA@120VAC	93F1050	186.70	171.14	157.97

8-PIN OCTAL SOCKETS

Mfg. Part No.	Mounting	Dimensions (in)	Stock No.	Price Each 1-9	10-24	25-49
27E122	Screw Terminal	2.385 x 1.572 x .925	57F3431	5.80	5.10	4.68
27E891	Screw Terminal, DIN mount	2.010 x 1.575 x .970	46F3587	5.39	4.91	4.88

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
24A110	DIN rail style extruded aluminum mounting rack 36" (914mm) long with holes on 6.0" (152.4mm) centers. Holes accept #8 screws.	46F3617	11.97

(2710)

P&B 10A MULTIFUNCTION TIME-DELAY RELAY

RoHS Compliant Available

TE connectivity

Authorized Distributor

DPDT multifunction time-delay relay for plug-in or panel mounting. Five timing functions selectable via rotary switch. 0.1 sec. to 9,990 hr. timing range. Fixed input type (120VAC ±15%). Rated 10A @ 30VDC/277VAC resistive. 1/16 DIN style enclosure with 11-pin octal plug-in base. Thumbwheel switches for programming delay time. Outline dimensions in inches (mm): 2.83 (71.9)L x 1.88(47.8)H x 1.88(47.8)W. Use **SSA-24C667** mounting clip to secure relay in panel-mount applications. UL recognized E22575, CSA certified LR15734.

RELAY

Mfg. Part No.	Nominal Voltage	Power Consumption	Stock No.	Price Each 1-4	5-9	10+
CNM5	120VAC	3VA @ 120VAC	93F1051	136.51	126.01	117.01

11-PIN OCTAL SOCKETS

Mfg. Part No.	Dimensions (in)	Mounting	Stock No	Price Each 1-9	10-24	25-49
27E123	2.322 x 2.385 x .925	Screw	57F3432	6.74	5.64	5.17
27E892	2.035 x 2.332 x .970	Screw, DIN Mount	46F3588	8.85	8.05	7.38

(2711)

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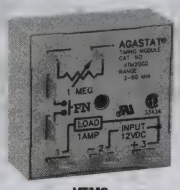
(196525)

AGASTAT INDUSTRIAL GRADE SOLID-STATE MINIATURE TIMING MODULES

TE connectivity

Authorized Distributor

VTM1



VTM2

Designed for demanding industrial applications. Repeat accuracy ±1% at constant temperature. 100,000,000 operations at rated load. **VTM1/VTMA1** time-delay operation begins when operating voltage is applied. At the end of the preset time-delay, the output relay (load) is energized until operating voltage is removed. To reset, remove operating voltage. Operation for **VTM2** off-delay models: operating voltage is applied continuously. The output relay (load) is energized when a normally-open control switch is closed (the load remains energized as long as the switch is closed). When the control switch is reopened, time delay begins. If the control state is reversed during time-delay period, the delay generating circuit automatically resets to zero. Dimensions: 2.00" x 2.00" x 1.25". UL recognized, CSA certified, CE compliant.

Mfg. Part No.	Time Range (sec.)	Voltage	Timing Function	Stock No.	Price Each 1-4	5-9
VTM1ACD	0.5-10	120VAC/VDC	On-Delay	98F9870	84.23	81.65
VTM1EDD	3-60	24VAC/VDC	On-Delay	95F9876	110.09	105.67
VTMA1ADA	3-60	120VAC/VDC	On-Delay with Integral Potentiometer	27C8651	114.77	110.15
VTM2ADD	3-60	120VAC	Off-Delay	95F9878	78.49	75.34
VTM2ECD	0.5-10	24VAC/VDC	Off-Delay	95F9881	71.63	68.75

(4009)

AGASTAT UNIVERSAL ON-DELAY TIMING MODULES

TE connectivity

Authorized Distributor

- On-delay operating mode
- Timing from 1 to 1000 seconds
- 1A solid-state SPNO output
- Quick-connect 1/4" terminals
- Universal voltage: 24 to 240VAC/DC or 12VDC available
- Rated to 10 million operations
- ±2% repeat accuracy
- Operating temperature: -22°F to +150°F (-30°C to +65°C)

Simple, encapsulated units, remarkably small in size and highly reliable. In-line timing module is wired in series with load circuit. Time delay is initiated when power is applied to the series network. Connecting a resistor across the center terminals provide tamper-proof setting of time delay from 1-1000 secs. UL recognized, CSA certified.

Mfg. Part No.	Description	Operating Voltage	Stock No.	Price Each 1-4	5-9	10-24
VTM-1	1-1000 Secs	24-240VAC/VDC	27C3921	206.16	188.57	171.98

(32879)

AGASTAT INDUSTRIAL DISCRETE SOLID-STATE TIMING RELAYS

TE connectivity

Authorized Distributor

SSC series is knob adjustable and features excellent transient immunity. Repeat accuracy is better than ±1%. Power consumption: 3W. Output: DPDT relay, 10A resistive, 28VDC/120VAC; 1/3 HP, 120/240VAC. Operating voltage: 120V 50/60Hz or 120VDC. Electrical life: 100,000 operations minimum at rated resistance load. UL recognized, CE compliant.

ON-DELAY, 10 AMP 8-PIN

Mfg. Part No.	Timing Range	Stock No.	Price Each 1-4
SSC12AAA	0.1 to 3 sec.	50F3841	134.25
SSC12ALA	0.33 to 10 min.	50F3843	112.44

(2708)

MILLENIUM 3 SMART PROGRAMMABLE LOGIC CONTROLLERS

CROUZET AUTOMATION

CD12

CD20

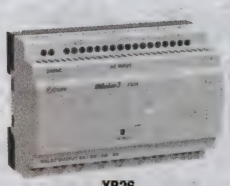
CB12

CD120

XD10

XD26

XB10


XB26

CD12RBT Smart

- Allow the use of the entire library of specific functions blocs of the software workshop
- Analog inputs 0-10 VDC, Potentiometer, NTC, LDR (0-20 mA/Pt100 with converters)
- Extended temperature range: -20°C to +70°C (units w/display); -30°C to +70°C (units w/o display)

XD26RBT Smart

XN07

Units with display feature highly visible blue LCD with 4 lines of 18 characters and configurable backlighting. Units without display are efficient and economical without display keys or keys setting. XB and XD expandable versions are Open to XN network communication extensions, digital I/O, analog Pt100 extensions.

CD12 SMART COMPACT RANGE CONTROLLERS — WITH DISPLAY

Mfg. Part No.	No. of Inputs	Available Analog	No. of Outputs	Output Type	Supply Voltage	Stock No.	Price Each
88974041	8	4	4	Relay	24VDC	75R7541	238.27
88974042	8	4	4	SSR*	24VDC	75R7542	222.57
88974044	8	...	4	Relay	24VAC	64R1068	213.92
88974045	8	4	4	Relay	12VDC	64R1069	242.36
88974046	8	4	4	SSR*	12VDC	90R9616	199.01
CD20 SMART COMPACT RANGE CONTROLLERS — WITH DISPLAY							
88974051	12	6	8	Relay	24VDC	64R1070	355.29
88974052	12	6	8	SSR**	24VDC	75R7543	350.39
88974054	12	...	8	Relay	24VAC	75R7544	316.54
88974055	12	6	8	Relay	12VDC	64R1072	364.02
CB12 SMART COMPACT RANGE CONTROLLERS — WITHOUT DISPLAY							
88974021	8	4	4	Relay	24VDC	75R7537	186.90
88974023	8	...	4	Relay	240VAC	75R7538	164.56
88974024	8	...	4	Relay	24VAC	75R7539	167.67
CB20 SMART COMPACT RANGE CONTROLLERS — WITHOUT DISPLAY							
88974031	12	6	8	Relay	24VDC	64R1065	305.82
88974033	12	...	8	Relay	240VAC	64R1066	267.40
88974034	12	...	8	Relay	24VAC	75R7540	269.54
XD10 SMART EXPANDABLE RANGE CONTROLLERS — WITH DISPLAY							
88974141	6	4	4	Relay	24VDC	64R1073	248.15
88974142	6	4	4	SSR*	24VDC	75R7545	252.04
88974143	6	...	4	Relay	240VAC	64R1074	219.40
88974144	6	...	4	Relay	24VAC	75R7546	224.86
XD26 SMART EXPANDABLE RANGE CONTROLLERS — WITH DISPLAY							
88974161	16	6	10	Relay	24VDC	64R1075	402.73
88974162	16	6	10	SSR**	24VDC	75R7549	422.85
88974164	16	...	10	Relay	24VAC	64R1077	360.43
88974165	16	6	10	Relay	12VDC	64R1078	414.53
XB10 SMART EXPANDABLE RANGE CONTROLLERS — WITHOUT DISPLAY							
88974131	6	4	4	Relay	24VDC	61T7139	217.42
88974132	6	4	4	SSR*	24VDC	61T7140	221.15

➤ CONTINUED ➤

MILLENIUM 3 SMART PROGRAMMABLE LOGIC CONTROLLERS (CONT.)

XB10 SMART EXPANDABLE RANGE CONTROLLERS — WITHOUT DISPLAY

Mfg. Part No.	No. of Inputs	Available Analog	No. of Outputs	Output Type	Supply Voltage	Stock No.	Price Each
88974133	6	...	4	Relay	240VAC	61T7141	199.99
88974134	6	...	4	Relay	24VAC	61T7142	203.72
XB26 SMART EXPANDABLE RANGE CONTROLLERS — WITHOUT DISPLAY							
88974151	16	6	10	Relay	24VDC	61T7143	351.09
88974152	16	6	10	SSR**	24VDC	75R7547	356.71
88974153	16	...	10	Relay	240VAC	61T7144	305.59
88974154	16	...	10	Relay	24VAC	61T7145	309.54
88974155	16	6	10	Relay	12VDC	75R7548	355.71

*Including 1 PWM; ** Including 4 PWM

STARTER KITS

Compact range starter kits include 1 Smart Millenium 3 (CD12 or 20), 1 USB link cable : PC to Millenium 3 and 1 interactive CD ROM including the software workshop, application library and technical brochures, the library of specific functions. Expandable range starter kits include 1 expandable Millenium 3 (XD26), 1 USB link cable : PC to Millenium 3 and 1 interactive CD ROM including the software workshop, application library and technical brochures, 1 CD-ROM including the library of specific functions. Relay outputs include eight 8A relays and two 5A relays.

COMPACT RANGE STARTER KITS — KIT 12

Mfg. Part No.	No. of Inputs	Available Analog	No. of Outputs	Output Type	Supply Voltage	Stock No.	Price Each
88974080	8	4	4	Relay	24VDC	61T7135	316.11
88974081	8	...	4	Relay	240VAC	61T7136	327.13
COMPACT RANGE STARTER KITS — KIT 20							
88974082	12	6	8	Relay	24VDC	61T7137	352.93
88974083	12	...	8	Relay	240VAC	61T7138	366.59
EXPANDABLE RANGE STARTER KITS — KIT 26							
88974084	16	6	10	Relay	24VDC	58T0564	373.54
88974085	16	...	10	Relay	240VAC	52T7257	390.20

SMART RANGE PROGRAMMABLE LOGIC CONTROLLERS WITH REMOVABLE TERMINAL BLOCKS

Designed for industrial, commercial, medical and paramedical machines. Improves the machine availability rate thanks to a fast maintenance process. Easier for cabling, allows pre-cabling of the installation. Simplifies the panel mounting. Suitable for applications subject to vibration and for mobile applications thanks to the spring cage connectors. Compatible with standard 5.08mm pitch spring cage or screw connectors (angled or straight). Features identical to the Millenium 3 Smart range, compatible with any extensions and accessories.

CD12RBT SMART COMMPACT RANGE CONTROLLERS WITH DISPLAY AND REMOVABLE TERMINAL BLOCK

Mfg. Part No.	No. of Inputs	Available Analog	No. of Outputs	Output Type	Supply Voltage	Stock No.	Price Each
88974441	8	4	4	Relay	24VDC	27W8918	226.28
XD26RBT SMART EXPANDABLE CONTROLLERS WITH DISPLAY AND REMOVABLE TERMINAL BLOCK							
88974561	16	6	10	Relay	24VDC	27W8919	295.96

XN07 SANDWICH COMMUNICATION EXTENSION

Mfg. Part No.	Description	Stock No.	Price Each 1-9
88974250	6-word Exchange Unit Communication Extension via the 24VDC Controller	75R7550	217.41

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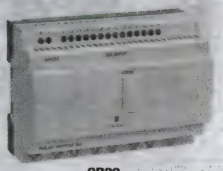
MILLENIUM 3 + PROGRAMMABLE LOGIC CONTROLLERS

RoHS Compliant Available

CROUZET AUTOMATION

CB12


CB20

XD10

- Expandable up to 50 I/O
- 10 bit analog inputs on DC powered models
- Large back-lit display - 4 lines by 18 characters
- Ethernet communication - modbus TCP/IP expansion module
- RS485 modbus communication expansion module
- Fully user programmable display and buttons
- Program via function block or ladder logic
- Analog output expansion available
- Single point modbus communication via programming port
- Real time clock calendar standard on all controllers
- Available unit voltages; 12VDC, 24VDC, 24VAC, 100-240VAC

CD20

CD series standard 12 I/O and 20 I/O controllers display and buttons. Program up to 250 blocks relay, transistor or PWM outputs. Relay outputs: 8A @ 250VAC. Transistor outputs: 650mA @ 28.8VDC. Single point modbus communication. **XD series** expandable 10 I/O and 26 I/O controllers expand up to 50 I/O display and buttons. Program up to 500 blocks relay, transistor or PWM outputs. Communications expansion modules. Analog output expansion modules.

Mfg. Part No.	Inputs/Outputs	Available Analog	Controller Type	Supply Voltage	Stock No.	Price Each 1-5
● 88970041	8/4Relay	4	CD12	24VDC	86K0457	203.04
● 88970045	8/4Relay	4	CD12	12VDC	86K0461	213.22

➤ CONTINUED ➤

MILLENIUM 3 + PROGRAMMABLE LOGIC CONTROLLERS (CONT.)

Mfg. Part No.	Inputs/Outputs	Available Analog	Controller Type	Supply Voltage	Stock No.	Price Each 1-5
88970051	12/8Relay	6	CD20	24VDC	86K0462	298.55
88970055	12/8Relay	6	CD20	12VDC	86K0466	320.16
XD SERIES EXPANDABLE CONTROLLERS						
88970141	6/4Relay	6	XD10	24VDC	86K0481	217.60
88970161	16/10Relay	6	XD26	24VDC	86K0485	345.80
88970162	16/10Solid State Relay	...	XD26	24VDC	86K0486	357.07
88974163	16/10Relay	...	XD26	100-240VAC	64R1076	356.36
88970165	16/10Relay	6	XD26	12VDC	86K0489	379.31

CD SERIES STANDARD CONTROLLERS

XR14 SERIES

Mfg. Part No.	Inputs/Outputs	Supply Voltage	Stock No.	Price Each 1-5
88970231	8/6Relay	24VDC	86K0498	148.76

XA04 SERIES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
88970241	ANALOG EXP MODULE	86K0502	245.11

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
88970108	EEPROM Memory Module	86K0476	57.00
88970109	USB Programming Cable	86K0477	121.48
88970111	Multilingual programming software containing specific library functions (CD-ROM)	76M8857	36.14
88950302	Power supply 60W, 2.5A	12P8847	163.60
88950304	Power supply 15W, 0.6A	64R1032	114.03
88970317	Removable Connector Kit	55W2144	66.74
88970492	MTP6/50 user kit (fixing brackets, MTP-M3 cable), 4.3", USB-MiniUSB cable, Direct connection M3-MTPModbus RS232/RS485 serial port	55W2145	774.64
88970494	MTP8/50 user kit (fixing brackets, MTP-M3 cable), 4.3", Ethernet RJ45 crossover cable, Direct connection M3-MTPModbus RS232/RS485 serial port, Ethernet TCP/IP port	55W2146	963.99
88970496	MTP8/70 user kit (MTP8/70, fixing brackets, MTP-M3 cable), 7", USB-MiniUSB cable or Ethernet RJ45 crossover cable, Direct connection M3-MTP2 Modbus RS232/RS485 serial ports, Ethernet port	55W2147	1463.20
88970501	MTP6/50-MTP8/70 programming kit - USB-MiniUSB connection (EB /helpfile CD, USB-MiniUSB cable)	55W2148	73.94
88970502	MTP8/50-MTP8/70 programming kit - Ethernet crossover connection (EB/helpfile CD, RJ45 crossover cable)	55W2149	73.94
88970503	Modbus cable for MTP8/70	60W2074	76.61
88970504	MTP 8/70 MODBUS Cable	60W2075	76.61

(72468)

ELCs, (EATON LOGIC CONTROLLERS), SOFTWARE AND ACCESSORIES

RoHS Compliant Available

EATON

ELCs

Graphic Display Panel

- Directly mounts on DIN rail
- Scalable I/O - from 10 to 256 I/O
- 240 instruction sets
- Modbus RTU and ASCII standard, Profibus and Devicenet modules available
- Removable terminal strips

At 1" wide, the ELC is one of the smallest PLC's available on the market today. Ideal for smaller applications of 40 I/O or less, but can be expanded up to 256 I/O. Expansion modules snap easily together, allowing for expansion without the use of rack. PC and PA controllers include a built-in numeric display for user-assigned process monitoring, error codes, display counts and more. PC controller includes two potentiometers. Analog and AC/DC digital I/O modules available. Capable of 1, 4, 8, 16 and 32 bit instructions, block compare, block move communications, interrupts, retentive memory, up to 512 counters and timers, PID and floating point. The programming software is available as an evaluation copy as a free download on the website. A 1 hour training guide is also available as a free download on the website.

ELC CONTROLLERS

Mfg. Part No.	Inputs	Outputs	Stock No.	Price Each 1-4
ELC-PB14NNDT-1	8 DC	6 Transistor	27K6014	241.02
ELC-PC12NNAR-1*	8 AC Voltage	4 Relay	27K6015	321.01
ELC-PC12NNDT-1*	8 DC	4 Transistor	27K6017	321.01
ELC-PA10AADT-7*	4 DC, 2 Analog	2 Transistor, 2 Analog	58M0201	570.14

* Include built-in clock/calendar

DIGITAL I/O EXPANSION MODULES

ELC-EX08NNAN	8 AC Voltage	...	27K5998	111.02
ELC-EX08NNDN	8 DC	...	84R8119	104.58

CONTINUED

ELCs, (EATON LOGIC CONTROLLERS), SOFTWARE AND ACCESSORIES (CONT.)

DIGITAL I/O EXPANSION MODULES

Mfg. Part No.	Inputs	Outputs	Stock No.	Price Each 1-4
ELC-EX08NNNR	...	8 Relay	27K6002	145.79
ELC-EX08NNNT-1	...	8 Transistor	27K6003	150.13
ELC-EX08NNDR	4 DC	4 Relay	84R8114	153.60
ELC-EX08NNDT-1	4 DC	4 Transistor	27K6001	140.90
ELC-EX16NNDT-1	8 DC	8 Transistor	27K6005	168.61
ELC-EX06NNNI-2	...	6 High-Current Relay	61M2000	192.99

ANALOG I/O MODULES

ELC-AN04ANNN-3	4 Analog, 14-Bit	...	27K5993	306.02
ELC-AN06AANN-3	4 Analog, 12-Bit	2 Analog, 12-Bit	60M2925	365.62
ELC-PT04ANNN-1†	4 PT 100Ω Platinum	...	27K6020	363.75

† 14-Bit resolution

GRAPHICS PANELS

Mfg. Part No.	Pixel Format	No. of Functions	Stock No.	Price 1-4
ELC-GP04-03	128 x 64	10	60M2897	380.26

COMMUNICATION MODULES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
ELC-CODNET	Device Net Communication Module	34K0502	413.32
ELC-COPBDP	Profibus Communication Module	34K0503	583.94
ELC-CAPBDP	PROFIBUS-DP slave adapter	41T0232	575.38
ELC-COENETM	Ethernet Module	41T0235	512.37

ACCESSORIES

ELCSOFT	Programming Software ELC Controllers	27K6022	327.02
ELCSOFTGP	Programming Software GP Units	27K6023	338.36
ELC-PS01-1	24-Watt, 1-Amp Power Supply	27K6018	92.08
ELC-PS02-2	48-Watt, 2-Amp Power Supply	27K6019	131.21
ELC-HHP-1	Hand-Held Programmer	27K6009	450.37
ELC-CBPCELC3-1	Cable-Connect a PC or GP Unit to ELC	27K5996	60.22
ELC-CBPCGP3-1	Cable-Connect PC to GP Unit	27K5997	56.81

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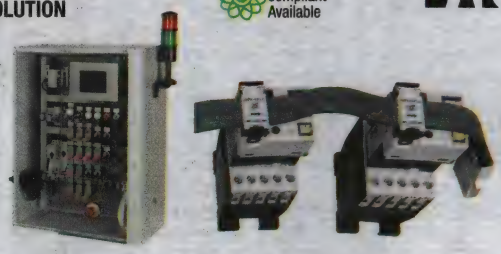
SMARTWIRE-DT PANEL WIRING SOLUTION

RoHS Compliant Available

EATON



GATEWAY MODULES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
EU5C-SWD-EIP-MODTCP	Ethernet Gateway Connection to EtherNet/IP or Modbus TCP Automatic baud rate detection 10/100 Mbps Address set with DIP switch or DHCP Two RJ45 sockets Connection of up to 99 SMARTWIRE-DT nodes	17W5654	303.51
EU5C-SWD-DP	PROFIBUS-DP Gateway Automatic baud rate detection from 9.6 Kbps to 12 Mbps Address range 1–1269-pole SUB-D socket Connection of up to 58 SmartWire-DT modes	17W5653	303.51
EU5C-SWD-CAN	CANopen Gateway Automatic baud rate detection from 10 Kbps to 1 Mbps Address range 1–32 9-pole SUB-D socket Connection of up to 99 SMARTWIRE-DT modes	17W5652	272.65
PROGRAMMABLE RELAYS			
EASY802-DC-SWD	Control relay withSMARTWIRE-DT, voltage rating:24VDC; current rating:500mA	48W4816	424.45
EASY806-DC-SWD	Control relay with SMARTWIRE-DT, 4 input; voltage rating: 24VDC; current rating:100mA	48W4817	525.91
POWERFEED MODULES			
EU5C-SWD-PF1-1	Powerfeed module 1 (for 24 Vdc auxiliary power)	17W5655	126.83
EU5C-SWD-PF2-1	Powerfeed module 2 (for 24 Vdc auxiliary power and 15 Vdc network power)	17W5656	160.65
DIGITAL I/O MODULES			
EU5E-SWD-8DX	Digital module with 8 digital inputs 24 Vdc	17W5664	97.74
EU5E-SWD-4DX	Digital module with 4 digital inputs 24 Vdc three-wire connections	17W5660	97.74
EU5E-SWD-X8D	Digital module with 8 digital outputs 24 Vdc 10.5A	17W5657	103.60

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SMARTWIRE-DT PANEL WIRING SOLUTION (CONT.)

DIGITAL I/O MODULES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● EU5E-SWD-4D4D	Digital module with 4 digital inputs 24 Vdc and 4 transistor outputs 24 Vdc/0.5A	17W5662	97.74
● EU5E-SWD-4D2R	Digital module with 4 digital inputs 24 Vdc and 2 relay outputs 250 Vac	17W5661	97.74
ANALOG I/O MODULES			
● EU5E-SWD-4AX	Analog module with 4 analog inputs 0–10V or 0–20 mA	17W5659	164.62
● EU5E-SWD-2A2A	Analog module with 2 analog inputs 0–10V or 0–20 mA and 2 analog outputs 0–10V or 0–20 mA	17W5658	195.48
● EU5E-SWD-4PT	RTD module with 4 temperature inputs PT100, PT1000 or Ni1000	17W5663	210.92
CONTACTOR MODULES			
● DIL-SWD-32-001	Two digital inputs for voltage-free contacts. One electrical interlock for the surface mounting of reversing combinations. Messages: Switch status contactor, status of the digital inputs 1 and 2. Commands: Contactor actuation.	17W5650	39.09
● DIL-SWD-32-002	Two digital inputs for voltage-free contacts. One electrical interlock for the surface mounting of reversing combinations. 1-0-A switch for manual or automatic operation. Messages: Contactor switching position, status of the digital inputs 1 and 2, 1-0-A switch position. Commands: Contactor actuation.	17W5651	43.22

M22 CONTACT MODULES WITHOUT LEDS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● M22-SWD-K11	Smartwire-DT Front Mount 1pole	17W5681	20.58
● M22-SWD-K22	Smartwire-DT Front Mount 2pole	17W5690	25.73
● M22-SWD-KC11	Smartwire-DT Base Mount 1pole	17W5679	20.58
● M22-SWD-KC22	Smartwire-DT Base Mount 2pole	17W5680	25.73
M22 CONTACT MODULES WITH LEDS			
● M22-SWD-K11LED-W	Smartwire-DT Front Mount 1pole, White	17W5685	29.84
● M22-SWD-K11LED-B	Smartwire-DT Front Mount 1pole, Blue	17W5682	29.84
● M22-SWD-K11LED-G	Smartwire-DT Front Mount 1pole, Green	17W5683	29.84
● M22-SWD-K11LED-R	Smartwire-DT Front Mount 1pole, Red	17W5684	29.84
● M22-SWD-K22LED-W	Smartwire-DT Front Mount 2pole, White	17W5694	34.98
● M22-SWD-K22LED-B	Smartwire-DT Front Mount 2pole, Blue	17W5691	34.98
● M22-SWD-K22LED-G	Smartwire-DT Front Mount 2pole, Green	17W5692	34.98
● M22-SWD-K22LED-R	Smartwire-DT Front Mount 2pole, Red	17W5693	34.98
● M22-SWD-K11LEDC-W	Smartwire-DT Base Mount 1pole, White	17W5689	29.84
● M22-SWD-K11LEDC-B	Smartwire-DT Base Mount 1pole, Blue	17W5686	29.84
● M22-SWD-K11LEDC-G	Smartwire-DT Base Mount 1pole, Green	17W5687	29.84
● M22-SWD-K11LEDC-R	Smartwire-DT Base Mount 1pole, Red	17W5688	29.84
● M22-SWD-K22LEDC-W	Smartwire-DT Base Mount 2pole, White	17W5698	34.98
● M22-SWD-K22LEDC-B	Smartwire-DT Base Mount 2pole, Blue	17W5695	34.98
● M22-SWD-K22LEDC-G	Smartwire-DT Base Mount 2pole, Green	17W5696	34.98
● M22-SWD-K22LEDC-R	Smartwire-DT Base Mount 2pole, Red	17W5697	34.98
M22 LED MODULES			
● M22-SWD-LED-W	Front Mount, White	17W5702	25.73
● M22-SWD-LED-B	Front Mount, Blue	17W5699	25.73
● M22-SWD-LED-G	Front Mount, Green	17W5700	25.73
● M22-SWD-LED-R	Front Mount, Red	17W5701	25.73
● M22-SWD-LEDC-W	Front Mount, White	17W5706	25.73
● M22-SWD-LEDC-B	Front Mount, Blue	17W5703	25.73
● M22-SWD-LEDC-G	Front Mount, Green	17W5704	25.73
● M22-SWD-LEDC-R	Front Mount, Red	17W5705	25.73
SYSTEM ACCESSORIES			
FLAT CABLE, 8 AWG 24, 600V WITH FLAT PLUGS SWD4-8MF2 INSTALLED			
● SWD4-100LF8-24	328.1 ft (100m)	17W5723	328.70
● SWD4-3LF8-24-2S	9.8 ft (3m)	17W5724	18.10
● SWD4-5LF8-24-2S	16.4 ft (5m)	17W5725	24.66
● SWD4-10LF8-24-2S	32.8 ft (10m)	17W5722	41.09
ROUND CABLE, 4 AWG 20 AND 4 AWG 24, 300V			
● SWD4-50LR8-24	164 ft (50m)	17W5726	287.62
UNIVERSAL (PLACEHOLDER) MODULES			
● M22-SWD-NOP	Smartwire-DT Front mount	17W5707	20.58
● M22-SWD-NOPC	Smartwire-DT Base mount	17W5708	20.58
ACCESSORIES			
● M22-SWD-A4	Smartwire-DT 4-way adapter	17W5673	2.07
● M22-SWD-I1-LP01	Smartwire-DT Element enclosure PCB1	17W5674	34.98
● M22-SWD-I2-LP01	Smartwire-DT Element enclosure PCB2	17W5675	38.08
● M22-SWD-I3-LP01	Smartwire-DT Element enclosure PCB3	17W5676	41.16
● M22-SWD-I4-LP01	Smartwire-DT Element enclosure PCB4	17W5677	44.24

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SMARTWIRE-DT PANEL WIRING SOLUTION (CONT.)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● M22-SWD-I6-LP01	Smartwire-DT Element enclosure PCB6	17W5678	50.41
● M22-SWD-SEL8-10	Control station PCB jumpers	17W5709	13.15
● SWD4-8SF2-5	Device plugs	17W5730	6.58
● SWD4-8MF2	Flat plugs	17W5728	2.67
● SWD4-8SFF2-5	Coupling	17W5729	16.44
● SWD4-8FRF-10	Panel cable adapter	17W5727	57.53
● SWD4-CRP-1	Smartwire-DT Device plug crimping tool	17W5710	657.40
● SWD4-CRP-2	Smartwire-DT Flat plug crimping tool	17W5711	805.32
● SWD4-RC8-10	Terminating resistor	17W5712	24.66
● SWD4-SEL8-10	Device plug jumpers	17W5713	6.58
● SWD4-SFL8-20	Cabinet cable adapter socket	17W5714	98.61
● SWD4-SML8-20	Cabinet cable adapter plug	17W5718	98.61
● SWD4-SF8-67	Round cable 8-pole connector socket	17W5716	29.59
● SWD4-SM8-67	Round cable 8-pole connector plug	17W5720	29.59
● SWD4-SF8-67W	Right angle round cable 8-pole connector socket	17W5717	41.09
● SWD4-SM8-67W	Right angle round cable 8-pole connector socket	17W5721	41.09
● SWD4-SF8-20	Enclosure bushing, 8-pole socket, M20	17W5715	49.31
● SWD4-SM8-20	Enclosure bushing, 8-pole plug, M20	17W5719	49.31
● V-M20	Smartwire-DT Round cable cord grip, M20	17W5731	3.59

(208425)

EASY® PROGRAMMABLE CONTROLLER

RoHS Compliant Available

EATON

- Program in Ladder Logic Directly on Unit Using Built-in Keypad
- Up To 12 Inputs and 8 Outputs
- High Current Relay Outputs
- Performs Basic PLC Functions
- Up To 121 Lines of Logic
- Local or Remote Expansion of Inputs and Outputs

Replace counters, timers and analog comparators using built-in user-friendly operating elements and an LCD display. Units are programmed in ladder logic right on the device itself with no external programming software or hardware required. Draw circuit diagrams on the LCD display using the built-in keypad. Expansion units increase the number of I/O. Optional software allows programing from a PC (requires optional cable and Windows 95). DIN rail mounting . UL listed, CSA certified, CE compliant.

Feature	Easy 500	Easy 700
Rung Lines	128	128
Timers	16	16
Markers	32	32
Conditional Jumps	8	8
Text Display	16	16
7-Day Time Switch	8	8
Year Time Switch	8	8
Analog Input (DC Units Only)	2 (0-10 VDC)	4 (0-10 VDC)
AC Input Resolution	10-Bit, 1024 Points	10-Bit, 1024 Points
Analog Value Processing	16	16
High Speed Counter	2	2
Frequency Counter	2	2
Master Reset	3	3
Operating Hour Counters	4	4

BASIC UNITS, 24VAC

Mfg. Part No.	Inputs Digital	Inputs Analog*	Outputs Type	Outputs Number	Display	Stock No.	Price Each
EASY512-AB-RC	8	2	Relay	4	LED	58M5645	180.06
EASY512-AB-RCX	8	2	Relay	4	None	58M5646	161.62
● EASY512-DC-RC	8	2	Relay	4	LED	42M1823	177.33
BASIC UNITS, 100-240VDC							
● EASY512-AC-R	8	0	Relay	4	LED	41M3161	165.49
● EASY512-AC-RC	8	0	Relay	4	LED	41M3162	227.00
EXPANDABLE BASIC UNITS, 24VDC							
● EASY719-DC-RC	12	4	Relay	6	LED	41M3164	317.36
● EASY721-DC-TC	12	4	Transistor	8	LED	45K1329	318.72
EXPANDABLE BASIC UNITS, 24VAC							
EASY719-AB-RC	12	4	Relay	6	LED	58M5647	307.64
EASY719-AB-RCX	12	4	Relay	6	None	58M5648	264.66
EXPANDABLE BASIC UNITS, 100-240VDC							
● EASY719-AC-RC	12	0	Relay	6	LED	41M3163	248.44
EXPANDABLE BASIC UNITS, 12VDC							
EASY719-DA-RCX	12	4	Relay	6	None	58M5649	292.93

➤CONTINUED➤

EASY® PROGRAMMABLE CONTROLLER (CONT.)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
EASY-PC-CAB	2m, 9-Pin Interface Cable for Connecting to PC	41M3160	83.58
EASY-SOFT-BASIC	Programming Software	96K9113	49.51

* Number of inputs that can be user-assigned as analog inputs (0-10V).
(34503)

FT1A SMARTAXIS 12, 24, 40 & 48 I/O CPUS

NEW

RoHS Compliant Available

IDEC

- Available with/without LCD screen
- 10 Amp Relay contacts
- USB Mini-B Programming Port
- Embedded Real Time Clock
- Embedded 2-, 4-, 6- or 8-pt analog inputs (0-10V DC, 10-bit, DC power type)
- Integrated 4 x 100KHz high-speed counter
- Embedded Ethernet port*
- Support Modbus TCP and RTU*
- Optional RS232C/RS485 adapter*
- SD Memory card for data logging and program storage*
- 100KHz high-speed outputs*
- Features vary between models.

FT1A SMARTAXIS 12 I/O CPU

Mfg. Part No.	Rated Voltage	Output Type	With Display	Stock No.	Price Each 1-2
FT1A-H12RC	100-240VAC	Relay	Yes	72W3983	153.14
FT1A-B12RC	24VDC	Relay	-	72W3969	133.38
FT1A-H12RA	100-240VAC	Relay	Yes	72W3982	160.03
FT1A-B12RA	24VDC	Relay	-	72W3968	133.38
FT1A SmartAXIS 24 I/O CPU					
FT1A-H24RC	100-240VAC	Relay	Yes	72W3985	340.86
FT1A-B24RC	24VDC	Relay	-	72W3971	311.22
FT1A-H24RA	100-240VAC	Relay	Yes	72W3984	340.86
FT1A-B24RA	24VDC	Relay	-	72W3970	311.22
FT1A SmartAXIS 40 I/O CPU					
FT1A-H40RC	100-240VAC	Relay	Yes	72W3986	394.22
FT1A-B40RC	100-240VAC	Relay	-	72W3972	355.68
FT1A-H40RKA	24VDC	Relay/Sink	Yes	72W3987	384.34
FT1A-B40RKA	24VDC	Relay/Sink	-	72W3973	355.68
FT1A-H40RSA	24VDC	Relay/Source	Yes	72W3988	384.34
FT1A-B40RSA	24VDC	Relay/Source	-	72W3974	355.68
FT1A SmartAXIS 48 I/O CPU					
FT1A-H48KC	100-240VAC	Trans. Sink	Yes	72W3990	444.60
FT1A-B48KC	100-240VAC	Trans. Sink	-	72W3976	414.96
FT1A-H48SC	100-240VAC	Trans. Source	Yes	72W3992	444.60
FT1A-B48SC	100-240VAC	Trans. Source	-	72W3978	414.96
FT1A-H48KA	24VDC	Trans. Sink	Yes	72W3989	444.60
FT1A-B48KA	24VDC	Trans. Sink	-	72W3975	414.96
FT1A-H48SA	24VDC	Trans. Source	Yes	72W3991	444.60
FT1A-B48SA	24VDC	Trans. Source	-	72W3977	414.96

(212217)

FT1A SMARTAXIS TOUCH HMI+PLC

NEW

RoHS Compliant Available

IDEC

- 3.8" HMI with embedded 12 I/O PLC
- Available in Monochrome or 65K TFT color
- 740 cd/m2 monochrome, 400 cd/m2 color
- 8 inputs, 4 relay outputs
- 10 Amp Relay contacts
- Embedded 2-pt analog inputs (0-10V DC, 10-bit, DC power type)
- Embedded Ethernet port
- USB Mini-B and USB Type A ports
- RS232C/RS485 interface
- IP66f

Mfg. Part No.	Screen Type	Bezel color	PLC I/O	Output Type	Stock No.	Price Each
FT1A-C12RA-B	3.7" Monochrome	Light Gray	8in/4out	10A Relay	72W3979	410.58
FT1A-C12RA-S	3.7" Monochrome	Dark Gray	8in/4out	10A Relay	72W3980	410.58
FT1A-C12RA-W	3.7" Monochrome	Silver	8in/4out	10A Relay	72W3981	410.58
FT1A-M12RA-B	3.8" TFT 65K Color	Light Gray	8in/4out	10A Relay	72W3993	388.44
FT1A-M12RA-S	3.8" TFT 65K Color	Dark Gray	8in/4out	10A Relay	72W3994	388.44
FT1A-M12RA-W	3.8" TFT 65K Color	Silver	8in/4out	10A Relay	72W3995	405.92

➤CONTINUED➤

FT1A SMARTAXIS TOUCH HMI+PLC (CONT.)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-2
FT1A-PC1	RS232C communication cartridge	73W9261	28.28
FT1A-PC2	RS485 communication cartridge Mini-Din	73W9262	28.28
FT1A-PC3	RS485 communication cartridge Screw	73W9263	28.28
FT1A-PM1	Memory cartridge	73W9264	24.38
FT9Z-1A01	FT1A SmartAXIS Touch rear mount adapter	73W9266	73.11

(212216)

COMBINATION STARTER KITS - TOUCHSCREEN AND PLC

RoHS Compliant Available

IDEC

Starter Kits include components built to work together to give you the most for your money. Starter Kits provide everything you need to automate an existing system with ease, providing a complete automation control strategy at a bargain price. Each Package includes an IDEC touchscreen, a MicroSmart Pentra PLC (Slim or All-in-One design), a slim power supply, cables and software.

Mfg. Part No.	Description	Stock No.	Price Each 1-2
KIT-PENTRA-12-HG1F	4.6" LCD Screens, RS232 Interface Module, PLC, Power Supply, Cables and Software	93T2119	1105.77
KIT-PENTRA-12-HG2G-HP	5.7" LCD Screens, Interface Module, PLC, Power Supply, Cables and Software	93T2120	1597.77
KIT-PENTRA-12-HG2G-TE	5.7" LCD Screens, Ethernet, Interface Module, PLC, Power Supply, Cables and Software	93T2121	1413.27
KIT-PENTRA-12-HG3G-AHP	10.4" LCD Screens, Interface Module, PLC, Power Supply, Cables and Software	93T2122	2274.27
KIT-PENTRA-12-HG3G-8HP	8.4" LCD Screens, Interface Module, PLC, Power Supply, Cables and Software	93T2123	1981.48
KIT-PENTRA-12-HG4G-HP	12.1" LCD Screens, Interface Module, PLC, Power Supply, Cables and Software	93T2124	2581.77

(203478)

MICROSMART PENTRA PLCS

RoHS Compliant Available

IDEC

PLC Starter Kits

FC5A Features
- Embedded Ethernet port
- Modbus TCP, RTU and ASCII
- Email and Text notifications
- Custom web page
- USB programming port
- Up to 7 Communication ports
- Use FC4A expansion I/O modules
- Max. 512 local I/Os
- Online Edit
- UL/cUL, Class 1 Div 2, CE, ABS

FC4A Features
- Max. 264 I/O
- Datalink up to 32 PLCs
- Easy programming
- 20kHz high speed I/O
- Standard RS232C port, optional RS485/RS232 port
- UL, c-UL, Class 1 Div 2, CE

The MicroSmart and MicroSmart Pentra systems can be used in any type of control application and can handle very sophisticated tasks. Available in two different CPU styles. Up to 264 I/Os can be configured in the MicroSmart system using FC4A MicroSmart expansion modules. Up to 512 I/Os can be configured in the MicroSmart Pentra system using the same FC4A MicroSmart expansion modules.

FC4A ALL-IN-ONE CPU

Mfg. Part No.	Supply Voltage	Output Type	Total I/O	Stock No.	Price Each 1-2
FC4A-C10R2	100-240 VAC	Relay	10 (14 in/10 out)	83C9473	172.14
FC4A-C16R2	100-240 VAC	Relay	16 (14 in/10 out)	83C9474	244.04
FC4A-C24R2	100-240 VAC	Relay	24 (14 in/10 out)	66M8440	361.30
FC5A ALL-IN-ONE BASE					
FC5A-C10R2	100-240 VAC	Relay	10 (6 in/4 out)	93K6469	182.69
FC5A-C10R2C	24 VDC	Relay	10 (6 in/4 out)	93K6470	190.91
FC5A-C10R2D	12 VDC	Relay	10 (6 in/4 out)	10R5636	173.13
FC5A-C16R2	100-240 VAC	Relay	16 (9 in/7 out)	93K6471	259.11
FC5A-C16R2C	24 VDC	Relay	16 (9 in/7 out)	93K6472	261.63
FC5A-C16R2D	12 VDC	Relay	16 (9 in/7 out)	10R5637	247.95
FC5A-C24R2	100-240 VAC	Relay	24 (14 in/10 out)	66M8442	353.43

➤CONTINUED➤

MICROSMART PENTRA PLCS (CONT.)

FC5A ALL-IN-ONE BASE

Mfg. Part No.	Supply Voltage	Output Type	Total I/O	Stock No.	Price Each 1-2
● FC5A-C24R2C	24 VDC	Relay	24 (14 in/10 out)	93K6474	369.33
● FC5A-C24R2D	12 VDC	Relay	24 (14 in/10 out)	09P2309	353.43
FC4A SLIM CPU					
● FC4A-D20RK1	24 VDC	Relay/Transistor Sink	20 (16 in/16 out)	47M3615	324.03
● FC4A-D20RS1	24 VDC	Relay/Transistor Source	20 (16 in/16 out)	47M3616	322.73
FC5A SLIM WITH ETHERNET					
● FC5A-D12K1E	24 VDC	Transistor Sink	(8 in/4 out)	46T9475	513.01
● FC5A-D12S1E	24 VDC	Transistor Source	(8 in/4 out)	41T3381	599.02
FC5A SLIM CPU					
● FC5A-D16RK1	24 VDC	Relay & Transistor Sink*	16 (8 in/8 out)	93K6475	340.56
● FC5A-D16RS1	24 VDC	Relay & Transistor Source*	16 (8 in/8 out)	93K6476	340.56
● FC5A-D32K3	24 VDC	Transistor Sink	32 (16 in/16 out)	93K6477	527.85
● FC5A-D32S3	24 VDC	Transistor Source	32 (16 in/16 out)	93K6478	527.85

DIGITAL I/O EXPANSION MODULES

Mfg. Part No.	Description	Stock No.	Price Each 1-2
● FC4A-N08B1	8-pt 24VDC Input	25C4107	88.82
● FC4A-N16B1	6-pt 24VDC Input	25C4108	156.69
● FC4A-M08BR1	4in/4out DC in Relay out	25C4106	139.50
● FC4A-T08K1	8-pt Tran. Sink output	25C4120	126.00
● FC4A-R081	8-pt Relay output	27M4043	119.82
● FC4A-R161	16-pt Relay output	29M9917	203.14

ANALOG I/O EXPANSION MODULES

Mfg. Part No.	Description	Stock No.	Price Each 1-2
● FC4A-J8C1	8-pt voltage/current input	34M2289	292.93
● FC4A-J4CN1	4-pt combination (V,I, RTD, thermocouple) input	05N6666	335.35
● FC4A-K2C1	2-pt output (-10-10V, 4-20mA)	34M2290	166.14
● FC4A-K4A1	4-pt output (-10-10V, 4-20mA)	47T1243	371.12
● FC5A-F2M2	PID Control Module analog out	47T1245	558.36
● FC5A-F2MR2	PID Controls Module, Relay Outputs	47T1244	558.36
● FC4A-K4A1	Analog Ouput Module 4 channels	47T1243	371.12

COMMUNICATION MODULES

Mfg. Part No.	Description	Stock No.	Price Each 1-2
● FC5A-SIF4	RS485C communication module (FC5A CPU only)	73R4803	248.01
● FC4A-HPC1	RS232C communicaiton module for slim CPU	83C9483	40.72
● FC4A-HPC3	RS485 communication module for slim CPU	35C2511	56.97

OPTIONAL MODULES AND ACCESSORIES

● SW1A-W1C	Automation Organizer Software Suite	10R5635	388.05
● FC4A-KC4CA	Programming cable	94C3980	37.91
● FC4A-PT1	Real-time clock cartridge	25C4117	42.64

FC4A STARTER KITS

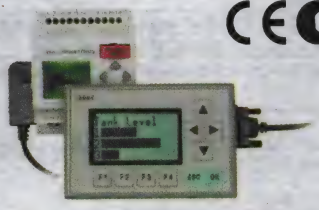
Mfg. Part No.	Description	Stock No.	Price Each 1-2
● MM-SMART-16	FC4A-C16R2 CPU, SW1A-W1C software, cable	84C6193	384.20
FC5A STARTER KITS			
● MM-PENTRA-12	FC5A-D12RS1 CPU, SW1A-W1C software, cable	47T1246	544.91
● MM-PENTRA-16	FC5A-D16RS1 CPU, SW1A-W1C software, cable	34M2048	465.96
● MM-PENTRA-24	FC5A-C24R2 CPU, SW1A-W1C software, cable	19M1586	465.96
● MM-PENTRA-16-HG2G-EM	FC5A-D16RS1, 5.7" mono HG2G, software & cables	10R5632	1140.79
● MM-PENTRA-16-HG2G-EC	FC5A-D16RS1, 5.7" color HG2G, software & cables	10R5631	1358.29
● MM-PENTRA-24-HG2G-EM	FC5A-C24R2, 5.7" mono HG2G, software & cables	10R5634	1140.79
● MM-PENTRA-24-HG2G-EC	FC5A-C24R2, 5.7" color HG2G, software & cables	10R5633	1412.62
● KIT-PENTRA-12-HG1F	4.6" Monochrome, RS232, HG1F-SB22BF-B, 12 I/O FC5A-D12S1E Ethernet CPU, software and cable	93T2119	1105.77
● KIT-PENTRA-12-HG2G-HP	5.7" 65K Color TFT, HG2G-5FT22TF-B, 12 I/O FC5A-D12S1E Ethernet CPU, software and cable	93T2120	1597.77
● KIT-PENTRA-12-HG3G-8HP	8.4" 65K Color TFT, Video In, Audio In/Out, HG3G-8JT22MF-B, 12 I/O FC5A-D12S1E Ethernet CPU, software and cable	93T2123	1981.48
● KIT-PENTRA-12-HG3G-AHP	10.4" 65K Color TFT, Video In, Audio In/Out, HG3G-AJT22MF-B, 12 I/O FC5A-D12S1E Ethernet CPU, software and cable	93T2122	2274.27
● KIT-PENTRA-12-HG4G-HP	12.1" 65K Color TFT, Video In, Audio In/Out, HG4G-CJT22MF-B, 12 I/O FC5A-D12S1E Ethernet CPU, software and cable	93T2124	2581.77

(88879)

SMART RELAYS

FM APPROVED — RoHS Compliant Available — IDEC

Features:
- Optional Text Message Display panel
- 4 built-in 0-10V analog inputs
- 4 built-in 5 kHz high speed inputs
- Universal voltage – 12-24 VDC, 24 VAC/DC, 100-240 VAC/DC
- Bright, high contrast, and controllable backlit LCD
- Extended programming memory
- New USB programming cable
- Worldwide approvals – cULus, CE, FM Class 1 Div 2, Lloyds Registered, and ABS approved



CPU MODULES

Mfg. Part No.	Voltage	Output Signal	With Display	With Clock	Stock No.	Price Each 1-2
● FL1E-H12RCA	24V AC/DC	Relay	Yes	Yes	55R1174	190.99
● FL1E-B12RCA	24V AC/DC	Relay	...	Yes	58P0359	154.03
● FL1E-H12SND	24VDC	Transistor	Yes	...	50R9725	168.83
● FL1E-B12RCC	100-240V AC/DC	Relay	...	Yes	58P0364	151.32
● FL1E-H12RCC	100-240V AC/DC	Relay	Yes	Yes	58P0363	195.47
● FL1E-B12RCE	12-24VDC	Relay	...	Yes	67P3718	149.10
● FL1E-H12RCE	12-24VDC	Relay	Yes	Yes	45P3221	189.37

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● FL9Y-LP1CDW	Programming Software: WindLGC Ver. 6CD w/Online Manual	31C1356	80.98
● FL1E-PC2	SmartRelay USB programming cable	51P3290	113.23
● FL1E-PM4	SmartRelay memory cartridge	51P2728	23.60
TEXT MESSAGE DISPLAY			
● FL1E-RD1	SmartRelay Text Display	58P0361	271.28
STARTER KITS			
● SMARTSTART-BDC-E	FL1E-B12RCE, WindLGC software, programming cable, and simulator switch	67P3721	199.22
SMARTSTART-BAC-E	FL1E-B12RCC, WindLGC software, and programming cable	61T3415	179.00
● SMARTSTART-HAC-E	CPU Module: FL1E-H12RCC, Programming PC Cable, WindLGC Software	51P3224	219.57
● SMARTSTART-HDC-E	CPU Module: FL1E-H12RCE, Programming PC Cable, WindLGC Software, Simulator Switch	45P6337	224.35

DIGITAL I/O EXPANSION MODULES

Mfg. Part No.	Module	Voltage	Input/Output	Stock No.	Price Each 1-2
● FL1B-M08B1S2	Digital Input/Output	24VDC	8 (4 in/4 out)	93C2588	71.36
● FL1B-M08B2R2	Digital Input/Output	12/24VDC	8 (4 in/4 out)	14M8169	73.47
● FL1B-M08C2R2	Digital Input/Output	100-240VAC/DC	8 (4 in/4 out)	14M8170	73.51
● FL1B-M08D2R2	Digital Input/Output	24VAC/DC	8 (4 in/4 out)	14M8171	70.87
● FL1B-J2B2	Analog Input	24VDC	2 (0-10VDC, 4-20mA)	14M8167	117.88

(72535)

iSMART INTELLIGENT RELAYS

RoHS Compliant Available — IMO

- Digital output (8A Relay), analog input (0-10 V)
- Control logic in Ladder or Functional Block Diagram
- Includes text HMI screen including programmable function keys
- PID control (up to 30 loops)
- Maths functions
- Retentive data registers
- Multi-language selectable

Expansion Module

Base Unit

BASE UNITS

Mfg. Part No.	Voltage	Digital In	Digital Out	Analog In	Features	Stock No.	Price Each 1-9
● SMT-EA-R10-V3	100-240 VAC	6	4	...	...	74R5345	158.74
● SMT-EA-R20-V3	100-240 VAC	12	8	...	...	74R5346	247.23
● SMT-ED-R12-V3	24 VDC	8	4	2	2 HSI (up to 1kHz)	74R5347	144.45
● SMT-ED-R20-V3	24 VDC	12	8	4	2 HSI (up to 1kHz)	74R5348	231.60
● SMT-CD-R20-V3	24 VDC	12	8	4	2 HSI (up to 1kHz)	74R5344	252.74
EXPANSION MODULES							
● SMT-MD-R8	24 VDC	4	4	...	2 HSI (up to 1kHz), RS485 Modbus, Link	74R5350	95.03

➤ CONTINUED ➤

iSMART INTELLIGENT RELAYS (CONT.)

ACCESSORIES

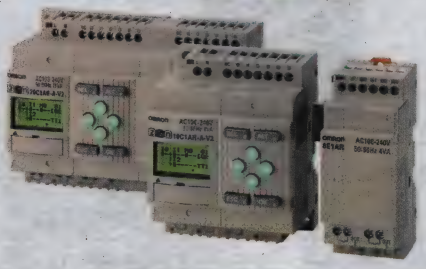
Mfg. Part No.	Features	Stock No.	Price Each 1-9	10-24	25-49
SMT-PM04-V3	32K Flash Memory Module	74R5353	17.67	17.03	16.39
SMT-PC03	PC-Link Programming Cable	74R5351	48.60	46.85	45.09

(177925)

PROGRAMMABLE NANO CONTROLLER

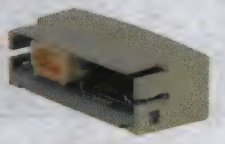
RoHS Compliant Available

OMRON AUTOMATION & SAFETY



Battery Unit

Connecting Cable



Memory Cassette

- Compact, CPU and Expansion Units Measure 70W x 90H x 56mmD (2.76 x 3.54 x 2.20")
- 8 Timers Support 4 Types of Operation and 3 Timing Ranges Available
- 4 Holding Timers Hold Data During Power Interruptions
- 8 Counters Can Be Switched Between Incremental and Decremental
- 8 Weekly Timers for Day/Time Control
- 8 Calendar Timers for Seasonal Control
- 6 Input Relays, 4 Output Relays, Expandable up to 34 I/O (18 Inputs/16 Outputs)
- 16 Holding Bits Retain ON/OFF Status in Case of Power Failure, No Need for Extra Circuitry

CPU

Mfg. Part No.	Supply Voltage	I/O	Output Type	Stock No.	Price Each 1-4
ZEN-10C1AR-A-V2	100-240VAC	6 Input, 4 Output	Relay	14M9199	178.52
ZEN-10C1DR-D-V2	24VDC	6 Input, 4 Output	Relay	22M4073	177.00
ZEN-10C1DT-D-V2	24VDC	6 Input, 4 Output	Transistor	40M9770	170.10
ZEN-10C2DR-DV2	24VDC	6 Input, 4 Output	Relay	17M9574	153.40
ZEN-10C3AR-A-V2	240VAC	6 Input, 4 Output	Relay	40M9773	153.40
ZEN-10C3DR-D-V2	24VDC	6 Input, 4 Output	Relay	40M9774	154.73
ZEN-20C1AR-A-V2	240VAC	12 Input, 8 Output	Relay	40M9776	233.95
ZEN-20C1DT-D-V2	24VDC	12 Input, 8 Output	Transistor	40M9777	241.89
ZEN-20C1DR-D-V2	24VDC	12 Input, 8 Output	Relay	17M9556	238.04
ZEN-20C3AR-A-V2	240VAC	12 Input, 8 Output	Relay	40M9781	192.78
ZEN-20C3DR-D-V2	24VDC	12 Input, 8 Output	Relay	40M9782	192.78
EXPANSION I/O					
ZEN-8E1AR	240VAC	4 Input, 4 Output	Relay	40M9783	106.20
ZEN-8E1DR	24VDC	4 Input, 4 Output	Relay	31M0963	101.92
ZEN-8E1DT	24VDC	4 Input, 4 Output	Transistor	40M9784	89.26

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
ZEN-ME01	Memory Cassette, Copy Program to Multiple Units	77C5996	49.42
ZEN-CIF01	Connecting Cable	77C5995	134.14
ZEN-BAT01	Battery Unit, Memory Back-Up	77C5994	56.34
ZENSOFT01V4	Support Software 4.1	63M9490	77.33

(72178)

MICRO PROGRAMMABLE CONTROLLER

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

CPM1A

CPM2A

CPM2C

- Peripheral communications port built in (CPM1A)
- Peripheral and RS-232C ports standard for direct connection to serial devices and programming tools (CPM2A)
- Transistor output types expand to 192 I/O (CPU + 5 modules): Relay output types expand to 180 I/O (CPU + 5 modules) (CPM2C)
- Auxiliary 24 VDC supply (AC type only)

CPM1A SERIES

Mfg. Part No.	I/O	Output Type	Stock No.	Price Each
CPM1A-10CDR-A-V1	6 inputs, 4 outputs	Relay	49H4444	450.81
CPM1A-20CDR-A-V1	12 inputs, 8 outputs	Relay	97C6735	671.03
CPM2A SERIES				
CPM2A-20CDR-A	12 inputs, 8 outputs	Relay	29C7138	886.02
CPM2A-30CDR-A	18 inputs, 12 outputs	Relay	10R5197	990.62
CPM2A-40CDR-A	24 inputs, 16 outputs	Relay	62H0378	1353.15
CPM2A-60CDR-A	36 inputs, 24 outputs	Relay	86H7597	1516.41
CPM2C SERIES				
CPM2C-10C1DR-D	6 inputs, 4 outputs	Relay	10R5201	649.89
CPM2C-20C1DR-D	12 inputs, 8 outputs	Relay	02J8113	750.66
EXPANSION I/O MODULES				
CPM1A-8ED	8 inputs	...	10R5195	294.28
CPM2C-10EDR	6 inputs, 4 outputs	Relay	02J7858	270.79
CPM2C-20EDR	12 inputs, 8 outputs	Relay	10R5202	440.71
CPM1A-8ER	8 inputs	Relay	19C7873	400.03
CPM1A-MAD01	2 inputs, 1 output	Analog	19C7862	745.27
CPM2C-MAD11	Analog I/O module	...	10R5199	770.24
CPM2C-TS001	Temperature sensor input module	...	10R5200	525.95

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
CPM2C-BAT01	CPM2C Battery	10R5198	59.37
CPM2C-MAD11	Analog I/O module	10R5199	770.24
CPM2C-PA201	100 ti 240 VAC input, 24VDC/600 mA output	09J8966	132.39
CPM2C-TS001	Temperature sensor input module	10R5200	525.95
CQM1-CIF02	C200HS-CN220-EU Program Download Cable C200H-CN320-EU Communication Cable	10R5204	814.97
CS1W-CN226	CPU's peripheral port to computer (D-sub 9-pin)	12C0580	193.35

(148685)

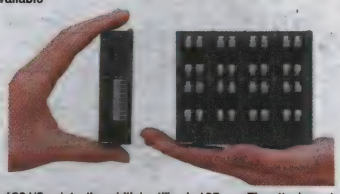
7

FPO MICRO PLC'S

RoHS Compliant Available

Panasonic

- High expansion capability with up to 384 /I/Os
- Fastest processing time, 0.3usec/basic command
- Compact design (W 30 x H 90 x D 60mm)
- Short circuit protected transistor outputs
- Built-in analog volume with two points
- Backup battery



A control unit is a mere 25mm in width. Even expanded to 128 I/O points, the width is still only 105mm. The attachment area is one of the smallest in its class. The control unit's dimensions are: W25* x H90 x D60mm. Also, the I/O unit can be expanded to a maximum of 128-points. Even so, the size is still only W105 x H90 x D60mm, a super compact design that breaks all previous common sense rules on small-scale PLCs. With the smallest ever attachment area, the FPO is perfect for installation in machines, facilities, and control boards where miniaturization is progressing even further. The expansion unit can easily be attached directly to the control unit. Special expansion cables, backplanes and so forth are unnecessary as the expansion unit employs a stacking system that uses expansion connectors and locking levers on the surface of the unit itself.

➤CONTINUED➤

FPO MICRO PLC'S (CONT.)

AC POWER SUPPLY UNITS

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● FP0-PSA4	32 points, terminal type, Input 85-265VAC, output, 24VDc, (0.7A)	63K4198	103.93

ACCESSORIES

● AFC1520M-US9	Programming cable, 3m, Mini-Din 5-pin to DP 9-pin	34B9250	59.69
FPWINGRS-EN2	PLC ladder programming software - FP0/FP1/FPM/FPsigma/FPX	34C9695	318.52

(115543)

ZELIO STARTER KIT

Schneider Electric

- All in one solution pack showing new Magelis STO 501 and direct connection to all Zelio Smart Relays through SR2CBL09
- Provides ease of use and safety with ability to interact with the Zelio from outside the Panel
- Provides a cost effective solution that offers more flexibility and connectivity vs. competition
- No communication module required

Description	Schneider Electric Part No.
1 Small Panel	HMISTO501
1 Zelio Logic	SR2B121BD
1 Vijeo Designer Limited Edition stored on a USB Key	...
1 Zelio Software SR2SFT01 + 1 USB Download Cable	SR2USB01
1 Link Cable Between STO & Zelio	SR2CBL09
1 Power Supply	ABL8MEM24012
1 Leaflet for the Installation	...

Mfg. Part No.	Description	Stock No.	Price Each 1-5
VJDSTKSTOSR2	Zelio Starter Kit	94W6973	617.50

(210264)

ZELIO LOGIC SMART RELAYS

RoHS Compliant Available

Schneider Electric

- Compact range
- Extreme compactness: up to 26 I/O within 124.6 x 90 x 59mm
- Large back-lit LCD display: 4 lines of 18 characters and 1 line of icons
- Contextual navigation using 6 buttons
- Serial or USB connecting cables for smart relay/PC connection
- Connection interfact (smart relay/PC) for Bluetooth wireless connection
- Remote monitoring and contol of installations using Modem Communication Interface (Analog or GSM)

SR3NET01BD

Zelio Soft 2 intuitive programming software using function block diagram (FBD): 32 pre-programmed functions, 7 Gracfect functions and 6 logic funcitons or contact lanngauge (LADDER): 12 pre-programmed functions.

Mfg. Part No.	Input Voltage	No. of Discrete Inputs	Analog Inputs Avail.	No. of Outputs	Output Type	Stock No.	Price Each 1-5
● SR2A101FU	100-240VAC	6	...	4	Relay	20K3195	244.18
● SR2A201BD	24VDC	12	2	8	Relay	20K3196	353.08
● SR2B201JD	12VDC	12	6	8	Relay	20K3205	392.53

ETHERNET COMMUNICATION INTERFACE

Mfg. Part No.	Description	Stock No.	Price Each Each
● SR3NET01BD	Ethernet Communications Module, 10/100BASE-T,1 RJ45 Connector	11R1885	233.62

(210262)

DIN W72×H36MM FREEZING/DEFROST TEMPERATURE CONTROLLERS

c UL us Autonics Sensors & Controllers

- ON/OFF control
- Basic input specification: NTC (Thermistor), Option: RTD (DIN Pt100Ω)
- Indication range: -40.0 to 99.9°C / 40 to 212°F (NTC sensor type), -99.9 to 99.9°C / -148 to 212°F (RTD Sensor type)
- Includes various delay functions
- Auto/Manual Defrost selection function, Start-up delay of compressor, Re-operation delay, Minimum ON time, Delay of defrost-end, Operation delay of evaporation-fan
- Input correction function
- Allows setting of operation period for protecting compressor in error

Mfg. Part No.	Supply Voltage	Output	Input	Stock No.	Price Each
TC3YF-14R-N	100VAC to 240VAC	Compressor	NTC	22T3602	56.95
TC3YF-14R-R	100VAC to 240VAC	Compressor	RTD	22T3603	56.95
TC3YF-24R-N	100VAC to 240VAC	Compressor / Defrost	NTC	22T3604	64.95
TC3YF-24R-R	100VAC to 240VAC	Compressor / Defrost	RTD	22T3605	64.95

➤CONTINUED➤

DIN W72×H36MM FREEZING/DEFROST TEMPERATURE CONTROLLERS (CONT.)

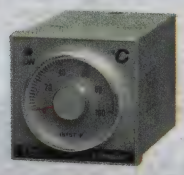
Mfg. Part No.	Supply Voltage	Output	Input	Stock No.	Price Each
TC3YF-34R-N	100VAC to 240VAC	Compressor / Defrost / Evaporation	NTC	22T3606	72.95
TC3YF-34R-R	100VAC to 240VAC	Compressor / Defrost / Evaporation	RTD	22T3607	72.95

(195422)

DIN H48 x W48MM ANALOG TEMPERATURE CONTROLLERS

c UL us Autonics Sensors & Controllers

- Power supply: 100-240VAC 50/60Hz
- Non-indicating type
- Setting temperature by dial
- Includes burn out function
- Universal power



Mfg. Part No.	Control Method	Control Output	Sensor Input	Temp. Range	Stock No.	Price Each
TOS-B4RP4F	ON/OFF, Proportional Control	Relay	Pt100Ω	0 to 400°F	22T4641	47.95
TOS-B4RJ2F	ON/OFF, Proportional Control	Relay	J (IC)	0 to 200°F	79R2819	47.95
TOS-B4RJ4F	ON/OFF, Proportional Control	Relay	J (IC)	0 to 400°F	84R7831	47.95
TOS-B4RJ6F	ON/OFF, Proportional Control	Relay	J (IC)	0 to 600°F	79R2820	47.95
TOS-B4RJ8F	ON/OFF, Proportional Control	Relay	J (IC)	0 to 800°F	22T4640	47.95
TOS-B4RK6F	ON/OFF, Proportional Control	Relay	K (CA)	0 to 600°F	68R2201	47.95
TOS-B4SJ4F	ON/OFF, Proportional Control	SSR Drive	J (IC)	0 to 400°F	79R2821	47.95
TOS-B4SJ6F	ON/OFF, Proportional Control	SSR Drive	J (IC)	0 to 600°F	79R2822	47.95
TOS-B4SK6F	ON/OFF, Proportional Control	SSR Drive	K (CA)	0 to 600°F	22T4642	47.95

(195425)

TOUCH SWITCH TYPE TEMPERATURE CONTROLLERS

RoHS Compliant Available

Autonics Sensors & Controllers

TC4S

TC4SP

TC4L

TC4H

TC4Y

TC4W

TC series is one of the most cost effective temperature controlling solutions with essential functions and improved performance. It realizes ideal temperature controlling with newly developed PID control algorithm and 100ms high speed sampling. Both SSRP output and relay output are supported to realize effective and economical controlling; in addition, improved visibility and compact size is another feature of the **TC series. TC4S** is terminal block type and **TC4SP** is plug type. Power supply range: 100VAC to 240VAC @ 50/60Hz.

Mfg. Part No.	Size (mm) W x H	Alarm Output	Control Output	Stock No.	Price Each
● TC4S-N4N	DIN 48 x 48	None	Indicator Only	22T3618	67.95
● TC4S-N4R	DIN 48 x 48	None	Relay + SSRP	22T3619	72.95
● TC4S-14R	DIN 48 x 48	Alarm 1	Relay + SSRP	22T3620	75.95
● TC4S-24R	DIN 48 x 48	Alarm 1 + Alarm 2	Relay + SSRP	22T3621	78.95
● TC4SP-14R	DIN 48 x 48	Alarm 1	Relay + SSRP	22T3622	75.95
● TC4H-N4N	DIN 48 x 96	None	Indicator Only	22T3610	75.95
● TC4H-N4R	DIN 48 x 96	None	Relay + SSRP	22T3611	81.95
● TC4H-14R	DIN 48 x 96	Alarm 1	Relay + SSRP	22T3612	83.95
● TC4H-24R	DIN 48 x 96	Alarm 1 + Alarm 2	Relay + SSRP	22T3613	86.95
● TC4Y-N4N	DIN 72 x 36	None	Indicator Only	22T3627	67.95
● TC4Y-N4R	DIN 72 x 36	None	Relay + SSRP	22T3628	72.95
● TC4Y-14R	DIN 72 x 36	Alarm 1	Relay + SSRP	22T3629	75.95
● TC4W-N4N	DIN 96 x 48	None	Indicator Only	22T3623	75.95
● TC4W-N4R	DIN 96 x 48	None	Relay + SSRP	22T3624	81.95
● TC4W-14R	DIN 96 x 48	Alarm 1	Relay + SSRP	22T3625	83.95
● TC4W-24R	DIN 96 x 48	Alarm 1 + Alarm 2	Relay + SSRP	22T3626	86.95
● TC4L-N4N	DIN 96 x 96	None	Indicator Only	22T3614	75.95

➤CONTINUED➤

TOUCH SWITCH TYPE TEMPERATURE CONTROLLERS (CONT.)

Mfg. Part No.	Size (mm) W x H	Alarm Output	Control Output	Stock No.	Price Each
● TC4L-N4R	DIN 96 x 96	None	Relay + SSRP	22T3615	81.95
● TC4L-14R	DIN 96 x 96	Alarm 1	Relay + SSRP	22T3616	83.95
● TC4L-24R	DIN 96 x 96	Alarm 1 + Alarm 2	Relay + SSRP	22T3617	86.95

(195428)

DIN W72×H36MM TEMPERATURE CONTROLLERS

Autonics
Sensors & Controllers

- Simple and economical type
- ON/OFF and Proportional control
- Relay control output:250VAC 3A 1c or 250VAC 16A 1c
- Input sensor: Thermocouple (J, K), RTD(Pt100Ω)
- Input correction function
- Finger safety type of terminal

Mfg. Part No.	Supply Voltage Range	Relay Output	Stock No.	Price Each
TC3YT-B4R3	100VAC to 240VAC	250VAC / 3A / 1c	22T3609	79.95
TC3YT-B4R16	100VAC to 240VAC	250VAC / 16A / 1c	22T3608	85.95

(195428)

iSERIES iR2™ ULTRA HIGH-PERFORMANCE FIBER-OPTIC INFRARED TEMPERATURE METER/CONTROLLER

RoHS Compliant Available

NEWPORT

NEW

Features:

- Wide temperature range: 300°C to 1800°C
- Highly accurate — 0.2% of full scale
- Extremely fast — 10msec response time
- Totally programmable analog ouput
- 1 SPDT form "C" relay 200mA @ 30VDC
- Big, bright programmable three-color dual LED displays
- User-friendly, simple to configure
- Two-color ratio measurement technique
- Ethernet with embedded Web-server
- Isolaterd RS-485/422/MODBUS
- On/Off or full autotune PID control
- Stainless steel 8mm spot-size optic lens, NEMA 4 rated
- Flexible fiber-optic 3-ft (1m) cable assembly
- Built-in laser sighting shows user precisely what lens is seeing
- Rugged cast aluminum enclosure, NEMA 4 rated, mounts on any surface
- Five-year manufacturer's warranty
- CE compliant

Specifications:

- Outputs: Two Control or Alarm
- Output types: Analog Voltage or Current, Relay, DC Pulse
- Analog/Pulse Output response: 1 sec.
- Accuracy: 0.02% of full scale
- Repeatability: 0.02% of full scale
- Temperature resolution 1 degree
- Temperature range:
  300 to 1300°C (572 to 2372°F) Single color 300 to 1300°C/Dual color 450 to 1300°C
  600 to 1800°C (112 to 32672°F) Single/Dual color
- Response time: 10msec
- Spectral response: 0.8 to 1.7 microns
- Selectable IR temperature measurement — single or dual color
- Wavelength (color): 650nm RED
- Optical field view: 25:1, adjustable focus from 200mm to more than 4M distance
- Max. laser power output: <1mW
- Operating temperature: 0 to 50°C (32 to 122°F)
- Power: 20 to 36VDC or 24VAC
- Protection: NEMA 4/ IP65 rated optical assembly and front panel
- Dimensions: 5.88" (149.35mm) W x 3.165" (80.39mm) H

iR2™ series ultra high-performance two-color ratio fiber-optic infrared thermometer/controller is a state-of-the-art instrument for difficult and demanding high-temperature applications. Ideally suited for measurement and control applications involving metals, glass, semiconductors and much more. Two-color ratio temperature measurement computes from the ratio of two different IR frequencies unlike standard IR thermometers that measure the absolute amount of IR energy. The ramp-to-setpoint feature allows user to define the rate of rise to setpoint minimizing thermal shock to the load during start-up. Comes complete with a compact NEMA 4 rated lens and flexible fiber-optic cable assembly that can be replaced in the field without the need of recalibration. Unique built-in laser sight illuminates the precise spot on the target that the lens is viewing. The laser can be easily turned on and off with the simple push button on the front panel, or remotely via network or serial communications.

Mfg. Part No.	Description	Temperature Range	Stock No.	Price Each
IR2C-300-53-C4EI/N	Fiber-Optic IR Thermometer/Controller	300 to 1300°C	04X5563	3495.00
IR2C-600-53-C4EI/N		600 to 1800°C	04X5564	2995.00

(211655)

i32 SERIES 1/32 DIN TEMPERATURE AND PROCESS PID CONTROLLERS

NEW

RoHS Compliant Available

NEWPORT

Features:

- Universal inputs: RTD, Thermocouple, Analog Voltage/Current
- No outputs or dual outputs for controlling or alarming functions
- High accuracy: 0.5°C, 0.03% rdg
- User-friendly, simple to configure
- Full autotune PID control
- Totally programmable color-changing display
- Built-in excitation
- Power: 90 to 240VAC ±10%, 50 to 400Hz
- Dimensions: 25.4H x48W x 127mmD (1 x 1.89 x 5")
- NEMA 4/Type 4 (IP65) rated front bezel
- Five-year manufacturer's warranty
- UL listed, CE compliant

i32 Series 1/32 DIN size (1.89" x 1") digital panel meters feature universal inputs for thermocouples (K, J, T, E, R, S, B, C, N & J DIN) RTDs: 100-, 500-, and 1000-ohm with 2-, 3-, and 4-wire connections, plus totally scalable process voltage 0–100mV, 0–1V, 0–10V ranges and process current: 0-20mA. Features the innovative **iSeries** display that can be programmed to change between green, amber and red at any set or alarm point. Options include isolated RS-232 and RS-485/422 and low-voltage power supply.

NO CONTROL OUTPUTS

Mfg. Part No.	Description	Output 1	Output 2	Stock No.	Price Each
I3200	Process/Temperature Controller	...	...	25C3530	140.00
I3200-C24	Process/Temperature Controller with Isolated RS232 & RS485/422, 300 to 19.2Kb	...	...	27C8000	200.00
● I3200-C24-DC	Process/Temperature Monitor with Isolated RS232 & RS485/422 and 12 to 36VDC, 24VAC Power Supply	...	...	50R9038	229.00

TWO CONTROL OUTPUTS

I3222-C24-DC	Process/Temperature Monitor with Isolated RS232 & RS485/422 and 12 to 36VDC, 24VAC Power Supply	0.5A SSR	0.5A SSR	04X5575	275.00
I3233	Process/Temperature Controller	Relay	Relay	96B0165	190.00
I3233-C24	Process/Temperature Controller with Isolated RS232 & RS485/422 Output	Relay	Relay	22C8543	250.00
I3233-C24-DC	Process/Temperature Controller with Isolated RS232 & RS485/422 and 12 to 36VDC, 24VAC Power Supply	Relay	Relay	61H4459	275.00
● I3243	Process/Temperature Controller	DC Pulse	Relay	10R2338	190.00
I3243-C24-DC	Process/Temperature Controller with Isolated RS232 & RS485/422 and 12 to 36VDC, 24VAC Power Supply	DC Pulse	Relay	04X5576	275.00
I3244-C24	Process/Temperature Controller with Isolated RS232 & RS485/422 Output	DC Pulse	DC Pulse	59J2288	250.00
I3252-DC	Process/Temperature Controller with 12 to 36VDC, 24VAC Power Supply	Analog	0.5A SSR	04X5577	215.00
I3253-DC	Process/Temperature Controller with 12 to 36VDC, 24VAC Power Supply	Analog	Relay	96B0169	215.00

(211653)

i18 SERIES 1/8 DIN TEMPERATURE, PROCESS AND STRAIN PID CONTROLLERS

RoHS Compliant Available

NEWPORT

NEW

Features:

- Universal inputs: RTD, Thermocouple, Process Voltage/Current, Strain
- No outputs or dual outputs for controlling or alarming functions
- High accuracy: ±0.5°C, 0.03% rdg
- User-friendly, simple to configure
- Full autotune PID control
- Totally programmable color-changing display
- Built-in excitation
- Power: 90 to 240VAC ±10%, 110 to 375VDC, equivalent voltage
- Dimensions: 1.89"H x 3.78"W x 5"D (48mmH x 96mmW x 127mmD)
- NEMA 1/Type 1 rated front bezel
- Five-year manufacturer's warranty
- UL listed, CE compliant

i8 Series 1/8 DIN size (3.7" x 1.9") digital panel meters feature universal inputs for thermocouples (K, J, T, E, R, S, B, C, N & J DIN) RTDs: 100-, 500-, and 1000-ohm with 2-, 3-, and 4-wire connections, plus totally scalable process voltage 0–100mV, 0–1V, 0–10V ranges and process current: 0-20mA. Features the innovative **iSeries** display that can be programmed to change between green, amber and red at any set or alarm point. Options include isolated RS-232 and RS-485/422, Ethernet, and low-voltage power supply.

NO CONTROL OUTPUTS

Mfg. Part No.	Description	Output 1	Output 2	Stock No.	Price Each
I800	Process/Temperature Controller	...	...	96B0170	200.00
● I800-C24-DC	Process/Temperature Monitor with Isolated RS232 & RS485/422 and 12 to 36VDC, 24VAC Power Supply	...	...	65K8795	285.00
I8A00	Process/Temperature Monitor with Isolated Analog Output	...	...	26H7971	310.00

➤ CONTINUED ➤

i18 SERIES ⅛ DIN TEMPERATURE, PROCESS AND STRAIN PID CONTROLLERS (CONT.)

TWO CONTROL OUTPUTS

Mfg. Part No.	Description	Output 1	Output 2	Stock No.	Price Each
I833	Process/Temperature Controller	Relay	Relay	96B0172	255.00
I833-EIT-DC	Process/Temperature Controller with Ethernet/embedded Web server and 12 to 36VDC, 24VAC Power Supply	3A Relay, SPDT	3A Relay, SPDT	04X5580	413.10
I853	Process/Temperature Controller	Analog	Relay	01C1227	325.00

STRAIN/PROCESS INPUT WITH TWO CONTROL OUTPUTS

iS8 model measures inputs from load cells, pressure transducer, and most any strain guage sensor as well as process voltage and current ranges. Features built-in 5 or 10VDC excitation for bridge transducers and supports 4- and 6-wire bridge configurations, ratiometric and non-ratiometric measurements. Offers fast, easy "in-process" calibration/scaling of signal inputs to any engineering unit.

IS833-EIT-DC	Strain/Process Controller with Ethernet/embedded Web server and 12 to 36VDC, 24VAC Power Supply	3A Relay, SPDT	3A Relay, SPDT	04X5566	450.00

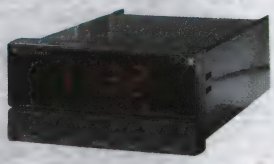
(211651)

INFINITY® INFCPH SERIES MICROPROCESSOR-BASED pH PANEL METER/CONTROLLERS

NEW NEWPORT

Features:

- Microprocessor-based versatility
- High and low alarm setpoints
- Programmable deadband hystersis around setpoints
- Scalable 4 to 20mA, 0 to 20mA or 0 to 10V output
- Automatic and manual temperature compensation of pH
- Quick calibration to 4, 7 and 10 pH
- Compact panel design
- Easy to operate through front keypad
- Large 4-Digit LED display, 0.54" (13.7mm)
- Ideal for environmental monitoring applications
- Interfaces with most BNC combination pH electrodes
- Five-year manufacturer's warranty
- UL listed, CE compliant



Specifications:

- Accuracy: ±0.1pH; 0.5°C
- Range: -2 to 16 pH; 0 to 100°C
- Resolution: 0.01 pH, 0.1°C
- Calibration pH: 2 or 3 point
- Relays: dual SPDT (form C) 5A @ 240VAC, mechanical
- Output: 4 to 20mA, 0 to 20mA or 0 to 10V (scalable)
- Analog output selectable in volts DC or mA DC
- Input impedance: $>10^{12}$ ohms
- Temperature compensation: 0 to 100°C using Pt 100/K ohm RTD (manual or automatic)
- Power: 115VAC, 230VAC or 10-32VDC
- Dimensions: 1.89"H x 3.78"W x 7"D (48mmH x 96mmW x 177mmD)

Mfg. Part No.	Description	Power	Stock No.	Price Each
INFCPH-011A	pH Controller with Red LED Display	115VAC	97H7627	395.00
INFCPH-211A	pH Controller with Red LED Display	230VAC	97H7624	395.00
INFCPH-411A	pH Controller with Red LED Display	10-32VDC	04X5557	490.00

(211647)

iSERIES TEMPERATURE/PROCESS LIMIT ALARM CONTROLLERS

RoHS Compliant Available NEW NEWPORT

Features:

- Universal inputs
- High accuracy
- Two relay alarm outputs
- Totally programmable color displays (visual alarms)
- User-friendly, simple to configure
- Built-in excitation source for transmitters or other devices
- AC or DC powered units
- Front removable and plug connectors
- Programmable digital filter
- High/Low limit
- Remote reset input
- Five-year manufacturer's warranty
- UL listed, CE compliant

Specifications:

- Input types: Thermocouple, RTD, Analog Voltage/Current
- Accuracy: ±0.5°C temp; 0.03% rdg
- Process: 50ppm/°C
- Reading rate: 3 samples/s
- Display: Single 4-digit 9-segment LED 0.83" for ⅛ DIN; 0.4" for 1/32, 1/16 DIN
- Thermocouple types (ITS 90): J, K, T, E, R, S, B, C, N, L (J DIN)
- Voltage input: 0 to 100mV, 0 to 1V, 0 to 10VDC
- Input impedance: 10Mohm for 100mV, 1Mohm for 1 or 10VDC
- Current input: 0 to 20mA (5 ohm shunt)
- Voltage excitation: 24VDC @ 25mA
- Operating temperature: 0 to 55°C (32 to 131°F)
- Power: 90 to 240VAC ±10%, 50 to 400Hz, 110 to 375VDC
- Protection: ⅛ DIN: NEMA 1/Type 1 front bezel; 1/32, 1/16 DIN: NEMA 4X/Type 4 (IP65) front bezel

iSeries Limit Alarm Controllers offer flexibility in process measurement and alarm applications. Front panel configuration switches allow user to select the type of input, the alarm conditions and the resulting display color. Process inputs are fully scalable, supporting virtually all engineering units with a selectable decimal point providing a perfect solution for pressure, flow or other process inputs.

➤ CONTINUED ➤

iSERIES TEMPERATURE/PROCESS LIMIT ALARM CONTROLLERS (CONT.)

AC POWERED UNITS — 90 TO 240VAC

Mfg. Part No.	Description	Dimensions (In.) H x W x D	Stock No.	Price Each
● I8-AL	⅛ DIN Limit Alarm Controller with 2 Relays	1.89 x 3.78 x 5	04X5578	270.00
● I16-AL	1/16 DIN Limit Alarm Controller with 2 Relays	1.89 x 1.89 x 5	04X5568	210.00
● I32-AL	1/32 DIN Limit Alarm Controller with 2 Relays	1.00 x 1.89 x 5	04X5573	164.00
DC POWERED UNITS — 12 TO 36VDC				
● I8-AL-DC	⅛ DIN Limit Alarm Controller with 2 Relays	1.89 x 3.78 x 5	04X5579	300.90
● I16-AL-DC	1/16 DIN Limit Alarm Controller with 2 Relays	1.89 x 1.89 x 5	04X5569	235.00
● I32-AL-DC	1/32 DIN Limit Alarm Controller with 2 Relays	1.00 x 1.89 x 5	04X5574	189.00

(211641)

iTH SERIES HUMIDITY + TEMPERATURE MONITORS AND CONTROLLERS

NEWPORT

- Output1 - Humidity, Output2 - Temperature
- High Accuracy ±0.5°C and ±2% RH
- 4 Popular DIN Sizes
- Ethernet and Serial Communications (optional)
- Full Autotune PID Control
- Programmable Ramp and Soak for Humidity and/or Temperature
- RH/Temperature Probe included

The NEWPORT® iTH Series instruments monitor and control both temperature and relative humidity. Available in four true DIN Sizes: the ultra compact 1/32 DIN (the world's smallest dual loop Humidity + Temperature controller); the popular midsize 1/16 DIN square bezel with dual display; the ⅛ DIN vertical, and the ⅛ DIN horizontal with the big bright 21mm digits. There are two Control or Alarm Output options: Form "C" 3A Relays, SSR, DC Pulse or Analog output.

Mfg. Part No.	Description	Stock No.	Price Each
ITH-I8DH00-2	1/8 DIN Dual Display Horizontal Temp and RH Monitor, 2" probe	05R6294	390.00
ITH-I8DH33-5	1/8 DIN Dual Display Horizontal Temp & RH Controller, 2 SPDT Relays, 5" probe	05R6295	490.00
ITH-I16D33-2-C24	1/16 DIN Dual Display! Temp & RH Controller, 2 SPDT Relays, Serial RS 232 and RS485 Output 2" probe	05R6291	520.00
ITH-I16D33-5-C4EI	1/16 DIN Dual Display! Temp & RH Controller, 2 SPDT Relays, Ethernet and serial output, 5" probe	05R6292	605.00
ITH-I3233-5-C24	1/32 DIN Temp & RH Monitor, 2SPDT Relays and Serial Output, 5" probe	05R6293	480.00

ACCESSORIES

Mfg. Part No	Description	Stock No.	Price Each
ITHP-2	Replacement Industrial Probe 2" (51mm), cable 3ft. (0.9m) with stripped wire ends	05R6296	115.00
ITHP-5	Replacement Industrial Probe 5" (137mm), cable 10ft. (3m) with stripped wire ends	05R6297	125.00

(147112)

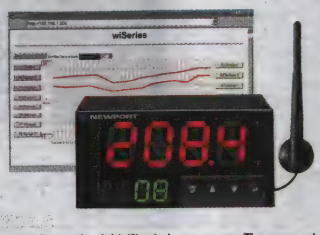
Wi8 SERIES WIRELESS MONITOR, SCANNER AND CONTROLLERS

NEWPORT

- Wireless Inputs: Thermocouple and RTD
- Easily Configure through your Web Browser
- Ethernet and Embedded Web Server (standard)
- Two Outputs for Alarm or Control: Relays, SSR's, dc Pulse, Analog Voltage and Current
- Free Software

Compatible with Newport wireless sensors

- UWTC "Universal Wireless Thermocouple" Types J, K, T, E, R, S, B, N,and C.
- UWRTD "Universal Wireless RTD".
- zSeries wireless end devices with sensors for temperature



The wiSeries ⅛ DIN Panel Meter & Controller can monitor up to eight (8) wireless sensors. The compact instrument connects directly to an Ethernet network and the Internet and features NEWPORT's award-winning embedded Web Server. It is easily configured and monitored with a Web browser over the Ethernet network or the Internet. Alternatively, the wi8 meter-controller can instead be connected to the USB port of a single computer with a "USB Ethernet Adapter" that are inexpensive and widely available. The wi8 meter-controller comes standard with a choice of either two Form C relays, or two SSR's (solid state relays) that can be used for control functions or alarms. The wi8 meter can monitor alarm conditions for any or all of the wireless sensors. For example, the wi8 meter can be set up to trip an alarm if any one of the sensors indicated it was above or below a pre-set alarm point. A complete wireless system requires at least one reciever (wi8**-U) and one end device (UWTC-* or UWRTD-*) or reciever (wi8**-zT) and one end device (zED-*).

Mfg. Part No.	Description	Stock No.	Price Each
WI833-U	Wireless Controller (Receiver) with 2 Relays: Form C SPDT 3 A @ 120 Vac, 3A @ 240 Vac	05R8697	405.00
WI853-U	Wireless Controller (Receiver) with Analog Output 0 to 10 Vdc or 0-20 mA @ 500 ohm max. and Form "C" Relay	05R8699	405.00

➤ CONTINUED ➤

Wi8 SERIES WIRELESS MONITOR, SCANNER AND CONTROLLERS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
● WI833-ZT	Wireless Controller (Receiver) with 2 Relays, which can supportup to 8 temperature end devices. (Used with zED end device)	72R4766	405.00
● UWTC-2	End Device- Wireless thermocouple connector	05R8693	145.00
● UWRTD-2	End Device- Wireless RTD connector	05R8691	145.00
● ZED-TP1-P	End Device- Wireless temperature sensor with stick probe, ac powered	05R8827	200.00
● ZED-TC-LCD	End Device- Dual thermocouple input, ac powered, LCD display	72R4769	300.00

(147124)

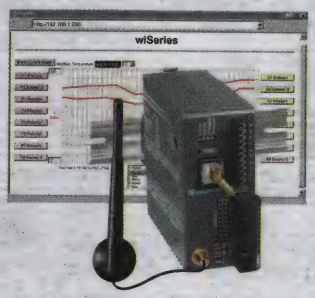
WiDR SERIES WIRELESS DIN RAIL MONITOR AND CONTROLLERS

NEWPORT

- Wireless Inputs: Thermocouple and RTD
- Easily Configure through your Web Browser
- Ethernet and Embedded Web Server (standard)
- Two Outputs for Alarm or Control: Relays, SSR's, dc Pulse, Analog Voltage and Current
- Free Software

Compatible with Newport wireless sensors

- UWTC "Universal Wireless Thermocouple" Types J, K, T, E, R, S, B, N,and C.
- UWRTD "Universal Wireless RTD".
- zSeries wireless end devices with sensors for temperature



The **wiSeries** DIN Rail Monitor & Controller can monitor up to eight (8) wireless sensors. The compact instrument connects directly to an Ethernet network and the Internet and features NEWPORT's award-winning embedded Web Server. It is easily configured and monitored with a Web browser over the Ethernet network or the Internet. Alternatively, the **wiDR** monitor-controller can instead be connected to the USB port of a single computer with a "USB Ethernet Adapter" that are inexpensive and widely available. A complete wireless system requires at least one Reciever (WiDR**-U) and one End Device (UWTC-* or UWRTD-*) or Receiver (WiDR**-zT) and one End Device (zED-*)

Mfg. Part No.	Description	Stock No.	Price Each
● WIDR33-ZT	Wireless Controller (Receiver) with 2 Relays: Form C SPDT 3 A @ 120 Vac, 3A @ 240 Vac (used with zED end device)	72R4764	405.00
● WIDR53-ZT	Wireless Controller (Receiver) with analog output 0 to 10 Vdc or 0 to 20 mA @ 500 ohm max. and Form "C" relay (used with zED end device)	72R4765	405.00
WIDR33-U	Wireless Controller (Receiver) with 2 Relays: Form C SPDT 3 A @ 120 Vac, 3A @ 240 Vac	05R8694	504.00
WIDR53-U	Wireless Controller (Receiver) with Analog Output 0 to 10 Vdc or 0-20 mA @ 500 ohm max. and Form "C" Relay	05R8696	405.00
● UWTC-2	End Device- Wireless thermocouple connector (extended distance)	05R8693	145.00
● ZED-T/N	End Device- Internal temperature sensor	72R4767	100.00
● ZED-TP1-P	End Device- Wireless temperature sensor with stick probe, ac powered	05R8827	200.00
● ZED-TC-LCD	End Device- Dual thermocouple input, ac powered, LCD display	72R4769	300.00

(147125)

ILD SERIES BIG DISPLAYS AND CONTROLLERS

NEWPORT

The BIG display features big bright 2.3" (57.2) or 4.0" (101.6) LED digits that can be programmed to change colors between red, amber and green at any set point or alarm point. The changes in color are quickly seen from a distance and equipment operators can intuitively react to changing conditions. The BIG display offers a wide assortment of signal inputs for process (DC) voltage and current, thermocouples, RTDs, strain gage, AC voltage and current, and frequency/pulse. The ethernet BIG display can display data transmitted via serial or TCP/IP communication from a computer or from other devices which transmit ASCII data via RS-232, RS-422 or RS-485. Optional outputs include SPDT relays for alarm or full PID control, isolated analog output, and RS-232/422/485 serial communications and MODBUS. The BIG display can be mounted flush in a panel or surface mounted with the included brackets and features full NEMA 4/IP65 protection. Available with 2 output relays; *go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each
ILD24-UTP/N	2.25" 4-Digit Universal Temp/Process Monitor	02E2615	795.00
ILD24-SP/N	2.25" 4-Digit Universal Strain	02E2613	795.00
ILD24-FP/N	2.25" 4-Digit Frequency/Pulse Totalize Input, RS-485 Output	02E2611	695.00
ILD44-UTP/N	4" 4-Digit Universal/Process Monitor	02E2620	995.00
ILD24-UTP-33/N	2.25" 4-Digit Universal/Process Controller w/ 2 Relay Outputs	02E2614	895.00
ILD24-EI/N	2.25" 4-Digit Display w/ Ethernet Input	10N9147	695.00
ILD26-EI/N,FS	2.25" 6-Digit Display w/ Ethernet Input	19K4907	895.00

➤ CONTINUED ➤

ILD SERIES BIG DISPLAYS AND CONTROLLERS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
ILD44-UTP-33/N	4" 4-Digit Universal Temperature/Process Controller w/ 2 Relay Outputs	02E2619	1095.00
ILD44-SP/N	4" 4-digit Strain/Process Monitor	02E2618	995.00

(73305)

i16 SERIES 1/16 DIN TEMPERATURE, PROCESS AND STRAIN PID CONTROLLERS

RoHS Compliant Available

NEWPORT

Features:

- Universal inputs: RTD, Thermocouple, Process Voltage/Current, Strain
- Single or dual display models
- High accuracy: 0.5°C, 0.03% rdg
- User-friendly, simple to configure
- Full autotune PID control
- Totally programmable color-changing displays (visual alarms)
- Built-in excitation
- Temperature stability
- Ratiometer mode for strain gauges
- Programmable digital filter
- Power: 90 to 240VAC ±10%, 110 to 375VDC, equivalent voltage
- Dimensions: 1.89"H x 1.89"W x 5"D (48mmH x 48mmW x 127mmD)
- NEMA 4/Type 4 (IP65) rated front bezel
- Five-year manufacturer's warranty
- UL listed, CE compliant

Single or Dual Display Models

i16 Series 1/16 DIN size (48mm²) digital panel PID controllers feature universal inputs for thermocouples (K, J, T, E, R, S, B, C, N & J DIN) RTDs: 100-, 500-, and 1000-ohm with 2-, 3-, and 4-wire connections, plus totally scalable process voltage 0–100mV, 0–1V, 0–10V ranges and process current: 0-20mA. Its innovative **iSeries** display can be programmed to change between green, amber and red at any set or alarm point. Measures inputs from load cells, pressure transducers and most any strain gauge sensor, as well as, process voltage and current ranges. **i16 Series** has built-in 5 or 10 excitation for bridge transducers andl supports 4- and 6-wire bridge communications, ratiometric measurements. Features fast and easy "in process" calibration/scaling of the signal inputs to any engineering units and offers 10-point linearization which allows the user to linearize the signal input from extremely nonlinear transducers of all kinds. Options include a second display for set point, isolated RS-232 and RS-485/422, Ethernet, and low-voltage power supply.

Mfg. Part No.	Description	Output 1	Output 2	Stock No.	Price Each
SINGLE DISPLAY WITH TWO CONTROL OUTPUTS					
I1633	Process/Temperature Controller	3A Relay, SPDT	3A Relay, SPDT	96B0159	225.00
I1644-C24-DC	Process/Temperature Controller with Isolated RS232 & RS485/422, and 12 to 36VDC, 24VAC Power Supply	DC Pulse	DC Pulse	04X5572	320.00
I1622	Process/Temperature Controller	0.5A SSR	0.5A SSR	96B0158	235.00
I1653	Process/Temperature Controller	Analog	3A Relay, SPDT	65H4320	235.00
I1653-C24	Process/Temperature Controller with Isolated RS232 & RS485/422	Analog	3A Relay, SPDT	96B0162	295.00
DUAL DISPLAY WITH TWO CONTROL OUTPUTS					
I16D33	Process/Temperature Controller	3A Relay, SPDT	3A Relay, SPDT	96B0157	260.00
I16D33-AL	Process/Temperature Controller with Limit Alarms, No PID Control	3A Relay, SPDT	3A Relay, SPDT	92H7474	260.00
I16D33-SM	Process/Temperature Controller with Simplified Menu (On/Off Control, No PID Control)	3A Relay, SPDT	3A Relay, SPDT	05R0235	260.00
I16D33-DC	Process/Temperature Controller with 12 to 36VDC, 24VAC Power Supply	3A Relay, SPDT	3A Relay, SPDT	27C1528	270.00
● I16033-EIT	Process/Temperature Controller with Ethernet Connectivity	3A Relay, SPDT	3A Relay, SPDT	35R2726	310.00
I16D33-C24-DC	Process/Temperature Controller with Isolated RS232 & RS485/422, and 12 to 36VDC, 24VAC Power Supply	3A Relay, SPDT	3A Relay, SPDT	04X5570	345.00
I16D44	Process/Temperature Controller	DC Pulse	DC Pulse	04X5571	260.00
I16D43	Process/Temperature Controller	DC Pulse	Relay	87H8809	245.00
I16D53	Process/Temperature Controller	Analog	Relay	65H4323	260.00
SINGLE DISPLAY STRAIN/PROCESS INPUT WITH TWO CONTROL OUTPUTS					
IS1633	Strain/Process Controller	3A Relay, SPDT	3A Relay, SPDT	05R0234	275.00
IS1633-C24-DC-AL	Strain/Process Controller with Isolated RS232 & RS485/422, 12 to 36VDC, 24VAC Power Supply, and Limit Alarms, No PID Control	3A Relay, SPDT	3A Relay, SPDT	04X5565	360.00
DUAL DISPLAY STRAIN/PROCESS INPUT WITH TWO CONTROL OUTPUTS					
IS16D33	Strain/Process Controller	3A Relay, SPDT	3A Relay, SPDT	05R0233	295.00

(51575)

CONTROLLERS – TEMPERATURE

⅛ DIN SIZE METER/PID CONTROLLERS

NEWPORT

The **iSeries** color display can be programmed to change between green, amber and red at any set or alarm point. Display features LEDs twice the size of typical ⅛ DIN meters for easier viewing. Contains a universal input for 10 thermocouples (K, J, T, E, R, S, B, C, N and J DIN), plus 100-, 500-, and 1000-ohm RTD's with 2-, 3-, and 4-wire connections for the most accurate RTD measurements. Totally scalable process voltage of 0–100mV, 0–1V, 0–10V ranges and process current of 0–20mA. Includes built-in 24VDC excitation, standard and optional RS-232 and RS-485 serial communications, and Ethernet output. Offers on/off or full autotune PID control with optional outputs: relays, SSR's, DC pulse and analog. The universal power supply runs on 90–240VAC/DC. Low-voltage 12–36VDC and 24VAC is optional.

STANDARD VERSION - 48H x 96W x 104.1mmL

Mfg. Part No.	Description	Stock No.	Price Each
I800	Temperature/Process Monitor	96B0170	200.00
I833	PID Controller, 2 SPDT 3A Relays	96B0172	255.00
ULTRA COMPACT VERSION - 48H x 96W x 54.84mmL			
I8C00	Monitor 1/8 DIN Short Case	31C0999	285.00

(51573)

E5CC & E5EC TEMPERATURE CONTROLLER

NEW

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- High-contrast, white LCD display visible from large distances and from any angle
- Easy to set up, and operate intuitively via CX-Thermo without power supply
- 50 ms sampling period for fast and precise regulation
- Functions for diagnosis for secure operations (see note 1)
- Useful timer and logic operation functions eliminating the need of a PLC

Mfg. Part No.	Temperature Accuracy ±	Stock No.	Price Each 1-4
● E5CC-QQ3A5M-003	0.3	46X9783	628.88
● E5CC-QQ3D5M-003	0.3	46X9784	628.88
● E5CC-QX3D5M-003	0.3	46X9785	599.97
● E5CC-RX3A5M-003	0.3	46X9786	592.74
● E5CC-RX3D5M-003	0.3	46X9787	592.74
● E5EC-PR0ASM-800	0.3	46X9814	571.06
● E5EC-PR2ASM-800	0.3	46X9815	643.34
● E5EC-PR2ASM-804	0.3	46X9816	945.63

(212178)

E5AC SERIES TEMPERATURE CONTROLLERS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- White LCD PV display with a height of approx. 25mm
- Tool ports are provided both on the top panel and the front panel
- High-speed sampling at 50ms
- Short body with depth of 60mm
- Easy connections to a PLC with programless communications
- 4 auxiliary outputs
- Screw terminals (with cover)

Mfg. Part No.	Supply Voltage	Control Output 1	Control Output 2	Stock No.	Price 1-4
● E5AC-CX4A5M-000*	100-240VAC	Current	none	86W6684	829.82
● E5AC-CX4D5M-000*	24VAC/DC	Current	none	86W6685	829.82
● E5AC-QX4A5M-000	100-240VAC	Voltage/SSR	Voltage/SSR	86W6686	541.39
● E5AC-QX4D5M-000	24VAC/DC	Voltage/SSR	Voltage/SSR	86W6687	541.39
● E5AC-RX4A5M-000	100-240VAC	Relay	none	86W6688	541.39
● E5AC-RX4A5M-010**	100-240VAC	Relay	none	86W6689	747.66
● E5AC-RX4D5M-000	24VAC/DC	Relay	none	86W6690	541.39
● E5AC-RX4D5M-010**	24VAC/DC	Relay	none	86W6691	747.66

*The control output cannot be used to transfer output; **2 event inputs; HB alarm and HS alarm

(210166)

E5AN / E5AN-H SERIES 1/4 DIN DUAL DISPLAY DIGITAL TEMPERATURE CONTROLLERS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

E5AN-R E5AN-H

Type	Basic	Advanced
Operating Voltage Range:	85% to 110% of rated supply voltage	
Power Consumption:	100 to 240VAC: 10VA 24VAC: 5.5VA, 24VDC: 4W	100 to 240VAC: 12VA 24VAC: 8.5VA, 24VDC: 5.5W
Sampling Period:	250ms	60ms
Thermocouple Input:	±0.3% of PV	±0.1% of PV
Pt Input:	±0.2% of PV	±0.1% of PV
Analog Input:	±0.2% FS	±0.1% FS
Operating Temp:	-10 to 55°C (w/ no condensation or icing), for 3-year warranty: -10 to 50°C	

BASIC-TYPE DIGITAL TEMPERATURE CONTROLLERS (3 AUX. OUTPUTS)

Mfg. Part No.	Control Output 1	Control Output 2	Stock No.	Price 1-4
● E5AN-R3MT-500-N AC100-240	Relay	None	10R5225	585.53
● E5AN-R3HMT-500-N AC100-240	Relay	Heater Burnout / SSR Failure / Heater Overcurrent Detection	10R5224	667.84
E5ANC3MT500NAC100240	Current	None	12P6379	414.29
ADVANCED DIGITAL TEMPERATURE CONTROLLERS (2 AUX. OUTPUTS)				
● E5AN-HAA2HBM-500 AC100-240	Control Unit	Control Unit	08R8841	571.41
● E5AN-HSS2HBM-500 AC100-240	SSR	SSR	08R8853	767.93
● E5AN-HAA2HBMD-500 AC/DC24	Control Unit	Control Unit	08R8843	665.03
● E5AN-HSS2HBMD-500 AC/DC24	SSR	SSR	08R8854	728.10

(60977)

E5AC TEMPERATURE CONTROLLER

NEW

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- High-contrast, white LCD display visible from large distances and from any angle
- Easy to set up, and operate intuitively via CX-Thermo without power supply
- 50 ms sampling period for fast and precise regulation
- Functions for diagnosis for secure operations (see note 1)
- Useful timer and logic operation functions eliminating the need of a PLC
- Operating temperature: -10°C to +55°C

Mfg. Part No.	Thermocouple Type	Stock No.	Price Each 1-4
● E5AC-PR0ASM-800	B, E, J, K, L, N, R, S, T, U, W, PLII	46X9727	650.57
● E5AC-PR2ASM-800	B, E, J, K, L, N, R, S, T, U, W, PLII	46X9728	650.57
● E5AC-PR2ASM-804	B, E, J, K, L, N, R, S, T, U, W, PLII	46X9729	795.14
● E5AC-QX1ASM-800	B, E, J, K, L, N, R, S, T, U, W, PLII	46X9752	416.97
● E5AC-QX1DSM-800	B, E, J, K, L, N, R, S, T, U, W, PLII	46X9753	416.97
● E5AC-QX3ASM-800	B, E, J, K, L, N, R, S, T, U, W, PLII	46X9754	452.91
● E5AC-QX3ASM-808	B, E, J, K, L, N, R, S, T, U, W, PLII	46X9755	599.97
● E5AC-QX3ASM-810	B, E, J, K, L, N, R, S, T, U, W, PLII	46X9756	542.14
● E5AC-QX3DSM-800	B, E, J, K, L, N, R, S, T, U, W, PLII	46X9757	452.91
● E5AC-QX3DSM-808	B, E, J, K, L, N, R, S, T, U, W, PLII	46X9758	599.97
● E5AC-QX3DSM-810	B, E, J, K, L, N, R, S, T, U, W, PLII	46X9759	542.14
● E5AC-RX1ASM-800	B, E, J, K, L, N, R, S, T, U, W, PLII	46X9771	416.97
● E5AC-RX1DSM-800	B, E, J, K, L, N, R, S, T, U, W, PLII	46X9772	416.97
● E5AC-RX3ASM-800	B, E, J, K, L, N, R, S, T, U, W, PLII	46X9773	452.91
● E5AC-RX3ASM-808	B, E, J, K, L, N, R, S, T, U, W, PLII	46X9774	599.97
● E5AC-RX3ASM-810	B, E, J, K, L, N, R, S, T, U, W, PLII	46X9775	542.14
● E5AC-RX3DSM-800	B, E, J, K, L, N, R, S, T, U, W, PLII	46X9776	452.91
● E5AC-RX3DSM-808	B, E, J, K, L, N, R, S, T, U, W, PLII	46X9777	599.97
● E5AC-RX3DSM-810	B, E, J, K, L, N, R, S, T, U, W, PLII	46X9778	542.14
● E5AC-RX4D5M-009	B, E, J, K, L, N, R, S, T, U, W, PLII	46X9781	766.23
● E5AC-RX4D5M-011	B, E, J, K, L, N, R, S, T, U, W, PLII	46X9782	896.34

(212177)

E5GN SERIES DIGITAL TEMPERATURE CONTROLS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Indication Accuracy
- Thermocouple input: ±0.3% of PV (previous models: ±0.5%)
- Pt input: ±0.2% of PV (previous models: ±0.5%)
- Analog input: ±0.2% FS (previous models: ±0.5%)
- Models are available with screw terminal blocks or screwless clamp terminal blocks.
- A PV/SV-status display function can be set to automatically alternate between displaying the status of the temperature controller (auto/manual, RUN/STOP, and alarms) and the PV or SV.
- Preventive maintenance for relays in the temperature controller using a control output ON/OFF counter.
- Switch the PV display between three colors.
- Compatible with Support Software (CX-Thermo version 4.2 or higher).
- Eleven-segment displays.
- Models are available with one or two alarm outputs.

Mfg. Part No.	Output	Stock No.	Price Each
E5GN-Q1T AC100-240	Voltage	72R8923	298.79
E5GN-RTD AC/DC24	Relay	72R8931	257.93
E5GN-R1T AC100-240	Relay	72R8933	303.38
E5GN-R1TD AC/DC24	Relay	72R8935	291.57

(178871)

1/16 DIN DIGITAL TEMPERATURE CONTROLLERS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- A PV/SV-status display function can be set to automatically alternate between displaying the status of the Temperature Controller (auto/manual, RUN/STOP, and alarms) and the PV or SV
- Preventive maintenance for relays in the Temperature Controller using a Control Output ON/OFF Counter

Advanced

Type	Basic	Advanced
Operating Voltage Range:	85% to 110% of rated supply voltage	
Power Consumption:	100 to 240VAC: 7.5 VA (max.) (E5CN-R2T at 100VAC: 3.0 VA) 24VAC/VDC: 5VA / 3W (max.) (E5CN-R2TD at 24VAC: 2.7 VA)	100 to 240VAC: 8.5VA (max.) (E5CN-HR2 at 100VAC: 3VA) 24VAC/VDC: 5.5VA / 3.5W (max.) (E5CN-HR2D at 24VAC: 2.7VA)
Sampling Period:	250ms	60ms
Thermocouple Input:	±0.3% of PV	±0.1% of PV
Pt Input:	±0.2% of PV	±0.1% of PV
Analog Input:	±0.2% FS	...
Operating Temp:	-10 to 55°C (w/ no condensation or icing), for 3-year warranty: -10 to 50°C	

BASIC-TYPE DIGITAL TEMPERATURE CONTROLLERS

Mfg. Part No.	No. of Digits	Supply Voltage	Control Output 1	Aux. Output	Stock No.	Price Each 1-4
E5CN-RMT-500 AC100240	4	100VAC to 240VAC	Relay	None	10R5227	341.81
E5CN-R2MT-500 AC100-240	4	100VAC to 240VAC	Relay	2	07J7174	279.16
E5CN-QMT500-AC100240	4	100VAC to 240VAC	Voltage/SSR	None	07J9811	268.21
E5CN-Q2MT500-AC100240	4	100VAC to 240VAC	Voltage/SSR	2	88K1928	279.16
E5CN-R2MTD-500 ACDC24	4	24VAC/VDC	Relay	2	10R5228	387.28
E5CN-Q2MTD-500 ACDC24	4	24VAC/VDC	Voltage/SSR	2	10R5226	381.42
ADVANCED DIGITAL TEMPERATURE CONTROLLERS						
E5CN-HQ2M-500 AC100-240	5	100VAC to 240VAC	Voltage/SSR	2	08R9002	460.90
E5CN-HR2MD-500 AC/DC24	5	24VAC/VDC	Relay	2	08R9007	442.96
E5CN-HQ2MD-500 AC/DC24	5	24VAC/VDC	Voltage/SSR	2	08R9004	456.91

CONTROLLER OPTION UNITS

Mfg. Part No.	Description	Stock No.	Price 1-4
E53-CNHBN2	Control output 2 (Voltage for diving SSR)	10R5237	72.96
E53-CNBN2	Event Inputs	10R5236	53.74

ACCESSORIES

Mfg. Part No.	Kit Contents	Stock No.	Price Each Each
EST2-2C-MV4	CX-Thermo Support Software	72M6955	217.08

(148697)

1/16 DIN TEMPERATURE CONTROLLER

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Automatic Adjustment and PID Control in a 48x48mm Package
- Control Accuracy to ±1% of Full Scale
- Selectable Temperature Ranges in °C or °F
- Easy-to-read 13.5mm-High LED Display
- Models for Thermocouple Types J/L and K Inputs and Platinum RTD Inputs
- PID and On/Off Control Modes
- Wide Power Supply Range: 100 to 240VAC, 50/60Hz
- Tamper-proof Setting, Faulty Sensor Detection and Controller Diagnostics

Versatile, low-cost controllers have °F scales. Voltage output is rated 12VDC, 21mA with short-circuit protection. Relay output is SPST-NO rated 3A, 250VAC. Accepts J/L, K thermocouples, auto-tuning of P band. Accurate to ± 0.5% of full scale. Eight-function alarm output (SPST-NO relay, 1A, 250VAC). Rated IP50 (NEMA 4 with optional cover *go online or call*). **E5CSV:** 1.89H x 1.89W x 3.07"D (48 x 48 x 78mm), 5VA power consumption. Panel mounting adapter is supplied. UL recognized, CSA certified.

Mfg. Part No.	Output	Input Type	Stock No.	Price Each
E5CSVQ1TFAC100240	Voltage	Thermocouple / Platinum RTD	17M6596	261.73
E5CSVR1TFAC100240	Relay	Thermocouple / Platinum RTD	80K1834	264.03

(2446)

E5EN / E5EN-H SERIES 1/8 DIN DIGITAL TEMPERATURE CONTROLLERS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

Basic

Advanced

Type	Basic	Advanced
Operating Voltage Range:	85% to 110% of rated supply voltage	
Power Consumption:	100 to 240VAC: 10VA 24VAC: 5.5VA, 24VDC: 4W	100 to 240VAC: 12VA 24VAC: 8.5VA, 24VDC: 5.5W
Sampling Period:	250ms	60ms
Thermocouple Input:	±0.3% of PV	±0.1% of PV
Pt Input:	±0.2% of PV	±0.1% of PV
Analog Input:	±0.2% FS	±0.1% FS
Operating Temp:	-10 to 55°C (w/ no condensation or icing), for 3-year warranty: -10 to 50°C	

Other DC voltage types available; *go online or call.*

BASIC-TYPE DIGITAL TEMPERATURE CONTROLLERS (3 AUX. OUTPUTS)

Mfg. Part No.	Control Output 1	Control Output 2	Stock No.	Price Each 1-4
E5EN-R3MT-500-N AC100-240	Relay	None	08R9136	405.22
E5EN-Q3MT-500-N AC100-240	Voltage/ SSR	None	08R9123	358.81
ADVANCED DIGITAL TEMPERATURE CONTROLLERS (2 AUX. OUTPUTS)				
E5EN-HAA2HBM-500 AC100-240	Control Unit	Control Unit	08R9099	547.70
E5EN-HSS2HBM-500 AC100-240	SSR	SSR	08R9110	678.45
E5EN-HAA2HBMD-500 AC/DC24	Control Unit	Control Unit	08R9100	547.70
E5EN-HSS2HBMD-500 AC/DC24	SSR	SSR	08R9111	678.45

(51796)

TEMPERATURE CONTROLLERS

RoHS Compliant Available

red lion

Model TCU

Model T16

Model T48

CONTINUED

TEMPERATURE CONTROLLERS (CONT.)

Can operate in the PID control mode for both heating and cooling, with on-demand auto-tune or ON/OFF control mode with adjustable hysteresis. CE compliant, UL recognized.

RANGE AND ACCURACY FOR MODEL TCU TEMPERATURE CONTROLLERS

TC Type	Range	Accuracy	Wire Color (ANSI)
T	-200°C to +400°C -328°F to +752°F	0.20% + 1.5°C 0.20% + 2.7°F	Blue
E	-200°C to +750°C -328 °F to +1382°F	0.20% + 1.5°C 0.20% + 2.7°F	Violet
J	-200°C to +760°C -328°F to +1400°F	0.15% + 1.5°C 0.15% + 2.7°F	White
K	-200°C to + 1250°C -328°F to +2282°F	0.20% + 1.5°C 0.20% + 2.7°F	Yellow
R	0°C to +1768°C +32°F to +3214°F	0.15% + 2.5°C 0.15% + 4.5°F	Black
S	0°C to +1768°C +32°F to +3214°F	0.15% + 2.5°C 0.15% + 4.5°F	Black
B	+200°C to +1820°C +300°F to +3308°F	0.15% + 2.5°C 0.15% + 4.5°F	Grey
N	-200°C to +1300°C -328°F to +2372°F	0.20% + 1.5°C 0.20% +2.5°F	Orange
mV	-5.00 to 56.00	0.15% + 1 LSD	...
RTD (385)	-200°C to +600°C -328°F to +1100°F	0.10% + 0.5°C 0.10% + 0.9°F	...
RTD (392)	-200°C to +600°C -328°F to +1100°F	0.10% + 0.5°C 0.10% + 0.9°F	...
OHMS	1.0 to 320.0	0.15% + 1 LSD	...

MODEL TCU TEMPERATURE CONTROL UNITS

Programmable user input (digital) for added flexibility. Manual/automatic and local/remote setpoint control modes. Setpoint ramping for process startup. Optional RS485 serial communications interface as well as additional options available; *go online or call.*

Mfg. Part No.	Input Voltage	Input Type	Output Type	Alarms	Stock No.	Price Each
TCU00000	115/230VAC	Thermocouple or RTD	Voltage/SSR	...	84K7518	249.00
TCU01001	115/230VAC	Thermocouple or RTD	Voltage/SSR	...	84K7519	358.00
TCU10002	115/230VAC	Thermocouple or RTD	Voltage/SSR	Relay	84K7521	347.00

MODEL T16 TEMPERATURE/PROCESS CONTROLLERS

On demand auto-tuning. User programmable function button. Other options available; *go online or call.*

● T1610000	85-250VAC	Thermocouple or RTD	Relay	...	84K7522	129.00
● T1620000	85-250VAC	Thermocouple or RTD	Voltage/SSR	...	84K7523	129.00

MODEL T48 1/16 DIN TEMPERATURE CONTROLLERS

On demand auto-tuning. Setpoint ramping for process startup. Programmable user input (digital) for added flexibility. Other options available; *go online or call.*

T4810000	85-250VAC	Thermocouple or RTD	Relay	...	84K7524	197.00
T4820000	85-250VAC	Thermocouple or RTD	Voltage/SSR	...	84K7525	197.00
T4821000*	85-250VAC	Thermocouple or RTD	Voltage/SSR	Relay	84K7526	223.00

*With NEMA 4X/P65 bezel.
(88725)

EAO CONFIGURABLE HMI PANEL DEVELOPMENT KIT

RoHS Compliant Available

eao

Features

- Completely customizable size, function, appearance, etc…
- "Mixed technology" helps differentiate critical functions
- Plug-and-play USB interface
- Illuminated animated buttons and engravable legends
- East-label slide-in legends for function keys
- Incorporated 5.7" LCD display with resistive touchscreen
- Single board computer integration available

Contents of Kit

- Configurable HMI Panel demo unit, user manual, and datasheet
- Touchscreen calibration driver
- Integrated USB, power, and monitor cables
- Carrying case

Add a Human Machine Interface to your equipment quickly and easily with EAO's Configurable HMI Panel. Awarded as industry's "Best New Products", the Configurable Panel's design flexibility allows for speedy customization to accommodate electronics, medical, aerospace, transportation, and CNC machinery applications effortlessly.

Mfg. Part No.	Description	Stock No.	Price Each 1-24
● EUS-C-HMI-06-RTSD-EK8/DEVKIT	5.7" window, acrylic glass lens, resistive touch screen w/display, E-Stop, keylock, 8 discrete pushbuttons	05W3760	2888.37

(203980)

OI TOUCHSCREEN STARTER KITS

RoHS Compliant Available

IDEC

- 5.7", 8.4", 10.4" and 12.1" touchscreens
- 65,536 Color TFT LCD
- Mounts portrait or landscape
- Video & audio interface
- Remote access, monitor & control
- Super bright: Up to 800 cd/m2
- Support of microsmart expansion discrete I/O modules
- Serial, Ethernet, & USB ports

Mfg. Part No.	Description	Stock No.	Price Each
● SMARTTOUCH-2GTE	5.7" 256 Color TFT LCD Screen, Power Supply, Cables and Software	61T3418	599.00
● SMARTTOUCH-2GHP	5.7" 65K Color TFT LCD Screen, Power Supply, Cables and Software	61T3417	849.00
● SMARTTOUCH-3G8HP	8.4" 65K Color TFT LCD Screen with Video & Audio, Power Supply, Cables and Software	61T3422	1099.00
● SMARTTOUCH-3GAHP	10.4" 65K Color TFT LCD Screen with Video & Audio, Power Supply, Cables and Software	61T3421	1499.00
● SMARTTOUCH-4GHP	12.1"65K Color TFT LCD Screen with Video & Audio, Power Supply, Cables and Software	61T3423	1699.00
● SMARTTOUCH-1F	4.6" Monochrome LCD Screen with RS232, Power Supply, Cables and Software	29M8420	411.77

ACCESSORY

Mfg. Part No.	Accessory Type	For Use With	Stock No.	Price Each 1-4
HG9Z-XCM2A	USB Cable	HG2G / HG3G / HG4G Series OI Touchscreens	60T5977	12.20

(203573)

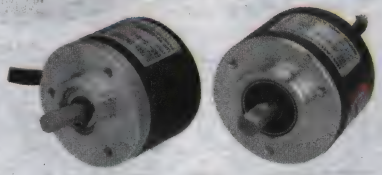
40 AND 50 MM DIAMETER INCREMENTAL ROTARY ENCODERS

CE

Autonics
Sensors & Controllers

Features

- 40mm types
- Easy installation at narrow space
- Small moment of inertia
- Power supply: 5VDC, 12-24VDC +/- 5%
- Various output types
- 50mm types
- Suitable for measuring angle, position, revolution, speed, acceleration and distance
- Power supply: 5VDc, 12-24VDC +/- 5%
- Cost effective
- Max. revolution: 5000rpm



40MM 50MM

40MM HOLLOW TYPE

Mfg. Part No.	Output Type	Resolution	Power Supply (VDC)	Stock No.	Price Each
E40H8-100-3-N-24	NPN	100	12V to 24V	22T1204	140.95
E40H8-100-3-T-24	Totem pole	100	12V to 24V	22T1205	140.95
E40H8-1024-6-L-5	Line driver	1024	4.75V to 5.25V	22T1206	162.95
E40H8-360-3-N-24	NPN	360	12V to 24V	22T1207	151.95
E40H8-360-3-T-24	Totem pole	360	12V to 24V	22T1208	151.95
E40H8-60-3-N-24	NPN	60	12V to 24V	22T1209	140.95
E40H8-60-3-T-24	Totem pole	60	12V to 24V	22T1210	140.95
40MM SHAFT TYPE					
E40S6-100-3-N-24	NPN	100	12V to 24V	22T1211	117.95
E40S6-100-3-T-24	Totem pole	100	12V to 24V	22T1212	117.95
E40S6-1024-6-L-5	Line driver	1024	4.75V to 5.25V	22T1213	154.95
E40S6-360-3-N-24	NPN	360	12V to 24V	22T1214	140.95
E40S6-360-3-T-24	Totem pole	360	12V to 24V	22T1215	140.95
50MM SHAFT TYPE					
E50S8-100-3-N-24	NPN	100	12V to 24V	22T1217	139.95
E50S8-100-3-T-24	Totem pole	100	12V to 24V	22T1218	139.95
E50S8-1024-6-L-5	Line driver	1024	4.75V to 5.25V	22T1219	182.95
E50S8-200-3-N-24	NPN	200	12V to 24V	22T1220	139.95
E50S8-200-3-T-24	Totem pole	200	12V to 24V	22T1221	139.95
E50S8-360-3-N-24	NPN	360	12V to 24V	22T1222	139.95
E50S8-360-3-T-24	Totem pole	360	12V to 24V	22T1223	139.95
E50S8-500-3-N-24	NPN	500	12V to 24V	22T1224	139.95
E50S8-500-3-T-24	Totem pole	500	12V to 24V	22T1225	139.95
E50S8-60-3-N-24	NPN	60	12V to 24V	22T1226	139.95
E50S8-60-3-T-24	Totem pole	60	12V to 24V	22T1227	139.95

(194490)

ENC SERIES INCREMENTAL MEASURING WHEEL TYPE ROTARY ENCODERS

Autonics
Sensors & Controllers

Features
- Suitable for measuring the length or speed of target moving successively by wheel type
- The output waveform is proportional to the unit of international measurement type (meter or inch)
- Power supply: 5VDC, 12-24VDC +/- 5%
- Max. revolution: 5000rpm

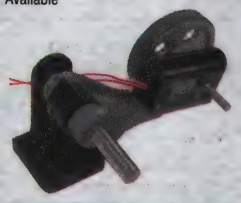
Mfg. Part No.	Measuring Unit	Output Type	Power Supply (VDC)	Stock No.	Price Each
ENC-1-4-N-24	0.01yd	NPN	12V to 24V	22T1195	159.95
ENC-1-4-T-24	0.01yd	Totem pole	12V to 24V	22T1196	159.95
ENC-1-5-N-24	0.1yd	NPN	12V to 24V	22T1197	159.95
ENC-1-5-T-24	0.1yd	Totem pole	12V to 24V	22T1198	159.95
ENC-1-6-N-24	1yd	NPN	12V to 24V	22T1199	159.95
ENC-1-6-T-24	1yd	Totem pole	12V to 24V	22T1200	159.95

(194491)

ES 9513 ROTARY CONTACTOR LENGTH (FEET) MEASURING SYSTEM

RoHS Compliant Available
EATON

Electronic rotary contactor measures shaft revolutions at speeds to 2400 RPM at 1:1 ratio; 2400 counts per minute maximum. Use for lineal paper, veneer, textile, steel, and jute lineal measurement applications. **Mfg. part no. 40891400** has leaf switch rated 5 amps, 120-240V for output into electromechanical circuits. Measuring system comprises rotary contactor, mounting bracket, and wheel; *each ordered separately.*



Mfg. Part No.	Description	Stock No.	Price Each 1-4
20154300	Rubber-Rimmed Measuring Wheel	87F6108	108.41
● 40460400	Mounting Bracket	87F6107	185.91
● 40891400	Rotary Contactor	83F7294	332.20

(2697)

SERIES D MECHANICAL MEASURING (ft.) SYSTEM

RoHS Compliant Available
EATON

Lightweight counter for measuring soft, delicate fabric, paper, etc. at speeds up to 800 yards per minute. Measure in feet with maximum count of **99999**. Wing nut reset. Oil-less maintenance-free bearings. System comprises rotary contactor, mounting bracket, and wheel.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
40187401	Clockwise	87F6142	408.06
● 40460400	Bracket	87F6107	185.91
20154300	Rubber-Rimmed Measuring Wheel	87F6108	108.41

(31688)

ELECTRONIC LENGTH MEASURING SYSTEM

RoHS Compliant Available
EATON

Mfg. part no. 38150100 single channel encoder measures web speed, length or position when radial load does not exceed 20 lbs., and axial load does not exceed 10 lbs. Delivers 100 pulses per revolution. Shaft: 0.375″ (9.53). Sealed against dust and oil. **Mfg. part no. 38151600** medium-duty quadrature encoder delivers 600 pulses per revolution and measures in 1/60″ increments. Both systems operate on 5 to 28VDC. Measuring systems comprise encoder, wheel, connector with cable, and mounting bracket; *each ordered separately.*

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● 38150100	Single Channel Encoder, 100PPR	87F6118	397.17
● 38151600	Quadrature Encoder, 600PPR	89M5403	653.63
● 20154301	12″ (304.8) Rubber Rim Wheel	87F6104	104.54
● 29665300	Connector & 10′ Shielded Cable	87F6105	118.37
● 40460402	Mounting Bracket	55M2240	217.11

(2693)

MINIATURE LENGTH SENSORS

RoHS Compliant Available
red lion

- Supply Voltage: 4.75 to 28 VDC @ 100 mA max.
- Output: NPN Open Collector Transistor
- Max. Frequency: 200KHz
- High precision (Up to 2500) PPR
- Max. Mechanical Speed: 6000 RPM
- Compact Size
- Quadrature Output
- Built-In spring tensioning
- Vertical, Horizontal, or Upside-down mounting
- Various measuring wheels available

Designed for light to medium duty sensing applications, the Miniature Length Sensor, Model ZMD, is compact in size and easy-to-use. It features a built-in spring-loaded torsion arm that adjust torsion load, allowing the unit to be mounted in almost any orientation, including upside down. Using a 6″ or 200 mm wheel, the ZMD can be used on almost any surface, while operating at speeds up to 3000 feet per minute. The housing is a durable, conductive composite material that will eliminate static build up. Whether you need to measure speed, position, or distances, the Model ZMD is the ideal solution. For other pulse rates and/or wiring configurations, contact the factory for further details.

Mfg. Part No.	PPR	Stock No.	Price Each
● ZMD0500B	500	19P7183	272.00
● ZMD1000B	1000	19P7184	272.00
● ZMD2000B	2000	19P7185	279.00
● ZMD2500B	2500	19P7186	279.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
● RPGMB002	Mounting Bracket	19P7172	28.00
● WI00060F	Urethane (6″ Circumference) Wheel	35M4648	42.00

(136327)

0.25″ SHAFT STANDARD SERVO MOUNT ROTARY PULSE GENERATORS

RoHS Compliant Available
red lion

- Supply Voltage: 4.75 to 28 VDC @ 100 mA max.
- Output: NPN Open Collector Transistor
- Max. Frequency: 200KHz
- High precision (Up to 2500) PPR
- Max. Mechanical Speed: 8000 RPM
- Low Cost
- Miniature size

The Model ZSD encoder is ideal for applications requiring a miniature, high precision, low cost encoder, designed with all metal construction for years of trouble-free operation. The NPN Open Collector outputs are each current limited to 20 mA. The outputs are standard quadrature with index, available in resolutions up to 2500 pulses per shaft revolution. The quadrature separation is typically 90 electrical degrees. Output A leads output B for clockwise rotation of the encoder shaft.

Mfg. Part No.	PPR	Stock No.	Price Each
● ZSD0500A	500	19P7203	233.00
● ZSD1000A	1000	19P7204	233.00
● ZSD2000A	2000	19P7205	243.00
● ZSD2500A	2500	19P7206	243.00

ACCESSORIES

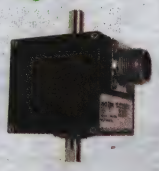
Mfg. Part No.	Description	Stock No.	Price Each
● RPGFC001	Flexible Coupling (1″ Length) 0.25″ - 0.25″	19P7165	40.00
● RPGFC002	Flexible Coupling (1″ Length) 0.25″ - 0.375″	19P7166	40.00
● RPGFC005	Flexible Coupling (1″ Length) 0.25″ - 6 mm	19P7169	40.00

(136324)

ZBH SERIES STANDARD DUTY ENCODERS

RoHS Compliant Available
red lion

- Current Sink Outputs
- High Pulse Per Revolution (PPR) Rates Up to 1200 PPR
- Quadrature Output
- Available with MS and M12 Connectors
- Shaft Speed: 600 RPM
- Supply Voltage: 5 to 28 VDC @ 80 mA max.



The units contain an L.E.D. light source and a photo sensor that scans a shaftmounted, slotted disc. An internal pulse-shaping amplifier circuit delivers a rectangular pulse signal from the current sinking output in response to the passing slots as it rotates. They can be direct-coupled to a machine shaft by means of a flexible-bellows, spring, or rubber sleeve type coupling that allows for axial and radial misalignment. They can also be coupled with light instrument timing-belts. Timing-belt drives also allow convenient gear-up or gear-down speed ratio changes that can be useful for obtaining non-standard PPR rates.

Mfg. Part No.	PPR	Stock No.	Price Each
● ZBH01002	100	19P7175	279.00
● ZBH05002	500	19P7176	279.00
● ZBH10002	1000	19P7177	279.00
● ZBH25002	2500	19P7178	372.30

CONTINUED

ZBH SERIES STANDARD DUTY ENCODERS (CONT.)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
● CCARPG00	Mating 6-Pin MS Connector	19P7150	23.00
● CCARPG01	10ft. 6-Pin 4-wire Cable/Connector	46M3690	50.00
● RPGFC002	Flexible Coupling (1″ Length) 0.25″ - 0.375″	19P7166	40.00
● RPGFC003	Flexible Coupling (1″ Length) 0.375″ - 0.375″	19P7167	40.00
● RPGFC004	Flexible Coupling (1″ Length) 0.375″ - 0.5″	19P7168	55.00
● RPGFC006	Flexible Coupling (1″ Length) 0.375″ - 6 mm	19P7170	40.00

(136322)

THRU-BORE ROTARY PULSE GENERATORS

RoHS Compliant Available

red lion®

- Supply Voltage: 4.75 to 28 VDC @ 100 mA max.
- Output: NPN Open Collector Transistor
- Max. Frequency: 200KHz
- High precision (Up to 2500) PPR
- Max. Mechanical Speed: 8000 RPM
- Flexible Butterfly Mounting
- Current Limited Outputs

The Model Z0D and Z0H are Thru-Bore Encoders. The Z0D has a bore of 0.25″ (6.35 mm) and the Z0H is a 0.375″ (9.5 mm) bore. These units are ideal for applications requiring a miniature, high precision, low cost encoder, designed with all metal construction for years of trouble-free operation. The encoders have a flexible butterfly mount and blind hollow shaft. These encoders use two set screws that are 90° apart to clamp the encoder's hub to the motor shaft. The NPN Open Collector outputs are each current limited to 100 mA. The outputs are standard quadrature with index, and are available in resolutions up to 2500 pulses per shaft revolution. The quadrature separation is typically 90 electrical degrees. Output A leads output B for clockwise rotation of the encoder shaft.

Z0D SERIES 0.25″ THRU-BORE ENCODERS

Mfg. Part No.	PPR	Stock No.	Price Each
● Z0D0500A	500	19P7191	233.00
● Z0D1000A	1000	19P7192	233.00
● Z0D2000A	2000	19P7193	243.00
● Z0D2500A	2500	19P7194	243.00
Z0H SERIES 0.375″ THRU-BORE ENCODERS			
● Z0H0500A	500	19P7195	246.00
● Z0H1000A	1000	19P7196	246.00
● Z0H2000A	2000	19P7197	246.00
● Z0H2500A	2500	19P7198	246.00

(136325)

2″ AND 2.5″ FLANGE MOUNT ROTARY PULSE GENERATOR

RoHS Compliant Available

red lion®

- Supply Voltage: 4.75 to 28 VDC @ 100 mA max.
- Output: NPN Open Collector Transistor
- Max. Frequency: Up to 1 MHz
- Max. Mechanical Speed: 8000 RPM
- Up to 250 PPR
- NEMA 4, 13 and IP65 standards

The ZDH and ZNH series of sensors are heavy duty, extremely rugged, reliable, yet compact encoders designed for harsh factory and plant floor environments. Both models are flange mount. Typical applications include motion control feedback, machine control, process control, elevator controls, conveyors, textile equipment, robotics and food processing. The ZDH and ZNH series of sensors have open collector outputs. An open collector output brings the uncommitted collector of the encoder switching device to the external world. Because the collector element is not associated with the sensor supply voltage, the sensor output collector may be "pulled up" to external voltages different than the encoder supply voltage (40 VDC maximum). NPN open collector outputs are current sinking devices. An output signal will not be generated unless a pull-up resistor is connected from the open collector to the positive side of an external supply. The same supply can be used for powering the unit and for the pull-up resistor.

2″ FLANGE MOUNT

Mfg. Part No.	PPR	Shaft Diameter (mm)	Stock No.	Price Each
● ZDH0500H	500	6.3	19P7179	379.00
● ZDH1000H	1000	6.3	19P7180	379.00
● ZDH2000H	2000	6.3	19P7181	416.00
● ZDH2500H	2500	6.3	19P7182	416.00
2.5″ FLANGE MOUNT				
● ZNH0500H	500	9.5	19P7187	369.00
● ZNH1000H	1000	9.5	19P7188	369.00
● ZNH2000H	2000	9.5	19P7189	404.00
● ZNH2500H	2500	9.5	19P7190	404.00

➤ CONTINUED ➤

2″ AND 2.5″ FLANGE MOUNT ROTARY PULSE GENERATOR (CONT.)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
● CCBRPG00	7-Pin Connector	19P7151	42.00
● CCBRPG02	10ft. 7-Pin 6-wire Cable/Connector	19P7152	63.00
● RPGFC002	Flexible Coupling (1″ Length) 0.25″ - 0.375″	19P7166	40.00
● RPGFC003	Flexible Coupling (1″ Length) 0.375″ - 0.375″	19P7167	40.00
● RPGFC004	Flexible Coupling (1″ Length) 0.375″ - 0.5″	19P7168	55.00
● RPGFC006	Flexible Coupling (1″ Length) 0.375″ - 6 mm	19P7170	40.00

(136323)

OPTICAL ENCODERS

Simpson

SE series encoders combine the most popular features into one economical, easy-to-order encoder package. The cube-style, quadrature encoder offers dual ⅜″ flat keyed shafts and 2 LEDs that flash as the shaft is turned, to aid in troubleshooting.

Mfg. Part No.	P.P.R.	Stock No.	Price Each
SE-060	60	83F7538	212.96
SE-100	100	83F7539	212.96
SE-120	120	83F7540	212.96
SE-600	600	83F7542	212.96

(33378)

THERMOCOUPLE AND RTD I/O MODULES

RoHS Compliant Available

ADVANTECH

CE

Mfg. part no. ADAM-6015-BE is a 7-channel RTD input module. Accuracy ± 0.05% or better. 16-bit resolution. PT-100 RTD: 7 temperature ranges from -200°C to +400°C, IEC RTD 100Ω = 0.00385), JIS RTD 100Ω = 0.00392). PT 1000 RTD: -40°C to +160°C. Balco 500 RTD: -30°C to +120°C. Ni 518: -80°C to +100°C.

ADAM-6018-BE

Mfg. part no. ADAM-6018-BE is an 8-channel thermocouple input with digital output module. Accuracy: ± 0.1% or better. 16-bit resolution. Temperature ranges: J: 0°C ~ 760°C, K: 0°C ~ 1370°C, T: -100°C ~ 400°C, E: 0°C ~ 1000°C, R: 500°C ~ 1750°C, S: 500°C ~ 1750°C, B: 500°C ~ 1800°C

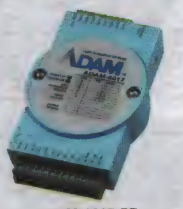
Mfg. Part No.	Analog Inputs	Digital Outputs	Input Type	Output Type	Stock No.	Price Each
● ADAM-6015-BE	7 Differential	...	Pt, Balco and Ni RTD	...	59M8629	375.00
● ADAM-6018-BE	8 Differential	8	Thermocouple	...	53M5903	450.00

(89553)

ANALOG I/O MODULES

CE RoHS Compliant Available

ADVANTECH



ADAM-6017-BE

Mfg. Part No.	Analog Inputs	Digital Outputs	Stock No.	Price Each
● ADAM-6017-BE	8 Differential mA, VDC	2 Open Collector	46M4730	315.00

(89554)

DISTRIBUTED I/O MODULES ADAM-4000

RoHS Compliant Available

ADVANTECH

FM CE

- Power Input: 10 - 30 VDC

Mfg. Part No.	Description	Stock No.	Price Each
● ADAM-4012-DE	1-ch Analog Input Module	47M1635	180.00
● ADAM-4013-DE	1-ch RTD Input Module	47M1636	170.00
● ADAM-4018+-BE	8-ch Thermocouple Input Module w/Modbus	59M8600	285.00

➤ CONTINUED ➤

DISTRIBUTED I/O MODULES ADAM-4000 (CONT.)

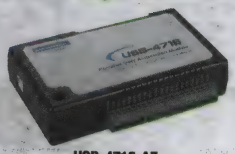
Mfg. Part No.	Description	Stock No.	Price Each
ADAM-4019+-AE	8-ch Universal Analog Input Module w/Modbus	59M8602	350.00
ADAM-4021-DE	1-ch Analog Output Module	47M1643	180.00
ADAM-4024-B1E	4-ch Analog Output Module w/ Modbus	59M8605	275.00
ADAM-4050-DE	15-ch Digital I/O Module	20M4516	110.00
ADAM-4051-BE	16-ch Isolated Digital Input Module w/Modbus	47M1645	140.00
ADAM-4053-AE	16-ch Digital Input Module	47M1648	125.00
ADAM-4055-BE	16-ch Isolated Digital I/O Module w/Modbus	47M1649	140.00
ADAM-4060-DE	4-ch Relay Output Module	47M1655	135.00
ADAM-4068-BE	8-ch Relay Output Module w/Modbus	47M1656	165.00
ADAM-4069-AE	8-ch Power Relay Output Module w/Modbus	47M1659	210.00
ADAM-4080-DE	2-ch Counter/Frequency Module	47M1660	180.00
ADAM-4117-AE	Robust 8-ch Analog Input Module w/Modbus	47M1662	270.00
ADAM-4015T-AE	Thermistor Module; No. of Channels:6	59M8599	330.00
ADAM-4016-A2E	Analog Input/Output Module; No. of Channels:1	26R9646	200.00
ADAM-4017-D2	8-Channel Analog InputModule w/ Modbus	71J0009	200.00
ADAM-4018-D2E	8-Channel ThermocoupleInput Module w/ Surge	59M8601	210.00
ADAM-4019-AE	Universal Analog Input Module;	59M8603	375.00
ADAM-4056S-AE	Digital Output Modbus; No. of Channels:12	47M1651	130.00
ADAM-4056SO-AE	Digital Output Modbus; No. of Channels:12	47M1653	155.00

(115437)

USB PORTS - DISTRIBUTED I/O MODULES

RoHS Compliant Available

ADVANTECH



USB-4718-AE

Mfg. Part No.	Description	Stock No.	Price Each
USB-4711A-AE	150kS/s, 12-bit Multifunction USB Module	71M0947	545.00
USB-4716-AE	200 kS/s, 16-bit, 16-ch Multifunction USB Module	05N1253	630.00
USB-4718-AE	8-ch Thermocouple Input USB Module with 8-ch Isolated DI	05N1254	325.00
USB-4750-AE	32-ch Isolated Digital I/O USB Module	51M2750	245.00
USB-4751-AE	48-CH TTL Digital I/O Module	05N1255	155.00
USB-4751L-AE	24-CH TTL Digital I/O Module	05N1256	135.00
USB-4761-AE	8-ch Relay & 8-ch Isolated Digital USB Module	51M2426	275.00

(115439)

DIGITAL I/O MODULES WITH COUNTER

RoHS Compliant Available

ADVANTECH

ADAM-6050

Mfg. Part No.	Digital Inputs	Digital Outputs	No. of Counters	Max. Count (kHz)	Stock No.	Price Each
ADAM-6051-BE	12 Logic	2 Open Collector	2	3	55M4832	195.00
ADAM-6052-CE	8 Logic	8, A, VDC	...	5	42X4860	189.00

(89556)

I/O MODULES

RoHS Compliant Available

crydom™ CROUZET AUTOMATION

Standard I/O

Quad I/O

➤CONTINUED➤

I/O MODULES (CONT.)

SMT construction for high reliability. 4KV optical isolation. Quad pack modules denoted with suffix **"Q"**; all others single point modules. Suffix **"N"** denotes modules with noise immunity per NEMA ICS2-230. **"M"** prefix denotes miniature modules for **M series** mounting boards. Prefix **"SM"** denotes miniature modules which plug into standard or sub-miniature mounting boards and offer nylon retaining pin for fast, secure installation. Both **"M"** and **"SM"** series are 33% thinner than standard I/O modules and feature open collector output. Suffix **"F"** denotes fast switching modules 47-63Hz. UL recognized and CE compliant.

INPUT MODULES

Mfg. Part No.	Input	Voltage	DC Logic	Stock No.	Price Each 1-9	Price Each 10-49
IAC5	AC/DC	90-140	5	17M6714	24.29	22.83
IAC24	AC/DC	90-140	24	17M6713	26.70	25.09
IAC5Q	AC/DC	90-140	5	46F4207	112.59	105.80
IDC5	DC	3.3-32	5	17M6715	23.99	22.55
IDC5F	DC	3.3-30	5	18M2180	29.66	27.87
IDC24	DC	3.3-32	24	18M2179	28.02	26.33
IDC5Q	AC/DC	10-48	5	46F4209	117.15	110.08
MIAC5	AC/DC	90-140	5	17M6723	23.99	22.55
SMIAC5	AC/DC	90-140	5	17M8208	24.29	22.83

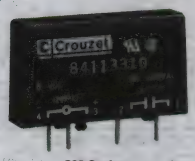
(3680)

M/SM SERIES INPUT/ OUTPUT MODULES

RoHS Compliant Available

crydom™ CROUZET AUTOMATION

M Series



SM Series

INPUT/OUTPUT MODULES

Mfg. Part No.	DC Input Voltage	Output Voltage	Amps	Stock No.	Price Each 1-9	Price Each 10-49
OAC5	5	12-140VAC	3.5	17M7503	23.69	22.27
OAC5A	5	24-280VAC	3.5	17M7504	25.15	23.64
OAC5AH	5	24-280VAC	5	17M7505	26.70	25.09
OAC-15	18.5	12-140V	3	03M5736	20.72	19.57
OAC24	24	12-140VAC	3.5	17M7501	29.74	28.36
ODC5	5	3-60VDC	3	18M9273	24.29	22.83
MODC24	24	18-32VDC	13	34B2968	32.09	30.29
ODC5F	5	3-60VDC	3	17M7508	32.75	30.78
ODC5Q	5	3-60VDC	3	46F4210	115.99	109.00
ODC5Q-11	5	3-60VDC	3	93F3630	109.00	102.43
ODC5ML	5	5-48 VDC	18	99F3051	46.57	43.96
ODC15	15	3-60VDC	3	21F862	28.29	26.98
ODC24	24	3-60VDC	3	17M7507	32.53	31.02
ODC-24A	30.5	5-200V	1	03M5738	32.08	30.28
MOAC5A	5	24-280VAC	3.5	18M9244	23.46	22.05
SM-OAC5	5	12-140VAC	3.5	18M9331	24.29	22.83

(3681)

"NEW GENERATION" DIN RAIL MOUNTABLE OUTPUT MODULES

RoHS Compliant Available

CROUZET AUTOMATION

DIN rail series I/O modules offer a packaging approach addressing installation and space-saving needs. DIN rail mountable (17.5mm wide) modules snap into place with an integral spring element which is part of the I/O assembly. Electrical connections made by wiring directly via a screw-clamp terminal design, conforming them to a "Touch Safe" IP-20 standard. Module includes LED indication, and output modules feature a quick and easy-to-change fuse (5A-Littlefuse Type 2290035). All units can also be configured for direct panel mounting. Input voltage is 4-32VDC. UL recognized and CE compliant. Dimensions mm (in.)

OUTPUT MODULES

Mfg. Part No.	Output Voltage	Max. Output Current (A)	Stock No.	Price Each 1-9	Price Each 10-49
84130104	5-60VDC	3	16F6315	36.61	34.89
84130105	12-280VAC	5	18M9802	44.65	42.55
INPUT MODULES					
84115503	4.5-30VDC	50mA	17M8468	50.20	47.18

(3761)

DR SERIES SINGLE POINT I/O MODULES

RoHS Compliant Available

CROUZET AUTOMATION

DR Series I/O modules offer a packaging approach that addresses installation and space saving needs. I/O modules snap into place with an integral spring element which is part of the I/O assembly. Electrical connections are made by wiring directly to color code and numbered terminal blocks designed to accept 28 to 14AWG wire. I/O modules include LED indicator, and output modules contain a replaceable 5A fuse. Mounting holes provided for panel-mount applications. I/Os available with 5 or 24VDC logic voltages. AC and DC outputs are suitable for most load requirements up to 5A.

INPUT MODULES, MAX. OUTPUT CURRENT 16mA

Mfg. Part No.	Input Voltage	Output Voltage	Stock No.	Price Each 1-9	Price Each 10-49
● DR-IAC5E	18-36V	3-6VDC	17M6580	45.26	42.53
● DRIAC5	90-140V	3-6VDC	17M6586	39.93	37.52
● DR-IAC24	90-140V	20-30VDC	17M6577	41.50	39.00
● DR-IAC24A	140-280V	20-30VDC	17M6578	42.83	40.25
● DR-IDC5	3.3-32VDC	3-6VDC	17M6582	40.36	37.92
● DR-IDC5A	10-48VDC	3-6VDC	17M6583	39.53	37.15
● DR-IDC24	-	20-30VDC	17M6581	36.41	34.70
● DR-IDC24A	10-48VDC	20-30VDC	96F1871	40.81	38.35
OUTPUT MODULES, MAX. OUTPUT CURRENT 3mA					
● DR-ODC5	3.5-8VDC	3-60VDC	17M6585	44.13	41.47
● DR-ODC24	18-32VDC	3-60VDC	17M6584	42.26	40.26
OUTPUT MODULES, MAX. OUTPUT CURRENT 5A					
● DR-OAC	3.7-32VDC	12-280VAC	20M7007	39.49	37.65

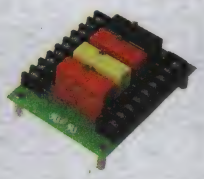
(3668)

DIGITAL I/O MODULE MOUNTING BOARDS

RoHS Compliant Available

CROUZET AUTOMATION

Accept input and output modules interchangeably. Plug-compatible connections on 8, 16, 24, and 32-position boards; screw terminal block on 4-position board. Screw terminal barrier block for load connections. Resident pull-up resistors. 5-amp replaceable fuses. LEDs indicate logic status. UL recognized, CSA certified boards indicated with (*). **"SM" suffix** denotes boards with pin-retaining system for **SM series** modules. Single-point boards also compatible with **SM series** units. **PB4R** accepts output modules only.



PB-4 & PB-4R

MOUNTING BOARDS FOR SINGLE-POINT AND SM MODULES

Mfg. Part No.	Positions	Stock No.	Price Each 1-9	Price Each 10-49
● PB-4*	4	21F854	74.97	70.78
● PB4R*	4	98F820	74.18	70.03
● PB-8*	8	21F855	113.17	106.84
PB-16	16	21F856	201.11	189.87
PB16T*	16	94F4618	182.72	172.51
PB-24*	24	21F857	295.97	279.43
PB-24SM	24	98F1900	310.64	293.28
MOUNTING BOARDS FOR QUAD-PACK MODULES				
PB24Q*	24	46F3695	303.42	286.46

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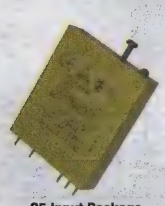
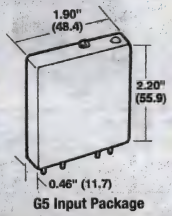
70G DIGITAL INPUT/OUTPUT MODULES (G5 SIZE)

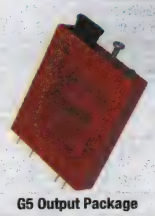
Grayhill



G5 Input Package



G5 Input Package



G5 Output Package

G5 Output Package

70G series G5 digital I/O modules can be matched to any G5 I/O mounting racks. G5 modules have built-in status LED. Output modules provide replaceable 5 x 20mm glass fuses. All models feature 4000V optical isolation.

➤CONTINUED➤

70G DIGITAL INPUT/OUTPUT MODULES (G5 SIZE) (CONT.)

DIGITAL OUTPUT, 5 AND 24V LOGIC

Mfg. Part No.	Description	Stock No.	Price Each 1-14	Price Each 15-24
70G-OAC5	120VAC, 5V Logic	01B4449	12.77	12.31
70G-OAC5A	220VAC, 5V Logic	96F5620	13.86	13.39
70G-ODC5	3-60VDC, 5V Logic Fast	96F5625	12.61	12.17
70G-ODC5A	4-200VDC, 5V Logic	16F7268	18.92	18.26
70G-ODC5R	4-200VDC, Dry Contacts	16F7270	22.70	21.91
70G-OAC24A	220VAC, 24V Logic	96F5624	13.86	13.39
70G-OAC24	120VAC, 24V Logic	96F5623	12.44	12.00
70G-ODC24	3-60VDC, 24V Logic	96F5627	12.77	12.31
DIGITAL INPUT, 5 AND 24V LOGIC				
70G-IAC5	120VAC, 5V Logic	95F9765	11.47	11.07
70G-IDC5	3 to 32VDC, 5V Logic	95F9770	11.47	11.07
70G-IDC5S	Dry Contacts, 5V Logic	16F7261	35.40	34.15
70G-IDC24	3 to 32VDC, 24V Logic	95F9772	11.45	11.05
70G-IAC24	120VAC, 24V Logic	95F9773	10.82	10.44

(3646)

G5 I/O MOUNTING RACKS

Grayhill

G5 mounting racks are designed to accommodate G5 modules, which incorporate a status LED in the module. The G5 output modules also have an integral fuse that eliminates the need for module fuses and LED status indicators on the rack. The G5 modules are slightly thinner than the standard modules. When used on the MicroDAC LT® controllers, analog and digital I/O modules can be intermixed on the same G5 rack.

SERIES 70G: G-5 I/O RACKS

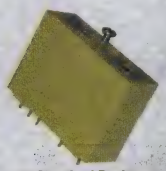
Mfg. Part No.	Description	Stock No.	Price Each 1-14
70GRCK4	4-Ch. Negative True Logic	16F7271	31.80
70GRCK4R	4-Ch. Positive/Negative True Logic	16F7273	32.90
70GRCK4R-DIN	4-Ch. Pos./Neg. True Logic-DIN Rail Mount	16F7274	71.38
70GRCK8-HL	8-Ch. 50-Pin Header with Ejector Levers	95F9763	71.70
70GRCK16-HL	16-Ch. 50-Pin Header with Ejector Levers	01B4471	109.72
70GRCK16I-DIN	16-Ch. Pos./Neg. True Logic-DIN Rail Mount	16F7276	176.78
70GRCQ24-HL	24-Ch. 50-Pin Header with Ejector Levers	95F9753	204.06
70GRCM32-HL	32-Ch. 50-Pin Header with Ejector Rails	95F9755	215.10

(68718)

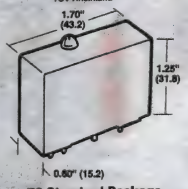
STANDARD DIGITAL INPUT/OUTPUT MODULES

Grayhill

TUV Rheinland



70 Standard Package



70 Standard Package

70 series I/O modules provide 4000VAC optical isolation between sensitive logic circuits and external AC and DC power devices. Output modules have built-in transient surge protection to prevent false operation. All input modules except high speed IDC5B and IDC5D types have filtered inputs and transmit clean on/off status signals to the controller. Modules are epoxy-filled for shock and vibration immunity and operate from −40° to +100°C. UL recognized, CSA certified and CE compliant. TÜV certified. Lifetime warranty. All modules pass the EMC directive (89/336/EEC) for industrial products. ISW1 and OSW1 modules have toggle switches for simulating inputs and outputs during troubleshooting. Four types available: AC Output (Black); DC Output (Red), AC Input (Yellow), and DC Input (White).

TERMINAL NUMBER AND CONNECTION

Type	#5	#4	#3	#2	#1
OAC	N/A	DC-In	DC+In	AC Out	AC Out
ODC	N/A	DC-In	DC+In	DC-Out	DC+Out
IAC	Ground	Output	+Vcc	AC In	AC In
IDC	Ground	Output	+Vcc	DC-In	DC+In

Only input modules have terminal #5.

SERIES 70 DIGITAL INPUT MODULES, 5V DC LOGIC

Mfg. Part No.	Description	Stock No.	Price Each 1-14	Price Each 15-24
70-IAC5	120VAC	87F3678	10.74	10.36
70-IDC5	3-32VDC	03B7103	10.86	10.48
70-IDC5B*	3-32VDC	87F3663	10.86	10.48

➤CONTINUED➤

STANDARD DIGITAL INPUT/OUTPUT MODULES (CONT.)

SERIES 70 DIGITAL INPUT MODULES, 24V DC LOGIC

Mfg. Part No.	Description	Stock No.	Price Each 1-14	Price Each 15-24
70-IAC24	120VAC	87F3677	10.13	9.77
70-IDC24	3-32VDC	87F3681	10.72	10.34
SERIES 70 DIGITAL OUTPUT MODULES, 5V DC LOGIC				
70-OAC5	120VAC	87F3671	10.74	10.36
70-OAC5A	240VAC	87F3672	11.87	11.46
70-ODC5	3-60VDC	87F3665	10.74	10.36
70-ODC5R	0-100VDC/0-120VAC, Dry Contacts	16F7265	20.23	19.52
70-ODC5A	4-200VDC	01B4417	17.84	17.21
70-ODC15	3-60VDC, 15V Logic	87F3673	11.30	10.89
SERIES 70 DIGITAL OUTPUT MODULES, 24V DC LOGIC				
70-OAC24	120VAC	87F3669	10.86	10.48
70-ODC24	3-60VDC	87F3664	10.86	10.48

*High speed polarized input circuitry.
(3647)

STANDARD I/O MOUNTING RACKS

Grayhill

Standard I/O Rack

Passive backplates accept I/O modules and connect one of the logic side terminals from each module to an associated pin on the logic side connector for interface to the controller. Up to 8 racks may be stacked along a DIN rail. Modules on standard racks are plugged into receptacle cups or connectors and are held in place by hold down screws, bars or clips. An LED indicates status of each digital module. 5A replaceable fuse protects outputs from short circuits. Miniature racks are much smaller than industry standard racks to save panel space.

SERIES 70 STANDARD I/O RACKS

Mfg. Part No.	Description	Stock No.	Price Each 1-14
70RCK4	4-Ch. Negative True Logic	87F3685	30.30
70RCK4R	4-Ch. Positive or Negative True Logic	96F5628	31.89
70RCK8-HL	8-Ch. 50-Pin Header with Ejector Levers	01B4574	66.66
70RCK16-HL	16-Ch. 50-Pin Header with Ejector Levers	90F7295	98.39
70RCK24	24-Ch. Card Edge	87F3684	159.72

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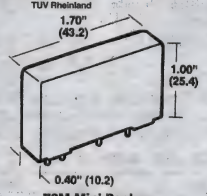
MINIATURE DIGITAL INPUT/OUTPUT MODULES

TUV Rheinland

Grayhill

70M Mini Package



70M Mini Package

70 series I/O modules provide 4000VAC optical isolation between sensitive logic circuits and external AC and DC power devices. Output modules have built-in transient surge protection to prevent false operation. All input modules except high speed IDC5B and IDC5D types have filtered inputs and transmit clean on/off status signals to the controller. Modules are epoxy-filled for shock and vibration immunity and operate from –40° to +100°C. UL recognized, CSA certified and CE compliant. TÜV certified. Lifetime warranty. All modules pass the EMC directive (89/336/EEC) for industrial products. ISW1 and OSW1 modules have toggle switches for simulating inputs and outputs during troubleshooting. Four types available: AC Output (Black); DC Output (Red), AC Input (Yellow), and DC Input (White).

SERIES 70M DIGITAL OUTPUT MODULES, MINI PACKAGE, 5V DC LOGIC

Mfg. Part No.	Description	Stock No.	Price Each 1-14	Price Each 15-24
70M-OAC5	120VAC	89F573	10.62	10.25
70M-OAC5A	240VAC	89F576	11.91	11.48
70M-ODC5A	4-200VDC	16F7266	18.11	17.47
70M-ODC5R	0-100VDC/0-120VAC, Dry Contacts	16F7267	19.77	19.08
70M-ODC5	3-60VDC	89F579	10.62	10.25
SERIES 70M DIGITAL OUTPUT MODULES, MINI PACKAGE, 24V DC LOGIC				
70M-ODC24	3-60VDC	89F581	11.19	10.80
SERIES 70M DIGITAL INPUT MODULES, MINI PACKAGE, 5V DC LOGIC				
70M-IAC5	120VAC	89F585	10.62	10.25
70M-IAC5A	240VAC	89F588	10.90	10.52
70M-IDC5	3-32VDC	89F591	10.62	10.25

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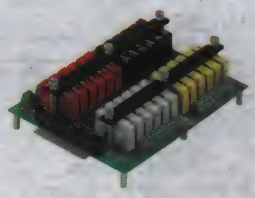
MINATURE I/O MOUNTING RACKS

Grayhill



Miniature I/O Rack

Passive backplates accept I/O modules and connect one of the logic side terminals from each module to an associated pin on the logic side connector for interface to the controller. Up to 8 racks may be stacked along a DIN rail. Modules on standard racks are plugged into receptacle cups or connectors and are held in place by hold down screws, bars or clips. An LED indicates status of each digital module. 5A replaceable fuse protects outputs from short circuits. Miniature racks are much smaller than industry standard racks to save panel space.

SERIES 70M MINIATURE I/O RACKS

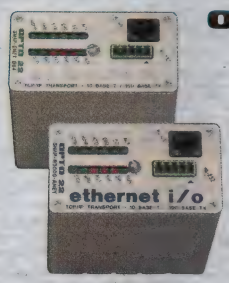
Mfg. Part No.	Description	Stock No.	Price Each 1-14
70MRCK8-EC	8-Ch. Card Edge	95F9757	62.38
70MRCK8-HL	8-Ch. 50-Pin Header with Ejector Levers	95F9759	71.08
70MRCK16-EC	16-Ch. Card Edge	89F582	118.33
70MRCK16-HL	16-Ch. 50-Pin Header with Ejector Levers	90F7302	109.65
70MRCK24-EC	24-Ch. Card Edge	95F9756	167.86
70MRCK24-HL	24-Ch. 50-Pin Header with Ejector Levers	95F9761	179.04
70MRCQ24-EC	24-Ch. Card Edge	90F7304	160.76
70MRCQ24-HL	24-Ch. 50-Pin Header with Ejector Levers	90F7306	166.34

(146411)

SNAP BRAINS

OPTO 22

- A High Performance I/O Processor Used Remotely to Control a Mix of Analog & Digital I/O Modules
- Used with either an Opto 22 Controller or a Host Computer
- On-board Intelligence Enables Many Distributed Control Functions
- Compatible with Standard 10 Mbps and 100 Mbps Ethernet Networks
- Can be Combined with SNAP "B-series" Mounting Racks, *Ordered Separately on pages 1957-1958*



SNAP-ENET-D64
SNAP-B3000-ENET

Mfg. Part No.	Description	Stock No.	Price Each
SNAP-B3000-ENET	Analog/Digital Ethernet Brain	48F1704	790.45
SNAP-ENET-D64	Digital-only Ethernet Brain (Requires SNAP-D64RS Digital-only Rack)	98B7690	824.90

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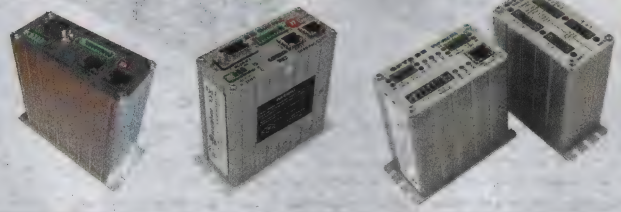
SNAP PAC SERIES CONTROLLERS

RoHS Compliant Available

OPTO 22



SNAP PACs are high-performance, Ethernet-based programmable automation controllers suitable for automation and control, remote monitoring, and data acquisition applications. **SNAP-PAC-S1** standalone controller, **mfg. part no. SNAP-PAC-S1**, can run up to 32 ioControl flowcharts simultaneously. It features two independent 19/100 Mbps Ethernet interfaces for host and I/O communication, one RS-485 serial port for connection to Opto 22 mistic I/O units, two RS-232 serial ports (one with full handshaking) for PPP host connection or serial device connections, and multiple protocol support including TCP/IP, SNMP, FTP, and OptoMMP™. SNAP PAC R-series controllers, **mfg. part no. SNAP-PAC-R1** and **mfg. part no. SNAP-PAC-R2,** are rack-mounted I/O processors with two 19/100 Mbps Ethernet network interfaces, one RS-232 port with full handshaking for PPP host connection or serial device connections, and multiple protocol support. The **SNAP-PAC-EB1** and **SNAP-PAC-EB1** brains are I/O and communications processors for your SNAP PAC System. New Wireless/Wired versions add **-W suffix** to part numbers.

SNAP PAC CONTROLLERS

Mfg. Part No.	Description	Stock No.	Price Each
SNAP-PAC-S1	Programmable Ethernet controller 2 Ethernet interfaces	75K1478	1263.25
● SNAP-PAC-S1-FM	Ethernet-based programmable automation controller with 2 Ethernet interfaces, Factory Mutual approved	11P7225	1513.00
● SNAP-PAC-S1-W	Programmable Ethernet controller 2 Ethernet interfaces Wireless/Wired	17T7104	1762.95
SNAP-PAC-S2	Programmable Ethernet controller 2 Ethernet interfaces and 4 serial ports	51M8457	1601.95
● SNAP-PAC-S2-W	Programmable Ethernet controller 2 Ethernet interfaces and 4 serial ports, Wireless/Wired	17T7105	2084.95
SNAP-PAC-R1	Analog/digital/serial rack-mounted controller, 2 Ethernet port and high-speed digital functions	73K0778	1014.85

➤CONTINUED➤

SNAP PAC SERIES CONTROLLERS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
● SNAP-PAC-R1-W	Analog/digital/serial rack-mounted controller, 2 Ethernet port and high-speed digital functions, Wireless/Wired	17T7102	1440.95
SNAP-PAC-R2	Analog/simple digital/serial rack-mounted controller, 2 Ethernet port	89K0425	892.45
● SNAP-PAC-R2-W	Analog/simple digital/serial rack-mounted controller, 2 Ethernet port, Wireless/Wired	17T7103	1279.95
● SNAP-PAC-ROK	SNAP PAC Redundancy Option Kit. includes a redundancy arbitration processor (SNAP-PAC-SRA) and a redundant power switch (SNAP-RPSW).	81R0180	2213.75
SNAP PAC BRAINS			
SNAP-PAC-EB1	Ethernet-based analog/digital/serial, I/O and comm. processor, w/ 2 switched Ethernet networ interfaces and high-speed digital functions	38M8497	684.00
● SNAP-PAC-EB1-W	Ethernet-based analog/digital/serial, I/O and comm. processor, w/ 2 switched Ethernet networ interfaces and high-speed digital functions, Wireless/Wired	17T7100	1056.40
SNAP-PAC-EB2	Ethernet-based analog/digital/serial, I/O and comm. processor, w/ 2 switched Ethernet networ interfaces	41M0029	444.52
● SNAP-PAC-EB2-W	Ethernet-based analog/digital/serial, I/O and comm. processor, w/ 2 switched Ethernet networ interfaces, Wireless/Wired	17T7101	912.00
SNAP-PAC-SB1	SNAP PAC Serial Brain, Ana/Dig/Ser with High-speed digital counting	51M8455	600.40
SNAP-PAC-SB2	SNAP PAC Serial Brain, Analog/Digital/Serial	51M8456	494.00

SNAP PAC MOUNTING RACKS

Mfg. Part No.	Description	Stock No.	Price Each
SNAP-PAC-RCK4	4-Module SNAP PAC rack	35M4653	130.70
SNAP-PAC-RCK8	8-Module SNAP PAC rack	41M0032	153.52
SNAP-PAC-RCK12	12-Module SNAP PAC rack	41M0030	174.85
SNAP-PAC-RCK16	16-Module SNAP PAC rack	41M0031	168.36
● SNAP-RACKDIN	SNAP PAC rack DIN-rail adapter clip	18M9332	9.71
● SNAP-RACKDINB	DIN-rail adapter clip for I/O racks, 25-pack	16F1853	169.80
● SNAP-RPSW	Redundant Power Switch	40T0076	64.40

SNAP PAC LEARNING CENTER

Provides a complete package for learning, demonstrating and examining the capabilities of the SNAP Ethernet system. Includes 9-lesson self-paced tutorial that features step-by-step instructions on assembling hardware, configuring I/O unit and points, programming the SNAP PAC controller and building a human-machine interface. Includes ioProject Basic, SNAP-M32 rack, 5 I/O modules, learning center load panel and cables.

Mfg. Part No.	Description	Stock No.	Price Each
SNAP-PACLC	SNAP PAC Learning center	89K0426	1541.55
● SNAP-I04AB-LC	SNAP I Learning center	06R5662	1354.50

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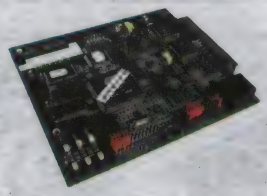
E1 AND E2 BRAINS

OPTO 22

E1



E2

- Drop-in replacement for existing B1 and B2 brain boards on an Optimux® serial network
- Dual network connectivity: RS-422/485 serial and 10/100 Mbps Ethernet
- Optomux® Modbus/TCP and OptoMMP protocol support
- Can use Opto 22 ioProject software for control, HMI, and OPC server

E1 and **E2** brain boards are Ethernet-ready I/O and communication processors for digital and analog I/O systems. **E1** connects to rack of Opto 22 G1, G4, or Quad Pak™ digital I/O modules. **E2** connects to a rack of Opto 22 G1 analog I/O modules. Drop-in replacements for B1 and B2 brain boards. Connect to 10/100 Mbps Ethernet networks while including support for serial Optomux®-based networks.

ETHERNET NETWORK INTERFACE SPECIFICATIONS

Type	IEEE 802.3 network, 10Base-T/100Base-TX
Connector	RJ-45
Rate	10/100 Mbps, half or full duplex
Protocols	Optomux® over Ethernet, Modbus/TCP, OptoMMP
Max. Segment Length	100m (328 ft.) with Cat 5 or superior UTP

SERIAL NETWORK INTERFACE SPECIFICATIONS

Type	RS-422/485 serial link
Connector	**E1** Terminal block; **E2** Terminal block on mounting rack
Data Rates	300, 600, 1200, 2400, 4800, 9600, 19200, 38400 baud
Protocols	Optomux

➤CONTINUED➤

E1 AND E2 BRAINS (CONT.)

SERIAL NETWORK INTERFACE SPECIFICATIONS

Range	Up to 32 Optomux stations for multidrop on serial network up to 1524m (5000 ft.) total length
Optomux I/O functions	**Digital I/O (E1):** Read point, write point, latch point (on/off), count, pulse duration, time delay*, pulse generation* **Analog I/O (E2):** Read point, write point, input averaging*, min/max recording (peak and valley), waveform generation*

* Functions not available with Modbus/TCP, OptoMMP, and OPC.

Mfg. Part No.	Description	Stock No.	Price Each
E1	Digital I/O Optomux® brain board for serial and Ethernet networks	45K1347	317.71
E2	Analog I/O Optomux® brain board for serial and Ethernet networks	45K1351	326.25

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CLASSIC DIGITAL AND ANALOG BRAIN BOARDS

OPTO 22

Classic brain boards are distinguished by the protocol that they support. Mistic protocol brain boards include the B100 (digital) and B200 (analog). The Optomux protocol is supported by the B1 and B100 (digital) and B2 and B200 (analog) brain boards. Pamux brain boards include B4 (32 channel digital), B5 (16 channel digital) and B6 (16 channel/analog). The mistic protocol provides seamless integration with Opto 22's FactoryFloor software.

DIGITAL

Mfg. Part No.	Description	Stock No.	Price Each
B1	16-Channel Digital Brain Optomux Protocol	92F3447	267.57
B4	32-Channel Digital Brain Pamux Prototcol	92F3449	247.38
TERM 1	Pamux Bus Termination Card	92F3488	44.40
ANALOG			
B2	16-Channel Analog Brain Optomux Protocol	92F3448	302.68
B6	16-Channel Analog Brain Pamux Protocol	92F3451	420.75

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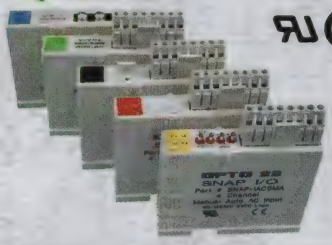
SNAP I/O™ MODULES

RoHS Compliant Available

OPTO 22



- Convenient Pluggable Connector for Removable Top-Mounted Field Wiring
- Ready Access to Standard Fuses
- Modules "SNAP" Securely on Racks - No Screws Required
- Highly Visible LED Status Indicator for Each Channel
- Mix Analog and Digital Modules on the Same Rack
- Handy Snap-On ID Plates for Channel Labels

SNAP I/O is Opto 22's highest density I/O packaging. SNAP I/O includes AC and DC digital modules and intelligent analog modules. SNAP's compact design delivers space savings while innovative packaging allows modules to simply snap in place. Factory Mutual (FM) approved versions of many SNAP I/O modules are available, *go online or call.*

ANALOG CURRENT INPUT MODULES

Mfg. Part No.	Description	Stock No.	Price Each
SNAP-AIMA2-I	Isolated 2-channel analog current input -1mA to +1 mA	67K3420	354.20
SNAP-AIMA	2 Channel analog Current input +/-20mA	52F7453	231.15
SNAP-AIMA-I	2 Channel Current Isolated, +/-20mA	12C1588	360.97
● SNAP-AIMA-8	8-channel analog current input -20 to +20 mA	12N2743	460.60
● SNAP-AIARMS-I-FM	Isolated 2-Ch 0-10 amp RMS analog input Factory Mutual approved	11P7204	392.60
SNAP-AIMA-ISRC	Isolated 2-channel analog current input -20mA to +20mA, with loop sourcing	26H1746	378.35
● SNAP-AIMA-ISRC-FM	Isolated two-channel analog current input -20 mA to +20 mA, with loop sourcing Factory Mutual approved	11P7206	421.56
SNAP-AOA-23-ISRC	Isolated 2-channe anaog output, current loop, 4-20mA, with loop sourcing	87K7147	466.13
SNAP-AOA-23	2 Channel analog output current Loop 4-20mA	91F5817	203.94
SNAP-AOA-3	Single Channel Current 4 to 20mA	16F1842	186.76
ANALOG LOAD CELL INPUT MODULES			
SNAP-AILC	Acts as Load Cell Front End, 2mV/3mV	89K0421	297.79
ANALOG VOLTAGE INPUT MODULES			
SNAP-AIV2-I	Isolated 2-channel analog voltage input -100 to +100 VDC or -50 to +50 VDC	49H7341	324.62
SNAP-AIV	2-channel analog voltage input -10 to +10 VDC or -5 to +5 VDC	52F7437	202.65
SNAP-AIV-4	4-channel analog voltage input -10 to +10 VDC or -5 to +5 VDC	32C2059	277.16

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SNAP I/O™ MODULES (CONT.)

ANALOG VOLTAGE INPUT MODULES

Mfg. Part No.	Description	Stock No.	Price Each
SNAP-AIV-8	8-channel analog voltage input -10 to +10 VDC or -5 to +5 VDC	66M8123	456.81
SNAP-AIV-32	32-channel analog voltage input -10 to +10 VDC or -5 to +5 VDC	41M0026	1006.25
SNAP-AIV-32-FM	32-channel analog voltage input -10 to +10 VDC or -5 to +5 VDC Factory Mutual approved	11P7210	1087.20
SNAP-AIV-I	2 Channel Voltage Isolated +/-10VDC	27C0290	277.16
ANALOG VOLTAGE OUTPUT MODULES			
SNAP-AOV-5	Single-channel analog voltage output, 0 to 10 VDC	16F1843	175.16
SNAP-AOV-27	2-channel analog voltage output, -10 to +10VDC	91F5819	203.92
SNAP-AOV-25	2-channel analog voltage output, 0 to +10VDC	91F5818	206.46
ANALOG VOLTAGE RMS INPUT MODULES			
SNAP-AIARMS	2-channel 0 to 10 amp RMS AC/DC input	10C2970	273.70
SNAP-AIVRMS-I	Isolated 2-channel 0 to 250 V RMS AC/DC input	89K0422	363.23
SNAP-AIVRMS-I-FM	Isolated two-channel 0 to 250 V RMS AC/DC input Factory Mutual approved	81R0178	407.70
ANALOG FREQUENCY INPUT MODULES			
SNAP-AIRATE	2 Channel Rate, 0-25kHz	83F5700	245.76
ANALOG THERMOCOUPLE INPUT MODULES			
SNAP-AITM2-I	2-channel isolated thermocouple Type B, C, D, G, N, T, R, S or -50 mV to +50 mVDC or -25 mV to +25 mV input	26H2200	321.96
SNAP-AICTD-8	8-channel analog temperature, ICTD	12N1588	445.45
SNAP-AITM-I	Isolated 2-channel type E, J or K thermocouple or -150 mV to +150 mV or -75 mV to +75mV input	32C2057	277.16
SNAP-AITM	2 Channel Thermocouple, Type, E, J, K	52F7438	203.94
SNAP-AITM-2	2 Channel Isolated Thermocouple Type B, C, D, G, N, T, R, S	32C2058	233.06
SNAP-AITM-4I	SNAP 4-Ch Isolated Type B, C, D, E, G, J, K, N, R, S, or T Thermocouple or +/-150, +/-75, +/-50, or +/-25 mV Analog Input Module	39T0880	503.30
SNAP-AITM-8	8 Channel Type B, C, E, G, J, K, N, R, S, or T Thermocouple or ±75, ±50, or ±25 mV Analog Input	14M9238	586.04
SNAP-AIRTD	2 Channel Temperature 100 ohm PT RTD	91F5815	248.82
SNAP-AIRTD-1K	2-channel 1-kohm copper RTD input	40T0069	263.25
ANALOG POWER MONITORING MODULES			
SNAP-AIPM	Single-phase Power Monitoring Module, 85-250V and 0-10A RMS Inputs	09J4541	313.95
SNAP-AIPM3V	Three-phase Power Monitoring Module, 85–300 V RMS and 0–0.333 VAC CT Inputs for Each Phase	40T0068	549.64
SNAP-AIPM-3	3-phase Power Monitoring Module, 85-250V and 0-10A RMS Inputs	17T7098	586.04
DIGITAL AC VOLTAGE INPUT MODULES			
SNAP-IAC5	4 Channel 90-140VAC	52F7491	47.24
SNAP-IAC-16	16 Channel Isolated Digital Input, 90-140 VAC/VDC	31M8931	216.42
DIGITAL AC VOLTAGE INPUT MODULES			
SNAP-OAC5	4 Channel 12-280VAC	52F7488	47.23
SNAP-OAC5MA	4 Channel 12-280VAC Isolated, Manual/Auto Switch	34C3484	103.81
SNAP-OAC5-I	4 Channel 12-280VAC Isolated	34C3483	47.23
DIGITAL DRY CONTACT INPUT MODULES			
SNAP-IDC5-SW	4 Channel Dry Contact, Norm Open	34C3478	72.97
DIGITAL DC VOLTAGE INPUT MODULES			
SNAP-IDC5G	4 Channel 35-75 VAC/VDC input, 5 VDC logic	17T7099	48.30
SNAP-IDC5-FAST-A	4 Channel High Speed 18-32VDC	83F5703	53.93
SNAP-IDC5	4 Channel 10-32VDC	52F7489	47.24
SNAP-IDC5D	4 Channel 2.5-28VDC	83F5702	47.24
SNAP-IDC5Q	2 Axis Quadrature Position Input	83F5699	216.42
SNAP-IDC5FAST	4 Channel High Speed 2.5-16VDC	91F5826	54.72
SNAP-IDC-32	32-point digital input, 10-32 VDC	20K7803	214.64
SNAP-IDC-32D	SNAP 32-channel Digital (Discrete) Input Module, 2.5 to 12 VDC	91T5931	213.20
SNAP-IDC-32DN	SNAP 32-channel Digital Input Module, -2.5 to -12 VDC, with positive common connection	91T5932	213.20
SNAP-IDC-32N	32-point digital input module, -10 to -32 VDC, with positive commonconnection	40T0073	196.30
SNAP-IDC-HT-16	SNAP leakage-tolerant isolated 16-point digital input module, 15–28 VDC/VAC	40T0072	196.30
DIGITAL DC OUTPUT MODULES			
SNAP-ODC5-I	4 Channel, 5-60VDC Isolated	34C3485	49.75
SNAP-ODC5A-I	4 Channel, 5-200VDC Isolated	34C3486	51.12
SNAP-ODC5SRC	4 Channel 5-60VDC	52F7486	50.38
SNAP-ODC5SNK	4 Channel DC Output 5-60VDC Load Sink	52F7487	50.87

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SNAP I/O™ MODULES (CONT.)

DIGITAL DC OUTPUT MODULES

Mfg. Part No.	Description	Stock No.	Price Each
SNAP-ODC-32-SRC	32-point digital output, 5-60 VDC load sourcing	26K2345	331.44
SNAP-ODC-32-SNK	32-point digital output, 5-60 VDC load sinking	74K3045	333.51
SNAP-ODC-32-SNK-FM	SNAP 32-point digital output module,v5–60 VDC load sinking Factory Mutual approved	11P7215	354.85
DIGITAL DRY CONTACT OUTPUT MODULES			
SNAP-ODC5R	4 Channel Dry Contact Output, Normally Open	83F5706	50.38
SNAP-ODC5R5	4 Channel Dry Contact Output, Normally Closed	27C1269	60.28
DIGITAL ENCORDER INPUT MODULES			
SNAP-IDC5Q	4 Channel Dry Contact Output, Normally Closed	83F5699	216.42
SERIAL RS-232 INTERFACE MODULE			
SNAP-SCM-232	2 Channel RS-232 Serial Communication	95B7598	369.18
SNAP-SCM-SSI	SNAP 2-Channel Serial Synchronous Interface Module	40T0077	339.75
SERIAL COMMUNICATION MODULES			
SNAP-SCM-ST2	SNAP- Pulse Direction Digital Output X2	59T0058	348.98
SNAP-SCM-CAN2B	Controller Area Network Communication Module	91T5933	369.00
MECHANICAL RELAY OUTPUT MODULES			
SNAP-OMR6-A	SNAP 4-Ch Isolated Mechanical Power Relay Output Module Form A	59T0055	111.90
SNAP-OMR6-C	SNAP 4-Ch Isolated Mechanical Power Relay Output Module Form C	59T0056	112.83

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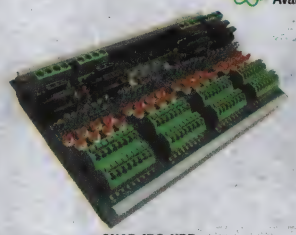
SNAP ACCESSORIES

RoHS Compliant Available

OPTO 22



SNAP-IDC-HDB

SNAP-STRAP

CABLES

Mfg. Part No.	Description	Stock No.	Price Each
SNAP-TEX-CBS6	6 ft. (1.8m) 8-wire, for SNAP I/O modules. Straight-through; no common terminals	12N3819	41.89
SNAP-HD-BF6	6 ft. (1.8m) wiring harness for 32-channel modules and breakout boards	69K5899	133.85
SNAP-HD-CBF6	6 ft. (1.8m) wiring harness with flying leads for most 32-point modules	74K3043	114.00
SNAP-HD-G4F6N	6 ft. (1.8m) header cable for SNAP-IDC-32N modules and G4 digital racks	59T0054	152.00
SNAP-HD-BF1	Header Cable; Length:14.5""	40T0071	159.00
BREAKOUT BOARDS			
SNAP-TEX-32	32-point breakout board for SNAP I/O modules	17T7110	102.30
SNAP-TEX-FB16-H	16-point breakout board for SNAP I/O modules with fuses, fuse-blown indicators & bussed power (120-240 V)	17T7106	117.80
SNAP-TEX-FB16-L	16-point breakout board for SNAP I/O modules with fuses, fuse-blown indicators & bussed power (12-24 V)	17T7107	117.80
SNAP-TEX-MR10-4	Mechanical relay breakout board for a 4-channel SNAP digital output module	17T7109	151.20
SNAP-TEX-MR10-16	Mechanical relay breakout board for one high-density or four 4-channel SNAP digital output module	17T7108	378.00
SNAP-IDC-HDB	Fused breakout board for SNAP 32-point digital input modules	69K5901	141.04
SNAP-ODC-HDB	Fused breakout board for SNAP 32-point digital output modules	74K3044	222.53
SNAP-AIV-HDB-FM	Breakout Board for SNAP-AIV-32 Analog Input Module, Factory Mutual Approved	11P7209	257.60
DIN-RAIL MOUNTING			
SNAP-PSDIN	DIN-rail adapter kit for most SNAP power supplies and controllers	83F5697	40.11
SNAP-PSUDIN	DIN-rail adapter kit for large-footprint SNAP power supplies	06R5671	53.66
SNAP-RACKDIN	DIN-rail adapter clip for I/O racks	18M9332	9.71
SNAP-RACKDINB	DIN-rail adapter clip for I/O racks, 25 pack	16F1853	169.80
SNAP-S2DIN	DIN-rail adapter kit for SNAP-PAC-S2	06R5672	36.12
TOOLS & SPARE PARTS			
ICTD	ICTD Temperature Probe	92F3465	38.78
SNAP-STRAPB	Jumper strap for digital I/O modules	18M9333	5.80
SNAP-FIELDCONB	SNAP module field connector, 10-pack	16F3660	7.88
SNAP-RCK-M2B	Adapter for using SNAP PAC or SNAP M brains on SNAP B-series racks	41M4268	152.95

➤CONTINUED➤

SNAP ACCESSORIES (CONT.)

TOOLS & SPARE PARTS

Mfg. Part No.	Description	Stock No.	Price Each
● SNAP-MR10	Mechanical relay replacement for breakout boards, 10 A	06R5664	17.22
SNAP-MODLATCHB	Replacement latches, 10-pack	06R5663	14.98
● SNAP-TEX-DRC10	SNAP PAC rack DIN-rail adapter clip, 10-pack	74R9242	32.80
● SNAP-MODTOOL	I/O module removal tool, 10-pack	74R5653	18.94
● SNAP-ROKDIN	DIN-rail adapter kit for SNAP-PACSRA or SNAP-RPSW	40T0075	15.99
● SNAP-TEX-REC10N	Narrow end cap for SNAP PAC racks DIN-rail assemblies, 10-pack	40T0078	39.36
● SNAP-TEX-REC10W	Wide end cap for SNAP PAC racks DIN-rail assemblies, 10-pack	40T0079	39.36
● STRAP2	2 position strap, Single rack, R0433	96F1071	1.35
● STRAP4Q	4 position strap, Quad rack, R0431	96F1073	6.45
● STRAP8	8 position strap, Single rack, R0430	96F1074	4.82
● G4STRAP	G4 jumper strap, R5187	18M9095	10.99
POWER SUPPLIES			
SNAP-PS24	110VDC to 24VDC @ 3/4A	91F5820	234.45
SNAP-PS24U	100-250VAC to 24VDC @ 1-1/4A output	83J8849	280.80
SNAP-PS5	110VAC to 5VDC @ 4A	91F5821	237.48
SNAP-PS5-24DC	24VDC to 5VDC @ 4A	83F5698	237.76

(94519)

G4 I/O MODULES

RoHS Compliant Available

OPTO 22

- High-density, single-channel analog & digital modules
- Digital modules include LED status indicator. Also available with manual switching (MA) capability for field wiring and control logic testing
- Digital output modules feature a top-mounted replaceable fuse (FUSEG4)
- Analog modules are factory-calibrated, offer 12-bit resolution and require a single 24-volt power supply

G4 DIGITAL AC INPUTS

Mfg. Part No.	Description	Stock No.	Price Each
G4IAC5	90-140VAC 5VDC Logic	96F1065	14.78
● G4IAC5-L	90-140 VAC, 5 VDC Logic, Low Input Impedence	40T0061	14.03
G4IAC15	90-140VAC 15VDC Logic	96F6444	14.20
G4IAC24	90-140VAC 24VDC Logic	96F6446	15.04
G4IAC5A	180-280VAC/VDC 4.5-6.0VDC Logic	96F6448	16.39
G4IAC5MA	90-140VAC/VDC 5 VDC Logic	96F1059	26.53
G4SWIN	Test Module w/Switch	96F1006	24.52
G4 DIGITAL DC INPUTS			
G4IDC5	10-32VDC 5VDC Logic	96F1066	14.50
G4IDC5B	4-16VDC 5VDC Logic High Speed	96F1067	18.92
G4IDC5D	2.5-28VDC 5VDC Logic	96F1068	15.04
G4IDC5K	2.5-16VDC 5VDC Logic Very High Speed	96F6452	19.34
● G4IDC5-SW	Switch Status Input, Self-powerd, Normally Open	74K5110	51.92
G4IDC5MA	10-32VDC 5VDC Logic w/Switch	96F1058	31.64
G4IDC15	10-32VDC 15VDC Logic	96F6449	16.93
G4IDC24	10-32VDC 24VDC Logic	96F6450	15.04
G4 DIGITAL AC OUTPUTS			
G4OAC5	12-140VAC 5VDC Logic	96F1042	14.78
G4OAC5A	24-280VAC 5VDC Logic	96F6457	16.41
G4OAC5A5	24-280VAC 5VDC Logic NC	96F1043	15.87
G4OAC5MA	12-140VAC w/HOA/SW	96F1044	26.53
G4OAC15A	24-280VAC 15VDC Logic	96F6454	16.07
G4OAC24	12-140VAC 24VDC Logic	96F6455	15.04
G4OAC24A	24-280VAC 24VDC Logic	96F6456	16.41
G4SWOUT	Test Module w/Switch	96F1007	24.52
G4OAC15	1.5-16VDC 12 -140VAC Logic	96F6453	14.37
G4 DIGITAL DC OUTPUTS			
G4ODC5	5-60VDC 5VDC Logic	96F1045	14.50
G4ODC5A	5-200VDC 5VDC Logic	96F6460	18.60
G4ODC5MA	5-60VDC 5VDC Logic w/HOA/SW	96F7187	26.53
G4ODC5R	Reed Relay Output 5VDC Logic	96F1046	16.41
G4ODC5R5	Reed Relay Output 5VDC Logic NC	96F1047	23.66
G4ODC15	5-60VDC 15VDC Logic	96F6458	14.76
G4ODC24	5-60VDC 24VDC Logic	96F6459	14.78

CONTINUED

G4 I/O MODULES (CONT.)

G4 DIGITAL DC OUTPUTS

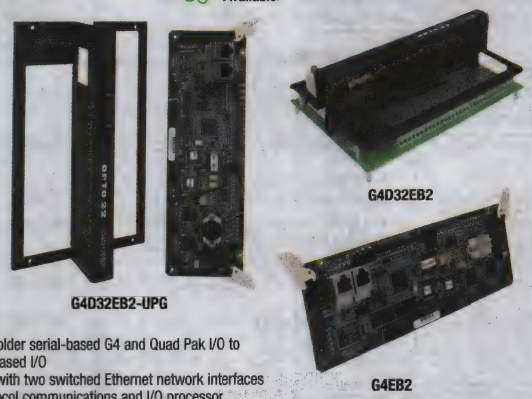
Mfg. Part No.	Description	Stock No.	Price Each
G4ODC24A	5-200VDC 24VDC Logic	92F9075	18.60
G4ODC5FM	4.0-8.0VDC 5-60VDC Logic	52F342	15.87
G4 ANALOG INPUTS			
G4AD3	4-20mA Input	52F306	269.87
G4 DIGITAL I/O MODULE ACCESSORIES			
● FUSEG4B	4 Amp Fuse for G4 Digital Output Modules	90T0529	4.80
● FUSE01G4	1 Amp Fuse for G4 Digital Rack Logic Power and Brick Regulator	18M9088	5.30
● FUSE01G4B	1-amp Fuse G4 Digital Rack Logic Power, Brick Regulator, 10 Pack	90T0531	4.76
● G4-MOD-SOCKETS	G4 Module Socket 100 Pack	96F6499	32.49
G4BATT32	Memory retention battery	52F263	67.20

(3753)

G4EB2 BRAINS

RoHS Compliant Available

OPTO 22



Features

- Upgrades older serial-based G4 and Quad Pak I/O to Ethernet-based I/O
- Equipped with two switched Ethernet network interfaces
- Multi-protocol communications and I/O processor
- Handles a mix of digital input and output modules in any position on one mounting rack
- No changes required to I/O and field wiring
- Multidrop capability

Announcing the **G4EB2 brain**: an Ethernet-based brain that talks OptoMMP protocol. It's a drop-in replacement, so you can leave I/O and field wiring intact while you upgrade. Now you can use legacy digital G4 and Quad Pak I/O with the latest SNAP PAC controllers.

BRAINS

Type	Description	Stock No.	Price Each 1-4
● G4D32EB2	Ethernet Simple Brain for 32 Position Racks	58T9567	909.65
● G4D32EB2-UPG	G4EB2 Ethernet Brain on a G4PB32R Rack	58T9568	523.25
● G4EB2	SNAP-PAC Ethernet Brain, Digital Only for G4PB32	58T9569	537.60

(202175)

QUAD PAK™ I/O MODULES

OPTO 22

- Four channels of digital I/O in one high-density package
- Integral LED for each channel on the module
- For use with Quad Pak brain board compatible mounting racks, PB16HQ and PB32HQ

Mfg. Part No.	Description	Stock No.	Price Each 1-9
IAC5Q	4-Channel, AC Input, 90-140VAC, 5VDC Logic	96F1014	89.81
IDC5BQ	4-Channel, DC Input, 4-16VDC, 5VDC Logic, High-Speed	96F1017	82.31
IDC5Q	4-Channel, DC Input, 10-32VDC, 5VDC Logic	96F1019	89.81
OAC5Q	4-Channel, AC Output, 12-280VAC, 5VDC Logic	96F1023	87.88
ODC5Q	4-Channel, DC Output, 5-60VDC, 5VDC Logic	96F1025	92.55

(3748)

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(196525)

STANDARD I/O MODULES

RoHS Compliant Available

OPTO 22

STANDARD DIGITAL AC INPUTS

Mfg. Part No.	Description	Stock No.	Price Each
● IAC15	90-140VAC 15VDC Logic	18M9102	16.91
● IAC15A	180-280 VAC 15 VDC Logic	96F6463	16.70
● IAC24	90-140VAC 24VDC Logic	18M9103	17.01
● IAC24A	180-280VAC 24VDC Logic	18M9104	16.10
● IAC5	90-140VAC 5VDC Logic	18M9105	18.54
● IAC5A	180-280VAC 5VDC Logic	19M4130	16.10
● IAC5P	90-140VAC 5VDC Logic	18M9106	17.00
STANDARD DIGITAL DC INPUTS			
● IDC15	10-32VDC 15VDC Logic	18M9111	23.13
● IDC24	10-32VDC 24VDC Logic	18M9112	16.91
● IDC5	10-32VDC 5VDC Logic	18M9113	17.88
● IDC5B	4-16VDC 5VDC Logic, High-Speed	18M9114	17.01
● IDC5D	2.5-28VDC 5VDC Logic	96F1018	17.20
● IDC5P	10-32VDC 5VDC Logic	18M9115	17.55
STANDARD DIGITAL AC OUTPUTS			
● OAC15	12-140VAC 15VDC Logic	18M9259	16.70
● OAC15A	24-280VAC 15VDC Logic	18M9260	16.70
● OAC24	12-140VAC 24VDC Logic	18M9261	17.01
● OAC24A	24-280VAC 24VDC Logic	18M9262	22.70
● OAC5	12-140VAC 5VDC Logic	18M9263	18.22
● OAC5A	24-280VAC 5VDC Logic	18M9264	17.01
● OAC5P	12-140VAC 5VDC Logic	18M9266	16.40
● OAC5A5	24-280VAC 5VDC Logic NC	18M9265	17.20
STANDARD DIGITAL DC OUTPUTS			
● ODC15	5-60VDC 15VDC Logic	18M9269	16.70
● ODC15A	5-200VDC 15VDC Logic	18M9270	18.37
● ODC24	5-60VDC 24VDC Logic	18M9271	16.71
● ODC24A	5-200VDC 24VDC Logic	18M9272	26.38
● ODC5	5-60VDC 5VDC Logic	18M9274	16.71
● ODC5A	5-200VDC 5VDC Logic	18M9275	18.37
● ODC5R	Reed Relay Output 5VDC Logic	18M9277	18.72
STANDARD ANALOG INPUTS			
AD3	4-20mA	92F3435	82.92
AD4	ICTD	92F3437	100.46
AD6	0-5VDC	92F3440	96.60
AD6HS	0-5VDC, High-Speed	92F3441	100.46
AD7	0-10VDC	92F3443	96.60
AD10T2	100Ω RTD, Isolated	92F3421	199.77
AD18T	Type T Thermocouple, Isolated	92F3431	198.13
AD3T	4-20mA, Isolated	92F3436	166.27
AD5T	Type J Thermocouple, Isolated	92F3439	199.77
AD6T	0-5VDC, Isolated	92F3442	166.27
AD8T	Type K Thermocouple, Isolated	92F3445	193.20
AD17T	Type R or S Thermocouple, Isolated	92F3430	204.73
I/O MODULE ACCESSORIES			
ICTD	Temperature Probe for AD4	92F3465	38.78
● FUSE05	5A Fuse for G1 Digital Output Modules	96F9249	4.70
● FUSE01	1A Fuse for G1Digital Logic Power	92F3170	4.74
STANDARD ANALOG OUTPUTS			
DA3	4-20mA	92F3452	104.65
DA3T	4-20mA, Isolated	92F3453	166.47
DA4	0-5VDC	92F3454	104.65
DA4T	0-5VDC, Isolated	92F3455	166.47
DA5	0-10VDC	92F3456	115.01
DA7T	-10 to +10VDC	74K4918	184.00

(16227)

CLASSIC BRAIN BOARD RACKS

OPTO 22

All mounting racks feature 50-pin header connector control interface and barrier strip field interface. **H suffix** in mfg. part no. indicates a 2-position screw terminal power interface and power indicator. UL listed, CSA certified, CE compliant.

GENERATION 4 DIGITAL

Mfg. Part No.	Description	Stock No.	Price Each
G4PB8H	8-Channel	92F9074	84.24
G4PB16H	16-Channel	92F3462	116.31
G4PB4	4-Channel	96F1053	41.98
G4PB4R	4-Channel, Output Only	96F1054	41.98
G4PB8	8-Channel	96F1055	73.50
G4PB16	16-Channel	96F1048	116.44
G4PB16I	16-Channel, Isolated Control	96F1049	130.70
G4PB16T	16-Channel w/Extra Terminal Strip	96F1050	130.70
G4PB24	24-Channel	96F1051	135.93
G4PB32DEC	32-Channel	96F1052	183.75
QUAD PAK™ DIGITIAL			
PB16HQ	Quad 4-Position/16-Channel	96F1034	119.00
PB24Q	Quad 6-Position/24-Channel	96F1038	196.18
PB24HQ	Quad 6-Position/24-Channel with Header Connector	96F1037	169.40
PB32HQ	Quad 8-Position/32-Channel with Header Connector	92F3479	234.90
STANDARD DIGITAL			
PB4H	4-Channel	92F3481	90.98
PB8H	8-Channel	92F3483	101.09
PB16H	16-Channel	92F3474	135.93
PB16A	16-Channel I/O Module Rack	96F1033	132.34
PB16T	16-Channel I/O Module Rack	96F1035	132.34
PB24	24-Channel I/O Module Rack	96F1036	153.52
PB4	4-Channel I/O Module Rack	96F1040	54.87
PB4R	4-Channel Output Module Rack	96F1069	47.92
PB8	8-Channel I/O Module Rack	96F1070	100.72
STANDARD ANALOG			
PB8AH	8-Channel	92F3482	167.51
PB16AH	16-Channel	92F3473	237.25

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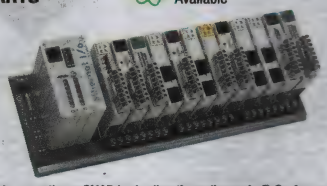
SNAP SYSTEM REPLACEMENT PARTS

RoHS Compliant Available

OPTO 22



B Series racks accommodate mounting a SNAP brain directly on the rack. **D Series** racks feature a standard 50-pin header for connection to a remote processor. **Mfg. part no. suffixes MC** denote the inclusion of an auxiliary terminal strip to facilitate field wiring. **M Series** racks are for SNAP PAC R-series, SNAP-UP1-M64, and SNAP-ENET-S64 controller/brains. **SNAP-RCK-M2B** adapters are for SNAP PAC B-series and allow rack to accommodate one PAC R series controller or one SNAP PAC brain.

CONTROLLERS

Mfg. Part No.	Description	Stock No.	Price Each
SNAP-LCM4	SNAP Modular M4 Controller	95B7593	2245.95
SNAP-LCSX-PLUS	SNAP Controller with 4 COM ports	83F5707	1233.80
SNAP-UP1-ADS	Analog/Digital/Serial SNAP Ultimate Brain	27C7525	1283.55
SNAP BRAINS			
SNAP-ENET-D64	Digital-only Ethernet Brain	98B7690	824.90
● B3000-B	Analog/Digital Brain	12N3600	486.60
SNAP-B3000-ENET	Analog/Digital/Serial Ethernet Brain	48F1704	790.45
● B3000-B	Mistic Seria Brain	12N3600	486.60
SNAP-B4	High-speed Digital Brain, Pamux Protocol	91F5827	284.70
SNAP MOUNTING RACKS			
SNAP-B4M	4 Module Rack	94B7135	119.00
SNAP-B8M	8 Module Rack	52F7483	132.07
SNAP-B8MC	8 Module Rack w/Extra Common TB	52F7484	135.00
SNAP-B16MC	16 Module Rack w/Extra Common TB	52F7451	235.75
SNAP-D4M	Digital 4 Module Rack	52F7440	49.50
SNAP-D6M	Digital 6 Module Rack	52F7443	75.15
SNAP-D6MC	Digital 6 Module Rack w/Extra Common TB	52F7444	85.80
SNAP-D12M	Digital 12 Module Rack	12C2071	127.71

➤CONTINUED➤

SNAP SYSTEM REPLACEMENT PARTS (CONT.)

RACK MOUNTING ADAPTERS

Mfg. Part No.	Description	Stock No.	Price Each
SNAP-RCK-M2B	For B-series racks	41M4268	152.95
FUSES			
● SNAP-FUSE 1AB	1 A 25 pack	40T0070	35.20
REMOTE ANALOG BRICK			
Mfg. Part No.	**Description**	**Stock No.**	**Price Each**
G4RAX	8-Channel I/O Unit Extender	52F288	584.50
REMOTE DIGITAL BRICK			
G4D16R	16-Channel Multifunction I/O Unit MISTIC Protocol	52F295	776.55
REMOTE DIGITAL BRICK BRAIN BOARDS			
G4RD	16-Channel Multifunction Brain MISTIC Protocol	52F299	584.50
ACCESSORIES			
● BRICKSTRAP	Bus Bar for Brick Base	52F355	16.40
G4BRICKBASE	Mounting Base for Brick Assembly	52F7475	164.00
G4RCOMMKIT	MISTIC 200 Remote Comm. Kit	52F354	246.00
G4REG	Brick Power Regulation Module	52F304	220.04
SBTA	Single Brick Terminal Adapter	52F356	41.00

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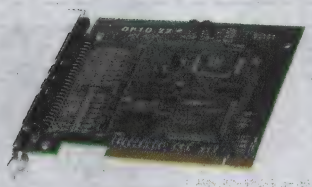
ADAPTER CARDS

OPTO 22

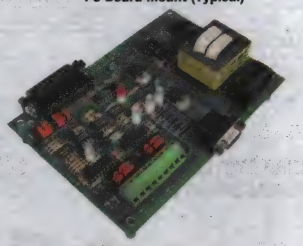


ISA BUS

PC Board Mount (Typical)

ISA BUS

Mfg. part no. PCI-AC5 adapter card provides an interface between personal computers with a 33MHz PCI Bus and Opto 22's digital I/O mounting racks, for direct connection to input/output points. 100 times as fast as the **mfg. part no. AC5**. Controls up to 48 I/O points. Includes header connectors and 6' cables. Adapter cards provide an interface between personal computers and Opto 22 mounting racks for direct connection to input/output points.



Stand-Alone (Typical)

Mfg. Part No.	Description	Stock No.	Price Each
AC24AT	Serial Port RS-422/485, Isolated	92F3394	292.52
AC422AT	Serial Port RS-422/485, Nonisolated	92F3414	250.73
AC5	ISA Bus to I/O Rack Adapter with 6 ft. Cable, Edge Connector	96F7185	193.82
AC28	ISA Bus to Pamux Bus Adapter	92F3396	195.06
PCI BUS			
PCI-AC51	PCI Bus to Pamux Bus Adapter	88H3857	413.14
PCI-AC5	ISA Bus to I/O Rack Direct Adapter	01C7187	507.00
STAND-ALONE			
AC7A	RS232-RS422/485 Converter, 120V	92F3416	203.75
AC7B	RS232-RS422/485 Converter, 220V	92F3417	203.75

(69346)

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TWIDO EXPANSION MODULES (TM2)

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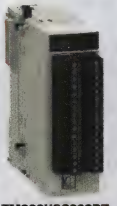
Schneider Electric

Benefits:
- Open to numerous communication networks
- Flexible due to 3 basic types (Compact, Modular and Extreme) and wid range of I/O's
- Twido and its associated TwidoSuite software provide simple and astute solutions for all your predicaments

Applications:
- Simple stand-alone installations
- Repetitive and compact machines

TM200HSC206DF



TM200HSC206DT

DISCRETE INPUT MODULES

Mfg. Part No.	No. of Inputs	Input Logic	Current Rating (mA)	Voltage Rating	Stock No.	Price Each 1-5
● TM2DDI8DT	8	Sink or Source	25	24VDC	11R1936	182.17
● TM2DAI8DT	8	...	55	120VAC	11R1932	174.33
● TM2DDI16DT	16	Sink or Source	40	24VDC	11R1934	313.79
● TM2DDI16DK	16	Sink or Source	35	24VDC	11R1933	228.15
● TM2DDI32DK	32	Sink or Source	65	24VDC	11R1935	392.66

DISCRETE OUTPUT MODULES

Mfg. Part No.	No. of Outputs	Output Logic	Current Rating (mA)	Voltage Rating	Stock No.	Price Each 1-5
● TM2DRA8RT	8	...	7A	24VDC	11R1942	216.73
● TM2DDO8UT	8	Sink	300	24VDC	11R1939	174.33
● TM2DDO8TT	8	Source	500	24VDC	11R1938	174.33
● TM2DRA16RT	16	...	40	24VDC	08R4352	373.89
● TM2DDO16UK	16	Sink	100	24VDC	94W2592	313.79
● TM2DDO16TK	16	Source	400	24VDC	85R3537	327.91
● TM2DDO32UK	32	Sink	100	24VDC	52T5312	522.99
● TM2DDO32TK	32	Source	400	24VDC	11R1937	522.99

DISCRETE INPUT/OUTPUT MODULES

Mfg. Part No.	No. of Inputs	Input Logic	No. of Outputs	Output Type	Current Rating (A)	Voltage Rating	Stock No.	Price Each 1-5
● TM2DMM8DRT	4	Sink or Source	4	Relay	7	24VDC	11R1941	191.77
● TM2DMM24DRF	16	Sink or Source	8	Relay	7	24VDC	11R1940	418.40

ANALOG INPUT MODULES

Mfg. Part No.	No. of Inputs	Input Type	Current Rating (mA)	Voltage Rating	Stock No.	Price Each 1-5
● TM2AMI2LT	2	Thermocouple	30	24VDC	52T5310	246.55
● TM2AMI2HT	2	Voltage/Current	40	24VDC	11R1924	319.24
● TM2AMI4LT	4	Temperature/Voltage/Current	60	24VDC	11R1925	470.68
● TM2AMI8HT	8	Voltage/Current	45	24VDC	11R1926	364.35
● TM2ARI8LT	8	Temperature	140	24VDC	85R3536	430.01
● TM2ARI8HT	8	Temperature	45	24VDC	52T5311	557.02
● TM2ARI8LRJ	8	Temperature	140	24VDC	11R1930	430.01

ANALOG OUTPUT MODULES

Mfg. Part No.	No. of Outputs	Output Type	Current Rating (mA)	Voltage Rating	Stock No.	Price Each 1-5
● TM2AMO1HT	1	Voltage/Current	20	24VDC	11R1929	288.05
● TM2AVO2HT	2	Voltage	60	24VDC	11R1931	248.21

ANALOG INPUT/OUTPUT MODULES

Mfg. Part No.	No. of Inputs	Input Type	No. of Outputs	Output Type	Current Rating (A)	Voltage Rating	Stock No.	Price Each 1-5
● TM2ALM3LT	2	Thermocouple	1	Voltage/ Current	20	24VDC	11R1923	400.96
● TM2AMM3HT	2	Voltage/Current	1	Voltage/ Current	20	24VDC	11R1927	400.96
● TM2AMM6HT	4	Voltage/Current	2	Voltage/ Current	20	24VDC	11R1928	419.00

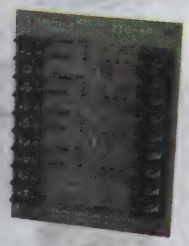
FAST COUNTING EXPANSION MODULES

Mfg. Part No.	No. of Modules per Controller	No. of Channels	No. of Inputs per Channel	No. of Outputs per Channel	Stock No.	Price Each
● TM200HSC206DF	3 max.	2	6 / 60kHz	2 (reflex actions)	94W2593	528.17
● TM200HSC206DT	3 max.	2	6 / 60kHz	2 (reflex actions)	94W2594	528.17

(210237)

P&B MOUNTING BOARDS FOR I/O MODULES

TE connectivity
Authorized Distributor



2I04A

Specifications	2I08	2I04A 2I016A	2I04B 2I016B	2I016 2I024
Field Terminals: Screw Terminals	X	X	X	X
Logic Terminals: Screw Terminals		X	X	
Logic Terminals: 26-Pin Card Edge Connector	X			
Logic Terminals: 50-Pin Card Edge Connector	X			X
Designed for Neg. True Logic; One Logic Voltage	X	X	X	
Designed for Neg. or Pos. True Logic; Mult. Logic Voltages			X	X
Will Accept 50-Pin Dual-Row Header				X

FOR STANDARD MODULES

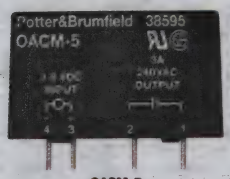
Mfg. Part No.	No. of I/O Channels and Module Positions	L x W x H*	Stock No.	Price Each 1-9	Price Each 10-24
2I04A	4	4.5 x 3.5 x 2.2"	81F4505	65.94	59.94
2I04B	4	4.5 x 3.5 x 2.2"	94F1901	64.23	58.88
2I08	8	8.4 x 3.5 x 2.2"	93B4142	109.84	100.06
2I016A	16	14.4 x 3.5 x 2.2"	94F809	311.41	283.66
2I016B	16	14.4 x 3.5 x 2.2"	94F810	229.56	175.70

*Height is measured to top of mounted modules; *order separately.*
(3267)

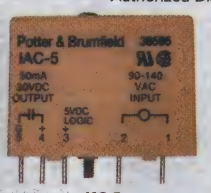
P&B SLIMLINE AND SOLID-STATE INPUT/OUTPUT MODULES

RoHS Compliant Available

TE connectivity
Authorized Distributor



OACM-5



IAC-5

Slimline input/output modules provide interfacing between microprocessor- or computer-based control systems and external input devices and loads such as switches and sensors. Color-coded with high isolation and noise immunity. Packaged in a 0.4" enclosure. SPST-NO contacts. Mfg. part nos. beginning with **IA** indicate module function is AC input. **ID** indicates DC input, **OA** indicates AC output, and **OD** indicates DC output. Solid state modules are photo-isolated and feature excellent transient immunity. Packaged in industry-standard plug-in enclosure. Units interchange easily without disturbing wiring. Maximum load current derating for output modules is linear from 3A to 0.8A between +25°C and +80°C; **OAC-5H** and **ODC-5H** are linear from 5A to 1.3A between +25°C and +80°C. Both module types ideal for series operation. Dimensions for slimline modules in inches (mm): 1.7 (43.18) L x 0.4 (10.16) W x 1.00 (25.4) H. Dimensions for standard modules: 1.7 (43.18)L x 0.6 (15.2)W x 1.25 (38.10)H. UL recognized, CSA certified. *Order mounting boards separately on this page.*

SLIMLINE MODULES

Mfg. Part No.	Input Voltage Min.	Input Voltage Max.	Output Voltage Min.	Output Voltage Max.	Stock No.	Price Each 1-9	Price Each 10-24
IACM-5	90VAC/VDC	140VAC/VDC	...	30VDC	18M9101	16.19	15.68
IDCM-5	±3.3VDC	±32VDC	...	30VDC	18M9110	18.70	16.54
OACM-5	3VDC	8VDC	24VAC	280AC	06R3609	16.51	15.13
ODCM-5	3VDC	8VDC	3VDC	60VDC	29M9955	18.53	16.54
OACM-5H	3VDC	8VDC	24VAC	280VAC	18M9258	21.22	19.90
OACM-U	3VDC	15VDC	24VAC	280VAC	18M9256	19.51	17.08
OACM-UH	3VDC	15VDC	24VAC	280VAC	18M9257	22.98	20.89
STANDARD MODULES							
IAC-5	90VAC/VDC	140VAC/VDC	...	30VDC	18M9099	18.14	16.49
IAC-5E	10VAC/VDC	36VACVDC	...	30VDC	18M9100	18.02	16.60
IAC-15	90VAC/VDC	140VAC/VDC	...	30VDC	18M9097	19.03	17.53
IAC-24	90VAC/VDC	140VAC/VDC	...	30VDC	18M9098	18.99	17.50
IDC-5	±10VDC	±36VDC	...	30VDC	18M9109	18.45	16.49
IDC-24	±10VDC	±36VDC	...	30VDC	18M9108	20.04	17.54
OAC-5	3VDC	6VDC	12VAC	280VAC	06R3607	14.26	13.67
OAC-5A	3VDC	6VDC	12VAC	280VAC	18M9255	18.14	16.49
OAC-5H	3VDC	6VDC	12VAC	280VAC	06R3608	21.22	19.90
OAC-15	9VDC	18VDC	12VAC	280VAC	18M9253	20.29	18.44
OAC24	18VDC	28VDC	12VAC	280VAC	17M7501	29.74	28.36

➤CONTINUED➤

P&B SLIMLINE AND SOLID-STATE INPUT/OUTPUT MODULES (CONT.)

STANDARD MODULES

Mfg. Part No.	Input Voltage Min.	Input Voltage Max.	Output Voltage Min.	Output Voltage Max.	Stock No.	Price Each 1-9	Price Each 10-24
OAC-24A	18VDC	28VDC	12VAC	280VAC	18M9254	27.56	24.12
ODC-5	3VDC	6VDC	5VDC	60VDC	29M9954	18.14	16.49
ODC-5A	3VDC	8VDC	3VDC	250VDC	06R3610	22.20	20.46
ODC-15	9VDC	18VDC	5VDC	60VDC	64P8092	20.11	17.60
ODC-15A	9VDC	18VDC	10VDC	200VDC	18M9267	22.75	20.97
ODC-24	18VDC	28VDC	5VDC	60VDC	18M9268	19.60	17.83

Logic in VDC is indicated in suffix of type number. Suffixes **-UH** and **-U** indicate logic of 3-15VDC.
(3266)

WIMODPAK SERIES WIRELESS SOLUTIONS

invensys EUROTHERM

Features

- Highly cost effective
- Space saving DIN rail package
- 2.4GHz (Global), 900MHz (US & Australia), and 868MHz (Europe) versions available
- Gateways have secure data transmission with 256 bit AES (900MHz, US) or 128 bit AES (900MHz, AU and 868MHz, Europe) encryption
- Modbus compatible
- I/O expandable (up to 6 modules plus base unit)
- CE, CUL, Class 1 Division 2, RoHS (900MHz only)
- Up to 25 Miles (40.2km) LOS* with standard antenna (included)
- 10 to 48 VDC or 18 to 30 VAC power
- Free software included - or free download from our website
- Rugged construction with -40 to 80°C operating temperature range
- Flexible design - the same unit can be programmed as a transmitter, receiver or repeater

MODBUS WIRELESS GATEWAYS

Mfg. Part No.	Frequency	Radio Power	RF Range Indoor/Outdoor	Stock No.	Price Each
WPM9-1W115K	900MHz	1W (sel)	915m (3000ft)/22.5km (14mi) 115K baud	26T3893	494.00
WPM24100MW250KF	2.4GHz	100mW	92m (300ft)/1.6km (1mi) 250k baud	26T3892	270.00

WIRELESS I/O BASE MODULES

Mfg. Part No.	Frequency	Radio Power	RF Range Indoor/Outdoor	Stock No.	Price Each
WPR24-2222P-F	900MHz	1W (sel)	458m (1500ft)/11.3km (7mi) 115k bps	26T3894	500.00

WIRELES I/O EXPANSION MODULES

Mfg. Part No.	Description	Stock No.	Price Each
WPX-4AO	4 Analog outputs (sinking)	26T3898	353.00
WPX-4AOP	4 Analog outputs (sourcing)	26T3899	354.00
WPX-4RTDA	4 Analog inputs (RTDs)	26T3900	404.00
WPX-8DI	8 Digital inputs	26T3901	234.00
WPX-8DON	8 Digital outputs (sinking)	26T3902	234.00
WPX-8DOP	8 Digital outputs (sourcing)	26T3904	234.00
WPX-8DOR	8 Digital outputs (Relays)	26T3905	276.00
WPA-PCOM-USB	USB Programming module, cable and software CD	26T3884	99.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
WPA9-ANT2	High gain antenna, 900MHz, Omni, 6DB, NF connector	26T3888	276.00
WPA9-ANT3Y	High gain antenna, 900MHz, Yagi, 9DB, NF connector	26T3889	141.00
WPA-OMNI	Mounting brackets, Omni antenna	26T3883	49.00
WPA24-ANT2	High gain antenna, 2.4GHz, Omni, 8DB, NF connector	26T3885	141.00
WPA24-ANT3Y	High gain antenna, 2.4GHz, Yagi, 12.5DB, NF connector	26T3886	193.60
WPA-CAB1	Spare antenna cable, 2ft SMA-NMB	26T3875	45.00
WPA-CAB10	High gain antenna CABLE 10ft, SMA-NM	26T3876	83.00
WPA-CAB2	High gain antenna cable, 2ft, SMA-NM	26T3879	49.00
WPA-CAB20	High gain antenna cable, 20ft, SMA-NM	26T3880	96.00
WPA-CAB50	High gain antenna cable, 50ft, SMA-NM	26T3882	193.00
WPA-CAB10MM	Antenna cable extension,10ft, NM-NM	26T3878	64.00
WPA-CAB20MM	Antenna cable extension, 20ft, NM-NM	26T3881	96.00
WPA-CAB10FM	Antenna cable extension, 10ft, NF-NM	26T3877	64.00
WPA9-AR1NF	Lightning arrester, 1GHz,1000W, 350V, 5KA, NFNF	26T3891	122.00
WPA24-AR1NF	Lightning arrester, 4GHz, 70W, 130V, 20KA, NFNF, RoHS	26T3887	122.00
WPA-BOXKIT1	NEMA 4X radio box kit:10x8x6 box, DIN rail, plate, cable	26T3874	321.00

(192444)

UW SERIES WIRELESS CONNECTOR / TRANSMITTER RECEIVERS

NEWPORT

UWTC-1/N

UWTC-REC1/N

- **UWTC**: User Configurable For Type J, K, T, E, R, S, B, N, C Thermocouple Input
- **UWRTD**: 3-wire, 100 Ω, 0.00385 or 0.00392 Curve RTD Sensor
- Free Software Converts Your PC Into a Multi- Channel Chart Recorder or Data Logger
- FCC Compliant (all versions)
- Built-In Cold Junction Compensation and Linearization
- Both Miniature and Standard Size Probes and Connectors
- One Receiver Works with Multiple Wireless Remote Connectors
- Low Power Operation and Sleep Mode For Long Battery Life
- Each Wireless Connector Transmits Thermocouple Temperature, Ambient Temperature, Signal Strength and Battery Status in Real Time
- **UWTC-REC1**: 48-channel receiver, USB powered, PC Chart Recording and Data Logging
- **UWTC-REC3**: 32-channel wireless receiver with ethernet for web-based temperature monitoring

The **UWTC-REC1** is a 48-channel receiver with USB connection. It's available with an optional NEMA rated enclosure. The **UWTC-REC3** receiver lets you monitor and record temperature over an Ethernet network or the Internet without any special software-just your web browser. Each Receiver can directly support up to thirty-two (32) Thermocouples, RTD, Infrared and Humidity wireless Connectors / Transmitters. The receiver is an independent node on the network sending and receiving data in standard TCP/IP packets. It is easily configured from a web browser and can be password protected. The **UWTC-REC3** can trigger an alarm if variables go above or below a setpoint that you can determine. Your alarm can be sent by e-mail to a single user or to a group distribution list, including text messages to Internet enable cell phones and PDA's. The Mail Notifier software is a free and easy-to-use program for this application.

Mfg. Part No.	Description	Stock No.	Price Each
UWTC-1/N	Wireless thermocouple connector (standard distance)	72W3016	135.00
UWTC-2/N	Wireless thermocouple connector (Extended distance)	72W3017	145.00
UWRTD-1/N	Wireless RTD connector (standard distance)	72W3013	135.00
UWTC-REC1/N	48-channel receiver/host (USB powered) for UWTC-1 or UWTC-2	72W3014	235.00
UWTC-REC3/N	32-channel receiver/host with Ethernet for UWTC-1 or UWTC-2	72W3015	285.00

(209537)

WIRELESS DIN RAIL MOUNT RECEIVER W/ ANALOG OUTPUTS

NEW

NEWPORT

- Works with Up to 48 Wireless Transmitters
- Four 0 to 5 Vdc, 0 to 10 Vdc or 4 to 20 mA Analog Outputs
- Interface Directly to PLCs, Chart Recorders and Data Loggers
- Standard DIN Rail Enclosure
- Built-in Programmable Alarms for Each Channel
- Field Programmable via USB
- Included Software Turns a PC Into a Multi-Channel Meter, Chart Recorder or Data Logger

The **UWTC-REC4** wireless DIN rail receiver can work with up to 48 wireless transmitters, displaying their data in real time on your PC. The **UWTC-REC4** also has four independent analog outputs, which can be user-programmed as a retransmission signal from any input channel, driving a PLC or data logger. The **UWTC-REC4** is compatible with the full line of UW wireless transmitters from Newport; choose from thermocouple, RTD, %RH, infrared (non-contact) temperature, pH, as well as process voltage/ current models. The standard DIN rail mount design provides for easy mounting, and fast connections to other DIN rail equipment, including PLCs. The optional **IDRN-PS-1000** power supply can power up to three **UWTC-REC4** units, which can give you up to 144 wireless input channels, and 12 analog outputs.

Mfg. Part No.	Description	Stock No.	Price Each
UWTC-REC4-MA/N	48-channel DIN rail receiver with 4 analog outputs and alarms, 4 to 20 mA signal	04X9790	325.00

(212209)

GROOV HUMAN DEVICE INTERFACE (HDI)

RoHS Compliant Available

OPTO 22

- Ready-made gadgets let you quickly create a browser-based operator interface to monitor and control your company's assets
- A groov interface runs on any device with a modern web browser—regardless of manufacturer or operating system
- No server required; no software to install; no per-user fees
- Secure Sockets Layer (SSL) encryption protects data

groov is Opto 22's new way to build, deploy, and view simple, effective, and scalable operator interfaces to monitor and control systems and equipment using computers and mobile devices. Using only a modern web browser, **groov** lets you quickly and securely build and deploy browser-based interfaces for automation, monitoring, and control applications. These operator interfaces can then be viewed on almost any computer or mobile device regardless of its manufacturer or operating system, including PCs, tablets, smartphones, and even smart high-definition televisions.

Mfg. Part No.	Description	Stock No.	Price Each
● GROOV-AT1	groov Box Preloaded w/ groov Applications	69W6090	2831.40
GROOV-SVR-WIN	Groov Software	17X1359	3040.80
GROOV-OPCC	Groov Software	17X1358	1050.00

(210134)

UNMANAGED INDUSTRIAL ETHERNET SWITCHES

RoHS Compliant Available

ADVANTECH

EKI-2525

EKI-2528

EKI-2525P

ETHERNET SWITCHES

Mfg. Part No.	Description	Stock No.	Price Each
● EKI-2525-AE	5-port Unmanaged Industrial Ethernet Switch	05N1247	89.00
● EKI-2525P-AE	5-port Unmanaged PoE Industrial Ethernet Switch	88M9511	295.00
● EKI-2528-AE	8-port Unmanaged Industrial Ethernet Switch	97M9534	145.00
● ADAM-6520I-AE	Industrial Ethernet Switch; No. of Ports:5; Features:Unmanaged	26R9657	195.00
● ADAM-6520L-AE	Industrial Ethernet Switch; No. of Ports:5; Features:Unmanaged	35M5380	105.00
● ADAM-6521/ST-AE	Industrial Ethernet Switch; No. of Ports:5; Features:Unmanaged	72M6494	250.00
● ADAM-6521-BE	Industrial Ethernet Switch; No. of Ports:5; Features:Unmanaged	80P3129	250.00
● ADAM-6521S-AE	Industrial Ethernet Switch; No. of Ports:5; Features:Unmanaged	26R9658	325.00
● EKI-2525I-AE	Industrial Ethernet Switch; No. of Ports:6; Features:Unmanaged; No. of Ports 10/100TX:5; No. of Ports 100FX:1	26R9689	165.00
● EKI-2525M-AE	Industrial Ethernet Switch; No. of Ports:5; Features:Unmanaged; No. of Ports 10/100TX:4; No. of Ports 100FX:1	26R9690	172.00
● EKI-2525PA-AE	Industrial Ethernet Switch; No. of Ports:5; Features:Unmanaged; No. of Ports 10/100TX:5	46P7055	345.00
● EKI-2526M-AE	Industrial Ethernet Switch; No. of Ports:6; Features:Unmanaged; No. of Ports 10/100TX:4; No. of Ports 100FX:2	26R9691	295.00
● EKI-2526PI-AE	Industrial Ethernet Switch; No. of Ports:6; Features:Unmanaged; No. of Ports 10/100TX:4; No. of Ports 100FX:2	26R9692	395.00
● EKI-2526S-AE	Industrial Ethernet Switch; No. of Ports:6; Features:Unmanaged; No. of Ports 10/100TX:4; No. of Ports 100FX:2	26R9693	645.00
● EKI-2528I-AE	Industrial Ethernet Switch; No. of Ports:8; Features:Unmanaged	26R9694	215.00
● EKI-2728-BE	Industrial Ethernet Switch; No. of Ports:8; Features:Unmanaged	26R9699	345.00
● EKI-7626C-AE	Industrial Ethernet Switch; No. of Ports:18; Features:Unmanaged; No. of Ports 10/100TX:16; No. of Ports 100FX:2	33P9658	565.00
● EKI-7629C-AE	Industrial Ethernet Switch; No. of Ports:10; Features:Unmanaged; No. of Ports 10/100TX:8; No. of Ports 100FX:2	26R9709	350.00
● EKI-2725-BE	5-port Unmanaged GbE Ethernet Switch (Green)	63R6126	271.97
● EKI-2548I-AE	8Tx Managed Ethernet Switch w/ Wide Temp	44W6738	500.00
REPEATERS/CONVERTERS			
● ADAM-4510I-AE	Repeater; Port Style:RS-422/485	59M8610	180.00
● ADAM-4520I-AE	Converter; Features:RS-232 to RS-422/485; Supply Voltage:30VDC	59M8611	130.00
● ADAM-4522-AE	Converter; Features:RS-232 to RS-422/485; Supply Voltage:30VDC	47M1676	80.00
● ADAM-4562-AE	Converter; No. of Ports:1; Features:Isolated USB to RS-232/422/485	47M1680	100.00
COMMUNICATION CONTROLLERS			
● ADAM-4500-AE	PC-based Communication Controller; Data Rate Max:115.2Kbps; External Depth:120mm; External Width:60mm; Supply Voltage:30VDC	26R9647	280.00
● ADAM-4501-AE	Communication Controller; Features:Ethernet enabled	59M8608	385.00
● ADAM-4501D-AE	Communication Controller; Features:Ethernet enabled, 7 segment LED	59M8609	455.00
SPLITTERS			
● EKI-2701PSI-AE	Industrial Ethernet PoE Splitter (wide temp)	26R9698	195.00

(115438)

INDUSTRIAL ETHERNET SWITCH

NEW · RoHS Compliant Available · ADVANTECH

- Supports IEEE 802.3az, Energy Efficient Ethernet standard: Automatically powers down ports that have no link, Budgets power output for different Ethernet cable length
- Support IEEE 802.1p QoS- VIP port setting: Ensures time sensitive data gets delivered efficiently, even during bursts of high data traffic, Ensures video streaming through switch with high priority.
- Supports redundant 12 ~ 48 VDC power input and P-Fail relay
- In Loop detection

Mgg. Part No.	Data Rate Max	No. of Ports	Stock No.	Price Each
EKI-3525	100	5	99W5443	84.00
EKI-3528	100	8	99W5444	123.00
EKI-3725	1	5	99W5447	187.00
EKI-3728	1	8	99W5448	293.00

(211953)

ADAM 6000 SERIES INDUSTRIAL ETHERNET NETWORK SYSTEMS

RoHS Compliant Available · ADVANTECH

- Supports +10 ~ 30 V_{DC} Voltage
- Provides Surge Protection 3000V_{DC} For Power Line
- Provides Flexible Mounting: DIN Rail, Panel, Piggyback
- Supports Operating Temperatures from -10 ~ 70°C

ADAM-6520-B

Mfg. part no. 6520 is suited for industrial environments with Ethernet networking needs. Applications include semiconductor factories, inventory control environments, and assembly lines and production.

Specifications	ADAM-6520BE
Interface	Network: 10/100Base-T Ethernet
Port	5 x 10/100 Mbps
Connector	RJ-45

Mfg. Part No.	Description	Stock No.	Price Each
ADAM-6520BE	5-Port Industrial 10/100Mbps Ethernet Switch	34M3188	125.00

(80068)

GRACEPORT® 5-PORT UNMANAGED ETHERNET SWITCHES

RoHS Compliant Available · GRACE ENGINEERED PRODUCTS, INC · UL · CSA · NEMA

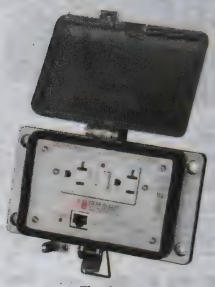


Fig. 1

Fig. 2

Fig. 3

- Save space on DIN rail by placing GFCI in door
- Enhances compliance towards NFPA 70e
- Designed to fit the Inside-Outlet® GFCI for NFPA 79 compliance
- Interior status LED's (port P2 - P5) duplicated on front for thru-door diagnostics
- Program multiple devices safely from outside the panel
- External RESET and Power LED indication
- Required external power supply: 24VDC only
- Cast aluminum base housing w/ polycarbonate cover and thermoplastic elastomer gasket
- Choose from silver (UL Type 4, UL Type 12) or black (UL Type 4X) housing
- External port: RJ45 jack x 1
- Internal ports: RJ45 jack x 5

Fig. 4

Mfg. Part No.	Fig.	Outlet Receptacle	Features	UL Type	Stock No.	Price Each 1-4
P-E5-M3RF0	1	GFCI Duplex, 120VAC/20A	...	4	35R1738	332.35
P-E5-M3RF15	2	GFCI Duplex, 120VAC/20A	15A Circuit Breaker	4	35R1739	350.75
P-E5-M3RX	3	None	Ethernet Switch Only	4	35R1740	319.70
P-E5P11-M3RF0	4	GFCI Duplex, 120VAC/20A	USB A Plug/Jack	4	35R1744	405.95
P-E5-M2RF0	1	GFCI Duplex, 120VAC/20A	...	4X	50R4534	381.80

➤CONTINUED➤

GRACEPORT® 5-PORT UNMANAGED ETHERNET SWITCHES (CONT.)

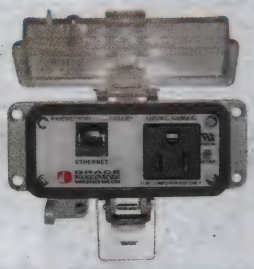
Mfg. Part No.	Fig.	Outlet Receptacle	Features	UL Type	Stock No.	Price Each 1-4
P-E5-M2RF15	2	GFCI Duplex, 120VAC/20A	15A Circuit Breaker	4X	35R1736	400.20
P-E5-M2RX	3	None	Ethernet Switch Only	4X	35R1737	369.15
P-E5P11-M2RF0	4	GFCI Duplex, 120VAC/20A	USB A Plug/Jack	4X	35R1743	455.40
P-E5-M4RF0	1	GFCI Duplex, 120VAC/20A	...	12	50R4535	379.75
P-E5-M4RF15	2	GFCI Duplex, 120VAC/20A	15A Circuit Breaker	12	35R1741	382.44
P-E5-M4RX	3	None	Ethernet Switch Only	12	35R1742	350.75
P-E5P11-M4RF0	4	GFCI Duplex, 120VAC/20A	USB A Plug/Jack	12	35R1746	437.00

(163080)

GRACEPORT® CAT 5 ETHERNET DATA INTERFACE PORTS

GRACE ENGINEERED PRODUCTS, INC · UL · CSA · NEMA

- UL recognized Type 4 (gray), NEMA 4 / 12
- 120VAC / 15A simple receptacle
- Cast alloy base housing w/ plastic cover
- NBR gasket
- External port: RJ45 jack
- Internal port: RJ45 jack



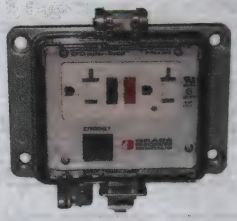
Mfg. Part No.	Rating	Stock No.	Price Each 1-4	5-9	10+
P-R2-F3R0.	NEMA 4/12	44P8590	129.02	121.16	112.19

(142133)

GRACEPORT® CAT 5 ETHERNET DATA INTERFACE PORTS

RoHS Compliant Available · GRACE ENGINEERED PRODUCTS, INC · UL · CSA · NEMA

- UL recognized type 4X (black)
- 120VAC / 20A duplex GFCI receptacle
- Cast alloy base housing w/ plastic cover
- NBR gasket
- External port: RJ45 jack
- Internal port: RJ45 jack



No Circuit Breaker

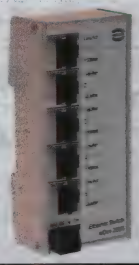
Mfg. Part No.	Rating	Circuit Breaker	No. of Ports	Housing Color	Stock No.	Price Each 1-4	5-9	10+
P-R2-K3RF0	NEMA 4/12	None	1	Gray	46T5263	177.42	166.63	154.29

(142134)

ETHERNET SWITCH FOR INDUSTRIAL APPLICATIONS

NEW · RoHS Compliant Available · HARTING®

- Energy supply of up to 4 terminal devices via PoE+ (137 watts) in accordance with IEEE 802.3at
- Fast Ethernet Non-Blocking Switch architecture in accordance with IEEE 802.3
- Variants with industrial temperature range of -40°C ... +70°C
- Surge protection and reverse polarity protection
- Minimum energy consumption due to energy-effi cient Ethernet



Mfg. Part No	No. of ports	Type of Ethernet	Stock No.	Price Each 1-4
2000 FAST ETHERNET BASIC				
24020050000	5 x RJ45	Fast Ethernet	53X2930	139.77
24020050020	5 x RJ45	Fast Ethernet with PoE	53X2931	312.02
24020061100	6 x RJ45, 1 x Fiber	Fast Ethernet	53X2932	354.58
24020061120	6 x RJ45, 1 x Fiber	Fast Ethernet with PoE	53X2933	468.04
24020062100	6 x RJ45, 2 x Fiber	Fast Ethernet	53X2934	453.87
24020080000	8 x RJ45	Fast Ethernet	53X2935	213.64
24020080010	8 x RJ45	Fast Ethernet	53X2936	161.73
24020080020	8 x RJ45	Fast Ethernet with PoE	53X2937	399.98
3000 FAST ETHERNET BASIC				
24030041100	4 x RJ45, 1 x Fiber	Fast Ethernet	53X2939	262.56
24030041120	4 x RJ45, 1 x Fiber	Fast Ethernet with PoE	53X2940	416.98
24030042100	4 x RJ45, 2 x Fiber	Fast Ethernet	53X2941	359.39
24030042120	4 x RJ45, 2 x Fiber	Fast Ethernet with PoE	53X2942	550.34

➤CONTINUED➤

INDUSTRIAL ETHERNET DEVICES

ETHERNET SWITCH FOR INDUSTRIAL APPLICATIONS (CONT.)

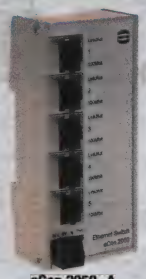
Mfg. Part No	No. of ports	Type of Ethernet	Stock No.	Price Each 1-4
● 24030042130	4 x RJ45, 2 x Fiber	Fast Ethernet with PoE	53X2943	521.94
● 24030060000	6 x RJ45	Fast Ethernet	53X2944	185.69
● 24030060020	6 x RJ45	Fast Ethernet with PoE	53X2945	351.76
● 24030061100	6 x RJ45, 1 x Fiber	Fast Ethernet	53X2946	354.58
● 24030061120	6 x RJ45, 1 x Fiber	Fast Ethernet with PoE	53X2947	468.06
● 24030080000	8 x RJ45	Fast Ethernet	53X2948	213.64
● 24030080020	8 x RJ45	Fast Ethernet with PoE	53X2949	399.98
● 24030080030	8 x RJ45	Fast Ethernet with PoE	53X2950	371.61
2000 and 3000 FULL GIGABIT ETHERNET BASIC				
● 24034042200	4 x RJ45, 2 x Fiber	Full Gigabit Ethernet	53X2951	794.28
● 24034060000	6 x RJ45	Full Gigabit Ethernet	53X2952	368.76
● 24034070000	7 x RJ45	Full Gigabit Ethernet	53X2953	397.13
● 24024052220	5 x RJ45, 2 x Fiber	Full Gigabit Ethernet with PoE	53X2938	1205.58

(212388)

ETHERNET SWITCH FOR INDUSTRIAL APPLICATIONS

RoHS Compliant Available

HARTING



eCon 2050 -A
20 76 105 3000

- Flat housing format
- Robust metal housing
- Adapted for mounting onto top hat mounting rail 35 mm according to EN 60 715

The Ethernet Switch **eCon 2050-A** can be used in industrial environments and supports Ethernet (10 Mbit/s) and Fast Ethernet (100 Mbit/s). Up to 5 Ethernet devices can be connected via the RJ45-ports. The Ethernet Switch supports a simple and quickly network diagnostics with integrated LEDs at every port. It works as unmanaged switch in the Store and Forward switching mode and supports Auto-crossing, Auto-negotiation and Auto-polarity. DIN-rail, panel mount and flat-mount bracket kits are also available; *go online or call.*

eCON 2000 ETHERNET SWITCH - IP 30 RATED

Mfg. Part No.	Number of Ports	Interface	Stock No.	Price Each Each
● 20 76 105 3000	5	RJ45 Twisted Pair Connection Style	35M5511	140.27
● 20 76 108 4000	8	RJ45 Twisted Pair Connection Style	45W1252	1061.87

ADAPTERS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● 21 03 381 4400	M12 to RJ45 Adapter, 4-port, Right-angle	68K1760	44.84

(78636)

ACCESSORIES

Mfg. Part No.	Accessory Type	For Use With	Stock No.	Price Each 1-9
● 20 80 000 0003	Fixing Clip	DIN EN 60715 Caprail	16J0513	28.45
● 20 80 010 0001	Mounting Bracket	Han Industrial Connectors	79K0838	18.64
20 80 024 0002	Mounting Bracket Kit	Han Industrial Connectors	79K0840	28.45

INDUSTRIAL ETHERNET SWITCH

NEW

HIRSCHMANN
A BELDEN BRAND

Mgg. Part No.	Data Rate Max	No. of Ports	Stock No.	Price Each
SPIDER 1TX/1FX	100Mbps	2	06X2895	169.58
SPIDER II 8TX	100Mbps	8	06X2794	165.35
SPIDER II 8TX POE	100Mbps	8	06X2894	549.83
MACH102-24TP-F	1Gbps	26	06X2781	1591.02

(211970)

element14 COMMUNITY

Get inspired, collaborate, design, research, ask experts questions.

element14.com

(196545)

ETHERNET SWITCHES SERIES 852

RoHS Compliant Available

WAGO

852-101 852-102 852-103 852-104 852-111

Features

- ECO & standard unmanaged plus managed
- Copper only plus copper and fiber
- SFP fiber optic ports
- Alarm relay for power and loss of signal
- 3 configuration options for managed switch
- E-mail notifications on managed switch
- High speed recovery on redundant ring - managed switch

SFP Modules

Ethernet switches are used to enable ethernet devices like controllers, couplers, IPCs, operator terminals and computers to communicate with each other efficiently and at high speeds. Customers that are using ethernet protocols like MODBUS TCP. EtherNet/IP, or profinet on our controllers, couplers and IPCs will in most cases need ethernet switches

Mfg. Part No.	Description	Stock No.	Price 1-4
● 852-101	5-Port 100BASE-TX Industrial Switch	73R8853	265.20
● 852-102	8-Port 100BASE-TX Industrial Switch	73R8854	317.23
● 852-103	8/2 Port 100BASE-TX/FX Industrial Switch	73R3684	488.39
● 852-104	7/2-Port 100BASE-TX/FX Industrial	73R8855	1331.66
● 852-111	5-Port 100BASE-TX Industrial Eco Switch	73R4155	141.29
● 852-201/107-002	SFP Modules 100Base-FX LC, 100Base-FX Multi-mode LC, 2 km	73R4156	157.21
● 852-201/107-030	SFP Module 30: 1310nm, 100Base-FX Single-mode LC, 30 km	73R8857	247.39

(177891)

UNMANAGED NETWORK SWITCHES 3, 5, 6, 8 PORTS

RoHS Compliant Available

Weidmüller

Industrial Ethernet

- Economic Plug and Play unmanaged switch with 3 to 8 Ethernet ports/DIN-rail mounting
- Automatic recognition and negotiation of data transmission rates
- Class 1 Division 2 approved
- AC input voltage, min.-max.: 12-24 VAC
- DC input voltage, min.-max.: 10-35 VDC

Media Converters

- Transparency in network
- Auto Link detection
- Multi-mode or single-mode versions
- Class 1 Division 2 approved
- AC input voltage, min.-max.: 12-24 VAC
- DC input voltage, min.-max.: 10-35 VDC

The **WaveLine** products integrate 3 to 8 RJ45 and Fiber Optic ports in a compact housing. With integral features such as Auto Negotiation and Auto Crossing, and an operating temperature range of 0°C to 60°C, the **WaveLine** is ideal for establishing Industrial Ethernet wherever you require a simple link between your device and your Ethernet network. **Media converters** can be switched between half duplex and full duplex by use of a small switch, making them ideal for use in demanding real-time applications. Auto Link detection checks the link status on the I/O ports and drops if one side is down. The multi-mode version provides interference-free transmission over distances of up to 2 kilometers, and the single-mode version up to 20 kilometers.

INDUSTRIAL ETHERNET

Mfg. Part No.	No. of Ports	Data Rate	Mode	Stock No.	Price Each 1-9
● 8896930000	3	10BASE-T/100BASE-TX	1xST-MM	55M2740	207.90
● 8896960000	6	10BASE-T/100BASE-TX	1xST-MM	55M2743	246.84
MEDIA CONVERTERS					
● 8916300000	3	100BASE-TX	1xSC-MM	95M3388	443.60

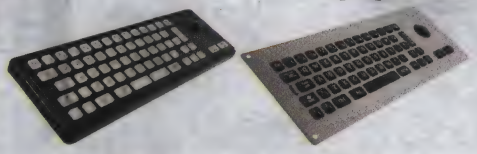
(115462)

2210-T/B SERIES COMPACT VANDAL-RESISTANT KEYBOARDS WITH INTEGRATED TRACKBALL

RoHS Compliant Available

Storm Interface

Features
- Weather resistant (IP65)
- Integral PS2/USB interface (switchable)
- Optional PC connection cables
- Operational life of 4 million cycles per key
- Compact format: 360mm x 118.5mm x 38.5mm
- Operating temperture: -20°C to +60°C
- 63 keys



Keyboard Keytop

Storm 2210-T/B keyboards are constructed to survive in exposed, unsupervised, public environments. Their responsive key action ensures rapid, reliable and responsive data entry in tough, wet or hostile conditions. A hardened stainless steel front plate and captive, cast metal or high impact polymer keys ensure the keyboard's resistance to hard use, abuse and vandalism. A water and impact resistant trackball makes this keyboard the complete and ideal solution for PC

Mfg. Part No.	Description	Stock No.	Price Each 1-9
2210-452223	Robust T/B keyboard with polymer keys and 2.5m USB cable	39T2259	388.88
2212-252223	Rugged extended top plate T/B keyboard with polymer keys	39T2260	497.03
2212-352323	Rugged extended top plate T/B keyboard with metal keys	39T2261	553.64

(194828)

2210 SERIES VANDAL-RESISTANT/ ROBUST KEYBOARDS WITH INTEGRATED TRACKBALL

NEW

Storm Interface

Features
- Vandal resistant (10J BS EN 60068-2-75: 1997)
- Weather resistant (IP54)
- With factory fitted 2.5m USB cable
- RFI/EMI Protection
- Operational life of more than 4 million cycles per key
- Resistant to most commonly used cleaning agents
- Integral 38mm trackball with left & right click keys
- 63 keys
- Compact format: 360mm x 118.5mm x 438.5mm

Storm's 2210 Series high contrast keyboard is great for use in public access and industrial installations. This responsive and reliable keyboard was developed specifically for use in unsupervised or semi-supervised environments where hardware may be subject to hard use or abuse. The 2210 Robust keyboard was designed to provide maximum systems accessibility to those with sensory or mobility impairments. Ideal for use in kiosk and retail applications.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
2210-252223	Robust T/B keyboard with polymer keys and 2.5m USB cable	23X5587	472.03

(211968)

2200 SERIES REDUCED FOOTPRINT VANDAL RESISTANT KEYBOARD

RoHS Compliant Available

Storm Interface

- Tough, Vandal Resistant Construction
- Sealed against Water & Dust to IP65 Specification
- -20°C (Dry) to +75°C Operational
- Operational Life of More than 4 Million Cycles per Key
- Resistant to Most Corrosives and Cleaning Agents

Constructed to survive in exposed, unsupervised, public environments. Responsive key action ensures rapid and reliable data entry in tough, wet or industrial conditions. A hardened stainless steel front plate and captive, high impact polymer keys ensure the keyboard's resistance to hard use and abuse. **Mfg. part no. 2220** has reduced footprint with function row keys; **Mfg. part no. 2230** has reduced footprint with function row and number pad. Each size is available with engraved chromed metal or high-impact polymer keys. Supplied with switchable PS2/USB encoding electronics. Approx. size 11"(W) x 5"(H). PS/2 and USB cables are available; *order separately below.*

Mfg. Part No.	Description	Stock No.	Price Each 1-9
2220-220023	Vandal-Resistant Keyboard	84C8655	425.93
2220-320023	Vandal-Resistant Metal Key Keyboard	10M8481	511.80
2230-220023	Vandal-Resistant Keyboard	10M8482	460.10
2230-320023	Vandal-Resistant Metal Key Keyboard	10M8483	569.07
1200-001003	PS/2 Cable w/ 6-Pin Mini-DIN Connector	29C7730	13.28
1200-002003	USB Cable w/ USB Connector	29C7731	13.10
2210-MK0003	2200 Series Under Panel Mount Kit	79K4485	19.58

(69336)

1200 SERIES MINIATURE VANDAL-RESISTANT KEYBOARD

RoHS Compliant Available

Storm Interface

- Environmentally Sealed Against Liquids and Dust to IP65 Specifications
- Permanent Laser-Engraved Keytop Graphics
- Operating Temperature Range: -20°C to +75°C

Developed for use in a new generation of web-enabled public telephones and transaction terminals, this small (approx. 7" x 3") but highly responsive keyboard is suitable for use in exposed or hostile environments. Robust construction is highly resistant to hard use, abuse and vandalism. It is sealed against water and dust to allow responsive, reliable data entry in the most demanding situations. Includes integral PS/2 to USB switchable encoder. *Order PS/2 and USB cable separately below.*

Mfg. Part No.	Description	Stock No.	Price Each 1-9
1200-320023	Vandal-Resistant, Miniature PC Keyboard	29C7884	365.61
1200-001003	PS/2 Cable w/ 6-Pin Mini-DIN Connector	29C7730	13.28
1200-002003	USB Cable w/ USB Connector	29C7731	13.10

(69339)

VANDAL-RESISTANT KEYBOARDS WITH INTEGRATED TRACKBALL

RoHS Compliant Available

Storm Interface

- Tough, Vandal-Resistant Construction
- Sealed Against Water and Dust to IP65 Specification
- Integral 38mm, PS2/USB Compatible Trackball with Left and Right Click Keys
- Operational Life of More Than 4 Million Cycles Per Key
- Resistant to Most Corrosives and Cleaning Agents
- Protected Against RFI/EMI in Accordance with Current and Forthcoming European and US Directives
- -20°C (Dry) to +75°C Operational Temperature

STORM 2210-Trackball keyboards are constructed to survive in exposed, unsupervised, public environments. Their responsive key action provides rapid, reliable and responsive data entry in tough, wet or industrial conditions. A hardened stainless steel front plate and captive keytops ensure the keyboard's resistance to hard use, abuse and vandalism. Water- and impact-resistant trackballs make these keyboards the complete and ideal solution for PC data entry in menu based "point and click" applications. Available with engraved chromed metal or high-impact polymer keys. Supplied with switchable PS2/USB encoding electronics. PS/2 and USB cables with connectors for keyboard and trackball are available separately.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
2210-220223	Vandal-Resistant Keyboard w/ Trackball	84C8652	545.76
2200-002003	PS/2 Trackball Cable	84C8650	13.20
STAND-ALONE TRACKBALLS			
2200-000203	RobustTrackball, Phenolic Ball	10M8478	137.93

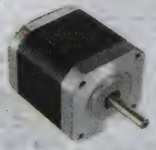
(72180)

4418 SERIES EXTREME TORQUE MOTORS

RoHS Compliant Available

LINENGINEERING Step Motor Specialists

Features
- NEMA Size 17 Mounting
- Up to 35% more torque in a smaller package
- Custom winding available (No additional cost)



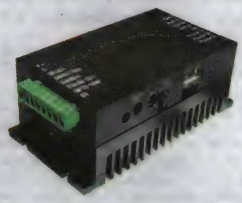
Mfg. Part No.	Amp/ Phase (A)	Torque N-m	Inertia (oz.-in.^{2})	Resist. Ohm/ Phase	Stock No.	Price Each
4418M-01-R0	2	0.48	0.34	1.3	84R6110	81.40
4418M-04P-R0	1.7	0.48	0.34	1.88	84R6111	81.40
4418M-06P-R0	1.5	0.48	0.34	3.1	84R6112	81.40
4418M-07S-R0	1.05	0.48	0.34	4.98	84R6113	81.40
4418S-01-R0	1.7	0.42	0.22	1.6	84R6114	69.43
4418S-04-R0	2.0	0.42	0.22	1.1	84R6115	69.43
4418S-06P-R0	1.4	0.42	0.22	2.7	84R6116	69.43
4418S-06S-R0	0.7	0.42	0.22	10.8	84R6117	69.43
4418S-51-R0	1.0	0.42	0.22	4.37	84R6118	69.43
4418X-01-R0	1.5	0.21	0.16	1.66	84R6119	63.44
4418X-02-R0	1.3	0.21	0.16	2.9	84R6120	63.44
4418X-04P-R0	1.33	0.21	0.16	2.7	84R6121	63.44
4418X-04S-R0	0.67	0.21	0.16	10.74	84R6122	63.44

(179659)

BLDC DRIVER WITH SPEED CONTROL

RoHS Compliant Available

LINENGINEERING Step Motor Specialists



- Input voltage from 12VDC to 48VDC
- Peak current up to 20 Amps Peak
- Continuous current up to 10 Amps
- Maximum wattage of 500 Watts
- Chopping frequency of 20kHz
- Three fault outputs via LED (flashes on and off)
- Closed-loop with hall sensors for speed control
- Direction of rotation change via hi/lo input change
- Direction mode which allows potentiometer to be used to rotate motor forwards and reverse
- Brake input, which will stop motor rotation suddenly using hi/lo input
- Speed control via 0-5VDC or 0-10VDC with external voltage input
- Speed reader output that outputs the speed of the motor in the form of a square wave
- GUI Software provided for easy installation and operation
- User selectable P & I values for smoother motion via closed loop with the hall sensors
- Communication via RS485, RS232 or USB converter card kits available

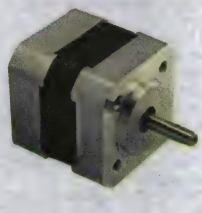
Mfg. Part No.	Supply Voltage (VDC) Min.	Supply Voltage (VDC) Max.	Drive Current Per Phase Max. (A)	Stock No.	Price 1-9
● BL100-R0	12	48	10	41T5553	200.66

(196178)

BLDC MOTORS

RoHS Compliant Available

LINENGINEERING Step Motor Specialists



- BL17 = 1.7" square / BL24 = 2.4" square
- Hall effect angle: 120° electrical angle
- Number of rotor poles: 8
- Number of Phases: 3
- Insulation class: Class B
- Dielectric strength: 500VDC for 1 minute
- Insulation resistance: 100MΩ Min. 500VDC
- Operating temperature: -20 to 50 deg C
- Humidity Range: 85% (RH) non-condensing
- Lead wire AWG: UL1007, AWG 20
- Direction of rotation*: CCW

SIZE 17 BLDC - STANDARD TORQUE MOTORS

Mfg. Part No.	Dim A. (in.)	Torque (oz.-in.)	Voltage (VDC)	Current Rating (A)	Encoder	Stock No.	Price Each
● BL17B17-03-R0	1.7	10	24	2.1	...	41T5554	66.00
● BL17B17-03D-08R0	1.7	10	24	2.1	200 CPR	41T5555	174.67
● BL17B17-03D-09R0	1.7	10	24	2.1	1000 CPR	41T5556	174.67
● BL17B32-02-R0	3.2	31	24	6.1	...	41T5557	96.00
● BL17B32-02D-05R0	3.2	31	24	6.1	200 CPR	41T5558	204.67
● BL17B32-02D-06R0	3.2	31	24	6.1	1000 CPR	41T5559	204.67
SIZE 23 BLDC - STANDARD TORQUE MOTORS							
● BL24B20-02-R0	2.0	19	36	2.1	...	41T5560	79.50
● BL24B20-02D-02R0	2.0	19	36	2.1	200 CPR	41T5561	188.17
● BL24B20-02D-03R0	2.0	19	36	2.1	1000 CPR	41T5562	188.17
● BL24B36-02-R0	3.6	67.5	36	7.3	...	41T5563	100.00
● BL24B36-02D-06R0	3.6	67.5	36	7.3	200 CPR	41T5564	208.67
● BL24B36-02D-07R0	3.6	67.5	36	7.3	1000 CPR	41T5565	208.67

(196176)

5518 SERIES SUPER TORQUE MOTORS

RoHS Compliant Available

LINENGINEERING Step Motor Specialists

Features

- Larger body but same mounting as Frame Size 23 motors
- Custom winding available (No additional cost)

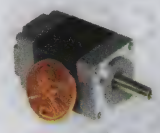
Mfg. Part No.	Amp/ Phase (A)	Torque N-m	Inertia (oz.-in.²)	Resist. Ohm/ Phase	Stock No.	Price Each
● 5818L-04P-R0	2.8	2.16	3.1	1.18	84R6123	134.02
● 5818L-04S-R0	1.4	2.16	3.1	4.7	84R6124	81.40
● 5818M-06P-R0	2.8	1.79	2.5	1.04	84R6125	70.90
● 5818M-06S-R0	1.4	1.79	2.5	4.14	84R6126	102.63
● 5818X-03P-R0	2.8	1.10	1.53	0.75	84R6127	90.62
● 5818X-03S-R0	1.4	1.10	1.53	3.0	84R6128	66.65

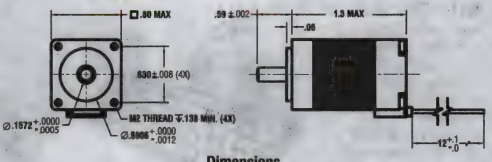
(179660)

NEMA SIZE 8 MINIATURE STEP MOTOR

RoHS Compliant Available

LINENGINEERING Step Motor Specialists





Dimensions

- 1.8° step resolution
- 0.79" square
- Up to 2.5 oz-in holding torque
- Applications include medical, communications, semiconductor and robotics

Torque curves for individual motors available online.

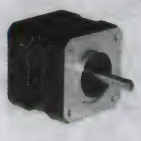
Mfg. Part No.	Dim A. (in.)	Amp/ Phase	Torque (oz.-in.)	Inertia (oz.-in.²)	No. of Leads	Stock No.	Price Each
● 208-13-01R0	1.3		3	0.01	4	16M4192	78.75

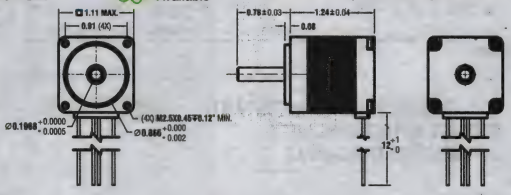
(84916)

NEMA SIZE 11 HIGH TORQUE STEP MOTOR

RoHS Compliant Available

LINENGINEERING Step Motor Specialists





Dimensions

- 1.8° step resolution
- 1.1" square
- Up to 9.2 oz-in
- Applications include medical, communications and semiconductor industries

Torque curves for individual motors available online.

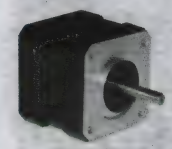
Mfg. Part No.	Dim A. (in.)	Amp/ Phase	Torque (oz.-in.)	Inertia (oz.-in.²)	No. of Leads	Stock No.	Price Each
● 211-13-01R0	1.24	670mA	9.2	0.05	4	16M4193	73.50

(84919)

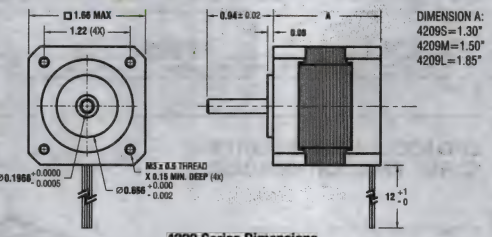
NEMA SIZE 17 HIGH TORQUE STEP MOTORS

RoHS Compliant Available

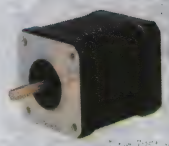
LINENGINEERING Step Motor Specialists



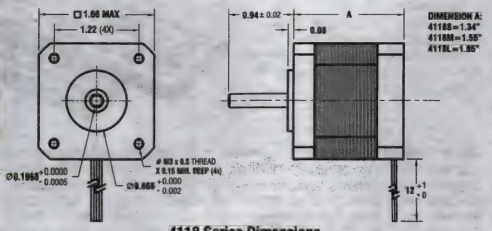
4209 Series



4209 Series Dimensions



4118 Series



4118 Series Dimensions

- 0.9° or 1.8° step resolution available
- 1.66" square
- Up to 44.4 oz-in holding torque (**4209 series**); (83 oz-in for **4118 series**)
- Applications include automation, packaging equipment, medical equipment and surveillance cameras

Torque curves for individual motors available online.

0.9° STEP RESOLUTION SUPER TORQUE STEP MOTORS

Mfg. Part No.	Dim A. (in.)	Amp/ Phase (A)	Torque (oz.-in.)	Inertia (oz.-in.²)	No. of Leads	Stock No.	Price Each
● 4209S-04R0	1.3	-999	29.3	0.192	4	16M4201	66.78
1.8° STEP RESOLUTION HIGH TORQUE STEP MOTORS							
● 4118S-02R0	1.34	1.3	42.7	0.18	4	16M4198	55.65
● 4118M-01R0	1.55	1.7	61.4	0.28	4	16M4197	60.90
● 4118L-01R0	1.85	2	86.3	0.37	4	16M4196	89.25

(84818)

3709V SIGNATURE SERIES STEP MOTORS

RoHS Compliant Available

LINENGINEERING Step Motor Specialists

Fig. 1 Fig. 2 Fig. 3 Fig. 4

Specifications:
- Bipolar
- Resistance: 10Ω
- Inductance: 10mH
- Weight: 0.27lbs

Features:
- NEMA size 14 or 17 mountings
- Small Package
- Cost Effective

Mfg. Part No.	Fig.	Amp/ Phase	Torque oz-in	Inertia oz-in²	No. of Leads	NEMA Size	Stock No.	Price Each
3709V-18-M1R0	1	0.6	16	0.07	4	17	10R4736	63.81
3709V-18-M4R0	2	0.6	16	0.07	4	14	10R4737	63.81
4118L-01D-43R0	3	2	83	0.37	4	17	79R1403	195.69
4118M-01D-23R0	3	1.7	63	0.28	4	17	79R1404	165.34
4118S-02D-23R0	3	1.3	0.32	0.18	4	17	79R1405	159.32
5718L-01PD-46R0	4	2.8	294	2.6	4	23	79R1406	217.84
5718M-05PD-24R0	4	2.8	130	1.5	4	23	79R1407	186.34
5718X-01PD-19R0	4	2.8	100	0.7	4	23	79R1408	177.95
DOP-5718L-01P-R0*	4	2.8	294	2.6	4	23	79R1390	259.82
DOP-5718M-11P-R0*	4	5	182	...	4	23	79R1391	253.63
DOP-5718X-01P-R0*	4	2.8	100	0.7	4	23	79R1392	248.53

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
RS232KIT	RS485 to RS232 Designer's Kit for C0 Series, R256, R356	79R1393	99.00
RS232KIT-02	RS485 to RS232 Designer's Kit for D0P and R525	79R1394	99.00
USBKIT	USB485 Designer's Kit for C0 Series, R256, R356	79R1395	99.00
USBKIT-02	USB485 Designer's Kit for D0B and R525	79R1396	99.99

(148677)

INERTIA DAMPERS

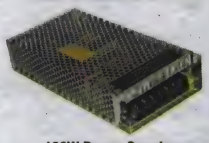
RoHS Compliant Available

LINENGINEERING Step Motor Specialists

NEMA 17 NEMA 23 150W Power Supply

Features:
- Inertia damper can help reduce resonance
- Durable
- Can be easily mounted

Specifications:
- Wet/Dry operation: Dry
- Mounting: Set screws
- Up to 10x less resonance



100W Power Supply

Mfg. Part No.	Inertia oz-in²	Shaft Size (mm)	NEMA Size	Mounting	Stock No.	Price Each 1-9
057-00006	0.064	5.00	17	Rear	10R4636	48.82
057-00011	0.360	6.35	23	Rear	10R4637	38.12
057-00009	0.064	5.00	17	Front	79R1398	15.00

POWER SUPPLIES

Mfg. Part No.	Description	Stock No.	Price Each
082-00003	24VDC, Power Supply, 150 W	79R1399	149.92
082-00017	48VDC, Power Supply, 100 W	79R1400	155.07
082-00018	48VDC, Power Supply, 150 W	79R1401	149.92

ACCESSORIES

090-00213	Motor Connection Cable	79R1402	18.99

(148683)

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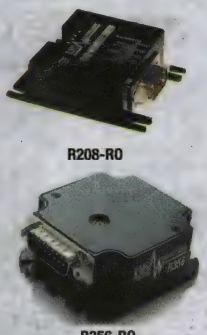
(212565)

MICROSTEPPING DRIVERS

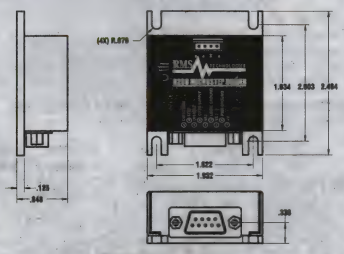
RoHS Compliant Available

LINENGINEERING Step Motor Specialists



R208-R0

R356-R0



R208-R0 Dimensions

R208-R0 features automatic current reduction. Provides up to 2A peak of phase current to any bipolar step motor. Microstepping resolution from 200, 400, 800, 1600 steps per revolution. Utilizes a 12-24VDC power supply to produce constant sinusoidal current waveforms.

R325 is rated the smoothest microstepping driver in the industry due to its ability to hold position over the zero-crossing point regardless of which motor is being used. Output currents from 0.3 to 3A peak. Input voltage: 12-48VDC. Step resolutions from 200, 400, 800, 1600, 3200, 6400, 12800, 25600, and 51200. Able to change microstepping currents and run and hold currents via DIP switches or RS-485 communication. Contains three optically isolated inputs and one optically isolated control input that can be used for step, direction, disable/enable, and fault detection.

Mfg. Part No.	Supply Voltage (VDC) Min.	Supply Voltage (VDC) Max.	Drive Current Per Phase (A) Min.	Drive Current Per Phase (A) Max.	Step Frequency Max.	Stock No.	Price Each
R208-R0*	12	24	0.35	2	25kHz	16M4189	89.95
R356-R0	12	40	0.3	3	2.5GHz	39P9296	249.00
R1025-R0	12	80	...	...	1MHz	05X8419	512.08

* Min. Drive Current is measured in (A_{rms})

ACCESSORY

Mfg. Part No.	Description	Stock No.	Price Each
USB485	USB to RS-485 Converter Card	78M6647	89.00

(84922)

PM PERMANENT MAGNET STEPPER MOTORS

RoHS Compliant Available

NMB Minebea

Features:
- Cost effective alternative to hybrid stepper motors
- Step angles range from 3.75 degree to 18 degree
- Typical positioning accuracy of +/- 10%

Mfg. Part No.	Size (mm)	Rated Current (mA)	Resistance (Ohms)	Step Angle (Holding Torque)	Stock No.	Price Each
PM20L-020-HHC3	20x19.6	400	13	18 degree (14.7 mNm)	25R3854	33.00
PM25S-048-HHC4	25x12.5	600	14	7.5 degree (25 mNm)	25R3856	20.00
PM25L-024-HHC5	25x17	600	8	15 degree (25 mNm)	25R3855	20.00
PM35S-048-HHC6	35x15.5	600	5.5	7.5 degree (50 mNm)	25R3858	25.00
PM35L-048-HHC7	35x22.2	600	15	7.5 degree (80 mNm)	25R3857	25.00
PM42S-048-HHC8	42x15.5	600	7	7.5 degree (67 mNm)	25R3860	26.00
PM42L-048-HHC9	42x22.2	600	7	7.5 degree (127 mNm)	25R3859	26.00
PM55L-048-HHD0	55x25.7	600	6	7.5 degree (167 mNm)	26R3538	35.00

(154603)

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(212568)

SANMOTION F2 2-PHASE STEPPING MOTORS

SANYO DENKI

- Size:56 & 86mm square
- IP65 Class - Splash proof and dust resistant
- Resolution: 1.8° / step
- Holding torque: 1.0 to 9.0 Nm MIN.
- Connection: Bipolar
- Class F (155° C)
- CE, UL and CSA compliant

Mfg. Part No.	Holding Torque Min. (oz-in)	Rated Current (A/phase)	Winding Resistance (Ω/phase)	Winding Inductance (mH/phase)	Rotor Inertia (oz-in²)	Stock No.	Price 1-4
DIAMETER: 56mm, BIPOLAR WINDING, WITH CONNECTOR							
SP2563-5260	141.6	3	0.75	3.4	1.15	94T9039	195.00
SP2566-5260	240.7	3	1	4.4	1.97	94T9040	178.30
DIAMETER: 86mm, BIPOLAR WINDING, WITH CONNECTOR							
SP2862-5160	906.3	4	0.85	6.4	16.4	94T9041	321.10
SP2862-5260	906.3	6	0.41	2.8	16.4	94T9042	327.86
SP2863-5160	1274.5	4	1.05	7.9	24.6	94T9043	387.01
SP2863-5260	1274.5	6	0.53	3.8	24.6	94T9044	377.72

(210167)

ADW SERIES DRIVES

SANYO DENKI

- Range of operating voltage: 24-75 VDC
- Range of current: 1.9-6 Amp. Easy setting of values by means of a dip-switch
- Wide speed range: 0.8 rpm to 2,000 rpm (continous operation zone up to approx 400 rpm, depending on motor choice)
- 64 internally selectable preset speed
- 0-5Vdc or 0-10Vdc selectable analog command range
- Low & High-speed motion profile
- Adjustable internal acceleration/deceleration ramp
- Voltage source for potentiometer available at connector
- "Auto-stop" function
- All opto-insulated digital inputs
- Sync-out for multi-Axis synchronization
- Over-voltage, short-circuit and thermal protection
- Warranty: 24 months

ADW is the new R.T.A. electronic drive designed for all applications where accurate speed control is needed. The motor velocity can be regulated in 3 ways: analog voltage input, external potentiometer, internal speed settings. The exteded ADW power range (24-75 VDC) and its versatility (4 modes of operation) allow access to a wide variety of application fields.

Mfg. Part No.	Driver Type	Voltage Range (VDC)	Current Range (A)	Dimensions (mm)	Stock No.	Price 1-4
ADW 06.V	Analog Input	24 to 75	1.9 to 6	122 x 93.5 x 25	94T9036	302.51

(210166)

14MM SQ. 2-PHASE STEPPING MOTORS

SANYO DENKI

- Weight: 28g
- 1.8° step resolution
- Source voltage: 24VDC

Mfg. Part No.	Amp/ Phase (A)	Torque (oz-in) Max.	Rotor Inertia (oz-in²)	No. of Shafts	Stock No.	Price Each
SH2141-5541	300	0.0065	0.0032	1	83T5261	104.00
SH2141-5511	300	0.0065	0.0032	2	83T5260	104.00

(201302)

SS242 SERIES 42MM SQ. (1.65INCH SQ) 2-PHASE STEPPER MOTORS

RoHS Compliant Available

SANYO DENKI

- 1.8° step resolution
- Bipolar winding
- Source voltage: 24 VDC
- Single shaft

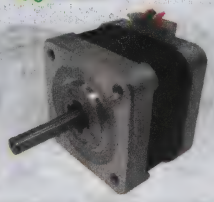
Mfg. Part No.	Holding Torque (oz-in) Min.	Amp/ Phase (A)	Rotor Inertia (oz-in²)	Stock No.	Price Each
● SS2421-5041	11.75	1	0.082	34R9056	60.00
● SS2422-5041	26.33	1	0.153	34R9057	63.00
● SS2423-5041	33.98	1	0.208	34R9058	66.00

(163711)

103H52 SERIES 42MM SQ. (1.65INCH SQ) 2-PHASE STEPPER MOTORS

RoHS Compliant Available

SANYO DENKI



- NEMA 17
- 1.8° step resolution
- Bipolar winding
- Source voltage: 24 VDC

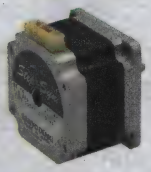
Mfg. Part No.	Holding Torque (oz-in) Min.	Amp/ Phase (mA)	Rotor Inertia (oz-in²)	Stock No.	Price Each
● 103H5205-5140	35.40	500	0.2	34R9657	37.00
● 103H5205-5240	37.53	1000	0.2	34R9658	37.00
● 103H5208-5140	53.81	500	0.31	34R9659	49.00
● 103H5208-5240	55.23	1000	0.31	34R9660	49.00
● 103H5210-5140	69.39	500	0.4	34R9661	52.00
● 103H5210-5240	72.22	1000	0.4	34R9662	52.00

(163703)

103H712 SERIES 56MM SQ. (2.20INCH SQ) 2-PHASE STEPPER MOTORS

RoHS Compliant Available

SANYO DENKI



- NEMA 23
- 1.8° step resolution
- Bipolar winding
- Source voltage: 24 VDC

Mfg. Part No.	Holding Torque (oz-in) Min.	Amp/ Phase	Rotor Inertia (oz-in²)	Stock No.	Price Each
SINGLE SHAFT					
● 103H7121-5640	77.9	1	0.55	34R9663	63.00
● 103H7121-5740	77.9	2	0.55	34R9664	59.00
● 103H7123-5640	141.6	1	1.15	34R9665	69.00
● 103H7123-5740	141.6	2	1.15	34R9667	64.00
● 103H7126-5740	226.6	2	1.97	34R9669	79.00
● 103H7128-5740	283.2	2	2.68	34R9671	99.00
DOUBLE SHAFTS					
● 103H7123-5710	141.6	2	1.15	34R9666	64.00
● 103H7126-5710	226.6	2	1.97	34R9668	79.00
● 103H7128-5710	283.2	2	2.68	34R9670	99.00

(163704)

F STEPPING SYSTEMS 42MM 2-PHASE STEPPER MOTORS

RoHS Compliant Available

SANYO DENKI

Specifications

- 42mm 0.9°/step bipolar winding
- Driving method: 2-phase energization (full step)
- Source voltage: 24 VDC
- Single shaft
- NEMA 17

Mfg. Part No.	Holding Torque (oz-in) Min.	Amp/ Phase (A)	Rotor Inertia (oz-in²)	Stock No.	Price Each
● SH1421-5041	32.5	1	0.24	34R8304	70.00
● SH1421-5241	32.5	2	0.24	34R8305	70.00
● SH1422-5041	48.1	1	0.36	34R8306	72.00
● SH1422-5241	48.1	2	0.36	34R8307	72.00
● SH1424-5041	67.9	1	0.49	34R8308	76.00
● SH1424-5241	67.9	2	0.49	34R8309	76.00

(163707)

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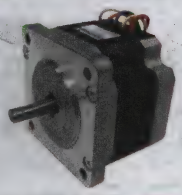
(196560)

F STEPPING SYSTEMS 60MM 2-PHASE STEPPER MOTORS

RoHS Compliant Available

SANYO DENKI



Specifications
- 60mm 0.9°/step bipolar/unipolar winding
- High-torque, low vibration, low noise
- Driving method: 2-phase excitation (full step)
- Source voltage: 24 VDC
- Single shaft
- NEMA 23

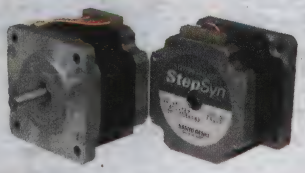
Mfg. Part No.	Holding Torque (oz-in) Min.	Amp/ Phase (A)	Rotor Inertia (oz-in²)	Stock No.	Price Each
UNIPOLAR WINDING					
SH1601-0440	80.7	2	1.31	34R8310	80.00
SH1602-0440	155.77	2	2.187	34R8312	83.00
SH1603-0440	240.74	2	4.1	34R8314	98.00
BIPOLAR WINDING					
SH1601-5240	97.7	2	1.31	34R8311	80.00
SH1602-5240	181.26	2	2.19	34R8313	83.00
SH1603-5240	304.47	2	4.1	34R8315	98.00

(163708)

103H762 SERIES 60MM SQ. (2.36INCH SQ) 2-PHASE STEPPER MOTORS

RoHS Compliant Available

SANYO DENKI



- NEMA 23
- 1.8° step resolution
- Bipolar winding
- Source voltage: 24 VDC

Mfg. Part No.	Holding Torque (N-m) Min.	Amp/ Phase	Rotor Inertia (oz-in²)	Stock No.	Price Each
SINGLE SHAFT					
103H7821-1760	0.88	4	1.5	20T1461	66.00
103H7821-5760	0.88	2	1.5	20T1463	66.00
103H7822-1760	1.37	4	2.19	20T1465	71.00
103H7822-5760	1.37	2	2.19	20T1467	71.00
103H7823-1760	2.7	4	4.59	20T1469	82.00
103H7823-5760	2.7	2	4.59	20T1471	82.00
DOUBLE SHAFTS					
103H7821-1730	0.88	4	1.5	20T1460	66.00
103H7821-5730	0.88	2	1.5	20T1462	66.00
103H7822-1730	1.37	4	2.19	20T1464	71.00
103H7822-5730	1.37	2	2.19	20T1466	71.00
103H7823-1730	2.7	4	4.59	20T1468	82.00
103H7823-5730	2.7	2	4.59	20T1470	82.00

(192328)

103H8922 SERIES 106MM CIR. (4.17INCH CIR) 2-PHASE STEPPER MOTORS

RoHS Compliant Available

SANYO DENKI

- 1.8° step resolution
- Bipolar winding
- Source voltage: 24 VDC

Mfg. Part No.	Holding Torque (N-m) Min.	Amp/ Phase	Rotor Inertia (oz-in²)	Stock No.	Price Each
SINGLE SHAFT					
103H89222-5241	13.2	6	79.83	20T1472	473.00
103H89223-5241	19	6	120.28	20T1473	577.00

(192329)

SANMOTION F 2-PHASE STEPPER MOTORS

RoHS Compliant Available

SANYO DENKI

- High-Torque NEMA 34
- Bipolar winding
- 1.8° Stepping Motor
- Source voltage: 100 VAC

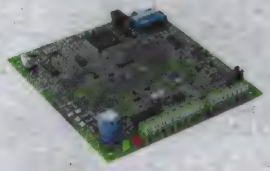
Mfg. Part No.	Holding Torque (N-m) Min.	Amp/ Phase	Rotor Inertia (oz-in²)	Stock No.	Price Each
SINGLE SHAFT					
SM2861-5152	3.3	4	8.09	20T1452	172.00
SM2861-5252	3.3	6	8.09	20T1453	172.00
SM2862-5152	6.4	4	16.4	20T1454	236.00
SM2862-5252	6.4	6	16.4	20T1455	236.00
SM2863-5152	9	4	24.6	20T1456	299.00
SM2863-5252	9	6	24.6	20T1457	299.00

(192330)

CSD 02/04 SERIES STEPPING MOTOR DRIVES

RoHS Compliant Available

SANYO DENKI



Features
- Range of operation voltages from 24 to 45 VDC
- Operation at 400, 800, 1600, 3200 steps/revolution
- Motor phase current setting by means of a DIP-Switch. Up to eight possible values, between 0.7A and 4.4A
- Pull-up or Pull-down inputs
- Two versions are available: with quick connection, crimp-type, or screw-type connectors
- Automatic current reduction at motor standstill
- Operation with a single external supply voltage
- High efficiency CHOPPER with MOSFET final stage output

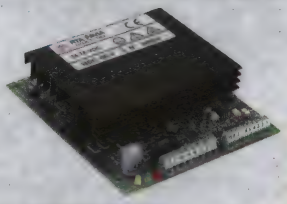
Mfg. Part No.	Inf Min. (amp)	Inf Max. (amp)	Dimensions (mm)	Stock No.	Price Each
CSD 02.V	0.7	2.4	92x85x22	20T1449	154.00
CSD 04.V	2.6	4.4	92x85x23	20T1450	183.00

(192331)

NDC SERIES STEPPING MOTOR DRIVES

RoHS Compliant Available

SANYO DENKI



Features
- Extended range of operation voltages from 24 to 75 VDC
- Operation at 400, 800, 1600, 3200 and 500, 1000, 2000, 4000 steps/revolution
- Motor phase current setting by means of a DIP-Switch. Up to eight possible equidstant values, between Inf min. and Inf max.
- Optoinsulated inputs compatible with differential control signals
- Two versions are available: with quick connection, crimp-type, or screw-type connectors
- Automatic current reduction at motor standstill
- Possibility to switch off motor current with an external logic signal
- Protection against short circuit at motor outputs, under-voltage and over-voltage
- Overtemperature protection with thermal sensor
- Operation with a single external supply voltage
- High efficiency CHOPPER with MOSFET final stage output
- Electronic resonance damping circuit to ensure acoustic noise and mechanical vibrations reduction at low and medium speed
- Built-in oscillator available, with speed range from 14 to 450 rpm

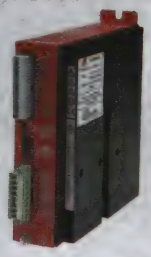
Mfg. Part No.	Inf Min. (amp)	Inf Max. (amp)	Dimensions (mm)	Stock No.	Price Each
NDC 06.V	1.9	6	101x94x25	20T1451	253.00

(192332)

X-MIND B SERIES STEPPING MOTOR DRIVES

RoHS Compliant Available

SANYO DENKI



Features
- Operation at 400, 800, 1600, 3200 and 500, 1000, 2000, 4000 steps/revolution
- Operation directly from the main AC supply (extended range from 110 to 230 V)
- Motor phase current setting by means of a DIP-Switch. Up to eight possible equidistant values, between Inf min. and Inf max.
- Optically insulated imputs compatible with differential control
- Automatic current reduction at motor standstill
- Possibility to switch off motor current with an external logic signal
- Protection against a short circuit at motor outputs
- Protection against under-voltage and over-voltage
- Overheating protection
- High efficiency CHOPPER with MOSFET final stage output
- Electronic resonance damping circuit to ensure acoustic noise and mechanical vibrations reduction at low and medium speed

➤CONTINUED➤

X-MIND B SERIES STEPPING MOTOR DRIVES (CONT.)

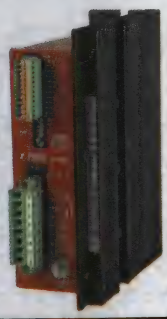
Mfg. Part No.	Inf Min. (amp)	Inf Max. (amp)	Dimensions (mm)	Stock No.	Price Each
● X-MIND-B6	3.4	6	180x173x53	20T1458	737.00

(192333)

X-PLUS B SERIES STEPPING MOTOR DRIVES

RoHS Compliant Available

SANYO DENKI



Features

- Operation directly from the main AC supply (from 110 to 230 VAC). No need of external transformer and rectifier
- High voltage DC bus: direct rectifier from main AC supply
- Easy motor phase current setting by means of DIP-Switch
- Operation at 400, 800, 1600, 3200 and 500, 1000, 2000, 4000 steps/revolution
- Automatic current reduction at motor standstill
- Protection against a short circuit at motor outputs
- Protection against under-voltage and over-voltage
- Overheating protection with thermal sensor
- Optoinsulated inputs compatible with differential control signals
- Possibility to switch off motor current with an external logic signal
- High efficiency CHOPPER with MOSFET final stage output
- Alarm memory by use of yellow blinking LED
- Electronic resonance damping circuit to ensure acoustic noise and mechanical vibrations reduction at low and medium speed

Mfg. Part No.	Inf Min. (amp)	Inf Max. (amp)	Dimensions (mm)	Stock No.	Price Each
● X-PLUS B4	2.4	4	152x129x46	20T1459	529.00
● X-PLUS A6	3.6	6	152x129x46	25T5848	529.00

(192334)

0.5 NM OVOID 3.9 WATTS D.C. GEARED MOTORS WITH BRUSHES

CROUZET AUTOMATION

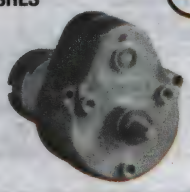
- Torque rating of gearboxes: 0.5 Nm, high-performance plastic gears
- Motors: nominal power 3 W, interference suppression for standard stocked products
- Wide speed range: 0.3 to 430 rpm
- Optional encoder built into the motor
- Voltage rating: 12VDC, 24VDC

Mfg. Part No.	Output Speed (rpm)	Ratios (i)	Voltage	Stock No.	Price Each 1-9
82861015	430	10	24 VDC	28C5027	140.38
82861016	215	20	24 VDC	28C5028	140.23
82861017	143	30	24 VDC	28C5029	140.86
82861018	108	40	24 VDC	68R2010	145.78
82861019	54	80	24 VDC	28C5031	140.86
82861021	11	375	24 VDC	28C5033	140.86
82861022	8.6	500	24 VDC	28C5034	140.86
82861023	3.6	1200	24 VDC	28C5035	147.20

(195454)

2 NM DOUBLE OVOID 3.9 WATTS D.C. GEARED MOTORS WITH BRUSHES

CROUZET AUTOMATION



- Torque rating of gearboxes: 2 Nm, high-performance plastic gears
- Motors: nominal power 3 W, interference suppression for standard stocked products
- Wide speed range: 0.3 to 430 rpm
- Optional encoder built into the motor
- Voltage rating: 12VDC, 24VDC

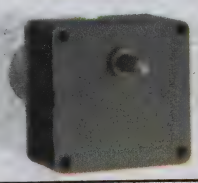
Mfg. Part No.	Output Speed (rpm)	Ratios (i)	Voltage	Stock No.	Price Each 1-9
82869001	108	40	12 VDC	28C5085	199.87
82869006	54	80	12 VDC	28C5086	199.68
82869007	27	160	12 VDC	28C5087	198.86
82869008	13	320	12 VDC	28C5088	193.74
82869009	7.2	600	12 VDC	28C5089	197.87
82869010	2.9	1500	12 VDC	28C5090	197.87

(195455)

5 NM 8, 16 WATTS D.C. GEARED MOTORS WITH BRUSHES

RoHS Compliant Available

CROUZET AUTOMATION



- Gearbox 5 Nm nominal
- With varistor filter
- Optional EMC filter
- Optional 1, 5, 12 or 48 pulses/rev encoder
- Voltage rating: 12VDC, 24VDC

Mfg. Part No.	Output Speed (rpm)	Ratios (i)	Voltage	Stock No.	Price Each 1-2
82737001	250	25/2	12 VDC	68R1963	346.85
82737002	125	25	12 VDC	68R1964	336.20
82737004	75	125/3	12 VDC	68R1965	343.16
82737005	50	125/2	12 VDC	68R1966	336.86
● 82737006	40	250/3	12 VDC	68R1967	344.74
82737007	25	125	12 VDC	68R1968	347.92
82737009	7	250	12 VDC	68R1969	317.15

(195456)

ROUNDLINE PLUS STAINLESS STEEL ACTUATORS DOUBLE ACTING NOSE MOUNT - DAN

RoHS Compliant Available

NORGREN ENGINEERING ADVANTAGE

Features:

- Oil impregnated sintered bronze rod bearing provides exceptional rod support, and optimal cycle life
- Chrome plated carbon steel piston rod for strength, smooth operation
- Stainless steel piston rod on 5/16, 7/16, 9/16
- Lip-Type nitrile rod seal, pressure energized and wear compensating
- Head and cap are solid aluminum alloy for strength and durability
- Solid aluminum piston is strong yet lightweight for low inertia
- Lip-type nitrile piston seals are wear compensating for long life
- 304 stainless steel cylinder body with polished I.D. ensures smooth performance and outstanding life cycle

Specifications:

- Maximum operating pressure: 250 psig (17.2 bar)
- Temperature range, Standard nitrile seals: -20° to 200°F (-29° to 93°C)
- Temperature range, High temp seals: -20° to 400°F (-29° to 205°C)
- Lubrication: Teflon® based grease for non-lube service and long life.
- Cylinder body: 304 Stainless steel
- Head and cap: Aluminum alloy
- Piston rod: Stainless steel or chrome plated steel
- Rod bearing: Oil impregnated sintered bronze
- Piston: Aluminum alloy or stainless steel
- Rod and piston seals: Nitrile
- Pivot bracket, rod clevis, foot bracket, & mounting nut: Zinc plated carbon steel

Mfg. Part No.	Bore Size	Stroke	Stock No.	Price Each 1-9	Price Each 10-14
● RP031X0.500-DAN	5/16″	0.50″	84R5923	23.83	22.98
● RP031X1.000-DAN	5/16″	1.00″	67R3213	25.50	24.59
● RP031X1.500-DAN	5/16″	1.50″	84R5925	25.96	25.05
● RP031X2.000-DAN	5/16″	2.00″	67R3218	25.96	25.05
● RP031X3.000-DAN	5/16″	3.00″	67R3223	28.10	27.11
● RP031X4.000-DAN	5/16″	4.00″	67R3228	30.24	29.17
● RP031X5.000-DAN	5/16″	5.00″	67R3231	32.37	31.23
● RP031X6.000-DAN	5/16″	6.00″	67R3234	34.51	33.29
● RP043X0.500-DAN	7/16″	0.50″	84R5927	24.64	23.77
● RP043X1.000-DAN	7/16″	1.00″	67R3237	24.64	23.77
● RP043X1.500-DAN	7/16″	1.50″	84R5929	27.01	26.05
● RP043X2.000-DAN	7/16″	2.00″	67R3242	27.01	26.05
● RP043X3.000-DAN	7/16″	3.00″	67R3247	29.37	28.34
● RP043X4.000-DAN	7/16″	4.00″	67R3252	31.74	30.62
● RP043X5.000-DAN	7/16″	5.00″	67R3255	34.11	32.90
● RP043X6.000-DAN	7/16″	6.00″	67R3258	36.48	35.19
● RP056X0.500-DAN	9/16″	0.50″	84R5932	25.28	24.39
● RP056X1.000-DAN	9/16″	1.00″	67R3261	25.28	24.39
● RP056X2.000-DAN	9/16″	2.00″	67R3266	27.65	26.67
● RP056X3.000-DAN	9/16″	3.00″	67R3271	30.02	28.96
● RP056X4.000-DAN	9/16″	4.00″	67R3276	32.38	31.24
● RP056X5.000-DAN	9/16″	5.00″	67R3279	34.75	33.52
● RP056X6.000-DAN	9/16″	6.00″	67R3282	37.12	35.81
● RP087X1.000-DAN	7/8″	1.00″	67R3285	28.01	27.02
● RP087X2.000-DAN	7/8″	2.00″	67R3290	30.38	29.30
● RP087X3.000-DAN	7/8″	3.00″	67R3295	32.75	31.59
● RP087X4.000-DAN	7/8″	4.00″	67R3300	35.11	33.87
● RP087X5.000-DAN	7/8″	5.00″	67R3303	37.48	36.16
● RP087X6.000-DAN	7/8″	6.00″	67R3306	39.85	38.44
● RP106X1.000-DAN	1-1/4″	1.00″	84R5946	29.62	28.57
● RP106X2.000-DAN	1-1/4″	2.00″	84R5949	31.99	30.86

➤ CONTINUED ➤

ROUNDLINE PLUS STAINLESS STEEL ACTUATORS DOUBLE ACTING NOSE MOUNT - DAN (CONT.)

Mfg. Part No.	Bore Size	Stroke	Stock No.	Price Each 1-9	Price Each 10-14
RP106X3.000-DAN	1-1/4″	3.00″	84R5952	34.35	33.14
RP106X6.000-DAN	1-1/4″	6.00″	84R5955	41.46	39.99
RP150X2.000-DAN	1-1/2″	2.00″	84R5960	56.16	54.17
RP150X3.000-DAN	1-1/2″	3.00″	84R5964	59.79	57.67
RP150X4.000-DAN	1-1/2″	4.00″	84R5968	63.41	61.17
RP150X6.00DAN	1-1/2″	6.00″	84R5971	56.87	54.86
RP175X1.000-DAN	1-3/4″	1.00″	67R3319	67.39	65.01
RP175X2.000-DAN	1-3/4″	2.00″	67R3324	71.12	68.61
RP175X3.000-DAN	1-3/4″	3.00″	67R3329	74.86	72.21
RP175X4.000-DAN	1-3/4″	4.00″	67R3333	78.59	75.81
RP175X5.000-DAN	1-3/4″	5.00″	67R3336	82.32	79.41
RP175X6.000-DAN	1-3/4″	6.00″	67R3339	86.05	83.01
RP200X2.000-DAN	2″	2.00″	84R5972	79.71	76.89
RP200X3.000-DAN	2″	3.00″	84R5974	83.65	80.69
RP200X4.00-DAN	2″	4.00″	84R5976	67.34	64.96
RP200X5.000-DAN	2″	5.00″	84R5979	91.52	88.29
RP200X6.000-DAN	2″	6.00″	84R5981	95.46	92.09
RP250X1.000-DAN	2-1/2″	1.00″	67R3351	107.44	103.64
RP250X2.000-DAN	2-1/2″	2.00″	67R3354	111.86	107.90
RP250X3.000-DAN	2-1/2″	3.00″	67R3357	116.27	112.16
RP250X4.000-DAN	2-1/2″	4.00″	67R3360	120.69	116.42
RP250X5.000-DAN	2-1/2″	5.00″	67R3363	125.10	120.68
RP250X6.000-DAN	2-1/2″	6.00″	67R3366	129.51	124.94
RP300X1.000-DAN	3″	1.00″	67R3369	151.78	146.41
RP300X2.000-DAN	3″	2.00″	67R3372	157.03	151.48
RP300X3.000-DAN	3″	3.00″	67R3375	162.28	156.54
RP300X4.000-DAN	3″	4.00″	67R3378	167.53	161.61
RP300X5.000-DAN	3″	5.00″	67R3381	172.78	166.68
RP300X6.000-DAN	3″	6.00″	67R3384	178.03	171.74

(176931)

ROUNDLINE PLUS STAINLESS STEEL ACTUATOR MOUNTING HARDWARE

RoHS Compliant Available

NORGREN ENGINEERING ADVANTAGE

Pivot Brackets — Foot Bracket — Rod Clevis

PIVOT BRACKETS

Mfg. Part No.	Bore Size	Hole Dia. (in.)	Stock No.	Price Each 1-24	Price Each 25-49
PB-0.	5/16″	0.13	67R3186	3.77	3.63
PB-1.	7/16″, 9/16″, 3/4″, 7/8″	0.16	67R3187	3.46	3.33
PB-2.	1-1/16″, 1-1/4″	0.25	67R3188	3.46	3.33
PB-3.	1-1/2″	0.38	67R3189	5.68	5.46
PB-5.	3″	0.50	67R3191	14.16	13.62

FOOT BRACKETS

FB-0D.	5/16″(S)	0.25	67R3080	2.70	2.59
FB-3.	3/4″(S)	0.50	67R3084	2.76	2.65
FB-4.	3/4″(D), 7/8″(S/D), 1-1/16″(S/D), 1-1/4″(S/D)	0.62	67R3085	2.76	2.65
FB-5.	1-1/2″(S/D)	0.75	67R3086	4.00	3.84
FB-5A.	1-3/4″(S/D)	1.03	67R3087	9.32	8.96
FB-6.	2″(S/D)	1.38	67R3088	8.24	7.92
FB-7.	2-1/2″(D)	1.50	67R3089	8.55	8.22
FB-8.	3″(D)	1.63	67R3090	12.67	12.18

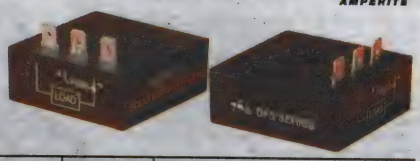
S = Single Acting Models D = Double Acting Models S/D = Single and Double Acting Models

ROD CLEVISES (INCLUDES PIN & JAM NUT)

Mfg. Part No.	Bore Size	Hole Dia. (in.)	Thread	Stock No.	Price Each 1-24	Price Each 25-49
RC-0.	5/16″	0.13	5-40	67R3205	3.65	3.51
RC-1.	7/16″, 9/16″	0.19	10-32	67R3206	3.46	3.33
RC-3	1-1/16″	0.25	5/16-24	12T9399	6.44	6.19
RC-4.	1-1/4″, 1-1/2″	0.38	7/16-20	67R3209	6.28	6.03
RC-5.	1-3/4, 2″, 2-1/2″	0.38	1/2-20	67R3210	6.94	6.67
RC-6.	3″	0.50	5/8-18	67R3211	14.00	13.46

(177840)

DFS SERIES SOLID-STATE FLASHERS

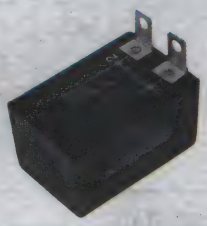


100% solid-state circuitry. Flash rates are fixed and available from 1 to 1,000fpm. All types below have flash rates of 60fpm. Duty cycle is 50%. Termination: 0.250″ QC male terminals. Case material: black plastic, epoxy-sealed. Dimensions: 2H x 2W x ¾″D. UL listed, CSA certified. Other flash rates and voltages are available; *go online or call.*

Mfg. Part No.	Input Voltage	Current Rating (A)	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49	Price Each 50-99
DFS152-60	120VAC	3	83F4165	41.58	39.69	37.60	34.47
DFS219-60	12VDC	3	83F4167	43.66	41.67	39.48	36.19
DFS224-60	24VDC	3	83F4169	43.66	41.67	39.48	36.19

(30771)

DF SERIES ENCAPSULATED FLASHERS



Solid state analog flasher circuitry encapsulated in black plastic case. Approximate 50% duty cycle. 2A load rating. 0.250″ quick-connect terminals. 1 11/16L x 1⅛W x 19/16″H. Temperature range: –23°C to +60°C. Units below are 24-120VAC/DC. Fixed voltage available. Other flash rates and voltages available; *go online or call.* UL recognized, CSA certified.

Mfg. Part No.	Flash Rate (FPM)	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49	Price Each 50-99
24-120F30DF	30	95F1633	25.41	24.27	23.00	21.08
24-120F45DF	45	95F1634	25.41	24.27	23.00	21.08
24-120F60DF	60	95F1635	34.29	33.88	33.47	33.19
24-120F90DF	90	95F1636	25.41	24.27	23.00	21.08
24-120F120DF	120	95F1637	25.41	24.27	23.00	21.08

(3987)

DFA SERIES ADJUSTABLE RECYCLING TIMERS (FLASHERS)

Solid-state digital CMOS recycle (flasher) timer circuitry with 8-pin base. Off/on time user adjustable over a 100:1 span. DPDT (2 Form C) isolated 10A relay contacts. Adjustable recycling timers provide a continuously operating off/on cycle as long as power is applied to the input terminals. Two knob operated potentiometers provide user adjustment of both the flash rate and duty cycle. Mfg. part no. prefix denotes input voltage. Other time-delays and voltages available. Spade terminal style available; *go online or call.* UL recognized, CSA certified.

Mfg. Part No.	Delay (Seconds)	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49	Price Each 50-99
12D A/A DFA	.1-10	92F3377	81.65	77.97	73.88	67.71
12D C/C DFA	.6-60	92F3380	81.65	77.97	73.88	67.71
120A A/A DFA	.1-10	92F3376	81.65	77.97	73.88	67.71
120A F/F DFA	1-100min./ 6000 sec.	92F3391	81.65	77.97	73.88	67.71

(4022)

DFV SERIES ADJUSTABLE FLASHERS

- Solid-state analog flasher circuitry
- DPDT isolated 10A relay contact
- Variable flash rate: standard flash rate range: 10-120 FPM
- Single-knob adjustment on top of unit
- 12V to 120V input voltage available — both AC and DC models

DFV series on/off recycling flashers have a flash rate that is adjustable from 10 - 120 flashes per minute (FPM) by means of a knob potentiometer on top of the unit. Custom rates are available within ranges between a minimum of 1 FPM and maximum of 240 FPM. Contact material: silver cadmium oxide. Termination: 8-pin octal-style plug. 11-pin spade terminals also available; *go online or call.* UL recognized, CSA certified.

Mfg. Part No.	Flash Rate (FPM)	Input Voltage	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49	Price Each 50-99
120AF10-120DFV	10-120	120AC	52F078	58.93	56.27	53.32	48.88
24DF10-120DFV	10-120	24DC	52F080	58.93	56.27	53.32	48.88

(55273)

HDFA SERIES ADJUSTABLE RECYCLING TIME-DELAY FLASHER RELAYS

- 10 ampere SPDT contacts circuitry
- CMOS digital timing circuitry
- Off- and on-time user-adjustable
- Timing from milliseconds to hours

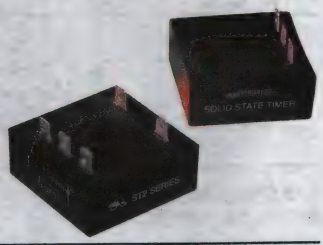
HDFA series low cost adjustable recycling timers may be used for alternately switching one or two load circuits with both OFF-Time and ON-Time adjustable by means of two built-in potentiometers. An SPDT 10 ampere contact set alternates continuously as long as power is applied to the relay. Typical applications include OFF/ON cycling for equipment burn-in test, lighting controls, and automatic cycling of electrically operated devices. Other voltages and time delay available; *go online or call.*

Mfg. Part No.	Recycle Delay	Input Voltage	Stock No.	Price Each 1-9	10-24	25-49	50-99
120AA/AHDFA	.25-10S	120VAC	**16C1878**	54.38	51.91	49.18	45.07
120AC/CHDFA	0.6-60S	120VAC	**16C1879**	54.38	51.91	49.18	45.07
120AF/FHDFA	1-100M	120VAC	**16C1880**	54.38	51.91	49.18	45.07
12DA/AHDFA	.25-10S	12VDC	**28B472**	54.38	51.91	49.18	45.07
12DC/CHDFA	.6-60S	12VDC	**16C1874**	54.38	51.91	49.18	45.07
12DF/FHDFA	1-100M	12VDC	**16C1875**	54.38	51.91	49.18	45.07
24DA/AHDFA	.25-10S	24VDC	**16C1885**	54.38	51.91	49.18	45.07
24DC/CHDFA	0.6-60S	24VDC	**16C1886**	54.38	51.91	49.18	45.07

(55272)

ST2 SERIES SOLID-STATE INTERVAL (ONE-SHOT) TIMERS

- 100% solid-state circuitry — no moving parts
- CMOS digital timing circuitry
- Adjustable delays from milliseconds to hours
- 2A continuous load current



Timers have contacts with solid-state switching device SPST, normally-open series connections. Continuous current rating: 2A. Maximum inrush: 20A. Voltage drop: 2.5Vrms or less @ 2A. Timing: fixed or field-adjustable from, 0.1 seconds to 100 hours. Timers have epoxy sealed black plastic enclosures measuring 2 x 2 x ¾". Available in 3 or 5¼" quick-connect male terminals.

Mfg. Part No.	Delay (Sec.)	Input Voltage	Stock No.	Price Each 1-9	10-24	25-49	50-99
120A.2-20SST2	0.2-20	120VAC	**16C1877**	32.81	31.32	29.68	27.18
120A1-100SST2	1-100	120VAC	**16C1882**	32.81	31.32	29.68	27.18
12D.2-20SST2	0.2-20	12VDC	**28B470**	32.81	31.32	29.68	27.18
12D1-100SST2	1-100	12VDC	**16C1876**	32.81	31.32	29.68	27.18
24D.2-20SST2	0.2-20	24VDC	**16C1884**	32.81	31.32	29.68	27.18

(55270)

SOLID-STATE AC AND DC FLASHERS

RoHS Compliant Available

- Digital Timing Circuitry

4210-115-60FPM

423-24-60FPM

For use in equipment which requires lamp, relay or solenoid to flash (pulse) at rate of 60 flashes per minute. Turn load on for 0.5 seconds every second. These flashers are availailable in various operating voltages and fixed-flash rates from the factory. **Mfg. part no. 4210-115-60FPM** UL/cUL recognized.

Mfg. Part No.	Ratings	Operating Temperature	Stock No.	Price Each 1-4	5-9
● 4210-115-60FPM	1A, 115VAC	-20°C to +85°C	**88K2146**	52.96	50.90
● 423-24-60FPM	1A, 24VDC	-20°C to +80°C	**88K2147**	48.32	46.45

(2893)

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(212569)

438S SERIES TIMERS AND CONTROLLERS

RoHS Compliant Available

Fig. 1

Fig. 2

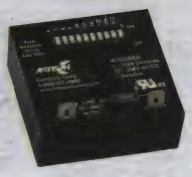


Fig. 4

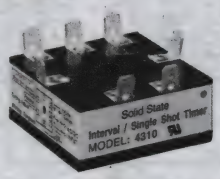
Delay-on-make timers: connect in series with any 10mA to 1A load. When the operating voltage is applied, a small amount of current will flow through the load and the timer. At the end of the time delay period, the timer turns ON and full load current is permitted to flow. **Mfg. part no. 438AS-115-1**: Operates from 115VAC, time delay is set by an external resistor across terminals 4 and 5 for the 0.1 to 30 second range. **Mfg. part no. 438UPS**: Operates from 19 to 288VAC/DC. Time delay of 0.1 to 6 minutes adjusted with internal potentiometer. **Mfg. part no. 438US**: Operates from 19 to 288VAC/DC. Time delay of 1 to 1000 seconds set by an external resistor across terminals 4 and 5. **Mfg. part no. 438USAS**: Operates from 19 to 288VAC/DC. Time delay of 1 to 1024 seconds adjusted with internal DIP switch.

Mfg. Part No.	Fig.	Timing Function	Time Range (sec.)	Operating Voltage (VAC/VDC)	Stock No.	Price Each 1-4	5-9
● 438AS-115-1	1	Delay-On-Make	0.1-30	115	**86K9980**	65.06	61.69
● 438UPS	2	Delay-On-Make	1-480	19-288	**86K9981**	46.41	44.00
● 438USAS	4	Delay-On-Make	1-1024	19-288	**86K9984**	45.26	42.91

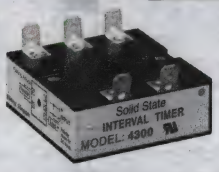
(88895)

INTERVAL/SINGLE-SHOT TIMERS

RoHS Compliant Available



4310 Series



4300 Series

4310 series can perform as an interval or single-shot timer with closure of a momentary or maintained switch. The load remains ON for the full time period upon closure of the switch. Offering zero voltage switching. Controls DC loads to 1 ampere and AC 5 amp units can be extended to 10 amps with additional heatsinking. **4300 series** performs as an interval timer. Upon application of operating voltage the timer turns ON to a 1 amp load circuit for a preset time period. Operating voltage must be present for more than the preset time period. The **4310** and **4300 series** are available in additional AC/DC voltages, output ratings and timing ranges. UL/cUL recognized.

4310 SERIES INTERVAL/SINGLE SHOT TIMERS

Mfg. Part No.	Supply Voltage	Output Load (A)	Time Range (Seconds)	Stock No.	Price Each 1-4	5-9
● 4310A-8-B-1	115VAC	5	0.1-30	**94F182**	75.71	72.79
● 4310A-8-B-2	115VAC	5	1-300	**93K7642**	81.62	78.48
4300 SERIES INTERVAL TIMERS						
● 4300A-8-2	115VAC	1	1-300	**88K1400**	50.33	48.39
● 4300A-2-1	12VDC	1	0.1-30	**20C3340**	50.33	48.39
● 4300A-3-1	24VDC	1	0.1-30	**97B3140**	47.48	45.65

(3085)

ACTIONPAK® SIGNAL CONDITIONER AND LIMIT ALARMS

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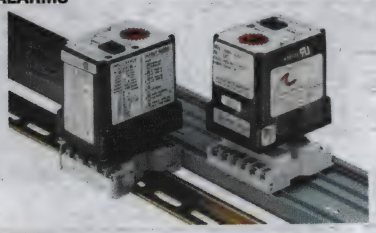
ACTION INSTRUMENTS™



SPECIFICATIONS

	Signal Conditioner	Limit Alarm
Input Range	Selection by DIP Switch	Selection by DIP Switch
Output (Conditioners)	0-5V, 0-10V, 0-1mA, 4-20mA	...
Limit Alarms	None	1 DPDT Relay, 5A 2 SPDT Relays, 5A
Accuracy	± 0.35% of FS (<20mV / 2mA) ± 0.1% of FS (>20mV / 2mA)	± 0.01%
Supply Voltage	120 / 240VAC	120 / 240VAC
Isolation Voltage	1500VDC between input, output and power	1000VDC between contacts, input and power

➤CONTINUED➤

ACTIONPAK® SIGNAL CONDITIONER AND LIMIT ALARMS (CONT.)

	Signal Conditioner	Limit Alarm
Size (inches)	3.56H x 2.85W x 2.05D	3.50H x 2.85W x 2.05D
Mounting	DIN Rail	DIN Rail

Signal conditioner offers wide ranging input and output capability for scaling and transmitting analog DC signals. Will accept input voltage spans from 10mV up to 100V, as well as input current spans from 1-100mA. The 4-20mA output signal is a powerful 20VDC. Can be configured to accept bipolar input ranges and offer selectable normal or reverse acting operation. **Mfg. part no. 4380-2001-1** is a 3-port isolator -- the output is optically isolated from its input up to 1500VDC. The ASIC- based I/O channel is independently transformer isolated from the selectable 120/240VAC power supply. UL recognized, CSA certified.

Mfg. Part No.	Description	Limit Alarm	Stock No.	Price Each
4380-2001-1	Signal Conditioner	...	85K9272	403.00
1090-2000-1	Limit Alarm	2 Relay, SPDT	85K9235	346.00

ACCESSORIES

Mfg. part no. MD11-0000 11-pin DIN mount socket is used with **1080** and **1090 series** limit alarms.

Mfg. Part No.	Description	Stock No.	Price Each
M004-0000	4ft. Channel Track	85K9195	18.00
M801-0000	Retaining Spring	85K9197	11.00
MD11-0000	11-Pin DIN Mount Socket	89K2092	20.00

(88628)

ULTRA SLIMPAK II™ ISOLATOR, SIGNAL CONDITIONER, LIMIT ALARMS

RoHS Compliant Available

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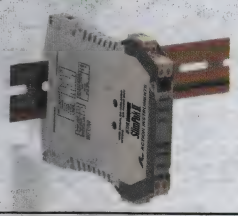
ACTION INSTRUMENTS™



SPECIFICATIONS

Input Range	Selectable by DIP Switch
Output (Conditioners)	0-10V, 0-20mA or 4-20mA
Output (Limit Alarms)	2 SPDT relays, 5A at 120VAC
Input/Output Accuracy	± 0.01% of FS / ± 0.05% of FS
Supply Voltage	9 to 30V DC
Isolation Voltage	1800VDC or peak AC between input, output and power
Size	Conditioners: 0.5" (12.77mm) wide Limit Alarms: 0.69" (17.5mm) wide Communications Interface and Power Supply: 0.89" (22.5mm) wide
Mounting Type	DIN Rail

Ultra SlimPak II DC powered isolating signal conditioners feature "Smart Power" to reduce power consumption and temperature rise. Units are configured using DIP switches and feature pushbutton calibration. Power jumpers are used to distribute power to multiple units. Each module can be remotely configured using an Ethernet connection to the WVC16 and a remote PC-based web browser. **WV408** and **WV428 series** isolators meet Class I, Div. 2 standards. UL recognized, CE compliant.

ISOLATORS AND SIGNAL CONDITIONERS

Mfg. Part No.	Signal Input	Stock No.	Price Each
WV408-2000.V1	DC Selectable Current or Voltage	46M5044	342.00
WV418-2000.V1	DC Selectable Current or Voltage	45P4510	376.00
● WV428-2000.V1	Selectable Thermocouple	55M4371	376.00
● WV438-2000.V1	Selectable Potentiometer	07P8540	376.00
WV448-2000.V1	DC Bridge Selectable Current or Voltage	45P4511	376.00
● WV468-2000.V1	AC Selectable Current or Voltage	88M8213	387.00
WV478-2000.V1	Selectable Frequency	57P8822	529.36

INPUT LIMIT ALARMS

WV108-2000.V1	DC Selectable Current or Voltage	01P5460	366.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
WV905-0000	24VDC (0.5A) Power Supply	85K9219	168.00

(88608)

ULTRA SLIMPAK™ SIGNAL CONDITIONERS AND LIMIT ALARMS

RoHS Compliant Available

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ACTION INSTRUMENTS™

- One of the most cost-effective products on the market, great for OEM applications
- Potentiometer based calibration, easy setup, user friendly
- DIP switch setting, ASIC technology, highly reliable, 3-way isolation

➤CONTINUED➤

ULTRA SLIMPAK™ SIGNAL CONDITIONERS AND LIMIT ALARMS (CONT.)

SPECIFICATIONS

Input Range	Selectable by DIP Switch
Output (Conditioners)	0-5V, 0-10V, -10 to 10V, 0-20mA or 4-20mA
Output (Limit Alarms)	2 SPDT relays, 5A at 120VAC
Input/Output Accuracy	± 0.015% of FS / ± 0.05% of FS
Supply Voltage	9 to 30 VDC (except G448, 18 to 30V DC)
Isolation Voltage	1800VDC or peak AC between input, output and power
Size	Conditioners: 12.6 or 17.5 mm wide Limit Alarms: 17.5mm wide
Mounting Type	DIN Rail

SELECTION GUIDE

Input Selection	Description	Model
DC Voltage or Current (V, mV, A, mA)	Field configuration DC input isolator	G408
	Field configuration DC input limit alarm	G108
Thermocouple (Types E, J, K, R, S, T, B)	Thermocouple input field configurable isolator	G428
	Thermocouple input field configurable limit alarm	G128
Potentiometer (0-100 ohm to 0-100k ohm)	Potentiometer input field configurable signal conditioner	G438
Strain Gauge (0.5, 1, 3, 5, 10, 20 50mV/V) 1 to 10V adjustable excitation	Bridge input field configurable isolator	G448
AC Voltage or Current (V, mV, A, mA)	AC input field configurable isolator	G468

The Ultra SlimPak **G4X8 Series** of Signal Conditioners accept a variety of process signals: DC voltage and current **(G408)**, thermocouple **(G428)**, potentiometer **(G438)**, strain-gauge **(G448)**, AC current or voltage **(G468)**. Three port isolation — input to output to power — ensures that common ground faults are eliminated from any source.
The Ultra SlimPak **G1X8 Series** of Limit Alarms accept the most popular process signals: DC voltage and current **(G108)**, thermocouples **(G128)**. Their output is a dual contact closure (2 - SPDT relays) which can be used to light hazard beacons, sound audible alarms or alert control systems of abnormalities. The Ultra SlimPak Series is a result of this effort and investment. It utilizes the latest ASIC and microprocessor based technologies to provide 1800VDC isolation and wide ranging adjustments for easy, accurate, discrete signal conditioning. The power supply of the Ultra SlimPak will accept source between 9 and 30VDC, typically a 12 or 24VDC supply is used.

SIGNAL CONDITIONERS

Mfg. Part No.	Description	Width (mm)	Stock No.	Price Each
G408-0001.V1	DC Voltage/Current Input	12.6	14N9940	315.00
G408-1001.V1	DC Voltage/Current Input-Bipolar Output 5V/10V	12.6	41P0303	315.00
G428-0001.V1	Thermocouple Input: B, E, J, K, R/S, T	17.5	41P0304	356.00
G468-0001.V1	AC Input: 50mV/50mA to 250V/100mA	12.6	41P0306	356.00
G448-0002.V1	Bridge/Strain Gauge Input	17.5	41P0305	356.00
● G438-0001.V1	Potentiometer Input :100 Ohms to 100K Ohms	12.6	07P8538	356.00

LIMIT ALARMS-DUAL SPDT RELAY

G108-0001.V1	DC Voltage/Current Input Limit Alarm	17.5	41P0301	343.00

(139126)

ACTION I/Q SIGNAL CONDITIONERS AND LIMIT ALARMS

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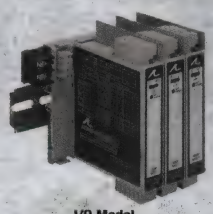
ACTION INSTRUMENTS™

- AC, DC or Loop Powered, 3-way isolation
- Multi-Channel, TouchCal or Software based calibration
- Math Functions, can replaces more than 1600 older plug-in models



I/Q Model

Loop Powered

SPECIFICATIONS

Input Range	Selectable by DIP Switch
Output (Conditioners)	0-10V, -10 to 10V, 0-20mA or 4-20mA
Output (Limit Alarms)	2 SPDT relays, 5A at 120VAC
Input/Output Accuracy	± 0.015% of FS / ± 0.05% of FS
DC Supply Voltage	9 to 30 VDC
AC Supply Voltage	85 to 264 VAC
Isolation Voltage	1800VDC or peak AC between input, output and power
Size	Conditioners: 22.29mm wide Limit Alarms: 22.29mm wide
Mounting Type	DIN Rail

➤CONTINUED➤

ACTION I/Q SIGNAL CONDITIONERS AND LIMIT ALARMS (CONT.)

DC ACTION I/Q SELECTION GUIDE

Input Selection	Description	Model
DC Voltage or Current (V, mV, A, mA)	DC input isolator (fast response time)	Q404
	Field configuration DC isolator, optional excitation supply and dual output	Q408
RTD (Pt100 Ohm, NI110 Ohm, Cu 10 ohm) Thermocouple (Types B, C, E, J, K, N, R, S, T)	Thermocouple input field configurable isolator	Q488
DC Voltage or Current (V, mV, A, mA)	Field configuration DC isolator, math functions	Q498
AC ACTIONI/Q SELECTION GUIDE		
DC Voltage or Current (V, mV, A, mA)	DC limit alarm	Q106
	Field configuration DC isolator, optional excitation supply and dual outputs	Q406
Potentiometer (0-100 ohm up to 0-100k ohm)	Potentiometer input field configurable signal conditioner	Q436
AC Voltage or Current (V, mV, A, mA)	AC input field configurable isolator	Q466
Frequency (0-2Hz to 0-10kHz)	Field configuration frequency to DC isolator	Q476
RTD (Pt100 Ohm, NI110 Ohm, Cu 10 ohm) Thermocouple (Types B, C, E, J, K, N, R, S, T)	Instand accuracy temperature to DC isolator, field configurable via DIP switch or PC	Q486

The **DC Action I/Q Series** is very similar to the AC ActionI/Q product line. The main difference is that the DC ActionI/Q line is DC powered, accepting 9 to 30V. The DC powered I/QRail is optional since the DC Action I/Qs have both DC power terminals as well as the power rail connector, unlike the AC ActionI/Q. The **AC powered ActionI/Q Series** of four-wire transmitters offers many of the most advanced microprocessor and ASIC based signal conditioning solutions available, requires the **IQRL-200X**. Field configurable and wide ranging, these modules are an off the shelf solution for most isolation, signal conditioning and limit alarm applications. The **Original ActionI/Q Series Loop Powered**, two-wire and three wire transmitters for sensor signal inputs including DC Voltage, DC Current, Platinum 100 Ohm RTD and thermocouples. These DC powered, fixed ranged, multi channel signal conditioners and isolators offer stable 0.1% accuracy over operating ambient temperature range of 20° to 80°C. Their multi channel design ensures high density and low material cost. Plug in terminal sockets makes wiring quick and easy.

DC POWERED SIGNAL CONDITIONERS

Mfg. Part No.	Description	Stock No.	Price Each
Q408-A004	DC Input Isolator: 20mV/2mA to 100V/100mA Input, 2CH	41P0317	499.00
Q408-A000	DC Input Isolator: 20mV/2mA to 100V/100mA Input, 1CH	30M7876	296.00
Q404-4L00	Singal Splitter, 1CH In, 2CH Out	41P0313	470.00
Q404-2L08	DC Input Isolator, 2CH, 4 to 20mA Output, 4mA I/O	84M7619	607.00
AC POWERED SIGNAL CONDITIONERS AND LIMIT ALARMS			
Q406-A002	Singal Splitter, 1CH In, 2CH Out	41P0315	399.00
Q406-A004	DC Input Isolator, Dual Channel	41P0316	546.00
Q476-0000	Frequency InputP: 2Hz to 10kHz	41P0320	381.00
Q436-0000	Potentiometer Input: 100 Ohms to 100K Ohms	41P0318	381.00
LOOP POWERED SIGNAL CONDITIONERS			
Q500-1B00	DC Input Loop Powered, 1CH: 0(4)-20mA IN, 0(4)-20mA OUT	41P0322	213.00
Q500-2B00	DC Input Loop Powered, 2CH: 0(4)-20mA IN, 0(4)-20mA OUT	41P0323	314.00
Q500-4B00	DC Input Loop Powered, 4CH: 0(4)-20mA IN, 0(4)-20mA OUT	41P0324	442.00
Q501-1B00	DC Output Loop Powered, 1CH: 4-20mA IN, 4-20mA OUT	41P0325	314.00
Q501-1B03	DC Output Loop Powered, 1CH: 0 to 10V IN, 4-20mA OUT	41P0326	314.00
Q501-2B00	DC Output Loop Powered, 2CH: 4-20mA IN, 4-20mA OUT	41P0327	442.00
Q510-0B10	DC Output Loop Powered, 2CH. RTD: 0-150 F IN, 4-20mA OUT	41P0329	314.00
Q510-4B08	DC Output Loop Powered, 4CH. RTD: 0-1000 F IN, 4-20mA OUT	41P0330	442.00
ACCESSORIES			
IQRL-D004	DC Power Distribution Bus for IQ series-4 Modules	41P0309	88.00
IQRL-2004	AC Power Distribution Bus for IQ series-4 Modules	11N7728	80.00

(139127)

TRANSPAK™ PROGRAMMABLE TRANSMITTER

invensys EUROTHERM

ACTION INSTRUMENTS™

CE

SPECIFICATIONS

Input Type	Thermocouples, RTD (2-, 3- & 4-wire, Pt-100, Ni-110, Ni-120), DCmV, Potentiometers (0-20kΩ), Resistance (0-400Ω)
Output	4-20 mA
Accuracy	± 0.1% of span over 12 months
Supply Voltage	9-40VDC @ no load, reverse polarity protected
Isolation Voltage	2000VDC, input to output
Mounting Type	DIN Rail

➤CONTINUED➤

TRANSPAK™ PROGRAMMABLE TRANSMITTER (CONT.)

Programmable two-wire transmitter that is configured to provide an isolated 4-20mA signal in proportion to the input signal. Supports either single or dual outputs. In the dual output mode, either input can be selected to control the output, or math functions can be applied in which both inputs have an effect on the output. Functions available are sum, difference, average, higher or lower of the two inputs. Typical applications include providing accurate, stable signals to distributed control systems (DCS), supervisory control and data acquisition systems (SCADA, environmental monitoring and control systems (EMCS), data acquisition and control systems (DACS) and custody transfer/pipeline systems. CE certified.

Mfg. Part No.	Signal Input	Stock No.	Price Each
T287-0000	2-wire Programmable	85K9210	281.00

ACCESSORIES

Communications kit includes: Isolated communications adapter, configuration and calibration software, and user's guide.

Mfg. Part No.	Description	Stock No.	Price Each
T25H-0000	Head Mount Enclosure	85K9209	37.00
C680-0001	Communications Kit	85K9185	288.00

(88629)

ISOLATING SIGNAL CONVERTER 2 OUPUTS DUALCON

RoHS Compliant Available

IMO

Features

- Universal configurable input - user selectable
- 2 configurable Outputs - user selectable
- Full 3-Port Isolation
- Wide range AC or DC Supply
- Supply voltage: 12-32 VAC and 12-36 VDC
- Isolated Transmitter Supply
- Very High Accuracy, Low Cost
- Only 17.5mm Wide on DIN rail

The new DUALCON Isolating Signal Converter can accept a wide range of inputs including 4-20mA, thermocouple, RTD and voltage signals. The units produce two high level DC outputs of either voltage or current.

Mfg. Part No.	Stock No.	Price Each 1-9
● DUALCON-6	74R5362	434.58

(177546)

ISOLATING SIGNAL CONVERTER ISOCON

RoHS Compliant Available

IMO

Features

- Universal input/output- user selectable
- Full 3-Port Isolation
- Wide range AC or DC Supply
- Supply voltage: 12-32 VAC and 12-36 VDC
- Isolated Transmitter Supply
- Very High Accuracy, Low Cost
- Only 12.5mm Wide on DIN rail

The new ISOCON Isolating Signal Converter can accept a wide range of inputs including 4-20mA, thermocouple, RTD and voltage signals. The units produce a high level DC output of either voltage or current.

Mfg. Part No.	Stock No.	Price Each 1-9
● ISOCON-6	74R5365	317.84

(177547)

iDRN AND iDRX SERIES DIN RAIL MOUNT SIGNAL CONDITIONERS

CE NEWPORT

Specifications:

- 10-32VDC Input Power Supply
- iDRN Output: 0-10VDC at 10mA Max.: 0-20mA or 4-20mA, 10V Compliance
- Isolation: Up to 1800VDC Peak
- Typical Response to 99%: 1 Second
- Operating Temperature: –5°C to +55°C (+23°F to +131°F)
- Storage Temperature: –40°C to +85°C (–40°F to +185°F)
- Mountable on a 35mm DIN Rail
- Dimensions: 3.55H x 0.99W x 4.88"D (91.2 x 25.1 x 124)

The new **iD series** signal conditioners combine the accuracy of laboratory instrumentation with the performance required by demanding industrial applications. Ideal for those applications in data acquisition, test and measurement, process control, and industrial automation where accuracy, performance and reliability are critically important. The **iDRN series** features 0-10VDC or 0-20mA (including 4-20mA) analog output signal that is typically scaled to be directly proportional to input signal.

Mfg. Part No.	Description	Stock No.	Price Each
IDRN-TC/N	J, K, T, E, R, S, B, J, DIN	16F2351	325.00
IDRN-PR/N	Process-DC Millivolt and Volt	16F2353	325.00

➤CONTINUED➤

iDRN AND iDRX SERIES DIN RAIL MOUNT SIGNAL CONDITIONERS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
IDRN-FP/N	Frequency/Pulse Input	19C7491	265.00
IDRN-ST/N	Strain Gage/Bridge Transducer	16F2354	345.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
IDRN-PS-1000/N	Power Supply (Linear), 115VAC Input, 24VDC Output @ 750mA	91F9168	150.00

(2460)

INTELLIGENT UNIVERSAL SIGNAL CONDITIONING MODULES

RoHS Compliant Available

red lion®

IAMS0001 IAMS0010 IAMS0011 Display/Programming Module

Features
- Universal Input, process, mA DC, VDC, TC, 100 (RTD, potentiometer, and linear resistance
- Universal power supply, 21.6 to 253 VAC/ 19.2 to 300 VDC
- 3-way isolation (power/signal/output)
- Choose setpoints and/or analog models
- Programming/display module (not included)
- Programming available in seven different languages
- Consumption: <2.5 W
- Fuse: 400 mA SB/250 VAC
- Operating temperature: -20 °C to +60°C

Mfg. Part No.	Signal Input	Signal Output	Stock No.	Price Each
IAMS0001	Universal	Analog	63R3517	209.00
IAMS0010	Universal	Dual Setpoints	63R3518	192.00
IAMS0011	Universal	Analog/Dual Setpoints	63R3519	225.00

ACCESSORY

Mfg. Part No.	Description	Display	Stock No.	Price Each
PGMMOD00	Display/Programming Module	LCD with 4 lines	63R4700	56.09

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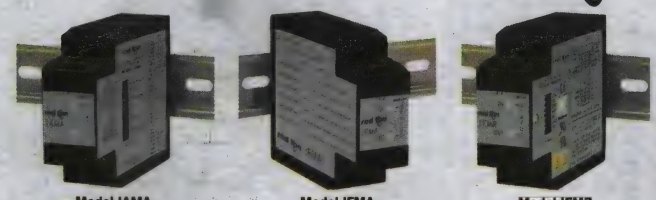
DIN-RAIL SIGNAL CONDITIONERS

RoHS Compliant Available

red lion®



Model IAMA Model IFMA Model IFMR

MODEL IAMA - UNIVERSAL SIGNAL CONDITIONING MODULE
3-way isolation of analog signals. Universal conversion module, inputs and outputs selected via DIP switch settings. Over 100 input and output analog conversions combinations. Linear or square root extraction model available; *go online or call.*

Mfg. Part No.	Supply Voltage	Signal Input	Alarm Type	Stock No.	Price Each
IAMA3535	24VAC/11-36VDC	Selectable Current or Voltage	...	84K7451	205.00

MODEL IFMA - DIN-RAIL FREQUENCY TO ANALOG CONVERTERS
On-line rating setting (using actual input signal or signal generator). User settable full scale frequency from 1Hz to 25KHz. Four output operating ranges (0-5V, 0-10V, 0-20mA and 4-20mA). Programmable input circuit accepts outputs from a variety of sensors. 3-way electrical isolation.

IFMA0035	9-32VDC	Selectable Current or Voltage	...	84K7452	202.00
IFMA0065	85-250VAC	Selectable Current or Voltage	...	84K7453	202.00

MODEL IFMR - DIN-RAIL SPEED SWITCHES
On-line trip frequency setting using actual input signal or frequency generator. User settable trip frequency from 0.1Hz to 25KHz. Over-speed, under-speed and zero-speed detection. Relay latching, alarm override and alarm reset functions. Programmable input circuit accepts outputs from a variety of sensors.

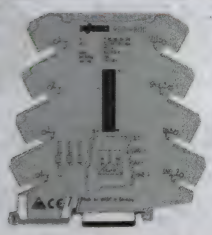
IFMR0036	9-32VDC	Selectable Current or Voltage	Relay	84K7454	158.00
IFMR0066	85-250VAC	Selectable Current or Voltage	Relay	84K7455	158.00

(88723)

857 SERIES JUMPFLEX SIGNAL CONDITIONERS

RoHS Compliant Available

WAGO®



Features:
- 6mm wide housing to reduce panel space
- Flexible jumpering system elminates redundant wiring
- Safe Opration with three-way isolation (2.5kV)
- Maintenance free wiring with CAGE CLAMP S
- Designed for extreme applications, with -25°C to +70°C temperature range

JUMPFLEX Signal Conditioning modules provide signal conversion, isolation, and amplification in a compact, DIN-rail mount package that features the Cage Clamp S spring pressure wiring technology. Additional module are available.

Mfg. Part No.	Description	Input Signal	Output Signal	Stock No.	Price Each 1-4
857-400	Configurable Isolation Amplifier	Configurable (V or I)	Configurable (V or I)	15N6552	299.33
857-401	Configurable Isolation Amplifier	Configurable (V or I)	Configurable (V or I)	76R6245	312.19
857-402	Universal Isolation Amplifier	Universal (V or I)	Universal (V or I)	62T1666	437.51
857-409	Configurable Isolation Amplifier	Configurable (V or I)	Configurable (V or I)	76R6246	307.85
857-411	Isolation Amplifier - current	0(4) - 20mA	0(4) - 20mA	79M7189	208.86
857-412	Isolation Amplifier - voltage	0(2) - 10V	0(2) - 10V	15N6553	208.86
857-413	Isolation Amplifier - voltage or current	0 - 10 V	0 - 20 mA	62T1667	208.86
857-414	Isolation Amplifier - voltage or current	0 - 10 V	4 - 20 mA	58T3551	208.86
857-415	Isolation Amplifier - voltage or current	0 - 20mA	0 - 10 V	62T1668	208.86
857-416	Isolation Amplifier - voltage or current	4 - 20 mA	0 - 10 V	62T1669	208.86
857-420	Repeater Power Supply	0(4) - 20mA	Configurable (V or I)	15N6554	227.76
857-421	Repeater Power Supply	4 - 20mA	4 - 20mA	41M0018	293.18
857-423	Signal Splitter	Configurable (V or I)	2 x 0(4) - 20mA	15N6555	300.31
857-531	Signal Splitter	Configurable (V or I)	2 x 0(4) - 20mA	62T1670	234.75
857-800	Signal Conditioner for RTD	Pt 100 - Pt 1000	Configurable (V or I)	15N6556	222.70
857-810	Signal Cond, for Thermocouples	Type J or K	Configurable (V or I)	61M2091	234.63
857-451	Passive Isolator 1-channel	0(4) - 20mA	0(4) - 20mA	72M6942	229.74
857-452	Passive Isolator 2-channel	0(4) - 20mA	0(4) - 20mA	72M6944	333.15

INSUATED WHITE JUMPER COMB, 18A

Mfg. Part No.	Description	Stock No.	Price Each 1-24
859-402	2 pole	29K5508	0.59

(120797)

(196527)

LUMATONE® AND VISUAL/AUDIO ELECTRONIC SIGNALS

Edwards Signaling™

E102A

Non-irritating harmonic tone that demands attention in both quiet and noisy environments. Panel mounts in a 1 5/32″ dia. hole, panel thickness up to 3/16″. Solid-state construction gives a rated life of 5,000 hours. No arcing, sparking or noise. Sound output level can be varied by applied voltage (80dB @ 1ft. with 12VDC).

Mfg. Part No.	VA Rating		Max Operating Current (MADC)	
	@12VDC	@24VDC	@12VDC	@24VDC
E102A	0.12	0.44	10	18
E103A	0.12	0.44	10	18
E104A	0.20	0.75	16	30
E105AE	0.20	0.75	16	30

Mfg. Part No.	Description	Stock No.	Price Each	
			Each	2-5
E102A	Steady Audio Signal	92F6370	69.97	64.31
E103A	Pulsating Audio Signal-Solid State Switching	92F6371	122.09	112.57
E104A	Steady Visual/Audio Signal	92F6372	73.01	67.30
E105AE	Pulsating Visual/Audio Signal-Solid State Switching	92F6373	127.48	117.52

(2791)

ADAPTABEL® VIBRATING BELLS

Edwards Signaling™

Easy installation wire attach to base, bell plugs into adaptaplate. Universal adaptable mounting plate mounts directly on surface or fits any single-gang opening or any 3 1/4″, 3 1/2″ or 4″ octagon box or any plaster cover with mounting holes on 2 3/4″ centers. 6″ bells also mount on 4″ square box. 120VAC units are PLC compatible with off-state current less than 25mA. Available in 4″, 6″, 10″ gong size AC., 4″, 6″, 8″ and 10″ gong size DC. Easy installation wires attach to base, bell plugs into adapt plate. Dustproof, shockproof, and corrosion resistant. UL listed, CSA certified.

Series 340

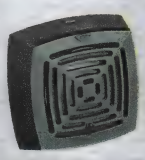
Mfg. Part No.	Volts	Bell Dia.	Amps	dB @10 ft.	Stock No.	Price Each	
						Each	2-5
340-4N5	120VAC	4″	0.062	88	92F6374	143.27	135.76
340-4G5	24VAC	4″	0.31	88	92F6375	149.78	141.93
340-6N5	120VAC	6″	0.07	92	92F6376	172.12	163.10
435-4G1	24VDC	4″	0.062	88	41B8486	134.78	127.72
435-6G1	24VDC	6″	0.062	92	41B8491	165.16	156.51

(2789)

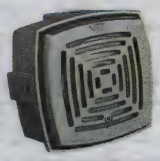
ADAPTAHORN® VIBRATING HORNS

Edwards Signaling™

- Adjustable Output: 78 to 103dB
- Durable Die Cast Housing
- DC versions in 6, 12, 24, 32 125, 250VDC
- AC versions in 12, 24, 120, 240VAC



Series 870P & 874



Series 876 & 877

Horns provide a low current, high decibel audio signal. Durable die-cast housing for heavy-duty use. All units are PLC compatible and have adjustable output from 78 to 103dB. Face dimensions are approximately 5″ x 5″. **Series 870** semi-flush, panel-mounting installation on 4″ square box, weatherproof when installed with supplied gasket. **Series 874** grille type, adaptable for mounting on signal gang, 3 1/4, 3 1/2 or 4″ octagon or square box. **Series 876** weatherproof grille type comes completely assembled in die-cast. Mounts on conduit flat surface. Top hole drilled and tapped for 3/4″ 14NPT.

Mfg. Part No.	Volts	Amps	VA	Stock No.	Price Each	
					1-4	5-9
870P-N5	120VAC	0.13	15	92F6384	128.06	121.52
870P-G5	24VAC	0.63	15	92F6385	127.51	120.98
874-N5	120VAC	0.13	15	92F6380	130.55	123.87
874-G5	24VAC	0.63	15	92F6381	128.86	122.27
874-R5	240VAC	0.06	15	92F6382	149.42	141.78
876-G5	24VAC	0.63	15.1	41B9059	173.95	165.05
876-N5	120VAC	0.13	15.6	92F6383	174.72	165.77
876-R5	240VAC	0.07	16.8	41B9060	204.60	194.13
871P-G1	24VDC	0.16	3.8	41B9030	155.50	147.54
875-G1	24VDC	0.16	3.8	41B9054	190.25	180.52
877-G1	24VDC	0.16	3.8	92B9854	232.89	220.97

(2785)

ADAPTATONE® MULTI-TONE INDUSTRIAL SIGNAL

Edwards Signaling™

Signal is heavy-duty industrial, tone selectable, stand alone, signaling device capable of producing up to 27, volume controlled, high decibel tones. PLC compatible. Terminals for 24VDC battery back up. Solid-state weatherproof design. Fully enclosed; heavy-duty zinc cast construction. UL listed for indoor, outdoor use.

Mfg. Part No.	Operating Voltage	Signal Input Voltage	Current (A)	Stock No.	Price Each	
					1-2	3-4
5530M-24Y6	120VAC	24VDC	0.24	29C8275	1136.63	1065.59
5530M-24AQ	24VDC	24VDC	0.64	27C4245	1116.64	1046.85

(2787)

WALL MOUNT STROBE/BUZZER

Edwards Signaling™

- 120VAC Operating Voltage
- Neutral White Color
- UL Listed

7007B-N5 audible/visual signaling device is designed for hospitals, public restrooms, handicapped areas and many other applications. Install in a simple gang box 2W X 4H″ (51 x 102mm). Audible signal generates 82dB, at 10 feet and a high intensity 150 candela (strobe) visual signal. **7008B-N5** included buzzer/strobe and emergency pull cord station for activation.

Mfg. Part No.	Description	Stock No.	Price Each
7007B-N5	Strobe/Buzzer	41B8932	153.03
7008B-N5	Call for Assistance System	41B8933	124.53

(3051)

NEW SOLUTIONS DISTINCTIVE PULSING AUDIBLE ALARMS

RoHS Compliant Available

MALLORY Sonalert® Products

- 72 Pulsing Tone
- 5 New Distinctive Pulsing Sounds
- Wide AC & DC Voltage Ranges
- Sound Levels Up to 105 dB
- Custom Beeping Patterns Upon Request

DISTINCTIVE PULSING AUDIBLE ALARMS

Mfg. Part No.	Sound Level @2 ft.	Voltage Range	Voltage Type	Pulse Rate	Stock No.	Price Each
						1-9
● SCE016XD3DP2B	95 to 105	6 - 16	DC Only	Fast Double Beep	05R6230	63.48
● SCE016XD3SU2B	95 to 105	6 - 16	DC Only	Fast Speed Up	06R3165	63.48
● SCE028LD3DP2B	85 to 95	16 - 28	DC Only	Fast Double Beep	05R6310	55.43
● SCE028LD3SU2B	85 to 95	16 - 28	DC Only	Fast Speed Up	06R3166	55.43
● SCE028MD3DP2B	75 to 85	16 - 28	DC Only	Fast Double Beep	06R3167	55.43
● SCE028MD3SU2B	75 to 85	16 - 28	DC Only	Fast Speed Up	06R3171	52.82
● SCE028XA3DP2B	95 to 105	16 - 28	AC/DC	Fast Double Beep	06R3172	63.95
● SCE028XA3SU2B	95 to 105	16 - 28	AC/DC	Fast Speed Up	06R3173	67.12
● SCE048LD3DP2B	85 to 95	28 - 48	DC Only	Fast Double Beep	06R3174	52.82
● SCE048LD3SU2B	85 to 95	28 - 48	DC Only	Fast Speed Up	06R3175	52.82
● SCE120XA3DP2B	95 to 105	48 - 120	AC/DC	Fast Double Beep	06R3176	74.98
● SCE120XA3SU2B	95 to 105	48 - 120	AC/DC	Fast Speed Up	06R3178	74.98
PULSING SERIES AUDIBLE ALARMS						
● SCE016XD3FP1B	95 to 105	6 - 16	DC Only	Fast Pulse	06R3162	59.34
● SCE016XD3MP1B	95 to 105	6 - 16	DC Only	Medium Pulse	06R3163	59.34
● SCE016XD3SP1B	95 to 105	6 - 16	DC Only	Slow Pulse	06R3164	59.34
● SCE028MD3FP1B	75 to 85	16 - 28	DC Only	Fast Pulse	06R3168	54.37
● SCE028MD3MP1B	75 to 85	16 - 28	DC Only	Medium Pulse	06R3169	54.49
● SCE028MD3SP1B	75 to 85	16 - 28	DC Only	Slow Pulse	06R3170	54.62
● SCE120XA3FP1B	95 to 105	48 - 120	AC/DC	Fast Pulse	06R3177	72.91
● SCE120XA3MP1B	95 to 105	48 - 120	AC/DC	Medium Pulse	56P4920	72.91
● SCE120XA3SP1B	95 to 105	48 - 120	AC/DC	Slow Pulse	19P7941	73.54

(147230)

DEV KIT HQ™

Newest technology, Development Kits & Evaluation Boards from the best suppliers.

newark.com/dev-kits

(196525)

HAZARDOUS LOCATION CLASS I DIV II SCH SERIES ALARMS

RoHS Compliant Available

MALLORY Sonalert® Products

Features
- Class I Div II Groups A, B, C, & D
- NEMA 3R, 4X, or 12
- Frequency: 2900 Hz
- CSA C22.2 No. 94
- IP-66
- UL File No. UGKZ2.E313311
- C-UL File No. UCST8.S1290

Mfg. Part No.	Min/Max Sound Level dBa (2 ft)	Operating Voltage	Max Current (mA)	Tone	Stock No.	Price Each Each
SCH110NR	80 - 95	30V to 120V	6 - 24	Continuous	06R3102	306.48
SCH616NR	80 - 95	6V DC to 16V DC	6 - 22	Continuous	68R3041	182.32
SCH628NR	80 - 90	6V DC to 28V DC	6 - 23	Continuous	14R8186	165.47
SCH628R	68 - 80	6V DC to 28V DC	3 - 18	Continuous	75R9520	150.53
SCH628PR	68 - 80	6V DC to 28V DC	6 - 26	Fast Pulse	75R9519	249.72

(192384)

CONTINUOUS TONE PANEL MOUNT ALARMS WITH EURO-TERMINALS

RoHS Compliant Available

MALLORY Sonalert® Products

New- Mallory Sonalert Solutions Series
- Pluggable Screw Terminal Block
- Extra Loud Sound Levels Available
- Max. Operating Current: 20A

Solutions Series

PANEL MOUNT- CONTINUOUS TONE

Mfg. Part No.	Loud-ness	Voltage Range	Voltage Type	Freq. ± 500Hz	Typ. Sound Level Output @ 2ft (dB)	Stock No.	Price Each 1-9
SCE028MD3CTB	Medium	16-28	DC Only	2900	75 to 85	89K2243	23.48
SCE028MA3CTB	Medium	16-28	AC or DC	2900	75 to 85	89K2242	41.17
SCE120MA3CTB	Medium	48-120	AC or DC	2900	75 to 85	89K2245	48.24
SCE028LD3CTB	Loud	16-28	DC Only	2900	85 to 95	89K2241	26.37
SCE028LA3CTB	Loud	16-28	AC or DC	2900	85 to 95	89K2240	51.97
SCE016XD3CTB	Extra-Loud	6-16	DC Only	2900	95 to 105	89K2239	30.37

(89410)

CONTINUOUS TONE PANEL MOUNT & LARGE BOARD MOUNT ELECTRONIC ALARMS

RoHS Compliant Available

MALLORY Sonalert® Products

Signals produce an audible tone when voltage from 1 to 250V is applied (depending on model). A piezoelectric transducer, operating substantially at resonance in a solid-state oscillator, converts electrical power to sound. Can be powered by many electrical sources, ranging from single-cell battery to industrial power lines. Because of low power requirements, they can be turned on or off with a transistor, SCR, or integrated circuit. No mechanical wear. Salt spray resistant. Operating temperature: –30°C to +65°C. Some units sound at voltages lower than minimum specified. Continuous tone. The **LSC series** combines a flashing LED with continuous audible signal for quick recognition. Frequencies in table below are ±500Hz except **SC628NDR** ±300Hz.

LSC616N

PANEL MOUNT - CONTINUOUS TONE

Mfg. Part No.	Voltage Range	Current (mA)	Freq.	Min. Volume @ 2ft (dB)	Stock No.	Price Each 1-4
SC110ER	30 - 120VAC/VDC	3 to 14	1900	55 to 65	82K6461	57.60
SC628AER	6 - 28VDC	3 to 14	1900	50 to 65	82K6488	55.90
SC628ER	6 - 28VDC	3 to 8	1900	55 to 68	82K6507	21.88
SC250F	60 - 250VAC/VDC	2 to 6	2900	55 to 65	64F279	57.43
SC628AFR	6 - 28VAC/VDC	2 to 6	2900	50 to 65	82K6491	58.57
SC628FR	6 - 28VDC	2 to 4	2900	55 to 70	82K6508	33.61
SC105R**	1 - 5VDC	3 to 16	2900	60 to 75	82K6454	18.12
SC110DR**	30 - 120VAC/VDC	6 to 21	1900	60 to 75	82K6458	41.78
SC250DR**	60 - 250VAC/VDC	5 to 16	1900	60 to 72	82K6471	42.68
SC628ADR**	6 - 28VAC/VDC	6 to 23	1900	60 to 75	82K6487	36.22
SC628DR**	6 - 28VDC	6 to 23	1900	60 to 75	82K6505	21.76
SC648ADR**	10 - 48VAC/VDC	4 to 16	1900	60 to 75	82K6521	39.42
SC648DR**	10 - 48VDC	6 to 23	1900	60 to 75	82K6529	22.26
SC110R**	30 - 120VAC/VDC	6 to 21	2900	68 to 80	82K6470	37.33
SC250R**	60 - 250VAC/VDC	5 to 18	2900	68 to 80	82K6477	39.54
SC628R**	6 - 28VDC	6 to 23	2900	68 to 80	82K6519	17.14
SC628AR**	6 - 28VAC/VDC	6 to 23	2900	68 to 80	82K6501	32.78
SC628NLR**	6 - 28VDC	4 to 16	2900	80 to 90	82K6515	23.47
SC628NPR**	6 - 28VDC	4 to 16	2900	80 to 90	82K6516	56.20
SC648R**	10 - 48VDC	5 to 22	2900	68 to 80	82K6532	19.96

➤CONTINUED➤

CONTINUOUS TONE PANEL MOUNT & LARGE BOARD MOUNT ELECTRONIC ALARMS (CONT.)

Mfg. Part No.	Voltage Range	Current (mA)	Freq.	Min. Volume @ 2ft (dB)	Stock No.	Price Each 1-4
SC110HR**	30 - 120VAC/VDC	6 to 21	4500	68 to 80	82K6463	42.50
SC628AHR	6 - 28VAC/VDC	4 to 16	4500	68 to 80	82K6494	56.54
SC628HR**	6 - 28VDC	6 to 23	4500	68 to 80	82K6511	24.37
SC648HR	10 - 48VDC	4 to 16	4500	68 to 80	82K6530	43.16
SC628MN	6 - 28VDC	4 to 16	2900	80 to 90	89F276	46.66
SC110NR**	30 - 120VAC/VDC	6 to 24	2900	80 to 95	82K6468	49.74
SC307NR**	3 - 7VDC	3 to 9	2900	80 to 90	82K6478	26.39
SC616NR**	6 - 16VDC	6 to 22	2900	80 to 95	82K6485	22.78
SC628NDR**	6 - 28VDC	3 to 16	2000	75 to 95	82K6514	33.05
SC628NR**	6 - 28VDC	6 to 23	2900	80 to 90	82K6517	20.99
SC628ANR**	6 - 28VAC/VDC	4 to 30	2900	80 to 95	82K6499	42.72
SC648AER	10 - 48VAC/VDC	3 to 11	1900	55 to 65	69R7048	54.19
SC648ANJR**	10 - 48VAC	4 to 26	2900	80 to 95	82K6524	50.58
SC648ANPR**	10 - 48VAC	4 to 26	2900	80 to 95	82K6525	60.22
PC BOARD MOUNT - CONTINUOUS TONE						
SBM616JR	6 - 16VDC	3 to 12	2900	68 to 78	82K6450	36.23
SBM428R**	4 - 28VDC	3 to 16	2900	64 to 78	82K6449	22.29
SNAP-IN PANEL MOUNT - CONTINUOUS TONE						
SNP428R**	4 - 28VDC	3 to 18	2900	64 to 76	82K6535	16.76
PANEL MOUNT - CONTINUOUS TONE / FLASHING LED						
LSC616N	6 - 16VDC	40 to 60	2900	80 to 95	98B5334	70.01
LSC628AN	6 - 28VAC/VDC	4 to 48	2900	85 to 95	30C8821	79.34
LSC110N	30 - 120VAC/VDC	5 to 16	2900	88 to 98	30C8819	58.26
LSC250N	60 - 250VAC/VDC	4 to 14	2900	84 to 87	30C8820	81.48

**UL recognized, Guide UCST2, yellow card S1290.

(7255)

INTERMITTENT TONE PANEL MOUNT & LARGE BOARD MOUNT ELECTRONIC ALARMS

RoHS Compliant Available

MALLORY Sonalert® Products

- Case Style D: Same as Case Style C except length of part behind the panel is 1.38"
- Case Style E: Same as Case Style C except length of part behind the panel is 1.94"
- All are panel mount except **SMB616P** and **SBM616PU**, which are PCB mount
- Sound Frequency is ± 500 Hz

FAST PULSE TONE

Mfg. Part No.	Case Style	Voltage Range	Current (mA)	Freq. (Hz)	Min. Volume @2 ft. (dB)	Stock No.	Price Each 1-4
SC110EPR	D	30 - 120VAC/VDC	4 to 14	1900	55 to 65	82K6460	61.52
SC628DPR**	C	6 - 28VDC	6 to 16	1900	60 to 75	82K6504	35.23
SC648ADPR	E	10 - 48VAC/VDC	4 to 20	1900	60 to 75	82K6520	58.72
SC110DPR**	D	30 - 120VAC/VDC	6 to 20	1900	60 to 75	82K6457	56.41
SC110PR**	D	30 - 120VAC/VDC	6 to 22	2900	68 to 80	82K6469	49.49
SC250PR**	D	60 - 250VAC/VDC	4 to 16	2900	68 to 78	82K6476	65.14
SC628APR**	D	6 - 28VAC/VDC	4 to 16	2900	68 to 80	82K6500	44.72
SC628PR**	C	6 - 28VAC/VDC	6 to 26	2900	68 to 80	82K6518	31.78
SC648APR**	D	10 - 48VAC/VDC	6 to 21	2900	68 to 80	82K6527	44.66
SC110HPR	E	30 - 120VAC/VDC	6 to 20	4500	68 to 80	82K6462	66.29
SC628HPR**	D	6 - 28VDC	4 to 16	4500	68 to 80	82K6510	54.44
SC110NPR**	D	30 - 120VAC/VDC	8 to 24	2900	80 to 95	82K6467	52.83
SC616NPR**	C	6 - 16VDC	6 to 22	2900	80 to 95	82K6484	29.26
SC628ANPR**	D	6 - 28VAC/VDC	4 to 30	2900	80 to 95	82K6498	47.37
SC628NDP**	D	6 - 28VDC	3 to 16	2000	85 to 95	95C0274	31.42
SC628MP**	D	6 - 28VDC	4 to 16	2900	70 to 85	98F3008	95.40
SLOW PULSE TONE							
SC110EJR	E	30 - 120VAC/VDC	4 to 14	1900	55 to 65	82K6459	61.60
SC628EJR	D	6 - 28VDC	3 to 14	1900	50 to 65	82K6506	54.55
SC628DJR**	D	6 - 28VDC	3 to 16	1900	60 to 75	82K6503	34.70
SC628JWR	...	6 - 28VDC	5 - 20	2900	78 to 89	89M5353	51.93
SC648ADJ	E	10 - 48VAC/VDC	4 to 20	1900	60 to 75	64F369	68.56
SC110DJR**	E	30 - 120VAC/VDC	6 to 20	1900	60 to 75	82K6456	52.95
SC648AJR**	E	10 - 48VAC/VDC	6 to 21	2900	68 to 80	82K6523	58.49
SC110JR**	E	30 - 120VAC/VDC	6 to 22	2900	68 to 80	82K6464	51.38
SC250JR**	E	60 - 250VAC/VDC	4 to 16	2900	68 to 78	82K6474	66.01
SC628AJR	E	6 - 28VAC/VDC	4 to 16	2900	68 to 80	82K6495	58.39
SC628NJR	E	6 - 28VDC	5 to 20	2900	90 to 103	28M4435	53.64
SC628JR**	D	6 - 28VDC	6 to 26	2900	68 to 80	82K6512	32.26
SC110HJ	E	30 - 120VAC/VDC	6 to 20	4500	68 to 80	64F350	75.93
SC628ANJR**	D	6 - 28VAC/VDC	4 to 30	2900	80 to 95	82K6497	46.27
SC110NJR**	D	30 - 120VAC/VDC	8 to 24	2900	80 to 95	82K6466	52.26
SC616NJR**	C	6 - 16VDC	6 to 22	2900	80 to 95	82K6482	56.38

➤CONTINUED➤

INTERMITTENT TONE PANEL MOUNT & LARGE BOARD MOUNT ELECTRONIC ALARMS (CONT.)

DUAL-MODE OPERATION--CONTINUOUS OR FAST PULSE TONE

Mfg. Part No.	Case Style	Voltage Range	Current (mA)	Freq. (Hz)	Min. Volume @2 ft. (dB)	Stock No.	Price Each 1-4
SC648S	D-1	10 - 48VDC	25 to 35	2900	80 to 90	52F573	53.74
SHORT PULSE TONE							
● SC110KR**	E	30 - 120VAC/VDC	6 to 22	2900	68 to 80	82K6465	65.30
FAST WARBLE TONE (SC628W requires 2 units to warble)							
SC628W	D-1	6 - 28VDC	4 to 20	2900	68 to 80	64F319	57.48
SLOW WARBLE TONE (SC630JW is a single unit; SC628JW requires 2 units to warble)							
● SC110JWR	D-1	30 - 120VAC	26	2800	68 to 80	26R2010	60.30
SC616JW	D-1	6 - 16VDC	6 - 26	2800	68 to 80	52F572	54.90
CHIME TONE							
● SC616CPR**	D	6 - 16VDC	6 to 23	2900	68 to 78	82K6481	36.90
SC628CPN**	D	6 - 28VDC	6 - 16	2900	76 to 86	99B1694	66.11
CHIRP TONE							
SC110Q**	C	30 - 120VAC	6 - 22	2900	68 to 80	81F454	25.40
SC616Q	C-1	6 - 16VDC	3 - 12	2900	68 to 78	81F455	44.52
CONTINUOUS TONE							
SC110M	C-1	30 - 120VDC/VDC	4 - 18	2900	71 to 85	08C2399	91.30
SC110MN	C-1	30 - 120VAC	6 - 24	2900	80 to 90	02J6537	96.69
● SC250ER	C-1	60 - 250VAC/VDC	5 - 16	1900	65 to 78	82K6472	58.93
SC616MN	C-1	6 - 16VDC	6 - 22	2900	80 to 95	02J6541	42.93
● SC628LR	C-1	6 - 28VDC	4 - 18	2900	68 to 80	82K6513	23.11
SC628M	C-1	6 - 28VDC	4 - 16	2900	70 to 85	98F9686	47.24
SC628MA	C-1	6 - 28VDC	4 - 21.5	2900	70 to 85	93B0064	61.11
SC628MD	C-1	6 - 28VDC	5 - 20	1900	60 to 75	08C2410	77.99

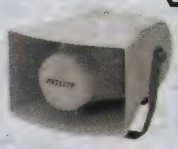
** UL Recognized
(7256)

EXPLOSION-SAFE VOICE ANNUNCIATOR - PVW-EXN SERIES

RoHS Compliant Available

PATLITE

- 166mm in height
- Explosion-safe for gas and dust
- Suitable for Zone 2 and Zone 22
- CE Compliance according to ATEX 94/9/EC & EMC 2004/108/EC
- Rated Voltage: 12/24 VAC / VDC
- Up to 63 sec. recording time @ 64kbps (ADPCM)
- Adjustable volume from 0dB to 105 dB at 1m
- Protection: IP65
- Indoor (any orientation) or outdoor (upright only)
- 4 pre-recorded messages on EPROM



Mfg. Part No.	Power Cossumption	Operating Temp. Range	Auxiliary Input	Stock No.	Price Each 1-4
● PVW04JF/EXN	12 W	-10°C - +55°C	Non-voltage contact 4/1bit	89T2156	502.32

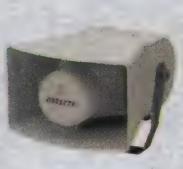
(203447)

EXPLOSION-SAFE MULTI SOUND ALARM - EWH-EXN SERIES

RoHS Compliant Available

PATLITE

- Explosion-safe for gas and dust
- 166mm in height
- CE Compliance according to ATEX 94/9/EC
- 32 built-in sounds
- Adjustable volume from 0dB to 105 dB at 1m
- Indoor (any orientation) or outdoor (upright only)
- Suitable for Zone 2 and Zone 22
- Rated Voltage: 24 VDC
- 8 channel in bit mode or 32 channel in binary mode
- IP-65 rated



SOUND SELECTION CHART

Pre-recorded on sounds

Beep	Stutter + Bell	Inverted Revelle	Annie Laurie
Stutter	Synthesized Melody	Galactic Motor	London Bridge
Bell	Chime	Ringing Phone	Mary's Lamb
Yelp	Call Sign	Two Tone	Camptown Races
Rapid Hi Lo	Train Ride	Alarm Clock	Amaryllis
Melody Chime	Galloping Hi Lo	Ringing Hi Lo	Symphony #40
Synthesized Piano	Alien Chatter	Fur Elise	Ave Maria
Synthesized Bell	Falling Crystals	Minuet	Grandfather's Clock

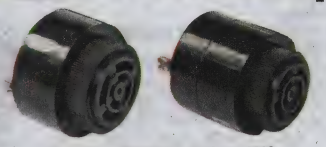
Mfg. Part No.	Power Cossumption	Operating Temp. Range	Auxiliary Input	Stock No.	Price Each 1-4
● EWH24E/EXN	8 W	-20°C - +60°C	Non-voltage contact	89T2139	1167.72

(203448)

AUDIBLE ELECTRONIC SIGNAL ALARMS

RoHS Compliant Available

multicomp



- KIB-108, KIB-118 and KIB-128 Series
- Case material: Nylon
- Color: Black
- Operating temperature: -20°C to +80°C
- Storage temperature: -30°C to +90°C
- Frequency: 2.9 kHz
- KIB-78 Series
- Case material: ABS
- Color: Black
- Operating temperature: -20°C to +60°C
- Storage temperature: -30° to +70°C

KIB-108 Series

Mfg. Part No.	Operating Voltage	Rated Voltage	Current Rating (mA)	Sound Pressure Rate (dBA/30cm)	Tone	Stock No.	Price Each 1-99
● MC25159	1 - 28 VDC	24 VDC	15	85	Continuous	12P8499	3.12
KIB-118 SERIES							
● MC25161	4 - 28 VDC	24 VDC	22	80	Fast Pulse	12P8501	6.25
● MC25162	4 - 28 VDC	24 VDC	22	80	Slow Pulse	12P8502	6.33
● MC25165	4 - 50 VDC	48 VDC	15	90	Continuous	12P8505	4.95
KIB-128 SERIES							
● MC25166	30 - 120 VAC/DC	110 VAC/DC	10/10	85	Fast Pulse	12P8506	9.23
● MC25167	4 - 28 VAC/DC	24 VAC/DC	40/20	85	Fast Pulse	12P8507	9.42
● MC25168	30 - 120 VAC/DC	110 VAC/DC	10/10	80	Slow Pulse	12P8508	9.95
● MC25169	4 - 28 VAC/DC	24 VAC/DC	40/20	85	Slow Pulse	12P8509	9.42
● MC25170	30 - 120 VAC/DC	110 VAC/DC	20/20	90	Continuous	12P8510	8.27
● MC25171	60 - 250 VAC	240 VAC	20	90	Continuous	12P8511	8.52
KIB-78 SERIES							
● MC25174	1.5 - 28 VDC	24 VDC	20	95	Continuous	12P8514	2.97

(135956)

86MM LED AND XENON STROBE SIGNAL LIGHTS WITH BUZZER

RoHS Compliant Available

MENICS SIGNALTECHNOLOGY

Features
- Ultra bright LED or Xenon lights
- Wide light distribution with prism-cut dome-shaped lens
- Outstanding visibility at distance
- Selectable steady or flashing modes for LED lights
- PCB module style Xenon lamp
- Fast and easy replacement of lamp
- Ip65 rated

Specifications
- **MS86L/LED Steady/Flashing**
- Flash (strobe pulse) rate: 80 time/minute +/- 3%
- Sound level: 85dB max.
- Ambient temperature: -30°C to +40°C
- **MS86S/Xenon stobe**
- Flash (strobe pulse) rate: 60 time/minute +/- 3%
- Ambient temperature: -30°C to +40°C

LED STEADY AND FLASHING WITH BUZZER

Mfg. Part No.	Current (mA)	Voltage	Lens Color	Stock No.	Price Each
● MS86L-BFF-B	140	90-240VAC	Blue	26T4059	122.05
● MS86L-B02-B-B	140	24 VAC/VDC	Blue	26T4064	116.79
● MS86L-B02-G-B	140	24 VAC/VDC	Green	26T4066	116.79
● MS86L-B02-R-B	120	24 VAC/VDC	Red	26T4067	116.79
LED STEADY AND FLASHING					
● MS86L-FFF-C	140	90-240VAC	Transparent	26T4070	113.63
XENON STROBE					
● MS86S-N10-B	220	110VAC	Blue	26T4084	84.16
● MS86S-N10-C	220	110VAC	Transparent	26T4085	84.16

(194503)

ADAPTABEACON® FLASHING OR SINGLE SIGNAL INDICATORS

Edwards Signaling

50 and 51 series direct or ½" NPT conduit mounted. Flashing visual signal for indoor use (when used outdoor, base must be mounted below the dome). Features halogen bulb. Available with audible horn that is rated at 85dB @ 10 ft. Flasher is 6"dia. x 6" high.; flasher with horn is 6"dia. x 7⅜" high. UL listed. Strobes for light duty industrial applications. Single flashing strobes are available as strobe only and strobe with audible horn. Units with audible horn are rated at 85dB @ 10 ft. Can be mounted directly on a 4" octagonal box or ½" NPT conduit. For indoor and outdoor use, when used outdoors, units should be mounted vertically with dome up. 120VAC. UL listed and CSA certified.

51 Series w/Horn

FLASHING - LAMPS

Mfg. Part No.	Color	Voltage	Amps	Stock No.	Price Each Each	Price Each 2-5
50R-N5-40WH	Red	120VAC	0.3	92F6439	334.04	311.78
50A-N5-40WH	Amber	120VAC	0.3	83F4207	331.43	309.34
FLASHING LIGHTS WITH HORN						
51R-N5-40W	Red	120VAC	0.3	12C2475	359.52	335.55
51A-N5-40W	Amber	120VAC	0.3	92F6438	342.02	318.74
51R-G1	Red	24VDC	1.1	88F4948	365.02	340.68

(2966)

48XBRM SERIES XTRA-BRITE LED DUAL-MODE INDICATORS

Edwards Signaling

- Voltage rating: 24V DC or 120V AC
- Shatter resistant polycarbonate lens
- Available with gray base
- Len colors: amber, blue, green, red or clear lens
- Option for panel or conduit mounting
- Operating temperature: -31°F to 150°F (-35° to 66°C) operating temperature
- Dual-mode beacons: Steady-On or Flashing LED

The 48XBRM Series XTRA-BRITE™ LED beacons are well suited for areas with high ambient noise levels, especially where ear protection must be worn. These LED beacons are also ideal for high-vibration applications and areas where long lamp life is a must. 48XBRM LED beacons are "dual-mode" devices that ship from the factory in steady-on mode and can be readily transformed by changing the dipswitch setting to 65 FPM "flashing" mode.

Mfg. Part No.	Current (mA)	LED Colors	Base Color	Operating Voltage	Stock No.	Price Each
48XBRMA120A	108	Amber	Gray	120VAC	40T9998	353.04
48XBRMA24D	215	Amber	Gray	24VDC	40T9999	353.04
48XBRMB120A	108	Blue	Gray	120VAC	41T0001	368.93
48XBRMB24D	215	Blue	Gray	24VDC	41T0002	353.04
48XBRMG120A	108	Green	Gray	120VAC	41T0003	353.04
48XBRMG24D	215	Green	Gray	24VDC	41T0004	353.04
48XBRMR120A	108	Red	Gray	120VAC	41T0005	365.75
48XBRMR24D	215	Red	Gray	24VDC	41T0006	368.93

(195730)

125 CLASS BEACONS SIGNALING LIGHTS

Edwards Signaling

- Voltage rating: 24VDC, 120VAC
- Operating temperature: -35°C to 66°C
- Gray or black base
- Flashing or steady-on modes
- Len colors: amber, blue, green, red and white

The **125 Class** beacons can be mounted on ½" or ¾" NPT conduit using a ½" internal or ¾" external conduit hub that comes with the unit. It can also be panel-mounted using the mounting gasket provided with the unit. When panel-mounting the 125 class, the surface and construction details of the panel must be taken into consideration to ensure the integrity of the outdoor, NEMA 4X rating is fully maintained.

Mfg. Part No.	Current (mA)	LED Colors	Base Color	Operating Voltage	Stock No.	Price Each
HALOGEN BEACONS						
125HALFA120A	200	Amber	Gray	120VAC	40T9939	239.32
125HALFA24D	770	Amber	Gray	24VDC	40T9940	239.32
125HALFR120A	200	Red	Gray	120VAC	40T9941	237.25
125HALFR24D	770	Red	Gray	24VDC	40T9942	237.25
125HALSR120A	200	Red	Gray	120VAC	32T8913	162.87
STANDARD LED BEACONS						
125LEDFA120A	97	Amber	Gray	120VAC	40T9943	267.53
125LEDFA24D	60	Amber	Gray	24VDC	40T9944	263.50
125LEDFR120A	97	Red	Gray	120VAC	40T9945	265.23
125LEDFR24D	60	Red	Gray	24VDC	40T9946	265.23
125LEDSA120A	97	Amber	Gray	120VAC	40T9947	267.53
125LEDSR120A	97	Red	Gray	120VAC	26T4241	267.53
STROBE BEACONS						
125STRHA120A	120	Amber	Gray	120VAC	40T9948	214.52
125STRHR120A	120	Red	Gray	120VAC	40T9949	214.52
XTRA-BRITE LED BEACONS						
125XBRMA120A	108	Amber	Gray	120VAC	40T9958	373.95
125XBRMA120AB	108	Amber	Black	120VAC	40T9959	373.95
125XBRMA24D	215	Amber	Gray	24VDC	40T9960	373.95
125XBRMA24DB	215	Amber	Black	24VDC	40T9961	387.41
125XBRMB120A	108	Blue	Gray	120VAC	40T9962	373.95
125XBRMB120AB	108	Blue	Black	120VAC	40T9963	387.41
125XBRMB24D	215	Blue	Gray	24VDC	40T9964	373.95
125XBRMB24DB	215	Blue	Black	24VDC	40T9965	373.95
125XBRMG120A	108	Green	Gray	120VAC	40T9966	373.95
125XBRMG120AB	108	Green	Black	120VAC	40T9967	390.78
125XBRMG24D	215	Green	Gray	24VDC	40T9968	373.95
125XBRMG24DB	215	Green	Black	24VDC	40T9969	373.95
125XBRMR120A	108	Red	Gray	120VAC	40T9970	390.78
125XBRMR120AB	108	Red	Black	120VAC	40T9971	390.78
125XBRMR24D	215	Red	Gray	24VDC	40T9972	390.78
125XBRMR24DB	215	Red	Black	24VDC	40T9973	373.95
125XBRMW120A	108	White	Gray	120VAC	40T9974	390.78
125XBRMW120AB	108	White	Black	120VAC	40T9975	387.41
125XBRMW24D	215	White	Gray	24VDC	40T9976	373.95
125XBRMW24DB	215	White	Black	24VDC	40T9977	373.95
125XBRZA120A	108	Amber	Gray	120VAC	40T9978	373.95
125XBRZA120AB	108	Amber	Black	120VAC	40T9979	373.95
125XBRZA24D	215	Amber	Gray	24VDC	40T9980	373.95
125XBRZA24DB	215	Amber	Black	24VDC	40T9981	373.95

CONTINUED

125 CLASS BEACONS SIGNALING LIGHTS (CONT.)

XTRA-BRITE LED BEACONS

Mfg. Part No.	Current (mA)	LED Colors	Base Color	Operating Voltage	Stock No.	Price Each
125XBRZB120A	108	Blue	Gray	120VAC	40T9982	373.95
125XBRZB120AB	108	Blue	Black	120VAC	40T9983	373.95
125XBRZB24D	215	Blue	Gray	24VDC	40T9984	373.95
125XBRZB24DB	215	Blue	Black	24VDC	40T9985	373.95
125XBRZG120A	108	Green	Gray	120VAC	40T9986	373.95
125XBRZG120AB	108	Green	Black	120VAC	40T9987	373.95
125XBRZG24D	215	Green	Gray	24VDC	40T9988	373.95
125XBRZG24DB	215	Green	Black	24VDC	40T9989	373.95
125XBRZR120A	108	Red	Gray	120VAC	40T9990	373.95
125XBRZR120AB	108	Red	Black	120VAC	40T9991	373.95
125XBRZR24D	215	Red	Gray	24VDC	40T9992	373.95
125XBRZR24DB	215	Red	Black	24VDC	40T9993	373.95
125XBRZW120A	108	White	Gray	120VAC	40T9994	373.95
125XBRZW120AB	108	White	Black	120VAC	40T9995	373.95
125XBRZW24D	215	White	Gray	24VDC	40T9996	373.95
125XBRZW24DB	215	White	Black	24VDC	40T9997	373.95

(195727)

MACHINE RATED FOR ADVERSE LOCATION ADAPTABEACON® LIGHTS

Edwards Signaling

Light With Mounting Bracket

Light With Outlet Box Base

Light With Pipe Mount Base

Feature NEMA 4X and marine-rated enclosure when asembled in accordance with installation instructions. Mounting options include pipe mount, outlet box and mounting bracket. Steady-On and Flashing models are available with either a high intensity halogen bulb or a long life LED. Strobes are available with 300,000 peak candela or high intensity 800,000 peak candela output. Order light module and mounting base separately. UL listed for use in Class 1, Division 2, Groups A, B, C, and D, Class 2, Division 2, Groups F and G and Class 3 Hazardous Locations, CSA certified, CE marked. All types and voltages available in red and amber; *go online or call.*

105 SERIES LIGHT MODULES

Mfg. Part No.	Description	Color	VAC	Current (Amps)	Stock No.	Price Each
105SINHR-N5	Steady-on Halogen	Red	120VAC	0.2	48F3798	277.74
105FINHR-N5	Flashing Halogen	Red	120VAC	0.2	48F3800	318.70
105STA-N5	Strobe	Amber	120VAC	0.1	48F3803	370.59
105HISTR-N5	High-intensity Strobe	Red	120VAC	0.1	48F3804	514.04
105XBRM SERIES LED ADVERSE LOCATION VISUAL SIGNALS						
105XBRMA120A	Steady-On mode	Amber	120VAC	0.108	40T9931	407.79
105XBRMA24D	Steady-On mode	Amber	24VDC	0.215	40T9932	426.14
105XBRMB120A	Steady-On mode	Black	120VAC	0.108	40T9933	407.79
105XBRMB24D	Steady-On mode	Black	24VDC	0.215	40T9934	407.79
105XBRMG120A	Steady-On mode	Green	120VAC	0.108	40T9935	407.79
105XBRMG24D	Steady-On mode	Green	24VDC	0.215	40T9936	426.14
105XBRMR120A	Steady-On mode	Red	120VAC	0.108	32T4902	426.14
105XBRMR24D	Steady-On mode	Red	24VDC	0.215	40T9937	426.14
105XBRMW24D	Steady-On mode	White	24VDC	0.215	40T9938	407.79
MOUNTING ATTACHMENTS						
105PM	Pipe Mount Attachment				48F3806	42.07
105BX	Outlet Box Attachment				48F3807	57.05
105BM	Mounting Bracket (Use with 105BX)				41B8077	82.28

(33993)

ADAPTABEACON® ROTATING LIGHT

Edwards Signaling

- Weatherproof
- 75 Revolutions Per Minute

Applications include: outdoor security areas - to alert passersby of a change of conditions inside. Noisy areas indoors - to warn or communicate. Direct or ½" NPT conduit mounted. Bayonet socket for easy lamp replacement. Feature long-life halogen bulb. For indoor and outdoor use. Lens must face up when mounted in outdoor application. Dia. 6", height 8.5". UL listed to 120VAC, 60Hz. 240VAC also available.

52 SERIES ROTATING LIGHT

Mfg. Part No.	Color	Voltage	Current (Amps)	Stock No.	Price Each
52R-N5-40WH	Red	120VAC	0.35	41B8709	311.58
52A-N5-40WH	Amber	120VAC	0.35	41B8677	397.43

CONTINUED

ADAPTABEACON® ROTATING LIGHT (CONT.)

Mfg. Part No.	Color	Voltage	Current (Amps)	Stock No.	Price Each
52B-N5-40WH	Blue	120VAC	0.35	41B8680	294.35
52A-G5-20WH	Amber	24VAC	0.8	92F6432	340.76

(2962)

HARMONY® XVE BEACONS SIGNALING LIGHTS

RoHS Compliant Available

Schneider Electric

- Light source: integral LED, steady light signaling
- Diameter: 70mm
- Supply voltage: 24VDC
- Consumption: <25mA
- Illuminating power: 800cds/m²
- Operating temperature: -25°C to +55°C

Mfg. Part No.	Color	Stock No.	Price Each		
			Each	2-4	5-9
● XVEC2B4	Red	20K4808	97.33	93.25	87.93
● XVEC2B5	Orange	20K4809	97.33	93.25	87.93
● XVEC2B6	Blue	20K4810	97.33	93.25	87.93
● XVEC2B7	Clear	20K4811	91.82	87.97	82.95

(210226)

HARMONY® XVR ROTATING MIRROR BEACONS

RoHS Compliant Available

Schneider Electric

- Pre-wired with superbright LEDs for long-distance visual signaling
- IP 23 rated degree of protection
- Rated impulse withstand voltage: 0.8kV
- Flashing frequency: 2.3Hz
- Sound level (continuous or intermittent tone) at 1m: 50..90dB
- Operating temperature: -10°C to +50°C

PRE-WIRED ROTATING MIRROR BEACONS — WITHOUT BUZZER

Mfg. Part No.	Lens Dia. (mm)	External Height (mm)	Supply Voltage (V)	Current Consumption (mA)	Color	Stock No.	Price Each 1-9
● XVR08B04	84	134	24	3	Red	09P7691	218.92
● XVR08B05	84	134	24	3	Orange	09P7692	209.49
● XVR08B06	84	134	24	3	Blue	09P7693	209.49
● XVR10J06	106	155	12	3	Blue	09P7705	240.92
● XVR10B04	106	155	24	3	Red	09P7699	240.92
● XVR10B06	106	155	24	3	Blue	09P7701	240.92
PRE-WIRED ROTATING MIRROR BEACONS — WITH BUZZER							
● XVR12B04S	120	150	24	4.7	Red	09P7709	258.36

(210225)

EZ-LIGHT™ TL50 LED TOWER LIGHTS

RoHS Compliant Available

BANNER® more sensors, more solutions

- High Brightness LED for excellent visibility
- Beacon Tower Lights are great for brightly lit or outdoor locations
- Rugged, cost-effective and easy-to- install
- Thousands of combinations available via Banner's Tower Light Configurator
- Many Audible varieties available, up to 99db
- 10 LED colors in gray or black housing
- AC and DC models
- Versatile mounting options

TL50 TOWER LIGHTS DC

Mfg. Part No.	LED Color	Audible	Connection	IP Rating	Stock No.	Price Each
TL50R	Red	...	2 m (6.5 ft) cable	IP67	31T7494	65.00
● TL50RQ	Red	...	4 -pin Euro Q.D.	IP67	10R5356	75.79
● TL50GRQ	Green, Red	...	4 -pin Euro Q.D.	IP67	10R5353	86.90
● TL50GYR	Green, Yellow, Red	...	2 m (6.5 ft) cable	IP67	31T7379	125.30
● TL50GYRQ	Green, Yellow, Red	...	4 -pin Euro Q.D.	IP67	67P3709	125.30
● TL50BGYRQ	Blue, Green, Yellow, Red	...	5 -pin Euro Q.D.	IP67	10R5351	159.78
● TL50WBGYRQ	White, Blue, Green, Yellow, Red	...	8 -pin Euro Q.D.	IP67	10R5357	207.90
● TL50HGYR	High Brightness Green, Yellow, Red	...	2 m (6.5 ft) cable	IP67	31T7442	174.35

➤CONTINUED➤

EZ-LIGHT™ TL50 LED TOWER LIGHTS (CONT.)

Mfg. Part No.	LED Color	Audible	Connection	IP Rating	Stock No.	Price Each
● TL50HGYRQ	High Brightness Green, Yellow, Red	...	4 -pin Euro Q.D.	IP67	31T7459	177.02
● TL50HBGYRQ	High Brightness Blue, Green, Yellow, Red	...	5 -pin Euro Q.D.	IP67	84R4174	218.90
TL50 AUDIBLE TOWER LIGHTS DC						
TL50GYRA	Green, Yellow, Red	Audible Alarm	2 m (6.5 ft) cable	IP50	31T7380	145.00
● TL50GYRALSQ	Green, Yellow, Red	Sealed Loud IP67	5 -pin Euro Q.D.	IP67	31T7388	178.17
● TL50HGYRAQ	High Brightness Green, Yellow, Red	Audible Alarm	5 -pin Euro Q.D.	IP50	31T7453	218.40
● TL50HGYRALSQ	High Brightness Green, Yellow, Red	Sealed Loud	5 -pin Euro Q.D.	IP67	31T7451	220.00
TL50 BEACON TOWER LIGHTS DC						
● TL50BLGYRQ	Green, Yellow, Red	...	4 -pin Euro Q.D.	IP67	94T4507	202.40
● TL50BLGY1R2Q	Green, Steady Yellow, Flash Red Rotate	...	4 -pin Euro Q.D.	IP67	65W9876	202.40
● TL50BLRYGALSQ	Red, Yellow, Green	Sealed Loud	5 -pin Euro Q.D.	IP67	65W9923	253.00
TL50 TOWER LIGHTS AC						
● TL50ZGYR	Green, Yellow, Red	...	2 m (6.5 ft) cable	IP67	72W3085	181.98
● TL50ZGYRQ	Green, Yellow, Red	...	4 -pin Euro Q.D.	IP67	72W3089	174.90
● TL50ZGYRA	Green, Yellow, Red	Audible Alarm	2 m (6.5 ft) cable	IP50	72W3086	214.50
● TL50ZGYRAQ	Green, Yellow, Red	Audible Alarm	5 -pin Euro Q.D.	IP50	72W3088	214.50
● TL50ZGYRALSQ	Green, Yellow, Red	Sealed Loud	5 -pin Euro Q.D.	IP67	72W3087	235.65

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EZ-LIGHT™ CL50 COLUMN LIGHTS

BANNER® more sensors, more solutions

- Illuminated light provides easy-to-see operator guidance and indication of equipment status
- 1, 2, or 3 color models available
- Compact devices are completely self-contained — no controller needed
- Immune to EMI and RFI interference
- 4-pin Euro integral QD connection
- 18 to 30VDC operation
- No assembly required

Mfg. Part No.	LED Color	Input	Stock No.	Price Each 1-2
● CL50GXXNQ	Green	NPN	10R5315	70.40
● CL50GXXPQ	Green	PNP	10R5316	74.62
● CL50XRXNQ	Red	NPN	10R5319	74.62
● CL50XRXPQ	Red	PNP	10R5320	74.62
● CL50GRXNQ	Green / Red	NPN	10R5307	91.30
● CL50GRXPQ	Green / Red	PNP	10R5308	91.30
● CL50GRYNQ	Green / Red / Yellow	NPN	10R5311	116.10
● CL50GRYPQ	Green / Red / Yellow	PNP	10R5312	116.10

(148659)

ECONOMY MACHINE STATUS INDICATOR

Edwards Signaling

- 3 High Preassembled Units
- Flashing or Steady-On
- Pipe Mount or Surface Mount
- PLC Compatible

Pipe Mount Surface Mount

➤CONTINUED➤

ECONOMY MACHINE STATUS INDICATOR (CONT.)

113 series Machlight® Stacklights are designed for machine and process control multi-status indication. Units have diffusion frensel lenses for wide area visibility. Lenses can be rearranged to suit your application. Surface mount units include mounting hardware. Pipe mount units include 10″ (254) mounting pole with hardware for mounting to horizontal surfaces. 8″ (203) wire leads.

PIPE MOUNT STACKLIGHT (RED, GREEN, AMBER)

Mfg. Part No.	Light Source	Operating Voltage	Stock No.	Price Each
113FP-RGA-AQ	Flashing	24VAC/DC	22H5028	80.36
113FP-RGA-N5	Flashing	120VAC	22H5029	80.36
113SP-RGA-AQ	Steady-On	24VAC/DC	22H5033	51.60
113SP-RGA-N5	Steady-On	120VAC	22H5034	51.60
SURFACE MOUNT STACKLIGHT (RED, GREEN, AMBER)				
113SS-RGA-AQ	Steady-On	24VAC/DC	22H5035	51.60
113SS-RGA-N5	Steady-On	120VAC	22H5036	51.60

(75414)

LED SIGNALIGHT TOWERS — LD6A

CE c UL us RoHS Compliant Available IDEC

Frame Mount | Wall Mount | Direct Mount | Pole Mount | L-Shaped Bracket | Clear Lens

Unique Striped Design Improves Visibility

- The striped design with non-illuminated area between the lenses, along with built-in super bright LEDs, reduce light disturbance to make the illuminated color really stand out.
- Unique oval lens shape enables high-visibility from different directions.
- Five different mounting styles available; frame mount, wall mount, direct mount and pole mount (round or L-shaped bracket). Facilitates mounting in unusual or difficult locations.
- Clear lens models available to clearly distinguish between illuminated and non-illuminated lenses.
- Custom configuration is possible.
- Flashing cycle: 1.75 Hz (approx. 105 flashes per second). Conforms to international standard IEC 60073.
- Ergonomically designed alarm sound (3.3 kHz, 2 different sounds) spreads 360 degrees. Adjustable volume (70 to 90 dB).
- Degree of protection: IP65 Steady units and IP54 Flashing units (using frame, wall, direct and pole mount with round base), IP23 Steady and Flashing units using pole mount with L-shaped bracket.

FRAME MOUNT

Mfg. Part No.	Color	Stock No.	Price Each 1-4
LD6A-1GQB-R	Red	72R4834	134.07
LD6A-2GQB-RG	Red/Green	72R4839	150.83
LD6A-3GQB-RYG	Red/Yellow/Green	72R4844	175.12
LD6A-5GQB-RYSGW	Red/Yellow/Blue/Green/White	72R4849	268.52
WALL MOUNT			
LD6A-1WQB-R	Red	72R4837	122.90
LD6A-2WQB-RG	Red/Green	72R4842	145.94
LD6A-3WQB-RYG	Red/Yellow/Green	72R4847	163.45
LD6A-5WQB-RYSGW	Red/Yellow/Blue/Green/White	72R4852	256.85
DIRECT MOUNT			
LD6A-1DQB-R	Red	72R4833	106.58
LD6A-2DQB-RG	Red/Green	72R4838	117.32
LD6A-3DQB-RYG	Red/Yellow/Green	72R4843	141.92
LD6A-5DQB-RYSGW	Red/Yellow/Blue/Green/White	72R4848	233.49
POLE MOUNT ROUND BASE			
LD6A-1PQB-R	Red	72R4836	145.24
LD6A-2PQB-RG	Red/Green	72R4841	169.30
LD6A-3PQB-RYG	Red/Yellow/Green	72R4846	178.76
LD6A-5PQB-RYSGW	Red/Yellow/Blue/Green/White	72R4851	280.20
POLE MOUNT WITH L-SHAPED BRACKET			
LD6A-1KQB-R	Red	72R4835	145.24
LD6A-2KQB-RG	Red/Green	72R4840	162.01
LD6A-3KQB-RYG	Red/Yellow/Green	72R4845	178.76
LD6A-5KQB-RYSGW	Red/Yellow/Blue/Green/White	72R4850	268.13

1. Above part numbers are with black base. White base available. Change B to W in part number. 2. Clear lens type also available. Specify "C" after the LED color code. Example: LD6A-5GQW-RYSGW => LD6A-5GQW-RYSGWC

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SIGNALIGHT™ TOWERS

c UL us RoHS Compliant Available IDEC

- Provides 360° illumination of status or alarm conditions
- Units can be either base or pole mounted
- Flashing or steady lights
- Vibration-resistant bulbs, up to 10W, provide 2,000 hours of life
- Vibration and shock damping base
- Bases are available in metal or plastic
- Color-coded wires make assembly and wiring easy
- Heat and shock-resistant polycarbonate lenses

Pole Mount Unit | Pole Unit | Pole/Mounting Base | Lamps | Lens Covers | LEDs

SignaLight™ towers offer 360° of indication illumination for reporting the status of automated machinery. Easy to assemble and disassemble. Available in 120VAC or 24VAC/DC. Build up to five tiers in five different color heat-and shock-resistant polycarbonate lenses (red, green, blue, yellow, and white). Choose from either steady or flashing lights and metallic or plastic bases. Lamp type: T-20; lamp base: BA15D. Prism-cut globe increases signal visibility. Built-in vibration/shock absorber, color-coded wires. Dimensions: each tier = 2.75H x 2.20″W (70 x 56). UL and cUL listed.

To build a complete SignaLight unit, pick: 1) Base unit + 2) Top cap + 3) Lenses + 4) Lamps + 5) Optional Pole unit for pole mounting and optional pole mounting base

1 tier = 6.7″ (170), 2 = 9.4″ (240), 3 = 12.2″ (310), 4 = 14.9″ (380), 5 = 17.7″ (450).

BASE UNITS

Mfg. Part No.	Tiers	Voltage	Lamp Type	Power (W)	Base	Stock No.	Price Each 1-4	Price Each 5-9
LT1A-0115M	1	120VAC	Steady	7	Metallic	52F7394	95.54	90.49
LT1A-0125M	2	120VAC	Steady	7	Metallic	52F7395	100.36	95.05
LT1A-0135M	3	120VAC	Steady	7	Metallic	52F7396	104.05	98.54
LT1A-0145M	4	120VAC	Steady	7	Metallic	52F7397	122.12	115.12
LT1A-0155M	5	120VAC	Steady	7	Metallic	52F7398	121.63	115.19
LT1A-0115P	1	120VAC	Steady	7	Plastic	52F7399	69.46	65.79
LT1A-0135P	3	120VAC	Steady	7	Plastic	52F7401	77.97	73.84
LT1D-0135P	3	120VAC	Flashing	7	Plastic	52F7411	138.07	130.76
LT1D-0132P	3	24VAC/DC	Flashing	10	Plastic	52F7415	138.07	130.76

LENSES

Mfg. Part No.	Color	Stock No.	Price Each 1-4	Price Each 5-9
LT1X-08R	Red	52F7418	11.85	11.16
LT1X-08Y	Yellow	52F7419	11.85	11.16
LT1X-08W	White	52F7420	12.44	11.72
LT1X-08S	Blue	52F7421	11.85	11.16

LAMPS

Mfg. Part No.	Voltage	Power (W)	Stock No.	Price Each 1-4	Price Each 5-9
B5-1	120VAC	7	52F7424	3.83	3.66
B5-31	30VAC/DC	7	52F7425	3.72	3.57

REPLACEMENT LEDs

Also available in blue and white; *go online or call.*

Mfg. Part No.	Voltage	Color	Stock No.	Price Each 1-24	Price Each 25-49
LTXD-2R	24VAC/DC	Red	66M8450	84.00	78.72
LTXD-2G	24VAC/DC	Green	91F5713	90.17	84.63
LTXD-2Y	24VAC/DC	Yellow	91F5717	90.17	84.63
LTXD-120G	120VAC	Green	91F5718	90.17	84.63
LTXD-120R	120VAC	Red	91F5719	90.17	84.63

MOUNTING ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10-24
LT1Z-10	Mounting Pole	19P2752	25.20	22.44
LT1X-06	Top Cap	66M8451	8.63	8.14

(3035)

STACKABLE LIGHT TOWERS

RoHS Compliant Available

IDEC

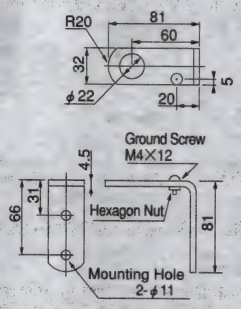
Base Unit w/Caps

5 Stack Lights

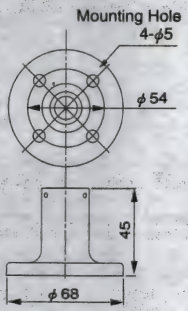
Removable LED Lens Modules

Color-Coded Wiring Terminals

- Lead-free design
- IP65 environment protection, NEMA, 4, 4X, 13
- 70mm diameter
- Ultra bright LEDs
- Unique contact design ensures longer life
- Fast and easy assembly
- Optional adjustable audible alarm
- Color-coded wiring terminals
- Ten modular components with 5 lens colors and 5 base units
- LED strobe modules available (pulses 77 times per minute)



Mounting Bracket Dimensions



Base Dimensions

The **LT7** light tower combines LED technology with modular-style assembly. This enables the towers to meet extensive requirements seen in most status-indicating applications. The design uses 6 modular components to make a five color tower, complete with alarm and flashing functions. Using the brightest LEDs in the **LT7** product range provides brilliant illumination for all lens colors. The prism cut design enhances the brightness and ensures outstanding levels of visibility from any direction or distance. Height (mm): 1 light 211, 2 lights 252, 3 lights 293, 4 lights 334, 5 lights 375. Strobe LED lens modules work with 24VAC/DC base units and pulse at 77 times per minute.

BASE UNITS (INCLUDING CAPS)

Mfg. Part No.	Description	Voltage	Alarm	Stock No.	Price Each 1-2	Price Each 3-4
● LT7B-D24FB	Flashing/Buzzer	24VDC	Alarm 1, Alarm 2*	35K5656	215.75	202.50
● LT7B-A250FB	Flashing/Buzzer	90-250VAC	Alarm 1, Alarm 2*	35K5654	277.19	260.15
● LT7B-D24	Steady Light	24VDC	...	35K5655	89.36	83.87
● LT7B-A250	Steady Light	90-250VAC	...	35K5653	151.93	142.59

* Alarm1 = Continuous sound; Alarm 2 = Intermittent sound

LED MODULES

Mfg. Part No.	Color	Stock No.	Price Each 1-2	Price Each 3-4	Price Each 5-9
● LT7A-LY	Lemon Yellow	82K9236	63.45	59.55	56.72
● LT7A-Y	Amber Yellow	35K5652	63.45	59.55	56.72
● LT7A-R	Red	19P2754	62.73	58.88	56.08
● LT7A-G	Green	35K5649	63.45	59.55	56.72
● LT7A-S	Blue	35K5651	63.45	59.55	56.72
● LT7A-C	White/Clear	35K5648	63.45	59.55	56.72

STROBE LED UNITS

Mfg. Part No.	Color	Stock No.	Price Each 1-2	Price Each 3-4	Price Each 5-9
● LT7A-XE-C	White	82K9237	174.91	166.78	157.62
● LT7A-XE-G	Green	82K9238	174.91	166.78	157.62
● LT7A-XE-R	Red	82K9239	174.91	166.78	157.62
● LT7A-XE-S	Blue	82K9240	174.91	166.78	157.62
● LT7A-XE-Y	Amber	82K9241	174.91	166.78	157.62

POLES

Mfg. Part No.	Description	Stock No.	Price Each 1-2
● LT9Z-7L	Pole with L-angle Bracket, Length 313mm, Dia. 70mm	35K5657	64.77
● LT9Z-7T	Pole with Base-mount Bracket, Length 323mm, Dia. 70mm	35K5658	61.10

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-2	Price Each 3-4	Price Each 5-9
● LT9Z-SZ020	Wall mounting bracket for LT7 pole units	82K9243	36.05	34.41	32.57
● LT9Z-SZ50NPT	1/2 inch NPT aluminum adapter bracket for LT7	82K9244	60.07	57.34	54.27

(84928)

EXPLOSION SAFE LED SIGNAL TOWERS - AR70 SERIES

RoHS Compliant Available

PATLITE

- 40mm diameter
- Explosion-safe for gas and dust
- Suitable for Zone 2 and Zone 22
- CE Compliance according to ATEX 94/9/EC & EMC 2004/108/EC
- Rated Voltage: 24VDC & 24VAC
- Available with continuous only or flashing and 2-alarm versions
- Protection: IP65 (IP54 with buzzer)
- Wall or direct mount

Explosion-safe signal lights feature an LED light that is versatile and energy-efficient. The vertical and horizontal cut lenses in combination with a double-reflection system enhances the LED light diffusion to create a unique, full and brilliant light. The lenses and main body are made of strong synthetic materials with characteristics to withstand harsh environments. The Signal Light can be ordered in any combination from 1 to 5 LED units with any color combination. In addition to its "continuous lighting" condition, the Signal Light can also be ordered with flashing / non-flashing functions, as well as with two super-loud alarm sounds with an 85dB (at 1m) output.

CONTINUOUS LIGHTING ONLY

Mfg. Part No.	No. of Lights	Color	Stock No.	Price Each 1-4
● AR-070-011-1-R	1	Red	89T2323	583.54
● AR-070-011-2-RG	2	Red, Green	89T2324	604.62
● AR-070-011-3-RYG	3	Red, Amber, Green	89T2325	633.48
● AR-070-011-4-RYGB	4	Red, Amber, Green, Blue	89T2326	662.34
● AR-070-011-5-RYGBC	5	Red / Amber / Green / Blue / Clear	89T2327	691.20

CONTINUOUS / FLASHING LIGHTING AND TWO AUDIBLE

● AR-070-021-1-R	1	Red	89T2328	777.00
● AR-070-021-2-RG	2	Red, Green	89T2329	806.64
● AR-070-021-3-RYG	3	Red, Amber, Green	89T2330	835.50
● AR-070-021-4-RYGB	4	Red, Amber, Green, Blue	89T2331	864.36
● AR-070-021-5-RYGBC	5	Red / Amber / Green / Blue / Clear	89T2332	893.22

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EXPLOSION SAFE LED SIGNAL TOWERS - AR78 SERIES

RoHS Compliant Available

PATLITE

- 60mm diameter
- Explosion-safe for gas and dust
- Suitable for Zone 2 and Zone 22
- CE Compliance according to ATEX 94/9/EC & EMC 2004/108/EC
- Rated Voltage: 24VDC
- Available with continuous only or flashing and 2-alarm versions
- Optional ¾" NPT Bracket
- Protection: IP65 (IP54 with buzzer)
- Wall or direct mount

Explosion-safe signal lights feature an LED light that is versatile and energy-efficient. The vertical and horizontal cut lenses in combination with a double-reflection system enhances the LED light diffusion to create a unique, full and brilliant light. The lenses and main body are made of strong synthetic materials with characteristics to withstand harsh environments. The Signal Light can be ordered in any combination from 1 to 5 LED units with any color combination. In addition to its "continuous lighting" condition, the Signal Light can also be ordered with flashing / non-flashing functions, as well as with two super-loud alarm sounds with an 90dB (at 1m) output.

CONTINUOUS LIGHTING ONLY

Mfg. Part No.	No. of Lights	Color	Stock No.	Price Each 1-2
● AR-078-011-1-R	1	Red	89T2343	816.77
● AR-078-011-2-RG	2	Red, Green	89T2345	847.62
● AR-078-011-3-RYG	3	Red, Amber, Green	89T2347	879.94
● AR-078-011-4-RYGB	4	Red, Amber, Green, Blue	89T2349	906.44
● AR-078-011-5-RYGBC	5	Red / Amber / Green / Blue / Clear	89T2351	952.40

CONTINUOUS LIGHTING ONLY W/ 3/4" NPT BRACKET

● AR-078-011-1N-R	1	Red	89T2344	889.20
● AR-078-011-2N-RG	2	Red, Green	89T2346	919.36
● AR-078-011-3N-RYG	3	Red, Amber, Green	89T2348	950.97
● AR-078-011-4N-RYGB	4	Red, Amber, Green, Blue	89T2350	996.94
● AR-078-011-5N-RYGBC	5	Red / Amber / Green / Blue / Clear	89T2352	1042.90

CONTINUOUS / FLASHING LIGHTING AND TWO AUDIBLE

● AR-078-021-1-R	1	Red	89T2353	906.44
● AR-078-021-2-RG	2	Red, Green	89T2355	936.60
● AR-078-021-3-RYG	3	Red, Amber, Green	89T2357	968.21
● AR-078-021-4-RYGB	4	Red, Amber, Green, Blue	89T2359	982.57
● AR-078-021-5-RYGBC	5	Red / Amber / Green / Blue / Clear	89T2361	1028.54

CONTINUOUS / FLASHING LIGHTING AND TWO AUDIBLE W/ 3/4" NPT BRACKET

● AR-078-021-1N-R	1	Red	89T2354	996.94
● AR-078-021-2N-RG	2	Red, Green	89T2356	1027.10
● AR-078-021-3N-RYG	3	Red, Amber, Green	89T2358	1058.70
● AR-078-021-4N-RYGB	4	Red, Amber, Green, Blue	89T2360	1073.07
● AR-078-021-5N-RYGBC	5	Red / Amber / Green / Blue / Clear	89T2362	1119.04

(203445)

EXPLOSION-SAFE ALARM/ MELODY & VOICE HYBRID ANNUNCIATOR - LKEH-EXN SERIES

RoHS Compliant Available

PATLITE

- 40mm diameter
- Explosion-safe for gas and dust
- Suitable for Zone 2 and Zone 22
- CE Compliance according to ATEX 94/9/EC & EMC 2004/108/EC
- Rated Voltage: 24VDC
- CE Compliance according to ATEX
- LKEH-FE: 32 built-in sounds; LKEH-FV: Field programmable w/MP3 files with SD card (sold separately)
- Up to 63 sec. @ 64kbps
- Adjustable volume from 0dB to 104 dB
- Protection: IP65
- Wall or FLUSH mount

SOUND SELECTION CHART

32 sounds are pre-recorded in one unit. 4 sound types are available.
8 sounds can be played back by a bit input and 32 sounds by binary input.

Beep	Stutter + Bell	Inverted Revelle	Annie Laurie
Stutter	Synthesized Melody	Galactic Motor	London Bridge
Bell	Chime	Ringing Phone	Mary's Lamb
Yelp	Call Sign	Two Tone	Camptown Races
Rapid Hi Lo	Train Ride	Alarm Clock	Amaryllis
Melody Chime	Galloping Hi Lo	Ringing Hi Lo	Symphony #40
Synthesized Piano	Alien Chatter	Fur Elise	Ave Maria
Synthesized Bell	Falling Crystals	Minuet	Grandfather's Clock

ALARM/MELODY HYBRID ANNUNCIATOR - FLUSH MOUNT

Mfg. Part No.	No. of Lights	Possible Colors	Stock No.	Price Each 1-4
LKEH-102FE-F/EXN	1	Red, Amber, Green, Blue	89T2140	1745.35
LKEH-202FE-F/EXN	2		89T2144	1904.80
LKEH-302FE-F/EXN	3		89T2148	2062.82
LKEH-402FE-F/EXN	4		89T2152	2555.54
ALARM/MELODY HYBRID ANNUNCIATOR - WALL MOUNT				
LKEH-102FE-W/EXN	1	Red, Amber, Green, Blue	89T2141	1775.52
LKEH-202FE-W/EXN	2		89T2145	1934.97
LKEH-302FE-W/EXN	3		89T2149	2092.98
LKEH-402FE-W/EXN	4		89T2153	2585.70
VOICE HYBRID ANNUNCIATOR - FLUSH MOUNT				
LKEH-102FV-F/EXN	1	Red, Amber, Green, Blue	89T2142	1893.31
LKEH-202FV-F/EXN	2		89T2146	2034.09
LKEH-302FV-F/EXN	3		89T2150	2176.30
LKEH-402FV-F/EXN	4		89T2154	2613.00
VOICE HYBRID ANNUNCIATOR - WALL MOUNT				
LKEH-102FV-W/EXN	1	Red, Amber, Green, Blue	89T2143	1923.48
LKEH-202FV-W/EXN	2		89T2147	2064.25
LKEH-302FV-W/EXN	3		89T2151	2206.47
LKEH-402FV-W/EXN	4		89T2155	2643.16

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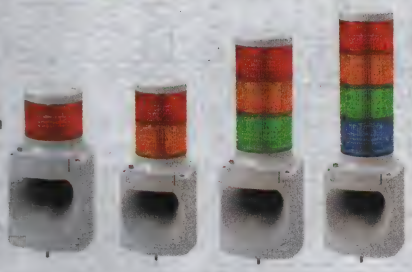
LKEH MP3 COMPATIBLE ANNUNCIATOR LED SIGNAL LIGHTS

RoHS Compliant Available

PATLITE



- 100mm-Diameter
- Field Programmable with SD Card (not included) & MP3 files
- Message capacity is up to 64 seconds (64kbit/s) with 4 channels
- Adjust the volume from 0db (at 1m) to 105db (at 1m) to fit various environments
- Smooth LED Lens Surface to make it more difficult for debris to collect
- LKEH-FE series has 32 pre-recorded sounds with 8 channels in one unit
- LKEH-FV series record up to 64 seconds (64kbit/s) with 4 channels
- CE, RoHS, IP53, (UL, c-UL pending)

DIRECT MOUNT CONTINUOUS & FLASHING LED SIGNAL LIGHTS - 32 AUDIBLE ALARMS

Mfg. Part No.	Lights	Voltage	Color	Stock No.	Price Each 1-2
LKEH-102FE-R	1	24V AC/DC	Red	10R5285	736.79
LKEH-202FE-RG	2	24V AC/DC	Red, Green	10R5287	827.05
LKEH-202FE-RY	2	24V AC/DC	Red, Yellow	10R5288	827.05
LKEH-302FE-RYG	3	24V AC/DC	Red, Yellow, Green	10R5291	978.36
LKEH-402FE-RYGB	4	24V AC/DC	Red, Yellow, Green, Blue	10R5293	1476.35

CONTINUED

LKEH MP3 COMPATIBLE ANNUNCIATOR LED SIGNAL LIGHTS (CONT.)

DIRECT MOUNT CONTINUOUS & FLASHING LED SIGNAL LIGHTS - MP3 MESSAGE CAPABILITY

Mfg. Part No.	Lights	Voltage	Color	Stock No.	Price Each 1-2
LKEH-102FV-R	1	24V AC/DC	Red	10R5286	860.13
LKEH-202FV-RG	2	24V AC/DC	Red, Green	10R5289	934.29
LKEH-202FV-RY	2	24V AC/DC	Red, Yellow	10R5290	934.29
LKEH-302FV-RYG	3	24V AC/DC	Red, Yellow, Green	10R5292	1075.31
LKEH-402FV-RYGB	4	24V AC/DC	Red, Yellow, Green, Blue	10R5294	1385.69

(148590)

LU7 SERIES MODULAR SYSTEM INDICATING LIGHT

RoHS Compliant Available

PATLITE

- Easy to assemble, no tools required
- LED's for longer life
- Size: 70mm diameter
- NPN or PNP open collector compatible
- Meets IP-65

FB type, two selectable single-tone alarms, one intermittent and one continuous, with adjustable volume to 90dB (at 1 m), and light has 60 flashes per minute. Unique contact in each color segment connects with a single twisting motion. Easy, hand-free assembly. Easy power/control wiring with spring-loaded terminal block. Pole mount options available, SZ-50L, SZ-50T. NEMA type 4, 4x, 13.

BASE MODULE (INCLUDING CAP)

Mfg. Part No.	Rated Voltage	Alarm/Flash	Stock No.	Price Each 1-4
LU7-02	24 VDC	Continuous Light	97H2734	76.69
LU7-02FB	24 VDC	2 Alarms/Flash	09J4672	138.05

LED MODULE

Mfg. Part No.	Color	Stock No.	Price Each 1-4
LU7-E-B	Blue	09J4667	63.73
LU7-E-G	Green	09J4669	58.48
LU7-E-R	Red	96H9680	57.95
LU7-E-Y	Yellow	96H9683	58.60
LED STROBE MODULE			
LU7-XE-R	Red	47M0743	85.96
LU7-XE-Y	Yellow	21M6493	85.96
LU7-XE-G	Green	21T9773	85.96
LU7-XE-B	Blue	21M6492	108.71
LU7-XE-C	Clear	21M6491	108.71

(80285)

LME SERIES INDICATING LIGHTS

RoHS Compliant Available

PATLITE

The **LME series** is 60mm in diameter and used a patented LED reflection system which increases the intensity of the light. Available in a continuous version (**LME**) and a continuous with flashing and buzzer (2) (**LME-FB**). The LME signal tower meets IP-65 and **LME-FB** meets IP-54. It comes with a 300mm aluminum pole with a flange type mounting bracket. Mounting brackets available on this page. UL listed. CE certified. Canadian UL listed. Other mounting option available, go online or call. Available in other color combinations.

CONTINUOUS LIGHT

Mfg. Part No.	Lights	Colors	Voltage	Mount	Stock No.	Price Each 1-4
LME-102-R	1	Red	24V AC/DC	Pole	50M0705	154.00
LME-112-R	1	Red	120VAC	Pole	07H2227	214.04
LME-202-RG	2	Red, Green	24V AC/DC	Pole	40T8742	188.14
LME-302-RYG	3	Red, Yellow, Green	24V AC/DC	Pole	07H2247	227.89
CONTINUOUS OR FLASHING LIGHT WITH AUDIBLE ALARM						
LME-102FB-R	1	Red	24V AC/DC	Pole	41M6956	215.28
LME-302FBW-RYG	3	Red, Yellow, Green	24V AC/DC	Direct	07H2246	264.03
LME-302FB-RYG	3	Red, Yellow, Green	24V AC/DC	Pole	29M7450	299.70
LME-312FBW-RYG	3	Red, Yellow, Green	120VAC	Direct	72M5810	300.77
LME-412FBW-RYGB	4	Red, Yellow, Green, Blue	120VAC	Direct	11N7684	355.22
LME-412FB-RYGB	4	Red, Yellow, Green, Blue	120VAC	Pole	75M9463	387.51

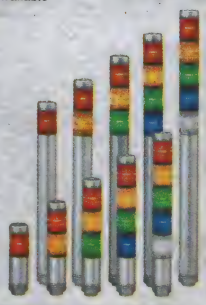
(74189)

SIGNALING – STACKLIGHTS

MP/MPS SERIES 30MM LED TOWER

RoHS Compliant Available

PATLITE



Slim LED tower with silver-colored body and a compact design at 30mm (1¼-inch) diameter. Direct mount only: includes M22 mounting nut and sealing gasket. Pre-assembled, pre-wired, interchangeable and stackable after purchase, 1-5 modules can be stacked. Control options include Dry contact closure such as switches or relay contacts, open-collector transistor (NPN or PNP) for DC24V, or direct voltage control. Input voltage 24 V AC/DC, IP65 protection rating. Two body lengths, 400mm (MP) and 220mm (MPS)

MP SERIES LED INDICATING LIGHTS

Mfg. Part No.	Lights	Color	Voltage	Stock No.	Price Each 1-4
MP-202-RG	2	Red, Green	24V AC/DC	08N3417	178.10
MP-502-RYGBC	5	Red, Yellow, Green, Blue, Clear	24V AC/DC	08N3420	297.89
MPS SERIES LED INDICATING LIGHTS					
MPS-202-RG	2	Red, Green	24V AC/DC	08N3422	171.92
MPS-302-RYG	3	Red, Yellow, Green	24V AC/DC	71M0339	229.05
MPS-402-RYGB	4	Red, Yellow, Green, Blue	24V AC/DC	96K2949	264.83

(115576)

MOUNTING BRACKETS

RoHS Compliant Available

PATLITE

SZ-010

SZ-011

SZ-017

SZ-903

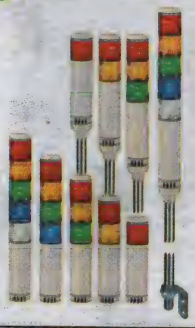
Mfg. Part No.	Product Used For	Pole Diameter (mm)	Stock No.	Price Each 1-4
SZ-010	LME, LCE*, ME*	22	07H2310	44.99
SZ-011	LCE	17	07H2311	41.53
SZ-017	LME, LCE*, ME*	22	07H2313	45.51
SZ-903	LCE, ME	...	07H2314	28.07
SZ-50T	LH	22	40P3355	106.76

*Requires SZ-903 Adapter. *Visit us online for other mounting brackets or accessories.*
(74192)

LCE SERIES INDICATING LIGHTS

RoHS Compliant Available

PATLITE



LCE series LED signal towers are 40mm in diameter, operate in a continuous light mode. **LCE-FB series** have continuous and flashing lights plus audible alarm. Super-bright LEDs provide an average of 100,000 hours of reliable, maintenance-free operation. Meets IP-65 for **LCE series** and IP-54 for **LCE-FB series.** Includes 300mm chrome-plated steel pole and side mounting bracket. Available in pole mount and direct mount styles. Mounting brackets available *on this page.* Other mounting options available, *go online or call.*

CONTINUOUS LIGHT

Mfg. Part No.	Lights	Colors	Voltage	Mount	Stock No.	Price Each 1-4
LCE-102W-R	1	Red	24V AC/DC	Direct	66M7585	110.45
LCE-102-R	1	Red	24V AC/DC	Pole	40T8726	129.50
LCE-202W-RG	2	Red, Green	24V AC/DC	Direct	21J7583	138.71
LCE-202-RG	2	Red, Green	24V AC/DC	Pole	46M2930	171.97
LCE-302W-RYG	3	Red, Yellow, Green	24V AC/DC	Direct	47M0715	164.42
LCE-302-RYG	3	Red, Yellow, Green	24V AC/DC	Pole	46M2966	199.12
LCE-3M2-RYG	3	Red, Yellow, Green	90-250VAC	Pole	88M3297	240.40
LCE-402W-RYGB	4	Red, Yellow, Green, Blue	24V AC/DC	Direct	51M2684	177.25
LCE-402-RYGB	4	Red, Yellow, Green, Blue	24V AC/DC	Pole	40T8733	232.96
LCE-4M2-RYGB	4	Red, Yellow, Green, Blue	90-250VAC	Pole	40T8731	285.38
LCE-402W-RGBC	5	Red, Green, Blue, Clear	24V AC/DC	Direct	40T8739	217.73
LCE-402-RGBC	5	Red, Green, Blue, Clear	24V AC/DC	Pole	40T8736	244.61

➤ CONTINUED ➤

LCE SERIES INDICATING LIGHTS (CONT.)

CONTINUOUS OR FLASHING LIGHT WITH AUDIBLE ALARM

Mfg. Part No.	Lights	Colors	Voltage	Mount	Stock No.	Price Each 1-4
LCE-102FBW-R	1	Red	24VAC/DC	Direct	40T8727	160.16
LCE-102FB-R	1	Red	24V AC/DC	Pole	07H2177	212.70
LCE-1M2FBR	1	Red	90-250VAC	Pole	51P2618	240.24
LCE-202FBW-RG	2	Red, Green	24V AC/DC	Direct	40T8729	188.67
LCE-202FB-RG	2	Red, Green	24V AC/DC	Pole	40T8728	231.51
LCE-302FBW-RYG	3	Red, Yellow, Green	24V AC/DC	Direct	40T8730	225.19
LCE-302FB-RYG	3	Red, Yellow, Green	24V AC/DC	Pole	07H2201	273.54
LCE-3M2FB-RYG	3	Red, Yellow, Green	90-250VAC	Pole	07H2197	310.40
LCE-402FBW-RYGB	4	Red, Yellow, Green, Blue	24V AC/DC	Direct	40T8734	266.45
LCE-402FB-RYGB	4	Red, Yellow, Green, Blue	24V AC/DC	Pole	07H2209	328.65
LCE-4M2FBW-RYGB	4	Red, Yellow, Green, Blue	90-250VAC	Direct	40T8732	302.85
LCE-402FBW-RGBC	5	Red, Green, Blue, Clear	24V AC/DC	Direct	40T8738	281.01
LCE-4M2FBW-RGBC	5	Red, Green, Blue, Clear	90-250VAC	Direct	40T8735	318.87

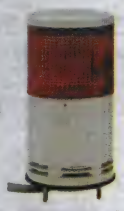
(74188)

HARMONY® XVC PREASSEMBLED TOWER LIGHTS

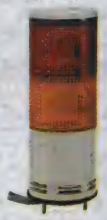
RoHS Compliant Available

Schneider Electric

- Available in 40, 60 and 100mm sizes
- IP 54 degree of protection
- Supply voltage: 100-240VAC/DC
- Rated impulse withstand voltage: 4kV
- Light source: LED
- Sound level (continuous or intermittent tone) at 1m: 70..85dB
- Fundamental frequency: 2.23kHz
- Flashing frequency of illuminated units: 1Hz



XVC1M1SK



XVC4M25S

XVC1M3SK

Designed for long-distance indication of the operating states or sequences of a machine with illuminated signalling units or adjustable audible buzzer. **XVC series** tower lights are supplied with 1, 2, 3, 4 or 5 illuminated signalling units, with our without buzzer, preassembled and pre-wired and with a support tube and bracket for mounting on vertical support or 3 screws for direct mounting on a horizontal surface. Available with five lens colors (red, orange, green, blue and clear) and lens colors are always placed in that order from top to botton. The light source consists of super-bright LEDs for optimum luminosity. For 60mm and 100mm tower lights equipped with a buzzer, the type of signal (continuous or intermittent) can be reversed by modifying the cable connections. Include a color coded, pre-wiring harness with a diagram label. Tower lights are preassemble and pre-wired at the factory and cannot be modified because the wires are soldered.

BASE MOUNTING — WITH BUZZER & FLASHING LIGHT

Mfg. Part No.	Lens Dia. (mm)	Lights	Current Consumption (mA)	Color	Stock No.	Price Each 1-9
XVC6M15SK	60	1	60	Red	92T2996	319.34
XVC6M35SK	60	3	85	Red, Orange, Green	92T3004	439.50
XVC6M55SK	60	5	115	Red, Amber, Green, Blue, Clear	92T3012	659.26
XVC1M1SK	100	1	85	Red	92T2974	1088.46
XVC1M3SK	100	3	170	Red, Orange, Green	92T2978	1255.56
XVC1M5SK	100	5	280	Red, Amber, Green, Blue, Clear	92T2982	1421.53
BASE MOUNTING — WITHOUT BUZZER (LED FOR STEADY LIGHT ONLY)						
XVC6M1K	60	1	35	Red	92T2994	204.88
XVC6M3K	60	3	60	Red, Orange, Green	92T3002	333.06
XVC6M5K	60	5	90	Red, Amber, Green, Blue, Clear	92T3010	584.86
BASE MOUNTING — WITHOUT BUZZER, WITH FLASHING LIGHT						
XVC1M1K	100	1	75	Red	92T2973	977.44
XVC1M3K	100	3	160	Red, Orange, Green	92T2977	1143.40
XVC1M5K	100	5	270	Red, Amber, Green, Blue, Clear	92T2981	1264.73
17MM SUPPORT TUBE MOUTNING — WITH BUZZER & FLASHING LIGHT						
XVC4M15S	40	1	50	Red	92T2984	370.83
XVC4M25S	40	2	65	Red, Orange	92T2986	421.19
XVC4M35S	40	3	80	Red, Orange, Green	92T2988	478.41
XVC4M55S	40	5	110	Red, Amber, Green, Blue, Clear	92T2992	682.15
17MM SUPPORT TUBE MOUTNING — WITHOUT BUZZER (LED FOR STEADY LIGHT ONLY)						
XVC4M1	40	1	30	Red	92T2983	244.93
XVC4M3	40	3	60	Red, Orange, Green	92T2987	355.95
XVC4M5	40	5	90	Red, Amber, Green, Blue, Clear	92T2991	545.95
22MM SUPPORT TUBE MOUTNING — WITH BUZZER & FLASHING LIGHT						
XVC6M15S	60	1	60	Red	92T2995	390.29
XVC6M35S	60	3	85	Red, Orange, Green	92T3003	487.58
XVC6M55S	60	5	115	Red, Amber, Green, Blue, Clear	92T3011	731.37
22MM SUPPORT TUBE MOUTNING — WITHOUT BUZZER (LED FOR STEADY LIGHT ONLY)						
XVC6M1	60	1	35	Red	92T2993	263.25
XVC6M3	60	3	60	Red, Orange, Green	92T3001	390.29
XVC6M5	60	5	90	Red, Amber, Green, Blue, Clear	92T3009	659.26

➤ CONTINUED ➤

HARMONY® XVC PREASSEMBLED TOWER LIGHTS (CONT.)

ACCESSORIES

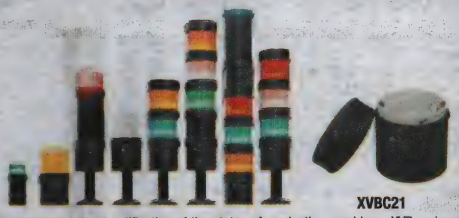
Mfg. Part No.	Description	Stock No.	Price Each 1-9
XVCZ13	Mounting Tube and Base, Diameter: 140mm; Height: 300mm	09P7625	328.13
XVCZ23	L-shape Mounting Bracket	09P7626	34.78

(210219)

XVB SERIES INDICATING BANKS

Schneider Electric

- Start With **XVBC21** Base
- Choose up to 5 Lens Modules or a Sounder Module
- Order Appropriate Color, Type and Voltage Lamps Seperately



XVBC21

Indicating banks give facility managers instant notification of the status of production machines. XVB series allows maximum user flexibility with simple installation and maintenance. No tools are required to assemble a bank; modules simply twist and click together. Maintenance-free LED lamps have an average life of 100,000 hours. 70mm diameter. Meets IP65, Nema 4X. UL listed, CSA recognized, CE compliant.

MOUNTING BASE

Mfg. Part No.	Description	Stock No.	Price Each 1-5
XVBC21	5 Circuit Base and Cap	96B1870	63.85

STEADY LENSES

Mfg. Part No.	Color	Stock No.	Price Each 1-5	Price Each 6-14
XVBC33	Green	16C7098	65.55	61.74
XVBC34	Red	16C7099	63.85	60.05
XVBC35	Orange	16C7100	62.07	58.37
XVBC36	Blue	16C7101	59.23	55.70
XVBC37	Clear	16C7102	64.45	60.71
XVBC38	Yellow	16C7103	64.45	60.71

FLASHING LENSES

Mfg. Part No.	Voltage	Color	Stock No.	Price Each 1-5	Price Each 6-14
XVBC4M4	120-240VAC	Red	16C7111	146.85	138.33

SOUNDER UNITS

Mfg. Part No.	Voltage	Stock No.	Price Each 1-5	Price Each 6-14
XVBC9B	12-48VAC/DC	16C7119	229.50	216.26
XVBC9M	120-230VAC	16C7120	353.09	332.73

XVB ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-5	Price Each 6-14
XVBC12	Metal Wall Mounting Bracket	16C7096	51.58	48.27
XVBC14	Side Entry Adapter for Cable	16C7097	8.04	7.58
XVBC00	½ NPT Tube Adapter	17C8279	3.50	3.28

(59977)

XVB, XVP AND XVD SERIES INDICATING BANK LAMPS AND BULBS

RoHS Compliant Available

Schneider Electric

LED lamps have an average life of 100,000 hours. Match color of LED lamp with lens color. Note: XVP Series indicating banks can use both versions of LED clusters, but only 5W and 7W incandescent bulbs.

STEADY LED CLUSTERS

Mfg. Part No.	Voltage	Color	Stock No.	Price Each 1-14
DL1BDB1	24V	White	16C3144	127.72
DL1BDB3	24V	Green	16C3145	126.62
DL1BDB4	24V	Red	16C3146	127.72
DL1BDB8	24V	Orange*	16C3148	122.22
DL1BDG3	120V	Green	16C3150	127.72
DL1BDG4	120V	Red	16C3151	127.72
DL1BDG6	120V	Blue	16C3152	126.62

➤CONTINUED➤

XVB, XVP AND XVD SERIES INDICATING BANK LAMPS AND BULBS (CONT.)

FLASHING LED CLUSTERS

Mfg. Part No.	Voltage	Color	Stock No.	Price Each 1-14
DL1BKB1	24V	White	86C7793	158.44
DL1BKB4	24V	Red	86C7795	158.44
DL1BKB8	24V	Yellow/Amber*	86C7797	165.57

INCANDESCENT BULBS

Mfg. Part No.	Voltage	Wattage	Stock No.	Price Each 1-14
DL1BEB	24V	7W	16C3154	9.88
DL1BEBS	24V	5W	16C3155	7.69
DL1BEG	120V	7W	16C3157	10.02
DL1BEMS	230V	5W	16C3161	7.52
DL1BLB	24V	10W	16C3162	10.02
DL1BLG	120V	10W	16C3164	9.68
DL1BLJ	12V	10W	16C3165	9.81

*Use orange lamp for orange and yellow lenses.
(59372)

XVP SERIES 50mm SLIMLINE INDICATING BANKS

Schneider Electric

- 50mm Slimline Modular Design
- Long-Life Protected LED Lamp with 100,000 Hour Average Life
- NEMA, UL Type 12 and IEG IP65 Compatible

Simple twist-and-click assembly allows OEM, user or distributor to assemble complete stack. Small footprint and sleek high-tech look for applications where aesthetics are important. Ring and base trim available in black or off-white to match application. Mounting options include direct, stand with tulip Base, wall bracket with hood, or tube bracket. Built-in electronic circuitry to protect against spikes, surges, EMI and PLC leakage currents. Available in 6 lens colors and 4 tone sound modules. *Order LED clusters and bulbs separately, go online or call.*

BASE UNIT

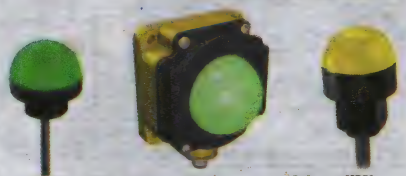
Mfg. Part No.	Description	Stock No.	Price Each 1-5
XVPC21	50mm Ind. Bank Black Base Unit	80C7371	64.37
LENSES			
XVPC33	50mm Ind. Bank Green Steady Lens/Black Ring	80C7374	59.63
XVPC34	50mm Ind. Bank Red Steady Lens/Black Ring	80C7376	59.06
XVPC35	50mm Ind. Bank Amber Steady Lens/Black Ring	80C7378	59.63
XVPC33W	50mm Ind. Bank Green Steady Lens/Off-White Ring	80C7375	59.63
SOUNDERS			
XVPC09G	50mm Ind. Bank Sounder/Black Ring 120V	80C7367	202.63
ACCESSORIES			
XVPC09G	50mm Ind. Bank 16″ (400) Tube with Bracket/Silver	80C7367	202.63
XVPC02	50mm Ind. Bank 4″ (100) Tube + Tulip Base/Black	80C7356	41.71

(72290)

EZ-LIGHT™ INDICATOR LIGHTS

BANNER®
more sensors, more solutions

Features:
- Offers a single-unit alternative to panel indicators, post, and stack lights
- IEC IP69K, depending on installation
- Rugged, solid-state design eliminates bulb replacement
- Compatible with PLC or other logic-level control outputs



K50L K80L K30L

Specifications:
- 18mm threaded barrel
- K50L models: 30mm threaded barrel base mount
- K30L models: 22mm threaded base mount
- K80L models: Flat or DIN mount
- 7-function models provide three colors, flash and alternate
- 4-pin integral Euro-Style quick-disconnect
- *Order EZ-LIGHT™ quick disconnect (OD) cables separately online*

EZ-LIGHT MULTI-COLOR GENERAL PURPOSE

Mfg. Part No.	Input Type	Housing Style	Mounting Barrel	Supply Voltage	Light Functions	Stock No.	Price Each 1-2
K30LGRYPQ	PNP	30mm Dome	22mm	10 to 30VDC	Green/Red/Yellow	89M4775	58.86
K50LGRYPQ	PNP	50mm Dome	30mm	18 to 30VDC	Green/Red/Yellow	20M0539	87.33

➤CONTINUED➤

EZ-LIGHT™ INDICATOR LIGHTS (CONT.)

Mfg. Part No.	Input Type	Housing Style	Mounting Barrel	Supply Voltage	Light Functions	Stock No.	Price Each 1-2
● K80LGRYPQ	PNP	50mm Dome	DIN Rail	18 to 30VDC	Green/Red/ Yellow	51M5471	104.18
● K50LGRYA120Q	PNP	50mm Dome	30mm	85 to 130VAC	Green/Red/ Yellow	96M3291	100.74
EZ-LIGHT MULTI-COLOR 7-FUNCTION							
● K50LGRY2PQ	PNP	50mm Dome	30mm	18 to 30VDC	Green/Red/ Yellow	20M0541	98.97
● K80LGRY2PQ	PNP	50mm Dome	DIN Rail	18 to 30VDC	Green/Red/ Yellow	51M5472	109.08

4-PIN EURO-STYLE QUICK DISCONNECT CABLES (DC MODELS)

Mfg. Part No.	Style	Length (m)	Stock No.	Price Each 1-2
● MQDC-406	Straight	2	02H6726	23.15
● MQDC-415	Straight	5	02H6728	26.31
● MQDC-430	Straight	9	02H6730	41.25

(83344)

EZ-LIGHT™ K50L AUDIBLE INDICATORS

BANNER® more sensors, more solutions

- Illuminated dome provides a big, easy-to-see green, red or yellow job light
- Compact devices are completely self-contained — no controller needed
- Immune to EMI and RFI interference
- 5-pin Euro QD connection
- 18 to 30VDC operation
- IP50 rated

Mfg. Part No.	LED Color	Audible Tone	Input	Stock No.	Price Each 1-2
● K50LGRAL1YPQ	Green / Red / Yellow	Steady - 95dB	PNP	10R5326	126.50
● K50LGRA1YNQ	Green / Red / Yellow	Steady - 75dB	NPN	96M3273	119.55
● K50LGRA1YPQ	Green / Red / Yellow	Steady - 75dB	PNP	96M3275	117.61
● K50LGRA2YPQ	Green / Red / Yellow	Pulsed - 75dB	PNP	96M3279	126.50

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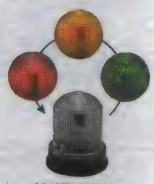
108 SERIES CHAMELEON INDICATORS

Edwards Signaling™

108 Series

105XBRI Series



125XBRi Series

- One Multi-Color Light Source Allows Multi-Status Indication From a Low Profile "Single Stack" Light
- Two-Stack Capability For a Fourth Visual Signal
- Multi-Tone Base Module
- Pipe or Surface Mount
- 120,000 Hour LED Light Source
- PLC Compatible

The Chameleon is designed to function as either a steady or flashing visual signal. Available in 24VDC and 120VAC 50/60Hz. Features include: vibration-resistant heavy-duty industrial design, molded-in gasketed lens modules, and a multi-tone base with eight selectable tone options. ¾" (19mm) mounting pipe or surface mounting. NEMA 4X housing. UL and CUL listed.

Mfg. Part No.	LED Colors	Voltage	Stock No.	Price Each 1-4
108I-RGA-N5	Red-Green-Amber	120VAC	25C4184	560.04
108I-RGA-G1	Red-Green-Amber	24VDC	25C4183	560.04
105XBRI SERIES XTRA-BRITE LED MULTI-STATUS INDICATORS				
105XBRIRBA120A	Red-Blue-Amber	120VAC	40T9926	593.91
105XBRIRBA24D	Red-Blue-Amber	24VDC	40T9927	617.67
105XBRIRGA120A	Red-Green-Amber	120VAC	40T9928	617.67
105XBRIRGA24D	Red-Green-Amber	24VDC	40T9929	593.91
125XBRI SERIES XTRA-BRITE LED MULTI-STATUS INDICATORS				
125XBRIRBA120A	Red-Blue-Amber/ Gray Base	120VAC	40T9950	438.53
125XBRIRBA120AB	Red-Blue-Amber/ Black Base	120VAC	40T9951	438.53
125XBRIRBA24D	Red-Blue-Amber/ Gray Base	24VDC	40T9952	438.53
125XBRIRBA24DB	Red-Blue-Amber/ Black Base	24VDC	40T9953	438.53
125XBRIRGA120A	Red-Green-Amber/ Gray Base	120VAC	40T9954	458.26
125XBRIRGA120AB	Red-Green-Amber/ Black Base	120VAC	40T9955	438.53

➤CONTINUED➤

108 SERIES CHAMELEON INDICATORS (CONT.)

125XBRI SERIES XTRA-BRITE LED MULTI-STATUS INDICATORS

Mfg. Part No.	LED Colors	Voltage	Stock No.	Price Each 1-4
125XBRIRGA24D	Red-Green-Amber/ Gray Base	24VDC	40T9956	458.26
125XBRIRGA24DB	Red-Green-Amber/ Black Base	24VDC	40T9957	454.32

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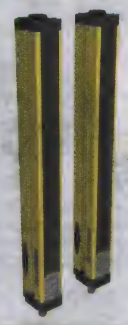
EZ-SCREEN® SAFETY LIGHT CURTAINS

RoHS Compliant Available

BANNER® more sensors, more solutions



- Compact but robust housing for large power presses
- Range up to18 m with 30 mm resolution and 6 m with 14 mm resolution
- Cascade up to 4 pairs of light curtains with unlimited beams
- Trip/ Latch, Fixed and floating blanking standard, remote teach fixed blanking models available
- Flexible wiring scheme for easy assembly and troubleshooting
- Two 7-segment displays and LED indicators showing diagnostic information
- Available with nickel-plated ESD-safe housing
- CE Type 4; Category 4 PLe and SIL 3 safety ratings

SAFETY LIGHT CURTAINS

Mfg. Part No.	Defined Area	Resolution	Response Time (ms)	Stock No.	Price Each 1-2
● SLSP14-300Q88	300mm	14mm	15	30K6991	1603.80
● SLSP30-300Q88	300mm	30mm	11	30K6995	1252.97
● SLSP14-450Q88	450mm	14mm	19	30K6992	2013.00
● SLSP14-600Q88	600mm	14mm	23	30K6993	2421.10
● SLSP30-600Q88	600mm	30mm	15	30K6996	1926.10
● SLSP14-900Q88	900mm	14mm	32	35K0390	3150.08
● SLSP30-900Q88	900mm	30mm	19	30K6997	2672.77
● SLSP14-1200Q88	1.2m	14mm	40	35K0374	3944.02
● SLSP30-1200Q88	1.2m	30mm	23	30K6994	3401.24
SLSP30-1500Q88	1.5m	30mm	27	35K0399	3917.27
● SLSP30-1800Q88	1.8m	30mm	32	35K0403	4597.79

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-2
● QDE-815D	8-pin M12 Euro-style single-end cordset – 4.5 m	99H1043	24.62
● QDE-825D	8-pin M12 Euro-style single-end cordset – 8 m	99H1044	30.59
● IM-T-9A	Interfacing Module — 3NO redundant output 6A contacts	20H8976	153.92
● IM-T-11A	Interfacing Module — 2NO redundant output 6A contacts, plus 1NC auxiliary contact	20H8975	151.95

(84777)

EZ-SCREEN® LOW-PROFILE SAFETY LIGHT CURTAINS

RoHS Compliant Available

BANNER® more sensors, more solutions

- Space saving 28 x 26 mm "safety" yellow powder-coat housing
- Range up to 7m with 14 mm and 25 mm resolutions
- Cascade up to 4 pairs of light curtains with unlimited beams
- Remote Teach, Fixed and Floating Blanking and Integral Muting models available
- Flexible wiring scheme for easy assembly and troubleshooting
- 7-segment display showing diagnostic information
- Available with nickel-plated ESD-safe housing
- CE Type 4; Category 4 PLe and SIL 3 safety ratings

Mfg. Part No.	Defined Area	Resolution	Response Time (ms)	Stock No.	Price Each 1-2
● SLPP14-270P88	270mm	14mm	10.5	31T6611	1250.83
● SLPP25-270P88	270mm	25mm	8	99R8161	977.01
● SLPP14-550P88	550mm	14mm	16.5	31T6623	1862.87
● SLPP25-550P88	550mm	25mm	11	10R5346	1513.11
● SLPP14-690P88	690mm	14mm	19.5	31T6629	2168.89
● SLPP25-690P88	690mm	25mm	12.5	10R5347	1781.15
● SLPP14-830P88	830mm	14mm	22.5	31T6635	2474.91
● SLPP25-830P88	830mm	25mm	14	10R5348	2004.11
● SLPP14-970P88	970mm	14mm	25.5	31T6641	2780.93
● SLPP25-970P88	970mm	25mm	15.5	10R5349	2267.33

➤CONTINUED➤

EZ-SCREEN® LOW-PROFILE SAFETY LIGHT CURTAINS (CONT.)

Mfg. Part No.	Defined Area	Resolution	Response Time (ms)	Stock No.	Price Each 1-2
SLPP14-1110P88	1.11m	14mm	28.5	31T6580	3086.95
SLPP25-1110P88	1.11m	25mm	17	10R5344	2529.48
SLPP14-1250P88	1.25m	14mm	31.5	31T6585	3392.97
SLPP25-1250P88	1.25m	25mm	18.5	10R5345	2791.63

ACCESSORIES

Mfg. Part No.	Description (Two Cordsets Required Per Pair)	Stock No.	Price Each 1-2
QDE-815D	8-pin M12 Euro-style single-end cordset – 4.5 m	99H1043	24.62
QDE-825D	8-pin M12 Euro-style single-end cordset – 8 m	99H1044	30.59

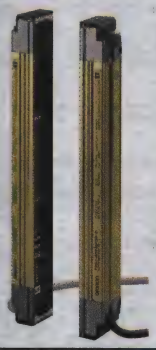
(148653)

F3SJ-A SAFETY LIGHT CURTAINS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- Cascaded designs possible 4 segments, up to 400 beams
- Warning zone function, partial muting, position detection muting, fixed blanking, floating blanking - up to four beams
- External Device Monitoring, two PNP safety outputs, one NPN auxiliary output
- Cross-talk prevention range selection



Resolution: 14mm (0.55 in.), 20 mm (0.79 in.), 30 mm (1.18 in.), or 55 mm (2.17 in.). Range: 7 m (23 ft.) or 9 m (29.5 ft.) dependent on minimum object resolution and protected height. Protected heights: 14 mm protected heights from 245 to 1631mm (9.6 to 64 in.), 20 mm and 30 mm protected heights from 245 to 2495 mm (9.6 to 98 in.), 55 mm from 270 to 2470 mm (10.6 to 97 in.). Very compact size - 30 x 24 mm (1.18 x 0.94 in.). Handheld setting console. SD manager programming software. F3SP/F3SX Safety Controller. Weld shields. IP67 enclosures. Multiple mounting options.

Mfg. Part No.	No. of Beams	Protective Height	Stock No.	Price Each
F3SJ-A0245P30	10	245 mm	01N4741	700.00
F3SJ-A0320P30	13	320 mm	01N4743	835.00
F3SJ-A0420P30	17	420 mm	01N4744	1020.00
F3SJ-A0425P20	28	425 mm	01N4745	1300.00
F3SJ-A0515P20	34	515 mm	01N4746	1460.00
F3SJ-A0725P20	48	725 mm	01N4749	1805.00
F3SJ-A0815P20	54	815 mm	01N4750	1960.00
F3SJ-A0820P30	33	820 mm	50M2027	1770.00
F3SJ-A0905P20	60	905 mm	01N4751	2115.00
F3SJ-A0920P30	37	920 mm	50M2031	1950.00
F3SJ-A1205P20	80	1.205 mm	01N4754	2655.00
F3SJ-A1505P20	100	1.505 mm	01N4755	3470.00
F3SJ-A1620P30	65	1.62 mm	01N4756	3185.00
F3SJ-A1805P20	120	1.805 mm	01N4757	4135.00
F3SJ-A1920P30	80	1.92 mm	01N4758	3655.00

(114879)

XPS MC SERIES PREVENTA™ CONFIGURABLE SAFTEY CONTROLLERS

RoHS Compliant Available

Schneider Electric

- Simple to use drag and drop software for configuration of XPSMC
- Narrow enclosure reduces panel space and DIN rail space requirements
- Multiple communication networks available
- Cost effective alternative to using safety relays
- Reduces installation and troubleshooting time
- Rated for Category 4, PL "e", and SIL 3

XPSMC safety controllers provide the logic for safety related systems and monitor the various inputs such as emergency stops or safety interlocks, and determine if the machine should be allowed to run or if the machine needs to stop, in accordance to US, European, and international safety standards. The easy use drag and drop software simplified the development of safety related systems.

CONFIGURABLE CONTROLLERS

Mfg. Part No.	Inputs	Outputs*	Communication Networks (slave) Modbus® Serial	CANopen	Profibus	Stock No.	Price Each
XPSMC16Z	16	6 + 2 x 2	Yes	...	...	34M0430	1972.88
XPSMC16ZC	16	6 + 2 x 2	Yes	Yes	...	34M0431	1943.10
XPSMC16ZP	16	6 + 2 x 2	Yes	...	Yes	34M0432	2105.02
XPSMC32Z	32	6 + 2 x 2	Yes	...	...	34M0433	2024.06

➤CONTINUED➤

XPS MC SERIES PREVENTA™ CONFIGURABLE SAFTEY CONTROLLERS (CONT.)

Mfg. Part No.	Inputs	Outputs*	Communication Networks (slave) Modbus® Serial	CANopen	Profibus	Stock No.	Price Each
XPSMC32ZC	32	6 + 2 x 2	Yes	Yes	...	34M0434	2428.87
XPSMC32ZP	32	6 + 2 x 2	Yes	...	Yes	34M0435	2644.77

* 8 independent safety outputs = 6 solid-state safety outputs + 2 x 2 relay outputs (4 relay outputs with guided contacts)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-5
XPSMCTS16	Plug-In Connectors with Screw Terminals for XPSMC16Z	20K4683	40.49
XPSMCTS32	Plug-In Connectors with Screw Terminals for XPSMC32Z	20K4684	53.98
XPSMCWIN	Configuration Software for XPSMC	20K4685	499.43
CONNECTION CABLES FOR PC TO CONTROLLER CONFIGURATION PROGRAMMING			
TSXCUSB485	RJ45/PC USB port converter	34M0230	303.93
XPSMCCPC	Adaptor for RJ45 socket/PC connection cables	20K4680	32.89
TSXPCX1031	Cable to PC serial port (SUB-D9)	20K4233	249.87

(196171)

HR1S SAFETY RELAY MODULES

RoHS Compliant Available

IDEC

- Up to Safety Cat. 4, PLe
- Removable and Fixed Terminal models
- LED status indicators
- Fingersafe termination

HR1S-AC/AF

HR1S-ATE

SAFETY INPUT TYPE 2NC (E-STOP/INTERLOCK SWITCH) / 2NO (NON CONTACT INTERLOCKS)

Mfg. Part No.	Description	Stock No.	Price Each 1-9
HR1S-AC5121	22mm; Dual Ch.; Cat 3; 3NO output; Auto/Manual	47T1434	190.95
HR1S-AC5121P	22mm; Dual Ch.; Cat 3; 3NO output; Auto/Manual *	47T1435	202.16
HR1S-AF5130B	22mm; Dual Ch.; Cat 4; 3NO output; Auto/Manual (weld detection)	93K6228	211.71
HR1S-AF5130PB	22mm; Dual Ch.; Cat 4; 3NO output; Auto/Manual (weld detection) *	47T1436	258.54
HR1S-ATE5110	45mm; Dual Ch.; Cat 4 2NO+3NO time delay (30s max) +4 aux transitor	47T1437	414.96
HR1S-ATE5110P	45mm; Dual Ch.; Cat 4 2NO+3NO time delay (30s max) +4 aux transitor*	47T1438	436.24

* Comes with removable terminal blocks

(196187)

HR2S SAFETY RELAY MODULES

RoHS Compliant Available

IDEC

- Universal Input type and 2NC safety input type
- Removable terminal blocks
- Plug in wiring, no tools required
- Safety Cat 4, PLe : EN ISO 13849-1: 2008
- TÜV SÜD European and North American (NRTL)
- Automatic or manual restart switch selectable

Mfg. Part No.	Description	Stock No.	Price Each 1-9
HR2S-301N	E-Stop/Switch (up to Cat3) or Light Curtain (Type 2 or 4); 3NO; 1NC Aux	47T1443	218.12
HR2S-301P	E-Stop/Switch (2NC) up to Cat 4; 3NO; 1NC Aux	47T1444	210.95
HR2S-332N-T075	E-Stop/Switch (2NC) up to Cat 4; 3NO+3NO time delay (7.5s max); 2NC Aux	47T1445	396.17
HR2S-332N-T15	E-Stop/Switch (2NC) up to Cat 4; 3NO+3NO time delay (15s max); 2NC Aux	47T1446	396.17
HR2S-332N-T30	E-Stop/Switch (2NC) up to Cat 4; 3NO+3NO time delay (30s max); 2NC Aux	47T1447	396.17

(196188)

ES5R SAFETY RELAYS

RoHS Compliant Available

EATON

- UL, cUL certifications and TÜV Rhineland functional safety certifications
- Applicable for EN 60204 stop categories 0 or 1
- Plug-in screw terminals for fast and fault-free replacement
- Multi-voltage versions (24–230 Vac/Vdc) for flexibility
- Delayed and non-delayed contact expansions accommodate a wide variety of applications

Eaton's ESR5 safety relays provide optimal safety and a high degree of reliability on plant machinery. Applications that meet the highest safety requirements in accordance with EN 954-1, EN ISO 13849-1 up to PL e and accordance with IEC 62061 up to SILCL 3 can be realized with the ESR5 safety relay. Compatible with a wide variety of safety devices such as emergency stops, rope pulls, two-hand control stations, light curtain (OSSD), gate enable devices, and safety switches.

SINGLE/DUAL CHANNEL MAIN UNITS

Mfg. Part No.	Safety Output (NO)	Safety Output (NO Delayed)	Output Delay	Signal Output (NC)	Control Voltage	Stock No.	Price Each 1-4
● ESR5-NO-31-24VAC-DC	3	...	...	1	24 VAC/DC	41T2720	289.55
● ESR5-NO-41-24VAC-DC	4	...	...	1	24 VAC/DC	47T4258	388.64
● ESR5-NO-31-230VAC	3	...	...	1	230 VAC	41T2719	329.19
● ESR5-NO-31-AC-DC	3	...	...	1	24-230 VAC/DC	41T2718	441.34
● ESR5-NV3-30	2	2	0.1-30s	...	24 VDC	41T2721	386.08
DUAL CHANNEL MAIN UNITS							
● ESR5-NZ-21-24VAC-DC	2	...	...	1	24 VAC/DC	41T2722	324.53

SINGLE CHANNEL EXPANSION UNITS

Mfg. Part No.	Safety Output (NO)	Safety Output (NO Delayed)	Output Delay	Signal Output (NC)/ Feedback Output	Control Voltage	Stock No.	Price Each 1-4
● ESR5-NE-51-24VAC-DC	5	...	...	1/1	24 VAC/DC	41T2717	277.38
● ESR5-VE3-42	...	4	0.3-3s	1/1	24 VDC	41T2723	486.79

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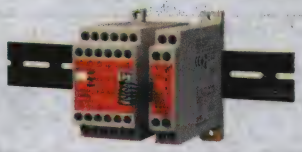
SAFETY RELAYS

RoHS Compliant Available

OMRON AUTOMATION & SAFETY



- 45mm Wide for Emergency-Stop and 2-Hand Control Circuit
- Adjustable 'OFF-Delay' Time
- Positive, Force-Guided Contacts
- DIN-Rail Mounting and Panel Mounting
- UL Recognized, CSA Certified, VDE Approved, CE Compliant

Mfg. Part No.	Contacts	Description	Input Channels	Stock No.	Price Each 1-2	Price Each 3-4
● G9SA-301	3PST-NO	Emergency-Stop Unit	1 or 2	29C7715	346.24	331.33

(68370)

XPS SERIES PREVENTA™ SAFETY RELAY MODULES

RoHS Compliant Available

Schneider Electric

- Simple to use
- Cost effective for machinery with few safety related inputs
- No programming required
- Wide variety of safety functions to select from
- Dual voltage versions available
- Removable terminals allow easy installation and replacement

Safety relays provide the logic for safety related systems and monitor the various inputs such as emergency stops or safety interlocks, and determine if the machine should be allowed to run or if the machine needs to stop, in accordance to US, European, and international safety standards.

Mfg. Part No.	Description	Outputs: Standard/ Timed	Outputs: Auxiliary	Control Voltage	Stock No.	Price Each 1-4
● XPSAC3421P	Safety Relay	3/0	1 solid state	115 VAC	89H6658	345.27
XPSAC5121P	Safety Relay	3/0	1 solid state	24 VAC/DC	89H6659	359.25
● XPSAF5130P	Safety Relay	3/0	...	24 VAC/DC	39C7302	376.35
● XPSAFL5130P*	Safety Relay	3/0	...	24 VAC/DC	89H6660	376.35
● XPSAK311144P*	Safety Relay	3/0	1 relay, 4 solid state	24 VAC/DC	80C6921	558.98
● XPSAK351144P*	Safety Relay	3/0	1 relay, 4 solid state	110 VAC or 24 VDC	80C6923	571.56

➤ CONTINUED ➤

XPS SERIES PREVENTA™ SAFETY RELAY MODULES (CONT.)

Mfg. Part No.	Description	Outputs: Standard/ Timed	Outputs: Auxiliary	Control Voltage	Stock No.	Price Each 1-4
● XPSAR351144P*	Safety Relay	7/0	2 relay, 4 solid state	110 VAC or 24 VDC	89H6662	936.79
● XPSAV11113P	Safety Relay with Timed outputs	3/3	3 solid state	24 VDC	89H6663	805.60
● XPSBF1132P	Safety Relay for Two hand Control Stations	2/0	2 solid state	24 VDC	20K4678	608.32
● XPSDMB1132P	Safety Relay For 2 Non-Contact Safety Interlocks	2/0	...	24 VDC	89H6664	361.70
● XPSDME1132P	Safety Relay For 6 Non-Contact Safety interlocks	2/0	...	24 VDC	89H6665	641.20
● XPSVNE1142P	Safety Relay for Zero Speed Detection	2/0	2 solid state	24 VDC	11R2098	715.72
● XPSVNE3442P	Safety Relay for Zero Speed Detection	2/0	2 solid state	115 VAC	11R2099	728.25

* Suitable for Solid State Output Light Curtains
(196175)

XPSBCE SERIEA PREVENTA™ SAFETY RELAY MODULES

RoHS Compliant Available

Schneider Electric

- Electrical monitoring of two-hand control stations
- Removable terminal block
- Contacts: DPST-NO/SPST-NCS

Mfg. Part No.	Coil Voltage	Relay Terminals	Stock No.	Price Each 1-9	Price Each 10-24
● XPSBCE3110C	24VAC/DC	Spring	45W6724	397.99	367.20
● XPSBCE3110P	24VAC/DC	Screw Clamp	45W6725	447.89	413.24
● XPSBCE3410C	115VAC	Spring	45W6726	414.11	382.07
● XPSBCE3410P	115VAC	Screw Clamp	45W6727	397.99	367.20
● XPSBCE3710C	230VAC	Spring	45W6728	397.99	367.20
● XPSBCE3710P	230VAC	Screw Clamp	45W6729	397.99	367.20

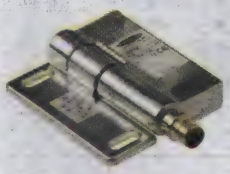
(210236)

SAFETY INTERLOCKING SWITCHES

RoHS Compliant Available

BANNER® more sensors, more solutions

- Design meets positive opening requirements for safety interlocks
- Flat-pack style with rotating head allows actuator engagement from front or back or either of two top
- Standard limit switch in metal housing per and compact plastic limit switch design
- No tools required to rotate four position operating head on limit style switches
- Compact plastic Limit switch Rotating head allows actuator engagement from four sides or four top positions; no tools are required to rotate head
- Hinge-style allow 0 – 180° (**SI-HG80**) range of motion; safety switching point is adjustable over the full operating range



SI-HG80DQD

Mfg. Part No.	Description	Contacts	Stock No.	Price Each 1-2
● SI-QS75MFC	Flat-Pack- Plastic, Flex Actuator	1NC	02H7574	90.95
● SI-QS90MFF	Flat-Pack - Plastic, Flex Actuator	2NC/1NO	02H7575	116.10
● SI-LS100MRFF	Limit Switch Style - Plastic, Flex Actuator	2NC/1NO	02H7568	104.15
● SI-HG80DQD	Hinge-Style, Metal (Die-cast Zinc), Inline QD	SPDT (Form C)	21H7867	182.81
● SI-HG80A	Blank Hinge used with SI-HGDQD	...	21H7866	39.61

(148674)

EMERGENCY STOP SAFETY MODULES

RoHS Compliant Available

BANNER® more sensors, more solutions

- Monitors Normally-Closed Emergency Stop Switch Circuit for Contact Failure or Wiring Fault
- Input Monitoring Circuit Uses Diverse-Redundant Design
- Multiple Redundant Output Switching Channels for Connection to Control-Reliable Power Interrupt Circuits

➤ CONTINUED ➤

EMERGENCY STOP SAFETY MODULES (CONT.)

Mfg. Part No.	Safety Output Configuration	Voltage	Stock No.	Price Each 1-2
ES-FA-9AA	E-stop/gate monitoring module, 1- or 2-channel input, 3 redundant (forced-guided) contacts, 6A each, 22.5mm	24VAC/DC	02H6515	197.23
ES-UA-5A	E-stop/gate monitoring module, 1- or 2-channel input, 4 redundant (forced-guided) contacts, 1 NC AUX output, 6A each, 45mm	115VAC/12-24VDC	20H6285	284.51
GM-FA-10J	Magnetic (gate) monitoring module, 1- or 2-channel input (see SI-MAGxx), 2 redundant (forced-guided) contacts, 6A each, 22.5mm	24VAC/DC	02H6596	304.34
EM-T-7A	Extension module, 4 redundant (forced-guided) contacts, 6A each, 22.5mm	24VDC	02H6503	132.03

(74185)

LS-TITAN™ SAFETY INTERLOCK SWITCHES

RoHS Compliant Available

EATON

Features

- Miniature DIN; full-size, solenoid key interlocks providing highest degree of personnel and process protection
- Large selection of actuators
- Miniature DIN models have a five-way adjustable head, while full-size DIN models have four-way adjustable heads
- Safety-rated as interlocking devices per EN 1088, with safety function by positive opening contacts per IEC/EN 60947-5-1
- Door-flap and door-hinge safety switches provide a unique solution when actuators (keys) cannot be used
- IP65 degree of protection

KEY INTERLOCK SWITCHES LS - ZB

Mfg. Part No.	Actuator Type	Circuitry	Stock No.	Price Each 1-4
LS-S02-ZB	Key	DPDT-NC	84R7024	111.46
LS-S11-ZB	Key	SPST-NO, SPST-NC	84R7030	181.91
LS-S11S-ZB	Key	SPST-NO, SPST-NC	84R7035	116.71
KEY INTERLOCK SWITCHES FULL-SIZE DIN LS4 -ZB				
LS4-S11-1-I-ZB	Key	DPST-1NO, SPST-NC	84R7044	203.66

SOLENOID SAFETY INTERLOCK SWITCH BODY - WITHOUT KEY LS -ZBZ

Mfg. Part No.	Voltage Rating	Circuitry	Stock No.	Price Each 1-4
LS-S11-24DFT-ZBZ-X	24VDC	DPST-1NO, SPST-NC	84R7033	358.60
LS-S02-24DFT-ZBZ-X	24VDC	DPDT-NC	84R7028	363.83
LS-S11-120AFT-ZBZ-X	120VAC	DPST-1NO, SPST-NC	84R7031	357.77
LS-S02-120AFT-ZBZ-X	120VAC	DPDT-NC	84R7025	359.79
LS-S11-24DMT-ZBZ-X	24VDC	DPST-1NO, SPST-NC	84R7034	341.76
LS-S02-24DMT-ZBZ-X	24VDC	DPDT-NC	84R7029	340.89
LS-S11-120AMT-ZBZ-X	120VAC	DPST-1NO, SPST-NC	84R7032	338.56
LS-S02-120AMT-ZBZ-X	120VAC	DPDT-NC	84R7026	354.37

SOLENOID SAFETY INTERLOCK KEYS

Mfg. Part No.	Description	Stock No.	Price 1-9
LS-XG-ZBZ	Flat Actuator Key	84R7039	4.28
LS-XW-ZBZ	Angled Actuator Key, Short	84R7042	5.43
LS-XWA-ZBZ	Angled Actuator Key, Long	84R7043	42.97
LS-XF-ZBZ	Angled Flexible Actuator	84R7037	21.51
LS-XFG-ZBZ	Even, Flexible Coasting Actuator	84R7038	21.51
LS-XNG-ZBZ	Flat Compensating Actuator	84R7040	54.29
LS-XNW-ZBZ	Angled Compensating Actuator	84R7041	59.98

(180411)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

FF5 SERIES MAGNETICALLY ACTUATED NON-CONTACT SAFETY SWITCHES

RoHS Compliant Available

Honeywell Sensing and Control

SELECTION, SPEED, SERVICE. All Found Here.

Specifications:

- Contact rating: 0.3A at 24VDC
- Auxiliary contact power: 15W
- Operating distance: 6mm ON; 17mm OFF
- Body material: Red ABS resin fill (stainless steel option)

Features:

- Totally contact-less door detection is more flexible and less prone to misalignment
- Protects against misalignment as non-contacting hard guarding solutions have a large actuation window to reduce alignment issues with the switch and magnet actuator
- Ideal for use in many machine-guarding applications
- Switches can be magnetically actuated from almost any angle
- Sealed to IP67 standards

FF5

Mfg. Part No.	Circuitry	Type	Termination	Stock No.	Price Each * 1-9
FF5-21-DC-03	3PST-2NC/1NO	DC	Cable	61M3572	69.07
FF5-21-DC-03-SS*	3PST-2NC/1NO	DC	Cable	61M3573	118.36

* Stainless steel

(102971)

MICRO SWITCH™ HAZARDOUS LOCATION BX GLOBAL EXPLOSION PROOF SWITCHES

RoHS Compliant Available

Honeywell Sensing and Control

SELECTION, SPEED, SERVICE. All Found Here.

Features:

- European approved tapered thread design
- Weather sealed for outdoor applications
- Low temperature tolerance to -40°F
- 10A rating with option of silver or gold
- Ideal for use in control valves and actuators in oil and gas, and other potentially explosive environments

Specifications:

- ATEX approved
- NEMA/UL 1, 3, 4, 6, 7 (Class 1, Division 1, Groups B, C, D), 9 (Class 2, Division 1, Groups B, C, D) 9 (Class 2, Division 1, Groups E, F, G), 13
- EExd IIC T6 category II 2 GD, SIRA)) ATEX 1037X
- 10A continuous carry electrical rating
- UL file E61730
- CSA file LR57327
- -40°C to 70°C (-40°F to 158°F)

Mfg. Part No.	Actuator Style	Circuitry	Conduit	Stock No.	Price Each 1-9	Price Each 10-49
BXC3K	Top Plunger	SPDT-1NO/1NC	1/2" NPT	71J3449	282.61	250.72
BXA3K	Side Rotary	SPDT-1NO/1NC	1/2" NPT	85C6607	217.37	207.40
BXA4L	Side Rotary	DPDT-2NO/2NC	3/4" NPT	85C6608	273.25	255.44

(90376)

MICRO SWITCH™ SAFETY LIMIT SWITCHES 24CE/924CE SERIES MINIATURE

RoHS Compliant Available

Honeywell Sensing and Control

SELECTION, SPEED, SERVICE. All Found Here.

Specifications:

- Operating temperature: 0°C to +105°C
- Sealed to IP66 specifications
- Mechanical life: 10 million operations
- IEC/EN 60947-5-1-3

Mfg. Part No.	Actuator	Cable Length (ft.)	Contacts*	Stock No.	Price Each 1-9
924CE1-S3	Top Pin Plunger	3	SPDT-1NO/1NC-BBM	97B4551	92.03
924CE1T3A	Top Pin Plunger	3	SPDT-1NO/1NC-MBB	40B1069	91.13
924CE18-S6	Top Pin Plunger	6	SPDT-1NO/1NC	05M3055	107.16
924CE2S3	Top Roller Plunger, parallel	3	SPDT-1NO/1NC	05M3056	101.97

*BBM = Break Before Make Contacts; MBB = Make Before Break Contacts

(80244)

MICRO SWITCH™ SAFETY INTERLOCK SWITCHES GKM SERIES MINIATURE

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE. All Found Here.

Specifications:
- 1NC/1NO and 2NC (Positive break on NC contacts)
- Cable and connector styles (Microchange DC style M12, 4-pin with external threads/male) *on page 1176*
- -25°C to 85°C [-13°F to 185°F]
- IP66; NEMA/UL 1, 12, 13
- IEC 947-5-1, EN60947-5-1

GKMD GKME

Features:
- Designed to detect if key is inserted or removed
- Glass filled polyester body
- Top and front key entry
- Straight and 90° keys sold separately *on this page*
- Miniature footprint: 2.730″ x 1.375″ x 0.630″
- GKME series is the first pre-assembled dual connection safety switch
- GKME integrated cable or connector(s) reduce installation time and cost
- GKME construction allows side by side mounting and daisy-chaining
- GKME small door swing radius allows use down to 160mm (6.3″)
- Ideal for: Multiple door modular machinery, textile, packaging, and wrapping

Mfg. Part No.	Current (A)	Circuitry	Termination	Stock No.	Price Each Each	Price Each 1-
● GKME07	0.1	DPST-NC	Dual Exit Connector	03P3453	111.07	94.24
● GKMB33	10	DPST-1NO/1NC	Bottom Exit Cable, 3m	94C0872	122.04	108.86
● GKMD03	10	DPST-1NO/1NC	Bottom Exit Connector	17M9295	74.15	71.75
● GKMA36	10	DPST-NC	Side Exit Cable, 3m	20M7545	82.71	66.05
● GKMB36	10	DPST-NC	Bottom Exit Cable, 3m	20M7581	61.46	58.20

KEYS

Mfg. Part No.	Description	Stock No.	Price Each 1-5	Price Each 6-14
● GKZ51M	Straight Key	83F5728	6.87	6.51
● GKZ52M	90° Angle Key	15M0241	6.74	6.47

(28877)

MICRO SWITCH™ SAFETY INTERLOCK SWITCHES GKE SERIES DUAL ENTRY KEY-OPERATED

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE. All Found Here.

Features:
- Environmentally sealed
- Low and high voltage energy capability
- Ideal for use in small doors and aperture
- Designed to detect if key is inserted or removed
- Glass filled polyester body
- Top and front key entry
- Miniature footprint: (3.63″ x 1.2″)
- Straight and 90° keys available *sold separately below*

Specifications:
- 1NC/1NO and 2NC (Positive break on NC contacts)
- -25°C to 85°C [-13°F to 185°F]
- IP66; NEMA/UL 1, 12, 13
- CCC, IEC 947-5-1, EN60947-5-1

Mfg. Part No.	Circuitry	Conduit	Stock No.	Price Each 1-9	Price Each 10-49
● GKEA03L	DPST-1NO/1NC	1/2″ NPT	20M6916	51.39	40.86
● GKEA06L	DPST-NC	1/2″ NPT	20M6932	44.91	41.42

KEYS

Mfg. Part No.	Description	Stock No.	Price Each 1-5	Price Each 6-14
● GKZ51M	Straight Key	83F5728	6.87	6.51
● GKZ52M	90° Angle Key	15M0241	6.74	6.47

(89714)

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element14.com

(196545)

MICRO SWITCH™ SAFETY INTERLOCK SWITCHES GKS SERIES TRAPPED KEY

RoHS Compliant Available

Honeywell
Sensing and Control
SELECTION, SPEED, SERVICE. All Found Here.

Features:
- Medium duty-trapped key
- 4 head key positions
- Glass filled polyester body
- Manual over-ride mechanism in case of power failure
- 3 conduits for simplicity of cabling
- Key not included; *order separately below*

Specifications:
- 3NC/1NO (Positive break on NC contacts)
- 100Kg (220lbs) max hold force
- Locking Pricipal: Power to Unlock
- Head orientation: Front
- -25°C to 50°C [-13°F to 122°F]
- IP67; NEMA 1, 4, 12, 13, EN60529
- CCC, IEC 947-5-1, EN60947-5-1

KEYS

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● GKZS6	Straight Key	21M6031	9.57
● GKZS7	90° Angle Key	21M6039	6.07

(89716)

HS6B AND HS6E SERIES SAFETY DOOR INTERLOCKING SWITCHES

RoHS Compliant Available

IDEC

HS6E DOOR INTERLOCK SAFETY WITH SOLENOID LOCKING
- Subminiature body: 15 x 75 x 75 mm
- 500N retention force
- Allows four actuator insertion directions
- Manual unlocking possible on three sides
- Solenoid power LED indicator

HS6B SERIES
- Subminiature body: 15 x 30 x 78 mm
- Two actuator entrance for mounting flexibility
- Complies with ISO14119 and EN 1088
- IP67 degree of protection

HS6B HS6E

HS6B SERIES

Mfg. Part No.	Current (A)	Contacts	Cable Length	Stock No.	Price Each 1-4
● HS6B-11B01	2.5	SPST-NO, SPST-NC	1m	84C2838	58.63
● HS6B-03B01	2.5	3PST-NC	1m	84C2836	68.65
● HS6B-12B01	2.5	SPST-NO, DPST-NC	1m	14M8173	71.40
● HS6B-03B01	2.5	3PST-NC	1m	84C2836	68.65
● HS6B-11B03	2.5	SPST-NO, SPST-NC	3m	84C2839	64.30
● HS6B-02B03	2.5	DPST-NC	3m	84C2835	64.30
● HS6B-12B03	2.5	SPST-NO, DPST-NC	3m	84C2841	66.10
● HS6B-03B03	2.5	3PST-NC	3m	84C2837	68.74

HS6E SERIES

MECHANICAL SPRING LOCK - ENERGIZED SOLENOID TO UNLOCK (3m CABLE, 24VDC)

Mfg. Part No.	Main Load Circuit	Monitor Contacts: Actuator Inserted	Monitor Contacts: Solenoid Locked	Stock No.	Price Each 1-4
● HS6E-L44B03-G	SPST-NC, SPST-NC	DPST-NC	SPST-NO	05N6988	192.89
● HS6E-M44B03-G	SPST-NC, SPST-NC	DPST-NC	SPST-NC	05N6994	186.55
● HS6E-N44B03-G	SPST-NC, SPST-NC	SPST-NO / SPST-NC	SPST-NO	05N7000	186.55
● HS6E-P44B03-G	SPST-NC, SPST-NC	SPST-NO / SPST-NC	SPST-NC	05N7006	186.55
SOLENOID LOCK - DE-ENERGIZED SOLENOID TO UNLOCK (3m CABLE, 24VDC)					
● HS6E-L7Y4B03-G	SPST-NC, SPST-NC	DPST-NC	SPST-NO	05N6991	186.55
● HS6E-M7Y4B03-G	SPST-NC, SPST-NC	DPST-NC	SPST-NC	05N6997	186.55
● HS6E-N7Y4B03-G	SPST-NC, SPST-NC	SPST-NO / SPST-NC	SPST-NO	05N7003	192.89
● HS6E-P7Y4B03-G	SPST-NC, SPST-NC	SPST-NO / SPST-NC	SPST-NC	05N7009	192.89

ACTUATORS FOR HS6B AND HS6E

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● HS9Z-A61	Straight	84C2848	6.41
● HS9Z-A62	Right Angle (actuator retention force 100N max)	84C2849	6.49
● HS9Z-A62S	Right Angle with Mounting Plate	05N7014	8.17
● HS9Z-A65	Angle adjustable w/hex screw (horizontal aor vertical)	92C3152	9.08

(72437)

HS5D AND HS5E SERIES SAFETY DOOR INTERLOCKING SWITCHES

RoHS Compliant Available

IDEC

HS5D DOOR INTERLOCK SAFETY SWITCH

- Miniature body: 30 x 30 x 91 mm
- Rotatable metal or plastic head allow for 8 entry directions
- Detects detachment of head for enhance safety
- Complies with ISO14119 and EN 1088
- IP67 degree of protection

HS5E DOOR INTERLOCK SAFETY WITH SOLENOID LOCKING

- Miniature body: 30 x 40 x 146 mm
- 1400N retention force
- Rotatable metal head allows for 8 entry directions
- Manual unlocking possible
- Solenoid power LED indicator

HS5D HS5E

HS5D SERIES

Mfg. Part No.	Contacts	Head Type	Conduit Port	Stock No.	Price Each 1-4
HS5D-11RN	SPST-NO, SPST-NC	Plastic	G 1/2	47T1533	48.08
HS5D-02RN	DPST-NC	Plastic	G 1/2	47T1529	48.55
HS5D-12RN	SPST-NO, DPST-NC	Plastic	G 1/2	47T1535	62.10
HS5D-03RN	3PST-NC	Plastic	G 1/2	47T1531	59.71
HS5D-11ZRN	SPST-NO, SPST-NC	Metal	G 1/2	47T1534	57.54
HS5D-02ZRN	DPST-NC	Metal	G 1/2	47T1530	57.54
HS5D-12ZRN	SPST-NO, DPST-NC	Metal	G 1/2	47T1536	70.56
HS5D-03ZRN	3PST-NC	Metal	G 1/2	47T1532	70.56
HS5D-12ZRNM	SPST-NO, DPST-NC	Metal	M20	47T1537	70.56
HS5D-12ZRNP	SPST-NO, DPST-NC	Metal	G 1/2	47T1538	70.56

HS5E SERIES

SOLENOID LOCK - ENERGIZE SOLENOID TO UNLOCK (3m CABLE, 24VDC)

Mfg. Part No.	Main Load Circuit	Monitor Contacts: Actuator Inserted	Monitor Contacts: Solenoid Locked	Stock No.	Price Each 1-4
HS5E-A4003	SPST-NC, SPST-NC	SPST-NO	SPST-NO	05N6922	136.68
HS5E-A4403-G	SPST-NC, SPST-NC	SPST-NO	SPST-NO	05N6924	147.71
HS5E-B4403-G	SPST-NC, SPST-NC	SPST-NO	SPST-NC	05N6933	142.85
HS5E-D4003	SPST-NC, SPST-NC	SPST-NC	SPST-NC	05N6953	136.68
HS5E-VA4003-G	SPST-NC, SPST-NC	SPST-NO	SPST-NO	47T1540	210.59
HS5E-VD4403-G	SPST-NC, SPST-NC	SPST-NC	SPST-NC	47T1541	210.59
HS5E-DD4403-G	SPST-NC, SPST-NC	...	...	47T1539	210.59
SOLENOID LOCK - DE-ENERGIZE SOLENOID TO UNLOCK (3m CABLE, 24VDC)					
HS5E-A7Y003	SPST-NC, SPST-NC	SPST-NO	SPST-NO	95M8746	136.68
HS5E-A7Y403-G	SPST-NC, SPST-NC	SPST-NO	SPST-NO	05N6928	142.85
HS5E-B7Y403-G	SPST-NC, SPST-NC	SPST-NO	SPST-NC	05N6939	142.85
HS5E-D7Y003	SPST-NC, SPST-NC	SPST-NC	SPST-NC	05N6958	136.68
HS5E-D7Y403-G	SPST-NC, SPST-NC	SPST-NC	SPST-NC	05N6961	142.85

ACTUATORS FOR HS5D AND HS5E

Mfg. Part No.	Description	Stock No.	Price Each 1-9
HS9Z-A51	Straight	84C2845	9.08
HS9Z-A51A	Straight with bushings	47T1542	10.51
HS9Z-A52	Right Angle	84C2846	8.97
HS9Z-A52A	Right Angle with bushings	05N7013	10.51
HS9Z-A53	Angle adjustable vertical operation	47T1543	13.34
HS9Z-A62	Right Angle (actuator retention force 100N max)	84C2849	6.49
HS9Z-A62S	Right Angle with Mounting Plate	05N7014	8.17
HS9Z-A5P	Plug Actuator	05N7012	31.13
HS9Z-PH5	Padlock hasp (prevents insertion of actuator)	47T1544	31.13
HS9Z-SP51	Mounting plate (allows mounting to aluminum frames)	47T1545	50.02
HS9Z-SH5	Slide actuator	05N7015	91.15

(147146)

HS7A-DMC SERIES NON-CONTACT INTERLOCK SWITCHES

RoHS Compliant Available

IDEC

- Voltage rating: 24V DC
- Current rating: 100mA
- Operating temperature: -25°C to 85°C
- Compact size (7 × 16 × 51mm)
- Positioning for installation is easy
- Up to 36 sets can be connected. (safety relay module: HR1S-DME)
- Combination with proprietary relay modules achieves safety category 4 (EN954-1)
- Degree of protection: IP67

➤ CONTINUED ➤

HS7A-DMC SERIES NON-CONTACT INTERLOCK SWITCHES (CONT.)

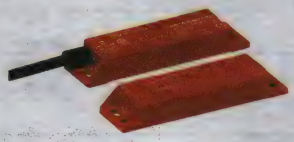
Mfg. Part No.	Contacts	Cable Length (m)	LED	Stock No.	Price Each 1-9
HS7A-DMC5902	SPST-NO, SPST-NC	2	Without	47T4078	74.97
HS7A-DMC5912	SPST-NO, SPST-NC	2	With	47T4079	78.54
HS7A-DMC7902	DPST-NC	2	Without	47T4080	77.97
HS7A-DMC7912	DPST-NC	2	With	47T4081	78.54

(196194)

HS7A-DMP SERIES NON-CONTACT INTERLOCK SWITCHES

RoHS Compliant Available

IDEC



- Voltage rating: 24V DC
- Current rating: 100mA
- Operating temperature: -25°C to 85°C
- Operation signals from auxiliary contacts can be read directly by controllers such as PLCs, allowing for monitoring HS7A-DMP non-contact interlock switches.
- Ideal for installation on guard doors where positioning is difficult.
- Conformable up to safety category 4 (EN954-1) (Combining with proprietary safety relay module achieves safety category 4.)
- A maximum of 36 sets can be connected (safety relay module: HR1S-DME)
- Degree of protection: IP67

Mfg. Part No.	Contacts	Cable Length (m)	LED	Stock No.	Price Each 1-9
HS7A-DMP5002	SPST-NO, DPST-NC	2	Without	47T4082	82.81
HS7A-DMP5012	SPST-NO, DPST-NC	2	With	47T4083	86.36
HS7A-DMP7002	DPST-NO, SPST-NC	2	Without	47T4084	86.12
HS7A-DMP7012	DPST-NO, SPST-NC	2	With	47T4085	86.36

(196195)

D4SL SERIES SAFETY INTERLOCK SWITCHES

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

Features

- Two types are available: a connector type that reduces wiring time and a detachable terminal block type
- Robust and durable metal head
- Key holding force of 1,300 N
- The wider key slot is less susceptible to movement from doors, and can handle doors with a small radius
- By rotating the mounting part, it is possible, both to change the key insertion point and to enable mounting on various devices
- Easy view LED indicators can be checked from any direction
- By utilizing the 6-contact type, both the door open/closed status and the solenoid ON/OFF status can be monitored independently
- A cost-effective 5-contact model is also available

Connector Type / Terminal Block Type

Mfg. Part No.	Contacts	Wiring Method	Stock No.	Price Each 1-14
D4SL-3MDG-DN	DPDT-NC, 3PST-NC	Connector	27T9130	230.49
D4SL-3MDG-D4	DPDT-NC, 3PST-NC	Terminal block	27T9131	317.27
D4SL-3NDA-DN	DPDT-NC, SPST-NO, DPDT-NC, SPST-NO	Connector	27T9133	235.03
D4SL-3NDA-D4	DPDT-NC, SPST-NO, DPDT-NC, SPST-NO	Terminal block	27T9134	324.32
D4SL-3NDG-D	DPDT-NC, SPST-NO, DPDT-NC, SPST-NO	Terminal block	27T9135	252.13
D4SL-3NDG-DN	DPDT-NC, SPST-NO, DPDT-NC, SPST-NO	Connector	27T9136	226.97
D4SL-3NDG-D4	DPDT-NC, SPST-NO, DPDT-NC, SPST-NO	Terminal block	27T9137	311.70
D4SL-3PDG-D	DPDT-NC, SPST-NO, 3PST-NC	Terminal block	27T9139	304.92
D4SL-3QDA-D	3PST-NC, DPDT-NC, SPST-NO	Terminal block	27T9140	253.20
D4SL-3QDA-DN	3PST-NC, DPDT-NC, SPST-NO	Connector	27T9141	284.60
D4SL-3QDA-D4	3PST-NC, DPDT-NC, SPST-NO	Terminal block	27T9142	311.70
D4SL-3QDG-D	3PST-NC, DPDT-NC, SPST-NO	Terminal block	27T9143	254.33
D4SL-3QDG-D4	3PST-NC, DPDT-NC, SPST-NO	Terminal block	27T9144	311.70

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-14
D4SL-K3	Adjustable horizontal mounting operation key	27T9126	28.89
D4SL-SK10-LK	Slide key	27T9128	412.64
D4SL-CN3	Connector Cable	27T9119	36.72
D4SL-CN5	Connector Cable	27T9120	54.20

(194783)

SWITCHES – SAFETY INTERLOCK

D4BS SERIES STANDARD SAFETY-DOOR SWITCHES

RoHS Compliant Available

OMRON AUTOMATION & SAFETY

- 4-Position Head, Side Entry
- 10A Slow-Action Contacts, 600VAC
- IP67 Enclosure Rating
- Industry Standard Switch Box Shape, Size and Mounting Pattern
- ½"-14 NPT Conduit Openings

NC contacts are positive opening. 4.39 x 1.51 x 1.61". Order keys separately below. UL listed, CSA certified, CE compliant.

Mfg. Part No.	Description	Stock No.	Price Each 1-14
● D4BS-K1	Horizontal Key	18M7243	14.40
● D4BS-K3	Adjustable Key	18M7245	39.71

(68753)

GENERAL-PURPOSE SAFETY LIMIT SWITCHES

OMRON AUTOMATION & SAFETY

- Miniature Safety Limit Switch

Compact, economical, plastic-body switch features direct-opening action mechanism that forcibly opens contacts to assure accurate switching. 1 set of DPDT contacts: NC for safety circuit and NO for control circuit. Meets NEMA enclosure types 3,4,6P and IEC enclosure IP65(EN60529 and EN50047) classification. 4-position turret head for flexibility to fit special applications. Rated load: 10A, 125/250VAC. For ½-14NPT conduit. Operating temperature: -30°C to +70°C. UL listed, CSA certified, CE compliant, TÜV approved.

Mfg. Part No.	Actuator	Contacts	Conduit	Stock No.	Price Each 1-5
D4N2120	Roller Lever	1 NC + 1 NO	G ½	80K1536	30.12

(34090)

PREVENTA XCSLE AND XCSLF SOLENOID LOCKING SAFETY INTERLOCK SWITCHES

Schneider Electric

- Metallic and plastic housing
- User rotatable head
- Up to 6 contacts (up to 3 safety contacts + up to 3 electromagnet contacts) – all positive opening
- Better resistance to forcible opening of actuating key 314.7 lbs (1400N) plastic range, and 674.4 lbs (3000N) for metallic range
- Cage clamps for easy and quick wiring
- Conduit entries ½" NPT and M20 x 1.5
- 3 conduit openings
- Mini connectors available
- Voltages available: 24 Vac/dc, 120 Vac or 230 Vdc
- Rear emergency release – allows opening of door or interlock to escape from inside machinery or work cells
- Uses same actuating keys as our other XCS metal body safety interlocks
- All wiring enters switch through one conduit opening
- 2 LEDs standard

Mfg. Part No.	Body Material	Contacts	Solenoid ang Led Voltage	Stock No.	Price Each 1-9
LOCKING WITHOUT POWER					
XCSLE2727313	Plastic	DPST-NC	24 Vac/dc	52T5925	258.52
XCSLE2727333	Plastic	DPST-NC	120 Vac	52T5926	247.39
LOCKING WITH POWER					
XCSLE2525513	Plastic	SPST-NO, SPST-NC	24 Vac/dc	52T5924	258.52
LOCKING WITHOUT POWER					
XCSLF2727313	Metal	DPST-NC	24 Vac/dc	52T5927	316.52
XCSLF2727333	Metal	DPST-NC	120 Vac	52T5928	316.52
XCSLF3535313	Metal	3PST	24 Vac/dc	52T5929	494.24
XCSLF3535333	Metal	3PST	120 Vac	52T5930	472.96
XCSLF3737313	Metal	3PST	24 Vac/dc	52T5931	489.99
XCSLF3737333	Metal	3PST	120 Vac	52T5932	472.96
XCSLF3838313	Metal	3PST-NC	24 Vac/dc	52T5935	472.96
LOCKING WITH POWER					
XCSLF3737513	Metal	3PST	24 Vac/dc	52T5933	494.24
XCSLF3737533	Metal	3PST	120 Vac	52T5934	489.99

(203433)

XCS SAFETY INTERLOCK SWITCH AND KEYS

RoHS Compliant Available

Schneider Electric

XCSPA593 XCSZ11 XCSZ12 XCSZ13

Features
- Multiple actuator types to fit a wide variety of application requirements
- Metal enclosures for rugged and demanding applications
- Small enclosure styles for mounting in tight spaces
- Locking devices keep personnel out of machine when hazards are present
- Multiple actuating keys and shaft or lever operators provide multiple solutions for guarding applications

Specifications
- Metal and plastic body
- Storage temperature: -40 to +158 °F (-40 to +70°C)
- Operating temperature: -13 to +158 °F (-25 to +70 °C)
- Vibration resistance: 5 gn - 10 to 50 Hz
- Enclosure rating: IP67

Mfg. Part No.	Actuator Type	Contacts	Contact Rating (A)	Stock No.	Price Each
XCSA703	Key	3PST-2NC/1NO	10	16B3209	210.73
XCSB703	Key	3PST-2NC/1NO	10	72C8363	271.96
● XCSC703	Key	3PST-2NC/1NO	10	16B3211	303.31
XCSC723	Key	3PST-2NC/1NO	10	89H9515	393.07
● XCSE7313	Key	3PST-2NC/1NO	6	16B3212	683.78
● XCSMP59L2	Key	DPST-1NO/1NC	2.5	89H6628	126.49
● XCSMP70L2	Key	3PST-2NC/1NO	2.5	89H6629	134.65
● XCSMP79L2	Key	DPDT-2NC	2.5	68H8185	126.49
● XCSMP80L2	Key	3PST-3NC	2.5	89H6630	134.65
XCSPA593	Key	DPST-1NO/1NC	10	16B3220	97.16
XCSPA793	Key	DPDT-2NC	10	16B3221	94.68
XCSPL583.	Lever	DPST-1NO/1NC	10	17C8195	113.46
XCSPL753.	Lever	DPDT-2NC	10	17C8197	113.46
XCSPL783.	Lever	DPDT-2NC	10	17C8200	113.46
XCSPR553.	Rotary Shaft	DPST-1NO/1NC	10	80C6759	125.62
● XCSTE7313	Key	DPDT-2NC	6	17C8206	348.23
● XCSTE7333	Key	DPDT-2NC	6	17C8207	348.23
● XCSM3710L2	Top Plunger	DPST-NC, SPST-NO	6	64M0697	149.62
● XCSD3710N12	Top Plunger	DPST-NC, SPST-NO	6	64M0700	103.37

SWITCH ACCESSORIES

Mfg. Part No.	Description	Fits interlock Type	Stock No.	Price Each
XCSZ01	Actuating Key - Straight	XCSA, XCSB, XCSC, XCSE	16B3223	23.55
XCSZ03	Actuating Key - Pivoting	XCSA, XCSB, XCSC, XCSE	16B3225	49.74
XCSZ05	Actuating Key - Side Bolt	XCSA, XCSB, XCSC, XCSE	16B3226	228.18
XCSZ11	Actuating Key - Straight	XCSPA, XCSTE	16B3227	9.65
XCSZ12	Actuating Key - Wide Mounting	XCSPA, XCSTE	16B3228	9.78
XCSZ13	Actuating Key - Pivoting	XCSPA, XCSTE	16B3229	39.35
XCSZ14	Actuating Key - Right Angled	XCSPA, XCSTE	16B3230	9.78
● XCSZ21	Guard Retaining Device	XCSPA, XCSTE	16B3231	30.02
● XCSZ81	Actuating Key - Straight	XCSMP	89H6634	12.18
● XCSZ83	Actuating Key - Right Angled	XCSMP	89H6635	27.29
● XCSZ84	Actuating Key - Pivoting for Right Hand Door	XCSMP	89H6636	12.18
● XCSZ85	Actuating Key - Pivoting for Left Hand Door	XCSMP	89H6637	27.29

(2730)

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(196560)

NON CONTACT SAFETY INTERLOCK SWITCHES XCSDM SERIES

RoHS Compliant Available

Schneider Electric

Features

- Non-Contact Safety interlock switches do not require contact between the switch and actuating key for operation, making them ideal for use where there are guard alignment or vibration issues. They are also suitable for wet and wash down areas.
- Designed for use in wet and washdown areas, making them ideal for food and beverage applications
- Small size allows installation in tight spaces or where there are issues with mounting standard safety interlocks
- XCSDM4 and XCSDM4 devices are SIL rated for use in safety related systems without the need for a safety relay or safety controller, eliminating panel space, reducing wiring, and reducing installation time and cost.
- Multiple approach directions of the actuating key provides greater flexibility for mounting switches, making potentially difficult solutions much simpler to solve
- Small size and flexibility in mounting allows placement of the switch and actuating key in a manner to minimize damage or tampering.

Non-Contact

Specifications

- Storage temperature: -40 to + 185 ° F (-40 to + 85 °C)
- Operating temperature: -13 to + 158 ° F (-25 to + 70 °C)
- Vibration resistance: 10 gn - 10 to 500 Hz
- Electrical shock resistance: 30 gn, duration 11 ms
- Connection method: cable
- Housing material: PBT
- Cable material: PVC
- Enclosure ratings: IP 66, IP 67

Mfg. Part No.	Type	Output	LED	Stock No.	Price Each
XCSDMC5902 *	Compact Rectangular	DPST-1NO/1NC	No	20K4639	147.69
XCSDMC5912 *	Compact Rectangular	DPST-1NO/1NC	Yes	89H6609	150.85
XCSDMC7902 **	Compact Rectangular	DPDT-2NC	No	72K1479	146.42
XCSDMC7912 **	Compact Rectangular	DPDT-2NC	Yes	89H6610	157.64
XCSDMP5002 *	Rectangular	3PST-2NO/1NC	No	20K4640	170.92
XCSDMP5012 *	Rectangular	3PST-2NO/1NC	Yes	89H6611	169.91
XCSDMP7002 **	Rectangular	3PST-2NC/1NO	No	72K1480	188.96
XCSDMP7012 **	Rectangular	3PST-2NC/1NO	Yes	89H6612	167.60
XCSDMR5902 *	Cylindrical - 30 mm	DPST-1NO/1NC	No	20K4641	163.56
XCSDMR7902 **	Cylindrical - 30 mm	DPDT-2NC	No	13M3562	141.33

* For use with XPSDM safety relays or XPSMC safety controllers.
** For use with XPSAF safety relays

SELF-CONTAINED SWITCHES

XCSDM379110	Self Contained - SL 2 10 m cable	DPDT-NC	Trii Color	82T6095	490.93
XCSDM480102.	Self Contained - SL 3 2 m cable	DPDT-NC	Trii Color	11R2083	397.36
XCSDM480110	Self Contained - SL 3 10 m cable	DPDT-NC	Trii Color	82T6096	546.24

XCSDM3 and XCSDM4 above do not require the use of a safety relay nor safety controller to be used in a safety related system.
(176994)

MICRO SWITCH™ CPS SERIES CABLE PULL SAFETY SWITCHES

RoHS Compliant Available

Honeywell

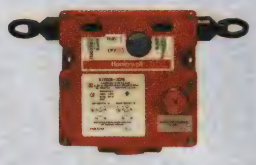
Sensing and Control

SELECTION, SPEED, SERVICE. All Found Here.

Features:

- Rugged zinc die-cast housing
- Longest span available from single device
- Can detect both cable pulled and broken/slack
- Large terminal cavity can be used to marshal cable
- High visibility lamp versions assist operations in locating tripped switch

1CPS



2CPS

Specifications:

- Normally closed contacts direct opening
- 1/2" NPT conduit termination
- Agency approvals EN60947-1, EN-60947-5-1, EN-60947-5-5
- Operating temperature: -25°C to +85°C [-13°F to 185°F]

SWITCHES

Mfg. Part No.	Circuitry	Indicator	Stock No.	Price Each 1-5
1CPSA1	DPST-1NO, SPST-NC	None	53K5916	208.85
1CPSA1B	DPST-1NO/1NC	120V LAMP	05M2262	231.20
1CPSA2	4PST-2NO/2NC	None	83H2412	258.39
1CPSA2A	4PST-2NO/2NC	24V LAMP	05M2263	279.46
1CPSA2B	4PST-2NO, DPST-NC	120V LAMP	05M2264	291.03
2CPSA1A1	4PST-2NO/2NC	None	86C3862	425.24
2CPSA1A1B	4PST-2NO/2NC	120V LAMP	86C3864	496.56

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-5
CLSZC3	Cable - 100 ft.	04M8545	155.84
CLSZC7	Cable - 250 ft.	85C6728	374.96
CPSZ1S	Draw-bar Endspring	85C6774	15.73

CONTINUED

MICRO SWITCH™ CPS SERIES CABLE PULL SAFETY SWITCHES (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each 1-5
CPSZK1*	Hardware Packet	04M8717	87.11
CPS-BRACKET	Mounting Bracket	73K0923	29.67

* Hardware Packet includes (1) J-hook turnbuckle with lock nuts, (2) thimbles, (2) low-profile duplex cable clamps, (16) sets of cable supports, (16) ¼-20 eye bolts, (32) ¼-20 nuts, (32) flat washers, (16) lock washers.
(77679)

XY2 SERIES CABLE PULL SWITCHES

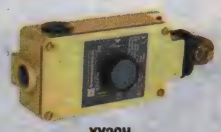
RoHS Compliant Available

Schneider Electric

Features

- Emergency cable pull versions provide for contact latching requiring the reset button to be pressed to resume operation
- Momentary operation uses snap acting contacts and do not latch, allowing operation to resume when cable is released
- Cable pull switches are ideal around conveyors where the cable can be pulled anywhere along the length of the cable
- More economical over a long distance than installing multiple individual emergency stop buttons
- Tension required can be adjusted to the requirements of the application

XY2CE



XY2CH

Specifications

- Storage Temperature: -40°C to + 70°C
- Operating Temperature: -25°C to + 70°C
- Vibration Resistance: 10G, F = 10 to 300 Hz
- Shock Resistance: 50G, Duration 11 ms
- Housing Material: Housing: Zamak
- Cover: Steel
- Enclosure Rating: 1, 4, 12, IP65 (IP667 with booted reset button)

Cable Pull Switches are used for emergency stops or for momentary stops at any point along the cable. XY2CE devices have a range of 230 feet, XY2CH switches have a range of 98 feet. The taut cable principle provides for contacts to open when the cable is pulled or if the cable is loose or broken.

EMERGENCY STOP CABLE PULL SWITCHES

Mfg. Part No.	Cable Span (m)	Circuitry	Pilot Light	Description	Stock No.	Price Each
XY2CE1A250H7	230	DPDT-1NO, SPDT-NC	No	Right Cable Mount, Booted Push Button	96F1945	583.95
XY2CE1A150H7	230	DPST-NO, DPST-NC	No	Right Cable Mount, Standard Push Button	14C3914	587.55
XY2CE2A250H7	230	DPST-NO, DPST-NC	No	Left Cable Mount, Booted Push Button	80C7407	583.95
XY2CE2A196H7	98	DPST-NO, DPST-NC	Yes	Left Cable Mount, Standard Push Button	11R7919	603.77
XY2CH13150H7	98	DPDT - 1NO/1NC	No	Standard Push Button	16B4496	502.85
XY2CH13250H7	98	DPDT - 1NO/1NC	No	Booted Push Button	26T4270	533.48

NORMAL STOP CABLE PULL SWITCHES

XY2CE3A010H7	230	DPST-NO, DPST-NC	No	Right Cable Mount	96M7854	576.74
XY2CE4A010H7	230	DPST-NO, DPST-NC	No	Left Cable Mount	93R4466	576.74

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
XY2CZ503	Cable Clamp	16B4504	8.20
XY2CZ601	Cable Support	16B4507	10.70
XY2CZ9310	10.5 m Cable Kit	66F3695	100.55
XY2CZ9325	25.5 m Cable Kit	16B4516	232.04
XY2CZ9350	50.5 m Cable Kit	16B4517	437.30

(2732)

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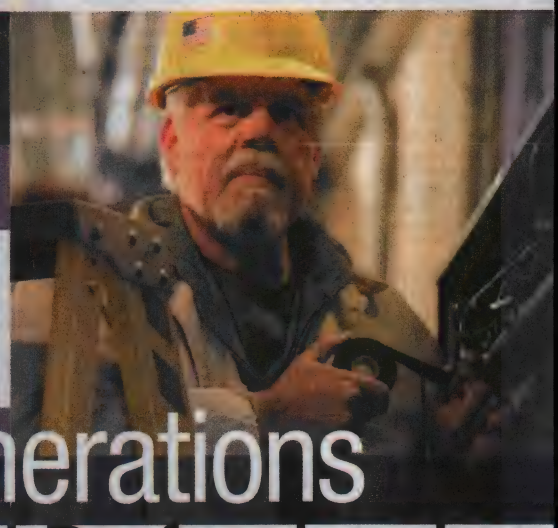
(212564)



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Finding the right connector is easy at Newark element14. We offer hundreds of thousands from audio visual to RF and Fiber Optic and so many more.

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BVX-100 SERIES BENCHTOP FUME EXTRACTION SYSTEM

RoHS Compliant Available

METCAL

- Single-User System with Multi-User Power For Thorough, Effective Fume Extraction
- No Installation Means Easy Set-Up and Relocation
- Small, Space-Saving Footprint
- Unique Blower Design Provides Quiet Operation

BVX-101

Mfg. Part No.	Description	Stock No.	Price Each
BVX-101	Benchtop Fume Extractor System, Single-User, Arm/Plenum, Pre-HEPA-Gas, 100-240VAC	20C2393	550.00
BVX-101-S	Benchtop Fume Extractor System, Single-User, Without Arm/Plenum, Pre-HEPA-Gas, 100-240 VAC	20H3566	473.00
BVX-103	Benchtop Fume Extractor System, Single-User, Arm/Plenum, Pre-Gas, 100-240 VAC	20H3567	550.00
BVX-103-S	Benchtop Fume Extraction System, Single-User, Without Arm/Plenum, Pre-Gas, 100-240 VAC	20H3568	473.00
FM-BVX	Main Replacement Filter (Combined HEPA/Gas)	76K1582	85.10
FP-BVX	Replacement Pre-Filters (**Sold in Pkg. of 5**)	76K1584	28.32

(68319)

BVX-200 FUME EXTRACTION SYSTEM

RoHS Compliant Available

METCAL

BVX-200 series compact, portable two-arm fume extraction system combines strong fan performance with efficient filtration and quiet, flexible operation. It is compact enough to go under a workbench, but still provide multi-user power in a truly portable system. Easily transported by one person without the strain induced by a larger unit. Features an innovative one-stage impeller design that provides more than double the total free-blowing airflow. Maximum free-blowing airflow is rated @ 250m^3/h, with maximum suction force @ 850Pa. The stand-alone unit does not require a separate compressor or external ducting; it only needs to be plugged into a power source to be ready to use.

BVX-201-KIT

Mfg. part no. BVX-201 fume extraction system is designed mainly for solder fumes and incorporates both pre- and main filters which can be changed independently to maximize the working life of each filter and lower the total cost of ownership. The main filter has a HEPA efficiency of 99.97% at 0.3 micron, plus an activated carbon filter to remove additional gases. For applications that require a high-capacity of gas filtration, such as cleaning with solvents or conformal coatings, **mfg. part no. BVX-203** fume extraction system features a deep-bed gas filter. **Mfg. part no. BVX-201KIT** fume extraction system kit includes filter unit, pre-HEPA-gas, with two flexible arms (1.2m long). *Order replacement accessories separately below.*

Mfg. Part No.	Description	Stock No.	Price Each
BVX-201	Two-Arm Fume Extraction Filter Unit, Pre-HEPA-Gas	97H5992	665.00
BVX-201-KIT	Two Arm Fume Extraction System Kit, Pre-HEPA-Gas	29M6877	806.00
BVX-201-KIT1	Two Arm Fume Extraction System Kit, Pre-HEPA-Gas	51R0322	965.00
BVX-203	Two-Arm Fume Extraction Filter Unit, Pre-Deep Bed Gas	01J2017	745.00
EXHAUST ARM KIT			
BVX-ARM-K1	One 28" BVX Arm with 6' Long Hose and Table Bracket with C-Clamps	01J2015	148.72
REPLACEMENT FILTERS			
FM-BVX200	Main Filter (Combined HEPA/Gas)	01J2019	98.04
FG-BVX200	Deep Bed Gas Filter	01J2018	181.76
FP-BVX200	Pre-Filter (**Sold in Pkg. of 5**)	01J2020	53.98

(79281)

FUME EXTRACTION SYSTEMS MFX-2200 SERIES

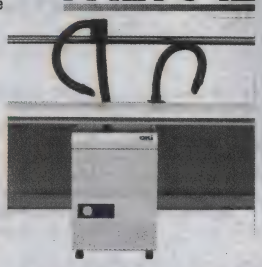
RoHS Compliant Available

METCAL

Pre / HEPA / Gas filtration models feature:
- Excellent air flow performance
- HEPA filter rating of 99.97% at 0.3 micron
- Dust filter seal keeps filter housing clean

Pre / Gas filtration models feature:
- High capacity gas filter cartridge ensures a long dwell-time of the gases inside the filter media
- Provides air flow for two exhaust cabinets

All models feature:
- Large, pleated pre-filter
- Casters as standard
- Minimum operating noise



The multi-user Fume Extraction models Pre / HEPA / Gas filtration provide the ultimate performance in a compact size that easily fits under most workbenches. It is ideal for removing solder fumes and filtering laser fumes. Models with Pre / Gas filtration are designed for the removal of gases and vapors from a range of heavy duty bench-top applications, including solvent cleaning, gluing/bonding and conformal coatings. Product is comprised of 1- filter unit with filters installed, 1 - power cord (110VAC or 230VAC) and user guide.

Mfg. Part No.	Power Supply	Flow Rate	Filtration	Control Panel	Stock No.	Price Each
MFX-2200C-D	110 V, 50/60 Hz	400 cfm	Pre – HEPA - Gas	Analog	68K5112	2794.00
MFX-2200G-A	110 V, 50/60 Hz	350 cfm	Pre – HEPA - Gas	Digital	68K5113	2525.00

➤CONTINUED➤

FUME EXTRACTION SYSTEMS MFX-2200 SERIES (CONT.)

Mfg. Part No.	Power Supply	Flow Rate	Filtration	Control Panel	Stock No.	Price Each
MFX-2200G-D	110 V, 50/60 Hz	350 cfm	Pre – Gas	Analog	68K5114	3015.00
MFX-2206C-A	230 V, 50 Hz	600 m^3/h	Pre – HEPA - Gas	Analog	68K5115	2395.00
MFX-2206C-D	230 V, 50 Hz	600 m^3/h	Pre – HEPA - Gas	Digital	68K5116	2794.00
MFX-2206G-A	230 V, 50 Hz	550 m^3/h	Pre – Gas	Analog	68K5117	2395.00
MFX-2206G-D	230 V, 50 Hz	550 m^3/h	Pre – Gas	Digital	68K5118	3015.00

(209483)

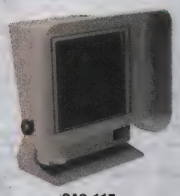
BENCHTOP FUME ABSORBERS

RoHS Compliant Available

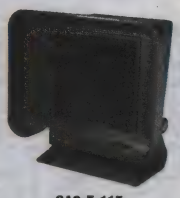
OK Industries Div. of Jonard Industries

- Compact, Low-Profile
- Can Be Used 6" to 8" From Work Area
- Carbon-Impregnated Filters Trap a Limited Portion of Flux Fumes

Aerodynamic hood design effectively draws irritating soldering fumes away from the work area. (**NOTE:** Each unit includes 3 replacement filters.)



SA9-115



SA9-E-115

Mfg. Part No.	Description	Stock No.	Price Each 1-4
SA9-115	Benchtop Fume Absorber, 115V	50F5445	132.46
SA9-E-115	ESD Fume Absorber, 115V	50F5446	159.58
SA-91	Fume Absorber w/Articulating Arm, 115V	95F3919	296.65
SA-91E	ESD Fume Absorber w/Articulating Arm, 115V	95F3920	329.60
SAF1	3-Piece Replacement Filter Set	96F7990	29.60

(5988)

BENCHTOP SOLDER FUME AND SMOKE ABSORBER

Weller®

- Fan air flow rate: 87-107cfm
- Replaceable carbon-activated filter system
- Stand adjusts to varying angles
- Quiet fan operation, 45-50dB
- ESD safe housing
- Convenient carry handle
- 62" Power cord with 3-wire plug

Ideal for removing flux fumes from soldering workbench. Great for workspaces using more active fluxes being used with lead-free solder. Fumes are absorbed by a replaceable carbon-activated filter. Electric fan motor rated 120VAC, 20W, 50/60Hz, 61.47322 BTU/Hr. Includes one replacement filter, users guide and one year manufacturer's warranty. **Mfg. part no. WAS350F** replacement filters can be ordered separately; *go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each
WSA350	Benchtop Solder Fume and Smoke Absorber	70K9977	71.60
ACCESSORY			
WSA350F	Carbon Activated Filters for WSA350, 3/Pack	79R3055	7.50

(87073)

ZERO-SMOG® VOLUME FUME EXTRACTION SYSTEMS

RoHS Compliant Available

Weller®

- Purifies air at up to eight workstations
- Large built-in pre-filter
- The adjustable pressure control guarantees optimal air flow regulation for each workstation – independent of the number of connected workstations
- Electronic filter control and easy filter exchange
- Four wheels to allow easy movement of the unit
- Noise-dampened metal housing

Suitable to use as a small central system in applications such as soldering, adhesives, clean-room work, and laser work. It is also capable for connection to small, selective reflow and soldering ovens. The large integrated pre-filter makes it suitable for lead-free soldering as it is able to catch a large quantity of particles. The **WFE 8S** can be connected so that it exhausts air. This is an advantage in applications where re-circulation is not allowed. Includes WFE 8S fume extraction unit with built-in pre-filter and compact filter consisting of HEPA filter H13 and wide band gas filter (50% active carbon, 50% Puratex).

Mfg. Part No.	Extraction Rate (m^3/h)	Sound Level @ 1m (dBA)	Voltage (VAC)	Power (VA)	Max. Vacuum (Pa)	HEPA Filter	Stock No.	Price Each
WFE8S	615	<55	120	450	2800	H13	23T0454	4319.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
0053659499	Replacement Pre-Filter	14T9179	128.10
0053659599	Replacement Compact Filter: HEPA Filter H13, Wide Band Gas Filter (50% Active Carbon / 50% Puratex)	23T0455	1488.90

(194470)

FUME EXTRACTION • SOLDERING STATIONS

ZERO-SMOG® VOLUME FUME EXTRACTION SYSTEMS

RoHS Compliant Available

Weller®

- Purifies air at up to eight workstations
- The adjustable pressure control guarantees optimal air flow regulation for each workstation independent of the number of connected workstations
- Electronic filter control and easy filter exchange
- Four wheels to allow easy movement of the unit
- Remote control with alarm function
- Noise-dampened metal housing

WFE 4S has a low noise emission level and is small and convenient to locate within the work area. To increase filter lifetime and save on energy, the **WFE 4S** is fitted with an automatic airflow speed control – depending on the number of connected workstations. To extend the capacity an external pre-filter can be fixed directly to the **WFE 4S**. The powerful maintenance-free variable speed turbine is electronically controlled. It has 3 operating modes: Standard speed control – selected by the user irrespective of the load on the system; Speed limiting control – the pump speed is automatically varied to match the load on the system; Economy control – the rate of fume absorption is maintained at a constant value. The operating hours and the filter condition are recorded for maintenance purposes.

Mfg. Part No.	Extraction Rate (m^3/h)	Sound Level @ 1m (dBA)	Voltage (VAC)	Power (VA)	Max. Vacuum (Pa)	HEPA Filter	Stock No.	Price Each
● WFE4S	615	51	120	450	2800	H13	**62R9528**	3757.90

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
0058735835	Adhesive Fume Filter (50% Active Carbon, 50% Puratex)	**14T9201**	572.30
0058735836	Fine Dust Filter F7 (**Pkg. of 10**)	**23T0456**	205.80
0058735837	Fine Dust Filter F5 (**Pkg. of 10**)	**23T0457**	68.30
0058735838	Compact Filter: HEPA Filter H13, Wide Band Gas FFilter (50% Active Carbon, 50% Puratex)	**14T9204**	688.80

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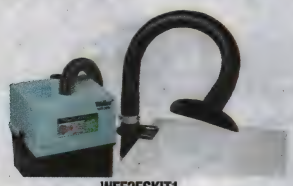
ZERO-SMOG® VOLUME FUME EXTRACTION SYSTEMS

RoHS Compliant Available

Weller®



WFE2ESKIT1

WFE2SKIT1

WFE2XKIT1S

WFE2XKIT1

- Purifies air at lead-free workbench for up to two operators
- Portable — conveniently transported for simple set-up or relocation
- 99.5% filtration efficiency — uses F5-Grade fine dust and H12-Grade HEPA filters
- Powerful turbine vacuum for fast, effective removal of air-born pollutants
- Quiet operation — less than 55dBA
- Easy filter exchange and electronic filter control (optional on **WFE2ES**)

Zero-Smog® portable volume extraction systems provides a comfortable, clean and safe working environment by capturing particles and pollutants produced during the soldering process. Ideal for use in applications such as hot air soldering, soldering machines, robots, solder baths, laser processing, adhesive dispensing, clean room applications (on request), microscope workstations and other fume emitting processes. Wide range of accessories, *ordered separately below*, provides users with a high-degree of operational flexibility. Extraction systems include Zero-Smog® mobile fume extraction unit with spare filter set consisting of fine dust pre-filter (except **WFE2X**) HEPA filter with wide band gas filter. Kits include the same contents as extraction systems plus funnel nozzle extraction arm accessory kits (contents listed below).

UNIT

Mfg. Part No.	Max. Work-stations	Extraction Rate (m^3/h)	Sound Level @ 1m (dBA)	Max. Vacuum (Pa)	HEPA Filter	Stock No.	Price Each
WFE2ES	2	220	55	1800	H12	**65M6531**	754.30
KITS							
WFE2ESKIT1	2	220	55	1800	H12	**33R1939**	929.00
● WFE2XKIT1	2	140	52	2300	H13	**52R7860**	1610.70
● WFE2XKIT1S	2	140	52	2300	H13	**14T7923**	1827.40

ACCESSORIES

Mfg. part no. 0053657199 funnel nozzle extraction arm accessory kit contains everything needed to set up one operator workplace: one **0053657899** 1M flexible fume extraction arm, one **0053657399** WF funnel nozzle 60, one **0053657499** WFV 60 stop/air flow valve and bench mounting bracket assembly, **0053657599** two bench mounting clamps and one **0053657699** 3M fume extraction hose.

➤CONTINUED➤

ZERO-SMOG® VOLUME FUME EXTRACTION SYSTEMS (CONT.)

Mfg. Part No.	Description	StockNo.	Price Each
0053657199	Accessory Kit - Extraction Arm, Funnel Nozzle, Stop Valve, Bench Mounting Bracket, Extraction Hose	**11R6626**	206.10
0053657299	WF Sloped Nozzle 60 Kit For WFE2ES / WFE2S / WFE2X	**14T9174**	206.10
0053657399	WF Funnel Nozzle 60 - For Flexible and Articulated Extraction Arm, 230 x 100mm	**51R5766**	46.20
0053657499	WFV 60 Stop / Air Flow Valve - Table connector for 60mm (2.36") Flex Arm and Extraction Tube	**51R5767**	77.60
0053657599	Bench Mounting Clamps, Max. Clamp Width 100mm (3.93"), **Pkg. of 2**	**51R5768**	35.70
0053657899	Flexible Fume Extraction Arm, 60mm (2.36") Dia. x 1m L - For Angled and Funnel Nozzles	**51R5771**	64.30
0053657999	WF 60 Angled Articulated Extraction Arm Kit For WFE2X	**14T9175**	400.90
0053659099	Active Carbon Filter For WFE2X	**85R6033**	412.70
0053659899	Articulated Extraction Arm, 60mm (2.36") Dia., w/ Articulated Joint, Airflow Control, Bench Clamp	**51R5772**	228.50
0058735860	Pre Filter for WFE2S Pre-Filter Box	**65M6654**	68.30
0058735862	Pre Filter Box WFE2S	**14T9207**	625.50
0058762703	F5 Fine Dust Pre Filter for WFE2ES, PK10	**65T6970**	51.80
0058735924	Filterbag For Sticky Residues	**14T9217**	94.50
0058762701	Spare Filter Set — Includes 1 Each H12-Grade HEPA with Wide Band Gas Filter and 10 F5-Grade Fine Dust Pre-Filters	**66M8526**	117.60
0052918699	Universal Fume Extraction Soldering Pencil Adapter Kit, Maxi	**65M6635**	36.30

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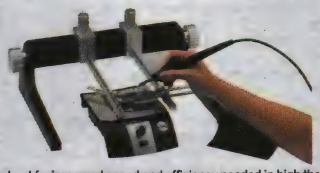
PCT-100 FOCUSED CONVECTION PREHEATER SYSTEM

RoHS Compliant Available

METCAL

CE TÜV Rheinland



- Accelerates and enhances rework process including lead-free, SMT and thru-hole
- Temperature ramps up quickly, maximizing productivity
- Adjustable temperature control up to 300°C
- Controlled cool-down eliminates thermal shock to PCB and components
- Automatically shut-off for added safety
- ESD safe
- TUV approved, CE compliant

PCT-100 focused convection preheater targets heat for improved speed and efficiency needed in high thermal demand applications. The hot convection air heats a PCB for better soldering, improved process control and increased productivity. Ideal for thick boards and smaller boards, such as cell phone and PDAs. Easy-to-use, just plug in, turn on, adjust the heat and it's ready to deliver hot air where needed. Small boards can be reworked directly on the preheater or use with free-standing PCB holder for larger size boards. The complete system includes choice of 115V or 230V convection preheater, a free-standing PC board holder and adjustable angle arm rest. All system components can also be *ordered separately below.*

Mfg. Part No.	Description	Stock No.	Price Each
● PCT-101-11	Focused Convection Preheater System — 115VAC	**51M8590**	420.00
● PCT-101-21	Focused Convection Preheater System — 230VAC	**51M8588**	420.00
● PCT-102-11	Focused Convection Preheater System — 115VAC	**47M0963**	675.00
● PCT-103-11	Focused Convection Preheater System — 115VAC	**73M3919**	510.00
● PCT-103-21	Focused Convection Preheater System — 230VAC	**73M3920**	510.00

PREHEATERS AND ACCESSORIES

Accessories add to ease-of-use. Free-standing board holder holds PCBs from 2.5" to 12" wide. Adjustable angle arm rest stabilizes hand and arm to help prevent operator fatigue.

● PCT-100-11	115V Focused Convection Preheater Only	**51M4853**	369.00
● BH-100	Free-Standing PC Board Holder	**88M2814**	319.00

(113241)

PS-900 SERIES PRODUCTION SOLDERING SYSTEM

RoHS Compliant Available

METCAL

- Compact benchtop system offers exceptional performance and superior control
- High power to deliver lead-free soldering at 600°F
- SmartHeat® temperature control
- Ergonomic, lightweight soldering handpiece
- Rugged, cast aluminum power supply housing
- Auto-Sleep workstand reduces tip oxidation
- Soldering tips are easily removed and replaced

PS-900 production soldering system packs power and provides exceptional thermal control in a compact power supply that fits on or under the bench. Suitable for lead-free soldering processes, multilayer boards and thermally demanding components. Features a variable power/fixed temperature control with no thermal over shoot. SmartHeat technology enables soldering at lower temperatures and requires no calibration.The complete **PS-900** soldering system includes 100 to 240VAC, 90W power supply with power cord, soldering iron handpiece with cord and coil assembly, Auto-Sleep workstand with sponge and brass pad, cartridge removal pad and user's guide. *Order accessories and* **SFV series** *power heater soldering tips separately below.*

➤CONTINUED➤

PS-900 SERIES PRODUCTION SOLDERING SYSTEM (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
PS-900	High-Power Soldering System	96M1588	256.47
ACCESSORIES			
PS-HC3	Soldering Iron Handpiece with Power Cord and Coil Assembly	96M1587	69.85
WS2	Auto-Sleep Workstand with Sponge and Brass Pad	31M7904	32.74
AC-YS4	Sponge (3.12" Diameter x 1.00")	64J8855	21.95
AC-CP2	Soldering Cartridge and Tip Removal Pads	91F5873	6.74
AC-BP	Lead-Free Brass Pads for Workstand — **Sold in Pkgs. of 10**	03M6022	10.50
PS-CA1	Coil Assembly for Light-to-Medium Soldering — **Sold in Pkgs. of 10**	01J2043	30.45

SFV SERIES POWER HEATER SOLDERING TIPS FOR PS-900 SYSTEM

SFV series replaceable soldering tips are quick and easy to change. The power heater is built into the tip, delivering heat quickly and precisely. Thermally-optimized large diameter tips include additional iron plating for longer life. Ideal for use with **mfg. part no. PS-900** production soldering system; *ordered separately above.* For easy identification of soldering tips used for lead-free processes, *order* **mfg. part no. AC-CK1** *lead-free ID soldering tip rings separately above.* These green-colored ID rings slip easily onto tip.

EASY ACCESS TIPS — FOR LONGER REACH, TOUCH-UP APPLICATIONS

Mfg. Part No.	Tip Style	Tip Thickness (in.)	Tip Length (in.)	Stock No.	Price Each
SFV-CH15A	Chisel	0.06	0.528	77M9252	11.48
TIPS FOR HEAVY-DUTY APPLICATIONS					
SFV-CH10	30° Chisel	0.04	0.43	66K6728	10.46
SFV-CHB15	30° Chisel Bent Bent	0.06	0.48	66K6727	10.46
SFV-CH20	Chisel	0.07	0.39	66K6729	9.42
SFV-CH25	Chisel	0.1	0.43	66K6730	9.42
SFV-CH50	Chisel, Extra-Large	0.2	0.40	66K6731	10.46
SFV-CN05	Conical	0.02	0.34	66K6736	10.46
SFV-CNB05	Conical Bent	0.02		66K6732	9.42
SFV-CNL04	Conical, Long	0.016	0.53	66K6733	10.46
SFV-CNL10	Conical, Long	0.04	0.51	66K6734	10.46
SFV-CNL14	Conical, Long	0.055	0.59	66K6735	10.46
SFV-DRH20	Conical Bevel	0.07	0.55	66K6737	10.46

(113243)

HCT2 SERIES DIGITAL HOT-AIR PENCIL

RoHS Compliant Available

METCAL

NEW

- 120 watt ceramic heater and dual stage air pump
- Digital airflow and temperature controls
- Fast response and performance
- Standby mode
- Universal power supply
- Ergonomic and lightweight hand-piece
- Nozzles
- Easily change heaters and nozzles

HCT2-120 Hot Air Pencil is the latest addition to Metcal's offering of convection rework tools. This digital handheld convection tool is ideally suited for applications, which use smaller components and integrated circuits. As component miniaturization continues, the ergonomics of a pencil allow a user more freedom to access and rework components on the board without affecting adjacent parts. Digital Hot Air Pencil includes: power system with hand-piece and heater, pack of 6 nozzles, workstand with nozzle plate holder and a nozzle removal pad.

Mfg Part No.	Description	Stock No.	Price Each
HCT2-120	Power System with Hand-Piece and Heater	18X2331	499.00

(211467)

HCT-900 HAND-HELD CONVECTION HOT-AIR TOOL

RoHS Compliant Available

METCAL

CE TÜV Rheinland

- Low-noise, diaphragm air pump (less than 45db) provides quiet operation
- Air flow: 6-25 l/min
- Control temperature: 100°C -500°C (212°F -932°F)
- Fully ESD compliant
- CE complaint, TUV approved

Mfg. part no. HCT-900-11 hot air tool offers a low-cost, versatile rework solution for a wide variety of soldering and desoldering applications. It has a compact, robust design comprising of analog controls for both airflow and heat. A closed loop feedback circuit controls the temperature allowing the desired temperature to be achieved and maintained regardless of changes in the volume of airflow. Used for the removal and replacement of electronic components, including lead-free, from 0201 up to 304 pin QFP. It is also effective at reworking pin in-hole devices such as sockets and connectors. And, using it with solder braid and flux is a fast and efficient way to remove solder shorts and splashes. It can also be used in plastic applications such as applying shrink wrap to components or the formation of plastic rivets. "Power off" cool down function retains airflow through the hand piece while the unit powers down, providing efficient heater cooling and reducing thermal stress. Hot air tool is supplied with **mfg. part no. H-D50** standard single-jet nozzle (0.2", 5.0mm). For specific applications, select from a wide selection of nozzles and two rework nozzle kits; *order separately below.*

Mfg. Part No.	Description	Stock No.	Price Each
HCT-900-10	100VAC Hot Air Convection Tool	68K4192	624.00
HCT-900-11	100/120VAC Hand-Held Convection Hot-Air Tool	66K6681	624.00

CONTINUED

HCT-900 HAND-HELD CONVECTION HOT-AIR TOOL (CONT.)

NOZZLE KITS

Mfg. part no. NZKT-1 nozzle kit for chip resistors, SOIC and TSOP packages. Includes (one each): **mfg. part nos. H-D25, H-SL16, H-SL28, H-SOJ40** and **H-TS48** nozzles. **Mfg. part no. NZKT-2** nozzle kit for PLCC, QFP and BQFP packages. Includes (one each): **mfg. part nos. H-P20, H-P44, H-P84, H-Q1420** and **H-Q2626** nozzles.

Mfg. Part No.	Description	Stock No.	Price Each
NZKT-1	5-Pc. Nozzle Kit for Chip Resistors, SOIC and TSOP Packages	66K6701	291.92
NZKT-2	4-Pc. Nozzle Kit for PLCC, QFP and BQFP Packages	66K6702	378.42

NOZZLES

Mfg. Part No.	For IC Model	Width (mm)	Height (mm)	Stock No.	Price Each
H-S16	SOIC-14, -16	6.8	10.2	66K6674	79.50
H-SL16	SOL-14, -16	10.6	10.8	66K6666	79.50
H-SL20	SOL-20, -20J	10.6	13.3	66K6667	79.50
H-SL24	SOL-24, -24J	10.6	15.9	66K6668	79.50
H-SL28	SOL-28	10.6	18.4	66K6670	79.50
H-SL44	SOL-44	16	27.9	66K6671	79.50
H-SOJ32	SOJ-32	13.5	20.6	66K6672	79.50
H-SOJ40	SOJ-40	13.5	25.4	66K6673	79.50
H-TS24	TSOP-20, -24	17	7.1	66K6677	79.50
H-TS32	TSOP-28, -32	21	9.1	66K6678	79.50
H-TS40	TSOP-40	21	10.8	66K6679	79.50
H-TSW24	TSOP-20, -24	10.2	18.4	66K6675	79.50
H-TSW44	TSOP-24, -28, -40, -44	12.7	19.8	66K6676	79.50
H-Q07	QFP-48	8.4	8.4	66K6659	100.70
H-Q14	QFP-52, -80	17.3	17.3	66K6661	100.70

NOZZLES

Mfg. Part No.	For IC Model	Outer Dia. (mm)	Stock No.	Price Each
H-D25	Chip and SOT	2.5	66K6649	21.20
H-D50		5	66K6650	21.20
H-D120		12	66K6648	21.20

(85790)

MFR-1300 SERIES DESOLDERING AND REWORK SYSTEMS

RoHS Compliant Available

METCAL

CE

- Dual switchable output
- Powered by Smartheat® Technology
- Self-contained powerful pump
- 2-in-1 ergonomic and flexible handpiece: pencil or pistol
- Collection chamber with 40% increased capacity
- Innovative collection chamber for quick and easy change
- Compatible with previous MFR series desolder range

MFR-1351

MFR-1300 series desoldering and rework systems are the next generation of stand-alone desoldering equipment from OK International. **Mfg. part no. MFR-PS1300** dual switchable output power supply features an internal pump providing 0.7 bar of vacuum suction force combined with Smartheat® technology that makes through-hole desoldering easy and keeps products safe from board damage. **Mfg part no. MFR-H5-DS** desoldering handpiece has been designed to be used in two configurations — as a pencil or as a pistol by simply adding a clip-on grip supplied with the handpiece. Solder collection capabilities have been increased by 40% compared to the previous **mfg. part no. MFR-HDS** desoldering handpiece and the innovative replaceable collection chamber enables reduced downtime and quicker changeover. Ambient operating temperature: 10°C to 40°C (50°C to 104°F). Enclosure temperature: 55°C (131°F) max. Input line voltage: 100-240VAC. Input line frequency: 50/60Hz. Power supply consumption: 110W max. Output power: 60W max. Output frequency: 450Khz. Power supply dimensions (approx.): 7"W x 8"D x 6"H (170mm x 200mm x 152.5mm). CE compliant, cTUVus approved.

SELECT FROM TWO DESOLDERING AND REWORK SYSTEMS

Mfg. part no. MFR-1350 desoldering system includes one **mfg. part no. MFR-PS1300** power supply with internal pump, one **mfg. part no. MFR-H5-DS** desoldering handpiece with selectable grip and one **mfg. part no. MFR-WSDSU** universal workstand for desoldering handpiece. **Mfg. part no. MFR-1351** desoldering/soldering system comes complete with all the same components as the **mfg. part. MFR-1350** system plus one **mfg. part no. MFR-H1-SC** soldering handpiece and one **mfg. part no. MFR-WS1** universal workstand for soldering handpiece. *Order replacement components and accessories separately below. Order* **DFP series** desoldering tip cartridges separately online or call; *order* **SFP series** soldering and **RFP series** rework tip cartridges separately *on page 1999.*

Mfg. Part No.	Description	Stock No.	Price Each
MFR-1350	Dual-Switch Output Desoldering System with Internal Pump	41T5442	699.00
MFR-1351	Dual-Switch Output Desoldering/Soldering System with Internal Pump	41T5443	852.00
REPLACEMENT COMPONENTS AND ACCESSORIES			
MFR-PS1300	Dual-Switch Output Power Supply with Internal Pump	32T2939	482.00
MFR-H5-DS	Desoldering Handpiece with Selectable Grip and 60"L Cord	41T5436	159.34
MFR-WSDSU	Universal Workstand for Desoldering Handpiece	41T5439	65.48
MFR-DC10	Disposable Desolder Collection Chamber — **Sold in Pkg. of 10**	43T7678	13.91
MFR-FTKIT	Fittings and Air Hose Kit	41T5435	29.95
MFR-PG	Replacement Pistol-Grip for **Mfg. Part No. MFR-H5-DS** Handpiece; *order separately above*	41T5437	27.29

(195534)

SOLDERING STATIONS

MFR-1100 SERIES SINGLE-OUTPUT SOLDERING AND REWORK SYSTEMS

RoHS Compliant Available

METCAL

MFR-1110

MFR-1100 Series Handpieces Tweezers, SSC Soldering Cartridge, ST Soldering Tip, SC Soldering Cartridge

Configurable System Provides Versatility with SmartHeat® Power and Control

- SmartHeat® Technology provides exceptional power for high thermal demand applications
- High-power output at a fixed temperature provides high throughput with excellent yields
- Four handpieces available for increased application solutions for soldering and rework on one system
- Each handpiece has a comprehensive range of soldering cartridges or tips for maximum flexibility
- Handpieces are ergonomic for operator safety and comfort
- Input line voltage: 100- 240VAC
- Input line frequency: 50/60Hz grounded circuit
- Power consumption: 65W max.
- Output power: 60W max. at 22°C
- Output frequency: 450KHz
- Ambient operating temperature: 10° to 40°C (50° to 104°F)
- Maximum enclosure temperature: 55°C (131°F)

MFR-1100 series single-output soldering and rework systems provide high-power solutions for production soldering, touch-up soldering and SMD rework. Features a choice of three handpieces to support today's PCB and component technologies, providing maximum application solutions and increased productivity. These tools incorporates Smart-Heat® Technology that dynamically responds to the load, delivers highly responsive and controlled heating, while protecting sensitive components and substrates from damage. These high-powered systems can perform lead-free soldering, as low as 600°F, resulting in longer tip life.

SELECT FROM FIVE SYSTEM CONFIGURATIONS

Mfg. part no. MFR-1110 system includes one **mfg. part no. MFR-PS1100** power supply unit, one **mfg. part no. MFR-H1-SC** soldering cartridge handpiece and one **mfg. part no. WS1** auto-sleep workstand with sponge and lead-free brass pad. *Order* **SxP series** *standard soldering tip cartridges and* **RxP series** *rework tip cartridges separately on page 1999.*

Mfg. Part No.	Description	Stock No.	Price Each
● MFR-1110	Single-Output Soldering & Rework System with Soldering Cartridge Handpiece and Workstand	47P0232	368.00

Mfg. part no. MFR-1120 system includes one **mfg. part no. MFR-PS1100** power supply unit, one **mfg. part no. MFR-H2-ST** production soldering tip handpiece and one **mfg. part no. WS1** auto-sleep workstand with sponge and lead-free brass pad. *Order* **SxV series** *production soldering tips separately on pages 1999-2000.*

● MFR-1120	Single-Output Soldering & Rework System with Soldering Tip Handpiece and Workstand	45P6317	352.00

Mfg. part no. MFR-1140 system includes **mfg. part no. MFR-PS1100** power supply unit, one **mfg. part no. MFR-H4-TW** precision tweezers cartridge handpiece, for SMD removal of 0201 resistors to 28mm long SOIC, and **mfg. part no. MFR-WSPT** tweezers workstand with sponge and lead-free brass pad. *Order* **TxP series** *precision tweezer cartridges separately on [85799].*

● MFR-1140	Single-Output Soldering & Rework System with Tweezers Cartridge Handpiece and Workstand	46P4043	476.00

Mfg. part no. MFR-1150 is a complete shop air desoldering system, **mfg. part no. MFR-UK5** upgrade kit can turn existing MFR-1100 or MFR-2200 series systems into a state-of-the-art desoldering system. The built in venturi provides 25 inHg (inch of mercury), which substantially increases desolder capability. *Order* **DxP series** *precision desoldering cartridges separately online or call.*

● MFR-1150	Single Output Desolder System with External Air (Venturi Box)	41T5441	599.00

Mfg. part no. MFR-1160 system includes one **mfg. part no. MFR-PS1100** power supply unit, one **mfg. part no. MFR-H6-SSC** soldering cartridge handpiece and one **mfg. part no. WS1** auto-sleep workstand with sponge and lead-free brass pad. *Order* **SSC series** *soldering tip cartridges separately; go online or call.* **NOTE:** Factory recommended replacement for the Metcal SP200 soldering station system.

● MFR-1160	Single-Output Soldering & Rework System with Soldering Cartridge Handpiece and Workstand	26R1719	340.00

Mfg. part no. MFR-1161 system includes one **mfg. part no. MFR-PS1100** power supply unit, one **mfg. part no. MFR-H1-SC** soldering cartridge handpiece, one **mfg. part no. MFR-H6-SSC** soldering cartridge handpiece and two **mfg. part no. WS1** auto-sleep workstands with sponge and lead-free brass pad. *For* **mfg. part no. MFR-H1-SC** *handpiece order* **SxP series** *standard soldering tip cartridges and* **RxP series** *rework tip cartridges separately on page 1999.* For **mfg. part no. MFR-H6-SSC** *handpiece order* **SSC series** *soldering tip cartridges separately.* **NOTE:** Factory recommended replacement for the Metcal SP200 soldering station system.

● MFR-1161	Single-Output Soldering & Rework System with Two Soldering Cartridge Handpieces and Two Workstands	26R1720	494.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
MFR-PS1100	Single-Output Universal Power Supply **ONLY** — 100-240VAC, 50/60Hz	46P8085	210.00
● MFR-H1-SC2	Soldering Cartridge Handpiece	11X2768	93.86
● MFR-H2-ST2	Soldering Tip Handpiece	11X2769	93.86
● MFR-CA3	Soldering Handpiece Coil Assembly	11X2767	27.29
● MFR-H4-TW	Tweezers Cartridge Handpiece	01N5078	206.27
● WS1	Auto-Sleep Workstand with Black Cradle, Sponge and Brass Pad	22M4770	65.48
● WS1G	Auto-Sleep Workstand with Green Cradle, Sponge and Brass Pad	26M8648	65.48
● MFR-WSDSX	Universal Workstand with Venturi Box for **MFR-H5-DS**	41T5440	288.00
● MFR-WSPT	Tweezers Workstand with Black Cradle, Sponge and Brass Pad	66K6699	65.48
● MFR-UK4	Upgrade Kit — **MFR-H4-TW** Tweezers Cartridge Handpiece and **MFR-WSPT** Workstand	01N5083	269.00
● MFR-UK5	Upgrade Kit — **MFR-H5-DS** Desolder Hand Piece and **MFR-WSDSX** Univ. Workstand	41T5438	429.00

➤CONTINUED➤

MFR-1100 SERIES SINGLE-OUTPUT SOLDERING AND REWORK SYSTEMS (CONT.)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
● AC-BP	Lead-Free Brass Pads for Workstand, **Pkg. of 10**	03M6022	10.50
● AC-CP2	Soldering Cartridge and Tip Removal Pads, **Pkg. of 2**	91F5873	6.74

(142168)

MX-5200 SERIES DUAL SIMULTANEOUS SOLDERING AND REWORK SYSTEMS

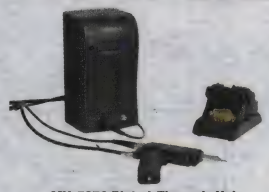
RoHS Compliant Available

METCAL

CE TÜV Rheinland

MX-5211 Soldering and Rework System

MX-5241 Precision Tweezers, Soldering and Rework System



MX-5250 Plated-Through-Hole Component Desoldering System

MX-5251 Soldering, Desoldering and Rework System

Power...Precision...Performance

- More power — recovery time increases production rates and throughput
- Improved precision — Metcal's Advanced™ and UltraFine™ handpieces ergonomically designed to decrease user fatigue and enhance dexterity
- Greater process control — SmartHeat® technology enables soldering and rework at safe, controlled temperatures
- Input line voltage: 100 - 240VAC, grounded circuit
- Input line frequency: 50/60Hz
- Power consumption: 125W max.
- Output power: 80W max. per channel at 22°C ambient temperature
- Output frequency: 13.56 MHz
- Ambient operating temperature: 10° to 40°C (50° to 104°F)
- Maximum enclosure temperature: 55°C (131°F)
- TUV approved, CE compliant

MX-5200 series soldering and rework system is composed of five configurations, each featuring different handpieces to fit specific application needs. The handpiece choices include **MX-H1-AV** Advanced™ soldering and rework handpiece, **MX-H2-UF** Metcal UltraFine™ soldering handpiece for micro-soldering applications, **MX-PTZ** precision tweezers handpiece for SMD rework, and **MX-DS1** through-hole desoldering handpiece. These high-powered systems can perform lead-free soldering, as low as 600°F, resulting in longer tip life. At the core of the system is a microprocessor-controlled power supply that provides more power, the highest level of precision and advanced user features for greater process control. This power supply has a built-in power indication meter with digital display and bar graph that dynamically provides the operator with feedback on the status of the soldering operation. It has four mode indications: "Ready", "Power", "Sleep" and "Powersave" to program the power to the handpiece. The system also features the TipSaver™ workstand with auto-sleep function. When the user places the handpiece in the workstand, power is automatically reduced saving energy and substantially increasing tip life.

SELECT THE SYSTEM THAT MEETS YOUR APPLICATION NEEDS...

All **MX-5200 series** systems include: 100 to 240VAC power supply with dual switch port and LCD display, appropriate handpieces and workstands (indicated in table below), power cord, cartridge removal pad, brass tip cleaning pad, and user guide. *Order tip cartridges separately.*

System Components	MX-5210	MX-5211	MX-5020	MX-5241	MX-5250	MX-5251
MX-PS5000 Power Supply	●	●	●	●	●	●
MX-H1-AV Metcal Advanced™ Handpiece with Three Grips*	●	●●		●		●
MX-H2-UF Metcal UltraFine™ Handpiece with Three Grips*			●			
MX-PTZ Precision Tweezers Handpiece				●		
MX-DS1 Desoldering Handpiece					●	●
MX-W1AV TipSaver™ Workstand	●	●●	●	●		●
MX-W4PT TipSaver™ Workstand				●		
MX-W5DS TipSaver™ Workstand					●	●

*Includes three interchangeable grips to give user a choice for feel and comfort

Mfg. part no. MX-5210 soldering and rework system offers users the ergonomic Metcal Advanced™ handpiece for soldering and rework. This system is highly effective for soldering applications including: lead-free, high mass components or boards, thermally sensitive components requiring low operating temperature, high volume production soldering and touch-up soldering operations. For these types of applications, *order the* **STTC series** soldering tip *cartridges separately online or call.* In addition, this system can be used for conduction rework of SMDs when using **SMTC series** soldering tip cartridges; *ordered separately.*

Mfg. Part No.	Description	Stock No.	Price Each
● MX-5210	Power Supply with (1) Advanced hand-piece and (1) Workstand	48W5011	699.00

Mfg. part no. MX-5211 includes the same features as **mfg. part no. MX-5210** but configured with two Advanced™ Hand-pieces and two TipSaver™Workstands. *Order* **STTC series** soldering tip cartridges separately online or call. In addition, this system can be used for conduction rework of SMDs when using **SMTC series** soldering tip cartridges, *also ordered separately.*

● MX-5211	Power Supply with (2) Advanced hand-pieces and (2) Workstands	48W5012	884.00

➤CONTINUED➤

MX-5200 SERIES DUAL SIMULTANEOUS SOLDERING AND REWORK SYSTEMS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
Mfg. part no. MX-5220 UltraFine™ soldering system with the UltraFine™ handpiece enables efficient, high-precision soldering and touch-up of micro-components in restricted access or high-density component packaging on a PCB. *Order* **UFTC series** UltraFine™ soldering tip cartridges separately below.			
MX-5220	Power Supply with (1) Ultrafine hand-piece and (1) Workstand	48W5013	724.00
Mfg. part no. MX-5241 combines both the Advanced™ Hand-piece and the Precision Tweezers Hand-piece. Users get maximum application flexibility for soldering and reworking the widest range of surface mount components. *Order* **PTTC series** tweezer tip cartridges separately below. Order STTC and SMTC tip cartridges online or call.			
MX-5241	Power Supply with (1) Tweezer hand-piece and (1) Advanced Hand-piece and (2) Workstands	48W5014	1059.00
Mfg. part no. MX-5250 plated-through-hole component desoldering system provides users with high-power capability to desolder thermally demanding through-hole devices at moderate, non-damaging temperatures. *Order* **STDC series** *desoldering tip cartridges separately.*			
MX-5250	Power Supply with (1) Desoldering hand-piece and (1) Workstand	48W5015	914.00
Mfg. part no. MX-5251 is the most versatile of the **MX-5200 series** systems capable of through-hole desoldering, general soldering and SMD rework applications. This system includes two handpieces: the Metcal Advanced™ and the Metcal **MX-DS1** desoldering handpiece for through-hole desoldering. *Order* **STTC, SMTC** and **STDC series** tip *cartridges separately online or call.*			
MX-5251	Power Supply with (1) Desoldering hand-piece and (1) Advanced hand-piece and (2) Workstands	48W5016	1099.00
ACCESSORY			
MX-PS5200	Power supply, dual-simultaneous, two-port output, 100-240 VAC	48W5010	514.00

UFTC SERIES ULTRAFINE™ TIP CARTRIDGES FOR MX-H2-UF SOLDERING IRON HANDPIECE

UFTC series UltraFine™ tip cartridges feature relatively small tip geometries of 0.2 mm (0.0078") to 1.2 mm (0.047") and are suited for low-mass or small part soldering.

Mfg. Part No.	Tip Style	Tip Width (mm)	Tip Length (mm)	Stock No.	Price Each
UFTC-7CHL06	Chisel	0.6	9	19P2161	30.00
UFTC-7CHL08	Chisel	0.8	9	19P2162	30.00
UFTC-7CH06	Chisel	0.6	5.1	19P2163	30.00
UFTC-7CH08	Chisel	0.8	5.1	19P2164	30.00
UFTC-7CH12	Chisel	1.2	5.1	19P2165	30.00
UFTC-7CN01	Conical	0.13	5.1	19P2169	30.00
UFTC-7CN02	Conical	0.2	5.1	19P2170	30.00
UFTC-7CN04	Conical	0.4	5.1	19P2171	30.00
UFTC-7CNL04	Conical	0.4	9	19P2166	30.00
UFTC-7CNB02	Conical Bent	0.2	5.5	19P2167	30.00
UFTC-7CNB04	Conical Bent	0.4	5.5	19P2168	30.00
UFTC-7DRH408	Micro Fine Hoof	0.8	5.1	19P2172	30.00
UFTC-7DRH412	Micro Fine Hoof	1.2	5.1	19P2173	30.00

PTTC SERIES TWEEZER TIP CARTRIDGES FOR MX-PTZ PRECISION TWEEZER HANDPIECE

PTTC series tweezer tip cartridges togther with the **MX-PTZ** precision tweezers handpiece provide an efficient and ergonomic resource to users for removal and replacement of chip and SOIC packages. Tweezer cartridges are available in large tip geometries and three temperatures. **Sold in pairs.**

Mfg. Part No.	Tip Style	Tip Width (mm)	Tip Length (mm)	Tip Temp. (°F)	Stock No.	Price per Pair Each
PTTC-601	Conical	0.4	19	600	40P1961	70.00
PTTC-701B	Conical Bent	0.4	14.3	700	40P1969	70.00
PTTC-602	Blade	1	16.5	600	40P1962	70.00
PTTC-702	Blade	1	16.5	700	40P1970	70.00
PTTC-603	Blade	2	16.5	600	40P1963	70.00
PTTC-703	Blade	2	16.5	700	40P1971	70.00
PTTC-604	Blade	6.35	12.7	600	40P1964	70.00
PTTC-704	Blade	6.35	12.7	700	40P1972	70.00
PTTC-605	Blade	16	12.7	600	40P1965	90.00
PTTC-705	Blade	16	12.7	700	40P1973	90.00
PTTC-805	Blade	16	12.7	800	40P1980	90.00
PTTC-706	Blade	20.5	12.7	700	40P1974	90.00
PTTC-707	Blade	28	12.7	700	40P1975	90.00

(136312)

MFR-2210 AND MFR-2211 DUAL-OUTPUT SOLDERING AND REWORK SYSTEMS

RoHS Compliant Available

METCAL

CE TÜV Rheinland

Select System with One or Two Active Handpieces

- SmartHeat® Technology provides exceptional power for high thermal demand applications
- Dual simultaneous outputs allow for single or dual operator use
- Allows one operator to use one or two hand-pieces together
- A comprehensive range of soldering cartridges for maximum flexibility
- Handpieces are ergonomic for operator safety and comfort
- Input line voltage: 100- 240VAC
- Input line frequency: 50/60Hz grounded circuit
- Power consumption: 130W max.
- Output power: 60W max. at 22°C per output
- Output frequency: 450KHz
- Ambient operating temperature: 10° to 40°C (50° to 104°F)
- Maximum enclosure temperature: 55°C (131°F)
- TUV approved, CE compliant

MFR-2211

➤CONTINUED➤

MFR-2210 AND MFR-2211 DUAL-OUTPUT SOLDERING AND REWORK SYSTEMS (CONT.)

MFR-2200 series soldering and rework systems provide a high power, flexible solution for production soldering, touch-up soldering and SMD rework. Features dual output capability which allows the user to select operation of one handpiece or two handpieces simultaneously. One or two handpiece operation is easily chosen via a front panel three-position switch. It dual-output power unit contains two separate power supplies providing full power for each handpiece that is in use. These high-powered systems can perform lead-free soldering, as low as 600°F, resulting in longer tip life.

Dual-output systems **mfg. part no. MFR-2210** includes one each and **MFR-2211** includes two each of the following components: **mfg. part no. MFR-H1-SC2** soldering cartridge handpiece and **mfg. part no. WS1** auto-sleep workstand with sponge and lead-free brass pad. This handpiece uses small diameter **SFP series** standard soldering tip cartridges for easy access and **RFP series** rework tip cartridges for SMD components; *ordered separately below.*

For increased flexibility two other handpieces, *ordered separately below*, can be used with these systems: **mfg. part no. MFR-H2-ST** soldering tip handpiece for high-power production soldering environments and **mfg. part no. MFR-H4-TW** precision tweezers handpiece for rework of SMD components. A wide assortment of **SFV series** soldering tips and **TFP series** tweezer tip cartridges are available; order separately online or call.

Mfg. Part No.	Description	Stock No.	Price Each
MFR-2211	Soldering and Rework System: 1 **MFR-PS2000** Dual-Output Power Unit, 2 **MFR-H1-SC** Cartridge Soldering Handpieces, 2 **WS1** Auto-Sleep Workstands	01N5085	673.00
ACCESSORIES			
MFR-PS2200	Dual Simultaneous Output Power Supply Unit **ONLY** — 100-240VAC, 50/60Hz	01N5080	367.00
MFR-H1-SC2	Soldering Cartridge Handpiece	11X2768	93.86
MFR-H2-ST	Soldering Tip Handpiece	01N5077	93.86
MFR-H4-TW	Tweezers Cartridge Handpiece	01N5078	206.27
WS1	Auto-Sleep Workstand with Black Cradle, Sponge and Brass Pad	22M4770	65.48
WS1G	Auto-Sleep Workstand with Green Cradle, Sponge and Brass Pad	26M8648	65.48
MFR-WSPT	Tweezers Workstand with Black Cradle, Sponge and Brass Pad	66K6699	65.48
MFR-UK4	Upgrade Kit — **MFR-H4-TW** Tweezers Cartridge Handpiece and **MFR-WSPT** Workstand	01N5083	269.00
AC-BP	Lead-Free Brass Pads for Workstand, **Pkg. of 10**	03M6022	10.50
AC-CP2	Soldering Cartridge and Tip Removal Pads, **Pkg. of 2**	91F5873	6.74
AC-BRUSH-P	Soft-Brass Cleaning Brush, **Pkg. of 6**	76K1432	53.96

SFP SERIES STANDARD SOLDERING TIP CARTRIDGES

SFP series replaceable standard soldering tip cartridges, for use with **mfg. part no. MFR-H1-SC2** handpiece, have been designed to deliver outstanding performance for the majority of point-to-point soldering and basic rework applications. The geometries within the range have been optimized to deliver maximum accessibility combined with optimal thermal efficiency within a narrow cartridge diameter. For easy identification of soldering tips used for lead-free processes, *order* **mfg. part no. AC-CK1** *lead-free ID soldering tip rings separately above.* These green-colored ID rings slip easily onto tip.

Mfg. Part No.	Tip Style	Tip Thickness (in.)	Tip Length (in.)	Stock No.	Price Each
SFP-BVL10	60° Bevel	0.04	0.56	66K6710	18.62
SFP-CH10	30° Chisel	0.04	0.36	66K6713	13.52
SFP-CH15	30° Chisel	0.06	0.39	66K6714	13.52
SFP-CH20	30° Chisel	0.08	0.4	66K6715	13.52
SFP-CH25	30° Chisel	0.1	0.394	66K6716	13.52
SFP-CH50	30° Chisel	0.2	0.3	66K6717	13.52
SFP-CHB15	30° Chisel Bent	0.06	0.474	66K6711	18.62
SFP-CHL20	Chisel, Long-Reach	0.08	0.632	66K6712	18.62
SFP-CN04	Conical	0.016	0.34	66K6721	13.52
SFP-CN05	Conical	0.02	0.2	66K6722	18.62
SFP-CNB04	Conical Bent	0.016	0.2	66K6718	13.52
SFP-CNB05	Conical Bent	0.02	0.579	66K6719	13.52
SFP-CNL04	Conical, Long-Reach	0.016	0.59	66K6720	13.52
SFP-DRH05	Drag Hoof	0.02	0.6	66K6723	25.76
SFP-DRH15	Drag Hoof	0.06	0.65	66K6724	25.76
SFP-DRH35	Drag Hoof	0.14	0.7	66K6725	25.76
SFP-DRK50	Drag Knife	0.2	0.63	66K6726	44.12

(85797)

MFR-2220 AND MFR-2222 DUAL-OUTPUT PRODUCTION SOLDERING SYSTEMS

RoHS Compliant Available

METCAL

CE TÜV Rheinland

- SmartHeat® Technology provides exceptional power for high thermal demand applications
- Dual simultaneous outputs allow for single or dual operator use
- Allows one operator to use one or two hand-pieces together
- A comprehensive range of soldering cartridges for maximum flexibility
- Handpieces are ergonomic for operator safety and comfort
- Input line voltage: 100- 240VAC
- Input line frequency: 50/60Hz grounded circuit
- Power consumption: 130W max.
- Output power: 60W max. at 22°C per output
- Output frequency: 450KHz
- Ambient operating temperature: 10° to 40°C (50° to 104°F)
- Maximum enclosure temperature: 55°C (131°F)
- TUV approved, CE compliant

MFR-2222

➤CONTINUED➤

SOLDERING STATIONS

MFR-2220 AND MFR-2222 DUAL-OUTPUT PRODUCTION SOLDERING SYSTEMS (CONT.)

MFR-2200 series soldering and rework systems provide a high power, flexible solution for production soldering, touch-up soldering and SMD rework. Features dual output capability which allows the user to select operation of one handpiece or two handpieces simultaneously. One or two handpiece operation is easily chosen via a front panel three-position switch. It dual-output power unit contains two separate power supplies providing full power for each handpiece that is in use. These high-powered systems can perform lead-free soldering, as low as 600°F, resulting in longer tip life.

Select System with One or Two Active Handpieces

Dual-output systems **mfg. part no. MFR-2220** includes one each and **MFR-2222** includes two each of the following components: **mfg. part no. MFR-H2-ST** soldering tip handpiece and **mfg. part no. WS1** auto-sleep workstand with sponge and lead-free brass pad. This handpiece features high power that uses **SFV series** tips designed for production soldering environments; *ordered separately below.*

For increased flexibility two other handpieces, *ordered separately below*, can be used with these systems: **mfg. part no. MFR-H1-SC2** soldering cartridge handpiece for point-to-point soldering and basic rework applications and **mfg. part no. MFR-H4-TW** precision tweezers handpiece ideal for SMD rework. A wide assortment of **SFP series** soldering, **RFP series** rework and **TFP series** tweezer cartridges are available; *order separately on page 1999.*

Mfg. Part No.	Description	Stock No.	Price Each
● MFR-2220	Production Soldering System: 1 **MFR-PS2000** Dual-Output Power Unit, 1 **MFR-H2-ST** Tip Soldering Handpiece, 1 **WS1** Auto-Sleep Workstand	**01N5086**	520.00
● MFR-2222	Production Soldering System: 1 **MFR-PS2000** Dual-Output Power Unit, 2 **MFR-H2-ST** Tip Soldering Handpieces, 2 **WS1** Auto-Sleep Workstands	**01N5087**	673.00
ACCESSORIES			
● MFR-PS2200	Dual Simultaneous Output Power Supply Unit **ONLY** — 100-240VAC, 50/60Hz	**01N5080**	367.00
● MFR-H1-SC2	Soldering Cartridge Handpiece	**11X2768**	93.86
● MFR-H2-ST	Soldering Tip Handpiece	**01N5077**	93.86
● MFR-H4-TW	Tweezers Cartridge Handpiece	**01N5078**	206.27
● WS1	Auto-Sleep Workstand with Black Cradle, Sponge and Brass Pad	**22M4770**	65.48
● WS1G	Auto-Sleep Workstand with Green Cradle, Sponge and Brass Pad	**26M8648**	65.48
● MFR-WSPT	Tweezers Workstand with Black Cradle, Sponge and Brass Pad	**66K6699**	65.48
● MFR-UK4	Upgrade Kit — **MFR-H4-TW** Tweezers Cartridge Handpiece and **MFR-WSPT** Workstand	**01N5083**	269.00
● AC-BP	Lead-Free Brass Pads for Workstand, **Pkg. of 10**	**03M6022**	10.50
● AC-CP2	Soldering Cartridge and Tip Removal Pads, **Pkg. of 2**	**91F5873**	6.74
● AC-BRUSH-P	Soft-Brass Cleaning Brush, **Pkg. of 6**	**76K1432**	53.96

SFV SERIES SOLDERING TIPS FOR HEAVY-DUTY APPLICATIONS

SFV series replaceable soldering tips are quick and easy to change. The power heater is built into the tip, delivering heat quickly and precisely. Thermally-optimized large diameter tips include additional iron plating for longer life. Ideal for use with **mfg. part no. MFR-H2-ST** production soldering handpiece. For easy identification of soldering tips used for lead-free processes, *order* **mfg. part no. AC-CK1** *lead-free ID soldering tip rings separately above.* These green-colored ID rings slip easily onto tip.

Mfg. Part No.	Tip Style	Tip Thickness (in.)	Tip Length (in.)	Stock No.	Price Each
● SFV-CH10	30° Chisel	0.04	0.43	**66K6728**	10.46
● SFV-CHB15	30° Chisel Bent Bent	0.06	0.48	**66K6727**	10.46
● SFV-CH20	Chisel	0.07	0.39	**66K6729**	9.42
● SFV-CH25	Chisel	0.1	0.43	**66K6730**	9.42
● SFV-CH50	Chisel, Extra-Large	0.2	0.40	**66K6731**	10.46
● SFV-CN05	Conical	0.02	0.34	**66K6736**	10.46
● SFV-CNB05	Conical Bent	0.02	0.51	**66K6732**	9.42
● SFV-CNL04	Conical, Long	0.016	0.53	**66K6733**	10.46
● SFV-CNL10	Conical, Long	0.04	0.51	**66K6734**	10.46
● SFV-CNL14	Conical, Long	0.055	0.59	**66K6735**	10.46
● SFV-DRH20	Conical Bevel	0.07	0.55	**66K6737**	10.46

(85792)

MRS-1000A SERIES MODULAR REWORK SYSTEM

RoHS Compliant Available

METCAL

Convection Rework System

- Digital display for repeatable temperature settings and profile control
- Automatic control of the preheater for simple operation
- Easy profile creation for operator repeatability
- Integrated vacuum pickup for easy component removal
- Hand held or tool holder mounted for operator comfort
- Manual mode for quick setup
- External thermocouple for process setup and verification
- Digital controlled airflow for repeatable results
- X, Y, Z and Theta controls for component alignment
- Adjustable PCB holder for easy change outs
- Automatic vacuum lift off at the end of the cycle
- Password lockout of programmed profiles

MRS-1000A

Mfg. part no. MRS-1100A is comprised of a hand held convection tool **HCT-1000**, preheater **PCT-1000**, adjustable tool holder **ATH-1100A**, and free-standing board holder **BH-2000** to create a manually assisted rework system. A series of nozzles, targeting a variety of applications, and optional light Magnifier **LM-1000A** round out the product offering for this system; *ordered separately below.*

With standard features such as programmability, a digital display, program storage of up to 50 profiles, this system is not only versatile, but also easy and efficient to work with. A choice of board holders and accessories are available that make the system capable of handling multiple sizes of PCBs.

Mfg. part no. MRS-1100A allows you the choice of using either the embedded profiling capability that can be

➤CONTINUED➤

MRS-1000A SERIES MODULAR REWORK SYSTEM (CONT.)

configured to operate at a fixed temperature, or a four zone programming option. The unit also allows the temperature to be controlled either at the heat output (internal) or at the board (external). The "external" control function uses a thermocouple which can be placed on the board or a component.

Mfg. Part No.	Description	Stock No.	Price Each
● MRS-1100A	Modular Rework System, Advanced	**59T9874**	4395.00
● ATH-1000A	Adjustable Tool and PCB Holder with Advanced Head	**47R4998**	1372.70

HCT-1000 PROGRAMMABLE HAND-HELD CONVECTION TOOL AND ACCESSORIES

The **HCT-1000** programmable hand-held convection tool is included in the **MRS-1100A series** modular rework system; *ordered separately above.*

Mfg. Part No.	Description	Stock No.	Price Each
● HCT-PS1000	Programmable Power Supply	**52R7664**	1296.00
● HCT-HV1	Rework Convection Tool Handpiece with Integral Vacuum, Cord and Connector	**52R7662**	535.19
● HCT-FS2	Dual Foot Switch — for use with HCT-1000	**52R7660**	75.68
● HCTA-VC50-5	Vacuum Cups, 3/16" (5mm) — **Sold in Pkg. of 5**	**52R7669**	10.81
● HCTA-VC64-5	Vacuum Cups, 1/4" (6.4mm) — **Sold in Pkg. of 5**	**52R7670**	14.95
● HCTA-VC80-5	Vacuum Cups, 5/16" (8mm) — **Sold in Pkg. of 5**	**52R7671**	10.81
● HCTA-VC11-5	Vacuum Cups, 7/16" (11mm) — **Sold in Pkg. of 5**	**52R7668**	14.95
● HCT-NC	Nozzle Carrier	**52R7663**	124.34
● HCTA-TH1	Handpiece Tool Holder	**52R7667**	8.65
● HNA-1	Nozzle Adapter	**52R7686**	270.30
● HCTA-NW1	Nozzle Wrench	**52R7666**	19.46
● HCTA-CC	Communications Cable	**52R7665**	9.73
● HCT-HTRASSY	Heater Assembly — for use with HCT-1000	**52R7661**	54.95
● AC-TCK-36-36	Thermocouple Kit, K-type, 36AWG, Pack of 2	**32T2526**	37.95
● AC-TCK-40-36	Thermocouple Kit, K-type, 40AWG, Pack of 2	**90T1227**	49.95

HN SERIES REWORK NOZZLES — FOR USE WITH MRS-1100A

Mfg. Part No.	For IC Component	W x H	Stock No.	Price Each
● HN-B0707	CSP, LGA44	7mm x 7mm	**52R7672**	162.18
● HN-B1414	CSP, QFP, TQFP100	14mm x 14mm	**52R7675**	178.40
● HN-B1408	CSP, SOIC24M	14mm x 8mm	**52R7674**	178.40
● HN-B1515	BGA	15mm x 15mm	**52R7676**	178.40
● HN-B1818	PLCC44, CSP, TQFP100, BGA	18mm x 18mm	**52R7678**	194.62
● HN-B2525	BGA, PLCC68	25mm x 25mm	**52R7680**	194.62
● HN-B1809	SOJ28, SOIC28M, TSOP32	18.2mm x 8.5mm	**52R7677**	194.62
● HN-B2727	BGA	27mm x 27mm	**52R7681**	194.62
● HN-B3232	BGA	32mm x 32mm	**52R7682**	227.05
● HN-B3535	BGA	35mm x 35mm	**52R7683**	227.05
● HN-B4040	BGA	40mm x 40mm	**52R7684**	227.05
● HN-J0005	Discrete	5mm Diameter	**52R7685**	162.18

PCT-1000 PROGRAMMABLE PREHEATER AND ACCESSORIES

Mfg. part no. PCT-1000 programmable preheater is included in both **MRS-1100A series** modular rework systems; *ordered separately above.* The **PCT-1000** preheater is ideal for aiding high-thermal demand applications including lead-free, multi-layer boards and large ground planes. It can be used in a variety of processes including soldering, desoldering, and SMD rework operations. Equipped with a highly-advanced convection heating system that creates a vortex effect to efficiently direct and concentrate heat. Easy-to-use with LCD display and clearly marked controls. Its step-by-step programming makes creating and storing up to 50 user defined profiles simple. Power rating: 1200W. Input voltage: 100-240VAC. Temperature: up to 622°F. Air flow: 19cfm. Size: 13L x 8W x 3"H. The **PCT-1000** preheater includes **PCT-FS1** foot switch. To easily position PCBs up to 12x12" or above over the **PCT-1000** preheater, *order* **mfg. part no. BH-1000** *post-rail PCB holder system or* **mfg. part no. BH-PK1000** *board holder pin kit separately below.*

Mfg. Part No.	Description	Stock No.	Price Each
● PCT-1000	Programmable Preheater	**08N1977**	1350.00
● PCT-FS1	Foot Switch — for use with PCT-1000	**46P6974**	37.84
● BH-2000	Free-Standing Board Holder	**90T4142**	539.00
● BH-PK1000	PCB Holder Pin Kit	**46P7489**	27.03

LM-1000 LIGHT MAGNIFIER AND ACCESSORIES

Mfg. part no. LM-1000A light magnifier is sold separately. It features a 4x magnification lens, an integrated 8 LED lighting system for shadow-free illumination and includes **LM-PS** 24V plug-in power supply. **Mfg. part no. LM-1000A** includes light and base plate assembly. **Mfg. part no. LM-1000A** light magnifier with base plate **LM-PS** 24V plug-in power supply - for use with **LM-1000.**

Mfg. Part No.	Description	Stock No.	Price Each
● LM-1000	Light Magnifier	**47R5000**	307.40
● LM-PS	24V Plug-In Power Supply — for use with LM-1000	**52R7688**	85.86

(164263)

DURATOOL AT NEWARK ELEMENT14

For your production and facilities needs, from soldering stations to tool sets & more.

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(212563)

MX-500 SERIES SMARTHEAT® SOLDERING & REWORK SYSTEMS

RoHS Compliant Available

METCAL

- Integrated power indication meter
- User programmable powersave mode
- Ground fault interrupt
- Universal power supply work on 50hz or 60hz
- Compatibility with all MX products
- Greater process control with SmartHeat® technology
- Reduced space requirements

The system utilizes SmartHeat® Technology, wherein each cartridge is equipped with a self-regulating heater which 'senses' its own temperature and closely maintains its pre-set idle temperature for the life of the heater-tip. MX-500 retains switchable dual port, 40W operation while introducing numerous new features in a new housing.

MX-500S

Mfg. part no. MX-500S Soldering / Rework System includes power supply, MX-RM3E soldering and rework hand-piece and WS1 sleeper workstand.

Mfg. Part No.	Stock No.	Price Each
MX-500S	23X5007	535.00

Mfg. part no. MX-500SPT Rework System includes power supply, MX-PTZ precision tweezer hand-piece with MX-W4PT TipSaver workstand and MX-RM3E soldering and rework hand-piece and WS1 sleeper workstand.

MX-500SPT	23X5008	875.00

Mfg. part no. MX-500DS Desoldering System includes power supply, MX-DS1 desoldering hand-piece with MX-W5DS TipSaver workstand and MX-RM3E soldering and rework hand-piece and WS1 sleeper workstand.

MX-500DS	23X5005	935.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
MX-TALON-01	TALON Upgrade Kit	50B6148	396.78
MX-D001	Desolder Upgrade Kit	76K1955	436.56
MX-500P-11	2-Port Switch Mode Power Supply	53M8486	455.00
MX-500P	MX-500 dual port switchable power supply	23X5006	395.00
MX-RM3E	Handpiece with Cord for **MX-500S**	91F5870	103.68
MX-RM6E	Long-Reach Soldering Handpiece with CP2 for **MX500**	41B5524	147.34
MX-W4PT	TipSaver Precision Tweezer Workstand	46P8240	87.31
MX-TALON	Handpiece with Cord (Tweezers) for TALON **MX-500TS**	77M9250	300.90
MX-PTZ	Precision Tweezer Soldring/Rework Handpiece for **MX-500**	95M8557	305.59
MX-DS1	Desoldering Handpiece	41B5513	327.42
MX-DCF1	Filter Pack for DS1 (Includes 15 Chamber Liners and 6 Fume Filters)	76K1952	24.25
MX-DCF1L	Chamber Liners for DS1 (**Sold in Pkg. of 40**)	76K1954	32.05
MX-DCF1F	Fume Filters for DS1 (**Sold in Pkg. of 20**)	02M2146	7.95
MX-DAH4	ESA Air Hose with Standard Fitting	76K1951	44.75
MX-W5DS	TipSaver Desoldering Workstand	46P8242	87.31
WST	Workstand with Sponge for TALON **MX-500TS** Soldering/ Rework System	21M8515	65.48
WS1	Workstand with Sponge for **MX-500S** Soldering/Rework System	22M4770	65.48
AC-CP2	Cartridge Removal Pad	91F5873	6.74

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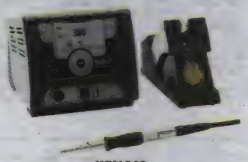
WX HIGH POWERED DIGITAL SOLDERING STATIONS AND ACCESSORIES

RoHS Compliant Available

Weller®



WX1010

WX2020

- Capacitive glass touch screen is chemical and temperature resistant
- Turn and click wheel with enter key and finger guide is intuitive to use
- Multi-language menu navigation
- Large graphic LCD display can be viewed from all angles
- Versatile connectivity options - preheaters and fume extraction systems
- Multi-purpose USB port for parameter configuration and data logging
- ESD safe to protect sensitive components
- **WX1010** uses XT series soldering tips, **WX1011** RT series and **WX1012** XNT series

Mfg. part no. WX2 control unit is designed for ease of use with its uniquely responsive touchscreen to its exceptionally intuitive user interface. WX2 control unit features a powerful and easy-to-use two-channel soldering device. A variety of connectivity options, intelligent soldering tools and a number of brand new features are ideal for soldering work on LED backplanes, solar applications and micro soldering joints. **Mfg. part no. WX2020** supports operation of two 120 watt soldering pencils simultaneously and 120 watt pencil can solder large or small parts requiring high power. **Mfg. part no. WX2021** fine, thin WXMP soldering pencil is suited for work under a microscope and WXMT tweezers are ideal for soldering and desoldering small SMD parts. **Mfg. part no. WX2** control unit is optimized by a wide selection of WX tools and accessories; *ordered separately below.*

Mfg. Part No.	Description	Stock No.	Price Each
WX1	High Powered Single Port Digital Power Unit, 200W, 120V	58T1161	393.50
WX1010	WX1 Solder Station, WXP120, WDH10, 120V	58T1162	597.90
WX1012	WX1 Solder Station, WXP65, WDH10, 120V	53T5062	515.10
WX1011	WX1 Solder Station, WXMP, WDH50, 120V	58T1163	546.80
WX2	High Powered Dual Port Digital Power Unit, 240W, 120V	39T0803	424.20

➤ CONTINUED ➤

WX HIGH POWERED DIGITAL SOLDERING STATIONS AND ACCESSORIES (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
WX2020	WX2 Solder Station, (2) WXP120, (2) WDH10 120V	39T0804	815.60
WX2021	WX2 Solder Station, WXMP-MS, WDH51,WXMT-MS, WDH60, 120V	39T0805	929.00

WX SOLDERING TOOLS AND ACCESSORIES

All WX tools have an integrated sensor system, customised bit calibration with no base station required, signal reader built into the handle and internal memory. Features an ergonomic design, extremely high precision and short heating times.

0052921199	WXP 65 Soldering Iron for WX1 and WX2 Soldering Stations	58T1164	196.60
0052921299	WXP 65 Soldering Iron with WDH 10 for WX1 and WX2 Soldering Stations	53T5063	269.40
0058765711	Barrel for WXP120 Soldering Iron	53T5076	27.10
0051317799	WXMT Micro-Desoldering Tweezers, No Tip Cartridge	39T0806	221.20
0051317899	WXMT Micro-Desoldering Tweezers, RTW2 Tip Set, WDH 60 Stand	39T0807	269.70
0051516999	WDH60 Safety Rest for WXMT	39T0808	110.10
0052920199	WXP120 Solder Pencil, 120W, 24V, For WX1 and WX2 Soldering Stations	39T0809	207.00
0052920299	WXP120 Solder Pencil w/WDH10 Stand, 120W, 24V, For WX1 and WX2 Soldering Stations	39T0810	279.80
0052920399	WXMP Micro-Soldering Pencil, No Tip	39T0811	186.20
0052920499	WXMP Micro-Soldering Pencil, RT3 Tip, WDH 50 Stand	39T0812	209.10
0052920599	WXP200 Solder Pencil, 200W, 24V, For WX1 and WX2 Soldering Stations	39T0813	217.40
0052920699	WXP200 Solder Pencil w/ WDH31 Stand, For WX1 and WX2 Soldering Stations	39T0814	290.20
0058764710	WX Interface Cable	39T0818	12.80
0058764711	WX Adapter for PC / Computer	39T0819	21.30
0058764712	WX Adapter for WFE / WHP	39T0820	21.30

SOLDERING TIPS FOR WXP200 SOLDERING PENCILS

Designed to provide maximum heat transfer from the heater to the tip.

Mfg. Part No.	Description	Stock No.	Price Each
0054480199	XHT D Chisel Tip, 5.0 mm Wide X 1.2 mm thick	39T0815	12.80
0054480299	XHT E Chisel Tip, 7.6 mm Wide X 1.5 mm thick	39T0816	12.80
0054480499	XHT C Chisel Tip, 3.2 mm Wide X 1.2 mm thick	39T0817	12.80

SOLDERING TIPS FOR WXP65 SOLDERING IRON

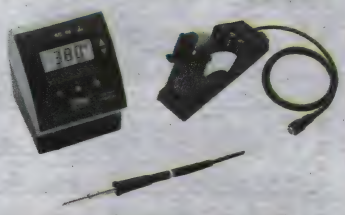
0054485299	XNT 1S Fine Chisel Tip 0.40mm wide X 0.15mm thick	53T5066	7.70
0054485099	XNT 1 Micro Tip, 0.25mm wide	53T5064	7.70
0054486299	XNT 1SC Soldering Tip 0.4 x 0.15mm	53T5075	14.90
0054485999	XNT H Chisel Tip 0.8mm wide X 0.4mm thick	53T5073	8.50
0054485599	XNT 4 Angled Round Tip O/D 1.20mm	53T5069	7.70
0054486099	XNT K Chisel Tip 1.2mm wide X 0.4mm thick	53T5074	8.50
0054485699	XNT 6 Chisel Tip 1.60mm wide X 0.4mm thick	53T5070	7.70
0054485199	XNT A Chisel Tip 1.6mm wide X 0.4mm thick	53T5065	7.70
0054486399	XNT KN Knife Tip 2.0mm wide	58T1165	14.90
0054485799	XNT B Chisel Tip 2.40mm wide X 0.8mm thick	53T5071	7.70
0054485899	XNT C Chisel Tip 3.20mm wide X 0.8mm thick	53T5072	7.70
0054485399	XNT D Chisel Tip 4.0mm wide X 0.8mm thick	53T5067	15.80
0054485499	XNT GW Gullwing O/D 2.0mm X 3.0mm thick X 13.4mm length	53T5068	13.80

(194841)

WD1000HPT HIGH-POWER DIGITAL SOLDERING STATION SYSTEM

Weller®

- WD1M high-power 160W microprocessor-controlled digital power unit with programmable advanced software
- WP120 high-power 120W soldering iron with rapid heat transfer into tip for quick, precise control
- WDH10T Stop+Go safety stand cools tip when iron is at rest; restores tip temperature immediately when removed
- Temperature control range: 150° to 850°F (50° to 450°C)
- ESD safe to protect sensitive components



This high-power programmable soldering station is specially designed for soldering operations which need a combination of high energy and maximum precision. Ideal for soldering on high-density circuit boards with heat sinks that cause dissipation in heat transfer. Perfect for high frequency/radio frequency applications and solar panel production. System includes **WD1M** digital, microprocessor-controlled power unit supplied with new advanced software, **WP120** 120W high-power soldering iron pencil with replaceable soldering tip, **WDH10T** Stop+Go iron rest stand, **WDC2** dry tip cleaning system , instruction manual and safety information. *Order **XT series** chisel-type soldering tips for* **mfg. part no. WP120** soldering iron pencil separately below.

Mfg. Part No.	Description	Stock No.	Price Each Each
WD1000HPT	High-Power Digital Soldering Station System	08P3661	682.00

ACCESSORIES

0052919399	**WP120** High-Power Soldering Iron Pencil	03P0679	228.80
0052919499	**WP120** High-Power Soldering Iron Pencil and **WDH10T** Stop+Go Iron Stand Set	08P3663	298.50
0051516199	**WDH10T** Stop+Go Iron Stand with Sponge	55M6393	110.10
0051512599	**WDC2** Attachable Soldering Tip Dry Cleaner	55M4510	14.40

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SOLDERING STATIONS

WD1000HPT HIGH-POWER DIGITAL SOLDERING STATION SYSTEM (CONT.)

XT SERIES CHISEL-TYPE SOLDERING TIPS FOR WM120 SOLDERING IRON PENCIL
These unique tips feature a wire-wound heater designed for maximum thermal recovery. The tip is shaped to fit snugly over the pyramid-shaped heater slug providing the user maximum surface contact between the tip and the heater. Constructed of solid copper plated with iron all over. Nickel and chromium behind the working surface.

Mfg. Part No.	Model	Width (mm)	Height (mm)	Length (mm)	Stock No.	Price Each Each
0054470299	XTM	3.2	1.19	39	08P3665	12.70
0054470399	XTA	1.6	0.71	36	08P3666	12.70
0054470499	XTB	2.4	0.79	36	08P3667	12.70
0054470599	XTC	3.2	0.79	36	08P3668	12.70
0054470699	XTD	4.6	0.79	34.5	08P3669	12.70
T0054470799	XTE	5.9	1.19	34.5	08P3670	12.70

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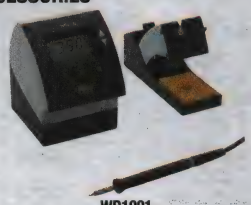
WD1000 SERIES SINGLE-CHANNEL DIGITAL SOLDERING STATIONS AND ACCESSORIES

RoHS Compliant Available

Weller®



WD1001

WTA50

Stations Include Mfg. Part No. WD1 85W Single-Channel Digital Power Unit:
- Voltage: 120V input, 24V output
- 3 "radio buttons" allows user to preset frequently-used temperature settings
- Special function menu allows user to access 6 advanced features: Setback Time, Standby Temp., Temp. Lockout, F°/C° Switching, Temp. Offset, Auto-Off Time
- Large, high-contrast LCD display shows more information at a glance
- Temperature accuracy/stability: ±9°F (±5°C)/±10°F (±6°C)
- Temperature range: 150°F to 850°F (50°C to 450°C)
- ESD-safe to protect sensitive components

Mfg. part no. WD1001 digital soldering station includes **mfg. part no. WD1** 85W single-channel power unit, **mfg. part no. WMP** 65W soldering micro-pencil, **mfg. part no. WDH20** soldering micro-pencil stand and **mfg. part no. NT1** soldering tip. **Mfg. part no. WMP** micro-pencil features a short tip-to-grip (37mm) distance putting user close to the work. Its heating element is built-in to the pencil rather than tip, using low-cost replacement tips. Select from a wide assortment of **NT series** tips for use with mfg. part no. WMP soldering micro-pencil; *ordered separately below.*

Mfg. part no. WD1002 digital soldering station includes **mfg. part no. WD1** 85W single-channel power unit, **mfg. part no. WP80** 80W soldering pencil with short tip-to-grip barrel (52mm), **mfg. part no. WDH10** soldering pencil stand and **mfg. part no. LTB** soldering tip. To work at a standard tip-to-grip length (65 mm), order **mfg. part no. 0058744846** long tip retainer assembly separately; *go online or call.*

Mfg. part no. WD1002T digital soldering station includes **mfg. part no. WD1** 85W single-channel micro power unit, **mfg. part no. 0052918099** 80W soldering pencil with short tip-to-grip barrel (52mm), **mfg. part no. WDH10T** Stop+Go soldering pencil stand that extends tip life by placing station in setback mode when pencil is not in use, **mfg. part no. WDC2** dry cleaner and **mfg. part no. LTB** soldering tip. To work at a standard tip-to-grip length (65 mm), order **mfg. part no. 0058744846** long tip retainer assembly separately; *go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each
● WD1001	85W Single-Channel Micro Digital Soldering Station with 65W Soldering Micro-Pencil and WDH20 Soldering Pencil Stand	24K3775	354.70
● WD1002	85W Single-Channel Digital Soldering Station with 80W Short-Barrel Soldering Pencil and WDH10 Soldering Pencil Stand	86K9118	354.70
WD1002T	85W Single-Channel Digital Soldering Station with 80W Short-Barrel Soldering Pencil and WDH10T Stop + Go Soldering Pencil Stand	08N3482	386.40
ACCESSORIES			
● WD1	85W Single-Channel Digital Soldering Station Power Unit	36K3087	217.70
● WSP80	80W Soldering Pencil	83F4097	131.10
0052918099	80W Soldering Pencil with Short Tip-To-Grip Barrel (52mm)	87K7588	131.10
0051512199	WDH10 Support Stand for **WP80** and **WSP80** Soldering Pencils	67K2889	46.30
● WMP	65W Soldering Micro-Pencil	01H8406	131.10
● 0051512299	WDH20 Support Stand for **WMP** Soldering Micro-Pencil	67K3182	46.30
● WTA50	SMD Desoldering Tweezer Handpiece	20C5672	213.20
● 0051504299	AK51 Support Stand for **WTA50** Tweezer Handpiece	25C6566	45.10

(84339)

HIGH-END PERFORMANCE SOLDERING STATIONS AND ACCESSORIES

Weller®

- Designed for Continuous Production Soldering
- Quick Heat-Up and Rapid Temperature Recovery
- ESD-Safe to Protect Sensitive Components
- Temperature Range: 350°F-850°F
- Slim, Comfortable Handpiece

WES51

Wireless temperature lockout to prevent operators from raising the temperatures to levels higher than specified for the board or component. Allows process control.

➤ CONTINUED ➤

HIGH-END PERFORMANCE SOLDERING STATIONS AND ACCESSORIES (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
WES51	50W, 120V, Electronic Station w/ETA Tip	92C1414	129.80
WESD51	50W, 120V Digital Soldering Station w/ETA Tip	94C3885	186.10
PES51	Soldering Pencil for Mfg. part no. WES51PU w/ETA Tip	94C1544	45.70
PH50	Soldering Stand and Sponge for **mfg. part no. PES51**	95B4551	20.00

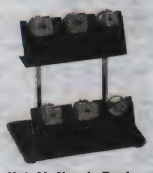
(48777)

WHA900 HOT-AIR REWORK STATION AND ACCESSORIES

Weller®

- Controlled output maintains set temperature regardless of air flow setting
- User-selected temperature and air flow setback
- Temperature offset control fine-tunes the hot air temperature at the tip
- Standby button to power-down to low settings when not in use
- Air from internal pump is infinitely adjustable from 5 L/min. to 50 L/min.
- Adjustable hot-air temperature from 122°F to 1022°F (50°C to 550°C)
- ESD safe

WHA 900



Hot-Air Nozzle Rack

Mfg. part no. WHA 900 hot-air rework station with internal pump is ideal for safe removal of larger, high lead-count SMD components and is capable of handling numerous other hot-air applications. Features closed-loop temperature feedback control that maintains the temperature at the nozzle, independent of the airflow rate. Includes rework station, 7.625"L hot-air pencil hand-piece and a rest support for hand-piece. Current supply: 120V / 24V. Power consumption: 750W. Hot-air pencil hand-piece output: 650W. Compact design maximizes workspace efficiency — station unit size: 8.125L x 6.625W x 4.25"H. *Order hot-air nozzles and hot-air nozzle rack separately below.*

Mfg. Part No.	Description	Stock No.	Price Each
WHA 900	Hot-Air Rework Station	34M4265	702.20

ACCESSORIES

Mfg. Part No.	Description	Size	Stock No.	Price Each
0058736881	Round Hot-Air Nozzle (No Vacuum)	2.5" I.D.	01C2581	72.20
0058736867	Round Hot-Air Nozzle (No Vacuum)	4" I.D.	01C2674	72.20
0058736870	Round Hot-Air Nozzle (No Vacuum)	0.276" I.D.	01C2679	72.20
0058736839	4-Sides Heated Hot-Air Nozzle	0.433 x 0.433"	30C2393	108.30
0058736842	2-Sides Heated Hot-Air Nozzle	0.394 x 0.551"	20C6324	102.60
0051504899	Hot-Air Nozzle Rack (Nozzles Not Included)		32H1877	91.80

(108765)

WTCPT CONTROLLED-OUTPUT SOLDERING STATION

Weller®

- Unique Closed-Loop Method of Controlling Maximum Tip Temperature
- Quick-Disconnect Plug Allows for Fast Soldering Iron Changes
- ESD-Safe to Protect Sensitive Components
- Lightweight, 60W Soldering Iron
- Temperature Range: 600°F to 800°F; Range Determined by Tip Selection

Mfg. Part No.	Description	Stock No.	Price Each
WTCPT	120V Temperature-Controlled Soldering Station	35F3309	179.90
WTCPT REPLACEMENT PARTS AND ACCESSORIES			
TC201T	Soldering Pencil with Mfg. Part No. PTA7 Soldering Tip	35F2522	94.70
TC217	Replacement Cord Assembly for TC201T Soldering Pencil	52F5681	26.50
PH1201ESD	ESD Iron Stand Assembly	95F3797	29.30
TC205	Replacement Sponge for PH Series Iron Stands	34F1030	1.30
EC234	Heater Assembly for mfg. part no. TC201T Iron	90F6541	20.50

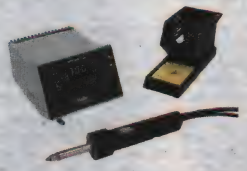
(5994)

DIGITAL SHOP AIR DESOLDERING STATION

RoHS Compliant Available

Weller®

- 80 watts of power for faster heat up and better performance
- For safely and efficiently removing through hole components from PCBs
- Microprocessor circuitry automatically recognizes other accessories
- Uses fast-response shop air
- Vacuum delay feature prevents clogging



Mfg. part no. WDD81X shop air desoldering station includes 95W power unit, **mfg. part no. DXV80** desoldering pencil with internal disposable solder collection tube, **mfg. part no. DX112** desoldering tip and desoldering pencil stand with sponge. Temperature range: 150° F to 850° F. Air flow volume: 35 liters/minute. Uses **DX series** threadless desoldering tiplets and is programmable using **mfg. part no. WCB1** control module, *all ordered separately; go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each
● WDD81X	Digital Shop Air Desoldering Station	30K6470	744.10

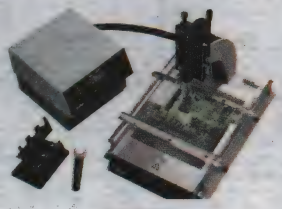
(48780)

WHA3000 SERIES 700W DIGITAL HOT-AIR STATIONS WITH BUILT-IN TURBINE

RoHS Compliant Available

Weller®

- Programmable station with a three-step temperature time profile
- Variable speed controlled turbine generates an air volume of up to 50 liters/min.
- Memory space to store up to 10 thermal profiles
- Hot-air pencil has automatic vacuum pickup for easy component removal
- Bright LCD display for easy reading of the parameter settings
- Temperature range: 122°F - 1022°F (50°C - 550°C)
- Control accuracy: +/- 77°F (+/-25°C)
- ESD-safe housing and pencil



WHA3000PS

WHA3000 series 700W hot-air stations perform demanding repair tasks on circuit boards with complex, fine-pitch SMD components. The advanced control technology coupled with user friendly operation, provides process control. Both units features an automatic operation mode for process repeatability to help increase productivity and quality. **Mfg. part no. WHA3000PS** also has a standby mode to reduce the nozzle temperature and air flow rate. Convenient lever lowers or raises head in the "z" direction and the heating plate heats up components to the correct temperature from below. Both units come complete with **mfg. part no. HAP3** hot-air pencil, two-stage foot switch, **mfg. part no. NQ30** hot-air nozzle, **mfg. part no. AKT30** Stop-and-Go stand, nozzle change tool, and **mfg. part no. WHA** control software. **Mfg. part no. WHA3000PS** also includes **mfg. part no. WBHS** PC board holder with slide rail and **mfg. part no. WHP3000** heating plate. A full range of **ND** and **NQ series** hot-air nozzles are available; *go online or call.*

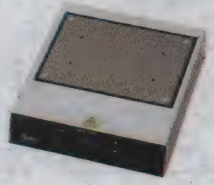
Mfg. Part No.	Description	Stock No.	Price Each
WHA3000P	700W Digital Hot-Air Station with Built-In Turbine	96H8432	3002.70
● WHA3000PS	700W Digital Hot-Air Station with Built-in Turbine, Standby Mode, PCB Holder with Tripod and Heating Plate	09J1426	6689.00

(84524)

WHP1000 PREHEATER DIGITAL PREHEATING PLATE

Weller®

- Powerful 1000W — four 250W heating elements allow preheating in a variety of ways
- Infrared heater heats-up fast, delivers accurate working temperatures
- Large heating plate (6" x 8.75") distributes heat evenly
- Preheats components, PCBs, contacts from the bottom
- Use under a PCB holder or work directly on heating surface
- Digitally controlled for precise temperature regulation
- "Auto-Off" and "Standby Temperature" special functions
- Set and actual temperature viewed on digital display
- ESD safe



Mfg. part no. WHP1000 is a high-power preheater that is suitable for contact preheating. Use it under **mfg. part no. WBH2** circuit board holder, *ordered separately on page 2022*, or simply work directly on the unit's heating surface. Well suited for use with flat silicon cells as well as ceramic and glass PCBs. Allows the temperature of the board's substrate material to be raised to the correct working temperature, providing perfect soldering operations without the risk of damage from thermal shock to the board. Ideal for rework of digital cameras, cell phones, PDAs, and MP3 players. Features an integrated RS232 interface that allows the preheater to be controlled externally from the **mfg. part no. WHA3000P** hot air station, *ordered separately on this page.* Temperature can be monitored at specific locations on the board using an insulated Type-K thermocouple, *ordered separately; go online or call.* Overall size: 10W x 11L x 2.75"H. Power supply: 120V, 50/60Hz. Temperature range: 150°F to 570°F.

Mfg. Part No.	Description	Stock No.	Price Each
WHP1000	Pre-Heater, Digital Preheating Plate	51R5765	1607.60

(163810)

WR3000M DIGITAL SELF-CONTAINED 3-FUNCTION REWORK SYSTEM

RoHS Compliant Available

Weller®

WR3000M

0051515599 SMT Chip Removal Nozzle Kit

Rework on the Highest Level — Innovation Newly Designed

- 400 watts of power over 3 independently-controlled channels with automatic tool detection
- Air and vacuum ports allow use of up to 3 tools simultaneously
- Compatible with all high-speed micro-tools — **WMRP** and **WMRT**
- Powerful **HAP200** 200W hot-air pencil for efficient, lead-free rework
- USB port allows use of included comprehensive PC software for monitoring, parameterizing and datalogging
- **WRK** rework desoldering set allows components removal up to 30 x 30mm
- **WVP** vacuum pen allows easy handling of components
- Large, intuitive LCD display shows critical functions for 3 channels

WR3000M DIGITAL SELF-CONTAINED 3-FUNCTION REWORK SYSTEM — COMPLETE WITH SELECT TOOLS AND ACCESSORIES

Mfg. part no. WR3000M rework system includes **mfg. part no. WR3M** digital, self-contained 3-function 400W rework station control unit, HAP200 200W hot-air pencil with nozzle adapter and WDH30 hot-air pencil stand with sponge, DXV80 80W desoldering pencil and WDH40 desoldering pencil stand with sponge, WP80 80W micro-soldering pencil with WDH10T "Stop-and-Go" soldering pencil stand with sponge, WVP vacuum pick-up pen, WDC2 attachable soldering tip dry cleaner, 1.2mm and 3.0mm hot-air nozzles, 2.3mm and 2.5mm desoldering nozzles, nozzle replacement tool, desoldering cleaning tools, brush and spare filters, color-coded clips for easy tool identification, CD with USB software and USB cable. Rework station features rotary vane pump. Temperature range: 150° F to 850° F (variable in one degree increments). Controllable temperature range is tool-dependent. Air flow volume: 1 liter/minute to 15 liters/minute. Voltage: 120V, 60Hz. All tool handles, cord sets and air flow are static free.

Mfg. Part No.	Description	Stock No.	Price Each
WR3000M	Digital Self-Contained 3-Function Rework System	50M8790	2363.90

➤ CONTINUED ➤

WR3000M DIGITAL SELF-CONTAINED 3-FUNCTION REWORK SYSTEM (CONT.)

CUSTOMIZE-A-SYSTEM — SELECT ONLY THE COMPONENTS, TOOLS AND ACCESSORIES NEEDED

WR3M DIGITAL, SELF-CONTAINED 3-FUNCTION REWORK STATION — CONTROL UNIT ONLY

Mfg. part no. WR3M digital, self-contained, 3-function rework station is specifically-designed to the needs and requirements of professional repairs to latest-technology electronic sub-assemblies in industrial production engineering and in the repair and laboratory fields. Features three independent tool channels with automatic tool detection for the simultaneous operation of three soldering tools. Station comes with adapter for use with HAP200 200W hot-air pencil, *ordered separate below,* CD with USB software and USB cable. Size: 10.75"L x 9.25"W x 4.02H". Select from a wide array of rework tools and accessories, *ordered separately below,* and create a "made-to-order" rework system.

Mfg. Part No.	Description	Stock No.	Price Each
WR3M	Digital Self-Contained 3-Function Rework Station	55M4664	1610.70

HOT-AIR TOOL SETS, NOZZLES AND ACCESSORIES

Mfg. part no. 0052711799 HAP200 hot-air tool set includes HAP200 200W hot-air pencil with finger switch to control pump speed, 1.2mm and 3.0mm nozzles, adapter and WDH30 hot-air pencil stand with sponge. For HAP200 hot-air pencil only , *order* **mfg. part no. 0052711699** *separately below. Order hot-air nozzles separately below.*

Mfg. Part No.	Description	Stock No.	Price Each
0052711799	HAP200 200W Hot-Air Tool Set with WDH30 Stand	58M1917	351.50
0052711699	HAP200 200W Hot-Air Pencil **Only**	55M4639	307.10

Mfg. part no. 0051515599 WRK SMT chip removal nozzle kit contains nine progressively-size nozzles to facilitate soldering and desoldering of SMT components up to 30x30mm. This 9-pc. nozzle set is for use with HAP200 hot-air pencil; *ordered separately above.* **Mfg. part no. 0051515499** ESD-safe, stainless steel stand is ideal for storing all nine nozzles that come with the WRK SMT chip removal kit; *ordered separately below.* Select from three different SMT quad chip removal nozzle sets, *ordered separately below.* These nozzle sets are for use with HAP200 hot-air pencil; *ordered separately above,* and include the WVP vacuum pick-up pen for easy manually handling of SMD components and other small parts. For the WVP ESD-safe, vacuum pick-up pen only, *order* **mfg. part no. 0052918499** *separately below.* To fit nozzles from the HAP1 hot-air pencil to the HAP200 hot-air pencil, *order* **mfg. part no. 0058761728** *hot-air nozzle adapter separately below.*

Mfg. Part No.	Description	Stock No.	Price Each
0051515599	WRK SMT Chip Removal Nozzle Kit	52M8403	362.10

DESOLDERING TOOL SETS AND TIPS

Mfg. part no. 0051318399 DSX80 desoldering tool set includes DSX80 80W desoldering pencil with external solder collection chamber, two desoldering nozzles, cleaning tool, glass collector, gasket, anti-bloc paste, filter and WDH30 desoldering pencil stand with sponge. For DSX80 80W desoldering pencil only , *order* **mfg. part no. 0051319099** *separately below.* Use the patented **X series** threadless desoldering tips, *ordered separately below.*

Mfg. Part No.	Description	Stock No.	Price Each
0051318399	DSX80 80W Desoldering Tool Set with WDH30 Stand	58M2800	299.00
● 0051314399	DX113 Threadless Desoldering Tip — 0.098" O.D. x 0.906"L	57K8655	13.80
0051315099	DX113HM High-Mass Threadless Desoldering Tip — 0.098" O.D. x 0.906"L	58M1910	18.30
0051314799	DX117 Threadless Desoldering Tip — 0.114" O.D. x 0.906"L	58M2794	13.80
0051314899	DX118 Threadless Desoldering Tip — 0.059" O.D. x 0.906"L	58M2795	13.80
0051315199	DX119 Threadless Desoldering Tip — 0.043" O.D. x 1.22"L	58M2796	13.80
0051315299	DX120 Threadless Desoldering Tip — 0.098" O.D. x 0.866"L	58M2797	13.80

Mfg. part no. 0051318299 DXV80 desoldering tool set includes DXV80 80W desoldering pencil with internal solder collection chamber, desoldering nozzles and WDH40 desoldering pencil stand with sponge. *Order the patented* **X series** *threadless desoldering tips separately above.*

Mfg. Part No.	Description	Stock No.	Price Each
0051318299	DXV80 80W Desoldering Tool Set with WDH40 Tool Stand	58M2799	286.90

SOLDERING TOOL SETS

Mfg. part no. 0052918199 WP80 soldering tool set includes WP80 80W soldering pencil with short "tip-to-grip" design (52mm working length), LTB soldering tip and WDH10 soldering pencil stand with sponge. **Mfg. part no. 0053313199** MPR80 antistatic Peritronic soldering tool set includes MPR80 80W ESD-safe Peritronic soldering pencil that increases visibility for making intricate connections, LTB soldering tip and KH25P soldering pencil stand with sponge.

Mfg. Part No.	Description	Stock No.	Price Each
0052918199	WP80 80W Short "Tip-to-Grip" Soldering Tool Set with WDH10 Stand	58M2804	169.60

Mfg. part no. 0053315999 WMP mico-soldering tool set includes WMP 65W micro-soldering pencil with heater in handle and extremely short "tip-to-grip" working distance, NT1 soldering tip and WDH20T "Stop-and-Go" soldering pencil stand with sponge. **Mfg. part no. 0052917999** WMP micro-soldering tool set comes with the same components as **mfg. part no. 0053315999** set except with the WDH20 soldering pencil stand with sponge.

Mfg. Part No.	Description	Stock No.	Price Each
0053315999	WMP 65W Short "Tip-to-Grip" Micro-Soldering Tool Set with WDH20T "Stop and Go" Stand	58M2806	218.40
0052917999	WMP 65W Short "Tip-to-Grip" Micro-Soldering Tool Set with WDH20 Stand	58M2803	169.60

STANDS AND ACCESSORIES

Mfg. part no. 0051515299 WDH30 stand with sponge for holding HAP1, HAP200, DSX80 or WSP150 tools. **Mfg. part no. 0051515399** WDH40 stand with sponge for holding DSV80 desoldering pencil. **Mfg. part no. 0051516199** WDH10T "Stop-and-Go" stand with sponge for holding WP80 or WSP80 soldering pencils. **Mfg. part no. 0051516299** WDH20T "Stop-and-Go" stand with sponge for holding WMP soldering pencil. **Mfg. part no. 0051515699** WDH50 stand with sponge for holding WMRP soldering pencil. **Mfg. part no. 0051503399** KH25P stand with sponge for holding MPR80 Peritronic soldering pencil. **Mfg. part no. 0051512599** WDC2 attachable soldering tip dry cleaner retrofits into WDH stands and includes metal wool for gentle cleaning of lead-free solder. Also available is **mfg. part no. WDC** free-standing soldering tip dry cleaner with metal wool. **Mfg. part no. 0051350099** cleaning tool is ideal for cleaning desoldering nozzles. **Mfg. part no. 0051303199** soldering tip tinner/activator is environmentally-safe, works fast to regenerate oxidized tips and will prolong tip life with regular use.

Mfg. Part No.	Description	Stock No.	Price Each
0051516199	**WDH10T** Stop+Go Iron Stand with Sponge	55M6393	110.10
0051515699	WDH50 Soldering Pencil Stand with Sponge	58M1915	105.10
0051350099	Desoldering Nozzle Cleaning Tool	81C8875	19.60
0051512599	**WDC2** Attachable Soldering Tip Dry Cleaner	55M4510	14.40
● WDC	Free-Standing Soldering Tip Dry Cleaner	34M8975	19.10
0051303199	Soldering Tip Tinner/Activator	58M1909	9.60

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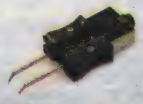
SOLDERING STATIONS

WD1000M MICRO DIGITAL REWORK/SOLDERING STATION ACCESSORIES

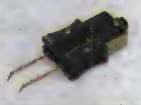
RoHS Compliant Available

Weller®

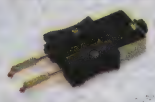
0051317399



RTW1 Tweezer Tip Set



RTW2 Tweezer Tip Set



RTW3 Tweezer Tip Set

RTW4 Tweezer Tip Set

Replacement accessories for use with **Mfg. part no. WD1000M** single-channel micro digital rework/soldering station, 120V designed for high-density SMT soldering and rework. **Mfg. part no. WMRP** micro-pencil is chrome-plated aluminum and features an auto-off switch. Its short tip-to-grip (45mm) distance putting user close to the work. Select from **RT series** soldering tips; *ordered separately below.*

REPLACEMENT ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
● WD1M	85W Single-Channel Micro Digital Rework/Soldering Power Unit	84K0485	271.90
● 0052917199	WMRP Soldering Mirco-Pencil	24K3757	142.50
0051515699	WDH50 Soldering Pencil Stand with Sponge	58M1915	105.10

RT SERIES SOLDERING TIPS

RT series soldering tips are specially designed for microsoldering tasks and microscope workstations. They can also be used with lead-free solder. Changing soldering tips is quick, easy and requires no tools. Just pull out the old tip, insert the new one, and continue soldering. The heating element is built into the tip, delivering heat quickly and precisely to the soldering joint. Length/reach: 1.654″ (0.42mm).

Mfg. Part No.	Description	Stock No.	Price Each
● RT3	Chisel Tip, 0.051″ (1.3mm) Thick, 0.016″ O.D.	24K3765	34.20
● RT5	30° Bent Chisel Tip, 0.031″ (0.79mm) Thick, 0.016″ O.D.	24K3767	34.20

MICRO DESOLDERING TWEEZER SETS, TIP SETS AND SUPPORT STAND

Mfg. Part No.	Description	Stock No.	Price Each
0051317299	WMRT Micro SMD Desoldering Tweezers with RTW2 Tip Set	84K0489	271.70
0051514699	WMRTH Support Stand for WMRT Micro Desoldering Tweezers	84K0491	88.90
● 0054465199	RTW1 Tweezer Tip Set — Tip Width O.D. 0.008″/2mm	84K0492	72.20
● 0054465299	RTW2 Tweezer Tip Set — Tip Width O.D. 0.028″/0.7mm	84K0493	72.20
● 0054465399	RTW3 Tweezer Tip Set — Tip Width O.D. 0.118″/3mm	84K0494	84.60
● 0054465499	RTW4 Tweezer Tip Set — Tip Width O.D. 0.236″/5.99mm	84K0495	84.60

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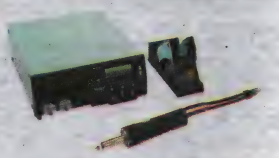
DIGITAL SELF-CONTAINED REWORK STATIONS

RoHS Compliant Available

Weller®

WR2000 - Hot Air



WR2000X - Desolder

WR2000VX - Solder / Desolder

Dual Port Digital Power Unit

Features for WR2 only:

- 2 independent tool channels with automatic tool recognition
- Simultaneous use of 2 tools (maximum of 300 watts)
- Will operate most Weller accessories up to 200 watts
- Self contained vacuum and air turbine

- ECO button for "Sleep Mode"
- Programmable temperature memory key
- ESD safe
- Weller Micro-Tools, WMRP & WMRT are not compatible

Mfg. Part No.	Temp. Range	Input / Output Voltage (V)	Soldering/ Desoldering Pencil	Supplied Tip / Stand	Stock No.	Price Each
● WR2000	+150°F to +999°F	120 / 24	HAP1	0058727821	13T8161	1233.60
● WR2000X	+150°F to +850°F	120 / 24	DXV80	DS112	13T8134	1233.60
● WR2000VX	+150°F to +850°F	120 / 24	DXV80, WP80	DX112/LTB	86R9498	1502.40

DIGITAL SELF-CONTAINED 2 CHANNEL REWORK STATION

The small set perfect for soldering and desoldering rework. With PDN desoldering nozzle plier.

WR 2000 ER	+150°F to +999°F	120 / 24	WP65, DSX120	...	96W2050	1520.00

CONTINUED

DIGITAL SELF-CONTAINED REWORK STATIONS (CONT.)

Mfg. Part No.	Temp. Range	Input / Output Voltage (V)	Soldering/ Desoldering Pencil	Supplied Tip / Stand	Stock No.	Price Each
A large all around set for requirements on the working bench.						
WR 3000M ER	+150°F to +999°F	120 / 24	DSX120, WP120, HAP200	DX112/LTB	96W2051	2380.00
HIGH POWERED DIGITAL SOLDERING STATIONS Consists of power unit WXD2 with WXDP120 high-power desoldering iron and safety rest **WXD2020** also includes **WXP120** soldering iron with safety rest. Both require shop air.						
WXD2010	+150°F to +850°F	120 /	WXDP120	XSD1/ WDH70	28W3380	1103.80
WXD2020	+150°F to +850°F	120 /	WXDP120 WTB tip & WHD stand	XSD1/ WDH70	28W3381	1344.00

DESOLDERING IRON

Desoldering iron 120 W, 24 V with excenter fixture, without safety rest. Safety rest **WDH 30** must be ordered separately.

Mfg. Part No.	Temp. Range	Input / Output Voltage (V)	For Use With	Supplied Tip	Stock No.	Price Each
DSX 120	+150°F to +850°F	24 /	WR 3M, WR 2	XDS	96W2049	340.00

ACCESSORIES

Desoldering and Measuring tips are for use with WXDP soldering iron.

Mfg. Part No.	Product Description	Nozzle Width (mm)	Internal Dia.(mm)	Tip Length (mm)	Stock No.	Price Each
XDS 1	Desolder Tip	2.5	1.4	10.5	96W2052	13.00
XDS 2		5.3	3	10.5	96W2053	12.00
XDS 3		2.3	1	10.5	96W2054	12.00
XDS 4		2.5	1.2	10.5	96W2055	12.00
XDS 5		3.3	1.8	10.5	96W2056	13.00
XDS 6		1.9	0.7	16.5	96W2057	12.00
XDS 7		2.7	1.2	16.5	96W2058	12.00
XDS 8		2.9	1.5	10.5	96W2059	12.00
XDS 9	Measuring Tip	2.2	0.55	11	96W2060	20.00
WXD2	High Powered Dual Port Digital Power Unit, 240W, 120V				28W3379	725.70

(192079)

DIGITAL SOLDERING STATIONS

RoHS Compliant Available

Weller®

WSM1

0058751880

- Built-in Stop+Go function saves energy and extends tip life
- Touch screen control
- Temperature lockout function
- Two pre-set temperature "radio" buttons

- Integrated, ergonomically designed 40W WMRP style micro-soldering pencil
- Safety rest with WDC dry cleaner
- ESD safe to protect sensitive components

Mfg. Part No.	Temp. Range	Power (W)	Input / Output Voltage (V)	Supplied Tip	Stock No.	Price Each
● WSM1	+150°F to +850°F	40	120 / 12	RT3	18T1408	392.50

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
● 0058751880	Car Adapter for WSM1C	14T9221	13.80

(192080)

WLC100 SOLDERING STATION

Weller®

- Variable Power Control Produces 5-40 Watts
- Lightweight Pencil Iron
- Natural Sponge Tip Cleaning Pad
- Cushioned Foam Grip with Replaceable Heating Element
- Includes **Mfg. Part No. ST3** Iron-Plated Copper Tip

Mfg. Part No.	Stock No.	Price Each
WLC100	92F5084	51.60

(5855)

DIGITAL SOLDERING STATIONS

NEW TENMA®

- **Mfg. part no. 21-10115** temperature range: +392°F to +896°F
- **Mfg. part no. 21-10120** temperature range: +302°F to +842°F (+150°C to +450°C)
- High contrast LCD display
- F or C selectable readout
- Three programmable presets
- ESD safe
- Lightweight iron handle

Compact soldering station **mfg. part no. 21-10115** features a digital display and low profile casing. Its compact design will fit on any tool bench and is small enough for convenient storage. Advanced digital soldering station **mfg. part no. 21-10120** simple controls provide a easy user interface. The thermostat-controlled 60-watt output of these units provides quick heat up with outstanding precision. Long-life ceramic heating element (replacement iron assembly: 21-11435). Both soldering stations include one tip and soldering stand with cleaning sponge.

Mfg. Part No.	Description	Stock No.	Price Each
21-10115	Digital Soldering Station, Comapct	56T2208	75.90
21-10120	Digital Soldering Station, UL Listed	56T2209	83.99
21-11435	Replacement Soldering Iron for 21-10115 and 21-10120	93T9669	17.79
21-10117	3 Pk. Soldering Tips for 21-10115	53W8506	8.39

(212136)

ROTARY DIAL TEMPERATURE CONTROLLED DIGITAL SOLDERING STATION

NEW TENMA®

- Stable and accurate temperature range of +392°F to 896°F
- Power consumption: 50W
- Temperature lockout to prevent accidental adjustments
- Lead free
- ESD safe
- Long life heating element
- Lightweight iron handle

Soldering station offers a space saving design and an easy to use rotary dial temperature control that make this soldering station ideal for professionals, hobbyists and students. Compact, split design makes for an easy fit on any tool bench. Includes one tip, soldering stand and cleaning sponge and replacement iron **mfg. part no. 21-11445** is also available; ***go online or call.***

Mfg. Part No.	Description	Stock No.	Price Each
21-11405	Soldering Station, Rotary Dial Controlled	93T9666	36.69

(212138)

TEMPERATURE CONTROLLED DIGITAL SOLDERING STATIONS

NEW TENMA®

- **Mfg. part no. 21-147** temperature range: +300°F to +790°F
- **Mfg. part no. 21-1590** temperature range: +320°F to +900°F
- 48W

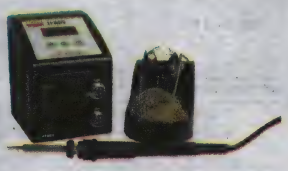
Mfg. part nos. 21-147 and 21-1590 feature adjustable temperature and a variety of available tips, these units are perfect for most soldering applications including SMD. Grounded tip for soldering static sensitive devices. Over-heat protection with closed loop temperature control. Units come with replaceable iron clad conical 3/64" tip.

Mfg. Part No.	Description	Stock No.	Price Each 1-3
21-147	Soldering Station, 12 LED Bargraph Display	39C0869	77.99
21-1590	Soldering Station, Digital Display	52F7963	89.99

(212139)

DUAL CHANNEL SOLDERING STATION

NEW TENMA®



- Temperature range: 392°F to 896°F
- Heating element: 32VAC, 80W
- Power requirements: 100–120VAC, 60Hz

ESD-safe dual channel soldering station is designed to allow for work on SMD chips and lead free soldering without alternating tools. Short distance between the handle and heating element allow for fast heat up time. These features saves both time and money for the user. Great for production and repair work.

Mfg. Part No.	Description	Stock No.	Price Each
21-10570	Dual Channel Soldering Station with Iron & Tweezer	56T2229	149.00
21-10571	Tweezer for 21-10570	52T9319	71.39
21-10575	Replacement Tweezer Tips 2mm, 2 pcs.	56T2231	6.49
21-10585	Replacement Tweezer Tips 5mm, 2 pcs.	56T2235	7.49
21-10590	Replacement Tweezer Tips 10mm, 2 pcs.	56T2237	7.49

➤CONTINUED➤

DUAL CHANNEL SOLDERING STATION (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
21-10595	Replacement Tweezer Tips 15mm, 2 pcs.	56T2239	7.49
21-10600	Replacement Tweezer Tips 20mm, 2 pcs.	56T2241	7.49

(212140)

HIGH POWER SOLDERING STATION

NEW TENMA®

- Fully adjustable temperature control
- On/off switch with power indicator
- Flexible burn resistant lead
- Adjustable temperature from +500°F to +900°F
- Protects components from voltage and current spikes
- Ergonomic rubber grip provides user comfort

80W high power soldering station is ideal for heavy duty lead-free soldering applications like stained glass work, production and repair work. High power heating element heats up fast and provides quick temperature recovery.

Mfg. Part No.	Description	Stock No.	Price Each
21-10565	High Power Solder Station	56T2227	49.99
21-10610	Replacement Iron for 21-10565	56T2245	25.49
21-10615	Conical Tip for 21-10565	46T0218	2.49
21-10620	3mm Chisel Tip for 21-10565	46T0219	2.49
21-10625	6mm Chisel Tip for 21-10565	46T0220	2.49

(212141)

VACUUM REWORK STATION

NEW TENMA®

Vacuum Desoldering Iron:
- 24VAC, 48W heating element
- Temperature range: +410°F to +900°F

Temperature Controlled Soldering Iron:
- 24VAC, 48W heating element
- Temperature range: +320°F to +900°F

Rework Station:
- Overall dimensions: 5 ½" (H) x 8 ¼" (W) x 7 ½" (D) ½"
- Power requirements: 120VAC, 60Hz, 100W

Rework station is a complete single-piece unit that combines the benefits of a temperature controlled vacuum desoldering station, with a high quality temperature controlled soldering iron.

Mfg. Type No.	Description	Stock No.	Price Each
72-6345	Vacuum Rework Station	12P9809	449.99
ACCESSORIES			
72-6865	1.2mm Replacement Nozzle	97H6816	4.89
72-6408	Replacement Glass Tube	01C0708	2.54
72-6407	Replacement Heating Element	01C0707	17.78
72-6863	Replacement Tip 0.8mm X 23mm	97H6810	4.59
72-6866	Replacement Tip 1.5mm X 23mm	96H8213	4.59
72-6867	Replacement Tip 2.0mm X 23mm	96H8235	4.48
72-6409	Filter Set	01C0709	0.99
72-6411	O Ring Set	39C0871	0.99

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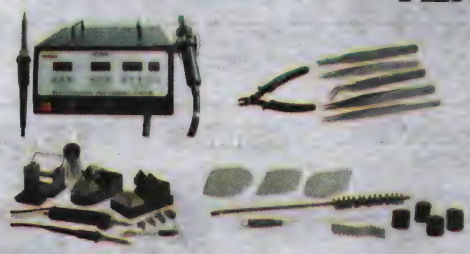
REWORK STATIONS

NEW TENMA®



Mfg. part no. 21-10560:

Desoldering iron
- Temperature range: +572°F to +842°F
- Heating element: 100-120VAC, 170W

Soldering iron
- Temperature range: +302°F to +896°F
- Heating element: 100-120VAC, 100W

Hot air
- Temperature range: +212°F to +896°F
- Power requirements: 100-120VAC
- Powe consumption: 600W
- Overall dimensions: 7.5" x 11.5" x 4.75"
- Fuse type:15A Fast type

Mfg. part no. 21-10555:

Desoldering iron
- Temperature range: +572°F to +842°F
- Heating element: 32VAC, 100W

Soldering iron
- Temperature range: +302°F to +896°F
- Heating element: 32VAC, 100W
- Overall dimensions: 7.5" x 11.5" x 4.75"

➤CONTINUED➤

SOLDERING STATIONS

REWORK STATIONS (CONT.)

Mfg. part no. 21-10560 multi-function SMD rework station is ideal for production, repair work, desoldering, general soldering and reworking surface mount devices with temperature-controlled hot air all in one unit. 3-in-one design saves work space and offers tool convenience. **Mfg. part no. 21-10555** versatile soldering and desoldering station is ESD safe and loaded with features making it suitable for a variety of uses like production, repair, general hobbyist work and lead free applications.

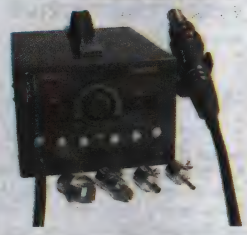
Mfg. Type No.	Description	Stock No.	Price Each
21-10560	Multi-Function SMD Rework Station	46T0217	499.00
21-10555	Rework Station	56T2224	329.99
REPLACEMENT TOOLS			
21-10561	Heat Gun for 21-10560	52T9318	74.99
21-10556	Desoldering Iron for 21-10560 and 21-10555	58T7107	84.99
21-10605	Soldering Iron for 21-9360 and 21-10555	56T2243	54.99
ACCESSORIES			
21-10557	Barrel and Nut Assembly for 21-10556	57T2725	2.09
21-10559	Glass Solder Collector for 21-10556	58T7108	7.49
21-10558	Heater Assembly for 21-10556	57T2726	29.99
21-10562	1.0mm Desoldering Tip for 21-10555 and 21-10560	58T7109	7.49
21-10563	1.2mm Desoldering Tip for 21-10555 and 21-10560	58T7110	7.49
21-10564	1.5mm Desoldering Tip for 21-10555 and 21-10560	58T7111	7.49
72-6712	Tenma QFP Nozzle for 72-6710	39C0442	37.99
72-6724	Nozzle Single 2.5mm for Tenma devices	07H1603	27.99
72-6725	Nozzle Single 4.4mm for Tenma devices	07H1607	28.99
72-6716	Nozzle SOP 4.4 x 10 for Tenma devices	39C0445	33.99

(212007)

INTELLIGENT REWORK STATION

NEW TENMA®

- High flow diaphragm pump for large SMD components
- ESD safe
- Constant temperature and closed-loop control circuit
- Automatic power off
- Control keys integrated into handle
- Control card function to prevent accidental temperature change
- Maintains stable air flow and hot-air temperature
- Temperature range: 302°F–932°F (150°C–500°C
- Total power: 800 Watt



Intelligent rework station provides a broad temperature range of to handle a wide range of soldering and desoldering applications. Features a Dual LED display that shows temperature, air flow and parameter setup.

Mfg. Type No.	Description	Stock No.	Price Each
21-11415	Intelligent Rework Station	93T8992	177.49

(212011)

2-in-1 REWORK STATION

NEW TENMA®

- Space saving design
- Digital display shows current temperature and conditions
- Easy pushbutton temperature adjustment
- Temperature range: soldering station, +392°F to 896°F (+200°C to +480°C); rework station, +212°F to +932°F (+100°C to +500°C)
- ESD safe

Dual function rework station combines the functions of a rework station and soldering station into a single piece of equipment for user convenience. Rework and solder functions are controlled by a central unit to maintain temperature accuracy and stability in both.

Mfg. Type No.	Description	Stock No.	Price Each
21-11420	2-in-1 Rework Station	93T9668	94.49

(212006)

2-in-1 INTELLIGENT SMD REWORK STATION

NEW TENMA®

- ESD safe
- Intelligent cooling system
- Energy saving auto off and sleep functions
- Temperature calibration for iron and hot air rework handpiece
- Low vibration diaphragm air pump
- Temperature range: soldering iron, +392°F to 896°F (+200°C to +480°C); hot-air tool, +212°F to +932°F (+100°C to +500°C)
- Adjustable air flow
- Selectable Fahrenheit/Centigrade temperature

Intelligent rework station combines rework station with soldering station with easy to operate space saving design. A MCU thermostat provides accurate and consistent working temperature. The dual LCD displays show live working states of both the iron and the hot air hand pieces, as well as, provides access to three programmable presets for each unit. Kit includes nozzles, soldering tip, hand pieces, and holders and replacement iron assembly **mfg. part no. 21-11445**.

Mfg. Type No.	Description	Stock No.	Price Each
21-10130	2-in-1 Intelligent SMD Rework Station	32T0390	178.49
21-11445	Soldering Iron for 21-10130 and 21-11405 Soldering Stations	93T9670	14.99

(212005)

HOT AIR SMD REWORK STATION

NEW TENMA®

- Hot air temperature adjustable from 212°F to 754°F
- Dimensions: 7 ½"W x 5 ⅜"H x 9 ¾"D

Hot air SMD rework station ideal for soldering and desoldering of most surface mount devices including QFP, SOP and PLCC packages.

Mfg. Type No.	Description	Stock No.	Price Each
72-6710	Hot Air SMD Rework Station	39C0897	529.00

(212009)

HOT AIR SMD DESOLDERING AND REWORK STATIONS

NEW TENMA®

- ESD safe
- Temperature range: +210°F to 896°F (+100°C to +480°C)
- 280 watt

Mfg. part no. 21-11410 hot air desoldering station offers plenty of features and temperature settings for a wide range of soldering and desoldering applications. Provides quick heating up to 662°F in only 10 seconds, while the temperature sensor keeps output temperature accurate and consistent. **Mfg. part no. 21-10125** hot air rework station provides a wide range of temperature and temperature settings for flexibility in soldering and desoldering work of sensitive components. A closed-loop heat sensor provides accurate and consistent working temperature.

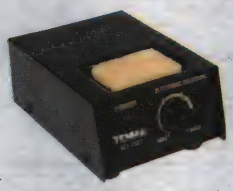
Mfg. Type No.	Description	Stock No.	Price Each
21-11410	Hot Air Desoldering Station	93T9667	104.99
21-10125	Hot Air Rework Station	32T0389	149.99
ACCESSORIES			
21-10162	Hot Air Nozzle, QFP 10.2mm x 10.2mm	32T0393	10.99
21-10164	Hot Air Nozzle, QFP 15.2mm x 15.2mm	32T0394	10.99
21-10166	Hot Air Nozzle, QFP 28.2mm x 28.2mm	32T0395	19.99
21-10160	Hot Air Nozzle, Single 2.5mm	32T0392	4.99
21-10168	Hot Air Nozzle, Single 4.4mm	32T0396	4.99
21-10176	Hot Air Nozzle, SOP 10 mm x 4.8 mm	32T0400	19.99
21-10170	Hot Air Nozzle, SOP 7.6 x 12.7mm	32T0397	4.99

(212010)

SMD SOLDERING/DESOLDERING TWEEZERS

NEW TENMA®

SMD Soldering/Desoldering Tweezers



Temperature Control Unit

SMD Soldering/Desoldering Tweezers provide a fast, efficient method to solder and desolder surface mount devices such as chip resistors, chip capacitors, SOTs, flat pack and DIP ICs. Dual highly insulated 40W ceramic heating elements insure rapid heat up and recovery. Heat resistant silicon cord is terminated with three pin grounded AC plug. A wide variety of interchangeable tips available in 2mm to 30mm widths. Soldering iron temperature control unit is perfect for adding wattage adjustability to any soldering device, up to 100W.

SOLDERING STATION REPLACMENT TIPS

Mfg. Part No.	Description	Stock No.	Price Each 1-9	Price Each 10+
21-8230	SMD Soldering/Desoldering Tweezers	95K9089	30.59	29.09
21-7927	Soldering Iron Temperature Control Unit Only	84R8693	32.99	31.69
ACCESSORIES				
21-8195	10mm Replacement Tip Set	18K8531	1.69	1.59
21-8196	15mm Replacement Tip Set	18K8533	1.69	1.59
21-8197	20mm Replacement Tip Set	18K8536	1.69	1.59
21-8198	30mm Replacement Tip Set	18K8538	1.69	1.59
21-8190	2mm Replacement Tip Set	18K8513	1.99	1.49
21-8191	3mm Replacement Tip Set	18K8515	1.79	1.68
21-8192	5mm Replacement Tip Set	18K8518	1.29	1.19

(211574)

MINI SMD PREHEATER

NEW

TENMA®

- Lead free
- ESD safe
- Air flow volume: 6.35 cubic ft/minute
- Temperature range: 212°F to 662°F (100°C to 350°C)
- Dimensions: 6.7 x 5.5 x 2.2"

Mini SMD Preheater packs big preheating power into a miniature package for work or rework of small PCB's. The 540 watt heater can reach up to 662°F in 10 seconds. Automatic and intelligent temperature control maintains accurate heat levels for any period of time. The unit can also help cool boards after rework.

Mfg. Part No.	Description	Stock No.	Price Each
21-10135	Mini SMD Preheater	32T0391	52.49

(211577)

INDUSTRIAL AND HEAVY-DUTY SOLDERING IRONS WITH PARAGON® TIPS

RoHS Compliant Available

American Beauty

- Ni-Chrome Wire, Compression-Wound on a Steel Spool Results in Long Element Life
- Paragon® Ironclad, Plug-Style Tips Outlast Ordinary Tips Many Times Over
- Hardwood Handle with Rubberoid Finish Provides Both Durability and Comfort

Mfg. Part No.	Description	Stock No.	Price Each
● 3125-60	60W Industrial Soldering Iron, ¼" Tip, 850°F	21M3078	91.20
● 3138-100	100W Heavy-Duty Soldering Iron, ⅜" Tip, 855°F	21M3081	134.50
● 3138-150	150W Heavy-Duty Soldering Iron, ⅜" Tip, 1010°F	21M3082	134.50
● 3158-200	200W Heavy-Duty Soldering Iron, ⅝" Tip, 1000°F	21M3083	186.20
3198-550	550W Heavy-Duty Soldering Iron, 1⅛" Tip, 1010°F	98B2996	310.00

REPLACEMENT PARAGON® SOLDERING TIPS
Other soldering tip styles available; *go online or call.*

Mfg. Part No.	Description	Fits Soldering Iron Models	Stock No.	Price Each
43C	Chisel Tip, ⅜ x 4⅜"	3138	32F1387	14.50
43D	Diamond Tip, ⅜ x 4⅜"	3138	32F1388	14.50
● 44C	Chisel Tip, ⅝ x 4 11/16"	3158	21M3219	32.20

(5859)

VACUUM DESOLDERING IRON

NEW

TENMA®

Allows single-handed desoldering of connections, PC boards and components. Spring-loaded plunger and 30W heating element removes most board level components quickly and safely. Easily disassemble for fast cleaning, tip and "O" ring replacement. Internal plunger pin automatically purges solder from tip with each use. Attached silicon cord is heat and solvent resistant.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
21-8240	Vacuum Desoldering Iron	26K1984	17.29
21-8241	Replacement Desoldering Tip	95K9090	1.49
21-8242	Replacement "O" Rings, 2 pcs.	95K9091	0.99

(212017)

EC SERIES SOLDERING IRONS AND STANDS

RoHS Compliant Available

Weller®

EC1201A

WTA50

ESD irons feature impact-resistant handle and stainless steel heater element. Additional soldering tips available; *go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each
EC1201A	40W General-Purpose Iron w/ETA Tip	93F2826	142.50
EC1302B	20W Micro-Soldering Iron w/EPH101 Tip	20C3110	140.40
● WTA50	Thermal Tweezers	20C5672	213.20

ESD SOLDERING IRON STANDS
Anti-static tool stand with base, sponge and receptacle.

PH1201ESD	For **EC1201A**, **EC1201P**, **TC201T** Irons	95F3797	29.30
● 0051504299	For **WTA50**	25C6566	45.10

(5996)

STANDARD LINE SOLDERING HANDLES AND HEATING ELEMENTS

RoHS Compliant Available

Weller®

- Ideal For Soldering Electronic Devices, PC Boards And Heavy Wiring
- Durable, Balanced Handles Feature Cool, "Soft Touch" Acid And Flux Resistant Grips
- Accept The Full Range Of Heaters And Integral Heater Tips *Available Below*
- All Handles And Heaters Are Interchangeable With The SL Series Of Complete Soldering Irons

7500

Heater for ¼" Thread-on Tips
Typical length - 3.43", dia. - 0.364"

Mfg. Part No.	Description	Stock No.	Price Each
MODULAR SOLDERING IRON HANDLES			
7500	3-Wire, Burn Resistant Cord	32F978	37.70
7400	3-Wire, Standard Cord	87F1628	24.50
7770	All Purpose, 2-Wire, Blue	33F030	17.80
7760	All Purpose, 2-Wire, Red	33F071	18.40
INTERCHANGEABLE HEATING ELEMENTS INTEGRAL HEATER/TIPS			
1233S	Long Taper Chisel, 33W, 900°F, Copper	33F646	27.20
● 4033S	Long Taper Chisel, 45W, 1000°F, Iron Clad	33F086	34.00
33	Long Taper Chisel, 50W, 1100°F, Iron Clad	90F1355	43.50
HEATERS FOR 1/4" THREAD-ON TIPS			
537S	23W, 700°F	32F977	23.00
1237S	33W, 800°F	33F678	25.10
4037S	45W, 900°F	33F677	35.50
37BK	50W, 1000°F	90F1356	39.00
HEATERS FOR 1/8" THREAD-IN TIPS			
535S	23W, 700°F	33F081	25.80
1235S	33W, 800°F	33F085	25.80
● 4035S	45W, 900°F	26M8379	29.20

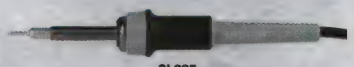
(5888)

COMPLETE IRONS FOR ELECTRONICS WORK

UL

Weller®

- Ready-To-Use Professional Soldering Irons
- Feature Interchangeable Handles, Heaters And Tips
- Handles Are 3-Wire Grounded With Cool, "Soft Touch" Acid- And Flux-Resistant Grips
- UL Listed



SL325

Mfg. Part No.	Description	Stock No.	Price Each
SL325	23W, 700°F	87F1625	44.20
SL335	33W, 800°F	87F1626	47.00
SL345	45W, 900°F	87F1627	49.70

(5886)

INDUSTRIAL SOLDERING IRONS

UL

Weller®

- These versatile irons feature interchangeable elements, allowing you to change wattage depending on the job
- Lightweight Handle With Cushion Grip
- Fitted with ST3 ⅛"D Screwdriver Tip
- Mfg. part no. WP25 is 25W, Temperature to 750°F
- Mfg. part no. WP35 is 35W, Temperature to 850°F

Mfg. Part No.	Stock No.	Price Each
WP25	33F175	43.90
WP35	34F1023	55.20

(5899)

CONTROLLED-OUTPUT SOLDERING IRONS

UL us

Weller®

- Uses Weller's "close-loop" method of controlling maximum tip temperature
- Stainless steel modular plug-in heater for greater efficiency and versatility
- Temperature is controlled by the soldering tip — 600°, 700° or 800°F **CT series** tips available
- Two- or three-wire grounded cord set models
- UL listed, cUL listed

These temperature-controlled, portable line voltage soldering irons require no base station. **W60P series** soldering irons include one CT5A7 700°F 1/16" screwdriver blade soldering tip. **W100P series** soldering irons include one CT6F7 700°F ⅜" screwdriver blade soldering tip. Nominal heat-up time with 700°F soldering tip is 110 seconds. Additional **CT series** soldering iron tips are available; *go online or call.*

Mfg. Part No.	Wattage	Voltage	6' Grounded Cord Set	Stock No.	Price Each
W60P	60	120	2-Wire	33F348	83.20
W60P-3	60	120	3-Wire	35F3320	86.00

➤CONTINUED➤

SOLDERING IRONS

CONTROLLED-OUTPUT SOLDERING IRONS (CONT.)

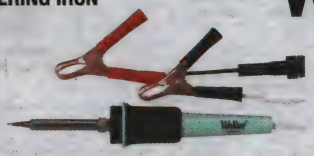
Mfg. Part No.	Wattage	Voltage	6' Grounded Cord Set	Stock No.	Price Each
W100PG	100	120	3-Wire	33F349	63.50
W100P3	100	120	3-Wire	35F3330	84.30

(5900)

CONTROLLED-OUTPUT FIELD SERVICE SOLDERING IRON

Weller®

- Versatile temperature-controlled tool for field servicing
- Operates from suitable batteries or low voltage power source
- UL listed



Mfg. part no. TCP12P temperature-controlled field-service soldering iron comes complete with one PTA7 3/16″ screwdriver blade soldering tip to create a 700F° temperature, two battery clips and one 12' fused cord. Additional soldering tips are available; *go online or call.*

Mfg. Part No.	Wattage	Voltage	Stock No.	Price Each
TCP12P	40	12 - 14	34F1033	125.90

(155329)

MFG. PART NO. WM120 SOLDERING IRON

Weller®

Mfg. part no. WM120 is a 7″ (178mm) long, pencil-thin soldering iron with a break-resistant stay-cool handle. Develops tip temperature 800°F (427°C). 12W, 120V, 50/60Hz.

Mfg. Part No.	Stock No.	Price Each
WM120	33F350	44.40

(5898)

PYROPEN CORDLESS BUTANE SOLDERING IRONS

Weller®

WPA-2

WSTA6

- Lightweight and completely portable
- Does not require cords, batteries or cartridges
- Butane gas operated soldering, brazing, and hot air tool

- Temperature control
- Ready to use in 30 seconds
- Ideal for field service jobs

Mfg. part no. WSTA3 Pyropen® professional cordless butane soldering iron comes with **mfg. part no. WPT2** and **WHC51** tips, torch ejector, spanner, cleaning sponge and operating manual, all in a metal storage case. Temperature adjusts from 392°F to 932°F; 25W to 60W. Sturdy metal tank holds enough gas for three hours of operation. **Mfg. part no. WPA-2** is Pyropen® professional cordless, self-igniting butane soldering iron comes with **mfg. part no. WPT2** and **WHC51** tips. Temperature adjusts from 482°F to 932°F; 25W to 60W. **Mfg. part no. WST-2** Pyropen® Jr. cordless butane soldering iron is a pocket-sized version that includes **mfg. part no. WPT15** tip. Has a temperature range of 392°F to 842°F; 15W to 60W and holds one-hour butane gas reserve. **Mfg. part no. WSTA-6** Pyropen® Jr. cordless, self-igniting butane soldering iron is supplied with **mfg. part no. WPT01** soldering tip, **mfg. part no. WHC0152** hot air nozzle and protective cap. Has a temperature range of 392°F to 932°F; 15W to 60W and handle holds one-hour butane gas reserve. All models can be easily refilled using **mfg. part nos. WB1** or **WB2** premium butane fuel; *ordered separately below.*

Mfg. Part No.	Description	Stock No.	Price Each
WSTA3	Pyropen® Professional Cordless Butane Soldering Iron	89F3425	145.60
WPA-2	Pyropen® Professional Self-Igniting Cordless Butane Soldering Iron	50F801	160.20
WST-2	Pyropen® Jr. Cordless Butane Soldering Iron	50F802	113.00
WSTA6	Pyropen® Jr. Self-Igniting Cordless Butane Soldering Iron	26H7371	69.70
WB2	Premium Butane Fuel — 1 fl.oz. Cylinder	10B398	5.60
WB1	Premium Butane Fuel — 2.1 fl.oz. Cylinder	00Z1606	4.10

(5901)

HIGH-PERFORMANCE LED SOLDERING IRONS

NEW

Weller®

- Three LED lights for superior soldering accuracy and application illumination
- Round co-molded soft grip ribbed handle for maximum comfort and reduced slippage
- Triangular handle area for maximum tip control
- Stainless steel heater technology with heat up to 750°F
- Excellent quality consumer iron 8 ¼″ (210mm) long
- UL listed - cUL available

Ideal for use on printed circuit boards, radio controlled, indoor lighting wire connection, <12 AWG (0.08″ diameter).

Mfg. Part No.	Description	Stock No.	Price Each
SP15NUS	Light Duty LED Soldering Iron (15 Watt - USA)	96W2043	15.20
SP25NKUS	Std. Duty LED Soldering Iron Kit (25 Watt - USA)	96W2044	20.20
SP25NUS	Std. Duty LED Soldering Iron (25 Watt - USA)	96W2045	17.20

➤CONTINUED➤

HIGH-PERFORMANCE LED SOLDERING IRONS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
SP40NKUS	Medium Duty LED Soldering Iron Kit (40 Watt - USA)	96W2046	24.30
SP40NUS	Medium Duty LED Soldering Iron (40 Watt - USA)	96W2047	20.20
SP80NUS	Heavy Duty LED Soldering Iron (80 Watt - USA)	96W2048	28.30

(211389)

150W HEAVY-DUTY SOLDERING PENCIL AND REPLACEABLE TIPS

RoHS Compliant Available

Weller®

WSP150

PH60

- For high-heat applications requiring maximum heat storage
- ESD safe

Mfg. part no. WSP150 heavy-duty soldering pencil comes complete with **mfg. part no. LHTF** 0.366″ O.D./width chisel soldering tip. Rated: 150W, 24V. Temperature range: 150°F to 850°F. Length: 12.4″. Compatible with **LHTseries** chisel soldering tips and **mfg. part no. PH60** pencil/iron stand; *order separately below.* Ideal for use with **mfg. part nos. WD2** and **WD2M** dual power units ordered separately; *go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each
● WSP150	Heavy-Duty Soldering Pencil with LHTF Chisel Tip	19M5231	190.40
PH60	Soldering Pencil/Iron Stand with Sponge	35F3347	27.50

LHT SERIES CHISEL SOLDERING TIPS — 0.071″ HT./I.D.

Mfg. Part No.	Tip Width/O.D. (In.)	Stock No.	Price Each
● LHTD	0.185	19M0579	8.20
● LHTF	0.366	19M0581	8.20

(89590)

SOLDERING IRON HOLDERS

Weller®

- Mfg. part no. 9800 Iron Holder With Ceramic Mouthpiece And Cast Metal Tray For Micro-Size Irons
- Mfg. part no. 8000 Iron Holder Attaches To Bench Or Other Surfaces

9800

8000

Mfg. Part No.	Stock No.	Price Each
9800	32F1014	29.20
8000	33F687	25.80

(5836)

SOLDERING TOOL STANDS

Weller®

PH60

PH100

Mfg. Part No.	For Irons	Barrel Dia.	Stock No.	Price Each
PH60	W60, WP25	15/32″	35F3347	27.50
PH100	W100	19/32″	35F3345	17.40

(5903)

HEAVY-DUTY SOLDERING IRONS

RoHS Compliant Available

Weller®

SP120

Mfg. part no. SP120 soldering iron is 11¾″ (289mm) long and heavy-duty for greater output. Ideal for home workshop and repairs, stained glass and hobbies. Includes iron rest and **mfg. part no. MTG30** ½″ (13mm) diameter iron-plated chisel tip; develops 900°F (482°C). Rated: 120W 120V. 50/60Hz. UL listed. **Mfg. part no. SP175** soldering iron is 12½″ (318mm) long and extra heavy-duty for demanding jobs such as sheet metal work. Includes iron rest and **mfg. part no. MTG40** ⅝″ (16mm) diameter iron-plated chisel tip; develops 900°F (482°C). Rated: 120W, 120V, 50/60Hz. *Order replacement soldering tips separately below.*

➤CONTINUED➤

HEAVY-DUTY SOLDERING IRONS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
SP120	Heavy-Duty Soldering Iron with MTG30 Tip	33F113	53.60
SP175	Heavy-Duty Soldering Iron with MTG40 Tip	33F114	65.70
REPLACEMENT SOLDERING TIPS			
● MTG30	1/2" Chisel Tip	26M8282	12.60
● MTG40	5/8" Chisel Tip	33F116	21.50

(5897)

CORDLESS BATTERY-POWERED SOLDERING IRONS

Weller®

- Lightweight, portable
- Heats up to working temperature in under 15 seconds
- Protective safety cap turns off power when placed on tool

BP645MP

These handy soldering tools go to where the work is with no power cord to worry about. Perfect for field service repair on small parts and components. Heats up fast, and has power to get the job done. **Mfg. part no. BP645MP** includes 6W, 900°F soldering iron, one soldering tip, three AA batteries, lead-free solder and tip removal wrench. Features red LED that indicates when power is on. **Mfg. part no. BP860MP** includes dual-power 8W/11W, 850°/950°F Pro Series soldering iron, two soldering tips, 4 AA batteries, lead-free solder and tip removal wrench. Features molded comfort grip, white LED light that illuminates working surface and dual-power (Hi/Lo) red and green LED indicators.

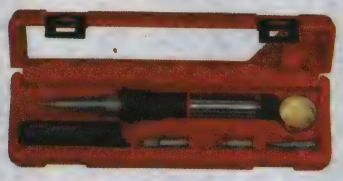
Mfg. Part No.	Description	Stock No.	Price Each
BP645MP	6W, 900°F Battery-Powered Soldering Iron	66K5744	15.30
BP860MP	Dual-Power 8W/11W, 850°/950°F Pro Series Battery-Powered Soldering Iron	31M1193	20.70
ACCESSORY			
BP10	Conical Soldering Replacement Tip for BP860MP	66M8432	9.80
BP11	Chisel Soldering Replacement Tip for BP860MP	66M8433	9.80

(87074)

PORTASOL SUPER-PRO CORDLESS, SELF-IGNITING BUTANE SOLDERING TOOL KIT

Weller®

- Professional quality — ideal for service technicians
- Designed for anti-static soldering, heat shrink and cutting rope
- Auto-switch safety shut-off
- Butane fuel level is visible through a window on the body of the tool
- Rugged stainless-steel body provides up to 125 watts of power
- Adjustable temperature up to 1076°F
- Operates up to 2 hours per butane fuel refill
- Iron-plated soldering tips



PSI100K

Mfg. part no. PSI100K kit contains the Portasol® Super-Pro cordless, self-igniting butane soldering tool, **mfg. part no. PSI-6** 2.4mm double flat soldering tip, **mfg. part no. PSI-8** 4.8mm double flat soldering tip, **mfg. part no. PSI-9** hot air tip, **mfg. part no. PSI-10** hot knife tip, cleaning sponge, stand, rugged storage case and operating instructions. Refillable with premium butane fuel; *ordered separately below*. Wide array of **PSI series** soldering tips are available; *go online or call*.

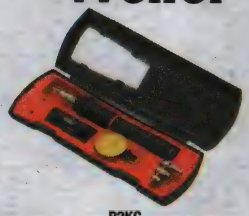
Mfg. Part No.	Description	Stock No.	Price Each
PSI100K	Portasol® Super-Pro Cordless, Self-Igniting Butane Tool Kit	92F5085	104.00
PSI100C	Portasol® Super-Pro Cordless, Self-Igniting Butane Tool (**Only**)	09B9912	76.00
WB2	Premium Butane Fuel — 1 fl.oz. Cylinder	10B398	5.60
WB1	Premium Butane Fuel — 2.1 fl.oz. Cylinder	00Z1606	4.10

(5853)

PORTASOL PRO CORDLESS, SELF-IGNITING BUTANE SOLDERING TOOL KIT

Weller®

- ESD-safe to protect sensitive components
- Reliable Piezo instant ignition with pushbutton ease
- Super-fast heat-up for high productivity — melts solder in less than 40 seconds
- Gas capacity allows for up to one-hour of continuous use
- Automatic safety fuel cut-off when cap is replaced
- Quick and easy refills in just 20 seconds with standard butane lighter fuel
- Powerful — adjusts from equivalent of 25 to 75 watts for temperatures up to 850°F
- Iron-plated soldering tips



P2KC

Mfg. part no. P2KC kit contains the Portsol® Pro cordless, self-igniting butane soldering tool, **mfg. part no.** PPT6 3/32" double flat soldering tip, **mfg. part no. PPT9** hot air tip, **mfg. part no. PPT10** hot knife tip, **mfg. part no. PPT11** hot air deflector tip for heat-shrink tubing, **mfg. part no. PPT12** flame tip, sponge and tray, storage case with tool holder, and operating instructions. Refillable with premium butane fuel; *order fuel and additional soldering iron tips separately below*.

Mfg. Part No.	Description	Stock No.	Price Each
P2KC	Portasol® Pro Cordless, Self-Igniting Butane Soldering Tool Kit	18C1875	71.80
P2C	Portasol® Pro Cordless Self-Igniting Butane Soldering Tool with PPT6 3/32" Double Flat Soldering Tip (**ONLY**)	18C1874	45.00

➤CONTINUED➤

PORTASOL PRO CORDLESS, SELF-IGNITING BUTANE SOLDERING TOOL KIT (CONT.)

ACCESSORIES

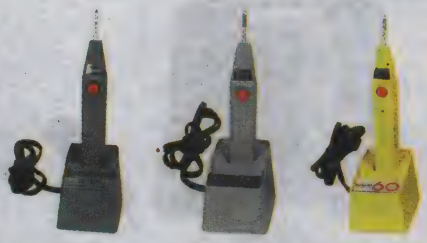
Mfg. Part No.	Description	Stock No.	Price Each
PPT1	Single Flat Soldering Tip, 1/32"	18C1861	9.30
PPT2	Single Flat Soldering Tip, 3/32"	18C1866	9.30
PPT5	Double Flat SolderingTip, 1/32"	18C1869	9.30
PPT6	Double Flat Soldering Tip, 3/32"	18C1870	9.30
WB2	Premium Butane Fuel — 1 fl.oz. Cylinder	10B398	5.60
WB1	Premium Butane Fuel — 2.1 fl.oz. Cylinder	00Z1606	4.10

(56372)

SOLDERING IRONS AND SPECIALTY TOOLS

ISO-TIP

- 7904/7944 Kits include: Power Pro Iron, charging stand, type 7933 battery, types 7577 and 7545 high-efficiency tips
- High-capacity battery provides up to 30 minutes of continuous soldering
- Full recharge in 4 hours
- LED charging indicator light
- Solders more than 200 electronic joints per recharge



7904 Power Pro — 7700 Quick Charge — 7800 "60" Pro-Charge

- 7700 Kit includes: Quick Charge Iron, charging stand, type 7733 battery, types 7545 and 7546 tips
- Recharges completely in 3 to 4½ hours
- Solders up to 125 electronic joints per recharge
- Withstands high-rate charging without damage
- 7800 Kit includes: "60" Pro-Charge Iron, charging stand, type 7833 battery, types 7577 and 7545 tips
- Fully recharges In 1 hour
- Energy-saving trickle-charging rate when battery is full
- Solders up to 125 electronic joints per charge

Iso-Tip rechargeable soldering irons are the preferred irons of professionals, craftsmen and hobbyists. The cordless iron design makes soldering work much easier without the limitations of a cord. Choose from a full line of lightweight, rechargeable irons offering options for charging, heating time and interchangeable tips. Units operate on direct current and when used with "isolated" tips, there is no chance of damage or leaks due to electrical current. These 25W irons reach a tip temperature of 900°F in less than 10 seconds. Replaceable NiCad batteries are included. All models feature a convenient work light.

7904 POWER PRO SOLDERING IRON

Mfg. Part No.	Description	Stock No.	Price Each
7904	Power Pro Kit - Boxed	96F6869	71.25
7944	Power Pro Kit - Clear Clam Pack	31B4872	84.45
7952-100	Power Pro Iron Only	52F9314	89.49
7928-100	Recharger	29C8271	28.95
7933	Battery	52F9319	33.21
7700 ISO-TIP QUICK CHARGE SOLDERING IRON			
7700	Quick Charge Kit	44F6636	84.80
7750	Quick Charge Iron Only	44F6646	65.74
7728-100	Recharger	44F6645	25.12
7733	Battery	66F1221	25.78
7740	Quick Charge Kit in Clam Shell Retail Display	31B4863	60.06
7800 ISO-TIP "60" PRO-CHARGE SOLDERING IRON			
7800	"60" Pro-Charge Kit	31B4866	98.69
7850	"60" Pro-Charge Iron Only	44F6637	94.86
7828-100	"60" Pro-Charge Recharger	44F6638	28.66
7833	Battery	83F3365	26.66
7840	"60" Pro-Charge Kit Clam Shell Retail Display	31B4867	71.25

STANDARD TIPS
Replacement tips fit all 7904,7800,7700 irons.

7546	Heavy Duty 3/16" Dia	44F6654	9.88
7535	Regular 5/32" Dia	44F6652	10.08
7577	Chisel Tip 5/32" Dia	44F6651	10.08
7572	Blunt tip 5/32" Dia	31B4859	9.75
7579	Beveled Tip 3/32" Dia	44F6648	10.26
7545	Fine Tip 1/16" Dia	44F6653	9.95
7571	Fine Beveled Tip 1/16" Dia	44F6647	6.00
7591	Extended Micro Tip 1/64" Dia x 1-1/8"Lngth	31B4862	11.32
7566	Standard Micro Tip 1/16" Dia	44F6650	9.42
7596	Knife Tip 1/4" Lngth	44F6655	6.00

LONG LIFE TIPS
Nickel plated for longer life.

7483	Long Life Fine Tip 1/16" Dia	52F9317	13.60
7484	Long Life Micro Tip 1/64" Dia	52F9318	14.55
7482	Long Life Ultra Tip .010"-.015" Dia	52F9316	7.95

➤CONTINUED➤

SOLDERING IRONS AND SPECIALTY TOOLS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
High E tips heat up faster longer battery life.			
7546-100	High Efficiency Heavy Duty 3/16″ Dia	96F6872	7.87
7535-100	High Efficiency Regular 5/32″ Dia	96F6870	7.87
7577-100	High Efficiency Chisel Tip 5/32″ Dia	96F6874	6.50
7579-100	High Efficiency Beveled Tip 3/32″ Dia	96F6875	8.42
7545-100	High Efficiency Fine Tip 1/16″ Dia	96F6871	10.21
7566-100	High Efficiency Micro Tip 1/64″ Dia	96F6873	8.42
REPLACEMENT PARTS			
1168-100	Bayonet type Bulb for 7904,7800,7700 Iron	52F9321	2.78

(5816)

ULTRATORCH® SELF-IGNITING CORDLESS HEAT TOOLS

MASTER APPLIANCE

UT-100SI-TC

UT-100SI

- Ultratip™ technology for use with lead-free soldering materials

Professional quality, self-igniting, refillable, butane powered soldering iron and flameless heat tool. No torch mode. Includes solder tip, heat tip, shrink attachment, spanner wrench, open end wrench and protective cap. **Mfg. part no. UT-100SI** operates up to 2 hours per refill and **mfg. part no. UT-100SI-TC** up to 120 minutes per refill with adjustable temperature setting up to 932°F with solder tip, 1202°F with heat tip. Kit contains UT-100Si Ultratorch®, three Ultratip® soldering tips, a hot air tip, heat shrink reflector, hot knife, wire cutter, needle nose pliers, coil of 63/40 solder, sponge and cap packed in a rugged plastic carrying case. **Mfg. part no. UT-200SI** Jumbo Ultratorch® operates up to 4-5 hours per refill with adjustable temperature setting up to 986°F with solder tip, 1004°F with heat tip.

Mfg. Part No.	Description	Stock No.	Price Each
UT-100SI	2-Hour Operating Time	93F7820	157.46
UT-100SI-TC	120 Min. Operating Time	60M2702	240.00
UT-200SI	4-5 Hour Operating Time	93F7821	213.01

(5660)

THERMASOLDER BUTANE POWERED SOLDERING IRON/ KITS

STEINEL® German Quality

ThermaSolder™ butane powered soldering irons are cordless, multi-function tools that may be used as soldering irons, convenient portable torches and flameless heat blowers. They heat-up in 20 seconds or less and are safe and simple to use under most any condition.

ULTIMATE BUTANE KIT
Versatile kit includes all the tools and accessories needed for: shrink tubing, installing connectors, desoldering, soldering, cutting, cauterizing, welding, light brazing, loosening rusted bolts, thawing frozen locks and electronic repair.

Mfg. Part No.	Description	Stock No.	Price Each
77000	Ultimate Butane Kit	73P5295	199.99
THERMASOLDER™ 550/550 KIT Butane soldering iron kit with 30W - 125W power range. Refillable 25ml tank for 160 minutes of continuous use.			
72550	TS550 Butane Soldering Iron	25T0754	63.99
72551	TS550K Auto Soldering Iron Kit	02P5532	102.49
THERMASOLDER™ 600 KIT High capacity soldering iron kit with auto ignition and powerful 30W - 125W output. Refillable 38ml tank for 200 minutes of continuous use.			
72601	TS600K Auto Soldering Iron Kit	01T1277	107.99

(191949)

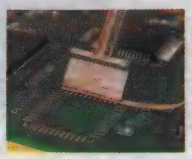
SMTC SERIES SOLDERING/SMT REWORK TIP CARTRIDGES

RoHS Compliant Available

METCAL

Hoof Tip

Knife Tip



Blade Tip

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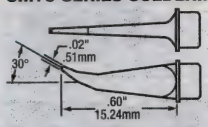
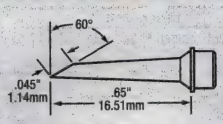
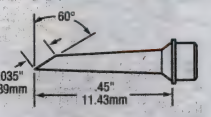
SMTC SERIES SOLDERING/SMT REWORK TIP CARTRIDGES (CONT.)



SMTC-0172



SMTC-0174



SMTC-1175

SMTC series tip cartridges are designed for reworking SMT components. Great for assembly, removal and cleaning these tips do it all. Available in slot, tunnel and quad tip cartridges plus hoofs tips for drag soldering, blade tips to remove residual solder from pads, knife tips for multi-lead soldering of PLCCs and micro-fine tips for reworking micro-fine components in tight area with the help of a microscope. SMTC soldering tip cartridges are for use with **mfg. part no. MX-RM3E** soldering/rework handpiece for **STSS** and **MX series** soldering and rework systems. Other geometries are available; *go online or call.*

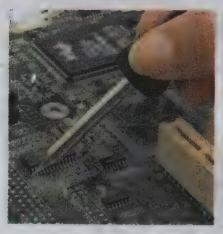
Mfg. Part No.	Tip Style	Application	Tip Series	Stock No.	Price Each
● SMTC-0172	Micro-Fine	Drag Soldering	600	76K2372	53.94
● SMTC-1172	Micro-Fine	Drag Soldering	700	76K2392	44.79
● SMTC-0147	Hoof	Drag Soldering	600	76K2368	46.97
● SMTC-1147	Hoof	Drag Soldering	700	76K2387	44.78
● SMTC-0174	Micro-Fine Hoof	Drag Soldering	600	72C6553	61.64
● SMTC-1174	Micro-Fine Hoof	Drag Soldering	700	76K2393	50.36
● SMTC-1175	Mini-Hoof	Drag Soldering	700	76K2394	51.37
● SMTC-0167	Mini-Hoof	Drag Soldering	600	76K2370	46.97
● SMTC-1167	Mini-Hoof	Drag Soldering	700	76K2390	44.78
● SMTC-0161	Knife	Drag Soldering	700	76K2369	46.97
● SMTC-1161	Knife	Drag Soldering	700	76K2389	44.78
● SMTC-060	0.410″ Blade	Pad Cleaning	600	76K2375	88.15
● SMTC-160	0.410″ Blade	Pad Cleaning	700	76K2395	84.00
● SMTC-061	0.620″ Blade	Pad Cleaning	600	76K2376	88.15
● SMTC-161	0.620″ Blade	Pad Cleaning	700	76K2396	84.00
● SMTC-062	0.870″ Blade	Pad Cleaning	600	91F5882	88.15
● SMTC-162	0.870″ Blade	Pad Cleaning	700	76K2397	84.00
● SMTC-1171	Micro-Fine Chip Removal	0201, 0402 Chips	700	76K2391	51.37
● SMTC-096	Slot Cartridge	0402, 0603 Chips	600	76K2377	44.96
● SMTC-196	Slot Cartridge	0402, 0603 Chips	700	83F2257	42.82
● SMTC-001	Slot Cartridge	0805 Chips	600	91F5885	44.96
● SMTC-101	Slot Cartridge	0805 Chips	700	76K2378	42.82
● SMTC-002	Slot Cartridge	1206, 1210 Chips	600	76K2361	44.96
● SMTC-102	Slot Cartridge	1206, 1210 Chips	700	83F2239	42.82
● SMTC-103	Slot Cartridge	1808, 1812 Chips	700	83F2240	44.96
● SMTC-005	Slot Cartridge	SOT-23	600	91F5888	44.96
● SMTC-008	Slot Cartridge	SOT-89	600	91F5890	37.23
● SMTC-108	Slot Cartridge	SOT-89	700	83F2243	36.50
● SMTC-104	Tunnel Cartridge	SOIC-8	700	76K2379	48.97
● SMTC-006	Tunnel Cartridge	SOIC-14, -16	600	76K2362	51.43
● SMTC-106	Tunnel Cartridge	SOIC-14, -16	700	76K2380	48.97
● SMTC-009	Tunnel Cartridge	SOIC-24	600	76K2364	58.77
● SMTC-042	Tunnel Cartridge	SOIC-32	600	91F5893	51.50
● SMTC-142	Tunnel Cartridge	SOIC-32	700	83F2251	51.50
● SMTC-026	Tunnel Cartridge	SOJ-28, SOM-36	600	91F5894	41.75
● SMTC-0154	Tunnel Cartridge	TSOP-40	600	91F5897	92.00
● SMTC-1154	Tunnel Cartridge	TSOP-40	700	83F2264	92.00
● SMTC-012	Quad Cartridge	PLCC-20	600	91F5898	92.20
● SMTC-0103	Quad Cartridge	PLCC-28	600	91F5899	65.50
● SMTC-113	Quad Cartridge	PLCC-28	700	76K2385	76.84
● SMTC-116	Quad Cartridge	PLCC-32	700	85K9073	73.49
● SMTC-014	Quad Cartridge	PLCC-44	600	91F5901	92.20
● SMTC-0-118	Quad Cartridge	PLCC-44	600	91F5906	92.20
● SMTC-1118	Quad Cartridge	PLCC-44	700	83F2260	76.84
● SMTC-1145	Quad Cartridge	PLCC-84	700	83F2262	139.00
● SMTC-021	Quad Cartridge	QFP-44	600	76K2374	65.50
● SMTC-121	Quad Cartridge	QFP-44	700	93B2030	65.50
● SMTC-115	Quad Cartridge	QFP-64, -80	700	91F5904	97.00
● SMTC-0122	Quad Cartridge	QFP-144	600	41B5795	97.00
● SMTC-1122	Quad Cartridge	QFP-144	700	76K2384	97.00
● SMTC-029	Dual Quad Cartridge	PLCC-84	600	91F5903	180.00
● SMTC-129	Dual Quad Cartridge	PLCC-84	700	83F2250	180.00
● SMTC-0109	Socket Cartridge	PLCC-32	600	76K2366	65.50
● SMTC-1109	Socket Cartridge	PLCC-32	700	76K2383	65.50

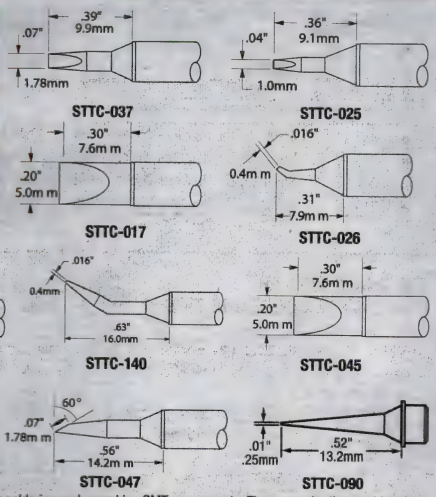
(72995)

STTC SERIES SOLDERING/SMT TIP CARTRIDGES

RoHS Compliant Available

METCAL





STTC series tip cartridges designed for soldering and reworking SMT components. These popular tips are ideal for a wide variety of soldering tasks. Available in three temperature ranges (500, 600 and 700 series). **STTC series** tip cartridges are for use in soldering/rework handpieces for **STSS** and **MX series** soldering and rework systems. Other geometrics are available; *go online or call*. **NOTE:** Mfg. part nos. with **P suffix** are a new lead-free soldering range of **STTC series** Power Tips™ for use with the **MX-500 series** soldering and rework systems. These Power Tips™ are specially designed to deliver heat more efficiently for common hand soldering applications.

Mfg. Part No.	Tip Style	Tip Width (in.)	Tip Series	Stock No.	Price Each
STTC-525	30° Chisel	1	500	76K2475	27.29
STTC-025	30° Chisel	1	600	76K2440	25.99
STTC-125	30° Chisel	1	700	76K2458	23.60
STTC-125P	30° Chisel	1	700	68K1797	23.60
STTC-038	30° Chisel	1.5	600	76K2445	23.60
STTC-138	30° Chisel	1.5	700	76K2463	23.60
STTC-838	30° Chisel	1.5	800	41B6009	25.86
STTC-537	30° Chisel	1.78	500	76K2477	27.29
STTC-037	30° Chisel	1.78	600	76K2444	23.60
STTC-137P	30° Chisel	1.8	700	14M6371	23.60
STTC-837	30° Chisel	1.78	800	76K2482	25.86
STTC-536	30° Chisel	2.5	500	76K2476	27.29
STTC-036	30° Chisel	2.5	600	76K2443	23.60
STTC-136	30° Chisel	2.5	700	76K2462	23.60
STTC-136P	30° Chisel	2.5	700	68K1795	23.60
STTC-836	30° Chisel	2.5	800	41B6007	25.86
STTC-199	30° Chisel Bent	1.5	700	76K2474	23.60
STTC-198	30° Chisel Bent	1.78	700	76K2473	23.60
STTC-042	60° Chisel	1.78	600	76K2446	26.51
STTC-142	60° Chisel	1.78	700	76K2465	25.99
STTC-103	90° Chisel	3	700	41B5959	25.70
STTC-113	90° Chisel	3	700	76K2454	27.29
STTC-165	Large Chisel	5	700	76K2471	31.04
STTC-017	Extra-Large Chisel	5	600	76K2438	23.60
STTC-117	Extra-Large Chisel	5	700	76K2456	23.60
STTC-817	Extra-Large Chisel	5	800	76K2481	25.86
STTC-026	30° Sharp Bent	0.4	600	76K2441	23.60
STTC-126	30° Sharp Bent	0.4	700	76K2459	23.60
STTC-044	30° Sharp Bent	0.5	600	76K2447	25.99
STTC-144	30° Sharp Bent	0.5	700	76K2467	23.60
STTC-145P	Conical	0.4	700	68K5809	23.60
STTC-143	Conical Sharp	0.5	700	76K2466	25.99
STTC-007	Conical Sharp	1	600	76K2435	27.84
STTC-107	Conical Sharp	1	700	76K2452	27.29
STTC-001	Conical Sharp	1	600	76K2433	25.99
STTC-101	Conical Sharp	1	700	76K2450	23.60
STTC-101P	Conical Sharp	1	700	10M9200	24.73
STTC-506	Conical Sharp	0.4	500	92F199	27.84
STTC-006	Conical Sharp	0.4	600	76K2434	27.29
STTC-106	Conical Sharp	0.4	700	76K2451	27.29
STTC-022	Conical Sharp	0.4	600	76K2439	23.60
STTC-122	Conical Sharp	0.4	700	76K2457	23.60
STTC-140	30° Chisel Bent	0.4	700	76K2464	23.60
STTC-135	30° Bevel	1.78	700	76K2461	27.84
STTC-514	45° Bevel	2.3	500	92F202	31.81
STTC-114	45° Bevel	2.3	700	76K2455	27.29

➤CONTINUED➤

STTC SERIES SOLDERING/SMT TIP CARTRIDGES (CONT.)

Mfg. Part No.	Tip Style	Tip Width (in.)	Tip Series	Stock No.	Price Each
STTC-146	60° Bevel	1	700	76K2469	25.99
STTC-047	60° Bevel	0.07	600	92F198	23.60
STTC-147	60° Bevel	1.78	700	76K2470	23.60
STTC-147P	60° Bevel	1.78	700	68K5810	23.60
STTC-545	60° Bevel	0.4	500	76K2480	27.84
STTC-045	60° Bevel	0.4	600	76K2448	25.99
STTC-145	60° Bevel	0.4	700	76K2468	23.60
STTC-090	Micro-Fine Conical	0.25	600	76K2449	25.99
STTC-190	Micro-Fine Conical	0.25	700	76K2472	25.99
STTC-1173P	Knife	5	700	77M9254	50.36

(19828)

TATC SERIES TALON SOLDERING TIP CARTRIDGES

RoHS Compliant Available

METCAL

TATC series soldering tip cartridges for use with **MX series** Talon soldering and rework systems. Each cartridge is designed to deliver high power in response to loads. Available in the popular tip geometries and in two standard temperature ranges (500 series and 600 series); *go online or call*. **Sold in pairs.**

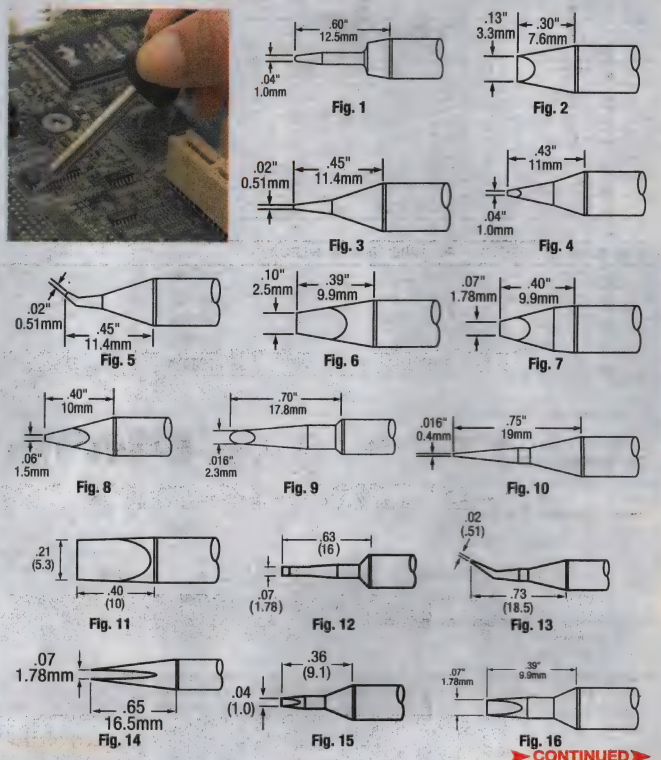
Mfg. Part No.	Tip Style	Tip Width	Tip Series	Stock No.	Price per Pair Each
TATC-601	Fine Point	0.20″	600	76K2483	120.00
TATC-602	Blade	0.25″	600	76M8912	120.00
TATC-603	Blade	0.62″	600	76K2485	120.00
TATC-604	Blade	0.81″	600	76K2486	120.00
TATC-606	Blade	1.1″	600	50B6174	145.00
TATC-605	TSOP 32	...	600	88K1244	120.00
TATC-608	Angled Viper	0.05″	600	76K2487	120.00

(72996)

SSC SERIES SOLDERING TIP CARTRIDGES COMPATIBLE WITH MFR-1160, MFR-1161 AND SP-200 SOLDERING SYSTEMS

RoHS Compliant Available

METCAL



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SOLDERING TIPS

SSC SERIES SOLDERING TIP CARTRIDGES COMPATIBLE WITH MFR-1160, MFR-1161 AND SP-200 SOLDERING SYSTEMS (CONT.)

SCC series tip cartridges are designed for use with **MFR-1160, MFR-1161** and **SP200-11 series** soldering systems; *ordered separately on page 1998*. Developed for high-power delivery, these tips permit soldering 100°F or more below conventional irons. Other geometrics are available; *go online or call*. For easy identification of soldering tips used for lead-free processes, *order* **mfg. part no. AC-CK** *3 lead-free ID soldering tip rings separately on page 1998*.

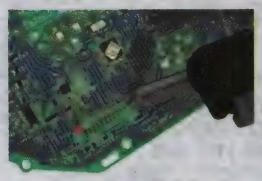
Mfg. Part No.	Fig.	Tip Style	Tip Series	Stock No.	Price Each
● SSC-601A	1	Conical Sharp	600	76K2402	19.25
● SSC-613A	2	90° Chisel	600	76K2403	22.00
● SSC-713A	2	90° Chisel	700	76K2412	22.00
● SSC-622A	3	Conical Sharp	600	76K2404	17.50
● SSC-722A	3	Conical Sharp	700	76K2413	17.50
● SSC-625A	4	30° Chisel	600	48F3840	17.50
● SSC-725A	4	30° Chisel	700	76K2414	17.50
● SSC-726A	5	30° Sharp Bent	700	76K2415	17.50
● SSC-636A	6	30° Chisel	600	48F3842	17.50
● SSC-737A	7	30° Chisel	700	76K2417	17.50
● SSC-738A	8	30° Chisel	700	76K2418	17.50
● SSC-639A	9	Drag Hoof	600	76K2408	28.00
● SSC-739A	9	Drag Hoof	700	76K2419	28.00
● SSC-645A	10	60° Bevel	600	76K2409	19.25
● SSC-745A	10	60° Bevel	700	76K2420	17.50
● SSC-717A	11	Chisel	700	85K8293	22.00
● SSC-742A	12	60° Chisel	700	48F3860	22.00
● SSC-754A	13	30° Sharp Bent	700	76K2421	19.25
● SSC-770A	14	Chisel	700	83C8232	22.00
● SSC771A	15	Conical Chisel	700	76K2423	19.25
● SSC-672A	16	Conical Chisel	600	76K2410	22.00
● SSC-772A	16	Conical Chisel	700	76K2422	22.00

(37170)

STDC SERIES DESOLDERING TIP CARTRIDGES

RoHS Compliant Available

METCAL



STDC series tip cartridges are designed for high heat transfer, making them ideal for desoldering on multi-layer boards. Available in three temperature ranges (600, 700 and 800 series). **STDC series** tip cartridges are for use in **mfg. part no. MX-DS1** desoldering handpiece for **MX series** soldering and desoldering systems. Other geometries are available; *go online or call*.

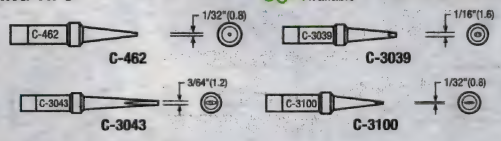
Mfg. Part No.	Tip Size (In.) I.D. / O.D.	Tip Series	Stock No.	Price Each
● STDC-003	0.03 / 0.066	600	41B5908	37.65
● STDC-004	0.04 / 0.07	600	41B5909	37.65
● STDC-102	0.25 / 0.066	700	41B5913	43.30
● STDC-103	0.03 / 0.066	700	76K2425	38.65
● STDC-105	0.03 / 0.066	700	76K2426	38.65
● STDC-106	0.06 / 0.09	700	76K2427	38.65
● STDC-107	0.095 / 0.125	700	76K2428	43.30
● STDC-804	0.04 / 0.07	800	41B5925	70.40
LONG REACH CARTRIDGES — FOR HARD-TO-ACCESS LEADS				
● STDC-703L	0.03 / 0.066	700	76K2429	48.01
● STDC-704L	0.04 / 0.07	700	41B5920	48.01
● STDC-803L	0.03 / 0.066	800	76K2431	77.17
● STDC-804L	0.04 / 0.07	800	84K0227	77.17
● STDC-805L	0.05 / 0.08	800	41B5928	77.17

(79283)

C SERIES WELLER® COMPATIBLE SOLDERING TIPS

RoHS Compliant Available

PLATO



- Enhanced performance of soldering station
- Longer tip life
- Improved heat recovery

C series long life 700° and 800° F soldering tips are designed to fit Weller® **mfg. part nos. WTCPL, WTCPN, WTCPR, WTCPS, WTCPT,** and **WTCPZ** soldering stations with **mfg. part no. TC201T** soldering iron handpieces. Choice of screwdriver, conical and bevel tip styles. Shank diameter: 0.215". Also available in 600°, 750° and 900°F tips and additional sizes; *go online or call*.

➤CONTINUED➤

C SERIES WELLER® COMPATIBLE SOLDERING TIPS (CONT.)

TIPS WITH 700° F OPERATING TEMPERATURE

Mfg. Part No.	Description	Tip Style	Stock No.	Price Each
● C-462-7	Soldering Tip, Replaces Weller® PTP7	Conical	68K2151	3.26
● C-3039-7	Soldering Tip, Replaces Weller® PTA7	Screwdriver	68K2147	3.26
● C-3043-7	Soldering Tip, Replaces Weller® PTK7	Screwdriver	06J1915	3.26
TIPS WITH 800° F OPERATING TEMPERATURE				
● C-462-8	Soldering Tip, Replaces Weller® PTP8	Conical	68K2152	3.26
● C-3039-8	Soldering Tip, Replaces Weller® PTA8	Screwdriver	68K2148	3.26
● C-3043-8	Soldering Tip, Replaces Weller® PTK8	Screwdriver	68K2149	3.26
● C-3100-8	Soldering Tip, Replaces Weller® PTH8	Screwdriver	68K2150	3.26

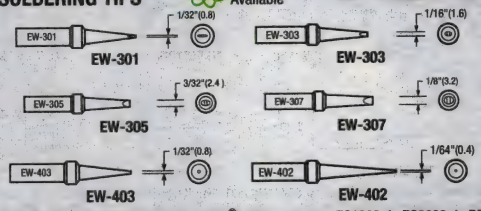
(79379)

EW SERIES WELLER® COMPATIBLE SOLDERING TIPS

RoHS Compliant Available

PLATO

- Enhanced performance of soldering station
- Longer tip life
- Improved heat recovery



EW series long life soldering tips are designed to fit Weller® **mfg. part nos. EC1002-1, EC2002-1, DEC1001, WTL-1000-1, DTL-1000, EC1000/1, EC2000/1, WTLE** and **WCC100** soldering stations that use **mfg. part no. EC1201A** 40W soldering iron handpiece. Choice of screwdriver and conical tip styles. Shank diameter: 0.215". Other tip sizes available; *go online or call*.

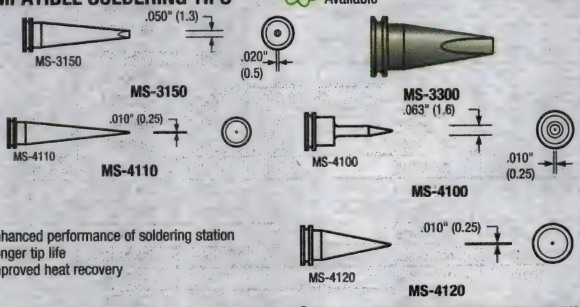
Mfg. Part No.	Description	Tip Style	Stock No.	Price Each
● EW-301	Soldering Tip, Replaces Weller® ETH	Screwdriver	68K3565	3.53
● EW-303	Soldering Tip, Replaces Weller® ETA	Screwdriver	68K3566	3.53
● EW-305	Soldering Tip, Replaces Weller® ETB	Screwdriver	68K3567	3.53
● EW-307	Soldering Tip, Replaces Weller® ETC	Screwdriver	68K3568	3.53
● EW-402	Soldering Tip, Replaces Weller® ETS	Conical	68K3569	3.53
● EW-403	Soldering Tip, Replaces Weller® ETP	Conical	98H2676	3.53

(79376)

MS SERIES WELLER COMPATIBLE SOLDERING TIPS

RoHS Compliant Available

PLATO



- Enhanced performance of soldering station
- Longer tip life
- Improved heat recovery

MS series long life soldering tips are designed to fit Weller® **mfg. part nos. WS 80, WSD 80, WSD 130, WSD 150** soldering stations and **mfg. part nos. WSP 80** and **MPR 80** soldering pencils. Choice of screwdriver and conical tip styles. Shank diameter: 0.237". Other tip sizes available; *go online or call*.

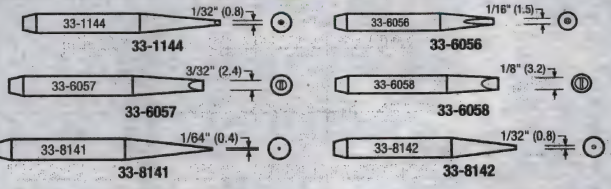
Mfg. Part No.	Description	Tip Style	Stock No.	Price Each
● MS-3150	Soldering Tip, Replaces Weller® LTK	Screwdriver	98H2835	4.07
● MS-3300	Soldering Tip, Replaces Weller® LTB	Screwdriver	98H2838	4.07
● MS-4100	Soldering Tip, Replaces Weller® LT1S	Conical	98H2842	4.07
● MS-4110	Soldering Tip, Replaces Weller® LT1L	Conical	98H2844	4.07
● MS-4120	Soldering Tip, Replaces Weller® LT1	Conical	98H2845	4.07

(79377)

3/16" PACE® COMPATIBLE SOLDERING TIPS

RoHS Compliant Available

PLATO



- Enhanced performance of soldering station
- Longer tip life
- Improved heat recovery

➤CONTINUED➤

3/16″ PACE® COMPATIBLE SOLDERING TIPS (CONT.)

These 3/16″ long life soldering tips are designed to fit Pace® SP-1A, SP-2A, PS-80, ST-45, IR-70 Sodr-Pen® soldering irons. Choice of screwdriver and conical tip styles. Shank diameter: 0.183″. Other tip sizes available; *go online or call.*

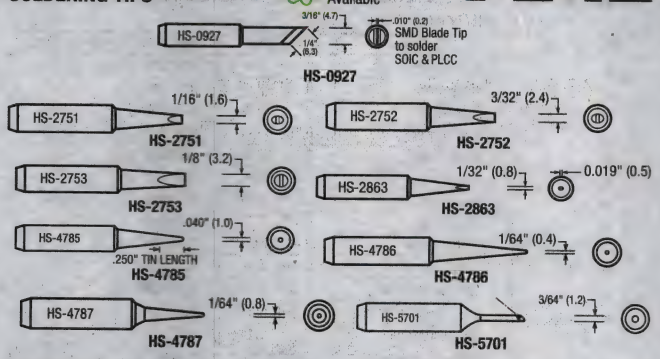
Mfg. Part No.	Description	Tip Style	Stock No.	Price Each
33-1144	3/16″ Soldering Tip, Replaces Pace® 1121-0359	Screwdriver	68K7432	5.72
33-6056	3/16″ Soldering Tip, Replaces Pace® 1121-0414	Screwdriver	98H3323	5.72
33-6057	3/16″ Soldering Tip, Replaces Pace® 1121-0360	Screwdriver	68K7433	5.72
33-6058	3/16″ Soldering Tip, Replaces Pace® 1121-0337	Screwdriver	68K7434	5.55
33-8141	3/16″ Soldering Tip, Replaces Pace® 1121-0357	Conical	68K7435	5.72
33-8142	3/16″ Soldering Tip, Replaces Pace® 1121-0336	Conical	68K7436	5.72

(79365)

HAKKO® COMPATIBLE SOLDERING TIPS

RoHS Compliant Available

PLATO®



- Enhanced performance of soldering station
- Longer tip life
- Improved heat recovery

These long life soldering tips are designed to fit Hakko® 926, 927 and 928 soldering stations with M926 or 900M handpieces. Choice of screwdriver, blade, conical and bevel tip styles. Shank diameter: 0.0.250″. Other tip sizes available; *go online or call.*

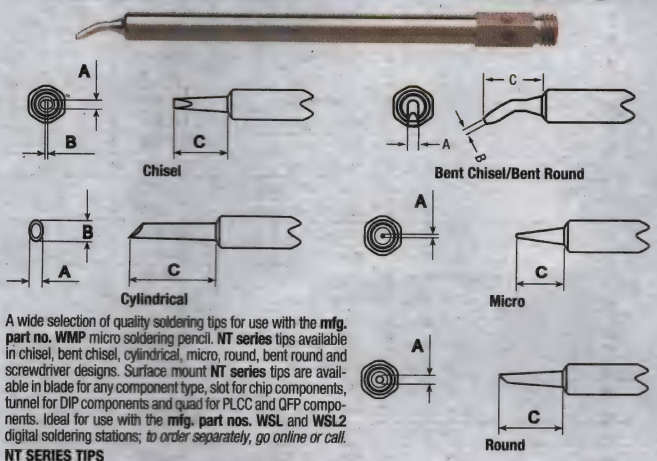
Mfg. Part No.	Description	Tip Style	Stock No.	Price Each
HS-0927	Soldering Tip, Replaces Hakko® 900M-T-K	Blade	06J1994	7.90
HS-2751	Soldering Tip, Replaces Hakko® 900M-T-1.6D	Screwdriver	98H2732	5.26
HS-2752	Soldering Tip, Replaces Hakko® 900M-T-2.4D	Screwdriver	98H2733	5.26
HS-2753	Soldering Tip, Replaces Hakko® 900M-T-3.2D	Screwdriver	98H2734	5.26
HS-2863	Soldering Tip, Replaces Hakko® 900M-T-0.8D	Screwdriver	98H2738	5.26
HS-4785	Soldering Tip, Replaces Hakko® 900M-T-B	Conical	98H2743	5.26
HS-4786	Soldering Tip, Replaces Hakko® 900M-T-LB	Conical	98H2744	5.91
HS-4787	Soldering Tip, Replaces Hakko® 900M-T-I	Conical	98H2745	5.91
HS-5701	Soldering Tip, Replaces Hakko® 900M-T-1C	Bevel	98H2758	5.26

(79366)

NT SERIES SOLDERING TIPS FOR WMP MICRO SOLDERING PENCIL

RoHS Compliant Available

Weller®



A wide selection of quality soldering tips for use with the **mfg. part no. WMP** micro soldering pencil. **NT series** tips available in chisel, bent chisel, cylindrical, micro, round, bent round and screwdriver designs. Surface mount **NT series** tips are available in blade for any component type, slot for chip components, tunnel for DIP components and quad for PLCC and QFP components. Ideal for use with the **mfg. part nos. WSL** and **WSL2** digital soldering stations; *to order separately, go online or call.*

NT SERIES TIPS

Mfg. Part No.	Description	Dimensions (In.) A	B	C	Stock No.	Price Each
NTH	Chisel Tip	0.031	0.016	0.331	09H2017	11.30
NTK	Chisel Tip	0.047	0.016	0.331	32H1247	11.30
NTA	Chisel Tip	0.063	0.016	0.331	09H2015	10.80
NT6	Chisel Tip	0.063	0.016	0.372	26H2559	10.80

➤CONTINUED➤

NT SERIES SOLDERING TIPS FOR WMP MICRO SOLDERING PENCIL (CONT.)

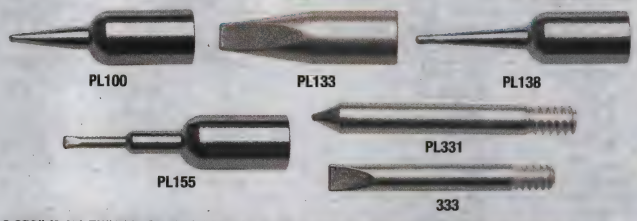
Mfg. Part No.	Description	Dimensions (In.) A	B	C	Stock No.	Price Each
NTB	Chisel Tip	0.094	0.031	0.289	26M8283	10.80
NTC	Chisel Tip	0.126	0.031	0.305	32H1245	10.80
NTD	Chisel Tip	0.157	0.031	0.305	26M8284	21.20
NTAX	Bent Chisel Tip	0.063	0.031	0.339	32H1243	15.30
NT1X	Bent Round Tip	0.016	0.063	0.321	01H8409	12.60
NTGW	Cylindrical Tip	0.079	0.118	0.528	01H8410	18.20
NT1	Micro Tip	0.010	...	0.291	02H0195	10.80
NT1S	Micro Tip	0.010	...	0.333	09H1979	10.80
NT4	Round Tip	0.047	...	0.39	02H6177	10.80

(78447)

SOLDERING TIPS

RoHS Compliant Available

Weller®



0.250″ (6.35) THREAD-ON TIPS FOR USE WITH DI AND SL HEATERS (360, 362, 363, 537S, 1237S, 4037S, 37UG)
Iron-clad except (*) unplated copper.

Mfg. Part No.	Tip Style	Tip Size In. (mm)	Stock No.	Price Each
PL100	Precision Electronic	0.05″ (1.27)	87F4279	6.00
PL111	Pencil	0.03″ (0.76)	33F679	6.40
PL113	Chisel	0.13″ (3.3)	33F681	5.80
PL114	Micro Spade	0.05″ (1.27)	30M7994	6.40
PL133	Long Taper	0.15″ (3.81)	26M8288	6.80
PL138	Tapered Needle	0.05″ (1.27)	26M8289	6.30
PL153	Chisel	0.20″ (5.08)	87F4281	7.30
PL155	Stepped Chisel	0.07″ (1.78)	87F4258	6.30
PL333	Chisel	0.13″ (3.3)	33F095	4.80
PL338	Tapered Needle	0.05″ (1.27)	33F686	5.60

0.125″ (3.18) THREAD-IN TIPLETS FOR USE WITH SL HEATERS (537S, 1237S, 4037S, 37, 37UG)
Iron-clad except (*) unplated copper.

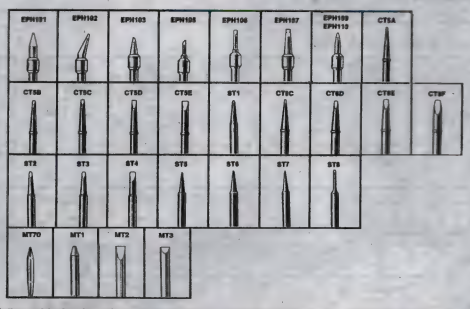
Mfg. Part No.	Tip Style	Tip Size In. (mm)	Stock No.	Price Each
PL331	Pencil/Cone	0.01″ (0.25)	33F093	5.20
333*	Chisel	0.13″ (3.3)	33F084	2.80

(5918)

SOLDERING IRON TIPS

RoHS Compliant Available

Weller®



These quality Weller soldering iron tips are designed to provide maximum heat transfer from heater to the tip.

MT SERIES TIPS FOR SP23 AND SP23D SERIES MARKSMAN® IRONS
Solid copper tips are nickel-plated and tinned.

Mfg. Part No.	Tip Style	Tip Size	Stock No.	Price Each
MT1	Cone Shaped Marksman®	0.125″ (3.18)	33F993	4.90
MT2	Screwdriver Marksman®	0.125″ (3.18)	33F994	4.90
MT3	Chisel Marksman®	0.125″ (3.18)	33F995	4.90

CT SERIES SCREWDRIVER TIPS FOR W60P AND W60P-3 IRONS
Solid copper tips plated with iron overall. Nickel and chromium behind the working surface.

CT5A7	0.063″ (1.60)	700°	35F2565	4.70
CT5A8	0.063″ (1.60)	800°	35F2566	4.70
CT5B8	0.094″ (2.39)	800°	26M8255	4.60
CT5C7	0.125″ (3.18)	700°	26M8256	4.70

➤CONTINUED➤

SOLDERING TIPS

SOLDERING IRON TIPS (CONT.)

CT SERIES SCREWDRIVER TIPS FOR W60P AND W60P-3 IRONS

Mfg. Part No.	Tip Style	Tip Size	Stock No.	Price Each
● CT5C8		0.125″ (3.18)	800°	35F2572	4.70
● CT5D7		0.188″ (4.78)	700°	35F2574	4.70
● CT5D8		0.188″ (4.78)	800°	26M8257	4.80
● CT5E8		0.250″ (6.35)	800°	35F2578	4.80

CT SERIES SCREWDRIVER TIPS FOR W100PG AND W100P-3 IRONS
Solid copper tips plated with iron overall. Nickel and chromium behind the working surface.

● CT6C7	0.125″ (3.18)	700°	26M8258	6.70
● CT6C8	0.125″ (3.18)	800°	35F2581	6.70
● CT6D7	0.188″ (4.78)	700°	35F2583	6.70
● CT6D8	0.188″ (4.78)	800°	35F2584	6.70
● CT6E7	0.250″ (6.35)	700°	26M8259	6.70
● CT6E8	0.250″ (6.35)	800°	35F2587	6.70
● CT6F7	0.375″ (9.53)	700°	35F3331	6.70
● CT6F8	0.375″ (9.53)	800°	35F3332	6.70

"REACH" EPH SERIES TIPS FOR EC1301 AND EC1302 IRONS
Solid copper tips plated with iron overall. Nickel and chromium behind the working surface.

● EPH101	Micropoint	0.016″ (0.41)	81F2380	13.70
● EPH106	Screwdriver	0.063″ (1.60)	26M8265	13.70
● EPH109	Conical	0.031″ (0.79)	26M8266	7.20
● EPH110	Conical	0.062″ (1.60)	90F8302	7.20
● EPH112	Long Micropoint	0.015″ (0.40)	95F3732	16.20

ST SERIES TIPS FOR WP25, WP30 AND WP35 IRONS
Precision ground copper tips are plated with iron, nickel and chromium.

● ST-1	Screwdriver	0.063″ (1.60)	26M8312	3.80
● ST2	Screwdriver	0.094″ (2.39)	33F177	3.70
● ST3	Screwdriver	0.125″ (3.18)	33F178	4.70
● ST-4	Screwdriver	0.188″ (4.78)	34F1025	4.90
● ST-5	Single Flat	0.031″ (0.79)	34F1026	3.80
● ST-6	Screwdriver	0.031″ (0.79)	34F1027	3.90
● ST-7	Conical	0.031″ (0.79)	26M8313	3.70
● ST-8	Narrow Screwdriver	0.063″ (1.60)	34F1029	3.90

(5915)

SOLDERING TIPS (CONT.)

Mfg. Part No.	Tip Style	Tip Size	Temp.	Stock No.	Price Each
● PTL7	Long Screwdriver	0.078″ (2.0)	700°F	35F2550	3.60
● PTL8			800°F	35F2551	3.60
● PTM7	Long Screwdriver	0.125″ (3.0)	700°F	26M8298	3.60
● PTM8			800°F	26M8299	3.60
● PTO7	Long Conical	0.031″ (0.8)	700°F	51F3535	3.60
PTO8			800°F	09B9935	3.60
● PTP7	Conical	0.031″ (0.8)	700°F	26M8301	3.60
● PTP8			800°F	35F3356	3.60
● PTR7	Narrow Screwdriver	0.063″ (1.5)	700°F	26M8302	3.60
● PTR8			800°F	90F8304	3.60
● PTS7	Long Conical	0.016″ (0.4)	700°F	90F8306	3.60
● PTS8			800°F	90F8307	3.60

ET SERIES TIPS FOR EC1201/1201AFE IRONS

Mfg. Part No.	Tip Style	Tip Size	Stock No.	Price Each
● ETA	Screwdriver	0.063″ (1.5)	33F1818	4.00
● ETB	Screwdriver	0.094″ (2.4)	33F1819	4.00
● ETC	Screwdriver	0.125″ (3.0)	26M8267	4.00
● ETD	Screwdriver	0.188″ (4.7)	33F1821	4.00
● ETH	Screwdriver	0.031″ (0.8)	33F1822	4.00
● ETP	Conical	0.031″ (0.8)	33F1826	4.00
● ETCC	Single Flat	0.125″ (3.0)	90F8308	4.00
● ETDD	Single Flat	0.188″ (4.7)	90F8309	4.00
● ETO	Long Conical	0.031″ (0.8)	33F1825	4.00
● ETS	Long Conical	0.016″ (0.4)	51F3536	4.00
● ETK	Long Screwdriver	0.047″ (1.2)	26M8268	4.00
● ETL	Long Screwdriver	0.078″ (2.0)	26M8269	4.00
● ETM	Long Screwdriver	0.125″ (3.0)	90F8310	4.00
● ETR	Narrow Screwdriver	0.063″ (1.5)	26M8270	4.00
● ETV	Single Flat	0.024″ (0.6)	95F3726	4.00

MP SERIES TIPS FOR WM120 SOLDERING IRON

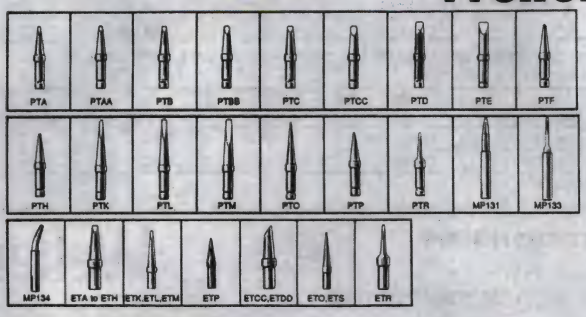
Mfg. Part No.	Tip Style	Tip Size	Stock No.	Price Each
● MP131	Conical	0.016″ (0.4)	33F1656	7.20
● MP133	Single Flat 40°	0.031″ (0.8)	33F1658	7.20

(5916)

SOLDERING TIPS

RoHS Compliant Available

Weller®



PT SERIES TIPS FOR WTCPT STATIONS

Mfg. Part No.	Tip Style	Tip Size	Temp.	Stock No.	Price Each
● PTA6	Screwdriver	0.063″ (1.5)	600°F	35F2525	3.60
● PTA7			700°F	35F2526	3.60
● PTA8			800°F	35F2527	3.60
● PTAA7	Single Flat	0.063″ (1.5)	700°F	35F3312	3.60
● PTAA8			800°F	35F3357	3.60
● PTB7	Screwdriver	0.094″ (2.4)	700°F	26M8292	3.60
● PTB8			800°F	35F2531	3.60
● PTBB7	Single Flat	0.094″ (2.4)	700°F	26M8291	3.60
● PTBB8			800°F	35F2555	3.60
● PTC7	Screwdriver	0.125″ (3.0)	700°F	35F2534	3.60
● PTC8			800°F	26M8293	3.60
● PTCC7	Single Flat	0.125″ (3.0)	700°F	35F2558	3.60
● PTCC8			800°F	35F2559	3.60
● PTD7	Screwdriver	0.188″ (4.7)	700°F	35F2538	3.60
● PTD8			800°F	35F2539	3.60
● PTE8	Screwdriver	0.234″ (6.0)	800°F	35F3363	3.60
● PTF7	Conical Flat	0.031″ (0.8)	700°F	35F3359	3.60
● PTF8			800°F	35F3360	3.60
● PTH6	Screwdriver	0.031″ (0.8)	600°F	35F2541	3.60
● PTH7			700°F	35F2542	3.60
● PTH8			800°F	26M8296	3.60
● PTK7	Long Screwdriver	0.047″ (1.2)	700°F	26M8297	3.60
● PTK8			800°F	35F2547	3.60

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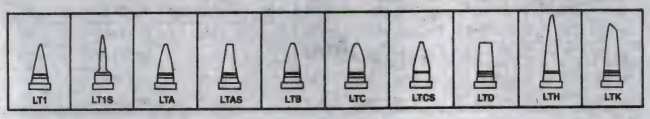
LT SERIES SOLDERING TIPS

RoHS Compliant Available

Weller®



- Solid copper plated with iron all over
- Nickel and chromium behind the working surface
- Designed to provide maximum heat transfer from the heater to the tip

LT series soldering tips for use with **mfg. part no. WSP80** soldering pencil; *order separately online or call.*

Mfg. Part No.	Description	Stock No.	Price Each
● LT1	0.010″W x 0.43″L Reach Round	83F4100	4.60
● LT1L	0.008″W x 0.98″L Reach Round	17C6588	4.60
● LTL	0.008″W x 0.98″L Reach Round	17C6585	5.40
● LT1S	0.008″W x 0.53″L Reach Round	83F4101	4.60
● LT1SLX	0.012″W x 0.076″L Reach Round	07C8835	8.20
● LTS	0.016″W x 0.79″L Reach Round	17C6587	4.60
● LTAS	0.063″W x 0.38″L Reach Round	83F4103	4.60
● LTCS	0.126″W x 0.43″L Reach Round	83F4106	4.60
● LT1LX	0.008″W x 0.98″L Reach Bent Round	17C6589	6.20
● LT1X	0.016″W x 0.37″L Reach Bent Round	17C6590	8.90
● LTH	0.031″W x 0.43″L Reach Chisel	83F4109	4.60
● LTK	0.047″W x 0.73″L Reach Chisel	83F4110	4.50
● LTA	0.063″W x 0.38″L Reach Chisel	83F4102	4.60
● LTB	0.094″W x 0.43″L Reach Chisel	83F4104	4.60
● LTC	0.126″W x 0.43″L Reach Chisel	83F4105	4.60
● LTM	0.126″W x 0.79″L Reach Chisel	17C6586	4.60
● LTD	0.181″W x 0.43″L Reach Chisel	83F4107	4.80
● LT4X	0.047″W x 0.59″L Reach Bent Chisel	26M8278	6.20
● LTAX	0.063″W x 0.50″L Reach Bent Chisel	17C6582	6.20
● LTKN	0.059″W x 0.73″L Reach Knife	17C6584	12.90
● LTF	0.047″W x 0.43″L Reach Single Flat	01C0658	4.60
LTGW	0.091″W x 0.74″L Reach Gull Wing	83F4108	4.40

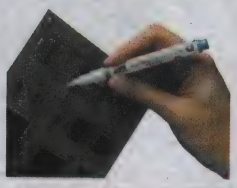
(74796)

CIRCUITWORKS® CONDUCTIVE PEN

RoHS Compliant Available

ITW Chemtronics®

- Quickly Creates Conductive Silver Traces on Most Surfaces
- Valved Pen Tip for Easy Application
- Can Be Soldered at Low Temperatures
- Dries in Minutes at Room Temperature
- Choice of Microtip for Fine Lines or Standard Tip for Wider Lines



Pen dispenser draws highly conductive silver traces, jumpers, and shielding with precision and control.

Mfg. Part No.	Description	Stock No.	Price Each
CW2200STP	Standard Tip	00Z1497	45.28
CW2200MTP	Microtip	00Z1498	45.28

(29682)

CIRCUITWORKS® OVERCOAT PEN

RoHS Compliant Available

ITW Chemtronics®

- Protects Conductive Pen Traces
- Hard Durable Coating
- Protects Against Shorting, Arcing, Abrasion and Moisture
- Dries in Minutes at Room Temperature
- Meets MIL-I-46058C and IPC-CC-830A
- Choice of Clear or Green Coating

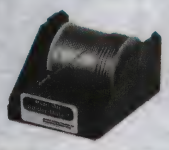
Pen dispenser provides precise application of a tough protective acrylic conformal coating.

Mfg. Part No.	Description	Stock No.	Price Each
CW3300C	Clear	00Z1543	22.40
CW3300G	Green	00Z1868	22.28
CW3300B	Blue	85M7994	19.28
CW3300BLACK	Black	91T4660	19.28

(29683)

SOLDER-MATE SOLDER DISPENSER

Weller®



Durable Solder-Mate™ solder dispenser minimizes core solder usage. Eliminates operator downtime, provides continuous solder wire. Holds one pound solder spool (not included). Size: 4.4L X 3.5W X 2.6"H. Cored wire solder ordered separately; *go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each
SM1	Solder-Mate Solder Dispenser	50F179	10.80

(108797)

ROSIN CORE SOLDER WIRE

NEW

DURATOOL

- Flux Type: Rosin Core, JIS-Z-3283

LEAD FREE SOLDER
Alloy: Tin 99.3% / Copper 0.7%. Melting Temperature: 440°F (227°C).

Mfg. Part No.	Description	Wire Dia. (mm)	Wt. (oz./lbs.)	Stock No.	Price Each
21-11638	Lead Free Solder	0.7	3.5 oz.	27W3341	8.66
21-11640	Lead Free Solder	1.2	3.5 oz.	27W3342	9.49

60/40 SOLDER
Melting Temperature: 374°F (190°C). High activity rosin flux with a low melting point for rework and repair.

21-11642	60/40 Solder	0.8	3.5 oz.	27W3343	7.49
21-11644	60/40 Solder	1.2	4.4 lbs.	27W3344	103.99

(211537)

multicomp AT NEWARK ELEMENT14

Affordable, performance board level & box build components at

newark.com/multicomp

(212569)

DISPENSER PACK

DURATOOL

- No-Clean Solder
- Convenient Size, Fits in Tool Box or Pocket
- All of the parts have Outer Diameter of 0.032"

SPC22157

Mfg. Type No.	Solder Alloy	Weight	Stock No.	Price Each
SPC22157	96.5, 3, 0.5 Sn, Ag, Cu	17	20M4951	9.09
SPC22158	63, 37 Sn, Pb	19.867	20M4952	5.60
SPC22159	60, 40 Sn, Pb	19.867	20M4953	5.71

(89765)

ROSIN-ACTIVATED SOLDER

DURATOOL

Rosin-activated solder offers the most effective form where wetting action is completely non-corrosive and electrically nonconductive. Water-soluble is more effective and heat-stable than rosin fluxes. Residue can be completely removed with water. Mildly active solder has high mobility, fast spreading action that meets military specification QQ-S-571. No-clean solder is environmentally safe. Leaves low amounts of residue which doesn't require cleaning.

Mfg. Part No.	Gauge (AWG)	Diameter (in.)	Alloy Content Tin/Lead	Weight (lb)	Stock No.	Price Each 1-4
ROSIN-ACTIVATED SOLDER, 3.3% FLUX						
SPC22126	21		60, 40 Sn, Pb	453.592	20M4920	39.87
SPC22129	16	0.062	60, 40 Sn, Pb	453.592	20M4923	40.20
SPC22132	21	0.031	63, 37 Sn, Pb	453.592	20M4926	40.30
SPC22128	18	0.05	60, 40 Sn, Pb	453.592	20M4922	38.61
SPC22127	19	0.04	60, 40 Sn, Pb	453.592	20M4921	39.56
SPC22130	25	0.02	63, 37 Sn, Pb	453.592	20M4924	60.80
SPC22131	23	0.025	63, 37 Sn, Pb	453.592	20M4925	44.77
SPC22133	19	0.04	63, 37 Sn, Pb	453.592	20M4927	52.29
SPC22135	16	0.062	63, 37 Sn, Pb	453.592	20M4929	36.08
SPC22124	21		60, 40 Sn, Pb	453.592	20M4918	20.15
SPC22125	23	0.025	63, 37 Sn, Pb	226.796	20M4919	24.43
SPC22123	23	0.025	60, 40 Sn, Pb	453.592	20M4917	22.65
WATER SOLUBLE SOLDER, 3.3% FLUX						
SPC22136	21	0.031	60, 40 Sn, Pb	453.592	20M4930	40.02
MILDLY ACTIVE SOLDER, 3.3% FLUX						
SPC22138	21	0.031	63, 37 Sn, Pb	453.592	20M4932	46.26
NO-CLEAN SOLDER, 1.1% FLUX						
SPC22139	21	0.031	63, 37 Sn, Pb	453.592	20M4933	42.48
SPC22140	25	0.02	63, 37 Sn, Pb	453.592	20M4934	52.83

(19328)

275 NO-CLEAN LEAD FREE STANDARD CORE WIRE SOLDER

RoHS Compliant Available

kester® CONNECTING INNOVATION™

- Colorless translucent residues
- Improves wetting performance
- Excellent solderability and fast wetting to a variety of surface finishes
- Eliminates the need and expense of cleaning
- Low smoke and odor
- Low spattering
- Classified as ROL0 per J-STD-004
- Compliant to Bellcore GR-78

275 no-clean flux for cored solder was developed to provide superior wetting performance for hand soldering in the electronics industry. The chemistry is based on some of the same principles that have been safely used for years in mildly activated rosin fluxes. Results in an extremely clear post-soldering residue without cleaning. The unique chemistry was also designed to reduce spattering common to most core fluxes. Flux core size: 58.

Mfg. Part No.	Alloy	Diameter (in.)	Gauge	Weight (lbs.)	Stock No.	Price Each 1-4
24-7068-7601	96.5, 3, 0.5 Sn, Ag, Cu	0.031	21	453.592	98H3732	117.91
24-7068-7603	96.5, 3, 0.5 Sn, Ag, Cu	0.02	25	453.592	72J6990	127.03
24-7068-7606	96.5, 3, 0.5 Sn, Ag, Cu	0.05	18	453.592	33K3799	113.72
24-7068-7607	96.5, 3, 0.5 Sn, Ag, Cu	0.062	16	453.592	33K3950	112.97
24-7068-7617	96.5, 3, 0.5 Sn, Ag, Cu	0.025	23	453.592	08J4198	130.57

(84352)

SOLDER

48 ROSIN ACTIVATED LEAD FREE STANDARD CORE WIRE SOLDER

RoHS Compliant Available

kester CONNECTING INNOVATION™

- Unparalleled wetting performance
- Excellent solderability and fast wetting to a variety of surface finishes
- Eliminates the need and expense and cleaning
- Low smoke and odor
- Low spattering
- Classified as ROL1 per J-STD-004

48 activated rosin flux for cored solder wire was developed for lead-free applications to enable solder of most common metals. The performance characteristics exceed those of standard RA fluxes. "Instant-action" wetting to provide fast and reliable solder joints. Flux core size: 66.

Mfg. Part No.	Alloy	Diameter (in.)	Gauge	Weight (lbs.)	Stock No.	Price Each 1-24
● 24-7068-1400	96.5, 3, 0.5 Sn, Ag, Cu	0.062	16	453.592	**75J3057**	105.48
● 24-7068-1401	96.5, 3, 0.5 Sn, Ag, Cu	0.02	25	453.592	**19K8814**	128.85
● 24-7068-1402	96.5, 3, 0.5 Sn, Ag, Cu	0.031	21	453.592	**70J9056**	114.89
● 24-7068-1404	96.5, 3, 0.5 Sn, Ag, Cu	0.05	18	453.592	**33K3963**	119.29
● 24-7068-1406	96.5, 3, 0.5 Sn, Ag, Cu	0.025	23	453.592	**33K3952**	121.08

(84351)

331 WATER-SOLUBLE LEAD FREE ORGANIC CORE WIRE SOLDER

RoHS Compliant Available

kester CONNECTING INNOVATION™

- Excellent solderability to a wide variety of matalizations
- Easy residue removal in DI water
- Classified as ORH1 per J-STD-004

331 organic flux is a water soluble formula for use in flux-cored solder wire and is more effective than rosin fluxes in solder difficult metals. The flux is more heat stable than most organic fluxes, resulting in minimal smoke and odor. The residue can be completely removed with a simple water rinse.

Mfg. Part No.	Alloy	Diameter (in.)	Gauge	Weight (lbs.)	Stock No.	Price Each 1-4
● 24-7068-6401	96.5, 3, 0.5 Sn, Ag, Cu	0.02	25	453.592	**07J1569**	139.50
● 24-7068-6403	96.5, 3, 0.5 Sn, Ag, Cu	0.031	21	453.592	**07J1570**	111.75
● 24-7068-6409	96.5, 3, 0.5 Sn, Ag, Cu	0.05	18	453.592	**64J7653**	121.47
● 24-7068-6411	96.5, 3, 0.5 Sn, Ag, Cu	0.062	16	453.592	**33K3961**	122.12
● 24-7068-6417	96.5, 3, 0.5 Sn, Ag, Cu	0.025	23	453.592	**08J4197**	127.82

(84353)

44 SERIES RA ROSIN CORE SOLDER

kester CONNECTING INNOVATION™

High-activity **RA** core flux designed for excellent instant wetting action, even on nickel surfaces. The residues are noncorrosive if not cleaned. Classified as ROM1 flux per J-STD-004. All **RA series** are 3% flux.

Mfg. Part No.	Alloy	Diameter (in)	Gauge	Spool Weight	Stock No.	Price Each 1-9
24-6337-0007	63/37	0.015	28	1 lb.	**34C5653**	60.81
24-6337-0010	63/37	0.020	25	1 lb.	**93B8307**	45.86
24-6337-0027	63/37	0.031	21	1 lb.	**34C5655**	42.88
24-6337-0053	63/37	0.050	18	1 lb.	**34C5657**	41.62
24-6337-0061	63/37	0.062	16	1 lb.	**34C5658**	41.13
24-6040-0010	60/40	0.020	25	1 lb.	**34C5647**	47.15
24-6040-0018	60/40	0.025	23	1 lb.	**26C0450**	37.73
24-6040-0027	60/40	0.031	21	1 lb.	**34C5648**	36.77
24-6040-0039	60/40	0.040	19	1 lb.	**34C5649**	36.93
24-6040-0053	60/40	0.050	18	1 lb.	**34C5650**	37.09
24-6040-0061	60/40	0.062	16	1 lb.	**34C5651**	34.48
24-6040-0066	60/40	0.093	13	1 lb.	**34C5652**	38.87
24-7150-0018	62/36/2ag	0.025	23	1 lb.	**34C5668**	118.32
24-6040-0018	63/37	0.025	23	½ lb.	**26C0450**	37.73

(68901)

"331" ORGANIC AND LEAD-FREE WATER-SOLUBLE CORE SOLDER

kester CONNECTING INNOVATION™

331 is designed for optimal cleanability with water. Highly active water-soluble flux for soldering difficult metals. Classified as ORH1 per J-STD-004. All organic water soluable core solder are 3% flux. *Order the lead-free water-soluble version separately below.*

"331" ORGANIC WATER-SOLUBLE

Mfg. Part No.	Alloy	Diameter (in.)	Gauge	Spool Weight	Stock No.	Price Each 1-9
24-6337-6422	63/37	0.015	28	1 lb.	**34C5659**	65.80
24-6337-6417	63/37	0.025	23	1 lb.	**12C0490**	38.65
24-6337-6403	63/37	0.031	21	1 lb.	**00Z879**	37.25
24-6337-6411	63/37	0.062	16	1 lb.	**00Z877**	40.69
24-6040-6403	60/40	0.031	21	1 lb.	**00Z878**	40.20
24-6040-6411	60/40	0.062	16	1 lb.	**00Z876**	76.64

(68902)

285 RMA FLUX-CORE SOLDER

kester CONNECTING INNOVATION™

RMA flux-core solder is RMA-based flux that provides wetting action comparable to that of a typical **RA** flux. The residues are noncorrosive if not cleaned. Catagorized as ROL1 per J-STD-004. Spool weight: 1lb.

Mfg. Part No.	Alloy	Diameter (in.)	Gauge	Flux (%)	Stock No.	Price Each 1-9
24-6337-9703	63/37	0.015	28	3	**34C5666**	65.76
24-6337-9702	63/37	0.020	25	3	**90B5872**	52.04
24-6337-9718	63/37	0.025	23	3	**34C5667**	44.82
24-6337-9713	63/37	0.031	21	2	**50B4544**	42.89
24-6337-9710	63/37	0.031	21	3	**00Z875**	39.88

(68903)

245 NO-CLEAN FLUX CORE SOLDER

kester CONNECTING INNOVATION™

Halide-free, rosin-based, no-clean flux that provides excellent wetting combined with optimal reliability, and is visually clear. Complies with Bellcore GR-78, and is classified as ROL0 per J-STD-004. Spool weight: 1 lb. except **mfg. part nos. 23-6337-8806** and **23-6337-8807** which are ½.

Mfg. Part No.	Alloy	Diameter (in.)	Gauge	Flux (%)	Stock No.	Price Each 1-9
24-6337-8806*	63/37	0.015	28	1	**34C5662**	65.89
24-6337-8807	63/37	0.020	25	1	**00Z1222**	52.60
24-6337-8834	63/37	0.020	25	2	**34C5665**	53.06
24-6337-8809	63/37	0.025	23	1	**01C6854**	40.18
24-6337-8800	63/37	0.031	21	1	**00Z1122**	41.80
24-6337-8801	63/37	0.031	21	2	**34C5661**	43.10
24-6337-8802	63/37	0.031	21	3	**27C3665**	38.55
24-6337-8813	63/37	0.040	19	1	**34C5663**	38.47
24-6337-8814	63/37	0.050	18	1	**34C5664**	41.32
24-6337-8817	63/37	0.062	16	1	**92B5994**	34.80

*Spool weight ½ lb.
(68904)

LEAD-FREE CORED WIRE SOLDER

RoHS Compliant Available

Multicore

Cored wire features ground-breaking, new lead-free flux core formulations to give users an easy transition to lead-free operations. Features a consistent distribution of lead-free flux throughout the solder wire making it ideal for automated wire soldering processes.

511™

511™ LEAD-FREE, NO-CLEAN CORED WIRE SOLDER

C511™ no-clean, clear-residue, cored wire solder features lead-free alloy of Sn96.5/Ag3/Cu0.5 with a melting point of 217°C.

Mfg. Part No.	Description	Diameter (mm)	Reel Quantity	Stock No.	Price Each
MM02104	SAC305 C511 3C	0.38	0.55 lb.	32M7029	56.27
MM01955	SAC305 C511 3C	0.81	1 lb.	42K3275	128.17
MM01951	SAC305 C511 3C	1.63	1 lb.	32M7028	89.14

HYDRO-X™ LEAD-FREE, WATER SOLUBLE CORED WIRE SOLDER

HYDRO-X™ water-soluble cored wire solder features lead-free alloy of Sn96.5/Ag3/Cu0.5 with a melting point of 217°C.

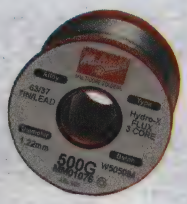
MM01950	SAC305 HX 3C	0.81	1 lb.	70K9447	120.37

(90466)

TIN-LEAD CORED WIRE SOLDER

Multicore

Tin-lead cored wire features multiple flux cores technology to provide even and consistent distribution of flux throughout the solder wire. This reliability makes this solder wire ideal for automated wire soldering processes. Additional sizes available; *go online or call.*



HYDRO-X™

400™ HALIDE-FREE, NO-CLEAN, CLEAR RESIDUE CORED WIRE SOLDER

400™ Sn63/Pb37-cored wire flux offers increased flux content for improved wetting. IPC Class: ROL0.

Mfg. Part No.	Description	Diameter (mm)	Reel Quantity	Stock No.	Price Each 1-4
MM01001	Sn63Pb/37 C400 5C 0.032″	0.81	1 lb.	72C1198	48.66

502™ NO-CLEAN, CLEAR RESIDUE, MEDIUM-ACTIVITY 3-CORE WIRE SOLDER

502™ Sn63/Pb37-cored wire flux offers good wetting on difficult substrates. IPC Class: ROM1.

MM00973	Sn63Pb/37 C502 3C 0.032″	0.81	1 lb.	67C1221	47.61

HYDRO-X™ HIGH-ACTIVITY, WATER SOLUBLE 3-CORE WIRE SOLDER

HYDRO-X™ Sn63/Pb37 3-core water wash wire flux offers excellent wetting on difficult substrates. IPC Class: ORH1.

MM00989	Sn63Pb/37 HX 3C 0.81mm	0.81	1 lb.	72C1196	46.88

HMP HIGH-MELTING POINT SOLDER (574°F) W/366

5% tin, 93.5% lead, 1.5% silver with activated rosin.

MM01007	HMP 366 5C 0.050″	1.22	1 lb.	72C1200	56.46
MM01006	HMP 366 5C 0.022″	0.56	1 lb.	72C1199	34.11

(10020)

ROSIN CORE SOLDER WIRE

NEW

TENMA®

- Rosin flux core
- Diameter: 1mm (0.04″)

Ideal for general purpose electronic repair and assembly use.

ROSIN CORE SOLDER 60/40 TIN/LEAD

Tin/lead formulation provides the lowest possible melting point. Melting point: 188°C (370°F).

Mfg. Part No.	Description	Wt. (oz./lbs.)	Stock No.	Price Each 1-9
21-1045	Rosin Core Solder, 60/40 Tin/Lead	6 oz.	38C9096	8.59
21-1040	Rosin Core Solder, 60/40 Tin/Lead	1 lb.	93B9303	23.09

LEAD FREE ROSIN CORE SOLDER, 99.3/0.7 TIN/COPPER

Tin/copper formulation meets current requirements for lead free solder use. Melting point: 227°C (441°F).

21-1046	Lead Free Rosin Core Solder, Tin/Copper	6 oz.	64M0943	13.99
21-1041	Lead Free Rosin Core Solder, Tin/Copper	1 lb.	64M0941	38.49

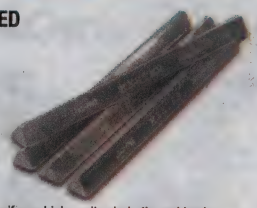
LEAD FREE ROSIN CORE SOLDER, 96.5/3/0.5 TIN/SILVER/COPPER

Silver formulation provides improved conductivity performance, lower melting point while continuing to meet requirements for lead free solder use. Melting point: 217°C (423°F)

21-1047	Lead Free Rosin Core Solder, Tin/ Silver/Copper	6 oz.	64M0944	27.49
21-1042	Lead Free Rosin Core Solder, Tin/ Silver/Copper	1 lb.	64M0942	71.49

(211536)

1-POUND EXTRUDED BAR SOLDER



kester® CONNECTING INNOVATION™

Extrusion process provides uniform, high-purity virgin tin and lead.

Mfg. Part No.	Alloy	Description	Stock No.	Price Each 1-9
04-6337-0050	63/37	SN63PB37 Ultrapure	90B7841	57.50

(68908)

GENERAL-PURPOSE, HI-TEMP. AND PRECISION SOLDER POTS

RoHS Compliant Available

PLATO®

General-Purpose and High-Temperature Solder Pot Features:

- Three-position control switch with infinitely variable temperature control (11°F)
- Safety heat shield
- Removable dross tray for easy cleaning
- Three-wire grounded UL listed cord
- Input: 120VAC
- 2.5″ (64mm) diameter by 1.5″ (38mm) deep crucible
- Capacity: 2 lbs. (1 kg)
- Adjustable leveling feet
- All parts easily replaceable including heating element and control switch
- Shipping weight: 11 lbs. (5 kg)

Precision Solder Pot Features:

- Exceeds military specifications ANSI (J-STD-001B) and Navy WS-6536E
- Controls temperature to ±5°F of a pre-selected setting from ambient to 925°F
- Solid state controller limits transient voltage spiking to 2mV peak-to-peak
- Temperature preset switch
- LCD displays present temperature and operating temperature
- Internal circuitry compensates for incoming power fluctuations
- Power line circuit breaker for ESD protection
- All metal construction
- Safety heat shield
- Removable dross tray for easy cleaning
- Three-wire, grounded UL listed cord
- Input: 120VAC
- 2.5″ (64mm) diameter by 1.5″ (38mm) deep crucible
- Capacity: 2 lbs. (1kg)
- Adjustable leveling feet
- Shipping weight: 12 lbs. (5.4kg)

SP-500T

Solder pots with porcelainized crucibles resists corrosion, wipes clean, and are ideal for lead free processes. Additional precision solder pots available; *go online or call.*

Mfg. Part No.	Description	Output Power (W)	Temperature Range	Stock No.	Price Each
SP-101	General-Purpose Solder Pot	350	500°F to 975°F	98H2906	393.94
SP-101-P	General-Purpose Solder Pot, Porcelainized Crucible	350	500°F to 975°F	29K7854	501.38
SP-301	High-Temperature Solder Pot	500	500°F to 1100°F	98H2945	407.20
SP-301-P	High-Temperature Solder Pot, Porcelainized Crucible	500	500°F to 1100°F	29K7855	522.60
SP-500T	Precision Solder Pot	350	Ambient to 925°F	98H2949	1350.25

(79329)

SOLDERING POTS

NEW

TENMA®

150W Solder Pot:

- Bowl Diameter: 1.5″

400W Solder Pot:

- Bowl Diameter: 3.1″
- Bowl depth: 1.5″

Both:

- 110V 60Hz

Compact soldering pots are ideal for small scale production, prototyping and chassis wiring. They are especially useful when tinning large quantities of stranded wire. Recommended for use with the Tenma #72-6309 bar solder

Mfg. Part No.	Description	Stock No.	Price Each 1-9
21-3511	150W Soldering Pot	63J8341	29.99
21-3515	400W Soldering Pot	96B2862	82.99

(212016)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

DESOLDERING BRAID

SODER-WICK® DESOLDERING BRAID

RoHS Compliant Available

ITW Chemtronics®

- Effective, economical way to safely and completely remove solder from BGA pads and chips
- Sized and designed specifically for BGA pad and chip rework/repair
- Entire BGA pads cleaned in 3 to 4 Passes
- Available in Rosin (80) and No-Clean (60) Fluxes
- Packaged in ESD-safe static-dissipative bobbins
- Meets MIL-F-14256, NASA-STD-8739.3, DOD-STD-883E, Anai/ipc J STD 004 Type ROL0, MIL-STD-1686C, MIL-HDBK-263B, MIL-B-81705C, and MIL-STD-2000A

SODER-WICK® BGA

Soder-Wick®, the world's leading brand of desoldering braid, is the fastest, cleanest and safest braid in the industry. It significantly reduces rework/repair time and minimizes the risk of heat damage to the board. Its geometrically precise weave design allows for maximum capillary action and solder capacity. Soder-Wick® desoldering braid optimizes heat transfer through the braid and into the solder joint, resulting in faster wicking action than any other competitive braid. Minimal flux residue on the board speeds up the cleaning process, or eliminates it entirely.

Soder-Wick® desoldering braid is available in the most comprehensive variety of widths, lengths and flux types. Application-specific sizes allow for precision solder removal in a flash. Wicking speed and board safety are maximized by matching the size of the braid to the soldering iron tip and the area to be desoldered.

Mfg. Part No.	Size	Color	Length (ft.)	Stock No.	Price Each
● 80-BGA-5	BGA	Purple	5	01F195	5.94
● 60-BGA-5	BGA	Purple	5	01F196	6.58

SODER-WICK® ROSIN 80 SD

- Non-corrosive type R Rosin flux
- Leaves no ionic contamination on boards
- Packaged in ESD-safe static-dissipative bobbins
- Minimizes risk of damage associated with static electricity
- Meets MIL-F-14256EF, NASA-STD-8739.3, DOD-STD-883E, Anai/ipc J STD 004 Type ROL0, MIL-STD-1686C, MIL-HDBK-263B, MIL-B-81705C, and MIL-STD-2000A

Mfg. Part No.	Size	Width (in.)	Color	Length (ft.)	Stock No.	Price Each
● 80-1-5	#1	0.8	White	5	95F6234	3.85
● 80-2-5	#2	1.5	Yellow	5	95F6235	3.85
● 80-3-5	#3	2	Green	5	95F6236	4.13
● 80-4-5	#4	2.8	Blue	5	95F6237	4.46
● 80-6-5	#6	5.3	Red	5	95F6239	5.21
● 80-1-10	#1	0.8	White	10	95F6240	6.72
● 80-2-10	#2	1.5	Yellow	10	95F6241	6.72
● 80-3-10	#3	2	Green	10	95F6242	7.15
● 80-4-10	#4	2.8	Blue	10	95F6243	7.90
● 80-5-10	#5	3.7	Brown	10	95F6244	8.81

SODER-WICK® NO-CLEAN SD

- Fast, clean no-clean flux desoldering braid packaged in ESD-safe static-dissipative bobbins
- Patented non-corrosive, halide-free, organic no-clean flux system
- Desolders up to 40% faster than competitive no-clean braids and leaves boards cleaner
- Meets MIL-F-14256EF, Bellcore TR-NWT-000078,ANSI / IPC J SF-818, NASA-STD-8739.3, DOD-STD-883E, Anai/ipc J STD 004 Type ROL0, MIL-STD-1686C, MIL-HDBK-263B, MIL-B-81705C, and MIL-STD-2000A

Mfg. Part No.	Size	Width (in.)	Color	Length (ft.)	Stock No.	Price Each
● 60-1-5	#1	0.8	White	5	95F6245	4.13
● 60-2-5	#2	1.5	Yellow	5	95F6246	4.13
● 60-3-5	#3	2	Green	5	95F6247	4.30
● 60-4-5	#4	2.8	Blue	5	95F6248	4.89
● 60-5-5	#5	3.7	Brown	5	95F6249	5.38
● 60-6-5	#6	5.3	Red	5	95F6250	5.82
● 60-1-10	#1	0.8	White	10	95F6251	7.46
● 60-2-10	#2	1.5	Yellow	10	95F6252	7.46
● 60-3-10	#3	2	Green	10	95F6253	7.90
● 60-4-10	#4	2.8	Blue	10	95F6254	8.81
● 60-5-10	#5	3.7	Brown	10	95F6255	9.70

SODER-WICK® UNFLUXED

- Can be coated with any flux type
- Allows for constant flux type throughout process
- Provides quick and safe desoldering

Mfg. Part No.	Size	Width (in.)	Color	Length (ft.)	Stock No.	Price Each
● 70-2-25	#2	1.5	Yellow	25	39C3081	14.87
● 70-3-25	#3	1.5	Green	25	22C5674	15.62

SODER-WICK® UNFLUXED SD

Same as Soder-Wick® unfluxed desoldering braid, *ordered separately above*, except packaged in ESD-safe static-dissipative bobbins to minimize the risk of damage associated with static electricity.

● 75-2-10	#2	1.5	Yellow	10	39C5309	5.92

(5852)

element14 COMMUNITY

Get inspired, collaborate, design, research, ask experts questions.

element14.com

(196545)

SODER-WICK® LEAD FREE DESOLDERING BRAID

RoHS Compliant Available

ITW Chemtronics®

- Engineered specifically for high temperature, lead-free solders
- Transfers heat to the solder joint more quickly and efficiently
- Specifically designed for all lead-free solders
- Can also be used with Tin/Lead solders
- Soder-Wick® Lead-Free packaged in ESD-safe static dissipative bobbins
- Minimizes the risk of damage associated with static electricity
- Noncorrosive ultra high purity no-clean flux
- Will not leave ionic contamination on the boards
- Especially effective at removing residual solder from SMT pads
- RoHS Compliant
- Patent Pending

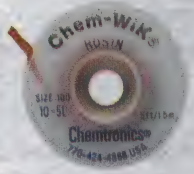
Mfg. Part No.	Size	Length (Feet)	Color	Stock No.	Price Each
● 40-2-10	#2	10	Yellow	29K6129	7.58
● 40-2-5	#2	5	Yellow	29K6130	4.20
● 40-3-10	#3	10	Green	29K6131	8.02
● 40-3-5	#3	5	Green	29K6132	4.44
● 40-4-10	#4	10	Blue	29K6133	8.76
● 40-4-5	#4	5	Blue	29K6134	4.96

(85077)

CHEM-WIK® ROSIN DESOLDERING BRAID

RoHS Compliant Available

ITW Chemtronics®



- The fast, safe rosin flux desoldering braid for removing solder from leads and components.
- Coated with ultra high purity rosin
- Non-corrosive Type R rosin flux
- Meets DOD-STD-1686C, DOD-HDK-263B, MIL-F-14256F, MIL-B-81705C and MIL-STD-2000A

As the industry standard desoldering braid for service and repair, Chem-Wik® desoldering braid ensures fast and safe desoldering. The ultra-pure, oxygen free copper braid quickly and completely removes solder from circuit boards and components. Its fast wicking action protects components from harmful heat damage.

Mfg. Part No.	Width	Length	Stock No.	Price Each
● 2-5L	0.030″ (0.76)	5′ (1.52M)	93F6336	3.42
● 2-25L	0.030″ (0.76)	25′ (7.62M)	93F6337	14.78
● 2-100L	0.030″ (0.76)	100′ (30.40M)	96B5623	58.90
● 5-5L	0.050″ (1.27)	5′ (1.52M)	93F6335	3.42
● 5-25L	0.050″ (1.27)	25′ (7.62M)	93F9157	14.78
● 5-50L	0.050″ (1.27)	50′ (15.24M)	93F6334	29.19
● 5-100L	0.050″ (1.27)	100′ (30.48M)	48F2107	58.90
● 7-25L	0.075″ (1.91)	25′ (7.62M)	97F7574	15.38
● 7-50L	0.075″ (1.91)	50′ (15.24M)	96F6876	30.53
● 7-100L	0.075″ (1.91)	100′ (30.48M)	48F2108	61.09
● 10-5L	0.100″ (2.54)	5′ (1.52M)	85R4900	3.76
● 7-500L	1.9″ (0.76)	500′ (152.4M)	23C9012	296.65
● 10-25L	0.100″ (2.54)	25′ (7.62M)	93F6333	16.41
● 10-50L	0.100″ (2.54)	50′ (15.24M)	98F6616	32.86
● 10-100L	0.100″ (2.54)	100′ (30.48M)	93F9160	65.51

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TECHSPRAY DESOLDERING BRAID / WICK

RoHS Compliant Available

TECHSPRAY®

- Strong capillary action instantly pulls solder
- Fast, reliable wicking action
- No-Clean braid is ideal for lead-free applications
- Pro-Wick® braid is ideal for high-volume PCB rework
- Unfluxed braid is ideal for use with water-soluble flux
- All meet or exceed MIL-F-14256, Type R specifications
- On antistatic, ESD-safe bobbins for static-sensitive environments

No-Clean Desoldering Braid

No-Clean desoldering braid is the cleanest no-clean braid in the industry and is approved for lead-free processes. Its proprietary flux formula is specially designed to avoid catastrophic and latent PCB failures caused by ionic flux residue. Pro Wick® desoldering braid is rosin flux coated for the fastest wicking action. Ideal for high-volume PCB production/repair environments. Unfluxed desoldering braid is perfect for use with water-soluble flux and in aqueous processes.

NO-CLEAN DESOLDERING BRAID

Mfg. Part No.	Braid Size	Braid Width (mm)	Braid Color	Roll Length (Ft.)	Stock No.	Price Each
● 1817-5F	#4	2.5	Blue	5	96C6387	5.06
● 1821-5F	#2	1.4	Yellow	5	49M0732	3.96
● 1821-10F	#2	1.4	Yellow	10	69K7664	7.21
● 1822-5F	#3	1.9	Green	5	23C1275	4.17
● 1822-10F	#3	1.9	Green	10	69K7665	7.38

CONTINUED

TECHSPRAY DESOLDERING BRAID / WICK (CONT.)

Mfg. Part No.	Braid Size	Braid Width (mm)	Braid Color	Roll Length (Ft.)	Stock No.	Price Each
1823-5F	#4	2.5	Blue	5	68K7293	4.51
1823-10F	#4	2.5	Blue	10	68K7292	7.95
PRO WICK® DESOLDERING BRAID						
1809-10F	#2	1.4	Yellow	10	96C6347	5.88
1810-5F	#3	1.9	Green	5	73K2472	3.33
1810-10F	#3	1.9	Green	10	68K7289	5.97
1811-5F	#4	2.5	Blue	5	68K7290	3.67
1811-10F	#4	2.5	Blue	10	72C8241	6.53
UNFLUXED DESOLDERING BRAID						
1830-10F	#1	0.9	White	10	96C6429	5.36
1831-10F	#2	1.4	Yellow	10	96C6431	5.38
1832-5F	#3	1.9	Green	5	24C9586	3.43

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ROSIN FLUX DESOLDERING BRAID

NEW TENMA®

- Manufactured in the USA

The copper braid utilizes only the best fine gauge oxygen-free strands, which are fully coated with specially formulated Type R rosin flux. The flux greatly enhances wick action ensuring fast reliable solder removal. Additionally, it cleans the connection, ensuring ease of re-soldering, while providing a protective coating to the wick to prevent oxidation, prolonging shelf life of the wick.

Mfg. Type No.	Width x Length (in.) x (ft.)	Stock No.	Price Each 1-9
21-8355	0.035 x 10	03M9678	2.29
21-8356	0.05 x 10	03M9679	2.29
21-8357	0.075 x 10	03M9680	2.29
21-8358	0.1 x 10	03M9681	2.29
21-8359	0.125 x 10	03M9682	2.99
21-8363	0.1 x 25	03M9686	6.59

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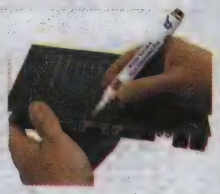
CIRCUITWORKS® FLUX-DISPENSING PENS

RoHS Compliant Available — ITW Chemtronics®

Common Features:
- Chisel-Tip Marker Provides Exact Delivery of Flux to Surface
- Easily removed with appropriate CircuitWorks® Flux Remover Pen



No-Clean Flux Dispensing Pen:
- Applies a Patented Noncorrosive, Halide Free, Organic No-Clean Flux
- Flux Meets Bellcore TR-N-WT-000078 and IPC SF-818 for Surface Insulation Resistance
- Flux Meets ANSI/IPC J-STD-004, Type ROL0

Water Soluble Flux Dispensing Pen::
- Applies a neutral pH organic water soluble flux for rapid soldering
- Flux meets ANSI/IPC J-STD-004, ORH1 Classification
- Easily removed with water

Rosin Flux Dispensing Pen:
- Applies a Noncorrosive Type R Flux
- Flux Meets MIL-F-14256 F Type R and ANSI/IPC J-STD-004, Type ROL0

Pen applies flux with precision and control.

Mfg. Part No.	Description	Stock No.	Price Each
CW8100	No-Clean Pen	00Z1870	8.55
CW8200	Rosin Pen	00Z1871	8.26
CW8300	Water Soluble Pen	85M7995	7.64

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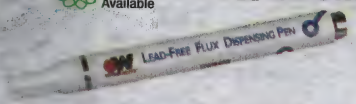
CIRCUITWORKS® LEAD-FREE FLUX DISPENSING PEN

RoHS Compliant Available — ITW Chemtronics®



- Applies a noncorrosive, halide free, no clean flux for high temperature, lead-free application
- Can also be used to for Tin/Lead fluxes
- Flux meets Bellcore TR-N-NWT-000078 and IPC SF-818 for Surface Insulation Resistance
- Flux meets ANSI / IPC J-STD-004, Type ROL0
- Easily removed with CircuitWorks® Lead-Free Flux Remover Pen, or Flux-Off® Lead-Free Flux Remover
- RoHS Compliant

Mfg. Part No.	Description	Stock No.	Price Each
CW8400	CircuitWorks® Lead-Free Flux Dispensing Pen, 9 g	29K6229	9.66

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LIQUID FLUX FOR LEAD-FREE SOLDERING

RoHS Compliant Available — kester® CONNECTING INNOVATION™

979 series is a VOC-free, no-clean flux formulation for high quality, low-defect soldering of electronic circuit board assemblies. This flux's finely tuned activation system offers the best wetting available in VOC-Free liquid flux technology and the shiniest solder joints. **979 series** also reduces micro-solderballing on glossy laminates and between connector pins. **979 series** will not attack properly cured solder masks or FR-4 Epoxy-Glass laminate and leaves no haze or visible residue behind, including the white powdery residue associated with use of earlier no-clean formulas. The miniscule amount of non-visible residue that remains after soldering is non-conductive, non-corrosive and does not have to be removed.

Mfg. Part No.	Description	Container Size (gallon)	Stock No.	Price 1-9
63-0000-0979	979 VOC-Free No-Clean Liquid Flux	1	96H7581	68.18

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LIQUID FLUXES

RoHS Compliant Available — kester® CONNECTING INNOVATION™

63-0097-2331

1544 SERIES ROSIN-BASED FLUXES
1544 series rosin-based fluxes are highly active and noncorrosive. Ideal for surfaces that are difficulty to solder. Residue is noncorrosive. Classified as ROM1 per J-STD-004.

Mfg. Part No.	Description	Size (gallon)	Stock No.	Price Each 1-9
63-0000-1544	1544 RA	1	34C5674	89.24
63-0000-0104	104 Flux Thinner	1	34C5670	84.79

WATER SOLUBLE FLUXES
2331-ZX series pH neutral organic flux is for automated and drag soldering process. Residue removal is required. Use soft or de-ionized water for flux removal. Classified as ORH1 per J-STD-004. **2235 series** organic flux is a high-activity flux for surface mount assemblies. Helps reduce skips on bottom side of surface mount pads. Residue removal is required. Use soft or de-ionized water for removal. Classified as ORH1 per J-STD-004.

Mfg. Part No.	Description	Size (gallon)	Stock No.	Price Each 1-9
63-0097-2331	2331-ZX Water Soluable	1	00Z1111	83.05
63-0000-2235	2235 Water Soluable	1	34C5675	90.18

959 series no-clean flux is designed for the wave soldering of conventional and surface mount assemblies. Developed to minimize the formation of micro-solderballs during wave soldering operations. Spray or foam flux application. Bellcore compliant, flux classified as ORL0, per J-STD-004. **977 series** flux is designed for wave soldering of circuit boards, and developed to reduce bottom side micro-solderballing and bridging. The wetting system is designed to allow for a larger process window and can survive longer dwell times in turbulent ship waves. Spray flux application. Bellcore compliant, flux classified as ORL0, per J-STD-004.

Mfg. Part No.	Description	Size (gallon)	Stock No.	Price Each 1-9
63-0000-0959	959 No-Clean	1	34C5672	77.73
63-0000-0977	977 VOC-Free No-Clean	1	34C5673	65.57

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FLUX AND LIQUID DISPENSER BOTTLES

RoHS Compliant Available — PLATO®

These needle flux dispensers have a unique, Pos-A-Loc® no-leak design that offers a convenient way to dispense precise amounts of a variety of flux and liquids without dripping, spilling or waste. ESD-safe needle flux dispensers meet MIL-STD-2000 (J-STD-001B) requirements. Capacity: 2 fl.oz.

FD-2, FD-21

SF-02, SF-01

SF-B2HS, SF-B2HH

Mfg. Part No.	Description	Needle (In./mm)	Stock No.	Price Each
FD-2	Needle Flux Dispenser for Rosin Flux	/0.2	98H2694	4.24
FD-21	Needle Flux Dispenser for No-Clean and Water Sol. Flux	0.010/0.25	98H2695	4.24
SF-02	ESD-Safe Needle Flux Dispenser for Rosin Flux	0.020/0.2	98H2889	8.66
SF-01	ESD-Safe Needle Flux Dispenser for No-Clean and Water Sol. Flux	0.010/0.25	98H2888	8.66

CONTINUED

FLUX AND LIQUID DISPENSER BOTTLES (CONT.)

Mfg. part no. BC-250 translucent polyethylene dispensing bottle with screw cap and angled spout provides an inexpensive way to wet sponges and dispense liquids at the work bench without waste. **Mfg. part no. SF-250** is a static dissipative version of **mfg. part no. BC-250** and provides electrostatic discharge protection to meet DOD-STD-1686 and MIL-B-81705, Type 2. **Mfg. part no. SF-1601** is the same as **mfg. part no. SF-250** except with a straight spout.

Mfg. Part No.	Description	Capacity (Oz.)	Stock No.	Price Each
● BC-250	Liquid Dispensing Bottle with Angled Spout	8	72K7274	7.25
● SF-250	ESD-Safe Liquid Dispensing Bottle with Angled Spout	8	98H2891	13.50

Mfg. part no. SF-B2HH with natural medium-to-stiff hog bristles that work well for removing difficult, sticky, crusty or viscous materials. Combination of static dissipative jacket and natural material meets ANSI (J-STD-001B).

● SF-B2HH	ESD-Safe Brush Scrub Solvent Dispensing Bottle with Medium Hog Bristle Brush	2	98H2886	17.12

(79292)

CHEMASK® SOLDER MASKING AGENTS

RoHS Compliant Available

ITW Chemtronics®

- Plastic safe
- Nonflammable
- Ozone safe

Chemask® solder masking agents protect PC boards, plated thru-holes, contacts, pins, posts, terminals and gold fingers during wave soldering. They provide short-term high-temperature protection from molten solder to 515°F/268°C. All Chemask® masks are nonflammable, non-contaminating and will not leave ionic or corrosive residue. Available in convenient squeeze bottles for precision application or in gallons for automated applications.

Mfg. part nos. CM8 and **CM1** Chemask® peelable temporary masking agent is fast-curing and dries tack-free in 30 minutes. Easy-to-use, just peel off when dry. Latex material is compatible with flux systems and stable with cleaning solvents.

CM8 CHV8 CWF8

Mfg. Part No.	Description	Size	Stock No.	Price Each
● CM8	Chemask®	8 oz.	00Z1101	17.04
● CM1	Chemask®	1 gal.	88F5767	171.90

Mfg. part no. CHV8 Chemask® HV High Viscosity peelable temporary masking agent is useable within five minutes of application with preheat cycle. Thicker coating does not seep through thru-holes and offers more controlled application. Latex material is compatible with flux systems and stable with cleaning solvents.

● CHV8	Chemask® HV	-999 oz.	00Z1998	21.94

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WONDERMASK TEMPORARY SOLDER MASKS

RoHS Compliant Available

TECHSPRAY

- **Mfg. part no. 2204-8SQ** Wondermask® WSOL water-soluble, lead-free compatible, dissolves quickly
- **Mfg. part no. 2205-8SQ** Wondermask® W water-washable, water-soluble, lead-free compatible, dissolves quickly
- **Mfg. part no. 2211-8SQ** Wondermask® P peelable, quick-drying, noncorrosive, nonammoniated

2204-8SQ 2205-8SQ 2211-8SQ

Wondermask® temporary solder mask is applied over PCB thru-holes and pads to prevent soldering the protected areas. **Mfg. part nos. 2204-8SQ** and **220-8SQ5** water-soluble masks can be washed off either by hand or in an aqueous bath or inline system. **Mfg. part no. 2204-8SQ** water soluable mask is designed for closed-loop systems and will not clog ion filter beds. **Mfg. part no. 2211-8SQ** peelable mask can be peeled off after the soldering process is complete. Larger sizes available; *go online or call.*

Mfg. Part No.	Description	Size	Stock No.	Price Each
● 2204-8SQ	Wondermask® WSOL Water-Soluble Solder Mask	8 oz.*	06H2870	20.25
● 2205-8SQ	Wondermask® W Water-Washable Solder Mask	8 oz.*	96C6528	16.23
● 2211-8SQ	Wondermask® P Peelable Solder Mask	8 oz.*	96C6530	13.73
2222-16SQ	Wondermask® PX Peelable Solder Mask	16 oz.*	85W2099	27.66
2222-G	Wondermask® PX Peelable Solder Mask	1 gallon	85W2098	126.56

*Squeeze Bottle
(73838)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

TIP-TIN TIP TINNER/CLEANER

RoHS Compliant Available

PLATO®

Lead-free tip tinner/cleaner provides improved cleaning and retinning of highly oxidized soldering iron tips. This thermally-stable compound is residue-free and ESD and environmentally safe.

Mfg. Part No.	Description	Stock No.	Price Each
● TT-95	Lead-Free Tip Tinner/Cleaner	98H3029	9.90

(79330)

TIP TINNER/CLEANER

NEW

TENMA®

- Size: 0.5oz. can

This tip tinner and cleaner helps prevent oxidation and re-tins tips. Cleans tips so they last longer.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
21-10675	Tip Tinner, 0.5 oz. Can	57T2729	5.99

(211533)

SOLDER ACCESSORIES

RoHS Compliant Available

Multicore

MINI-FLUXERS AND CLEANER
Touch-up, rework, assembly made simple. Easy-to-use pen/marker-type dispenser contains no-clean flux or Prozone non-CFC cleaner.

TTC-LF™ Tip Tinner/Cleaner

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● M293321	Prozone Non-CFC Flux Cleaner	70C5164	10.35

SPOT-ON
Temporary, peelable resist, and water soluble. No residue or stains. **Sold in 250ml squeeze bottles.**

● M292961	Spot-On	49C9062	42.41

MULTI-TAK REPAIR PASTE — NO-CLEAN
Flux medium holds component in place. Aids in soldering and reflow assembly. **Sold in 10cc syringes.**

● M00449	MP200 Multi-Tak Repair Paste	26H5738	26.77

TTC-LF™ LEAD-FREE TIP TINNER/CLEANER
Handy, non-abrasive soldering iron tip tinner helps extend tip life. Easily wets hot soldering irons leaving a brightly tinned tip. Improves hand soldering efficiency. Adhesive pad allows easy mounting on or near the soldering iron holder. **Sold in 15 gram tins.**

● MM01921	TTC-LF™ Lead-Free Tip Tinner/Cleaner	55K4577	15.84

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SOLDERING TIP CLEANERS

NEW

TENMA®

Replacement brass coil for **mfg. part no. 21-4355** helps clean tips quickly without reducing tip temperature. **Mfg. part no. 21-11455** provides a water-free solution to cleaning soldering iron tips. Improves efficiency by cleaning tips without reducing tip temperature. **Mfg. part no. 21-11460** durable metal soldering iron holder is compatible with most independent soldering irons. Features a tip cleaner to easily clean tips without using water or reducing tip temperature.

Mfg. Part No.	Description	Stock No.	Price Each
21-10550	Replacement Brass Coil	56T2222	3.49
21-11455	Covered Tip Cleaner	93T9672	5.99
21-11460	Iron Holder with Tip Cleaner	93T9673	9.99

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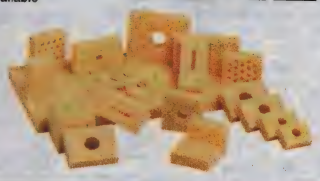
PLATO® SOLDER TIP CLEANING SPONGES

RoHS Compliant Available

PLATO®

All natural, premium sponges aid in keeping solder tips well tinned and help extend tip life. Removes surface oxides and excess solder from tip while exposing tip point definition. Manufactured from natural cellulose that holds many times its weight in water (expands to 1") and resists abrasion and tearing forces which occur during the tip wiping process. Meets ANSI (J-STD-001B) requirements for low sulphur content and fine porosity. Other sizes available; *go online or call.* **Sold in packages of 10.**



Mfg. Part No.	Size (In.)*	Description	Stock No.	Price per Pkg.
CS-1	1.50 x 2.12	Weller SP-60, Pace 4021-0005	57J3334	14.10
CS-36	2.25 x 3.50	Hexacon 8141 and 8141C	68K2251	18.80
CS-40	2.50 x 3.25	Edsyn Loner RS-199	68K2252	18.80
CS-44	2.70 x 2.70	Hakko 609-029 and A-1042, Weller TC205	68K2253	17.50
CS-44M	2.70 x 2.70	Weller EC305, Hakko A-1042 with Swiss Cheese holes	68K2254	19.20
CS-47	2.10 x 3.20	Metcal STSS-YS3 and STSS-WS5, Ungar 455 and UTC234	68K2255	17.50

*Dry, compressed state
(79316)

KLEEN-TIP™ SPONGE AND TRAY

Weller®

Mfg. part no. 400 sponge and tray used to clean soldering tips. Phenolic tray fastens to bench. *Order* **mfg. part no. 455** *replacement sponge separately below.*

400

Mfg. Part No.	Description	Stock No.	Price Each
400	Sponge and Tray Set	33F683	13.20
455	Replacement Sponge	33F684	3.50

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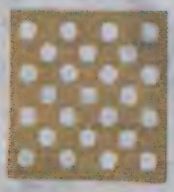
SOLDER TIP SPONGES

Weller®



EC305

TC205

Mfg. Part No.	Stock No.	Price Each
TC205	34F1030	1.30
EC305	66F9479	3.30

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DESOLDERING PUMPS

DURATOOL

- External diameter: 0.78"
- Length:7.64"
- Tip hole diameter: 0.13"

SD01154

Mfg. Type No.	Description	Stock No.	Price Each 1-99
SD01154	Aluminum Desoldering Pump	01N3629	2.60

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SOLDER SUCKER

DURATOOL

Easy to operate. Cleans solder instantly. Made of aluminum and plated with a special metal. Tip is replaceable.

Mfg. Part No.	Stock No.	Price Each 1-9
4005	84N1045	11.27

(32971)

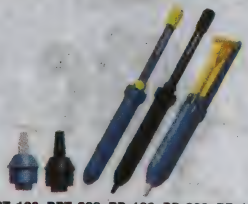
DP SERIES DESOLDERING PUMPS

RoHS Compliant Available

OK Industries
Div. of Jonard Industries

- Durable, Corrosion-Resistant Plastic Construction
- Precision Metal Plunger
- Fitted With Teflon® Tip

Made to exacting specifications and provides precise repeatable operation.



DPT-100 DPT-200 DP-100 DP-200 DP-140

Mfg. Part No.	Description	Stock No.	Price Each
DP-140	Compact Desoldering Pump 8" Long	90B0556	14.22
DP-100	High-Vacuum Desoldering Pump, 13" Long	16F043	24.25
DP-200	High-Vacuum Desoldering Pump, ESD Safe, 13" Long	16F044	30.39
DPT-100	1 Replacement Tip for Mfg. Part Nos. DP-100/DP-140	16F045	3.60
DPT-200	1 Replacement Tip for Mfg. Part No. DP-200	16F046	6.34

(5970)

ESD DESOLDERING PUMP

NEW

TENMA®

- Overall length: 13½"
- Cylinder length: 6½"
- Cylinder diameter: 1"

Provides safe means of desoldering connections, PC boards and components. Large capacity spring-loaded plunger quickly removes solder in a single action. Tools easily disassemble for fast cleaning, tip and "O" ring replacement. Internal plunger pin automatically purges solder from tip with each use.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
21-8225	Desoldering Pump, ESD, Spring Loaded Plunger	64K2020	10.19
21-8235	Desoldering Pump, Metal Case Spring Loaded	82K9060	8.09
21-8220	Desoldering Pump, Standard	72J7152	7.99
21-8227	Replacement "O" Rings, 2 pcs.	64K2023	0.49
21-8226	Replacement Tip ESD, for 21-8225	64K2021	1.69
21-8236	Replacement Tip, ESD for 21-8235	82K9069	1.49
21-8221	Replacement Tip, Standard Tip for 21-8220	95K9088	1.39

(212018)

DESOLDERING PUMPS AND ACCESSORIES

Weller®

Pumps remove solder manually. Lightweight, easy to operate.

Mfg. Part No.	Description	Stock No.	Price Each
7874B	Desolder Pump, 0.07" Tip, Antistatic	87F682	25.00
7880	Desolder Pump, 0.12" Tip	90F5881	26.60
7881	ESD Desoldering Pump	90F5882	36.50
7875B	Replacement Tip for **Mfg. part no. 7874B**	32F1009	5.40
7883	Replacement Tip for **Mfg. part no. 7881**	90F5884	9.10

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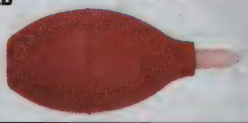
7805 DESOLDERING BULB

Weller®

Tip made of heat-resistant material which will not scratch PC boards.



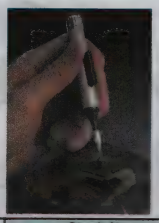
Mfg. Part No.	Stock No.	Price Each
7805	32F975	10.90

(5912)

VACUUM PICK-UP PEN

Weller®

Designed for handling SMT components. Light and easy to use. Durable steel case with pocket clip.



Mfg. Part No.	Stock No.	Price Each
WLSK200	92B0440	59.20

(46785)

ESD-SAFE CIRCUIT BOARD HOLDERS

Weller®

ESF-120ESD

WBH2

Mfg. part no. ESF120ESD circuit board holding vise is antistatic/ESD-safe making it ideal for soldering, desoldering and reworking. Boards and components are held in place by a cushioned arm. Allows 360° rotation in 15° increments. Adjusts for holding circuit boards up to 6¼″ x 9⅛″ (160 x 235mm).

Mfg. Part No.	Description	Stock No.	Price Each
ESF120ESD	Circuit Board Holding Vise	66F7803	59.20

Mfg. part no. WBH2 circuit board holder is an open-frame, antistatic/ESD-safe design made to work with all Weller's preheaters, including **mfg. part no. WHP1000**, *ordered separately on page 2003*. Lightweight yet stable, it's portable to easily adapt to any application. Ideal for R&D prototyping, production, or component rework. Holds circuit boards up to 10.24″ (260mm) wide x unlimited length. Fitted with a stop pin so x-y positioning can be repeated. Spring loaded arm simplifies board placement and removal.

WBH2	Circuit Board Holder	51R5764	333.60

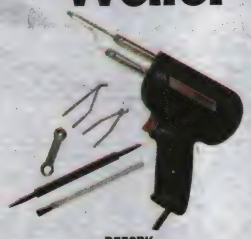
(19430)

HEAVY-DUTY SOLDERING GUN KIT

UL RoHS Compliant Available

Weller®

- Balanced Pistol-Grip Design
- Twin Lights To Illuminate Work
- 2-Position Trigger Selection of Dual Heats



D550PK

Mfg. part no. D550PK kit contains **mfg. part no. D550** soldering gun, 1 sealing tip, flux brush, soldering aid tool, 40/60 rosin-core solder, plastic carrying case, and booklet. UL listed.

Mfg. Part No.	Description	Stock No.	Price Each
D550PK	Soldering Gun Kit	33F132	62.40
D550	Soldering Gun	33F129	54.10
● 7250	2 Copper Soldering Tips	26M8402	5.00
● 7250N	Solder Tip with Nuts	26M8403	5.00
● 6140	Smoothing Tip with Nuts	33F138	5.00
● 7324	Switch for Dual Heat Models	33F163	13.20

(5856)

MEDIUM-DUTY SOLDERING GUN

UL RoHS Compliant Available

Weller®

- All-Purpose Soldering Gun Ready To Solder In 6 Seconds
- Fingertip Trigger Selection
- High-Efficiency Tin-Plated, Pure Copper Tip
- Compact, Balanced Pistol-Grip Design

Mfg. Part No.	Description	Stock No.	Price Each Each
8200	140/100W Soldering Gun	33F148	38.70
● 6110	2 Cutting Tips, Nickel-Plated Copper	33F135	5.40
● 6120	2 Smoothing Tips, Nickel-Plated Copper	33F136	5.40
● 8125	2 Premium Iron and Tin-Plated Tips	33F149	5.40
● 8125N	Solder Tip with Nuts	26M8404	5.40
● 7135W	2 Copper Soldering Tips	33F124	5.40
● 7135N	Solder Tip with Nuts	33F140	5.40

(5857)

HIGH-POWER SOLDERING GUN

Weller®

- High-Power Output: 300W In High Position, 200W In Low Position
- Nickel-Plated Copper Secondary
- Heat-Resistant Thermoplastic Housing
- Tin-Plated Copper Tip

Mfg. Part No.	Stock No.	Price Each
D650	92F7641	73.90

(5917)

SOLID STATE SOLDERING GUN

UL

Weller®

- Temperature controlled with fast 6-sec. heat-up, 700°F
- Interchangeable power heads give choice of 600°F or 700°F capability
- Designed for modern solid state electronic work
- UL and cUL listed

Mfg. Part No.	Description	Stock No.	Price Each
GT7A	Complete Gun with 700°F Power Head and 3/16″ Chisel Tip	35F2560	73.90
ACCESSORY			
6B	600°F Power Head and Cone Tip for GT7A	35F2563	51.30

(194834)

MASTER® AND VARITEMP® HEAT GUNS/ KITS

UL CSA

MASTER APPLIANCE

HG

HG Kit

VT750C

VTS-750

Fig. 1

Fig. 2

Fig. 3

Production line quality heat guns for high volume heat. Average air velocity: 3000FPM. Feature double-jacketed heater housing to protect mica-insulated ceramic heat element, and die-cast aluminum housing to protect motor assembly. Adjustable air intake and non-slip stand. Heavy-duty, oil-resistant 3-wire cordset with molded-on grounded 3-prong plug. 120V models are UL listed. **Mfg. part no. HG-201A** and **HG-301A** are CSA certified. 8L x 5.25W x 9.5″H (203.20 x 133.35 x 241.30). 3½ lbs. *Order additional heat elements and optional attachments separately below.*

MASTER® HEAT GUNS, 120V

Mfg. Part No.	Amps	Watts	Temp. (°F)	Stock No.	Price Each
HG-201A	5	600	200/300	37F1442	172.85
HG-301A	12	1440	300/500	37F1437	171.36
HG-501A	14	1680	500/750	37F415	175.10
HG-751B	14.5	1740	750/1000	37F422	175.10

MASTER® HEAT GUN KITS, 120V

Kits include heat gun, A-160-HG shrink attachment, 51543 spreader attachment, 51544 reducer attachment and 51013 storage case.

Mfg. Part No.	Amps	Watts	Temp. (°F)	Stock No.	Price Each
HG-301AK	12	1440	300/500	66K7454	223.14
HG-501AK	14	1680	500/750	58K3448	223.14
HG-751BK	14.5	1740	750/1000	66K7455	225.08

VARITEMP® HEAT GUNS

The Varitemp® **mfg. part no. VT750C** allows you to dial temperature from ambient to 1000°F– locks in place for continuous production use. 120V. Reinforced ceramic heat element has double-jacket housing for protection. Die-cast aluminum housing protects motor assembly. 3-wire, oil-resistant cordset. **Mfg. part no. VT-750CK** heat gun kit includes heat gun, A-160-HG shrink attachment, 51543 spreader attachment & 51544 reducer attachment and 51013 storage case. **Mfg. part no. VTS-750** deluxe heat gun includes pivoting handle and slide grip with removable stand. UL listed.

Mfg. Part No.	Amps	Watts	Temp. (°F)	Stock No.	Price Each
VT-750C	14.5	1740	Ambient - 1000	87F2611	244.10
VT-750CK	14.5	1740	Ambient - 1000	83K1752	300.94
VTS-750	14.5	1740	Ambient - 1000	59M8864	276.08

HEAT ELEMENTS FOR MASTER® AND VARITEMP® HEAT GUNS

Mfg. Part No.	For Use With	Stock No.	Price Each
HAS-042K	Master Appliance Model HG201A Heat Gun	37F1767	32.86
HAS-041K	Master Appliance Model HG301A Heat Gun	37F1769	32.49
HAS-011K	Master Appliance Model HG501A Heat Gun	37F1772	32.49
HAS-043K	Master Appliance Model HG751B Heat Gun	37F1774	33.43

ATTACHMENTS FOR MASTER® HEAT GUNS

Mfg. Part No.	Fig.	Description	Stock No.	Price Each
51309	1	0.250″ (5.08) Pinpoint Heat Attachment	37F427	18.32
A-160-HG	2	Baffle for Tubing to 0.750″ (19.05) O.D.	37F425	18.08
A-170-HG	3	Baffle for Tubing 0.750″ (19.05) to 2″ (50.8) O.D.	37F426	18.32

(5724)

PROHEAT HEAT GUNS AND KIT

MASTER APPLIANCE

PH-1100 PH-1000

PH-1100K

- Compact, lightweight, easy-to-use
- Balanced ergonomic design prevents operator fatigue
- Two heat settings 500°F or 1000°F (260°C or 540°C)
- Protective hand/switch guard and hanging loop
- **Mfg. part no. PH-1000** features Momentary Contact Safety Switch — shuts off if not held
- High impact durable housing
- cULus listed

Professional-quality, Proheat® industrial heat guns are ideally suited to activate adhesives, bend plastics, dry filler material, shrink tubing and much more. Air velocity: 4000 FPM/1219m/min. Air volume: 16 CFM/453 l/min. Rated: 120V, 60 Hz, 11A, 1300W. Nozzle opening: 0.88" I.D., 1.31" O.D. Size: 8.2" L x 3.0" W x 7.3" H. Includes 6 ft., 3-wire grounded cordset. **Mfg. part no. PH-1100K** Proheat® dual-temperature heat gun kit includes heat gun, 3½" spreader attachment, 1⅜" heat-shrink attachment, and durable storage/carrying case. *Order from a broad range of specialty attachments for* **mfg. part nos. PH-1100** *and* **PH-1000** *heat guns separately on this page.*

Mfg. Part No.	Description	Stock No.	Price Each
PH-1100	Proheat® Dual Temperature Heat Gun	93F7822	137.30
PH-1100K	Proheat® Dual Temperature Heat Gun Kit	24K3796	168.48
PH-1000	Proheat® Momentary Contact Heat Gun	35R0003	151.71

(5625)

VARITEMP® HEAT GUNS

MASTER APPLIANCE

PH-1200K

PH1200-1

PH-1200

- Compact, lightweight, easy to use
- Variable temperature 130°F to 840°F (54°C to 449°C)
- Special electronic closed loop temperature control system
- Maintains constant temperature
- Protects unit from overheating when using specialty attachments
- Patented heat controls and housing design
- Base provides built-in stand for hands-free use

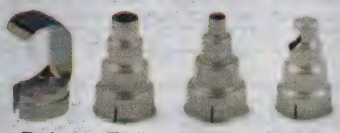


Fig. 1 Fig. 2 Fig. 3 Fig. 4

SPECIFICATIONS:

Voltage:	120V, 60Hz, 11A
Output:	1300W max.
Temperature (Variable):	Variable 130°F - 840°F (49°C - 449°C)
Airflow Volume (Variable):	15CFM
Airflow Velocity:	3584FPM
Nozzle Opening:	0.87" diameter
Cordset:	6', 3-wire grounded
Dimensions: (L x W x H)	8.2 x 3.0 x 7.3"
New Weight:	26 oz. (737g)
Motor:	Permanent magnet

Mfg. part no. PH-1200K Varitemp® heat gun kit includes heat gun, attachments and storage case. *Order replacement attachments separately below.*

Mfg. Part No.	Description	Stock No.	Price Each
PH-1200	Heat Gun	93F7823	220.44
PH-1200K	Heat Gun Kit	24K3797	287.33
PH1200-1	Heat Shrink System	50B4987	235.03

ATTACHMENTS FOR VARITEMP® AND PROHEAT® HEAT GUNS

Mfg. Part No.	Fig.	Description	Stock No.	Price Each
35017	1	Shrink Attachment	93F7824	17.67
35293	2	9/16" Reducer	24K0649	17.67
35294	3	5/16" Reducer	37K5963	17.67
35292	4	Specialty Connector	73J7304	17.67

(5725)

MASTER-MITE® HEAT AND ESD HEAT GUNS

MASTER APPLIANCE

Quiet-running, brushless, 120V continuous-duty motor. 3-wire grounded cord set. High-impact plastic housing withstands hard knocks. Air velocity just right for benchtop use. Won't blow small components around work area. Adjustable stand and 1" heat shrink attachment are standard for both models. **Mfg. part no. 10008** has standard 650°F heat element. ESD **mfg. part no. 10012** has 800°F element and conductive housing that will not build up or hold a static charge. Both are UL listed. **Mfg. part no. 10008** also CSA certified.

Mfg. Part No.	Amps	Temp. (°F)	Stock No.	Price Each
10008	4.0	650	37F1450	136.05
10012	4.5	800	92C2530	216.38

ADDITIONAL HEATING ELEMENTS FOR MASTER-MITE® GUNS

Mfg. Part No.	Color Code	Temp. (°F)	Watts	Stock No.	Price Each
20013	Silver	650	475	37F2901	40.43
20014	Black	800	525	37F2902	40.43

(5726)

DUAL TEMPERATURE HEAT GUN AND KIT

RoHS Compliant Available

DURATOOL

- Votage and frequency: 120V–60Hz
- Rated power I/II: 750W/1500W
- Temperature I/II: 300°C/500°C
- Air flow I/II:280/480 l/min.
- Soft grip handle
- Housing: UL approval

Heat guns feature double insulated housing, rocker switch and 1.8m SJT 16AWG cable. Element construction is reinforced mica composite without ceramic. Life 100 hrs. **Mfg. part no. MC35843** kit includes 1 ea. hot air gun, concentrated scoop, fish tail nozzle and carrying case.

Mfg. Part No.	Description	Stock No.	Price Each 1-2
MC35842	Hot Air Gun	91R2105	46.57
MC35843	Hot Air Gun Kit	91R2106	51.01
ACCESSORIES			
MC35844	Reflector Nozzle for Hot Air Gun	91R2107	8.66
MC35845	Spreader Nozzle for Hot Air Gun	91R2108	8.66

(190796)

ELECTRONIC HEAT GUNS

RoHS Compliant Available

STEINEL® German Quality

34830

34850

34870

34261

34885

ELECTRONIC THERMOCOUPLE HEAT GUNS
STEINEL new generation of heat guns use state of the art technology to maximize precision and durability. All feature impact resistant housing, double insulated rubber power cord, exclusive Duratherm™ heating element for long life and accept a full range of reduction, welding or reflector nozzles and accessories.

ELECTRONIC HEAT GUN
Ergonomic, electronically controlled heat gun.

Mfg. Part No.	Volts	Watts	Description	Temp. Range	Stock No.	Price Each
34830	120	1500	HL 1910E	+120°F to +1100°F	33P6177	255.40
34261	120	1500	HG 2000E	+120°F to +1100°F	86R9721	231.70

INTELLITEMP™ AND VARIABLE TEMPERATURE ELECTRONIC HEAT GUNS
Microprocessor controlled enabling temperature selection in 10°F increments. Gets hot fast , cools fast and lasta a long time.

34850	120	1500	HL 2010E	+120°F to +1150°F	86R9738	280.20
34851	120	1500	HL 2010E	+120°F to +1150°F	86R9739	305.90

CONTINUED

HEAT GUNS

ELECTRONIC HEAT GUNS (CONT.)

Mfg. Part No.	Volts	Watts	Description	Temp. Range	Stock No.	Price Each
LOC Lockable Override Control™ of temperature and airflow output settings, non-slip soft stand. LCD display enables temperature selection in 10°F increments. LOC enables user to control the temperature without others changing desired heat range, Quality and assurance.						
34870	120	1600	HG 2310	+120°F to +1200°F	88K0941	303.80
34871	120	1600	HG 2310	+120°F to +1200°F	86R9744	329.60
BLACK BOX TECHNOLOGY Same Programmable Intellitemp™ heat guns with LCD display technology with addtional safety feature preventing auto on use when gun is left in the on position and the master switch or power outage turns off all electricity. Gun does not allow auto on when electricity is turned back on.						
34885	120	1600	HG 2310 Black Box	+120°F to +1200°F	01P5240	427.40
ESD SAFE PROGRAMMABLE INTELLITEMP™ HEAT GUN LOC Lockable Override Control™ of temperature and airflow output settings, non-slip soft stand. LCD display enables temperature selection in 10°F increments.						
34890	120	1600	HG 2310	+120°F to +1200°F	86R9749	317.20

ACCESSORIES

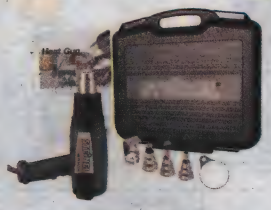
Mfg. Part No.	Description	Stock No.	Price Each
01410	Heat Gun Stand	96M0514	39.10
07061	9mm (3/8") Reflector Nozzle	08H0133	25.70
07461	14mm (9/16") Reflector Nozzle	08H0135	17.50
07051	39mm (1-1/2") Reflector Nozzle	24R5303	15.20
07062	9mm (3/8") Reduction Nozzle	08H0137	15.20
07071	14mm (5/8") Reduction Nozzle	65J9284	15.20
07081	20mm (3/4") Reduction Nozzle	65J9287	15.20

(191942)

HEAT GUN KITS

RoHS Compliant Available

STEINEL® German Quality



Electronics Kit

Silver Anniversary Heat Gun Kit

CLASSIC HEAT GUN KIT
Kit includes: HL 1910 E variable temperature heat gun with electronic thermocouple adjustable temperature wheel, 14mm and 39mm reflector nozzles, 9mm reduction nozzle, overhead hanger, carrying case and application hand book.

Mfg. Part No.	Description	Stock No.	Price Each
34838	Classic Heat Gun Kit w/HL1910E	86R9737	272.95

PLASTIC WELDING KIT
Kit includes: HL 2010 E programmable IntelliTemp™ heat gun with LCD temperature display, 39mm reflector nozzle, 9mm reducer nozzle, 20mm lap welding tip, welding rod tip, ABS, PP, PVC, LDPE, HDPE plastic welding rods applications guide book all provided in heavy duty carrying case.

● 34854	Plastic Welding Kit w/HL2010E	86R9741	329.60

MULTI-PURPOSE KIT
Kit includes: HL 2010 E programmable IntelliTemp™ heat gun with LCD temperature display, welding rod assortment: ABS, PP, PVC, LDPE, HDPE 9mm reducer nozzle, welding tip, 9mm, 39mm reflector nozzles, overhead security hanger applications guide book all provided in heavy duty carrying case.

● 34856	Multi-Purpose Kit w/HL2010E	86R9743	354.30

SILVER ANNIVERSARY HEAT GUN KIT
Kit includes: HL 2010 E programmable IntelliTemp™ heat gun with LCD temperature display, welding rod and shrink tube aassortments, 75mm spreader nozzle, 14mm, 39mm, reflector nozzles, 9mm reducer nozzle, welding tip all in a silver carrying case.

● 34859	Silver Anniversary Kit w/HL2010E	84T1834	299.99

AUTOMOTIVE KIT
Kit includes: HG 2310LCD programmable IntelliTemp™ heat gun with LCD temperature display, accessories incl. welding iron, 9mm, 20mm reducer nozzles, 2 pcs. wire mesh, 16 pcs. thermoflex™ welding rod, temperature guard, DVD, applications guide book and heavy duty carrying case for repairing plastics, windshields, seats and other body shop work.

34874	Auto Body Welding Kit w/HG2310	07P8748	391.40

ELECTRONICS KIT
Kit includes: HG 2310 LCD heat gun, accessories incl. 9mm, 14mm, and 39mm reflector nozzles,9mm reduction nozzle, overhead security hanger, applications guidebook all provided in a handy carrying case for applying heat shrink tubing, connectors, and de-soldering circuit boards.

34875	Electronics Kit w/HG2310LCD	86R9745	353.30

HG3002 HEAT GUN AND NOZZLE KIT
Kit includes: HG 3002 heat gun, 9mm, 14mm reducer nozzles and 39mm reflecter nozzle.

34589	HG3002 Heat Gun & Nozzle Kit	27T2411	339.90

ACCESSORY

07403	Wire Protection Tube for xx10 Heat Guns	86R9673	17.50

(191943)

PRECISION HOT AIR TOOL

STEINEL® German Quality

34735

- Temperature: 750°F (without nozzle), 930°F (with 7mm reducer incl.)
- Air flow rate: 3.5 CFM
- Output: 300W
- Voltage: 120VC/60Hz
- Wt.: 660g.
- Power cord: industrial grade rubber, length 6 ft.
- Dimensions: 9 1/2 x 2 1/2 x 7"

ESD safe, ergonomically optimized precision hot air tool features innovative LED light to illuminate work area and targeted 3.5 CFM air flow ensures an accurate result. LED serves as a convenient "on" indicator and safety resets help prevent surface contact with hot nozzle. Built-in security hanger for overhead suspension.

Mfg. Part No.	Description	Stock No.	Price Each
34735	HG350 S Hot Air Tool	86R9722	139.00
34890	HG2510 ESD Program Heat Gun	86R9749	317.20

ACCESSORY

07730	7mm (1/4") Reducer for HG 350ESD	86R9689	4.10
07403	Wire Protection Tube for HG 2510 ESD	86R9673	17.50

(191945)

TWO AND THREE STAGE PROFESSIONAL HEAT GUNS

RoHS Compliant Available

STEINEL® German Quality

Mfg. part no. 34820:
- Temperature: 120°F/750°F/1100°F
- Air flow: 3.6/ 10.0 /15.9CFM
- Switch: 120°F/3.6 CFM 750°F/ 10.0 CFM 1100°F/15.9 CFM
- Element: DuraTherm™ Ceramic
- Voltage: 120VAC/60Hz
- Wt.: 28 oz.

Mfg. part no. 34810:
- Temperature: 575°F/950°F
- Air flow: 8.5/14.8CFM
- Switch: 575°F/8.5 CFM 950°F/14.8 CFM
- Element: Reinforced Ceramic / Mica
- Voltage: 120VC/60Hz
- Wt.: 25 oz.

34810

TWO-STAGE HEAT GUN
General purpose heat gun with two temperature settings is designed for safe, convenient professional and industrial use. Lightweight, ergonomic design ensures comfortable long-term operation.

Mfg. Part No.	Volts	Watts	Description	Temp. Range	Stock No.	Price Each
● 34810	120	1300	HL 16105	+575°F to +950°F	86R9729	124.60

THREE-STAGE HEAT GUN
Multi-purpose heat gun with cool air stage and choice of 2 temperature settings for convenient hand-held or benchwork. Exclusive DuraTherm™ heating element ensures long life and even heat.

34820	120	1400	HL 18105	+120°F to +1100°F	86R9732	151.40

(191946)

ULTRAHEAT HEAT GUNS AND KITS

UL RoHS Compliant Available

UltraHEAT™

UltraHEAT™ are designed to to combine high performance with exceptional value. All provide double insulated power cord for safe operation. General purpose UltraHEAT™ heat guns feature reinforced heating elements and impact resistant housings to ensure durability.

UltraHEAT™ HEAT BLOWER
UltraHEAT™ heat blower quick heat-up, cool air stage for rapid cool down and ultra quiet operation. Rugged yet lightweight construction with removable stand for hand held use. Safety cooling tube. Field changeable plug-in heating element.

Mfg. Part No.	Volts	Watts	Description	Temp. Range	Stock No.	Price Each
34075	120	1750	SV 750 Blower	+750°F to +1000°F	86R9715	103.00
DUAL TEMPERATURE HEAT GUN General purpose heat gun with 2 output settings.						
34100	120	1300	SV 800	+600°F to +950°F	86R9716	48.40
VARIABLE TEMPERATURE HEAT GUN Variable temperature and cool air stage for maximum versatility. Ergonomic design and soft grip handle for comfortable operation.						
● 34103	120	1400	SV 803	+140°C to +1050°C	10R1446	68.00
VARIABLE TEMPERATURE HEAT GUN KIT Kit includes: SV 803 heat gun, 3" spreader, 1 1/2" reflector, heavy duty carrying case.						
● 34104	120	1400	SV 803 Kit	+140°F to +1050°F	86R9719	86.50

(191947)

STANDARD-DUTY 1000W HEAT GUN

RoHS Compliant Available

Weller®

- Dual Temperature: 1200°F (1000W) and 790°F (400W)
- Ideal For Most Applications
- Lightweight, Only 22 Ounces!
- 3-Wire Grounded Plug With 6' Cord
- 3-Way Switch (High-Off-Low)
- UL Listed

1095

1080

1082

Mfg. Part No.	Description	Stock No.	Price Each
1095	General-Purpose Heat Gun	87F3433	62.70
● 1080	Reducer for Concentrating Heat	87F1629	7.80
● 1082	Reflector for Heat Shrink	87F1631	7.80

(5889)

ESD-SAFE LIGHTWEIGHT 250W HEAT GUN

RoHS Compliant Available

Weller®

6966C

6956

6957

6958

6964

- Long-Life Heater and Fan Components
- Approx. 750°F to 800°F Hot Air at Nozzle
- 3-Position Switch (Hot-Off-Cool)
- 3-Wire Grounded Plug With 6' Power Cord
- Weighs Only 13 ounces!

Mfg. part no. 6966C heat gun is designed for assembly and repair applications in production plants, labs and service shops. Ideal for shrink tubing and vinyl/T.F.E., epoxy curing, drying and cooling. Heat gun comes complete with the following 4 attachments (shown): **mfg. part no. 6956** ½" reflector, **mfg. part no. 6957** 1½" reflector, **mfg. part no. 6958** reducing baffle and **mfg. part no. 6964** 0.20" precision reflector. UL listed. *Order replacement attachments and* **mfg. part no. 6965A** *heat gun wire stand separately below.*

Mfg. Part No.	Description	Stock No.	Price Each
6966C	Heat Gun with 4 Attachments	35F3074	143.50
REPLACEMENT ATTACHMENTS AND HEAT GUN WIRE STAND			
● 6956	½" Reflector	87F1633	2.90
● 6957	1½" Reflector	87F1634	3.90
● 6958	Reducing Baffle	87F1635	5.60
● 6964	0.20" Precision Reflector	87F1632	13.60
6965A	Heat Gun Wire Stand	35F3075	25.40

(5890)

MAGNA-LITE BUTANE-POWERED TABLETOP TORCH

Weller®

- Fast, reliable Piezo electronic ignition system
- Wind-resistant 2400°F flame
- Adjustable flame length and level of heat output
- Up to 60 minutes continuous use
- Built-in stands holds torch upright for tabletop use
- Flame lock-on allows hands-free operation
- Ergonomic textured rubber grip for comfortable control

Powerful, compact and portable Magna-Lite™ butane-powered tabletop torch is perfectly suited for heat-shrink tubing, fusing rope ends, frozen or rusted locks, nuts and bolts, soldering and brazing, heating and bending thin metal, and many other uses around the home, shop, boat or campsite. Refillable in just 20 seconds using premium butane fuel; *ordered separately below.* Child-resistant safety trigger lock meets Consumer Products Safety Commission (CPSC) guidelines.

ML200

Mfg. Part No.	Description	Stock No.	Price Each
ML200	Magna-Lite™ Butane-Powered Tabletop Torch	10M6684	25.80
WB2	Premium Butane Fuel — 1 fl.oz. Cylinder	10B398	5.60
WB1	Premium Butane Fuel — 2.1 fl.oz. Cylinder	00Z1606	4.10

(89373)

MAGNA-LITE BUTANE-POWERED MICRO TORCH

Weller®

- Piezo electronic ignition system for reliable ignition every time
- Blue LED light illuminates work in dark conditions
- Adjustable flame height (2400°F)
- Nozzle cover prevents accidental ignition
- Handy keyring lanyard

Portable, self-igniting, self-contained Magna-Lite™ butane-powered micro torch. Ideal for heat shrink tubing, fusing rope ends, frozen locks, camping, first aid, labs and boating. Runs up to 25 minutes on a full tank. Refillable with premium butane fuel; *ordered separately below.*

ML100

➤ CONTINUED ➤

MAGNA-LITE BUTANE-POWERED MICRO TORCH (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
ML100	Magna-Lite™ Butane-Powered Micro Torch	84K0484	9.80
WB2	Premium Butane Fuel — 1 fl.oz. Cylinder	10B398	5.60
WB1	Premium Butane Fuel — 2.1 fl.oz. Cylinder	00Z1606	4.10

(88541)

MICROTORCH™ MT-51 SERIES

MASTER APPLIANCE

- Produces a Broad Yellow or Blue Pinpoint Adjustable, Wind-Resistant Flame with Temperatures Up to 2500F
- Built-In Self-Igniting Switch
- Meets Consumer Products Safety Commission (CPSC) Child Safety Requirements
- Runs Approximately 2 Hours on a Full Charge (Unit is Shipped Without Fuel)

MT-51 MT-51B MT-51H

MT-51 is a hand held or table top butane-powered Microtorch™. Wide stable base makes it perfect for hands-free use. **Mfg. part no. MT-51** is an open flame torch only. **Mfg. part no. MT-51B** includes 15/16 oz. can of Ultratane butane. Butane under 1 oz.ships without hazardous material charges. **Mfg. part no. MT-51H** is a "2 in 1" open flame torch and flameless heat tool with heat shrink attachment.

Mfg. Part No.	Stock No.	Price Each
MT-51	34C6783	32.99
MT-51B	60M1691	38.08
MT-51H	66K7500	49.98

(68889)

BUTANE-POWERED, TABLE-TOP MICROTORCH WITH STABLE BASE

MASTER APPLIANCE

- Built-in self-igniting system includes a safety lock that prevents unintentional ignition, locks for storage
- Stable 3" dia. circular base is perfect for bench-top use
- Butane-powered, eliminates the need for external fuel tanks, costly piping or unsightly hoses
- Large capacity, self-contained, refillable metal fuel tank
- 60 minutes continuous run time with a full charge
- Adjustable broad or pinpoint flame with temperatures up to 2500°F/1300°C

Mfg. part no. MT-30 Microtorch™ is ideal for industrial, institutional, scientific and dental laboratory applications, including shrinking tubing and specialty connectors, soldering, heating and spot drying materials, heating wax and jewelry repairs. Compact, low-profile design is easily moved to any location or conveniently stored in a small space. Size: 5.1" L x 3" W x 3.5" D. Use only Master Appliance® Ultratane® butane fuel; *ordered separately below.*

Mfg. Part No.	Description	Stock No.	Price Each
MT-30	Butane-Powered, Table-Top Microtorch™ with Stable Base	35R1515	47.60
ULTRATANE® BUTANE FUEL			
10448-72	Ultratane® Butane Fuel, 15/16 oz. (26 gram) Canister	96B6111	7.40
51773-72	Ultratane® Butane Fuel, 5⅛ oz. (145 gram) Canister	64M0769	7.53

(172540)

THERMATORCH BUTANE POWERED TORCHES

STEINEL® German Quality

ThermaTorch™ features state-of-the-art waterproof piezo electronic ignition, ergonomic designs convenient for hand-held or bench work, fully adjustable flames and easy refilling with any standard butane gas.

71151

THERMATORCH™ 270
High output butane torch provides the most powerful and stable butane flame available for demanding jobs. Designed with features to withstand the rigors of daily professional use. Refillable 60ml tank for 120 minutes of continuous use (90 min. at mid setting).

Mfg. Part No.	Description	Stock No.	Price Each
71270	TT270 ThermaTorch Butane Powered Torch	25T0753	58.99

THERMATORCH™ 175
Butane torch with adjustable airflow and flame control. High capacity 60ml refillable fuel tank for up to 220 minutes continuous use. Features heavy duty brass construction and removable safety stand.

71151	TT175 ThermaTorch Butane Powered Torch	25T0752	27.99

THERMATORCH™ MINI
Windproof lighter with waterproof automatic ignition system. Features simple twist flame adjustment and protective auto-flip cap. Refillable 5ml tank for 30 minutes of continuous use.

71030	ThermaTorch Butane Torch Lighter	11N6445	12.99

ACCESSORY

70001	BT 01 Butane Fuel	25T0751	8.00

(194826)

CUBE® 3D PRINTER AND ACCESSORIES

NEW

3DSYSTEMS

- Wi-Fi printing
- 2nd generation Cube
- Print up to a 5.5" (140mm) cube
- Cube software included: load, check, print
- Easy load cartridge
- Mac & Windows compatible
- 5 Model colors

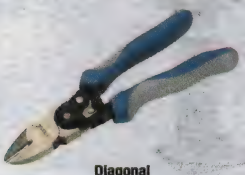
Cubify Cube Printer 2nd Generation is a personal single head 3D printer based on Plastic Jet Printing (PJP) methods. It is possible to print vibrant color models of sizes up to 5.5 x 5.5 x 5.5" / 139.7 x 139.7 x 139.7mm. It has Plug and Play simplicity and WiFi for very fast and easy use.The Cube Printer 2nd Generation can print with both ABS and PLA Plastics. PC with minimum requirements: Processor: multi-core processor - 2GHz or faster per core, System RAM: 2 GB, Screen Resolution: 1024x768.

Mfg. Part No.	Description	Stock No.	Price Each
381000	Cube 3D Printers, 2nd Generation, Silver	95W1842	1299.00
382000	Cube 3D Printers, 2nd Generation, White	95W1843	1299.00
383000	Cube 3D Printers, 2nd Generation, Magenta	95W1845	1299.00
384000	Cube 3D Printers, 2nd Generation, Green	95W1846	1299.00
385000	Cube 3D Printers, 2nd Generation, Blue	95W1847	1299.00
CUBE PRINTER CARTRIDGES			
350162	Red ABS	95W1810	54.53
350163	Green ABS	95W1811	54.53
350164	Blue ABS	95W1812	54.53
350165	Yellow ABS	95W1813	54.53
350166	White ABS	95W1814	54.53
350167	Black ABS	95W1815	54.53
350168	Tan ABS	95W1816	54.53
350169	Magenta ABS	95W1817	54.53
350170	Neon Orange ABS	18X3336	49.00
350171	Neon Green ABS	18X3337	49.00
380136	Teal ABS	18X3370	49.00
380137	Purple ABS	18X3371	49.00
380138	Brown ABS	18X3372	49.00
380140	Glow in the Dark Green ABS	18X3373	49.00
380141	Glow in the Dark Blue ABS	18X3374	49.00
380142	Red PLA	95W1831	54.53
380143	Green PLA	95W1832	54.53
380144	Blue PLA	95W1833	54.53
380145	Yellow PLA	95W1834	54.53
380146	White PLA	95W1835	64.56
380147	Black PLA	95W1836	54.53
380148	Tan PLA	95W1837	54.53
380149	Magenta PLA	95W1838	54.53
ACCESSORY			
380159	Cubestick	95W1840	10.25

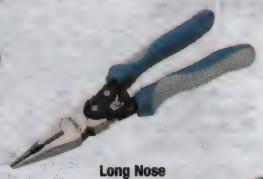
(211392)

PRO SERIES COMPOUND-ACTION PLIERS

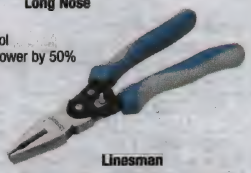
CRESCENT



Diagonal



Long Nose



Linesman

- Ergonomic co-molded, non-slip grips for added comfort and control
- Patented compound high-leverage design that increases cutting power by 50%
- Chrome vanadium alloy steel for superior strength and durability
- Heat-treated joint rivet for smooth and consistent operation
- Steel spring holds jaws comfortably open
- Induction hardened cutting edges for long life
- ⅓ lighter than standard pliers to help reduce fatigue
- Safety lock keeps pliers securely closed when not in use

Pro series compound-action pliers offer a winning combination of increased power and unparalleled comfort for exceptional ease of use. Advanced compound-action design provides up to 50% more cutting or holding power with the same effort compared to standard pliers. Ergonomically designed grips are 30% wider than those on standard pliers, therby spreading out the load of the grip against the fingers and palm for much improved comfort and added control. Cut capacity: 11 AWG.

Mfg. Part No.	Description	Stock No.	Price Each
PS5429C	9" Pro Series Diagonal Compound Action Pliers	18M9997	28.54
PS6549C	9" Pro Series Long Nose Compound Action Pliers	18M9998	28.54
PS20509C	9" Pro Series Linesman Compound Action Pliers	18M9996	28.54

(89565)

COMBINATION SLIP-JOINT PLIERS

CRESCENT

H28N

G210CV

- Sharp bias-cut gripping teeth bite in to hold better for more turning power
- Low-profile riveted joint maintains close tolerances for superior cutting and gripping
- Deeper wire cutter is repositioned closer to joint reducing cutting effort
- Forged alloy steel, accurately machined and spring tempered for strength and durability with less weight
- Bright, polished nickel-chrome plating for improved corrosion resistance
- Knurled handles or non-slip cushion grips for added comfort and control

Refined and improved for maxium strength, durability and performance these combination slip-joint pliers are designed for gripping and turning round objects such as pipes, rods, pins. All feature 2-position curved-style nose.

Mfg. Part No.	Description	Jaw Capacity (In.)	Stock No.	Price Each
H26CVSMLN	6½" Cee Tee Co.® Combination Slip-Joint Pliers with Cushion Grip	25	68R2872	10.24
H28N	8" Combination Slip-Joint Pliers with Knurled Handles	25	51R1972	10.02
G210CV	10" Motor Kit Combination Slip-Joint Pliers with Cushion Grip	35	09B9214	14.48

(89605)

HEAVY-DUTY SLIP JOINT PLIERS

DURATOOL

250mm (10") slip joint pliers have serrated jaws, DuoForm cadmium-free plastic handles with slip guard. Jaw capacity, max: 36mm.

Mfg. Part No.	Description	Stock No.	Price Each 1-24
D00632	Slip Joint Pliers, 250mm	61M5961	28.95

(116832)

LOCKING PLIERS

DURATOOL

- Drop forged, heat treated, serrated steel jaws
- Adjustment screw and quick release lever
- Black finish

TL10323

Mfg. Part No.	Description	Stock No.	Price Each 1-24
TL10323	Locking Pliers, 4 pc	99M1250	23.41

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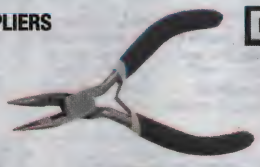
MINI LONG NOSE PLIERS

DURATOOL

- Handle type: Double Dipped
- Jaw type: Long Nose
- Drop forged

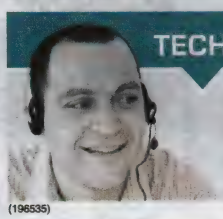


TL10328

Mfg. Part No.	Description	Stock No.	Price Each 1-99
TL10328	Mini Long Nose Pliers, 4.72"	97M9398	3.31

(116777)

TECHNICAL SUPPORT HOTLINE



Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

ESD SNIPE NOSE PLIERS

DURATOOL

D00654

D00659

ESD electrostatic discharge certified. Chrome-vanadium steel Snipe Nose Pliers have plain jaws and spring-release handles. 2-component handles with slip guard. Length:130mm. Bent Nose are at 30° angle.

Mfg. Part No.	Description	Stock No.	Price Each 1-24
D00654	Straight Snipe Nose ESD Pliers	61M5983	32.73
D00659	Angled Snipe Nose ESD Pliers	61M5988	36.79

(116840)

PLIER SETS

DURATOOL

TL10331

22-9750

22-8900

TL10332

D00642

6-PIECE MINI PLIER SET
Ideal for precision electronic work. Lightweight, ergonomic grip. All pliers are approximately 5" long. Set includes: Micro cutter, Long nose, Bent nose, Flat nose, Fine tip needle nose, Long nose with side cutter. Convenient padded zipper case for tool storage.

5-PIECE MINI PLIER SET
Five-piece set comes organized in a zippered carry case and features soft finish, ergonomic handles for a comfortable grip. Includes: 5" round nose pliers, 4" top cutter pliers, 5" flat nose pliers, 4xxx" diagonal cutting pliers, 4xxx" combination pliers.

5-PIECE FULL-SIZE PLIER SET
The handy pliers in this set are drop forged carbon steel, hardened and tempered for outstanding durability. Precision machine jaws for rigid use. Ergonomically designed double injected handles for a better grip that reduces user fatigue. Set includes: 7" diagonal cutting pliers, 7" combination pliers, 8" long nose pliers, 8" slip joint pliers, 10" water pump pliers.

3-PIECE FULL-SIZE PLIER SET
A set of 3 of the most regularly used pliers. Bi-material cushion grip handles. Drop forged, heat treated steel. Fully polished heads. Contents: 7" Diagonal pliers, 8" Combination pliers, 8" Long nose pliers.

3-PIECE VDE PLIER SET
Chrome vanadium steel pliers feature 2-color handles with slip guard. Individually tested to 10,000V. Meet VDE 0682-0201, IEC 60900. Set includes 160mm (6¼") diagonal pliers, 180mm (7") combination pliers, and 200mm (8") long nose pliers.

Mfg. Part No.	Description	Stock No.	Price Each
22-8900	6-Piece Mini Plier Set	99M1266	27.48
TL10331	5-Piece Mini Plier Set	99M1252	14.42
22-9750	5-Piece Full-Size Plier Set	99M1263	23.26
TL10332	3-Piece Full-Size Plier Set	99M1253	17.42
D00642	3-Piece VDE Plier Set	61M5971	101.54

(116778)

DURATOOL AT NEWARK ELEMENT14

For your production and facilities needs, from soldering stations to tool sets & more.
newark.com/duratool

(212563)

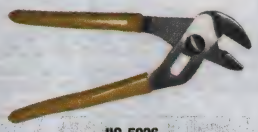
PROFESSIONAL-QUALITY PLIERS

RoHS Compliant Available

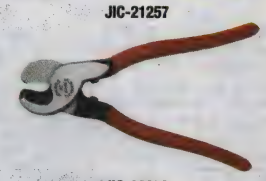
JONARD INDUSTRIES CORP.

JIC-7858

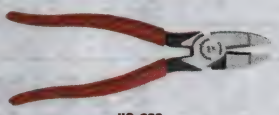
JIC-21257



JIC-5026



JIC-63050



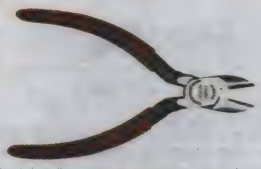
JIC-683

BCOMB

JIC-891

JIC-2288

DIAGB5



DIABVNOTCH

Manufactured to the highest quality standards using specially-forged alloy steel with plastic dipped comfort-grip handles. **Mfg. part no. DIABVNOTCH** pliers feature a V-notch with stripping W-notches on jaws. **Mfg. part no. JIC-891** connector-crimper pliers for UG, UR, UY connectors. **Mfg. part no. JIC-7858** plier with two stripping holes and stripping V-notches. **Mfg. part no. JIC-63050** is designed with a shear-type jaw for cutting aluminum and soft copper. Not for use on steel or ACSR type cables. Cuts up to 100-pair cables. Red handle 9 ½" long. **Mfg. part no. BCOMB** pliers does not have dipped handles. **Mfg. part no. JIC-22148** five tools in one, combines crimper for UR/UY/UG, AMP tel splice connectors, 709 series connectors, crimping "B" type connectors and a long nose pliers.

Mfg. Part No.	Description	Length (in.)	Stock No.	Price Each
● DIAGB5	Diagonal General-Use Pliers		23K8769	18.75
● DIABVNOTCH	Diagonal Crushing-Slitting Pliers		23K8768	21.96
JIC-683	Linesman B-Side Heavy-Duty Cutting Pliers		88H9407	22.15
JIC-891	Connector-Crimping Pliers with Side Cutters		48F5763	18.48
JIC-2288	High-Leverage Diagonal Cutting Pliers		23K8853	21.19
● JIC-2488	High Leverage Diagonal Cutter Angled Head	8.625	77R1988	20.91
JIC-7858	Telecom Diagonal Cutting Pliers		48F5762	26.64
JIC-21257	Telecom Long Noise Crushing-Stripping Pliers with Side Cutters		48F5761	25.92
● JIC-842	Telecom Long Nosed Pliers	6.875	88H9409	17.66
● JIC-5026	Pump Plier 6"		71K5355	11.11
● JIC-50210	Pump Pliers - 10"		61M0804	12.97
● JIC-50212	Pump Pliers - 12"		61M0805	15.92
● JIC-63050	High Leverage Cable Cutter 9 1/2"		71K5356	20.91
● BCOMB	Slip-Joint Crushing-Slitting Pliers with Side Cutters		23K8729	11.75
● JIC-22148	Combo Crimper Long Nose Pliers	6.875	23K8852	21.31

(84360)

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Affordable, performance board level & box build components at
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(212569)

PLIERS

CURVED NOSE PLIERS

JONARD INDUSTRIES CORP.

JIC-3385

JIC-3026

- Bent nose for maximum visibility
- Perfect for use in confined areas
- Comfortable ergonomic handles

Mfg. part no. JIC-3026 curved long nose plier features a nose bent 70° for maximum visibility. Ideal for use in confined areas. Knurled jaws for sure wrapping and looping. Comfortable ergonomic yellow plastic handles. **Mfg. part no. JIC-3385** curved needle nose plier features a nose bent 60° for maximum visibility. Used in confined areas for bending and forming fine wire. Inside jaws and jaw edges are polished to prevent nicking the wire. Plier has a spring-loaded ergonomic design with dark blue plastic handles.

Mfg. Part No.	Description	Length (In.)	Stock No.	Price Each
JIC-3026	Curved Long Nose Plier	6.375	**75R7648**	20.87
JIC-3385	Curved Needle Nose Plier	5.5	**75R7649**	20.59

(178435)

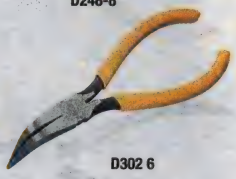
PROFESSIONAL-QUALITY PLIERS

KLEIN TOOLS®

D245-5

D248-8

D301-6



D302 6

- Custom US-made tool steel
- Hot-riveted joint fo smooth action and no handle wobble
- Plastic-dipped handles for comfort and ease of identification

Mfg. part no. D201-7NE is a standard side-cutter with knurled jaws. **Mfg. part no. D213-9NE** is a high-leverage side-cutter with knurled jaws to provide 46% greater cutting and gripping power than other side-cutters. **Mfg. part no. D245-5** is a standard diagonal cutter with tapered-nose. **Mfg. part no. D248-8** is a high-leverage, diagonal cutter with an angled-head. **Mfg. part nos. D321** and **D322** have midget slim-noses where **mfg. part no. D321** has knurled jaws and **mfg. part no. D322** has smooth jaws. **Mfg. part no. D307-5** has a long slim-nose with knurled jaws. **Mfg. part no. D301** has a long-nose and knurled jaws. **Mfg. part no. D310** has a long tapered-nose with knurled jaws. **Mfg. part no. D302** has a 70° curved-nose with knurled jaws. **Mfg. part nos. D203** have standard long-noses with side cutters. **Mfg. part no. D318** has a long needle-nose with knurled jaws.

Mfg. Part No.*	Overall Length (in.)	Jaw Length (in.)	Handle Color	Stock No.	Price Each
SIDE-CUTTING PLIERS					
D201-7NE	189	33	Blue	**17C1478**	58.69
D213-9NE	238	41	Blue	**17C1479**	52.51
DIAGONAL PLIERS					
D245-5	129	18	Red	**07C1225**	44.30
D248-8	205	13/16	Red	**52F6447**	46.24
LONG-NOSE PLIERS					
D321 4 1/2C	122	27	Blue	**34F095**	35.85
D322 41/2C	122	27	Blue	**34F113**	38.13
D318 5 1/2C	143	43	Yellow	**34F123**	40.24
D307-5 1/2C	143	43	Yellow	**34F025**	38.13
D302 6	162	38	Yellow	**34F016**	47.61
D203-6	168	48	Yellow	**92B6043**	37.59
D203 6C	168	48	Yellow	**34F012**	40.77
D301-6	168	48	Yellow	**24C1396**	33.85
D301 6C	168	48	Yellow	**34F009**	36.80

***NOTE:** Mfg. part nos. with suffix **C** indicate spring-action handle

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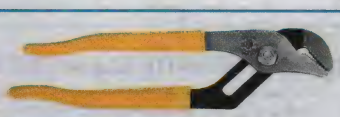
PUMP PLIERS



KLEIN TOOLS®

Jaws lock to desired size by engaging tongue in proper groove.

Mfg. Part No.	Length	Max. Cap.	Stock No.	Price Each
D502 6	6″	1″	**34F235**	31.30
D502 10	10″	1¾″	**34F097**	38.85
D502 12	12″	2⅛″	**34F098**	48.11

(5721)

6IN1 COMBINATION PLIERS

Milwaukee

- Reaming head design
- Bolt cutter
- Wire stripper
- Locking mechanism
- Rust protection
- Forged alloy steel
- Manufacturer's limited lifetime warranty

6 IN 1 combination pliers features a dual head design for wire stripping and needle nose functionality. 6 IN 1 combination pliers were uniquely designed with a reaming head to smooth out rough edges of metal pipe. 6 IN 1 combination pliers also feature six application specific designs (reaming, wire stripping, bolt cutter, wire cutting, pliers, and loop maker) that allows professionals to carry less tools.

Mfg. part No.	Description	Length (in.)	Jaw Length (in.)	Jaw Capacity (in.)	Knife Length (in.)	Stock No.	Price Each
48-22-3069	6in1 Combination Pliers	7-1/2	2-1/4	1-1/2	1/2	**83T1372**	48.00

(207480)

6-in-1 LONG NOSE PLIERS

Milwaukee

- Reaming head design
- Loop maker
- Wire stripper
- Laser hardened cutting edges
- Rust protection
- Forged alloy steel
- Manufacturer's limited lifetime warranty

6-in-1 long nose pliers feature a dual head design for wire stripping and needle nose functionality. 6-in-1 long nose pliers were uniquely designed with a reaming head to smooth out rough edges of metal pipe. 6-in-1 long nose pliers also feature six application specific designs (reaming, wire stripping, nail/wire cutting, nail pulling, pliers, and loop maker) that allows professionals to carry less tools.

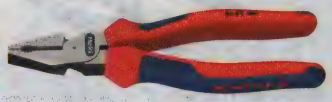
Mfg. part No.	Description	Length (in.)	Jaw Length (in.)	Jaw Capacity (in.)	Knife Length (in.)	Stock No.	Price Each
48-22-3068	6-in-1 Long Nose Pliers	8	1-1/4	1-3/4	11/16	**83T1371**	41.00

(207479)

COMBINATION PLIERS

KNIPEX®

03 02 160



02 02 180

- With gripping zones for flat and round material, suitable for versatile use
- With cutting edges for soft, hard and piano wire
- Long cutting edges for thicker cables
- Cutting edges additionally induction hardened, cutting edge hardness approx. ca. 60 or 64 HRC
- Special tool steel, oil-hardened and tempered
- With two-color dual component handles
- DIN ISO 5746

Mfg. Part No.	Head	Cutting Performances ∅ (mm) Soft	Cutting Performances ∅ (mm) Hard	Overall Length (mm)	Wt. (g)	Stock No.	Price Each
03 02 160	Polished	3.1	2.0	160	223	**06R6259**	29.84
03 02 180	Polished	3.4	2.2	180	254	**06R6260**	30.42
03 02 200	Polished	3.8	2.5	200	322	**06R6261**	34.90
COMBINATION PLIERS VDE SAFETY INSULATED 1000V, ASTM AND VDE TESTED							
03 06 180	Chrome	3.4	2.2	180	264	**06R6263**	40.00

HIGH LEVERAGE COMBINATION PLIERS

For heavy duty use. Requires 35% less effort due to improved lever action compared with conventional combination.

Mfg. Part No.	Head	Cutting Performances ∅ (mm) Hard	Cutting Performances ∅ (mm) Piano	Overall Length (mm)	Wt. (g)	Stock No.	Price Each
02 02 180	Polished	2.5	2.0	180	240	**06R6258**	35.10

(147252)

ELECTRONICS GRIPPING PLIERS

KNIPEX®

Mfg. Part No.	Description	Overall Length (in.)	Stock No.	Price Each
35 12 135 G	Flat, Wide Jaws	135	**81R0683**	41.86
35 22 135 G	Flat-Round Jaws	135	**81R0686**	41.68

CONTINUED

ELECTRONICS GRIPPING PLIERS (CONT.)

Mfg. Part No.	Description	Overall Length (in.)	Stock No.	Price Each
35 42 135 G	Angled, Flat-Round Jaws	135	81R0693	44.80
35 32 135 G	Round, Poiinted Jaws	135	81R0690	41.68

(194846)

COBRA WATER PUMP PLIERS

KNIPEX®

87 01 180

87 01 250

87 02 250

- Fast adjustment directly on the workpiece: fast and comfortable handling
- Box-joint design: high stability because of double guide
- Self-locking on pipes and nuts and low handforce required
- Gripping surfaces with special hardened teeth, teeth hardness approx. 61 HRC
- One-hand adjustment
- DIN ISO 8976

Mfg. Part No.	Head	Handles	Working Capacity (in.)	Adjustment Positions	Overall Length (mm)	Wt. (g)	Stock No.	Price Each
87 01 180	Polished	Plastic Coated	1 3/8	11	180	170	06R6320	44.14
87 01 250	Polished	Plastic Coated	2	25	250	335	06R6321	46.78
87 02 250	Polished	Dual Component	2	25	250	355	06R6322	51.64

(147256)

PROFESSIONAL INSULATED PLIERS AND CUTTERS

wiha Premium Tools

32838

32806

- Meet 10,000V test standards — Certified to 1000VAC or 1500VDC
- Meets EN/IEC 60900, ASTM F-1505-01 and according to VDE 0682/part 201, NFPA70E insulation standards
- Drop-forged from special tool steel
- Chrome finish for long lasting corrosion protection
- Cutting edges additionally induction hardened
- Soft grip ergonomically designed handle body
- Safety slip guard

Mfg. part no. 32838 insulated 8" high-leverage diagonal cutter. Semi-circular; low wear lap joint, riveted and able to withstand high levels of load. Lightweight, clean cutting action, lay-on joint, and optimized power transmission. Ideal for soft, hard and piano wire. Copper cutting capacity: #4 AWG.

Mfg. Part No.	Description	Stock No.	Price Each
32838	8" Professional Insulated High-Leverage Diagonal Cutter	28C1418	81.89

Mfg. part no. 32806 insulated 6.3" long-nose pliers with cutter features half-round jaws and serrated gripping surface. Copper cutting capacity: #10 AWG.

32806	6.3" Professional Insulated Straight Long-Nose Pliers with Cutter	95B9827	53.57

(163094)

PROFESSIONAL INSULATED CUTTERS AND PLIERS

wiha Premium Tools

- Made from premium CV tool steel forgings
- Induction hardened jaws and cutters to 60HRC
- Industrial brushed finish
- Two component ergo cushion grips
- Meets ASTM F1505, VDE 0680, CSA, NFPA, OSHA, ISO, EN/IEC 60900, & ISO 1000V
- All tools individually tested to 10,000V/1000V rating

Mfg. Part No.	Description	Stock No.	Price Each
32933	6.3" Insulated Diagonal Cutter	82T4525	38.26
32926	6.3" Insulated Long Nose with Cutter	82T4521	38.26
32947	6.3" Insulated Stripping Pliers	82T4527	43.05
32945	7" Insulated Crimper	82T4526	47.61
32923	8" Insulated Long Nose With Cutter	82T4520	45.44

CONTINUED

PROFESSIONAL INSULATED CUTTERS AND PLIERS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
32929	8" Insulated Heavy Duty Diagonal Cutter	82T4523	47.84
32930	8" Insulated Lineman's with Dynamic Joint	82T4524	46.65
32927	8" Insulated Heavy Duty Cable Cutter	82T4522	47.84
32917	9" Insulated Lineman's with Crimper	82T4519	55.01
32981	Insulated 3 Piece Set: 8" Combo Pliers, 8" Long Nose Pliers and 8" Cutters	82T4528	124.84

(200576)

DIAGONAL CUTTING PLIERS

Xcelite®

These cutting pliers are constructed of forged alloy steel, precision machined and scientific proportioned. ESD-safe, green cushion-grip handles are designed to fit the hand comfortably and to provide maximum leverage. Cleanly machined and aligned jaws grip tightly and securely for easy cutting.

MS54

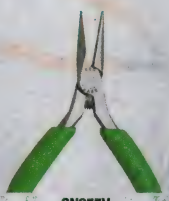
Mfg. Part No.	Description	Stock No.	Price Each
4"L, OVAL-HEAD			
MS54V	Semi-Flush Cut — General-Purpose Use	09B9618	19.70
MS54J	Flush-Cut — General-Purpose Use	52F9047	20.70
5"L, TAPERED-HEAD			
S475NJS	Flush-Cut — For Cutting Component Leads	73K9501	18.90
4"L, SLIM-LINE TAPERED-HEAD			
MS545V	Semi-Flush Cut	09B9624	19.20
4-1/2"L, END CUTTER			
EC54J	Transverse End, Flush-Cut — For Vertical Cutting in Tight Spaces	52F9052	23.40

(5984)

ELECTRONIC PLIERS

Xcelite®

LN54GV



CN255V

NN7776V

These small, lightweight pliers are designed for holding, bending and cutting fine wires in electronics, radio, TV, electrical and jewelry work. Green, ESD-safe cushion-grip handles provide comfort and maximum leverage. Feature coil spring and polished head.

Mfg. Part No.	Description	Stock No.	Price Each
THIN-LONG NOSE PLIERS — GENERAL-PURPOSE			
LN54GV	5"L Pliers with Smooth Jaws	09B9546	19.30
LN775512V	5½"L Pliers with Serrated Jaws	09B9565	22.30
WIRE PLIERS — FOR CUTTING AND FORMING WIRE			
TC55	5½" L Pliers with Tip Cutter	96F8886	25.60
CURVED LONG-NOSE PLIERS — FOR CONFINED AREAS			
CN54G	5"L Pliers, Curved 60° with Smooth Jaws	52F9039	21.40
CN55G	5½"L Pliers, Curved 45° with Smooth Jaws	52F9040	25.40
CN255V	5"L Pliers, Curved 60° Thin Tip with Serrated Jaws	09B8800	23.40
ROUND-NOSE PLIERS — FOR LOOPING AND FORMING FINE WIRE			
RN54	4½"L Pliers with Round, Smooth Jaws that Tapered to Point	96F8892	20.30
NEEDLE NOSE PLIERS — FOR FINE WIRE			
L4G	4"L Subminiature Needle Nose Pliers with Smooth Jaws	09B9592	19.40
NN54GV	5"L Needle Nose Pliers with Smooth Jaws	09B9720	22.60
L4V	4"L Subminiature Needle Nose Pliers with Serrated Jaws	09B9593	17.30
NN54V	5"L Slim Line Needle Nose Pliers with Serrated Jaws	09B9721	22.40
NN7776V	6"L Long Needle Nose Pliers with Serrated Jaws	09B9734	21.40

(5985)

element14 COMMUNITY

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element14.com

(196545)

THIN-PROFILE, LONG-REACH ELECTRONIC PLIERS

Xcelite®

Long nose, 5.5″ electronic pliers, available with smooth or serrated jaw, are ideal for access into tight spaces. Lightweight for maximum comfort. Perfect for use in precision electronic assembly applications. Molded red grips for comfort. ESD-safe versions feature static-dissipative molded black grips.

378SMM

Mfg. Part No.	Description	Stock No.	Price Each
378SMM	Smooth Jaw, Red Grips	50F4005	11.50
378SMD	Smooth Jaw, ESD-Safe Black Grips	96F8901	12.50
378M	Serrated Jaw, Red Grips	96F8903	11.50
378D	Serrated Jaw, ESD-Safe Black Grips	96F8904	12.50

(5991)

TWO-PIECE SHEARCUTTER AND PLIERS SET

Xcelite®

- Superior overall quality
- Highest quality carbon steel
- Non-glare black finish
- Advanced handle design with red cushion grips
- Lighweight construction

Mfg. part no. S2K two-piece set includes one **mfg. part no. 170M** 5″ all-purpose miniature electronic flush-cutting shearcutter and one **mfg. part no. 378M** 5.5″ needle-nose pliers with serrated jaws. Shears are designed to cut soft wire up to 20 AWG with less effort.

Mfg. Part No.	Description	Stock No.	Price Each
S2K	Two-Piece Shearcutter and Pliers Set	83F4093	17.50

(33271)

PROFESSIONAL-GRADE PLIERS

Xcelite®

64CGV

55NCG 57CGV 50CGV 59NCG

These pliers are constructed of forged alloy steel that is precision machined and scientific proportioned. Cleanly machined and aligned jaws grip tightly and surely for easy cutting. For extra working comfort, these professional tools have permanent, red plastic-coated cushion grip handles designed to fit the hand comfortably and to provide maximum leverage.

Mfg. Part No.	Description	Stock No.	Price Each
64CGV	4″ Side-Cutting Diagonal Pliers — 13/32″ Semi-Flush Jaw	10B3765	27.60
55NCG	5″ All-Purpose Side-Cutting Diagonal Pliers — Standard Beveled Edges	73K9935	22.30
57CGV	5 11/16″ Needle-Nose Standard Pliers — 1 23/32″ Fine Serrated Jaw	10B3540	24.20
50CGV	5″ Slip-Joint Ignition Pliers — 3-Jaw Opening Adjustment to ½″	10B2957	19.10
59NCG	8″ Electrician's Chain-Nose Pliers — Serrated 1½″L Jaw Offers Long Reach	73K9948	28.50

(5697)

2400 SERIES MAGICSENSE® PRECISION PLIERS

Erem®

Needle-Nose

Flat-Nose

- Ergonomic, non-slip grips for added comfort and control — ESD safe
- Shatterproof, extruded 100% machined Eremadium® tool steel for strength and durability
- Induction hardening process provides cutting edge Rockwell-hardness of 64-65 HRc
- Patented, unbreakable internal Magic® spring maintains constant opening/closing force operation
- Erem Maximum Opening Stop (EMOS) limits handles from opening to help eliminate user fatigue
- Interlock screw joint system delivers wobble-free operation and avoids blades overlapping

2400 series MagicSense® precision pliers deliver the ultimate in comfort, control and performance. These ergonomically designed pliers feature a new co-molded grip material that furnishes a soft yet solid feel of control for more comfort and less fatigue. The heat-treated hardened blades provide very high-strength, perfect alignment and long tool life. Select from fine-point needle-nose pliers in choice of smooth or serrated jaws and flat-nose pliers with smooth jaws.

Mfg. Part No.	Description	Stock No.	Price Each
2411P	5″ Fine-Point Needle-Nose Pliers, Smooth Jaws	18M9947	64.50
2411PD	5″ Fine-Point Needle-Nose Pliers, Serrated Jaws	18M9948	68.70
2442P	5″ Flat-Nose Pliers, Smooth Jaws	18M9951	76.00

(89570)

HOLLOW-SHAFT NUT DRIVER SET

JONARD INDUSTRIES CORP.

- Full 7″ length for working with long bolts
- Cushion gripped, color-coded handles
- Ergonomic design provides greater torque and user comfort

Mfg. part no. ND-631 7-pc. set includes: 3/16″ (black), ¼″ (red), 5/16″ (yellow), 11/32″ (green), 3/8″ (blue), 7/16″ (brown) , and ½″ (red) hollow-shaft nut drivers.

Mfg. Part No.	Description	Stock No.	Price Each
ND-631	7-Pc. Hollow-Shaft Nut Driver Set	75R7654	53.95

(178430)

6″ CUSHION-GRIP NUT DRIVERS AND KITS

KLEIN TOOLS®

- Hollow Shaft Allows Fitting Over Long Bolts and Studs
- Color-Coded Handle With Tip-Ident® On Top Shows Hex Shape and Size

630-3/8

Mfg. Part No.	Color Code	Hex Size	Shank Length	Stock No.	Price Each
630-3/16	Black	3/16″	6″	17C1512	12.75
630-1/4	Red	¼″	6″	17C1510	12.90
630-5/16	Yellow	5/16″	6″	17C1514	13.09
630-3/8	Blue	3/8″	6″	17C1513	13.46
630-7/16	Brown	7/16″	6″	17C1515	15.20

Mfg. part no. 647 7-piece set includes: 6″ hollow shaft nut driver set. Includes sizes: 3/16, ¼, 5/16, 11/32, 3/8, 7/16, ½″.

Mfg. Part No.	Stock No.	Price Each
647	17C1516	95.55

Mfg. part no. 631 7-piece set includes: 3″ shaft nut driver set. Includes sizes: 3/16, ¼, 5/16, 11/32, 3/8, 7/16, ½″.

631	50B4637	88.75

(56576)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196563)

HEAVY-DUTY SOFT FINISH CUSHIONED GRIP NUT DRIVER SETS

wiha Premium Tools

34791

34792

- Precision formed to exact tolerances for a perfect fit
- SoftFinish® ergonomic shape handle allows maximum torque and user comfort
- Extra-large diameter, solid molded core handle with soft outer cushion grip requires less force to achieve more torque
- Handle molded directly onto blade for a permanent bond
- Solid chrome-vanadium-molybdenum tool steel blade, super hardened-plated for extreme durability
- Anti-corrosion nickel-plated finish
- Deep forged 1″ heavy-duty socket
- Hex bolster for for increased torque

Mfg. part no. 34791 5-pc. heavy-duty SoftFinish® cushioned grip nut driver set includes metric sizes: 5mm, 6mm, 8mm, 10mm, 11mm.

Mfg. Part No.	Description	Stock No.	Price Each
34791	5-Pc. Heavy-Duty SoftFinish Cushioned Grip Nut Driver Set	83F6427	73.90

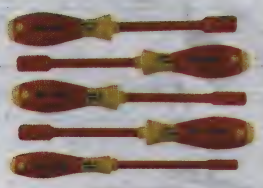
Mfg. part no. 34792 6-pc. heavy-duty SoftFinish® cushioned grip nut driver set includes inch sizes: 3⁄16″, 1⁄4″, 5⁄16″, 3⁄8″, 7⁄16″, 1⁄2″.

34792	6-Pc. Heavy-Duty SoftFinish Cushioned Grip Nut Driver Set	83F6426	94.26

(163090)

PROFESSIONAL INSULATED NUT DRIVER SETS

wiha Premium Tools



32291, 32292

32294

- Tested to 10,000V— Certified to 1000VAC or 1500VDC
- High-alloy chrome-vanadium-molybdenum steel blades, black finish, hardened to average 58/60RC
- Insulation molded directly onto the blade for permanent bonding
- Solid core SoftFinish® handle with outer cushion grip — more torque
- Responds to OSHA's use specification 29 CFR1910
- Meets insulation test standards according to: EN/IEC 60900, ASTM F-1505-01, VDE spec. 0682/part 201, DIN 7437, NFPA70E

Mfg. part no. 32291 5-pc. insulated nut driver set includes metric sizes: 6mm, 7mm, 8mm , 9mm, 10mm.

Mfg. Part No.	Description	Stock No.	Price Each
32291	5-Pc. Professional Insulated Nutdriver Set — Metric Sizes	26C2071	80.63

Mfg. part no. 32292 5-pc. insulated nut driver set includes inch sizes: 7⁄32″, 1⁄4″, 5⁄16″, 3⁄8″, 1⁄2″.

32292	5-Pc. Professional Insulated Nut Driver Set — Inch Sizes	71M0858	80.43

Mfg. part no. 32294 7-pc. insulated nut driver set includes inch sizes: 3⁄16″, 7⁄32″, 1⁄4″, 5⁄16″, 3⁄8″, 7⁄16″, 1⁄2″.

32294	7-Pc. Professional Insulated Nut Driver Set — Inch Sizes	08J5011	110.44

(163088)

INSULATED DRIVER SET IN MOLDED TRAY

wiha Premium Tools

- Meets ASTM F1505, VDE 0680, CSA, NFPA, OSHA, ISO and/or EN/IEC 60900 1000V insulation standards
- All tools individually tested to 10,000V/1000V rating

Insulated 19 pc. driver set includes insulated sotted: 2.5, 3, 3.5, 4, 4.5, 5.5, 6, 6.5, 8, 10, insulated phillips: #0, #1, #2, #3, insulated terminal drivers: #1 & #2, insulated square drivers: #1 & #2, voltage detector: 3mm slotted.

Mfg. Part No.	Description	Stock No.	Price Each
32095	Insulated Driver Set In Molded Tray	82T4518	256.94

(200575)

PICO SOFT GRIP PRECISION NUT DRIVER SETS

wiha Premium Tools

- Molded on soft tactile Pico grip handles
- Narrow profile precision formed nut drivers
- Exclusive CRM-72 special tool steel
- Satin micron vapor chromed finish
- Super through hardened blades
- Handles proportioned to blade size for maximum torque
- Rotating finger tip control cap for precise turning control
- Precision quality made in Germany

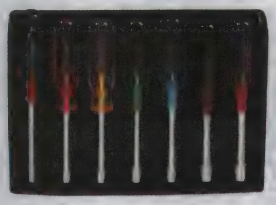
Mfg. part no. 26593 8-piece Pico nut driver set includes inch sizes: 3⁄32, 7⁄64, 1⁄8, 9⁄64, 5⁄32, 3⁄16, 7⁄32, 1⁄4. **Mfg. part no. 26596** 8-piece Pico nut driver set includes metric sizes: 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5. Technician quality nut driver sets come standard in rugged canvas pouch.

Mfg. Part No.	Stock No.	Price Each
26593	84K5395	79.89
26596	84K5396	78.91

(89320)

NUTDRIVER SETS

Xcelite®



127TB

PS-120

Mfg. part no. 127TB nutdriver set includes seven solid-shaft nutdrivers with color-coded plastic handles and case-hardened sockets. Sizes: 3⁄16″, 7⁄32″, 1⁄4″, 9⁄32″, 5⁄16″, 11⁄32″, 3⁄8″. Packaged in a hard-plastic, black molded tray. **Mfg. part no. PS-120** nutdriver set contains 10 color-coded plastic-handle shafts, sizes 3⁄32″, 1⁄8″, 5⁄32″, 3⁄16″, 7⁄32″, 1⁄4″, 9⁄32″, 5⁄16″, 11⁄32″, 3⁄8″. Also contains a torque amplifier handle in a clear, hard-plastic stand-up storage case.

Mfg. Part No.	Description	Stock No.	Price Each
127TB	7-Pc. Solid-Shaft Nutdriver Set	34F366	41.30
PS120	10-Pc. Nutdriver Set	34F336	44.90

(5807)

FIXED HANDLE NUTDRIVERS

Xcelite®

HS11

FIXED HANDLE HOLLOW SHAFT NUTDRIVERS
Ideal for use where nuts must be installed or removed over protruding bolts. Finely tempered and finished steel.

Mfg. Part No.	Nut Size	Handle	Stock No.	Price Each
HS6	3⁄16″	Black	34F318	7.10
HS8	1⁄4″	Red	34F319	8.00
HS10	5⁄16″	Amber	34F320	7.10
HS11	11⁄32″	Green	34F321	7.60
HS12	3⁄8″	Blue	34F322	7.60
HS14	7⁄16″	Brown	34F323	9.60
HS16	1⁄2″	Red	34F324	9.60

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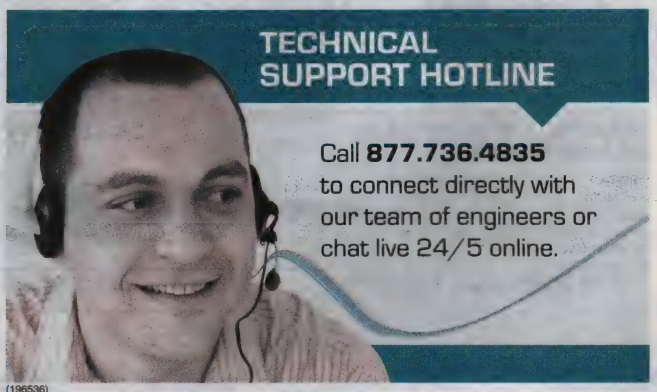

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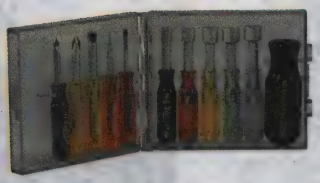
NUT DRIVERS • SCREWDRIVERS & ACCESSORIES

NUTDRIVER AND SCREWDRIVER SETS

Xcelite®



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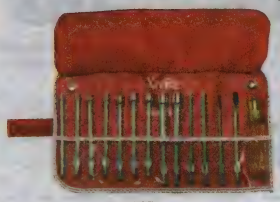
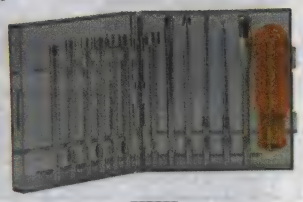


99PR



99PS50

Mfg. part no. PS-130 11-pc. compact convertible nutdriver and screwdriver set contains five color-coded plastic-handle nutdrivers, sizes: 3/16″, 1/4″, 5/16″, 11/32″ and 3/8″; five color-coded plastic handle screwdrivers, sizes: #1 Phillips, #2 Phillips and 1/8″, 3/16″, 1/4″ slotted. Plus a black attachable torque amplifier handle. All packaged in a clear plastic, stand-up storage case.

Mfg. Part No.	Stock No.	Price Each
PS130	35F207	45.20

Mfg. part no. 99PR 14-pc. Series 99® multi-purpose nutdriver and screwdriver set contains nine nutdriver shafts, sizes: 3/16″, 7/32″, 1/4″, 9/32″, 5/16″, 11/32″, 3/8″, 7/16″, 1/2″; two slotted screwdriver shafts, sizes: 3/16″, 1/4″; two Phillips screwdriver shafts, sizes: #1 and #2; and one regular handle. All packaged in a roll-up pouch.

99PR	34F395	89.50

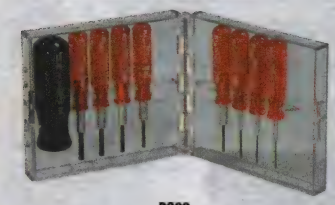
Mfg. part no. 99-PS-50 13-pc. Series 99® compact screwdriver and nutdriver set contains seven regular nutdriver shafts, sizes: 3/16″, 7/32″, 1/4″, 9/32″, 5/16″, 11/32″, 3/8″; two slotted screwdriver shafts, sizes: 3/16″, 1/4″; two Phillips screwdriver shafts, sizes: #1, #2; one regular handle; and one extension. All packaged in a clear plastic, stand-up storage case.

99PS50	34F341	66.60

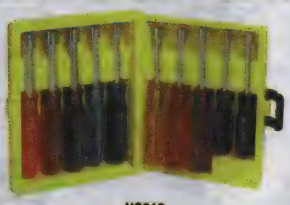
(5740)

SCREWDRIVER AND NUTDRIVER SETS

Xcelite®



PS89



HS618

SOCKET TYPE SCREWDRIVER SETS

Mfg. part nos. 99PS-40 standard and **99PS-40BP** ballpoint 11-pc. Allen® hex socket sets contain one regular handle (99-1), one extension (99-X5) and nine blades: 0.050″, 1/16″, 5/64″, 3/32″, 7/64″, 1/8″, 9/64″, 5/32″, 3/16″. All packaged in a clear plastic, stand-up storage case.

Mfg. Part No.	Description	Stock No.	Price Each
99PS40	11-Pc. Standard Allen® Hex Socket Set	34F339	50.50
99PS40BP	11-Pc. Ballpoint Allen® Hex Socket Set	35F208	77.00

Mfg. part no. PS-89 9-pc. screwdriver set for hex socket screws. Includes eight compact screwdrivers with red plastic handles in sizes: 0.028″, 0.035″, 0.050″, 1/16″, 5/64″, 3/32″, 7/64″, 1/8″ and one black, torque-amplifier handle. All packaged in a clear plastic, stand-up storage case.

Mfg. Part No.	Stock No.	Price Each
PS89	35F1432	30.40

COLOR-CODED NUTDRIVER SETS

Mfg. part no. HS-6-18 10-pc. hollow shaft nutdriver set. Hex openings: 3/16″, 7/32″, 1/4″, 9/32″, 5/16″, 11/32″, 3/8″, 7/16″, 1/2″, 9/16″. Color-coded plastic handles. Packaged in a sturdy plastic storage case.

Mfg. Part No.	Stock No.	Price Each
HS618	34F376	79.10

(5806)

DURA-DRIVER INTERCHANGEABLE BIT SCREWDRIVERS

CRESCENT

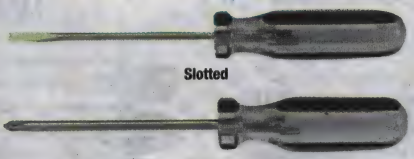
Includes #1 Phillips X 3/16″ slotted, #2 Phillips X 9/32″ slotted, 1/4″ X 5/16 and a 7/16 nutdriver. 2 double-ended bits stored in removeable steel holding sleeves. Both ends of the holding sleeves are nutdrivers.

Mfg. Part No.	Description	Stock No.	Price Each
SDMB7V	7-in-1 Screwdriver	95B4610	11.25

(48791)

SCREWDRIVERS

DURATOOL



Slotted

Phillips

Screwdrivers feature large, rounded grip handles. Blades are cross-ground chrome vanadium steel. Meet federal specification GGG-S-121E. Lifetime warranty.

Mfg. Part No.	Description	Size	Stock No.	Price Each
SPC10887	Slotted	1/8″ x 3″	27C3520	3.16
SPC10888	Slotted	3/16″ x 4″	27C3523	3.83
SPC11302	Slotted	1/4″ x 6″	34C7545	5.24
SPC10889	Phillips	#0 x 2.5″	27C3524	2.95
SPC10890	Phillips	#1 x 3″	27C3527	3.39
SPC10891	Phillips	#2 x 4″	27C3528	4.98

(5784)

11 PIECE PRECISION SCREWDRIVER SET

DURATOOL

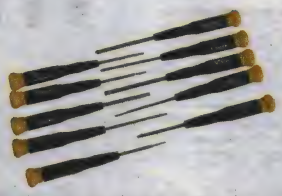
An 11 piece precision screwdriver set manufactured with steel blades which have precision ground tips and metallic handles with a rotating tip. The kit is supplied in a moulded, impact resistant case with a durable hinge and a snap shut fastener. The kit contains: 6 x Slotted Screwdrivers, 1, 1.2, 1.4, 1.8, 2.4, and 3mm; 3 x Phillips Screwdrivers, PH00, PH0 and PH1; 1 x Pointing Awl; 1 x Magnetic Pick-up Tool.

Mfg. Part No.	Description	Stock No.	Price Each 1-99
D00394	Jewellers Screwdriver Set	42M1817	4.49

(116823)

15-PIECE PRECISION SCREWDRIVER SET

DURATOOL



Cushion handle provides super soft comfortable grip allowing use over prolonged periods. Supplied in a convenient plastic carry case. Set contents: Slotted - 2 x 65mm, 2.5 x 65mm, 3 x 65mm, 4 x 65mm; Phillips - PH000 x 65mm, PH00 x 65mm, PH0 x 65mm, PH1 x 65mm; Torx - T6 x 50mm, T7 x 50mm, T8 x 50mm, T9 x 50mm, T10 x 50mm, T15 x 50mm, T20 x 50mm.

Mfg. Part No.	Description	Stock No.	Price Each 1-49
D00292	15-Piece Precision Screwdriver Set	58M5433	23.73

(116824)

11-PC. 5-POINT SECURITY TORX BIT SET

DURATOOL

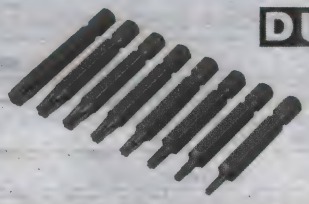
11-piece set of five-point Torx security bits are for technician use of removing security screws used in computer equipment, hard drive enclosures, European automobiles, and other Torx Plus style fasteners which are becoming more commonly used. These do not fit standard six-point torx fasteners. Hole in center of the bit for tamper-proof fasteners, Includes pocket sized organizer. All bits 1" long. Contains T8, T9, T10, T15, T20, T25, T27, T30, T40, T45, T50.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
22-9795	11-Piece 5 Point Security Torx Set	75M9211	8.90

(116763)

TORX BIT SET

DURATOOL



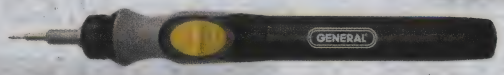
8-piece star torx bit set for use with screwdriver handles and portable screwdrivers with 1/4" hex drives. Manufactured from chrome vanadium steel. Bit lengths: 50mm. Sizes: T8, T10, T15, T20, T25, T27, T30 and T40.

Mfg. Part No.	Description	Stock No.	Price Each 1-99
TL10394	8-Piece Torx Bit Set	99M1204	2.96

(116773)

ULTRATECH POWER PRECISION SCREWDRIVER

GENERAL



- Quick-change chuck for effortless bit changes
- 10+ hours of power for long run-time
- 100+ RPM motor with forward and reverse controls
- Super-torque drive — delivers ~2.43 in.-lb. of torque
- Ergonomic design for comfort
- Includes 6-pc.1/8" precision bit assortment
- 1-year manufacturer's warranty

Mfg. part no. 500 UltraTECH™ power precision screwdriver is ideal for ultra-delicate applications such as computer and electronics repair, industrial applications, hobbies and crafts. Its ergonomic handle design provides multiple grip positions to accommodate a variety of working situations. Comes complete with 6-pc. 1/8" drive precision bit assortment: 1/16", 1/8" slotted, #00, #0 Phillips, and T5, T6 Torx. Operating voltage range: 1.5 ~ 3.0 VDC (two "AAA" alkaline batteries included).

Mfg. Part No.	Description	Stock No.	Price Each
500	UltraTECH™ Power Precision Screwdriver	73R4525	39.56

(177012)

10-PIECE MINI-SCREWDRIVER SET

GENERAL

690

Mfg. part no. 690 chrome-plated vanadium steel blades with hardened tips and shafts. Ergonomically designed for rapid rotation and comfort. Set includes 3/64", 1/16", 5/64", 3/32" slotted blades; #000, #00, #0 cross points; T-6, T-7, T-8 Torx® drivers. Fitted plastic case. Overall length: 4 5/8".

Mfg. Part No.	Description	Stock No.	Price Each
690	10-Piece Mini-Screwdriver Set	83F7633	31.04
S-607	Jeweler Screwdriver Set, Nickel-Plated w/Screw Chuck	87F1157	31.49
8071	Rachet Offset Screwdriver Set	50F9072	19.83
8082	Slotted Screw Starter, Spring Chuck, 5" Handle	50F9068	13.01
8083	Crosspoint Screw Starter, Spring Chuck, 5" Handle	50F9069	12.10

(32384)

PIN VISE

GENERAL

Mfg. part no. 92 swivel head pin vise. Hardened steel. 2 double-end reversible collets: 0.10 to 0.125" and 0.10 to 3.17mm.

Mfg. Part No.	Description	Stock No.	Price Each
92	Swivel Head Pin Vise	34F580	15.64

(5586)

CUSHION-GRIP SCREWDRIVERS

KLEIN TOOLS®

- Cushion-grip is locked around a solid plastic handle for unbeatable comfort
- Strong, heat-treated and tempered steel shanks
- Handle resists slippage for greater torque
- Grip is oil-, gas- and water-resistant
- Handle tops permanently inscribed with tip-description symbol for easy identification

85076

These cushion-grip screwdrivers are built to handle the tough jobs. Select from a wide assortment of shank and tip styles and sizes or choose from three general-purpose selections of the most frequently used screwdrivers.

Mfg. Part No.	Shank Shape	Shank Tip	Shank Lgth. (In.)	Overall Lgth. (In.)	Stock No.	Price Each
600 4	Square*	1/4" Keystone	4	8 11/32	34F100	15.96
600-6	Square*	5/16" Keystone	6	10 15/16	17C1505	20.66

➤ CONTINUED ➤

CUSHION-GRIP SCREWDRIVERS (CONT.)

Mfg. Part No.	Shank Shape	Shank Tip	Shank Lgth. (In.)	Overall Lgth. (In.)	Stock No.	Price Each
600-8	Square*	3/8" Keystone	8	13 7/16	94F5784	26.06
602-4	Round*	1/4" Keystone	4	8 11/32	96B1090	16.17
601-4	Round	3/16" Cabinet	4	7 3/4	94F5785	13.60
601 6	Round	3/16" Cabinet	6	9 3/4	34F108	14.55
605-4	Round*	1/4" Cabinet	4	8 11/32	91B4558	14.91
605-6	Round*	1/4" Cabinet	6	10 11/32	94F5789	16.32
607-3	Round	3/32" Cabinet	3	5 3/4	58T3003	11.75
608-3	Round	1/8" Cabinet	3	5 3/4	50M2276	11.75
608-6	Round	1/8" Cabinet	6	8 3/4	02M5724	13.06
603-1	Round	#2 Phillips	1 1/2	3 7/16	94F5786	12.83
603-3	Round	#1 Phillips	3	6 3/4	94F5787	12.90
603-4	Round	#2 Phillips	4	8 5/16	94F5788	14.71
603-6	Round	#3 Phillips	6	11	17C6746	19.77
603-7	Round	#2 Phillips	7	11 5/16	17C1508	16.67
603-10	Round	#2 Phillips	10	14 5/16	10C2374	18.86
661	Round	#1 Sq.-Recess	4	7 3/4	39C3677	14.91
662	Round	#2 Sq.-Recess	4	8 1/4	39C3679	14.91
666	Round	#2 Sq.-Recess	8	12 1/4	90B4486	16.82

*Heavy-duty

Mfg. part no. 85076 7-piece cushion-grip screwdriver set includes: one heavy-duty 4" square-shank, 1/4" keystone-tip (length: 8 11/32"); one 6" heavy-duty round-shank, 5/16" keystone-tip (length: 10 15/16"); one 3" round-shank, 3/16" cabinet-tip (length: 6 3/4"); one 6" round-shank, 3/16" cabinet-tip (length: 9 3/4"); one heavy-duty 4" round-shank, 1/4" cabinet-tip (length: 8 11/32"); one 3" round-shank, #1 Phillips-tip (length: 6 3/4"); and one 4" round-shank, #2 Phillips-tip (length: 8 5/16"). Plus a vinyl storage pouch.

Mfg. Part No.	Description	Stock No.	Price Each
85076	7-Pc. Cushion-Grip Screwdriver Set	50B4657	104.13

Mfg. part no. 85074 6-piece cushion-grip screwdriver set includes: one 3" round-shank, 3/16" cabinet-tip (length: 6 3/4"); one heavy-duty 4" square-shank, 1/4" keystone-tip (length: 8 11/32"); one heavy-duty 6" square-shank, 5/16" keystone-tip (length:10-15/16"); one 3" round-shank, #1 Phillips-tip (length: 6 3/4"); one 4" round-shank, #2 Phillips-tip (length: 8 5/16") and one 6" round-shank, #3 Phillips-tip (length: 11"). Plus a plastic storage container.

Mfg. Part No.	Description	Stock No.	Price Each
85074	6-Pc. Cushion-Grip Screwdriver Set	68K1842	92.73

Mfg. part no. 85075 5-piece cushion-grip screwdriver set includes: one heavy-duty 4" square-shank, 1/4" keystone-tip (length: 8 11/32"); one 6" round-shank, 3/16" cabinet-tip (length: 9 3/4"); one heavy-duty 6" round-shank, 5/16" keystone-tip (length: 10 15/16"); one 4" round-shank, #2 Phillips-tip (length: 8 5/16"); and one heavy-duty 6" round-shank, 1/4" cabinet-tip (length: 10 11/32"). Plus a vinyl storage pouch.

Mfg. Part No.	Description	Stock No.	Price Each
85075	5-Pc. Cushion-Grip Screwdriver Set	52F9175	77.09

Mfg. part no. 85484 4-piece cushion-grip screwdriver set includes: one miniature screwdriver 3" round shank, no. 0 phillips-tip (length: 5 3/4"); one miniature screwdriver 2" round shank, 1/8" keystone tip (length: 4 3/4");one miniature screwdriver 3" round shank,3/32" cabinet tip (length: 5 3/4");one miniature screwdriver 3" round shank,1/8" cabinet tip (length: 5 3/4"). Convenient P-O-P packaging.

Mfg. Part No.	Description	Stock No.	Price Each
85484	4-Pc. Mini Cushion Grip Screwdriver Set	50M2326	42.08

(56574)

MULTI-BIT CUSHION-GRIP SCREWDRIVER/NUT DRIVERS

KLEIN TOOLS®

- Integrated driver shaft holds popular bits
- Interchangeable blade for quick and easy switch out
- Cushion-grip handle for greater torque and comfort

Mfg. part no. 32476 5-in-1 screwdriver/nutdriver includes one each: #1 and #2 Phillips, 9/32" and 3/16" slotted screwdriver bits and 5/16" nutdriver bit.

Mfg. Part No.	Description	Stock No.	Price Each
32476	5-in-1 Screwdriver/Nut Driver	17C1503	19.61

Mfg. part no. 32477 10-in-1 screwdriver/nut driver includes one each: #1 and #2 Phillips, 1/4" and 3/16" slotted, T10 and T15 Torx®, #1 and #2 square-recess screwdriver bits and 1/4" and 5/16" nut driver bits.

32477	10-in-1 Screwdriver/Nut Driver	17C1504	27.64

Mfg. part no. 32500 11-in-1 screwdriver/nut driver includes one each: #1 and #2 Phillips, 1/4" and 3/16" slotted, T10 and T15 Torx®, and #1 and #2 square-recess screwdriver bits and 3/8", 5/16" and 1/4" nut driver bits.

32500	11-in-1 Screwdriver/Nut Driver	95M2216	30.70

(56575)

10-FOLD 10-IN-1 FOLDING SCREWDRIVER/NUT DRIVERS

KLEIN TOOLS®

32535

32538

10-Fold™ pocket-style 10-in-1 folding tool with interchangeable bits — eight screwdriver sizes and two nut drivers. Unfolds and locks at a 180° angle to provide a straight screwdriver. Blast finished steel bits provide a firm hold to the fastener to reduce cam-out.

Mfg. part no. 32535 10-Fold™ screwdriver/nut driver contains 1/4" and 3/16" slotted, #1 and #2 Phillips, T10 and T15 TORX®, and #1 and #2 square-recess screwdriver bits and 5/16" and 1/4" nut driver bits. Color: black.

➤ CONTINUED ➤

10-FOLD 10-IN-1 FOLDING SCREWDRIVER/NUT DRIVERS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
32535	10-Fold™ 10-In-1 Screwdriver/Nut Driver	79R7485	45.34

Mfg. part no. 32538 10-Fold™ fractional hex screwdriver/nut driver contains 1/16″, 5/64″, 3/32″, 7/64″, 1/8″, 9/64″, 5/32″, 3/16″ hex screwdriver bits and 5/16″ and 1/4″ nut driver bits. Color: red.

32538	10-Fold™ Fractional Hex Screwdriver/Nut Driver	79R7486	45.34

(178868)

ELECTRONICS SCREWDRIVERS

KLEIN TOOLS®

- Cushion-grip handles for maximum comfort when working on small equipment
- Rotating caps for optimum and precise control.
- Color coded rings and hot stamped cap markings for quick identification
- Heat-treated precision ground tip for greater strength

5-Pc. Electronics Screwdriver Set

These cushion-grip screwdrivers are built to handle the tough jobs. Select from a wide assortment of shank and tip styles and sizes or choose from three general-purpose selections of the most frequently used screwdrivers.

Mfg. Part No.	Blade Length (mm)	Overall Length (mm)	Screwdriver Type	Stock No.	Price Each
613-3	76	165	PH#0 Phillips	87T7288	14.68
614-2	51	140	1/16″ Slotted	87T7289	14.33
614-3	76	165	3/32″ Slotted	87T7290	14.68
614-4	102	191	1/8″ Slotted	87T7291	15.26
614-6	152	241	1/8″ Slotted	87T7293	16.57

5-PIECE ELECTRONICS SCREWDRIVER SET
614-2, 613-3, 614-3, 614-4, 614-6 Electronic Screwdrivers & Case

85614	5-Piece Electronics Screwdriver Set	82T5063	84.54

(202052)

ESD-SAFE DISSIPATIVE PRECISION DRIVER SETS

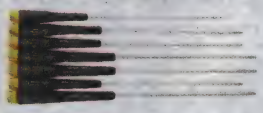
wiha Premium Tools

27399, 27590, 27591

27790, 27791

27390

- Impact-resistant, ESD static dissipative handle material — 10^6 to 10^9 ohms surface resistance
- Meets ESD standard IEC 61340-5-1
- Ideal for working on sensitive electronic components
- Molded-on, slim tapered handles allow rapid rotation and are proportioned to blade size
- Rotating cap for precise turning and control with fingertip
- High-performance chromed-finish CVM steel blades
- Hardened, precision ground tips for exact fit, Chromtop finish to long life



27393

Mfg. part no. 27399 8-pc. ESD-safe precision slotted and Phillips® screwdriver set includes slotted metric sizes: 1.5mm, 2mm, 2.5mm, 3mm and Phillips® sizes: #000, #00, #0, #1. All packaged in a canvas tool pouch.

Mfg. Part No.	Description	Stock No.	Price Each
27399	8-Pc. ESD-Safe Precision Slotted and Phillips Screwdriver Set	27K5423	71.61

Mfg. part no. 27590 8-pc. ESD-safe precision metric hex driver set includes sizes: 0.7mm, 0.9mm, 1.3mm, 1.5mm, 2mm, 2.5mm, 3mm, 4mm. All packaged in a canvas tool pouch.

Mfg. Part No.	Description	Stock No.	Price Each
27590	8-Pc. ESD-Safe Precision Metric Hex Driver Set	27K5435	66.78

Mfg. part no. 27591 8-pc. ESD-safe precision inch hex driver set includes sizes: 0.05″, 1/16″, 5/64″, 3/32″, 7/64″, 1/8″, 9/64″, 5/32″. All packaged in a canvas tool pouch.

Mfg. Part No.	Description	Stock No.	Price Each
27591	8-Pc. ESD-Safe Precision Inch Hex Driver Set	27K5436	64.46

Mfg. part no. 27790 8-pc. ESD-safe precision metric nut driver set includes sizes: 1.5mm, 2mm, 2.5mm, 3mm, 3.5mm, 4mm, 5mm, 5.5mm. All packaged in a canvas tool pouch.

Mfg. Part No.	Description	Stock No.	Price Each
27790	8-Pc. ESD-Safe Precision Metric Nut Driver Set	27K5449	91.14

Mfg. part no. 27791 8-pc. ESD-safe precision inch nut driver set includes sizes: 3/32″, 7/64″, 1/8″, 9/64″, 5/32″, 3/16″, 7/32″, 1/4″. All packaged in a canvas tool pouch.

➤CONTINUED➤

ESD-SAFE DISSIPATIVE PRECISION DRIVER SETS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
27791	8-Pc. ESD-Safe Precision Inch Nut Driver Set	27K5450	95.24

Mfg. part no. 27390 7-pc. ESD-safe precision slotted and Phillips® screwdriver set includes slotted metric sizes: 1.5mm, 2mm, 2.5mm, 3.5mm and Phillips® sizes: #00, #0, #1.

Mfg. Part No.	Description	Stock No.	Price Each
27390	7-Pc. ESD-Safe Precision Slotted and Phillips Screwdriver Set	20C3545	50.74

Mfg. part no. 27393 7-pc. ESD-safe precision extra-long slotted and Phillips® screwdriver set includes slotted metric sizes: 2mm, 2.5mm, 3mm, 3.5mm, 4mm and Phillips® sizes: #0, #1.

Mfg. Part No.	Description	Stock No.	Price Each
27393	7-Pc. ESD-Safe Precision Long Slotted and Phillips Screwdriver Set	84K5409	66.40

(68835)

PICO SOFT GRIP PRECISION SCREWDRIVER SETS

wiha Premium Tools

- Exact fit precision machined tips
- Exclusive CRM-72 special tool steel
- Satin micron vapor chromed finish
- Super through hardened blades
- Handles proportioned to blade size for optimum torque
- Free turning precision finger control cable
- Molded on soft tactile grip handle
- Precision quality made in Germany

Pico 8-piece slotted soft grip set **mfg. part no. 26093** includes slotted sizes: 0.8, 1.2, 1.5, 2.0mm 2.5, 3.0, 3.5, 4.0mm. Pico 8-piece slotted and phillips set **mfg. part no. 26193** includes: slotted: 1, 1.5, 2, 2.5, 3.5 and phillips tools: #00, #0, #1. Pico 8-piece inch hex set **mfg. part no. 26392** includes: .028, .035, .050, 1/16,//, 3/32, 7/64, 1/8. Pico 7-piece hex ball end set **mfg. part no. 26493** includes: 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32. Pico soft grip precision screwdriver sets come standard in rugged canvas pouch.

Mfg. Part No.	Stock No.	Price Each
26093	84K5337	67.52
26193	84K5347	64.30
26493	84K5376	66.87

(89322)

PRECISION SERIES SCREWDRIVER SETS

wiha Premium Tools

- Precision high-alloy, chrome-vanadium-molybdenum steel blades, hardened, chrome-plated
- Precision ground tips with non-slip, hard chrome finish for exact fit
- Precision handle constructed of high-quality plastic, cadmium free
- Molded-on, tapered handle allows rapid rotation
- Rotating cap for precise turning and control with fingertip

26190

Mfg. part no. 26190 7-pc. precision slotted and Phillips® screwdriver set includes slotted metric sizes: 1.5mm, 2mm, 2.5mm, 3mm and Phillips® sizes: #00, #0, #1.

Mfg. Part No.	Stock No.	Price Each
Mfg. part no. 26090 6-pc. precision slotted screwdriver set includes metric sizes: 1.5mm, 2mm, 2.5mm, 3mm, 3.5mm, 4mm.		
26090	90F7776	32.57
Mfg. part no. 26390 7-pc. precision hex screwdriver set includes metric sizes: 0.7mm, 0.9mm, 1.3mm, 1.5mm, 2mm, 2.5mm, 3mm.		
26390	90F7778	36.85
Mfg. part no. 26391 8-pc. precision hex screwdriver set includes inch sizes: 0.028″, 0.035″, 0.05″, 1/16″, 5/64″, 3/32″, 7/64″, 1/8″.		
26391	90F7781	40.28
Mfg. part no. 26490 8-pc. precision ball end hex driver set includes inch sizes: 0.05″, 1/16″, 5/64″, 3/32″, 7/64″, 1/8″, 9/64″, 5/32″. Angle entry up to 30°.		
26490	90F7792	48.60
Mfg. part no. 26591 8-pc. precision nut driver set includes inch sizes: 3/32″, 7/64″, 1/8″, 9/64″, 5/32″, 3/16″, 7/32″, 1/4″.		
26591	90F7791	56.63
Mfg. part no. 26590 8-pc. precision nut driver set includes metric sizes: 2.5mm, 3mm, 3.5mm, 4mm, 4.5mm, 5mm, 5.5mm, 6mm.		
26590	90F7779	58.28
Mfg. part no. 26790 6-pc. precision Torx® screwdriver set includes Torx® sizes: T6, T7, T8, T9, T10, T15.		
26790	90F7780	45.17
Mfg. part no. 26810 precision chip lifter.		
26810	93F6583	8.31

(68834)

PROFESSIONAL INSULATED SCREWDRIVER

wiha Premium Tools

- Tested to 10,000V — Certified to 1000VAC or 1500VDC
- High-alloy chrome-vanadium-molybdenum steel blades, black finish, hardened to average 58/60RC
- Insulation molded directly onto the blade for permanent bonding
- Solid core SoftFinish® handle with outer cushion grip — delivers more torque
- Responds to OSHA's use specification 29 CFR1910
- Meets insulation test standards according to: EN/IEC 60900, ASTM F-1505-01, VDE spec. 0682/part 201, DIN 7437, NFPA70E

Other sizes and styles are available; *go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each
32015	8″ Insulated Slotted Screwdriver — 3.5mm x 100mm (9/64″)	91B7995	7.93

(163091)

PROFESSIONAL INSULATED SCREWDRIVER SETS

wiha Premium Tools

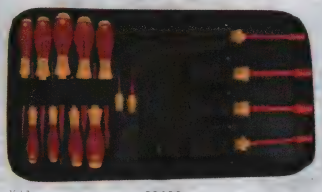
32090

32092

32093

32094

32590



32190

- Tested to 10,000V — Certified to 1000VAC or 1500VDC
- High-alloy chrome-vanadium-molybdenum steel blades, black finish, hardened to average 58/60RC
- Insulation molded directly onto the blade for permanent bonding
- Solid core SoftFinish® handle with outer cushion grip — delivers more torque
- Responds to OSHA's use specification 29 CFR1910
- Meets insulation test standards according to: EN/IEC 60900, ASTM F-1505-01, VDE spec. 0682/part 201, DIN 7437, NFPA70E

Mfg. part no. 32090 4-pc. insulated slotted and Phillips® screwdriver set includes slotted metric sizes: 3.5mm, 4.5mm and Phillips® sizes: #1, #2.

Mfg. Part No.	Description	Stock No.	Price Each
32090	4-Pc. Insulated Screwdriver Set	3430369	26.55

Mfg. part no. 32092 6-pc. insulated slotted and Phillips® screwdriver set includes slotted metric sizes: 3.5mm, 4.5mm, 6.5mm and Phillips® sizes: #1, #2, #3.

32092	6-Pc. Insulated Screwdriver Set	90B2680	66.67

Mfg. part no. 32093 10-pc. insulated slotted and Phillips® screwdriver set includes slotted metric sizes: 2mm, 2.5mm, 3mm, 3.5mm, 4.5mm, 6.5mm and Phillips® sizes: #0, #1, #2, #3.

32093	10-Pc. Insulated Screwdriver Set	95C0698	92.83

Mfg. part no. 32094 13-pc. insulated slotted and Phillips® screwdriver set includes slotted metric sizes: 2mm, 2.5mm, 3mm, 3.5mm, 4.5mm, 5.5mm, 6.5mm, 8mm, 10mm and Phillips® sizes: #0, #1, #2, #3.

32094	13-Pc. Insulated Screwdriver Set	27K5588	112.36

Mfg. part no. 32590 6-pc. insulated Torx® screwdriver set includes sizes: T8, T9, T10, T15, T20, T25.

32590	6-Pc. Insulated Torx® Screwdriver Set	28C1410	53.18

Mfg. part no. 32190 15-pc. insulated slotted, Phillips® and nut driver set includes slotted metric sizes: 2mm, 2.5mm, 3mm, 3.5mm, 4.5mm, 6.5mm, 8mm and Phillips® sizes: #1, #2, #3 and inch nut sizes: 1/4″, 5/16″, 3/8″, 7/16″, 1/2″. All packaged in a zippered tool case.

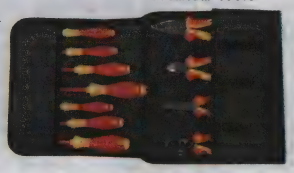
32190	15-Pc. Insulated Screwdriver & Nut Driver Set	10J2022	202.58

(68842)

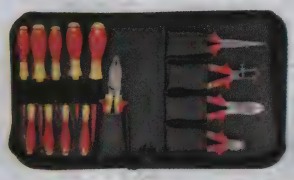
PROFESSIONAL INSULATED TOOL SETS

wiha Premium Tools

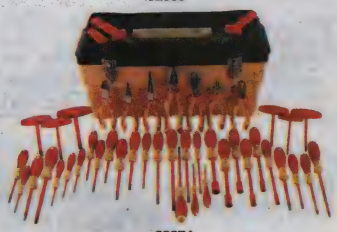
32891



32888



32895



32874

32877

32896

- Tested to 10,000V — Certified to 1000VAC or 1500VDC
- Meets insulation test standards according to: EN/IEC 60900, ASTM F-1505-01, VDE spec. 0682/part 201, NFPA70E
- Precision crafted from special tool steel
- High frequency induction hardened
- High-visibility comfort grip handles

Mfg. part no. 32891 10-pc. insulated pliers and slotted/Phillips® screwdriver set includes 8″ combination pliers, 8″ long-nose pliers, 8″ side cutter, 6.75″ cable cutter, 6.3″ universal wire stripper, and insulated screwdrivers in slotted metric sizes: 4.5mm, 6.5mm and Phillips® sizes: #1, #2, #3. All packaged in a zipper storage case.

Mfg. Part No.	Description	Stock No.	Price Each
32891	10-Pc. Professional Insulated Pliers and Screwdriver Set	28C1425	420.53

Mfg. part no. 32888 11-pc. insulated pliers and slotted/Phillips® screwdriver set includes 8″ combination pliers, 6.3″ long-nose pliers, 6.3″ stripping pliers, 6.3″ side cutter, and insulated screwdrivers in slotted metric sizes: 2.5mm, 3.5mm, 4.5mm, 6mm and Phillips® sizes:#0, #1, #2. All packaged in a handy canvas pouch.

32888	11-Pc. Professional Insulated Pliers and Screwdriver Set	33M7686	290.13

Mfg. part no. 32895 14-pc. insulated pliers and slotted/Phillips® screwdriver set includes 9″ combination pliers, 8″ long-nose pliers, 6.3″ stripping pliers, 6.3″ side cutter, 8″ high-leverage cutter and insulated screwdrivers in slotted metric sizes: 2mm, 2.5mm, 3mm, 3.5mm, 4.5mm, 6.5mm and Phillips® sizes: #1, #2, #3. All packaged in a zipper tool case.

32895	14-Pc. Professional Insulated Pliers and Screwdriver Set	92H2165	438.21

Mfg. part no. 32896 31-pc. Master Electrician's insulated tool set includes 9″ combination pliers, 6.3″ and 8″ long-nose pliers, 6.3″ stripping pliers, 6.3″ round-nose pliers, 7″ Lineman's pliers, 8″ high-leverage cutter, and 6.3″ side cutter. Insulated screwdrivers in slotted metric sizes: 2mm, 2.5mm, 3mm, 3.5mm, 4.5mm, 5.5mm, 6.5mm, 8mm, 10mm and Phillips® sizes: #0, #1, #2, #3. Insulated nut drivers in inch sizes: 5/32″, 3/16″, 7/32″, 1/4″, 5/16″, 3/8″, 7/16″, 1/2″, 9/16″. Plus a 6-ft. fiberglass folding ruler all packaged in a durable molded tool case.

32896	31-Pc. Master Electrician's Insulated Tool Set	10J2310	738.95

Mfg. part no. 32874 48-pc. professional insulated tool set includes 6.3″ combination pliers, 6.3″ and 8″ long-nose pliers, 6.3″ stripping pliers, 9″ combo plier/crimper, 6.3″ side cutter, 8″ high-leverage cutter, and 8″ adjustable wrench. Insulated screwdrivers in slotted metric sizes: 2mm, 2.5mm, 3mm, 3.5mm, 4.0mm, 4.5mm, 5.5mm, 6.0mm, 6.5mm, 8mm; Phillips® sizes: #0, #1, #2, #3; Square sizes: #1, #2; Slt/Ph Terminal sizes: #1, #2; Torx® sizes: T8, T9, T10, T15, T20, T25, T27, T30; T-handle hex sizes: 5/32″, 3/16″, 7/32″, 1/4″, 5/16″, 3/8″. Insulated nut drivers in inch sizes: 7/32″, 1/4″, 5/16″, 3/8″, 7/16″, 1/2″. Plus a ruler and cable knife all packaged in a durable molded tool case.

32874	48-Pc. Professional Insulated Tool Set	65R6610	969.13

Mfg. part no. 32877 80-pc. Master Electrician's insulated tool set includes: 6.3″ and 8″ long-nose pliers, 6.3″ stripping pliers, 6.3″ bent-nose pliers, 6.3″ long flat-nose pliers, 9″ combination plier/crimper, 8.3″ cable cutter, 8″ high-leverage cutter, 6.3″ diagonal cutter and 8″ adjustable wrench. Insulated screwdrivers in slotted metric sizes: 2mm, 2.5mm, 3mm, 3.5mm, 4mm, 4.5mm, 5.5mm, 6mm, 6.5mm, 8mm, 10mm; Phillips® sizes: #0, #1, #2, #3; Slt/Ph Terminal sizes: #1, #2; Square sizes: #1, #2; Torx® sizes: T6, T7, T8, T9, T10, T15, T20, T25, T30; T-handle hex in metric sizes: 4mm, 5mm, 6mm, 8mm and in inch sizes: 5/32″, 3/16″, 7/32″, 1/4″, 5/16″, 3/8″. Insulated L-key in sizes: 1/2″ and 10mm. Insulated nut drivers in inch sizes: 7/32″, 1/4″, 5/16″, 3/8″, 7/16″ and metric sizes: 5mm, 5.5mm, 6mm, 7mm, 8mm, 10mm, 13mm. Insulated sockets in inch sizes: 1/2″, 9/16″, 5/8″, 11/16″, 3/4″, 13/16″, 7/8″ and metric sizes: 13mm, 14mm, 15mm, 17mm, 19mm, 20mm, 22mm. Insulated 3/8″-Dr. ratchet and 4.9″ insulated extension. Plus a ruler and 50mm cable knife all packaged in a durable molded tool case.

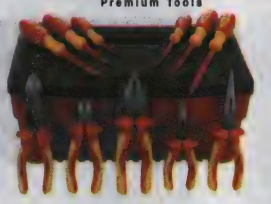
32877	80-Pc. Master Electrician's Insulated Tool Set	65R6611	2067.45

(68841)

SCREWDRIVERS & ACCESSORIES

PROTURN BRAND 11-PC. INSULATED PLIERS AND SCREWDRIVER SET

wiha Premium Tools



- Individually tested to 10,000V for 1000V insulation integrity
- Meets EN/IEC 60900, ASTM F-1505-01 and according to VDE 0682/part 201, NFPA70E insulation standards
- ISO, OSHA compliant
- Screwdriver blades CVM tool steel, hardened, black finish, molded-on insulation
- Pliers/cutters drop-forged from premium tool steel, induction hardened, chrome- and nickel-plated, mirror polished
- Proturn® soft grip handles for maximum comfort

Mfg. part no. 32390 Proturn® 11-pc. insulated pliers and screwdriver set includes: 8″ lineman's pliers, 6.3″ and 8″ long-nose pliers with cutter, 6.3″ diagonal cutter, 8″ high-leverage cutter, and insulated screwdrivers in slotted sizes: 3.0mm (1/8″), 4.5mm (3/16″), 6.5mm (1/4″) and Phillips® sizes: #0, #1, #2. All packaged in a molded tool box.

Mfg. Part No.	Description	Stock No.	Price Each
32390	11-Pc. Proturn® Insulated Pliers and Screwdriver Set	27K5590	243.46

(163097)

SOFTFINISH SCREWDRIVERS

wiha Premium Tools

Blade CVM tool steel, hardened. Cushion grip-handle, multi-component.

Mfg. part no. 30294 6-piece insulated set includes slotted sizes: 4.0, 6.5, 8.0 and 4.0 stubby. Phillips sizes: # 1, #2.

Mfg. Part No.	Stock No.	Price Each
30294	83F6424	59.80

Mfg. part no. 36291 6-piece insulated set includes Torx® sizes: T6, T7, T8, T9, T10 and T15.

36291	83F6425	39.55

(68838)

6-IN-1 MULTI-BIT INSULATED SCREWDRIVER SET

wiha Premium Tools

- Six tools in one!
- 1000 volt rated
- Insulated 1/4″ bit holder
- Impact resistant

Mfg. part no. 38006 6-in-1 multi-bit insulated screwdriver set features PowerHandle with snap-lock rotatable cap, chambered bit holder for storing bits, insulated chrome-plated steel shaft and stainless steel magnetic bit holder. Set includes the following six 1/4″ bits: slotted metric sizes: 5.5mm, 6.5mm, 8.0mm and Phillips sizes: #1, #2 , #3. Blade length: 4.7″. Overall length: 9″.

Mfg. Part No.	Description	Stock No.	Price Each
38006	6-in-1 Multi-Bit Insulated Screwdriver Set	90F7774	26.97

(68839)

6-IN-1 MULTI-BIT STUBBY SCREWDRIVER SET

wiha Premium Tools

- Six tools in one!
- Just 2.5″ over all length
- SoftFinish® cushioned grip for comfort

Mfg. part no. 38043 6-in-1 multi-bit Stubby screwdriver set features an ergo 2.5″ soft grip handle with removable, easy-access snap cap for storing bits and stainless steel magnetic bit holder. Set includes the following six industrial bits: slotted metric sizes: 4.5mm, 6.5mm, Phillips sizes: #1, #2, and Pozi sizes: #1, #2.

Mfg. Part No.	Description	Stock No.	Price Each
38043	6-in-1 Multi-Bit Stubby Screwdriver Set	11R6730	28.59

(163082)

ADJUSTABLE TORQUE-CONTROL SCREWDRIVER BIT SETS

wiha Premium Tools

28589

28595

28590

Mfg. part no. 28589 Master 59-pc. torque-control screwdriver bit set with three TorqueVario adjustable torque drivers: 15 to 80 in-oz, 5 to 10 in-lbs and 10 to 50 in-lbs. Set includes Torx® bits: T5, T6, T7, T8, T9, T10, T15, T20, T25, T30; hex metric bits: 1.5, 2, 2.5, 3, 4, 5, 6mm; hex inch bits: 0.05, 1/16, 5/64 ,3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4″; square bits: #1, #2, #3; Pozi® bits: #1, #2; Phillips® bits: #0, #1, #2; and slotted inch bits: 3/16, 7/32, 1/4″. Plus sockets (metric): 4, 4.5, 5, 5.5, 6, 7, 8mm; sockets (inch): 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 3/8″; hex-square adapter, bit holder, torque setting tool and storage box.

Mfg. Part No.	Description	Stock No.	Price Each
28589	59-Pc. Master Torque-Control Screwdriver Bit Set	27R1474	667.00

Mfg. part no. 28595 51-pc. torque-control 1/4″ screwdriver bit set with **mfg. part no. 28506** adjustable torque driver (10 to 50 in-lbs). Set includes 48 1/4″ drive insert bits: slotted (metric): 4.5, 5.5, 6.5, 8mm; Phillips®: #0, #1, #2, #3; Torx®: T6, T7, T8, T9, T10, T15, T20, T25; Hex (inch): 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16″; Hex (metric): 1.5, 2, 2.5, 3, 4, 5, 6, 8mm; Tri-Wing: #0, #1, #2, #3, #4; Torque Set: #4, #5, #6, #8; Square: #1, #2, #3; and Pozi-Drive: #0, #1, #2, #3. Plus 1/4″ ball retainer bit holder (non-magnetized); torque setter adjustment tool and storage box.

28595	51-Pc. Torque-Control Screwdriver Bit Set	10J1841	303.28

Mfg. part no. 28590 24-Pc. torque-control 4mm MicroBit set with **mfg. part no. 28504** adjustable torque driver (7.5 to 20 in-lbs). Set includes slotted metric micro bits: 1.5, 2, 3, 4mm; Phillips® micro bits: #00, #0, #1; Torx® micro bits: T6, T7, T8, T9, T10, T15; and hex inch micro bits: 0.05, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32″. Plus torque setter adjustment tool and storage box.

28590	24-Pc. Torque-Control MicroBit Set	73H5965	232.06

(162391)

SCREWDRIVER BIT COLLECTOR SETS

wiha Premium Tools

71997

71991, 71990

- Professional quality
- Precision machined exact fit tips
- Hardened CRM72 premium tool steel
- Packaged in a compact durable molded storage box

Mfg. part no. 71997 Drive-Loc 39-pc. standard and security bit collector set with Drive-Loc handle, adjustable length bit holder and 1/4″ drive bit-holding socket. Set includes standard bits in slotted metric sizes: 6.5mm, 8mm; Phillips® sizes: #1, #2; Pozidriv® sizes: #0, #1, #2, #3; and square sizes: #1, #2, #3. Security bits in TR- Hex sizes: 5/64, 3/32, 7/64, 1/8, 9/64, 5/32; TR-Torx® sizes: TR8, TR10, TR15, TR20, TR25, TR27, TR30, TR40; Spanner sizes: #4, #6, #8, #10; Tri-Wing sizes: #1, #2, #3, #4; and Torq-Set sizes #6, #8, #10.

Mfg. Part No.	Description	Stock No.	Price Each
71997	39-Pc. Drive-Loc Standard and Security Bit Collector Set	05R8556	122.41

Mfg. part no. 71991 ClicFix 39-pc. standard and security bit collector set with standard handle, 1/4″ ClicFix quick-release bit holder and 1/4″ drive bit-holding socket. Set includes standard bits in slotted metric sizes: 6.5mm, 8mm; Phillips® sizes: #1, #2; Pozidriv® sizes: #0, #1, #2, #3; and square sizes: #1, #2, #3. Security bits in TR- Hex sizes: 5/64, 3/32, 7/64, 1/8, 9/64, 5/32; TR-Torx® sizes: TR8, TR10, TR15, TR20, TR25, TR27, TR30, TR40; Spanner sizes: #4, #6, #8, #10; Tri-Wing sizes: #1, #2, #3, #4; and Torq-Set sizes #6, #8, #10.

71991	39-Pc. ClicFix Standard and Security Bit Collector Set	96H9089	108.31

Mfg. part no. 71990 39-pc. standard and security bit collector set with standard bit-holding handle, 1/4″ magnetic bit holder and 1/4″ drive bit-holding socket. Set includes standard bits in slotted metric sizes: 6.5mm, 8mm; Phillips® sizes: #1, #2; Pozidriv® sizes: #0, #1, #2, #3; and square sizes: #1, #2, #3. Security bits in TR- Hex sizes: 5/64, 3/32, 7/64, 1/8, 9/64, 5/32; TR-Torx® sizes: TR8, TR10, TR15, TR20, TR25, TR27, TR30, TR40; Spanner sizes: #4, #6, #8, #10; Tri-Wing sizes: #1, #2, #3, #4; and Torq-Set sizes #6, #8, #10.

71990	39-Pc. Standard and Security Bit Collector Set	97B2481	105.03

(68837)

DURATOOL AT NEWARK ELEMENT14

For your production and facilities needs, from soldering stations to tool sets & more.

newark.com/duratool

(212563)

31-PIECE XL-SELECTOR BIT SETS

wiha Premium Tools

- Industrial quality through hardened bits
- Small pocket-sized versions also available
- Tip-out drawer holds ten bits, bits always visible opened or closed
- Small sets include "clicfix" quick-release magnetic bit holder
- Made in Germany

Mfg. part no. 79490 security bit set includes spanner bits: #4, #6, #6, #10; tri-wing bits: #2, #3, #4, #5; Torx® set bits: #6, #8, #10; security Torx® bits: T7, T8, T9, T10, T15, T20, T25; security hex: 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16; square bits: #1, #2; Pozi bits- #1, #2; slotted bit: 6.5; Phillips bits: #1, #2; and ¼ magnetic bit holder. **Mfg. part no. 79495** combo set of slotted, Phillips, hex, and Torx® bits includes slotted bits: 5.5, 6.5, 8.0; Phillips bits: #0, #1, #2, #3; Torx® bits: T6, T7, T8, T9, T10, T15, T20, T25; hex: 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, ¼; hex bits: 2.0, 2.5, 3.0, 4.0, 5.0, 6.0; and ¼ magnetic bit holder. Both bit sets include 30 bits, molded storage box and standard magnetic bit holder.

Mfg. Part No.	Stock No.	Price Each
79490	84K6855	86.15
79495	84K6856	64.54

(89321)

BIT-SELECTORS

wiha Premium Tools

Included in these sets are: 10 hardened bits of chrome-vanadium-molybdenum steel, ¼" magnetic bit holder. Slide-out drawer allows quick bit access.

Mfg. part no. 79243 10-bit set includes slotted sizes: 5.5, 6.5, 8.0mm. Phillips sizes: #0, #1, #2, #3. Torx® sizes: T10, T15, T20.

Mfg. Part No.	Stock No.	Price Each
79243	93F2754	22.90

Mfg. part no. 79245 10-bit set includes Torx® sizes: T7, T8, T9, T10, T15, T20, T25, T27, T30 and T40.

79245	28C2453	25.59

Mfg. part no. 79247 10-bit set includes Tamper-Resistant Torx® sizes: TR7, TR8, TR9, TR10, TR15, TR20, TR25, TR27, TR30 and TR40.

79247	28C2455	37.90

(68840)

MASTER TECHNICIANS POWERED MICRO BIT SET

wiha Premium Tools

- Battery powered handle with forward / reverse thumb switch
- 38 micro precision bits & manual static dissipative slim profile handle
- 110 RPM, maximum torque 4 in-lbs at 4.5V
- Requires three AAA batteries not included

Proturn 40-pc.battery powered aluminum grip screwdriver set includes:slotted bits: .8, 1.2, 1.5, 1.8, 2, 2.5, 3, 3.5, 4mm, phillips bits: #000, #00, #0, #1,TORX bits: T3, T4, T5, T6, T7, T8, T9, T10, T15 hex bits metric: .71, .89, 1.27, 1.5, 2, 2.5, 3, 4, hex bits inch: .050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32. Contained in a rugged metal storage box with custom interior.

Mfg. Part No.	Description	Stock No.	Price Each
75989	Master Technicians Powered Micro Bit Set	82T4529	160.89

(200574)

PRO-SERIES ERGONOMIC SCREWDRIVERS AND SETS

Xcelite®

- ESD safe to protect sensitive equipment
- Ergonomically designed handles allow for sustained high torque with minimal slippage and muscle fatigue
- Handle core is shockproof plastic with soft rubber outer-coating for comfort and slip resistance
- Smooth, shatterproof handle cap for minimal friction when being turned
- Narrow pinch grip for added comfort and control
- Thumb bolster allows added downward force
- Satin finish chrome molybdenum vanadium steel shafts provide durability
- Specially treated black oxide tips eliminate light reflection

XPE700

Mfg. part no. XPE500 5-piece Pro-Series slotted and Phillips® screwdriver set includes: **mfg. part nos. XPE184, XPE3166, XPE144, XPE101** and **XPE102**. **Mfg. part no. XPE700** 7-piece Pro-Series slotted and Phillips® screwdriver set includes: **mfg. part nos. XPE184, XPE5324, XPE3166, XPE144, XPE5166, XPE101** and **XPE102**.

➤CONTINUED➤

PRO-SERIES ERGONOMIC SCREWDRIVERS AND SETS (CONT.)

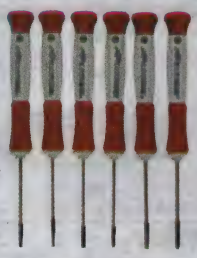
Mfg. Part No.	Description	Stock No.	Price Each
XPE500	5-Piece Pro-Series Screwdriver Set	17C6655	33.30
XPE700	7-Piece Pro-Series Screwdriver Set	17C6658	47.20
SCREWDRIVERS — SOLD INDIVIDUALLY			
XPE184	⅛" Slotted x 4" Blade Length	17C6653	4.70
XPE5324	5/32" Slotted x 4" Blade Length	17C6657	5.80
XPE3166	3/16" Slotted x 6" Blade Length	17C6654	7.30
XPE144	¼" Slotted x 4" Blade Length	17C6652	7.70
XPE101	#1 Phillips® x 3" Blade Length	17C6650	5.70
XPE102	#2 Phillips® x 4" Blade Length	17C6651	7.70

(66396)

ESD-SAFE 6-PC. PRECISION SCREWDRIVER SETS

Xcelite®

- Smooth-turning concave swivel caps for comfort and control
- Chrome-molybdenum vanadium steel blades for superior strength
- Snap-lock plastic carrying case



XP600

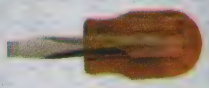
Mfg. part no. XP600 is a 6-piece screwdriver set that includes: 1.5mm, 2.0mm, 2.5mm, 3.0mm slotted screwdrivers; #0, #00 Phillips® tip screwdrivers. **Mfg. part no. XPT600** is a 6-piece Torx® screwdriver set that includes: #5 pt., #6 pt. standard Torx® tip driver, #7 pt., #8 pt., #10 pt., #15 pt. tamperproof Torx® tip driver.

Mfg. Part No.	Description	Stock No.	Price Each
XP600	ESD-Safe Swivel-Cap Screwdriver Set	92B0521	27.10
XPTX600	ESD-Safe Swivel-Cap Torx® Screwdriver Set	92B0539	32.60

(48788)

SLOTTED SCREWDRIVERS

Xcelite®



S141†

S3163

Blades are AISI 6150 chrome vanadium steel finished in bright nickel chrome with plastic handles. Additional blade sizes available; *go online or call.*

Mfg. Part No.	Blade Size	Stock No.	Price Each
SQUARE BLADES			
S141†	¼" x 1¼"	34F276	5.80
S3163	3/16" x 3"	34F203	5.50
S3164	3/16" x 4"	34F204	6.00
S144	¼" x 4"	34F209	8.10
S388	⅜" x 8"	34F217	12.50
S3161†	3/16" x 1¼"	34F275	5.50
ROUND BLADES			
R3322*	3/32" x 2"	34F250	2.60
R3323*	3/32" x 3"	34F251	3.00
R3324*	3/32" x 4"	34F252	3.40
R182	⅛" x 2"	34F254	3.20
R183*	⅛" x 3"	34F253	3.20
R184	⅛" x 4"	34F255	4.10
R186	⅛" x 6"	34F256	4.40
R188	⅛" x 8"	34F257	4.80
R-1810	⅛" x 10"	34F258	5.00
R5323	5/32" x 3"	34F259	3.80
R5324	5/32" x 4"	34F260	3.70
R5325	5/32" x 5"	34F261	4.20
R3163	3/16" x 3"	34F263	5.10
R3164	3/16" x 4"	34F264	5.90
R3166	3/16" x 6"	34F265	6.40
R3168	3/16" x 8"	34F266	6.80
R31610	3/16" x 10"	34F267	8.00
R144	¼" x 4"	34F269	6.60
R146	¼" x 6"	34F270	7.50
R1410	¼" x 10"	34F272	8.60
R5166	5/16" x 6"	34F273	8.30
R181*	⅛" x 2"	34F277	2.50

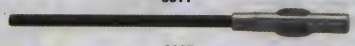
*Pocket clip style; †Stubby style

(5727)

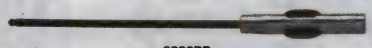
99 SERIES INTERCHANGEABLE DRIVER BLADES, SHANKS AND HANDLES

Xcelite®

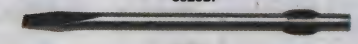
9911



9925



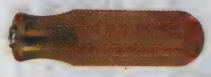
9923BP



99250

99822

995ESD



991

994R

INTERCHANGEABLE NUTDRIVER SHANKS

Mfg. Part No.	Diameter	Length	Stock No.	Price Each
996	3/16″	3⅝″	35F3112	4.90
997	7/32″	3⅝″	35F3113	5.40
998	1/4″	3⅝″	35F3114	5.40
9910	5/16″	3⅝″	35F3117	4.90
9911	11/32″	3⅝″	35F3119	5.10
9912	3/8″	3⅝″	35F3120	5.60
9914	7/16″	4″	35F3122	6.50
9916	1/2″	4″	35F3123	7.10
INTERCHANGEABLE ALLEN® HEX SOCKET TYPE SCREWDRIVER BLADES				
9920	0.05″	4″	35F3124	4.40
9921	1/16″	4″	35F3125	4.40
9922	5/64″	4″	35F3126	4.40
9923	3/32″	4″	35F3127	4.40
99764	7/64″	4″	35F3128	4.40
9924	1/8″	4″	35F3129	4.40
99964	9/64″	4″	35F3130	4.40
9925	5/32″	4″	35F3131	4.40
9926	3/16″	4″	35F3132	4.40
INTERCHANGEABLE BALLPOINT ALLEN® HEX SOCKET TYPE SCREWDRIVER BLADES				
9923BP	3/32″	4″	94F433	7.50
99764BP	7/64″	4″	94F439	7.50
9925BP	5/32″	4″	98F1009	7.50
INTERCHANGEABLE REAMER				
9938	1/8″ x 3/8″	4″	35F3133	12.40
INTERCHANGEABLE SLOTTED SCREWDRIVER BLADES				
99250	1/4″	4″	35F3135	4.90
99811	3/16″	4″	35F3136	4.90
INTERCHANGEABLE PHILLIPS® SCREWDRIVER BLADES				
99820	#0	4″	99F7410	4.90
99821	#1	4″	35F3137	4.90
99822	#2	4″	35F3138	4.90
INTERCHANGEABLE EXTENSIONS				
99X5	4″	4″	35F3139	6.80
99X10	7″	7″	35F3140	7.40

INTERCHANGEABLE HANDLES

Mfg. Part No	Description	Stock No.	Price Each
995ESD	1½″ Dia. x 4″ L ESD-Safe Ergonomic Handle, Gray	71R7419	18.20
991	1 3/16″ Dia. x 4⅛″ L Handle, Amber	34F398	5.20
993	1 3/16″ Dia. x 2″ L Stubby Handle, Amber	35F3111	5.00

(5737)

PHILLIPS SCREWDRIVERS

Xcelite®

All have plastic handles. **SX101** and **SX102** are stubby type. **P12S** has pocket clip. Super Tru-Tips have black oxide tips for longer wear.

REGULAR

Mfg. Part No.	Point Size	Blade Size	Stock No.	Price Each
SX101	1	1 7/16″	34F287	5.70
SX102	2	1 5/16″	34F288	6.30
P12S	0	2″	34F289	3.40

➤ CONTINUED ➤

PHILLIPS SCREWDRIVERS (CONT.)

Mfg. Part No.	Point Size	Blade Size	Stock No.	Price Each
X101	1	3″	34F290	5.10
X102	2	4″	34F291	6.70
X103	3	6″	34F292	9.40
X108	1	6″	34F294	6.60
X1010	1	10″	34F295	8.60
X1020	2	10″	34F296	9.60
SUPER TRU-TIP				
XST100	0	4⅝″	35F1433	4.80
XST101	1	6⅝″	35F1434	6.40
XST102	2	8⅛″	35F1435	8.40

(48794)

DUAL-PURPOSE DRIVERS

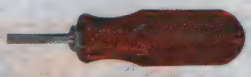
Xcelite®

Reversible blades. **Mfg. part no. CR1** is for 3/16″ and No. 1 Phillips screws. **CR2** 1/4″ and No. 2 Phillips.

Mfg. Part No.	Length	Stock No.	Price Each
CR1	7¼″	34F298	11.50
CR2	7¼″	34F299	11.50

(5729)

4-WAY POCKET TOOL



Xcelite®

Combination nutdriver and screwdriver features special reversible SB1 blade that fits slotted or Phillips® head screws. Double-ended handle serves as 2 sizes of nutdrivers (7/16″ and 1/4″). Especially handy for removing backs of TV sets and installing antennas.

Mfg. Part No.	Description	Stock No.	Price Each
600	4-Way Pocket Tool	35F1421	12.30

(5733)

SCREWDRIVER SETS

Xcelite®

SDX22

CK23

Mfg. part no. SDR11. 5 round blade slotted screwdrivers: 1/8″, 5/32″, 3/16″, 1/4″, 5/16″.

Mfg. part no. SDS44. 5 square-blade slotted screwdrivers, sizes 1/4″ stubby and 3/16″, 1/4″, 5/16″, 3/8″ regular. Both in clear plastic case.

Mfg. Part No.	Description	Stock No.	Price Each
SDR11	5-Pc. Round Blade Slotted Screwdriver Set	46F2586	29.40
SDS44	5-Pc. Square Blade Slotted Screwdriver Set	46F2587	43.10

CK-3 or **CK-23** Type 25 handle with 3 reversible blades: #1, 2 and 3 Phillips and 3/16″, 1/4″ and 5/16″ slotted blades. **Mfg. part no. CK-3** Pocket roll-up case. **Mfg. part no. CK-23** Clear plastic case.

CK3	Set with Pocket Roll-Up Case	46F2591	24.90
CK23	Set with Clear Plastic Case	35F1424	24.90

Mfg. part no. SDX-22. 5 Phillips screwdrivers: #0, #1, #2, #3 regular, and #2 stubby. Clear plastic case.

SDX22	5-Pc. Phillips Screwdriver Set	46F2590	32.10

(5732)

TORX® SCREWDRIVERS

Xcelite®

Screwdrivers for Torx® head screws. Blades made of AISI 6150 chrome vanadium steel, plated for protection. Durable plastic handle.

Mfg. Part No.	Blade Length	Tip Size	Stock No.	Price Each
XTD10	3″	T-10	33F1800	5.80
XTD15	3″	T-15	33F1801	5.70
XTD20	3″	T-20	33F1802	5.70
XTD25	3″	T-25	33F1803	5.70
XTD27	4½″	T-27	33F1804	6.30
XTD30	4½″	T-30	33F1805	6.30

(5730)

SCREWDRIVER SETS

Xcelite®

PS88

M60

XL70

Mfg. part no. XL70 19-piece midget reversible ratchet screwdriver set. Ideal for all work involving Allen hex head type, Phillips® and slotted screws. Driver bits ¼″ hex shank. Allen hex sizes: 0.050, 1/16, 5/64, 3/32, 7/64, ⅛, 9/64, 5/32, 3/16, 7/32, ¼, 5/16″. Phillips® screw bits: #1, #2, 3/16″, ¼″ slotted screw bit. Adapter bit, reversible ratchet, spinner-extension and plastic case. Hot drop forged cutlery steel.

Mfg. Part No.	Description	Stock No.	Price Each
XL70	19-Pc. Midget Reversible Ratchet Screwdriver Set	35F200	76.00

Mfg. part nos. PS88 and **M60** compact midget screwdriver sets come with "piggyback" torque amplifier handle that slips over drivers for better gripping. **Mfg. part no. PS88** set includes 3 Phillips® and 5 slotted drivers with blade diameters from 3/32″ to ¼″. **Mfg. part no. M60** set consists of 5 jeweler's blades and 1 Phillips® blade for detailed work.

Mfg. Part No.	Description	Stock No.	Price Each
PS88	9-Pc. Compact Convertible Screwdriver Set	34F375	32.60
M60	6-Pc. Compact Jeweler's and Phillips Midget Screwdriver Set	35F206	15.90

(5731)

GRIP-N-STRIP™ END STRIPPER

IDEAL®

Features self-adjusting stripping blades. Just insert wire in the end, squeeze hand and release. Tapered nose allows stripping in confined spaces. Strips 12 AWG solid through 20 AWG stranded. Built-in wire cutter.

Mfg. Part No.	Description	Stock No.	Price Each
45-227	Grip-N-Strip™	87F2743	65.91

(7438)

KINETIC SUPER™ AND KINETIC REFLEX™ WIRE STRIPPERS

IDEAL®

45-715

45-716

45-918

Compact, lightweight and easy-to-use, the **Kinetic™ series** of wire strippers have an ergonomic design to reduce muscle fatigue and handle grips that wick away perspiration. The Thumb Valley ™ guide and precision stripping holes offer a high level of stripping accuracy and maintain the tightest stripping tolerances for consistent and reliable performance. Plus, the Kinetic Reflex™ wire strippers feature curved handles for added comfort. All models strip both solid and stranded wire.

Mfg. Part No.	Description	Stock No.	Price Each
45-715	Kinetic Super™ Wire Stripper for 10-18 AWG Solid, 12-20 AWG Stranded	90C0008	35.16
45-716	Kinetic Super™ Wire Stripper for 14-24 AWG Solid, 16-26 AWG Stranded	90C0009	35.91
45-915	Kinetic Reflex™ Wire Stripper 10-18 AWG Solid, 12-20 AWG Stranded	23K9690	35.91
45-918	Kinetic Reflex™ Wire Stripper 6-14 AWG Solid, 8-16 AWG Stranded	23K9691	36.29

(73635)

REFLEX™ T®-STRIPPER WIRE STRIPPERS

IDEAL®

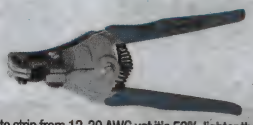
Reflex™ T®-Stripper wire strippers feature an ergonomic design that reduces wrist fatigue. Includes precision form-ground stripping holes and knife-type blades for solid and stranded wire. Features injection molded handles, wire looping holes, and plier-type nose ends.

Mfg. Part No.	Wire Range (AWG)	Stock No.	Price Each
45-415	10-18 Solid, 12-20 Stranded	95B7140	21.02
45-416	14-24 Solid, 16-26 Stranded	48F6884	21.47
45-417	22-30 Solid, 24-32 Stranded	95B7141	23.15
45-418	6-14 Solid, 8-16 Stranded	93B5083	22.86

(47776)

STRIPMASTER™ LITE WIRE STRIPPERS

IDEAL®



Stripmaster™ Lite has the capability to strip from 12-30 AWG yet it's 50% lighter than Stripmaster™, needs 33% less effort to operate and is ¾ the size. Features the same knife-type blade design.

Mfg. Part No.	Wire Range (AWG)	Stock No.	Price Each
45-671	16-22	93F8755	71.84
45-672	24-30	93F8756	70.34

(7425)

STRIPMASTER™ WIRE STRIPPERS

IDEAL®

Stripmaster™ wire stripper features single-squeeze operation and automatically holds jaw open for removing wire without crushing end. Perfect for lighter PVC, THHN and similar insulations. Includes knife-type stripping blades, die-cast body and frame with cushioned hand grips. Capability to strip from 8-30 AWG depending on model. Many more models are available; *go online or call.*

Mfg. Part No.	Wire Range (AWG)	Stock No.	Price Each
45-092	10-22	84F505	51.93
45-093	14-22	58F553	53.75
45-097	16-26	58F554	53.75
45-098	20-30	58F555	53.75

(7442)

T®-STRIPPER WIRE STRIPPERS

IDEAL®

45-120

T®-Strippers feature precision form-ground stripping holes and knife-type blades for solid and stranded wire. All feature new injection molded handles, wire looping holes and plier-type nose ends. Super T®-Strippers also include wider, curved handles, a locking pawl, and 6-32 and 8-32 treaded bolt cutting holes.

T®-STRIPPERS

Mfg. Part No.	Wire Range (AWG)	Stock No.	Price Each
45-120	10-18 Solid, 12-20 Stranded	58F586	17.07
45-125	22-30 Solid, 24-32 Stranded	59F1103	20.12

SUPER T®-STRIPPERS

(5691)

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Affordable, performance board level & box build components at

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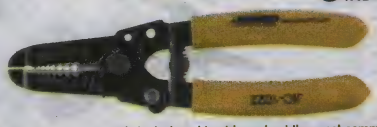
WIRE STRIPPERS

WIRE STRIPPERS AND CUTTERS

JONARD INDUSTRIES CORP.



Mfg. part no. JIC-1022 wire stripper and cutter is designed to strip and cut the most commonly used stranded and single wire gauges 10 to 22 AWG and 2-3 mm fiber jackets. **Mfg. part no. JIC-1626** is designed for 16-26 AWG wire and **mfg. part no. JIC-2030** for 20-30 AWG wire. Other features include a coil spring opening to reduce fatigue, wire looping, bending holes conveniently located, black oxide finish, locking mechanism, and cutting surfaces that are hardened, tempered and ground for superior performance. Length: 6 3/4". Wt.: 4.5 oz.

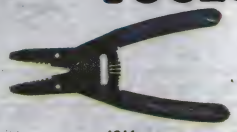
Mfg. Part No.	Description	Stock No.	Price Each
JIC-1022	Wire Stripper and Cutter 10-22 AWG	51M0207	11.53
JIC-1626	Wire Stripper and Cutter 16-26 AWG	61M0802	11.53
JIC-2030	Wire Stripper and Cutter 20-30 AWG	61M0803	11.53

(139062)

MULTI-PURPOSE COMBINATION WIRE STRIPPING AND CUTTING TOOLS

KLEIN TOOLS®

1010



1011

Mfg. part no. 1010 long-nose multi-purpose tool strips, cuts and crimps. Easily strips and cuts 10 – 22 AWG (4mm² – 0.34 mm²) wire. Crimps 10 – 22 gauge insulated and non-insulated terminals and 7 to 8mm ignition terminals. Cleanly shears bolts in sizes 4-40, 5-40, 6-32, 8-32, 10-32, 10-24. Designed with cutters and strippers in front of the pivot for maximum ease-of-use in reaching into tight places. Narrow, serrated plier nose to pull, loop, and bend wire. Long, curved cutting blade. Blue, plastic-covered cushioned handles for comfort.

Mfg. Part No.	Description	Stock No.	Price Each
1010	8¼"L Multi-Purpose Stripper/Cutter/Crimper	94F5755	38.03

Mfg. part no. 1011 multi-purpose wire stripper/cutter strips and cuts 10 – 20 AWG (4mm² – 0.5mm²) solid and stranded wire. Easily strips six standard wire sizes without nicking wire. Its smooth scissors action of ½" (13mm) wide cutter makes clean cuts with little effort. Serrated nose jaws for bending, shaping or pulling wire and holes for looping wire ends. Tool is spring-loaded for self-opening action. Blue plastic-coated handles for maximum comfort.

1011	6⅛"L Multi-Purpose Wire Stripper/Cutter	50B4624	22.26

(56570)

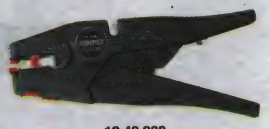
WIRE STRIPPERS

KNIPEX®

11 02 160

12 12 02

12 21 180



12 40 200

12 42 195

12 62 180

Mfg. Part No. 11 02 160 WIRE STRIPPER
Two-colour dual component handles. Special tool steel, oil-hardened and tempered. For single, multiple and fine stranded conductors with plastic or rubber insulation max. 5.0 mm dia. or resp. 10.0 mm² cable cross section. Easy adjustment to the required diameter of solid or stranded wire with knurled screw and lock nut.

Mfg. Part No. 12 12 02 UNIVERSAL INSULATION STRIPPER
Comfortable two color dual component handles, lightweight construction and smooth operating mechanism for repetitive work. Easily strips difficult insulating materials such as Teflon®, silicone, Radox®, Kapton® and rubber, as well as, multilayered insulations. Positive stripping due to precise shape of blades. Includes cable guide.

Mfg. Part No. 12 21 180 AUTOMATIC INSULATION STRIPPERS
Strong light-metal construction. Replaceable blades of special steel with 4 and 6 positions responsible for different wire cross sections. Positive stripping due to precise shape of blades and length stop. Clamping jaws hold wire firmly and a spring leads the the stripper back to the starting position.

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WIRE STRIPPERS (CONT.)

Mfg. Part No. 12 40 200 SELF-ADJUSTING INSULATION STRIPPER
Light, fibreglass reinforced plastic. Smooth operating mechanism with easily interchangeable blades and plastic jaws. For single, multiple and fine stranded conductors with plastic or rubber insulation adjusts automatically to the respective cable cross-section which prevents damage to the conductor. Cutting depth can be adjusted for different insulation materials with wire cutter for copper and aluminium wires, multiple stranded up to 10 mm² and single stranded up to 6 mm².

Mfg. Part No.12 42 195 KNIPEX MULTISTRIP 10, SELF-ADAPTING UNIVERSAL INSULATION STRIPPER
Tough, fiberglass reinforced plastic with ergonomic handle. Fully automated adjustment to the respective cross-section-depending insulation thicknesses in a range from 0.03 - 10.0 mm².
Unique self-infeeding of the cutting depth preventing damage to the conductor. Strips cables with insulating materials like Teflon® and Radox®. Wire cutter for copper and aluminum wires, multiple stranded up to 10 mm² and single stranded up to 6 mm². Interchangeable blades block and length stop.

Mfg. Part No. 12 62 180 SELF-ADJUSTING INSULATION STRIPPER
Tough, fiberglass reinforced plastic with ergonomic handle. Compact tool for single, multiple and fine stranded cables of 0.2 up to 6.0 mm² with standard insulation adjusts automatically to the respective cable cross-section. With wire cutter for copper and aluminum wires up to 2.5 mm² with adjustable length stop from 6.0 - 18.0 mm for constant stripping length. Easily exchangeable blades.

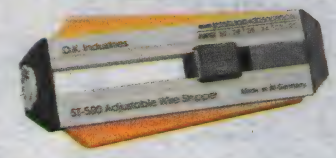
Mfg. Part No.	Head/ Body	Stripping Capabilites AWG	Overall Length (mm)	Wt. (g)	Stock No.	Price Each
11 02 160	Polished	7	160	165	06R6265	40.56
12 12 02	Burnished	32-14	195	447	06R6266	215.46
12 21 180	Burnished	20-19/17/15/13/11/10	180	366	06R6267	108.28
12 40 200	Reinforced/ Plastic	32-7	200	202	06R6268	118.38
12 42 195	Reinforced/ Plastic	32-7	195	150	06R6269	165.38
12 62 180	Reinforced/ Plastic	24-10	180	180	06R6274	63.84

(147267)

ADJUSTABLE PRECISION WIRE STRIPPERS

OK Industries Div. of Jonard Industries

- Adjustable to Six Wire Gauges
- Calibrated Wire Stop
- Single-Action Squeeze-Pull Motion
- Clean, Precise Strip of Any Insulation Type
- Shirt-Pocket Size and Light-Weight (<1 oz.)
- ST-550ESD Uses ESD Safe Polycarbonate



Mfg. Part No.	Wire Stripping Range	Stock No.	Price Each
ST-450	26 to 36 AWG	61M1049	52.92
ST-500	20 to 30 AWG	90F1767	44.77
ST-500ESD	20 to 30 AWG	61M1050	63.47
ST-550	18 to 28 AWG	90F1768	43.51

(5871)

WIRE CUT-AND-STRIP TOOLS

OK Industries Div. of Jonard Industries

For easy, clean stripping of wires for wire wrapping. Place up to four wires in the stripping slot with ends extended beyond the hardened steel cutting blades, press tool, and pull to cut wires to perfect wire-wrapping length. All tools now have a double blade.

Mfg. Part No.	AWG	Adjustable Strip-Off Length (in.)	Blade	Stock No.	Price Each
ST-100	24-22	1 5/16" — 1 9/16"	Double	10F7573	66.78
ST-100-2426	26-24	1 5/16" — 1 11/16"	Double	72K0759	66.78
ST-100-2830	30-28	⅞" — 1⅛"	Double	72K0760	66.78

(5878)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

GripP 10 AND 20 AWG WIRE/CABLE STRIPPERS

GREENLEE. COMMUNICATIONS A Textron Company

- Non-scoring stripping
- Smooth wire cutting
- Ergonomic design
- Rubber-embedded, non-slip handles

PA1123 Combo Pack

PA1117

GripP 10 and 20 wire/cable strippers combine ergonomics and versatility. Strips the most common types of electrical and hook-up wire, and multiconductor and flat cable. Works on Romex household cable too, but not for use on steel or armored wire and cable. Head of tool and handles are designed at an optimum 22 degree angle to prevent awkward wrist bends. Contoured wire stripping areas are precision ground for accuracy. Features spring-loaded closure, gripping jaws on front of tool, screw cutter and wire loops embedded in frame. *Order* **mfg. part no. PA1123** *economical combo pack separately below to get both GripP strippers.* ProGrip fiber optic stripper **mfg. part no. PA1171** has cavities for 2.0 - 2.4 mm outer jacket, 2.0 - 3.0 mm loose tube, 2.8 - 3.0 mm outer jacket, 900 µm buffer insulation, and 900/125 µm and 250/125 µm buffer/acrylate. **Mfg. part no. PA1177** has cavities for 2.0 mm outer jacket, 900 µm buffer insulation, and 250 µm buffer/acrylate.

WIRE/CABLE STRPPERS

Mfg. Part No.	Description	AWG	Stock No.	Price Each
PA1117	GripP 10 Wire/Cable Stripper	22-10	97H2957	18.20
PA1118	GripP 20 Wire/Cable Stripper	30-20	97H2958	18.20
PA1123	GripP 10 and 20 Wire/Cable Stripper Combo Pack	30-10	78R4030	30.35

FIBER OPTIC CABLE STRIPPERS

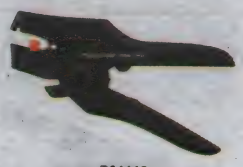
Mfg. Part No.	Description	Stock No.	Price Each
PA1171	ProGrip 5-in-1 Fiber Optic Stripper	85R5191	71.75
PA1177	ProGrip 3-in-1 Fiber Optic Stripper	85R5194	41.84

(83209)

STRIPAX® PRO 6 AND MINI STRIPAX® PLUS WIRE STRIPPERS/CUTTERS

RoHS Compliant Available

GREENLEE. COMMUNICATIONS A Textron Company



PA1113

PA1115P

Strips and cuts solid and fine stranded conductors with all grades of PVC insulation hardness. Automatic opening after stripping. Wear-free gripping jaws. Self-adjusting cable cutter. Includes one blade. Lifetime manufacturer's warranty on Stripax® Pro 6 stripper/cutter.

Mfg. Part No.	Description	Stock No.	Price Each
PA1113	Stripax Pro 6 — Strips 28-10 AWG	97B0120	109.23
PA1115P	Mini Stripax Plus — Strips 28-18 AWG PVC and 32-18 AWG PTFE	90F6879	117.72

(5747)

WIRE STRIPPERS

DURATOOL

22-8850

TL10336

Mfg. part no. 22-8850 3-in-1 wire stripper consists of pliers, cutter, and wire stripper in one tool. Ideal for 10~22AWG copper and aluminum wire.

Mfg. Part No.	Description	Stock No.	Price Each
22-8850	3-in-1 Wire Stripper	95K9120	5.38

Mfg. part no. TL10336 is a "parrot type" wire stripper and is good for all types of wire from 0.2 - 6 mm, strips lengths up to 25mm, self-adjusting mechanism.

TL10336	Automatic Wire Stripper, 7"	97M9400	3.96

(116787)

ADJUSTABLE WIRE STRIPPER

DURATOOL

This wire stripper and cutter is suitable for all commonly used insulated wires. All cutting surfaces are ground to provide smooth shearing action. Adjusting stop on gripping handles permits adjustments. For 10-30AWG.

Mfg. Part No.	Stock No.	Price Each
3613	84N1038	8.06

(32778)

ESD SAFE WIRE STRIPPER

wiha Premium Tools

- Static dissipative ESD safe (resistance 10^6-10^9 ohms)
- Stamped from C70 tool steel
- Guaranteed ProTurn quality

Ideal for use on static sensitive electronics. Durable, precision technicians quality with return spring for ease of use.

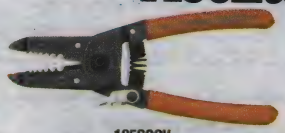
Mfg. Part No.	Stripping Capability (AWG)	Overall Length (in.)	Stock No.	Price Each
45810	30 to 20	6.5	65R6659	23.82

(192362)

INDUSTRIAL WIRE STRIPPER/CUTTERS

Xcelite®

104CG



105SCGV

- Cuts and strips solid and stranded wire
- Red plastic-coated cushion grips for comfort and maximum leverage

103SV

Mfg. part no. 104CG wire stripper/cutter features wide size-range bolt cutter, fast scissors-action, up-front wire cutting/stripping, pliers nose for wire pulling and bending capabilities, hardened pivot joint bushing and crimp stations.

Mfg. Part No.	Description	Stripping Range (AWG)	Stock No.	Price Each
104CG	8¼" Wire Stripper/Cutter with Scissors-Action	22-10	70B1218	33.20

Mfg. part no. 101SV cuts and strips both solid and stranded wire cleanly, neatly. Adjustable screw stop for different wire sizes. Spring-equipped self-opening handles.

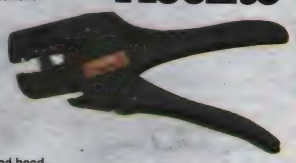
105SCGV	6 " Wire Stripper/Cutter with Scissors-Action, Spring and Lock	22-10	10B1285	19.40

(5698)

SELF-ADJUSTING COMBINATION WIRE STRIPPER

Xcelite®

- Capable of stripping wires from 34 to 8 AWG without adjustment
- Cuts conductors: 16 AWG Solid, 8 AWG Stranded
- Easily interchangeable stripping blades enable precision stripping
- Strips a wide range of insulation types , PVC to PTFE
- Suitable for production of field service work
- Fine insulation can be stripped without damage to the conductor
- Ergonomic design is lightweight, strong and comfortable — features a sculpted shape, soft grip main handle
- Low-friction moving handle, optimized grip span, and angled head
- Made tough — tested to over 150,000 cycles



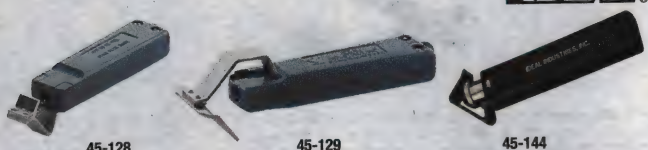
Mfg. part no. SAS3210 self-adjusting combination wire stripper is ideal for cutting and stripping a wide variety of jacketed wire and cable including PVC, conduit wire, mains cable, equipment wire and communications cable. Standard straight blade supplied with tool. **Mfg. part no. SAS3210TRB** V-blade for stripping Teflon®, PTFE and other hard insulation materials from 32 AWG to 10 AWG.

Mfg. Part No.	Description	Stock No.	Price Each
SAS3210	Self-Adjusting Combination Wire Stripper	26H3590	81.20
SAS3210TRB	PTFE Wire Replacement Blade	32H1402	34.50

(88479)

CABLE STRIPPERS

SWIVEL-BLADE® CABLE STRIPPERS



45-128 45-129 45-144

For both end or center stripping of coaxial and power cable. Strips insulation up to 0.156″ thick including PVC, rubber, Neoprene, Teflon®, polyethylene, nylon, Kapton, and fiberglass. Cuts circumferentially and transversely.

Mfg. Part No.	Description	Stock No.	Price Each
45-128	0.25-0.75″ O.D.	35F2461	46.65
45-129	0.75-1.50″ O.D.	59F1117	58.03
45-144	0.125-1.75″ O.D.	01F2586	74.61

(5692)

COAX CABLE STRIPPERS

45-526

Adjustable coax strippers for 2- or 3-step stripping. Each blade is individually adjustable for precision stripping. High quality blades provide a long stripping life. All models strip RG-6, RG-59 and RG-58 coax. Also works on RG-6 Quad cable in removing the outer shield. Replacement blade cartridges are available; *go online or call.*

Mfg. Part No.	Strip Capability	Stock No.	Price Each
45-520	3-Step, 0.24″ and 0.24″ Strip	93F6621	28.31
45-526	2-Step, 0.24″ Strip — Perfect for Most Compression Connectors	52F9338	28.61
45-528	3-Step, 0.24″ and 0.24″ Strip	52F9340	52.18

(7852)

COAX/UTP CABLE STRIPPERS

45-165

These coax/UTP cable strippers perform nick-free 2-level stripping via adjustable blades, 0.24″ step strip. Also includes a slitting blade and notch — three blades in total. *Order replacement blade sets separately below.*

CABLE STRIPPERS

Mfg. Part No.	Description	Stock No.	Price Each
45-162	Up to 1/8″ O.D./ Mini-Coax	20F970	36.75
45-163	1/8″ to 7/32″ O.D.	20F971	36.79
45-164	1/4″ to 9/16″ O.D.	20F972	58.43
45-165	3/16″ to 5/16″ O.D./UTP	81F2815	34.45
REPLACEMENT BLADE SETS			
L9225	45-162, 45-163, 45-165	20F973	12.03
L9226	45-164	20F974	14.98

(7426)

THERMAL STRIPPERS FOR OPTICAL FIBER

- Compact bench-top design
- Adjustable and fixed blade versions
- Accommodates different fiber coatings and cladding sizes
- Adjustable temperature range: 60-200° C, or ambient
- Adjustable heat time settings: 0-30 seconds (2 sec. increments)

TSAB-40

Ericsson Style Platform

Fitel/Fujikura Style Platform

Universal Clamp

Thermal strippers are compact, easy-to-use optical fiber stripping units designed to thermo-mechanically remove coatings from optical fibers. The heater is adjustable up to 200°C. The higher temperature helps facilitate stripping extremely difficult and baked-on coatings and in some cases can even remove fluoroacrylate undercoatings. **Mfg. part no. TSAB-40** adjustable blade thermal stripper supports optical fibers with cladding diameters from 40μm to 1000μm,

➤CONTINUED➤

THERMAL STRIPPERS FOR OPTICAL FIBER (CONT.)

and with buffer diameters up to 1200μm. **Mfg. part no. TSFB-125** fixed blade thermal stripper supports optical fibers with 125μm cladding and buffer diameters from 250μm to 900μm. External power supply: 100-240VAC, 47-63Hz. Dimensions: 5.1″W x 2.9″D x 2.8″H (129.5 x 73.5 x 71mm).

Mfg. Part No.	Description	Stock No.	Price Each
TSAB-40	Thermal Optical Fiber Stripper with Adjustable Blade	34R2404	2769.00
TSFB-125	Thermal Optical Fiber Stripper with Fixed Blade	34R2405	2535.00

ACCESSORIES

For a more efficient stripping and splicing process, order the corresponding platforms for use with Ericsson®, Fitel® or Fujikura® fusion splicers with fiber holder. For large diameter fibers (LDF) and all others without fiber holders, order **mfg. part no. TSUC-40** universal clamp for stripping applications where a connector is attached to the fiber.

TSPE-125	Ericsson Style Platform	45P2994	237.45
TSPF-125	Fitel/Fujikura Style Platform	45P2995	237.45
TSUC-40	Universal Clamp	45P2996	323.86

(159800)

ROUND CABLE STRIPPER

- Fast and precise jacket removal
- Triple action cutting tool
- Simple, versatile, easy-to-use

CST-1900

CST-7915

Mfg. part no. CST-1900 is designed for fast and precise jacket removal of PVC, rubber, PE and other jacket materials, and works well on round cable with diameters ranging from 3/16″ to 1 1/8″ (4.5-29 mm). This triple action tool cuts longitudinally for end stripping, spiral for end stripping and mid-span cuts, and circular for jacket removal. **Mfg. part no. CST-7915** replaceable cutting blade, *ordered separately below*, is spring-loaded, adjustable for various cable diameters, provides a 90° blade rotation and is designed for long life.

Mfg. Part No.	Description	Stock No.	Price Each
CST-1900	Round Cable Stripper	75R7645	65.15
CST-7915	Replaceable Cutting Blade	75R7646	16.24

(178429)

FIBER OPTIC TOOLS

RoHS Compliant Available

Cable Seath Stripper and Ring Tool

Fiber Optic Stripper

Fiber Optic Stripper Three Hole

Electrician Scissor

Cable sheath stripper and ring tool slits the cable jacket lengthwise and around the circumference of the cable. Good for copper cable and tight-buffer optical fiber cable. Adjustable for 0.018″ or 0.31″ thick insulation. Stripper. **Mfg. part no JIC-125** is used for stripping the 250 micron coating from the cable down to the 125 micron glass fiber. **Mfg. part no JIC-375** strips the 2-3 mm fiber jacket down to the 900 micron buffer coating. The second hole strips the 900 micron buffer coating down to the 250 micron coating and the third hole is used to strip the 250 micron cable down to the glass fiber without nicks or scratches.

Mfg. Part No.	Description	Stock No.	Price Each
JIC-4366	Cable Sheath Stripper and Ring Tool	85C2633	70.72
● JIC-125	Fiber Optic Stripper	71K5352	28.81
● JIC-375	Fiber Optic Stripper Three Hole	71K5353	30.18

ELECTRICIAN'S SCISSORS

Electrician scissor is made of high carbon steel with a special hardening process for greater durability and double plated chrome over nickel for that professional look. Scissor is notched (for 19 & 23 gauge wire) and one blade is serrated. These scissors are the perfect tool for telephone and electrical work, holding their edge longer when used on fiber cables and Kevlar based cables.

● ES-1964	Electrician Scissor	71K3589	12.97
● ES-1964ERG	Ergonomic Electricians Scissor	77R1923	11.85

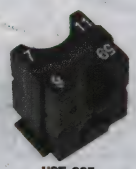
(72732)

UNIVERSAL CABLE STRIPPING TOOLS

RoHS Compliant Available

JONARD INDUSTRIES CORP.

UST-500



UST-205

UST-210

- For coax, round network and flat cables

This versatile tool is five tools in one. Simply reverse the cassette for RG59/6 and 7/11 coax cables. Insert the round cable into the second hole (adjustable) for a fast and easy strip. The third hole is for cutting all styles of cable while the fourth hole is designed for flat cable and 4P/6P style cable. The perfect wire stripper for most stripping applications.

Mfg. Part No.	Description	Stock No.	Price Each
UST-500	Universal Cable Stripping Tool	05T6286	17.01
UST-596	Universal Cable Stripping Tool (59/6)	31T9153	17.01
ACCESSORIES			
UST-205	Replacement Blade for UST-500	31T9151	9.72
UST-210	Replacement Blade for UST-596	31T9152	9.72

(195418)

COAXIAL CABLE STRIPPERS

KNIPEX®

16 60 05 SB

16 60 100 SB

COAX-STRIPPING TOOL

- For stripping coax-cables (RG 58, RG 59 and RG 62)
- For stripping outer sheath, shield and dielectricum in one operating cycle
- With three built-in blades
- The cutting depth of each blade can be adjusted individually by means of a hexagonal key (Allen key) The blade spacing remains constant tool body made of plastic

COAX-STRIPPING TOOL

- For dismantling and stripping all common coax-cables between 4.8 - 7.5 mm dia. (e. g. for TV- and satellite antenna), also suitable for PVC round cable 3 x 0.75 mm²
- With linear scale 5.0 - 20.0 mm double shell, folding back stripping tool
- With opening spring and locking lever
- Tool body made of fiberglass reinforced polyamide

Mfg. Part No.	Body	Stripping Capabilites ∅ (mm)	Overall Length (mm)	Stock No.	Price Each
16 60 05 SB	Plastic	RG 58 / 59 / 62	105	06R6282	41.38
16 60 100 SB	Fiberglas	4.8 - 7.5 round cables 3 x 0.75 mm²	100	06R6283	42.06

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
16 39 135	Spare Blade for 16 30 135 SBA	06R6281	18.84

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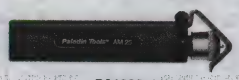
AM 25/35 UNIVERSAL SLITTERS/STRIPPERS

RoHS Compliant Available

GREENLEE. COMMUNICATIONS A Textron Company

PA1822



PA1820

Slits and trims round cables. Adjustable cutting depth for insulations up to 0.18″ with swivel blade for circular, longitudinal and spiral cuts. **Blade stays centered for more accurate strips.** Cable-holding clip with integrated edge for removing slit insulations. Spare blade in handle. **Mfg. part no. PA1820** for 0.18-1.0″ diameter cables. **Mfg. part no. PA1821** for 1-1.4″ diameter cables. **Mfg. part nos. PA1820** and **PA1821** have lifetime warranty; 1-year on **mfg. part no. PA1822**.

Mfg. Part No.	Description	Stock No.	Price Each
PA1820	AM 25 Cable Stripper/Slitter	90F6873	67.96
PA1821	AM 35 Cable Stripper/Slitter	48F2032	81.31
PA1822	Universal Cable Stripper/Slitter	34C6136	33.98
PA2109	Replacement Blade	50F6322	19.40

(5749)

CST PRO COAXIAL CABLE STRIPPER AND ACCESSORIES

RoHS Compliant Available

GREENLEE. COMMUNICATIONS A Textron Company

PA1283

CST Pro coaxial cable stripper can be used in the professional broadcast industry as well as home integration applications. **Mfg. part no. PA1283** CST Pro 2-level-cut cable stripper is ideal for stripping coaxial cable including RG6, RG6QS, RG59, as well as CATV "F" connectors and mini's. Cam adjustment provides a precise hold on cable. The dual roller mechanism centers cable perfectly and applies equal pressure against blades to eliminate distortion of cable jacket during stripping process. Patent-pending reversible rollers easily adjust for various sizes of cable, including mini's. **Mfg. part no. PA2282** quick-change die/blade cassette helps reduce set-up time. Cassette securely holds a fixed blade for 0.25″ pre-strip lengths (braid); blade depth is individually adjustable. Manufacturer's lifetime warranty on tool frame, one-year manufacturer's warranty on die/blade cassette. *Order replacement die/blade cassette and roller sets separately below.* Other CST Pro coaxial cable strippers and accessories are available; *go online or call.*

Mfg. Part No.	Description	Pre-Set Strip Length (in.)	Color	Stock No.	Price Each
PA1283	CST Pro 2-Level Stripper with **2283** Die/Blade Cassette	0.25 (braid)	Blue	01N4818	83.29
PA1243	CST 3-Level Stripper with **2243** Die/Blade Cassette	0.295 (braid), 0.137 (dielectric)	Brown	94B1957	121.37

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
PA2283	CST Pro Replacement Die/Blade Cassette Only, 0.25″ Blue	99M1189	36.04

(116779)

ECONOMICAL COAXIAL CABLE STRIPPERS

RoHS Compliant Available

GREENLEE. COMMUNICATIONS A Textron Company

These economical, high-performance coaxial cable strippers are ergonomically designed for comfort. **Mfg. part no. PA1255** strips RG58/RG59/RG62 AU/RG6 coaxial cable. **Mfg. part no. PA1256** strips RG8/RG11/RG213 coaxial cable. **Mfg. part no. PA1257** strips RG59/RG66/RG6 Quad shield coaxial cable for CATV "F" connectors. **Mfg. part no. PA1258** strips RG178, RG179, RG188, AT&T 735(A), NT735, Belden 1855A, 8218, LMR 100A, RG180, RG187, RG188A, and RG405 small diameter coaxial cable. These three strippers perform 2- and 3-level stripping with a simple blade adjustment.

PA1257

Mfg. Part No.	Description	Pre-Set Strip Lengths	Stock No.	Price Each
PA1255	LC CST-58/59 2- and 3-Level Adjustable Coaxial Cable Stripper	0.315″ Outer Jacket 0.157″ Inner Dielectric	93B2835	21.41
PA1256	LC CST-11 2- and 3-Level Adjustable Coaxial Cable Stripper	0.315″ Outer Jacket 0.157″ Inner Dielectric	19C8814	21.41
PA1257	LC CST CATV "F" 2-Level Coaxial Cable Stripper	0.236″ Outer Jacket	20C4621	21.41
PA1258	LC CST-Mini 2- and 3-Level Adjustable Coaxial Cable Stripper	0.344″ Outer Jacket 0.094″ Inner Dielectric	20C4622	21.41

(64778)

CABLE STRIPPERS

Xcelite®

- Lightweight
- Pocket-size design
- Safe, no exposed sharp edges
- Easy-to-use

CJS100

CJS200

Mfg. part no. CJS100 cable jacket stripper is a precision stripping tool for removing the sheath from signal, telephone, audio-visual, instrumentation and data transmission copper and fiber optic cable. Adjustable 10-position indexed blade height adjustment wheel provides accurate and repeatable stripping results. Simply squeeze to open the stripping cavity, insert cable, rotate once, remove from cable and pull off the scrap insulation sheath. Stripping range: 0.10″ to 0.43″ diameter; 1.0mm thick insulation. Made tough from impact-resistant nylon. Tested to over 50,000 cycles. Safe, rounded, pocketable and lightweight design. Size: 3.6L x 1.6″H.

Mfg. Part No.	Description	Stock No.	Price Each
CJS100	Cable Jacket Stripper	30H6104	28.00

Mfg. part no. CJS200 professional stripping tool for round cable of all insulation types. Features two interchangeable cable retention guides giving it an incomparable stripping capacity of 0.18" to 1.57" in one tool. Both cable guides are included. Positive locking positions for circular, lengthways, and spiral cuts. No special tools required to interchange cable guides. Safety strap (not included) can be attached to the eyelet at the base of the tool to prevent accidental dropping. Ergonomic design. Tested to over 100,000 cycles. **Mfg. part no. CJS200B** replacement blade available; go online or call.

CJS200	Round Cable Stripper	30H6106	64.50

(88478)

CSK SERIES COAXIAL WIRE STRIPPERS

Xcelite®

2CSKR Two-Step Wire Stripper Kit

2CSKCATV

CSK series two-step and three-step coaxial wire stripper kits are ideal for users of many different cable sizes. These fast, accurate coax-stripping systems strip cable from 0.10" to 0.30" in thickness (RG178 to RG6) in seconds. Also removes dielectric, braid and outside insulation simultaneously or separately. Kits available with different color-coded cassettes designed to meet exact stripping specifications. Kits include four V-blocks, cassette (type indicated in table below), hex wrench to adjust cable size and instructions for most applications. **Note:** three-step kit is not recommended for cable with hollow (RG 62) or foam dielectrics; two-step kits should be used instead. Replacement blade cassettes are available; *go online or call.*

TWO-STEP COAXIAL WIRE STRIPPER KITS — STRIPPING RANGE 0.1" TO 0.3"

Mfg. Part No.	Cassette Type/Color	Blade Spacing in. (mm)	Stock No.	Price Each
2CSKR	2C-R/Red	0.24 (6.1)	46F4184	55.20
2CSKB	2C-B/Blue	0.27 (6.86)	46F4185	55.20
THREE-STEP COAXIAL WIRE STRIPPER KIT— STRIPPING RANGE 0.1" TO 0.3"				
3CSKGN	3C-GN/Green	0.235 (5.97)	46F4187	58.30

PRE-ADJUSTED COAXIAL WIRE STRIPPER — STRIPPING RANGE 0.19" TO 0.25"
Mfg. part no. 2CSKCATV is an economical coaxial wire stripper designed to quickly and easily provide an industry-standard strip for CATV "F" connectors on all RG59 and RG6 coaxial cable. Patented spring-like action adjusts to provide a precise strip without any adjustments. Built-in stop provides an industry-standard 2-step strip of 0.25" braid and 0.25" conductor. Replaceable blade cassette lasts 1000-2000 strips. Convenient built-in belt clip. **Mfg. part no. CATVC** replacement blade is available; *go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each
2CSKCATV	Economical Coaxial Wire Stripper	92C1684	9.90

(5709)

CRIMPING TOOL 8-1 AWG

GREENLEE. COMMUNICATIONS

- Small Size And Lightweight Make This An Ideal Tool For Crimping Small Lugs And Splices
- Easily Fits In Tool Pouches
- Full-Cycle Mechanism Assures That Crimps Are Complete
- Jaws Can Be Opened In Mid-Cycle If Necessary To Adjust Connector
- Wide Grips Make Crimping Easy On The Hands

Tool capacity 8 AWG - 1 AWG copper color-coded connectors. Overall length 10" (273 mm), weight 1.4 lbs. (0.6 kg). Tool is UL and cUL classified to be used with Anderson, Blackburn, Burndy, ILSCO, Panduit, Penn-Union, and Thomas & Betts copper color-coded code connectors.

Mfg. Part No.	Description	Stock No.	Price Each
K111	Crimping Tool	54H1794	261.33

(85009)

CRIMPMASTER™ CRIMP TOOL AND DIE SETS

IDEAL®

Crimpmaster™

Die Set

Professional Crimpmaster™ heavy-duty, ratcheting crimp tool for coax, twisted pair and crimp terminal applications. Features comfort grip handles. **Mfg. part no. 30-506** Crimpmaster™ tool frame accepts a variety interchangeable die sets; ordered separately below. Many other die sets are available; *go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each
30-506	Crimpmaster™ Tool Frame **Only**	50F3161	63.55
30-500	Tool Frame and Die Set for 22-10 AWG Insulated Terminals	50F3155	86.54
30-502	Tool Frame and Die Set for BNC Connectors	50F3157	87.45
30-483	Tool Frame and Die Set for RG-9, Belden 8281, RG-6 Cable	50B4251	87.45
INTERCHANGEABLE DIE SETS			
30-579	Die Set for 22-10 AWG Insulated Terminals	93B5606	27.99
30-580	Die Set for 22-8 AWG	01C0376	27.70
30-581	Die Set for BNC Connectors	98B2562	28.27
30-582	Die Set for RG-6 and RG-59F Connectors	50F3165	27.99
30-578	Die Set for RG-9, Belden 8281, RG-6 Cable	19C1166	27.99
30-587	Die Set for RG-174 and RG-5 Cable	97B1671	28.27

(47779)

RATCHET CRIMP TOOL

IDEAL®

Precision tool crimps insulated or bare terminals and wire splices (22 to 10 AWG). To assure uniform crimps, ratchet action prevents release prior to crimp connection.

Mfg. Part No.	Stock No.	Price Each
83-001	98F9589	243.53

(5636)

CRIMPING/CUTTING TOOLS

KLEIN TOOLS®

1005

Mfg. part no. 1005 forged crimp tool for insulated and noninsulated terminals and connectors. Thin nose for tight spaces. Accommodates 10-22 AWG wire. Wire cutter. Red plastic-coated handles. **Mfg. part no. 1006** designed for crimping non-insulated, solderless terminals and connectors ranging from 10 to 22 AWG. Specially hardened wire cutter in nose. Tapered nose for work in confined spaces. Plastic dipped handles (one red, one black to identify proper crimping position).

Mfg. Part No.	Description	Stock No.	Price Each
1005	10-22 AWG Insulated/Non-Insulated	98F1875	52.62
1006	10-22 AWG Non-Insulated	94F5754	52.83

(5723)

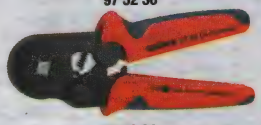
CRIMPING PLIERS

KNIPEX®

97 43 200

97 51 10

97 52 36



97 53 04

CRIMP SYSTEM PLIERS
- Includes service tools (hexagonal key, open end wrench, screws and nuts) in a plastic case
- Almost parallel crimping performance
- Repetitive, high crimping quality due to precision dies and integral lock (self-releasing mechanism)
- Ergonomically designed handles and factory calibrated
- Wide range of different crimp profiles for nearly all common crimp connections
- Crimp dies not included

CRIMP PLIERS FOR WESTERN PLUGS
- Professional tool for cutting and stripping unshielded ribbon telephone cables
- For crimping 6- and 8-pole Western plugs type
- Exact crimping process due to parallel crimping
- Repetitive, high crimping quality due to integral lock (self-releasing mechanism)
- With length cutter and dismantling knife for ribbon cables 6 and 12 mm length

PRECIFORCE®, CRIMP PLIERS
- Repetitive, high crimping quality due to precision dies and integral lock (self-releasing mechanism)
- Factory calibrated
- Lightweight, short design and ergonomically shaped handles

SELF-ADJUSTING CRIMP PLIERS
- For crimping end sleeves (ferrules) according to DIN 46228 parts 1 + 4
- Lateral loading of the end sleeves (ferrules) into the tool
- Simple handling as a result of self-adjustment to the size of the end sleeve (ferrule)
- Square crimping for optimum contact areas in the clamp connection
- Repetitive, high crimping quality due to integral lock (self-releasing mechanism)
- Factory calibrated
- **Mfg. part no. 97 53 08** crimping from 0.08 - 10.0 mm² in one profile, parallel loading up to 2.5 mm²
- **Mfg. part no. 97 53 14** heaxagonal crimping for optimum positioning in confined areas

CRIMP PLIERS FOR END SLEEVE FERRULES
- For crimping end sleeves (ferrules) according DIN 46228 parts 1 + 4 from 0.25 to 16 mm²
- Crimping in marked half-round dies for secure connections between the sleeve and the conductor 9 Deep troughs with conical side faces

All pliers have high or optimum transmission force for reduced user fatigue.

CONTINUED

CRIMPING PLIERS (CONT.)

Mfg. Part No.	Handles	Applications/ Capacity	No of Crimp Positions	Overall Lgth. (mm)	Wt. (g)	Stock No.	Price Each
CRIMP SYSTEM PLIERS — BURNISHED HEAD							
97 43 200	Plastic Coated	Crimpmig Dies	...	200	988	06R6329	301.64
CRIMP PLIERS FOR WESTERN PLUGS — BURNISHED HEAD							
97 51 10	Dual Comp.	RJ 11/12 (6-poles) RJ 45 (8-poles)	2	190	340	06R6330	76.02
PRECIFORCE®, CRIMP PLIERS — BURNISHED HEAD							
97 52 36	Dual Comp.	Insulated Terminals and Plug Connectors/ AWG 20-10	3	220	487	06R6331	205.86
SELF-ADJUSTING CRIMP PLIERS — BURNISHED HEAD							
97 53 04	Dual Comp.	End Sleeves (ferrules)	1	180	405	06R6332	320.34
97 53 08	Dual Comp.	End Sleeves (ferrules)/ Front loading and Parellel loading	1	190	477	06R6333	326.92
97 53 14	Dual Comp.	End Sleeves (ferrules)	1	180	404	06R6334	336.72
CRIMP PLIERS FOR END SLEEVE FERRULES — POLISHED HEAD							
97 72 180	Dual Comp.	End Sleeves (ferrules)	9	180	283	06R6338	74.78

(147404)

ALL-IN-ONE CRIMP TOOLS FOR MODULAR PLUGS

multicomp

HT200AR

HT2008AR

- Professional quality
- Durable middle carbon steel construction
- Black oxide and hardened finish
- Ratchet mechanism
- Comfort grip handles
- 8.3" long

Mfg. part no. HT-200AR professional modular crimp tool for crimping modular plugs: 10P10C, AMP 8P8C/RJ-45, 6P6C/RJ-12, 6P4C/RJ-11, 4P4C and 4P2C plugs, and DEC/offset plug-6P6C. **Mfg. part no. HT-2008AR** professional modular crimp tool for crimping modular plugs: 8P8C/RJ-45, 6P6C/RJ-12, 6P4C/RJ-11, 4P4C and 4P2C plugs, and DEC/offset plug-6P6C.

Mfg. Part No.	Description	Stock No.	Price Each 1-24
HT200AR	Modular Crimp Tool — AMP Style	42M0919	93.08
HT2008AR	Modular Crimp Tool — WE/SS Style	42M0920	94.15

(116639)

1300 and 8000 SERIES CRIMPERS WITH INTERCHANGEABLE DIE SETS

RoHS Compliant Available

GREENLEE. COMMUNICATIONS A Textron Company

8000 series CrimpALL®

1300 series

1300 series economy crimp tool frame with interchangeable die sets feature fully-ratcheted cycle, manual ratchet-release, adjustable crimp tension and EZI-CHANGE™ thumb screws for the die sets — no additional tool required to change crimp application. 5-year warranty. **8000 series** CrimpALL® ergonomically-designed crimp tool with interchangeable die sets make it easier and more efficient to do any crimping job — the CrimpALL® tool does all work. Angled head prevents awkward wrist bending, reduced handle grip makes it a snap for both large and small hands, higher crimp force is produced with less hand force so your hand doesn't tire as quickly and no breakover hand force — the effort required on the last click at the end of the crimp cycle — to complete the crimp. Comfortable, rubber-embedded handles. Rugged double-plated jaw assembly. Uses same interchangeable dies as the **1300 series** crimper. 10-year warranty. Other crimpers and die sets are available; *go online or call.*

FOR INSULATED TERMINALS AND LUGS - SIZE 22-10AWG

1300 Series Crimper & Die			8000 Series CrimpALL & Die			Die Only		
Mfg. Part No.	Stock No.	Price Each	Mfg. Part No.	Stock No.	Price Each	Mfg. Part No.	Stock No.	Price Each
● PA1305	50F6302	69.55	● PA8021	20C4864	89.60	● PA2035	52F1363	30.65
FOR OPEN BARREL NON-INSULATED TERMINALS AND LUGS - SIZE 22-14AWG								
● PA1306	92B6687	69.55	● PA8026	20C4869	89.60	● PA2033	50B6414	30.65
FOR WIRE FERRULES - SIZE 22-10AWG								
● PA1360	13C2575	69.55	● PA8025	20C4868	89.60	...	...	...

➤CONTINUED➤

1300 and 8000 SERIES CRIMPERS WITH INTERCHANGEABLE DIE SETS (CONT.)

FOR COAXIAL CONNECTORS - RG58/59, 62AU, BNC/TNC

1300 Series Crimper & Die			8000 Series CrimpALL & Die			Die Only		
Mfg. Part No.	Stock No.	Price Each	Mfg. Part No.	Stock No.	Price Each	Mfg. Part No.	Stock No.	Price Each
● PA1317	50F6306	69.55	● PA8001	20C4844	89.60	● PA2034	91B6556	30.65
FOR COXIAL CONNECTORS - RG59/RG6, CATV"F"								
● PA1328	50F6296	69.55	● PA8013	20C4856	89.60	● PA2042	50B6415	30.65
FOR COAXIAL CONNECTORS - HDTV, BNC/TNC								
...	...	...	● PA8049	73J8570	89.60	● PA2699	73J8490	30.65
FOR MODULAR PLUGS - RJ45, WE/SS & RG6, RG6 QUAD CATV "F"								
● PA1387	32H6888	71.91	● PA8045	32H7049	89.60	● PA2687	32H6975	37.73
FOR MODULAR PLUGS - RJ45 WE/SS								
● PA1307	92F2631	69.55	● PA8030	20C4873	89.60	● PA2061	91B0839	30.65

1300 SERIES CRIMP TOOL FRAME ONLY

Mfg. part no. PA1302 crimp tool frame accepts interchangeable crimp die sets; *order separately from table above.*

Mfg. Part No.	Description	Stock No.	Price Each
● PA1302	**1300 Series** Crimp Tool Frame Only	50F6284	50.69

(5746)

1600 SERIES PROFESSIONAL CRIMPERS

RoHS Compliant Available

GREENLEE. COMMUNICATIONS A Textron Company

Professional-quality crimping tools with precision-calibrated crimp profiles. Manufactured from the finest quality tool steel. Ergonomically-shaped handles with comfortable, non-slip rubber grip with small grip distance — perfect for smaller hands. This crimp frame is preferred by many broadcast engineers. Lifetime manufacturer's warranty. Die only avaialble; *go online or call.*

PA1646, PA1647

Mfg. Part No.	Crimps	Stock No.	Price Each
● PA1645	Open-Barrel Contacts, 30-18 AWG, Size 30-24/22-18 F-Type	97B3917	161.06
● PA1631	Open-Barrel Contacts, 24-14 AWG, Size 24-22/18-14 F-Type	97B2530	220.25
● PA1646	Open-Barrel D-Sub Contacts, 28-20 AWG, Size 28-24/22-20 F-Type	20C4662	236.77
● PA1647	Insulated/Non-Insulated Wire Ferrules, Size 20-10 AWG Trapezoid	26C0994	196.67

(72365)

SEALTITE® CRIMP TOOLS AND WATERPROOF CATV "F" COMPRESSION CONNECTORS

RoHS Compliant Available

GREENLEE. COMMUNICATIONS A Textron Company

PA901024

PA1559

Powerful SealTite® crimp tools and waterproof CATV "F" coaxial connectors — a durable combination from Paladin Tools. **Mfg. part no. PA1555** SealTite® Pro Crimper and **PA1559** easily crimp all waterproof and weatherproof linear CATV "F", BNC, RCA and right-angle compression-type connectors, from all manufacturers, for RG59, RG62AU, RG6 and RG6 Quad shield cable. Features an advanced fully-ratcheted system with built-in release. Crimp height adjusts with thumb screw and locks into place. Comfortable, non-slip rubber-embedded handles. **Mfg. part no. PA901024** SealTite® 59/6 compression crimp tool crimps Paladin SealTite® CATV "F" connectors, *ordered separately below* and also Augat/T&B Snap-N-Seal® connectors and Aim CATV "F" waterproof connectors for RG59, RG6 and RG6 Quad 75-ohm coaxial cable. Features a fully ratcheting one-cycle crimp function and comfort-grip handles.

SEALTITE® CRIMP TOOLS

Mfg. Part No.	Description	Stock No.	Price Each
● PA901024	SealTite 59/6 Compression Crimp Tool	19C8810	50.69
PA1559	SealTite ProM Coax Crimper	84R6199	81.30

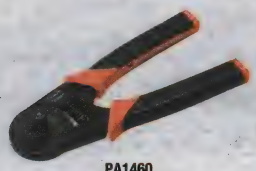
SEALTITE® CONNECTORS

Mfg. Part No.	Description	Stock No.	Price per Pkg.
● PA9611	SealTite Waterproof CATV "F" Compression Connector for RG6 Cable — **Sold in Pkg. of 20**	90H9693	26.65
● PA9643	SealTite Waterproof CATV "F" Compression Connector for RG6 Cable — **Sold in Pkg. of 10**	16M3472	15.00

(64776)

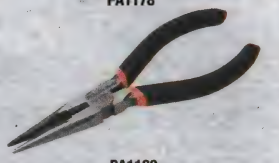
D-SUBMINIATURE AND SPLICE CRIMPERS

GREENLEE COMMUNICATIONS A Textron Company



PA1460

PA1178



PA1180

Indent crimping tools for crimping screw machine pins and socket contacts. Crimps D-subminiature contacts for RS232 interface connectors. Built-in contact locator (for **mfg. part no. 1440** only), full ratchet cycle. **Mfg. part no. 1178** and **1180** splice crimpers have side cutter for AWG 19-26 copper. Crimp capacity UR: AWG 19-26, UY: AWG 22-26, UG: AWG 19-26.

D-SUBMINIATURE CRIMPERS

Mfg. Part No.	Description	Stock No.	Price Each
PA1460	4-Indent Crimper; 26-20 AWG	85R5199	46.46
PA1461	4-Indent Crimper; 20-12 AWG	85R5200	46.46
PA1462	8-Indent Crimper; 26-20 AWG	85R5201	49.95
SPLICE CRIMPERS			
PA1178	Telecom Splice Crimper	85R5195	17.41
PA1180	4-in-1 Telecom Splice Crimper	85R5197	23.23

(5627)

ERGOCRIMP PLUS CRIMPING TOOL FRAME AND INTERCHANGEABLE DIE SETS

Xcelite®

- Patented ergonomic design makes this tool easy and comfortable to use
- Lowest possible handle forces required
- High-quality construction with tight tolerances
- Superior crimp die design provides the highest quality crimp results
- High-strength, through-hardened alloy steel
- Guaranteed for 50,000 cycles
- Precise eccentric adjustment for consistent performance for life of tool

Tool Frame with Die Set Installed

ErgoCrimp Plus® crimping tool frame and interchangeable die sets can handle the widest range of crimping applications. Tool frame features a patented design that provides up to 50% better mechanical gain than most other crimpers, resulting in the lowest handle forces possible. Lower handle force results in elevated productivity and fewer work-related injuries. Frame length: 10″. *Order crimping tool frame and die sets separately below.*

Mfg. Part No.	Description	Stock No.	Price Each Each
ECP000	ErgoCrimp Plus® Crimping Tool Frame	09B9102	80.10
ERGOCRIMP® DIE SETS These nine commercial-grade die sets are easily interchangeable into the ErgoCrimp Plus® crimping tool frame; *ordered separately above.* Die sets constructed of precision-machined hardened steel.			
D100	For 22-10 AWG Red, Blue and Yellow Insulated Terminals and Splices	09B9067	84.30
D102	For RG58, RG59/62 AU BNC/TNC Coaxial Connectors — 0.213″, 0.255″ and 0.068″ Hex Cavities	09B9069	74.90
D104	For RG59, Belden® 8281, 50- and 75-Ohm Coaxial Connectors — 0.324″, 0.255″, 0.068″ and 0.042 Hex Cavities	09B9071	74.90
D105	For RG174 BNC/TNC Coaxial Connectors — 0.178, 0.128″ and 0.068″ Hex Cavities	09B9072	74.90
D106	For RG8, RG11, RG213, RG216 Coaxial Connectors — Ethernet N-Series, 0.429″, 0.100″ and 0.080″ Hex Cavities	09B9073	58.30
D107	For RG59, RG6 CATV "F" Coaxial Connectors — 0.346″, 0.315″ and 0.256″ Hex Cavities	09B9074	58.30
D109	For SMA/SFR Fiber Optic Connectors — 0.213″, 0.178″ and 0.151″ Hex Cavities	09B9076	71.80

(90719)

CABLE CUTTERS

DURATOOL

Cable cutters feature fine polished matt-chrome plated finish. Shock-proof 2-component handles with slip guards.

Mfg. Part No.	Description	Stock No.	Price Each 1-24
D00628	Cable Cutter, 160mm	61M5957	36.77
D00629	Cable Cutter, 210mm	61M5958	43.10

(116827)

DATA T®-CUTTER

IDEAL®

Mfg. part no. 45-074 Data T®-Cutter cuts round communication cable and maintains cable geometry for better performance. Cuts multipair cable up to 0.5″ (12.7 mm) and coaxial cable up to RG-9/U. Blades are suitable for soft cables (not ACSR). Steel-reinforced center conductors can be trimmed with bolt-cutting holes. Comfort grip increases handling ease. Locking latch keeps tool closed in pouch.

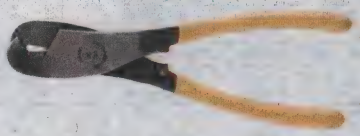
Mfg. Part No.	Description	Stock No.	Price Each
45-074	Data T®-Cutter	48F1307	21.64

(33872)

¾″ COAX CABLE CUTTER

JONARD INDUSTRIES CORP.

- Designed to cut ¾″ coaxial cable
- Made from chrome vanadium steel
- Heat-treated for added strength and longer lasting cutting edges
- Cuts cleanly without compressed or frayed ends
- Durable yellow plastic handles
- 8″ long



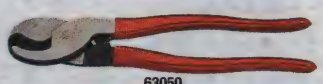
Mfg. part no. JIC-750 ¾″ coaxial cable cutter functions like a tube cutter by eliminating cable distortion during cable prep. **NOTE:** Not designed to cut steel cable.

Mfg. Part No.	Description	Stock No.	Price Each
JIC-750	¾″ Coax Cable Cutter	61M0806	25.55

(178428)

CABLE CUTTERS

KLEIN TOOLS®



63050

J63050

63020

High-leverage cable cutters cut up to 4/0 aluminum AWG (no steel or ACSR), 2/0 AWG soft copper and 100-pair 24 AWG communications wire. High-leverage design for exceptional cutting capability. Precision, one-hand shearing action. Cable-gripping shear-type jaws. Hot-riveted joint provides smooth action and no handle wobble. Custom, US-made tool steel, through-hardened for longer-lasting cutting surfaces. **Mfg. part no. 63050** features red plastic-dipped handles with an overall length of 9½″. **Mfg. part no. J63050** features dual-material, red/black Journeyman™ finish handles with contoured thumb area for comfort and a firm grip Overall length: 9 9/16″.

Mfg. Part No.	Description	Stock No.	Price Each
63050	High-Leverage Cable Cutter	94F5796	52.99
J63050	Journeyman™ High-Leverage Cable Cutter	83H2074	64.16

Mfg. part no. 63020 Klein-Kurve® multi-cable cutter features hardened steel precision cutting blades for long life. Copper curved cutter cleanly cuts round copper cable without compression or frayed ends. Anvil cutter for solid and stranded copper wire up to 12 AWG and stainless steel up to 0.032″ diameter. Mild steel cutter for conductors up to 0.08″ diameter. Curved cutter for solid and stranded copper wire up to 8 AWG, multi-conductor cable up to ½″ diameter and coaxial cable RG-6 Quad, RG-59, and RG-62. Red double-dipped grips for comfort. Coil spring provides fast self-opening action. Holes for looping and bending wire. Handy closure lock for convenient storage. Shearing size: 6-32 and 8-32. Overall length: 7″.

63020	Klein-Kurve® Multi-Cable Cutter	06J9577	40.19

(5799)

RATCHETING CABLE CUTTER

KLEIN TOOLS®

- Unique ratchet action holds cable tight, allows rapid, straight cuts
- Hold-open spring speeds cutting action
- Quick-release lever opens blade during operation
- Finger-formed, plastic-covered handles for comfort and gripping power
- Compact, lightweight design
- Locks in closed position for safe pouch carrying

Cleanly cuts copper up to 400 MCM, as well as aluminum and multiconductor cable up to 600 MCM. Not designed for cutting steel or ACSR. Handle color: red. Overall length: 10″.

Mfg. Part No.	Description	Stock No.	Price Each
63060	Ratcheting Cable Cutter	94F5797	417.99

(85001)

CABLE AND WIRE ROPE SHEARS

KNIPEX

***Mfg. Part No. 95 05 165 CABLE SHEARS**
- For universal use; cuts cables up to 10 mm dia. / 24 mm²
- With opening spring and locking lever
- Blades made of stainless steel oil-hardened and tempered

***Mfg. Part No. 95 11 165 CABLE SHEARS**
- For cutting copper and aluminum cables, single and multiple wire up to 1/0AWG
- Universal use for dismantling and stripping
- Precision ground, hardened blades
- Clean and smooth cut without crushing and deformation

****Mfg. Part No. 95 05 190 COMBINATION SHEARS**
- For cutting cardboard, plastics, aluminum, brass and copper foils
- With opening spring and locking lever
- With guard and adjustable screw joint
- Blades made of stainless steel oil-hardened and tempered

Mfg. Part No. 95 32 038 CABLE SHEARS (RACHET ACTION)
- For cable diameters up to 38mm, handles can be positioned at an angle or 550 mcm
- Heavy duty telescopic handles made of oval aluminum tubing; extendable up to 770 mm; retractable down to 570 mm
- Replaceable cutting head
- Adjustable bolted joint

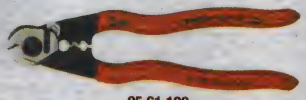
Mfg. Part No. 95 61 190 WIRE ROPE CUTTER
- For medium hard wire up to 6 mm dia.
- With opening spring and locking lever
- Cutting edges additionally induction hardened
- Special blade geometry prevents the wire rope fanning out

95 05 165

95 11 165

95 05 190

95 32 038



95 61 190

Mfg. Part No.	Head	Cutting Performances ∅ (mm)/ mm² Copper	Aluminum	Overall Length (mm)	Wt. (g)	Stock No.	Price Each
95 05 165	Polished	10	24	165	111	06R6323	37.30
95 05 190	Polished	...	...	190	116	06R6324	33.24
95 11 165	Burnished	15	50	165	210	06R6325	43.46
95 32 038	Burnished	38	280	570	1980	19T8482	410.10
95 61 190	Polished	6	10	190	314	06R6327	71.32

* Not suitable for steel wire and hard drawn copper conductors
** Not suitable for steel wire or iron sheets
(147405)

CABLE CUTTERS

Paladin Tools

Mfg. Part No. PA1175 and **PA1179** make precise and effortless cuts on solid or stranded cable up to AWG 6. Ideal for UTP and Coax, RG58, RG59 and RG6/6Q; RG7 and RG11 with PA1175. **Mfg. Part No. PA1181** cuts flat satin cables easily and quickly and includes gripping pliers at the tip.

ROUND CABLE CUTTER

Mfg. Part No.	Description	Stock No.	Price Each
PA1175	Contour Round Cable Cutter	85R5192	23.45
PA1179	Dual-Contour Round Cable Cutter	85R5196	23.45
FLAT CABLE CUTTER			
PA1181	Flat Cable Cutter	85R5198	17.57

(195411)

PROFESSIONAL CABLE CUTTERS/STRIPPERS

RoHS Compliant Available

GREENLEE. COMMUNICATIONS A Textron Company

PA1119

Mfg. part no. PA1119 SmartHome SureStrip™ professional all-in-one cutter/stripper for coaxial and twisted pair cable. Cuts and strips RG6, RG6 Quad, RG59, CAT6, CAT5e and CAT5 cable. Features removable coax blade cassette to adjust stripping depth, adjust UTP/STP stripper depth with simple thumb screw, self-regulating to prevent nicks and has contoured finger grips for more cutting power. **Mfg. part no. PA1116** Data SureStrip™ cuts and strips 4-, 6-, 8-conductor flat satin cable and UTP/STP data cable, 25-pair UTP/STP data and telephone cable and 14-8 AWG wire and multiconductor round bundle cable with a maximum diameter of 0.5". Features adjustable stripping depth with simple thumb screw and self-regulating to prevent nicks.

CONTINUED

PROFESSIONAL CABLE CUTTERS/STRIPPERS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
PA1119	SmartHome SureStrip Cable Cutter/Stripper	28M7898	36.40
● PA1116	Data SureStrip Cable Cutter/Stripper	89C9208	24.27

(72362)

CABLE CUTTERS

GREENLEE. COMMUNICATIONS

718

Mfg. part no. 727 cable cutters have forged steel blades for cutting up to ⅝ aluminum or copper cable. High-leverage handles are plastic covered for extra comfort and grip. **Mfg. part no. 718** cable cutters are lightweight and compact. Steel handles have rubber grips for greater leverage and comfort. Cut up to 350MCM copper; not for use with steel cable, ACSR or live circuits. 18" length.

Mfg. Part No.	Description	Stock No.	Price Each
727	Cable Cutter	50F6971	31.86
718	Compact Cable Cutter	89F2780	86.39

(5683)

COMPACT RATCHET CABLE CUTTERS

GREENLEE. COMMUNICATIONS

42506/45207

Compact ratchet cable cutters with 2-speed ratchet mechanism adjusts for light or heavy cutting. Simple, 1-hand operation.

Mfg. part no. 45206 has 1⅞₁₆" jaw opening for up to 600 MCM A1 and Cu. **Mfg. part no. 45207** for larger capacity with 2" jaw opening for up to 1000 MCM A1 and 750 MCM Cu.

Mfg. Part No.	Description	Stock No.	Price Each
45206	1-7/16" Jaw	48F2197	385.32
45207	2" Jaw	52F8911	439.27

(5766)

ESD CUTTERS

DURATOOL

D00655

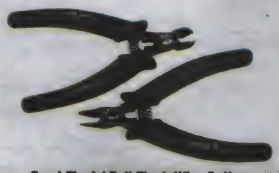
ESD electrostatic discharge certified. Drop-forged fine polished black oxidized head.. Plain jaws and spring-release handles. 2-component handles with slip guard. Length:130mm.

Mfg.Part No.	Description	Stock No.	Price Each 1-24
D00655	ESD Cutter, no bevel round head, spring release handle	61M5984	38.90
D00656	ESD Cutter, bevel round head, spring release handle	61M5985	36.72
D00657	ESD Cutter, no bevel round head with lead catcher, spring release handle	61M5986	37.32

(116841)

PRECISION WIRE CUTTERS

DURATOOL



Semi Flush/ Full Flush Wire Cutters

Precision-ground cutting edges available in semiflush and full flush configurations. Static-dissipative handles are ergonomically designed to offer a safe and comfortable grip in any working condition. High-pressure joint provides smooth operation. Antiglare black oxidation surface treatment for better vision. Length: 5". **Mfg. part nos. 1371** through **1373** are rated for 1 million cuts.

Mfg. Part No.	Configuaration	Cutting Capacity	Stock No.	Price Each
1371	Semiflush	2.0mm (12 AWG) Soft Wire	92N3652	12.95
1373	Full Flush	1.3mm (16 AWG) Copper Wire	92N3654	12.95
10521	Full Flush	1.3mm (16 AWG) Soft Wire	50N046	10.95
10525	Full Flush	0.81mm (20 AWG)	50N048	11.25

(19249)

CUTTERS – WIRE

SIDE CUTTERS

DURATOOL

- 2-component handle with slip guard
- Shock proof handle
- Drop forged, heat treated fully polished steel
- Available in two sizes: 140mm or 160mm

Mfg. Part No.	Description	Stock No.	Price Each 1-24
D00622	Side Cutter Diagonal, Length: 140 mm	61M5951	29.39
D00623	Cutter Side Diagonal, Length: 160 mm	61M5952	32.98

(116846)

HEAVY DUTY SIDE CUTTER

DURATOOL

- 2-component handle with slip guard
- Shock proof handle
- Drop forged, heat treated fully polished steel

Mfg. Part No.	Description	Stock No.	Price Each 1-24
D00624	Diagonal Side Cutter, Length: 180 mm	61M5953	38.59

(116847)

CUTTERS

DURATOOL

PL-501

TL10329

- An exceptionally clean smooth cut
- Lightweight and easy to handle
- Suitable for copper wire, not for use with steel wire

Mfg. Part No.	Description	Stock No.	Price Each 1-99
TL10329	Mini Cutters, Length:4.72"	97M9399	3.39
PL-501	Micro Cutters, Length: 5"	01N3627	4.58

(116707)

DIAGONAL CUTTERS

DURATOOL

D00646

Drop-forged black oxidized head is made of chrome vanadium steel. PVC handle with silver guard. Length: 110mm.

Mfg. Part No.	Description	Stock No.	Price Each 1-24
D00646	Cutter, no bevel round head, spring release handle	61M5975	32.22
D00647	Cutter, bevel round head, spring release handle	61M5976	29.09
D00648	Cutter, no bevel round head with lead catcher, spring release handle	61M5977	33.81

(116834)

element14 COMMUNITY

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element14.com

(196545)

TIP CUTTERS

Erem®

570E

530E10

Erem® Magic® cutters are made of extruded, machined tool steel for superior durability. Built-in Magic® spring for "fatigue-free" operation. Interlock screw joint eliminates blade overlapping. ESD -safe cushion grips for comfort and protection. Swiss-made for superior quality.

Mfg. Part No.	Description	Jaw Length (In.)	Max. Cutting Dia. (In.)	Stock No.	Price Each
570E	4¾" Diagonal, Small Tapered Relieved Head, Full-Flush Cut, Angled Tip Cutter for Cutting 24 AWG or Smaller Wires in Confined Areas	0.024	0.866	96F9434	77.00
530E10	4¾" Antishock Head, Shear Cut, PCB Cutter, Cut Off @ 0.040" (1mm)	0.047	0.787	73C3016	116.50

(5754)

HIGH-PRECISION DIAGONAL CUTTERS

Erem®

Erem® **N series** diagonal wire cutters are made with superior-grade steel. Have integrated, unbreakable springs for a constant, free-opening force. Feature ergonomic, ESD-safe cushion grips.

Mfg. Part No.	Description	Stock No.	Price Each
612N	4" Small Oval Head, Semi-Flush	91F2835	68.70
622N	4" Small Oval Head, Full-Flush	91F2837	57.20
632N	4" Small Oval Head, Super Full-Flush	83F4083	62.40
512N	5" Medium Oval Head, Semi-Flush	91F2836	64.50
522N	5" Medium Oval Head, Full-Flush	91F2838	62.40
532N	5" Medium Oval Head, Super Full-Flush	83F4082	74.90
622NA	4" Tapered Head, Full Flush	95B5096	67.60
622NB	4" Tapered Relieved Head, Full Flush	95B5097	58.30
812N	5" Side Cutters, Semi-Flush Cut	81C8015	67.60
822N	5" Side Cutters, Full-Flush Cut	81C8016	67.60

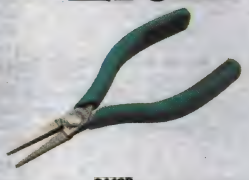
(36374)

ERGONOMIC CUTTERS AND PLIERS

Erem®

2412E

2411P



2442P

Mfg. part no. 2412E is a 5" oval head, diagonal, semi-flush cutter with co-molded ergonomic grip for maximum comfort. Ideal for cutting soft copper wire 32-16 AWG. Made of extruded 100% machined Eremadium® tool steel for durability. Patent internal Magic® spring maintains constant fatigue-free operation. Erem Maximum Opening Stop (EMOS) limits handles from opening.

Mfg. Part No.	Stock No.	Price Each
2412E	18M9949	67.60

Mfg. part no. 2422E is a 5" oval head, diagonal, full-flush cutter with co-molded ergonomic grip for maximum comfort. Ideal for cutting soft copper wire 32-16 AWG. Made of extruded 100% machined Eremadium® tool steel for durability. Patent internal Magic® spring maintains constant fatigue-free operation. Erem Maximum Opening Stop (EMOS) limits handles from opening. **Mfg. part no. 2222EK** is a 5" hardwire wire cutter specifically designed for medical electronics use.

2422E	13M5844	66.60

Mfg. part no. 2432E is a 5" oval head, diagonal, super full-flush cutter with co-molded ergonomic grip for maximum comfort. Ideal for cutting soft copper wire 38-16 AWG. Made of extruded 100% machined Eremadium® tool steel for durability. Patent internal Magic® spring maintains constant fatigue-free operation. Erem Maximum Opening Stop (EMOS) limits handles from opening.

2432E	18M9950	66.60

Mfg. part no. 2482E is a 5" 45° angled flush-cut medium tip cutter for easy access to circuit boards for SMT and thru-hole lead trimming. Made of extruded machined Eremadium® tool steel for durability. "ESD-safe", ergonomic designed cushion-grips for comfort. Internal spring for fatigue-free use. Interlock screw joint for wobble-free operation.

2482E	18M9957	78.00

Mfg. part no. 2411P is a 5" very fine point, needle-nose pliers with smooth jaws that's perfect for microelectronics. Co-molded ergonomic grip for maximum comfort. Made of extruded 100% machined Eremadium® tool steel for durability. Patent internal Magic® spring maintains constant fatigue-free operation. Erem Maximum Opening Stop (EMOS) limits handles from opening.

2411P	18M9947	64.50

CONTINUED

ERGONOMIC CUTTERS AND PLIERS (CONT.)

Mfg. Part No.	Stock No.	Price Each
Mfg. part no. 2442P is a flat-nose pliers with smooth jaws. Co-molded ergonomic grip for maximum comfort. Flat-nose is ideal for universal bending. Made of extruded 100% machined Eremadium® tool steel for durability. Patent internal Magic® spring maintains constant fatigue-free operation. Erem Maximum Opening Stop (EMOS) limits handles from opening.		
2442P	18M9951	76.00

(36277)

MAGICSENSE® PRECISION CUTTERS

Erem®

- Ergonomic, non-slip grips for added comfort and control — ESD safe
- Shatterproof, extruded 100% machined Eremadium® tool steel for strength and durability
- Induction hardening process provides cutting edge Rockwell-hardness of 64-65 HRc
- Patented, unbreakable internal Magic® spring maintains constant opening/closing force operation
- Erem Maximum Opening Stop (EMOS) limits handles from opening to help eliminate user fatigue
- Interlock screw joint system delivers wobble-free operation and avoids blades overlapping

MagicSense® precision cutters deliver the ultimate in comfort, control and performance. These ergonomically-designed cutters feature a new co-molded grip material that furnishes a soft yet solid feel of control for more comfort and less fatigue. The heat-treated hardened blades provide very high-strength, perfect alignment and long tool life.

SIDE CUTTERS

Mfg. Part No.	Description	Stock No.	Price Each
2412E	5″ Oval-Head Semi-Flush-Cut Diagonal Side Cutter	18M9949	67.60
2422E	5″ Oval-Head Full-Flush-Cut Diagonal Side Cutter	13M5844	66.60
2432E	5″ Oval-Head Super-Full-Flush-Cut Diagonal Side Cutter	18M9950	66.60

(89571)

PRECISION CARBIDE TIP CUTTERS

Erem®

576TX

503ETST

- Precision cutter blades fitted with carbide inserts to cut MP35M stainless wire (0.004″/0.10mm to 0.020″/0.50mm dia.) found in stents, catheters and guide wires
- Super-full-flush cut for critical medical applications
- Extruded 100% machined Eremadium® tool steel for strength and durability
- Patented internal Magic® spring maintains constant opening/closing fatigue-free operation
- Erem® Maximum Opening Stop (EMOS) limits handles from opening to prevent excessive hand spread
- ESD safe, ergonomic cushion grips for more comfort and protection
- Interlock screw joint system delivers wobble-free operation and avoids blades overlapping

Carbide tip precision cutters deliver the ultimate in comfort, control and performance necessary for demanding medical applications. Swiss-made for superior quality, precision and reliability. **Mfg. part no. 576TX** diagonal tip carbide cutter features a tapered relieved head that reaches into tight places. Also cuts other malleable wire up to 0.008″ (0.20mm) diameter. **Mfg. part no. 503ETST** angled tip oblique head carbide cutter is angled at 30° to ease stress on user's wrist.

PRECISION CARBIDE TIP CUTTERS FOR MEDICAL APPLICATIONS

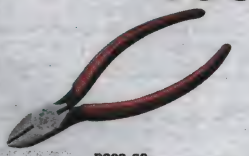
Mfg. Part No.	Description	Stock No.	Price Each
576TX	4¼″ Tapered-Relieved Head Super-Full-Flush-Cut Diagonal Tip Carbide Cutter	83F4089	197.60
503ETST	4¼″ Oblique Head Full-Flush-Cut 30° Angled Tip Carbide Cutter	72J5889	266.30

(89622)

WIRE CUTTERS

KLEIN TOOLS®

D257-4C



D202-6C

All tools have plastic-dipped or slip-on plastic handles. **Mfg. part nos. D202** and **D257** are standard cutters with a standard tapered nose, except **mfg. part no. D257** which is a semi-flush cutter. **Mfg. part no. D210** is a standard semi-flush diagonal cutter. **Mfg. part nos. D219-4C, D219-5C** are midget slim pointed nose diagonal cutters. **Mfg. part nos. D209, D244,** and **D259** are midget pointed noses and diagonal cutters, but **mfg. part no. D244** is a narrow jaw and **mfg. part no. D259** has extra narrow jaws. **Mfg. part no. D295** has a midget tapered nose with a midget jaw. **Mfg. part no. D228** has a tapered nose with high leverage handles. **Mfg. part no. D209** has a pointed nose and semi-flush cutters. **Mfg. part no. D230** has a midget pointed nose with high hardness. **Mfg. part no. D275** has a steel, hold-open spring and a flush cutter which cuts up to 14 AWG.

Mfg. Part No.*	Overall Length	Stock No.	Price Each
D202 6C	6⅛″	34F019	46.77
D257-4	4⅜″	18C4022	45.76

CONTINUED

WIRE CUTTERS (CONT.)

Mfg. Part No.*	Overall Length	Stock No.	Price Each
D257 4C	4⅜″	34F093	49.17
D209 5C	5″	34F028	48.89
D244-5C	5″	84F2090	54.99
D259-4C	4⅜″	94F5748	50.32
D295-4/C	4⅜″	94F5749	56.47
D228 8	8″	34F117	43.21
D209 4C	4⅜″	34F231	48.61
D230-4C	4⅜″	50F7346	53.09
D275-5	5″	34F045	17.47

***NOTE:** Mfg. part nos. with suffix **C** indicate coil spring handle

(5720)

WIRE STRIPPERS/CUTTERS

KLEIN TOOLS®

11045-11047, 11049

1004

Compact, lightweight wire-stripping and cutting tools strip, gauge, cut and loop solid or stranded wire. Easy-to-read wire gauge markings on both sides for stripping in either direction. Strong, hardened-steel with precision-ground stripping holes for easy removal of insulation. Narrow nose fits into tight places. Spring loaded for self-opeing action. Textured handles provide a firm, comfortable grip. Overall length: 6¼″

Mfg. Part No.	AWG	Handle Color	Stock No.	Price Each
11045	18-10	Yellow	94F5759	23.96
11046	26-16	Red	92B3579	24.02
11047	30-22	Yellow	92B0882	26.09
11049	18-8	Red	84C8719	24.80

Mfg. part no. 1004 adjustable wire stripper/cutter perfect for cutting and stripping solid or stranded wire and insulation. Convenient hole for looping or bending wire. Black-oxide finish with plastic-dipped handles. Features hold-open spring. Adjustable slide stop with set screw for repeat stripping work. Overall length: 5″.

1004	26-12	Yellow	88F5517	15.70

(56571)

ELECTRONIC PRECISION PLIERS

KNIPEX®

78 03 125

78 03 125 ESD

- Precision pliers for ultra fine cutting work, e. g. in electronics and fine mechanics
- Precision shaped tips also cut close sitting wire from 0.2 mm dia.
- Joint with stainless steel rivet
- Smooth movement for minimum operator fatigue
- Opening spring and restricted opening
- DIN ISO 9654

Mfg. Part No.	Head	Cutting Performances ∅ (mm) Soft	Cutting Performances ∅ (mm) Medium Hard	Overall Length (mm)	Wt. (g)	Stock No.	Price Each
78 03 125	INOX Stainless Steel	1.6	1	125	56	06R6308	38.00
78 23 125	INOX Stainless Steel	1	0.60	125	55	06R6312	42.90
78 61 125	Burnished	1.6	1.2	125	55	06R6313	39.70
ELECTRONICS DIAGONAL CUTTERS ESD Electrically discharging version - dissipative. Two-color dual component handles black/gray.							
78 03 125 ESD	INOX Stainless Steel	1.6	1	125	55	06R6309	40.30
78 13 125 ESD	INOX Stainless Steel	1.6	1	125	57	06R6311	42.18
78 61 125 ESD	Burnished	1.6	1.2	125	56	06R6314	43.76
78 71 125 ESD	Burnished	1.6	1.2	125	57	06R6316	46.34

(147269)

NEW PRODUCTS ADDED DAILY

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(196560)

CUTTERS – WIRE • CUTTERS – KNIFE

DIAGONAL CUTTING PLIERS

KNIPEX®

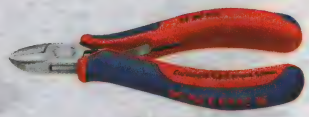
DIAGONAL CUTTERS
- High quality diagonal cutter for all-round use and precise workmanship for long service life
- Precision cutting edges for soft and hard wire
- Clean cutting at cutting edge tips; also in case of thin copper wires
- Cutting edges additionally induction hardened, cutting edge hardness approx. 62 HRC
- Narrow head style for use in confined areas
- Vanadium electric steel, oil-hardened and tempered
- DIN ISO 5749

HIGH LEVERAGE DIAGONAL CUTTERS
- With forged-on axle for heaviest duty
- Suitable for all types of wire including piano wire
- High cutting performance with minimum effort due to optimum co-ordination of the cutting edge angle, Transmission ratio and ergonomic handle shape
- Precision cutting edges additionally induction-hardened, cutting edge hardness approx. 64 HRC
- High performance chrome vanadium steel, oil-hardened and tempered
- Length 250 mm: long diagonal cutter is suitable for copper conductors up to 16 mm² and aluminium conductors up to 35 mm²
- DIN ISO 5749

ELECTRONICS DIAGONAL CUTTERS
- Precision pliers for ultra fine cutting work with precision box joint
- Low-friction double spring for gentle and even opening
- Polish or mirror polish finish with a fine film of oil offer rust protection - no peeling chrome
- Cutting edges additionally induction hardened, cutting edge hardness approx. 62 HRC
- Special tool steel, oil-hardened and tempered
- DIN ISO 9654

77 02 125

74 02 140


77 02 115

77 02 115 ESD

Mfg. Part No.	Head	Cutting Performances ∅ (mm) Soft	Hard	Overall Length (mm)	Wt. (g)	Stock No.	Price Each
70 02 125	Polished	2.3	1.5	125	80	06R6288	33.96
70 02 140	Polished	2.5	1.8	140	126	06R6289	38.68
70 02 160	Polished	2.8	2	160	171	06R6290	34.20
70 02 180	Polished	3	2.5	180	200	06R6291	41.46

Mfg. Part No.	Head	Cutting Performances ∅ (mm) Soft	Hard/ Piano	Overall Length (mm)	Wt. (g)	Stock No.	Price Each
74 02 140	Polished	3.1	2	140	157	06R6292	43.20
74 02 160	Polished	3.4	2.5	160	209	06R6293	44.76
74 02 180	Polished	3.8	2.7	180	273	06R6294	48.34
74 02 200	Polished	4.2	3	200	304	06R6295	49.80
74 02 250	Polished	4.6	3.5	250	437	06R6296	62.90
74 08 250 US	Polished	2	...	250	...	06R6297	69.92

Mfg. Part No.	Head	Cutting Performances ∅ (mm) Soft	Hard	Overall Length (mm)	Wt. (g)	Stock No.	Price Each
77 02 115	Mirror Polished	1.6	0.6	115	80	06R6298	61.46
77 21 115	Polished	1.3	...	115	64	06R6301	57.02
77 32 115	Mirror Polished	1.3	0.5	115	80	06R6302	65.86
77 42 115	Mirror Polished	1.3	...	115	80	06R6304	64.78
77 52 115	Mirror Polished	1	0.5	115	77	06R6306	68.06
ELECTRONICS DIAGONAL CUTTERS ESD Electrically discharging version - dissipative. Two-color dual component handles black/gray.							
77 02 115 ESD	Mirror Polished	1.6	0.6	115	82	06R6299	63.04
77 12 115 ESD	Mirror Polished	1.6	0.6	115	80	06R6300	69.28
77 32 115 ESD	Mirror Polished	1.3	0.5	115	79	06R6303	67.98
77 42 115 ESD	Mirror Polished	1.3	...	115	78	06R6305	68.26
77 52 115 ESD	Mirror Polished	1	0.5	115	80	06R6307	71.86

(147399)

ELECTRONICS DIAGONAL CUTTERS

KNIPEX®

Mfg. Part No.	Description	Overall Length (mm)	Stock No.	Price Each
77 12 125 G	With small bevel, with lead catcher	135	81R1017	57.96
77 22 125 G	Without bevel	135	81R1020	51.98
77 82 125 G	Without bevel, with lead catcher	135	81R1026	52.18

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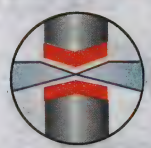
ESD SAFE CUTTERS

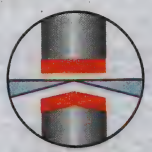
wiha Premium Tools

32712

Beveled Cutter


Semi-Flush Cutter

Flush Cutter


Full Flush Cutter

Mfg. Part No.	Description	Stock No.	Price Each
32704	Side Cutters, Small Tapered Head With Hollow Grinded Back - Flush	92C2632	55.62
32706	Side Cutters, Wide Tapered Head - Bevel	89C2987	68.17
32708	Side Cutters, Wide Tapered Head - Flush	89C2988	68.31
32710	Side Cutters, Wide Tapered Head - Full Flush	89C2989	74.36
32712	Side Cutters, Slim Oval Head - Flush	89C2991	68.31
32714	Side Cutters, Slim Oval Head - Full Flush	89C2992	76.80
32724	Oblique Angled Cutters, 29° - Full Flush	89C2998	85.44
32728	Oblique Front Cutters, Very Small Head, 40° - Flush	89C3000	79.32
32732	End Cutters, Extra Slim - Flush	89C3001	77.88
ESD SAFE PLIERS			
32742	Ripping and Bending Pliers, Short Snipe Nose (Chain Nose) Pliers Straight, Serrated Jaws	89C3003	61.51
32746	Ripping and Bending Pliers, Long Needle Nose Pliers, Straight, Serrated Jaws	89C3005	66.75
32748	Ripping and Bending Pliers, Needle Nose Pliers, Bent 45°, Serrated Jaws	89C3006	67.25
32752	Ripping and Bending Pliers, Short Flat Nose Pliers Smooth Jaws	89C3008	58.61

(73116)

HARD WIRE CUTTERS

Xcelite®

Mfg. part nos. 134CG are made from hardened steel and are ideal for cutting spring or hardened wire. Shear cutting action for square cuts. Patented hold-down mechanism captures wire on both sides of the cut. Cuts up to 0.062″ music wire and 1/16″ stranded wire.

Mfg. Part No.	Description	Stock No.	Price Each
134CG	Hard Wire Cutters	66F7823	42.00

(5756)

RETRACTABLE UTILITY KNIFE

DURATOOL

TL10494

D00284

Retractable Utility blade has 3 positions, cast metal construction. Precision die-cast ergonomically designed handle with an easy blade change without the use of any tools. **TL10494** contains of 100 two notch stainless steel blades which are suitable for use with most retractable knives. The dispenser can be mounted on wall or carried around.

Mfg. Part No.	Description	Stock No.	Price Each 1-49
D00284	Retractible Utility Knife	97M9419	6.49
TL10494	Utility Knife Blades and Dispenser, 100 pc	97M9420	10.19

(116717)

HOBBY KNIFE SETS

DURATOOL

- Hobby knife set contains everything you would need to get you started
- Ideal for the modeler or craft worker

TL10507

Mfg. Part No.	Description	Stock No.	Price Each 1-24
TL10507	Hobby Knife Set, 35 pc	99M1264	17.86

(116769)

3-PC. SPLICERS KIT

RoHS Compliant Available

JONARD INDUSTRIES CORP.

- Knife features a short 1 3/4" tough, cutlery-steel blade and a non-slip handle
- Scissors are made of high carbon steel w/ scraper and file on one side, plus 2 stripping notches
- Both fit securely in leather pouch which can be mounted on belts up to 2" wide

This compact kit contains a special purpose ergonomic cable splicer's knife, scissor and leather pouch.

Mfg. Part No.	Description	Stock No.	Price Each
TK-400	3-Pc. Splicer's Kit	51M0631	31.34
KN-7	Ergonomic Cable Splicing Knife	76M0043	9.31
ES-1964	Electrician Scissor	71K3589	12.97

(139049)

INSULATED KNIVES

KNIPEX®

CABLE KNIFE
- Solid, fixed straight blade blade oil-hardened and tempered
- Transparent protective cap

DISMANTLING KNIFE
- Solid, fixed-hook blade, sickle shaped, made of stainless steel, vacuum hardened
- Guide shoe at the blade point
- No damage of the conductor insulation
- Transparent protective cap

CABLE KNIFE
- Solid, fixed straight blade
- Replaceable specially ground blade made of stainless steel
- Hinged blade guard, integrated in the handle, captive
- Back of the blade plastic coated to avoid short circuit

98 52

98 55

98 56

All knives feature ergonomically shaped safety handles and are VDE tested according to DIN EN/IEC 60900 : 2004.

Mfg. Part No.	Blade Length (mm)	Overall Length (mm)	Wt. (g)	Stock No.	Price Each
98 52	50	180	67	06R6339	24.08
98 55	38	155	68	06R6340	62.86
98 56	50	185	64	06R6341	39.86

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
98 56 09	Spare Blade For 98 56	06R6342	16.10

(147406)

DURATOOL AT NEWARK ELEMENT14

For your production and facilities needs, from soldering stations to tool sets & more.
newark.com/duratool

(212563)

FASTBACK FLIP POCKET AND SLIDING UTILITY KNIVES

Milwaukee

- Tool free blade change
- Wire stripper up to 10 ga.
- Integrated gut hook

Fastback™ utility knife is designed to activate the blade 3X faster than a 2-handed opening for easy activation. Sliding utility knife features a side activated slide switch to reduce the risk of exposing the blade accidentally. Complete with rubber overmold to increase comfort and reduce hand slippage. Both include a tool free blade change for fast efficient adjustments. The integrated gut hook and wire stripper also increase utility.

FASTBACK™ Flip Pocker Knife

Sliding Utility Knife

Mfg. part No.	Description	Blades Included	Knife Length (in.)	Stock No.	Price Each
48-22-1901	FASTBACK™ Flip Pocker Knife	1	7-1/4	90R5380	18.00
48-22-1902	Fastback II™ Flip Utility Knife With Storage	2		88W3637	25.00
48-22-1910	Sliding Utility Knife	...		90R5381	14.00

(207486)

POWERBLADE 12-TOOLS-IN ONE

GREENLEE. COMMUNICATIONS A Textron Company

- Patent-pending wire and cable stripping system
- SOG® beveled-edge knife
- 0.15"-0.25" cable strippers built into handle of tool
- UTP stripper with spring-loaded blade
- V-notch to adjust to cable
- 22-10 AWG wire strippers for both solid and stranded wire
- Lifetime manufacturer's warranty

PowerBlade, this unique electrician's knife and 11 separate wire and cable strippers all in one, is built for a lifetime of professional use, all day, every day. Cryogenic heat-treated 3" long blade increases strength to enable longer sharpness and chip resistance. Manufactured from AUS 8 stainless steel. Lightweight tool handle made from military-grade Zytel® plastic. Liner-Lock blade release system keeps knife securely locked while in-use position for added safety. Thumb stud for easy one-hand opening. Total length: 7.5".

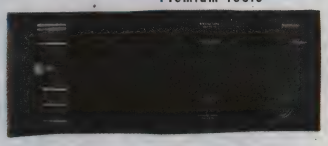
Mfg. Part No.	Description	Stock No.	Price Each
PA6575	PowerBlade 12-Tools-in-One	63M4719	69.73

(116762)

SYSTEM 4 BLADE SETS WITH PRECISION HANDLES

wiha Premium Tools

26992



26997

- High-alloy CVM steel hardened blades
- Tapered ESD-safe handle has easy control fingertip rotating cap

Mfg. part no. 26992 10-blade combo set (20 tips) contains slotted sizes: 1.5 and 3.0, 2.0 and 3.5, 2.5 and 4.0mm. Phillip sizes: #000, #00, #0 and #1. Hex/ball point sizes: 1.3, 1.5mm. Straight hex: 2.0, 2.5, 3.0mm. Ball end hex: 2.0, 2.5 and 3.0mm. Comes with an antistatic adjustable collet-type handle. In durable pouch.

Mfg. Part No.	Stock No.	Price Each
26992	93F6584	108.31

Mfg. part no. 26997 8-blade combo set (16-tips) contains slotted sizes: 1.5 and 3.0, 2.0 and 3.5, 2.5 and 4.0mm. Phillips sizes: #000, #00, #0 and #1. Torx® sizes: T6 and T8, T7 and T9, T10, T15. Antistatic adjustable collet-type handle in fold-out box.

26997	92F8113	76.64

Mfg. part no. 32090 Insulated screwdriver set.

32090	3430369	26.55

(68844)

ELECTRICIAN'S KNIFE

Xcelite®

This 4" long utility tool is both a knife and a screwdriver. Screwdriver blade with sharp edge for scraping insulation. Tough Delrin handle.

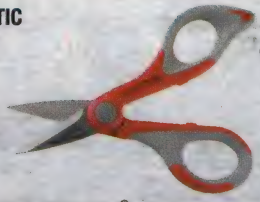
Mfg. Part No.	Description	Stock No.	Price Each
K22	4" Electrician's Knife	35F251	25.30

(20234)

CUTTERS - SCISSORS

ERGONOMIC FIBER OPTIC KEVLAR® CUTTER

JONARD INDUSTRIES CORP.



- Ergonomic handles for user comfort and durability
- Adjustable joint screw under protective cap
- Serrated blades grip material
- Sharp and durable 6″ long

High carbon stainless steel blades designed to cut Kevlar®, cabling insulation, tape, cable ties and other material.

Mfg. Part No.	Description	Stock No.	Price Each
JIC-186	Ergonomic Wire and Kevlar Cutting Shears	51M0209	17.35

(139048)

170 SERIES PLATOSHEARS LEAD CUTTERS

RoHS Compliant Available

PLATO®

170 170SD 170LX

- Ergonomically designed
- Reduces operator fatigue
- Made in the U.S.A.

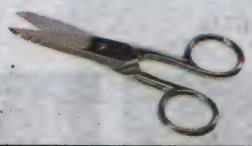
Platoshears® lead cutters flush cut copper wire up to 18 AWG (0.040″/1.00mm). The shear cutting action reduces operator fatigue and prolongs the life of the blades. **Mfg. part no. 175** features a lead-catcher safety guard that reduces the risk of lead fly-off. **Mfg. part nos. 170SD** has permanently static-dissipative plastic grips which meet DOD-STD-1686 and MIL-B-81705, Type 2 specifications.

Mfg. Part No.	Description	Stock No.	Price Each
● 170	Lead Cutter	98H3229	5.80
● 175	Lead Cutter with Lead-Catcher Safety Guard	98H3232	8.51
● 170SD	Lead Cutter with Static-Dissipative Plastic Grips	98H3230	11.50
● 170LX	Ergonomic ESD-Safe Shear Cutter	83K3388	8.37
● 175LX	Ergonomic ESD-Safe Shear Cutter with Safety Guard	83K3389	11.24

(79284)

5″ ELECTRICIAN'S SCISSORS

AVEN



Heavy-duty, general-purpose scissors with serrated outside blade and two notches for 19 AWG and 23 AWG wire. Blade length: 2″.

Mfg. Part No.	Stock No.	Price Each
1331	10N313	8.50

(19250)

NIPPERS, CUTTERS, SHEARS AND SCISSORS

Wiss®

1570B 175E5 764

NIPPERS AND CUTTERS

Mfg. part no. TC1 industrial thread nippers feature nickel-plated, hot drop-forged steel blades with self-opening spring action. **Mfg. part no. 1570B** Quick-Clip® speed cutter features stainless steel, replaceable 1″ long blades, positive spring action and heavy-duty contour frame.

Mfg. Part No.	Description	Stock No.	Price Each
1570B	4¾″ Quick Clip® Speed Cutter — Sharp Point Blades	46F2594	7.47

SHEARS AND SCISSORS

Mfg. part no. 175-E electrician's scissors feature nickel-plated, hot drop-forged 1⅞″ long blades with a scraper and file on back edge of blade. **Mfg. part no. 175E-5** electrician's scissors is the same as **mfg. part no. 175E** plus features a double stripping notch for 19 gauge and 23 gauge wire. **Mfg. part no. 764** sewing and embroidery scissors feature nickel-plated, hot drop-forged 1⅜″ long blades with sharp points, flat pattern and ring handles.

Mfg. Part No.	Description	Stock No.	Price Each
175E	5¼″ Electrician Scissors — Scraper and File on Back of Blade	34F1003	19.37
175E5	5¼″ Electrician Scissors — Double Stripping Notch, Serrated Along Entire Bottom Blade	46F2593	18.58
764	4⅛″ Sewing and Embroidery Scissors	10B4216	26.05

(20236)

UTILITY SHEARS

Wiss®

WEZSNIP W8TA W912 W812

Mfg. part no. WEZSNIP Easy Snip utility shear features strong, corrosion-resistant 4″ long stainless steel blades with rounded points. Textured, molded handles for secure, comfortable grip. Spring assist action minimizes fatigue. Wire cutting notch in lower blade. Thumb latch secures blades closed for storage.

Mfg. part no. W8TA utility shear features take-apart blades for easy cleaning. Strong, corrosion-resistant stainless steel 4″ long blades with rounded points. Black plastic handles are dishwasher safe.

Mfg. part no. W912 shop shear features serrated lower blade for better grip on materials being cut. Cutting notch on lower blade for rope and twine. Safety point on 4¼″ long blades. Adjustable pivot to change cutting tension for best feel. Black, hard plastic handles clean easily.

Mfg. part no. W812 8½″ home and craft scissor features corrosion-resistant, stainless steel 3½″ long blades with sharp points. Straight blades can be sharpened. Adjustable pivot to change cutting tension for best feel. Red, hard plastic handles with Soft-Touch finish offer high leverage.

Mfg. Part No.	Description	Stock No.	Price Each
WEZSNIP	8¾″ Easy Snip Utility Shear	84K0499	14.82
W8TA	8″ Take-Apart Utility Shear	84K0500	18.56
W912	10″ Shop Shear	84K0502	18.51
W812	8½″ Home and Craft Scissor	84K0501	11.04

(88514)

ELECTRONIC SHEARCUTTERS

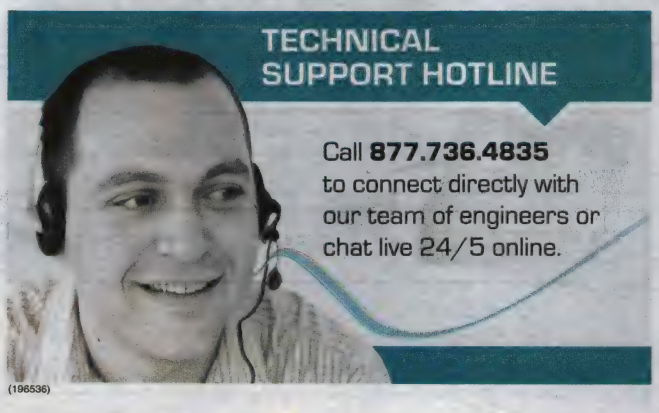
Xcelite®

170M 1178M

Carbon steel electronic shearcutters with easy-grip molded red handles. Superior blade by-pass shear cutting action is designed to cut with less effort. 5″ shears flush-cut soft wire up to 20 AWG. 6″ shears flush-cut wire up to 14 AWG. Heavy-duty shears offer maximum durability for IC pins, cable and harnesses. **Mfg. part nos. 175M, 175D, 2178M** and **2178D** feature safety clips to help prevent flying leads.

Mfg. Part No.	Description	Stock No.	Price Each
170M	5″ General-Purpose, Low-Profile Shearcutters	50F172	7.10
175M	5″ General-Purpose, Low-Profile Shearcutters with Safety Clips	50F4002	8.10
1178M	6″ Heavy-Duty Shearcutters	96F8902	12.10
2178M	6″ Heavy-Duty Shearcutters with Safety Clips	50F4003	14.50
ELECTROSTATIC DISSIPATIVE (ESD) MODELS Feature static-dissapative black grips to help reduced mechanical shock delivered to the work.			
170D	5″ General-Purpose, Low-Profile Shearcutters with ESD Grips	92F6157	7.50
175D	5″ General-Purpose, Low-Profile Shearcutters with Safety Clips, ESD Grips	52F5705	9.10
1178D	6″ Heavy-Duty Shearcutters with ESD Grips	96F8900	14.60
2178D	6″ Heavy-Duty Shearcutters with Safety Clips, ESD Grips	66F2965	16.00

(5990)



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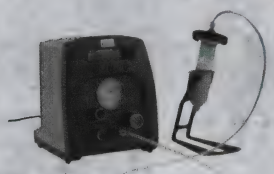
DX-250 AND DX-350 SERIES PROGRAMMABLE, DIGITAL FLUID DISPENSER/CONTROLLERS

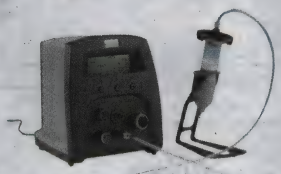
RoHS Compliant Available

METCAL

TÜV Rheinland



DX-250, DX-255



DX-350, DX-355

- Dispenses low, medium and high-viscosity fluids accurately and consistently
- Adjustable vacuum-driven "suck-back" to control material "tailing" and waste
- Large, clearly marked air pressure and vacuum control knobs
- High-visibility LCD display panel with back lighting
- Universal power supply with snap-on plug for worldwide use
- Multiple units can be stacked and fastened on top of each other to conserve workspace
- One year manufacturer's warranty
- CE complaint, TUV approved

Productivity-focused **DX-250/255** and **-350/355 series** digital dispenser/controllers are highly-responsive air pressure and vacuum management system, coupled with a digital timing circuit, to provide consistent and repeatable fluid dispensing and material waste control. **DX-250/255 series** units feature user-friendly firmware for easy task set-up. **DX-350/355 series** units feature user programmable manual purge and automatic dispense cycle settings, 10 programmable memories for storing and recalling most frequently used dispensing cycle timing, "Teach" mode for determining the dispensing time required when dispensing output is unknown, tactile-responsive user programming buttons and a digital pressure/vacuum readout. All units come complete with syringe holder, foot switch, air-line holder, 10cc receiver head assembly, sample dispensing needles, fitting and air inlet tubing kit, 100-240VAC universal power adapter and user guide. *Order additional receiver head assemblies separately below. Order additional syringes separately online or call.*

Specifications	DX-250 Series	DX-350 Series
Cycle Rate	600 cycles/minute	1200 cycles/minute
Digital Timing Range	0.020 - 60.00 seconds	0.008 - 60.000 seconds
Cycle Modes	Timed, Purge (Manual)	Timed, Interrupt, Teach, Purge
LCD Display Panel	16"W x 2"H	20"W x 4"H
Vacuum Force	16" (406mm) of Hg	
Timing Repeat Tolerance	+/- 0.001%	
Input Voltage	100-220VAC	
Input Frerquency	50-60Hz	
Dimensions and Weight	7"H x 6"W x 6.5"D; 2.6 lbs.	

Mfg. Part No.	Description	Max. Air Output Pressure (psi)	Stock No.	Price Each
DX-250	DX-250 Dispenser/Controller	0-100 (0-6.9 bar)	39M4552	400.00
DX-255	DX-255 Dispenser/Controller	0-15 (0-1.0 bar)	39M4553	445.00
DX-350	DX-350 Dispenser/Controller	0-100 (0-6.9 bar)	39M4554	775.00
DX-355	DX-355 Dispenser/Controller	0-15 (0-1.03 bar)	39M4555	820.00

700 SYSTEM RECEIVER HEAD ASSEMBLIES

These receiver head assemblies are the connecting link between time/pressure controllers and syringe assemblies, providing a safe connection for accident-proof dispensing. Each assembly consists of one receiver head with O-ring, three or six feet of tubing and a male quick connector. *Order syringes, barrels, pistons, end caps, needles and tips separately on [5940] and [5938], and [5937].*

Mfg. Part No.	Size (cc)	Tubing Lgth. (ft.)	Stock No.	Price Each
903-3RHB	3	3	39M4559	19.39
903-6RHB	3	6	39M4560	20.55
905-3RHB	5	3	39M4563	19.39
905-6RHB	5	6	39M4564	20.55
910-3RHB	10	3	39M4567	19.39
910-6RHB	10	6	39M4568	20.55
93055-3RHB	30/55	3	39M4580	19.39
93055-6RHB	30/55	6	39M4581	20.55

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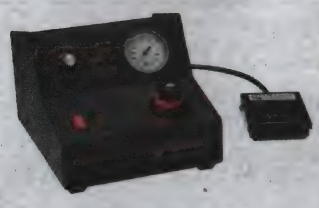
ECONOMY AND BASIC SHOT METER DISPENSERS

Weller®



KDS834A Economy

KDS808 Basic

Shot Meter benchtop dispensers allow easy dial reading and adjustment of air pressure and vacuum. Both Shot Meter models have a drip-free vacuum, an electrically-actuated foot pedal for excellent ergonomics, 0-100 psi regulators and gauges with locking ring, and slide switch for changing voltage from 115-230V. **Mfg. part no. KDS834A** economy Shot Meter also features a digital timer control for metered shot repeatability, a time duration adjustable from 0.01 to 99.99

➤ CONTINUED ➤

ECONOMY AND BASIC SHOT METER DISPENSERS (CONT.)

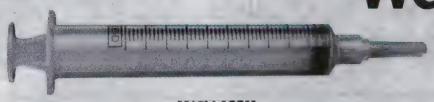
seconds, adjustable 4-position pushbutton timer switch. **Mfg. part no. KDS808** Shot Meter dispenser is a basic unit with vacuum. *Order* **mfg. part no. KDS824A** *deluxe Shot Meter dispenser, syringes, syringe adapters and other accessories separately; on pages 2053-2054.*

Mfg. Part No.	Description	Stock No.	Price Each Each
KDS834A	Economy Shot Meter Dispenser	95B6168	844.40
KDS808	Basic Shot Meter Dispenser with Vacuum	31H9755	649.00

(48886)

DISPENSING SYRINGES AND ADAPTERS

Weller®



M10LLASSM

AIR-OPERATED LUER LOK™ TIP SYRINGES — UNASSEMBLED, NON-CALIBRATED

Industrial syringes with Luer Lok ™ tip is ideal for micro-air dispensing. Works with Kahnetics ® Shot Meter dispensers; *ordered separately; go online or call.* These unassembled, non-calibrated syringes include barrel and plastic stopper.

Mfg. Part No.	Syringe Size (cc)	Stock No.	Pkg. of	Price per Pkg. Each
A30LLPS	30	17C6569	10	11.80

MANUAL LUER LOK™ TIP SYRINGE — UNASSEMBLED, NON-CALIBRATED

This manual, unassembled syringe includes barrel, rubber stopper and plunger rod.

Mfg. Part No.	Syringe Size (cc)	Stock No.	Pkg. of	Price per Pkg.
M5LL	5	17C6596	20	12.70

MANUAL LUER LOK™ TIP SYRINGES — ASSEMBLED, CALIBRATED

This manual, assembled syringe includes graduated barrel, rubber stopper, plunger rod and tip cap.

Mfg. Part No.	Syringe Size (cc)	Stock No.	Pkg. of	Price per Pkg. Each
M10LLASSM	10	30M2687	15	10.00
M30LLASSM	30	07W3588	10	12.40

UNIVERSAL SYRINGE ADAPTER ASSEMBLIES

Plugs directly into any Kahnetics Shot Meter dispenser; *ordered separately.* Compatible with Luer Lok ™ tip air-operated syringes *ordered separately above.* Works with all manufacturer's syringes. Features 360° swivel head for ease of motion. Adapters come with either metal or lightweight plastic grippers. Metal versions fit many odd size syringes best. Use with single component, two-part, self-leveling, and non-self-leveling materials. Produces repeatable shots of material and requires minimal clean-up. Syringe adapter assembly comes complete with syringe adapter head, 6-ft. air line and fitting.

Mfg. Part No.	Fits Syringe Size (cc)	Gripper	Stock No.	Price Each
KDS510S6	10	Plastic	95B6155	26.00

(48979)

DISPENSING NEEDLES

Weller®

- Blunt tip
- Color-coded plastic threaded hub
- Disposable and non-sterile

Stainless steel, antistatic, opaque dispensing needles lock onto Luer Lok™ style syringes; *ordered separately.* **Sold in packages of 50.** Additional package quantities are available; *go online or call*.

Mfg. Part No.	Gauge	Needle Length	I.D.	O.D.	Hub Color	Stock No.	Price per Pkg. Each
KDS1412P	14	½"	0.067"	0.083"	Dark Green	33C3807	13.40
KDS141P	14	1"	0.067"	0.083"	Dark Green	17C7303	13.40
KDS151P	15	1"	0.060"	0.072"	Orange	17C7304	13.40
KDS1612P	16	½"	0.053"	0.064"	Purple	33C3814	13.40
KDS161P	16	1"	0.053"	0.064"	Purple	17C7305	13.40
KDS16112P	16	1½"	0.053"	0.064"	Purple	33C3813	13.40
KDS1812P	18	½"	0.038"	0.050"	Pink	33C3819	9.60
KDS181P	18	1"	0.038"	0.050"	Pink	17C7308	9.60
KDS2012P	20	½"	0.026"	0.035"	Yellow	33C3828	9.60
KDS201P	20	1"	0.026"	0.035"	Yellow	17C7311	9.60
KDS2112P	21	½"	0.023"	0.032"	Green	33C3832	9.60
KDS2212P	22	½"	0.019"	0.028"	Black	33C3835	9.60
KDS221P	22	1"	0.019"	0.028"	Black	17C7313	9.60
KDS2312P	23	½"	0.017"	0.025"	Light Blue	33C3838	9.60
KDS2512P	25	½"	0.012"	0.020"	Blue	33C3842	9.60
KDS3012P	30	½"	0.006"	0.012"	Lavender	33C3848	16.80

(68542)

DISPENSING EQUIPMENT • EXTRACTION TOOLS

PLASTIC TAPER TIP NEEDLES

Weller®

- Polyethylene taper tip Luer Lok
- Overall length of 1½″
- Prevents surface scratches
- Tapered feature helps alleviate dripping problems
- Additional package quantities available; *go online or call*

Mfg. Part No.	Gauge	Nominal I.D.	Color	Pkg. Qty.	Stock No.	Price per Pkg. Each
KDS14TNP	14	0.063″	Salmon	50	33C3805	16.90
KDS16TNP	16	0.048″	Grey	50	33C3812	16.90
KDS18TNP	18	0.034″	Green	50	33C3816	16.90
KDS20TNP	20	0.024″	Pink	50	33C3824	16.90
KDS22TNP	22	0.017″	Blue	50	33C3833	16.90

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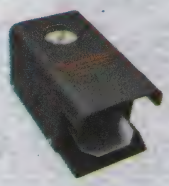
FOOT VALVE DISPENSER

Weller®



Easy to set-up and operate. Sits on the floor, so no table space is needed. Foot actuated for excellent ergonomics. Works on compressed air input only — no electricity required. 0 - 100 psi regulator and gauge. **Mfg. Part No. KDS806V** with vacuum free drip available; *go online or call*. Size: 3.75W x 7.25D x 3.75″H. *Order syringes, syringe adapters and other accessories separately; on page 2053.*

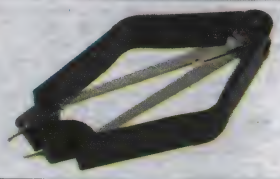
Mfg. Part No.	Description	Stock No.	Price Each
KDS806	Foot Valve Dispenser	95B6162	279.10

(48887)

PLCC EXTRACTOR TOOL

DURATOOL

- For removing PLCC type devices from their sockets
- Prevents damage to the IC packaging and socket
- Easy to use, simply squeeze the tool handle to extract
- Length: 98mm



Mfg. Part No.	Description	Stock No.	Price Each 1-99
D00038	PLCC Extractor Tool	23M5825	2.93

(116821)

FUSE PULLERS

IDEAL®

34-016 34-003

Mfg. part nos. 34-001, 34-002, 34-003 fuse pullers for cartridge-type fuses. Fully insulated, reinforced, high-dielectric engineering plastic. No-slip grip, marked amp range, moisture resistant. **Mfg. part nos. 34-015** and **34-016** molded of high-impact nylon with no-slip grip and finger stops.

Mfg. Part No.	Length	Removes Fuses	Stock No.	Price Each
34-001	5″	Small 9/32-½″ dia.	87F2747	11.50
34-002	7½″	0-100A, 250V; 600V	87F2748	19.25
34-003	11¾″	31-600A, 250V; 31-400A, 600V	87F2740	41.17
34-015	5″	0-30A, 250V	87F2741	14.08
34-016	7¼″	0-100A, 250V; 0-60A, 600V	87F2742	16.31

(5693)

PIN EXTRACTOR

RoHS Compliant Available

JONARD INDUSTRIES CORP.

Plunger-style pin extractor for pushing pins out from behind the connector blocks. For contact sizes 16-20. 3″ long.

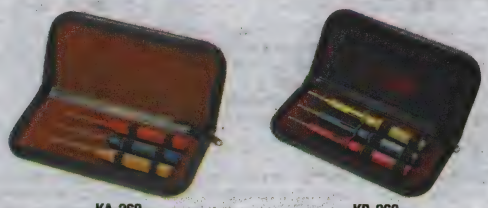
Mfg. Part No.	Stock No.	Price Each
● R-5926	19C7658	15.45

(58683)

INSERTION AND REMOVAL TOOL KITS

RoHS Compliant Available

JONARD INDUSTRIES CORP.



KA-260 KR-260

Mfg. part no. KA-260 insertion kit includes the three most popular color-coded sized insertion tools for contact sizes 20 (red), 16 (blue) and 12 (yellow). 5″ long. **Mfg. part no. KR-260** removal kit includes the three most popular color-coded sized extraction tools for contact sizes 20 (red), 16 (blue) and 12 (yellow) 6″ long. Both kits include durable leather-padded zipper case.

Mfg. Part No.	Description	Stock No.	Price Each
● A-4598	Insertion Tool size 20	50F5458	54.12
● A-4599	Insertion Tool size 16	50F5454	54.74
● KA-260	Insertion Tool Kit (contains above 3 tools) in leather case	35F1148	163.42
● R-4602	Removal Tool size 16	22C8720	56.81
● KR-260	Removal Tool Kit (contains above 3 tools) in leather case	35F1149	179.36

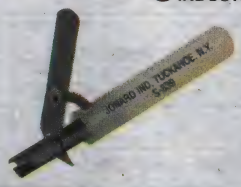
(58672)

LAMP EXTRACTOR

RoHS Compliant Available

JONARD INDUSTRIES CORP.

Mechanical extractor used to remove or insert miniature lamps with bayonet style bases in panels and switchboards by firmly and gently grasping lamps. Grasp lever includes a return spring for fast lamp insertion and removal. Lamp grasp is limited to 5/16″ to prevent shorts. Handle diameter: ½″. 4″ long.



Mfg. Part No.	Stock No.	Price Each
● S-339	84F877	33.33

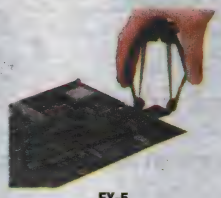
(58574)

UNIVERSAL PLCC EXTRACTION TOOL

RoHS Compliant Available

OK Industries Div. of Jonard Industries

- Extracts a Range of PLCC Sizes From 20-Pins Through 84-Pins Without Damage to The Chip
- Spring Loaded One-Hand Design Requires No Pulling, Squeeze Handles and Chip is Lifted from the Socket
- EX-5 has ESD Safe Handles for use on all Static Safe Components and Machined Stainless for Long Life
- EX-6 has ABS Handles and Stamped Steel



EX-5

Mfg. Part No.	Description	Stock No.	Price Each
● EX-5	ESD Safe PLCC Extration Tool	50F5444	28.27
● EX-6	PLCC Extration tool	92F2621	14.55

(5929)

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(196545)

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(196560)

INSERTION/EXTRACTION KIT

RoHS Compliant Available

OK Industries Div. of Jonard Industries

- Includes DIP IC Extractors and Inserters to Accomodate All IC's From 8- to 40-Pins
- Tools Engaging Conductive Surfaces are CMOS Safe
- Grounding Lugs Included Where Appropriate

Kit contents are available individually (see table below).

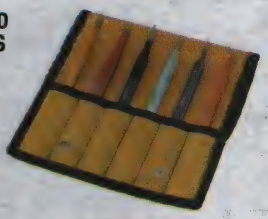
Mfg. Part No.	Description	Stock No.	Price Each
WK-7	Insertion/Extraction Kit	10F7495	103.96

CONTENTS OF WK-7 KIT

Mfg. Part No.	Function	Stock No.	Price Each
EX-1	8-24 Pin Extractor	10F7547	3.15
EX-2	24-40 Pin Extractor	10F7494	27.83
MOS-1416	14-16 Pin Inserter	10F7498	24.33
MOS-2428	24-28 Pin Inserter	10F7497	24.33
MOS-40	36-40 Pin Inserter	10F7496	27.67

(5987)

E-Z PIK COLOR-CODED PRECISION TWEEZERS AND TWEEZER SET



AVEN

18480EZ 6-Pc. Set

E-Z Pik precision tweezers are manufactured from anti-acid, anti-magnetic stainless steel and feature a highly-durable, special color coating for high visibility and easy identification. Color coding helps user quickly find the tweezers needed by identifying the color only rather than style of tweezers. Available in six popular styles.

Mfg. Part No.	Description	Length (In.)	Color	Stock No.	Price Each
18013EZF	Style AA — Straight, Strong Precise Tips	5	Yellow	01N4764	3.83
18032EZ	Style 00 — Straight Thick Flat, Strong Tips	4.75	Red	01N4765	5.75
18049EZF	Style 2A — Tapered Straight Flat Tips	4.75	Black	01N4766	3.83
18056EZF	Style 3C — Straight Ultra Fine Tips	4.25	Light Blue	01N4767	3.83
18062EZF	Style 5 — Tapered Ultra Fine Tips	4.25	Green	01N4768	3.83
18072EZ	Style 7 — Curved Fine Tips	4.5	Orange	01N4769	5.75

6-PC. E-Z PIK PRECISION TWEEZERS SET WITH PROTECTIVE POUCH

Set includes one each of the following tweezers: style AA yellow, style 00 red, style 2A black, style 3C light blue, style 5 green, style 7 orange, and a handy protective storage pouch.

18480EZ	6-Pc. E-Z Pik Precision Tweezers Set	26R9213	34.51

(116782)

TWEEZER SETS

DURATOOL

- Set of value for money tweezers
- Includes: needle, angle, straight and flat point

Mfg. Part No.	Description	Stock No.	Price Each 1-99
TL10508	Twezzer Set, 4 pc	01N3568	1.88

(116750)

DURATOOL AT NEWARK ELEMENT14

For your production and facilities needs, from soldering stations to tool sets & more.

newark.com/duratool

(212563)

5-PC. PRECISION INDUSTRIAL TWEEZERS SET

DURATOOL

- Five most used precision tweezers
- Anti-magnetic stainless steel (SA)
- Supplied in a protective plastic case

SET CONTENTS:

Model No.	Description	Length (in. / mm)
00 SA	Tweezers with Flat, Strong Tips	4¾ / 120
2A SA	Tweezers with Flat, Rounded Tips	4¾ / 120
3C SA	Tweezers with Very Sharp Tips	4¼ / 110
5 SA	Tweezers with Very Fine Tips	4¼ / 110
7 SA	Tweezers with Fine, Bent Tips	4¼ / 110

Mfg. Part No.	Description	Stock No.	Price Each 1-24
D00349	5-Pc. Precision Industrial Tweezers Set	34M5835	86.38

(116657)

PRECISION INDUSTRIAL TWEEZERS

DURATOOL

- Quality manufactured, economically priced
- Anti-magnetic stainless steel (SA)
- Wide choice of shapes for a large variety of industrial applications
- Packaged in a protective plastic case

Mfg. Part No.	Model No.	Description	Length (in.)	Length (mm)	Stock No.	Price Each 1-49
D00334	00 SA	Flat Edges, Thick	4¾	120	34M5820	15.46
D00335	1 SA	Accurate, Strong Tips	4¾	120	34M5821	19.75
D00336	2 SA	Flat, Sharp Fine Tips	4¾	120	34M5822	20.78
D00337	2A SA	Flat, Round Tips	4¾	120	34M5823	19.75
D00339	3C SA	Very Sharp Tips, Superior Finish	4¼	110	34M5825	20.78
D00340	4 SA	Fine Tips	4¼	110	34M5826	14.72
D00341	5 SA	Extra Fine Tips	4½	115	34M5827	15.49
D00342	5A SA	Extra Fine Tips	4½	115	34M5828	15.49
D00343	7 SA	Fine Curved Tips	4½	115	34M5829	23.01
D00344	7A SA	Fine Strong Curved Tips	4½	115	34M5830	22.16
D00345	AA SA	Strong Tips for General Use	5	130	34M5831	16.08
D00346	AC SA	Strong Tips, Serrated Grips	4¼	110	34M5832	23.01
D00347	MM SA	Strong Fine Tips for General Use	5	130	34M5833	16.08
D00348	SS SA	Extra Fine Super Slim	5½	140	34M5834	20.78

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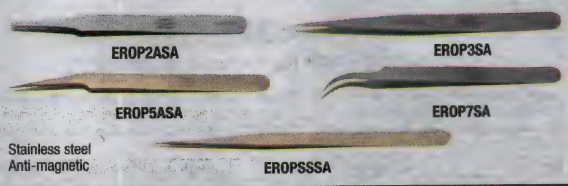
PRECISION TWEEZERS

Erem®



- Stainless steel
- Anti-magnetic

Mfg. Part No.	Description	Length (In.)	Stock No.	Price Each
EROP2ASA	Tweezer, Large Flat Round Straight Tips	4.75	48F2389	3.90
EROP3CSA	Tweezer, Ultra-Fine Straight Points	4.25	48F2390	3.90
EROP3SA	Tweezer, Ultra-Fine Straight Points	4.75	48F2391	3.90
EROP5ASA	Tweezer, 10° Offset Micro-Fine Straight Points	4.5	48F2393	3.90
EROP5SA	Tweezer, Micro-Fine Straight Points	4.5	48F2394	3.90
EROP7SA	Tweezer, Micro-Fine Curved Points	4.5	48F2395	3.90
EROPAASA	Tweezer, Medium Straight Points	5	48F2396	3.90
EROPSSSA	Tweezer, Ultra-Fine Straight Points	5.5	48F2399	3.90

(34094)

TWEEZERS

EREM® CUSHION-GRIP TWEEZERS

E00SA

Mfg. Part No.	Description	Stock No.	Price Each
E2ASA	Flat, Round, Precision Tips	92B0557	24.80
E3CSA	Straight, High-Precision Tips	95B4280	35.00
E5SA	Straight, Thin-Tapered, Ultra-Fine, High-Precision Tips	95B4281	37.20
E7SA	Curved, Fine-Point, High-Precision Tips	95B4282	37.50

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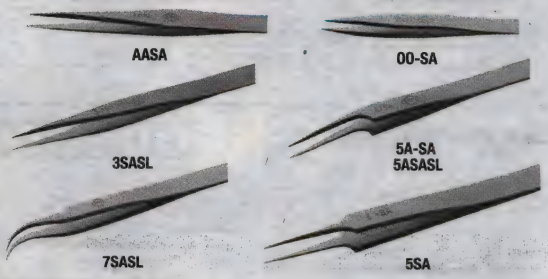
FINE TIP TWEEZERS



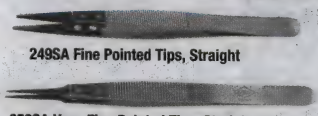
SWISS HIGH PRECISION TWEEZERS

Mfg. Part No.	Description	Size	Stock No.	Price Each
AASA	Fine, But Strong Points	4¾″	96F9421	11.60
ACSA	For Precision Bending and Handling; Serrated Grip	4¼″	96F9437	12.60
00-SA	Flat Inside Edges; Resistant; For Electronics Assembly	4¾″	96F9426	20.40
00DSA	Same as **00-SA** Plus Interior and Exterior Serrations; Carbon Steel	4½″	96F9431	23.20
2A-SA	Flat, Round Points	4½″	96F9423	21.00
3C-SA	Excellent for Microelectronics	4¼″	96F9446	22.80
5SA	Fine Points, Special Shaping for Very Small Wires and Components	4½″	96F9428	34.60
5A-SA	Very Fine, for Die Attaching	4½″	96F9451	30.20
7SA	Curved for Easy Manipulation in Confined Areas	4½″	93F5408	29.90
2ASARU	Label-Handling Tweezer, Flat, Round Precision Tips	4¾″	95B5050	30.20
FINE TIP ITALIAN TWEEZERS				
1SASL	General Purpose, Fine Points	4½″	52F9065	13.00
3SASL	For Micro Electronics, Fine Points	4¼″	52F9066	11.00
5ASASL	Very Fine, Die Attaching	4½″	52F9068	14.80
5SASL	Super Fine Points. For Handling Very Fine Wires, Miniature Components.	4½″	52F9069	13.40
7SASL	Curved for Easy Manipulation in Confined Areas	4½″	52F9070	14.60

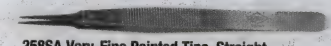
(19347)

HEAT-RESISTANT, PRECISION POINTED TIP TWEEZERS

- Anti-glare finish
- Synthetic heat-resistant pointed tips to 480° F (250° C)
- Acid-, solder-, and rust-resistant
- Non-magnetic
- Waterproof
- ESD safe



249SA Fine Pointed Tips, Straight



258SA Very-Fine Pointed Tips, Straight-Relieved

Professional-quality, Swiss-made, "special" stainless steel/PPS tweezers are perfect for conventional and precision handling of small components, fiber optics and wires. Ideal for tasks in microelectronics industry, labs, medicine and other applications where high precision is required. Choice of straight fine or straight-relieved very-fine pointed tips. Serrated grips provide more control.

Mfg. Part No.	Description	Length (In.)	Stock No.	Price Each
249SA	Fine Pointed Tips Straight Tweezer	5.12	19M5241	32.40
258SA	Very-Fine Pointed Tips Straight -Relieved Tweezer	4.72	26H3549	46.30

(89617)

FIVE STAR COBALTIMA® EXTREME PRECISION MINIATURE TWEEZERS

COBALTIMA® tweezers are made from a patented alloy containing Cobalt for added strength and corrosion resistance to acids. COBALTIMA® is harder than stainless steel and is anti magnetic. Resistant to temperatures up to 500°C (932°F). Highly recommended for autoclave sterilization. All tweezers have radiused inside edges and outside finger serrations for positive gripping.

Mfg. Part No.	Length (in.)	Tip	Stock No.	Price Each
2-CO	4.75	Tapered Medium	95H8427	105.61
3-CO	4.75	Straight Fine	95H8679	108.49
4-CO	4.375	Tapered Micro Fine	95H8841	113.21
51-CO	4.5	Micro Fine Oblique	95H9100	132.41
7B-CO	4.5	Serrated Curved	95H9344	132.06
M-3-CO	3.125	Straight Fine	95H7939	79.71
M-5-CO	3.125	Very Fine	95H7944	91.23
M-51-CO	3.125	Angled Fine	95H7949	106.20
M-6-CO	3.125	Angled Sharp	95H7950	109.49
M-7-CO	3.125	Curved Very Fine	95H7951	100.16
MN-0C-CO	3.125	Tapered	95H7956	90.49
MN-2A-CO	3.125	Flat Round	95H7957	68.39

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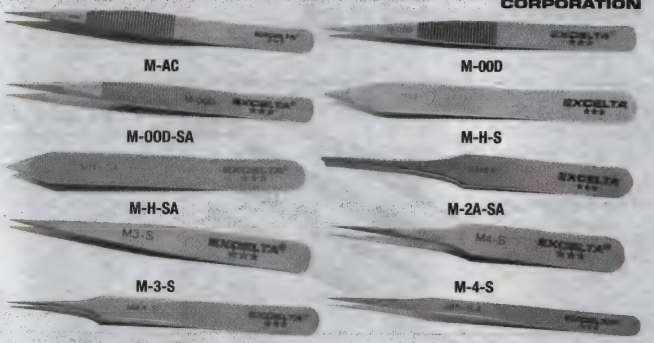
MINIATURE TWEEZERS



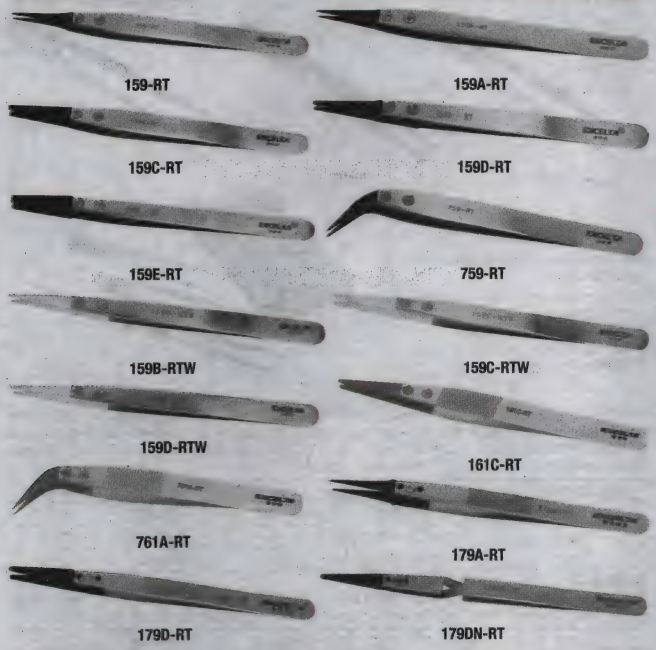
Miniature size is useful when working under a microscope. Available in NEVERUST® (**SA suffix**), Stainless Steel (**S suffix**), S/S Antimagnetic (**SA-PI suffix**), Carbon Steel.

Mfg. Part No.	Body Material	Length (in.)	Tip	Rating	Stock No.	Price Each
M-AC	Steel	3.25	Straight Medium	3-Star	95H7929	43.35
M-00D	Steel	3.375	Straight Medium	3-Star	95H7936	49.84
M-00D-SA	Stainless Steel	3.375	Straight Medium	3-Star	23T0492	47.73
M-H-S	Stainless Steel	3.5	Tapered Blunt	3-Star	95H7930	48.41
M-H-SA	Stainless Steel	3.5	Tapered Blunt	3-Star	95H7931	51.07
M-2-SA	Stainless Steel	3.5	Tapered Round Sharp	3-Star	54M5835	41.23
M-2A-SA	Stainless Steel	2.75	Tapered Round Flat	3-Star	95H7938	46.90
M-3-S	Stainless Steel	3.125	Straight Fine	3-Star	95H7940	46.47
M-4-S	Stainless Steel	2.75	Tapered Extra Fine	3-Star	95H7942	48.41
M-4A-S	Stainless Steel	3.5	Tapered Medium Fine	3-Star	95H7943	36.71
M-5-SA	Stainless Steel	3.125	Straight Very Fine	3-Star	95H7947	43.73

(192389)

REPLACEABLE TIP TWEEZERS

EXCELTA CORPORATION



Carbofib is a teflon base material with carbon fibers added. Carbofib is conductive with a surface resistivity of 103 Ω-cm, and temperature resistant up to 121°C (249°F). Stainless steel antimagnetic body with screw on replaceable tips. **Delrin** tips have outstanding resistant to chemicals and solvents. They are electrically insulative and resistant to temperatures up to 85°C (185°F). Stainless steel antimagnetic body with screw on replaceable tips. Excellent for clean room use. **PEEK (Polyetheretherketon)** is a high temperature thermoplastic with excellent chemical resistance. Inert to all common solvents, it resists a wide range of inorganic liquids, and is widely used with semi-conductors. It has a working temperature of 249°C (480°F). Lightweight, non-magnetic aluminum body. **Copolymer** tips are a special blend of static dissipative plastics without the use of carbon fibers. Surface resistivity of 1010 Ω-cm, temperature resistant to 90°C (195°F) and are silicon and chloride free. Stainless steel antimagnetic body with screw on replaceable tips. ESD and clean room safe.

Mfg. Part No.	Tip Material	Tip Size	Length (in.)	Body Material	Rating	Stock No.	Price Each
159-RT	Carbon Fibre	0.012″	5	Stainless Steel	3-Star	95H8320	60.87
159A-RT	Carbon Fibre	0.02″	5	Stainless Steel	3-Star	95H8325	60.87
159C-RT	Carbon Fibre	0.08″	5	Stainless Steel	3-Star	95H8336	60.87
159D-RT	Carbon Fibre	0.06″	5	Stainless Steel	3-Star	95H8341	60.34
159E-RT	Carbon Fibre	0.12″	5	Stainless Steel	3-Star	12J9952	60.87
759-RT	Carbon Fibre	0.017″	5	Stainless Steel	3-Star	21M8500	60.87
159B-RTW	White Delrin	0.04″	5	Stainless Steel	3-Star	95H8332	57.42
159C-RTW	White Delrin	0.08″	5	Stainless Steel	3-Star	95H8337	57.42
159D-RTW	White Delrin	0.06″	5	Stainless Steel	3-Star	12J9950	60.87
161C-RT	PEEK	0.08″	5	Aluminium	5-Star	12J9964	124.71
179A-RT	Copolymer	0.02″	5	Stainless Steel	4-Star	73J3657	167.85
179D-RT	Copolymer	0.08″	5.125	Stainless Steel	4-Star	73J3659	175.40
179DN-RT	Copolymer	0.08″	5	Stainless Steel	4-Star	73J3661	191.08

(192388)

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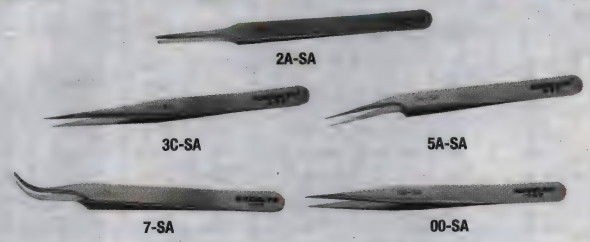
ELECTRONIC STYLE TWEEZERS

RoHS Compliant Available

EXCELTA CORPORATION



- (3) Star Quality - Swiss - AISI 303/304 Stainless Steel; Anti-magnetic; Anti-acid
- (2) Star Quality - Italian - AISI 316L Stainless; Anti-magnetic; Anti-acid
- (1) Star Quality - General - AISI 316L Stainless; Anti-magnetic; Anti-acid

Additional styles avaialble; *go online or call.*

Mfg. Part No.	Tip Description	Tip Size	Stock No.	Price Each
2A-SA***	Flat Round	1.50 x .20 mm	95H8442	31.07
2A-SA-PI**	Flat Round	n/a	95H8445	16.04
2A-SA-SE*	Flat Round	n/a	95H8448	4.37
3C-SA***	Straight	.17 x 10mm	95H8702	29.71
3C-SA-PI**	Straight	n/a	95H8705	16.04
3C-SA-SE*	Straight	n/a	95H8707	4.37
5-SA***	Ultra Fine Precision	.10 x .06mm	95H8997	40.61
5-SA-PI**	Ultra Fine Precision	n/a	95H9000	17.82
5-SA-SE*	Ultra Fine Precision	n/a	95H9003	4.37
5A-SA***	Ultra Fine Offset	.17 x .06mm	95H9013	40.61
5A-SA-SE*	Ultra Fine Offset	n/a	95H9018	4.37
7-SA***	Curved	.17 x.10mm	95H9327	34.13
7-SA-PI**	Curved	n/a	95H9330	18.00
7-SA-SE*	Curved	n/a	95H9333	4.37
00-SA***	Strong Fine	0.0177 x 0.0098″	95H8129	32.50
00-SA-PI**	Strong Fine	n/a	95H8132	16.04
00-SA-SE*	Strong Fine	n/a	95H8134	4.37

* (1) Star Quality; ** (2) Star Quality; *** (3) Star Quality

(79285)

TWEEZERS FOR SURFACE MOUNT DEVICES

RoHS Compliant Available

EXCELTA CORPORATION

Stainless steel tweezers are anti-magnetic and anti-acid.

Mfg. Part No.	For Use With	Length (in.)	Type	Stock No.	Price Each
102A-SA-PI	Chips / Miniature Components	4.5	Paddle	34P6779	25.93
103-SA-PI	SOT-23 / SOT-89 Packages	4.25	SMD	34P6837	26.20
104-SA-PI	SOT-89 Transistors / Monolithic Chip Capacitors	4.5	SMD	34P6856	27.24
109-SA-PI	Dense Areas	4.25	SMD	34P6864	23.57
110-SA-PI	Small Parts / Wires	4.25	SMD	17T8221	32.55

CONTINUED

TWEEZERS

TWEEZERS FOR SURFACE MOUNT DEVICES (CONT.)

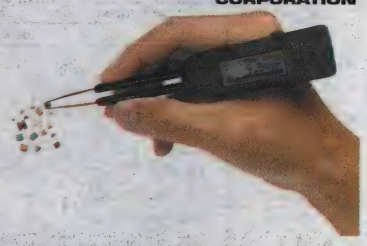
Mfg. Part No.	For Use With	Length (in.)	Type	Stock No.	Price Each
111-SA	SMD Components	4.5	SMD	95H8230	69.93
● 115-SA	1mm Diameter Cylindrical Parts	4.25	SMD	95H8240	69.93
● 116-SA	MELF	4.25	SMD	95H8249	69.93
117-SA	3mm and larger parts	4.5	SMD	95H8260	34.87
121-SA	Picking Parts From "Gel Pak"	5.5	SMD	95H8275	69.93
122-SA	Components for De-Soldering	5.5	Paddle	95H8276	69.93
● 124-SA	SOT-23 / TO-236 Packages	4.25	SMD	95H8278	69.93
125-SA	0402 Resistors	4.25	SMD	95H8279	69.93
126-SA	Jumper Wires on PC Boards	4.25	Fine	95H8280	69.93

(79339)

TM-500 INTELLITWEEZE® RECHARGEABLE R-C-L TWEEZERMETER™

EXCELTA CORPORATION

- Operating temperature: 0 °C to +55 °C
- Battery type: 3.7V LiPO rechargeable 150mAH
- Battery life (continuous): 80 Hours typical, 2 hrs. charging cycle
- Electromagnetic compatibility (EMC): FCC 15 part B, SE
- Size: 3.94 x 0.9 x 1.5"
- Weight: 1.9 oz.
- Manufacturer's warranty: 1 yr.



IntelliTweeze® Rechargeable R-C-L TweezerMeter™ is a quick and easy way of testing and troubleshooting many types of components. With the use of only one hand, this lightweight unit will quickly measure resistance, capacitance, inductance, continuity and polarity. Includes USB/Wall adaptor and carrying case.

Mfg. Part No.	Description	Stock No.	Price Each
TM-500	Rechargeable R-C-L TweezerMeter™	74T5450	379.00

(207767)

ERGONOMIC TWEEZERS

RoHS Compliant Available

EXCELTA CORPORATION

- ESD Safe
- Ergonomic Cushion Comfort for Extended Use
- Offered in (2) and (3) Star Quality
- Protects Operator from Heat
- (3) Star Quality - Swiss - AISI 303/304 Stainless Steel; Anti-magnetic; Anti-acid
- (2) Star Quality - Italian - AISI 316L Stainless; Anti-magnetic; Anti-acid

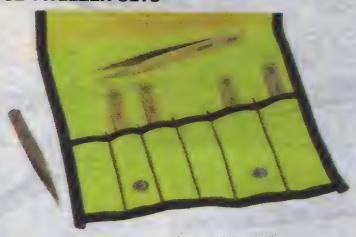
2A-SA-ET

Mfg. Part No.	Description	Tip Size (in.)	Stock No.	Price Each
● 2A-SA-ET***	Flat Round	.0591 x .0078	95H8443	35.07
● 3C-SA-ET***	Straight	.0066 x .0039	95H8703	33.71
● 5-SA-ET***	Ultra Fine Precision	.0039 x .0024	95H8998	44.61
● 7-SA-ET***	Curved	.006 x .0039	95H9328	38.13
● 00-SA-PI-ET**	Strong Fine	n/a	95H8133	20.04
● 00-SA-ET***	Strong Fine	.0177 x .0098	95H8130	36.50

** (2) Star Quality; *** (3) Star Quality
(79340)

GENERAL-PURPOSE TWEEZER SETS

AVEN



1385

Mfg. part no. 1385 kit includes: 7" curved solder utility, 6" blunt tip with serrated points, 4½" solder utility with sharp points, 7" wide point with lock, 7" wide point cross locking, and 7" solder utility straight tweezers. **Mfg. part no. 1386** includes: 4¼" curved with serrated tips, 4¼" smooth spade tip, 4¼" wide point with serrated tips, 4¼" indented shank with smooth tips, and 4¼" solder utility with sharp points tweezers. **Mfg. part no. 1387** includes: 5" precise tip, 4¾" fine straight precision point, 4¼" straight precision tip, 4¼" curved tip, 4¾" fine straight point with interior tip and finger serration tweezers.

Mfg. Part No.	Description	Stock No.	Price Each
1385	6-Piece General-Use Tweezer Set	92N3666	27.67
1386	5-Piece Stainless Steel Tweezer Set	92N3667	26.26
1387	6-Piece Electrical Tweezer Set	92N3668	28.63

(19129)

ULTRATECH LIGHTED TWEEZERS AND TWEEZER SET

GENERAL

70401 70403 70408

Working In Dark, Confined Spaces Just Got Easier!

- Great for retrieving or positioning parts in dimly lit areas
- Push On/Off powerful LED light
- Non-slip cushion grip for added comfort
- Batteries included

70400

UltraTECH™ lighted tweezers offer a built-in, bright white LED light to directly illuminate the working area. Manufactured from heat-treated steel with a corrosion-resistant, non-glare black finish, these cutting-edge tweezers are built to withstand tough jobs and working environments. Includes three "LR41" batteries. Length: 6.25" (165mm). Available in three popular tip styles and a convenient 3-pc. set.

Mfg. Part No.	Description	Stock No.	Price Each
70401	Smooth Pointed Tip Lighted Tweezer	63P8779	12.55
70403	Serated BluntTip Lighted Tweezer	63P8780	12.55
70408	Serated BentTip Lighted Tweezer	63P8781	13.43

ULTRATECH™ 3-PC. LIGHTED TWEEZER SET

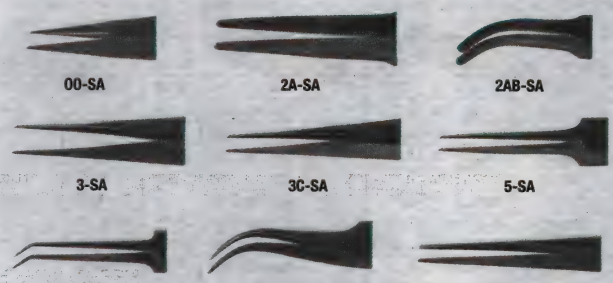
Mfg. part no. 70400 3-pc. set includes one **70401** smooth pointed tip, **70403** serrated blunt tip and **70408** serrated bent tip lighted tweezers, "LR41" batteries, and a heavy-duty nylon carrying case for storage and protection.

70400	UltraTECH™ 3-Pc. Lighted Tweezer Set	73R4526	37.06

(177011)

STAINLESS STEEL TWEEZERS

AVEN



00-SA 2A-SA 2AB-SA 3-SA 3C-SA 5-SA 5B-SA 7S-SA SS-SA

Good balance, fine points and light tension make these tweezers ideal for semiconductor electronics and computer/microelectronics. Antiacid, antimagnetic stainless steel. Precision tweezers also have anti-glaze finish.

Mfg. Part No.	Description	Style	Stock No.	Price Each
1340	4¾ Deluxe Stainless Steel	00-SA	92N3621	5.43
1343	4¾ Deluxe Stainless Steel	2A-SA	92N3624	5.43
1344	4¾ Deluxe Stainless Steel	2AB-SA	92N3625	5.43
1345	4¾ Deluxe Stainless Steel	3-SA	92N3626	5.43
1346	4⅜ Deluxe Stainless Steel	3C-SA	92N3627	5.43
1347	4⅜ Deluxe Stainless Steel	5-SA	92N3628	5.43
1348	4⅝ Deluxe Stainless Steel	5B-SA	92N3629	5.75
1349	4⅜ Deluxe Stainless Steel	7S-SA	92N3630	5.43
1350	4¾ Deluxe Stainless Steel	SS-SA	92N3631	5.43

(19130)

multicomp AT NEWARK ELEMENT14

Affordable, performance board level & box build components at

newark.com/multicomp

(212569)

STAINLESS STEEL FORCEPS

DURATOOL

The most versatile tool. Use as clamps, heat sinks, and third hands while soldering. Has a 3-position locking device. Serrated jaws. Plastic coated handles.

Mfg. Part No.	Length	Tip	Stock No.	Price Each
12011	5″	Straight	50N040	5.25
12013	6″	Straight	50N042	6.30
12012	5″	Curved	50N041	5.25
12014	6″	Curved	50N043	6.30

(32974)

ESD SAFE TWEEZERS

wiha Premium Tools

Antistatic conductive, ESD-safe hypo-allergenic tweezers. Special stainless steel, anti-magnetic and acid-resistant.

Mfg. Part No.	Description	Stock No.	Price Each
44501	Universal Fine Point AA SA IND—130mm	28C1832	28.79
44502	Sturdy Long, Fine Round Points GG SA IND—130mm	28C1833	33.48
44505	Flat Round Tips, Smooth Sides 2a SA IND—120mm	28C1836	31.90
44506	Fine Round Points for Assembly 3 SA IND—120mm	28C1837	32.67
44508	Very Fine Points/Tapered to Tip 4 SA IND—110mm	28C1839	33.48
44509	Extra-Fine Points/Tapered to Tip 5 SA IND—110mm	28C1840	35.47
44510	Curved Extra-Fine Rounded Tips 7a SA IND—120mm	28C1841	43.25
44512	Holds 1.5 - 3mm Diameter 51 SA IND—120mm	28C1843	32.87
44521	MicroTip 45° Hook - 1 x 1 x 2mm 12SA-SMD IND—120mm	28C1849	40.35
44522	MicroTip for Chips Angled - 1.6 x 1 x 1mm 13 SA IND—120mm	28C1850	40.78
44525	Curved Extra Fine 3mm Long Straight Tip 7abb SA IND—120mm	93C9901	52.92
44527	Angled Extra-Fine Points Bent 30° w/3mm Long Tips 5abb SA IND—117mm	28C1854	42.67
44529	MicroTip Bent 30°, 1mm Wide 0.5mm Slot 8b SA IND—120mm	28C1856	40.46
44531	ESD-Safe, General-Purpose Fine Point 1 SA IND—120mm	28C1858	33.45

(68813)

STAINLESS STEEL JUNIOR SEIZER

Xcelite®

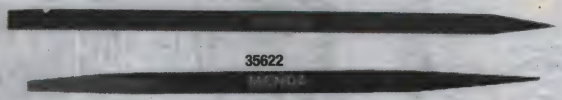
This 5″ straight nose Junior Seizer has unusual holding qualities and clamps firmly to hold wires for soldering. Acts as a heat sink and retrieves small parts from hard-to-reach places. Precision-machined from perfectly tempered stainless steel. Box-joint construction with Seizer forceps, smooth jaws and 3-position snap lock.

Mfg. Part No.	Description	Stock No.	Price Each
32H	5″ Straight Nose Junior Seizer	34F373	8.70

(5699)

NYLON SOLDERING PROBER

MENDA



35622

35621

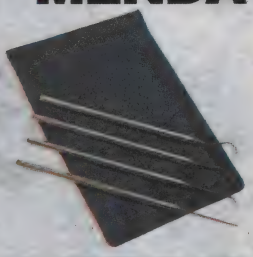
Minimal charge generation makes this soldering probe tool ideal for use in ESD protected areas. Tough glass-filled nylon construction won't mar delicate surfaces. Temperature-resistant to withstand melting. Notched for hooking and pulling wires or components. Flat "screwdriver" end for spudging wire leads down on PC boards. Pointed end for forming wire leads or using as pointer probe for holding objects for soldering. Length: 6″. Made in U.S.A.

Mfg. Part No.	Description	Stock No.	Price Each
35622	Nylon Soldering Prober, 6″ long	90H0265	1.84
35621	Nylon Probe, Spudger, 5-1/2″	88H3027	2.31

(82426)

4-PC. STAINLESS STEEL PROBE TOOL KIT

MENDA



Kit contains: 5¼″ long straight needle point probe, 5¼″ long hook needle point probe, 5½″ long angle needle point probe, 5¼″long curved needle point probe and durable light blue vinyl storage pouch. Non-magnetic, conductive 300 series stainless steel construction for minimal charge generation, won't corrode. Semi-hardened points may be reshaped for special applications. Ergonomically designed 5/32″ (4mm) hex-shape handle allows for a better grip and prevents rolling. Any charge is grounded when placed on ESD protected work surface. Made in U.S.A.

Mfg. Part No.	Description	Stock No.	Price Each
COMPLETE KIT			
35630	4-Pc. Stainless Steel Probe Tool Kit	96H7144	17.07
INDIVIDUAL PROBES			
35123	Stainless Steel Probe, Hook Tip, 5.5 in.	50M6760	3.57
35623	Stainless Steel Probe, Curved Tip, 5.5 in.	50M6787	3.57
35122	Stainless Steel Probe, Straight Tip, 5.5 in.	81H6482	2.86
35617	Stainless Steel Probe, Angle Tip, 5.5 in.	83H2014	2.86

(82427)

ALIGNMENT TOOLS

NEW

JONARD INDUSTRIES CORP.

AT-6241 TK-AT5

Mfg. part no. AT-6241 2-in1 nonconductive alignment tool 1/4″ in diameter, stepped down to 5/32″ in diameter. Ideal for most variable capacitors, coils and resistors. Also used to harness and separate fine wire terminals in computers, telephones and cables. Made of non-conductive thermoplastic material. 7″ long. **Mfg. part no. TK-AT5** 5 piece pocket kit contains the most popular non-conductive tools for aligning and adjusting components. Includes AT-3767 trimpot, AT-6241 alignment tool, AT-3112 spudger, S-389 orange stick and JIC-22035 probe pick.

Mfg. Part No.	Description	Stock No.	Price Each
● AT-6241	Alignment Tool	27C5649	1.85
● TK-AT5	Alignment Tool Kit	89H1739	8.65

(211422)

PROBE SET

AVEN

Scalpel-sharp for fine probing. Useful for cold solder probing, hand inspection, micro-positioning, and lead adjusting.

Mfg. Part No.	Stock No.	Price Each
20210	50N045	18.80

(32975)

BURNISHERS

BURR SETS

DURATOOL

- Great for craft, modelling and repair
- Can be used on ceramics, tiles, brick, glass, plastics, fibreglass, steel and wood
- 3.17mm shank

TL10359

Mfg. Part No.	Description	Stock No.	Price Each 1-49
TL10359	30 piece diamond burr set, 150 diamond grit	01N3614	4.64

(116698)

WIRE BRUSHES

DURATOOL

- Heavy duty construction with a comfortable grip handle
- Ideal for cleaning metal before welding
- Brassed steel wire

TL10429

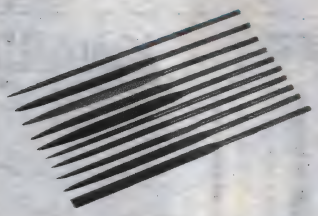
TL10428

Mfg. Part No.	Description	Stock No.	Price Each 1-99
TL10428	Wire Brush	97M9408	2.73
TL10429	Mini Wire Brush Set, 6 pc	01N3618	2.59

(116752)

FILE SETS

DURATOOL



TL10358

TL10363

Needle files contain a 6 piece needle file kit with cushion grip size: 3 x 140mm, the contents are: round, flat parallel, flat tapered, square, triangular, crossing, half round, knife, oval, barrette type files. Engineer files are manufactured from high carbon alloy steel along with soft grip handles with hanging holes. File blades measure 8″ in length.

Mfg. Part No.	Description	Stock No.	Price Each 1-49
TL10357	File Set with Handles, Needle 6pc	99M1254	7.36
TL10358	File Set without handles, Needle 10pc	99M1255	6.81

(116709)

NEEDLE-FILE SET

GENERAL

S475

Mfg. part no. S475 12-piece needle file set. Double-cut Swiss pattern. Plastic case.

Mfg. Part No.	Description	Stock No.	Price Each
S475	12-Pc. Needle File Set	93F9969	32.73

(5590)

DIAMOND BURNISHING SPATULA KIT

RoHS Compliant Available

JONARD INDUSTRIES CORP.

K-234

Abrasive diamond particles clean relay contacts with minimal pressure. With nominal material removal you won't alter normal contact gaps. **Mfg. part no. K-234** 3-piece kit contains coarse 0.019″ (0.483); medium 0.017″ (0.432) thick; fine 0.011″ (0.279) thick.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● K-234	Diamond Burnishing Spatula (Kit)	35F1100	197.38
● D-200	Diamond Burnisher - Coarse (Each)	35F1101	66.02
● D-300	Diamond Burnisher - Medium (Each)	35F1102	66.02
● D-400	Diamond Burnisher - Fine (Each)	35F1103	66.02

(72735)

CONTACT BURNISHERS

JONARD INDUSTRIES CORP.

OB-2

Plastic/insulated handles for working on live contacts. Tools are packaged in a clear plastic vial for protection from grease and moisture. Handles are color-coded for size identification. Length: 3″. Width: ¼″ except for **mfg. part no. OB-1**, which is 3/16″. **Sold in packages of 12.**

Mfg. Part No.	Description	Stock No.	Price Each
OB-1	Fine Contacts	35F2219	33.96
OB-2	Extra Sensitive Points	35F2220	47.91
OB-3	General-Purpose	35F2221	89.47
OB-4	Industrial	35F2222	103.16

(58674)

POCKET-TYPE BURNISHERS AND BLADES

RoHS Compliant Available

JONARD INDUSTRIES CORP.

PB-7

Used to remove corrosion on relay and switch contact points. For all types of metal including: platinum, silver, gold, molybdenum and tungsten. Blade adjusts for both length and rigidity. Supplied with replacement blades stored in pen barrel at the other end. Sturdy plastic barrel and cap for dielectric work. Length: 4½″, diameter: 3/8″. Blades are 3/16″ wide x 1½″ long. Rods are ball-ended, 0.020″ in diameter x 1¼ long.

Mfg. Part No.	Description	Stock No.	Price Each
● PB-3R	Same as **mfg. part no. PB-3** Plus 6 Abrasive Rods	50F5448	45.92
● PB-7	Pen with 6 Blades, 0.007″ Thick	50F5449	49.69
● B-7/25	Replacement Blades for PB-7 (0.007″) (**Pkg. of 25**)	50F5452	47.25
● B-3/25	Replacement Blades for PB-3 (0.0035″) (**Pkg. of 25**)	50F5450	47.25

(58673)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

FILES

NICHOLSON

6-Pc. Hobby File Assortment

12-Pc. Needle File Set

37814

Fine-quality professional files used primarily by jewelers, die-makers and fine toolmakers. **Mfg. part nos. 37029** and **37035** 12-pc. XF® needle file assortments feature Swiss pattern teeth and 4″ round knurled handles in choice of 0 or 2 file cut. All file sets/packs are supplied in a protective plastic pouch.

FILE ASSORTMENT SETS

Mfg. Part No.	Description	File Cut	Stock No.	Price Each
37029	12-Pc. 4″ Round Handle Needle File Set	0	90F7213	228.46
37035	12-Pc. 4″ Round Handle Needle File Set	2	90F7214	228.46
42030	6-PC. 5 1/2″ Hobby File Assortment, Carded	Mini	10B2823	49.42
XF® FILES (SOLD INDIVIDUALLY) Swiss pattern teeth ideal for use by fine toolmakers and jewelers.				
37814	6¼″ Needle Half Round File, Knurled Round Handle		10B2563	20.47

(5706)

POWER PRECISION ENGRAVER

GENERAL

- Diamond tip bit
- Uses standard 3/32″ engraving bit
- Aluminum body 20,000 RPM motor 2 AAA batteries (included)

Precision cordless engraving anywhere, protect all types of valuables with identifying markings and use on metal, plastic, ceramic or glass surfaces. An aluminum body offers superior durability and the one-of-a-kind tri-lobe ergonomic grip provides comfort and ease-of-use.

Mfg. Part No.	Description	Stock No.	Price Each
505	Cordless Precision Engraver	88T7522	26.66

(207771)

HIGH-VISIBILITY TAPE MEASURES

DURATOOL

- High-visibility plastic housing
- Thumb operated blade lock
- Convenient belt clip and wrist strap
- Three popular lengths

D00007

Mfg. Part No.	Length (ft/mm)	Width (mm)	Case Color	Stock No.	Price Each 1-99
D00005	10 / 3	13	Yellow	94M6915	1.81
D00006	16 / 5	19	Orange	74M0792	2.45
D00007	26 / 8	25	Green	94M6916	5.01

(116645)

element14 COMMUNITY

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element14.com

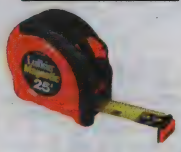
(196545)

POWER RETURN TAPE MEASURES

Lufkin®

W9212

AL725



L725MAG

- Lightweight, high-strength cases designed to fit perfectly in the hand
- Fits easily into most tape holsters
- Yellow clad blade with easy-to-read numerals
- Power retraction operation
- Cushioned blade return
- Handy belt clip

2000 series

Mfg. Part No.	Blade Style	Blade Size W x L	Stock No.	Price Each
2000 SERIES — CHROME-FINISHED CASE				
2316	A2	¾″ x 16′	50F1828	19.78
2312	A2	¾″ x 12′	50F1827	15.94
MEZURALL® — CHROME-PLATED CASE				
W9212	A1	½″ x 12′	10B709	21.62
1000 SERIES HI VIZ® — BRIGHT ORANGE CASE				
HV1316	A2	¾″ x 16′	52F9061	14.69
700 SERIES AUTOLOCK — BRIGHT ORANGE CASE WITH BLACK NONSLIP GRIP				
AL725	A5	1″ x 25′	73K7357	13.19
700 SERIES MAGNETIC END HOOK — BRIGHT ORANGE CASE WITH BLACK NONSLIP GRIP				
L725MAG	A5	1″ x 25′	84K0508	15.42

(5701)

MAGNETIC TAPE MEASURES

NEW

Milwaukee

- Finger stop
- Dual magnets
- Blueprint scale
- Wire form belt clip
- 2-Sided Printing
- Up to 9′ standout
- 360° hook attachment

Magnetic tape measures use nylon blade protection and a 5-point reinforced frame offers up to 10X longer blade life, by resisting contamination wear and increasing protection when dropped.

Mfg. Part No.	Length	Stock No.	Price Each
48-22-5116	16′	97W3724	31.00
48-22-5125	25′	97W3725	37.00
48-22-5216	5m/16′	97W3726	31.00
48-22-5225	8m/26′	97W3727	37.00

(212182)

AUTOMATIC CENTER PUNCHES

GENERAL

79

87

Mfg. part no. 79 automatic center punch. Threaded steel point and shaft. Adjustable tension.

Mfg. Part No.	Description	Stock No.	Price Each
79	Automatic Center Punch	34F565	37.66
79P	Replacement Point for **mfg. part no. 79**	34F566	5.42

Mfg. part no. 87 pocket automatic center punch. Pencil-thin aluminum body. Alloy steel point. Adjusts for light or heavy markings.

87	Pocket Automatic Center Punch	50F9074	22.03

(5587)

PUNCHES

HYDRAULIC PUNCH DRIVER

GREENLEE. COMMUNICATIONS

½-2″ conduit size. Ideal for fast, straight-on front panel punching. Step-saver adapter converts standard Greenlee knockout punches through 1¼″ conduit sizes to use 7⁄16″ draw stud for one-step punching. Includes driver, 3 draw studs, 2 adapters, 1 spacer, and rugged case. **Mfg. part no. 7806SB** are straight drivers. **7904SB/7906SB** are right-angle drivers with heads that rotate through 180 degrees.

7904SB

Mfg. Part No.	Description	Stock No.	Price Each
7806SB	Straight Driver w/Punches and Dies	98F1335	1386.65
7904SB/33794	Right-Angle Driver	52F8910	1174.87
7906SB	Right-Angle Driver w/Punches and Dies	48F2187	1674.28

(5619)

STANDARD ROUND PUNCH SET

GREENLEE. COMMUNICATIONS

MADE IN USA

Cuts up to 10-gauge mild steel, aluminum, fiberglass, and plastic. Use with manual, ratchet, or hydraulic drivers. Includes ½″ - ¼″ conduit size standard round punches, dies, 2 draw studs, and rugged plastic case.

Mfg. Part No.	Stock No.	Price Each
19973	48F2184	279.51

(36271)

SLUG-BUSTER® PUNCH SETS

GREENLEE. COMMUNICATIONS

7238SB

7235BB

Innovative design splits slug in half so it falls freely without effort. Works to 10-gauge mild steel. Punches uniform holes in plastic and fiberglass as well. Use with manual, ratchet or hydraulic drivers. **Mfg. part no. 7238SB** includes ratchet.

Mfg. Part No.	Conduit Size	Stock No.	Price Each
7211BB-1/2	0.50″	46F5186	52.22
7211BB-3/4	0.75″	46F5187	74.43
7235BB	0.50-1.25″	89F2775	240.94
7238SB	0.50-2.0″	89F2777	478.09

(5679)

ROUND KNOCKOUT PUNCHES

GREENLEE. COMMUNICATIONS

Mfg. part no. 730. Punch round openings in 10-gauge mild steel. With manual drive draw studs.

Mfg. Part No.	Size	Stock No.	Price Each	Size	Stock No.	Price Each
730BB-1-1/4	½″	33F760	67.80	1¼″	93B1807	110.37
730BB-1-3/8	⅝″	33F761	65.26	1⅜″	91B7659	100.16
730 BB 1 1/2	11⁄16″	50B3753	65.28	1½″	33F771	114.00
730BB-1-5/8	¾″	94F6539	62.26	...	...	...
730BB-1-3/4	13⁄16″	96B8067	65.28	1¾″	96B7140	140.39
730BB-1-7/8	15⁄16″	50B3754	68.02	...	...	...
730BB-2	1″	90B2440	74.22	2″	48F2186	169.19
730BB-2-1/4	1⅛″	94F6537	76.22	2¼″	92B7823	194.35
730BB-2-1/2	...	...	...	2½″	93B7892	274.34

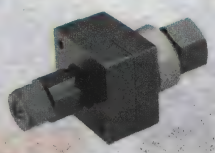
Mfg. part no. 60246. 17⁄32″ punch for control units.

Mfg. Part No.	Description	Stock No.	Price Each
60246	Punch	33F778	92.13

(5677)

SQUARE PUNCHES

GREENLEE. COMMUNICATIONS



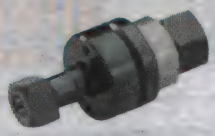
Square punches cut precise holes in 10-gauge mild steel. Use with wrench or hydraulic driver.

Mfg. Part No.	Size	Stock No.	Price Each
60001	0.500″ (12.70)	33F779	298.99
60016	1.000″ (25.40)	33F782	411.83

(5624)

"D" PUNCHES

GREENLEE. COMMUNICATIONS



Dimensions: **mfg. part no. 60077** is 0.500″ x .0469″.

Mfg. Part No.	Description	Stock No.	Price Each
60077	½″ D	70B4198	298.99

(36171)

ELECTRONIC CONNECTOR PANEL PUNCHES

GREENLEE. COMMUNICATIONS

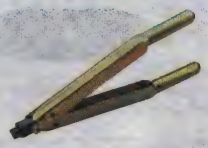
Drill one 7⁄16″ hole. Punch 3 holes for front or rear mount 25-pin D-subminiature connectors (Cinch, ITT Cannon DB-25P and DB-25S or equivalent). Manual or hydraulic operation. 22-16 gauge mild steel and 0.125″ aluminum.

Mfg. Part No.	No. of Pins	Stock No.	Price Each
229	9	87F2607	757.77
231	15	87F2608	757.77
RS-232	25	46F5197	735.70
234	37	87F2609	818.03
238	50	87F2610	818.03

(5623)

720 KEYWAY PUNCH

GREENLEE. COMMUNICATIONS



Cuts 0.125″ and 0.375″ wide keyways in up to 10-gauge mild steel. Also cuts 0.125″ or 0.187″ keyways in pre-drilled or pre-punched hole 0.750″ diameter or larger. Eliminates tedious hand sawing and filing when making keyways for oil-tight pushbutton switches.

Mfg. Part No.	Description	Stock No.	Price Each
720	Keyway Punch	89F2781	315.40

(5622)

PUNCH AND SCREWDRIVER SETS

Starrett

18A

S551Z-7

PUNCH SETS

Mfg. Part No.	Description	Punch Diameter Range (In.)	Stock No.	Price Each
S565PC	Drive Pin Punch 8 Pc. Set, Vinyl Case	1/16 to 5/16	85K3769	49.50

SCREWDRIVER SETS

Mfg. Part No.	Description	Blade Width Range	Stock No.	Price Each
S551Z-7	Precision Screwdriver 7 Pc. Set, with Case	.060″ to #1	85K3764	55.00
S555Z-7	Jewelers' Screwdriver 7 Pc. Set, with Case	.025″ to #0	85K3768	82.00

➤ CONTINUED ➤

PUNCH AND SCREWDRIVER SETS (CONT.)

AUTOMATIC CENTER PUNCH

Mfg. Part No.	Description	Punch Diameter Range (in.)	Stock No.	Price Each
18AA	4" Automatic Center Punch	7/16	85K4573	35.00
18A	5" Automatic Center Punch	9/16	85K4572	39.00

(88728)

BALL-PEIN HAMMERS

Plumb®

- Ground, black painted head
- Polished poles and peins
- Quality, hickory handle
- Permabond® construction between head and handle

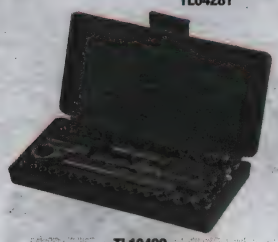
Mfg. Part No.	Length	Head Weight	Stock No.	Price Each
11494	10.50"	4 oz.	84K0545	17.02
11496	11.25"	8 oz.	90F7216	19.10
11497	11.25"	12 oz.	90F7217	19.78
11498	12.75"	16 oz.	90F7218	20.45

(20232)

SOCKET SETS

DURATOOL

TL04281



TL10409

TL10410

29-PIECE, ¼" DRIVE SOCKET SET
Manufactured from chrome vanadium steel and supplied in a rigid, blow molded case. Contents: Flank drive sockets: 4, 4.5, 5, 5.5, 6, 7, 8, 9, 10, 11, 12 and 13mm; Slotted screwdriver sockets: 4, 4.5, and 7mm; Hex screwdriver sockets: 3, 4, 5, 6 and 8mm; Phillips screwdriver sockets: No. 1, No. 2; Pozidriv screwdriver sockets: PZ 1, PZ 2. Also includes Quick release ratchet handle, Spinner handle, Universal joint, Extension bar, and Sliding T-bar.

40-PIECE, ¼" AND ⅜" DRIVE SOCKET SET
1x ⅜" reversible ratchet handle; 14x ¼" drive metric sockets: 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8, 9, 10, 11, 12, 13mm; 14x ¼" drive imperial sockets: 5/32, 3/16, 7/32, ¼, 9/32, 5/16, 11/32, ⅜, 13/32, 7/16, 15/32, ½, 17/32, 9/16"; 3 x ¼" drive (8 point) sockets imperial size: ¼, 5/16 and ⅜"; 1x ⅜" extension bar; 1x ¼" to ⅜" adaptor; 1x ⅜ x 16mm spark plug socket; 1x 6" spinner handle; 1x spin disc; 1x ⅜" metric drive socket: 15mm; 1x ⅜" imperial drive socket: ⅝"; Blow molded case.

94-PIECE, ¼" AND ½" DRIVE SOCKET SET
The kit contains: 13 x ¼" metric flank drive sockets: 4, 4.5, 5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13 and 14mm; 18 x ½" drive flank deep sockets: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27, 30 and 32mm; 8 x Metric flank deep drive sockets: 6, 7, 8, 9, 10, 11, 12 and 13mm; 4 x Metric flank deep drive sockets: 14, 15, 17 and 19mm; 1 x ¼" x 2" extension bar; 1 x ¼" x 4" extension bar; 1 x ½" x 5" extension bar; 1 x ½" x 10" extension bar; 1 x ¼"drive universal joint; 1 x ½" drive universal joint; 1 x ¼" quick ratchet handle; 1 x ½" quick ratchet handle; 2 x ½" drive spark plug: 16 & 21mm; 3 x Hex key wrenches: 1.5, 2 & 2.5mm; 1 x 6" Spinner handle; 17 x Bits: Slotted: 4, 5.5 and 7mm. Hex: 3, 4, 5 and 6mm. Phillips: PH1 and PH2. Pozi: PZ1 and PZ2. Torx: T8, T10, T15, T20, T25 and T30; 15 x Bits: Regular: 8, 10 and 12mm. Hex: 8, 10, 12 and 14mm. Phillips: PH3 and PH4. Pozi: PZ3 and PZ4. Torx: T40, T45, T50 and T55; 1 x Bit adaptor; 1 x Bit holder; 1 x 3 way adaptor; 1 x ¼" x 6" Flexible extension; 1 x ¼" drive sliding T bar

Mfg. Part No.	Description	Stock No.	Price Each 1-9
TL04281	29-Piece 1/4" Drive Socket Set	01N3573	68.06
TL10409	40-Piece 1/4" and 3/8" Drive Socket Set	01N3563	16.84
TL10410	94-Piece 1/4" and 1/2" Socket Set	01N3564	114.13

(116711)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

INSULATED ⅜" DRIVE SOCKET SETS

wiha Premium Tools

31493, 31590

31495

- Tested to 10,000V — Certified to 1000VAC or 1500VDC
- Insulated according to EN/IEC 60900, DIN 7448 specification
- Forged, chrome-vanadium steel, oil-hardened
- Inch set - 6 and 12 point
- Metric set - 12 point

Mfg. part no. 31493 10-pc. insulated ⅜" drive socket set includes eight sockets in inch sizes: 5/16", ⅜", 7/16", ½", 9/16", ⅝", 11/16", ¾"; one ⅜" x 125mm insulated extension bar, one ⅜" (280mm) insulated ratchet and a handy storage case

Mfg. Part No.	Description	Stock No.	Price Each
31493	10-Pc. ⅜" Drive Insulated Inch Socket Set	85M1587	551.74

Mfg. part no. 31590 10-pc. insulated ⅜" drive socket set includes eight sockets in metric sizes: 8mm, 10mm, 11mm, 12mm, 13mm, 14mm, 17mm, 19mm; one ⅜" x 125mm insulated extension bar, one ⅜" (280mm) insulated ratchet and a handy storage case

31590	10-Pc. ⅜" Drive Insulated Metric Socket Set	85M1607	551.74

Mfg. part no. 31495 24-pc. insulated ⅜" drive socket, pliers and driver set includes eleven sockets in inch sizes: ¼", 9/32", 5/16", 11/32", ⅜", 7/16", ½", 9/16", ⅝", 11/16", ¾"; one each: ⅜" x 125mm and ⅜" x 250mm insulated extension bars, ⅜" (190mm) insulated ratchet, 50mm insulated electrician's knife, 6.3" insulated long-nose pliers, 8" insulated combination pliers, 6.3" insulated diagonal cutter, 3.5mm, 4.5mm, 6.5mm slotted insulated screwdrivers and #1, #2, #3 Phillips insulated screwdrivers. All packaged in a handy tool case.

31495	24-Pc. ⅜" Drive Insulated Socket, Pliers and Driver Set	85M1588	996.73

(163092)

20-PC. ⅜" DRIVE SOCKET WRENCH SET

KLEIN TOOLS®

Mfg. part no. 65508 socket wrench set consists of the following 20 pieces: four 6-point sockets in sizes: ⅜", 7/16", ½", and 9/16"; five 12-point sockets in sizes: ⅝", 11/16", ¾", 13/16", and ⅞"; eight 6-point deep sockets in sizes: ⅜", 7/16", ½", 9/16", ⅝", 11/16", ¾", and 13/16"; two extensions in sizes: 1¾" and 3" long; and one ratchet. All neatly packaged in a hinged metal storage box.

Mfg. Part No.	Description	Stock No.	Price Each
65508	20-Pc. 3/8" Drive Socket Wrench Set	94F5801	107.22

(178986)

CAN WRENCH WITH WIRE STRIPPER AND SECURITY KEY INSERT KIT

JONARD INDUSTRIES CORP.

- Six tools in one
- Multiple opening, tightening, stripping and security key functions

M-216CKIT

Mfg. part no. M-216CS22 double end can socket 1½" deep wrench, ⅜" and 7/16" hex, orange plastic handle with 22AWG stripper blade. Used in placing fuses in cable terminals and connecting wires to fuses and binding posts. The walls on both sockets are thin enough so they can be used to work locking devices on most terminals and cabinets. Overall length: 7". **Mfg. part no. SK-51632** security key insert is designed with a double-ended hex adapter for two sizes of pin-in-head security fasteners. Key slips into the ⅜" side of a can wrench and user is ready for either a 5/16" or 5/32" hex security screw. The 5/16" side is used on tamperproof cross-connect cabinets, MESA, CATV closures and any other closure that requires a 5/16" tamperproof hex tool to gain access. Reversible — one end is for SLC cabinets and the other is for most network interface boxes. **Mfg. part no. M-216CKIT** includes **mfg. part no. M-216CS22** can wrench and **mfg. part no. SK-51632** security key insert. *Order complete kit or individual tools separately below.*

Mfg. Part No.	Description	Stock No.	Price Each
M-216CKIT	Can Wrench with Wire Stripper and Security Key Insert Kit	75R7651	32.58
● M-216C/EX	Can Wrench Ergonomic 1" Dia. Handle, Hex Outer Socket	27C0217	13.87
M-216CS22	Can Wrench with Wire Stripper	75R7652	23.88
SK-51632	Security Key Insert	75R7655	10.40

(178420)

DOUBLE-ENDED SPEED WRENCHES

JONARD INDUSTRIES CORP.

- Constructed of high carbon alloy steel
- Polished high-gloss finish
- 6½" long

Speed head makes tightening and loosening quick and easy, plus head is angled (15°) to ease access. **Mfg. part no. ASW-7916** measures 7/16" at one end and 9/16" at the other end for F connectors and RG11 connectors.

Mfg. Part No.	Description	Size at Ends	Stock No.	Price Each
ASW-12	Double-Ended Speed Wrench	½"	75R7642	10.80
ASW-716	Double-Ended Speed Wrench	7/16"	75M9520	11.56
ASW-7916	Double-Ended Speed Wrench	7/16" and 9/16"	75R7644	14.00
● CW-716	Combination Wrench 7/16"	7/16"	77R1920	6.25

(178416)

TORQUE WRENCHES

JONARD INDUSTRIES CORP.

- Designed for 7/16" "F" connectors
- Help prevent over tightening
- Audible click tells user the connection has been properly achieved
- Choice of full or speed head
- Choice 20 or 30 inch/pounds of torque
- 6-1/2" long

These torque wrenches all have angle heads, sized for 7/16" "F" connectors and are designed with an ergonomic cushioned handle for user comfort and protection. Works in tightening mode only.

Mfg. Part No.	Description	Torque Inch/Pounds	Stock No.	Price Each
TWAF-71620	7/16" Full Head Torque Wrench	20	75R7658	36.57
TWAF-71630	7/16" Full Head Torque Wrench	30	75R7659	34.50
● TWAF-71640	7/16" Full Head Torque Wrench	40	62W1062	34.50
TWAS-71620	7/16" Speed Head Torque Wrench	20	75R7660	34.98
TWAS-71630	7/16" Speed Head Torque Wrench	30	75R7661	34.98
ACCESSORIES				
● SST-716	Security Shield Tool 7/16"		77R2717	9.10
● SST-916	Security Shield Tool 9/16"		39X7492	30.00
● SST-716AT	Security Shield Tool - Aqua Tight		05T6282	17.88

(178419)

ADJUSTABLE WRENCHES

KLEIN TOOLS®

D507-6

Precision-machined jaws and smooth turning knurl for easy operation. Forged heat-treated alloy steel for maximum strength and light weight. High polish chrome-plated finish is corrosion resistant. Contoured handles for comfortable use. **Mfg. part no. D506-4** standard-capacity adjustable wrench features plastic-dipped dovetail handle. **Mfg. part nos. D507-6** and **D507-8** extra-capacity adjustable wrenches feature plastic-dipped handle. Extra capacity allows use of a smaller size wrench to handle bigger jobs, especially in confined spaces.

Mfg. Part No.	Length (in.)	Max. Capacity (in.)	Stock No.	Price Each
D506-4	4	½	34F129	38.19
D507-6	6	15/16	50F7342	40.97
D507-8	8	1⅛	50F7343	45.19

(5722)

AC SERIES ADJUSTABLE WRENCHES

CRESCENT

All AC series Adjustable Wrenches Feature:

- Industrial professional or home use
- Heat-Treated, Drop-Forged Alloy Steel
- Chrome finish resists rust and corrosion
- Wide handle for increased leverage
- Polished Jaw
- SAE/Metric size indicator on jaw

RapidSlide™ Adjustable Wrench Only:

- Slide button mechanism in handle for quick, fast adjustment
- Debris shield protects slide mechanism, and maintains a smooth operation

Fig. 1

Fig. 2

Mfg. Part No.	Length	Jaw Opening	Fig.	Stock No.	Price Each
AC16	6"	¾"	1	52F9056	27.91
AC18	8"	15/16"	1	52F9057	28.74
AC8NKWMP	8"	1"	2	73K7065	28.78

(5703)

OFFSET RATCHET SPANNER SETS

DURATOOL

- Metric offset ratchet ring spanner set
- Ideal for getting at hard to reach nuts & bolts
- 30° offset design helps prevent bruised and scraped nuckles
- 12 point for maximum surface contact
- Drop forged heat treated steel

TL10436

Mfg. Part No.	Description	Stock No.	Price Each 1-24
TL10436	Offset Ratchet Spanner Set, 5 pc	99M1262	22.80

(116786)

STUBBY L-WRENCH SETS

BONDHUS® Better, All The Way Around.™

16537

Mfg. Part No.	Description	Stock No.	Price Each
16537	13-Piece Inch Set Contains Sizes: .050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8", Bondhex® Case	97C8507	22.90
16538	10-Piece Inch Set Contains Sizes: 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", Bondhex® Case	97C8508	14.30
16592	7-Piece Inch Set Contains Sizes: 1.5mm, 2mm, 2.5mm, 4mm, 5mm, 6mm, Bondhex® Case	97C8509	11.30
16599	9-Piece Inch Set Contains Sizes: 1.5mm, 2mm, 2.5mm, 3mm, 4mm, 5mm, 6mm, 8mm, 10mm, Bondhex® Case	97C8510	18.60
20599	Double Pack Contains #16537 SBLX13 Inch Stubby Set and #16599 SBLX9M Stubby Set.	97C8513	39.20

(73533)

BALLDRIVER® L-WRENCH COMBOS

ProTanium HIGH TORQUE STEEL

BONDHUS® Better, All The Way Around.™

20199

14132

Mfg. part no. 20199 double pack contains BLX 13 inch Balldriver® set and BLX 9 metric Balldriver® set. **Mfg. part no. 14132** triple pack contains BLX 13 inch and BLX 9 metric L-wrench sets and the 12632 GorillaGrip® fold-up star recessed set.

Mfg. Part No.	Description	Stock No.	Price Each
20199	Balldriver® Set	83F6330	31.80
14132	L-Wrench Sets and GorillaGrip® Set	83F6331	45.60

(29679)

BALLDRIVER® HEX TOOL SETS

BONDHUS® Better, All The Way Around.™

10637 (BSX13)

Mfg. part no. 10637 (BSX13) 13-piece inch set contains sizes: 0.050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8". Bondhex® case.

Mfg. part no. 10699 (BSX9MM) 9-piece metric set contains sizes: 1.5mm, 2mm, 2.5mm, 3mm, 4mm, 5mm, 6mm, 8mm, 10mm. Bondhex® case.

Mfg. Part No.	Description	Stock No.	Price Each
10637 (BSX13)	13-Pc. Fractional Size Set	90F7788	55.95
10699 (BSX9MM)	9-Pc. Metric Set	90F7790	44.10

(5629)

BALL END HEX KEY SETS

BONDHUS Better, All The Way Around.

Mfg. Part No.	Description	Stock No.	Price Each Each
10946 (BLX6MM)	6 PC (1.5 - 5mm)	90F7786	6.90

(100555)

BALLDRIVER® T-HANDLE SETS

BONDHUS Better, All The Way Around.

ProTanium HIGH TORQUE STEEL

- Precision-Welded Handle Stands Up to Ultra-High Torque Projects
- Each Cushion-Grip Handle is Sized for Maximum Torque and Comfort

Mfg. part no. 13189 8-piece metric set contains sizes: 2.0mm*, 2.5mm, 3.0mm*, 4.0mm, 5.0mm, 6.0mm, 8.0mm, 10mm and stand. (*Straight hex only.)

Mfg. Part No.	Stock No.	Price Each
13189	98B0066	49.50

Mfg. part no. 13190 10-piece inch set contains sizes: 3/32"*, 7/64"*, 1/8"*, 9/64"*, 5/32", 3/16", 7/32", 1/4", 5/16", 3/8" and stand. (*Straight hex only.)

Mfg. Part No.	Stock No.	Price Each
13190	98B0067	59.60

(59380)

GORILLA GRIP® FOLD-UP TOOL SETS

BONDHUS Better, All The Way Around.

- 40% Stronger than Metal Fold-Ups
- Handle is Made of an Engineered Resin that is Stronger than Steel
- Virtually Unbreakable

12589

12550

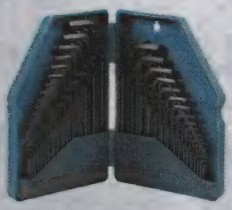
Mfg. Part No.	No. of Pieces	Size	Stock No.	Price Each
12589	9	5/64" - 1/4"	52F6707	7.50
12591	9	.050" - 3/16"	52F6706	5.80
12592	7	1.5 - 6mm	52F6708	6.05
12550	12	1.5, 2, 2.5, 3, 4, 5 mm / 5/64, 3/32, 7/64, 1/8, 9/64, 5/32"	91F1987	10.30
12595	6	3 - 10mm	91F1985	11.25
12634	8	Star Fold Up T9-T40	91F1986	14.85
12632	8	Star Fold Up T6-T25	52F6710	14.50

(5760)

HEX KEY SETS

DURATOOL

22-8870



TL10416

TL10421

9-PIECE FOLDING SAE HEX KEY SET
Hex keys feature hardened and tempered steel with black oxide finish. Keys easily fold into carry handle for easy storage. Precision machined for exact fit. SAE set includes sizes: 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4".

30-PIECE SAE HEX KEY SET
Supplied in a molded case. Set contains SAE sizes: 1/36", 1/28", 1/20", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8".

10-PIECE METRIC T-HANDLE HEX KEY SET
Made from heat treated steel with a black oxide finish. High torque T-handles provide a firm grip and easy turning. Individually organized stand makes it easy to find the correct size. Handles are stamped with sizes. **Mfg. part no. TL10421** set contains metric sizes: 2, 2.5, 3, 4, 4.5, 5, 5.5, 6, 8 and 10mm.

Mfg. Part No.	Description	Stock No.	Price Each 1-49
TL10416	30-Piece Hex Key Set	99M1259	15.47

(116775)

9 PIECE BALL ENDED HEX KEY SETS

DURATOOL

- A range of high quality chrome vanadium steel, metric hexagonal keys
- Chamfered ball point end on one side allows user to work at angles up to 25°

Mfg. Part No.	Description	Stock No.	Price Each 1-49
D00594	9pc Hexagonal Key Set, 1.5, 2, 2.5, 3, 4, 5, 6, 8 and 19mm	74M0912	8.53
D00595	9pc Hexagonal Key Set, 1/16, 5/64, 3/32, 1/8, 5/32, 3/16, 1/4, 5/16 and 3/8"	74M0913	8.31

(116848)

13 PIECE LONG ARM BALL ENDED HEX KEY SETS

DURATOOL

- A range of high quality chrome vanadium steel, metric and imperial hexagonal keys
- Extra long arm for deep insertions of hex nuts or screws
- Chamfered ball point end on one side allows user to work at angles up to 25°

Mfg. Part No.	Description	Stock No.	Price Each 1-49
D00596	13pc Hexagonal Key Set, 1.27, 1.5, 2, 2.5, 3, 3.5, 4, 5, 5.5, 6, 7, 8 and 10mm	74M0914	9.98
D00597	13pc Hexagonal Key Set, 1/2, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16 and 3/8"	74M0915	9.89

(116850)

L-STYLE HEX KEY SETS

KLEIN TOOLS®

- Top-grade steel treated for rust and corrosion resistance
- Made in the U.S.A.

BLK12

Mfg. part no. BLK12. 12-pc. L-style ball-end hex key caddy set includes inch sizes: 1/20", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16"; and a durable caddy to keep hex keys organized.

Mfg. Part No.	Description	Stock No.	Price Each
BLK12	12-Pc. Inch L-Style Ball End Hex Key Set	81F1329	36.23

Mfg. part no. BLMK10 10-pc. metric L-style ball end hex key caddy set includes sizes: 1.27mm, 1.5mm, 2mm, 2.5mm, 3mm, 4mm, 5mm, 6mm, 8mm, 10mm; and a durable caddy to keep hex keys organized.

BLM25	1-Pc. Metric L-Style Ball-End Hex Key - 2.5mm	06J3552	3.10
BLMK10	10-Pc. Metric L-Style Ball and Hex Key Set	81F1327	33.44

(5714)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196537)

MAGIC RING SCREW-HOLDING BALL HEX L-KEY SETS

wiha Premium Tools

66990

66991

66992

Don't Drop That Screw! MagicRing Makes the Job Easier

- MagicRing compression ring holds screw...saves time, increases productivity
- Securely grips inner head of screw
- Allows free hand for work positioning
- Sizes ⅛ to ⅜ screw holding feature
- Hardened CRM72 tool steel
- Precision machined exact fit tips
- Super-hard chromed finish
- ProStar holder — every key can be taken out separately without having to move another key

Mfg. part no. 66990 9-pc. MagicRing ball hex L-key set in metric sizes: 1.5*, 2*, 2.5*, 3, 4, 5, 6, 8 and 10mm.

Mfg. Part No.	Description	Stock No.	Price Each
66990	9-Pc. MagicRing Ball Hex L-Key Set — Metric Sizes	33C9736	46.69

Mfg. part no. 66991 13-pc. MagicRing ball hex L-key set includes inch sizes: 0.05″*, 1/16″*, 5/64″*, 3/32″*, 7/64″*, 1/8″, 9/64″, 5/32″, 3/16″, 7/32″, 1/4″, 5/16″ and 3/8″.

66991	13-Pc. MagicRing Ball Hex L-Key Set — Inch Sizes	33C9737	59.17

Mfg. part no. 66992 22-pc. combination MagicRing ball hex L-key set includes **mfg. part no. 66990** metric-size set: 1.5*, 2*, 2.5*, 3, 4, 5, 6, 8, 10mm and **mfg. part no. 66991** inch-size set: 0.05″*, 1/16″*, 5/64″*, 3/32″*, 7/64″*, 1/8″, 9/64″, 5/32″, 3/16″, 7/32″, 1/4″, 5/16″, 3/8″.

66992	22-Pc. Combo MagicRing Ball Hex L-Key Set — Inch and Metric Sizes	10J4426	104.02

*Standard ball - no ring
(68810)

CONTROL CABINET KEYS

KNIPEX®

00 11 01

00 11 02

00 11 04

00 11 07

Mfg. Part No. 0011 01 TWIN KEY
Multifunctional key for the actuation of locking systems from the areas of facilities engineering (heating and sanitation, air conditioning, electro technology), gas and water supply and shut-off-systems. **Mfg. part no. 00 11 01** TwinKey® has eight arms and consists of two cross keys that are held inside each other with a magnet. Includes square 5. 6, 7, 8, 9, 10, 11 mm; triangle 7, 8, 9, 10, 11, 12 mm; 2-way key 3-5 mm; half moon 6 mm; male square in steps 6-9 mm; 1/4″ insert bit slotted 1.0 x 7 mm and PH2.

Mfg. Part Nos. 00 11 02, 00 11 03, 00 11 04 CONTROL CABINET KEYS
With 1/4″ insert bit: slotted 1.0 x 7 mm and cross recess PH 2; **mfg. part nos. 00 11 02** and **00 11 03** incl. square 5, 6, 8 mm; triangle 9 mm; 2-way key 3-5 mm. **Mfg. part no. 00 11 04** is for door and window handles or air bleeding. Includes square 5, 7, 8 mm; triangle 6, 9, 10 mm; male square in steps 6, 7, 8, 9 mm; 1/4″ insert bits.

Mfg. Part Nos. 00 11 07, 00 11 08 PEN-STYLE-CONTROL CABINET KEYS
Portable pen-style control cabinet keys with fastening clip. Three/four different key profiles can be utilized by swiveling the key holder for control cabinets and shut-off systems in the supply of gas, water and electricity. Universal 1/4″ bit adapter for standard bits (permanent magnet for retaining). Additional bit adapter for 1/4″ bits inside one key profile. With bit insert: cross recess PH 2 and possibility of safekeeping a second bit. **Mfg. part nos. 00 11 07** is for control cabinets and shut-off systems in the supply of gas, water and electricity. Includes square 5, 6, 8 mm; triangle 9 mm and 2-way key 3-5 mm. **Mfg. part no. 00 11 08** is a multi-purpose key used for heating, air conditioning, plumbing and building maintenance. Includes square 5, 8 mm; triangle 9 mm; male square in steps 6, 7, 8, 9 mm.

Mfg. Part No.	Quadrilateral (mm)	Triangle (mm)	Double Bit (mm)	Overall Length (mm)	Wt. (g)	Stock No.	Price Each
00 11 01	5/6-7/8-9/10-11	7 -8 /9-10/11-12	7mm slot / PH 2	92	135	87T9269	52.76
00 11 02	5/6/8	9	9	44	65	06R6246	39.38
00 11 03	5/6/8	9	9	76	88	06R6247	39.90
00 11 04	5/7/8	9-10	...	90	86	06R6248	32.88

➤CONTINUED➤

CONTROL CABINET KEYS (CONT.)

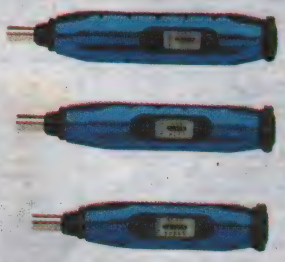
Mfg. Part No.	Quadrilateral (mm)	Triangle (mm)	Double Bit (mm)	Overall Length (mm)	Wt. (g)	Stock No.	Price Each
00 11 07	5/6/8	9	9∅ 5 mm (internal)/ ∅ 9 mm (external)	145	152	06R6249	50.18
00 11 08	5/8	9	...	145	142	06R6250	50.18

(147426)

MICRO-ADJUSTABLE METAL HANDLE TORQUE SCREWDRIVERS

CDI TORQUE PRODUCTS A Snap-on® Company

- Positive locking pull down adjustment knob
- Trilobular comfort grip
- Universal ¼″ hex bit holder with strong rare earth magnet
- Cam-over torque limiting clutch
- Easy-to-read window scale
- Light weight ease-of-use
- Automatic lock in counterclockwise direction
- Accuracy: ± 6% of indicated value, CW, from 20% to 100% of full scale
- Individually serialized with matching certificate of calibration traceable to N.I.S.T.



401SM, 151SM, 61SM

Adjustable models offer versatility for applications that require more than one torque value. These torque screwdrivers are particularly suited for the electronics industry and for instrument assembly work. A simple, cam-over design prevents over-tightening and possible damage to components. Torque settings are easily and accurately changed with a unique adjusting knob and easy-to-read window scale. Positive locking knob makes accidental setting changes impossible. Automatic lock in counterclockwise direction makes fastener removal a snap.

Mfg. Part No.	Torque Range	W x L (In.)	Weight (Lbs.)	Stock No.	Price Each
61SM	20-100 in-oz	1.10 x 5.50	6.8	20M2170	275.96
151SM	3-15 in-lb	1.1 x 6.25	8	20M1745	282.65
401SM	5-40 in-lb	1.2 x 6.38	10.8	20M1930	289.40

(69710)

COMPUTORQ3 ELECTRONIC TORQUE WRENCH

CDI TORQUE PRODUCTS A Snap-on® Company

- Sleek new design
- 15-Degree flex ratcheting head
- Push button socket release head
- Large, easy to read digital display
- Long battery life, uses 2 each CR123 lithium batteries
- Ergonomically designed molded non-slip rubber grip
- Torques in both clockwise and counterclockwise directions
- Battery saving auto-shutoff after two minutes
- Audible tone sounds when set torque value is reached
- Display will hold value and flash for ten seconds when desired torque value is reached
- 3 Color LED light bar
- ACCURACY: ± 2% CW of readings from 20% to 100% of full scale ± 3% CCW of readings from 20% to 100% of full scale
- N.I.S.T. Traceable certificate of calibration included

COMPUTORQ3 series electronic torque wrench is a simple to use digital readout wrench that displays real time torque values in any of four torque units, ft.lbs., in.lbs., Nm, kg.cm. Simply set the desired torque value and apply force until the green LED illuminates. Great for light industrial, automotive, motorcycle, watercraft and aircraft applications.

Mfg. Part No.	Drive Size (In.)	Torque Range				Length (In.)	Wght. (Lbs.)	Stock No.	Price Each
		Ft. Lb.	In. Lb.	Nm	Kg. Cm.				
2401CI3	1/4	2-20	24-240	2.71-27.10	27.6-276	15	2	20M1881	347.33
1002CF3	3/8	5-100	120-1200	13.6-135.6	138-1382	17	2.2	20M1666	374.97
2503CF3	1/2	25-250	300-3000	33.8-338	345-3456	27	3.5	20M1896	438.65

(89691)

MICRO-ADJUSTABLE METAL HANDLE TORQUE WRENCHES

CDI TORQUE PRODUCTS A Snap-on® Company

- Dual scale, calibrated dual direction
- Positive Lock with spring loaded pull down lock ring
- Fast, accurate and easy to set
- Easy-to-read Laser marked scales
- Individually serialized with matching certificate of calibration traceable to N.I.S.T.
- Most feature Quick Release buttons which provide good socket retention as well as easy socket removal
- Accuracy: ± 4% clockwise ± 6% CCW of indicated value, CW, from 20% to 100% of full scale
- Meets or exceeds ASME B107.14M-1994, ISO 6789 Standards

Micrometer adjustable "click" torque wrenches are easy-to-operate, and have many industrial, automotive, and aircraft uses. All wrenches have easy-to-read, precision laser marked dual scales in English units. To set the desired torque, simply pull down the lock ring and turn the handle to the desired torque setting. Once set, the positive locking device locks in the torque setting. When the desired torque is reached, an impulse can be felt through the handle along with an audible "click". Most ratchets feature a "Quick Release" push button that both locks the socket in place and makes socket changes quick and easy. A wide variety of torque ranges are available from 10 in.-lbs. to 2000 ft.-lbs. and in Newton meter units; *go online or call.*

➤CONTINUED➤

MICRO-ADJUSTABLE METAL HANDLE TORQUE WRENCHES (CONT.)

ENGLISH DUAL SCALE INCH POUND

Mfg. Part No.	Drive Size (In.)	Torque Range (In.-Lb.)	Length (In.)	Weight (Lbs.)	Stock No.	Price Each
501MRMH	1/4	10-50	10.15	0.85	**20M1943**	214.69
1501MRMH	1/4	20-150	10.15	0.9	**20M1732**	214.42
1502MRMH	3/8	20-150	10.15	0.9	**20M1738**	214.69
2502MRMH	3/8	30-250	11.25	0.9	**20M1891**	221.64
7502MRMH	3/8	100-750	16.00	2.5	**20M2946**	233.34

(89699)

¼″ FEMALE DRIVE TORQUE SCREWDRIVER AND BITS SET

KLEIN TOOLS®

- "Torque by feel" — just turn, click, and it's torqued to micrometer accuracy
- Range: 2 - 36 in.-lb.
- Graduated in 2 in.-lbs. (0.2 NM) increments
- Torques either clockwise or counter-clockwise
- Can be preset and sealed for production use
- Meets MIL-H-26497 specifications
- Easy-release bit holder
- Aluminum outside construction for light weight and non-magnetic characteristics
- Non-slip grip
- Overall length: 8″

57034

Mfg. part no. 57034 torque screwdriver set contains **mfg. part no. 57035** ¼″ female drive adjustable, torque-limiting screwdriver with calibrated micrometer scale and **mfg. part no. 57036** 8-pc. torque screwdriver bits set which includes bits in sizes: Phillips: nos.1 and 2, slotted: no. 4 (3/16″ x 0.034″), no. 5 (7/32″ x 0.036″), no. 6 (¼″ x 0.038″), no. 10 (5/16″ x 0.046″), no. 12 (3/8″ x 0.05″) and ¼″ hex-to-square male adapter. All neatly organized in a form-fitted storage box. **Mfg. part no. 57035** ¼″ female adjustable, torque-limiting screwdriver only; bits not included; *order* **mfg. part no. 57036** *8-pc. torque screwdriver bits set separately below.*

Mfg. Part No.	Description	Stock No.	Price Each
57034	1/4″ Female Drive Torque Screwdriver and 8-Pc. Bits Set	**97B9550**	403.15
57036	8-Pc. Torque Screwdriver Bits Set	**06J9488**	52.35

(178999)

MICRO TORQUE-LIMITING SCREWDRIVERS

mountz the torque tool specialists®

- Precision radial ball clutch "slips-free" when the preset torque is reached preventing over-torquing.
- Thrust bearings insure that the torque setting is independent of any end load applied by the operator.
- Bi-directional operation.
- ESD compliant IEC 61340-5-1:1998
- Tamper-proof internal adjustment. No external adjustment scale - must be preset using a torque analyzer.

020066

020074

TORQUE-LIMITING SCREWDRIVERS

Mfg. Part No.	Torque Range	Stock No.	Price Each
020066	3 in-oz/12 in-lb	**49M1774**	207.00
020074	0.7 in-oz/12 in-oz	**49M1782**	254.00

(113768)

TITAN 100i TORQUE-LIMITING CLICK WRENCH

mountz the torque tool specialists®

- Bi-directional ratchet head
- Easy-to-read dual scale (American & S.I.) protected by a display window
- Graduation collar on the torque handle
- Strong steel shaft with firm, ergonomic grip
- "Push-Button Locking Device" securely locks the preset torque and prevents inadvertent adjustment
- Certificate of calibration
- Positive "click" can be heard and felt when torque is reached

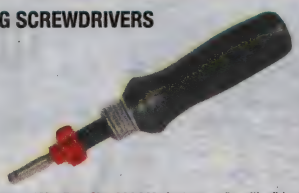
Click-type torque-sensing wrench provides audible "click" to provide fast, simple indication of micrometer-accurate torque settings.

Mfg. Part No.	Description	Range (lbf.in.)	Stock No.	Price Each
280010	Titan 100i Click Wrench	20-100	**49M4822**	302.00

(113767)

TORQUE-LIMITING SCREWDRIVERS

mountz the torque tool specialists®



Ergo Micro Torque screwdriver, **Mfg. Part No. 020440,** features a "positive" locking system that prevents incidental torque adjustment. Bi-directional cam "slips free" once the set torque has been reached, making over-tightening impossible. ¼″ F/Hex drive and 2-12 lbf.in torque range. Externally adjustable torque range. **Mfg. Part No. 020452** is similar to **020440**, but with 10 - 50 lbf.in torque range.

Mfg. Part No.	Description	Stock No.	Price Each
020440	EMT12 Torque Screwdriver	**49M1951**	395.00
020452	EMT50 Torque Screwdriver	**49M1971**	409.00

(113765)

TORQUE-LIMITING BREAK-OVER WRENCH

mountz the torque tool specialists®

- Break-over mechanism minimizes shock to assemblies
- Tamper-proof internal adjustment
- "Breaks-over" when preset torque is reached, eliminating overtorquing
- Small and lightweight. Ideal for restricted spaces.
- Handle: L 5" L x 9/16" Diameter.

Mfg. Part No.	Size	Torque Range (lbf.in)	Stock No.	Price Each
06005B-104-TB	3/16″	3-12	**96M0008**	190.00
06005B-106-TB	5/16″	3-12	**96M0009**	190.00
06005B-109-TB	7/16″	3-12	**96M0010**	156.00

(113764)

CAM OVER TORQUE-LIMITING WRENCH

mountz the torque tool specialists®

- Unique cam action provides high repeatability while eliminating overtorquing
- Anodized quality finish with stainless steel head
- Comfortable rubber hand grip
- Slim profile and light weight
- Non-length dependent
- ESD compliant (IEC 61340-5-1:1998)
- Features an externally adjustable micrometer scale and easy-to-use positive locking adjustment system

Mfg. Part No.	Drive Size (In.)	Range (lbf.in.)	Stock No.	Price Each
020340	1/4	10-45	**49M1882**	490.00
020341	1/4	20-90	**49M1883**	504.00

(113766)

INSULATED TORQUE WRENCH

mountz the torque tool specialists®

- Meet or exceed the accuracy and repeatability requirements of ISO 6789:2003 (±4% of setting)
- May be used for torque on battery terminals
- Reduces possibility of shorting or shock
- PVC heat shrink insulation.
- Non-conductive plastic grip handles.
- For use on electrical systems up to 50V

Mfg. Part No.	Torque Range	Sq. Drive	Stock No.	Price Each
060398	40in-lb to 80in-lb	1/4″	**49M2276**	540.00

(197919)

DURATOOL AT NEWARK ELEMENT14

For your production and facilities needs, from soldering stations to tool sets & more.
newark.com/duratool

(212563)

CLEAN ROOM TORQUE SCREWDRIVERS

mountz the torque tool specialists®

- Meets or exceeds accuracy and repeatability requirements of ISO 6789:2003 (±6% of setting)
- Exceeds Class 100 clean room standards
- Special seals prevent contamination
- External components are high grade stainless steel to inhibit any form of corrosion
- Special microfiltered internal lubricant
- Aluminum handle sealed with PTFE impregnated anodized finish
- ESD compliant (IEC 61340-5-1:1998)
- Tamper-proof internal adjustment. No external adjustment scale -must be preset using a torque analyzer

Mfg. Part No.	Torque Range	Drive F/Hex	Stock No.	Price Each
020320	3in-oz to 32in-oz	1/4″	99M6873	420.00
020321	1in-lb to 12in-lb	1/4″	99M6874	484.17
020322	1.4in-lb to 36in-lb	1/4″	99M6875	482.00
020498	10in-lb to 120in-lb	1/4″	99M6879	602.00

(197921)

E-SERIES ELECTRIC SCREWDRIVERS

mountz the torque tool specialists®

- Plugs directly into a power outlet (no separate power supply required)
- Automatic power shut off once torque is achieved
- Crafted to rest comfortably in the operators hand
- External torque adjustment scale
- Push-to-Start and Lever models
- Duty cycle tool
- 110V models 220V moels are also available; *go online or call*
- Power cord with a noise filter to reduce electronic noise (EMC)
- Lightweight

Mfg. Part No.	Driver Type	Torque Range	Drive F/Hex	Stock No.	Price Each
145645	Lever	0.9lb-in to 15.6lb-in	1/4″	49M4257	670.00
145647	Push-to-Start	2.2in-lb to 15.6in-lb	1/4″	49M4259	670.00
145649	Lever	1.3in-lb to 21.7in-lb	1/4″	49M4261	670.00
145651	Push-to-Start	2.2in-lb to 21.7in-lb	1/4″	49M4263	670.00

ACCESSORIES

Torque Cover protects the E-Series from incidental or operator tampering of torque setting. Allows for color-coding of specific torque values in production areas.

145654	Torque Cover - Black	49M4265	25.00

(197922)

ELECTRONIC AND MECHANICAL TORQUE CONTROL SCREWDRIVERS

Weller®

- Electronic control drives uptime and lowest cost of maintenance
- Highest speed and up to 33% lower weight
- Widest torquer range
- Torque adjustment via electronic control (ECL) and external adjustment (Clutch)
- All screwdrivers ESD safe and clean room ready
- Quick change locking 1/4″ Hex

Mfg. Part No.	Model No.	Description	Torque Range (Nm)	Free Speed (RPM)	Torque Control	Stock No.	Price Each 1-9
0053909199	WBTS12L	Brushless Motor Lever Start	0.05 to 1.2	650	Clutch	63T8141	592.30
0053909399	WBTS35L	Brushless Motor Lever Start	0.5 to 3.5	800	Clutch	63T8143	737.50
0053909499	WBTS35P	Brushless Motor Push Start	0.5 to 3.5	800	Clutch	63T8144	809.60
0053909599	WBTS35ECL	Brushless Motor Lever Start	0.5 to 3.5	800	Electronic	63T8145	679.80

DIGITAL AND ANALOG POWER UNITS

Features auto-sensing input voltage, ease of positioning, auto energy shut-off mode, self tapping application functionality with tighten and loosen process and hard / soft joint optimization through digital parameter controls.

Mfg. Part No.	Model No.	Description	Stock No.	Price Each
WTSD	WTSD	Digital power unit, (90-260) VAC	63T8139	854.90
0053901299	WTSA	Analog power unit, (90-260) VAC	63T8140	521.20

➤ CONTINUED ➤

ELECTRONIC AND MECHANICAL TORQUE CONTROL SCREWDRIVERS (CONT.)

ACCESSORIES

Mfg. Part No.	Model No.	Description	Torque Range (Nm)	Free Speed (RPM)	Torque Control	Stock No.	Price Each 1-9
0058767701	WAH12	Angle Head				63T8146	506.00
0058767702	WAH35	Angle Head				63T8147	521.20
0058767703	WBAL	Balancer 0.9 - 2.2 Lbs				63T8148	64.90
0058767704	WCAB5M	Five Meter Tool Cable				63T8149	98.00
0058767705	WCAB5MS	Five meter Spiral Tool Cable				63T8150	145.00
0058767706	WTT5	Torque Tester, 2.6 - 44.2 Lbf-in				63T8151	1954.00

(197672)

ADJUSTABLE TORQUE-LIMITING SCREWDRIVERS AND KITS

UTICA

TS-30

KT-30

KT-130

KT-100

U.S. standard adjustable torque-limiting screwdrivers feature precision micrometer scale, easy-release bit holders and anti-backlash design for repeatability. ¼″ female hex drive. Accuracy: ±6% from 20% of full scale to full scale. Meets or exceeds ASME B107.14M and ISO 6789 specifications.

ADJUSTABLE TORQUE-LIMITING SCREWDRIVERS

Mfg. Part No.	Range	Collar Color	Increments	Stock No.	Price Each
TS-100	20-100 in-oz	Black	2 in-oz	97H3848	338.63
TS-30	6-30 in-lb	Red	1 in-lb	97H3849	338.63

ADJUSTABLE TORQUE-LIMITING SCREWDRIVER KITS

Mfg. part no. KT-100 20-pc. kit contains one **mfg. part no. TS100** ¼″ female hex adjustable torque-limiting screwdriver, torque screwdriver blades in sizes 0.000 and 0.100, hex sockets in sizes 3/32″ and 7/64″, hex keys in sizes 0.028 and 0.035, screwdriver hex bits in sizes 0.050, 1/16″, 5/64″, screwdriver blade torque screw in sizes 2, 3 and 4, 5, Phillips blade torque screw in sizes 0, 1 and 2, 3, 4, ¼″ drive adapter, mini-torque bit holder, ¼″ drive regular sockets in sizes ⅛″ and 3/16″, insert and storage case.

Mfg. Part No.	Description	Stock No.	Price Each
KT-100	20-Pc. Torque-Limiting Screwdriver Kit, Range 20-100 in.-oz.	63J9936	601.80

Mfg. part no. KT-30 24-pc. kit contains one **mfg. part no. TS-30** ¼″ female hex adjustable torque-limiting screwdriver, 0.100 torque screwdriver blade, 7/64″ hex socket, 0.035 hex key, screwdriver hex bits in sizes 0.050, 1/16″, 5/64″, 3.32″, ⅛″ and 5/32″, screwdriver blade torque screw in sizes 2,3, 4,5, 5,6 and 6,8, Phillips blade torque screw in sizes 0, 1 and 2, 3, 4, ¼″ drive adapter, mini-torque bit holder, ¼″ drive regular sockets in sizes ⅛″, 3/16″, ¼″ and 5/16″, insert and storage case.

KT-30	24-Pc. Torque-Limiting Screwdriver Kit, Range 6-30 in.-lb.	63J9946	637.20

Mfg. part no. KT-130 48-pc. kit contains one **mfg. part no. TS-100** and one **mfg. part no. TS-30** ¼″ female hex adjustable torque-limiting screwdrivers, three torque screwdriver blades (one in size 0.080 and two in size 0.100), three hex sockets (one in size 3/32″ and two in size 7/64″), three hex keys (one in size 0.028 and two in size 0.035), nine screwdriver hex bits (two each in sizes 0.050, 1/16″, 5/64″, and one each in sizes 3.32″, ⅛″, 5/32″), six screwdriver blade torque screw (two each in sizes 2, 3 and 4, 5; one each in sizes 5, 6 and 6, 8), five Phillips blade torque screw (two each in sizes 0, 1 and 2, 3, 4; and one in size 4, 6, 7, 8, 10), two ¼″ drive adapters, two mini-torque bit holders, six ¼″ drive regular sockets (one each in sizes ⅛″, 5/32″, ¼″, 5/16″, and two in size 3/16″), insert and storage case.

Mfg. Part No.	Description	Stock No.	Price Each
KT-130	43-Pc. Torque-Limiting Screwdriver Kit, Range 20 in.-oz. to 30 in.-lb.	97H3842	1156.40

(78737)

ADJUSTABLE TORQUE-SENSING WRENCHES

UTICA

- Two calibration adjustments (major and fine) permit easy, precise torque settings
- Dual scale models give readings in in-lb/Newton Meters or ft-lbs/Newton Meters
- patented spring-loaded locking collar locks scale on desired reading
- Slim, lightweight design reduces fatigue

"Click" type torque-sensing wrenches provide audible "click" and/or a few degrees of travel to provide fast, simple indication of micrometer-accurate torque settings. Patented low-friction torque control mechanism produces accurate readings in either direction.

➤ CONTINUED ➤

ADJUSTABLE TORQUE-SENSING WRENCHES (CONT.)

RATCHET HEAD — IN.-LB. GRADUATIONS

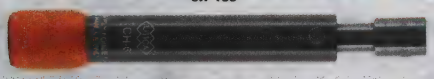
Mfg. Part No.	Drive Size (in.)	Range	Graduations	Lgth. (mm)	Stock No.	Price Each
TCI-150RA	1/4	30-150 in-lb, 2.8-17.5 Nm	1.0 in-lb., 0.113 Nm	241.3	**97H3846**	281.15
TCI-150RA 3/8	3/8	30-150 in-lb, 2.8-17.5 Nm	1.0 in-lb., 0.113 Nm	241.3	**97H3847**	276.91
TCI-250R	3/8	50-250 in-lb, 5.0-28 Nm	1.0 in-lb., 0.113 Nm	317.5	**64J1222**	391.76
RATCHET HEAD — FT.-LB. GRADUATIONS						
TCI-75FRN	3/8	15-75 ft-lb, 24-105 Nm	0.5 ft-lb., 1.4 Nm	362	**64J1227**	485.84

(78735)

TORQUE-SENSING WRENCHES — "A" SIZE SERIES

UTICA

CH-150



CHA-6, CHA-11

"Click" type torque-sensing wrenches accept a variety of interchangeable "A" size drive heads to suit specific application requirements; *ordered separately on this page* . Head changes are quick and easy without the need for recalibration. Heads are available in drive sizes ¼" through ¾".

MICROMETER ADJUSTABLE WRENCH — "A" SIZE

Mfg. Part No.	Range	Graduations	Length (mm)	Stock No.	Price Each
CH-150	30-150 in-lb, 3.4-17 Nm	1.0 in-lb, 0.113 Nm	228.6	**63J8908**	260.18

SINGLE SETTING (PRESET) WRENCHES — "A" SIZE

Mfg. Part No.	Range	Length (mm)	Stock No.	Price Each
CHA-6	10-50 in-lb, 1.2-6 Nm, 0.8-4.2 ft-lb, 12-60 cm-kg	135	**97H3841**	173.87
CHA-11	20-100 in-lb, 2.2-11 Nm, 1.6-8 ft-lb, 23-115 cm-kg	146.1	**97H3840**	150.44

(78738)

OPEN-END HEADS

UTICA

Open-end, U.S. standard "A".

Mfg. Part No.	Opening Size	Max. Torque (In.-Lb.)	Stock No.	Price Each
OP 102	5/16"	138	**97H3843**	72.55

(78736)

TOOL BALANCERS

AIMCO

Tool Balancer keeps your torque equipment at an ergonomic height for the operator. Ergonomic spring release provides a safety lock giving extra control of the tool. Stainless steel cable can recoil or provide more length for better maneuverability to reach multiple applications. Gear mechanism allows more exact adjustment of tension.

Mfg. Part No.	Description	Stock No.	Price Each
ASB-0C	1.1 - 3.3 lbs. Capacity	**49H8504**	59.25
ASB-3C	3.3 - 6.6 lbs. Capacity	**35H8575**	79.50

(75382)

multicomp AT NEWARK ELEMENT14

Affordable, performance board level & box build components at

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(212569)

IMPACT AND NON-IMPACT PUNCH DOWN TOOLS

FLUKE networks

D914S™

D814™

Fluke Networks™ punch down tools provide technicians a variety of options. The popular **D914S™ series** impact tool features a rounded edge handle with soft rubber grip to reduce recoil, preventing hand fatigue and slipping while terminating. It also includes a built in probe plc/spudger and torque allowing you to choose from high and low impact settings. **D914™** and **D814™ series** spring-loaded impact tools make efficient connections with less effort. Increased versatility and flexibility of these punch down tools and a wide variety of interchangeable blades allows each tool to perform multiple functions. *Order additional blades separately below.*

PUNCH DOWN TOOLS

Mfg. Part No.	Description	Stock No.	Price Each
10061120	**D914S™** 66 and M110 Blades	**18C1550**	85.00
10051120	**D914™** with 66 and 110 Blade	**97C9297**	74.00
10051501	**D914™** with 66 and 110 Extra Blade	**48F4931**	74.00
10055110	**D814™** with 110 Blade	**95B8127**	56.00
10055200	**D814™** with 66 and 110 Blade	**97C9298**	66.00
10055501	**D814™** with 66 and 110 Extra Blade	**48F4933**	66.00

PUNCH DOWN TOOL BLADES

Through special processing of the metal, Eversharp™ high-performance blades stay sharper three-times longer than other competitive blades. Sharper blades provide better termination at the block, leading to quality installs.

Mfg. Part No.	Description	Stock No.	Price Each
10056500	Eversharp™ 66 Blade	**18C1546**	25.00
10176500	EverSharp™ 110 Blade	**18C1551**	25.00
10665000	BIX® Blade	**48F4957**	49.00

(62989)

PRO-TOOL KITS

FLUKE networks

11293000

These Pro-Tool™ kits are comprised of the most essential tools for telecom installations, conveniently stored in a durable PVC pouch. **Mfg. part no. 11293000** kit includes D914S™ impact tool, electrician's D-Snips™, cable stripper, Mini-Maglite and Sharpie pen. **Mfg. part no. 11292000** kit includes D914S™ impact tool, electrician's D-Snips™, cable stripper, and EverSharp™ 66/110 cut blade.

Mfg. Part No.	Description	Stock No.	Price Each
11293000	Pro-Tool™ Kit IS60	**02H5542**	181.00
11292000	Pro-Tool™ Kit IS50	**97C9305**	155.00

(73269)

ELECTRICIAN D-SNIPS™

FLUKE networks

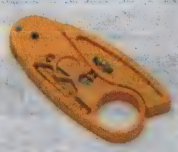
D-Snips™ offer a unique ergonomically-designed handle that leverages your power, providing 1½ times the cutting force with half the effort. The special plastic coated "tail" on the handle that provides the added leverage also minimizes hand fatigue. Made of high-quality forged steel. With a reinforced center joint these new snips are the most durable in the industry.

Mfg. Part No.	Description	Stock No.	Price Each
44300000	Electrician D-Snips	**31C7928**	24.00

(68357)

ROUND CABLE STRIPPER

FLUKE networks



Adjustable cable stripper for round cable, UTP/STP telephone and data cable, and other flexible cable.

Mfg. Part No.	Description	Stock No.	Price Each
11230002	Round Cable Stripper	**97C9300**	28.00

(51183)

TELECOM TOOLS • TERMINATION TOOLS

E-Z CHECK® GFI AND RECEPTACLE CIRCUIT TESTERS

IDEAL®

- Non-slip ergonomic design maximizes comfort
- Premium neon lamps prevent false readings
- Tough impact-resistant case
- Safety-yellow color for easily visibility
- 5-year manufacturer's warranty
- UL listed, CSA certified

61-051

61-035

Mfg. part no. 61-051 E-Z Check® Plus GFI circuit tester tests the integrity and operation of GFI receptacles, protected circuits or outlets. Also tests for correct wiring, open-ground, reverse-polarity, open-hot, open-neutral, hot-on-neutral, hot and ground reversed with open-hot, and ground fault interruption in 3-wire 125V AC circuits. Push-pull shape, easy-to-read indicators. **Mfg. part no. 61-035** E-Z Check® circuit tester is the same except no GFI outlet test capability.

Mfg. Part No.	Description	Stock No.	Price Each
61-051	E-Z Check® Plus GFI Circuit Tester	90F2394	55.26
61-035	E-Z Check® Circuit Tester	35F2254	27.14

(5603)

TELEMASTER™ MODULAR PLUG CRIMPING TOOLS AND KITS

IDEAL®

30-496

30-696 Ratcheting

33-750

Rugged multifunction crimping tools for RJ-45 and RJ-11 plugs. Cuts UTP/STP cable and strips flat cable. **Mfg. part no. 30-696** includes a ratcheting mechanism for consistent crimping.

Mfg. Part No.	Description	Stock No.	Price Each
30-496	Crimps RJ-11 and RJ-45 Plugs	92F1528	68.25
30-696	Ratcheting, Crimps RJ-11 and RJ-45 Modular Plugs	48F1305	81.72

KITS

Mfg. part no. 33-750 economy 10Base-T Telemaster™ kit includes UTP/Coax stripper, Telemaster™ RJ-11/RJ-45 crimping tool, 50 8-position RJ-45 non-keyed solid plugs, and a durable, hard-sided storage case. **Mfg. part no. 33-652** 10Base-T Crimpmaster™ RJ-45 kit includes Data T®-Cutter, UTP/Coax stripper, Crimpmaster crimp tool frame only, 8-position crimp die set for RJ-45 Plugs, 200 8-position RJ-45 non-keyed solid plugs, and a durable, hard-sided storage case.

Mfg. Part No.	Description	Stock No.	Price Each
33-750	Economy 10Base-T Telemaster™ Kit	16F7673	131.20
33-652	10Base-T Crimpmaster™ RJ-45 Kit	01F020	267.20

(7602)

PUNCHMASTER II™ IMPACT PUNCH DOWN TOOLS

IDEAL®

35-485

Mfg. part nos. 35-485 and **35-487** seat and cut cable terminations. Impact-absorbing, neoprene-cushioned grip reduces operator stress for high-volume installers and provides increased nonslip comfort. Sure-Lock™ blade holder provides fast and easy blade changes and prevents blade pull-out. Adjustable Hi/Low impact settings.

Mfg. Part No.	Description	Stock No.	Price Each
35-485	Punch Down Tool with 110 Blade	01F2601	77.79
35-495	Replacement 110 Blade/Cut and No-Cut	01F2603	27.75
35-497	Replacement 66 Blade/Cut and No-Cut	01F2604	27.75

(18627)

element14 COMMUNITY

Get inspired, collaborate, design, research, ask experts questions.

element14.com

(196545)

NETWORK INSTALLATION KIT

RoHS Compliant Available

JONARD INDUSTRIES CORP.

Puchdown tool kit features six tools performing over 21 functions to complete any installation or repair. Contains: EPB-KIT66110 punchdown tool with 66 and 110 blades, UST-500 multipurpose universal cable stripping tool, ES-1964ERG ergonomic electrician scissor, JIC-22035 spudger, M-216CS22 can wrench with 22 AWG wire stripper, JIC-22148 multipurpose needle nose crimping plier with cutter and H-1000 cordura pouch.

Mfg. Part No.	Description	Stock No.	Price Each
● TK-21	Network Installation Service Kit	05T6283	169.50

(195424)

EPB-500 PUNCH DOWN TOOLS

JONARD INDUSTRIES CORP.

- Ergonomic design to minimize repetitive stress and impact recoil
- The easiest high/low impact setting adjustment
- Convenient 2 blade storage compartment
- Non-slip handle
- Reliable fail safe mechanism
- Lifetime warranty

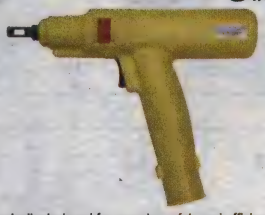
Mfg. Part No.	Description	Stock No.	Price Each
EPB-500	Ergonomic Punchdown Tool	61M0608	49.92
EPB-KIT66	Ergonomic Punchdown Tool Plus 1 Blade (EPB-66)	61M0604	57.10
EPB-KIT110	Ergonomic Punchdown Tool Plus 1 Blade (EPB-110)	61M0603	60.53
EPB-KIT66110	Ergonomic Punchdown Tool Plus 2 Blades (EPB-66, EPB-110)	61M0605	70.41

(195417)

BATTERY POWERED PUNCH DOWN TOOL

JONARD INDUSTRIES CORP.

- Over 1,000 impacts between charges
- Dual action trigger for LED task lighting and impact
- Quick-easy blade lock and release
- 90° Blade orientation adjustment for any angled impact
- Hi/Low impact settings easily adjusted
- Powerful, lightweight 7.2V lithium ion battery
- Quick charge battery charger



Battery powered punchdown tool, ergonomically designed for operator safety and efficiency.

Mfg. Part No.	Description	Stock No.	Price Each
EPB-1200	Punchdown Tool, Battery, 115V Charger (no blades included)	99R8111	241.10
EPB-1066	Punchdown Tool, Battery, 115V Charger, 66 blade	99R8107	248.58
EPB-1110	Punchdown Tool, Battery, 115V Charger, 110 blade	99R8110	248.58
EPB-11066	Punchdown Tool, Battery, 115V Charger, 110 & 66 blades	99R8109	255.99
EPB-1000KR	Punchdown Tool, Battery, 115V Charger, Krone blade	99R8108	261.08

(195423)

IMPACT TERMINAL TOOLS

DURATOOL

- Professional BT-type terminal tool
- Manufactured from toughened plastic with a hardened steel blade
- Quickly and safely cuts and terminates cable
- Handles house wire hooks and extractors
- Supplied with molded belt holder

TL09782

Mfg. Part No.	Description	Stock No.	Price Each 1-49
TL09782	Impact terminal tool	01N3630	16.09

(116812)

JACKRAPID™ TERMINATION TOOLS

FLUKE networks

- Seats and cuts all wires at once, saving up to 2 minutes installation time per jack
- High quality, consistent terminations
- Simple, one-handed operation and ergonomic handle reduces hand fatigue
- Unique design easily accommodates close-to-wall installation
- Replaceable blade head for use with multiple jack types

JR-ADC-2

JackRapid™ termination tools are innovative and time saving installation tools. JackRapid™ allows you to accurately terminate jacks faster than traditional impact tools. The patented jack termination tool seats and terminates all wires simultaneously with one squeeze of an ergonomic handle. Get clean, consistent cuts every time. The built-in blade cuts off the excess wire after it is seated in the connector, eliminating the need for a secondary trim step. With JackRapid™, you'll never punch into the palm of your hand or through drywall again.

Mfg. Part No.	Description	Stock No.	Price Each
JR-LEV-1	JackRapid Termination Tool (for LEVITON 41106, 41108, 5G108)	95M6386	82.00
JR-LEV-1-H	JackRapid Replacement Blade Head (for LEVITON 41106, 41108, 5G108)	95M6387	59.00
JR-SYS-UNI-1	JackRapid Termination Tool (for MPS100E,C5,M1BH & UNJ600/500/300)	95M6390	82.00
JR-SYS-UNI-1-H	JackRapid Replacement Blade Head (for MPS100E,C5,M1BH&UNJ600/500/300)	07P5216	59.00
JR-LEV-2	JackRapid Termination Tool (for LEVITON 61110, 5G110, 6110G)	95M6388	82.00
JR-LEV-2-H	JackRapid Replacement Blade Head (for LEVITON 61110, 5G110, 6110G)	95M8571	59.00
JR-SYS-2	JackRapid Termination Tool (for SYSTIMAX MGS400,MGS500,MFP420,MFP520)	95M6391	82.00
JR-SYS-2-H	JackRapid Replacement Blade Head (for SYSTIMAX MGS400,MGS500, MFP420, MFP520)	95M8573	59.00
JR-ORT-2	JackRapid Termination Tool	95M6389	82.00
JR-ADC-2	JackRapid Termination Tool (for ADC KM8, CopperTen)	45P7637	82.00
JR-ADC-2-H	JackRapid Replacement Blade Head (for ADC KM8, CopperTen)	46P3794	59.00

(115573)

TERMINATOR TOOLS

JONARD INDUSTRIES CORP.

- Terminator tools ergonomic handle provides greater leverage and a superior grip

TT-4

TT-7

These terminator tools are used for various locking terminators including the Gilbert Engineering GTP (Morlock), PRC (Production Products Company), LFT, PCT (International Technology), TPG, TR 75 GTL (Viewsonics), and SV-LT and SV-LTA (Signal Vision) locking terminators. **Mfg. part no. TTB-6** barrel lock plunger key is compatible with several types of Highfield and Innertite barrel locks with inside diameters ranging from 0.176″ to 0.196″.

Mfg. Part No.	Description	Shaft Size	Stock No.	Price Each
TT-4	4½″L Terminator Tool	2½″	75R7656	13.62
TT-7	8″L Terminator Tool	4″	75R7657	16.24
● TT-7V	9″L Terminator Tool with Prongs	4″	05T6285	17.50
● TTB-6	Barrel Lock Plunger Key	...	62W1058	58.98

(178433)

QUICK CLIP WIRE INSERTION TOOL

JONARD INDUSTRIES CORP.

- Used for terminating jumpers on Quick Clip 3 and 4 beam terminals
- Cuts 22 and 24 gauge wire

Mfg. part no. JIC-950C Quick Clip multipurpose wire insertion tool performs several vital functions. The wire cutter is designed to cut 22 and 24 gauge wire, the hook at the back of the tool is used for both jumper and back-tap removal, and the bit inserts 22 or 24 gauge (0.5 mm or 0.6 mm) wire into the terminal block. Ideal for wire insertion in 3-beam (112 type blocks) and 4 beam (78 type blocks) terminals in Cosmic and Cosmic II distributing frames.

Mfg. Part No.	Description	Stock No.	Price Each
JIC-950C	Quick Clip Multipurpose Wire Insertion Tool	75R7650	179.52

(178434)

RATCHETING, ALL-IN-ONE TELEPHONE TOOLS

RoHS Compliant Available

GREENLEE COMMUNICATIONS A Textron Company

PA1530R

Mfg. part nos. PA1530R and PA1556 are fully-ratcheting, all-in-one telephone tools that cut, strip, and crimp 4- and 6-position RJ11/RJ12, 4-position RJ22 handset plugs, and 8-position RJ45 modular telephone plugs. AWG 28-24. WE/SS-style. Complete ratchet cycle and durable steel frame with rubber embedded handles. **Mfg. part nos. PA1530R and PA1556** have a 5-year limited warranty. **Mfg. part no. PA901016** has a precision die-cast aluminum head and lifetime warranty. **Mfg. part no. PA1561** is for standard and "snagless" RJ45 connectors and RJ11/22 and RJ22 WE/SS style plugs.

Mfg. Part No.	Description	Stock No.	Price Each
● PA1530R	All-In-One Pro Telephone Crimper/Cutter/Stripper	90F6851	153.28
● PA901016	All-in-One Ultra-Pro Telephone Crimper/Cutter/Stripper	48F2034	176.87
PA1561	All in one UTP Snagless Crimper	84R4605	54.59

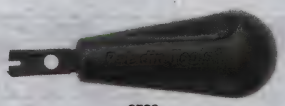
(5655)

SUREPUNCH™ AND ECONOMY PUNCH DOWN TOOLS

RoHS Compliant Available

GREENLEE COMMUNICATIONS A Textron Company

3591



3580

3581

SurePunch™ PDT terminates and cuts telephone wire and data cable into a variety of termination panels. Shorter handle and a spring mechanism requiring less hand force to actuate. Spring mechanism designed to terminate the new cables in a single stroke. Finger grips and non-slip cushioned sides make it comfortable to use. Blade storage in handle with latch cover. Slitting tooth to separate bonded twisted pairs or to strip insulation. Hook to feed wires through the holes. Spudger can be used as a screwdriver or IDC contact insertion tool. Detachable light, bright LED light are also available. Increase life span. Uses all twist and lock style blades. 10 year warranty.

Mfg. Part No.	Description	Stock No.	Price Each Each
● PA3589	SurePunch Pro Handle Only	32H6977	73.08
● PA3586	SurePunch Pro with 110 /66 Reversible Cut and Punch/Punch-Only Blades	97H2980	96.69
● PA3591	SurePunch Pro with 110/66 combination Cut-Only Blade	32H6979	84.89
● PA3592	SurePunch Pro with 110 Reversible Cut and Punch/Punch-Only Blade	32H6980	84.89
● PA3593	SurePunch Pro with 66 Reversible Cut and Punch/Punch-Only Blade	32H6981	84.89
● PA3584	SurePunch Pro with Double 110 Blade and Detachable Light	23K8016	99.03
● PA4599	SurePunch Pro Detachable Light and Batteries	32H7022	18.21
● PA3580	Non-Impact Tool w/110 Blade	20C4780	14.14
● PA3581	Non-Impact Tool w/66 Blade	20C4781	14.14
● PA1913	Non-Impact Punchdown/Stripper	34C6137	5.88

(84710)

LAN PRONAVIGATOR™ NETWORK AND COAXIAL CABLE TESTER AND KIT

RoHS Compliant Available

GREENLEE COMMUNICATIONS A Textron Company

PA1543

PA901066

Mfg. part no. PA1543 LAN ProNavigator™ with remote is a UTP/STP and coaxial cable tester for patch cords or installed cable runs. Tests data and telephone cable for proper pairing for EIA/TIA-568A and B, Token Ring, 10 Base T and common Cat5, Cat5e, Cat6 configurations. Also tests continuity of 50 and 75 ohm coaxial cable with BNC terminations. Compact, lightweight and easy-to-use, the LAN ProNavigator™ detects open wires, shorts, crossed-wires and split pairs in only seconds. Test results at both ends. Generates oscillating audio tone for use with tone probes to locate cable. Uses 9V battery with auto-off function to preserve power. Includes belt clips and battery. **Mfg. part no.**

➤CONTINUED➤

TOOL KITS

LAN PRONAVIGATOR™ NETWORK AND COAXIAL CABLE TESTER AND KIT (CONT.)

PA901066 LAN ProNavigator™ kit includes LAN ProNavigator™ network and coaxial cable tester with remote plus two RJ45 patch cords, two BNC coaxial cables, two CATV "F"-to-BNC adapters, one shielded RJ45 coupler, two belt clips, 9V battery and durable, hard-sided storage case with custom-fit foam insert. One-year manufacturer's warranty.

Mfg. Part No.	Description	Stock No.	Price Each
● PA1543	LAN ProNavigator Network and Coaxial Cable Tester with Remote Only	07C7929	110.90
● PA901066	LAN ProNavigator Network and Coaxial Cable Tester with Remote Kit	20C4956	196.44

(56470)

DATAREADY® TOOL KIT

RoHS Compliant Available

GREENLEE. COMMUNICATIONS A Textron Company

Complete Category 5 datacom tool set perfect for the IT professional. DataReady® kit includes: **mfg. part no. PA1116** Data SureStrip® UTP/STP and flat satin cutter/stripper, **mfg. part no. PA1556** All-in-One phone/data tool (WE/SS), **mfg. part no. PA3570** SurePunch® impact punchdown tool handle, **mfg. part no. PA4571** SurePunch® reversible 110/66 blade, **mfg. part no. PA1576** Data Link/ID and Cable-Check™ tester and 20 RJ-45 Cat5e modular connectors. All packaged in zipper storage case.

Mfg. Part No.	Description	Stock No.	Price Each
● PA901053	DataReady Tool Kit	98B6237	246.43

(54970)

LAN AND TELECOM CABLE TESTING KIT

RoHS Compliant Available

GREENLEE. COMMUNICATIONS A Textron Company

RJ45 LAN Tester Features:
- True cable mapper
- Auotmatic display of mapping
- Dual speeds: Slow and Fast

Telephone Test Set and Tone Probe Cable Tracer Features:
- Check polarity of phone power lines
- View phone line status: dial tone, ringing line or busy line
- Provide talk power for phone lines and butt set use
- Four tone generator patterns
- Test continuity of wires, cable and loads
- Tone generator features Auto-Off function
- Locate patch and termination point of wire
- Identify cable pair carrying tone signal
- Audible speaker with adjustable volume control

Mfg. part no. PA1573 LAN and telecom cable testing kit is ideal for data and voice testing needs. Identify connector and cable pin-out with true cable mapping or utilize the full-range continuity, line condition, signal tracing and wire identification with tone generator and tone probe cable tracer. Kit includes: Tone and Cable-Check™ transmitter main unit, Tone and Cable-Check™ remote receiver unit, RJ-11and alligator clip cord, two RJ-45 shielded patch cords, inductive high-sensitivity probe, jack for headset, durable nylon carrying case with belt loop and two 9V batteries.

Mfg. Part No.	Description	Stock No.	Price Each
● PA1573	LAN and Telecom Cable Testing Kit	87H5780	96.79

(83200)

PREMISE SERVICE KIT

RoHS Compliant Available

GREENLEE. COMMUNICATIONS A Textron Company

Mfg. part no. 901039 premise service kit for data, voice and coaxial LAN installations comes conveniently packaged in a sturdy molded case with form-fitting foam. Kit includes: KT 8 cutter, Data SureStrip® and flat cable cutter/stripper, LC CST CATV "F" coax stripper, CrimpALL™ ergonomic crimp frame with RJ11/12 and RJ45/CATV "F" combined die, SurePunch™ Pro, 66, and 110 blades, LAN ProNavigator® coax network tester, telephone test set and LAN Cable-check™, RJ45 adapter, two BNC-to-CATV adapters and plano plastic tackle box.

Mfg. Part No.	Description	Stock No.	Price Each
● PA901039	Premise Service Kit	20C4952	560.09

(72366)

SEALTITE® PRO WATERPROOF COMPRESSION KITS

RoHS Compliant Available

GREENLEE. COMMUNICATIONS A Textron Company

PA4910

PA4915

SealTite® waterproof compression kits are designed for applications requiring weatherproof CATV "F" connections including satellite dish and CATV installations. **Mfg. part no. PA4910** SealTite® Pro compression kit includes: SealTite® Pro compression crimper, KT8 cable cutter, LC CST CATV "F" coax stripper, multi-function coax flaring tool and RG6/RG6 Quad SealTite® compression cable TV "F" connectors, all packaged in a nylon zipper storage case.

Mfg. Part No.	Description	Stock No.	Price Each
● PA4910	SealTite Pro Kit	73J8554	139.14

Mfg. part no. PA4915 SealTite® Pro Smarthome AV tool kit includes: SealTite® Pro compression crimper, SmartHome SureStrip™ coax cable cutter/stripper, two each of: RG6/RG6 Quad CATV "F", RCA and BNC compression connectors and six slip-on color ID bands, all packaged in a zipper storage case.

PA4915	SealTite Pro Smarthome AV Tool Kit	39M4518	112.00

(84680)

DATA/LINK ID AND CABLE-CHECK™ AND LAN CABLE-CHECK™ CONTINUITY TESTERS

RoHS Compliant Available

GREENLEE. COMMUNICATIONS A Textron Company

PA1574

PA1576

Mfg. part no. PA1576 Data/Link ID and Cable-Check™ multi-function continuity tester and network identifier features a Cable-Check™ mode to test UTP/STP and flat satin phone cable with RJ-45 terminations. Tests both data and telephone connection schemes, including patch cords and installed cable, to identify good connections, opens, shorts and cross-connections. Its Data/Link ID mode identifies data and link transmission speeds with real-time detection: 10MB and 100MB. Tester comes complete with two RJ45 patch cords, 9V battery and nylon carrying case with belt loop. One-year manufacturer's warranty.

Mfg. Part No.	Description	Stock No.	Price Each
● PA1576	Data/Link ID and Cable-Check	97H2964	70.57

Mfg. part no.1574 LAN Cable-Check™ continuity tester for testing UTP/STP and flat satin cable with RJ-45 terminations. Tests both data and telephone connection schemes, including patch cords and installed cable, to identify good connections, opens, shorts and cross-connections. Features slow and fast scan speeds. Tester includes two RJ45 patch cords, 9V battery and nylon carrying case with belt loop. One-year manufacturer's warranty.

Mfg. Part No.	Description	Stock No.	Price Each
● PA1574	LAN Cable-Check	97H2963	35.27

(83199)

ULTIMATE TECHNICIAN TOOL KIT

RoHS Compliant Available

GREENLEE. COMMUNICATIONS A Textron Company

PA4932

PA4923

Ultimate technician tool kit **mfg. part no. PA4932** is a complete tool kit for data, voice and video installation and maintenance. Includes all necessary cable preparation tools for Cat5, Cat 5e, Cat 6, and RG6/RG6 Quad. Contained in **mfg. part no. PA4923** ultimate tool bag. **Mfg. part no. PA4932** kit includes; KT 8 cutter, Data SureStrip® UTP/STP & flat cable cutter/stripper, LC CST CATV "F" coax stripper, SealTite® Pro compression and All-in-One crimpers, SurePunch® Pro Handle with, 110, 66, BIX, Krone LSA, Double 110 blades, SurePunch® Pro detachable light, LAN ProNavigator® coax network tester, telephone test set & LAN Cable-check™, can wrench, RJ45 adapter, untwist tool, CATV "F" flaring and attachment tool, (10) RJ22 handset plugs, (10) RJ11/12 plugs stranded flat, (10) RJ45 Cat5 plugs solid round, (10) CATV "F" RG6/RG6 quad compression connectors, (2) BNC-to-CATV adapters, ultimate tool bag, and plano plastic tackle box.

➤ CONTINUED ➤

ULTIMATE TECHNICIAN TOOL KIT (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
● PA4932	Ultimate Technician Tool Kit	29K8633	731.07
● PA4923	Ultimate Tool Bag (Empty)	33K4396	96.51

(84706)

116-PC. ULTIMATE TELCO TECHNICIANS TOOL KIT

GREENLEE. COMMUNICATIONS A Textron Company

Mfg. part no. PA4938 116-pc. ultimate telco technicians tool kit consists of all the UTP tools, connectors and accessories one might need to prepare cable, test new installations, and troubleshoot problems. Kit includes **mfg. part no. PA1556** all-in-one data and phone crimp tool (WE/SS-style), **mfg. part no. PA4941** GripPack SurePunch® Pro technician's kit (includes **mfg. part no. PA4599** SurePunch® Pro PDT with LED light, **mfg. part no. PA3589** SurePunch® Pro PDT handle, **mfg. part no. PA4571** 110/66 blades for SurePunch® and SurePunch® Pro PDTs, **mfg. part no. PA1116** Data SureStrip™ stripper, **mfg. part no. PA1925** datacomm/telecom scissors, mini MagLit® with two AA batteries, one black Sharpie® marker and a quick-release tool holster), **mfg. part no. PA1780** butt set (handset) with ABN cord, **mfg. part no. PA1573** Tone and Probe Plus Cable Check™, **mfg. part no. PA1902** RJ45 modular adapter (8-Way), **mfg. part no. PA1903** RJ11 modular adapter (6-way), **mfg. part no. PA9546** 10-pack of RJ45 WE/SS 8P8C modular plugs (Cat5e, Cat5), **mfg. part no. PA9520** 10-pack of RJ11 WE/SS 6P6C modular plugs, **mfg. part no. PA6500** PT-510 PowerPlay® multi-tool, and **mfg. part no. PA4573** 66 blade for SurePunch® and SurePunch® Pro PDTs. All neatly packaged in the "ultimate" tool bag and plano box.

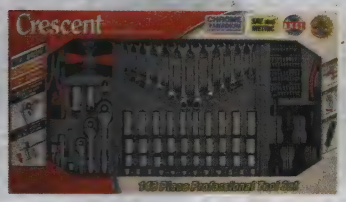
Mfg. Part No.	Description	Stock No.	Price Each
PA4938	116-Pc. Ultimate Telco Technicians Tool Kit	01N4821	620.72

(116770)

PROFESSIONAL TOOL SETS

CRESCENT

CTK70MP



CTK148MP

70-PIECE PROFESSIONAL TOOL SET

Mfg. part no. CTK70MP 70-piece professional tool set includes: (1 ea.) 3/8" drive and 1/4" drive 72-tooth quick-release ratchet handles, (1 ea.) 1/4" and 3/8" x 3" extensions, (16) SAE and metric 3/8" 12-point sockets: 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 10mm, 11mm, 12mm, 13mm, 14mm, 15mm, 17mm, and 19mm. (16) SAE and metric 1/4" drive 6-point sockets: 3/16", 7/32", 1/4", 9/32", 5/16" 11/32", 3/8", 7/16", 5mm, 6mm, 7mm, 8mm, 9mm, 10mm, 11mm, and 12mm. (12) SAE and metric combination wrenches: 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 10mm, 12mm, 13mm, 14mm, 15mm, 17mm, (1) 3/8" female-to-1/4" male adapter, (8) SAE hex key set and holder, (1) multi-bit Dura-Driver™ magnetic bit driver and (12) 1" driver bits: slotted, Phillips, Torx and hex, and storage case. All tools are industrial-quality, meeting stringent new ANSI and ASME specifications, and come with a full-satisfaction manufacturer's guarantee.

Mfg. Part No.	Description	Stock No.	Price Each
CTK70MP	70-Pc. Professional Tool Set	73K7620	105.34

148-PIECE PROFESSIONAL TOOL SET

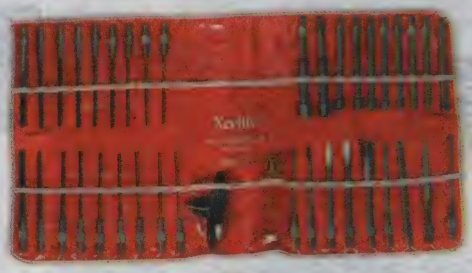
Mfg. part no. CTK148MP 148-piece tool set includes: 1/2" Drives: (1) 1/2" 70 tooth quick release drive, (1) 1/2" drive 5" extension, (10) Sockets: 1/2", 9/16", 5/8", 3/4", 7/8", 15mm, 17mm, 18mm, 19mm, 21mm; (1) 3/8"; 3/8" Drives: (1) 3/8" 72 tooth quick release drive, (1) 3/8" drive 4" extension, (1) 3/8" drive 6" extension, (1) 3/8" to 1/4" drive adapter, (2) 5/8" and 3/16" spark plug sockets; (16) Sockets: 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4" 9mm, 10mm, 12mm, 13mm, 14mm, 15mm, 17mm and 19mm; (1) Deep Sockets: 7/16", 1/2", 9/16" 11/16", 3/4", 12mm, 13mm, 14mm, 16mm, and 17mm; 1/4" Drive: (1) 1/4" 72 tooth quick release drive, (1) 1/4" drive 3" extension; (20) Sockets: 3/16", 7/32", 1/4", 9/32", 5/16", 11/32" 3/8", 7/16", 1/2", 9/16", 4mm, 5mm, 6mm, 7mm, 8mm, 9mm, 10mm, 11mm, 12mm, 13mm; (12) Combination Wrenches: 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 8mm, 10mm, 12mm, 13mm, 14mm, 15mm; (2) Pliers: 8" long nose cutting and 6" diagonal cutting; Magnetic Screwdrivers: (4) 1/4" x 4" slotted, 3/16" x 3" slotted, #2 x 4" Phillips and #1 x 3" Phillips; (1) Magnetic Bit Driver; (44) 1" driver bits and holders; (1" Hex Keys and Holders and (1) Storage Case.

Mfg. Part No.	Description	Stock No.	Price Each
CTK148MP	148-Pc. Professional Tool Set	96H1216	171.90

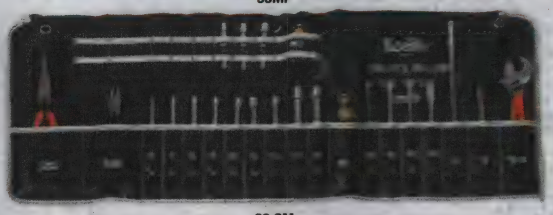
(78153)

99 SERIES TOOL SERVICE KITS

Xcelite®



99MP



99 SM

99 series screwdrivers, nutdrivers, blades and handles are all interchangeable. Handles feature spring devices which hold blades firmly and permit quick, easy insertion.

Mfg. part no 99MP 39-piece multipurpose kit contains: regular screwdriver handle, Tee screwdriver handle, 1/4" magnetic nutdriver, 9 regular nutdrivers, 9 Allen hex screwdrivers, 9 Bristol multispline screwdrivers, 4 slotted screwdrivers, 3 Phillips screwdrivers, reamer and extension.

Mfg. part no 99PS-60 11-piece Bristol multiplespline socket screwdriver set. Contains handle, extension and 9 4" 6-flute Bristol blades: 0.048", 0.060", 0.069" (4-flute), 0.072", 0.076" (4-flute), 0.096", 0.111", 0.145", 0.183", clear plastic case.

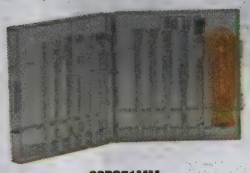
Mfg. part no 99 SM or **99SMX** 23-piece kits each contain: regular screwdriver handle, stubby screwdriver handle, 9 regular nutdrivers, 3 stubby nutdrivers. 2 slotted screwdrivers, 2 Phillips screwdrivers, reamer, extension, long-nose 6" pliers, 5" diagonal pliers, 6" adjustable wrench and wire stripper/cutter.

Mfg. Part No.	Description	Stock No.	Price Each
99MP	39-Pc. Multipurpose Service Kit	34F223	218.40
99PS60	11-Pc. Bristol Multiple Spline Socket Screwdriver Set	34F340	50.50
99 SM	23-Pc. Tool Set with Canvas Case	34F388	195.60

(5735)

METRIC-SIZE HAND TOOL SETS

Xcelite®



99PS51MM

PS121MM

Mfg. part no. 413MM is a 10-piece set of metric-size, plastic-handle nutdrivers, size 4-8mm, 10mm, 11mm, 13mm. All have 31.35mm deep shaft hole. Sturdy molded plastic carrying case.

Mfg. Part No.	Stock No.	Price Each
413MM	34F189	79.10

Mfg. part no. 99PS51MM is a 12-piece nutdriver set containing 1 regular handle; 1 extension; and 10 shafts, sizes 4mm, 4.5mm, 5mm, 5.5mm, 6mm, 7mm, 8mm, 9mm, 10mm, 11mm. In clear, hard plastic stand-up case.

99PS51MM	35F209	76.00

Mfg. part no. PS121MM compact convertible nutdriver kit contains 10 plastic-handle shafts, sizes 3mm, 3.5mm, 4mm, 4.5mm, 5mm, 5.5mm, 6mm, 7mm, 8mm, 10mm. Also includes torque amplifier handle in clear, hard plastic stand-up case.

PS121MM	34F624	55.20

Mfg. part nos. 99PS41MM standard Allen® hex socket and **99PS41MMBP** ballpoint Allen® hex socket contain one regular handle, one extension and seven shafts. Sizes: 1.27mm, 1.5mm, 2mm, 2.5mm, 3mm, 4mm, 5mm. In clear, hard plastic stand-up case.

Mfg. Part No.	Description	Stock No.	Price Each
99PS41MM	Standard Allen® Hex Socket Set	34F621	49.90
99PS41MMBP	Ballpoint Allen® Hex Socket Set	34F622	62.40

(5741)

TOOL KITS

PROFESSIONAL TOOL KITS

Xcelite®

TCMB150ST

TCS200ST

- Carefully selected assortment of quality Xcelite® hand tools
- 46-pc. tool kit organized in a super tough, hard-sided polyethylene attache-style case
- 37-pc. tool kit packaged in a rugged, soft-sided Cordura® carrying case

Mfg. part no. TCMB150ST 46-pc. tool kit contains 23 individual hand tools (including **42H** seizer, **46CG** adjustable wrench, **50CG** 5″ midget slip joint pliers, **53CG** 7″ utility pliers, **51CG** 6″ long nose pliers, **54CG, 55CG, 57CG** 4″, 5″, 5½″ diagonal pliers, **59CG** 8″ chain nose pliers, **86CG** electronic snips, **101S** wire stripper, and **K22** electrician's knife), **WP25** Weller® 25W soldering iron, **24 series** 99® 23 interchangeable screwdriver blades (slotted, Phillips, Allen hex-socket type) and 4 interchangeable hex nutdriver blades. Plus reamer, extension, straight and tee handles, **XL75** 5-pc. offset ratchet screwdriver set, measuring tape, solder and more. All neatly organized in a super tough, hard-sided, black polyethylene attache-style tool case that features rich looking black anodized aluminum hardware. Overall size: 17¾″ x 12⅝″ x 4¾″. **NOTE: mfg. part no. TCMB150MT** *black, hard-sided polyethylene attache-style tool case (no tools included) can also be ordered separately below.*

Mfg. Part No.	Description	Stock No.	Price Each
TCMB150ST	46-Pc. Tool Kit in Hard-Sided Polyethylene Attache Case	72R7000	767.60
TCMB150MT	Hard-Sided Polyethylene Attache Case (No Tools), 17-3/4″ x 12-5/8″ x 4-3/4″	10B325	256.90

Mfg. part no. TCS200ST 37-pc. tool kit contains 10 individual hand tools (**43H** 6″ curved nose seizer, **46CG** 6″ adjustable wrench, **51CG** 6-1/2″ long nose pliers, **53CG** 7″ utility pliers, **64CG** 4″ diagonal pliers, **55CG** 5″ diagonal pliers, **57CG** 5-1/2″ needle nose pliers, **86CG** electronic snips, **101S** wire stripper-cutter, and **K22** electrician's knife) and **27 series** 99® 16 interchangeable screwdriver blades (slotted, Phillips and hex socket) and 7 interchangeable hex nutdriver blades. Plus reamer, extension and straight and tee handles. All neatly packaged in a rugged, soft-sided, black Cordura® carrying case that features heavy-duty zipper closure, soft leather wrapped handles and one large outer pocket on one side, two smaller outer pockets on opposite side. Overall size: 13-1/2″ x 10-1/2″ x 2-3/8″.

TCS200ST	37-Pc. Tool Kit in Cordura® Soft-Sided Carrying Case	72R7001	452.40

(66397)

PROFESSIONAL TOOL KITS FOR TECHNICIANS, SERVICEMEN AND FIELD ENGINEERS

Xcelite®

TCMB100/ST

TCA100/ST

86-Pc. Professional Tool Kits Contain 53 Popular Tools:
- Including pliers, cutters, wrenches, snips, screwdrivers and nutdrivers
- 31 **Series 99®** interchangeable screwdriver and nutdriver blades and handles
- Two specialized screwdriver and nutdriver kits

46-Pc. Professional Tool Kit Contains 23 Popular Tools:
- Including pliers, cutters, screwdrivers and nutdrivers
- Weller® **WP25** 25W soldering iron
- 24 **Series 99®** interchangeable screwdriver and nutdriver blades and handles
- Offset ratchet screwdriver set, measuring tape and solder

TCS100/ST

TC series attached tool cases are durable, charcoal-brown leather-grained Marvelon vinyl featuring solid brass hardware, padded handle, removable 3-panel hinged tool pallet in lid, plus anodized aluminum divider and additional tool pallet in bottom. **TCMB series** tool case is super-tough, black polyethylene with rich-looking black anodized aluminum hardware, removable 3-panel hinged tool pallet in lid and additional tool pallet in bottom. **TCA series** tool cases are high-tech aluminum with smooth finish featuring a keyless combination lock, chrome-plated latches, tongue-and-groove lid with rubber gasket for a positive seal, removable tool pallet in lid and additional tool pallet in bottom. **TCS series** tool case is softsided, rugged Cordura® with dual heavy-duty zippers, leather wrapped handles and three outside storage pockets.

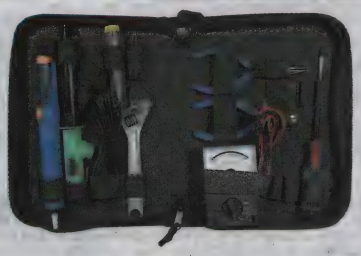
Mfg. Part No.	Description	Stock No.	Price Each
TCMB100/ST	86-Pc. Kit with Polyethylene Tool Case — 17¾″ x 12⅝″ x 5¾″	50F1839	940.20
TCA100ST	86-Pc. Kit with Aluminum Tool Case — 17⅝″ x 12⅝″ x 7⅞″	50F1837	1093.10
TCA150/ST	46-Pc. Kit with Aluminum Tool Case — 17⅝″ x 12⅝″ x 5¾″	50F1838	849.00
TCS100/ST	86-Pc. Kit with Cordura® Tool Case — 17″ x 12″ x 3¼″	50F1842	862.20

(5736)

ELECTRONIC TOOL KITS

DURATOOL

22-8820



22-8815

9-PIECE ELECTRONIC TOOL SET
Kit contains: 30W soldering iron, desoldering pump, solder, 6″ adjustable wrench, 6″ long nose pliers, 5″ diagonal cutting pliers, VOM meter measures AC/DC voltage DC amps and ohms (includes battery), #2 phillips screwdriver, slotted screwdriver and padded zipper carry case.

12-PIECE ELECTRONIC TOOL SET
Kit contains: 30W soldering iron with cover, desoldering pump, 4.5″ long nose pliers, 4.5″ diagonal cutting pliers, two slotted screwdrivers, two phillips screwdrivers, slotted precision screwdriver, phillips precision screwdriver, utility knife and padded zipper carry case.

22-8825

25-PIECE ELECTRONIC TOOL SET
Kit contains: 30W soldering iron with cover, desoldering pump, six piece screwdriver set (three slotted, three phillips), two precision screwdrivers (slotted/phillips), 5″ long nose pliers, 5″ diagonal cutting pliers, IC puller, Wire stripper that strips up to 10AWG wire, DMM measures AC/DC voltage, DC amps, ohms, hFE transistors (includes battery and test leads), eight piece hex key wrench set (1.5-6.0mm), long nose tweezers and padded zipper carry case.

Mfg. Part No.	Description	Stock No.	Price Each 1-2
22-8815	9-Piece Electronic Tool Kit	95K9116	27.02
22-8820	12-Piece Electronic Tool Kit	99M1267	22.91
22-8825	25-Piece Electronic Tool Kit	99M1268	42.75

(116807)

MINIATURE TOOL KITS

DURATOOL

TL10406

Tools are all made from chrome vanadium steel and are supplied in a rigid, blow molded case. The kit contains bit assortment: PH1, PH2, PH3, slotted 5, 6 and 7mm, torque 10, 15 and 20mm, adapter, magnetic tip handle, 5″ mini long nose pliers, 4.5″ mini side cutters, 115mm tweezers, ¼″ drive sockets: 5,6,8 and 10mm, extension bar, precision screwdrivers: 4 slotted and 2 Phillips.

Mfg. Part No.	Description	Stock No.	Price Each 1-49
TL10406	Mini Tool Kit, 26 pc	01N3562	7.46

(116806)

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(196562)

PLIER AND ELECTRONIC TOOL SETS

KNIPEX

00 19 57: 4-PIECE PRECISION RETAINING RING PLIERS SET

Practical, adjustable quick release fastener. Tool roll made of hard-wearing polyester fabric. Set includes: four commonly used, straight precision circlip pliers internal pliers for sizes 1/2 to 1″ and 3/4 to 2-3/8″ and external pliers for sizes 5/16 to 1″ and 3/4 to 2-3/8″ for highest requirements.

00 20 11: 3-PIECE ASSEMBLY PLIERS SET

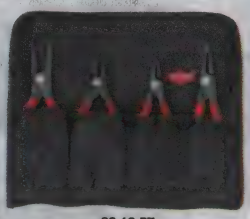
Two-color dual component handles. Box set includes: 1 ea. 7″ cushion grip combination pliers, 1 ea. 8″ cushion grip long nose side cutting pliers and 1 ea. 6¼' diagonal cutter.

00 20 15: 4-PIECE INSULATED TOOL SET

All pliers VDE tested according to DIN EN/IEC 60900 1000V, pliers finish 6. Case made of high quality, shock-resistant plastic with foam insert for variable equipment. Outside dimensions (H x W x D): 65 x 327 x 275 mm. Box set includes: 1 ea. combination pliers, wire stripper, long nose side cutting pliers and diagonal cutter. Set contents are all insulated tools: 1ea. 7″ combination pliers, 1 ea. 6-1/4″ wire stripper, 1 ea. 8″ long nose pliers, 1 ea. 6-1/4″ diagonal.

00 20 18: 8-PIECE ELECTRONICS TOOL SET

Plastic, shock-resistant storage case, with foam insert. Set includes: 2 electronics pliers and 6 electronics screwdrivers. Set contents: 1 ea. 4½″ half round tip electronics pliers, 1 ea. 4½″ round head diagonal small bevel; 1 ea. precison slotted screwdrivers 0.4 x 2.5 mm, 0.5 x 3 mm, 0.6 x 3.55 mm, 0.8 x 4.0 mm; 1 ea. precision phillips screwdrivers #0 x 60 mm, #1 x 80 mm.



00 19 57

00 20 11

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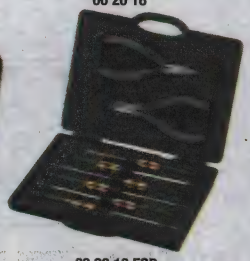


00 20 18 ESD

00 20 17: 6-PIECE ESD ELECTRONIC PLIERS SET

Case made of hard-wearing polyester fabric, pliers are held by elastic band, with zip fastener. Set includes: 6 ESD electronics pliers, electrically discharging version. Set contents: 1 ea. ESD electronic pliers 4-1/2″ flat tip, 4-1/2″ half round tip, 4½″ round tip; 1 ea. ESD 4-3/4″ oblique end cutter; 1 ea. ESD 4-1/2″ round head diagonal small bevel, 4½″ pointed head no bevel diagonal.

00 20 18 ESD: 8-PIECE ESD ELECTRONICS TOOL SET

Plastic, shock-resistant storage case, with foam insert. Set includes: 2 electronics pliers and 6 electronics screwdrivers, ESD electrically discharging version. Set contents: 1 ea. ESD 4-1/2″ half round tip electronics pliers, 1 ea. ESD 4-1/2″ round head diagonal small bevel; 1 ea. ESD precison slotted screwdrivers 0.4 x 2.5 mm, 0.5 x 3 mm, 0.6 x 3.55 mm, 0.8 x 4.0 mm;1 ea. ESD precision phillips screwdrivers #0 x 60 mm, #1 x 80 mm.

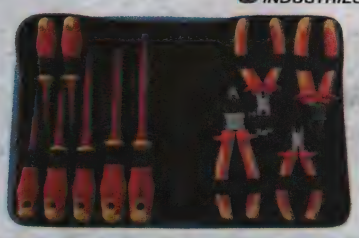
Mfg. Part No.	Description	Stock No.	Price Each
00 19 57	4-Pc. Precision Retaining Ring Pliers Set	06R6251	124.56
00 20 11	3-Pc. Assembly Pliers Set	06R6252	102.58
00 20 15	4-Pc. Insulated Tool Set	06R6253	220.42
00 20 18	8-Pc. Electronic Tool Set	06R6256	213.22
00 20 17	6-Pc. ESD Electronic Pliers Set	06R6255	377.74
00 20 18 ESD	8-Pc. ESD Electronic Tool Set	06R6257	237.52

(147251)

11-PC. INSULATED TOOL KIT

JONARD INDUSTRIES CORP.

11-Pc. insulated tool kit includes: phillips head screwdrivers #1 x 3″, #2 x 4″, #3 x 6″; slotted head screwdrivers 3/32 x 3″, 1/8 x 4″, 1/4 x 6″, 5/16 x 7″ ; linemans plier 7 1/4″; long nose plier 6 1/4″; diagonal plier 6 1/4″ ; wire stripper 6 1/2″.



Mfg. Part No.	Description	Stock No.	Price Each
TK-110INS	11-Pc. Insulated Tool Kit	76M1022	139.71

(139053)

PTX SERIES WIRE-WRAPPING AND UNWRAPPING TOOLS AND KITS

OK Industries Div of Jonard Industries

RoHS Compliant Available

- Ergonomic design minimizes repetitive stress
- NiMH battery-operated or 115V electric-powered versions
- Rugged construction for field use
- Wraps and unwraps 18 to 30 AWG wire
- Rated maximum usage: 2,500 cycles/day

Mfg. part no. PTX-KIT1 kit includes tool, battery charger and two NiMH batteries. **Mfg. part no. PTXKIT1DH** includes all **mfg. part no. PTX-KIT1** kits content plus **mfg. part no. DFB224** wrap/unwrap bit set and Cordura tool pouch. Individual tools and accessories available separately; *go online or call.*

PTX-KIT1 PTX-KIT1DH PTX-1 PTX-1BF

Mfg. Part No.	Description	Stock No.	Price Each
PTX-KIT1	Battery-Operated Wrap/Unwrap Tool Kit (Tool, Charger and 2 NiMH Batteries)	04M4596	386.67
PTX-KIT1DH	Battery-Operated Wrap/Unwrap Tool Kit (Tool, Charger, 2 NiMH Batteries, Bit and Sleeve Set and Tool Pouch)	04M4597	569.06
PTX-1	115V Electric-Powered Wrap/Unwrap Tool	04M4598	294.27
PTX-1BF	115V Electric-Powered Wrap/Unwrap Tool with Backforce	96C2377	310.89

(68028)

DUAL-FUNCTION WRAP/ UNWRAP BIT AND SLEEVE SETS

RoHS Compliant Available

OK Industries Div of Jonard Industries

- Combines both wrap and unwrap functions into 1 bit/ sleeve set
- Eliminates the need to carry extra tools or bits
- Wraps or unwraps 22-24 AWG or 24-26 AWG wire
- Used with **PTX series** tools

DFB224

The bit is precision-machined for high-quality wrapping in the clockwise direction, but also includes the removal mechanism that is used to unwrap when operated counter-clockwise.

Mfg. Part No.	Description	Stock No.	Price Each
DFB224	Wrap/Unwrap Bit and Sleeve Set, 22-24 AWG	30C2716	143.73
DFB2426	Wrap/Unwrap Bit and Sleeve Set, 24-26 AWG	30C2717	143.73

(68029)

MANUAL WIRE-WRAPPING TOOLS

RoHS Compliant Available

OK Industries Div of Jonard Industries

G100/R3278INS G100/R3278 G200/R3278 G100/R3278FL

- **G100/R3278** offers durability with rugged aluminum construction
- **G100/R3278INS** provides 1000V of dielectric strength across most of the aluminum housing
- **G200/R3278** Lexan housing is lightweight and lower cost
- **G200/R3278FL** insulated model with LED flashlight

These tools are designed to make full use of bits and sleeves accommodating wire sizes 18 – 32 AWG for wire wrapping applications

Mfg. Part No.	Description	Stock No.	Price Each
G100/R3278	Aluminum	10F7585	185.77
G100/R3278INS	Aluminum (Insulated)	96C0343	187.91
G100/R3278FL	Wire Wrapping Gun with LED Flashlight	71K4495	185.52
G200/R3278	Lexan™	10F7586	139.98

(5872)

DURATOOL AT NEWARK ELEMENT14

For your production and facilities needs, from soldering stations to tool sets & more.

newark.com/duratool

(212563)

WIRE WRAP

WIRE-WRAPPING BITS AND SLEEVES

RoHS Compliant Available

OK Industries Div. of Jonard Industries

3" BITS

Mfg. Part No.	AWG	Dimensions (in.) Insul. Dia.	Terminal Dia.	Terminal Depth	Terminal Diagonal Min.	Terminal Diagonal Max.	Stock No.	Price Each
● KB22	22AWG	...	0.075	0.75	0.054	0.073	10F7512	61.06
● KB224-1	24-22	...	0.075	1	0.054	0.073	41B5408	61.06
● KB224	24-22	...	0.075	0.807	0.054	0.073	10F7513	60.36
● KB24	24AWG	...	0.075	0.75	0.055	0.074	10F7514	57.60
WB2426M	26-24	0.046	0.075	0.75	0.054	0.073	41B6162	60.96
● KB26	26AWG	...	0.075	1	0.058	0.073	10F7515	61.06
WB28SHM	28AWG	0.030	0.036	0.75	0.031	0.035	10F7517	64.62
SB30MSH-B	30AWG	0.027	0.036	0.75	0.031	0.035	10F7518	71.80
WB3032M	32-30	0.030	0.04	0.75	0.034	0.038	52F1331	63.89

3" SLEEVES

Mfg. Part No.	Use With Bit No.	AWG	Stock No.	Price Each
● P2224	Bit No. KB2075, KB22, KB224-1, KB224, WB2426M	26AWG to 20AWG	10F7519	26.36
● P2426	Bit No. KB24, KB26	26AWG to 24AWG	10F7520	26.71
● P3032	Bit No. WB28SHM, SB30MSH-B, WB3032M	32AWG to 28AWG	10F7522	46.85

(5874)

HAND WRAPPING, STRIPPING AND UNWRAPPING TOOLS

OK Industries Div. of Jonard Industries

Mfg. Part No.	Use With	Stock No.	Price Each
WSU-2224	22-24 AWG on Standard 0.03 x 0.06" and 0.045" Sq. Posts	10F7534	58.19
WSU-24M	Modified Wrap for 24 AWG on 0.045" Sq. Posts	50B6108	54.90
WSU-26M	Modified Wrap for 26 AWG on 0.045" Sq. Posts	70B5873	57.54
WSU-30M	Modified Wrap for 30 AWG on 0.025" Sq. Posts	10F7535	40.05
WSU-30	Regular Wrap for 30 AWG on 0.025" Sq. Posts	10F7536	39.71

(5829)

KYNAR™ PRE-CUT AND PRE-STRIPPED WIRE WRAPPING WIRE

UL

RoHS Compliant Available

OK Industries Div. of Jonard Industries

- 50 pieces per package
- Kynar™ insulated
- Silver plated copper conductor
- UL listed
- 1" of stripped wire on either end

30 AWG (0.25mm) Pre-Cut/Pre-Stripped Wire 50 Pieces/Pkg.

Insulation Length	Blue Mfg. Part No.	Blue Stock No.	White Mfg. Part No.	White Stock No.	Price per Pkg. 1-4
1.0"	● 30B-50-010	50B6129	● 30-W-50-010	96B9607	11.87
2.0"	● 30-B-50-020	97B2946	● 30-W-50-020	50B6126	12.03
3.0"	● 30-B-50-030	20C0015	● 30-W-50-030	96B9605	13.41
5.0"	● 30-B-50-050	20C0022	● 30-W-50-050	96B9444	13.41

(5920)

HAND WRAPPING/ UNWRAPPING TOOLS

RoHS Compliant Available

OK Industries Div. of Jonard Industries

One tool does the work of two. Switch from wire wrapping to unwrapping in only seconds by changing cap from one end to the other. Compact, convenient tools for use where occasional wraps are required.

REGULAR WRAPPING TYPE

Mfg. Part No.	AWG	Wrap (in.) Diameter	Wrap (in.) Terminal Depth	Unwrap (in.) Diameter	Unwrap (in.) Terminal Depth	Stock No.	Price Each
● HW-UW-20	20AWG	0.075	1	0.07	1	10F7524	104.43
● HW-UW-224-1	24AWG to 22AWG	0.075	1	0.07	1	41B5364	103.25
● HW-UW-2426	26AWG to 24AWG	0.075	0.75	0.07	1	41B5373	104.43
● HW-UW-26	26AWG	0.075	1	0.07	1	10F7526	104.43
MODIFIED WRAPPING TYPE							
● HW-UW-26SM	26AWG	0.04	0.75	0.038	1	10F7527	117.48
● HW-UW-2829M	29AWG to 28AWG	0.04	0.075	0.038	1	18C3951	118.50
● HW-UW-30	30AWG	0.036	0.75	0.038	1	10F7528	118.50

(5921)

HAND UNWRAPPING TOOLS

OK Industries Div. of Jonard Industries

Fig. 1

Fig. 2

Fig. 3

Use to easily remove solderless wrapped connections.

Mfg. Part No.	AWG	Fig.	Hand	Terminal Diameter x Depth	Stock No.	Price Each
UW-1	20-26	1	Left	0.070 x 1.000"	10F7660	35.93
UW-2	20-26	3	Left, Right	0.070 x 1.000"	10F7661	41.53
UW-4	20-26	2	Left	0.070 x 2.360"	10F7662	46.17
UW-093R	24-32	1	Left	0.038 x 1.000"	10F7664	35.53
UWD-93-93	24-32	3	Left, Right	0.038 x 1.000"	10F7665	41.53

(5877)

HAND WRAPPING TOOLS

RoHS Compliant Available

OK Industries Div. of Jonard Industries

HW-224 to HW26

*HW30

Compact, convenient for use where occasional wraps are required and where power wrapping tools are not practical. *A complete line of hand wrapping tools are available; go online or call.*

REGULAR WRAPPING TYPE

Mfg. Part No.	AWG	Terminal Dia. (In.)	Terminal Depth (In.)	Stock No.	Price Each
● HW-224	24AWG to 22AWG	0.075	0.807	10F7655	86.18
● HW-26	26AWG	0.075	1	10F7657	86.18
MODIFIED WRAPPING TYPE					
● HW-30*	30AWG	0.036	0.75	10F7659	89.23

*Tool is recommended for .025" (0.63mm) square terminals on .100" (2.54mm) centers

(5830)

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Affordable, performance board level & box build components at

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(212569)

M4™ 1/4″ HEX 2-SPEED SCREWDRIVER KIT

- Voltage: 4V
- Speed: 0 – 200 / 0 – 600 RPM
- Peak Torque: 44 in-lbs
- Chuck Type: ¼″ Hex Quick Change
- Tool Weight: 1.0 lbs
- Tool Length: 9.6″
- Battery: REDLITHIUM™ 2.0

2101-21

Featuring 44 in-lbs. of peak torque and a 21-position clutch with auto shut-off, the new screwdriver offers improved torque control during repetitive applications. Two speeds, 200 and 600 RPM, offer further user control for precision work. **Mfg. part no. 2101-21** kit contains: **2101-20** ¼″ Hex 2-Speed Screwdriver, (1) 48-11-2001 M4™ REDLITHIUM™ 2.0 compact battery pack. **Mfg. part no. 2101-22** kit contains: **2101-20** ¼″ Hex 2-Speed Screwdriver, (2) **48-11-2001** (1) M4™ REDLITHIUM™ 2.0 compact battery pack, and both kits contain #2 phillips bit and **48-59-2001** charger.

Mfg. Part No.	Description	Stock No.	Price Each
2101-20	M4™ 1/4″ Hex Screwdriver	66W5473	118.00
2101-21	M4™ 1/4″ Hex Screwdriver Kit	72W1442	182.00
48-11-2001	M4™ 2.0 Battery	72W1444	61.00
48-59-2001	M4™ Charger	72W1445	70.00

(209631)

CORDLESS 12V SUB-COMPACT MICRO DRIVER DRILL

- Quick bit-loading ¼ in. hex chuck for bit insertion and release with one hand
- Metal gear housing for job site durability — 0 to 500 rpm
- Sub-compact 7″ length fits in tight areas for increased convenience
- Delivers 100 in.-lbs. of torque
- Battery fuel gauge for displaying remaining run-time
- Built-in LED for illumination of dark work spots
- Variable speed trigger for output power control
- Overmolded side and grip for secure grip and work surface protection
- 5-year manufacturer's warranty

Mfg. part no. 2401-22 sub-compact micro driver drill has the power to drive the majority of common small fasteners, and the run-time of full day screw driving without recharging. Comes complete with: #2 Phillips 1/4″ hex insert bit, 6F-7R ¼″ hex insert bit, 12V Li-Ion battery pack, 12V battery charger and storage bag.

Mfg. Part No.	Description	Stock No.	Price Each
2401-22	Cordless 12V ¼″ Sub-Compact Micro Driver Drill	96M8784	188.00

(113774)

M18 FUEL 1/4″ HEX IMPACT DRIVER KIT

- POWERSTATE™ brushless Mmotor
- REDLITHIUM™ battery technology
- REDLINK PLUS™ intelligence

M18 FUEL™ 1/4″ hex impact driver delivers maximum performance at only 5½" in length and 3 lbs. POWERSTATE™ Brushless Motor for up to 3X longer motor life and increased power. REDLINK PLUS™ Electronic Intelligence allows the operator to choose between 3 fastening modes with Milwaukee's proprietary DRIVE CONTROL™ feature. In addition, REDLITHIUM™ battery packs provide up to 50% more run time and operate down to -18°C /0°F. Kit includes M18 FUEL™ ¼″ hex impact driver, (2) M18™ REDLITHIUM™ compact battery packs, 30-minute multi-voltage charger, belt clip and carrying case.

Mfg. Part No.	Description	Stock No.	Price Each
2653-22CT	M18 FUEL 1/4″ Hex Impact Driver Kit	05W4992	304.50

(206200)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

M18 FUEL 1/2″ HAMMER DRILL/DRIVER KIT

- POWERSTATE™ brushless Mmotor
- REDLITHIUM™ battery technology
- REDLINK PLUS™ intelligence

M18 FUEL™ Hammer Drill/Driver delivers up to 725 in lbs. of torque and with POWERSTATE™ brushless motor up to 10X longer motor life for maximum durability. M18™ REDLITHIUM™ batteries provide longer battery life, with over 5X more recharges. REDLINK PLUS™ electronics provide total system communication with overload protection. Kit includes M18™ FUEL ½″ drill/driver, (2) M18™ HIGH CAPACITY REDLITHIUM™ battery packs, multi-voltage charger and carrying case.

Mfg. Part No.	Description	Stock No.	Price Each
2604-22	M18 FUEL 1/2″ Hammer Drill/Driver Kit	05W4991	388.57

(206199)

M12 CORDLESS SUB-COMPACT BAND SAW

- One-handed cuts
- Powerful motor
- 1-5/8″ cut capacity
- Meets OSHA guarding requirements
- LED light
- Blade tension adjustment

M12™ sub-compact band saw is compact and lightweight at less than half the weight and size compared to a traditional deep cut band saw. The M12™ band saw weighs only 6.75 lbs and 12" in length, making it ideal for overhead or one-handed cutting applications. Includes sub-compact band saw tool, 30-minute charger, M12™ XC high capacity REDLITHIUM™ battery, sub-compact portable band saw blade and carrying case.

Mfg. Part No.	Description	Stock No.	Price Each
2429-21XC	M12 Cordless Sub-Compact Band Saw	94T3808	257.50

(206197)

3 PK. 14 AND 18 TPI COMPACT PORTABLE BAND SAW BLADES

- Matrix II high speed steel teeth deliver maximum durability
- Alloy backing steel provides extended blade life
- Precision formed teeth create fast, clean cuts
- For cutting common materials 5/32″ - 3/16″ thick and very hard materials 3/16″ - 5/16″ thick

Compact and sub-compact portable band saw blades are designed to maximize performance of Milwaukee compact and Milwaukee M12 cordless sub-compact band saws.

Mfg. Part No.	Description	Stock No.	Price Each
48-39-0519	3 Pk. 14 TPI Compact Portable Band Saw Blade	90R5440	34.25
48-39-0572	3 Pk. 18 TPI Sub-Compact Portable Band Saw Blades	05W4993	19.95

(206206)

M18 CORDLESS LITHIUM ION BAND SAW KIT

- 45% lighter than deep cut
- 3¼″ cut capacity
- Tool-free adjustable material shoe
- LED work Light
- Blade ejection system
- Drop resistant pulley guard
- Cast aluminum gear case

M18™ Cordless LITHIUM-ION Band Saw Kit is the perfect tool for cutting metal in-place, overhead or in tight spaces.With 3¼″ cut capacity and low vibration, this saw delivers the cleanest cuts on the most common materials including strut, 2-1/2″ conduit, 3″ angle iron, 3″ copper and threaded rod without ruining the threads. Kit includes: M18™ cordless LITHIUM-ION band saw, (2) M18™ XC high capacity RED LITHIUM™ batteries, 1-hr.charger, blade and case.

CONTINUED

M18 CORDLESS LITHIUM ION BAND SAW KIT (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
2629-22	M18 Cordless Lithium Ion Band Saw Kit	90R4171	463.25

(206202)

M12 HACKZALL CORDLESS LITHIUM-ION RECIPRICATING SAW

Milwaukee

- Only 11″ and 2.6 lbs.
- M12™ RED LITHIUM™ battery
- Keyless QUIK-LOK™ blade clamp
- All-metal gear case
- Variable speed trigger
- Battery Fuel Gauge
- Accepts both HACKZALL™ and SAWZALL® style blades
- Built-In LED light

M12™ cordless LITHIUM-ION recipricating saw features compact and light weight design for superior control and versatility in tight spaces. A powerful motor delivers 0-3,000 strokes per minute and a 1/2" stroke length allows for fast cutting through a wide range of material such as drywall, wood, and PVC. Includes HACKZALL™ M12™ cordless LITHIUM-ION recip. saw, (2) M12™ RED LITHIUM™ batteries, 30-minute charger, (2) Hackzall™ blades and carrying case.

Mfg. Part No.	Description	Stock No.	Price Each
2420-22	M12 Hackzall Cordless Lithium-Ion Recip Saw	90R3628	194.25

(206196)

M18 SAWZALL CORDLESS LITHIUM-ION RECIPRICATING SAW

Milwaukee

- M18™ XC high capacity RED LITHIUM™ battery
- Patented gear-protecting clutch
- Lever action QUIK-LOK™ blade clamp
- Battery fuel gauge
- Variable speed trigger

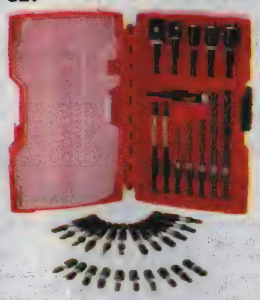
M18™ Cordless LITHIUM-ION SAWZALL® powered by an M18™ XC High Capacity RED LITHIUM™ battery offers up to 75 more cuts per charge and is designed to cut up to 30% faster with less vibration. Kit includes Sawzall® M18™ cordless LITHIUM-ION recip. saw, (2) M18™ XC high capacity RED LITHIUM™ batteries, M18™ charger, general purpose SAWZALL® blade and carrying case.

Mfg. Part No.	Description	Stock No.	Price Each
2620-22	M18 Sawzall Cordless Lithium Ion Recip Saw	90R4166	426.93

(206201)

SHOCKWAVE 35 PC. DRILLING/DRIVING BIT SET

Milwaukee



- Geometric design provides the shock absorption
- Proprietary steel and heat treat process for maximum strength and durability
- Forged tips for maximum grip.

Shockwave™ Impact Duty accessory line is not only ideal for heavy duty impact applications, but delivers a full system solution for all the user's drilling and fastening needs.

Mfg. Part No.	Description	Stock No.	Price Each
48-32-4402	Shockwave 35 Pc. Drilling and Driving Bit Set	26T3541	40.00

(206204)

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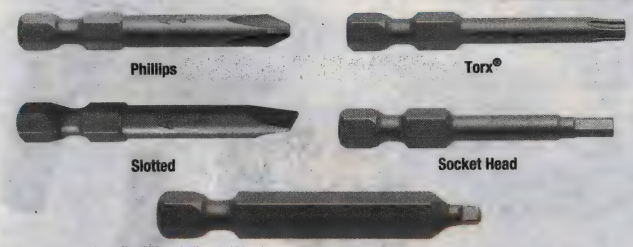
(196545)

¼″ HEX DRIVE POWER BITS

APEX



PHILLIPS

Mfg. Part No.	Point Size	Length	Stock No.	Price Each
4910X	#0	1 15/16″	97H3822	4.09
4910-AX	#0	2¾″	97H3820	5.61
4910-BX	#0	3½″	97H3821	9.54
4910-CX	#0	6″	64J2744	12.31
491X	#1	1 15/16″	97H3819	2.13
491-AX	#1	2¾″	97H3816	2.17
491-BX	#1	3½″	97H3817	2.80
491-CX	#1	6″	97H3818	5.96
492X	#2	1 15/16″	97H3826	1.61
492-AX	#2	2¾″	97H3823	1.89
492-BX	#2	3½″	97H3824	2.36
492-CX	#2	6″	97H3825	5.24

Torx®

Mfg. Part No.	Driver Size	Length	Stock No.	Price Each
49-B-TX-05	T-5	3½″	64J2664	44.66
49-TX-06	T-6	1 15/16″	97H3810	9.82
49-A-TX-06	T-6	2¾″	97H3804	10.60
49-TX-07	T-7	1 15/16″	97H3811	10.21
49-A-TX-07	T-7	2¾″	97H3805	11.31
49-TX-08	T-8	1 15/16″	97H3812	9.82
49-A-TX-08	T-8	2¾″	97H3806	10.79
49-B-TX-08	T-8	3½″	64J2666	11.93
49-C-TX-08	T-8	6″	64J2688	14.72
49-A-TX-09	T-9	2¾″	97H3807	11.33
49-TX-10	T-10	1 15/16″	97H3814	6.27
49-A-TX-10	T-10	2¾″	97H3808	7.08
49-B-TX-10	T-10	3½″	64J2668	8.25
49-C-TX-10	T-10	6″	64J2691	11.55
49-TX-15	T-15	1 15/16″	97H3815	5.86
49-A-TX-15	T-15	2¾″	97H3809	7.10

SLOTTED

Mfg. Part No.	Screw Size	Length	Stock No.	Price Each
320-000X	1F-2R	1 15/16″	97H3801	3.95
323-000X	1F-2R	3″	13J0803	10.48
324-000X	1F-2R	4″	64J2137	8.87
328-000X	1F-2R	6″	13J0805	11.91
320-00X	2F-3R	1 15/16″	97H3800	3.95
323-00X	2F-3R	3″	64J2127	5.24
324-00X	2F-3R	4″	64J2136	10.34
328-00X	2F-3R	6″	64J2181	11.91
320-0X	3F-4R	1 15/16″	97H3799	3.81
323-0X	3F-4R	3″	64J2126	5.52
324-0X	3F-4R	4″	64J2135	10.21
328-0X	3F-4R	6″	64J2180	11.91
320-1X	4F-5R	1 15/16″	97H3802	3.42
320-2X	5F-6R	1 15/16″	97H3803	3.29

SOCKET HEAD

Mfg. Part No.	Hex Size	Length	Stock No.	Price Each
AM-01-A	0.05″	1 15/16″	70M9785	16.38
AM-02	1/16″	1 15/16″	97H3793	7.28
AM-02-A	5/64″	1 15/16″	97H3794	7.28
AM-03	3/32″	1 15/16″	97H3795	7.28
AM-03-3	3/32″	3″	63J8695	31.87
AM-03-6	3/32″	6″	63J8696	40.15
AM-03-A	7/64″	1 15/16″	97H3796	7.56
AM-04	1/8″	1 15/16″	97H3797	6.98
AM-04-3	1/8″	3″	63J8697	31.87
AM-04-4	1/8″	4″	63J8699	31.63
AM-04-A	9/64″	1 15/16″	97H3798	7.05

➤ CONTINUED ➤

¼″ HEX DRIVE POWER BITS (CONT.)

SQUARE RECESS

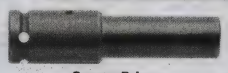
Mfg. Part No.	Point Size	Length	Stock No.	Price Each
954-1X	3/32″	1 15/16″	64J3731	2.12
954-A-1X	3/32″	2¾″	64J3720	2.36
954-2X	⅛″	1 15/16″	64J3732	1.82
954-A-2X	⅛″	2¾″	64J3721	2.13

(78704)

HEX AND FEMALE SQUARE DRIVE BIT HOLDERS

APEX

¼″ Hex Magnetic



Square Drive

¼″ HEX DRIVE BIT HOLDERS

Mfg. Part No.	Description	Length (in.)	Stock No.	Price Each
490	¼″ Hex Non-Magnetic	54	64J2722	6.64
M-490-2	¼″ Hex Magnetic	51	97H3832	17.56
M-490-NR	¼″ Hex Magnetic, No Lock Ring	75	72R4583	34.90
M-490	¼″ Hex Magnetic	75	97H3831	16.23
M-497	¼″ Hex Magnetic, 3/8″ (9.5mm) Reduced Dia.	79	64J0158	23.90
M-490-4	¼″ Hex Magnetic	102	64J0155	29.16
FEMALE SQUARE DRIVE BIT HOLDERS				
825	¼″ Female Square Drive, Non-Magnetic	25	97H3833	9.32

(78714)

¼″ HEX DRIVE INSERT BITS

APEX

Phillips

Torx®

Socket Head

Square Recess Turned Body

PHILLIPS

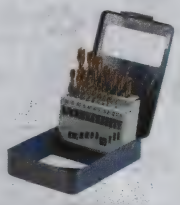
Mfg. Part No.	Size	Length	Stock No.	Price Each
446-0X+	#0	1″	97H3644	2.02
440-1X	#1	1″	97H3636	0.87
446-1X+	#1	1″	97H3645	1.09
440-2X	#2	1″	97H3637	0.93
446-2X+	#2	1″	97H3646	1.05
TORX®				
440-TX-05X	T-5	1″	07J0589	13.16
440-TX-06X	T-6	1″	97H3629	7.10
440-TX-07X	T-7	1″	97H3630	4.30
440-TX-08X	T-8	1″	97H3631	3.73
440-TX-08-H*	T-8-H	1″	64J2309	8.46
440-TX-10X	T-10	1″	97H3633	3.89
440-TX-15X	T-15	1″	97H3634	3.73
440-TX-20X	T-20	1″	97H3635	3.73
SOCKET HEAD				
185-000X	0.05″	1″	64J1742	10.82
185-0X	5/64″	1″	97H3622	3.69
185-1X	3/32″	1″	97H3624	3.69
185-9X	7/64″	1″	97H3628	4.19
185-10X	9/64″	1″	97H3625	3.59
SQUARE RECESS TURNED BODY				
1950-1X	3/32″	1 15/16″	64J1782	3.42
1950-2X	⅛″	1 15/16″	64J1783	3.02

+Limited Clearance Phillips bits for shallow screw recesses; *Tamper-Resistant Torx® bits accept post in the center of the recess of tamper-resistant Torx® screws

(78709)

METRIC DRILL BIT SETS

DURATOOL



TL10449

TL10441

TL-10516

TL10519

19-PIECE TITANIUM DRILL BIT SET
Titanium nitride coated drill bit set with advanced split point for drilling wood and plastic. Sizes include: 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8, 8.5, 9, 9.5 and 10mm.

20-PIECE DRILL BIT SET, HSS MICRO
Titanium coated. For power drill use. Sizes include: 0.3. 0.35. 0.4. 0.45. 0.5. 0.55. 0.6. 0.65. 0.7. 0.75. 0.8. 0.85. 0.9. 0.95. 1.0. 1.2. 1.3. 1.4. 1.5 and 1.6mm.

48-PIECE DRILL BIT SET
13pcs HSS Titanium coated drill set: 1.5, 2, 2.5, 3, 3.2, 3.5, 4, 4.5, 4.8, 5, 5.5, 6, 6.5mm; 4pcs Masonry drill: 3, 5, 6, 10mm; 5pcs Wood flat drill: 10, 13, 16, 19, 22mm; 4pcs Hole saws: 32, 38, 45, 54mm; 1pc Hole saw adaptor; 8pcs 50mm CRV bits; 4pcs 38mm CRV bits; 7pcs Nut drivers: 5, 6, 7, 8, 9, 10, 11mm; 2pcs Screw finder; Blow molded carry/storage case.

100-PIECE DRILL BIT SET
21pcs HSS Titanium coated drills: 1.0, 1.5, 2.0, 2.5, 3.0, 3.2, 3.5, 4.0, 4.0, 4.2, 4.5, 5.0, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 9.0, 10.0mm ; 8pcs Masonry drills: 3, 4, 5, 6, 7, 8, 9, 10mm; 8pcs Woodworking drills: 3, 4, 5, 6, 7, 8, 9, 10mm; 6pcs Flat wood drill bits: 14, 16, 18, 20, 22, 24mm; 4pcs Hole saw: 32, 38, 45, 54mm; 1pc Hole saw mandrel; 3pcs Drill stoppers; 3pcs Drill finders: 3, 4, 5mm; 21pcs 25mm length bits: Slotted: 4.5, 5.0, 6.0mm; Phillips: PH1, PH2, PH3; Pozi: PZ1, PZ2, PZ3 ; Torx: T10, T15, T20, T25, T30 ; Hexagon: 3, 4, 5, 6mm; Square: S1, S2, S3; 12pcs 50mm length bits: Slotted: 4.5, 5.0, 6.0mm; Phillips: PH1, PH2, PH3; Pozi: PZ1, PZ2, PZ3; Torx: T10, T15, T20 ; 6pcs Nut drivers: 6, 7, 8, 10, 12, 13mm ; 3pcs Hex key: 2.5, 3.0, 4.0mm; 1pc Magnetic holder; 1pc Screwdriver; 1pc 225mm lever model; 1pc Center dril; Blow molded carry/storage case.

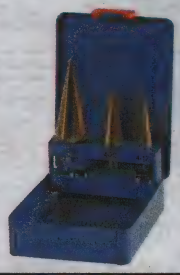
Mfg. Type No.	Description	Stock No.	Price Each 1-49
TL10449	19-Piece Titanium Drill Bit Set	99M1213	13.46
TL10441	20-Piece HSS Micro Drill Bit Set	99M1207	4.57
TL10516	48-Piece Drill Bit Set	99M1215	28.24
TL10519	100 Piece Drill Bit Set	99M1218	47.81

(116726)

STEP DRILL SET

DURATOOL

3-piece, drop forged, high speed steel kit conatins 1 x 4-12mm nine step bit, 1 x 4-20mm nine step bit, 1 x 4-30mm fourteen step bit in a convenient carry case.



Mfg. Part No.	Description	Stock No.	Price Each 1-24
TL10512	3-Piece Step Drill Set	99M1214	61.63

(116760)

BITS & BIT HOLDERS

DURATOOL

- Tip Size:1/4″
- Tip type:Hexagonal
- Shank Size:2.36″

Mfg. Part No.	Description	Stock No.	Price Each 1-99
TL10396	Magnetic Bit Holder, 6″	01N3616	2.69

(116788)

DRILL BITS & ACCESSORIES

KWIK STEPPER™ STEP BIT SET

GREENLEE. COMMUNICATIONS

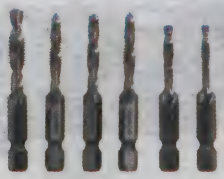
MADE IN USA

Two fluted design step bits for fast, cooler cutting of 10-gauge mild steel plus copper, brass, wood, plastics and laminates. Self-starting tips resist walking or skidding. Multi-hole bits make a broad range of holes with each bit. Three-bit set (34401, 34403 and 36413) for multiple holes from ⅛″ through 1⅛″. In case.

Mfg. Part No.	Stock No.	Price Each
35884	50F6960	238.15

(5678)

DRILL TAP KIT/BITS



GREENLEE. COMMUNICATIONS

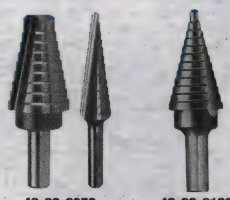
Mfg. part no. DTAPKIT 6-32 to ¼-20 6 piece drill/tap set. Drill bit material thickness 10 gauge. Material type mild steel, copper, brass, aluminum. Shank ¼″ quick change hex, Drill material hardened high speed steel. Drill point split point with web thinning.

Mfg. Part No.	Description	Stock No.	Price Each
DTAPKIT	Drill Tap Kit	96H8409	51.76
DTAP1/4-20	1/4-20NC Drill/Tap Bit	96H8414	9.40
DTAP10-24	10-24NC Drill/Tap Bit	25K2323	9.40
DTAP10-32	10-32NF Drill/Tap Bit	25K2324	9.40
DTAP6-32	6-32NC Drill/Tap Bit	25K2326	9.40
DTAP8-32	8-32NC Drill/Tap Bit	25K2327	9.12

(85018)

HIGH-SPEED STEEL DRILL BITS AND ASSORTMENTS

Milwaukee



48-89-9050 48-89-9130

STEP DRILL BIT SETS — HIGH-SPEED STEEL WITH BLACK OXIDE FINISH

Mfg. Part No.	Description	Stock No.	Price per Set
48-89-8990	3-Pc. Step Drill Bit Set: Mfg. Part Nos. **48-89-9100** 13-Hole, **48-89-9105** 9-Hole, **48-89-8955** 6-Hole	96M8790	77.00
48-89-9050	2-Pc. Step Drill Bit Set: Mfg. Part Nos. **48-89-9100** 13-Hole, **48-89-9105** 9-Hole	95F4187	67.00

HEAVY-DUTY STEP DRILL BITS — HIGH-SPEED STEEL WITH BLACK OXIDE FINISH

Mfg. Part No.	Description	Stock No.	Price Each
48-89-9100	Self-Starting Multi-Hole, 13 Sizes, ¼″ Shank	95F4188	27.44
48-89-9105	Self-Starting Multi-Hole, 9 Sizes, ⅜″ Shank	95F4189	45.44
48-89-9110	Hole-Enlarging Bit, 8 Sizes, ⅜″ Shank	95F4172	48.00
48-89-9130	Self-Starting Multi-Hole, 12 Sizes, ⅜″ Shank	95F4176	62.44

(5826)

21 PC. THUNDERBOLT BLACK OXIDE DRILL BIT SET

Milwaukee

- Thunderbolt® web, provides longer life and faster driller times
- Parabolic flute, clears chips faster
- 135° degree split point, precision start no walking
- 3-Flat secure grip shank, reduces bit slipping in chuck

Thunderbolt® black oxide jobber length drill bits are designed for extreme durability and long life. The Thunderbolt® web features a thicker core than a standard drill bit, which provides ultimate strength and protects against side-load breakage.

Mfg. Part No.	Description	Stock No.	Price Each
48-89-2801	21 Pc. THUNDERBOLT Black Oxide Drill Bit Set	90R8239	36.60

(206205)

ROTARY ACCESSORY SETS

DURATOOL

Rotary accessory have everything you will ever need, it is for use with the multi-tool. Cuts, grinds, sands, drills, sharpens and polishes. Works on metal, wood, ceramic, glass and plastic. Grinds and shapes welds, castings, rivet heads and removes rust. Makes clean cuts through fasteners plastics and woods. Fibre reinforced cut-off wheels can be used to clean and polish precious metals such as jewellery and silverware. Can be used for fine detail work including carving, engraving and routing. Can also be used to remove corrosion from metals. Comes with 0.094″ and 0.125″ shanks.

TL10361

Mfg. Part No.	Description	Stock No.	Price Each 1-24
TL10361	Rotary Accessory set, 150 pc	99M1256	16.83

(116746)

HOLE DEBURRING TOOL

GREENLEE. COMMUNICATIONS

- Cleans burrs from both sides of the hole in seconds, saving time and labor
- Works with any hole size or shape ¾″ or larger
- Use with existing drills, battery or electric powered

SPECIFICATIONS:

Material Thickness:	Deburrs up to 10 gauge
Material Type:	Mild and stainless steel, copper, brass, aluminum
Shank:	Minimum chuck size 3/8"
Cutter Size:	13/16" diameter
Operation:	Run tool clockwise to deburr, counterclockwise to clear chips

Mfg. Part No.	Description	Stock No.	Price Each
11170	Deburring Tool	09J1712	32.47
11180	Replacement Cutter, 3 Pack	09J1713	26.23

(80166)

12-PC. SERIES 99® INTERCHANGEABLE STUBBY BLADE TOOL KIT FOR CORDLESS SCREWDRIVERS

Xcelite®

99PA50

Mfg. part no. 99PA50 Series 99® interchangeable stubby blade screwdriver and nutdriver kit designed for use with cordless, rechargeable screwdrivers. Contains 12 most popular nutdriver and screwdriver sizes: (1) 3/16″ stubby nutdriver, (1) 7/32″ stubby nutdriver, (1) ¼″ stubby nutdriver, (1) 9/32″ stubby nutdriver, (1) 5/16″ stubby nutdriver, (1) 11/32″ stubby nutdriver, (1) ⅜″ stubby nutdriver, (1) 3/16″ stubby slotted screwdriver, (1) ¼″ stubby slotted screwdriver, (1) #1 stubby Phillips screwdriver, (1) 2 stubby Phillips screwdriver, and (1) cordless screwdriver power adapter. All packaged in a convenient vinyl carrying pouch. *Order additional* **mfg. part no. 99PA** *¼″ hex chuck power bit adapters separately below.*

Mfg. Part No.	Description	Stock No.	Price Each
99PA50	12-piece Series 99 Interchangeable Stubby Blade Tool Kit	50F1844	34.60
99PA	¼″ Hex Chuck Power Bit Adapter	50F1815	6.60

(5734)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

PARTICULATE RESPIRATORS

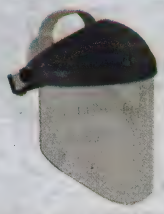
8210 8511 8576

High-quality particulate respirators provide comfortable, reliable worker protection in a wide variety of industrial applications. All particulate respirators are NIOSH approved, lightweight and come with adjustable noseclips. **Mfg. part no. 8210** provides protection against non-oil based aerosol particles. **Mfg. part nos. 8211, 8214, 8511** and **9211** feature 3M™ proprietary Cool Flow™ exhalation valve which offers easy exhalation for cool/dry comfort in work settings that involve heat, humidity, or long periods of wear. **Mfg. part no. 9211** features an innovative, 3-panel design that offers a low-profile for better visibility and conformability to a wide range of face sizes. **Mfg. part no. 8576** disposable P95 particulate respirator helps provide reliable respiratory protection against certain oil and non-oil based particles. The respirator features a carbon layer to remove nuisance levels of acid gases. Other styles available depending on conditions of use; *go online or call.*

Mfg. Part No.	Description	Pkg. of	Stock No.	Price per Pkg. 1-4
8210	N95 Particulate Respirator for Dusty Operations	20	49H8038	24.77
8210 PLUS	N95 Particulate Respirator for Dusty Operations with Braided Headstrap	20	93K5663	28.79
8211-	N95 Particulate Respirator	1	63W2607	4.35
8511	N95 Particulate Respirator with Cool Flow Exhalation Valve for Hot /Dusty Operations	10	31M7908	28.81
9211	N95 Particulate Respirator with 3-Panel Design and Cool Flow Exhalation Valve for Hot/Dusty Operations	10	31M7909	31.19
8214	N95 Particulate Welding Respirator with Faceseal, Cool Flow Exhalation Valve and Nuisance Level Organic Vapor Relief *†	10	31M7906	94.63
8576	P95 Particulate Respirator with Nuisance Level Acid Gas Relief *	1	63W2608	5.97
8247	R95 Particulate Respirator with Nuisance Level Organic Vapor Relief *	20	31M7907	94.25

*Recommended for relief against nuisance levels of organic vapors refers to concentrations not exceeding the OSHA PEL, or applicable exposure limits, whichever is lower.
†Recommended for ozone protection up to 10 times the OSHA PEL or applicable government occupational exposure limits, whichever is lower. Not NIOSH approved for use against ozone.
IMPORTANT: The 3M products in this catalog must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.
(14730)

H8A HEADGEAR/FACESHIELD COMBO SYSTEM

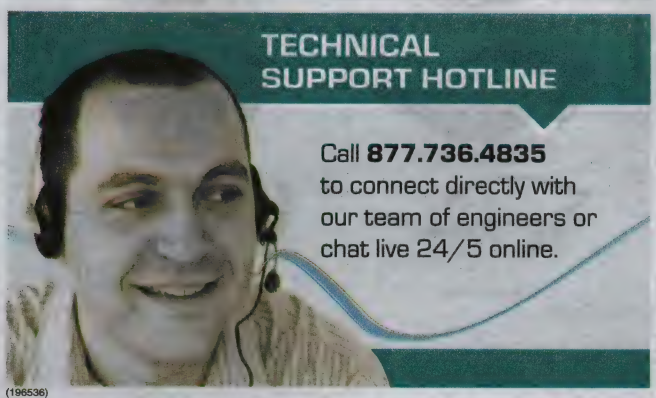


- 5-position crown strap for additional support and comfort
- Meets the high-impact requirements of ANSI Z87.1-2003

H8A a combination headgear and faceshield safety system. Includes H8A ratchet headgear and WP96 polycarbonate faceshield. Adjustable ratchet suspension. Molded faceshield provides impact protection. Requires protective eyewear, sold separately. *Order* **mfg. part no. 82701-00000** *clear polycarbonate replacement faceshield (window) separately below.*

Mfg. Part No.	Description	Stock No.	Price Each
82783-00000	Ratchet Headgear H8A, Head and Face Protection with Clear Polycarbonate Faceshield	63W2493	44.84
82701-00000	Clear Polycarbonate Faceshield WP96, Face Protection, Molded	63W2489	10.87

IMPORTANT: The 3M products in this catalog must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.
(79542)



(196536)

SecureFit™ PROTECTIVE EYEWEAR

Clear Gray Amber

- Self-adjusts to fit a wide array of head sizes, reducing the need to stock multiple frame sizes
- Provides a secure, snug fit without compromising comfort
- Helps reduce eyewear/frame slippage during head movements
- Contemporary design weighs less than 1 oz.
- Available in anti-fog or anti-scratch lens coatings
- Polycarbonate lens absorbs 99.9% UVA & UVB
- Meets the requirements of CSA Z94.3 and ANSI Z87.1-2010

3M™ SecureFit™ Protective Eyewear features proprietary self-adjusting 3M™ Pressure Diffusion Temple Technology helps diffuse pressure over the ear, enhancing frame comfort while at the same time ensuring a secure fit across diverse workforces.

Mfg. Part No.	Product Description	Stock No.	Price Each 1-4
1-00-78371-65717-5	SF201AF, Clear, Anti-Fog Lens	86W0077	3.98
1-00-78371-65718-2	SF202AF, Gray, Anti-Fog Lens	86W0078	4.28
1-00-78371-65719-9	SF203AF, Amber, Anti-Fog Lens	86W0079	4.28
1-00-78371-65720-5	SF201AS, Clear, Anti-Scratch Lens	86W0080	3.39
1-00-78371-65721-2	SF202AS, Gray, Anti-Scratch Lens	86W0081	3.69
1-00-78371-65722-9	SF203AS, Amber, Anti-Scratch Lens	86W0082	3.69

WARNING: These eye or face protection products help provide limited eye and face protection. Misuse or failure to follow warning and instruction may result in serious potential injury, including blindness or death. For proper use, selection, and applications against fl ying particles, optical radiation and / or splash see supervisor, read user instructions and warning on the package or call 3M OH&ESD Technical Service in the USA at 1-800-243-4630. In Canada, call 1-800-267-4414.
(209606)

SAFETY EYEWEAR — GLASSES AND GOGGLES

16644 13250 11228

14300 41120 40686

11674 11476 - 11479

11670

- Protection plus fashionable good looks
- Comfortable, secure fit

Lexa™ safety eyewear provides a unique combination of performance, comfort and fit. Easy-change™ lenses with DX™ anti-fog hard coat that helps protect lens from fog, scratching, and many chemicals. Features an extended viewing range, patented ellipsoidal shape to promote optimum full coverage, and wide span design for orbital eye protection. Customizable fit with adjustable three-position lens angle and temple length. GoggleGear™ dust or splash goggles with adjustable head strap for a secure fit and comfort. Meets the requirements of CSA Z94.3-2007 and the high impact requirements of ANSI Z87.1-2010.

Mfg. Part No.	Description	Stock No.	Price Each
16644-00000	Lexa™ Splash GoggleGear™ Goggles — Clear Lens, Clear Shroud and Black Strap, Medium	06R2441	17.07

Maxim™ safety eyewear is lightweight, stylish and durable. **Mfg. part no. 13250-0000** weighs less than an ounce. Three-position pantoscopic lens adjustment moves lens up and down on the face. Adjustable temple length and dual-injected cushion browguard. DX™ anti-fog hard coat helps protects lens from fog, scratching, and many chemicals. Meets the requirements of CSA Z94.3-2007. **Mfg. part no. 40686** is designed for tactical use, the Maxim™ 2x2 protective, polycarbonate safety goggle features flexible fit temples, an anti-fog seal and an elastic strap for a secure fit, it maximizes visual comfort and clarity. Both meet the high impact requirements of ANSI Z87.1-2010.

13250-00000	Maxim™ Safety Eyewear — DX™ Clear Lens, Black Frame	06R2435	11.63
40686	Maxim™ Safety Goggle 2x2, Clear Anti-Fog Lens, Black Frame, Elastic Strap	63W2605	37.65

CONTINUED

SAFETY EYEWEAR — GLASSES AND GOGGLES (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
Virtua™ V4 safety eyewear delivers protection with contemporary styling at an affordable price. Soft, dual-injected black temples and gray overmold frame for comfortable, all-day wear. Hard-coat polycarbonate lens in clear and indoor/outdoor mirror lens. Absorbs 99.9% of harmful UV rays.			
11670-00000	Virtua™ V4 Safety Eyewear — Clear Hard-Coat Lens, Black/Gray Frame	06R2431	3.81
11672	Virtua™ V4 Safety Eyewear — Clear Anti-Fog Lens, Black/Gray Frame	63W2598	4.36
11674-00000	Virtua™ V4 Safety Eyewear — I/O Mirror Lens, Black/Gray Frame	06R2433	5.03
Mfg. part no. 11228 Virtua™ safety eyewear offers economical, comfortable protection. Perfect for use as visitor safety glasses. Unisex styled lightweight clear frame. High wrap provides additional coverage. Clear, uncoated polycarbonate lens absorbs 99.9% UV. Meets the high impact requirements of ANSI Z87.1-2010.			
11228-00000-100	Virtua™ Safety Eyewear — Clear Lens, Clear Frame	29R0304	1.60
Nassau Plus™ safety eyewear features a integrated sideshield for wraparound protection. Adjustable temple length for a custom fit. Meets the requirements of CSA Z94.3-2007 and the high impact requirements of ANSI Z87.1-2010.			
14300-00000-20	Nassau Plus™ Safety Eyewear — Clear Lens, Black Frame	63W2331	9.90
Tour-Guard™ 958B safety eyewear is an economical choice when safety eyewear is needed for visitors. Can be worn alone or fits comfortably over most prescription glasses. Meets the requirements of CSA Z94.3-2007 and the high impact requirements of ANSI Z87.1-2010.			
41120-00000	Tour-Guard™ III 958B Safety Eyewear — Clear Lens, Clear Frame	06R2454	2.54

LightVision™ 2 safety eyewear won't leave the wearer in the dark. Dual LED lights provide hands-free lighting for dark work environments. Lights swivel and adjust for bright directional beams. Long-lasting batteries provide up to 50 hours of continuous use. Feature black rubber temples and soft nosebridge for extended wear comfort. High wrap offers additional coverage. Impact-resistant, clear polycarbonate lens with anti-fog coating absorbs 99.9% UV. Meets the requirements of CSA Z94.3-2007 and the high impact requirements of ANSI Z87.1-2010. **Mfg. part nos. 11477, 11478** and **11479** LightVision™ 2 bi-focal readers are perfect eye protection for anyone who wears reading glasses, who is engaged in small detailed work, or who has difficulty reading small print. Available in three magnification strengths: +1.5, +2.0 or +2.5 diopter. All LightVision™ 2 safety eyewear includes microfiber bag and lanyard.

Mfg. Part No.	Description	Stock No.	Price Each
11476-00000	Light Vision™ 2 Safety Eyewear — Anti-Fog Clear Lens, Gray Frame, Dual LED Lights	06R2430	24.84
11477-00000	Light Vision™ 2 Bifocal Reader Safety Eyewear — +1.5 Diopter Anti-Fog Clear Lens, Gray Frame, Dual LED Lights	14R8425	38.07
11478-00000	Light Vision™ 2 Bifocal Reader Safety Eyewear — +2.0 Diopter Anti-Fog Clear Lens, Gray Frame, Dual LED Lights	14R8426	36.95
11479-00000	Light Vision™ 2 Bifocal Reader Safety Eyewear — +2.5 Diopter Anti-Fog Clear Lens, Gray Frame, Dual LED Lights	14R8427	38.07

IMPORTANT: The 3M products in this catalog must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.
(32982)

BX™ PROTECTIVE EYEGLASSES AND READERS

3M

11374, 11375, 11376, 11380, 11457, 11458, 11459 | 11377, 11378, 11379, 11381 | 11471, 11472, 11473, 11474, 11475

11523 | 11524 | 11525

- Better fitting — designed for all day comfort
- Fully adjustable temple, lens angle and nose bridge
- Sleek, wraparound lens styling
- Readers available in three magnification strengths — +1.5, +2.0, +2.5 diopter
- Lens absorbs 99.9% of harmful UV rays
- Meets CSA Z94.3-2007 and ANSI Z87.1-2010 high-impact requirements

BX™ protective eyeglasses and readers designed for workers who have difficulty reading small print or who are engaged in small detail work. Rugged polycarbonate lenses with three adjustable lens angles for a customized fit. Adjustable soft-tip temple lengths and soft nose bridge provides comfort for extended wear. Choice of bi-focal or multi-focal dual readers with three magnification diopters: +1.5, +2.0, +2.5 in clear, gray tint or indoor/outdoor mirror lenses. Non-magnified BX™ protective eyeglasses are also available with anti-fog lenses in clear, gray, light blue or light amber tint and indoor/outdoor mirror lenses.

BX™ DUAL-READER PROTECTIVE EYEGLASSES — MULTI-FOCAL (TOP/BOTTOM) MAGNIFICATION
BX™ Dual-Readers with dual (top/bottom) magnification diopters are the perfect eye protection for jobs that require workers to look up and down for near vision frequently throughout the day.

Mfg. Part No.	Frame Color	Lens Color / Type	Stock No.	Price Each
11457-00000-20	Black, Silver	Transparent, Anti-Fog, +1.5 Diopter	63R9554	18.24
11458-00000-20	Black, Silver	Transparent, Anti-Fog, +2.0 Diopter	63R9555	18.24
11459-00000-20	Black, Silver	Transparent, Anti-Fog, +2.5 Diopter	63R9556	18.88

BX™ READER PROTECTIVE EYEGLASSES — BI-FOCAL (BOTTOM) MAGNIFICATION
BX™ Readers with single (bottom) magnification diopters are ideal for anyone who wears reading glasses, who is engaged in small detailed work or who has difficulty reading small print.

11374-00000-20	Black, Silver	Transparent, Anti-Fog, +1.5 Diopter	06R5333	18.23
11375-00000-20	Black, Silver	Transparent, Anti-Fog, +2.0 Diopter	05R9903	17.87

CONTINUED

BX™ PROTECTIVE EYEGLASSES AND READERS (CONT.)

BX™ READER PROTECTIVE EYEGLASSES — BI-FOCAL (BOTTOM) MAGNIFICATION

Mfg. Part No.	Frame Color	Lens Color / Type	Stock No.	Price Each
11376-00000-20	Black, Silver	Transparent, Anti-Fog, +2.5 Diopter	05R9907	18.23
11377-00000-20	Black, Silver	Grey, Anti-Fog, +1.5 Diopter	05R9909	19.35
11378-00000-20	Black, Silver	Grey, Anti-Fog, +2.0 Diopter	24R8921	19.35
11379-00000-20	Black, Silver	Grey, Anti-Fog, +2.5 Diopter	63R9553	19.16
11473-00000-20	Ocean Blue	Silver, Indoor/Outdoor, +1.5 Diopter	63R9559	19.35
11474-00000-20	Ocean Blue	Silver, Indoor/Outdoor, +2.0 Diopter	63R9560	19.35
PROTECTIVE EYEGLASSES — NO MAGNIFICATION				
11380-00000-20	Black, Silver	Transparent, Anti-Fog	14R8385	7.67
11381-00000-20	Black, Silver	Grey, Anti-Fog	24R8561	8.94
11471-00000-20	Ocean Blue	Transparent, Anti-Fog	63R9557	8.05
11472-00000-20	Ocean Blue	Silver, Indoor/Outdoor	63R9558	8.47
11523-00000-20	Ocean Blue	Light Blue, Anti-Fog	63R9561	9.39
11524-00000-20	Ocean Blue	Light Amber, Anti-Fog	63R9562	9.39
11525-00000-20	Ocean Blue	Grey, Anti-Fog, Indoor/Outdoor	63R9563	8.94

IMPORTANT: The 3M products in this catalog must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.
(166276)

PROTECTIVE EYEGLASSES

3M

Fuel™ X2 11635 | Fuel™ X2 11636
Fuel™ X2 11637 | Fuel™2 11650
Fuel™2 11651 | Fuel™2 11652
Fuel™2 11653 | Fuel™2 11654
Fuel™ 11640 | Fuel™ 11641
Fuel™ 11663 | Fuel™ 11664
Moon Dawg™ 11215 | Privo™ 11262
Privo™ 11263 | Privo™ 11266

CONTINUED

PROTECTIVE EYEGLASSES (CONT.)

Privo™ 11268

Nuvo™ 11411

- Good looking eye protection
- Lenses absorb 99.9% of harmful UV rays
- Meets ANSI Z87.1-2010 high-impact requirements

Fuel™ X2 protective eyeglasses are an ultra-efficient blend of comfort, style, and fully-charged features. An evolutionary design, the frame has bold new grooved styling, rubber over-molded adjustable temples and a fully adjustable nose bridge for all-day comfort. The sleek frame profile and rimless lower polycarbonate lenses help provide uncompromised protection and performance. Each pair of Fuel™ X2 eyeglasses include a handy microfiber bag, lens cleaner and lanyard.

Mfg. Part No.	Description	Frame Color	Lens	Stock No.	Price Each
11635-00000-10	Fuel™ X2	Dark Copper	Red	63R9564	35.33
11636-00000-10		Dark Copper	Brown, Anti-Fog	63R9565	35.33
11637-00000-10		Dark Copper	Transparent, Anti-Fog	63R9566	35.13

Fuel™ 2 protective eyeglasses feature a rugged nylon frame with flared design and color accents. Tough polycarbonate lenses are coated for scratch resistance and 99.9% UV protection. Soft nose bridge and temple tips for a comfortable, head-hugging fit. Meets the requirements of CSA Z94.3-2007 and the high impact standards of ANSI Z87.1-2010. Each pair of Fuel™ 2 protective eyeglasses include a handy microfiber bag and lanyard.

11650-00000-10	Fuel™ 2	Metallic Sand, Red Accents	Red	63R9573	37.85
11652-00000-10		Silver, Blue Accents	Blue	63R9575	35.33
11653-00000-10		Silver, Blue Accents	Transparent, Anti-Fog	63R9576	35.13
11654-00000-10		Black Rubberized	Grey, Anti-Fog	63R9577	35.33

Fuel™ high-performance safety eyeglasses feature a rugged nylon frame, streamlined geometry design, and hot color accents for a good-looking, head-hugging fit. Tough polycarbonate lenses for optimum safety and maximum optical clarity are coated for scratch resistance and 99.9% UV protection. Vented temples help minimize fogging. Soft nose bridge and temple tips provide all-day comfort. Meets ANSI Z87.1-2010 high impact requirements. Each pair of Fuel™ high-performance safety eyeglasses include a handy microfiber bag and lanyard.

11640-00000-10	Fuel™	Metallic Sand, Red Accents	Red	63R9567	36.76
11641-00000-10		Silver, Blue Accents	Blue	63R9568	35.33
11642-00000-10		Steel Blue, Blue Accents	Silver, Indoor/Outdoor	63R9569	35.33
11663-00000-10		Burnt Copper, Black Accents	Brown	63R9578	35.33
11664-00000-10		Glacier White, Blue Accents	Blue, Hard Coat	63R9579	36.74

Moon Dawg™ surf-inspired safety sunglasses combine wide temples and rectangular polycarbonate lenses for high-fashion good looks. Stylish frame is lightweight and comfortable. Wide temple design provides enhanced side coverage from sun. Unlike regular sunglasses, Moon Dawg™ safety sunglasses meet ANSI Z87.1-2010 high impact requirements and absorbs 99.99% of UV harmful rays.

11215-00000-20	Moon Dawg™	Black	Grey, Anti-Fog	63R9551	16.43
11216-00000-20		Black	Silver, Indoor/Outdoor	63R9552	17.70

Privo™ protective eyeglasses feature European-inspired styling with a sleek frame profile and rimless lower polycarbonate lenses. Soft molded nose bridge and color-accented temple tips for all day comfort. Meets the requirements of CSA Z94.3-2007 and ANSI Z87.1-2010 high impact standards.

Mfg. Part No.	Description	Frame Color	Lens	Stock No.	Price Each
12261-00000-20	Privo™	Black, Orange Accents	Transparent, Anti-Fog	63R9592	9.59
12262-00000-20		Black, Orange Accents	Grey, Anti-Fog	63R9593	10.19
12263-00000-20		Black, Orange Accents	Amber, Anti-Fog	63R9594	11.13
12264-00000-20		Black, Orange Accents	Silver, Indoor/Outdoor	63R9595	12.16
12265-00000-20		Silver, Red Accents	Transparent, Anti-Fog	63R9596	9.38
12266-00000-20		Silver, Red Accents	Grey, Anti-Fog	63R9597	10.19
12267-00000-20		Silver, Red Accents	Amber, Anti-Fog	63R9598	10.19
12268-00000-20		Silver, Red Accents	Silver, Indoor/Outdoor	63R9599	12.53

Nuvo™ lightweight, retro-styled protective eyewear features adjustable temples, an integral brow bar and soft nosepiece. Contoured frame and sideshields offer additional comfort. Meets the requirements of CSA Z94.3-2007 and ANSI Z87.1-2010 high impact standards.

Mfg. Part No.	Description	Frame Color	Lens	Stock No.	Price Each
11411	Nuvo™	Grey	Transparent, Anti-Fog	45P0192	10.00
11434		Grey	Transparent, Anti-Fog	63W2596	19.53
11435		Grey	Transparent, Anti-Fog	63W2597	19.53

IMPORTANT: The 3M products in this catalog must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.
(166277)

element14 COMMUNITY

Get inspired, collaborate, design, research, ask experts questions.

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(196545)

HEARING-PROTECTION — EARPLUGS AND EARMUFFS

3M

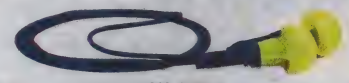
310-1001

391-1001

391-1000

370-2000

311-1114



318-1003

318-1009

310-1250

311-1250

340-4002

340-4036

H6A/V

H9A

H7A

H7P3E

EARPLUGS

E-A-R™ Classic™ cordless, cylindrical earplugs made of soft, low-pressure foam for all-day comfort. Bright yellow foam is moisture resistant and flame retardant. CSA Class AL. **Mfg. part no. 310-1001** E-A-R™ Classic™ earplugs come in a reuseable pillow pack for convenience and storage. **Mfg. part no. 391-1001** E-A-R™ Classic™ earplugs come in One Touch™ refills for use with **mfg. part no. 391-1000** E-A-R™ Classic™ One Touch™ dispenser; *all ordered separately below.*

Mfg. Part No.	Description	Noise Reduction Rating	Pkg. Qty.	Stock No.	Price per Pkg.
310-1001	E-A-R™ Classic™ One Touch™ Foam Earplugs	29	200	06R2442	34.27
312-1201	E-A-R™ Classic™ Uncorded Foam Earplugs	29	1-Pr.	63W2601	0.20
391-1001	E-A-R™ Classic™ One Touch™ Foam Earplug Refill	29	500	06R2452	81.91
391-1000	E-A-R™ One Touch™ Earplug Dispensing Unit with Reusable Base	...	1	06R2451	38.63

Mfg. part no. 370-2000 ARC Plug™ dual-ended cordless earplugs with patented Hear-Through™ design allows wearer to hear conversations, signals, or other critical sounds clearly, while protecting against damaging impulse noise from an arc flash. Insert the yellow end and it allows clear hearing. Insert red end for steady-state 22 dB protection from high-noise levels. Comfortable triple-flange tips allow for fast and easy, no-roll insertion. Washable and reusable. Comes in a handy plastic carrying case with dielectric chain. CSA Class AL.

370-2000	ARC Plug™ Earplugs in Carrying Case	22	1-Pr.	73R8129	17.00

E-A-R™ Express™ Pod Plugs™ corded, push-to-fit earplugs feature advanced "no-roll", slow-recovery foam. Paddle-style grips allow easy fitting and help keep earplug tips clean even when your hands are dirty. Test compatible with 3M™ E-A-Rfit™ Validation System.

311-1114	E-A-R™ Express™ Pod Plugs™ Corded Earplugs	25	1-Pr.	63W2600	1.06

CONTINUED

HEARING-PROTECTION — EARPLUGS AND EARMUFFS (CONT.)

Mfg. Part No.	Description	Noise Reduction Rating	Pkg. Qty.	Stock No.	Price per Pkg.

Mfg. part nos. 318-1003 and **318-1005** E-A-R™ Push-Ins™ corded push-to-fit foam earplugs provide extended hearing comfort, convenience and protection. Constructed of 3M™ E-A-Rform™ foam, these earplugs feature a no roll-down design and a blue stem for a quick and easy fit. Test compatible with 3M™ E-A-Rfit™ Validation System. **Mfg. part no. 318-1009** E-A-R™ Push-Ins™ with patented Grip Rings corded push-to-fit foam earplugs gently seal the earcanal to enhance fit. Test compatible with 3M™ E-A-Rfit™ Validation System.

318-1003	E-A-R™ Push-Ins™ Corded Earplugs	28	1-Pr.	63W2602	0.60
318-1005	E-A-R™ Push-Ins™ Corded Earplugs	28	1-Pr.	63W2603	0.55
318-1009	E-A-R™ Push-Ins™ with Grip Rings Corded Earplugs	30	1-Pr.	63W2604	0.65

E-A-Rsoft™ Yellow Neons cordless and corded foam earplugs are easy to roll down and insert, they expand within the earcanal for a comfortable, low-pressure seal. Test compatible with 3M™ E-A-Rfit™ Validation System. CSA Class AL. Also available in large size to fit larger, deeper earcanals; *go online or call*. **Mfg. part no. 310-1250** cordless earplugs come in a reuseable pillow pack for convenience and storage. **Mfg. part no. 391-1004** cordless earplugs come in One Touch™ refills for use with **mfg. part no. 391-1000** E-A-R™ Classic™ One Touch™ dispenser; *ordered separately above*. **Mfg. part no. 311-1250** corded earplugs are regular size to fits most earcanals.

310-1250	E-A-Rsoft™ Yellow Neons™ Foam Earplugs, Pillow Pack	33	200	06R2443	26.04
391-1004	E-A-Rsoft™ Yellow Neons™ Foam Earplugs, One Touch™ Refill	33	500	06R2453	66.20
311-1250	E-A-Rsoft™ Yellow Neons™ Corded Foam Earplugs	33	200	06R2444	51.57

E-A-R™ UltraFit™ cordless and corded premolded, triple-flange design gently hugs the earcanal to provide an effective seal against noise. Earplugs are washable and reusable. No rolling or sizing needed to get a comfortable, protective fit. Test compatible with 3M™ E-A-Rfit™ Validation System. CSA Class AL. **Mfg. part no. 340-4002** corded earplugs come with a convenient carrying case to keep plugs clean when not in use. **Mfg. part no. 340-4036** earplugs are on a natural cotton cord.

Mfg. Part No.	Description	Noise Reduction Rating	Pkg. Qty.	Stock No.	Price per Pkg.
340-4002	E-A-R™ UltraFit™ Corded Earplugs with Carrying Case	25	50	06R2448	84.02
340-4036	E-A-R™ UltraFit™ Corded Earplugs, Natural Cotton Cord	25	100	06R2450	154.02

EARMUFFS

Mfg. part nos. H6A/V, H9A and **H7A** Peltor™ Optime™ over-the-head earmuffs are effective protection against high frequency noise associated with many work areas and functions including machine shops, factories, sheet metal works, printing and textile operations. Wide ear cushions for comfort and headband wires with four point suspension helps distribute cushion pressure evenly. **Mfg. part no. H7P3E** Peltor™ Optime™ 101 helmet-attachable earmuffs feature two low mounting points to provide comfort. Offers excellent attenuation at low and high frequencies.

Mfg. Part No.	Description	Noise Levels Up to (dBA)	Noise Reduction Rating (dB)	Color	Stock No.	Price Each
H6A/V	Peltor™ Optime™ 95 Over-the-Head Earmuffs	95	21	Beige	06R2426	15.28
H9A	Peltor™ Optime™ 98 Over-the-Head Earmuffs	98	25	Yellow	06R2429	17.62
H7A	Peltor™ Optime™ 101 Over-the-Head Earmuffs	101	27	Green	06R2427	22.81
H7P3E	Peltor™ Optime™ 101 Helmet-Attachable Earmuffs	101	24	Green	06R2428	23.10

IMPORTANT: The 3M products in this catalog must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.
(14732)

HARD HATS AND HARD HATS WITH UVICATOR™ SENSOR

NEW

3M

- Uvicator UV sensor
- Comfortable 4-point ratchet suspension with height adjustment
- Replaceable brow pad
- Vented hard hat options are also available: *go online or call*
- Hi-Viz **H-800 series** hard hat colors meet ANSI Z89.1-2009 High-Visibility Performance requirements
- ANSI/ISEA compliant when worn in the forward and reverse donning positions
- Slots for accessory attachment

H-700 series hard hats help deliver lightweight protection and durability for extended comfort. **H-800 series** hat hats deliver high impact resistance that wears lightweight. With the new Uvicator sensor, workers have an easy way to monitor their hard hat exposure to the sun, so they will know when it's time for a replacement. These hard hats feature a low-profile design for stability and balance.

H-700 AND H-800 SERIES HARD HATS

Mfg. Part No.	Description	Helmet Color	Stock No.	Price Each 1-4
H-701R	Hard Hat H-701R	White	06X4613	13.76
H-702R	Hard Hat H-702R	Yellow	17X8770	16.09
H-707R	Hard Hat H-707R	Bright Orange	06X4617	13.77
H-801R	Full Brim Hard Hat H-801R	White	06X4618	20.22
H-802R	Full Brim Hard Hat H-802R	Yellow	06X4620	20.22
H-807R	Full Brim Hard Hat H-807R, Hi-Vis	Hi-Viz Orange	06X4622	20.22
H-700 AND H-800 SERIES HARD HATS WITH UVICATOR™ SENSOR				
H-701R-UV	Hard Hat H-701R-UV, with Uvicator™ Sensor	White	06X4614	17.63
H-702R-UV	Hard Hat H-702R-UV, with Uvicator™ Sensor	Yellow	06X4616	16.79

CONTINUED

HARD HATS AND HARD HATS WITH UVICATOR™ SENSOR (CONT.)

H-700 AND H-800 SERIES HARD HATS WITH UVICATOR™ SENSOR

Mfg. Part No.	Description	Helmet Color	Stock No.	Price Each 1-4
H-801R-UV	Full Brim Hard Hat H-801R-UV, with Uvicator™ Sensor	White	06X4619	23.48
H-802R-UV	Full Brim Hard Hat H-802R-UV, with Uvicator™ Sensor	Yellow	06X4621	23.48

(211417)

COMFORT GRIP AND GRIPPING MATERIAL WORK GLOVES

NEW

3M

General Use — Cut Resistant — Gripping Material

3M™ COMFORT GRIP GENERAL USE GLOVES

This washable glove's nitrile coating provides excellent grip, even in wet or oily conditions, and its nylon stretch liner gives you a breathable, "second skin" fit.

Mfg. Part No.	Cuff Style	Color	Size	ANSI Cut Level (0-5)	EN388: 2004 Abrasion Level (0–4)	Cut Level (0–4)	Tear Level (0–4)	Puncture Level (0–4)	Stock No.	Price per Pair 1-99
CGM-GU	Knit Wrist	Grey	8 M	1	4	1	2	2	17X0337	6.58
CGL-GU			9 L	1	4	1	2	2	17X0335	6.91
CGXL-GU			10 XL	1	4	1	2	2	17X0339	6.58

3M™ COMFORT GRIP CUT RESISTANT GLOVES

These gloves provide the same comfort as the 3M™ Comfort Grip General Use Gloves but with an Ultra High Molecular Weight Polyethylene Composite Liner that gives you exceptional cut, puncture and tear resistance.

CGL-CR	Knit Wrist	Grey	8 M	3	4	5	4	4	17X0334	24.39
CGM-CR			9 L	3	4	5	4	4	17X0336	23.23
CGXL-CR			10 XL	3	4	5	4	4	17X0338	24.39

3M™ GRIPPING MATERIAL WORK GLOVES

The 3M™ Gripping Material sewn into the palm and fingers of these gloves helps improve users' grip while providing slip resistance.The durable synthetic suede, combined with padded fingers and thumbs, adds protection, while the expansion areas on the finger backs and knuckles provide a comfortable fit.

WGS-1	Elastic Adj.	Black/ Grey	8 S	...	...	...	...	...	17X0342	42.06
WGM-1			9 M	...	...	...	...	...	17X0341	42.06
WGL-1			10 L	...	...	...	...	...	17X0340	42.06
WGXL-1			11 XL	...	...	...	...	...	17X0343	42.06

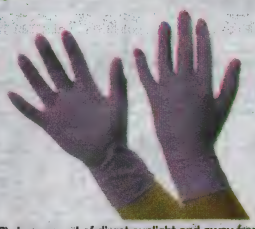
(211446)

PURPLE NITRILE BODYGUARD GLOVES

RoHS Compliant Available

multicomp

- Material: Nitrile
- Color: Purple
- Accelerators: Accelerator Free
- Design: Ambidextrous, free of natural rubber latex, beaded cuff
- Surface finish: Micro textured
- Pinhole rate: AQL - 1.5 max.
- Thickness: 0.09mm
- CE classification: Class 1 non sterile - minimal risk
- Shelf life: 3 years



These products should be stored in a cool (Min 18°C) dry area out of direct sunlight and away from heat. Each dispenser box contains 100 gloves.

Mfg. Part No.	Glove Size	Gloves per Dispenser Box	Stock No.	Price per Box 1-24
● M1090205	S	100	67T1744	20.15
● M1090206	M	100	67T1745	19.88
● M1090207	L	100	67T1746	19.88
● M1090208	XL	100	67T1747	19.88

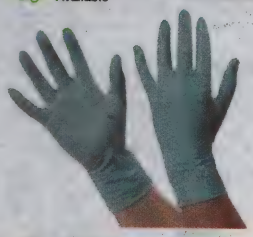
(198005)

BLUE NITRILE BODYGUARD GLOVES

RoHS Compliant Available

multicomp

- Material: Nitrile
- Color: Blue
- Design: Ambidextrous, free of natural rubber latex, beaded cuff
- Surface finish: Micro textured
- Pinhole rate: AQL - 1.5 max.
- Thickness: 0.09mm
- CE classification: Class 1 non sterile - minimalrRisk
- Shelf life: 3 years



These products should be stored in a cool (Min 18°C) dry area out of direct sunlight and away from heat. Each dispenser box contains 100 gloves.

Mfg. Part No.	Glove Size	Gloves per Dispenser Box	Stock No.	Price per Box 1-49
M1090201	S	100	67T0110	15.29
M1090202	M	100	67T0114	19.88
M1090203	L	100	67T0115	17.23
M1090204	XL	100	67T0117	18.58

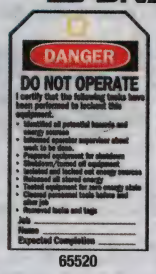
(198004)

PADLOCKS AND LOCKOUT TAGS

BRADY

51339

99615



65520

Safety and Aluminum Padlocks
- Available separately and in keyed-different or keyed-alike sets
- Lightweight yet rugged
- Corrosion-resistant, chrome-plated six-pin cylinder
- Hardened chrome-plated steel shackle
- 1½″ Shackle has ¼″ diameter

Lockout Tags — Legend: DANGER DO NOT OPERATE
- Easy to write on using pencil, pen and marker
- ⅜″ diameter metal eyelet resists tearing and accepts most padlock shackles

SAFETY PADLOCKS
Feature one-piece, seamless, nonconductive, fiberglass-reinforced nylon body with ribbed design for easier gripping and handling. OSHA compliant — safer alternative to metal locks. Key won't release until shackle is securely closed. Each safety padlock includes one key plus "Danger" and "Property Of" labels. Body dimensions: 1-3/4″H x 1-1/2″W x 4/5″D. Color: red. Other colors are available; *go online or call.* **Sold individually and in keyed-different or keyed-alike sets.**

Mfg. Part No.	Description	Pkg. of	Stock No.	Price per Pkg. Each
99552	Keyed Safety Padlock	1	19K0691	18.34
51339	Keyed-Different Safety Padlock Set	6	19K0083	103.59
105886	Keyed-Alike Safety Padlock Set	3	10M4069	45.81
105890	Keyed-Alike Safety Padlock Set	6	10M4073	91.63

ALUMINUM PADLOCKS
Features solid aluminum body. Each padlock includes two keys. Body dimensions: 1-3/5″H x 1-1/2″W x 3/4″D. Color: metallic red. Other vibrant metallic colors and aluminum padlock labels are available; *go online or call.* **Sold individually and in keyed-different or keyed-alike sets.**

99615	Keyed Aluminum Padlock	1	19K0709	16.82
51370	Keyed-Different Aluminum Padlock Set	6	19K0100	98.88
105902	Keyed-Alike Aluminum Padlock Set	3	10M4085	53.81
105882	Keyed-Alike Aluminum Padlock Set	6	10M4065	107.64

LOCKOUT TAGS — LEGEND: DANGER DO NOT OPERATE
Mfg. part no. 65520 heavy-duty polyester lockout tags withstand moisture, grease, chemicals and extreme temperatures. Pen and marker writing can be completely erased using isopropyl alcohol, allowing for repeated use. Holds up to 80 lbs. of pull force, preventing accidental removal. Includes nylon fasteners for easy attachment.

Mfg. Part No.	Description	H x W (in.)	Pkg. of	Stock No.	Price per Pkg. Each
65520	Heavy-Duty Polyester Lockout Tags	5.50 x 3	25	92H7043	68.12

(87877)

NEW PRODUCTS ADDED DAILY
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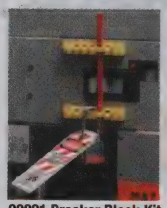
(196560)

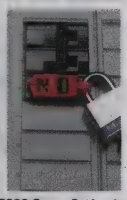
CIRCUIT BREAKER LOCKOUTS

BRADY



90891 Breaker Block Kit

66320 Universal Lockout



65688 Snap-On Lockout

65396, 65397 Clamp-On Lockout

65396, 65397 Clamp-On Lockout Installed

65329, 65321 Oversized Lockout

BREAKER BLOCKER KIT
480/600V Breaker Blocker kit is perfect for locking out oversized and irregularly shaped switches. Self-adhesive backed mounting rails are permanently installed into an electrical panel — no drilling required. Kit includes two yellow mounting rails, one red blocking bar (for indicating locked "Off"), one green blocking bar (for indicating locked "On" and three alcohol wipes. Blocking bars are 7½″ long. **NOTE:** Lock and tag not included.

Mfg. Part No.	Description	Stock No.	Price Each
90891	480/600V Breaker Block Kit	11J0926	26.74

UNIVERSAL MULTI-POLE BREAKER LOCKOUT
This universal multi-pole breaker lockout works with most major-manufacturer's multi-pole breakers that employ a tie-bar. Constructed of durable impact-modified nylon. Easy-to-install using patented thumbscrew design. **NOTE:** Lock not included.

Mfg. Part No.	Description	Pkg. of	Stock No.	Price per Pkg.
66320	Universal Multi-Pole Breaker Lockout	6	34R2304	87.64

120V SNAP-ON BREAKER LOCKOUT
Designed for 120V breakers that have holes in the switch tongue. Easy-to-use — just snap in place and apply lock (not included). Dual cavities accommodate different size switch tongues. Accepts lock shackles up to 9/32″ in diameter. Size: 0.83″H x 0.35″W x 2.15″L.

65688	Snap-On 120V Breaker Lockout	6	94C3967	29.40

CLAMP-ON BREAKER LOCKOUTS
Clamp-on breaker lockouts work on a wide range of single-pole and internal-trip multi-pole breakers. Made of rugged polypropylene and impact-modified nylon. Easy-to-install using patented thumbscrew design. Accepts lock shackles up to 9/32″ in diameter. Includes detachable cleats to provide positive restraint for breakers with long, sliding switch throws. *Order additional cleats separately below.* **NOTE:** Lock not included.

Mfg. Part No.	Description	Pkg. of	Stock No.	Price per Pkg. Each
65396	120/277V Clamp-On Breaker Lockout	1	11K6490	14.90
65965	120/277V Clamp-On Breaker Lockout	1	30C4272	13.19
65397	480/600V Clamp-On Breaker Lockout	1	11K6491	16.19

OVERSIZED BREAKER LOCKOUTS
Oversized 480/600V frame lockouts fit breaker switches up to 2¼″ wide and ⅞″ thick. Constructed of durable polypropylene and glass-filled impact-modified nylon. Updated design gets better grip and works on move breaker models. **NOTE:** lock and tag not included.

65329	Oversized 480/600V Circuit Breaker Lockout	1	11K6456	16.91

(94466)

NO TOOL CIRCUIT BREAKER LOCKOUT DEVICE

PANDUIT®

Individual circuit breakers to be locked in off position quickly and easily without any tools. Compact, universal design fits a wide range of single, double and triple handle circuit breakers. Accommodates breaker handle sizes ranging from .30″- .60″ (7.62 mm x 15.24 mm) tall and .16″-.35″ (4.06 mm x 8.89 mm) thick. Easily attach with no modifications to panel or circuit breaker and does not require hole in circuit breaker handle. Constructed of rugged nylon and stainless steel providing strength, durability, added security and corrosion resistance.

Mfg. Part No.	Description	Stock No.	Price Each 1-2
PSL-CBNT	No Tool Universal Circuit Breaker Lockout	66H3310	26.50
PSL-CBILNT	No Tool Circuit Breaker Lockout for Use with Square D I-LINE/ Federal Pacific (FPE) Circuit Breakers	66H3308	28.20

(6634)

CIRCUIT BREAKER LOCKOUTS

RoHS Compliant Available

PANDUIT®

Large Handle Circuit Breaker Lockout

No-Tool Miniature Circuit Breaker Lockout

- Individual circuit breakers can be lockout in the off position quickly and easily without any tools

Mfg. part no. PLS-CBL compact universal design fits a wide range of large handle circuit breakers. Accommodates breaker handle dimensions up to . 80″ thick x 3.00″ wide (20.32 mm X 76.20 m). Easily attached with no modifications to panel or circuit breaker. Constructed of rugged nylon and stainless steel providing strength, durability, added security and corrosion resistance.

Mfg. Part No.	Description	Stock No.	Price Each 1-2	Price Each 3-4
PSL-CBL	Large Handle Circuit Breaker Lockout	91F7289	31.99	30.64
● PSL-MCBNT	No-Tool Miniature Circuit Breaker Lockout	58T4105	18.68	17.90

(12636)

NON-CONDUCTIVE LOCKOUT PADLOCKS

PANDUIT®

- Non-conductive lock body and shackle
- Available in six assorted colors
- Padlocks can be ordered with various keying options (keyed-alike and master-keyed)
- Vinyl lock body and shackle design

Each lock keyed differently and supplied with 1 key and 2 padlock labels. Key-retention feature means that key cannot be removed from padlock when open. Six-pin cylinder design allows for a large number of key options.

1.50″ (38.1MM) SHACKLE

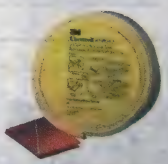
Mfg. Part No.	Color	Stock No.	Price 1-2
PSL-8	Red	34T2438	20.21
PSL-8BL	Black	34T2439	20.21
PSL-8BR	Brown	34T2440	18.89
PSL-8BU	Blue	34T2441	20.21
PSL-8GR	Green	34T2442	20.21
PSL-8OR	Orange	34T2443	18.89
PSL-8PU	Purple	34T2444	18.89
PSL-8YL	Yellow	34T2445	18.89

(196378)

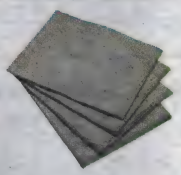
SORBENTS – SPILL MANAGEMENT PRODUCTS

3M

Petroleum Sorbent



5-Gallon Spill Kit



Maintenance Sorbent Pad

Mfg. part nos. M-FL550DD/M, C-FL550DD/P and **P-FL550DD/T** sorbents come in handy dispenser box. Convenient folded sheets are perforated every 16 inches so user can select just the right length for the clean-up job. Can be used as pads, pillows, booms and rolls. **Sold in boxes of 5′ x 50′. Mfg. part no. C-SKFL5** spill kit is excellent for containing hazardous materials in factories, laboratories, police, fire work, etc. **Mfg. part no. P-SKFL5** spill kit is used for sorbing petroleum-based liquids of up to 5 gallons. Each kit includes 1-roll (5″ x 26″) and one temporary disposable bag and tie. **Mfg. part no. M-PD1520DD** sorbent pads are ideal for placing in, under and around machines to catch drips. These pads are highly sorbent and non-granular so it will not damage plant equipment. Each case sorbs 37.5 gallons. **Mfg. part no. HP-156** sorbent pads are great for in-plant spills under leaking equipment and machinery. **Mfg. part no. P-110** chemical sorbent pads are powerful enough to handle acids (including hydrofluoric acid), bases, coolants, and most other hazardous fluids.

Mfg. Part No.	Description	Pkg. Qty.	Stock No.	Price Each
M-FL550DD/M-F2001	Maintenance Sorbent Folded, High Capacity	1	04R8137	120.84
C-FL550DD/P-F2001	Chemical Sorbent Folded, High Capacity	1	10R1096	60.01
P-FL550DD/T-F2001	Petroleum Sorbent Folded, High Capacity	1	04R8145	113.35
C-SKFL5	Chemical Folded Spill Kit, Chemroll, 5-Gallon	1	05R5045	125.50
P-SKFL5	Petroleum Folded Spill Kit, Petroll, 5-Gallon	1	05R5046	100.85
M-PD1520DD	Maintenance Sorbent Pads 15.5 x 20.5″, High Capacity	Case of 100	93K5638	127.35

➤ CONTINUED ➤

SORBENTS – SPILL MANAGEMENT PRODUCTS (CONT.)

Mfg. Part No.	Description	Pkg. Qty.	Stock No.	Price Each
HP-156	High Performance Oil Petroleum Sorbent Pad (17″x19″)	Case of 100	39M4158	85.65
P-110	Chemical Sorbent Pad (11″x13″)	50	39M4159	49.68

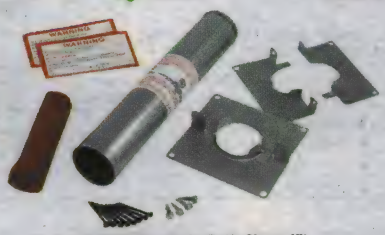
IMPORTANT: The 3M products in this catalog must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.
(49290)

FIRE BARRIER PRODUCTS

RoHS Compliant Available

3M

Fire Barrier IC 15WB+ Sealant



DT200 Fire Barrier Putty Sleeve Kit

Fire Barrier Pillow

Fire Barrier Quick Pass Device 4″ Round

Firestop caulks are used to prevent the spread of fire, smoke, toxic fumes and moisture for up to four hours. Good for both joint and through-penetration application. Re-enterable/repairable. **Mfg. part no. CP25WB+ CAULK** is a no-sag, non-halogen formula; fast-drying tack-free in approximately 10-15 minutes, paintable. Color: brown. **Mfg. part no. IC 15WB** is a low cost, latex based, intumescent smoke and firestopping sealant for wall and floor penetrations. Easy-to-handle formulation that bonds to concrete, metal, wood and cable jacketing. Dries to a firm, rubber-like solid. Provides up to 2 hours of fire protection. Color: yellow. UL listed.

FIRE BARRIER CAULK

Mfg. Part No.	Description	Stock No.	Price Each
● IC-15WB-10.10Z	Fire Barrier Caulk, 10.1 Fl. Oz Cartridge	81H7444	14.38

COMPOSITE SHEET

Composite sheet is a thin one-part composite system comprised of four components, used for shielding cable trays and conduit, HVAC ductwork and vital process equipment from radiant heat, flame spread and smoke. Fire ratings of up to 4 hours.

Mfg. Part No.	Description	Stock No.	Price per Box
● CS-195+3X2-BOX	Composite Sheet — 3′ x 2′ (Boxed)	81H7129	464.04

FIRE BARRIER MOLDABLE PUTTY

Moldable Putty+ is a one-part, halogen-free product designed to firestop electrical outlet boxes and a wide variety of through-penetrations including cable, conduit, insulated pipe and metal pipe, which penetrate fire-rated construction. Pliable. Easy to mold into any shape. Adheres. Sticks well to most surfaces but not to the applicator's hands. Conformable. Color: red-brown.

Mfg. Part No.	Description	Stock No.	Price Each
● MP+	Moldable Putty — 1.5″ x 11″ Stick	81H7504	37.14
MPP+ 4″X8″	Moldable Putty — 4″ x 8″ x ⅛″ Pad	97M9986	8.89
MPP+ 7″X7″	Moldable Putty — 7″ x 7″ x ⅛″ Pad	97M9988	9.20

FIRE BARRIER PUTTY SLEEVE KIT

Mfg. part no. DT200 fire barrier putty sleeve kit is designed to help prevent the passage of fire and smoke in new or existing cable penetrations through walls or floors. Kit comes complete with 2″ dia. x 12″ long putty sleeve (two-part steel sleeve with set of two-part 5¼″ square steel flanges), 3M™ fire barrier moldable putty+, sheet metal screws, drywall screws and two installation identification labels. Easily installed in a 2⅝″ to 4″ opening. Fire-rated through penetration firestop systems in accordance with ASTM E814 (UL 1479).

Mfg. Part No.	Description	Stock No.	Price per Kit
DT200	Fire Barrier Putty Sleeve Kit	74R1642	69.02

FIRE BARRIER PILLOW

Fire barrier pillows are a self-contained highly intumescent product designed to firestop a wide variety of through-penetrations including cable trays (up to two per opening), conduit and blank openings, which penetrate fire-rated construction.

Mfg. Part No.	Description	Stock No.	Price Each
● FB-249	Fire Barrier Pillow — 2″ x 4″ x 9″	81H7200	31.83
● FB-269	Fire Barrier Pillow — 2″ x 6″ x 9″	81H7201	36.16
● FB-369	Fire Barrier Pillow — 3″ x 6″ x 9″	81H7202	40.90

FIRE BARRIER QUICK PASS DEVICE AND MOUNTING BRACKETS

Fire barrier quick pass device passes the ASTM E814 Fire Test Standard and is fire-rated for up to 3 hours (dependent upon system application). Fire barrier quick pass devices are UL certified and Class L smoke-rated for additional life-safety protection.

Mfg. Part No.	Description	Stock No.	Price Each
● QP2.5SD	Fire Barrier Quick Pass Device, 2½″ Square	93K5544	167.34
● QP4RD	Fire Barrier Quick Pass Device, 4″ Round	93K5546	206.94
● QP4SD	Fire Barrier Quick Pass Device, 4″ Square	93K5548	206.94
● QP2.5SMB	Fire Barrier Quick Pass Mounting Brackets, 2½″ Square Single Mount (Pair)	93K5545	1.59

➤ CONTINUED ➤

FIRE BARRIER PRODUCTS (CONT.)

FIRE BARRIER QUICK PASS DEVICE AND MOUNTING BRACKETS

Mfg. Part No.	Description	Stock No.	Price Each
QP4RMB	Fire Barrier Quick Pass Mounting Brackets, 4" Round Single Mount (Pair)	93K5547	1.84
QP4SMB	Fire Barrier Quick Pass Mounting Brackets, 4" Square Single Mount (Pair)	93K5549	1.86

(88683)

RATE-OF-RISE/FIXED TEMPERATURE HEAT DETECTORS

Edwards Signaling

- UL listed for 50 ft. (15.2m) spacing
- Single pole — normally open contact
- Low profile with mounting plate
- Pure white finish
- Mounting flexibility with screw terminals
- Easy twist-on installation
- On-site testing of rate-of-rise feature
- Positive operating indication — for fixed temperature element

280B-PL series heat detectors offer fixed temperature or combination rate-of-rise and fixed temperature detection.

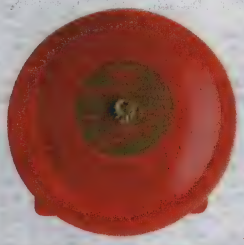
Mfg. Part No.	Description	Stock No.	Price Each
281B-PL	Heat Detector, 135°F (57°C), Rate-of-Rise and Fixed Temperature	41B8417	17.65
282B-PL	Heat Detector, 194°F (90°C), Rate-of-Rise and Fixed Temperature	41B8418	26.91
283B-PL	Heat Detector, 135°F (57°C), Fixed Temperature	41B8419	26.91
284B-PL	Heat Detector, 194°F (90°C), Fixed Temperature	41B8420	17.88

(203539)

439D SERIES VIBRATING FIRE ALARM BELLS

Edwards Signaling

- Heavy duty die cast housing
- Rugged, compact mechanism
- Under dome mechanism
- UL & CSFM listed, FM approved



Fire alarm bells are diode polarized, vibrating bells designed for use with fire alarm control equipment. The gongs are made of select, alloy steel to sound the loud, resonant tone required in fire alarm systems. They are epoxy powder coated red. Supplied mounting plate installs directly on surface or on any single gang box, 3 ½" (89mm) or 4" (102mm) octagon, or 4" (102mm) square electrical box. Rated for outdoor use with optional **mfg. part no. 449** weatherproof back box; *go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each		
			Each	2-5	6-10
439D-6AW-R	6in. Fire Alarm Bell 24VDC, Red	41B8517	167.26	156.78	142.79

(203547)

COMMUNICATIONS MICROPHONES

RoHS Compliant Available

SHURE

Microphone Accessories Available; *Go online or call*

450 Series 2

562

515SBGX

Mfg. part no. 514B compact. Frequency response: 100-6,000Hz. Leaf switch and neoprene cable. Impedance @ 1kHz: 200-ohms.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
514B	Compact microphone	66F4189	141.11

Mfg. part no. 450 Series 2 ideal for dispatch and paging use. Frequency response: 100-10,000Hz. Impedance @ 1kHz: Low 210-ohms; high 15 kiliohms, nominal.

450-SERIES 2	Desk top microphone	61FX172	275.58

Mfg. part no. 562 unidirectional noise-cancelling dynamic microphone is suited for high-noise environments. Frequency response: 100-6,000Hz. Gooseneck mount. Impedance @ 1kHz: 180-ohms. #4 Allen wrench supplied.

562	Unidirectional noise-cancelling dynamic microphone	50F2994	194.30

Mfg. part no. 527B omnidirectional dynamic hand-held, low-impedance, push-to-talk microphone. *Order* **mfg. part no. RK6MB** *hang-up brackets separately, go online or call.*

527B	Omnidirectional dynamic, hand-held, push-to-talk microphone	17M8449	175.49

➤CONTINUED➤

COMMUNICATIONS MICROPHONES (CONT.)

Mfg. part no. 561 omnidirectional dynamic microphone for gooseneck mounting.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
561	Gooseneck mount omnidirectional dynamic microphone	33M7772	162.51

Mfg. part no. 515SBG-18X unidirectional dynamic gooseneck microphone has momentary push-to-talk switch. Frequency response: 80-13,000Hz. Impedance @ 1kHz: 150-ohms. 18" gooseneck and heavy-duty mounting flange.

515SBG-18X	Unidirectional dynamic gooseneck microphone	33M7771	165.35

Mfg. part no. 577B cardioid dynamic hand-held, push-to-talk microphone features noise canceling for loud environments. *Order* **type RK6MB** *hang-up brackets separately below.*

577B	Cardioid dynamic hand-held, push-to-talk microphone	17M8452	265.49

Mfg. part no. 596LB economical microphone for budget-restricted installations. Silver plated push-to-talk switch for increased reliability. Durable vinyl-jacketed coil cord. Rugged ARMO-DUR® case. Increased output (matches most paging amplified inputs).

596LB	Economy microphone	66F4227	97.87

(4778)

MICROPHONES

BOGEN. COMMUNICATIONS, INC.

MGN-19

DDU250

Mfg. part no. MGN-19 pushbutton omnidirectional. 19.00" flexible gooseneck mounting flange and 7 feet of 4-conductor cable. 2000Hz. **Mfg. part no. DDU250** dynamic desktop microphone. Uni-directional, 16" gooseneck design ideal for any podium or PA system. 10-foot cable. Push-to-talk switch for momentary paging and a push-to-lock switch for continuous audio.

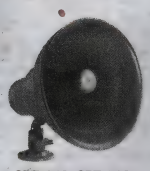
Mfg. Part No.	Description	Stock No.	Price Each
MGN-19	Omnidirectional gooseneck microphone	90F1964	118.18
DDU250	Dynamic desktop unidirectional microphone	31C7919	179.87

(4674)

REENTRANT HORN LOUDSPEAKERS

BOGEN. COMMUNICATIONS, INC.

IH8A



SPT-15A, SPT-30A

BDT-30A

For indoor/outdoor use in plants, warehouses, schools, construction, recreational areas. Textured mocha enamel-finish metal. **Mfg. part nos. SPT-15A, SP15-8A:** 9.00 diameter x 9.25"D (228.60 x 234.95); **mfg. part no. IH8A:** 6.50 diameter x 6.63"D (165.10 x 168.40); **mfg. part nos. SPT-30A, SP30-8A:** 11.00 diameter x 10.50"D (279.40 x 266.70); **mfg. part no. BDT-30A:** 16.50 diameter x 9.75"D (419.10 x 247.65).

Mfg. Part No.	Description	Stock No.	Price Each 1-4
IH8A	15W, 8 Ohms	87F4410	86.70
SPT-15A	25/70V, 15W Continuous	79W433	153.91
SP15-8A	8 Ohms, 15W Continuous, 20W Equalized	87F4412	132.76
SPT-30A	25/70V, 30W Continuous, 40W Equalized	87F4411	198.30
SP30-8A	8 Ohms, 30W Continuous	87F4413	160.13
BDT-30A	25/70V, 30W Continuous	87F4414	253.52

(4681)

DURATOOL AT NEWARK ELEMENT14

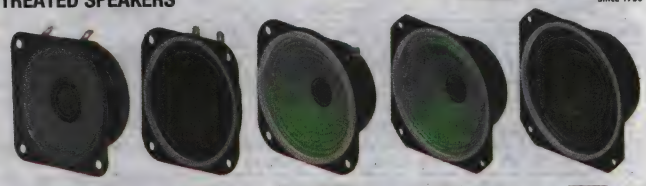
For your production and facilities needs, from soldering stations to tool sets & more.
newark.com/duratool

(212563)

GENERAL REPLACEMENT, INTERCOM AND OUTDOOR TREATED SPEAKERS

RoHS Compliant Available

Quam Since 1930



25C25Z80T 30A05Z8 30C25Z80T 4C3Z80T 4C5Z8

Precision centered voice coils with 8 or 40Ω impedances (designated **"Z8"** or **"Z45"**). Use 45Ω speakers for intercom applications. Outdoor treated speakers (**OT suffix**) resist wind, moisture and temperature extremes. Alnico magnet speakers (designated **"A"**) are magnetically shielded. Ceramic magnetic speakers (designated **"C"**) are unshielded. All conform to industry standard mounting centers. Finish: black baked powdered epoxy.

GENERAL REPLACEMENT

Mfg. Part No.	Size/ Shape	Frequency Response	Power Capacity (W)	Depth (in.)	Stock No.	Price Each 1-4
● 25A07Z8	2.5" Square	150-12kHz	1.5	1.090	**33M7639**	16.20
● 25A07Z45	2.5" Square	150-12kHz	1.5	1.090	**81F2835**	16.36
● 25C25Z80T	2.5" Square	200-6kHz	4	1.040	**33M7640**	14.65
● 25C25Z450T	2.5" Square	200-6kHz	4	1.040	**96B5810**	15.74
● 30A05Z8	3" Square	150-12kHz	2	1.242	**33M7666**	16.75
● 30A05Z45	3" Square	150-12kHz	2	1.242	**33M7665**	17.36
● 30C25Z8	3" Square	150-14kHz	4	1.190	**33M7667**	14.65
30C25Z80T	3" Square	150-10kHz	4	1.190	**50B6855**	15.36
● 30C25Z450T	3" Square	150-10kHz	4	1.190	**92B6258**	15.73
● 4A1Z8	4" Square	200-12kHz	3	1.465	**81F2827**	17.46
● 4A1Z45	4" Square	200-12kHz	3	1.465	**33M7707**	16.84
● 4C3Z80T	4" Square	130-9kHz	10	1.450	**33M7708**	19.78
● 4C5Z8	4" Square	120-15kHz	10	1.450	**33M7709**	22.61

(4691)

NOVEC™ AEROSOL CLEANERS

3M

- Non-flammable
- Low toxicity
- Non-ozone depleting
- Non-corrosive
- Fast drying, virtually no residue
- Contains no HCFCs, HFCs, nPB or HAPs

Based on proprietary 3M solvent technology, Novec™ aerosol cleaners are designed to remove tough soils – while reducing the impact on people and the environment. They offer a responsible alternative to HCFC 141b-based cleaners.

Contact Cleaner

NOVEC™ CONTACT CLEANER

Novec™ Contact Cleaner effectively removes light oils, greases, silicones, dust and particulates from sensitive electronic and electrical equipment. It is compatible with plastics and can be used on energized equipment or components.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
NOVEC(TM) CONTACT	Novec™ Contact Cleaner, 11 oz.	**78K7084**	27.19

NOVEC™ CONTACT CLEANER PLUS

Novec™ Contact Cleaner Plus is formulated with extra cleaning power to remove stubborn oils, greases and silicones, as well as fluorinated oils and greases, dust and particulates, from sensitive electrical and electronic equipment. This includes connectors, printed circuit boards, electromechanical devices, scales, relays and circuit breakers. Excellent compatibility with plastics and other materials of construction.

NOVEC-CCPLUS	Novec™ Contact Cleaner Plus, 11 oz.	**47R4845**	28.73

NOVEC™ ELECTRONIC DEGREASER

Novec™ Electronic Degreaser effectively removes oils, greases and handling soils from electric motors, electrical equipment, precision devices and other electro-mechanical or sensitive devices. Industrial strength cleaner. Test on plastics before using – may damage acrylics, polycarbonates, ABS and PS.

NOVEC(TM) ELECTRONIC DEGR	Novec™ Electronic Degreaser, 12 oz.	**78K7083**	25.34

NOVEC™ FLUX REMOVER

Novec™ Flux Remover removes rosin solder fluxes, waxes and similar contaminants. It is also effective in removing hydrocarbons, silicone and fluorochemical oils and greases from devices such as electric motors, generators, precision devices and other electromechanical or sensitive equipment. Test on plastics before using – may damage acrylics, polycarbonates, ABS and PS.

NOVEC(TM) FLUX REMOVER	Novec™ Flux Remover, 12 oz.	**78K7082**	25.35

(87098)

LENS CLEANING CLOTHS

3M

- Assorted colors
- Polyester/nylon

Ribbon-shaped fibers lift dirt and grease instead of rolling over it. Dirt and particles are trapped within knitted tufts of the fibers. Rows and rows of tufts and valleys trap large and small particles.

Mfg. Part No.	Description	Size (in.) W X L	Stock No.	Price Each 1-9
● 9021	Lens Cleaning Cloths	7.1 X 6.3	**77R3825**	18.39

(197424)

DeoxIT® CONTACT CLEANER AND REJUVENATOR

CAIG LABORATORIES, INC.

D100P

DN5S-6N D50W D100L-2DB D100L-25C

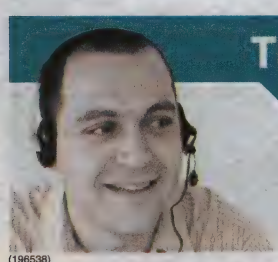
- Dissolves oxidation and corrosion
- Cleans, lubricates and protects
- Reseals surfaces on metal contacts
- Improves connector performance/reliability
- Reduces intermittent connections
- Improves signal quality and data speeds
- Reduces arcing and RFI
- Reduces wear and abrasion
- Improves the flow of electricity
- Temperature range, -34°C to 200°C

DeoxIT® dissolves oxides and sulfides that form on metal contact surfaces, removing the sources of resistance. This restores the contact's integrity and leaves a thin (organic) layer that coats and seals the metals. When contact surfaces are exposed to dust, smoke, soot, and other solids suspended in the atmosphere, non-metallic films can form, inhibiting conductivity. Metal oxide formation is the most common cause of oxidation. Salt-laden air in coastal areas corrodes metals, forming chloride films. DeoxIT's® unique properties allow it to work on stationary or moving contacts and connectors with similar or dissimilar metals. Its advanced formula contains deoxidizers, preservatives, conductivity enhancers, arcing and RFI inhibitors and anti-tarnishing compounds that significantly increase the performance and reliability of electrical equipment. **NOTE:** After cleaning with DeoxIT®, apply DeoxIT® Gold (indoor applications) or DeoxIT® Shield (harsh environments; water, salt, pollution) for maximum performance and protection; *order separately online or call.*

Mfg. Part No.	Description	Size	Stock No.	Price Each
● D5S-6	DeoxIT® D5 Spray, Flushing Action, Slow Dry, 5% Solution, Flammable	142g	**08H0311**	20.82
● DN5MS-15	DeoxIT® DN5 Mini-Spray, Nonflammable, Quick Dry - Non-Drip, 5% Solution	14g	**42J5217**	11.80
● DN5S-6N	DeoxIT® DN5 Spray, Nonflammable, Quick Dry - Non-Drip, 5% Solution	163g	**42J5218**	29.64
● D100P	DeoxIT® Pen Applicator, Nonflammable, 100% Solution	6ml	**08H0319**	23.96
● D50W	DeoxIT® Wipes, Nonflammable, 100% Solution	50 count	**08H0320**	24.72
● D100L-2DB	DeoxIT® Brush Applicator, Nonflammable, 100% Solution	7.4ml	**49H8608**	22.22

(74202)

TECHNICAL SUPPORT HOTLINE



Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196538)

DeoxIT® GOLD CONTACT CLEANER, CONDITIONER AND PROTECTOR FOR PLATED METAL ELECTRICAL CONNECTIONS

CAIG LABORATORIES, INC.

GN5S-6N Spray | G5S-6 Spray | G5 Mini-Spray | G100L Brush Applicator

- Ideal for gold plated surfaces
- For critical and low signal applications
- Improves conductivity and maintains optimum signal quality
- Prevents dendrite and fretting corrosion
- Prevents data errors, lockups and intermittents
- Protects base metals from oxidation
- Reduces arcing, RFI, wear and abrasion

DeoxIT® GOLD Pen Applicator

DeoxIT® GOLD Wipes

DeoxIT® GOLD Needle Dispenser

DeoxIT® Gold (formerly ProGold) is specifically formulated to improve conductivity, lubricate and protect plated connectors and contacts for maximum performance and protection. It deoxidizes minor amounts of surface contamination, and penetrates plated surfaces and molecularly bonds to the base metals. Unlike other products, it also stabilizes connections between similar and dissimilar metals. Provides long-lasting protection on gold, as well as silver, rhodium, copper, nickel and other precious metals in connectors and on contacts. **NOTE:** On oxidized/corroded surfaces, pre-clean with DeoxIT®. For severe environments (humidity, salt, pollution, etc.), treat with DeoxIT® and finish with DeoxIT® Shield; *ordered separately online or call.*

DeoxIT® Gold	G100L	GX, GX100L*
Temperature Range:	-34°C to 240°C	-45°C to 310°C

** For details, go online or call.*

Mfg. Part No.	Description	Size	Stock No.	Price Each 1-4
GN5S-6N	DeoxIT® Gold, GN5 Spray, Nonflammable, Quick Dry - Non Drip, 5% Solution	163g	42J5221	35.14
GN5MS-15	DeoxIT® Gold GN5 Mini-Spray, Nonflammable, Quick Dry - Non Drip, 5% Solution	14g	42J5220	14.13
G5S-6	DeoxIT® Gold G5 Spray, Flushing Action, Slow Dry, Flammable, 5% Solution	142g	08H0314	29.64
G100P	DeoxIT® Gold Pen Applicator, Nonflammable; 100% Solution	6ml	08H0321	29.88
G50W	DeoxIT® Gold Wipes, Nonflammable, 100% Solution	50 Count	08H0322	32.94
G100L-2DB	DeoxIT® Gold Brush Applicator, Nonflammable, 100% Solution	7.4ml	08H0312	35.22
G100L-25C	DeoxIT® Gold G100L Needle Dispenser, Nonflammable, 100% Solution	25ml	49H8893	64.09
G5L-4A	DeoxIT® Gold G5L Liquid, Safe on most Plastics, 5% Solution	118ml	77M2490	71.31
GX5S-6N	DeoxIT® Gold GX5 Spray, Nonflammable, Non Drip, Safe on Plastics, 5% Solution	163g	22M5039	54.01

(74200)

DeoxIT® SHIELD CONTACT AND CONNECTOR PROTECTOR

RoHS Compliant Available

CAIG LABORATORIES, INC.

- Lubricates and protects metal surfaces
- Oxidation and corrosion deterent
- Reduces intermittent connections
- Reduces arcing and RFI
- Reduces wear and abrasion
- Improves the flow of electricity
- Ideal for severe environments: high degrees of humidity, salt, pollution, etc.

S5 Mini-Spray | S5 Spray | SN5 Spray

DeoxIT® Shield lubricates and protects metal surfaces against oxidation and contamination. **NOTE:** Use on newly manufactured components or those surfaces cleaned by DeoxIT®, ultrasonics or other procedures. DeoxIT® Shield contains no cleaners or deoxidizers, and provides long-lasting protection.

Mfg. Part No.	Description	Size	Stock No.	Price Each Each
S5S-6	DeoxIT® Shield S5 Spray, Flushing Action, Slow Dry, Flammable, 5% Solution	142g	67K2678	21.49
SN5S-6N	DeoxIT® Shield SN5 Spray, Nonflammable, Quick Dry - Non-Drip, 5% Solution	163g	67K2670	30.74

CONTINUED

DeoxIT® SHIELD CONTACT AND CONNECTOR PROTECTOR (CONT.)

Mfg. Part No.	Description	Size	Stock No.	Price Each Each
S5L-4A	DeoxIT® Shield Liquid, Quick Dry Solvent, Non-Drip, 5% Solution	118ml	77M3415	42.17
S5L-32A	DeoxIT® Shield Liquid, Quick Dry Solvent, Non-Drip, 5% Solution	944ml	77M3414	192.08
S100L-12	DeoxIT® Shield Liquid, Safe on Plastics, 100% Solution	354ml	77M3412	196.96

(74201)

FLUX-OFF® PRECISION FLUX REMOVERS

RoHS Compliant Available

ITW Chemtronics®

Flux-Off® flux removers are formulated to remove all types of rosin (type R, RA, and RMA), no-clean (both rosin and synthetic, type SA), and water-soluble (type OA) flux. Removers available in aerosol, BrushClean™ System and liquid form for benchtop dispenser, vapor degreaser, ultrasonic, and dip tank applications. All aerosol/BrushClean™ products feature the "All-Way" spray valve.

Flux-Off® CZ is an ozone-safe, nonflammable flux remover safe for use on plastics. Washes away types R, RMA, RA, SA, and OA fluxes. Flux-Off® VZ is an economical non-ozone depleting, non-flammable flux remover.

Mfg. Part No.	Description	Size	Stock No.	Price Each
ES7200	Flux-Off® CZ	12 oz.	00Z1593	57.95
ES7208B	Flux-Off® CZ BrushClean™	5 oz.	00Z1594	28.75
ES6200	Flux-Off® VZ	12 oz.	97H7681	24.72

Flux-Off® Rosin is an ozone-safe flux remover that's safe for use on plastics. Washes away rosin and rosin-based no-clean fluxes.

ES1035	Flux-Off® Rosin	10 oz.	00Z1137	21.54
ES1035B	Flux-Off® Rosin Brush Clean™	10 oz.	07C8878	22.02
ES835B	Flux-Off® Rosin Brush Clean™	5 oz.	00Z1472	12.80
ES135	Flux-Off® Rosin	1 gal.	25C4512	81.79
ES535	Flux-Off® Rosin	5 gal.	50B9381	266.12

New and improved Flux-Off® No Clean flux remover removes all types of no-clean encrusted flux. Same great features as original but now without HCFC-141b. Nonflammable, dries fast and leaves no residue. For use in ultrasonics and soak tanks. Contains HCFC-225. Test on plastics.

ES1695	New and Improved Flux-Off® No Clean Flux Remover — Aerosol	12 oz.	97C8419	36.21
ES895B	New and Improved Flux-Off® No Clean Flux Remover —BrushClean™ System	6 oz.	97C8421	23.72

New and improved Flux-Off® No Clean Plus is a powerful cleaner that removes encrusted no-clean and synthetic fluxes from hard-to-reach areas. Ozone safe, dries fast and leaves no residue. For use in dip or soak tanks. Flammable. Test on plastics. Recommended for post-solder operations, PC boards, SMD pads, chip carriers, screen and stencils, heat sinks, sensitive circuit components and more.

ES1696	New and Improved Flux-Off® No Clean Plus	12 oz.	97C8420	20.43
ES896B	New and Improved Flux-Off® No Clean Plus BrushClean™	6 oz.	97C8422	13.50

Flux-Off® Water Soluble is an ozone-safe flux remover for cleaning water soluble flux from boards with water sensitive components. Safe to use on plastics. (NOTE: Formerly Flux-Off® II and Flux-Off® NR 2000.)

ES1530	Flux-Off® Water Soluble	13.5 oz.	00Z1083	18.31
ES130	Flux-Off® Water Soluble	1 gal.	50B1927	99.62

Flux-Off® Heavy-Duty flux remover removes encrusted rosin and synthetic-based (type SA), nonflammable, no-clean and rosin fluxes. Can also be used to remove uncured epoxy from misprinted boards. Test on plastics.

ES1631	Flux-Off® Heavy-Duty	12 oz.	00Z1883	52.75

Flux-Off® Aqueous cleans water-soluble and no-clean fluxes, and type R, RMA and RA fluxes. Ideal for use in ultrasonics and in-line cleaners.

ES132	Flux-Off® Aqueous	1 gal.	50B9379	46.94

(7429)

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(212569)

CHEMICAL CLEANERS & ACCESSORIES

AUDIO/VIDEO CLEANERS

RoHS Compliant Available

ITW Chemtronics®

- Cleans most A/V equipment including: TVs, VCRs, movie cameras and projectors
- Great for cleaning PCBs, contacts, switches, connectors, and scanner equipment too

ES820L

ES2400

Mfg. part no. ES820L, IPA - isopropyl alcohol, improves performance while extending the life of the equipment and the tapes. Safe for use on plastic. Flammable and ozone-safe; CFC/HCFC free. Apply to head surfaces with Chamois Tips™ Swab, *ordered separately; go online or call.*

Mfg. Part No.	Description	Size	Stock No.	Price Each
● ES820L	IPA - Isopropyl Alcohol	8 oz. Liquid	00Z1420	13.13

Mfg. part no. ES2400, Tun-O-Wash® cleaner, is the original fast-drying cleaner for electromechanical and electronic tuners. Safe for use on plastic. Flammable and ozone-safe.

● ES2400	Tun-O-Wash	12.5 oz. Aerosol	00Z1193	25.30

(7423)

ULTRAJET® BRAND COMPRESSED GAS DUSTERS

RoHS Compliant Available

ITW Chemtronics®

ES1020

ES1620

ES1015

ES1020R

Ultrajet® brand dusters are the most powerful dusters on the market. Nonflammable dusters remove dry contaminants from many kinds of surfaces. Dusters are safe on plastics and leave no residue. Ultrajet® dusters are filtered to 0.2 microns.

Mfg. part no. ES1020 Ultrajet® Duster provides the biggest blast to clean anything fast. 100% ultra-pure HFC-134a.
Mfg. part no. ES1620 Ultrajet® All-Way Duster provides the same power as **mfg. part no. ES1020** but it also sprays in any direction without the risk of dispensing a liquid spray that can freeze and damage sensitive surfaces. 100% ultra-pure HFC-134a.
Mfg. part no. ES1015 Ultrajet® 70 Duster provides a powerful cleaning blast at an economic price. 100% ultra-pure HFC-134a.
Mfg. part no. ES1020K Ultrajet® Duster System has a precision surgical-grade chrome trigger for pinpoint control. The system sprays in any direction with a 36″ flex-extension tube. 100% ultra-pure HFC-134a.
Mfg. part nos. ES1017, **ES1217** and **ES1617** Dusters provide regular strength cleaning at an economical price. Nonflammable. Made with HFC-134a.
Mfg. part no. ES270-1 Ultrajet® CO_2 Duster System, the ultra-pure, ultra-powerful duster for highly sensitive surfaces and equipment. 100% ultra-pure CO_2.

Mfg. Part No.	Description	Size	Blasting Power	Stock No.	Price Each
● ES1020	Ultrajet® Biggest Blast	10 oz.	Xtra Xtra	00Z1209	18.88
● ES1620	Ultrajet® All-Way Biggest Blast	8 oz.	Xtra Xtra	00Z1817	16.56
● ES1015	Ultrajet® Big Blast	10 oz.	Xtra	00Z1305	14.15
● ES1020K	Ultrajet® System	10 oz.	Regular	00Z1211	47.80
● ES1020R	Ultrajet® System Refill	10 oz.	Regular	00Z1210	17.94
● ES710V	Chrome Trigger Valve for **ES1020R**	...	...	66F6773	33.00
● ES1017	Duster	10 oz.	Regular	94B3540	13.55
● ES1217	Duster	8 oz.	Regular	00Z1818	10.86
● ES1617	Duster	12 oz.	Regular	00Z1819	16.17

(36777)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

ELECTRO-WASH® CLEANERS/DEGREASERS

RoHS Compliant Available

ITW Chemtronics®

These general-purpose electronics and electrical cleaners remove a wide variety of contaminants including oil, grease, oxides, handling soils, plus flux and coatings from PC boards, cable splices, control systems, office equipment, and motors. All aerosol/BrushClean™ products feature the All-Way spray valve.

Mfg. part no. ES6100, Electro-Wash VZ® is an economical, non-ozone depleting, non-flammable universal cleaner and degreaser.

Mfg. part no. ES1678, New and Improved Electro-Wash® PN, is a nonflammable cleaner degreaser safe for use on plastics. 141b-free; contains HCFC-225.

Mfg. part nos. ES1210 and **ES110**, Electro-Wash® PX, are extra-strength universal cleaner/degreasers safe for use on plastics. It's flammable and ozone-safe.

ES7100

ES1678

ES1210

Mfg. part no. ES810, Electro-Wash® PX, is a one-step buffer gel removal cleaner, ideal for fiber-optic connectors and cables.

Mfg. part no. ES1603, Electro-Wash® PR, is a regular-strength cleaner safe for use on plastics. It's flammable and ozone-safe.

Mfg. part nos. ES1611 and **ES2211**, New and Improved Electro-Wash® NX, are extra-strength, nonflammable cleaner degreasers. 141b-free; contain HCFC-225.

Mfg. part no. ES1614, New and Improved Electro-Wash® NR, is a regular-strength, nonflammable cleaner degreaser. 141b-free; contains n-propyl bromide.

Mfg. part no. ES1621, Electro-Wash® MX, is an extra-strength plastic-safe universal cleaner with a moderate evaporation rate. Ideal for cleaning contamination from semiconductive cores of high voltage cables.

Mfg. part no. ES1137, the Mighty Liquid™, is a powerful universal cleaning solvent.

Mfg. part no. ES1607, Electro-Wash® NXO is an ozone-safe, nonflammable, extra-strength universal cleaner/degreaser. Test on plastics. Also available in 1-gallon quantities; *go online or call.*

Mfg. part no. ES7100, Electro-Wash® CZ is the non-ozone depleting, nonflammable cleaner safe for use on plastics. Contains CIROZANE™ CFC replacement chemistry based on HFE technology from 3M. Also available in 1-gallon quantities, *go online or call.*

Mfg. Part No.	Description	Size	Stock No.	Price Each
● ES7100	Electro-Wash® CZ	12 oz.	00Z1585	56.52
● ES6100	Electro-Wash® VZ	12 oz.	97H7680	24.32
● ES1678	New and Improved Electro-Wash® PN	12 oz.	97C8418	47.22
● ES1210	Electro-Wash® PX Contact Cleaner	12.5 oz.	00Z1138	24.17
● ES110	Electro-Wash® PX	1 gallon	50B1925	84.14
● ES810	Electro-Wash® PX	5 oz.	49H7680	13.00
● ES1603	Electro-Wash® PR	10 oz.	00Z1535	14.44
● ES1607	Electro-Wash® NXO	12 oz.	00Z1941	56.39
● ES1611	New and Improved Electro-Wash® NX	12 oz.	97C8412	38.05
● ES2211	New and Improved Electro-Wash® NX	18 oz.	31K9861	50.17
● ES1614	New and Improved Electro-Wash® NR	12 oz.	97C8415	19.49
● ES1621	Electro-Wash® MX Cleaner Degreaser	10.8 oz.	49H7679	22.93

(7428)

CONTACT CLEANERS/ LUBRICANTS

RoHS Compliant Available

ITW Chemtronics®

Contact cleaners remove oily carbon soils, greases, and oxides from contact surfaces. Use in all phases of electronics and electrical contact maintenance, including metal contacts, plastic embedded contacts, relays, breakers, and controls. All aerosol products feature the All-Way spray valve.

ES1677

ES1612

ES1626

ES1629

Mfg. part no. ES7300, Pow-R-Wash™ CZ, is an ozone safe, nonflammable cleaner safe for use on powered-up contacts and surrounding plastics. Contains Cirozane™ CFC replacement chemistry based on HFE technology from 3M.

Mfg. part no. ES 6300 Pow-R-Wash™ VZ, is an economical non-ozone depleting, nonflammable contact cleaner safe for use on live circuits.

Mfg. part no. ES1677, New and Improved Pow-R-Wash™ PN, is a nonflammable contact cleaner safe for use on powered-up contacts and surrounding plastics. 141b-free; contains HCFC-225.

Mfg. part no. ES1612, New and Improved Pow-R-Wash™ NX, is an extra-strength, nonflammable contact cleaner that quickly removes soils and oxides. 141b-free; contains HCFC-225.

Mfg. part no. ES1613, New and Improved Pow-R-Wash™ NR, nonflammable contact cleaner that quickly removes soils and oxides. 141b-free; contains n-propyl bromide.

Mfg. part no. ES1605, Pow-R-Wash™ PR, is a regular-strength, flammable contact cleaner that is safe for use on plastics. Ozone-safe.

Mfg. part no. ES1626, DPL® Lubricant, can be used to clean, protect, and lubricate all electrical and electronic switches, contacts, relays, plugs and sockets. Safe on plastics, inhibits corrosion and reduces friction.

Mfg. part no. ES1629, New and Improved Kontact Restorer, is a 1-step contact cleaner and lubricant. 141b-free; contains n-propyl bromide.

Mfg. Part No.	Description	Size	Stock No.	Price Each
● ES7300	Pow-R-Wash™ CZ	12 oz.	00Z1589	58.60
● ES6300	Pow-R-Wash™ VZ	12 oz.	97H7682	22.90
● ES1677	New and Improved Pow-R-Wash™ PN	12 oz.	97C8417	49.26
● ES1612	New and Improved Pow-R-Wash™ NX	12 oz.	97C8413	40.66
● ES1613	New and Improved Pow-R-Wash™ NR	12 oz.	97C8414	20.14
● ES1605	Pow-R-Wash™ PR	10 oz.	00Z1538	14.27

➤CONTINUED➤

CONTACT CLEANERS/LUBRICANTS (CONT.)

Mfg. Part No.	Description	Size	Stock No.	Price Each
ES1626	DPL® Lubricant	11 oz.	84K7728	9.93
ES1629	New and Improved Kontact Restorer® Cleaner Lubricant	12 oz.	97C8416	26.32

(7590)

KONFORM® CONFORMAL COATINGS

RoHS Compliant Available

ITW Chemtronics®

Mfg. part no. CTAR acrylic resin is engineered for effective insulation against high-voltage arcing and shorts. Acrylic coating stable from -75°F/-59°C to +270°F/137°C. High dielectric strength of 8300V/mil. Provides excellent acid-resistance. Meets military standards: MIL-I-46058C, Type AR. **Mfg. part no. CTSR** silicone coating engineered for maximum flexibility and protection from extreme temperatures and vibration damage. Silicone coating stable from -85°F/-64°C to +390°F/200°C. High dielectric strength of 1100 volts/mil. Meets military standards: MIL-I-46058C, Type SR qualifications. All types UL recognized.

Mfg. Part No.	Size	Stock No.	Price Each
CTAR-12	11.5 oz.	00Z1203	27.97
CTAR-1	1 gal.	95B9179	254.66
CTSR-12	10 oz.	00Z1201	36.05
CTSR-1	1 gal.	94B4217	344.16
CTSR-HV1	1 gal.	93B3184	1090.34

(64977)

STATIC FREE™ HARD SURFACE TREATMENT

ITW Chemtronics®

- Provides static dissipation to hard surface
- Long-lasting dissipative protection; up to 30 days
- Effective in relative humidity below 15%
- Noncorrosive, amine free formulation
- Meets static decay criteria of MIL-B-891705C
- Nonflammable
- Safe on surfaces not harmed by water
- Nonabrasive
- No surfactants, no phosphates

Static Free™ Hard Surface Treatment is formulated to provide static dissipative properties on a variety of hard surfaces. This aqueous based formulation is suitable for most non-porous surfaces, dries fast and will rapidly render the surface static dissipative.

Mfg. Part No.	Description	Stock No.	Price Each
ES3260	Static Free Hard Surface Treatment – 32 oz trigger sprayer	83T1900	11.90
ES160	Static Free Hard Surface Treatment – 1 gallon	83T1894	24.33

(201286)

STATIC FREE™ CARPET TREATMENT

ITW Chemtronics®

- Provides static dissipation to porous surfaces
- Reduces static build up for carpet and fabric surfaces
- Leaves no film
- Effective in relative humidity below 15%
- Chloride and amine free formulation
- Noncorrosive, neutral pH
- Meets static decay criteria of MIL-B-891705C
- Safe on surfaces not harmed by water
- No surfactants, no phosphates
- Low odor

Static Free™ Carpet Treatment is a water-based formulation created to prevent static electricity build up on carpet fibers and other fabric surfaces. Its specialty formulation controls the generation of static charges on all types of fabric surfaces.

Mfg. Part No.	Description	Stock No.	Price Each
ES3261	Static Free Fabric Treatment Treatment – 32 oz trigger sprayer	83T1901	10.19
ES161	Static Free Fabric Treatment – 1 gallon	83T1895	25.04

(201287)

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(196545)

STATIC FREE™ FLOOR FINISH

ITW Chemtronics®

- Gives a non-yellow high gloss finish for conventional flooring
- Easy to apply and maintain
- Eliminates need for static control tiles
- Dries in 30 minutes
- Provides a surface resistivity 106 – 109 ohms per ANSI/ESD S7.1
- Meets slip resistance standard ASTM D-21.0

Static Free™ Floor Finish is used to dissipate static charges and prevent static charge generation while providing a high gloss finish for conventional flooring. It can be easily applied to a variety of flexible and hard surfaces, such as vinyl composition, vinyl asbestos, linoleum, rubber, sealed wood, sealed concrete and terrazzo.

Mfg. Part No.	Description	Stock No.	Price Each
ES167	Static Free Floor Finish – 1 gallon	83T1897	45.38
ES567	Static Free Floor Finish – 5 gallon	83T1903	143.98

(201288)

DUSTER AND FREEZE SPRAYS

RoHS Compliant Available

multicomp

- Environmentally safe
- Non-ozone depleting
- Evaporates rapidly
- Zero residue

SPC12778

SPC12779

Mfg. part no. SPC12778 non-flammable duster is formulated with HFC-134a, a pure, moisture-free, odorless inert gas that removes microscopic contaminants, particles, dust, lint, metallic oxide deposits and other soils without the use of harmful solvents.

Mfg. Part No.	Description	Size (oz.)	Stock No.	Price Each 1-13
SPC12778	Non-Flammable Duster Spray	10	78H4044	11.45

Mfg. part no. SPC12779 non-flammable freeze spray is formulated with HFC-134a, a rapidly evaporating liquid that chills to -62°F (-52°C). Used as a troubleshooting aid for intermittently faulting capacitors, resistors, semiconductors, and other defective components. Can also detect cold solder joints, cracks in PCBs, and oxidized junctions.

SPC12779	Non-Flammable Freeze Spray	10	78H4045	11.37

(78922)

PRECISION-V HIGH-PRECISION SOLVENT CLEANER

RoHS Compliant Available

TECHSPRAY

PRECISION V

Features

- Nonflammable with no flash-point
- Low VOC — 37% (EPA), 75% (CARB)
- Non-ozone depleting
- Residue-free
- Rapid evaporation
- Safe on most plastics
- Ideal replacement for AK225

1651-16S

1651 series Precision-V high-performance, high-precision flux remover cleans R, RA, RMA and SA type flux residues after high-temperature reflow, wave and hand soldering. Ideal for both lead and lead-free electronic and electrical soldering processes. Effective on both rosin and no-clean fluxes. And because Precision-V flux remover is non-ozone depleting, it's the ideal replacement for cleaners containing Freon, HFC-141b and AK225. Formulated to reduce VOCs within your facility. Ideal for aviation and other applications where strict VOC caps apply (based on EPA VOC exemptions). Bulk chemicals ideal for cold/bucket cleaning and ultrasonics (not intended for vapor degreaser).

Mfg. Part No.	Description	Size	Stock No.	Price Each
1651-16S	Precision-V Flux Remover — Aerosol Spray	16 oz.	34P2758	35.03
1651-P	Precision-V Flux Remover — Glass Bottle	1 pint	51P2802	47.49

(142140)

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See the newest products, technologies and suppliers on our website.

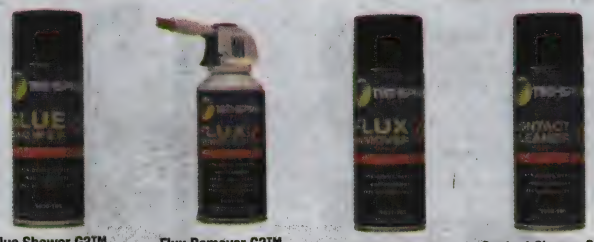
(196560)

CHEMICAL CLEANERS & ACCESSORIES

G3™ NON-FLAMMABLE SOLVENT CLEANERS

RoHS Compliant Available

TECHSPRAY



Blue Shower G3™ Cleaner/Degreaser 1630 Series

Flux Remover G3™ with Brush Attachment 1631-5S

Flux Remover G3™ 1631 Series

Contact Cleaner G3™ 1632 Series

- Superior HCFC-141b replacement
- Powerful and non-flammable
- Non-Ozone Depleting
- Nonflammable
- Safe on Most Plastics
- Rapidly Evaporating
- Works with Lead- Free Soldering Process
- **Mfg. Part No. 1630-16S** - Ford Tox #167818
- **Mfg. Part No. 1631-16S** - Ford Tox #167834
- **Mfg. Part No. 1632-16S** - Ford Tox #167835
- **Mfg. Part Nos. 1630-16S** and **1632-16S** pass Boeing spec D6-17487 rev P

No-Clean Flux Remover G3™ 1634 Series

G3™ Universal Cleaner 1638-G

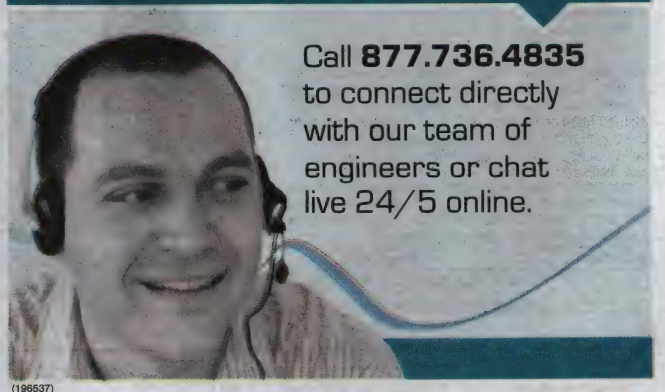
Industrial Maintenance Cleaner G3™ 1635-20S

G3™ solvents are designed as direct replacements for all cleaner/degreasers, flux removers, and contact cleaners containing HCFC-141b. **Mfg. part no. 1630-16S** Blue Shower® G3™ is an innovative blend designed for precision cleaning of polar and non-polar soils including hand and solder oils, greases, silicones, fluxes and other similar contaminants. **Mfg. part no.1631-16S** Flux Remover G3™ is designed specifically for removing R, RA, RMA and SA type flux residues after high temperature reflow. **Mfg. part no. 1634-16S** No-Clean Flux Remover G3 cleans tough-to-clean white residues left from no-clean flux. **Mfg. part no. 1632-16S** Contact Cleaner G3™ is the optimal choice for removing oils, greases, silicones, dirt and grime from all types of switches, relays, contact pads and other electrical connections. **Mfg. part no. 1635-20S** Industrial Maintenance Cleaner is for cleaning all types of switches, relays, contact pads, and other electrical connections.

Mfg. Part No.	Description	Size	Stock No.	Price Each
● 1630-16S	Blue Shower® G3™ Gen-Purpose Cleaner/Degreaser	16fl.oz. (US)	81C8423	29.57
● 1631-5S	G3™ Flux Remover	5fl.oz. (US)	86H3843	18.78
● 1631-16S	G3™ Flux Remover	16fl.oz. (US)	81C8424	28.32
● 1631-16SB	G3™ Flux Remover	16fl.oz. (US)	46W1022	29.14
● 1632-16S	G3™ General-Purpose Contact Cleaner	16fl.oz. (US)	81C8425	29.60
● 1634-12S	G3™ No-Clean Flux Remover	12fl.oz. (US)	97H2095	26.66
● 1638-G	G3™ Universal Cleaner (Flux Remover)	1gallon (US)	92H5286	285.93
● 1635-20S	G3™ Industrial Maintenance Cleaner	20fl.oz. (US)	59M9293	24.91

(72172)

TECHNICAL SUPPORT HOTLINE



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(196537)

E-LINE ECONOMICAL & POWERFUL SOLVENT CLEANERS

RoHS Compliant Available

TECHSPRAY

E-LINE

E-Line IPA

E-Line Zero-VOC

EcoLine™ Cleaner/Degreaser 1620 Series

EcoLine™ Flux Removers 1621 Series

EcoLine™ Contact Cleaner 1622 Series

- Non-ozone depleting

1610 series E-LINE IPA isopropyl alcohol 99.8% pure IPA is ideal for defluxing, stencil cleaning & fiber optics and **1611 series** for removing inks & adhesives. **1620 series** EcoLine™ cleaner/degreaser is designed for cleaning of polar and non-polar soils including hand and solder oils, greases, silicones, fluxes and other similar contaminants. **1621 series** EcoLine™ flux remover dissolves type R, RMA, SA and most no-clean fluxes. It can also be used for the removal of light oils, silicones, waxes, greases, and other similar contaminants. **1622 series** EcoLine™ contact cleaner removes oils, greases, silicones and dirt from all types of switches, relays, contact pads and other electrical connections. **1626 series** E-LINE Hi-Flash is a non-chlorinated, light duty degreaser and electrical cleaner ideal for electrical & maintenance cleaning. **NOTE:** These economical hydrocarbon cleaners are flammable.

Mfg. Part No.	Description	Volume	Stock No.	Price Each
● 1610-12S	E-LINE IPA, Isopropyl Alcohol	12fl.oz. (US)	46W1015	8.98
● 1611-12S	E-Line Zero-VOC Maintenance Cleaner	12fl.oz. (US)	46W1017	9.06
● 1621-10SB	E-Line Flux Remover	10fl.oz. (US)	46W1018	16.62
● 1620-10S	EcoLine™ Cleaner/Degreaser	10fl.oz. (US)	10J6813	15.38
● 1621-5G	EcoLine™ Flux Remover / Maintenance Cleaner	18.9l	10J6815	197.92
● 1621-10S	EcoLine™ Flux Remover	10fl.oz. (US)	10J6814	15.82
● 1622-10S	EcoLine™ Contact Cleaner	295ml	78H3678	14.85
● 1622-13S	EcoLine™ Contact Cleaner	13fl.oz. (US)	33K2606	16.92
1626-11S	E-Line Hi-Flash Maintenance Cleaner	11fl.oz. (US)	46W1020	9.06
● 1611-P	E-Line Hi-Flash Maintenance Cleaner	1pint (US)	46W1016	6.92
1626-G	E-Line Hi-Flash Maintenance Cleaner	1gallon (US)	46W1019	39.00
1626-5G	E-Line Hi-Flash Maintenance Cleaner	5gallon (US)	46W1021	175.00

(34287)

ECO-STENCIL WATER-BASED SMT STENCIL CLEANER

RoHS Compliant Available

TECHSPRAY

- Eco-friendly "green" high-performance cleaning
- Safe for equipment stencils, tools, squeegee, misprinted boards, work surfaces
- Removes unsoldered eutectic (leaded) and lead-free solder pastes
- Quickly clean off uncured adhesives
- Non-flammable
- Biodegradable
- Low VOC
- Non-ozone depleting

1-Qt. Trigger Spray

1-Gal. Container

Wipes

ECO-STENCIL™ MANUAL STENCIL CLEANER

Eco-Stencil™ manual stencil cleaner effectively removes all types of solder paste (e.g. water-based, RMA, no-clean, lead-free) and uncured adhesive from screens, misprinted boards and equipment. Completely safe on stencils, squeegees, and equipment surfaces. One quart trigger spray and one gallon containers are ideal for surface and tool cleaning. Trigger spray eliminates the need for propellants, which can have a global warming impact. Convenient pre-saturated wipes, in a pop-up dispenser, are lint-free and resistant to tearing/shredding. Fully compliant with the requirements of CARB (California Air Review Board), European REACH (Registration, Evaluation, Authorization & Restriction of Chemicals) and the initiatives of WEEE (Waste Electrical and Electronic Equipment Directive), RoHS (Restriction of Hazardous Substances), and SVHC (Substances of Very High Concern). Even the packaging is recyclable.

Mfg. Part No.	Description	Stock No.	Price Each
● 1570-QT	1-Quart Trigger Spray	10R1050	13.80
● 1570-G	1-Gallon	10R1049	25.95
● 1570-54G	54-Gallon	27T6069	3878.00
● 1570-100DSP	100-Count Pre-Saturated Wipes	16R1544	18.97

ECO-STENCIL™ AQ BATCH STENCIL CLEANER

Designed for ultrasonic and spray-in-air systems, Eco-Stencil AQ batch stencil cleaner offers great cleaning performance with much lower environmental impact. Concentrated formula (1 gallon makes 10 gallons of cleaner) saves shipping and storage cost. Can be used in all of the most common cleaning equipment and has been tested and proven compatible with every part of your stencil.

Mfg. Part No.	Description	Stock No.	Price Each
● 1572-G	1-Gallon (Makes 10 Gallons)	91R1997	84.00

(148500)

ISOPROPYL ALCOHOL (IPA) GENERAL-PURPOSE CLEANERS

RoHS Compliant Available

TECHSPRAY

ELINE

1610-P 1610-PT 1610-100DSP 1610-50PK

Ultra-pure isopropyl alcohol (IPA) is used for general-purpose cleaning. Excellent for tape head cleaning, removal of fluxes, light oils, polar soils, and white mineral residue. Suitable as a thinner for flux. **1610 series** IPA cleaners and wipes are 99.8% pure and meets ACS reagent grade IPA, Fed. spec. TT-1-735A (amend 3, notice 2) grades A&B, ASTM D770-05 specifications. **Mfg. part no. 1608-100DSP** wipes are saturated with 70% pure IPA with 30% DI water to slow down dry time thereby allowing it to soak into and break-down heavier soils.

1610-G1 1608-100FL

Mfg. Part No.	Description	Stock No.	Price Each
1608-100DSP	SMT Stencil Wipes, 100 Wipes	68K7278	24.54
1610-50PK	IPA Presaturated Wipes; Individual Packets — **50 Per Pkg.**	98H3675	24.73
1610-100DSP	IPA Presaturated Wipes in Pop-Up Dispenser — **100 Wipes**	25C4466	27.20
1610-P	IPA Cleaner — 1 Pint Bottle	10J6809	11.07
1610-PT	IPA Cleaner — 1 Pint Trigger Spray Bottle	68K7280	13.14
1610-G1	IPA Cleaner — 1-Gal. Container	74R6763	30.22
1610-G4	IPA Cleaner — **Four 1-Gal. Containers Per Pkg.**	96B7338	110.64
2358-50	TechClean® SMT Cleaning Wipes	68K7383	48.77
1608-100FL	IPA Cleaning Wipes - Flip-top Tub	66W0674	27.79
1608-100R	IPA Cleaning Wipes - Refill	66W0675	23.79
1610-100FL	Isopropyl Alcohol Wipes - Flip-top Tub	66W0676	30.45
1610-100R	Isopropyl Alcohol Wipes - Refill	66W0677	26.45

(34292)

HIGH PRECISION LUBRICANTS

RoHS Compliant Available

TECHSPRAY

- Displaces moisture
- Waterproofs
- Penetrates rapidly
- Loosens corroded parts
- Prevents corrosion
- Safe on most plastic
- Non-ozone depleting

Mfg. part no. 2420-10S Slic™ silicone lubricant is specifically formulated to lubricate, protect and water-proof mechanical devices found in electrical and electronic equipment. **Mfg. part no. 2421-12S** Kleen-It™ G3® cleaner/lubricant is formulated to quickly penetrate and flush away grease, dirt, oil, dust, and oxidized surface metals. Leaves a thin protective coating of silicone to lubricate and protect against corrosion.

Mfg. Part No.	Description	Size	Stock No.	Price Each
2420-10S	Slic™ Silicone Lubricant Aerosol	10 oz.	70K9009	16.03
2421-12S	Kleen-It™ G3® Cleaner/Lubricant	12 oz.	68K7386	22.79

(65179)

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(196546)

AK225 HIGH PRECISION SOLVENT CLEANERS

RoHS Compliant Available

TECHSPRAY

1660-6S No-Clean Flux Remover w/ Brush 1665-18S Flux Remover AMS 1667-18S Blue Shower II Cleaner Degreaser 1668-18S Contact Cleaner II

- Non-Flammable
- Safe on Plastics
- VOC exempt /Low VOC
- Rapid evaporation
- Zero residue

High-precision, high-performance cleaners. **Mfg. part no.1667** Blue Show II Cleaner/Degreaser is designed for cleaning of polar and non-polar soils including hand and solder oils, greases, silicones, fluxes and other similar contaminants. **Mfg. part no. 1665** Flux Remover AMS removes R, RA, RMA and SA type flux residues after high-temperature reflow. **Mfg. part no. 1660** No-Clean Flux Remover cleans tough-to-clean white residues left from no-clean flux. **Mfg. part no. 1668** Contact Cleaner II removes oils, greases, silicones and dirt from all types of switches, relays, contact pads and other electrical connections.

Mfg. Part No.	Description	Size	Stock No.	Price Each
1660-6S	No-Clean Flux Remover w/ Brush	6 oz.	07J7028	27.00
1664-18S	Kleen ATMS	18 oz.	90B9271	57.74
1665-18S	Flux Remover AMS	18 oz.	00Z2012	61.66
1667-18S	Blue Shower II Cleaner/Degreaser	18 oz.	00Z1978	60.46
1668-18S	Contact Cleaner II	18 oz.	00Z2013	62.23

(34294)

CONFORMAL COATINGS

RoHS Compliant Available

TECHSPRAY

2102-12S Silicone 2103-12S Acrylic 2104-12S Urethane 2108-12S 2108-G

- High dielectric strength
- Crystal clear, glossy finish
- UV indicator for black light QC inspection
- IPC-CC-830B and MIL-I-46058C tested
- UL94 V-0 rated

Conformal coatings are designed to spray directly on printed circuit boards and protect them from the environments. Each Fine-L-Kote product is intended for different conditions and contain Opti-Scan for black light QC inspection. IPC-CC-830B and MIL-I-45058C qualified. **Mfg. part no. 2102-12S** conformal silicone coating is UL rated file no. E95150. **Mfg. part no. 2102-12S** Silicone coating protects against moisture, thermal shock, chemicals. **Mfg. part no. 2103-12S** Acrylic hard coating, used on aviation components. **Mfg. part no. 2104-12S** Urethane coating protects against chemicals.

Mfg. Part No.	Container Type	Size	Stock No.	Price Each
2102-12S	Aerosol	12 oz.	10J6915	32.60
2103-12S	Aerosol	12 oz.	68K7372	26.24
2104-12S	Aerosol	12 oz.	10J6920	30.02
2108-12S	Aerosol	12 oz.	94M4715	24.98
2108-P	Bottle	1 pint	96M0443	27.62
2108-G	Can	1 gal.	96M0442	141.70
2109-P	Bottle	1 pint	27T6072	35.90
2109-G	Can	1 gal.	27T6071	184.22
2109-5G	Drum	5 gal.	27T6073	729.30
2110-P	Bottle	1 gal.	27T6075	11.72
2110-G	Can	1 gal.	27T6074	60.45
2110-5G	Drum	5 gal.	27T6076	272.34

(116818)

CHEMICAL CLEANERS & ACCESSORIES

DUSTERS AND FREEZERS

RoHS Compliant Available

TECHSPRAY

Economy Duster 1673 | Duster 1671 | Combo Pack Duster 1671 | Freezer 1672

- Moisture-free
- Non-flammable, (except **mfg. part no. 1673-10S**)
- Non-ozone depleting

Dusters blow away microscopic contaminants, lint, dust, metallic oxide deposits and other soils that can cause heat build-up or shorts in sensitive electronics. Freezers chill down PC boards for troubleshooting intermittently faulting capacitors, resistors, semi-conductors, and other defective components.

Mfg. part no. 1673-10S Economy duster has a powerful blast for quick dust removal. It should not be used around open flames or sparks.

Anti-Stat Freezer 1747 | Vortex Duster 1697

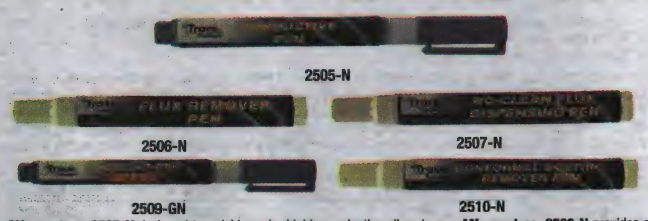
Mfg. Part No.	Description	Size	Stock No.	Price Each
● 1673-10S	Economy Duster	10 oz.	88K0924	7.48
1671 series Non-flammable ultra-pure duster is 100% pure HFC-134a and is deal for energized circuit cleaning.				
● 1671-10S	Duster	10 oz.	00Z1980	13.16
● 1671-15S	Duster	15 oz.	00Z1981	19.46
1697 series Vortex™ dusters are 100% pure HFC-134a and blast at a much higher velocity. **Mfg. part no. 1697-8S** Vortex™ 360° duster sprays upside-down for cleaning hard-to-reach places. They are ideal for the removal of dust, lint and other contaminants from computers, printers as well as optical cleaning equipment.				
● 1697-10S	Vortex™ High-Velocity Duster	10 oz.	14C8044	17.60
● 1697-8S	Vortex™ 360° High-Velocity Duster	8 oz.	14C8045	16.06
1672 series Diagnostic freezer sprays are used as a troubleshooting aid and chill PC boards down to -60°F.				
● 1672-10S	Freezer	10 oz.	00Z1982	14.11
● 1672-15S	Freezer	15 oz.	58K0004	21.31
Mfg. part no. 1747-10S Anti-static, diagnostic freezer spray is used as a troubleshooting aid in static sensitive areas. Chills PC boards down to -40°F and leaves behind a light, anti-static residue to avoid static build-up.				
● 1747-10S	Anti-Static Freezer	10 oz.	00Z1983	20.79

(34293)

TRACE TECH PCB REWORK & REPAIR PENS

RoHS Compliant Available

TECHSPRAY



2505-N | 2506-N | 2507-N | 2509-GN | 2510-N

Mfg. part no. 2505-N designed to quickly make highly conductive silver traces. **Mfg. part no. 2506-N** provides a convient method for touch-up cleaning of flux residues. **Mfg. part no. 2507-N** designed to dispense no-clean flux in the high precision applications of prototype and rework/repair of printed circuit boards. **Mfg. part no. 2509-GN** is designed to insulate printed circuit board traces and components against high voltage arcing. **Mfg. part no. 2510-N** quickly and precisely removes most conformal coatings.

Mfg. Part No.	Description	Stock No.	Price Each
● 2505-N	Conductive Pen	69K4414	47.84
● 2506-N	Flux Remover Pen	10J7017	9.72
● 2507-N	No-Clean Flux Dispensing Pen	68K7393	7.51
● 2509-GN	Overcoat Pen -Green	26C1581	15.75
● 2510-N	Conformal Coating Remover	68K7396	11.25

(68651)

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(212563)

CREDIT CARD READER CLEANER

RoHS Compliant Available

TECHSPRAY

- Credit card size 2⅛" x 3⅜"
- Non-abrasive
- Safe on plastics
- Zero residue

A one-time use Tech Clean® cleaning card is presaturated with isopropyl alcohol (IPA) to remove dirt, magnetic oxides, and other contaminants from credit card readers, ATM's/POS terminals, and other magnetic or photocard reading apparatus. **Sold in packages of 50 cards.**

Mfg. Part No.	Description	Pkg. of	Stock No.	Price per Pkg. Each
● 1603-50PK	Tech Clean® Presaturated Cleaning Cards	50	99B3532	72.28

(68654)

SPECIALTY CLEANING PRODUCTS

RoHS Compliant Available

multicomp

1612-2SQ | 1613-6S | 1625-18S | 1607-6FP

ROLLER REJUVENATOR
Cleans and revitalizes rubber, rollers and platens.

Mfg. Part No.	Description	Size	Stock No.	Price Each
● 1612-2SQ	Roller Rejuvenator	2 oz. Bottle	00Z1958	8.83

LABEL AND ADHESIVE REMOVER
Safely removes labels and adhesive gums. **NOTE:** Not for sale in California due to CARB regulations.

● 1613-6S	Label and Adhesive Remover	6 oz. Aerosol	00Z2014	13.67

GLASS CLEANER
An outstanding product for the removal of hand oils, ink marks, dust, fingerprints, nicotine, syrup, carbon and other soils from CRTs, computer screens, windows, and other hard surfaces.

● 1625-18S	Glass Cleaner	18 oz. Aerosol	98B7790	4.79

OFFICE EQUIPMENT MAINTENANCE CLEANER
This unique maintenance product cleans equipment surfaces, removing ink, toner, fingerprints and other common soils, making office equipment look "new" again. Ideal for repair and refurbishing facilities. Can also be used as a general surface cleaner.

● 1607-6FP	Office Equipment Maintenance Cleaner	6 oz. Pump Spray	51R8448	8.18

(34290)

LICRON PERMANENT STATIC DISSIPATIVE COATING

RoHS Compliant Available

TECHSPRAY

- Provides Excellent Adhesion to Metal, Plastics, Paints and Most Other Surfaces
- Operates From 0 - 100% Humidity and is Translucent
- Cured Coating is Durable, Will Not Chip and Maintains 10^7 - 10^9 Conductivity
- Coats 200ft^2

Using Licron™ permanent static dissipative coating eliminates the need for replacing non-ESD safe objects. Can be used to treat non-EDS safe bins, totes, tools, etc. Can help work areas meet ANSI/ESD-S20.20 standards.

Mfg. Part No.	Description	Size	Stock No.	Price Each 1-9
● 1756-8S	Crystal Clear Static Dissipative Coating	8 oz.	59M9294	39.46

(101624)

ZERO CHARGE ANTISTATIC CLEANERS, FLOOR COATINGS AND HAND LOTIONS

RoHS Compliant Available

TECHSPRAY

1743-QT 1743-50PK 1720-G 1702-8FP

Zero Charge® screen and keyboard cleaner and presaturated wipes, with regular use, will eliminate static charge from sensitive surfaces and provide long-term static protection. Removes hand oils, ink marks, dust, fingerprints, nicotine, syrup, carbon, and other soils from work areas. Non-streaking, foaming action cleans plastic and glass. Non-ozone depleting.

Mfg. Part No.	Description	Size	Stock No.	Price Each
1743-QT	Zero Charge® Antistatic Screen and Keyboard Cleaner with Trigger Spray	1 Quart	81H3814	19.71
1743-50PK	Zero Charge® Antistatic, Presaturated Screen and Keyboard Cleaner Wipes in Individual Packets	50 Wipes	51R6163	26.67

Zero Charge® static-dissipative floor coating is a high-gloss, zinc-free floor finish designed for use in electronic production areas, computer rooms and other static-sensitive areas. Contains a non-migratory, static-dissipative polymer, which will maintain a constant surface resistivity of 10^6-10^9 ohms throughout the humidity spectrum. Provides a glossy yet slip-resistant finish.

1720-G	Zero Charge® Static-Dissipative Floor Coating	1 Gallon	01C1846	71.21

Zero Charge® antistatic hand lotion contains natural ingredients including aloe vera and vitamins A and E. Special blend of moisturizers penetrate rapidly leaving the skin soft and non-greasy. This antistatic formulation is designed to improve the contact between personnel and grounding devices such as wrist and heel straps. Does not contain silicone or lanolin found in conventional hand lotions that can interfere with PCB manufacturing.

1702-8FP	Zero Charge® Antistatic Hand Lotion with Finger-Pump	8 Oz.	33K2643	7.77
1702-G	Zero Charge® Antistatic Hand Lotion	1 Gallon	68K7284	63.75

(85016)

TECHSPRAY RENEW ECO-FRIENDLY DUSTER AND FREEZER

RoHS Compliant Available

TECHSPRAY

- Global Warming Potential (GWP) less than 1/100th of HFC-134a
- 8% more volume (sprays) per can vs. HFC-134a
- Non-flammable
- Non-ozone depleting
- Zero residue & no odor

Eco-Duster and Eco-Freezer are drop-in replacements for HFC-134a based products. They are non-flammable, odorless, low toxicity, and similar velocity and freezing temperature as traditional dusters and freezers.

Mfg. Part No.	Description	Volume	Stock No.	Price Each
1580-10S	Eco Duster	8.5fl.oz (US)	88T4950	18.63
1583-10S	Eco Freezer	8.5fl.oz (US)	88T4951	20.14

(209486)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196562)

TECHNICAL BRUSHES

RoHS Compliant Available

TECHSPRAY

Mfg. Part No.	Description	Stock No.	Price Each
2032-1	½" x ⅜" Horse Hair – Metal Handle	80K6222	10.73
2042-1	1³⁄₁₆" x ⅜" Horse Hair – Metal Handle	68K7335	26.09
2022-1	2⅛" x ⅞" Hog Hair – Wood Handle	68K7330	11.99
2021-1	1⅜" x ¼" Hog Hair – Wood Handle	68K7329	5.90
2031-1	¼" x ³⁄₁₆" Horse Hair – Metal Handle	68K7332	11.17
2027-1	⅞" x ⅜" Hog Hair – Wood Handle	68K7331	9.66
2033-1	⁷⁄₁₆" x ⅜" Horse Hair – Metal Handle	68K7333	8.11
2040-1	1³⁄₁₆" x ⅛" Horse Hair – Metal Handle	68K7334	15.96
2020-1	1⅜" x ¼" Horse Hair – Metal Handle	68K7328	4.12
2043-1	1³⁄₁₆" x ⅜" Stainless Steel – Metal Handle	68K7336	27.09

(88653)

TECHNICAL SWABS

RoHS Compliant Available

TECHSPRAY

Double-Tip Cotton Swab 2300 Series

Single-Tip Cotton Swab 2301 Series

Double-Tip Pointed Cotton Swab 2313-30

TechSwabs™ Foam Tip Swab 2303-50

TechSwabs™ Foam Tip Swab 2306-50

TechSwabs™ Foam Tip Swab 2307-50

COTTON SWABS

Cotton swabs feature tightly wrapped, pre-cleaned cotton tips that provide the least amount of extractable contaminants. Durable wooden handles. Double and single round tipped swabs offer aggressive cleaning while pointed tip swabs allow for precision cleaning.

Mfg. Part No.	Description	Swab Tip Width (In.)	Handle Lgth. (In)	Pkg. of	Stock No.	Price per Pkg. Each
2300-100	Double-Tip Cotton Swabs	³⁄₁₆	6	100	83K9262	5.18
2300-1000	Double-Tip Cotton Swabs	³⁄₁₆	152.4	1000	33K2634	39.49
2301-100	Single-Tip Cotton Swabs	³⁄₁₆	152.4	100	68K7376	4.48
2301-1000	Single-Tip Cotton Swabs	³⁄₁₆	152.4	1000	06H2871	27.21
2313-30	Double Pointed Tip Cotton Swabs	⅛	3¼	30	95C0471	7.31

TECHSWABS™ FOAM SWABS

TechSwabs™ foam tip swabs are precisely designed, manufactured and packaged to serve various cleaning and maintenance needs. Absorbent foam tip is heat sealed onto flexible, polypropylene handle to avoid contaminating residues of adhesives. Manufactured in accordance with rigid specifications to provide low particle generation and solvent compatibility.

CONTINUED

TECHNICAL SWABS (CONT.)

Mfg. Part No.	Description	Swab Tip Width (In.)	Handle Lgth. (In.)	Pkg. of	Stock No.	Price per Pkg. Each
● 2303-50	TechSwabs™ Single-Tip Foam Swabs	¼	149.23	50	68K7377	22.66
● 2306-50	TechSwabs™ Single-Tip Foam Swabs	½	127	50	26K1254	21.33
● 2307-50	TechSwabs™ Single-Tip Foam Swabs	3/16	106.04	50	68K7378	32.79

(56070)

SWABS

RoHS Compliant Available

ITW Chemtronics®

CC50

CF1050

CF2050

CX50

CT200

CHAMOIS TIPS™
For cleaning audio/video heads and optical pick-ups. **Sold in bags of 50.**

Mfg. Part No.	Description	Stock No.	Price per Pkg. Each
● CC50	3¼", ABS Handle, 3/8"W x 7/8"L x 1/8" Thick Head; Flexible Handle	97F7566	48.44

FOAMTIPS™
Highly absorbent precision cleaning swabs with 100 ppi polyurethane foam heads. They come in a variety of head sizes and shapes. **Sold in bags of 50.**

● CF1050	5", Polypropylene Handle, 13/16"W x 1"L x 3/8" Thick Rigid Head	50F9478	25.83
● CF2050	5⅛", Polypropylene Handle, ½"W x 1"L x 7/16" Thick Rigid Head	50F9490	28.81
● CF3050	6", Polypropylene Handle, ¼"W x ¾"L x ¼" Thick Rigid Head	50F9475	25.63
● CF4050	2⅞", Polypropylene Handle, 3/16"W x ½"L x 3/16" Thick Rigid Head	50F9489	22.99

FLEXTIPS™
Flexible 100 ppi polyurethane foam head for cleaning optics and confined areas. **Sold in bags of 50.**

● CX50	4 7/16", Polypropylene Handle, ¼"W x ¾"L x 13/16" Flex Tip	50F9476	35.41

COTTONTIPS™
Double-head 100% pure pharmaceutical-grade bleached white cotton swabs for general cleaning applications. **Sold in bags of 100.**

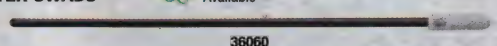
● CT100	6", Wood Handle, 3/16"W x 5/8"L x 3/16" Thick Rigid Single Head	96B1615	4.56
● CT200	6", Wood Handle, 3/16"W x 5/8"L x 3/16" Thick Rigid Double Head	50F9487	4.76

(7504)

COVENTRY™ SEALED POLYESTER SWABS

RoHS Compliant Available

ITW Chemtronics®



36060

Exceptionally clean swabs produced by Coventry's proprietary thermoforming process. Swabs are acid and solvent resistant without loose fibers or particulate. Sealed edges build in extra strength with no loose fibers or particulate. **Sold in packages of 500.**

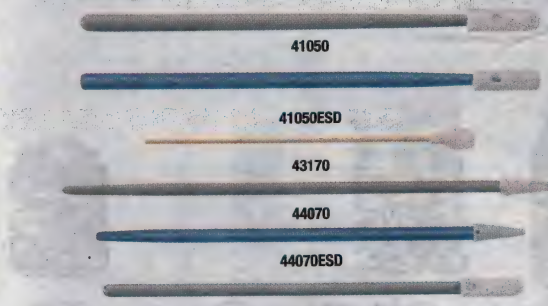
Mfg. Part No.	Description	Stock No.	Price per Pkg. Each
● 36060	6" Polypropylene Handle, 0.21" Sealed Polyester Head Swab	16C7345	157.32
● 38040	2.7" Polypropylene Flexible Tip Handle, 0.12" Sealed Polyester Head Swab	91B0463	84.16

(64981)

COVENTRY™ SEALED FOAM SWABS

RoHS Compliant Available

ITW Chemtronics®



41050

41050ESD

43170

44070

44070ESD

48040

Most cost-efficient swabs for general-purpose applications. 100 PPI reticulated medical grade foam provides excellent particle entrapment. The open cell structure gives the best solvent holding ability of any style swab. These swabs are adhesive and binder free, and the fiberless construction does not generate particles. **Sold in bags of 500.**

Mfg. Part No.	Description	Stock No.	Price Each
● 41050	2.8" Polypropylene Handle, 0.14" Sealed Foam Head Swab	16C7316	56.03
● 41050ESD	2.8" Polypropylene ESD Handle, 0.14" Sealed Foam Head Swab	16C7350	113.98
● 43170	6" Wood Handle, 0.35" Foam Over Cotton Head Swab	97C8515	110.38
● 44070	3.2" Polypropylene Handle 0.13" Sealed Foam Pointed Head Swab	16C7352	59.68
● 44070ESD	3.2" Polypropylene ESD Handle 0.13" Sealed Foam Pointed Head Swab	16C7346	114.34
● 48040	2.7" Polypropylene Flexible Tip Handle, 0.12" Sealed Foam Head Swab	97C8516	71.38

(64980)

SCRUBS® IN-A-BUCKET

RoHS Compliant Available

ITW Chemtronics®

Heavy-duty, waterless hand cleaner towels with proven pumice performance that can be used anywhere, anyplace, anytime. Loosen, dissolve and absorbs dirt, grease, oil, paint, adhesive, tar, caulk and more. They are antibacterial (contain Triclosan), while conditioning and softening hands. 72 count per bucket. Size: 10½ x 12¼.

Mfg. Part No.	Stock No.	Price Each
● 42272	19C9362	28.94

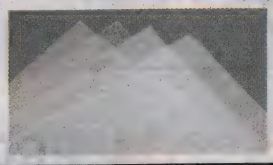
(64984)

WIPES

RoHS Compliant Available

ITW Chemtronics®

Mfg. part no. C600 and **C900**,Twillwipes™, are textured cotton wipes that trap contaminates and particulates. Highly absorbent.



Mfg. Part No.	Size	Pkg. of	Stock No.	Price Each
● C900	9 x 9"	150	50F9483	96.61
Mfg. part no. C920, Opticwipes™, are soft, nonabrasive wipes for cleaning optical-grade surfaces, laboratory equipment and computer components.				
● C920	9 x 9"	500	50F9486	50.86
Mfg. part no. C910, Controlwipes™, are 100% lint-free cellulose polyester blend for maximum contamination control.				
● C910	9 x 9"	150	50F9485	43.65
Mfg. part no. QbE, cleaning system, is ideal for cleaning fiber-optic end faces and is effective in "wet" or "dry" applications.				
● QBE	3 x 3"	200	49H7682	54.76
Mfg. part no. 6209, Poly-Wipes are manufactured from lightweight polyester material for high strength, excellent chemical capability and the lowest levels of contamination possible.				
● 6209	9 x 9"	150	16C7310	67.73
Econowipes™ dry wipes are manufactured from nonwoven polyester/cellulose blend material, ideal for cleaning in all fiber-optic applications and clean room environments.				
● 6704	4 x 4"	1200	63M2911	35.43
● 6709	9 x 9"	300	49H7726	35.43

(7505)

PRESATURATED PADS

RoHS Compliant Available

ITW Chemtronics

Presaturated swabs and wipes combine highly effective cleaners and static dissipative treatments with the convenience of a disposable applicator.

Mfg. part no. CSP20 is a 2-part, cleaning and static-control system for CRT screens. Cleans and controls static. **Sold in box of 25.**

CSP20

Mfg. Part No.	Description	Stock No.	Price Each
CSP20	Screen Prep	00Z1516	33.39

Mfg. part no. CP410 premoistened lens-grade tissue is for cleaning/polishing CRT optical surfaces, lenses, photographic equipment and CRT screens. **Sold in box of 50.**

CP410	Optic Prep	00Z1512	28.04

Mfg. part no. CP400 general-purpose lint-free, nonabrasive pads are presaturated with IPA; ideal for cleaning magnetic heads, computers, office equipment, and electronic appliances. **Sold in box of 50.**

CP400	Chempad	00Z1513	31.39

Mfg. part no. CS25 lint-free polyurethane foam swabs (**type CF2050**) presaturated with IPA. **Sold in box of 25.**

CS25	Chemswab	00Z1515	39.69

Mfg. part no. SIP100P IPA presaturated wipes for general purpose cleaning. Ideal for cleaning solder paste off of SMT stencils. **100 wipes packaged in pop-up tub dispenser.**

SIP100P	IPA Presaturated Cleaning Wipes	01C5050	28.69

(7807)

TECHSPRAY RENEW ECO-FRIENDLY WIPES

RoHS Compliant Available

TECHSPRAY

100% Cotton Cleanroom Wipes

Recycled Wipes, Small

Recycled Wipes, Large

- Eco-friendly "green" high-performance cleaning
- Highly absorbent
- Biodegradable and sustainable

TECHSPRAY RENEW™ high-performance eco-friendly wipes are fully compliant with the requirements of European REACH (Registration, Evaluation, Authorization & Restriction of Chemicals) and the initiatives of WEEE (Waste Electrical and Electronic Equipment Directive). These wipes do not contain RoHS (Restriction of Hazardous Substances) restricted substances, SVHC (Substances of Very High Concern) listed substances, or halides.

100% COTTON CLEANROOM WIPES
Highly-absorbent hydro-entangled cotton wipes absorb six times their weight. Lint-free and extra low chemical extractables make them ideal for cleanroom environments and stencil cleaning. Recommended for ISO 14644-1 Class 5 (US FED STD 209E Class 100) or higher cleanrooms. Thickness: 11 mils. Size: 9"W x 9"L flat. **Sold in bags of 100-count.**

Mfg. Part No.	Description	Size W x L (in.)	Pkg. Qty.	Stock No.	Price per Pkg. Each
2340-100	Renew™ Eco-Friendly Cotton Cleanroom Wipes	228.6 x 228.6	100	16R0508	25.39

RECYCLED CELULOSE DELICATE TASK WIPES
These friendly "green" wipes are 100% recycled celulose that quickly and easily wipes up liquids and dust. Ideal for light cleaning and delicate tasks in labs, repair shops and maintenance facilities. Conveniently packaged in a dispenser box to reduce lint and cross contamination. Thickness: 3 mils. Choice of two sizes: small 4.4"W x 8.3"L and large 15"W x 16.6"L. Dispenser box is made of recycled materials.

2342-300	Renew™ Friendly Green Recycled Delicate Task Wipes — Small	111.76 x 210.82	300	16R1549	4.19
2343-140	Renew™ Friendly Green Recycled Delicate Task Wipes — Large	381 x 421.64	140	16R1550	11.23

(152793)

multicomp AT NEWARK ELEMENT14

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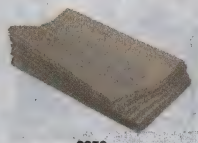
TECHCLEAN WIPES

RoHS Compliant Available

TECHSPRAY



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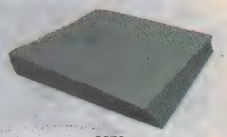

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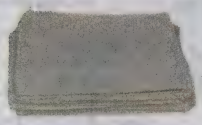


2363

2364

TECHCLEAN® WIPER CLEANING WIPES
TechClean® Wiper general-purpose cleaning wipes are made of hydroentangled cellulose/polyester fiber that's highly absorbent and lintfree. Class 100 cleanroom qualified. These C-folded wipes are packaged to stay contaminant-free until opened and then pack provides convenient dispensing. Color: white.

Mfg. Part No.	Description	Wipe Size (in.)	Stock No.	Pkg. of	Price per Pkg. Each
2350-100	TechClean® Wiper Cleaning Wipes	228.6x228.6	68K7379	100	23.77

TECHCLEAN® ABSORBWIPE CLEANING WIPES
Soft, non-abrasive polyester AbsorbWipes wipes are perfect for cleaning optical equipment and other sensitive surfaces. Highly absorbent to six times their own weight, these flat wipes are available in two popular sizes. Class 100 cleanroom qualified. Color: white.

Mfg. Part No.	Description	Wipe Size (in.)	Stock No.	Pkg. of	Price per Pkg. Each
2351-100	TechClean® AbsorbWipe Cleaning Wipes	101.6x101.6	68K7380	100	9.23
2352-100	TechClean® AbsorbWipe Cleaning Wipes	228.6x228.6	33K2636	100	27.73

TECHCLEAN® PURWIPE™ CLEANING WIPES
Purwipes™ feature a 100% polyester fiber interlocking knit designed for super-high absorbency, low particulate generation, and high-durability. Made tough, these reusable flat wipes can be used repeatedly without fraying. Cleanroom compatible. Class 100 cleanroom qualified. Color: white.

Mfg. Part No.	Description	Wipe Size (in.)	Stock No.	Pkg. of	Price per Pkg. Each
2355-100	TechClean® Purwipe™ Cleaning Wipes	228.6x228.6	68K7382	100	44.74

TECHCLEAN® SMT FOAM CLEANING WIPES
Specifically designed for cleaning surface mount stencils and screening equipment, these flat, polyurethane foam wipes trap particulates and liquids. Ideal for lintfree cleaning. Class 100 cleanroom qualified. Color: white.

Mfg. Part No.	Description	Wipe Size (in.)	Stock No.	Pkg. of	Price per Pkg. Each
2358-50	TechClean® SMT Cleaning Wipes	228.6x228.6	68K7383	50	48.77

TECHCLEAN® BLUE CLEANING WIPES
Specifically designed for general maintenance, these cellulose/polyester wipes are highly absorbent with extra-low particulate and chemical extractables. Color: blue.

Mfg. Part No.	Description	Wipe Size (in.)	Stock No.	Pkg. of	Price per Pkg. Each
2359-300	TechClean® Blue Cleaning Wipes	228.6x228.6	68K7384	300	45.84
2364-50	TechClean® Blue Maintenance Wipes	304.8x304.8	11N6632	50	8.63

TECHCLEAN® TWILLWIPE CLEANING WIPES
Twillwipe tightly-woven cotton twill wipes are perfect for cleaning abrasive surfaces, even in static-sensitive areas. Their high-tear strength prevents shredding and excessive linting. Color: white.

Mfg. Part No.	Description	Wipe Size (in.)	Stock No.	Pkg. of	Price per Pkg. Each
2357-100	TechClean® Twillwipe Cleaning Wipes	6x6	95C0422	100	30.16

TECHCLEAN® MICROFIBER GLASS AND PLASTIC CLEANING WIPES
2363 series TechClean® Microfiber wipes clean and polish glass or plastic. Ideal for removing fingerprints and light oils without the use of solvent cleaners. Ideal for cleaning and preparing smooth surfaces such as glass, polycarbonate, stainless and similar nonporous surfaces without the danger of scratching or etching. Low-linting, polyester/nylon blend fabric with sewn hemmed edges on all four sides. Washable and reusable countless times (avoid fabric softener). Color: white.

Mfg. Part No.	Description	Wipe Size (in.)	Stock No.	Pkg. of	Price per Pkg. 1-99
2363-5	TechClean® Microfiber Glass and Plastic Cleaning Wipes	SPAN	51R8449	5	8.58
2363-50		EHIGH 6x8	95M5306	50	62.61

(68655)

WIPES

RoHS Compliant Available

multicomp

MicroWhite SD | Dyclean ESD-Safe | White Magic with P.A.T.

MICROWHITE SD WIPES
MicroWhite SD knitted lightweight wipes are made from 100% polyester that are durable yet soft and non-abrasive. Provide excellent water and oil absorption. Particles, metallic ion contaminant and extractable are very low. Laundered by ultra-pure D.I. water, and packaged in a Class 10 cleanroom. Size: 9x9". Color: white.

Mfg. Part No.	Description	Wipe Size	Stock No.	Pkg. of	Price per Pkg. 1-24
● DYC100-01-MICROWHITE-SD-99	MicroWhite SD Cleanroom Wipes	228.6x228.6"	19P4635	150	63.20

DYCLEAN ESD-SAFE WIPES
Dyclean ESD cleanroom wipes are knitted polyester with carbon fiber and designed for use in ESD-sensitive environments. Size: 9x9". Color: white.

● DYC100-01-DYCLEAN-ESD-99	ESD-Safe Cleanroom Wipes	228.6x228.6"	01P0783	150	73.39

KIMWIPES Ex-L
Kimwipes Ex-L delicate task wipes are made from 40% post-consumer and 30% pre-consumer wastepaper. Feature extra low lint performance, will not scratch or contaminate, and offer gentle absorbency. Convenient pop-up dispensing box offers controlled one-at-a-time usage and easy portability. Ideal for applications such as: electronics assembly, semiconductor fabrication, research and development and general office use. Size: 15Wx17"L. Color: white.

● DYC100-03-34256	Kimwipes Ex-L Wipes	381x431.8"	01P0786	140	24.58

WHITE MAGIC WIPES WITH P.A.T.
White Magic double-knit wipes feature Anticon® with Particle Attraction Technology (P.A.T.) that attracts 35 times more particles than other wipes and retains 95% of particles captured for less chance of recontamination. Packaged in an ISO Class I cleanroom environment, these wipes start out twice as clean as competitive wipes because they arrive with minimal particles, fibers and ions. Works well with solvents. Size: 9L x 9"W. Color: white.

● DYC100 30-493200-530	White Magic Wipes with P.A.T.	228.6x228.6"	01P0782	150	58.83

(121729)

AEROSOL SPRAY ADHESIVES, CLEANER AND PENETRANT

RoHS Compliant Available

3M

Super 77 Aerosol Adhesive | 90 Aerosol Adhesive | 5-Way-Penetrant

Mfg. part no. 77 Super fast-drying transparent spray adhesive has high-tack, low-misting high coverage. For permanently attaching foils, carpeting, foams, paper, cardboard, etc., to painted or unpainted base materials. **Mfg. part no. 90** high contact strength adhesive is an easy-to-use aerosol that dries in minutes and features a low-misting lace spray for accurate application. Great for bonding decorative laminate. Adheres polyethylene and polypropylene to wood, metal, and more. **Mfg. part no. 90-Inverted** is the same high-strength aerosol adhesive as **mfg. part no. 90** but sprays upside down making it ideal for whenever spraying downward is more convenient and effective.

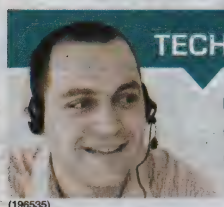
Mfg. Part No.	Description	Size (oz.)	Stock No.	Price Each 1-4
● 77 SUPER	Super 77 Multipurpose Spray Adhesive	24	00Z1147	30.12
● 90	High-Strength 90 Aerosol Adhesive	-999	98M0084	33.65
● 90-INVERTED	High-Strength 90 Inverted Aerosol Adhesive	24	73R4366	39.92

CITRUS CLEANER AND 5-WAY PENETRANT
Mfg. part no. Citrus-Based Cleaner is a liquid cleaner/degreaser that can be used to dissolve and remove dirt, grease, tar, and many non-curing type adhesives. It can also be used to degrease substrates for adhesive bonding in place of many chlorinated or petroleum-based solvents. **Mfg. part no. 5-Way Penetrant** displaces moisture and dries out electrical apparatus. Helps prevent shorting and increases conductivity. Inhibits rust. Frees rusted bolts, lubricates and cleans, drives out moisture. Also excellent as a tapping liquid for stainless steel and aluminum.

● CITRUS-BASED-CLEANER-24OZ	Citrus-Based Industrial Cleaner	24	93K5577	33.02

(7959)

TECHNICAL SUPPORT HOTLINE



Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

SCOTCH-WELD™ HOT MELT ADHESIVES

RoHS Compliant Available

3M

Mfg. part no. 3798 LM Jet-melt™ "gummy-glue" low-melt adhesive is heat-applied and removable. Can be used on a wide variety of heat-sensitive substrates including most corrugated coated substrates. It's easy-to-use and obtains strength in seconds. Fast setting thermoplastic is tack-free and solvent-free. Applied at 265°F (129°C). Color: clear. Designed for application using a 3M™ Polygun™ LT applicator, *ordered separately online or call.* **Sold in 1-lb. pkgs.**.

Mfg. part no. 3789 Q Scotch-Weld™ high-performance general-purpose hot-melt adhesive for bonding some flexible and rigid plastic substrates. Can be used with some supported and unsupported vinyls, leather, and wood substrates. Not recommended for polyolefins. Fast setting, thermoplastic. Applied at 385°F (196°C). Color: clear. Easily dispensed through 3M™ Polygun™ TC applicator; *ordered separately online or call.* **Sold in 1-lb. pkgs.**.

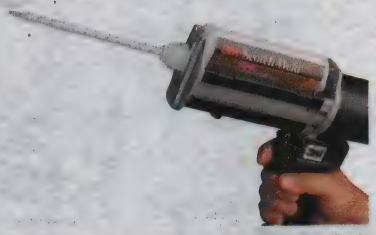
Mfg. Part No.	Description	Stock No.	Price per Pkg. 1-4
● 3798-LM	Jet-Melt "Gummy-Glue" Low-Melt Adhesive	93K5584	61.78
● 3789 Q	Scotch-Weld High-Performance Hot-Melt Adhesive	26H2090	88.09

(33079)

SCOTCH-WELD™ ADHESIVE EPX APPLICATOR AND NOZZLES

RoHS Compliant Available

3M



Scotch-Weld™ **mfg. part no. EPX** applicator simultaneously meters, mixes and applies 2-component adhesives and potting compounds. Duo-Pak™ cartridges, *order separately; go online or call*, snap into **mfg. part no. EPX** applicator. Squeezing trigger advances plunger, which forces the two components through patented nozzle that completely mixes them without introducing air. Sturdy metal construction. 90-day warranty.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● EPX APPLICATOR	Applicator	93F6943	96.60
● EPX NOZZLE BULK	Nozzle	93F6944	1.68

(7526)

SCOTCH-WELD™ TWO-PART EPOXY ADHESIVES

RoHS Compliant Available

3M

DP-100 | EPX Applicator

- Convenient Duo-Pak™ cartridges

Scotch-Weld™ two-part epoxy adhesives provide reliable bonds and seals for a broad spectrum of applications. These fast-setting, room-temperature curing, two-part epoxy adhesives bond to a variety of materials: metals, ceramics, wood and plastics. **Mfg. part nos. DP-460EG** and **DP4XLEG** electronic-grade (EG) two-part epoxy adhesives that are an excellent alternative to mechanical fasteners and lower-grade adhesives. These EG epoxies produce far lower contamination levels of ionic and outgassing impurities than typical epoxy adhesives making them ideal for the fabrication and assembly of critical components. Precision dispensing is made easy with **mfg. part no. EPX Applicator** metal hand-held Scotch-Weld™ EPX™ adhesive applicator; *ordered separately below.*

EPOXY ADHESIVES

Mfg. Part No.	Features	Size	Stock No.	Price Each 1-4
● DP-100 CLEAR 1.7 FL OZ	Fast Cure, High Flow, 3-5 Minutes Work Life, 15-20 Minutes Handling Strength, Clear	1.7 oz.	00Z1161	17.72
DP-100 FR OFF-WHITE	Two-part Flame Retardant, Off White, 4-8 Min. Work Life	50 oz.	02M2018	28.58
● DP-100+ CLEAR 1.7 FL OZ	Fast Setting, Slightly Flexible, High Shear/Peel Strength, 3-4 Minutes Work Life, 20 Mins. Handling Strength, Clear	1.7 oz.	95C2299	22.70
● DP-125 GRAY 1.7 FL OZ	Flexible, High Shear/Peel Strength, 25 Minutes Work Life, 2.5 Hrs. Handling Strength, Gray	1.7 oz.	95C2300	28.59

CONTINUED

SCOTCH-WELD™ TWO-PART EPOXY ADHESIVES (CONT.)

Mfg. Part No.	Features	Size	Stock No.	Price Each 1-4
DP-125 TRANSLUCENT	Flexible, High Shear/Peel Strength, 25 Minutes Work Life, 2.5 Hrs. Handling Strength, Gray	50 oz.	39K4559	28.17
DP190	Flexible, High Shear/Peel Strength, 90 Minutes Work Life, 12 Hrs. Handling Strength, Clear	1.7 oz.	39K5995	26.18
DP405LH OFF-WHITE	Low Halogen Content, Durable, High Shear/Peel Strength, Low Odor, 5 Minutes Work Life, 8-10 Minutes Handling Strength, Off-White	37 ml	73R4352	30.33
DP405LH BLACK	Durable, High Shear/Peel Strength, Low Odor, 5 Minutes Work Life, 8-10 Minutes Handling Strength, Black	37 ml	73R4351	26.98
DP-420	High-Performance, Durable, High Shear/Peel Strength, 20 Minutes Work Life, 2-3 Hrs. Handling Strength, Black	1.25 oz.	98M0044	27.28
DP-460 OFF-WHITE	Electronic-Grade, High Durability, Lower Ionic/Outgassing Impurities, 60 Minutes Work Life, 4-6 Hrs. Handling Strength, White	1.25 oz.	89C3393	23.39
DP460EG	Electronic-Grade, High Durability, Lower Ionic/Outgassing Impurities, 60 Minutes Work Life, 4-6 Hrs. Handling Strength, White	1.7 oz.	73R4353	22.69
DP4XLEG	Electronic-Grade, High Shear/Peel Strength, High Durability, Lower Ionic/Outgassing Impurities, Extra Long 5-6 Hrs. Work Life, 12-18 Hrs. Handling Strength, White	1.7 oz.	73R4350	25.37
DP920	Bonds Oily Metal, Durable, Low Odor; High Shear/Peel Strength, 20-30 Minutes Work Life, 4 Hrs. Handling Strength, Off-White	37 ml	73R4354	26.05
EPOXY POTTING COMPOUND/ADHESIVES				
DP-270 series Scotch-Weld™ epoxy potting compound adhesive is ideal for potting and encapsulation of heat sensitive and delicate components.				
DP-270 CLEAR 1.7 FL OZ	Good Thermal Shock Resistance, Excellent Electrical Properties, 60-70 Minutes Work Life, 4-6 Hrs. Handling Strength, Clear	1.7 oz.	00Z1163	22.13
DP-270 BLACK 1.7 FL OZ	Good Thermal Shock Resistance, Excellent Electrical Properties, 60-70 Minutes Work Life, 4-6 Hrs. Handling Strength, Black	1.7 oz.	00Z1164	22.13
LOW ODOR ACRYLIC ADHESIVE				
DP-810 BLACK 1.7 FL OZ	Bonds Oily Metal, Tough, Durable, High Shear/Peel Strength, 10 Minutes Work Life, 10 Mins. Handling Strength, Black	1.7 oz.	95C2301	22.95

SCOTCH-WELD™ EPX™ ADHESIVE APPLICATOR

Mfg. Part No.	Description	Stock No.	Price Each 1-4
EPX APPLICATOR	EPX™ Adhesive Applicator with 2:1 Plunger	93F6943	96.60

(7527)

SCOTCH-WELD™ INSTANT ADHESIVES AND ACTIVATOR

3M

RoHS Compliant Available

SF20-20 PR600-56 RT3500B AC452-2

Super Fast Cyanoacrylate Adhesives Features:
- Rely less on surface moisture for cure speed than standard cyanoacrylates
- Designed to join together difficult-to-bond plastics and rubbers, acidic and/or contaminated surfaces
- Use for a super fast cure in high speed production applications
- **SF 20** is a low viscosity and **SF 100** a low-medium viscosity cyanoacrylate

Engineered-Grade Plastic and Rubber Cyanoacrylate Adhesives Features:
- Exceptional performance on difficult-to-bond plastic and rubber substrates
- May be bonded to like substrates or in combination with metal or composite substrates
- **PR100** is a general purpose, low viscosity bonder
- **PR 600** is a medium viscosity cyanoacrylate with some gap-filling capability
- **PR 54** is a fast curing, very high viscosity, gap-filling gel used on poorly mating components, porous substrates and vertical surfaces

➤CONTINUED➤

SCOTCH-WELD™ INSTANT ADHESIVES AND ACTIVATOR (CONT.)

Rubber Toughened Cyanoacrylate Adhesives Features:
- Formulated with a unique elastomer that maximizes impact, vibration, peel, and thermal cycling resistance
- Provides tough, flexible bond ideally suited for substrates and dissimilar materials
- **RT300B** is a medium viscosity cyanoacrylate
- **RT3500B** is a high viscosity bonder with good gap filling capabilities

High-Temperature Cyanoacrylate Adhesives Features:
- Provides superior performance for demanding applications where high temperatures, thermal cycling, or shock resistance is required
- High temperature resistant toughened cyanoacrylate with some gap filling
- Withstands intermittent exposure up to 250°F (121°C)
- **HT700** is a medium viscosity cyanoacrylate

Rapid Flash Cyanoacrylate Accelerator Activator Features:
- Enhances cure speeds on porous and acidic surfaces, and difficult to bond polyethylene and polypropylene
- Acetone-based formulation flashes off rapidly
- Gives excellent adhesion
- Overspray may attack some plastics

Scotch-Weld™ cyanoacrylate instant adhesives offer more than a range of seconds-fast bonding for substrates ranging from metal to plastic, wood to rubber. These liquid and gel formulations give you a wide selection of other properties to help improve production and end use.

Mfg. Part No.	Description	Bottle Size	Stock No.	Price Each 1-9
SF20-20	Super Fast Instant Adhesive	20 g	08N1751	16.61
SF100-20	Super Fast Instant Adhesive	20 g	08N1750	21.80
PR100 1OZ	Engineered-Grade Plastic and Rubber Instant Adhesive	1 oz.	73R4358	22.62
PR100 1LB	Engineered-Grade Plastic and Rubber Instant Adhesive	1 lb.	73R4357	255.28
PR600-56	Engineered-Grade Plastic and Rubber Instant Adhesive	2 oz.	08N1748	24.34
PR54-20	Engineered-Grade Plastic and Rubber Instant Gel Adhesive	20 g*	08N1747	18.23
RT300B 1OZ	Rubber-Toughened Instant Adhesive	1 oz.	73R4360	25.58
RT300B 1LB	Rubber-Toughened Instant Adhesive	1 lb.	73R4359	206.35
RT3500B 1OZ	Rubber-Toughened Instant Adhesive	1 oz.	73R4362	20.09
HT700 1LB	High-Temperature Instant Adhesive	1 lb.	73R4355	186.95
AC452-2	Rapid Flash Cyanoacrylate Accelerator Activator	2 oz.	08N1745	5.96

*Tube
(7524)

SCOTCH-GRIP ADHESIVES

RoHS Compliant Available

3M

Scotch-Grip™ adhesives **mfg. part no. 1357** is a neoprene high-performance contact adhesive with rapid strength build-up for metal. Resists heat and continuous load stress. Meets MIL-A21366A and MMM-A-121 specifications. **Mfg. part no. 4475** is a general-purpose plastic adhesive that dries rapidly. Excellent resistance to plasticizers, water, detergent and soap solutions. **Mfg. part no. 4799** brushable, heat-resistant adhesive that develops strength rapidly and provides good creep resistance and low soak-in on porous surfaces.

Mfg. Part No.	Description	Color	Bonding Range	Tube Size (oz.)	Stock No.	Price Each 1-4
1357 5 OZ	Very High Strength Bond	Gray-Green	0-5 mins.	5	95C2703	28.11
4475	Fast Tacking, Quick Drying	Clear	0-10 mins.	5	95C2766	31.30

(73336)

CHIPBONDER® SURFACE MOUNT ADHESIVES

RoHS Compliant Available

LOCTITE®

Chipbonder® surface mount adhesives are idea for high-speed syringe dispense and stencil print assembly processes. Designed for bonding surface mount devices to printed circuit boards prior to wave soldering. Suited for applications where high-speed dispensing, high dot profile and high wet strength are required.

3616™ 7360™

CHIPBONDER® 3621™
Mfg. part no. 3621™ epoxy surface mount adhesive is suited where ultra-high syringe dispense speeds from 25,000 to 55,000 dots/h are required. Meets the challenge of lead-free wave solder processes with water- and alchol-based fluxes. Good green strength, superior humidity resistance and good electrical chararacteristics. Ready-to-use syringes fit straight into a variety of air pressure/time dispensing systems. No mixing required, heat cure. Color: red (uncured).

Mfg. Part No.	Description	Size (ml)	Stock No.	Price Each
3621	Chipbonder® Surface Mount Adhesive — Syringe Dispense	10	31M3706	49.74

CHIPBONDER® 3616™
Mfg. part no. 3616™ epoxy surface mount adhesive is suited where high stencil print dispense speeds from 20 to 150 mm/s are required. Suitable for printing a range of dot heights with one stencil thickness. Ideal for use on all common open squeegee and enclosed head stencil printing systems, such as ProFlow®, PumpPrint®, and Varidot®. Easy-to-use — no mixing required, heat cure. Color: red (uncured).

Mfg. Part No.	Description	Size (ml)	Stock No.	Price Each
3616	Chipbonder® Surface Mount Adhesive — Stencil Print	300	31M3705	461.22

➤CONTINUED➤

CHIPBONDER® SURFACE MOUNT ADHESIVES (CONT.)

Mfg. Part No.	Description	Size (ml)	Stock No.	Price Each

Mfg. part no. 7360™ is a non-CFC, low-odor, solvent-base cleaner that's ideal for cleaning stencils, screens and dispensing nozzles used to apply surface mount adhesives and for removal of adhesives from misprinted printed circuit boards. Fully compatible with Chipbonder® epoxy adhesives, *ordered separately above*. Perfect for providing a clean surface for good adhesion and adhesive cure.

Mfg. Part No.	Description	Size (ml)	Stock No.	Price Each
● 7360	Surface Mount Adhesive Remover/Solvent	500	31M3711	143.80

(90374)

CYANOACRYLATE INSTANT ADHESIVES

RoHS Compliant Available

LOCTITE®

PRISM® HIGH-PERFORMANCE INSTANT ADHESIVES

401™ Prism® surface-insensitive instant adhesive is designed for hard-to-bond surfaces that require uniform stress distribution and strong tension and/or shear strength. Provides rapid bonding of a wide range of materials, including metals, plastics and elastomers. Suited for bonding porous or absorbent materials such as wood, paper, leather and fabric. Low viscosity. Easy-to-use, requires no mixing. Transparent, dries clear.

Mfg. Part No.	Description	Tube Size (gm.)	Stock No.	Price Each 1-4
● 40104	401™ Prism® Surface-Insensitive Instant Adhesive	3	00Z790	11.04

454™ Prism® surface-insensitive instant gel adhesive designed for the assembly of hard-to-bond materials that require uniform stress distribution and strong tension and/or shear strength. Provides rapid bonding of a wide range of materials, including metals, plastics and elastomers. Suited for bonding porous or absorbent materials such as wood, paper, leather and fabric. The gel consistency prevents adhesive flow even on vertical surfaces. High viscosity. Easy-to-use, requires no mixing. Transparent, dries clear.

Mfg. Part No.	Description	Size	Stock No.	Price Each 1-4
● 45404	454™ Prism® Surface-Insensitive Instant Gel Adhesive	3 gm. Tube	92B8319	11.18
● 21925	454™ Prism® Surface-Insensitive Instant Gel Adhesive	10 gm. Syringe	00Z1279	45.28
● 45440	454™ Prism® Surface-Insensitive Instant Gel Adhesive	20 gm. Tube	93B7002	46.97

460™ Prism® low-odor, low-bloom alkoxy instant adhesive suitable for applications in areas with low ventilation. The low-bloom feature makes it ideal for use where the finished part must be cosmetically perfect. Bonds metals, plastics and elastomers. Medium viscosity. Easy-to-use, requires no mixing. Transparent, dries clear.

Mfg. Part No.	Description	Size	Stock No.	Price Each
● 46040	460™ Prism® Low-Odor/Low-Bloom Instant Adhesive	20 gm. Bottle	91B9746	49.69

SUPER BONDER® INSTANT ADHESIVES

409™ Super Bonder® general-purpose, ethyl cyanoacrylate instant gel adhesive bonds rubbers, plastics and metals. Fills gaps to 0.010″. Thick gel consistency prevents adhesive flow even on vertical surfaces. Easy-to-use, requires no mixing. Transparent, dries clear.

Mfg. Part No.	Description	Tube Size (gm.)	Stock No.	Price Each 1-4
● 40904	409™ Super Bonder® General-Purpose Instant Gel Adhesive	3	00Z1037	9.08

416™ Super Bonder® general-purpose, ethyl cyanoacrylate instant adhesive for bonding and gap-filling plastics, metals and rubbers. Fills gaps to 0.008″. Low-viscosity. Easy-to-use, requires no mixing. Transparent, dries clear.

Mfg. Part No.	Description	Bottle Size (oz.)	Stock No.	Price Each 1-4
● 41650	416™ Super Bonder® Gap-Filling Instant Adhesive	1	94B2341	44.22

430™ Super Bonder® industrial-grade, general-purpose, methyl cyanoacrylate instant adhesive for bonding close-fitting metal parts. Also instantly bonds plastics and rubbers. Fills gaps to 0.005″. Low-viscosity. Easy-to-use, requires no mixing. Transparent, dries clear.

Mfg. Part No.	Description	Bottle Size (oz.)	Stock No.	Price Each
● 43050	430™ Super Bonder® Industrial-Grade, General-Purpose Instant Adhesive	1	90B9011	30.97

495™ Super Bonder® general-purpose, ethyl cyanoacrylate instant adhesive for bonding plastics, metals and rubbers. Fills gaps to 0.004″. High-viscosity. Easy-to-use, requires no mixing. Transparent, dries clear.

Mfg. Part No.	Description	Size	Stock No.	Price Each 1-4
● 49504	495™ Super Bonder® General-Purpose Instant Adhesive	3 gm. Tube	00Z806	8.07
● 49550	495™ Super Bonder® General-Purpose Instant Adhesive	1 oz. Bottle	00Z807	43.95

499™ Super Bonder® thermal-cycling, ethyl cyanoacrylate instant gel adhesive bonds rubbers, plastics and metals. Fills gaps to 0.010″. Ideal for heat-resistant applications and general-purpose use. Offers superior resistance to humidity. Easy-to-use, requires no mixing. Transparent, dries clear.

Mfg. Part No.	Description	Tube Size (gm.)	Stock No.	Price Each 1-4
● 49945	499™ Super Bonder® Thermal Cycling Instant Gel Adhesive	20	11C1564	39.96

QUICKSET™ INSTANT ADHESIVE

404™ QuickSet™ general-purpose instant adhesive for bonding of plastics and elastomeric materials where very fast fixturing is required. Ideal for rubber O-rings. Low viscosity. Easy-to-use, requires no mixing. Transparent, dries clear.

➤ CONTINUED ➤

CYANOACRYLATE INSTANT ADHESIVES (CONT.)

Mfg. Part No.	Description	Bottle Size (oz.)	Stock No.	Price Each 1-4
● 46551	404™ QuickSet™ General-Purpose Instant Adhesive	0.33	90B5607	47.93

(68850)

TAK PAK® INSTANT ADHESIVES, ACCELERATORS AND KIT

RoHS Compliant Available

LOCTITE®

Mfg. part no. 12292 444™ Tak Pak® instant adhesive is designed for printed circuit board assembly and repair. Cures instantly with 7452™ and 712™ Tak Pak® accelerators, *ordered separately below*. **Mfg. part no. 20419** 444™ Tak Pak® instant adhesive and accelerator kit includes 444™ Tak Pak® instant adhesive (one 20g bottle) and 7452™ Tak Pak® acetone-based accelerator (one 0.7 oz. aerosol can).

20419 444™ Tak Pak® Kit

Mfg. Part No.	Description	Bottle Size (gm.)	Stock No.	Price Each 1-4
● 12292	444™ Tak Pak® Instant Adhesive	20	90B6324	35.90
● 20419	444™ Tak Pak® Instant Adhesive and Accelerator Kit		81H3332	61.57

382™ ultra-performance Tak Pak® cyanoacrylate instant adhesive formulated for wire tacking and electronic component mounting applications. Bonds rubbers, plastics and metals. Fast-curing, high-viscosity. Easy-to-use, requires no mixing. Transparent, dries clear. Designed for use with 7452™ and 712™ Tak Pak® accelerators, *ordered separately below*, to attain instant cures for tacking electronics components.

Mfg. Part No.	Description	Bottle Size (gm.)	Stock No.	Price Each 1-4
● 38240	382™ Tak Pak® Instant Adhesive Ultra-Performance Wiring Tacking Instant Adhesive	20	00Z789	50.39

7452™ Tak Pak® acetone-based and 712™ isopropanol-based accelerators are used where increased cure speed of cyanoacrylate adhesives is required. They can be either pre- or post-applied to the bond. Especially suited for post-application on cyanoacrylate adhesive to provide rapid fixturing. Typical applications include securing wires or coils to PCBs, tamperproofing adjustable components, mounting stand-offs, edge guides and board stiffeners. Color: clear/amber. **NOTE:** Because acetone may adversely affect some thermal plastic substrates, 712™ Tak Pak® isopropanol-based accelerator is recommended for these materials.

Mfg. Part No.	Description	Size	Stock No.	Price Each 1-4
● 18490	7452™ Tak Pak® Acetone-Based Accelerator	1.75 oz. Brush-Cap Bottle	90B8317	16.24
● 20352	712™ Tak Pak® Isopropanol-Based Accelerator	1.75 oz. Bottle	00Z1829	21.03

(7518)

LIQUID THREADLOCKERS

RoHS Compliant Available

LOCTITE®

Threadlocker single-component, anaerobic adhesives cure only when confined between metal parts. Solvent-resistant, low-toxicity, nonflammable. Ideal for threadlocking, thread sealing, gasketing, retaining and bonding. Lock nuts, bolts, and studs to prevent vibration and wear. Seal out moisture that causes corrosion. Available in varying viscosities and strengths for many applications.

222MS™ THREADLOCKER — LOW STRENGTH

222MS™ threadlocker is ideal for fastener diameters of ¼″ (6mm) and smaller. Controlled lubricity for accurate clamp loads. Parts can be separated using hand tools. Applications include adjustable screws, calibration screws, meters and gauges. Meets MIL-S-46163A specifications for existing designs; agency approval rated ASTM D-5363, NSF P1, CFIA.

Mfg. Part No.	Description	Color	Bottle Size (ml)	Stock No.	Price Each 1-4
● 22221	222MS™ Threadlocker Low-Strength Adhesive	Purple	10	00Z781	28.22
● 22231	222MS™ Threadlocker Low-Strength Adhesive	Purple	50	00Z782	79.10

242® THREADLOCKER — MEDIUM STRENGTH

242® general-purpose, removable threadlocker for fasteners between ¼″ and ¾″ (6mm to 20mm) diameters. Controlled lubricity for accurate clamp loads. Parts can be separated using hand tools. Applications include machine tools and presses, pumps and compressors, and mounting bolts. Meets MIL-S-46163A specifications for existing designs; agency approval rated ASTM D-5363, NSF/ANSI 61, NSF P1, ABS, CFIA.

Mfg. Part No.	Description	Color	Size (ml)	Stock No.	Price Each 1-4
● 24205	242® Threadlocker Medium-Strength Adhesive	Blue	0.5 Capsule	98B9938	3.90
● 24221	242® Threadlocker Medium-Strength Adhesive		10 Bottle	00Z783	30.66
● 24231	242® Threadlocker Medium-Strength Adhesive	Blue	50 Bottle	00Z784	85.23

➤ CONTINUED ➤

LIQUID THREADLOCKERS (CONT.)

262™ THREADLOCKER — MEDIUM-TO-HIGH STRENGTH
262™ permanent threadlocker for fasteners up to ¾″ (20mm) diameter. High-lubrication for easy assembly. Excellent for preventing rust and corrosion in extreme chemical/environmental conditions. Meets MIL-S-46163A specifications for existing designs; agency approval rated ASTM D-5363, NSF P1, ABS, CFIA.

Mfg. Part No.	Description	Color	Bottle Size (ml)	Stock No.	Price Each
26221	262™ Threadlocker Medium-to-High Strength Adhesive	Red	10	00Z944	22.76
26231	262™ Threadlocker Medium-to-High Strength Adhesive	Red	50	00Z1034	63.50

271™ THREADLOCKER — HIGH STRENGTH
271™ permanent, low-viscosity threadlocker for fasteners up to 1″ (25mm) in diameter. Ideal for heavy equipment, suspension bolts, bearing cap bolts/studs, and motor and pump mounts. Meets MIL-S-46163A specifications for existing designs; agency approval rated ASTM D-5363, UL classified for U.S., CFIA.

Mfg. Part No.	Description	Color	Bottle Size (ml)	Stock No.	Price Each 1-4
27121	271™ Threadlocker High-Strength Adhesive	Red	10	00Z785	31.00
27131	271™ Threadlocker High-Strength Adhesive	Red	50	00Z786	84.75

272™ THREADLOCKER — HIGH STRENGTH/HIGH TEMPERATURE
272™ threadlocker withstands temperatures to 450°F. Provides a fast cure on most surfaces, including "as received" fasteners. Recommended for bolts up to 1 ½″ (36mm) in diameter. Removable with heat and hand tools. Ideal for heavy equipment, suspension bolts, bearing cap bolts/studs, and motor and pump mounts. Agency approval rated CFIA.

Mfg. Part No.	Description	Color	Bottle Size (ml)	Stock No.	Price Each 1-4
27240	272™ Threadlocker High-Strength/ High-Temperature Adhesive	Reddish Orange	50	00Z945	79.10

290™ THREADLOCKER — WICKING GRADE
290™ medium-strength, wicking-grade threadlocker for preassembled bolts and instrumentation screws up to ½″ (12mm) diameter on electrical connectors and carburetors. Penetrates threads by capillary action. Secures set screws and other assemblies after setting is complete. Seals welds and porous metal parts. Protects threads from rust and corrosion. Localized heating and hand tools are needs for disassembly. Meets MIL-S-46163A specifications for existing designs; agency approval rated ASTM D-5363, NSF/ANSI 61, NSF P1, CFIA.

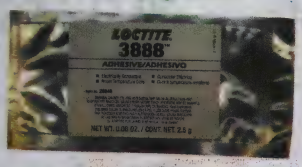
Mfg. Part No.	Description	Color	Bottle Size (ml)	Stock No.	Price Each 1-4
29021	290™ Threadlocker Wicking-Grade Adhesive	Green	10	00Z787	28.79
29031	290™ Threadlocker Wicking-Grade Adhesive	Green	50	00Z788	80.01

(68851)

ELECTRICALLY-CONDUCTIVE ADHESIVES

RoHS Compliant Available

LOCTITE®



3888™

Electrically-conductive adhesives provide a robust mechanical bond and a low-impedance electrical interconnection for board level assembly. Room-temperature-curing makes it suited for bonding heat-sensitive components where solder temperatures are impractical. Delivers a lead-free alternative to solder and allows nonsolderable substrates like plastic or glass to be used.

3888™ ELECTRICAL INTERCONNECT ADHESIVE
Mfg. part no. 3888™ epoxy adhesive is designed for bonding metals, ceramics, rubbers and plastics used in electronic parts, where good adhesion combined with electrical and thermal conductivity is required. Two parts: silver paste resin and clear hardener.

Mfg. Part No.	Description	Size (gm)	Stock No.	Price Each
3888	Electrically-Conductive Epoxy Adhesive	2.5	31M3709	76.95

(90378)

CIRCUITWORKS® CONDUCTIVE EPOXY

RoHS Compliant Available

ITW Chemtronics®

Conductive Silver Epoxy provides excellent electrical conductivity. Ideal for precision repairs and high-strength conductive bonding. Restores defective traces and creates jumpers to board. Quick solderless electronic connections. Multilingual instructions and regulatory information included. One 7g tube of adhesive and one 7g tube of hardener conveniently packaged in a blister pack.

Mfg. Part No.	Description	Size	Stock No.	Price Each
CW2400	Conductive Epoxy	2, 7g Syringes	00Z1602	71.91

(47973)

ELECTRICIAN'S AND BUNDLING TAPE

RoHS Compliant Available

3M

2000 2120 3939 6969 8979

Mfg. part no. 2000 cloth-free, electrician's bundling tape is embossed with PVC backing, which offers a clear adhesive transfer. Tape tears easily and evenly by hand for quick, on-the-go application. Comes off clean leaving no sticky residue. The temperature-stable adhesive makes it easy to handle; does not melt in hot weather or fail to stick in cold. Color: gray. **Mfg. part no. 2120** transparent bundling tape is strong enough to tackle almost any repair project in or around the home, vehicle, boat or job site. Transparent when applied, this clear duct tape makes repairs less noticeable. Lasts six times longer than other heavy-duty duct tapes, based on accelerated weathering, providing long-lasting repairs.

Mfg. Part No.	Description	Roll Size (yards)	Stock No.	Price per Roll 1-9
2000 GRAY (2″X50YDS)	Scotch® Duct Tape, Gray	50	18C0979	15.69
2120A CLEAR (1.88″X20YD)	Scotch® Duct Tape, Transparent	20	96H7678	10.55
GENERAL-PURPOSE DUCT TAPE General-purpose duct tapes offer good adhesion and strong backing.				
3939 SILVER (2″X60YDS)	Duct Tape, Silver, 2″W	60	95C2750	22.76
INDUSTRIAL STRENGTH DUCT TAPE **6969 series** polyethylene-coated industrial strength duct tape is for use in moisture proofing, duct sealing, protecting, and general-purpose applications.				
6969 SILVER (2″X60YDS)	Heavy-Duty Duct Tape, Silver, 2″W	60	93F6922	30.63
6969 BLACK (2″X60YDS)	Heavy-Duty Duct Tape, Black, 2″W	60	95C2820	30.93
PERFORMANCE PLUS DUCT TAPE Clean removal for up to 6 months indoors or outdoors.				
8979 BLACK (2″X60YDS)	Performance Plus Duct Tape, Black, 2″W	60	93K5564	55.37

(65678)

MULTI-PURPOSE DUCT TAPE 3900

RoHS Compliant Available

3M

- High tack adhesive for good quick stick to many surfaces
- Conformable and tears easily by hand

Multi-Purpose Duct Tape 3900 is a polyethylene backing that resists moisture prolonging the tape bond in moist or humid environments. The rubber adhesive sticks well to many surfaces. It is a versatile tape for many applications. Available in seven colors for color coding. Used for sealing, holding, bundling, reinforcing, identifying, tabbing, wrapping, splicing and protecting.

ROLL SIZE: 1.88″ X 60 YARDS

Mfg. Part No.	Color	Stock No.	Price Each 1-9	10-24	25+
3900-BLACK	Black	29K7338	18.51	16.14	14.56
3900-BLUE	Blue	29K7339	17.47	15.24	13.75
3900-OLIVE	Olive	29K7340	17.47	15.24	13.75
3900-RED	Red	29K7341	17.47	15.24	13.75
3900-SILVER	Silver	29K7342	16.99	14.82	13.37
3900-WHITE	White	29K7343	18.51	16.14	14.56
3900-YELLOW	Yellow	29K7344	18.51	16.14	14.56

(209488)

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(196545)

TAPE

SCOTCH® SUPER 33+™ VINYL ELECTRICAL TAPE

RoHS Compliant Available

MADE IN USA

Scotch® SUPER 33+™ professional-use, 7-mil electrical tape stretches easily, sticks aggressively in temperatures ranging from 0°F to 221°F. Provides excellent resistance to flame, abrasion, moisture, alkalies, solvents, oil, ultraviolet rays, and many acids. Color: black. UL listed, CSA certified.

Mfg. Part No.	Roll Size	Stock No.	Price per Roll 1-9	10-24	25-49	50+
● 33+SUPER (3/4"X20FT)	¾" x 20'	30M8008	3.12	2.93	2.80	2.73
● 33+SUPER (3/4"X66FT)	¾" x 66'	30M8009	7.71	7.24	6.91	6.73

(9246)

SCOTCH® VINYL ELECTRICAL TAPE FOR COLOR CODING 35 SERIES

RoHS Compliant Available

35 series Scotch® premium-grade 7-mil flame-retardant electrical tape resistant to weather, abrasion, moisture, UV rays, solvents, alkalies, and many acids. Choice of 7 colors. Other colors available; *go online or call.* UL listed, CSA certified.

Mfg. Part No.	Size	Color	Stock No.	Price per Roll
● 35 RED (1/2"X20FT)	1/2" x 20'	Red	30M8010	2.17
● 35 RED (3/4"X66FT)	3/4" x 66'	Red	46F4354	7.10
● 35 YELLOW (1/2"X20FT)	1/2" x 20'	Yellow	36F902	2.17
● 35 YELLOW (3/4"X66FT)	3/4" x 66'	Yellow	46F4356	7.10
● 35 GRAY (1/2"X20FT)	1/2" x 20'	Gray	36F903	2.17
● 35 GRAY (3/4"X66FT)	3/4" x 66'	Gray	36F907	6.96
● 35 WHITE (1/2"X20FT)	1/2" x 20'	White	36F901	2.17
● 35 WHITE (3/4"X66FT)	3/4" x 66'	White	30M8011	7.10
● 35 BLUE (1/2"X20FT)	1/2" x 20'	Blue	87F758	2.17
● 35 BLUE (3/4"X66FT)	3/4" x 66'	Blue	87F759	6.98
● 35 ORANGE (1/2"X20FT)	1/2" x 20'	Orange	87F755	2.17
● 35 ORANGE (3/4"X66FT)	3/4" x 66'	Orange	87F756	7.10
● 35 GREEN (3/4"X66FT)	3/4" x 66'	Green	95C2721	7.10
● 35 GREEN (1/2"X20FT)	1/2" x 20'	Green	87F673	2.17
● 35 BROWN (1/2"X20FT)	1/2" x 20'	Brown	87F753	2.09
● 35 BROWN (3/4"X66FT)	3/4" x 66'	Brown	87F754	7.10
● 35 VIOLET (3/4"X66FT)	3/4" x 66'	Violet	95C2722	7.10

35 SERIES SCOTCH® VINYL ELECTRICAL TAPE ASSORTMENT, 5-PACK, COLORED
35 series Scotch® vinyl electrical tape assortment combine the flexibility of a PVC backing with excellent electrical insulating properties. **Sold in packages of 5 rolls.**

Mfg. Part No.	Size	Color	Stock No.	Price per Pkg.
● 35 ASSORTMENT	1/2" x 20'	Assorted	93K5558	8.89

(77514)

SCOTCH® VINYL ELECTRICAL TAPE SUPER 88

RoHS Compliant Available

Super 88 Scotch® electrical tape is premium-quality, heavy-duty 8.5-mil vinyl plastic that is flame-retardant and weather-resistant. Excellent low-temperature characteristics. Extra thickness provides added electrical properties, quicker insulation buildup, and abrasion resistance. Meets ASTM D-3005-72, type II and MIL-I-24391. Color: black. **Mfg. part no. Super 88** size: ¾" (19.1mm) x 66' (20.1m), **mfg. part no. 88T** roll size: ¾" x 60', UL listed, CSA certified. Other widths and lengths available; *go online or call.*

Mfg. Part No.	Description	Stock No.	Price per Roll 1-9
● 88-SUPER (3/4"X66FT)	Vinyl Plastic Electrical Tape	36F886	10.06
● 88T (3/4"X60FT)	Vinyl Tape	70C3703	6.91

(9226)

SCOTCH® MASTIC PADS 2200 AND SCOTCH® RUBBER MASTIC ROLLS 2228

RoHS Compliant Available

MADE IN USA

Scotch® mastic pads 2200 and Scotch® rubber mastic rolls 2228 are ideal for padding and sealing electrical splice connections. Ethylene propylene rubber bonded to tacky, temperature-stable mastic.

Mfg. Part No.	Size	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 2200 (3-1/4"X4-1/2")	3¼ x 4½" Pad	87F733	5.11	4.75	4.44	4.15
● 2228 (2"X10FT)	2" x 10' Roll	95F6315	41.52	38.58	36.03	33.69

(9247)

SCOTCH® ELECTRICAL MOISTURE SEALANT ROLL 06147 AND PAD 06149

RoHS Compliant Available

MADE IN USA

06147

Mfg. part nos. 06147 Scotch® electrical moisture sealant roll and **06149** pre-cut pads apply quickly and easily to insulate, seal, and protect electrical/electronic connections. Self-fusing, rubber-based insulating mastic forms a moisture-tight seal around connections. Tough, elastic, vinyl backing provides additional protection against vibration (45-mil). Made in the U.S.A.

Mfg. Part No.	Size	Pkg. Qty.	Stock No.	Price Each 1-9	10-24	25-49	50-99
● 06147	2½" x 10' Roll	1 Roll	93F2827	29.40	26.62	23.99	21.21

(9248)

SCOTCH® GLASS CLOTH ELECTRICAL TAPE 27 SERIES

RoHS Compliant Available

27 series Scotch® glass cloth electrical tape is a 7-mil woven insulating glass cloth tape with pressure-sensitive rubber thermosetting adhesive. Designed to operate in 600V dry applications requiring high mechanical strength and resistance to high temperatures. Specially treated and prepared to provide corrosion-free protection. Glass cloth will not shrink, rot or burn, has a high tensile strength and is printable. Performs at Class B (130°C/266°F) temperatures. Provides heat-stable insulation around thermocouples and other hot-spot applications. UL recognized, CSA certified.

Mfg. Part No.	Roll Size	Stock No.	Price per Roll 1-49	50-99	100-249	250-499
● 27 TAPE (1/2"X60YDS)	½" x 60'	29K7272	20.79	18.86	17.28	16.05
● 27 TAPE (1"X60YDS)	1" x 60'	97B9402	37.65	34.50	32.05	31.00
● 27 TAPE (1/2"X66FT)	½" x 66'	36F905	16.83	15.20	13.59	12.10
● 27 TAPE (3/4"X66FT)	¾" x 66'	87F725	24.99	22.58	20.15	17.94

(9249)

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(196560)

SCOTCH® GLASS CLOTH ELECTRICAL TAPE 69 SERIES

RoHS Compliant Available

3M

69 series Scotch® white glass cloth 7-mil electrical tape with thermosetting silicone adhesive performs at class H temperatures (180°C/356°F). Secures non-PSA insulation in high-temperature areas. Ideal for reinsulating and repairing coils on mining machines. Used for splicing silicone-covered glass wire where splices require abrasion resistance and mechanical strength.

Mfg. Part No.	Roll Size	Stock No.	Price per Roll 1-4	5-9	10-24	25-99
69 (1/2"X66FT)	½" x 66'	95F6312	18.09	16.69	15.39	14.77
69 (3/4"X66FT)	¾" x 66'	95F6313	26.46	24.42	22.50	21.59

(9224)

TEMFLEX™ VINYL ELECTRICAL AND CORROSION PROTECTION TAPE

UL CSA RoHS Compliant Available

3M

1700 1200 1700C

Mfg. part no. 1700 Temflex™ economy-grade, 7-mil general-use vinyl electrical tape is used for protective jacketing and harnessing. Abrasive- and UV-resistant. UL listed and CSA certified for 176°F (80°C). Individually cellophane-wrapped. Roll size: ¾" (19.1mm) x 60' (18.29m). **Mfg. part no. 1200** Temflex™ 20 mil general-purpose, vinyl corrosion-resistant protection tape is applied over primed pipe to protect the pipe and pipe joints from corrosion. Roll size: 2" x 100'.

Mfg. Part No.	Description	Stock No.	Price per Roll 1-9	10-24	25-49
1700 BLACK (3/4"X60FT)	Temflex™ Vinyl Electrical Tape	87F729	1.98	1.80	1.62
1700C-BLUE (3/4"X66FT)		75M9117	2.81	2.64	2.47
1700C-GREEN (3/4"X66FT)		48M4280	2.81	2.64	2.47
1700C-ORANGE-3/4"X66FT		48M4277	2.81	2.64	2.47
1700C-RED-3/4"X66FT		48M4276	2.81	2.64	2.47
1700C-WHITE-3/4"X66FT		48M4281	2.81	2.64	2.47
1700C-YELLOW-3/4"X66FT		48M4279	2.81	2.64	2.47
1200 (4"X100FT)	Vinyl Corrosion Protection Tape, Black	98M0067	20.97	19.64	18.42

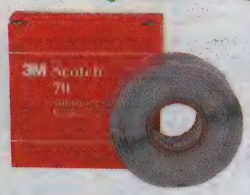
(9223)

SCOTCH® SELF-FUSING SILICONE RUBBER ELECTRICAL TAPE 70

RoHS Compliant Available

3M

Mfg. part no. 70 Scotch® heavy-duty triangular self-fusing, 12-mil and 20-mil, high-temperature electrical tape composed of fully cured inorganic silicone rubber. Comes with easy-tear/easy-strip liner. Use as protective overwrap where class H (180°C/356°F) temperatures are encountered. Arc- and track-resistant. Color: sky blue-gray. Roll size: 1" (25.4mm) x 30' (9.14m).



Mfg. Part No.	Stock No.	Price per Roll 1-9	10-24	25-49	50-99
70 TAPE (1" X 30FT)	15P8399	61.76	57.83	54.23	50.30

(9222)

DURATOOL AT NEWARK ELEMENT14

For your production and facilities needs, from soldering stations to tool sets & more.

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(212563)

SCOTCH® THREAD SEALANT TAPE 48 SERIES

RoHS Compliant Available

3M

48 series Scotch® thread sealant tape 48 rolls on dry, molds into threads (bolts, fittings, pipe or screens) to form leak-proof seal. Works on most fluid and gas lines with no mess. Unaffected by oils, hydraulic fluid, freon. Never dries out; permanently lubricated joints never stick.

Mfg. Part No.	Roll Size	Stock No.	Price per Roll 1-9	10-24	25-49	50-99
48 (1/2"X22FT)	½" x 260'	87F727	11.72	10.64	9.52	8.45
48 (1/4"X22FT)	¼" x 260'	87F726	8.87	8.06	7.21	6.39

(9250)

SCOTCH® SPLICING COMPOUND TAPE 2242

RoHS Compliant Available

3M

MADE IN USA

2242:

- Typical application is all voltage, splicing, jacketing, and insulating

Scotch® splicing compound tape is a highly conformable, linerless EPR rubber high-voltage insulating tape providing excellent thermal dissipation of splicing heat. Meets industry standards for flame retardance.

Mfg. Part No.	Roll Size	Stock No.	Price per Roll 1-9	10-24	25-49	50-99
2242 (3/4"X15FT)	¾" x 15'	30M8007	10.50	9.42	8.39	7.49
2242 (1-1/2"X15FT)	1 ½" x 15'	96C7883	20.43	18.29	16.33	14.53

(9225)

SCOTCH LINERLESS RUBBER SPLICING TAPE 130C

RoHS Compliant Available

3M

Scotch® 130C highly-conformable, self-bonding, linerless ethylene propylene rubber (EPR), high-voltage splicing/insulating tape provides excellent thermal dissipation of splice heat. Tough rubber resin adhesive. Professional premium grade; for low and high voltage through 69kV. Can be used on cable whose emergency overload temperatures can reach 130°C. Operating temperature range: -18° to 90°C. Color: black.

Mfg. Part No.	Roll Size W x L	Stock No.	Price per Roll 1-9	10-24	25-49
130C (3/4'X30FT)	¾" x 30'	94F8943	24.43	21.87	19.52
130C (1"X30FT)	1" x 30'	14C4164	26.21	23.85	21.99
130C (1-1/2"X30FT)	1½" x 30'	97B2319	39.90	36.32	33.48

(179642)

ALUMINUM FOIL TAPE 425

RoHS Compliant Available

3M

Dead-soft aluminum foil-backed tape provides excellent heat and light reflection to protect against high temperatures and UV degradation. The foil also serves as an excellent barrier against moisture, dust, flame, and certain chemicals. The acrylic adhesive supplies superior temperature, UV and solvent resistance. Can be used indoors or out. It provides excellent age life and is ideal for harsh, long-term outdoor environments.

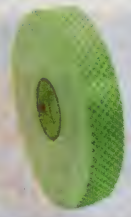
Mfg. Part No.	Roll Size	Stock No.	Price per Roll 1-4
425 (1/2"X60YDS)	½" x 60 yards	95C2759	27.31
425 (3/4"X60YDS)	¾" x 60 yards	95C2761	33.92
425 (1"X60YDS)	1" x 60 yards	95C2760	43.68
425 (2"X60YDS)	2" x 60 yards	93F6945	88.66
425 (3"X60YDS)	3" x 60 yards	95C2762	131.57
425 (4"X60YDS)	4" x 60 yards	95C2763	175.42

(9354)

DOUBLE-COATED ACRYLIC ADHESIVE FOAM TAPE

RoHS Compliant Available

3M



These double-sided foam tapes are ideal for general-purpose mounting, joining, and holding. Firm, acrylic pressure-sensitive adhesive features high ultimate bond strength, very good high temperature and solvent resistance, and very high shear holding power. **Mfg. part nos. 4016** and **4008** are double-coated urethane foam tape with an open-cell foam design perfect for interior applications or for exterior applications where the tape will be protected from the environment. They are soft, conformable and have excellent low temperature properties. Color: off white. Roll size: 1" x 36 yards.

Mfg. Part No.	Description	Color	Thickness (In.)	Stock No.	Price per Roll 1-24	25-49	50-99
● 4016 (3/4"X36YDS)	Urethane Foam	Off White	0.0625	**98B3466**	60.16	57.41	55.88
● 4016 (1"X36YDS)	Urethane Foam	Off White	0.0625	**98F1819**	75.59	70.99	66.77
● 4008 (1"X36YDS)	Urethane Foam	Off White	0.125	**50F4820**	122.43	114.97	108.14

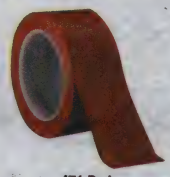
(9197)

COLORED VINYL TAPE 471 AND SAFETY STRIPE VINYL TAPE 5702

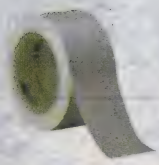
RoHS Compliant Available

3M

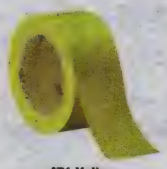
471 Blue



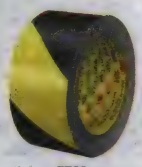
471 Red



471 White



471 Yellow



5702

471 series conformable colored 5.2 mil vinyl-backed tape with a rubber adhesive ideal for lane and safety markings, color coding, masking, sealing, splicing and other general-purpose applications. Maintains vivid color even when exposed to heavy abrasion. Dead stretch properties provide straighter lines when masking, marking and sealing. Resistant to most common solvents (avoid ketones, chlorinated hydrocarbons, esters). **Mfg. part no. 5702** safety black/yellow stripe tape features a 5.4 mil vinyl backing with rubber adhesive, resists most common solvents. This durable vinyl tape is ideal for identifying and marking traffic areas and physical hazards. **Mfg. part no. M-77** lane marking applicator available; *go online or call.* **Roll length: 36 yards.**

Mfg. Part No.	Color	Width	Stock No.	Price per Roll 1-9	10-24	25-49
● 471 BLUE (1/4"X36YDS)	Blue	¼"	**12C1644**	17.02	15.59	13.81
● 471 BLUE (2"X36YDS)	Blue	2"	**93K5559**	45.75	42.73	39.93
● 471 RED (2"X36YDS)	Red	2"	**93K5561**	45.75	42.73	39.93
● 471 WHITE (2"X36YDS)	White	2"	**93K5562**	50.44	47.11	44.02
● 471 YELLOW (2"X108YDS)	Yellow	2"	**93F6341**	53.91	50.35	47.04

SAFETY STRIPE TAPE 5702

Safety stripe tape **5702** has vinyl backing with rubber adhesive, resists most common solvents. Tape **5702** is used to identify, mark traffic areas, and physical hazards.

● 5702 BLACK/YELLOW (2"X36YDS)	Black/Yellow	2"	**93K5563**	64.57	60.31	56.35

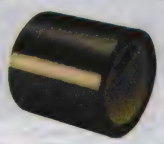
(9353)

PTFE EXTRUDED FILM TAPE 5490

RoHS Compliant Available

3M

Extruded, semi-transparent fused PTFE film made of fluorocarbon resin for excellent chemical resistance. Antifriction, easy release surface. Ideal for wrapping rollers, plates, belts, and more. Silicone adhesive. Roll size: 1" × 36 yards.



Mfg. Part No.	Stock No.	Price Per Roll 1-24	25-49	50-99	100-249
● 5490 (1/2"X36YDS)	**03P9646**	86.34	82.40	80.20	77.57
● 5490 (1" X 36YDS)	**93F6928**	157.71	146.19	135.39	126.02

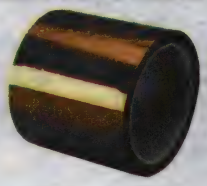
(9348)

POLYIMIDE FILM TAPE 5413

RoHS Compliant Available

3M

- Designed for high temperature applications



3M™ **5413** polyimide film tape used as mask for protection of gold fingers of PC boards during wave solder or solder dip process. Kapton® polyimide film is flame-retardant, radiation- and chemical-resistant, and does not soften at elevated temperatures, thus the film provides an excellent release surface at elevated temperatures. Silicone adhesive offers high-temperature performance reducing adhesive transfer. Temperature use range: -100° to 500°F (73°C to 260°C). Roll length: 36 yards. Color: amber. **Sold in pack quantities listed in table below.**

Mfg. Part No.	Width	No. of Rolls per Pack	Stock No.	Price per Pack 1-9	10-24	25-49	50-99
● 5413 (1/2"X36YDS)	½"	2	**93F6930**	85.97	80.41	74.84	69.73
● 5413 (3/4"X36YDS)	¾"	2	**93F6931**	128.44	120.12	111.82	104.14
● 5413 (1"X36YDS)	1"	1	**91B5052**	75.91	71.19	...	...
● 5413 (2"X36YDS)	2"	1	**90B4129**	153.00	143.49	...	...

(9347)

SCOTCH® EMI/RFI FOIL SHIELDING TAPE 1181, 1245, AND 1345

RoHS Compliant Available

3M

Scotch® copper foil electrical tapes shield against EMI/RFI radiation. Foil tapes are conductive through the adhesive and offer mechanical, electrical, and thermal values to meet shielding effectiveness/frequency requirements. **Mfg. part no. 1345** provides greatest shielding effectiveness and corrosion resistance.

Mfg. Part No.	Roll Size	Stock No.	Price per Roll 1-4	5+
SMOOTH FINISH				
● 1181 TAPE (1/4"X18YDS)	¼" x 18 yds.	**96F9287**	13.81	12.92
● 1181 TAPE (1/2"X18YDS)	½" x 18 yds.	**96F9288**	27.37	25.61
● 1181 TAPE (3/4"X18YDS)	¾" x 18 yds.	**66F6106**	50.61	47.50
● 1181 TAPE (1"X18YDS)	1" x 18 yds.	**44F3261**	53.93	50.49
● 1181 TAPE (2"X18YDS)	2" x 18 yds.	**92B3894**	119.90	112.25
EMBOSSED FINISH				
● 1245 TAPE (1"X18YDS)	1" x 18 yds.	**44F3256**	47.89	44.84
EMBOSSED TIN FINISH				
● 1345 TAPE (1/2"X18YDS)	½" x 18 yds.	**96F9290**	29.68	27.78
● 1345 TAPE (1"X18YDS))	1" x 18 yds.	**46F4361**	60.29	56.42

(9251)

VHB TAPES

RoHS Compliant Available

3M

Clear VHB™ Tape

4910 VHB™ double coated acrylic foam tape has a 40 mil clear, closed-cell acrylic carrier and film liner. This tape is excellent for joining transparent material. **4943F** VHB™ tape, conformable foam, low temperature appliable acrylic adhesive, gray, thickness 0.045 in. (1.1 mm), clear polyester liner. **4952** VHB™ Plus acrylic foam tape, firm foam, low surface energy synthetic adhesive, white, thickness 0.045 in. (1.1 mm), paper liner. VHB™ Plus tape provides good adhesion to polypropylene and powder paints.

Mfg. Part No.	Description	Color	Roll Size (Width x Length)	Stock No.	Price per Roll
● 4910 CLEAR (1/2"X36YDS)	VHB™ Double Coated Acrylic Foam Tape, 40.0 mil	Transparent	1//2" x 36 yds.	**82H0644**	105.17
● 4943F GRAY (1/2"X36YDS)	VHB™ Conformable Foam Tape, Small Pack, 45.0 mil	Grey	1//2" x 36 yds.	**82H0648**	165.49
● 4952 WHITE (1/2"X36YDS)	VHB™ Plus Acrylic Foam Tape, Small Pack, 45.0 mil	White	1//2" x 36 yds.	**82H0650**	167.85

VHB™ TAPE

Used to replace mechanical fastening for permanent assembly in many assemblies. The foam carrier helps provide higher strength, handling, convenience, cushioning, damping, and impact resistance. UL listed. Additional size of ½" is also available; *go online or call.* **Sold in packages of 3, except (**) sold individually.**

CONTINUED

VHB TAPES (CONT.)

Mfg. Part No.	Description	Color	Roll Size (Width x Length)	Stock No.	Price per Roll
● 4950 WHITE (3/4"X36YDS)	Acrylic Foam Tape, 45.0 mil	White	3/4" x 36 yds.	30M7991	147.28
● 4950 WHITE (1"X36YDS)**	Acrylic Foam Tape, 45.0 mil	White	1" x 36 yds.	19M1088	180.60

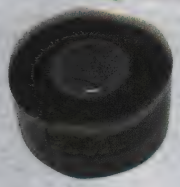
(88686)

AMP SILICON FUSION TAPE

RoHS Compliant Available

TE connectivity

Authorized Distributor



Applied tape forms solid rubber insulator at room temperature in 24 hours or less for excellent dielectric insulator, moistureproof barrier. Color guide stripe throughout for proper overlap when applying.

Mfg. Part No.	Width (in.)	Color	Roll Length (ft.)	Stock No.	Price Each 1-14	Price Each 15-24
● 608036-1	1	Red with Blue Stripe	36	95F1112	25.76	24.12
● 608036-2	1	Grey	36	95F1113	78.02	68.67
● 608036-4	1	Grey	36	95F1115	32.41	27.51
● 1-608036-2	1	Transparent	15	95F1123	92.82	83.72
● 1-608036-3	1	Red	15	95F1124	53.16	47.45
● 1-608036-4	1	Black, White Stripe	15	95F1125	48.03	43.23

(5458)

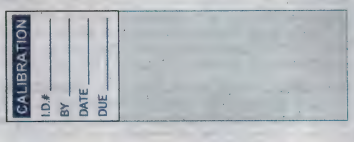
Q-CEE'S QUP SERIES VINYL WRAP-UP CALIBRATION LABELS

RoHS Compliant Available

TE connectivity

Authorized Distributor

AVAILABLE COLORS
BK, BR, BU, GR, GY, LB, LG, MG, OR, RD, VT, YL



QUP3, QUP6 Series

QUP12 Series

- Three styles
- Multiple colors for color control of calibration interval
- Designed for use on handles and odd shapes
- Clear protective cover wraps around label
- Resist cutting oils, coolants and chemicals
- Permanent adhesive backing

Q-CEE's wrap-up calibration labels feature clear covers that wrap around and protect data from tampering, smearing, weathering, chemicals and abrasion. Use on small cylindrical surfaces like gauges and handles. Ideal for any narrow part of an instrument too. Easy to use, just wrap completely around the part until the clear tail covers the writing on the label. All three label styles feature preprinted text and provide blank spaces to record standard information.

QUP3 SERIES WRAP-UP LABELS — 1"L x 1"W, 5"L WRAP AROUND

Mfg. Part No.	Label Legend	Color	Labels per Pkg.	Stock No.	Price per Pkg. 1-24
● QUP3BR	CALIBRATION / ID# / BY / DATE / DUE	Brown / White	30	29X4546	23.63
QUP3GR		Green / White	30	29X4547	23.63
● QUP3GY		Grey / White	30	29X4548	23.63
● QUP3LG		Light Green / White	30	29X4549	23.63
● QUP3MG		Magenta / White	30	29X4550	23.63
QUP3RD		Red / White	30	29X4551	23.63
QUP3VT		Violet / White	30	29X4552	23.63
● QUP3YL		Yellow / White	30	29X4553	23.63

QUP6 SERIES WRAP-UP LABELS — 1"L x 1"W, 2"L WRAP AROUND

Mfg. Part No.	Label Legend	Color	Labels per Pkg.	Stock No.	Price per Pkg. 1-24
QUP6BK	CALIBRATION / ID# / BY / DATE / DUE	Black / White	60	29X4554	15.30
● QUP6BU		Blue / White	60	29X4555	15.30
● QUP6GR		Green / White	60	29X4556	15.30
● QUP6LG		Light Green / White	60	29X4557	15.30
● QUP6RD		Red / White	60	29X4558	15.30
QUP6VT		Violet / White	60	29X4559	15.30

➤CONTINUED➤

Q-CEE'S QUP SERIES VINYL WRAP-UP CALIBRATION LABELS (CONT.)

QUP12 SERIES WRAP-UP LABELS — 2"L x 0.25"W, 4"L WRAP AROUND

Mfg. Part No.	Label Legend	Color	Labels per Pkg.	Stock No.	Price per Pkg. 1-24
QUP12BK	CAL / ID# / BY / DATE / DUE	Black / White	120	29X4535	22.02
QUP12BU		Blue / White	120	29X4536	22.02
● QUP12GR		Green / White	120	29X4537	22.02
● QUP12GY		Grey / White	120	29X4538	22.02
QUP12LB		Light Blue / White	120	29X4539	22.02
● QUP12LG		Light Green / White	120	29X4540	22.02
● QUP12MG		Magenta / White	120	29X4541	22.02
● QUP12OR		Orange / White	120	29X4542	22.02
● QUP12RD		Red / White	120	29X4543	22.02
● QUP12VT		Violet / White	120	29X4544	22.02
● QUP12YL		Yellow / White	120	29X4545	22.02
QUP12-136 CALIBRATION-RELATED WRAP-UP LABELS — 2"L x 0.25"W, 4"L WRAP AROUND					
● QUP12-136	FOR REFERENCE ONLY	Red / White	120	29X4534	21.84

(84842)

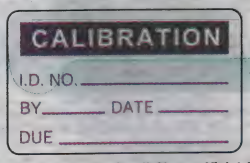
Q-CEE'S QCC SERIES VINYL COVERALL CALIBRATION LABELS

RoHS Compliant Available

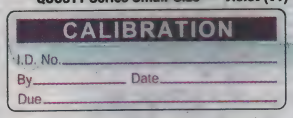
TE connectivity

Authorized Distributor

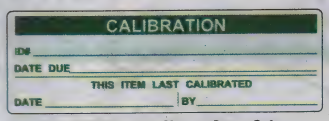
AVAILABLE COLORS
BK, BR, BU, GR, GY, LB, LG, MG, OR, PK, RD, VT, YL



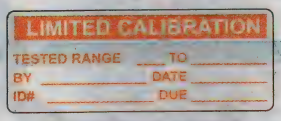
QCC311 Series Small-Size — Violet (VT)



QCC306 Series Mid-Size — Violet (VT)



QCC330 Large-Size — Green Only



QCCLIM — Orange Only

- Four styles
- Multilpe colors for color control of calibration interval
- Easy to write or stamp on
- Self-laminating clear cover
- Permanent adhesive backing

Q-CEE's coverall calibration labels are designed for use on gauges and instruments that are subjected to constant handling, cutting oils or chemicals. Features a clear polyester cover prepositioned at the top of the vinyl label. The cover protects data from tampering, smearing, weathering and abrasion. Permanent adhesive backing keeps label in place. All label styles feature preprinted text and provide blank spaces to record standard information. **NOTE:** Use labels on flat or slightly curved surfaces.

QCC311 SERIES SMALL-SIZE COVERALL LABELS — 1"L x 0.625"W
Mfg. part no. QCC311ZC multicolor pack consisting of 312 small-size coverall labels per pack, 13 colors per pack.

Mfg. Part No.	Label Legend	Color	Labels per Book	Stock No.	Price per Book 1-24
● QCC311BK	CALIBRATION / I.D. NO. / BY / DATE / DUE	White / Black	144	29X4464	22.28
● QCC311BR		Brown / White	144	29X4465	22.28
QCC311BU		Blue / White	144	29X4466	22.28
● QCC311GR		Green / White	144	29X4467	22.28
● QCC311GY		Grey / White	144	29X4468	22.28
● QCC311LB		Light Blue / White	144	29X4469	22.28
QCC311LG		Light Green / White	144	29X4470	22.28
QCC311MG		Magenta / White	144	29X4471	22.28
QCC311OR		Orange / White	144	29X4472	22.28
● QCC311PK		Pink / White	144	29X4473	22.28
● QCC311RD		Red / White	144	29X4474	22.28
● QCC311VT		Violet / White	144	29X4475	22.28
● QCC311YL		Yellow / White	144	29X4476	22.28
QCC311ZC		Multicolor Pack	312	29X4477	22.28

➤CONTINUED➤

Q-CEE'S QCC SERIES VINYL COVERALL CALIBRATION LABELS (CONT.)

Mfg. Part No.	Label Legend	Color	Labels per Book	Stock No.	Price per Book 1-24
Mfg. part no. QCC306ZC multicolor pack consisting of 208 mid-size coverall labels per pack, 13 colors per pack.					
QCC306BK	CALIBRATION / I.D. No. / By / Date / Due	White / Black	144	29X4450	20.82
● QCC306BR		Brown / White	144	29X4451	20.82
● QCC306BU		Blue / White	144	29X4452	20.67
● QCC306GR		Green / White	144	29X4453	20.82
● QCC306GY		Grey / White	144	29X4454	20.82
● QCC306LB		Light Blue / White	144	29X4455	20.82
● QCC306LG		Light Green / White	144	29X4456	20.82
● QCC306MG		Magenta / White	144	29X4457	20.82
● QCC306OR		Orange / White	144	29X4458	20.82
QCC306PK		Pink / White	144	29X4459	20.82
● QCC306RD		Red / White	144	29X4460	20.82
QCC306VT		Violet / White	144	29X4461	20.82
● QCC306ZC		Multicolor Pack	208	29X4463	20.82

QCC330 LARGE-SIZE CALIBRATION AND QCCLIM LIMITED CALIBRATION COVERALL LABELS
Mfg. part no. QCC330 large-size 3"L x 1"W coverall calibration labels. **Mfg. part no. QCCLIM** limited calibration coverall labels are sized 1.75"L x 0.625"W. **NOTE:** available only in color listed in table below.

Mfg. Part No.	Label Legend	Color	Labels per Pkg.	Stock No.	Price per Pkg. 1-49
QCC330	CALIBRATION/ ID# / DATE DUE / THIS ITEM LAST CALIBRATED / DATE / BY	Green / White	108	75X1473	39.84
● QCCLIM	LIMITED CALIBRATION / TESTED RANGE / TO / BY / DATE / ID# / DUE	Orange / White	140	29X4448	33.34

QCC306X BLANK VINYL COVERALL LABELS —1.75"L x 0.625"W
Mfg. part no. QCC306X blank coverall labels provide the whole label surface for recorded information. Easy to write or stamp on. Attached vinyl cover protects written data.

● QCC306X	Blank (No Legend)	White	144	29X4462	20.82

(84843)

DUAL-LOCK™ RECLOSABLE FASTENERS

RoHS Compliant Available

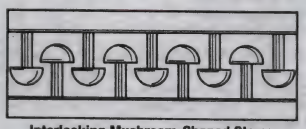
3M

Mini-Pack

SJ3542

MP4570 Low Profile

- Fast, easy attachment
- Excellent holding power
- Extreme flexibility



Interlocking Mushroom-Shaped Stems

Dual-Lock™ reclosable fasteners offer advanced closure alternatives to zippers, screws, snaps, bolts and more. Often better than conventional closure methods because they offer greater design flexibility, faster product assembly, smoother and cleaner exterior surfaces and improved product performance in many applications. These fasteners feature mushroom-shaped stems that interlock with one another with audible snap. Five times more holding power than hook and loop fasteners. Engaged strength varies depending on mating component, options include 170, 250, 400 and 705 mushroom-shaped stems per square inch. Available in mini-packs, standard roll lengths or trial bags.

DUAL-LOCK™ RECLOSABLE FASTENERS — MINI-PACKS
Dual-Lock™ reclosable fastener mini-packs contain different or the same strength-type fastener, making them great for design development, prototypes or small jobs. Mini-packs simplifies storage and dispensing and are available in different pressure-sensitive adhesive backings. **Mfg. part no. MP-3541/42** has general-purpose synthetic rubber adhesive that bonds well to most substrates. **Mfg. part nos. MP-3551/52** and **MP3560** have high-performance acrylic foam adhesive that bonds well to high surface energy substrates. **Mfg. part no. MP4570** Dual Lock™ low profile reclosable fasteners have acrylic LSE adhesive that bonds well to low surface energy substrates.

Mfg. Part No.	Qty. per Mini-Pack	Color Fastener/ Adhesive	Roll Size (W x Thickness x L)	Stock No.	Price per Mini-Pack 1-4
● MP-3541/42 BLACK	1 - 3541 1 - 3542	Black/Black	1" x 0.23" x 4.9 yd.	93F6918	104.44
● MP-3551/52 BLACK	1 - 3551 1 - 3552	Black/White	1" x 0.23" x 4.9 yd.	93F6919	146.12
● MP-3560 CLEAR	2 - 3560	Clear/Clear	1" x 0.23" x 4.9 yd.	93F6920	167.13
MP4570	1- 4570	Clear/Clear	5/8" x 0.1" x 10 ft.	97M9989	14.11

DUAL-LOCK™ RECLOSABLE FASTENERS — STANDARD ROLLS
Dual-Lock™ reclosable fasteners are available in different engaged strengths (stems per square inch) and pressure-sensitive adhesive backings. **Mfg. part nos. SJ-3540,SJ-3541, SJ-3542** has low surface energy (LSE) rubber-based adhesive that bonds well to low surface energy materials . **Mfg. part nos. SJ-3552** and **SJ3560** have high-performance acrylic foam adhesive that bonds well to high surface energy substrates.

➤CONTINUED➤

DUAL-LOCK™ RECLOSABLE FASTENERS (CONT.)

Mfg. Part No.	Stems per Sq. In.	Color Fastener/ Adhesive	Roll Size (W x Thickness x L)	Stock No.	Price per Roll 1-9
● SJ-3542	170	Black/Black	1" x 0.23" x 50 yd.	92B6269	342.78
● SJ-3552 1"	170	Black/White	1" x 0.23" x 50 yd.	95C1819	478.28
● SJ-3560	250	Clear/Clear	1" x 0.23" x 50 yd.	23C6647	510.88
● SJ-3540 (BLACK) 1"	250	Black/Black	1" x 0.23" x 50 yd.	25C4392	302.50
● SJ-3541	400	Black/Black	1" x 0.23" x 50 yd.	97B3495	340.28

DUAL-LOCK™ RECLOSABLE FASTENERS — TRIAL BAGS 1 MATED STRIP PER BAG

Mfg. Part No.	Stems per Sq. In.	Color Fastener/ Adhesive	Roll Size (W x Thickness x L)	Stock No.	Price per Trial Bag 1-4
TB3540	250/250	Black/Black	1" x 0.23" x 10 yd.	24T4975	34.40
TB3541/42	400/170	Black/Black	1" x 0.23" x 10 yd.	63T8040	35.78
TB3550	250/250	Black/Black	1" x 0.23" x 10 yd.	40T4410	35.43
TB3560	250/250	Clear/Clear	1" x 0.23" x 10 yd.	63T8043	53.15
TB3561/62	400/170	Clear/Clear	1" x 0.23" x 10 yd.	63T8044	35.78
TB3870	250/250	Black/Grey	1" x 0.24" x 10 yd.	63T8047	34.40
TB3871/72	400/170	Black/Grey	1" x 0.24" x 10 yd.	63T8048	34.40
TB4570	...	Clear/Clear	1" x 0.098" x 10 yd.	63T8051	21.68
TB4575	...	Black/Clear	1" x 0.098" x 10 yd.	63T8052	22.23

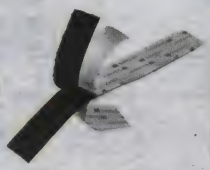
(9341)

SCOTCHMATE™ HOOK AND LOOP FASTENERS

RoHS Compliant Available

3M

Mini-Pack



3526 Hook and 3527 Loop

Quick Fastening Hooks and Loops

Scotchmate™ nylon hook and loop reclosable fasteners offer an advanced closure alternative to zippers, screws, snaps, hooks, bolts, latches, and more. They provide greater design flexibility, faster product assembly, smoother and cleaner exterior surfaces and improved product performance in many applications. The hook and loop fasteners consist of two strips of nylon fabric which engage to form a quick fastening attachment. Simply pull the strips apart by hand to disengage. The woven hook backing is covered with flexible self-supporting J-shaped hooks, about 300 hooks per square inch (46/sq. cm.) protruding up from a woven backing. The woven loop backing is covered with thousands of soft, pliable loops, providing for thousands of openings and closings (cycles). Mini-packs contain one 4.9 yard roll each of the hook and the loop fastener, making them great for design development, prototypes or small jobs. Mini-packs also simplify storage and dispensing. Standard roll lengths are also available; *go online or call.*

SCOTCHMATE™ PRESSURE-SENSITIVE ADHESIVE-BACK FASTENERS — MINI-PACKS
The plain backing can be sewn on, stapled, or ultrasonically bonded in place. Provides an adjustable closure with a tailored appearance for garments and fabrics and is washable and dry cleanable.

Mfg. Part No.	Qty. per Mini-Pack	Color	Roll Size (W x L)	Stock No.	Price per Mini-Pack 1-9
The pressure-sensitive rubber adhesive-backing allows hook and loop fasteners to be attached to substrates with convenience and ease — simply peel off the liner and press in place.					
● MP-3526/27 WHITE	1 Ea.-3526 Hook/3527 Loop	White	1" x 4.9 yd.	93F6916	73.55
● MP-3526/27 BLACK	1 Ea.-3526 Hook/3527 Loop	Black	1" x 4.9 yd.	93F6917	73.56

HOOK AND LOOP FASTENERS — TRIAL BAGS 1 MATED STRIP PER BAG
TB3000 is a thin back to back hook and loop fastener which can wrap around and attach to itself to be used for bundling items.

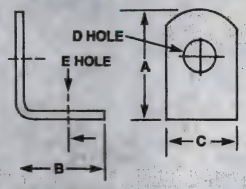
Mfg. Part No.	Description	Color	Roll Size (W x L)	Stock No.	Price per Trial Bag 1-9
TB3000 BLACK	1 Ea.-TB3000 Hook/Loop	Black	1" x 10 ft.	63T8033	12.03
TB3000 RED	1 Ea.-TB3000 Hook/Loop	Red	1" x 10 ft.	63T8034	12.03
TB3000 WHITE	1 Ea.-TB3000 Hook/Loop	White	1" x 10 ft.	63T8035	12.03
TB3401/TB3402 is a plain backed fastener for applications not requiring an adhesive, most commonly sewn.					
TB3401/TB3402	1 Ea.-TB3402 Hook/TB3401 Loop	Black	1" x 10 ft.	63T8036	20.05
TB3506/TB3507 Thin hook and loop fasteners offer clean smooth lines for applications where aesthetics are critical.					
TB3506/TB3507	1 Ea.-TB3506 Hook/TB3507 Loop	White	1" x 10 ft.	63T8037	12.03
TB3526N/TB3527N are coated on the backside with a high performance rubber based pressure sensitive adhesive to be easily attached to a variety of substrates.					
TB3526N/TB3527N	1 Ea.-TB3526N Hook/TB3527N Loop	Black	1" x 10 ft.	63T8038	20.05
TB3530/TB3531 are coated with a general purpose rubber based pressure sensitive adhesive.					
TB3530/TB3531	1 Ea.-TB3530 Hook/TB3531 Loop	Black	1" x 10 ft.	63T8039	20.05
TB3546/TB3547 are coated on the backside with a general purpose acrylic pressure sensitive adhesive designed to adhere to variety of surfaces including low surface energy materials while still providing good temperature resistance.					
TB3546/TB3547	1 Ea.-TB3546 Hook/TB3547 Loop	Black	1" x 10 ft.	63T8041	20.05
TB3571/TB3572 coated with high performance acrylic pressure sensitive adhesive which has high temperature resistance and is resistant to many environmental and chemical conditions.					
TB3571/TB3572	1 Ea.-TB3571 Hook/TB3572 Loop	Black	1" x 10 ft.	63T8045	20.05
TB3576/TB3577 woven polyester hook backing has flexible, self-supporting inverted J-hooks protruding up from the backing.					
TB3576/TB3577	1 Ea.-TB3576 Hook/TB3577 Loop	Black	1" x 10 ft.	63T8046	20.05

(9342)

UNIVERSAL BRACKETS

RoHS Compliant Available

KEYSTONE ELECTRONICS CORP.



Brass and steel brackets with tapped (*) clear holes.

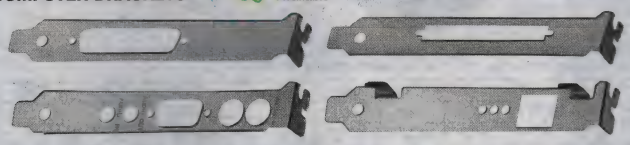
Mfg. Part No.	Dimensions A	B	C	D Hole	E Hole	Stock No.	Price Each 1-99
612	0.343	0.375	0.250	0.128	4-40*	75M3240	0.25
621	0.343	0.375	0.250	4-40	4-40*	30H5040	0.34
633	0.375	0.375	0.281	0.140	0.140	62W5719	0.18
634	0.375	0.375	0.281	0.140	6-32*	62W5720	0.59
614	0.406	0.343	0.312	0.144	6-32*	62W5163	0.28
615	0.437	0.343	0.281	0.144	0.125	62W5164	0.23
616	0.453	0.312	0.250	0.136	4-40*	62W5165	0.56
617	0.578	0.600	0.500	0.165	6-32*	62W5166	0.55
619	0.687	0.687	0.375	0.144	0.144	62W5168	0.27
620	1.156	0.656	0.375	0.169	0.169	62W5169	0.47

(9252)

STANDARD COMPUTER BRACKETS

RoHS Compliant Available

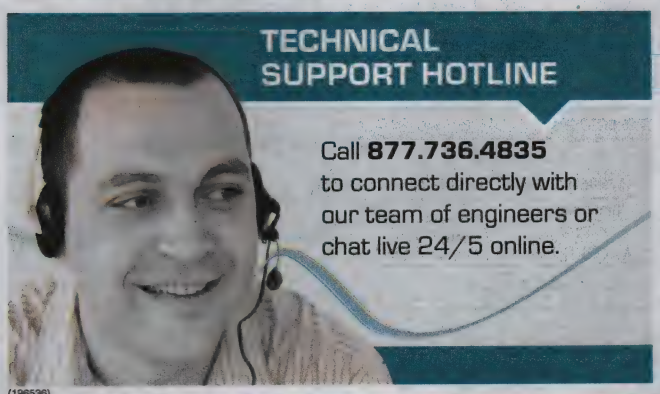
KEYSTONE ELECTRONICS CORP.



Brackets are designed to fit all computers. Available for most common configurations. Holes and cutouts are made to match with all peripherals. Construction: 0.032″ steel, nickel-plated.

Mfg. Part No.	Description	Pins	Stock No.	Price Each 1-49
9200	EISA/ISA OR PCI	...	83F7657	2.74
9201	EISA/ISA OR PCI	...	83F7658	2.54
9202	EISA/ISA	...	83F7659	3.13
9203	PCI	...	83F7660	2.62
9204	PCI	...	83F7661	2.95
9220	Security Bracket	...	83F7662	5.56
9200-1	EISA/ISA	9	83F7663	2.66
9200-2	PCI	9	83F7664	2.54
9200-3	EISA/ISA	15	83F7665	2.70
9200-4	EISA/ISA	25	83F7666	2.66
9200-6	SCSI 1/PCI	50	83F7667	2.54
9200-7	SCSI/PCI	68	83F7668	2.54
9200-8	SCSI 2, 3, 4/PCI	50	83F7669	2.54
9200-9	SCSI 2, 3, 4/PCI	68	83F7670	2.66
9204-1	Sound, EISA/ISA	...	83F7671	2.95
9201-1	A/V, PCI	...	83F7672	2.54
9200-10	USB, EISA/ISA or PCI	...	83F7673	2.54
9203-1	Modem, PCI/ISDN	...	83F7674	2.95
9202-1	Modem, EISA/ISA	...	83F7675	2.95
9203-2	Network, PCI	...	83F7676	3.13

(36470)

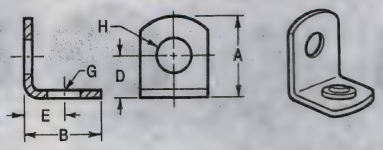


(196536)

THREADED MOUNTING BRACKETS

RoHS Compliant Available

multicomp



Mfg. part nos. 8459-0665, 8459-0666, 8459-0670, and **8459-0671** are 0.062″ steel. **Mfg. part no. 8459-0667** is 0.047″ brass. **Mfg. part nos. 8459-0668** and **8459-0669** are 0.032″ brass. **Mfg. part no. 8459-0672** is 0.037″ brass. **Sold in packages of 100.**

SPECIFICATIONS

Mfg. Part No.	Stock No.	Dimensions A	B	D	E	G Dia.	H Dia.
8459-0665	16N947	0.343″	0.375″	0.203″	0.250″	4-40	0.130″
8459-0666	16N948	0.343″	0.375″	0.203″	0.250″	4-40	4-40
8459-0667	16N949	0.453″	0.312″	0.265″	0.187″	4-40	0.136″
8459-0668	16N950	0.375″	0.375″	0.218″	0.218″	6-32	0.140″
8459-0669	16N951	0.420″	0.343″	0.250″	0.197″	6-32	0.144″
8459-0670	16N952	0.562″	0.562″	0.412″	0.412″	6-32	6-32
8459-0671	16N953	0.578″	0.500″	0.328″	0.299″	6-32	0.165″
8459-0672	16N954	0.375″	0.422″	0.234″	0.250″	8-32	0.135″

Mfg. Part No.	Plating	Stock No.	Price per Pkg. 1-4	5-9	10-24	25-49
8459-0665	Zinc	16N947	29.76	25.51	21.60	19.99
8459-0666	Zinc	16N948	38.59	33.08	28.01	25.92
8459-0667	Tin	16N949	51.85	44.45	37.64	34.83
8459-0668	Nickel	16N950	59.49	50.98	43.18	39.96
8459-0669	Tin	16N951	34.42	29.51	24.99	23.13
8459-0670	Nickel	16N952	158.95	136.24	115.38	106.79
8459-0671	Tin	16N953	52.39	44.92	38.03	35.20
8459-0672	Tin	16N954	77.81	66.70	56.48	52.28

(9396)

RECESSED BUMPERS

RoHS Compliant Available

KEYSTONE ELECTRONICS CORP.

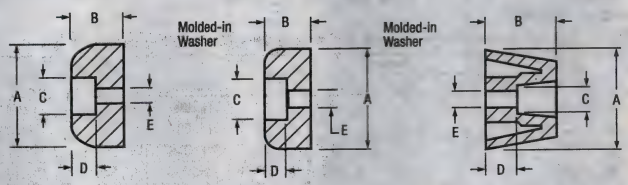


Fig. 1 Fig. 2 Fig. 3

- Material: Rubber, BUNA S (Figs. 1 & 2), Vinyl (Fig. 3)

Provides excellent traction and shock absorbing qualities, available with or without Mold-in Washers.

Mfg. Part No.	Figure	Screw Size	Dimensions A	B	C	D	E	Stock No.	Price Each 1-49
720	1	#4	12.7	0.25	0.250	0.188	3.175	97H7023	0.26
721	1	#4	15.875	0.312	0.250	0.188	3.175	25C3781	0.41
722	1	#4	18.237	0.437	0.250	0.218	3.175	97H7024	0.82
723	2	#8	23.8	0.375	0.375	0.188	4.75	97H7025	0.79
724*	3	#6	17.45	0.25	0.343	0.125	3.937	97H7026	0.59
725*	3	#8	22.23	0.312	0.406	0.125	4.75	97H7027	1.04
726*	3	#10	26.975	0.437	0.468	0.234	5.08	67H5723	1.36
727	3	#4	14.275	0.375	0.218	0.188	2.921	20C2182	0.72
728	3	#6	19.05	0.437	0.265	0.25	3.759	97H7028	0.83
729	3	#8	23.8	0.625	0.359	0.297	4.42	97H7029	1.21

*Grey - All others black

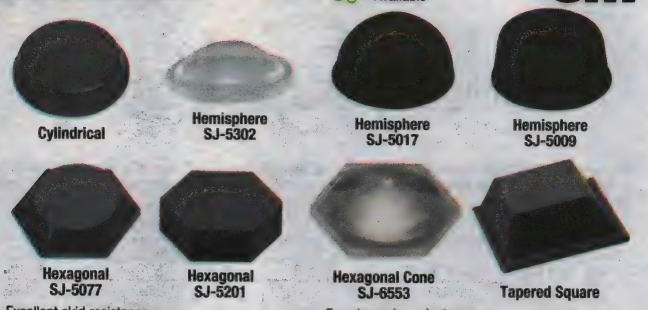
(78606)

HARDWARE BUMPERS • HARDWARE GROMMETS • HARDWARE HANDLES

BUMPON™ PROTECTIVE FEET/SPACERS/BUMPERS

RoHS Compliant Available

3M



- Excellent skid resistance
- Long aging resiliency – will not crack or harden
- Abrasion, marring and staining resistance
- Easy to apply — just press-on
- Bonds fast and permanently

Self-sticking, press-on Bumpon™ protective feet/spacers/bumpers can be used almost anywhere slamming, scratching, nicking, scuffing, marring, sliding, vibration, or noise could be a problem. Ideal for fans, small appliances, furniture and glass shelves, telephones, computers, calculators, scales and speakers, cabinet doors, lids and drawers, chairs, walls, sliding doors and for stacking glass and metal sheets. Bonds with metal, wood, glass, steel, acrylic plastic, and aluminum. Molded of durable, resilient polyurethane. The aggressive, high-tack, pressure-sensitive adhesive backing is protected with a release liner making application fast and easy. **Sold per card of quantities listed below.**

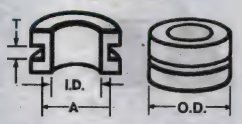
Mfg. Part No.	Description	Color	W x H (in.)	Qty. per Card	Stock No.	Price per Card
● SJ-5012 BLACK	Round	Black	12.70 x 0.14	56	35R6324	9.56
● SJ-5302 CLEAR	Hemisphere	Clear	7.925 x 0.085	96	35R6319	9.99
● SJ-5017 BLACK	Hemisphere	Black	19 x 9.6	40	34R2142	10.17
● SJ-5201 BROWN	Hexagon	Brown	10.998 x 0.125	132	35R6320	9.21
● SJ-6553 CLEAR	Hexagon	Clear	10.998 x 0.120	132	35R6315	10.34
● SJ-5008 BLACK	Tapered Square	Black	12.7 x 3.1	80	34R2141	5.64
● SJ-5018 BLACK	Tapered Square	Black	12.70 x 0.23	80	35R6323	9.56
● SJ-5023 BLACK	Tapered Square	Black	20.574 x 0.30	36	47R4816	6.82

(9309)

GROMMETS

RoHS Compliant Available

multicomp



RUBBER GROMMETS

Material: black SBR butadiene-styrene copolymer. Durometer hardness: 60 ± 5. **Sold in packages of 100.**

Mfg. Part No.	Dimensions A	T	I.D.	O.D.	Stock No.	Price per Pkg. 1-9	10-24
● BG-901	0.250″	0.062″	0.125″	0.343″	31F2000	20.92	19.14
● BG-2286	0.312″	0.062″	0.187″	0.437″	31F2001	26.45	24.20
● BG-8051	0.312″	0.062″	0.187″	0.500″	32F1349	28.73	26.27
● BG2902	0.375″	0.062″	0.250″	0.500″	50N6919	34.77	31.79
● BG-921	0.375″	0.156″	0.281″	0.625″	31F2282	26.65	24.39
● BG2903	0.375″	0.125″	0.250″	0.500″	32F1353	33.30	30.45
● BG505	0.437″	0.062″	0.312″	0.625″	50N6920	38.75	35.44
● BG230	0.500″	0.062″	0.375″	0.625″	50N6921	34.63	31.68
● BG-1787	0.562″	0.062″	0.437″	0.750″	31F2081	35.35	32.33
● BG230-060	0.625″	0.062″	0.500″	0.812″	50N6922	53.08	48.54
● BG-915	0.750″	0.062″	0.562″	1.000″	31F2080	48.73	44.57
● BG-2285	0.875″	0.062″	0.625″	1.125″	31F2083	58.69	53.68
● BG-1032	1.000″	0.078″	0.687″	1.312″	31F2084	86.89	79.46

VINYL GROMMETS

Color: black. **Sold in packages of 100, except (*) package of 50.**

Mfg. Part No.	Dimensions A	T	I.D.	O.D.	Stock No.	Price per Pkg.
● SPC21795	0.250″	0.062″	0.125″	0.343″	18M5976	24.92
● SPC21796	0.500″	0.062″	0.375″	0.625″	18M5977	32.28

(9334)

multicomp AT NEWARK ELEMENT14

Affordable, performance board level & box build components at

newark.com/multicomp

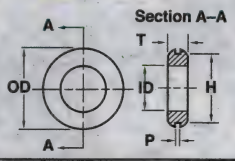
(212569)

HOLE GROMMETS

RoHS Compliant Available

pro-POWER

Install instantly and easily; simply snap into hole. Flexible vinyl material. Color: black. **Sold in packages of 100.**



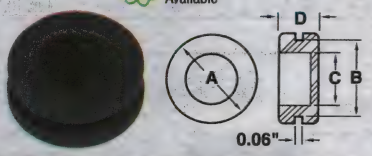
Mfg. Part No.	Outside Diameter	Inside Diameter	Dimensions H	P	T	Stock No.	Price per Pkg. 1-9
● SPC4884	0.375″	0.156″	0.25″	0.06″	0.250″	50N122	14.66
● SPC4885	0.438″	0.219″	0.31″	0.06″	0.219″	50N123	18.14
● SPC4886	0.563″	0.250″	0.37″	0.09″	0.281″	50N124	15.65
● SPC4887	0.563″	0.312″	0.44″	0.06″	0.187″	50N125	20.75
● SPC4888	0.672″	0.375″	0.49″	0.06″	0.281″	50N126	32.66
● SPC4889	0.859″	0.625″	0.75″	0.06″	0.219″	50N127	43.98
● SPC4890	1.234″	0.734″	0.99″	0.06″	0.312″	50N128	79.12
● SPC4891	1.188″	0.859″	1.00″	0.06″	0.312″	50N129	99.03

(34974)

BLANK DIAPHRAGM GROMMETS

RoHS Compliant Available

pro-POWER



Lock into round, oval, threaded, punched or drilled holes. Flexible vinyl material. Diaphragm can be perforated to accommodate any size wire. Color: black. **Sold in packages of 100.**

Mfg. Part No.	Dimensions A	B	C	D	Stock No.	Price per Pkg. 1-9
● SPC4872	0.50″	0.39″	0.25″	0.26″	50N110	29.06
● SPC4873	0.62″	0.49″	0.37″	0.25″	50N111	46.89
● SPC4874	1.00″	0.87″	0.72″	0.31″	50N112	59.69
● SPC4875	1.15″	1.00″	0.81″	0.31″	50N113	73.69

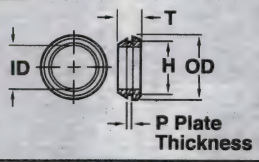
(34972)

QUICK-FIT GROMMETS

RoHS Compliant Available

pro-POWER

Protect wires and cables when passing through metal panels. Open grommet designed to snap neatly and quickly into position. Soft PVC material. Color: black. **Sold in packages of 100.**



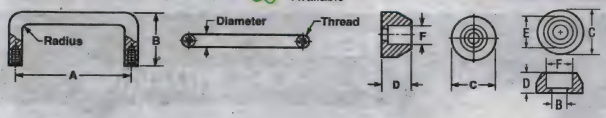
Mfg. Part No.	Dimensions H	I.D.	O.D.	T	P	Stock No.	Price per Pkg. 1-9
● SPC4876	0.39″	0.24″	0.53″	0.32″	0.06″	50N114	19.97
● SPC4877	0.55″	0.39″	0.69″	0.32″	0.06″	50N115	31.01
● SPC4878	0.71″	0.55″	0.85″	0.32″	0.06″	50N116	37.22
● SPC4882	0.39″	0.24″	0.53″	0.37″	0.12″	50N120	19.73
● SPC4883	0.55″	0.39″	0.69″	0.37″	0.12″	50N121	33.86

(34973)

ROUND INSTRUMENTATION HANDLES

RoHS Compliant Available

KEYSTONE



Choice of nickel-plated brass per ASTM-B-16/QQ-N-290 or black anodized aluminum per QQ-A-325/MIL-A-8625. *Order ferrules separately below.*

4-40 THREADED ROUND INSTRUMENTATION HANDLES

Dimensions (in.) A	B	Diameter	Brass Mfg. Part No.	Stock No.	Price Each 1-49	Aluminum Mfg. Part No.	Stock No.	Price Each 1-49
1.25	1.00	0.156	...	...	...	● 7170	96F9895	5.83
2.00	1.00	0.156	...	...	...	● 7171	96F9896	6.45

➤ CONTINUED ➤

ROUND INSTRUMENTATION HANDLES (CONT.)

6-32 THREADED ROUND INSTRUMENTATION HANDLES

Dimensions (in.)			Brass			Aluminum		
A	B	Diameter	Mfg. Part No.	Stock No.	Price Each 1-49	Mfg. Part No.	Stock No.	Price Each 1-49
1.25	1.00	0.187	9106	16F2000	8.04	9116	16F2010	6.54
2.00	1.00	0.187	9108	16F2002	8.32	9118	16F2012	6.99
8-32 THREADED ROUND INSTRUMENTATION HANDLES								
3.00	1.50	0.250	7143	96F9871	8.85	7173	94F4260	7.75
4.00	1.50	0.250	7144	94F4258	9.41	7174	94F4425	8.13
10-32 THREADED ROUND INSTRUMENTATION HANDLES								
3.00	1.50	0.312	7145	94F4433	9.79	7175	96F9907	9.29
4.00	1.50	0.312	7146	96F9882	10.32	...	...	...
4.00	1.75	0.312	...	...	...	523	96F9912	9.53
4.50	1.50	0.312	490	96F9883	10.63	...	...	...
4.562	1.50	0.312	7147	96F9884	10.63	...	...	...
5.00	1.75	0.312	495	96F9890	10.17	525	96F9914	9.57
6.00	1.50	0.312	7148	96F9887	11.62	...	...	...
6.00	1.75	0.375	...	...	...	526	96F9915	9.98
4.00	1.375	0.375	7150	96F9893	11.24	7180	96F9917	9.17
4.00	1.375	0.375	...	...	...	7181	96F9918	10.31

OVAL INSTRUMENTATION HANDLES — ALUMINUM (0.625 x 0.281 in.)

Mfg. Part No.	Dimensions (in.) A	B	C	Thread Size	Stock No.	Price Each 1-49
7186	4.00	1.75	0.625	10-32	90B2385	14.18
541	5.00	1.75	0.625	10-32	88F3787	15.38
7188	6.437	1.75	0.625	10-32	94F4427	16.72

FERRULES FOR ROUND HANDLES

Dimensions (in.)			Brass			Aluminum		
Dim. C	Dim D	Dim. F	Mfg. Part No.	Stock No.	Price per Pkg. 1-49	Mfg. Part No.	Stock No.	Price Each 1-49
0.562	0.187	0.320	7164	96F9921	21.52	7194	62W5178	1.30

(9258)

ROUND ALUMINUM OR STAINLESS STEEL HANDLES

RoHS Compliant Available

RAF ELECTRONIC HARDWARE
a Division of MW Industries, Inc.

- Aluminum, black anodize **suffix -A-24**
- Stainless steel **suffix -SS**

6.3MM ROUND HANDLES

Width (mm)	M4 x 0.7 Thread Mfg. Part No.	Stock No.	Price Each 1-99	M4 x 0.7 Thread Mfg. Part No.	Stock No.	Price Each 1-99
32	M6120-4007-A-24	27T8229	4.47	M6120-4007-SS	27T8230	6.33
38	M6121-4007-A-24	27T8231	4.47	M6121-4007-SS	27T8232	6.11
44	M6122-4007-A-24	27T8233	4.57	M6122-4007-SS	27T8234	6.18
51	M6123-4007-A-24	27T8235	4.61	M6123-4007-SS	27T8236	6.28
57	M6124-4007-A-24	27T8237	4.80	M6124-4007-SS	27T8238	6.32
63	M6125-4007-A-24	27T8239	4.82	M6125-4007-SS	27T8240	6.46
70	M6126-4007-A-24	27T8241	5.26	M6126-4007-SS	27T8242	6.51
76	M6127-4007-A-24	27T8243	4.89	M6127-4007-SS	27T8244	7.09
102	M6128-4007-A-24	27T8245	5.22	M6128-4007-SS	27T8246	27.31
127	M6129-4007-A-24	27T8247	5.55	M6129-4007-SS	27T8248	7.28

3/16″ ROUND HANDLES

Width (in.)	4-40 Thread Mfg. Part No.	Stock No.	Price Each 1-99	6-32 Thread Mfg. Part No.	Stock No.	Price Each 1-99
2	8074-440-A-24	27T9005	3.45	8074-632-A-24	27T9006	4.64
3	8075-440-A-24	27T9007	3.45	8075-632-A-24	27T9008	4.89
4	8076-440-A-24	27T9009	5.44	8076-632-A-24	27T9010	5.08
5	8077-440-A-24	27T9011	5.34	8077-632-A-24	27T9012	5.34

1/4″ ROUND HANDLES

Width (in.)	6-32 Thread Mfg. Part No.	Stock No.	Price Each 1-99	8-32 Thread Mfg. Part No.	Stock No.	Price Each 1-99
1.125	8102-632-A-24	27T9013	4.71	8102-832-A-24	27T9014	4.71
1.25	8103-632-A-24	27T9015	5.06	8103-832-A-24	27T9016	4.71
1.5	8104-632-A-24	27T9017	4.75	8104-832-A-24	27T9018	4.75
1.75	8105-632-A-24	27T9019	4.82	8105-832-A-24	27T9020	4.82
2	8106-632-A-24	27T9021	5.26	8106-832-A-24	27T9022	4.89

(194786)

OVAL ALUMINUM HANDLES

RoHS Compliant Available

RAF ELECTRONIC HARDWARE
a Division of MW Industries, Inc.

- Aluminum, black anodize

5/8″ x 9/32 OVAL HANDLES - 10-32 Thread

Mfg. Part No.	Height (in.)	Width (in.)	Stock No.	Price Each 1-99
8358-1032-A-24	1.281	3	27T9023	7.90
8359-1032-A-24	1.281	4	27T9024	22.06
8360-1032-A-24	1.281	4.25	27T9025	7.85
8368-1032-A-24	1.5	4	27T9026	8.50
8370-1032-A-24	1.5	4.5	27T9027	8.80
8371-1032-A-24	1.5	4.563	27T9028	8.22
8372-1032-A-24	1.5	5	27T9029	8.91
8373-1032-A-24	1.5	6	27T9030	9.38
8376-1032-A-24	1.75	3	27T9031	7.78
8377-1032-A-24	1.75	4	27T9032	8.22
8379-1032-A-24	1.75	4.5	27T9033	8.33
8381-1032-A-24	1.75	5	27T9034	9.16

(194787)

PLUG BUTTONS

RoHS Compliant Available

CINCH

- Nickel-Plated Steel
- Spring-Tension Prongs

Mfg. part no. 41V provides ventilation whenever required.

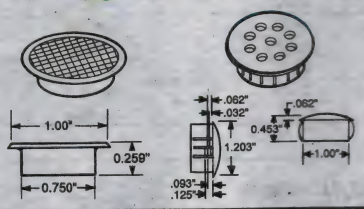
Mfg. Part No.	Hole Diameter	Overall Diameter	Stock No.	Price Each 1-49	50-99
41C	0.500″(12.70)	0.656″(16.67)	29F635	2.72	1.82
41V	1.000″(25.40)	1.156″(29.37)	29F641	7.75	6.24

(8843)

VENT PLUGS

RoHS Compliant Available

multicomp



Mfg. Part No.	Description	Stock No.	Price Each 1-4	5-9
VPMB	Brass-Plated Metal Wire Mesh	95N3644	1.88	1.77
VPMN	Nickel-Plated Metal Wire Mesh	95N3645	2.01	1.90
SPC21794	Snap-In, Black Perforated Plastic	18M5975	16.21	14.06

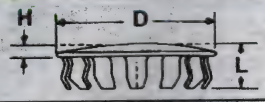
(9239)

SNAP BUTTON HOLE PLUGS

RoHS Compliant Available

multicomp

Cover holes in metal, wood, and more. **Mfg. part no. HP-14** size fits switch box knock-out holes. Nickel-plated steel. **Sold in packages of 100.**



Mfg. Part No.	Hole Dia.	Panel Thickness	Dimensions D	H	L	Stock No.	Price per Pkg. 1-2
SPC21893	0.250″	0.031-0.062″	0.406″	0.062″	0.234″	18M6074	83.07
HP-05	0.312″	0.046-0.078″	0.437″	0.062″	0.250″	32F646	83.80
SPC21894	0.375″	0.046-0.062″	0.500″	0.062″	0.234″	18M6075	121.09
SPC21895	0.500″	0.031-0.062″	0.656″	0.078″	0.281″	18M6076	123.96
HP-10	0.625″	0.062-0.093″	0.812″	0.078″	0.296″	31F2017	103.86
SPC21896	0.750″	0.062-0.093″	0.921″	0.078″	0.296″	18M6077	137.24
HP-14	0.875″	0.062-0.093″	1.062″	0.062″	0.296″	32F648	92.92

CONTINUED

SNAP BUTTON HOLE PLUGS (CONT.)

Mfg. Part No.	Hole Dia.	Panel Thickness	Dimensions D	Dimensions H	Dimensions L	Stock No.	Price per Pkg. 1-2
● SPC21897	1.000″	0.093-0.125″	1.140″	0.093″	0.312″	18M6078	192.90
● HP-18	1.125″	0.031-0.125″	1.312″	0.093″	0.343″	32F649	169.68

(9335)

MACHINE SCREWS

RoHS Compliant Available

multicomp

SBH

SRH

SBH SERIES NICKEL-PLATED STEEL BINDER HEAD SCREWS – PKG. OF 100

Mfg. Part No.	Thread	Length	Stock No.	Price per Pkg. 1-9
● SPC21821	#2-56	¼″	18M6002	44.00
● SPC21823	#4-40	¼″	18M6004	27.04
● SPC21824	#4-40	½″	18M6005	46.95
● SPC21825	#4-40	¾″	18M6006	37.96
● SPC21826	#6-32	3/16″	18M6007	31.07
● SPC21827	#6-32	¼″	18M6008	21.14
● SPC21829	#6-32	½″	18M6010	31.07
● SPC21830	#6-32	¾″	18M6011	25.23
● SPC21831	#8-32	¼″	18M6012	37.96
● SPC21832	#8-32	⅜″	18M6013	33.65
● SPC21833	#8-32	½″	18M6014	31.93
● SPC21834	#8-32	¾″	18M6015	37.10
● SPC21835	#10-32	½″	18M6016	33.65
● SPC21836	#10-32	¾″	18M6017	33.65
SRH SERIES NICKEL-PLATED STEEL ROUND HEAD SCREWS – PKG. OF 100				
● SPC21837	#2-56	½″	18M6018	33.65
● SPC21838	#2-56	¾″	18M6019	78.51
● SPC21839	#4-40	¼″	18M6020	25.23
● SPC21840	#4-40	⅜″	18M6021	22.35
● SPC21841	#4-40	½″	18M6022	29.33
● SPC21842	#4-40	¾″	18M6023	32.79
● SPC21843	#6-32	¼″	18M6024	24.16
● SPC21844	#6-32	⅜″	18M6025	106.06
● SPC21845	#6-32	½″	18M6026	33.65
● SPC21846	#6-32	¾″	18M6027	33.65
● SPC21847	#6-32	1″	18M6028	36.62
● SPC21848	#6-32	1¼″	18M6029	29.33
● SPC21849	#6-32	2″	18M6030	41.41
● SPC21850	#8-32	⅜″	18M6031	27.61
● SPC21851	#8-32	½″	18M6032	31.24
● SPC21852	#8-32	¾″	18M6033	44.87
● SPC21855	#10-32	½″	18M6036	30.19

(9331)

STAINLESS STEEL/ALUMINUM THUMB SCREWS

RoHS Compliant Available

RAF ELECTRONIC HARDWARE a Division of MW Industries, Inc.

Washer Face

Plain

WASHER FACE THUMB SCREWS - THREAD SIZE 4-40

Length (in.)	Stainless Steel Mfg. Part No.	Stainless Steel Stock No.	Stainless Steel Price Each 1-99	Aluminum Mfg. Part No.	Aluminum Stock No.	Aluminum Price Each 1-99
0.313	● 7100-SS	27T8946	2.25	● 7100-AL	27T8945	1.01
0.375	● 7101-SS	27T8948	2.39	● 7101-AL	27T8947	1.05
0.438	● 7102-SS	27T8950	2.49	● 7102-AL	27T8949	1.08
WASHER FACE THUMB SCREWS - THREAD SIZE 6-32						
0.375	● 7103-SS	27T8952	2.57	● 7103-AL	27T8951	1.07
0.438	● 7104-SS	27T8954	2.48	● 7104-AL	27T8953	1.17
0.5	● 7105-SS	27T8956	2.68	● 7105-AL	27T8955	1.20
WASHER FACE THUMB SCREWS - THREAD SIZE 8-32						
0.375	● 7106-SS	27T8958	3.39	● 7106-AL	27T8957	1.33
0.5	● 7107-SS	27T8960	3.47	● 7107-AL	27T8959	1.43
0.625	● 7108-SS	27T8962	3.79	● 7108-AL	27T8961	1.52

➤ CONTINUED ➤

STAINLESS STEEL/ALUMINUM THUMB SCREWS (CONT.)

WASHER FACE THUMB SCREWS - THREAD SIZE 10-32

Length (in.)	Stainless Steel Mfg. Part No.	Stainless Steel Stock No.	Stainless Steel Price Each 1-99	Aluminum Mfg. Part No.	Aluminum Stock No.	Aluminum Price Each 1-99
0.375	● 7109-SS	27T8964	3.39	● 7109-AL	27T8963	1.33
0.5	● 7110-SS	27T8966	17.47	● 7110-AL	27T8965	1.53
0.625	● 7111-SS	27T8968	4.07	● 7111-AL	27T8967	1.52
WASHER FACE THUMB SCREWS - THREAD SIZE 1/4-20						
0.375	● 7112-SS	27T8970	4.11	● 7112-AL	27T8969	1.80
0.5	● 7113-SS	27T8972	4.58	● 7113-AL	27T8971	1.93
0.625	● 7114-SS	27T8974	5.04	● 7114-AL	27T8973	1.97
0.75	● 7115-SS	27T8976	5.49	● 7115-AL	27T8975	2.08
PLAIN THUMB SCREWS - THREAD SIZE 4-40						
0.313	● 7120-SS	27T8978	1.67	● 7120-AL	27T8977	0.81
0.375	● 7121-SS	27T8980	1.74	● 7121-AL	27T8979	0.82
0.438	● 7122-SS	27T8982	1.81	● 7122-AL	27T8981	0.85
0.5	● 7123-SS	27T8984	1.88	● 7123-AL	27T8983	0.87
PLAIN THUMB SCREWS - THREAD SIZE 6-32						
0.313	● 7124-SS	27T8986	1.83	● 7124-AL	27T8985	0.88
0.375	● 7125-SS	27T8988	1.76	● 7125-AL	27T8987	0.83
0.438	● 7126-SS	27T8990	1.84	● 7126-AL	27T8989	0.86
0.5	● 7127-SS	27T8992	1.72	● 7127-AL	27T8991	0.89

(197677)

METRIC STAINLESS STEEL THUMB SCREWS

RoHS Compliant Available

RAF ELECTRONIC HARDWARE a Division of MW Industries, Inc.

Washer Face

Plain

• Stainless steel

WASHER FACE THUMB SCREWS - M3 x 0.5

Mfg. Part No.	Length (mm)	Stock No.	Price Each 1-99
● M3440-SS	8	27T8183	2.78
● M3441-SS	9	27T8184	2.68
● M3442-SS	11	27T8185	3.05
WASHER FACE THUMB SCREWS - M3.5 x 0.6			
● M3443-SS	9	27T8186	2.85
● M3444-SS	11	27T8187	3.07
● M3445-SS	13	27T8188	3.24
WASHER FACE THUMB SCREWS - M4 x 0.7			
● M3446-SS	9	27T8189	3.82
● M3447-SS	13	27T8190	4.01
● M3448-SS	16	27T8191	4.64
PLAIN THUMB SCREWS - M3 x 0.5			
● M3465-SS	8	27T8192	2.11
● M3466-SS	9	27T8193	2.01
● M3467-SS	11	27T8194	2.27
● M3468-SS	13	27T8195	2.38
PLAIN THUMB SCREWS - M3.5 x 0.6			
● M3469-SS	8	27T8196	2.09
● M3470-SS	9	27T8197	2.04
● M3471-SS	11	27T8198	2.14
● M3472-SS	13	27T8199	2.24
PLAIN THUMB SCREWS - M4 x 0.7			
● M3473-SS	9	27T8200	2.77
● M3474-SS	11	27T8201	2.98
● M3475-SS	13	27T8202	2.93
● M3476-SS	14	27T8203	3.07
● M3477-SS	16	27T8204	3.55
PLAIN THUMB SCREWS - M5 x 0.8			
● M3478-SS	9	27T8205	3.67
● M3479-SS	11	27T8206	3.67
● M3480-SS	13	27T8207	3.87
● M3481-SS	14	27T8208	3.96
● M3482-SS	16	27T8209	4.56
PLAIN THUMB SCREWS - M6 x 1			
● M3483-SS	13	27T8210	5.55
● M3484-SS	15	27T8211	5.34
● M3485-SS	16	27T8212	5.69

➤ CONTINUED ➤

METRIC STAINLESS STEEL THUMB SCREWS (CONT.)

PLAIN THUMB SCREWS - M6 x 1

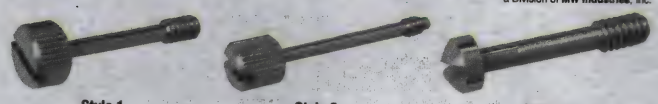
Mfg. Part No.	Length (mm)	Stock No.	Price Each 1-99
M3486-SS	18	27T8213	5.98
M3487-SS	19	27T8214	6.51

(197676)

METRIC CAPTIVE PANEL SCREWS

RoHS Compliant Available

RAF ELECTRONIC HARDWARE
a Division of MW Industries, Inc.



Style 1 Style 2 Style 4

- Stainless steel

4MM CAPTIVE PANEL SCREWS - M2.5 x 0.45 THREAD -STYLE 4

Mfg. Part No.	Length (mm)	Stock No.	Price Each 1-99
M0274-SS	6.5	27T7472	3.67
M0275-SS	8	27T7473	3.52
M0276-SS	9.5	27T7474	1.48
M0277-SS	11	27T7475	1.62
M0278-SS	13	27T7476	1.65
M0279-SS	14.5	27T7477	1.57
M0280-SS	16	27T7478	1.70
M0281-SS	17.5	27T7479	1.61
M0282-SS	19	27T7480	2.13

4.3MM CAPTIVE PANEL SCREWS - M3 x 0.5 THREAD -STYLE 4

M0283-SS	6.5	27T7481	1.32
M0284-SS	8	27T7482	1.46
M0285-SS	9.5	27T7483	1.48
M0286-SS	11	27T7484	3.69
M0287-SS	13	27T7485	1.65
M0288-SS	14.5	27T7486	1.66
M0289-SS	16	27T7487	1.58
M0290-SS	17.5	27T7488	1.73
M0291-SS	19	27T7489	1.98

6.5MM CAPTIVE PANEL SCREWS - M3 x 0.5 THREAD - STYLE 2

M0170-SS	9.5	27T7458	1.70
M0171-SS	11	27T7459	1.74
M0172-SS	13	27T7460	1.92
M0173-SS	14.5	27T7461	2.07
M0174-SS	16	27T7462	2.10

8MM CAPTIVE PANEL SCREWS - M3 x 0.5 THREAD - STYLE 1

M0100-SS	16.5	27T7443	2.61
M0101-SS	18	27T7444	2.67
M0102-SS	20	27T7445	2.83
M0103-SS	21.5	27T7446	3.03
M0104-SS	23	27T7447	3.24

8MM CAPTIVE PANEL SCREWS - M3 x 0.5 THREAD - STYLE 2

M0181-SS	9.5	27T7463	2.04
M0182-SS	11	27T7464	2.09
M0183-SS	13	27T7465	2.59
M0184-SS	14.5	27T7466	2.47
M0185-SS	16	27T7467	2.54

8MM CAPTIVE PANEL SCREWS - M3.5 x 0.6 THREAD - STYLE 2

M0192-SS	11	27T7468	2.20
M0193-SS	13	27T7469	2.29
M0194-SS	14.5	27T7470	2.35
M0195-SS	16	27T7471	2.54

8MM CAPTIVE PANEL SCREWS - M3.5 x 0.6 THREAD - STYLE 1

M0105-SS	16.5	27T7448	2.61
M0106-SS	18	27T7449	2.67
M0107-SS	20	27T7450	2.83
M0108-SS	21.5	27T7451	3.03
M0109-SS	23	27T7452	3.24

9.5MM CAPTIVE PANEL SCREWS - M3.5 x 0.6 THREAD - STYLE 1

M0110-SS	16.5	27T7453	3.16
M0111-SS	18	27T7454	3.48
M0112-SS	20	27T7455	15.48
M0113-SS	21.5	27T7456	3.68
M0114-SS	23	27T7457	3.78

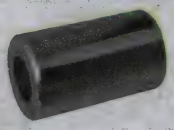
(197682)

ROUND ALUMINUM SPACERS

RoHS Compliant Available

RAF ELECTRONIC HARDWARE
a Division of MW Industries, Inc.

- Aluminum



3/16" ROUND SPACERS - CLEAR IRIDITE

Length (in.)	.090 Bore Size Mfg. Part No.	Stock No.	Price Each 1-99	.115 Bore Size Mfg. Part No.	Stock No.	Price Each 1-99
0.125	1107-2-AL-7	27T8480	0.36	1107-4-AL-7	27T8483	0.38
0.188	1108-2-AL-7	27T8486	0.36	1108-4-AL-7	27T8489	0.39
0.25	1109-2-AL-7	27T8492	0.43	1109-4-AL-7	27T8495	0.40
0.313	1110-2-AL-7	27T8498	0.41	1110-4-AL-7	27T8501	0.41
0.375	1111-2-AL-7	27T8504	0.42	1111-4-AL-7	27T8507	0.42
0.438	1112-2-AL-7	27T8510	0.42	1112-4-AL-7	27T8513	0.42
0.5	1113-2-AL-7	27T8516	0.43	1113-4-AL-7	27T8519	0.43

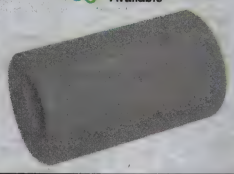
(197679)

ROUND METRIC NYLON SPACERS

RoHS Compliant Available

RAF ELECTRONIC HARDWARE
a Division of MW Industries, Inc.

- Nylon
- M2.5 thread for 2.7mm
- M3 thread for 3.2mm
- M4 thread for 4.3mm
- M5 thread for 5.3mm



4.5MM ROUND SPACERS

Length (imm)	2.7mm Bore Size Mfg. Part No.	Stock No.	Price Each 1-99	3.2mm Bore Size Mfg. Part No.	Stock No.	Price Each 1-99
1	M0500-25-N	27T7491	0.51	M0500-3-N	27T7494	0.54
2	M0501-25-N	27T7497	0.55	M0501-3-N	27T7500	0.52
3	M0502-25-N	27T7503	0.56	M0502-3-N	27T7506	0.56
4	M0503-25-N	27T7509	0.57	M0503-3-N	27T7512	0.57
5	M0504-25-N	27T7515	0.58	M0504-3-N	27T7518	0.54
6	M0505-25-N	27T7521	0.59	M0505-3-N	27T7524	0.55
7	M0506-25-N	27T7527	0.60	M0506-3-N	27T7530	0.56
8	M0507-25-N	27T7533	0.57	M0507-3-N	27T7536	0.61
9	M0508-25-N	27T7539	0.58	M0508-3-N	27T7542	0.58
10	M0509-25-N	27T7545	0.59	M0509-3-N	27T7548	0.59
11	M0510-25-N	27T7551	0.60	M0510-3-N	27T7554	0.60
12	M0511-25-N	27T7557	0.65	M0511-3-N	27T7560	0.70
13	M0512-25-N	27T7563	0.66	M0512-3-N	27T7566	0.66

6MM ROUND SPACERS

Length (imm)	3.2mm Bore Size Mfg. Part No.	Stock No.	Price Each 1-99	4.3mm Bore Size Mfg. Part No.	Stock No.	Price Each 1-99
1	M0530-3-N	27T7569	0.56	M0530-4-N	27T7572	0.56
2	M0531-3-N	27T7575	0.60	M0531-4-N	27T7578	0.56
3	M0532-3-N	27T7581	0.59	M0532-4-N	27T7584	0.59
4	M0533-3-N	27T7587	0.63	M0533-4-N	27T7590	0.64
5	M0534-3-N	27T7593	0.61	M0534-4-N	27T7596	0.66
6	M0535-3-N	27T7599	0.67	M0535-4-N	27T7602	0.67
7	M0536-3-N	27T7605	0.63	M0536-4-N	27T7608	0.63
8	M0537-3-N	27T7611	0.64	M0537-4-N	27T7614	0.69
9	M0538-3-N	27T7617	0.66	M0538-4-N	27T7620	0.66
10	M0539-3-N	27T7623	0.72	M0539-4-N	27T7626	0.67
11	M0540-3-N	27T7629	0.68	M0540-4-N	27T7632	0.68
12	M0541-3-N	27T7635	0.70	M0541-4-N	27T7638	0.70
13	M0542-3-N	27T7641	0.71	M0542-4-N	27T7644	0.71

8MM ROUND SPACERS

Length (imm)	3.2mm Bore Size Mfg. Part No.	Stock No.	Price Each 1-99	4.3mm Bore Size Mfg. Part No.	Stock No.	Price Each Length (imm)
1	M0590-3-N	27T7647	0.56	M0590-4-N	27T7650	0.56
2	M0591-3-N	27T7656	0.57	M0591-4-N	27T7659	0.57
3	M0592-3-N	27T7665	0.59	M0592-4-N	27T7668	0.59
4	M0593-3-N	27T7674	0.64	M0593-4-N	27T7677	0.60
5	M0594-3-N	27T7683	0.61	M0594-4-N	27T7686	0.61
6	M0595-3-N	27T7692	0.67	M0595-4-N	27T7695	0.63
7	M0596-3-N	27T7701	0.63	M0596-4-N	27T7704	0.63
8	M0597-3-N	27T7710	0.64	M0597-4-N	27T7713	0.64
9	M0598-3-N	27T7719	0.66	M0598-4-N	27T7722	0.66

CONTINUED

HARDWARE SPACERS

ROUND METRIC NYLON SPACERS (CONT.)

Length (imm)	3.2mm Bore Size Mfg. Part No.	Stock No.	Price Each 1-99	4.3mm Bore Size Mfg. Part No.	Stock No.	Price Each Length (imm)
10	● M0599-3-N	27T7728	0.67	● M0599-4-N	27T7731	0.67
11	● M0600-3-N	27T7737	0.74	● M0600-4-N	27T7740	0.68
12	● M0601-3-N	27T7746	0.70	● M0601-4-N	27T7749	0.70
13	● M0602-3-N	27T7755	0.76	● M0602-4-N	27T7758	0.76

8MM ROUND SPACERS

Length (imm)	5.3mm Bore Size Mfg. Part No.	Stock No.	Price Each 1-99
1	● M0590-5-N	27T7653	0.56
2	● M0591-5-N	27T7662	0.62
3	● M0592-5-N	27T7671	0.63
4	● M0593-5-N	27T7680	0.64
5	● M0594-5-N	27T7689	0.61
6	● M0595-5-N	27T7698	0.67
7	● M0596-5-N	27T7707	0.63
8	● M0597-5-N	27T7716	0.64
9	● M0598-5-N	27T7725	0.66
10	● M0599-5-N	27T7734	0.72
11	● M0600-5-N	27T7743	0.68
12	● M0601-5-N	27T7752	0.70
13	● M0602-5-N	27T7761	0.76

(197431)

CAPTIVE PANEL SCREWS

RoHS Compliant Available

RAF ELECTRONIC HARDWARE
a Division of MW Industries, Inc.

Style 1 Style 2 Style 4

• Stainless Steel

5/16 HEAD DIAMETER - STYLE 1

Length (in.)	4-40 Thread Mfg. Part No.	Stock No.	Price Each 1-99	6-32 Thread Mfg. Part No.	Stock No.	Price Each 1-99
0.656	● 0100-SS	27T8438	2.70	● 0105-SS	27T8443	2.55
0.719	● 0101-SS	27T8439	2.80	● 0106-SS	27T8444	2.80
0.781	● 0102-SS	27T8440	2.98	● 0107-SS	27T8445	2.77
0.844	● 0103-SS	27T8441	2.96	● 0108-SS	27T8446	2.96
0.906	● 0104-SS	27T8442	3.41	● 0109-SS	27T8447	3.17

3/8 HEAD DIAMETER - STYLE 1

Length (in.)	6-32 Thread Mfg. Part No.	Stock No.	Price Each 1-99
0.656	● 0110-SS	27T8448	3.28
0.719	● 0111-SS	27T8449	3.29
0.781	● 0112-SS	27T8450	3.30
0.844	● 0113-SS	27T8451	3.62
0.906	● 0114-SS	27T8452	3.72

1/4 AND 5/16 HEAD DIAMETER - STYLE 2

Length (in.)	4-40 Thread - 1/4 Head Diameter Mfg. Part No.	Stock No.	Price Each 1-99	4-40 Thread - 5/16 Head Diameter Mfg. Part No.	Stock No.	Price Each 1-99
0.375	● 0367-SS	27T8453	1.77	● 0378-SS	27T8458	1.97
0.438	● 0368-SS	27T8454	1.70	● 0379-SS	27T8459	2.02
0.5	● 0369-SS	27T8455	1.73	● 0380-SS	27T8460	2.34
0.563	● 0370-SS	27T8456	2.02	● 0381-SS	27T8461	2.38
0.625	● 0371-SS	27T8457	2.21	● 0382-SS	27T8462	2.47

5/16 HEAD DIAMETER - STYLE 2

Length (in.)	6-32 Thread Mfg. Part No.	Stock No.	Price Each 1-99
0.438	● 0389-SS	27T8463	2.14
0.5	● 0390-SS	27T8464	2.39
0.563	● 0391-SS	27T8465	2.28
0.625	● 0392-SS	27T8466	2.47

➤CONTINUED➤

CAPTIVE PANEL SCREWS (CONT.)

1/4 HEAD DIAMETER - STYLE 4

Length (in.)	4-40 Thread Mfg. Part No.	Stock No.	Price Each 1-99
0.25	● 0817-SS	27T8467	1.34
0.313	● 0818-SS	27T8468	1.27
0.375	● 0819-SS	27T8469	1.52
0.438	● 0820-SS	27T8470	1.55
0.5	● 0821-SS	27T8471	1.57
0.563	● 0822-SS	27T8472	1.62
0.625	● 0823-SS	27T8473	1.65
0.688	● 0824-SS	27T8474	1.88
0.75	● 0825-SS	27T8475	1.91
0.813	● 0826-SS	27T8476	2.09
0.875	● 0827-SS	27T8477	2.35
0.938	● 0828-SS	27T8478	2.46
1	● 0829-SS	27T8479	2.64

(197533)

ROUND ALUMINUM SPACERS

RoHS Compliant Available

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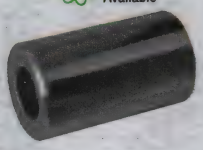

• Aluminum

1/4" ROUND SPACERS - CLEAR IRIDITE

Length (in.)	.115 Bore Size Mfg. Part No.	Stock No.	Price Each 1-99	.140 Bore Size Mfg. Part No.	Stock No.	Price Each 1-99
0.125	● 1122-4-AL-7	27T8522	0.24	● 1122-6-AL-7	27T8525	0.24
0.188	● 1123-4-AL-7	27T8531	0.28	● 1123-6-AL-7	27T8534	0.26
0.25	● 1124-4-AL-7	27T8540	0.27	● 1124-6-AL-7	27T8543	0.29
0.313	● 1125-4-AL-7	27T8549	0.31	● 1125-6-AL-7	27T8552	0.31
0.375	● 1126-4-AL-7	27T8558	0.33	● 1126-6-AL-7	27T8561	0.69
0.438	● 1127-4-AL-7	27T8567	0.35	● 1127-6-AL-7	27T8570	0.35
0.5	● 1128-4-AL-7	27T8576	0.36	● 1128-6-AL-7	27T8579	0.39
0.563	● 1129-4-AL-7	27T8585	0.38	● 1129-6-AL-7	27T8588	0.38
0.63	● 1130-4-AL-7	27T8594	0.40	● 1130-6-AL-7	27T8597	0.40
0.688	● 1131-4-AL7	27T8603	0.41	● 1131-6-AL-7	27T8606	0.41
0.75	● 1132-4-AL-7	27T8612	0.44	● 1132-6-AL-7	27T8615	0.44
0.813	● 1133-4-AL-7	27T8621	0.46	● 1133-6-AL-7	27T8624	0.46
0.88	● 1134-4-AL-7	27T8630	0.49	● 1134-6-AL-7	27T8633	0.49
0.938	● 1135-4-AL-7	27T8639	0.52	● 1135-6-AL-7	27T8642	0.52
1	● 1136-4-AL-7	27T8648	0.53	● 1136-6-AL-7	27T8651	0.57

1/4" ROUND SPACERS - CLEAR IRIDITE

Length (in.)	.166 Bore Size Mfg. Part No.	Stock No.	Price Each 1-99
0.125	● 1122-8-AL-7	27T8528	0.24
0.188	● 1123-8-AL-7	27T8537	0.26
0.25	● 1124-8-AL-7	27T8546	0.27
0.313	● 1125-8-AL-7	27T8555	0.31
0.375	● 1126-8-AL-7	27T8564	0.33
0.438	● 1127-8-AL-7	27T8573	0.35
0.5	● 1128-8-AL-7	27T8582	0.36
0.563	● 1129-8-AL-7	27T8591	0.38
0.63	● 1130-8-AL-7	27T8600	0.40
0.688	● 1131-8-AL-7	27T8609	0.41
0.75	● 1132-8-AL-7	27T8618	0.44
0.813	● 1133-8-AL-7	27T8627	0.46
0.88	● 1134-8-AL-7	27T8636	0.49
0.938	● 1135-8-AL-7	27T8645	0.52
1	● 1136-8-AL-7	27T8654	0.53

(194777)

ROUND NYLON SPACERS

RoHS Compliant Available

RAF ELECTRONIC HARDWARE
a Division of MW Industries, Inc.

- Nylon

3/16" ROUND SPACERS

Length (in.)	.090 Bore Size Mfg. Part No.	Stock No.	Price Each 1-99	.115 Bore Size Mfg. Part No.	Stock No.	Price Each 1-99
0.125	1107-2-N	27T8481	0.18	1107-4-N	27T8484	0.19
0.188	1108-2-N	27T8487	0.23	1108-4-N	27T8490	0.21
0.25	1109-2-N	27T8493	0.23	1109-4-N	27T8496	0.22
0.313	1110-2-N	27T8499	0.22	1110-4-N	27T8502	0.22
0.375	1111-2-N	27T8505	0.23	1111-4-N	27T8508	0.25
0.438	1112-2-N	27T8511	0.24	1112-4-N	27T8514	0.24
0.5	1113-2-N	27T8517	0.24	1113-4-N	27T8520	0.24

1/4" ROUND SPACERS

Length (in.)	.115 Bore Size Mfg. Part No.	Stock No.	Price Each 1-99	.140 Bore Size Mfg. Part No.	Stock No.	Price Each 1-99
0.125	1122-4-N	27T8523	0.16	1122-6-N	27T8526	0.16
0.188	1123-4-N	27T8532	0.17	1123-6-N	27T8535	0.18
0.25	1124-4-N	27T8541	0.17	1124-6-N	27T8544	0.19
0.313	1125-4-N	27T8550	0.19	1125-6-N	27T8553	0.18
0.375	1126-4-N	27T8559	0.19	1126-6-N	27T8562	0.18
0.438	1127-4-N	27T8568	0.30	1127-6-N	27T8571	0.19
0.5	1128-4-N	27T8577	0.20	1128-6-N	27T8580	0.21
0.563	1129-4-N	27T8586	0.21	1129-6-N	27T8589	0.21
0.63	1130-4-N	27T8595	0.21	1130-6-N	27T8598	0.21
0.688	1131-4-N	27T8604	0.22	1131-6-N	27T8607	0.22
0.75	1132-4-N	27T8613	0.22	1132-6-N	27T8616	0.22
0.813	1133-4-N	27T8622	0.22	1133-6-N	27T8625	0.22
0.88	1134-4-N	27T8631	0.22	1134-6-N	27T8634	0.22
0.938	1135-4-N	27T8640	0.23	1135-6-N	27T8643	0.23
1	1136-4-N	27T8649	0.23	1136-6-N	27T8652	0.23

1/4" ROUND SPACERS

Length (in.)	.166 Bore Size Mfg. Part No.	Stock No.	Price Each 1-99
0.125	1122-8-N	27T8529	0.18
0.188	1123-8-N	27T8538	0.17
0.25	1124-8-N	27T8547	0.18
0.313	1125-8-N	27T8556	0.18
0.375	1126-8-N	27T8565	0.18
0.438	1127-8-N	27T8574	0.19
0.5	1128-8-N	27T8583	0.20
0.563	1129-8-N	27T8592	0.21
0.63	1130-8-N	27T8601	0.21
0.688	1131-8-N	27T8610	0.22
0.75	1132-8-N	27T8619	0.22
0.813	1133-8-N	27T8628	0.22
0.88	1134-8-N	27T8637	0.22
0.938	1135-8-N	27T8646	0:23
1	1136-8-N	27T8655	0.25

(194778)

ROUND METRIC STAINLESS STEEL SPACERS

RoHS Compliant Available

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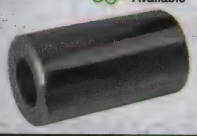

- Stainless steel
- M2.5 thread for 2.7mm
- M3 thread for 3.2mm
- M4 thread for 4.3mm
- M5 thread for 5.3mm

4.5MM ROUND SPACERS

Length (mm)	2.7mm Bore Size Mfg. Part No.	Stock No.	Price Each 1-99	3.2mm Bore Size Mfg. Part No.	Stock No.	Price Each 1-99
1	M0500-25-SS	27T7492	0.65	M0500-3-SS	27T7495	0.70
2	M0501-25-SS	27T7498	0.66	M0501-3-SS	27T7501	0.66
3	M0502-25-SS	27T7504	0.68	M0502-3-SS	27T7507	0.73
4	M0503-25-SS	27T7510	0.69	M0503-3-SS	27T7513	0.69
5	M0504-25-SS	27T7516	0.77	M0504-3-SS	27T7519	0.71
6	M0505-25-SS	27T7522	0.78	M0505-3-SS	27T7525	0.78
7	M0506-25-SS	27T7528	0.74	M0506-3-SS	27T7531	0.74

➤ CONTINUED ➤

ROUND METRIC STAINLESS STEEL SPACERS (CONT.)

2.7mm Bore Size / 3.2mm Bore Size

Length (mm)	2.7mm Bore Size Mfg. Part No.	Stock No.	Price Each 1-99	3.2mm Bore Size Mfg. Part No.	Stock No.	Price Each 1-99
8	M0507-25-SS	27T7534	0.78	M0507-3-SS	27T7537	0.78
9	M0508-25-SS	27T7540	0.86	M0508-3-SS	27T7543	0.86
10	M0509-25-SS	27T7546	0.87	M0509-3-SS	27T7549	0.94
11	M0510-25-SS	27T7552	0.89	M0510-3-SS	27T7555	0.89
12	M0511-25-SS	27T7558	0.90	M0511-3-SS	27T7561	0.90
13	M0512-25-SS	27T7564	0.91	M0512-3-SS	27T7567	0.91

6MM ROUND SPACERS

Length (mm)	3.2mm Bore Size Mfg. Part No.	Stock No.	Price Each 1-99	4.3mm Bore Size Mfg. Part No.	Stock No.	Price Each 1-99
1	M0530-3-SS	27T7570	0.67	M0530-4-SS	27T7573	0.67
2	M0531-3-SS	27T7576	0.68	M0531-4-SS	27T7579	0.68
3	M0532-3-SS	27T7582	0.71	M0532-4-SS	27T7585	0.71
4	M0533-3-SS	27T7588	0.73	M0533-4-SS	27T7591	0.73
5	M0534-3-SS	27T7594	0.81	M0534-4-SS	27T7597	0.81
6	M0535-3-SS	27T7600	0.78	M0535-4-SS	27T7603	0.78
7	M0536-3-SS	27T7606	0.79	M0536-4-SS	27T7609	0.79
8	M0537-3-SS	27T7612	0.81	M0537-4-SS	27T7615	0.81
9	M0538-3-SS	27T7618	0.82	M0538-4-SS	27T7621	0.82
10	M0539-3-SS	27T7624	0.83	M0539-4-SS	27T7627	0.83
11	M0540-3-SS	27T7630	0.84	M0540-4-SS	27T7633	0.84
12	M0541-3-SS	27T7636	0.85	M0541-4-SS	27T7639	0.85
13	M0542-3-SS	27T7642	0.86	M0542-4-SS	27T7645	0.86

8MM ROUND SPACERS

Length (mm)	3.2mm Bore Size Mfg. Part No.	Stock No.	Price Each 1-99	4.3mm Bore Size Mfg. Part No.	Stock No.	Price Each 1-99
1	M0590-3-SS	27T7648	0.72	M0590-4-SS	27T7651	0.72
2	M0591-3-SS	27T7657	0.74	M0591-4-SS	27T7660	0.74
3	M0592-3-SS	27T7666	0.78	M0592-4-SS	27T7669	0.83
4	M0593-3-SS	27T7675	0.80	M0593-4-SS	27T7678	0.80
5	M0594-3-SS	27T7684	0.85	M0594-4-SS	27T7687	0.85
6	M0595-3-SS	27T7693	0.88	M0595-4-SS	27T7696	0.88
7	M0596-3-SS	27T7702	0.90	M0596-4-SS	27T7705	0.90
8	M0597-3-SS	27T7711	0.93	M0597-4-SS	27T7714	0.93
9	M0598-3-SS	27T7720	1.05	M0598-4-SS	27T7723	1.05
10	M0599-3-SS	27T7729	1.09	M0599-4-SS	27T7732	1.09
11	M0600-3-SS	27T7738	1.11	M0600-4-SS	27T7741	1.11
12	M0601-3-SS	27T7747	1.15	M0601-4-SS	27T7750	1.15
13	M0602-3-SS	27T7756	1.16	M0602-4-SS	27T7759	1.16

8MM ROUND SPACERS

Length (mm)	5.3mm Bore Size Mfg. Part No.	Stock No.	Price Each 1-99
1	M0590-5-SS	27T7654	0.72
2	M0591-5-SS	27T7663	0.74
3	M0592-5-SS	27T7672	0.78
4	M0593-5-SS	27T7681	0.86
5	M0594-5-SS	27T7690	0.85
6	M0595-5-SS	27T7699	0.95
7	M0596-5-SS	27T7708	0.90
8	M0597-5-SS	27T7717	0.93
9	M0598-5-SS	27T7726	1.05
10	M0599-5-SS	27T7735	1.09
11	M0600-5-SS	27T7744	1.11
12	M0601-5-SS	27T7753	1.15
13	M0602-5-SS	27T7762	1.16

(194779)

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(196545)

HARDWARE SPACERS

ROUND STAINLESS STEEL SPACERS

RoHS Compliant Available

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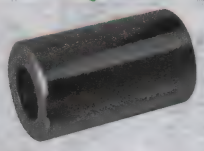

• Stainless Steel

3/16″ ROUND SPACERS

Length (in.)	.090 Bore Size Mfg. Part No.	Stock No.	Price Each 1-99	.115 Bore Size Mfg. Part No.	Stock No.	Price Each 1-99
0.125	● 1107-2-SS	27T8482	0.62	● 1107-4-SS	27T8485	0.62
0.188	● 1108-2-SS	27T8488	0.63	● 1108-4-SS	27T8491	0.68
0.25	● 1109-2-SS	27T8494	0.67	● 1109-4-SS	27T8497	0.67
0.313	● 1110-2-SS	27T8500	0.69	● 1110-4-SS	27T8503	0.69
0.375	● 1111-2-SS	27T8506	0.80	● 1111-4-SS	27T8509	0.80
0.438	● 1112-2-SS	27T8512	0.82	● 1112-4-SS	27T8515	0.82
0.5	● 1113-2-SS	27T8518	0.89	● 1113-4-SS	27T8521	0.96

1/4″ ROUND SPACERS

Length (in.)	.115 Bore Size Mfg. Part No.	Stock No.	Price Each 1-99	.140 Bore Size Mfg. Part No.	Stock No.	Price Each 1-99
0.125	● 1122-4-SS	27T8524	0.64	● 1122-6-SS	27T8527	0.64
0.188	● 1123-4-SS	27T8533	2.32	● 1123-6-SS	27T8536	0.68
0.25	● 1124-4-SS	27T8542	0.71	● 1124-6-SS	27T8545	0.77
0.313	● 1125-4-SS	27T8551	0.74	● 1125-6-SS	27T8554	0.74
0.375	● 1126-4-SS	27T8560	0.93	● 1126-6-SS	27T8563	0.87
0.438	● 1127-4-SS	27T8569	0.90	● 1127-6-SS	27T8572	0.90
0.5	● 1128-4-SS	27T8578	1.17	● 1128-6-SS	27T8581	1.17
0.563	● 1129-4-SS	27T8587	1.19	● 1129-6-SS	27T8590	1.19
0.63	● 1130-4-SS	27T8596	1.21	● 1130-6-SS	27T8599	1.21
0.688	● 1131-4-SS	27T8605	1.25	● 1131-6-SS	27T8608	1.25
0.75	● 1132-4-SS	27T8614	1.29	● 1132-6-SS	27T8617	1.29
0.813	● 1133-4-SS	27T8623	1.37	● 1133-6-SS	27T8626	1.37
0.88	● 1134-4-SS	27T8632	1.39	● 1134-6-SS	27T8635	1.39
0.938	● 1135-4-SS	27T8641	1.42	● 1135-6-SS	27T8644	1.42
1	● 1136-4-SS	27T8650	1.46	● 1136-6-SS	27T8653	1.46

1/4″ ROUND SPACERS

Length (in.)	.166 Bore Size Mfg. Part No.	Stock No.	Price Each 1-99
0.125	● 1122-8-SS	27T8530	0.64
0.188	● 1123-8-SS	27T8539	0.73
0.25	● 1124-8-SS	27T8548	0.71
0.313	● 1125-8-SS	27T8557	0.74
0.375	● 1126-8-SS	27T8566	0.87
0.438	● 1127-8-SS	27T8575	0.90
0.5	● 1128-8-SS	27T8584	1.17
0.563	● 1129-8-SS	27T8593	1.19
0.63	● 1130-8-SS	27T8602	1.21
0.688	● 1131-8-SS	27T8611	1.25
0.75	● 1132-8-SS	27T8620	1.29
0.813	● 1133-8-SS	27T8629	1.37
0.88	● 1134-8-SS	27T8638	1.39
0.938	● 1135-8-SS	27T8647	1.42
1	● 1136-8-SS	27T8656	1.46

(194780)

ROUND METRIC ALUMINUM SPACERS

RoHS Compliant Available

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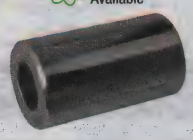

• Aluminum

4.5MM ROUND SPACERS

Length (mm)	2.7mm Bore Size Mfg. Part No.	Stock No.	Price Each 1-99	3.2mm Bore Size Mfg. Part No.	Stock No.	Price Each 1-99
1	● M0500-25-AL	27T7490	0.37	● M0500-3-AL	27T7493	0.37
2	● M0501-25-AL	27T7496	0.37	● M0501-3-AL	27T7499	0.37
3	● M0502-25-AL	27T7502	0.42	● M0502-3-AL	27T7505	0.39
4	● M0503-25-AL	27T7508	0.39	● M0503-3-AL	27T7511	0.39
5	● M0504-25-AL	27T7514	0.39	● M0504-3-AL	27T7517	0.39
6	● M0505-25-AL	27T7520	0.43	● M0505-3-AL	27T7523	0.43

➤CONTINUED➤

ROUND METRIC ALUMINUM SPACERS (CONT.)

Length (mm)	2.7mm Bore Size Mfg. Part No.	Stock No.	Price Each 1-99	3.2mm Bore Size Mfg. Part No.	Stock No.	Price Each 1-99
7	● M0506-25-AL	27T7526	0.43	● M0506-3-AL	27T7529	0.43
8	● M0507-25-AL	27T7532	0.43	● M0507-3-AL	27T7535	0.43
9	● M0508-25-AL	27T7538	0.43	● M0508-3-AL	27T7541	0.43
10	● M0509-25-AL	27T7544	0.44	● M0509-3-AL	27T7547	0.47
11	● M0510-25-AL	27T7550	0.44	● M0510-3-AL	27T7553	0.44
12	● M0511-25-AL	27T7556	0.45	● M0511-3-AL	27T7559	0.45
13	● M0512-25-AL	27T7562	0.47	● M0512-3-AL	27T7565	0.47

6MM ROUND SPACERS

Length (mm)	3.2mm Bore Size Mfg. Part No.	Stock No.	Price Each 1-99	4.3mm Bore Size Mfg. Part No.	Stock No.	Price Each 1-99
1	● M0530-3-AL	27T7568	0.39	● M0530-4-AL	27T7571	0.39
2	● M0531-3-AL	27T7574	0.39	● M0531-4-AL	27T7577	0.39
3	● M0532-3-AL	27T7580	0.43	● M0532-4-AL	27T7583	0.40
4	● M0533-3-AL	27T7586	0.43	● M0533-4-AL	27T7589	0.40
5	● M0534-3-AL	27T7592	0.44	● M0534-4-AL	27T7595	0.41
6	● M0535-3-AL	27T7598	0.44	● M0535-4-AL	27T7601	0.41
7	● M0536-3-AL	27T7604	0.46	● M0536-4-AL	27T7607	0.43
8	● M0537-3-AL	27T7610	0.43	● M0537-4-AL	27T7613	0.43
9	● M0538-3-AL	27T7616	0.45	● M0538-4-AL	27T7619	0.45
10	● M0539-3-AL	27T7622	0.49	● M0539-4-AL	27T7625	0.46
11	● M0540-3-AL	27T7628	0.46	● M0540-4-AL	27T7631	0.46
12	● M0541-3-AL	27T7634	0.47	● M0541-4-AL	27T7637	0.47
13	● M0542-3-AL	27T7640	0.48	● M0542-4-AL	27T7643	0.48

8MM ROUND SPACERS

Length (mm)	3.2mm Bore Size Mfg. Part No.	Stock No.	Price Each 1-99	4.3mm Bore Size Mfg. Part No.	Stock No.	Price Each 1-99
1	● M0590-3-AL	27T7646	0.39	● M0590-4-AL	27T7649	0.39
2	● M0591-3-AL	27T7655	0.40	● M0591-4-AL	27T7658	0.40
3	● M0592-3-AL	27T7664	0.41	● M0592-4-AL	27T7667	0.44
4	● M0593-3-AL	27T7673	0.41	● M0593-4-AL	27T7676	0.41
5	● M0594-3-AL	27T7682	0.43	● M0594-4-AL	27T7685	0.45
6	● M0595-3-AL	27T7691	0.43	● M0595-4-AL	27T7694	0.43
7	● M0596-3-AL	27T7700	0.44	● M0596-4-AL	27T7703	0.44
8	● M0597-3-AL	27T7709	0.45	● M0597-4-AL	27T7712	0.45
9	● M0598-3-AL	27T7718	0.47	● M0598-4-AL	27T7721	0.47
10	● M0599-3-AL	27T7727	0.51	● M0599-4-AL	27T7730	0.48
11	● M0600-3-AL	27T7736	0.48	● M0600-4-AL	27T7739	0.48
12	● M0601-3-AL	27T7745	0.50	● M0601-4-AL	27T7748	0.50
13	● M0602-3-AL	27T7754	0.51	● M0602-4-AL	27T7757	0.51

8MM ROUND SPACERS

Length (mm)	5.3mm Bore Size Mfg. Part No.	Stock No.	Price Each 1-99
1	● M0590-5-AL	27T7652	0.39
2	● M0591-5-AL	27T7661	0.40
3	● M0592-5-AL	27T7670	0.44
4	● M0593-5-AL	27T7679	0.41
5	● M0594-5-AL	27T7688	0.43
6	● M0595-5-AL	27T7697	0.43
7	● M0596-5-AL	27T7706	0.44
8	● M0597-5-AL	27T7715	0.45
9	● M0598-5-AL	27T7724	0.47
10	● M0599-5-AL	27T7733	0.48
11	● M0600-5-AL	27T7742	0.48
12	● M0601-5-AL	27T7751	0.50
13	● M0602-5-AL	27T7760	0.51

(194784)

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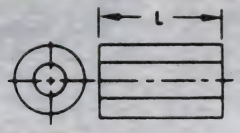
(196560)

0.25″ (6.35) O.D. NYLON SPACERS

RoHS Compliant Available

ABBATRON HH Smith



Made of type 6/6 nylon. **Sold in packages of 100.**

Length (in.)	#4 Hole Mfg. Part No.	#4 Hole Stk. No.	#6 Hole Mfg. Part No.	#6 Hole Stk. No.	#8 Hole Mfg. Part No.	#8 Hole Stk. No.	Price per Pkg. Each
0.125	4000	30F1433	4001	30F1434	4002	30F1435	4.42
0.25	4006	30F1436	4007	30F1437	4008	30F1438	4.11
0.5	4018	30F1442	4019	30F1443	4020	30F1444	4.93
0.625	4024	30F1445	4025	30F1446	4026	30F1447	4.59
0.75	4030	30F1448	4031	30F1449	4032	30F1450	5.59

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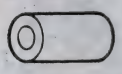
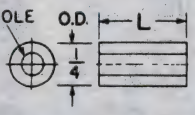
ROUND CLEAR SPACERS

RoHS Compliant Available

KEYSTONE





BRASS ROUND NICKEL-PLATED

Lgth. (in)	#4 (0.120″) Clearance Hole Mfg. Part No.	Stock No.	Price Each 1-99	#6 (0.140″) Clearance Hole Mfg. Part No.	Stock No.	Price Each 1-99	#8 (0.171″) Clearance Hole Mfg. Part No.	Stock No.	Price Each 1-99
0.125	1909	62W5595	0.31	1934	62W5599	0.33	...	...	...
0.25	1454A	62W5555	0.35	1457A	62W5560	0.35	1480	62W5569	0.35
0.375	1454B	62W5556	0.41	1457B	62W5561	0.38	1481	62W5570	0.37
0.75	1454D	62W5558	0.68	1457D	62W5563	0.52	1483	62W5572	0.50
2	1925	62W5598	2.25	1938	62W5602	2.24	2035	62W5626	2.24

ALUMINUM ROUND IRIDITE FINISH

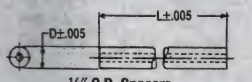
Lgth. (in)	#4 Clearance Hole Mfg. Part No.	Stock No.	Price Each 1-99	#6 Clearance Hole Mfg. Part No.	Stock No.	Price Each 1-99	#8 Clearance Hole Mfg. Part No.	Stock No.	Price Each 1-99
0.125	2036	62W4978	0.19	3403	62W5630	0.19	4258	62W5669	0.18
0.25	3457	04P0521	0.21	3464	62W5634	0.22	3471	62W5640	0.22
0.375	3458	62W5041	0.27	3465	62W5635	0.25	3472	62W5641	0.25
0.5	3459	62W5042	0.29	3466	62W5044	0.29	3473	62W5045	0.27
0.75	3460	62W5631	0.34	3467	62W5636	0.36	3474	62W5642	0.34
1.5	3462	62W5632	1.05	...	...	...	3476	62W5644	0.96

(9281)

ROUND CLEAR SPACERS

RoHS Compliant Available

multicomp



¼″ O.D. Spacers

Sold in packages of 100.

¼″ OUTER DIAMETER BRASS SPACERS – NICKEL-PLATED

Screw Size	Mfg. Part No.	Length (in.)	Stock No.	Price per Pkg. 1-4
#6	RB-6-250A	6.35	93N2154	42.19

¼″ OUTER DIAMETER ALUMINUM SPACERS – IRIDITE FINISH, MEET MIL-C-5541 SPECS.

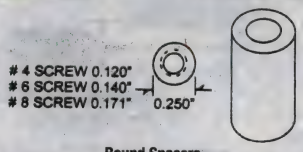
Screw Size	Mfg. Part No.	Length (in.)	Stock No.	Price per Pkg. 1-4
#4	SPC21537	6.35	11M2154	22.76
#4	SPC21539	9.525	11M2156	33.42
#4	SPC21536	12.7	11M2153	36.07
#6	SPC21541	6.35	11M2158	22.07
#6	SPC21540	12.7	11M2157	31.47
#6	SPC21543	15.875	11M2160	38.50
#8	SPC21547	9.525	11M2164	31.84
#8	SPC21544	12.7	11M2161	39.30
#8	SPC21546	19.05	11M2163	49.17

(9296)

ROUND SPACERS

RoHS Compliant Available

multicomp



Round Spacers

For self-tapping screws. Rated UL94V-2. **Sold in packages of 100.**

WHITE NYLON

Lgth. (in.)	#4 Screw Mfg. Part No.	Stk. No.	Price per Pkg. 1-4	#6 Screw Mfg. Part No.	Stk. No.	Price per Pkg. 1-4	#8 Screw Mfg. Part No.	Stk. No.	Price per Pkg. 1-4
.125	RN-4-125A	93N2174	18.36	RN-6-125A	93N2178	20.02	...	...	...
.250	RN-4-250A	93N2175	20.28	RN-6-250A	93N2179	20.02	RN-8-250A	93N2184	19.77
.375	RN-4-375A	93N2176	21.39	RN-6-375A	93N2180	29.93	RN-8-375A	93N2185	21.66
.500	RN-4-500A	93N2177	21.65	RN-6-500A	93N2181	22.69	RN-8-500A	93N2186	23.07
.750	RN-4-750A	93N2189	25.74	RN-6-750A	93N2182	24.31	RN-8-750A	93N2187	24.96
1.	...	...	...	RN-6-1000A	93N2183	25.22	RN-8-1000A	93N2188	26.70
GRAY PVC									
.250	RP4-250	93N1001	18.20	RP6-250	93N1004	14.25	...	...	...
.500	RP4-500	93N1002	16.29	RP6-500	93N1005	17.34	...	...	...
1.	...	...	...	...	...	...	RP8-1000	93N1009	21.23

(9297)

THREADED ROUND TAPPED SPACERS

RoHS Compliant Available

multicomp

Threaded Round Spacers

Material: nylon 6/6, rated UL94V-2. Color: white. **Sold in packages of 100.**

Length (in.)	#4-40 Thread Mfg. Part No.	Stock No.	Price per Pkg. 1-9	#6-32 Thread Mfg. Part No.	Stock No.	Price per Pkg. 1-9	#8-32 Thread Mfg. Part No.	Stock No.	Price per Pkg. 1-9
0.375	2396	92N4901	26.49	2403	92N4908	26.50	2410	92N4915	26.41
0.75	2399	92N4904	27.88	2406	92N4911	29.26	...	...	...
1	2401	92N4906	30.29	2408	92N4913	29.19	...	...	...

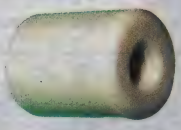
(17038)

COMMERCIAL-TYPE ROUND CERAMIC THREADED SPACERS

RoHS Compliant Available

multicomp

- 6-32 thread
- **Sold in packages of 25**



Mfg. Part No.	Length (in.)	Thread Size	Depth (in.)	O.D. (in.)	Stock No.	Price per Pkg. 1-4	5-9	10-24
2685	0.25	6-32	Thru	0.250	92N5227	86.94	74.19	62.74
2688	0.5	6-32	0.187	0.375	92N5230	87.30	74.48	62.99
2690	0.75	6-32	0.250	0.500	92N5232	94.70	80.81	68.33
2691	1	6-32	0.375	0.500	92N5233	97.72	83.38	70.51

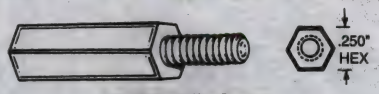
(17842)

HARDWARE SPACERS

¼" THREADED MALE/FEMALE HEX SPACERS

RoHS Compliant Available

multicomp



Male/Female Hex Spacers

Material: nylon 6/6, rated UL94V-2. Color: white. Order hex machine screw nuts separately; *go online or call.* **Sold in packages of 100.**

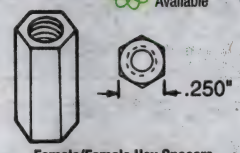
Length (in.)	#4-40 Thread Mfg. Part No.	Stock No.	Price per Pkg. 1-9	#6-32 Thread Mfg. Part No.	Stock No.	Price per Pkg. 1-9	#8-32 Thread Mfg. Part No.	Stock No.	Price per Pkg. 1-9
0.25	● 2436	92N4941	34.26	● 2443	92N4948	34.62	...	...	...
0.375	● 2437	92N4942	35.24	● 2444	92N4949	34.87	...	...	...
0.500	● 2438	92N4943	30.24	● 2445	92N4950	36.21	● 2452	92N4957	36.60
0.625	● 2439	92N4944	37.26	● 2446	92N4951	35.50	...	...	...
0.750	● 2440	92N4945	37.90	● 2447	92N4952	37.90	● 2454	92N4959	36.11
1.000	● 2442	92N4947	38.82	● 2449	92N4954	38.82	● 2456	92N4961	38.83

(17037)

¼" THREADED FEMALE/FEMALE HEX SPACERS

RoHS Compliant Available

multicomp



Female/Female Hex Spacers

Material: nylon 6/6, rated UL94V-2. Color: white. Made in the U.S.A. **Sold in packages of 100.**

Length (in.)	#4-40 Thread Mfg. Part No.	Stock No.	Price per Pkg. 1-9	#6-32 Thread Mfg. Part No.	Stock No.	Price per Pkg. 1-9	#8-32 Thread Mfg. Part No.	Stock No.	Price per Pkg. 1-9
0.25	● 2415	92N4920	34.11	● 2422	92N4927	32.16	...	...	...
0.375	● 2416	92N4921	34.75	● 2423	92N4928	32.76	● 2430	92N4935	34.02
0.625	● 2418	92N4923	38.48	● 2425	92N4930	37.05	...	...	...
0.75	● 2419	92N4924	42.11	● 2426	92N4931	42.55	● 2433	92N4938	40.12
1	● 2421	92N4926	44.86	● 2428	92N4933	45.34	● 2435	92N4940	45.34

(17036)

SNAP-IN PC BOARD SPACERS

RoHS Compliant Available

multicomp

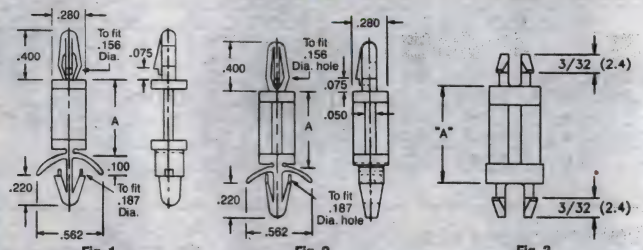


Fig. 1 Fig. 2 Fig. 3

NYLON FLEXIBLE SUPPORTS – FIG. 1
Flexible supports allow access to underside of PC board for maintenance and repair. Lock to PC board and chassis. Material: nylon 6/6. Color: natural.

Mfg. Part No.	Dimension A ±0.015" (0.4)	Pkg. of	Stock No.	Price per Pkg. 1-4
● FPCS-6	0.375" (9.53)	100	37N1659	37.39
● FPCS-8	0.500" (12.70)	100	37N1660	42.72
● 2622	0.750" (19.05)	100	92N4837	42.05

NYLON LOCKING PC BOARD SUPPORTS – FIG. 2
Ends lock by hand, no tools required. Strong grip. Material: nylon 6/6. Color: natural.

● PCS-3	0.188" (4.78)	100	50N4751	25.68
● PCS-4	0.250" (6.35)	100	50N4752	27.00
● PCS-6	0.375" (9.53)	100	50N4753	28.05
● PCS-8	0.500" (12.70)	100	50N4754	30.14
● PCS-10	0.625" (15.88)	100	50N4755	31.50
● PCS-12	0.750" (19.05)	100	50N4756	33.77
● PCS-16	1.000" (25.40)	100	50N4757	40.22
● PCS-20	1.250" (31.75)	100	50N5421	53.41

NYLON LOW-PROFILE SUPPORT POSTS – FIG. 3
Installs by hand and locks securely. Removable by pinching prong tips. Larger base on one side differentiates one end from the other. Material: nylon 6/6. Color: natural.

➤CONTINUED➤

SNAP-IN PC BOARD SPACERS (CONT.)

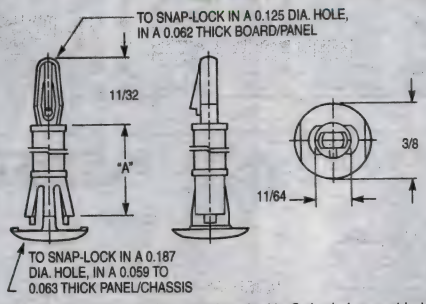
Mfg. Part No.	Dimension A ±0.015" (0.4)	Pkg. of	Stock No.	Price per Pkg. 1-4
● 8476-0422	0.188" (4.78)	100	16N804	27.14
● 8476-0423	0.250" (6.35)	100	16N805	26.69
● 8476-0425	0.500" (12.70)	100	16N807	31.90
● 8476-0428	0.875" (22.23)	100	16N810	34.52

(9426)

REVERSE-LOCKING SPACERS

RoHS Compliant Available

multicomp



Reverse-locking spacers insert into both holes from chassis underside. Spring lock support installs and releases by hand. Thin button head for minimal protrusion under chassis. Material: nylon 6/6. Color: natural. **Sold in packages of 100.**

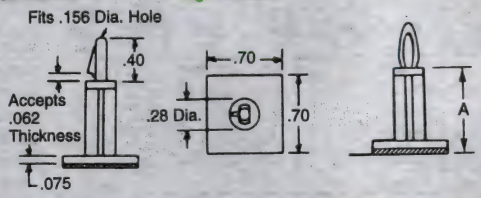
Mfg. Part No.	Dimension A	Stock No.	Price per Pkg. 1-4	5-9
● 2630	0.250" (6.35)	92N4845	30.72	26.06
● 2631	0.375" (9.53)	92N4846	31.84	27.03
● 2632	0.500" (12.70)	92N4847	33.01	28.02
● 2633	0.625" (15.88)	92N4848	36.63	31.08

(17041)

ADHESIVE MOUNT SNAP-IN SPACERS

RoHS Compliant Available

multicomp



Fit 0.156" diameter hole. Accept 0.062" thickness panel. ½" thick double-adhesive tape with release tab. Material: nylon 6/6. Color: natural. **Sold in packages of 100.**

Mfg. Part No.	Dimension A ±0.015" (0.4)	Stock No.	Price per Pkg. 1-4	5-9
● APCS-3	0.188" (4.78)	81N2584	78.04	65.69
● APCS-4	0.250" (6.35)	81N2585	80.16	67.57
● APCS-6	0.375" (9.53)	81N2586	80.29	67.58
● APCS-8	0.500" (12.70)	81N2587	84.51	71.12
● APCS-10	0.625" (15.88)	81N2588	84.88	71.44
● APCS-12	0.750" (19.05)	81N2589	85.77	72.19
● 2629	1.00" (25.40)	92N4844	70.45	59.29

(9428)

METRIC SPACERS

RoHS Compliant Available

HARWIN

Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6 Fig. 7 Fig. 8

➤CONTINUED➤

METRIC SPACERS (CONT.)

FIGURE 1: HEX 5.5mm A/F, NICKEL PLATED

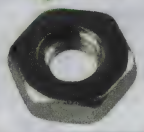
Mfg. Part No.	Length (mm)	Body Material	Stock No.	Price Each 1-9	Price Each 10-99
R30-1010402	4	Brass	19K7799	0.89	0.62
R30-1010802	8	Brass	87H6314	0.91	0.64
R30-1011002	10	Brass	56K2848	0.90	0.63
R30-1011102	11	Brass	56K2849	0.99	0.70
R30-1011202	12	Brass	37K6629	0.94	0.66
R30-1011302	13	Brass	56K2850	1.04	0.73
R30-1011402	14	Brass	56K2851	0.99	0.69
R30-1011502	15	Brass	56K2852	1.01	0.71
R30-1011802	18	Brass	56K2855	1.09	0.76
R30-1012502	25	Brass	56K2857	1.24	0.87
FIGURE 2: M/F HEX 5.0mm A/F, STUD LENGTH = 6mm, NICKEL PLATED					
R30-3000402	4	Brass	26H5431	0.82	0.57
R30-3000502	5	Brass	95H7627	0.87	0.61
R30-3000602	6	Brass	56K2872	0.87	0.61
R30-3000702	7	Brass	56K2873	0.94	0.66
R30-3000802	8	Brass	56K2874	0.96	0.67
R30-3000902	9	Brass	56K2875	0.99	0.70
R30-3001002	10	Brass	56K2877	0.98	0.69
R30-3001102	11	Brass	56K2878	1.05	0.73
R30-3001202	12	Brass	56K2879	1.03	0.72
R30-3001302	13	Brass	56K2880	1.10	0.77
R30-3001402	14	Brass	72J5962	1.10	0.77
R30-3001502	15	Brass	07J0320	1.16	0.82
R30-3001602	16	Brass	56K2881	1.16	0.81
R30-3001802	18	Brass	56K2883	1.24	0.87
R30-3001902	19	Brass	56K2884	1.23	0.86
R30-3002002	20	Brass	72J6953	1.06	0.83
R30-3002502	25	Brass	56K2888	1.19	0.92
R30-3003002	30	Brass	56K2890	1.28	0.99
FIGURE 3: ROUND 4.75 O/D, NICKEL PLATED					
R30-5000402	4	Brass	56K2936	0.68	0.42
R30-5000802	8	Brass	56K2940	0.91	0.57
R30-5002502	25	Brass	56K2951	1.13	0.79
FIGURE 4: ROUND 4.75mm O/D, 3.3mm INNER DIA., NICKEL PLATED					
R30-6010202	2	Brass	56K2953	1.08	0.75
R30-6010302	3	Brass	56K2954	1.14	0.80
R30-6010402	4	Brass	56K2955	1.21	0.85
R30-6010502	5	Brass	65J9150	1.22	0.86
R30-6010602	6	Brass	56K2956	1.21	0.85
R30-6010702	7	Brass	56K2957	1.18	0.83
R30-6011102	11	Brass	56K2961	1.04	0.81
FIGURE 5: ROUND 5.0mm O/D, 3.2mm INNER DIA.					
R30-6700394	3	Nylon (Polyamide)	72J5964	0.50	0.31
R30-6700494	4	Nylon (Polyamide)	56K2986	0.81	0.51
R30-6700594	5	Nylon (Polyamide)	81H5167	0.53	0.33
R30-6700694	6	Nylon (Polyamide)	72J5968	0.88	0.55
R30-6700794	7	Nylon (Polyamide)	56K2987	0.36	0.34
R30-6700894	8	Nylon (Polyamide)	83K1635	0.51	0.32
R30-6701094	10	Nylon (Polyamide)	56K2989	0.61	0.38
R30-6701194	11	Nylon (Polyamide)	56K2990	0.72	0.50
R30-6701694	16	Nylon (Polyamide)	56K2994	0.77	0.54
R30-6702094	20	Nylon (Polyamide)	56K2996	0.77	0.54
FIGURE 7: M/F HEX 7.0mm, STUD LENGTH = 7mm, NICKEL PLATED					
R40-3000802	8	Brass	56K3060	1.11	0.78
R40-3001202	12	Brass	56K3064	1.25	0.88
R40-3001402	14	Brass	56K3066	1.14	0.88
R40-3002002	20	Brass	56K3070	1.28	1.00
R40-3002502	25	Brass	56K3071	1.61	1.25
R40-3003002	30	Brass	56K3072	1.71	1.32
FIGURE 8: ROUND 6.35mm O/D, 4.4mm INNER DIA., NICKEL PLATED					
R40-6000402	4	Brass	56K3085	0.72	0.50
R40-6000502	5	Brass	56K3086	0.72	0.50
R40-6000602	6	Brass	72J5963	0.83	0.58
R40-6000802	8	Brass	56K3088	0.77	0.54

(89374)

HEX MACHINE SCREW NUTS

RoHS Compliant Available

multicomp



NICKEL-PLATED STEEL–PKG. OF 100

Mfg. Part No.	Thread	Width	Stock No.	Price per Pkg. 1-9	Price per Pkg. 10-24
SPC21805	2-56	3/16″	18M5986	26.11	24.77
SPC21801	4-40	1/4″	18M5982	24.07	22.83
SPC21802	6-32	1/4″	18M5983	11.18	10.60
SPC21807	6-32	5/16″	18M5988	20.88	19.82
SPC21803	8-32	1/4″	18M5984	18.06	17.13
SPC21808	8-32	5/16″	18M5989	26.75	25.38
SPC21804	10-32	3/8″	18M5985	5.92	5.62
NYLON–PKG. OF 100					
SPC21810	2-56	3/16″	18M5991	14.80	14.04
SPC21811	4-40	1/4″	18M5992	18.28	17.34
SPC21812	6-32	5/16″	18M5993	24.07	22.83
SPC21813	8-32	5/16″	18M5994	35.38	33.56

(9233)

ROUND THUMB NUTS

RoHS Compliant Available

RAF ELECTRONIC HARDWARE
a Division of MW Industries, Inc.

Thread Size Imperial	Aluminum Mfg. Part No.	Aluminum Length (in.)	Aluminum Stock No.	Aluminum Price Each 1-99	Stainless Steel Mfg. Part No.	Stainless Steel Stock No.	Stainless Steel Price Each 1-99
2-56	7210-AL	0.25	27T8993	0.51	7210-SS	27T8994	1.06
8-32	7211-AL	0.25	27T8995	0.51	7211-SS	27T8996	1.34
6-32	7212-AL	0.281	27T8997	0.58	7212-SS	27T8998	1.63
8-32	7213-AL	0.281	27T8999	0.79	7213-SS	27T9000	2.20
10-24	7214-AL	0.344	27T9001	0.86	7214-SS	27T9002	12.89
10-32	7215-AL	0.344	27T9003	0.86	7215-SS	27T9004	2.75

(197844)

ROUND METRIC THUMB NUTS

RoHS Compliant Available

RAF ELECTRONIC HARDWARE
a Division of MW Industries, Inc.

- **-12 in mfg. part no.** indicates zinc (clear chromate) finish

Thread Size Metric	Brass Mfg. Part No.	Brass Length (mm)	Brass Stock No.	Brass Price Each 1-99	Stainless Steel Mfg. Part No.	Stainless Steel Stock No.	Stainless Steel Price Each 1-99
M2.5	M3560-B-12	6	27T8215	0.96	M3560-SS	27T8216	1.19
M4	M3561-B-12	6	27T8217	1.18	M3561-SS	27T8218	1.53
M3.5	M3562-B-12	7	27T8219	1.43	M3562-SS	27T8220	1.82
M4	M3563-B-12	7	27T8221	1.43	M3563-SS	27T8222	1.82
M5	M3564-B-12	9	27T8223	1.84	M3564-SS	27T8224	3.17
M6	M3565-B-12	9	27T8225	1.84	M3565-SS	27T8226	2.95
M8 x 1.25	M3566-B-12	12	27T8227	1.79	M3566-SS	27T8228	6.37

(197843)

PRECISION SOCKETHEAD SHOULDER SCREWS

RoHS Compliant Available

RAF ELECTRONIC HARDWARE
a Division of MW Industries, Inc.

- Stainless steel

Mfg. Part No.	M3 x 0.5 Thread Length (mm)	M3 x 0.5 Thread Stock No.	M3 x 0.5 Thread Price Each 1-99
M3370-SS	10.36	27T8176	1.58
M3371-SS	11.94	27T8177	1.75
M3372-SS	13.53	27T8178	1.80

CONTINUED

PRECISION SOCKETHEAD SHOULDER SCREWS (CONT.)

Mfg. Part No.	M3 x 0.5 Thread Length (mm)	Stock No.	Price Each 1-99
● M3373-SS	15.12	27T8179	2.02
● M3374-SS	16.7	27T8180	2.07
● M3375-SS	18.29	27T8181	2.14
● M3376-SS	19.88	27T8182	13.36

(197845)

450 PIECE ALUMINUM SPACER ASSORTMENT KIT

multicomp

Kit contains 300 round and hex tapped spacers and 150 round thru-hole spacers ¼″ to 1″ long for #4, #6 and #8 screws.

Mfg. Part No.	Stock No.	Price Each
8404-RTA	23N3614	204.68

(9301)

STANDOFF AND SPACER ENGINEERING KITS

RoHS Compliant Available

KEYSTONE

Ideal for R&D, prototype, maintenance and low-volume users. Popular lengths for mix-and-match design flexibility. **STR series** kits supplied with threaded female hex and male-female hex standoffs in both aluminum with clear iridite finish and nylon 6/6 materials. **SCR series** kits are supplied with round clear hole spacers in aluminum with clear iridite finish, brass with a nickel finish, nylon 6/6 and flat aluminum precision formed into a round spacer. All kits come in a convenient mini-cabinet with clear plastic drawers.

Each kit contains 25 pieces of each assortment.

Mfg.Part No.	Kit Includes	Stock No.	Price Each
● STR-440	4-40 Threaded 1/4″, 1/2″, 3/4″, and 1″ Standoffs and 4-40 Threaded Panhead Screws	65H4616	120.28
● STR-632	6-32 Threaded 1/4″, 1/2″, 3/4″, and 1″ Standoffs and 6-32 Threaded Panhead Screws	65H4617	120.28
● STR-832	8-32 Threaded 1/4″, 1/2″, 3/4″, and 1″ Standoffs and 8-32 Threaded Panhead Screws	85H0153	121.33
● SCR-6	400-Pcs of 1/4″, 1/2″, 3/4″ & 1″ Clear Hole Spacers	65H4612	116.61

(77702)

HEX MALE/FEMALE ALUMINUM STANDOFFS

RoHS Compliant Available

RAF ELECTRONIC HARDWARE
a Division of MW Industries, Inc.

• Aluminum

3/16″ HEX MALE/FEMALE STANDOFFS

Length (in.)	2-56 Thread Mfg. Part No.	Stock No.	Price Each 1-99	4-40 Thread Mfg. Part No.	Stock No.	Price Each 1-99
0.188	● 4500-256-AL-7	27T8813	0.47	● 4500-440-AL-7	27T8816	0.50
0.25	● 4501-256-AL-7	27T8822	0.48	● 4501-440-AL-7	27T8825	0.51
0.313	● 4502-256-AL-7	27T8831	0.52	● 4502-440-AL-7	27T8834	0.52
0.375	● 4503-256-AL-7	27T8840	0.06	● 4503-440-AL-7	27T8843	0.53
0.438	● 4504-256-AL-7	27T8849	0.50	● 4504-440-AL-7	27T8852	0.54
0.5	● 4505-256-AL-7	27T8858	0.55	● 4505-440-AL-7	27T8861	0.99

➤CONTINUED➤

HEX MALE/FEMALE ALUMINUM STANDOFFS (CONT.)

3/16″ HEX MALE/FEMALE STANDOFFS

Length (in.)	6-32 Thread Mfg. Part No.	Stock No.	Price Each 1-99
0.188	● 4500-632-AL-7	27T8819	0.48
0.25	● 4501-632-AL-7	27T8828	0.54
0.313	● 4502-632-AL-7	27T8837	0.57
0.375	● 4503-632-AL-7	27T8846	0.55
0.438	● 4504-632-AL-7	27T8855	0.58
0.5	● 4505-632-AL-7	27T8864	0.64

1/4″ HEX MALE/FEMALE STANDOFFS

Length (in.)	4-40 Thread Mfg. Part No.	Stock No.	Price Each 1-99	6-32 Thread Mfg. Part No.	Stock No.	Price Each 1-99
0.25	● 4530-440-AL-7	27T8867	0.55	● 4530-632-AL-7	27T8870	0.61
0.313	● 4531-440-AL-7	27T8873	0.60	● 4531-632-AL-7	27T8876	0.58
0.375	● 4532-440-AL-7	27T8879	0.62	● 4532-632-AL-7	27T8882	0.64
0.438	● 4533-440-AL-7	27T8885	0.58	● 4533-632-AL-7	27T8888	0.60
0.5	● 4534-440-AL-7	27T8891	0.64	● 4534-632-AL-7	27T8894	0.66
0.563	● 4535-440-AL-7	27T8897	0.62	● 4535-632-AL-7	27T8900	0.68
0.63	● 4536-440-AL-7	27T8903	0.70	● 4536-632-AL-7	27T8906	0.66
0.688	● 4537-440-AL-7	27T8909	0.72	● 4537-632-AL-7	27T8912	0.67
0.75	● 4538-440-AL-7	27T8915	0.74	● 4538-632-AL-7	27T8918	0.69
0.813	● 4539-440-AL-7	27T8921	0.70	● 4539-632-AL-7	27T8924	0.72
0.88	● 4540-440-AL-7	27T8927	0.76	● 4540-632-AL-7	27T8930	0.72
0.938	● 4541-440-AL-7	27T8933	0.73	● 4541-632-AL-7	27T8936	0.73
1	● 4542-440-AL-7	27T8939	0.79	● 4542-632-AL-7	27T8942	0.78

(194755)

HEX MALE/FEMALE NYLON STANDOFFS

RoHS Compliant Available

RAF ELECTRONIC HARDWARE
a Division of MW Industries, Inc.

• Nylon

3/16″ HEX MALE/FEMALE STANDOFFS

Length (in.)	2-56 Thread Mfg. Part No.	Stock No.	Price Each 1-99	4-40 Thread Mfg. Part No.	Stock No.	Price Each 1-99
0.188	● 4500-256-N	27T8814	1.58	● 4500-440-N	27T8817	1.49
0.25	● 4501-256-N	27T8823	1.61	● 4501-440-N	27T8826	1.54
0.313	● 4502-256-N	27T8832	1.66	● 4502-440-N	27T8835	1.58
0.375	● 4503-256-N	27T8841	1.69	● 4503-440-N	27T8844	1.63
0.438	● 4504-256-N	27T8850	1.72	● 4504-440-N	27T8853	1.80
0.5	● 4505-256-N	27T8859	1.90	● 4505-440-N	27T8862	1.85

3/16″ HEX MALE/FEMALE STANDOFFS

Length (in.)	6-32 Thread Mfg. Part No.	Stock No.	Price Each 1-99
0.188	● 4500-632-N	27T8820	1.54
0.25	● 4501-632-N	27T8829	1.58
0.313	● 4502-632-N	27T8838	1.63
0.375	● 4503-632-N	27T8847	1.68
0.438	● 4504-632-N	27T8856	1.72
0.5	● 4505-632-N	27T8865	1.75

1/4″ HEX MALE/FEMALE STANDOFFS

Length (in.)	4-40 Thread Mfg. Part No.	Stock No.	Price Each 1-99	6-32 Thread Mfg. Part No.	Stock No.	Price Each 1-99
0.25	● 4530-440-N	27T8868	1.58	● 4530-632-N	27T8871	1.78
0.313	● 4531-440-N	27T8874	1.79	● 4531-632-N	27T8877	1.70
0.375	● 4532-440-N	27T8880	1.79	● 4532-632-N	27T8883	1.71
0.438	● 4533-440-N	27T8886	1.83	● 4533-632-N	27T8889	1.93
0.5	● 4534-440-N	27T8892	1.84	● 4534-632-N	27T8895	1.81
0.563	● 4535-440-N	27T8898	1.87	● 4535-632-N	27T8901	1.91
0.63	● 4536-440-N	27T8904	1.93	● 4536-632-N	27T8907	1.92
0.688	● 4537-440-N	27T8910	1.96	● 4537-632-N	27T8913	2.01

➤CONTINUED➤

HEX MALE/FEMALE NYLON STANDOFFS (CONT.)

Length (in.)	4-40 Thread Mfg. Part No.	Stock No.	Price Each 1-99	6-32 Thread Mfg. Part No.	Stock No.	Price Each 1-99
0.75	4538-440-N	27T8916	1.97	4538-632-N	27T8919	2.02
0.813	4539-440-N	27T8922	2.05	4539-632-N	27T8925	2.26
0.88	4540-440-N	27T8928	2.15	4540-632-N	27T8931	2.27
0.938	4541-440-N	27T8934	2.17	4541-632-N	27T8937	2.38
1	4542-440-N	27T8940	2.22	4542-632-N	27T8943	6.66

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HEX MALE/FEMALE STAINLESS STEEL STANDOFFS

RoHS Compliant Available

RAF ELECTRONIC HARDWARE
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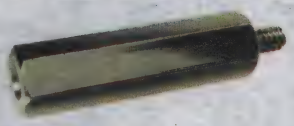

• Stainless Steel

3/16" HEX MALE/FEMALE STANDOFFS

Length (in.)	2-56 Thread Mfg. Part No.	Stk. No.	Price Each 1-99	4-40 Thread Mfg. Part No.	Stk. No.	Price Each 1-99
0.188	4500-256-SS	27T8815	1.14	4500-440-SS	27T8818	1.20
0.25	4501-256-SS	27T8824	1.26	4501-440-SS	27T8827	1.26
0.313	4502-256-SS	27T8833	1.21	4502-440-SS	27T8836	8.23
0.375	4503-256-SS	27T8842	1.33	4503-440-SS	27T8845	1.21
0.438	4504-256-SS	27T8851	1.27	4504-440-SS	27T8854	1.24
0.5	4505-256-SS	27T8860	1.31	4505-440-SS	27T8863	1.41

3/16" HEX MALE/FEMALE STANDOFFS

Length (in.)	6-32 Thread Mfg. Part No.	Stk. No.	Price Each 1-99
0.188	4500-632-SS	27T8821	8.70
0.25	4501-632-SS	27T8830	1.34
0.313	4502-632-SS	27T8839	1.29
0.375	4503-632-SS	27T8848	1.33
0.438	4504-632-SS	27T8857	1.45
0.5	4505-632-SS	27T8866	1.48

1/4" HEX MALE/FEMALE STANDOFFS

Length (in.)	4-40 Thread Mfg. Part No.	Stk. No.	Price 1-99	6-32 Thread Mfg. Part No.	Stk. No.	Price 1-99
0.25	4530-440-SS	27T8869	1.34	4530-632-SS	27T8872	1.56
0.313	4531-440-SS	27T8875	1.31	4531-632-SS	27T8878	1.60
0.375	4532-440-SS	27T8881	1.46	4532-632-SS	27T8884	1.55
0.438	4533-440-SS	27T8887	1.53	4533-632-SS	27T8890	1.60
0.5	4534-440-SS	27T8893	1.58	4534-632-SS	27T8896	1.65
0.563	4535-440-SS	27T8899	1.52	4535-632-SS	27T8902	1.84
0.63	4536-440-SS	27T8905	1.58	4536-632-SS	27T8908	1.95
0.688	4537-440-SS	27T8911	1.64	4537-632-SS	27T8914	1.82
0.75	4538-440-SS	27T8917	1.69	4538-632-SS	27T8920	1.86
0.813	4539-440-SS	27T8923	1.86	4539-632-SS	27T8926	2.05
0.88	4540-440-SS	27T8929	1.91	4540-632-SS	27T8932	1.97
0.938	4541-440-SS	27T8935	1.84	4541-632-SS	27T8938	2.18
1	4542-440-SS	27T8941	1.90	4542-632-SS	27T8944	2.24

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METRIC HEX MALE/FEMALE STAINLESS STEEL STANDOFFS

RoHS Compliant Available

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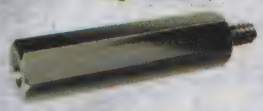


• Stainless Steel

4.5MM HEX MALE/FEMALE STANDOFFS

Length (mm)	M2.5 x 0.45 Mfg. Part No.	Stock No.	Price Each 1-99	M3 x 0.5 Mfg. Part No.	Stock No.	Price 1-99
5	M2100-2545-SS	27T7968	1.48	M2100-3005-SS	27T7970	1.48
6	M2101-2545-SS	27T7972	1.53	M2101-3005-SS	27T7974	1.53
7	M2102-2545-SS	27T7976	1.45	M2102-3005-SS	27T7978	1.45
8	M2103-2545-SS	27T7980	1.59	M2103-3005-SS	27T7982	1.59
9	M2104-2545-SS	27T7984	1.63	M2104-3005-SS	27T7986	1.51
10	M2105-2545-SS	27T7988	1.67	M2105-3005-SS	27T7990	1.67
11	M2106-2545-SS	27T7992	1.71	M2106-3005-SS	27T7994	1.59

➤CONTINUED➤

METRIC HEX MALE/FEMALE STAINLESS STEEL STANDOFFS (CONT.)

Length (mm)	M2.5 x 0.45 Mfg. Part No.	Stock No.	Price Each 1-99	M3 x 0.5 Mfg. Part No.	Stock No.	Price 1-99
12	M2107-2545-SS	27T7996	1.63	M2107-3005-SS	27T7998	1.63
13	M2108-2545-SS	27T8000	1.66	M2108-3005-SS	27T8002	1.79
14	M2109-2545-SS	27T8004	1.81	M2109-3005-SS	27T8006	1.81
15	M2110-2545-SS	27T8008	1.75	M2110-3005-SS	27T8010	1.88
16	M2111-2545-SS	27T8012	1.90	M2111-3005-SS	27T8014	1.90
17	M2112-2545-SS	27T8016	1.92	M2112-3005-SS	27T8018	1.79
18	M2113-2545-SS	27T8020	1.83	M2113-3005-SS	27T8022	1.83
19	M2114-2545-SS	27T8024	1.86	M2114-3005-SS	27T8026	1.86
20	M2115-2545-SS	27T8028	2.04	M2115-3005-SS	27T8030	1.90
21	M2116-2545-SS	27T8032	2.09	M2116-3005-SS	27T8034	2.09
22	M2117-2545-SS	27T8036	1.97	M2117-3005-SS	27T8038	1.97
23	M2118-2545-SS	27T8040	2.00	M2118-3005-SS	27T8042	2.00
24	M2119-2545-SS	27T8044	2.04	M2119-3005-SS	27T8046	2.04
25	M2120-2545-SS	27T8048	2.23	M2120-3005-SS	27T8050	2.22

6MM HEX MALE/FEMALE STANDOFFS

Length (mm)	M2.5 x 0.45 Mfg. Part No.	Stock No.	Price Each 1-99	M3 x 0.5 Mfg. Part No.	Stock No.	Price Each 1-99
5	M2140-2545-SS	27T8052	1.73	M2140-3005-SS	27T8054	1.73
6	M2141-2545-SS	27T8060	1.67	M2141-3005-SS	27T8062	1.80
7	M2142-2545-SS	27T8068	1.71	M2142-3005-SS	27T8070	1.84
8	M2143-2545-SS	27T8076	1.90	M2143-3005-SS	27T8078	1.77
9	M2144-2545-SS	27T8084	1.82	M2144-3005-SS	27T8086	1.82
10	M2145-2545-SS	27T8092	2.02	M2145-3005-SS	27T8094	1.88
11	M2146-2545-SS	27T8100	1.93	M2146-3005-SS	27T8102	1.93
12	M2147-2545-SS	27T8108	2.13	M2147-3005-SS	27T8110	2.13
13	M2148-2545-SS	27T8116	2.05	M2148-3005-SS	27T8118	2.20
14	M2149-2545-SS	27T8124	2.10	M2149-3005-SS	27T8126	2.20
15	M2150-2545-SS	27T8132	2.14	M2150-3005-SS	27T8134	2.14
16	M2151-2545-SS	27T8140	2.40	M2151-3005-SS	27T8142	2.36
17	M2152-2545-SS	27T8148	2.27	M2152-3005-SS	27T8150	2.27
18	M2153-2545-SS	27T8156	2.31	M2153-3005-SS	27T8158	2.31
19	M2154-2545-SS	27T8164	2.35	M2154-3005-SS	27T8166	2.35

6MM HEX MALE/FEMALE STANDOFFS

Length (mm)	M3.5 x 0.6 Mfg. Part No.	Stock No.	Price Each 1-99	M4 x 0.7 Mfg. Part No.	Stock No.	Price Each 1-99
5	M2140-3506-SS	27T8056	1.80	M2140-4007-SS	27T8058	1.98
6	M2141-3506-SS	27T8064	1.83	M2141-4007-SS	27T8066	2.03
7	M2142-3506-SS	27T8072	1.88	M2142-4007-SS	27T8074	2.09
8	M2143-3506-SS	27T8080	2.06	M2143-4007-SS	27T8082	2.14
9	M2144-3506-SS	27T8088	1.97	M2144-4007-SS	27T8090	2.23
10	M2145-3506-SS	27T8096	2.05	M2145-4007-SS	27T8098	2.41
11	M2146-3506-SS	27T8104	2.08	M2146-4007-SS	27T8106	2.29
12	M2147-3506-SS	27T8112	2.14	M2147-4007-SS	27T8114	2.33
13	M2148-3506-SS	27T8120	2.23	M2148-4007-SS	27T8122	2.37
14	M2149-3506-SS	27T8128	2.26	M2149-4007-SS	27T8130	2.62
15	M2150-3506-SS	27T8136	2.48	M2150-4007-SS	27T8138	2.48
16	M2151-3506-SS	27T8144	2.35	M2151-4007-SS	27T8146	2.52
17	M2152-3506-SS	27T8152	2.39	M2152-4007-SS	27T8154	2.55
18	M2153-3506-SS	27T8160	2.47	M2153-4007-SS	27T8162	2.60
19	M2154-3506-SS	27T8168	2.51	M2154-4007-SS	27T8170	2.63

(194764)

METRIC HEX MALE/FEMALE ALUMINUM STANDOFFS

RoHS Compliant Available

RAF ELECTRONIC HARDWARE
a Division of MW Industries, Inc.

• Aluminum

4.5MM HEX MALE/FEMALE STANDOFFS

Length (mm)	M2.5 x 0.45 Mfg. Part No.	Stock No.	Price Each 1-99	M3 x 0.5 Mfg. Part No.	Stock No.	Price Each 1-99
5	M2100-2545-AL	27T7967	0.57	M2100-3005-AL	27T7969	0.57
6	M2101-2545-AL	27T7971	0.58	M2101-3005-AL	27T7973	0.54
7	M2102-2545-AL	27T7975	0.55	M2102-3005-AL	27T7977	0.59
8	M2103-2545-AL	27T7979	0.60	M2103-3005-AL	27T7981	0.56
9	M2104-2545-AL	27T7983	0.56	M2104-3005-AL	27T7985	0.56

➤CONTINUED➤

METRIC HEX MALE/FEMALE ALUMINUM STANDOFFS (CONT.)

Length (mm)	M2.5 x 0.45 Mfg. Part No.	Stock No.	Price Each 1-99	M3 x 0.5 Mfg. Part No.	Stock No.	Price Each 1-99
10	● M2105-2545-AL	27T7987	0.61	● M2105-3005-AL	27T7989	0.61
11	● M2106-2545-AL	27T7991	0.57	● M2106-3005-AL	27T7993	0.63
12	● M2107-2545-AL	27T7995	0.63	● M2107-3005-AL	27T7997	0.59
13	● M2108-2545-AL	27T7999	0.59	● M2108-3005-AL	27T8001	0.63
14	● M2109-2545-AL	27T8003	0.60	● M2109-3005-AL	27T8005	0.60
15	● M2110-2545-AL	27T8007	0.64	● M2110-3005-AL	27T8009	0.60
16	● M2111-2545-AL	27T8011	0.60	● M2111-3005-AL	27T8013	0.61
17	● M2112-2545-AL	27T8015	0.61	● M2112-3005-AL	27T8017	0.66
18	● M2113-2545-AL	27T8019	0.62	● M2113-3005-AL	27T8021	0.62
19	● M2114-2545-AL	27T8023	0.66	● M2114-3005-AL	27T8025	0.63
20	● M2115-2545-AL	27T8027	0.68	● M2115-3005-AL	27T8029	0.69
21	● M2116-2545-AL	27T8031	0.64	● M2116-3005-AL	27T8033	0.64
22	● M2117-2545-AL	27T8035	0.64	● M2117-3005-AL	27T8037	0.65
23	● M2118-2545-AL	27T8039	0.65	● M2118-3005-AL	27T8041	0.65
24	● M2119-2545-AL	27T8043	0.66	● M2119-3005-AL	27T8045	0.71
25	● M2120-2545-AL	27T8047	0.72	● M2120-3005-AL	27T8049	0.67

6MM HEX MALE/FEMALE STANDOFFS

Length (mm)	M2.5 x 0.45 Mfg. Part No.	Stock No.	Price Each 1-99	M3 x 0.5 Mfg. Part No.	Stock No.	Price Each 1-99
5	● M2140-2545-AL	27T8051	0.60	● M2140-3005-AL	27T8053	0.66
6	● M2141-2545-AL	27T8059	0.61	● M2141-3005-AL	27T8061	0.66
7	● M2142-2545-AL	27T8067	0.62	● M2142-3005-AL	27T8069	0.67
8	● M2143-2545-AL	27T8075	0.63	● M2143-3005-AL	27T8077	0.64
9	● M2144-2545-AL	27T8083	0.64	● M2144-3005-AL	27T8085	0.65
10	● M2145-2545-AL	27T8091	0.66	● M2145-3005-AL	27T8093	0.72
11	● M2146-2545-AL	27T8099	0.67	● M2146-3005-AL	27T8101	0.74
12	● M2147-2545-AL	27T8107	0.69	● M2147-3005-AL	27T8109	0.70
13	● M2148-2545-AL	27T8115	0.70	● M2148-3005-AL	27T8117	0.70
14	● M2149-2545-AL	27T8123	0.71	● M2149-3005-AL	27T8125	0.72
15	● M2150-2545-AL	27T8131	0.72	● M2150-3005-AL	27T8133	0.73
16	● M2151-2545-AL	27T8139	0.73	● M2151-3005-AL	27T8141	0.80
17	● M2152-2545-AL	27T8147	0.75	● M2152-3005-AL	27T8149	0.75
18	● M2153-2545-AL	27T8155	0.75	● M2153-3005-AL	27T8157	0.76
19	● M2154-2545-AL	27T8163	0.76	● M2154-3005-AL	27T8165	0.84

Length (mm)	M3.5 x 0.6 Mfg. Part No.	Stock No.	Price Each 1-99	M4 x 0.7 Mfg. Part No.	Stock No.	Price Each 1-99
5	● M2140-3506-AL	27T8055	0.63	● M2140-4007-AL	27T8057	0.66
6	● M2141-3506-AL	27T8063	0.64	● M2141-4007-AL	27T8065	0.74
7	● M2142-3506-AL	27T8071	0.65	● M2142-4007-AL	27T8073	0.69
8	● M2143-3506-AL	27T8079	0.66	● M2143-4007-AL	27T8081	0.75
9	● M2144-3506-AL	27T8087	0.68	● M2144-4007-AL	27T8089	0.72
10	● M2145-3506-AL	27T8095	0.69	● M2145-4007-AL	27T8097	0.73
11	● M2146-3506-AL	27T8103	0.70	● M2146-4007-AL	27T8105	0.74
12	● M2147-3506-AL	27T8111	0.72	● M2147-4007-AL	27T8113	0.75
13	● M2148-3506-AL	27T8119	0.73	● M2148-4007-AL	27T8121	0.76
14	● M2149-3506-AL	27T8127	0.74	● M2149-4007-AL	27T8129	0.78
15	● M2150-3506-AL	27T8135	0.75	● M2150-4007-AL	27T8137	0.79
16	● M2151-3506-AL	27T8143	0.76	● M2151-4007-AL	27T8145	0.80
17	● M2152-3506-AL	27T8151	0.78	● M2152-4007-AL	27T8153	0.81
18	● M2153-3506-AL	27T8159	0.79	● M2153-4007-AL	27T8161	0.82
19	● M2154-3506-AL	27T8167	0.80	● M2154-4007-AL	27T8169	0.84

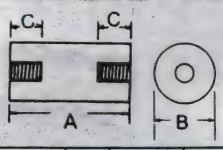
(194750)

ROUND CERAMIC STANDOFFS

RoHS Compliant Available

ABBATRON HH Smith

Made of grade L-5 Steatite material. Good in compression or tension. Perform well in high temperatures. Available in commercial and military grades.



MILITARY TYPES

Mfg. Part No.	Military Number	Thread	Length (in.)	O.D. (in.)	Thread Depth (in.)	Pkg. Qty.	Stock No.	Price per Pkg. Each
● 2600†	NL-523W01-004	6-32	0.5	0.375	0.156	25	98F3553	90.29
● 2601†	NL-523W01-005	6-32	0.625	0.375	0.250	25	67F4208	90.20
● 2602†	NL-523W01-006	6-32	0.75	0.375	0.250	25	98F3243	95.88
● 2603§	NL-523W01-008	6-32	1	0.375	0.375	1	67F4210	6.99
● 2604§	NL-523W01-010	6-32	1.25	0.375	0.375	1	67F4211	6.94
● 2606§	NL-523W01-016	6-32	2	0.375	0.375	1	67F4213	8.92
● 2607*	NL-523W02-005	8-32	0.625	0.500	0.187	5	98F3468	20.17
● 2608*	NL-523W02-006	8-32	0.75	0.500	0.250	5	98F3558	20.14

CONTINUED

ROUND CERAMIC STANDOFFS (CONT.)

Mfg. Part No.	Military Number	Thread	Length (in.)	O.D. (in.)	Thread Depth (in.)	Pkg. Qty.	Stock No.	Price per Pkg. Each
● 2609§	NL-523W02-008	8-32	1	0.5	0.375	1	67F4216	7.49
● 2610§	NL-523W02-010	8-32	1.25	0.500	0.375	1	67F4217	7.21
● 2611§	NL-523W02-012	8-32	1.5	0.500	0.375	1	67F4218	7.59
● 2612§	NL-523W02-016	8-32	2	0.500	0.375	1	67F4219	9.92
● 2615§	NL-523W03-008	10-32	1	0.750	0.375	1	50F4910	8.63
● 2616§	NL-523W03-010	10-32	1.25	0.750	0.375	1	81F4346	8.92
● 2617§	NL-523W03-012	10-32	1.5	0.750	0.375	1	81F4347	9.70
● 2618§	NL-523W03-016	10-32	2	0.750	0.375	1	81F4348	10.81
● 2622§	NL-523W04-010	1/4-20	1.25	1.000	0.437	1	94F1634	13.45

COMMERCIAL TYPES

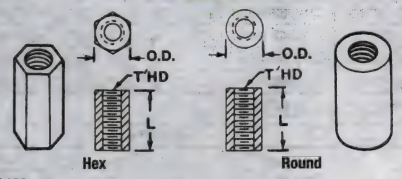
Mfg. Part No.	Thread	Length (in.)	O.D. (in.)	Thread Depth (in.)	Pkg. Qty.	Stock No.	Price per Pkg. Each
● 2642†	6-32	0.375	0.375	0.156	25	67F4224	73.67
● 2643†	6-32	0.5	0.375	0.187	25	98F2931	84.66
● 2644§	6-32	0.5	0.500	0.140	1	98F309	6.03
● 2646§	6-32	1	0.500	0.375	1	67F4228	6.97
● 2649§	1/4-20	2.5	0.750	0.750	1	67F4231	11.92

*Package of 5; †Package of 25; § Each
(9288)

THREADED FEMALE/FEMALE STANDOFFS

RoHS Compliant Available

multicomp



Sold in packages of 100.

¼" OUTER DIAMETER HEX BRASS STANDOFFS – ZINC-PLATED

Dim. L (in.)	4-40 Thread Mfg. Part No.	Stock No.	Price per Pkg. 1-4	6-32 Thread Mfg. Part No.	Stock No.	Price per Pkg. 1-4
0.25	● HTB-4-250A	93N2159	53.24	● HTB-6-250A	93N2164	56.57
0.375	● HTB-4-375A	93N2160	67.67	● HTB-6-375A	93N2165	57.25
0.5	● HTB-4-500A	93N2161	63.69	● HTB-6-500A	93N2166	73.43
0.75	● HTB-4-750A	93N2162	115.83	● HTB-6-750A	93N2167	97.04
1	● HTB-4-1000A	93N2163	139.74	● HTB-6-1000A	93N2168	119.92
2	...	...	...	● 2746	92N5288	219.80
¼" OUTER DIAMETER HEX ALUMINUM STANDOFFS – IRIDITE FINISH, MEETS MIL-C-5541 SPECS.						
0.625	...	...	...	● SPC21562	11M2179	52.99
1.5	...	...	...	● SPC21558	11M2175	91.90
0.25	● SPC21550	11M2167	35.61	● SPC21557	11M2174	29.48
0.375	● SPC21552	11M2169	34.30	● SPC21561	11M2178	36.91
0.5	● SPC21549	11M2166	50.77	● SPC21556	11M2173	41.03
0.75	● SPC21551	11M2168	54.95	● SPC21560	11M2177	44.73
1	● SPC21548	11M2165	71.00	● SPC21555	11M2172	59.04
¼" OUTER DIAMETER ROUND ALUMINUM STANDOFFS – IRIDITE FINISH, MEETS MIL-C-5541 SPECS.						
0.25	● SPC21591	11M2208	37.15	...	...	...
0.5	● SPC21590	11M2207	44.26	● SPC21598	11M2215	41.36
	...	...	...			
1	● SPC21589	11M2206	70.53	● SPC21597	11M2214	66.57
1.5	● SPC21592	11M2209	104.55	● SPC21599	11M2216	107.95

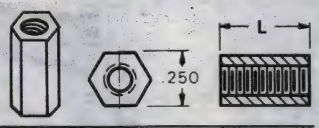
(9298)

NYLON THREADED HEX STANDOFFS

RoHS Compliant Available

KEYSTONE ELECTRONICS CORP.

O. D. for all versions: 0.250". Standoffs also available as round PBE Grade Natural Color Phenolic. *Go online or call.*



NYLON - HEX THREADED - UL 94 V-0

Length (in.)	4-40 Thread Mfg. Part No.	Stock No.	6-32 Thread Mfg. Part No.	Stock No.	8-32 Thread Mfg. Part No.	Stock No.	Price Each 1-99
0.5	● 1902C	18K5088	● 1903C	62W4949	● 1904C	62W4956	0.59
1	● 1902E	62W4945	● 1903E	62W4951	● 1904E	62W4958	0.76

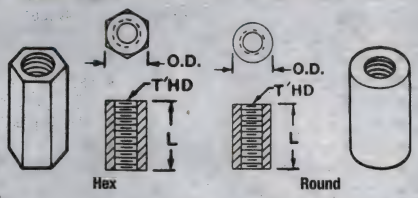
(9398)

THREADED STANDOFFS

RoHS Compliant Available

KEYSTONE ELECTRONICS CORP.

- Thread size 2-56, 4-40, 6-32, 8-32
- Sold in packages of 100



ALUMINUM IRIDITE FINISH

Thrd. Size	O.D. (in.)	Lgth. (in.)	Hex Mfg. Part No.	Hex Stk. No.	Hex Price Each 1-99	Round Mfg. Part No.	Round Stk. No.	Round Price Each 1-99
2-56	0.156	4.75	1797A	01C6376	0.53	...	...	...
2-56	0.156	6.35	1797B	94B3010	0.57	...	...	...
2-56	0.156	7.925	1797C	51B250	0.59	...	...	...
2-56	0.156	9.525	1797D	94B3090	0.61	...	...	...
4-40	0.187	9.525	1892	51B251	0.33	...	...	...
4-40	0.187	12.7	1893	62W4939	0.39	2027	95B0517	0.38
4-40	0.187	19.05	1895	62W4940	0.48	...	...	...
4-40	0.250	9.525	2202	09P8647	0.33	3479	62W5646	0.28
...	...	...	...	...	...	3480	62W5046	0.31
4-40	0.250	19.05	2204	62W4987	0.44	3481	62W5647	0.38
6-32	0.250	9.525	2209	62W4990	0.33	3486	62W5650	0.28
6-32	0.250	12.7	2210	62W4991	0.36	3487	62W5048	0.33
6-32	0.250	19.05	2211	62W4992	0.41	3488	62W5049	0.38
6-32	0.250	25.4	2212	52K9607	0.56	3489	62W5050	0.51
6-32	0.250	50.8	2214	89F1929	1.94	3491	62W5652	0.99
8-32	0.250	38.1	2220	62W4996	0.89	...	...	...

HEX-THREADED BRASS ZINC PLATE

Mfg. Part No.	Thread Size	O.D. (in.)	Length (imm)	Stk. No.	Price Each 1-99
1450A	4-40	0.250	6.35	62W5546	0.39
1450B	4-40	0.250	9.525	62W5547	0.49
1450C	4-40	0.250	12.7	62W5548	0.53
1450D	4-40	0.250	19.05	86H9389	0.81
1450E	4-40	0.250	25.4	62W5549	0.92
1451A	6-32	0.250	6.35	62W5550	0.39
1451B	6-32	0.250	9.525	62W5551	0.46
1451C	6-32	0.250	12.7	62W5552	0.56
1451D	6-32	0.250	15.875	62W5553	0.71
1451E	6-32	0.250	19.05	62W5554	0.81
1833	6-32	0.250	22.2	56W3981	0.76
1635	6-32	0.250	25.4	70B1756	0.97
1474A	8-32	0.250	6.35	56W3980	0.32
1474D	8-32	0.250	19.05	62W5567	0.81
1474E	8-32	0.250	25.4	62W5568	0.92

* Round-Threaded
(9280)

HEX MALE/FEMALE THREADED STANDOFFS

RoHS Compliant Available

KEYSTONE ELECTRONICS CORP.

Passivated stainless steel threaded standoffs are also available; *go online or call.*

BRASS, NICKEL PLATED HEX THREADED STANDOFFS

Length (in.)	4-40 Thread Mfg. Part No.	4-40 Stock No.	4-40 Price Each 1-99	6-32 Thread Mfg. Part No.	6-32 Stock No.	6-32 Price Each 1-99	8-32 Thread Mfg. Part No.	8-32 Stock No.	8-32 Price Each 1-99
0.250	8713	50F4707	0.48	8716	62W5741	0.44	...	...	...
0.500	1944	62W5603	0.65	1952	62W5611	0.60	1957	62W5615	0.65
0.625	1945	62W5604	0.71	1953	62W5612	0.72	1958	62W5616	0.84
0.750	1946	62W5605	0.79	1954	62W5613	0.80	1959	62W5617	0.89
1.000	1947	62W5606	0.89	1644	62W5578	0.89	1960	62W5618	1.08
1.250	1948	62W5607	1.36	1955	94F688	2.13	1961	62W5619	1.36

CONTINUED

HEX MALE/FEMALE THREADED STANDOFFS (CONT.)

Length (in.)	4-40 Thread Mfg. Part No.	4-40 Stock No.	4-40 Price Each 1-99	6-32 Thread Mfg. Part No.	6-32 Stock No.	6-32 Price Each 1-99	8-32 Thread Mfg. Part No.	8-32 Stock No.	8-32 Price Each 1-99
1.500	1950	62W5609	1.46	1645	62W5579	1.23	1963	62W5621	1.55
1.625	7203	62W5724	1.47	7214	55M3711	1.47	7224	62W5730	1.55

*Sold individually

NYLON 6/6 HEX THREADED STANDOFFS

Length (in.)	4-40 Thread Mfg. Part No.	4-40 Stock No.	4-40 Price Each 1-99	6-32 Thread Mfg. Part No.	6-32 Stock No.	6-32 Price Each 1-99	8-32 Thread Mfg. Part No.	8-32 Stock No.	8-32 Price Each 1-99
0.500	4802	62W5677	0.39	4816	62W5691	0.39	4830	62W5705	0.39
1.000	4806	62W5681	0.45	4820	62W5695	0.42	4834	62W5709	0.42

STAINLESS STEEL, HEX THREADED STANDOFFS

0.250	8712*	50F4710	2.71	...	...	...	...	...	...
0.500	2088*	50F4713	1.68	2120	50F4726	1.45	...	...	...

*Sold individually

METRIC BRASS, NICKEL PLATE HEX THREADED STANDOFFS, 5mm O.D.

Length (mm)	Mfg. Part No.	Stock No.	Price Each 1-99
12	24314	22M2407	0.83
20	4317	91B3062	0.91

METRIC BRASS, NICKEL PLATE HEX THREADED STANDOFFS, 5.5mm O.D.

18	4322	92B9468	0.93
20	4323	35C2422	0.96

ALUMINUM, CLEAR IRIDITE PLATED HEX THREADED STANDOFFS

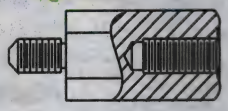
Length (in.)	4-40 Thread Mfg. Part No.	4-40 Stock No.	4-40 Price Each 1-99	6-32 Thread Mfg. Part No.	6-32 Stock No.	6-32 Price Each 1-99	8-32 Thread Mfg. Part No.	8-32 Stock No.	8-32 Price Each 1-99
0.250	8714	50F4709	0.33	8717	62W5343	0.37	...	...	...
0.500	8401	62W5282	0.53	8414	62W5292	0.40	8427	62W5302	0.50
0.625	8402	62W5283	0.57	...	...	...	8428	62W5739	0.54
0.750	8403	62W5284	0.55	8416	62W5738	0.51	8429	62W5303	0.57
1.000	8405	62W5285	0.63	8418	62W5294	0.58	8431	62W5305	0.67
1.250	8407	62W5287	0.82	8420	62W5296	0.60	8433	62W5306	0.99
1.500	8409	62W5289	0.93	8422	62W5298	0.83	8435	62W5308	1.02

(9282)

¼" O.D. BRASS MALE/FEMALE STANDOFFS

RoHS Compliant Available

ABBATRON HH Smith



SOLD IN PACKAGES OF 100

Body Length (in.)	4-40 Thread Mfg. Part No.	4-40 Stock No.	4-40 Price per Pkg. Each	6-32 Thread Mfg. Part No.	6-32 Stock No.	6-32 Price per Pkg. Each	8-32 Thread Mfg. Part No.	8-32 Stock No.	8-32 Price per Pkg. Each
0.25	8216	81F4262	74.87	8248	81F4278	65.25	8280	81F4294	62.26
1	8222	81F4268	102.86	8254	81F4284	99.99	8286	81F4300	94.33
SOLD IN PACKAGES OF 25									
1.125	8223	50F206	30.85	8255	98F3605	24.26	8287	50F210	24.26
2.5	8230	98F2933	41.67	8262	98F2928	32.88	8294	98F3460	33.25
3	8231	98F3458	42.23	8263	98F2869	36.51	8295	98F3606	35.49

(9941)

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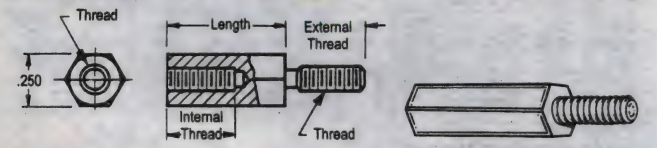
(212563)

HARDWARE STANDOFFS

THREADED MALE/FEMALE STANDOFFS

RoHS Compliant Available

multicomp



Sold in packages of 100.

¼″ OUTER DIAMETER HEX ALUMINUM STANDOFFS — IRIDITE FINISH

Length (in.)	4-40 Thread* Mfg. Part No.	Stock No.	Price Each 1-4	6-32 Thread† Mfg. Part No.	Stock No.	Price Each 1-4
0.25	● SPC21573	11M2190	46.64	● SPC21579	11M2196	55.25
0.375	● SPC21575	11M2192	50.22	● SPC21581	11M2198	58.11
0.5	● SPC21572	11M2189	77.49	● SPC21578	11M2195	55.85
0.625	● SPC21576	11M2193	83.38	● SPC21582	11M2199	73.96
0.75	● SPC21574	11M2191	85.75	● SPC21580	11M2197	74.62
1	● SPC21571	11M2188	86.79	● SPC21577	11M2194	84.84

Length (in.)	8-32 Thread‡ Mfg. Part No.	Stock No.	Price Each 1-4
0.5	● SPC21585	11M2202	74.62
0.625	● 2727	92N5269	79.45
0.75	● SPC21586	11M2203	88.46
1	● SPC21584	11M2201	98.80

¼″ OUTER DIAMETER HEX BRASS STANDOFFS — ZINC PLATED

Length (in.)	4-40 Thread* Mfg. Part No.	Stock No.	6-32 Thread† Mfg. Part No.	Stock No.	Price Each 1-4
0.25	● HMFB-4-250A	93N2190	● HMFB-6-250A	93N2193	78.31
0.375	● HMFB-4-375A	93N2191	● HMFB-6-375A	93N2194	67.90
0.5	● HMFB-4-500A	93N2192	● HMFB-6-500A	93N2195	79.09
0.625	● 2756	92N5298	● 2759	92N5301	102.94
0.75	● 2757	92N5299	● 1954	62W5613	0.80

Length (in.)	8-32 Thread‡ Mfg. Part No.	Stock No.	Price Each 1-4
0.375	● 2761	92N5303	91.48
0.5	● HMFB-8-500A	93N2203	92.11
0.75	● HMFB-8-750A	93N2204	126.09
1	● HMFB-8-1000A	93N2205	119.55

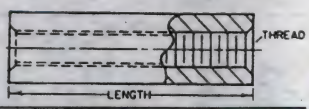
*Thread depth: 0.187″ external/0.250″ internal; †Thread depth: 0.250″ external/0.375″ internal; ‡Thread depth: 0.375″ external/internal.
(17751)

ROUND THREADED NYLON STANDOFFS

RoHS Compliant Available

ABBATRON HH Smith

Standoffs available in 4-40, 6-32, and 8-32 threaded holes. 0.75″ (19.05) long, tap is 0.375″ (9.53) from each end, not continuous. **Sold in packages of 100.**



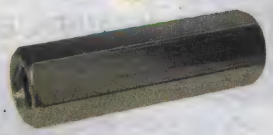
Length (in.)	4-40 Thread Mfg. Part No.	Stock No.	6-32 Thread Mfg. Part No.	Stock No.	8-32 Thread Mfg. Part No.	Stock No.	Price per Pkg. Each
0.5	● 4056	30F1463	● 4057	30F1464	...	...	21.86
1	● 4062	30F1469	● 4063	30F1470	...	...	24.51

(9287)

HEX FEMALE ALUMINUM STANDOFFS

RoHS Compliant Available

RAF ELECTRONIC HARDWARE
a Division of MW Industries, Inc.



• Aluminum

3/16″ HEX FEMALE STANDOFFS — CLEAR IRIDITE

Length (in.)	2-56 Thread Mfg. Part No.	Stock No.	Price Each 1-99	4-40 Thread Mfg. Part No.	Stock No.	Price Each 1-99
0.125	● 2051-256-AL-7	27T8657	0.24	● 2051-440-AL-7	27T8660	0.24
0.188	● 2052-256-AL-7	27T8663	0.25	● 2052-440-AL-7	27T8666	0.26
0.25	● 2053-256-AL-7	27T8669	0.27	● 2053-440-AL-7	27T8672	0.25
0.313	● 2054-256-AL-7	27T8675	0.29	● 2054-440-AL-7	27T8678	0.29

➤CONTINUED➤

HEX FEMALE ALUMINUM STANDOFFS (CONT.)

Length (in.)	2-56 Thread Mfg. Part No.	Stock No.	Price Each 1-99	4-40 Thread Mfg. Part No.	Stock No.	Price Each 1-99
0.375	● 2055-256-AL-7	27T8681	0.29	● 2055-440-AL-7	27T8684	0.29
0.438	● 2056-256-AL-7	27T8687	0.33	● 2056-440-AL-7	27T8690	0.30
0.5	● 2057-256-AL-7	27T8693	0.34	● 2057-440-AL-7	27T8696	0.34
0.563	● 2058-256-AL-7	27T8699	0.38	● 2058-440-AL-7	27T8702	0.41
0.63	● 2059-256-AL-7	27T8705	0.46	● 2059-440-AL-7	27T8708	0.43
0.688	● 2060-256-AL-7	27T8711	0.45	● 2060-440-AL-7	27T8714	0.45
0.75	● 2061-256-AL-7	27T8717	0.50	● 2061-440-AL-7	27T8720	0.47

1/4″ HEX FEMALE STANDOFFS — CLEAR IRIDITE

Length (in.)	4-40 Thread Mfg. Part No.	Stock No.	Price Each 1-99	6-32 Thread Mfg. Part No.	Stock No.	Price Each 1-99
0.125	● 2098-440-AL-7	27T8723	0.25	● 2098-632-AL-7	27T8726	0.26
0.188	● 2099-440-AL-7	27T8729	0.28	● 2099-632-AL-7	27T8732	0.28
0.25	● 2100-440-AL-7	27T8735	0.26	● 2100-632-AL-7	27T8738	0.26
0.313	● 2101-440-AL-7	27T8741	0.28	● 2101-632-AL-7	27T8744	0.30
0.375	● 2102-440-AL-7	27T8747	0.29	● 2102-632-AL-7	27T8750	0.29
0.438	● 2103-440-AL-7	27T8753	0.32	● 2103-632-AL-7	27T8756	0.30
0.5	● 2104-440-AL-7	27T8759	0.34	● 2104-632-AL-7	27T8762	0.32
0.563	● 2105-440-AL-7	27T8765	0.36	● 2105-632-AL-7	27T8768	0.34
0.63	● 2106-440-AL-7	27T8771	0.38	● 2106-632-AL-7	27T8774	0.35
0.688	● 2107-440-AL-7	27T8777	0.38	● 2107-632-AL-7	27T8780	0.41
0.75	● 2108-440-AL-7	27T8783	0.40	● 2108-632-AL-7	27T8786	0.42
0.813	● 2109-440-AL-7	27T8789	0.55	● 2109-632-AL-7	27T8792	0.51
0.88	● 2110-440-AL-7	27T8795	0.56	● 2110-632-AL-7	27T8798	0.52
0.938	● 2111-440-AL-7	27T8801	0.54	● 2111-632-AL-7	27T8804	0.54
1	● 2112-440-AL-7	27T8807	0.55	● 2112-632-AL-7	27T8810	0.59

(194497)

HEX FEMALE NYLON STANDOFFS

RoHS Compliant Available

RAF ELECTRONIC HARDWARE
a Division of MW Industries, Inc.

• Nylon

3/16″ HEX FEMALE STANDOFFS

Length (in.)	2-56 Thread Mfg. Part No.	Stock No.	Price Each 1-99	4-40 Thread Mfg. Part No.	Stock No.	Price Each 1-99
0.125	● 2051-256-N	27T8658	0.85	● 2051-440-N	27T8661	0.79
0.188	● 2052-256-N	27T8664	0.84	● 2052-440-N	27T8667	0.84
0.25	● 2053-256-N	27T8670	0.94	● 2053-440-N	27T8673	0.94
0.313	● 2054-256-N	27T8676	0.92	● 2054-440-N	27T8679	0.98
0.375	● 2055-256-N	27T8682	0.97	● 2055-440-N	27T8685	0.97
0.438	● 2056-256-N	27T8688	1.08	● 2056-440-N	27T8691	1.01
0.5	● 2057-256-N	27T8694	1.07	● 2057-440-N	27T8697	1.07
0.563	● 2058-256-N	27T8700	1.11	● 2058-440-N	27T8703	1.11
0.63	● 2059-256-N	27T8706	1.16	● 2059-440-N	27T8709	1.16
0.688	● 2060-256-N	27T8712	1.60	● 2060-440-N	27T8715	1.60
0.75	● 2061-256-N	27T8718	1.64	● 2061-440-N	27T8721	1.64

1/4″ HEX FEMALE STANDOFFS

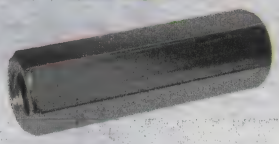
Length (in.)	4-40 Thread Mfg. Part No.	Stock No.	Price Each 1-99	6-32 Thread Mfg. Part No.	Stock No.	Price Each 1-99
0.125	● 2098-440-N	27T8724	0.81	● 2098-632-N	27T8727	0.81
0.188	● 2099-440-N	27T8730	0.87	● 2099-632-N	27T8733	0.87
0.25	● 2100-440-N	27T8736	0.91	● 2100-632-N	27T8739	0.91
0.313	● 2101-440-N	27T8742	0.95	● 2101-632-N	27T8745	0.95
0.375	● 2102-440-N	27T8748	1.01	● 2102-632-N	27T8751	1.09
0.438	● 2103-440-N	27T8754	1.15	● 2103-632-N	27T8757	1.07
0.5	● 2104-440-N	27T8760	1.21	● 2104-632-N	27T8763	4.21
0.563	● 2105-440-N	27T8766	1.18	● 2105-632-N	27T8769	1.18
0.63	● 2106-440-N	27T8772	1.23	● 2106-632-N	27T8775	1.33
0.688	● 2107-440-N	27T8778	1.71	● 2107-632-N	27T8781	1.71
0.75	● 2108-440-N	27T8784	1.79	● 2108-632-N	27T8787	1.79
0.813	● 2109-440-N	27T8790	1.92	● 2109-632-N	27T8793	1.92
0.88	● 2110-440-N	27T8796	1.97	● 2110-632-N	27T8799	1.97
0.938	● 2111-440-N	27T8802	2.02	● 2111-632-N	27T8805	2.17
1	● 2112-440-N	27T8808	2.10	● 2112-632-N	27T8811	2.26

(194747)

HEX FEMALE STAINLESS STEEL STANDOFFS

RoHS Compliant Available

RAF ELECTRONIC HARDWARE
a Division of MW Industries, Inc.



• Stainless Steel

3/16″ HEX FEMALE STANDOFFS

Length (in.)	2-56 Thread Mfg. Part No.	Stock No.	Price Each 1-99	4-40 Thread Mfg. Part No.	Stock No.	Price Each 1-99
0.125	2051-256-SS	27T8659	1.03	2051-440-SS	27T8662	1.03
0.188	2052-256-SS	27T8665	1.07	2052-440-SS	27T8668	1.16
0.25	2053-256-SS	27T8671	1.11	2053-440-SS	27T8674	1.20
0.313	2054-256-SS	27T8677	1.23	2054-440-SS	27T8680	1.23
0.375	2055-256-SS	27T8683	1.28	2055-440-SS	27T8686	1.38
0.438	2056-256-SS	27T8689	1.32	2056-440-SS	27T8692	1.10
0.5	2057-256-SS	27T8695	1.33	2057-440-SS	27T8698	1.33
0.563	2058-256-SS	27T8701	1.42	2058-440-SS	27T8704	1.53
0.63	2059-256-SS	27T8707	1.50	2059-440-SS	27T8710	1.61
0.688	2060-256-SS	27T8713	1.64	2060-440-SS	27T8716	1.64
0.75	2061-256-SS	27T8719	1.98	2061-440-SS	27T8722	1.98

1/4″ HEX FEMALE STANDOFFS

Length (in.)	4-40 Thread Mfg. Part No.	Stock No.	Price Each 1-99	6-32 Thread Mfg. Part No.	Stock No.	Price Each 1-99
0.125	2098-440-SS	27T8725	1.11	2098-632-SS	27T8728	1.11
0.188	2099-440-SS	27T8731	1.29	2099-632-SS	27T8734	1.20
0.25	2100-440-SS	27T8737	1.37	2100-632-SS	27T8740	1.27
0.313	2101-440-SS	27T8743	1.33	2101-632-SS	27T8746	1.33
0.375	2102-440-SS	27T8749	1.41	2102-632-SS	27T8752	1.52
0.438	2103-440-SS	27T8755	1.47	2103-632-SS	27T8758	1.56
0.5	2104-440-SS	27T8761	1.57	2104-632-SS	27T8764	1.66
0.563	2105-440-SS	27T8767	1.79	2105-632-SS	27T8770	1.92
0.63	2106-440-SS	27T8773	1.99	2106-632-SS	27T8776	2.14
0.688	2107-440-SS	27T8779	2.08	2107-632-SS	27T8782	2.08
0.75	2108-440-SS	27T8785	2.09	2108-632-SS	27T8788	4.73
0.813	2109-440-SS	27T8791	2.10	2109-632-SS	27T8794	2.10
0.88	2110-440-SS	27T8797	2.12	2110-632-SS	27T8800	2.12
0.938	2111-440-SS	27T8803	2.13	2111-632-SS	27T8806	2.13
1	2112-440-SS	27T8809	2.32	2112-632-SS	27T8812	2.32

(194749)

METRIC HEX FEMALE NYLON STANDOFFS

RoHS Compliant Available

RAF ELECTRONIC HARDWARE
a Division of MW Industries, Inc.

• Nylon

4.5MM HEX FEMALE STANDOFFS

Length (mm)	M2.5 x 0.45 Mfg. Part No.	Stock No.	Price Each 1-99	M3 x 0.5 Mfg. Part No.	Stock No.	Price Each 1-99
3	M1250-2545-N	27T7764	0.72	M1250-3005-N	27T7767	0.72
4	M1251-2545-N	27T7770	0.75	M1251-3005-N	27T7773	0.75
5	M1252-2545-N	27T7776	0.84	M1252-3005-N	27T7779	0.84
6	M1253-2545-N	27T7782	0.88	M1253-3005-N	27T7785	0.88
7	M1254-2545-N	27T7788	0.91	M1254-3005-N	27T7791	0.91
8	M1255-2545-N	27T7794	0.87	M1255-3005-N	27T7797	0.87
9	M1256-2545-N	27T7800	0.90	M1256-3005-N	27T7803	0.90
10	M1257-2545-N	27T7806	1.01	M1257-3005-N	27T7809	1.01
11	M1258-2545-N	27T7812	0.96	M1258-3005-N	27T7815	0.96
12	M1259-2545-N	27T7818	0.99	M1259-3005-N	27T7821	0.99
13	M1260-2545-N	27T7824	1.01	M1260-3005-N	27T7827	1.01
14	M1261-2545-N	27T7830	1.14	M1261-3005-N	27T7833	1.06
15	M1262-2545-N	27T7836	1.16	M1262-3005-N	27T7839	1.08
16	M1263-2545-N	27T7842	1.18	M1263-3005-N	27T7845	1.12
17	M1264-2545-N	27T7848	1.31	M1264-3005-N	27T7851	1.31
18	M1265-2545-N	27T7854	1.41	M1265-3005-N	27T7857	1.41
19	M1266-2545-N	27T7860	1.43	M1266-3005-N	27T7863	1.43
20	M1267-2545-N	27T7866	1.74	M1267-3005-N	27T7869	1.62
21	M1268-2545-N	27T7872	1.62	M1268-3005-N	27T7875	1.62
22	M1269-2545-N	27T7878	1.64	M1269-3005-N	27T7881	1.64
23	M1270-2545-N	27T7884	1.65	M1270-3005-N	27T7887	1.75

CONTINUED

METRIC HEX FEMALE NYLON STANDOFFS (CONT.)

Length (mm)	M2.5 x 0.45 Mfg. Part No.	Stock No.	Price Each 1-99	M3 x 0.5 Mfg. Part No.	Stock No.	Price Each 1-99
24	M1271-2545-N	27T7890	1.67	M1271-3005-N	27T7893	1.67
25	M1272-2545-N	27T7896	1.71	M1272-3005-N	27T7899	1.71

6MM HEX FEMALE STANDOFFS

Length (mm)	M3 x 0.5 Mfg. Part No.	Stock No.	Price Each 1-99	M4 x 0.7 Mfg. Part No.	Stock No.	Price Each 1-99
3	M1300-3005-N	27T7902	0.79	M1300-4007-N	27T7905	0.79
4	M1301-3005-N	27T7908	0.83	M1301-4007-N	27T7911	0.83
5	M1302-3005-N	27T7914	0.88	M1302-4007-N	27T7917	0.88
6	M1303-3005-N	27T7920	0.93	M1303-4007-N	27T7923	0.93
7	M1304-3005-N	27T7926	0.96	M1304-4007-N	27T7929	0.96
8	M1305-3005-N	27T7932	1.00	M1305-4007-N	27T7935	1.00
9	M1306-3005-N	27T7938	1.05	M1306-4007-N	27T7941	1.05
10	M1307-3005-N	27T7944	1.10	M1307-4007-N	27T7947	1.18
11	M1308-3005-N	27T7950	1.21	M1308-4007-N	27T7953	1.13
12	M1309-3005-N	27T7956	1.27	M1309-4007-N	27T7959	1.27
13	M1310-3005-N	27T7962	1.23	M1310-4007-N	27T7965	1.23

(194761)

METRIC HEX FEMALE STAINLESS STEEL STANDOFFS

RoHS Compliant Available

RAF ELECTRONIC HARDWARE
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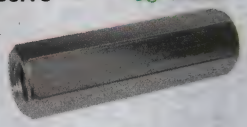

• Stainless Steel

4.5MM HEX FEMALE STANDOFFS

Length (mm)	M2.5 x 0.45 Mfg. Part No.	Stock No.	Price Each 1-99	M3 x 0.5 Mfg. Part No.	Stock No.	Price Each 1-99
3	M1250-2545-SS	27T7765	0.96	M1250-3005-SS	27T7768	1.03
4	M1251-2545-SS	27T7771	0.98	M1251-3005-SS	27T7774	0.98
5	M1252-2545-SS	27T7777	1.02	M1252-3005-SS	27T7780	1.02
6	M1253-2545-SS	27T7783	1.13	M1253-3005-SS	27T7786	1.13
7	M1254-2545-SS	27T7789	1.13	M1254-3005-SS	27T7792	1.21
8	M1255-2545-SS	27T7795	1.16	M1255-3005-SS	27T7798	1.24
9	M1256-2545-SS	27T7801	1.29	M1256-3005-SS	27T7804	1.20
10	M1257-2545-SS	27T7807	1.34	M1257-3005-SS	27T7810	1.34
11	M1258-2545-SS	27T7813	1.33	M1258-3005-SS	27T7816	1.25
12	M1259-2545-SS	27T7819	1.28	M1259-3005-SS	27T7822	1.38
13	M1260-2545-SS	27T7825	1.32	M1260-3005-SS	27T7828	1.32
14	M1261-2545-SS	27T7831	1.44	M1261-3005-SS	27T7834	1.44
15	M1262-2545-SS	27T7837	1.40	M1262-3005-SS	27T7840	1.50
16	M1263-2545-SS	27T7843	1.41	M1263-3005-SS	27T7846	1.41
17	M1264-2545-SS	27T7849	1.54	M1264-3005-SS	27T7852	1.54
18	M1265-2545-SS	27T7855	1.64	M1265-3005-SS	27T7858	1.64
19	M1266-2545-SS	27T7861	1.65	M1266-3005-SS	27T7864	1.65
20	M1267-2545-SS	27T7867	1.67	M1267-3005-SS	27T7870	1.67
21	M1268-2545-SS	27T7873	1.70	M1268-3005-SS	27T7876	1.70
22	M1269-2545-SS	27T7879	1.72	M1269-3005-SS	27T7882	1.72
23	M1270-2545-SS	27T7885	1.73	M1270-3005-SS	27T7888	1.73
24	M1271-2545-SS	27T7891	1.89	M1271-3005-SS	27T7894	1.76
25	M1272-2545-SS	27T7897	1.78	M1272-3005-SS	27T7900	1.78

6MM HEX FEMALE STANDOFFS

Length (mm)	M3 x 0.5 Mfg. Part No.	Stock No.	Price Each 1-99	M4 x 0.7 Mfg. Part No.	Stock No.	Price Each 1-99
3	M1300-3005-SS	27T7903	1.14	M1300-4007-SS	27T7906	1.06
4	M1301-3005-SS	27T7909	1.10	M1301-4007-SS	27T7912	1.10
5	M1302-3005-SS	27T7915	1.15	M1302-4007-SS	27T7918	1.15
6	M1303-3005-SS	27T7921	1.20	M1303-4007-SS	27T7924	1.20
7	M1304-3005-SS	27T7927	1.24	M1304-4007-SS	27T7930	1.24
8	M1305-3005-SS	27T7933	1.28	M1305-4007-SS	27T7936	1.28
9	M1306-3005-SS	27T7939	1.43	M1306-4007-SS	27T7942	1.33
10	M1307-3005-SS	27T7945	1.35	M1307-4007-SS	27T7948	1.35
11	M1308-3005-SS	27T7951	1.47	M1308-4007-SS	27T7954	1.36
12	M1309-3005-SS	27T7957	1.39	M1309-4007-SS	27T7960	1.39
13	M1310-3005-SS	27T7963	1.40	M1310-4007-SS	27T7966	1.40

(194763)

METRIC HEX FEMALE ALUMINUM STANDOFFS

RoHS Compliant Available

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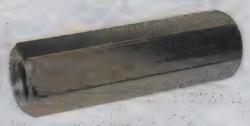


- Aluminum

4.5MM HEX FEMALE STANDOFFS

Length (mm)	M2.5 x 0.45 Mfg. Part No.	Stock No.	Price Each 1-99	M3 x 0.5 Mfg. Part No.	Stock No.	Price Each 1-99
3	● M1250-2545-AL	27T7763	0.47	● M1250-3005-AL	27T7766	0.47
4	● M1251-2545-AL	27T7769	0.44	● M1251-3005-AL	27T7772	0.44
5	● M1252-2545-AL	27T7775	0.49	● M1252-3005-AL	27T7778	0.48
6	● M1253-2545-AL	27T7781	0.49	● M1253-3005-AL	27T7784	0.49
7	● M1254-2545-AL	27T7787	0.50	● M1254-3005-AL	27T7790	0.50
8	● M1255-2545-AL	27T7793	0.55	● M1255-3005-AL	27T7796	0.55
9	● M1256-2545-AL	27T7799	0.56	● M1256-3005-AL	27T7802	0.52
10	● M1257-2545-AL	27T7805	0.59	● M1257-3005-AL	27T7808	0.59
11	● M1258-2545-AL	27T7811	0.59	● M1258-3005-AL	27T7814	0.59
12	● M1259-2545-AL	27T7817	0.60	● M1259-3005-AL	27T7820	0.60
13	● M1260-2545-AL	27T7823	0.58	● M1260-3005-AL	27T7826	0.63
14	● M1261-2545-AL	27T7829	0.61	● M1261-3005-AL	27T7832	0.61
15	● M1262-2545-AL	27T7835	0.64	● M1262-3005-AL	27T7838	0.68
16	● M1263-2545-AL	27T7841	0.66	● M1263-3005-AL	27T7844	0.66
17	● M1264-2545-AL	27T7847	0.74	● M1264-3005-AL	27T7850	0.74
18	● M1265-2545-AL	27T7853	0.70	● M1265-3005-AL	27T7856	0.70
19	● M1266-2545-AL	27T7859	0.76	● M1266-3005-AL	27T7862	0.71
20	● M1267-2545-AL	27T7865	0.77	● M1267-3005-AL	27T7868	0.77
21	● M1268-2545-AL	27T7871	0.78	● M1268-3005-AL	27T7874	0.78
22	● M1269-2545-AL	27T7877	0.73	● M1269-3005-AL	27T7880	0.73
23	● M1270-2545-AL	27T7883	0.73	● M1270-3005-AL	27T7886	0.79
24	● M1271-2545-AL	27T7889	0.74	● M1271-3005-AL	27T7892	0.80
25	● M1272-2545-AL	27T7895	0.80	● M1272-3005-AL	27T7898	0.80

6MM HEX FEMALE STANDOFFS

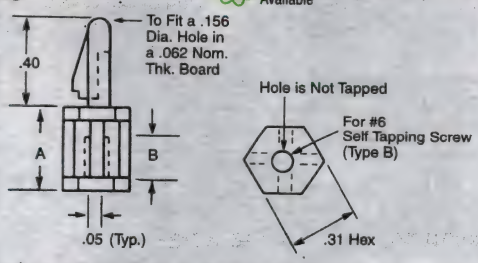
Length (mm)	M3 x 0.5 Mfg. Part No.	Stock No.	Price Each 1-99	M4 x 0.7 Mfg. Part No.	Stock No.	Price Each 1-99
3	● M1300-3005-AL	27T7901	0.46	● M1300-4007-AL	27T7904	0.46
4	● M1301-3005-AL	27T7907	0.46	● M1301-4007-AL	27T7910	0.46
5	● M1302-3005-AL	27T7913	0.49	● M1302-4007-AL	27T7916	0.49
6	● M1303-3005-AL	27T7919	0.51	● M1303-4007-AL	27T7922	0.51
7	● M1304-3005-AL	27T7925	0.52	● M1304-4007-AL	27T7928	0.52
8	● M1305-3005-AL	27T7931	0.53	● M1305-4007-AL	27T7934	0.53
9	● M1306-3005-AL	27T7937	0.59	● M1306-4007-AL	27T7940	0.54
10	● M1307-3005-AL	27T7943	0.56	● M1307-4007-AL	27T7946	0.56
11	● M1308-3005-AL	27T7949	0.57	● M1308-4007-AL	27T7952	0.57
12	● M1309-3005-AL	27T7955	0.58	● M1309-4007-AL	27T7958	0.58
13	● M1310-3005-AL	27T7961	0.63	● M1310-4007-AL	27T7964	0.63

(194743)

SCREW-FASTENED PC BOARD STANDOFFS

RoHS Compliant Available

pro-POWER



Insert #6 self-tapping screw through chassis and into support. Snap PC board over top of support's tapered head. Tension flange holds PC board in place; squeeze flange for board removal. Material: nylon. Color: natural. **Sold in packages of 100.**

Mfg. Part No.	Dimensions A	Dimensions B	Stock No.	Price per Pkg. 1-4	Price per Pkg. 5-9
● SPCS-4	0.250″ (6.35)	0.203″ (5.16)	23N3975	38.17	32.18
● SPCS-6	0.375″ (9.53)	0.313″ (7.95)	23N3976	38.14	32.13
● SPCS-8	0.500″ (12.70)	0.313″ (7.95)	23N3977	40.74	34.35
● SPCS-12	0.750″ (19.05)	0.313″ (7.95)	23N3978	44.59	37.58
● SPCS-14	0.875″ (22.23)	0.313″ (7.95)	95N4041	46.13	38.90

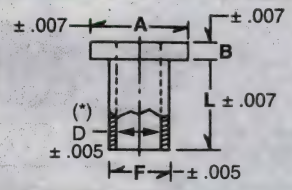
(9427)

SCREW INSULATOR/BUSHINGS

RoHS Compliant Available

multicomp

Used with high-strength, noninsulated screws. Wide flange isolates screw from mounting surface. Can also be used as a lightweight load bearing. Requires no lubrication. Constructed of nylon. Color: natural. **Sold in packages of 100.**



Mfg. Part No.	Length Size	Length L	Dimensions A	Dimensions B	Dimensions F	Stock No.	Price per Pkg. 1-9	Price per Pkg. 10-49
● SIB-0403*	#4	0.046″	0.235″	0.047″	0.145″	28F1910	15.91	13.29
● SIB-0406*	#4	0.093″	0.235″	0.047″	0.145″	28F1912	15.60	13.03
● SIB-0616**	#6	0.250″	0.290″	0.047″	0.170″	28F1915	15.65	13.09

* 0.115 ** 0.140
(32985)

WASHERS

RoHS Compliant Available

multicomp

SHOULDER WASHERS – BLACK VULCANIZED FIBER

Mfg. Part No.	Screw Size	O.D.	Pkg. of	Stock No.	Price per Pkg. 1-9
● SPC21879	No. 6	5/16″	100	18M6060	46.15
● SPC21880	No. 8	3/8″	100	18M6061	57.07
● SPC21881	No. 10	7/16″	100	18M6062	45.80
FLAT WASHERS – NICKEL PLATED STEEL					
● SPC21883	No. 4	9/32″	100	18M6064	8.97
● SPC21884	No. 6	3/8″	100	18M6065	7.92
● SPC21885	No. 8	7/16″	100	18M6066	17.11
SPC21886	No. 10	1/2″	100	18M6067	17.96
EXTERNAL TOOTH LOCKWASHERS – ZINC PLATED					
● WLE-04-016-SC	No. 4	17/64″	100	30F644	9.24
● SPC21888	No. 6	9/32″	100	18M6069	20.53
● SPC21889	No. 8	21/64″	100	18M6070	15.40
SPC21890	No. 10	3/8″	100	18M6071	44.37
SPLIT TYPE LOCKWASHERS – ZINC PLATED STEEL					
● WLS-04-017-SZ	No. 4	17/64″	100	31F2160	7.82
WLS-06-018-SZ	No. 6	9/32″	100	31F2161	8.59
WLS-10-024-SZ	No. 10	3/8″	100	31F2163	11.98
INTERNAL TOOTH LOCKWASHERS – ZINC PLATED					
WLI-02-012-SC	No. 2	3/16″	100	31F2243	11.44
● WLI-04-017-SC	No. 4	17/64″	100	31F2245	11.39
● WLI-06-018-SC	No. 6	9/32″	100	31F2246	6.69
● WLI-08-021-SC	No. 8	21/64″	100	31F2247	9.17
● WLI-10-024-SC	No. 10	3/8″	100	31F2248	46.57
● WLI-25-030-SC	1/4″	15/32″	100	31F2249	20.91

(9305)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

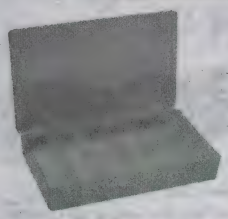
(196536)

HEAVY-DUTY MULTICOMPARTMENT PARTS BOXES

DURATOOL

MADE IN USA

- Variety of Compartment Configurations



K-824

Rugged utility boxes are ideal for organizing hardware, precision parts, electronic components, medical or lab supplies. Hinged overlapping lid fastens securely. 2 versions available: high-impact, transparent K-Resin construction; or conductive version constructed of black carbon-filled plastic for static-sensitive parts. Made in the U.S.A.

TRANSPARENT K-RESIN SMALL PARTS BOXES

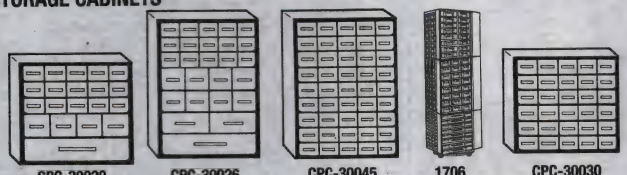
Mfg. Part No.	L x W x D	Compartments	Stock No.	Price Each 1-9	Price Each 10-24
K-203	4.50 x 8.25 x 1.375″	6	44N4966	7.60	6.79
K-606	6.75 x 11.00 x 1.75″	6	44N4960	14.21	12.70
K-806	9.00 x 13.125 x 2.313″	6	44N4963	24.02	21.45
K-208	4.50 x 8.25 x 1.375″	12	44N4967	7.20	6.43
K-602	6.75 x 11.00 x 1.75″	12	44N4961	14.21	12.70
K-812	9.00 x 13.125 x 2.313″	12	44N4964	23.71	21.17
K-200	4.50 x 8.25 x 1.375″	18	44N4968	7.70	6.88
K-618	6.75 x 11.00 x 1.75″	18	44N4962	15.01	13.41
K-824	9.00 x 13.125 x 2.313″	24	44N4965	23.71	21.17
K-166	7.00 x 10.00 x 1.813″	36	44N4969	16.39	14.64
CONDUCTIVE PLASTIC UTILITY BOXES					
CB-6018	6.75 x 11.00 x 1.75″	18	87N2414	39.44	36.57
CB-8024	9.00 x 13.125 x 2.313″	24	87N2416	59.60	55.27

(7055)

300 SERIES COPOLYMER-FRAME CONDUCTIVE STORAGE CABINETS

MADE IN USA

DURATOOL



CPC-30020 CPC-30026 CPC-30045 1706 CPC-30030

Durable cabinets protect against static damage with copolymer shells and drawers and static ground wire. Rustproof, dentproof construction. Meet military specification DOD-HDT3K-263. **Mfg. part no. 1706** tower system holds 16 large (16.5″H) cabinets. Tower turns on a ball-bearing base. Ideal for stockroom, sales floor, or workshop. Provides a large storage area that is 70″ high. *Order drawer dividers separately; go online or call.*

Mfg. Part No.	No. of Drawers	Drawer Size H x W x D (In.)	Overall Cabinet H x W x D (In.)	Stock No.	Price Each 1-4
CPC-30020	15 4 1	1.375 x 2 x 5.313 2.25 x 2.5 x 5.313 2.25 x 11 x 5.313	11.25 x 12 x 6	84N1453	103.74
CPC-30026	15 8 2 1	1.375 x 2 x 5.313 2.25 x 2.5 x 5.313 2.25 x 5.312 x 5.313 2.25 x 11 x 5.313	16.5 x 12 x 6	84N1454	142.86
CPC-30030	30	1.375 x 2 x 5.313	11.25 x 12 x 6	84N1455	103.74
CPC-30045	45	1.375 x 2. x 5.313	16.5 x 12 x 6	84N1456	147.39
1706	Tower System		70 x 18 x 18	92N3708	595.93

(7176)

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(196546)

PLASTIC FRAME STORAGE CABINETS

DURATOOL

High-density storage can be achieved with these all-plastic cabinets. Maximize any work area by organizing and storing tools, hardware or parts. Designed with a sturdy shell and drawer rail structure for extra strength. These rugged cabinets can be stacked or wall mounted for greater storage flexibility. Drawers are all molded in clear styrene resin for optimum visibility and speedy retrieval of contents. Each cabinet features drawer stops to prevent accidental spills.

Mfg. Part No.	No. of Drawers	H x W x D (Inches)	Stock No.	Price Each 1-9
SPC11294	20	11.25 x 12 x 6	34C7537	43.27
SPC11295	26	16.50 x 12 x 6	34C7538	58.61
SPC11296	30	11.25 x 12 x 6	34C7539	44.01
SPC11297	45	16.50 x 12 x 6	34C7540	57.94

(68818)

PORTABLE SMALL PARTS COMPARTMENTED CASES

MADE IN USA

DURATOOL

- Handsome, Satchel-Style Cases with See-Through Lids, Molded from Rugged Copolymer Resin
- Comfortable Luggage-Style Handles; Positive Latches Keep Lids Securely Closed
- Adjustable Cases Have Removable Dividers for Custom Design
- Used by Professionals in Virtually Every Area of Sales or Service

SC-748

Boxes are molded from rustproof copolymer resins and feature tinted covers. **Mfg. part no. SC-748** is a 2-sided case and has 9 to 24 compartments per side. **Mfg. part no. SC-724** is the same, but 1-sided only. **8467 series** cases fit into **mfg. part nos 8537-0695** and **8537-0696** sliding racks, *ordered separately.* *on page 2126*

Mfg. Part No.	H x W x D	Compartments	Stock No.	Price Each 1-9
SMALL				
SC-724	11.75 x 15.50 x 2.50″	9-24 Adjustable	44N4956	31.47
SC-748	11.75 x 15.50 x 5.00″	18-48 Adjustable	44N4957	64.63
LARGE				
8467-0332	13.00 x 18.50 x 3.00″	4-16 Adjustable	16N079	39.08
8467-0333	13.00 x 18.50 x 3.00″	21 Fixed	16N080	36.18

(7226)

PLASTIC COMPARTMENT BOXES AND STORAGE RACKS

DURATOOL

MADE IN USA

- Ideal for storing small parts and slectronic components

8537-0714

Storage boxes manufactured from high-strength, oil-resistant polypropylene. Feature 2 snap latches and heavy-duty, reinforced hinges that allow lid to stand open. Handy metal storage racks hold 5 storage boxes. Rack features durable gray baked enamel finish. Keyhole slots permit wall mounting of rack. Convenient handle on top of rack can be removed for stacking. Racks enable use of floor or table-top space.

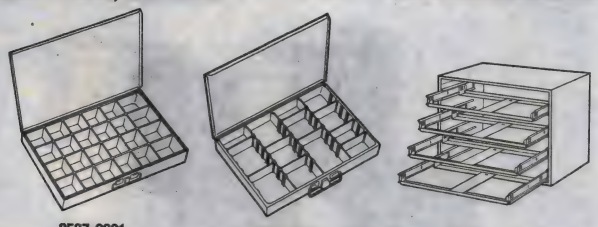
Mfg. Part No.	H x W x D	Compartments	Stock No.	Price Each 1-4
SMALL				
8537-0705	1.75 x 11 x 6.75″	6	16N2329	13.52
8537-0706	1.75 x 11 x 6.75″	12	16N2330	12.03
8537-0707	1.75 x 11 x 6.75″	13	16N2331	13.52
8537-0708	1.75 x 11 x 6.75″	18	16N2332	6.84
LARGE				
8537-0709	2.31 x 13.13 x 9″	6	16N2333	17.01
8537-0712	2.31 x 13.13 x 9″	24	16N2336	16.79
8537-0713	13.25 x 13.50 x 9.12″	Rack Only	16N2337	85.35

(7225)

STORAGE PRODUCTS

SCOOP COMPARTMENT BOXES, SLIDING RACKS, AND BASES

MADE IN USA — DURATOOL



8537-0691 8537-0694 8537-0696

Durable rust- and acid-resistant steel boxes with gray baked-enamel finish. Feature high-impact plastic inserts with rounded design to ease part removal. **Mfg. part nos. 8537-0701** and **8537-0694** adjustable boxes allow customizing the number and size of compartments with 9 removable dividers. Drawers ride on coated slides and tracks and have stops to prevent accidental pull-out. Slide racks enable easy storage and access to 2 or 4 boxes. Reinforced metal rack bases support loaded boxes in the open position without tilting.

SMALL

Mfg. Part No.	H x W x D	Description	Stock No.	Price Each 1-4
8537-0699	2.00 x 13.38 x 9.25″	16 Compartment Box	16N2322	44.01

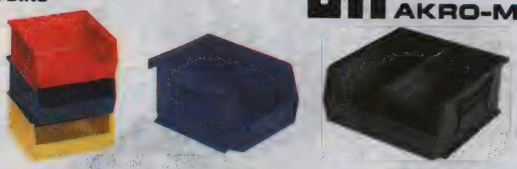
LARGE

Mfg. Part No.	H x W x D	Description	Stock No.	Price Each 1-4
8537-0692	3.00 x 18.00 x 12.00″	12 Compartment Box	16N2315	64.92
8537-0691	3.00 x 18.00 x 12.00″	24 Compartment Box	16N2314	64.62
8537-0694	3.00 x 18.00 x 12.00″	Adjustable Box	16N2317	69.24

(7227)

AKROBINS® AND ESD AKROBINS® STORAGE BINS

AKRO-MILS



30-235 30-210 30-220 ESD

Optimize storage space and organize more efficiently by using AkroBin® heavy-duty storage bins. Sturdy, one-piece molded polypropylene construction is water-, rust-, and corrosion-proof and unaffected by weak acids and alkalis. Easily stacked together or hang from Akro-Mils louvered racks and panels, rail racks, and carts for high-density storage. Choose from a wide assortment of sizes. Color: blue. Also available in red, yellow, green and stone; *go online or call.*

30320

AKROBINS®

Mfg. Part No.	Inside Dimensions (Inches) L	W	H	Stock No.	Price Each 1-9
30-210 BLUE	4¾	3 7/16	2 13/16	80W089	1.70
30-220 BLUE	6¾	3 7/16	2 13/16	80W090	3.17
30-230 BLUE	10¼	4⅜	4¾	80W091	7.85
30-235 BLUE	10¼	10	4¾	46F7471	12.27
30-239 BLUE	10	6 9/16	6¾	46F7472	12.79
30-240 BLUE	14	6 9/16	6¾	80W092	15.43
30-250 BLUE	14	14¾	6¾	80W093	17.69

33″ WIDE AKROBINS® — 33″W x 8⅝″L x 5″H, 80-LB. CAPACITY

These 33″ wide AkroBins® are great for storing multiple sizes and shapes of materials including extra long parts. Heavy-duty polypropylene construction with rigid grid design on base for additional load support and reinforced sides for secure stacking. Features full-width hanger lip to support bin on hanging systems. Fits on standard Akro-Mils rail, louver and 36″ shelf systems. Large label area on front accommodates multiple labels. Choice of five colors: blue, red, yellow, green and stone. Removable bin dividers for creating up to eight internal compartments are available; *go online or call.*

Mfg. Part No.	Color	Stock No.	Price Each 1-9
30320BLUE	Blue	84M7536	22.13

ESD AKROBINS®

ESD AkroBins® containers dissipate electrostatic charges which can severely damage sensitive electronic components. Color: black only.

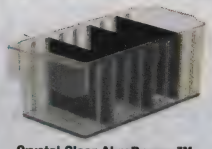
Mfg. Part No.	Fit Bench Rack*	Inside Dimensions (Inches) L	W	H	Stock No.	Price Each 1-9
30210ESD	40	4¾	3 7/16	2 13/16	48F2479	5.71
30220ESD	40	6¾	3 7/16	2 13/16	48F2480	7.69
30230ESD	18	10¼	4⅜	4¾	48F2482	17.28
30235ESD	9	10¼	10	4¾	48F2483	27.59
30240ESD	8	14	6 9/16	6¾	48F2484	45.30

(7133)

AKRODRAWERS

AKRO-MILS

Gray, Yellow, Blue, Red, Crystal Clear



Crystal Clear AkroDrawer™ shown with Dividers

Cover, Store, Protect and More with AkroDrawers™

- Choice of five convenient sizes
- Choice of five colors – Crystal Clear, Red, Blue, Yellow and Gray
- Colors made of high-impact polystyrene
- Crystal Clear made of durable acrylic blend to keep contents visible
- Stackable to optimize space
- Wide front handle for easy gripping
- Sturdy backstop tab allows AkroDrawers™ to hang securely from shelves

AkroDrawers™ are designed for use in a variety of environments — from industrial to health care. Helps keep supplies, parts, tools and other materials secure, dust-free, and organized. Freestanding or used with available shelving, racks and mobile carts. Offered in 12″ or 18″ depths to work with compatible shelving. Easy to label and color code inventory for quick identification of parts and supplies. AkroDrawers™ drawer dividers, *ordered separately below,* help keep contents neatly separated in drawers.

AKRODRAWERS™

Mfg. Part No.**	Outside Dim. (In.) L	W	H	Bottom Dim. (In.) L	W	H	Load Capacity (lbs.)	Use with Divider	Stock No.	Price Each 1-49
31142 BLUE	11⅝	3¾	4⅝	10¼	3	4 7/16	15	41440	83R7099	8.60
31142 RED	11⅝	3¾	4⅝	10¼	3	4 7/16	15	41440	83R7102	8.04
31142 YELLOW	11⅝	3¾	4⅝	10¼	3	4 7/16	15	41440	83R7103	8.04
31142 GRAY	11⅝	3¾	4⅝	10¼	3	4 7/16	15	41440	83R7101	8.04
31142 CRYSTAL CLEAR	11⅝	3¾	4⅝	10¼	3	4 7/16	15	41440	83R7100	11.38
31162 BLUE	11⅝	5 9/16	4⅝	10¼	4⅞	4 7/16	20	41460	83R7104	9.46
31162 RED	11⅝	5 9/16	4⅝	10¼	4⅞	4 7/16	20	41460	83R7107	8.84
31162 YELLOW	11⅝	5 9/16	4⅝	10¼	4⅞	4 7/16	20	41460	83R7108	8.84
31162 GRAY	11⅝	5 9/16	4⅝	10¼	4⅞	4 7/16	20	41460	83R7106	8.84
31162 CRYSTAL CLEAR	11⅝	5 9/16	4⅝	10¼	4⅞	4 7/16	20	41460	83R7105	12.84
31182 BLUE	11⅝	8⅜	4⅝	10¼	7⅝	4 7/16	20	41480	83R7114	11.65
31182 RED	11⅝	8⅜	4⅝	10¼	7⅝	4 7/16	20	41480	83R7117	10.89
31182 YELLOW	11⅝	8⅜	4⅝	10¼	7⅝	4 7/16	20	41480	83R7118	10.89
31182 GRAY	11⅝	8⅜	4⅝	10¼	7⅝	4 7/16	20	41480	83R7116	10.89
31182 CRYSTAL CLEAR	11⅝	8⅜	4⅝	10¼	7⅝	4 7/16	20	41480	83R7115	14.94
31168 BLUE	17⅝	5 9/16	4⅝	16¼	4⅞	4 7/16	25	41460	83R7109	12.97
31168 RED	17⅝	5 9/16	4⅝	16¼	4⅞	4 7/16	25	41460	83R7112	12.97
31168 YELLOW	17⅝	5 9/16	4⅝	16¼	4⅞	4 7/16	25	41460	83R7113	12.97
31168 GRAY	17⅝	5 9/16	4⅝	16¼	4⅞	4 7/16	25	41460	83R7111	12.97
31168 CRYSTAL CLEAR	17⅝	5 9/16	4⅝	16¼	4⅞	4 7/16	25	41460	83R7110	18.30
31188 BLUE	17⅝	8⅜	4⅝	16¼	7⅝	4 7/16	25	41480	83R7119	14.31
31188 RED	17⅝	8⅜	4⅝	16¼	7⅝	4 7/16	25	41480	83R7122	14.31
31188 YELLOW	17⅝	8⅜	4⅝	16¼	7⅝	4 7/16	25	41480	83R7123	14.31
31188 GRAY	17⅝	8⅜	4⅝	16¼	7⅝	4 7/16	25	41480	83R7121	15.31
31188 CRYSTAL CLEAR	17⅝	8⅜	4⅝	16¼	7⅝	4 7/16	25	41480	83R7120	23.58

Suffix in **mfg. part no. indicates color

AKRODRAWER™ DIVIDERS — BLACK

Mfg. Part No.	Dimensions (In.) W	H	D	Pkg of	Stock No.	Price per Pkg. 1-49
41440	3 9/16	4⅛	13/16	6	99R3219	8.32
41460	5 21/64	4⅛	13/16	6	99R3221	8.61
41480	8 9/64	4⅛	1/10	6	99R3222	14.59

(189997)

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Affordable, performance board level & box build components at

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(212569)

19 SERIES HEAVY-DUTY STEEL STORAGE CABINETS AND STORAGE-GO-ROUND STORAGE CABINET RACK

AKRO-MILS

- For industrial-strength small parts storage that stands up to the toughest environment
- Two steel cabinets fit side-by-side on standard 36″ wide shelving
- Choice of five different drawer sizes
- Removable drawers are rust-, corrosion- and dent-proof
- Molded-in label holder and transparent drawers allow instant content identification
- Unique rear stop tab on each drawer prevents spills

Storage-Go-Round with Turntable Base

19-715

19 series heavy-duty steel cabinets organize and protect components. A variety of drawer configurations provide versatile storage solutions. Cabinet features heavy-duty welded steel frame with gray chip-proof, powder-coated finish. High-impact, polypropylene transparent drawers are removable and dividable. Comes complete with two dividers and one label for each drawer. Cabinets stack securely and are wall mountable or create a carousel-type storage system with **mfg. part no. 98325** Storage-Go-Round storage cabinet rack; *ordered separately below.*

19 SERIES HEAVY-DUTY STEEL STORAGE CABINETS

Mfg. Part No.	No. of Drawers	Drawer Dimensions L x W x H (in.)	Stock No.	Price Each 1-5
19228	28	10 9/16 x 2 9/16 x 2 1/16	27C9417	223.83
19-320	20	10 9/16 x 3 9/16 x 2 1/16	80W062	223.54
19-416	16	10 9/16 x 4 x 2 1/8	80W050	214.00
19-715	15	10 9/16 x 3 9/16 x 3 1/16	80W063	210.83
19-909	9	10 9/16 x 5 9/16 x 3 1/16	80W064	209.11
19228RED	28	11 x17 x11	67T1899	208.90
19228BLUE	28	11 x17 x11	67T1898	208.90
19228YELLOW	28	11 x17 x11	67T1900	208.90
19228BLACK	28	11 x17 x11	67T1897	208.90
19320RED	20	11 x17 x11	67T1903	206.83
19320BLUE	20	11 x17 x11	67T1902	206.83
19320YELLOW	20	11 x17 x11	67T1904	206.83
19320BLACK	20	11 x17 x11	67T1901	206.83
19416RED	16	11 x17 x11	67T1907	206.92
19416BLUE	16	11 x17 x11	67T1906	206.92
19416YELLOW	16	11 x17 x11	67T1908	216.23
19416BLACK	16	11 x17 x11	67T1905	206.92
19715RED	15	11 x17 x11	67T1911	203.85
19715BLUE	15	11 x17 x11	67T1910	213.02
19715YELLOW	15	11 x17 x11	67T1912	203.85
19715BLACK	15	11 x17 x11	67T1909	203.85
19909RED	9	11 x17 x11	67T1915	193.48

STORAGE-GO-ROUND STORAGE CABINET RACK — 31″L x 31″W x 60″H
Storage-Go-Round storage cabinet rack with turntable base is a rotating storage system for housing and organizing small parts, tools, and products. Holds up to 20 **19 series** 17″ wide steel storage cabinets; *ordered separately above.* Provides access to as many as 560 drawers in less than three square feet of floor space. Holds up to 1000 lbs. of parts. Assembly required.

Mfg. Part No.	Description	Stock No.	Price Each
98325	Storage-Go-Round Storage Cabinet Rack	66F4373	782.99

(7112)

STACKABLE STORAGE CABINETS

AKRO-MILS

- Strong plastic cabinets organize and protect components
- A variety of drawer configurations provide versatile storage solutions
- Cabinets stack securely and are wall mountable
- Polypropylene drawers: unbreakable, flexible, strong, see-through, chemical resistant

Mfg. part nos. 10126 and **10144** combo cabinets feature two drawer sizes.

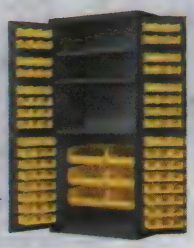
Mfg. Part No.	Cabinet Size L x W x H (in.)	Drawer Size L x W x H (in.)	Stock No.	Price Each 1-5
10116	6 3/8 x 10 9/16 x 8 1/2	5 1/4 x 2 1/8 x 1 1/2	30H0871	33.67
10126	6 3/8 x 20 x 10 11/32	(20) 5 1/4 x 2 1/8 x 1 1/2 (6) 5 1/4 x 4 3/8 x 2	30H0873	50.05
10124	6 3/8 x 20 x 15 13/16	5 1/4 x 4 3/8 x 2	30H0872	66.95
10144	6 3/8 x 20 x 15 13/16	(32) 5 1/4 x 2 1/8 x 1 1/2 (12) 5 1/4 x 4 3/8 x 2	30H0874	77.50
10164	6 3/8 x 20 x 15/13/16	5 1/4 x 2 1/8 x 1 1/2	30H0875	69.38

(7129)

AKROBIN® CABINETS WITH REMOVABLE STORAGE BINS

AKRO-MILS

- Fully assembled and ready-to-use
- Constructed from 16-gauge steel
- Popular gray powder-coat finish
- Removable, bright yellow AkroBin® storage bins included
- Louvered panel on back wall
- Locking double doors with two keys



AC3624Y3AS
AkroBin® Cabinet with 3 Shelves

AC3618Y
AkroBin® Cabinet with Flush Doors

AkroBin® steel cabinets are perfect for storing and protecting parts, tools, supplies and personal belongings from dust, damage and theft. Each cabinet comes complete with yellow AkroBin® polypropylene storage bins in assorted sizes to customize a unique storage system. Additional AkroBins® are available; *order separately on page 2126.*

AKROBIN® CABINET WITH 3 SHELVES AND 102 STORAGE BINS — 36″W x 24″D x 78″H
Mfg. part no. AC3624Y3AS AkroBin® cabinet features three full 24″ shelves, louvered panel on doors and back wall to securely hold up to 102 AkroBins®. Comes complete with 102 yellow AkroBin® polypropylene storage bins: 48 5 3/8″L x 4 1/8″W x 3″H bins, 48 7 3/8″L x 4 1/8″W x 3″H bins and six 14 3/4″L x 16 1/2″W x 7″H bins.

Mfg. Part No.	Description	Stock No.	Price Each
AC3624Y3AS	AkroBin® Cabinet with 3 Shelves and 102 Storage Bins	41J4061	2166.58

AKROBIN® CABINET WITH FLUSH DOORS AND 42 STORAGE BINS — 36″W x 18″D x 78″H
Mfg. part no. AC3618Y AkroBin® cabinet features flush doors and louvered panel on back wall that holds up to 42 AkroBins®. Comes complete with 42 yellow AkroBin® polypropylene storage bins: 24 10-7/8″L x 5-1/2″W x 5″H bins, 12 14-3/4″L x 8-1/4″W x 7″H bins and six 14-3/4″L x 16-1/2″W x 7″H bins.

AC3618Y	AkroBin® Cabinet with Flush Doors and 42 Storage Bins	41J4060	1823.67

(84374)

STORAGE CASES

AKRO-MILS

- Grid Design in Lid Keeps Items in Their Own Compartments
- Small and Medium Cases include 4 Front-to-Back Adjustable Dividers
- Large Cases Include 5 Front-to-Back Adjustable Dividers

Mfg. Part No.	Description	Fixed Dividers	(L x W x H)	Stock No.	Price Each 1-14
05705	Small Case	2	8 5/8 x 5 1/8 x 1 1/8″	32C8287	7.39
05805	Medium Case	2	11 x 7 x 2 3/8″	32C8290	10.98
05905	Large Case	2	14 3/8 x 9 1/2 x 2 1/2″	32C8293	18.71

(68790)

HEAVY-DUTY TOOL BOXES

AKRO-MILS

- Rugged Plastic- Akro ProBoxes.
- Color: Red
- Carry fully loaded boxes with confidence.
- Steel draw latch snaps tightly closed.
- Handle provides comfortable, secure grip.
- Oversized padlock eye accepts large padlock for securing tools.
- Trays included in 14″, 17″, and 20″ Akro ProBox.

Mfg. Part No.	L x W x H (Inches)	Stock No.	Price Each
09912	6 x 12 x 4	92C0704	5.58
09514	8 x 14 x 8 1/8	30H0867	15.66

(7131)

DURATOOL AT NEWARK ELEMENT14

For your production and facilities needs, from soldering stations to tool sets & more.
newark.com/duratool

(212563)

STORAGE PRODUCTS • TOOL BAGS & CARRIERS

PROCART™ WORK CARTS

AKRO-MILS

Large and Small ProCarts™ (Shown with Hinged Sides Up)

Large ProCart™ (Shown with Installed 9-Rail Hanging System Holding AkroBins® — *All Ordered Separately*)

- Converts to a flat-top or box-top by flipping hinged side gates on shelves up or down
- Molded-in top storage compartments to keep small items within easy reach during transport
- Comfortable, full-width handle provides easy maneuverability
- I-beam post makes loading/unloading large boxes on lower shelf easy
- Smooth, rounded corners and edges for added safety

ProCart™ work carts are customizable work centers perfect for wherever portable storage is needed. Constructed of high-density polyethylene structural foam that's dent-resistant, rustproof and never needs painting. Ergonomic and user-friendly for easy maneuverability. Durable 5″ non-marking wheels — 2 locking, 2 non-locking. Maximum cart load capacity 400 lbs.; 200 lbs. per top and bottom shelf. Assembly required. **Mfg. part nos. 30900** and **30906** 9-rail hanging systems add the capability of hanging AkroBins® and modular cabinets on the ProCart™; *order separately below.* A wide assortment of AkroBins® are available; *order separately on page 2126.*

PROCARTS™

Mfg. Part No.	Description	L x W x H (in.)	Stock No.	Price Each
30930G	Small ProCart™	40 x 19½ x 34¾	95B3789	311.43
30936G	Large ProCart™	45 x 24 x 34¾	95B3790	367.50
9-RAIL HANGING SYSTEMS FOR PROCART™				
30900	9-Rail Hanging System for Small ProCart™	30¾ x 1¾ x 1	95B3787	90.50
30906	9-Rail Hanging System for Large ProCart™	35¾ x 1¾ x 1	95B3788	97.22

(47983)

FLAT SHELF CARTS

Rubbermaid Commercial Products

Carts for moving PCs and workstations and transport of oversized, bulky items. Non-marking casters for easy movement. Capacity: 500 lbs., 250 lbs. per shelf. Dimensions: **4505 series** 38L x 19W x 33″H, **4594 series** 38L x 19″W, **4525 series** 44L x 26W x 33″H. Color: Beige. Also available in black; *go online or call.*

4505

Mfg. Part No.	Description	Stock No.	Price Each 1-2
4505-BEIGE	Cart	01F182	421.63
4525-BEIGE	Cart	01F183	451.03

(12330)

HEAVY-DUTY SERVICE/ UTILITY CARTS

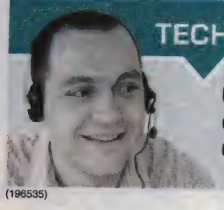
Rubbermaid Commercial Products

Perfect for transporting equipment and heavy loads in any environment. Sturdy structural foam construction won't rust, dent, chip or peel. Rounded corners protect walls and furniture. Lightweight and maneuverable. Large, non-marking casters. Shown with optional middle shelf, *ordered separately; go online or call.* Capacity: 500 lbs. Color: Beige. Also available in black; *go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each
4500-88BEIGE	Two-Shelf Utility Cart 39L x 18W x 33″H	83H2306	381.22
4520-88BEIGE	Two-Shelf Utility Cart, 45L x 26W x 33″H	83H4391	418.00

(12331)

TECHNICAL SUPPORT HOTLINE



Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

TOOL CASES

platt

600T-CB

369TH-SGSH

410TH-SGSH

777TH-SGSH

- **Mfg. part no. 600T-CB** has durable ribbed outershell, molded handle, chrome-plated keylocks and two tool pallets
- **Mfg. part no. 800T-CB** has chemical-resistant shell, extruded aluminum frame, golf-grip handle, chrome-plated keylocks and two tool pallets
- **Mfg. part no. 928T-CB** has heavy-duty frame with gasket, golf-grip handle and two tool pallets
- **Mfg. part no. 920TC-CB** has durable ribbed shell, aluminum frame, cast key locks, golf-grip handle, piano hinge, molded adjustable bottom divider; one pocket and two tool pallets
- **Mfg. part no. 369TH-SGSH** is larger in size with recessed hardware, combo lock, telescoping handle, wheels and super-size tool pallets
- **Mfg. part no. 777TH-SGSH** has recessed hardware, combo lock, piano hinge, pocket in lid, tool pallets and two interior straps to hold contents in place
- **Mfg. part no. 410TH-SGSH** is stackable and has molded-in bumper system, key locking latches, piano hinge, combo lock

All cases come in popular black. Additional case sizes and styles are available; *go online or call.* **NOTE:** tools shown are not included.

Mfg. Part No.	Description	Material	Exterior L x W x D (in.)	Stock No.	Price Each
600T-CB	Standard Tool Case	Polyethylene	18 x 13 x 6	97B8318	206.78
800T-CB	Deluxe Tool Case	Polypropylene	18 x 13 x 6	87F3595	216.83
928T-CB	Deluxe Tool Case with Chrome Hardware	Polyethylene	18 x 13 x 8	87F3581	244.85
920TC-CB*	Deluxe Tool Case with Chrome Hardware	Polyethylene	18 x 13 x 9	97H1646	281.08
369TH-SGSH*	Super-Sized Tool Case with Wheels and Telescoping Handle	Polyethylene	17½ x 14⅝ x 9	83F7705	503.29
777TH-SGSH*	Guardsman ATA Tool Case with Wheels and Telescoping Handle	Polyethylene	19 x 15 x 10	91F2013	761.70
410TH-SGSH	Rotational Molded Tool Case with Wheels and Telescoping Handle	Polyethylene	19½ x 17¼ x 12½	97H1495	582.86

*Contains built-in TSA lock to protect contents when traveling

(5564)

ALL-PURPOSE EQUIPMENT CASES

platt

ABS Cases:
- Scuff-resistant molded ABS thermoplastic shell
- Extruded aluminum rim, keylocks, and strong handle

Polyethylene Cases:
- Impact-resistant HMW Polyethylene shell
- Heavy-duty aluminum valance
- Cast chrome keylocks
- Golf-grip handle

ABS

Polyethylene

All cases are filled with layers of cubed foam and a flat cushion in the bottom and convoluted and/or flat cushion in the lid. Ideal for transporting and displaying of delicate items. Perfect for medical or audiovisual equipment. All cases come in popular black. Additional case sizes and styles are available; *go online or call.*

Mfg. Part No.	Material	Interior L x W x D (in.)	Body Depth (in.)	Stock No.	Price Each
1412*	ABS	12 x 8 x 5	3	87F3584	86.32
1416*	ABS	16 x 12 x 5	3	87F3585	101.97
1419*	ABS	18 x 13 x 5	3	94F7677	110.99

CONTINUED

ALL-PURPOSE EQUIPMENT CASES (CONT.)

Mfg. Part No.	Material	Interior L x W x D (in.)	Body Depth (in.)	Stock No.	Price Each
1425**	ABS	18 x 13 x 7	4	87F3586	142.99
221609	Polyethylene	22 x 16 x 9	5	87F3589	283.46

*Light-duty valance; **Medium-duty valance
(5586)

FOAM-FILLED BLOW-MOLDED CASES

- High-density polyethylene with double-wall construction
- Textured exterior resists dents, cracking, scuffs and extreme temperatures
- Filled with protective foam cushioning
- Comfortable molded-in handle
- All cases come in popular black

107 207 - 707

The economical solution to "make-your-own" case needs, these blow-molded cases are filled with layers of cubed foam and a flat cushion in the bottom and convoluted and/or flat cushion in the lid. Feature mechanical latches that are field replaceable and a mechanical hinge system that is made to last. Meets U.S. 94B specifications as an electrical insulator and are impervious to chemical attack.

Mfg. Part No.	Interior L x W x D (in.)	Exterior L x W x D (in.)	Stock No.	Price Each
107*	7.5 x 5 x 2.19	8.5 x 6 x 2.5	94B3263	22.01
207	9.5 x 6 x 2.69	10.5 x 7 x 3	92B8915	26.05
307	11 x 7 x 3.43	12 x 8 x 3.75	91B4224	39.88
407	12.4 x 8.9 x 5.15	13.5 x 10 x 5.5	92B9510	51.33
507	13.9 x 9.9 x 4.03	15 x 11 x 4.38	91B0539	60.66
707	17.9 x 12.7 x 7.14	19 x 14 x 7.5	50B6685	113.51

*No handle
(90324)

PELICAN PROTECTOR WATERTIGHT EQUIPMENT CASES

1400 1440 1630

- Watertight and airtight to 30' for ultimate in protection
- Lightweight, space-age structural resin construction
- Open cell core with solid wall design
- Neoprene O-ring seal and automatic pressure equalization valve
- Easy-open double-throw latches
- All cases come in popular black
- Manufacturer's unconditional lifetime guarantee of excellence

These watertight, crushproof and dustproof equipment cases feature prescored Pick 'N' Pluck™ (no cutting required) with convoluted lid foam, locking flanges, and a comfortable molded fold-down handle. Additional case sizes and styles are available; *go online or call.*

Mfg. Part No.	Interior L x W x D (In.)	Stock No.	Price Each
1150WF	4.375 x 7.563 x 9.25	97H1344	115.58
1300WF	9.87 x 7 x 6.12	66H7558	100.91
1400WF	6.875 x 13 x 16	97H1356	304.00
1450WF	14.62 x 10.18 x 6	93B7541	192.61
1500WF	16.75 x 11.18 x 6.12	25C4185	233.08
1510WF*	19.75 x 11 x 7.6	46M4324	365.94
1550WF	18.43 x 14 x 7.62	25C4186	285.52
1600WF	21.43 x 16.5 x 7.87	97B9396	337.57
1620WF*	21.37 x 16.31 x 12.56	57H7190	465.66
1630WF**	27.7 x 20.98 x 15.5	46M4023	641.51
1650WF*	28.5 x 17.4 x 10.5	25C4188	479.27
1660WF*	28.18 x 19.75 x 17.62	87K3079	635.62

*Has wheels and retractable handle; **Has wheels
(68047)

ZIPPER-STYLE SOFT-SIDE TOOL CASES

- Constructed of abrasion-, puncture- and tear-resistant nylon
- Ideal for service applications
- All cases come in popular black

688ZT

Additional case sizes and styles are available; *go online or call.* **NOTE:** tools shown are not included.

Mfg. Part No.	Description	Exterior L x W x D (in.)	No. of Interior Tool Pockets	Stock No.	Price Each
660ZT	Trouble-Shooter Tool Case	13 x 10 x 2	29	87F3582	113.49
669ZT	Master Technician Tool Case	15½ x 11 x 2	47	66F1485	161.94
695ZT	Field Service Tech Tool Case	17½ x 10¼ x 6	39	22C7804	268.41
688ZT	Double-Sided LAN Tool Case	17 x 12¼ x 5	59	97H1565	283.52
689ZT*	Combo Tool and Computer Attache Case	18 x 13 x 6	47	83F7706	236.64

*Contains padded computer pocket
(5565)

MECHANIC'S TOOL BAGS

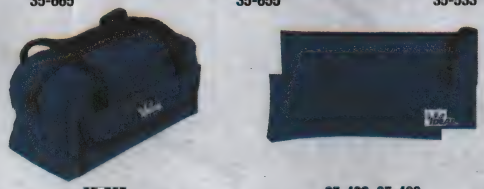
- Heavy-Duty Nylon Construction for Durability
- 8 Inside Pockets and 2 Pouches on the Outside Keep Smaller Tools and Parts Better Organized
- Water and Stain Resistant Exteriors
- Outside Dimensions: 12L x 6W x 6.5"D

Mfg. Part No.	Description	Stock No.	Price Each
MTB	Black	25C4142	28.76
MTB-BLU	Blue	16C1530	29.09
MTB-BURG	Burgundy	25C4143	28.76

(68046)

TOOLS AND PARTS BAGS

35-665 35-655 35-533



35-535 35-402, 35-403

Mfg. part no. 35-665 BucketBag™ tool carrier fits perfectly over the rim of a standard five-gallon bucket. Has 43 pockets, 36 pleated outside pockets and seven inside pockets. Rugged nylon polyester construction. **Mfg. part no. 35-655** Divider Pouch™ small parts bag has six internally divided pockets, each 5" in depth. An outside drawstring closes the pouch. **Mfg. part no. 35-533** Tool Carrier™ natural canvas bag has 18 stitched, outer pockets. 12 pockets are 2⅛ W x 5⅞"D, six pockets are 4⅜ W x 7⅜"D. Velcro® closure. **Mfg. part no. 35-535** mechanic's tool bag has a large capacity, zippered main storage area. Eight interior pockets keep small tools in place and easy to find. Two 10" x 4" exterior, snap-closure pockets hold larger tools or loose items. **Mfg. part nos. 35-402** and **35-403** zippered pouches available in two lengths are constructed from a durable, water-resistant material and feature a heavy-duty, self-repairing zipper opening.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
35-533	Tool Carrier™ (Natural Canvas)	52F9080	91.20
35-535	Mechanic's Tool Bag	48F1323	49.73
35-402	Zipper Pouch — 10½"L	23K9300	8.79
35-403	Zipper Pouch — 12½"L	37J0483	16.68

(5789)

ZIPPER TOOL BAGS

KLEIN TOOLS

5139

5139B

- Conveniently stores pliers, wrenches, drivers, other tools and spare parts
- Overall size: 12½" long x 7" high

Mfg. part no. 5139 sturdy, white tool bag constructed of No. 10 canvas features a strong zipper closure. **Mfg. part no. 5139B** durable, black tool bag constructed of Cordura® ballistic nylon, a high-performance fabric resistant to abrasions, tears, and scuffs. Features a heavy-duty nylon zipper closure.

Mfg. Part No.	Description	Stock No.	Price Each
5139	White No. 10 Canvas Zipper Tool Bag	94F5772	17.00
5139B	Black Cordura® Ballistic Nylon Zipper Tool Bag	50M2248	17.45

Cordura® is a registered trademark of INVISTA for durable fabrics
(56577)

HAND CLAMP TOOL

DURATOOL

- Adjustable joints for movement and placement in all directions
- Heavy cast-iron base for stability (mfg. part no. 22-9730 only)
- Distortion free magnifying glass for closer inspection (mfg. part no. 22-9730 only)
- Adjustable arms with alligator clips hold objects for hand free work

22-9730

Mfg. Part No.	Description	Stock No.	Price Each Each
22-9730	Clamp Tool with Magnifier	58M3108	6.45
21-10270	Helping Hands Magnifier with LED Light	47T9912	8.49
21-10275	Helping Hands Tool with 4X Magnifier	47T9913	2.85
21-10280	Helping Hands Tool with 2X Magnifier	47T9914	3.87
21-10285	Helping Hands Tool	47T9915	2.99

(116705)

INSPECTION MIRRORS

DURATOOL

TL10483

TL10484

21-8500

Inspection mirror contains a chrome finish telescopic shaft, non slip cushion grip handle which, extends from 14" to 30", Mirror size: 2" x 4". **Mfg. part no. TL0484** telescopic mirror contains a chrome finish telescopic shaft with pocket clip which can extend from 5" to 18½". Diameter: 1¼". **Mfg. part no. 21-8500** adjustable telescopic mirror has double jointed head and pivots a full 360°. Includes a pocket clip and extends 24" to help see around tight spots. Diameter: 1½".

Mfg Part No.	Description	Stock No.	Price Each 1-49
TL10483	Inspection Mirror, 2x4"	97M9417	3.90
TL10484	Telescopic Inspection Mirror	97M9418	2.34
21-8500	Telescopic Inspection Mirror	12M5187	5.45

(116727)

INSPECTION MIRRORS AND MAGNIFIER

GENERAL

555, 557, 558, 560

565

80557

80560

Mfg. part no. 555 1¼" diameter mirror. Plated holder. Knurled handle has ball-and-socket joints. 8"L. **Mfg. part no. 557** 2½" diameter mirror with telescoping 15" handle. **Mfg. part no. 558** oval 1 x 2" mirror. 9"L. **Mfg. part no. 560** oblong 3½ x 2" telescoping mirror. 11½"L; extends to 16".

Mfg. Part No.	Description	Stock No.	Price Each
555	1-1/4" Diameter Inspection Mirror	50F9084	10.86
557	2-1/2" Diameter Inspection Mirror	95B0366	15.54
558	Oval 1 x 2" Inspection Mirror	34F443	13.03
560	Oblong 3-1/2 x 2" Telescoping Inspection Mirror	87F1158	17.29

Mfg. part no. 565 oblong illuminated magnifier. 2 x 4" shatterproof 2.5 power lens. Includes 5-power bifocal insert, bulb, batteries. **Mfg. part no. 531** 2.5 power pocket magnifier folds into storage case.

565	2 x 4" Oblong Illuminated Magnifier	87F1161	47.28

Telescoping shaft extends 12 to 33 in. on rectangular lighted mirror **mfg. part no. 80560** and to 34-1/4 in. on round mirror **mfg. part no. 80557**, and the shatter-resistant mirror sits on a 360° degree swivel head for accurate positioning. Lighted round inspection mirror:1.875 in. (45mm) dia. lighted rectangular inspection mirror: 2 x 3 in. (50 x 75mm). CE approved.

80557	Telescoping Lighted Round Inspection Mirror	88T7532	22.87
80560	Telescoping Lighted Rectangular Inspection Mirror	88T7533	22.87

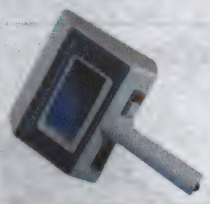
(5589)

UV INSPECTION LAMP

RoHS Compliant Available

LUXO

- Two 4W ultraviolet bulbs for precise inspection
- Also includes: Two 4 Watt fluorescent bulbs for normal use
- Dual switching for "Fault Finder" and normal inspection modes
- 5-Diopter, 4" X 2.5" lens with 2.25X magnification
- Color: Gray



Perfect for inspection of conformal coatings. Coatings glow brilliantly under UV black illumination, especially when magnified through a five-diopter (2.25X) optical-quality glass lens. Unique combination of two 4W UV black bulbs and two 4W fluorescent white bulbs is also perfect for inspection of welds, solder joints, flux residues and hairline stress cracks.

Mfg. Part No.	Description	Stock No.	Price Each
● 16401	UV Inspection Lamp	44F1260	340.00

(5613)

PROVUE TOUCH LED MAGNIFYING LAMPS

AVEN

- Magnification: 1.75X (3-diopter) 3.00X (8-diopter) spot lens
- Lens diameter: 7"
- Adjustable arm length: 35"
- Color: white
- Bulb: **mfg. part no. 20865-LED** 108 LEDs, **mfg. part no. 20865-LDV** 108 White LEDs/72 UV LEDs
- Weight: 10.8lbs.

ProVue Touch LED magnifying lamps feature touch sensitive 3 stage on-off switch & for controlling light intensity and modern slim design. Industrial grade spring balanced enclosed arm stays put in any position. Lens can be easily removed and replaced when necessary with lens cover included. Dual voltage: operates at 110V or 220V.

Mfg. Part No.	Description	Stock No.	Price Each
26508-LED	ProVue Touch LED Magnifying Lamp	83T1978	316.00
26508-LDV	ProVue Touch Dual LED Magnifying Lamp	92T3367	355.00

(209463)

MIGHTY VUE AND PROVUE MAGNIFYING LAMPS

AVEN

- Magnification: 1.75X (3 Diopter)
- Lens size: 7 x 6"
- Adjustable arm length: 30" or **mfg. part no. 26505-LED** only 32"
- Bulb: two 9 watt flourescent bulbs
- Color: ivory or **mfg. part no. 26505-ESD** black ESD safe
- Weight: 10lbs.

Mighty Vue Magnifying Lamp features a large 7 x 6in, 1.75x (3 Diopter) crystal clear lens mounted to a high tech style mar resistant plastic housing with dual light sources. The large rectangular viewing area enables comfortable shadow free viewing with both eyes. The housing is mounted on an internal spring balanced arm with a 30" or 32" reach. Comes with a 5ft. power cord. Swing-away lens 5 diopter (2.25x) is alo availble; *go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each
26505-SIV	Mighty Vue Magnifying Lamp, Ivory	**26R9352**	170.00
26505-ESD	Mighty Vue Magnifying Lamp, ESD Safe	**15R7908**	187.00
26505-LED	LED Powered Mighty Vue Magnifying Lamp	**58T8129**	185.00
26505-ESL	Mighty Vue Magnifying Lamp, Ivory, LED ESD	**66W1000**	190.00
26505-ESL-5D	Mighty Vue Magnifying Lamp-LED 5D ESD Safe	**29X6621**	250.00

PROVUE MAGNIFYING LAMP

The ProVue 8D Magnifying lamp is designed for viewing small parts. It is equipped with an ultra-bright 22-watt circular fluorescent bulb and a Crystal Clear 5" glass lens to provide 360° distortion free viewing. Metal housing is mounted on a 45" spring balanced arm that stays set in any position.

26501-8D	ProVue Magnifying Lamp, 8 Diopter, (3x)	**30X0498**	124.95
ACCESSORIES			
26505-B09	Fluorescent Bulb, 9 Watt	**26R9351**	9.97
26501-B22	Fluorescent Bulb, 22 Watt	**26R9343**	14.77
26501-SLA	Swing-Away Lens, 5 Diopter (2.25x)	**26R9346**	9.42
26501-AL3	Auxiliary Lens, 3 Diopter	**26R9342**	27.65
26501-RBLED	Replacement LED Board	**27R1471**	27.00
26501-RC	Replacement Clamp for 26501 Series Lamps	**60R3398**	8.43
26505-RC-ESD	Replacement Clamp for 26505-ESD Series Lamps	**29X6622**	10.00
26505-RC	Replacement Clamp for 26505-SIV Series Lamps	**99W1625**	10.00

(206208)

KFM LED MAGNIFIERS

LUXO

- 3-diopter (1.75X) or 5-diopter (2.25X) optical quality glass lens
- Fully enclosed neck assembly and 30" or 45" reach
- Heavy-duty internal-spring K-arm
- Edge clamp or weighted base
- Color: black (ESD safe), light grey
- UL/CUL listed

KFM LED is Luxo's newest, and most energy-efficient, addition to its growing line of KFM magnifiers ideal for any inspection or assembly application. Now with a dimmable 9W LED lightsource which produces 2500 lux at 12" working distance, it produces nearly 75% greater light output than traditional KFM models. A ¾ hour automatic shut-off feature further ensures energy savings. No knobs to tighten, nothing to adjust a flexible, self-balancing shade and hands-free neck design allows the lamp head to be secured in any position.

A ESD-Safe version for use in static-sensitive environments is also available. The ESD-Safe lens guards against uncontrolled static dissipation and is protected with a special coating that alters the electrical characteristics at the surface of the material. The shade and arm are powder-coated with a metal-laced paint that measures 1010 Ω/sq. (static dissipative) making the surfaces no longer insulative. Triboelectric charging results in drastically lower voltages, especially since any charge (under 50 volts) is uniformly distributed throughout the entire surface of the unit's head assembly. 45" heavy-duty internal-spring K-arm. 5-diopter (2.25X) optical quality glass lens. Edge clamp mount. Color: black.

KFM LED, 9W, 120V

Mfg. Part No.	Arm Length (in.)mm	Diopter	Color	Mount	Stock No.	Price Each
18113BK	45/1143	3	Black	Edge Clamp	**85W3687**	340.00
18113LG	45/1143	3	Lt. Grey	Edge Clamp	**85W3688**	340.00
18115BK	30/762	5	Black	Edge Clamp	**85W3689**	350.00
18115LG	30/762	5	Lt. Grey	Edge Clamp	**85W3690**	350.00
18115WT	30/762	5	White	Edge Clamp	**11X2559**	395.00
18213LG	30/762	5	Lt. Grey	Edge Clamp	**85W3691**	340.00
18215LG	30/762	3	Lt. Grey	Edge Clamp	**85W3692**	350.00
18253LG	30/762	5	Lt. Grey	Weighted Base	**85W3693**	430.00
18255BK	30/762	3	Black	Weighted Base	**85W3694**	440.00
18255LG	30/762	5	Lt. Grey	Weighted Base	**85W3695**	440.00
ESD-SAFE, KFM LED, 9W, 120V						
18313BK	45/1143	5	Black	Edge Clamp	**85W3696**	445.00
18313LG	45/1143	5	Lt. Grey	Edge Clamp	**11X2560**	435.00

(209620)

LFM LED MAGNIFIERS

NEW

LUXO

- 9.5W dimmable LEDs (10W total power consumption)
- 4000°K color temperature
- Diecast aluminum housing
- 5" diameter lens
- 3 (1.75X) or 5diopter (2.25X) lens
- 45" or 30" heavy-duty internal spring K-arm
- Edgeclamp or weighted base mount
- Color: light grey

LFM LED Magnifier is Luxo's most cost-effective addition to its growing line of LED Magnifiers. 9.5W dimmable LEDs (with a total power consumption of 10W) with a 4000°K color temperature guarantees both energy savings and accurate color rendition. The LFM LED Magnifier is well-equipped for any inspection or assembly application.

Mfg. Part No.	Arm Length (in.)/mm	Mount	Diopter	Stock No.	Price Each
18345LG	45/1123	Edge Clamp	3	**09X6504**	165.00
18346LG	45/1123	Edge Clamp	5	**09X6505**	175.00
18350LG	30/762	Edge Clamp	3	**09X6506**	165.00
18351LG	30/762	Weighted Base	3	**09X6507**	230.00
18352LG	30/762	Edge Clamp	5	**09X6508**	175.00
18353LG	30/762	Weighted Base	5	**09X6509**	240.00

STAYS (Self-Traction Accessory Yield System) LENSES

Luxo's new STAYS lenses are for use with KFM LED, KFM, WAVE LED, WAVE+Plus, LFM LED and Circus Magnifiers. 4-diopter (2X), 6-diopter (2.5X), or 10-diopter (3.5X) lenses are available. The diameter of the STAYS lens itself is 2" (2.5" including the silicon gasket frame).

Mfg. Part No.	Working distance when used with a 3D/3.5D lens (in.)	Working distance when used with a 5D lens (in.)	Diopter	Stock No.	Price Each
50404	6	4	4	**09X6510**	65.00
50406	4	3.8	6	**09X6511**	68.00
50410	2.9	2.6	10	**09X6512**	75.00

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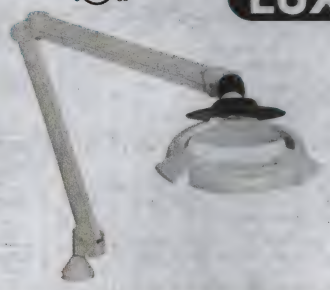
CIRCUS MAGNIFIERS

LUXO



- 6.5" diameter optical-quality white-crown lens
- 3.5- (1.88X) or 5-diopter (2.25X) magnification
- 45" covered spring-balanced arm
- Edge clamp mount
- Color: white
- UL/CUL listed

Luxo's Circus Magnifiers now combine sleek styling and high-output illumination with a newly redesigned metal housing which is non-corrosive and durable. A highly flexible, self-balancing shade with built-in handles allows the lamp head to be positioned horizontally, vertically and laterally. Tinted hinged lens cover protects the lens from unwanted dust, debris and contamination and allows for safe operation in direct sunlight. A 22W T-5C fluorescent light source provides 2.5X greater light than comparable magnifiers and virtually eliminates shadows. A fully enclosed arm and neck assembly make the Circus ideal for environments where cleanliness and sanitation are sought.

Mfg. Part No.	Light Source	Watt (W)	Voltage (V)	Arm Length (in.)mm	Diopter	Stock No.	Price Each
17980WT	T5 Fluorescent	22	120	45/1143	3.5	**45W1837**	425.00
17981WT	T5 Fluorescent	22	120	45/1143	5	**45W1838**	435.00

(209485)

WAVE® LED MAGNIFIERS

LUXO

- Lighting: two dimmable 6W LEDs
- Left/right lighting controls
- Auto shut-off
- Magnification: 3.5- (1.88X) or 5-diopter (2.25X) lens
- 6.75" x 4.5" precision-ground white crown optical-quality glass lens
- 30" or 45" heavy duty K-arm with 0.5" square steel tubing - 20 gauge CRS
- Edge clamp or weighted base
- Color: black (ESD safe), light grey
- UL/CUL listed

WAVE LED Magnifier is Luxo's newest, and most energy-efficient, addition to it's growing line of WAVE+Plus Magnifiers. The WAVE LED is ideal for any inspection or assembly application. No knobs to tighten, nothing to adjust a flexible, self-balancing shade and hands-free neck design allows the lamp head to be secured in any position. A fully enclosed neck assembly and 30" or 45" reach heavy-duty internal-spring K-arm for environments where cleanliness and sanitation are sought. ESD-Safe versions for use in static-sensitive environments also available in black.

➤CONTINUED➤

WAVE® LED MAGNIFIERS (CONT.)

WAVE® LED MAGNIFIERS, 2x6W, 120V

Mfg. Part No.	Arm Length (in.)mm	Mount	Diopter	Color	Stock No.	Price Each
18845LG	45/1143	Edge Clamp	3.5	Lt. Grey	69W6382	395.00
18846LG	30/762	Edge Clamp	3.5	Lt. Grey	87W8055	395.00
18847LG	30/762	Weighted Base	3.5	Lt. Grey	87W8056	485.00
18945LG	45/1143	Edge Clamp	5	Lt. Grey	87W8059	405.00
18946LG	30/762	Edge Clamp	5	Lt. Grey	87W8060	405.00
18947LG	30/762	Weighted Base	5	Lt. Grey	87W8061	495.00
ESD-SAFE WAVE® LED MAGNIFIERS, 2x6W, 120V						
18904BK	30/762	Weighted Base	3.5	Black	87W8058	665.00
18900BK	45/1143	Edge Clamp	3.5	Black	69W6237	575.00
18902BK	30/762	Edge Clamp	3.5	Black	87W8057	575.00
18910BK	45/1143	Edge Clamp	5	Black	69W6238	585.00

(209634)

IFM SERIES MAGNIFIERS

LUXO

- Sturdy, all steel construction
- 5" diameter lenses in 3-diopter (1.75x) or 5-diopter (2.25x) magnification
- 22W circline florescent light source
- Light gray or white finish

IFM series light-duty illuminated magnifiers are perfect for the econonmical user. Features a built-in starter so the switch doesn't have to be held down for several seconds to illuminate the tube. All models come with a lamp diffuser cover, 5-wire cord, and 22-watt fluorescent tube which provides shadow-free illumination. Operates on 115VAC. UL/cUL listed.

Mfg. Part No.	Description	Mount	Arm Reach	Lens Type	Color	Stock No.	Price Each
16345LG	Light-Duty Illuminated Magnifier	Edge Clamp	45"	3-diopter	Light Gray	62H0637	155.00
16345WT	Light-Duty Illuminated Magnifier	Edge Clamp	45"	3-diopter	White	59M9002	155.00
16346LG	Light-Duty Illuminated Magnifier	Edge Clamp	45"	5-diopter	Light Gray	95H6611	165.00
16346WT	Light-Duty Illuminated Magnifier	Edge Clamp	45"	5-diopter	White	59M9004	165.00
16350LG	Light-Duty Illuminated Magnifier	Edge Clamp	30"	3-diopter	Light Gray	30K5821	155.00
16351LG	Light-Duty Illuminated Magnifier	Weighted Base	30"	3-diopter	Light Gray	01J0397	210.00
16352LG	Light-Duty Illuminated Magnifier	Edge Clamp	30"	5-diopter	Light Gray	11X2558	165.00
16353LG	Light-Duty Illuminated Magnifier	Weighted Base	30"	5-diopter	Light Gray	01J0401	220.00

(5611)

GREEN-LITE™ RECTANGULAR LED MAGNIFIERS

O.C.White Co.

- 4x the lumen output of a standard magnifier
- Reduced glare, heat and energy consumption
- Multi-angle LEDs for shadowless lighting at a full range of focal lengths and heights
- User controlled LED groups shine desired level of light exactly where required
- Superb dimming software via convenient, reliable membrane switch
- Built in energy management system & lighting timer
- Standard 4 diopter (2x) lens
- Standard 43"' arm reach
- 120V - 240V
- 10-year mechanical warranty

Green-Lite™ LED magnifiers feature high quality die cast aluminum shades and all steel arm components for ESD safety.

Mfg. Part No.	Description	Mounting Style	Stock No.	Price Each
82300-4	7" x 5.25" Rec. LED Magnifier, Shadow Wht.	Screw Down Base	13T1741	499.00
82300-4-B	7" x 5.25" Rec. LED Magnifier, Carbon Black	Screw Down Base	13T1742	499.00
82400-4	7" x 5.25" Rec. LED Magnifier, Shadow Wht.	Table Edge Clamp	13T1743	499.00
82400-4-B	7" x 5.25" Rec. LED Magnifier, Carbon Black	Table Edge Clamp	13T1744	499.00

➤CONTINUED➤

GREEN-LITE™ RECTANGULAR LED MAGNIFIERS (CONT.)

Mfg. Part No.	Description	Mounting Style	Stock No.	Price Each
82600-4	7" x 5.25" Rec. LED Magnifier, Shadow Wht.	Weighted Base	27T2073	599.00
82600-4-B	7" x 5.25" Rec. LED Magnifier, Carbon Black	Weighted Base	29T5891	599.00

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GREEN-LITE™ BIG EYE™ 7.5" ROUND LED MAGNIFIERS

O.C.White Co.

- 4x the lumen output of a standard magnifier
- Reduced glare, heat and energy consumption
- Multi-angle LEDs for shadowless lighting at a full range of focal lengths and heights
- User controlled LED groups shine desired level of light exactly where required
- Superb dimming software via convenient, reliable membrane switch
- Built in energy management system & lighting timer
- Suffix **-4** indicates 4 diopter (2x) lens, **-5** indicates 5 diopter (2.25x) lens
- Standard 43" arm reach
- 120V - 240V
- 10-year mechanical warranty

High quality die cast aluminum shades and all steel arm components for ESD safety.

Mfg. Part No.	Description	Mounting Style	Stock No.	Price Each
62300-4	7.5" Rd. LED Magnifier, Shadow Wht.	Screw Down Base	13T8268	489.00
62300-4-B	7.5" Rd. LED Magnifier, Carbon Black	Screw Down Base	13T8269	489.00
62300-5	7.5" Rd. LED Magnifier, Shadow Wht.	Screw Down Base	29T5884	519.00
62300-5-B	7.5" Rd. LED Magnifier, Carbon Black	Screw Down Base	29T5886	519.00
62400-4	7.5" Rd. LED Magnifier, Shadow Wht.	Table Edge Clamp	13T1737	489.00
62400-4-B	7.5" Rd. LED Magnifier, Carbon Black	Table Edge Clamp	13T1738	489.00
62400-5	7.5" Rd. LED Magnifier, Shadow Wht.	Table Edge Clamp	13T1739	519.00
62400-5-B	7.5" Rd. LED Magnifier, Carbon Black	Table Edge Clamp	13T1740	519.00
62600-4	7.5" Rd. LED Magnifier, Shadow Wht.	Weighted Base	29T5887	589.00
62600-4-B	7.5" Rd. LED Magnifier, Carbon Black	Weighted Base	29T5888	589.00
62600-5	7.5" Rd. LED Magnifier, Shadow Wht.	Weighted Base	29T5889	619.00
62600-5-B	7.5" Rd. LED Magnifier, Carbon Black	Weighted Base	29T5890	619.00

(196227)

GREEN-LITE™ MAGNILITE® 6" LED MAGNIFIERS

O.C.White Co.

- 4x the lumen output of a standard magnifier
- Reduced glare, heat and energy consumption
- Multi-angle LEDs for shadowless lighting at a full range of focal lengths and heights
- User controlled LED groups shine desired level of light exactly where required
- Superb dimming software via convenient, reliable membrane switch
- Built in energy management system & lighting timer
- Suffix **-4** indicates 4 diopter (2x) lens, **-5** indicates 5 diopter (2.25x) lens
- Standard reach of 43"
- 120V - 240V
- Screw down base
- 10-year mechanical warranty

High quality die cast aluminum shades and all steel arm components for ESD safety.

Mfg. Part No.	Description	Mounting Style	Stock No.	Price Each
42300-4	6" LED Magnifier, Shadow Wht.	Screw Down Base	13T1731	399.00
42300-4-B	6" LED Magnifier, Carbon Black	Screw Down Base	13T1732	399.00
42300-5	6" LED Magnifier, Shadow Wht.	Screw Down Base	29T5882	429.00
42300-5-B	6" LED Magnifier, Carbon Black	Screw Down Base	29T5883	439.00
42400-4	6" LED Magnifier, Shadow Wht.	Table Edge Clamp	13T1733	399.00
42400-4-B	6" LED Magnifier, Carbon Black	Table Edge Clamp	13T1734	399.00
42400-5	6" LED Magnifier, Shadow Wht.	Table Edge Clamp	13T1735	429.00
42400-5-B	6" LED Magnifier, Carbon Black	Table Edge Clamp	13T1736	439.00

(196228)

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(212563)

ESD-SAFE VISION-LITE® MAGNIFIERS WITH FULLY DIMMABLE LIGHT SOURCE

RoHS Compliant Available

O.C.White Co.

71600-B

72400-B

- Free 10 diopter swing away lens included

Vision-Lite® magnifiers with patented microchip controlled ballast allows operator to dim the unit from 100% down to 25%. Highly reflective surfaces can be easily seen by dimming the units bulb. Light is provided by the 3-sided illuminated bulb, which eliminates shadows and provides 10,000 hours service life. Eye fatigue is reduced by eliminating fluorescent flickering. 7.5″ x 6.2″ provides 46.5 sq. inches of viewing area. "3 Diopter" Lens provides 1.75x - 1.85x power. Unit provided with an ergonomically designed ESD Safe Shade. Clamped model has a 43″ Ultraflex® reach arm. The weighted base model is provided with a 25″ reach arm. Black or shadow white finish. 10 yr. warranty. Addtional colors available: *go online or call.*

3 DIOPTER (1.75X) MODELS

Mfg. Part No.	Description	Stock No.	Price Each
71600	25″ Reach with Weighted Base, Shadow White	56K7811	559.00
71600-B	25″ Reach with Weighted Base, Black	30M7446	559.00
72300	43″ Reach with Screw Down Base, Black	56K7817	459.00

ACCESSORY

Mfg. Part No.	Description	Stock No.	Price Each
● 13392	Replacement Bulb	50H7681	42.00

(75426)

MIGHTY SCOPE HAND-HELD INSPECTION MICROSCOPES

RoHS Compliant Available

AVEN

- Easy-to-use digital and analog models
- Hand-held, compact design
- Simply plugs into a PC — USB interface or 75Ω RCA jack
- LEDs can be turned on or off
- Brightness can be adjusted using control wheel on body
- Magnifucation can be easily changed by adjusting the distance from the object
- Active pixel technology for sharp images and accurate color
- Microtouch shutter trigger allows for convenient image capture
- Windows® XP SP2 and Vista operating system

Mighty Scope in 26700-210 Boom Stand

Mighty Scope LED hand-held inspection microscopes provide high-resolution magnification at your fingertips. Can be used for science and engineering work, dermatology, detailed repair, electronics/mechanical assembly and quality control, hobbies and collecting (coins, stamps, jewelry), law enforcement (counterfeit ID, crime lab, etc.), entertainment and much more. Available in an analog and four digital versions including a UV digital model consisting of six UV LED lights operating at 405nm and a digital model with polarizer designed for use with reflective surfaces. Digital versions feature ¼″ color CMOS image sensor and effective pixels 1280H x 1024V; analog model has ⅓″ color CMOS image sensor and effective pixels 510H x 496V (NTSC), 628H x 586V (PAL). All Mighty Scopes come complete with PC software for easy capture of images or videos (measurement function included), 6-ft. long cord and adjustable stand . *Order* **mfg. part no. 26700-210** *boom stand separately below.*

Mfg. Part No.	Description	Magnification Range	Signal/Video Output	Stock No.	Price Each
26700-200	Mighty Scope Digital Microscope	10X-200X	USB 2.0	19P8052	209.47
● 26700-203	Auto-Focus Mighty Scope	1X-80X	USB 2.0	94T6598	295.00
26700-204	Mighty Scope Digital Microscope	500x Fixed	USB 2.0	39P9102	262.11
26700-205	UV Mighty Scope Digital Microscope	10X-200X	USB 2.0	56P3515	262.11

ACCESSORY

26700-210	Adjustable Boom Stand, 295mmH x 250mmL Boom; 200mm Sq. Base	19P8053	168.42
26700-312	3D Stand, Digital Microscope	07W3832	49.95

(176233)

MIDAS® HAND-HELD DIGITAL MICROSCOPE INSPECTION SYSTEM

LUXO

MIDAS

MIDAS-GS

MIDAS-ST

- 1.3 mega-pixel USB camera
- Polarizing filter prevents glare and reflection
- Adjustable 10x-200x magnification range
- ¼″ color CMOS image sensor
- Six white-light LEDs provide abundant illumination
- Auto gain control
- Automatic white balance
- Windows® XP SP2 and Vista operating system
- 5-year manufacturer's warranty
- ESD Safe
- UL/cUL listed

MIDAS® (Microscope Inspection Digital Application System) is a universally-positionable digital inspection system which provides a versatile way of viewing, capturing and documenting images from any direction or angle. With a 150mm working distance at 10X magnification and a 13mm working distance at 50X magnification, this system is ideal for assembly, repair, inspection, leak detection, document authenticity, criminology, museum and artwork restoration, currency verification and gemstone and mineral examination Easily operated using a hand-held trigger which permits hi-resolution, 1280H x1024V pixel image capture. MIDAS® can be used alone or is available with either an adjustable 13.8″ gooseneck arm stand or an adjustable boomstand with a 9.8″ vertical and 11.6″ horizontal reach.

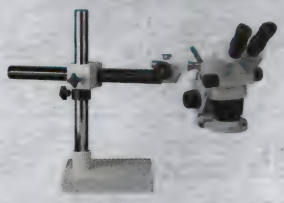
Mfg. Part No.	Description	Stock No.	Price Each
MIDAS	MIDAS® Hand-Held Digital Microscope Inspection System, ESD Safe	73R4317	295.00
MIDAS-GS	MIDAS® Hand-Held Digital Microscope Inspection System with Gooseneck Stand, ESD Safe	67R4350	380.00
MIDAS-ST	MIDAS® Hand-Held Digital Microscope Inspection System with Boomstand, ESD Safe	64R8673	495.00

(176991)

SYSTEM 250 BINOCULAR STEREO-ZOOM MICROSCOPE

LUXO

- 26" stainless steel horizontal boom extension
- Flexibility and adjustability — alter angles up to 45°; 360° head rotation in its focus mount
- Magnification range of 6.5X to 45X
- 10X wide-field eyepieces
- 10" x 10" base
- Zoom control is by graduated knobs on the sides of the body



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System 250 Microscopes - Binocular Stereo-Zoom Microscopes with sturdy, heavy duty, cast aluminum alloy housing that rotates 360° in its focus mount. Models are standard with 10X widefield eyepieces and have a zoom range from 6.5X to 4.5X giving them a magnification range of 6.5X - 45X. The zoom control is by graduated knobs on the sides of the body. The extended magnificaion range is from 3.25X to 225X when using optional eyepieces and accessory lenses. **Mfg. part no. 18750** .05X reducing lens extends working distance to nearly 6"; *ordered separately below.*

Mfg. Part No.	Description	Stock No.	Price Each
18712	Binocular Stereo-Zoom Microscope, Fluorescent Ring Light	28C7586	1690.00
18714	Binocular Stereo-Zoom Microscope	95C3196	1470.00
18750	.05X Reducing Lens	29C2729	160.00

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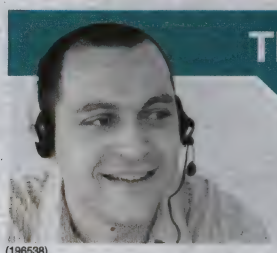


TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

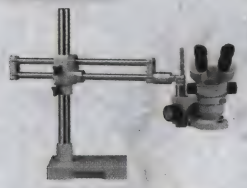
(196538)

INSPECTION • TASK LIGHTING

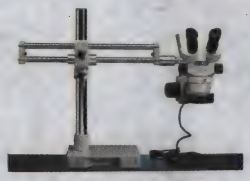
SYSTEM 273 BINOCULAR MICROSCOPES

RoHS Compliant Available

LUXO



23712RB Dual Boom Stand



23727RB Dual Boom Stand

- 23mm optics system
- 8 in. (203 mm) working distance (when used with an accessory 0.5X reducing lens)
- 15% greater field of view
- 7X to 45X magnification
- 5 year warranty
- Dual boom ball-bearing stand with 10 in. x 10 in. base, 19.5 in. (495 mm) vertical boom and 26 in. (660 mm) horizontal boom extension

System 273 - Binocular Microscopes with a 23mm optics system, 8 in. (203 mm) working distance (when used with an accessory 0.5X reducing lens), 15% greater field of view and a 7X to 45X magnification range. Select from three different light sources: 17W fluorescent ring light, dimmable 150W fiber-optic illuminator with continuous ring light, 18W dimmable LED high output ring light or 9W dimmable LED ring light, which produces up to 3600 footcandles at 4.5" working distance. A 26" stainless steel horizontal boom extension and 19.5" vertical boom are mounted to a 10x10" die-cast base. Ball-bearing design allows fluid horizontal extension of the boom stand. Extensive flexibility and adjustability allow this microscope to alter angles up to 45°; the head can be rotated 360° in its focus mount. *Order accessories separately below.*

Mfg. Part No.	Description	Stock No.	Price Each
● 23711RB	Microscope with Dual Boom Stand, 150W Halogen Fiber-Optic Illuminator with Ring Light	48M5292	2505.00
● 23712RB	Microscope with Dual Boom Stand, 17W Fluorescent Ring Light	58M0142	1940.00
23727RB	Microscope with Dual Boom Stand, Dimmable 9W LED Ring Light	30M9583	2250.00
23728RB	Microscope with Dual Boom Stand, Dimmable LED High Output Ring Light	14P9360	2490.00

LIGHTING OPTIONS AND ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
● 18742	17W Fluorescent Ring Light	96C6511	240.00
18743	Dimmable LED-High Output Ring Light	09P2299	790.00
● 18746	Dimmable 9W 40-LED Ring Light	18M1304	550.00
LED3000	LED-3000 Ring Light	79R0004	315.00
LED3000-PF	LED-3000 Ring Light with Polarizing Filter	66T8685	495.00
● 23750	0.5X Reducing Lens	30M9584	150.00

(101606)

ESD-SAFE, SYSTEM 273 BINOCULAR MICROSCOPES

RoHS Compliant Available

LUXO

- Only ESD-safe microscope available on the market today
- Ideal for use in static-sensitive environments
- Nearly 8" of working distance when used with a 0.5X reducing lens

ESD-safe, System 273 stereo-zoom binocular microscopes are designed for inspection and assembly applications in static-sensitive environments. The housing and stand are powder-coated with a metal-laced paint that measures 10^5 Ω/sq. (static dissipative). Available with dual boom ball-bearing stands, which feature a 26" stainless steel horizontal boom extension and 19.5" vertical boom mounted to a 10" die-cast base. Ball-Bearing design allows fluid horizontal extension of the boomstand. Extensive flexibility and adjustability allow this microscope to alter angles up to 45°; the head can be rotated 360° in its focus mount. Microscope magnification range of 7X to 45X. **Mfg. part no. 23714-RB-ESB** comes without lighting, allowing purchaser to select from three different light sources; *ordered separately below.* **Mfg. part no. 23750** 0.5X reducing lens extends working distance to nearly 8" ; *ordered separately below.*

Mfg. Part No.	Description	Stock No.	Price Each
● 23714RB-ESD	ESD-Safe Stereo-Zoom 23mm Binocular Microscope with Dual Boom Stand — *Order Lighting Separately Below*	59M7234	1750.00
23726RB-ESD	ESD-Safe Stereo-Zoom 23mm Binocular Microscope with 7W LED Ring Light	59M9032	2065.00

LIGHTING OPTIONS AND ACCESSORIES

● 18742	17W Fluorescent Ring Light	96C6511	240.00
● 18746	Dimmable 9W 40-LED Ring Light	18M1304	550.00
● 23750	0.5X Reducing Lens	30M9584	150.00
18743	Dimmable LED-High Output Ring Light	09P2299	790.00
LED3000	LED-3000 Ring Light	79R0004	315.00
LED3000-PF	LED-3000 Ring Light with Polarizing Filter	66T8685	495.00

(101625)

MICRO-LITE® ESD-SAFE MICROSCOPE ILLUMINATION

Micro-Lite

GREEN LITES O.C.White Co.

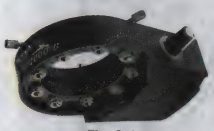


Fig. A

Fig. B

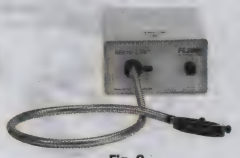


Fig. C

ESD-SAFE HIGH OUTPUT LED LIGHT SOURCE

- Made in the USA
- Fully Variable from 100 - 5%
- Exclusive Replaceable LED Array
- No Replacement Bulbs Ever Needed, and No Desktop Control Box
- 100-240V Auto Switchable Daesign with World Wide Approvals
- Fits most standard microscopes on the market (2.35" ID)

Mfg. Part No.	Description	Fig.	Stock No.	Price Each
LV2000-B	High Ouput ESD Safe LED Ring Illuminator, Blk	A	84R8461	349.00
LV2000	High Ouput ESD Safe LED Ring Illuminator, Wht	A	59P6803	349.00

ESD-SAFE FLUORESCENT ILLUMINATORS

- ESD-Safe
- Instant Start
- No Fluorescent Flickering
- Unique Eye-Easing Phosphor
- Fits Object Lenses Up to 2.35" OD
- MIL STD 2000A, Certified for Shadowless Lighting
- Made in the USA
- Ultraviolet and Yellow Bulbs Optional

Mfg. Part No.	Description	Fig.	Stock No.	Price Each
FL1000	High/Low Fluorescent Ring Light	B	50H7642	199.00
FV1000	Fully Variable Fluorescent Ring Light	...	50H7648	299.00
FL150	FL-150 Replacement Bulb for FL1000 / FV1000	...	81H0438	45.00

ESD-SAFE FIBER-OPTIC LIGHT SOURCES

- More Light, Less Heat; Cool Solid State Design that Provides 45% More Light and an Internal IR Filter
- Silent Fan Provides Quiet Vibration Free Operation

Mfg. Part No.	Description	Fig.	Stock No.	Price Each
FL3000-A	150W, Annular Fiber Optic Illuminator with IR Filter	C	50H7645	699.00
FL3000-D	150W, Dual-Point Fiber Optic Illuminator with IR Filter	...	50H7646	649.00
● FL400	EKE Replacement Bulb for FL3000 series	...	50H7647	28.50

(75422)

LED ALUMINUM FLASHLIGHTS

DURATOOL

HP-007-BLK

SL-012-BLUE

- Super bright LED flashlights
- Shock, dust and weather proof
- Quality LED with 100,000 hr. lifespan
- Aircraft grade Aluminium
- Tailcap on/off switch
- Cross-hatch decorated handle for secure grip
- Lightweight and compact
- Supplied with lanyard
- Beam color:white

Mfg. part nos. HP-007-BLK and HP-007-RED require 1 x AA battery, **mfg. part no. HP-011** requires 2 x AA batteries ,**mfg. part no. HP-015** requires 2 x CR123A batteries, **mfg. part nos. HP-013, SL-012-BLUE, SL-012-BLK and SL-016** requires 3 x AAA batteries (not included). Order batteries separately: *go online or call.*

Mfg. Part No.	Light Source	Range	L x Dia. (mm)	Color	Wt. (grams)	Stock No.	Price Each 1-24
● HP-007-BLK	CREE XR-E® LED x 1	100	94 x 20	Black	36.7	01P2491	29.69
● HP-007-RED	CREE XR-E® LED x 1	100	94 x 20	Red	36.7	01P2492	29.67
● HP-013	CREE XR-E® LED x 1	150	128 x 35	Gun Metal	105	01P2494	29.33
● SL-012-BLUE	Super Bright LED x 14	40	122 x 33	Blue	76.8	01P2518	10.33
● SL-012-BLK	Super Bright LED x 14	40	122 x 33	Black	76.8	01P2517	9.96
● SL-016	Super Bright LED x 28	40	144 x 46	Black	126.5	01P2519	10.29

(121371)

element14 COMMUNITY

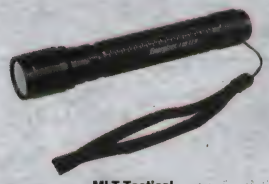
Get inspired, collaborate, design, research, ask experts questions.

element14.com

(196545)

LED METAL FLASHLIGHTS

Energizer



MLT Tactical

EMHIL21E

- Big light in a compact size
- Sleek, easy-to-carry design
- Bright LED light source
- Precision-machined, high-strength aluminum case
- Cost-efficient, reduced battery consumption

MLT series two AA tactical metal flashlights are built tough to withstand harsh treatment. Features a durable, black case, shatterproof lens, tail switch and handy lanyard. Choice of 1W or 3W models, both include two AA lithium batteries. **Mfg part no. EMHIL21E** high intensity white LED provides up to 150 lumens and the light features a robust machined aluminum body that survives a 2-meter drop. Its weatherproof construction makes it suitable for outdoor use. The easy push button tail cap switch allows for onehanded operation.

Mfg. Part No.	Description	Run Time	Stock No.	Price Each
MLT1WAAE	Tactical Metal Flashlight — 1W LED	2.5-Hrs. (Lithium)	82T3327	31.78
EMHIL21E	High Intensity LED Flashlight	2-Hrs. (Alkaline)	83T0903	36.62

(90540)

LED HANDHELD FLASHLIGHTS

EVEREADY

- Intrinsically safe
- Waterproof
- Impact resistent
- Safety orange and black

Energizer® Intrinsically Safe™ LED Handheld is ideal for work in harsh conditions. The light is waterproof, dustproof and survives a 2 meter drop test. A built-in carabiner belt clip allows quick access and the compact size fits easily in any toolbox. 12 hr. runtime.

Mfg. Part No.	Power Source	No of LED's	Lamp Output (Lumens)	Dimensions (mm) (L x W x H)	Stock No.	Price 1-4
MS2AALED	2 / AA	3	18	151.6 x 35.1 x 40.6	83T1212	16.64
MS2DLED	2 / D	1	28	201.4 x 50.8 x 64.8	83T1213	24.63

(207773)

SAFETY FLASHLIGHTS

EVEREADY

- **Mfg. part no. 5109LS** meets IEC 60529 IPX4 requirements

Floating Lantern

Durable construction can withstand a 5' drop to concrete, except **mfg. part no. 5109LS** can survive a 3' drop. The polypropylene housing resists grease, oil, and gasoline. Shatterproof lens, it floats, and has a wide switch for easy use with gloved hands. **Mfg. part no. 1259** is UL listed for Division I and II, Class I, Group C and D environments.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
5109LS	LED Floating Lantern	83T1542	9.39

(38080)

LED PENLIGHT

Energizer

LED Penlight

- Handy light anywhere
- Super bright lifetime LED lamp
- Convenient one-hand pushbutton switch
- Handy pocket clip holds fast to pocket, briefcase or tool bag
- Requires two AAA batteries

Mfg. part no. PLED23AEH penlight features super-bright white LED that never needs replacing. Durable, lightweight, silvertone aluminum case. High-intensity bulb provides bright, concentrated beam. Lamp output: 6 lumens . *Size*:: 5 72" x 0 659 ". *Order Energizer® AAA alkaline batteries separately on page 1566.*

Mfg. Part No.	Description	Stock No.	Price Each 1-4
PLED23AEH	LED Penlight	74R6755	8.78

(68238)

M12™ LED WORK LIGHT

Milwaukee

- Aluminum head: impact and weather resistant
- 90° rotating head: aims light at work space
- Magnetic back: hands-free use
- Voltage: 12V
- Length: 7"
- Tool warranty: 1 yr.

The M12™ Cordless LED Work Light outlasts and outperforms all other subcompact lights. Powered by an M12™ RED LITHIUM™ battery, the work light is 2X brighter and whiter than conventional incandescent bulbs and runs up to twice as long. Milwaukee® provides a limited lifetime LED warranty. Quickly charge all M12™ batteries in less than an hour with the M12™ Lithium-Ion Charger.

Mfg. Part No.	Description	Stock No.	Price Each
49-24-0146	M12™ LED Work Light	86R9973	66.00
48-11-2401	M12™ REDLITHIUM™ Battery	10R5366	67.00
48-59-2401	M12™ Lithium-ion Battery Charger	03P0059	78.00

(209484)

HIGH PERFORMANCE LED FLASHLIGHTS

NTE® ELECTRONICS, INC.

COAST

- Lightweight aluminum case
- Impact and water resistant
- Batteries included
- Lifetime manufacturer's guarantee

Mfg part nos. HP5 and **HP14** High Performance LED Flashlights offer the best combination of small size and bright light. A quick cycle switch gives you the option to select between a high or low output setting. Pure Beam Focusing Optic System with Fingertip Speed Focus Control provides superior beam consistency from spot to flood, with no dark rings associated with focusing flashlights. The Bulls Eye spot beam pattern gives you a great focused spot, while producing an outer ring of flood light which allows you to see a broader area to the sides. Beam Lock System easily locks in your desired beam. Tested and rated to ANSI/FL1 standards.

Mfg. Part No.	Light Output High/ Low (Lumens)	Length (in.)	Runtime (hrs.)	Beam Distance (ft.)	Stock No.	Price Each 1-9
HP5	High: 121 Low: 41	4.65	High: 4.5 Low: 6	High: 255 Low: 150	90T0937	85.10
HP14	High: 339 Low: 56	8.38	High: 4.75 Low: 20	High: 574 Low: 118	90T0936	111.96

(195391)

COAST LED FLASHLIGHTS

COAST

NTE® ELECTRONICS, INC.

- Compact design
- Lightweight aluminum case
- Batteries included
- Lifetime manufacturer's guarantee

PROFESSIONAL USE LED FLASHLIGHTS

Mfg. part no. PX20 dual color led flashlight combines five super bright white LEDs with one red LED, each color controlled with its own switch. The white light is for general flashlight use, while the red LED is perfect when you only need minimal light, such as when reading a map. Max Beam Optic System combined with the 5 high quality white LED's gives you a broad, diffused beam that lights up a large area with no dark spots. **Mfg. part no. PX25** LED Flashlight is easy to carry in the included belt sheath. The Bulls Eye spot beam pattern gives you a great focused spot, while producing an outer ring of flood light which allows you to see a broader area for added side vision. Both tested and rated to ANSI/FL1 standards.

Mfg. Part No.	No of LED's	Light Output (Lumens)	Length (in.)	Beam Distance (ft.)	Runtime (hrs.)	Stock No.	Price Each 1-9
PX20	6: White	125	3.95	173	5.5	90T0938	46.38
PX25	1	208	4.7	419	6.25	90T0939	63.56

GENERAL USE LED FLASHLIGHTS

Mfg. part no. G10 LED Flashlight is small enough to fit in your pocket, yet is powerful enough to be an everyday utility flashlight. Max Beam™ Optic System shapes the available light from the LED into the most usable beam pattern, giving you the maximum amount of light for your application. **Mfg. part no. G30** Focus Beam LED flashlight has an impressive light output of 121 lumens. Pure Beam ™ Focusing Optic System with Twist Focus provides superior beam consistency from spot to flood, with no dark rings typically associated with focusing flashlights.

Mfg. Part No.	No of LED's	Light Output (Lumens)	Length (in.)	Beam Distance (ft.)	Runtime (hrs.)	Stock No.	Price Each 1-4
G10-BLK	1	32	3.7	78	2.75	90T0930	15.70
G30	105	121	6.46	478	2	90T0932	59.29

(89631)

LED HEADLAMP

NTE® ELECTRONICS, INC.

COAST

- Front power switch
- Impact and water resistant
- Batteries Included
- Lifetime maufactutrer's guaranteee

LED headlamp with Bulls Eye spot beam pattern gives you a great focused spot, while producing an outer ring of flood light which allows you to see a broader area to the sides. A dimming function allows light output adjustment to just the right level for your application. The durable expandable Z-Cord provides power to the LED from the battery pack and is built into the headband to reduce the possibility of snagging. Tested and rated to ANSI/FL1 standards.

Mfg. Part No.	Light Output High/ Low (Lumens)	Beam Distance (ft.)	Runtime (hrs.)	Stock No.	Price Each 1-9
● HL6	High: 181 Low: 3	High: 364 Low: 55	High: 6.25 Low: 75.5	90T0935	62.40

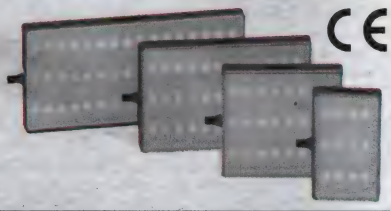
(89634)

WLA SERIES LED WORK LIGHTS

RoHS Compliant Available

BANNER® more sensors, more solutions

- Voltage rating: 12 to 30VDC
- High power solid state LED array with cool white light
- Color temperature (CCT): 5000 - 8300K
- Designed for area and machine lighting
- Rugged thermoplastic housing rated to IP69K
- Operating temperature: -20°C to 50°C
- Illuminates a large area with an even pattern of light and no shadows
- Cabled and quick disconnect models available



Mfg. Part No.	Housing Length (mm)	Current @ 12VDC	Power (W)	Lumens (lm)	Terminals Type	Stock No.	Price Each 1-2
● WLAW105X180Q	105	1A	12	450	4-pin M12	41T3241	218.90
● WLAW190X180Q	190	2A	24	900	4-pin M12	41T3242	388.00
● WLAW275X180Q	275	3A	36	1350	4-pin M12	41T3243	537.90
● WLAW360X180Q	360	4A	48	1800	4-pin M12	41T3244	701.41

(196337)

WLS28 WORK LIGHT STRIPS

RoHS Compliant Available

BANNER® more sensors, more solutions

- Voltage rating: 12 to 30VDC
- High power solid state LED array with cool white light
- Color temperature (CCT): 5000 - 8300K
- Designed for enclosure or area lighting
- Rugged aluminum housing
- Narrow 28 mm total width
- Operating temperature: -20°C to 50°C
- Lighted lengths available from 145 mm to 1130 mm
- Low-profile design with included swivel mounting brackets
- Illuminates a large area with an even pattern of light and no shadows
- Cabled and quick disconnect models available
- Stand-alone and cascadable models available
- ON/OFF switch and non-switch models available
- Low power consumption; less than 9 watts per foot

NON-SWITCH MODELS

Mfg. Part No.	Light Length (mm)	Current @ 12VDC	Power (W)	Lumens (lm)	Terminals Type	Stock No.	Price Each 1-2
● WLS28XW285X		mA	9		2 m cable	31T7881	141.90
● WLS28XW285XQ		mA	9		4-pin M12	31T7882	147.01
● WLS28XW430X		A	15		2 m cable	31T7883	196.90
● WLS28XW430XQ		A	15		4-pin M12	31T7884	196.90
● WLS28XW570X		A	18		2 m cable	31T7885	240.25
● WLS28XW570XQ	570	1.5A	18	560	4-pin M12	31T7886	229.90
● WLS28XW710X	710	2A	24	700	2 m cable	31T7887	284.90
● WLS28XW710XQ	710	2A	24	700	4-pin M12	31T7888	284.90
● WLS28XW850X	850	2.25A	27	840	2 m cable	31T7889	317.90
● WLS28XW850XQ	850	2.25A	27	840	4-pin M12	31T7890	317.90
● WLS28XW990X	990	2.75A	33	980	2 m cable	31T7891	372.90
● WLS28XW990XQ	990	2.75A	33	980	4-pin M12	31T7892	372.90
● WLS28XW1130X		A	36		2 m cable	31T7877	405.90
● WLS28XW1130XQ		A	36		4-pin M12	31T7878	405.90
ON/OFF SWITCH MODELS							
● WLS28XW285XPB	285	750mA	9	280	2 m cable	41T3316	166.25
● WLS28XW285XPBQ	285	750mA	9	280	4-pin M12	41T3317	165.53
● WLS28XW430XPB	430	1.25A	15	420	2 m cable	41T3318	223.97

➤ CONTINUED ➤

WLS28 WORK LIGHT STRIPS (CONT.)

ON/OFF SWITCH MODELS

Mfg. Part No.	Light Length (mm)	Current @ 12VDC	Power (W)	Lumens (lm)	Terminals Type	Stock No.	Price Each 1-2
● WLS28XW430XPBQ	430	1.25A	15	420	4-pin M12	41T3319	223.00
● WLS28XW570XPB	570	1.5A	18	560	2 m cable	41T3320	253.61
● WLS28XW570XPBQ	570	1.5A	18	560	4-pin M12	41T3321	246.40
● WLS28XW710XPB	710	2A	24	700	2 m cable	41T3322	314.96
● WLS28XW710XPBQ	710	2A	24	700	4-pin M12	41T3323	301.40
● WLS28XW850XPB	850	2.25A	27	840	2 m cable	41T3324	349.45
● WLS28XW850XPBQ	850	2.25A	27	840	4-pin M12	41T3325	334.40
● WLS28XW990XPB	990	2.75A	33	980	2 m cable	41T3326	400.79
● WLS28XW990XPBQ	990	2.75A	33	980	4-pin M12	41T3327	389.40
● WLS28XW1130XPB	1130	3A	36	1120	2 m cable	41T3314	422.40
● WLS28XW1130XPBQ	1130	3A	36	1120	4-pin M12	41T3315	441.41

(196336)

LUMIFA LED LIGHTING

RoHS Compliant Available

IDEC

Features:

- Energy saving: One-third of fluorescent lamps
- Long life: Five times more than fluorescent lamps
- Vibration and shock resistant
- Voltage rating: 24V DC

LF1D Slim LF1D Wide

These environmentally-friendly light units pay for themselves, you recoup their cost with savings over time. Perfect for narrow areas, those not easily accessible or that are dangerous to access, these LEDs have a minimum lifespan of 40,000 hours. Once it's installed, customers won't have to worry about maintenance issues for a long time! Plus these LED light strips provide a bright light source while producing very little heat (even less than a fluorescent lamp). IP40 degree of protection. IP67f protection water, dust and oil resistant. Stainless steel front bezel. Oil and heat resistant cable. IP54 degree of protection water and dust resistant.

LF1D SERIES (IP671/IP67)

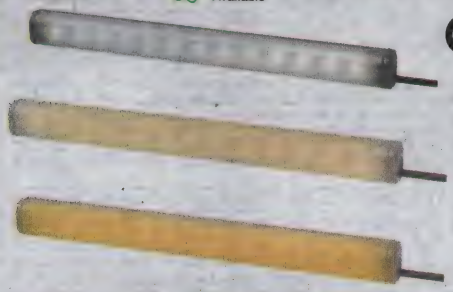
Mfg. Part No.	Length (mm)	LEDs	Color	Power Rating (W)	Stock No.	Price Each
● LF1D-F3G-2W-A	310	7 LED's x 2 rows	White	12.5	73R4852	565.00
● LF1D-F2F-2W-200	310	7 LED's x 2 rows	White	12.5	73R4849	495.00
● LF1D-E2F-2W	390	10 LED's x 1 rows	White	9	73R4839	395.00
● LF1D-E2F-2W-A	390	10 LED's x 1 rows	White	9	73R4840	465.00
● LF1D-E2F-2W-451	390	10 LED's x 1 rows	White	9	73R4842	465.00
● LF1D-E3G-2W	390	10 LED's x 1 rows	White	9	73R4843	395.00
● LF1D-E3G-2W-A	390	10 LED's x 1 rows	White	9	73R4844	465.00
● LF1D-E3G-2W-451	390	10 LED's x 1 rows	White	9	73R4846	465.00
● LF1D-F2F-2W	310	7 LED's x 2 rows	White	12.5	73R4847	495.00
● LF1D-F2F-2W-A	310	7 LED's x 2 rows	White	12.5	73R4848	565.00
● LF1D-H2F-2N-3B0	1500	...	Neutral White	18.4	67W2338	730.00
● LF1D-H2F-2N-4B0	1500	...	Neutral White	18.4	67W2340	730.00
● LF1D-J2F-2N-3B0	1500	...	Neutral White	27.6	67W2342	875.00
● LF1D-J2F-2N-4B0	1500	...	Neutral White	27.6	67W2344	875.00
● LF1D-C2F-2W-330	3000	...	White	4.6	67W2334	235.00
● LF1D-C2F-2W-430	3000	...	White	4.6	67W2336	235.00
● LF1D-C2F-2W-350	5000	...	White	4.6	67W2335	250.00
● LF1D-C2F-2W-450	5000	...	White	4.6	67W2337	250.00
● LF1D-H2F-2N-350	5000	...	Neutral White	18.4	67W2339	730.00
● LF1D-H2F-2N-450	5000	...	Neutral White	18.4	67W2341	730.00
● LF1D-J2F-2N-350	5000	...	Neutral White	27.6	67W2343	875.00
● LF1D-J2F-2N-450	5000	...	Neutral White	27.6	67W2345	875.00

(136209)

CLA SERIES LED LIGHT BARS 100-1500MM

RoHS Compliant Available

PATLITE



The CLA Series LED Light Bar produces bright, uniform lighting in an IP-69K enclosure for high-temperature washdown applications for food and pharmaceutical applications, as well as illumination for control panels and workstations. The 4 different mounting options and 7 different lengths from 100mm to 1500mm make this product and ideal consideration for fluorescent tube replacement as well.

Mfg. Part No.	Color	Voltage (VDC)	Length (mm)	Stock No.	Price Each 1-4
CLA1S-24-CD	Daylight White	24	100	26T4284	136.65
CLA1S-24-CN	White	24	100	26T4285	131.90
CLA1S-24-Y	Amber	24	100	26T4286	137.84
CLA2S-24-CD	Daylight White	24	200	26T4291	163.64
CLA2S-24-CN	White	24	200	26T4292	157.95
CLA3S-24-CD	Daylight White	24	300	26T4293	181.13
CLA3S-24-CN	White	24	300	26T4294	180.35
CLA3S-24-Y	Amber	24	300	26T4295	178.79
CLA6S-24-CD	Daylight White	24	600	26T4296	314.39
CLA6S-24-CN	White	24	600	26T4297	300.85
CLA9S-24-CD	Daylight White	24	900	26T4298	401.16
CLA9S-24-CN	White	24	900	26T4299	401.16
CLA12S-24-CD	Daylight White	24	1200	26T4287	568.86
CLA12S-24-CN	White	24	1200	26T4288	546.98
CLA15S-24-CD	Daylight White	24	1500	26T4289	632.39
CLA15S-24-CN	White	24	1500	26T4290	632.39

(194789)

WORK BENCH VISES

PANAVISE®

301 350 381 396

PanaVise workstations feature full tilt, turn and rotate on three planes to optimize your work conditions.

VICE COMBINATIONS

Mfg. part no. 301 combines **mfg. part no. 303** head with **mfg. part no. 300** multi-position base. All-purpose work holding unit. Overall height: 6¾".

Mfg. Part No.	Stock No.	Price Each
301	75F017	70.55

Mfg. part no. 350 multi-purpose work center combines **mfg. part no. 376** wide-opening head, **mfg. part no. 312** tray base mount and **mfg. part no. 300** base. Overall height: 7-7/8".

350	75F030	125.96

Mfg. part no. 381 combines **mfg. part no. 380** vacuum base with **mfg. part no. 303** head. Allows for rapid set-ups in a variety of locations. Overall height: 6-1/8".

381	75F032	95.13

Mfg. part no. 324 combines **mfg. part no. 315** circuit board holder, **mfg. part no. 371** solder station with nib soldering iron sponges, **mfg. part no. 300** base and **312** tray base mount.

391	83F7678	59.49

Mfg. part no. 396 wide-opening vise combines **mfg. part no. 300** base with **mfg. part no. 366** head. Overall height: 7-5/16".

396	50F2993	89.80

VICE HEAVY DUTY

Mfg. part no. 400 Heavy Duty Base is for projects requiring added holding power. Accepts any 1" (25.4mm) diameter shaft. Recent engineering changes all the 400 base to hold up to 75lbs (34.0kg) at 45 degrees.

400	91B0704	58.03

VICE BASE MOUNTS

Mfg. part no. 310 Surface Plate Base Mount is compatible with the 201 PV Jr. Vise and 300 & 305 bases. This unique Base Mount features a precision cast iron flat surface (Blanchard ground): ideal for layout work.

310	92C8195	147.73

VICE HEADS

Mfg. part no. 203 PV Jr. Head with 5/8" shaft for **300 series** bases. Jaws feature horizontal grooves perfect for holding small tubes, rods, or small circuit boards firmly in place and are made of reinforced thermal composite plastic [continuous heat tolerance to 350°F (177°C), intermittent heat up to 450°F (204°C)].

203	39C3887	34.16

(5812)

CIRCUIT BOARD HOLDERS

PANAVISE®

PV201 207 315

316 324 333

PanaVise workstations feature full tilt, turn and rotate on three planes to optimize your work conditions.

VICE COMBINATIONS

Mfg. part no. PV201 compact PVjr. workstation turns, rotates and swivels for soldering, drilling, painting, assembly. Die cast zinc base. Thermal plastic alloy jaws open to 2⅞" wide. Overall height: 6¾".

Mfg. Part No.	Stock No.	Price Each
201	97F8324	38.48

Mfg. part no. 207 Vice Buddy Jr. transform your bench vise into a precision vise without changing work stations.

207	07W3759	27.63

Mfg. part no. 209 Vacuum Base PV Jr. ideal for light-duty field repairs, electronics, hobbies and more! Attaches securely to any smooth, flat, non-porous surface.

209	68K1480	47.84

Mfg. part no. 324 combines **mfg. part no. 315** circuit board holder, **mfg. part no. 371** solder station with nib soldering iron sponges, **mfg. part no. 300** base and **312** tray base mount.

324	75F027	125.96

Mfg. part no. 333 board holder has 8-position rotating adjustment and 6-position lock positions in vertical plane. Offers tilt angle and height adjustment, board rotation. NOTE: Not compatible with other PanaVise models.

333	75F028	123.44

CIRCUIT BOARD HOLDER

Mfg. part no. 315 circuit board holder accommodates boards from 0.125" (3.18) to 12" (304.80) wide. Fits **mfg. part nos. 300, 305** and **380** bases.

315	75F022	49.87

(5809)

QS SERIES WORKMASTER™ WORKBENCH AND ACCESSORIES

LAC industries

- Workbench and shelves available in standard or ESD versions
- Sizes to fit every need
- Heavy-gauge steel
- 1000 lbs. distributed weight on worksurface
- Adjustable 30" worksurface height; bench legs adjusts to 32", 34", and 36" high
- Bolt-on heavy-duty bench leg extensions accept floor glides
- Adjustable bench leg extender kit included
- Full line of accessories

Easy-to-assemble WorkMaster™ workbenches for assembly, lab and technical environments. A variety of optional drawers, cabinets and electrical components allow easy customization. Worksurface is laminated over industrial-grade particleboard to a full 1¼" thickness; metal threaded inserts are installed in sealed underside for easy installation and strength. Features a 180° rolled front edge and front and rear heavy-gauge steel top support beams that allow 1000 lbs. of distributed weight on work surface. All attachment points have preinstalled inserts for easy assembly and high-strength connections. Color: sky blue powder coat paint finish with low-glare white standard or ESD laminate with white contrast trim. ESD bench version includes dual ground studs and a 10-ft. ground cord. Workbenches are available in three popular sizes. Height adjusts 30" to 36" on two inch increments.

Mfg. Part No.	Description	W x D (in.)	Stock No.	Price Each
QS-1000002-D	Workmaster Standard Workbench	60 x 30	19K6187	458.00
QS-1006002-D	Workmaster ESD Workbench	60 x 30	24K0854	625.00
QS-1000003-D	Workmaster Standard Workbench	72 x 30	36K4175	499.00
QS-1006003-D	Workmaster ESD Workbench	72 x 30	36K4177	694.00
QS-1000013-D	Workmaster Standard Workbench	72 x 36	36K4176	760.16

WORKMASTER™ SHELVES, DRAWERS, CABINET AND ACCESSORIES

Instrument shelves constructed in same manner as worksurface with matching low-glare white laminate and preinstalled threaded inserts. Heavy-gauge, formed steel risers clamp onto worksurface and attach to underside. Access cover detachs for installation of **QS-1022161-D** riser electrical panel (QS-SECIS). Full-length under-shelf channel support beams allow up to 500 lbs. distributed weight on shelf's work surface. ESD shelf version includes dual ground studs and 5-ft. coiled ground cord. Color: sky blue powder coat paint finish. Choice of two sizes: 60"W or 72"W x 18"H x 15"D.

➤CONTINUED➤

QS SERIES WORKMASTER™ WORKBENCH AND ACCESSORIES (CONT.)

Mfg. Part No.	Description	Width (in.)	Stock No.	Price Each 1-24
QS-1020002-D	Workmaster Standard Instrument Shelf	60	19K6190	346.58
QS-1020102-D	Workmaster ESD Instrument Shelf	60	24K0855	496.61
QS-1020003-D	Workmaster Standard Instrument Shelf	72	36K4179	389.93

File drawers and cabinet are constructed of a heavy-gauge steel and equipped with full extension, 100-lb. capacity metal ball-bearing drawer slides. May be mounted left or right and stacked for multiple drawer/cabinet combinations. Safety recessed handles. Enclosure is finished with sky blue color; drawer or cabinet face is finished with contrasting white color. Size: 15″W x 18″D.

Mfg. Part No.	Description	Stock No.	Price Each 1-24
QS-1050002-D	Workmaster Single File Drawer, 6″H	19K6191	243.09
QS-1050004-D	Workmaster Single File Drawer, 12″H	19K6192	327.95
QS-1050005-D	Workmaster Single Cabinet with Door, 12″ H	24K0857	273.03

Type QS-1022161-D instrument shelf riser electrical panel features four 115V, 15A, 60Hz duplexes with switch and power cord and a 15A pilot light switch/circuit breaker combination. **Types QS-1022122-D** and **QS-1022123-D** electrical outlet strip channels feature four 15A, 60Hz duplexes, circuit breaker and 8-ft. power cord. May be mounted at top-rear of worksurface, under shelf front or rear, or top-rear of shelf. Engineered to meet rigid UL requirements, and ETL (Electric Testing Lab) approved. Color: sky blue. **Types QS-1021502** and **QS-1021503** heavy-duty tubular designed footrests adjust front to rear. Finish: bright zinc.

Mfg. Part No.	Description	Stock No.	Price Each 1-24
QS-1022161-D	Workmaster Instrument Shelf Riser Electrical Panel, 18″H″	24K0856	182.89
QS-1022122-D	Electrical Outlet Channel Strip, 60″ W	19K6193	219.86
QS-1022123-D	Electrical Outlet Channel Strip, 72″ W	36K4181	250.57
QS-1021503	Footrest Tube, 72″ W	26K2738	97.40

(84346)

ARLINK® 8000 TECHNICAL WORKSTATIONS AND ACCESSORIES

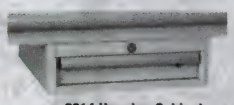
LISTA making workspace work

A-SS Single-Sided Starter

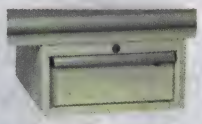
A-SA Single-Sided Adder

A-DS Double-Sided Starter

A-DA Double-Sided Adder



8614 Hanging Cabinet



8619 Hanging Cabinet

8658 Hanging Cabinet

- Select single-sided or double-sided starters and adders
- Choose either 60″ or 72″ wide sections
- Pick the worksurface in plastic laminate or ESD laminate
- Fast and simple set-up and reconfiguration
- Cold-rolled steel construction
- Ergonomically designed

Modular Arlink® 8000 technical workstations consist of easy-to-assemble starter and adder workstation sections, that can be adapted and reconfigured to suit the user's needs. Ideal for assembly, repair, light manufacturing, clean rooms and a host of other applications, these section are easily linked together to create infinite layout options, section widths can be mixed and matched, and sections can be converted from single- to double-sided at any time. Constructed of high-strength, cold-rolled steel that's powder-coated in an attractive light gray paint finish. Blue plastic accent trim gives support columns, lights, steel shelves and footrests a contemporary appearance. Ergonomically designed to improve comfort, eliminate wasted motion, and minimizes fatigue and strain. Each starter and adder section includes the necessary accessories to design a custom workstation. Arlink® 8000 hanging cabinets, *ordered separately below*, provide convenient below-worksurface storage. Other Arlink® 8000 workstation accessories are also available; *go online or call.*

A-SS series single-sided starter section includes: one starter assembly frame, one footrest, two outriggers, one worksurface assembly (choice of plastic laminate or static-dissipative plastic laminate), one single-sided power beam (15A), one 12″D open wire shelf, one light fixture assembly and one parabolic light diffuser.

Mfg. Part No.	Description	H x W x D (in.)	Stock No.	Price Each
A-SS608430SL	Single-Sided Starter, Plastic Laminate Top	84 x 30 x 30	01N3801	1687.54
A-SS608430SD	Single-Sided Starter, ESD Plastic Laminate Top	84 x 30 x 30	01N3800	1864.69

➤ CONTINUED ➤

ARLINK® 8000 TECHNICAL WORKSTATIONS AND ACCESSORIES (CONT.)

Mfg. Part No.	Description	H x W x D (in.)	Stock No.	Price Each
A-SS728430SL	Single-Sided Starter, Plastic Laminate Top	84 x 30 x 30	01N3803	1807.84
A-SS728430SD	Single-Sided Starter, ESD Plastic Laminate Top	84 x 30 x 30	01N3802	2061.36

A-SA series single-sided adder section includes: one adder assembly frame, one footrest, one outrigger, one worksurface assembly (choice of plastic laminate or static-dissipative plastic laminate), one single-sided power beam (15A), one 12″D open wire shelf, one light fixture assembly and one parabolic light diffuser.

A-SA608430SL	Single-Sided Adder, Plastic Laminate Top	84 x 30 x 30	01N3797	1512.49
A-SA608430SD	Single-Sided Adder, ESD Plastic Laminate Top	84 x 30 x 30	01N3796	1654.32
A-SA728430SL	Single-Sided Adder, Plastic Laminate Top	84 x 30 x 30	01N3799	1600.02
A-SA728430SD	Single-Sided Adder, ESD Plastic Laminate Top	84 x 30 x 30	01N3798	1854.41

A-DS series double-sided starter section includes: one starter assembly frame, two footrests, four outriggers, two worksurface assemblies (choice of plastic laminate or static-dissipative plastic laminate), one double-sided power beam (15A), two 12″D open wire shelves, two light fixture assemblies and two parabolic light diffusers.

Mfg. Part No.	Description	H x W x D (in.)	Stock No.	Price Each
A-DS608430SL	Double-Sided Starter, Plastic Laminate Top	84 x 30 x 30	01N3793	2707.21
A-DS608430SD	Double-Sided Starter, ESD Plastic Laminate Top	84 x 30 x 30	01N3792	3174.05
A-DS728430SL	Double-Sided Starter, Plastic Laminate Top	84 x 30 x 30	01N3795	3017.22
A-DS728430SD	Double-Sided Starter, ESD Plastic Laminate Top	84 x 30 x 30	01N3794	3427.17

A-DA series double-sided adder section includes: one adder assembly frame, two footrests, two outriggers, two worksurface assemblies (choice of plastic laminate or static-dissipative plastic laminate), one double-sided power beam (15A), two 12″D open wire shelves, two light fixture assemblies and two parabolic light diffusers.

A-DA608430SL	Double-Sided Adder, Plastic Laminate Top	84 x 30 x 30	01N3789	2453.98
A-DA608430SD	Double-Sided Adder, ESD Plastic Laminate Top	84 x 30 x 30	01N3788	2922.52
A-DA728430SL	Double-Sided Adder, Plastic Laminate Top	84 x 30 x 30	01N3791	2767.39
A-DA728430SD	Double-Sided Adder, ESD Plastic Laminate Top	84 x 30 x 30	01N3790	3178.48

ARLINK® 8000 HANGING CABINETS

These hanging cabinets provide convenient below-worksurface storage. Cabinet is mounted under worksurface-to-worksurface support beams and can be repositioned to any horizontal position. Cabinets locks for security. Exterior dimensions: 16¾″W x 19¼″D. Usable interior dimensions: 13¼″W x 16¹⁵⁄₁₆″D. Drawer weight capacity: 50 lbs. Choice of three heights: 5″, 8″ or 19⅞″.

Mfg. Part No.	No. of Drawers	Cabinet Height (in.)	Drawer Height (in.)	Stock No.	Price Each
8614	1	5	2¾	01N3829	250.08
8619	1	8	5¾	01N3830	270.36
8658	2*	9⅞	5¾	01N3831	508.55

*One 5¾″H drawer and one file drawer with file hangers

(116572)

MODULAR DRAWER STORAGE CABINETS

LISTA making workspace work

XSSC0900-0501/BB

XSSC0900-0703/BB

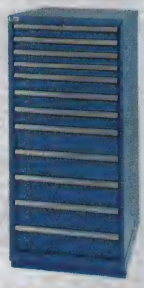
XSSC0900-0901/BB

XSSC0900-1002/BB

XSSC1350-0803/BB

XSSC1350-0903/BB

XSSC1350-1103/BB



XSSC1350-1234/BB

➤ CONTINUED ➤

MODULAR DRAWER STORAGE CABINETS (CONT.)

XSSC1350-1502/BB

XSST0750-0701M/BB

XSHS0750-0701M/BB

- High-quality, all-steel construction provides strength and stability
- 100% full extension drawers with 440-lb. load capacity
- Steel bearing drawer glides for problem-free operation
- PreventTip® locking system prevents accidental tipping
- Ergonomic, flush drawer handles for safety and good looks
- Hinged label holders for easy identification of drawer contents
- Key lockable for security and safety
- Choice of counter-height, eye-level height or mobile models
- Ideal for replacing shelving
- Maximizes floor space

XSSC and **XSHS series** storage drawer cabinets are ideal for a wide range of workspaces and storage needs, from manufacturing to warehousing to research and development. Designed to provide years of safe, convenient, high-density storage and problem-free operation. Heavy-duty steel construction, unique Z-bar support drawer design and fork truck base, with front and rear covers, provide full dimensional stability. Drawers fully extend 100%, even with a full 440 lb. (200 kg) load, allowing complete use of the furthest corners and easy access to all contents. PreventTip® locking system prevents cabinet from tipping by locking remaining drawers closed when one is extended open. Ergonomic drawer handles are full width, located at top of each drawer and flushed with cabinet housing when closed so nothing protrudes, improving safety and appearance. Drawer handles have a unique hinged plastic cover that protects identification labels and is easily opened and closed to allow labels to be added and changed. Installed drawer dividing accessories for better item organization and faster retrieval. All cabinets come with individual removable core lock with two keys for secure, safe storage. Cabinets can be anchored directly to the floor or bolt to adjacent units for stable, secure positioning with no shifting. Finish: bright blue.

XSSC0900 SERIES COUNTER-HEIGHT CABINETS — 28¼″W x 28½″D x 41¾″H

Mfg. Part No.	No. of Drawers	No. of Drawer Compartments	Drawer Height	Stock No.	Price Each
XSSC0900-0501/BB	5	61	Three at 5″H, One at 7″H, One at 9″H	01N3809	2742.33
XSSC0900-0703/BB	7	114	Two at 2″H, Two at 3″H, One at 5″H, Two at 7″H	01N3810	3255.49
XSSC0900-0901/BB	9	154	Four at 2″H, Three at 3″H, Two at 5″H	01N3811	2284.53
XSSC0900-1002/BB	10	210	Four at 2″H, Six at 3″H	01N3812	4052.44
XSSC1350 SERIES EYE-LEVEL HEIGHT CABINETS — 28¼″W x 28½″D x 59½″H					
XSSC1350-0803/BB	8	88	Six at 5″H, One at 7″H, One at 9″H	01N3813	2434.49
XSSC1350-0903/BB	9	124	Nine at 5″H	01N3814	2607.51
XSSC1350-1103/BB	11	172	Four at 2″H, Four at 4″H, Two at 5″H, One at 9″H	01N3815	2862.95
XSSC1350-1234/BB	12	210	Four at 2″H, Three at 3″H, Five at 5″H	01N3816	3159.63
XSSC1350-1502/BB	15	300	Seven at 2″H, Seven at 3″H, One at 4″H	01N3817	3608.13

XSST AND XSHS SERIES MOBILE CABINETS — 22½″D x 41½″H

Keep what's needed close at hand with **XSST** and **XSHS series** mobile storage drawer cabinets. Ideal for safe and secure storage and transport for parts and tools. Designed for the utmost ergonomic efficiency, each mobile cabinet includes a mobile base with two fixed and two swivel 6x2″ casters with wheel locks, tubular steel handle and removable core lock with two keys. PreventTip® locking system prevents cabinet from tipping by locking remaining drawers closed when one is extended open. Features individual drawer latches to secure drawer in closed position for safety when moving. Heavy-duty steel construction with bright blue painted finish. Drawer capacity: 440-lbs.

Mfg. Part No.	Cabinet Width (in.)	No. of Drawers	No. of Drawer Compartments	Drawer Height	Stock No.	Price Each
XSST0750-0701M/BB	28¼	7	72	Four at 2″H, One at 3″H, One at 5″H, One at 7″H	01N3818	2151.33
XSHS0750-0701M/BB	40¼	7	94	Four at 2″H, One at 3″H, One at 5″H, One at 7″H	01N3808	2500.14

(116729)

DURATOOL AT NEWARK ELEMENT14

For your production and facilities needs, from soldering stations to tool sets & more.
newark.com/duratool

(212563)

V-4 AND V-8 SERIES VALUE-LINE UPHOLSTERED AND ESD (STATIC CONTROL) SEATING

BEVCO ergonomic seating

VALUE-LINE by BEVCO

V4007HC-BLK

V4507MG-BLU

V4507MG-GRY

V800SMG

- Ergonomic waterfall seat for comfort
- Easy-to-use pneumatic seat height adjustment
- 360##UndefTag-786## swivel
- Tilt back with adjustable tension control
- Sturdy five-legged, black, reinforced-plastic base
- Easy-to-assemble with a #2 Philips screwdriver
- Meets applicable ANSI/BIFMA X5.1 standards for quality, durability and safety
- Three-year manufacturer's warranty
- Made in the U.S.A.

V850SHC

V-4 series upholstered seating and **V-8 series** static-control ESD-protective seating are both available on smooth-sliding glides or hard-floor casters. Dimensions: seat: 18″W x 18″D x 2.75″H; back: 16″W x 15″H x 2″D.

V4 SERIES UPHOLSTERED SEATING

V-4 series task chairs and task stools with 18″ adjustable footring feature BIFMA Class 1 rated Olefin fabric upholstery that resists fading, pilling, punctures and moisture. Meets flame retardant standards of California Technical Bulletin 117. Choice of three popular colors: black, blue or gray. Comfortable foam padding and contoured back with durable scuff-resistant back pan. *Order* **mfg. part no. AV** *ergonomic height-adjustable armrests with polyurethane arm pads separately below.*

Mfg. Part No.	Description	Upholstery Color	Seat Height Adjustment (in.)	Base Size (in.)	Stock No.	Price Each
V4007MG-BLK	Upholstered Task Chair on Glides	Black	16 to 21	23	73P9721	116.00
V4007MG-BLU		Blue			73P9722	116.00
V4007MG-GRY		Gray			73P9723	116.00
V4007HC-BLK	Upholstered Task Chair on Hard-Floor Casters	Black	17 to 22		73P9718	125.00
V4007HC-BLU		Blue			73P9719	125.00
V4007HC-GRY		Gray			73P9720	125.00
V4307MG-BLK	Upholstered Task Stool on Glides with Footring	Black	20 to 27.5	27	73P9727	149.00
V4307MG-BLU		Blue			73P9728	135.00
V4307MG-GRY		Gray			73P9729	135.00
V4307HC-BLK	Upholstered Task Stool on Hard-Floor Casters with Footring	Black	21 to 28.5		73P9724	143.00
V4307HC-BLU		Blue			73P9725	143.00
V4307HC-GRY		Gray			73P9726	143.00
V4507MG-BLK	Upholstered Task Stool on Glides with Footring	Black	23 to 33		73P9733	135.00
V4507MG-BLU		Blue			73P9734	135.00
V4507MG-GRY		Gray			73P9735	135.00
V4507HC-BLK	Upholstered Task Stool on Hard-Floor Casters with Footring	Black	24 to 34		73P9730	158.00
V4507HC-BLU		Blue			73P9731	143.00
V4507HC-GRY		Gray			73P9732	143.00
AV	Ergonomic Height-Adjustable Armrests — **Sold in Pkg. of 2**				73P9717	40.00

V8 SERIES STATIC-CONTROL ESD-PROTECTIVE UPHOLSTERED SEATING

V8 series ESD-protective task chairs and task stools with 18″ adjustable footring are static-dissipative with a resistance of less than 106 ohms and have a grounding brass drag chain. All models feature navy blue, conductive fabric upholstery that is BIFMA Class 1 rated for durability and meets flame retardant standards of California Technical Bulletin 117. Comfortable foam padding and a contoured back with durable molded bumpers to prevent fabric wear.

Mfg. Part No.	Description	Seat Height Adjustment (in.)	Base Size (in.)	Stock No.	Price Each
V800SMG	ESD Task Chair on Glides	16 to 21	23	73P9737	186.00
V800SHC	ESD Task Chair on Casters	17 to 22		73P9736	192.00
V830SMG	ESD Task Stool on Glides with Footring	20 to 27.5	27	73P9739	262.00
V830SHC	ESD Task Stool on Casters with Footring	21 to 28.5		73P9738	244.00
V850SMG	ESD Task Stool on Glides with Footring	23 to 33		73P9741	238.00
V850SHC	ESD Task Stool on Casters with Footring	24 to 34		73P9740	269.00

(143742)

9000 SERIES DELUXE UPHOLSTERED ESD (STATIC CONTROL) AND CLEANROOM SEATING

BEVCO ergonomic seating

9051ME-NY 9551ME-NY 9051MC2-BLV 9551MC2-BKV

- Ergonomic seat with waterfall edge for and comfort
- Contoured backrests for upper and lower back support
- Easy-to-use pneumatic seat height adjustment
- 360° swivel
- Tilt back and seat with adjustable control
- Polypropylene back shell for improved durability
- Sturdy five-legged, polished-aluminum base on smooth-sliding glides
- Exceeds ANSI/BIFMA standards for quality, durability and safety
- 12-year manufacturer's warranty
- Made in the U.S.A.

9000 series top-of-the-line seating provides advanced ergonomic features and total body support for around-the-clock comfort and reliability in a variety of workplace environments. Models designed specifically for static control (ESD) or cleanroom use, these deluxe chairs will fit almost any requirement. Featuring a large, comfortable waterfall seat and backrest, both with tilt function: 6° seat tilt range rearward/forward and backrest that tilts 110° forward/150° backward. Dimensions: seat: 20"W x 18"D x 3"H; back: 17.5"W x 16"H x 3"D.

DELUXE ESD (STATIC CONTROL) FABRIC-UPHOLSTERED SEATING

Deluxe static control ESD-protective task chairs and task stools with 20" adjustable ESD footring are fully assembled at the factory and tested for conductivity prior to shipment. The ESD fabric upholstery has a surface resistance of 108 ohms or less and comes with a conductive backing that more than doubles its abrasion surface. Averages 1.0x105 ohms resistance from any part of the chair to the ground, exceeding NFPA standards. All ESD models include drop chain, ESD glides, protective ESD backshell, and other chrome-plated components. *Order* **mfg. part no. A8** *height-adjustable ESD armrests and* **mfg. part no. CARD/5 S** *heavy-duty ESD dual-wheel casters for hard floors separately below.*

Mfg. Part No.	Description	Upholstery Color	Seat Height Range (in.)	Stock No.	Price Each
9051ME-CH	Deluxe ESD Task Chair on Glides	Charcoal	17 to 22.25	74P0066	368.00
9351ME-CH	Deluxe ESD Task Stool on Glides with Footring		20 to 27.5	74P0070	404.00
9051ME-NY	Deluxe ESD Task Chair on Glides	Navy Blue	17 to 22.25	74P0067	368.00
9351ME-NY	Deluxe ESD Task Stool on Glides with Footring		20 to 27.5	74P0071	404.00
9551ME-NY	Deluxe ESD Task Stool on Glides with Footring		24 to 34	74P0075	404.00
A8	ESD Height-Adjustable Armrests — **Sold in Pkg. of 2**			74P0061	59.00
CARD/5S	ESD Heavy-Duty Dual-Wheel Casters — **Sold in Pkg. of 5**			74P0062	60.00

DELUXE CLEANROOM VINYL-UPHOLSTERED SEATING

These deluxe cleanroom task chairs and task stools with 20" adjustable footring are rated Cleanroom Class 100, tested and certified by IBR for cleanroom use, and meet particulate goals of Federal Standard 209. Durable vinyl upholstery in choice of two popular colors: black and royal blue. *Order* **mfg. part no. A** *5 height-adjustable armrests and* **mfg. part no. 3850S/5** *heavy-duty dual-wheel casters for hard floors separately below.*

Mfg. Part No.	Description	Upholstery Color	Seat Height Range (in.)	Stock No.	Price Each
9051MC2-BKV	Deluxe Cleanroom Task Chair on Glides	Black	17 to 22.25	74P0064	412.00
9351MC2-BKV	Deluxe Cleanroom Task Stool on Glides with Footring		20 to 27.5	74P0068	448.00
9551MC2-BKV	Deluxe Cleanroom Task Stool on Glides with Footring		24 to 34	74P0072	448.00
9051MC2-BLV	Deluxe Cleanroom Task Chair on Glides	Royal Blue	17 to 22.25	74P0065	412.00
9351MC2-BLV	Deluxe Cleanroom Task Stool on Glides with Footring		20 to 27.5	74P0069	448.00
9551MC2-BLV	Deluxe Cleanroom Task Stool on Glides with Footring		24 to 34	74P0073	448.00
A5	Height-Adjustable Armrests — **Sold in Pkg. of 2**			74P0060	40.00
3850S/5	Heavy-Duty Dual-Wheel Casters — **Sold in Pkg. of 5**			74P0063	11.00

(144705)

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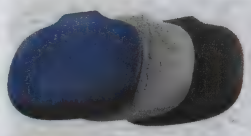
(212569)

7000 SERIES ERGONOMIC INDUSTRIAL SEATING

BEVCO ergonomic seating



Blue, Gray, Black

7000-BLK 7501-BLK

- Durable polyurethane seat and back with ventilated ribs for comfort and support
- Fully adjustable contoured back with heavy-duty back bracket
- Contoured waterfall seat edge for and comfort
- Easy-to-use pneumatic seat height adjustment
- 360° swivel
- Tilt back and seat with adjustable control on **mfg. part nos. 7001, 7301, 7501**
- Sturdy five-legged, reinforced-plastic base on smooth-sliding glides
- Scratch-resistant, baked-enamel finish on metal components
- Meets ANSI/BIFMA standards for quality, durability and safety
- 12-year manufacturer's warranty
- Made in the U.S.A.

7000 series egonomic industrial polyurethane seating is specifically designed for outstanding comfort and long lasting use in the toughest workplace environment. These durable task chairs and stools offer total body support with advanced ergonomic features that improve productivity and reduce worker fatigue. The rugged self-skinned polyurethane seat and back resist stains and damage from punctures, grease, water, and chemicals. Ventilation ribs increase air circulation, comfort and ease of cleanup. **Mfg. part nos. 7001, 7301,** and **7501** come with an articulating seat and back tilt control for maximum ergonomic benefit. Tilt function: 6° seat tilt range rearward/forward and back tilts 11° forward/15° backward. **Mfg. part nos. 7300, 7301, 7500** and **7501** feature a wider base with an 18" diameter adjustable chrome footring. Dimensions: seat: 18.5"W x 17"D x 1.5"H; back:16.52"W x 12.5"H x 1"D. *Order* **mfg. part no. 3850S/5** *heavy-duty dual-wheel casters for hard floors separately below.*

Mfg. Part No.	Description	Color	Seat Height Adjustment (in.)	Back Adj. (in.) Vert. / Horiz.	Stock No.	Price Each
7000-BLK	Industrial Task Chair on Glides	Black	15 to 20	2.25 / 2	74P0632	179.00
7000-BLU		Blue			74P0633	179.00
7000-GRY		Gray			74P0634	179.00
7001-BLK	Industrial Task Chair on Glides with Tilt Control	Black	15 to 20	6 / Tilt	74P0635	233.00
7001-BLU		Blue			74P0636	233.00
7001-GRY		Gray			74P0637	233.00
7300-BLK	Industrial Task Stool on Glides with Footring	Black	19.5 to 26.5	2.25 / 2	74P0638	203.00
7300-BLU		Blue			74P0639	203.00
7300-GRY		Gray			74P0640	203.00
7301-BLK	Industrial Task Stool on Glides with Tilt Control and Footring	Black	19.5 to 26.5	6 / Tilt	74P0641	256.00
7301-BLU		Blue			74P0642	256.00
7301-GRY		Gray			74P0643	256.00
7500-BLK	Industrial Task Stool on Glides with Footring	Black	21 to 31	2.25 / 2	74P0644	203.00
7500-BLU		Blue			74P0645	203.00
7500-GRY		Gray			74P0646	203.00
7501-BLK	Industrial Task Stool on Glides with Tilt Control and Footring	Black	21 to 31	6 / Tilt	74P0647	256.00
7501-BLU		Blue			74P0648	256.00
7501-GRY		Gray			74P0649	256.00
3850S/5	Heavy-Duty Dual-Wheel Casters — **Sold in Pkg. of 5**				74P0063	11.00

(145367)

SWIVEL TABLE VICES

DURATOOL

- Heat treated jaws, 60mm wide & 25mm deep, open to 80mm
- Locking swivel base turns through 360°
- Mounting clamp opens up to 45mm
- Paint coated body

Mfg. Part No.	Description	Stock No.	Price Each 1-24
D00099	Swivel Table Vise with Anvil, 2.36"	97M9396	20.00

(116751)

1864 SERIES FLOOR MAT

3M

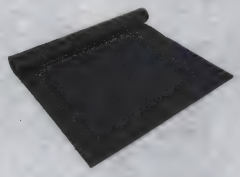
The main purpose of a conductive floor mat or runner is to remove static charge from personnel as they approach work areas. This could include supervisors and parts delivery personnel, as well as the worker who removes his or her wrist strap and momentarily steps away. Floor mats provide significant passive protection in well-traveled assembly areas. Continuous runners extend static protection throughout and between entire areas. This is a semi-flexible conductive floor mat that contains a rubber filler for resilience.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
1864 4X6	Electrically Conductive Floor Mat, 1/8 x 4' x 6'	93K6229	395.47
1864R 2X40	Electrically Conductive Floor Runner, 1/8 x 2' x 40'	93K6230	1246.80

(88905)

ESD FLOOR MAT GROUNDING KIT

DURATOOL



Dual-layer, rubber ESD floor mat is resistant to heat and chemicals. Comes with 15' domed ground cord, 10mm stud, one megohm resistor on mat, termination end, and a universal snap kit: 10mm stud, 10mm socket, groundable point label, washer and screws. Mat size: 4'W x 6'L, 3/32" thick. Color: dark blue.

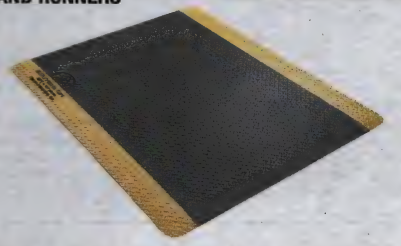
Mfg. Part No.	Description	Stock No.	Price Each
MC35757	ESD Floor Mat Grounding Kit	83R0274	214.72

(89637)

STATFREE DPL PLUS DIAMOND PLATE ESD FLOOR MATS AND RUNNERS

DESCO

- Anti-fatigue, conductive
- Embossed diamond plate surface offers high-tech look while providing traction



Statfree DPL Plus™ homogeneous vinyl conductive material laminated to double-thick rubber foam base provides anti-fatigue properties. Diamond plate surface supplies traction in wet areas and abrasion resistance for high traffic areas. Black with yellow safety borders and laser engraved ESD protective symbol on top of mat alert employees to ESD sensitive areas. Non-humidity dependence allows consistent electrical performance. Statfree DPL Plus™ meets the technical range recommended in ANSI/ESD S20.20 for ESD Floor < 1 x 10E9 ohms tested per ANSI/ESD S7.1.

Mfg. Part No.	Description	Dimensions W x L	Thickness (in.)	Stock No.	Price Each
40980	Floor Mat	36" x 48"	0.450	51M0856	341.47
40982	Floor Runner	36" x 60'	0.450	32M0593	3609.05

(84349)

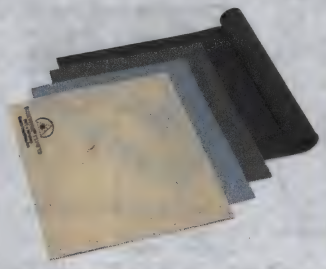
TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

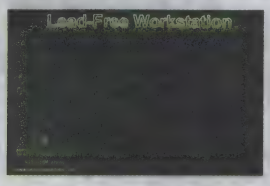
(196535)

STATFREE T2 DISSIPATIVE DUAL-LAYER RUBBER WORKSURFACE MATS AND ROLLS

DESCO



Statfree T2™ Dual Layer Rubber Mats and Rolls



Lead-Free Green Mats and Rolls

- Ideal for soldering and assembly areas
- 10E6-10E8 Dissipative top with conductive bottom layer (Ref. ESD S4.1 and S20.20)
- Conductive properties warranted for life of product
- 100% premium nitrile butadiene rubber
- Superior heat-, chemical-, and wear-resistance

Statfree T2™ worksurface mats and rolls are available in other sizes and colors; *go online or call*. Green mats and rolls are lead free and laser engraved with "Lead-Free Workstation" to clearly identify the workstation as a Lead-Free work area.

STATFREE T2™ DUAL-LAYER RUBBER MATS

Statfree T2™ worksurface mats come complete with **mfg. part no. 14213** common ground point kit that consists of one **09826** common point ground (1 megohm resistor, 15' ground cord) and one universal 10mm stud snap kit.

Mfg. Part No.	Mat Dim. H x W (in.)	Color	Stock No.	Price Each
66040	24 x 36	Blue	49H6828	108.39
66045	x 24	Blue	49H6829	127.67
66050	x 24	Dark Gray	49H6830	104.87
66057	24 x 36	Green**	24K0880	125.46
66058	24 x 48	Green**	24K0881	144.10

STATFREE® T2™ DUAL-LAYER RUBBER ROLLS

Mfg. Part No.	Roll Dim. W (in.) x L (ft.)	Color	Stock No.	Price Each
66070*	24 x 40	Blue	49H6836	876.98
66075*	36 x 40	Blue	49H6837	1260.96
66110*	30 x 40	Blue	49H6848	1045.42
66085*	36 x 40	Dark Gray	49H6840	1254.85
66086*	36 x 40	Dark Blue	49H6841	1260.96
66106*	30 x 40	Dark Blue	49H6847	1050.56
66120*	24 x 24	Green	24K0882	539.06

*Grounding hardware not included; **Lead free

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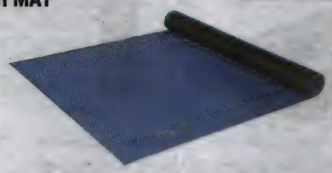
STATFREE B2 DUAL LAYER VINYL ESD BENCH MAT

DESCO



Statfree B2™ meets the worksurface required limits of ANSI/ESD S20.20 of < 1 x 10E9 ohms. Statfree B2™ is designed for the dissipative dark blue side to be used as the top working surface meeting the upper limit requirement of ANSI/ESD S20.20 and lower limit recommendation of ANSI/ESD S4.1. The black side of Statfree B2™ is more conductive and provides a reliable path to ground which makes it compatible with continuous or constant monitors. Mat top kit includes benchmat and **mfg. part no. 14213** common point ground kit.

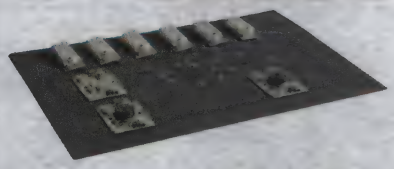
Mfg. Part No.	Description	Dimensions W x L	Thickness (in.)	Stock No.	Price Each
66161	Static Protection Bench Mat	30" x 50'	0.06	12P4358	984.11

(194910)

DISPOSABLE ESD MATS

DESCO

- Disposable fiberboard with internal conductive layer
- Dissipative worksurface 10E6 - 10E8 ohms Rtt per ANSI/ESD S4.1
- Volume resistance 10E6 - 10E7 ohms per ANSI/ESD STM11.12
- Material thickness 0.060"
- Recyclable
- Made in America



Disposable ESD mat meets ANSI/ESD S20.20 worksurface required limit and recommendation of ANSI/ESD S4.1 for contact with ESD susceptible items. The material is intended to be a sacrificial material to protect a more expensive worksurfaces from damage caused by conformal coating, solder fluxes, or other contaminates.

Mfg. Part No.	Dimensions (L x W) (in.)	Stock No.	Price Each
82100	11 x 14	27T5358	6.77
82101	14 x 22	27T5359	11.05

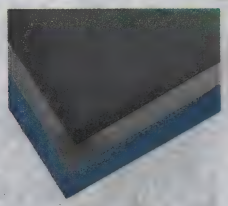
(196377)

FLOOR & WORK AREA SURFACES

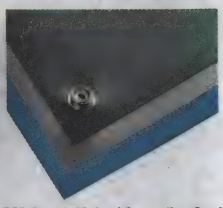
ESD BENCH MATS

RoHS Compliant Available

multicomp



ESD Bench Mat



ESD Bench Mat w/ Grounding Cord

ESD Bench Mat - 2 Layer
- 2mm thick double-layer structure
- Surface layer is 0.5mm thick static-dissipative layer
- Bottom layer is 1.5mm thick conductive layer

ESD Bench Mat - 3 Layer
- 3mm thick double-layer structure
- Surface layer is 1.25mm thick static-dissipative layer
- Middle layer is 0.5mm thick conductive layer
- Bottom layer is 1.25mm thick static-dissipative layer

ESD BENCH MAT - 2 LAYER (MAT ONLY)

Mfg. Part No.	Dimensions (ft.) Width	Length	Color	Stock No.	Price Each 1-4
● MC36340	2	3	Green	27T3773	53.27
● MC36341	2	4	Green	27T3774	61.17
● MC36342	2	5	Green	27T3775	69.09
● MC36343	2.5	4	Green	27T3776	69.53
● MC36344	2.5	50	Green	27T3777	700.37

ESD BENCH MAT W/ GROUNDING CORD - 2 LAYER
Supplied w/two studs to two corner and 10ft. straight earth lead (10mm stud-ring terminal)

● MC36345	2	3	Grey	27T3778	54.96
● MC36346	2	4	Grey	27T3779	67.06
● MC36347	2	3	Blue	27T3780	54.96
● MC36348	2	4	Blue	27T3781	67.06
● MC36349	2	40	Blue	27T3782	527.20

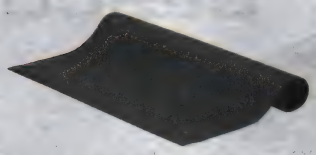
ESD BENCH MAT W/ GROUNDING CORD - 3 LAYER
Supplied w/two studs to two corner and 10ft. straight earth lead (10mm stud-ring terminal)

● MC36350	2	4	Green	27T3783	69.67
● MC36351	2	4	Grey	27T3784	71.67
● MC36352	2	4	Blue	27T3785	71.67

(192419)

STATIC-DISSIPATIVE TABLE AND FLOOR MATS AND RUNNERS

3M



Static-Dissipative Rubber Table Mat

Static-Dissipative Vinyl Three-Layer Floor Mats

STATIC-DISSIPATIVE RUBBER TABLE AND FLOOR MATS AND RUNNERS
Static-dissipative rubber table and floor mats and runners feature a dual-layer construction consisting of a top layer of static-dissipative rubber laminated to a bottom layer of conductive rubber. The synthetic rubber work surface offers excellent resistance to oil, grease, and most common solvents, plus a higher degree of resistance to heat and hot solder than vinyl. Easy to keep surface clean with **mfg. part no. 8001** static control surface mark remover; *ordered separately below.*

STATIC-DISSIPATIVE RUBBER TABLE MATS
Each table mat includes one **mfg. part no. 3048** wrist strap grounding system and two **mfg. part no. 3034** female snap fasteners (installed). Table mat rolls come with no hardware.

Mfg. Part No.	Size	Color	Stock No.	Price Each 1-4
88A0	2′ × 3′	Gray	93K6238	83.92
88A1	2′ × 3′	Blue	93K6239	83.92
88A2	2′ × 3′	Green*	93K6240	70.47
8810	2′ × 4′	Gray	66F9500	100.92
8811	2′ × 4′	Blue	66F9501	100.05
8830	3′ × 4′	Gray	93B0292	166.87
8831	3′ × 4′	Blue	22C9016	173.63
8800	2′ × 40′ Roll	Gray	93K6242	767.87
8801	2′ × 40′ Roll	Blue	93K6243	767.87
8821	2.5′ × 40′ Roll	Blue	66F9503	978.48

STATIC-DISSIPATIVE RUBBER TABLE RUNNERS
Each table runner includes two **mfg. part no. 3040** 15′ ground cords and five **mfg. part no. 3034** female snap fasteners (not installed). Table runner rolls come with no hardware.

Mfg. Part No.	Size	Color	Stock No.	Price Each 1-4
8840	2′ × 24′	Gray	66F9504	483.77
8841	2′ × 24′	Blue	66F9505	494.65
8860	3′ × 24′	Gray	71C9304	870.76

➤ CONTINUED ➤

STATIC-DISSIPATIVE TABLE AND FLOOR MATS AND RUNNERS (CONT.)

STATIC-DISSIPATIVE RUBBER TABLE RUNNERS

Mfg. Part No.	Size	Color	Stock No.	Price Each 1-4
8861	3′ × 24′	Blue	82H1043	890.35
8850	3′ × 40′ Roll	Gray	66F9506	1226.02

*Green mat table/runner identifies work surface as a lead-free area

STATIC-DISSIPATIVE RUBBER FLOOR MATS
Each floor mat includes one **mfg. part no. 3040** 15′ ground cord and two **mfg. part no. 3050** female snap fasteners (installed).

Mfg. Part No.	Size	Color	Stock No.	Price Each 1-4
8870	4′ × 6′	Gray	66F9508	256.53
8871	4′ × 6′	Blue	66F9509	256.53

STATIC-DISSIPATIVE VINYL THREE-LAYER TABLE AND FLOOR MATS AND RUNNERS
Static-dissipative vinyl table and floor mats and runners feature a three-layer construction. The top layer is semiconductive vinyl with a sufficiently low-resistance to discharge static-laden conductors while preventing the shorting of PC boards laid on the mat. The second layer is a highly conductive scrim, which provides the main discharge path to ground. The third layer is nonconductive foam backing, which prevents the bypassing of the protective conductive layers. Easy to keep surface clean with **mfg. part no. 8001** static control surface mark remover; *ordered separately below.*

STATIC-DISSIPATIVE VINYL THREE-LAYER TABLE MATS
Each three-layer constructed table mat includes one **mfg. part no. 3048** wrist strap grounding system and two female snap fasteners (installed), except **mfg. part no. 8243** mat does not include hardware.

Mfg. Part No.	Size	Color	Stock No.	Price Each 1-4
8223	2′ × 3′	Grey	89M4049	80.35
8211 TABLE MAT	2′ × 4′	Brown	46F7458	92.71
8213	2′ × 4′	Gray	90F2069	94.95
8214	2′ × 4′	Blue	90F2070	94.95
8261	2′ × 24′	Brown	50B186	354.73
8263	2′ × 24′	Gray	26H0168	360.18
8264	2′ × 24′	Blue	90B3868	357.06
8234	2′ × 50′	Blue	93K6235	669.00
8243	2.5′ × 50′	Grey	46M2684	1053.31
8244	2.5′ × 50′	Blue	93K6236	1071.74
8274	3′ × 50′	Blue	93K6237	1196.93

STATIC-DISSIPATIVE VINYL THREE-LAYER FLOOR MATS AND RUNNERS
Each three-layer constructed floor mat includes one **mfg. part no. 3040** 15′ ground cord and two **mfg. part no. 3050** female snap fasteners (installed). Each three-layer constructed floor runner (except **mfg. part no. 82A4**) includes two **mfg. part no. 3040** 15′ ground cords and two **mfg. part no. 3050** female snap fasteners to be installed by customer.

Mfg. Part No.	Size	Color	Stock No.	Price Each 1-4
8224	2′ × 3′ Floor Mat	Blue	93K6234	85.96
8204 FLOOR MAT	4′ × 6′ Floor Mat	Blue	86H7363	231.96
8201	4′ × 6′ Floor Mat	Brown	46F7456	229.95
8281	2′ × 40′ Floor Runner	Brown	09J2371	525.98

+No hardware

STATIC CONTROL SURFACE MARK REMOVER
Mfg. part no. 8001 static control surface mark remover is an extra-strength cleaner for removing ordinary dirt and grime, as well as difficult spots and stains, from all types of static control surfaces: table and floor mats and runners, hard laminate benchtops, portable field service kit work surfaces, etc. This easy-to-use cleaner is suitable for any washable static control surface. Designed to be used full-strength, it's a clear, homogenous, water-based liquid that contains detergents, conditioners, and other cleaning additives, and has a fresh, clean scent. Comes in a handy, refillable 1-quart spray bottle.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
8001	Static Control Surface Mark Remover, 1-Quart Bottle	83K9447	9.01

ULTRA R-2 LAYER RUBBER
Resistant to heat and chemicals, excellent electrical properties, thickness 0.060 in. (1.5 mm).

Mfg. Part No.	Description	Color	Stock No.	Price Each 1-4
RM30600L2RBL	2' x 3' Table Mat	Blue	34P6252	1080.47
RM36600L2RBL	3' x 50' Table Mat	Blue	34P6254	1200.85

3-LAYER VINYL
Excellent electrical properties, thickness 0.125 in. (3.2 mm).

Mfg. Part No.	Description	Color	Stock No.	Price Each 1-4
TM24600L3BL	2.5' x 50' Table Mat	Blue	04P1738	605.33
TM30600L3BL	3' x 50' Table Mat	Blue	34P6454	825.86
TM36600L3BL	3' x 50' Table Mat	Blue	34P6457	908.01

(4661)

element14 COMMUNITY

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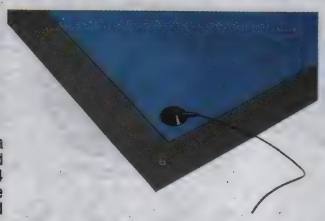
element14.com

(196545)

STATIC DISSIPATIVE RUBBER MATS AND RUNNERS 6800 SERIES

3M

- Material: nitrile
- Thickness: 0.065 in. (1.7 mm)
- Hardness: 65 Shore A
- Width: ± .25 in.
- *Resistance:
  Surface to Ground (RTG) < 108 ohms
  Surface to Surface (RTT) < 109 ohms
- *Tested per ESD Association Standard S4.1.



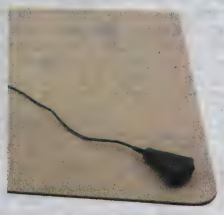
6800 series matting is a dual layer rubber mat featuring a smooth finish. **6800 series** mat is available in blue/black and grey/black colors with standard sizes in 2 feet, 3 feet and 4 feet widths and 50 feet lengths. The **6800 series** mats are also available as 2 x 4 ft. cut mats in blue/black and grey/black, including snaps only.

Mfg. Part No.	Size (ft.)	Color	Stock No.	Price Each 1-4
6810	2 x 4	Grey	62W4292	60.97
6811	2 x 4	Blue	62W4293	62.25
6840	2 x 50	Grey	62W4294	513.23
6841	2 x 50	Blue	61W8511	492.36
6860	3 x 50	Grey	62W4295	766.56
6870	4 x 50	Grey	62W4297	998.10
6871	4 x 50	Blue	62W4298	902.00

(209289)

DISSIPATIVE RIGID WORK SURFACES

3M



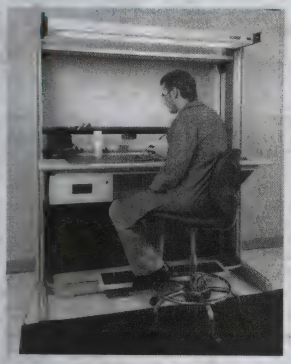
Dissipative rigid work surfaces have the high abrasion resistance of a laminate, yet they are easy to install. Non-glare surfaces resist staining, scorching, and common solvents. Come with 2 factory-installed female snap fasteners and 1 grounding system.

Mfg. Part No.	Size	Color	Stock No.	Price Each 1-4
8344	24 x 36″	Gray	94F7902	246.60
8353	24 x 48″	Beige	94F8843	314.67
8354	24 x 48″	Gray	66F6107	299.36

(12427)

STATIC CONTROL WORKSTATION GROUNDING KITS

3M



Each Kit Includes:
- 2′ x 4′ Table mat
- 4′ x 6′ Floor mat
- 15′ Ground cord 3040
- Adjustable wrist strap 2214
- Wrist strap/table mat grounding system 3048

Workstation Monitor

Workstation grounding kits provide the basic items needed to create a static-safe work environment for fabrication, assembly, storage, kiting, testing, and repair operations. Workstation grounding kit **8020 series** floor and table mats are made from three-layer static-dissipative material to ensure resistance-to-ground measurement will be same from any point on surface of material. Workstation grounding kit **8030 series** table mats are made of softer three-layered, static-dissipative material, while floor mat is of more-rigid, durable, volume-conductive material. Table and floor mats connect to building ground using components included in kit. Up to 2 wrist straps connect to the wrist strap/table mat grounding system. Wrist strap features 1-megohm resistor to protect personnel from electrical shock through cord.

Mfg. Part No.	Mat Color	Description	Stock No.	Price Each 1-4
8021	Brown	Kit with 3-Layer Material Table and Floor Mats	46F7446	587.92
8023	Gray		46F7448	601.15
8024	Blue		46F7449	601.15
8033	Gray	Kit with 3-Layer Material Table Mat and Velostat™ Floor Mat	46F7453	620.50
8034	Blue		46F7454	620.50

(4552)

PORTABLE FIELD SERVICE GROUNDING KITS

3M

These portable grounding kits provide all the basic items needed to create a static-safe work environment for field service work. All kits contain adjustable wrist band, ground cords, and a static-dissipative work surface. Static dissipative grounding kit **8501** is portable and compact. **Mfg. part no. 8505** kit is lightweight and, when folded, small enough to fit in a shirt pocket. Portable field service kit **8507** also includes wrist strap monitor **725** and dual conductor wrap strap with grounding cord, to give a field technician the same continuously monitored, static-protected working environment as that enjoyed by workers in a manufacturing facility.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
8501	Field Service Grounding Kit	46F7444	117.55
8505	Small, Lightweight, Portable Field Service Grounding Kit	95F2864	165.21
8507	Portable Field Service Kit with Continuous Monitoring	90B4103	219.16

(4660)

STATIC CONTROL FIELD SERVICE KIT

MADE IN USA

DURATOOL

- 0.018 in. (0.46 mm) red laminated dissipate vinyl
- Antistatic, low tribocharging, portable, protective worksurface with two ground snaps
- 15′ long common point ground cord
- Provided with 1 megohm resistance between mat and ground and banana jacks for two wrist straps
- Large threaded grounding clip
- Construction is a supported laminate for added tear strength
- Holds up longer in demanding and rough "Field Service" environment
- Adjustable wrist strap included
- Everything needed is provided
- Ground cord threaded end designed to fit ground jack AC outlet
- Canvas carrying pouch
- Easy to store and transport service kit
- Made in America

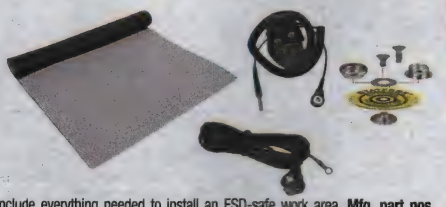
Mfg. Part No.	Description	Stock No.	Price Each
MC23796	Field Service Kit	14N9060	63.72

(132363)

ESD BENCHTOP GROUNDING KITS

DURATOOL

All Kits Include:
- Dual-layer rubber mat — available in 2′ x 4′
- Adjustable elastic wrist strap with 4mm male stud snap
- 6′ retractile coil cord with 4mm socket snap, molded banana plug
- 15′ black ground cord with 10mm male stud snap, 1megohm resistor, ring terminal
- One Universal 10mm snap kit



These static control grounding kits include everything needed to install an ESD-safe work area. **Mfg. part nos. MC35758** and **MC35759** benchtop mat grounding kits include a soft elastic wrist strap that has silver impregnated polypropylene on the inside for reliable removal of static charge.

Mfg. Part No.	Description	Mat Size (Ft.)	Mat Color	Stock No.	Price Each 1-9
MC35758	ESD Benchtop Mat and Wrist Strap Grounding Kit	2 x 4	Gray	83R0275	112.83
MC35759	ESD Benchtop Mat and Wrist Strap Grounding Kit	2 x 4	Dk. Blue	83R0276	118.03

(142329)

STATGUARD® FLOOR CARE

DESCO

- Converts Hard Floors to ESD Protected Flooring
- Non-Tribocharging, Minimizing Charge Generation
- Other Product Sizes Available; *go online or call*

10512

10410

Mfg. Part No.	Description	Size	Stock No.	Price Each
10512	Floor Finish, Dissipative	5 Gallon	49H6806	333.41
10551	Floor Finish, Low VOC Dissipative	5 Gallon	28W2703	280.27
10442	Floor Stripper	5 Gallon	49H6804	157.76
10566	Floor Cleaner	5 Gallon	49H6810	214.12
10409	Dark Gray Conductive Paint	5 Gallon	49H6796	1097.81
10410	Light Gray Conductive Paint	5 Gallon	49H6797	1350.08

(75371)

REZTORE™ ANTISTATIC SURFACE AND MAT CLEANER

DESCO

10601

10600

10435

- Static dissipative solution cleans and restores ESD mats
- Leaves no insulative residue; will not degrade surface's ability to drain charges
- Removes contaminants, eliminating possible source of ESD event
- Will not dry out mats

Mfg. Part No.	Description	Stock No.	Price Each Each
10435	1 Quart Spray	49H6801	14.02
10438	2.5 Gallon Refill	49H6802	96.94
REZTORE™ WIPES			
10601	Static-Wipes, Pop-up Dispenser, 60 Wipes, **Carton of 12**	24K0875	136.92
10600	Static-Wipes, Pop-up Dispenser, 160 Wipes	49H6811	32.55

(75370)

STATIC-DISSIPATIVE PRODUCTS

RoHS Compliant Available

ITW Chemtronics®

Mfg. part nos. ES1668 Static Free™ Plast-N-Glas® and **ES1664T** Mat and Benchtop Reconditioner are engineered to protect electronic equipment and work spaces from static buildup while cleaning and reconditioning. They prevent and eliminate electrostatic point sources on nonporous surfaces. **Mfg. part no. C805** Static Free™ Hand Guard™ Hand Lotion minimizes static buildup and will not inhibit solderability of circuits and components. Nonflammable and ozone-safe.

ES1668

Mfg. Part No.	Description	Stock No.	Price Each Each
● ES1668	14 oz. Aerosol Static Free Plast-N-Glas Non-Streaking Cleaner for Transparent Surfaces	00Z1296	12.45
● ES1664T	16 oz. Trigger Spray Static Free Mat and Benchtop Reconditioner Cleans and Rejuvenates ESD Mats	00Z1297	17.16
● C805	8 oz. Pump Bottle Static Free Hand Guard Lotion Electrostatic Protective Hand Lotion	50F9497	9.31

(36775)

WRIST STRAP GROUNDING SYSTEM, MONITOR-TO-MAT CORD AND MAT SNAP FASTENERS

3M

3048

2380

3033 Male

3034 Female

3050 Female

Mfg. part no. 3048 grounding system for wrist straps easily snaps on mats and runners (10mm male snap); grounds two single conductor wrist straps. Comes complete with ring connector and 15 feet (4.6m) ground cord. Ground cord has a one megohm resistor for mat connection only. **Mfg. part no. 2380** six foot (1.8 m) monitor/table mat replacement cord with 10mm snap does not have a resistor molded into the snap fastener cap. Use with **mfg. part no. 724** 3M™ wrist strap workstation monitor, ordered separately *on page 2148*, to extend monitor to the static control work surface to be monitored. **Mfg. part nos. 3033** and **3034** male and female snap fasteners 0.125″ (3.2mm) hole, 10mm diameter, for 3M™ **1800** and **8800 series** mats and runners. **Mfg. part no. 3050** female snap fastener, 10 mm diameter, for 3M™ **8200 series** mats and runners. **Mfg. part no. 3040** straight 15 feet (4.6 m) ground cord molded-in male snap fastener with integral 1-megohm resistor on one end, solderless terminal on other. **Mfg. part no. 3042** grounding system for wrist strap . Grounds two single conductor wrist straps and conveniently mounts beneath the edge of most work benches. Comes complete with 10 ft. (3.0 m) ground cord. **Sold in packs of 10.**

Mfg. Part No.	Description	Stock No.	Price Each 1-9
3048	Grounding System for Wrist Strap-to-Table Mat	87F3726	48.49
2380	Replacement Cord for Monitor-to-Table Mat	49H7743	19.52
3033	Male Snap Fastener for Mats and Runners	93K6231	14.12
3034	Female Snap Fastener for Mats and Runners	91C6270	13.95
3050	Female Snap Fastner for Mats and Runners	98F2534	23.80
3040	Grounding Cord for Static Control Mats and Runners	46F7437	19.07
3042	Static Protection Kit	7081815	30.53

(88924)

SCC MAT SNAPS

3M

- Size: 3/8″ (10mm) Female
- Rivet style snap includes 10 sockets and 10 eyelets in each pack

Female Prong Snap

Female Snap

SCC snaps are used to connect a ground cord to a static mat. Rivet style snaps are attached with a snap tool. Clinch style snaps are attached without using a specialized tool. These nickel plated brass snaps provide good electrical connection and a long service life. **Sold in packs of 10.**

Mfg. Part No.	Description	Stock No.	Price per Pkg. 1-4
FPSNAP	3/8″ Female Prong Snap Socket	61M4512	18.02
SNAPSOCKET3/8	3/8″ Female Snap For Mats	61M4525	5.34
SNAPTOOL	Heavy Duty Snap Tool w/ Rubber Handles	67M9057	42.23

(91142)

UNIVERSAL SNAP KIT

DESCO

- Recommended for Homogeneous and 2 Layer Mats
- Kit Includes a 10mm Stud, 10mm Socket, Long Screw, Short Screw, and Ground Label
- ESD Ground for Mats
- Includes Required Common Point Ground Symbol

Mfg. Part No.	Description	Stock No.	Price Each
09864	Universal Snap Kit	50H8162	4.05

(75445)

FLOOR AND TABLE MAT GROUNDING CORD KIT WITH 10MM STUD

DESCO

- 15′ ground cord with 10mm snap stud
- Screw allows ground cord to be bolted to mat; keeps cord from disconnecting
- Low profile helps keep users from tripping on cord connection

14234 Kit

Mfg. part no. 14234 grounding cord kit includes one **mfg. part no. 09813** ground consisting of: 10mm (0.395″) snap stud with threaded hole, 6-32x1/4″ flat head screw, countersunk washer, resistor, ring terminal at end of 15′ ground cord and one **mfg. part no. 09864** universal snap kit consisting of: 10mm stud, 10mm socket, long and short screws and ESD common point ground symbol label.

Mfg. Part No.	Description	Stock No.	Price Each
14234	Grounding Cord Kit with Resistor	50H8164	24.40
09813	10mm Stud with Resistor	50H8153	21.03
09814	10mm Stud without Resistor	50H8154	23.83

(75446)

COMMON POINT GROUNDING CORD KIT FOR BENCH MAT AND TWO WRIST STRAPS

DESCO

- Grounds snaps to bench mat and accepts two wrist straps
- Two banana jacks — provides two grounding points for wrist straps or carts
- Low profile reduces snagging of clothes and work instruments

14213 Kit

Mfg. part no. 14213 common point ground cord kit with resistor includes one **mfg. part no. 09826** common point ground consisting of: 10mm socket snap, resistor, two banana jacks, ring terminal at end of 15′ ground cord, extra ring terminal for customizing cord length and one **mfg. part no. 09864** universal snap kit consisting of: 10mm stud, 10mm socket, long and short screws and ESD common point ground symbol label.

Mfg. Part No.	Description	Stock No.	Price Each
14213	Common Point Grounding Cord Kit with Resistor	50H8163	25.32
09820	10mm Socket without Resistor, 10′ Cord	50H8158	20.77
09821	10mm Socket with Resistor, 10′ Cord	50H8159	23.83
09825	10mm Stud without Resistor, 15′ Cord	50H8160	21.41
09826	10mm Stud with Resistor, 15′ Cord	50H8161	24.12

(75447)

SCC GROUND CORDS

3M

Low Profile Commom Ground Cord

Bench Ground Block

- Table mat ground cord **LPCGC151M** connect a mat and two wrist straps to ground
- Floor mat ground cord **FGC151M** has domed profile to help avoid snap disconnect
- Ground block mounts to bench and connects two wrist straps to ground. Two parking studs reduce damage to cords left at the bench. No Resistor.

Use SCC ground cords to connect your table, floor mats and wrist straps to a ground point and comply with ANSI/ESD S-20.20 and ESD STM-6.1. Both ground cords include one megohm resistor and #10 ring terminal.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
FGC151M	Floor Ground Cord w/ 3/8″ Stud and 15′ Cord	39M5829	13.36
LPCGC151M	Low Profile Common Grnd Cord w 3/8″ Stud	39M5830	13.75
WSGR2	Bench Ground Block for Wrist Straps, 10′ Cord, No Resistor	39M5831	15.22

(91141)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

COMMON POINT GROUND CORD FOR BENCH MATS AND WRIST STRAPS

DURATOOL

- 10mm socket snap — compatible with mats that have a 10mm stud snap
- Two banana jacks — provides two grounding points for wrist straps or carts
- Ring terminal at end of ground cord — allows easy attachment to electrical ground
- Low profile — reduces snagging of clothes and work instruments

Mfg. Part No.	Description	Stock No.	Price Each 1-4
MC23795	Common Point Ground Cord — 15-Ft. Long	14N9059	16.71

(132362)

SCC WRIST STRAPS

3M

- Adjustable wristband
- Retractable coiled cord
- 1 meg resistor
- UL listed (WBB series)

WBB-AFWS61M

SCC family of wrist straps offers a complete selection of single wire set, which are designed to fit comfortably and maintain good electrical contact with the person and ground. A lot code on the grounder provides quality traceability. SCC wrist straps meet or exceeds the requirements of ANSI/ESD S-1.1, ANSI/ESD S-20.20, EIA 625, MIL-STD-1686

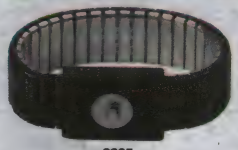
Mfg. Part No.	Description	Stock No.	Price Each
CC61M	Coil Cord, 6′, Resistor	39M5814	11.87
ECWS61M-1	Economy Adj. Blue Wrist Strap/6′ Cord	39M5815	6.80
WBB-AFWS	Adj. Blue/White Wrist Band	39M5816	10.61
WBB-AFWS61M	Adj. Blue/White Wrist Band/6′ Cord	39M5817	42.63

(91139)

METAL WRIST STRAPS AND GROUNDING CORDS

RoHS Compliant Available

3M



2205

Metal wrist straps feature quality Spediel™ metal expansion bands for durability and comfort. Each link is covered with an insulative plastic cap. Compatible with wrist strap ground cords **mfg. part nos. 2210, 2220, 4610** and **4611,** *sold separately below.*

Mfg. Part No.	Description	Stock No.	Price Each 1-9
METAL WRIST STRAPS			
2205	Metal Wrist Band only, Small For Wrists 4½″ to 6″	24C6876	35.46
2206	Metal Wrist Band only, Medium For Wrists 5½″ x 7¼″	24C6847	37.80
2207	Metal Wrist Band only, Large for Wrists Larger Than 6½″	24C6855	36.28
WRIST STRAP GROUNDING CORDS			
2210	Ground Cord, Coiled 5-ft.	46F7420	25.57
2220	Ground Cord, Coiled 10-ft.	46F7425	33.70
4610	Lightweight Ground Cord, 5-ft.	26H2744	16.40
4611	Lightweight Ground Cord, 10-ft.	94B6337	18.80

(79593)

STATIC CONTROL ADJUSTABLE FABRIC WRIST STRAP AND SETS

3M

2204

BLUEWS61M Set

Ideal for all static control processes, these fully-adjustable stretch fabric wrist straps are made of a conductive threads woven together with elastic nylon to allow full conductivity, comfort and reliability, while providing rapid and continuous drain of static charge. One size adjusts to most any size wrist for reliable, 360° protection. Wrist strap sets include one adjustable wrist strap with 4mm snap, one black 5-ft, 6-ft. or 10-ft retractable coil grounding cord with one megohm resistor and banana jack, and one alligator clip to provide an alternative ground attachment method.

CONTINUED

STATIC CONTROL ADJUSTABLE FABRIC WRIST STRAP AND SETS (CONT.)

Mfg. Part No.	Description	Wrist Band Color	Stock No.	Price Each 1-4
2204	Adjustable Wrist Strap (Only)	Burgundy	89F878	9.81
2214	Adjustable Wrist Strap Set — 5-ft. Ground Cord	Burgundy	89F879	32.15
MWS61M	Adjustable Wrist Strap Set — 6-ft. Ground Cord	Maroon	34P5289	19.27
BLUEWS61M	Adjustable Wrist Strap Set — 6-ft. Ground Cord	Blue	34P3320	13.34
2224	Adjustable Wrist Strap Set — 10-ft. Ground Cord	Burgundy	89F880	35.72

(4561)

ECONOMY ADJUSTABLE FABRIC WRIST STRAP SET

3M

Mfg. part no. 2272 3M™ adjustable wrist strap set includes 5' cord (extendable to 6'), monofilament band, and alligator clip. 1-megohm resistor and molded-in strain relief. Blue and white band.

2272

Mfg. Part No.	Description	Stock No.	Price Each 1-4
2272	Wrist Strap Set	92F1282	15.15
2271	Wrist Band	92F1284	4.58

(4583)

4600 SERIES STATIC CONTROL ADJUSTABLE THERMOPLASTIC WRIST BAND/STRAP AND SET

3M

4650

Mfg. part no. 4620 adjustable wrist band/strap grounds static charge from personnel before static sensitive devices/printed circuit boards can be damaged. Features a molded, insulative thermoplastic, colored exterior with an integrally molded conductive interior and 4mm stud. Easy-on/off adjustable zipper-style latching mechanism fits any size wrist comfortably. Lightweight, low-profile design is safe for contact with human skin. Provides full conductivity and reliability. **Mfg. part no. 4650** wrist band/strap set includes one **mfg. part no. 4620** wrist band/strap with 4mm stud, one 5-ft. coiled grounding cord with one megohm resistor molded into the 4mm snap end, and one alligator clip.

Mfg. Part No.	Description	Wrist Band Color	Stock No.	Price Each 1-4
4620	Adjustable Wrist Band/Strap (Only)	Blue	82H0526	4.25
4650	Adjustable Wrist Band/Strap Set with 5-ft. Ground Cord	Blue	30H5784	16.75

(33074)

DISPOSABLE WRIST STRAP

UL

3M

Disposable wrist strap 2209 is ideally suited for shipping with valuable products to provide protection at the receiving end; or in the plant environment for short-term usage by visitors and others who don't need the durability of a reusable strap. Hypo-allergenic adhesive provides 360° contact with skin to minimize skin-to-band resistance. Adhesive-backed copper foil at other end adheres to any convenient electrical ground. 1MΩ resistor contained in the black volume-conductive layer. UL listed.

Mfg. Part No.	Description	Stock No.	Price Each 1-24
2209	Disposable Wrist Strap	89F876	2.18

(4662)

ELASTIC ADJUSTABLE WRIST STRAPS

DESCO

- Extra Wide, Soft Elastic Band
- Has Silver Impregnated Nylon Knitted on Inside for Superior Conductivity
- Replacement Elastic Bands Available and Easy to Replace Without Tools
- Unique Patented Adjustment Design Eliminates Exposed Conductive "Tail" of Band
- UL Listed - Coil Cord Includes 1 Megohm Resistor

Mfg. Part No.	Description	Stock No.	Price Each
09070	Band with 6' Black Coil Cord	57H7342	24.64
09041	Band Only, Black	61H5677	27.50
14830	Band with 10' Blue Coil Cord	61H5941	26.80
19859	Band with Snap-on 6' Black Coil Cord	99H5989	58.64

(79302)

ADJUSTABLE WRIST STRAP SETS

DURATOOL

- **Mfg. part no. MC23779** Elastic blue wrist strap is made of adjustable, non-slip material that may be fitted to any size. 5 foot coil cord. 360° contact and "A" grade banana spring. **Mfg. part no. MC23786** is the elastic blue wrist strap only. Mfg. part no. 23780 is a coiled12' cord with barrel type banana plug. Fits industry standard banana jack .166 in. (4.22mm). Metallized, high flex tinsel, black jacket. One megohm, ¼ watt, series resistor, molded within snap assembly, limits current for operator safety. **Mfg. part no. MC23801** includes 5-ft. coil cord w/banana plug; Elastic strap offers user comfort; Adjustable, non-slip material may be fitted to any size; Color: Blue.

SPC20879

Mfg. Part No.	Description	Stock No.	Price Each 1-4
MC23780	Wrist Strap Kit	14N9045	13.14
MC23786	Wrist Strap (Only)	14N9050	10.73

(18148)

WRIST STRAPS AND STRAP SETS

DURATOOL

MC23801

MC23786

MC23794

Mfg. part nos. 23801 and **23786** feature soft, non-slip elastic strap for user comfort, adjustable to fit most any size. **Mfg. part no. MC23794** is designed for one time use. Perfect for guests, field service calls, or to be shipped with ESD sensitive products. Dissipative vinyl ribbon is 35.5" long, with mini alligator clip included. **Mfg. part no. MC23780** wrist strap kit includes one maroon elastic wristband with 4mm stud, 12-ft. coiled ground cord with barrel type banana plug, one megohm, ¼ W resistor in snap assembly, spring loaded 4mm snap socket and alligator clip.

MC23780

Mfg. Part No.	Description	Stock No.	Price Each
MC23801	Wrist Strap Set with 5-ft. Coil Cord	14N9065	12.93
MC23786	Wrist Strap (Only)	14N9050	10.73
MC23794	Multi-Use Disposable Wrist Strap	14N9058	4.50
MC23780	Wrist Strap Kit	14N9045	13.14

(132361)

HEEL AND TOE GROUNDING ASSEMBLIES

3M

Heel Grounder

Toe Grounder

3M™ heel grounding assemblies provide greater freedom of movement without compromising static control protection. Effectively ground worker in contact with conductive flooring materials. Feature comfortable elastic ankle straps. Simply place assembly over shoe, adjust strap for a comfortable fit and insert extra long contact ribbon between shoe and sock. Foot perspiration produces enough moisture to create electrical contact between conductive ribbon and the body. The intrinsic resistance in the heel strap does not increase shock hazard to wearer. Accommodate most shoes and boots. **Mfg. part no. 2044** is a COP-Style heel grounder with a high visibility "yellow glow" strap that helps facility supervisors

➤CONTINUED➤

HEEL AND TOE GROUNDING ASSEMBLIES (CONT.)

effectively manage their static control problem. **Mfg. part no. 2053** is designed for use with high-heeled shoes, the toe grounding assembly grounds personnel when they are in contact with conductive/ dissipative flooring. To be effective, the shoe grounders must be worn on both feet.

HEEL GROUNDING ASSEMBLIES

Mfg. Part No.	Resistors	Stock No.	Price Each 1-4
2044	1 Megohm, Economy	95C1736	6.99
2051	1 Megohm	50F7138	11.25
TOE GROUNDING ASSEMBLY			
2053	1 Megohm	95F5386	14.51

(4534)

FOOT GROUNDERS

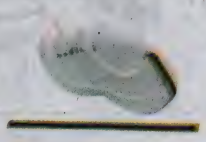
UL 3M

HGS1MD-RED

BLUE-HGC1MD

HGC1M-N72-BLU

HGC1M-ECG



5402

SG1M

- 1 meg resistor
- Multi-strand conductive ribbon
- Durable 3-layer sole exterior <10^5 ohms
- Lot coding provides quality traceability
- UL listed for safety and tested for electrical performance

Foot grounders are designed and manufactured for comfort, durability, and cost effectiveness. Feature a multi-strand, carbon suffused nylon on polyester ribbon, sewn in sinusoidal pattern to provide side-to-side conductivity. Available in black or in colors for higher visibility. Meets the requirements of ANSI/ESD S-20.20, EIA 625, MIL-STD-1686, and MIL-HDBK-263.

HEEL GROUNDERS

Mfg. Part No.	Description	Color	Stock No.	Price Each
HGS1M	Standard-Style Heel Grounder with Hook & Loop Strap, 24" Conductive Ribbon	Black	34P4382	7.41
HGS1MD-RED	Standard-Style Heel Grounder with D-Ring and Hook & Loop Closure, 24" Conductive Ribbon	Red / Black	34P4383	9.70
HGC1M	Cup-Style Heel Grounder with Elastic Hook & Loop Closure, 24" Conductive Ribbon	Black	08N5661	7.14
HGC1M-N72-BLU	Cup-Style Heel Grounder with Elastic Hook & Loop Closure, 24" Conductive Ribbon	Blue / Black	39M5820	6.94
HGC1M-ORG	Cup-Style Heel Grounder with Elastic Hook & Loop Closure, 24" Conductive Ribbon	Black / Orange	34P4380	8.23
BLUE-HGC1MD	Cup-Style Heel Grounder with D-Ring and Hook & Loop Closure, 24" Conductive Ribbon	Blue / Black	39M5819	8.94
HGC1M-C	Quick Clasp Heel Grounder, Elastic Strap, 24" Conductive Ribbon	Black	34P4377	8.22
HGC1M-EC	Economy Cup-Style Heel Grounder with Hook & Loop Closure, 18" Conductive Ribbon	Black	34P4378	6.01
HGC1M-ECG	Economy Cup-Style Heel Grounder with Hook & Loop Closure, 24" Conductive Ribbon	Green / Black	34P4379	7.10
NS-HGC1M	2-layer, Non-Scuffing, Dissipative Rubber Sole Reversible for Long Wear; 24" conductive ribbon	Blue	97M6305	7.98
DISPOSABLE HEEL GROUNDER				
5402	Disposable Heel Grounder, Adhesive, High Visibility	Black / Yellow	34P8136	0.83
SOLE GROUNDERS — FULL COVERAGE				
SG1M-SM	Small Sole Grounder with D-Ring and Hook & Loop Closure, 18" Conductive Ribbon	Black	39M5824	13.67
SG1M-M	Medium Sole Grounder with D-Ring and Hook & Loop Closure, 18" Conductive Ribbon	Black	39M5823	13.67

CONTINUED

FOOT GROUNDERS (CONT.)

SOLE GROUNDERS — FULL COVERAGE

Mfg. Part No.	Description	Color	Stock No.	Price Each
SG1M-L	Large Sole Grounder with D-Ring and Hook & Loop Closure, 18" Conductive Ribbon	Black	39M5822	16.32
SG1M-XL	X-Large Sole Grounder with D-Ring and Hook & Loop Closure, 18" Conductive Ribbon	Black	39M5825	13.67

(91140)

HOOK AND LOOP HEEL GROUNDERS

DESCO

- Non-marring interior
- Hook and loop fastening assembly with genuine "non-selveged" Velcro® material
- 30" long, 8 strand nylon polyester grounding tab
- UL Listed
- Made in America

17200

Durable heel grounder cup features non-marring interior that will not mar shoes, exceptionally tear resistant dual layer rubber with inner scrim. Hook and loop fastening assembly has genuine "non-selveged" Velcro® material that is adjustable and comfortable. 30" long, 8-strand nylon polyester grounding tab does not particulate, provides superior body to ground contact. UL Listed.

Mfg. Part No.	Description	Stock No.	Price Each
17200	Hook and Loop, 1 Megohm Resistor	49H6817	13.03
07588	Heel Grounder, 1 Megohm Resistor	61H5663	10.84
07590	D-Ring, 1 Megohm Resistor Rtg:10E6-10E7 Ohms	61H5664	17.85
17252	3-Layer Non Moving, 1 Megohm Resistor Rtg: 10E6-10E7 Ohms	61H5984	16.44
17250	Heal Grounder, No-Marring, No-Resistor	61H5983	18.49
07501	Foot Grounder, 2 Megaohm Resistor	69K4329	24.54

(75376)

HEEL GROUNDER

DURATOOL

- Two layer rubber composite sole material
- Conductive exterior provides rapid and safe dissipation
- 18" conductive ribbon
- One megohm fully insulated safety resistor

Heel cups for use with standard shoes have two layer rubber composite sole material and conductive exterior that provides rapid and safe dissipation. 18" conductive ribbon and one megohm fully insulated safety resistor.

Mfg. Part No.	Description	Heel Color	Stock No.	Price Each
MC23783	Heel Grounder with 1 Megohm Resistor	Black	14N9048	8.14

(132359)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196537)

ESD TESTERS & MONITORS

STATIC CONTROL (ESD) MONITORS AND GROUNDING WRIST BANDS

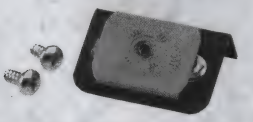
RoHS Compliant Available

3M

Workstation Monitor

Wrist Strap and Ground Monitor

Dual-Conductor Ground Cord



Monitor Stand-By Jack

Dual-Conductor Wristband

Static Monitor

STATIC CONTROL MONITORS

Mfg. part no. 724 workstation monitor is designed to detect electrostatic discharge (ESD) of two operators. Includes a remote dual-conductor jack, AC adapter, ground cord (green/yellow in color for better visibility), and monitor/table mat cord with a diode to prevent current flow back into the monitor. **Mfg. part no. 773** monitor can also be used tomonitor the resistance-to-ground and voltage level on two persons wearing dual-wire wrist straps. **Mfg. part no. 3057** allows an operator to disconnect a ground cord from the wrist band and leave the workstation without deactivating the 724 workstation monitor. **Mfg. part no. 725** wrist strap monitor is a small, compact, battery-powered wrist band monitor used to track ESD and ground one operator. **Mfg. part no. 790** static monitor is a cost- effective unit that is small compact and versatile in its usage, and may be mounted directly into device handling equipment, testers and auto insertion equipment. **Mfg. part no. 790** measures the voltage potential on a person referenced to earth ground. Equipped with a slide switch that allows the user to select the voltage level necessary for the specific job being performed. **NOTE:** All monitors require each operator to wear a dual-conductor grounding wrist band; *order separately below.*

Mfg. Part No.	Description	Stock No.	Price Each 1-4
724	Workstation Monitor	83F8473	214.00
773	Wrist Strap and Ground Monitor	63R1300	384.41
3057	Monitor Stand-By Jack	66H7371	24.76
725	Compact, Battery-Operated Wrist Band Monitor	83F8475	113.12
790 STATIC MONITOR	Static Monitor	06H1005	126.19

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
732	Dual Conductor Remote Input Jack for **Mfg. Part No. 724** Workstation Monitor	99F7840	37.51
733	Dual Conductor Remote Input Jack Splitter Kit for **Mfg. Part No. 724** Workstation Monitor	90H0259	50.41
● 724P-US	Replacement Plug-In External AC Power Supply for **Mfg. Part Nos. 724** and **790** Monitors	25H9881	12.13

MONITOR VERIFICATION KITS

Mfg. part nos. 724VK and **725VK** verification kits are designed to check the wrist band input resistance ranges of the **700 series** workstation, wrist bands, and work surface monitors. **Mfg. part nos. 790VK** verification kit contains hardware items for connecting to **mfg. part no. 790** static monitor. **NOTE:** In addition to this kit, a DC power supply and resistance substitution box are required (supplied by user). Refer to instruction manual for complete details.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
724VK	Verification Kit, Six 1% Resistor Test Plugs and Case	73C1236	94.24

EXPANDABLE METAL WRIST BANDS — DUAL-CONDUCTOR

2380 series long-lasting metal expansion bands are for use in clean rooms and applications requiring extended band life. Three sizes available: small, medium for wrists from 5.5″ to 7.25″ and large for wrists larger than 6.5″. Color: black. **Mfg. part nos. 2382** and **2883** include one metal expansion wrist band and a 5-ft. grounding cord to permit monitoring of resistance-to-ground of the operator. Used exclusively with **mfg. part no. 724** workstation monitor and **mfg. part no. 725** wrist band monitor; *order separately above.*

Mfg. Part No.	Description	Stock No.	Price Each 1-9
2384	Dual-Conductor Metal Wrist Band (**Only**) — Small	24C8842	55.03
2385	Dual-Conductor Metal Wrist Band (**Only**) — Medium	24C8844	49.43
2386	Dual-Conductor Metal Wrist Band (**Only**) — Large	24C8846	49.43
2382	Dual-Conductor Metal Wrist Band with 5′ Cord — Medium	13C3386	73.82
2383	Dual-Conductor Metal Wrist Band with 5′ Cord — Large	13C3395	82.01

ADJUSTABLE FABRIC WRIST BAND — DUAL-CONDUCTOR

Mfg. part no. 2368 adjustable dual-conductor fabric wrist band permits monitoring resistance-to-ground of the operator. The band is segmented for strain relief and comfortable. Used exclusively with **mfg. part no. 724** workstation monitor and **mfg. part no. 725** wrist band monitor; *order separately above.*

Mfg. Part No.	Description	Stock No.	Price Each 1-4
2368	Dual-Conductor Fabric Wrist Band	13C3380	20.46

➤ CONTINUED ➤

STATIC CONTROL (ESD) MONITORS AND GROUNDING WRIST BANDS (CONT.)

ADJUSTABLE DUAL-CONDUCTOR WRIST BAND

Mfg. part no. 4720 adjustable dual-conductor wrist band features a thermoplastic strap with a molded conductive interior. Easy-on, easy-off zipper-style latching mechanism adjusts to any wrist size. Lightweight and low-profile design makes reliable contact with skin and provides an effective grounding device. Wrist band connects to monitors via **mfg. part nos. 2360** or **2370** dual-conductor coiled grounding cords; *order separately below.* Used in conjunction with **mfg. part no. 724** workstation monitor and **mfg. part no. 725** wrist strap monitor; *order separately above.*

Mfg. Part No.	Description	Stock No.	Price Each 1-4
4720	Adjustable Dual-Conductor Wrist Band — Blue	95B9075	9.50

DUAL-CONDUCTOR COILED GROUND CORDS

Dual-conductor coiled grounding cords, in three popular lengths, for use exclusively with **mfg. part no. 4720** adjustable dual-conductor wristband; *order separately above.*

Mfg. Part No.	Length	Stock No.	Price Each 1-4
2360	Dual-Conductor Coiled Grounding Cord — 5′	97B1092	39.20
2370	Dual-Conductor Coiled Grounding Cord — 10′	12C2401	44.68
2371	Dual-Conductor Coiled Grounding Cord — 20′	12C2404	55.49

(4499)

WRIST STRAP TESTER

3M

CE

Wrist strap tester 746 provides periodic testing of wrist straps while the strap is being worn. Accepts both standard and shrouded (European) banana plugs. PASS/FAIL LED indicates if strap resistance is within acceptable limits, (7509KΩ to 10MΩ). Supplied with an AC adapter, a 9V lithium battery, and a wall mounting kit. CE compliant.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
746	Wrist Strap Tester	93B4477	311.99

(4663)

WRIST STRAP AND FOOTWEAR RESISTANCE TESTERS

3M

740, 741

746C

718 CERTIFIED

Mfg. part no. 740 3M™ wrist strap and footwear resistance tester for static control wrist straps is simple to operate. Wall-mounted unit tests the wrist strap and cord while they are being worn and can also test each component independently to isolate an identified fault. Red and green LEDs give a clear "go" or "no go" indication. Features four different resistance levels. A digital output allows the unit to interface with a computer, automatic door lock, alarm or other control devices. Wrist strap and footwear tester comes with an output connector, 3M Dual Lock™ wall-mounting system and template, cover for the wrist strap plug-in jack, AC/DC transformer and instructions. To test footwear, simply attach **mfg. part no. 741** shoe electrode, *ordered separately below.*

Mfg. Part No.	Description	Stock No.	Price Each 1-4
740	Wrist Strap and Footwear Resistance Tester	16F1764	680.09
740 CERTIFIED	Wrist Strap and Footwear Resistance Tester (Certified)	66K5718	839.95

Mfg. part no. 741 shoe electrode connects to **mfg. part no. 740** resistance tester, *ordered separately above,* converting it into a footwear tester as well as a wrist strap tester. By standing on the shoe electrode test plate, the user can check static control footwear, heel straps, etc.

741	Shoe Electrode	16F1765	166.56

Mfg. part no. 746C battery-operated wrist strap tester tests wrist straps while being worn or tests individual wrist strap components. Wall mountable. Resistance measuring range: 750 kohm to 10 mohm. Tester comes complete with 9VDC lithium/manganese dioxide battery, AC/DC adapter, 3M™ dual lock system wall mounting kit, cover for wrist strap plug-in jack and instruction manual.

746C	Wrist Strap Tester	08P3411	519.62

Mfg. part no. 718 CERTIFIED static sensor (certified) easy-to-use, hand-held instrument is designed to measure static voltages on objects and surfaces for electrostatic charge buildup. Measuring range: 2kV to 20kV. Sensor comes with instruction manual and Certificate of Conformance. Operates on a 9V battery (not included).

718 CERTIFIED	Static Sensor (Certified)	46M4958	1061.40

(4622)

COMBOTESTER AND WSMONITORS

3M

- Easy to use
- Visual and audible alarms
- Compatible with standard wrist straps

COMBOTESTER WSMONITOR2

Use SCC testers and monitors to confirm your compliance to ESD standards. **Mfg. part no. COMBOTESTER** combination wrist strap and footwear tester allows workers to test their own wrist straps, heel grounders or shoes. Results are immediate and easy to understand. A red light indicates high resistance and a yellow light indicates a resistance that is too low. A green "Pass" light and tone indicator indicate a resistance in the acceptable range. Acceptable range is 750k to 100 megohm for footwear. Includes control unit, stand pole, base, power adapter, battery, hardware, ground wire, instructions, and certificate. AC or battery powered with multiple connections for wrist straps.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
COMBOTESTER	Combination Wrist Strap and Footwear Tester	39M5836	625.78

SINGLE WIRE CONTINUOUS WRIST STRAP MONITORS

Single wire continuous wrist strap monitors offer the most cost-effective means for continuously testing the connection integrity of the entire ground loop including the person, the wrist strap and the coil cord. By using new impedance sensing technology, adjustments and false alarms are virtually eliminated. This system is fully automatic and activates when a wrist strap is plugged into the unit. It provides a green light for safe condition and a red light and tone for unsafe condition. Units are powered and grounded by the included AC adapter. Compatible with most standard wrist straps. Easy to install and use. **Mfg. part no. WSMONITOR1** monitors one wrist strap/person. **Mfg. part no. WSMONITOR2** monitors one wrist strap/person and the bench mat. **Mfg. part no. WSMONITOR3** monitors two wrist straps/persons and the bench mat.

WSMONITOR1	Single Wire Unit Monitors One Wrist Strap	39M5837	78.30
WSMONITOR2	Single Wire Unit Monitors One Wrist Strap and Bench Mat	39M5838	130.59
WSMONITOR3	Single Wire Unit Monitors Two Wrist Straps and Bench Mat	34P6618	207.33

(91143)

TEST KIT FOR STATIC CONTROL SURFACES

3M

Kit includes:

- Two 10′ test leads
- Two 5lb. test weights
- Bulldog clip
- Alligator clip
- 22.5 V battery
- 1.5 V battery
- Operator manual
- Foam lined carry case

Test kit **mfg. part no. 701** is for testing the effectiveness of static control working surfaces. Megohmmeter has separate scales and settings for measuring surface-to-ground and surface-to-surface resistance at 10V and 100V, plus system continuity, and open circuit tests. Certified version also available; *go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each 1-4
701	Test kit	98F6963	1320.20

(4500)

STATIC SENSOR AND AIR IONIZER TESTER

UL CE 3M

Static sensor is an easy-to-use, hand-held instrument designed to measure static voltages on objects and surfaces arising from electrostatic buildups, and can help identify ESD trouble spots. Small size, lightweight, conductive plastic housing. Membrane switches for Power, Range/Zero, and Hold functions. Digital, LCD display updates quickly. Measurements are accurate to 5%. Meets military specification MIL-STD-45662. UL listed, CE compliant. Air ionizer test kit 718, when used in conjunction with **mfg. part no. 718** static sensor can be used for periodic verification of air ionizer performance. **Mfg. part no. 718A** includes a charge plate and charger.

CONTINUED

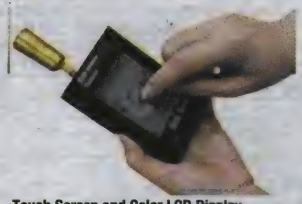
STATIC SENSOR AND AIR IONIZER TESTER (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each 1-4
718	Static Sensor, Certified	18C0431	853.27
718A	Air Ionizer Test Kit	18C0444	582.94

(65673)

EM EYE METER

CE c UL us RoHS Compliant Available 3M



Touch Screen and Color LCD Display
Easy to Use...Quick to Navigate

The Power of a Benchtop Meter in Your Pocket

- Compact, hand-held meter for ESD event, EMI field and RF signal detection and measurement
- Modular construction expands to different applications by using interchangeable sensor modules
- Touch screen and color LCD display
- miniSD™ memory card slot for data logging capability
- Audio indicators with volume control
- Convenient headphone jack
- Remote or local antenna selection

CTM048 series EM Eye Meter is one of the smallest, most versatile instruments for measuring electro-magnetic (EM) fields, radio frequency (RF) signals and electro-static discharge (ESD) events determined by the sensor module connected to the meter. Key functions include: ESD event detector, electromagnetic field (EMF) meter, power density meter, effective isotropically radiated power (EIRP) meter and radio frequency (RF) meter. Technicians can expand their instrumentation capabilities by connecting a different sensor module to the meter — it's less expensive than purchasing a completely new instrument. *Order additional sensor modules separately below.* The EM Eye Meter supports data logging by using a miniSD™ memory card and exports to an Excel® spreadsheet. Having data at hand enables quick analysis and with the EM Eye Meter, problems can be measured and solutions developed quickly on the spot. Lightweight, only 9.75 oz. Dimensions: 2.6″ W x 1.3″ D x 4.2″ L. Each meter includes sensor module (indicated in table below), local directional antenna (except **mfg. part no. CTM048-29** which includes an RF BNC cable and 20dB attenuator), memory card, AC power supply/battery charge, users guide, and one-year manufacturer's limited warranty. UL listed, CE compliant.

Mfg. Part No.	Description	Stock No.	Price Each
● CTM048-2128	EM Eye Meter with ESD and EMI Sensor Modules	34R2851	5003.66
● CTM048-21	EM Eye Meter with ESD Sensor Module	34R2850	4377.42
● CTM048-28	EM Eye Meter with EMI Sensor Module	34R2852	4377.42
● CTM048-29	EM Eye Meter with RF Sensor Module	34R2853	4377.42
INTERCHANGEABLE SENSOR MODULES			
CTC021	ESD Sensor Module	34R2847	1058.22
CTC028	EMI Sensor Module	34R2848	1058.22
● CTC029	RF Sensor Module	34R2849	1058.22

(159807)

SURFACE RESISTANCE METER

3M

- Measurement: 10^3 to 10^{12} ohms/square ASTM D257 10^2 to 10^{11} ohms EOS/ESD 11.11
- Resolution: one order of magnitude
- Accuracy: ±1/2 decade
- Power: 9 volt battery
- Electrodes: Parallel Bar

The SCC-625 is a wide range, multi-scale, auto-ranging meter. It measures resistivity per ASTM D257, resistance per EOS/ESD S11.11, and resistance to ground (RTG). Useful for audit testing required by ANSI/ESD S-20.20, EIA 625, MIL-STD-1686. Measures conductive, dissipative and insulative items. The meter is battery powered and simple to use. High speed electronics insure repeatable measurements. Wt.:6.2oz. Size:115mm x 69mm x 26mm

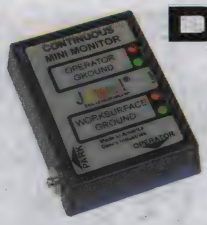
Mfg. Part No.	Product Description	Stock No.	Price Each 1-9
SRMETER	Surface Resistance/Resistivity RTG Meter	34P6343	479.04

(209473)

ESD TESTERS & MONITORS • APPAREL

JEWEL® MINI MONITOR

DESCO



- Wave distortion technology continuously monitors for operator path to ground and presence of 1 Meg resistor
- Stand-by parking snap
- Full-time status LEDs and audible alarm
- Miniscule electrical current required to generate waveform

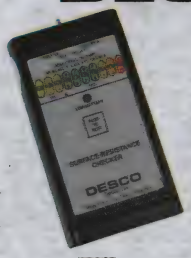
Small size unit 2.77" x 2.07" (7cm x 5cm) provides true 100% continuous monitoring, not pulsed current that's off over 90% of time. Stand-by parking snap keeps unit from going into alarm when user disconnects cord . Wave distortion technology provides real-time monitoring, pays for itself and ensures ESD protected workstation, reducing catastrophic failures and latent defects. Miniscule electrical current required to generate waveform, no reported case of skin irritation. Two 10mm studs on bottom of unit permanently snap monitor flush on mat. Two 10mm push & clinch sockets included.

Mfg. Part No.	Description	Color	Stock No.	Price Each
19218	120V, Mini Monitor	Sapphire	26T3781	205.94

(75375)

SURFACE RESISTANCE CHECKER

DESCO



- Color-coded LEDs
- Automatic test range voltage selection per compliance verification ESD TR53
- Reading displayed as long as test button is depressed
- Portable operation with 9V battery (included)
- Flashing LED warns when battery is low
- NIST calibrated with certificate
- Made in America

19640

Mfg. part no. 19640 economical compliance verification surface resistance checker used for determining if a surface is dissipative, conductive, or insulative. Starts tests at 10 volts and automatically switches to 100 volts if the measurement is over 10E5 ohms. Provides exponent range of resistance measurement which is often all that is required for determining if a material is intended for an ESD protected area . Surface resistance checker comes complete with one 9V battery and calibration certificate. *Order electrodes and test leads, separately below, for external resistance point-to-point (Rtt) and resistance to ground (Rtg) measurements of larger surfaces, such as flooring and mats.*

Mfg. Part No.	Description	Stock No.	Price Each
19640	Surface Resistance Checker	25P9709	449.57
ACCESSORIES			
19641	Test Leads, **1-Pair**	11R6161	17.84
50003	5-lb. Electrodes, **1-Pair**	73R8123	130.17

(177512)

DIGITAL STATIC FIELD METER AND IONIZATION TEST KIT

DESCO CE

- Portable meter for testing of electrostatic fields
- Durable dissipative housing design with membrane switches
- Stainless steel conductive plate for static field meter **mfg. part no. 19493**
- ±1000 volt charger **mfg. part no. 19493**
- LED range finder
- Hold button
- NIST calibrated
- Made in America

19492

Digital Static Field Meter is a high quality, portable non-contacting static field meter which consistently produces accurate readings with ease and provides years of trouble-free operation. Ionization test kit **mfg. part no. 19493** allows **mfg. part no. 19492** digital static field meter to be used to measure the offset voltage (balance) and charge decay of ionization equipment. The test kit also includes a charger used to place a ±1000V charge on **mfg. part no. 19498** conductive plate, making it possible to also measure the discharge times of air ionization equipment per ANSI/ESD SP3.3 Periodic Verification of Air Ionizers. **Mfg part no.19492** digital static field meter is designed to operate only with **mfg. part no. 19493** ionization test kit. Digital static field meter includes a 9V alkaline battery, data output cord and cert. of calibration. Ionization test kit also includes conductive plate and charger.

Mfg. Part No.	Description	Stock No.	Price Each
19492	Digital Static Field Meter	11R6159	923.07
19493	Ionization Test Kit	11R6160	1769.92

(196359)

ANALOG SURFACE RESISTANCE TEST KIT

DESCO CE

- Analog compliance verification surface resistance checker
- Automatic test range voltage selection per compliance verification ESD TR53
- LED illuminates when battery power is low
- Test kit includes set of five pounds electrodes and leads
- NIST calibrated
- Made in America

Analog surface resistance test kit is a portable battery-powered instrument designed to measure resistance point-to-point (RTT) and surface to ground (RTG). The meter is equipped with an automatic test voltage selector. The test voltage will switch from 10V to 100V should the measured resistance exceed 10E5 ohms. Kit includes analog surface resistance meter, 9V alkaline battery, two shielded test leads and five pound electrodes, carrying case and cert. of calibration.

Mfg. Part No.	Description	Stock No.	Price Each
19784	Analog Surface Resistance Test Kit	69R7109	893.64

(196360)

MULTI-GROUND CONTINUOUS MONITOR

EMIT

- Continuously monitors 8 ground connections and 1 ground hub
- Each ground channel can be set to 1 ohm, 1 megohm, 10 megohms, and 35 megohms resistance limits
- 2 relay terminals allow for output to a light pole or programmable logic controller
- Ground reference connection
- Self calibration and self diagnostic modes
- Enclosed in stainless steel
- Mounting tabs allow mounting underneath a bench top
- Operating temp.: 32°F-104°F
- 5-year limited warranty
- Made in America

Multi-ground continuous monitor is a continuous monitor designed to verify that a worksurface, shelving, or equipment is connected to ground, which depending upon the value of ESD sensitive items should be a continuous task. Includes 1 multi-ground hub which has six banana jacks and six 10-32 screws with split washer, interchangeable plug power supply, right angle ground wire, 12' long, ground wire with ring terminal, 10' long and cert. of calibration.

Mfg. Part No.	Description	Stock No.	Price Each
50570	Multi-Ground Continuous Monitor, 110-240VAC, 50/60Hz	01N0579	691.57

(196375)

ESD INSPECTION GLOVES

DESCO

- Dissipative (10E5 - 10E8 ohms) Thunderon® fibers
- Kevlar Kleen® carrier yarn
- Seamless fine gauge knit
- Durable construction

ESD inspection gloves are designed to be worn when handling ESD susceptible items. The seamless fine gauge knit is designed for all-day wear allowing easy hand movement and a high level of tactile sensitivity. ESD inspection gloves may be laundered and will retain their ESD properties for 30 washings or approximately 1 year.

Mfg. Part No.	Size	Length (in.)*	Stock No.	Price per Pair
68120	S	7-3/8	27T9667	7.57
68121	M	7-1/2	27T9668	7.57
68122	L	7-3/4	27T9669	7.57
68123	XL	8	27T9670	7.57

*Length is measured from the tip of the fingers to the bottom of the glove
(196355)

DURATOOL AT NEWARK ELEMENT14

For your production and facilities needs, from soldering stations to tool sets & more.
newark.com/duratool

(212563)

DISSIPATIVE NYLON GLOVES WITH POLYURETHANE COATING

NEW **DESCO**

- Dissipative (1 x 10^5 < 1 x 10^6 ohms) Thunderon® fibers
- Kevlar Kleen® carrier yarn
- Polyurethane coated palm and fingers
- Seamless fine gauge knit
- Non-scratch touchscreen compatible
- Sold in pairs

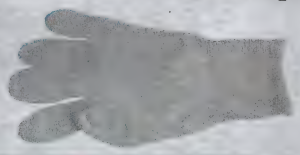
ESD inspection gloves are designed to be worn when handling ESD susceptible items. The carrier yarn will also absorb sweat and oils produced by the operator's hands to help prevent contamination. The seamless fine gauge knit is designed for all-day wear allowing easy hand movement and a high level of tactile sensitivity. ESD inspection gloves may be laundered and will retain their ESD properties for 30 washing or approximately 1 year.

Mfg. Part No.	Size	Cuff Color	Stock No.	Price Each
68124	X-Small	Orange	06X3277	8.83
68125	Small	Gray	06X3278	8.58
68126	Medium	Green	06X3279	8.58
68127	Large	Brown	06X3280	8.58
68128	X-Large	Yellow	06X3281	8.88

(212183)

ESD-SAFE GLOVES WITH POLYURETHANE FINGER TIPS

multicomp



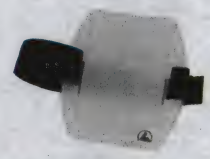
- Polyurethane coated finger tips provide anti-slip grip and avoids leaving finger prints
- Can be laundered for re-use
- Super-conductive threads for static safety
- White
- **Sold in packages of 10**

Mfg. Part No.	Size	Stock No.	Price per Pkg. 1-24
109-0920	Small	74M5801	42.26
109-0917	Medium	74M5802	42.26
109-0918	Large	74M5803	42.26

(116618)

BLACK ESD ARM BAND BADGE HOLDER

NEW **MENDA**



- ESD symbol allows people to immediately know the badge holder has ESD control properties: low charging antistatic and dissipative
- Perfect for active personnel if standard badges fall off their clothing
- Adjustable black elastic band flexs with arm movement for secure fit

Ideal for use by electronic manufacturers working with ESD sensitive components. Made with a custom dissipative material.

CLEAR ARM BADGE ESD HOLDER

Mfg. Part No.	Overall Size	Insert Size	Stock No.	Price Each
35193	4 x 4⅝″	2 ⅜″ x 3 ⅜″	42X9598	8.92

(212050)

ESD PROTECTIVE BADGE AND CARD HOLDERS

MENDA

35011 35014 35067

- Highly-visible yellow header marked with black ESD protective symbol
- RTT: 10E6 to 10E10 ohms per ANSI/ESD S11.11
- Tribocharging : less than 100V
- Made in Amercia

Ideal for use by electronic manufacturers working with ESD sensitive components. Available in horizontal and vertical, with or without clip. To wear ESD protective badge and card holders around the neck, *order* **mfg. part no. 35067** *ESD protective vinyl breakaway lanyard separately below.*

➤CONTINUED➤

ESD PROTECTIVE BADGE AND CARD HOLDERS (CONT.)

CLIP-ON ESD DISSIPATIVE BADGE HOLDERS

Mfg. Part No.	Description	Overall Size	Insert Size	Stock No.	Price Each Each
35010	Vertical	2 11/16″ x 3 11/16″	2⅜″ x 3⅜″	60R6711	1.49
35011	Horizontal	3⅞″ x 3 11/16″	3⅝″ x 2⅜″	60R6712	1.55
35012	Horizontal	4¼″ x 2 15/16″	3⅞″ x 2⅝″	60R6713	1.55
35013	Horizontal	4 5/16″ x 3⅜″	4″ x 3″	60R6714	1.49
PROXIMITY ESD DISSIPATIVE CARD HOLDERS, WITHOUT CLIP					
35014	Vertical	2 11/16″ x 4⅜″	2⅛″ x 3⅜″	60R6715	1.26
35015	Horizontal	3 15/16″ x 3 11/16″	3⅜″ x 2⅜″	60R6716	1.26
ESD DISSIPATIVE BADGE HOLDERS, WITH ZIPPER					
35016	Vertical	2 11/16″ x 4⅜″	2⅛″ x 3⅜″	27T5186	2.03
35017	Horizontal	4″ x 3⅜″	3⅝″ x 2⅜″	27T5187	2.21

Mfg. part no. 35067 ESD protective breakaway lanyard/neck strap is made of soft, frosty clear vinyl and presents a low profile that doesn't compete with clothing. Lanyard snaps around the neck and easily attaches to ESD protective badge and card holders; *ordered separately above.* Ideal for short term use; vinyl dissipative <1 x 10E11 ohms tested per ANS/ESD S11.13. Electrostatic charges removed to ground when grounded. Made in America.

Mfg. Part No.	Description	Stock No.	Price Each Each
35067	ESD Protective Vinyl Breakaway Lanyard/Neck Strap — 27″L x ⅛″W	02P8725	2.32

(177468)

ESD-SAFE PROTECTIVE JACKET SMOCKS

multicomp

- Resistance <1 x 10E11 ohms per ANSI/ESD STM2.1
- No collar, V-neck styling
- Easy on/off snap front closure
- Open cuffs with adjustable sleeve snaps
- Spacious chest pocket

ESD-safe jacket smocks offer antiistatic protection from electrostatic fields generated by clothing on the wearer's body. Comfortable 91% polyester material with a minimum 9% carbon. Available in blue.

Mfg. Part No.	Size	Stock No.	Price Each
MC35659	S	74R6809	41.33
MC35660	M	74R6810	43.76
MC35661	L	74R6811	45.86
MC35662	XL	74R6812	43.76
MC35663	2XL	74R6813	38.83

(177914)

ESD STATSHIELD PROTECTIVE JACKET SMOCKS AND LAB COATS

DESCO

- Meets requirement for groundable static control garment
- Compatible with most single-wire wrist strap monitors and testers
- Patented hip-to-cuff grounding
- Easy on/off snap front closure
- Comfortable conductive elastic knit cuffs
- Three roomy patch pockets on front
- Badge holder tab on front (**Black only**)
- Handy pen pocket on each sleeve (**Black only**)
- Made in America

Jacket Smock Jacket Smock Lab Coat

Statshield® groundable static control garments meet the ANSI/ESD S20.20-2007 required limit of < 3.5 x 10E7 ohm Rtg tested per ANSI/ESD STM2.1. Designed to be antistatic, low tribocharging, these garments offer protection from electrostatic fields generated by clothing on the user's body. Using high-quality texturized polyester material with a minimum 9% carbon nylon monofilament, the garment creates a Faraday Cage around the torso of the wearer. Static charges generated by the wearer and wearer's clothing will be shielded from ESD susceptible products. The dissipative material becomes part of the ground path to remove static charges. Patented hip-to-cuff grounding allows connection of wearer's ground cord to a 4mm snap stud on the hip of the garment providing hands-free grounding thereby increasing productivity. Available in black and blue. Other sizes and colors available; *go online or call.*

JACKET SMOCKS WITH ELASTIC CUFFS

Mfg. Part No.	Size	Color	Stock No.	Price Each
73860	XS	Black	55R0865	60.21
73862	M	Black	55R0867	63.19
73863	L	Black	55R0868	62.53
73864	XL	Black	55R0869	62.53
73865	2XL	Black	55R0870	68.33

➤CONTINUED➤

ESD STATSHIELD PROTECTIVE JACKET SMOCKS AND LAB COATS (CONT.)

Mfg. Part No.	Size	Color	Stock No.	Price Each
73866	3XL	Black	55R0871	74.89
73750	S	Blue	49H6890	59.56
73755	M	Blue	49H6891	59.56
73760	L	Blue	49H6892	59.56
73765	XL	Blue	49H6893	60.19
73770	2XL	Blue	49H6894	65.11
LAB COATS WITH ELASTIC CUFFS				
73611	S	Blue	49H6860	65.65
73612	M	Blue	49H6861	65.65
73613	L	Blue	49H6862	67.05
73614	XL	Blue	49H6863	65.65
73615	2XL	Blue	49H6864	70.77

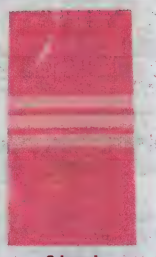
(75369)

PINK ANTISTATIC BAGS

multicomp

- Low density polyethylene
- Static Decay = 0.05 seconds
- Heat sealable
- Open top or re-sealable
- MIL Spec 81705-B

Open Top



Gripseal

Sold in packages of 100

Mfg. Part No.	Dimensions (in.) Width	Height	Stock No.	Price per Pkg. 1-9
OPEN TOP				
001-0001	3	5	74M5383	5.04
001-0003	4	6	74M5384	6.98
001-0006	5	8	74M5385	9.34
001-0008	6	8	74M5386	10.77
001-0009	6	10	74M5387	13.36
001-0014	8	10	74M5388	15.71
001-0017	8	12	74M5389	18.79
001-0020	10	12	74M5390	21.66
001-0021	10	14	74M5391	23.29
001-0023	12	13.97	74M5392	31.39
001-0029	12	16	74M5394	34.07
001-0028	12	18	74M5393	34.79
001-0037	14	18	74M5398	36.48
001-0031	16	18	74M5396	45.12
001-0030	18	24	74M5395	52.49
001-0076	20	24	74M5400	59.04
001-0035	24	36	74M5397	127.09
001-0041	36	48	74M5399	172.84
GRIPSEAL				
003-0001	3	5	74M5401	13.39
003-0002	4	6	74M5402	17.11
003-0003	6	8	74M5403	26.57
003-0011	8	10	74M5406	39.43
003-0013	8	12	74M5408	41.33
003-0004	10	12	74M5404	51.94

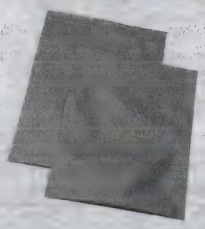
(188933)

TRANSPARENT METAL IN STATIC SHIELDING BAGS

RoHS Compliant Available

multicomp

- Material thickness: .003" (.0762mm) nominal +/-10%
- Surface Resistance:
  Outer Layer:m <10E11 ohms per ANSI/ESD S11.11
  Inner Layer:10E11 ohms per ANSI/ESD S1111
- Static Shielding: <50 nJ per ANSI/ESD S11.31
- Light Transmission: >40% per ASTM 1003



Sold in packages of 100

METAL IN, OPEN

Mfg. Part No.	Dimensions (in.) Width	Height	Stock No.	Price per Pkg. 1-4
● MC35821	2	3	86R9080	5.56
● MC35822	3	5	86R9081	6.55

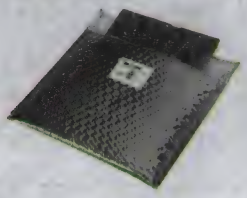
➤CONTINUED➤

TRANSPARENT METAL IN STATIC SHIELDING BAGS (CONT.)

Mfg. Part No.	Dimensions (in.) Width	Height	Stock No.	Price per Pkg. 1-4
MC36464	3	7	46T4344	9.92
MC36465	4	4	46T4345	6.11
● MC35823	4	6	86R9082	7.85
MC36466	4	8	46T4346	10.33
MC36467	4	9	46T4347	10.44
MC36468	4	24	46T4348	35.49
MC36469	4	25	46T4349	40.13
MC36470	5	7	46T4350	10.85
● MC35824	5	8	86R9083	11.99
MC36471	5	10	46T4351	10.80
MC36472	6	6	46T4352	16.26
● MC35825	6	8	86R9084	14.42
MC36473	6	9	46T4353	18.31
● MC35826	6	10	86R9085	15.99
MC36474	6	12	46T4354	16.02
MC36475	6	14	46T4355	23.78
MC36476	6	18	46T4356	35.91
MC36477	7	15	46T4357	33.22
MC36478	8	8	46T4358	23.40
● MC35827	8	10	86R9086	20.84
● MC35828	8	12	86R9087	24.66
MC36479	8	14	46T4359	29.41
MC36480	8	16	46T4360	31.78
MC36481	8	18	46T4361	38.69
MC36482	8	24	46T4362	50.18
● MC35829	10	12	86R9088	27.62
● MC35830	10	14	86R9089	31.97
MC36483	10	16	46T4363	44.84
MC36484	10	18	46T4364	49.28
MC36485	10	24	46T4365	43.42
MC36486	10	30	46T4366	71.36
MC36360	11	15	26T3873	46.04
MC36361	12	16	26T3869	54.46
MC36364	12	18	26T3863	57.87
MC36487	12	25	46T4367	102.37
MC36488	14	18	46T4368	67.06
MC36489	15	18	46T4369	75.04
MC36490	15	19	46T4370	147.33
MC36491	16	18	46T4371	83.97
MC36492	16	20	46T4372	83.68
MC36493	16	24	46T4373	86.60
MC36365	18	18	26T3860	81.29
MC36494	18	24	46T4374	108.45
MC36495	22	23	46T4375	182.85
MC36496	22	25	46T4376	182.37
MC36497	22	28	46T4377	168.23
MC36498	24	30	46T4378	132.15
MC36499	30	30	46T4379	262.63
METAL IN, W/ ZIPPER				
MC35831	2	3	86R9090	11.28
MC35832	3	5	86R9091	12.78
MC36500	4	4	46T4380	16.75
MC35833	4	6	86R9092	13.94
MC36501	4	8	46T4381	21.68
MC36502	4	29	46T4382	47.72
MC35834	5	8	86R9093	17.39
MC35835	6	8	86R9094	25.55
MC35836	6	10	86R9095	19.95
MC35837	8	10	86R9096	32.82
MC35838	8	12	86R9097	29.79
MC35839	10	12	86R9098	40.48
MC35840	10	14	86R9099	41.76
MC36362	11	15	26T3897	69.84
MC36363	12	16	26T3872	61.40
MC36366	12	18	26T3867	67.25
MC36367	18	18	26T3861	106.80
MC36504	24	24	46T4384	289.03

(189693)

METAL-OUT CUSHIONED REUSABLE STATIC-SHIELDING BAGS AND WRAP



2120R Bags

2126R Wrap

2120R series metal-out cushioned bags are used for physical protection as well as static shielding. Cost-effective and convenient, the five-layer construction protects against direct discharge, triboelectric charge and static fields. The inside layer (closest to components) is a smooth, static-dissipative polyethylene liner that minimizes snagging of pins or sharp edges during insertion and removal. Open-cell cushioning enhances shock protection. Metal-out construction makes bags easily testable and reusable. Thickness: 125 mil. Strength tested to ASTM D882 (tensile), and FTMS 101 (puncture) standards. **2126R series** cushioned static-shielding wrap provides shielding and physical protection for large or irregularly shaped circuit boards. Made of the same open-cell cushioning construction used for **2120R series** static-shielding bags and is heat-sealable, but does not have the smooth inner liner. Can be cut to fit various wrapping applications.

2120R SERIES CUSHIONED STATIC-SHIELDING BAGS — SOLD IN PACKAGES OF 100

Mfg. Part No.	W x L (in.)*	Stock No.	Price per Pkg. 1-4
2120R 8X7	8×7	52F7569	397.17
2120R 10X7	10×7	52F7570	375.43
2120R 08X11	8×11	52F7571	395.59
2120R 12X11	12×11	52F7572	524.90
2120R 14X11	14×11	52F7573	679.00

2126R SERIES CUSHIONED STATIC-SHIELDING WRAP — SOLD IN 125′ ROLLS

Mfg. Part No.	W x L (in.)	Stock No.	Price per Roll
2126R 24X125	24×125	35K3434	394.05
2126R 48X125	48×125	35K3435	650.39

*First dimension is opening size
(4608)

METAL-OUT STATIC-SHIELDING BAGS

RoHS Compliant Available

Metal-out static-shielding bags **2100R** and **2110R series** are produced with a construction in which the shielding layer is very near the exterior surface. A thin abrasive-resistant coating protects this metal surface from scratches, but still permits rapid charge draining when the bag is placed on a conductive or dissipative work surface. The bags use a double-thick polyester with an applied thin metallization layer which makes the bags more durable and provides electrical isolation that prevents electrical currents from passing through the bag. The interior features an amine-free antistat agent that limits triboelectric charging of parts as they move around inside the bag. Functions properly in conditions as low as 10% relative humidity. **2110R series** bags feature a zipper closure for easy opening and closing. **Sold in packages of 100.**

2100R SERIES STATIC-SHIELDING BAGS

Mfg. Part No.	W x L (in.)	Stock No.	Price per Pkg. 1-5
2100R-4X6	4×6	33K4633	29.77
2100R-5X8	5×8	33K4634	49.12
2100R-6X8	6×8	33K4636	50.34
2100R-8X10	8×10	33K4637	62.85
2100R-8X12	8×12	33K4638	71.93
2100R-10X12	10×12	33K4629	77.60
2100R-12X18	12×18	33K4630	149.32
2100R-15X18	15×18	33K4631	107.20

2110R SERIES STATIC-SHIELDING BAGS WITH RECLOSABLE ZIPPER

● 2110R 3X5	3×5	66F3385	30.31
2110R-4X6	4×6	33K4642	34.60
2110R-6X8	6×8	33K4645	84.11
2110R-8X10	8×10	33K4646	84.75
2110R-8X12	8×12	33K4647	85.36
2110R-10X12	10×12	33K4639	119.20
2110R-10X14	10×14	33K4640	125.01
2110R-11X15	11×15	33K4641	164.84

(84868)

METAL-IN STATIC-SHIELDING BAGS

Metal-in static-shielding bags **1900** and **1910 series** are an economical alternative shielding bag for less demanding applications where testing and reusing bags are not prime considerations. Aluminum is vapor-coated on half-mil polyester. This shielding layer is bonded between the polyester layer and a static-dissipative polyethylene inner layer. These static-shielding bags are amine-free, non-corrosive and meet EIA-541 definition for static shielding/dissipative packaging. **1910 series** bag features a zipper closure for easy opening and closing. **Sold in packages of 100.**

1900 SERIES STATIC-SHIELDING BAGS

Mfg. Part No.	W x L (in.)	Stock No.	Price per Pkg. 1-4
1900 3X5	3×5	50F7146	12.97
1900-4X6	4×6	33K4604	13.50
1900-5X8	5×8	50F7147	17.67
1900-6X8	6×8	33K4605	20.35
1900 6X10	6×10	97C5001	23.06
1900-8X10	8×10	33K4606	25.65
1900-10X12	10×12	33K4601	36.91
1900 10X14	10×14	92F1299	43.69
1900 12X16	12×16	50F7158	59.81
1900-12X18	12×18	33K4602	82.70
1900 18X18	18×18	50F7159	98.94

1910 SERIES STATIC-SHIELDING BAGS WITH RECLOSABLE ZIPPER

1910-4X6	4×6	92F1300	19.87
1910-6X8	6×8	33K4613	25.61
1910-8X10	8×10	50F7151	39.32
1910-10X12	10×12	33K4608	55.07
1910 12X16	12×16	50F7152	82.69
1910-12X18	12×18	33K4610	91.84
1910 18X18	18×18	50F7153	132.13

(84870)

METAL-IN STATIC-SHIELDING BAG SCC 1000

RoHS Compliant Available

- Faraday Cage effect shielding protects electronic devices from ESD and electrostatic fields
- Durability is enhanced by positioning the metal layer between polyester and polyethylene
- Four layer construction offers excellent protection from punctures and tears
- Bags are printed with ESD warning symbol and date coded for QC traceability

SCC 1000 is atransparent, metallized static shield bag helps provide a static safe environment for sensitive electronic devices. SCC 1000 bags are tested to meet or exceed the requirements of certain electrical and physical requirements of ANSI/ESD S541, EIA 625, and to be ANSI/ESD S20.20 program compliant.

Mfg. Part No.	W x L (in.)	Stock No.	Price Each
● 10023	2 × 3	64M0237	7.74
● 10024	2 × 4	39M3792	8.24
10035	3 × 5	39M3793	4.99
● 10044	4 × 4	34P6738	9.60
● 10046	4 × 6	39M3795	6.54
● 100424	4 × 24	39M3794	32.35
● 100426	4 × 26	34P6737	27.25
● 10056	5 × 6	34P6740	13.62
● 10058	5 × 8	39M3796	8.93
● 10068	6 × 8	34P6749	10.80
● 10088	8 × 8	34P6757	15.96
● 100610	6 × 10	39M3797	12.22
● 100612	6 × 12	64M6597	16.67
● 100614	6 × 14	34P6744	19.70
● 100616	6 × 16	34P6745	23.57
● 100711	7 × 11	34P6751	19.17
● 100715	7 × 15	34P6752	25.10
● 100810	8 × 10	39M3798	18.64
● 100812	8 × 12	39M3799	23.04
● 100818	8 × 18	77R3903	43.82
● 100824	8 × 24	14P5185	0.59
● 1001014	10 × 14	77R3899	31.20
● 1001016	10 × 16	34P6716	33.65
● 1001024	10 × 24	08P4972	75.87

CONTINUED

METAL-IN STATIC-SHIELDING BAG SCC 1000 (CONT.)

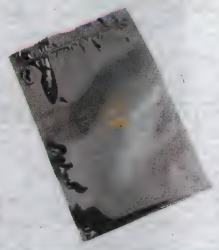
Mfg. Part No.	W x L (in.)	Stock No.	Price Each
● 1001114	11 × 14	34P6719	43.29
● 1001115	11 × 15	88M0333	44.28
● 1001212	12 × 12	34P6720	38.59
● 1001214	12 × 14	34P6721	47.34
● 1001216	12 × 16	77R3900	39.33
● 1001218	12 × 18	39M3789	56.86
● 1001224	12 × 24	34P6722	64.63
● 1001418	14 × 18	39M3790	64.25
● 1001518	15 × 18	08P0409	70.69
● 1001618	16 × 18	03P1622	1.22
● 1001620	16 × 20	34P6727	72.20
● 1001624	16 × 24	88M0335	90.73
● 1001818	18 × 18	34P6729	80.46
● 1001824	18 × 24	77R3901	91.96
● 1001830	18 × 30	34P6731	131.63
● 1002024	20 × 24	39M3791	120.41
● 1002430	24 × 30	77R3902	181.46
● 1002436	24 × 36	34P6734	220.94

(90819)

ZIPTOP RECLOSABLE STATIC-SHIELDING BAG SCC 1000

RoHS Compliant Available

3M



- Same Faraday cage shielding, durability, and four layer structure as the SCC 1000
- Durability is enhanced by positioning the metal layer between polyester and polyethylene
- ZipTop zipper is welded to the bag interior for reliability
- Bags are printed with ESD Warning Symbol and date coded for QC traceability
- Testable to industry standards
- ANSI/ESD S-20.20, ANSI/ESD S-541

SCC 1000 ZipTop bags provide an alternative to folding your bags and securing them with a warning label. Quality-tested zipper material is used to provide zipper bags with high reliability. **Sold in packages of 100.**

Mfg. Part No.	W x L (in.)	Stock No.	Price per Pkg. 1-4
● 30023	2×3	56P5453	11.80
● 30033	3×3	34P7527	11.34
● 30035	3×5	56P5454	16.24
● 30046	4×6	39M3843	19.75
● 30058	5×8	39M3844	25.24
● 30068	6×8	56P5457	26.14
● 300610	6×10	39M3845	30.09
● 300630	6×30	39M3846	66.59
● 30088	8×8	34P7530	25.28
● 300810	8×10	39M3847	36.35
● 300812	8×12	39M3848	40.73
● 300912	9×12	34P7531	40.22
● 3001012	10×12	39M3834	46.10
● 3001014	10×14	39M3835	51.13
● 3001115	11×15	34P7520	52.36
● 3001212	12×12	34P7521	49.47
● 3001218	12×18	39M3837	75.61
● 3001824	18×24	39M3840	132.48
● 3002424	24×24	34P7526	231.22

(90818)

MOISTURE BARRIER BAG DRI-SHIELD 2000

RoHS Compliant Available

3M

- Designed for dry packaging of electronic devices
- Flexible structure is easy to vacuum seal
- Protect SMD's from moisture and static damage
- Printed with ESD and moisture symbols
- Coded for QC traceability
- Tested to meet or exceed industry certain electrical and physical requirements of ANSI/ESD S-541, EIA 625
- ANSI/ESD S20.20 program compliant
- 3.6 mils

Dri-Shield 2000 family of moisture barrier bags satisfy many dry packing applications and provide the same static control benefits as static shielding bags. Moisture barrier bags work by enclosing a device with a metal shield that has a high resistance to moisture vapor permeation. Dry devices are placed inside this shield, and the moisture-laden air is evacuated. Desiccant filled pouches scavenge the remaining moisture from the bag's interior. **Sold in packages of 100.**

Mfg. Part No.	W x L (in.)	Stock No.	Price per Pkg. 1-5
● 70046	4 × 6	34P8313	19.83
● 70068	6 × 8	34P8316	35.67

➤CONTINUED➤

MOISTURE BARRIER BAG DRI-SHIELD 2000 (CONT.)

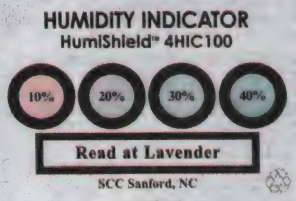
Mfg. Part No.	W x L (in.)	Stock No.	Price per Pkg. 1-5
● 700630	6 × 30	07P8515	94.19
● 700810	8 × 10	78R7413	48.01
● 700812	8 × 12	07P8512	56.87
● 7001024	10 × 24	34P8307	97.74
● 7001218	12 × 18	34P8308	84.39
● 7001719	17 × 19	34P8310	107.82

(90816)

SCC HUMIDITY INDICATOR CARDS

3M

51015HIC125



4HIC100

- **Mfg. part no. 3HIC125** complies with MS 20003-2, and MIL-P-116: popular for military applications, this card is approved for use by DOD, NATO, and governmental agencies for Method II packaging
- **Mfg. part no. 51015HIC125** complies with IPC/JEDEC J-STD-033A standard
- **Mfg. part no. 51060HIC125** complies with IPC/JEDEC J-STD-033B standard
- **Mfg. part no. 4HIC100** complies with EIA 581, MIL-P-116, and MIL-I-8835: designed for dry packaging SMD's, color reference bar assists with accurate readings
- **Mfg. part no. 6HIC200** complies with EIA 581, MIL-P-116, and MIL-I-8835: used in a variety of dry packaging application, this card monitors humidity levels across the widest range

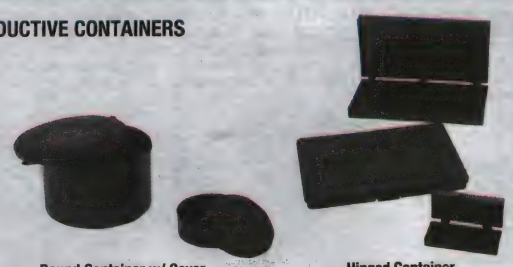
Humidity indicator cards are used as part of protective dry packaging for moisture sensitive devices with SCC moisture barrier bags, desiccant, and moisture labels; *ordered separately on this page.* Cards are printed with moisture sensitive spots, which respond to various levels of humidity with a visible color change from blue to pink. Accuracy based on ambient temperature of 75°F. Meet JEDEC, EIA, and military standards and are lot traceable. When used inside vacuum-sealed moisture barrier bags, the interior humidity conditions are easily monitored. **Sold in air-tight cans of quantities listed in table below.**

Mfg. Part No.	Description	Humidity Range	W x L (in.)	Cards per Can	Stock No.	Price per Can 1-4
3HIC125	3 Spot Humidity Indicator Cards	30% / 40% / 50% Relative Humidity	2 x 3	125	39M5893	28.87
51015HIC125	3 Spot Humidity Indicator Cards	5% / 10% / 15% Relative Humidity	2 x 3	125	78R7416	28.87
51060HIC125	3 Spot Humidity Indicator Cards	5% / 10% / 60% Relative Humidity	2 x 3	125	39M5895	29.18
4HIC100	4 Spot Humidity Indicator Cards	10% to 40% Relative Humidity	3 x 2	100	39M5894	25.46

(91138)

CONDUCTIVE CONTAINERS

3M



Round Container w/ Cover — Hinged Container

Injection-molded plastic, noncorrosive and lightweight. Static-sensitive devices can be transported in these containers which provide protection from direct static discharges as well as from static fields from charged personnel and materials.

HINGED CONTAINERS

Hinged containers feature molded pin hinges that provide better security and reliability than traditional snap hinges.

Mfg. Part No.	Dimensions Length (in.)	Width (in.)	Depth (in.)	Stock No.	Price Each
4021	2.88	1.19	.50	03H2900	4.99
4022	3.88	1.94	.50	94F8839	6.02
4023	2.56	3.5	1.75	93B3590	5.51
4024	7	3.5	1.	94F8840	8.08

ROUND CONTAINERS WITH COVERS

Injection-molded in a variety of shapes and sizes. They are ideal for static-safe storage, kitting, and in-process handling and transporting of static-sensitive assemblies and devices.

➤CONTINUED➤

CONDUCTIVE CONTAINERS (CONT.)

Mfg. Part No.	Dimensions Diameter (in.)	Dimensions Height (in.)	Stock No.	Price Each
4011	2.38	.88	06C1107	7.05
4012	3.38	.88	91B8737	8.53

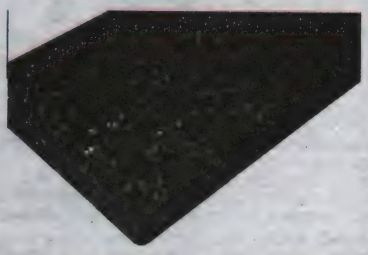
(88087)

STATIC-FREE CONDUCTIVE FOAM

MADE IN USA

DURATOOL

- Antistatic, low tribocharging
- Dissipative and corrosion resistant for long term storage
- Volume and surface resistivity: 10E3 - 10E5 ohms
- Made in the U.S.A.



High-density conductive foam is ideal for lead insertion packaging, providing ESD and physical protection to components leads. Material minimizes exposure to discharge and will conduct charges if grounded. Offers uniform protection that will not affect the solderability of device leads. Construction: polyurethane open cell, carbon/acrylic impregnated. Size: 24 × 36". Color: black.

Mfg. Part No.	Thickness (In.)	Stock No.	Price Each
MC23781	0.25	14N9046	40.00
MC23782	0.375	14N9047	60.51

(132360)

ANTI-STATIC COMPONENT MAILERS

PROTEKTIVE PAK

- Ship or store ESD-sensitive circuit boards or other components
- Convoluted foam secures items, protects from shock
- Static-dissapative foam laminated to top, conductive crosslink black polyethelene foam in bottom
- No assembly required

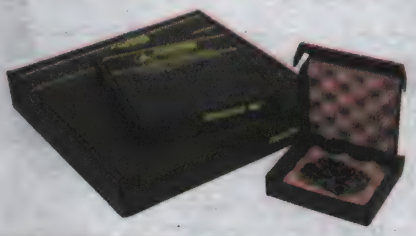
Mfg. Part No.	Dimensions (in.)	Stock No.	Price Each
37003	3-7/16 x 2-1/8 x 1	24K1004	2.06
37004	3-3/4 x 3-3/4 x 1	24K1005	3.57
37005	7 x 3-1/2 x 1	09J9747	3.82

(84354)

ANTI-STATIC SHIPPING MAILERS

PROTEKTIVE PAK

- Ship or store ESD-sensitive components
- Convoluted foam secures items, protects from shock
- Static-dissapative foam laminated to top, conductive crosslink black polyethelene foam in bottom
- No assembly required



Mfg. Part No.	Dimensions (in.)	Stock No.	Price Each
37061	10-1/2 x 8-1/2 x 2-1/2	24K1007	8.32
37065	12-1/2 x 10-1/2 x 2-1/2	24K1008	9.16
37087	16 x 15 x 3	71J0424	23.64

(84355)

ANTISTATIC TAPE AND DISPENSER

RoHS Compliant Available

3M

Utility Tape 40 | Polymide Film Tape 5419 | Tape Dispenser 620

40 PRINTED AND UNPRINTED ANTISTATIC UTILITY TAPE

3M™ **40** printed and unprinted antistatic utility tape is perfect for use in static-sensitive areas. Transparent polyester film with acrylic adhesive is available clear (unprinted) or printed with black 3M™ logo and ESD protective symbol. Made with a proprietary technology, this tape generates extremely low levels of triboelectric charge when it is unwound from the roll and also when removed from most surfaces on which it is placed, making it an excellent choice for use near electronic components and assemblies.

Mfg. Part No.	Color	Roll Size Width (in.)	Roll Size Length (Yds.)	Stock No.	Price per Roll
40 (1/2"X36YDS)	Transparent	½	36	83K9439	15.87
40 (1"X72YDS)	Transparent	1	72	83K9440	63.73
40 (1/2"X72YDS)	Transparent	½	72	29K7349	18.40
40 (3/4"X36YDS)	Transparent	¾	36	29K7351	13.14
40 (3/4"X72YDS)	Transparent	¾	72	29K7352	26.28
40PR (1/4"X72YDS)	Black Print on Clear	¼	72	23H0615	8.74
40PR (1/2"X36 YDS)	Black Print on Clear	½	36	71H6428	9.07
40PR (1/2"X72YDS)	Black Print on Clear	½	72	05C0024	18.40
40PR (3/4"X36YDS)	Black Print on Clear	¾	36	29K7354	13.14
40PR (3/4"X72YDS)	Black Print on Clear	¾	72	88F6266	26.28
40PR (1"X72YDS)	Black Print on Clear	1	72	09J9936	36.09

5419 LOW-STATIC POLYIMIDE FILM TAPE

3M™ 5419 low-static polyimide film tape is a translucent gold-color, polyimide film-backed silicone adhesive tape with unique and extremely low electrostatic discharge properties. Used to mask printed circuit boards during the wave solder or solder dip process.

5419 (1/2"X36YDS)	Gold	½	36	83K9443	78.52
5419 (3/4"X36YDS)	Gold	¾	36	83K9445	104.85
5419 (7/8"X36YDS)	Gold	⅞	36	29K7564	78.60
5419 (1"X36YDS)	Gold	1	36	83K9444	141.50

620 ANTISTATIC TAPE DISPENSER WITH BASE

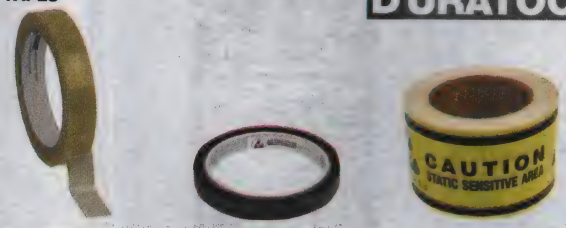
3M™ **620** manual tape dispenser with sturdy base is designed for use in ESD protected areas and is suited for use in clean room areas too.Constructed of conductive and static dissipative materials that will minimize or eliminate problems associated with conventional dispensers. Ideal for use with 3M™ **40** and **42** antistatic tapes.

Mfg. Part No.	Description	Stock No.	Price Each
620-DISPENSER	Antistatic Tape Dispenser with Base	83K9446	532.59

(88088)

ESD TAPES

DURATOOL



MC24587 | MC23799 | MC23785

Mfg. Part No.	Description	Roll Size Width (in.)	Roll Size Lgth. (ft.)	Stock No.	Price per Roll
MC24587	Clear ESD Antistatic Packaging Tape	1	216	02P9685	11.94
MC23799	Hi-Temp ESD Antistatic Polyimide Tape	0.5	108	14N9063	47.03
MC23785	Aisle Marking Static Warning Tape — Black Legend on on Yellow Ground: CAUTION Static Sensitive Area	3	108	14N9049	44.18

(89683)

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(212569)

ESD PACKAGING • WORKSTATION ACCESSORIES

STATIC AWARENESS LABELS

3M

ATTENTION Static-Sensitive Devices Label

ATTENTION Contents Static-Sensitive Label

Designed to alert personnel handling bags, boxes or other carriers that the contents are static-sensitive. Help prevent improper handling of static-sensitive components. Available in single-use (destructible) or reusable forms using the accepted industry static symbols: JEDEC-14 (Joint Electric Device Engineering Council) and MIL-STD-129M. **Sold in roll quantites listed in table below.**

Mfg. Part No.	Description	Legend	Color	Roll Quantity	Stock No.	Price per Roll 1-9
7101	Reusable, 2.5″ H x 1.875″W	ATTENTION Static-Sensitive Devices Handle Only at Static-Safe Work Stations Reusable Do Not Destroy	Black on Orange	500	**46F7439**	39.82
7102	Single-Use (Destructible), 2.5″ H x 1.875″W	ATTENTION Contents Static Sensitive Handling Precautions Required Contents	Black on Yellow	500	**46F7440**	39.97
7201	Reusable, 2″ H x 2″W	Attention Observe Precautions For Handling Electrostatic Discharge Sensitive Devices	Black on Yellow	500	**46F7441**	47.86
7202	Single-Use (Destructible), 2″ H x 2″W	Attention Observe Precautions For Handling Electrostatic Discharge Sensitive Devices	Black on Yellow	500	**46F7442**	41.70

(4609)

HAND-E-GLOVE PROTECTIVE HAND LOTION

RoHS Compliant Available

CAIG LABORATORIES, INC.

- Moisturizes skin
- Safe/tested
- Non-greasy
- Does not impair grip

HAND-E-GLOVE™ protects and shields your hands from dirt, grease,chemicals and harsh contaminants. HAND-E-GLOVE™ is antibacterial and has antistatic properties.

Mfg. Part No.	Description	Stock No.	Price Each
● EEP-102	Antistatic, Anti Bacterial, Hand Lotion, 2 oz. Bottle	**41T2428**	9.77
● EEP-102-16	Antistatic, Anti Bacterial, Hand Lotion, 16 oz. Pump Bottle	**75T4276**	20.35

(196379)

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(196545)

STATIC-DISSIPATIVE BOTTLES

DURATOOL

- Static-Dissipative 2 oz. Flux Bottles: Available with 26, 20 or 16 Gauge Needle
- Static-Dissipative 6 oz. Solvent Containers: Standard or Purity Pump, which Prevents Contamination by Stopping Fluid Return to Dispenser. Both Stainless Steel with Airtight Check Values
- Static-Dissipative 8 oz. Water Bottle
- Static-Dissipative 32 oz. Sports Bottle: for Personal Consumption of Cold Beverages
- Static-Dissipative 16 oz. Catch-All Bottle: General-Purpose Cup for Holding Small Items
- Static-Dissipative 16 oz. Spray Bottle: ESD-Safe Bottle with Spray Pump

Regular plastic bottles produce a 10,000V charge, damaging sensitive components, while non-static generating dissipative bottles average 10^9 to 10^{10} Ω surface resistivity. Dissipate ±5000V charge <2 sec. @ 40% relative humidity.

Mfg. Part No.	Description	Stock No.	Price Each
1462	2 oz. Flux Bottle, 26 Gauge Needle	**10N685**	13.46
1463	2 oz. Flux Bottle, 20 Gauge Needle	**10N686**	13.46
1464	2 oz. Flux Bottle, 16 Gauge Needle	**10N687**	12.75
1465	6 oz. Standard Solvent Dispenser	**10N688**	31.16
1466	6 oz. Solvent Dispenser	**10N689**	34.65
1467	8 oz. Water Bottle	**10N690**	13.50
1470	16 oz. Spray Bottle	**10N693**	21.67

(19350)

ESD PROTECTIVE WASH AND ONE-TOUCH PUMP BOTTLES

MENDA

- Squeeze wash bottle has angled non-drip spout
- Stainless steel, genuine Menda one-touch pump
- Patented one handed operation frees operator's hands
- Dispenses approximately 2cc of liquid with each pump
- durAstatic yellow HDPE bottles are dissipative
- No migratory additives – reduce the chance for contamination from the bottle
- Highly-visible and marked with ESD protective symbol

Wash Bottle

Mfg. Part No.	Description	Capacity (oz.)	Stock No.	Price Each
35359	Yellow, ESD Protective Wash Bottle with Angled Non-Drip Spout	8	**07J0929**	17.88
35433	Yellow, ESD Protective Bottle **Only**	4	**64R8676**	5.42
35436	Yellow, ESD Protective Wash Bottle, Low Charging LDPE	16	**87R1383**	18.61

(79321)

NATURAL HIGH-DENSITY POLYETHYLENE (HDPE) BOTTLES

MENDA

- Stainless steel, genuine Menda one-touch and take-along pumps
- Locking take-along pump (**35702**) will not leak when engaged - suitable for travel
- Patented one-handed operation frees operator's hands
- Bottles made of high-density polyethylene (HDPE)
- Square bottle for stability and wide opening for easy refilling
- Translucent
- Made In America

Mfg. Part No.	Description	Capacity (oz.)	Stock No.	Price Each
35305	Square One-Touch Pump Bottle	4	**81C8432**	17.53
35396	Square Pure-Touch Pump Bottle, Imprinted "Isopropanol"	4	**55M8391**	20.46
35309	Square One-Touch Pump Bottle	6	**81C8434**	18.07
35312	Square One-Touch Pump Bottle	8	**81C8435**	18.36
35702	Square Take-Along Locking Pump Bottle	4	**07J0893**	27.08

(79320)

STATIC-DISSIPATIVE FLUX DISPENSERS WITH NEEDLE

MENDA

- Low tribo-charging
- ESD-Safe bottle designed to protect static-sensitive printed circuitry
- Choice of three dispensing needle sizes
- Color: blue

Mfg. Part No.	Description	Capacity (Oz.)	Stock No.	Price Each
35291	Static-Dissipative Flux Dispenser with 26-Gauge Needle	2	75R7852	10.03
35292	Static-Dissipative Flux Dispenser with 20-Gauge Needle	2	75R7853	9.91
35293	Static-Dissipative Flux Dispenser with 16-Gauge Needle	2	75R7854	10.03

(177926)

durAstatic™ DISSIPATIVE BOTTLES

RoHS Compliant Available

MENDA

- HDPE durAstatic™ dissipative bottles are designed to protect valuable static sensitive printed circuitry
- Printed bottles eliminate the need for additional labels
- No migratory additives
- Embossed with ESD protective symbol
- Long lasting dissipative properties: Rtt: 1 x 104 to <1 x 1011 ohms tested per ANSI/ESD STM11.12 <2 second charge decay, tested per IEC 61340-5-1:1998
- Made In America

ORANGE, 60Z. (180ML)

Mfg. Part No.	Description	Stock No.	Price Each
35270	One-Touch Pump, Sq, HDPE	47W8630	19.38
35271	One-Touch Pump, Sq, HDPE, Printed ACETONE	43W8368	20.40
35272	One-Touch Pump, Sq, HDPE, Printed IPA	47W8631	21.83
35597	One-Touch Pump, Sq, Printed FLUX REMOVER	06X3101	18.11
35491	Bottle Only, HDPE	47W8634	6.49
35492	Bottle Only, Printed ACETONE	47W8635	6.94
35493	Bottle Only, Printed IPA	47W8636	6.49
35593	Bottle Only, Printed FLUX REMOVER	06X3097	6.55
35242	Bottle Only, HDPE, Printed HAZARD INFO	42X9602	6.55
35820	Bottle Only, HDPE, With Black Screwcap	42X9622	8.05
GREEN, 60Z. (180ML)			
35273	One-Touch Pump, Sq, HDPE	47W8632	19.38
35274	One-Touch Pump, Sq, HDPE, Printed ACETONE	47W8633	21.83
35275	One-Touch Pump, Sq, HDPE, Printed IPA	43W8369	21.83
35596	One-Touch Pump, Printed FLUX REMOVER	06X3100	18.11
35494	Bottle Only, HDPE	47W8637	6.49
35241	Bottle Only, HDPE, Printed HAZARD INFO	42X9601	7.20
35819	Bottle Only, HDPE, With Black Screwcap	42X9621	8.05
35495	Bottle Only, Printed ACETONE	47W8638	6.49
35496	Bottle Only, Printed IPA	47W8639	6.49
35592	Bottle Only, Printed FLUX REMOVER	06X3096	6.55
YELLOW, 60Z. (180ML)			
35497	Bottle Only, HDPE	48W2134	6.49
35240	Bottle Only, HDPE, Printed HAZARD INFO	42X9600	6.55
35818	Bottle Only, HDPE, With Black Screwcap	42X9620	8.05
35498	Bottle Only, Printed ACETONE	48W2135	6.49
35499	Bottle Only, Printed IPA	48W2136	6.49
35591	Bottle Only, Printed FLUX REMOVER	06X3095	6.55
35276	One-Touch Pump, Sq, HDPE	07W3652	22.22
35595	One-Touch Pump, Sq, Printed FLUX REMOVER	06X3099	18.11
35268	Pure-Take Pump, Sq, HDPE	42X9605	29.13
35267	Pure-Touch Pump, Sq, HDPE	42X9604	23.17
● 35277	One-Touch Pump, Sq, HDPE, Printed ACETONE	07W3653	21.83
● 35278	One-Touch Pump, Sq, HDPE, Printed IPA	07W3661	20.40
BLUE, 40Z. (120ML)			
35282	One-Touch Pump, Sq, HDPE	71T6110	15.61
35260	Bottle Only, HDPE	07W3646	7.43
BLUE, 60Z. (180ML)			
35283	One-Touch Pump, Sq, HDPE	71T6111	19.38
35299	One-Touch Pump, Sq, HDPE, Printed IPA	06X1821	20.40

➤CONTINUED➤

durAstatic™ DISSIPATIVE BOTTLES (CONT.)

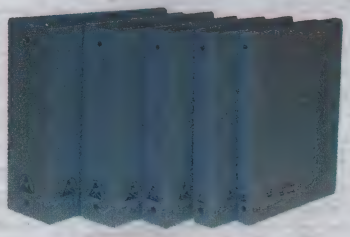
BLUE, 60Z. (180ML)

Mfg. Part No.	Description	Stock No.	Price Each
35298	One-Touch Pump, Sq, HDPE, Printed ACETONE	06X1820	20.40
35259	One-Touch Pump, Sq, Printed HAZARD INFO	42X9603	20.40
35594	One-Touch Pump, Sq, Printed FLUX REMOVER	06X3098	18.11
35285	Pure-Touch Pump, Sq, HDPE	71T6113	24.79
35286	Pure-Take Pump, Sq, HDPE	71T6114	29.13
35287	Take-Along Pump, Sq, HDPE	71T6115	28.68
35590	Bottle Only, Printed FLUX REMOVER	06X3094	6.55
35261	Bottle Only, HDPE	07W3647	7.44
35265	Bottle Only, HDPE, Printed ACETONE	06X1817	6.55
35266	Bottle Only, HDPE, Printed IPA	85W2179	6.55
35239	Bottle Only, HDPE, Printed HAZARD INFO	42X9599	6.55
35817	Bottle Only, HDPE, With Black Screwcap	42X9619	8.05
BLUE, 80Z. (240ML)			
35284	One-Touch Pump, Sq, HDPE	71T6112	15.61
35288	One-Touch Pump, Sq, HDPE, Printed ACETONE	71T6116	21.83
35289	One-Touch Pump, Sq, HDPE, Printed IPA	71T6117	17.58
35262	Bottle Only, HDPE	07W3648	7.51
35263	Bottle Only, Printed ACETONE	07W3650	7.51
35264	Bottle Only, Printed IPA	07W3651	7.51
ACCESSORY			
35821	Screw Cap, Black, Insulative for 38-400 Neck Size	42X9623	0.46

(209428)

STATIC DISSIPATIVE BINDERS

DESCO



- For Storing Required Documents in ESD Protected Areas
- Dissipative Vinyl Allows Electrostatic Charges to Be Removed to Ground
- 3-Ring Loose Leaf Format for Standard 8 ½″ x 11″ Paper

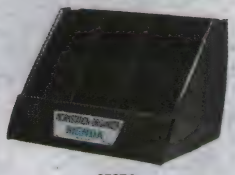
Mfg. Part No.	Ring Size	Spine Size	Stock No.	Price Each Each
07405	0.5″	1.2″	49H6761	21.95
07410	1″	1.7″	49H6762	21.08
07412	1.5″	2.3″	49H6763	26.12
07415	2″	2.9″	49H6764	29.73
07420	3″	4.2″	49H6765	37.29

(75448)

ESD PROTECTIVE WORKSTATION ORGANIZERS

MENDA

35872



35874

35892

- Extruded, conductive, high-impact polypropylene
- Conductive 10E2 - 10E4 ohms per ANSI/ESD S 11.11
- Superior strength and durability
- Chemical and moisture resistant
- Made in America

Ideal for improving the appearance of ESD workstations and properly setting up and standardizing the placement of tools in any ESD work area. Constructed of extruded, conductive polypropylene Plastek™ material that provides reliable path-to-ground. These multiple compartment storage units are perfect for organizing various items, such as dispensing bottles, wash bottles, flux bottles, solder spools, cutters, tweezers, lotion, and much more. Color: black.

Mfg. part no. 35872 ESD workstation organizer kit includes multi-compartment organizer assembly, one **35354** ESD-safe bottle and one **35666** 8-oz. unscented lotion. Overall size: 16⅞″W x 8⅛″D x 2⅜″H.

➤CONTINUED➤

ESD PROTECTIVE WORKSTATION ORGANIZERS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
35872	ESD Workstation Organizer Kit	59P3100	53.40

Mfg. part no. 35874 ESD workstation organizer consists of six cells: three front row cells measure 2½″ x 3″, three back row cells measure 3″ x 3″. The front of the organizer is cut low for quick and easy access to smaller items placed in the front cells. Overall size: 9¼″W x 5⅝″D x 7″H.

35874	ESD Workstation Organizer	12P6205	35.53

Mfg. part no. 35892 Reusable cover holds wiper boxes 4 ½″ x 3″. Dimensions: 5 ¾″ W x 5 ¾″ D x 3″ H.

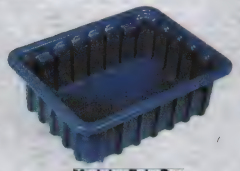
35892	ESD Safe Wipe Cover with Overlay	25T1494	15.12

(177478)

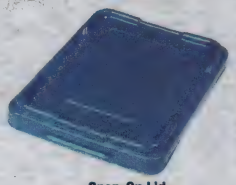
STATIC-DISSIPATIVE STACKABLE MODULAR TOTE BOXES

RoHS Compliant Available

DURATOOL



Modular Tote Box



Snap-On Lid

Static-dissipative tote boxes are vacuum formed from sheets of high-density polyethylene. Vacuum forming produces a stress-free container with maximum resistance to cracking. These containers are impervious to oils, most chemicals, rot, solvents, and temperature extremes. Totes stack with or without lids so they do not rest on the storage contents. Divider grooves on 1¼″ centers allow for the formation of 1⅛ x 1⅛″ compartments or multiples thereof. *Order lids, dividers, and standard card holders separately below.*

MODULAR TOTE BOXES

Mfg. Part No.	Outside Dimensions (in.) L	W	H	Inside Dimensions (in.) L	W	Stock No.	Price Each
● 2819	11	8	3.5	9	6.25	92N5583	34.07
● 2820	11	8	5	9	6.25	92N5584	38.04
● 2821	16.63	11	3.5	14.75	9	92N5585	43.61
● 2822	16.63	11	7	14.75	9	92N5586	68.19
● 2823	22.38	17.5	3	20	15	92N5587	77.94
● 2824	22.38	17.5	6	20	15	92N5588	104.40
● 2825	22.38	17.5	9	20	15	92N5589	143.48
● 2826	22.38	17.5	12	20	15	92N5590	182.22

TOTE BOX SNAP-ON LIDS

Mfg. Part No.	Dimensions (in.) L	W	Stock No.	Price Each
● 2827	11	8	92N5591	30.01
● 2828	16.63	11	92N5592	42.27
● 2829	22.38	17.5	92N5593	64.29

SHORT DIVIDERS

Mfg. Part No.	Use with Tote Box Type	Max. Per Tote	Stock No.	Price Each
● 2830	2819	7	92N5594	6.15
● 2831	2820	7	92N5595	7.04
● 2832	2821	11	92N5596	7.52
● 2833	2822	11	92N5597	14.23
● 2834	2823	15	92N5598	8.35
● 2835	2824	15	92N5599	16.55
● 2836	2825	15	92N5600	23.32
● 2837	2826	15	92N5601	6.95
LONG DIVIDERS				
● 2838	2819	5	92N5602	7.82
● 2839	2820	5	92N5603	9.69
● 2840	2821	7	92N5604	16.55
● 2841	2822	7	92N5605	8.62
● 2842	2823	11	92N5606	13.37
● 2843	2824	11	92N5607	16.55
● 2844	2825	11	92N5608	20.82
● 2845	2826	11	92N5609	23.41

STANDARD CARD HOLDERS

Mfg. Part No.	Dimensions (in.) H	W	Stock No.	Price Each
2846	1.5	6.25	92N5610	5.68
2847	3	2.25	92N5611	5.68
2848	3.5	7.5	92N5612	6.72
2849	6.25	8.25	92N5613	6.72

(18044)

PLASTEK SHIPPER SAVER STORAGE CONTAINERS

PROTEKTIVE PAK

- Provides physical protection with conductive material providing reliable path-to-ground
- Includes wire frame for extra strength
- Ships flat – easy assembly
- Rtt: 10E2 – 10E4 ohms
- Made in America

Additional options available; lid, ESD handles, static dissipative foam bottom to provide ESD and shock protection, and document holders; *go online or call.*

Mfg. Part No.	Dimensions (mm) L	W	D	Stock No.	Price Each
39300	432	330	171	47T5771	62.76
39301	432	330	222	47T5772	68.42
39302	432	330	273	47T5773	74.81
39303	432	330	321	47T5774	85.31
39304	467	314	324	47T5775	86.71
39305	467	314	435	47T5776	94.83
39306	467	314	476	47T5777	99.84
39307	473	381	149	47T5778	66.38
39308	473	381	203	47T5779	74.32
39309	473	381	254	47T5780	80.19
39310	473	381	305	47T5781	86.92
39311	473	381	356	47T5782	93.60
39312	581	327	152	47T5783	68.49
39313	581	327	203	47T5784	75.61
39314	581	327	254	47T5785	81.82
39315	581	327	321	47T5786	91.16
39316	581	327	387	47T5787	100.93
39317	581	327	464	47T5788	115.01

(198006)

AEROSTAT® XC™ EXTENDED COVERAGE IONIZING AIR BLOWER

SIMCO ION™ An ITW Company

- Inherently Balanced to ±5V
- Built-in Emitter Point Cleaner
- 3-Speed Fan and Integrated Heater

The Aerostat® XC™ extended coverage ionizing air blower provides excellent coverage, stability of balance and rapid static charge decay times. The XC™ neutralizes static across an entire 3′ x 6′ benchtop area and has an integrated heater for operator comfort. 3-speed fan delivers a controlled air volume of 70, 90 or 120 CFM. Weighs 17.5 lbs. Dimensions: 15⅜W x 4-1/2H x 8⅛″D.

Mfg. Part No.	Description	Stock No.	Price Each
4002612	XC™ 120V, 60Hz	08H0343	650.00
4470059	Replacement Air Filter	08H0352	19.45

(74175)

AEROSTAT GUARDIAN OVERHEAD IONIZING AIR BLOWERS

SIMCO ION™ An ITW Company

- Rapidly neutralizes static charges
- Covers an extended area with ionized air
- Inherently balanced ion output to ±5V
- Built-in emitter point cleaner
- Variable speed, three-fan units with wide range of airflow
- Power rated: 120V, 60Hz
- Dimensions: 42-3/4L x 4″H x 6¾″D
- UL listed, CE complaint

4004063 Standard Model

4008630 Cleanroom Model

Aerostat® Guardian™ ionizing air blowers provide fast static charge decay over an entire work surface area. These blowers offer user-friendly operation while effectively protecting even the most sensitive components from ESD damage. **Mfg. part no. 4004063** standard version Guardian™ produces an air volume of 150 to 300 CFM , is equipped with task lighting, an ionization indicator light and an integrated heater. The standard version Guardian™ covers a 2½′ x5′ area and weighs 16 lbs. **Mfg. part no. 4008630** cleanroom version Guardian™ CR2000 is designed specifically for use above critical cleanroom applications where ESD is a concern and is Class 10 209E (ISO Class 4) compatible. The Guardian CR2000 provides cleanroom compatibility using specially chosen components and materials, and is manufactured to insure cleanliness and minimize risk of contamination. The Guardian™ CR2000 produces an adjustable air flow velocity of 135 to 270 CFM, is equipped with ion output and ion balance monitors, and has a lock-out keyswitch for performance in critical applications. The Guardian™ CR2000 covers a 2′ x4′ area and weighs 15 lbs.

Mfg. Part No.	Description	Stock No.	Price Each
4004063	Aerostat® Guardian™ Ionizing Air Blower, Standard Model	08H0345	940.00
4008630	Aerostat® Guardian™ CR2000 Ionizing Air Blower, Cleanroom Model	01J8140	995.00

(74176)

AEROSTAT® PC™ PERSONAL COVERAGE IONIZING AIR BLOWER

SIMCO ION™ An ITW Company

- Inherently Balanced to ±5V
- Built-in Emitter Point Cleaner
- Variable Speed Fan and Integrated Heater

Small, quiet and lightweight yet uncompromising in performance, SIMCO's Aerostat® PC™ provides superior static charge decay over a targeted work surface area. Provides optimum protection from the destructive effects of ESD and features an integrated heater for operator comfort. Variable speed fan produces an air volume of 35 to 70 CFM. The PC™ covers a 1′ by 5′ area, weighs 5.3 lbs. Dimensions: 5.5W x 8.625H x 3.25″D.

Mfg. Part No.	Description	Stock No.	Price Each
4003367	PC™ 120V, 60Hz	08H0344	495.00

(74177)

TOP GUN™ IONIZING AIR GUN

SIMCO ION™ An ITW Company

- Electronically Balanced to ±15V
- Operates on Compressed Air or Nitrogen
- Adjustable Airflow Control (5 to 100psi)
- 0.01 Micron Filter at Gun Exit Provides Clean Air
- UL Listed

SIMCO's Top Gun™ is a high-performance ionizing air gun for electronics manufacturing and clean room applications. Balanced to ±15V, the Top Gun™ features high blow-off force of up to 100psi to provide efficient cleaning and rapid static charge decay. The gun body is static dissipative, lightweight (less than 7 oz.) but durable, and features a light-touch trigger. All control functions are built into the gun for easy operator use: airflow control, ion balance adjustment, and a 2-level LED to indicate both power and ionization. The Top Gun™ operates on 120VAC.

Mfg. Part No.	Description	Stock No.	Price Each
4005105	Top Gun™, 7′ Cable, 120V, 50/60Hz	08H0346	795.00
5050696	Replacement Air Filters **(Package of 2)**	08H0355	74.40

(74178)

MINION2™ IONIZING AIR BLOWER

SIMCO ION™ An ITW Company

- Compact design — perfect for benchtop
- Covers 1′ x 4′ area
- Self-Balancing to ±10V
- Power and fault indicators
- 24VDC input
- Modular wiring system allows for "daisy chaining" up to 3 units via RJ-11

4011424 MinION2

MinION2 Shown in 5051441Stand

MinION2™ ionizing air blower is designed to control electrostatic charges in sensitive electronics assembly and automated tool applications requiring stable operation with fast discharge time performance. Incorporates Simco's steady-state DC corona ion technology with patented radial ion emitter design for enhanced performance. Unique geometry and airflow control (21 to 42 CFM) meets the demands of electronics and critical assembly applications. Hardwiring of power can be accomodated by use of a terminal block located on back of blower. The terminal block also features a relay contact output of the fault signal to enable remote monitoring. Discharge time 1000V - 100V less than 2 seconds. Two-position ON-OFF switch. Recessed potentiometer controls fan speed. Weight: 1.1 lbs. Size: 3⅞W x 5⅜H x 2⅜D ″. **Mfg. part no. 5051441** clamp-on, articulated spring-arm stand is available for applications requiring an elevated position or to save work surface space; *order separately below.*

Mfg. Part No.	Description	Stock No.	Price Each
4011425	MinION2™ Ionizer with 100/120VAC to 24VDC Power Supply	45M7492	449.00
4011424	MinION2™ Ionizer (**Only**)	45M7491	395.00
5051141	Articulated Spring-Arm Stand	08H0356	130.76

(74180)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

FMX-003 HAND-HELD ELECTROSTATIC FIELDMETER

SIMCO ION™ An ITW Company

- Graphic display of charge
- Self-storing plate for ionizer measurement
- Auto-ranging digital display
- HOLD function

Mfg. part no. 4010723 FMX-003 hand-held electrostatic fieldmeter is a compact, portable instrument for measuring electrostatic charge. Measures positive and negative polarity electrostatic charges to 20 kV (20,000 V) at a distance of one inch. Two LED guide ring lights on the measuring side of the unit converge at the proper distance from a charged test object. The conductive case and ground lead facilitate reference grounding for accurate measurement.

Mfg. Part No.	Description	Stock No.	Price Each
4010723	Compact Hand-held Fieldmeter with Charge Plate	69K6574	625.00

(74181)

AIR FORCE IONIZING AIR GUN

SIMCO ION™ An ITW Company

- Small ergonomic gun design
- Flexible lightweight air hose
- IsoStat® "self balancing" technology
- Class 10 cleanroom approved
- UL listed, CE compliant

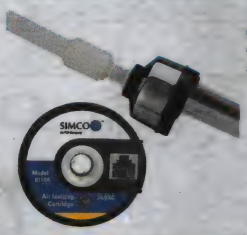
AirForce gun was designed with the operator in mind. The lightweight, flexible, air hose (⅜ diameter) moves with the operator making work easier. The guns ergonomic design - light touch trigger, and easy view LED minimizes fatigue and eliminates wrist hyper extension. The compact console can be mounted anywhere and does not take up valuable workspace. The AirForce incorporates steady state DC ion emission with average discharge times of < 1 second, and also features low audible noise with an ion balance of +/-30V, and a .01m filter. The gun measures 8L x 3W x 1″D. Wt. 12oz. The console measures 8.5L x 3W x 1.6″D. Wt. 11.5oz.

Mfg. Part No.	Description	Stock No.	Price Each
91-6115-NXFMR	Model 6115 AirForce Gun with 8ft. Hose	20T0550	750.00
92-6115-US	Model 6115 AirForce Gun (includes power supply)	83T4249	800.00
91-6115FLT	Replacement Air Filter	20T0551	91.52

(194430)

CONVERTS AIR GUN — IONIZED AIR

SIMCO ION™ An ITW Company



- Air gun ionization
- IsoStat® "self balancing" technology
- CE compliant

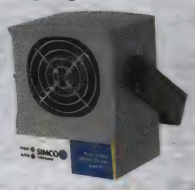
Attach the 6110A to an ordinary air gun and the air stream is ionized. The optional 6110A has an internal sensor to initiate ionization only when the gun is triggered. The unit measures 3.1L x 2.2″D and weighs 6oz, air line requirements are 1/4 ″ input and output. (1/8″ adapter available).

Mfg. Part No.	Description	Stock No.	Price Each
91-6110	Model 6110 Ionizing Cartridge	20T0548	385.00
91-6110A	Model 6110A Ionizing Cartridge (with air flow sensor)	20T0549	445.00
92-6110A-US	Model 6110A Ionizing Cartridge (includes power supply)	83T4248	495.00

(194431)

POINT OF USE IONIZING BLOWER

SIMCO ION™ An ITW Company



- Smallest footprint
- IsoStat® "self balancing" technology requires no calibration
- Automatic point cleaning system
- Visual & remote alarm indicator
- UL listed, CE compliant

91-6422E-AC-01

Mfg. part no. 91-6422E-AC-01 is the most efficient small ionizing blower of its kind for controlling static charges in target, hard to reach areas, and process tool applications. The 6422e incorporates our patented "auto clean" system that cleans the emitter points each time the unit powers down. This substantially reduces maintenance, insures consistent performance, and extends emitter life. Dimensions: 4.95H x 3.26W x 2.84″D. Wt. 12.7oz. including the bracket.

Mfg. Part No.	Description	Stock No.	Price Each
91-6422E-AC-01	6422e Ionizer	20T0552	425.00
14-1320	Wall Transformer 120V	20T0543	22.88

(194427)

IONIZERS

POINT OF USE IONIZING BLOWER

SIMCO ION
An ITW Company

- Small footprint
- IsoStat® "self balancing" technology requires no calibration
- Visual and remote alarm indicator
- UL listed, CE compliant

921-6432E

Mfg. part no. 921-6432E is designed to control static charges in assembly, inspection, packaging areas, and in process tool applications, wherever static build-up can cause ESD damage, particle contamination, or microprocessor lock-up. The 6432e utilizes Steady State DC ion emission to provide fast discharge with low airflow for greater operator comfort. Depending on application – choose either a standard benchtop or a small in-tool bracket/stand. Dimensions: 5.3H x 5.0W x 2.5"D. Wt. 21oz.

Mfg. Part No.	Description	Stock No.	Price Each
921-6432E	6432e Ionizer	20T0557	330.00
14-1320	Wall Transformer 120V	20T0543	22.88
32-6433	Benchtop Stand	20T0545	44.62
32-6434	In Tool Bracket / Stand	20T0546	34.32

(194428)

BENCH TOP IONIZER

DESCO

- Adjustable high volume output air flow to 117 CFM max.
- Auto-balanced AC ionizing system with less than 2 sec. discharge time at 12 in.
- Gold plated emitters
- Multi-mount stand
- Fixed temperature heater
- Grounding Jack
- NIST calibrated
- Made in America

Ionizing unit is a self-balancing bench top ionizer. The ionizer's patented* Faraday Balance System assures perfect ion balance automatically. It offers greater efficiency and easier cleaning than conventional ionizers. The bench top ionizer is designed to neutralize static electricity from insulators in localized work areas in assembly rooms, wavesolder lines, laboratories, QC, test stations, packing and shipping areas and clean rooms. Unit includes power cord, 6' IEC type, cleaning brush, filter and guard assembly. Dimensions: 11" x 9" x 7".

Mfg. Part No.	Description	Stock No.	Price Each
19500	Bench Top Ionizer,120VAC, 50/60Hz, 3.0A	61H6006	807.69

*Manufactured under U.S. patent #5,008,594

(196356)

CHARGEBUSTER JR. H/O IONIZER

DESCO

Features and Benefits:

- Compact Auto-Balanced 60-77 CFM Adjustable Output Air Flow
- Patented Emitter Replacement Cassettes and Removable Back Grill
- Active Balancing System with Audible and Visual Alarm
- Stainless Steel Housing
- Multi-Mount Stainless Steel Stand
- Grounding jack
- Made in America

Compact auto-balanced 60-77 CFM adjustable output airflow unit features efficient design that minimizes bench top space while maximizing neutralization efficiency and overall performance (less than 2 sec discharge time at 12" and ±15V offset). Patented emitter replacement cassettes and removable back grill allow cleaning away from workstation and for emitter pins to be replaced with minimal downtime. Active balancing system with audible and visual alarm continually adjusts voltage output for optimal performance and automatically alarms when maintenance is needed or unit is not operating correctly. Stainless steel housing minimizes foreign objects debris, corrosion, and other contamination. Multi-mount stainless steel stand. Grounding jack for operator grounding or other grounding requirements.

Mfg. Part No.	Description	Stock No.	Price Each
60500	120V Chargebuster Jr., H/O Ionizer, NIST Calibrated	61H6319	786.04

(84402)

DURATOOL AT NEWARK ELEMENT14

For your production and facilities needs, from soldering stations to tool sets & more.
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(212563)

CHARGEBUSTER OVERHEAD IONIZERS

DESCO

Features and Benefits:

- Two 3-blade fans with steady-state DC ionization for 2'x4' coverage area
- Auto-Feedback System — automatic shut-down with audible and tri-color LED alarms
- 120/220 VAC input voltage selectable
- Air volume: 100-200cfm
- Ionization performance is consistent at all three fan speeds (Low, Medium, High)
- Field replaceable emitter pins allow for minimal downtime
- Made in America

Mfg. part no. 60640 Chargebuster® is a steady-state DC overhead ionizer designed to cover a 2 foot by 4 foot ESD sensitive work area. The specially designed 3-speed fan modules create better coverage, consistent offset voltage (±10V), and superior discharge times (<3 seconds) tested per ANSI/ESD STM 3.1. Equipped with a auto-feedback system, that continually optimizes the unit's performance and will automatically shut down the ionizer and alarm if/when the supply voltage drops. Can be used with 110V or 220V power sources. AC line power, 120VAC, 50/60Hz, but can be changed internally to 220V. Durable white, powder-coated steel housing. Overall size: 3.5H x 6.5W x 24"L. Chargebuster® overhead ionizer comes complete with hanging kit, power cord, three emitter point cleaners and certificate of calibration.

Mfg. Part No.	Description	Stock No.	Price Each
60640	Chargebuster® Overhead Ionizer, 2 Fan	08R2388	1065.93
60473	Chargebuster® Overhead Ionizer, 3-Fan	88M1061	1258.46

(177484)

2-FAN AND 3-FAN OVERHEAD IONIZER

EMIT

Features and Benefits:

- Overhead installation for versatile and stable ionization system
- Three levels of air velocity
- Hand-held remote control
- User programmable maintenance and alarm levels
- Removable fan modules
- Up to 124 units can be daisy-chained into one serial port
- **Mfg. part no. 50664** dimensions: 3.50H x 6.50W x 27.00L"
- **Mfg. part no. 50665** dimensions: 3.50H x 6.50W x 42.00L"

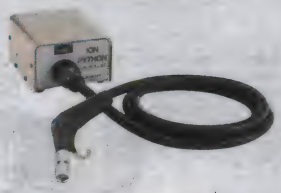
Mfg. Part No.	Description	Stock No.	Price Each
50664	Overhead 2 Fan Ionizer, 120V	96H6150	1522.04
50665	Overhead 3 Fan Ionizer, 120V	96H6151	1952.21

(84462)

NEUTRALIZING ION PYTHON HAND GUN

DESCO

- Point-of-use ionizer, adjustable (30-100 PSI) compressed air ionizer
- Detachable 7' long ESD protective flexible hose with thumb button
- Adjustable balance (±20 Volts) with less than 1 second discharge time at 6 inch
- Stainless steel housing
- Made in America



Ion Python is a point-of-use ionizer using compressed air or nitrogen to neutralize electrostatic charges from a small, defined area and/or to facilitate removal of charged particles. These ready-to-use units are designed for use in applications and areas where electrostatic attraction contamination create manufacturing or handling problems. The Ion Python meets or exceeds the recommended technical requirements of ANSI/ESD S20.20 tested in accordance with ANSI/ESD S3.1. Includes cord with IEC connector.

Mfg. Part No.	Description	Stock No.	Price Each
19587	Ion Python Hand Gun, 120VAC	61H6010	1314.64

(196361)

BENCHTOP AND OVERHEAD AIR IONIZERS

RoHS Compliant Available

3M

Benchtop Air Ionizer | Mini Air Ionizer | Overhead Air Ionizer

Mfg. part no. 960 versatile, mini-size air ionizer is ideal for small, confined spaces. Generates a well-balanced flow of ionized air particles, which neutralizes any stray electrostatic buildup. Perfect inside OEM equipment, on ESD workstations, and in or around electronic equipment. Comes complete with mounting bracket and a 3' modular telephone plug cable assembly to connect it to **mfg. part no. 960X/980X** wall transformer power supply, *ordered separately below.* Input power: 24VAC, 5.5W supplied by the wall transformer power supply that can handle for up to four mini ionizers. Size: 4.5H x 3.3W x 2"D (including bracket). UL listed, CE compliant.

➤ CONTINUED ➤

BENCHTOP AND OVERHEAD AIR IONIZERS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each 1-4
960	Mini Air Ionizer	95B9131	573.50
960X/980X	Wall Transformer Power Supply	95B3900	137.17

Mfg. part no. 963E air ionizer blankets the benchtop with ionized air to help prevent static from damaging sensitive electronics. Features a two-speed fan (100fpm and 300fpm), power indicator lamp, static-dissipative plastic housing, and a combination metal-plastic stand that doubles as a mounting bracket. Provides fast neutralization of static charges on nonconductive objects. Maintains equal balance of positve-negative ions. The ionizer uses AC 110V power. Supplied with 6′ (1.8m) power cord with IEC 320 and U.S. plugs. One-year manufacturer's warranty. Size: 7.4H x 6W x 3″D UL listed, CE compliant, NOM certification.

● 963E	Benchtop Air Ionizer — 110V	98P0364	703.98

Mfg. part no. 991 air ionizer with its overhead mounting system handles an area 2 x 4 ft. (61x 122 cm) directly under ionizer to provide consistent static control coverage. Steady-state DC ion emission enables fast discharge with low airflow, providing a more comfortable work environment. Emitter points behind the three fans eliminate field-induced charge and provides a homogeneous mixture of ionized air. Features alarm relay closure circuitry, bi-color LED visual performance indicators, high and low speeds. Air flow: 114 CFM (per fan, high speed, free-air). IEC60320 power inlet with removable line cord, 100-230VAC, 50/60 Hz, 27W max., 0.4A max. IEC60320 female outlet, unfused, 5A max. load. Includes four eyebolts with one 1/8 in. S-hooks, three air filters; one 8.2 ft. power cord, one-year manufacturer's warranty and instruction manual. Dimensions: 44L x 6W x 4″H. UL listed, CE certified, TUV approved. *Order* **mfg. part no. 991-F** *replacement filters separately below.*

991	Overhead Air Ionizer	55M3955	1590.62

(49175)

IONIZED AIR GUN

Ionized air gun 980 lightweight, ergonomically designed air gun is an excellent tool for blowing particulate contamination off any surface. Releases a constantly balanced stream of compressed ionized air or gas that neutralizes static charges that attract particulates to a surface. Its unique ionization system is completely self-balancing; it maintains balance to within ±30V of 0V at a distance of 6″. Maintenance-free gun uses safe, efficient, low-voltage power allowing for the use of much lighter wiring. Includes a transformer that converts line power from a standard 120V outlet to 24V. *Order accessories separately below.* UL listed, CSA certified, CE compliant.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
980	Ionized Air Gun	91F2938	1172.30
980-F	Air Filter (Package of 3)	91F2935	141.45
980-T	Emitter Points (1 Pair)	91F2936	146.76
960X/980X	Wall Transformer Power Supply	95B3900	137.17

(10944)

ELECTRONICS VACUUM

RoHS Compliant Available

Powerful 3M™ electronics vacuum cleaner developed for high-efficiency cleanup of most business equipment. Features high-quality filtration system, portability, quick setup, and efficient and safe operation. Plastic accessories have a resistivity low enough to dissipate electrostatic buildup, yet high enough to limit current to safe levels at 220V or less. Replaceable, 1HP motor is continuous-duty rated with one sealed ball bearing and one sleeve bearing lubricated for life. Comes complete with a type 2 toner/dust filter, stretch hose (approximately 10-ft.), wand crevice tool and brush, needle nose nozzle, and dusting brush.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● 497AJM	Electronics Vacuum, 120V	18M9349	347.13
ACCESSORIES			
● SV-SPF1	Type 1 Fine Particle Filter for Extremely Fine Particles	50F948	35.26
● SV-MPF2	Type 2 High-Performance Filter for Medium Particles (Toner/Dust)	50F949	19.25
● SV-SH32	10-ft Vacuum Hose Assembly	91B1564	37.67
SV-SH50	10-ft. Vacuum Hose Assembly	91B7300	64.94

(4540)

ESD SAFE COMPUTER/ ELECTRONIC CLEANING SYSTEM

METRO DATA-VAC

- Anti-static wrist strap
- Powerful, 2-speed, 1.7 peak horsepower motor
- Integrated toner filter system
- Ballistic nylon carry case
- Rugged, heavy-duty, all-steel body
- Manufactured to government specifications

DATAVAC/3ESD with it's 4 Stage HEPA filtration system is 99.97% effective in trapping dust particles down to 0.3 microns preventing them from re-contaminating the office environment. **DataVac/ 3ESD series** is equipped with a unique anti-static wrist-strap grounding the user from generating static. **DataVac/3ESD series** features a rugged all-steel body and a 2-speed 1.7 peak horsepower motor. Accessories included anti-static 3-6 ft. expandable stretch hose, crevice tool, dust brush, 4-Piece micro tool kit; 6 disposable 3-ply toner filter bags, repl. foam filter, shoulder strap and fully padded soft carry case. Weight: 8 lbs. Technical Specifications; 7.5 Amps; 100 CFM; 80" water lift (sealed suction measurement); 115V; 60Hz.

Mfg. Part No.	Description	Stock No.	Price Each 1-5
DV-3ESD1	ESD Safe Computer/Elec. Cleaning System	23K8225	603.70

(84243)

STATIC CONTROL VACUUM

RoHS Compliant Available

DURATOOL

Vacuum is statically controlled with conductive construction to prevent shocks to operators and damage to sensitive electronic components. Disposable 0.3-micron filter canister is for use on toner, developer, dirt, dust, mold, pollen, soot, paint pigments, and other dry materials. Water lift: 30″ open and 50″ sealed. Perfect for use on laser printer toner and sensitive equipment, such as disk drives. Power: 6.83A, 1HP, 92.8 cfm. Attachments include 6′ flexible hose, goose-neck extender, crevice tool and crevice tool brush. UL listed, CSA certified. 3-year warranty. Standard or HEPA replacement filter canisters are availble; *go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each
● SPC22010	110V Static Control Vacuum	18M9991	364.93

(18041)

PORTABLE ESD SAFE VACUUM CLEANERS AND ACCESSORIES

RoHS Compliant Available

DURATOOL

- Portable
- Convenient
- Powerful
- Safe

Mfr. part no. SPC36174 ideal for soot, dust, laser toner and other fine particulate. **Mfr. part no. SPC36175** uses include very fine dust, color toner, allergens, mold spores, as well as, other ultra fine particulate. These vacuums come with an ESD safe hose, ESD safe round dust brush, ESD safe gooseneck, ESD safe crevice tool and power cord. The complete system is grounded from the tip of the hose through the end of the power cord. Motor: 120V, 600W. Dimensions: 12.25L x 7.50W x 6.5 ″H. Wt: 4 lbs. Hose dia.:inside 1″, outside 1-3/16 ″. Water lift at hose: 50 ″.

VACUUMS

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● SPC36174	ESD Safe Vacuum w/ Toner Cartridge	22T4866	207.10
● SPC36175	ESD Safe Vacuum w/ HEPA Filter	22T4867	288.67

REPLACEMENT FILTERS

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● SPC36254	Standard Filter for SPC36174, PK 2	22T4868	33.82
● SPC36255	HEPA Filter for SPC36175, PK 2	22T4869	58.08

(192324)

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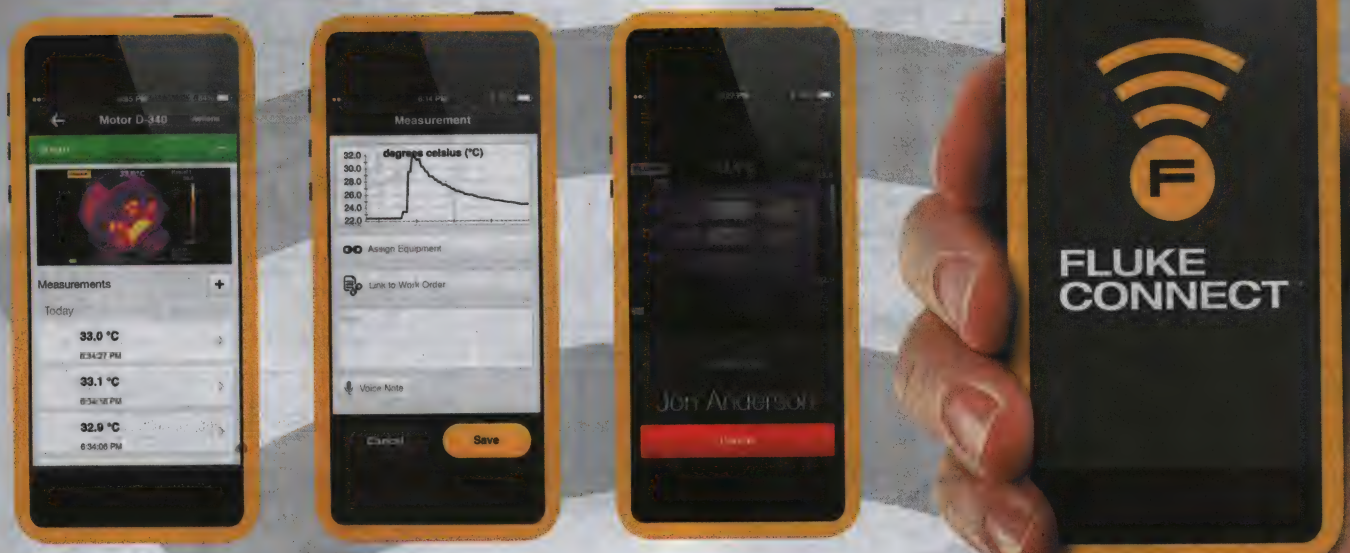

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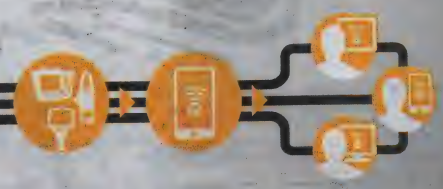

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DC Power Supplies 2192-2202
Decade Boxes 2206
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Electronic Loads 2202-2203
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Micro-Ohmmeters 2203-2204
Optoelectronics Meters 2191
Oscilloscopes & Logic Analyzers 2166-2177
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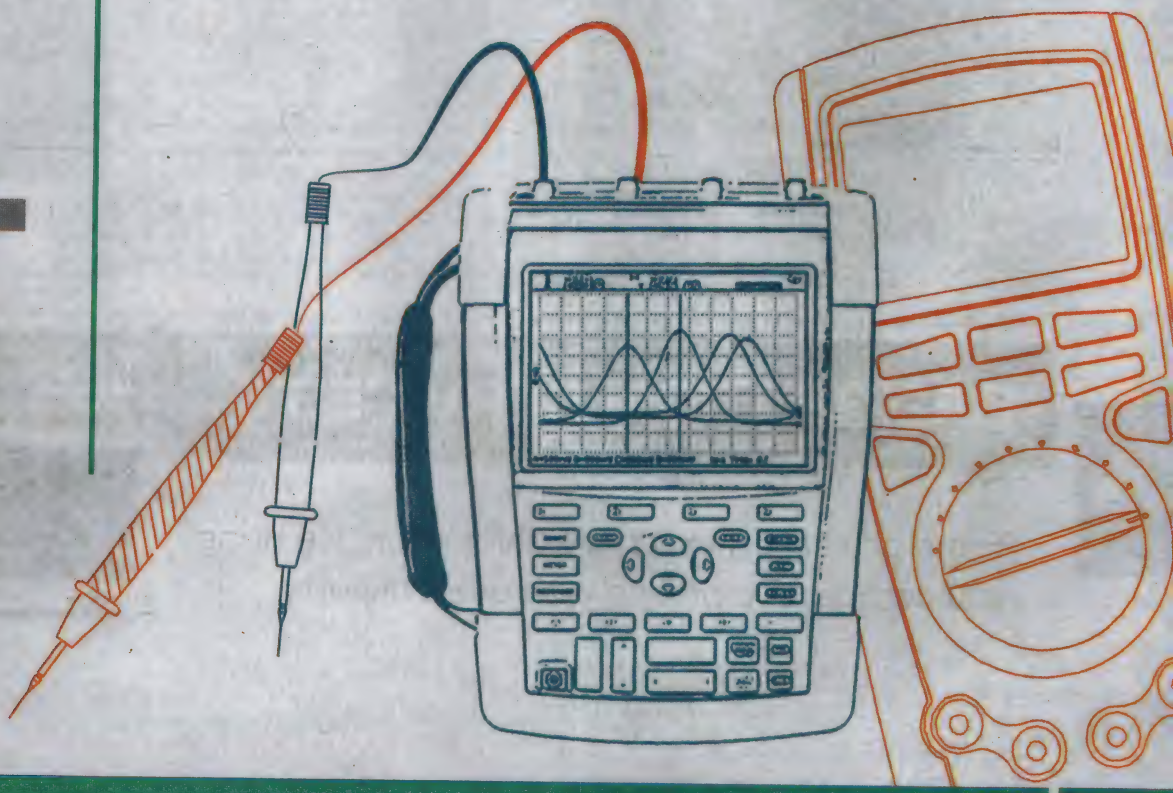

OSCILLOSCOPES & LOGIC ANALYZERS

TEKTRONIX OSCILLOSCOPE PROBES AND ACCESSORIES

Tektronix

Mfg. Part No.	Attenuation	Bandwidth	Input Impedance	Maximum Voltage	Interface	MSO/ DPO2000B	MDO3000/ MSO/DPO4000B/ MDO4000B	MSO/ DPO5000B	TBS-1000B	TBS-1000	TDS-2000C	TDS-3000C	TPS-2000B	THS-3000C	Stock No.	Price Each
PASSIVE PROBES																
P6139B	10X	500 MHz	10MΩ / 8pF	300V CAT II	BNC							x			26T4407	463.00
P2220	1X/10X	200 MHz	10MΩ / 17pF	300V CAT II	BNC				x	x	x		x		11J4782	131.00
TPP0200	10X	200 MHz	10MΩ / 12pF	300V CAT II	BNC	x									67T0948	59.00
TPP0201	10X	200 MHz	10MΩ / 12pF	300V CAT II	BNC				x	x	x		x		25T5583	59.00
TPP0100	10X	100 MHz	10MΩ / 12pF	300V CAT II	BNC	x									76T5049	49.00
TPP0101	10X	100 MHz	10MΩ / 12pF	300V CAT II	BNC				x	x	x		x		23T0304	49.00
TPP0051	10X	50 MHz	10MΩ / 12pF	300V CAT II	BNC				x	x					33X1218	25.00
LOW-CAPACITANCE PASSIVE PROBES																
TPP1000	10X	1 GHz	10MΩ / 3.9pF	300V CAT II	TekVPI		x	x							14T0795	996.00
TPP0500B	10X	500 MHz	10MΩ, <4pF	300V CAT II	TekVPI		x	x							29X7346	595.00
TPP0250	10X	250 MHz	12MΩ / 3.9pF	300V CAT II	TekVPI		x	x							29X7345	283.00
TPP0502	2X	500 MHz	2MΩ / 12.7pF	300V CAT II	TekVPI		x	x							34T4630	639.00
ACTIVE PROBES																
TAP1500	10X	1.5 GHz	1MΩ / ≤1pF	±8V	TekVPI	x*	x	x							69K6771	2260.00
TAP2500	10X	2.5 GHz	40kΩ / ≤0.8pF	±4V	TekVPI			x							79K2022	3990.00
P6205	10X	750 MHz	1MΩ / ≤2pF	±10V	TekProbe				x†	x†	x†	x			83F2221	1400.00
P6243	10X	1 GHz	1MΩ / ≤1pF	±8V	TekProbe				x†	x†	x†	x			11B2439	1130.00
P6245	10X	1.5 GHz	1MΩ / ≤1pF	±8V	TekProbe				x†	x†	x†	x			83F2222	2190.00
DIFFERENTIAL PROBES																
TDP0500	5X/50X	500 MHz	1MΩ / <1pF	±42V (DC + pk AC)	TekVPI	x*	x	x							23M9705	3500.00
TDP1000	5X/50X	1 GHz	1MΩ / <1pF	±42V (DC + pk AC)	TekVPI		x	x							23M2862	3950.00
TDP1500	1X/10X	1.5 GHz	200 kΩ / ≤1pF	±8.5V	TekVPI			x							88M0416	4000.00
P6246	1X/10X	400 MHz	200 kΩ / ≤1pF	±8.5V	TekProbe				x†	x†	x†	x			50B7808	3620.00
P6251	5X/50X	1 GHz	1MΩ / <1pF	±42 V (DC + pk AC)	TekProbe				x†	x†	x†	x			02P6185	5220.00
CURRENT PROBES																
TCP0030A	120MHz, 30ADC/30ARMS/50A Peak, 10mA Min. AC/DC				TekVPI	x*	x	x							72W2795	3690.00
TCP0020	50MHz, 20ADC/20ARMS/100A Peak, 10mA Min. AC/DC				TekVPI	x*	x	x							27W5596	2590.00
TCP0150	20MHz, 150ADC/150ARMS/500A Peak, 5mA Min. AC/DC				TekVPI	x*	x	x							53M2971	4360.00
TCP312A	100MHz, 30ADC/21.2ARMS/50A Peak, 1mA Min. AC/DC				TekProbe							x‡			72W0955	1830.00
TCP305A	50MHz, 50ADC/35.4ARMS/50A Peak, 5mA Min. AC/DC				TekProbe							x‡			72W2796	1580.00
TCP303	15MHz, 150ADC/150ARMS/500A Peak, 5mA Min. AC/DC				TekProbe							x‡			29H2811	2970.00
TCP202A	50MHz, 15ADC/10.6ARMS/50A Peak, 10mA Min. AC/DC				TekProbe							x			24W8886	2390.00
TCP2020	50MHz, 20ADC/20ARMS/100A Peak, 10mA Min. AC/DC				BNC										44W0172	2430.00
P6021A	60MHz, 10.6ARMS/250A Peak, 10mA Min. AC				BNC					x	x		x	x	72W2794	1640.00
P6022	120MHz, 4ARMS/100A Peak, 1 mA Min. AC				BNC					x	x		x	x	83F2212	1790.00
A621	5Hz-50kHz, 1kARMS/2kA Peak, 10mA Min. AC				BNC					x	x		x	x	01F2438	672.00
A622	100kHz, 100ADC/71ARMS/100A Peak, 10mA Min. AC/DC				BNC					x	x		x	x	01F2474	677.00
HIGH-VOLTAGE DIFFERENTIAL PROBES																
TMDP0200	25X/250X	200 MHz	5MΩ, <2pF	±750V	TekVPI	x*	x	x							72T3246	1830.00
THDP0200	50X/500X	200 MHz	10MΩ, <2pF	±1500V	TekVPI	x*	x	x							72T3245	1830.00
THDP0100	100X/1000X	100 MHz	40MΩ, <2.5pF	±6000V	TekVPI	x*	x	x							72T0877	3110.00
P5202A	20X/200X	100 MHz	5MΩ, <2pF	±640V	TekProbe							x			34T4735	1450.00
P5205A	50X/500X	100 MHz	10MΩ, <2pF	±1300V	TekProbe							x			34T4736	1450.00
P5210A	100X/1000X	50 MHz	40MΩ, <2.5pF	±5600V	TekProbe							x			34T4737	2920.00
P5200A	50X/500X	50 MHz	10MΩ, <2pF	±1300V	BNC				x	x	x		x	x	34T4734	993.00
HIGH-VOLTAGE SINGLE-ENDED PROBES																
TPP0850	50X	800 MHz	40MΩ / 1.5pF	2.5kV Peak	TekVPI		x	x							34T4631	805.00
P5150	50X	500 MHz	40MΩ / 3.8pF	2.5kV Peak	BNC								x	x	78T1292	515.00
P5100A	100X	500 MHz	40MΩ / 1.5pF	2.5kV Peak	BNC		x	x	x	x	x	x			34T4628	488.00
P5122	100X	200 MHz	100MΩ / 4pF	1000V RMS CAT II	BNC								x	x	76R0634	287.00
P6015A	1000X	75 MHz	100MΩ / 3pF	20kV RMS	BNC				x	x	x				85F019	2000.00

* Requires TekVPI external power supply 119-7465-xx for MSO/DPO2000B Series. † Requires 1103 TekProbe external power supply for TBS1000, TDS2000, TPS2000 Series. ‡ Requires TCPA0300 Probe Amplifier
(72453)

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(207668)

TBS1000 SERIES DIGITAL STORAGE OSCILLOSCOPES

Tektronix

Key Performance Specifications
- 150 MHz, 100 MHz, 60 MHz and 40 MHz bandwidth models
- 4 and 2-channel models
- Up to 1 GS/s sample rate on all channels
- 2.5k point record length on all channels
- Advanced triggers including pulse width trigger and line-selectable video trigger

Ease-of-Use Features
- 16 automated measurements, and FFT analysis for simplified waveform analysis
- Built-in waveform limit testing
- Automated, extended data logging feature
- Autoset and signal auto-ranging
- Built-in context-sensitive help
- Probe check wizard
- Multiple-language user interface
- 5.7 in. (144 mm) Active TFT Color Display
- Small footprint and lightweight - Only 4.9 in. (124 mm) deep and 4.4 lb. (2 kg)

Connectivity
- USB 2.0 host port on the front panel for quick and easy data storage
- USB 2.0 device port on rear panel for easy connection to a PC or direct printing to a PictBridge®-compatible printer
- Includes Tektronix OpenChoice® software for connecting your bench

The **TBS1000** digital storage oscilloscope series provides you with affordable performance in a compact design. Packed with standard features – including USB connectivity, 16 automated measurements, limit testing, data logging, and context-sensitive help – the **TBS1000** series oscilloscopes help you get more done, in less time.

Mfg. Part No.	Bandwidth (MHz)	Sample Rate	Channels	Stock No.	Price Each
TBS1042	40	500MSPS	2 Analogue	**46W2928**	680.00
TBS1064	60	1GSPS	4 Analogue	**99W1817**	990.00
TBS1104	100	1GSPS	4 Analogue	**99W1818**	1490.00
TBS1152	150	1GSPS	2 Analogue	**46W2931**	1520.00
TBS1154	150	1GSPS	4 Analogue	**99W1819**	1790.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
TPP0101	100 MHz, 10X Passive Voltage Probe	**23T0304**	49.00
TPP0201	200 MHz, 10X Passive Voltage Probe	**25T5583**	59.00
TPP0101-PK10	100 MHz, 10X Passive Voltage Probe (Pkg. of 10)	**32T5143**	441.00
TPP0201-PK10	200 MHz, 10X Passive Voltage Probe (Pkg. of 10)	**32T5145**	531.00

(208463)

TBS1000B SERIES DIGITAL STORAGE OSCILLOSCOPES

NEW

Tektronix

Key Performance Specifications
- 200MHz, 150 MHz, 100 MHz, 70 MHz and 50 MHz bandwidth models
- 2-channel models
- Up to 2 GS/s sample rate on all channels
- 2.5k point record length on all channels
- Advanced triggers including pulse and line-selectable video triggers

Key Features
- 7 inch WVGA (800X480) Active TFT Color Display
- 34 automated measurements
- Dual window FFT, simultaneously monitors both the time and frequency domains
- Built-in waveform limit and trend plot testing
- Dual channel frequency counter
- Zoom Function
- Automated, extended data logging feature
- Autoset and auto-ranging functions
- Built-in context-sensitive help
- Multiple-language user interface
- Small footprint and lightweight - Only 4.9 in. (124 mm) deep and 4.4 lb. (2 kg)

Connectivity
- USB 2.0 host port on the front panel for quick and easy data storage
- USB 2.0 device port on rear panel for easy connection to a PC

The **TBS1000B** Digital Storage Oscilloscope Series provides you with affordable performance in a compact design. Packed with standard features - including USB connectivity, 34 automated measurements, limit testing, data logging, frequency counter, trend plot and a context-sensitive help menu - the **TBS1000B Series** oscilloscopes helps you get more done, in less time.

Mfg. Part No.	Bandwidth (MHz)	Sample Rate	Channels	Stock No.	Price Each
TBS1052B	50	1GSPS	2 Analogue	**33X1207**	550.00
TBS1052B-EDU	50	1GSPS	2 Analogue	**33X1208**	520.00
TBS1072B	70	1GSPS	2 Analogue	**33X1209**	890.00
TBS1072B-EDU	70	1GSPS	2 Analogue	**33X1210**	790.00
TBS1102B	100	2GSPS	2 Analogue	**33X1211**	1190.00
TBS1102B-EDU	100	2GSPS	2 Analogue	**33X1212**	1090.00
TBS1152B	150	2GSPS	2 Analogue	**33X1213**	1490.00
TBS1152B-EDU	150	2GSPS	2 Analogue	**33X1214**	1390.00
TBS1202B	200	2GSPS	2 Analogue	**33X1215**	1790.00
TBS1202B-EDU	200	2GSPS	2 Analogue	**33X1216**	1690.00

(211973)

TPS2000B SERIES DIGITAL STORAGE OSCILLOSCOPES

Tektronix

- Autoset
- FFT Standard on All Models
- Simplified Setup
- Built-in I/O Interface
- 11 Automatic Measurements

TPS2000B series oscilloscopes from Tektronix are versatile portable instruments ideal for taking differential measurements up to 30V rms floating. When combined with OpenChoice® PC connectivity software, your measurement results can be captured, transferred, documented, and analyzed. **TPS2000B** scopes have been designed with your safety in mind. They employ innovative isolated channel technology, providing either 2- or 4-isolated channels (depending on the model) allowing you to safely, accurately and quickly measure three-phase power. **TPS2000B** scopes have familiar dedicated knobs and analog style controls, plus simplified functions and setup including auto set, auto range, automatic measurements, probe check wizard and context-sensitive help. These scopes can be used effectively in both bright daylight and dimly lit areas by adjusting the brightness and contrast controls and the backlit menu buttons. **TPS2000B series** scopes include integrated compact flash mass storage and accept any type 1 compact flash card as large as 1 GB. FFT and I/O printer port interface is standard on all models. *Order additional accessories and test probes separately on page 2166.*

Use **TPS2000B series** scopes on your bench, in your lab, or in the field with up to 8-hours of continuous battery operation. Hot-swappable batteries allow measurements to continue even while batteries are being replaced. Digital real-time sampling acquisition technology makes it possible to capture high-frequency information, such as glitches and edge anomalies that eludes other oscilloscopes in its class.

SPECIFICATIONS	TPS2012B	TPS2014B	TPS2024B
Channels	2-Isolated	4-Isolated	4-Isolated
Bandwidth (MHz)	100	100	200
Sample Rate (GS/s) Per Channel	1.0	1.0	2.0
Record Length	2.5 K Points on All Models		
Vertical Resolution	8-Bit (Normal or With Averaging)		
Vertical Sensitivity	2 mV to 5V/div on All Models with Calibrated Fine Adjustment		
Vertical Accuracy	±3% on All Models		
Vertical Zoom	Vertically Expand or Compress a Live or Stopped Waveform		
Isolated External Trigger Input	Standard on All Models		
Float Voltage (When use with P2220 Probes)	30V rms Floating		
Float Voltage (When use with P5122 Probes)	1000Vrms CAT II or 600Vrms CAT III Floating		
Position Range	2 mV to 200 mV/div ±2V; >200 mV to 5 V/div ±50V		
Bandwidth Limit	20 MHz for All Models		
Linear Dynamic Range	±5 div		
Time Base Range	5 ns to 50 s/div	5 ns to 50 s/div	2.5 ns to 50 s/div
Time Base Accuracy	50 ppm		
Input Impedance	1MΩ ±2% in Parallel with 20 pF		
Input Coupling	AC, DC, GND on All Models		
Horizontal Zoom	Horizontally Expand or Compress a Live or Stopped Waveform		
FFT	Standard on All Models		
RS-232, Centronics - Parallel Ports	Standard on All Models		
PC Connectivity	Standard on All Models		
Integrated CompactFlash Mass Storage	Standard on All Models		
NI LabVIEW SignalExpressTM Tektronix Edition, Limited Edition Software	Standard on All Models		
TPS2PWR1 Power Software	Instantaneous Power Waveform Analyis, Waveform Analysis, Harmonics Analysis, Switching Loss, Phase Angles, dv/dt and di/dt Cursors		

Mfg. Part No.	Bandwidth (MHz)	Sample Rate (GS/s)	Channels	Stock No.	Price Each
TPS2012B	100	1	2 Digital	**32T5051**	3100.00
TPS2014B	100	1	4 Digital	**32T5052**	4090.00
TPS2024B	200	2	4 Analogue	**32T5053**	4610.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
AC2100	Softside Transit Case	**11J4780**	136.00
P2220	10X - 1X Switchable Passive Test Probe, 200MHz When 10X is Selected	**11J4782**	131.00
TPS2PBND2	Power Bundle: P5122 Probes, TPS2PWR1 Power Measurement and Analysis Software for **TPS2000B Series** Oscilloscopes	**82R3978**	1600.00
TPS2PWR1	TPS2PWR1 Power Measurement Software	**11J4785**	693.00
TPSBAT	Additional Battery	**11J4786**	304.00
TPSCHG	Battery Charger	**11J4787**	530.00

(195390)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

OSCILLOSCOPES & LOGIC ANALYZERS

TDS2000C SERIES DIGITAL STORAGE OSCILLOSCOPES

Tektronix

Key Performance Specifications:
- 200 MHz, 100 MHz, 70 MHz, 50 MHz bandwidth models
- 2- and 4-channels
- Up to 2 GS/s sample rate on all channels
- 2.5k point record length on all channels
- Advanced triggers including Pulse Width Trigger and Line-selectable Video Trigger

Ease of Use Features:
- 16 automated measurements and FFT analysis
- Built-in waveform limit testing
- Automated, extended data logging feature
- Autoset and signal auto-ranging
- Built-in context-sensitive help
- Probe check wizard
- Lifetime warranty
- 5.7 ″ (144 mm) active TFT color display
- 4.9 ″ (124 mm) deep and 4.4 lb. (2 kg)

Connectivity:
- USB 2.0 host port on front panel for quick and easy data storage, printing and connecting a USB keyboard
- USB 2.0 device port on rear panel for connection to a PC or direct printing to a PictBridge®-compatible crinter
- Includes National Instrument's LabVIEW SignalExpress™ TE Limited Edition and Tektronix OpenChoice® software for connecting your bench

Mfg. Part No.	Bandwidth (MHz)	No. of Channels	Sample Rate (GS/s)	Stock No.	Price Each
TDS2001C	50	2	0.5	86R8476	963.00
TDS2002C	70	2	1	86R8477	1150.00
TDS2004C	70	4	1	86R8478	1790.00
TDS2012C	100	2	2	86R8479	1400.00
TDS2014C	100	4	2	86R8480	2090.00
TDS2022C	200	2	2	86R8481	2000.00
TDS2024C	200	4	2	86R8482	2420.00

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TDS3000C SERIES DIGITAL PHOSPHOR OSCILLOSCOPES (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
Mfg. part no. TDS3LIM Limit Testing Module adds custom waveform limit testing capabilities			
TDS3LIM	Limit Testing Module	29C7992	823.00
Mfg. part no. TDS3TMT Telecom Mask Testing Module adds pass/fail compliance of ITU-T G.703 and ANSI T1.102 standards, custom mask testing and more.			
TDS3TMT	Telecom Mask Testing Module	99B1853	1540.00
Mfg. part no. TDS3VID Extended Video Analysis Module adds video quickmenu, autoset, hold, line count trigger, video picture mode, vectorscope* mode, HDTV format trigger graticules and more.			
TDS3VID	Extended Video Analysis Module	48F1568	823.00

*Vectorscope does not support composite video

ACCESSORIES

Mfg. part no. TNGDTS01 Operator Training Kit provides extensive instructions and step-by-step lab exercises to learn about the operation of **TDS3000C Series** oscilloscopes. Kit includes self-paced CD-ROM based manual and signal source board.

Mfg. Part No.	Description	Stock No.	Price Each
SIGEXPTE	NI LabVIEW SignalExpress™ Software	84K8123	779.00
TDS3GV	GPIB, VGA, RS-232 Interface Communication Module	29C7991	823.00
TDS3BATC	Rechargeable Lithium Ion Battery Pack	61M2323	685.00
AC3000	Softside Transit Case	48F1571	259.00
HCTEK4321	Hardside Transit Case — Requires **Mfg. Part No. AC3000** Softside Case; *Order Separately Above*	69K6768	829.00
RMD3000	Rackmount Kit	84M7357	525.00
P6243	1 GHz 10X Active Probe	11B2439	1130.00
P6246	400 MHz 8.5 V Differential Probe	50B7808	3620.00
P5205A	1.3 kV, 100 MHz High-Voltage Differential Probe	34T4736	1450.00
P5210A	5.6 kV, 50 MHz High-Voltage Differential Probe	34T4737	2920.00

(109370)

TDS3000C SERIES DIGITAL PHOSPHOR OSCILLOSCOPES

CE Tektronix

Features and Benefits

TDS3054C

Key Performance Specifications:
- 100, 300, and 500MHz bandwidth models
- 2 or 4 analog channels
- Sample rates up to 5GS/s on all channels
- 10 kilosample record length on all channels
- 3600wfm/s continuous waveform capture rate
- Suite of advanced triggers
- CE compliant

Ease of Use Features:
- Optional battery operation provides up to three hours without line power
- USB 2.0 host port on front panel for quick and easy data storage
- 29 automated measurements, and FFT analysis for simplified waveform analysis
- Integrated 10/100 Ethernet port for network connection and video out port to export the oscilloscope display to a monitor or projector
- WaveAlert® automatic waveform anomaly detection
- TekProbe® interface supports active, differential and current probes for automatic scaling and units
- Small footprint and lightweight

Additional Application Support:
- Advanced Analysis
- Limit Testing
- Telecommunications Mask Testing
- Extended Video
- 601 Serial Digital Video

SPECIFICATIONS AT A GLANCE

Mfg. Part No.	TDS3012C	TDS3014C	TDS3032C	TDS3034C	TDS3052C	TDS3054C
Input Channels	2 Analog	4 Analog	2 Analog	4 Analog	2 Analog	4 Analog
Calculated Rise Time 5mV/div (typical)	3.5ns	3.5ns	1.2ns	1.2ns	0.7ns	0.7ns
Maximum Record Length	10k points	10k points	10k points	10k points	10k points	10k points
Analog Bandwidth (-3dB)	100MHz	100MHz	300MHz	300MHz	500MHz	500MHz
Maximum Sample Rate (All Channels)	1.25GS/s	1.25GS/s	2.5GS/s	2.5GS/s	5GS/s	5GS/s

TDS3000C Series portable digital phosphor oscilloscopes make dealing with complex signals simple. Displays, stores and analyzes in real-time three dimensions of signal information: amplitude, time and distribution of amplitude over time. An intensity graded color display to provide frequency information of signal amplitudes and widths, to help locate and characterize elusive waveform anomalies. Fast update rate makes it easier to capture and display infrequent waveforms or waveform variations. Optional communication and application modules, *ordered separately below*, enable the instrument to be configured for specific applications or upgraded without returning it to the manufacturer. The TekProbe® interface provides power to a range of application specific accessories. All models include probes, power cord, accessory tray, protective front cover, NIST - traceable certificate of calibration and three-year manufacturer's warranty. *Order additional accessories and test probes separately online or call.*

Mfg. Part No.	Description	Stock No.	Price Each
TDS3012C	100MHz, 2-Channel Digital Phosphor Oscilloscope	84M7358	5480.00
TDS3014C	100MHz, 4-Channel Digital Phosphor Oscilloscope	84M7359	6690.00
TDS3032C	300MHz, 2-Channel Digital Phosphor Oscilloscope	84M7360	8070.00
TDS3034C	300MHz, 4-Channel Digital Phosphor Oscilloscope	84M7361	9610.00
TDS3052C	500MHz, 2-Channel Digital Phosphor Oscilloscope	84M7362	11600.00
TDS3054C	500MHz, 4-Channel Digital Phosphor Oscilloscope	84M7363	13800.00

APPLICATION MODULES

Mfg. part no. TDS3AAM Advanced Analysis Module adds extended math capability, arbitrary math expressions, measurement statistics and additional automated measurements.

Mfg. Part No.	Description	Stock No.	Price Each
TDS3AAM	Advanced Analysis Module	29C7990	823.00

➤ CONTINUED ➤

DPO2000B / MSO2000B SERIES MIXED SIGNAL OSCILLOSCOPES

Tektronix

MSO2024B

Key Performance Specifications
- 200, 100, 70 MHz Bandwidth Models
- 2 and 4 Analog Channel Models
- 16 Digital Channels (MSO Series)
- 1 GS/s Sample Rate on All Channels
- 1 Megapoint Record Length on All Channels
- 5,000 wfm/s Maximum Waveform Capture Rate
- Suite of Advanced Triggers

Ease of Use Features
- Wave Inspector® Controls Provide Easy Navigation and Automated
- Search of Waveform Data
- FilterVu™ Variable Low-pass Filter Allows for Removal of Unwanted Signal Noise while still Capturing High-frequency Events
- 29 Automated Measurements, and FFT Analysis for Simplified Waveform Analysis
- TekVPI® Probe Interface Supports Active, Differential, and Current Probes for Automatic Scaling and Units
- 7 in. (180 mm) Widescreen TFT-LCD Color Display
- Small Footprint and Lightweight – Only 5.3 in. (134 mm) deep and 7 lb. 14 oz. (3.6 kg)
- Five-year warranty

Connectivity
- USB 2.0 Host Port on the Front Panel for Quick and Easy Data Storage
- USB 2.0 Device Port on Rear Panel for Easy Connection to a PC or Direct Printing to a PictBridge®-compatible Printer
- Optional 10/100 Ethernet Port for Network Connection and Video Out Port to Export the Oscilloscope Display to a Monitor or Projector

Optional Serial Triggering and Analysis
- Automated Serial Triggering, Decode, and Search Options for I2C, SPI, CAN, LIN, and RS-232/422/485/UART

Mixed Signal Design and Analysis (MSO Series)
- Automated Triggering, Decode, and Search on Parallel Buses
- Multichannel Setup and Hold Triggering

Offering up to 200 MHz bandwidth and 1 GS/s sample rate, the **MSO/DPO2000B** Mixed Signal Oscilloscope Series delivers advanced debug features at an entry-level price. With up to 20 channels for analyzing analog and digital signals, you can quickly find and diagnose problems in complex designs. To capture long windows of signal activity while maintaining fine timing resolution, the **MSO/DPO2000B** offers a deep record length of 1 Mpoints standard on all channels. With Wave Inspector® controls for rapid waveform navigation and automated serial and parallel bus analysis, the **MSO/DPO2000B** Oscilloscope Series from Tektronix provides the feature-rich tools you need to simplify and speed debug of your complex design.

Mfg. Part No.	Bandwidth (MHz)	Sampling Rate (GS/s)	Channels	Stock No.	Price Each
DPO2002B	70	1	2 Analogue	28W4944	1290.00
DPO2004B	70	1	4 Analogue	28W4945	2010.00
DPO2012B	100	1	2 Analogue	28W4946	1650.00
DPO2014B	100	1	4 Analogue	28W4947	2390.00
DPO2022B	200	1	2 Analogue	28W4948	2330.00
DPO2024B	200	1	4 Analogue	28W4949	2870.00
MSO2002B	70	1	2 Analogue, 16 Digital	28W4950	2230.00
MSO2004B	70	1	4 Analogue, 16 Digital	28W4951	2920.00
MSO2012B	100	1	2 Analogue, 16 Digital	28W4952	2560.00
MSO2014B	100	1	4 Analogue, 16 Digital	28W4953	3300.00

➤ CONTINUED ➤

DPO2000B / MSO2000B SERIES MIXED SIGNAL OSCILLOSCOPES (CONT.)

Mfg. Part No.	Bandwidth (MHz)	Sampling Rate (GS/s)	Channels	Stock No.	Price Each
MSO2022B	200	1	2 Analogue, 16 Digital	28W4954	3260.00
MSO2024B	200	1	4 Analogue, 16 Digital	28W4955	3800.00

DPO2000B APPLICATION MODULES

Mfg. part no. DPO2AUTO Automotive Serial Triggering and Analysis Module enables triggering on packet level information on CAN and LIN buses, as well as analytical tools, such as digital views of the signal, bus views, packet decoding, search tools, and packet decode tables with time stamp information.

Mfg. Part No.	Description	Stock No.	Price Each
DPO2AUTO	Automotive Serial Bus	09P2326	500.00

Mfg. part no. DPO2EMBD Embedded Serial Triggering and Analysis Module enables triggering on packet level information on I2C and SPI buses, as well as analytical tools, such as digital views of the signal, bus views, packet decoding, search tools, and packet decode tables with time stamp information.

DPO2EMBD	Embedded Bus Serial	09P2329	500.00

Mfg. part no. DPO2COMP Computer Serial Triggering and Analysis Module Enables triggering on packet level information on RS-232/422/485/UART buses, as well as analytical tools, such as digital views of the signal, bus views, packet decoding, search tools, and packet decode tables with time stamp information.

DPO2COMP	Computer Serial Bus	09P2327	500.00
DPO2CONN	Ethernet and Video Out Connectivity Module	09P2328	540.00

ACCESSORIES

SIGEXPTE	NI LabVIEW SignalExpress™ Software	84K8123	779.00
TPA-BNC	TekVPI-to-TekProbe BNC Adapter	69K6774	535.00
TEK-USB-488	GPIB-to-USB Adapter	69K6773	830.00
P2221	Passive Probe	09P2336	131.00
ACD2000	Softside Transit Case with Front Protective Cover	09P2325	259.00
HCTEK4321	Hardside Transit Case — Requires **Mfg. Part No. ACD2000** Softside Case; *order separately above*	69K6768	829.00
RMD2000	Rackmount Kit	09P2337	540.00
EDUKIT	Educator's Resource Kit	25R1273	373.00

(208179)

MDO3000 SERIES MIXED DOMAIN OSCILLOSCOPES

NEW

Tektronix

Key performance specifications

- 2 and 4 analog channel models
- 1 GHz, 500 MHz, 350 MHz, 200 MHz, 100 MHz bandwidth models
- Bandwidth is upgradable (up to 1 GHz)
- Up to 5 GS/s sample rate
- 10 M record length on all channels
- >280,000 wfm/s maximum waveform capture rate
- Standard passive voltage probes with 3.9 pF capacitive loading and 1 GHz, 500 MHz, or 250 MHz analog bandwidth

Key features

- FastAcq™ high-speed waveform capture rate finds elusive signal anomalies quickly
- Wave Inspector® Controls provide easy navigation and automated search of waveform data
- 33 automated measurements and waveform histograms for simplified waveform analysis
- TekVPI® probe interface directly supports active, differential, and current probes for automatic scaling and units
- 9 in. (229 mm) WVGA widescreen color display
- Small footprint and lightweight – Only 5.8 in. (147 mm) deep and 9.2 lb. (4.2 kg)

Today's integrated designs need an oscilloscope that is just as integrated - such as the **MDO3000 Mixed Domain Oscilloscope (MDO) Series**. It is the ultimate 6-in-1 integrated oscilloscope that includes an integrated spectrum analyzer, arbitrary function generator, logic analyzer, protocol analyzer, and digital voltmeter/counter. The **MDO3000** is completely customizable and fully upgradeable. Add the instruments and performance you need now - or later.

Mfr. Part No.	Bandwidth	Scope Channels	Rise Time	Sample Rate	Stock No.	Price Each
MDO3012	100MHz	2 Analogue	4ns	2.5GSPS	29X1614	3350.00
MDO3014	100MHz	4 Analogue	4ns	2.5GSPS	29X1615	3990.00
MDO3022	200MHz	2 Analogue	2ns	2.5GSPS	29X1616	3990.00
MDO3024	200MHz	4 Analogue	2ns	2.5GSPS	29X1617	4450.00
MDO3032	350MHz	2 Analogue	1.14ns	2.5GSPS	29X1618	6900.00
MDO3034	350MHz	4 Analogue	1.14ns	2.5GSPS	29X1619	8300.00
MDO3052	500MHz	2 Analogue	800ps	2.5GSPS	29X1620	8750.00
MDO3054	500MHz	4 Analogue	800ps	2.5GSPS	29X1621	11200.00
MDO3102	1GHz	2 Analogue	400ps	5GSPS	29X1622	10500.00
MDO3104	1GHz	4 Analogue	400ps	5GSPS	29X1623	13900.00

INSTRUMENT OPTIONS

Mfr. Part No.	Description	Stock No.	Price Each
MDO3AFG	Arbitrary function generator with 13 predefined waveforms and arbitrary waveform generation	29X1582	750.00
MDO3MSO	16 digital channels; includes P6316 digital probe and accessories	29X1609	1500.00
MDO3SA	Increase spectrum analyzer input frequency range to 9 kHz – 3 GHz and capture bandwidth to 3 GHz	29X1611	2500.00
MDO3SEC	Enhanced instrument security to enable password protected control of turning on/off all instrument ports and instrument firmware update functionality	29X1612	400.00

APPLICATION MODULES

MDO3AERO	Aerospace Serial Triggering and Analysis Module	29X1581	1100.00
MDO3AUDIO	Audio Serial Triggering and Analysis Module	29X1583	1100.00
MDO3AUTO	Automotive Serial Triggering and Analysis Module	29X1584	1100.00

➤CONTINUED➤

MDO3000 SERIES MIXED DOMAIN OSCILLOSCOPES (CONT.)

APPLICATION MODULES

Mfr. Part No.	Description	Stock No.	Price Each
MDO3COMP	Computer Serial Triggering and Analysis Module	29X1605	1100.00
MDO3EMBD	Embedded Serial Triggering and Analysis Module	29X1606	1100.00
MDO3FLEX	FlexRay Serial Triggering and Analysis Module	29X1607	1100.00
MDO3LMT	Limit and Mask Testing Application Module	29X1608	750.00
MDO3PWR	Power Analysis Application Module	29X1610	1400.00
MDO3USB	USB Serial Triggering and Analysis Module	29X1613	1100.00

(211622)

MSO3000 SERIES MIXED SIGNAL DIGITAL PHOSPHOR OSCILLOSCOPES

CE Tektronix

MSO3054

Features:

- 100, 300, and 500 MHz bandwidth models
- 2 or 4 analog channels, plus 16 digital channels
- Sample rates up to 2.5 GS/s on all analog channels
- Sample rates up to 8.25 GS/s on all digital channels
- 5 Megasample record length on all channels
- 50,000 wfm/s maximum waveform capture rate
- Suite of advanced triggers
- Wide-screen 9" WVGA intensity-graded, color digital phosphor display
- USB 2.0 host port on front and rear panel; USB 2.0 device port on rear panel
- TekVPI® probe interface supports active, differential and current probes for automatic scaling and units
- Small footprint, only 5.8" (147mm) deep
- Lightweight, only 9 lbs. (4 kg), for easy transport
- CE compliant

Capture:

- Long standard record lengths
- Complete set of triggers, including serial packet content
- Trigger across all signals
- MagniVu™ high-speed acquisition provides 121.2ps fine timing resolution on digital channels

Search:

- Wave Inspector® navigation and search with front-panel controls
- Pan/Zoom, Play/Pause, User marks
- Automated search and mark for analog, digital and serial bus data

Analyze:

- 29 automated measurements — triggering, decode and search on parallel buses
- Advanced waveform math
- Serial bus triggering, decode and search options for I²C, SPI, CAN, LIN, RS-232/422/485/UART, and I²S, LJ, RJ, TDM
- Specialized application support: power analysis, HDTV and video debug options

SPECIFICATIONS AT A GLANCE

Mfg. Part No.	MSO3012	MSO3014	MSO3032	MSO3034	MSO3054
Bandwidth	100MHz	100MHz	300MHz	300MHz	500MHz
Analog Channels	2	4	2	4	4
Digital Channels	16				
Maximum Sample Rate (All Channels)	2.5GS/s Analog, 500MS/s Digital (Main), 8.25GS/s Digital MagniVu				
Calculated Rise Time 5mV/div (typical)	3.5ns	3.5ns	1.17ns	1.17ns	700ps
Maximum Record Length (All Channels)	5M points				
Input Impedance	1MΩ, 75Ω, 50Ω (±1%)				

MSO3000 Series mixed signal digital phosphor oscilloscopes deliver superior performance. All models come complete with one **mfg. part no. P6139B** 500 MHz, 10x passive probe per analog channel, one **mfg. part no. P6316** 16-channel logic probe and accessory kit, protective front cover, OpenChoice® desktop software, National Instruments LabVIEW SignalExpress™ Tektronix edition LE software, calibration certificate documenting traceability to National Metrology Institute(s) and ISO9001 quality system registration, user manual, documentation CD, power cord, accessory pouch, and three-year manufacturer's warranty. *Order application modules, probes and other accessories separately below.*

Mfg. Part No.	Bandwidth (MHz)	Channels	Stock No.	Price Each
MSO3012	100	2 Analogue, 16 Digital	10R0173	4940.00
MSO3014	100	4 Analogue, 16 Digital	10R0174	5670.00
MSO3032	300	2 Analogue, 16 Digital	10R0175	8780.00
MSO3034	300	4 Analogue, 16 Digital	10R0176	10600.00
MSO3054	500	4 Analogue, 16 Digital	10R0179	14100.00

APPLICATION MODULES

Mfg. part no. DPO3AUDIO Audio Serial Triggering and Analysis Module enables triggering on packet-level information on I2S, left justified (LJ), right justified (RJ), TDM, and custom audio buses, as well as analytical tools, such as digital views of the signal, bus views, packet decoding, search tools, and packet decode tables with time stamp information.

Mfg. Part No.	Description	Stock No.	Price Each
DPO3AUDIO	Audio Serial Triggering and Analysis Module	73P4703	1130.00

Mfg. part no. DPO3AUTO Automotive Serial Triggering and Analysis Module enables triggering on packet-level information on CAN and LIN buses, as well as analytical tools, such as digital views of the signal, bus views, packet decoding, search tools and packet decode tables with time stamp information.

Mfg. Part No.	Description	Stock No.	Price Each
DPO3AUTO	Automotive Serial Triggering and Analysis Module	84M7345	1130.00

Mfg. part no. DPO3COMP Computer Serial Triggering and Analysis Module enables triggering on packet-level information on RS-232/422/485/UART buses, as well as analytical tools, such as digital views of the signal, bus views, packet decoding, search tools, and packet decode tables with time stamp information.

Mfg. Part No.	Description	Stock No.	Price Each
DPO3COMP	Computer Serial Triggering and Analysis Module	84M7346	1130.00

Mfg. part no. DPO3EMBD Embedded Serial Triggering and Analysis Module enables triggering on packet-level information on I²C and SPI buses, as well as analytical tools, such as digital views of the signal, bus views, packet decoding, search tools and packet decode tables with time stamp information.

➤CONTINUED➤

MSO3000 SERIES MIXED SIGNAL DIGITAL PHOSPHOR OSCILLOSCOPES (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
DPO3EMBD	Embedded Serial Triggering and Analysis Module	84M7347	1130.00

Mfg. part no. DPO3PWR Power Analysis Application Module enables quick and accurate analysis of power quality, switching loss, harmonics, safe operating area (SOA), modulation, ripple, and slew rate (dI/dt, dV/dt).

Mfg. Part No.	Description	Stock No.	Price Each
DPO3PWR	Power Analysis Module	57P6427	1410.00
DPO3VID	HDTV and Custom (Nonstandard) Video Triggering Module	84M7348	716.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
SIGEXPTE	NI LabVIEW SignalExpress™ Software	84K8123	779.00
TPA-BNC	TekVPI-to-TekProbe BNC Adapter	69K6774	535.00
TEK-USB-488	GPIB-to-USB Adapter	69K6773	830.00
TDP0500	500MHz TekVPI 42V High-Voltage Differential Probe	23M9705	3500.00
TDP1000	1GHz TekVPI 42V High-Voltage Differential Probe	23M2862	3950.00
ACD4000	Softside Transit Case	84M7343	259.00
HCTEK4321	Hardside Transit Case — Requires **Mfg. Part No. ACD4000** Softside Case; *order separately above*	69K6768	829.00
RMD3000	Rackmount Kit	84M7357	525.00

(149346)

MDO4000B SERIES MIXED DOMAIN OSCILLOSCOPES

NEW

Tektronix

Key Performance Specifications
- 4 analog channels (1 GHz, 500 MHz, 350 MHz, and 100 MHz bandwidth models)
- 16 digital channels (MagniVu™ high-speed acquisition provides 60.6 ps fine timing resolution)
- 1 spectrum analyzer channel (9 kHz to 3 GHz or 9 kHz to 6 GHz frequency range models; Ultra-wide capture bandwidth ≥1 GHz)
- Standard passive voltage probes with 3.9 pF capacitive loading and 500 MHz or 1 GHz analog bandwidth

Mixed Domain Analysis
- Time-correlated analog, digital, and RF signal acquisitions in a single instrument
- Wave Inspector® controls provide easy navigation of timecorrelated data from both the time and frequency domains
- Amplitude, frequency, and phase vs. time waveforms derived from spectrum analyzer input
- Selectable spectrum time to discover and analyze how RF spectrum changes over time - even on a stopped acquisition

Spectral Analysis
- Dedicated front-panel controls for commonly performed tasks
- Automated peak markers identify frequency and amplitude of spectrum peaks
- Manual markers enable non-peak measurements
- Trace types Include: Normal, Average, Max Hold, and Min Hold
- Detection types include: +Peak, -Peak, Average, and Sample
- Spectrogram display enables easy observation and insight into slowly changing RF phenomena
- Automated measurements include: Channel Power, Adjacent Channel Power Ratio (ACPR), and Occupied Bandwidth (OBW)
- Trigger on RF power level
- Triggered or Free Run spectral analysis

Ease of Use Features
- Optional serial triggering and analysis - serial protocol trigger, decode, and search for I2C, SPI, USB, Ethernet, CAN, LIN, FlexRay, RS-232/422/485/UART, MIL-STD-1553, and I2S/LJ/RJ/TDM
- 264 mm (10.4 inches) bright XGA color display
- Small footprint and lightweight - Only 147 mm (5.8 inches) deep and 5 kg (11 lb.)

Connectivity
- Two USB 2.0 host ports on the front panel and two on the rear panel for quick and easy data storage, printing, and connecting a USB keyboard
- USB 2.0 device port on the rear panel for easy connection to a PC or direct printing to a PictBridge®-compatible printer
- Integrated 10/100/1000BASE-T Ethernet port for network connection and video out port to export the oscilloscope display to a monitor or projector

Mfg. Part No.	Bandwidth	Sample Rate (GS/s)	Rise Time	Spectrum Analyzer Frequency Range	Stock No.	Price Each
MDO4014B-3	100MHz	2.5	3.5ns	9kHz - 3GHz	06X3496	9500.00
MDO4034B-3	350MHz	2.5	1ns	9kHz - 3GHz	06X3498	14000.00
MDO4054B-3	500MHz	2.5	700ps	9kHz - 3GHz	06X3500	17400.00
MDO4054B-6	500MHz	2.5	700ps	9kHz - 6GHz	06X3502	21100.00
MDO4104B-3	1GHz	5	350ps	9kHz - 3GHz	06X3504	21500.00
MDO4104B-6	1GHz	5	350ps	9kHz - 6GHz	06X3506	25700.00

ACCESSORIES & MODULES

Mfg. Part No.	Description	Stock No.	Price Each
SIGNALVU-PC-SVE CON	Live link to the MDO4000B	06X3509	1990.00
SIGNALVU-PC-SVE SV23	WLAN 802.11a/b/g measurement	06X3510	2990.00
SIGNALVU-PC-SVE SV24	WLAN 802.11n measurement application(requires opt SV23)	06X3511	4990.00
SIGNALVU-PC-SVE SV25	WLAN 802.11n measurement application(requires opt SV24)	06X3512	4990.00

(211452)

MSO/DPO4000B SERIES OSCILLOSCOPES

Tektronix

Key Performance Specifications
- 350MHz, 500MHz, 1GHz bandwidth models
- 4 analogue channels
- 16 digital channels (**MSO4000B Series**)
- Sample rates up to 5GS/s on all channels
- 20 megapoint record length on all channels (5 megapoint for **-L**)
- 50,000wfm/s maximum waveform capture rate
- Standard passive voltage probes with less than 4 pF capacitive loading and 500MHz or 1GHz analog bandwidth
- Suite of advanced triggers

Ease of Use Features
- Wave Inspector® controls provide easy navigation and automated search of waveform data
- 41 automated measurements, waveform histograms and FFT analysis for simplified waveform analysis
- TekVPI® probe interface supports active, differential and current probes for automatic scaling and units
- 10.4" (264mm) bright XGA color display
- 5.8" (147mm) deep and 11lb. (5 kg)

Connectivity
- Two USB 2.0 host port on front panel and two on rear panel for data storage, printing and connecting a USB keyboard
- USB 2.0 device port on rear panel for connection to a PC or direct printing to a PictBridge®-compatible printer
- Integrated 10/100/1000BASE-T Ethernet port for network connection and video out port to export oscilloscope display to a monitor or projector

Mixed Signal Design and Analysis (MSO Series)
- Automated triggering, decode and search on parallel buses
- Per-channel threshold settings
- Multichannel setup and hold triggering
- MagniVu™ high-speed acquisition provides 60.6ps fine timing resolution on digital channels

DIGITAL PHOSPHOR

Mfg. Part No.	Bandwidth	Rise Time	Sample Rate (GS/s)	Scope Channels	Stock No.	Price Each
DPO4014B	100MHz	3.5ns	2.5	4 Analogue	26W7466	7150.00
DPO4034B	350MHz	1ns	2.5	4 Analogue	99R3241	11000.00
DPO4054B	500MHz	700ps	2.5	4 Analogue	99R3242	14400.00
DPO4102B	1GHz	350ps	5	2 Analogue	82T3564	13000.00
DPO4102B-L	1GHz	350ps	2.5	2 Analogue	82T3565	10200.00
DPO4104B	1GHz	350ps	5	4 Analogue	99R3243	17600.00
DPO4104B-L	1GHz	350ps	5	4 Analogue	82T3566	13600.00

MIXED SIGNAL

MSO4014B	100MHz	3.5ns	2.5	4 Analogue, 16 Digital	26W7469	9500.00
MSO4054B	500MHz	700ps	2.5	4 Analogue, 16 Digital	99R3249	17400.00
MSO4102B	1GHz	350ps	5	2 Analogue, 16 Digital	82T3567	17000.00
MSO4102B-L	1GHz	350ps	2.5	2 Analogue, 16 Digital	82T3568	13400.00
MSO4104B	1GHz	350ps	5	4 Analogue, 16 Digital	99R3250	21900.00
MSO4104B-L	1GHz	350ps	2.5	4 Analogue, 16 Digital	82T3569	16700.00

APPLICATION MODULES

Mfg. Part No.	Description	Stock No.	Price Each
DPO4AERO	Aerospace Serial Triggering & Analysis Module	99R3237	1610.00
DPO4AUDIO	Audio Serial Triggering & Analysis Module	73P4705	1450.00
DPO4AUTOMAX	Extended Automotive Serial Triggering & Analysis Module	84M7356	5040.00
DPO4COMP	Computer Serial Triggering & Analysis Upgrade	31M1249	1450.00
DPO4EMBD	Embedded Serial Triggering & Analysis Module	69K6762	1450.00
DPO4ENET	Ethernet Serial Triggering & Analysis Module	99R3239	1610.00
DPO4LMT	Limit & Mask Test Application Module	99R3240	888.00
DPO4PWR	Power Analysis Application Module	73P4706	1800.00
DPO4USB	USB 2.0 Triggering and Analysis	51R4501	1610.00
DPO4VID	HDTV Video Triggering & Analysis	51M6792	888.00

ACCESSORIES

SIGEXPTE	NI LabVIEW SignalExpress™ Software	84K8123	779.00
TPA-BNC	TekVPI-to-TekProbe BNC Adapter	69K6774	535.00
TEK-USB-488	GPIB-to-USB Adapter	69K6773	830.00
TAP1500	1.5GHz TekVPI Active FTI Probe	69K6771	2260.00
TDP0500	500MHz TekVPI 42V High-Voltage Differential Probe	23M9705	3500.00
TDP1000	1GHz TekVPI 42V High-Voltage Differential Probe	23M2862	3950.00
P6247	1GHz Differential Probe	90B2295	5120.00
P6246	400 MHz 8.5 V Differential Probe	50B7808	3620.00
P5205A	1.3 kV, 100 MHz High-Voltage Differential Probe	34T4736	1450.00
P5210A	5.6 kV, 50 MHz High-Voltage Differential Probe	34T4737	2920.00
P5100A	2.5kV, 500MHz, 100X High-Voltage Passive Probe	34T4628	488.00
ADA400A	100X, 10X, 1X, 0.1X High-Gain Differential Amplifier	83F2202	1980.00
TCPA300	Wide-Range Current Amplifier	20H0193	2430.00
TCPA400	High-Range Current Amplifier	54H4607	2420.00
ACD4000B	Softside Transit Case	14T0790	272.00
ACD4000	Softside Transit Case	84M7343	259.00
HCTEK4321	Hardside Transit Case	69K6768	829.00
RM4000	Rackmount Kit	69K6770	900.00

(190792)

MSO/DPO5000B SERIES OSCILLOSCOPES

NEW

Tektronix

- Wave Inspector® navigation with Advanced Search and Mark
- Parallel and serial bus triggering and decode
- 16 digital channels (**MSO models**)
- Long record length (standard record length of 25M/channel, optional up to 125M points/channel)
- Standard high-impedance, low-capacitance passive voltage probing with up to 1 GHz bandwidth
- FastAcq maximum waveform capture rate of >250,000 waveforms per second
- FastFrame segmented memory acquisition
- Optional analysis for jitter and eye diagram measurements, serial compliance test, power measurements, limit test, mask test, and DDR memory bus analysis
- LXI Class C compliance
- Windows 7 Ultimate 64-bit operating system
- Standard removable solid state disk drive (≥480 GB)
- Field upgradeable MOS capability

Mfg. Part No.	Bandwidth	Channels	Sample Rate (GS/s)	Stock No.	Price Each
DPO5000B SERIES					
DPO5034B	350MHz	4 Analogue	5	17X0192	12300.00
DPO5054B	500MHz	4 Analogue	5	17X0194	15300.00
DPO5104B	1GHz	4 Analogue	10	17X0196	18800.00
DPO5204B	2GHz	4 Analogue	10	17X0198	21500.00
MSO5000B SERIES					
MSO5034B	350MHz	4 Analogue, 16 Digital	5	17X0220	15600.00
MSO5054B	500MHz	4 Analogue, 16 Digital	5	17X0222	18600.00
MSO5104B	1GHz	4 Analogue, 16 Digital	10	17X0224	22100.00
MSO5204B	2GHz	4 Analogue, 16 Digital	10	17X0226	24800.00

(211453)

DPO7000 SERIES DIGITAL PHOSPHOR OSCILLOSCOPES

NEW

Tektronix

Key performance specifications

- 3.5 GHz, 2.5 GHz, 1 GHz, and 500 MHz bandwidth models
- Up to 40 GS/s real-time sample rate on one channel, up to 20 GS/s on two channels, and up to 10 GS/s on three or four channels
- Up to 500 megapoint record length with MultiView Zoom™
- >250,000 wfms/s maximum waveform capture rate with FastAcq™
- FastFrame™ segmented memory acquisition mode with >310,000 waveforms per second capture rate
- User-selectable bandwidth limit filters for better low-frequency measurement accuracy

Key features

- Pinpoint® Triggering provides the most flexible and highest performance triggering, with over 1400 combinations to address virtually any triggering situation
- Visual Trigger and Search precisely qualifies triggers and finds unique events in complex waveforms
- Advanced Search and Mark to find specific events in the entire waveform
- MyScope® custom control windows and right mouse click menus for exceptional efficiency
- 53 automated measurements, waveform histograms, and FFT analysis for simplified waveform analysis
- TekVPI® Probe Interface supports active, differential, and current probes for automatic scaling and units
- 12.1 in. (307 mm) bright XGA display with touch screen

Connectivity

- USB Host Ports on the front and side panels for quick and easy data storage, printing, and connecting USB peripherals
- Integrated 10/100/1000BASE-T Ethernet port for network connection and Video Out port to export the oscilloscope display to a monitor or projector
- Microsoft® Windows 7 64-bit operating system for easy connectivity and integration into your environment
- LXI Class C compliant

Tektronix understands that engineers rely on an oscilloscope throughout their design cycle, from prototype turn-on to production testing. The **DPO7000 Series** oscilloscopes' unique capabilities combined with exceptional signal acquisition performance and analysis accelerate your measurement tasks.

Mfg. Part No.	Bandwidth	Rise Time	Sample Rate	Stock No.	Price Each
DPO7054C	500MHz	460ps	20GSPS	37T9540	18800.00
DPO7104C	1GHz	300ps	20GSPS	41T3423	23500.00
DPO7254C	2.5GHz	160ps	40GSPS	41T2156	31700.00
DPO7354C	3.5GHz	115ps	40GSPS	41T3420	40500.00

(211514)

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(196545)

MSO/DPO4000B & MSO/DPO5000 OSCILLOSCOPE PROBES

Tektronix

- Use the **P6616** probe to view digital signals on a system bus. Use an analog probe, such as the **TPP1000** active probe to view analog waveform information.

TPP1000

Mfg. Part No.	Description	Input Capacitance	Features	Stock No.	Price Each
P6516	General Purpose Logic Probe	3pF	16 Data Channels	39M5351	1300.00
P6616	General Purpose Logic Probe	3pF	16 Data Channels	14T0792	1240.00
TPP1000	Passive Voltage Probe	<4pF	1GHz Bandwidth	14T0795	996.00

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AC/DC CURRENT MEASUREMENT SYSTEMS

Tektronix

- AC / DC measurement capabilities
- Automatic scaling and units*2 – oscilloscope on-screen readout of magnitude and units reduces measurement errors with no more hand calculations
- DC - 100MHZ, current probe amplifier (Type TCPA300) uses:
  - DC - 100MHz, 30 A DC (Type TCP312)
  - DC - 50MHz, 50 A DC (Type TCP305)
  - DC -15MHz, 150 A DC (TypeTCP303)
- DC - 50MHZ, current probe amplifier (type TCPA400) uses:
  - DC - 2MHz, 750*1 A DC (Type TCP404XL) (500 A DC continuous)

TCPA300

Mfg. part no. TCPA300 amplifier, when used with **mfg. part no. TCP312A**, **mfg. part no. TCP305A**, or **mfg. part no. TCP303** probes, provides a wide range of current measurement capability and spans the gap between low level milliamp measurements and very high current levels. The three probes provide current measurement capabilities of 30A, 50A, and 150A DC continuous. For even higher current levels, **mfg. part no. TCPA400** amplifier with **mfg. part no. TCP404XL** current probe measures 500A DC continuous and 750A DC continuous, derated with duty cycle.

All TCPA300 / TCPA400 current probe amplifiers include: AC/DC current probe amplifier, instruction/service manual, TEKPROBE interface cable, male to male BNC cable (50 Ω), 50 Ω feed-through termination, certificate of traceable calibration.

Mfg. Part No.	Description	Stock No.	Price Each
TCPA300	Wide-Range Current Amplifier	20H0193	2430.00
TCPA400	High-Range Current Amplifier	54H4607	2420.00
TCP404XL	DC-2MHz, 500A, Current Probe	54H4815	4040.00
TCP2020	DC-50MHz, 20A, Current Probe	44W0172	2430.00
TCP312A	AC/DC current, DC to 100 MHz, 30 A DC	72W0955	1830.00
TCP305A	AC/DC current, DC to 50 MHz, 50 A DC	72W2796	1580.00
TCP303	DC-15MHz, 150A, Current Probe	29H2811	2970.00

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253xB SERIES DIGITAL STORAGE OSCILLOSCOPES

BK PRECISION

2530B

2540B

SPECIFICATIONS

Mfg. Part No.	2530B	2532B	2540B	2542B
Rise Time	<14ns	<8.8ns	<5.83ns	<3.50ns
Sensitivity	2mV/div -10V/div(1-2-5 order)		...	...
DC Gain Accuracy	...	...	...	...
Input Imped.	...	1MΩ in parallel with 16pF	1MΩ in parallel with 18pF	
Memory	32kpts	32kpts	Up to 2.4Mpts	
Other Features	Cursors with readouts			
Power	100-240VAC, CAT II, 50VA max, 45 to 440Hz		100-240VAC, CAT II, 50VA max, 47 to 440Hz	

Oscilloscopes with **-GEN suffix** contain four buttons (MENU/GRAPH, FREQ/CAPTURE, AMPL/LOCAL, ON/OFF) under the "Generator" group that are used for setting up and controlling the built-in arbitrary waveform generator.

➤CONTINUED➤

OSCILLOSCOPES & LOGIC ANALYZERS

253xB SERIES DIGITAL STORAGE OSCILLOSCOPES (CONT.)

NON-CALIBRATED

Mfg. Part No.	Bandwidth (MHz)	Sampling Rate	Channels	Display Type	Stock No.	Price Each
2530B	25	500MSPS	2	TFT LCD Color	91R0845	449.00
2532B	40	500MSPS	2	TFT LCD Color	65T6442	599.00
2540B	60	1GSPS	2	TFT LCD Color	56T3350	779.00
2542B	100	1GSPS	2	TFT LCD Color	56T3351	899.00
NON-CALIBRATED W/ WAVEFORM GENERATOR						
2540B-GEN	60	1GSPS	2	TFT LCD Color	82T3539	1195.00
2542B-GEN	100	1GSPS	2	TFT LCD Color	82T3540	1395.00

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2550 SERIES DIGITAL STORAGE OSCILLOSCOPES

RoHS Compliant Available

BK PRECISION

2-Channel

4-Channel

- Bandwidth up to 300 MHz
- 2 GSa/s sample rate
- 4-channel acquisition (on select models)
- Large 7" widescreen color display
- 32 automatic measurements
- FFT plus four additional math functions
- Built-in context sensitive help system
- 50Ω input coupling
- PC software that lets you remotely control the oscilloscope and capture, save, and analyze waveform data
- Front and rear panel USB host port for convenient storing and recalling of waveform data, setups, and screenshots on a USB flash drive
- Standard LAN (supports SCPI) and USB device port (USBTMC compliant) for remote PC control

The **2550 series** digital storage oscilloscopes deliver performance and value in 2-channel and 4-channel configurations. With bandwidth from 70 MHz to 300 MHz and 2 GSa/s sample rates, these oscilloscopes offer 24 kpts/Ch waveform memory, 32 automatic measurements, and advanced triggering capabilities including math functions. Engineered to allow you to see more of your signal under test, the **2550 series'** widescreen 7" TFT display offers a significantly larger viewing area than typical economy oscilloscopes (5.7").

Mfg. Part No.	Bandwidth (MHz)	Sampling Rate	Channels	Rise Time	Stock No.	Price Each
● 2552	70	2GSPS	2 Analogue	5ns	88W3118	1015.00
2553	70	2GSPS	4 Analogue	5ns	53W5491	1385.00
● 2554	100	2GSPS	2 Analogue	3.5ns	88W3830	1170.00
2555	100	2GSPS	4 Analogue	3.5ns	53W5492	1615.00
2556	200	2GSPS	2 Analogue	1.8ns	53W5493	1515.00
2557	200	2GSPS	4 Analogue	1.8ns	53W5494	2015.00
2558	300	2GSPS	2 Analogue	1.2ns	53W5495	1995.00
2559	300	2GSPS	4 Analogue	1.2ns	53W5496	2495.00

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GDS-2000A SERIES VISUAL PERSISTENCE DIGITAL STORAGE OSCILLOSCOPES

RoHS Compliant Available

GW INSTEK

Simply Reliable

CE

2-Channel

4-Channel

- 300MHz/200MHz/100MHz/70MHz Bandwidth ,2 or 4 Input Channel
- 2GSa/s Real-time Sampling Rate and 100GSa/s Equivalent Time Sampling Rate
- 2MegaPoints Record Length
- 1mV /div to 10V/div of Vertical Range
- 1ns/div to 100s/div of Time Base Range
- 80,000 wfm/s of Waveform Update Rate
- 8 inch 800*600 High Resolution TFT LCD Display
- Built-in Segmented Memory and Waveform Search Functions to Optimize the Efficiency of Record Length
- Zoom Window and Play/Pause can Rapidly Navigate the Waveforms
- 36 Automatic Measurement Functions Offers Various Measurement Selections
- Optional 8 or 16 digital channel with Logic analyzer(MSO)
- Optional Function Generator
- Flexible Remote Control Connectivity(Standard:USB ;Option:LAN/GPIB)

GDS-2000A Series Digital Storage Oscilloscope offers 2 and 4-channel configurations and wide bandwidth selections, including 300MHz, 200MHz, 100MHz and 70MHz. Each model provides 2GSa/s maximum real-time sampling rate and 100GSa/s high-speed equivalent-time sampling rate. Equipped with an 8-inch 800 x 600 high-resolution TFT LCD display, 1mV/div to 10V/div vertical range and 1ns/div to 100s/div time base, the **GDS-2000A Series** is able to faithfully demonstrate waveforms of complicated and obscure signals. The **GDS-2000A Series** provides 2Mega point record length, and Waveform Search and Segmented Memory functions as standard features. The events of interest can be captured and saved into the Segmented Memory, which can be divided into 2048 sections, for observation, while the irrelevant waveforms can be ignored. Consequently, the overall efficiency of memory usage can be enhanced. Under Waveform Search mode, after the input signal is triggered, the **GDS-2000A Series** is able to Search and Mark the waveform sections, which comply with user-defined search condition and threshold level within the whole memory. Meanwhile, with Zoom window and Play/Pause button to scroll through whole displayed waveform, the user can rapidly navigate all the waveforms in an efficient way.

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GDS-2000A SERIES VISUAL PERSISTENCE DIGITAL STORAGE OSCILLOSCOPES (CONT.)

Mfg. Part No.	Bandwidth (MHz)	Channels	Rise Time (ns)	Stock No.	Price Each
GDS-2072A	70	2 Analogue	5	47W9232	836.00
GDS-2074A	70	4 Analogue	5	47W9233	1434.00
GDS-2102A	100	2 Analogue	3.5	47W9234	1143.00
GDS-2104A	100	4 Analogue	3.5	47W9235	1694.00
GDS-2202A	200	2 Analogue	1.75	47W9236	1626.00
GDS-2204A	200	4 Analogue	1.75	47W9237	1962.00
GDS-2302A	300	2 Analogue	1.17	47W9238	2385.00
GDS-2304A	300	4 Analogue	1.17	47W9239	2877.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
DS2-08LA	8-Channel Logic Analyzer Module	47W9230	570.00
DS2-16LA	16-Channel Logic Analyzer Module	47W9231	830.00
DS2-FGN	DDS Function Generator Module	48W4929	245.00
DS2-GPIB	GPIB Interface Module	48W4930	400.00
● DS2-LAN	Ethernet & SVGA Output Module	48W4931	280.00

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1000 SERIES PORTABLE DIGITAL STORAGE OSCILLOSCOPES (DSO)

KEYSIGHT TECHNOLOGIES

DSO1000B

DSO1000A

- 50 – 150 MHz bandwidth, 2 channel models
- 5.7-inch color display
- 23 automatic measurements
- Sequential acquisition of up to 1000 trigger events
- Mask testing
- 11-language user interface and built-in-help menus

1000 Series deliver the performance and features found in bigger scopes and the portability and economical price required in smaller scopes. All models come complete with documentation CD, localized front panel overlay (if language option other than English is chosen), power cord, and 10:1 passive probe for each input channel (2 or 4). Education student lab guide and professor slide set downloadable free from Agilent's website. A Model Dimensions: 12.78 W x 6.21 H x 5.08"D. A Model Weight: 6.68 lbs. B Model Dimensions: 11.9 W x 6.06 H x 5.23"D. B Model Weight: 5.3 lbs. *Order additional accessories separately; go online or call.*

Mfg. Part No.	Bandwidth (MHz)	Channels	Sample Rate Max (GS/s)	Memory Depth (kpts)	Stock No.	Price Each
DSO1052B	50	2 Analogue	1	8/16	85T8668	520.00
DSO1072B	70	2 Analogue	1	8/16	85T8669	830.00
DSO1102B	100	2 Analogue	1	8/16	85T8670	1102.00
DSO1152B	150	2 Analogue	1	8/16	85T8671	1523.00

ACCESSORIES

Mfg. part no. N2740A education training kit for **1000 Series** scopes includes training board, USB cable and manual. **Mfg. part no. N2862A** probe comes standard with 60MHz and 100MHz **1000 Series** scope models and **mfg. part no. N2863A** probe comes standard with 200MHz scope models. Additional accessories available; *go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each
N2738A	Softside Carrying Case, Zipper Closure, Black	71P8336	115.00
N2739A	Rack Mount Kit	71P8337	333.00
N2740A	Education Training Kit	71P8338	373.00

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INFINIIVISION 2000 X-SERIES OSCILLOSCOPES

KEYSIGHT TECHNOLOGIES

NEW

- 70MHz, 100MHz and 200MHz bandwidth
- 2 or 4 analog channels (DSO) + 8 digital channels (MSO)
- Up to 2 GSa/s sampling rate
- High resolution 8.5-inch WVGA (800 x 480) display
- Up to 50,000 wfms/s update rate
- Fast, responsive MegaZoom IV deep memory, 100 kpts
- Industry-exclusive WaveGen built-in function generator (optional)
- Upgradable bandwidth, MSO, WaveGen built-in 20MHz function generator and measurement applications
- Connectivity: USB host (one front, one back), USB device, LAN (optional), GPIB (optional)
- Dimensions (H x W x D): 8.05 x 14.98 x 5.57"
- Standard 3-year warranty

DIGITAL STORAGE

Mfg. Part No.	Bandwidth (MHz)	Channels	Stock No.	Price Each
DSOX2002A	70	2 Analogue	21T9315	1260.00
DSOX2004A	70	4 Analogue	21T9316	1919.00
DSOX2012A	100	2 Analogue	21T9317	1575.00
DSOX2014A	100	4 Analogue	21T9318	2268.00

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INFINIIVISION 2000 X-SERIES OSCILLOSCOPES (CONT.)

Mfg. Part No.	Bandwidth (MHz)	Channels	Stock No.	Price Each
DSOX2022A	200	2 Analogue	21T9319	2219.00
DSOX2024A	200	4 Analogue	21T9320	2732.00
MIXED SIGNAL				
MSOX2002A	70	2 Analogue, 8 Digital	21T9321	1993.00
MSOX2004A	70	4 Analogue, 8 Digital	21T9322	2652.00
MSOX2012A	100	2 Analogue, 8 Digital	21T9323	2308.00
MSOX2014A	100	4 Analogue, 8 Digital	21T9324	3001.00
MSOX2022A	200	2 Analogue, 8 Digital	21T9325	2952.00
MSOX2024A	200	4 Analogue, 8 Digital	21T9326	3465.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
DSOX2AUTO	Automotive Serial Triggering & Analysis Module	69W6413	500.00
DSOX2COMP	Computer Serial Triggering & Analysis Upgrade	69W0506	500.00
DSOX2EMBD	Embedded Serial Triggering & Analysis Upgrade	69W0507	500.00
DSOX2MASK	Mask Test Option	21T9311	307.00
DSOX2MEMUP	Memory Upgrade	67W3201	200.00
DSOX2MSO	Digital Timing Channels Upgrade	21T9312	731.00
DSOX2SGM	Segmented Memory Upgrade	21T9313	307.00
DSOX2WAVEGEN	WaveGen Function Generator	21T9314	511.00
DSOXEDK	Education & Training Kit	21T9274	511.00

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INFINIIVISION 3000 X-SERIES OSCILLOSCOPES

KEYSIGHT TECHNOLOGIES

- 100MHz, 200MHz, 350MHz, 500MHz and 1GHz bandwidth
- 2 or 4 analog channels + 16 digital channels (MSO)
- Up to 4 GSa/s sampling rate
- High resolution 8.5-inch WVGA (800 x 480) display
- Up to 1,000,000 wfms/s update rate
- Fast, responsive MegaZoom IV deep memory, up to 4M
- Serial protocol analyzer (optional)
- Upgradable bandwidth, memory, MSO, WaveGen built-in 20MHz function generator and measurement applications
- Connectivity: USB host (one front, one back), USB device, LAN (optional), GPIB (optional)
- Dimensions (H x W x D): 8.05 x 14.98 x 5.57"
- Standard 3-year warranty

DIGITAL STORAGE

Mfg. Part No.	Bandwidth	Channels	Rise Time	Stock No.	Price Each
DSOX3012A	100MHz	2 Analogue	3.5ns	21T9286	3228.00
DSOX3014A	100MHz	4 Analogue	3.5ns	21T9287	3883.00
DSOX3024A	200MHz	4 Analogue	1.75ns	21T9288	4241.00
DSOX3032A	350MHz	2 Analogue	1ns	21T9289	6534.00
DSOX3034A	350MHz	4 Analogue	1ns	21T9290	7861.00
DSOX3052A	500MHz	2 Analogue	800ps	21T9291	8356.00
DSOX3054A	500MHz	4 Analogue	800ps	21T9292	10691.00
DSOX3102A	1GHz	2 Analogue	450ps	75T5127	9985.00
DSOX3104A	1GHz	4 Analogue	450ps	75T5128	13046.00
MIXED SIGNAL					
MSOX3012A	100MHz	2 Analogue, 16 Digital	3.5ns	21T9293	4554.00
MSOX3014A	100MHz	4 Analogue, 16 Digital	3.5ns	21T9294	5209.00
MSOX3024A	200MHz	4 Analogue, 16 Digital	1.75ns	21T9295	5566.00
MSOX3032A	350MHz	2 Analogue, 16 Digital	1ns	21T9296	7860.00
MSOX3034A	350MHz	4 Analogue, 16 Digital	1ns	21T9297	9187.00
MSOX3052A	500MHz	2 Analogue, 16 Digital	800ps	21T9298	9682.00
MSOX3054A	500MHz	4 Analogue, 16 Digital	700ps	21T9299	12016.00
MSOX3102A	1GHz	2 Analogue, 16 Digital	450ps	75T5129	12789.00
MSOX3104A	1GHz	4 Analogue, 16 Digital	450ps	75T5130	15850.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
DSOX3AUDIO	Audio Serial Triggering & Analysis Module	21T9277	800.00
DSOX3AUTO	Automotive Serial Triggering & Analysis Module	21T9278	800.00
DSOX3COMP	Computer Serial Triggering & Analysis Upgrade	21T9279	800.00
DSOX3EMBD	Embedded Serial Triggering & Analysis Upgrade	21T9280	800.00
DSOX3MASK	Mask Test Option	21T9281	800.00
DSOX3MEMUP	Memory Upgrade	21T9282	511.00
DSOX3MSO	MSO Upgrade	21T9283	1326.00
DSOX3SGM	Segmented Memory Upgrade	21T9284	800.00
DSOX3WAVEGEN	WaveGen Function Generator	21T9285	731.00
DSOXGPIB	GPIB Connection Module	21T9275	511.00
DSOXLAN	LAN/VGA Connection Module	21T9276	404.00
N6456A	Rack Mount Kit	21T9300	358.00
N6457A	Soft Carrying Case	21T9301	153.00
U1881A-003	Power Analysis Manager Software	21T9302	1734.00
DSOXPERFMSO	MSO Upgrade	75T5124	2804.00

CONTINUED

INFINIIVISION 3000 X-SERIES OSCILLOSCOPES (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
DSOXDVM	Integrated 3-Digit Digital Voltmeter, 3-Digit	83T1677	76.00
DSOXEDK	Education & Training Kit	21T9274	511.00
DSOX3ADVMATH	Advanced Math Analysis Module	65T6461	307.00
DSOX3AERO	Aerospace Serial Triggering and Analysis Module	65T6462	1536.00
DSOX3FLEX	FlexRay Serial Triggering and Analysis Module	65T6463	1536.00
DSOX3PWR	Power Measurement Software Module	65T6464	1536.00
DSOX3VID	HDTV Video Analysis Module	65T6465	800.00

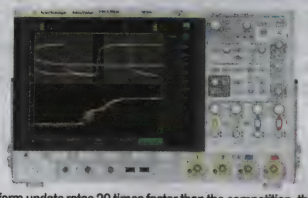
(211802)

INFINIIVISION 4000 X-SERIES OSCILLOSCOPES

KEYSIGHT TECHNOLOGIES

NEW

- 200 MHz to 1.5 GHz bandwidth, 4 Mpts memory standard, DSO and MSO models
- Up to 1,000,000 waveform updates/sec
- 12.1-inch capacitive touch display – 40% larger than competitive scopes
- Industry's only InfiniiScan Zone touch triggering
- MegaZoom IV uncompromised smart memory with segmented memory standard
- Fully upgradable – bandwidth, MSO, dual-channel WaveGen built-in 20-MHz arb/function generator, integrated 3-digit voltmeter and serial analysis including USB



These 200 MHz to 1.5 GHz oscilloscopes deliver waveform update rates 20 times faster than the competition, the power of MegaZoom IV smart memory, and an intuitive GUI – all with a capacitive touch screen interface. Experience the speed with the ability to find the most difficult problems in your design with 1 million waveforms/sec update rate, MegaZoom IV smart memory and standard segmented memory. Experience the usability of the first oscilloscope designed for touch capability with the industry's largest 12.1-inch capacitive touch display and innovative InfiniiScan Zone touch triggering. Experience the integration of 5 instruments in one: oscilloscope, logic analyzer, serial protocol analyzer, WaveGen built-in dual channel 20MHz arbitrary/function generator, and integrated 3-digit voltmeter, with the ability to upgrade your scope at any time for complete investment protection.

Mfg. Part No.	Bandwidth	Sampling Rate	Channels	Stock No.	Price Each
DSOX4022A	200MHz	5GSa/s	2 Analogue	28W2466	5622.00
DSOX4024A	200MHz	5GSa/s	4 Analogue	28W2467	7027.00
DSOX4032A	350MHz	5GSa/s	2 Analogue	28W2468	8734.00
DSOX4034A	350MHz	5GSa/s	4 Analogue	28W2469	10942.00
DSOX4052A	500MHz	5GSa/s	2 Analogue	28W2470	11444.00
DSOX4054A	500MHz	5GSa/s	4 Analogue	28W2471	14255.00
DSOX4104A	1GHz	5GSa/s	4 Analogue	28W2472	16732.00
DSOX4154A	1.5GHz	5GSa/s	4 Analogue	28W2473	19275.00
MSOX4022A	200MHz	5GSa/s	2 Analogue, 16 Digital	28W2474	8433.00
MSOX4024A	200MHz	5GSa/s	4 Analogue, 16 Digital	28W2475	9838.00
MSOX4032A	350MHz	5GSa/s	2 Analogue, 16 Digital	28W2476	11545.00
MSOX4034A	350MHz	5GSa/s	4 Analogue, 16 Digital	28W2477	13753.00
MSOX4052A	500MHz	5GSa/s	2 Analogue, 16 Digital	28W2478	14255.00
MSOX4054A	500MHz	5GSa/s	4 Analogue, 16 Digital	28W2479	17066.00
MSOX4104A	1GHz	5GSa/s	4 Analogue, 16 Digital	28W2480	19474.00
MSOX4154A	1.5GHz	5GSa/s	4 Analogue, 16 Digital	28W2481	22086.00

OPTIONS

Mfg. Part No.	Description	Stock No.	Price Each
DSOX4FPGAX	FPGA Dynamic Probe Option for Xilinx	28W2818	1530.00
DSOX4COMP	RS-232/UART Trigger and Decode	28W2815	1530.00
DSOX4MASK	Mask/Waveform Limit Testing	28W2819	1020.00
DSOX4EMBD	I2C/SPI Trigger and Decode	28W2816	1530.00
DSOX4AERO	MIL-STD 1553/ARINC429 Trigger and Decode	28W2812	1530.00
DSOX4USBH	USB 2.0 Hi-Speed Trigger and Decode	28W2823	1020.00
DSOX4USBFL	USB 2.0 Full/Low Speed Trigger and Decode	28W2822	510.00
DSOX4WAVEGEN2	WaveGen Arbitrary/Function Generator	48W4369	1020.00
DSOX4FLEX	FlexRay Trigger and Decode	28W2817	1530.00
DSOX4AUTO	CAN/LIN Trigger and Decode	28W2814	1530.00
DSOX4AUDIO	I2S Trigger and Decode	28W2813	1530.00
DSOX4VID	HDTV Video Analysis	28W2824	1020.00
DSOX4PWR	Power Measurement and Analysis	28W2820	1530.00

TEST PROBES

Mfg. Part No.	Type	Bandwidth	Stock No.	Price Each
N2750A	Differential	1.5GHz	28W2482	3206.00
N2751A	Differential	3.5GHz	28W2483	5353.00
N2752A	Differential	6GHz	28W2484	6613.00
N2894A	Passive	700MHz	28W2485	381.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
N2763A	Rack Mount Kit	28W2797	551.00
N2733B	Soft Carrying Case	28W2796	200.00

(211803)

OSCILLOSCOPES & LOGIC ANALYZERS

INFINIIVISION 7000B SERIES DIGITAL STORAGE (DSO) AND MIXED-SIGNAL (MSO) OSCILLOSCOPES

KEYSIGHT TECHNOLOGIES

- Engineered for the best signal visibility

Attractive:
- High-definition big 12.1" LCD display
- Display mode — main, delayyed, XY and roll with autoscale
- Easy-to-operate front-panel controls

Fast:
- Fast update rate to 100,000 waveforms per second
- MegaZoom III technology — always fast, always responsive, always on

Smart:
- Triggering:Edge, Pulse Width, Pattern, TV, Duration, Sequence, CAN, LIN, FlexRay, USB and more
- Compete connectivity — 2 USB 2.0 high-speed drive, 2 USB 1.1 host,10/100-BaseT LAN, XGA out

MSO7104B

InfiniiVision 7000B series highly-portable digital storage oscilloscopes (DSO) and mixed-signal oscilloscopes (MSO) are the only scopes in their class engineered for maximum signal visibility, showing jitter, infrequent events and subtle detail other scopes miss. Powered by MegaZoom III technology that delivers a responsive deep memory, high-definition display system and a superior ability to capture transient signals. Displays up to 20 channels simultaneously with serial protocol on 12.1" display in a package only 6.8" deep. Dimensions: 17.9 W x 10.9 H x 6.8" D", weight: 13 lbs. All models come complete with user's manual and three-year manufacturer's warranty. *Order accessories, options and applications separately below.*

DIGITAL STORAGE OSCILLOSCOPES (DSO)

Mfg. Part No.	Bandwidth	Analog Channels	Sample Rate	Memory Depth	Stock No.	Price Each
DSO7012B	100 MHz	2 Analogue	2 GSPS	8 Mpts	55R0635	6419.00
DSO7014B	100 MHz	4 Analogue	2 GSPS	8 Mpts	55R0636	7751.00
DSO7032B	350 MHz	2 Analogue	2 GSPS	8 Mpts	55R0637	8920.00
DSO7034B	350 MHz	4 Analogue	2 GSPS	8 Mpts	55R0638	11151.00
DSO7052B	500 MHz	2 Analogue	4 GSPS	8 Mpts	55R0639	11438.00
DSO7054B	500 MHz	4 Analogue	4 GSPS	8 Mpts	55R0640	14797.00
DSO7104B	1 GHz	4 Analogue	4 GSPS	8 Mpts	55R0641	17985.00
MIXED-SIGNAL OSCILLOSCOPES (MSO)						
MSO7012B	100 MHz	2 Analogue, 16 Digital	2 GSPS	8 Mpts	55R0642	8700.00
MSO7014B	100 MHz	4 Analogue, 16 Digital	2 GSPS	8 Mpts	55R0643	10297.00
MSO7032B	350 MHz	2 Analogue, 16 Digital	2 GSPS	8 Mpts	55R0644	11941.00
MSO7034B	350 MHz	4 Analogue, 16 Digital	2 GSPS	8 Mpts	55R0645	14285.00
MSO7052B	500 MHz	2 Analogue, 16 Digital	4 GSPS	8 Mpts	55R0646	16328.00
MSO7054B	500 MHz	4 Analogue, 16 Digital	4 GSPS	8 Mpts	55R0647	18246.00
MSO7104B	1 GHz	4 Analogue, 16 Digital	4 GSPS	8 Mpts	55R0648	22674.00

ACCESSORIES AND OPTIONS

Mfg. Part No.	Description	Stock No.	Price Each
N2735A OPTION 002	2-Channel, 350 MHz DSO-to-MSO Upgrade Kit	76M7908	2558.00
N2737A	4-Channel, 1 GHz DSO-to-MSO Upgrade Kit	76M7912	4139.00
N5427A	SEC Secure Environment Mode Factory-Installed Option — For All DSO/MSO Models	10P1666	611.00
N2733B	Soft Carrying Case	28W2796	200.00
N2732A	Rack Mount Kit	76M7906	565.00
APPLICATIONS			
N5468A	I2S Triggering and Decode Application — For DSO and MSO 4-Channel Models Only	55R0650	1661.00
N5469A	MIL-STD 1553 Triggering & Decode Application — For DSO and MSO 4-Channel Models Only	55R0651	1662.00
N5424A	CAN/LIN Automotive Triggering and Decode — For DSO and MSO 4-Channel Models Only	96K3157	1661.00
N5423A	I2C/SPI Serial Decode — For DSO and MSO 4-Channel Models Only	87K0298	1661.00
N5457A	RS-232/UART Triggering and Decode — For DSO and MSO 4-Channel Models Only	76M7918	1661.00
N5406A	MSO FPGA Dynamic Probe Application for Xilinx	64K0300	1883.00
N5434A	MSO FPGA Dynamic Probe Application for Altera	45M6086	1734.00
U1881A	Power Measurements and Analysis Software	89M6502	1793.00
N5454A	Segmented Memory — For All DSO/MSO Models	89M6495	1661.00

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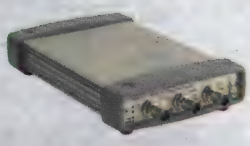
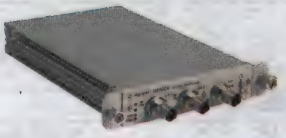
USB MODULAR OSCILLOSCOPES

KEYSIGHT TECHNOLOGIES



U2701A



U2702A

➤CONTINUED➤

USB MODULAR OSCILLOSCOPES (CONT.)

Features:
- Bandwidths of 100 MHz and 200 MHz
- Up to 1 GSa/s maximum sample rate
- 32 Mpts of waveform memory
- Advanced triggering, including edge, pulse width, and TV
- Compatibility with Hi-Speed USB 2.0, USBTMC 488.2 standards
- Four math functions, including FFTs standard
- Standaione and modular capability; Requires U2781A for modular capability

The U2701A and U2702A modular oscilloscopes combine a set of essential features that are ideal for analyzing designs in an affordable way. These devices are uniquely designed to accommodate your needs for flexibility with the dual-play function. The U2701A and U2702 give you the debugging power you need.

Mfg. Part No.	Description	Stock No.	Price Each
U2701A	USB Modular Oscilloscope, 100 MHz	05N1302	1501.00
U2702A	USB Modular Oscilloscope, 200 MHz	05N1303	1851.00
ACCESSORIES			
U2921A-100	BNC Cable	08P3579	21.30
U2921A-101	USB Secure Cable, 2m	08P3580	21.30
10070D	1:1, 20MHz, Passive Probe	13T9145	193.00

(211812)

GENERAL PURPOSE PROBES

KEYSIGHT TECHNOLOGIES

10070D

1165A

1007XD PASSIVE VOLTAGE

Rugged, high-quality 1007XD family of passive probes are for general purpose measurements, they feature a durable cable and a solid stainless steel probe body encased with a hard, fracture resistant plastic. General purpose probes are designed and tested to ensure operation in the toughest of conditions and are available with attenuation ratios of 1:1, and 10:1.

Mfg. Part No.	Description	Stock No.	Price Each
10070D	1:1, 20MHz, Passive Probe	13T9145	193.00
10072A	Fine-Pitch Probe Kit	91F3016	136.00
10073D	10:1, 500V, 500MHz, Passive Probe	83R9177	372.00
10075A	0.5 mm, IC Clip Kit	91F3019	267.00

116XA PASSIVE VOLTAGE

Compact 116XA family of general purpose replacement probes significantly reduce the problem of probing densely populated integrated circuit components or minute conductors on printed circuit boards. For tight probing areas, the probe handle can be unscrewed and pulled back along the cable. Resistive divider probes are useful for probing low voltage signals such as ECL circuits, 50 Ω transmission lines, and GaAs circuits.

Mfg. Part No.	Description	Stock No.	Price Each
1165A	10:1, 10 Megohm, 1.5 m, miniature passive probe	95H8259	646.00

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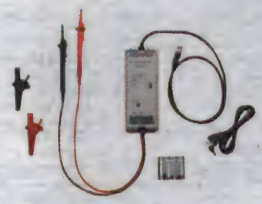
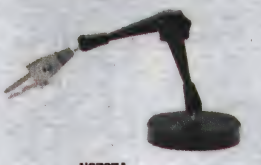
PROBES AND PROBE POSITIONERS

KEYSIGHT TECHNOLOGIES

N2780B



N2791A



N2787A

N2780B SERIES AC/DC CURRENT PROBES WITH N2779A POWER SUPPLY

Using hybrid technology that includes a hall-effect sensor and an AC current transformer, the probes provide accurate measurement of DC or AC currents up to 500 Arms for N2780B or DC–100 MHz for N2783B, without breaking into the circuit. Using split core construction, the probe easily clips on and off of a conductor.

Mfg. Part No.	Description	Stock No.	Price Each
N2779A	3-Channel Power Supply for N2780A Series Current Probes	41M1763	1197.00
N2780B	2MHz, Current Probe	65T6466	5091.00
N2781B	10MHz, Current Probe	65T6467	4117.00

➤CONTINUED➤

PROBES AND PROBE POSITIONERS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
N2782B	50MHz, Current Probe	65T4579	2698.00
N2783B	100MHz, Current Probe	65T6468	3060.00

N2790A AND N2791A 100/25 MHz HIGH-VOLTAGE DIFFERENTIAL PROBES

Mfg. part nos. N2790A and **N2791A** differential probes offer sufficient dynamic range and bandwidth for your application to make the floating measurements found in power electronics circuits safely and accurately.

Mfg. Part No.	Description	Stock No.	Price Each
N2790A	100MHz High Voltage Differential Probe	26R2279	1371.00
N2791A	25MHz High Voltage Differential Probe	25R3849	632.00

PROBE POSITIONERS

A full suite of revolutionary probe positioners for quick and stable hands-free probing. Compatible with most scope probes. N2784A and N2785A have one or two articulated arms with stable high-mass base. N2786A for quick and stable XY positioning and N2787A 3D probe positioning for hard to reach XYZ access.

Mfg. Part No.	Description	Stock No.	Price Each
N2784A	1-Arm Probe Positioner	35R0418	1222.00
N2785A	2-Arm Probe Positioner	35R0419	1776.00
N2786A	Two-Leg Probe Positioner	35R0420	62.64
N2787A	3D Probe Positioner	35R0421	738.00

(211810)

PICOSCOPE 6000 SERIES HIGH PERFORMANCE USB OSCILLOSCOPES

pico Technology

- 4 channels
- Up to 500MHz bandwidth
- 5GS/s real-time sample rate
- Up to 2 GS buffer memory
- Arbitrary waveform generator and spectrum analyzer
- Hi-speed USB 3.0 connection to PC
- Serial bus decoding and mask limit testing built-in
- Supplied with a full SDK including example programs
- Supports Linux, Windows XP, Vista and Windows 7 and 8

The PicoScope **6000 Series** scopes have the best bandwidth, sampling rate and memory depth of any USB oscilloscopes. These features are backed up by advanced software developed with the help of feedback from customers.

Mfg. Part No.	Pico-Scope No.	Band-width (MHz)	Sam-pling	Buffer Size	Features	Stock No.	Price Each
PICOSCOPE 6402C	6402C	250	5GSPS	256MS	Func Gen and Probes	08X2004	3291.75
PICOSCOPE 6402D	6402D	250	5GSPS	512MS	AWG and Probes	08X2005	4116.75
PICOSCOPE 6403C	6403C	350	5GSPS	512MS	Func Gen and Probes	08X2006	4941.75
PICOSCOPE 6403D	6403D	350	5GSPS	1GS	AWG and Probes	08X2007	5766.75
PICOSCOPE 6404C	6404C	500	5GSPS	1GS	Func Gen and Probes	08X2008	6591.75
PICOSCOPE 6404D	6404D	500	5GSPS	2GS	AWG and Probes	08X2009	7416.75

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PICOSCOPE® 5000 SERIES FLEXIBLE RESOLUTION OSCILLSCOPES

pico Technology

- Flexible resolution, from 8 to 16 bits
- Up to 200MHz analog bandwidth
- Up to 512MS buffer memory
- Up to 1GS/s real-time sampling
- Up to 10GS/s equivalent-time sampling
- Up to 200MHz spectrum analyzer
- Built-in function generator or AWG
- USB-connected

4-Channel

Pico Technology continues to push the limits of PC oscilloscope design. The new PicoScope® **5000 Series** scopes have a significantly different architecture in which multiple high-resolution ADCs can be applied to the input channels in different time-interleaved and parallel combinations to boost either the sampling rate or the resolution. Careful front-end design and shielding reduces noise, crosstalk and harmonic distortion. In 2-channel mode the **5000 Series** scopes can be powered from USB only, making them ideal for the engineer on the move. The external power supply is only needed when operating more than 2 channels. The **5000 Series** oscilloscopes are suitable for field use in many applications, such as design, research, test, education, service and repair. Each PicoScope® **5000 Series** oscilloscope kit comes with probes specifically trimmed to match the performance of your oscilloscope. Pico Technology now offers both Windows and Linux drivers for this Oscilloscope Series.

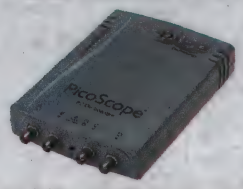
Mfg. Part No.	Channels	Bandwidth	Feature	Buffer Size	Stock No.	Price Each
PICOSCOPE 5242A	2 Analogue	60MHz	Function Generator	16MS	87W8218	1153.35
PICOSCOPE 5242B	2 Analogue	60MHz	AWG	32MS	87W8219	1318.35
PICOSCOPE 5243A	2 Analogue	100MHz	Function Generator	64MS	87W8220	1483.35
PICOSCOPE 5243B	2 Analogue	100MHz	AWG	128MS	87W8221	1648.35
PICOSCOPE 5244A	2 Analogue	200MHz	Function Generator	256MS	87W8222	1813.35
PICOSCOPE 5244B	2 Analogue	200MHz	AWG	512MS	87W8223	1978.35
PICOSCOPE 5442A	4 Analogue	60MHz	Function Generator	16MS	87W8224	1565.85
PICOSCOPE 5442B	4 Analogue	60MHz	AWG	32MS	87W8225	1813.35
PICOSCOPE 5443A	4 Analogue	100MHz	Function Generator	64MS	87W8226	2060.85
PICOSCOPE 5443B	4 Analogue	100MHz	AWG	128MS	87W8227	2308.35
PICOSCOPE 5444A	4 Analogue	200MHz	Function Generator	256MS	87W8228	2555.85
PICOSCOPE 5444B	4 Analogue	200MHz	AWG	512MS	87W8229	2803.35

(209988)

PICOSCOPE 4000 SERIES HIGH-RESOLUTION PC OSCILLOSCOPES

pico Technology

- Accurate 12-bit resolution inputs
- 20, 50 and 100MHz bandwidth models
- 32M sample memory
- Up to 250 MS/s sample rate
- I²C and CAN serial decoding
- Mask limit testing
- USB 2.0 connection and power
- API compatible with LabVIEW, C, VB and excel



PicoScope 4000 series high-precision PC oscilloscopes are designed to meet the requirements of modern electronic engineering servicing, design and debugging. With their high input resolution, they can detect or trigger on voltage changes of less than 50µV. This makes them ideal for electromechanical applications such as monitoring transducers, and for spectral analysis of audio, noise and vibration. PicoScope 4000 oscilloscopes are bundled with PicoScope software, 2 or 4 scope probes and a tough carry case. Pico Technology now offers both Windows and Linux drivers for this Oscilloscope Series.

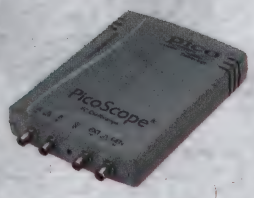
SPECIFICATIONS	PICOSCOPE 4224	PICOSCOPE 4424
No. of Channels	2	4
Bandwidth	20MHz	
Max. Sample Rate	80 MS/s	
Oscilloscope Timebases	100 ns/div to 200 s/div	
Timebase Accuracy	50ppm	
Spectrum Ranges	DC to 20MHz	
Buffer Size (Record Length)	32M Samples	
Resolution / Accuracy	12-bits / 1%	
Voltage Ranges (FSR)	±50 mV to ±100 V in 11 ranges	
Inputs	1 MΩ in parallel with 22pF	
Waveform Generator Output	Not fitted	
PC Connection	USB 2.0 (USB 1.1 compatible)	
Power Supply	USB Port	
PC Requirements	Windows XP, Vista, Windows 7 (32/64 bit)	

Mfg. Part No.	Description	Stock No.	Price Each
PICOSCOPE 4424 KIT	PicoScope 4424 Kit	60R3595	1361.25
PICOSCOPE 4224 KIT	PicoScope 4224 Kit	60R4917	856.35

(175979)

PICOSCOPE® 3000 SERIES USB-POWERED OSCILLOSCOPES

pico Technology



Standard 2-Channel

Differential

- 4 channels
- 12-bit precision
- 5MHz bandwidth
- 20 MS/s sampling rate
- 400 V differential and common-mode range
- PicoScope PC Oscilloscope and spectrum analysis software included
- PicoLog PC Data Logger software included
- USB 2.0 for high speed
- Powered by USB port
- Application Programming Interface (API) and example code included

Standard 4-Channel

Standard

- 60-200MHz bandwidth
- 4-128MS buffer size
- Up to 1 GS/s real-time sampling
- Up to 10 GS/s repetitive sampling
- Advanced digital triggers
- 60-200MHz spectrum analyzer
- Built-in function generator/AWG
- USB 2.0 connected and powered

The **PicoScope 3000 Series** are the highest–performance USB–powered oscilloscopes available. These 2–channel oscilloscopes have 8–bit resolution and are accurate to within 3%. This combined with their large memory, high sampling rates and high bandwidths make them ideal for use in all areas of test and measurement — from manufacturing and repair, to research and development. The **PicoScope 3000 Series** also includes the **PicoScope 3425**. This has differential inputs that allow you to measure signals that are not referenced to ground. Pico Technology now offers both Windows and Linux drivers for this Oscilloscope Series.

STANDARD 2-CHANNEL

Mfg. Part No.	Band-width (MHz)	Sampling	Mem-ory (MS)	Generator	Stock No.	Price Each
PICOSCOPE 3204A	60	500MSPS	4	Function	45T2523	658.35
PICOSCOPE 3204B	60	500MSPS	8	Function / Arb. Waveform	45T2524	823.35
PICOSCOPE 3205A	100	500MSPS	16	Function	45T2525	988.35
PICOSCOPE 3205B	100	500MSPS	32	Function / Arb. Waveform	32T5074	1153.35
PICOSCOPE 3206A	200	500MSPS	64	Function	45T2526	1318.35
PICOSCOPE 3206B	200	500MSPS	128	Function / Arb. Waveform	45T2527	1483.35
PICOSCOPE 3207A	250	1GSPS	256	Function	65W6006	1813.35
PICOSCOPE 3207B	250	1GSPS	512	Function / Arb. Waveform	65W6007	1978.35

➤ CONTINUED ➤

OSCILLOSCOPES & LOGIC ANALYZERS

PICOSCOPE® 3000 SERIES USB-POWERED OSCILLOSCOPES (CONT.)

STANDARD 4-CHANNEL

Mfg. Part No.	Bandwidth (MHz)	Sampling	Memory (MS)	Generator	Stock No.	Price Each
PICOSCOPE 3404A	60	1GSPS	4	Function	94T8669	988.35
PICOSCOPE 3404B	60	1GSPS	8	Function / Arb. Waveform	94T8670	1235.85
PICOSCOPE 3405A	100	1GSPS	16	Function	94T8671	1483.35
PICOSCOPE 3405B	100	1GSPS	32	Function / Arb. Waveform	94T8672	1730.85
PICOSCOPE 3406A	200	1GSPS	64	Function	94T8673	1978.35
PICOSCOPE 3406B	200	1GSPS	128	Function / Arb. Waveform	94T8674	2225.85
DIFFERENTIAL 4-CHANNEL						
PICOSCOPE 3425	5	20	...	...	95M3864	1608.75

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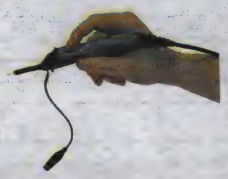
PICOSCOPE 2000 SERIES PEN-TYPE PC-BASED OSCILLOSCOPES



pico Technology

Plug a PicoScope® pen-type PC-based oscilloscope into your computer's USB port, install the PicoScope® software and you are ready to take measurements, with no additional batteries, power supplies, or accessories required. Digital ETS provides up to 2 GS/s sampling for repetitive signals. Both models include PicoScope® software, PicoLog® data acquisition software, and 32-bit programming libraries. Pico Technology now offers both Windows and Linux drivers for this Oscilloscope Series.

Mfg. Part No.	No. of Channels	Bandwidth	Repetitive Sampling	Resolution (Bits)	Stock No.	Price Each
PICOSCOPE 2104	1	10MHz	1 GS/s	8	02M0837	206.25
PICOSCOPE 2105	1	25MHz	2 GS/s	8	02M0838	328.35

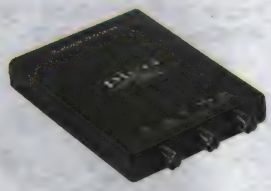
(89093)

PICOSCOPE 2200A SERIES PC OSCILLOSCOPES WITH ARBITRARY WAVEFORM GENERATOR

NEW

pico Technology

- Up to 1 GS/s sampling rate
- Arbitrary waveform generator
- Advanced digital triggers
- Persistence display modes
- USB connected and powered
- Free software upgrades
- Mask limit testing
- Serial bus decoding



PicoScope 2200A PC oscilloscopes offer from 10 MHz to 200 MHz bandwidth with advanced analysis features, and an integrated arbitrary waveform generator, in a slimline package for use on the move and in any location.

Mfg. Part No.	Input Channels	Bandwidth (-3 dB)	Max. Sampling Rate	Buffer Memory	Stock No.	Price Each
PICOSCOPE 2204A	2 Analogue	10MHz	100MSPS	8kS	18X2829	196.35
PICOSCOPE 2205A	2 Analogue	25MHz	200MSPS	16kS	18X2830	328.35
PICOSCOPE 2206A	2 Analogue	50MHz	500MSPS	32kS	18X2831	493.35
PICOSCOPE 2207A	2 Analogue	100MHz	1GSPS	40kS	18X2832	658.35
PICOSCOPE 2208A	2 Analogue	200MHz	1GSPS	48kS	18X2833	823.35

ACCESSORIES

Mfg. Part No.	Description	For Use With	Stock No.	Price Each
TA132	150 MHz probes (2)	2207A	63T6480	33.00
TA131	250 MHz probes (2)	2208A	63T6479	41.25

KITS

Mfg. Part No.	Description	Stock No.	Price Each
PICOSCOPE EDUCATIONAL KIT	Pico Education Kit w/ PicoScope 2201A and Apparaturs	18X2834	651.75

(212417)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

PICOSCOPE® 2205 MSO USB-POWERED MIXED SIGNAL OSCILLOSCOPE

NEW

pico Technology

- 25 MHz analog bandwidth
- 100 MHz max. digital input frequency
- 200 MS/s mixed signal sampling
- Advanced digital triggers
- SDK and example programs
- Supplied with a full SDK including example programs
- Software compatible with Windows XP, Windows Vista, Windows 7 and 8

With the **PicoScope 2205 Mixed–Signal Oscilloscope (MSO)** it is possible for you to measure both analogue and digital signals at the same time, using one device, and view the analogue waveforms and digital data on the same screen. The **PicoScope 2205 MSO** from Pico Technology is a 2+16 channel, 8-bit resolution oscilloscope. This means that along with 2 analog channels, the **PicoScope 2205 MSO** also has 16 digital inputs, so you can view your digital and analog signals simultaneously.

Mfg. Part No.	Kit Contents	Stock No.	Price Each
PICOSCOPE 2205-MSO W/O PROBES	PicoScope 2205 MSO, Software and Reference CD, Quick Start Guide, USB cable	71T8206	493.35
PICOSCOPE 2205-MSO KIT	PicoScope 2205 MSO, TA136 digital cable, 2 x TA139 pack of 10 test clips, 2 x MI007 probes, PicoScope probe pouch, Software and Reference CD, Quick Start Guide, USB cable	71T8205	575.85

(212418)

PC USB DIGITAL OSCILLOSCOPES

NEW

TENMA®

- Multi-language support, easy to use
- USB2.0 interface, no external power required
- 23 measurement functions, PASS/FAIL check, FFT
- OS: Windows NT, Windows 2000, Windows XP, Windows 7
- Labview/VB/VC SDK

Mfg. Part No.	Channels	Bandwidth	Sample Rate	Stock No.	Price Each
72-10155	2 Analogue	40MHz	100MSPS	26W6986	239.00
72-10160	2 Analogue	60MHz	150MSPS	26W6987	279.00
72-10165	2 Analogue	100MHz	250MSPS	26W6988	349.00

(211947)

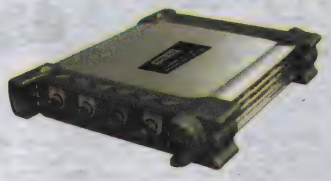
PC USB DIGITAL OSCILLOSCOPES

NEW

TENMA®

72-10175

- Frequency Counter, FFT Spectrum Analysis
- 8-36V wide range of niput voltage, suptable for vehicle power
- USB2.0 interface plug and play, LAN and WIFI optional
- More than 20 kinds of automatic measurement functions, as well as a PASS/FAIL Check function, which are suitable for engineering applications
- OS: Windows NT, Windows 2000, Windows XP, VISTA, Windows 7



72-10175

72-10178

- 5 in 1 multifunctional testing instrument: Oscilloscope / Logic Analyzer / Arb. Waveform Generator / FFT Spectrum Analysis / Frequency Counter
- 16M memory depth oscilloscope
- 16 data input channels and 16M sample depth logic analyzer
- 200MSa/s DDS arb. waveform generator

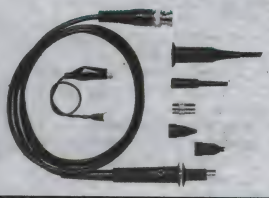
Mfg. Part No.	Bandwidth	Channels	Sample Rate	Stock No.	Price Each
72-10175	60MHz	4 Analogue	200MSPS	26W6990	499.00
72-10178	60MHz	2 Analogue, 16 Digital	200MSPS	26W6991	559.00

(211974)

PASSIVE OSCILLOSCOPE PROBES

Pomona®

These general purpose probes feature high performance for greater flexibility. Complete accessory kit included. All probes are rated 300V (DC + Peak AC) per IEC1010-2-03. Cat I, cables are 1.2 meters except **Mfg. part no. 5827A**, which is 2.0 meters.



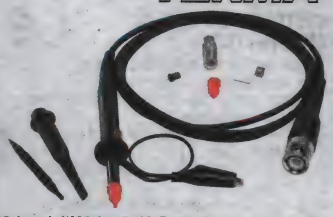
Mfg. Part No.	Atten-uation	System Band-width @-3dB (MHz)	System Risetime (ns)	System Input Resis-tance* (Mohm)	Capaci-tance* (pF)	Compen-sation Range (pF)	Stock No.	Price Each
5800A/POM	X1	30	11.66	1	57	NA	52K4452	61.25
4550B	X1/X10	15/100	23.33/3.5	1/10	64/10.5	NA/10-60	93F2888	65.50
6101A	X10	150	2.33	10	10.5	10-30	16F4656	64.95
5803A	X10	200	1.75	10	10	10-60	98F5200	67.50
5806A	X1/X10	20/200	17.5/1.75	1/10	77/11.5	NA/10-60	98F5150	74.95
5827A	X100	200	1.75	10	5.5	15-50	93F2949	116.50
6069A	X10	250	1.4	10	10	10-30	16F4658	69.95
6102A	X10	250	1.4	10	10	10-30	16F4659	74.95
5809A	X10	300	1.17	10	17	10-60	90F2359	119.50
5812A	X10	300	1.17	10	17	10-60	90F2361	126.00
6266	X1/X10	20/60	17.5/5.83	1/10	65/11	N/A/10-60	02B1794	48.95
5795A	X10	100	3.5	10	9.5	10-60	90F2365	49.95

*Measurements based on 1 MΩ, 20pF oscilloscope.
(10016)

60, 100 AND 200MHz REPLACEMENT OSCILLOSCOPE PROBE KITS

TENMA®

- EN61010-2-031 CATI (IEC1010)
- 600V (DC+AC Peak)
- Low Noise - Improved Compensation
- 1.2m Cable Length
- 10-35pF Compensation Adjustment
- REF Position, Tip Disconnected and Scope Input Grounded (Types 76-102 and 76-105 Only)
- Accessory Kit and Storage Pouch Included



Mfg. part no. 76-109: 60MHz -3dB, x10 position, 10MΩ imped. (1MΩ input), 18pF capacitance, 5.8ns risetime. 15MHz -3dB, x1 position, 1MΩ imped. (scope input), 46pF capacitance, 27ns risetime. **Mfg. part no. 76-102**: 100MHz -3dB, x10 position, 10MΩ imped. (1MΩ input), 16pF capacitance, <3.5ns risetime. 6MHz @ -3dB, x1 position, 1MΩ impedance (scope input), 90pF capacitance, 58ns risetime. **Mfg. part no. 76-105**: 200MHz -3dB, x10 position, 10MΩ imped. (1MΩ input), 14pF capacitance, <1.8ns risetime. 10MHz @ -3dB, x1 position, 1MΩ imped. (scope input), 90pF capacitance, 35ns risetime.

Mfg. Part No.	Description	Stock No.	Price Each
76-109	60MHz Range	84N2151	32.67
76-102	100MHz Range	84N2144	43.81
76-105	200MHz Range	84N2147	55.36
76-110	Replacement Sprung Hook	84N2152	6.78

(5923)

250MHz REPLACEMENT OSCILLOSCOPE PROBES

TENMA®

- X1/X10 (type 76-107 is X10 only)
- 1MΩ and 10MΩ Input Impedance
- EN61010-2-031 CAT I (IEC1010)
- 600V (AC+DC Peak)
- Low Noise, Improved Compensation
- 1.2m Cable Length
- 10-35pF Compensation Adjustment
- Accessory Kit and Storage Pouch Included
- Type 76-107 Includes Readout Actuator Pin

Specifications	
Bandwidth (X10 Position)	250MHz (-3dB) into 14pF
Rise Time (X10 Position)	<1.4nSec

REPLACEMENT SPRUNG HOOK

Mfg. Part No.	Description	Stock No.	Price Each
76-106	250MHz Oscilloscope Probe	84N2148	85.37
76-107	250MHz Oscilloscope Probe w/Readout Pin	84N2149	75.43
76-110	Replacement Sprung Hook	84N2152	6.78

(5922)

TRUE RMS AC+DC BENCH MULTIMETERS

BK PRECISION

2831E / 5491B

- Basic VDC accuracy of up to 0.02%
- Up to 25 readings per second measurement rate
- AC volt and amp measurement over wide frequency range (ACV 100kHz/ACI 20kHz)
- Limit mode for Pass/Fail testing
- Built-in math functions: Rel, Max/Min, dBm, dB, %, Hold, Compare
- CATI (1000V)/CATII (300V) Protection
- USB (Virtual Com) and RS-232 interface
- SCPI compatible

2831E

5492B / 5492BGPIB

- 0.01% basic VDC accuracy
- Advanced triggering options such as external, bus and event trigger
- Two and four-wire resistance measurement up to 120MΩ
- AC voltage and AC current measurement over wide frequency range (ACV 100kHz/ACI 10kHz)
- AC (RMS) and DC current measurements up to 12A
- Limit mode for Pass/Fail testing
- Save/recall up to 10 instrument settings
- Built-in math functions: Rel, Max/Min, dBm, dB, %, Hold, Compare
- CATI (1000 V)/CATII (300 V) protection
- USB (Virtual Com) and RS-232 interface
- SCPI compatible

5492B / 5492GPIB

2831E and **5491B** are versatile and dependable bench-top multimeters suitable for applications in education, service & repair and manufacturing requiring basic and reliable measurements. Additionally, these instruments enhance your productivity with built-in math functions and USB connectivity, features not found in other bench meters in this price category. **5492B** is a versatile bench multimeter suitable for applications in education, service repair, and manufacturing. The instrument enhances your productivity with built-in math functions and USB connectivity. Rel, Max/Min, dBm, dB, %, and Hold functions provide educators with a convenient tool to teach basic math concepts. Additionally, the **5492B** offers powerful features not commonly found in other 5xxx- digit DMMs such as advanced triggering, buffer storage operation, and a GPIB interface option (**5492BGPIB**).

Mfg. Part No.	No. of Digits	Count	Features	Stock No.	Price Each
2831E	4-1/2	20000	Dual Display w/ USB Interface	53R0915	339.00
5491B	4-3/4	50000	Dual Display w/ USB and RS-232 Interface	67R1991	409.00
5492B	5-1/2	120000	USB and RS-232 Interface	94T2727	649.00
5492BGPIB	5-1/2	120000	USB, RS-232 and GPIB Interface	94T2728	789.00

(84894)

FLUKE-884xA SERIES BENCHTOP PRECISION DIGITAL MULTIMETERS

FLUKE. Calibration

- 2x4 Wire Ohms measurement technique
- Analytical Modes: TrendPlot™, Histogram and Statistics
- RS-232, IEEE-488 and LAN interfaces
- USB Device Port for memory storage devices (**Fluke-8846A** Only)
- Popular DMM emulation modes
- Three-year manufacturer's warranty

Fluke-8846A

Fluke-8845A and **Fluke-8846A**, 6.5 digit precision multimeters have the precision and versatility to handle demanding measurements on the bench or in a system. Both models are designed to comply with IEC 61010-12000-1, ANSI/ISA-S82.01-1994, CAN/CSA-C22.2 No.1010.1-92, 1000V CAT I/600V CAT II standards.

COMPARISION AT A GLANCE:

Mfg. Part No.	Fluke-8845A	Fluke-8846A
Basic VDC Accuracy	0.0035%	0.0024%
DC Voltage	1000V	
AC Voltage	750V	1000V
Resistance (2x4 Wire Ohms)	100MΩ	1GΩ
DC Current	100uA to 10A	
AC Current	10mA to 10A	100µA to 10A
Frequency/Period	3Hz to 300kHz	3Hz to 1MHz
Continuity/Diode Test	Yes	
Capacitance	...	1nF to 0.1F
Temperature RTD	...	-200° to +600°
ADVANCED FUNCTIONS		
Analytical Functions	Statistics, Histogram, TrendPlot™, Limit Compare	
Math Functions	Ratio, NULL, Min./Max.	Ratio, NULL, Min./Max., dB/dBm
INPUT/OUTPUT		
USB Device Memory Drive Port	...	Yes
Real Time Clock	...	Yes
Interfaces	RS-232, IEEE-488.2, Ethernet	
Programming Languages/ Emulation Modes	SCPI (IEEE-488.2), Agilent 34401A, Fluke-45	

Mfg. Part No.	Description	Stock No.	Price Each
8845A 120V	Benchtop Precision Digital Multimeter, 35ppm	83K1738	1065.00
8846A 120V	Benchtop Precision Digital Multimeter, 25ppm, USB/Memory	83K1739	1495.00

(88093)

DIGITAL MULTIMETERS

FLUKE 8808A DIGITAL MULTIMETERS

FLUKE. Calibration

- 5.5-digit resolution
- Basic VDC accuracy of 0.01%
- Dual display
- Dedicated DC leakage current measurement
- 2x4 Wire Ohms measurement technique
- Six dedicated buttons for fast access to instrument setups
- Hi/Lo limit compare for pass/fail testing
- Three-year manufacturer's warranty

8808A

Fluke-8808A 5.5-digit multimeter has a broad range of functions, measuring volts, ohms and amps. Six setup buttons for instrument presets on front panel. Includes TL71 test leads, line cord, spare line fuse, user manual on CD ROM.

SPECIFICATIONS

Basic VDC Accuracy	0.01%
DC Voltage	1000V
AC Voltage	750V
Resistance (2x4 Wire Ohms)	100MΩ
DC Current	200uA to 10A
AC Current	20mA to 10A
Frequency/Period	20Hz to 1MHz
Continuity/Diode Test	Yes
Math Functions	Min./Max., relative, hold, compare, dB

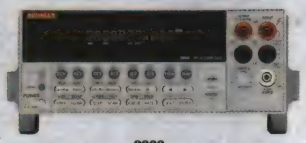
Mfg. Part No.	Description	Stock No.	Price Each
8808A 120V	5.5 Digit Multimeter	61M3746	810.00
8808A/SU 120V	5.5 Digit Multimeter, SW USB Cable Kit	61M3747	1055.00

(102969)

DIGITAL MULTIMETERS

CE KEITHLEY

2000 & 2000/2000-SCAN
- 13 built-in measurement functions
- 2000 readings/second at 4½ digits
- Optional scanner cards for multipoint measurements
- IEEE-488 and RS-232 interfaces
- Fluke 8840/42 command set

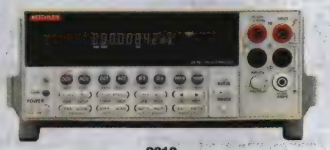


2000

2001, 2001/MEM1 & 2002
- Exceptional measurement integrity w/ high speed
- High speed function and range changing
- Broad range of built-in measurement functions
- Multiple measurement display
- Built-in 10-channel scanner option
- IEEE-488.2 and SCPI compatible
- HP3458A emulation mode (**Model 2002**)

2001

2010
- 100nVrms noise floor
- 7ppm DCV repeatability
- Built-in 10-channel scanner mainframe
- Dry circuit and low power measurement mode
- 15 measurement functions including support for RTD and thermocouple temperature measurements
- Built-in ratio measurement function



2010

Model	2000 & 2000/2000-SCAN	2010	2001 & 2001/MEM1	2002
Digits	6-1/2	7-1/2	7-1/2	8-1/2
DCV Max. Reading	1000V	1000V	1100V	1100V
ACV Max. Reading	750V	750V	775V (1100Vpk)	775V (1100Vpk)
ACV Bandwidth	3Hz to 300kHz	3Hz to 300kHz	1Hz to 2MHz	1Hz to 2MHz
Ohms (2/4 Wire) Max. Reading	120MΩ	120MΩ	1GΩ	1GΩ
DCA Range	10mA to 3A	10mA to 3A	200uA to 2A	200uA to 2A
ACA Range	1A to 3A	1A to 3A	200uA to 2A	200uA to 2A
ACA Bandwidth	3Hz to 5kHz	3Hz to 5kHz	3Hz to 5kHz	3Hz to 5kHz

Mfg. Part No.	Description	Stock No.	Price Each
2000	6-1/2 Digit DMM	58T8718	1140.00
2000/2000-SCAN	6-1/2 Digit DMM / Scanner Combination	96J0035	1680.00
2010	7-1/2 Digit Autoranging DMM	59T7529	2990.00
2001	7-1/2 Digit High Performance DMM w/ 8K Memory	42J5238	4600.00
2001/MEM1	7-1/2 Digit High Performance DMM w/ 32K Memory	59T7511	4990.00
2002	8-1/2 Digit High Performance DMM w/ 8K Memory	26R1845	6150.00

(197892)

5½ DIGIT USB DIGITAL MULTIMETERS

UL CE KEITHLEY

- High accuracy, high speed for general purpose measurements
- 15 measurement functions, including capacitance and thermocouple measurements
- Dual-line display allows concurrent measurements
- TMC-compliant US B 2.0 interface for use with SCPI test commands
- GPIB option for use in system applications
- Includes PC software utilities for graphing and data sharing in both Microsoft® Word and Excel
- Rugged construction for durability in bench/portable applications
- Includes all accessories, such as start-up software, USB cable,power cable, and safety test leads
- CE compliant and UL listed

Model 2110 5½-Digit Dual-Display Digital Multimeter provides a comprehensive set of capabilities, superior measurement accuracy, and high speed for a broad range of applications. It features 15 measurement functions and 7 math functions and has dual-line display capability, which allows it to display two different measurements concurrently. Its buffering capability and GPIB option further increases its performance and flexibility. **Model 2110** is ideal for production, R&D, and test engineers, scientists, and students making a wide variety of measurements in portable, bench, and system applications.

SPECIFICATIONS	
AC Current:	1A, 3A, 10A
DC Current:	10mA, 100mA, 1A, 3A, 10A
AC Voltage:	0.1V, 1V, 10V, 100V, 750V
DC Voltage:	0.1V, 1V, 10V, 100V, 1000V
Resistance:	100ohm, 1kohm, 10kohm, 100kohm, 1Mohm, 10Mohm, and 100Mohm
Frequency:	10Hz to 300kHz
Temperature:	(RTD and NTC Thermistor) measurements

Mfg. Part No.	Description	Stock No.	Price Each
2110-120	5-1/2 digit USB Digital Multimeter (120V)	44W8031	622.00
2110-120-GPIB	5-1/2 digit USB and GPIB Digital Multimeter (120V)	44W8032	759.00

(208465)

6½ DIGIT USB DIGITAL MULTIMETER

CE UL KEITHLEY

- High precision 6½ digit DMM for critical measurements at a 5½ digit price
- 11 measurement functions cover most commonly measured parameters
- Fully specified accuracies on all functions for ISO-compliant results
- TMC compliant USB 2.0 interface for use with SCPI test programs
- Included PC software utilities for graphing and data sharing in both Microsoft® Word and Excel
- Rugged construction for durability in bench/portable applications
- Selectable front/rear inputs facilitate bench or rack use
- Includes all accessories, such as startup software, USB cable, power cable, and safety test lead, for lowest total cost
- CE compliant and UL listed

Model 2100 USB Digital Multimeter has high accuracy (38ppm) and 6½ digit resolution which is ideal for critical measurements. It features 11 measurement functions and 8 math functions to easily accommodate the most commonly measured parameters. All accessories, such as USB cable, probes, and software, are included. With its unique combination of high precision and low total cost of ownership, **Model 2100** is an unbeatable value for R&D engineers, test engineers, scientists, and students making basic precision measurements on the bench and in system applications.

	2100/120
AC Current:	1A, 3A
DC Current:	10mA,100mA, 1A, 3A
AC Voltage:	100mV / 1V / 10V / 100V / 750V
DC Voltage:	100mV to 1000V
Resistance:	100ohm, 1kohm, 10kohm, 100kohm, 1Mohm, 10Mohm, 100Mohm
Frequency:	3Hz to 300kHz
Temperature:	-200°C to +630°C

Mfg. Part No.	Description	Stock No.	Price Each
2100/120	6-1/2 digit USB Digital Multimeter	59T7566	879.00

(197863)

CALIBRATION SERVICES

From pre-calibration to re-calibration, we bring you competitive pricing with quick delivery.

(207664)

INTEGRA SERIES MULTIMETER / DATA ACQUISITION / SWITCH SYSTEMS

KEITHLEY

2700

2750

- Combines functions of DMM, switch system, and datalogger
- True 6½ digit (22-bit) resolution
- Choice of 12 switch/control plug-in modules
- Up to 200 differential input channels (with 300V isolation) for measurement and control
- Convenient front panel inputs
- Free LabVIEW®, LabWindows / CVI, Visual Basic, and C/C++ drivers (IVI style)
- Ethernet, GPIB, RS-232 communications capabilities
- Free ExceLINX™-1A datalogging software

Integra Series systems combine precision measurement, switching, and control in a single, tightly integrated enclosure for either rack-mounted or benchtop applications. These cost-effective, high performance test platforms offer affordable alternatives to separate DMMs and switch systems, dataloggers/recorders, plug-in card data acquisition equipment, and VXI/PXI systems. The **Integra Series** plug-in switching and control modules offer unmatched flexibility and testing efficiency for a wide range of industries and applications. System builders can create test solutions with a combination of channel count, cost per channel, and system performance unmatched by any other single-box measurement system. The input modules provide the flexibility to vary the channel count from 20 to 200 (2-pole), apply a stimulus to the device under test, route signals, control system components, and make precision measurements with up to 14 functions. Robust digital I/O capabilities can be used for triggering, handshaking with other automation equipment, and alarm limit outputs. Scan rates of up to 500 channels/second (up to 3500 readings/second on a single channel) will increase test productivity.

Model	2700	2750
No. of differential input channels:	80	200
Matrix crosspoints:	96	240
Ohms resolution:	100uW	1uW
Dry circuit ohms (20mV clamp):	No	Yes
No. of slots:	2	5
Memory buffer:	55,000 rdgs	110,000 rdgs
Size (2U height):	Half-rack width	Full-rack width
Communications:	GPIB, RS-232	GPIB, RS-232
Scan-Rate (memory):	180/s	230/s
Scan-Rate (bus):	145/s	210/s
Max. Internal Trigger Rate:	2000/s	2000/s
Max. External Trigger Rate:	375/s	375/s

Mfg. Part No.	Description	Stock No.	Price Each
2700	DMM, Data Acquisition, Datalogging System w/2 Slots	96M9137	1650.00
2700/7700	DMM, Data Acquisition, Datalogging System w/2 Slots and 20-channel Differential Multiplexer Module	10J8814	2070.00
2750	DMM, Data Acquisition, Switching, Datalogging System w/5 Slots	11J1599	2590.00

ACCESSORIES

Mfg. Part No.	Description	Features	Stock No.	Price Each
7700	Differential Multiplexer Module	20-Channel, 50MHz Bandwidth, Automatic CJC, Screw Terminals	96M9138	501.00
7701	Differential Multiplexer Module	32-Channel, 25 and 50 Pin Female D Connectors	59T8953	726.00
7702	Differential Multiplexer Module	40 Channel, Screw Terminals. 2 Channels for Current Measurement	11J1603	951.00
7703	Differential Multiplexer Module	32-Channel, High-Speed, 2 50-Pin Female D Connectors	59T8960	1140.00
7705	Single-Pole Control Module	40-Channel, Single-Pole, 2 50-Pin Female D Connectors	59T8964	839.00
7706	I/O Module	20-Channel, Automatic CJC, 16 Digital Outputs, 2 Analog Outputs, Counter/Totalizer, Screw Terminals	59T8969	951.00
7707	Digital I/O Module	10-Channel w/ 32-Channel Digital I/O	59T8973	839.00
7708	Differential Multiplexer Module	40 Channel, Automatic CJC, Screw Terminals	23R9247	951.00
7709	Matrix Module	6x8 Matrix, 25 and 50 Pin Female D Connectors	59T8981	951.00
7710	Solid-State Differential Multiplexer	20-Channel, Automatic CJC, Long Life, Solid State	59T8985	726.00

(198143)

TENMA® AT NEWARK ELEMENT14

Affordable, reliable Test & Measurement equipment and accessories at newark.com/tenma

(212566)

TOTAL HARMONIC DISTORTION MULTIMETERS

KEITHLEY

- THD, THD+Noise, and SINAD measurements
- 20Hz–20kHz sine wave generator
- Fast frequency sweeps
- 4Vrms single-ended or 8Vrms differential output (**Model 2015**)
- 9.5Vrms single-ended or 19Vrms differential output (**Model 2016**)
- Individual harmonic magnitude measurements
- 5 standard audio shaping filters
- 13 DMM functions (6½ digits)

2015

Models 2015 and **2016** Total Harmonic Distortion Multimeters combine audio band quality measurements and analysis with a full-function 6½ digit DMM. Test engineers can make a broad range of voltage, resistance, current, frequency, and distortion measurements, all with the same compact, half-rack measurement instrument. **Model 2016** has twice the sine wave generator output of the **Model 2015** for applications that require test signals greater than 8Vrms.

Model	2015 / 2016
Digits	6-1/2
DCV Max. Reading	1000V
ACV Max. Reading	750V
ACV Bandwidth	3Hz to 300kHz
Ohms (2/4 Wire) Max. Reading	120MΩ
DCA Ranges	10mA to 3A
ACA Ranges	1A to 3A
ACA Bandwidth	3Hz to 5kHz

Mfg. Part No.	Description	Stock No.	Price Each
2015	6-1/2 Digit Total Harmonic Distortion DMM	59T7535	4450.00
2016	6-1/2 Digit Total Harmonic Distortion DMM w/ 9V Source Output	59T7546	4570.00

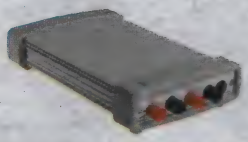
(198545)

USB MODULAR DIGITAL MULTIMETERS

KEYSIGHT TECHNOLOGIES

Features:

- Measures up to 300Vdc with 5.5 digits resolution
- Make fast measurements with up to 100 readings/s
- Frequency and temperature measurement capability
- Utilize wide measurement ranges: 100 mVdc to 300 Vdc and 10 mA to 2 A
- Standalone and modular capabilities; Requires U2781A for modular capability



The U2741A is a small form factor multimeter with huge capabilities. It provides a broad range of measurement functions, including temperature and frequency. The U2741A is a 5.5 digit resolution digital multimeter that is able to capture up to 100 readings/sec. It uses the common non-proprietary standard high-speed USB 2.0 interface that provides ease of connectivity - allowing users to set up and configure their tests swiftly with its plug and play feature.

Mfg. Part No.	Description	Stock No.	Price Each
U2741A	USB Modular Digital Multimeter	08P3578	1165.00

(211786)

34000 SERIES BENCHTOP DIGITAL MULTIMETERS

NEW

KEYSIGHT TECHNOLOGIES

- Multi-function flexibility
- Laboratory accuracy at production-line speeds
- True RMS AC Volts and Current
- RS-232 and GPIB Standard
- Store up to 512 Readings

34000 series benchtop digital multimeters measure DC voltage up to 1000V across 5 ranges, AC voltage up to 750V from 3Hz to 300kHz, DC and AC current, resistance (up to 100MΩ across 7 ranges), frequency, and period (to 300kHz) with laboratory accuracy and at production-line speeds. They deliver dependable results and convenient features that minimize test and troubleshooting times. Standard commands for programmable instruments (SCPI) as well as other command languages are built in. Power: 100/120/220/240V, 45-65Hz, 360-440Hz. **Mfg. part nos. 34410A** and **34411A** high-performance, dual-display DMMs have all of the professional qualities of **mfg. part no. 34401A** plus greatly improved performance, flexibility and speed.

SPECIFICATIONS AT A GLANCE:

Mfg. Part No.	34450A	34401A	34410A	34411A	3458A	34420A
Digits	5½	6½	6½	6½	8½	7½
Dual-Display	●	...	●	●	...	...
Two Channel	...	...	...	...	...	●
AC Voltage	●	●	●	●	●	...
ACV Accuracy	0.2%	0.06%	0.06%	0.06%	0.007%	...
DC Voltage	●	●	●	●	●	●
DCV Accuracy	0.015%	0.0035%	0.0030%	0.0030%	0.0008%	0.003%
AC/DC Current	●	●	●	●	●	●
2-Wire Res.	●	●	●	●	●	●
4-Wire Res.	●	●	●	●	●	●

CONTINUED

DIGITAL MULTIMETERS

34000 SERIES BENCHTOP DIGITAL MULTIMETERS (CONT.)

Mfg. Part No.	34450A	34401A	34410A	34411A	3458A	34420A
Low-Power Resistance	...	...	...	...	...	●
Resistance Accuracy	...	0.010%	0.010%	0.010%	0.0010%	0.006%
Frequency	●	●	●	●	●	...
Period	...	●	●	●	●	...
Ratio	...	...	...	...	...	●
Difference	...	...	...	...	...	●
Continuity	●	●	●	●	...	...
Diode Test	●	●	●	●	...	...
Capacitance	●	...	●	●	...	...
Temperature	Thermistor	...	RTD, Thermistor			Thermocouple, Direct SPRT, RTD, Thermistor
Triggering	...	...	S/W, H/W, Pre-, Post-Trigger, Level	SW or H/W	...	...
Math Functions	...	Null, Limit Test, dB, dBm				
	...	Statistics				
	...	...	...	...	Scale, Offset, Filter	
	...	...	...	...	% Error	Moving Average Filter
Connectivity	RS-232, GPIB	IntuiLink Software, GPIB				
	USB 2.0	RS-232	USB 2.0	USB 2.0	...	RS-232
	...	...	LAN, LXI-C		...	...

Mfg. Part No.	Description	Stock No.	Price Each
34450A	5½ Digit, Benchtop Digital Multimeter	48W1864	813.00
34401A	6½ Digit, Benchtop Digital Multimeter	91F3030	1162.00
34410A	6½ Digit, Next Generation Dual-Display Benchtop Digital Multimeter	60K0566	1407.00
34411A	6½ Digit, High-Performance Dual-Display Benchtop Digital Multimeter	60K0567	2240.00
3458A	8½ Digit, Benchtop Digital Multimeter	92H4778	9586.00
34420A	7½ Digit, Nanovolt/Micro-ohmmeter	95H8766	4357.00
ACCESSORIES			
34161A	Accessory Pouch	91F3034	45.71

(211782)

U3606B MULTIMETER / DC POWER SUPPLY

NEW

KEYSIGHT TECHNOLOGIES

- Combination of a 5.5 digit digital multimeter and 30-W power supply in a single unit
- 10 DMM measurements, including 4-wire miliohm measurement
- 8 built-in math functions
- OVP and OCP for load protection
- Ramp and scan function, and built in square-wave output
- USB 2.0 interface and GPIB connectivity
- Kensington lock slot for security

Mfg. Part No.	U3606B
Display	5-1/2 digits
Resolution	120,000 counts
DC Voltage	Accuracy: 0.025%, Range: 19.9999mV - 1000V
DC Current	Accuracy: 0.05%, Range: 10mA - 3A
Resistance	2-wire Accuracy: 0.05%, Range: 100Ω- 100MΩ
Low Resistance	4-wire Accuracy: 0.25%, Range: 100mΩ- 1000Ω
Diode, Continuity, Capacitance	Yes
True RMS AC Voltage	Accuracy: 0.2%, Range: 100mV - 750V
True RMS AC Current	Accuracy: 0.5%, Range: 10mA - 3A
Frequency	Accuracy: 0.02%, Range: <2Hz - 300kHz

Mfg. Part No.	Description	Stock No.	Price Each
U3606B	U3606B Multimeter / DC Power Supply	06X3054	1260.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
U8201A	Combo Test Lead Kit	10R2318	39.59
34190A	Rack Mount Kit	95B9510	63.33
U8202A	Electronic Test Lead Kit (for DMM function)	10R2319	30.41
34133A	Precision Electronic Test Leads (for DMM function)	27C3791	36.73
34330A	30A Current Shunt (for DMM function)	91F3037	97.04
34136A	40kV High-Voltage Probe (for DMM function)	95H8758	176.00
11059A	Kelvin Probe Set	92F026	179.00

➤ CONTINUED ➤

U3606B MULTIMETER / DC POWER SUPPLY (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
11062A	Kelvin Clip Set (for DMM function)	92F027	47.55
E3600A-100	Test Lead Kit (for DC power supply function)	08N5821	15.95

(211785)

TRUEVOLT SERIES 34460A/34461A DIGITAL MULTIMETERS

KEYSIGHT TECHNOLOGIES

NEW

Display
- Save and document DMM data from your PC, mobile device or IO of choice
- Drag-and-drop USB file transfer – no software required
- Bright, 4.3 inch (109 mm), high-resolution, color graphical display
- Intuitive, menu-driven interface
- I/O: USB, LAN/LXI (Opt on **34460A**), GPIB (Opt on **34460A and 34461A**)
- Front panel USB memory

Measure
- Analog-to-digital converter enables patented metrology grade architecture and digital AC measurements
- Accounts for measurement errors created by real-world factors like power line noise and injected current – so you can be confident in your measurements
- All specifications tested, compliant and guaranteed according to ISO/IEC 17025

Move
- No need to rewrite your software programs with the industry's only 100% drop-in, SCPI compatible replacement for the Agilent **34401A** DMM

The **Truevolt Series** of digital multimeters (DMMs) is the next generation of bench/system DMMs from Agilent. Only with Agilent's Truevolt DMMs can you: 1) Display DMM results in ways you never have before, 2) Measure with unquestioned Truevolt confidence, and 3) Move to the next generation **34401A** DMM with 100% assurance. **34460A** comes with power cord, certificate of calibration (for full accessory kit, order 3446ACCU). **34461A** comes with power cord, certificate of calibration, test lead set, documentation and IO library CD, USB cable.

SPECIFICATIONS

	34460A	34461A
Resolution	6 1/2 digits	
1 Year DCV accuracy	75 ppm	35 ppm
Max reading rate	300 rdgs/s	1k rdgs/s
Memory	1k rdgs	10k rdgs
DCV, ACV	100 mV – 1,000 V	
DCI, ACI	100 uA – 3 A	100 uA – 3 A, 10 A
2-/4-wire resistance	100 Ω – 100 MΩ	
Continuity, diode	Y, 5 V	
Frequency, period	3 Hz – 300 kHz	
Temperature	RTD/PT100, Thermistor	
Display & graphics	Color Graphical Display, Histogram, Bar Chart, Math, Statistics	Color Graphical Display, Histogram, Bar Chart, Trend, Math, Statistics
Rear input terminals	No	Yes
I/O interface	GPIB (optional), USB, LAN/LXI Core (optional)	GPIB (optional), USB, LAN/LXI Core

Mfg. Part No.	Description	Stock No.	Price Each
34460A	Truevolt 34460A 6 1/2 Digit DMM	72W3098	945.00
34461A	Truevolt 34461A 6 1/2 Digit DMM	72W3099	1097.00

(211783)

U3400 SERIES DUAL DISPLAY DIGITAL MULTIMETERS

KEYSIGHT TECHNOLOGIES

- Up to 120,000 counts resolution
- Up to 0.012% DCV accuracy
- 11 basic measurements:
  DC, AC and AC+DC (True RMS) voltage and current
  Selectable 2 or 4-wire resistance (Note: 2-wire only, for **mfg. part no. U3401A**)
  Frequency, continuity and diode tests
- Dual display on bright VFD
- Built-in math functions: dBm, relative, min/max, compare, hold
- Selectable resolutions for variable measurement speeds (**mfg. part no. U3402A** only)
- Kensington lock slot

Mfg. part nos. U3401A and **U3402A** dual-display digital multimeters provide basic capabilities with good performance at 4 1/2 or 5 1/2 digits. PC-grade lock slot for physical security. Benchtop units are ideal for use in educational, electronics and communications applications. Includes quick start guide, product reference CD, certificate of calibration, test lead kit and AC power cord.

DMM SPECIFICATIONS:

Mfg. Part No.	U3401A	U3402A
Display	Dual	
Resolution	50,000 counts	Selectable 120,000, 40,000 or 4,000 counts
DC Voltage	Accuracy: 0.02% Range: 500mV - 1000V	Accuracy: 0.012% Range: 120mV - 1000V
True RMS AC Voltage	Accuracy: 0.35% Range: 500mV - 750V	Accuracy: 0.2% Range: 120mV - 750V
True RMS AC+ DC Voltage	Accuracy: 0.5% Range: 500mV - 750V	Accuracy: 0.2% Range: 120mV - 750V

➤ CONTINUED ➤

U3400 SERIES DUAL DISPLAY DIGITAL MULTIMETERS (CONT.)

Mfg. Part No.	U3401A	U3402A
DC Current	Accuracy: 0.05% Range: 500µA - 10A	Accuracy: 0.05% Range: 12mA - 12A
True RMS AC Current	Accuracy: 0.5% Range: 500µA - 10A	Accuracy: 0.5% Range: 12mA - 12A
True RMS AC+ DC Current	Accuracy: 0.5% Range: 500µA - 10A	Accuracy: 0.5% Range: 12mA - 12A
Resistance	2-wire Accuracy: 0.1% Range: 500Ω - 50MVΩ	Selectable 2- or 4-wire Accuracy: 0.05% (for 4-wire) Range: 120Ω- 120MΩ
Frequency	Accuracy: 0.01% Range: 500Hz - 500kHz	Accuracy: 0.005% Range: 1200Hz - 1MHz
Diode, Continuity	Yes	Yes
Math Functions	dBm, Relative, Min/Max, Compare, Hold, Duty Cycle	dBm, Relative, Min/Max, Compare, Hold
Security	Kensington lock slot	

Mfg. Part No.	Description	Stock No.	Price Each
U3401A	4 1/2 digit Dual Display Digital Multimeter	10R2310	497.00
U3402A	5 1/2 digit Dual Display Digital Multimeter	10R2312	662.00
ACCESSORIES			
U3400A-1CM	Rackmount Kit	10R2308	59.74
U3400A-1CN	Lock Link Kit	10R2309	161.00
U3606A-1CM	Rackmount Kit	10R2316	59.74
U8201A	Combo Test Lead Kit	10R2318	39.59
U8202A	Electronic Test Lead Kit	10R2319	30.41

(211784)

DIGITAL MULTIMETERS

Tektronix

All Models:
- CAT I 1000 V, CAT II 600 V
- Three-year manufacturer's warranty

Mfg. Part No. DMM4020 Only:
- 5.5 digit resolution
- Basic VDC accuracy of up to 0.015% (1 yr.)
- 200 mV to 1000 V voltage range, with up to 10 µV resolution
- 200 µA to 10 A current range, with up to 1 nA resolution
- 200 Ω to 100 MΩ ohm range, with up to 1 mΩ resolution

Mfg. Part Nos. DMM4040 and DMM4050 Only:
- 6.5 digit resolution
- Basic VDC accuracy of up to 0.0024% (1 yr.)
- 100 mV to 1000 V voltage range, with up to 100 nV resolution
- 100 µA to 10 A current range, with up to 100 pA resolution
- 10 Ω to 1 GΩ ohm range, with up to 10 µΩ resolution

Digital multimeters offer a broad range of functions in one easy-to-use instrument. Easily capture, save, and analyze measurement results from your multimeter with the special limited edition of National Instrument's LabVIEW SignalExpress™ software. SignalExpress supports the range of Tektronix bench instruments*, enabling you to connect your entire test bench. This allows you to automate complex measurements requiring multiple instruments, log data for an extended period of time, time-correlate data from multiple instruments, and easily capture and analyze your results, all from your PC. All multimeters include USB to RS-232 interface adapter cable.

Mfg. Part No.	Description	Stock No.	Price Each
DMM4020	5.5 Digit Multimeter	32R7766	849.00
DMM4040	6.5 Digit Multimeter	32R7767	1170.00
DMM4050	6.5 Digit Multimeter	32R7768	1450.00
ACCESSORIES			
TL705	2 x 4 Wire Ohm 1000V Precision Test Lead	32R7769	84.00
TL725	2 x 4 Wire Ohm SMD Test Tweezer Leads	32R7771	112.00
TP750	100 ohm RTD Temperature Probe	32R7772	566.00
RMU2U	Single/Dual Rackmount Shelf Kit	52T3309	152.00

*NI LabVIEW Signal Express™ supports the following Tektronix instruments: MSO/DPO4000/3000/2000 series oscilloscopes, TDS3000C/2000B/1000B series oscilloscopes, AFG3000 series arbitrary/function generators, DMM4050/4040/4020 series digital multimeters.

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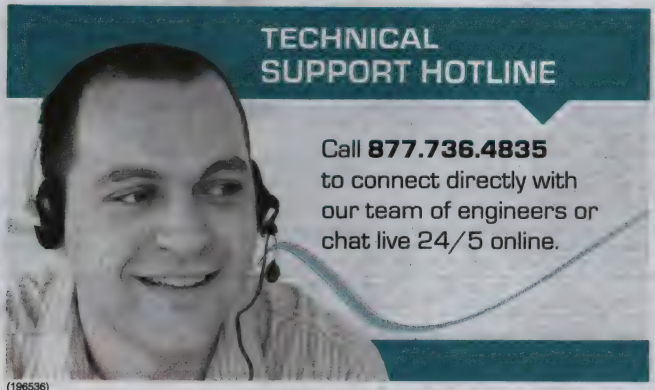


(196536)

BENCHTOP DIGITAL MULTIMETERS

TENMA®

72-1015

72-1020

72-1055

Features:
- Fused current measurement to 10A
- 10MΩ input impedance
- Continuity buzzer
- AC or battery operation
- ideal for the service bench or in the classroom

All digital multimeters measure AC/DC voltage and current, resistance, capacitance and frequency. **Mfg. part no. 72-1015** also measures transistor hFE and temperature. **Mfg. part no. 72-1020** also measures temperature and provides 4–20mA loop testing. **Mfg. part no. 72-1055** also measures transistor hFE and temperature. All models are true RMS (except for **mfg. part no. 72-1055**).

SPECIFICATIONS

Mfg. Part No.	72-1015	72-1020	72-1055
Display Count	5999	40000	1999
No. of Digits	3-3/4	4-1/2	3-1/2
DC Voltage	600mV to 1000V	400mV to 1000V	200mV to 1000V
AC Voltage	600mV to 1000V	4V to 1000V	2V to 1000V
DC Current	600µA to 10A	40µA to 10A	1µA to 100mA
AC Current	600µA to 10A	40µA to 10A	200µA to 10A
Resistance	600ohm to 60Mohm	400ohm to 40Mohm	200ohm to 200Mohm
Capacitance			
Frequency	6kHz to 60MHz	40Hz to 400MHz	2kHz to 200kHz
Temperature	-40°C to +1000°C	-40°C to +1000°C	-40°C to +1000°C
Diode	●	●	●
Continuity	●	●	●
Data Hold	●	●	
Data Store	●	●	
Relative Mode		●	

TRUE RMS
AC or AC+DC TRMS measurement, RS-232 serial interface (includes software and cables), Switchable auto/manual range

Mfg. Part No.	Included Accessories	Stock No.	Price Each
72-1015	Test leads, Alligator clip adapters, Temperature probe, RS-232 & USB interface cables, software	10M9694	182.59
72-1020	Test leads, Alligator clip adapters, Temperature probe, RS-232 and USB interface cables, Software	74M7699	233.59
STANDARD			
72-1055	Test leads, Alligator clip test leads, Temperature probe	80R7462	99.99

(12951)

4050 SERIES DUAL CHANNEL FUNCTION/ARBITRARY WAVEFORM GENERATORS

CE

BK PRECISION

- 14-bit, 125 MSa/s, 16k point arbitrary waveform generator
- Generate sine waves up to 50 MHz
- Large 3.5-inch LCD color display with waveform preview
- Linear and logarithmic sweep
- AM, DSB-AM, ASK, FM, FSK, PM, and PWM modulation functions
- Variable DC offset
- Adjustable duty cycle
- Two independent channels with individual output ON/OFF buttons
- Internal/external triggering
- Gate and burst mode
- 48 built-in predefined arbitrary waveforms
- Store/recall up to 10 instrument settings and 10 arbitrary waveforms
- Built-in counter

4052

- USB device interface and front panel USB host port
- GPIB connectivity with optional USB-to-GPIB adapter
- SCPI-compliant command set
- Arbitrary waveform editing software provided
- Short circuit protection on output

The **4050 Series** Dual Channel Function/Arbitrary Waveform Generators are capable of generating stable and precise sine, square, triangle, pulse, and arbitrary waveforms. With easy-to-read color displays and an intuitive user interface with numeric keypad, these instruments offer plenty of features including linear/logarithmic sweep, built-in counter, extensive modulation and triggering capabilities, a continuously variable DC offset, and a high performance 14-bit, 125 MSa/s arbitrary waveform generator. The main output voltage can be varied from 0 to 10 Vpp into 50 ohms (up to 20 Vpp into open circuit) and the secondary output can be varied from 0 to 3 Vpp into 50 ohms (up to 6 Vpp into open circuit).

Mfg. Part No.	Sine Frequency Range	Square Frequency Range	Stock No.	Price Each
4052	1 µHz - 5 MHz	1 µHz - 5 MHz	85W8913	499.00
4053	1 µHz - 10 MHz	1 µHz - 10 MHz	86W0308	599.00

➤CONTINUED➤

SIGNAL & FUNCTION GENERATORS

4050 SERIES DUAL CHANNEL FUNCTION/ARBITRARY WAVEFORM GENERATORS (CONT.)

Mfg. Part No.	Sine Frequency Range	Square Frequency Range	Stock No.	Price Each
4054	1 µHz - 25 MHz	1 µHz - 25 MHz	86W0309	850.00
4055	1 µHz - 50 MHz	1 µHz - 25 MHz	86W0310	1050.00

(210044)

DDS FUNCTION GENERATORS

BK PRECISION

4005DDS

4045

4084, 4085, 4086, 4087

SPECIFICATIONS

Model	Built-In Waveforms	Arb	Sine	Square	Triangle	Pulse	Ramp
4005DDS	3		X	X	X		
4045	6	X	X	X	X	X	X
4084	27	X	X	X	X	X	X
4085	27	X	X	X	X	X	X
4086	27	X	X	X	X	X	X
4087	27	X	X	X	X	X	X

Mfg. Part No.	Description	Stock No.	Price Each
4005DDS	5MHz DDS Sweep Function Generator	71T7475	309.00
4084	20MHz Programmable DDS Function Generator	54M5388	925.00
4085	40MHz Programmable DDS Function Generator	54M5390	1150.00
4086	80MHz Programmable DDS Function Generator	54M5391	1375.00
4087	120MHz Programmable DDS Function Generator	54M5393	1650.00

(102109)

DDS SWEEP FUNCTION GENERATORS

BK PRECISION

- Linear and logarithmic sweep
- Adjustable duty cycle
- Output On/Off button

4007B / 4013B

- Sine, square, and triangle/ramp waveform generation
- Adjustable DC offset
- Store and recall up to 9 instrument settings
- Overvoltage, overcurrent, and short circuit protection on main output

4007B / 4013B

4014B / 4040B / 4045B

- Sine, square, and triangle/ramp waveform generation (**4014B / 4040B**)
- Sine, square, triangle, and arbitrary waveform generation (**4045B**)
- Bright color LCD display with waveform preview
- AM/FM modulation
- Independent DC offset amplifier design allows large offsets on small amplitude (e.g. 10 mV) waveforms
- Low-jitter square wave generation for simulating reliable clock signals, generating triggers, or validating serial data buses (**4045B**)
- Store and recall instrument settings
- Internal/external triggering
- Gate and burst mode (**4040B / 4045B**)
- Built-in counter
- USB interface with SCPI-compliant command set
- Short circuit and overvoltage protection on all inputs and outputs

DDS SWEEP FUNCTION GENERATOR

Mfg. Part No.	Bandwidth (MHz)	Stock No.	Price Each
4007B	7	46W2362	375.00
4013B	12	46W2363	425.00
4014B	12	46W2364	475.00
4040B	20	46W2365	550.00
DDS SWEEP FUNCTION GENERATOR W/ ARB FUNCTION			
4045B	20	46W2366	750.00

(209452)

ARBITRARY/FUNCTION GENERATORS

BK PRECISION

High performance laboratory grade synthesized function generators with arbitrary capability. Direct digital synthesis (DDS) creates stable, accurate output signals for all 27 built-in standard and complex (arbitrary) waveforms. Built-in 100 MHz universal counter with frequency measurement and totalize function.

SPECIFICATIONS

Mfg. Part No.	Arb	27 Built-In Waveforms	Sine	Square	Triangle	Pulse	Ramp	Stock No.
4084AWG	X	X	X	X	X	X	X	54M5389
4086AWG	X	X	X	X	X	X	X	54M5392

Mfg. Part No.	Description	Stock No.	Price Each
4084AWG	20MHz Arbitrary/Function Generator	54M5389	1295.00
4086AWG	80MHz Arbitrary/Function Generator	54M5392	1895.00

(102108)

FUNCTION AND SWEEP FUNCTION GENERATORS

BK PRECISION

4011A

4040A

SPECIFICATIONS

Mfg. Part No.	Sine	Square	Triangle	TTL	CMOS	Pulse	Ramp	Burst
4010A	X	X	X	X	X	X	X	...
4011A	X	X	X	X	X	X	X	...
4012A	X	X	X	X	X	X	X	...
4017A	X	X	X	X	X	X	X	...
4040A	X	X	X	X	X	X	X	X

Mfg. Part No.	Description	Stock No.	Price Each
4010A	2MHz Function Generator	96B4090	269.00
4011A	5MHz Function Generator	22C6860	355.00
4012A	5MHz Sweep Function Generator	97J8431	395.00
4017A	10MHz Sweep Function Generator	22C6861	439.00
4040A	20MHz Sweep Function Generator	96B4096	669.00

(5299)

AUDIO GENERATOR

BK PRECISION

- Sine and square wave generator
- 20Hz to 150kHz in 46 steps
- Low distortion RC oscillator
- Variable output control
- Compact, fully portable, light weight
- Low battery indicator

Comes with two standard banana plug to insulated clip test leads, 9V battery and instruction manual.

Mfg. Part No.	Description	Stock No.	Price Each
3001	Audio Generator	90F2312	85.00

(202078)

ANALOG PULSE GENERATORS

BK PRECISION

- Internal frequency range: 0.1Hz to 10MHz in 8 decade ranges & variable
- Rate: 100ns to 0.1s
- Internal, external and manual triggering modes
- Pulse width: 50ns to 50ms (6 decade ranges & variable)
- Delay: 0 to 2us variable w.r.t. trigger
- Output polarity: Normal/Inverting
- Pulse out: 0.5V to 5V at 50Ω
- Rise & fall time: 10ns approximately
- Output terminal: BNC connector

4030

Mfg. part no. 4030 is a versatile signal source which combines four functions into one unit – waveform generation, pulse generation (through variable symmetry), frequency sweep operation, and triggered operation. It offers low rise and fall time pulsed signals to meet many test and measurement applications.

Mfg. Part No.	Frequency (MHz)	No. of Channels	Voltage (VAC)	Power (VA)	Stock No.	Price Each
4030	10	1	230	10	81C7888	395.00

(190316)

DIGITAL PULSE GENERATORS

BK PRECISION

- Repetition rate of 0.1Hz to 50MHz
- Flexible trigger modes: Continuous, Triggered (internal, external, manual), Gated Burst and External Width
- Pulse width programmable from 10ns to 10s
- Transition times (rise and fall times) variable from 6ns to 25ms
- Programmable delay and double pulse
- Store up to 99 different test setups with auto retention of last power down setup
- Direct Digital Synthesis
- Closed case calibration
- Graphical LCD Display
- Programmable via GPIB and RS-232
- SCPI compatible

Mfg. part nos. 4033 and 4034 are high performance programmable pulse generators for testing digital systems and circuits based on TTL, CMOS, or ECL technologies. Both instruments generate clean and accurate pulses at up to 6 digits resolution with variable pulse widths from 10ns to 10s and pulse delays from 0ns to 10s. Output levels are adjustable from -10V to +10V, with pulse amplitudes settable from 0.1Vpp to 10Vpp into a 50Ω load. All parameters, modes, and functions are programmable via the front panel or remote control commands. Additionally, the pulse generators provide selectable complementary pulse and double pulse generation in continuous, triggered, gated, and counted burst modes.

Mfg. Part No.	Frequency (MHz)	No. of Channels	Voltage (VAC)	Power (VA)	Stock No.	Price Each
4033	50	1	240	50	99R2386	5250.00
4034	50	2	240	50	99R2387	7950.00

(190426)

FLUKE-271 DIRECT DIGITAL SYNTHESIS (DDS) FUNCTION GENERATOR WITH ARB

FLUKE. Calibration

- Four row alphanumeric LCD
- Arbitrary capability with storage for five user defined waveforms
- Multiple standard and complex waveforms recalled from internal memory
- Extensive modulation capabilities include Sweep, AM, Gating, Trigger/Burst, FSK and Hop
- Variable symmetry, variable duty cycle
- RS-232 and IEEE-488 interfaces

Mfg. part no. 271 is a high-performance function generator using Direct Digital Synthesis (DDS) techniques. Standard waveforms include: sine, square, positive pulse, negative pulse, triangle, ramp up, ramp down. Additionally arbitrary waveforms include multi-level squarewaves, waveform hopping and pseudo-random noise. Extensive modulation capabilities make this a highly versatile signal source. Up to five arbitrary waveforms of 1024 10-bit words can be stored in non-volatile memory. All waveforms can be swept over their full frequency range at a rate variable between 10 milliseconds and 15 minutes. All functions are accessible via the front panel. Size: 3U, 5.11" (130mm) high; half-rack 8.34" (212mm) wide, 12.99" (330mm) deep. Weight: 9 lbs. Power: 110 to 120VAC or 220 to 240VAC +/– 10 %, 50/60Hz AC by internal adjustment. Includes user manual, power cord. *Order* **mfg. part no. Y200H** *19" rack mounting kit separately below.* Also available, **mfg. part no. SW200ARB** Window®-based Waveform Manager Plus software, allows advanced waveform creation, editing and management; *order separately, go online or call.*

SPECIFICATIONS	
Frequency Range	0.0MHz to 10MHz
Frequency Resolution	7 Digits or 0.1MHz
Output Impedance	50Ω or 600Ω Switchable
Amplitude	5mV to 20V pk-pk Open Circuit (2.5mV to 10V into 50Ω/600Ω) Output can be specified as V-H: 2

Mfg. Part No.	Description	Stock No.	Price Each
271-U 115V	Direct Digital Synthesis (DDS) Function Generator with ARB	43K0433	1845.00

(85277)

280 SERIES ARBITRARY WAVEFORM GENERATORS

FLUKE. Calibration

281

284

- Choice of 1, 2 and 4 independent or linked channels
- Uses Direct Digital Synthesis (DDS) techniques
- 40MS/s max. sampling speed
- 16MHz function generator
- 10MHz pulse generator
- Pulse train pattern generator
- 12-bit arbitrary generator
- Link 16 (max.) arbitrary waveforms in a sequence
- Powerful modulation capabilities
- Built-in trigger generators
- Multi-channel phase locking and summing
- Waveform Manager Plus for Windows® software included
- Multiple standard waveforms recalled from internal memory
- RS-232 and IEEE-488 interfaces

280 series universal waveform generators combine many generators in one instrument. Their extensive signal simulation capabilities include arbitrary waveforms, function generator, pulse/pulse train generator, sweep generator, trigger generator, tone generator, and amplitude modulation source. These waveform generators use Direct Digital Synthesis (DDS) techniques and variable clock sampling technology to provide a fully featured programmable function and arbitrary waveform capability. Standard waveforms include: sine, square, triangle, dc, positive ramp, negative ramp, sine(x)/x, pulse, pulse train, cosine, haversine and havercosine. By using the Versatile Pulse generator capabilities each channel can generate complex pulse trains. Fully programmable via RS-232 or IEEE-488 interfaces. All functions are accessible via the front panel. Size: 3U, 5.11" (130mm) high; half-rack 8.34" (212mm) wide, 12.99" (330mm) deep. Weight: 9 lbs. Power: 110 to 120VAC or 220 to 240VAC +/– 10%, 50/60Hz AC by internal adjustment. Includes power cord, user manual, and Window®-based **mfg. part no. SW200ARB** Waveform Manager Plus software, that allows advanced waveform creation, editing and management. *Order* **mfg. part no. Y200H** or **Y200F** *19" rack mounting kit separately below.*

CONTINUED

280 SERIES ARBITRARY WAVEFORM GENERATORS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
281-U 115V	1-Channel Arbitrary Waveform Generator	43K0434	2455.00
282-U 115V	2-Channel Arbitrary Waveform Generator	43K0435	4180.00
284-U 115V	4-Channel Arbitrary Waveform Generator	43K0436	6720.00

(85278)

290 SERIES WAVEFORM GENERATORS

FLUKE. Calibration

291

292-294

- Choice of 1, 2 and 4 independent or linked channels
- 100 MS/s 12-bit arbitrary waveform capability
- 1M point waveform memory
- 40 MHz function generator capabilities using DDS (50MHz for square waves)
- 10ns pulse pattern generator
- Waveform sequencing with up to 1024 segments
- Unlimited waveform storage using CF® memory card
- Waveform Manager Plus software for Windows
- USB interface in addition to RS-232 and GPIB

290 series uses Direct Digital Synthesis techniques and variable clock sampling technology to provide fully featured programmable function and arbitrary waveform capability, combining many generators into one instrument. Signal simulation capabilities include arbitrary waveforms, function generator, pulse/pulse train generator, sweep generator, trigger generator, tone generator, and amplitude modulation source. Maximum arbitrary waveform size is 1 M points. Up to 500 user-defined waveforms may be stored on the removable memory card. Arbitrary waveforms can be defined by front panel editing controls, by downloading of waveform data via RS-232,USB or GPIB, or by writing directly to the removable memory card using the USB card reader/writer connected to a PC. Waveforms: Sine, square, triangle, DC, positive ramp, negative ramp, sin(x)/x, pulse, pulse train, cosine, haversine and havercosine.

Mfg. Part No.	Description	Stock No.	Price Each
291-U 115V	1-Channel 100 MS/s Arbitrary Waveform Generator	61M3743	4065.00
292-U 115V	2-Channel 100 MS/s Arbitrary Waveform Generator	61M3744	6150.00
294-U 115V	4-Channel 100 MS/s Arbitrary Waveform Generator	61M3745	8930.00

(102973)

AFG-3000 SERIES ARBITRARY FUNCTION GENERATORS

CE GW INSTEK Simply Reliable

- Wide frequency range from 1uHz to 80/50MHz
- High 200MSa/s sampling rate
- 16-bit Amplitude Resolution
- Output from any section of 1M-point-long waveforms
- 4.3" high resolution LCD display/on-screen help/ Impedance switch
- Four ways to generate arbitrary waveforms: Front Panel Operation, CSV file uploading, Direct Waveform Reconstruction (DWR), Arbitrary Waveform Editing PC Software
- USB, RS-232, GPIB interface support

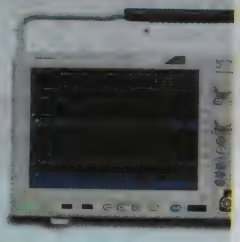
The **AFG-3000 Series** is arbitrary waveform generator designed for industrial, scientific research and educational applications. The series comes in bandwidths of 80MHz (**AFG-3081**) and 50MHz (**AFG-3051**) with built-in multiple standard waveforms to meet users' diversified needs. The **AFG-3000 Series** also provides a high 16 bit resolution, 200MSa/s sample rate and a 1M memory depth for editing arbitrary waveforms directly through the intuitive user interface. The Direct Waveform Reconstruction (DWR) function enables users to directly import waveforms from a **GDS-2000 Series** oscilloscope to the **AFG-3000** via USB host, allowing users to edit waveforms and enhance measurement efficiency.

Mfg. Part No.	Description	Stock No.	Price Each
AFG-3051	50MHz Arbitrary Function Generator	91R2033	1800.00
AFG-3081	80MHz Arbitrary Function Generator	79T9500	2700.00

(210127)

CALIBRATION SERVICES

From pre-calibration to re-calibration, we bring you competitive pricing with quick delivery.



(207665)

SIGNAL & FUNCTION GENERATORS

50MHZ ARBITRARY WAVEFORM / FUNCTION GENERATOR

KEITHLEY

- 50MHz sine wave frequency
- 25MHz square wave frequency
- Arbitrary waveform generator with 256k-point, 14-bit resolution
- Built-in function generator capability includes: sine, square, triangle, noise, DC, etc.
- Precision pulses and square waves with fast (5ns) rise/fall times
- Built-in 10MHz external-time base for multiple unit synchronization
- Built-in AM, FM, PM, FSK, PWM modulation
- Frequency sweep and burst capability
- Waveform creation software, KiWAVE, included
- LXI Class C compliance

Model 3390 is an easy-to-use programmable signal generator with advanced function, pulse, and arbitrary waveform capabilities. Superior signal integrity, faster rise and fall times, lower noise, and greater waveform memory combine to provide high quality output signals. High resolution waveforms are supported by four times the waveform memory of any competitive waveform generator on the market. From its fully featured arbitrary waveform generator (ARB) to its high speed and ease-of-use, the **Model 3390** is a complete signal generation solution for all your waveform application needs up to 50MHz.

Mfg. Part No.	Description	Stock No.	Price Each
3390	50MHz Arbitrary Waveform/Function Generator	58T8433	1780.00

(197674)

33500B SERIES WAVEFORM GENERATORS

KEYSIGHT TECHNOLOGIES

- 8 upgradable models in 20 & 30MHz
- Sine waves with 5x lower harmonic distortion
- Higher bandwidth pulses with 10x less jitter
- Point-by-point arbitrary waveforms with sequencing
- 16-bit resolution with 1mV to 10V ranges
- LAN (LXI-C), USB, and GPIB are standard in all models
- Non-Arb models can be upgraded to Arb
- Memory options only available on non-Arb models
- Models with Arb include 1M memory and embedded editor (also applies to models upgraded to Arb)
- 1-channel models can NOT be upgraded to 2-channel
- MEM option is for 16M samples per channel

33500B Series waveform generators is the first in its class with Agilent's exclusive waveform technology. Agilent Trueform Ttechnology is the next generation in waveform signal creation and provides superior performance over previous waveform technology. This technology has more ability, fidelity, and choice than traditional DDS generators by offering the lowest jitter, lowest harmonic distortion and true point true point-by-point arbitrary waveforms. **33500B Series** comes in 8 different models with various configurations: 20 or 30 MHz, 1- or 2-channels, with Arb or without Arb and all models come with a large color display, embedded waveform editor, and CD with BenchLink Waveform Builder Pro Software 30-day trial. The 2-channel model has a flexible dual-channel mode with frequency and amplitude coupling, differential channels, and combined output channels. Upgrades available; *go online or call.*

Mfg. Part No.	Bandwidth (MHz)	No. of Channels	With Arb	Stock No.	Price Each
33509B	20	1	No	94T6987	1710.00
33510B	20	2	No	94T6988	2612.00
33511B	20	1	Yes	94T6989	2021.00
33512B	20	2	Yes	94T6990	3058.00
33519B	30	1	No	94T6991	1918.00
33520B	30	2	No	94T6992	2928.00
33521B	30	1	Yes	94T6993	2228.00
33522B	30	2	Yes	94T6994	3369.00

(211823)

33502A 2-CHANNEL 50Vpp ISOLATED AMPLIFIERS

KEYSIGHT TECHNOLOGIES

- Full-power BW 100kHz @ 50Vpp
- Small-signal BW> 300kHz
- Slew rate 20V/µs min.
- THD+N < 0.01% @ 10kHz, 40Vpp
- Output drive 200mA max.
- Isolation floats ±42Vpk to earth

Mfg. part no. 33502A is a dual-channel, high voltage output amplifier. It has an isolated analog front end with up to 50 Vpp (±25 V) output voltage range. It is also a very low-distortion amplifier with < 0.01% @ 10 kHz and 40 Vpp. **Mfg. part no. 33502A** is designed to work as a companion for function generators to offer low-distortion, higher voltage outputs. It is configured with LAN (LXI Class-C compliant) and USB interfaces to meet your computer IO needs. **Mfg. part no. 33502A** provides both a programmable interface and a softkey-driven front panel for flexibility in configuring.

Mfg. Part No.	Description	Stock No.	Price Each
33502A	Isolated Amplifier, 2-ch 50 Vpp	51R1557	2818.00
33502A/001	Isolated Amplifier, 2-ch 50 Vpp, Rear Output Channels	51R1558	3022.00

(211824)

33600A SERIES TRUEFORM WAVEFORM GENERATORS

NEW

KEYSIGHT TECHNOLOGIES

- 80 and 120 MHz, 1- and 2-channel models
- 2-channnel coupling and synchronization
- Trueform waveforms sequencing
- PRBS serial patterns
- Superior signal integrity with Trueform technology provides the lowest jitter and lowest distortion
- Flexibility to select needed functionality from four new value-priced models, with the ability to upgrade later when your needs change
- Superior user experience with intuitive front panel, complimentary software and localized online help and access to manuals from mobile devices
- Up to 120 MHz sine wave
- Up to 100 MHz pulse
- 1 GSa/s sampling rate
- 14-bit amplitude resolution
- Up to 64 MSa per channel arb memory
- Low jitter: 1 ps, low phase noise: –125 dBc/Hz
- Low harmonic and spurious distortion

Agilent's **33600A Series** of waveform generators with exclusive Trueform Technology offer more capability, fidelity and flexibility than previous generation DDS waveform generators. Four new upgradeable models are available at 80 and 120 MHz with 1- and 2-channels. The **33600A Series** offers a full set of standard features and an optional baseband I-Q signal player.

Mfg. Part No.	Bandwidth	No. of Channels	Stock No.	Price Each
33611A	80MHz	1	29X7419	4003.00
33612A	80MHz	2	29X7420	5706.00
33621A	120MHz	1	29X7421	4704.00
33622A	120MHz	2	29X7422	6708.00

(211825)

FUNCTION/ARBITRARY WAVEFORM GENERATORS

KEYSIGHT TECHNOLOGIES

33210A / 33220A / 33250A

- 10 standard waveforms with sine and square to 10MHz, 20MHz, 30 MHz or 80MHz
- Arbitrary waveforms at 50 MSa/s, 250 MSa/s or 200 MSa/s
- Custom waveform generation
- Direct Digital Synthesis for excellent stability
- Built-In Linear and Log Sweeps, AM, FM, FSK and Burst Modulation
- THD less than 0.04% and flatness as low as ±0.1dB

Mfg. part nos. 33210A, 33220A and **33250A** give you 10 standard waveforms and the ability to create versatile arbitrary waveforms, with 14-bit resolution. In addition, **mfg. part nos. 33210A, 33220A** and **33250A** can be used as a pulse generator with variable edge time. Built-in modulation capabilities and both linear and log sweeps do not require additional function generators. External clock-reference timebase increases frequency stability while letting you generate precise phase-offset signals, phase-lock to another function generator, or to a 10 MHz frequency standard. All include software to create and edit waveforms as standard. **Mfg. part no. 33220A** includes GPIB, LAN and USB interfaces. **Mfg. part no. 33210A** and **33250A** include GPIB interface. The 33500 series function/arbitrary waveform generators have < 40 ps jitter for any signal.

Mfg. Part No.	Freq. (MHz)	Channels	Sample Rate (MSa/s)	Features	Stock No.	Price Each
33210A	10	1	50	...	02P0684	1323.00
33210A /002	7	1	50	8K-Point Arbitrary Waveform Generator	02P0686	1728.00
33210A /001	7	1	50	External Timebase Reference	02P0685	1728.00
33220A	20	1	50	...	95H9608	2492.00
33250A	80	1	200	...	31C6221	4962.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
34161A	Accessory Pouch	91F3034	45.71

(211828)

N9310A 9 kHz to 3 GHz RF SIGNAL GENERATOR

KEYSIGHT TECHNOLOGIES

- 9 kHz to 3 GHz CW output, 20 Hz to 80 kHz low frequency (LF) output
- -127 to +13 dBm output level range (maximum +20 dBm settable)
- -95 dBc/Hz SSB phase noise
- Full sweep function: RF (9 kHz to 3 GHz) /Amplitude (-127 to +13 dBm), LF (20 Hz to 80 kHz)
- Extensive analog modulation: AM, FM, Phase, and Pulse modulation
- Optional IQ modulator, 40 MHz bandwidth
- Intuitive GUI offering 11 languages
- Standard USB connectivity for test automation and memory stick support
- SCPI command set for remote control

Mfg. part. no. N9310A RF Signal Generator features 9 kHz to 3 GHz with 0.1 Hz resolution and generates CW, analog modulated (AM/FM/∅M) and pulse modulated signals. Wide bandwidth (40 MHz) IQ modulator enables digital modulated signals such as GSM, CDMA, OFDM from custom IQ signals. Easy programmable control for automation, either SCPI command or with Virtual Panel software in PC environment. Multi-language UI and USB connectivity for easy operation and data storage.

Bandwidth	Phase Noise	Output Power Range
9 kHz to 3 GHz CW, 20 Hz to 80 kHz low frequency (LF)	-95 dBc/Hz	-127 to +13 dBm

➤CONTINUED➤

N9310A 9 kHz to 3 GHz RF SIGNAL GENERATOR (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
N9310A	RF Signal Generator 9 kHz to 3 GHz	21M4619	7824.00

(211832)

USB MODULAR FUNCTION GENERATORS

KEYSIGHT TECHNOLOGIES

- 20 MHz sine and square waveforms
- Ramp, triangle and DC waveforms
- Pulse generation edge
- Arbitrary waveform (14-bit, 64K points 50 MSa/s)
- 14-bit, 50 MSa/s, 64 Kpoint arbitrary waveforms
- AM, FM, PM, ASK, FSK, PSK modulation types
- High-speed USB 2.0 (480Mbits/s) TMC 488.2 compliant
- Standalone or modular capabilities; Requires U2781A for modular capability

The U2761A signal generator offers 10 standard waveforms plus pulse and arbitrary waveforms generation capabilities. It uses the common non-proprietary standard high-speed USB 2.0 interface that provides ease of connectivity - allowing users to set up and configure their test swiftly with the plug and play feature. It comes bundled with the Agilent Measurement Manager for quick setup to perform measurement. Users are able to customize waveform by drawing in the arbitrary waveform editor.

Mfg. Part No.	Description	Stock No.	Price Each
U2761A	USB Modular Function Generator, 20 MHz	05N1306	1863.00

(211834)

AFG2021 ARBITRARY / FUNCTION GENERATOR

Tektronix

- 20 MHz sine, 10 MHz square and pulse waveforms provide coverage for your most common applications
- 250 MS/s sampling rate and 14-bit vertical resolution enable the creation of high-fidelity signals
- The innovative UI reduces setup and evaluation time with direct access to frequently used functions and parameters
- The internal 4 × 128 kS memory and the USB memory expansion capability provide substantial capacity for defining complex waveforms
- USB remote control port and USB flash drive port are included. GPIB and LAN interfaces are available as an option

- Built-in Modulation, Noise Generator, Burst, and Sweep modes for greater versatility
- Built-in waveforms provide quick access to commonly used signals
- Large 3.5 inch color screen displays both graphical and numeric waveform information simultaneously
- Menu and online help in 8 languages
- 2U height and half-rack width fits both benchtop and rack-mounted applications
- Free ArbExpress software makes waveform editing and downloading extremely easy
- Free SignalExpress software combines Tektronix bench instruments into a low-cost solution for automatic testing

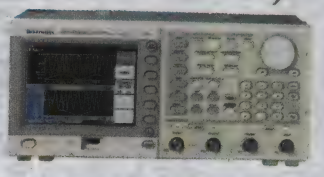
Mfg. Part No.	Description	Stock No.	Price Each
AFG2021	Arbitrary/Function Generator	05W5104	1590.00
AFG2021/GL	Arbitrary/Function Generator (GPIB and LAN Interfaces)	05W5105	1690.00

(209482)

AFG3000C SERIES ARBITRARY FUNCTION GENERATORS

Tektronix

- 10 MHz, 25 MHz, 50 MHz, 100 MHz, or 240 MHz Sine Waveforms
- 14 bits, 250 MS/s, 1 GS/s, or 2 GS/s Arbitrary Waveforms
- Amplitude up to 20 Vp-p into 50 Ω Loads
- 5.6 in. Color TFT LCD Display for Full Confidence in Settings and Waveform Shape
- Multilanguage and Intuitive Operation Saves Setup Time
- Pulse Waveform with Variable Edge Times
- AM, FM, PM, FSK, PWM
- Sweep and Burst
- Dual-channel Models Save Cost and Bench Space
- USB Connector on Front Panel for Waveform Storage on Memory Device
- USB, GPIB, and LAN
- LabVIEW and LabWindows/IVI-C Drivers



Unmatched performance, versatility, intuitive operation, and affordability make the **AFG3000C Series** of Function, Arbitrary Waveform, and Pulse Generators the most useful instruments in the industry. Users can choose from 12 different standard waveforms. Arbitrary waveforms can be generated up to 128 K in length at high sampling rates. On pulse waveforms, leading and trailing edge time can be set independently. External signals can be connected and added to the output signal. Dual-channel models can generate two identical or completely different signals. All instruments feature a highly stable time base with only ±1 ppm drift per year. Color TFT LCD screen on all models shows all relevant waveform parameters and graphical wave shape at a single glance. This gives full confidence in the signal settings and lets you focus on the task at hand. Shortcut keys provide direct access to frequently used functions and parameters. Others can be selected conveniently through clearly structured menus. This reduces the time needed for learning and relearning how to use the instrument. Look and feel are identical to the world's most popular **TDS3000** Oscilloscopes. With this PC software waveforms can be seamlessly imported from any Tektronix oscilloscope, or defined by standard functions, equation editor, and waveform math.

Mfg. Part No.	No. of Channels	Sine (MHz)	Pulse (MHz)	Arb Sample Rate	Output Voltage (p-p)	Stock No.	Price Each
AFG3011C	1	10	5	250 MS/s	20mV-20V	46W2420	4220.00
AFG3021C	1	25	12.5	250 MS/s	10mV-10V	46W2422	1890.00
AFG3022C	2	25	12.5	250 MS/s	10mV-10V	46W2423	2790.00

➤CONTINUED➤

AFG3000C SERIES ARBITRARY FUNCTION GENERATORS (CONT.)

Mfg. Part No.	No. of Channels	Sine (MHz)	Pulse (MHz)	Arb Sample Rate	Output Voltage (p-p)	Stock No.	Price Each
AFG3051C	1	50	25	1 GS/s	10mV-10V	46W2424	2590.00
AFG3052C	2	50	12.5	250 MS/s	10mV-10V	46W2425	3830.00
AFG3101C	1	100	50	1 GS/s	20mV-10V	46W2426	4290.00
AFG3102C	2	100	25	250 MS/s	20mV-10V	46W2427	6090.00
AFG3251C	1	240	120	2 GS/s	50mV-5V	46W2428	9140.00
AFG3252C	2	240	60	250 MS/s	50mV-5V	46W2429	12600.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
RM3100	Rack Mount Kit	54K5085	450.00
013034500	Fuse Adapter, BNC Plug to BNC Jack	58K0057	329.00
159045400	Fuse Set, 3 Pieces, 125mA, 125V	58K0076	24.00
012048200	Cable Assembly, BNC Plug to BNC Plug, Shielded, 3-ft.	11B2576	233.00

(208889)

SERIES 2400 GENERAL PURPOSE SOURCEMETER® INSTRUMENTS

CE KEITHLEY

- Five instruments in one (IV Source, IVR Measure)
- Source and sink (4-quadrant) operation
- 0.012% basic measure accuracy with 6½ digit resolution
- 2-, 4-, and 6-wire remote V-source and measure sensing
- 1700 readings/second at 4½ digits via GPIB
- Pass/Fail comparator for fast sorting/binning
- Available high speed sense lead contact check function
- Programmable DIO port for automation/handler/prober control (except **Model 2401**)
- Standard SCPI GPIB, RS-232 and Keithley Trigger Link interfaces
- Keithley LabTracer 2.0 I-V curve tracing application software (download)

Designed specifically for test applications that demand tightly coupled sourcing and measurement. All **SourceMeter** models provide measurement capabilities as well as precision voltage and current sourcing. Each **SourceMeter** instrument is both a true instrument-grade 6½ digit multimeter and a highly stable DC power source. The power source characteristics include low noise, precision, and readback. The multimeter capabilities include high repeatability and low noise. The result is a compact, single-channel, DC parametric tester. In operation, these instruments can act as a voltage source, a current source, a voltage meter, a current meter, and an ohmmeter. Manufacturers of components and modules for the communications, semiconductor, computer, automotive, and medical industries will find the **SourceMeter** instruments invaluable for a wide range of characterization and production test applications.

Model	2400	2401	2410	2420	2430	2440
Power Output:	22W	22W	22W	66W	1100W	55W
Current Min:	±10pA	±10pA	±10pA	±100pA	±100pA	±100pA
Current Max:	±1.05A	±1.05A	±1.05A	±3.15A	±10.5A	±5.25A
Voltage Min:	±1uV	±1uV	±1uV	±1uV	±1uV	±1uV
Voltage Max:	±21V/±210V	±21V/±210V	±1100V	±63V	±105V	±42V
Ohms Range:	<0.2Ω to >200MΩ					
Accuracy I:	0.035%	0.035%	0.035%	0.035%	0.035%	0.035%
Accuracy V:	0.015%	0.015%	0.015%	0.015%	0.015%	0.015%
Accuracy Ω:	0.06%	0.06%	0.07%	0.06%	0.06%	0.06%

Mfg. Part No.	Description	Stock No.	Price Each
2400	200V, 1A, 20W SourceMeter Instrument	41J2103	4600.00
2401	20V, 1A, 20W SourceMeter Instrument	64T2777	3370.00
2410	1100V, 1A, 20W SourceMeter Instrument	19K4451	6590.00
2420	60V, 3A, 60W SourceMeter Instrument	30K6552	6560.00
2430	100V, 10A, 1000W Pulse Mode SourceMeter Instrument	16R1055	11500.00
2440	40V, 5A, 50W SourceMeter Instrument	59T7677	7500.00

(198546)

2450 SOURCEMETER® SMU INSTRUMENT

NEW KEITHLEY

- Capabilities of analyzers, curve tracers, and I-V systems at a fraction of their cost.
- Five-inch, high resolution capacitive touchscreen GUI
- 0.012% basic measure accuracy with 6xxx-digit resolution
- Enhanced sensitivity with new 20mV and 10nA source/measure ranges
- Source and sink (4-quadrant) operation
- Four "Quickset" modes for fast setup and measurements
- Built-in, context-sensitive front panel help
- Front panel input banana jacks; rear panel input triaxial connections
- 2450 enhanced SCPI and TSP® scripting programming modes
- Model 2400 SCPI-compatible programming mode
- Front panel USB memory port for data/programming/configuration I/O

The **Model 2450** is Keithley's next-generation SourceMeter source measure unit (SMU) Instrument that truly brings Ohm's law (current, voltage, and resistance) testing right to your fingertips. Its innovative graphical user interface (GUI) and advahced, capacitive touchscreen technology allow intuitive usage and minimize the learning curve to enable engineers and scientists to learn faster, work smarter, and invent easier. The **2450** is the SMU for everyone: a versatile instrument, particularly well-suited for characterizing modern scaled semiconductors, nano-scale devices and materials, organic semiconductors, printed electronics, and other small-geometry and low-power devices. All this combined with Keithley SMU precision and accuracy allow users to Touch, Test, InventTM with the new favorite go-to instrument in the lab for years to come.

➤CONTINUED➤

SOURCE MEASURE METERS

2450 SOURCEMETER® SMU INSTRUMENT (CONT.)

Model	2450
Power Output:	20W
Current Min:	±10nA
Current Max:	±1A
Voltage Min:	±20mV
Voltage Max:	±200V
Ohms Range:	<2Ω to >200MΩ
Basic Accuracy:	0.012%

Mfg. Part No.	Description	Stock No.	Price Each
2450	200V, 1A, 20W SourceMeter Instrument	88W3815	5400.00

(210805)

SERIES 2600A / 2600B SYSTEM SOURCEMETER® INSTRUMENTS

CE KEITHLEY

- Combines a power supply, true current source, DMM, arbitrary waveform generator, V or I pulse generator with measurement, electronic load, and trigger controller (**2600A**)
- Tightly-integrated, 4-quadrant voltage/current source and measure instruments offer best in class performance with 6-1/2 digit resolution (**2600B**)
- Family of products offers wide dynamic range: 1fA to 10A and 1uV to 200V (**2600A**) 10A pulse to 0.1fA and 200V to 100nV (**2600B**)
- Built-in, Java-based test software enables true plug & play I/V characterization and test through any browser (**2600B**)
- 20,000 rdg/s provides faster test times and ability to capture transient device behavior (**2600A**)
- Precision timing and channel synchronization (<500ns) (**2600A**)
- USB port for saving data and test scripts (**2600A**)
- LXI Class C compliance supports high speed data transfer and enables quick and easy remote testing, monitoring, and troubleshooting
- Software: TSP® Express for quick and easy I-V test (embedded); ACS Basic Edition for semiconductor component characterization (optional)

2601B

2651A

Series 2600A System SourceMeter® instruments are for use as either a bench-top I-V characterization tool or as a building block component of multi-channel I-V test systems. For bench-top use, **Series 2600A** instruments feature an embedded TSP® Express Software Tool that allows users to quickly and easily perform common I-V tests without programming or installing software. For system level applications, **Series 2600A** Test Script Processor (TSP®) architecture along with new capabilities such as parallel test execution and precision timing provides the highest throughput in the industry to lower the cost of test. **Series 2600B** offers single- and dual-channel models that combine the capabilities of a Precision Power Supply, true Current Source, 6½ digit DMM, Arbitrary Waveform Generator, Pulse Generator, and Electronic Load all into one tightly integrated instrument.

	2651A
Description:	High power
Power Output:	2,000W pulsed/200W DC
Current Min:	±1pA
Current Max:	±50A (±100A when 2 units connected in parallel)
Voltage Min:	±1uV
Voltage Max:	±40V (±80V when 2 units connected in series)
Accuracy I:	±0.02%
Accuracy V:	±0.015%

	2601B	2602B	2604B	2611B	2612B	2614B/2634B	2635B/2636B
Description:	Single Channel	Dual Channel	Dual Channel, Bench Top	Single Channel	Dual Channel	Dual Channel, Bench Top	Low Current
Power Output:	30-40W	30-40W / channel		30-40W	30-40W / channel		2000W pulse/ 200W DC
Current Min:	100fA					0.1fA for 2634B 100fA for 2614B	0.1fA
Current Max:	10A pulse						
Voltage Min:	100nV						
Voltage Max:	40V			200V			
Accuracy I:	0.02%	±0.02%		0.02%		±0.02%	0.02%
Accuracy V:	0.015%	±0.015%		0.015%		±0.015%	0.015%

Mfg. Part No.	Description	Stock No.	Price Each
2651A	High Power System SourceMeter® Instrument	59T7814	15800.00
2601B	Single-channel System SourceMeter Instrument (3A DC, 10A Pulse)	44W8033	6490.00
2602B	Dual-channel System SourceMeter Instrument (3A DC, 10A Pulse)	44W8034	9520.00
2604B	Dual-channel System SourceMeter Instrument (3A DC, 10A Pulse, Benchtop Version)	44W8035	7890.00
2611B	Single-channel System SourceMeter Instrument (200V, 10A Pulse)	44W8036	6490.00
2612B	Dual-channel System SourceMeter Instrument (200V, 10A Pulse)	44W8037	9520.00
2614B	Dual-channel System SourceMeter Instrument (200V, 10A Pulse, Benchtop Version)	44W8038	7890.00
2634B	Dual-channel System SourceMeter Instrument (0.1fA, 10A Pulse, Benchtop Version)	44W8039	12400.00
2635B	Single-channel System SourceMeter Instrument (0.1fA, 10A Pulse)	44W8040	9670.00
2636B	Dual-channel System SourceMeter Instrument (0.1fA, 10A Pulse)	44W8041	14900.00

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LOW CURRENT METERS

KEITHLEY

- 10fA resolution (**Model 6485, 6487**), 1fA resolution (**Model 6482**)
- 5½ digit resolution (**Model 6485, 6487**), 6½ digit resolution (**Model 6482**)
- Dual ±30V bias sources (**Model 6487, 6482**)
- <200uV burden voltage (**Model 6485, 6487**)
- Up to 1000 readings/second (**Model 6485, 6487**)
- Built-in Model 485 emulation mode (**Model 6485**)
- Built-in Model 486 and 487 emulation mode (**Model 6487**)
- Alternating Voltage method ohms measurements (**Model 6487**)
- Automated voltage sweeps for I-V characterization (**Model 6487**)
- Floating measurements up to 500V (**Model 6487**)
- IEEE-488 and RS-232 interfaces
- Analog output
- Digital I/O (**Model 6487, 6482**)

6487

6485

Model 6485 Picoammeter combines Keithley's expertise in sensitive current measurement instrumentation with enhanced speed and a robust design. With eight current measurement ranges and high speed autoranging, this cost-effective instrument can measure currents from 20fA to 20mA, taking measurements at speeds up to 1000 readings per second. **Model 6487** Picoammeter/Voltage Source improves on the measurement capability of **Model 6485**, and adds a high resolution 500V source. It provides higher accuracy and faster rise times, as well as a damping function for use with capacitive devices. In addition, **Model 6487** source voltage from 200uV to 505V. **Model 6482** is a great measurement tool for analyzing multi-channel devices, monitoring currents in multiple locations on materials, and recording data from multiple sensors at once.

MODEL	6485	6487	6482
Power:	100–120V or 220–240V, 50–60Hz, (30VA)	100–120V or 220–240V, 50–60Hz, (50VA)	100, 120, 220, 240V, 50–60Hz, (50VA)
Current Range:	2nA–20mA		
Storage Buffer:	2500 points	3000 points	6000 readings (two 3000 point)
Best V Source Resolution:	...	0.2 mV	...
Dimensions (H x W x D):	90 × 214 × 369mm (3.5 × 8.325 × 14.5625")		89× 213 × 370mm (3.5 × 8.4 × 14.6")

Mfg. Part No.	Description	Stock No.	Price Each
6485	Picoammeter	42J5237	1780.00
6487	Picoammeter / Voltage Source	32M6464	3890.00
6482	Dual-Channel Picoammeter / Voltage Source	44W8042	3970.00

(197891)

CURRENT SOURCES

KEITHLEY

6220 and 6221

- Source and sink (programmable load) 100fA to 100mA
- 1014W output impedance ensures stable current sourcing into variable loads
- 65000-point source memory allows executing comprehensive test current sweeps directly from the current source
- Built-in RS-232, GPIB, Trigger Link, and digital I/O interfaces
- Reconfigurable triax output simplifies matching the application's guarding requirements
- Model 220 emulation mode eliminates need to reprogram existing applications

6221

6221 Only

- Source AC currents from 4pA to 210mA peak to peak for AC characterization of components and materials; the 6221's 10MHz output update rate generates smooth sine waves up to 100kHz
- Built-in standard and arbitrary waveform generators with 1mHz to 100kHz frequency range; applications include use as a complex programmable load or sensor signal and for noise emulation
- Programmable pulse widths as short as 5us, limiting power dissipation in delicate components; supports pulsed I-V measurements down to 50us when used with Model 2182A Nanovoltmeter
- Built-in Ethernet interface for easy remote control without a GPIB controller card

Model 6220 DC Current Source and **Model 6221** AC and DC Current Source combine ease of use with exceptionally low current noise. Low current sourcing is critical to applications in test environments ranging from R&D to production, especially in the semiconductor, nanotechnology, and superconductor industries. High sourcing accuracy and built-in control functions make the **Models 6220** and **6221** ideal for applications like Hall measurements, resistance measurements using delta mode, pulsed measurements, and differential conductance measurements.

Mfg. Part No.	Current Type	Current Range	Stock No.	Price Each
CURRENT SOURCE				
6220	DC		43K0016	3660.00
6221	AC / DC	±2nA to ±100mA	54K3077	4870.00
CURRENT SOURCE AND NANOVOLTMETER				
6220/2182A	DC	±2nA to ±100mA	59T8560	6490.00

(197890)

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(212567)

NANOVOLTMETER

KEITHLEY

- Make low noise measurements at high speeds, typically just 15nV p-p noise at 1s response time, 40–50nV p-p noise at 60ms
- Delta mode coordinates measurements with a reversing current source at up to 24Hz with 30nV p-p noise (typical) for one reading. Averages multiple readings for greater noise reduction
- Synchronization to line provides 110dB NMRR and minimizes the effect of AC common-mode currents
- Dual channels support measuring voltage, temperature, or the ratio of an unknown resistance to a reference resistor
- Built-in thermocouple linearization and cold junction compensation

The two-channel **Model 2182A** Nanovoltmeter is optimized for making stable, low noise voltage measurements and for characterizing low resistance materials and devices reliably and repeatably. It provides higher measurement speed and significantly better noise performance than alternative low voltage measurement solutions.

SPECIFICATIONS

Power Supply:	100V / 120V / 220V / 240V
Line Frequency:	50Hz, 60Hz, and 400Hz, automatically sensed at power-up
Power Consumption:	22VA
Operating Environment:	Specified for 0° to 50°C; Specified to 80% RH at 35°C
Dimensions (H x W x D):	Rack Mount: 89 × 213 × 370mm (3.5 × 8.375 × 14.563″) Bench (w/ handles and feet): 104 × 238 × 370mm (4.125 × 9.375 × 14.563″)

Mfg. Part No.	Voltage Range	Thermocouple Temperature	Stock No.	Price Each
2182A	10mV to 100V	-200°C to +1820°C	**59T7574**	3230.00

KITS

Mfg. Part No.	Description	Stock No.	Price Each
2187-4	Low Thermal Test Lead Kit	**59T7580**	394.00

(197862)

HIGH POWER SYSTEM SOURCEMETER® INSTRUMENT

KEITHLEY

- Source or sink up to 180W of DC or pulsed power (±3000V@20mA, ±1500V@120mA)
- 1fA low current resolution
- Dual 22-bit precision ADCs and dual 18-bit 1µs per point digitizers for high accuracy and high speed transient capture
- Fully TSP® compliant for easy system integration with other **Series 2600A** System SourceMeter models
- Combines a precision power supply, current source, DMM, arbitrary waveform generator, V or I pulse generator, electronic 18-bit load, and trigger controller
- Includes TSP® Express characterization software, LabVIEW® driver, and Keithley's Test Script Builder software development environment

Model 2657A is a high voltage, high power, low current source measurement unit (SMU) instrument that delivers unprecedented power, precision, speed, flexibility, and ease of use to improve productivity in R&D, production test, and reliability environments. **Model 2657A** is designed specifically for characterizing and testing high voltage electronics and power semiconductors, such as diodes, FETs, and IGBTs, as well as other components and materials in which high voltage, fast response, and precise measurements of voltage and current are required.

SPECIFICATIONS

Power Output:	180W
Current Min:	±1nA
Current Max:	±120mA
Voltage Min:	±200V
Voltage Max:	±3kV
Source Accuracy I:	0.03%
Source Accuracy V:	0.03%

Mfg. Part No.	Description	Stock No.	Price Each
2657A	High Power System SourceMeter Instrument	**89T4206**	19700.00

(203715)

ELECTROMETERS / HIGH RESISTANCE METER

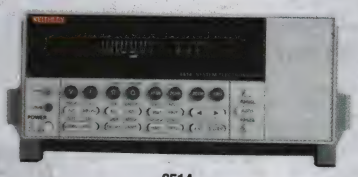
KEITHLEY

6514

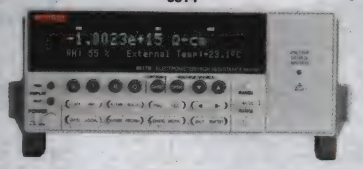
- <1fA noise
- >200TΩ input impedance on voltage measurements
- Charge measurements from 10fC to 20uC
- High speed—up to 1200 readings/second
- Interfaces readily with switches, computers, and component handlers
- Cancels voltage and current offsets easily

6517B

- Measures resistances up to 10^{16}Ω
- 1fA–20mA current measurement range
- <20uV burden voltage on lowest current ranges
- 200TW input impedance
- <3fA bias current
- Up to 425 rdgs/s
- 0.75fA p-p noise
- Built-in ±1kV voltage source
- Unique voltage reversal method for high resistance measurements
- Optional plug-in scanner cards



6514



6517B

Model 6514 Electrometer combines flexible interfacing capabilities with current sensitivity, charge measurement capabilities, resolution, and speed. **Model 6514's** built-in IEEE-488, RS-232, and digital I/O interfaces make it simple to configure fully automated, high speed systems for low-level testing. The 5½ digit **Model 6514** is designed for applications that demand fast, yet precise measurements of low currents, voltages from high resistance sources, charges, or high resistances. **Model 6514** offers far greater current sensitivity and significantly lower voltage burden (as low as 20uV) than other instruments can provide. The 5½ digit **Model 6517B** Electrometer / High Resistance Meter offers accuracy and sensitivity specifications unmatched by any other meter of this type. It also offers a variety of features that simplify measuring high resistances and the resistivity of insulating materials. With reading rates of up to 425 readings/second, **Model 6517B** is also significantly faster than competitive electrometers, so it offers a quick, easy way to measure low-level currents.

ELECTROMETER

Mfg. Part No.	Current Measuring Range	Voltage Measuring Range	Resistance Measuring Range	Charge Measuring Range	Stock No.	Price Each
6514	20pA to 20mA	2V to 200V	2kohm to 200Gohm	10fC to 20uC	**59K0092**	4830.00

ELECTROMETER / HIGH RESISTANCE METER

6517B	20pA to 20mA	2V to 200V	2Mohm to 200Tohm	10fC to 20uC	**56P3700**	8110.00

ACCESSORIES

Mfg. Part No.	Description	Features	For Use With	Stock No.	Price Each
6521	Scanner Card	10-Channel, Low Current, BNC	6517B	**59T8631**	2170.00
6522	Scanner Card	10-Channel, Low Current, High Impedance Voltage, High Resistance, Triax	6517B	**53M2661**	2930.00
4288-1	Rack Mount Kit	Single, Fixed, Height: 88mm (3-1/2″)	...	**35K3431**	93.00

(197984)

SUB-FEMTOAMP REMOTE SOURCEMETER®

KEITHLEY

- 0.4fA p-p (4E–16A) noise
- Remote PreAmp can be located at the signal source to minimize cable noise
- >1016W input resistance on voltage measurements
- High speed — up to 2000 readings/second
- Up to 6½ digit resolution
- Fast characterization of components with programmable digital I/O and interfaces

Model 6430 Sub-Femtoamp Remote SourceMeter combines the voltage and current sourcing and measurement functions of Keithley's popular SourceMeter and Source-Measure Unit (SMU) products with sensitivity, noise, and input resistance specifications superior to electrometers. This unique combination of broad functionality and exceptional measurement integrity is made possible by **Model 6430's** Remote PreAmp, which offers a very sensitive bi-directional amplifier with sensitive feedback elements for measuring or sourcing currents at the device being tested. The high level signals output by the Remote PreAmp are sent to the controlling mainframe via a two-meter cable. This allows the user to make a direct or very short connection to the signal, minimizing the effects of cable noise.

Mfg. Part No.	Current Range	Voltage Range	Output Power (W)	Resistance Range	Stock No.	Price Each
6430	±1pA to ±100mA	± 200mV to ± 200V	2.2	<2Ω to >20TΩ	**59T8598**	13900.00

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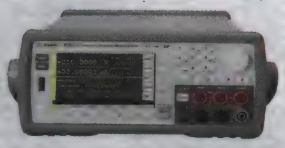
B2900A SERIES PRECISION SOURCE/ MEASURE UNITS

KEYSIGHT TECHNOLOGIES



- Integrated voltage/current 4-quadrant precision source and measurement capabilities for easy and accurate I/V measurement
- Wide coverage up to 210V, 3A DC / 10.5A pulse
- Up to 10fA / 100nV minimum measurement resolution (6½ digits)
- Up to 10fA / 100nV minimum sourcing resolution (6½ digits)
- 4.3" front panel color display supports both graphical and numerical view modes
- High resolution arbitrary waveform generation (AWG) and list sweep functions (10µs minimum interval)
- High speed digitizing capability (max. 10µs sample rate)
- Free application software to facilitate PC -based instrument control
- IVI-COM drivers and SCPI supporting conventional SMU command set for basic compatibility
- LXI class C, USB 2.0, GPIB, LAN and digital I/O interface

Mfg. Part No.	Channels	Source/ Measure Digits Max.	Source/Measure Resolution Min.		Stock No.	Price Each
			Voltage	Current		
B2901A	1	5-1/2 / 6-1/2	1µV / 100nV	1pA / 100fA	**58T3069**	6145.00
B2902A	2	5-1/2 / 6-1/2	1µV / 100nV	1pA / 100fA	**63T4453**	8938.00
B2911A	1	6-1/2 / 6-1/2	100nV / 100nV	10fA / 10fA	**65T0836**	8715.00
B2912A	2	6-1/2 / 6-1/2	100nV / 100nV	10fA / 10fA	**67T2380**	13493.00

(211835)

B2961A/B2962A 6.5 DIGIT LOW NOISE POWER SOURCE

NEW

KEYSIGHT TECHNOLOGIES

- The world's only 6.5 digit resolution power source with a bipolar sourcing range from 100 nV to 210 V and 10 fA to 3 A (DC)/10.5 A (pulsed)
- Optional ultra-low noise filters can reveal your device's true characteristics with low noise performance (10 uVrms from 10 Hz to 20 MHz, 1 nVrms/√Hz @10 kHz)
- Supports both pre-defined and user-defined arbitrary waveform generation (1 mHz to 10 kHz)
- Output voltage and current can be verified quickly using the built-in 4.5 digit voltage/current monitor
- Output voltage and current can be checked graphically on the B2900As 4.3 LCD front panel display using the time-domain voltage/current waveform viewer
- Programmable output resistance feature enables the emulation of a wide variety of DC voltage and current characteristics, such as driver ICs, regulators, energy generating devices, etc
- Free application software for easy PC-based instrument control
- LXI Core conformant, USB2.0, GPIB, LAN and digital I/O interface

Mfg. Part No.	Channels	Source/ Measure Digits Max.	Source/Measure Resolution Min.		Stock No.	Price Each
			Voltage	Current		
B2961A	1	6-1/2 / 4-1/2	100nV / 100nV	10fA / 10fA	47W2017	6145.00
B2962A	2	6-1/2 / 4-1/2	100nV / 100nV	10fA / 10fA	47W2018	8938.00

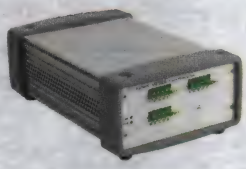
(211836)

USB MODULAR SOURCE MEASURING UNITS

KEYSIGHT TECHNOLOGIES

Features:

- Three-channel SMU
- Four-quadrant operation (±20 V)
- Maximum current output of 120 mA per channel
- Embedded test script (able to support three channels with coherent source and measurement capabilities) (for U2723A)
- IV Curve application support in the Agilent Measurement Manager software (for U2723A)
- Faster rise/fall time (for U2723A)
- High measurement sensitivity of 100 pA with 16-bit resolution
- 0.1% basic accuracy
- Low current measurement capability down to nA levels
- Voltage and current programming/readback
- USB 2.0 and USBTMC-USB488 standards
- Command logger function
- Wide range of Application Development Environments (ADEs) compatibility



- Standalone and modular
- SCPI and IVI-COM supported

U2722A/U2723A USB modular source measure unit is more than just a power supply – it has fast response time, and has voltage and current programming/readback with high accuracy measurement capabilities. The U2722A and its enhanced version, the U2723A are capable of four-quadrant operation, acting as current source and also as current sink (load) with both polarities of the output voltage. The U2723A offers additional features such as embedded test scripts to simplify automated testing and faster rise time to help improve throughput during mass testing of semiconductor component.

Mfg. Part No.	Description	Stock No.	Price Each
U2722A	USB Modular Source Measure Unit, 3 Channel	05N1304	2446.00
U2723A	USB Modular Source Measure Unit with Embedded Test Script 3 Channel	15R7281	3989.00

(211837)

SERIES 3700 SYSTEM SWITCH / MULTIMETER

KEITHLEY

- Six slot system switch mainframe with optional high performance multimeter
- Multi-processor architecture optimized for high throughput scanning and pattern switching applications
- Remote PC control via Ethernet, USB, and GPIB interfaces
- Up to 576 two-wire or 720 onewire multiplexer channels in one mainframe
- Up to 2,688 one-pole matrix crosspoints in one mainframe
- Capable of over 14,000 readings per second to memory with optional high performance multimeter
- LXI Class B with embedded Web browser interface for test setup, maintenance, and basic application control

Series 3700 offers scalable, instrument grade switching and multi-channel measurement solutions that are optimized for automated testing of electronic products and components. **Series 3700** includes four versions of the **Model 3706** system switch mainframe along with a growing family of plug-in switch and control cards. When the **Model 3706** mainframe is ordered with the high performance multimeter, you receive a tightly integrated switch and measurement system that can meet the demanding application requirements in a functional test system or provide the flexibility needed in stand-alone data acquisition and measurement applications. To see other models, *go online or call.*

SPECIFICATIONS

	Sensitivity	Max. Reading	Basic Accuracy
DC Voltage	10nV	300V	0.002%
AC Voltage (TRMS)	100nV	300V	0.05%
Ohms (2/4 Wire)	100nΩ	100MΩ	0.004%
DC Current	1pA	10μA to 3A	0.03%
AC Current (TRMS)	1nA	1mA to 3A	0.08%

Mfg. Part No.	Description	Stock No.	Price Each
3706A	6-Slot System Switch w/ High Performance DMM	59T7961	2930.00

➤ CONTINUED ➤

SERIES 3700 SYSTEM SWITCH / MULTIMETER (CONT.)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
3720	Dual 1x30 Multiplex Card (Auto CJC with 3720-ST)	59T7974	1220.00
3721	Dual 1x20 Multiplex Card (Auto CJC with 3721-ST)	59T7981	1050.00
3722	Dual 1x48 High Density Multiplex Card	59T7988	1680.00
3723	Dual 1x30 High Speed Reed Relay Multiplex Card	59T9432	1380.00
3724	Dual 1x30 FET Card (Auto CJC with 3724-ST)	59T8001	1750.00
3730	6 x 16 High Density Matrix Card	59T8006	1680.00
3731	6X16 High Speed Reed Relay Matrix Card	59T9433	2200.00
3732	Quad 4X28, Ultra-High Density, Reed Relay Matrix Card	59T9434	5960.00
3740	28 Independent Form C and 4 High Current Form A Card	59T8019	1050.00
3750	Multifunction Card with 40 DIO, 4 Counters, 2 AO	59T8024	1410.00

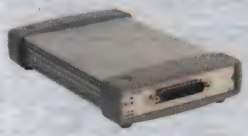
(197857)

USB MODULAR SWITCH MATRIX

KEYSIGHT TECHNOLOGIES

Features:

- 4x8 2-wire matrix configuration
- Max. 30V/2A
- -30dB crosstalk and <3dB insertion loss at 45MHz operation
- 4ms Max. switching time
- Command logger function
- DB25 connector
- High-speed USB 2.0 (480MBits/s) TMC488.2 compatible
- Standalone and Modular capabilities; Requires U2781A for modular capability



The U2751A USB Modular Switch offers a flexible connection path between the device under test and test equipment, thus allowing different instruments to be connected to multiple points on the device under test at the same time. This instrument offers measurement at a higher bandwidth up to 45MHz. It uses the common non-proprietary standard high-speed USB 2.0 interface that provides ease of connectivity – allowing users to set up and configure their tests swiftly with the plug and play feature. Certificate of calibration available on all models, *go online or call*.

Mfg. Part No.	Description	Stock No.	Price Each
U2751A	USB Modular Switch Matrix	05N1305	1048.00

(211843)

USB MODULAR PRODUCTS CHASSIS

KEYSIGHT TECHNOLOGIES

Features:

- Six USB module slots
- High-speed USB 2.0 (480 Mbit/s)
- Hot-swappable and auto-detectable characteristic minimizes startup time/effort
- Allows expansion up to 384 channels
- Simultaneous synchronization between modules
- SSI/Star trigger bus synchronization between external trigger source and modules
- Dimensions: 250 mm (W) x 177 mm (H) x 271 mm (D)
- This chassis supports USB modular Data Acquisitions (**U2300, U2500, U2600 series**) and USB modular Instruments (**U2700 series**)

The **U2781A** USB modular instrument chassis is AC powered and compact. It has an external 10 MHz reference clock, external trigger in and trigger out functions. The **U2781A** is ideal for R&D, design validation and manufacturing engineers for data logging, measurement, and monitoring over a broad range of industries. *Please see products supported on [134266] and [134275] and [134276] and [134268], and [134273].*

Mfg. Part No.	Description	Stock No.	Price Each
U2781A	USB Modular Instrument Chassis	42M3708	1266.00

(211771)

USB MODULAR MULTIFUNCTION DATA ACQUISITION DEVICES

KEYSIGHT TECHNOLOGIES

- Up to 3 MSa/s sampling rate for a single channel
- Functions as a standalone or modular unit
- Easy-to-use plug-and-play and hot swappablewith Hi-Speed USB 2.0
- Up to 384 channels when incorporated into U2781A Agilent modular product chassis
- Easy-to-use bundled software for quick setup and data logging to PC
- 12-bit or 16-bit analog-to-digital (A/D) resolution
- 24-bit programmable digital input/output
- Self-calibration capability
- USB 2.0 and USBTMC-USB488 standards

U2300A series USB modular high-density multifunction data-acquisition (DAQ) devices offer a high-performance PC data-acquisition solution. **U2300A series** DAQ devices applications extend across industrial and education environments. The DAQ device is well suited for research and development, manufacturing, and design-validation engineers who require measurement devices with fast sampling rate. Both models include AC/DC power adapter, power cord, USB extension cable, L-mount kit (used with modular product chassis), USB modular products quick start guide and reference CD-ROM, automation-ready CD-ROM (contains the IO libraries suite) and certificate of calibration.

Mfg. Part No.	Description	Stock No.	Price Each
U2331A	High Performance Multifunction DAQ, 64-CH single-ended or 32-CH differential analog inputs; 3MS/s	32M0128	2354.00
U2351A	Basic Multifunction USB DAQ, 16-CH single-ended or 8-CH differential analog inputs; 250 kSa/s	61M3816	1413.00
U2352A	Basic Multifunction USB DAQ, 16-CH single-ended or 8-CH differential analog inputs; 250 kSa/s; without analog output	32M7899	1187.00

➤ CONTINUED ➤

USB MODULAR MULTIFUNCTION DATA ACQUISITION DEVICES

(CONT.)

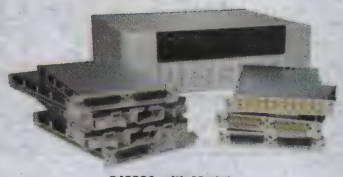
Mfg. Part No.	Description	Stock No.	Price Each
U2353A	Basic Multifunction USB DAQ, 16-CH single-ended or 8-CH differential analog inputs; 500 kSa/s	58M2880	1766.00
U2354A	Basic Multifunction USB DAQ, 16-CH single-ended or 8-CH differential analog inputs; 500 kSa/s; without analog output	09P8824	1649.00
U2355A	High Performance Multifunction DAQ, 64-CH single-ended or 32-CH differential analog inputs; 250 kSa/s	77M7916	1531.00
U2356A	High Performance Multifunction DAQ, 64-CH single-ended or 32-CH differential analog inputs; 500KS/s	35M3687	2004.00
ACCESSORIES			
U2901A	Terminal Board with SCSI-II 68-pin Connector with 1 Meter Cable	32M0132	135.00
U2902A	Terminal block and SCSI-II 68-pin Connector with 2-Meter Cable	32M0136	158.00

(211770)

34980A MULTIFUNCTION SWITCH AND DATA ACQUISITION UNIT AND MODULES

KEYSIGHT TECHNOLOGIES

- 8-Slots With Integrated 6.5 Digit Multimeter
- 21 Plug-in Modules with LF/RF/uW Switch, DIO, D/A Converter, and Counter
- Up to 560 2-wire mux or 4096 matrix cross-points in one mainframe
- Scan rates up to 1,000 channels/sec.
- Standard LAN, USB, GPIB Connectivity to PC
- Standard Cables, Terminal Cards or Mass Interconnect
- Priced Up to 40% Less Than Comparable Module Solutions in VXI or PXI
- 34832A BenchLink Data Logger Pro allows for advanced data logging and decision making without programming



34980A with Modules

Mfg. part no. 34980A multifunction switch/measure unit is a compact, economical one-box solution for medium to high-density switch/measure applications in design verification, automated test and data acquisition. **Mfg. part no. 34980A** eight-slot mainframe, with built-in 6.5 digit DMM, holds your choice of 19 different plug-in modules. These include switching from DC to 26.5 GHz, digital I/O, D/A converters, and counter/totalizer functionality. One mainframe can accommodate up to 560 two-wire multiplexer channels or 4096 matrix cross points. **Mfg. part no. 34980A** also includes USB, Ethernet, and GPIB as standard interfaces to the PC. With Ethernet connections and the graphical web interface, you can access and control the unit remotely. Standard connectors on the modules also allow you to use standard, off-the-shelf 50- and 78-pin shielded cables to easily connect test signals from the instrument to the unit under test or other test points. Additional wiring options include detachable terminal blocks for discrete wiring needs and mass interconnect solutions. BenchLink Data Logger Pro Software available, *go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each
34980A	Multifunction Switch/Measure Mainframe — Holds Up to 8 Plug-in Modules	56J9919	2808.00
MODULES			
34921A	40-Channel Armature Multiplexer with Low Thermal Offset	56J9904	948.00
34922A	70-Channel Armature Multiplexer	56J9905	1461.00
34923A	40/80-Channel Reed Multiplexer	56J9906	1122.00
34924A	70-Channel Reed Multiplexer	56J9907	1686.00
34925A	40/80-Channel Optically Isolated FET Multiplexer	56J9908	1348.00
34931A	Dual 4 x 8 Armature Matrix	56J9909	1098.00
34932A	Dual 4 x 16 Armature Matrix	56J9910	1769.00
34933A	Dual/Quad 4 x 8 Reed Matix	56J9911	1223.00
34937A	28-Channel Form C and 4-Channel Form A	56J9912	1060.00
34938A	20-Channel 5A Form A	56J9913	1295.00
34941A	Quad 1 x 4 50-Ohms, 3GHz RF Multiplexer	56J9914	1798.00
34942A	Quad 1 x 4 75-Ohm 1.5 GHz RF Multiplexer	29K9466	1798.00
34945A	Microwave Switch/Attenuator Driver	64J2250	1343.00
34947A-004	Triple 1 x 2 SPDT Unterminated Microwave Switch (4GHz)	59K0721	2244.00
34951A	4-Channel Isolated D/A Converter with Waveform Memory	56J9917	1123.00
34952A	Multifunction Module with 32-Bit DIO, 2-Channel D/A and Totalizer	56J9918	829.00
ACCESSORIES			
Y1130A	Rack Mount Kit	56J9896	132.00
Y1132A	Module Extender	99K4543	242.00
Y1135A	50-Pin, 1.5m D-Sub Interconnect Cable	56J9897	125.00
Y1137A	78-Pin, 1.5m D-Sub Interconnect Cable	56J9898	163.00
Y1138A	78-Pin, 3m D-Sub Interconnect Cable	56J9899	196.00
Y1139A	Solder Cup Connector Kit for Types 34921/23/24/31/32/33/37/38 — 50-Pin D-Sub Female	56J9900	124.00
Y1140A	Solder Cup Connector Kit for Type 34922 — 78-Pin D-Sub Female	56J9901	156.00
Y1142A	Solder Cup Connector Kit for Type 34950A — 78-Pin D-Sub Male	56J9903	130.00
34832A	BenchLink Data Logger Software	74M9577	1029.00
34934A	Quad Reed Matrix	09P8856	5702.00
34939A	Geenral Purpose Module	07P8521	1337.00
34945EXT	Microwave Switch, Attenuator Driver	80K0228	562.00
34950A	Digital I/O with Memory & Counter	64J2251	1348.00
34959A	Breadboard Module	64J2255	531.00

(211768)

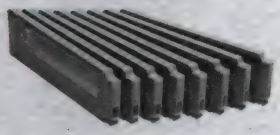
34970A and 34972A DATA ACQUISITION SWITCH UNIT AND MODULES

KEYSIGHT TECHNOLOGIES

34970A

34972A

- 3-slot mainframe, 8 switch and control plug-in modules
- 6-1/2-Digit (22-Bit) Internal DMM
- Scan rates up to 250 channels/second
- Measures 11 Functions Without External Signal Conditioning
- Up to 60 2-wire mux or 96 2-wire matrix cross-points in one mainframe
- Benchlink Data Logger Software to configure and control tests, display results and transfer data
- Built-in GPIB and RS-232 Interfaces (**34970A**)
- Built-in LAN and USB Interfaces (**34972A**)
- 0.004% Basic DCV Accuracy
- 50K Readings of Non-Volatile Memory Holds Data When Power Is Removed



Modules

POWERFUL FLEXIBILITY TO GET YOUR JOB DONE

Whether you need to measure temperature, AC/DC volts, resistance, frequency or current - **mfg. part no. 34970A** can handle it. The internal autoranging DMM directly measures 11 different functions, eliminating the need for expensive external signal conditioning. Each channel can be configured for maximum flexibility.

34970A data acquisition/switch unit
Includes operating and service manuals, calibration certificate, Quick Start package (Benchlink Data Logger software, RS-232 cable, thermocouple, screwdriver) and power cord. Modules must be purchased separately.

34972A data acquisition/switch unit
Includes internal 6 1/2 digit DMM, operating and service manuals, test report, Quick Start package (Benchlink Data Logger software, thermocouple, screwdriver) and power cord. Modules must be purchased separately.

MODULES:

34901A 20-Channel Armature Multiplexer
60 ch/s scanning, 2- and 4-wire scanning, built-in thermocouple reference junction, 300V switching. 2 additional fused inputs (22 channel total) route up to 1A of current to the internal DMM, allowing current measurements without the need for an external shunt.

34902A 16-Channel High-Speed Multiplexer Module
250 channels/s scanning, 2- and 4-wire scanning, built-in thermocouple reference junction, 300V switching. User provided shunts required for current measurements.

34903A 20-Channel Actuator/General Purpose Switch Module
SPDT (Form C) latching relays, 300V, 1A, 50W actuation and control. Use to cycle power to test sample, actuate external power relays and solenoids.

34904A 4 x 8 2-Wire Matrix Switch Module
32 2-wire crosspoints, 300V, 1A switching. Rows or columns may be connected between multiple modules to build 8 x 8, 4 x 16 or larger matrices, with up to 96 crosspoints in a single frame.

34905A Dual 4-Channel RF Multiplexer 50 Ohms
2GHz bandwidth (1GHz with included BNC-to-SMB adapters). Route signals between your DUT and signal generator, oscilloscope, spectrum analyzer, or other instrumentation. Arranged as two independent 1 x 4 multiplexers.

34906A Dual 4-Channel RF Multiplexer 75 Ohms
2GHz bandwidth (1GHz with included BNC-to-SMB adapters). Route signals between your DUT and signal generator, oscilloscope, spectrum analyzer, or other instrumentation. Arranged as two independent 1 x 4 multiplexers.

34907A Multifunction Module
16 bits of digital input and output, 100kHz totalizer input. Two ±12V analog outputs.

34908A 40-Channel Single Ended Multiplexer Module
60 channels/s scanning, single-wire switching for common-low applications, built-in thermocouple reference junction, 300V switching. All two-wire internal measurements except current are supported.

Mfg. Part No.	Description	Stock No.	Price Each
34970A	Data Logger/Switch Unit	83F4190	1748.00
34972A	Data Acquisition/Switch Unit with LAN and USB	55R0480	2019.00
34901A	20-Channel Multiplexer	83F4191	525.00
34902A	16-Channel Multiplexer	83F4192	639.00
34903A	20-Channel Actuator/GP Switch	83F4193	453.00
34904A	4 x 8 Matrix Switch Module	83F4194	567.00
34905A	Dual 4-Channel RF Multiplexer 50Ω	83F4195	828.00
34907A	Multifunction Module	83F4197	424.00
34908A	40-Channel Single Ended Multiplexer	83F4198	541.00
ACCESSORY			
34830A	BenchLink Data Logger Pro Software for 34970A	12N1500	822.00

DATA ACQUISITION SWITCH UNIT
(211767)

element14 COMMUNITY

Get inspired, collaborate, design, research, ask experts questions.

element14.com

(196545)

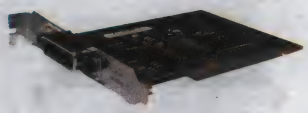
SPECTRUM ANALYZERS • RF POWER METERS & SENSORS • POWER QUALITY ANALYZERS

GPIB & INSTRUMENT CONTROL PRODUCTS

NEW

KEYSIGHT TECHNOLOGIES

E5810A



82350B

82357B

- Simplified connectivity over GPIB, USB and LAN
- Easy access and control of GPIB instruments
- Support of industry standards – IEEE 488, USB and Ethernet
- VISA IO libraries provide industry-standard connectivity software
- High throughput solutions up to 900 kB/s

Agilent offers a full line of interface products to connect your instrumentation to your PC. These interface cards and converters make it easy for you to access and control instruments, exchange data, and create your own automated test applications. You can access your GPIB instruments using standard I/O such as LAN, USB, or if you prefer, with an IEEE 488 GPIB interface. **Mfg. part no. E5810A** LAN-to-GPIB gateway provides remote access and control of GPIB instruments via 10BASE-T or 100BASE-TX LAN networks, enabling resource sharing, global project communications and remote access to instruments. **Mfg. part no. 82350B** high-performance GPIB card plugs into the backplane of your computer and provides maximum system throughput. **Mfg. part no. 82357B** provides a direct connection from a USB port on your laptop or desktop PC to GPIB instruments.

Mfg. Part No.	Description	Stock No.	Price Each
E5810A	LAN/GPIB Gateway	95H9607	1398.00
E5810B	LAN/GPIB/USB Gateway	72W2805	1205.00
82350B	PCI GPIB Interface Card	95H9610	543.00
82357B	USB/GPIB Converter	31M9424	553.00
10833A	GPIB Cable Assembly, 1 meter	91F7425	81.91
10833B	GPIB Cable Assembly, 2 meter	91F7426	92.15
10833C	GPIB Cable Assembly, 4 meter	35H6608	102.00
10833G	GPIB Cable Assembly, 8 meter	95H8221	133.00

(211769)

GSP-730 3GHZ SPECTRUM ANALYZER & GRF-1300 RF AND COMMUNICATION TRAINER

RoHS Compliant Available

GW INSTEK Simply Reliable

CE

GSP-730

GRF-1300

GSP-730
- Frequency Range : 150kHz ~ 3GHz
- Autoset Function
- Noise Floor: ≤-100dBm
- RBW Range : 30kHz, 100kHz, 300kHz, 1MHz
- ACPR/CHPW/OCBW Measurement
- 3 Traces in Different Colors
- Split Window Function
- Limit Line Function
- Remote Control Software
- Presentation Material for Training Courses
- Support Interface : USB Device/Host, RS-232C
- 5.6" TFT LCD with VGA Output

GRF-1300
- Sine Wave: 0.1 ~ 3MHz
- Square Wave: 0.1 ~ 3MHz
- Triangle Wave: 0.1 ~ 3MHz
- RF Frequency : 870 ~ 920MHz
- AM Modulation & FM Modulation
- 5 On/Off Switches and 5 Test Points to Simulate 8 Failure Conditions for Trouble-Shooting Study
- USB Interface to Provide Remote Control

GW Instek **GSP-730** is a 3 GHz Spectrum Analyzer mainly developed to fulfill the demands of RF Communication educations. Budget constraint and insufficient teaching tools are normally the two hurdles for schools to provide high-quality courses for RF communication experiments. A moderate spectrum analyzer, **GSP-730**, featuring full functions should provide, along with **GRF-1300** training kit possesses a unique position in the field as an economic turn-key solution for 3GHz RF Communication Experiment courses. With its components, **GSP-730** Spectrum Analyzer, **GRF-1300** Trainer and a PC, properly connected, a tangible system is integrated for performing ongoing experiments while the lecture is given. Using a PC, the teacher can present teaching material with PowerPoint slide and simultaneously control **GSP-730** and **GRF-1300** to perform experiments and get spectrum displays and parameter readings on the PC screen. **GSP-730** and **GRF-1300** easily transferred the current teaching materials, including the PowerPoint slides, textbook, and a remote control software, into electronic-teaching system.

Mfg. Part No.	Description	Stock No.	Price Each
● GSP-730	3 GHz Spectrum Analyzer	44W8980	999.00
GRF-1300	RF and Communication System Trainer	44W8979	399.00

(210117)

RF & MICROWAVE POWER SENSORS/METERS

Tektronix

Features:
- Max Hold and Relative Measurement Modes
- Offset, Frequency Response, and 75 Ω Minimum Loss Pad Correction
- Pass/Fail Limit Mode
- Compact Size
- Flexible Averaging Modes for Quick, Stable Measurements

PSM3000, PSM4000, & PSM5000 SERIES

Applications:
- Peak and Average Power Measurements on Modulated Signals such as GSM, CDMA, WCDMA, HSPA, WiMAX up to 10 MHz
- Level Control Feedback for Signal Sources
- Validation and Characterization of Power Amplifiers, Switches, and Other RF and Microwave Components

Mfg. Part No.	Frequency Range	Dynamic Range	Measurement Speed	Stock No.	Price Each
PSM3110	10MHz to 8GHz	-55 dBM to 20 dBm	2000 readings/s	67T0006	2630.00
PSM3120	10MHz to 8GHz	-55 dBM to 20 dBm	2000 readings/s	67T0007	2630.00
PSM3310	10MHz to 18GHz	-55 dBM to 20 dBm	2000 readings/s	67T0008	3500.00
PSM3320	10MHz to 18GHz	-55 dBM to 20 dBm	2000 readings/s	67T0009	3500.00
PSM3510	10MHz to 26.5GHz	-55 dBM to 20 dBm	2000 readings/s	67T0010	4460.00
PSM4110	10MHz to 8GHz	-60 dBm to 20 dBM	2000 readings/s	67T0011	2830.00
PSM4120	10MHz to 8GHz	-60 dBm to 20 dBM	2000 readings/s	67T0012	2830.00
PSM4320	50MHz to 18GHz	-60 dBm to 20 dBM	2000 readings/s	67T0013	5370.00
PSM4410	50MHz to 20GHz	-60 dBm to 20 dBM	2000 readings/s	67T0014	5370.00
PSM5110	100MHz to 8GHz	-60 dBm to 20 dBM	2000 readings/s	67T0015	3750.00
PSM5120	100MHz to 8GHz	-60 dBm to 20 dBM	2000 readings/s	67T0016	3750.00
PSM5320	50MHz to 18GHz	-60 dBm to 20 dBM	2000 readings/s	67T0017	6380.00
PSM5410	50MHz to 20GHz	-60 dBm to 20 dBM	2000 readings/s	67T0018	6380.00

(198544)

6800B SERIES AC POWER SOURCE / ANALYZERS

NEW

KEYSIGHT TECHNOLOGIES

- Provides a complete AC and DC power and measurement solution
- Protect valuable DUTs with extensive protection features
- Easy to use graphical user interface (GUI)

Keysight AC power source/analyzers provide a complete AC test solution. As AC sources, they combine the capabilities of a power amplifier and an arbitrary waveform generator. This allows you to simulate normal waveforms and many types of distorted power waveforms. The built in power analyzer combines the capabilities of a multimeter, oscilloscope, harmonic analyzer and power analyzer. These instruments may also be used to produce DC power, either alone or as a DC offset to an AC waveform.

Mfg. Part No.	Phases	Output Power	Stock No.	Price Each
6811B	1	375VA	95H9302	7625.00
6812B	1	750VA	95H9303	9309.00
6813B	1	1750VA	95H9304	12818.00

(212546)

PA1000 POWER ANALYZER

NEW

Tektronix

- High Measurement Accuracy: 0.05% basic V & I accuracy
- 1MHz measurement bandwidth, 1MS/s sample rate
- Bright LCD color graphics display with waveform graphics & harmonics bar charts
- Dual internal current shunts: 20A shunt & 1A shunt for accurate low-current measurements
- Accurate measurements with high crest factors up to CF10
- Harmonics Analysis for 50th harmonic as a standard feature
- Application-specific Setup Modes for Lamp Ballast, Standby Power, Energy integration
- USB, LAN, and GPIB interfaces all standard
- Easy data export to flash drive or PC using front USB port
- PWRVIEW PC software features automated full compliance test for Standby Power
- Unmatched 5-year warranty

The Tektronix **PA1000** is your best choice for making precision power measurements on single-phase power supplies and all types of products connected to the AC line. Whether you need to test for compliance with energy-usage regulations such as Energy Star™, or simply need to characterize your product's overall power-conversion performance and efficiency, you will find the **PA1000** offers the most modern and complete test solution with performance and features unmatched by other single-phase analyzers.

Mfg. Part No.	Description	Stock No.	Price Each
PA1000	Single-Phase Power Analyzer	17X9725	2790.00

(211455)

PA4000 SERIES POWER ANALYZERS

Tektronix

- 1 to 4 Input Modules allows several configurations to match your application
- High measurement accuracy of 0.04% (basic voltage & current accuracy) for demanding test requirements
- Dual internal current shunts for each module maximize accuracy for high- and low-current measurements
- Unique Spiral Shunt design maintains stability over variations in current, temperature, etc. (patent applied for)
- Proprietary frequency detection algorithms ensure rock-solid frequency tracking even on noisy waveforms
- Application-specific test modes simplify instrument setup and reduce the likelihood of user error
- Easy data export to USB flash drive or remote PC software, for reporting and/or remote control
- Many standard features such as comm ports and harmonic analysis eliminate costly upgrade options

Tektronix **PA4000** Power Analyzers deliver highly accurate, multi-channel power, energy, and efficiency measurements. Precisely-matched inputs, unique Spiral Shunt™ technology, and advanced signal processing deliver high accuracy even with highly modulated waveforms and crest factors as high as 10. The versatile **PA4000** offers comprehensive power measurements. Dual current shunts provide optimal resolution from microwatts to kilowatts. Harmonics analysis up to the 100th harmonic, and motor analysis with torque and speed inputs are included in the standard instrument. Every **PA4000** comes with multiple PC interfaces, PC software, and USB flash drive support to help you collect and analyze data.

Mfg. Part No.	Description	Stock No.	Price Each
PA4000 1CH 15V	One Input Module Installed	67W2990	10725.00
PA4000 2CH 15V	Two Input Modules Installed	67W2991	13625.00
PA4000 3CH 15V	Three Input Modules Installed	67W2992	16425.00
PA4000 4CH 15V	Four Input Modules Installed	67W2993	19125.00

(209919)

PULSED LASER DIODE TEST SYSTEM W/ REMOTE TEST HEAD

KEITHLEY

- Simplifies laser diode LIV testing prior to packaging or active temperature control
- Integrated solution for in-process LIV production testing of laser diodes at the chip or bar level
- Sweep can be programmed to stop on optical power limit
- Combines high accuracy source and measure capabilities for pulsed and DC testing
- Synchronized DSP based measurement channels ensure highly accurate light intensity and voltage measurements
- Programmable pulse on time from 500ns to 5ms up to 4% duty cycle
- Pulse capability up to 5A, DC capability up to 1A
- 14-bit measurement accuracy on three measurement channels (VF, front photodiode, back photodiode)
- Measurement algorithm increases the pulse measurement's signal-tonoise ratio
- Up to 1000-point sweep stored in buffer memory eliminates GPIB traffic during test, increasing throughput
- Digital I/O binning and handling operations
- IEEE-488 and RS-232 interfaces

Model 2520 Pulsed Laser Diode Test System is an integrated, synchronized system for testing laser diodes early in the manufacturing process, when proper temperature control cannot be easily achieved. The Model 2520 provides all sourcing and measurement capabilities needed for pulsed and continuous LIV (light-current-voltage) testing of laser diodes in one compact, half-rack instrument. The tight synchronization of source and measure capabilities ensures high measurement accuracy, even when testing with pulse widths as short as 500ns.

Mfg. Part No.	Current Range	Voltage Range	Stock No.	Price Each
2520	0A to 5A	0V to ± 20V	59T7743	21400.00

PULSED LASER DIODE MEASUREMENT KIT

Mfg. Part No.	Kit Contents	Stock No.	Price Each
2520/KIT1	Model 2520, Model 2520INT and 3 ft. triax cable	59T7747	27900.00
2520INT-1-GE	Integrating Sphere (1") w/ Germanium Detector	59T7748	6430.00

(197701)

LOW CURRENT FIBER ALIGNMENT PHOTODIODE METER

KEITHLEY

- Dual-channel instrument for optical power measurements, beam measurements, and nanoscale materials and device research
- ±100V source for bias requirements
- Measure photodetector current from 1fA to 20mA
- 1fA current measurement resolution
- Measure optical power directly when used with Model 2500INT Integrating Sphere
- 0–10V analog output for high resolution optical power feedback
- Provides a high accuracy, high speed fiber alignment solution
- Supports assembly process, final testing, parts binning, and specification
- Allows faster alignment of the fiber with the laser diode's optimum light emitting region
- Combines fiber alignment and device characterization processes
- User-programmable photodetector calibration coefficients
- 3000-point buffer memory on each channel allows data transfer after test completion
- Digital I/O and Trigger Link for binning and sweep test operations
- IEEE-488 and RS-232 interfaces

Model 2502 Dual-Channel Picoammeter provides two independent picoammeter-voltage source channels for a wide range of low level measurement applications including laser diode testing. It is also designed to increase the throughput of Keithley's LIV (lightcurrent- voltage) test system for production testing of laser diode modules (LDMs). Developed in close cooperation with leading manufacturers of LDMs for fiberoptic telecommunication networks, this dual-channel instrument has features that make it easy to synchronize with other system elements for tight control over optical power measurements. **Model 2502** features a high speed analog output that allows using the LIV test system at the fiber

➤CONTINUED➤

LOW CURRENT FIBER ALIGNMENT PHOTODIODE METER (CONT.)

alignment stage of the LDM manufacturing process. Through the use of buffer memory and a Trigger Link interface that's unique to Keithley instruments, **Model 2502** can offer the fastest throughput available today for LIV testing of laser diode modules. These instruments are ruggedly engineered to meet the reliability and repeatability demands of continuous operation in round-the-clock production environments.

Mfg. Part No.	Current Range	Stock No.	Price Each
2502	2nA to 20mA	59T7729	7530.00

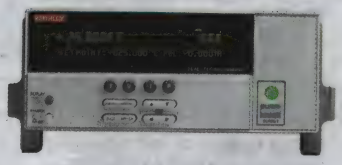
ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
2500INT-2-GE	Integrating Sphere with Germanium Detector	59T7726	3730.00
2500INT-2-IGAC	Integrating Sphere with Cooled Indium Gallium Arsenide Detector	59T7727	6260.00
2500INT-2-SI	Integrating Sphere with Silicon Detector	59T7728	3510.00
2500INT-FC/APC	FP/APC Connector	59T7723	232.00
2500INT-FC/PC	FC/PC Connector	59T7724	232.00
2500INT-SMA	SMA Connector	59T7725	232.00

(197695)

TEMPERATURE CONTROLLERS

KEITHLEY



- 50W TEC Controller combined with DC measurement functions
- Fully digital P-I-D control
- Autotuning capability for the thermal control loop (**2510-AT**)
- Designed to control temperature during laser diode module testing
- Wide temperature setpoint range (–50°C to +225°C) and high setpoint resolution (±0.001°C) and stability (±0.005°C)
- Compatible with a variety of temperature sensor inputs—thermistors, RTDs, and IC sensors
- Maintains constant temperature, current, voltage, and sensor resistance
- AC Ohms measurement function verifies integrity of TEC
- Measures and displays TEC parameters during the control cycle
- 4-wire open/short lead detection for thermal feedback element
- IEEE-488 and RS-232 interfaces
- Compact, half-rack design

Models 2510 and **2510-AT** TEC SourceMeter instruments enhance Keithley's CW (Continuous Wave) test solution for high speed LIV (lightcurrent- voltage) testing of laser diode modules. These 50W bipolar instruments were developed in close cooperation with leading manufacturers of laser diode modules for fiberoptic telecommunications networks. Designed to ensure tight temperature control for the device under test, **Model 2510** was the first in a line of highly specialized instruments created for telecommunications laser diode testing. It brings together high speed DC sourcing and measurement with the ability to control the operation of a laser diode module's Thermo- Electric Cooler or TEC (sometimes called a Peltier device) accurately. **Model 2510-AT** offers autotuning capability. P, I, and D (proportional, integral, and derivative) values for closed loop temperature control are determined by the instrument using a modified Zeigler-Nichos algorithm. This eliminates the need for users to determine the optimal values for these coefficients experimentally. In all other respects, the **Model 2510** and **Model 2510-AT** provide exactly the same set of features and capabilities.

Mfg. Part No.	Description	Stock No.	Price Each
2510	TEC SourceMeter	59T7733	4680.00
2510-AT	Autotuning TEC SourceMeter	59T7734	5560.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
2510-CAB	4-Wire Unshielded Cable, Phoenix Connector to Unterminated End	59T7738	30.00
2510-RH	Resistive Heater Adapter for Model 2510	59T7740	96.00

(197697)

TF960 / TF930 / PFM3000 BENCH/PORTABLE UNIVERSAL COUNTERS WITH USB

Aim TTI

TF930

TF930 / TF960

- 0.001Hz to > 3000MHz frequency range
- Frequency, period, pulse width, duty cycle, frequency ratio and event counting modes
- High performance temperature compensated timebase
- Reciprocal measurement technique gives superior resolution
- High input sensitivity over the full frequency range
- High impedance DC coupled input up to 125MHz
- Variable trigger threshold and switchable attenuator
- Large 10 digit LCD display with annunciators
- Operation from built-in rechargeable batteries
- Low power consumption gives up to 24 hours operation
- Remote control and readback via USB interface

PFM3000

- 3 Hz to > 3000 MHz in two overlapping ranges
- High input sensitivity over the full frequency range
- High impedance measurement up to 125 MHz
- Reciprocal measurement technique gives superior resolution
- Period measurement from 3 Hz to 125 MHz
- Selectable measurement time; display hold function
- Noise filter for low frequency measurements
- Large 8.5 digit display with full range of annunciators
- Battery operation; handheld format with tilt-stand
- Push-to-measure function with auto power-down

➤CONTINUED➤

TF960 / TF930 / PFM3000 BENCH/PORTABLE UNIVERSAL COUNTERS WITH USB (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
TF930	3GHz bench/portable universal counter with USB	71R7098	420.00
TF960	6GHz bench/portable universal counter with USB	05X0056	560.00
PFM3000	3GHz low-cost handheld frequency counter	06X3420	197.00

(178356)

UNIVERSAL FREQUENCY COUNTERS

BK PRECISION

Mfg. part no. 1823A benchtop universal counter measures frequency to 2.4GHz. 8-digit display provides up to 0.1Hz resolution. Large bright LED display. Includes period, period average, totalize, ratio, time interval, selectable gate time and min./max./avg. 8-digit LED. Sensitivity to 20mV rms. AC power: 100/120/220/240VAC, 50/60Hz. **Mfg. part no. 1856D** benchtop reciprocal frequency counter measures frequency to 3.5GHz based a 10 MHz TCO (Temperature Controlled Oscillator). 9-digit display provides up to 10 nHz resolution. Large bright LED display. Includes RPM (revolutions per minute) period, totalize functions. Sensitivity to 30mV rms.

Mfg. Part No.	Description	Stock No.	Price Each
1823A	2.4GHz Universal Frequency Counter with Ratio Function	57K8330	470.00
1856D	3.5GHz Reciprocal Frequency Counter with Totalize, Period Functions	97J8046	540.00

(33277)

53200A SERIES RF AND UNIVERSAL FREQUENCY COUNTER/TIMERS

KEYSIGHT TECHNOLOGIES

- Optional 6 GHz or 15 GHz Input
- Single-shot resolution 20ps models
- 1M reading memory & datalogging
- LXI-C, LAN, USB, GPIB
- 1MSa continuous/gap-free measurement and timestamp capability (53230A)
- Optional pulse microwave measurements (53230A) and battery
- One year manufacturer's warranty

53200A series new generation of 350 MHz RF and Universal counter/timers with new performance and usability standards. Large color graphical display: Math, statistics, histogram, trend/stripchart, datalogging. The first frequency counters with LXI-C compliance, the combination of high speed measurements and new built-in analysis and graphing capabilities provide functionality not previously available. Counters include cert. of calibration, power cord, software, operating and programming guides.

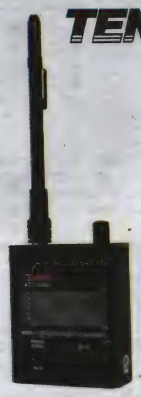
Mfg. Part No.	Description	Stock No.	Price Each
53210A	350MHz RF Frequency Counter w/ GPIB Port, 10 digit/sec	86R9475	2169.00
53220A	350MHz Univ. Freq. Counter/Timer, GPIB Port, 12 digit/sec, 100ps	86R9477	2512.00
53230A	350MHz Univ. Freq. Counter/Timer, GPIB Port, 12 digit/sec, 20ps	86R9479	3926.00
OPTIONS			
53200U-106	6 GHz Microwave Input Upgrade Kit	86R9468	1322.00
53200U-115	15 GHz microwave input Upgrade Kit	86R9469	3273.00
53200U-150	Pulse microwave measurements (53230A only) Upgrade Kit	86R9470	2115.00
53200U-201	Rear panel parallel inputs for baseband channels Upgrade Kit	86R9471	133.00
53200U-203	Microwave Input - front Type N Upgrade Kit	86R9472	319.00
53200U-300	Internal lithium ion smart battery and charger Upgrade Kit	86R9473	852.00

(211766)

ULTRA COMPACT RF FREQUENCY COUNTER

TENMA®

- Seven digit LCD display
- Input: BNC female, 50Ω
- 16 segment bargraph signal strength meter
- Rugged aluminum housing with black anodized finish
- Internal NiCad battery pack with included charger
- Removable telescopic antenna
- Dimensions (HxWxD): 3.25 x 2.8 x 1.25"



Rugged instrument is smaller than a deck of cards. **Mfg. part no. 72-7390** provides frequency measurement of digital, on/off keying and analog signals from 30MHz to 2.8GHz. It is perfect for displaying the output of two–way radio equipment, analog and digital cell phones, RF remote controls and many other items. Internal vibrator alert also makes this an outstanding device for detecting transmitters in counter–surveillance applications.

Mfg. Part No.	Frequency Measuring Range	Resolution	Stock No.	Price Each
72-7390	30MHz to 800MHz / 500MHz to 2.8GHz	10kHz (digital and on/off keying) 1kHz (analog)	80R7494	199.00

(191934)

MCA3000 SERIES MICROWAVE COUNTER / ANALYZERS & INTEGRATED POWER METER

CE Tektronix

Features
- Automated Measurements: Frequency, Period, Ratio, Time Interval, Time Interval Error, Pulse Width, Rise/Fall Time, Phase Angle, Duty Cycle, Max./Min. Voltage, Peak-to-Peak Voltage
- Integrated Power Meter
- Multi-parameter display
- Trend Plot mode
- Measurement Statistics and Histogram mode
- Allan deviation
- Zero dead-time frequency/period measurements

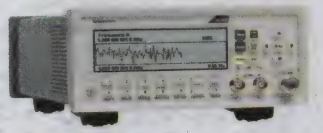
Specifications
- Microwave analyzer channel with CW or Burst
- Two 300 MHz general-purpose channels
- -35 dBm to +10 dBm power range
- 12 digit/s frequency resolution, 14 digit display
- 25 ms (Auto) or Zero (Manual) acquisition time
- Optional 1.5×10–8 ultra high-stability oven time base

Mfg. Part No.	Bandwidth	Time Resolution	Voltage Resolution	Stock No.	Price Each
MCA3027	27GHz	100ps	3mV	84R5911	8860.00
MCA3040	40GHz	100ps	3mV	84R5912	13000.00

(188943)

FCA3000 & FCA3100 SERIES TIMER / COUNTER / ANALYZERS

CE Tektronix



Features
- Automated measurements: Frequency, Period, Ratio, Time Interval, Time Interval Error, Pulse Width, Rise/Fall Time, Phase Angle, Duty Cycle, Max./Min. Voltage, Peak-to-Peak Voltage
- Totalize measurement (FCA3100 series)
- Multi-parameter display
- Trend plot mode
- Measurement statistics mode
- Histogram mode
- Allan deviation
- Zero dead-time frequency/period measurements
- Continuous data streaming over USB/GPIB bus during measurement (FCA3100 series)
- Programmable pulse output from 0.5Hz to 50MHz

Specifications
- Up to 3 input channels
- 12 Digit/s frequency resolution
- 0.001° phase resolution
- Optional 5×10–8 High-stability oven time base

Mfg. Part No.	Bandwidth	Time Resolution	Voltage Resolution	Stock No.	Price Each
FCA3000 SERIES					
FCA3000	400MHz	100ps	3mV	84R5905	2270.00
FCA3003	3GHz	100ps	3mV	84R5906	3320.00
FCA3020	20GHz	100ps	3mV	84R5907	6580.00
FCA3100 SERIES					
FCA3100	400MHz	50ps	1mV	84R5908	3550.00
FCA3103	3GHz	50ps	1mV	84R5909	4610.00
FCA3120	20GHz	50ps	1mV	84R5910	7840.00

(188935)

CPX SERIES POWERFLEX DC POWER SUPPLIES

NEW

Aim TTi

- High performance autoranging outputs
- Twin 175W or twin 420W (350W or 840W total)
- Compact half-rack case size

The TTi PowerFlex design of the **CPX series** enables higher currents to be generated at lower voltages within an overall power limit envelope. Each output can provide twice as much current as a conventional PSU of the same maximum voltage and power. The **CPX series** are dual output power supplies with two completely independent and isolated outputs. The outputs operate in constant voltage or constant current mode with automatic crossover and mode indication. Each output has its own on-off switch. The **CPX series** incorporates separate high resolution voltage and current meters for each output using large bright LED displays.

Mfg. Part No.	Outputs	Input Voltage	Output Voltage (V)	Output Current (A)	Stock No.	Price Each
CPX200	2	110V AC to 240V AC	35	10	06X4066	1025.60

(212103)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196560)

CPX400 SERIES POWERFLEX DC POWER SUPPLIES

NEW

- Single & dual output PowerFlex dc PSUs - 420 watts per output
- High performance autoranging outputs, 60V and 20A maximum
- True analog controls with digital functionality including S-Lock
- Isolated tracking for easy series/parallel use - up to 120V or 40A
- GPIB, RS-232, USB and LAN interfaces; LXI class C compliance

CPX400SP

CPX400DP

The **CPX series** is a different type of laboratory power supply designed to meet the need for flexibility in the choice of voltage and current. A conventional PSU has a fixed current limit giving a power capability that reduces directly with the output voltage. The TTi **PowerFlex** design of the **CPX series** enables higher currents to be generated at lower voltages within an overall power limit envelope. Each output can provide considerably higher current than a conventional PSU of the same maximum voltage and power (see power curve).

Mfg. Part No.	Outputs	Analogue	RS-232	USB	LAN (LXI)	GPIB	Stock No.	Price Each
CPX400S	1						04X9893	840.00
CPX400SA	1	X					04X9894	1000.00
CPX400SP	1		X	X	X	X	04X9895	1080.00
CPX400D	2						04X9891	1360.00
CPX400DP	2		X	X	X	X	04X9892	1592.00

(212102)

QPX SERIES LAB POWER SUPPLIES

- 1200 watts PowerFlex/PowerFlex+
- Higher currents at lower voltages
- Up to 80 volts and up to 50 amps
- Analog, RS-232, USB & LAN (LXI)
- GPIB interface optional

Mfg. part no. QPX1200L offers flexibility that cannot be achieved with conventional laboratory power supplies. **Mfg. part no. QPX600D** can be operated as two entirely independent power supplies, each with its own display. Alternatively multiple tracking modes are available including ones intended for series and parallel operation which provide metering of total voltage or total current respectively. It uses PowerFlex+, which offers a much wider flexing range of more than 6 1/2:1. Both suited to bench-top and system applications **mfg. part no. QPX1200L** with front and rear terminals and a wide range of interfaces **mfg. part no. QPX600D** has a wide range of remote control interfaces.

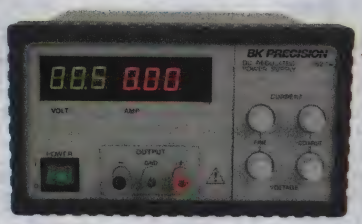
Mfg. Part No.	Outputs	Voltage (V)	Current* (A)	Power (W)	Interfaces	Stock No.	Price Each
QPX1200SP-USA	1	0 to 60	0 to 50	1200	RS232/USB/LAN	71R6825	1849.42
QPX600D	2	0 to 80	0 to 50	2 x 600	RS232/USB/LAN	71R6826	2179.02

* Max. current is not available with max. voltage

(178355)

SINGLE OUTPUT DC POWER SUPPLIES

- Continuously monitor voltage and current output on two digital meters
- Connect two supplies in parallel to double the current output
- Connect two supplies in series to double the voltage output
- New compact style
- Reliable, Durable
- Operate continuously at full load without overheating
- Fully overload protected
- Coarse and fine voltage controls
- Great regulation
- Very low ripple
- Constant voltage or constant current operation



Mfg. Part No.	Output Voltage	Output Current	Output Power	Stock No.	Price Each
1621A	0 to 18V	0 to 5A	220W	01H7504	249.00

(209449)

SINGLE OUTPUT PROGRAMMABLE DC POWER SUPPLIES

- Excellent display resolution
- Low ripple and low noise due to linear regulation
- Outstanding temperature stability
- Fast transient response time (<120 us)
- SCPI compatible command set, programmable via USB and RS232
- Closed case calibration
- List mode operation for increased throughput.
- Download and execute command sequences from non-volatile memory
- For bench use or rack mountable
- Very quiet due to intelligent fan speed control, making the supply suitable for lab bench use
- Over voltage protection

➤ CONTINUED ➤

SINGLE OUTPUT PROGRAMMABLE DC POWER SUPPLIES (CONT.)

B&K Precision® models 9150, 9151, 9152 and 9153 are high performance linear-regulated programmable DC power supplies that provide excellent performance and features not found in other supplies in this price category. The 9150 series are designed for applications in design verification, production or university labs that require high yet clean and reliable power, combined with excellent resolution, accuracy and fast transient response time.

Mfg. Part No.	Output Voltage (V)	Output Current (A)	Stock No.	Price Each
9150	0 - 5.2	0 - 60	34R9976	1895.00
9151	0 - 20	0 - 27	34R9977	1795.00
9152	0 - 30	0 - 18	34R9978	1795.00
9153	0 - 60	0 - 9	34R9979	1795.00

(163093)

HIGH CURRENT / HIGH POWER SWITCHING DC POWER SUPPLIES

1692

1900

- Lightweight and compact
- Fixed Output (1680 & 1682A, 1692)
- Variable Output (1686A, 1688A, 1692, 1693, 1694, 190x Series)
- Low Ripple
- Rotary encoder control for precise voltage and current setting (190x Series)
- 3 user-defined voltage and current presets (190x Series)
- Remote control function (190x Series)
- Overvoltage, overtemperature, and overload protection
- Designed for continuous operation
- Ideal for substituting for car batteries

Mfg. Part No.	Output Voltage (V)	Max. Output Current (A)	Display	Stock No.	Price Each
HIGH CURRENT					
1680	13.8	4	None	52F555	59.00
1682A	13.8	12	None	36C2946	135.00
1686A	3-14	12	Meter	36C2947	225.00
1692	3-15	40	LED	22C6851	345.00
1693	1-15	60	LED	34T4662	499.00
1694	1-30	30	LED	34T4663	499.00
HIGH POWER					
1900	1-16	60	LED	34T4664	625.00
1901	1-32	30	LED	34T4665	625.00
1902	1-60	15	LED	34T4666	625.00

(85493)

XLN SERIES PROGRAMMABLE DC POWER SUPPLIES

- Compact, high density, 1U package
- USB interface (standard), GPIB and LAN (optional)
- External analog programming interface
- List mode: execute test sequences with up to 150 steps from instrument memory
- Average command processing time <50 ms
- Programmable voltage and current slew rate allow for "soft starting" of loads
- Internal memory stores up to 10 instrument settings
- Control up to 30 power supplies from one
- PC via the RS485 interface
- Remote sense
- Timer-controlled output (1 s to 100 hr)
- Front to rear airflow allows for efficient cooling in high rack density environments
- Application software and LabVIEW™ drivers available
- SCPI-compliant command set
- Extensive protection features: OVP, OCP, OPP, OTP, foldback protection mode, and key-lock function
- Easy to configure master/slave mode for series or parallel connection of up to four units

The **XLN series** are programmable, single-output DC power supplies, that provide clean power up to 1560 watts in a compact 1U rackmountable package. Comparable supplies from other manufacturers primarily address the ATE market only, while the **XLN series** is designed for both benchtop users and system integrators. For benchtop applications, these power supplies offer built-in voltage and current meters displaying setting and output values concurrently, as well as an intuitive user interface with full keypad and rotary knob. Standard USB, RS485, and optional GPIB and LAN interfaces combined with fast average command processing times of less than 50 ms make the **XLN series** ideal for ATE applications. Free application software and a complete set of LabVIEW™ drivers are available to provide remote control capabilities, reduce programming time, and increase productivity. When greater output power is required, up to four **XLN** models can be connected in series (high current models only) or parallel and synchronized with the RS485 interface. Alternatively, the RS485 interface can be used to daisy chain up to 30 units and to remotely control them from one master PC via USB, GPIB, or LAN interface. These power supplies are perfectly suited for ATE systems integration, product design and development, product QC and burn-in testing, and other applications requiring excellent regulation, high power, low noise, and a wide range of voltage and current ratings.

HIGH CURRENT

Mfg. Part No.	Output Power	Output Current Max	Output Voltage Max	Stock No.	Price Each
XLN3640	1.44kW	36V	40A	53R0417	2100.00
XLN6024	1.44kW	60V	24A	53R0420	2100.00
XLN8018	1.44kW	80V	18A	53R0422	2100.00
XLN10014	1.44kW	100V	14.4A	53R0415	2100.00

➤ CONTINUED ➤

DC POWER SUPPLIES

XLN SERIES PROGRAMMABLE DC POWER SUPPLIES (CONT.)

HIGH VOLTAGE

Mfg. Part No.	Output Power	Output Current Max	Output Voltage Max	Stock No.	Price Each
XLN15010	1.56kW	150V	10.4A	95W0533	2250.00
XLN30052	1.56kW	300V	5.2A	95W0535	2250.00
XLN60026	1.56kW	600V	2.6A	95W0537	2250.00

(165133)

SWITCHING DC POWER SUPPLIES

NEW

BK PRECISION

- Automatic CV/CC crossover operation
- Lightweight and compact
- Rotary encoder control for precise voltage and current setting
- Save up to 3 user-defined voltage and current presets for quick recall
- PC software for remote control and external timed programming
- Analog remote control function
- USB interface
- Front panel auxiliary output
- Overvoltage, overtemperature, and overload protection

B&K Precision models **1685B**, **1687B**, and **1688B** are laboratory grade switching mode DC power supplies with high current output in a small, lightweight form factor. These power supplies provide various configurations of output voltage and current, and feature rotary encoder control knobs, which make setting voltage and current levels fast and precise. Its dual action push button allows the user to easily set both coarse and fine, voltage and current levels. In addition to its constant voltage (CV) and constant current (CC) modes, these high efficiency DC power supplies offer preset and remote control modes. Save up to three different presets of voltage and current values for quick recall. For remote control, an analog remote control terminal is accessible on the rear, or use the USB interface to communicate with the power supply via PC software or remote commands. These features make the **1685B** Series suitable for a wide range of applications including production testing, telecommunications, R&D, electronic field service, and university labs.

Mfg. Part No.	Output Voltage Max.	Output Current Max.	Output Power Max.	Stock No.	Price Each
1685B	60V	5A	300W	06W1643	339.00
1687B	36V	10A	360W	06W1644	339.00
1688B	18V	20A	360W	06W1645	339.00

(212278)

LOW CURRENT HIGH RESOLUTION DC POWER SUPPLY

NEW

BK PRECISION

- Low 1 mA settable current limit with 0.1 mA resolution
- Output on/off button
- Exceptionally low current ripple and noise (<0.4 mArms)
- Excellent regulation
- Constant voltage (CV) and constant current (CC) operation
- Two large, easy-to-read LED displays provide good visibility in bright or low light conditions
- CV and CC mode indicator
- Automatic recall of saved voltage and current settings upon power-up
- RS-232 interface
- Isolated output
- Overload and reverse polarity protection
- Power-on self test

The model **1739** is a high resolution, low current DC power source with excellent load regulation and low noise characteristics. Two 4-digit LED displays continuously monitor the output voltage and current. The power supplies can be operated locally from the front panel or remotely through the RS-232 interface. The mechanical configuration conserves bench space and allows for easy portability. Using a MOSFET circuit design and high quality components with very low temperature coefficients, the power supply is extremely stable and capable of outputting current as low as 1 mA with a 100 uA settable resolution. This power supply was designed for electrical and electronics applications requiring precise levels of low current, including 4-20 mA current loop testing, calibration, or basic IC testing.

Mfg. Part No.	Output Voltage Max.	Output Current Max.	Stock No.	Price Each
1739	30V	1A	27W2274	639.00

(212279)

PROGRAMMABLE DC POWER SUPPLIES

BK PRECISION

- Excellent display resolution
- Low ripple and low noise
- Outstanding temperature stability
- Fast transient resonse time (<20ms)
- SCPI Compatible
- Front and rear output terminals
- Closed case calibration

912XA series are laboratory grade programmable DC Power Supplies providing great performance and features not found in other supplies in this price category. These power supplies are designed to meet the needs of today's applications in R&D design verification, production testing or university labs that require clean and reliable power, high resolution/accuracy and fast transient response time.

Mfg. Part No.	Volts	Amps	Stock No.	Price Each
9120A	32	3	60M9899	729.00
9121A	20	5	55M8721	735.00
9122A	60	2.5	78M8275	765.00

➤CONTINUED➤

PROGRAMMABLE DC POWER SUPPLIES (CONT.)

Mfg. Part No.	Volts	Amps	Stock No.	Price Each
9123A	30	5	78M8277	815.00
9124	72	1.2	85M2252	745.00

9130 series triple output fully programmable power supplies deliver 0-30V/0-3A on 2 outputs and 0-5V/0-3A on 1 output. Each output is fully floating and can be adjusted independently or connected in series or parallel to produce higher voltages or currents.

Mfg. Part No.	Volts (Ch 1)	Amps (Ch 1)	Volts (Ch 2)	Amps (Ch 2)	Volts (Ch 3)	Amps (Ch 3)	Stock No.	Price Each
9130	30	3	30	3	5	3	60M9900	935.00

(84557)

PROGRAMMABLE POWER SUPPLIES

BK PRECISION

Programmable DC power supplies with sixteen user programmable outputs, controllable output On/Off switch, 10mV/10mA display resolution and closed case calibration. Ripple and Noise: 1mV. Comes complete with interface cable and software.

1785B

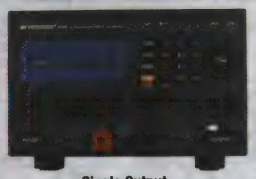
Mfg. Part No.	Output Voltage (V)	Output Current (A)	Line Reg	Load Reg	Stock No.	Price Each
1785B	0-18	0-5	< 0.1% + 3mV	≤ 0.01% + 3mV	97J8008	399.00
1786B	0-32	0-3	< 0.1% + 3mV	≤ 0.01% + 3mV	97J8009	399.00
1787B	0-72	0-1.5	< 0.1% + 3mV	≤ 0.01% + 3mV	97J8010	399.00
1788	0-32	0-6	< 0.1% + 3mV	≤ 0.02% + 5mV	97J8011	545.00

(48675)

9170 / 9180 SERIES PROGRAMMABLE DUAL-RANGE DC POWER SUPPLIES

CE

BK PRECISION



Single Output

Dual Output

- Single and dual output models with up to 210W output power
- Exceptionally low ripple and noise
- Front and rear panel output
- List mode for executing up to 10 stored test sequences with a maximum of 150 steps in total
- Overvoltage/overcurrent/overtemperature protection (OVP/OCP/OTP) and key-lock function
- Fast transient response time of < 50 us for most models
- Programmable voltage and current slew rates
- Standard USB interface
- 4 optional types of modular interface cards add LAN and GPIB, Digital I/O and Analog Control, RS485, or RS232 functionality
- LabVIEW (TM) drivers available

The **9170/9180 series** programmable DC power supplies deliver clean, stable and precise output power due to the supplies' exceptionally low ripple and noise, low temperature coefficient, excellent regulation and fast transient response time characteristics. These power supplies offer SCPI IEEE488.2 compliant USB (standard), RS232, RS485, GPIB and LAN interfaces, combined with front and rear panel output and remote sense terminals to facilitate test system development and integration. The LAN interface includes a built-in web server that allows users to configure, control, or monitor basic power supply settings. In addition to a full numerical keypad for convenient data entry, this series also provides unique features not typically found in comparable power sources, such as LED test modes, modular interface card slots, automatic range selection, and an optional 8-bit bidirectional digital I/O interface.

Mfg. Part No.	Voltage Ranges	Max Current	Output Power	Outputs	Stock No.	Price Each
9171	10V, 20V	10A, 5A	100W	1	47W4025	985.00
9172	35V, 70V	3A, 1.5A	105W	1	47W4026	985.00
9173	10V, 20V	10A, 5A	200W	2	47W4027	1395.00
9174	35V, 70V	3A, 1.5A	210W	2	47W4028	1395.00
9181	18V, 36V	8A, 4A	144W	1	47W4029	1125.00
9182	10V, 20V	20A, 10A	200W	1	47W4030	1285.00
9183	35V, 70V	6A, 3A	210W	1	47W4031	1285.00
9184	100V, 200V	2A, 1A	200W	1	47W4032	1385.00
9185	400V, 600V	500mA, 350mA	210W	1	47W4033	1385.00

(209447)

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(212566)

9115 SERIES MULTI-RANGE PROGRAMMABLE DC POWER SUPPLIES

- Multi-ranging operation (output up to 1200 W with up to 150 V/60A rating)
- Compact, high density, 1U rackmount form factor
- Adjustable voltage slope (rise and fall time)
- List mode programming
- Save and recall up to 100 instrument settings
- Analog interface with control and monitoring functions
- Master/Slave mode for parallel and series operation
- Remote sense
- Overvoltage/overpower/overtemperature protection, and key-lock function
- Standard USB (USBTMC-compliant), RS-232, GPIB and RS-485 interfaces supporting SCPI commands for remote control
- Test functions compliant to automotive standards (**9115-AT** only)
- Includes calibration certificate and test report

Offering precise control and versatility for ATE and automotive test applications, the new **9115 Series** multi-range DC power supplies from B&K Precision offer high power up to 1200 W with output ratings up to 150 V and 60 A. The front panel features a bright VFD display and numeric keypad along with rotary knobs and cursors designed for quick and precise setting of output levels. Unlike conventional supplies with fixed output ratings, **9115 Series** models automatically recalculate voltage and current limits for each setting, providing any Volt/Amp combination within the power supply's output power rating. This flexible power range can free up valuable bench space by allowing users to replace multiple power supplies with a single unit. Additionally, model **9115-AT** adds a built-in automotive test function to simulate common test conditions for electronic devices installed in automobiles.

Mfg. Part No.	Output Voltage	Output Current	Output Power	Stock No.	Price Each
9115	80V	60A	1.2kW	**53W6917**	1845.00
9115-AT	80V	60A	1.2kW	**53X3991**	2385.00
9116	150VDC	30A	1.2kW	**53X3992**	2150.00

(209445)

SINGLE AND TRIPLE OUTPUT DC LAB POWER SUPPLIES

1760A, 1761

1651A

1735A, 1715A

All power supplies are designed for continuous duty at maximum rated output. The designs include reverse polarity protection, thermal protection, short-circuit protection, and current limiting. Regulation is tight and ripple is low regardless of variations in the load or the input AC line voltage. All units have constant voltage and constant current modes.

Mfg. Part No.	Output 1 (V)	Output 1 Current	Output 2 (V)	Output 2 Current	Output 3 (V)	Output 3 Current	Meters	Stock No.	Price Each
1670A	30	3A	12	500mA	5	500mA	Digital	**36C2945**	209.00
1651A	24	500mA	24	500mA	5	4A	LED	**22C6850**	469.00
1760A	30	2A	30	2A	6.5	5A	Digital	**93C9454**	679.00
1761	35	3A	35	3A	6.5	5A	LED	**73C7912**	709.00
1762	60	2A	60	2A	6.5	5A	LED	**09R1794**	759.00
1746B	16	10A	...	...	...	...	LED	**48K7299**	559.00
1710A	30	1A	...	...	...	...	LED	**81C9151**	265.00
1730A	30	3A	...	...	...	...	LED	**93C9451**	349.00
1735A	30	3A	...	...	...	...	Digital	**74C1209**	409.00
1743B	35	6A	...	...	...	...	Digital	**41K8779**	559.00
1715A	60	2A	...	...	...	...	Digital	**93C9450**	435.00

(5300)

DUAL RANGE DC POWER SUPPLIES

1737

1747

- Dual range to accommodate applications requiring either a higher voltage or a higher current
- Low ripple and noise
- Excellent regulation
- Constant voltage (CV) and constant current (CC) mode operation
- Two 4-digit LED displays provide good visibility in bright or low light
- LED indication for CV and CC modes
- Automatic recall of last settings on power up
- RS-232 interface
- Front panel emulation software available for download
- Isolated output
- Overload protection
- Reverse polarity protection

B&K Precision's models **1737** and **1747** are general purpose dual range DC power sources. These power supplies can output higher voltage at a lower current range or more current at a lower voltage range. Two 4-digit LED displays continuously monitor the output voltage and current. The power supplies can be operated locally from the front panel or remotely through the RS-232 interface. The **1737** and **1747** both exhibit excellent regulation and low ripple

➤ CONTINUED ➤

DUAL RANGE DC POWER SUPPLIES (CONT.)

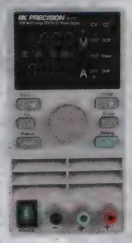
characteristics. Their mechanical configuration conserves bench space and allows for easy portability. These power supplies are well-suited for a wide variety of electrical and electronics applications in service shops, engineering labs, production, school laboratories, and home use.

Mfg. Part No.	Output Voltage Max.	Output Current Max.	Output Power Max.	Stock No.	Price Each
1737	60V	3A	180VA	**74T1002**	559.00
1747	60V	10A	560VA	**17W5639**	879.00

(202231)

MULTI-RANGE POWER SUPPLY

- Digitally controlled, mixed mode linear/ switching DC power supply
- 10mV/1mA resolution over full range
- High reliability due to over current/ voltage/temperature protection
- Store and recall 4x100 groups of preset volt/amp values
- Output On/Off control
- Compact design (1550 only)
- USB charging port (1550 only)



9110

1550

Mfg. No. 9110 automatically recalculates voltage/current for each setting, forming a constant hyperbolic-shaped boundary, providing 100W output power in any volt/amp combination within the rated voltage (60V) and current (5A). Includes line cord, manual. Mfg. No. 1550 has a USB charging port located on the front of the panel allowing the user to charge a cell phone or MP3 player. The 1550 is ideally used for any bench laboratoriees, work shops and schools where bench space is limited. Accessories available; *go online or call.*

SPECIFICATIONS FOR 9110

	Voltage	Current
Output Ratings	0-60V	0-5A
Load Regulation	Less than or equal to 0.01% + 3mV	Less than or equal to 0.01% + 3mA
Line Regulation	Less than or equal to 0.01% + 3mV	Less than or equal to 0.1% + 2mA
Setting Accuracy	Less than or equal to 0.05% + 10mV	Less than or equal to 0.2% + 2mA
Display Accuracy	Less than or equal to 0.05% + 10mV	Less than or equal to 0.1% + 2mA
Ripple	Less than or equal to 2.0mVrms	Less than or equal to 5mArms

SPECIFICATIONS FOR 1550

	Voltage	Current
Output Ratings	1-36 VDC	0-3A
Load Regulation	From 10% to 100% ± 50 mV	From 10% to 100% ± 20 mA
Line Regulation	From min to max ± 20 mV	From min to max ± 20 mA

Mfg. Part No.	Output Voltage	Output Current	Stock No.	Price Each
9110	0-60V	0-5A	**60M9898**	290.00
1550	1-36V	0-3A	**04P2069**	149.00

(102983)

TRIPLE OUTPUT DC POWER SUPPLIES

- Three independent outputs
- Individual control knobs for voltage and current settings of variable outputs
- CV (constant voltage)/CC (constant current) mode operation
- Separate 3-digit voltage and current displays for variable outputs
- LED indication for CV/CC mode
- Overload indication LED for fixed output
- Series tracking and parallel tracking mode operation to double output voltage or current respectively

Mfg. Part No.	Output 1	Output 2	Output 3	Stock No.	Price Each
1672	0 to 32VDC / 0 to 3A	0 to 32VDC / 0 to 3A	5VDC / 3A	**08J5304**	489.00
1673	0 to 32VDC / 0 to 6A	0 to 32VDC / 0 to 6A	5VDC / 3A	**20T9544**	829.00

(194754)

VARIABLE DC OUTPUT PROGRAMMABLE SWITCHING POWER SUPPLIES

- RS-232 interface
- Low noise and ripple
- Tight line and load regulation
- Output disable
- Over voltage protection
- Constant voltage operation
- Constant current operation (current limiting)
- Large easy to read LCD display

Programmable switching DC power supplies are ideal for repetitive test routines and data logging. Units are supplied complete with software for programming and calibration.

➤ CONTINUED ➤

DC POWER SUPPLIES

VARIABLE DC OUTPUT PROGRAMMABLE SWITCHING POWER SUPPLIES (CONT.)

Mfg. Part No.	Output Voltage	Output Current	Stock No.	Price Each
1696	222	10A	97H7830	375.00
1697	222	5A	86H6509	355.00
1698	222	3.3A	92H3098	375.00

(79343)

VARIABLE OUTPUT DC SWITCHING POWER SUPPLY

BK PRECISION

- Over voltage, short circuit and temperature protection
- Constant voltage or constant current operation
- Low ripple and noise
- Tight line and load regulation

Laboratory switching mode design provides high power output at an affordable price.

Mfg. Part No.	Output Voltage	Output Current	Stock No.	Price Each
1667	222	3.3A	07J1416	269.00

(79344)

80W SWITCHING MODE DC POWER SUPPLY

EXTECH INSTRUMENTS A FLIR COMPANY

- Constant voltage or current
- 3 selectable ranges:
  0 to 16V/0 to 5A
  0 to 27V/0 to 3A
  0 to 36V/0 to 2.2A
- 4-Digit LED displays
- Front/Rear output terminals
- Lightweight for easy portability

Mfg. part no. 382260 3-in-1 power supply features remote sensing for accurate applied voltage at load point. Compact slim tower housing is ideal for tight work bench. Comes complete with AC power cord.

SPECIFICATIONS:

Input Voltage:	90-264VAC
Input Frequency:	47-63Hz
Ripple & Noise:	<30mVpp
Line Regulation:	<4mV
Load Regulation:	<20mV
Display:	Dual 4-digit LED displays
Dimensions:	13 x 5 x 2" (330 x 127 x 53.5mm)
Weight:	4.2 lbs. (1.9kg)

Mfg. Part No.	Output 1		Output 2		Output 3		Output Power (W)	Stock No.	Price Each
	V	A	V	A	V	A			
382260	16.4	5.1	27.6	3.1	36.8	2.3	80	61M1150	279.99

(148533)

PSW SERIES PROGRAMMABLE SWITCHING DC POWER SUPPLIES

RoHS Compliant Available

GW INSTEK Simply Reliable

- Voltage Rating: 30/80V/160V, Output Power: 360W ~ 1080W
- Constant Power Output for Multiple Range (V&I) Operation
- CV/CC Priority; Particularly Suitable for the Battery and LED Industry
- Adjustable Slew Rate
- Series and Parallel Operation (2 units in Series / 3 units in Parallel Maximum)
- High Efficiency and High Power Density
- ⅛ Rack Mount Size Design (EIA/JIS Standard)
- Standard Interface: LAN,USB,Analog Control Interface, GPIB-USB Adaptor(Optional)
- Labview Driver

The **PSW-Series** is a single output multi-range programmable switching DC Power Supply covering a power range up to 1080W. This series of products include six models with the combination of 30V,80V and 160V rated voltages and 360W, 720W and 1080W maximum output powers. The multi-range feature allows the flexible and efficient configuration of voltage and current within the rated power range. As the **PSW-Series** can be connected in series for maximum 2 units or in parallel for maximum 3 units, the capability of connecting multiple PSW units for higher voltage or higher current output provides a broad coverage of applications. With the flexibility of multi-range power utilization and series/parallel connection, the PSW Series significantly reduces the user's investment for various power supply products to accommodate the projects with different power requirements.

Mfg. Part No.	Output Voltage	Output Current	Output Power	Stock No.	Price Each
● PSW 30-36	0 ~ 30V	0 ~ 36A	360W	79T9643	1285.00
● PSW 30-72	0 ~ 30V	0 ~ 72A	720W	79T9644	1570.00
● PSW 30-108	0 ~ 30V	0 ~ 108A	1.08kW	79T9642	2045.00
● PSW 80-13.5	0 ~ 80V	0 ~ 13.5A	360W	79T9645	1285.00
● PSW 80-27	0 ~ 80V	0 ~ 27A	720W	79T9646	1570.00
● PSW 80-40.5	0 ~ 80V	0 ~ 40.5A	1.08kW	71T8092	2045.00

➤CONTINUED➤

PSW SERIES PROGRAMMABLE SWITCHING DC POWER SUPPLIES (CONT.)

Mfg. Part No.	Output Voltage	Output Current	Output Power	Stock No.	Price Each
● PSW 160-7.2	0 ~ 160V	0 ~ 7.2A	360W	48W5215	1410.00
● PSW 160-14.4	0 ~ 160V	0 ~ 14.4A	720W	48W5213	1725.00
● PSW 160-21.6	0 ~ 160V	0 ~ 21.6A	1.08kW	48W5214	2250.00

(210122)

SINGLE-CHANNEL PROGRAMMABLE DC POWER SUPPLIES

KEITHLEY

- Five models ranging in power from 86W to 150W with voltage outputs from 20V to 72V address a wide range of power requirements
- 0.03% basic voltage output accuracy and 0.05% basic current accuracy provide quality test data
- High output and measurement resolution, 1mV and 0.1mA, for testing low power circuits and devices
- Remote sensing to ensure the programmed voltage is applied to the load
- Dual-line display shows both the programmed values and actual outputs for a continuous indication of the status of the power delivered to the load
- Repeatable test sequences of up to 80 output steps are easy to create with the built-in List mode
- GPIB and USB interfaces are standard for convenient automated control

Series 2200 Programmable DC Power Supplies provide a wide range of voltage outputs to address the testing and characterization of components, circuits, modules, and complete devices whether you are in a research laboratory, in design and development, or in production test. Single Channel Power Supplies consist of five models with output voltages from 20V to 72V that can deliver 86W, 96W, 100W, and 150W of power. In addition, these power supplies can act as constant current sources as well as constant voltage sources. Multi-Channel Power Supplies combine two and three channels of output power to cost-effectively characterize and test a wide range of devices, circuit boards, modules, and products that require more than one power source. **Series 2200** Power Supplies offer an excellent combination of performance, versatility, and ease of use to maximize the information from characterization or test as quickly and as easily as possible. They perform as effectively in automated test systems as they do in manual instrument configurations.

Mfg. Part No.	Output Voltage (V)	Output Current (A)	Power (W)	Stock No.	Price Each
2200-20-5	20	5	100	82T8212	939.00
2200-30-5	30	5	150	82T8213	1110.00
2200-32-3	32	3	96	82T8214	939.00
2200-60-2	60	2.5	150	82T8215	1110.00
2200-72-1	72	1.2	86	82T8216	939.00

(203757)

MULTI-CHANNEL USB AND USB/GPIB PROGRAMMABLE DC POWER SUPPLIES

NEW

KEITHLEY

- Dual and triple output models with two 30V/1.5A (45W) channels and a 6V/5A (30W) channel on the triple output supply
- All channels are independently controlled and have isolated outputs for maximum flexibility
- All channels have remote sensing to ensure that programmed voltage is accurately applied to the load
- Two 30V channels can be combined either in series to double output voltage or in parallel to double output current
- 0.03% basic voltage output accuracy and 0.1% current accuracy ensure quality test data
- Low noise, linear regulation with <3mVpp ripple and noise
- Voltage and current outputs for all channels are displayed simultaneously for easy observation of each output state
- Keypad entry allows fast, precise entry of output values
- USB interface standard on all versions for remote control; "G" versions include USB and GPIB interfaces

The **Models 2220, 2220G, 2230, and 2230G** Multi-Channel Programmable DC Power Supplies combine two and three channels of output power to cost-effectively characterize and test a wide range of devices, circuit boards, modules, and products that require more than one power source. The **Models 2220-30-1** and **2220G-30-1** supplies provide two channels, with each channel capable of outputting up to 30V and up to 1.5A. The **Models 2230-30-1** and **2230G-30-1** include two 30V/1.5A channels and add a 6V channel with up to 5A output for powering digital circuits. These multi-channel power supplies offer an excellent combination of performance, versatility, and ease of use to maximize the information from characterization or test as quickly and as easily as possible. They perform as effectively in automated test systems as they do in manual instrument configurations. The USB interface is standard on all models; the "G" versions add a GPIB interface.

Mfg. Part No.	Output 1		Output 2		Output 3		Output Power (W)	Stock No.	Price Each
	V	A	V	A	V	A			
2220-30-1	30	1.5	30	1.5	...	...	90	28W5118	964.00
2220G-30-1	30	1.5	30	1.5	...	...	90	19X9754	1060.00
2230-30-1	30	1.5	30	1.5	6	5	120	28W2312	1170.00
2230G-30-1	30	1.5	30	1.5	6	5	120	19X9755	1270.00

(211599)

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(212567)

2260B SERIES 360W AND 720W PROGRAMMABLE DC POWER SUPPLIES

NEW

KEITHLEY

- 360W and 720W versions with voltage up to 80V and current up to 72A
- Combine power supplies in serial and parallel combinations to expand voltage and current outputs up to 160V and 216A
- Programmable voltage or current rise and fall times from 0.1V/s to 160V/s or 0.01A/s to 144A/s prevent damage from inrush current to low impedance loads
- Constant current priority setting reduces voltage and current overshoot when powering LEDs
- Simulate a battery's output characteristics with a programmable output resistance
- Display delivered power with either the output current or the output voltage
- Choose from analog control, USB, LAN, or an optional GPIB interface for automated control
- Save bench and test system space: six 71mm-wide 360W units or three 143mm-wide 720W units fit in a standard rack width

Source a wide range of voltages and currents with the 360W **Model 2260B-30-36** or the **Model 2260B-80-13** Programmable DC Power Supplies. For higher power requirements, output up to 720W with either the **Model 2260B-30-72** or the **Model 2260B-80-27** DC power supplies. All four instruments have constant power outputs to provide a flexible range of voltage and current output combinations. The 360W supplies can output as much as 30V or 80V or as much as 13.5A or 36A, while the 720W supplies can output twice as much current, 72A and 27A, with the same maximum voltage outputs. The wide range of output voltages and currents of the **Series 2260B** power supplies along with multiple interfaces, enable their use in numerous applications including research and design, quality control, and production test.

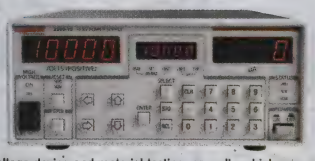
Mfg. Part No.	Output Voltage	Output Current	Output Power	Stock No.	Price Each
2260B-30-36	30V	36A	360W	**54X6568**	1420.00
2260B-30-72	30V	72A	720W	**54X6569**	1880.00
2260B-80-13	80V	13A	360W	**54X6570**	1420.00
2260B-80-27	80V	27A	720W	**54X6571**	1880.00

(212421)

2290 SERIES HIGH VOLTAGE POWER SUPPLIES

NEW

KEITHLEY



- Source voltages up to 5kV and 10kV
- 1uA current measurement resolution
- Low noise for precision sourcing and sensitive measurements; selectable filters reduce noise to less than 3mV RMS on the 5kV supply
- Safety interlock controls high voltage output
- IEEE-488 programmable
- Protection module prevents damage to low voltage instrumentation

Series 2290 High Voltage Power Supplies facilitate high voltage device and material testing, as well as high energy physics experimentation. The **Model 2290-5** 5kV Power Supply provides voltage outputs up to 5000V, and the **Model 2290-10** 10kV Power Supply offers up to 10,000V. The **Model 2290-5** has a 5mA current capacity, and the **Model 2290-10** has a 1mA current capacity. These supplies measure both output voltage with 1V resolution and output current with 1uA resolution. In addition to the voltage and current output displays, a third display shows one of four settings: output voltage, voltage limit, current limit, or current trip. These values can be set precisely with the front panel keypad. The settings can also be programmed over the IEEE-4888 interface, or the output voltage can be set with an analog control voltage.

Mfg. Part No.	Description	Stock No.	Price Each
2290-5	5kV Power Supply, 120VAC Nominal Input Voltage	**33X1234**	3890.00
2290-10	10kV Power Supply	**33X1233**	4900.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
2290-PM-200	10kV Protection Module	**33X1232**	1200.00

(211625)

BATTERY & BATTERY/CHARGER SIMULATING DC POWER SUPPLIES

CE

KEITHLEY

2303

2306

2308

- Optimized for battery-powered device testing
- Ultra-fast response times to load changes
- 100nA sensitivity
- Single and dual channel options
- Monitor voltage control and power consumption
- Measure sleep and standby currents
- Built-in digital voltmeter
- CE compliant

Model	2302	2303	2303-PJ	2304A	2306	2306-PJ	2306-VS	2308
Current Sink Capacity	3A	2A		3A				
DC Current Measurement Sensitivity	100nA		10uA	100nA		10uA (Ch.1) 100nA (Ch.2)	100nA	

CONTINUED

BATTERY & BATTERY/CHARGER SIMULATING DC POWER SUPPLIES (CONT.)

Model	2302	2303	2303-PJ	2304A	2306	2306-PJ	2306-VS	2308
Accuracy (V / I)	0.05% / 0.2%							
Relay Control Port	4	2		2	4	4	No	4

BATTERY SIMULATOR

Mfg. Part No.	Channels	Output Voltage	Output Current	Output Power	Stock No.	Price Each
2302	1	0 to 15V	3A @ 15V	60W	**58T8417**	2720.00
2302-PJ	1	0 to 15V	3A @ 15V	60W	**58T8418**	2720.00
BATTERY / CHARGER SIMULATOR						
2306	2	0 to 15V	3A @ 15V	50W	**58T8423**	3370.00
2306-PJ	2	0 to 15V	3A @ 15V	50W	**58T8425**	3370.00
2306-US	2	0 to 15V	3A @ 15V	50W	**58T8426**	3370.00
2306-VS	2	0 to 15V	3A @ 15V	50W	**58T8427**	3850.00
PORTABLE DEVICE BATTERY / CHARGER SIMULATOR						
2308	2	0 to 15V	3A @ 15V	50W	**58T8428**	3080.00
HIGH SPEED POWER SUPPLY						
2303	1	0 to 15V	3A @ 15V	45W	**58T8419**	2060.00
2303-PJ	1	0 to 15V	3A @ 15V	45W	**58T8420**	2060.00
2304A	1	0 to 20V	5A @ 20V	100W	**58T8422**	2770.00

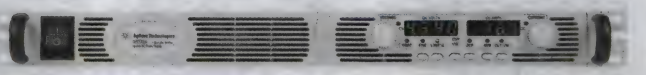
ACCESSORIES

Mfg. Part No.	Description	For Use With	Stock No.	Price Each
2304-DISP	Remote Display	2304A	**58T8421**	222.00
2306-DISP	VFD Remote Display with Keypad	2302 or 2306	**58T8424**	358.00

(197656)

N5700 SERIES SYSTEM DC POWER SUPPLIES

KEYSIGHT TECHNOLOGIES



- 750W and 1500W high-power single-output power supplies
- Easy Front Panel Operation
- Output Up to 600V and Up to 180A
- Built-In Voltage and Current Measurement
- Full Protection From Over-Voltage and Over-Current
- Parallel Up to 4 Units for Higher Power
- Universal AC Input 85 VAC to 265 VAC
- LAN, USB, and GPIB Interfaces Standard

The **N5700 series** system DC power supplies have just the right performance - at just the right price - in a compact (1 U) package. This family of affordable 750 W and 1500 W single output programmable DC power supplies are designed to simplify system development. Ideal for basic DC power applications, they provide stable output power, built-in voltage and current measurement, and output voltage and current from 6 V to 600 V and 1.3 A to 180 A. All models come standard with GPIB, LAN and USB 2.0 interfaces. Rack mount ears and handles are provided standard with every unit. An additional **N5740A** rack mount slide kit makes it easy to integrate an **N5700 series** into a test rack by providing all the necessary hardware to rack mount an **N5700 series** power supply in only 1 U of rack space.

750W

Mfg. Part No.	Description	Stock No.	Price Each
N5741A	6V, 100A	**56J9856**	2616.00
N5742A	8V, 90A	**56J9857**	2616.00
N5743A	12.5, 60A	**56J9858**	2616.00
N5744A	20V, 38A	**56J9859**	2616.00
N5745A	30V, 25A	**37J0610**	2616.00
N5746A	40V, 19A	**56J9860**	2616.00
N5747A	60V, 12.5A	**56J9861**	2616.00
N5748A	80V, 9.5A	**56J9862**	2616.00
N5749A	100V, 7.5A	**56J9863**	2616.00
N5750A	150V, 5A	**56J9864**	2616.00
N5751A	300V, 2.5A	**56J9865**	2616.00
N5752A	600V, 1.3A	**56J9866**	2616.00
1500W			
N5761A	6V, 180A	**56J9867**	3106.00
N5762A	8V, 165A	**56J9868**	3106.00
N5763A	12.5, 120A	**56J9869**	3106.00
N5764A	20V, 76A	**56J9870**	3106.00
N5765A	30V, 50A	**56J9871**	3106.00
N5766A	40V, 38A	**56J9872**	3106.00
N5767A	60V, 25A	**56J9873**	3106.00
N5768A	80V, 19A	**56J9874**	3106.00
N5769A	100V, 15A	**56J9875**	3106.00
N5770A	150V, 10A	**56J9876**	3106.00
N5771A	300V, 5A	**56J9877**	3106.00
N5772A	600V, 2.6A	**56J9878**	3106.00
RACKMOUNT KIT			
N5740A	Rack Mount Slide Kit	**56J9855**	144.00

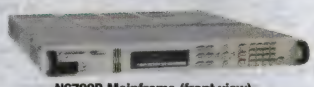
(211777)

DC POWER SUPPLIES

N6700 SERIES LOW-PROFILE MODULAR POWER SYSTEM

KEYSIGHT TECHNOLOGIES

- Choice of three power system mainframes: 400W, 600W or 1200W
- Up to four power modules housed in one mainframe: 50W, 100W, 300W or 500W
- Mix and match among basic DC, high performance, or precision power modules
- Low-profile mainframe design — takes up only 1U of rack space
- Stable, reliable DC output to 150V and 50A
- Fast command processing: <1ms improves throughput
- Connect via built-in GPIB, LAN, or USB



N6700B Mainframe (front view)

DC Power Modules
N6700B Mainframe (rear view)

N6700 series is a flexible modular power platform that gives you the ability to mix and match more than 30 different DC power modules to create a 1- to 4-channel DC power system optimized to meet specific test requirements. System engineers can invest in high-performance outputs where speed and accuracy are needed, or purchase basic performance outputs for simple DC power requirements. Plus it saves rack space for automatic test equipment (ATE) applications with the smallest, highest density modular power supply available at only one rack unit high.

To build a modular power system, select **mfg. part no. N6700B, N6701A** or **N6702A** mainframe. Order up to four modules per mainframe. When rack mounting mainframe, use only mfg. part no. N6709A rack mount kit; *ordered separately below.* **NOTE:** Do not use standard rack mounting hardware.

MODULAR POWER SYSTEM MAINFRAMES — 4-SLOTS
Small in size the **mfg. part nos. N6700B, N6701A** and **N6702A** mainframes come standard with built-in measurement of voltage and current, protection features against over-voltage, over-current, and over-temperature; GPIB, USB 2.0, and 10/100 Base-T Ethernet LAN interfaces for connectivity, and interfacing disabling for extra security. Also, all nonvolatile RAM data and settings can be cleared from the front panel.

Mfg. Part No.	Total Power (W)	Stock No.	Price Each
N6700B	400	45J0022	2632.00
N6705B	600	76R6635	7486.00
N6701A	600	60K0560	2991.00
N6702A	1200	60K0561	3949.00

N6730 SERIES BASIC DC POWER MODULES — 50W
N6730, N6740, and **N6770 series** of basic DC power modules provide programmable voltage and current, measurement and protection features at an economical price, making these modules suitable to power the device-under-test (DUT) or to provide power for ATE system resources, such as fixture control.

Mfg. Part No.	Output Voltage (V)	Output Current (A)	Stock No.	Price Each
N6731B	5	10	56J9881	559.00
N6732B	8	6.25	56J9882	559.00
N6733B	20	2.5	56J9883	559.00
N6734B	35	1.5	56J9884	559.00
N6735B	60	800	56J9885	559.00
N6736B	100	500	56J9886	559.00
N6740 SERIES BASIC DC POWER MODULES — 100W				
N6741B	5	20	56J9887	1031.00
N6742B	8	12.5	56J9888	1031.00
N6743B	20	5	56J9889	1031.00
N6744B	35	3	56J9890	1031.00
N6745B	60	1.6	56J9891	1031.00
N6746B	100	1	56J9892	1031.00
N6770 SERIES BASIC DC POWER MODULES — 300W				
N6773A	20	15	60K0562	1498.00
N6774A	35	8.5	60K0563	1498.00
N6775A	60	5	60K0564	1498.00
N6776A	100	3	60K0565	1498.00
N6777A	150	2	76T8607	1469.00

N6750 SERIES HIGH-PERFORMANCE DC POWER MODULES — 50W, 100W
N6750 series power modules, for applications where the power supply plays a critical role, provide low-noise, high-accuracy and programming speeds that are up to 10 to 50 times faster than other programmable power supplies. High-speed test extensions offer an oscilloscope-like digitizer that simplifies system configuration and increases measurement accuracy when viewing high-speed transient or pulse events within the device-under-test (DUT). In addition, autoranging output capabilities enable one power supply to do the job of several traditional power supplies.

Mfg. Part No.	Power (W)	Output Current (A)	Stock No.	Price Each
N6751A	50	5	56J9893	1270.00
N6752A	100	10	56J9894	1750.00
N6753A	300	50	64M0126	2691.00
N6754A	300	20	39M6170	2691.00
N6755A	500	50	76T8601	3067.00
N6756A	500	17	76T8602	3067.00
N6760 SERIES PRECISION DC POWER MODULES — 50W, 100W				
N6761A	50	1.5	45J0457	2493.00
N6762A	100	3	56J9895	2967.00
N6763A	300	50	76T8603	3724.00
N6764A	300	20	76T8604	3724.00

➤CONTINUED➤

N6700 SERIES LOW-PROFILE MODULAR POWER SYSTEM (CONT.)

N6760 SERIES PRECISION DC POWER MODULES — 50W, 100W

Mfg. Part No.	Output Voltage (V)	Output Current (A)	Stock No.	Price Each
N6765A	500	50	76T8605	4272.00
N6766A	500	17	76T8606	4272.00

N6780 SERIES PRECISION DC POWER MODULES — 20W
N6780 Series SMUs for applications requiring high accuracy, high resolution and measurement flixibility. The **N6781A** and **N6782A** 2-quadrant SMUs offer advanced sourcing and measurement capabilities required to overcome test challenges associated with optimizing power consumption and maximizing battery life of battery powered devices and their components. The **N6784A** 4-quadrant SMU offers advanced sourcing and measurement capabilities in all four quadrants. It is designed to be a versatile tool for general purpose applications.

N6781A	2-Quadrant Source/Measure Unit for Battery Drain Analysis	79R9083	5737.00
N6782A	2-Quadrant Source/Measure Unit for Functional Test	84R7987	4581.00
N6784A	4-Quadrant General-Purpose Source/Measure Unit	29T3217	4022.00

N6783A SERIES APPLICATION-SPECIFIC DC POWER MODULES — 18W, 24W
N6783A Series are basic 2-quadrant DC power modules designed for specific applications. The **N6783A-MFG** is for testing battery-powered (mobile) devices in manufacturing. The **N6783A-BAT** is for qualifying, validating, and conditioning batteries in R&D that will be used in mobile devices.

N6783A-BAT	Battery Charge/Discharge Module	51T1859	1518.00
N6783A-MFG	Mobile Communications DC Power Module	65T9676	1301.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
N6708A	Filler Panel Kit	56J9879	57.02
N6709A	Rack Mount Kit	56J9880	148.00

(211778)

U8000 SERIES DC POWER SUPPLIES

KEYSIGHT TECHNOLOGIES

- 3A/90W or 5A/150W single-output, nonprogrammable models and 3A/375W or 6A/375W Triple-Output DC Power Supply
- Easy-to-use front panel operation
- Fast 50µsec transient response reduces test time
- Excellent load and line regulation — Constant Voltage: <0.01% +2mV, Constant Current: <0.02% +2mA
- Low output noise: 1mVrms, 3mArms (20Hz to 20MHz)
- Over-voltage and over-current protection prevents damage to DUT
- LCD display with backlight on/off option
- Standby output for safety
- Save-and-Recall memory function
- Keypad locking prevents accidental front panel usage
- Physical lock mechanism provides secure instrument storage
- CSA certified, CE complaint

U8000 Series non-programmable 30V and 60V DC power supplies includes the functionality and features typically found in costly programmable supplies. These benchtop units deliver excellent value by providing reliable DC power, efficient set-up capabilities and important security benefits. Ideal for a variety of applications in electronics manufacturing and in educational lab settings. Supplies can be easily integrate into a test rack with rack mount kits; *ordered separately below.* Both models come complete with product reference CD, power cord, and certificate of calibration . *Order test lead set and the comprehensive user's and service guide separately below.*

Mfg. Part No.	Description	Stock No.	Price Each
U8001A	90W, 3A/30V Single-Output DC Power Supply	14N3964	331.00
U8002A	150W, 5A/30V Single-Output DC Power Supply	14N3967	415.00
U8031A	375W, 6A/30V Triple-Output DC Power Supply	47T6079	1042.00
U8032A	375W, 3A/60V Triple-Output DC Power Supply	47T6080	1042.00

(211781)

CALIBRATION SERVICES

From pre-calibration to re-calibration, we bring you competitive pricing with quick delivery.

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N8700 SERIES HIGH POWER DC POWER SUPPLIES

KEYSIGHT TECHNOLOGIES

- Small, high density 2 U high, 19" wide package
- 3.3kW and 5kW power families
- Outputs up to 600V and up to 400A
- Parallel multiple units for higher power
- Built-in voltage and current measurement
- LAN, USB, and GPIB interfaces standard.
- Full protection from over-voltage and over-current
- Flexible AC input voltage options

N8700 series single-output programmable DC power supplies consists of 21 models for simple DC power applications. They provide stable output power, built-in voltage and current measurement, and output voltage and current from 8V to 600V and 5.5A to 400A. **N8700 series** offers many system-ready features like multiple standard I/O interfaces to simplify and accelerate test-system development. Its air vents are in the front and rear, so you can stack other instruments directly above or below to save valuable rack space.

Mfg. Part No.	Output Voltage (V)	Output Current (A)	Max. Power	Stock No.	Price Each
3.3kW					
N8733A/N8731A-831/N8731A-230	15	220	3.3	10R2024	4793.00
N8734A-831-230	20	165	3.3	10R2026	4793.00
N8736A-831-230	40	85	3.4	10R2030	4922.00
N8737A/N8731A-831/N8731A-230	60	55	3.3	10R2032	4922.00
N8737A-861-208	60	55	3.3	10R2033	4922.00
N8739A-861-208	100	33	3.3	10R2037	4793.00
N8742A/N8731A-831/N8731A-230	600	5.5	3.3	10R2042	4793.00
N8742A-861-208	600	5.5	3300	10R2043	4922.00
5kW					
N8756A-861-208	40	125	5	10R2046	6234.00
N8757A-861-208	60	85	5.1	10R2047	6402.00
N8761A-861-208	300	17	5.1	10R2051	6402.00

(211779)

66000 MODULAR POWER SYSTEM 1200W PER MAINFRAME GPIB FEATURES

KEYSIGHT TECHNOLOGIES

- Greater throughput in less space with the flexible modular power system
- Up to 8 modules in the required high density 1200W 66000A mainframe
- Stable, low ripple and noise power source
- Sequence up to 20 voltage and current setting per output
- Easy to reconfigure with front loading modules

The **66000 series** modular power system simplifies test-system assembly, cabling, programming, de-bugging, and operation. It is ideal for ATE and production test environments for supplying bias power and stimulus to subassemblies and final products.

Required mainframe: 66000A

Mfg. Part No.:	66101A	66102A	66103A	66104A	66105A	66106A
GPIB:	Yes	Yes	Yes	Yes	Yes	Yes
Output Voltage:	0-8V	0-20V	0-35V	0-60V	0-120V	0-200V
Output Current:	0-16A	0-7.5A	0-4.5A	0-2.5A	0-1.25A	0-0.75A
Ripple RMS:	2mV	3mV	5mV	9mV	18mV	30mV
Power:	128W	150W	150W	150W	150W	150W

Mfg. Part No.	Description	Stock No.	Price Each
66000A	Modular System Mainframe	95H9246	2699.00
66101A	Module Power Supply 8V, 16A	95H9249	2484.00
66102A	Module Power Supply 20V,7.5A	95H9250	2484.00
66103A	Module Power Supply 35V, 4.5A	95H9251	2484.00
66104A	Module Power Supply 60 V, 2.5 A	95H9252	2484.00
66105A	Module Power Supply 120V, 1.25A	95H9253	2484.00
66106A	Module Power Supply 200V, 0.75A	95H9254	2484.00

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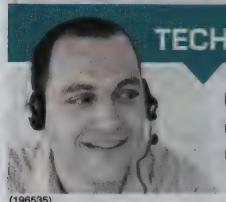
TECHNICAL SUPPORT HOTLINE



Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

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E3600 SERIES SINGLE, DUAL AND TRIPLE OUTPUT DC POWER SUPPLIES

KEYSIGHT TECHNOLOGIES

- Dual or triple output
- 30W to 60W output power
- Constant-Current (CC) and Constant-Voltage (CV) Modes
- Linear Power
- 10-Turn Voltage and Current Controls
- Digital Voltage and Current Meters
- Low Noise and Excellent Regulations
- Dual range models available

Mfg. part no. E3620A features: dual outputs isolated, 10-turn pots, and CV and CL modes. **Mfg. part no. E3630A** features: tracking, common outputs, and CV and CL modes. Transient response time: <50µs following change in output current from full load to half load for output to recover to within 15mV. Common mode current: <1µArms. Dual range models available, *go online or call.*

Mfg. Part No.	Output Volts	Output Amps	Ripple and Noise Voltage	Meter Resolution Volts	Meter Resolution Amps
E3620A	25V 25V	1A 1A	<350µVrms, <1.5mVp-p	10mV (0-20V), 100mV (>20V)	1mA
E3630A	+6V +20V −20V	2.5A 0.5A 0.5A	<350µVrms, <1.5mVp-p	10mV	10mA

Mfg. Part No.	Description	Stock No.	Price Each
E3620A	Dual-Output Power Supply	91F3056	657.00
E3630A	Triple-Output Power Supply	91F3057	657.00

(211774)

E3630A SERIES SINGLE- AND TRIPLE-OUTPUT PROGRAMMABLE DC POWER SUPPLIES

KEYSIGHT TECHNOLOGIES

- 80W to 200W output power
- Built-in RS-232 and GPIB interface
- 0.01% load and line regulation

E3631A:
- Triple-Output, 80 watts total
- Dual +/-25V, 1A outputs, one isolated 0–6V, 5A output
- Ripple and noise <350µ Vrms / 2mV p-p

E3632A:
- Single-Output 120 watts total
- 0–15V, 7A or 0–30V, 4A
- Ripple and noise <350µ Vrms / 2mV p-p

E3633A:
- Single-Output 200 watts total
- 0–8V, 20A or 0–20V, 10A
- Ripple and noise <350µ Vrms / 3m V p-p

E3634A:
- Single-Output 200 watts total
- 0–25V, 7A or 0–50V, 4A
- Ripple and noise <500µ Vrms / 3mV p-p

All models operate in both constant voltage and constant current modes. Single output models have overvoltage and overcurrent protection. Up to 3 complete power supply settings can be stored and recalled from the internal none volatile memory.

Mfg. Part No.	Description	Stock No.	Price Each
E3631A	80W Triple-Output Power Supply	91F3058	1386.00
E3632A	105/120W Single-Output Power Supply	91F3059	1211.00
E3633A	160/200W Single-Output Power Supply	95H9602	1464.00
E3634A	175/200W Single-Output Power Supply	95H9603	1464.00

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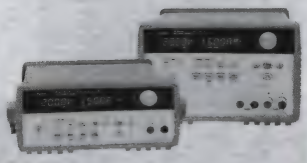
E3640A SERIES SINGLE AND DUAL-OUTPUT PROGRAMMABLE DC POWER SUPPLIES

KEYSIGHT TECHNOLOGIES

- Single- and Dual-Output
- 30W to 100W Output Power
- Front and Rear Output Terminals
- Over Voltage Protection
- Remote Senses
- GPIB and RS232 as Standard



The **E364XA series** of programmable DC power supplies provide great performance. CVCI mode. All types deliver clean power, dependable regulation, and fast transient response. Calibration with printed certification and data report is available on all models, *go online or call*.

SINGLE-OUTPUT

Mfg. Part No.	E3640A	E3641A	E3642A	E3643A	E3644A	E3645A
Outputs	1	1	1	1	1	1
Output Max V/I	8V/3A or 20V/1.5A	35V/0.8A or 60V/0.5A	8V/5A or 20V/2.5A	35V/1.4A or 60V/0.8A	8V/8A or 20V/4A	35V/2.2Aor 60V/1.3A
Power Rating	30W	30W	50W	50W	80W	80W
Ripple and Noise	Less Than 5mVpp/ 0.5mVrms	Less Than 8mVpp/ 1mVrms	Less Than 5mVpp/ 0.5mVrms	Less Than 8mVpp/ 1mVrms	Less Than 5mVpp/ 0.5mVrms	Less Than 8mVpp/ 1mVrms

CONTINUED

DC POWER SUPPLIES

E3640A SERIES SINGLE AND DUAL-OUTPUT PROGRAMMABLE DC POWER SUPPLIES (CONT.)

	DUAL-OUTPUT			
Mfg. Part No.	E3646A	E3647A	E3648A	E3649A
Outputs	2	2	2	2
Output Max V/I	8V/3A or 20V/1.5A	35V/0.8A or 60V/0.5A	8V/5A or 20V/2.5A	35V/1.4A or 60V/0.8A
Power Rating	60W	60W	100W	100W
Ripple and Noise	<5mVpp/ 0.5mV rms	<8mVpp/ 1mV rms	<5mVpp/ 0.5mV rms	<8mVpp/ 1mV rms

SINGLE-OUTPUT

Mfg. Part No.	Stock No.	Price Each
E3640A	18C1837	790.00
E3641A	18C1838	790.00
E3642A	18C1839	842.00
E3643A	18C1840	842.00
E3644A	18C1841	1028.00
E3645A	18C1842	1028.00
DUAL-OUTPUT		
E3646A	13C1023	1096.00
E3647A	18C1843	1096.00
E3648A	18C1844	1322.00
E3649A	18C1845	1322.00

(211776)

Z+ SERIES 200W to 800W PROGRAMMABLE POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda
Innovating Reliable Power

Features
- 2U high
- Built-in USB, RS-232 & RS-485 Interface
- Optional LAN, GPIB & Isolated Analog Programming
- Bench or Rack Mount
- Constant Current or Voltage Modes
- Five Year Warranty

Mfg. Part No.	Output Voltage (V)	Output Current	Power Rating (W)	Stock No.	Price Each 1-9
● Z10-20-U	10	20A	200	07W8743	1196.85
● Z10-40-U	10	40A	400	71T6666	1474.60
● Z10-60-U	10	60A	600	07W8750	1742.25
● Z10-72-U	10	72A	720	07W8757	2009.90
● Z20-10-U	20	10A	200	07W8785	1196.85
● Z20-20-U	20	20A	400	71T6680	1474.60
● Z20-30-U	20	30A	600	07W8792	1742.25
● Z20-40-U	20	40A	800	07W8799	2009.90
● Z36-6-U	36	6A	216	07W8820	1196.85
● Z36-12-U	36	12A	432	71T6687	1474.60
● Z36-18-U	36	18A	648	07W8806	1742.25
● Z36-24-U	36	24A	864	07W8813	2009.90
● Z60-3.5-U	60	3.5A	210	07W8841	1196.85
● Z60-7-U	60	7A	420	71T6694	1474.60
● Z60-10-U	60	10A	600	07W8827	1742.25
● Z60-14-U	60	14A	840	07W8834	2009.90
● Z100-2-U	100	2A	200	07W8764	1196.85
● Z100-4-U	100	4A	400	71T6673	1474.60
● Z100-6-U	100	6A	600	07W8771	1742.25
● Z100-8-U	100	8A	800	07W8778	2009.90
● Z160-1.3-U	160	1.3A	208	51X5989	1255.00
● Z160-2.6-U	160	2.6A	416	51X5994	1545.00
● Z320-0.65-U	320	650mA	208	51X5999	1255.00
● Z320-1.3-U	320	1.3A	416	51X6004	1545.00
● Z650-0.64-U	650	640mA	416	51X6014	1545.00
● Z650-0.32-U	650	320mA	208	51X6009	1255.00
LAN INTERFACE LXI CLASS C COMPLIANT					
● Z10-20-LAN-U	10	20A	200	07W8742	1742.25
● Z10-40-LAN-U	10	40A	400	71T6665	2050.30
● Z10-60-LAN-U	10	60A	600	07W8749	2358.35
● Z10-72-LAN-U	10	72A	720	07W8756	2626.00
● Z20-10-LAN-U	20	10A	200	07W8784	1742.25
● Z20-20-LAN-U	20	20A	400	71T6679	2050.30
● Z20-30-LAN-U	20	30A	600	07W8791	2358.35
● Z20-40-LAN-U	20	40A	800	07W8798	2626.00
● Z36-6-LAN-U	36	6A	216	07W8819	1742.25
● Z36-12-LAN-U	36	12A	432	71T6686	2050.30

➤CONTINUED➤

Z+ SERIES 200W to 800W PROGRAMMABLE POWER SUPPLIES (CONT.)

LAN INTERFACE LXI CLASS C COMPLIANT

Mfg. Part No.	Output Voltage (V)	Output Current	Power Rating (W)	Stock No.	Price Each 1-9
● Z36-18-LAN-U	36	18A	648	07W8805	2358.35
● Z36-24-LAN-U	36	24A	864	07W8812	2626.00
● Z60-3.5-LAN-U	60	3.5A	210	07W8840	1742.25
● Z60-7-LAN-U	60	7A	420	71T6693	2050.30
● Z60-10-LAN-U	60	10A	600	07W8826	2358.35
● Z60-14-LAN-U	60	14A	840	07W8833	2626.00
● Z100-2-LAN-U	100	2A	200	07W8763	1742.25
● Z100-4-LAN-U	100	4A	400	71T6672	2050.30
● Z100-6-LAN-U	100	6A	600	07W8770	2358.35
● Z100-8-LAN-U	100	8A	800	07W8777	2626.00
● Z160-1.3-LAN-U	160	1.3A	208	51X5988	1800.00
● Z160-2.6-LAN-U	160	2.6A	416	51X5993	2125.00
● Z320-0.65-LAN-U	320	650mA	208	51X5998	1800.00
● Z320-1.3-LAN-U	320	1.3A	416	51X6003	2125.00
● Z650-0.64-LAN-U	650	640mA	416	51X6013	2125.00
● Z650-0.32-LAN-U	650	320mA	208	51X6008	1800.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● Z-BP	Blanking Panel for 19" Rack (70mm)	71T6652	42.37
● Z-NL100	19" Rack Housing (Accepts four 105mm width units or six 70mm width units)	71T6653	460.56
● Z-WBP	Blanking Panel for 19" Rack (105mm)	07W8736	42.37

(198161)

PWS2000 SERIES DC BENCH POWER SUPPLIES

Tektronix

Key Features:
- Low noise, linear regulation
- Wide voltage and current ranges
- 10 mV/10 mA programming resolution
- Less than 3 mVp-p ripple and noise
- Bright vacuum fluorescent displays
- 20 user-defined setup memories
- 3-year warranty

PWS2000 series power supplies offer wide current and voltage ranges, plus 10 mV and 10 mA resolution. Numeric keypads make voltage and current selection fast and accurate. Bright vacuum fluorescent displays with large digits provide excellent readability. A max voltage setting and password-protected front panel lockout help prevent circuit damage. **PWS2000 series** power supplies satisfy a wide variety of applications. All models include: documentation CD, power cord, calibration certificates documenting traceability to National Metrology Institute(s) and quick start user manual.

SPECIFICATIONS

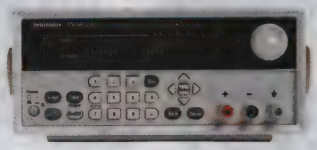
Mfg. Part No.	PWS2185	PWS2323	PWS2326	PWS2721
Voltage Load Regulation	0.02% + 5 mV	0.02% + 5 mV	0.04% + 6 mV	0.02% + 4 mV
Current Load Regulation	0.1% + 2 mA typical			

Mfg. Part No.	Output Voltage (VDC)	Output Current (A)	Max. Power (VA)	Stock No.	Price Each
PWS2185	18	5	350	73R7677	407.00
PWS2323	32	3	350	73R7678	407.00
PWS2326	32	6	700	73R7679	470.00
PWS2721	72	1.5	350	73R7680	407.00

(177885)

PWS4000 SERIES PROGRAMMABLE DC BENCH POWER SUPPLIES

Tektronix



Key Features and Functions::
- Low-noise linear regulation
- Wide voltage and current ranges
- 0.03% basic voltage accuracy, 0.05% basic current accuracy
- Up to 40 user-defined setup memories
- USB interface for remote programming
- Bright display shows actual voltage, current, and limits simultaneously
- List mode for test sequencing
- Remote sense, rear outputs and trigger/status lines
- 3-year warranty

PWS4000 series provides excellent voltage and current accuracy, and remote sensing for precise output levels. Both numeric keys and a rotary knob provide the ability to enter parameters directly or make continuous adjustments. The four-parameter, bright vacuum fluorescent display shows meter readings and limits at a glance. Integrated setup memory and list functions help speed manual and remote control testing. Remote programming is through USB, and NI Signal Express PC software (included). A max voltage setting and password-protected front panel lockout help prevent unintentional circuit damage. All models also include: documentation CD, power cord, calibration certificates documenting traceability to National Metrology Institute(s) and quick start user manual.

➤CONTINUED➤

PWS4000 SERIES PROGRAMMABLE DC BENCH POWER SUPPLIES (CONT.)

SPECIFICATIONS

Mfg. Part No.	PWS4205	PWS4305	PWS4323	PWS4602	PWS4721
Voltage Load Regulation	0.01% + 2 mV				
Current Load Regulation	0.05% + 0.1 mA	0.05% + 1.5 mA	0.05% + 0.1 mA	0.05% + 0.5 mA	0.05% + 0.1 mA
Voltage Ripple & Noise (7 MHz)	1 mV RMS 3 mV P-P	1 mV RMS 4 mV P-P	1 mV RMS 4 mV P-P	1 mV RMS 5 mV P-P	1 mV RMS 3 mV P-P
Current Ripple & Noise (7 MHz)	3 mA RMS	4 mA RMS	3 mA RMS	3 mA RMS	3 mA RMS

Mfg. Part No.	Output Voltage (VDC)	Output Current (A)	Power Max. (W)	Stock No.	Price Each
PWS4205	20	5	100	73R7681	904.00
PWS4305	30	5	150	73R7682	1070.00
PWS4323	32	3	96	73R7683	904.00
PWS4602	60	2.5	150	73R7684	1070.00
PWS4721	72	1.2	86	73R7685	904.00

(177886)

SWITCH MODE LABORATORY DC POWER SUPPLIES

NEW TENMA®

- Backlit four digit LCD display
- Simultaneous display of voltage and current
- Auto selecting constant voltage (CV) and constant current (CC) modes
- Ultra quiet convection cooling
- Short circuit, overload, over voltage and thermal protection
- 84% efficiency at maximum output
- RoHs compliant

Precision adjustable supply is ideal for test, measurement and service applications where tight voltage and current regulation are critical. Highly efficient switch mode design delivers outstanding performance from an extremely compact footprint. Unique separate output ON/OFF control allows voltage and current setting, with the supply output turned off.

Mfg. Part No.	Output Voltage Max	Output Current Max	Stock No.	Price Each
72-8340A	60V	1.6A	20X1048	149.00
72-8345A	36V	3A	95W9878	149.00
72-8350A	20V	5A	95W5650	159.99

(212505)

72-8XXXA SERIES DC POWER SUPPLIES

NEW TENMA®

72-8XXXA is a series of general DC power supplies suitable for laboratory use. Both CH1 and CH2 may work in CV or CC mode, and these two modes convert automatically according to the load. CH1 and CH2 have auto tracking function. In this condition, the output of CH2 tracks the output of CH1. This function is usually used when adjustable symmetrical and double polarity power is required. Both CH1 and CH2 display the output voltage or current with a 6-digit-LED meter. CH3 (in some models) is a 5V fixed output. Its maximum output current is 2A, and it is usually used in TTL circuits etc. CH1, CH2 and CH3 all have overload protection.

Mfg. Part No.	Output Voltage Max	Output Current Max	Channels	Stock No.	Price Each 1-9
72-8335A	25V	2A	3	47X1648	103.43
72-8690A	32V	3A	2	47X1649	152.68
72-8695A	32V	3A	3	47X1650	161.54
72-8700A	32V	5A	2	47X1651	189.28

(212474)

72-6628 TRIPLE-OUTPUT DC POWER SUPPLY

CE TENMA®

- Adjustable 0 - 30VDC Outputs 3A
- Fixed 5V @ 500mA Continuous, 1A Max
- Fixed 12V @ 500mA Continuous, 1A Max
- Constant Current or Constant Voltage Operation
- Overload and Short Circuit Protection
- 1-Year Warranty
- CE Compliant

A triple-output power supply, with large, clear LCD digital volt and amp meters. High-current binding posts for main output.

SPECIFICATIONS

Load Regulation	≤15mV
Line Regulation	≤10mV
Ripple and Noise	≤5mVrms

➤CONTINUED➤

72-6628 TRIPLE-OUTPUT DC POWER SUPPLY (CONT.)

Power Requirements	120VAC 60Hz
Dimensions	4¾ (H) x 8 (W) x 10" (D)
Weight	11 lbs.

Mfg. Part No.	Description	Stock No.	Price Each
72-6628	Triple-Output DC Power Supply	50N1382	175.35

(49288)

HIGH CURRENT SWITCH MODE POWER SUPPLIES

TENMA®

- Front panel 3/16" binding posts provide convenient access for loads up to 25A (**72-7670**)
- Front panel banana jacks provide convenient access for loads up to 5A (**72-7655**)
- Rear panel 3/8" posts accept banana plugs, ring terminals or spade lugs for loads up to 60A (**72-7655**)
- Remote voltage control and sensing (**72-7655**)
- Large 5/8" high LED digits
- Display resolution to 0.1V, 0.1A
- Excellent load and line regulation
- Low ripple and noise
- Over-voltage, overload, temperature and short circuit protection
- Detachable IEC power cord

SPECIFICATIONS

Model:	72-7670	72-7655
Output Voltage:	3VDC to 15VDC	1VDC to 15VDC
Output Current:	25A	60A
Load Regulation:	200mV	0.1% +5mV
Line Regulation:	50mV ±10%	0.05% +3mV
Ripple and Noise:	5mV (RMS)	40mV (p-p)
Efficiency:	...	85%
Meter Accuracy:	...	±1% +1 count
Power Requirements:	115VAC, 60Hz	120VAC, 60Hz
Dimensions:	4-1/4" (H) x 8-3/4" (W) x 8-3/4" (D)	4-1/4" (H) x 8-3/4" (W) x 14-1/4" (D)
Weight:	6.6 lbs.	12.8 lbs.

Mfg. Part No.	Description	Stock No.	Price Each
72-7670	Heavy Duty 25A Switch Mode Power Supply	27K5867	149.99
72-7655	Heavy Duty 60A Switch Mode Power Supply	57J0202	305.99

(203708)

5A HIGH CURRENT SWITCHING MODE POWER SUPPLY

CE TENMA®

- Adjustable 1 - 40V @ 5A
- 3½ Digit LED Display
- Coarse and Fine Voltage Adjustment
- Auto-Cross Over for CC and CV Modes
- Low Ripple and Noise
- Excellent Load and Line Regulation
- Thermostat Control Fan
- OVP, Overload, Short Circuit and Over Temperature Protection

Type 72-7295 is a 200W laboratory grade switching power supply. Features OVP (output overvoltage protection) that protects voltage sensitivity loads by shutting down the supply when the output voltage is in excess of the set voltage. *To order calibrated certificate add* **"C"** to the end of the type number. CE compliant.

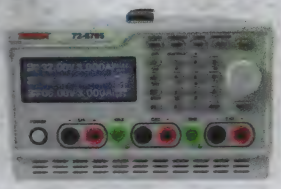
SPECIFICATIONS	
Load Regulation	0.5% + 100mV
Line Regulation	50mV
Ripple and Noise (P-P)	20mV
Power Requirements	90 - 265VAC 50/60Hz
Dimensions / Weight	205L x 115W x 275mmD / 3kg

Mfg. Part No.	Description	Stock No.	Price Each
72-7295	1 - 40V @ 0 - 5A Power Supply	22H6406	197.40

(74500)

PROGRAMMABLE DC POWER SUPPLY

TENMA®



72-8795

Features:

- Programmable power supply with a digital interface
- Three separately adjustable linear outputs
- The 192×64 LCD Display can display multiple settings and measurements simultaneously
- Windows-based interface for user-friendly operation
- High stability and low drift
- Over Voltage, Current, and Temperature protection
- Intelligent fan control adjusts with output power
- Built-in warning buzzer
- Accurate user calibration software
- Space-saving design
- Fine adjustment knob
- 90 setting memory
- Parallel, series, and independent operation modes
- 1-second timing resolution

72-8795 Programmable Power Supply is controlled by a Microprocessor Unit (MPU) that is designed for a communication interface by RS-232 or USB to computer to enable advanced testing and power delivery by programmable control. The voltage and current are controlled by a 12 bit D/A Converter with high resolution and accuracy. Also, the digital interface provides a speedy, precise and convenient input of information controlled by intuitive controls. The adjustment

➤CONTINUED➤

PROGRAMMABLE DC POWER SUPPLY (CONT.)

of voltage/current is made by software calibration, eliminating potential manual fault, that increases the precision of the instrument. Over Voltage Protection (OVP) and Over Current Protection (OCP) can be set with the software and utilized by the hardware to achieve precise, instant protection to prevent damage and increase the users' safety.

Mfg. Part No.	Description	Stock No.	Price Each
72-8795	Programmable DC Power Supply	32T0685	379.99

(202208)

REGULATED DC POWER SUPPLIES

TENMA®

72-1025

Features

- Color coded binding post output
- Cigarette lighter output (3A, 6A and 10A only)
- Lighted rocker switch
- Analog current meter
- Attached 6' three prong grounded power cord

Specifications

Mfg. Part No.	72-8140	72-8141	72-8142	72-8144
Continuous	3A	6A	10A	20A
Surge	5A	8A	12A	22A
Dimensions (H x W x D)	3-1/4" x 4-1/2" x 7"	4-3/8" x 5-1/2" x 9-1/4"		4-3/4" x 8" x 10-1/4"
Line/load regulation	1.5%			
Input voltage	110-127VAC, 60Hz			

Stout power supplies are perfect for cell phones, moderate to high power auto sound products, scanners, CB and ham radio equipment. Rugged design provides up to 30 minutes of full load continuous operation.

Mfg. Part No.	Description	Stock No.	Price Each
72-8140	13.8VDC, 3A Continuous	01N4881	54.97
72-8141	13.8VDC, 6A Continuous	54M4269	65.98
72-8142	13.8VDC, 10A Continuous	34M2634	107.96

(114926)

MULTIPLE OUTLET DC POWER STRIP

TENMA®

- Isolated steel case
- Separate ground lug
- Attached 6' lead with color coded, gold plated spade lugs
- Mounting hole centers 12½"
- Dimensions: 2½" (H) x 3½" (W) x 13" (L) including binding posts

Section One:

- Two sets of heavy duty, individually fused binding posts
- Current capacity is 35A on either set
- Total max combined capacity 35A
- 0–35A analog ammeter
- LED status indicator

Section Two:

- Six sets of 10A binding posts, 15A max total capacity
- 15A fuse for entire set
- 0–15A analog ammeter
- Rocker switch with LED status indicator

This multiple outlet high-current terminal strip the perfect accessory to any bench top power supply, especially when a number of permanent items are connected, while others are routinely added and removed. Intended for the service bench, it is also great for use in ham radio and other communications environments. It is the perfect companion to the Tenma Model 72-7655 Switch Mode Power Supply. Attached 8AWG cable is terminated with gold plated, color–coded spade lugs, for easy connection to any benchtop power supply. Color coded binding posts accept spade terminals, bare wire, single or paired banana plugs. This unit is divided into two independent sections, with a combined total current capacity of 35A.

Mfg. Part No.	Description	Stock No.	Price Each 1-3
72-6627	Multiple Outlet DC Power Strip	95H7726	54.99

(191933)

PRECISION REGULATED 13.8V DC POWER SUPPLIES

TRIPP-LITE POWER PROTECTION

PR-7

- Clean 13.8V DC output (±0.5V)
- 120V AC input voltage
- Tight line and load regulation
- Compact size
- Over-current protection
- Crowbar over-voltage protection on models over 15 Amps

These single-output DC power supplies are ideal for use as test bench supplies, laboratory supplies, mobile audio equipment, electronic design and quality control equipment, test bench equipment, point-of-sale displays, etc.. Designed for reliability and superior performance. All models have chassis mount fusing except **mfg. part nos. PR3, PR3UL** and **PR4.5**, which have internal fusing.

Mfg. Part No.	ICS* (Amps)	Cont. Duty (Amps)	Dimensions (in.) H	W	D	Wt. (lbs.)	Stock No.	Price Each 1-9
PR3UL	3	3	4.25	3	7.5	4	46F2622	89.32
PR4.5	4.5	3	3	4.5	7.5	5	50F5008	71.63
PR7	7	5	3.75	6.5	7.5	7	46F2623	86.28
PR-10B	10	7.5	4.5	6.75	7.75	10	46F2624	135.77
PR12	12	9.5	4.5	6.75	7.75	11	92F3245	144.25

➤ CONTINUED ➤

PRECISION REGULATED 13.8V DC POWER SUPPLIES (CONT.)

Mfg. Part No.	ICS* (Amps)	Cont. Duty (Amps)	Dimensions (in.) H	W	D	Wt. (lbs.)	Stock No.	Price Each 1-9
PR15	15	12	4.5	6	10	13	46F2625	204.00
PR20	20	16	4.5	6	10	15	92F3246	222.74
PR25	25	20	6.75	6.25	10.25	19	46F2626	280.02
PR30	30	24	6.75	6.25	10.25	21	92F3247	292.75
PR40	40	32	6.75	10.5	11.5	27	46F2627	374.42
PR50	50	35	6.75	10.5	11.5	30	92F3248	420.03
PR60	60	48	6.75	10.5	11.5	33	89F683	470.96

*Intermittent Communications Service (50% Duty Cycle)

(3863)

ISOLATED VARIABLE AC POWER SUPPLY

TENMA®

Features

- Provides isolation from the AC line when servicing "hot" chassis equipment
- Protects AC powered test equipment
- Variable 0-145VAC output
- Safely troubleshoot power supplies, regulators and output circuits
- Minimize damage to associated components
- Dual analog meters simultaneously display output voltage and current
- Independent line input and variable output fusesprotect variable supply and equipment under test
- Output fuse may be changed to a lower value
- Grounded 6' line cord and outlets.

Specifications

Mfg. Part No.	72-1097	72-1098
Input Voltage	100~127VAC	
Output Voltage	145VAC (with 110VAC input)	
Max Output Current	3.5A	7A
Line Fuse (included)	6A	10A
Output Fuse (included)	5A	9A
Output Outlets	One	Two
Dimensions (H x W x D)	5-3/4" x 9-1/8" x 9"	6-1/8" x 11-7/8" x 10-1/4"
Weight	13-1/4 lbs.	17-3/4 lbs

Variable AC supplies combine the safety benefits of an isolation transformer with the service advantages of a variable autotransformer.

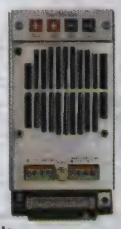
Mfg. Part No.	Description	Stock No.	Price Each
72-1097	Single Outlet 3.5A Isolated Variable AC Power Supply	01N4884	237.52
72-1098	Dual Outlet 7A Isolated Variable AC Power Supply	01N4885	421.08

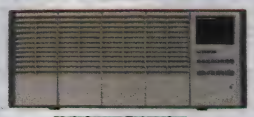
(114927)

MDL SERIES MODULAR PROGRAMMABLE DC ELECTRONIC LOADS

B&K PRECISION

Module





Mainframe Extension

Mainframe

- Modules offer wide voltage and current range, 0 to 500V, 0 to 120A
- Support for up to 8 or 16 channels with mainframe extension
- Transient mode up to 25kHz
- Synchronous Load on/off function
- Adjustable slew rate in CC mode
- Standard LAN, GPIB, USB, and RS-232 interfaces with USBTMC/SCPI protocol support
- Short circuit test
- Built-in 16-bit resolution voltage and current measurement (0.1mV, 0.01mA)
- Remote voltage sensing to compensate for the effect of voltage drop in wires
- Operate identical modules in parallel mode for high current applications
- OVP/OCP/OPP/OTP and reverse voltage protection

The **MDL Series** is a multi-channel modular programmable electronic load system. Six different modules of programmable DC loads ranging in power from 200W to 600W provide users the flexibility to test a wide range of power sources from multi-output AC/DC power supplies to batteries, fuel cells, and photovoltaic arrays. The mainframe has four slots that can be configured with any assortment of the modules up to 2400W (up to 4800W with mainframe extension). The high-performance electronic load modules of the **MDL Series** are capable of operating in constant current (CC), constant voltage (CV), constant resistance (CR), constant power (CW), and constant impedance (CZ) mode, which uses DSP technology to simulate non-linear loads and realistic loading behavior. **MDL252** is a dual-channel module supporting a unique flexible power configuration. The user can allocate 250W to either channel up to 300W total (e.g. 50W/250W, 250W/50W, 150W/150W).

MODULES

Mfg. Part No.	Power	Voltage	Current	Stock No.	Price Each
MDL200	200W	80V	40A	67W2946	1085.00
MDL252	250W	80V	20A	67W2947	2045.00
MDL305	300W	500V	20A	67W2948	1785.00
MDL400	400W	80V	60A	67W2949	1615.00
MDL600	600W	80V	120A	67W2951	2415.00

➤ CONTINUED ➤

MDL SERIES MODULAR PROGRAMMABLE DC ELECTRONIC LOADS (CONT.)

MAINFRAMES

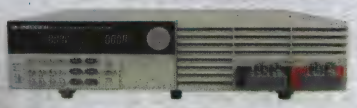
Mfg. Part No.	Description	Dimensions (H x W x D)	Weight	Stock No.	Price Each
MDL001	Mainframe	445 x 183 x 549mm	15.4kg	**67W2944**	1625.00
MDL002	Mainframe Extension	445 x 183 x 549mm	15.4kg	**67W2945**	1250.00

(209444)

8500 SERIES PROGRAMMABLE DC ELECTRONIC LOADS

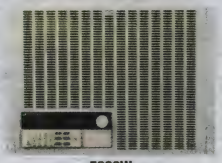
BK PRECISION

300W



600W, 1200W

2400W



5000W

- Wide operating ranges up to 0 to 500V and 0 to 240A (5000W max.)
- Low minimum operating voltage <0.1V
- Built-in transient generator
- Short circuit test
- High-resolution 0.1mA/1mV voltage/current measurement (Models **8500** and **8502**)
- Bright, easy-to-read VFD display
- Constant current (CC), constant resistance (CR), constant voltage (CV) and constant power (CW) operation
- Over-current/over-voltage/over-power/over-temperature protection
- Stores up to 25 instrument set-ups
- Thermostatically-controlled fan operates quietly
- All rack mountable; 300 and 600W models for bench use

Affordable full-featured programmable electronic DC loads offer a high degree of accuracy and great display resolution. Ideal for testing and evaluating a variety of DC power sources: DC power supplies, DC-DC converters, batteries, fuel cells and solar cells. Because they are fully programmable via the RS 232 or optional USB interface they are ideal for automated test systems. The loads can operate in constant current, constant voltage, constant resistant and constant power mode while voltage/current or resistant/power values are measured and displayed in real time. Each unit is supplied with power cord, TTL-to-RS232 serial converter, user manual, installation CD with application software, and one year manufacturer's warranty. *Order* **mfg. part no. IT-E151** *rack mount kit and* **mfg. part no. IT-132** *TTL-to-USB serial adapter separately; go online or call.*

Mfg. Part No.	Power (W)	Operating Voltage (0.1 to V)	Rated Current (A)	Stock No.	Price Each
8500	300	120	30	**97J9482**	1095.00
8502	300	500	15	**41P0141**	1195.00
8510	600	120	120	**31M6999**	2125.00
8512	600	500	30	**41P0142**	2595.00
8514	1200	120	240	**41P0143**	3095.00
8518	1200	60	240	**41P0144**	4175.00
8520	2400	120	240	**41P0145**	5650.00
8522	2400	500	120	**41P0146**	6975.00
8524	5000	60	240	**41P0147**	10550.00
8526	5000	500	120	**41P0148**	13250.00

(84537)

MFG. PART NO. 8540 150W DC ELECTRONIC LOAD

BK PRECISION

- Operates between 0-60VDC, 1 mA-30A (150W maximum)
- Easy operation
- Bright, easy-to-read display
- Very compact and lightweight
- Two current ranges: 3A (1mA resolution) and 30A (10mA resolution)
- Constant current (CC), constant resistance (CR) and constant voltage (CV) operation
- Over-current and over-voltage protection
- Short mode to simulate shorts
- Save up to 400 instrument settings

Mfg. part no. 8540 DC electronic load is a very compact, economically-priced instrument that is perfect for use on both the bench and the production floor. Though small in size, it can reliably test a 5V power supply to 30A and do it continuously. The load can operate in CC, CV or CR mode while voltage/current or resistance/power values are measured and displayed in real time, making it well suited to test a variety of DC power sources. Its performance is comparable to most full-size bench DC loads, yet it does the job at half the price and takes up half the bench space. Unit is supplied with power cord, user manual, and one year manufacturer's warranty. Dimensions: 3.5 W x 6.9H x 11.1"D.

Mfg. Part No.	Power (W)	Voltage (V)	Current	Stock No.	Price Each
8540	150	60	1mA - 30A	**13P0414**	525.00

(143525)

SINGLE-INPUT DC ELECTRONIC LOADS

KEYSIGHT TECHNOLOGIES

- 250W to 300W
- Cost-effective for single input applications
- Convenient optional front panel input connection
- One year manufacturer's warranty

Mfg. part nos. 6060B and **6063B** each provide one load input. Entering commands manually using the front panel keypad is simpler because the channel does not need to be specified, as in a mainframe configuration. Includes overvoltage, overcurrent, overtemperature, overpower, and reverse polarity protection. These electronic loads are particularly suited for the lab bench.

Mfg. Part No.	Description	Stock No.	Price Each
6060B	Electronic Load, 3-60V, 0-60A, 300W	**95H9222**	3010.00
6063B	Electonic Load, 3-240V, 0-10A, 250W	**95H9223**	3413.00

(211788)

N3300 SERIES DC ELECTRONIC LOAD MAINFRAME

KEYSIGHT TECHNOLOGIES

Features:

- Stable operation down to zero volts
- GPIB and RS-232 control of current, voltage and resistance
- GPIB and RS-232 readback of current, voltage and power
- Built-in pulse waveform generation with programmable amplitude, frequency, duty cycle and slew rate
- Full protection from over-current, over-power, over-temperature and reverse polarity
- Electronic calibration
- Trigger for external synchronization
- Parallel units in constant current mode for higher power
- VXI *plug & play* drivers

Mfg. part no. N3301A and **mfg. part no. N3300A** electronic load mainframes accept user-installable load modules for easy system configuration and future reconfiguration. **Mfg. part no. N3301A** holds up to two **mfg. part no. N3302A, mfg. part no. N3303A**, and **mfg. part no. N3304A** load modules, or one **mfg. part no. N3305A** or **mfg. part no. N3306A** load module, allowing up to 600 watts of total maximum power. **Mfg. part no. N3300A** holds up to six **mfg. part no. N3302A, mfg. part no. N3303A, mfg. part no. N3304A** and **mfg. part no. N3307A** load modules, or three **mfg. part no. N3305A** and **mfg. part no. N3306A** load modules, allowing up to 1800 watts of total maximum power. One GPIB address is all you need for complete control and readback of all load modules within a single mainframe. This series of dc electronic loads provides the fast operation and accurate programming and readback need for high-volume dc power supply test systems.

Mfg. Part No.	Description	Stock No.	Price Each
N3300A	1800W DC Electronic Load Mainframe	**95H8001**	2630.00
N3301A	600W DC Electronic Load Mainframe	**95H8002**	2239.00
N3302A	150W 0-60V 0-30A Module	**95H8003**	1837.00
N3303A	250W 0-240V 0-10A Module	**95H8004**	2610.00
N3304A	300W 0-60V 0-60A Module	**95H8005**	2271.00
N3305A	500W 0-150V 0-60A Module	**95H8006**	3348.00
N3306A	600W 0-60V 0-120A Module	**95H8007**	3221.00
N3307A	250W 0-150V 0-30A Module	**95H8008**	2437.00

(211787)

PRECISION MILLIOHM METER

CE EXTECH INSTRUMENTS A FLIR COMPANY

- High accuracy and performance for low resistance measurements
- Large 0.7"(18mm) LCD 1999 count
- 4-wire cables with Kelvin clip connectors
- Manual zero display adjust
- Over range indication
- Built into compact, durable field service housing with protective cover
- Wide operating conditions 0 to 50°C, less than 80%RH
- One year warranty

Complete with 4-wire cables with Kelvin clip connectors and power cord.

SPECIFICATIONS

Specifications	Range	Resolution	Max Voltage	Accuracy ±(%rdg+digits)
Resistance	200mΩ	100μΩ	3.8VDC	±(0.75%+4d)
	2000mΩ	1mΩ	3.4VDC	±(0.75%+2d)
	20Ω	10mΩ	3.4VDC	±(0.75%+2d)
	200Ω	100mΩ	3.2VDC	±(0.75%+2d)
	2kΩ	1Ω	3.2VDC	±(0.75%+2d)
Power	110VAC, 60Hz or 220VAC, 50Hz			
Dimensions	9.3 x2.8 x 3.4" (160 x120 x 85mm)			
Weight	1.5lbs (680g)			

Mfg. Part No.	Description	Stock No.	Price Each
380460	4-Wire milliohm meter, 110 VAC	**27K9608**	399.99
380462	4-Wire milliohm meter, 220 VAC	**27K9610**	419.99
380465	Spare Kelvin Clip Test Clip set	**27K9612**	69.99

(91238)

MICRO-OHMMETERS • COMPONENT TESTERS

HIGH RESOLUTION MILLIOHM METER

EXTECH INSTRUMENTS A FLIR COMPANY

- 7 ranges for wide low resistance measurements
- High resolution to 0.01mΩ
- 1999 count display with large 0.8" digits
- 4 wire-test cable with Kelvin clip connectors
- Automatic zero
- Built-in comparator for hi/lo/go resistance testing or selection
- One year warranty

Complete with 4-wire cables with Kelvin clip connectors and power cord.

SPECIFICATIONS

Specifications	Range	Resolution	Current	Accuracy ±(%rdg+digits)
Resistance	20mΩ	0.01mΩ	1A	±(0.2%+6d)
	200mΩ	0.1mΩ	1A	±(0.2%+4d)
	2Ω	0.001Ω	100mA	±(0.2%+4d)
	20Ω	0.01Ω	10mA	±(0.2%+4d)
	200Ω	1Ω	1mA	±(0.2%+4d)
	2kΩ	0.001kΩ	100uA	±(0.2%+4d)
	20kΩ	0.1kΩ	10uA	±(0.2%+4d)
Power	110VAC, 60Hz or 220VAC, 50Hz			
Dimensions	11 x 8.3 x 3.5" (280 x 210 x 90mm)			
Weight	4.85lbs (2.2kg)			

Mfg. Part No.	Description	Stock No.	Price Each
380560	Precision milliohm meter 110 VAC	27K9613	509.00
380562	Precision milliohm meter 220 VAC	27K9615	529.00
380465	Spare Kelvin Clip Test Clip set	27K9612	69.99

(91239)

BENCH LCR/ESR METER WITH COMPONENT TEST

BK PRECISION

Features:

- Measurement parameters: Z, L, C, DCR, ESR, D, Q, ACV, DCV, ACA, DCA and ∅
- Test conditions: 100 Hz, 120 Hz, 1 kHz, 10 kHz, 100 KHz, 200 kHz, 1 Vrms, 0.25 Vrms, 0.05 Vrms
- 0.1% basic accuracy
- Dual LCD display
- Very quick response, user friendly
- Fully auto/manual selection
- DC resistance measurement
- USB interface
- One year warranty

Mfg. part no. 889B synthesized in-circuit LCR/ESR Meter is a high accuracy test instrument used for measuring inductors, capacitors and resistors with a basic accuracy of 0.1%. Also, with the built-in functions of DC/AC Voltage/Current measurements and Diode/Audible continuity checks, the 889B can help engineers and students understand the characteristics of electronic components. Accessories included: instruction manual, kelvin probe and line cord.

SPECIFICATIONS

Mfg. Part No.	889B
Operating Temperature	32°F to 104°F (0°c to 40°C)
Storage Temperature	-4°F to 158°F (-20°C to 70°C)
Relative Humidity	Up to 85%
AC Operation	110V/220V AC, 60/50Hz
Low Power Warning	Under 2.2V
Dimensions (LxWxH)	11.8 x 8.7 x 5.9" (300 x 220 x 150mm)
Weight	10 lbs. (4.5 kg)

Mfg. Part No.	Description	Stock No.	Price Each
889B	Bench LCR/ESR Meter with Component Test	41P0157	1475.00

(164460)

IC TESTERS

BK PRECISION

570A Features:

- 16-Pin ZIF Socket
- Tests All Common Analog ICs
- Auto Identification of Unmarked/ House Coded Devices Listing Possible Replacements
- Conditional/Unconditional Loop Testing Mode

575A Features:

- 40-Pin Wide Entry ZIF Sockets (Type 575)
- Large Built-In Library
- Tests TTL, CMOS, Memory, LSI

Mfg. part no. 570A tests all common analog ICs. Autoidentifies unmarked devices. Has conditional/unconditional loop testing mode; functional test eliminates passive circuitry; display diagnostic information. High-quality 16-pin ZIP socket. **Mfg. part no. 575A** is a digital IC tester that tests up to 40-pin ICs.

Mfg. Part No.	Description	Stock No.	Price Each
570A	Linear IC Tester	36M2370	1495.00
575A	Digital IC Tester	36M2371	1195.00

➤CONTINUED➤

IC TESTERS (CONT.)

ACCESSORY

Mfg. Part No.	Description	Stock No.	Price Each
AK57X	IC Library Development Manager	75M0217	700.00

(48682)

E4980A PRECISION LCR METER

NEW

KEYSIGHT TECHNOLOGIES

- 20 Hz to 2 MHz, with 4-digit resolution in any range
- 0.05% basic accuracy with superior measurement repeatability at low and high impedance
- Built-in 40V DC Bias (**Option 001**)
- 40 A DC support with the **option 002** and the **42841A** Bias Current Source
- Rdc measurements (**Option 200**)
- 20 Vrms test signal (**Option 001**)
- High-speed measurements: 5.6 ms
- 201 points list sweep
- Versatile PC connectivity (LAN, USB and GPIB)

The **E4980A** precision LCR meter provides the best combination of accuracy, speed, and versatility for a wide range of component measurements. Offering fast measurement speed and outstanding performance at both low and high impedance ranges, the **E4980A** is the ultimate tool for general R&D and manufacturing test of components and materials. LAN, USB and GPIB PC connectivity enhances your design and test productivity.

Mfg. Part No.	Frequency Range	Stock No.	Price Each
E4980A	20 Hz to 2 MHz	78K5118	17666.00

(212536)

E4980AL SERIES PRECISION LCR METERS

NEW

KEYSIGHT TECHNOLOGIES

- Exceptionally low noise at both low and high impedance to improve test quality
- 0.05% basic impedance accuracy
- Open/Short/Load compensation
- Test cable extension (1/2/4 m)
- Fast speed with an affordable price contributes to reduce cost of tests
- 12 ms (SHORT), 118 ms (MED), 343 ms (LONG) @1 MHz
- 20 Hz to 300 kHz/500 kHz/1 MHz test frequency with 4-digit resolution
- 16 impedance parameters
- 100 uV to 2 Vrms, 1 uA to 20 mA variable test signal
- DC bias 1.5/2 V
- Auto-level control
- 201 points of programmable list sweep
- DC resistance

E4980AL precision LCR meter is an industry standard of basic LCR meters which provides the best combination of accuracy, speed and versatility with the frequency selections. Along with the widest variety of accessories, a broad range of component and material measurement applications in general R&D and production environments can be addressed. Frequency upgrades are also available to maximize the ROI.

Mfg. Part No.	Description	Stock No.	Price Each
E4980AL-030	20 Hz to 300 kHz with DCR Measurement	97W1121	4275.00
E4980AL-050	20 Hz to 500 kHz with DCR Measurement	97W1122	6412.00
E4980AL-100	20 Hz to 1 MHz with DCR Measurement	97W1123	8549.00
ACCESSORIES			
E4980AL-1CM	Rack Mount Kit	97W1125	118.00

(212280)

E4981A CAPACITANCE METER

NEW

KEYSIGHT TECHNOLOGIES

- 120 Hz, 1 kHz, 1 MHz
- 0.07% Basic accuracy
- High-speed measurements to 2 ms @ 1 MHz
- Measurements 7 parameters
- 256 Multi-channel correction
- Front-panel USB memory interface
- GPIB, USB, LAN (LXI-C)

Mfg. Part No.	Frequency	Stock No.	Price Each Each
E4981A-001	120 Hz/1 kHz/1 MHz/1 MHz ± 1%/1 MHz ± 2%	25R3940	12176.00
E4981A-002	120 Hz/1 kHz	83R9227	6972.00

(212527)

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Test & Measurement Equipment
newark.com/test-measurement

(212567)

E4982A SERIES 1MHZ TO 3GHZ LCR METER

KEYSIGHT TECHNOLOGIES

- 3 measurement time modes: 0.9msec, 2.1msec, 3.7msec
- Low variation for repeatability
- 11 parameters: Z, Y, L, C, R, X, G, B, D, Q, θ
- Measurement range from 0.14Ω to 4.8kΩ (within 10% accuracy)
- 0.8% basic accuracy
- Sophisticated calibration/compensation method with calibration wizard function
- SCPI commands
- GPIB, LAN, USB, Handler interface
- Cable extension and small test head (the same size as the **4287A**)
- Multi-function comparator
- Contact check using DCR measurement function
- List measurement up to 201 points/table, Table & plot format
- User defined function keys/parameters
- Undo recall/preset
- Context sensitive embedded help

E4982A LCR meter provides the best performance for the passive component manufacturing such as SMD inductors and EMI filters, where impedance testing at high frequencies is required. The **E4982A** is compatible to **4287A** for drop-in replacement.

Mfg. Part No.	Description	Stock No.	Price Each
E4982A	LCR Meter, 1MHz to 3GHz	**82T3467**	33453.00

(211764)

E5100A HIGH-SPEED NETWORK ANALYZER

NEW

KEYSIGHT TECHNOLOGIES

- High speed filter and resonator evaluation using waveform analysis commands
- IBASIC for easy automation
- Phase tracking function for high speed evaluation of resonator
- Evaporation monitoring function
- **E5100A/400** -300MHz, 4 Receivers, Ports R, A, B and C
- **E5100A/600** -300MHz X'tal resonator test to use w/PI-network

Mfg. Part No.	Frequency Range	Stock No.	Price Each
E5100A-400	10 KHz to 300 MHz	**39M5999**	16306.00
E5100A-600	10 KHz to 300 MHz	**50M8474**	16344.00

(212521)

4285A PRECISION LCR METER

NEW

KEYSIGHT TECHNOLOGIES

- 75 kHz to 30 MHz in 100 Hz steps
- 0.1% basic accuracy
- High-speed measurements: 30 ms/meas.
- Constant V or I test signal level
- 10 A DC bias with the 42841A
- List sweep measurement capability

The **4285A** precision LCR meter provides a precise, reliable, high-speed solution for component and material measurement. For demanding RF component tests, the **4285A** offers a higher test-frequency range, from 75 kHz to 30 MHz. Whether in research and development, production, quality assurance, or incoming inspection, the **4285A** will meet all of your LCR meter test and measurement requirements.

Mfg. Part No.	Frequency Range	Stock No.	Price Each
4285A	75 kHz to 30 MHz	**09J9882**	19610.00

(212537)

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element14.com

(196546)

GPT-9800 SERIES SAFETY TESTERS

CE

GW INSTEK Simply Reliable

- 200VA AC Test Capacity
- 240x64 Ice Blue Dot matrix LCD
- Manual/Auto Mode
- Function Key for quick selecting
- High intensity flash for Caution & Status indication
- Safety INTERLOCK function
- Zero Crossing Turn-on Operation
- Controllable Ramp-up Time
- True RMS Current Measurement
- High resolution: 1uA for measuring current, 2V for setting voltage
- PWM amplifier to enhance the power efficiency and reliable testing
- Max. 100 memory block for test condition (step) setting. And each step can be named individually.
- Remote terminal on the front panel for "start" and "stop" control
- Interface : RS-232C, USB device, Signal I/O and GPIB (optional)

The **GPT-9800 Series** look to meet a variety of safety standards such as IEC, EN, UL, CSA, GB, JIS and other safety-related requirements for the safety tests of electronic products and components. A total of 4 safety testers are available for various applications. The **GPT-9804** is a 4-in-1 model capable of performing AC withstanding, DC withstanding, insulation resistance and ground bond tests. The **GPT-9803** is a 3-in-1 model capable of performing AC withstanding, DC withstanding as well as insulation resistance tests. The **GPT-9802** is capable of performing both AC and DC withstanding tests, whereas the **GPT-9801** is able to perform AC withstanding test. The series of safety testers is built upon a high-efficiency PWM amplifier platform with AC 200VA maximum output capacity to impede the influence from the voltage fluctuation of the input AC source. This ensures a stable voltage supply for all the tests of the **GPT-9800 Series**.

Mfg. Part No.	Description	Stock No.	Price Each
GPT-9801	AC 200VA AC Withstanding Voltage Tester	**79T9564**	1128.00
GPT-9802	AC 200VA AC/DC Withstanding Voltage Tester	**79T9565**	1300.00
GPT-9803	AC 200VA AC/DC Withstanding Voltage/ Insulation Resistance Tester	**79T9566**	1584.00
GPT-9804	AC 200VA AC/DC Withstanding Voltage/ Insulation Resistance / Ground Bond Tester	**79T9567**	2376.00

(210120)

3130 SERIES PORTABLE PNEUMATIC PRESSURE CALIBRATOR

NEW

CE

FLUKE. Calibration

- Measure and generate pressures from vacuum to 2 MPa (300 psi, 20 bar)
- Internal pump can generate vacuum to -80 kPa (-12 psi, -0.8 bar) or pressure to 2 MPa (300 psi, 20 bar)
- Supply pressure connection allowing the use of external gas supply up to 2 MPa (300 psi, 20 bar)
- Includes variable volume for fine adjustment of pressures
- Pressure measurement accuracy of 0.025 % reading ± 0.01 % FS
- Electrical measurement and 24 volt supply for close looped calibrations
- Measure or generate 4 to 20 mA
- Measure 0 to 30 V dc
- Powered by internal, rechargeable, high capacity NiMH battery or universal ac mains adapter
- Compatible with **Fluke 700P** Pressure Modules

The **3130** Portable Pneumatic Pressure Calibrator is ideal for calibrating pressure transmitters, transducers, gauges and similar devices. The **3130** contains everything you need to generate, control and measure pressure, as well as read the output of the device under test (DUT).

Mfg. Part No.	Range	Stock No.	Price Each
3130-G2M	Portable Pressure Calibrator with US, EUR, UK, and China/ Australia line cords (standard calibration)	**96W2007**	5700.00

(211401)

525B TEMPERATURE / PRESSURE CALIBRATOR

NEW

FLUKE. Calibration

- Simulates and measures all ANSI thermocouples, as well as L and U types, and provides cold junction compensation to enable calibration of a wide variety of thermocouple instrumentation.
- Direct input for storage of ITS-90 RTD constants.
- RTD source uncertainties to 0.03 °C.
- Direct measurement of all Fluke 700 Series and 525A-P Series Pressure Modules covering the most common pressure ranges from 1″ H20 to 10,000 PSI.
- Converts easily to any pressure unit directly from the front panel or through remote communications.
- Sources dc voltage and current for multifunction workload coverage, enabling calibration of data loggers, strip chart recorders, multimeters, and other industrial instruments.
- Supports automation using Fluke Calibration's MET/CAL® Plus Calibration Management Software or custom automated programs with standard RS-232-C and IEEE-488 interface.
- Eight user programmable setpoints allow quick recall of values for Zero, Span and linearity checks during calibration.
- Programmable setpoint dwell times for automated calibration and troubleshooting.

The Fluke Calibration **525B** Temperature/ Pressure Calibrator gives you a workhorse combination of high accuracy and broad functionality for temperature and pressure instrument calibration. Compact and economical, the **525B** has an interface for automated calibration, providing wide workload coverage in instrument shops and calibration labs, as well as in ATE applications. The **525B** is the most accurate Fluke Calibration temperature calibrator, sourcing and measuring a complete range of RTDs, thermocouples, and the YSI 400 thermistor. It also measures pressure covering common ranges from 1 inch (6900 Pa) of water up to 10,000 PSI (69 MPa) using the Fluke **700 Series** and **525A-P Series** Pressure Modules. Plus, the dc voltage and current specifications of the **525B** enable you to calibrate other process calibrators and a wide variety of other instruments with accuracy that rivals any calibrator in its price range.

➤ CONTINUED ➤

PROCESS CALIBRATORS • EPROM PROGRAMMERS & ERASERS • DECADE BOXES

525B TEMPERATURE / PRESSURE CALIBRATOR (CONT.)

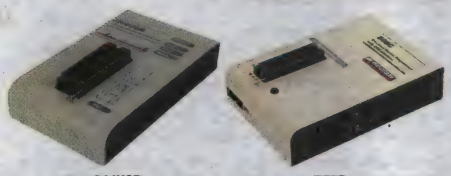
Mfg. Part No.	Description	Stock No.	Price Each
525B/A0 120V	Temperature/Pressure Calibrator	89W2218	5250.00

(211402)

UNIVERSAL DEVICE PROGRAMMERS

BK PRECISION

- Extensive device libraries
- Fast and high performance
- Powerful program software
- Supports Windows® XP/ Vista/7



844USB 866C

Universal device programmers are powerful, versatile, and simple to use. Theseprogrammers are the ideal solution for programming new chips as well as copying chips for backup or repair purposes. On-going program software updates extend device libraries and provide continuous improvements for both models **844USB** and **866C** programmers. Whether you are working with PLCC, SOIC, TSOP, DIP, TQFP, SSOP, PSOP or QFP packaging, an extensive line of socket adapters are available that will work in conjunction with our programmer; *go online or call.*

Mfg. Part No.	844USB	866C
Devices Supported	EPROM, EEPROM/Flash, Serial EPROM, Microcontroller, PLD and BPROM (BPROMs **866C**)	
Devices Libraries	>29000	>70000
Interface	USB 2.0 / USB 1.1 Compatible	
Programming Socket	DIL40 pin ZIF socket, ISP for in-circuit programming	DIL48 pin ZIF socket, ISP for in-circuit programming
Buffer Features	Erase, Random Data Fill, Fill Block, Copy Block, Move Block, Swap Block, Buffer Print, Find Text, Replace Text, GoTo Address, Checksum Calculator, 8 bit & 16 bit View Modes	
IC Tester	No	Yes
Weight	1.1lbs (500g)	1.98lbs (0.9kg)
Dimensions (W x H x D)	3.8 x 1.4 x 6.3" (95 x 35 x 160mm)	5.5 x 2.2 x 7.7" (140 x 56 x 195mm)

Mfg. Part No.	Description	Stock No.	Price Each
844USB	Device Programmer with USB PC Interface	43K8672	539.00
866C	Universal Device Programmer with USB Interface	46W2437	1095.00

(68944)

HPRS SERIES RESISTANCE DECADE BOXES

IET

Features
- High Performance
- High Power

Specifications
- Resistance Range: 0.001Ω to 10 MΩ
- Power Rating: 225 W/decade, 250 W max.
- Voltage Rating: 1000V
- Accuracy: 0.5%

Mfg. Part No.	Resistance Max. (Ω)	Resolution (Ω)	No. of Decades	Accuracy	Stock No.	Price Each
HPRS-F-6-1	1M	1ohm	6	1	35K8002	1780.00

(103591)

GenRad 1433 HIGH PRECISION DECADE BOX

IET

Features
- Accepted Industry Standard
- Ranges from 0.01ohm to 111Megohm available
- 0.01% +/- 2milliohm Accuracy
- TC as low as 3ppm/°C
- Stability as high as 5ppm/yr
- May be used for RTD Simulation

1433 Series decade resistors are primarily intended for precision measurement applications where their excellent accuracy, stability, and low zero resistance are important. They are convenient resistance standards for checking the accuracy of resistance measuring devices and are used as components in dc and audio frequency impedance bridges. Many of the models can be used into the radio-frequency range.

Mfg. Part No.	Total Resistance (Ohms)	Resolution (Ohms)	Decades	Stock No.	Price Each
1433-10	1,111.10	0.01	5	71C9272	2295.00
1433-12	11,111.0	0.1	5	35K9906	2235.00
1433-19	1,111.110	0.001	6	35K9911	2595.00
1433-20	11,111.10	0.01	6	35K9912	2467.00
1433-24	1.111 110 M	1	6	35K9914	2695.00
1433-31	1.111 111 0 M	0.1	7	35K9919	3180.00

(88740)

OS SERIES DIGITAL RESISTANCE DECADE BOXES

IET

Features
- Uses Real Resistors
- Ideal For PT-100 and PT-1000 RTD Simulations
- Microprocessor Controlled
- Resistance Values Stored in Up to 10 mem locations
- Current Limiter to Prevent Possible Damage
- Automatic Residual Resistance w/ No Zero Subtraction Required

Specifications
- Power Rating: 1W
- Power Supply: 4 AA Batteries
- RS-232 Interface

Mfg. Part No.	Resistance Max. (MΩ)	Resolution (Ω)	Accuracy under 1kΩ (Ω)	Accuracy over 1kΩ (Ω)	Stock No.	Price Each
OS-260	24	0.1ohm	±0.5	0.1 %	70M8800	1165.00
OS-270	1.5	0.01ohm	±0.1	0.01 %	21M6260	1385.00

(103579)

RS/RCS SERIES DIGITAL RESISTANCE DECADE BOXES

IET

Power Rating: 500 mW

RS SERIES RS-201

Mfg. Part No.	Resistance Max. (Mohms)	Accuracy	Decades	Resolution (Ohms)	Stock No.	Price Each
RS-200	9.999	±(1%+25 mΩ)	7	1	29C8704	174.00
RS-201	9.999	±(0.1%+25 mΩ)	7	1	35K8913	324.00
RS-200W	99.99	±(1%+30 mΩ)	9	0.1	35K8912	324.00
RS-201W	99.99	±(0.1%+30 mΩ)	9	0.1	35K8914	539.00

RCS SERIES

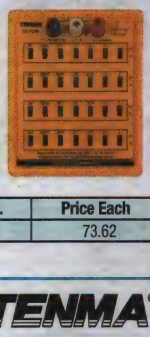
Mfg. Part No.	Resistance Max. (MΩ)	Capacitance Max. (uF)	Description	Stock No.	Price Each
RCS-500	9.999	999.9	Combines RS-200 and CS-300	36K4130	359.00
RCS-502	9.999	999.9	Combines RS-201 and CS-301	36K4131	669.00

(84981)

RESISTANCE DECADE BOX

TENMA®

- Pocket Sized
- Ideal for Service, Prototype and Experimental Use
- 1~11, 111, 110 Ohms, in One Ohm Increments
- 28 Individual Slide Switches



This useful tool may be set at any resistance value from 1 ~ 11,111,110Ω, in 1Ω increments. 28 individual slide switches allow the user to quickly and easily select resistor values. Wave soldered, two layer PC board utilizes high quality 1% tolerance 1/3W resistors. Maximum stray internal resistance is 1/3Ω. Color-coded binding posts provide resistor and ground connections. Passive device requires no power source. Dimensions: 5¾ (H) x 4½ (W) x 1¼" (D).

Mfg. Part No.	Description	Stock No.	Price Each
72-7270	Resistance Decade Box	22H6397	73.62

(74572)

CAPACITANCE DECADE BOX

TENMA®

- Pocket Sized
- Ideal for Service, Prototype and Experimental Use
- 100pF~11,111μF, in 100pF Increments
- 20 Individual Slide Switches

This useful tool may be set at any non-polarized capacitor value from 100pF ~ 11,111μF, in 100pF increments. 20 individual slide switches allow the user to quickly and easily select capacitance values. Wave soldered, two-layer PC board utilizes high quality 5% tolerance mylar capacitors. Maximum internal residual capacitance is 50pF. Color-coded binding posts provide capacitor and ground connections. Passive device requires no power source. Dimensions: 5-3/4(H) x 4½ (W) x 1¼" (D).

Mfg. Part No.	Description	Stock No.	Price Each
72-7265	Capacitance Decade Box	22H6398	85.13

(74573)

TENMA® AT NEWARK ELEMENT14

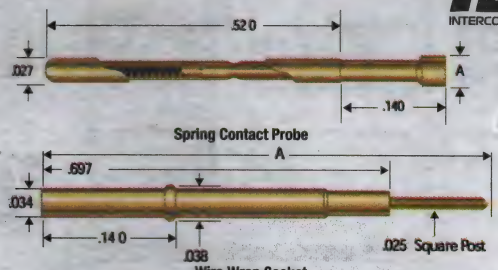
Affordable, reliable Test & Measurement equipment and accessories at newark.com/tenma

(212566)

SPRING CONTACT PROBES—0.050″ (SIZE S0) CENTERLINE SPACING

RoHS Compliant Available

INTERCONNECT DEVICES



3A continuous current. Working stroke: 0.070″. Full stroke: 0.100″. Spring force: 2.2 oz. @ 0.070″ rated travel. **Sold in packages of 10.**

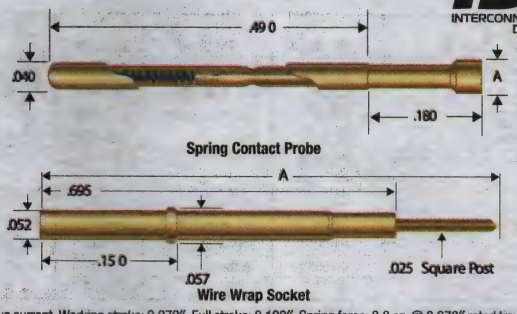
Mfg. Part No.	Dimension A	Tip Style	Stock No.	Price per Pkg. 1-4	Price per Pkg. 5-9
S-0-A-2.2-G	0.156″	90° Cup	30C4637	24.87	21.16
S-0-B-2.2-G	0.021″	30° Spear Point	30C4638	22.36	19.03
S-0-E-2.2-G	0.035″	90° Convex	30C4639	22.21	18.90
S-0-H-2.2-G	0.035″	Waffle	30C4640	21.94	18.68
S-0-J-2.2-G	0.021″	Spherical Radius	30C4641	22.34	19.03
S-0-U-2.2-G	0.021″	4-Point Crown	30C4643	35.19	29.95
SOCKETS—0.050″ (SIZE 0) CENTERLINE SPACING					
R-0-CR R-SS-50-CR PLTD*	...	Crimp	30C4612	9.84	8.35
R-0-SC RSS50SC*	...	Solder Cup	30C4613	13.46	11.42

*Mounting hole size 0.035″/0.0365″; Drill size #64
(74909)

SPRING CONTACT PROBES—0.075″ (SIZE S1) CENTERLINE SPACING

RoHS Compliant Available

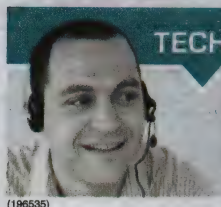
INTERCONNECT DEVICES



3A continuous current. Working stroke: 0.070″. Full stroke: 0.100″. Spring force: 3.8 oz. @ 0.070″ rated travel. **Sold in packages of 10.**

Mfg. Part No.	Dimension A	Tip Style	Stock No.	Price per Pkg. 1-4	Price per Pkg. 5-9
S-1-A-3.8-G	0.060″	90° Cup	30C4644	16.69	14.21
S-1-B-3.8-G	0.026″	30° Spear Point	30C4645	22.59	19.22
S-1-E-3.8-G	0.060″	90° Convex	30C4646	22.53	19.17
S-1-H-3.8-G	0.060″	Waffle	30C4647	16.41	13.95
S-1-J-3.8-G	0.026″	Spherical Radius	30C4648	17.19	14.61
S-1-K-3.8-G	0.060″	45° Chisel	30C5429	31.68	26.96
SOCKETS—0.075″ (SIZE 1) CENTERLINE SPACING					
R-1-CR RSS75CR PLTD 5 AU*	...	Crimp	30C4614	7.32	6.23
R-1-SC RSS75SC*	...	Solder Cup	92B3232	1.00	0.91
R-1-WW-429 RSS75WW*	1.124″	Wire Wrap Sq. Post	30C4616	17.77	15.12

* Mounting hole size 0.055″/0.057″; Drill size 1.45mm
(74910)



TECHNICAL SUPPORT HOTLINE

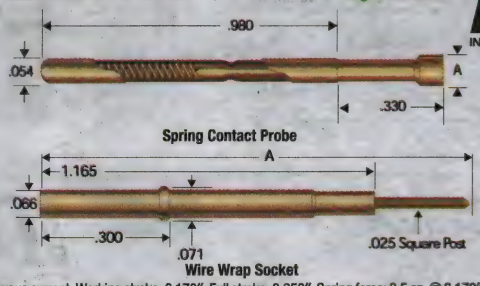
Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

SPRING CONTACT PROBES—0.100″ (SIZE S100) CENTERLINE SPACING

RoHS Compliant Available

INTERCONNECT DEVICES



3A continuous current. Working stroke: 0.170″. Full stroke: 0.250″. Spring force: 3.5 oz. @ 0.170″ rated travel. **Sold in packages of 10.**

Mfg. Part No.	Dimension A	Tip Style	Stock No.	Price per Pkg. 1-4	Price per Pkg. 5-9
S-100-A-3.5-G	0.060″	90° Concave	97H7042	19.41	16.49
S-100-B-3.5-G†	0.036″	30° Spear Point	98H1470	25.46	21.66
S-100-D-3.5-G†	0.050″	Spherical Radius	98H1471	34.69	29.52
S-100-H-3.5 G†	0.060″	Serrated	30C4659	19.35	16.44
S-100-J-3.5-G†	0.036″	Spherical Radius	45J3549	25.46	21.67
S-100-K-3.5-G†	0.060″	Chisel	45J3550	45.76	38.94
S-100-T-3.5-G†	0.060″	60° Chisel	98H1476	25.77	21.93
S-100-U-3.5-G-S†	0.036″	4 Point Crown	98H1477	44.00	37.44
S-100-W-3.5-G†	0.050″	4 Point Crown	98H1478	31.43	26.75

3A continuous current. Working stroke: 0.170″. Full stroke: 0.250″. Spring force: 6.7 oz. @ 0.170″ rated travel. No bifurcated beams.

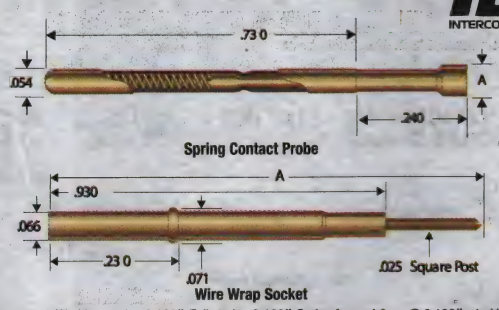
S-100-B-6.7-G†	0.036″	30° Spear Point	88H4366	26.36	22.40
S-100-H-6.7-G†	0.060″	Serrated	98H1474	35.99	30.63
SH-100-H-6.7-G†	0.060″	Waffle	45J3552	2.93	2.67
S-100-W-6.7-G†	0.050″	4 Point Crown	98H1479	45.76	38.94
S-100-Y-6.7-G-S†	0.055″	Tulip	98H1480	45.76	38.94
S-100-A-6.7-G†	0.060″	Cup	45J3548	25.46	21.66
SOCKETS—0.100″ (SIZE 25) CENTERLINE SPACING					
R-100-CR R-25-CR*	...	Crimp	45J3544	9.78	8.32
R-100-SC R-25-SC*	...	Solder Cup	45J3545	9.26	7.87
R-100-WW-429 R-25-WW-429 EXT.*	1.594″	Wire Wrap Sq. Post	45J3546	10.24	8.72
RH-100-SC RH-25-SC*	...	Solder Cup	45J3547	12.52	10.65

* Mounting hole size 0.068″/0.070″; Drill size #50; †Steel Option; ‡Steel
(74926)

SPRING CONTACT PROBES—0.100″ (SIZE S2) CENTERLINE SPACING

RoHS Compliant Available

INTERCONNECT DEVICES



3A continuous current. Working stroke: 0.100″. Full stroke: 0.160″. Spring force: 4.0 oz. @ 0.100″ rated travel. **Sold in packages of 10.**

Mfg. Part No.	Dimension A	Tip Style	Stock No.	Price per Pkg. 1-4	Price per Pkg. 5-9
S-2-A-4-G	0.075″	90° Cup	30C4649	18.74	15.95
S-2-B-4-G	0.040″	30° Spear Point	30C4650	18.73	15.94
S-2-D-4-G	0.050″	Spherical Radius	30C4651	18.74	15.95
S-2-E-4-G	0.075″	90° Convex	30C4652	18.74	15.95
S-2-G-4-G	0.075″	Waffle	30C4653	25.85	22.00

3A continuous current. Working stroke: 0.100″. Full stroke: 0.160″. Spring force: 7.0 oz. @ 0.100″ rated travel.

S-2-A-7-G	0.075″	90° Cup	90F2893	25.85	22.00
S-2-B-7-G	0.040″	30° Spear Point	90F2894	36.61	31.15
S-2-E-7-G	0.075″	90° Convex	90F2895	36.96	31.45
S-2-H-7-G	0.075″	Waffle	90F2896	18.73	15.94

CONTINUED

SPRING CONTACT PROBES—0.100″ (SIZE S2) CENTERLINE SPACING (CONT.)

SOCKETS—0.100″ (SIZE 2) CENTERLINE SPACING

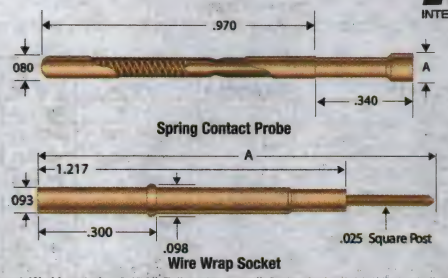
Mfg. Part No.	Dimension A	Tip Style	Stock No.	Price per Pkg. 1-4	Price per Pkg. 5-9
● R-2-CR*	...	Crimp	30C4617	7.31	6.23
● R-2-SC*	...	Solder Cup	30C4618	8.95	7.61
● R-2-WW-429*	1.359″	Wire Wrap Sq. Post	30C4619	12.58	10.71

*Mounting hole size 0.068″/0.070″; Drill size #50
(74925)

SPRING CONTACT PROBES—0.125″ (SIZE S3) CENTERLINE SPACING

RoHS Compliant Available

INTERCONNECT DEVICES



5A continuous current. Working stroke: 0.170″. Full stroke 0.250″. Spring force: 4.0 oz. @ 0.170″ rated travel. **Sold in packages of 10.**

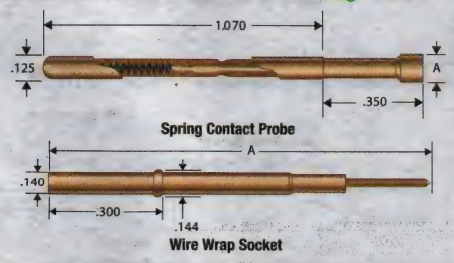
Mfg. Part No.	Dimension A	Tip Style	Stock No.	Price Each 1-4	Price Each 5-9
● S-3-A-4-G	0.100″	90° Cup	30C4666	25.77	21.93
● S-3-B-4-G	0.067″	30° Spear Point	30C4668	36.31	30.90
● S-3-J-4-G	0.067″	Spherical Radius	30C4674	26.23	22.31
● S-3-E-4-G	0.100″	90° Convex	30C4670	36.31	30.90
● S-3-H-4-G	0.100″	Waffle	30C4672	25.77	21.93
5A continuous current (**SH series** 27A). Working stroke: 0.170″. Full stroke: 0.250″. Spring force: 7.0 oz. @ 0.170″ rated travel.					
● S-3-A-7-G	0.100″	90° Cup	30C4667	26.82	22.78
● S-3-B-7-G	0.067″	30° Spear Point	30C4669	36.31	30.90
● S-3-J-7-G	0.067″	Spherical Radius	30C4675	36.31	30.90
● S-3-E-7-G	0.100″	90° Convex	30C4671	52.79	44.93
● S-3-H-7-G	0.100″	Waffle	30C4673	26.82	22.78
● SH-3-H-7-G	0.100″	Waffle	30C5426	47.23	40.11
SOCKETS—0.125″ (SIZE 3) CENTERLINE SPACING					
● R-3-CR*	...	Crimp	30C4623	10.54	8.96
● R-3-SC*	...	Solder Cup	30C4624	12.82	10.91
● R-3-WW-429*	1.646″	Wire Wrap Sq. Post	30C4625	16.99	14.45
● RH-3-SC*	...	Solder Cup	30C5422	40.24	34.18

* Mounting hole size 0.0948″/0.0960″; Drill size #41
(74927)

SPRING CONTACT PROBES—0.187″ (SIZE S5) CENTERLINE SPACING

RoHS Compliant Available

INTERCONNECT DEVICES



5A continuous current. Working stroke: 0.170″. Full stroke: 0.250″. Spring force: 16.4 oz. @ 0.170″ rated travel. **Sold in packages of 10.**

Mfg. Part No.	Dimension A	Tip Style	Stock No.	Price per Pkg. 1-4	Price per Pkg. 5-9
● S5A16.4G	0.156″	90° Cup	30C4684	60.89	51.71
● S5B16.4G	0.110″	30° Spear Point	30C4685	40.22	34.15
● S5H16.4G	0.156″	Waffle	30C4686	39.53	33.63
● SH5H18.7G	0.156″	Waffle	30C5428	69.15	58.85
SOCKETS—0.187″ (SIZE 5) CENTERLINE SPACING					
● R5CR*	...	Crimp	30C4628	14.01	11.93
● R5SC*	...	Solder Cup	30C4629	17.29	14.71

➤ CONTINUED ➤

SPRING CONTACT PROBES—0.187″ (SIZE S5) CENTERLINE SPACING (CONT.)

SOCKETS—0.187″ (SIZE 5) CENTERLINE SPACING

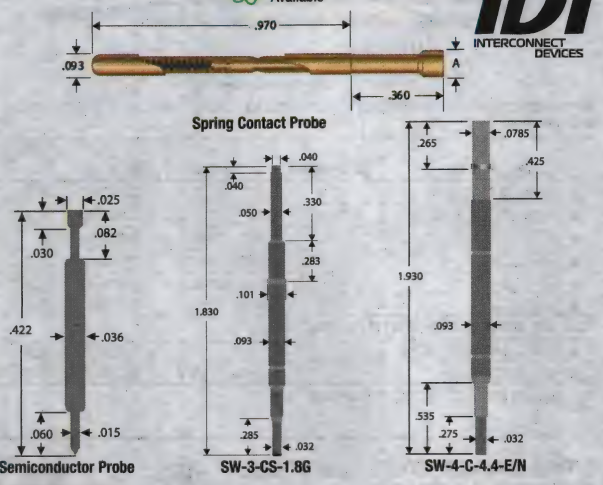
Mfg. Part No.	Dimension A	Tip Style	Stock No.	Price per Pkg. 1-4	Price per Pkg. 5-9
● R-5-WW-429*	1.724″	Wire Wrap Sq. Post	30C4630	29.04	24.71
● RH5SC*	...	Solder Cup	30C5424	47.64	40.55

* Mounting hole size 0.141″/0.143″; Drill size 9/64
(74931)

CONTACT PROBES

RoHS Compliant Available

INTERCONNECT DEVICES



SPRING CONTACT PROBES

5A continuous current. Working stroke: 0.170″. Full stroke: 0.250″. Spring force: 5.0 oz. @ 0.170″ rated travel. **Sold in packages of 10.**

Mfg. Part No.	Dimension A	Tip Style	Stock No.	Price per Pkg. 1-4	Price per Pkg. 5-9
● S-4-A-5-G**	0.156″	90° Cup	30C4676	30.65	26.09
● S-4-B-5-G	0.078″	30° Spear Point	30C4678	63.36	53.91
● S-4-D-5-G	0.090″	Spherical Radius	30C4680	30.65	26.09
● S-4-H-5-G	0.156″	Waffle	30C4682	30.65	26.09
5A continuous current (**SH series** 32A. Spring force: 10.0 oz. @0.170″ rated travel). Working stroke: 0.170″. Full stroke: 0.250″. Spring force: 7.0 oz. @ 0.170″ rated travel.					
● S-4-A-7-G**	0.156″	90° Cup	30C4677	43.28	36.83
● S-4-B-7-G	0.078″	30° Spear Point	30C4679	63.36	53.91
● S-4-D-7-G	0.090″	Spherical Radius	30C4681	43.28	36.84
● S-4-H-7-G**	0.156″	Waffle	30C4683	30.21	25.71
● SH-4-H-10-G	0.156″	Waffle	30C5427	54.84	46.58
SOCKETS—0.156″ (SIZE 4) CENTERLINE SPACING					
● R-4-CR R-4-SW PLTD	...	Crimp	24C0337	11.06	9.39
● R-4-SC	...	Solder Cup	30C4626	12.82	10.91
● RH-4-SC	...	Solder Cup	30C5423	43.88	37.25

* Mounting hole size 0.110″; Drill size #35. ** 0.187″ centers

SEMICONDUCTOR PROBES
Sold in packages of 10.

Mfg. Part No.	Spring Force Rated Stroke	Rated Travel	Stock No.	Price per Pkg. 1-4	Price per Pkg. 5-9
● 100785-003**	1.5 oz.	0.06″	05N1437	52.46	44.64

SWITCH PROBES

A Switch Probe is a spring contact probe and receptacle combination that is normally open, and after a designated travel the switch probe closes. The most common use for switch probes is in the cable harness testing industry. The switch probe is used to verify the correct location of a terminal in a connector while checking the retention force as well. Switch probes also verify the presence of nonconductive components such as caps for connectors or devices on a circuitboard. There are two separate current paths in a switch probe. From the plunger tip to the tail is normally open and closes only after the probe deflects to the designated travel. The second path, from the plunger tip to the outside of the receptacle, is always closed. **Sold in packages of 10.**

Mfg. Part No.	Spring Force @ Switch	Travel @ Switch	Rated Travel	Stock No.	Price per Pkg. 1-4
● SW-3-CS-1.8-G**	1.8 oz.	0.025″	0.197″	05N1432	134.41
● SW-4-C-4.4-E/N-107**	4.4 oz.	0.107″	0.12″	05N1433	190.62

(74930)

REPLACEABLE SPRING-LOADED POGO® CONTACTS AND SOCKETS

RoHS Compliant Available

OSTBY BARTON • PYLON
EVERETT CHARLES TECHNOLOGIES

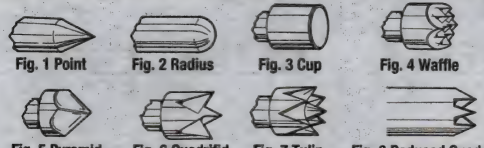
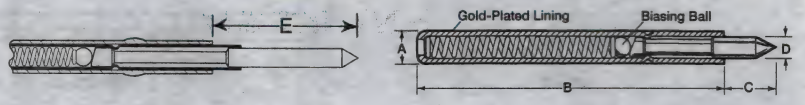


Fig. 1 Point | Fig. 2 Radius | Fig. 3 Cup | Fig. 4 Waffle

Fig. 5 Pyramid | Fig. 6 Quadrifid | Fig. 7 Tulip | Fig. 8 Reduced Quadrifid



Pylon replaceable spring-loaded POGO® contacts provide high performance in testing and interconnect applications utilizing spring probe technology. Biasing-Ball construction maximizes wiping contact of plunger to inner diameter of probe body. Gold-plated contact body provides superior surface conditioning for consistently low contact resistance over life (typically 1,000,000 cycles). Gold-plated plunger and socket. Stroke full/working: 0.125″. **Sold in packages of 10.**

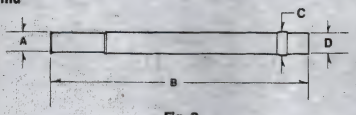


Fig. 9

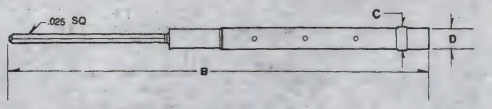


Fig. 10

0.050″ CENTERLINE SPACING/3 AMPS MAX. ELECTRICAL RESISTANCE < 30Ω

Mfg. Part No.	Fig.	Dimensions (in.) A	B	C	D	E	Tip Description	Spring Force Initial/ Final Oz.	Stock No.	Price Each 1-9
P2662AG-1C1S	1	.027	.580	.130	.021	.170	60° Contact	1-2.2	50F5567	31.17
P2662AG-1R1S	2	.027	.580	.130	.021	.170	Radius Contact	1-2.2	50F5568	31.17
P2662AG-2V1S	3	.027	.580	.130	.040	.170	120° Cup Contact	1-2.2	50F5570	29.38
S2662A-3ED	9	.022	.690	.041	.036	...	Extended Socket	...	84F969	48.28
P2662BG-1C1S	1	.027	.470	.105	.021	.145	60° Contact	1-2.2	50F5571	35.30
P2662BG-1R1S	2	.027	.470	.105	.021	.145	Radius Contact	1-2.2	50F5572	35.30
P2662BG-1Q1S	6	.027	.470	.105	.021	.145	.021″ Quad Contact	1-2.2	50F5574	45.83
P2662BG-2V1S	3	.027	.470	.105	.040	.145	120° Cup Contact	1-2.2	50F5573	38.39
PR261-1	9	...	.690	.037	.034	...	Equiv. to S2662B 6ED (Solder Cup)	...	91F7150	10.25
PR261-0	9	.021	.690	.037	.034	...	Equiv. to S2662B 6ED (Crimp)	...	91F7149	9.15
0.075″ CENTERLINE SPACING/3 AMPS MAX. ELECTRICAL RESISTANCE < 10Ω										
P2663G-1P1S	5	.042	.670	.140	.060	.190	Pyramid Contact	1.5-4.2	50F5578	23.49
P2663G-1C1S	1	.042	.670	.140	.030	.190	60° Contact	1.5-4.2	84F964	22.87
P2663G-1R1S	2	.042	.670	.140	.030	.190	Radius Contact	1.5-4.2	50F5575	23.15
P2663G-1V1S	3	.042	.670	.140	.050	.190	120° Cup Contact	1.5-4.2	50F5576	23.15
P2663G-1W1S	4	.042	.670	.140	.060	.190	.060″ Waffle Contact	1.5-4.2	50F5577	22.58
S2663-1ED	9	.038	.760	.059	.054	...	Extended Socket	...	84F971	17.61
0.100″ CENTERLINE SPACING/5 AMPS MAX. ELECTRICAL RESISTANCE < 10mΩ										
P2664G-1C1S	1	.054	.720	.125	.040	.185	60° Contact	1.9-4.5	50F5579	23.49
P2664G-1R1S	2	.054	.720	.175	.040	.235	Radius Contact	1.9-4.5	50F5583	22.47
P2664G-1W1S	4	.054	.720	.175	.070	.235	.070″ Waffle Contact	1.9-4.5	50F5580	26.62
P2664G-4V1S	3	.054	.720	.175	.070	.235	120° Cup Contact	1.9-4.5	50F5582	25.95
PR541-1	9	...	.950	.070	.066	...	Equiv. to S2664-1/2ED (Solder Cup)	...	91F7155	11.43
P3158G-1Q1S	6	.054	720	.250	.060	.310	.060″ Quad Contact	2.5-8.5	50F5586	27.20
P3158G-1R1S	2	.054	.720	.250	.040	.310	Radius Contact	2.5-8.5	50F5587	25.73
P3158G-1V1S	3	.054	.720	.250	.070	.310	120° Cup Contact	2.5-8.5	50F5589	25.90
P3158G-1W1S	4	.054	.720	.250	.070	.310	.070″ Waffle Contact	2.5-8.5	50F5590	27.49
P3158G-2Q1S	8	.054	.720	.250	.040	.310	.040″ Reduced Quad	2.5-8.5	50F5591	27.94
P3158G-3C1S	1	.054	.720	.250	.040	.310	34° Contact	2.5-8.5	50F5585	30.85
P5160G-1Q1S	6	.054	1.000	.310	.060	.370	Quad Contact	2.5-8.5	84F967	23.80
P5160G-1R1S	2	.054	1.000	.310	.030	.370	Radius Contact	2.5-8.5	50F5594	24.11
P5160G-1V1S	3	.054	1.000	.310	.060	.370	120° Cup Contact	2.5-8.5	50F5592	23.80
P5160G-2C1S	1	.054	1.000	.310	.040	.370	60° Contact	2.5-8.5	50F5593	24.09
P5160G-2W1S	4	.054	1.000	.310	.060	.370	.060″ Waffle Contact	2.5-8.5	84F966	23.80
P5160G-3C1S	1	.054	1.000	.310	.040	.370	34° Contact	2.5-8.5	84F965	23.80
P5160G-3P1S	5	.054	1.000	.310	.060	.370	Pyramid Contact	2.5-8.5	50F5596	24.09
PR54-1	9	...	1.190	.072	.066	...	Equiv. to S5160-1ED (Solder Cup)	...	91F7152	10.84
PR54-2	10	...	1.570	.072	.066	...	Equiv. to S5160-1/3EWWD	...	91F7153	11.59
0.125″ CENTERLINE SPACING/7 AMPS MAX. ELECTRICAL RESISTANCE < 10mΩ										
P2665G-1C1S	1	.080	.960	.330	.066	.420	60° Contact	1.4-3.8	50F5609	29.32
P2665G-1R1S	2	.080	.960	.330	.066	.420	Radius Contact	1.4-3.8	50F5611	29.64
P2665G-1V1S	3	.080	.960	.330	.090	.420	120° Cup Contact	1.4-3.8	50F5612	29.94
P2665G-1W1S	4	.080	.960	.330	.090	.420	.090″ Waffle Contact	1.4-3.8	50F5610	29.95
PR80-1	9	...	1.200	.098	.093	...	Equiv. to S2665-6ED (Solder Cup)	...	91F7159	12.66
0.187″ CENTERLINE SPACING/7 AMPS MAX. ELECTRICAL RESISTANCE < 10mΩ										
P2757G-1C1S	1	.116	.890	.320	.098	.410	60° Contact	2.0-5.0	50F5615	44.60
P2757G-1R1S	2	.116	.890	.320	.120	.410	.120″ Radius Contact	2.0-5.0	50F5617	44.14
P2757G-3W1S	4	.116	.890	.320	.122	.410	.122″ Waffle Contact	2.0-5.0	50F5616	46.26
S2757-2ED	9	.055	1.053	.138	.133	...	Extended Socket	...	84F976	21.97

(3818)

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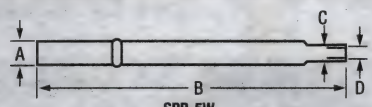

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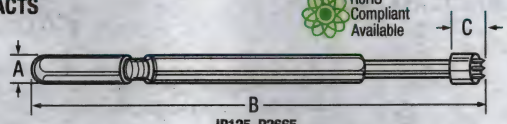

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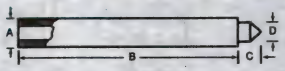

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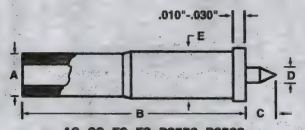
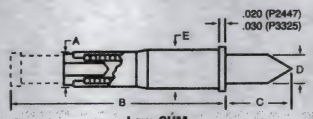
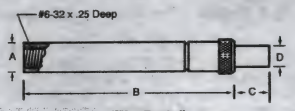


AS, CS, ES, FS, P2550, P2532



Low-OHM



"The Brute"

Constructed of an outer tubular body and an inner spring-loaded plunger. Contacts have rugged, 1-piece machined bodies. Materials: gold-plated barrel. For applications in test and interface assemblies where multiple connections must be made. **Sold in packages of 10.**

0.050″ CENTERLINE/0.030″ TRAVEL—MAX. CURRENT 2 AMPS*
A-S solder pot termination (diameter 0.025 x 0.045″ DP). Gold-plated plunger and socket. **A-A-S** solder pot termination (diameter 0.022 x 0.050″ DP). Gold-plated plunger and socket.

Mfg. Part No.	Dimensions A	B	C	D	E	Tip Description	Spring Force Initial/ Final Oz.	Stock No.	Price per Pkg. 1-9
● A-S-C	0.035″	0.200″	0.030″	0.014″	0.037″	60° Point	0.7-1.6	46F3775	30.24
● A-S-R	0.035″	0.200″	0.030″	0.014″	0.037″	Radius	0.7-1.6	46F3776	30.99
● A-A-S-C	0.030″	0.280″	0.030″	0.021″	...	60° Point	0.5-2.5	89F1446	385.92
● A-A-S-R	0.030″	0.280″	0.030″	0.021″	...	Radius	0.5-2.5	95F8680	40.51
0.075″ CENTERLINE/0.045″ TRAVEL—MAX. CURRENT: 5 AMPS* Solder pot termination (diameter 0.027 x 0.080″ DP). Gold-plated plunger and socket.									
● C-S-C	0.042″	0.350″	0.045″	0.026″	0.045″	60° Point	0.5-4.6	46F3777	38.60
● C-S-R	0.042″	0.350″	0.045″	0.026″	0.045″	Radius	0.5-4.6	46F3778	39.77
0.100″ CENTERLINE/0.065″ TRAVEL—MAX. CURRENT: 5 AMPS* Solder pot termination (diameter 0.046 x 0.100″ DP). Gold-plated plunger.									
● E-S-C	0.062″	0.430″	0.065″	0.045″	0.065″	60° Point	1.5-3	46F3779	42.34
● E-S-F	0.062″	0.430″	0.065″	0.045″	0.065″	0.045″Flat	1.5-3	94F061	44.91
● E-S-R	0.062″	0.430″	0.065″	0.045″	0.065″	Radius	1.5-3	46F3781	44.45
● E-S-V	0.062″	0.430″	0.115″	0.090″	0.065″	120° Cup	1.5-3	95F8681	42.42
● E-S-W	0.062″	0.430″	0.110″	0.070″	0.065″	0.070″ Waffle	1.5-3	46F3780	47.15
0.125″ CENTERLINE/0.100″ TRAVEL—MAX. CURRENT: 5 AMPS* Solder pot termination (diameter 0.043 x 0.150″ DP). Gold-plated plunger and socket.									
● F-S-C	0.066″	0.680″	0.100″	0.045″	0.085″	60° Point	2-8	94F3339	77.38
● F-S-W	0.066″	0.680″	0.154″	0.090″	0.085″	0.090″ Waffle	2-8	46F3782	75.46
0.125″ CENTERLINE/3.8″ TRAVEL—MAX. CURRENT: 7 AMPS* Electrical resistance: <10mΩ. Maximum curent: 7 amps. Plunger travel: .250″ (6.35). Gold plated plunger.									
● P2665G-1W1B	0.080″	1.290″	0.330″	...	...	Waffle	1.5 - 3.0	99F3939	31.40
0.156″ CENTERLINE/0.139″ TRAVEL—MAX. CURRENT: 5 AMPS* Solder pot termination (diameter 0.062 x 0.110″ DP). Gold-plated plunger and socket.									
● P2532-1	0.088″	0.673″	0.139″	0.059″	0.093″	Radius	1-3	46F3784	44.14
● P2532-2	0.088″	0.673″	0.139″	0.059″	0.093″	60° Point	1-3	94F3341	42.05
0.187″ CENTERLINE/0.250″ TRAVEL—MAX. CURRENT: 5 AMPS* Solder pot termination (diameter 0.100 x 0.188″ DP). Gold-plated plunger and socket.									
● P2550-9	0.120″	1.078″	0.320″	0.125″	0.125″	0.125″ Waffle	1-4	48F3789	59.91
0.187″ CENTERLINE/0.250″ TRAVEL—MAX. CURRENT: 7 AMPS* Probe resistance 50mΩ, with a standard deviation of <7mΩ @ 25mA test current.									
● P2757G2W1B	0.116″	0.89″	0.320″	...	...	0.250″ Waffle	1.5 - 3.0	66F6076	72.55
● P2757G3W1B	0.116″	0.89″	0.320″	...	...	0.122″ Waffle	1.5 - 3.0	66F6077	48.76
0.187″ CENTERLINE/0.250″ TRAVEL—MAX. CURRENT: 8 AMPS* Probe resistance 50mΩ, with a standard deviation of <7mΩ @ 25mA test current.									
● SPA-5H†	0.125″	1.42″	0.100″	...	...	0.156″ Waffle	6.13 - 16.0	90B6889	5.40
● SPR-5W†	0.140″	1.32″	0.93″	0.79″	...	Crimp or Push-On Termination	6.13 - 16.0	94B3765	4.72
LOW-OHM SERIES (<10mΩ)—MAX. CURRENT: 10 AMPS* **Mfg. part no. P2447** 0.300″ travel; **mfg. part no. P3325** 0.100″ travel. Low resistance is achieved by making POGO® plunger and terminal in a single unit and eliminating the resistance of spring and body. **Mfg. part no. P2447** has nickel-plated plunger; **mfg. part no. P3325** has gold-plated plunger.									
● P2447-1W	0.153″	0.700″	0.445″	0.187″	0.156″	0.187″ Waffle	6-18	94F063	126.78
● P3325-0	0.082″	0.545″	0.100″	0.061″	0.085″	Radius	5-10	95F8684	39.48
● P3325-1	0.082″	0.545″	0.150″	0.090″	0.085″	120° Cup	5-10	95F8685	48.68
"THE BRUTE" (<5mΩ)/0.250″ TRAVEL—MAX. CURRENT: 25 AMPS* Gold-plated plunger and socket.									
● P4301-1F	0.187″	1.500″	0.250″	0.154″	...	Flat	16-32	98F2365	104.60

*Continuous; † Sold individually
(3820)

CALIBRATION SERVICES

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(207667)

2510 SERIES HANDHELD DIGITAL STORAGE OSCILLOSCOPES

NEW

BK PRECISION

- 60 MHz (**2511/2515**) and 100 MHz (**2512/2516**) bandwidth
- 1 GSa/s sample rate
- Deep waveform memory up to 2 Mpts
- 2 fully isolated and floating 1,000 V CAT II, 600 V CAT III rated inputs (isolated models **2515** and **2516**)
- 300 V CAT II rated inputs (non-isolated models **2511** and **2512**)
- Built-in 6000-count DMM with dedicated terminals for current measurement
- Scope and meter trend plot functions for data logging
- Bright 5.7" color display
- Compact and lightweight – 3.4 lbs (1.54 kg)
- FFT including four additional math functions - Add, Subtract, Multiply, and Divide
- 32 automatic measurements
- USB host port for saving and recalling waveform setups, data, and screenshots on a USB flash drive
- Software provided for remote PC control
- Advanced tools include digital filters with adjustable limits, scope and waveform recorder mode
- Multi-language user interface
- Up to four hours of continuous battery operation

The **2510 Series** handheld digital storage oscilloscopes provide floating measurement and recorder capabilities with a built-in digital multimeter (DMM), all in one portable and lightweight package. These versatile 60 MHz and 100 MHz bandwidth scopes offer 1 GSa/s sample rates, 2 Mpts waveform memory, 32 automatic measurements, and multiple recording functions to capture transient or long-term signal behavior.

Mfg. Part No.	Bandwidth	Channels	Stock No.	Price Each
2511	60MHz	2 Non-Isolated	**08X6501**	935.00
2512	100MHz	2 Non-Isolated	**08X6502**	1125.00
2515	60MHz	2 Fully Isolated	**08X6503**	2165.00
2516	100MHz	2 Fully Isolated	**08X6504**	2395.00

(212175)

2-CHANNEL DIGITAL OSCILLOSCOPES

EXTECH INSTRUMENTS
A FLIR COMPANY

Features:

- One-touch automatic setup optimizes the position, range, timebase, and triggering to assure a stable display of virtually any waveform
- Easy-to-use pop-up menu with built-in multi-language help system
- 22 Automatic Measurements
- Waveform Math: Add, Subtract, Multiply, and Divide
- Store and recall up to 50 waveform screens and setups
- Automatic cursor tracking measurements
- XY Mode
- Built-in FFT function converts a time-domain signal into its frequency components to measure harmonic content and distortion in systems
- Waveform Recorder to capture/replay input waveforms from CH1 and CH2 with a maximum record length of 1000 frames
- Pass-Fail function compares a stored waveform to an unknown input
- Average Mode for smoothing waveforms
- Square Wave Output (2V, 1kHz) for probe adjustment
- 6,000 count MultiMeter with analog bargraph
- USB interface and software for transferring waveforms and data
- Complete with two 1X/10X oscilloscope probes, test leads, Windows® compatible software and USB cable, universal AC adaptor/charger, and case

SPEC TABLE

	MS6060	MS6100	MS6200
Real time sample rate:	125MS/s	500MS/s	500MS/s
Rise time:	5.8ns	3.5ns	1.7ns
Glitch Capture:	8ns	2.5ns	

Mfg. Part No.	Description	Stock No.	Price Each
MS6060	60MHz Dual Channel Digital Oscilloscope	**61T5949**	999.00
MS6100	100MHz Dual Channel Digital Oscilloscope	**61T5950**	1299.00
MS6200	200MHz Dual Channel Digital Oscilloscope	**61T5951**	1599.00

(202205)

SCOPEMETER® 190 SERIES II HANDHELD OSCILLOSCOPES

IEC 1010-1 600V CAT

FLUKE®

2-Channel

4-Channel

- Up to four independent floating isolated inputs, up to 1000 V
- High-speed sampling: Up to 5 GS/sec on 2 channels simultaneously
- Deep memory: 10,000 points per trace waveform capture (scope mode)
- CAT III 1000 V/CAT IV 600 V safety rated for industrial environments
- Up to seven hours of battery operation using **BP291**
- Isolated USB host port for direct data storage to a USB memory device; USB device port for easy PC communication
- Easy access battery door for quick battery swaps in the field
- Compact and only 2.2 kg (4.8 lb)
- Security slot: lock down oscilloscope with Kensington® lock while unattended
- IP 51 rating, dust- and drip-proof
- Connect-and-View™ triggering for intelligent, automatic triggering on fast, slow and even complex signals
- Frequency Spectrum using FFT-analysis
- Automatic capture and REPLAY of 100 screens
- ScopeRecord™ Roll mode gives 30,000 points per input channel for low frequency signal analysis
- TrendPlot™ paperless recorder mode with deep memory for long-term automatic measurements
- 5,000 count DMM included in the 2-channel models

For the more demanding applications, **ScopeMeter® 190 Series II** high-performance oscilloscopes are ideal for engineers who need the capabilities of a high-performance oscilloscope in a hand-held, battery powered instrument. All models come complete with battery charger/line voltage adapter, battery pack, hard point test lead set, Getting-Started guide, and user manual on CD. In addition, models with **SCC290** kit includes: hardside carrying case, serial interface cable and FlukeView® ScopeMeter® software for Windows®. Available calibrated with printed certification and data report; *go online or call.*

Mfg. Part No.	Channels	Bandwidth (MHz)	Sample Rate (GS/s)	Features	Stock No.	Price Each
FLUKE-190-062/AM	2 Analogue	60	0.625	...	**46T3746**	2999.95
FLUKE-190-062/AM/S	2 Analogue	60	0.625	SCC290 Kit	**46T3747**	3399.95
FLUKE-190-102/AM	2 Analogue	100	1.25	...	**46T3748**	3499.95
FLUKE-190-102/AM/S	2 Analogue	100	1.25	SCC290 Kit	**46T3749**	3899.95
FLUKE-190-202/AM	2 Analogue	200	2.5	...	**46T3750**	3899.95
FLUKE-190-202/AM/S	2 Analogue	200	2.5	SCC290 Kit	**46T3751**	4299.95
FLUKE 190-502/AM	2 Analogue	500	5	...	**45W1867**	4999.95
FLUKE 190-502/S	2 Analogue	500	5	SCC290 Kit	**45W1866**	5399.95
FLUKE-190-104/AM	4 Analogue	100	1.25	...	**20T0487**	3999.95
FLUKE-190-104/AM/S	4 Analogue	100	1.25	SCC290 Kit	**20T0488**	4399.95
FLUKE-190-204/AM	4 Analogue	200	2.5	...	**20T0489**	4499.95
FLUKE-190-204/AM/S	4 Analogue	200	2.5	SCC290 Kit	**20T0490**	4899.95
FLUKE 190-504/AM	4 Analogue	500	5	...	**49X0369**	4990.00
FLUKE 190-504/S	4 Analogue	500	5	SCC290 Kit	**49X0370**	5390.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
AS400	Probe Accessory Set	**20T0483**	113.96
RS400	Probe Accessory Replacement Set	**20T0492**	134.96
VPS410-R	10:1 Industrial Voltage Probe Set, Red	**20T0497**	179.96
VPS410-B	10:1 Industrial Voltage Probe Set, Blue	**20T0495**	199.95
VPS410-G	10:1Industrial Voltage Probe Set, Grey	**20T0496**	179.96
VPS410-V	10:1 Voltage Probe Set, Green	**20T0498**	199.95
VPS420-R	100:1 High Working Voltage Probe, Black & Red	**20T0499**	224.96
C290	Hardside Carrying Case	**20T0485**	249.95
BC190/813	Battery Charger	**56P3207**	98.96
BP291	Li-Ion Battery Pack	**20T0484**	292.46
EBC290	External Battery Charger for Li-Ion Battery	**20T0486**	119.95
HH290	Hanging Hook	**20T0491**	84.95
SCC290	FlukeView ScopeMeter Sotware, Hard-Shell Carrying Case	**20T0493**	474.95
SW90W	FlukeView ScopeMeter Software	**20T0494**	299.95

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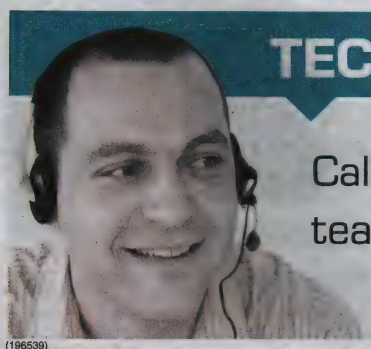

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(196539)

HAND HELD OSCILLOSCOPES

FLUKE-120 SERIES THREE-IN-ONE SIMPLICITY SCOPEMETER® HAND-HELD OSCILLOSCOPES

FLUKE®

- Dual-Input 40MHz or 20MHz Digital Oscilloscope
- 5,000 Count True-RMS Digital Multimeters
- Dual-Channel TrendPlot™ Recorder
- Connect-and-View™ Trigger Simplicity for Hands-Off Operation
- 10:1 Voltage Probe Included for Reduced Circuit Loading
- Optically-Isolated RS-232 Interface
- Meets 600V CAT III Safety Standards (IEC 1010-1)
- UL listed, CSA certified
- Recommended accessories - C125 Case, TL220 Test Lead Set, i200s Current Clamp

Compact **FLUKE-120 series** Scopemeter® is the rugged solution for industrial troubleshooting and installation jobs in machinery, instrumentation, control and power systems. It's an integrated test tool with oscilloscope, paperless data recorder and DMM functions. You can use one and the same set to test leads for waveform display, multiple meter readings, capacitance and resistance measurements, and continuity checking. There is no need to swap leads.

Mfg. part no. FLUKE-125 has all of the features of **mfg. part no. FLUKE-124** plus network bus health test, power and harmonics measurement, RPM reading and low resistance readings.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-123/003	20MHz ScopeMeter®	16F6982	1499.95
FLUKE-123/003S	20MHz ScopeMeter® with SCC120E Kit	16F6983	1899.95
FLUKE-124/003	40MHz ScopeMeter®	29H4613	1899.95
FLUKE-124/003S	40MHz ScopeMeter® with SCC120E Kit	26H5462	2299.95
FLUKE-125/003	40MHz ScopeMeter®	30M9563	2699.95
FLUKE-125/003S	40MHz ScopeMeter® with SCC120E Kit	30M9564	2999.95
ACCESSORIES			
BP120MH	Rechargeable Battery Pack	73K7383	119.95
C120	Hardside Carrying Case for 120 Series ScopeMeters	16F6984	129.95
C125	Softside Fabric Meter Case	16F6985	39.95
SCC120E	C120 Hardside Carrying Case, FlukeView Software and Interface Cable for 120 Series ScopeMeters	33B1938	424.95

(19030)

U1600 SERIES HAND-HELD DIGITAL OSCILLOSCOPES

KEYSIGHT TECHNOLOGIES

U1610A

U1620A

- Three-in-one solution: dual channel oscilloscope, true RMS DMM, and real-time data logger
- Large 4.5" color LCD display
- Up to 40 MHz bandwidth with advanced triggering
- Up to 200 MSa/s sampling rate
- Up to 125 000 points recording length
- 22 automatic scope measurement functions
- Full remote control and data transfer via PC Link application software
- USB 2.0 full-speed interface connectivity

U1600 series hand-held digital oscilloscope has a 4.5-inch LCD color display, which helps to clearly distinguish waveforms between two channels. Users can use the Dual Waveform Math (DWM) and Fast Fourier Transform (FFT) functions in the U1604B model to perform quick waveform analysis in both time and frequency domains. Not only do these instruments provide fully featured oscilloscope functions, but also a 6,000- count true RMS DMM with real-time data logger. The DMM measurement functions include a voltmeter (for DC voltage, AC voltage and true RMS AC + DC voltage measurements), an ohmmeter (for 2-wire resistance, capacitance, diode and continuity tests), and an auxiliary meter (for temperature, ampere measurement)*.

Mfg. Part No.	Description	Stock No.	Price Each
U1602B	20MHz Hand-Held Digital Oscilloscope	55R2343	1390.00
U1602B/001	20MHz Hand-Held Digital Oscilloscope with USB Host	55R2344	1544.00
U1604B	40MHz Hand-Held Digital Oscilloscope	55R2345	1736.00
U1604B/001	40MHz Hand-Held Digital Oscilloscope with USB Host	55R2346	1890.00
U1610A	100MHz Handheld Digital Oscilloscope	76T5096	3174.00
U1620A	200MHz Handheld Digital Oscilloscope	76T5097	3482.00

ACCESSORIES

Mfg. part nos. U1560A, U1561A, and **U1562A** scope test probes include ground lead with mini-alligator clip and hook-clip for probe tip.

Mfg. Part No.	Description	Stock No.	Price Each
U1561A	10:1 Scope Test Probe, Rated X10 CAT III 600V	04M7397	154.00
U1562A	100:1 Scope Test Probe, Rated X100 CAT III 600V	04M7398	169.00
U1571A	4500mA NiMH Battery Pack	04M7399	72.47
U1580A	Digital Multimeter Test Lead Probes — 1-Pair	04M7400	26.26

➤ CONTINUED ➤

U1600 SERIES HAND-HELD DIGITAL OSCILLOSCOPES (CONT.)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
U1586B	Temperature Adapter	55R2342	86.89
U1590A	Softside Carrying Case	04M7402	63.03

* additional accessories required and offered as optional

(211853)

THS3000 SERIES HANDHELD OSCILLOSCOPES

Tektronix

Key Performance Specifications
- 100MHz or 200MHz bandwidth models
- Max sample rates up to 5GS/s and 200ps resolution
- 4 fully isolated and floating channels
- 600VRMS CAT III, 1000VRMS CAT II rated inputs (BNC to earth ground)

Measurement and Analysis
- 21 automatic measurements
- Waveform math and FFT spectral analysis
- Volts, time, frequency, watts cursor measurements

Application Functions
- Measurement data logging with TrendPlot
- Waveform pass/fail limit testing
- Automatic 100 display screens recorder

Ease of Use Features
- 6" (153mm) bright color display
- USB device and host support
- 7 hours of continuous battery operation

The optional travel kit (**-TK suffix**) version includes a hard-sided carry case for your instrument, accessories, and storage space for a laptop PC.

Mfg. Part No.	Bandwidth (MHz)	Sampling Rate (GS/s)	Rise Time (ns)	Features	Stock No.	Price Each
THS3014	100	2.5	3.5	...	63T8001	4310.00
THS3014-TK	100	2.5	3.5	Travel Kit	63T8002	4790.00
THS3024	200	5	1.7	...	63T8003	4850.00
THS3024-TK	200	5	1.7	Travel Kit	63T8004	5390.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
THP0301-Y	(Yellow) 300V, DC to 300MHz, 10X high-voltage probe	63T7998	190.00
THP0301-B	(Blue) 300V, DC to 300MHz, 10X high-voltage probe	63T7995	190.00
THP0301-M	(Magenta) 300V, DC to 300MHz, 10X high-voltage probe	63T7997	190.00
THP0301-G	(Green) 300V, DC to 300MHz, 10X high-voltage probe	63T7996	190.00

(200683)

HAND HELD 2-CHANNEL DSO OSCILLOSCOPES

TENMA®

- True RMS digital multimeter
- Advanced trigger functions
- Adjustable trigger sensitivity
- USB storage / auto measurement
- Replaceable Li-ion battery back-up
- 3.8" color TFT-LCD display

Mfg. Part No.	Bandwidth (MHz)	Sampling Rate (MSPS)	Rise Time (ns)	Stock No.	Price Each
72-8470	20	100	17.5	80R7546	730.06
72-8474	100	500	3.5	80R7547	982.31

(191929)

HANDHELD DIGITAL STORAGE OSCILLOSCOPES

RoHS Compliant Available

TENMA®

- Power: 100 - 240V, 50/60Hz, 1.5A
- LCD size: diagonal 145mm (5.7")
- Continuity buzzer
- Diode
- Trend diagram
- Manual / Auto ranging
- Max. display: 5999

MULTIMETER SPECIFICATIONS

Model	72-9355	72-9360	72-9365	72-10380
Resistance:	600Ω, 6kΩ, 60kΩ, 600kΩ, 6MΩ, 60MΩ			400Ω, 4KΩ, 40KΩ, 400KΩ, 4MΩ, 40MΩ
DC Voltage:	600mV, 6V, 60V, 600V, 1000V			400mV, 4V, 40V, 400V
AC Voltage:	600mV, 6V, 60V, 600V, 700V			400mV, 4V, 40V, 400V

➤ CONTINUED ➤

HANDHELD DIGITAL STORAGE OSCILLOSCOPES (CONT.)

MULTIMETER SPECIFICATIONS				
Model	72-9355	72-9360	72-9365	72-10380
DC/AC Current:	6mA, 60mA, 600mA, 6A			400µA, 4000µA, 40mA, 4000mA, 10A
Capacitance:	6nF, 60nF, 600nF, 6µF, 60µF, 600µF, 6mF			51.2nF, 512nF, 5.12µF, 51.2µF, 100µF

Mfg. Part No.	Bandwidth (MHz)	Rise Time (ns)	Real-Time Sampling Rate	Stock No.	Price Each Each
72-10380	25	14	200MSPS	12X9088	499.00
● 72-9355	60	5.8	250MSPS	59T9198	1149.00
● 72-9360	100	3.5	500MSPS	59T9199	1499.00
● 72-9365	200	1.8	1GSPS	59T9200	1799.00

(203978)

AM-500 DIGITAL MULTIMETER SERIES

AMPROBE®

Features:
- Autoranging feature automatically sets up voltage, current, and resistance ranges for you
- Voltage up to 1000V AC/DC
- AC/DC current
- Resistance
- Flame sensor (uA)
- Audible continuity
- Diode test
- Data hold
- Auto power off

AM-500

AM-510

SECIFICATIONS

Mfg. Part No.	AM-500	AM-510	AM-520	AM-530	AM-560	AM-570
AC Voltage (V)	600	600	750	750	1000	1000
DC Voltage (V)	600	600	1000	1000	1000	1000
AC/DC Current (A)	10					
Resistance (MOhms)	20	40	40	40	60	60
Temperature inputs	...	...	1	1	2	2
LCD Counts	2000	4000	4000	4000	6000	6000
Safety Rated	CAT III 600V				CAT IV 600V,CAT III 1000V	

Mfg. Part No.	Description	Stock No.	Price Each
AM-500	Auto-ranging Digital Multimeter	78T5757	33.95
AM-510	Commercial/Residential Digital Multimeter	78T5758	46.95
AM-520	HVAC Digital Multimeter	78T5759	59.95
AM-530	True-rms Electrical Contractor Multimeter	78T5760	79.95
AM-560	Advanced HVAC Multimeter	88W3750	99.95
AM-570	Industrial Multimeter	88W3751	129.95

(203485)

COMPACT MULTIMETERS WITH MAGNE-GRIP™ HOLSTER AND VOLTECT™

AMPROBE®

Features:
- 2000-Count (**Mfg. part nos. 15XP-B** and **35XP-A**) 4000-Count Display (**35XP-A**)
- Voltect™, Non-Contact Voltage Detection, 70 to 600VAC, 50Hz ~ 60Hz
- AC/DC Voltage Measurements
- AC/DC Current Measurements
- Resistance, Continuity, Diode Test
- Capacitance, Temperature and Frequency (**Mfg. part no. 35XP-A**)
- Range Lock, Data Hold, Input Jack Warning Tone (**Mfg. part no. 35XP-A**)
- Logic Test (**Mfg. part no. 15XP-B**)
- One-Year Warranty

35XP-A

Includes MagneGrip™ Holster and Voltect™. The exclusive Magne-Grip™ holster wih magnetic hanging strap frees both your hands for work, and Voltect™ , a non-contact voltage dector, allows the quick detection of dangerous AC voltages without probing.

SPECIFICATIONS

Mfg. Part No.	5XP-A	15XP-B	35XP-A
DC Voltage	200mV - 1000V (5 Ranges)		400mV - 1000V (5 Ranges)
AC Voltage	200mV - 750V (5 Ranges)		400mV - 750V (5 Ranges)
DC / AC Current	200µA to 200mA	200µA to 2A	400uA to 2A
Resistance	200 Ohm to 20 MOhm	200 Ohm to 2000 MOhm	400 Ohm to 40 MOhm
Capacitance	...	...	4nF - 400 µF
Temperature	...	...	20 to 1000°C, (-4 to 1832°C)
Frequency	...	...	4KHZ to 1MHz

Mfg. Part No.	Description	Stock No.	Price Each
5XP-A	Compact DMM w/Non-Contact Voltage Detector	29M6539	59.95
15XP-B	Compact DMM w/Non-Contact Voltage Detector	41R3759	69.95
35XP-A	Compact DMM w/Temperature, Frequency and Capacitance	29M6228	119.95

(79168)

TEST BENCH® HIGH-PERFORMANCE DIGITAL MULTIMETERS

BK PRECISION

Features:
- Resistance measurement
- Frequency measurement
- Diode check
- Audible continuity
- All current ranges fused
- Auto power off
- Ruggedized case
- CATIII 1000 V, (all models)
- CATIV 600 V, (392 & 393)

389A

High performance and value priced, the **Test Bench® Series** offers more features for the dollar than other multimeters. In addition to measuring voltage and current, the meters also measure capacitance, frequency and temperature, and include component test, diode test and logic indicator capabilities. A double injection molded case provides improved grip and protection for the meters.

SPECIFICATIONS

Mfg. Part No.	388B	389A	390A	391A	392/393
True RMS	...	...	...	X	X
DCV Accuracy	0.005	0.0025	0.001	0.0005	0.0008
Display Count	4000			20000	60000
Bargraph	...	X	X	...	X
Ranging	Manual	Auto/Manual	Auto/Manual	Manual	Auto/Manual
Transistor Test	X	...	...	...	...
Logic Probe	X	...	...	X	X
AC/DC Voltage	400mV to 750V / 400mV to 1000V			200mV to 750V / 200mV to 1000V	600mV to 750V / 600mV to 1000V
Capacitance	X	X	X	...	X
Temperature Probe	...	...	X	...	X
Min./Max. Peak Hold, Rel. Mode	...	X	X	...	...
Data Hold	...	X	X	X	X
RS-232 Interface and Software	...	...	X	...	...
USB	...	...	...	...	393

Mfg. Part No.	Description	Stock No.	Price Each
388B	Handheld DMM	22C6856	139.00
389A	Handheld DMM with Bargraph	22C6857	159.00
390A	Handheld DMM with Bargraph, RS-232 Interface and Software	22C6858	179.00
391A	Handheld DMM with True rms	22C6859	199.00
392	Handheld DMM with True rms, Bargraph	39X0081	205.00
393	Handheld DMM with True rms, Bargraph, USB Interface	39X0082	216.00

(5416)

FLUKE CONNECT 3000 FC SERIES TEST TOOLS

FLUKE®

- Communicate with your iOS (4s and later) and Android™ (4.3 and up) devices with the new Fluke Connect mobile app
- Wireless technology allows connectivity between your phone, PC, and all Fluke Connect enabled test tools
- Let your team see what you see in an instant with ShareLive™ video call
- Save money and time by taking multiple measurements simultaneously
- Isolate intermittent events or record signal fluctuations without even being there using the log function on the modules
- View results on your computer with the PC Adapter
- Work with fewer interruptions by recording multiple sessions before downloading. Data is saved to a PC in .csv format (comma separated variable) file format for easy viewing at your convenience
- Capture readings at different intervals, with user-set recording intervals from one second to one hour
- Future proof your investment by adding functionality to the 3000 FC DMM when you need it
- Send and communicate test data to your manager and coworkers to assess abnormal system response in seconds
- Have all asset test results at your fingertips after downloading to your PC for future asset performance tracking and reliability programs
- See multiple measurements on one screen at one time (DMM and three modules, Ti200/300/400 and five modules)
- No more writing data down. Capture up to 65000 sets of min/max/avg readings over single or multiple logging sessions using the recording capability. Each reading and session is time stamped
- Avoid awkward or uncomfortable measurement positions. Set up the measurement once, step back and read it as many times as you want, when you want
- View up to 6 live readings at once on the Fluke Connect mobile app or a PC to get a complete understanding of the situation
- Easily see backlit displays in dark or dimly lit work environments
- Choose auto or manual ranging
- Use the optional TPak Magnetic Hanger for even more hands-free working
- Integrated holster protects the meters, while probe holders keep accessories organized
- Be in multiple places at once, reducing the risk of arc flash by separating yourself from hazardous measurement situations
- Fluke 3000 FC meets Measurement Category 1000 V CAT III and Category IV 600 V safety standards: AC Current Clamp module and AC/DC Current Clamp module 600 V CAT III; AC Voltage Module, DC Voltage Module, and iFlex Clamp Meters 600 V CAT IV/1000 CAT III

The new **Fluke Connect** system of test tools communicates with the new Fluke Connect mobile app on your Android™ or iOS smart device, allowing you to share live measurements, monitor readings from safe distances, and get your job done easier than ever before. The wireless digital multimeter functions as the mobile hub, displaying readings from up to three module tools simultaneously from up to 20 meters away. The **Fluke Connect** modules also give you the flexibility to build your wireless test tool system how you want when you want. **Now compatible with Fluke Connect™ Mobile App.**

➤CONTINUED➤

FLUKE CONNECT 3000 FC SERIES TEST TOOLS (CONT.)

DMM SPECIFICATIONS	
AC/DC Voltage	600mV / 6V / 60V / 600V / 1000V
Resistance	600Ω / 6kΩ / 60kΩ / 600kΩ / 50MΩ
Diode Test	2V
Capacitance	1000nF / 10µF / 100µF / 9999µF*
AC/DC Current	60mA / 400mA**
Frequency	99.99Hz / 999.9Hz / 9.999kHz / 99.99kHz

* In the 9999µF range for measurements to 1000µF, measurement accuracy is 1.2% + 2.
** 400.0mA accuracy specified up to 600mA overload.

DIGITAL MULTIMETER

Mfg. Part No.	Description	Stock No.	Price Each
FLK-3000 FC	FC Wireless Digital Multimeter	47X3332	349.95

MODULES

Mfg. Part No.	Description	Range	Stock No.	Price Each
FLK-A3000 FC	FC Wireless AC Current Clamp Module	0.5A to 400A	47X3306	169.95
FLK-A3001 FC	FC Wireless iFlex AC Current Module	0.5A to 2500A	47X3308	199.95
FLK-A3002 FC	FC Wireless AC/DC Current Module	600A / 1000A	47X3310	129.95
FLK-V3000 FC	FC Wireless AC Voltage Module	6V / 60V / 600V / 1000V	47X3327	169.95
FLK-V3001 FC	FC Wireless DC Voltage Module	600mV / 6V / 60V / 600V / 1000V	47X3329	169.95
FLK-T3000 FC	FC Wireless K-Type Temperature Module	K-type: -200°C to 1372°C	47X3323	161.46
FLK-PC3000 FC	FC Adapter and Software	...	47X3312	52.21

KITS

Mfg. Part No.	Contents	Stock No.	Price Each
FLK-3000 FC IND	Industrial System includes multimeter, three iFlex clamp modules, one ac voltage module and accessories	47X3335	999.95
FLK-3000 FC GM	General Maintenance System includes multimeter, iFlex clamp module, ac voltage module, dc voltage module and accessories	47X3333	849.95
FLK-3000 FC HVAC	HVAC System includes multimeter, ac current clamp module, temperature module and accessories	47X3334	599.95
FLK-T3000 FC KIT	T3000 FC Kit includes multimeter, temperature module and accessories	47X3324	449.95
FLK-A3000 FC KIT	A3000 FC Kit includes multimeter, ac current clamp module and accessories	47X3307	449.95
FLK-A3001 FC KIT	A3001 FC Kit includes multimeter, iFlex clamp module and accessories	47X3309	499.95
FLK-V3000 FC KIT	V3000 FC Kit includes multimeter, ac voltage module and accessories	47X3328	449.95
FLK-V3001 FC KIT	V3001 FC Kit includes multimeter, dc voltage module and accessories	47X3330	449.95
FLK-V3003 FC KIT	V3003 FC Kit includes multimeter, ac voltage module, dc voltage module and accessories	47X3331	649.95

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
C3004IND	Soft Tool Bag for Industrial Kit	47X3300	74.95

(208323)

FLUKE-233 TRUE-RMS, WIRELESS REMOTE DISPLAY DIGITAL MULTIMETER

Measures:
- True-rms AC voltage and current
- Measure up to 1000V AC and DC
- Measure up to 10A (20A for 30 seconds)
- 10,000µF capacitance range
- Frequency to 50kHz
- Built-in thermometer conveniently takes temperature readings without having to carry a separate instrument
- Resistance, continuity and diode test
- Min/Max and average recording to capture variations automatically

Made in the U.S.A. of U.S. and non U.S. parts

Features:
- Wireless technology allows display to be carried up to 30-ft. away from point of measurement
- Removable magnetic display can be conveniently mounted where it is easily seen
- No need to hold meter to make or read measurements, improving visual focus on probes
- Low-power 802.15.4 wireless technology does not interfere with measurement accuracy
- Use as a conventional multimeter when display is connected
- Auto power off maximizes battery life
- Radio transmitter automatically turns off when display is connected to meter
- Test continuity and diodes
- Easy-to-read display with large digits and bright backlight
- Battery life approximately 200-hours
- Three-year manufacturer's warranty
- Made in the U.S.A.
- CSA certified, CE compliant

➤ CONTINUED ➤

FLUKE-233 TRUE-RMS, WIRELESS REMOTE DISPLAY DIGITAL MULTIMETER (CONT.)

SPECIFICATIONS AT A GLANCE

Mfg. Part No.	FLUKE-233
Counts:	6000
Voltage:	0.1mV to 1000V AC/DC
Current:	0.1mA to 10A AC/DC
Resistance:	0.1Ω to 40MΩ
Capacitance:	1nF to 9999µF
Frequency:	0.1Hz to 50kHz
Functions:	Min/Max/Average, Hold, Auto, Manual Range, Continuity/Diode
Temperature:	-40°C to +400°C
Power:	5 AA Batteries for 200-Hrs. of Battery Life
Wireless Frequency:	2.4GHz
Safety Rating:	CAT III 1000V, CAT IV 600V

FLUKE-233 true-rms, remote display digital multimeter allows the operator to be in two places at once. The removable display solves the problems of holding both the meter and the test leads to make a measurement. Designed for making measurements in hard-to-reach places, and in machines or panels that are physically separated from a limit switch or an isolator switch. Ideal for working in areas where the operator can't be close to the active measurement point, like clean-rooms or hazardous areas. Comes complete with test leads, alligator clips, temperature probe, batteries, user's manual and three-year manufacturer's warranty.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-233	True-rms Wireless Remote Display Digital Multimeter	10R6966	299.95

(148702)

FLUKE-27-II AND FLUKE-28-II RUGGED, WATERPROOF, FULLY-SUBMERSIBLE DIGITAL MULTIMETERS

Measures:
- Measure up to 1000V AC and DC (Ex zones require reduced measurements)
- Measure up to 10A (**27-II & 28-II** 20A for 30 seconds)
- 10,000µF capacitance range
- Frequency to 200kHz
- Extended AC voltage bandwidth – 15Hz to 20khz (**28 II**),40 Hz to 30 kHz (**27 II**)
- Built-in thermometer conveniently takes temperature readings without having to carry a separate instrument (**28 II**)
- Resistance, continuity and diode test
- Min/Max/AVG and Peak recording to capture variations automatically

FLUKE-27-II

FLUKE-28-II

Made in the U.S.A. of U.S. and non U.S. parts

Features:
- IP67 waterproof and dustproof protection, impervious to the harsh environments
- Designed to withstand 3 meter drop
- Hi-resolution, easy-to-read display with large digits and bright, two-level backlight for increased visibility
- Backlit keypad buttons allows for easy visibility in low-lit areas
- Reversible holster for added protection when not in use
- Improved sleep mode for long battery life
- Relative mode to remove test lead resistance from low ohms measurements
- Auto and manual ranging for maximum flexibility
- MSHA approved for hazardous areas (**27-II & 28-II**)
- Limited lifetime manufacturer's warranty (**27-II & 28-II**)
- Made in the U.S.A.(**27-II & 28-II**)
- CSA certified, CE compliant

FLUKE-28-IIEX

SPECIFICATIONS AT A GLANCE

Mfg. Part No.	FLUKE-27-II	FLUKE-28-II	FLUKE-28-II Ex
Response:	Average	True-rms	
Counts:	6000	6000 / 19,999	
Voltage:	0.1mV to 1000V AC/DC		
Current:	0.1µA to 10A AC/DC		
Resistance:	0.1Ω to 50 MΩ		
Capacitance:	1nF to 9999µF		10nF to 9999µF
Frequency:	0.5Hz to 199.99kHz		
Functions:	Min/Max/Average, Hold, Auto, Manual Range, Continuity / Diode		
Temperature:	...	-200°C to +1090°C	
Low Pass Filter (Measurements on VSD's):	...	Yes	
Safety Rating:	CAT III 1000V, CAT IV 600V		
Ex Certification:	...	...	IECEx Ex ia IIC T4 Gb, Ex ia IIIC T130 °C Db, Ex ia I Ma
IP Rating:	IP67		
Power:	3xAA Batteries for 800-Hours of Life		3xAA Batteries for 400-Hours of Life
Dimensions:	8"H x 3.75"W x 2.2"D		7.8"H x 3.93"W x 2.5"D

➤ CONTINUED ➤

FLUKE-27-II AND FLUKE-28-II RUGGED, WATERPROOF, FULLY-SUBMERSIBLE DIGITAL MULTIMETERS (CONT.)

FLUKE-27-II and **FLUKE-28-II** fully-submersible digital multimeters are ruggedly built to work in the toughest environments. These two industrial multimeters define a new standard for operating in harsh conditions with the features and accuracy to troubleshoot most electrical problems. Both meters have IP-67 (waterproof and dustproof) rating, MSHA approvals, an extended operating temperature range of -15° C to + 55°C (5°F to 131°F) and 95% humidity, and are shock/vibration-resistant to withstand a 3-meter (10-ft.) drop to concrete. Both meters can withstand hazardous 8000 volt spikes caused by load switching and faults on industrial circuits and comply with second edition IEC and ANSI electrical safety standards. **Mfg. part no. FLUKE-28-II** also features hi-resolution 20,000 count display mode and true-rms AC voltage and current for accurate measurements on non linear signals. Plus it has a unique function for accurate voltage and frequency measurements on adjustable speed motor drives and other electrically noisy equipment. Both models come complete with holster, test leads, alligator clips, batteries and user's manual. **Mfg. part no. FLUKE-28-IIEx** can be used in IC (gas) Zone 1 and 2 and IIIC (dust) Zone 21 and 22 areas.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-27-II	Waterproof Digital Multimeter	10R6967	499.95
FLUKE-28-II	True-RMS, Waterproof Digital Multimeter	10R6968	499.95
FLUKE-28-IIEX	Intrinsically Safe True-RMS Digital Multimeter	47W0383	1499.95

(148703)

FLUKE 287, 289 DIGITAL DATA LOGGING MULTIMETERS

FLUKE®

Capabilites

- Measures up to 1000V AC and DC
- Current measurement 20A (30 seconds momentary; 10A continuous)
- 10,000µF capacitance range
- Frequency to 999.99kHz
- Build in thermometer -200°C to +1350°C (-328°F to +2462°F)
- Continuity/Conductance/Capacitance
- Resistance and continuity

FLUKE 289

Made in the U.S.A. of U.S. and non U.S. parts

Features:

- 50,000 count 1/4 VGA dot matrix display with white backlight
- True-RMS for accurate measurements on non-linear loads
- Trendcapture plots measurements as single line to help detect anomalies
- LoZ: low input impedance prevents false readings due to "ghost voltage" (Model 289)
- 50 Ohm Range for motor winding and low ohm measurements (Model 289)
- Soft keys and navigation control provide access to secondary functions
- Saved measurements allows the user to name and recall measurements made in the field
- Field upgradeable and expandable meter as new capabilities added
- Record events and trends, and display as a graph on the meter without downloading to a PC
- Multi lingual interface
- Internal memory allows stand-alone logging up to 200 hours
- Min/Max/Average with Time Stamp to record signal fluctuations
- Compatible with optional magnetic hanger (ToolPak) for hands free operation
- Optical RS232, USB communication interface
- CAT III 1000 V / CAT IV 600 V safety rated

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-287	Fluke 287 Digital Multimeter	42M9904	449.96
FLUKE-289	Fluke 289 Digital Multimeter	42M9905	539.96

KITS

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE 287/FVF	Fluke-287 True-RMS Electronics Logging Multimeter, FlukeView® forms software and cable, 80BK-A thermocouple probe, modular test leads and probes, alligator clips and soft case	34P0650	584.96
FLUKE-289/FVF	Fluke 289 Digital Multimeter, test leads, alligator clips, 80BK temperature probe, TPAK magnetic meter hanger, FlukeView® forms software and cable, soft case	54M4559	629.96

(94360)

NEW PRODUCTS ADDED DAILY

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(196561)

ELECTRONICS AND INDUSTRIAL MASTER TEST LEAD KITS

FLUKE®

TLK287

TLK289

These master test lead kits are ideal for today's electrical and electronics testing and design. Perfect to complement **mfg. part nos. Fluke-287** and **Fluke-289** logging digital multimeters; *ordered separately on this page.*

ELECTRONICS MASTER TEST LEAD KIT

Mfg. part no. TLK287 Electronics Master test lead kit includes precision electronic probes with multiple spring-loaded sharp tips to maximize contact with SMD test points, micro-grabbers and leads to enable fine SMD testing plus mini-alligator clips, grabbers and probes for virtually every electronics need. All packaged in a handy storage case.

Mfg. Part No.	Description	Stock No.	Price Each
TLK287	Electronics Master Test Lead Kit	70M8699	142.46

INDUSTRIAL MASTER TEST LEAD KIT

Mfg. part no.TLK289 Industrial Master test lead kit contains SureGrip™ alligator clips, grabbers, hook clips and industrial test probes for dependable contact with a variety of test points. Also includes a temperature adapter with K-Type thermocouple for direct temperature measurement with user's own DMM's temperature measurement functions, a convenient, magnetic DMM hanger and a protective, softside carrying case.

Mfg. Part No.	Description	Stock No.	Price Each
TLK289	Industrial Master Test Lead Kit	70M8700	149.95

(105203)

INDUSTRIAL MULTIMETER SERVICE COMBO KITS

FLUKE®

Fluke-289/IMSK Kit Includes:

- Fluke-289V advanced data logging multimeter
  Trendcapture: record, graph and review measurements in the field
  Precise performance: solve problems with speed and accuracy
  Large 50,000 count, 1/4 VGA display with white backlight
  Unique function for accurate voltage and frequency measurements
  LoZ volts low impedance voltage function
  50 ohm range
- Fluke-i400 AC 400A current clamp
  Companion to your DMM to measure up to 400A AC
  1mA/Amp output
  CAT IV 600V / CAT III 1000V safety rating
  Designed to offer maximum utility in a very compact shape
  22 of the most useful accessories
- TL71 Silicone test leads
- AC72 alligator clips
- Limited lifetime manufacturer's warranty on **Fluke-289** and 1-year manufacturer's warranty on accessories

Fluke-289/IMSK

Fluke-87V/IMSK Kit Includes:

- Fluke-87V multimeter with temperature frequency, capacitance 250µs peak min-max
  6000 counts, 3¾ digits
  Unique function for accurate voltage and frequency measurements on electrically noisy equipment
- Fluke-i400 AC 400A current clamp
  Companion to your DMM to measure up to 400A AC
  1mA/Amp output
  CAT IV 600V / CAT III 1000V safety rating
  Designed to offer maximum utility in a very compact shape
  22 of the most useful accessories
- 80BK-A thermocouple bead probe
- TL75 test leads
- AC72 alligator clips
- Limited lifetime manufacturer's warranty on **Fluke-87V** and 1-year manufacturer's warranty on accessories

FLUKE-87V/IMSK

Mfg. part no. FLUKE-289/IMSK combo kit combines the advanced data logging multimeter with Trendcapture with the i400 AC current clamp. Together they provide the ability to troubleshoot most industrial problems.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-289/IMSK	Fluke-289 Industrial Logging Meter w/ Fluke- i400 Current Clamp Combo Kit	09R2346	699.95

Mfg. part no. FLUKE-87V/IMSK combo kit combines the 87V industrial digital multimeter with the i400 AC current clamp. Together they provide the ability to troubleshoot most industrial problems, providing the functionality needed to effectively do the job right.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-87V/IMSK	Fluke-87V Industrial Multimeter w/Fluke-i400 Current Clamp Combo Kit	11R0628	474.95

(147954)

DIGITAL MULTIMETERS

MULTIMETER ACCESSORIES

FLUKE®

IV series accessories allows easy storage of multimeters. **TPAK** ToolPak™ allows you to hang your meter by a magnet or strap hanger. The magnet allows you to hang your multimeter just about anywhere. For use with **Fluke 233, 77 IV, 1587 & 1577, 280, 170, 110, 80 series IV & V, 70 series III, 20 series II**, DMMs, **780 series, 720 series, 710 series** calibrators, **50 series** digital therermometers and the **922** airflow meter.

Mfg. part no. FVF-SC2 FlukeView® Forms version 3.0 software allows you to document, store and analyze readings or measurements from **mfg. part nos. 280** and **180 series , 789, 1550B** or **1653** test tools. **Mfg. part no. FVF-SC4** version 4.0 software supports **8808A, 8845A** and **8846A** multimeters. Creation of custom forms, reports, graphs and tables. Includes interface cable, full user documentation and manual. **Mfg. part no. FVF-Basic** works with **mfg. part nos. 280** and **180 series, 789, 1550B** and **1653**.

Mfg. part no. BP189 high capacity battery pack for **Fluke-180 series** DMMs. **Mfg. part no. IR189USB** changes the RS232 serial cable in the **mfg. part no. FVF-SC2** to a USB cable.

Mfg. Part No.	Description	Stock No.	Price Each
TPAK	ToolPak Magnetic Hanging Strap	97B3576	38.21
FLUKE-FVF-SC2	FlukeView Forms Software with Cable for 280 and 180 series, 789, 1550B and 1653	26K2565	224.95
FLUKE-FVF-BASIC	FlukeView Forms Basic Software with Cable for 280 and 180 series, 789 and 1550B	26K2563	149.95
FLUKE-IR189USB	RS232-to-USB Cable Assembly	26K2568	59.95

(48580)

FLUKE-80 SERIES V INDUSTRIAL MULTIMETERS

FLUKE®

Made in the U.S.A. of U.S. and non U.S. parts

IEC 1010-1 1000V CAT III

Capabilities:
- Measure up to 1000V AC and DC
- Measure up to 10A (20A for 30 seconds)
- 10,000uF Capacitance Range
- Frequency to 200kHz and % Duty Cycle
- True-rms AC Voltage and Current for Accurate Measurements on Non Linear Signals (**FLUKE-87-5**)
- Built-in Thermometer (**FLUKE-87-5**); Thermocouple Included
- Peak Capture to Record Transients as Fast as 250 µs (**FLUKE-87-5**)
- 4½ Digit Mode (**FLUKE-87-5**)

Features:
- Unique Function for Accurate Voltage and Frequency Measurements on Adjustable Speed Motor Drives and Other Electrically Noisy Equipment (**FLUKE-87-V**)
- Optional Magnetic Hanger for Hands-Free Setup and Viewing
- Large Display Digits and 2-Level Bright White Backlight for Increased Visibility
- Withstands Hazardous 8,000 Volt Spikes Caused by Load Switching and Faults on Industrial Circuits
- Complies with Second Edition IEC and ANSI Electrical Safety Standards
- Improved Sleep Mode for Long Battery Life
- Relative Mode to Remove Test Lead Resistance for Low Ohms Measurements
- Auto and Manual Ranging for Maximum Flexibility
- Meets 1000V CAT III and 600V CAT IV Safety Standards (IEC 1010-1)
- UL listed, CSA certified, CE compliant, VDE approved, TUV approved
- Recommended accessories: C35 Case, TLK-220 Test Lead Set, i400 Current Clamp

FLUKE-80 series V has improved measurement functions, troubleshooting features, resolution and accuracy to solve more problems in electronics, plant automation, power distribution, and electro-mechanical equipment.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-83-5	Industrial Digital Multimeter	96H6286	399.95
FLUKE-87-5	Industrial Multimeter with Temperature	96H6287	399.95

(78246)

FLUKE-170 SERIES DIGITAL MULTIMETERS

FLUKE®

FLUKE-179

IEC 1010-1 1000V CAT III IEC 1010-1 600V CAT IV

Made in the U.S.A. of U.S. and non U.S. parts

- Wide 1000 V measurement range
- True-rms voltage and current measurements
- 6000 count resolution
- Digital display with analog bargraph and backlight (177, 179)
- Manual and automatic ranging
- Display Hold and Auto Hold
- Frequency and capacitance measurements
- Resistance, continuity and diode measurements
- Temperature measurements (179)
- Min/Max/Avg recording
- Easy battery exchange without opening the case
- Closed case calibration through front panel
- Ergonomic case with integrated protective holster
- EN61010-1 CAT III 1000 V, CAT IV 600 V
- Recommended accessories: C25 Case, TL71 Test Lead Kit, i410 Current Clamp

AC amps: 3mA to 10.00A (20A overload for 30 seconds). DC amps: 0.01mA to 10.00A (20A overload for 30 seconds). AC voltage: 30mV to 1000V. DC voltage: 0.1mV to 1000V. Resistance: 0.1Ω to 50.00MΩ. Capacitance: 1nF to 9999µF. Frequency voltage input: 2Hz to 100kHz; current input: 2Hz to 30kHz. Temperature range: -40°F to +752°F (-40°C to +400°C). Includes test leads, battery and manual. **FLUKE-179** also includes 80BK-A temperature probe. Certificate of calibration available on all models, *go online or call*.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-175 ESFP	Model 175 Digital Multimeter	25C4796	249.95
FLUKE-177 ESFP	Model 177 Digital Multimeter	25C4800	274.95
FLUKE-179-EFSP	Model 179 Digital Multimeter	25C4804	299.95

(68973)

ELECTRONICS COMBO KIT

FLUKE®

Combo Kit Includes:
- Fluke 179 True-rms Digital Multimeter with Backlight
- Fluke TL224 Silicone Test Leads
- Fluke TL910 Electronic Fine Point Test Probes with Replacement Tips
- Fluke AC280 Hook Clips
- Fluke 80BK-A Integrated Temperature Probe
- Fluke C35 lightweight soft case to provide optimal protection and storage
- TPAK One Piece Magnetic Hanger

Full-featured DMM with advanced electronic troubleshooting functions plus probes and hooks for delicate electronic measurements all packed in a sleek, durable carrying case. Designed to meet the demands of the electronics professional.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-179/EDA2	Electronics Combo Kit	31M7868	349.95

(74088)

ELECTRICIAN'S COMBO KIT

FLUKE®

Combo Kit Includes:
- Fluke 179 True-rms Digital Multimeter with Backlight
- Fluke 1AC-II Non-Contact Voltage Tester
- Fluke TL224 Silicone Test Leads
- Fluke TP220 Industrial Test Probes
- Fluke AC220 Heavy Duty Alligator Clips
- Fluke 80BK-A Integrated Temperature Probe
- Fluke 35 Soft Carrying Case
- TPAK One Piece Magnetic Hanger

Multimeter and accessory combination designed specifically for today's electrician. Rugged 1000V CAT III meter, and industrial strength test lead set, and a non-contact voltage detector all in a durable carrying case.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-179/1AC-II KIT	Electricians Combo Kit	45M5421	349.95

(74086)

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(196548)

FLUKE-116/62MAX+ TECHNICIAN'S COMBO KIT

Fluke116 Digital Multimeter
- Fluke 116 HVAC Multimeter with Temperature and Microamps
- TL175 Hard Point Test Lead Set
- TPak ToolPak Magnetic Meter Hanging Strap
- Flexible Cuff Pipe Clamp Thermocouple
- 80BK Integrated Temperature Probe
- 80AK-A Thermocouple Adapter
- C115 Deluxe Soft Carrying Case with Shoulder Strap

Fluke 62 MAX+ Infrared Thermometer
- Dust and water-resistant: IP54 rated
- Rugged: 3-meter (9.8-foot) drop tested
- Ergonomically designed: Completely redesigned for a more natural hand fit
- Distance to spot: 12:1
- Dual lasers: Identifies area to be measured
- Large, backlit display: Makes data easier to read, even in dark areas

116 62 MAX+

For the complete solution to HVAC troubleshooting the extra value-packed HVAC Technician's Combo Kit, provides the ability to troubleshoot and solve problems more efficiently by providing all the needed accessories an HVAC professional would need in a compact carry case.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-116/62 MAX+	True-RMS Digital Multimeter/Infrared Thermometer Combo Kit	66W5427	274.95

(88090)

INDUSTRIAL MULTIMETER AND INFRARED THERMOMETER COMBO KIT

Combo Kit Includes:
- Fluke 179 Features - True-Rms Digital Multimeter With Backlight
- Fluke 61 - Infrared Thermometer
- 80BK-A Thermocouple
- C800 Carry Case

Created for industrial electricians, HVAC and facility maintenance. Rugged true-rms multimeter with a built-in thermometer to troubleshoot electrical and electromechanical problems plus a laser guided, non-contact infrared thermometer for measuring rotating or energized equipment. Includes temperature probe and a durable carrying case.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-179/61 KIT	Industrial Multimeter and IR Thermometer Combo Kit	02J7893	399.95

(79145)

87V/E INDUSTRIAL COMBO KIT

Kit Contents:
- 87V Industrial Multimeter
- 1.5m Silicone Leads Resist Heat
- Removable Probes with 4mm of Exposed Metal for Use on Industrial Circuits
- Retractable Long Reach Alligator Clips
- Magnetic Hanger to Position and Hold Meter to Steel Surfaces
- K-Type Temperature Probe
- Lightweight soft case to provide optimal protection and storage
- Kit Offers a Solution for Maximum Productivity of Industrial Electricians

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-87-5/E2 KIT	Industrial Multimeter Combo Kit	12M6081	474.95

(78759)

CALIBRATION SERVICES

From pre-calibration to re-calibration, we bring you competitive pricing with quick delivery.

(207664)

FLUKE 88 SERIES V DELUXE AUTOMOTIVE MULTIMETER

- 0.1% DC accuracy
- Current measurements up to 10A, 20A for up to 30 sec
- Millisecond pulse width measurements for fuel injectors
- Optional magnetic hanger allows meter to attach to the vehicle
- Min/Max/Avg recording with Min/Max Alert to capture variations automatically
- Peak Min/Max to record transients as fast as 250µs
- Relative mode to remove test lead resistance from low ohms measurements
- Auto and manual ranging
- Autohold™ to capture stable readings with only one touch of the leads
- Large display digits and two-level bright white backlight
- Analog bargraph to track changing or unstable signals
- Input Alert provides audible warning against wrong use of input jacks
- Access door for fast battery changes without opening up the case
- "Classic" design that fits your hand with new removable holster, built-in test lead and probe storage
- 10Mohm input impedance won't damage computer circuits
- Limited lifetime warranty

Kit

Kit Includes:
- 88V Multimeter
- TL224 silicone test leads
- AC285 long reach alligator clips
- TP220 test probes
- RPM 80 inductive RPM
- TPAK ToolPak™ Magnetic Meter Hanging Kit
- 80BK temperature probe two automotive backprobe pins insulation piercing probe
- C800 durable carrying case holster
- 9V battery (installed)
- Getting Started Manual
- CD with detailed manual

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-88-5	88 Series V Deluxe Automotive Multimeter	73K8007	474.95
FLUKE-88-5/A	88 Series V Deluxe Automotive Multimeter Kit	73J7956	649.95

(83702)

FLUKE INFRARED THERMOMETER KITS

Fluke 62MAX+ Infrared Thermometer
- Dust and water-resistant: IP54 rated
- Rugged: 3-meter (9.8-foot) drop tested
- Ergonomically designed: Completely redesigned for a more natural hand fit
- Distance to spot: 12:1
- Dual lasers: Identifies area to be measured
- Large, backlit display: Makes data easier to read, even in dark areas

Fluke T+PRO Voltage and Continuity Tester
- 3 forms of ac/dc voltage detection: light, sound, and vibration
- Extra heavy-duty, replaceable test leads
- CAT IV 600, CAT III 1000 V safety rated
- Continuity beeper

FL62MAX+/323/1AC

Fluke 1AC VoltAlert™ Voltage Detector
- Fits in a shirt pocket for convenience
- All outer surfaces are non-conductive for safety
- Detects voltage without metallic contact
- Manufactured, printed and packaged in the US
- Quickly locates the hot, neutral and ground terminals in any receptacle

Fluke 323 Clamp Meter
- 400 A ac current measurement
- 600 V ac and dc voltage measurement
- True-rms ac voltage and current for accurate measurements on non-linear signals
- Resistance measurement up to 40 kΩ with continuity detection
- Slim, ergonomic design
- CAT IV 300V/CAT III 600 V safety rating

FLUKE-414D/62MAX+

Fluke 414D Laser Distance Meter
- The most advanced laser technology for distance measurement
- Measures up to 50 m (165 ft) with accuracy of 2 mm (0.08 in)
- Quick calculation of area (square feet/meters) and volume
- Pythagoras function indirectly measures height via two other measurements
- Stores up to five measurement results
- Battery life of 3000 measurements with automatic shut-off feature

Mfg. Part No.	Description	Stock No.	Price Each
FL62MAX+/T+PRO/1AC	Infrared Thermometer/Voltage and Continuity Tester/Voltage Detector Combo Kit	65W6011	249.95
FL62MAX+/323/1AC	Infrared Thermometer/Clamp Meter/Voltage Detector Combo Kit	65W6012	249.95
FLUKE-414D/62MAX+	Laser Distance Meter/Infrared Thermometer Combo Kit	65W6010	249.95

(147957)

DIGITAL MULTIMETERS

FLUKE 179 MULTIMETER AND TOOLPAK™ COMBO KIT

FLUKE ®

Combo Kit Includes:
- Fluke 179 Meter (w/ Temperature)
- One Piece Magnatic Hanging Strap

FLUKE 179 multimeter includes (TPak) one piece magnetic hanger for hands free viewing. The strong magnet accessory will attach to an electrical panel, a metal door jamb or any other ferrous-type metal.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-179/TPAK	True-RMS Digital Multimeter w/Magnetic Hanging Kit	74C6496	324.95

(74091)

FLUKE 110 SERIES DIGITAL MULTIMETERS

FLUKE ®

FLUKE-117

- VoltAlert™ technology non-contact voltage detection
- AutoVolt automatic AC/DC voltage selection
- LoZ: low input impedance prevents false readings due to "ghost voltage"
- Large display and white LED backlight to work in poorly lit areas more effectively
- CAT III 600V safety rated
- UL listed, CSA certified, CE compliant, VDE approved, TUV approved

110 series digital multimeters have features and functions professional electricians need to get their job done. **Mfg. part no. Fluke-117** is the ideal DMM for demanding settings like commercial buildings, hospitals and schools. The compact design makes it easy to hold and use one-handed. **Mfg. part no. Fluke-116** has a built-in thermometer and is specialized for HVAC applications including temperature and microamp measurements to quickly troubleshoot problems with HVAC equipment and flame sensors. **Mfg. part no. Fluke-115** is designed for a wide variety of electrical and electronic testing applications. **Mfg. part no. Fluke-113** is simple-to-use and has the features needed to repair most electrical problems Using the Fluke VCHEK™ LoZ low impedance measurement function, users can simultaneously test for voltage or continuity. All models compatible with **mfg. part no. TPAK** ToolPak™ magnetic hanger for hands-free operation; ordered separately below. These DMMs include **mfg. part no. TL75** hard point test lead set, registration and manual.

COMPARISON AT A GLANCE:

Mfg. Part No.	Fluke-117	Fluke-116	Fluke-115	Fluke-114	Fluke-113
AC/DC Voltage	600V	600V	600V	600V	600V
AC/DC Current	10A Continuous	...	10A Continuous	...	...
MicroAmps	...	●	...	...	...
VoltAlert™	●	...	...	...	...
AutoVolts	●	●	...	●	...
VCHEK™	...	...	...	...	●
LoZ	●	●	...	●	●
Resistance	40MΩ	40MΩ	40MΩ	40MΩ	60KΩ
Temperature	...	●	...	...	...
Capacitance	1nF to 9999µF	1nF to 9999µF	1nF to 9999µF	...	1nF to 9999µF
Frequency	0.1Hz to 50kHz	0.1Hz to 50kHz	0.1Hz to 50kHz	...	...
Continuity	●	●	●	●	●
Min./Max./Avg.	●	●	●	●	●
Diode Test	●	●	●	...	●
Hold	●	●	●	●	●

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-117	Electrician's True RMS Digital Multimeter	83K1721	170.96
FLUKE-116	HVAC True RMS Digital Multimeter	83K1719	161.46
FLUKE-115	True RMS Digital Multimeter	83K1718	151.96
FLUKE-114	Electrical True RMS Digital Multimeter	83K1717	132.96
FLUKE-113	Utility Digital Multimeter	94M4662	123.46
ACCESSORIES			
C25	Softside Vinyl Meter Case	44F7741	34.95
TPAK	ToolPak Magnetic Hanging Strap	97B3576	38.21
TL75	Replacement Test Leads	44F622	22.45

(88089)

FLUKE-116/117 TRUE-RMS DIGITAL MULTIMETER AND FLUKE-323 CLAMP METER ELECTRICIAN'S COMBO KIT

FLUKE ®

Fluke 116 Digital Multimeter
- Fluke 116 HVAC Multimeter with Temperature and Microamps
- TL175 Hard Point Test Lead Set
- TPak ToolPak Magnetic Meter Hanging Strap
- Flexible Cuff Pipe Clamp Thermocouple
- 80BK Integrated Temperature Probe
- 80AK-A Thermocouple Adapter
- C115 Deluxe Soft Carrying Case with Shoulder Strap

116

117

323

Fluke 117 Digital Multimeter
- VoltAlert™ technology for non-contact voltage detection
- AutoVolt automatic ac/dc voltage selection
- Low input impedance: Helps prevent false readings due to ghost voltage
- Large white LED backlight to work in poorly lit areas
- True-rms for accurate measurements on non-linear loads
- Measures 10 A (20 A overload for 30-seconds)
- Resistance, continuity, frequency and capacitance
- Min/Max/Average to record signal fluctuations
- Compact ergonomic design for one-handed operation
- CAT III 600 V safety rated

Fluke 323 Clamp Meter
- 400 A ac current measurement
- 600 V ac and dc voltage measurement
- True-rms ac voltage and current for accurate measurements on non-linear signals
- Resistance measurement up to 40 kΩ with continuity detection
- Slim, ergonomic design
- CAT IV 300V/CAT III 600 V safety rating

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-116/323 KIT	HVAC Technician's Combo Kit	66W5426	299.95
FLUKE-117/323 KIT	Electrician's Multimeter Combo Kit	66W5428	324.95

(88091)

TLK-220 US INDUSTRIAL TEST LEAD KIT

FLUKE ®

Included With Set:
- AC220 Plunger Style Alligator Clips
- AC285 Large Jaw Alligator Clips
- TP220 Sharp Test Probes
- TL224 Right-to-Straight Test Leads
- Zippered Vinyl Carrying Case With Moveable Divider

Special value SureGrip Set for industrial applications. Includes two sizes of alligator clips and sharp test probes for reliable connections, test leads and a roomy carrying case to hold and protect your meter and all your accessories. All 1000V CAT III, 600V CAT IV related.

Mfg. Part No.	Description	Stock No.	Price Each
TLK-220	SureGrip Industrial Test Lead Kit	86H2845	139.95

(79154)

AC/DC CURRENT CLAMP KITS

FLUKE ®

- For use with your Fluke DMM to extend the current ranges
- Choice of noncalibrated or calibrated models

These special-value current clamp kits are ideal for electrical professionals looking to add on DC and AC current measurement capabilities to their DMM. Each kit includes a zippered, vinyl carry case with moveable divider. Case is roomy enough to hold and protect current clamp (included) along with your own digital multimeter and accessories

NON-CALIBRATED KITS

Mfg. Part No.	Description	Current Measuring Range	Stock No.	Price Each
I410-KIT	AC/DC Current Clamp Kit	400A (AC), 400A (DC)	02J7894	299.95
I1010-KIT	AC/DC Current Clamp Kit	600A (AC), 1000A (DC)	85H0100	424.95
CURRENT CLAMP ONLY				
I800	AC Current Clamp Probe	800A (AC)	55M0782	299.95
I410	AC/DC Current Clamp	400A (AC), 400A (DC)	01F006	249.95
I1010	AC/DC Current Clamp	600A (AC), 1000A (DC)	01F007	399.95

(79163)

METER AND ACCESSORY CASES

Made in the U.S.A. of U.S. and non U.S. parts

FLUKE®

CXT80 C510 C550 C1600

CXT80, 170, 280 EXTREME CASES
- Unbreakable, watertight, airtight, dustproof, chemical resistant and corrosion proof
- Buoyancy allows case to float in salt water with 7.94 lb load
- Includes an automatic purge valve for quick equalization
- Features an exclusive neoprene O-ring and ABS latches for excellent seal
- **CXT80**: for use with with the following test tools: multimeters: 27, 83 V, 85 V, 87 V, 187, 189, process tools: 724, 725, 726, 789
- **CXT170**: for use with with the following test tools: air quality: 922, multimeters: 77 III, 77 IV, 114, 115, 116, 117, 177, 179, process tools 712, 714, 715, 717, 718, 787
- **CXT280**: for use with with the following test tools: multimeters: 287, 289, earth ground testers: 1621

Mfg. Part No.	Description	Stock No.	Price Each
CXT80	Extreme Case	12P9337	189.95
CXT170	Extreme Case	09R2344	189.95
CXT280	Extreme Case	67P4216	189.95

C510 AND C520A LEATHER CASES
- Oiled genuine top-grain cowhide (brown)
- Rugged construction with heavy-duty stitching and reinforced rivets
- Large tool belt loop and top flap to secure meter
- **C510** case designed for **Fluke 110** and **170 series** meters and most other Fluke DMMs, thermometers, and process calibrators
- **C520A** case designed for **Fluke T2** and **T5 series** electrical testers

Mfg. Part No.	Description	Stock No.	Price Each
C510	Leather Meter Case	01C1138	69.95
C520A	Leather Electrical Tester Case	39C3071	54.95

C550 TOOL BAG
- Rugged, black and yellow ballistic cloth with heavy-duty hardware
- Steel reinforced frame
- Large, zippered storage compartment with 25 pockets
- Weather resistant
- Carry all your tools to the job

Mfg. Part No.	Description	Stock No.	Price Each
C550	Tool Bag	06C0817	94.95

C25 LARGE, SOFT VINYL METER CASE FOR DMMs
- Zippered, black and yellow soft vinyl case with padding
- Inside pocket
- 8.5 x 4.9 x 2.5″

Mfg. Part No.	Description	Stock No.	Price Each
C25	Large, Soft Vinyl Meter Case	44F7741	34.95

C35 SOFT CARRYING CASE
- Durable polyester 600D case construction for long life
- top opens laterally to allow use of test tool w/out removing it from the case (includes strap to secure test tool)
- Compatible with Fluke 20, 70, 11X, 170 Series digital multimeters and other similar format test tools

Mfg. Part No.	Description	Stock No.	Price Each
C35	Soft Polyester Carrying Case	55M0562	22.45

C90 SOFT VINYL METER CASE
- Zippered, black and yellow soft vinyl case
- Inside pocket and belt loop
- 8 x 3.5 x 2.5″

Mfg. Part No.	Description	Stock No.	Price Each
C-90	Soft Vinyl Meter Case	44F597	34.95

C125 SOFT FABRIC METER CASE
- Zippered, black and yellow fabric case
- Detachable external pouch
- Accomodates Fluke 120 series scope meter or handheld DMM

Mfg. Part No.	Description	Stock No.	Price Each
C125	Soft Fabric Meter Case	16F6985	39.95

C789 FABRIC METER AND ACCESSORY CASE
- Large black fabric carrying case with 3 compartments
- Removable handle and shoulder strap
- 12 x 10 x 3″

Mfg. Part No.	Description	Stock No.	Price Each
C789	Fabric Meter and Accessory Case	92F7017	129.95

C1600 GEAR BOX FOR METER AND ACCESSORIES
- Deep interior, lift-out tray keeps everything organized
- Rubber gasket in lid seals out dust and keeps contents dry
- Includes five hook and loop straps to wrap cords and test leads when not in use
- Can be locked
- Large carry handle for comfortable hauling

Mfg. Part No.	Description	Stock No.	Price Each
C1600	Gear Box	81H6396	64.95

➤CONTINUED➤

METER AND ACCESSORY CASES (CONT.)

FLUKE-C101 HARDSIDED CARRYING CASE FOR INDUSTRIAL TEST TOOLS
- Tough, black polyprophylene exterior shell measures 12 x 14.2 x 4.1″
- Interior cavity measures 9 x 11.5 x 2.5″
- Configure diced foam interior to fit, store and protect all Fluke test tools
- Durable molded latches and handle

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-C101	Hardside Carrying Case	26K2562	58.46

(61079)

U1230 SERIES HANDHELD DIGITAL MULTIMETERS

KEYSIGHT TECHNOLOGIES

U1230 U1177A

- True RMS, 6000 count display
- Built-in LED flashlight to illuminate test area
- Flashing backlight as additional visual alert during continuity tests in noisy environments
- Vsense to perform non-contact voltage detection (**mfg. part no. U1233A**)
- Data logging capability (stores up to 10 readings)
- IR-to-USB connectivity to transfer data to PC for record

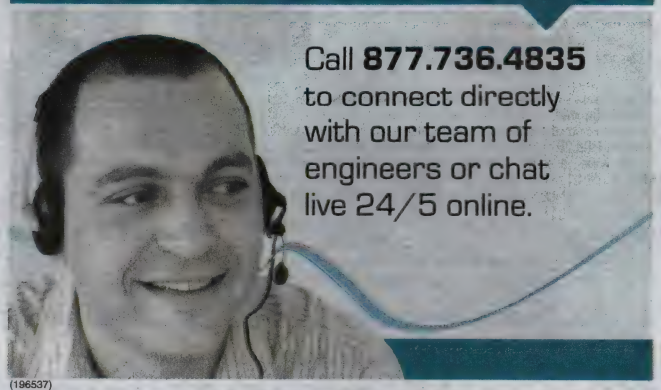
Built for handheld users working in a poorly lit environment, the **U1230 Series** allows you to single-handedly illuminate your test area while making measurements with its easily activated built-in flashlight. Its ergonomic shape fits your hand, while the easily accessible rotary dial allows selection of measurement functions. The **U1230 Series** is built for continuity detection in dark and noisy environments. Its audible beep and flashing backlight display provides increased visual and audio alert to indicate continuity. The Vsense, a unique feature found in the **U1233A** model performs non-contact voltage detection. It delivers more safety while making measurements in dangerous working environments by avoiding any contact with hot or live wires. Upon detection of voltage, it produces a unique combination of beeping alert and blinking LED light to make measurements more efficiently – especially in a dark or noisy environment.

	U1231A	U1232A	U1233A
Voltage Measuring Range (AC/DC):	600mV to 600V		
Resistance Measuring Range:	600Ω to 60MΩ		
Capacitance Measuring Range:	1000nF to 10mF		
Current Measuring Range (AC/DC):	...	60uA to 10A	
Frequency Measuring Range:	99.99Hz to 99.99kHz		
Thermal Type:	K (-40°C to 1372°C / -40°F to 2502°F)		

Mfg. Part No.	Description	Stock No.	Price Each
U1231A	Handheld Digital Multimeter, Basic	48T3127	101.00
U1232A	Handheld Digital Multimeter	45T1552	138.00
U1233A	Handheld Digital Multimeter w/ Non-Contact Voltage Detector	47T6068	168.00
ACCESSORIES			
U1177A	Bluetooth Adapter	47T6066	49.97
U1115A	Remote Logging Display	49X8744	247.00
U1118A	Remote Connectivity Kit	49X8746	337.00

(211849)

TECHNICAL SUPPORT HOTLINE



Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196537)

DIGITAL MULTIMETERS

U1240 SERIES HAND-HELD DIGITAL MULTIMETERS

KEYSIGHT TECHNOLOGIES

Both Models:
- 10,000 count display
- 0.09% basic DCV accuracy
- True RMS AC measurement
- Built-in switch counter, harmonic ratio
- Basic functions: ACV, DCV, ACI, DCI, resistance, frequency, diode, continuity test
- Advanced functions: capacitance, temperature, MINMAX recording
- Adjustable backlight with 2 intensity levels

Mfg. Part No. U1242B Only:
- Manual data logging
- Dual/differential temperatures capabilities

U1240 Series handheld digital multimeters enable you to check more with wider measurement ranges. They feature true RMS readings on their 10,000-count displays. The adjustable backlighting allows you to complete your jobs even in subdued lighting conditions, or to simply prolong battery life. Your maintenance tasks are greatly simplified due to the built-in switch counter, harmonic ratio, dual and differential temperature capabilities, with just a press of the button. CAT III 1000 V and CAT IV 600 V safety protection and are certified to CE and CSA standards. Both DMM models come complete with test probe leads (19mm and 4mm tips), quick-start guide, certificate of calibration, and four 1.5V AAA alkaline batteries.

DIGITAL MULTIMETERS

Mfg. Part No.	Description	Stock No.	Price Each
U1241B	Hand-held Digital Multimeter	55R2335	206.00
U1242B	Hand-held Digital Multimeter with Data Logging	55R2336	226.00

ACCESSORIES

Mfg. part no. U1181A immersion probe measures temperature of food, oil, and other liquids within -50° to +700° range. **Mfg. part no. U1182A** industrial surface probe measures still surface temperature within -50° to +400° range. **Mfg. part no. U1183A** air probe measures dryer, transport pipe and surrounding air temperature within -50° to +800° range. **Mfg. part no. U1583A** AC current clamp extends current measurement range up to 400A.

Mfg. Part No.	Description	Stock No.	Price Each
U1162A	Alligator Clip	53M4043	10.49
U1163A	SMT Grabber	53M4044	10.49
U1164A	Fine Tip Test Probe	53M4045	10.49
U1169A	Test Probe Leads (with 19-mm tips and 4-mm tips)	15R4086	31.34
U1171A	Magnetic Hanging Kit	09P8809	20.88
U1181A	Immersion Temperature Probe	53M4046	61.91
U1182A	Surface Temperature Probe	53M4047	188.00
U1183A	Air Temperature Probe	53M4048	72.41
U1184A	Temperature Probe Adapter	53M4049	10.49
U1186A	Thermocouple (K-type, 1m) and Adaptor	53M4051	20.88
U1187A	Thermocouple (K-type, 3.5m) and Adaptor	77R3366	31.29
U1583B	AC Current Clamp, Dual Range 40A and 400A	55R2341	146.00

(211850)

U1250 SERIES HAND-HELD DIGITAL MULTIMETERS

KEYSIGHT TECHNOLOGIES

All Models:
- 50,000-count dual display
- Up to 0.025% basic DCV accuracy
- Manual and automated (interval) data logging; internally to DMM and externally to PC
- CAT III 1000 V and CAT IV 600 V safety protection

Mfg. Part Nos. U1252B & U1253B:
- True-RMS AC and AC+DC measurements
- K-type and J-type temperature measurements
- Built-in 20MHz frequency counter
- Built-in programmable square-wave generator

Mfg. Part No. U1253B Only:
- Superior contrast from organic LED (OLED) display

U1251B

U1253B

U1250 Series DMM's are housed in robust overmold enclosures and operate over a wide temperature range of –20°C to +55°C. **Mfg. part no. U1251B** expands your capabilities beyond typical DMM measurements to include data logging. Record readings manually or at specified intervals when you connect to a PC with the optional IR-to-USB cable. **Mfg. part no. U1252B** starts with the same foundation, and then adds a 20- MHz frequency counter and programmable square-wave generator to perform more tests conveniently with one tool. Offering the same functionality as the **U1252B**, the **U1253B** provides organic LED display for crystal-clear viewing indoors, even in dark or off-angle situations. Each DMM also includes a 30 kA high energy fuse to further protect you against violent fuse failures during high-current measurements.

Mfg. Part No.	Description	Stock No.	Price Each
U1251B	Data Logging Digital Multimeter	55R2337	390.00
U1252B	Data Logging Digital Multimeter w/ Frequency Counter and Square Wave Output	55R2338	419.00
U1253B	Data Logging Digital Multimeter w/OLED Display	55R2339	460.00

ACCESSORIES

Mfg. part no. U1161A extended test lead kit includes: extended test leads and extension test probes both rated 1000V/15A, medium alligator clips and 4mm banana plugs both rated 600V/10A. **Mfg. part no. U1180A** temperature probe thermocouple accessory kit (limits the temperature range to -20° to +200°C) includes: non-compensation transfer adapter, yellow K-type tip thermocouple and black J-type tip thermocouple.

➤CONTINUED➤

U1250 SERIES HAND-HELD DIGITAL MULTIMETERS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
U1173B	Handheld Digital Multimeter PC Connectivity Cable	05X9288	31.51
U1174A	Soft Carrying Case	78M8406	20.88
U1161A	Extended Test Lead Kit	04M7390	44.12
U1180A	Temperature Probe Thermocouple Accessory Kit	04M7392	36.75

(211851)

U1270 SERIES INDUSTRIAL HANDHELD DIGITAL MULTIMETERS

NEW

KEYSIGHT TECHNOLOGIES

- 30,000 count resolution with 0.05% DCV accuracy
- Fuse accessible through battery door
- Practical features to increase efficiency
- LPF, ZLow, Peak Detect, Qik-V and Smart Ω
- Flashing display alert and loud beep for continuity checks
- IR-to-USB connectivity for unlimited data logging
- Water and dust resistance IP54 compliance
- Superior contrast from OLED display (U1273A) with 160 degrees viewing angle
- U1273AX operates in below freezing temps down to –40°C

U1271A / U1272A

U1273A / U1273AX

U1270 series handheld DMM's are water and dust resistant, which provide better protection against the harsh working conditions. The DMMs' ergonomic design fit better in hands, ideal for engineers or technicians on the move.

Mfg. Part No.	Volt. Range AC/DC	Curr. Range AC/DC	Res. Range	Freq. Range	Cap. Range	Temp. Range	Stock No.	Price Each
U1271A	300mV to 1000V	300µA to 10A	300ohm to 100Mohm	99.999Hz to 999.99kHz		K	84R8257	347.00
U1272A	30mV to 1000V	300µA to 10A	30ohm to 300Mohm	99.999Hz to 999.99kHz		J, K	84R8258	378.00
U1273A	30mV to 1000V	300µA to 10A	30ohm to 300Mohm	99.999Hz to 999.99kHz		J, K	55T1126	404.00
U1273AX	30mV to 1000V	300µA to 10A	30ohm to 300Mohm	99.999Hz to 999.99kHz		J, K	43W5362	451.00

(211852)

AUTO-RANGING DIGITAL MULTIMETERS

TENMA®

- Diode and continuity tests
- Data hold
- Fused 10A range
- Full icon display
- Low battery display
- Battery included
- 1-year warranty
- Calibration is available on select units; *go online or call*

72-7735, 72-7740, 72-7745, 72-7750

72-7755

New digital multimeters' advanced designs use high-resolution A/D converters and microcontrollers. Performance, versatility, and safety are optimized for the most demanding applications.

Mfg. Part No.	72-7735	72-7740	72-7745	72-7750	72-7755
Backlit	...	X	X	X	X
Disp. Count	3999			5999	3999
DC V	400mV to 1000V			600mV to 1000V	400mV to 1000V
AC V	4V to 750V			600mV to 1000V	4V to 750V
DC A	400mA to 10A	400uA to 10A		60mA to 10A	400uA to 10A
AC A	400mA to 10A	400uA to 10A		60mA to 10A	400uA to 10A
Ohms	400ohm to 40Mohm			600ohm to 60Mohm	400ohm to 40Mohm
Cap.	40nF to 100mF	40nF to 100nF	40nF to 100uF	6nF to 6mF	4nF to 40mF
Temp.	...	-40°C to +1000°C			
Freq.	10Hz to 10MHz			6kHz to 60MHz	4kHz to 400MHz
Safety	IEC 1010, 1000V CAT II, 600V CAT III, CE			...	...

Mfg. Part No.	Description	Stock No.	Price Each
72-7735	Test Leads, Manual, Test Clip, RS-232C Cable, Software	02J5540	47.95
72-7740	Test Leads, Manual, Test Clip, Point Contact Temp. Probe	02J5541	72.39
72-7745	Test Leads, Manual, Test Clip, Point Contact Temp. Probe, RS-232C Cable, Software	02J5542	90.85

➤CONTINUED➤

AUTO-RANGING DIGITAL MULTIMETERS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
72-7750	Test Leads, Manual, Test Clip, Point Contact Temp. Probe, RS-232C Cable, Software	02J5543	83.89
72-7755	Test Leads, Manual, Test Clip, Point Contact Temp. Probe, RS-232C Cable, Software, Holster	02J5544	113.85

(83983)

PROFESSIONAL DIGITAL MULTIMETERS

NEW TENMA®

- Auto ranging
- Features Continuity, Duty Cycle, and Diode testing
- Backlit LCD (**72-10405** and **72-10410**)
- Low battery indication
- USB connectivity
- Analog bar graph
- Data hold
- Input protection
- Relative mode
- Auto power off
- Max/Min value (**72-10405** and **72-10410**)
- Peak value (**72-10415**)
- Includes battery, test leads, multi-purpose socket, USB interface cable, PC software CD
- Temperature probe included with **72-10405** only

This meter is feature rich, impeccably accurate, and competitively priced to meet the needs of any technician or tradesman.

72-10405

SPECS	72-10405	72-10410	72-10415
DC Voltage	40mV to 1000V	60mV to 1000V	220mV to 1000V
AC Voltage	40mV to 750V	60mV to 750V	220mV to 750V
DC Current	400µA to 10A	600µA to 10A	200µA to 10A
AC Current	400µA to 10A	600µA to 10A	220µA to 10A
Resistance	400Ω to 40MΩ	600Ω to 60MΩ	220Ω to 220MΩ
Capacitance	40nF to 4000µF		22nF to 220mF
Frequency	10Hz-10MHz		10Hz-220MHz
Frequency Response	45~400Hz	45~3kHz	45~10kHz
Temperature	-40°F~1832°F (-40°C~1000°C)	...	...

Mfg. Part No.	Description	Stock No.	Price Each
72-10405	Professional Digital Multimeter with 4000 Count Display	26W7009	61.19
72-10410	Professional TRMS Digital Multimeter with 6000 Count Display	26W7010	71.39
72-10415	Professional TRMS Digital Multimeter with 22000 Count Display	26W7011	111.19

(212470)

POCKET DIGITAL MULTIMETERS

NEW TENMA®

- Auto ranging
- 3999 count display
- Data hold
- Auto power off
- Low battery indicator
- Relative mode
- Features duty cycle, diode, and continuity testing

Pocket-sized multimeter is rich in features, and comes in a self-contained folding case.

SPECIFICATIONS	72-10395	72-10400
DC Voltage	400mV/4V/40V/600V	400mV/4V/40V/600V
AC Voltage	4V/40V/400V/600V	4V/40V/400V/600V
DC Current	...	400µA/4mA/40mA/400mA
AC Current	...	400µA/4mA/40mA/400mA
Resistance	400Ω/4kΩ/40kΩ/400kΩ/4MΩ/40MΩ	...
Capacitance	4nF/40nF/400nF/4µF/40µF/200µF	4nF/40nF/400nF/4µF/40µF/200µF
Frequency	10Hz~10MHz	10Hz~10MHz

Mfg. Part No.	Description	Stock No.	Price Each
72-10395	Pocket Digital Multimeter with Resistance Measurement	26W7007	19.86
72-10400	Pocket Digital Multimeter with AC/DC Current Measurement	26W7008	21.58

(212432)

MINI DIGITAL MULTIMETER

NEW TENMA®

- Test diodes and continuity
- 1999 count display
- Low battery indicator
- Data hold
- Backlit LCD
- Includes battery, test leads, holster, and temperature probe

Small digital multimeter fits easily in your palm, desk drawer, tool box, or anywhere you need to keep a DMM. Measures AC/DC voltage, DC current, Resistance, and temperature.

72-10405

SPECIFICATIONS	
DC Voltage	200mV/2000mV/20V/200V/500V
AC Voltage	200V/500V
DC Current	2000mA/20mA/200mA/10A
Resistance	200Ω/2kΩ/20kΩ/200kΩ/20MΩ
Temperature	-40°~1832°F (-40°C~1000°C)

Mfg. Part No.	Description	Stock No.	Price Each
72-10420	Mini Digital Multimeter	26W7012	15.99

(212472)

LARGE DISPLAY DIGITAL MULTIMETERS

TENMA® CE

- Diode test, continuity buzzer, data hold
- 59 x 25mm backlit LCD display
- Sleep mode, low battery display
- DC input impedance approx. 10MΩ
- Max display count 1999
- Include test leads, manual, test clips

New digital multimeters' advanced designs use high-resolution A/D converters and microcontrollers. Performance, versatility, and safety are optimized for the most demanding applications.

Mfg. Part No.	72-7720	72-7725
Ranging	Auto	Manual
DC V	200mV to 1000V	200mV to 1000V
AC V	200mV to 750V	2V to 750V
DC A	20µA to 20A	20mA to 20A
AC A	20µA to 20A	20mA to 20A
Ohms	2kohm to 200Mohm	200ohm to 200Mohm
Capacitance		
Temperature	...	-40°C to +1000°C
Frequency	...	2kHz to 20kHz

Mfg. Part No.	Includes	Stock No.	Price Each 1-4
72-7720	Test Leads, Manual, Test Clip	02J5538	34.79
72-7725	Test Leads, 9V Batter, Manual, Point Contact Temp. Probe, Test Clip	02J5539	37.95

(190026)

COMPACT DIGITAL MULTIMETERS

TENMA®

- Diode and continuity tester
- Low battery indicator
- 48 x 16mm, 3 ¾ digit LCD display
- Includes test leads, manual and holster

New digital multimeters' advanced designs use high-resolution A/D converters and microcontrollers. Performance, versatility, and safety are optimized for the most demanding applications.

72-7765
72-7770

Mfg. Part No.	72-7765	72-7770
Backlight	...	X
Display counts	3999	1999
DC V	400mV to 500V	200mV to 500V
AC V	4V to 500V	200V, 500V
DC A	400uA to 10A	
AC A	400uA to 10A	...

CONTINUED

DIGITAL MULTIMETERS • VOLTAGE TESTERS

COMPACT DIGITAL MULTIMETERS (CONT.)

Mfg. Part No.	72-7765	72-7770
Ohms	400ohm to 40Mohm	200ohm, 2kohm, 20kohm, 200kohm, 20Mohm, 200Mohm
Safety	IEC 1010, 600V CAT I, 300V CAT II, CE	

Mfg. Part No.	Features	Battery Size (Included)	Stock No.	Price Each
72-7765	hFE Transistor Tester	9V	02J5546	22.94
72-7770	Square Wave Output	AAA x 2	02J5547	12.69

(190040)

HANDHELD DIGITAL MULTIMETER WITH TRANSISTOR TEST AND TEMPERATURE

NEW TENMA®

- Manual ranging
- Easy to read 1999 count LCD display
- Includes Diode, Transistor, and continuity testing
- Low battery indicator
- Data hold
- Includes battery, test leads, multi-purpose socket, and temperature probe

A reliable, no-nonsense multimeter in a palm-sized design. Measures AC/DC voltage, DC current, resistance, and temperature.

SPECIFICATIONS	
DC Voltage	200mV/2000mV/20V/200V/500V
AC Voltage	200V/250V
DC Current	2000µA/20mA/200mA/10A
Resistance	200Ω/2000Ω/20kΩ/200kΩ/20MΩ
Temperature	-40°F ~ 1832°F (-40°C ~ 1000°C)

Mfg. Part No.	Description	Stock No.	Price Each
72-10390	Handheld Digital Multimeter with Transistor Test and Temperature	26W7006	16.99

(212469)

AC VOLTAGE DETECTORS

AMPROBE®

TIC 300 PRO TIC 410A

Mfg. Part No. TIC 300 PRO Features:
- Lower voltage setting for checking voltage presence in breaker panels, breakers, power outlets and wiring
- Verifies presence of voltage from 30VAC to 122,000VAC (122kV)
- Non-contact AC voltage detection
- Visual and audible voltage indication
- Self-test verifies that tester works properly
- Ergonomic design with a convenient handle
- Drop-proof to 6ft.

Mfg. Part No. TIC 410A Features:
- Up to 121kV
- 48" long

Mfg. part no. TIC 300 PRO warns against dangerous voltages in low and medium voltage applications up to 122kV without contacting the energized conductor. Rugged and reliable utility tool for checking transmission lines, power distribution equipment, down power lines, fuses, and load break connectors. Used with hot stick **mfg. part no.Tic 410A** for voltage higher than 1500VAC.

Mfg. Part No.	Description	Stock No.	Price Each
TIC 300 PRO	High Energy Tic Tracer - Non Contact AC Voltage Detector	54R8818	249.95
TIC 410A	Hot Stick	72M4735	149.95

(147138)

TENMA® AT NEWARK ELEMENT14

Affordable, reliable Test & Measurement equipment and accessories at newark.com/tenma

(212566)

AC CIRCUIT LOAD TESTER

EXTECH INSTRUMENTS A FLIR COMPANY

AC Load Tester
- Selectable loads of 12, 15 and 20 Amps
- Measures loaded and unloaded AC line voltage
- Calculates and displays % voltage drop and line impedance
- Displays peak line voltage and frequency

Outlet Tester Functions
- Neutral to ground voltage
- Hot, neutral and ground impedance
- GFCI trip time
- GFCI trip current
- Open or reversed wiring

Complete with AC test cord (standard North American 3-prong plug).

Mfg. Part No.	Voltage (VAC)	Stock No.	Price Each
CT70	90 to 240V	41T2014	239.99

(202087)

T+ AND T+PRO ELECTRICAL TESTERS

FLUKE®

T+PRO T+PRO-1AC KIT

- Uses 3 forms of AC/DC voltage detection: light, sound and vibration
- AC/DC voltage: 12 to 600V on LED bar, 10.2 to 600V on LCD (**T+PRO** only)
- Replaceable, heavy-duty test leads
- Continuity beeper
- Bright LED flashlight
- GFCI trip
- On/Off switchable beeper
- Compliant with NFPA 70E recommendations
- UL listed, CSA certified, CE compliant

Safer than traditional solenoid testers, T+ and T+PRO electrical testers use all three voltage detection methods: light, sound and vibration, to work more efficiently in noisy environments, dimly lit areas or tight spaces. T+PRO is the perfect choice for demanding commercial and industrial applications, with its voltage and continuity measurement, a Rotary Field indicator, resistance to 9.99kΩ and a LCD digital display with 0.1V resolution and "hold" feature for easier viewing in hard-to-test areas. Basic electrical tester, T+ is ideal for residential electricians and HVAC techs who need a durable, reliable tool for testing voltage and continuity. All models include test leads and probes, test lead strap for managing leads, two AAA batteries and 2-year manufacturer's warranty. **Mfg. part no. T+PRO-1AC KIT** also includes **mfg. part no. FLUKE-1AC-II** VoltAlert™ pocket-sized, non-contact AC voltage detector. **Mfg. part no. T5-Kit** is a starter kit for use with the Fluke T5 electrical tester. Includes **mfg. part no. TP220** SureGrip test probes with removable comfort grips, **mfg. part no. AC285** SureGrip large jaw alligator clips and **mfg. part no. C33** zippered soft case. SureGrip™ alligator clips are designed to improve steadiness in slippery hands. Blunt tip grabs round screw heads up to 9.5 mm. Includes one pair (red, black) of small, insulated, nickel plated jaws. **Mfg. part no. TP1** flat blade design holds securely in blade type electrical wall sockets. Includes one pair (red, black) of slender probe bodies.

Mfg. Part No.	Description	Stock No.	Price Each
T+ US	T+ Electrical Tester	30M9569	74.95
T+PRO US	T+PRO Electrical Tester	30M9570	94.95
T+PRO-1AC KIT	T+PRO Electrical Tester and VoltAlert AC Voltage Detector Kit	30M9580	119.95
T5-KIT	Starter Kit for T5 Electrical Tester	97H3607	49.46
AC220	SureGrip Alligator Clips	81C7979	37.96
TP1	Flat Bladed Test Probes	83F2783	16.58

(90368)

VOLTALERT NON-CONTACT VOLTAGE DETECTORS

FLUKE®

TÜV Rheinland

FLK2AC/90-1000V

1AC-II/1LAC-II Voltage Detectors:
- Continually tests its battery and its circuit integrity using Voltbeat™ technology
- Voltage detection of 90 to 1000 VAC90 V to 1000 V AC or 200 V to 1000 V AC depending on model

All Voltage Detectors:
- Category IV – 1000 V overvoltage rated
- Rugged, reliable, and have two-year warranty
- 2 AAA batteries (included)

AC voltage detectors, with VoltAlert™ non-contact voltage detection, are easy to use - just touch the tip to a terminal strip, outlet, or cord. When tip glows red and unit beeps (1AC-II only), there's voltage in the line. Allow users to quickly test for energized circuits and defective grounds on the factory floor, in the shop, or at home.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-1AC-A1-II	VoltAlert AC Voltage Detector, 90 to 1000VAC	55K3325	28.46
FLUKE-1LAC-A-II	VoltAlert AC Low-Voltage Detector, 20 to 90VAC	55K3327	26.96
FLK2AC/90-1000V	VOLTALERT VOLTMETER, 90V TO 1000V	12T6535	29.95
FLK2AC/90-1000V5PK	5-PK VoltAlert Voltmeter, 90V to 1000V	12T6537	123.46
FLUKE-1AC-A1-II 5 PK	VoltAlert AC Voltage Detector Kit, **Pkg. of 5**	04M4406	129.95

➤CONTINUED➤

VOLTALERT NON-CONTACT VOLTAGE DETECTORS

(CONT.)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
T5-KIT	Starter Kit for T5 Electrical Tester	97H3607	49.46
AC220	SureGrip Alligator Clips	81C7979	37.96
TP1	Flat Bladed Test Probes	83F2783	16.58

(6534)

NON-CONTACT AC VOLTAGE DETECTOR

FLUKE®

- Built-in flashlight
- Detector glows blue when AC voltage is present
- Detector glows red when it is at the source
- 40V to 300VAC

Mfg. part no. LVD1 non-contact AC voltage detector and LED flashlight is combined in one convenient, compact design. With exclusive dual-sensitivity. The voltage detector glows blue when it's 1-5" or 2.5-12.5cm away from the source AC voltage, and glows red when it's at the source. Detects voltages from 40 V AC to 300 V AC. Voltage detector glows blue 50 Hz - 60 Hz or 2.5 - 38 cm (1 - 5") away from source. Operating temperature 0 °C to 50 °C. Ultra-bright white LED with 100,000 hour bulb life. AAA battery included.

Mfg. Part No.	Description	Stock No.	Price Each
LVD1	Volt Light	11J3453	24.95

(84888)

LVD2 VOLT LIGHT NON-CONTACT AC VOLTAGE DETECTOR AND LED FLASHLIGHT

FLUKE®

- Dual Sensitivity
- Ultra-bright LED light with 100,000 hour-life
- Detects from 90 to 600V AC

Mfg. part no. LVD2 non-contact AC voltage detector and LED flashlight are combined into one easy-to-use, pen-style design. Suitable for commercial and industrial applications. Dual levels of detection — blue indicates proximity (1" to 5") to AC voltage source and red indicates when at the source. CAT IV 600V rated. Includes one AAA battery.

Mfg. Part No.	Description	Stock No.	Price Each
LVD2	Volt Light	30M9568	39.95

(90367)

FLUKE-T5-600 AND -1000 VOLTAGE/ CONTINUITY/CURRENT TESTERS

FLUKE®

- Compact Design with Probe Storage
- Automatically Measures Volts AC and Volts DC with Precise Digital Resolution
- Resistance and Continuity Beeper
- Easy and Accurate OpenJaw™ Current Measurement to 100 A ac
- Available in 600V and 1000V Models
- **Mfg. part no. T5-600** meets 600 V CAT III safety standards (IEC 1010-1)
- **Mfg. part no. T5-1000** meets 1000 V CAT III, 600 V CAT IV safety standards (IEC 1010-1)
- UL listed, CSA certified, CE compliant

T5-1000 FLUKE-62/T+PRO/1AC

Troubleshoots a wider range of problems safer and faster than a traditional solenoid tester. **T5 series** voltage/continuity/current testers provide a variety of measurements in one compact testing unit. Measure up to 100A AC current and 1000 ohm resistance. **Mfg. part no. T5-600** measures AC or DC voltage to 600V. **Mfg. part no. T5-1000** measures AC or DC voltage to 1000V. Includes 4mm detachable probes, instruction sheet, and 2-year manufacturer's warranty. *Order leather carrying case*, holster, or starter kit , *that attaches to a belt and neatly stows test leads, separately below.* **Mfg. part no. FLUKE-62MAX+/T+PRO/1AC** electrical/HVAC combo kit includes compact Fluke 62MAX+ IR thermometer teamed with the full featured T+PRO voltage tester and the easy-to-use 1-AC-II non-contact voltage detector. Use the IR thermometer to test for overheating in electrical devices, then use the electrical test tools to find more about the problem. Comes complete with soft case.

Mfg. Part No.	Description	Stock No.	Price Each
T5-600 USA	600V Voltage/Continuity/Current Tester	91F6069	119.95
T5-1000	1000V Voltage/Continuity/Current Tester	91F6070	159.95

➤CONTINUED➤

FLUKE-T5-600 AND -1000 VOLTAGE/CONTINUITY/CURRENT TESTERS (CONT.)

ACCESSORIES

Fluke 62MAX+ Mini Infrared Thermometer
- Dust and water-resistant: IP54 rated
- Rugged: 3-meter (9.8-foot) drop tested
- Ergonomically designed: Completely redesigned for a more natural hand fit
- Distance to spot: 12:1
- Dual lasers: Identifies area to be measured
- Large, backlit display: Makes data easier to read, even in dark areas

Fluke T+PRO Voltage and Continuity Tester
- Three forms of ac/dc voltage detection: light, sound, and vibration
- Extra heavy-duty, replacement test leads
- Safety rated CAT IV 600, CAT III 1000 V
- Continuity beeper

Fluke 1AC-II VoltAlert™ Non-Contact Voltage Detector
- Voltbeat technology continually tests its battery and circuitry
- Upon detection of voltage, tip glows and beeper sounds
- Voltage detection of 90 to 1000 VAC
- CAT IV 1000V

Mfg. part no. FLUKE-62MAX+/T+PRO/1AC electrical/HVAC combo kit includes compact Fluke 62MAX+ IR thermometer teamed with the full featured T+PRO voltage tester and the easy-to-use 1-AC-II non-contact voltage detector. Use the IR thermometer to test for overheating in electrical devices, then use the electrical test tools to find more about the problem. Comes complete with soft case.

Mfg. Part No.	Description	Stock No.	Price Each
C520A	Leather Tester Case	39C3071	54.95
H5	Holster	83F2779	29.95
T5-KIT	Starter Kit for T5 Electrical Tester	97H3607	49.46
FL62MAX+/T+PRO/1AC	FLUKE-62MAX+/T+PRO/1AC Kit with C115 Softcase	65W6011	249.95
T5-RLS	Replacement Test Leads	72T0058	24.95

(19028)

TLK-225 SUREGRIP™ MASTER ACCESSORY SET

FLUKE®

SureGrip™ Set Includes:
- AC220 Plunger Style Alligator Clips
- AC280 Plunger Style Hook Clips
- AC283 Plunger Style Pincer Clips
- AC285 Large Jaw Alligator Clips
- TP220 Sharp Test Probes
- TL224 Right-to-Straight Test Leads
- 6-Pocket Storage Pouch

Special value SureGrip™ Master Set is a complete selection of test tool accessories for any industrial application. Includes a convenient toll-up pouch that neatly stores each accessory. 1000V CAR III, 600V CAT IV rated.

Mfg. Part No.	Description	Stock No.	Price Each
TLK-225	SureGrip Master Accessory Set	02J7895	149.95

(79146)

AEMC CLAMP METERS

AEMC® INSTRUMENTS

503 511 514 565 670

675 CM605 F05 F07 F09

Mfg. Part Nos.	503	511	514	565	670	675	CM605	F05	F07	F09
Jaw Capacity:	28mm	40mm	40mm	28mm	40mm	42mm	15mm	26mm	26mm	26mm
TRMS:			X	X	X	X		X	X	X

➤CONTINUED➤

CLAMP METERS

AEMC CLAMP METERS (CONT.)

Mfg. Part Nos.	503	511	514	565	670	675	CM605	F05	F07	F09
Frequency on ACA:	500Hz	4kHz	10kHz	3kHz	1kHz	1kHz	500Hz	4kHz	4kHz	4kHz
Frequency on ACV:	500Hz	10kHz	10kHz	3kHz	10kHz	10kHz	500Hz	4kHz	4kHz	4kHz
Resistance:	400Ω	4kΩ	4kΩ	1kΩ	10kΩ	10kΩ	10kΩ	40kΩ	40kΩ	40kΩ
Zero Button:	X	X	X	X	X	X	X	X	X	X
Data Hold:	X	X	X	X	X	X	X	X	X	X
1mS Peak Function:		X	X		X	X	X	X	X	X

Mfg. Part No.	Current Measuring Range AC	Current Measuring Range DC	Voltage Measuring Range AC	Voltage Measuring Range DC	Stock No.	Price Each
503	0.05A to 400A	0.1A to 400A	0.5V to 600V	0.2V to 600V	80K0400	159.00
511	0.05A to 1000A	...	0.5V to 750V	200mV to 1000V	80K0412	159.00
514	0.05A to 1000A	1A to 1000A	0.5V to 750V	200mV to 1000V	80K0414	199.00
565	0A to 100A	...	0V to 600V	0V to 600V	80K0450	269.00
670	0A to 1000A	...	0V to 1000V	0V to 1400V	24R8363	229.00
675	0A to 1000A	0A to 1400A	0V to 1000V	0V to 1400V	11R0539	289.00
CM605	1mA to 10A, 10mA to 100A		600V	600V	24R5868	249.00
F09	0.2A to 400A	0.2A to 400A	0.2V to 600V	0.2V to 600V	79K6501	365.00

(87933)

400 & 600 SERIES GENERAL PURPOSE & POWER CLAMP-ON METERS

IP54 CE AEMC® INSTRUMENTS

- 1000V CAT IV Rated
- UL 94 IV flame retardant self-extinguishing
- IP54 Rated
- 10,000 count blue electroluminescent backlit display
- Measures up to 1000Vac (1400V peak); (1000Vdc and AC+DC with resolution to 10mV model dependent)
- Measures up to 2000Aac and 3000Adc (model dependent)
- Measures single- and three-phase power (real, reactive and apparent) up to 3MW with resolution to 1W (model dependent)
- Auto selects AC or DC measurement
- True InRush® current measurement with 1mS capture
- Measures harmonics up to the 25th (Models 407 & 607)
- Records up to 1000 measurements (Models 407 & 607)
- Leads are constructed with a flexible silicone material

Includes set of color-coded silicone insulated test leads, test probes and alligator clips, K-thermocouple with 4mm integrated adapter, soft carrying case, four 1.5V AA batteries and user manual.

Mfg. Part No.	Description	Stock No.	Price Each
401	Clamp-On Meter Model 401 (TRMS, 1000Vac/dc, 1000Aac, Ohms, Continuity, Temperature)	71T9521	309.00
403	Clamp-On Meter Model 403 (TRMS, 1000Vac/dc, 1000Aac/1500Adc, Ohms, Continuity, Temperature)	71T9522	329.00
601	Clamp-On Meter Model 601 (TRMS, 1000Vac/dc, 2000Aac, Ohms, Continuity, Temperature)	71T9525	411.00
603	Clamp-On Meter Model 603 (TRMS, 1000Vac/dc, 2000Aac/3000Adc, Ohms, Continuity, Temperature)	71T9526	450.00
405	Clamp-On Meter Model 405 (TRMS, 1000Vac/dc, 1000Aac/1500Adc, Ohms, Continuity, Power, THD)	71T9523	350.00
605	Clamp-On Meter Model 605 (TRMS, 1000Vac/dc, 2000Aac/3000Adc, Ohms, Continuity, Power, THD)	71T9527	490.00
407	Power Clamp-On Meter Model 407 (TRMS, 1000Vac/dc, 1000Aac/1500Adc, Ohms, Continuity, Energy, Harmonics, Power, THD, Recording)	71T9524	450.00
607	Power Clamp-On Meter Model 607 (TRMS, 1000Vac/dc, 2000Aac/3000Adc, Ohms, Continuity, Energy, Harmonics, Power, THD, Recording)	71T9528	550.00

(209534)

MULTIMETER AND STANDARD DIGITAL CLAMP METERS

CE AMPROBE®

- Safety CAT III 600V
- **Mfg. part nos. ACD-6 PRO** and **-6 TRMS-PRO** accommodates conductors up to 1.77" (45mm) in diameter
- **Mfg. part nos. ACD-10 PLUS,** and **-10 TRMS-PLUS** accommodates conductors up to 1.02" (26mm) in diameter
- **Mfg. part no. AC40C** accomodoates conductors up to 1.0" (25.4mm) in diameter

ACD-10 PLUS / ACD-10 TRMS-PLUS

ACD-6 PRO

AC40C

Mfg. part nos. ACD-10 PLUS, ACD-10 TRMS PLUS, ACD-20SW and **ACD21SW** include test leads, battery installed, soft carrying pouch, and user's manual. **Mfg. part no. AC40C** includes users manual, carrying case and test leads.

➤ CONTINUED ➤

MULTIMETER AND STANDARD DIGITAL CLAMP METERS (CONT.)

SPECIFICATIONS

Mfg. Part No.	ACD-10 PLUS	ACD-10 TRMS-PLUS	ACD-6 PRO	AC40C
AC Voltage	4.000V, 40.00V, 400.0V, 600V		600V	400.0V, 600V
DC Voltage	400.0mV, 4.000V, 40.00V, 400.0V, 600V			400.0V, 600V
AC Current	40.00A, 400.0A, 600A		400.0A, 1000A	40.00A, 400.0A
Resistance	400.0μΩ, 4.000Ω, 40.00Ω, 400.0Ω, 4.000MΩ, 40.00MΩ		400.0Ω, 4.000kΩ, 40.00kΩ, 400.0kΩ, 4.000MΩ, 40.00MΩ	400Ω
Capacitance	500.0nF, 5.000F, 50.00CF, 500.0μF, 3000μF		...	...
Frequency	40Hz → 400Hz with Jaw, 10Hz → 100kHz with test leads		...	...

MULTIMETER CLAMPS

Mfg. Part No.	Description	Stock No.	Price Each
ACD-10 PLUS	600A Clamp Multimeter	71M1578	79.95
ACD-10 TRMS-PLUS	600A Clamp Multimeter TRMS	71M1579	119.95

STANDARD CLAMPS

ACD-6 PRO	Digital Clamp Meter 600V AC/DC	02J0395	99.95
AC40C	400A Mini-Clamp Digital Multimeter	47T1936	89.95

(85522)

AC CLAMP-ON MULTIMETERS

AMPROBE® CE

ACD-15 TRMS PRO

ACD-16 TRMS PRO

SPECIFICATIONS

Mfg. Part No.	ACD-14 PLUS	ACD-14 TRMS-PLUS	ACD-16 PRO	ACD-16 TRMS PRO
True RMS	...	X	...	X
AC AMPS	600A	600A	1000A	1000A
AC/DC Voltage	600V	600V	600V	600V
Resistance	X	X	X	X
Capacitance	X	X	...	...
Frequency	X	X	X	X
Temperature	X	X	X	X
AC/DC micro-Amps	X	X	...	...
Non-contact voltmeter	...	...	...	...
PC Connection	...	...	X	X
Safety	CE EN61010-1, EN61010-2-032 - Pollution Degree 2		CAT III 600V	CAT III 600V

Mfg. Part No.	Description	Stock No.	Price Each
ACD-14 PLUS	600A Clamp-On Multimeter with Dual Display	40P3919	129.95
ACD-14 TRMS-PLUS	600A Clamp-On Multimeter with Dual Display TRMS	40P3920	169.95
ACD-15 TRMS PRO	TRMS Clamp-on, 2000A AC	66K6276	224.95
ACD-16 TRMS PRO	TRMS Clamp-on, 1000A AC, PC connection	66K6278	224.95

(85778)

LH41A AC/DC CLAMP-ON AMMETER

AMPROBE®

- Precise low current measurement
- 1mA resolution
- Extremely easy to use
- Auto ranging
- Data Hold
- Auto Power Off

Mfg. Part No.	Current Measuring Range AC/DC	Stock No.	Price Each
LH41A	0A to 40A	54M6282	449.95

(202049)

MINI DC/AC CLAMP METERS

EXTECH INSTRUMENTS A FLIR COMPANY

- High resolution and accuracy
- Large 4000 count LCD display
- Fast 40 segment bargraph
- One touch auto zero
- Min/Max
- Data hold and auto power off
- CAT III-300V
- 1-year warranty

True RMS models recommended for measurements where distortion may otherwise cause inaccuracies. Both come complete with wrist strap , carrying case and 2 AA batteries. **Mfg. part no. 380942** also includes test leads. Optional 3-prong AC line separator **mfg. part no. 480172** enables safe and easy measurements on power cables with molded plugs; *ordered separately online.*

SPECIFICATIONS

Mfg. Part No. 380942	Ranges	Resolution	Accuracy (%rdg+digits)	Overload Protection
DCCurrent	0-4A 0-30A	1mA 10mA	±(0.2% + 3d)	40A DC 100A DC
AC Current	0-400mA 0-4A 0-30A	0.1mA 1mA 10mA	±(1.5% + 5d)@50/60Hz ±(2.5% + 5d)@50/60Hz ±(2.0% + 5d)@50/60Hz	40A AC 40A AC 100A AC
DC Voltage	0-400V	0.1V	±(1.0% + 2d)	100V DC
AC Voltage	0-400V	0.1V	±(2.0% + 5d)	800V AC

Mfg. Part No. 380947	Ranges	Resolution	Accuracy (%rdg+digits)
DCA	40A/400A	10mA/100mA	1% ±2d
ACA True RMS	4A/40A/100A/400A	1mA/10mA/100mA/100mA	1.5% ±3d
Frequency	10kHz	0.01-100Hz	0.5% ±2d

Mfg. Part No.	Description	Stock No.	Price Each
380942	True RMS 30A Mini Clamp Meter	27K9635	389.99
380947	True RMS DC/AC Mini Clamp Meter	27K9639	299.99

(89514)

FLUKE 320 SERIES CLAMP METERS

FLUKE®

Fluke-321 / Fluke-322

- Smaller size fits easily into tight places
- Precise measurements with 1.8% basic accuracy
- Resolution up to 0.01A and 0.1 V
- Measures AC current to 400A
- Measures AC volts to 600V
- Measures DC volts to 600V (**Fluke-322** only)
- Resistance measurement to 400Ω
- Continuity for quick checking of shorts
- IEC 1010-2-031, 600V CAT III
- Automatic low battery indicator
- Display hold function
- Two year warranty

Fluke-323 / Fluke-324 / Fluke-325

- 400A AC current measurement (AC and DC current, **Fluke-325** only)
- 600V AC and DC voltage measurement
- Resistance measurement up to 40kΩ
- Temperature and capacitance measurement (**Fluke-324** and **Fluke-325** only)
- Frequency measurement (**Fluke-325** only)
- CAT IV 300V / CAT III 600V
- Slim, ergonomic design
- Large, easy to read backlight display (**Fluke-324** and **Fluke-325** only)

Fluke-321 Fluke-323

The **Fluke 320 Series** True-rms Clamp Meters are designed to perform in the toughest environments and provide accurate, reliable results users can trust to confidently diagnose problems. Certificate of calibration available; *go online or call .*

Specifications	321	322	323	324	325
AC Current	0-400A	0-40A, 40-400A	0-400A	0-40A, 40-400A	
DC Current	...	...	...	...	0-40A, 40-400A
AC Voltage	0-400V, 0-600V		0-600V		
DC Voltage	...	0-400V, 0-600V	0-600V		
Resistance	0-400Ω	0-400Ω	0-400Ω, 0-4kΩ	0-400Ω, 0-4kΩ, 0-40kΩ	
Continuity	<=30Ω		<=70Ω	<=30Ω	
Capacitance	...	...	...	100µF to 1000µF	
Frequency	...	...	...	...	5Hz to 500Hz
AC Response	Averaging		True RMS		
Backlight	No		Yes		
Contact Temp.	...	...	...	-10°C to 400°C / 14°F to 752°F	

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-323	Type 323 True RMS Clamp Meter	88T2547	107.96
FLUKE-324	Type 324 True RMS Clamp Meter	88T2548	134.96
FLUKE-325	Type 325 True RMS Clamp Meter	88T2549	202.46

(72229)

FLUKE CLAMP METERS

FLUKE®

FLUKE-381

FLUKE-365

Fluke 365 Detachable Jaw Clamp Meter:

Fluke 365 is a new, innovative Fluke clamp meter, offering a thin, small jaw design that makes it easy to get around tightly packed wires. The detachable jaw on a flexible lead makes access to wires and viewing the display easier than ever. The Fluke 365 measures DC and AC current up to 200A with basic DMM features (volt, ohms and continuity measurement) and true-rms measurement.

Fluke 370 Series Clamp Meters:

Fluke 370 series clamp meters offer improved performance perfect for a wide range of current measurement situations. All offer true-rms ac voltage and current measurements, and can measure up to up to 600V and 600A; the Fluke 376 can read up to 1000V and 1000A. New iFLEX flexible current probe (included with Fluke 376, optional with 374 and 375) expand the measurement range to 2500 A AC while providing increased display flexibility, flexibility to measure awkward sized conductors and improved wire access. Additionally, all 370 series clamp meters are CAT IV safety rated.

Fluke 381 Clamp Meter:

Fluke 381 does everything you would expect from a clamp meter, and then lets you remove the display for even more flexibility. Now one technician can do jobs that used to require two people; clamp the Fluke 381 around a conductor, remove the display and walk across the room to operate controls or remove protective equipment, all while watching real-time readings. Also, new iFLEX flexible current probe (included) expand the measurement range to 2500 A AC while providing increased display flexibility, flexibility to measure awkward sized conductors and improved wire access.

Fluke I2500-18 and I2500-10 iFlex Flexible Current Probes:

Fluke iFLEX flexible current probes expand the measurement range of the select Fluke meters to 2500 A AC while providing the ultimate measurement flexibility. The iFLEX probes connect directly to the clamp meter, displaying current measurements without error prone scaling factors. The large loop size and thin cross section allow measurement of awkward sized conductors and improved access in crowded spaces. Available in 10 in. and 18 in. sizes.

SPECIFICATIONS

Mfg. Part No.	FLUKE-365	FLUKE-373	FLUKE-374	FLUKE-375	FLUKE-376	FLUKE-381
AC Current Range	200.0A	600.0A	600.0A	600.0A	1000.0A	1000.0A
AC Type True RMS	X	X	X	X	X	X
DC Current Range	200.0A	...	600.0V	600.0V	1000.0A	1000.0A
AC Voltage Range	600.0V	600.0V	600.0V	600.0V	1000.0A	1000.0A
DC Voltage Range	600.0V	600.0V	600.0V	600.0V (500mV)	1000.0A (500mV)	1000.0A
Resistance Range	1000Ω	6000.0Ω	6000.0Ω	60000.0Ω	60000.0Ω	60000.0Ω
Frequency Range	...	...	...	500.0Hz	500.0Hz	500.0Hz
Capacitance Range	...	1,000uF	1,000uF	1,000uF	1,000uF	...
Continuity	X	X	X	X	X	X
Hold	X	X	X	X	X	X
Backlight	X	X	X	X	X	X
Min/Max	...	...	X	X	X	X
Inrush	...	...	X	X	X	X
Low Pass Filter	...	...	...	X	X	X
Detachable Remote Display	...	...	...	...	...	X
Build in Spotlight	X	...	...	...	...	...
10 in. iFLEX Flexible Current Probe	...	...	Accessory	Accessory	Accessory	Accessory
18 in. iFLEX Flexible Current Probe	...	...	Accessory	Accessory	Included	Included
Wire Capacity	200 MCM	750 MCM	750 MCM or 2-500 MCM	750 MCM or 2-500 MCM	750 MCM or 2-500 MCM	750 MCM or 2-500 MCM
Safety Rating	CAT III 600V, CAT IV 300V		CAT III 1000V, CAT IV 600V			

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-365	Fluke-365 Clamp Meter	73R7387	237.46
FLUKE-373	Fluke-373 Clamp Meter	73R7388	213.71
FLUKE-374	Fluke-374 Clamp Meter	73R7389	284.96
FLUKE-375	Fluke-375 Clamp Meter	73R7390	332.46
FLUKE-376	Fluke-376 Clamp Meter with iFlex	73R7391	379.96
FLUKE-381	Fluke-381 Clamp Meter with iFlex	73R7392	474.96
ACCESSORIES			
FLUKE-I2500-10	iFlex 2500A Probe, 10 in.	73R7381	125.96
FLUKE-I2500-18	iFlex 2500A Probe, 18 in.	73R7382	125.96

(68964)

CLAMP METERS

FLUKE 350 SERIES TRUE-RMS 2000A CLAMP METERS

- Reliably handle a wide range of high-current applications with 2000A ac + dc true-rms, 1400A ac, and 2000A dc
- 2.3 in. jaw capacity is suitable for large, or multiple conductors
- In-rush current measurement captures 'power-on' surge current with accuracy and repeatability high voltage measurement of 1000V ac + dc true-rms, 600V ac, and 1000V dc allows users to perform multiple tests with only one tool (355 only)
- Resistance to 400kΩ coupled with a continuity beeper, provide the convenience of a multimeter (355 only)
- Accurately measure frequency up to 1kHz for optimum troubleshooting
- Quickly analyze readings using the MIN, MAX, and AVG functions
- Large backlit display allows for easy visibility in low-lit areas
- Use display hold feature to capture readings even when the display cannot be viewed
- Use the low-pass filter to smooth out noisy loads and stabilize readings
- CAT IV 600 V, CAT III 1000 V rating for added user protection

Fluke 350 series clamp meters address the need for accurate high current measurements up to 2000A. Meters come complete with C43 soft carrying case, 6 AA batteries, and users manual. **Mfg. part no. Fluke-355** also includes TL224 1.5 m silicone rubber test leads, TP2 test probes and AC285 alligator clips. Perfect for electrical contractors and industrial service technicians.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-353	AC/DC True-rms Clamp Meter, 2000 A, Amps only	64M1119	699.95
FLUKE-355	AC/DC True-rms Clamp Meter, 2000 A	64M1120	799.95

(103501)

FLUKE-360 AC LEAKAGE CURRENT CLAMP METER

- Measures current from from 1mA to 60A with 1mA of resolution
- Durable clamp withstands over 50,000 operations — wide 1.5" jaw size
- Dual display — 3200-count digital, 32-segments LCD bargraph
- "Display-Hold" button to capture readings in hard-to-reach places
- Auto power-Off with warning buzzer
- Conforms to IEC1010 and EMC standards
- Meets safety standard VDE0404-4 and VDE0702 requirements

Mfg. part no. FLUKE-360 AC leakage current clamp meter, designed for noninvasive checks of insulation condition, allows user to perform tests without powering down the installation or disconnecting equipment — saving time, without compromising on quality or safety. Unique jaw design eliminates the influence of adjacent current conductors, and minimizes the effects of external magnetic fields, even at low currents — perfect for performing accurate and reliable tests in todays crowded electrical environments. Uses one 3V Lithium button-cell battery. Meter comes complete with soft carrying pouch and multi-language user's manual. Overall dimensions: 6.9L x 2.8W x 1"H.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-360	AC Leakage Current Clamp Meter	30M2188	749.95

(90373)

FLUKE 902 TRUE RMS HVAC CLAMP METER

- Designed for HVAC applications with capacitance, DC Current (µA), and temperature measurements
- Small body and jaws fit perfectly in your hand and into tight places
- Handy 'Display Hold' button keeps measurements on the display
- Meter controls are positioned so current measurements can be done with one hand (index finger on clamp opening lever and thumb on rotary switch)
- Large, backlit display is easy-to-see in less than ideal conditions
- Auto shut-off maximizes battery life so the meter works when you need it
- Three year warranty

True-rms HVAC clamp meter includes two AA alkaline batteries, one pair TL75 test leads, one 80BK integrated DMM temperature probe, soft carrying case and a users manual with safety information.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-902	True-rms HVAC Clamp Meter	05M4770	299.95

(147930)

We're Engineers' 1st Choice for
Test & Measurement Equipment
newark.com/test-measurement

(212567)

i5s SERIES LOW-LEVEL 5A AC CURRENT CLAMP

i5sPQ3

- Ideal for use with **Fluke 433** and **434 series** 3-Phase Power Quality Analyzers
- Measures 10mA to 5A AC
- Accuracy 10mA to 1A: 1% ±5mA (48 to 65Hz)
- Accuracy 1A to 5A: 1% (48 to 65Hz)
- Bandwidth from 40Hz to 5kHz
- Output level: 400mV/A
- Buy the 3-Pack and Save

Specially configured to provide low-current accuracy while taking measurements on secondary current transformers. **Mfg. part no. i5s** AC current clamp accommodates conductors up to 0.6" (15mm). Compact shape makes transporting and storing convenient; the clamp measures only 4. 6 x 1.7 x .9" (116 x 43 x 23mm) . Takes accurate readings without breaking the circuit. Output cable is 2.5 meters long with BNC connector termination. Rated CAT III 600V (insulated conductors only). One-year manufacturers warranty.

Mfg. Part No.	Description	Stock No.	Price Each
I5S	Low-Level 5A AC Current Clamp	43K8757	549.95
I5SPQ3	5A AC Current Clamp	43K8758	1199.95

(85474)

U1190 SERIES CLAMP METERS

- Unique wire separator separates wires from a bundle
- Vsense performs non-contact voltage detection (except **U1191A**)
- Built-in LED flashlight illuminates test area (except **U1191A**)
- Current measurement up to 600A (**U1193A** and **U1194A** only)
- Digital multimeter (DMM) with Resistance, Capacitance (except **U1191A**), DCV, ACV, DCuA (**U1194A** only), ACuA (**U1194A** only)
- Continuity and Diode test measurements
- CAT III 600V / CAT IV 300V safety rating

U1191A

With the **U1190 Series** handheld clamp meters are packed with a wealth of features to help you work more efficiently and more safely. Housed in robust cases, each model comes with an innovative wire separator that helps you isolate and measure individual wires in a bundle. The built-in LED flashlight illuminates your test area and Vsense performs non-contact voltage detection. The clamp meters are also certified with both CAT III 600 V and CAT IV 300 V ratings to cover wider measurement categories.

Mfg. Part No.	Current Measuring Range AC	Current Measuring Range DC	Voltage Measuring Range AC/DC	Resistance Measuring Range	Stock No.	Price Each
U1191A	400A	...	600V	600ohm to 6kohm	55T1122	100.00
U1192A	60A to 400A	...	60V to 600V	600ohm to 60kohm	55T1123	138.00
U1193A	60A to 600A	...	60V to 600V	600ohm to 60kohm	55T1124	174.00
U1194A	60A to 600A, 60µA to 600µA		60V to 600V	600ohm to 60kohm	55T1125	223.00

(211845)

U1210 SERIES HAND-HELD CLAMP METERS

- 1000A True RMS AC current measurement
- Small body and large jaw size up to 52mm
- One-hand operation
- Peak-hold with in-rush current measurement
- Large backlight dual display
- Temperature and capacitance measurement
- Manual and auto-ranging for all measurements
- CAT III 1000V and CAT IV 600V safety protection

Measurements of electrical distribution cables can be challenging and risky. For cables up to two inches in diameter, the **U1210 series** handheld clamp meters enable high-current measurements without breaking the circuit up to 1000A for AC, DC or AC + DC. Unlike most clamp meters, they also include DMM capabilities resistance, capacitance, frequency and temperature to simplify troubleshooting during installation and maintenance. **U1210 series** handheld clamp meters provide convenience, versatility and the ability to handle big currents safely. Includes test leads, 19mm and 4mm probes, quick-start guide, certificate of calibration and soft carrying case.

Mfg. Part No.	Description	Stock No.	Price Each
U1211A	AC/DC Clamp Meter	55R2351	255.00
U1212A	AC/DC Clamp Meter	55R2352	337.00
U1213A	AC/DC, AC+DC Clamp Meter	55R2353	358.00

(211846)

DIGITAL CLAMP MULTIMETER WITH FREQUENCY

RoHS Compliant Available

TENMA®

Features:
- 3999 count autoranging display
- 1" Clamp diameter
- Diode test
- Continuity buzzer
- Data hold
- Sleep mode
- Full icon display
- Low battery indicator

Specifications: Range
- DC voltage: 400mV, 4V, 40V, 400V, 600V
- AC voltage: 4V, 40V, 40V, 600V
- DC current: 40A, 400A
- AC current: 40A, 400A
- Resistance: 400Ω, 4KΩ, 40KΩ, 400KΩ, 4MΩ, 40MΩ
- Frequency: 10Hz - 100MHz
- Duty cycle: 0.1 - 99.9%
- *TRMS AC voltage frequency: 40Hz - 400Hz
- *TRMS AC current frequency: 50Hz - 60Hz

72-7226

Digital Clamp Multimeter with Frequency Measurement is perfect for general purpose applications. Comes complete with zipper case, test leads, 9V battery and owners manual.

Mfg. Part No.	Description	Stock No.	Price Each
72-7226	Digital Clamp Multimeter with Frequency and True RMS AC Measurement	45M5526	69.99
72-7224	Digital Clamp Multimeter with Frequency	45M5525	53.98
● 72-9480	Digital Clamp Multimeter with Auto Range	76T4530	83.55
● 72-9485	Digital Clamp Multimeter with True RMS	76T4531	97.50
● 72-9490	Digital Clamp Multimeter with True RMS AC/DC	76T4532	111.15

***Mfg. part no. 72-7226** only
(93047)

260 SERIES ANALOG VOLTMETERS

Simpson

260-8 and 260-8XI

Based on the famous **260**, the **260-6XLPM** has extra features and extra ranges. The large viewing area with color-coded scales minimizes measurement mistakes and visual confusion. The **260-6XLPM** allows accurate in-circuit tests without risk to components or without causing digital circuits to switch states. The durable ABS plastic case provides high-impact resistance and increased drop protection in the toughest environments. The **260-8** features more attributes than its predecessors. Standard and high- energy fusing in conjunction with diode network meter movement protection makes the **260-8** the best combination of quality and affordability. The **260-8P** has an additional relay overload protection circuit that is resettable and also provides audible continuity checking. **-RT suffix** indicates roll top case. The **260-8Xi** has all of the circuit protection features and advantages for which the **260 Series** is famous and even more features than its predecessors. The yellow case color for enhanced visibility and user safety awareness is the trademark of the **260-8Xi**. The durable ABS plastic case also provides high-impact resistance and increased drop protection in the toughest environments. Safety is the major design feature of the **260-9S/9SP** and the reputation, advantages and reliability of Simpson test equipment is guaranteed. It is suitable for testing most commercial and industrial installations and is rated for Category III-600V applications. **-SP suffix** indicates protected with case. *Carrying cases and other accessories ordered separately; on this page*.

Mfg. Part No.	AC Voltage Range	DC Voltage Range	Stock No.	Price Each
12206(260-6XLM)	2.5V to 1000V	250mV to 1000V	98F3358	367.65
12211 (260-6XLMP)	2.5V to 1000V	250mV to 1000V	01B6875	433.69
12388 (260-8)	2.5V to 1000V	250mV to 1000V	62F300	262.73
12391 (260-8P)	2.5V to 1000V	250mV to 1000V	62F1191	337.81
12389 (260-8RT)	2.5V to 1000V	250mV to 1000V	62F303	310.19
12392 (260-8PRT)	2.5V to 1000V	250mV to 1000V	62F2270	386.71
12395(260-8Xi)	2.5V to 1000V(260-8Xi)	250mV to 1000V(260-8Xi)	50F3533	300.82
12396(260-8XPi)	2.5V to 1000V(260-8XPi)	250mV to 1000V(260-8XPi)	50F3534	375.80
12397 (260-9S)	0V to 600V	250mV to 600V	48M1188	449.35
12398 (260-9SP)	0V to 600V	250mV to 600V	21M6098	521.21

(5320)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

TEST EQUIPMENT ACCESSORIES

Simpson

Mfg. Part No.	Description	Stock No.	Price Each
00832	Nylon Case-Yellow*	50F3535	65.37
00834	Nylon Case-Black*	50F8971	65.67
00805 CASE	Leatherette Case*	62F302	82.96
00248	Roll-Top Case (260-8, 8P, 270-5)	62F204	70.12
00043	Probe Leads w/Screw Clips (260-8, 8P, 270-5)	62F3012	40.86
00125	Probe Leads w/Alligator Clips (260-6XLM, 6XLMP, 8Xi, 8XPi, 228, 229-2)	01B6608	45.32
00545	150-2 AC Amp-Clamp (260-8, 8P, 270-5)	62F2377	149.27

*For use with **mfg. part nos.** 260-8, 8P, 8Xi, 8XPi, 6XLM, 6XLMP, 270-5, 228, 229-2
(5376)

DELUXE ANALOG DISPLAY VOM

TENMA®

Features:
- Large three-color mirrored scale
- Carry handle doubles as a stand
- Continuity buzzer

Specifications: Range
- DC voltage: 600mV, 3V, 12V, 60V, 300V, 1000V
- AC Voltage: 600mV, 3V, 12V, 60V, 300V, 1000V
- DC Current: 120uA, 3mA, 30mA, 300mA, 10A
- Resistance: x1Ω, x100Ω, x1KΩ, x10KΩ
- Battery Test: 1.5V @ 300mA, 9V @ 30mA
- Continuity: Audible indication, less than 100Ω
- Input Impedance: 20KΩ/V (DC), 9KΩ/V (AC)
- Dimensions: 6.7" x 4.9" x 1.9" (H x W x D)

Deluxe Analog Display VOM is perfect for educational purposes or in applications where unstable readings make digital displays inconvenient. Comes complete with test leads, instruction manual, one 9V battery and two AA batteries.

Mfg. Part No.	Description	Stock No.	Price Each
72-8170	Deluxe Analog Display VOM	20M0354	30.99

(92286)

VOLTAGE, CURRENT, AND EVENT USB DATA LOGGERS

RoHS Compliant Available

LASCAR

- USB interface for setup and download
- 32,510 reading capacity
- Programmable sample rates from 1 sec. to 12 hrs. (**-3 & -4 suffix**)
- Logging rate of up to 5/sec for events, 2/sec for state changes and 100/sec when counting (**-5 suffix**)
- Two progammable alarm threshholds with LED indication (**-3 & -4 suffix**)
- Replaceable internal battery (included)
- Connection via screw terminals in cap
- Includes free Windows® data logging configuration and graphing software

The **EL-USB-3** permits the recording of measurements from a wide range of sensors. **EL-USB-4** enables quick and easy monitoring of manufacturing processes. EL-USB-5 can record events, state changes and count events. Connection to the circuit is via screw terminals housed in the cap.

Mfg. Part No.	Function	Measuring Range	Stock No.	Price Each 1-24	Price Each 25+
EL-USB-3	Voltage	0 to 30VDC	80K5461	98.09	88.28
EL-USB-4	Current Loop	4 to 20mA	80K5462	100.91	90.83
● EL-USB-5	Counter, Event, State	...	12T3227	102.39	92.15

(88047)

AC/DC MILLIVOLT DATA LOGGER WITH CURRENT CLAMP

LASCAR

- Compatible with AC and DC current clamps
- Energy monitoring mode (to calculate power, cumulative energy and cost)
- AC and DC millivolt measurement mode
- Logging rates between 1 sec and 12 hrs
- Stores 127,000 readings
- USB interface for set-up and data download
- High contrast 4 digit LCD screen with measurement functions, battery status, alarm indicators and measurement units
- Immediate, delayed and push-to-start logging
- Supplied with user replacable batteries and Windows control software

When used with a current clamp, this stand alone data logger measures and stores up to 127,000 readings over a 0 to 1000A measurement range (0 to 723A for AC). In energy monitoring mode, this data is converted into power, energy (using a user defined voltage value) and cost (using a user supplied energy cost). User replaceable batteries typically allow logging up to 6 months.

➤CONTINUED➤

AC/DC MILLIVOLT DATA LOGGER WITH CURRENT CLAMP (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each 1-24
EL-USB-ACT	AC and DC Millivolt Data Logger	89T2070	183.40

(203479)

BLUETOOTH TEMP AND RH DATA LOGGER WITH ANDROID COMPATIBILITY

NEW

LASCAR

- Compatible with Android (Bluetooth)
- Stores over 1 million temp/humidity readings
- IP67 sealed unit
- LCD screen for Bluetooth status, current reading, min/max readings, and battery levels
- Pushbutton for Bluetooth connection and reset of max/min recorded temperature
- Rechargeable battery via micro USB
- Red and green LEDs indicate logger status

The **EL-BT-2** data logger measures and stores over 1 million temperature and humidity readings. The user can easily set up the logger and view downloaded data by using a suitable Android phone via Bluetooth remotely. The LCD screen indicates Bluetooth connection status as well as logger operation. The pushbutton allows cycling of current, minimum and maximum recorded values. Comes with rechargeable battery or can be used with USB wall charger.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
EL-BT-2	Bluetooth Temp/RH Data Logger with Android Compatibility	54X7623	389.03

(212400)

WIFI DATA LOGGERS WITH OPTIONAL CLOUD STORAGE

LASCAR

- Easy Set-Up Using Free PC Software and supplied USB Cable
- Sensors Store Data Even if Temporarily Disconnected from the WiFi Network
- Rechargeable Internal Lithium Polymer Battery
- On-Board Screen Shows Current Reading Min & Max, Alarm and Battery Status
- Change Sensor Settings Remotely via PC or the Cloud
- EL-WiFi-ALERT produces immediate sound and light alarms when used with any sensor

The **EL-WiFi-TH** (temp/RH), **EL-WiFi-TP** (temp via external thermistor probe), **EL-WiFi-T** (temp) and **EL-WiFi-TC** (temp via external thermocouple probe) data loggers can measure temperature and humidity or simply temperature. During set-up, the user can choose the required WiFi network, name the logger, select the sample and transmission rate and set high and low alarms. Once programmed, the data loggers can be placed within range of the WiFi network to wirelessly stream data to PC or Cloud. The Cloud service allows monitoring of data loggers from any internet enabled device and use of email and text alerts in the event of alarm breach.

Mfg. Part No.	Description	Stock No.	Price Each 1-24
EL-WIFI-T	WiFi Temperature Data Logger	56W5217	175.50
EL-WIFI-TH	WiFi Temperature and Humidity Data Logger	06W5062	226.19
EL-WIFI-TP	WiFi Thermistor Probe Temperature Data Logger	06W5063	183.40
EL-WIFI-TC	WiFi Thermocouple Probe Temperature Data Logger	72W3112	216.45
EL-WIFI-DTC	Dual-Channel WiFi Thermocouple Probe Temperature Data Logger	54X7625	293.48
EL-WIFI-T+	Higher Accuracy WiFi Temperature Data Logger	72W3111	292.50
EL-WIFI-TH+	Higher Accuracy WiFi Temperature and Humidity Logger	72W3113	333.45
EL-WIFI-TP+	Higher Accuracy WiFi Thermistor Probe Temperature Data Logger	72W3114	292.50
EL-WIFI-DTP+	Dual-Channel Higher Accuracy WiFi Thermistor Probe Temperature Data Logger	54X7626	293.48
EL-WIFI-ALERT	WiFi Alert Sensor Monitoring System	72W3110	216.45

(209555)

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element14.com

(196545)

700 SERIES FILTER AND PUMPS

FLUKE

FLUKE-700PTP-1

700-PMP

FLUKE-700PTP-1 PNEUMATIC PRESSURE PUMP

Mfg. Part No. 700PTP-1 For use with 700 series pressure modules or test gauges. Can be directly connected to the reference port consolidating two separate pieces when performing pressure calibration and testing. Can also be used with 717 pressure calibrators. Ideal for calibrating pressure transmitters, pressure switches and pressure gauges up to 600 PSI/40 bar.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-700PTP-1	Hand-Held Pressure Pump	55M0610	699.95

FLUKE-700PMP PRESSURE PUMP

700PMP is a hand-operated pressure pump to provide pressures up to 150 psi/1000 kPa. Output fitting: 1/8 FNPT.

FLUKE-700PMP	Pressure Measuring Pump	31C1618	474.95

(68957)

FLUKE 700G SERIES PRECISION PRESSURE TEST GAUGES

FLUKE

- Precision pressure measurement from ±10 inH2O/20 mbar to 10,000 psi/690 bar
- Absolute pressure measurement ranges 15, 30, 100, 300 psia
- Accuracy to 0.05 % of full scale
- Reference class gauge accuracies to 0.04 % of reading
- Easy to use, rugged construction for reliable performance
- CSA; Class 1, Div 2, Groups A-D rating
- ATEX rating: II 3 G Ex nA IIB T6
- Combine with the **700PTPK** or **700HTPK** pump kits for a complete pressure testing solution for up to 600 psi (40 bar) with the PTP-1 pneumatic pump and up to 10,000 psi (690 bar) with the **HTP-2** hydraulic pump
- Log up to 8,493 pressure measurements to memory (requires **700G/TRACK** software)
- Three-year warranty

Mfg. Part No.	Range	Resolution	Stock No.	Price Each
FLUKE-700G01	-10 to +10 inH20 / -20 mbar to 20 mbar	0.001 inH20 / 0.001 mbar	08X5414	895.00
FLUKE-700G02	-1 to +1 psi / -70 mbar to 70 mbar	0.0001 psi / 0.001 mbar	08X5415	895.00
FLUKE-700G04	-14psi to +15psi / -.97bar to +1bar	0.001psi / 0.0001bar	94T2575	899.95
FLUKE-700G05	-14psi to +30psi / -.97bar to +2bar	0.001psi / 0.0001bar	94T2576	899.95
FLUKE-700G06	-12psi to +100psi / -.83bar to +6.9bar	0.01psi / 0.0001bar	83T0009	899.95
FLUKE-700G07	-12psi to +500psi / -.83bar to +34bar	0.01psi / 0.001bar	94T2577	899.95
FLUKE-700G08	-14psi to +1000psi / -.97bar to +69bar	0.1psi / 0.001bar	94T2578	899.95
FLUKE-700G10	-14 to 2000 psi / -.97 bar to 140 bar	0.1 psi / 0.01 bar	08X5416	895.00
FLUKE700G27	-12psi to +300psi / -.83bar to +20bar	0.01psi / 0.001bar	91T5855	899.95
FLUKE-700G29	-14psi to +3000psi / -.97bar to +200bar	0.1psi / 0.01bar	94T2579	949.95
FLUKE-700G30	-14psi to +5000psi / -.97bar to +340bar	0.1psi / 0.01bar	94T2580	949.95
FLUKE-700G31	-14psi to +10000psi / -.97bar to +690bar	1psi / 0.01bar	93T1360	949.95
FLUKE-700GA4	0 to 15 psia / 0 to 1 bar absolute	0.001 psi / 0.0001 bar	08X5411	895.00
FLUKE-700GA5	0 to 30 psia / 0 to 2 bar absolute	0.001 psi / 0.0001 bar	08X5412	895.00
FLUKE-700GA6	0 to 100 psia / 0 to 6.9 bar absolute	0.01 psi / 0.0001 bar	08X5413	895.00
FLUKE-700GA27	0 to 300 psia / 0 to 20 bar absolute	0.01 psi / 0.001 bar	08X5410	895.00
FLUKE-700RG05	-14 to +30 psi / -0.97 to +2 bar	0.001 psi / 0.0001 bar	08X5417	995.00
FLUKE-700RG06	-12 to 100 psi / -0.83 to 6.9 bar	0.01 psi / 0.0001 bar	08X5418	995.00
FLUKE-700RG07	-12 to 500 psi / -0.83 to 34	0.01 psi / 0.001 bar	08X5419	995.00
FLUKE-700RG08	-14 to 1000 psi / -0.97 to 69 bar	0.1 psi / 0.001 bar	08X5420	995.00
FLUKE-700RG29	-14 to 3000 psi / -0.97 to 200 bar	0.1 psi / 0.01 bar	08X5421	1025.00
FLUKE-700RG30	-14 to 5000 psi / -0.97 to 340 bar	0.1 psi / 0.01 bar	08X5422	1025.00
FLUKE-700RG31	-14 to 10000 psi / -0.97 to 690 bar	1 psi / 0.01 bar	08X5423	1025.00

CONTINUED

FLUKE 700G SERIES PRECISION PRESSURE TEST GAUGES (CONT.)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
700G/TRACK	Logging Software w/ Communication Cable	94T2583	549.95
TEST KITS			
FLUKE-700PTPK	Pneumatic Test Kit	94T2581	649.95
FLUKE-700HTPK	Hydraulic Test Kit	82T5517	1399.95

(203701)

FLUKE 700G SERIES PRECISION PRESSURE TEST GAUGES

NEW

FLUKE®

- Precision pressure measurement from ±10 inH20/20 mbar to 10,000 psi/690 bar
- Absolute pressure measurement ranges 15, 30, 100, 300 psia
- Accuracy to 0.05 % of full scale
- Reference class gauge accuracies to 0.04 % of reading
- Easy to use, rugged construction for reliable performance
- CSA; Class 1, Div 2, Groups A-D rating
- ATEX rating: II 3 G Ex nA IIB T6
- Combine with the 700PTPK or 700HTPK pump kits for a complete pressure testing solution for up to 600 psi (40 bar) with the PTP-1 pneumatic pump and up to 10,000 psi (690 bar) with the HTP-2 hydraulic pump
- Log up to 8,493 pressure measurements to memory (requires 700G/TRACK software)
- Three-year warranty

Mfg. Part No.	Range	Resolution	Stock No.	Price Each
FLUKE-700G01	-10 to +10 inH20 / -20 mbar to 20 mbar	0.001 inH20 / 0.001 mbar	08X5414	895.00
FLUKE-700G02	-1 to +1 psi / -70 mbar to 70 mbar	0.0001 psi / 0.001 mbar	08X5415	895.00
FLUKE-700G10	-14 to 2000 psi / -.97 bar to 140 bar	0.1 psi / 0.01 bar	08X5416	895.00
FLUKE-700GA27	0 to 300 psia / 0 to 20 bar absolute	0.01 psi / 0.001 bar	08X5410	895.00
FLUKE-700GA4	0 to 15 psia / 0 to 1 bar absolute	0.001 psi / 0.0001 bar	08X5411	895.00
FLUKE-700GA5	0 to 30 psia / 0 to 2 bar absolute	0.001 psi / 0.0001 bar	08X5412	895.00
FLUKE-700GA6	0 to 100 psia / 0 to 6.9 bar absolute	0.01 psi / 0.0001 bar	08X5413	895.00
FLUKE-700RG05	-14 to +30 psi / -0.97 to +2 bar	0.001 psi / 0.0001 bar	08X5417	995.00
FLUKE-700RG06	-12 to 100 psi / -0.83 to 6.9 bar	0.01 psi / 0.0001 bar	08X5418	995.00
FLUKE-700RG07	-12 to 500 psi / -0.83 to 34	0.01 psi / 0.001 bar	08X5419	995.00
FLUKE-700RG08	-14 to 1000 psi / -0.97 to 69 bar	0.1 psi / 0.001 bar	08X5420	995.00
FLUKE-700RG29	-14 to 3000 psi / -0.97 to 200 bar	0.1 psi / 0.01 bar	08X5421	1025.00
FLUKE-700RG30	-14 to 5000 psi / -0.97 to 340 bar	0.1 psi / 0.01 bar	08X5422	1025.00
FLUKE-700RG31	-14 to 10000 psi / -0.97 to 690 bar	1 psi / 0.01 bar	08X5423	1025.00

(211497)

FLUKE-700P SERIES PRESSURE MODULES

FLUKE®

FLUKE-700P22

Mfg. Part No.	Description	Range/Resolution 1 year	Maximum Overpressure	Stock No.	Price Each
FLUKE 700P00	Differential	1in. H_2O/0.001	30 in. H_2O	18C0609	2159.95
FLUKE-700P01	Differential	10.000 in. H_2O/2.4910kPa	30 in. H_2O	83F9098	1679.95
FLUKE-700P02	Differential	1.0000 psi/6.8948kPa	3 psi	83F9099	1679.95
FLUKE-700P22	Differential	1.0000 psi, Wet/6.8948kPa	3 psi	83F9107	1679.95
FLUKE-700P03	Differential	5.0000 psi/34.474kPa	15 psi	83F9100	1679.95
FLUKE-700P23	Differential	5.0000 psi, Wet/34.474kPa	15 psi	83F9108	1679.95
FLUKE-700P04	Differential	15.000 psi/103.42kPa	45 psi	83F9101	1679.95
FLUKE-700P24	Differential	15.000 psi/103.42kPa	45 psi	83F9109	1679.95
FLUKE-700P05	Gage	30.000 psi/206.84kPa	90 psi	83F9102	1679.95
FLUKE-700P06	Gage	100.00 psi/689.48kPa	300 psi	83F9103	1679.95
FLUKE 700P27	Gage	300.00 psi/0.001	900 psi	18C0619	1679.95
FLUKE-700P07	Gage	500.00 psi/3447.4kPa	1500 psi	83F9104	1679.95
FLUKE-700P08	Gage	1000.0 psi/6894.8kPa	3000 psi	83F9105	1679.95
FLUKE-700P09	Gage	1500.0 psi/10342kPa	3000 psi	83F9106	1679.95
FLUKE-700P29	Gage	3000.00 psi/20.684 MP.	6000 psi	83F9110	2639.95
FLUKE-700P30	Gage	5000.0 psi/34.474 mp	10000 psi	83F9111	2639.95
FLUKE-700P31	Gage	10000 psi/68.948 mp	15000 psi	83F9112	2639.95
FLUKE-700PA3	Absolute	5.0000 psi/34.474kPa	20 psia	83F9113	1919.95

➤ CONTINUED ➤

FLUKE-700P SERIES PRESSURE MODULES (CONT.)

Mfg. Part No.	Description	Range/Resolution 1 year	Maximum Overpressure	Stock No.	Price Each
FLUKE-700PA4	Gage	15.000 psi/103.42kPa	60 psi	83F9114	1919.95
FLUKE-700PA5	Absolute	30.000 psi/206.84kPa	105 psia	83F9115	1919.95
FLUKE-700PA6	Absolute	100.00 psi/689.48kPa	315 psia	83F9116	1919.95
FLUKE-700PV3	Vacuum	-5.0000 psi/-34.474kPa	15 psi	83F9124	1599.95
FLUKE-700PV4	Vacuum	-15.000 psi/-103.42kPa	45 psi	83F9125	1599.95
FLUKE-700PD2	Dual	±1.0000 psi/±6.8948kPa	5 psi	83F9118	1919.95
FLUKE-700PD3	Dual	±5.0000 psi/±34.474kPa	15 psi	83F9119	1919.95
FLUKE-700PD4	Dual	±15.000 psi/±103.42kPa	45 psi	83F9120	1919.95
FLUKE-700PD5	Dual	-15/30.000 psi/ -100/208.84kPa	90 psi	83F9121	1919.95
FLUKE-700PD6	Dual	-15/100.00 psi/ -100/689.48kPa	300 psi	83F9122	1919.95
FLUKE-700PD7	Dual	-15/200.00 psi/ -100/1379.0kPa	600 psi	83F9123	1919.95

(34077)

HAND-HELD LOOP CALIBRATORS

IEC 1010-1 1000V CAT III

FLUKE®

FLUKE-705 FLUKE-707 FLUKE-709 FLUKE-715 FLUKE-787

These powerful loop calibrators are ideal for loop calibration, maintenance and repair applications. **Mfg. part no. 707** features a one-handed user interface with "Quick-Click" detented knob making it extremely fast and easy to use. Its intrinsically-safe version, **mfg. part no. 707EX**, is for use in explosion endangered areas and is certified in accordance with the ATEX directive (Ex II 2 G Eex ia IIC T4) in Zones 1 and 2, ZELM 02 ATEX 0120 X. **Mfg. part no. 709** has HART communication and support. All models come complete with alligator test clips, safety-designed test lead set, carrying case, one 9V battery (**mfg. part no. 709** has six AAA batteries and **mfg. part no. 789** has four AA batteries), instructions and a three-year manufacturer's warranty (**mfg. part no.707EX** has a one-year manufacturer's warranty and includes Instruction manual on CD-ROM). **Mfg. part nos. 787** and **789** ProcessMeter™ also include Quick-Reference guide and users manual. Recommended accessories: **Mfg. part no. C50** Case, **Mfg. part no. TL71** Test Leads, **Mfg. part no. TPAK** Meter Hanger (for 705 and 707), **Mfg. part no. C25** Case, **Mfg. part no. T71** Test Leads, **Mfg. part no. AC72** Alligator Clips (for 715) **Mfg. part no. C116** Case, **Mfg. part no. TLK225** Accessory Set, **Mfg. part no. Mfg. part no.** Meter Hanger (for 787 and 789).

COMPARISON AT A GLANCE:

Mfg. Part No.	787	715	709/709H	707, 707EX	705
SOURCES					
VDC	...	0 to 20	0 to 30	...	...
mA DC	0 to 20	0 to 24	0 to 24	0 to 20	0 to 20
24V Loop Supply		X	X	X	X
MEASUREMENTS					
VDC	1000	10	30	28	28
VAC True-rms	1000	...	...	...	...
Ohms	40MΩ	...	...	...	...
mA DC	1000	24	24	24	24
mA AC	1000	...	...	...	...
Frequency	20kHz	...	...	...	...
Min./Max.	X	...	...	...	...
Hold	X	...	...	...	...
IEC 61010 Cat.	Cat. III	...	...	...	...

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-705	Loop Calibrator	48F2058	749.95
FLUKE-707	Loop Calibrator with "Quick Click" Control Knob	39C2941	719.96
FLUKE-707EX	Intrinsically-Safe Loop Calibrator with "Quick Click" Control Knob	63H2496	1199.95
FLUKE-709	Precision Loop Calibrator	84W8830	719.96
FLUKE-709H	Precision HART Loop Calibrator	67W3043	1299.95
FLUKE 715	Voltage/mA Calibrator	83F4183	1099.95
FLUKE 787	ProcessMeter	91F6067	719.96

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
709H/TRACK	Data Logging Software / Cable for 709H	84W8831	359.96

(34070)

PROCESS METERS & CALIBRATORS

FLUKE 712B AND 714B TEMPERATURE CALIBRATORS

NEW

FLUKE®

- The **712B** can measure and simulate (13) different RTD types and resistance
- The **714B** can measure and simulate (17) different thermocouple types and millivolts
- Measure 4 to 20 mA signals while simultaneously sourcing a temperature signal
- Hanging tool designed in and included with every unit
- Configurable 0% and 100% source settings for quick 25% linearity checks
- Linear ramp and 25% step auto ramp based on 0% and 100% settings
- Dual inputs and backlit display for easy interpretation of measurements
- Power down settings remembered at power up for easy restart of tests
- 1-year and 2-year specifications and traceable certificate of calibration

For the temperature calibration professional that wants a highly accurate, easy-to-use, single function temperature calibrator the 712B and 714B are ideal test tools.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-712B	RTD Input and Output	36X3064	1195.00
FLUKE-714B	Thermocouple Input and Output	36X3065	1195.00

(211872)

FLUKE-718 AND FLUKE-717 SERIES PRESSURE CALIBRATORS

CE

FLUKE®

FLUKE-718 AND -717 SERIES MODELS

- DC current measurement: 0 to 24mA
- Loop supply: 24VDC
- Min./Max. and Hold Functions
- Clear, 5-digit display
- EMI tolerant, dust- and splash-resistant
- CSA certified, CE compliant
- Recommended accessories - TL220 Test Lead Set, 700PTP Pneumatic Test Pump

FLUKE-718 SERIES MODELS ONLY

- Built-in hand pump — sources -11psig to full scale

FLUKE-718 Series

FLUKE-717 Series

FLUKE-718 and **FLUKE-717 series** pressure calibrators include: protective yellow holster, test leads, alligator clips, single 9V alkaline battery (two with **FLUKE-718 series** models), instructions and three-year manufacturer's warranty. **NOTE:** Pressure may also be measured using 1 of 29 **mfg. part no. 700Pxx** pressure modules ordered separately; go online or call.

FLUKE-718 SERIES

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-718-1G	1psi Pressure Calibrator	83K0435	2399.95
FLUKE-718 30US	30psi Pressure Calibrator	48F2059	2399.95
FLUKE-718 100US	100psi Pressure Calibrator	48F2060	2399.95
FLUKE-718-300G	300psi Pressure Calibrator	83K0436	2399.95
FLUKE-718EX 300	Intrinsically-Safe 300psi Pressure Calibrator	14N6781	3399.95

FLUKE-717 SERIES

FLUKE-717-1G	1psi Pressure Calibrator	83K0428	1399.95
FLUKE-717 15G	15psi Pressure Calibrator	72T3237	1399.95
FLUKE-717 30G	30psi Pressure Calibrator	83F9129	1399.95
FLUKE-717 100G	100psi Pressure Calibrator	55C4468	1399.95
FLUKE-717-300G	300psi Pressure Calibrator	83K0431	1399.95
FLUKE-717-500G	500psi Pressure Calibrator	83K0433	1399.95
FLUKE-717-1000G	1000psi Pressure Calibrator	83K0429	1399.95
FLUKE-717-1500G	1500psi Pressure Calibrator	83K0430	1499.95
FLUKE-717-3000G	3000psi Pressure Calibrator	83K0432	1499.95
FLUKE-717-5000G	5000psi Pressure Calibrator	83K0434	1499.95
FLUKE-717 10000G	10000psi Pressure Calibrator	72T3236	1499.95

(34075)

FLUKE 719 ELECTRIC PRESSURE CALIBRATORS

FLUKE®

Features:

- Electric pump for one handed pressure calibration
- Best in class pressure measurement uncertainty of 0.025%
- Measure and source mA with best in class 0.015% accuracy
- Precision pressure adjust vernier
- Variable release rate bleed valve for easy pressure adjustment
- Ideal performance for high accuracy transmitter calibration
- Programmable pump limit allows:
  Protection from damage due to over-pressurization
  The user to program target pressures for pumping
- Extended measurement range with any of twenty nine (29) 700Pxx Pressure Modules
- Source mA with simultaneous pressure measurement to test valves and I/Ps
- Simulate mA signals to troubleshoot 4-20 mA loops
- Test pressure switches with built in switch test function
- Power transmitters during test using 24 V loop supply with simultaneous mA measurement
- Proven cleanout ports reduce pump failures

FLUKE 719

With built-in electric pump, the Fluke 719 provides pressure calibrator makes it possible to calibrate and test pressure devices quickly and easily with one hand saving valuable time. Use the programmable pump limit settings to avoid over-pressurization, and to set 'pump to' pressure values. The unique cleanout port design reduces pump failures, and makes the 719 easy to clean without repair. The compact, lightweight form, combine with one-handed use, makes this pressure calibrator the ideal tool for process professionals.

Function Measure or Source	Range	Resolution	Accuracy	Notes
Pressure 719-30G	-12 to 36 psi, -850 mbar to 2.4 bar	0.001 psi, 0.1 mbar	0.025 % Range	6 month spec., 0.035% of Range for 1 year
Pressure 719-100G	-12 to 120 psi, -850 mbar to 8 bar	0.01 psi, mbar		
mA	0 to 24 mA	0.001 mA	0.015% Rdg + 2 counts	Max load, 1000 Ω 750 Ω in HART mode
Loop Supply	24 V dc	N/A	10%	...

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-719 30G	Electric Pressure Calibrator, 30 PSI	08P4409	3199.95
FLUKE-719 100G	Electric Pressure Calibrator, 100 PSI	08P4408	3199.95

(134285)

FLUKE 719PRO ELECTRIC PRESSURE CALIBRATORS

NEW

FLUKE®

- Unique integrated electric pump for one handed pressure calibration
- Test pressure switches easily with easy-to-use switch test function
- Precision pressure adjust vernier for easy and accurate pressure calibration
- Ideal accuracy and performance (0.025%) for reference class transmitter calibration
- 30PSI, 150PSI and the new 300PSI pressure ranges
- Programmable pressure calibrator pump limit eliminates over-pressurization and allows the user to program target pressures for pumping
- Extended pressure measurement range with any of 29 **700Pxx** Pressure Modules
- Pump cleanout ports reduce pump failures from moisture and fluid damage
- Fluid trap included with the unit to mitigate chance of fluid damage in at-risk applications
- Precision temperature measurement with optional RTD probe

The **719Pro** Electric Pressure Calibrator is the ideal test tool for calibrating high accuracy transmitters, pressure switches and pressure gauges. The **719Pro** includes a full functioning loop calibrator that sources, simulates and measures mA signals and more.

Mfg. Part No.	Range	Resolution	Stock No.	Price Each
FLUKE-719PRO 30G	-12 to 30 PSI / -0.8 to 2 bar	0.001 PSI, 0.0001 bar	08X5427	3195.00
FLUKE-719PRO 150G	-12 to 150 PSI / -0.8 to 10 bar	0.01 PSI, 0.001 bar	08X5426	3195.00
FLUKE-719PRO 300G	-12 to 300 PSI / -0.8 to 20 bar	0.01 PSI, 0.001 bar	08X5428	3395.00

(211496)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196563)

FLUKE 721 PRECISION PRESSURE CALIBRATORS

NEW

FLUKE®

- Ideal for gas flow calibration (custody transfer) applications
- Two isolated, stainless steel, pressure sensors with 0.025 % accuracy
- Pt100 RTD input for temperature measurement, (probe optional)
- Measures 4 to 20 mA signals
- Internal 24 V loop power supply can power a transmitter under test
- Measure up to 30 V dc, check 24 V loop power supplies
- Extend pressure measurement range with connection to external 700 series pressure modules (29 ranges)
- Large backlit graphic display can display up to three inputs simultaneously
- Store five instrument setups for recall and use

The **Fluke 721** Precision Pressure Calibrator with dual isolated pressure sensors is the ideal tool for gas custody transfer applications allowing you to take simultaneous static and differential pressure measurements with a single tool. The **721** can be configured by selecting either a 16 PSI (1.1 bar) or 36 psi (2.48 bar) low pressure sensor then add any of 7 high pressure ranges including 100, 300, 500, 1000, 1500, 3000 or 5000 psi (6.9, 20, 24.5, 69, 103.4, 200, 345 bar).

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-721-1601	Dual Sensor Pressure Calibrator, 16 PSIG, 100 PSIG	08X5430	2295.00
FLUKE-721-1603	Dual Sensor Pressure Calibrator, 16 PSIG, 300 PSIG	08X5431	2295.00
FLUKE-721-1605	Dual Sensor Pressure Calibrator, 16 PSIG, 500 PSIG	08X5432	2295.00
FLUKE-721-1610	Dual Sensor Pressure Calibrator, 16 PSIG, 1000 PSIG	08X5433	2295.00
FLUKE-721-1615	Dual Sensor Pressure Calibrator, 16 PSIG, 1500 PSIG	08X5434	2295.00
FLUKE-721-1630	Dual Sensor Pressure Calibrator, 16 PSIG, 3000 PSIG	08X5435	2295.00
FLUKE-721-1650	Dual Sensor Pressure Calibrator, 16 PSIG, 5000 PSIG	08X5436	2295.00
FLUKE-721-3601	Dual Sensor Pressure Calibrator, 36 PSIG, 100 PSIG	08X5437	2295.00
FLUKE-721-3603	Dual Sensor Pressure Calibrator, 36 PSIG, 300 PSIG	08X5438	2295.00
FLUKE-721-3605	Dual Sensor Pressure Calibrator, 36 PSIG, 500 PSIG	08X5439	2295.00
FLUKE-721-3610	Dual Sensor Pressure Calibrator, 36 PSIG, 1000 PSIG	08X5440	2295.00
FLUKE-721-3615	Dual Sensor Pressure Calibrator, 36 PSIG, 1500 PSIG	08X5441	2295.00
FLUKE-721-3630	Dual Sensor Pressure Calibrator, 36 PSIG, 3000 PSIG	08X5442	2295.00
FLUKE-721-3650	Dual Sensor Pressure Calibrator, 36 PSIG, 5000 PSIG	08X5443	2295.00

(211498)

FLUKE-725 AND FLUKE-726 MULTIFUNCTION PROCESS CALIBRATORS

FLUKE®

All Models:

- Streamlined, hand-held design
- Reliably-built to stand up to tough field use
- Two-channel, measure/source screen, for viewing input and output simultaneously
- Easy-to-read display with backlight for poorly lit areas
- Measures volts, mA, RTDs, thermocouples, frequency, resistance to test sensors and transmitters
- Source/simulate volts, mA, RTDs, thermocouples, frequency, resistance, pressure to calibrate transmitters
- Supports flow meter testing with frequency function
- Auto-Step and Auto-Ramp for fast linearity testing
- Power transmitters during test using 24V loop power supply with simultaneous mA measurement
- Stores frequently-used test setups for later use
- Three-year manufacturer's warranty
- CSA certified, CE compliant
- Recommended accessories - C280 Case, TL220 Test Leads, TPAK Meter Hanger (for 725) C115 Case, TL220 Test Leads, TPAK Meter Hanger (for 726)

FLUKE-725

FLUKE-726 Only:

- Precise measuring and calibrating — accuracies of 0.01%
- Transmitter error % calculation — no calculator needed
- Memory storage for later analysis
- Enhanced flow meter testing with frequency pulse train source mode
- HART mode inserts 250Ω resistor in mA measure
- Integrated pressure switch test
- Custom RTD curves for enhanced temperature measurement
- Voltage input protection for improved reliability

FLUKE-726

COMPARISON AT A GLANCE:

Mfg. Part No.	FLUKE-725, -725EX	FLUKE-726
Documenting	...	Memory Storage for up to 8 Calibrations
mA Accuracy	0.025%	0.015%
RTD Accuracy	0.33C	0.15C
RTD Coefficient	...	X
Pressure+	29 Rgs., 0.05%	29 Rgs., 0.05%
Switch Test	...	X
TC/RTD Ranges	12/7	12/8
Error Calculation	...	X

+Measure or source* pressure (*pressure pump required) using any of the **FLUKE-700P series** pressure modules; *order separately, go online or call*.

Mfg. part no. FLUKE-725 multifunction process calibrator is a powerful, yet easy-to-use field calibrator for the maintenance and troubleshooting of process control instrumentations. **Mfg. part no. FLUKE-725EX**, its intrinsically-safe version, is able to calibrate almost any process instrument likely to need service in an area where explosive gasses may be present and is in compliance with safety specfications ATEX II 1 G EEx ia IIB 171°C KEMA 04ATEX 1303X; I.S. Class I, Division 1 Groups B-D, 171°C. **Mfg. part no. FLUKE-726** precision multifunction process calibrator is designed specifically for broader workload coverage, calibration power and unsurpassed accuracy. It interprets results without the help of a calculator and stores measurement data for later analysis. All models operate on 4 AA batteries and come complete with one-set each of **mfg. part no. TL75** test leads, **mfg. part no. AC72** alligator clips, and stackable test leads, plus a product manual and a users guide on CD.

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FLUKE-725 AND FLUKE-726 MULTIFUNCTION PROCESS CALIBRATORS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-725 US	Multifunction Process Calibrator	48F6885	2599.95
FLUKE-725EX	Intrinsically-Safe Multifunction Process Calibrator	19K1381	3699.95
FLUKE-726	Precision Multifunction Process Calibrator	64K0072	3499.95

(85726)

FLUKE 750 SERIES DOCUMENTING PROCESS CALIBRATORS

FLUKE®

- Calibrate temperature, pressure, voltage, current, resistance, and frequency
- Programmable calibration routines enable you to create and run automated as-found/as-left procedures to ensure fast, consistent, calibrations
- Records and documents results to support your ISO-9000 or regulatory standards
- USB interface lets you transfer the results to a PC
- Supports Fluke DPC/TRACK™ software as well as popular programs from Honeywell Meridium, Emerson, Cornerstone, Yokogawa, Prime Technologies, Intergraph and others
- Create procedures, instructions, and action lists to deliver fast, easy documentation
- Runs an entire shift on a rechargeable Li-ion battery pack
- Overmolded urethane case stands up to rough handling in industrial environments
- Calibrators offer one- or two-year calibration cycles and three-year warranty
- Bright white display lets you read your results in any kind of light
- Soft keys provide one-touch access to enhanced functions such as task lists, automated procedures, scaling, min/max, stepping and ramping, and review memory
- Measure, Source, or simultaneous Measure/Source modes enable technicians to troubleshoot, calibrate, or maintain instrumentation with just one tool
- Integrated HART communication capability lets you program and control HART instrumentation (**Fluke-754** only)

Fluke-754

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-753	Documenting Process Calibrator	55T0896	5199.95
FLUKE-754	Documenting Process Calibrator w/ HART	55T0897	6499.95

ACCESSORIES & KITS

Mfg. Part No.	Description	Stock No.	Price Each
BC7240	Battery Charger	55T0892	42.45
BP7240	Battery Pack	55T0893	159.95
C799	Field Soft Case	55T0894	74.95
754HCC	HART Communication Cable	55T0898	74.95
FLUKE-700TLK	Process Calibration Deluxe Test Kit	55T0895	129.95

(196697)

FLUKE 750P SERIES PRESSURE MODULES

NEW

FLUKE®

- 0.025 % reference uncertainty
- 6-month and 1-year specifications
- Temperature compensated 0 °C to 50 °C
- Digital communication to calibrators, no analog losses or errors
- Broad selection of ranges
- Gage, differential, dual range, absolute and vacuum measurement models

The **750P Series** Pressure Modules are the ideal pressure modules to enable gage, differential and absolute pressure measurement with Fluke **750** and **740** series DPCs and **725**, **726** MPCs to measure pressure.

DIFFERENTIAL

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-750P00	0 to 1 in H20 (0 to 2.5 mBar)	36X3085	1795.00
FLUKE-750P01	0 to 10 in H20 (0 to 25 mBar)	36X3086	1395.00
FLUKE-750P02	0 to 1 psi (0 to 70 mBar)	36X3087	1395.00
FLUKE-750P22	0 to 1 psi (0 to 70 mBar)	36X3096	1395.00
FLUKE-750P03	0 to 5 psi (0 to 350 mBar)	36X3088	1395.00
FLUKE-750P23	0 to 5 psi (0 to 350 mBar)	36X3097	1395.00
FLUKE-750P04	0 to 15 psi (0 to 1 bar)	36X3089	1395.00
FLUKE-750P24	0 to 15 psi (0 to 1 bar)	36X3098	1395.00
GAGE			
FLUKE-750P05	0 to 30 psi (0 to 2 bar)	36X3090	1395.00
FLUKE-750P06	0 to 100 psi (0 to 7 bar)	36X3091	1395.00
FLUKE-750P27	0 to 300 psi (0 to 20 bar)	36X3099	1395.00
FLUKE-750P07	0 to 500 psi (0 to 35 bar)	36X3092	1395.00
FLUKE-750P08	0 to 1000 psi (0 to 70 bar)	36X3093	1395.00
FLUKE-750P09	0 to 1500 psi (0 to 100 bar)	36X3094	1395.00
FLUKE-750P2000	0 to 2000 psi (0 to 140 bar)	36X3095	1395.00

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FLUKE 750P SERIES PRESSURE MODULES (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
HIGH			
FLUKE-750P29	0 to 3000 psi (0 to 200 bar)	36X3100	2195.00
FLUKE-750P30	0 to 5000 psi (0 to 340 bar)	36X3101	2195.00
FLUKE-750P31	0 to 10000 psi (0 to 700 bar)	36X3102	2195.00
ABSOLUTE			
FLUKE-750PA3	0 to 5 psia (0 to 350 mBar)	36X3067	1595.00
FLUKE-750PA4	0 to 15 psia (0 to 1 bar)	36X3068	1595.00
FLUKE-750PA5	0 to 30 psia (0 to 2 bar)	36X3069	1595.00
FLUKE-750PA6	0 to 100 psia (0 to 7 bar)	36X3070	1595.00
FLUKE-750PA27	0 to 300 psia (0 to 20 bar)	36X3066	1595.00
FLUKE-750PA7	0 to 500 psia (0 to 35 bar)	36X3071	1595.00
FLUKE-750PA8	0 to 1000 psia (0 to 70 bar)	36X3072	1595.00
FLUKE-750PA9	0 to 1500 psia (0 to 100 bar)	36X3073	1595.00
VACUUM			
FLUKE-750PV3	-5 psi (-350 mBar)	36X3083	1595.00
FLUKE-750PV4	-15 psi (-1 bar)	36X3084	1595.00
DUAL			
FLUKE-750PD2	-1 to 1 psi (-70 to 70 mBar)	36X3075	1595.00
FLUKE-750PD3	-5 to 5 psi (-350 to 350 mBar)	36X3077	1595.00
FLUKE-750PD10	-10 to 10 psi (-700 to 700 mBar)	36X3074	1595.00
FLUKE-750PD4	-15 to 15 psi (-1 to 1 bar)	36X3078	1595.00
FLUKE-750PD5	-15 to 30 psi (-1 to 2 bar)	36X3079	1595.00
FLUKE-750PD50	-15 to 50 psi (-1 to 3.5 bar)	36X3080	1595.00
FLUKE-750PD6	-15 to 100 psi (-1 to 7 bar)	36X3081	1595.00
FLUKE-750PD7	-15 to 200 psi (-1 to 14 bar)	36X3082	1595.00
FLUKE-750PD27	-15 to 300 psi (-1 to 20 bar)	36X3076	1595.00
REFERENCE			
FLUKE-750R04	0 to 15 psi (0 to 1 bar)	36X3106	1595.00
FLUKE-750R06	0 to 100 psi (0 to 7 bar)	36X3107	1595.00
FLUKE-750R27	0 to 300 psi (0 to 20 bar)	36X3110	1595.00
FLUKE-750R07	0 to 500 psi (0 to 35 bar)	36X3108	1595.00
FLUKE-750R08	0 to 1000 psi (0 to 70 bar)	36X3109	1595.00
FLUKE-750R29	0 to 3000 psi (0 to 200 bar)	36X3111	2395.00
FLUKE-750R30	0 to 5000 psi (0 to 340 bar)	36X3112	2395.00
FLUKE-750R31	0 to 10000 psi (0 to 700 bar)	36X3113	2395.00
FLUKE-750RD5	-15 to 30 psi (-1 to 2 bar)	36X3104	1795.00
FLUKE-750RD6	-12 to 100 psi (-1 to 7 bar)	36X3105	1795.00
FLUKE-750RD27	-12 to 300 psi (-0.8 to 20 bar)	36X3103	1795.00

(211873)

FLUKE 770 SERIES MILLIAMP PROCESS CLAMP METER

FLUKE®

771 Milliamp Process Clamp Meter:

- Measures 4-20mA output signals from transmitters without breaking the loop
- Measures 10 to 50mA signals in older control systems using the 99.9mA range
- Accuracy: 0.2%
- Resolution and sensitivity to 0.01mA
- Hold function captures and displays changing measurements
- Dual backlit display with both mA measurement and percent of 4 to 20mA span

772 and 773 Milliamp Process Clamp Meters:

- DC voltage measurement to verify 24 V power supplies or voltage I/O signals
- Source dc voltage to test input devices that accept a 1 to 5 volt or 0 to 10 volt signal
- Scaled mA output provides a continuous mA signal that corresponds to a 4 to mA signal measured by the mA clamp Output signal enables a logging DMM or other device to record the 4 to 20 mA signal without breaking the loop
- mA in/out: simultaneously measure the mA signal Apply a mA input signal to a device and measure its' 4 to 20 mA output on devices such as valves or mA isolators
- Voltage output linear ramp of 25% step output Automatically change the voltage output for remote testing

Mfg. part no. FLUKE-771 compact process clamp meter measures mA signal for PLC and control systems analog I/O. Detachable clamp with extension cable allows user to take measurements in tight locations, and the built-in spotlight illuminates hard to see wires in dark enclosures. Features automatic power-off after 15 minutes and 2 minute automatic-off for backlight and spotlight. Uses two AA 1.5V alkaline batteries. Meter includes soft carrying case, user's manual and manufacturer's warranty: 3-years for electronics, 1-year for clamp cable assembly.

SPECIFICATIONS

Mfg. Part No.	Function	Resolution and Range	Accuracy	Notes
771, 772, 773	mA measurement	0 to 20.99 mA 21.0mA to 100.0 mA	0.2% + 2 counts	measured by clamp
772 and 773	mA measurement	0 to 24.00 mA	1% + 5 counts	measured in series by test jacks
772 and 773	mA source	0 to 24.00 mA	0.2% + 2 counts	Maximum mA drive: 24mA into 1,000 ohms
772 and 773	mA simulate	0 to 24.00 mA	0.2% + 2 counts	Maximum voltage 50 V dc

➤CONTINUED➤

FLUKE 770 SERIES MILLIAMP PROCESS CLAMP METER (CONT.)

Mfg. Part No.	Function	Resolution and Range	Accuracy	Notes
773	voltage source	0 to 10.00 V dc	0.2% + 2 counts	2 mA maximum drive current
773	voltage measure	0 to 30.00 V dc	0.2% + 2 counts	...

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-771	Milliamp Process Clamp Meter	30M9567	599.95
FLUKE-772	Milliamp Process Clamp Meter	09R2350	799.95
FLUKE-773	Milliamp Process Clamp Meter	09R2351	1199.95

(90370)

ACCESSORIES

Mfg. Part No.	Description	For Use With	Stock No.	Price Each
2722971	Clamp	FLUKE-771	05R0208	246.60

FLUKE 789 PROCESSMETER AND TEMPERATURE KIT

NEW

FLUKE®

- Unique new wireless measurement logging capability
- Temperature measurement from -200°C to 1372°C using the t3000 FC
- 24 V Loop power supply
- HART mode setting with loop power (adds 250 ohm resistor)
- 100% larger dual display
- 1200 ohm drive capability on mA source
- Enhanced backlight with two brightness settings
- 0% to 100% mA Span Check buttons to toggle between 4 and 20 mA
- Infrared I/O serial port compatible with FlukeView® Forms Software Version 2.1
- Externally accessible fuses for easy replacement

The Fluke **789 ProcessMeter™** is the ultimate troubleshooting tool for electricians and instrumentation professionals, combining the functionality of a loop calibrator with the power of a digital multimeter. By equipping the 789 with a temperature measurement module and the wireless data logging capabilities of Fluke Connect™ with ShareLive™ video call, process technicians can now do a lot more while carrying a lot less. And with its built-in, selectable 250 ohm HART® resistor, it eliminates the need to carry a separate resistor with you. Use the included FC Connector with the Fluke **789** and get the full benefits of the Fluke Connect™ mobile app. Download it now and get started.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-789	Fluke 789 ProcessMeter™	81C7984	949.95
KIT			
FLUKE-789 FC/T3000	Fluke 789 ProcessMeter™ and FC Wireless t3000 K-Type Temperature Module	47X3303	1099.95
ACCESSORIES			
FLUKE-IR3000FC	Fluke Connect IR to Wireless Connector	47X3336	49.95

(212267)

MICRO-BATH THERMOMETER CALIBRATORS

FLUKE. Calibration

6102 7102 7103

Each model is stable to ±0.03°C or better, depending on the fluid you use. Uniformity is ±0.02°C or better for low uncertainties using a reference thermometer. Display accuracy has been improved to ±0.25°C for quick calibrations without a reference thermometer. In short, you get the stability and precision of a liquid bath in a dry-well-sized package. With a 48mm (1.9") diameter, 140mm (5.5") deep tank, a **Micro-Bath** can calibrate any type of sensor including short, square, or odd-shaped sensors. The problems of fit and immersion are virtually eliminated by using a fluid medium rather than a dry-block calibrator. Micro-Baths are perfect for liquid-in-glass and bimetal thermometers. **Micro-Baths** have RS-232 ports, come with our Interface-it software, and can be used with MET/TEMP II software. Also included are contacts to calibrate a thermal switch, eight set-point memory storage, ramp-rate adjust, and over-temperature safety cutout.

SPECIFICATIONS

Model	6102	7102	7103
Range	+35°C to +200°C (+95°F to +392°F)	-5°C to +125°C (+23°F to +257°F)	-30°C to +125°C (-22°F to +257°F)
Accuracy	± 0.25°C		
Stability	±0.02°C at +100°C (5013) ±0.03°C at +200°C (5013)	±0.015°C at -5°C (5010) ±0.03°C at +121°C (5010)	±0.03°C at -25°C (5010) ±0.05°C at +125°C (5010)
Uniformity	± 0.02°C		

➤CONTINUED➤

MICRO-BATH THERMOMETER CALIBRATORS (CONT.)

SPECIFICATIONS

Model	6102	7102	7103
Well Size (Dia.xD)	64 x 140mm (2.5 x 5.5")		
Size (WxHxD)	14 x 26 x 20cm (5.5 x 10.38 x 8")	18 x 31 x 24cm (7.2 x 12 x 9.5")	

Mfg. Part No.	Temperature Range	Stock No.	Price Each
6102-156	+35°C to +200°C (+95°F to +392°F)	09K7043	4400.00
7102-156	-5°C to +125°C (+23°F to +257°F)	09K7107	5250.00
7103-156	-30°C to +125°C (-22°F to +257°F)	09K7108	6650.00

ACCESSORIES

Mfg. Part No.	Description	For Use With	Stock No.	Price Each
5013-1L	Silicone Oil, Type 200.20, 1 Liter	6102	09K6922	130.00
5010-1L	Silicone Oil, Type 200.20, 1 Liter	7102 / 7103	40M4458	140.00
9310	Carrying Case	6102	09K7314	740.00
9311	Carrying Case	7102	09K7315	740.00
9317	Carrying Case	7103	09K7318	840.00

(197428)

2700G SERIES REFERENCE PRESSURE GAUGES

NEW

FLUKE Calibration

- Precision pressure measurement from 100 kPa (15 psi) to 70 MPa (10 000 psi)
- Accuracy to 0.02% of full scale
- Easy-to-use, rugged construction for reliable performance
- Combine with the 700PTPK or 700HTPK pump kits for a complete portable pressure testing solution for up to 4 MPa (600 psi) with the PTP-1 pneumatic pump and up to 70 MPa (10 000 psi) with the HTP-2 hydraulic pump
- Combine with the P5510, P5513, P5514, or P5515 Comparison Test Pumps for a complete bench top pressure calibration solution
- Test port is ¼ NPT Male. ¼ BSP and M20 X 1.5 adaptors are included standard
- USB communications cable and universal power supply included standard

The **2700G** Reference Pressure Gauges provide best-in-class measurement performance in a rugged, easy-to-use, economical package. Improved measurement accuracy allows it to be used for a wide variety of applications. It is ideal for calibrating pressure measurement devices such as pressure gauges, transmitters, transducers, and switches. In addition, it can be used as a check standard or to provide process measurements with data logging. The **2700G** has an easy-to-use interface that allows you to configure the sampling rate, tare value, damping, and auto-off time interval as well as reset the min/max pressure. You can also view the remaining battery life. Select from 21 different standard engineering units, including bar, in H2O, kPa, MPa, and psi. In addition, the supervisor menu can be used to set one custom engineering unit. To ensure against incorrect measurements, each of the above functions can be locked from use through the supervisor menu. The **2700G** Reference Pressure Gauge can be combined with the Fluke Calibration **P5500** series of comparison test pumps to make a complete pressure calibration system. The unique test port design of the P5500 series allows for hand tight connection of the **2700G** without the use of PTFE tape.

Mfg. Part No.	Range	Stock No.	Price Each
2700G-BG100K	-15 psi to 15 psi (-100 kPa to 100 kPa)	90W4125	1200.00
2700G-BG200K	-15 psi to 30 psi (-100 kPa to 200 kPa)	90W4121	1200.00
2700G-BG700K	-12 psi to 100 psi (-80 kPa to 700 kPa)	90W4124	1200.00
2700G-BG2M	-12 psi to 300 psi (-80 kPa to 2 MPa)	90W4120	1200.00
2700G-BG3.5M	-12 psi to 500 psi (-80 kPa to 3.5 MPa)	90W4122	1200.00
2700G-BG7M	-12 to 1000 psi (-80 kPa to 7 MPa)	90W4123	1200.00
2700G-G20M	0 to 3000 psi (0 to 20 MPa)	90W4126	1200.00
2700G-G35M	0 to 5000 psi (0 to 35 MPa)	90W4127	1200.00
2700G-G70M	0 to 10000 psi (0 to 70 MPa)	90W4128	1200.00

PUMPS & COMPARATORS

Mfg. Part No.	Description	Stock No.	Price Each
P5510-2M	Pneumatic Comparison Test Pump, vacuum to 300 psi (2 MPa)	45W5864	2111.00
P5513-20M	Pneumatic Comparator, 0 to 3000 psi (20 MPa)	45W5865	3713.00
P5514-70M	Hydraulic Comparison Pump with Viton Seals, 0 to 10 000 psi (70 MPa)	45W5866	1435.00
P5514-70M-EP	Hydraulic Comparison Pump with EP Seals, 0 to 10 000 psi (70 MPa)	45W5867	1497.00
P5515-140M	Hydraulic Comparison Pump with Viton Seals, 0 to 20 000 psi (140 MPa)	45W5870	5096.00
P5515-140M-EP	Hydraulic Comparison Pump with EP Seals, 0 to 20 000 psi (140 MPa)	45W5871	5158.00

(211400)

CALIBRATION SERVICES

From pre-calibration to re-calibration, we bring you competitive pricing with quick delivery.

(207664)

U1401B HAND-HELD MULTI-FUNCTION CALIBRATOR/METER

KEYSIGHT TECHNOLOGIES

- Dual display with bright LCD backlight
- Simultaneous source and measure
- Bipolar voltage and current, square-wave, auto scan and ramp outputs
- Full-span DMM capability, including temperature and frequency measurements
- Hold and Min/Max/Average recordings
- Data logging to PC with optional
- IR-to-USB cable
- Built-in charging capability

Mfg. part no. U1401B hand-held multi-function calibrator/meter incorporates complete DMM performance into a process calibration tool, with the unique ability to both source and measure simultaneously. DMM measurement functions include AC+DC voltage and current, resistance, temperature, frequency, diode and continuity tests. Includes calibrator and meter standard test lead kit, certificate of calibration, protective holster, rechargeable battery pack, AC power adapter and cord, yellow test lead for mA simulation, and quick start guide. Three-year manufacturer's warranty

Mfg. Part No.	Description	Stock No.	Price Each
U1401B	Hand-held Multi-Function Calibrator/Meter	55R2340	731.00

ACCESSORIES

U5481B	IR to USB PC Connectivity Cable	06X2962	31.29
U1161A	Extended Test Lead Kit	04M7390	44.12
U1181A	Immersion Temperature Probe	53M4046	61.91
U1182A	Surface Temperature Probe	53M4047	188.00
U1183A	Air Temperature Probe	53M4048	72.41
U1184A	Temperature Probe Adapter	53M4049	10.49
U1186A	Thermocouple (K-type, 1m) and Adaptor	53M4051	20.88

(211854)

POCKETTACH MINI® TACHOMETERS

CE

EXTECH INSTRUMENTS A FLIR COMPANY

- Hold button freezes display reading
- Ergonomically designed and pocket sized housing with protective finger guard
- Easy to operate by simply contacting the rotating object with the sensor tip and read
- **(Mfg Part No. 461750)** Contact model with surface wheels enable tachometer to measure linear surface speeds in ft/min, m/min, and yd/min
- **(Mfg Part No. 461700)** Non-contact integral light beam model with ideal measurement range up to 6" (150 mm) distance
- One year warranty

461750

Complete with 9V battery: **Mfg. part no.461700** includes reflective tape and **mfg. part no. 461750** includes surface wheels

SPECIFICATIONS

Mfg. Part No.	461700	461750
Display Counts:	99,999 count LCD	99,999 count LCD
Range rpm:	10 to 99,999rpm	10 to 9,999rpm
ft/min:	—	3 to 6560ft/min
m/min:	—	1 to 1999.9m/min
yd/min:	—	1 to 5,000yd/min
Basic accuracy:	±(0.1%rdg +2d)	±(0.1%rdg +2d)
Max rpm Resolution:	0.001	0.001
ft/min Resolution:	—	0.0001
Dimensions:	4.88x1.97x1.3" (124x50x33mm)	5.87x1.97x1.3" (149x50x33mm)
Weight: 4oz (114g)	5oz (142g)	

Mfg. Part No.	Description	Stock No.	Price Each
461700	Mini Photo Tachometer	26K9266	159.99
461750	Mini Contact Tachometer	26K9267	159.99
461937	Spare Reflective Tape (5pks 23" each roll)	25T5660	43.99

(91074)

COMBINATION CONTACT/PHOTO TACHOMETER

EXTECH INSTRUMENTS A FLIR COMPANY

CE

- Characters on display reverse direction depending on contact or photo mode
- Uses visible light to read up to 6" (150mm) from target
- Memory/readings button holds last reading for 5 min and recalls min/max readings
- 1-year warranty

Combines both contact and non-contact models for use in all applications. Choice of built-in laser model for accurate measurements at long distances. Complete with tips and wheel for rpm or linear surface speed, four 1.5V AA batteries, reflective tape and carrying case

SPECIFICATIONS

	Photo Mode	Contact Mode
Range (RPM)	10 to 99,999	0.5 to 20,000

CONTINUED

TACHOMETERS • MOTOR PHASE/ROTATION TESTERS • GAUSSMETERS

COMBINATION CONTACT/PHOTO TACHOMETER (CONT.)

Accuracy	0.05% rdg +1 digit	
Sampling Time	1 Sec > 60rpm	1 Sec > 6rpm
Surface Speed	...	0.2 to 6560ft/min 0.05 to 1999.9m/min
Resolution	0.1rpm (< 1,000 rpm) 1rpm (> 1000rpm)	
Power	4 AA Batteries	

Mfg. Part No.	Description	Stock No.	Price Each
461895	Combination Contact/Photo Tachometer	27K9911	269.99
461995	Laser Photo/Contact Tachometer	27K9922	309.99

(89516)

RPM10 COMBINATION TACHOMETER + IR THERMOMETER

CE

EXTECH INSTRUMENTS A FLIR COMPANY

Features:
- Built-in IR thermometer with laser measures remote surface temperature on motors and rotating parts
- Provides wide RPM (photo and contact) and linear surface speed (contact) measurements
- Non-contact photo tachometer uses a laser for greater measuring distance up to 6.5 ft (2m) from target
- Memory stores last, max. and min. readings
- Characters on display reverse direction depending on mode
- Large 5-digit LCD display
- Double molded housing

RPM10 461923

Mfg. part no. RPM10 photo/contact tachometer combines a non-contact tachometer for RPM measurements using a narrow beam of laser light source and a contact tachmometer for RPM and surface speed measurements. Plus, a non-contact IR thermometer for quick and accurate surface temperature measurements. Temperature range: -20° to 300°C (-4° to 572°F). Accurate to 0.05% with maximum resolution of 0.1rpm in either photo or contact mode. Fixed 0.95 emissivity covers 90% of surface applications. Includes tips and wheel for rpm or linear surface speed, four 1.5V AA batteries, reflective tape, rubber boot and carrying case. 1-year manufacturer's warranty. CE compliant.

Mfg. Part No.	Description	Stock No.	Price Each
RPM10	Tachometer+IR Thermometer	26K9261	339.99
461893	Photo Tachometer	27K9909	209.99
461995	Laser Photo/Contact Tachometer	27K9922	309.99
461937	Spare Reflective Tape, 10 Strips, 23" Each	25T5660	43.99

(84562)

TACHOMETERS

SHIMPO

DT-105A DT-107A

The **DT-100** and **DT-200 series** tachometers provide accuracy and capabilities for measuring and recording rotational, linear, surface speeds and total length. **Mfg. part no. DT-105A** and **DT-107A** battery operated tachometers feature expanded memory storage, added length functions, free N.I.S.T. certificate and many standard accessories. **Mfg. part no. DT-105A-S12** and **DT-107A-S12** tachometers measure speed and direct linear length with accuracy via a 12" wheel. All **DT-200 series** models perform non-contact and contact applications via the included contact adapter. **Mfg. part no. DT-209X** is equipped with data collection capabilities, featuring simultaneous storage of data in three different measuring modes (USB, Standard and Average). **Mfg. part no. DT-209X** offers contact and non-contact applications. USB and Analog output included.

Model:	DT-105A	DT-107A
Range, Contact:	0.1-25,000 RPM	
Display:	5 digit LCD	5 digit LED
1/4 x 20 tripod style mounting hole:	X	X
Memory:	Last, max min and last 10 readings	
NIST certificate:	X	X

Mfg. Part No.	Description	Stock No.	Price Each
DT-105A	Contact Tachometer, LCD Display	82K8376	270.00
DT-107A	Contact Tachometer, LED Display	82K8380	270.00
TACHOMETER WITH WHEEL			
DT-105A-S12	DT-105A Tachometer with 12" Wheel	82K8377	325.00
DT-107A-S12	DT-107A Tachometer with 12" Wheel	82K8381	325.00
DT-105A-12CBL	DT-105A Tachometer with 12" Grooved Wheel for Elevators and Cables	82K8379	350.00
ACCESSORIES			
FPM-6	Circular Measuring Wheel	82K8574	30.00
FPM-12	Circular Measuring Wheel	82K8571	50.00
CONE -1/2	.5" Cone Adapter for Contact Motor Shaft RPM Measurement	82K8329	6.50
CONE-3/4	.75" Cone Adapter for Contact Motor Shaft RPM Measurement	82K8331	16.00
CONE-1-1/4	1.25" Cone Adapter for Contact Motor Shaft RPM Measurement	82K8330	21.50

➤ CONTINUED ➤

TACHOMETERS (CONT.)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
FUNNEL-3/4	.75" Funnel Adapter for Contact Motor Shaft RPM Measurement	82K8578	16.00
EXT-SHAFT	3.5" Extension Shaft for all DT Series Tachometers	82K8438	11.00
TAPE	Reflective tape strip for non-contact measurement	82K8624	2.50

(89382)

PHASE ROTATION INDICATOR

FLUKE®

Features:
- Three phase indication
- Indication of phase rotation
- Large LCD display
- Voltage range: 40 to 700V
- Frequency range: 15-400Hz
- No battery required — power supplied by unit under test
- Rated CAT III 600V to ground
- Two-year manufacturer's warranty

Mfg. part no. FLUKE-9040 phase rotation indicator is a portable, handheld instrument designed to detect and measure the phase rotation in all areas where three phase supplies are used to feed motors, drives and electrical systems. Provides clear indication of the three phase via an LCD display and the phase rotation direction (clockwise or counterclockwise) to determine correct connections. It allows rapid determination of phase sequence and has a voltage and frequency range suitable for commercial and industrial applications. Meets IEC 61010/EN 61010, IEC 61557-7/EN 61557-7 electrical safety specifications. Comes complete with three self-retaining test leads, probes, alligator clips and users manual.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-9040	Phase Rotation Indicator	52K4229	299.95

(85494)

5100 GAUSS METER & PROBES

RoHS Compliant Available

F.W. BELL

- Auto Zero, Min/Max./Peak Hold
- Auto Range and Relative Mode
- Gauss, Tesla or Ampere/Meter readings
- 5180 features a corrected analog output (+/- 3V FS) and a USB communication port

The 5100 Series Hall effect portable gaussmeters incorporates the use of digital signal processing technology making it the world's first hand-held gaussmeter to have a digital signal processor (DSP) on board. F.W. Bell's exclusive Dynamic Probe Correction allows measurements from 0 to 30 kG with a basic accuracy of 1%. Built-in software eliminates the need for complex calibration procedures. User prompts on the custom formatted LCD allow fast, simple push button operation. **Mfg. part nos. 5170 and 5180** come equipped with a detachable transverse probe, zero gauss chamber, instruction manual, hard carrying case, and four AA batteries. Axial, ultra thin transverse and low-field probes are available as options.

KITS

Mfg. Part No.	Basic DC Accuracy	Frequency Bandwidth	Digits	Stock No.	Price Each
● 5170	2 %	DC-20 kHz	3 1/2	60K8441	1116.46
5180	1.1 %	DC-30 kHz	3 2/3	89J5968	1492.18

Mfg. Part No.	Description	Stock No.	Price Each
MODEL 5170 PROBES			
● HTH17-0604	4" Probe Length, 0.180" dia.	85J8888	411.76
● STH17-0404	4" Probe Length, 0.158" dia. (incl. w/5170)	89J4103	355.89
● SAH17-1904	4" Probe Length, 0.187" dia.	89J1899	430.29
MODEL 5180 PROBES			
● HTD18-0604	4" Probe Length, 0.180" dia.	85J8874	430.29
● STD18-0404	4" Probe Length, 0.158" dia.(incl. w/5180)	89J4065	358.95
● STD18-0402	2" Probe Length, 0.158" dia.	89J4064	430.29
● SAD18-1904	4" Probe Length, 0.187" dia.	89J1855	351.31
● SAD18-1902	2" Probe Length, 0.187" dia.	89J1854	358.95
MODEL 5170/5180 GAUSSMETER PROBES			
MOS51-3204	4" Probe Length, 0.285" dia.	85J8922	851.01

(135712)

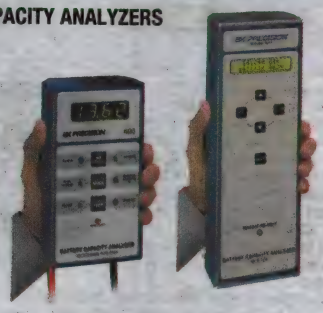
TENMA® AT NEWARK ELEMENT14

Affordable, reliable Test & Measurement equipment and accessories at newark.com/tenma

(212566)

BATTERY CAPACITY ANALYZERS

BK PRECISION



600 601

These battery capacity analyzers are ideal for testing lead acid batteries used in UPS devices, emergency lighting, sprinkler systems, communications equipment and alarm systems. All testers display stored charge capacity along with loaded and unloaded voltage. **Mfg. part no. 601** also displays batteries internal resistance.

SPECIFICATIONS	600	601
Battery Test Voltages	12	6, 12
Selectable Amp-Hours	7, 12, 24, 42, 65, 100	1-100 Amp-Hrs. in 1 Amp-Hr. Steps
Dimensions	6.3(H) x 3.14(W) x 1.6"(D)	9.5(H) x 3.14(W) x 1.6"(D)

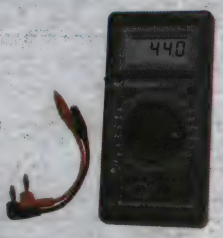
Mfg. Part No.	Description	Stock No.	Price Each
600	12V Lead-Acid Battery Capacity Analyzer	29C9349	329.00
601	6V and 12V Lead-Acid Battery Capacity Analyzer	84H9306	439.00

(68948)

875B 3½-DIGIT LCD LCR METER

BK PRECISION

- 8 Capacitance Ranges: 200pF to 20mF
- 7 Resistance Ranges: 2Ω to 20MΩ
- 7 Inductance Ranges: 200μH to 200H



Rotary switch allows easy function/range selection. Measure dissipation factor of capacitors and 1/Q of inductors. Low battery and overload indicator. Overload: fuse protected 250VAC, 100mA. Measurement rate: 2.5 per second, nominal. Includes test clips, 9V battery, spare fuse, instructions.

Mfg. Part No.	Description	Stock No.	Price Each
875B	LCR Meter	46F8205	225.00
ACCESSORIES			
TL LCR	5" Long Sheathed Banana to Alligator Clip	73H3775	10.00
TL-8	Tweezer Test Lead (Surface Mount)	96B6798	26.00

(5293)

40,000 COUNT DUAL DISPLAY HANDHELD LCR METERS

BK PRECISION

- 0.5% basic accuracy
- Dual LCD Display
- Two Selectable test frequencies of 120 Hz & 1 kHz (**878B**)
- Four Selectable test frequencies of 100 Hz, 120 Hz, 1 kHz & 10 kHz (**879B**)
- Auto Ranging
- LCD with bright backlight (**879B**)
- Mini USB interface
- 3 Year warranty

Mfg. part nos. 878B and **879B** perform quick, fully auto-ranging capacitance, resistance and inductance measurements. Components can be measured with selectable test frequencies in series or parallel modes as desired. The 40,000 count main LCD displays the measured component value, and the secondary 10,000 count display reads D or Q on **mfg. part no. 878B** and D, Q, phase angle and ESR measurements on **mfg. part no. 879B**.

Mfg. Part No.	Description	Stock No.	Price Each
878B	Dual-Display Handheld LCR Meters	71R5084	249.00
879B	Dual-Display Handheld LCR Meters	71R5085	299.00
ACCESSORIES			
TL8SM	SMD Tweezer Probe with Blade Style Socket	82T3538	35.00
BE800	120VAC Wall Adapter with output of 12VDC/150mA, Center +	13T8291	19.00
BE802	230VAC European Two Prong Wall Adapter with output of 12VDC/150mA, Center +	13T8292	19.00

(5294)

IN-CIRCUIT ESR TESTER

BK PRECISION

- Measures ESR with a range of 0.1 to 30 ohms
- Three color front panel chart shows ESR readings of Good, Fair, and Bad
- Measures DC Resistance with a range of 0.1 to 30 ohms
- Automatically calibrates internal signal
- 15mVp-p Output test voltage (will not turn on any solid-state devices)
- Includes a one-handed tweezers test probe
- Uses a standard 9VDC battery as power source

This in-circuit ESR & DC Resistance capacitor tester is specially designed to measure ESR (Equivalent Series Resistance) on capacitors in the range of 0.47uF to 2200uF, in or out of circuit. The ability to trouble shoot in-circuit saves time and makes the 881 a must for anyone that tests or trouble shoots printed circuit boards.

SPECIFICATIONS	
Open circuit probe voltage	15mV pp
Output test frequency	100 KHz sine wave
ESR range Ω	0.1 – 30 (25 segment LED bar scale) Beeps from 1 to 5 beeps depending on ESR of capacitor
DC Resistance range Ω	0.5 – 30 flashing the LED
Power	One 9V battery or an external AC adapter (9V DC 100mA 5.5mm x 2.1mm center pin+)
Power drain	10mA typical
Dimensions	1.5" x 3.8" x 5.7"

Mfg. Part No.	Description	Stock No.	Price Each
881	In-Circuit ESR & DC Resistance Capacitor Tester	78H0309	210.00

(209448)

11,000-COUNT DUAL-DISPLAY HANDHELD CAPACITANCE METERS

BK PRECISION

- 9 Automatic Ranges
- 4 xxx Digit, 11,000 Count, Dual LCD Display
- Auto Ranging
- Backlit Display
- Sort on preset tolerance of 1, 5, 10%
- USB PC Interface for Data Logging included
- AC Adapter Included (**830C**)
- Free Software available on B&K Precision Website
- 3 Year Warranty

The model **830C** and **890C** are handheld capacitance meters ideal for performing quick and precise measurements including measuring values, inspection, sorting capacitors and testing capacitors against standard tolerances.

Mfg. Part No.	Capacitance Measuring Range	Stock No.	Price Each
830C	1pF to 199.99mF	41T5663	289.00
890C	1pF to 50mF	41T5664	149.00
ACCESSORIES			
BE800	120VAC Wall Adapter with output of 12VDC/150mA, Center +	13T8291	19.00
BE802	230VAC European Two Prong Wall Adapter with output of 12VDC/150mA, Center +	13T8292	19.00
TL-8	Tweezer Test Lead (Surface Mount)	96B6798	26.00

(33279)

U1700 SERIES HAND-HELD CAPACITANCE/LCR METERS

NEW

KEYSIGHT TECHNOLOGIES

- Visible and audible tolerance mode for easy capacitor sorting
- Relative mode
- Hold and Min/Max/Average values recordings
- Dual display with backlight

Mfg. part no. U1701B features 11,000 counts resolution and compare mode with up to 25 sets of high/low limit settings. PC data logging is optional via IR-to-USB cable. Each unit includes certificate of calibration, alligator clip leads, 9V alkaline battery, and quick start guide. Three-year manufacturer's warranty.

Mfg. Part No.	Description	Stock No.	Price Each
U1701B	Handheld Capacitance Meter	55R2347	164.00
ACCESSORIES			
U1174A	Soft Carrying Case	78M8406	20.88
U5481B	IR to USB PC Connectivity Cable	06X2962	31.29

CONTINUED

U1700 SERIES HAND-HELD CAPACITANCE/LCR METERS (CONT.)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
U1782B	SMD Tweezer	07W8079	31.29
U1780A	Power Adapter and Cord	51P3615	36.50

(211847)

U1730C SERIES HANDHELD LCR METERS

KEYSIGHT TECHNOLOGIES

- 20,000 counts resolution
- 0.2% basic accuracy
- Wide LCR ranges with three to five selectable test frequencies (up to 100 kHz for **U1733C**)
- Auto identification (Ai) automatically determines and displays component type and measurements
- Detailed component analysis with DCR, ESR, Z, D, Q, and θ functions
- Battery life of 16 hours/AC-powered
- IR-to-USB connectivity for data logging to PC

U1730C Series handheld LCR meters allow you to measure at frequencies as high as 100 kHz—a capability typically found only in benchtop meters—providing more flexibility to test a wider range of components. With auto identification (Ai) the testing and measuring experience is easy; eliminating unnecessary trial and error time—with just a single push of a button. This unique feature automatically specifies L, C, or R with parallel and series mode, without the need to manually change buttons. The handheld LCR meters allow you to test various component types, including secondary components of Dissipation Factor (D), Quality Factor (Q), and Angle Indication of Impedance (θ). This new handheld series also includes other functions that result in a more detailed component analysis. For example, the built-in Equivalent Series Resistance (ESR) function helps you better understand the inherent resistance behavior typically found in capacitors across selected frequencies. DCR is a built-in DC resistance measurement that eliminates the use of a separate digital multimeter (DMM) for component test. Ideal for testing on the go, these LCR meters operate on a battery that lasts up to 16 hours.

Mfg. Part No.	Measurements	Test Frequencies	Back-light	Stock No.	Price Each
U1731C	Z/L/C/R/D/Q/θ/ESR	100Hz, 120Hz, 1kHz	No	47T6069	316.00
U1732C	Z/L/C/R/D/Q/θ/ESR	100Hz, 120Hz, 1kHz, 10kHz	Yes	47T6071	382.00
U1733C	Z/L/C/R/D/Q/θ/ESR/DCR	100Hz, 120Hz, 1kHz, 10kHz, 100kHz	Yes	47T6073	437.00

KITS

Each combo kit includes corresponding handheld LCR meter, **U5491A** soft carrying case, **U5481A** IR-to-USB cable, **U1780A** AC adapter and **U1782A** SMD tweezer.

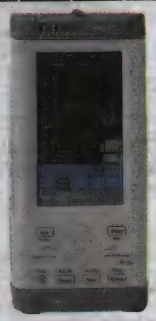
Mfg. Part No.	Description	Stock No.	Price Each
U1731P	U1731C Combo Kit	47T6070	461.00
U1732P	U1732C Combo Kit	47T6072	522.00
U1733P	U1733C Combo Kit	47T6074	574.00

(211848)

PSA SERIES II 1.3GHZ AND 2.7GHZ PORTABLE RF SPECTRUM ANALYZERS

NEW

Aim TT



- 1MHz to 1300MHz or 2700MHz frequency range
- Resolution bandwidths of 1MHz, 280kHz or 15kHz
- -96dBm typical noise floor at -20dBm reference level
- Measurement in dBm or dBuV, mV or uW
- Zero span mode with AM and FM audio demodulation
- Trace modes of normal, peak hold and trace average
- Live, View and Reference traces in contrasting colours
- Twin markers with readout of absolute & difference values
- Smart marker movement with selectable peak tracking
- Frequency presets and independent state storage
- Auto-find automatically sets sweep parameters for the highest signal found
- Unlimited storage for waveforms, set-ups and screens
- User assignable file names, file stamping from real-time clock
- USB interfaces for Flash drives and PC connection
- Comprehensive status and context sensitive help screens
- More than 8 hours continuous operation from a charge
- Smaller and lighter than other spectrum analyzers (weight only 0.56 kg)

Mfg. Part No.	Description	Stock No.	Price Each
PSA1302	1.3GHz Spectrum Analyser	63W2662	1395.00
PSA1302USC	1.3GHz Spectrum Analyser + SC Kit and U01	63W2663	1595.00
PSA2702	2.7GHz Spectrum Analyser	63W2665	1695.00
PSA2702USC	2.7GHz Spectrum Analyser + SC Kit and U01	63W2666	1850.00

ACCESSORIES

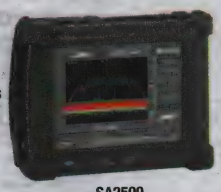
Mfg. Part No.	Description	Stock No.	Price Each 1-9
PSA U01	PSA Series 2 Features upgrade	63W2661	199.25
PSA-SC2	Soft transit case PSA 2	63W2664	80.00
PC-PSA-T	Leather Protective Cover for PSA-T Series	63W2660	90.00
SC-PSA-T	Soft Carry Case for PSA-T Series	63W2667	52.00

(211413)

H500 / SA2500 SPECTRUM ANALYZER

NEW

Tektronix



SA2500

- Revolutionary DPX™ Live RF spectrum display technology with DPX Spectrum Mask provides intuitive understanding of live RF signals using colors based on frequency of occurrence, processing up to 10,000 spectrums/sec with a 100% Probability of Intercept (POI) to capture pulsed signals, radar emissions, hopping signals, and any other intermittent signals with a minimum duration as brief as 125 us
- Benchtop spectrum analyzer performance in a ruggedized handheld battery-operated field unit offers better than 70 dB spurious free dynamic range (SFDR), guaranteed ≤-95 dBc/Hz at 10 kHz offset phase noise specifications from 10kHz to 6.2GHz
- Excellent sensitivity for detecting very low-level signals with -153 dBm DANL at 10 Hz RBW (equivalent to -163 dBm/Hz) such as RF bugs and unauthorized transmitters
- LAN interface for remote control and unattended monitoring stations for spectrum awareness
- Built-in classification capability for WLAN, GSM, W-CDMA, CDMA, ATSC signals makes quick and simple identification of legitimate signals
- Flexibility to edit, upgrade, and share signal databases and signal classification database using CSV file formats
- Ability to export I/Q data into CSV, MATLAB®, and IQT format for additional post-analysis
- Rapid targeting of signals with field-proven signal hunting, mapping, and documentation tools
- Hunt outdoor signals with built-in GPS receiver by plotting measurements directly into GPS geo-referenced maps such as Pitney Bowes Map info, Google™ Earth, Microsoft® MapPoint®, Bitmap, and many others
- Improved spectrum awareness with high-accuracy measurement synchronization and time stamping
- Hunt in-building signals with a single-touch Tap-and-Walk-and-Tap interface
- Backlit display, viewable in direct sunlight, and extended battery performance with hot-swappable dual batteries
- Rugged design per MIL-PRF-28800F

The **H500** and **SA2500** will quickly scan the RF environment, classify the known signals, and help you locate the unknown signals with their field-proven signal hunting tools. Featuring real-time DPX™ Live RF spectrum display technology, the **H500** and **SA2500** offer practical solutions for discovering transient events that slip past conventional spectrum analyzers. With field-ready, rugged hardware featuring outstanding displayed average noise level (DANL), spurious free dynamic range (SFDR), phase noise, and easy LAN networking capability in a handheld unit, the **H500** and **SA2500** are a great choice for general-purpose spectrum measurements and ideal signal-hunting tools.

Mfg. Part No.	Description	Stock No.	Price Each
H500	Real-time spectrum analyzer with DPX™ Live RF spectrum display of 125 us minimum signal duration for 100% Probability of Intercept (POI) and signal classification capability	06X9565	43400.00
SA2500	Real-time spectrum analyzer with DPX™ Live RF spectrum display of 500 us minimum signal duration for 100% Probability of Intercept (POI)	04X9806	24600.00

UPGRADES

Mfg. Part No.	Description	Stock No.	Price Each
SA2500F EP1	Spectrum Processing Field Upgrade	06X9567	5690.00

(211459)

ONETOUCH AT NETWORK ASSISTANT

FLUKE networks

- Combined copper, fiber and Wi-Fi troubleshooting resolves a broad range of problems with one tool
- Automated testing with pass/fail analysis speeds identification of the most common problems in about a minute
- Standardized network troubleshooting and performance validation empowers technicians of various skill levels to solve more problems with confidence
- A comprehensive client view of performance isolates the problem root cause starting from the physical layer, through the network and to server-hosted applications
- Wired and Wi-Fi discovery and analysis provides visibility into connected devices, key device properties and problems
- End-to-end path performance measurement to a peer or a reflector validates and documents link readiness and SLA compliance
- Inline VoIP analysis simplifies troubleshooting of desktop VoIP problems in real-time without TAPs or switch mirror ports
- Wired and Wi-Fi packet capture streamlines collaboration and escalation of the most complex issues
- Versiv™ test platform expands testing capabilities through the addition of new modules as testing needs evolve

The **OneTouch™ AT** Network Assistant is an all-in-one Gigabit Ethernet troubleshooter for copper, fiber optic and Wi-Fi networks. It provides a client view of network performance so you can resolve problems fast and complete deployment projects on time.

Mfg. Part No.	Description	Stock No.	Price Each
1T-1000	OneTouch AT Network Assistant with the Copper/Fiber LAN option	07W3527	4995.00
1T-1500	OneTouch AT Network Assistant with Copper/Fiber LAN, Capture and Advanced Tests options	86W7301	6995.00
1T-2000	OneTouch AT Network Assistant with Copper/Fiber LAN and Wi-Fi options	24W7952	7995.00
1T-3000	OneTouch AT Network Assistant with Copper/Fiber LAN, Wi-Fi, Capture and Advanced Tests options	24W7955	9995.00

GOLD SUPPORT

1T-1000/GLD	OneTouch AT 1T-1000, plus 1 year of Gold support	24W7951	5594.00
1T-1500/GLD	OneTouch AT 1T-1500, plus 1 year of Gold support	86W7304	7834.00
1T-2000/GLD	OneTouch AT 1T-2000, plus 1 year of Gold support	24W7954	8955.00
1T-3000/GLD	OneTouch AT 1T-3000, plus 1 year of Gold support	24W7962	11194.00

(209949)

AIRCHECK WI-FI TESTER AND ACCESSORIES

FLUKE networks

Wi-Fi Troubleshooting Made Simple

- Dedicated, hand-held 802.11 a/b/g/n tester with instant-on technology
- Fully supports 2.4 and 5.0GHz frequency bands
- Rapidly performs Wi-Fi discovery to fully access current wireless security settings and network availability
- Intuitive interface allows quick checking of WiFi network usage by channel — identifies if it's 802.11 traffic or non-WiFi interference
- Robust and in-depth WLAN connection tests — from probing to DHCP request to ping
- Quickly identifies and locates access points, whether authorized or rogue
- Fully documents troubleshooting session, creates professional-quality reports
- Enables fast trouble ticket resolution or problem escalation to quickly solve frontline WiFi problems

Mfg. part no. AIRCHECK AirCheck™ Wi-Fi tester comes complete with USB cable, soft storage case, CD with AirCheck™ Manager software, Getting Started guide, and user manual.

Mfg. Part No.	Description	Stock No.	Price Each
AIRCHECK	AirCheck™ Wi-Fi Tester	65R5134	1995.00
ACCESSORIES			
EXTANT-RPSMA	External Uni-Directional Antenna, RSMA connector	65R5135	252.00
WBP-LION	AirCheck™ Lithium Ion Replacement Battery	65R5137	282.00
POE-DETECTOR	Power Over Ethernet Detector, 802.3AT	65R5136	82.00
MS-AUTO-CHG	Auto Charger	58M9397	50.00

(166578)

CERTIFIBER PRO OPTICAL LOSS TEST SET

NEW FLUKE networks

- Versiv enables users to accomplish more than ever with a cable tester, accelerating every step of the testing process
- ProjX management system eases tasks from initial set-up of a job to system acceptance. It eliminates redundant steps, and ensures that all tests are completed correctly the first time, and every time
- Taptive user interface puts advanced data analysis and easy set-up and operation at the fingertips of technicians of all skill levels
- LinkWare management software provides unmatched analysis of test results and professional test reports
- Three-second Autotest optical loss measurement of two fibers at two wavelengths with distance measurement and optical loss budget calculation
- Provides automatic Pass/Fail analysis to industry standards or custom test limits
- Identifies incorrect test procedures resulting in negative loss readings
- Onboard (USB) inspection camera documents images of fiber optic end-faces
- Interchangeable power meter adapters available for all typical connector types (SC, ST, LC and FC) to enable the most accurate 1-jumper reference method
- Built-in visual fault locator for basic troubleshooting and polarity determination
- Dual wavelength measurement capability on a single fiber allows the tester to be used in applications that require only one fiber link
- Compliant with TIA-526-14-B and IEC 61280-4-1 Encircled Flux requirements with no additional equipment or procedures

The **CertiFiber Pro** Optical Loss Test Set (OLTS) helps cabling professionals accomplish more than ever. It's all about accurate, error-free certification, making jobs easier to manage and certifying fiber optic cabling to industry standards, faster. **CertiFiber Pro** OLTS complies with all applicable cabling standards, which call out the new Encircled Flux launch condition requirements for optical sources. It's not just for the expert technicians and Project Managers. Individuals of various skill levels can improve the set-up, operation, test reporting, and simultaneously manage diverse projects.

Mfg. Part No.	Description	Stock No.	Price Each
CFP-100-M 120	CertiFiber Pro Multimode OLTS Kit	96W1991	7950.00
CFP-100-S 120	CertiFiber Pro Singlemode OLTS Kit (Configured for testing LC Style)	96W1993	9950.00
CFP-100-Q 120	CertiFiber Pro Quad OLTS Kit (Configured for testing LC Style)	96W1992	12500.00
OFP-CFP-MI 120	OptiFiber Pro and CertiFiber Pro Multimode Kit with Inspection	96W1994	17950.00
OFP-CFP-SI 120	OptiFiber Pro and CertiFiber Pro Singlemode Kit with Inspection	96W1996	20750.00
OFP-CFP-QI 120	OptiFiber Pro and CertiFiber Pro Quad (Multimode and Singlemode) Kit with Inspection	96W1995	27750.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
CFP-MM-ADD	CertiFiber Pro multimode modules add on kit	96W1998	6000.00
CFP-SM-ADD	CertiFiber Pro singlemode modules add on kit	96W2001	8000.00
CFP-Q-ADD	Certifiber Pro Quad Add On Kit (modules and SC/LC TRCs)	96W1999	11250.00
CFP-Q-ADD-R	Certifiber Pro Quad Add On Kit with Remote (modules and SC/LC TRCs)	96W2000	11750.00
OFP-Q-ADD	Optifiber Pro Quad Add On Kit (module and SC/LC launch cords)	96W2002	14800.00

(211403)

DTX SERIES CableAnalyzer™ AND ACCESSORIES

FLUKE networks

- Exceeds Cat 5e/6/7 requirements
- Fast 9-second Cat 6 Autotest
- Fast diagnostics pinpoint faults and suggest fixes
- 900MHz capability for 10 Gig Ethernet, Class F, CATV
- Resident fiber modules allow one-button switching from copper to fiber
- Fast, reliable, and rugged
- Color display
- 12-hour batttery life
- Reduces certification costs by as much as 33% a year
- All models are upgradable to the top model

DTX series CableAnalyzers™ significantly reduces total time to certify by improving every aspect of testing. Three times faster and more accurate than other testers.

DTX SERIES MAINFRAMES AND PACKAGES

Mfg. part no. DTX-1800 CableAnalyzer™ includes DTX-1800 main unit and smart remote, LinkWare PC software, 128MB MMC card, Cat 6/Class E permanent link and channel adapters (2), Headsets (2), AC chargers (2), USB interface cable (mini-B), serial RS-232 cable (DB9 to IEEE 1394), user's manual and carrying case. **Mfg. part no. DTX-1200** CableAnalyzer™ includes DTX-1200 main unit and smart remote, LinkWare PC software, Cat 6/Class E permanent link adapters (2) Cat 6/Class E channel adapters (2), headsets for talk (2), AC chargers (2), carrying case, USB interface cable (mini-B), and a user manual.

Mfg. Part No.	Description	Stock No.	Price Each
DTX-1800 120	DTX-1800 CableAnalyzer	36J9968	10950.00
DTX-1800 120/GLD	DTX-1800 CableAnalyzer with 1 Yr of Gold Support	24W4892	11887.00
DTX-1200 120	DTX-1200 CableAnalyzer	62K4096	8730.00
KITS			
DTX-1800-MS 120	DTX-1800 with Multimode and Singlemode Fiber Modules	85K0633	23280.00
DTX-1800-MS120/GLD	DTX-1800 with Multimode and Singlemode Fiber Modules and 1 Yr of Gold Support	24W4894	25580.00
DTX-1800-M 120/GLD	DTX-1800 with Multimode Fiber Modules and 1 Yr of Gold Support	24W4893	16770.00
DTX-1800MS0120/GLD	DTX 1800 Copper/Fiber/OTDR Kit and 1 Yr of Gold Support	24W4895	36940.00
DTX-1800-E	DTX-1800 and Set of two DTX Encircled Flux Multimode Fiber Modules	72W1313	16050.00
DTX-1800-E 120/GLD	DTX-1800 and Set of two DTX Encircled Flux Multimode Fiber Modules and 1 Yr of Gold Support	72W1314	17610.00

FIBER MODULES

Mfg. Part No.	Description	Stock No.	Price Each
DTX-SFM2	Set of 2 DTX Gigabit Multimode Fiber Modules--850nm VCSEL and 1310nm Laser Sources	18M6085	7735.00

DTX SERIES NETWORK SERVICE MODULE

Mfg. part no. DTX-NSM network service module certifies cabling, verifies network service availability and link connectivity, and documents findings in one LinkWare report. Documentation provides clear evidence that the job was done right. Module plugs into the back of the **DTX series** CableAnalyzer main unit; *order separately above.*

Mfg. Part No.	Description	Stock No.	Price Each
DTX-NSM	Network Service Module	76K2751	1385.00

DTX SERIES OTDR MODULES

Mfg. Part No.	Description	Stock No.	Price Each
DTX-QUAD-OTDR 120	DTX 1800 Compact OTDR Kit	50M3542	12360.00

DTX SERIES ACCESSORIES

Mfg. part no. DTX-10GKIT enables testing and certification of twisted pair cabling for 10 Gigabit Ethernet deployments – whether it is an existing Cat 6 or newly installed Augmented Cat 6 cabling system. Includes two **mfg. part no. DTX-AXTLK1** communication modules, AxTalk Analyzer™ software, **mfg. part nos. DTX-PLA002S** and **DTX-CHA01AS**, and a total of 8 terminators (2 sets of **mfg. part no. DTX-AXTERM**).

Mfg. Part No.	Description	Stock No.	Price Each
DTX-10GKIT	DTX-1800 Alien Crosstalk Analyzer Kit	18M6086	3150.00
DTX-CHA002S	Set of two Cat 6A/Class E Channel Adapters	60R4045	345.00
DTX-COAX	DTX Series Coax Cable Adapter Kit	73J6920	810.00
DTX-TERA	TERA Adapter Kit	73J6927	1505.00
DTX-CHA011	TERA Channel Adapter	73J6918	295.00
DTX-PLA011	TERA Permanent Link Adapter	73J6926	580.00

(79290)

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(212567)

CABLE TESTERS (FIBER)

VISIFAULT™ VISUAL FAULT LOCATOR

FLUKE networks

- Accelerates end-to-end fiber continuity checks
- Speeds fiber tracing and identification
- Simplifies fiber polarity verification
- Aids in location of fiber faults including tight bends, breaks and bad connectors
- Features continuous and flashing modes
- Connects to 2.5mm standard and 1.25mm SFF connectors
- Over 80 hours of battery life with two AA batteries

VisiFault™ Visual Fault Locator (VFL) traces optical fibers, verifies continuity and fiber polarity, and helps find breaks in cables, connectors and splices. The bright red laser light is easily visible from a distance. Continuous and flashing output modes makes identification easier. Ruggedly constructed with an energy-absorbing, impact-resistant case to ensure years of trouble-free use. A handy lanyard attachment and a carrying case make it easy to attach the VisiFault™ to your belt where it is readily available.

Mfg. Part No.	Description	Stock No.	Price Each
VISIFAULT	Visual Fault Locator	56J8969	341.00
NF380	1.25 VisiFault Adapter	56J8967	100.00

(83018)

CableIQ™ QUALIFICATION TESTER, KITS AND ACCESSORIES

FLUKE networks

- Qualifies — sees if existing cabling has the bandwidth to support voice, 10/100, VoIP or gigabit Ethernet
- Troubleshoots — shows why existing cabling cannot support the network's bandwidth requirement (e.g. crosstalk at 11 meters)
- Discovers — detects what's at the end of any cable and displays device configuration (Speed/Duplex/Pairing)
- Identifies unused switch ports that can be reallocated
- Graphically maps wiring configuration and shows distance to faults with intelligent wiremap
- Tests all copper cabling media: twisted-pair, coax, and audio cable

Mfg. part no. CIQ-100 CableIQ™ qualification tester is designed to meet the emerging needs of network technicians who need to upgrade to higher network speeds and troubleshoot connectivity problems. It allows network technicians to perform a series of troubleshooting steps to better isolate cabling from network problems and identifies whether insufficient cabling bandwidth is the cause of the problem. Supports UTP, STP, FTP, SSTP, RG6, RG59, audio and security type cable. Supported tests include wiremap, length, cable signal performance, digital and analog toner, Ethernet port detection and ID, analog phone and video signal detection, continuity, and cable fault finding. Measures crosstalk and impedance and compares against appropriate limits based on qualification test selected. Tester stores up to 250 qualification test results.

CableIQ™ TESTER AND KITS

Mfg. part no. CIQ-100 CableIQ™ qualification tester comes complete with remote adapter, CableIQ™ Reporter software CD, two RJ-45-RJ45 patch cords, USB cable, coax "F" push-on adapter, CD and user guides, softside carrying case and four AA batteries.

Mfg. Part No.	Description	Stock No.	Price Each
CIQ-100	CableIQ Qualification Tester	73J6912	1350.00

Mfg. part no. CIQ-Kit advanced IT kit includes CableIQ™ qualification tester with remote adapter, CableIQ™ Reporter software CD, Intellitone 200 digital probe, 6 remote office ID's, (2) RJ-45-RJ45 patch cords, USB cable, coax "F" push-on adapter, 75-ohm coax patch cord, RJ45/11 universal coupler, CD and user guides, test accessory soft pouch, hardside carrying case, and (4) AA batteries.

CIQ-KIT	CableIQ Advanced IT Kit	73J6909	1895.00

Mfg. part no. CIQ-KRQ residential qualifier kit includes CableIQ™ qualification tester, (2) RJ-45 patch cords, (2) RJ11 patch cords, USB and coax cable, bare wire and speaker wire adapters, coax BNC and RCA adapters, pack of 50 "Qualified" labels, CD and user guides, softside carrying case, and (4) AA batteries.

CIQ-KRQ	CableIQ Residential Qualifier Kit	44K0059	1360.00

Mfg. part no. CIQ-SVC service kit includes CableIQ qualification tester with remote adapter, LinkRunner Network Multimeter, IntelliTone 200 Probe, six remote office IDs, rugged carrying case and all needed batteries.

CIQ-SVC	CableIQ Service Kit	17M9683	2310.00

CableIQ™ ACCESSORIES

Mfg. part no. CIQ-Coax CableIQ™ coax adapter kit includes F, BNC, and RCA connectors.

CIQ-IDK24	CableIQ Remote Identifier Kit, Numbers 2-4	73J6907	275.00
CIQ-IDK57	CableIQ Remote Identifier Kit, Numbers 5-7	73J6908	275.00
CIQ-COAX	CableIQ Coax Adapter Kit	73J6906	25.00
CIQ-SPKR	CableIQ Speaker Wire Adapter	73J6911	65.00
CIQ-RJA	CableIQ RJ45/11 Modular Adapter	73J6910	50.00
CIQ-CIT	CableIQ Hardside Carrying Case	73J6905	90.00

(83782)

SIMPLIFIBER PRO OPTICAL POWER METER AND FIBER TEST KITS

FLUKE networks

FTK1450

- Dual-wavelength testing – complete testing in half the time
- Additional wavelengths to include 1490 and 1625 – calibrated to extend from typical enterprise wavelengths for broader applications
- Min/Max – automated precision tracking of intermittent power fluctuations
- FindFiber – quick end-to-end cable routing identification
- CheckActive – audible tone and display icon alerts you to a live wire
- Saves 1000 results – large internal memory enables continuous testing and recording; fully compatible with our popular **LinkWare™** Cable Test Management Software
- Quickly locate cable fault, polarity, and connector problems with **VisiFault™ VFL***
- Inspect end-faces at 200x magnification with the **FT120 FiberViewer** or **FT500 FiberInspector Mini***

With new advanced capabilities that make testing simple, SimpliFiber® Pro Optical Power Meter and Fiber Test Kits are the best "go-to" kits for anyone involved in first-line optical fiber cabling installation and verification. Whether you are a fiber technician or contractor, our expertly configured kits contain all the tools necessary to quickly measure loss and power levels, locate faults and polarity issues, and inspect and clean connector end-faces. Industry-leading features such as single-port dual-wavelength testing and auto-wavelength detection, combined with time-saving capabilities such as CheckActive™, FindFiber™, and Min/Max make SimpliFiber Pro the best fiber test kit on the market.

KIT CONTENTS AT A GLANCE

Mfg. Part No.	FTK2000	FTK2100	FTK1000	FTK1300	FTK1350	FTK1450
SimpliFiber Pro®	●	●	●	●	●	●
SimpliFiber Pro® 850/1300 Multimode Source			●	●	●	●
SimpliFiber Pro® 1310/1550 Singlemode Source	●	●				●
SimpliFiber Pro® 1490/1625 Singlemode Source VisiFault™ Visual Fault Locator		●		●	●	●
FT120 Fiber Viewer Optical Microscope				●		
FT500 FiberInspector Mini					●	●
FindFiber Remote ID Sources				●	●	●
NFC-Kit-Box fiber optic cleaning kit						●
Carrying Case for protection and easy transport	●	●	●	●	●	●

POWER METERS

Mfg. Part No.	Description	Stock No.	Price Each
SFPOWERMETER	SimpliFiber Pro Power Meter w/ SC Adapter, Carrying Pouch	45P8143	1200.00

LASER LIGHT SOURCES

SFSINGLEMODESOURCE	SimpliFiber Pro Singlemode Source 1310/1500 w/ SC Port, FindFiber Source Capability	45P8144	2205.00
SFSINGLEMODE2	SimpliFiber Pro Singlemode Source 1490/1625 w/ SC Port, FindFiber Source Capability	20T0415	2135.00

FIBER TEST KITS

FTK2000	Singlemode Fiber Verification Kit	45P6666	3115.00
FTK2100	Singlemode Fiber Verification Kit	20T0414	4770.00
FTK1000	Multimode Fiber Verification Kit	45P6662	2070.00
FTK1300	Multimode Fiber Verification Kit w/ FT120 FiberViewer	45P6663	3325.00
FTK1350	Multimode Fiber Verification Kit w/ FT500 FiberInspector Mini	45P6664	4825.00
FTK1450	Complete Fiber Verification Kit w/ FT500 FiberInspector Mini	45P6665	7325.00

ACCESSORIES

FINDFIBER	FindFiber Remote ID source w/ SC Port, Carrying Pouch	45P6657	195.00
NFK1-SMPLX-LC	62.5 uM Simplex Test Reference Cord Set (SC/LC, LC/LC), 1m; Mandrel	45P7931	115.00
NFK1-SMPLX-SC	62.5 uM Simplex Test Reference Cord Set (SC/SC), 1m; mandrel	45P7932	115.00
NFK1-SMPLX-ST	62.5 uM Simplex Test Reference Cord Set (SC/ST, ST/ST), 1m; Mandrel	45P7933	115.00
NFK2-SMPLX-LC	50 uM Simplex Test Reference Cord Set (SC/LC, LC/LC), 1m; Mandrel	45P7934	115.00
NFK2-SMPLX-SC	50 uM siSimplex Test Reference Cord Set (SC/SC), 1m; Mandrel	45P7935	115.00
NFK2-SMPLX-ST	50 uM Simplex Test Reference Cord Set (SC/ST, ST/ST), 1m; Mandrel	45P7936	115.00
NFK3-SMPLX-LC	Singlemode Simplex Test Reference Cord Set (SC/LC, LC/LC), 1m	45P7937	115.00
NFK3-SMPLX-SC	Singlemode Simplex Test Reference Cord Set (SC/SC), 1m	45P7938	115.00
NFK3-SMPLX-ST	Singlemode Simplex Test Reference Cord Set (SC/ST, ST/ST), 1m	45P7939	115.00

CONTINUED

SIMPLIFIBER PRO OPTICAL POWER METER AND FIBER TEST KITS (CONT.)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
NFA-SC-SINGLE	SC Interchangeable Connector Adapter (1)	45P7929	105.00
NFA-LC-SINGLE	ST Interchangeable Connector Adapter (1)	45P7928	105.00
NFA-ST-SINGLE	LC Interchangeable Connector Adapter (1)	45P7930	105.00
NF-MANDREL-625	Multimode Fiber Mandrel for 62.5/125 µm Fiber with 3 mm Jacket (Gray)	53H7347	10.00
NF-MANDREL-50	Multimode Fiber Mandrel for 50/125 µm Fiber with 3 mm Jacket (Red)	53H7346	10.00

*Not available in all kit configurations
(142261)

OPTIFIBER® PRO OTDR

FLUKE networks

- Accelerate fiber certification with trace times as short as two seconds in Quick Test mode
- Maximize efficiency with a smartphone user interface that allows anyone to perform expert fiber troubleshooting and certification
- Quickly test datacenter fiber with pre-programmed settings
- Troubleshoot datacenter fiber links with short patch cables and many connectors
- Easily characterize all connectors, splices and areas of high loss with graphical EventMap™ view
- Increase return on investment by enabling OTDR project sharing among users and different jobs
- Reduce network downtime by quickly and precisely identifying faults on all fiber types
- Facilitate results reporting and management with integrated LinkWare™ software to generate detailed and standards compliant reports

OFP-100-S

As enterprises consume more storage resources and adopt higher bandwidth (40G, 100G) datacenter architectures, the resilience of the cabling infrastructure becomes highly dependent upon maintenance tools to ensure fiber reliability. **OptiFiber Pro** is the industry's first purpose-built OTDR that meets the unique challenges of an enterprise fiber infrastructure. With its simple smartphone user interface and powerful feature set, the **OptiFiber Pro** turns anyone into an efficient and expert premise fiber troubleshooter or installer.

Mfg. Part No.	Description	Stock No.	Price Each
OFP-100-M	OptiFiber Pro Multimode OTDR Kit	87T3471	9750.00
OFP-100-S	OptiFiber Pro Singlemode OTDR Kit	87T3479	10750.00
OFP-100-Q	OptiFiber Pro Quad OTDR Kit	87T3475	14976.00
OFP-100-QI	OptiFiber Pro Quad OTDR Kit with Inspection Kit	87T3477	17576.00
OFPQI-MFP	Data Center Fiber (MM/SM) Troubleshooting Kit	44W5162	26952.00
OFPMI-MFP	Data Center Fiber (MM) Troubleshooting Kit	44W5160	21914.00

(74094)

FIBER QUICKMAP™ ONE-BUTTON MULTIMODE FIBER TROUBLESHOOTER

FLUKE networks

- One-button testing – can be used straight out of the box with no user-setup required
- Six-second test time, eliminating blind troubleshooting that can last hours
- Locate multiple incidents in the channel to provide full visibility of any potentially problematic links and connections
- Locate high loss incidents or breaks, the most common causes of multimode fiber failure
- Locate and measure high reflective incidents, which cause poor network performance with bit error rates
- Various kit configurations include additional diagnostics tools such as power meters, sources, and fiber inspection microscopes to facilitate Fiber Best Practices and to boost the troubleshooting capability of technicians

Fluke Networks' **Fiber QuickMap™** is an enterprise fiber troubleshooter that quickly and efficiently locates connections and breaks in multimode fiber. By instantly providing distances to failures such as high loss and high reflectance incidents, **Fiber QuickMap™** is the must-have troubleshooter for any technician who works with fiber.

Mfg. Part No.	Description	Stock No.	Price Each
FQM-MAIN	Fiber QuickMap Enterprise Fiber Troubleshooter w/ Carrying Pouch	39T1028	1499.00

KITS

Mfg. Part No.	Description	Stock No.	Price Each
FQM-KIT	Fibre QuickMap Mainframe, Interchangeable LC Adapter	39T1027	1899.00
FTS900	Fibre QuickMap, SC/ LC Hybrid Test Reference Cords, VisiFault VFL	39T1031	2149.00
FTS1000	Fibre QuickMap, SC/SC & SC/LC Test Reference Cords, SimpliFiber Pro Power Meter	39T1029	3749.00
FTS1100	Fibre QuickMap, SC/SC & SC/LC Cord, SimpliFiber Pro Power Meter, Mini Video Microscope	39T1030	5099.00

(196353)

DSX-5000 CABLEANALYZER

FLUKE networks

- Versiv enables users to accomplish more than ever with a cable tester, by accelerating every step of the testing process
- ProjX management system eases tasks from initial set-up of a job to system acceptance. It eliminates redundant steps, and ensures that all tests are completed correctly the first time, and every time.
- Taptive user interface puts advanced data analysis and easy set-up and operation at the fingertips of of technicians of all skill levels.
- LinkWare management software provides unmatched analysis of test results and professional test reports
- The **DSX** reduces the time required to fix cabling faults with Dedicated Diagnostics, a simple test that locates the problem
- Ten second Cat 6A test time contributes to the fastest way to gain certification
- Graphically displays the source of failures including crosstalk and distance to shield faults for faster troubleshooting
- Manage up to 12,000 test results with full graphics
- Capacitive touchscreen allows quick tester setup with easily selectable cable types, standards and testing parameters
- 1 billion links reported on LinkWare management software

The **DSX CableAnalyzer** copper test solution enables testing and certification of twisted pair cabling for up to 10 Gigabit Ethernet deployments and will handle any cabling system whether it is a Cat 5e, 6, 6A or Class FA. Certifying a cable is one part of a process that starts with system design and ends with system acceptance. The faster that process goes, the more profitable you'll be. Unfortunately, there are a lot of things that slow the process down - setting up the tester incorrectly, testing to the wrong limits, waiting for skilled technicians to analyze and troubleshoot failures, misinterpretation of results, and producing test reports that customers can not understand. As part of the Versiv cabling certification product family, the **DSX CableAnalyzer** provides accurate, error-free certification. In the installation business there are multiple teams, varying media types and multiple testing requirements. The difference between profitability is just a few percentage points. The **DSX** certifies copper cabling, complies with all standards including Level V accuracy, making jobs easier to manage, and getting to system acceptance faster. It's not just for the expert technicians and Project Managers. Individuals of various skill levels can improve the set-up, operation, test reporting, and simultaneously manage diverse projects.

Mfg. Part No.	Description	Stock No.	Price Each
DSX-5000 120	DSX-5000 CableAnalyzer	96W1924	10950.00
DSX-5000QI 120	DSX-5000 with OLTS Quad and Fiber Inspection	96W1928	23950.00
DSX-5000QOI 120	DSX-5000 with OLTS Quad, OTDR Quad and Fiber Inspection	96W1930	36950.00
DSX-5000MI 120	DSX-5000 with OLTS Multimode and Fiber Inspection	96W1926	18000.00
DSX-5000 120/GLD	DSX-5000 CableAnalyzer with 1 year Gold Support	96W1925	11850.00
DSX-5000QI 120/GLD	DSX-5000 with OLTS Quad and Fiber Inspection with 1 year Gold Support	96W1929	25950.00
DSX-5000QOI 120/GLD	DSX-5000 with OLTS Quad, OTDR Quad and Fiber Inspection with 1 year Gold Support	96W1931	40000.00
DSX-5000MI 120/GLD	DSX-5000 with OLTS Multimode and Fiber Inspection with 1 year Gold Support	96W1927	19500.00

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MICROMAPPER™

FLUKE networks

- Tests twisted pair cable for open circuits, shorts, crossed pairs, reversed pairs and split pairs
- Easy-to-read fault display
- Tone generator for use with IntelliTone™ Probe
- Shield integrity testing
- Remote unit enables 1-person testing of installed cable
- Small remote unit slides into master unit for convenient and safe storage
- Automatic Sleep Mode and power switch decreases power consumption
- Low-battery LED
- 1-year manufacturer's warranty

MicroMapper™ is a compact, handheld cable tester and toner designed to allow network professionals to quickly and easily verify the integrity of an Ethernet twisted-pair cabling installation. **Mfg. part no. MT-8200-49A** includes MicroMapper™, MicroMapper™ remote, patch cord, carrying case, 6V battery and user guide.

Mfg. Part No.	Description	Stock No.	Price Each
MT-8200-49A	MicroMapper	92H6881	115.00

(73615)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

MICROSCANNER2 CABLE VERIFIER

FLUKE networks

- Length meter shows distance to termination, open or short
- PoE detection rules out insufficient power
- Detail mode gives additional test status information
- Intuitive icons show what's at the end of any cable
- Modular port accepts RJ45 and RJ11 plugs
- Coax connector for video and audio testing

MS2-KIT

MS2-100

MicroScanner2 displays all key test results -- wiremap, pair lengths, distance to fault, cable ID and far-end devices -- on one screen. Both the main unit and the far-end identifiers can be used to test telephone jacks, Ethernet jacks, and CATV outlets right out of the box. Built-in Intellitone digital and analog toning to precisely locate virtually any wire pair. **Mfg. part no. MS2-KIT** Microscanner2 kit includes: Cable Verifier, remote identifiers #2-7, Intellitone Pro 200 probe, shielded twisted pair RJ45 patch cord, RJ11 patch cord, clip-set RJ45 to8 alligator clip bare wire adapter, F coax push-on patch cord, accessory soft pouch, batteries and operator guides, all packaged in a deluxe carry case.

Mfg. Part No.	Description	Stock No.	Price Each
MS2-100	Microscanner2 Cable Verifier	47M2208	499.00
MS2-KIT	Microscanner2 Cable Verifier Kit	47M2205	885.00

(100939)

INTELLITONE™ PRO KITS WITH TONER AND PROBE

FLUKE networks

- InteliTone digital processing eliminates noise and false signals
- New SmartTone™ analog toning precisely isolates individual wire pairs
- Locates cables safely and effectively on active networks
- Verifies twisted-pair installation with visual end-to-end continuity test
- Identifies, diagnoses, and troubleshoots datacom/telecom services

INTELLITONE™ Pro 200 also features:

- Identifies and diagnoses 10/100/1Gb Ethernet link connectivity with NIC/Hub indication
- Identifies and diagnoses POTS with Line 2 service and polarity
- Validates twisted pair installation with Cablemap capability, which identifies common cable miswires

IntelliTone™ Pro's breakthrough digital and analog toning finds cables other toners/probes can't. **Mfg. part no. MT-8200-50A** IntelliTone Pro 100 toner and probe kit includes: toner and probe, coax F connector adapter, RJ-11 and RJ-45 patch cable, test leads with alligator clips, lanyards, owner's CD, quick-start guide and two 9V batteries. **Mfg. part no. MT-8200-60A** IntelliTone Pro 200 toner and probe kit includes: toner and probe, coax F connector adapter, two RJ-11 and two RJ-45 patch cable, test leads with alligator clips, lanyards, owner's CD, quick-start guide and two 9V batteries.

Mfg. Part No.	Description	Stock No.	Price Each
MT-8200-50A	IntelliTone Pro 100 Kit with Toner and Probe	92H6882	165.00
MT-8200-60A	IntelliTone Pro 200 Kit with Toner and Probe	92H6885	225.00
ACCESSORIES			
MT-8202-05	IntelliTone Pro Carrying Case	92H6889	25.00
MT-8203-20	IntelliTone Pro Test Leads with Bed of Nails	92H6894	25.00
MT-8203-22	IntelliTone Pro Test Leads with Alligator Clips	92H6895	15.00

(79293)

POCKET TONER®

FLUKE networks

- Low voltage protection for both the main body and detachable toner unit
- Dual audible indicators
- Bi-gender adaptable toner section
- Removable push-on connector
- Removable Speed 81™ connector
- Lightweight, durable anodized aluminum
- Auto shut off
- Replaceable parts
- Uses one AAA battery
- One-year warranty

PTNX1

PTNX2

PTNX8

Pocket Toner® NX1 is ideal for identifying and testing low voltage, singular coax cables for continuity, opens and shorts. Low voltage protection and verification up to 52V. **Pocket Toner® NX2** offers all the features of the **NX1** plus more. The **PTNX2** tests VDV cables for continuity, AC and DC voltage (low voltage protection and verification up to 52V), opens, shorts, 50-75Ω termination and polarity with the optional Dial Tone Detective™ adapter. The **Pocket Toner® NX2** easily confirms if there is AC or DC voltage, an open circuit on the line, if a short exists or if continuity is achieved. **Pocket Toner® NX2's** key feature is the ability to know if the cable being tested is connected to any device with a voltage output of up to 52V. **Pocket Toner® NX8** advanced and versatile **Pocket Toner** tool tests VDV cables 8 times faster. It has all the features of the **NX1** and **NX2** including the ability to test eight outlets at once. The eight segment LED display shows if a short exists, if there is an open circuit, AC or DC voltage (up to 52V), simple, direct continuity or which of the eight ID caps matches the line being tested.

➤CONTINUED➤

POCKET TONER® (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
PTNX1	Includes NX1 unit, toner, F-type (M-push, Speed 81™) adapters and 1-AAA battery	48T6967	34.00
PTNX2	Includes NX2 unit, toner, F-type (M-push, Speed 81™) adapters and 1-AAA battery	48T6968	44.00
PTNX8	Includes NX8 unit, toner, F-type (M-push, Speed 81™) adapters, 1-AAA battery and deluxe case with belt clip	48T6971	54.00

KITS

Mfg. Part No.	Description	Stock No.	Price Each
ADAP-PTNX-KIT	Accessory Kit	48T6962	47.00
PTNX2-CABLE	Pocket Toner NX2 Cable Kit	48T6969	56.00
PTNX2-DLX	Pocket Toner NX2 Deluxe Kit	48T6970	95.00
PTNX8-CABLE	Pocket Toner NX8 Cable Kit	48T6972	91.00
PTNX8-CT	Pocket Toner NX8 Cable and Telephone Kit	48T6973	105.00
PTNX8-DLX	Pocket Toner NX8 Deluxe Kit	48T6974	125.00
PTNX8-VV-PRO	Pocket Toner NX8 Voice and Video Pro Kit	48T6976	146.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
ADAP-PTNX-RJ11	RJ-11 Adapter	48T6963	43.00
CASE-PTNX-LG	Carry Case	48T6965	26.00
CASE-PTNX-SM	Carry Case	48T6966	19.00
PTNX8-ID-1-8	ID Cap	48T6975	43.00

(196699)

TS PROFESSIONAL SERIES VOICE, DATA AND VIDEO TEST SETS

FLUKE networks

TS23-P-01

TS53-P-01

TS54-A-09-TDR

TS23 PRO gives voice, data and video professionals and communication service provider technicians all the functionality needed in a telephone test set. **TS23 PRO** performs four essential tests and includes our patented RainSafe™, DropSafe™ and DataSafe™ technology all in our newly-designed, ruggedly-built case. **TS53 PRO** delivers voice, data and video professionals and communication service provider technicians the seven-essential testing functions needed in one telephone test set. **TS53 PRO** contains all the latest advancements to our patented RainSafe™, DropSafe™ and DataSafe™ technology all in our newly-designed, ruggedly-built case. **TS54 TDR** is perfect for voice, data and video professionals and communication service provider technicians who need a best-in-class test set combined with a powerful TDR and toner. Buying the **TS54 TDR** means you no longer need to carry a separate TDR, toner, pair identifier and test set. **TS54** not only delivers 10-testing functions but also delivers 20 percent more extreme weather protection with the latest advancements to our patented RainSafe™, DropSafe™ and DataSafe™ technology. This means the **TS54** is weatherproof and rugged and able to butt-in on live DSL lines to test POTS quality without crashing data service. **TS54 TDR** gives you the power and functionality you need to keep up with an ever-changing network.

TS®23 PRO – STANDARD VOICE, VIDEO AND DATA TELEPHONE TEST SET

Mfg. Part No.	Description	Stock No.	Price Each
TS23-A-09	TS23 Test Set, ABN with Piercing Pin	91T9959	352.00
TS23-AR-09	TS23 Test Set, ABN with Piercing Pin and RJ-11 Plug	91T9960	373.00
TS23-BANA	TS23 Test Set, 4 MM Banana Plug, Extra-large Alligator Clips and Test Probe	91T9961	373.00
TS23-P-01	TS23 Test Set, Piercing Pin	91T9962	352.00
TS®53 PRO – PROFESSIONAL VOICE, DATA AND VIDEO TELEPHONE TEST SET			
TS53-A-09	TS53 Test Set, ABN with Piercing Pin	91T9963	443.00
TS53-AR-09	TS53 Test Set, ABN with Piercing Pin and RJ-11	91T9964	464.00
TS53-BANA	TS53 Test Set, 4 MM Banana Plug, Extra-large Alligator Clips, and Test Probe	91T9965	464.00
TS53-C-04	TS53 Test Set, Central Office (CO) 346A Plug	91T9966	443.00
TS53-P-01	TS53 Test Set, Piercing Pin	91T9967	443.00
TS®54 TDR – PREMIUM VOICE, DATA AND VIDEO TEST SET			
TS54-BANA	TS54 Test Set, TDR, 4 MM Banana, Extra-large Alligator Clips, and Test Probe	91T9969	605.00
TS54-A-09-TDR	TS54 Test Set, TDR, ABN with Piercing Pin	91T9968	605.00

(203704)

TS®52 PRO LCD TEST SET

FLUKE networks

- Caller-ID, DTMF Digit Grabbing, Visual ANAC Mode (not available in all regions)
- LCD backlight with ON/OFF option to conserve battery life and phosphorescent (glow in the dark) keypad
- Speakerphone w/ volume indicator icon
- Tone and pulse
- One-way amplified speaker phone mode programmable
- Last number redial
- Over voltage and over current protection
- PBX pause button
- Audible ringer
- Speed dialing
- Line and battery powered
- Auto on (test set automatically turns on when clipped to an active line)
- Hearing aid compatible
- Software upgradeable

52801001

Mfg. Part No.	Description	Stock No.	Price Each
52801001	TS52 PRO test set with piercing pin clips	15R6902	418.00
52801004	TS52 PRO test set with 346A plug	15R6903	418.00
52801009	TS52 PRO test set with ABN/PP clips	11R8024	418.00
52801RJ9	TS52 PRO test set with ABN/PP and RJ11 plug	15R6901	436.00

(196354)

TS®30 SERIES TELECOM TEST SET

FLUKE networks

TS®30 series telecom test set provides superior quality at an affordable price. With its high-impedance monitor for DataSafe™ operation, technicians can clip onto a line in monitor mode without disrupting data. Unsurpassed RainSafe™ protection standards and DropSafe™ durability enables these test sets to keep working even in the toughest environments. New weatherproofing provides enhanced resistance to severe weather conditions.

Mfg. Part No.	Description	Stock No.	Price Each
30800009	TS30 Telecom Test Set with Angled Bed-of-Nails	48F4947	236.00
30800001	TS30 Telecom Test Set with Piercing Pin	92B3150	236.00

(39377)

TS®22 SERIES TELECOM TEST SET

FLUKE networks

22800-001

TS®22 series telecom test set offers an unbeatable combination of reliability, durability and expanded utility. Multiple memories enable storage of nine 18-digit telephone numbers in repertory dialer (speed dialing) for easy access to the test boards, the CO and other frequently called numbers. The last-number redial feature eliminates the need to re-key your last entry. **TS®22A series** telecom test set's unique built-in amplified speaker provides 3 audio levels for hands free listening and use with automated voice response systems.

Mfg. Part No.	Description	Stock No.	Price Each
22800-001	TS22 Telecom Test Set Standard Cord	48F4944	289.00
22801-001	TS22A Telecom Test Set with Piercing Pin Cord	48F4945	335.00
22801-009	TS22A Telecom Test Set with Speaker Phone	48F4946	335.00

(39375)

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TS®19 SERIES TELECOM TEST SET

FLUKE networks

TS®19 series telecom test set combines all of the basic test set features at an incredible price. Its high-impedance monitor prevents accidental disruption of service from clipping onto a data line while in monitor mode, thus providing the integrity of critical data lines. Features such as tone (DTMF) or pulse operation, talk/monitor capabilities, polarity test button and last number redial make this test set the perfect combination of features and price.

Mfg. Part No.	Description	Stock No.	Price Each
19800003	TS19 Telecom Test Set	48F4962	115.00
19800009	TS19 Telecom Test Set with Angled Bed-of-Nails	48F4943	115.00

(39374)

PRO3000 ANALOG TONE AND PROBE KIT

FLUKE networks

Tone Generator features:

- SmartTone technology
- Send tone signal up to 10 miles on most cables
- Line cord features angled bed-of-nails clips and ruggedized RJ-11 plug
- External switch allows selection of solid or alternating tone options
- Continuity testing
- Line polarity confirmation

Probe features:

- Loud large speaker amplifies tone through walls, enclosure, wood or plaster
- Easy-to-use adjustable volume control dial
- "Quick-twist" tip for easy replacement
- Includes spare tip inside Pro3000 Tone and Probe Kit

Pro3000 Analog Tone and Probe Kit is used for toning and tracing bare wire on non-active networks, and specifically for identifying individual pairs with SmartTone™ technology. SmartTone™ provides five distinct tones for exact pair identification.

Mfg. Part No.	Description	Stock No.	Price Each
26000900	Pro3000 Analog Tone and Probe Kit	58J8221	86.00
26100900	Pro3000 Probe	85K2089	64.00
26200900	Pro3000 Analog Tone Generator	85K2090	43.00
ACCESSORIES			
26100103	Pro3000 Probe Tip	85K2088	10.00

(164663)

PEL 100 SERIES POWER AND ENERGY LOGGERS

CE

AEMC® INSTRUMENTS

- Simple to use, single-, dual- (split-phase) and three-phase (Y, Δ) power & energy loggers
- Provides all the necessary functions for Power and Energy data logging for 50Hz, 60Hz, 400Hz and DC distribution systems
- Current measurements from 200mA up to 10,000A using flexible current sensors
- Automatic recognition of the connected current sensors/probes
- Power measurements: VA, W and var
- Energy measurements VAh, Wh (source/load indication) and varh (including quadrant indication)
- Record cost of energy usage
- Power Factor (PF), Cos (φ), Tan (Φ) and DPF
- Total Harmonic Distortion (THD) for voltages and currents
- Harmonics up to the 50th order for 50/60Hz voltages and currents and 7th order for 400Hz
- Simultaneous RMS measurements of each phase @ 128 samples/cycle and DC
- Bright blue, four line LCD on **Model PEL 103** (3 phases shown simultaneously)
- Storage of measured and calculated values on a SD-Card or SDHC-Card
- Configuration of current and voltage ratios to external PT and CT ratios
- USB, LAN, and Bluetooth communication
- Includes DataView® software for data storage, real-time display, analysis and report generation with supplied pre-defined or custom templates

Mfg. Part No.	Description	Stock No.	Price Each
PEL 102	Power & Energy Logger Model PEL 102 (no LCD, w3 MA193-10-BK sensors)	48W6613	1695.00
PEL 103	Power & Energy Logger Model PEL 103 (with LCD, w3 MA193-10-BK sensors)	52W8850	1995.00

(209474)

POWER QUALITY ANALYZERS

FLUKE-345 POWER QUALITY CLAMP METER

FLUKE®

- Clamp-on measurement without breaking the circuit
- Accurate in noisy environments even with distorted waveforms
- Datalogging power parameters for minutes or months
- Troubleshoot, analyze and log harmonics digitally or graphically
- Capture and analyze nuisance tripping, from 3 to 300 seconds
- 3-Phase power — built-in capability for balanced loads
- View graphs and generate reports with Power Log software
- 600V CAT IV safety rating, CSA certified, CE compliant

Mfg. part no. FLUKE-345 power quality clamp meter features a bright, color LCD display with 2-level backlight to analyze the harmonic spectrum, a low-pass filter to remove high frequency noise, and a high EMC immunity design. Ideal for commissioning, trouble-shooting and measuring modern electrical switching loads, such as variable frequency drives, electronic lighting and UPS systems. Additionally, the Hall Effect measurement system makes measurement of DC current possible without the need to break the circuit, and the internal memory enables long-term datalogging for analysis of trends or intermittent problems. Meter comes complete with Power Log software, test leads and probes, alligator clips, USB cable, international AC adapter/battery eliminator, soft carrying case, printed user manual and multi-language manual on CD.

SPECIFICATIONS

Current Measuring Range	0 to 2000A DC or 1400 AC rms
Voltage Measuring Range	0 to 825V DC or AC rms
Watts Measuring Range (Single- and Three-Phase)	0 to 1650kW DC or 1200kW AC
VA Measuring Range (Single- and Three-Phase)	0 to 1650kVA DC or 1200kVA AC
VAR Measuring Range (Single- and Three-Phase)	0 to 1250kVAR
Frequency (From Current or Voltage Sources)	15Hz to 1kHz
Jaw Opening/Capacity	2.36"/2.28" Dia.
Overall Size	12L x 3.75W x 2"H

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-345	Power Quality Clamp Meter	30M9566	2599.95

(90371)

FLUKE VR1710 VOLTAGE QUALITY RECORDER

FLUKE®

- Fast and easy recording of voltage trends, dropouts, and power quality
- Easy to use
- Continuous recording of all values with no gaps
- Clear graphical summary of data and quick overview of key power quality parameters
- Min, Max, Average RMS values (1/4 cycle) with time stamps
- Actual transient display (>100 µs) with time stamp
- Flicker according to EN 61000-4-15, individual harmonic and THD values with trends
- Statistical analysis of voltage event
- Includes PowerLog software package for quick download, analysis, and automatic reporting

Mfg. part no. Fluke VR1710 is a single-phase, plug-in voltage quality recorder for detecting and recording voltage quality problems. Voltage quality parameters including RMS average, transients, flicker, and harmonics up to the 32nd are recorded using a user-selected average period from 3 seconds to 10 minutes. The Fluke VR1710 satisfies the needs of maintenance and facilities management personnel in industrial, utilities, and large service organizations where reliable voltage quality is essential.

Specifications	Fluke VR1710
Operating Volage	70V to 300V
MIN/MAX/AVG RMS value	Resolution 0.125
Number of Events	175,000
Voltage Resolution	0.125V
Harmonics Measurement	EN 610000-4-7 (up to 32nd)
Number of Recording Channels	1 Phase to Neutral 2 Phase/Neutral to Ground
Frequency Range	50 Hz ± 1 Hz and 60 Hz ± 1 Hz
Harmonics Measurement	Cat II 300V

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-VR1710	Plug-In Voltage Quality Recorder	71M3716	999.95

(103578)

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(196562)

FLUKE 430 SERIES II THREE-PHASE POWER QUALITY & ENERGY ANALYZERS

FLUKE®

FLUKE-434-II/BASIC

430 Series II Power Quality and Energy Analyzers offer the best in power quality analysis and introduce, for the first time ever, the ability to monetarily quantify energy losses. The new **Fluke 434, 435 and 437 Series II** models help locate, predict, prevent, and troubleshoot power quality problems in three-phase and single-phase power distribution systems. Additionally, the Fluke-patented energy loss algorithm, Unified Power Measurement, measures and quantifies energy losses due to harmonics and unbalance issues, allowing the user to pinpoint the origin of energy waste within a system.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-434-II	Three-Phase Energy Analyzer	76T4890	5999.95
FLUKE-434-II/BASIC	Three-Phase Energy Analyzer (w/out clamps)	76T4891	5399.95
FLUKE-435-II	Three-Phase Power Quality and Energy Analyzer	76T4892	8299.95
FLUKE-435-II/BASIC	Three-Phase Power Quality and Energy Analyzer (w/out clamps)	76T4893	7699.95
FLUKE-437-II	400 Hz Three-Phase Power Quality and Energy Analyzer	76T4894	9799.95
FLUKE-437-II/BASIC	400 Hz Three-Phase Power Quality and Energy Analyzer (w/out clamps)	76T4895	9199.95

ACCESSORIES

I430-FLEXI-TF	6000A Fluke 430 Thin Flexible	76T4896	427.46
I430-FLEXI-TF-4PK	6000A Fluke 430 Thin Flexible (4 Pack)	76T4897	1499.95
C437-II	Hard Case 430 Series II with roller	76T4889	599.95
C1740	Softcase for 174X and 43X-II PQ Analyzer	76T4888	249.95

(199463)

FLUKE-43B POWER QUALITY ANALYZER

FLUKE®

Mfg. part no. FLUKE-43B power quality analyzer performs the measurements you need to maintain power systems, troubleshoot power problems and diagnose equipment failures. Combines capabilities of a power quality analyzer, multimeter and scope. Calculates 3-phase power on balanced loads, from a single-phase measurement. Measures power harmonics, captures voltage sags, transients and inrush current. Monitoring functions help track intermittent problems. Single keystroke toggle for most commonly-used power quality modes. Records 2 selectable parameters for up to 16 days. Flukeview software provides a complete harmonic profile up to 51st harmonic. Measures resistance, diode voltage drop, continuity, and capacitance. Includes voltage probes, 500A current clamp, Flukeview™ software and optically isolated interface cable. 3-year manufacturer's warranty on the **FLUKE-43B** analyzer, 1-year manufacturer's warranty on accessories. *Order* **mfg. part no. 1400S** *AC current clamp separately below.*

SPECIFICATIONS

Volts/Amps/Hertz	Transients
True-Rms Voltage: (AC + DC) 5.0V to 1240V* True-RMs Current: (AC + DC) 50.00 to 1250KA Frequency: 10.0Hz to 15.0KHz	Minimum Pulse Width: 40ns Voltage Threshold Settings: 20%, 50%, 100%, 200%
Power Display	**Inrush Current**
Watts, VA, VAR Reactive Power 1-Phase and 3-Phase, on Balanced Loads: 250W to 1.56 GW PF Power Factor: 0.00 to 1.0 DPF Displacement Power Factor: 0.25 to 1.00	Current Ranges (Selectable): 1A to 1000A Inrush Times (Selectable): 1sec. to 5 min.
Harmonics	**Dual-Channel Oscilloscope**
Volts, Amps, Watts: 2 to 51st Harmonic Phase: 2nd to 51st	Input Impedance: 1MΩ Bandwidth Input: 1 (Voltage): DC to 20 MHZ TimeBase: 60 s/div to 20 ns/div Sampling Rate: 25MS/s

CONTINUED

FLUKE-43B POWER QUALITY ANALYZER (CONT.)

Volts/Amps/Hertz	Transients
Rated: 600Vrms CAT III Surge Protection: 6KV on Input 1 and 2 Floating Measurements: 600Vrms From Any Terminal to Ground	Resistance: 500.0Ω to 30.00 MΩ Capacitance: 50.00nF, to 500.0μF Temperature:** -100.0°C to 400.0°C

*Rated 600V CAT III, **Requires Optional Temperature Accessory

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-43B/003	Power Quality Analyzer	31C1557	3399.95
I400S	AC Current Clamp	56J9493	247.46

(68961)

FLUKE 1730 THREE-PHASE ELECTRICAL ENERGY LOGGER

NEW

FLUKE®

- Voltage, current, power, power factor and associated values enable energy saving strategies to be implemented
- Perform convenient in-the-field analysis and data checks with full graphical display
- All measured values are automatically logged and can be reviewed during logging and before downloading for on-the-go analysis (more than 20 separate logging sessions can be stored on the instrument)
- Quick, guided, graphical setup ensures you're capturing the right data every time, and the intelligent verification function indicates correct connections have been made, reducing user uncertainty
- Complete "in-the-field" setup through the front panel means there's no need to return to the workshop for download and setup or to take a computer to the electrical panel
- Power instrument directly from the measured circuit eliminating the need to find a power outlet while allowing the instrument to be secured safely inside electrical panels
- One USB port for PC connection and another for fast, simple download to standard USB thumb drives, or other USB devices
- Designed to fit in tight spaces and panels
- 600 V CAT IV/1000 V CAT III rated for use at the service entrance and downstream
- Flat voltage cable and thin flexible current probes ensure easy installation even in tight spaces
- Four-hour operating time (backup time) per charge on lithium-ion battery
- Safeguard against theft with a Kensington lock
- Download, analyze and automate reporting for a complete picture of energy saving potential

The new **Fluke 1730** Three-Phase Electrical Energy Logger introduces a new simplicity to discovering sources of electrical energy waste. Discover when and where energy in your facility is being consumed; from the service entrance to individual circuits. Profiling energy usage across your facility helps you identify opportunities for energy savings, and provides you with the data you need to act on them. The new Energy Analyze software package allows you to compare multiple data points over time to build a complete picture of energy usage, which is the first step to reduce the cost of your energy bill.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-1730/BASIC	Three-Phase Electrical Energy logger (excludes current probes)	06X3030	2495.00
FLUKE-1730/US	Portable Energy Logger US version	06X3031	2795.00

(211414)

FLUKE-1735 POWER LOGGER-ANALYST

IEC 1010-1 600V CAT IV

FLUKE®

- Record loading according to NEC 30-day load study requirement
- Monitor demand at 15 minute or user-defined averaging periods
- Prove the benefit of efficiency improvements with energy consumption tests
- Measure harmonic distortion caused by electronic loads
- Improve reliability by capturing voltage dips and swells from load switching
- Easily confirm instrument setup with color display of waveforms and trends
- Measure all three phases and neutral with included 4 flexible current probes
- View graphs and generate reports with included Power Log software
- Compact, rugged design with IP65 case
- Rated 600V CAT III
- 2-year manufacturer's warranty

Fluke 1735 Power Logger-Analyst is the ideal electrician's tool for conducting load studies according to National Electric Code 220.65. Sets up in seconds with the included flexible current probes and color display. Logs most electrical parameters and harmonics as well as capturing voltage events. Includes soft carrying case, 4 flexible current probes (15A/150A/3000A), Power Log software, voltage leads and clips, color localization set, PC interface cable , universal AC adapter, printed English manual, and multi-language manual CD.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-1735	Power Logger-Analyst	83K1727	3499.95

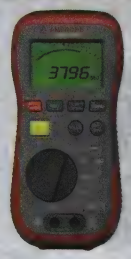
ACCESSORIES

MBX USB-RS232	MBX USB-RS232 USB-to-Serial (DB-9 Male) Converter	66K7488	58.46

(88084)

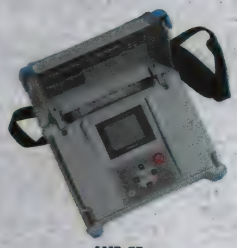
DIGITAL INSULATION RESISTANCE TESTERS

AMPROBE®



AMB-45

AMB-50



AMB-55

Cut unscheduled downtime and reduce shock hazards by testing wires, cables, transformers or entire electrical systems. Amprobe Industrial High-Voltage Insulation Testers have all necessary features for advanced professional insulation diagnostics. Automated calculation of PI, DD and DAR, combined with a possibility to perform a step voltage test make these instruments suitable for the most demanding customers and applications. Large LCD display allows real time R(t) graphs to be displayed. Windows compatible PC Software and either RS232 or USB communications ports serve for connecting the instrument to the PC and management of the recorded test data.

AMB-110

Mfg. Part No.	Description	Stock No.	Price Each
AMB-45	1000V Insulation Resistance Tester	50H8694	549.95
AMB-50	5000V Basic Insulation Resistance Tester	47T1938	849.95
AMB-55	5500V Industrial High-Voltage Insulation Tester	47T1939	2699.95
AMB-110	10000V Industrial High-Voltage Insulation Tester	47T1937	3799.95

(198299)

1503 AND 1507 INSULATION TESTERS

FLUKE®

- Automatic calculation of Polarization Index and Dielectric Absorption Ratio saves both time and money (**mfg. part no. 1507** only)
- Compare (Pass/Fail) function makes repetitive tests simple and easy (**mfg. part no. 1507** only)
- Remote test probe makes repetitive or hard-to-reach testing easier
- Live circuit detection prevents insulation test if voltage >30V is detected for added user protection
- Auto-discharge of capacitive voltage for added user protection
- AC/DC voltage: 0.1V to 600V
- 200mA continuity
- Resistance: 0.010hm to 20.00KOhms
- Large, backlit digital display for easy readability
- CAT III – 1000V, CAT IV – 600V overvoltage category rating for added user protection
- One-year manufacturer's warranty
- Recommended accessories - TL225 Test Leads, C25 Case, TPAK Meter Hanger

1503 and 1507

Mfg. part nos. 1503 and **1507** insulation testers are compact, rugged, reliable, and easy to use. Multiple test voltages make them ideal for troubleshooting, commissioning, and preventative maintenance. Additional features save both time and money. Included accessories: remote probe, test leads and probes, alligator clips. Four AA alkaline batteries (NEDA 15A or IEC LR6) for at least 1000 insulation tests. These insulation testers accept **mfg. part no. TPAK** ToolPak magnetic tool hanger to free your hands for other work. *Order magnetic tool hanger and carrying cases separately below.*

INSULATION TESTERS

Mfg. Part No.	Insulation Test Range	Insulation Test Voltages	Stock No.	Price Each
1503	0.1Ω-2000MΩ	50V, 100V, 250V, 500V, 1kV	57K0680	474.96
1507	0.01MΩ-10GΩ	50V, 100V, 250V, 500V, 1kV	57K0681	494.96

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
TPAK	ToolPak Magnetic Hanging Strap	97B3576	38.21
FLUKE-C101	Hardside Carrying Case	26K2562	58.46
C25	Softside Vinyl Meter Case	44F7741	34.95

(85521)

TENMA® AT NEWARK ELEMENT14

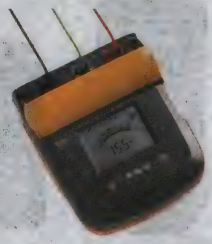
Affordable, reliable Test & Measurement equipment and accessories at newark.com/tenma

(212566)

INSULATION & GROUND RESISTANCE TESTERS

1550C/1555 INSULATION RESISTANCE TESTERS

FLUKE®



- Test voltages to up 10 kV and save time by trending on the spot only with Fluke Connect
- CAT III 1000 V, CAT IV 600 V safety rating
- Warning function alerts the user that line voltage is present and gives the voltage reading up to 600V ac or dc for increased user safety
- Selectable test voltages in 50 V steps from 250 V to 1000 V, and 100 V steps above 1000 V
- Measurements can be stored in up to 99 memory locations, with each location assigned a unique, user defined, label for easy recall
- Long battery life gives the user over 750 tests between charges
- Automatic calculation of Dielectric Absorption (DAR) and Polarization Index (PI) with no additional setup
- Guard system eliminates the effect of surface leakage current on high-resistance measurements
- Large digital/analog LCD for easy viewing
- Capacitance and leakage current measurement
- Ramp function for breakdown testing
- Resistance measurements up to 2TΩ
- Timer settings up to 99 minutes for timed tests
- 3-year warranty

The Fluke **1555** and Fluke **1550C** insulation resistance testers, offer digital insulation testing up to 10 kV, making them ideal for testing a wide range of high voltage equipment including switchgear, motors, generators and cables. Fluke insulation testers can now conduct the entire range of test voltages specified in IEEE 43-2000 with a best in class, 3 year warranty and CAT IV 600 V safety rating. With measurement storage and PC interface, the **1555** and **1550C** are perfect tools for preventative or predictive maintenance programs designed to identify potential equipment failures before they occur. The Fluke Connect mobile app is an easy to use, advanced wireless system for capturing and trending anomalies for troubleshooting, commissioning and preventative maintenance of insulation resistance applications. **Now compatible with Fluke Connect™ Mobile App.**

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-1550C	5 kV Insulation Tester	73R7383	4199.95
FLUKE-1555	10 kV Insulation Tester	73R7385	4999.95
KITS			
FLUKE-1555/KIT	10 kV Insulation Tester Kit	73R7386	5499.95
FLUKE-1550C/KIT	5 kV Insulation Tester Kit	73R7384	4799.95
1550C/KIT NA FC	5kV Insulation Tester Kit (compatible w/ Fluke Connect)	47X3556	4799.95
1555/KIT NA FC	10kV Insulation Tester Kit (compatible w/ Fluke Connect)	47X3557	5499.95
ACCESSORIES			
FLUKE-IR3000FC1550	Fluke Connect IR to Wireless Connector	47X3337	74.95

(72287)

FLUKE 1577 AND 1587 INSULATION MULTIMETERS

FLUKE®

All models:
- A multimeter and insulation resistance tester all in one meter!
- Large backlit display
- Auto-discharge of capacitive voltage
- Auto power off
- Live circuit detection to prevent insulation test when voltage is >30V
- CAT III-1000V, CAT IV-600V measurement category
- 3-year warranty
- Recommended accessories: C25 Case, TLK-225 Accessory Set, i1010 Current Clamp

FLUKE 1587 Only:
- Filter for motor drive measurements
- Capacitance, Diode Test, Temperature, Min/Max, Frequency (Hz)
- Also includes K-type thermocouple

FLUKE 1587

FLUKE 1577 and **1587** insulation multimeters combine a digital insulation tester with a full-featured digital multimeter in a single, compact handheld unit. Provides maximum versatility for both troubleshooting and preventative maintenance. Rugged, reliable and easy to use. Ideal for work on motors, cables and switch gear. Included accessories: Remote probe, test leads and probes, alligator clips, and rugged utility hard case.

Mfg. Part No.	FLUKE 1577	FLUKE 1587
DMM functions:	AC/DC voltage, DC mV, AC/DC mA, Resistance (0.1Ω-50MΩ), Continuity	
Insulation test:	0.1MΩ to 600MΩ	0.01MΩ to 2GΩ
Insulation test voltages:	500V, 1000V	50V, 100V, 250V, 500V, 1000V

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-1577	500-1000V Insulation Multimeter	30K6970	649.95
FLUKE-1587	50 -1000V Insulation Multimeter	30K6971	749.95

(84802)

FLUKE-1623-2 AND 1625-2 SERIES GEO EARTH GROUND TESTERS

FLUKE®

- 3- and 4-pole Fall of Potential, earth resistance loop testing
- 4-pole Soil Resistivity testing
- Selective earth ground rod testing using 1 clamp
- Stakeless earth ground rod testing using 2 clamps
- IP56 rated for outdoor use
- Professional carrying case
- USB data storage and transfer
- Automatic Frequency Control (**1625-2**)
- R° measurement (**1625-2**)
- Adjustable limits - for quicker testing (**1625-2**)

The new Fluke **1623-2** and **1625-2** GEO Earth Ground Testers offer data storage and download capabilities via USB port. World class accessories will simplify and speed up testing time. Includes tester, user's manual, batteries, quick reference guide, 2 test keads and USB cable. Kits contain the following additional accessories: 2 clamps (1 source, 1 sensing), **C1620** professional carrying case, 4 earth ground stakes and 3 color coded cable reels.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-1623-2 KIT	Basic GEO Earth Ground Tester Kit	29X1564	2699.95
FLUKE-1623-2	Basic GEO Earth Ground Tester	29X1563	1699.95
FLUKE-1625-2 KIT	Advanced GEO Earth Ground Tester Kit	29X1566	3799.95
FLUKE-1625-2	Advanced GEO Earth Ground Tester	29X1565	2799.95
FLUKE-1621	Basic Earth Ground Tester	50M1641	999.95
ACCESSORIES			
EI-1623	Selective/Stakeless Clamp Set for **FLUKE-1623**	83K1713	699.95
EI-1625	Selective/Stakeless Clamp Set for **FLUKE-1625**	83K1714	899.95
ES-162P3-2	Earth Stake Set for 3 Pole Measurement	29X1561	299.95
ES-162P4-2	Earth Stake Set for 4 Pole Measurement	29X1562	399.95
EARTH STAKE	Ground/Earth Stake	29X1560	74.95
CABLE REEL 25M BL	Ground/Earth Cable Reel of Wire, 25m	29X1538	74.95
CABLE REEL 25M GR	Ground/Earth Cable Reel of Wire, 25m	29X1539	74.95
CABLE REEL 50M RD	Ground/Earth Cable Reel of Wire, 50m	29X1540	84.95
EI-162BN	Split Core Transformer, 12.7"	83K1712	2299.95
C1620	Carrying Case	29X1559	249.95

(88086)

U1450A/U1460A SERIES INSULATION RESISTANCE TESTERS

NEW

KEYSIGHT TECHNOLOGIES

- Remote testing coupled with report generation capability
- 50 V/100 V/250 V/500 V/1000 V test voltages (1)
- Adjustable test voltages from 10 V up to 1.1 kV (2) **
- Up to 260 GΩ insulation resistance range
- Full-featured 4.5 digit OLED DMM (66,000 counts) (3) *
- Timed/PI/DAR test (4)
- IP 67 certified – waterproof and dust proof (5)
- Tested to withstand a 3 meter (10-ft) drop
- (–40 °C to +55 °C) operating temperature range **
- * **U1461A** only
- ** **U1453A** and **U1461A** only

Mfg. Part No.	Resistance	Stock No.	Price Each
U1451A	66Gohm	49X8747	500.00
U1452A	260Gohm	49X8748	697.00
U1452AT	66Gohm	49X8749	597.00
U1453A	260Gohm	49X8750	790.00
U1461A	260Gohm	49X8751	890.00

ACCESSORIES

Mfg. Part No.	Accessory Type	Stock No.	Price Each Each
U1593A	Rubber Sleeve	49X8752	29.95
U1594A	Carrying Case	49X8753	49.96
U5403A	Remote Switch Probe	49X8754	79.95
U1117A	Infrared-to-Bluetooth Adapter	49X8745	97.09

(212519)

9

CALIBRATION SERVICES

From pre-calibration to re-calibration, we bring you competitive pricing with quick delivery.

(207667)

5kV AND 10kV INSULATION RESISTANCE TESTERS

Megger.

- Industry best guard terminal accuracy
- Compact and lightweight for easy transport and use
- PI, DAR, DD, SV and ramp test
- Unique dual case design provides additional user protection
- Lithium-ion battery - extended capacity, rapid charge
- Advanced memory with time/date stamp
- CATIV 600 V safety rating on all terminals

The **MIT515** (5 kV), **MIT525** (5 kV) and **MIT1025** (10 kV) are designed based on Megger's extensive knowledge of insulation testing (100+ years of experience) and significant feedback from actual end users. Megger has taken the best insulation testers in the world and improved them to add functionality, make them easier to use and easier to transport. They include Megger's patented digital/analog display (real-time pointer movement), a CATIV safety rating at all terminals and a unique dual case design.

SPECIFICATIONS

		MIT515	MIT525	MIT1025
Test Voltages	10 kV	...	...	X
	5 kV	X	X	X
	2.5 kV	X	X	X
	1 kV	X	X	X
	500 V	X	X	X
	250 V	X	X	...
	10V Steps 50V-1kV, 25V Steps 1kV to Max. Test Volt.	X	X	...
Measurements	Max resistance	10 TOhms	10 TOhms	20 TOhms
	Min resistance	10 kOhms	10 kOhms	10 kOhms
	Voltage	X	X	X
	Capacitance and time constant	X	X	X
	Leakage curent	X	X	X
Tests	Auto IR	X	X	X
	Auto PI	X	X	X
	Auto SV	...	X	X
	Auto DD	...	X	X
	Auto DAR	X	X	X
Timer	Timer control	X	X	X
	Timer display	X	X	X
Output	USB	...	X	X
	RS-232	...	X	X

Mfg. Part No.	Description	Stock No.	Price Each
MIT515	5kV Insulation Resistance Tester	94T2039	3300.00
MIT525	5kV Insulation Resistance Tester	94T2040	4325.00
MIT1025	10kV Insulation Resistance Tester	94T2038	5240.00

(89376)

10A MICRO-OHMMETER

AEMC® INSTRUMENTS

- Test currents from 1mA to 10A
- RTD temperature probe to check tested sample (optional)
- Selectable metal types
- Automatic and manual temperature correction
- Two programmable alarm set points
- Selectable inductive or resistive test modes
- Automatic multiple test mode
- Large multi-line display
- Local or remote test setup and control
- Direct printout
- Internal rechargeable batteries
- Rugged double-insulated waterproof case
- Software included for data storage, real-time display, analysis, and report generation

Mfg. Part No.	6240	6250
Range:	1μΩ to 400Ω range dependent	0.1μΩ to 2500Ω range dependent
Accuracy:	0.25% ± 2cts	0.05% + 1 to 300μΩ range dependent
Resolution:	1μΩ to 100mΩ range dependent	0.1μΩ to 100mΩ range dependent
Test Current:	10mA, 100mA, 1A, 10A	1mA, 10mA, 100mA, 1A, 10A
Measurement Mode:	Instantaneous, continuous and auto (multiple tests)	
Memory:	Stores up to 99 tests	Stores up to 1500 tests
Power:	Rechargeable 6V, NiMH battery included	
Battery Life:	Approximately 5000 10A tests	
Software:	DataView® analysis and reporting software included	

Mfg. Part No.	Description	Stock No.	Price Each
6240	10A Micro-Ohmmeter Model 6240 (Includes set of 10A Kelvin clips-mfg. part no. 1017-84)	72M5352	2895.00
6250	10A Micro-Ohmmeter Model 6250 (Includes set of 10A Kelvin clips-mfg. part no. 1017-84)	73K2762	3895.00

ACCESSORIES

1017.84	Kelvin Clips (10A - Hippo), set of two, 10 ft	73K2779	199.00
2129.95	RTD Temperature Probe (plug into faceplate for ambient temperature)	79K9807	174.00

➤CONTINUED➤

10A MICRO-OHMMETER (CONT.)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
2129.96	RTD Temperature Probe with 7 ft extension cable	73K2782	289.00
2118.70	Kelvin Clips (10A - Hippo), set of two, 20 ft	40P8956	229.00
2118.73	Kelvin Probes (1A - spring loaded), set of two, 16 ft	60M3149	99.00
2118.74	Kelvin Probes (1A - spring loaded), set of two, 20 ft	72M5089	149.00

(88072)

TWISTGUARD™ PREMIUM TEST LEADS AND PROBES

Genuine Fluke Accessory

FLUKE®

TP175 TL175

- Extendable tip sheath provides correct tip exposure for most measurements
- New WearGuard™ lead wire wear indication. Inner contrasting color exposed when leads are worn **mfg. part no. TL175**
- Heavy duty strain relief tested to over 30,000 cycles for unmatched reliability
- Threaded probe tip accepts premium alligator clips and other specialty probes
- Double insulated silicone leads, withstands high temperatures and remain flexible in cold temperatures **mfg. part no. TL175**
- Probes always show correct category rating for tip being used
- TL175E includes removable 4 mm lantern tips for versatility
- Compatible with all instruments that accept standard 4 mm shrouded banana plugs
- Test lead length 48"/1.2m **mfg. part no. TL175**
- Ratings: CAT III 1000 V, CAT IV 600 V, CAT II 1000 V, 10 A max., Pollution Degree 2
- Conforms to EN61010-031

Patented extendable tip sheath meets new electrical safety requirements to reduce tip exposure while providing the flexibility you need for most measurements. Just twist the top of the probe body to extend or reduce tip exposure.

Mfg. Part No.	Description	Stock No.	Price Each
TL175	TwistGuard™ Premium Test Leads	73R7393	23.71
TP175	TwistGuard™ Premium Probes	73R7394	17.96
TP175E	TwistGuard™ 2MM Premium Probes	76T4528	18.96
TL175E	TwistGuard™ 4MM Premium Test Leads	47T2465	24.71

(177858)

TEST LEAD SETS AND PROBE LIGHT KIT

FLUKE®

TLK287 ELECTRONIC TEST LEAD SET

- The TLK287 is TLK287 Electronics Master Test Lead Set
- Precision electronic probes with multiple spring-loaded sharp tips to maximize contact with SMD test points
- Micro-grabbers and leads to enable fin SMD test
- Mini-alligator clips, grabbers, and probes for virtually every electronics need

Mfg. Part No.	Description	Stock No.	Price Each
TLK287	Electronics Master Test Lead Set	70M8699	142.46

TLK 289 INDUSTRIAL MASTER TEST LEAD SET

- SureGrip™ alligator clips, grabbers, hook clips and industrial test probes for dependable contact with a variety of test points
- Magnetic hanger for convenient suspension of your DMM from a metal surface
- Temperature adapter with K-Type thermocouple for direct temperature measurement with your DMM's temperature measurement functions
- Protective soft case for your DMM and all its accessories

Mfg. Part No.	Description	Stock No.	Price Each
TLK289	Industrial Master Test Lead Set	70M8700	149.95

TL75 HARD POINT™ TEST LEAD SET

- Set Includes: One Pair (Red, Black) Comfort Grip Probes with PVC Insulated, Leads with Right-Angle, Shrouded Banana Plugs
- Recommended for General-Purpose Measurements
- Rating: Dual Safety Rated CAT III 1000V and CAT IV 600V
- UL listed

Mfg. Part No.	Description	Stock No.	Price Each
TL75	Hard Point™ Test Lead Set	44F622	22.45

TL71 PREMIUM TEST LEAD SET

- Set Includes: One Pair (Red, Black) Comfort Grip Probes with Silicone Insulated, Right-Angle Test Leads
- Replacement Test Leads for Series 80 IV DMMS, 280 series
- Recommended for μV Measurements
- Rating: Category III, 1000V, 10A
- UL listed

Mfg. Part No.	Description	Stock No.	Price Each
TL71	Premium Test Lead Set	94B7832	24.95

➤CONTINUED➤

TEST LEADS & ACCESSORIES

TEST LEAD SETS AND PROBE LIGHT KIT (CONT.)

L210 PROBE LIGHT AND PROBE EXTENDER KIT
- Kit Includes Probe Light and Test Probe Extenders
- 8" Probe Keep Hands Away From Live Circuits
- Extender Fits Between Modular Test Probe and Test Lead
- 120 Hours of Battery Life, Uses 2-3 Volt Watch Batteries

Mfg. Part No.	Description	Stock No.	Price Each
L210	Probe Light and Probe Extender Kit	82H8219	37.96

(61081)

FLUKE TEST LEADS AND CLIPS

FLUKE ®

AC175 AC89

AC175 ALLIGATOR CLIPS
- One Pair (Red, Black) Safety Grip, Spring Loaded Hook Clips
- Hook Opening is 10mm x 2mm
- Rating: Category III, 1000V, 3A
- Used with types TL22 and TL24 Test Leads

Mfg. Part No.	Description	Stock No.	Price Each
AC175	Alligator Clip Set	05W4571	24.71

AC89 HEAVY DUTY INSULATION PIERCING TEST CLIP
- One Pair (Red, Black) Slender Probe Bodies for Probing Closely Spaced or Recessed Terminals
- Hard, Stainless Steel Probe Tips
- Rating: Category III, 1000V, 10A
- Type TP1 Has a Flat Blade Design to Hold Securely in Electrical Wall Sockets (Not for Europe)
- Type TP2 Has 2mm Diameter Tip for Electronics Work
- Type 38 has Insulated Probe Tip (Designed to Meet GS38 Specification for United Kingdom). For Use with Types TL22 and TL24 Test Leads

Mfg. Part No.	Description	Stock No.	Price Each
AC89	Heavy Duty Insulation Piercing Test Clip	50F9867	35.96

TP1, TP2, AND TP38 SLIM REACH TEST PROBES

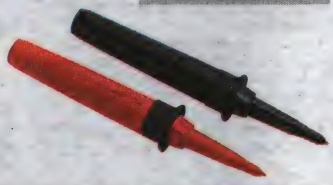
Mfg. Part No.	Description	Stock No.	Price Each
TP1	Test Probe	83F2783	16.58
TP2	Test Probe	83F2784	17.45
TP38	Test Probe	23C9383	16.58

(68960)

SUREGRIP FUSED TEST PROBE

FLUKE ®

Features:
- Built in fuses for additional measurement protection
- 2mm threaded probe tips include removable 4 mm spring contacts and removable insulated caps for probing closely spaced leads
- CAT III 1000 V, CAT IV 600 V, 10 A rating
- Operating temperature -20 °C to 50 °C (-5 °F to 120 °F)



SureGrip Fused Test Probes with built-in replaceable fuses for additional measurement protection. If the probe fuse does blow, these fused test probes will still allow the meter to indicate live voltage, helping to prevent a possible misreading of no voltage present. These modular probes mount onto any standard modular test leads, for instance the Fluke TL221, TL222, or TL224. Rated to CAT III 1000V, these probes have removable tip guards for reduced probe tip exposure.

Mfg. Part No.	Description	Stock No.	Price Each
FTP-1	Fused Test Probe Set	47T2091	89.95

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
AC285-FTP	Alligator Clips for FTP-1 & FTPL-1	72T0056	29.95

(203492)

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Test & Measurement Equipment
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(212567)

SUREGRIP FUSED TEST PROBE & TEST LEAD SET

FLUKE ®

Features:
- Built in fuses for additional measurement protection, 1000 V, 11 A with 20 kA interrupt rating
- Probes allow indication of live voltage even with blown fuse
- 2 mm threaded probe tips include removable 4 mm spring contacts and removable insulated caps for probing closely spaced leads
- TL224 leads are right angle connector on one end and straight connector on the other with reinforced strain reliefs, 1.5 meter silicone – insulated wire resists heat and cold
- Operating temperature – 20 °C to 50 °C (-5 °F to 120 °F)
- CAT III 1000 V, CAT IV 600 V, 10 A rating

SureGrip Fused Test Probe and Test Lead set with built-in replaceable fuses for additional measurement protection. If the probe fuse does blow, these fused test probes will still allow the meter to indicate live voltage, helping to prevent a possible misreading of no voltage present. These modular probes ship with the Fluke TL224 silicone test leads. Rated to CAT III 1000 V, these probes have removable tip guards for reduced probe tip exposure.

Mfg. Part No.	Description	Stock No.	Price Each
FTPL-1	SureGrip Fused Test Probe and Test Lead set	47T2092	99.95

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
AC285-FTP	Alligator Clips for FTP-1 & FTPL-1	72T0056	29.95

(203486)

SUREGRIP™ ACCESSORIES

Genuine Fluke Accessory

FLUKE ®

SureGrip™ accessories were designed to provide a reliable grip in slippery hands. Rubber-overmolded surfaces and finger-hugging curves give the user a comfortable steady hold. For industrial, electrical and electronic environments. Designed for comfort, ergonomic support and durability. Can be used safely in both CAT III and CAT IV settings (1000V CAT III, 600V CAT V).

AC220 SUREGRIP™ ALLIGATOR CLIPS
- One Pair (Red, Black) of Small, Insulated, Nickel-Plated Jaws
- Blunt Tip Grabs Round Screw Heads Up to 9.5mm

Mfg. Part No.	Description	Stock No.	Price Each
AC220	SureGrip Alligator Clips	81C7979	37.96

AC285 SUREGRIP™ LARGE ALLIGATOR CLIPS
- One Pair (Red, Black) of Large Alligator Clips with Nickel-Plated Steel Jaws
- Multipurpose Tooth Pattern Grips Anything from Fine Gauge Wire to a 20mm Bolt

Mfg. Part No.	Description	Stock No.	Price Each
AC285	SureGrip Large Alligator Clips	81C7982	22.45

AC280 SUREGRIP™ HOOK CLIPS
- One Pair (Red, Black) of Nickel-Plated Clips
- Profile Narrows to 5.6mm at Tip, Hook Opening 6.4mm at Front, 2mm at Base

Mfg. Part No.	Description	Stock No.	Price Each
AC280	SureGrip Hook Test Clips	81C7980	32.45

AC283 SUREGRIP™ PINCER CLIPS
- One Pair (Red, Black) of Nickel-Plated Pincers Open to 5mm
- 11.4 cm Flexible Insulated Shaft

Mfg. Part No.	Description	Stock No.	Price Each
AC283	SureGrip Pincer Test Clips	81C7981	39.95

TP220 SUREGRIP™ INDUSTRIAL TEST PROBES
- One Pair (Red, Black) of Industrial Probes
- 12mm Stainless Steel Tip Provides Reliable Contact
- For use with **mfg. part nos. TL222** and **TL224** test leads

Mfg. Part No.	Description	Stock No.	Price Each
TP220	SureGrip Industrial Test Probes	81C8008	17.45

TL222 SUREGRIP™ SILICONE-INSULATED INDUSTRIAL TEST LEADS
- DMM Test Leads (Red, Black) with Safety Shrouded, Standard Diameter Banana Plugs
- Right Angle Connector on Both Ends, Reinforced Strain Relief

Mfg. Part No.	Description	Stock No.	Price Each
TL222	SureGrip Silicone-Insulated Industrial Test Leads	30H0450	24.95

TL224 SUREGRIP™ SILICONE-INSULATED INDUSTRIAL TEST LEADS
- DMM Test Leads (Red, Black) with Safety Shrouded, Standard Diameter Banana Plugs
- Right Angle Connector on One End and Straight Connector on the Other
- Reinforced Strain Relief 1.5m Silicone-Insulated Wire Resists Heat and Cold

Mfg. Part No.	Description	Stock No.	Price Each
TL224	SureGrip Silicone-Insulated Industrial Test Leads	81C8007	24.95

TL220 SUREGRIP™ INDUSTRIAL TEST LEAD SET
- **Mfg. part no. AC220** SureGrip™ Alligator Clip Set
- **Mfg. part no. TP220** SureGrip™ Test Probe Set
- **Mfg. part no. TL222** SureGrip™ Silicone Test Lead Set (Right-to-Right)

Mfg. Part No.	Description	Stock No.	Price Each
TL220	SureGrip Industrial Test Lead Set	30H0448	74.95

➤CONTINUED➤

SUREGRIP™ ACCESSORIES (CONT.)

TL221 SUREGRIP™ SILICONE-INSULATED TEST LEAD EXTENSION SET
- One Pair (Red, Black) of Silicone-Insulated Leads with Straight Connectors on Both Ends
- Reinforced Strain Relief
- Includes One Pair (Red, Black) of Female Couplers
- Extends Test Leads by 1.5m

Mfg. Part No.	Description	Stock No.	Price Each
TL221	SureGrip Silicone-Insulated Test Lead Extension Kit	30H0449	24.95

TL223 SUREGRIP™ ELECTRICAL TEST LEAD SET
- **Mfg. part no. AC220** SureGrip™ Alligator Clip Set
- **Mfg. part no. TP1** Slim-Reach™ Test Probes (Flat Bladed)

Mfg. Part No.	Description	Stock No.	Price Each
TL223	SureGrip Electrical Test Lead Set	26H1655	74.95
TL223-1	SureGrip Electrical Test Lead Set	72T3241	74.95

TL238 SUREGRIP™ HIGH-ENERGY TEST LEAD SET
- Pair Insulated Tip Probes Lessen the Risk of Arc Flash Explosion
- Pair 8" Probe Extenders Keep Hands Away from Live Circuits
- **Mfg. part no. TL224** SureGrip™ Silicone Test Lead Set (Right-to-Straight)

Mfg. Part No.	Description	Stock No.	Price Each
TL238	SureGrip High-Energy Test Lead Set	10J8436	74.95

TL225 SUREGRIP™ STRAY VOLTAGE ELIMINATOR ADAPTER TEST LEAD SET
- **Mfg. part no. SV225** SureGrip™ Stray Voltage Eliminator
- **Mfg. part no. TL224** SureGrip™ Silicone Test Lead Set (Right-to-Straight)
- **Mfg. part no. TP220** SureGrip™ Test Probe Set
- **Mfg. part no. C75** Accessory Case

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-TL225	SureGrip Stray Voltage Eliminator Adapter Test Lead Set	26K2570	109.95

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ALLIGATOR CLIPS

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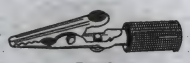
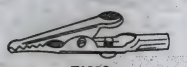
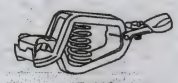

T115S

T154

T160


T160S


T510S

T641 CPR, T641CPB

All are steel with nickel plating. **Suffix S** in mfg. part no. indicates clip with screw.

Mfg. Part No.	Amp	Clip Length	Handle Insulat.	Max. Jaw Opening	Pkg. of	Stock No.	Price Each 1-49
T115SR	10	2.3"	Red	0.32"	Each	90F7186	1.84
T115SB	10	2.3"	Black	0.32"	Each	90F7187	1.78
T154	5	1.2"	None	0.24"	Each	90F7188	0.66
T641CPR	50	3.0"	Red	0.87"	Each	90F7189	3.47
T641CPB	50	3.0"	Black	0.87"	Each	90F7190	2.09

Mfg. Part No.	Amp	Clip Length	Handle Insulat.	Max. Jaw Opening	Pkg. of	Stock No.	Price Each 1-4
T160	10	2.0"	None	0.32"	500	42F2393	274.25
T160S	10	2.0"	None	0.32"	500	42F2394	193.53
T510S	10	2.0"	None	0.43"	500	42F2398	838.69

(5478)

UNINSULATED ALLIGATOR CLIPS

RoHS Compliant Available

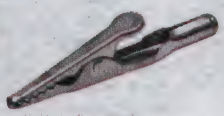
MUELLER

BU-60 / BU-60C / BU-60X

BU-60S / BU-60CS

BU-60TBO

BU-60U


BU-61

STANDARD, 7.9mm JAW OPENING

Mfg. Part No.	Current Rating (A)	Connection	Material	Length (mm)	Stock No.	Price Each 1-24
● BU-60	10	Crimp or Solder	Nickel-Plated Steel	50	28F500	0.35
● BU-60C	10	Crimp or Solder	Solid Copper	50	16F3572	0.86
● BU-60X	10	Crimp or Solder	Stainless Steel	50	83F8060	0.96
● BU-60S	10	Screw	Nickel-Plated Steel	50	28F501	0.48
● BU-60CS	10	Screw	Solid Copper	50	28F502	0.93

➤CONTINUED➤

UNINSULATED ALLIGATOR CLIPS (CONT.)

Mfg. Part No.	Current Rating (A)	Connection	Material	Length (mm)	Stock No.	Price Each 1-24
● BU-60PR-2	10	Phone or Test Prod Tip	Nickel-Plated Steel	50	28F464	0.60
● BU-60TBO	10	Threaded Barrel	Nickel-Plated Steel	53.97	82C0881	0.70
● BU-60U	10	Crimp or Solder	Nickel-Plated Steel	50	46F3809	0.36
BU-61	10	Cage Spring Barrel	Nickel-Plated Steel	51.59	37B8852	2.85
● BU-70	5	Crimp or Solder	Nickel-Plated Steel	42.86	28F530	0.55
● BU-70C	10	Crimp or Solder	Solid Copper	42.86	37B8880	0.82
● BU-70S	5	Crimp or Screw	Nickel-Plated Steel	42.86	28F531	0.56
● BU-70CS	10	Crimp or Screw	Solid Copper	42.86	28F532	0.74

INSULATORS

Mfg. Part No.	For Use With	Color	Stock No.	Price Each 1-24
BU-62-0	BU-60 / 60C / 60CS / 60PR2 / 60S / 60TBO / 60U / 60X / 61	Black	28F493	0.26
BU-62-2	BU-60 / 60C / 60CS / 60PR2 / 60S / 60TBO / 60U / 60X / 61	Red	28F492	0.26
BU-62-4	BU-60 / 60C / 60CS / 60PR2 / 60S / 60TBO / 60U / 60X / 61	Yellow	98F6100	0.27
BU-62-5	BU-60 / 60C / 60CS / 60PR2 / 60S / 60TBO / 60U / 60X / 61	Green	99F6586	0.27
BU-62-6	BU-60 / 60C / 60CS / 60PR2 / 60S / 60TBO / 60U / 60X / 61	Blue	94F048	0.27
BU-62-9	BU-60 / 60C / 60CS / 60PR2 / 60S / 60TBO / 60U / 60X / 61	White	94F050	0.27
BU-72-0	BU-70 / 70C / 70CS / 70S	Black	28F475	0.36
BU-72-2	BU-70 / 70C / 70CS / 70S	Red	28F474	0.36
BU-72-4	BU-70 / 70C / 70CS / 70S	Yellow	37B8915	0.37
BU-72-5	BU-70 / 70C / 70CS / 70S	Green	37B8916	0.37
BU-72-6	BU-70 / 70C / 70CS / 70S	Blue	37B8917	0.37
BU-72-9	BU-70 / 70C / 70CS / 70S	White	37B8918	0.37

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UNINSULATED MINIATURE & MICRO ALLIGATOR CLIPS

RoHS Compliant Available

MUELLER

BU-30 / BU-30C

BU-30BL

BU-30TBO

BU-34 / BU-34C

MINIATURE, 5A, 4.8mm JAW OPENING

Mfg. Part No.	Connection	Material	Length (mm)	Stock No.	Price Each 1-24
● BU-30	Crimp or Solder	Nickel-Plated Steel	27.78	28F528	0.28
● BU-30C	Crimp or Solder	Solid Copper	27.78	28F529	0.43
● BU-30BL	Crimp or Solder	Nickel-Plated Steel	31.75	46F3810	0.29
● BU-30TBO	Threaded Barrel	Nickel-Plated Steel	38.75	87F3721	0.63

MICRO, 5A, 5.6mm JAW OPENING

● BU-34	Crimp or Solder	Nickel-Plated Steel	27.78	28F496	0.53
● BU-34C	Crimp or Solder	Solid Copper	27.78	28F497	0.70

INSULATORS

Mfg. Part No.	For Use With	Color	Stock No.	Price Each 1-24
BU-31-0	BU-30BL / 30TBO	Black	87F3719	0.26
BU-31-2	BU-30BL / 30TBO	Red	87F3718	0.26
BU-31-4	BU-30BL / 30TBO	Yellow	37B8740	0.27
BU-31-5	BU-30BL / 30TBO	Green	37B8741	0.27
BU-31-6	BU-30BL / 30TBO	Blue	37B8742	0.27
BU-31-9	BU-30BL / 30TBO	White	37B8743	0.27
BU-32-0	BU-30 / 30C	Black	28F473	0.24
BU-32-2	BU-30 / 30C	Red	28F472	0.24
BU-32-4	BU-30 / 30C	Yellow	37B8767	0.26
BU-32-5	BU-30 / 30C	Green	37B8768	0.26
BU-32-6	BU-30 / 30C	Blue	37B8769	0.26
BU-32-9	BU-30 / 30C	White	96B3180	0.26
BU-36-0	BU-34 / 34C	Black	28F498	0.24
BU-36-2	BU-34 / 34C	Red	28F499	0.24
BU-36-4	BU-34 / 34C	Yellow	93B9109	0.26
BU-36-5	BU-34 / 34C	Green	93B9110	0.26

➤CONTINUED➤

UNINSULATED MINIATURE & MICRO ALLIGATOR CLIPS (CONT.)

Mfg. Part No.	For Use With	Color	Stock No.	Price Each 1-24
BU-36-6	BU-34 / 34C	Blue	93B9112	0.26
BU-36-9	BU-34 / 34C	White	93B9114	0.26

(201269)

INSULATED ALLIGATOR CLIPS

RoHS Compliant Available

MUELLER

- **BU-63-*** same as **BU-60S** and includes a skin-tight, two-piece, flexible insulator
- **BU-63C-*** same as **BU-60CS** and includes a skin-tight, two-piece, flexible insulator
- Compatible with all shrouded, unshrouded, or retractable 0.16″ (4mm) banana plugs
- PVC insulator
- Length: 2.25″ (57.15mm)
- Rating: 10A

Mfg. Part No.	Material	Color	Pkg. of	Stock No.	Price Each 1-24
BU-63-0	Nickel-Plated Steel	Black	1	28F533	1.08
BU-63-2	Nickel-Plated Steel	Red	1	28F534	1.08
BU-63-4	Nickel-Plated Steel	Yellow	1	37B8871	1.13
BU-63-6	Nickel-Plated Steel	Blue	1	37B8872	1.13
BU-63-9	Nickel-Plated Steel	White	1	37B8873	1.13
BU-63C-0	Solid Copper	Black	1	28F535	1.46
BU-63C-2	Solid Copper	Red	1	28F536	1.46
BU-63C-4	Solid Copper	Yellow	1	37B8874	1.56
BU-63C-5	Solid Copper	Green	1	92B2540	1.56
BU-63C-6	Solid Copper	Blue	1	37B8875	1.56
BU-63C-9	Solid Copper	White	1	94B8744	1.56
● BU-P2240-0	Nickel-Plated Steel	Black	10	66W1165	8.01
● BU-P2240-2	Nickel-Plated Steel	Red	10	66W1166	8.01

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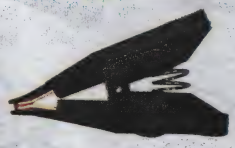
KELVIN CLIPS

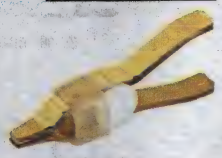
RoHS Compliant Available

MUELLER

- Gold contacts
- Nylon housing (**mfg. part no. BU-75K**)
- Isolated jaws (**mfg. part no. BU-78K**)
- Rating: 10A



BU-75K



BU-78K

Mfg. Part No.	Insulator Color	Jaw Opening Max (in.)	Length (in.)	Stock No.	Price Each 1-24
BU-75K	Black	0.313	1.625	90F1604	12.17
● BU-78K	-	0.5	2.28	84F764	51.36

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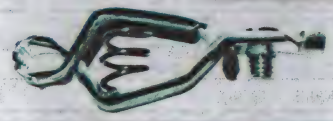
MULTI-PURPOSE PEE WEE TEST CLIPS

MUELLER



- Screw or crimp connection
- Jaw opens 0.31″ (7.9 mm) max
- Length: 1.53″ (38.89mm)
- Federal Spec: CID AA59466-006 (**BU-45C**)

Mfg. Part No.	Current Rating (A)	Material	Stock No.	Price Each 1-24
BU-45	5	Zinc-Plated Steel	28F513	0.56
BU-45C	10	Solid Copper	28F514	0.96

INSULATORS

Mfg. Part No.	Color	Stock No.	Price Each 1-24
BU-47-2	Red	28F476	0.27
BU-47-5	Green	50B5845	0.29

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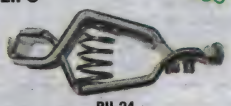
MULTI-PURPOSE TEST CLIPS

RoHS Compliant Available

MUELLER



BU-24

BU-25

BU-27

BU-27CG

- Crimp or screw connection
- Clip unmarked (**BU-24APN**) and marked positive (**BU-24APS**)
- teeth mesh on three sides of the jaw (**BU-25 / BU-25C**)
- Curved jaws clip on to seismograph rings (**BU-27CG / BU-27CGW**)
- Federal Spec: CID AA59466-009 (**BU-25C**), CID AA59466-008 (**BU-27C**)

Mfg. Part No.	Type	Current Rating (A)	Jaw Opening Max (mm)	Material	Length (mm)	Stock No.	Price Each 1-24
BU-24APN	Heavy Duty	25	19	Zinc-Plated Steel	72.23	16F6682	1.30
BU-24APS	Heavy Duty	25	19	Zinc-Plated Steel	72.23	16F6683	1.30
● BU-25	Automotive	40	19	Zinc-Plated Steel	72.6	90F2011	1.14
● BU-25C	Automotive	75	19	Solid Copper	72.6	28F519	3.07
BU-27	General Purpose	20	16	Zinc-Plated Steel	61.9	28F523	0.81
BU-27C	General Purpose	40	16	Solid Copper	61.9	28F524	1.49
● BU-27CG	Geophone	40	16	Solid Copper	61.1	16F3583	1.60

INSULATORS

Mfg. Part No.	For Use With	Color	Length (mm)	Stock No.	Price Each 1-24
BU-26-0	BU-24A / BU-25 / BU-25C	Black	98.4	28F483	1.03
BU-26-2	BU-24A / BU-25 / BU-25C	Red	98.4	28F482	1.03
BU-26-4	BU-24A / BU-25 / BU-25C	Yellow	98.4	37B8704	1.11
BU-26-5	BU-24A / BU-25 / BU-25C	Green	98.4	50B5836	1.11
BU-26-6	BU-24A / BU-25 / BU-25C	Blue	98.4	90B7798	1.11
BU-26-9	BU-24A / BU-25 / BU-25C	White	98.4	90B6269	1.11
BU-29-0	BU-27 / BU-27C / BU-27CG / BU-27CGW	Black	88.9	28F487	0.69
BU-29-2	BU-27 / BU-27C / BU-27CG / BU-27CGW	Red	88.9	28F486	0.69
BU-29-4	BU-27 / BU-27C / BU-27CG / BU-27CGW	Yellow	88.9	92B8566	0.72
BU-29-5	BU-27 / BU-27C / BU-27CG / BU-27CGW	Green	88.9	94F1489	0.72
BU-29-6	BU-27 / BU-27C / BU-27CG / BU-27CGW	Blue	88.9	92B8562	0.72
BU-29-9	BU-27 / BU-27C / BU-27CG / BU-27CGW	White	88.9	94F1488	0.72
BU-90-4	BU-27 / BU-27C / BU-27CG / BU-27CGW	Yellow	92	37B8929	1.15

(202167)

INSULATED SAFETY ALLIGATOR CLIPS

RoHS Compliant Available

MUELLER

- Compatible with all shrouded, unshrouded, or retractable 0.16″ (4mm) banana plugs
- Material: nickel-plated steel clip, glass-filled nylon housing
- Rating: 1000V, 30A, IEC 1010 Compliant (**BU-65-***)
- Rating: 1000V category II, 600V category III, 20A, IEC 1010 Compliant (**BU-651-*, BU-652-***)

Large

Standard

Small w/ Extended Banana Jack

Mfg. Part No.	Type	Current Rating (A)	Length (mm)	Jaw Opening Max. (mm)	Color	Stock No.	Price Each 1-24
● BU-65-0	Large	30	82.04	19	Black	93F9833	4.92
● BU-65-2	Large	30	82.04	19	Red	93F9831	4.92
BU-65-4	Large	30	82.04	19	Yellow	37B8878	4.75
BU-65-5	Large	30	82.04	19	Green	38C3260	4.75
BU-65-6	Large	30	82.04	19	Blue	37B8879	3.44
BU-65-9	Large	30	82.04	19	White	38C1693	7.15
BU-651-0	Standard	10	57	7	Black	93B1389	5.77
BU-651-2	Standard	10	57	7	Red	93B1392	5.77
BU-652-0	Small w/ Extended Banana Jack	20	82	7	Black	95B8434	10.45
BU-652-2	Small w/ Extended Banana Jack	20	82	7	Red	95B8439	10.45

(201268)

MINIATURE PLIER-STYLE CLIPS WITH LONG PVC INSULATORS

MUELLER

BU-46A-0L

BU-46C-2L

- Popular clip for testing, trickle charging and timing
- Wire attachment is quick and sure
- Heavy-duty, plated spring
- Matched clinching ears grip wire securely at end of leg
- Jaws clamp solidly on terminals
- Assembled with flexible PVC insulators in red or black
- Crimp or solder connection
- Copper-plated steel (BU-46A-*L) or solid copper (BU-46C-*L)

Mfg. Part No.	Current Rating (A)	Jaw Opening Max. (mm)	Body Color	Stock No.	Price Each 1-24
BU-46A-0L	50	28.6	Black	79T9313	1.58
BU-46A-2L	50	28.6	Red	79T9314	1.58
BU-46C-0L	75	28.6	Black	79T9315	2.42
BU-46C-2L	75	28.6	Red	79T9316	2.42

ACCESSORIES

Mfg. Part No.	Description	Color	Stock No.	Price Each 1-24
BU-46PR-0L	Insulator	Black	79T9317	0.50
BU-46PR-2L	Insulator	Red	79T9318	0.50

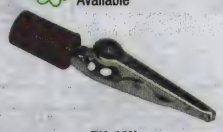
(198887)

ALLIGATOR CLIPS W/ ACETATE HANDLE

RoHS Compliant Available

MUELLER

- Compatible with all shrouded, unshrouded, or retractable 0.16" (4mm) banana plugs (**BU-60H, BU-60HS, BU-60CHS**)
- Accepts standard phone tip or test prod tip (**BU-60HPR**)
- Jaw opens 0.31" (7.9mm) max (except for **BU-60HPR**)
- Rating: 10A



BU-60H

BU-60HS / BU-60CHS

BU-60HPR

Mfg. Part No.	Connection	Material	Color	Length (mm)	Stock No.	Price Each 1-24
BU-60H-0	4mm Plug	Nickel-Plated Steel	Black	56.75	37B8838	0.72
BU-60H-2	4mm Plug	Nickel-Plated Steel	Red	56.75	37B8839	0.72
BU-60H-5	4mm Plug	Nickel-Plated Steel	Green	56.75	37B8841	0.72
BU-60H-9	4mm Plug	Nickel-Plated Steel	White	56.75	37B8843	0.72
BU-60HS-0	4mm Plug	Nickel-Plated Steel	Black	59.53	28F504	0.74
BU-60HS-2	4mm Plug	Nickel-Plated Steel	Red	59.53	28F503	0.74
BU-60CHS-0	4mm Plug	Solid Copper	Black	59.53	28F506	1.16
BU-60CHS-2	4mm Plug	Solid Copper	Red	59.53	28F505	1.16
● BU-60HPR-0	Phone or Test Prod Tip	Nickel-Plated Steel	Black	56.75	16F6684	0.80
● BU-60HPR-2	Phone or Test Prod Tip	Nickel-Plated Steel	Red	56.75	16F6685	0.80

(201321)

PLIER-TYPE CLIPS

MUELLER

- Locks on to both side and top mounted battery terminals (**BU-41APN**)
- Solder or crimp connection (**BU-46A / BU-46C**)

BU-41APN

BU-46

Mfg. Part No.	Type	Current Rating (A)	Material	Insulator Color	Jaw Opening Max (mm)	Length (mm)	Stock No.	Price Each 1-24
BU-41APN	Standard	200	Copper-Plated Steel	...	41.3	152	03M6550	3.24
BU-46A-0	Miniature	50	Copper-Plated Steel	Black	28.6	98.42	28F467	1.11
BU-46A-2	Miniature	50	Solid Copper	Red	28.6	98.42	28F468	1.11
BU-46C-0	Miniature	75	Copper-Plated Steel	Black	28.6	98.42	46F3811	1.94
BU-46C-2	Miniature	75	Solid Copper	Red	28.6	98.42	46F3812	1.94

➤ CONTINUED ➤

PLIER-TYPE CLIPS (CONT.)

INSULATORS

Mfg. Part No.	For Use With	Color	Stock No.	Price Each 1-24
BU-46PR-0	BU-46A / BU-46C	Black	90B2216	0.24
BU-46PR-2	BU-46A / BU-46C	Red	90B2218	0.24

(201476)

COAXIAL BREAKOUTS

RoHS Compliant Available

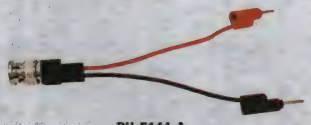
MUELLER

BU-1450-C

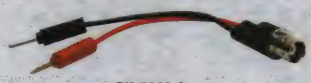
BU-5030-C

BU-5100-A

BU-5330-F



BU-5144-A



BU-5244-A

Mfg. Part No.	Connector A	Connector B	Length (in.)	Stock No.	Price Each 1-24
BU-1450-C-12-0	BNC Plug	Mini Micro Plunger	12	37B8665	23.50
BU-1450-C-24-0	BNC Plug	Mini Micro Plunger	24	90F5735	26.65
BU-1450-C-36-0	BNC Plug	Mini Micro Plunger	36	90F5736	27.10
BU-1450-C-48-0	BNC Plug	Mini Micro Plunger	48	37B8666	29.15
BU-1450-C-60-0	BNC Plug	Mini Micro Plunger	60	37B8667	33.22
BU-5030-C-12-0	BNC Plug	Alligator Clip	12	37B8799	16.30
BU-5030-C-24-0	BNC Plug	Alligator Clip	24	90F5770	16.69
BU-5030-C-36-0	BNC Plug	Alligator Clip	36	70B9941	24.00
BU-5030-C-48-0	BNC Plug	Alligator Clip	48	37B8800	36.20
BU-5030-C-60-0	BNC Plug	Alligator Clip	60	90F2012	34.95
BU-5100-A-4-0	BNC Plug	Free End	4	89F472	9.20
BU-5100-A-48-0	BNC Plug	Free End	48	88F6344	16.80
BU-5100-A-180-0	BNC Plug	Free End	180	62M3262	32.16
BU-5114-A-4-0	BNC Plug	Mini Micro Plunger	4	89F473	14.32
BU-5120-A-4-0	BNC Plug	Banana Plug	4	89F474	10.93
BU-5131-A-4-0	BNC Plug	Minigator Clip	4	89F476	17.74
BU-5144-A-4-0	BNC Plug	Pin Tip Plug Stackable	4	89F477	19.65
BU-5200-A-4-0	BNC Jack	Free End	4	90F5756	7.02
BU-5214-A-4-0	BNC Jack	Mini Micro Plunger	4	16F3545	11.71
BU-5220-A-4-0	BNC Jack	Banana Plug	4	16F3546	12.69
BU-5231-A-4-0	BNC Jack	Minigator Clip	4	90F5758	10.45
BU-5244-A-4-0	BNC Jack	Pin Tip Plug Stackable	4	90F5759	15.74
BU-5330-F-12-0	BNC Plug	Alligator Clip	12	37B8811	16.13
BU-5330-F-24-0	BNC Plug	Alligator Clip	24	37B8812	16.24
BU-5330-F-36-0	BNC Plug	Alligator Clip	36	37B8813	16.52
BU-5330-F-48-0	BNC Plug	Alligator Clip	48	37B8814	28.96
BU-5330-F-60-0	BNC Plug	Alligator Clip	60	37B8815	41.57
● BU-P4970	BNC Plug	Flying Lead	4	66W1218	10.48
● BU-P4969	BNC Jack	Flying Lead	4.75	66W1217	7.88

(201323)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

TEST LEADS & ACCESSORIES

COAXIAL CABLE ASSEMBLIES

RoHS Compliant Available

MUELLER

- BNC plug: gold-plated center contact, silver-plated body, MIL-C-39012 (**BU-5050-B**)
- BNC plug: silver-plated brass body, gold/nickel plated brass center contact, MIL-C-39012 (**BU-5454-B**)
- BNC plug: tarnish resistant nickel-plated brass body, gold-plated brass center contact (**BU-P2249-C**)
- BNC plug/jack: fully insulated nylon housing, nickel-plated brass body, gold/nickel plated brass center contact, polyethylene dielectric (**BU-5659-B**)
- Rating: Hands free testing at 500 VRMS on center conductor

BU-5050-B

Mfg. Part No.	Connector A	Connector B	RG	Length (in.)	Stock No.	Price Each 1-24
BNC PLUG BOTH ENDS						
BU-5050-B-12-0	BNC Straight Plug	BNC Straight Plug	58C/U	12	89F470	9.69
BU-5050-B-24-0	BNC Straight Plug	BNC Straight Plug	58C/U	24	89F471	9.69
BU-5050-B-36-0	BNC Straight Plug	BNC Straight Plug	58C/U	36	93F9739	9.81
BU-5050-B-48-0	BNC Straight Plug	BNC Straight Plug	58C/U	48	37B8804	14.01
BU-5050-B-120-0	BNC Straight Plug	BNC Straight Plug	58C/U	120	95B7368	27.94
BNC PLUG W/ STRAIN RELIEF BOTH ENDS						
BU-5454-B-12-0	BNC Straight Plug	BNC Straight Plug	58C/U	12	37B8821	16.29
BU-5454-B-24-0	BNC Straight Plug	BNC Straight Plug	58C/U	24	37B8822	19.93
BU-5454-B-36-0	BNC Straight Plug	BNC Straight Plug	58C/U	36	37B8823	23.24
BU-5454-B-48-0	BNC Straight Plug	BNC Straight Plug	58C/U	48	37B8824	28.13
BU-5454-B-60-0	BNC Straight Plug	BNC Straight Plug	58C/U	60	37B8825	33.03
● BU-P2249-C-6	BNC Straight Plug	BNC Straight Plug	58C/U	6	66W1175	16.23
● BU-P2249-C-12	BNC Straight Plug	BNC Straight Plug	58C/U	12	66W1167	16.23
● BU-P2249-C-24	BNC Straight Plug	BNC Straight Plug	58C/U	24	66W1170	16.23
● BU-P2249-C-36	BNC Straight Plug	BNC Straight Plug	58C/U	36	66W1173	16.23
● BU-P2249-C-48	BNC Straight Plug	BNC Straight Plug	58C/U	48	66W1174	20.11
● BU-P2249-C-60	BNC Straight Plug	BNC Straight Plug	58C/U	60	66W1176	20.19
● BU-P2249-C-120	BNC Straight Plug	BNC Straight Plug	58C/U	120	66W1168	23.95
● BU-P2249-C-180	BNC Straight Plug	BNC Straight Plug	58C/U	180	66W1169	29.43
● BU-P2249-C-240	BNC Straight Plug	BNC Straight Plug	58C/U	240	66W1171	34.42
● BU-P2249-C-300	BNC Straight Plug	BNC Straight Plug	58C/U	300	66W1172	39.90
● BU-P2249-C-600	BNC Straight Plug	BNC Straight Plug	58C/U	600	66W1177	58.86
INSULATED BNC PLUG TO BNC JACK						
BU-5659-B-12-0	BNC Straight Plug	BNC Straight Jack	58	12	37B8828	22.11
BU-5659-B-24-0	BNC Straight Plug	BNC Straight Jack	58	24	37B8829	22.25
BU-5659-B-36-0	BNC Straight Plug	BNC Straight Jack	58	36	50F2947	35.52
BU-5659-B-48-0	BNC Straight Plug	BNC Straight Jack	58	48	37B8830	23.02
BU-5659-B-60-0	BNC Straight Plug	BNC Straight Jack	58	60	37B8831	41.28
BU-5659-B-72-0	BNC Straight Plug	BNC Straight Jack	58	72	93B7270	77.57

(201324)

CABLE MOUNTABLE 4mm SHROUDED BANANA PLUGS

MUELLER

- Banana plug: nickel-plated brass
- Insulator: nylon
- Length: 1.91 in (48.5mm)
- Rating: 1000V, category III. 1500V, category II. 20A, IEC 1010 Compliant

Mfg. Part No.	Color	Stock No.	Price Each 1-24
BU-32603-0	Black	50B5841	5.76
BU-32603-2	Red	50B5842	5.76

(201479)

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(196545)

DELUXE DMM TEST MAXI KIT

Pomona®

Mfg. part no. 5677 is ideal for Test and Measurement Scenarios using DMM's. Includes silicone insulated 4ft (1.2m) leads with right angle plug, modular probe set with replaceable tips, replacement tips set, Retractable tip test probe set, test lead coupler set, medium alligator clip set, large alligator clip set, spade lugs, IC probe tip adapter, Minigrabber® test clip leads, Minipincer® test clip leads, and Nylon storage pouch.

Mfg. Part No.	Description	Stock No.	Price Each
5677B	Deluxe DMM Kit	30C4814	132.50

(5328)

BASIC ELECTRONIC DMM TEST LEAD KIT

RoHS Compliant Available

Pomona®

Nickel plated brass tip offers high conductivity for precision measurements. Contains 2 each test probe leads and alligator clips, one black, one red. Also includes two pieces of dogleg micro tips. Supplied in a reusable plastic pouch.

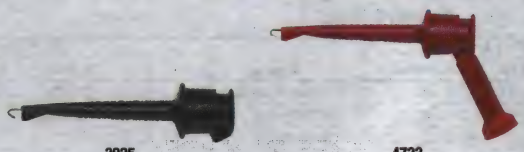
Mfg. Part No.	Description	Stock No.	Price Each
● 5325A	Basic Electronic DMM Test Lead Kit	94F1526	30.60

(9154)

MINIGRABBER® TEST CLIPS AND KITS

RoHS Compliant Available

Pomona®



3925 4723

Feature plunger-action clip with gold-plated contact hook that attaches to component leads, terminals. No sharp teeth to damage wires. Fingertip operation. 0.625" (15.88) diameter. +102°C.

MFG. PART NOS. 3925 AND 4555 MINIGRABBER TEST CLIPS

Rated 3000WVDC, 12A, 2.54" (64.52)L, +102°C.

Mfg. Part No.	Color	Wire O.D.	Stock No.	Price Each
● 3925-0*	Black	0.090" (2.29)	73C4848	18.95
● 3925-2*	Red	0.090" (2.29)	20H0137	18.95
● 3925-4*	Yellow	0.090" (2.29)	30F1406	18.95
● 3925-5*	Green	0.090" (2.29)	94F1578	18.95
● 3925-9*	White	0.090" (2.29)	94F1580	18.95
● 4555-0*	Black	0.144" (3.66)	48F5004	22.45
● 4555-2*	Red	0.144" (3.66)	48F5005	22.45

*Sold in packages of 10

MFG. PART NO. 3925 MINIGRABBER TEST CLIP KITS

Mfg. Part No.	Description	Stock No.	Price Each
● 4176-02	1 Black, 1 Red **Mfg. part no. 3925** Clip	46F2201	4.35
● 5522	10 **Mfg. part no. 3925** Clips, 1 each: Black, Red, Brown, Orange, Yellow, Green, Blue, Violet, Gray, White	90F2174	21.00

MFG. PART NO. 4723 MINIGRABBER TEST CLIPS WITH BANANA JACK

Nickel-plate brass standard banana jack in plunger directly connects test clip to banana plug patch cord. 45VAC, 5A. +102°C.

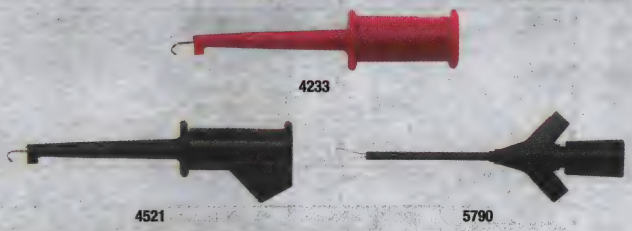
Mfg. Part No.	Color	Stock No.	Price Each
● 4723-0	Black	46F2380	5.90
● 4723-2	Red	46F2381	5.90

(8964)

MICROGRABBER® TEST CLIPS AND KIT

RoHS Compliant Available

Pomona®



4233

4521 5790

MFG. PART NO. 4233 MICROGRABBER TEST CLIPS AND KIT
Rated 1000WVDC, 3A, +102°C. Accept 0.090″ (2.29) maximum wire O.D. 1.71″ (43.43)L.

Mfg. Part No.	Description	Stock No.	Price Each
4233-0*	Black Test Clip	48F5003	23.95
4233-2*	Red Test Clip	13H6565	23.95
4233-9*	White Test Clip	94F1532	24.95

*Sold in Package of 10; +Each.

MFG. PART NO. 4521 MICROGRABBER TEST CLIPS WITH 0.025″ SQUARE PIN
Have 0.025″ (0.635) square pin within 0.15″ (3.81) square access hole. 1.73″ (43.94) long. Rated 45VAC, 3A, +102°C.

Mfg. Part No.	Description	Stock No.	Price Each
4521-0	Black Test Clip	35F1691	3.85
4521-2	Red Test Clip	35F1692	3.85

MFG. PART NO. 5790 ROTATING MICROGRABBER TEST CLIPS
Ideal for testing surface mount devices. High-density leads have 0.050″ (1.27) spacing and 0.004″ (0.101) gauge wires. 2 access entries with 0.025″ (0.635) square pins.

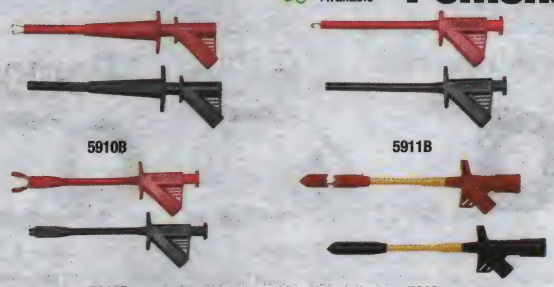
Mfg. Part No.	Description	Stock No.	Price Each
5790-0	Black Test Clip	95F1351	8.95
5790-2	Red Test Clip	95F1352	8.95

(8966)

MAXIGRABBER® TEST CLIP SETS

RoHS Compliant Available

Pomona®



5910B 5911B

5912B 5913

Rated to IEC 1010-2-031 CATIII 1000V, 10A (except **mfg. part no. 5913**, IEC 1010-2-031 CAT III 1000V 5A). Each set contains one black and one red clip.

Mfg. part nos. 5910B, 5911B and **5912B** feature a long shaft that is ideal for electronic, electrical and industrial applications where access to hard to reach high voltage test points is a requirement. Safety sheathed jack mates to Pomona's **5907A, 5908A** and **5909A** flexible test leads for digital multi-meter interfacing. **Mfg. part no. 5910B** pincer can securely grab a 0.16″ (4mm) max. O.D. terminal post. **Mfg. part no. 5912B** clip jaws securely grip wires and test points for solid contact with conductors.

Mfg. part no. 5913 pierces wire up to 0.14″ diameter and is for use with 23-16 AWG wire. Compatible with all Pomona banana plug leads. Sheathed 4mm receptacle accepts shrouded and unshrouded banana plugs.

Mfg. Part No.	Description	Stock No.	Price Each
5910B	Test Clip Set with Pincer	73K9952	25.80
5911B	Test Clip Set with Hook	73K9953	19.80
5912B	Test Clip Set with Jaws	73K9954	27.90
5913	Insulation Piercing Test Clip Set	95F1295	49.95

(42174)

TEST CLIP-TO-TEST CLIP PATCH CORD KITS

RoHS Compliant Available

Pomona®

Each kit contains ten patch cords, 24″ (0.610M) long, with grabber test clips on each end of patch cord. Patch cords available in ten colors: black, red, brown, orange, yellow, green, blue, violet, gray and white. **Mfg. part no. 5523** rated 300V, 5A; **mfg. part nos. 5525** and **5521** rated 150V, 0.5A.

Mfg. Part No.	Description	Stock No.	Price Each
5523	Minigrabber® Type 3781-24	90F2175	45.90
5525	Micrograbber® Type 4613-24	90F2173	73.00
5521	SMD Grabber® Type 5301-24	90F2333	99.95

(9039)

PRECISION ELECTRONIC PROBE SETS AND KITS

RoHS Compliant Available

Pomona®

- Ideal for Probing Fine Pitch IC Leads and Densely Packed PC Boards
- Slim Design Tip Enables a Firm Grip and Access Into Tight Spots
- Rating: 1000V, 3A Max.

6275

Ideal for probing fine pitch IC leads and densely packed PC Boards. Slim design tip enable firm grip and access into tight spots. Rated to IEC 1010-2-031 CAT III 1000V, 3A Max. Compact and ergonomic, these high precision probes fit most DMM's. Note: **Mfg. part no. 6341** includes a set of 5 0.040" dia. Stainless steel and gold-plated replacement tips.

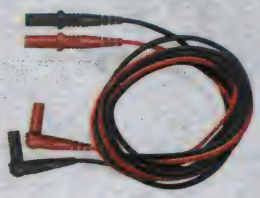
Mfg. Part No.	Description	Stock No.	Price Each
6341	Probe Kit with Tip Set and Case	51B961	40.50
6342	Probe Set with Gold-Plated Tips	91B0558	23.95
6275	Probe Set with Stainless Steel Tips	91B1291	23.95
6601	Probe Set with Removable 4mm Banana Plug Adapter	82H6149	20.55

(65379)

REPLACEMENT MODULAR TEST LEADS AND PROBES

Pomona®

RoHS Compliant Available



5907A

5906A TEST PROBE HANDLE SET
Mfg. part no. 5906A set contains test probe handle with brass caged banana plug tip and sheathed 0.158″ (4) banana jack in handle. Set contains one black, one red probe. **Mfg. part no. 6232** similar to **mfg. part no. 5906A** except .080 notch tip.

Mfg. Part No.	Description	Stock No.	Price Each
5906A	Test Probe Handle Set	95F1302	11.85

Set fit Fluke, HP, Tektronix, and Wavetek brand-multimeters. One black, one red lead. 48″ long high-temperature silicone wire. **Mfg. part no. 5907A** right-angle sheathed banana plug to straight sheathed banana plug. **Mfg. part no. 5908A** straight sheathed banana plug each end. **Mfg. part no. 5909A** right-angle sheathed banana plug each end.

FLEXIBLE TEST LEAD SETS

Mfg. Part No.	Description	Stock No.	Price Each
5907A	Right-Angle Sheathed Banana Plug	95F1291	14.55
5908A	Straight Sheathed Banana Plug To Straight Shreathed Banana Plug	48F1708	14.55
5909A	Straight Sheathed Banana Plug	95F1293	14.55
6358	Straight DMM Plug To Retractable Sheath Plug	96B9220	16.35

(5399)

REPLACEMENT TEST PROBE KITS

RoHS Compliant Available

Pomona®

Mfg. part no. 5519A kit has general-purpose replacement leads with standard 0.080 tip. Fit most meters from Fluke, Wavetek (Meterman), HP (Agilent), Tektronix, Amprobe and many others. **Mfg. part no. 5517A** leads fit Simpson **mfg. part no. 260** meters with pin-type input jacks. **Mfg. part no. 5898** leads have stainless-steel tips for penetrating corroded or oxidized test points. All leads have 4′ silicone insulated wires.

Mfg. Part No.	Description	Stock No.	Price Each
5519A	CAT III 1000V, UL	90F2354	16.95
5898	CAT III 1000V, UL	95F1303	17.95
6262-02	Fine Point Extended Adapter for Pomona DMM Test Probes	30C4846	15.60

(61182)

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(196560)

TEST LEADS & ACCESSORIES

TEST PROBE SETS

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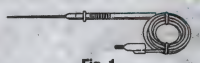


Fig. 1

Fig. 2

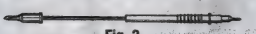


Fig. 3

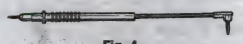


Fig. 4

Mfg. part nos. 5952A and **5953A** probes have tip that extends to 3.00″ (76.20) for hard-to-reach points. **Mfg. part nos. 5950A** and **5951A** probes have replaceable .080″ (2.03) O.D. stainless steel tip. Probes connected by 48″ (1.22M) 18 AWG, 0.144″ (3.66) O.D. PVC wire. 1 black, 1 red probe.

EXTENDABLE TIP PROBES

Mfg. Part No.	Fig.	Plug Type	Stock No.	Price Each
5952A	1	Stacking Banana	35C4345	25.80
● 5953A	2	Multimeter	29C9527	26.85
REPLACEABLE TIP PROBES TO BANANA PLUGS				
5950A	3	In-Line Banana	30C4823	25.80
5951A	4	Right-Angle Banana	30C4824	25.80

(8970)

PATCH CORDS

RoHS Compliant Available

Pomona®

Fig. 1

Fig. 2

Fig. 3

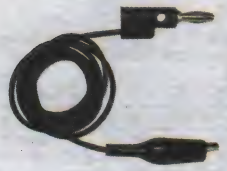


Fig. 4

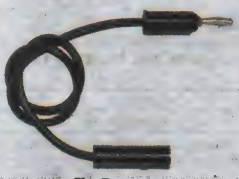


Fig. 5

Fig. 6

Pomona has made it easy for you to get exactly what you need with a huge selection of patch cords and test leads designed for reliable, convenient connections.

STACKING PIN TIP PLUG EACH END — FIG. 1
0.080″ (2.03) O.D. pin tip. 20 AWG. 3000VDC, 5A, +55°C.

Mfg. Part No.	L	Color	Stock No.	Price Each
● P-4-0	4″	Black	06M7552	6.25
● P-4-2	4″	Red	06M7553	6.25
● P-8-0	8″	Black	06M7554	6.50
● P-8-2	8″	Red	06M7555	6.50
● P-12-0	12″	Black	06M7546	6.95
● P-12-2	12″	Red	06M7547	6.95
● P-24-0	24″	Black	06M7548	7.50
● P-24-2	24″	Red	06M7549	7.50
● P-36-0	36″	Black	06M7550	7.50
● P-36-2	36″	Red	06M7551	7.50
STACKING STANDARD BANANA PLUG EACH END — FIG. 2 18 AWG. 5000VDC, 15A, +55°C.				
● B-4-0	4″	Black	06M6942	4.90
● B-4-2	4″	Red	06M6943	4.90
● B-8-0	8″	Black	06M6951	5.10
● B-8-2	8″	Red	06M6952	5.10
● B-12-0	12″	Black	34F880	5.10
● B-12-2	12″	Red	34F879	5.10
● B-12-6	12″	Blue	96F7092	5.10
● B-12-9	12″	White	84F885	5.10
● B-18-0	18″	Black	34F882	5.20
● B-18-2	18″	Red	34F881	5.20
● B-18-6	18″	Blue	70B7185	5.20
● B-18-9	18″	White	94F284	5.20
● B-24-0	24″	Black	34F849	5.40
● B-24-2	24″	Red	34F848	5.40
● B-24-8	24″	Grey	96B8428	5.40
● B-36-0	36″	Black	34F851	5.40
● B-36-2	36″	Red	34F850	5.40
● B-36-8	36″	Grey	70B4665	5.40
● B-48-4	48″	Yellow	91B3621	5.60
● B-60-9	60″	White	92B0840	5.70
● B-72-3	72″	Orange	50B6691	5.80
● B-72-4	72″	Yellow	50B6692	5.80
● B-72-5	72″	Green	50B6693	5.80

➤ CONTINUED ➤

PATCH CORDS (CONT.)

STACKING STANDARD BANANA PLUG EACH END — FIG. 2

Mfg. Part No.	L	Color	Stock No.	Price Each
● B-72-6	72″	Blue	50B6694	5.80
● B-72-8	72″	Grey	50B6696	5.80
● B-72-9	72″	White	50B6697	5.80
● 2948-12-0	12″	Black	90B3695	9.10
● 2948-36-0	36″	Black	10M4226	9.10
● 2948-36-2	36″	Red	10M4227	9.10
INSULATED ALLIGATOR CLIP EACH END — FIG. 3 18 AWG. 150V, 5A, +50°C.				
● AL-B-12-0	12″	Black	06M6923	5.80
● AL-B-12-2	12″	Red	06M6924	5.80
● AL-B-24-0	24″	Black	06M6925	6.10
● AL-B-24-2	24″	Red	06M6926	6.10
● AL-B-36-0	36″	Black	06M6927	6.20
● AL-B-36-2	36″	Red	06M6928	6.20
● AL-B-60-2	60″	Red	78B1539	7.10
MINIGATOR CLIP TO STACKING BANANA PLUG — FIG. 4 20 AWG. 45V, 5A, +50°C.				
● 3220-36-0	36″	Black	10M4234	5.70
● 3220-36-2	36″	Red	10M4235	5.70
BANANA PLUG TO IN-LINE BANANA JACK — FIG. 5 18 AWG. 5000VDC, 15A, +55°C.				
● 4702-24-0	24″	Black	10M4345	7.10
● 4702-24-2	24″	Red	10M4346	7.10
● 4702-36-0	36″	Black	10M4347	7.20
● 4702-36-2	36″	Red	10M4348	7.20
EXTENSION STACKING BANANA PLUG EACH END — FIG. 6 Insulates hot leads. 0.144″ (3.66) O.D. 18 AWG. 5000VDC, 15A, +55°C. *Other sizes available, go online or call.*				
● HB-36-0	36″	Black	06M7324	11.55
● HB-36-2	36″	Red	06M7325	11.55
● HB-60-0	60″	Black	06M7328	11.85
● HB-60-2	60″	Red	81F4626	11.85

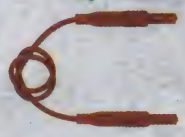
(8971)

LOW EMF PATCH CORDS

RoHS Compliant Available

Pomona®

1693-36-0



5291A-12-2

5295-36-0

All products have 12 AWG wire. Spade Lug are gold plated Electrolytic Tough Pitch (ETP) 110 Copper Alloy, ½ hard. Banana plug bodies are gold plated tellurium copper; Spring are gold-plated beryllium copper. Rated up to 1000V per IEC1010-2-031, 7A, +131°F (+55°C). The **1693** and **1756 series** Rating: Hands free testing in controlled voltage environment: 2000 Vdc; Not intended for hand held use at voltages above 33 Vrms/70 Vdc, 20A, +131°F (+55°C) max. The **5291 series** Rating: up to 1000V per IEC1010-2-031, 7A, +131°F (+55°C). The **5295 series** Rating: Hands free testing in controlled voltage environment up to 1000V; Not intended for hand held use at voltages above 33 Vrms/70 Vdc, 7A, +131°F (+55°C) max.

Mfg. Part No.	Description	Lgth. (in.)	Stock No.	Price Each
● 1693-36-0	Spade Lug Patch Cord, Black	3	51B931	21.15
● 1693-36-2	Spade Lug Patch Cord, Red	3	51B932	21.15
● 1693-60-0	Spade Lug Patch Cord, Black	5	98F961	21.15
● 1693-60-2	Spade Lug Patch Cord, Red	5	94F296	21.15
● 1756-48	Shielded Spade Lug Patch Cord	4	77B1776	52.25
● 5291A-60-0	Retractable Sheath Banana, Black	5	95B0991	21.15
● 5291A-60-2	Retractable Sheath Banana, Red	5	95B0997	21.15
● 5295-36-0	Retractable Sheath Banana Plug to Spade Lug, Black	3	94F5215	19.80
● 5295-36-2	Retractable Sheath Banana Plug to Spade Lug, Red	3	94F5216	19.80

(84757)

TEST CLIP-TO-TEST CLIP PATCH CORDS

RoHS Compliant Available

Pomona®

3781 SERIES MINIGRABBER® PATCH CORD
The **3781 series** has test clips with PVC insulated 20 AWG .087″ O.D. wire. Hook attaches to leads up to .060″ O.D. Rated up to 300V; and up to 5A +102°C. Mfg. part nos. with **Suffix-0** are black; **Suffix-2** are red; **Suffix-6** are blue.

Mfg. Part No.	Length	Stock No.	Price Each
● 3781-8-0	8″ (0.203M)	10M4280	4.80
● 3781-8-2	8″ (0.203M)	35F1032	4.80

➤ CONTINUED ➤

TEST CLIP-TO-TEST CLIP PATCH CORDS (CONT.)

Mfg. Part No.	Length	Stock No.	Price Each
3781-12-0	12" (0.305M)	10M4268	4.90
3781-12-2	12" (0.305M)	10M4269	4.90
3781-18-0	18" (0.457M)	10M4270	4.90
3781-18-2	18" (0.457M)	10M4271	4.90
3781-24-0	24" (0.610M)	10M4272	4.90
3781-24-2	24" (0.610M)	10M4273	4.90
3781-36-0	36" (0.914M)	10M4274	5.10
3781-36-2	36" (0.914M)	10M4275	5.10
3781-36-6	36" (0.914M)	94F1583	5.10
3781-48-0	48" (1.219M)	10M4276	5.40
3781-48-2	48" (1.219M)	10M4277	5.40
3781-60-0	60" (1.524M)	10M4278	5.40
3781-60-2	60" (1.524M)	10M4279	5.40

4613 SERIES MICROGRABBER® PATCH CORD
The **4613 series** has test clips with PVC insulated 20 AWG .087" O.D. wire. Hook attaches to components up to 0.040" O.D. Rated up to 150V; and up to 3A, +102°C. Mfg. part nos. with **Suffix-0** are black; **Suffix-2** are red.

4613-12-0	12" (0.305M)	10M4339	7.60
4613-12-2	12" (0.305M)	10M4340	7.60
4613-24-0	24" (0.610M)	10M4341	7.90
4613-24-2	24" (0.610M)	10M4342	7.90
4613-36-0	36" (0.914M)	10M4343	8.00
4613-36-2	36" (0.914M)	10M4344	8.00

5301 SERIES SMD GRABBER® PATCH CORD
The **5301 series** has test pincers with PVC insulated 22 AWG 0.064" O.D. wire. Pincer attaches to components up to .040" O.D. Rated up to 150V; .5A, and up to +102°C.

5301-12-0	12" (0.305M)	46F2391	10.50
5301-12-2	12" (0.305M)	10M4843	10.50
5301-24-0	24" (0.610M)	46F2393	10.50
5301-24-2	24" (0.610M)	46F2394	10.50

(9040)

STACKING BANANA PLUG PATCH CORDS

RoHS Compliant Available

Pomona®

3782 SERIES MINIGRABBER® PATCH CORDS
The **3782 series** test clip hook attaches to leads up to 0.060" in O.D. Test clip connected to standard stacking banana plug by PVC insulated 20 WG wire. Rating 300V, 5A, +55°C.

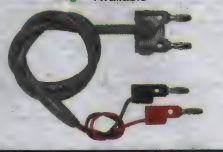
Mfg. Part No.	Length	Stock No.	Price Each
3782-12-0	12" (0.305M)	10M4281	6.50
3782-12-2	12" (0.305M)	10M4282	6.50
3782-24-0	24" (0.610M)	10M4283	6.60
3782-24-2	24" (0.610M)	10M4284	6.60
3782-36-0	36" (0.914M)	10M4286	6.60
3782-36-2	36" (0.914M)	10M4287	6.60
3782-48-0	48" (1.219M)	10M4291	6.70
3782-48-2	48" (1.219M)	10M4292	6.70
3782-60-0	60" (1.524M)	10M4293	6.80
3782-60-2	60" (1.524M)	10M4294	6.80

(9036)

BANANA PLUGS/DUAL BANANA PLUGS

RoHS Compliant Available

Pomona®



Rating: 300Vrms +50°C.

Mfg. Part No.	L	Stock No.	Price Each
1368-A-18	18"	10M4167	30.75
1368-A-36	36"	10M4168	30.75
1368-A-48	48"	89F403	30.75
1368-A-60	60"	94F294	30.75

(8912)

MOLDED BREAKOUTS

RoHS Compliant Available

Pomona®

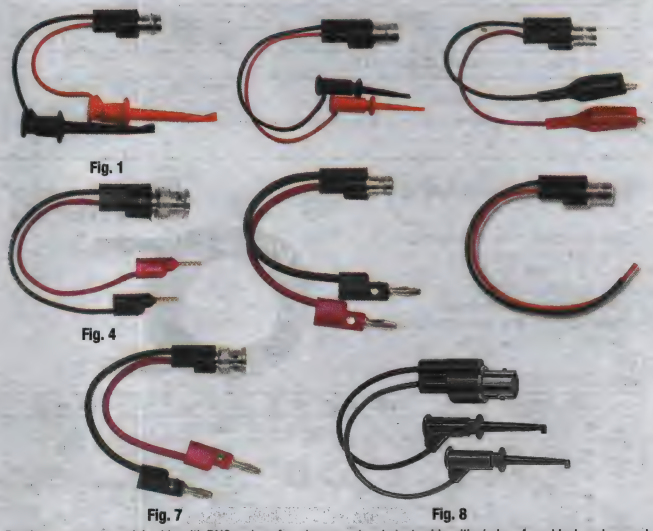


Fig. 1 Fig. 4 Fig. 7 Fig. 8

Breakouts convert coaxial cable with BNC male or female connectors to test cable with choice of one black and one red clips or plugs. Tarnish-resistant, plated-brass BNC with gold-plated copper contact. Overall length: 7.0". **Mfg. part nos. 4969**, **4970**, **3221**, **3957** and **3073** rated 500Vrms; **mfg. part nos. 3788** and **3789** rated 300Vrms; **mfg. part nos. 5188**, **5305** and **2630** rated 150Vrms; **mfg. part no. 2631** rated 45Vrms.

Mfg. Part No.	Fig.	Description	Stock No.	Price Each
3788	1	Female BNC to 2 Minigrabber™ Clips	35F1061	12.30
3789	...	Male BNC to 2 Minigrabber™ Clips	35F975	15.15
5305	2	Female BNC to 2 SMD Grabber Clips	46F2415	16.20
2630	3	Female BNC to 2 Alligator Clips	10M4222	12.30
2631	3	Female BNC to 2 Minigator Clips	10M4223	12.30
3221	...	Female BNC to Stacking Pin Tip Plugs	10M4236	14.85
3901	4	Male BNC to Stacking Pin Tip Plugs	77B2426	18.30
3073	5	Female BNC to Stacking Banana Plugs	10M4233	11.55
4969	6	Female BNC with 20 AWG leads	94F1506	8.30
4970	...	Male BNC with 20 AWG leads	94F1507	10.95
3957	7	Male BNC to Multistacking Banana Plug	94F1581	16.65
5188	8	Female BNC to Micrograbber™ Clips	90F1316	15.75

(8975)

CABLE ASSEMBLIES

RoHS Compliant Available

Pomona®

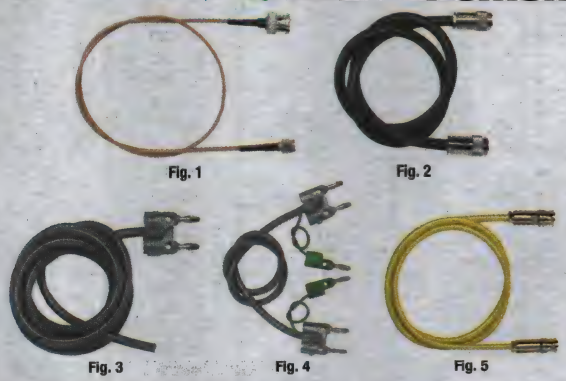


Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5

BNC MALE TO SMA MALE INSULATED CABLE — FIG. 1
Rating: 335Vrms. Cable Type: RG316/U. 0.98" O.D.

Mfg. Part No.	Cable Length (in.)	Stock No.	Price Each
4935-BB-24	24	77B4084	50.50
4935-BB-48	48	10M4376	50.50
4935-BB-60	60	10M4377	50.50
TYPE 'N' MALE, EACH END 50 OHM CABLE — FIG. 2			
1658-T-36	36	77B2158	72.00
1658-T-60	60	77B2160	93.75
MULTI-STACKING DOUBLE BANANA PLUG, ONE END ONLY - FIG 3			
1326-A-60	60	96F7101	17.25
TWO CONDUCTOR SHIELDED BALANCED LINE — FIG 4			
1167-36	36	10M4160	40.20

➤CONTINUED➤

TEST LEADS & ACCESSORIES

CABLE ASSEMBLIES (CONT.)

TRIAXIAL 3 LUG MALE TRIAXIAL CABLE — FIG 5

Mfg. Part No.	Cable Length (in.)	Stock No.	Price Each
● 5223-36	36	94F5207	109.50
TRIAXIAL 2 LUG MALE TRIAXIAL CABLE — FIG 5			
● 5054-36	36	78B1833	109.50
● 5054-60	60	78B1834	119.00

(8969)

TRUE 75Ω BNC MALE CABLES

RoHS Compliant Available

Pomona®

- BNC Connectors are Perfectly Matched to 75Ω Impedance for Superior VSWR and Return Loss Performance
- Ideal for Digital Video and Telecommunications Applications
- Cable Type: High-Flex, Multistrand Center Conductor, RG59 Type, Black

Rating: 500Vrms +50°C.

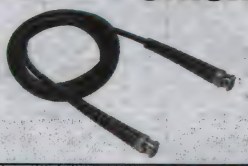
Mfg. Part No.	Cable Length	Stock No.	Price Each
● 6510-V-12-0	12″	30C5088	20.85
● 6510-V-24-0	24″	30C5089	20.85
● 6510-V-36-0	36″	30C5090	20.85
● 6510-V-48-0	48″	30C5091	24.75
● 6510-V-60-0	60″	30C5092	24.75

(68987)

BNC MALE EACH END CABLE ASSEMBLIES

RoHS Compliant Available

Pomona®



Molded stress relief boot. **2249-C series:** ideal for most test and measurement applications, RG58C/U, 50Ω; **2249-E series:** ideal for use with TV, video and LAN signals, RG59B/U, 75Ω; **4964 series:** ideal for low power, low frequency measurements.

Mfg. Part No.	Length (in)	Stock No.	Price Each
● 2249-C-6	6	91B6405	16.95
● 2249-C-12	12	35F1072	16.95
● 2249-C-24	24	35F1073	16.95
● 2249-C-36	36	35F1074	16.95
● 2249-C-48	48	35F1075	21.15
● 2249-C-60	60	35F1076	21.15
● 2249-C-72	72	89F333	21.15
● 2249-C-120	10	89F332	25.05
● 2249-C-180	180	89F331	30.75
● 2249-C-300	300	88F6303	41.70
● 2249-C-600	600	88F6302	61.50
● 2249-E-12	12	35F1077	18.00
● 2249-E-24	24	35F1078	18.00
● 2249-E-36	36	35F1079	18.00
● 2249-E-48	48	35F1080	21.15
● 2249-E-60	60	35F1081	21.15
● 2249-E-72	72	50F1471	21.15
● 2249-E-120	120	14C7842	25.50
● 2249-E-180	180	98F7840	30.75
● 2249-E-240	240	51B934	36.00
● 2249-E-300	300	97B2360	41.70
● 4964-SS-24	24	89F334	22.65
● 4964-SS-36	36	89F328	22.65
● 4964-SS-48	48	89F329	27.15
● 4964-SS-60	60	89F330	27.15
● 4964-SS-240	20	50B6750	41.25

(8905)

TENMA® AT NEWARK ELEMENT14

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(212566)

BNC MALE CABLE ASSEMBLIES

RoHS Compliant Available

Pomona®

BNC male/BNC male. 50Ω. 500Vrms, +80°C. (*)Economy style.

BNC-C

Mfg. Part No.	Length	Stock No.	Price Each
● BNC-C-18	18″	30F1417	20.95
● BNC-C-24	24″	34F842	20.95
● BNC-C-36	36″	34F843	20.95
● BNC-C-48	48″	44F2636	22.95
● BNC-C-60	60″	44F2638	22.95
● 5697-6*	6″	94B9361	9.10
● 5697-12*	12″	50F1529	9.10
● 5697-24*	24″	50F1530	9.10
● 5697-36*	36″	50F1531	9.10
● 5697-48*	48″	50F1532	13.65
● 5697-60*	60″	50F1533	13.65
● 5697-72*	72″	50F1534	13.65
● 5697-120*	120″	50F1535	15.90

(8906)

BNC MALE CABLE ASSEMBLIES W/MOLDED STRAIN RELIEF TO MULTI-STACKING DOUBLE BANANA PLUG

RoHS Compliant Available

Pomona®

The **4530-C series** double banana plug body is made of nickel-plated brass. The springs are made of beryllium copper. The cable is RG-58C/U 0.195" O.D. It is rated to 500 Vrms and up to +50°C.

Mfg. Part No.	Length	Stock No.	Price Each
● 4530-C-18	18″	10M4332	19.35
● 4530-C-24	24″	10M4333	19.35
● 4530-C-36	36″	10M4334	19.35
● 4530-C-48	48″	10M4335	21.60
● 4530-C-60	60″	10M4336	21.60
BNC MALE TO TWO STACKING BANANA PLUGS			
● 5268-C-24	24″	10M4840	23.70
● 5268-C-36	36″	10M4841	23.70
● 5268-C-48	48″	92B5476	25.80
● 5268-C-60	60″	10M4842	26.55
BNC MALE TO TWO RETRACTABLE SHEATH BANANA PLUGS			
● 5343-C-36	36″	50B6754	24.75

(42573)

TEST LEAD ACCESSORIES

Pomona®

File patch cords and cable assemblies for easy selection. Mount on any vertical surface. Cold rolled steel with baked enamel finish.

Mfg. Part No.	Color	Fits Cable	No. of Slots	Stock No.	Price Each
1508/POM	Orange	0.210″	14	34F956	13.65
4408	Black	0.320″	10	34F1017	11.25
2708	Blue	0.450″	9	34F957	13.65

(8976)

KELVIN PROBES

Pomona®

- Patented Design for High-Precision Rapid Testing
- Easily Move from One Test Point to Another for Rapid Readings
- Rating: 30VAC/70VDC
- For Use with 4-Wire Kelvin Meters

Designed for use with 4- and 2-wire measurements.

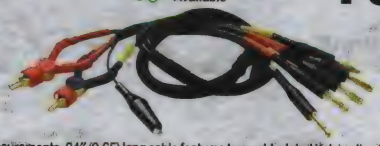
Mfg. Part No.	Description	Stock No.	Price Each
6303	Kelvin Probes	03C3869	112.50

(68955)

KELVIN CLIPS

RoHS Compliant Available

Pomona®



Accurate four wire measurements. 24" (0.65) long cable features two gold-plated Kelvin clips for low contact resistance, and four color-coded gold-plated banana plugs. Minigator to banana plug lead is included for grounding or guarding. Rated: 30VAC/70VDC.

Mfg. Part No.	Description	Stock No.	Price Each
5940	Kelvin Clips Set for 4-Wire Resistive Measurement	95F1364	200.00

(8984)

SOIC TEST CLIPS

RoHS Compliant Available

Pomona®

Spring-loaded clips for testing SOIC and SOJ small outline ICs. 2.54mm pitch spacing.

8-, 14-, 16-, 20-, 24-, AND 28- PIN SOIC CLIPS—BODY WIDTHS 0.15" – 0.3"

Mfg. Part No.	Pins	Stock No.	Price Each
5250	8	46F2416	11.85
5251	14	46F2417	11.55
5252	16	46F2418	12.90
5253	20	46F2419	15.15
5254	24	46F2420	21.75
5437	28	89F422	26.10

32-, 40-, AND 44-PIN SOIC/SOJ CLIPS—BODY WIDTHS 0.30" – 0.60"

Mfg. Part No.	Pins	Stock No.	Price Each
6107	32	91F2996	39.95
6108	40	91F2997	44.95
6109	44	91F2998	47.95

(16327)

TEST LEAD ACCESSORIES

RoHS Compliant Available

Pomona®

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

MOLDED PVC STRESS RELIEF BOOTS

Protects cable 0.185-0.2.00" (4.70-5.08) outer diameter except (*) which fit 0.237-0.247" (6.02-6.27) outer diameter.

Mfg. Part No.	Fig.	Color	Fits Cable	Stock No.	Price Each
5155-0+	1	Black	RG 58, 141	48F5006	10.20
5156-0+	1	Black	RG 59, 62, 210	20H0126	10.20
5076-0*	2	Black	RG 58, 141	44F5342	4.95

* Each; +Sold in Packages of 10.

CONNECTOR TEST ADAPTERS

For rapid testing of hard-to-reach contacts of multi-pin and socket rack or panel connectors. 2500 WVDC, +50°C.

Mfg. Part No.	Fig.	Description	Contact Diameter	Amps	Stock No.	Price Each
4690-2#	3	Red Socket	0.030"	5.0	81F4649	4.80
4691-0	4	Black Pin	0.030"	5.0	81F4642	4.80
4691-2#	4	Red Pin	0.030"	5.0	81F4650	4.80
3560-0	3	Black Socket	0.040"	7.5	81F4643	4.55
3560-2	3	Red Socket	0.040"	7.5	81F4651	4.55
3561-0	4	Black Pin	0.040"	7.5	81F4644	4.55
3561-2	4	Red Pin	0.040"	7.5	81F4652	4.55
3562-0	3	Black Socket	0.063"	13.0	81F4645	4.55
3562-2	3	Red Socket	0.063"	13.0	81F4653	4.55
3563-0	4	Black Pin	0.063"	13.0	81F4646	4.55
3563-2	4	Red Pin	0.063"	13.0	81F4654	4.55
3564-0	3	Black Socket	0.093"	23.0	81F4647	7.30
3564-2	3	Red Socket	0.093"	23.0	81F4655	7.30

➤CONTINUED➤

TEST LEAD ACCESSORIES (CONT.)

Mfg. Part No.	Fig.	Description	Contact Diameter	Amps	Stock No.	Price Each
3565-0	4	Black Pin	0.093"	23.0	81F4648	4.70
3565-2	4	Red Pin	0.093"	23.0	81F4656	4.70
RETRACTABLE SLEEVE BANANA PLUGS						
122505A	5	4mm Banana Plug for 18AWG Wire, Black			99F7945	5.30
122506A	5	4mm Banana Plug for 18AWG Wire, Red			02B1440	5.30
IN-LINE BANANA PLUG						
6383-0	...	User Installed In-Line Banana Plug, Black			32H5245	27.90
6383-2	...	User Installed In-Line Banana Plug, Red			57H6847	27.90
IN-LINE BANANA JACK						
6384-0	...	User Installed In-Line Banana Jack, Black			35H7046	30.45

(43070)

ALLIGATOR CLIPS

RoHS Compliant Available

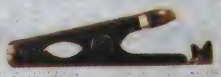
SILVERTRONIC

501784, 501784X, 501784C

501784U

501784S, 501784CS

501785



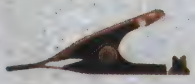
501793, 501793C

501795

501999

502005, 502005C

502007



502008, 502008C

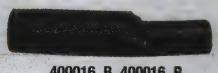
502019

501993_B, 501993_R, 501993C_B, 501993C_R

502000_B, 502000_R, 502000C_B, 502000C_R

400017_B, 400017_R

400015_B, 400015_R



400016_B, 400016_R

400024_B, 400024_R

400025_B, 400025_R

501789

UNINSULATED CLIPS

Mfg. Part No.	Jaw Opening Max. (in.)	Current (A)	Termination	Material	Features	Stock No.	Price Each 1-24
501784	0.31	10	Banana Plug or Crimp / Solder	Steel	Standard w/ Barrel	82R5243	0.28
501784S	0.31	10	Banana Plug or Screw	Steel	Standard w/ Barrel and Screw	82R5247	0.43
501784U	0.31	10	Crimp / Solder	Steel	U-Shaped Tail	82R5249	0.27
501784X	0.31	10	Banana Plug or Crimp / Solder	Stainless Steel	Standard w/ Barrel	82R5251	0.84
501784C	0.31	10	Banana Plug or Crimp / Solder	Copper	Standard w/ Barrel	82R5244	0.68
501784CS	0.31	10	Banana Plug or Screw	Copper	Standard w/ Barrel and Screw	82R5245	0.77
501785	0.31	10	Threaded Barrel	Steel	8-32 UNC Thread	82R5253	0.55
501793	0.19	5	Crimp / Solder	Steel	Miniature	82R5273	0.23
501793C	0.19	5	Crimp / Solder	Copper	Miniature	82R5277	0.40
501795	0.19	5	Crimp / Solder	Steel	Miniature w/ Barrel	82R5280	0.23

➤CONTINUED➤

TEST LEADS & ACCESSORIES

ALLIGATOR CLIPS (CONT.)

Mfg. Part No.	Jaw Opening Max. (in.)	Current (A)	Termination	Material	Features	Stock No.	Price Each 1-24
● 501999	0.39	10	Crimp / Solder or Banana Plug	Steel	Fang Tooth w/ Barrel	82R5323	0.28
● 502005	0.31	5	Crimp / Solder	Steel	...	82R5345	0.44
● 502005C	0.31	10	Crimp / Solder	Copper	...	82R5346	0.65
● 502007	0.19	5	Threaded Barrel	Steel	6-32 UNC Thread	82R5348	0.53
● 502008	0.22	5	Crimp / Solder	Steel	Toothless	82R5349	0.45
● 502008C	0.22	5	Crimp / Solder	Copper	Toothless	82R5350	0.59
● 502019	0.31	10	Accepts Standard Prod	Steel	Phone Tip/Test Prod Formed Barrel	82R5369	0.53

INSULATED CLIPS

Mfg. Part No.	Jaw Opening Max. (in.)	Current (A)	Termination	Material	Insulator Color	Features	Stock No.	Price Each 1-24
● 501993_B	0.31	10	Banana Plug or Screw	Steel	Black	...	82R5299	0.96
● 501993_R	0.31	10	Banana Plug or Screw	Steel	Red	...	82R5300	0.97
● 501993C_B	0.31	10	Banana Plug or Screw	Copper	Black	...	82R5301	1.25
● 501993C_R	0.31	10	Banana Plug or Screw	Copper	Red	...	82R5302	1.25
● 502000_B	0.31	10	Banana Plug or Screw	Steel	Black	Standard w/ Barrel	82R5325	0.55
● 502000_R	0.31	10	Banana Plug or Screw	Steel	Red	Standard w/ Barrel	82R5327	0.55
● 502000C_B	0.31	10	Banana Plug or Screw	Copper	Black	Standard w/ Barrel	82R5328	0.91
● 502000C_R	0.31	10	Banana Plug or Screw	Copper	Red	Standard w/ Barrel	82R5330	0.91

INSULATORS

Mfg. Part No.	For Use With	Color	Stock No.	Price Each 1-24
● 400017_B	Silvertronic 501784 & 501785 Series Alligator Clips	Black	82R5188	0.21
● 400017_R	Silvertronic 501784 & 501785 Series Alligator Clips	Red	82R5191	0.21
● 400015_B	Silvertronic 501793 Alligator Clips	Black	82R5180	0.17
● 400015_R	Silvertronic 501793 Alligator Clips	Red	82R5181	0.17
● 400016_B	Silvertronic 501795 & 502007 Series Mini Alligator Clips	Black	82R5183	0.19
● 400016_R	Silvertronic 501795 & 502007 Series Mini Alligator Clips	Red	82R5186	0.19
● 400024_B	Silvertronic 502005 Series Alligator Clips	Black	82R5219	0.27
● 400024_R	Silvertronic 502005 Series Alligator Clips	Red	82R5220	0.27
● 400025_B	Silvertronic 502008 Series Toothless Alligator Clips	Black	82R5221	0.20
● 400025_R	Silvertronic 502008 Series Toothless Alligator Clips	Red	82R5222	0.20

TEST LEADS

Mfg. Part No.	For Use With	Stock No.	Price Each 1-24
● 501789	Multi-Color Insulated Test Leads (Set of 10)	82R5255	4.33

(190778)

SPRING TEST CLIPS

RoHS Compliant Available

SILVERTRONIC

CLIPS

Mfg. Part No.	Type	Jaw Opening Max. (in.)	Current (A)	Termination	Material	Stock No.	Price Each 1-24
● 501790	Heavy Duty (Large)	1.1	50	Crimp or Screw	Steel	82R5257	2.70
● 501790C	Heavy Duty (Large)	1.1	100	Crimp or Screw	Copper	82R5260	8.04
● 501797	Analyzer	0.5	10	Crimp or Screw	...	82R5282	0.67
● 501797C	Analyzer	0.5	20	Crimp or Screw	Copper	82R5284	0.92
● 501994	Petite	0.32	5	Crimp or Screw	Steel	82R5304	0.50
● 501994C	Petite	0.32	10	Crimp or Screw	Copper	82R5305	0.85
● 501995	Alligator	0.32	5	Crimp or Screw	...	82R5309	0.55
● 501995C	Alligator	0.32	10	Crimp or Screw	Copper	82R5310	1.07
● 501996	General Purpose	0.63	20	Crimp or Screw	Steel	82R5313	0.75
● 501996C	General Purpose	0.63	40	Crimp or Screw	Copper	82R5314	1.70
● 501996CG	Curved Jaw	0.63	40	Crimp or Screw	Copper	82R5315	2.01
● 501997	Automotive	0.75	40	Crimp or Screw	Steel	82R5318	1.01
● 501997C	Automotive	0.75	75	Crimp or Screw	Copper	82R5319	3.26
● 502002	Heavy Duty (Small)	0.75	25	Crimp or Screw	Steel	82R5336	1.13
● 502033C	Welding	0.75	300	Lug	Copper	82R5371	24.41
● 502050C	Meter Testing	0.5	20	Crimp or Screw	Copper	82R5372	2.07
● 502055	Economy	0.44	10	Crimp or Screw	Steel	82R5374	0.57
● 503011	Heavy Duty	1.63	100	Lug	Steel	82R5376	5.96
● 503011C	Heavy Duty	1.63	200	Lug	Copper	82R5377	12.20

INSULATORS

Mfg. Part No.	For Use With	Color	Stock No.	Price Each 1-24	Price Each 25-49
● 400020_B	Silvertronic 501790 Series General Purpose Clips	Black	82R5202	1.16	1.09
● 400020_R	Silvertronic 501790 Series General Purpose Clips	Red	82R5204	1.12	1.05
● 400019_B	Silvertronic 501797 Series Analyzer Clips	Black	82R5196	0.56	0.53
● 400019_R	Silvertronic 501797 Series Analyzer Clips	Red	82R5199	0.56	0.53
● 400018_B	Silvertronic 501994 Series Petite Clips	Black	82R5194	0.23	0.22
● 400018_R	Silvertronic 501994 Series Petite Clips	Red	82R5195	0.23	0.22
● 400021_B	Silvertronic 501955 Series Croc Clips	Black	82R5206	0.36	0.34
● 400021_R	Silvertronic 501955 Series Croc Clips	Red	82R5208	0.36	0.34
● 400022_B	Silvertronic 501996 Series General Purpose Test Clips	Black	82R5209	0.56	0.53
● 400022_R	Silvertronic 501996 Series General Purpose Test Clips	Red	82R5212	0.56	0.53
● 400023_B	Silvertronic 501997 Series Auto Test Clips	Black	82R5215	0.93	0.88
● 400023_R	Silvertronic 501997 Series Auto Test Clips	Red	82R5217	0.89	0.84

(190761)

CALIBRATION SERVICES

From pre-calibration to re-calibration, we bring you competitive pricing with quick delivery.

(207666)

PLIER-TYPE (BATTERY) CLAMPS

RoHS Compliant Available

SILVERTRONIC

UNINSULATED CLAMPS

Mfg. Part No.	Type	Jaw Opening Max. (in.)	Current (A)	Termination	Material	Stock No.	Price Each 1-24
501774	Charger (Small)	1.125	50	Crimp / Solder	Steel	82R5236	0.51
501774C	Charger (Small)	1.125	75	Crimp / Solder	Copper	82R5239	1.83
501774Z	Charger (Small)	1.125	50	Crimp / Solder	Steel	99R3801	0.60
501849	Charger (Large)	1.6	200	Crimp / Solder	Steel	82R5289	2.99
501849C	Charger (Large)	1.6	400	Crimp / Solder	Copper	82R5292	13.76

INSULATED CLAMPS

Mfg. Part No.	Type	Jaw Opening Max. (in.)	Current (A)	Color	Termination	Material	Stock No.	Price Each 1-24
501774_B	Charger (Small)	1.125	50	Black	Crimp / Solder	Steel	82R5237	0.82
501774_R	Charger (Small)	1.125	50	Red	Crimp / Solder	Steel	82R5238	0.82
501774C_B	Charger (Small)	1.125	75	Black	Crimp / Solder	Copper	80R9399	1.92
501774C_R	Charger (Small)	1.125	75	Red	Crimp / Solder	Copper	80R9397	1.92
501849_B	Charger (Large)	1.6	200	Black	Crimp / Solder	Steel	82R5290	3.98
501849_R	Charger (Large)	1.6	200	Red	Crimp / Solder	Steel	82R5291	3.98
501849C_B	Charger (Large)	1.6	400	Black	Crimp / Solder	Copper	82R5293	14.78
501849C_R	Charger (Large)	1.6	400	Red	Crimp / Solder	Copper	82R5294	14.78
502003_B	Heavy Duty	1.7	500	Black	Crimp / Solder or Screw	...	82R5339	18.31
502003_R	Heavy Duty	1.7	500	Red	Crimp / Solder or Screw	...	82R5340	18.31
502004_B	Charger (Small)	1.25	...	Black	Crimp / Solder	...	82R5342	2.80
502004_R	Charger (Small)	1.25	...	Red	Crimp / Solder	...	82R5343	2.80
502009_B	Petite	0.75	15	Black	Crimp / Solder	Steel	82R5353	0.71
502009_R	Petite	0.75	15	Red	Crimp / Solder	Steel	82R5354	0.72
502012_B	Heavy Duty	1.7	500	Black	Crimp / Solder or Screw	Copper	82R5358	18.93
502012_R	Heavy Duty	1.7	500	Red	Crimp / Solder or Screw	Copper	82R5359	18.31

INSULATORS

Mfg. Part No.	For Use With	Color	Stock No.	Price Each 1-24
400010B	Silvertronic 501774 Series Small Charger Clips	Black	82R5167	0.10
400010R	Silvertronic 501774 Series Small Charger Clips	Red	82R5168	0.10

➤CONTINUED➤

PLIER-TYPE (BATTERY) CLAMPS (CONT.)

Mfg. Part No.	For Use With	Color	Stock No.	Price Each 1-24
400012B	Silvertronic 501849 Series Large Charger Clips	Black	82R5170	0.52
400012R	Silvertronic 501849 Series Large Charger Clips	Red	82R5171	0.52
400027_B	Silvertronic 503011 Series Test Clips	Black	99R3800	3.39
400027_R	Silvertronic 503011 Series Test Clips	Red	82R5226	3.39
400035_B	Silvertronic 502033 Series Test Clips	Black	82R5227	6.83
400035_R	Silvertronic 502033 Series Test Clips	Red	82R5228	6.83

(190763)

KELVIN CLIPS

RoHS Compliant Available

SILVERTRONIC

Mfg. Part No.	Type	Jaw Opening Max. (in.)	Current (A)	Color	Termination	Material	Stock No.	Price Each 1-24
502001	Standard	0.31	10	...	Screw	Gold	82R5334	9.69
502012_B	Standard Heavy Duty	1.7	500	Black	Crimp / Solder or Screw	Copper	82R5358	18.93
502012_R	Standard Heavy Duty	1.7	500	Red	Crimp / Solder or Screw	Copper	82R5359	18.31
502013_B	Kelvinized Heavy Duty	1.7	500	Black	Crimp / Solder or Screw	Copper	82R5361	24.77
502013_R	Kelvinized Heavy Duty	1.7	500	Red	Crimp / Solder or Screw	Copper	82R5362	25.10
502078	Standard	0.5	10	...		Gold	82R5375	48.65

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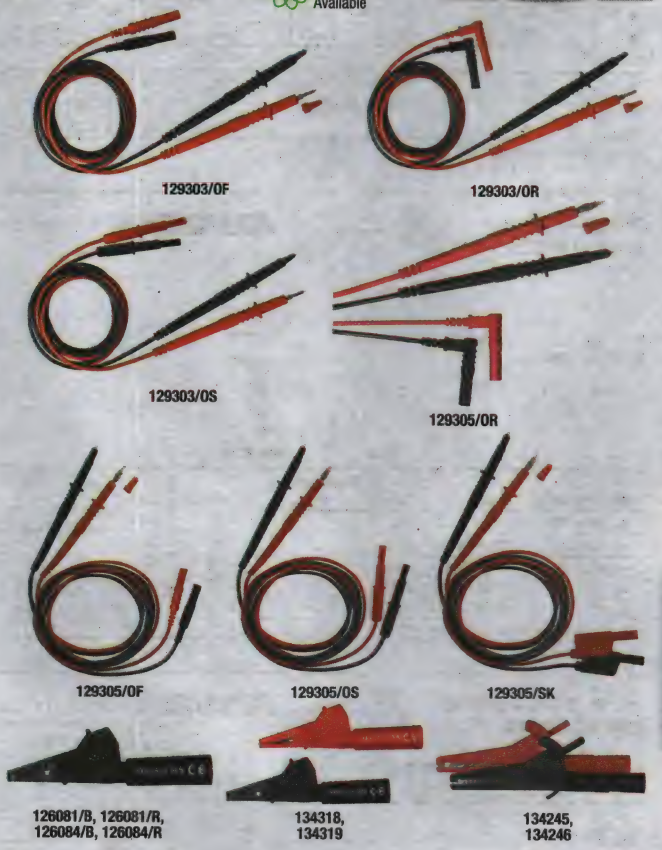
SAFETY TEST LEADS

RoHS Compliant Available

SILVERTRONIC



- 1.2m double skin silicone cable
- 3.6mm diameter multistranded very flexible copper core
- Temp. rating: -10°C to +150°C
- IEC1010 rating: 1000V CATIII, 20A

➤CONTINUED➤

SAFETY TEST LEADS (CONT.)

TEST LEADS

Mfg. Part No.	Features	Plug Type	Stock No.	Price Each 1-24
● 129303/0F	8-32 UNC Threaded	Fixed Shroud	82R3704	12.86
● 129303/0R	8-32 UNC Threaded	Right Angle	82R3705	12.69
● 129303/0S	8-32 UNC Threaded	Shutter	82R3706	13.35
● 129305_0F	4mm Lantern Contact	Fixed Shroud	82R3707	12.48
● 129305_0R	4mm Lantern Contact	Right Angle	82R3708	13.35
● 129305_0S	4mm Lantern Contact	Shutter	82R3709	14.03
● 129305_SK	4mm Lantern Contact	Stackable	82R3710	13.11

COMPATIBLE CLIPS

Mfg. Part No.	For Use With	Insulator Color	Voltage Rating	Stock No.	Price Each 1-24
● 126081/B	129303 Series Test Leads	Black	300V	82R3620	4.19
● 126081/R	129303 Series Test Leads	Red	300V	82R3621	4.19
● 134246	129303 Series Test Leads	Black / Red	1000V	82R3769	15.58
● 134318	129303 Series Test Leads	Black / Red	300V	82R3786	8.76
● 126084/B	129305 Series Test Leads	Black	300V	82R3622	4.19
● 126084/R	129305 Series Test Leads	Red	300V	82R3623	4.19
● 134245	129305 Series Test Leads	Black / Red	1000V	82R3767	15.58
● 134319	129305 Series Test Leads	Black / Red	300V	82R3787	8.76

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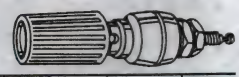
INSULATED BINDING POSTS

RoHS Compliant Available — ABBATRON HH Smith

Polycarbonate head and washers. Body brass, gold plated.



FLUTED HEAD

Mfg. Part No.	MIL-SPEC 1	MIL-SPEC 2	Rating (A)	Color	Thread Size	Stock No.	Price Each 1-4
● 1517-102*	...	...		Red	6-32	67F4000	14.64
● 1517-103*	...	...		Black	6-32	67F4001	14.64
● 1514-102*	PBF01FA01	A-A-59560 (MIL-P-55149)		Red	8-32	46F1316	20.27
● 1514-103*	PBF01FA02	A-A-59560 (MIL-P-55149)		Black	8-32	46F1317	19.15
HEX HEAD							
● 257-102	PB01FA03	A-A-59560 (MIL-P-55149)		Red	10-32	35F844	9.66
● 257-103	PB01FA04	A-A-59560 (MIL-P-55149)		Black	10-32	35F749	9.66
● 257-104	...	...		Green	10-32	28F1223	15.85

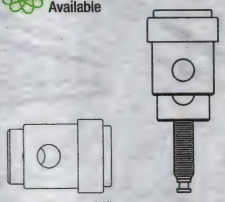
* UL recognized (UL 1244)

(9311)

SPRING-LOADED BINDING POSTS

RoHS Compliant Available — ABBATRON HH Smith

Nickel-plated brass body. Plastic top cap. Rated 15A.



2809 2803, 2804

Mfg. Part No.	Style	Color	Stud Length (in.)	Thread Size	Stock No.	Price Each 1-4
● 2809-102	Internal Thread	Red	...	6-32	81F4212	8.14
● 2809-103	Internal Thread	Black	...	6-32	81F4213	8.04
● 2803-102	External Thread	Red	½	6-32	96F9076	7.80
● 2803-103	External Thread	Black	½	6-32	96F9077	7.91
● 2804-102	External Thread	Red	¾	6-32	50B7279	9.55
● 2804-103	External Thread	Black	¾	6-32	94F1638	10.24

(9315)

MIL-P-55149/8 SPRING-LOADED BINDING POSTS

RoHS Compliant Available — ABBATRON HH Smith

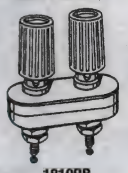
Nylon washers; silicon rubber insulation. Rated 15A.

Mfg. Part No.	MIL No.	Color	Stock No.	Price Each 1-4	Price Each 5-9
● 1837-102	PBO8NA02	Red	87F3814	23.30	22.09
● 1837-103	PBO8NA01	Black	87F3815	23.30	22.09

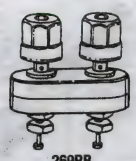
(9317)

INSULATED DUAL BINDING POSTS, ¾" CENTERS

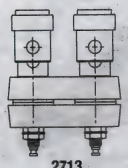
RoHS Compliant Available — ABBATRON HH Smith



1810RB



269RB



2713

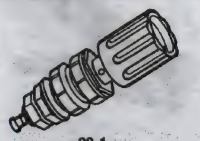
Polycarbonate heads, insulators. Body brass.

Mfg. Part No.	Style	Rating (A)	Color	Thread Size	Stock No.	Price Each 1-4
● 269RB	Hex Head	30	Red and Black	10-32	35F847	10.03
● 1810RB	Fluted Head	15	Red and Black	8-32	46F2329	16.45
● 2713-RB	Dual Spring-loaded	15	Red and Black	8-32	80H9106	15.48
● 2713-RR	Dual Spring-loaded	15	Red and Red	8-32	28C3324	14.81
● 2713BB	Dual Spring-loaded	15	Black and Black	8-32	96F9073	15.68

(9319)

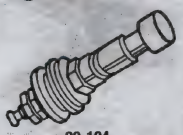
29 SERIES BINDING POSTS AND PUSH POSTS

RoHS Compliant Available — Grayhill



29-1

29-100 29-110



29-104

Mfg. part no. 29-1 straight-skirt binding posts fit 0.375" (9.53) dia. hole for close spacing. Rated 120VDC, 15A continuously. Insulation resistance between stud and mounting panel: 120,000 megohms. Voltage breakdown: 1500VAC. Panel thicknesses to 0.187" (4.75). Insulated per MIL-M-14, type CFG. **Mfg. part nos. 29-100** and **29-110** are standard push posts. **Mfg. part no. 29-104** insulated push post features black phenolic washers. All push posts are rated 120VDC, 20A continuously. **NOTE:** With push posts, simply press button top, put lead in slot, and release button. Spring pressure provides positive contact. Extends 0.875" (22.23) above mounting board.

Mfg. Part No.	Description	Cap	Mount Hole Dia.	Stock No.	Price Each 1-49	Price Each 50-99
● 29-1 BLK	Straight-Skirt Binding Post	Black	0.375"	28F567	7.70	7.41
● 29-1 RED	Straight-Skirt Binding Post	Red	0.375"	28F566	7.44	7.16
● 29-100 BLK	Standard Push Post	Black	0.171"	28F418	5.10	4.92
● 29-100 RED	Standard Push Post	Red	0.171"	28F417	5.10	4.92
● 29-110	Standard Push Post	None	0.171"	57F2650	4.93	4.74
● 29-104 BLK	Insulated Push Post	Black	0.390"	28F422	6.97	6.70
● 29-104 RED	Insulated Push Post	Red	0.390"	28F421	6.97	6.70

(5059)

STANDARD BINDING POSTS

RoHS Compliant Available — EMERSON Network Power — Johnson Connectivity Solutions

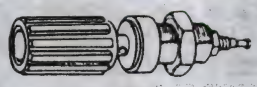


Fig. 1

For standard 0.175" diameter banana plug. Fluted, insulating nylon body prevents turning. Silver-plated brass stud has turret termination. Come with nickel-plated nut. Current: 15A. Breakdown voltage: 5700Vrms minimum. Panel thickness: 0.281" max. Other colors available; *go online or call.*

INSULATED — FIG. 1

Mfg. Part No.	Color	Stock No.	Price Each 1-9
● 111-0101-001	White	39F1545	5.15
● 111-0102-001	Red	39F1546	5.08
● 111-0103-001	Black	39F1547	4.93
● 111-0104-001	Green	39F1548	5.15
● 111-0107-001	Yellow	39F1551	5.01
● 111-0110-001	Blue	39F1554	5.01
INSULATED WITH KNURLED THUMB, NUT-GROUND TYPE			
● 111-0703-001*	Black	08B546	4.46
● 111-0702-001*	Red	94F3892	4.41
UNINSULATED WITH KNURLED THUMB, NUT-GROUND TYPE			
● 111-2223-001	...	96F9760	4.02

(9089)

DUAL BINDING POSTS

RoHS Compliant Available

multicomp

Nickel-plated brass body. Captive molded nylon head. Molded black insulation, cross slotted to accept standard phone tips in post either forward or sideways. Mount in two ½" holes on ¾" mounting centers in panels to ¼" thick. Accept single or dual banana plugs. Include 4 hex nuts, and 2 flat washers.

Mfg. Part Nos. 4-876-R, SPC15285

Mfg. Part No.	Color	Stock No.	Price Each 1-99	100-249	250-499
SPC15375	Two Black	79K4959	6.59	5.43	4.94
SPC15285	Two Red	79K4882	9.83	8.08	7.41
SPC15475	One Each	79K5047	6.67	5.49	5.03

(9056)

BNC, PHONE, AND PHONO ADAPTERS

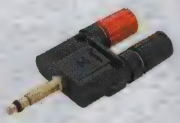
RoHS Compliant Available

Pomona®

1270

3269

72937



5001

4993

50 OHM BNC COAXIAL ADAPTERS

Mfg. Part No.	Description	Stock No.	Price Each
1269	BNC Female to Double Stacking Banana Plugs	10M4161	8.70
1270#	BNC Male to Double Stacking Banana Plugs	10M4162	12.75
1296	BNC Male to Double Stacking Binding Posts	34F870	16.20
1469	Dual Binding Post to BNC Plug	89F351	36.15
3430-0	Binding Post to BNC Male	10M4249	8.50
3430-2	Binding Post to BNC Male	06M6791	8.50
3269	BNC Female to Miniature Double Banana Plug	10M4237	16.95
3296	Miniature Binding Post to BNC Male	10M4238	29.95
72910	IEC Insulated BNC Male to 2 Male 4mm Banana Plugs	74K0043	16.71
72937	IEC Insulated BNC Male to 2 4mm Banana Jacks	34M2974	17.25
72938	IEC Insulated BNC Female to 2 4mm Banana Jacks	35M4638	21.60
PHONE AND PHONO ADAPTERS			
5001	Dual Binding Post/Bantam Plug	94F5422	27.32
2112	Binding Post to PJ051/WECO310 Phone Plug	44F5336	29.10
3837	BNC Female to 2-Conductor Tini Plug	50F1466	17.10
4993	Bantam Female to WECO310 Male Adapter	89F353	38.40
BANANA PLUG ADAPTERS			
1286	Double Banana Plug w/ Binding Posts	77B1860	11.95
5405	Double Banana Plug w/ Binding Posts	96F7108	17.95

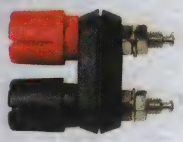
(8979)

BINDING POSTS AND ACCESSORIES

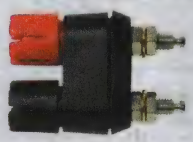
RoHS Compliant Available

Pomona®

4995-0, 4995-2



6883



6884

BINDING POSTS

Mfg. Part No.	Description	Stock No.	Price Each
3750-4	Brass Standard Binding Post, Yellow	94F757	6.95
3750-6	Brass Standard Binding Post, Blue	94F758	6.95
3760-0	Bright Tin Standard Binding Post, Black	89F356	3.65
3760-2	Bright Tin Standard Binding Post, Red	89F355	3.65
3760-8	Bright Tin Standard Binding Post, Grey	84F910	3.65
3760-9	Bright Tin Standard Binding Post, White	94F922	3.65
4243-0	Double Binding Post Assembly, Black	89F359	7.50
4243-2	Double Binding Post Assembly, Red	89F360	7.50
3750-0	Gold-Plated Standard Binding Post, Black	78B1720	6.95

CONTINUED

BINDING POSTS AND ACCESSORIES (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
3750-2	Gold-Plated Standard Binding Post, Red	78B1721	6.95
5018-0	Hex Head Binding Post, Black	50F1463	12.95
5018-2	Hex Head Binding Post, Red	50F1464	12.95
5018-5	Hex Head Binding Post, Green	78B1778	12.95
2382-2	Gold-Plated Single Insulated Miniature Binding Post, Red	94F746	7.95
4995-0	Spring Loaded Binding Post, Per MIL-P-55149/8, Black	77B4168	23.25
4995-2	Spring Loaded Binding Post, Per MIL-P-55149/8, Red	70B9068	23.25
6883	Dual Binding Posts With Base	02J8383	2.60
6884	Dual Binding Posts With Raised Base	02J8384	2.50

MISCELLANEOUS ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
3777A-0	Spade Lug to Banana Jack, Black	30F1428	2.50
3777A-2	Spade Lug to Banana Jack, Red	50F1468	2.50
3777A-02	Spade Lug to Banana Jack, 1 Red and 1 Black	22C8108	4.70
5699-0	Terminal Strip Banana Jack, 6-32 Thread, Black	50F1537	4.95
5700-0	Terminal Strip Banana Jack, 8-32 Thread, Black	50F1543	4.95
5700-3	Terminal Strip Banana Jack, 8-32 Thread, Orange	50F1544	4.95
5701-0	Terminal Strip Banana Jack, 10-32 Thread, Black	50F1546	4.95
2240-0*	Alligator Clip to Banana Jack with Flex Boot, Black	30F1421	8.50
4115*	Shorting Bar — **Sold in Packages of 10**	20H0132	29.40

*Sold in packages of 10

(110639)

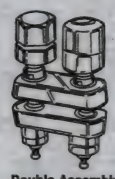
5-WAY® BINDING POSTS

RoHS Compliant Available

Superior Electric

Miniature

Hex Nut



Double Assembly

Single- and double-assembly binding posts available in standard sizes rated 30A and miniature versions rated 15A, 1000V working. All fit panels 0.06-0.25" (1.52-6.35) thick. Standard types fit 0.50" (12.70) diameter panel hole; miniature posts fit 0.375" (9.52) diameter. Captive thumbnuts with positive stop. Insulating parts are nylon. Current-carrying parts are gold-, nickel- or tin-plated brass. Some binding posts meet MIL-P-20693A, Type IV specifications; *see tables below.* Mfg. part no. **suffix** indicates color: **R** = red, **B** = black, **BL** = blue, **GN** = green, **WT** = white, **Y** = yellow. UL recognized. ***Series BP21 and BP30 meet MIL-P-20693A Type IV Specifications.*** Custom color ring and all-metal grounding styles also available; *go online or call.*

SINGLE-ASSEMBLY BINDING POSTS

BP21 SERIES — MINIATURE FLUTED NUT - NO. 6-32 STUD

Mfg. Part No.	Color	Plating	Stock No.	Price Each 1-24
BP21R	Red	Gold	35F3000	10.84
BP21B	Black	Gold	35F3002	10.97
BP21BL-1 PKG	Blue	Gold	35F3003	11.30
BP21GN	Green	Gold	35F3005	11.39
BP21WT	White	Gold	35F3001	11.15
BP21Y-1 PKG	Yellow	Gold	35F3004	11.30
BP30 SERIES — STANDARD HEX NUT - NO. 8-32 STUD				
BP30R	Red	Gold	35F3006	11.68
BP30B	Black	Gold	35F3008	11.68
BP30BL	Blue	Gold	35F3009	12.28
BP30GN	Green	Gold	35F3011	12.12
BP30WT	White	Gold	35F3007	12.01
BP30Y-1 PKG	Yellow	Gold	35F3010	12.28
BP30RN-1 PKG	Red	Nickel	96F1970	11.17
BP30BN-1 PKG	Black	Nickel	96F1971	11.38
BP30BLN-1 PKG	Blue	Nickel	96F1972	11.17
BP30GNN-1 PKG	Green	Nickel	96F1973	11.31
BP30WTN-1 PKG	White	Nickel	96F1974	11.17

DOUBLE-ASSEMBLY BINDING POSTS WITH BLACK/RED THUMBNUTS

BP21 SERIES — MINIATURE FLUTED NUT

Mfg. Part No.	Plating	Stud Size	Stock No.	Price 1-24
BP21-2BR-B PKG	Gold	6-32	35F3018	20.45
BP21-2BRN-B PKG	Nickel	6-32	67C0655	21.02
BP30 SERIES — STANDARD HEX NUT				
BP30-2BR-B PKG	Gold	8-32	35F3019	22.50
BP30-2BR10-B PKG	Gold	10-32	87F3424	23.53
BP30-2BR10N-B PKG	Nickel	10-32	87F3429	21.99

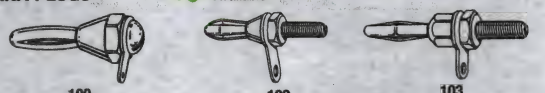
(9338)

BANANA JACKS/PLUGS

STANDARD METAL BANANA PLUGS

RoHS Compliant Available

ABBATRON HH Smith



100 102 103

Nickel-plated brass body, beryllium copper spring. Supplied with mounting hardware and solder lug. **Sold in packages of 5.**

Mfg. Part No.	Type	Stud Thread	Stud Length (in.)	Current Rating (A)	Stock No.	Price per Pkg. 1-4
● 185	Giant	1/4-32	13/32	25	82T5289	53.21
● 186	Giant	10-32	...	25	82T5290	40.44
● 192	Mini	2-56	17/64	5	82T5292	11.12
● 460	Short	4-40	3/8	10	82T5316	12.38
● 462	Short	6-32	3/8	10	82T5317	18.74
● 100	Standard	6-32	29/32	15	82T5273	11.60
● 102	Standard	6-32	3/8	15	82T5275	11.05
● 103	Standard	6-32	1/2	15	82T5276	10.49
● 401	Standard	6-32	3/8	15	82T5312	8.12
● 432	Standard	6-32	1/2	15	82T5313	14.70

(9320)

INSULATED BANANA PLUGS

RoHS Compliant Available

ABBATRON HH Smith

285

204 455, 212 211

Banana plugs are nickel plated brass with beryllium copper springs. Handles are molded plastic. **Sold in packages of 5.**

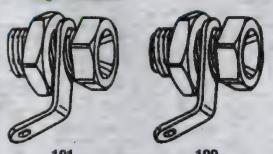
Mfg. Part No.	Type	Wiring	Current Rating (A)	Color	Stock No.	Price per Pkg. 1-4
● 285-102	Giant	Solder	25	Red	82T5305	48.01
● 285-103	Giant	Solder	25	Black	82T5306	48.01
● 204-102	Standard	Screw Terminals	15	Red	82T5293	17.27
● 204-103	Standard	Screw Terminals	15	Black	82T5294	17.27
● 455-102	Standard	Solderless	15	Red	82T5314	9.96
● 455-103	Standard	Solderless	15	Black	82T5315	9.96
● 211-102	Standard	Stud or Well	15	Red	82T5297	12.05
● 211-103	Standard	Stud or Well	15	Black	82T5298	12.21
● 212-102	Standard	Stud or Well	15	Red	82T5299	12.47
● 212-103	Standard	Stud or Well	15	Black	82T5300	12.47
● 295-102	Standard	Stud or Well	15	Black	82T5311	27.34
● 295-103	Standard	Stud or Well	15	Red	50F202	27.34
● 476-102	Standard	Stud or Well	15	Red	82T5318	12.81
● 476-103	Standard	Stud or Well	15	Black	77B3522	12.65

(9321)

UNINSULATED BANANA JACKS

RoHS Compliant Available

ABBATRON HH Smith



101 109

Threaded bodies are machined from brass and nickel plated. Body is held to panel with nut. Wire solders to lug between nut and panel. Hardware included. **Sold in packages of 5.**

Mfg. Part No.	Type	Body Length (in.)	Thread Size	Head Dia. (in.)	Stock No.	Price per Pkg. 1-4
● 157	Giant	7/8	...	5/8	82T5288	25.89
● 187	Giant	19/32	3/8-24	1/2	82T5291	13.45
● 101	Standard	13/32	1/4-32	3/8	82T5274	3.88
● 109	Standard	1/2	1/4-32	5/16	82T5277	5.68

(9322)

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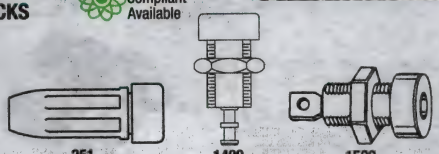
(212567)

INSULATED BANANA JACKS

RoHS Compliant Available

ABBATRON HH Smith



251 1499 1509

Metal body jacks are nickel plated brass. Jacks mount and are insulated from panel in 5/16" holes. Metal body jacks can be conductive-to-panel mounted in 1/4" holes. All are held with nut supplied. Wire wraps and solders around turret or through hole in interior contact. Wire can be soldered to lug supplied on metal body jacks. Rated at 15A for 10°C temperature rise, continuous duty. Voltage 1kVAC. **Sold in packages of 5.**

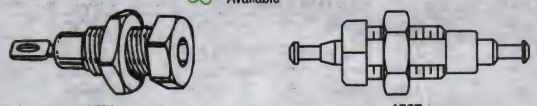
Mfg. Part No.	Type	Body Length (in.)	Thread Size	Head Dia. (in.)	Color	Stock No.	Price per Pkg. 1-4
● 286-102	Giant	13/16	3/8-24	5/8	Red	82T5307	35.18
● 286-103	Giant	13/16	3/8-24	5/8	Black	82T5308	36.53
● 251-102	In-Line	29/32	1/4-32	7/16	Red	82T5301	20.65
● 251-103	In-Line	29/32	1/4-32	7/16	Black	82T5302	20.65
● 1458-102	Miniature	5/8	1/4-32	5/16	Red	82T5278	26.55
● 1458-103	Miniature	5/8	1/4-32	5/16	Black	82T5279	26.55
● 205-102	Standard	9/16	1/4-32	7/16	Red	82T5295	14.58
● 205-103	Standard	9/16	1/4-32	7/16	Black	82T5296	14.58
● 1499-101	Standard	15/32	5/16-32	7/16	White	82T5280	5.91
● 1499-102	Standard	15/32	5/16-32	7/16	Red	82T5281	5.91
● 1499-103	Standard	15/32	5/16-32	7/16	Black	82T5282	6.06
● 1499-104	Standard	15/32	5/16-32	7/16	Green	82T5283	5.65
● 1509-101	Standard	15/32	5/16-32	7/16	White	82T5284	4.45
● 1509-102	Standard	15/32	5/16-32	7/16	Red	82T5285	4.46
● 1509-103	Standard	15/32	5/16-32	7/16	Black	82T5286	4.46
● 1509-104	Standard	15/32	5/16-32	7/16	Green	82T5287	4.45
● 1509-107	Standard	15/32	5/16-32	7/16	Yellow	82T5047	7.80

(9323)

INSULATED TIP JACKS

RoHS Compliant Available

ABBATRON HH Smith



1506 1507

Polycarbonate head. Nickel-plated brass body. 1/4" mounting hole. **Mfg. part no. 1507-103** sold as pack of 5.

Mfg. Part No.	Description	Color	Stock No.	Price Each
● 1506-102	Solder	Red	35F757	2.70
● 1506-103	Solder	Black	35F758	2.66
● 1507-102	Feed-Thru Brass Wire Wrap	Red	70B1850	2.14
● 1507-103	Feed-Thru Brass Wire Wrap	Black	98F3552	10.64

(9324)

CAGED-SPRING BANANA PLUGS

RoHS Compliant Available

ABBATRON HH Smith

Sturdy brass construction in choice of nickel or gold plating. Features a caged spring-type plug. Overall length: 1 9/32".

Mfg. Part No.	Plating	Stock No.	Price Each 1-4
● 425	Gold	95B9643	3.88
● 425AA	Nickel	95B9047	5.50

(48300)

INSULATED RIB-LOC® TIP JACKS

RoHS Compliant Available

EMERSON Network Power

Johnson Connectivity Solutions

Accept standard 0.080" (2.03) diameter tip plugs. Press mount into mounting hole. Silver-plated terminals. Current rating: 5 amps. Breakdown voltage: 3500Vrms. Contact resistance: 0.005 ohm maximum. Panel thickness: up to 0.375" (9.53), 0.172" (4.37) hole. Other colors available; *go online or call.*

Mfg. Part No.	Color	Stock No.	Price Each 1-9
● 105-1041-001	White	81F4433	1.50
● 105-1042-001	Red	81F4434	1.50
● 105-1043-001	Black	81F4435	1.50
● 105-1047-001	Yellow	81F4437	1.52

(8994)

VERTICAL TEST JACKS

RoHS Compliant Available

EMERSON. Network Power

Johnson Connectivity Solutions

Mount through 0.052″ (1.32) hole; requires minimum mounting area. Accept 0.080″ (2.03) diameter tip plugs. Machined or formed beryllium copper contact with silver finish. Current rating: 5 amps. Other colors available; *go online or call.*

MACHINED CONTACTS

Mfg. Part No.	Color	Stock No.	Price Each 1-9
105-0851-001	White	39F1752	1.37
105-0852-001	Red	39F1753	1.37
105-0853-001	Black	39F1754	1.37
105-0854-001	Green	39F1755	1.32
105-0857-001	Yellow	39F1756	1.32
105-0860-001	Blue	39F1757	1.34
FORMED CONTACTS			
105-2201-201	White	81F4439	1.22
105-2202-201	Red	81F4440	0.76
105-2203-201	Black	81F4441	0.74
105-2207-201	Yellow	81F4443	1.29

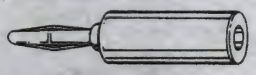
(8995)

INSULATED HEX BODY BANANA PLUGS

RoHS Compliant Available

EMERSON. Network Power

Johnson Connectivity Solutions



For standard 0.166″ banana jacks. Wire is solder or solderless up to 16 gauge. Nylon insulated handle is UL approved for self extinguishing. Plug is nickel-plated brass. Current rating: 15A. Breakdown voltage: 3500Vrms minimum. Contact resistance: 0.010 ohms maximum. Other colors available; *go online or call.*

INSULATED HEX BODY SOLDER STUD

Wire can be soldered to threaded stud or flared and held by stud for solderless connection.

Mfg. Part No.	Color	Stock No.	Price Each 1-9
108-1762-101	Red	33F1876	5.33
108-1763-101	Black	33F1878	5.19
SOLDER TYPE INSULATED HEX BODY—1.375″ LONG HANDLE			
108-0752-001	Black	39F897	3.57

(8998)

SMALL HANDLE INSULATED TIP PLUGS

RoHS Compliant Available

EMERSON. Network Power

Johnson Connectivity Solutions

For standard 0.080″ (2.03) diameter tip jack. Accepts up to 16-gauge wire, using a solder-type connection. Nylon body is UL approved for self extinguishing. Tip material is nickel-plated brass. Current rating: 10 amps. Breakdown voltage: 3500Vrms minimum. Contact resistance: 0.010 ohms maximum. Other colors available; *go online or call.*

Mfg. Part No.	Color	Stock No.	Price Each 1-9
105-0772-001	Red	94F036	1.41
105-0773-001	Black	39F1751	1.43

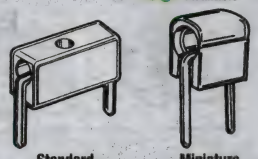
(8999)

HORIZONTAL TEST JACKS

RoHS Compliant Available

EMERSON. Network Power

Johnson Connectivity Solutions



Standard Miniature

Accept standard 0.080″ (2.03) diameter tip plug in either end, or top or bottom. Cross-hole accepts hook-type oscilloscope probe. Channel on underside for air-flow cooling during soldering. Silver-plated, copper aluminum alloy contact. Two common terminals. Current rating: 5A. Breakdown voltage: 2100Vrms minimum. Contact resistance: 0.010 ohms maximum. Nylon body is UL approved for self extinguishing. Other colors available; *go online or call.*

STANDARD HORIZONTAL TEST JACKS—0.412″ L x 0.156″ W

Mfg. Part No.	Color	Stock No.	Price Each 1-9
105-0751-001	White	39F1742	0.88
105-0752-001	Red	39F1743	0.88
105-0753-001	Black	39F1744	0.90
105-0754-001	Green	39F1745	0.88
105-0756-001	Orange	39F1746	1.17
105-0757-001	Yellow	39F1747	0.90
105-0760-001	Blue	39F1749	0.88
105-0762-001	Violet	39F1750	0.90

MINIATURE INSULATED HORIZONTAL TEST JACKS—0.212″ L x 0.147″ W

Mfg. Part No.	Color	Stock No.	Price Each 1-9
105-1101-001	White	81F4445	0.75
105-1102-001	Red	81F4446	0.75
105-1103-001	Black	81F4447	0.75
105-1110-001	Blue	81F4451	0.69

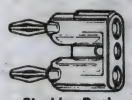
(9001)

INSULATED BANANA PLUGS

RoHS Compliant Available

EMERSON. Network Power

Johnson Connectivity Solutions



Stacking Dual

Single

For standard 0.166″ banana jack. Insulated nylon handle. Connect wire to 16 AWG. Nickel-plated brass body with nickel silver plug spring. Current: 15A. Resistance: 0.010 ohms. Other colors available; *go online or call.*

SINGLE SOLDERLESS BANANA PLUGS

Mfg. Part No.	Color	Stock No.	Price Each 1-9
108-0301-001	White	39F1530	1.95
108-0302-001	Red	39F1531	1.94
108-0303-001	Black	39F1532	1.94
108-0304-001	Green	39F1533	1.94
108-0306-001	Orange	39F1535	2.00
108-0307-001	Yellow	39F1536	2.96
108-0308-001	Brown	39F1537	2.03
108-0310-001	Blue	39F1539	2.03
108-0312-001	Violet	39F1541	2.03
108-0313-001	Grey	39F1542	2.03

MINIATURE INSULATED SOLDER BANANA PLUGS

For miniature 0.104″ (2.64mm) diameter banana jacks. Insulated nylon handle. Nickel-plated brass body with beryllium copper plug spring. Current: 10A. Resistance 0.010 ohms max. Breakdown voltage: 3500 Vrms min.

108-1002-001	Red	94F3887	2.26
108-1003-001	Black	96F9769	2.26

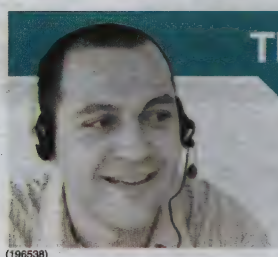
STACKING DUAL BANANA PLUGS—SET SCREW TO 14 AWG

For standard banana jack: 0.175″ (4.45) across flats. Molded body incorporates polarity indication and strain relief for wire leads. Machined brass studs extend length of pins. Voltage: 3500Vrms. Current: 15A.

108-0252-001	Red	90F1996	12.15
108-0253-001	Black	90F2009	12.15

(9081)

TECHNICAL SUPPORT HOTLINE



Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196538)

BANANA JACKS/PLUGS

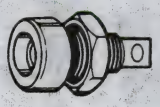
NYLON INSULATED BANANA JACKS

RoHS Compliant Available

EMERSON. Network Power

Johnson Connectivity Solutions

For standard 0.175″ banana plug. Formed brass contact, bright-tinned finished. Come with nickel-plated nut. Panel thickness: to 0.343″. Current: 15A. Contact resistance: 0.010 ohms.



Mfg. Part No.	Color	Stock No.	Price Each 1-9
● 108-0901-001	White	39F1573	0.75
● 108-0902-001	Red	39F1574	0.75
● 108-0903-001	Black	39F1575	0.75
● 108-0904-001	Green	39F1576	0.80
● 108-0906-001	Orange	39F1578	0.85
● 108-0907-001	Yellow	39F1579	0.75
● 108-0908-001	Brown	39F1580	0.84
● 108-0910-001	Blue	39F1582	0.75
● 108-0912-001	Violet	39F1584	0.78
● 108-0913-001	Gray	39F1585	0.84

(9082)

INSULATED STANDARD TIP JACKS

RoHS Compliant Available

EMERSON. Network Power

Johnson Connectivity Solutions

For standard 0.080″ diameter tip plug. Nylon body, phosphor bronze contact. Panel thickness: 0.437″ max. Current: 10A. Breakdown voltage: 5700Vrms minimum. Other colors available; *go online or call.*

Mfg. Part No.	Color	Stock No.	Price Each 1-9
● 105-0801-001	White	39F1560	0.96
● 105-0802-001	Red	39F1561	0.92
● 105-0803-001	Black	39F1562	0.96
● 105-0804-001	Green	39F1563	0.97
● 105-0807-001	Yellow	39F1566	0.97
● 105-0810-001	Blue	39F1569	0.96

(9083)

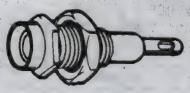
INSULATED METAL-CLAD STANDARD TIP JACKS

RoHS Compliant Available

EMERSON. Network Power

Johnson Connectivity Solutions

For 0.080″ diameter standard tip plug. Nylon body, nickel-plated threaded, brass jacket. Silver-plated contact with slotted terminal. Come with nickel-plated nut. Mount panels to 0.218″ thick. Current: 10A. Breakdown voltage: 5700Vrms minimum. Other colors available; *go online or call.*



Mfg. Part No.	Color	Stock No.	Price Each 1-9
● 105-0251-001	White	39F1700	1.97
● 105-0252-001	Red	39F1701	1.95
● 105-0253-001	Black	39F1702	1.95

(9084)

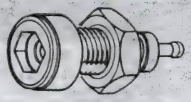
INSULATED DELUXE TIP JACKS

RoHS Compliant Available

EMERSON. Network Power

Johnson Connectivity Solutions

For 0.080″ diameter standard tip plug. Machined silver-plated brass contact with turret terminal and wrap-around beryllium copper spring. Come with threaded nylon body and nickel-plated nut. Mount in panels to 0.437″ thick. Current: 10A. Breakdown voltage: 5700Vrms min. Other colors available; *go online or call.*



Mfg. Part No.	Color	Stock No.	Price Each 1-9
● 105-0601-001	White	39F878	1.71
● 105-0602-001	Red	39F879	1.71
● 105-0603-001	Black	39F880	1.73
● 105-0604-001	Green	39F881	1.73
● 105-0607-001	Yellow	39F883	1.67
● 105-0610-001	Blue	39F885	1.73

(9085)

INSULATED TIP JACKS WITH SLEEVE ASSEMBLY

RoHS Compliant Available

EMERSON. Network Power

Johnson Connectivity Solutions

For standard 0.080″ diameter tip plug. Machined, silver-plated brass contact with turret terminal and wrap-around beryllium copper spring. Assembled body and handle are nylon. For panel thicknesses to 0.125″. Current: 10A. Contact resistance: 0.010 ohms.

Mfg. Part No.	Color	Stock No.	Price Each 1-9	Price Each 10-49
● 105-0702-001	Red	39F1501	1.97	1.75
● 105-0703-001	Black	39F1502	1.97	1.75

(9086)

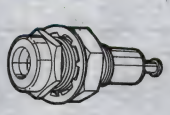
MILITARY INSULATED, METAL-CLAD TIP JACKS

RoHS Compliant Available

EMERSON. Network Power

Johnson Connectivity Solutions

For 0.080″ diameter standard tip plug. Come with nylon body and nickel-plated brass jacket. Gold-plated turret terminal contact with wrap-around beryllium copper spring. Come with nickel-plated washer and nut. Mount panels to 0.218″ thick. Breakdown voltage: 5700VRMS min. Current: 10A. Conform with MS-16108, Rev. F of MIL-STD-242A and MIL-C-39024/10. Other colors available; *go online or call.*



Mfg. Part No.	Color	Stock No.	Price Each 1-9
● 105-0201-200	White	39F1726	6.10
● 105-0202-200	Red	39F1727	6.10
● 105-0203-200	Black	39F1728	6.10
● 105-0204-200	Green	39F1729	6.18

(9087)

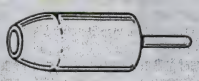
INSULATED TIP PLUGS

RoHS Compliant Available

EMERSON. Network Power

Johnson Connectivity Solutions

For 0.080″ diameter standard tip jacks. Nylon insulating handle with nickel-plated brass plug contact. Accept wire sizes to 16 gauge. Head recessed to reduce shock hazard. Current: 10A. Breakdown voltage: 3500Vrms. Other colors available; *go online or call.*



Solderless

SOLDERLESS TIP PLUGS

Mfg. Part No.	Color	Stock No.	Price Each 1-9
● 105-0301-001	White	39F1513	1.37
● 105-0302-001	Red	39F1514	1.35
● 105-0303-001	Black	39F1515	1.35
● 105-0304-001	Green	39F1516	1.32
● 105-0310-001	Blue	39F1522	1.32

(9088)

PANEL MOUNT UNINSULATED BANANA PLUGS AND JACK

RoHS Compliant Available

EMERSON. Network Power

Johnson Connectivity Solutions

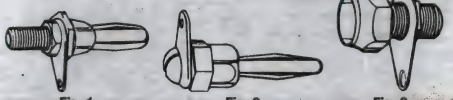


Fig. 1 Fig. 2 Fig. 3

Brass body with nickel silver springs. Threaded stud types (Fig. 1): **Mfg. part no. 108-0750**, takes standard jack; panel thickness ≤0.250″ or ≤0.625″; up to 14 gauge wire; 15A. Screw type plugs (Fig. 2): **Mfg. part no. 108-0753**, for standard jack; 0.125″ panel thickness, 14 gauge wire; 15A. **Mfg. part no. 108-0740-001** standard jack (Fig. 3) has nickel finish; ≤ 0.375″ panel thickness; 12 gauge wire; 15A; pierced lug.

Mfg. Part No.	Fig.	Description	Stock No.	Price Each 1-9
● 108-0750-001	1	Plug, ⅝″ Stud	39F888	2.59
● 108-0753-001	2	Plug, 6-32 Screw	39F890	1.56
● 108-0753-102	2	Plug, Screw	98F7304	3.01
● 108-0740-001	3	Standard Jack	39F893	1.97

(9090)

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(196545)

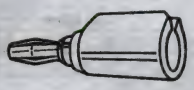
INSULATED SINGLE BANANA PLUGS

RoHS Compliant Available

EMERSON. Network Power

Johnson Connectivity Solutions

For standard banana jacks 0.166″ (4.23) across flats. Accept up to 16-gauge wire. Nylon insulated handle UL approved for self extinguishing. Rating: 15 amps. Breakdown voltage: 3500Vrms min. Contact resistance: 0.010 ohms max. Other colors available; *go online or call.*



INSULATED STACKING SINGLE TYPE

Mfg. Part No.	Color	Stock No.	Price Each 1-9	10-49	50-99
108-1082-001	Red	93F9165	2.76	2.45	2.30
108-1083-001	Black	93F9164	2.76	2.45	2.30
108-1081-001	White	94F3888	2.73	2.42	2.27
108-1087-001	Yellow	50B4461	2.73	2.42	2.27
INSULATED ROUND BODY SOLDER OR SOLDERLESS					
108-1722-101	Red	08B535	4.52	4.02	3.77
108-1723-101	Black	08B537	4.46	3.96	3.72
INSULATED, ROUND-BODY, SOLDERLESS					
108-1722-103	Red	08B536	2.38	2.11	1.98
108-1723-103	Black	08B538	2.27	2.01	1.89

(9158)

BANANA PLUGS

RoHS Compliant Available

KEYSTONE ELECTRONICS CORP.

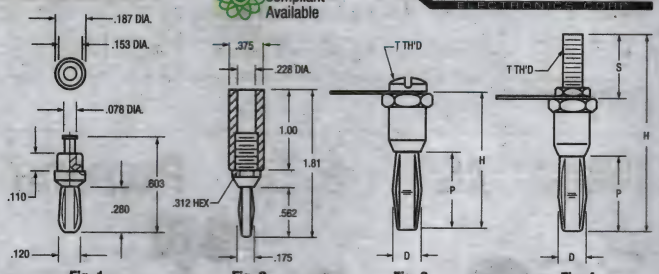


Fig. 1 Fig. 2 Fig. 3 Fig. 4

- Spring Material: Beryllium Copper or Nickel Silver
- Body Material: Brass

Mfg. Part No.	Fig.	Plug Diameter	Body Plating	Plug Length	Color	Stock No.	Price Each 1-49
452*	1	0.120″	Silver	0.280″	Silver	67C1614	1.56
6080†	2	0.175″	Nickel	0.562″	Red	94F4443	6.01

Spring Material * Beryllium Copper, † Nickel Silver

BANANA PLUGS INTERNAL THREAD -FIG. 3

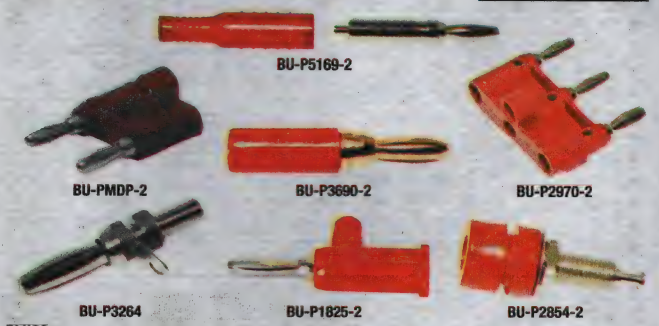
Mfg. Part No.	Dimensions D	P	H	S	Thread	Stock No.	Price Each 1-49
6072‡	0.175″	0.531″	0.937″	...	6-32	96B7988	2.61
BANANA PLUGS EXTERNAL THREAD -FIG. 4							
6075‡	0.300″	0.750″	1.75″	0.625″	¼-28	89C0190	8.35

‡ Spring Material: Nickel Silver, Body is Nickel Plated
(78682)

BANANA TEST CONNECTORS

RoHS Compliant Available

MUELLER



PLUGS

Mfg. Part No.	Mounting	Termination	Insulator Color	Current Rating (A)	Pkg. of	Stock No.	Price Each 1-24
BU-P5169-0	Cable	Crimp / Solder	Black	15	1	66W1224	2.67
BU-P5169-2	Cable	Crimp / Solder	Red	15	1	66W1225	2.67
BU-P5170-0	Cable	Crimp / Solder	Black	15	1	66W1226	2.67

➤ CONTINUED ➤

BANANA TEST CONNECTORS (CONT.)

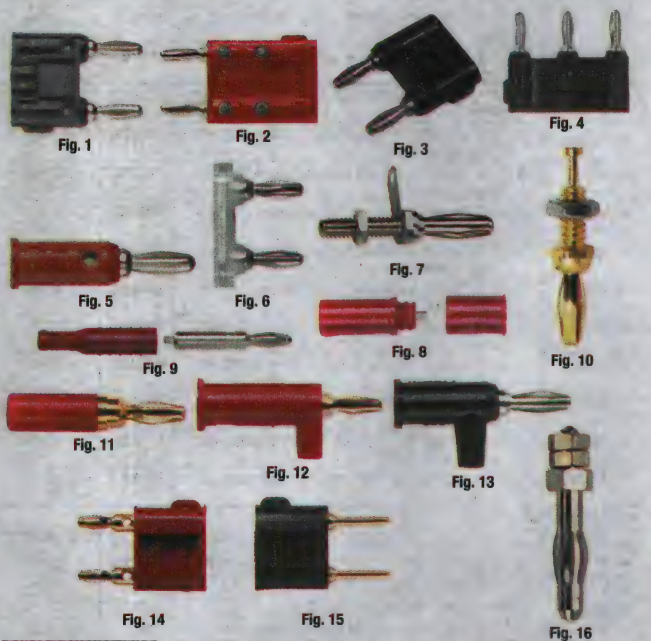
Mfg. Part No.	Mounting	Termination	Insulator Color	Current Rating (A)	Pkg. of	Stock No.	Price Each 1-24
BU-P5170-2	Cable	Crimp / Solder	Red	15	1	66W1227	2.67
BU-PMDP-0	Cable	Screw	Black	15	1	66W1153	2.80
BU-PMDP-2	Cable	Screw	Red	15	1	66W1154	2.80
BU-PMDP-9	Cable	Screw	White	15	1	66W1155	2.80
BU-PMDP-S-0	Cable	Screw	Black	15	1	66W1150	4.03
BU-PMDP-S-2	Cable	Screw	Red	15	1	66W1151	4.03
BU-PMDP-S-9	Cable	Screw	White	15	1	66W1152	4.03
BU-P3690-0	Cable	Solder	Black	5	10	66W1192	22.73
BU-P3690-2	Cable	Solder	Red	5	10	66W1193	22.73
BU-P1330-0	Cable	Solderless	Black	15	1	66W1157	3.12
BU-P1330-2	Cable	Solderless	Red	15	1	66W1158	3.12
BU-P1825-0	Cable	Solderless	Black	15	10	66W1159	16.78
BU-P1825-2	Cable	Solderless	Red	15	10	66W1160	16.78
BU-P2970-2	Cable	Screw	Red	15	1	66W1182	5.72
BU-P3264	Panel	Solder	...	15	10	66W1183	19.48
BU-P3276	Panel	Solder	...	5	10	66W1184	15.82
BU-P72918	Panel	...	...	36	10	66W1232	10.62
JACKS							
BU-P5167-0	Cable	Crimp / Solder	Black	15	1	66W1220	1.47
BU-P5167-2	Cable	Crimp / Solder	Red	15	1	66W1221	1.47
BU-P5168-0	Cable	Crimp / Solder	Black	15	1	66W1222	2.67
BU-P5168-2	Cable	Crimp / Solder	Red	15	1	66W1223	2.67
BU-P2142-0	Panel	Solder	Black	5	10	66W1161	15.57
BU-P2142-2	Panel	Solder	Red	5	10	66W1162	15.57
BU-P2143-0	Panel	Solder	Black	5	1	66W1163	4.22
BU-P2143-2	Panel	Solder	Red	5	1	66W1164	4.22
BU-P2269	Panel	Solder	Black, Red	15	1	66W1178	3.56
BU-P2854-0	Panel	Solder	Black	15	10	66W1180	24.46
BU-P2854-2	Panel	Solder	Red	15	10	66W1181	24.46

(210043)

STANDARD AND MINIATURE BANANA PLUGS

RoHS Compliant Available

Pomona®



DOUBLE BANANA PLUGS

Mfg. Part No.	Fig.	Description	Stock No.	Price per Pkg. Each
MDP-0	1	Stackable Double Banana Plug with Cable Guide, Nickel-plated, Black	34F857	3.00
MDP-1	1	Stackable Double Banana Plug with Cable Guide, Nickel-plated, Brown	94F289	3.00
MDP-2#	1	Stackable Double Banana Plug with Cable Guide, Nickel-plated, Red	34F856	3.00
MDP-3	1	Stackable Double Banana Plug with Cable Guide, Nickel-plated, Orange	94F1606	3.00
MDP-4	1	Stackable Double Banana Plug with Cable Guide, Nickel-plated, Yellow	70B1828	3.00

➤ CONTINUED ➤

STANDARD AND MINIATURE BANANA PLUGS (CONT.)

Mfg. Part No.	Fig.	Description	Stock No.	Price per Pkg. Each
● MDP-5	1	Stackable Double Banana Plug with Cable Guide, Nickel-plated, Green	94F1607	3.00
● MDP-6	1	Stackable Double Banana Plug with Cable Guide, Nickel-plated, Blue	30F1412	3.00
● MDP-7	1	Stackable Double Banana Plug with Cable Guide, Nickel-plated, Violet	94F1608	3.00
● MDP-8	1	Stackable Double Banana Plug with Cable Guide, Nickel-plated, Gray	70B7274	3.00
● MDP-9	1	Stackable Double Banana Plug with Cable Guide, Nickel-plated, White	94F1609	3.00
● 4892-0	1	Stackable Double Banana Plug with Cable Guide, Gold-plated, Black	77B2790	6.95
● 4892-2	1	Stackable Double Banana Plug with Cable Guide, Gold-plated, Red	77B6030	6.95
● MDP-S-0	1	Double Banana Plug with Shorting Bar, Black	06M7344	4.90
● MDP-S-2	1	Double Banana Plug with Shorting Bar, Red	06M7345	4.90
● MDP-S-9	1	Double Banana Plug with Shorting Bar, White	10M9198	4.90
● MDP-ST	1	Double Banana Plug with Solder Turret Terminals, Black	39F3615	4.35
● MDP-X	2	Double Banana Plug, Four Terminal Isolation, Red	34F859	13.50
● 1330-0	3	Double Banana Plug with Component Mounting Area, Black	30F1430	3.25
● 1330-2	3	Double Banana Plug with Component Mounting Area, Red	77B1864	3.25
● 5145	6	Incapsulated Double Banana Plug Shorting Bar, Clear	94F940	8.20
TRIPLE BANANA PLUGS				
● 2970-0	4	Triple Banana Plug, Black	35F1066	6.00
● 2970-2	4	Triple Banana Plug, Red	35F1065	6.00
STANDARD BANANA PLUGS				
● 3263*	7	Banana Plug w/ Threaded Stud and Solder Lug (8-32 x 0.5")	89F361	21.95
● 4933-0	8	Do-It-Yourself In-Line Sheathed Banana Plug, Black 18, 20, 22 AWG	44F5346	4.25
● 4933-2	8	Do-It-Yourself In-Line Sheathed Banana Plug, Red, 18, 20, 22 AWG	44F5347	4.25
● 5169-0	9	Do-It-Yourself In-Line Banana Plug with Flexible-Boot, Black, 22-18 AWG	94F1520	2.80
● 5169-2	9	Do-It-Yourself In-Line Banana Plug with Flexible-Boot, Red, 22-18 AWG	94F1521	2.80
● 5170-0	9	Do-It-Yourself In-Line Banana Plug with Flexible-Boot, Black, 16-14 AWG	94F1522	2.80
● 5170-2	9	Do-It-Yourself In-Line Banana Plug with Flexible-Boot, Red, 16-14 AWG	94F1523	2.80
● 1825-0*	13	Do-It-Yourself Solderless, Stackup Banana Plug with Safety-Shield, Black	73C4851	17.95
● 1825-1*	13	Do-It-Yourself Solderless, Stackup Banana Plug with Safety-Shield, Brown	13H6568	17.95
● 1825-2*	13	Do-It-Yourself Solderless, Stackup Banana Plug with Safety-Shield, Red	73C7348	17.95
● 1825-3*	13	Do-It-Yourself Solderless, Stackup Banana Plug with Safety-Shield, Orange	94F1567	17.95
● 1825-4*	13	Do-It-Yourself Solderless, Stackup Banana Plug with Safety-Shield, Yellow	70B4552	17.95
● 1825-5*	13	Do-It-Yourself Solderless, Stackup Banana Plug with Safety-Shield, Green	70B4553	17.95
● 1825-6*	13	Do-It-Yourself Solderless, Stackup Banana Plug with Safety-Shield, Blue	70B4554	17.95
● 1825-7*	13	Do-It-Yourself Solderless, Stackup Banana Plug with Safety-Shield, Violet	94F1568	17.95
● 1825-8*	13	Do-It-Yourself Solderless, Stackup Banana Plug with Safety-Shield, Gray	94F1548	17.95
● 1825-9*	13	Do-It-Yourself Solderless, Stackup Banana Plug with Safety-Shield, White	87F025	17.95
● 72918*	16	4mm Banana Plug w/ Threaded M3 Stud, Nickel-Plated	34P0013	11.10
MINIATURE BANANA PLUGS				
● 3276*	10	Miniature Banana Plug with 0.23"L Threaded Stud	26H1916	17.95
● 4513*	10	Miniature Banana Plug with 0.48"L Threaded Stud	77B2548	24.95
● 3690-0*	11	Mini Solder-Type Banana Plug, Black	48F5001	24.95
● 3690-2*	11	Mini Solder-Type Banana Plug, Red	48F5002	24.95
● 4617-0*	...	Do-It-Yourself Solder Type Miniature Banana Plug	98F9311	4.02
● 4617-2*	...	Do-It-Yourself Solder Type Miniature Banana Plug	99F6652	4.02
● 2944-0	...	Miniature Solderless Stackup Banana Plug, Black	77B2300	4.45
● 2944-2	...	Miniature Solderless Stackup Banana Plug, Red	77B5885	4.45
● 2945-0	12	Miniature Solderless Stackup Banana Plug with Safety-Collar, Black	34F938	4.45
● 2945-2	12	Miniature Solderless Stackup Banana Plug with Safety-Collar, Red	34F939	4.45
● 3268*	...	Miniature Rivet-Type Banana Plug with Swaging Information, Panel Thickness 0.062"	77B2350	17.95
● 2035-0	14	Mini-Double Banana Plug/Shorting Bar, Black	16F1593	6.95
● 2035-2	14	Mini-Double Banana Plug/Shorting Bar, Red	98F2236	6.95
● 2244-0	14	Mini-Double Banana Plug/Set Screws, Black	34F844	6.95

➤CONTINUED➤

STANDARD AND MINIATURE BANANA PLUGS (CONT.)

MINIATURE BANANA PLUGS

Mfg. Part No.	Fig.	Description	Stock No.	Price per Pkg. Each
● 2244-2	14	Mini-Double Banana Plug/Set Screws, Red	34F845	6.95
● 3452-0	15	Shorting Bar Pin Tip Plug, Black	84F903	6.95

STANDARD BANANA PLUGS - PKG. OF 10

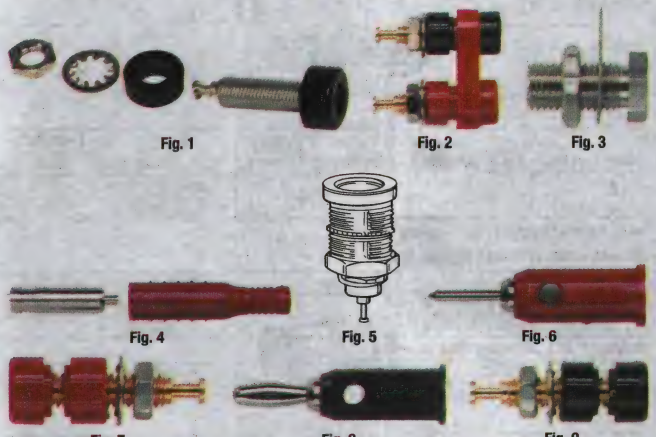
Mfg. Part No.	Fig.	Description	Stock No.	Price per Pkg. Each
● 1325-0*	5	Do-It-Yourself Banana Plug, Solderless and Stackable, Black	73C7347	17.95
● 1325-1*	5	Do-It-Yourself Banana Plug, Solderless and Stackable, Brown	96F7102	17.95
● 1325-2*	5	Do-It-Yourself Banana Plug, Solderless and Stackable, Red	48F4997	17.95
● 1325-3*	5	Do-It-Yourself Banana Plug, Solderless and Stackable, Orange	84F886	17.95
● 1325-4*	5	Do-It-Yourself Banana Plug, Solderless and Stackable, Yellow	94F1556	17.95
● 1325-5*	5	Do-It-Yourself Banana Plug, Solderless and Stackable, Green	73C7306	17.95
● 1325-6*	5	Do-It-Yourself Banana Plug, Solderless and Stackable, Blue	94F1557	17.95
● 1325-7*	5	Do-It-Yourself Banana Plug, Solderless and Stackable, Violet	84F887	17.95
● 1325-8*	5	Do-It-Yourself Banana Plug, Solderless and Stackable, Gray	88F2790	17.95
● 1325-9*	5	Do-It-Yourself Banana Plug, Solderless and Stackable, White	94F293	17.95
● 5230-0*	5	Do-It-Yourself Banana Plug with High Temperature Black Insulation	25H8622	23.45

*Sold in packages of 10
(8977)

STANDARD AND MINIATURE BANANA AND PIN JACKS

RoHS Compliant Available

Pomona®



Mfg. Part No.	Fig.	Description	Pkg. of	Stock No.	Price per Pkg. Each
● 1581-0	1	Banana Jack, Black	10	89F354	16.45
● 1581-2	1	Banana Jack, Red	10	30F1410	16.45
● 1581-8	1	Banana Jack, Gray	10	84F892	16.45
● 2854-0	1	Gold Banana Jack, Black	10	77B2284	27.95
● 2854-2	1	Gold Banana Jack, Red	10	97B1821	27.95
● 2269-0	2	Double Banana Jack, Black	1	30F1419	3.75
● 2269-2	2	Double Banana Jack, Red	1	30F1418	3.75
● 4543-0	2	Pin Tip Jack with Double Mounting Base, Black	10	94F1590	5.95
● 4543-2	2	Pin Tip Jack with Double Mounting Base, Red	10	84F922	5.95
● 2143-0	2	Mini Insulated Double Banana Jack, Black	1	50F1465	4.95
● 2143-2	2	Mini Insulated Double Banana Jack, Red	1	50F1536	4.95
● 3267	3	Uninsulated Banana Jack	10	50F1460	12.45
● 5167-0	4	In-Line Banana Jack with Flexible Boot, Black	10	20H0615	15.95
● 5167-2	4	In-Line Banana Jack with Flexible Boot, Red	10	29H4060	15.95
● 6387-ST-T-0	5	Panel Mount Banana Jack for Sheathed Plug, Black	10	20H0118	26.40
● 6387-ST-T-2	5	Panel Mount Banana Jack for Sheathed Plug, Red	10	20H0095	26.40
● 1432-0	6	Banana Jack-to-Pin Tip Plug, Black	10	73C7311	14.70
● 1432-2	6	Banana Jack-to-Pin Tip Plug, Red	10	54H0403	14.70
● 3542-0	7	0.080" Pin Jack, Black	10	89F357	32.95
● 3542-2	7	0.080" Pin Jack, Red	10	89F358	32.95
● 1809-0	8	0.080" Pin Jack-to-Banana Plug, Black	10	73C7293	24.95

➤CONTINUED➤

STANDARD AND MINIATURE BANANA AND PIN JACKS (CONT.)

Mfg. Part No.	Fig.	Description	Pkg. of	Stock No.	Price per Pkg. Each
1809-2	8	0.080" Pin Jack-to-Banana Plug, Red	10	73C7294	24.95
2142-0	9	Mini Insulated Banana Jack, Black	10	48F5000	16.45
2142-2	9	Mini Insulated Banana Jack, Red	10	73C7290	16.45
2142-3	9	Mini Insulated Banana Jack, Orange	10	94F742	16.45
2142-4	9	Mini Insulated Banana Jack, Yellow	10	94F743	16.45
2142-5	9	Mini Insulated Banana Jack, Green	10	94F744	16.45
2142-6	9	Mini Insulated Banana Jack, Blue	10	55H8848	16.45

ACCESSORIES

Mfg. Part No.	Description	Pkg. of	Stock No.	Price Each
4619-0	Black mounting base for use with models 2142, 2143, 2382, 2383, 2439, 2440, 3542, 4022, 4773 and 4543	10	77B2605	6.60

(8978)

RETRACTABLE SLEEVE BANANA PLUGS

RoHS Compliant Available

Pomona®

Provides a rapid method for splicing single banana plug patch cords. Rating: 5000VDC, 15 amps, +55°C (+131°F) max. Dimensions: 1.50" x 0.38". **Sold in packages of 10.**

Mfg. Part No.	Color	Stock No.	Price per Pkg. Each
1829-0	Black	78B1669	19.35
1829-2	Red	30F1431	19.35

(48571)

BANANA ADAPTERS, PLUGS, JACKS

RoHS Compliant Available

Pomona®

Pomona banana plugs, jacks, and adapters offer quick and easy connection for both 4mm and 2mm safety sheathed banana plugs and jacks. **Sold in packages of 10.**

Mfg. Part No.	Description	Stock No.	Price Per Pkg. Each
72914-0	4mm banana jack/2mm plug, black	74K0049	26.85
72914-2	4mm banana jack/2mm plug, red	74K0051	26.85
72914-02*	4mm banana jack/2mm plug, 1 black, 1 red	02M5699	5.40
6728-0+	4mm sheathed banana jack to non-sheathed banana plug, black	67H4764	4.05
6728-2+	4mm sheathed banana jack to non-sheathed banana plug, red	67H4767	4.05
72917-0	4mm banana plug to 2mm sheathed banana jack, black	74K0056	25.05
72917-2	4mm banana plug to 2mm sheathed banana jack, red	74K0057	25.05
72921-0+	2mm safety sheathed jack, black	74K0068	2.60
72921-2+	2mm safety sheathed jack, red	74K0069	2.60
72922-0+	2mm safety sheathed jack, solder tab, black	74K0070	2.70
72922-2+	2mm safety sheathed jack, solder tab, red	74K0071	2.70
72925-0+	Do-it-yourself 2mm stackable safety sheathed plug, black	74K0076	3.55
72925-2+	Do-it-yourself 2mm stackable safety sheathed plug, red	74K0077	3.55
6729-0+	Do-it-yourself 4mm right angle sheath plug, black	63H2239	5.30
6729-2+	Do-it-yourself 4mm right angle sheath plug, red	63H2241	5.30
72912-0	Panel mount IEC1010 banana jacks for sheathed plugs, threaded stud, black	74K0045	34.95
72912-2	Panel mount IEC1010 banana jacks for sheathed plugs, threaded stud, red	74K0046	34.95
72913-0	Panel mount IEC1010 banana jacks for sheathed plugs, solder tab, black	74K0047	29.95

CONTINUED

BANANA ADAPTERS, PLUGS, JACKS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Per Pkg. Each
72913-2	Panel mount IEC1010 banana jacks for sheathed plugs, solder tab, red	74K0048	29.95
72930-0	Panel mount IEC1010 4mm jack for sheathed plugs, threaded stud, black	26M8715	24.95
72930-1	Panel mount IEC1010 4mm jack for sheathed plugs, threaded stud, brown	29M6597	24.95
72930-2	Panel mount IEC1010 4mm jack for sheathed plugs, threaded stud, red	26M8712	24.95
72930-4	Panel mount IEC1010 4mm jack for sheathed plugs, threaded stud, yellow	21M8705	24.95
72930-5	Panel mount IEC1010 4mm jack for sheathed plugs, threaded stud, green	21M8708	24.95
72930-6	Panel mount IEC1010 4mm jack for sheathed plugs, threaded stud, blue	82K7464	24.95
72930-8	Panel mount IEC1010 4mm jack for sheathed plugs, threaded stud, gray	21M8709	24.95
72930-9	Panel mount IEC1010 4mm jack for sheathed plugs, threaded stud, white	13M5850	24.95

***Sold in packages of 2; +Sold individually (each)**

(88658)

SUPERCON® ELECTRICAL CONNECTORS

RoHS Compliant Available

Superior Electric

Pin Plug PP Series | Socket Plug PS Series | Socket Receptacle RS Series | Pin Receptacle RP Series

SUPERCON® connectors provide rapid and positive panelboard connections. They feature a functional plug design for handling ease and comfort. 25-, 50- and 100-amp versions are rated 125-250VAC/VDC current interrupting, 600V unenergized connect or disconnect use only; 250-amp types are rated 600V unenergized connect or disconnect use only. Wiring to the same plug can be soldered or solderless. Cable fastening screws permit a wide range of cable sizes. Mfg. part no. **suffix** indicates color: **B** = black, **Y** = yellow, **R** = red, **BL** = blue, **GN** = green, **WT** = white. Wiring connections to threaded stud by wire wrap-around, lug or bus bar. 25-, 50- and 100-ampere types are CSA certified.

25-AMPERE TYPES

Pin Plug		Socket Receptacle			Price Each	
Mfg. Part No.	Stock No.	Mfg. Part No.	Stock No.	Color	1-14	15-24
PP25GB	06F060	RS25GB	06F048	Black	35.43	33.89
PP25GR	06F062	RS25GR	06F050	Red	33.11	31.70
PP25GGN	06F064	RS25GGN	06F052	Green	33.58	32.15
PP25GWT	06F065	RS25GWT	06F053	White	33.58	32.15
Socket Plug		**Pin Receptacle**			**Price Each**	
Mfg. Part No.	Stock No.	Mfg. Part No.	Stock No.	Color	1-14	15-24
PS25GB	06F066	RP25GB	06F054	Black	33.11	31.70
PS25GR	06F068	RP25GR	06F056	Red	34.17	32.70
PS25GGN	06F070	RP25GGN	06F058	Green	33.58	32.15
PS25GWT	06F071	RP25GWT	06F059	White	33.58	32.15

50-AMPERE TYPES

Pin Plug		Socket Receptacle			Price Each	
Mfg. Part No.	Stock No.	Mfg. Part No.	Stock No.	Color	1-14	15-24
PP50GB	06F030	RS50GB	06F000	Black	43.71	41.82
PP50GR	06F032	RS50GR	06F002	Red	40.30	38.57
PP50GBL	06F033	RS50GBL	06F003	Blue	41.46	39.69
PP50GGN	06F034	RS50GGN	06F004	Green	40.99	39.24
PP50GWT	06F035	RS50GWT	06F005	White	40.99	39.24
Socket Plug		**Pin Receptacle**			**Price Each**	
Mfg. Part No.	Stock No.	Mfg. Part No.	Stock No.	Color	1-14	15-24
PS50GB	06F024	RP50GB	06F006	Black	42.23	40.42
PS50GR	06F026	RP50GR	06F008	Red	42.23	40.42
PS50GBL	06F027	RP50GBL	06F009	Blue	39.11	37.44
PS50GGN	06F028	RP50GGN	06F010	Green	40.99	39.24
PS50GWT	06F029	RP50GWT	06F011	White	40.99	39.24

100-AMPERE TYPES

Pin Plug		Socket Receptacle			Price Each	
Mfg. Part No.	Stock No.	Mfg. Part No.	Stock No.	Color	1-14	15-24
PP100GB	06F042	RS100GB	06F012	Black	54.83	52.37
PP100GR	06F044	RS100GR	06F014	Red	56.75	54.21
Socket Plug		**Pin Receptacle**			**Price Each**	
Mfg. Part No.	Stock No.	Mfg. Part No.	Stock No.	Color	1-14	15-24
PS100GB	06F036	RP100GB	06F018	Black	54.83	52.37
PS100GR	06F038	RP100GR	06F020	Red	51.93	49.66

250-AMPERE TYPES

Pin Plug		Socket Receptacle			Price Each	
Mfg. Part No.	Stock No.	Mfg. Part No.	Stock No.	Color	1-14	15-24
PP250GB	06F041	RS250GB	06F095	White	85.96	82.21
PP250GR	06F098	RS250GR	06F096	Red	87.22	83.41

CONTINUED

BANANA JACKS/PLUGS

SUPERCON® ELECTRICAL CONNECTORS (CONT.)

250-AMPERE TYPES

Pin Plug		Socket Receptacle			Price Each	
Mfg. Part No.	Stock No.	Mfg. Part No.	Stock No.	Color	1-14	15-24
● PS250GB	06F672	● RP250GB	06F675	Black	87.22	83.41
● PS250GR	06F674	● RP250GR	06F677	Red	90.06	86.04

(9942)

TAPERED SOLDERLESS BANANA PLUGS

RoHS Compliant Available

TENMA®

High-voltage insulated plugs offer fast, solderless connection to 16-gauge wire. Phosphor Bronze with nickel-plated spring and brass, nickel-plated body.

Mfg. Part No.	Color	Stock No.	Price Each 1-249	250-499	500-999	1000-4999
● SPC15259	White	79K4856	3.42	2.57	2.28	2.05
● SPC15424	Red	79K5004	3.46	2.60	2.31	2.07
● SPC15427	Black	79K5007	3.46	2.60	2.31	2.07
● SPC15278	Green	79K4875	3.42	2.57	2.28	2.05
● SPC15250	Yellow	79K4847	3.42	2.57	2.28	2.05
● SPC15232	Blue	79K4831	3.42	2.57	2.28	2.05

(8900)

BANANA PLUGS

RoHS Compliant Available

TENMA®

Nickel-plated brass hex body. 4-leafed nickel-plated phosphor bronze spring. Fit banana jacks. **Fig. 1** includes screw and tinned lug. **Fig. 2** includes hex nut, flat washer, tinned lug, and #6-32 threaded stud. Panel mount.

Fig. 1 Fig. 2

Mfg. Part No.	Fig.	Stock No.	Price Each 1-99	100-249	250-499	500-999
● SPC15372	1	79K4956	2.17	1.71	1.52	1.41
● SPC15445	2	79K5022	3.30	2.47	2.20	1.97

(9124)

TENMA INSULATED BANANA PLUGS

RoHS Compliant Available

TENMA®

Nickel-plated brass body. Four-leafed nickel-plated phosphor bronze spring. All fit standard jacks. Stud or well and internal stud types allow for soldering directly to brass stud or to plug itself but the stud also locks wire to plug for solderless connection. Set screw types have a set screw to secure wire without soldering.

Fig. 1 Fig. 2 Fig. 3 Fig. 4

STUD OR WELL

Mfg. Part No.	Fig.	Color	Stock No.	Price Each 1-99	100-249	250-499	500-999
● SPC15329	1	Red	79K4921	2.28	1.79	1.61	1.46
● SPC15327	1	Black	79K4919	2.17	1.71	1.52	1.41
● SPC15144	1	Yellow	79K4756	1.18	1.06	0.97	0.84
● SPC15170	1	Green	79K4774	0.86	0.77	0.71	0.62
SET SCREW							
● SPC15432	2	Red	79K5012	2.12	1.66	1.49	1.37
● SPC15443	2	Black	79K5020	2.12	1.66	1.49	1.37
● SPC15258	2	Green	79K4855	2.07	1.64	1.47	1.34
● SPC15210	2	Yellow	79K4812	1.45	1.30	1.19	1.04
INTERNAL STUD							
● SPC15377	3	Red	79K4961	3.01	2.34	2.09	1.93
● SPC15374	3	Black	79K4958	1.81	1.63	1.51	1.33
● SPC15156	3	Yellow	79K4764	0.84	0.76	0.70	0.62
● SPC15246	3	Green	79K4843	1.89	1.67	1.34	0.99

➤CONTINUED➤

TENMA INSULATED BANANA PLUGS (CONT.)

INTERNAL STUD

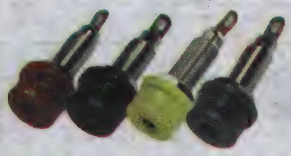
Mfg. Part No.	Fig.	Color	Stock No.	Price Each 1-99	100-249	250-499	500-999
● SPC15161	3	Blue	79K4767	2.45	1.92	1.73	1.58
● SPC15223	3	White	79K4822	1.89	1.67	1.34	0.99
SET SCREW							
● SPC15192	4	Red	79K4795	1.84	1.42	1.26	1.17
● SPC15243	4	Black	79K4840	1.95	1.72	1.39	1.02

(9125)

COMBINATION INSULATED JACKS

RoHS Compliant Available

TENMA®



Nickel-plated brass body. Phosphor bronze spring. Include hex nut and nylon washer. Accept standard tip or banana plugs. Mount in 0.313″ (7.95) diameter hole in panels up to 0.5″ (12.70) thick.

Mfg. Part No.	Color	Stock No.	Price Each 1-249	250-499	500-999	1000-4999
● SPC15338	Red	79K4930	3.37	2.53	2.25	2.02
● SPC15357	Black	79K4946	3.51	2.63	2.34	2.09
● SPC15179	Green	79K4782	3.30	2.48	2.20	1.97
● SPC15194	Yellow	79K4797	3.34	2.52	2.24	2.00

(9130)

INSULATED BANANA JACKS

RoHS Compliant Available

TENMA®

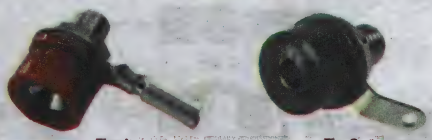


Fig. 1 Fig. 2

Brass, Nickel-plated body. Mount in 0.313″ (7.95) diameter hole in panels up to 0.375″ (9.53) thick. Include hex nut, insulated washer, lock washer, and tinned brass lug. Molded head.

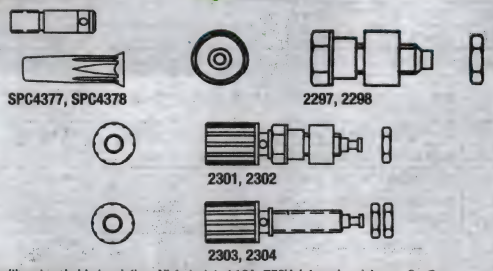
Mfg. Part No.	Fig.	Color	Stock No.	Price Each 1-99	100-249	250-499	500-999
● SPC15188	1	Red	79K4791	1.93	1.50	1.36	1.24
● SPC15206	1	Black	79K4808	1.92	1.49	1.35	1.23
● SPC15363	2	Red	79K4950	2.90	2.17	1.93	1.73
● SPC15354	2	Black	79K4944	2.90	2.17	1.93	1.73
● SPC15182	2	Green	79K4785	2.93	2.20	1.96	1.76
● SPC15190	2	Yellow	79K4793	2.85	2.14	1.91	1.71

(9131)

4MM BANANA JACKS AND BINDING POSTS

RoHS Compliant Available

TENMA®



Banana jacks with unbreakable insulation. Nickel-plated.16A, 750V, internal resistance: 6mΩ.

Mfg. Part No.	Description	Color	Stock No.	Price Each 1-9	10-24	25-49	50-99
● SPC4377	Jack, Screw	Black	92N4653	2.90	2.61	2.36	2.18
● SPC4378	Jack, Screw	Red	92N4654	2.93	2.65	2.39	2.21

Banana jacks feature nylon insulation. Nickel-plated. Nylon hex nut, nylon spacer and nut. 36A, 750V, internal resistance: 5mΩ.

● 2297	Jack, Solder	Black	92N4659	2.00	1.80	1.63	1.51
● 2298	Jack, Solder	Red	92N4660	1.88	1.69	1.53	1.42

➤CONTINUED➤

4MM BANANA JACKS AND BINDING POSTS (CONT.)

Mfg. Part No.	Description	Color	Stock No.	Price Each 1-9	10-24	25-49	50-99
Insulated binding posts with 4mm banana jack and 2mm wire hole. Spacer, 2 nuts. 36A, 750V, internal resistance: 5mΩ.							
2301	Binding Post	Black	92N4663	11.22	10.11	9.13	8.44
2302	Binding Post	Red	92N4664	11.36	10.24	9.24	8.54
Noninsulated binding posts with 4mm banana jack and 2mm wire hole. External lockwasher and 2 nuts. 25A, 750V, internal resistance: 6mΩ.							
2303	Binding Post	Black	92N4665	9.25	8.33	7.53	6.95
2304	Binding Post	Red	92N4666	8.74	7.87	7.11	6.57

(19626)

SAFETY BANANA JACKS

RoHS Compliant Available

TENMA®

2269 2270

4MM safety jacks (sockets) accept sheathed or shrouded banana plugs and meets the latest international safety standard IE61010-031 to 1,000V CATIII. Round panel nut allows for compact placement and assembly. Mfg. part nos. 2268 and 2269 have a 0.080 inch dia. solder hole for wire attachement while mfg part nos. have a 0.080 inch dia hole with cross slot

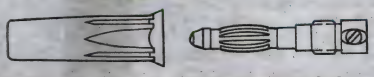
Mfg. Part No.	Description	Color	Stock No.	Price Each 1-9	10-24	25-49	50-99
2268	Safety Socket, Solder	Black	92N4630	4.32	3.90	3.52	3.24
2269	Safety Socket, Solder	Red	92N4631	4.32	3.90	3.52	3.24
2270	Safety Socket, Fork	Black	92N4632	4.67	4.19	3.79	3.49
2271	Safety Socket, Fork	Red	92N4633	4.67	4.19	3.79	3.49

(19627)

BANANA PLUGS

RoHS Compliant Available

TENMA®



Banana plugs screw into insulator. Nickel-plated. 16A, 750V, internal resistance: 6mΩ.

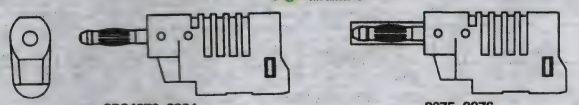
Mfg. Part No.	Description	Color	Stock No.	Price Each 1-9	10-24	25-99	100-249
2305	Plug, Solder	Black	92N4667	4.89	3.86	3.30	2.74
2306	Plug, Solder	Red	92N4668	4.83	3.80	3.26	2.70
2307	Plug, Screw	Black	92N4669	6.00	4.70	4.03	3.33
2308	Plug, Screw	Red	92N4670	6.06	4.76	4.09	3.37

(19628)

INSULATED BANANA PLUGS

RoHS Compliant Available

TENMA®



SPC4379, 2294 2275, 2276

Mfg. part nos. SPC4379 and **2294** banana plugs have 4mm banana jack that accepts 4mm plug. Feature wire connection with recessed screw and nickel plating. **Mfg. part nos. 2275** and **2276** have retractable sheath. Rated: 36A, 750V. Internal resistance: 6mΩ.

Mfg. Part No.	Description	Color	Stock No.	Price Each 1-9	10-24	25-49	50-99
SPC4379	Stackable Plug	Black	92N4655	7.82	6.92	6.18	5.62
2294	Stackable Plug	Red	92N4656	7.57	6.71	5.98	5.45
2275	Retractable Plug	Black	92N4637	10.38	9.20	8.19	7.47
2276	Retractable Plug	Red	92N4638	10.24	9.08	8.09	7.37

Mfg. part nos. 2295 and **2296** banana plugs have 4mm banana jack that accepts 4mm plug. Feature quick-wire connection with pushbutton and nickel plating. **Mfg. part nos. 2277** and **2278** have a retractable sheath. Rated: 36A, 750V. Internal resistance: 6mΩ.

Mfg. Part No.	Description	Color	Stock No.	Price Each 1-9	10-24	25-49	50-99
2295	Stackable Plug	Black	92N4657	9.39	8.33	7.42	6.76
2296	Stackable Plug	Red	92N4658	9.39	8.33	7.42	6.76
2277	Retractable Plug	Black	92N4639	12.01	10.64	9.49	8.65
2278	Retractable Plug	Red	92N4640	12.01	10.64	9.49	8.65

(19630)

SAFETY SOCKETS, TOOLS, AND ACCESSORIES

RoHS Compliant Available

TENMA®

Mfg. part nos. 2264 and **2265** 4mm safety sockets with 2 panel nuts meet IEC 1010 standard. Nickel-plated brass contact. Threaded studs, M4 x 0.39″ (10) length. 1000V CATIII P2, 36A, <5mΩ resistance.

2264

Mfg. Part No.	Description	Color	Stock No.	Price Each 1-9	10-24	25-49	50-99
2264	Safety Socket	Black	92N4626	5.26	4.72	4.29	3.93
2265	Safety Socket	Red	92N4627	5.26	4.72	4.29	3.93
Mfg. part nos. 2266 and 2267 4mm safety sockets with panel nut meet IEC 1010 standard. Nickel-plated brass contact. Fast-on terminals, 0.25 x 0.39″, 0.031″ thick (6.3 x 10, 0.8). 1000V CATIII P2, 36A, <5mΩ resistance.							
2266	Safety Socket	Black	92N4628	5.36	4.81	4.38	4.01
2267	Safety Socket	Red	92N4629	5.36	4.81	4.38	4.01

(19634)

COLOR-KEYED PC TEST POINTS

RoHS Compliant Available

KEYSTONE ELECTRONICS CORP.

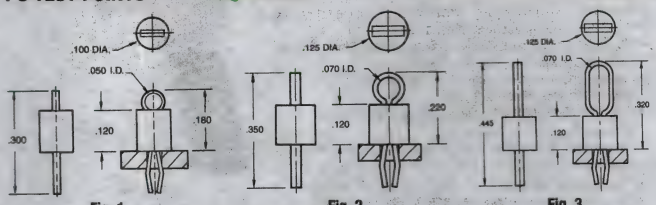


Fig. 1 Fig. 2 Fig. 3

Color-keyed PC test point terminations for high visibility and quick identification. Snap-fit mounting for positive retention for wave soldering. Wireform loop for safe, non-slip testing. Suitable for high-density packaging on 0.062″ and 0.093″ PC boards. Terminal material: Miniature (0.010 x 0.020″) is phosphor bronze wire, silver plated; Compact (0.015 x 0.032″) is phosphor bronze wire, silver plated; multipurpose (0.015 x 0.032″) is phosphor bronze wire, silver plated. Base material:Valox, meets UL94V-0.

Mfg. Part No.	Base Color	Mounting Hole	Stock No.	Price Each 1-49
MINIATURE WITH MOUNTING CENTER 0.100″ x 0.100″ — FIG. 1				
5000	Red	0.040″ Dia.	07J9695	0.38
5001	Black	0.040″ Dia.	62W5135	0.38
5002	White	0.040″ Dia.	62W5136	0.37
5003	Orange	0.040″ Dia.	62W5137	0.37
5004	Yellow	0.040″ Dia.	62W5138	0.37
COMPACT WITH MOUNTING CENTER 0.125″ x 0.125″ — FIG. 2				
5005	Red	0.063″ Dia.	62W5139	0.38
5006	Black	0.063″ Dia.	62W5140	0.38
5007	White	0.063″ Dia.	62W5141	0.38
5008	Orange	0.063″ Dia.	62W5142	0.35
5009	Yellow	0.063″ Dia.	62W5143	0.35
MULTIPURPOSE WITH MOUNTING CENTER 0.125″ x 0.125″ — FIG. 3				
5010	Red	0.063″ Dia.	62W5144	0.37
5011	Black	0.063″ Dia.	88H2535	0.37
5012	White	0.063″ Dia.	67H8654	0.37
5013	Orange	0.063″ Dia.	62W5145	0.37
5014	Yellow	0.063″ Dia.	62W5146	0.35

(9393)

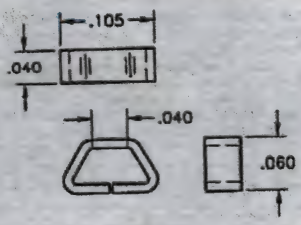
SURFACE MOUNT TEST POINTS

RoHS Compliant Available

KEYSTONE ELECTRONICS CORP.

5015
- Manufactured using flat wire to provide a large mounting surface area
- Ideal for use with miniature probes, clips, and hooks
- Efficient, safe, board level testing
- Ultra low profile, ideally suited for advanced surface mount printed circuit board applications
- Designed for long life and durability

5016
- Ideal for use with standard probes, clips and hooks
- Efficient, safe, board level testing
- Unique design provides exceptional strength and durability
- Simplifies testing on dense SMT circuit boards



5015

Mfg. Part No.	Contact	Tape Cut Stock No.	Tape Cut Price Each 1-49	Tape & Reel Stock No.	Tape & Reel Price Each 1-999
5015	0.010″	50B4581	0.41	21J7580	0.16
5016	0.015″	93B2696	0.40	57J1845	0.19

(68403)

IR THERMOMETERS

FLUKE-560 SERIES INFRARED AND CONTACT THERMOMETERS

Fluke-561 IR Thermometer:

- IR thermometer for quick measurements up close or at a distance
- Single-point laser sighting
- Contact thermometer for use with mini-connector K-type thermocouples (not included)
- Temperature range, -40 °C to 550 °C (-40 °F to 1022 °F)
- Easy emissivity adjustment for measuring pipes and ducts more accurately
- Efficient — no need to shut down equipment when making IR measurements
- MIN/MAX and DIF functions help identify problems quickly
- Scan large areas or small objects quickly and efficiently
- Recommended accessories – H6 Holster, 80PK-27 Temperature Probe, 80PK-8 Temperature Probe

Fluke-566 and Fluke-568:

- Measure -40 °C to 800 °C /-40 °F to 1472 °F **Fluke-568** or -40 °C to 650 °C/-40 °F to 1202 °F **Fluke-566**
- Easily access advanced features with the soft-key buttons and graphical display
- Measure objects from further away, with a distance-to-spot ratio of 50:1 **Fluke-568** or 30:1 **Fluke-566**
- Compatibility with all standard miniconnector K-type thermocouples
- Measure a wide variety of surfaces with adjustable emissivity feature, including a built-in material table
- Capture up to 99 points **Fluke-568** or 20 point **Fluke-566** of data, for downloading and recalling later
- Easily trend and analyze data with included FlukeView® Forms software **Fluke-568**
- Use USB **Fluke-568** and your laptop for"Hands-free" datalogging
- **Fluke-568E X** meets intrinsically safe certifications in Class I Div 1 and Div 2 or Zone 1 and 2 hazardous environments
- Troubleshoot equipment with 1% measurement accuracy
- Versatile interface six languages from which to choose
- Two-year manufacturer's warranty

Fluke-561

Fluke-568

With the easy-to-use, lightweight **mfg. part no. Fluke-561** HVACPro IR thermometer, take contact and ambient temperatures in the way that's best for you. Use the IR thermometer to measure hot, moving, electrically energized and hard-to-reach objects instantly. Check motors, insulation, breakers, radiant heating, pipes, corroded connections and wires. Plus, scan ducts from the floor — leave the ladder in the truck! Includes Velcro® pipe probe for superheat/sub-cooling and other contact and ambient measurements and a users manual. Can be plugged in any industry-standard K-type mini-connector thermocouple probes, ordered separately; *go online or call.*

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-561	Infrared and Contact Thermometer	83K1733	189.95
FLUKE 566	Infrared and Contact Thermometer with Dot Matrix Display	64M6508	299.95
FLUKE 568	Infrared and Contact Thermometer with Dot Matrix Display	64M6509	399.95
FLUKE-568 EX/ETL	Fluke 568 EX Intrinsically Safe Infrared Thermometer	99W5466	1499.95

(88092)

FLUKE VT02 / VT04 / VT04A VISUAL IR THERMOMETERS

- Built-in digital camera
- Exclusive thermal heat map blending overlay can blend digital and thermal images to instantly show the exact location of the issue (blend between 0%, 25%, 50%, 75%, and full thermal with one button)
- Fully automatic with built-in intelligence (no training required)
- True pocket size design
- SmartView® reporting software can store up to 10,000 images per Gb on included SD card and make professional reports on included professional software
- Hot and cold spot trackers automatically identify hottest and coldest spots within field of view
- Utilizes hyper-thin pyroelectric array technology
- **VT04/VT04A** has additional alarm and time lapse features (Hi/Lo temperature alarm, Time lapse image capture, Auto-monitor™ alarm)

Fluke Visual IR Thermometers combine the convenience of a spot thermometer with the visual advantage of an infrared camera creating a brand new tool category. Every Fluke Visual IR Thermometer has a built-in digital camera with a thermal heat map overlay to instantly identify the exact location of the problem. Now you can detect and capture issues instantaneously with digital and thermal blended images, pinpoint hot and cold spots with temperature markers, and document problems efficiently with SmartView® professional reporting software. Included accessories: Hard Case, hand strap, mini SD card and adapter, SmartView® software on CD, Lithium Ion batteries and Micro USB Charger/Power Supply (including mains adapters) (**VT04/VT04A**) or 4 AA batteries (**VT02**), printed Quick Start Guide in English, Spanish, German, French and Simplified Chinese, others on CD. Users' manual on CD (21 languages).

SPECIFICATIONS

	VT02	VT04/VT04A
Built in digital camera	Yes	
Thermal heat map overlay	Yes (five blending modes)	
Image optics system	PyroBlend™ optic	PyroBlend™ Plus optic, 4 x sharper image
Center point temperature measurement	Yes	
Field of view	20° x 20°	28° x 28°
Battery	4 AA batteries	VT04: Li-ion rechargeable; VT04A: Four (4) AA batteries
Automated monitoring with temperature alarms	-	Yes

CONTINUED

FLUKE VT02 / VT04 / VT04A VISUAL IR THERMOMETERS (CONT.)

SPECIFICATIONS

	VT02	VT04/VT04A
Temperature range	-10°C to +250°C (+14°F to +482°F)	
Temperature measurement accuracy	±2°C or ±2%	
Compact and focus free	Yes – no training required	
SD card (four Gb included)	Yes – 10,000 images per GB	
Professional reporting SmartView® software	Included	
Dimensions	21cm x 7.5cm x 5.5cm (8.3" x 3" x 2.2")	
Weight	385 g (13.5 oz)	VT04: 350 g (12.5 oz); VT04A: 385 g (13.5 oz)

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-VT02	Fluke VT02 Visual IR Thermometer	43W5367	499.95
FLK-VT04	Fluke VT04 Visual IR Thermometer	99W5465	699.95
FLK-VT04A	Fluke VT04A Visual IR Thermometer	47X3326	649.95

(208427)

FLUKE-60 SERIES INFRARED THERMOMETERS

All Models:

- Fast response
- Backlit LCD display for poorly lit areas

FLUKE-59 MAX Only:

- Precise laser technology for more accurate and repeatable measurements
- Small and lightweight design fits easily fits into your tool box
- IP40 rated for extra protection
- 10:1 Distance to Spot ratio, **59 MAX+** (8:1 Distance to Spot ratio, **59 MAX**)
- Displays the minimum, maximum or average temperature, or the difference between two measurements
- Hi and Lo alarms for rapid display of measurements outside the limits
- Powered by one (1) AA battery
- One year warranty

FLUKE-61 Only:

- Bright laser beam provides easy targeting
- Shock-absorbing holster increases ruggedness
- 0.2 °C (0. 5 °F) resolution up to 275 °C (525 °F)
- Automatic sleep mode after 7 seconds extends battery life
- Alkaline batteries provide 4000 typical measurements
- Includes 9V battery and operator's guide

FLUKE-62 MAX Only:

- IP54 rated for dust and water resistance
- 3-meter (9.8-foot) drop tested
- Dual rotating lasers to help identify area to be measured (measurement area is the spot between the dots)
- Powered by a single, standard AA battery

FLUKE-59 MAX NA

FLUKE-61

FLUKE-62 MAX

Fluke has built the **59 MAX** and **59 MAX+** IR thermometers with the precision you need to do your job accurately and within your budget. Designed to withstand a 1 meter drop, you can count on these lightweight, compact IR thermometers to work when you need them. **FLUKE-60 series** non contact, infrared thermometers are ideal diagnostic tools for quick and accurate temperature readings at all distances. These handheld portable tools enable professionals to research heating and ventilation problems and monitor the status of electrical motors and electrical panels. **Mfg. part no. FLUKE-62 MAX** is small in size, extremely accurate and very easy to use. They are ergonomically designed for a more comfortable hand fit. Precise laser technology makes for more accurate and repeatable measurements.

Mfg. Part No.	Description	Temperature Range	Stock No.	Price Each
FLUKE-59 MAX NA	MAX IR Thermometer	-30°C to +350°C	08X5408	75.96
FLUKE-59 MAX+ NA	MAX+ IR Thermometer	-30°C to +500°C	08X5409	89.95
FLUKE-61	IR Thermometer	-18°C to +275°C	72C6687	143.96
FLUKE-62 MAX	MAX IR Thermometer	-30°C to +500°C	88T2550	99.95
FLUKE-62 MAX+	MAX+ IR Thermometer	-30°C to +650°C	88T2551	116.96

(84678)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

FLUKE 572-2 INFRARED THERMOMETER

NEW

FLUKE®

- Measure -30 °C to 900 °C (-22 °F to 1652 °F)
- 60:1 distance to spot ratio with dual laser sighting for fast, accurate targeting
- Multi-language interface (user select)
- Current Temperature plus MAX, MIN, DIF, AVG temperature displays
- Compatible with standard mini-connector K-type thermocouples, including ones you already own and have installed.
- Adjustable emissivity and pre-defined emissivity table
- Infrared and thermocouple temperature on backlit display
- Last reading Hold (20 seconds)
- High and low temperature alarm
- Data storage and review (99 data sets)
- Tripod mount
- 12 or 24 hour clock
- USB 2.0 computer interface cable
- FlukeView® Forms Documenting Software
- Two-year warranty

The Fluke **572-2** Infrared Thermometer is the one product you can use in high-temperature industrial environments all around the world. Whether you work in power utility, metal refining and smelting, glass, cement or petrochemical environments, the new **572-2** allows you to carry the most trusted name in test tools anywhere you need accurate, high-temperature and high distance-to-spot measurements. With a straight-forward user interface and soft-key menus, the Fluke **572-2** makes even complex measurements easy. Quickly navigate and adjust emissivity, start data logging, or turn on and off alarms, with just a few pushes of a button. **Includes:** Infrared thermometer with contact thermometer capabilities, K-type thermocouple bead probe, USB2.0 computer interface cable, FlukeView® Forms Documenting Software, hard carrying case, getting started guide (print) and user's manual (CD).

Mfg. Part No.	IR Temperature Range	Stock No.	Price Each
FLUKE-572-2	-30 °C to 900 °C (-22 °F to 1652 °F)	99W5467	799.95

(211404)

FLUKE 568 EX INTRINSICALLY SAFE INFRARED THERMOMETER

NEW

FLUKE®

- Meets intrinsically safe certifications in Class I Div 1 and Div 2 or Zone 1 and 2 hazardous environments from recognized safety agencies around the world
- Measure -40 °C to 800 °C /-40 °F to 1472 °F
- Conductive Case for carrying the IR thermometer safely into hazardous area
- Easily access advanced features with the soft-key buttons and graphical display
- Measure small objects from further away, with a distance-to-spot ratio of 50:1
- Compatible with mini-connector K-type thermocouple (KTC) probe
- Confidently measure a wide variety of surfaces with the adjustable emissivity feature, including a built-in material table
- Capture up to 99 points of data
- Confidently troubleshoot equipment with ± 1 % measurement accuracy
- Versatile interface with five languages from which to choose
- Two-year warranty

The **Fluke 568 Ex** Intrinsically Safe Infrared Thermometer is the one product you can use in Class I Div 1 and Div 2 or Zone 1 and 2 hazardous environments anywhere in the world. Whether you work in petroleum, chemical, oil and gas, or pharmaceutical environments, the **568 Ex** allows you to carry the most trusted name in test tools into most Ex rated areas all around the globe. With a straight-forward user interface and soft-key menus, the Fluke 568 Ex makes even complex measurements easy. Quickly navigate and adjust emissivity, save data or turn on and off alarms, with just a few pushes of a button. All in a single intrinsically safe tool certified by major rating bodies from around the world.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-568 EX/ETL	Fluke 568 EX Intrinsically Safe Infrared Thermometer	99W5466	1499.95

(211405)

TI400, TI300 AND TI200 ADVANCED PERFORMANCE THERMAL IMAGERS

NEW

FLUKE®

- Quick transfer of images from imager directly to PC, iPhone® or iPad® with WIFI® connectivity
- Easy analysis and quick reporting in the field with the new quick SmartView® mobile software app for iPhone® and iPad®
- Easily communicate problems or prove repairs were made with SmartView® Analysis and Reporting Software, included
- Fast and convenient operation using either rugged touch screen or optimized tactile button menu navigation
- High-temperature measurement (up to 1200 °C on the Ti400)
- Discover and report problems faster and easier with IR-Fusion® Technology with AutoBlend™ mode
- Work in the most demanding environments with Torture tested™ legendary Fluke ruggedness and reliability
- See infrared images live, in real time, with streaming HDMI video
- No need to carry pen and paper any more with voice recording IR-PhotoNotes™ photo annotation system
- Be ready for any situation with optional wide angle and telephoto interchangeable lenses
- Convenience of patented field-changeable, rechargeable smart batteries with charge level indicators

➤ CONTINUED ➤

TI400, TI300 AND TI200 ADVANCED PERFORMANCE THERMAL IMAGERS (CONT.)

SPECIFICATIONS

	Ti400	Ti300	Ti200
Temperature measurement range (not calibrated below -10 °C)	-20 °C to +1200 °C (-4 °F to +2192 °F)	-20 °C to +650 °C (-4 °F to +1202 °F)	
Temperature measurement accuracy	± 2 °C or 2 % (at 25 °C nominal, whichever is greater)		
On-screen emissivity correction	Yes (by number and table)		
Detector type	Focal Plane Array, uncooled microbolometer, 320 x 240 pixels	Focal Plane Array, uncooled microbolometer, 240 X 180 pixels	Focal Plane Array, uncooled microbolometer, 200 X 150 pixels
Thermal sensitivity (NETD)	≤ 0.05 °C at 30 °C target temp (50 mK)	≤ 0.05 °C at 30 °C target temp (50 mK)	≤ 0.075 °C at 30 °C target temp (75 mK)
Infrared spectral band	7.5 um to 14 um (long wave)		
Visual (visible light) camera	Industrial performance 5.0 megapixel		
Minimum focus distance	60 cm (approx. 24 in)		
Standard infrared lens type			
Field of view	24 ° x 17 °		
Spatial resolution (IFOV)	1.31 mRad	1.75 mRad	2.09 mRad
Minimum focus distance	15 cm (approx. 6 in)		
Palettes: Standard and Ultra Contrast™	Ironbow, Blue-Red, High Contrast, Amber, Amber Inverted, Hot Metal, Grayscale, Grayscale Inverted, Ironbow Ultra, Blue-Red Ultra, High Contrast Ultra, Amber Ultra, Amber Inverted Ultra, Hot Metal Ultra, Grayscale Ultra, Grayscale Inverted Ultra		
IR-Fusion® technology	Picture-in-picture (PIP), full screen infrared, AutoBlend™ mode and on-camera continuous blending		
Color alarms (temperature alarms)	High-temperature , low-temperature, and isotherm (user-selectable)		
Voice annotation	60 seconds maximum recording time per image; reviewable playback on imager		
IR-PhotoNotes™	Yes		
WIFI connectivity	to iPhone®, iPad® and PC		
Streaming Video	Via USB to PC		
GPS positioning	Yes		

Mfg. Part No.	Description	Stock No.	Price Each
FLK-TI400 60HZ	Ti400 60Hz Thermal Imager	99W5456	8495.00
FLK-TI300 60HZ	Ti300 60Hz Thermal Imager	99W5455	6595.00
FLK-TI200 60HZ	Ti200 60Hz Thermal Imager	99W5459	5995.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
FLK-LENS/TELE2	Telephoto Lens	99W5453	1299.95
FLK-LENS/WIDE2	Wide Angle Lens	99W5454	1199.95
FLK-TI-TRIPOD3	Tripod	99W5457	99.95
FLK-TI-VISOR3	Visor	99W5458	74.95

(211406)

FLUKE P3 SERIES THERMAL IMAGERS

FLUKE®

- Unparalleled image alignment – for the most accurate measurements and image diagnosis, only with Fluke's patented IR-Fusion®
- Rugged and reliable – the only high performance imagers to survive a 6.5 ft. drop test
- Easiest to use – three-button menu is intuitive and fastest to learn
- Superior image quality – industry leading thermal sensitivity (NETD) and field of view (IFOV) reveals the smallest temperature differences
- Full analysis/reporting software – user-preferred SmartView® included with each imager
- Built to last – two-year warranty standard with extended warranties available

SPECIFICATIONS:

Mfg. Part Nos.	Ti32	Ti29	Ti27	TiR32	TiR29	TiR27
Temp. Measurement Range	-20°C to +600°C (-4°F to +1112°F)			-20°C to +150°C (-4°F to +302°F)		
Accuracy	±2°C or 2% (@25°C nom. whichever is >)					
Thermal Sensitivity (NETD)	≤0.045°C at 30°C (45mK)	≤0.05°C at 30°C (50mK)		≤0.04°C at 30°C (40mK)	≤0.045°C at 30°C (45mK)	
Field of View (FOV)	23° horizontal x 17° vertical					
Spatial Resolution (IFOV)	1.25mRad	1.43mRad	1.67mRad	1.25mRad	1.43mRad	1.67mRad
Min. focus distance	Thermal lens: 15cm (approx. 6"), Visible (visual) light lens: 46cm (approx. 18")					
Detector size	320 x 240	280 x 210	240 x 180	320 x 240	280 x 210	240 x 180
Digital display	9.1cm (3.7") diagonal landscape color VGA (640 x 480) LCD					
Storage medium	2GB SD Card Stores up to 3000 .bmp image files, 3000 .jpeg image files or 1200 .IS2 full data files					

➤ CONTINUED ➤

THERMAL IMAGERS

FLUKE P3 SERIES THERMAL IMAGERS (CONT.)

Mfg. Part Nos.	Ti32	Ti29	Ti27	TiR32	TiR29	TiR27
Voice annotation	60 seconds maximum recording time per image; reviewable playback on imager					
Battery type	Two lithium ion rechargeable smart battery pks.					
Battery time	4 hours + per battery pack (two included)					

High-performance, fully radiometric imagers are ideal for troubleshooting electrical installations, electro-mechanical equipment, process equipment, HVAC/R equipment and other applications. Palettes include: 8 std.: ironbow, blue-red, high-contrast, amber, amber inverted, hot metal, greyscale, and greyscale inverted. 8 ultra-contrast™: ironbow ultra, blue-red ultra, high-contrast ultra, amber ultra, amber inverted ultra, hot metal ultra, greyscale ultra, and greyscale inverted ultra .

THERMAL IMAGERS FOR ELECTRICAL / MECHANICAL

Mfg. Part No.	Description	Stock No.	Price Each
FLK-TI32 60HZ	Ti32 Thermal Imager	26R4661	7999.95
FLK-TI29 60HZ	Ti29 Thermal Imager	47T2080	6999.95
FLK-TI27 60HZ	Ti27 Thermal Imager	47T2079	5999.95

THERMAL IMAGERS FOR BUILDINGS

FLK-TIR32 60HZ	TiR32 Thermal Imager	26R4659	7999.95
FLK-TIR29 60HZ	TiR29 Thermal Imager	47T2078	6999.95
FLK-TIR27 60HZ	TiR27 Thermal Imager	47T2077	5999.95

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
TI-VISOR	Thermal Imager Visor	46P3044	79.95
FLK-LENS/TELE1	Ti32/TiR32 Telephoto Infrared Lens	26R4656	999.95
FLK-LENS/WIDE1	Ti32/TiR32 Wide-angle Infrared Lens	26R4657	999.95

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FLUKE Ti SERIES THERMAL IMAGERS

Ti10 TiS

- Unparalleled image alignment – for the most accurate measurements and image diagnosis, only with Fluke's patented IR-Fusion®
- Rugged and reliable – the only high performance imagers to survive a 6.5 ft. drop test
- Easiest to use – three-button menu is intuitive and fastest to learn
- Superior image quality – industry leading thermal sensitivity (NETD) and field of view (IFOV) reveals the smallest temperature differences
- Full analysis/reporting software – user-preferred SmartView® included with each imager
- Built to last – two-year warranty standard with extended warranties available

SPECIFICATIONS:

Mfg. Part Nos.	Ti10	TiS
Temp. Measurement Range	-20°C to +250°C (-4°F to +482°F)	-20°C to +100°C (-4°F to + 212°F)
Accuracy	±2°C or 2% (@25°C nom. whichever is >)	±5°C or 5% (@25°C nom. whichever is >)
Detector Type	160 x 120	120 x 120
Thermal Sensitivity (NETD)	≤0.13°C at 30°C (130mK)	≤0.1°C at 30°C (100mK)
Field of View (FOV)	23° horizontal x 17° vertical	17° x 17°
Spatial Resolution (IFOV)	2.5mRad	
Min. focus distance	Thermal lens: 15cm (approx. 6"), Visible (visual) light lens: 46cm (approx. 18")	
Digital display	9.1cm (3.7") diagonal landscape color VGA (640 x 480) LCD w/ backlight and clear cover	
Storage medium	2GB SD Card Stores up to 3000 .bmp image files or 1200 .IS2 full data files	
Voice annotation	No	
Battery type	Internal rechargeable battery (included)	
Battery time	Thermal lens: 15cm (approx. 6"), Visible (visual) light lens: 46cm (approx. 18")	

High-performance, fully radiometric imagers are ideal for troubleshooting electrical installations, electro-mechanical equipment, process equipment, HVAC/R equipment and other applications. Palettes for ***mfg. part nos. Ti10 and Ti***: ironbow, blue-red, high contrast, grey .

THERMAL IMAGERS FOR ELECTRICAL / MECHANICAL

Mfg. Part No.	Description	Stock No.	Price Each
FLK-TI10 9HZ	Ti10 Thermal Imager	72M5714	4599.95

THERMAL IMAGERS FOR BUILDINGS

FLK-TIS 9HZ	TiS Thermal Imager	79R5437	1999.95

➤CONTINUED➤

FLUKE Ti SERIES THERMAL IMAGERS (CONT.)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
TI-VISOR	Thermal Imager Visor	46P3044	79.95

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INDUSTRIAL-COMMERCIAL INFRARED CAMERAS

- The combination of great resolution with an optimized field of view provides brilliant detail and ensures quality images captured from a safe distance
- Exclusive IR-OptiFlex™ focus system – ensures that images are in good focus from 1.2 meters (4 feet) and beyond for optimum image clarity and scanning convenience
- For shorter distances change to manual mode with the touch of a finger (**Ti110** and **Ti125**)
- Entire line up of infrared cameras is compatible to Fluke Connect™ – the largest network for wirelessly enabled tools
- Find problems faster and easier with Fluke IR-Fusion® technology (**Ti125, Ti110, Ti105**)
- Accurately identify potential issues by combining digital and IR images
- Get further clarification with AutoBlend™ mode – the blending of a digital and partially transparent IR image into a single information-filled image
- Multi-mode video recording – focus-free video in visible light and infrared with full IR-Fusion (**Ti110** and **Ti125**)

A Fluke infrared camera can save you time and money by finding potential problems before they become costly failures. Industrial professionals bring Fluke infrared cameras to the job because they do the job. Over 65 years of industrial experience give Fluke infrared tools the level of performance needed to keep you up and running. With the innovative features and functionality in the Fluke **Ti125, Ti110, Ti105, Ti100, Ti95** and **Ti90** infrared cameras, you can perform infrared inspections faster and more efficiently. Enjoy the industry's only point-and-shoot IR-Fusion camera. Fluke patented technology provides the user with both a digital and an infrared image in one to precisely document problem areas. Scan for issues significantly faster than before with Fluke's revolutionary, ultra-rugged focus system. The IR-OptiFlex focus system gives you optimum focus by combining focus-free, ease-of-use with the flexibility of manual focus on the same camera. **Now compatible with Fluke Connect™ Mobile App.**

Model	Ti125	Ti110	Ti105	Ti100	Ti95	Ti90
Accuracy	±2°C or 2% (at 25°C nominal, whichever is greater)					
Detector Type	160x120 uncooled microbolometer				80x80 uncooled microbolometer	80x60 uncooled microbolometer
Thermal Sensitivity	≤ 0.10°C at 30°C target temp (100 mK); Filtered mode to get to 80 mK		≤ 0.10°C at 30°C target temp (100 mK)			
FOV	22.5°H x 31°V				26°H x 26°V	19.5°H x 26°V
IFOV	3.39 mRad				5.6 mRad	
Min. IR Focus Distance	15.25cm (6")		122cm (48")			
Focus Mechanism	IR-OptiFlex™ focus system		Focus-free 1.2m (4ft) and beyond		Focus-free 0.6m (2ft) and beyond	
Digital Display	3.5" diagonal LCD (portrait format)					
Visual Camera	2 MP industrial-grade			None - IR Only	2 MP industrial-grade	

INDUSTRIAL / COMMERCIAL

Mfg. Part No.	Temperature Measuring Range	Capture/Refresh Rate	Stock No.	Price Each
FLK-TI125 30HZ	-20°C to +350°C	30Hz	83T4000	5499.95
FLK-TI110 30HZ	-20°C to +250°C	30Hz	83T3998	4499.95
FLK-TI105 30HZ	-20°C to +250°C	30Hz	45W1865	2999.95

GENERAL USE

FLK-TI100 9HZ	-20°C to +250°C	9Hz	83T3997	2499.95
FLK-TI95 9HZ	-20°C to +250°C	9Hz	47X3314	1999.95
FLK-TI90 9HZ	-20°C to +250°C	9Hz	47X3313	1499.95

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
FLK-TI-VISOR2	Sun Visor	83T3994	79.95
FLK-TI-TRIPOD2	Tripod Mounting Accessory	83T3992	109.95
FLK-FC-SD CARD	Fluke Connect Wireless SD Card	47X3311	99.95

KITS

FLK-TI100/C1A 9HZ	Ti100 IR Camera (9Hz) w/ 1 CNX-A3000	08X3964	2599.95
FLK-TI125/C3I 30HZ	Ti125 IR Camera (30Hz) w/ CNX 3000	08X3965	5799.95
FLK-TI125/IND 30HZ	Ti125 IR Camera (30Hz) w/ 3 CNX-I3000	08X3966	6099.95
FLK-TI105 30HZ/FCA	Ti105 IR Camera (30Hz) w/ DMM and A3001 FC iFLEX	47X3315	3499.95
FLK-TI125 30HZ/FCB	Ti125 IR Camera w/ 805 FC and 3 A3001 FC	47X3316	7999.95
FLK-TI95 9HZ/FCA	Ti95 IR Camera w/ DMM and A3001 FC iFLEX	47X3321	2499.95
FLK-TI95 9HZ/FCC	Ti95 IR Camera w/ 805 FC and 3 A3001 iFLEX	47X3322	4499.95

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BUILDING DIAGNOSTIC THERMAL IMAGERS

NEW

FLUKE®

- Exclusive IR-OptiFlex™ focus system—ensures that images are in good focus from 1.2 m (4 ft) and beyond for optimum image clarity and scanning convenience
- For shorter distances change to manual mode with the touch of a finger (**TiR110** and **TiR125**)
- Always have references handy—IR-PhotoNotes™ annotation system—Quickly identify and keep track of inspection locations by adding digital images of important information and surrounding areas (**TiR110** and **TiR125**)
- Find problems faster and easier with Fluke IR-Fusion® technology (**TiR125, TiR110, TiR105**)
- Accurately identify potential issues by combining digital and IR images
- Get further clarification with AutoBlend™ mode - the blending of a digital and partially transparent IR image into a single information-filled image (**TiR125**)
- Multi-mode video recording—focus-free video in visible light and infrared with full IR-Fusion (**TiR110** and **TiR125**)
- Easily communicate the location of problems with the Electronic 8-Point Cardinal Compass (**TiR125** and **TiR110**)

Whether you're searching for air leaks, hidden moisture, construction defects, or other building issues, a Fluke thermal imager delivers a huge competitive advantage—it allows you to work faster and more efficiently, and document your findings. Spend less time in the field and more time growing your business with these new Fluke thermal imagers.

Model	TiR125	TiR110	TiR105
Accuracy	±2°C or 2% (at 25°C nominal, whichever is greater)		
Detector Type	160 x 120 FPA Uncooled Microbolometer		
Thermal Sensitivity (NETD)	≤0.08°C at 30°C target temp (80mK)		
Field of View (FOV)	22.5°H x 31°V		
Spatial Resolution (IFOV)	3.39mRad		
Min. IR Focus Distance	15.25cm (6")		PIP 1.2m (4ft), FULL IR, FULL VISIBLE
Focus	IR-OptiFlex™ focus system		Focus-free 1.2m (4ft) and beyond
Digital Display	3.5" diagonal LCD (portrait format)		
Visual Camera	2 megapixel industrial-grade		

BUILDING DIAGNOSTIC

Mfg. Part No.	Temperature Measuring Range	Capture/Refresh Rate	Stock No.	Price Each
FLK-TIR125 9HZ	-20°C to +150°C	9Hz	83T3996	5499.95
FLK-TIR110 9HZ	-20°C to +150°C	9Hz	83T3995	4499.95
FLK-TIR105 9HZ	-20°C to +150°C	9Hz	45W1864	2999.95

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
FLK-TI-VISOR2	Sun Visor	83T3994	79.95
FLK-TI-TRIPOD2	Tripod Mounting Accessory	83T3992	109.95

(212181)

FLUKE CV SERIES CLIRVU INFRARED WINDOWS

NEW

FLUKE®

Hand Turn

Security Key

Superior arc blast protection

- High temperature silicon gaskets
- Mounting and door latches provide high pressure gasket compression
- Die cast components are manufactured with the highest strength alloys (ZA-27 and EZAC)
- Jam nut screws are made from 4037 steel, heat treated to 160,000 psi tensile

Torture Tested to the highest test ratings

- IEEE C37.20.7 63 kA Arc tested at KEMA, UL 50/50E/50V, UL1558, IEC60529-1: IP67, IEC 60068, NEMA 4½, CSA C22.2 NO. 14-13:2012, and CE

Quick and easy installation

- Installation takes 5 minutes with one technician
- Only one hole necessary with standard Greenlee® punch. Rear access required for punch connection only (Easily accomplished with one technician)
- Installs from front; no template needed; no rear access required
- Grounds instantly to metal enclosure with patent pending AutoGround™ process
- Sharp teeth on jam nuts assure four gas-tight ground connections
- All components have electrically conductive finishes for optimum grounding

Corrosion and UV resistance for challenging outdoor environments

- All hardware is made from stainless steel or zinc plated steel
- Die cast components are plated with black chromium over high phosphorous Electroless nickel

Easy to use

- Quarter turn latch easily opens hinged cover
- Three sizes 50 mm, 75 mm and 95 mm (2 in , 3 in and 4 in) with the option of hand turn or security key door latches

Increase the safety and speed of electrical thermal imaging inspections with the new Fluke **ClirVu®** IR Windows. Reduce the risk of arc-flash and electrocution, increase the safety of your personnel and reduce the time and cost of preventive maintenance. No more removing the panel door for installation. Work permit requirements and NFPA 70E processes are significantly reduced. Full PPE is often not required so inspections are done faster and more comfortable.

➤CONTINUED➤

FLUKE CV SERIES CLIRVU INFRARED WINDOWS (CONT.)

Mfg. Part No.	Size	Door Latch	Stock No.	Price Each
FLUKE-CV200	2 in (50 mm)	Hand Turn	99W5460	294.95
FLUKE-CV201	2 in (50 mm)	Security Key	99W5461	294.95
FLUKE-CV300	3 in (75 mm)	Hand Turn	99W5462	394.95
FLUKE-CV301	3 in (75 mm)	Security Key	99W5463	394.95
FLUKE-CV400	4 in (95 mm)	Hand Turn	99W5464	594.95
FLUKE-CV401	4 in (95 mm)	Security Key	08X5407	594.95

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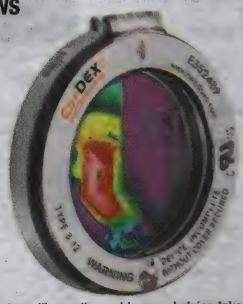
IW3000/4000 SERIES INTELLIGENT IR WINDOWS

CorDEX INSTRUMENTS
SAFER | FASTER | BETTER



- Fully certified and tested to the following standards: UL50, UL50V, UL1558
- Manufactured from industrial grade materials proven to withstand electric arcs
- Efficient ¼ turn locking system
- Intelligent multiple identification system for each individual window

The **IW Series** infrared window operates with any thermal imager, helping take electrical inspection and predictive maintenance to a new level of safety, efficiency and accuracy. The **IW Series** is manufactured from industrial grade materials designed to withstand electrical arcs and certified by Underwriters Laboratories (UL) to follow the very latest IR window standards. Install the certified, **IW Series** Intelligent IR Windows to help comply with NFPA70E electrical safety guidelines and reduce the need to wear large and bulky PPE. Through intelligent design and special features the **IW Series** reduces the time it takes to perform inspections. With the ¼ turn locking system and spring loaded cover it reduces your time per inspection. The **IW Series** crystal lens is also protected with HydroGARD™ advanced formula to stop environmental moisture damage allowing the windows to be used both indoor and outdoor.

Mfg. Part No.	Crystal Insert Diameter	Viewing Aperture Diameter	Viewing Aperture Area	Thick-ness	Stock No.	Price Each
IW3000	80mm (3.15in)	73mm (2.87in)	4186mm² (6.49in²)	2mm (0.08in)	53W3064	199.00
IW4000	100mm (3.94in)	93mm (3.66in)	6794mm² (10.53in²)	4mm (0.16in)	53W3065	350.00

(209150)

FLUKE-971 TEMPERATURE HUMIDITY METER

FLUKE®

- Use as part of a regular HVAC maintenance plan
- Ideal for checking environmental conditions in response to building occupant complaints
- Calculates wet bulb and dewpoint temperatures instantly
- Temperature range: -20°C to 60°C (-4°F to 140°F)
- Humidity range: 5% to 95% RH
- Rugged construction
- Bright, backlit dual display
- Simple to use, accurate results

Mfg. part no. Fluke-971 meter comes complete with integral holster and belt clip, four AAA batteries and operation manual.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-971	Temperature Humidity Meter	55K5001	299.95

(85520)

CALIBRATION SERVICES

From pre-calibration to re-calibration, we bring you competitive pricing with quick delivery.

(207666)

TEMPERATURE & HUMIDITY

FLUKE 50 SERIES II THERMOMETERS

FLUKE

- Rugged Design with Holster
- K, J, T, E-Type Thermocouple Compatibility
- Hold / MIN / MAX / AVG Recording
- Relative Time Stamp
- Electronic Offset Minimizes Thermocouple Error
- Dual Display with Backlight
- User Friendly Front Panel Set-Up
- Readout in °C, °F or Kelvin (K)
- 3-Year Warranty
- Recommended accessories - C50 Case, TPAK Meter Hanger, 80PK-27 Temperature Probe

Fluke 53B and 54B Additional Features

- Data Logging Up to 500 Points with User Adjustable Intervals
- Additional Thermocouple Type Inputs
- Real Time Clock
- IR Communication Port Allows Data to Be Exported to Optional FlukeView® Software

51-2 54-2B

The rugged, hand-held, **Fluke 50 Series II** thermometers have extra large dual displays with bright backlights. They offer fast response and a basic accuracy of ±0.05% +0.5°F, and a wide measurement range from -418°F to 3212°F (depending on thermocouple type). Readings can be displayed in °C, °F or Kelvin. **Mfg. part no. FVF-SC1** Flukeview Forms Software allows you to document, store and analyze measurements from **Fluke 53-2B and 54-2B**. Download data. Real-time logging. Create custom forms, reports, graphs and tables.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-51-2 60HZ	Single-Input Thermometer	95B1678	261.21
FLUKE-52-2 60HZ	Dual-Input Thermometer	95B1685	308.71
FLUKE-53-2 B 60HZ	Single-Input Thermometer w/ USB Recording	47T2083	374.95
FLUKE-54-2 B 60HZ	Dual-Input Thermometer w/ USB Recording	47T2084	424.95

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1523/1524 REFERENCE THERMOMETERS

FLUKE Calibration

- High accuracy
- PRTs: up to ± 0.011 °C
- Thermocouples: up to ± 0.24 °C
- Precision thermistors: ± 0.002 °C

1523 1524

The new **1523/24** Reference Thermometers from Fluke Calibration measure, graph, and record PRTs, thermocouples, and thermistors. These new thermometer readouts deliver high accuracy, wide measurement range, logging, and trending, all in a handheld tool you can take anywhere. The **1523/24** lets you handle field applications, laboratory measurements, and data logging with ease. And with the dual channel measurement capabilities of the model **1524**, you can do twice the work in half the time.

Mfg. Part No.	Description	Stock No.	Price Each
1523-156	Reference Thermometer, Handheld, 1 Channel	16R0487	1740.00
1524-156	Reference Thermometer, Handheld, 2 Channel, Data Logger	11R0742	2080.00
1523-P1-156	1523 Bundled with 5616 PRT, Universal TC INFO-CON Connector, TPAK, and Case	16R0484	3200.00
1523-P3-156	1523 Bundled with 5627A PRT, Universal TC INFO-CON Connector, TPAK, and Case	16R0486	3000.00
1524-P1-156	1524 Bundled, with 5616 PRT, Universal TC INFO-CON Connector, TPAK, and Case	16R0488	3520.00
1524-P3-156	1524 Bundled with 5627A PRT, Universal TC INFO-CON Connector, TPAK, and Case	16R0490	3300.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
1523-CASE	1523/1524 Readout and Probe Carrying Case	46P8768	450.00

(209898)

element14 COMMUNITY

Get inspired, collaborate, design, research, ask experts questions.

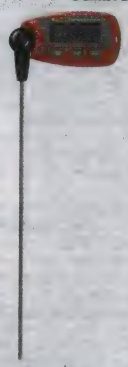
element14.com

(196545)

1551A EX / 1552A EX INTRINSICALLY SAFE "STIK" THERMOMETERS

FLUKE Calibration

- ± 0.05 °C accuracy over full range
- Intrinsically safe (ATEX compliant)
- Display temperature in °C or °F
- Optional data logging to internal memory
- Temperature trend indicator
- User selectable resolution (0.1, 0.01, 0.001)
- 300 hour battery life
- Percent battery-life and low battery indicator
- NVLAP accredited calibration (NIST traceable)



Whether working outdoors in environments where potentially explosive gases may be present or on the fl oor of a processing plant, the intrinsically safe, battery-operated, portable reference thermometer is designed to go where you work. The RTD sensor of the "Stik" Thermometer is housed in a rugged stainless steel sheath—you no longer have to worry about breaking a mercury-in-glass thermometer and the subsequent cleanup. The probe and digital readout are fixed together, calibrated as a system, and accurate to ± 0.05 °C over the full temperature range. The large backlit LCD display rotates 90° making it easy to read from any position. Minimize measurement errors with the userconfigurable temperature trend/stability indicator which tells you when your temperature source is stable or if your temperature is trending up or down.

Mfg. Part No.	Temperature Range	Probe Sheath Length	Stock No.	Price Each
1551A-9	-50°C to +160°C	9″	23T9777	710.00
1551A-12	-50°C to +160°C	12″	23T9773	680.00
1552A-12	-80°C to +300°C	12″	23T9779	1070.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
1551-CASE	Carrying Case	23T9770	80.00

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STAND-ALONE DATA LOGGER WITH LARGE MEMORY CAPACITY

IP67 LASCAR

- Stores up to 256,000 readings with on-screen programming, data download and graphing independent of the computer
- Logging rates between 1 sec and 12 hrs.
- User programmable alarms, audible alarms, confidence LEDs and user replaceable batteries

These stand alone data loggers measure and store up to 256,000 temperature readings. The high contrast LCD allows on-screen programming and data download in realtime and retrospective values. User-replaceable batteries typically allow logging up to 6 months or can be used with a USB power adapter. Variants include a temperature logger (**EL-GFX-1**), a temp/RH logger (**EL-GFX-2**), a higher accuracy temp/rh logger (**EL-GFX-2+**), a dual and single channel thermocouple logger (**EL-GFX-DTC/EL-GFX-TC**) and a dual and single channel thermistor based temp logger (**EL-GFX-DTP/EL-GFX-TP**).

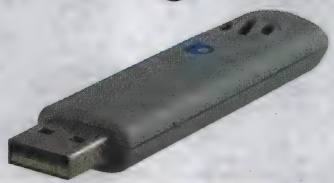
Mfg. Part No.	Description	Stock No.	Price Each 1-24
EL-GFX-1	Temperature Data Logger	89T2069	165.06
EL-GFX-2	Temperature and Relative Humidity Data Logger	56W5209	175.50
EL-GFX-2+	Higher Accuracy Temperature and Relative Humidity Data Logger	54X7624	204.75
EL-GFX-DTC	Dual Channel Thermocouple Data Logger	56W5208	226.19
EL-GFX-TC	Single Channel Thermocouple Data Logger	32X9779	211.58
EL-GFX-DTP	Dual Channel Thermistor-Based Temp Probe	72W3108	216.45
EL-GFX-TP	Single Channel Thermistor-Based Temp Probe	32X9781	211.58

(202241)

REAL-TIME TEMPERATURE/ RH/ DEW POINT USB DATA LOGGER

LASCAR

- Data displayed on PC monitor as it happens — real-time
- -20° to +70°C (-4° to +158°F) measurement range
- 0 to 100% RH measurement range
- Dew point indication via Windows® control software (included)
- USB interface for set-up and data download
- User-programmable alarm thresholds
- Powered by the USB



Mfg. part no. EL-USB-RT real-time data logger is easy to install and use. The user can measure temperature and relative humidity and view downloaded data by plugging the logger into a PC's USB port and using the supplied Windows® control software (runs under 2000, XP and Vista). The PC displays the temperature, RH and dew point in real-time and saves it to a file which can store up to seven day's worth of data. This data file is overwritten at the beginning of each new logging session. The supplied software provides the option for the user to save the data file permanently to the hard-drive. Temperature, relative humidity and dew point can be graphed, printed and exported to other applications.

Mfg. Part No.	Description	Stock No.	Price Each 1-24	Price Each 25+
EL-USB-RT	Real-Time Temperature/RH/Dew Point USB Data Logger	39P9593	91.96	82.77

(137189)

4180 PRECISION INFRARED CALIBRATORS

- Calibrated radiometrically for meaningful, consistent results
- Accredited calibration included
- Accurate, reliable performance from -15°C to +120°C
- Large target size of 152 mm (6 in) is required for calibrating most thermometers
- Light instrument weight of 8.6 kg (19 lbs) makes it easy to lift and carry
- Intuitive, easy-to-read display that indicates when temperature is stable

The **4180 Series** of Precision Infrared Calibrators for infrared thermometers and thermal imagers is fast, accurate, and easy to use. It comes with an accredited calibration from one of the world's most trusted temperature calibration laboratories, sample calibration procedures for Fluke thermometers built right in and everything you need to get started making high-quality infrared thermometer calibrations. This is the perfect solution for any infrared thermometer or thermal imager within its temperature range. The **4180** Infrared Temperature Calibrator reaches temperatures from -15°C to +120°C. Uniformity is important in infrared temperature calibration work because an infrared thermometer will "see" as much as the entire target when placed at the appropriate calibration distance. In addition, with accuracies as good as ± 0.35°C the **4180 Series** can meet its specifications without additional emissivity-related corrections, leading to legitimate test uncertainty ratios (TUR) as good as 4:1.

Mfg. Part No.	Description	Stock No.	Price Each
4180-156	IR Calibrator, 152 mm (6 in), -15°C to +120°C	16R0673	7640.00

(209902)

7526A PRECISION PROCESS CALIBRATOR

- Sources and measures dc voltage, current, resistance, RTDs and thermocouples
- Precision pressure measurement using Fluke **700** or **525A-P** series pressure modules
- Includes 24Vdc transmitter loop power supply
- Measures 4-20 mA loop current
- Isolated pressure module input (accuracy determined by the pressure modules)
- Primary input/output controls and cursor controls
- Isolated input terminals for dc voltage/current measurement, switch-test input and 24Vdc loop power supply
- Isolated input controls
- Includes automated switch-test function
- Accepts ITS-90 coefficients for accurate SPRT measurements
- Compatible with MET/CAL® Calibration Software

The Fluke Calibration **7526A** Precision Process Calibrator offers the best balance of economy and accuracy for benchtop calibration of temperature and pressure process instrumentation. Easily calibrate RTD and thermocouple readouts, pressure gauges, temperature transmitters, digital process simulators, data loggers, multimeters and more.

SPECIFICATIONS	
DC voltage output terminals	0 mV to 100 V Accuracy: 30 ppm (+3 uV*), 1-year
DC current output terminals	0 mA to 100 mA Accuracy: 50 ppm, 1-year
RTD/Ω output terminals (two-wire)	5 Ω to 4 kΩ Accuracy: ± 0.05 °C, –200 °C to 630 °C, (Pt 385, 100 Ω), 1-year
Thermocouple input/output terminal	Accuracy: ± 0.1 °C, –100 °C to 800 °C (type K), 1-year
Four-wire RTD/Ω input terminals	Accuracy: ± 0.02 °C, –80 °C to 100 °C (Pt 385, 100 Ω), 1-year

Mfg. Part No.	Description	Stock No.	Price Each
7526A-156	Precision Process Calibrator	47W9289	6220.00

ACCESORIES

Mfg. Part No.	Description	Stock No.	Price Each
7526A-CASE	Carrying Case	47W9288	610.00
Y7526A	Rack Mount Kit	47W9287	530.00

(209879)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196562)

FIELD METROLOGY WELLS

9142 9143 9144

- Lightweight, portable, and fast
- Cool to -25°C in 15 minutes and heat to 660°C in 15 minutes
- Built-in two-channel readout for PRT, RTD, thermocouple, 4-20 mA current
- True reference thermometry with accuracy to ±0.01°C
- On-board automation and documentation
- Metrology performance in accuracy, stability, uniformity, and loading

The new **914X Series** Field Metrology Wells extend high performance to the industrial process environment by maximizing portability, speed, and functionality with little compromise to metrology performance. Field Metrology Wells are packed with functionality and are remarkably easy to use. They are lightweight, small, and quick to reach temperature set points, yet they are stable, uniform, and accurate. These industrial temperature loop calibrators are perfect for performing transmitter loop calibrations, comparison calibrations, or simple checks of thermocouple sensors. With the "process" option, there is no need to carry additional tools into the field. This optional built-in two-channel readout reads resistance, voltage, and 4–20 mA current with 24 volt loop power. It also has on-board documentation. Combined, the three models (9142, 9143, and 9144—each with a "process" option) cover the wide range of -25°C to 660°C.

Mfg. Part No.	Temperature Range	Stock No.	Price Each
9142-DW-156	–25°C to +150°C (-13°F to +302°F)	43W4496	5550.00
9143-DW-156	+33°C to +350°C (+91°F to +662°F)	43W4497	4120.00
9144-DW-156	+50°C to +660°C (+122°F to +1220°F)	43W4498	4960.00

(209287)

DRY-WELL & DRY BLOCK CALIBRATORS

9103 9140 9141

- Lightweight and very portable
- Accuracy to ±0.25 °C
- RS-232 and Interface-it software included
- Easy to recalibrate

If you've been using a dry well calibrator or dry block calibrator for field work, you know there's a lot more to them than temperature range and stability. Size, weight, speed, convenience, and software are also significant. A field dry well needs to be portable, flexible, and suitable for high-volume calibrations or certifications. At Fluke Calibration, we use dry well calibrators every day in our manufacturing and calibration work, and we know what makes a dry well easy and productive to use—which is exactly how users describe our series of field dry wells. These dry wells work for you instead of the other way around. In addition, the heating and cooling rate of each of these dry-well calibrators is adjustable from the front panel, thermal switches can be checked for actuation testing, and multiple-hole inserts are available for a variety of probe sizes. Fluke Calibration dry wells are easy to calibrate. You don't even have to open the case. This means less maintenance costs and less down time when a dry well does need calibration. Our Interface-it software lets you adjust set-points and ramp rates, log dry-well readings to a file, create an electronic strip chart, and perform thermal switch testing with data collection. The software is written for Windows and has a great graphical interface. Regardless of whether you want basic software or a completely automated calibration system, we've got what you want.

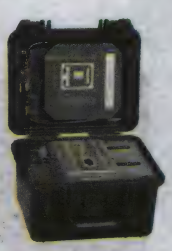
Mfg. Part No.	Temperature Range	Stock No.	Price Each
9103-DW-156	-25°C to +140°C (-13°F to +284°F)	43W4493	4860.00
9140-DW-156	+35°C to +350°C (+95°F to +662°F)	43W4494	3270.00
9141-DW-156	+50°C to +650°C (+122°F to +1202°F)	43W4495	4430.00

(209288)

TEMPERATURE CALIBRATION • CHART RECORDERS & DATA LOGGERS

9009 INDUSTRIAL DUAL-BLOCK THERMOMETER CALIBRATOR

FLUKE. Calibration



- Temperatures from –15 °C to 350 °C in one unit
- Two wells in each block for simultaneous comparison calibrations
- Rugged, lightweight, water-resistant enclosure
- Includes two ¼ in (6.4 mm) and two 3⁄16 in (4.8 mm) inserts

The **Model 9009** includes two independently controlled temperature blocks. The hot block provides temperatures from 50°C to 350°C, while the cold block covers the range –15°C to 110°C. Each block is controlled by a precision Fluke Calibration temperature controller. Each temperature block includes two wells with removable inserts. You can calibrate four probes at once, or you can calibrate two probes at the same time with an external reference like Fluke Calibration's **Model 1523** Reference Thermometer, or you can use the two temperature wells to get quick "zero" and "span" references for transmitter calibrations. The **9009** is housed in a tough Pelican™ case that is both airtight and watertight. It's a small package weighing only 10 pounds, yet it fits everything you need, including a power cord and four extra inserts. Inserts are available to accommodate sensors of any size from 1⁄16″ (1.6 mm) to 7⁄16″ (11.1 mm). The cold block is calibrated to within ±0.2°C with stability of ±0.05°C. The hot block's display is accurate to ±0.6°C with stability of ±0.05°C. A NIST-traceable calibration is included for each of the two test blocks. For use with automated systems, the **9009** comes with an RS-232 connection and our **Model 9930** Interface-it software, which allows you to control and monitor temperatures from your PC. For completely automated calibrations, Fluke Calibration's MET/TEMP II software also integrates with the **9009**.

Mfg. Part No.	Description	Stock No.	Price Each
9009-B-156	Industrial Dual-Block Dry-Well, Black	09K7152	5520.00

(209542)

9100S/9102S HANDHELD DRY-WELLS

FLUKE. Calibration

- Smallest dry-wells in the world
- Ranges from -10°C to +375°C
- Accuracy to ±0.25°C, stability of ±0.05°C at 0°C
- RS-232 interface with 9930 Interface-it v3.81 software

9100S

9102S

Despite its small size (2!!! inches high and 5 inches wide) and light weight, the **9100S** outperforms every dry-well in its class in the world. It has a range to +375°C (+707°F) and is perfect for checking RTDs, thermocouples, and small bimetal thermometers in the field. Plug it in, switch it on (Note, these wells are fixed and not interchangeable), set the temperature with the front-panel buttons, and insert your probe into the properly sized well. Compare the reading of your device to the display temperature or to an external reference, and the difference is the error in your device. With a proprietary Fluke Calibration temperature controller, the **9100S** has a display resolution of 0.1 degrees, an accuracy of ±0.5°C, a stability of ±0.1°C, and a stabilization time of just five minutes. For work in the temperature range of -10°C to +122°C, our Model **9102S** dry-well is another first in the industry, featuring stability to ±0.05°C. This dry-well is only four inches high and six inches wide, achieves temperatures as low as -10°C, includes a NIST-traceable calibration, and is stable to ±0.05°C. The Model **9102S** is excellent for dial gauges, digital thermometers, bulb switches, and other sensors that need calibration below ambient. The **9102S** has two wells so you can use one for a reference thermometer to increase accuracy. Both wells are ½ inch in diameter, and each has inserts available for almost any sensor size. The **9102S** also has a battery pack option that gives you approximately four hours of field use when AC power is unavailable.

Mfg. Part No.	Description	Stock No.	Price Each
9100S-A-156	HDRC Handheld Dry-Well A	09K7154	1920.00
9102S-156	HDRC Handheld Dry-Well	09K7157	3180.00

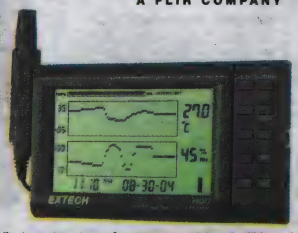
ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
3102-2	Insert, 1/8 in (3.2 mm) : 9102S	09K6892	150.00
3102-3	Insert, 3/16 in (4.8 mm) : 9102S	29H3090	150.00
3102-4	Insert, 1/4 in (6.4 mm) : 9102S	29H3089	150.00
3102-5	Insert, 5/16 in (7.9 mm) : 9102S	09K6893	150.00
3102-6	Insert, 3/8 in (9.5 mm) : 9102S	09K6894	150.00

(209903)

HUMIDITY AND TEMPERATURE CHART RECORDER

CE EXTECH INSTRUMENTS A FLIR COMPANY



- Simultaneous numerical and graphical display of Humidity and Temperature readings, plus Time and Date
- Measures Humidity (10 to 95%RH) and Temperature (-20.0°F to 140.0°F) plus included LabVIEW™-based software calculates and graphs Dew Point, Wet Bulb, and GPP (grains per pound)
- Large dual graphical LCD displays with adjustable vertical and horizontal TAC resolution
- Internal memory records up to 49,000 data points and can be transferred to a PC via RS-232 serial port
- Detachable probe extends up to 1 meter for measurements in closed environments

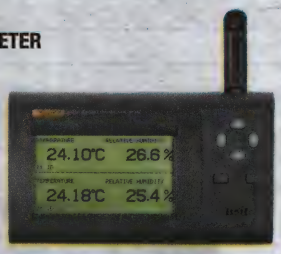
Mfg. part no. RH520A is easy to use, set up and operate. LCD indicates percentage of memory remaining. Audible and visual alarm with Hi/Low setpoints. Replaceable probe does not require recalibration. Desk or wall mount. Includes built-in stand, detachable probe with 3ft. (1m) cable, RS232 cable, RS-232 To USB adaptor, LabView-based PC software, adaptor, and 3 AA batteries.

Mfg. Part No.	Description	Stock No.	Price Each
RH520A	Humidity + Temperature Chart Recorder	02P7937	299.99

(148530)

1620A "DewK" THERMO-HYGROMETER

FLUKE. Calibration



- Superior accuracy
- Network enabled
- Powerful logging and analysis tools
- Two interchangeable calibrated sensors
- Huge memory
- Upgraded software

The DewK thermo hygrometer and humidity monitor measures temperature to ± 0.125°C and humidity to ± 1.5% on two channels, and displays it on a big, clear screen. Ethernet, wireless (optional), or RS-232 will allow you to network as many DewKs as you'd like. And the LogWare III software will allow real-time logging of multiple DewKs, data storage to your computer and seamless integration with MET/CAL® software. **Mfg. part no. 1620A** includes one standard-accuracy sensor, wall mount bracket and RS-232 cable. **Mfg. part no. 1621A** includes two standard-accuracy sensors, wall mount bracket, RS-232 cable, 7.6 m [25 ft] sensor extension cable, sensor wall mount bracket, sensor case, **9936A** LogWare III single-PC license (required for use with MET/CAL software). **Mfg. part no. 1622A** includes **1621A** value kit, **2633-RF** wireless option (requires wireless modem), wireless Modem and USB to wireless.

SPECIFICATIONS	
Operating Range	0°C to +50°C (+32°F to +122°F); 0% RH to 100% RH
Calibrated Temp. Accuracy ("S" Model")	± 0.25°C from +15°C to +35°C (± 0.45°F from +59°F to +95°F)
Calibrated Temp. Accuracy ("H" Model")	± 0.125°C from +16°C to +24°C (± 0.225°F from +60.8°F to +75.2°F)
Calibrated RH Accuracy ("S" Model)	± 2% RH from 20% RH to 70% RH
Calibrated RH Accuracy ("H" Model)"	± 1.5% RH from 20% RH to 70% RH
Display	240 x 128 monochrome LCD
Size (HxWxD)	125mm x 211mm x 51mm (4.9" x 8.3" x 2.0")

Mfg. Part No.	Description	Stock No.	Price Each
1620A-S-156	"DewK" Thermo-Hygrometer, Standard-Accuracy	16R0494	2210.00
1620A-H-156	"DewK" Thermo-Hygrometer, High-Accuracy	43W4490	2520.00
1621A-S-156	"DewK" Thermo-Hygrometer, Standard-Accuracy Value Kit	05R5438	3100.00
1621A-H-156	"DewK" Thermo-Hygrometer, High-Accuracy Value Kit	43W4491	3710.00
1622A-S-156	"DewK" Thermo-Hygrometer, USB Wireless Standard-Accuracy Value Kit	16R0496	3670.00
1622A-H-156	"DewK" Thermo-Hygrometer, USB Wireless High-Accuracy Value Kit	43W4492	4280.00

SOFTWARE

Mfg. Part No.	Description	Stock No.	Price Each
9936A	LogWare III Data Logging and Charting Software	34M2338	1015.00

ACCESSORIES

2626-S	Spare Sensor, Standard-Accuracy	48J6339	580.00

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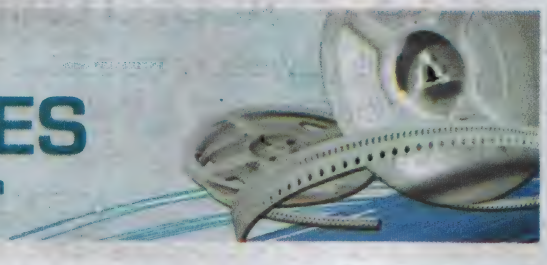
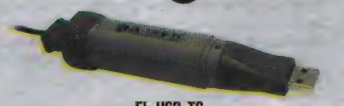


(211465)

THERMOCOUPLE TEMPERATURE USB DATA LOGGERS

LASCAR

- K-type: -200°C to +1350°C measurement range
- J-type: -200°C to +1190°C measurement range
- T-type: -200°C to +390°C measurement range
- USB interface for set-up and data download
- Stores over 32000 temperature readings
- Programmable sample rates: 1 sec., 10 sec., 1min., 5min., 30min., 1hr., 6 hr., 12 hr.
- User-programmable alarm thresholds
- Red and green LED status indication
- Supplied with 1.5m basic K-type thermocouple
- Replaceable lithium battery (included)
- High contrast LCD shows last, high and low stored readings (EL-USB-TC-LCD)
- Immediate, delayed and push-to-start mode (EL-USB-TC-LCD)



EL-USB-TC

EL-USB-TC-LCD

EL-USB-TP-LCD

Thermocouple data loggers with USB interface are easy to set up, install and use. A thermocouple is attached via the thermocouple socket at the base of the unit. The user can easily set up the thermocouple type, logging rate, start-time, logging mode, and download the stored data by plugging the logger straight into a PC's USB port and running the supplied Windows® control software (runs under 2000, XP and Vista). Data can then be graphed, printed and exported to other applications.

Mfg. Part No.	Description	Stock No.	Price Each 1-24	Price Each 25+
EL-USB-TC	Thermocouple USB Data Logger	14P9925	104.22	93.81
EL-USB-TC-LCD	Thermocouple Data Logger with LCD	71R5098	126.33	113.70
EL-USB-TP-LCD	Thermocouple Probe Data Logger with LCD	17X8887	119.34	107.41

(137188)

TEMPERATURE/RH USB DATA LOGGERS

LASCAR

- -35 to +80°C (-31° to +176°F) and 0-100% RH
- More than 16,000 reading capacity per parameter
- Programmable sample rates from 10 sec to 12 hrs
- **EL-USB-2-LCD** and **EL-USB-2-LCD+** also include LCD display showing latest log and max/min log
- **EL-USB-2+** and **EL-USB-2-LCD+** have higher accuracy sensor

EL-USB-2-LCD and EL-USB-2-LCD+

EL-USB-2

These temp/RH data loggers use simple configuration and graphing software supplied at no cost. Plugging directly into the USB port, users can quickly program and download data from these loggers in a variety of temp/RH environments.

Mfg. Part No.	Description	Stock No.	Price Each 1-24
EL-USB-2	Temp/RH Data Logger	37K5969	100.55
EL-USB-2+	Temp/RH Data Logger with Higher Accuracy	39P9594	135.76
EL-USB-2-LCD	Temp/RH Data Logger with LCD Display	13P0588	122.62
EL-USB-2-LCD PLUS	Higher Accuracy Temp/RH Data Logger w/ LCD Display	53R1886	128.49

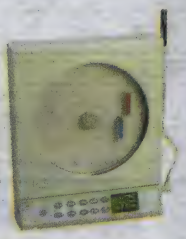
(137186)

MICROPROCESSOR-BASED PORTABLE UNIVERSAL CIRCULAR CHART SUPERECORDER™

CE RoHS Compliant Available

NEWPORT

CTXL-TRH is a temperature / relative humidity chart recorder with a temperature range of -17 to 49°C (2 to 120°F), and a humidity range of 2 to 98%. The **CTXL-DTC** is a dual thermocouple input chart recorder that accepts J, K, or T Type thermocouple probes. The **CTXL-DPR** is a dual-process input chart recorder that accepts 0 to 1Vdc, 0 to 5Vdc, 0 to 10Vdc, 0 to 20mA, and 4 to 20mA inputs. Models have dual backlit LCDs that display two inputs in real-time. Charted data is stored in the nonvolatile memory that can be downloaded to a PC at a later time. This provides an electronic copy of the charted data. In addition, the **CTXL series** provides many powerful functions such as audible and visual alarms with two built-in relay contacts; real time clock to monitor and store data vs. time; monitoring of the Minimum, Maximum, and Average values; 1, 7, or 32-day recording; chart re-scaling, and more.



Mfg. Part No.	Description	Input Type	Color	Stock No.	Price Each
CTXL-TRH-G/N	Temperature / Relative Humidity Recorder	...	Gray	01P0087	825.00
CTXL-TRH-W/N	Temperature / Relative Humidity Recorder	...	White	78M5240	845.00
CTXL-DTC-G/N	Dual Thermocouple Input Recorder	...	Gray	05R2259	845.00
CTXL-DTC-W/N	Dual Thermocouple Input Recorder	...	White	05R2260	825.00
• CTXL-DPR-G-I/N	Dual-Process Input Recorder	Current	Gray	45T1553	825.00
• CTXL-DPR-W-I/N	Dual-Process Input Recorder	Voltage	White	45T1554	825.00
• CTXL-DPR-G-V/N	Dual-Process Input Recorder	Current	Gray	29T5913	825.00
• CTXL-DPR-W-V/N	Dual-Process Input Recorder	Voltage	White	45T1555	825.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
• CTXL-CABLE-6	1.8 m (6') extension cable	78M5242	15.00
• CTXL-CABLE-10/N	3.05 m (10') extension cable	05R2256	25.00

CONTINUED

MICROPROCESSOR-BASED PORTABLE UNIVERSAL CIRCULAR CHART SUPERECORDER™ (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
CT485-CDF/N	100 Charts, 1 day°F, double sided	92F6587	21.00
CT485-CWF/N	100 Charts, 7 day°F, double sided	92F6589	21.00
CT485-CMF/N	100 Charts, 32 day°F, double sided	93F9241	21.00
CT485-PS/N	Pen set, red and blue, package of 1 each	93F9240	12.00

(147088)

FLUKE-985 PARTICLE COUNTER AND FLUKE CO-220 CARBON MONOXIDE METER

FLUKE®

The particle counter is an essential tool in the facility maintenance, HVAC and IAQ professional's toolbox. From filter testing to indoor air quality investigations, the particle counter equips the user with valuable data concerning the concentration and source of particulates in the tested environment. **Fluke 985** has a large 3.5" color display with backlight and user friendly intuitive icons plus a large font option for easy navigation and viewing. It features configurable settings for the display, sample methods and sample size alarm. Data can be presented in traditional tabular or as a trend graph and exported to a USB memory stick or directly to a PC via a USB or Ethernet cable. It meets ISO 21501, JIS B9921 and CE standards. **Fluke 985** is ultra-lightweight with an ergonomic design for easy single-hand operation. Includes: cradle for charging and USB and Ethernet communications, ENET CAT5E cable, USB-A to MINI-B cable, 12VDC power supply, zero count inlet-filter, filter adapter, sample inlet protective cap, hard case, getting started manual and user manual CD.

985

	Fluke 985
Six Size Channels	0.3µm, 0.5µm, 1.0µm, 2.0µm, 5.0µm, 10.0µm
Flow Rate	0.1cfm (2.83L/min)
Count Modes	Raw counts, #/m3, #/ft3, #/liter in Cumulative or Differential mode
Data Storage	10,000 records (rotating buffer)
Alarms	User selected particle channels and limits
Display	QVGA color with backlight
Rechargeable Battery	Li-ion 7.4V 2600mAh
Battery Duration / Charge Time	10 hours / 3.5 hours
Dimensions (LxWxD)	27.2cm x 9.9cm x 5.3cm (10.7" x 3.9" x 2.1")

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-985	**Fluke 985** Particle Counter	88T2552	4599.95

FLUKE CO-220 CARBON MONOXIDE METER AND ACCESSORIES

Mfg. part no. FLUKE CO-220 carbon monoxide meter measures CO levels from 0 to 1000ppm, with an audible signal triggered more frequently as CO levels rise. Used to detect dangerous CO leaks. It responds very quickly to ambient changes in carbon monoxide concentration without the use of a pump. Perfect for professionals who need to measure CO levels where the accumulation of combustion gas is possible. **Mfg. part no. FLUKE CO-205** aspirator kit contains all the components necessary for providing a clean sample for the Fluke® family of gas measuring devices.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE CO-220	Carbon Monoxide Meter	26K2559	424.95
FLUKE CO-205	Aspirator Kit	26K2557	159.95

(83701)

FLUKE 922 AIRFLOW METER

FLUKE®

- Powerful meter provides differential and static pressure, air velocity and flow readings
- Convenient colored hoses help proper interpretation of pressure readings
- Bright, backlit display for clear viewing in all environments
- User-defined duct shape and size for maximum airflow accuracy
- Resolution down to 0.001 in H2O
- 99 point data storage capacity
- Min/Max/Average/Hold functions for easy data analysis
- 2 year warranty

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-922	Airflow Meter	38M9737	649.95
FLUKE-922/KIT	Airflow Meter Kit	89M0304	749.95

(94365)

AIR QUALITY • VIBRATION METERS • ANEMOMETERS

FLUKE-975 AIRMETER™ AIR QUALITY ANALYZER KITS

FLUKE®

Features:

- Simultaneously measures, logs and displays temperature, air velocity, humidity, CO_2 and CO
- Bright, backlit LCD display
- Wet bulb and dew point temperature
- % of outside air calculation
- Automatically compensates for barometric pressure changes
- Min/Max/Average on all measured and calculated readings
- Multi-language user interface
- Metric and standard units
- Audible and visual threshold alarms
- Extensive discrete or continuous data logging capacity, downloaded to PC via USB interface
- Keypad lock for security
- Two-year manufacturer's warranty

FLUKE-975V

Use the Fluke-975 AirMeter™ to:

- Maximize comfort conditions for building occupants
- Quickly respond to indoor air quality concerns
- Verify the operation of HVAC control systems
- Monitor air flow and velocity to provide proper ventilation
- Optimize HVAC ventilation settings for ASHRAE 62 recommendations
- Monitor temperature and humidity to meet ASHRAE 55 guidelines
- Actively monitor conditions that promote a productive environment

Mfg. part no. Fluke-975 AirMeter™ is ideal for testing and monitoring HVAC output and indoor air quality. This rugged and easy-to-use hand-held device combines five tools in one — measures temperature, humidity, air velocity, CO_2, and CO, enabling users to quickly generate detailed reports for further analysis. **Mfg. part no. Fluke-975** kit includes: AirMeter™, calibration cap, FlukeView Forms® software, international power plugs, rechargeable Li-ion battery pack, three back-Up AA batteries, AC power adapter, users manual with safety information and hardside carrying case. **Mfg. part no. Fluke-975V** AirMeter™ kit also includes **mfg. part no. Fluke-975VP** AirMeter™ air velocity probe. **Mfg. part no. Fluke-975CK** AirMeter™ calibration kit includes: CO/CO2 calibration gas, nitrogen zeroing gas, regulator, tubing and hardside carrying case.

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-975	AirMeter Kit	**17M6374**	3299.95
FLUKE-975V	AirMeter Kit with Velocity Probe	**17M6376**	3599.95
FLUKE-975VP	AirMeter Air Velocity Probe	**17M6377**	599.95

(89499)

FLUKE 810 HANDHELD VIBRATION TESTER W/ DIAGNOSTIC TECHNOLOGY

FLUKE®

- On-board identification and location of the most common mechanical faults (bearings, misalignment, unbalance, looseness) focus maintenance efforts on root cause, reducing unplanned downtime
- Fault severity scale with four severity levels help you prioritize maintenance work
- Repair recommendations advise technicians on corrective action
- Self-test function ensures optimal performance and more time on the job
- Share the results of your diagnostic tests with the machine expert, your manager, the planner and others using Fluke Connect ShareLive™ video call
- Survey equipment before and after planned maintenance and confirm the repair
- Commission new equipment and ensure proper installation
- Provide quantifiable proof of equipment condition and drive investment in repair or replacement
- Prioritize and plan repair activities and operate more efficiently
- Anticipate equipment failures before they happen and take control of spare parts inventories
- Diagnose, document and take action on alignment, imbalance, looseness and bearing fault issues with Fluke Connect enabled **810** vibration tester

The most advanced troubleshooting tool for mechanical maintenance teams who need an answer now. The unique diagnostic technology of the **Fluke 810** Vibration Tester helps you quickly identify and prioritize mechanical problems, putting the expertise of a vibration analyst in your hands. The **Fluke 810** Vibration Tester takes you from vibrations to answers in minutes by using a simple step-by-step process to report on machine faults the first time measurements are taken, without prior measurement history. The combination of diagnoses, severity and repair recommendations help you make informed maintenance decisions and address critical problems first. **Now Compatible with Fluke Connect™ Mobile App.**

SPECIFICATIONS	
Machine rotational speed range	200rpm to 12000rpm
Ranging	Automatic
A/D converter	4 channel, 24 bit
Usable bandwidth	5Hz to 20kHz
Dimensions (HxDxW)	18.56 cm x 7.00 cm x 26.72 cm (7.30 in x 2.76 in x 10.52 in)
Weight (with battery)	1.9 kg (4.2 lb)
Display	1/4 VGA, 320×240 Color (5.7" diagonal) TFT LCD w/ LED backlight
Operating temperature	0°C to 50°C (32°F to 122°F)
Sensor type	Accelerometer
Tachometer range	6.0 to 99,999rpm

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-810 FC	Handheld Vibration Tester	**47X3305**	8599.95

(203705)

FLUKE 805 VIBRATION METER

FLUKE®

- Innovative sensor design minimizes measurement variations caused by device angle or contact pressure
- Consistent data quality at both low and high frequency ranges
- Four-level severity scale assesses urgency of problems for overall vibration and bearing condition
- Exportable data via USB
- Trending in Microsoft® Excel using built-in templates
- Overall vibration measurement (10 Hz to 1,000 Hz) for acceleration, velocity and displacement units of measurement for a wide variety of machines
- Crest Factor+ technology provides reliable bearing assessment using direct sensor tip measurements between 4,000 Hz and 20,000 Hz
- Colored lighting system (green, red) and on-screen comments indicate how much pressure needs to be applied to take measurements
- Temperature measurement with Spot IR Sensor increases diagnostic capabilities
- On-board memory holds and saves up to 3,500 measurements
- Audio output for listening to bearing tones directly
- External accelerometer support for hard to reach locations
- Flashlight for viewing measurement locations in dark areas
- Large screen with high resolution for easy navigation and viewing

Make go or no-go maintenance decisions with confidence. The **Fluke 805** Vibration Meter is the most reliable vibration screening device available for frontline mechanical troubleshooting teams that need repeatable, severity-scaled readings of overall vibration and bearing condition. **Now compatible with Fluke Connect™ Mobile App.**

Mfg. Part No.	Frequency Range		Stock No.	Price Each
	Low (Overall Measurement)	High (CF+ Measurement)		
FLUKE-805 FC	10Hz to 1,000Hz	4,000Hz to 20,000Hz	**47X3304**	1899.95

(203703)

CFM/CMM THERMO-ANEMOMETER + IR THERMOMETER

CE EXTECH INSTRUMENTS A FLIR COMPANY

- Measures remote surface temperatures to 500°F (260°C) with 8.1 distance to spot ratio and Laser Pointer (**mfg. part no. AN200**)
- Simultaneous display of Ambient Temperature and Air Flow or Air Velocity
- 3% velocity accuracy via low friction2.83"D (72mm) ball-bearing vane wheel on 3.9ft (120cm) cable
- Data Hold and MIN/MAX
- One year warranty

Complete with vane sensor with 3.9 ft (120cm) cable 9V battery, protective rubber holster and carrying case.

SPECIFICATIONS

Specifications	Range	Resolution	Basic Accuracy
Air Velocity	0.4 to 30.00 m/s	0.01 m/s	±3% m/s
	1.4 to 108.0 km/h	0.1 km/h	±3% km/h
	80 to 5906 ft/min	1 ft/min	±3% ft/min
	0.9 to 67.2 mph	0.1 mph	±3% mph
	0.8 to 58.3 knots	0.1 knots	±3% knots
Air Temperature	14 to 140°F (-10 to 60°C)	0.1°F/°C	±4.0°F(2.0°C)
InfraRed Temperature (Mfg. Part No. AN200 only)	-58 to -4°F (-50 to 20°C)	0.1°F/°C	±9.0°F(5°C)
	-4 to -500°F (-20 to 260°C)	1°F/°C	±2% reading or ±2°F(°C) whichever is greater
Airflow	0 to 9999 CMM (m^3/min)	0.1	
	0 to 9999 CFM (ft^3/min)	0.1	

Mfg. Part No.	Description	Stock No.	Price Each
AN100	CFM/CMM Thermo-Anemometer	**80K7606**	169.99
AN200	CFM/CMM Thermo-Anemometer + IR Thermometer	**87K0998**	219.99

(91358)

TENMA® AT NEWARK ELEMENT14

Affordable, reliable Test & Measurement equipment and accessories at newark.com/tenma

(212566)

ULTRASONIC LEAK DETECTOR KITS

AMPROBE

Mfg. Part No. TMULD-300 Features:
- UT-300 transmits an ultrasonic signal for non pressurized applications
- Tests the "air-tightness" of weather seals, tanks, ovens, refrigerators, etc.
- Locating leaks in duct work
- Finds the ends of buried PVC pipes

Mfg. Part No. ULD-300 Features:
- Identifies failing solenoids, valves and bearings
- Battery, audible and visual leak indicators

Mfg. part no. TMULD-300 detects any pressurized gas leak regardless of type CFC's, HFC's, Nitrogen, etc. and is unaffected by contaminants. **Mfg. part no. TMULD-300** kit includes UT-300 ultrasonic transmitter, flexible tubing adapter, extension tube, parabola (reflector) and headphones. **Mfg. part no. ULD-300** kit includes headphones, extension tube and parabola (reflector).

Mfg. Part No.	Description	Stock No.	Price Each
TMULD-300	Ultrasonic Leak Detector Kit	15B4483	524.95
ULD-300	Ultrasonic Leak Detector Kit	15B4498	374.95

(147135)

FLUKE RLD2 HVAC/ REFRIGERANT FLASHLIGHT

FLUKE®

- Compact, easy-to-use
- 100,000 hours of life
- Four operating modes

RLD2 UV flashlight uncovers refrigerant leaks instantly. Use the UV light to find the leakage area, then, use the laser pointer to pinpoint the exact leak location. Ideal for HVAC technicians.

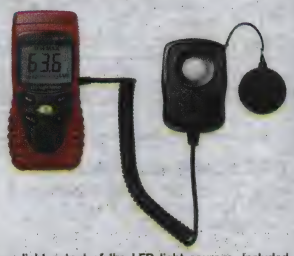
Mfg. Part No.	Description	Stock No.	Price Each
RLD2	Leak Detector Flashlight	09R2354	54.95

(147956)

LED LIGHT METER

CE AMPROBE

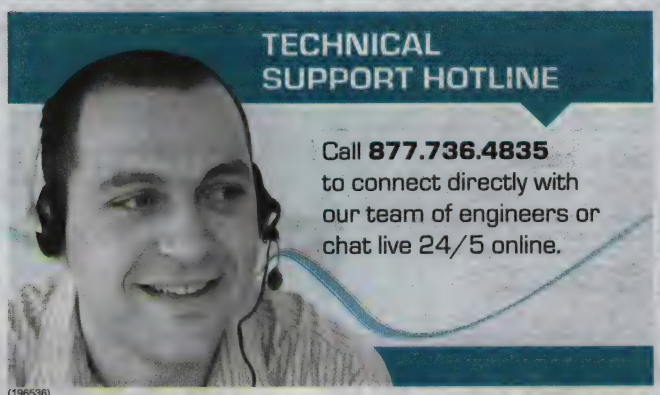
- Lux or Foot-candle user selectable measurement units
- Measuring Range to 200,000 Lux or 20,000 Foot candles
- Data Hold to freeze reading on the digital display
- MAX recording to capture highest light measurement
- Measuring lights source include all visible ranges
- Spectral response close to CIE luminous spectral efficiency
- Angled light cosine correction
- Extended length of wire for light sensor approximately 5 feet (1.5m)
- Measurements according to JISC1609:1993 and CNS 5119 general A class specifications
- Includes protective sensor cap
- Large, 3½ digit display



A professional tester specifically designed to accurately measure light output of the LED light sources. Included accessories: Users manual, 9 volt battery, carrying case.

Mfg. Part No.	LED Light Measurement	Stock No.	Price Each
LM-200LED	200 lux, 2,000 lux, 20,000 lux, 200,000 lux 20, 200, 2,000, 20,000 foot-candle	77R5077	104.46

(209608)



(196536)

FOOT CANDLE AND LIGHT METERS

CE EXTECH INSTRUMENTS A FLIR COMPANY

401021 401025 401027 407026

401021 converts your multimeter to a foot candle light meter (up to 5,000Fc). **401025** includes analog output and fast/slow response feature. **401027** measures up to 2000Fc for basic lighting applications. **407026** light meter has four lighting types: Tungsten/Daylight, Fluorescent, Sodium, and Mercury. **407026** comes complete with 9V battery and protective holster.

Mfg. Part No.	Foot Candle Range	Lux Range
401021	0 to 200 / 200 to 2000 / 2000 to 5000	...
401025	0 to 200 / 0 to 2000 / 0 to 5000	0 to 2000 / 0 to 20000 / 0 to 50000
401027	0 to 200 / 0 to 2000	...
407026	0 to 200 / 0 to 2000 / 0 to 5000	0 to 2000 / 0 to 20000 / 0 to 50000

METERS

Mfg. Part No.	Description	Stock No.	Price Each
401021	Foot Candle Light Adapter	27K9705	69.99
401025	Foot Candle / Lux Meter	27K9706	149.99
401027	Pocket Foot Candle Light Meter	27K9708	99.99
407026	Heavy Duty Light Meter w/ PC Interface	27K9734	199.99

ACCESSORIES

Windows Data Acquisiton Software and serial cable (**mfg. part no. 407001**) enable user to display and capture readings on a PC and set time intervals and alarms. Battery operated Datalogger module (**mfg. part no. 380340**) stores over 8000 readings for a later transfer to a PC.

Mfg. Part No.	Description	Stock No.	Price Each
407001	Data Acquisition Software and Serial Cable	27K9733	69.99
380340	Datalogger Module with PC-DOS Software	27K9593	209.99
409997	Soft Vinyl Pouch Carrying Case	27K9812	20.99

(91228)

EASYVIEW™ LIGHT METERS

EXTECH INSTRUMENTS A FLIR COMPANY

EA30 / EA31 (Light Meter)
- Compact and rugged design features large display
- Data hold freezes reading on display
- MIN/MAX readings
- Zero function
- Cosine and color corrected measurements
- Low battery and overrange indication
- Auto power off to save battery life
- Utilizes precision silicon photodiode sensor with 3ft coiled cable for easy storage
- Complete with built-in stand, remote sensor with protective cover, protective rubber holster, and 6 AAA batteries

EA30 / EA31

EA33 (Light Meter w/ Memory)
- Store and recall up to 50 measurements with realtive or real time clock stamp
- Luminous intensity (candela) calculations
- Ripple function excludes the effect of stray light from the primary light source measurement
- Auto Power off with disable feature
- Multiple point average function
- Timed-Hold, Relative in absolute value or % deviation, and Comparator function with high low alarms
- Cosine and color corrected, CNS 5119 Class II
- Complete with built-in stand, light sensor and protective cover with 36" (0.9m) cable, protective holster, 6 AAA batteries, and carrying case

EA33

Mfg. Part No.	Foot Candle Range (Fc)	Lux Range (Lux)	Resolution	Stock No.	Price Each
EA30	40, 400, 4000, 40000	40, 400, 4000, 40000, 400000	0.01Fc/Lux	27K7541	189.99
EA31	20, 200, 2000, 20000	20, 200, 2000, 20000	0.01Fc/Lux	27K7543	149.99
EA33	9.999, 99.99, 999.9, 9999, 99990	99.99, 999.9, 9999, 99990, 999900	0.001Fc/ 0.01Lux	27K7545	279.99

(195431)

ToughPIX II EXPLOSION PROOF DIGITAL CAMERA FOR HAZARDOUS (VAPOR) AREAS

NEW

CorDEX INSTRUMENTS
SAFER | FASTER | BETTER

Ex IP54

- ATEX and IECEx Certified for Zone 1 IIB+H2 T6 explosive (vapor) atmospheres
- 16 megapixel SLR style with armoured 2.7" LCD screen
- 16GB memory and High Definition video
- Macro, Auto-focus, Anti-shake, 3x Optical and 4x digital zoom
- Reporting capability through CorDEX CONNECT

The **ToughPIX II** explosion proof digital camera is designed and certified with the professional inspector in mind. **ToughPIX II** is ATEX certified Ex d IIB+H2 T6 Gb / II2G Gb T6, for use in hazardous areas. Weighing in at 900g* ToughPIX II is lightest in class making it easier than ever to carry and transport. With an IP54 industrial protection rating **ToughPIX II** has the ability to capture still images and high definition video in the most demanding industrial environments. **ToughPIX II** makes close up and wide area photography possible with crisp and clear images using the built in macro feature, anti-shake technology, 3x optical and 4x digital zoom.

Certification information	
ATEX/IECEx Certificate No:	TRAC13ATEX0046X / IECEx TRC 13.0016x
ATEX/IECEx Certificate Type:	Ex d IIB+H2 T6 Gb / II2G Gb T6
Ambient Temperature:	Tamb -20C to +50C
General Information	
Image download	High Speed USB (safe area only)
Image storage	16GB
Standard image capture resolution	16 Megapixel
Zoom	3 x optical, 4 x digital zoom
Screen size	2.7 inches
Additional Features	Anti shake, auto focus, macro, face recognition
Tripod mount	1/4 inch 20 TPI
Detailed information	
Body Material	Anodised aluminium with anti-static over mould
Lens & LCD Material	Armoured Glass
Weight	900g
IP	54
Electrical information	
Battery type	Removable & Rechargeable
Capacity	1100mAh
Cell type	NiMH

Mfg. Part No.	Description	Stock No.	Price Each
TOUGHPIX II	ToughPIX II Explosion Proof Digital Camera	19X7732	3256.87

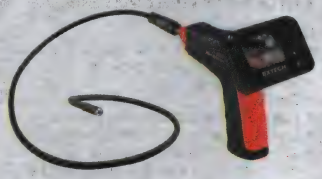
(211939)

BR100 & BR150 VIDEO BORESCOPE INSPECTION CAMERAS

NEW

IP67

EXTECH INSTRUMENTS
A FLIR COMPANY



- Camera head with 39" (1m) flexible gooseneck cable retains configured shape
- High resolution, mini waterproof (IP67) camera head with built-in bright LED lamps and dimmer function to illuminate viewed object
- Glare-free close-up field of view
- Display detaches for easy storage
- Optional **BR200-EXT** extension cable available for increasing viewing depth; 19mm diameter connector and 37" (0.95m) cable length; maximum 2 extension cables can be connected to the borescope
- Complete with 4 AA batteries, extension tools (mirror, hook, magnet), video output jack, and hard case

Mfg. Part No.	Description	Stock No.	Price Each
BR100	17mm diameter/1m cable	73R7819	199.99
BR150	9mm diameter/1m cable	04X5323	249.99

(212315)

BR200 & BR250 VIDEO BORESCOPE/ WIRELESS INSPECTION CAMERAS

EXTECH INSTRUMENTS
A FLIR COMPANY

Mfg. part nos. BR250 and **BR200** feature 9mm and 17mm camera diameters, 3.5" color TFT LCD wireless monitor with a 2GB microSD memory card (included) for capturing images (JPEG) or video (AVI) for viewing on your PC. Ideal for use in electrical, automotive, pest control, water restoration, HVAC and refrigeration applications.

SPECIFICATIONS:

Mfg. Part No.	BR250	BR200
Monitor Size	3.5"	3.5"
Camera	9mm	17mm
Waterproof Camera	Yes	Yes
LED Lighting	2 adjustable	2 adjustable
Capture Video/Images to Memory	Yes	Yes
Video Output	Yes	Yes

➤CONTINUED➤

BR200 & BR250 VIDEO BORESCOPE/WIRELESS INSPECTION CAMERAS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each
BR250	Flexible Video Borescope with Wireless LCD Monitor	73R7820	349.99
BR200	Flexible Video Borescope with Wireless LCD Monitor	15R8050	299.99

(177064)

BR300 & BR350 WATERPROOF BORESCOPE/ INSPECTION CAMERAS

NEW

IP67

EXTECH INSTRUMENTS
A FLIR COMPANY

- Waterproof (IP67 rated), lightweight, handheld design for quick, easy, on-the-spot viewing in small openings
- **Model BR300** - Borescope with 8mm diameter camera head with four bright LED lamps with dimmer
- **Model BR350** - Borescope with 5.5mm diameter camera head with two bright LED lamps with dimmer
- Built-in waterproof 39" (1m) flexible gooseneck cable retains configured shape
- 2.7" (68mm) color TFT LCD monitor for detailed images
- 2x digital zoom for close-up viewing
- 180° image rotation on screen
- Glare-free, close-up field of view
- Low battery indicator
- Complete with camera probe and 39" (1m) flexible cable, 4 AA batteries, and hard case

Mfg. Part No.	Description	Stock No.	Price Each
● BR300	8mm diameter/1m cable	47X3267	199.99
● BR350	5.5mm diameter/1m cable	47X3268	269.99

(212314)

HD VIDEOSCOPES WITH HANDSET/ARTICULATING PROBE

CE

EXTECH INSTRUMENTS
A FLIR COMPANY

- A built-in wireless transmitter in your camera cable control allows you to transmit video up to 100ft (30m) from the measurement point to your monitor (**HDV640W**)
- 6mm diameter camera head with 1m semi-rigid cable retains configured shape
- 5.7" color LCD TFT with high definition 640 x 480 resolution
- 320° camera probe rotation
- Mini, high-resolution water-proof (IP57) camera head
- Rugged water and drop proof housing (IP67/2m)
- Non-slip ergonomic handles for ambidextrous use
- SD memory card included to store >14,600 images
- Video recording (up to 4 hours) with voice annotation
- AV output for viewing images and video directly on a monitor
- Video and images can be transferred to a PC via the SD card or USB output

HDV640W

Mfg. Part No.	Description	Stock No.	Price Each
HDV640	High Definition Articulating VideoScope	58T7380	3099.00
HDV640W	High Definition Wireless Articulating VideoScope	58T7372	3599.00

(202181)

DIGITAL MINI MICROSCOPES

CE

EXTECH INSTRUMENTS
A FLIR COMPANY

- 1.8" TFT color LCD screen with 2MB memory
- 7x to 108x magnification range
  Optical zoom: 7x to 27x
  Digital zoom: 4x
- Four white LEDs with adjustable brightness for object illumination
- 5 Image Effect modes: normal, gray, inverse, emboss, and dual window view
- Dual Window View simultaneously displays the magnified image next to the original image
- One year warranty

Mfg. part no. MC108 dual window view simultaneously displays the magnified image next to the original image. Includes microscope stand, three AAA Ni-MH rechargeable batteries, adaptor/charger, Windows® compatible PC software with mini USB cable, cleaning cloth, and wrist strap. Dimensions: 4.7 x 2.2 x 0.8" (120 x 56 x 20mm). Wt. 2.5 oz. without batteries. CE compliant.

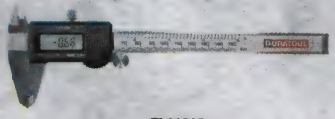
Mfg. Part No.	Description	Stock No.	Price Each
MC108	Digital Mini Microscope	71P2407	349.99

(148527)

DIGITAL CALIPER

DURATOOL

- Manufactured from extra strong carbon fibre composites
- LCD, internal/external measurement
- True mm/inch conversion
- Lightweight and durable



TL11016

Mfg. Part No.	Description	Stock No.	Price Each 1-24
D00377	6" Digital Caliper	01N3623	16.80

(116704)

DIGIMATIC CALIPER WITH SET AND FORGET TECHNOLOGY

Mitutoyo

- On/off, origin set, zero/ABS
- Convenient thumb roller
- Data output function, output models only
- 20,000 hours battery life under normal use
- Resolution: .0005″/0.01mm (inch/metric), 0.01mm (metric)
- Accuracy: ±.001″/0.02mm (6″ and 8″), ±.0015″/0.03mm (12″)

Mfg. Part No.	Description	Stock No.	Price Each
NON-OUTPUT			
500-197-30	8″/200mm Digimatic Caliper	81K9215	224.00
500-193	12″/300mm Digimatic Caliper	81K9213	450.00
WITH OUTPUT			
500-173	12″/300mm Digimatic Caliper	81K9205	525.00

(88527)

CD-AX/APX SERIES AOS ABSOLUTE DIGIMATIC CALIPERS

NEW

Mitutoyo

- Resolution: 0.01mm
- Repeatability: 0.01mm
- Power supply: Button-type silver oxide battery
- SR44 (No. 938882), 1 piece supplied as standard (The standard supplied battery is for the monitor)
- Battery life: Approx. 3.5 years under normal use
- Maximum response speed: Unlimited
- A battery life of approximately 3.5 years has been achieved under normal use through the adoption of Mitutoyo's ABSOLUTE scale
- The slider configuration features an ergonomic, thumb-friendly shape
- Step-measurement capable
- Font height: 9mm,alleviation of fatigue with the high-contrast LCD
- Carbide-tipped jaw models are ideally suited to the measurement of rough-machined workpieces, castings, grindstones, etc.
- The data output function allows integration into statistical process control and measurement systems

Mfg. Part No.	Range	Accuracy	Mass	Stock No.	Price Each
500-150-30	0-100mm	±0.02mm	143g	45X8728	215.00
500-180-30	0-100mm	±0.02mm	143g	45X8748	172.00
500-151-30	0-150mm	±0.02mm	168g	45X8729	252.00
500-154-30	0-150mm	±0.02mm	168g	45X8731	358.00
500-155-30	0-150mm	±0.02mm	168g	45X8732	373.00
500-158-30	0-150mm	±0.02mm	168g	45X8735	272.00
500-181-30	0-150mm	±0.02mm	168g	45X8749	194.00
500-152-30	0-200mm	±0.02mm	198g	45X8730	302.00
500-156-30	0-200mm	±0.02mm	198g	45X8733	400.00
500-157-30	0-200mm	±0.02mm	198g	45X8734	420.00
500-182-30	0-200mm	±0.02mm	198g	45X8750	266.00
500-170-30	0-4″	±0.001″	143g	45X8740	172.00
500-195-30	0-4″	±0.001″	143g	45X8751	144.00
500-171-30	0-6″	±0.001″	168g	45X8741	183.00
500-174-30	0-6″	±0.001″	168g	45X8743	350.00
500-175-30	0-6″	±0.001″	168g	45X8744	374.00
500-178-30	0-6″	±0.001″	168g	45X8747	266.00
500-196-30	0-6″	±0.001″	168g	39X7683	156.00
500-159-30	0-6″	±0.001″	168g	45X8736	242.00
500-160-30	0-6″	±0.001″	168g	45X8737	312.00
500-172-30	0-8″	±0.001″	198g	45X8742	241.00
500-176-30	0-8″	±0.001″	198g	45X8745	389.00
500-177-30	0-8″	±0.001″	198g	45X8746	411.00
500-197-30	0-8″	±0.001″	198g	81K9215	224.00
500-163-30	0-8″	±0.001″	198g	45X8738	295.00
500-164-30	0-8″	±0.001″	198g	45X8739	389.00

(212369)

IP 65 COOLANT PROOF DIGIMATIC MICROMETER

IP65

Mitutoyo

Available Functions:
- Origin setting
- Inch/mm selection
- Zero-setting
- Error alarm
- Auto-sleep

Features:
- Extra large LCD readout
- Light weight design and digital display allow one hand operation
- Two measuring modes — ABS (absolute) and INC (incremental) for efficient measurement
- Carbide tipped measuring face

Three types of constant-force devices are available, *go online or call.*

Mfg. Part No.	Range	Resolution	Constant Force Device	Stock No.	Price Each
293-340	0-1″/0-25mm	0.00005″	Ratchet Stop	81K8459	178.00

(88512)

SLIDE CALIPERS

Starrett

120 and 1202 series offer clear dial graduations of .001″ per revolution, sharp black graduations on the satin finished bar every .100″, knife-edge contacts and thumb operated fine adjustment. **120 series** is manufactured in the USA. The **799 series** electronic calipers have large easy-to-read displays, fine adjustment to precision, zero at any position, .0005″ resolution, lock to hold position and hardened stainless steel body for long life.The **798 series** features IP67 level of protection against coolant, water, chips, dirt, dust, and other contaminants. The **799 series** provides a lightweight, ergonomic design.

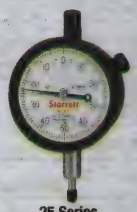
Mfg. Part No.	Description	Range	Stock No.	Price Each
SLIDE CALIPERS				
120-12	Slide Caliper, White Dial, without Case	0-12″	85K4294	359.00
120A-6	Slide Caliper, White Dial, in Fitted Plastic Case	0-6″	85K4296	195.00
1202-12	Slide Caliper, White Dial, in Fitted Case	0-12″	85K4317	208.00
1202-6	Slide Caliper, White Dial, in Fitted Case	0-6″	85K4319	101.00
ELECTRONIC CALIPERS				
798B-6/150	IP67 Elect.Caliper with Output in Fitted Plastic Case	0-6″	75R9910	239.00
798B-8/200	IP67 Elect.Caliper with Output in Fitted Plastic Case	0-8″	64R5067	289.00
798B-12/300	IP67 Elect.Caliper with Output in Fitted Plastic Case	0-12″	75R9911	430.00
799A-6/150	Elect. Caliper in Fitted Plastic Case	0-6″	85K6986	151.00
799A-8/200	Elect. Caliper in Fitted Plastic Case	0-8″	85K6987	214.00
799A-12/300	Elect. Caliper in Fitted Plastic Case	0-12″	85K6985	319.00

(88730)

DIAL AND ELECTRONIC INDICATORS

Starrett

Starrett indicators are made to American Gauge Design (AGD) specifications. The **25 series** and **81 series** indicators have a shockless, hardened steel gear train and jewel bearings. They are furnished with a lug-on-center back. The **196 series** is an accurate Universal Back-Plunger style indicator with 3 Contact Points.



25 Series

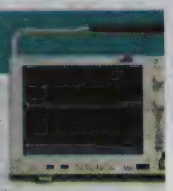
3600 Series

Mfg. Part No.	Graduations (In.)	Range (In.)	Dial Reading	Stock No.	Price Each
25-141J	0.001″	.250	0-50-0	85K4918	144.00
25-441J	0.001″	1.00	0-100	85K4991	144.00
25-631J	.0005	1.00	0-50	85K5002	166.00
81-141J	0.001″	.250	0-50-0	85K7021	144.00
81-241J	0.001″	.250	0-100	85K7053	144.00
196A1Z	0.001″	.200	0-100	85K4596	235.00
196B1	0.001″	.200	0-100	85K4599	135.00

Mfg. Part No.	Description	Stock No.	Price Each
ELECTRONIC INDICATORS			
3600-5	Electronic Indicator Inch AGD Group2 (no output)	88K0944	163.00
3600M-5	Electronic Indicator mm AGD Group2 (no output)	88K0945	163.00
CONTACT POINT			
PT06632/2	Contact Point for AGD Indicator	74K0511	9.60

(88718)

CALIBRATION SERVICES



From pre-calibration to re-calibration, we bring you competitive pricing with quick delivery.

(207664)

FORCE GAUGES • GAUGES

DIGITAL FORCE GAUGES

EXTECH INSTRUMENTS A FLIR COMPANY

Features:
- 5-digit 0.4" (10mm) LCD with reversible display feature to match viewing angle
- Exclusive load cell measurement transducer
- Overrange, low battery, and advanced function indication
- Zero Adjust pushbutton and Peak Hold switch
- Selectable fast/slow response
- One-year manufacturer's warranty
- CE compliant

Push/pull measurements in kg, lbs., oz., and Newton units. Choice of noncalibrated, calibrated and high-capacity models. All three gauges come complete with hook adapter for tension, compression adapters (flat, cone and chisel head), 5" (127mm) extension rod, six AA batteries and carrying case. *Order AC-to-DC adapters separately below.*

Mfg. Part No.	Description	Range	Stock No.	Price Each
475040	Digital Force Gauge	176 oz / 5000g / 49N	27K9924	399.99
475044	High-Capacity Digital Force Gauge	44 lbs / 20kg / 196N	27K9926	489.99
ACCESSORIES				
153117	120VAC Adapter		27K9561	31.99

(85529)

LARGE CAPACITY DIGITAL FORCE GAUGES

SHIMPO

The microprocessor-controlled, digital **FGV-HX** and **FGE-HX series** offers the same features of the **FGV-X** and **FGE-X series** 89394, but in an extremely heavy-duty case, allowing the gauges to handle larger capacities from 0 to 500 pounds. Two "knurled" steel handles are provided for hand operation and a hanger is included which enables each gauge to be used as a scale. The **FGV-HX series** includes all **FGE-HX series** features plus RS232C and analog outputs and an overload output signal. One year warranty

Force Gauge Model:	FGE-200HX	FGE-500HX	FGV-500HX
Capacity:	200 lb, 100 kg, 1000 N	500 lb, 250 kg, 2500 N	
Resolution:	0.1 lb, 0.1 kg, 1 N		
Accuracy:	0.2%	0.2%	0.2%
Display:	4 digit LCD		
Average mode:	X	X	X
Peak compression mode:	X	X	X
Peak tension mode:	X	X	X
Power required:	Univeral AC adapter / NiCad charger		
RS232C output:			X
Analog output:			X

LARGE CAPACITY DIGITAL FORCE GAUGES

Mfg. Part No.	Capacity (lb.)	Description	Stock No.	Price Each
FGE-200H X	200	Digital Force Gauge	82K8529	795.00
FGE-500H X	500	Digital Force Gauge	82K8532	795.00
FGV-500 HX	500	Digital Force Gauge w/ RS232C and Analog Outputs	82K8566	945.00

MOTORIZED PROGRAMMABLE STANDS FOR FORCE GAUGES AND LARGE SAMPLES - 31.10" STROKE (789mm)

Mfg. Part No.	Capacity (lb.)	Interface	Description	Stock No.	Price Each
FGS-250PVL	500	RS232C	Vertical Low Speed Motorized Force Gauge Stand (12.5-125mm/min)	82K8539	5200.00
FGS-250PVM	500	RS232C	Vertical Standard Speed Motorized Force Gauge Stand (50-500mm/min)	82K8540	4800.00

(89395)

DIGITAL FORCE GAUGES

SHIMPO

FGE-50X

With an internal update rate of 1000HZ, ability to read and display both Peak Tension and Peak Compression as a push pull gauge, the **FGE-X** and **FGV-X series** gauges are still ergonomically designed to fit in the palm of your hand. The rugged, all metal construction of the microprocessor-controlled **FGE-X** and **FGV-X series** permits accurate measurement of compression and tension forces up to 100 pounds. The **FGE-X** and **FGV-X series** feature a unique, push-button inverted digital display, permitting the user to read the display in a right side-up fashion. The **FGV series** includes all **FGE series** features plus RS232C and analog outputs and an overload output signal. Additionally, each gauge possesses three types of signal outputs for data collection and function analysis.

Force Gauge Model:	FGE-50X	FGV-50XY
Capacity:	50 lb, 20 kg, 200 N	50 lb, 20 kg, 200 N
Resolution:	0.01 lb, 0.01 kg, 0.1 N	0.01 lb, 0.01 kg, 0.1 N
Accuracy:	0.2%	0.2%
Display:	4 digit LCD	4 digit LCD
Average mode:	X	X
Peak compression mode:	X	X

CONTINUED

DIGITAL FORCE GAUGES (CONT.)

Force Gauge Model:	FGE-50X	FGV-50XY
Peak tension mode:	X	X
Power required:	Univeral AC adapter / NiCad charger	Univeral AC adapter / NiCad charger
RS232C output:		X
Analog output:		X

DIGITAL FORCE GAUGES

Mfg. Part No.	Capacity (lb.)	Description	Stock No.	Price Each
FGE-50 X	50	Digital Force Gauge	82K8531	595.00
FGV-50XY	50	Digital Force Gauge with USB/RS-232/Analog Outputs	35R2888	795.00

(89394)

UT5000 INTRINSICALLY SAFE THICKNESS GAUGE

CorDEX INSTRUMENTS SAFER | FASTER | BETTER

- ATEX and IECEx Certified for Zone 1 IIC T4 hazardous vapour areas
- ATEX and IECEx Certified for ibD IIIB T200°C Db hazardous dust areas
- EchoEcho technology measure thicknesses through painted surfaces
- With Corrosion Mode, continuous real time measurements are logged with Min-Max- Average thickness readings
- MultiECHO technology brackets four echoes before providing a reading, reducing intermittent readings caused by irregular echoes
- Drop-down menus to select the correct material velocity
- Features CorDEX CONNECT
- Full Colour, Backlit Screen

CorDEX Instruments **UT5000** Intrinsically Safe thickness gauge with CorDEX CONNECT™ measures metal thickness for Non-Destructive Testing (NDT) and Predictive Maintenance (Pdm) on pipelines and fixed equipment within hazardous locations. **UT5000** is a next generation thickness gauge packed with proven technologies: CorDEX CONNECT™ uses RFID + Software to tag measurements with their location then organises the data, giving the engineer a view of the pipeline at any specific location; the unique corrosion mode feature helps identify spots of thinning; whilst MultiECHO™ technology helps to improve accuracy on uneven surfaces. Also incorporating Echo-Echo functionality, the **UT5000** is able to take thickness readings through protective paints without having to remove the coating. Designed for rugged environments, the shock resistant skin protects a 3.1 inch (8cm) colour screen and has easy-to-feel raised buttons. The intrinsically safe dual-element, 4MHz transducer is adjustable up to 8Hz with accuracy of +/- 0.05mm (0.01inch).

Mfg. Part No.	Description	Stock No.	Price Each
UT5000	Intrinsically Safe Thickness Gauge	53W3072	2995.00

(209147)

ULTRASONIC THICKNESS GAUGES

NEW

EXTECH INSTRUMENTS A FLIR COMPANY

Common Features
- 5MHz probe: 0.040" to 20" of steel
- 10MHz probe: 0.020" to 20" of steel (optional)
- Sunlight readable dot-matrix display with backlight
- Multiple transducer options for high temperature and difficult to measure materials
- Fast minimum feature to capture minimum thicknesses
- On screen display of 8 languages
- Splash-proof (IP54), high impact, compact housing

Model TKG100 & TK150 Additional Feature
- Sun light readable

Model TKG150 & TKG250 Additional Features
- Echo to Echo option to reduce coating errors
- 100K internal datalogger with export to Excel
- B-scan (visual cross section of test piece)
- Vibrate on alarm

Model TKG250 Additional Features
- Color LCD display shows red, yellow and green visual alarm indication
- Live Waveform (A-scan for thickness verification)
- File compare feature as a real time corrosion monitor
- Dynamic change of waveform color on alarm
- Grid review of saved readings

TKG100

TKG150

Mfg. Part No.	Description	Stock No.	Price Each
TKG100	Digital Ultrasonic Thickness Gauge	99W6422	1495.00
TKG150	Digital Ultrasonic Thickness Gauge/Datalogger	99W6423	2595.00
TKG250	Color Waveform Ultrasonic Thickness Gauge/Datalogger	99W6424	3295.00

(212334)

WIRE GAUGES

Mitutoyo

Designed for checking wire and plate thickness. American Std. is used to gauge non-ferrous wire and sheet. U.S. Std. is used to gauge sheet steel.

Mfg. Part No.	Description	Stock No.	Price Each
950-202	American Std. Wire Gage #0-36	82K5487	39.05
950-203	U.S. Std. Wire Gage #0-36	82K5488	39.05

(88474)

LASERMETER 3000XP EXPLOSION PROOF LASER DISTANCE METER

CorDEX INSTRUMENTS
SAFER | FASTER | BETTER

- ATEX and IECEx certified for Mining and Zone 1 IIC T4 explosive areas (vapour) atmospheres
- CSA Certified for Class I Div.1 B,C,D hazardous areas
- Single or continuous measurement option with onboard mathematics
- Interchangeable, rechargeable battery pack for continued operation

LaserMETER 3000XP explosion proof, laser distance meter is ATEX, IECEX and CSA certified for use within Zone 1 IIC T4 and Class I Div.1 B,C,D hazardous (explosive) areas. The robust IP65 design incorporates shock resistant, anti-static over mould to protect against accidental knocks and impacts. The **LaserMETER 3000XP** also includes a removable/rechargeable battery pack that is interchangeable with your ToughPIX XP Series digital camera (check operations maintenance manual for compatibility). With a backlit LCD screen and capable of measuring distances of 30m with a typical accuracy of 3mm the **LaserMETER 3000XP** reduces time and the need for excess personnel with an easy to use, point, click and measure system. LaserMETER 3000XP is packed with features including: Pythagoras, Area and Volume calculations allowing you to get round any obstacles and reduce errors found in traditional measurement methods. With this in mind the **LaserMETER 3000XP** is the ultimate hazardous area distance measurement tool.

Mfg. Part No.	Range	Stock No.	Price Each
LM3000XP	0.5m to 30m (1.6ft to 118ft)	53W3066	1049.00

(209146)

LASER DISTANCE METERS

EXTECH INSTRUMENTS
A FLIR COMPANY

Features:

- Historical Storage recalls the previous 20 records (measurements or calculated results)
- Automatically calculates Area and Volume
- Indirect measurement using Pythagorean theorem
- Continuous measurement function with Min/Max distance tracking updates every 5 seconds
- Addition/Subtraction, Front or rear edge reference
- Low battery indicator, Auto power off
- Complete with carrying case and 2 AAA batteries

DT300

Mfg. Part No.	Measurement Range	Stock No.	Price Each
DT200	2″ to 115′ (0.05 to 35m)	04X5327	129.99
DT300	2″ to 164′ (0.05 to 50m)	84R3675	149.99

(202223)

FLUKE 424D, 419D AND 414D LASER DISTANCE METERS

FLUKE®

All models offer:

- Reduction of estimation errors
- Instant measurement with one-button operation
- Easy targeting with bright laser
- Quick calculation of area (square footage) and volume
- Easy addition and subtraction of measurements
- Minimum/maximum function
- Improved battery life from automatic shut-off feature
- Pythagoras calculation for determining distance indirectly from two other measurements
- Pouch with Fluke logo
- Three-year warranty

414D 419D 424D

424D and 419D additionally offers:

- Improved visibility with backlit screen
- Ability to measure up to 80m (260ft) for **419D**, 100m (330ft) for **424D**
- Tripod mode allows you to mount to a tripod for measuring long distances
- Stake out function
- Enhanced Pythagoras calculation for determining distance indirectly from three other measurements
- Audible keypad feedback
- Storage of the last twenty measurements for quick recall of distance
- Strong environmental protection with IP54 (water spray and dust proof) sealing

424D additionally offers:

- Inclination sensor for taking measurements in hard to reach areas
- Compass provides a "heading" for distance measurement
- Automated endpiece correction: when measuring from an edge or corner, a built-in sensor detects the position of this bracket and automatically changes the reference point

The compact and handy Fluke laser distance meters were designed for indoor and limited outdoor applications. All three models are simple to operate, with the Fluke durability and quality you expect. And, with specific function buttons, different tasks can be completed quickly and easily. The extra bright laser is clearly visible so you can always see your targeting point even if the target object is in a hard-to-reach spot, or a long distance away. These units have a large LCD screen and buttons positioned for one-handed measurements.

➤CONTINUED➤

FLUKE 424D, 419D AND 414D LASER DISTANCE METERS (CONT.)

GENERAL SPECIFICATIONS

Model	414D	419D	424D
Typical range	40m / 130ft	80m / 260ft	80m / 260ft
Typical measuring tolerance	± 2.0mm	± 1.0mm	
Laser Class	II		
Laser type	635nm, < 1mW		
Automatic laser/power off	After 90 seconds / After 180 seconds		
Battery life	up to 3,000 measurements	up to 5,000 measurements	
Protection class	IP40	IP54	
Size (HxWxD)	116mm x 53mm x 33mm (4.56in x 2.08in x 1.29in)	127mm x 56mm x 33mm (5in x 2.20in x 1.29in)	
Weight (w/ batteries)	113g (3.98oz)	153g (5.39oz)	158g (5.57oz)
Temperature Storage range	-25°C to +70°C (-13°F to +158°F)		
Temperature Operation range	0°C to +40°C (+32°F to +104°F)	-10°C to +50°C (+14°F to +122°F)	
Maximum altitude	3000m		
Maximum relative humidity	85% at +20°F to +120°F (-7°C to +50°C)		
Batteries	(2 x AAA) 1.5 V NEDA 24A / IEC LR03		
Safety	CAN/CSA-C22.2 No. 61010-1-04, UL Std. No. 61010-1 (2nd Edition), ISA-82.02.01, IEC Standard No. 61010-1:2001, EN60825-1:2007 (Class II)		
EMC	61326-1:2006		

Mfg. Part No.	Description	Stock No.	Price Each
FLUKE-414D	Laser Distance Meter, 50m/165ft (at Leica target plate GZM26)	05W4600	139.95
FLUKE-419D	Laser Distance Meter, 80m/260ft (at Leica target plate GZM26)	05W4601	261.21
FLUKE-424D	Laser Distance Meter, 100m/330ft (at Leica target plate GZM26)	05W4602	382.46

(133292)

STEEL RULES

Mitutoyo

Manufactured from hardened and tempered stainless steel. Available in satin finish for easy reading.

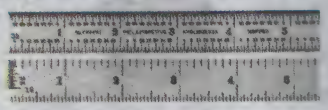
SATIN CHROME FINISH

Mfg. Part No.	Size	Graduations*	Width	Stock No.	Price Each
182-101	6″(4R)	1/8″, 1/16″, 1/32″, 1/64″	3/4″	81K7380	14.55
182-105	6″ x 150mm	1/32″; 1/64″	3/4″	81K7384	14.55
182-121	12″(4R)	1/8″, 1/16″, 1/32″, 1/64″	1″	81K7395	31.05
182-125	12″ x 300mm	1/32″; 1/64″	1″	81K7399	31.05
182-161	24″(4R)	1/8″, 1/16″, 1/32″, 1/64″	1 3/16″	81K7416	61.95
182-165	24″ x 600mm	1/32″; 1/64″	1 3/16″	81K7419	61.95
182-201	6″(4R)	1/8″, 1/16″, 1/32″, 1/64″	1/2″	81K7424	13.80
182-205	6″ x 150mm	1/32″; 1/64″	1/2″	81K7428	13.80
182-221	12″(4R)	1/8″, 1/16″, 1/32″, 1/64″	1/2″	81K7444	27.30
182-225	12″ x 300mm	1/32″; 1/64″	1/2″	81K7448	27.30
POCKET STEEL RULE					
950-300	6″ x 150mm	1/64″	1/2″	82K5521	8.75
950-301	6″	1/32″; 1/64″	1/2″	84K7231	4.50

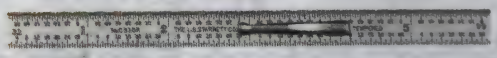
*Unit of measurement is inches unless otherwise specified.
(88423)

RULES

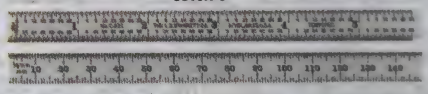
Starrett



C604RE-6



C310K-6



C331-150

Mfg. Part No.	Description	Size	Graduations	Stock No.	Price Each
C305R-6	Chrome, Full-Flexible*	6″ (5R)	1/10″, 1/100″, 1/32″, 1/64″	85K2498	23.00
C305R-12	Chrome, Full-Flexible*	12″ (5R)	1/10″, 1/100″, 1/32″, 1/64″	85K2493	46.50
C310K-6	Chrome,Flex., with Pocket Clip	6″ (10R)	1/32″; 1/64″	85K2503	23.00
C310T-6	Chrome,Flexible with Tapered End	6″(10R)	1/32″; 1/64″	85K2508	24.00

➤CONTINUED➤

RULES (CONT.)

Mfg. Part No.	Description	Size	Graduations	Stock No.	Price Each
C604R-6	Chrome,Spring Tempered, Regular Steel Finish	6″ (4R)	1/8″, 1/16″, 1/32″, 1/64″	85K2647	23.00
C604RE-6	Chrome with End Graduations	(4R)	1/8″, 1/16″, 1/32″, 1/64″	85K2650	24.50
C604R-12	Chrome,Spring Tempered, Regular Steel Finish	12″(4R)	1/8″, 1/16″, 1/32″, 1/64″	85K2636	38.50
C331-150	Chrome,English/ Metric	150mm or 5-3/4″	1/32″; 1/64″	85K2549	24.00
C331-300	Chrome,English/ Metric	300mm or 11-3/4″	1/32″; 1/64″	85K2550	46.50

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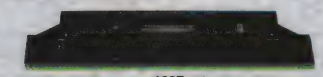
PRECISION LEVELS

Starrett



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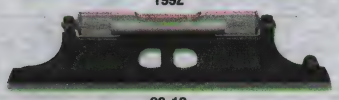

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135A

134

The **199 and 98 series** precision levels are made of seasoned cast iron and have a black wrinkle finish. The **199 series** Master level has a scraped reference surface for the highest degree of accuracy in a precision level. **98 series** features an involute groove running the length of the base, permitting better centering and greater capacity to handle larger rounds. **Mfg. part no. 134** cross test level and plumb has two vials at right angles for cross test leveling without moving the tool and is cast iron with a satin nickel finish. **Mfg. part no. 130** compact bench level has a sensitive and accurate single vial. The body is made of cast iron with black wrinkle finish and accurately machined base leveling surface. **135 series** pocket level is made from hexagonal stock with convex ends and satin nickel-plated finish.

PRECISION MACHINISTS' LEVELS

Mfg. Part No.	Description	Size (in.)	Stock No.	Price Each
199Z	With Main Vial	15	85K4611	838.00
98-4	Without Cross Test Vial	4	85K7289	104.00
98-6	With Cross Test Vial	6	85K7290	122.00
98-8	With Cross Test Vial	8	85K7292	150.00
98-12	With Single Plumb Vial and Cross Test Vial	12	85K7286	211.00
98-18	With Double Plumb Vial and Cross Test Vial	18	85K7288	341.00
CROSS TEST LEVEL AND PLUMB				
134	With Cross Test Vials and Plumb Vial	2 x 3	85K4401	49.50
BENCH LEVEL				
130	With Main Vial	3-3/8	85K4391	36.50
POCKET LEVELS				
135A	With Main Vial	2-1/2	85K4402	28.00
135B	With Main Vial	3-1/2	31C9991	29.50

(88727)

CLEAR LOUPE

Mitutoyo

Drawtube is made of acrylic resin for clear image of the workpiece. Drawtube is removable for use as a magnifying glass.

Mfg. Part No.	Magnification	Stock No.	Price Each
183-302	10X	81K7527	37.15

(88510)

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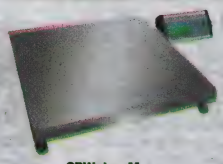
(212567)

CPWplus PLATFORM SCALES

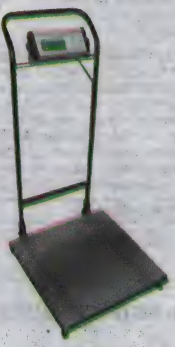
ADAM

CPWplus



CPWplus-M

CPWplus-L



CPWplus-W

- Battery and AC operation
- Crisp backlit LCD
- Removable stainless steel platforms
- RS-232 interface
- Display Hold function
- Dynamic weighing
- Weighs in lb, kg, oz and lb:oz

CPWplus scales utilize the same versatile indicator which features 4 weighing modes (lb, kg, oz, lb:oz), a crisp backlit display, color coded buttons with positive click feel, and simple, quick operation. The indicator can be mounted where you need it for total flexibility and the best viewing position. Rechargeable battery pack and AC adapter both included.

Mfg. Part No.	Capacity (lbs.)	Readability (lbs.)	Platform Size (in.)	Stock No.	Price Each
CPWplus					
CPW PLUS 6	13	0.005	11.8 × 11.8	08R4512	195.00
CPW PLUS 15	33	0.01	11.8 × 11.8	08R4499	195.00
CPW PLUS 35	75	0.02	11.8 × 11.8	08R4508	195.00
CPW PLUS 75	165	0.05	11.8 × 11.8	08R4513	195.00
CPW PLUS 150	330	0.1	11.8 × 11.8	08R4500	205.00
CPW PLUS 200	440	0.1	11.8 × 11.8	08R4504	215.00
CPWplus-M					
CPW PLUS 35M	75	0.02	19.7 x 19.7	08R4510	350.00
CPW PLUS 75M	165	0.05	19.7 x 19.7	08R4515	360.00
CPW PLUS 150M	330	0.1	19.7 x 19.7	08R4502	370.00
CPW PLUS 200M	440	0.1	19.7 x 19.7	08R4506	380.00
CPWplus-W					
CPW PLUS 35W	75	0.02	19.7 x 19.7	08R4511	425.00
CPW PLUS 75W	165	0.05	19.7 x 19.7	08R4516	435.00
CPW PLUS 150W	330	0.1	19.7 x 19.7	08R4503	445.00
CPW PLUS 200W	440	0.1	19.7 x 19.7	08R4507	455.00
CPWplus-L					
CPW PLUS 35L	75	0.02	35.4 x 23.6	08R4509	525.00
CPW PLUS 75L	165	0.05	35.4 x 23.6	08R4514	535.00
CPW PLUS 150L	330	0.1	35.4 x 23.6	08R4501	545.00
CPW PLUS 200L	440	0.1	35.4 x 23.6	08R4505	555.00
CPW PLUS300L	660	0.02	35.4 x 23.6	08R4517	575.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
7954	Hard Carry Carrying Case with Lock for CPWplus	08R4562	85.00

(147872)

CBK BENCH SCALES

ADAM

- Non-slip adjustable feet
- Large backlit LCD display
- Overload protection
- Easy to use keypad
- Rechargeable battery with up to 90 hours operation
- Tare function
- Large stainless steel pan
- Memory accumulation
- Pre-set weighing with alarm
- Check weighing LED bar graph
- Capacity tracker

CBK includes basic weighing, check weighing with LED limit indicators and parts counting. CBK features RS232 interface, date and time, a built in rechargeable battery pack and AC adapter. Ideal for production, warehousing or even in the field.

Mfg. Part No.	Capacity (lbs.)	Readability (lbs.)	Platform Size (in.)	Stock No.	Price Each
CBK8A	8	0.0002	8.9 × 10.8	08R4494	395.00
CBK16A	16	0.0005	8.9 × 10.8	08R4490	395.00
CBK16AH	16	0.0002	8.9 × 10.8	08R4491	495.00
CBK35A	35	0.001	8.9 × 10.8	08R4492	395.00
CBK70A	70	0.002	8.9 × 10.8	08R4493	395.00
CBK100A	100	0.005	8.9 × 10.8	08R4489	395.00

CONTINUED

CBK BENCH SCALES (CONT.)

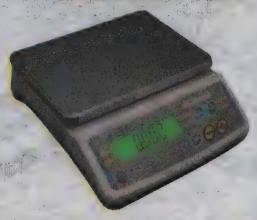
ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
9025	Hard Carry Carrying Case with Lock for CBC, CBK	08R4566	85.00
6080	Below Balance Weighing (CBK factory install)	08R4561	125.00
5006	Wet Cover for CBC, CBK	87P0423	20.00
5006-5	Wet Cover for CBC, CBK (Pkg. of 5)	08R4560	160.00
5006-10	Wet Cover for CBC, CBK (Pkg. of 10)	08R4559	280.00

(147873)

LBK WEIGHING SCALES

ADAM®



- Rechargeable battery or AC adapter operation (adapter included)
- Stainless steel pan
- 5 weighing units
- Pre-set tare
- Auto power off
- Overload alarm
- Adjustable level feet

Compact LBK scales offer quick and easy weighing. Simple to use with only 5 keys, which are color coded to highlight the most used keys for faster operation.

Mfg. Part No.	Capacity (lbs.)	Readability (lbs.)	Platform Size (in.)	Stock No.	Price Each
LBK6A	6	0.001	9.9 x 7.1	08R4535	175.00
LBK12A	12	0.002	9.9 x 7.1	08R4533	175.00
LBK25A	25	0.005	9.9 x 7.1	08R4534	175.00
LBK65A	65	0.01	9.9 x 7.1	08R4536	175.00

(147876)

HIGHLAND™ PORTABLE PRECISION BALANCES

ADAM®

- RS-232 and USB interfaces
- Can be stacked for storage and transportation
- ShockProtect™ overload protection
- Audible overload indicator
- HandiCal™ internal calibration for fast accurate readings
- Lock down mounting slot for Kensington™ type lock and cable
- Dual tare keys, color coded for easy recognition
- Internal rechargeable battery with auto power off and low-battery indicator
- Capacity tracker
- Removable draft shield

Highland balances feature multiple weighing units, RS-232 and USB interfaces, rechargeable battery pack and AC operation, capacity tracker, adjustable feet and level and lock down.

Mfg. Part No.	Capacity (g)	Readability (g)	Platform Size (in.)	Stock No.	Price Each
HCB123	120	0.001	4.7 ∅	08R4526	425.00
HCB153	150	0.005	4.7 ∅	08R4528	345.00
HCB302	300	0.01	4.7 ∅	08R4530	335.00
HCB602H	600	0.01	4.7 ∅	08R4532	415.00
HCB602	600	0.02	4.7 ∅	08R4531	345.00
HCB1002	1	0.01	4.7 ∅	08R4525	485.00
HCB1502	1.5	0.05	4.7 ∅	08R4527	345.00
HCB3001	3	0.1	4.7 ∅	08R4529	345.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
9307	Hard Carry Carrying Case with Lock for CQT, HCB	08R4569	75.00
8030	Kensington Lock and Cable for PGW, PGL, HCB, CQT	08R4564	28.00
9305	Wet Cover for HCB	08R4568	20.00

(147878)

CORE™ COMPACT PORTABLE BALANCE

ADAM®

- Stainless steel pan
- Three-point ShockProtect™ overload protection
- Built in security slot for Kensington™ type lock
- Dual tare keys, color-coded for easy recognition
- Battery powered with 6 x AA batteries or AC adapter
- Auto power off to save battery life
- Low-battery indicator
- Large backlit display is clear and quick to read
- Removable draft shield on 4.7" / 120mm ø pans
- Stacking storage (CQT202, 251, 601 and 1501 models)

Core series durable ABS housing is designed to withstand field and laboratory environments, while being easy to clean and protected from accidental spills.

Mfg. Part No.	Capacity (g.)	Readability (g.)	Platform Size (in.)	Stock No.	Price Each
CQT202	200	0.01	4.7 ∅	08R4520	240.00
CQT251	250	0.1	4.7 ∅	08R4521	110.00
CQT601	600	0.1	4.7 ∅	08R4524	155.00

➤ CONTINUED ➤

CORE™ COMPACT PORTABLE BALANCE (CONT.)

Mfg. Part No.	Capacity (g.)	Readability (g.)	Platform Size (in.)	Stock No.	Price Each
CQT1501	1.5	0.1	4.7 ∅	08R4518	225.00
CQT2601	2.6	0.1	5.7 ∅	08R4522	280.00
CQT2000	2	1	5.7 ∅	08R4519	110.00
CQT5000	5	1	5.7 ∅	08R4523	155.00

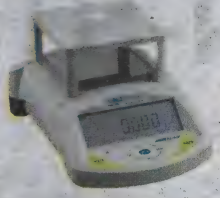
ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
9307	Hard Carry Carrying Case with Lock for CQT, HCB	08R4569	75.00
8030	Kensington Lock and Cable for PGW, PGL, HCB, CQT	08R4564	28.00
9306	Wet Cover for CQT	87P0586	20.00

(147879)

PGW PRECISION BALANCES

ADAM®



- Metal casing
- Force restoration mechanism
- RS-232 bi-directional interface
- Accessories interface
- Security locking station
- External calibration
- Internal calibration models
- GLP print outs
- Date and time
- Colour coded keys
- Backlit LCD with dual display
- Up to 18 weighing units (including one custom unit)
- Draft shield supplied as standard with models with 0.001g readability
- Capacity tracker
- Multilingual display

PGW precision balances are designed to deliver the ultimate in speed and accuracy in an easy- to-use and reliable model.

Mfg. Part No.	Capacity (g)	Readability (g)	Platform Size (in.)	Stock No.	Price Each
PGW153E	150	0.001	5.5 x 5.5	08R4545	875.00
PGW253E	250	0.001	5.5 x 5.5	08R4547	975.00
PGW453E	450	0.001	5.5 x 5.5	08R4550	1075.00
PGW753E	750	0.001	5.5 x 5.5	08R4551	1475.00
PGW1502E	1.5	0.01	7.6 × 7.6	08R4544	875.00
PGW2502E	2.5	0.01	7.6 × 7.6	08R4546	975.00
PGW3502E	3.5	0.01	7.6 × 7.6	08R4548	1075.00
PGW4502E	4.5	0.01	7.6 × 7.6	08R4549	1175.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
8036	Anti -Vibration Table use with PGW	87P0574	675.00
8030	Kensington Lock and Cable for PGW, PGL, HCB, CQT	08R4564	28.00
7238	Below balance Hanger for PGW, PGL	87P0538	25.00
8031	Wet Cover for PGW, PGL	08R4565	25.00

(147880)

CBC BENCH COUNTING SCALES

ADAM®

- Non-slip adjustable feet
- Large backlit LCD displays
- Overload protection
- Easy to use keypad
- Rechargeable battery with up to 90 hours operation
- Preset tare function
- Large stainless steel pan
- Memory accumulation

Durable CBC scales offer speed and simplicity for counting applications. With three displays to show weight, unit weight and number of parts simultaneously its analysis is quick and complete. CBC scales provide reliable performance.

Mfg. Part No.	Capacity (lbs.)	Readability (lbs.)	Platform Size (in.)	Stock No.	Price Each
CBC 8A	8	0.0002	8.9 × 10.8	08R4487	425.00
CBC 16A	16	0.0005	8.9 × 10.8	08R4484	425.00
CBC 35A	35	0.001	8.9 × 10.8	08R4485	425.00
CBC 70A	70	0.002	8.9 × 10.8	08R4486	425.00
CBC100A	100	0.005	8.9 × 10.8	08R4488	425.00

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each
9025	Hard Carry Carrying Case with Lock for CBC, CBK	08R4566	85.00
5006	Wet Cover for CBC, CBK	87P0423	20.00
5006-5	Wet Cover for CBC, CBK (Pkg. of 5)	08R4560	160.00
5006-10	Wet Cover for CBC, CBK (Pkg. of 10)	08R4559	280.00

(147882)

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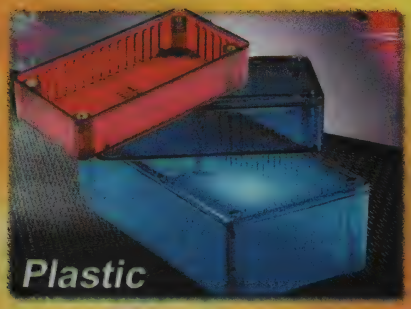
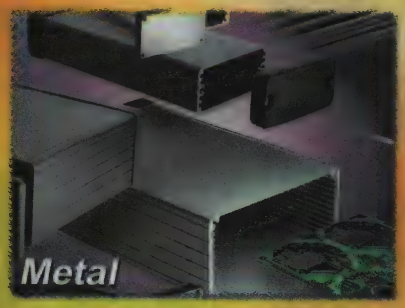
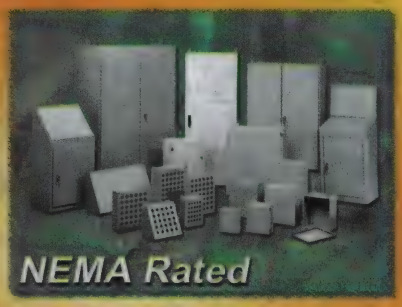
IN-STOCK ENCLOSURES







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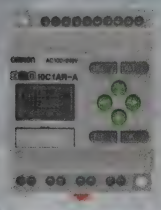
To search by manufacturer, see our detailed Manufacturer Index on page 2458.

CONTROL—The products you need to maintain control...

Controllers - PLC



Over 600 products
From 11 top brands including:
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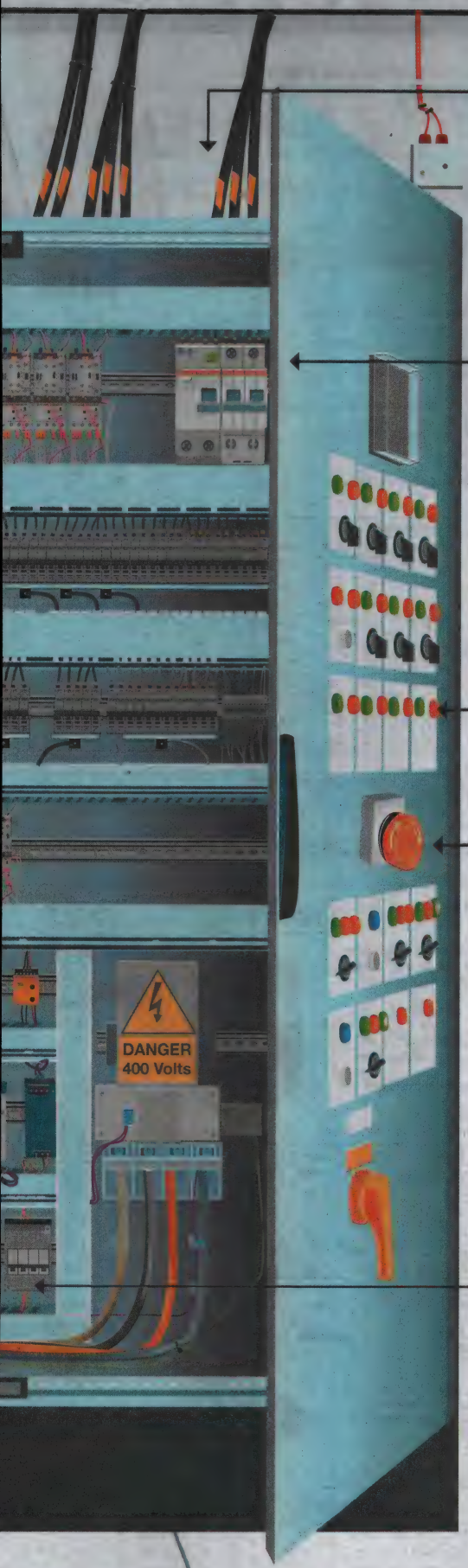

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From more than 20 top brands including:
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Panduit
3M

Sensors

Over 1, 500 products
From 32 top brands including:
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IDEC
Banner

Circuit Breakers

Over 2, 600 products
From 72 top brands including:
Airpax
Schneider Electric
Eaton
Carling

Switches – Rocker Selector & Toggle

Over 6, 000 products
From 39 top brands including:
Eaton
Honeywell
Omron
Schneider Electric

Switches – Pushbutton

Over 3, 800 products
From 48 top brands including:
Honeywell
IDEC
Eaton

Switches – Estop

Over 520 products
From 21 top brands including:
IDEC
Schneider Electric
EAO

Power

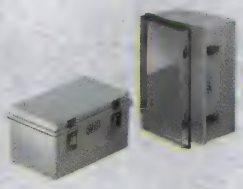
Over 6, 000 products
From more than 30 top brands including:
Emerson
Sola HD
TDK Lambda
XP Power

NEMA ENCLOSURES

NEMA, UL, IEC WATERTIGHT PLASTIC BOXES

NEMA · RoHS Compliant Available · Bud Industries, Inc. · IP65 · UL

- Gasketed enclosures meet NEMA 1, 2, 4, 4X, 12, 13, IEC 529, IP65 and UL-508-4X specifications
- May be used in wet, dirty, and corrosive environments
- ABS/PC blended plastic with UL94-5VB flammability rating
- Suggested service temp. range: -40°C to +70°C
- Stainless steel hinges with locking draw latch
- Optional clear doors are polycarbonate with UL94V-0 rating
- Modifications available, *go online or call*
- Order accessories separately *on pages 2288-2289*



INDOOR VERSION

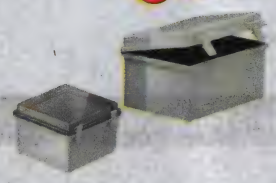
Mfg. Part No.	Dimensions (in.) L	W	H	Door	Stock No.	Price Each 1-4	5-24	25+
● NBA-10142	11.8	7.85	5.97	Solid	83F6444	76.37	59.52	50.56
● NBA-10144	11.8	7.85	7.09	Solid	83F6445	90.28	70.36	59.76
● NBA-10148	15.75	11.8	7.09	Solid	83F6446	132.66	103.39	87.82
● NBA-10152	19.68	15.75	7.87	Solid	83F6447	199.03	155.12	131.76
● NBA-10156	23.61	15.75	9.06	Solid	83F6448	236.21	184.09	156.37
● NBA-10162	11.8	7.85	5.97	Clear	83F6449	86.66	67.54	57.37
● NBA-10164	11.8	7.85	7.09	Clear	83F6450	101.79	79.34	67.38
● NBA-10168	15.75	11.8	7.09	Clear	83F6451	143.63	111.94	95.08
● NBA-10176	23.61	15.75	9.06	Clear	83F6453	233.45	181.94	154.54

(82489)

NEMA, UL, IEC WATERTIGHT PLASTIC BOXES

NEMA · RoHS Compliant Available · Bud Industries, Inc. · IP66 · UL

- NEMA 1, 2, 4, 4X, 12, 13 IEC 529-IP66
- May be used in wet, dirty, and corrosive environments
- Non-metallic hinges with snap-action latches
- Stainless steel wall mounting brackets
- Finish, light gray body and door
- Indoor versions are ABS/PC blended plastic with UL94-5VB flammability rating
- Outdoor versions are PC/PBT blended plastic with UL94-5VA flammability rating and UV stabilized
- Economy versions are ABS plastic with UL94-HB flammability rating
- Optional clear doors are polycarbonate plastic with UL94V-0 flammability rating and UV stabilized
- Modifications available online
- Order panels below and additional accessories separately *on pages 2288-2289*



INDOOR VERSION WITH SOLID DOOR, UL508-4X

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5-9	10-24
● NBB-10240	5.9 x 5.9 x 3.57	83F6454	26.75	21.63	18.88
● NBB-10241	10.73 x 6.79 x 4.33	97H2148	54.12	43.75	38.18
● NBB-10243	11.28 x 7.47 x 5.5	83F6455	58.21	47.06	41.08
● NBB-10245	13 x 13 x 7.04	83F6456	80.47	65.05	56.78
● NBB-10247	15.68 x 11.73 x 6.3	83F6457	78.81	63.71	55.61
● NBB-10253	19.17 x 14.64 x 7.85	83F6458	132.04	106.75	93.17
INDOOR VERSION WITH CLEAR DOOR, UL508-4X					
● NBB-10260	5.9 x 5.9 x 3.57	83F6460	30.61	24.74	21.60
● NBB-10261	10.73 x 6.79 x 4.33	97H2150	56.21	45.44	39.67
● NBB-10263	11.28 x 7.47 x 5.5	83F6461	63.67	51.47	44.93
● NBB-10265	13 x 13 x 7.04	83F6462	90.37	73.06	63.77
● NBB-10271	14.52 x 10.55 x 5.9	97H2151	73.29	59.26	51.72
● NBB-10267	15.68 x 11.73 x 6.3	83F6463	88.60	71.63	62.52
● NBB-10273	19.17 x 14.64 x 7.85	83F6464	144.13	116.52	101.70
OUTDOOR VERSION WITH SOLID DOOR, UL508-4X					
● NBB-15240	3.57 x 5.9 x 5.9	95B0333	31.03	25.52	23.64
● NBB-15243	5.5 x 7.47 x 11.28	95B0343	61.64	50.69	46.95
● NBB-15247	6.3 x 11.73 x 15.68	95B0348	87.10	71.64	66.35
● NBB-15253	7.85 x 14.64 x 19.17	95B0355	154.06	126.70	117.34
ABS VERSION WITH SOLID DOOR					
● NBB-22240	5.9 x 5.9 x 3.57	97H2156	20.73	16.76	14.63
● NBB-22241	10.73 x 6.79 x 4.33	97H2157	36.06	29.15	25.45
● NBB-22243	11.28 x 7.47 x 5.5	43J1452	48.15	38.93	33.98
● NBB-22245	13 x 13 x 7.04	97H2158	58.43	47.23	41.23
● NBB-22247	15.68 x 11.73 x 6.3	97H2159	63.49	51.32	44.79
● NBB-22251	14.52 x 10.55 x 5.9	97H2160	61.94	50.08	43.71

PLASTIC INTERNAL PANELS

Mfg. Part No.	Dimensions (in.) Height	Width	For Use With	Stock No.	Price Each 1-4	5-9
● NBX-10979-PL	5.37	9.25	NBB-10241, NBB-10261, NBB-22241	10R2345	5.46	4.57
● NBX-10984-PL	4.9	4.9	NBB-10240, NBB-10260	10R2349	2.80	2.34
● NBX-10985-PL	6.3	9.9	NBB-10243, NBB-10263	10R2350	5.62	4.70
● NBX-10986-PL	11.5	11.5	NBB-10245, NBB-10265	10R2351	17.04	14.27

➤ CONTINUED ➤

NEMA, UL, IEC WATERTIGHT PLASTIC BOXES (CONT.)

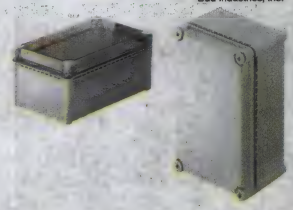
Mfg. Part No.	Dimensions (in.) Height	Width	For Use With	Stock No.	Price Each 1-4	5-9
● NBX-10987-PL	10.4	14.3	NBB-10247, NBB-10267	10R2352	18.94	15.85
● NBX-10988-PL	10.4	14.3	NBB-10251, NBB-10271, NBB-22251	10R2353	17.37	14.55
● NBX-10990-PL	13.1	17.6	NBB-10253-, NBB-10273	10R2354	28.79	24.10

(82490)

NEMA, UL, IEC WATERTIGHT PLASTIC BOXES

IP65 · UL · NEMA · RoHS Compliant Available · Bud Industries, Inc.

- Gasketed enclosures meet NEMA 1, 2, 4, 4X, 12, 13 IEC 529, IP65 and UL-508-4X specifications
- May be used in wet, dirty, and corrosive environments
- Phillips drive non-metallic fasteners
- Indoor versions are ABS/PC blended plastic with UL94-5VB flammability rating
- Outdoor versions are PC/PBT blended plastic with UL94-5VA flammability rating and UV stabilized
- Optional clear doors are polycarbonate with UL94V-0 flammability rating
- Modifications available online
- Order accessories separately *on pages 2288-2289*



INDOOR VERSION

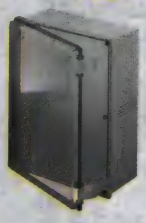
Mfg. Part No.	Dimensions (in.) L	W	H	Door	Stock No.	Price Each 1-4	5-24	25+
● NBD-10442	11.02	7.48	5.03	Solid	83F6467	61.39	46.18	40.65
● NBD-10445	15.00	7.53	7.00	Solid	83F6468	93.97	70.70	62.23
● NBD-10449	13.42	11.05	5.11	Solid	83F6469	88.14	66.30	58.36
● NBD-10452	14.96	11.02	7.01	Solid	83F6470	118.98	89.51	78.79
● NBD-10456	22.08	14.97	7.04	Solid	83F6471	199.47	150.05	132.08
● NBD-10462	7.48	11.02	5.03	Clear	83F6472	61.39	46.18	40.65
● NBD-10465	15.00	7.53	7.00	Clear	83F6473	98.05	73.77	64.93
● NBD-10469	13.42	11.05	5.11	Clear	83F6474	90.09	67.77	59.66
● NBD-10472	14.96	11.02	7.01	Clear	83F6475	119.92	90.21	79.41
● NBD-10476	22.08	14.97	7.04	Clear	83F6476	203.12	152.80	134.50
OUTDOOR VERSION								
● NBD-15442	11.02	7.48	5.03	Solid	95B0364	62.81	51.66	47.84
● NBD-15449	13.42	11.05	5.11	Solid	95B0368	96.09	79.03	73.19
● NBD-15452	14.96	11.02	7.01	Solid	95B0369	125.35	103.10	95.48
● NBD-15456	22.08	14.97	7.04	Solid	95B0374	226.59	186.36	172.60

(82492)

NEMA, UL, IEC WATERTIGHT PLASTIC BOXES

NEMA · RoHS Compliant Available · Bud Industries, Inc. · IP65 · UL

- Gasketed enclosures meet NEMA 1, 2, 4, 4X, 12, 13 IEC 529, IP65 and UL-508-4X specifications
- May be used in wet, dirty, and corrosive environments
- ABS/PC blended plastic with UL94-5VB flammability rating
- Suggested service temperature -40°C to +70°C
- Non-metallic hinges with snap-action latches; swing-frame panel
- Optional clear doors are polycarbonate with UL94V-0
- Modifications available online
- Order accessories separately *on pages 2288-2289*



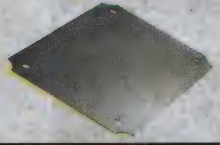
Mfg. Part No.	Dimensions (in.) Length	Width	Height	Door Color	Stock No.	Price Each 1-4	5-24	25+
● NBE-10543	11.28	7.47	5.5	Solid	83F6477	90.45	80.74	72.06
● NBE-10547	15.68	11.73	6.3	Solid	83F6478	115.46	103.07	91.98
● NBE-10563	11.28	7.47	5.5	Clear	83F6481	90.45	80.74	72.06
● NBE-10567	15.68	11.73	6.3	Clear	83F6482	118.51	105.79	94.40
● NBE-10573	14.64	19.17	7.85	Clear	83F6483	179.31	160.06	142.84

(82493)

NEMA, UL, IEC PLASTIC BOX ACCESSORIES

NEMA · RoHS Compliant Available · Bud Industries, Inc.

16 gauge galvanized steel panels that attach to the mounting bosses of the cabinet and are used to mount equipment without drilling through enclosure and damaging NEMA rating.



INTERNAL PANELS

Mfg. Part No.	For Use With	Dimensions (in.) W	H	Stock No.	Price Each 1-4
● NBX-10980	NBA Series Enclosures	6.74	10.5	83F5559	9.70
● NBX-10981	NBA Series Enclosures	10.44	14.3	83F5560	18.71
● NBX-10982	NBA Series Enclosures	14.28	18.2	83F5561	27.02

➤ CONTINUED ➤

NEMA, UL, IEC PLASTIC BOX ACCESSORIES (CONT.)

Mfg. Part No.	For Use With	Dimensions (in.) W	Dimensions (in.) H	Stock No.	Price Each 1-4
NBX-10983	NBA Series Enclosures	13.9	22.1	83F5562	34.00
NBX-10984	NBB Series Enclosures	4.88	4.9	83F5563	5.35
NBX-10985	NBB, NBD and NBE Series Enclosures	6.38	9.9	83F5564	10.24
NBX-10986	NBB Series Enclosures	11.46	11.5	83F5565	14.43
NBX-10987	NBB and NBE Series Enclosures	10.43	14.3	83F5566	18.49
NBX-10988	NBB Series Enclosures	12.99	9.06	56J7476	22.95
NBX-10990	NBB and NBE Series Enclosures	12.8	17.6	83F5567	23.95
NBX-10991	NBB and NBE Series Enclosures	18.9	26.8	83F5568	52.71
NBX-10996	NBD Series Enclosures	10	12.3	83F5572	18.16
NBX-10997	NBD Series Enclosures	10	13.8	83F5573	29.46
NBX-10999	NBD Series Enclosures	20.9	13.6	83F5574	33.33

ACCESSORIES

Mfg. Part No.	Description	Pack Qty.	Stock No.	Price Each 1-4
NBX-10911	Top Mount Vent	1	83F5544	4.13
NBX-10920	Small External Wall Mounting Brackets	4	83F5546	7.09
NBX-10922	Medium External Wall Mounting Brackets	4	83F5547	8.43
NBX-10970	Internal Panel Hinge Bracket Kit	2	90R9623	3.95

LOCKING HASP KIT
Used in combination with customer supplied padlock to secure enclosures against entry. Kit comes complete with hasp, gasket and all mounting hardware.

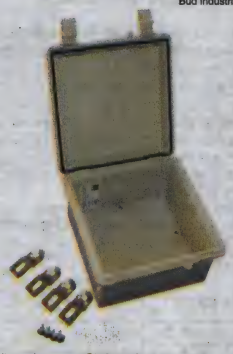
Mfg. Part No.	Description	Stock No.	Price Each 1-4	5-24	25-99
NBX-10915	Locking hasp kit	83F5545	18.98	15.86	14.21

(82500)

UL / NEMA / IEC WATERTIGHT PLASTIC BOXES

IP66 NEMA RoHS Compliant Available BUD Industries, Inc.

- IP66 of IEC 529 and NEMA 1, 2, 4, 4X, 12, and 13 specifications
- Style A has two or three plastic latches
- Style B has two plastic latches and one stainless steel padlockable latch
- ABS plastic enclosures molded out of light gray material with UL94-HB flammability rating
- ABS/PC blended plastic enclosures molded out of light gray material with UL94-5VA flammability rating
- PC/PBT blended plastic enclosures molded out of light gray material with UL94-5VA flammability rating and UV stabilized
- Clear doors molded out of polycarbonate material with UL94-V0 flammability rating
- Includes stainless steel wall mounting brackets and hardware



Style A Solid Door

INDOOR

Mfg. Part No.	Dimensions (mm) H x W x D	Material	Door Type	Style	Stock No.	Price Each 1-4
NBF-32002	70 x 130 x 100	Acrylonitrile Butadiene Styrene (ABS)	Solid	A	73R7984	12.19
NBF-32004	70 x 150 x 100	Acrylonitrile Butadiene Styrene (ABS)	Solid	A	73R7985	13.75
NBF-32006	70 x 200 x 100	Acrylonitrile Butadiene Styrene (ABS)	Solid	A	73R7986	16.86
NBF-32008	70 x 270 x 100	Acrylonitrile Butadiene Styrene (ABS)	Solid	A	73R7987	17.45
NBF-32010	90 x 150 x 150	Acrylonitrile Butadiene Styrene (ABS)	Solid	A	73R7988	15.42
NBF-32018	160 x 300 x 200	Acrylonitrile Butadiene Styrene (ABS)	Solid	A	73R7992	33.18
NBF-32026	160 x 400 x 300	Acrylonitrile Butadiene Styrene (ABS)	Solid	A	73R7996	51.25
NBF-32032	160 x 500 x 400	Acrylonitrile Butadiene Styrene (ABS)	Solid	A	73R7999	81.90
NBF-32038	200 x 530 x 430	Acrylonitrile Butadiene Styrene (ABS)	Solid	A	73R8002	152.27
NBF-32042	250 x 600 x 500	Acrylonitrile Butadiene Styrene (ABS)	Solid	B	73R8004	292.65
NBF-32046	250 x 700 x 500	Acrylonitrile Butadiene Styrene (ABS)	Solid	B	73R8006	325.64
NBF-32202	70 x 130 x 100	ABS, Polycarbonate	Clear	A	73R8030	18.18
NBF-32204	70 x 150 x 100	ABS, Polycarbonate	Clear	A	73R8031	23.22
NBF-32206	70 x 200 x 100	ABS, Polycarbonate	Clear	A	73R8032	26.01
NBF-32208	70 x 270 x 100	ABS, Polycarbonate	Clear	A	73R8033	28.55
NBF-32210	90 x 150 x 150	ABS, Polycarbonate	Clear	A	73R8034	26.43
NBF-32218	160 x 300 x 200	ABS, Polycarbonate	Clear	A	73R8038	56.21
NBF-32226	160 x 400 x 300	ABS, Polycarbonate	Clear	A	73R8042	98.66
NBF-32232	160 x 500 x 400	ABS, Polycarbonate	Clear	A	73R8045	142.53
NBF-32238	200 x 530 x 430	ABS, Polycarbonate	Clear	A	73R8048	275.85
NBF-32242	250 x 600 x 500	ABS, Polycarbonate	Clear	B	73R8050	377.61
NBF-32246	250 x 700 x 500	ABS, Polycarbonate	Clear	B	73R8052	422.76
NBF-32102	70 x 130 x 100	ABS, Polycarbonate	Solid	A	73R8007	17.55
NBF-32104	70 x 150 x 100	ABS, Polycarbonate	Solid	A	73R8008	23.22
NBF-32106	70 x 200 x 100	ABS, Polycarbonate	Solid	A	73R8009	26.01
NBF-32108	70 x 270 x 100	ABS, Polycarbonate	Solid	A	73R8010	27.72

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UL / NEMA / IEC WATERTIGHT PLASTIC BOXES (CONT.)

Mfg. Part No.	Dimensions (mm) H x W x D	Material	Door Type	Style	Stock No.	Price Each 1-4
NBF-32110	90 x 150 x 150	ABS, Polycarbonate	Solid	A	73R8011	27.22
NBF-32118	160 x 300 x 200	ABS, Polycarbonate	Solid	A	73R8015	55.11
NBF-32126	160 x 400 x 300	ABS, Polycarbonate	Solid	A	73R8019	101.62
NBF-32132	160 x 500 x 400	ABS, Polycarbonate	Solid	A	73R8022	142.53
NBF-32138	200 x 530 x 430	ABS, Polycarbonate	Solid	A	73R8025	275.85
NBF-32142	250 x 600 x 500	ABS, Polycarbonate	Solid	B	73R8027	377.61
NBF-32146	250 x 700 x 500	ABS, Polycarbonate	Solid	B	73R8029	432.91
OUTDOOR						
NBF-32402	x x	PBT, Polycarbonate	Clear	A	73R8076	19.69
NBF-32404	x x	PBT, Polycarbonate	Clear	A	73R8077	29.21
NBF-32406	x x	PBT, Polycarbonate	Clear	A	73R8078	29.86
NBF-32408	x x	PBT, Polycarbonate	Clear	A	73R8079	32.00
NBF-32410	x x	PBT, Polycarbonate	Clear	A	73R8080	29.91
NBF-32418	x x	PBT, Polycarbonate	Clear	A	73R8084	77.82
NBF-32426	x x	PBT, Polycarbonate	Clear	A	73R8088	113.21
NBF-32432	x x	PBT, Polycarbonate	Clear	A	73R8091	155.90
NBF-32438	x x	PBT, Polycarbonate	Clear	A	73R8094	336.31
NBF-32442	x x	PBT, Polycarbonate	Clear	B	73R8096	438.38
NBF-32446	x x	PBT, Polycarbonate	Clear	B	73R8098	486.96
NBF-32302	x x	PBT, Polycarbonate	Solid	A	73R8053	20.16
NBF-32304	x x	PBT, Polycarbonate	Solid	A	73R8054	28.36
NBF-32306	x x	PBT, Polycarbonate	Solid	A	73R8055	30.76
NBF-32308	x x	PBT, Polycarbonate	Solid	A	73R8056	32.00
NBF-32310	x x	PBT, Polycarbonate	Solid	A	73R8057	30.20
NBF-32318	x x	PBT, Polycarbonate	Solid	A	73R8061	77.06
NBF-32326	x x	PBT, Polycarbonate	Solid	A	73R8065	115.93
NBF-32332	x x	PBT, Polycarbonate	Solid	A	73R8068	155.90
NBF-32338	x x	PBT, Polycarbonate	Solid	A	73R8071	336.31
NBF-32342	x x	PBT, Polycarbonate	Solid	B	73R8073	448.90
NBF-32346	x x	PBT, Polycarbonate	Solid	B	73R8075	486.96

STEEL INTERNAL PANELS FOR NBF SERIES

Mfg. Part No.	Dimensions (in.) L x Wx Thickness	For Enclosures	Stock No.	Price Each 1-4
NBX-32902	3.8 x 2.68 x 0.06	NBF-32002, NBF-32102, NBF-32202 NBF-32302, NBF-32402	40T8004	4.70
NBX-32904	4.57 x 2.68 x 0.06	NBF-32004, NBF-32104, NBF-32204 NBF-32304, NBF-32404	40T8006	5.49
NBX-32906	6.52 x 2.68 x 0.06	NBF-32006, NBF-32106, NBF-32206 NBF-32306, NBF-32406	40T8008	5.49
NBX-32908	9.25 x 2.68 x 0.06	NBF-32008, NBF-32108, NBF-32208 NBF-32308, NBF-32408	40T8010	9.14
NBX-32912	7.32 x 5.35 x 0.06	NBF-32012, NBF-32112, NBF-32212 NBF-32312, NBF-32412	40T8012	4.47
NBX-32914	6.89 x 6.89 x 0.06	NBF-32014, NBF-32114, NBF-32214 NBF-32314, NBF-32414	40T8014	11.36
NBX-32916	10.51 x 6.69 x 0.06	NBF-32016, NBF-32116 NBF-32216 NBF-32316, NBF-32416	32T4927	16.04
NBX-32926	14.25 x 10.43 x 0.06	NBF-32026, NBF-32126, NBF-32226 NBF-32326, NBF-32426	40T8017	30.00
NBX-32928	16.54 x 12.09 x 0.06	NBF-32028, NBF-32128, NBF-32228 NBF-32328, NBF-32428 NBF-32030, NBF-32130, NBF-32230 NBF-32330, NBF-32430	40T8019	36.23
NBX-32932	18.23 x 14.25 x 0.06	NBF-32032, NBF-32132, NBF-32232 NBF-32332, NBF-32432 NBF-32034, NBF-32134, NBF-32234 NBF-32334, NBF-32434	32T5047	43.76
NBX-32936	18.22 x 14.25 x 0.06	NBF-32036, NBF-32136, NBF-32236 NBF-32336, NBF-32436 NBF-32038, NBF-32138, NBF-32238 NBF-32338, NBF-32438	40T8022	43.76
NBX-32940	18.31 x 22.64 x 0.06	NBF-32040, NBF-32140, NBF-32240 NBF-32340, NBF-32440 NBF-32042, NBF-32142, NBF-32242 NBF-32342, NBF-32442	41T2461	72.24

PLASTIC INTERNAL PANELS FOR NBF SERIES

NBX-32902-PL	3.8 x 2.68 x 0.14	NBF-32002, NBF-32102, NBF-32202 NBF-32302, NBF-32402	40T8005	1.40
NBX-32904-PL	4.57 x 2.68 x 0.14	NBF-32004, NBF-32104, NBF-32204 NBF-32304, NBF-32404	40T8007	1.40
NBX-32906-PL	6.52 x 2.68 x 0.14	NBF-32006, NBF-32106, NBF-32206 NBF-32306, NBF-32406	40T8009	2.05
NBX-32908-PL	9.25 x 2.68 x 0.14	NBF-32008, NBF-32108, NBF-32208 NBF-32308, NBF-32408	40T8011	2.48
NBX-32912-PL	7.32 x 5.35 x 0.12	NBF-32012, NBF-32112, NBF-32212 NBF-32312, NBF-32412	40T8013	2.15
NBX-32914-PL	6.89 x 6.89 x 0.16	NBF-32014, NBF-32114, NBF-32214 NBF-32314, NBF-32414	40T8015	6.02
NBX-32916-PL	10.51 x 6.69 x 0.13	NBF-32016, NBF-32116 NBF-32216 NBF-32316, NBF-32416	40T8016	11.48

CONTINUED

UL / NEMA / IEC WATERTIGHT PLASTIC BOXES (CONT.)

PLASTIC INTERNAL PANELS FOR NBF SERIES

Mfg. Part No.	Dimensions (in.) L x Wx Thickness	For Enclosures	Stock No.	Price Each 1-4
NBX-32926-PL	14.25 x 10.43 x 0.15	NBF-32026, NBF-32126, NBF-32226 NBF-32326, NBF-32426	40T8018	22.39
NBX-32928-PL	16.54 x 12.09 x 0.17	NBF-32028, NBF-32128, NBF-32228 NBF-32328, NBF-32428 NBF-32030, NBF-32130, NBF-32230 NBF-32330, NBF-32430	40T8020	32.90
NBX-32932-PL	18.23 x 14.25 x 0.17	NBF-32032, NBF-32132, NBF-32232 NBF-32332, NBF-32432 NBF-32034, NBF-32134, NBF-32234 NBF-32334, NBF-32434	40T8021	40.53
NBX-32936-PL	18.22 x 14.25 x 0.17	NBF-32036, NBF-32136, NBF-32236 NBF-32336, NBF-32436 NBF-32038, NBF-32138, NBF-32238 NBF-32338, NBF-32438	40T8023	40.53

(177530)

NEMA 4X ENCLOSURES

NEW

RoHS Compliant Available

Bud Industries, Inc.

IP67 UL

- Body made of gray Polycarbonate (PC) reinforced with 10% fiberglass
- Cover made of gray Polycarbonate (PC)
- High impact resistance
- IP-67 TUV rating to keep out dust and water in extreme conditions
- UL508 / NEMA type 4X and type 6 listed #E343339
- UL industrial controls & CE Low Voltage directive 2006/95/EC listed
- UV stabilized UL94-V0 flammability rating suggested service temperature -40°C to 120°C

Internal Steel Panel No.	Dimensions (in.) H	W	D	Grey Cover Mfg. Part No.	Stock No.	Price Each 1-49	Clear Cover Mfg. Part No.	Stock No.	Price Each 1-49
PIX-11760	5.12	3.15	1.42	● PIP-11760	48X9595	11.97	● PIP-11760-C	48X9596	11.97
PIX-11760	5.12	3.15	3.35	● PIP-11763	48X9597	16.71	● PIP-11763-C	48X9598	16.71
PIX-11766	5.12	5.12	1.38	● PIP-11766	48X9599	15.41	● PIP-11766-C	48X9600	15.41
PIX-11766	5.12	5.12	2.4	● PIP-11767	48X9601	17.54	● PIP-11767-C	48X9602	17.54
PIX-11772	7.087	7.087	2.992	● PIP-11772	48X9603	26.23	● PIP-11772-C	48X9604	26.23
PIX-11772	7.09	7.09	4.92	● PIP-11774	48X9605	31.72	● PIP-11774-C	48X9606	31.72
PIX-11775	10.04	7.09	2.95	● PIP-11775	48X9607	35.80	● PIP-11775-C	48X9608	35.80
PIX-11775	10.04	7.09	4.96	● PIP-11777	48X9609	39.89	● PIP-11777-C	48X9610	39.89

INTERNAL PANELS

Dimensions (in.) H	W	Thicknes (in.)	Steel Mfg. Part No.	Stock No.	Price Each 1-99	Plastic Mfg. Part No.	Stock No.	Price Each 1-99
3.858	1.929	0.063/0.157	● PIX-11760	48X9614	3.16	● PIX-11760-P	48X9615	1.41
3.858	3.858	0.063/0.157	● PIX-11766	48X9616	3.55	● PIX-11766-P	48X9617	1.97
5.827	5.827	0.063/0.157	● PIX-11772	48X9618	6.32	● PIX-11772-P	48X9619	4.21
5.827	8.78	0.063/0.157	● PIX-11775	48X9620	12.09	...	...	...

(212295)

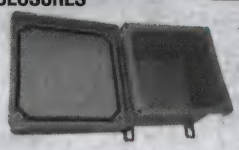
FIBERGLASS WATERTIGHT NEMA ENCLOSURES

NEMA

RoHS Compliant Available

Bud Industries, Inc.

IP66



Screw Cover

Latch Cover

- Meets NEMA 1, 2, 4, 4X, 12, and 13 ratings
- Meets IP66 ratings
- Meets UL508-4X requirements
- Light gray finish

Enclosures are constructed of a durable and easy to machine fiberglass reinforced plastic (SMC). They are suitable for outdoor and indoor applications. Hinges, screws, latches and wall mounting brackets are made of stainless steel. Powder coated internal steel panel is also included.

Mfg. Part No.	External Dim. (in.) H	W	D	Internal Dim. (in.) H	W	D	Cover	Stock No.	Price Each
● NF-6610	7.75	7.75	4.5	6.1	6.1	4.2	Screw	34M2296	44.62
● NF-6611	9.64	7.76	4.5	8	6.1	4.2	Screw	34M2297	51.55
● NF-6612	11.78	9.9	6.5	10.1	8.26	6.1	Screw	34M2298	67.38
● NF-6613	13.78	11.9	6.5	12.1	10.3	6.1	Screw	34M2299	78.77
● NF-6614	15.79	13.89	6.5	14.15	12.25	6.1	Screw	34M2300	92.15
● NFL-6630	7.75	7.75	4.8	6.1	6.1	4.2	Latch	09R5012	70.64

➤CONTINUED➤

FIBERGLASS WATERTIGHT NEMA ENCLOSURES (CONT.)

Mfg. Part No.	External Dim. (in.) H	W	D	Internal Dim. (in.) H	W	D	Cover	Stock No.	Price Each
● NFL-6633	13.78	11.9	6.8	12.1	10.3	6.1	Latch	09R5013	124.48
● NFL-6634	15.78	13.9	6.8	14.15	12.25	6.1	Latch	09R5014	141.84

(90516)

WATERTIGHT SHEET METAL BOX WITH MOUNTING BRACKET

IP65 NEMA

RoHS Compliant Available

Bud Industries, Inc.

- NEMA 1, 2, 4, 4X, 12, 13 and IP65 and UL508-4X ratings
- Durable 14 gauge steel
- Smooth continuous welded seams
- Hinged cover clamps to base to allow watertight seal
- Stainless steel screws and brackets included
- Weld nut for inner panel mounting
- Bonding studs for grounding on base and door
- 14 ga. steel removable powder-coated panel included for easy component mounting
- Modifications available; *go online or call.*

Mfg. Part No.	Dimensions (in.) H	W	D	Stock No.	Price Each Each	2-4	5-9
● SN-3700	6	4	3	93K7420	58.14	48.59	43.67
● SN-3701	8	6	3.5	93K7421	69.99	58.49	52.57
● SN-3702	6	6	4	93K7422	59.32	49.58	44.56
● SN-3703	12	10	5	93K7423	104.91	87.67	78.80
● SN-3704	10	8	6	93K7424	102.35	85.53	76.88
● SN-3705	12	12	6	93K7425	125.63	104.99	94.37
● SN-3709	16	14	10	93K7429	183.11	153.03	137.54

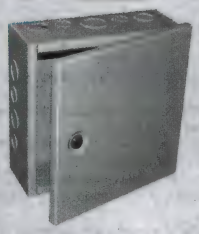
(89365)

NEMA 1 JUNCTION BOXES

UL NEMA

Bud Industries, Inc.

- Heavy duty 16 GA welded steel construction
- Screwed on flat cover with key holes on mfr. part nos. with prefix **JB**
- Hinged cover withslotted head cam lock mfr. part nos. with prefix **JBH**
- Easily removable concentric knockouts on all four sides for industry standard conduit sizes
- Four wall mounting holes in black
- Embossed grounding hole in bottom allows flush wall mounting
- Durable ANSI 65 grey powder coating
- Complies with NEMA and UL-50 Type 1 rating
- UL listing pending



SCREW COVER — Hinged

Dimensions (in.) H	W	D	Without Knockouts	Stock No.	Price Each	With Knockouts	Stock No.	Price Each
4	4	3	● JB-3950	40T7834	8.81	● JB-3950-KO	40T7835	8.81
4	4	4	● JB-3951	40T7836	9.80	● JB-3951-KO	40T7837	9.80
6	4	3	● JB-3952	40T7838	10.92	● JB-3952-KO	40T7839	10.92
6	4	3.5	● JB-3944	40T7830	11.29	● JB-3944-KO	40T7831	11.70
6	4	4	● JB-3953	40T7840	12.37	● JB-3953-KO	40T7841	11.94
6	6	3	● JB-3954	40T7842	13.81	● JB-3954-KO	40T7843	13.81
6	6	3.5	● JB-3945	40T7832	14.52	● JB-3945-KO	40T7833	14.52
6	6	4	● JB-3955	40T7844	13.71	● JB-3955-KO	40T7845	13.71
8	6	4	● JB-3956	40T7846	16.27	● JB-3956-KO	40T7847	16.27
8	8	4	● JB-3957	40T7848	19.50	● JB-3957-KO	40T7849	19.50
10	8	4	● JB-3958	40T7850	22.83	● JB-3958-KO	40T7851	22.04
10	8	6	● JB-3959	40T7852	27.57	● JB-3959-KO	40T7853	27.57
10	10	4	● JB-3960	40T7854	26.13	● JB-3960-KO	40T7855	26.91
10	10	6	● JB-3961	40T7856	32.00	● JB-3961-KO	40T7857	32.00

HINGED COVER

Dimensions (in.) H	W	D	With Knockouts	Stock No.	Price Each
6	4	3.5	● JBH-4944-KO	40T7858	13.87
6	4	4	● JBH-4953-KO	40T7860	13.44
6	6	3	● JBH-4954-KO	40T7861	15.15
6	6	3.5	● JBH-4945-KO	40T7859	17.49
6	6	4	● JBH-4955-KO	40T7862	17.04
8	6	4	● JBH-4956-KO	40T7863	19.50
8	8	4	● JBH-4957-KO	40T7864	22.83
10	8	4	● JBH-4958-KO	40T7865	26.03
10	8	6	● JBH-4959-KO	40T7866	30.79
10	10	4	● JBH-4960-KO	40T7867	30.23
10	10	6	● JBH-4961-KO	40T7868	35.22

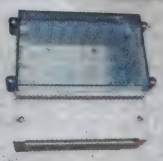
(195492)

NEMA SEALED DUAL-COMPARTMENT ENCLOSURES

IP65 UL RoHS Compliant Available BUD Bud Industries, Inc.

- Body made of high impact ABS
- Cover made of blue tinted Polycarbonate (UL 94-HB)
- Easy to remove knockouts provided on bottom side to accommodate conduit fittings or cable glands
- Both compartment sealed with durable and oil resistant silicone sponge gasket
- Built-in DIN-Rail mounting clips
- PCB guides provided in upper compartment

(DCH prefix) Hinged Cover



(DCS prefix) with Screw-On Cover

Sealed dual-compartment enclosures have a separate compartment for housing terminals, power supplies, batteries or other equipment. Boxes available in two styles: with screw-on cover (DCS prefix) or hinged cover (DCH prefix) designed for frequent access.

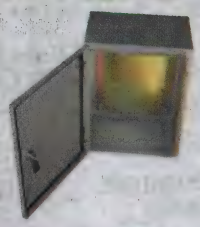
Hinged Cover						Screw-On Cover		
Dimensions (in.)			Mfg. Part No.	Stock No.	Price Each	Mfg. Part No.	Stock No.	Price Each
H	W	D			1-4			1-4
6.34	6.54	3.66	DCH-11920	55W6164	34.55	DCS-11900	55W6169	27.27
6.34	6.54	4.76	DCH-11921	55W6165	31.88	DCS-11901	55W6170	32.90
7.28	8.39	4.11	DCH-11922	55W6166	51.77	DCS-11902	55W6171	47.09
8.54	10.08	5.22	DCH-11923	55W6167	58.70	DCS-11903	55W6172	52.80
11.06	11.65	6.22	DCH-11924	55W6168	80.53	DCS-11904	55W6173	76.76

(209934)

STEEL WATERTIGHT NEMA ENCLOSURES

IP65 NEMA RoHS Compliant Available BUD Bud Industries, Inc.

- Meets NEMA 1, 2, 4, 4X, 12, and 13 ratings
- Meets IP65 rating and UL508-4X requirements
- Key lock cover provided
- Bounding studs for grounding provided on base and door
- Smooth gray powder finish



SNB series NEMA sheet metal boxes are constructed of a continuous seam welded 16 gauge steel. Their unique stainless steel hinges allow for easy disassembly of cover. Wall mounting holes are located on the inside for security. A Zinc plated 14 gauge steel removable inner panel is also included.

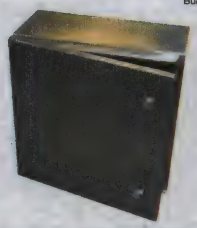
	Dimensions (in.)				Price Each		
Mfg. Part No.	H	W	D	Stock No.	Each	2-4	5-9
SNB-3738	7.87	5.91	5.91	09R5430	52.26	47.14	44.18
SNB-3739	7.87	7.87	3.98	09R5431	49.76	44.89	42.07
SNB-3741	9.84	7.87	3.98	09R5433	56.16	50.66	47.47
SNB-3730	9.84	7.87	5.91	34M2382	58.30	52.59	49.29
SNB-3740	9.84	9.84	5.91	09R5432	69.06	62.30	58.38
SNB-3731	11.81	9.84	5.91	34M2383	65.99	59.54	55.79
SNB-3732	11.81	9.84	7.87	34M2384	68.10	61.43	57.57
SNB-3733	11.81	11.81	5.91	34M2385	72.62	65.51	61.39
SNB-3734	11.81	11.81	7.87	34M2386	78.26	70.60	66.17
SNB-3735	15.75	11.81	5.91	34M2387	84.20	75.95	71.18
SNB-3736	15.75	11.81	7.87	34M2388	93.22	84.09	78.81
SNB-3743	15.75	13.98	7.87	09R5435	114.76	103.52	97.01
SNB-3737	15.75	15.75	7.87	34M2389	110.29	99.49	93.24
SNB 3746	20	16	8.31	99W2295	173.15	156.19	146.37
SNB 3749	20	20	12.31	99W1706	231.94	209.22	196.07
SNB 3751	24	16	8.31	99W2296	204.32	184.31	172.73
SNB 3752	24	20	8.31	99W1711	233.68	210.79	197.54
SNB 3754	24	24	10.31	99W1707	286.86	258.76	242.50

(90499)

NEMA STAINLESS STEEL WALL-MOUNT BOXES

IP65 NEMA RoHS Compliant Available BUD Bud Industries, Inc.

- NEMA type 1, 2, 4, 4X, 12 and 13 and IP65 ratings
- Continuous seam welded 304 stainless steel construction
- Hinged cover clamps to the base with keyed quarter turn latch for a watertight seal
- External mounting brackets allow mounting to a wall or panel without having to remove the cover and exposing internal components to the environment
- Bonding studs for grounding provided on base and door
- Clear zinc-plated Internal panel and hardware included



	Dimensions (mm)		Price Each			
Mfg. Part No.	H x W x D	Stock No.	Each	2-4	5-9	10+
SNB-3738-SS	200 x 150 x 150	73R8107	139.11	131.79	123.00	115.68
SNB-3739-SS	200 x 200 x 101	73R8108	137.27	130.04	121.37	114.15
SNB-3741-SS	250 x 200 x 101	73R8110	159.79	151.38	141.29	132.88

CONTINUED

NEMA STAINLESS STEEL WALL-MOUNT BOXES (CONT.)

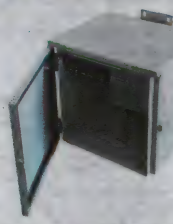
	Dimensions (mm)		Price Each			
Mfg. Part No.	H x W x D	Stock No.	Each	2-4	5-9	10+
SNB-3730-SS	250 x 200 x 150	73R8099	189.99	179.99	168.00	157.99
SNB-3740-SS	250 x 250 x 150	73R8109	210.22	199.16	185.89	174.82
SNB-3731-SS	300 x 250 x 150	73R8100	247.29	234.27	218.65	205.64
SNB-3732-SS	300 x 250 x 200	73R8101	280.07	265.33	247.64	232.91
SNB-3733-SS	300 x 300 x 150	73R8102	276.05	261.52	244.08	229.56
SNB-3734-SS	300 x 300 x 200	73R8103	311.01	294.64	275.00	258.63
SNB-3735-SS	400 x 300 x 150	73R8104	328.51	311.22	290.48	273.19
SNB-3736-SS	400 x 300 x 200	73R8105	368.04	348.66	325.42	306.05
SNB-3743-SS	400 x 355 x 200	73R8111	401.38	380.25	354.90	333.78
SNB-3737-SS	400 x 400 x 200	73R8106	448.34	424.74	396.42	372.83
SNB 3746 SS	508 x 406 x 211	99W1712	586.63	555.75	518.70	487.83
SNB 3749 SS	508 x 508 x 313	99W1708	793.06	751.32	701.24	659.50
SNB 3751 SS	613 x 406 x 211	99W2297	672.41	637.02	594.56	559.17
SNB 3752 SS	610 x 508 x 211	99W1713	779.10	738.09	688.89	647.88
SNB 3754 SS	610 x 610 x 262	99W1709	948.48	898.56	838.66	788.74

(177402)

NEMA 3R ENCLOSURES

RoHS Compliant Available BUD Bud Industries, Inc.

- Heavy duty 16 GA galvanized steel spot welded construction
- Drip-shielded top and seam-free sides, back and front
- Easily removable concentric knockouts on bottom
- Two external wall mounting brackets in back
- Durable ASA-70 gray powder coating
- Complies with NEMA and UL-50 Type 3R rating
- UL 50 and 50E listed - File E238062



NEMA 3R enclosures provide excellent corrosion protection and are well suited for a variety of outdoor applications. Features hinged cover with weather resistant neoprene gasket and zinc plated and powder coated pad-lockable draw latch. External mounting brackets allow installation on vertical surfaces without the need to open the cover and expose internal components. Includes internal zinc plated steel panel.

	External Dim. (in.)				Price Each		
Mfg. Part No.	H	W	D	Stock No.	1-4	5-9	10-24
N3R-5801	6	4	4	92T3388	33.79	28.23	28.23
N3R-5802	6	6	4	92T3389	42.57	35.58	35.58
N3R-5803	8	6	4	92T3390	49.48	41.34	41.34
N3R-5804	8	8	6	92T3391	67.47	56.38	56.38
N3R-5805	10	8	6	92T3392	77.56	64.82	64.82
N3R-5806	12	10	6	92T3393	97.63	81.59	81.59
N3R-5807	12	12	6	92T3394	113.42	94.78	94.78
N3R-5808	12	12	10	92T3395	132.28	110.54	110.54

(203587)

(209554)

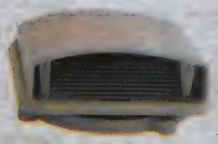
NEMA ENCLOSURES

LARGE AIR & MOISTURE VENTS FOR NEMA ENCLOSURES

UL NEW

Bud Industries, Inc.

- Designed to allow large air volume while offering basic protection from rain water
- Made of gray Polycarbonate (PC) reinforced with 10% fiberglass
- Heavy duty plastic internal nut with mounting bosses for optional ventilation fan
- Great for cooling and pressure equalizing where protection from rain water is required
- High impact resistance



Mfg. Part No.	H	W	D	Stock No.	Price Each 1-49
IPV-1115	2.91	2.91	1.10	47X5984	8.81
IPV-1116	3.95	3.95	1.25	47X5985	8.03

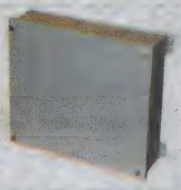
(212297)

NEMA SHEET METAL BOXES WITH LIFT-OFF SCREW COVER

IP65 NEMA RoHS Compliant Available

Bud Industries, Inc.

- Meets NEMA 1, 2, 4, 4X, 12, 13 and IP65 ratings
- UL listed to UL508-4X requirements (pending)
- Continuous seam welded 16 gauge steel construction
- Wall mounting holes located inside for security
- Bonding studs for grounding provided on base and door
- Finish is smooth gray powder coat



Includes 14 gauge steel, zinc plated removable inner panel.

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5-9	10-24
SNC-3750	9.84 x 7.87 x 5.91	89M4573	65.17	54.46	50.79
SNC-3751	11.81 x 9.84 x 5.91	89M4574	70.43	58.85	54.89
SNC-3753	11.81 x 11.81 x 5.91	89M4576	83.92	70.13	65.41
SNC-3755	15.75 x 11.81 x 5.91	89M4578	95.85	80.10	74.70
SNC-3756	15.75 x 11.81 x 7.87	89M4579	109.06	91.14	84.99

(110544)

DIE CAST ALUMINUM NEMA BOXES

IP67 NEMA RoHS Compliant Available

Bud Industries, Inc.

- Rugged #ADC-12 die cast aluminum alloy
- Thick wall (0.098 inch, 2.5 mm) construction for heavy duty applications
- One-piece molded outer Silicone gasket provides reliable sealing meets NEMA 4X and IP67 requirements
- Captive cover assembly screws (M4) are located outside the sealing area
- Recessed area on cover surface for decals
- Easily machined and modified to your particular requirements
- Finish: Natural

Die cast external mounting brackets are also available, *go online or call.*

Mfg. Part No.	Dimensions (in.) H	W	D	Stock No.	Price Each 1-9	10-99	100+
IPS-3901	3.79	3.79	1.77	12T7367	30.53	25.46	22.96
IPS-3903	3.79	3.79	2.64	12T7368	32.88	27.42	24.72
IPS-3905	7.56	3.78	1.77	12T7369	54.87	45.75	41.25
IPS-3907	7.56	3.78	2.64	12T7370	56.96	47.49	42.82
IPS-3909	10.79	6.81	2.6	12T7371	105.16	87.67	79.05
IPS-3911	10.79	6.81	3.94	12T7372	118.50	98.80	89.09
IPS-3913	3.94	5.91	1.97	12T7373	45.48	37.92	34.19
IPS-3915	5.91	3.94	2.95	12T7374	56.30	46.94	42.32
IPS-3916	7.87	5.91	1.1	12T7375	54.66	45.57	41.09
IPS-3917	7.87	5.91	1.97	12T7376	85.83	71.56	64.53
IPS-3919	7.87	5.91	2.95	12T7377	95.65	79.75	71.91
IPS-3921	5.98	4.41	1.18	12T7378	33.95	28.31	25.52
IPS-3923	5.98	4.41	2.17	12T7379	40.14	33.47	30.18
IPS-3925	6.38	6.38	2.17	12T7380	59.36	49.49	44.62
IPS-3927	6.38	6.38	3.15	12T7381	65.34	54.47	49.12
IPS-3929	7.95	5.59	2.17	12T7382	63.41	52.87	47.67
IPS-3931	7.95	5.59	3.15	12T7383	69.61	58.03	52.33
IPS-3933	10.31	7.17	2.17	12T7384	85.77	71.50	64.48
IPS-3935	10.31	7.17	3.54	12T7385	93.86	78.25	70.56

(192413)

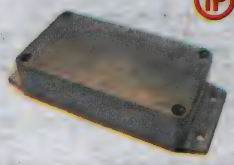
DIECAST ALUMINUM NEMA 4X BOX W/ MOLDED MTG. BRACKETS

UL NEMA RoHS Compliant Available

Bud Industries, Inc.

IP65

- Designed to IP65 of IEC529 and NEMA 1, 2, 4, 4x, 12, and 13 specifications
- Cover incorporates a recessed gasket (included but not installed on black finish boxes)
- Internal bosses for mounting PCBs horizontally or for connecting terminals, ground, etc.
- Most models have internal guide slots for mounting PCB assemblies vertically
- Excellent screening properties
- Mounts to wall or panel with #10 size screws (not furnished)
- UL Listed
- Finish: Natural or Black powdercoat (add suffix -B)



These boxes allow for the mounting of the box without having to remove the cover, thereby possibly compromising the NEMA 4X rating.

Dimensions (in.) L	W	D	Natural Finish Mfg. Part No.	Stock No.	Price Each 1-4	Black Mfg. Part No.	Stock No.	Price Each 1-4
3.54	1.42	1.18	AN-2850	40T7619	7.13	AN-2850-B	40T7620	12.37
2.52	2.28	1.38	AN-2851	40T7621	7.57	AN-2851-B	40T7622	13.15
4.53	2.56	1.18	AN-2852	40T7623	11.03	AN-2852-B	40T7624	17.82
4.53	2.56	2.17	AN-2853	40T7625	13.59	AN-2853-B	40T7626	20.94
4.53	3.54	2.17	AN-2854	40T7627	15.27	AN-2854-B	40T7628	25.06
5.83	4.25	2.95	AN-2855	40T7629	27.90	AN-2855-B	40T7630	39.97
6.73	4.76	2.17	AN-2856	40T7631	28.35	AN-2856-B	40T7632	39.35
8.75	5.75	2.17	AN-2857	40T7633	29.03	AN-2857-B	40T7634	43.40
8.75	5.75	3.25	AN-2858	40T7635	35.53	AN-2858-B	40T7636	51.16
6.18	3.18	1.58	AN-2863	47X3914	15.41	AN-2863-B	47X3915	22.05
6.14	3.20	2.24	AN-2864	47X3916	18.37	AN-2864-B	47X3917	25.27
7.52	3.97	2.36	AN-2866	47X3918	27.31	AN-2866-B	47X3919	37.84
7.54	4.00	3.19	AN-2867	47X3920	30.32	AN-2867-B	47X3921	42.79
9.13	4.80	2.95	AN-2872	47X3922	36.98	AN-2872-B	47X3923	45.48

(195505)

DIE-CAST WATERTIGHT ALUMINUM BOXES

NEMA RoHS Compliant Available

Bud Industries, Inc.

IP65 cULus

- NEMA 1, 2, 3, 4, 12, 13; IP65, IEC
- UL listed to UL508-4 requirements (file# E194432)
- Body and cover constructed of aluminum alloy
- Cover incorporates a recessed silicon gasket
- Internal PC board mounting bosses
- Wall mount holes (style A) and cover attaching screws are outside the sealing area (style B) does not have wall mounting holes

NATURAL

Mfg. Part No.	Style	Dimensions (mm) H x W x D	Thickness (mm)	Stock No.	Price Each 1-4	5-9	10-24
AN-1300	B	89.9 x 36.1 x 30	2.79	95F935	6.02	5.62	5.40
AN-1301	A	64 x 57.9 x 35.1	3.3	95F936	6.21	5.80	5.58
AN-1302	A	115.1 x 65 x 30	3.3	95F937	9.14	8.56	8.21
AN-1303	A	115.1 x 65 x 55.1	3.3	95F938	10.90	10.18	9.78
AN-1304	A	115.1 x 89.9 x 55.1	3.3	95F939	12.80	11.98	11.49
AN-1305	B	148.1 x 108 x 74.9	3.3	95F940	22.91	21.43	20.55
AN-1306	B	170.9 x 120.9 x 55.1	3.3	95F941	23.72	22.18	21.28
AN-1307	A	224 x 148.1 x 55.1	3.05	95F942	24.65	23.04	22.10
AN-1308	A	224 x 148.1 x 82.6	3.05	50B1140	30.43	28.44	27.28
AN-1309	A	120.7 x 120.7 x 101.6	3.3	99B1068	27.11	25.34	24.31
AN-1310	A	158.8 x 158.8 x 101.6	3.3	91B9541	30.72	28.71	27.55
AN-1311	A	50 x 45 x 28.4	3.05	49H5766	5.80	5.42	5.20
AN-1312	A	97.8 x 64 x 34.3	3.05	49H5768	8.72	8.15	7.82
AN-1313	A	124.5 x 79.8 x 40.4	3.05	49H5770	12.18	11.38	10.92
AN-1314	A	124.5 x 79.8 x 57.4	3.05	49H5772	14.32	13.38	12.84
AN-1315	A	150.1 x 64 x 36.8	3.81	49H5774	13.63	12.74	12.22
AN-1316	A	159.8 x 99.8 x 60.2	3.05	49H5776	23.67	22.12	21.23
AN-1317	A	159.8 x 99.8 x 81	3.05	49H5778	25.59	23.92	22.95
AN-1318	A	55.6 x 40.9 x 31	1.52	74R3281	6.54	6.11	5.86
AN-1319	A	79.5 x 74.4 x 52.1	1.78	74R3282	11.50	10.75	10.31
AN-1320	A	102.6 x 52.6 x 25.4	1.78	74R3283	7.36	6.88	6.60
AN-1321	A	175 x 80 x 59.9	1.78	74R3284	20.80	19.44	18.65
AN-1322	A	199.9 x 108.5 x 74.9	1.78	74R3285	34.35	32.12	30.80
AN-1323	A	260.1 x 160 x 90.4	1.78	74R3286	39.34	36.77	35.28
GRAY							
AN-1300-G	B	89.9 x 36.1 x 30	2.79	94B0747	10.53	9.85	9.45
AN-1301-G	A	64 x 57.9 x 35.1	3.3	95F6373	10.92	10.21	9.80
AN-1303-G	A	115.1 x 65 x 55.1	3.3	95F6375	16.99	15.88	15.24
AN-1304-G	A	115.1 x 89.9 x 55.1	3.3	95F6376	20.67	19.33	18.54

CONTINUED

DIE-CAST WATERTIGHT ALUMINUM BOXES (CONT.)

GRAY

Mfg. Part No.	Style	Dimensions (mm) H x W x D	Thickness (mm)	Stock No.	Price Each 1-4	5-9	10-24
AN-1305-G	B	148.1 x 108 x 74.9	3.3	95F6377	32.60	30.48	29.23
AN-1306-G	B	170.9 x 120.9 x 55.1	3.3	95F6378	32.98	30.83	29.57
AN-1307-G	A	224 x 148.1 x 55.1	3.05	95F6379	35.79	33.46	32.09
AN-1308-G	A	224 x 148.1 x 82.6	3.05	99B1067	44.54	41.63	39.94
AN-1309-G	A	120.7 x 120.7 x 101.6	3.3	99B1069	35.98	33.63	32.26
AN-1310-G	A	158.8 x 158.8 x 101.6	3.3	99B1070	44.97	42.04	40.33
AN-1314-G	A	124.5 x 79.8 x 57.4	3.05	49H5773	21.77	20.35	19.52
AN-1316-G	A	159.8 x 99.8 x 60.2	3.05	49H5777	32.73	30.60	29.35
AN-1317-G	A	159.8 x 99.8 x 81	3.05	49H5779	37.03	34.62	33.21

ALUMINUM INTERNAL PANELS FOR AN SERIES BOXES

Mfg. Part No.	Dimensions (in.)	Fits Enclosure	Stock No.	Price Each 1-4
ANX-91300	3.07 x 0.95 x 0.06	AN-1300, AN-1300-G, AN-2800, AN-2800-B AN-2850, AN-2850-B	40T7637	5.94
ANX-91301	2.13 x 1.87 x 0.06	AN-1301, AN-1301-G, AN-2801, AN-2801-B AN-2851, AN-2851-B	40T7638	6.05
ANX-91302	4.06 x 2.09 x 0.06	AN-1302, AN-1302-G, AN-2802, AN-2801-N AN-1303, AN-1303-G, AN-2803, AN-2803-B AN-2853, AN-2853-B	40T7639	7.27
ANX-91304	4.04 x 3.05 x 0.06	AN-1304, AN-1304-G, AN-2804, AN-2804-B AN-2854, AN-2854-B	40T7640	7.46
ANX-91305	5.37 x 3.79 x 0.06	AN-1305, AN-1305-G, AN-2805, AN-2805-B AN-2855, AN-2855-B	40T7641	8.39
ANX-91306	6.23 x 4.26 x 0.06	AN-1306, AN-1306-G, AN-2806, AN-2806-B AN-2856, AN-2856-B	40T7642	9.74
ANX-91307	8.3 x 5.3 x 0.06	AN-1307, AN-1307-G, AN-2807, AN-2807-B AN-2857, AN-2857-B, AN-1308, AN-1308-G AN-2808, AN-2808-B, AN-2858, AN-2858-B	40T7643	11.42
ANX-91309	4.02 x 4.02 x 0.06	AN-1309, AN-1309-G, AN-2809, AN-2809-B	40T7644	8.29
ANX-91310	5.52 x 5.52 x 0.06	AN-1310, AN-1310-G, AN-2810, AN-2810-B	40T7645	9.40
ANX-91311	1.7 x 1.5 x 0.06	AN-1311, AN-1311-G, AN-2811, AN-281-B	40T7646	5.51
ANX-91312	3.5 x 2.16 x 0.06	AN-1312, AN-1312-G, AN-2812, AN-2812-N	40T7647	6.38
ANX-91313	4.48 x 2.72 x 0.06	AN-1313, AN-1313-G, AN-2813, AN-2813-B AN-1314, AN-1314-G, AN-2814, AN-2814-B	40T7648	7.46
ANX-91315	5.53 x 2.15 x 0.06	AN-1315, AN-1315-G, AN-2815, AN-2815-B	40T7649	6.81
ANX-91316	5.51 x 3.43 x 0.06	AN-1317, AN-1317-G, AN-2817, AN-2817-B	40T7650	8.32
ANX-91318	1.81 x 1.26 x 0.06	AN-1318, AN-1318-G, AN-2818, AN-2818-B	40T7651	5.51
ANX-91319	2.77 x 2.58 x 0.06	AN-1319, AN-1319-G, AN-2819, AN-2819-B	40T7652	6.81
ANX-91320	3.71 x 1.73 x 0.06	AN-1320, AN-1320-G, AN-2820, AN-2820-B	40T7653	6.16
ANX-91321	6.53 x 2.78 x 0.06	AN-1321, AN-1321-G, AN-2821, AN-2821-B	40T7654	7.78
ANX-91322	7.49 x 4.35 x 0.06	AN-1322, AN-1322-G, AN-2822, AN-2822-B	40T7655	9.08
ANX-91323	9.76 x 5.85 x 0.06	AN-1323, AN-1323-G, AN-2823, AN-2823-B	40T7656	11.02

ACCESSORIES

Mfg. Part No.	Color	Stock No.	Price Each 1-4	5-9	10-24
57-58	PCB Mounting Hardware	74K0837	0.89	0.84	0.81

(6947)

DIE-CAST WATERTIGHT ALUMINUM BOXES WITH MOUNTING BRACKETS

NEMA · RoHS Compliant Available · Bud Industries, Inc.

- NEMA 1, 2, 4, 4X, 12, 13; IP66 of IEC529
- UL listed to UL508-4 requirements (file# E194432)
- ADC-12 aluminum alloy construction
- Excellent screening properties
- Covers incorporate a recessed silicon gasket (included but not installed on black finish boxes) and attach with M4 stainless steel screws
- Internal bosses for mounting PC boards horizontally (most models have internal guides for mounting PCB assemblies vertically)
- Heavy-duty external wall mounting bracket allows for mounting without removal of cover

IP66 c UL us

Natural

NATURAL ALUMINUM FINISH

Mfg. Part No.	Dimensions (mm) H	W	D	Stock No.	Price Each 1-4	5-9	10-24
AN-2804	115.1	89.9	55.1	97H4973	24.80	23.64	22.48
AN-2805	148.1	108	74.9	97H4975	38.09	36.31	34.52
AN-2808	222.3	146.1	82.6	97H4981	47.33	45.11	42.90
AN-2809	120.7	120.7	101.6	97H4983	45.23	43.11	41.00
AN-2810	158.8	158.8	101.6	97H4985	48.33	46.06	43.79
AN-2818	55.6	40.9	31	74R5571	13.25	12.63	12.01
AN-2819	79.5	74.4	52.1	74R5573	19.15	18.26	17.36
AN-2821	175	80	59.9	74R5577	29.96	28.55	27.15
AN-2822	199.9	108.5	74.9	74R5579	43.68	41.64	39.59
AN-2823	260.1	160	90.4	74R5581	53.69	51.18	48.67

CONTINUED

DIE-CAST WATERTIGHT ALUMINUM BOXES WITH MOUNTING BRACKETS (CONT.)

SMOOTH BLACK POWDER-COATED FINISH

Mfg. Part No.	Dimensions (mm) H	W	D	Stock No.	Price Each 1-4	5-9	10-24
AN-2801-B	64	57.9	35.1	97H4968	16.94	16.15	15.35
AN-2803-B	115.1	65	55.1	97H4972	24.60	23.45	22.29
AN-2804-B	115.1	89.9	55.1	97H4974	27.10	25.83	24.56
AN-2805-B	148.1	108	74.9	97H4976	42.62	40.62	38.63
AN-2806-B	170.9	120.9	55.1	97H4978	43.10	41.07	39.06
AN-2807-B	222.3	146.1	55.1	97H4980	50.34	47.98	45.62
AN-2808-B	222.3	146.1	82.6	97H4982	57.12	54.43	51.76
AN-2809-B	120.7	120.7	101.6	97H4984	49.03	46.73	44.43
AN-2820-B	102.6	52.6	25.4	74R5576	24.77	23.61	22.45
AN-2821-B	175	80	59.9	74R5578	40.24	38.36	36.47
AN-2822-B	199.9	108.5	74.9	74R5580	54.88	52.31	49.74
AN-2823-B	260.1	160	90.4	74R5582	67.94	64.75	61.56

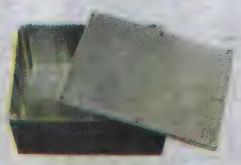
ACCESSORIES

Mfg. Part No.	Color	Stock No.	Price Each 1-4	5-9	10-24
57-58	PCB Mounting Hardware	74K0837	0.89	0.84	0.81

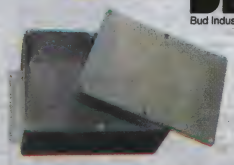
(78561)

DIE-CAST WATERTIGHT ALUMINUM NEMA BOXES

IP65 · NEMA · RoHS Compliant Available · Bud Industries, Inc.



Without Molded-in Flanges



With Molded-in Flanges

- Rugged #ADC-12 alloy die cast aluminum box with NEMA 1, 2, 4, 4X, 12, 13 and IP65 ratings
- Self-adhesive gasket easily attaches to cover
- Cover attaches with 4 or 6 screws for a secure and tight seal
- Many sizes have internal card guides for PC board mounting or partitioning

Available in natural finish, other finishes available. Easily machined and modified for customization, *go online or call.*

Mfg. Part No.	Dimensions (in.) H	W	D	Molded-In Card Guides	Stock No.	Price Each 1-4	5-9
CN-5701	1	2.16	3.15	Yes	79K6001	5.60	5.28
CN-5700	1.22	2.16	2.36	Yes	79K6000	5.23	4.93
CN-5702	1.22	1.38	3.52	No	79K6002	5.05	4.75
CN-5703	1.22	2.5	4.51	No	79K6003	8.04	7.58
CN-5704	2.22	2.5	4.51	No	79K6004	9.48	8.93
CN-5705	2.22	3.57	4.54	No	79K6005	11.02	10.39
CN-5706	1.44	4.73	3.95	Yes	79K6006	10.96	10.33
CN-5707	3.05	4.01	5.47	Yes	79K6007	15.17	14.30
CN-5708	3.05	5.01	6.51	Yes	79K6008	19.92	18.77
CN-5709	2.22	4.77	6.78	No	79K6009	18.15	17.11
CN-5710	4.21	4.77	6.78	No	79K6010	22.70	21.42
CN-5711	2.25	5.74	8.75	No	79K6011	23.83	22.46
CN-5712	4.22	5.74	8.75	No	79K6012	32.47	30.61
CN-5713	4.01	9.85	9.85	Yes	79K6013	56.94	53.67
CN-5714	2.64	6.89	10.81	Yes	79K6014	35.38	33.35

MOLDED-IN MOUNTING FLANGES

Mounting flanges are molded-in, onto the short side of the base for one-piece construction, eliminating separate welded-on plates that could trap fluids. Allows wall or panel mounting without having to remove the cover and expose internal components to the environment.

Mfg. Part No.	Dimensions (in.) H	W	D	Molded-In Card Guides	Stock No.	Price Each 1-4	5-9
CN-6702	3.52	1.38	1.22	Yes	79K6015	6.39	6.07
CN-6703	4.51	2.5	1.22	Yes	79K6016	10.02	9.50
CN-6704	4.51	2.5	2.22	Yes	79K6017	11.97	11.35
CN-6705	4.54	3.57	2.22	Yes	79K6018	12.97	12.30
CN-6707	5.47	4.01	3.05	Yes	79K6020	17.88	16.95
CN-6708	6.51	5.01	3.05	Yes	79K6021	22.66	21.48
CN-6709	6.78	4.77	2.22	Yes	79K6022	21.11	20.01
CN-6710	6.78	4.77	4.21	Yes	79K6023	25.56	24.25
CN-6711	8.75	5.74	2.25	Yes	79K6024	28.38	26.91

(88063)

NEMA ENCLOSURES

DIE-CAST WATERTIGHT ALUMINUM BOX WITH HINGED COVER

IP65 NEMA RoHS Compliant Available Bud Industries, Inc.

- Hinged cover
- External mounting brackets
- NEMA 1, 2, 4, 4X, 12, 13 and IP65
- Available in smooth black powder coat finish
- Offers EMC protection

Hinged cover allows for easy access without risk of damage to cover. External mounting brackets allow the box to be mounted on a wall or panel without having to remove the cover and exposing internal components to the environment. Gasketed cover attaches with screws. Easily machined and modified to your particular requirements. Modifications available; *go online or call.*

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5-9	10-24
● AN-2900	1.98 x 3.04 x 3.95	27K6569	40.42	35.41	33.56
● AN-2901	2.23 x 3.92 x 4.54	27K6570	43.42	38.04	36.06

(84584)

EMI/RFI NEMA BOXES

IP66 NEMA RoHS Compliant Available Bud Industries, Inc.

- One-piece molded outer silicone gasket meets NEMA 4X and IP66 requirements
- Rugged #ADC-12 die cast aluminum alloy
- Thick wall (0.098", 2.5 mm) construction
- Second wire-mesh with sponge rubber gasket provides EMI/RFI protection
- Recessed area on cover surface for decals

ENCLOSURES

Mfg. Part No.	Dimensions (in.) H x W x D	Color	Stock No.	Price Each 1-9	10-99	100-199
● ANS-3803	2.64 x 3.79 x 3.79	Unfinished	89M4545	19.44	16.37	14.61
● ANS-3811	6.81 x 3.94 x 10.79	Unfinished	89M4553	68.26	57.48	51.27
● ANS-3819	5.91 x 2.95 x 7.87	Unfinished	89M4561	55.76	46.96	41.89

(110542)

NON-METALLIC WATERTIGHT BOXES

IP65 NEMA c UL us RoHS Compliant Available Bud Industries, Inc.

- Designed to IP65 of IEC 529 and NEMA 1, 2, 4, 4X, 12, 13
- **PN series** boxes feature a smooth, flush top cover
- **PNR series** boxes feature a recessed area in the top cover for labels, nameplates, keypads, etc.
- Polycarbonate bodies and covers have a UL stabilized UL94V2 flammability rating; suggested service temperature: -40°C to +120°C
- ABS bodies and covers have a UL94-HB flammability rating; suggested service temperature: -40°C to +80°C
- All have wall-mounting holes
- Cable glands available; *go online or call*
- Modifications available; *go online or call*

LIGHT GRAY POLYCARBONATE BODY AND COVERS — Light Gray

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5-9	10-24
● PN-1320	1.38 x 2.28 x 2.56	95F960	8.11	6.81	6.42
● PN-1321	1.57 x 2.56 x 4.53	95F961	11.60	9.75	9.19
● PN-1322	2.17 x 2.56 x 4.53	95F962	12.58	10.57	9.96
● PN-1323	2.17 x 3.54 x 4.53	95F963	14.40	12.11	11.42
● PN-1324	2.17 x 4.76 x 6.73	95F964	20.19	16.97	16.00
● PN-1325	2.17 x 5.75 x 8.74	95F965	26.36	22.16	20.88
● PN-1326	2.17 x 3.15 x 7.68	66F3901	20.19	16.97	16.00
● PN-1328	3.15 x 3.54 x 4.53	66F3904	17.95	15.08	14.22
● PN-1327	3.16 x 4.76 x 6.73	92F2518	22.88	19.25	18.14
● PN-1329	2.95 x 5.75 x 8.74	66F3907	29.61	24.89	23.46
● PN-1331	2.17 x 3.15 x 3.23	52F6535	12.37	10.41	9.80
● PN-1332	2.17 x 3.15 x 6.30	52F6536	16.74	14.07	13.26
● PN-1333	3.35 x 3.15 x 6.30	52F6537	17.72	14.90	14.04
● PN-1334	2.95 x 4.72 x 7.87	52F6538	25.13	21.12	19.91
● PN-1335	10.43 x 7.28 x 3.74	91F3908	41.54	34.92	32.92
● PN-1336	4.72 x 4.72 x 2.36	91F3909	18.04	15.17	14.30
● PN-1337	4.72 x 4.72 x 3.54	91F3910	19.92	16.75	15.77
● PN-1338	6.30 x 6.30 x 2.36	91F3911	25.02	21.04	19.83
● PN-1339	6.30 x 6.30 x 3.54	91F3912	26.67	22.42	21.13
● PN-1340	3.54 x 6.30 x 9.45	91B8157	32.24	27.10	25.54
● PN-1341	4.72 x 6.30 x 9.45	99B1497	40.03	33.64	31.71
● PN-1342	3.39 x 9.06 x 11.81	99B1500	73.78	62.02	58.45
● PN-1343	4.37 x 9.06 x 11.81	99B1503	82.73	69.55	65.55
● PN-1344	5.91 x 7.87 x 14.17	99B1506	100.76	84.70	79.83
● PNR-2600	2.17 x 3.94 x 3.94	77C5283	14.78	12.43	11.78
● PNR-2601	3.54 x 3.94 x 3.94	77C5286	16.52	13.89	13.17
● PNR-2602	2.17 x 4.72 x 3.15	77C5289	15.88	13.35	12.65

➤CONTINUED➤

NON-METALLIC WATERTIGHT BOXES (CONT.)

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5-9	10-24
● PNR-2603	4.72 x 3.15 x 3.35	77C5292	16.76	14.09	13.35
● PNR-2604	3.54 x 7.87 x 4.72	77C5295	24.92	20.95	19.86
● PNR-2605	2.36 x 9.45 x 4.72	77C5298	25.36	21.32	20.22
● PNR-2606	3.94 x 9.45 x 4.72	77C5301	32.29	27.14	25.74
● PNR-2608	2.95 x 7.87 x 5.91	77C5307	25.47	21.41	20.30
LIGHT GRAY POLYCARBONATE BODY AND CLEAR COVERS					
● PN-1320-C	1.38 x 2.28 x 2.56	95F6385	8.37	7.04	6.64
● PN-1321-C	1.57 x 2.56 x 4.53	95F6386	12.06	10.14	9.57
● PN-1322-C	2.17 x 2.56 x 4.53	95F6387	12.77	10.73	10.12
● PN-1323-C	2.17 x 3.54 x 4.53	95F6388	15.11	12.71	11.97
● PN-1324-C	2.17 x 4.76 x 6.73	95F6389	20.83	17.51	16.51
● PN-1325-C	2.17 x 5.75 x 8.74	95F6390	27.46	23.08	21.75
● PN-1326-C	2.17 x 3.15 x 7.68	66F3902	19.46	16.36	15.42
● PN-1327-C	3.16 x 4.76 x 6.73	92F2519	23.15	19.47	18.34
● PN-1329-C	2.95 x 5.75 x 8.74	66F3908	30.50	25.64	24.16
● PN-1331-C	2.17 x 3.15 x 3.23	52F6540	12.51	10.51	9.90
● PN-1332-C	2.17 x 3.15 x 6.30	52F6541	17.06	14.34	13.52
● PN-1334-C	2.95 x 4.72 x 7.87	52F6543	25.76	21.65	20.41
● PN-1335-C	10.43 x 7.28 x 3.74	91F3913	40.35	33.91	31.96
● PN-1337-C	4.72 x 4.72 x 3.54	91F3915	19.78	16.63	15.68
● PN-1338-C	6.30 x 6.30 x 2.36	91F3916	25.02	21.04	19.83
● PN-1339-C	6.30 x 6.30 x 3.54	91F3917	27.05	22.74	21.43
● PN-1340-C	3.54 x 6.30 x 9.45	99B1495	31.78	26.72	25.19
● PN-1341-C	9.45 x 6.30 x 4.72	99B1498	39.16	32.91	31.02
● PN-1342-C	3.39 x 9.06 x 11.81	99B1501	74.50	62.62	59.02
● PNR-2602-C	2.17 x 4.72 x 3.15	77C5290	15.88	13.35	12.65
DARK GRAY ABS PLASTIC BODY AND COVERS					
● PN-1320-DG	1.38 x 2.28 x 2.56	95F6391	6.46	5.43	5.13
● PN-1321-DG	1.57 x 2.56 x 4.53	95F6392	8.32	7.01	6.61
● PN-1322-DG	2.17 x 2.56 x 4.53	95F6393	9.31	7.83	7.38
● PN-1323-DG	2.17 x 3.54 x 4.53	95F6394	11.06	9.31	8.77
● PN-1324-DG	2.17 x 4.76 x 6.73	95F6395	16.01	13.46	12.68
● PN-1325-DG	2.17 x 5.75 x 8.74	95F6396	21.96	18.46	17.40
● PN-1326-DG	2.17 x 3.15 x 7.68	66F3903	13.37	11.25	10.59
● PN-1327-DG	3.16 x 4.76 x 6.73	92F2520	15.81	13.28	12.53
● PN-1328-DG	3.15 x 3.54 x 4.53	66F3906	11.92	10.02	9.45
● PN-1329-DG	2.95 x 5.75 x 8.74	66F3909	19.56	16.44	15.50
● PN-1331-DG	2.17 x 3.15 x 3.23	52F6545	8.70	7.31	6.90
● PN-1332-DG	2.17 x 3.15 x 6.30	52F6546	12.91	10.86	10.23
● PN-1333-DG	3.35 x 3.15 x 6.30	52F6547	13.96	11.73	11.06
● PN-1334-DG	2.95 x 4.72 x 7.87	52F6548	18.81	15.81	14.90
● PN-1335-DG	10.43 x 7.28 x 3.74	91F3918	31.49	26.47	24.96
● PN-1336-DG	4.72 x 4.72 x 2.36	91F3919	13.26	11.15	10.51
● PN-1337-DG	4.72 x 4.72 x 3.54	91F3920	13.96	11.73	11.06
● PN-1339-DG	6.30 x 6.30 x 3.54	91F3922	20.57	17.29	16.29
● PN-1340-DG	3.54 x 6.30 x 9.45	99B1496	25.67	21.58	20.34
● PN-1341-DG	4.72 x 6.30 x 9.45	99B1499	29.21	24.56	23.14
● PN-1342-DG	3.39 x 9.06 x 11.81	99B1502	46.99	39.50	37.23
● PN-1343-DG	4.37 x 9.06 x 11.81	99B1505	50.84	42.73	40.29
● PN-1344-DG	5.91 x 7.87 x 14.17	99B1508	58.97	49.57	46.72
● PNR-2601-DG	3.54 x 3.94 x 3.94	77C5288	14.68	12.34	11.70
● PNR-2604-DG	3.54 x 7.87 x 4.72	77C5297	18.70	15.72	14.90
● PNR-2606-DG	3.94 x 9.45 x 4.72	77C5303	19.68	16.54	15.69
● PNR-2608-DG	2.95 x 7.87 x 5.91	77C5309	18.38	15.45	14.65

EXTERNAL MOUNTING BRACKETS

External mounting brackets mount to **PN Series** non-metallic NEMA boxes. Allow box to be mounted to a wall or panel without removing the sealed cover. 4 molded brackets attach to the bottom of the box. Includes nylon ¼ attachment screws. **Sold in packages of 4.**

Mfg. Part No.	Description	Stock No.	Price per Pkg. 1-4	5-9	10-24
● MB-1390-LG	Mounting brackets, light gray	91F3923	2.16	1.78	1.62
● MB-1390-DG	Mounting brackets, dark gray	91F3924	2.16	1.78	1.62

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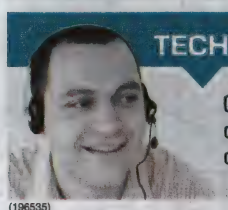
TECHNICAL SUPPORT HOTLINE



Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

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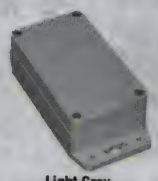
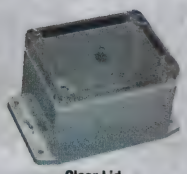
ABS PLASTIC NEMA 4X BOX W/ EXTERNAL MTG. BRACKET

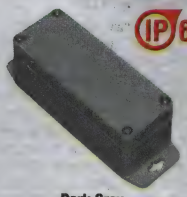
UL NEMA RoHS Compliant Available Bud Industries, Inc. IP66



Light Gray



Clear Lid



Dark Gray

- Designed to IP66 of IEC 529 and NEMA 1, 2, 4, 4x, 12, and 13 specifications
- Integrally molded external mounting brackets allow the box to be wall or panel mounted
- Cover attaching screws are outside the sealing area thus preventing ingress of moisture and dust
- Most models have internal guide slots for mounting PCB assemblies vertically
- Internal bosses allow moutning of PCBs horizontally (except PN-1320 and PN-1330)
- Cover screws are M-4 stainless steel, non-magnetic
- Gasket material: silicon sponge

POLYCARBONATE

Light Gray						Clear Lid		
Dimensions (in.)			Mfg. Part No.	Stock No.	Price Each	Mfg. Part No.	Stock No.	Price Each
H	W	D			1-4			1-4
2.52	2.28	1.38	PN-1320-MB	40T8036	7.94	PN-1320-CMB	40T8034	7.94
4.53	2.56	1.58	PN-1321-MB	40T8039	11.48	PN-1321-CMB	40T8037	11.48
4.53	2.56	2.17	PN-1322-MB	40T8042	11.88	PN-1322-CMB	40T8040	11.88
4.53	3.54	2.17	PN-1323-MB	40T8045	13.52	PN-1323-CMB	40T8043	13.52
6.73	4.76	2.17	PN-1324-MB	40T8048	22.20	PN-1324-CMB	40T8046	21.94
8.74	5.75	2.17	PN-1325-MB	40T8051	28.79	PN-1325-CMB	40T8049	28.79
6.73	4.76	3.15	PN-1327-MB	40T8054	23.63	PN-1327-CMB	40T8052	23.91
4.53	3.54	3.15	PN-1328-MB	40T8057	15.37	PN-1328-CMB	40T8055	15.55
8.74	5.75	2.95	PN-1329-MB	40T8060	30.83	PN-1329-CMB	40T8058	31.14
3.17	1.99	1.38	PN-1330-MB	48X9624	7.89	PN-1330-CMB	48X9622	8.16
4.31	3.28	2.17	PN-1331-MB	48X9627	14.94	PN-1331-CMB	48X9625	15.05
7.46	3.21	2.17	PN-1332-MB	48X9630	20.86	PN-1332-CMB	48X9628	20.98
7.50	3.25	3.35	PN-1333-MB	48X9633	21.57	PN-1333-CMB	48X9631	21.69
5.87	4.77	2.36	PN-1336-MB	48X9636	22.05	PN-1336-CMB	48X9634	22.28
5.91	4.81	3.54	PN-1337-MB	48X9639	21.72	PN-1337-CMB	48X9637	21.83

ABS

Dark Gray					
Dimensions (in.)			Mfg. Part No.	Stock No.	Price Each
H	W	D			1-4
2.52	2.28	1.38	PN-1320-DGMB	40T8035	6.43
4.53	2.56	1.58	PN-1321-DGMB	40T8038	8.58
4.53	2.56	2.17	PN-1322-DGMB	40T8041	9.12
4.53	3.54	2.17	PN-1323-DGMB	40T8044	10.19
6.73	4.76	2.17	PN-1324-DGMB	40T8047	15.45
8.74	5.75	2.17	PN-1325-DGMB	40T8050	19.62
6.73	4.76	3.15	PN-1327-DGMB	40T8053	16.73
4.53	3.54	3.15	PN-1328-DGMB	40T8056	12.22
8.74	5.75	2.95	PN-1329-DGMB	40T8059	20.56
3.17	1.99	1.38	PN-1330-DGMB	48X9623	6.84
4.31	3.28	2.17	PN-1331-DGMB	48X9626	12.37
7.46	3.21	2.17	PN-1332-DGMB	48X9629	14.94
7.50	3.25	3.35	PN-1333-DGMB	48X9632	15.76
5.87	4.77	2.36	PN-1336-DGMB	48X9635	16.12
5.91	4.81	3.54	PN-1337-DGMB	48X9638	17.19

INTERNAL ALUMINUM PANELS FOR PN AND PNR SERIES BOXES

Mfg. Part No.	Length x Width x Thickness (in.)	Fits Enclosures	Stock No.	Price Each 1-4
PNX-91420	2.17 x 1.93 x 0.06	PN-1320, PN-1320-DG, -C, -MB, DGMB	40T8061	6.27
PNX-91421	4.06 x 2.09 x 0.06	PN-1321, PN-1321-DG, -C, -MB, DGMB PN-1322, PN-1322-DG, -C, -MB, DGMB	40T8062	7.83
PNX-91423	4.02 x 3.03 x 0.06	PN-1323, PN-1323-DG, -C, -MB, DGMB	40T8063	7.95
PNX-91424	6.26 x 4.29 x 0.06	PN-1324, PN-1324-DG, -C, -MB, DGMB	40T8064	9.40
PNX-91425	8.27 x 5.27 x 0.06	PN-1325, PN-1325-DG, -C, -MB, DGMB	40T8065	10.86
PNX-91426	7.32 x 2.8 x 0.06	PN-1326, PN-1326-DG, -C, -MB, DGMB	40T8066	9.29
PNX-91430	1.71 x 1.63 x 0.06	PN-1330, PN-1330-DG, -C	40T8070	5.51
PNX-91431	2.87 x 2.8 x 0.06	PN-1331, PN-1331-DG, -C	40T8071	6.92
PNX-91432	5.91 x 2.76 x 0.06	PN-1332, PN-1332-DG, -C PN-1333, PN-1333-DG, -C	40T8072	7.83
PNX-91434	7.41 x 4.35 x 0.06	PN-1334, PN-1334-DG, -C	40T8073	9.41
PNX-91435	10.02 x 6.87 x 0.06	PN-1335, PN-1335-DG, -C	40T8074	13.77
PNX-91436	4.29 x 4.29 x 0.06	PN-1336, PN-1336-DG, -C PN-1337, PN-1337-DG, -C	40T8075	7.78
PNX-91438	5.87 x 5.87 x 0.06	PN-1338, PN-1338-DG, -C PN-1339, PN-1339-DG, -C	40T8076	9.51
PNX-91440	8.98 x 5.83 x 0.06	PN-1340, PN-1340-DG, -C PN-1341, PN-1341-DG, -C	40T8077	11.95

➤CONTINUED➤

ABS PLASTIC NEMA 4X BOX W/ EXTERNAL MTG. BRACKET (CONT.)

Mfg. Part No.	Length x Width x Thickness (in.)	Fits Enclosures	Stock No.	Price Each 1-4
PNX-91442	11.37 x 8.62 x 0.06	PN-1342, PN-1342-DG, -C PN-1343, PN-1343-DG, -C	40T8078	15.71
PNX-91444	13.65 x 7.35 x 0.06	PN-1344, PN-1344-DG, -C	40T8079	16.01
PNX-92600	3.58 x 3.58 x 0.06	PNR-2600, PNR-2600-DG, -C PNR-2601, PNR-2601-DG, -C	40T8080	7.24
PNX-92602	4.37 x 2.8 x 0.06	PNR-2602, PNR-2602-DG, -C PNR-2603, PNR-2603-DG, -C	40T8081	7.24
PNX-92605	9.07 x 4.36 x 0.06	PNR-2605, PNR-2605-DG, -C	40T8083	9.41
PNX-92607	7.52 x 5.55 x 0.06	PNR-2607, PNR-2607-DG, -C PNR-2608, PNR-2608-DG, -C	40T8084	9.51

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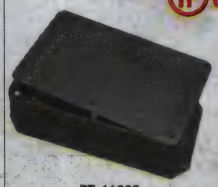
NEMA 4X PLASTIBOXES™ STYLE J

IP65 NEMA RoHS Compliant Available Bud Industries, Inc.



PT-11800

PT-11801

- Meets NEMA 4X and IP65 specifications
- Made from flame retardant black ABS plastic with UL94-5VA flammability rating
- Easily removable cover screws into threaded brass inserts in base
- 8 PC board mounting bosses in base (**PT-11801** has 6 extra mounting bosses inside elevated cover)
- Molded in flanges allow easy wall or panel mounting
- Finish is textured matte black

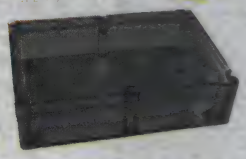
Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5-9	10-24
PT-11800	3.00 x 5 x 8.25	89M4571	23.92	19.89	17.89
PT-11801	4.33 x 5 x 8.25	89M4572	24.93	20.73	18.64

(110545)

POLYCARBONATE WATERTIGHT NEMA ENCLOSURES

IP65 NEMA RoHS Compliant Available Bud Industries, Inc.

- Meets NEMA 1, 2, 4, 4X, 12, and 13, IEC52/IP65 and UL508-4X
- UL94-V2 flammability rating
- Suitable for wet, dry, and/or corrosive environments
- Cover sealed with silicon gasket
- Transparent blue finish



Suitable as PC board enclosures, junction boxes, and other applications that require monitoring of internal components without the need for removing the cover. Wall mounting holes and cover attaching screws are outside the sealing area, thus preventing ingress of moisture and dust.

Mfg. Part No.	Dimensions (in.) H	W	D	Stock No.	Price Each 1-9	10-49	50-99
BT-2723	4.53	3.54	2.17	34M1888	15.69	13.19	11.74
BT-2724	6.73	4.76	2.17	34M1889	23.15	19.47	17.34
BT-2725	8.74	5.75	2.17	34M1890	30.25	25.43	22.65
BT-2734	7.87	4.72	2.95	34M1892	26.16	22.00	19.59
BT-2740	9.45	6.30	3.54	34M1893	36.71	30.86	27.49
BT-2742	11.81	9.06	3.39	34M1894	83.61	70.28	62.61

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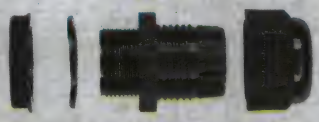
CABLE GLANDS

RoHS Compliant Available Bud Industries, Inc.



Assembly consists of black molded nylon body, hex nut, cable nut and a rubber gasket and cable seal. Cable seal maintains NEMA rating for cable entry or exit. Nylon material has UL94V-2 flammability rating and -40°C to +100°C suggested service temperature. Use cable glands with any Bud NEMA boxes.

Mfg. Part No.	Mounting Size	Mounting Hole Diameter (in.)	Cable Range (in.)	Stock No.	Price Each 1-4	5-9	10-24
NG-9511	PG-7	0.50	0.12 - 0.26	83F3332	1.87	1.60	1.54
NG-9512	PG-9	0.61	0.16 - 0.31	83F3333	1.87	1.60	1.54
NG-9513	PG-11	0.73	0.20 - 0.39	83F3334	1.98	1.70	1.63
NG-9514	PG-13.5	0.81	0.24 - 0.47	83F3335	2.53	2.17	2.09
NG-9515	PG-16	0.89	0.39 - 0.55	83F3336	2.75	2.35	2.27

➤CONTINUED➤

NEMA ENCLOSURES

CABLE GLANDS (CONT.)

Mfg. Part No.	Mounting Size	Mounting Hole Diameter (in.)	Cable Range (in.)	Stock No.	Price Each 1-4	5-9	10-24
● NG-9516	PG-21	1.12	0.51 - 0.71	25B6420	3.52	3.01	2.90
● NG-9517	PG-29	1.47	0.71 - 0.98	25B6421	7.89	6.74	6.49

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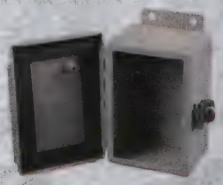
SMALL ENCLOSURES (CLAMPED HINGED COVER)

NEMA · RoHS Compliant Available · HAMMOND MANUFACTURING · IP65 · UL · CSA



- NEMA 12 & 13; IP65
- Rugged enclosures feature external screw clamps on 3 sides and continuous hinged cover
- Includes inner panel (except where noted); white powder paint
- Protection against dirt and dust
- Watertight, oil- and petroleum-resistant protection
- Finished in ANSI 61 gray recoatable powder paint

Suitable for transformer or instrument housings. Use as electrical junction and terminal boxes, to mount pneumatic or hydraulic instruments, or as control tubing junction point.

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each Each	2-4	5-9
● 1414PHA*	4 x 4 x 3	90F9588	54.94	53.58	50.06
● 1414PHC4	6 x 4 x 4	90F9593	72.33	70.54	65.92
● 1414PHC	6 x 4 x 3	90F9589	68.75	67.06	62.65
● 1414PHE	6 x 6 x 4	90F9594	75.91	74.04	69.18
● 1414PHG6	8 x 6 x 6	90F9601	96.89	94.50	88.30
● 1414PHG	8 x 6 x 3.5	90F9590	83.62	81.56	76.21
● 1414PHH4	8 x 8 x 4	90F9595	94.26	91.93	85.90
● 1414PHI	10 x 8 x 4	90F9596	104.00	101.44	94.78
● 1414PHI6	10 x 8 x 6	90F9602	113.42	110.63	103.36
● 1414PHJ6	10 x 10 x 6	90F9603	128.82	125.64	117.40
● 1414PHRK	10 x 12 x 5	90F9600	132.67	129.40	120.90
● 1414PHK	12 x 10 x 5	90F9599	132.83	129.56	121.05
● 1414PHK8	12 x 10 x 8	90F9611	160.36	156.41	146.14
● 1414PHL6	12 x 12 x 6	90F9604	154.78	150.96	141.05
● 1414PHMH6	14 x 8 x 6	90F9605	141.90	138.40	129.32
● 1414PHM6	14 x 12 x 6	90F9606	169.73	165.55	154.69
● 1414PHM8	14 x 12 x 8	90F9612	187.62	183.00	170.98
● 1414PHR06	14 x 16 x 6	90F9610	200.70	195.76	182.91
● 1414PHN6	16 x 10 x 6	90F9608	170.98	166.77	155.82
● 1414PHO6	16 x 14 x 6	90F9609	197.67	192.80	180.14
● 1414PHO8	16 x 14 x 8	90F9613	220.24	214.81	200.71

*Inner panel not included
(6974)

SMALL NEMA ENCLOSURES (CLAMPED HINGED COVER)

RoHS Compliant Available · HAMMOND MANUFACTURING · UL · CSA · NEMA

- NEMA 4, 12 & 13 rated
- Rugged enclosures feature external screw clamps on 3 sides and continuous hinged cover
- Includes inner panel (except where noted); white powder paint
- Protection against dirt and dust
- Watertight, oil- and petroleum-resistant protection
- Finished in ANSI 61 gray recoatable powder paint

Suitable for transformer or instrument housings. Use as electrical junction and terminal boxes, to mount pneumatic or hydraulic instruments, or as control tubing junction point.

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5-9	10-14
● 1414N4PHA	4 x 4 x 3	90F9615	70.93	68.66	65.24
● 1414N4PHC	6 x 4 x 3	90F9616	90.26	85.11	79.97
● 1414N4PHE	6 x 6 x 4	90F9618	102.44	96.60	90.76
● 1414N4PHI	10 x 8 x 4	90F9619	135.58	127.86	120.13
● 1414N4PHI6	10 x 8 x 6	90F9621	152.63	143.93	135.23
● 1414N4PHK	12 x 10 x 5	90F9620	174.30	164.36	154.43
● 1414N4PHL6	12 x 12 x 6	90F9622	180.75	170.45	160.15
● 1414N4PHM6	14 x 12 x 6	90F9623	220.09	207.54	195.00
● 1414N4PHM8	14 x 12 x 8	90F9625	239.47	225.82	212.17

(116718)

SMALL NEMA 4, 12 & 13 ENCLOSURES (QUARTER TURN LATCH HINGED COVER)

NEMA · RoHS Compliant Available · HAMMOND MANUFACTURING · UL · CSA

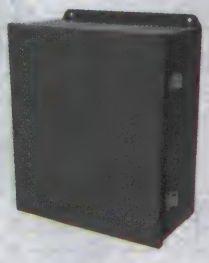
- 16-gauge steel body and door
- Unpainted, galvanized steel inner panel included
- Continuously welded seams, formed lip on door and enclosure to exclude flowing liquids
- Continuously hinged door has 304 stainless steel hinges and provides 180° opening
- Bonding stud on door and ground stud in enclosure
- Permanently secured oil-resistant gasket with retainers
- Door features quarter turn latch formed from black zinc diecast
- Finished in recoatable ANSI/ASA61 gray powder paint

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each Each	2-4	5-9
● EJ443	4 x 4 x 3	89C5007	52.43	48.84	45.81
● EJ444	4 x 4 x 4	89C5008	56.11	52.27	49.03
● EJ643	6 x 4 x 3	84C9843	63.51	59.16	55.49
● EJ644	6 x 4 x 4	89C5009	66.66	62.10	58.24
● EJ664	6 x 6 x 4	84C9844	70.00	65.21	61.16
● EJ863	8 x 6 x 3.5	84C9845	78.77	73.39	68.82
● EJ866	8 x 6 x 6	89C5012	87.60	81.61	76.54
● EJ884	8 x 8 x 4	73C4845	85.95	80.07	75.10
● EJ8104	8 x 10 x 4	89C5011	95.28	88.76	83.24
● EJ1084	10 x 8 x 4	72C9444	95.13	88.62	83.11
● EJ1086	10 x 8 x 6	84C9839	107.51	100.15	93.93
● EJ10106	10 x 10 x 6	89C4998	120.03	111.82	104.87
● EJ1264	12 x 6 x 4	72C9447	86.06	80.16	75.18
● EJ12105	12 x 10 x 5	73C1672	119.91	111.71	104.77
● EJ12108	12 x 10 x 8	89C5000	145.91	135.92	127.48
● EJ12126	12 x 12 x 6	84C9840	127.40	118.68	111.31
● EJ12146	12 x 14 x 6	73C0918	155.44	144.80	135.80
● EJ1486	14 x 8 x 6	89C5003	142.85	133.08	124.81
● EJ14126	14 x 12 x 6	84C9841	151.55	141.18	132.41
● EJ14128	14 x 12 x 8	89C5001	176.07	164.03	153.83
● EJ16106	16 x 10 x 6	89C5004	154.59	144.02	135.07
● EJ16146	16 x 14 x 6	84C9842	179.97	167.66	157.24
● EJ16148	16 x 14 x 8	89C5006	198.87	185.27	173.76
● EJ161410	16 x 14 x 10	89C5005	211.66	197.18	184.93

(116719)

MILD STEEL TYPE 4 AND 12 JUNCTION BOXES

NEW · RoHS Compliant Available · HAMMOND MANUFACTURING · IP66 · UL · CSA · CE



- Body 16 or 14 gauge steel. Covers are 14 gauge steel.
- Smooth, continuously welded seams without knockouts, cutouts or holes
- Welded brackets provide for enclosure mounting
- Continuous hinged cover is secured with stainless steel clamps and screws
- Stainless steel continuous hinge on door may be removed by pulling the stainless steel hinge pin
- Seamless poured-in place gasket
- Internal threaded weld studs are provided for mounting inner panels
- A bonding stud is provided on the door and a grounding stud is provided in the enclosure
- Finish: recoatable smooth ANSI 61 gray powder coating

Designed for use as instrument enclosures, electric, hydraulic or pneumatic control housings, electrical junction boxes or terminal wiring enclosures. Provides protection where equipment may be hosed down or otherwise be very wet, or in outdoor applications for full weather protection.

Mfg. Part No.	Dimensions H x W x D (in.)	Gauge Body	Gauge Door	Stock No.	Price Each 1-24
● HJ443HLP	4 x 4 x 3	16	14	01X3372	55.07
● HJ444HLP	4 x 4 x 4	16	14	01X3373	57.45
● HJ643HLP	6 x 4 x 3	16	14	01X3374	63.08
● HJ644HLP	6 x 4 x 4	16	14	01X3375	66.65
● HJ664HLP	6 x 6 x 4	14	14	01X3376	71.44
● HJ683HLP	6 x 8 x 3.5	14	14	01X3377	75.91
● HJ8104HLP	8 x 10 x 4	14	14	01X3378	93.38
● HJ863HLP	8 x 6 x 3.5	14	14	01X3379	75.91
● HJ866HLP	8 x 6 x 6	14	14	01X3380	90.07
● HJ884HLP	8 x 8 x 4	14	14	01X3381	88.88
● HJ10106HLP	10 x 10 x 6	14	14	01X3355	120.07
● HJ10125HLP	10 x 12 x 5	14	14	01X3356	119.54
● HJ1084HLP	10 x 8 x 4	14	14	01X3357	94.25
● HJ1086HLP	10 x 8 x 6	14	14	01X3358	106.31
● HJ12105HLP	12 x 10 x 5	14	14	01X3359	120.65
● HJ12108HLP	12 x 10 x 8	14	14	01X3360	147.04
● HJ12126HLP	12 x 12 x 6	14	14	01X3361	143.80

➤CONTINUED➤

MILD STEEL TYPE 4 AND 12 JUNCTION BOXES (CONT.)

Mfg. Part No.	Dimensions H x W x D (in.)	Gauge Body	Gauge Door	Stock No.	Price Each 1-24
HJ12146HLP	12 x 14 x 6	14	14	01X3362	150.98
HJ1264HLP	12 x 6 x 4	14	14	01X3363	96.91
HJ14126HLP	14 x 12 x 6	14	14	01X3364	156.14
HJ14128HLP	14 x 12 x 8	14	14	01X3365	174.78
HJ14166HLP	14 x 16 x 6	14	14	01X3366	177.86
HJ1486HLP	14 x 8 x 6	14	14	01X3367	129.24
HJ16106HLP	16 x 10 x 6	14	14	01X3368	154.14
HJ161410HLP	16 x 14 x 10	14	14	01X3369	208.72
HJ16146HLP	16 x 14 x 6	14	14	01X3370	179.59
HJ16148HLP	16 x 14 x 8	14	14	01X3371	188.39

(211393)

EXTRUDED ALUMINUM ENCLOSURES WITH METAL END PANELS

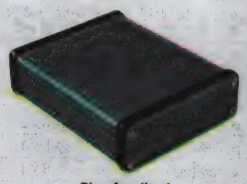
NEW

RoHS Compliant Available

HAMMOND MANUFACTURING

Features:

- Designed to house PC boards or for equipment interfacing
- Sized for standard Eurocards
- PC boards mount horizontally by sliding into internal slots extruded into the enclosure body.
- Rugged body constructed from extruded aluminum with a minimum thickness of .06" (1.5 mm).
- Extruded body includes a slide removable "belly" plate - except in smaller "C" & "D" sizes (ie..1455D601, 1455D801, 1455C801 & 1455C1201 sizes)



Blue Anodized

Includes:

- Two aluminum end panels - finish matched to extruded aluminum body
- Two black ABS plastic bezels (your option to install)
- Extruded aluminum body - choice of clear, black or blue anodized finish
- Self adhesive rubber feet
- All hardware - end panel screws are #6 x ⅜" TTT - thread rolling, steel screws with a #4 flat head phillips drive. Zinc plate finish - either clear or black (black screws are used on the both the black & blue models).
- For black replacement screws (quantity 100) *order* **mfg. part no. 1455MS100BK**; *go online or call*
- For clear replacement screws (quantity 100) *order* **mfg. part no. 1455MS100**; *go online or call*
- NOTE: Recommended screw torque is 5 lbf/in

Mfg. Part No.	Dimensions H x W x D (in.)	Stock No.	Price Each 1-99	100-249
1455A802BU	0.472 x 2.756 x 3.19	06X3874	13.02	13.02
1455A1002BU	0.472 x 2.756 x 3.976	06X3872	12.40	12.40
1455A1202BU	0.472 x 2.756 x 4.764	06X3873	13.06	13.06
1455B802BU	0.754 x 2.824 x 3.19	06X3877	12.45	12.45
1455B1002BU	0.754 x 2.824 x 3.976	06X3875	13.20	13.20
1455B1202BU	0.754 x 2.824 x 4.764	06X3876	13.99	13.99
1455C801BU	0.906 x 2.126 x 3.15	06X3880	18.32	18.32
1455C1201BU	0.906 x 2.126 x 4.724	06X3879	19.68	19.68
1455D601BU	0.906 x 1.673 x 2.362	06X3882	16.83	16.83
1455D801BU	0.906 x 1.673 x 3.15	06X3883	17.35	17.35
1455J1201BU	0.945 x 3.071 x 4.724	06X3885	24.83	24.83
1455J1601BU	0.945 x 3.071 x 6.299	06X3886	26.62	26.62
1455K1201BU	1.575 x 3.071 x 4.724	06X3888	25.58	25.58
1455K1601BU	1.575 x 3.071 x 6.3	06X3889	27.33	27.33
1455L1201BU	1.085 x 4.055 x 4.724	06X3891	27.03	27.03
1455L1601BU	1.081 x 4.055 x 6.3	06X3892	30.62	30.62
1455L2201BU	1.081 x 4.055 x 8.661	06X3893	34.98	34.98
1455N1201BU	1.967 x 4.055 x 4.724	06X3895	27.03	27.03
1455N1601BU	1.963 x 4.055 x 6.3	06X3896	30.62	30.62
1455N2201BU	1.967 x 4.055 x 8.661	06X3897	34.98	34.98
1455P1601BU	1.041 x 4.921 x 6.3	06X3899	31.65	31.65
1455P2201BU	1.041 x 4.921 x 8.661	06X3900	35.18	35.18
1455Q1601BU	1.873 x 4.921 x 6.3	06X3902	35.33	35.33
1455Q2201BU	1.873 x 4.921 x 8.661	06X3903	39.44	39.44
1455R1601BU	1.201 x 6.5 x 6.3	06X3905	35.82	35.82
1455R2201BU	1.201 x 6.5 x 8.661	06X3906	39.76	39.76
1455T1601BU	2.028 x 6.5 x 6.3	06X3908	36.51	36.51
1455T2201BU	2.028 x 6.5 x 8.661	06X3909	40.55	40.55

ALUMINIUM BLUE END PLATES
Sold in packages of 10.

Mfg. Part No.	For Use With Enclosure	Stock No.	Price per Pkg. 1-49	50-99
1455CALBU-10	1455C801, 1455C1201	06X3878	14.72	14.72
1455DALBU-10	1455D601, 1455D801	06X3881	26.02	26.02
1455JALBU-10	1455J1201, 1455J1601	06X3884	14.72	14.72
1455KALBU-10	1455K1201, 1455K1601	06X3887	14.72	14.72
1455LALBU-10	1455L1201, 1455L1601, 1455L2201	06X3890	23.56	23.56
1455NALBU-10	1455N1201, 1455N1601, 1455N2201	06X3894	23.56	23.56
1455PALBU-10	1455P1601, 1455P2201	06X3898	29.39	29.39
1455QALBU-10	1455Q1601, 1455Q2201	06X3901	29.39	29.39

CONTINUED

EXTRUDED ALUMINUM ENCLOSURES WITH METAL END PANELS (CONT.)

ALUMINIUM BLUE END PLATES

Mfg. Part No.	Dimensions H x W x D (in.)	Stock No.	Price Each 1-99	100-249
1455RALBU-10	1455R1601, 1455R2201	06X3904	48.10	48.10
1455TALBU-10	1455T1601, 1455T2201	06X3907	48.10	48.10

OPEN BEZELS-TRANSPARENT BLUE
Sold in packages of 2 or 10.

Mfg. Part No.	For Use With Enclosure	Stock No.	Price per Pkg. 1-99	100-249
1455QBTBU, Pk. 2	1455Q1601, 1455Q2201	61K2188	11.16	11.16
1455QBTBU-10	1455Q1601, 1455Q2201	61K2189	34.75	34.75
CLOSED BEZEL-TRANSPARENT BLUE				
1455QPLTBU, Pk. 2	1455Q1601, 1455Q2201	61K2200	11.44	11.44
1455QPLTBU-10	1455Q1601, 1455Q2201	61K2201	37.41	37.41

(211415)

SMALL STAINLESS STEEL NEMA ENCLOSURES (HINGED COVER)

RoHS Compliant Available

HAMMOND MANUFACTURING

- NEMA 3R, 4, 4X, 12 & 13 rated
- Rugged enclosures feature external screw clamps on 3 sides and continuous hinged cover
- Includes inner panel; white powder paint
- Protection against dirt and dust
- Watertight, oil- and petroleum-resistant protection

Suitable for transformer or instrument housings. Use as electrical junction and terminal boxes, to mount pneumatic or hydraulic instruments, or as control tubing junction point.

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each Each	2-4	5-9
1414N4PHSSE	6 x 6 x 4	93B4143	297.02	280.09	261.63
1414N4PHSSI	10 x 8 x 4	90F9631	409.28	385.96	360.51
1414N4PHSSK	12 x 10 x 5	90F9632	558.04	526.24	491.54
1414N4PHSSL6	12 x 12 x 6	90F9633	618.26	583.02	544.58

(88578)

SMALL STAINLESS STEEL NEMA ENCLOSURES (QUARTER TURN LATCH HINGED COVER)

NEMA

RoHS Compliant Available

HAMMOND MANUFACTURING

IP66

- NEMA 3R, 4, 4X, 12 & 13 rated
- 304 Stainless steel body and door
- Unpainted galvanized steel inner panel included
- Continuously welded seams, formed lip on door and enclosure to exclude flowing liquids
- Continuously hinged door has 304 stainless steel hinges and provides 180° opening
- Bonding stud on door and ground stud in enclosure
- Permanently secured oil-resistant gasket with retainers
- Door features quarter turn latches formed from 316 stainless steel

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each Each	2-4	5-9
EJ664SS	6 x 6 x 4	32H7245	269.67	254.46	237.86
EJ863SS	8 x 6 x 3.5	50H3920	300.32	283.38	264.90
EJ1084SS	10 x 8 x 4	50H3912	374.26	353.16	330.12
EJ12105SS	12 x 10 x 5	50H3913	485.42	458.04	428.16
EJ12126SS	12 x 12 x 6	50H3914	550.43	519.38	485.51
EJ16146SS	16 x 14 x 6	50H3918	716.98	676.54	632.41

(116732)

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(196545)

NEMA ENCLOSURES

SMALL NEMA 12 & 13 LIFT-OFF COVER ENCLOSURES

NEMA · RoHS Compliant Available · HAMMOND MANUFACTURING

- NEMA 12 & 13 rated
- Rugged enclosures feature external screw clamps and lift-off cover
- Inner panel (except where noted) and plated lid chain
- Smooth, continuously welded seams
- Enclosure grounding stud
- Welded wall mount brackets
- Permanently secured oil-resistant gasket
- Formed from 14-gauge or 16-gauge steel
- Enclosures finished in recoatable ASA 61 gray powder paint and panels finished in white powder paint

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each Each	2-4	5-9
● 1414A*	4 x 4 x 3	99F6085	56.46	47.93	44.35
● 1414C	6 x 4 x 3	99F6086	68.69	58.31	53.95
● 1414E	6 x 6 x 4	83F8941	77.90	66.12	61.18
● 1414G	8 x 6 x 3.5	83F8942	85.71	72.75	67.31
● 1414I	10 x 8 x 4	88F2065	106.77	90.62	83.86

*Inner panel not included
(34285)

SMALL NEMA 12 & 13 SCREW COVER ENCLOSURES

RoHS Compliant Available · HAMMOND MANUFACTURING · NEMA

- NEMA 12 & 13 rated
- Rugged enclosures feature captive screw cover
- Smooth, continuously welded seams
- Enclosure grounding stud
- Welded wall mount brackets
- Permanently secured oil-resistant gasket
- Inner panel (except where noted)
- Formed from 14-gauge or 16-gauge steel
- Enclosures finished in recoatable ASA 61 gray powder paint and panels finished in white powder paint

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each Each	2-4	5-9
● 1414SCA*	4 x 4 x 3	84F003	53.89	50.57	47.81
● 1414SCC	6 x 4 x 3	84F004	66.95	62.83	59.39
● 1414SCE	6 x 6 x 4	99F4210	75.98	71.30	67.40
● 1414SCG	8 x 6 x 3.5	84F005	83.55	78.41	74.13
● 1414SCI	10 x 8 x 4	99F4510	103.44	97.08	91.78
● 1414SCK	12 x 10 x 5	84F006	136.47	128.07	121.08
● 1414SCM6	14 x 12 x 6	84F007	174.28	163.56	154.62

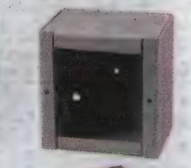
*Inner panel not included
(116734)

C-BOX SERIES ENCLOSURES (SCREW COVER)

NEMA · RoHS Compliant Available · HAMMOND MANUFACTURING

- NEMA 1
- Designed for general purpose indoor commercial use as a junction, pull or switch box
- Through holes in back for wall mounting
- Grounding location embossed in body
- Enclosure and cover finished in ANSI/ASA 61 gray powder coating

Screw Cover w/ Knockouts



Screw Cover w/out Knockouts

Mfg. Part No.	Dimensions (in.) H x W x D	Knockouts	Stock No.	Price Each Each	2-4	5-9
● CSK0664	6 x 6 x 4	Yes	72J9493	15.79	14.04	12.82
● CSK0884	8 x 8 x 4	Yes	72J9497	22.33	19.85	18.12
● CSK01084	10 x 8 x 4	Yes	72J9460	26.70	23.73	21.67
● CSK010104	10 x 10 x 4	Yes	72J9458	29.61	26.32	24.03
● CSK010106	10 x 10 x 6	Yes	72J9459	34.64	30.79	28.11
● CSK012124	12 x 12 x 4	Yes	72J9464	37.00	32.89	30.02
● CSK012126	12 x 12 x 6	Yes	72J9465	44.43	39.49	36.06
● CSK016166	16 x 16 x 6	Yes	72J9471	59.66	53.03	48.42
● CS443	4 x 4 x 3	No	10J8517	14.89	13.81	...
● CS663	6 x 6 x 3	No	72J9567	21.34	19.80	...
● CS664	6 x 6 x 4	No	72J9568	15.24	14.14	...
● CS864	8 x 6 x 4	No	09J9702	18.51	17.17	...

➤CONTINUED➤

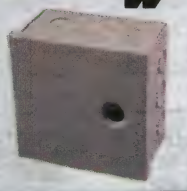
C-BOX SERIES ENCLOSURES (SCREW COVER) (CONT.)

Mfg. Part No.	Dimensions (in.) H x W x D	Knockouts	Stock No.	Price Each Each	2-4	5-9
● CS12124	12 x 12 x 4	No	72J9540	35.92	33.32	...
● CS12126	12 x 12 x 6	No	10J8523	45.76	42.45	...

(88705)

C-BOX SERIES ENCLOSURES (HINGED COVER)

NEMA · RoHS Compliant Available · HAMMOND MANUFACTURING



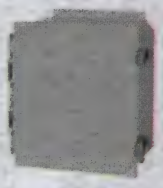
- NEMA 1
- Designed for general purpose indoor commercial use as a junction, pull or switch box
- Through holes in back for wall mounting
- Grounding location embossed in body
- Enclosure and cover are finished in ANSI/ASA 61 gray powder coating

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each Each	2-4	5-9
● CHK0644	6 x 4 x 4	72J9236	14.48	13.51	12.84
● CHK0663	6 x 6 x 3.5	72J9237	16.29	15.20	14.44
● CHK0664	6 x 6 x 4	72J9238	16.10	15.02	14.27
● CHK0666	6 x 6 x 6	72J9239	20.47	19.10	18.15
● CHK0864	8 x 6 x 4	72J9240	19.06	17.78	16.90
● CHK0884	8 x 8 x 4	72J9241	23.02	21.48	20.41
● CHK0886	8 x 8 x 6	72J9242	30.09	28.08	26.68
● CHK01084	10 x 8 x 4	72J9219	27.28	25.45	24.18
● CHK010104	10 x 10 x 4	72J9217	31.44	29.33	27.87
● CHK012106	12 x 10 x 6	72J9222	46.94	43.80	41.62
● CHK012126	12 x 12 x 6	72J9224	46.73	43.59	41.42
● CHK016126	16 x 12 x 6	72J9227	56.65	52.86	50.23
● CHK016166	16 x 16 x 6	72J9228	63.37	59.12	56.19
● CHK018126	18 x 12 x 6	72J9230	63.37	59.12	56.19
● CHK018186	18 x 18 x 6	72J9231	84.60	78.94	75.01

(116741)

TYPE 4X POLYCARBONATE JUNCTION BOXES

NEMA · RoHS Compliant Available · HAMMOND MANUFACTURING



- Injection moulded polycarbonate thermoplastic enclosure
- Enhanced UV inhibitors protect against outdoor weathering
- Threaded brass inserts are provided for optional inner panel or terminal kit mounting
- Stainless steel 316 screw fasteners
- Door fasteners include a provision for padlocking on snap latches
- Captive oil resistant gasket provides a positive seal
- Operating temperatures between +130°C and -35 °C (+266°F to -31°F)
- UL 508 Type 1, 2, 3, 4, 4X, 12 and 13
- CSA Type 1, 2, 3, 4, 4X, 12 and 13
- Mounting hardware is included
- Light gray finish

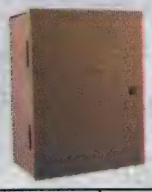
Designed to insulate and protect controls and componets in both indoor and outdoor conditions. Ideal for industrial pump controls, waste water, irrigation control along with solar/wind and chemical plants.

Solid Cover Flange						Steel Inner Panel		
Dimensions (in.) H	W	D	Mfg. Part No.	Stock No.	Price Each 1-4	Mfg. Part No.	Stock No.	Price Each 1-4
5.93	6.16	3.98	● PCJ664LF	85W2684	81.82	● PCJR0505	85W2678	6.10
7.94	6.16	3.98	● PCJ864LF	85W2685	77.95	● PCJR0705	85W2679	6.79
9.93	8.15	3.98	● PCJ1084LF	85W2682	80.88	● PCJR0907	85W2680	9.98
11.92	10.15	5.98	● PCJ12106LF	85W2683	98.57	● PCJR1109	85W2681	15.01
13.94	12.16	5.98	● PCJ14126LF	69W0986	112.98	● PCJR1311	69W0988	15.09

(209950)

STEEL NEMA ENCLOSURES

NEMA · RoHS Compliant Available · HAMMOND MANUFACTURING



- NEMA 1
- 14-gauge steel
- Removable door on slip hinges
- Removable inner panel mounted in rear of the enclosure on collar studs
- ASA61 gray powder paint finish enclosure, white panel

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each Each	2-4	5-9
● N1A16127	16 x 12 x 7	91F2191	198.56	187.25	175.93
● N1A16167	16 x 16 x 7	91F2192	222.76	210.07	197.37
● N1A20167	20 x 16 x 7	91F2193	244.63	230.69	216.75

➤CONTINUED➤

STEEL NEMA ENCLOSURES (CONT.)

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each Each	2-4	5-9
N1A20169	20 x 16 x 9	91F2194	269.73	254.36	238.97
N1A20207	20 x 20 x 7	91F2195	279.45	263.52	247.60
N1A20209	20 x 20 x 9	91F2196	304.86	287.48	270.10
N1A24207	24 x 20 x 7	91F2197	309.67	292.02	274.37
N1A24209	24 x 20 x 9	91F2198	337.93	318.68	299.42
N1A24247	24 x 24 x 7	91F2199	349.34	329.43	309.51
N1A24249	24 x 24 x 9	91F2200	368.65	347.64	326.63

ACCESSORIES

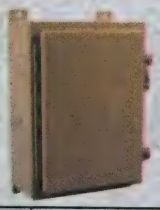
Mfg. Part No.	Description	Stock No.	Price Each 1-4	5-9	10-24
1427LKN1	Lock Kit	24B6425	36.23	33.71	31.74

(12428)

HEAVY-DUTY NEMA 12 ENCLOSURES WITH PANEL

NEMA · RoHS Compliant Available · HAMMOND MANUFACTURING

- 14-gauge steel bodies with clamped doors and 12-gauge steel inner panel
- Smooth, continuously welded seams
- Formed lip on door and enclosure to exclude flowing liquids
- Enclosure and door grounding stud
- Welded wall-mount brackets
- Permanently secured oil-resistant gasket with retainers
- Padlock hasp
- Literature pocket
- Exterior finish of recoatable ASA 61 gray powder paint
- Interior and panel finish of white powder paint



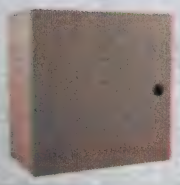
Mfg. Part No.	Dimensions (in.) H x W x D	Panel Size (in.)	Stock No.	Price Each Each	2-4	5-9
1418B6	16 x 12 x 6	13 x 9	50F8420	354.92	334.69	314.46
1418C6	20 x 16 x 6	17 x 13	50F8421	422.44	398.37	374.29
1418B8	16 x 12 x 8	13 x 9	50F8426	373.86	352.55	331.24
1418C8	20 x 16 x 8	17 x 13	50F8427	432.92	408.25	383.57
1418D8	20 x 20 x 8	17 x 17	50F8428	480.73	453.34	425.94
1418E8	24 x 20 x 8	17 x 13	50F8429	520.45	490.79	461.12
1418J8	24 x 24 x 8	21 x 21	50F8430	566.59	534.30	502.01
1418K8	30 x 24 x 8	27 x 21	50F8431	637.25	600.93	564.61
1418J10	24 X 24 X 10	21 x 21	50F8437	593.32	559.51	525.69
1418K10	30 X 24 X 10	27 x 21	50F8438	667.69	629.63	591.58
1418KK12	30 x 30 x 12	27 x 27	50F8444	807.96	761.91	715.86

(34278)

ECLIPSE NEMA 4 WALL MOUNT ENCLOSURES

NEMA · RoHS Compliant Available · HAMMOND MANUFACTURING

- Formed from 14 or 16 gauge steel
- Smooth, continuously welded seams
- Door features quarter turn latch
- Features stainless steel hinges and oil resistant gasket
- Finished in ANSI/ASA61 recoatable gray powder paint
- Bonding stud in door and ground stud in enclosure
- Order panel separately, *go online or call*



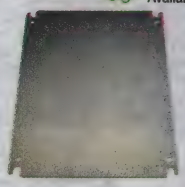
Mfg. Part No.	Dimensions (in.) H x W x D	Panel	Stock No.	Price Each Each	2-4	5-9
EN4SD12126GY	12 x 12 x 6	EP1212	16F1944	270.75	245.16	230.34
EN4SD16126GY	16 x 12 x 6	EP1212	16F1945	289.02	261.70	245.88
EN4SD16166GY	16 x 16 x 6	EP1616	16F1946	311.09	281.68	264.65
EN4SD20166GY	20 x 16 x 6	EP2016	16F1947	333.50	301.98	283.73
EN4SD16168GY	16 x 16 x 8	EP2016	90B7612	327.24	296.31	278.41
EN4SD16128GY	16 x 12 x 8	EP1612	22C4551	302.98	274.34	257.76
EN4SD16208GY	16 x 20 x 8	EP1620	16F1949	353.42	320.01	300.67
EN4SD20168GY	20 x 16 x 8	EP2016	16F1950	351.43	318.21	298.98
EN4SD201610GY	20 x 16 x 10	EP2016	94C1535	351.85	318.60	299.34
EN4SD20208GY	20 x 20 x 8	EP2020	16F1951	377.11	341.47	320.82
EN4SD24168GY	24 x 16 x 8	EP2416	16F1952	375.86	340.33	319.76
EN4SD24208GY	24 x 20 x 8	EP2420	16F1962	408.16	369.57	347.24
EN4SD24206GY	24 x 20 x 6	EP2420	50H3988	397.16	359.62	337.89
EN4SD242010GY	24 x 20 x 10	EP2420	50H3984	419.90	380.21	357.23
EN4SD242012GY	24 x 20 x 12	EP2420	01C2676	465.91	421.87	396.37
EN4SD24248GY	24 x 24 x 8	EP2424	90B9350	440.88	399.21	375.08

(7031)

ECLIPSE INNER PANELS

NEMA · RoHS Compliant Available · HAMMOND MANUFACTURING

- Larger than standard NEMA panels
- Designed with corner notches for easy installation
- Finished in white
- Other sizes are available; *go online or call*



Mfg. Part No.	Dimensions (in.) H x W	Stock No.	Price Each Each	2-4	5-9
EP1212	10.2 x 10.2	16F1964	14.19	12.99	12.27
EP1612	14.2 x 10.2	16F1965	24.30	22.24	20.99
EP1616	14.2 x 14.2	16F1966	46.37	42.45	40.06
EP1620	14.2 x 18.2	16F1967	53.97	49.41	46.63
EP2016	18.2 x 14.2	16F1968	53.95	49.39	46.61
EP2020	18.2 x 18.2	16F1969	64.10	58.68	55.37
EP2416	22.2 x 14.2	16F1970	64.13	58.71	55.40
EP2420	22.2 x 18.2	16F1942	81.84	74.93	70.71
EP2424	22.2 x 22.2	24B4523	95.90	87.80	82.84

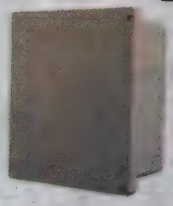
(7032)

NEMA 4, 4X NON-METALLIC ENCLOSURES

NEMA · RoHS Compliant Available · HAMMOND MANUFACTURING

- Molded, fiberglass-reinforced polyester with matching cover
- Stainless steel hinge
- Latches and wall-mounting hardware
- Fiberglass material that is easily punched, drilled or sawed
- Snap-latch and hinged screw-cover versions

UL listed, CSA certified. Optional white panels available separately below.



SNAP-LATCH ENCLOSURES

Mfg. Part No.	Dimension (in.) H x W x D	Panel Size*	Stock No.	Price Each Each	2-4	5-9
PJ1086L	10.13 x 8.26 x 6.13	C	50F8465	101.25	95.02	89.83
PJ12106L	12.13 x 10.26 x 6.13	D	50F8466	113.25	106.28	100.47
PJ14126L	14.13 x 12.26 x 6.13	E	50F8467	134.90	126.60	119.68
PJ16148L	16.27 x 14.4 x 8.13	F	50F8468	152.95	143.54	135.70
PJ20168L	20 x 16 x 8.13	H	50F8470	298.57	280.20	264.88

HINGED, SCREW-COVER ENCLOSURES

PJ664H	6.1 x 6.1 x 4.18	A	50F8471	70.68	66.32	62.70
PJ864H	8 x 6.12 x 4.13	B	50F8472	73.38	68.86	65.10
PJ1086H	10.13 x 8.26 x 6.13	C	50F8473	82.16	77.10	72.89
PJ12106H	12.13 x 10.26 x 6.13	D	50F8474	102.00	95.72	90.49
PJ14126H	14.13 x 12.26 x 6.13	E	50F8475	113.24	106.27	100.47
PJ16148H	16.27 x 14.4 x 8.13	F	50F8476	135.07	126.76	119.83
PJ18168H	18.4 x 16.4 x 8.13	G	50F8477	188.72	177.11	167.43

** Order Separately Below*

OPTIONAL PANELS

Mfg. Part No.	Size	Dimensions (in.) L x W	Stock No.	Price Each Each	2-4
14R0505	A	4.88 x 4.88	50F8479	6.30	6.02
14R0705	B	6.75 x 4.88	50F8480	7.31	7.00
14R0907	C	8.75 x 6.88	50F8481	9.84	9.41
14R1109	D	10.75 x 8.88	50F8482	13.45	12.87
14R1311	E	12.75 x 10.88	50F8483	17.39	16.63
14R1513	F	14.75 x 12.88	50F8484	23.27	22.26
P1868	G	16.88 x 14.88	50F8485	43.23	41.35
P2068	H	18.44 x 14.44	50F8486	49.17	47.04

(6859)

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(196560)

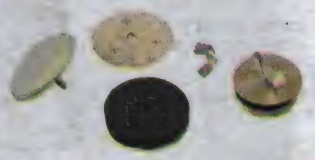
NEMA ENCLOSURES

STEEL HOLE PLUGS

RoHS Compliant Available

HAMMOND MANUFACTURING

HP series steel hole plugs are designed to seal unused pushbutton holes, conduit openings and knockout holes against dust, oil and water. Plugs have oil-resistant gasket and are secured with an 8-32 x ¾" threaded stud and plated wing nut. Steel hole plugs are finished in gray. Stainless steel in a brushed natural stainless finish.



Mfg. Part No.	Size	Diameter (in.)	Material	Stock No.	Price Each Each	2-4	5-9
HP22	22mm Pushbutton	1.22	Steel	66F7217	8.13	7.72	7.23
HP50	0.5" Conduit	1.38	Steel	66F7223	8.23	7.81	7.31
HP50SS	0.5" Conduit	1.38	Stainless Steel	66F7224	23.13	20.20	18.84
HP75	0.75" Conduit	1.56	Steel	66F7225	10.25	9.73	9.10
HP75SS	0.75" Conduit	1.56	Stainless Steel	66F7226	25.55	24.75	23.54
HPB	Standard Pushbutton	1.75	Steel	66F7227	11.02	10.46	9.79
HP100	1" Conduit	1.88	Steel	66F7209	14.16	13.45	12.58
HP100SS	1" Conduit	1.88	Stainless Steel	88F5145	34.47	33.39	31.77
HP125	1.25" Conduit	2.19	Steel	66F7211	14.92	14.45	13.75
HP125SS	1.25" Conduit	2.19	Stainless Steel	24B4621	39.68	37.67	35.25
HP150	1.5" Conduit	2.50	Steel	66F7213	17.65	17.10	16.27
HP200	2" Conduit	3.00	Steel	66F7215	19.81	18.81	17.60
HP200SS	2" Conduit	3.00	Stainless Steel	66F7216	48.00	46.49	44.23

(7203)

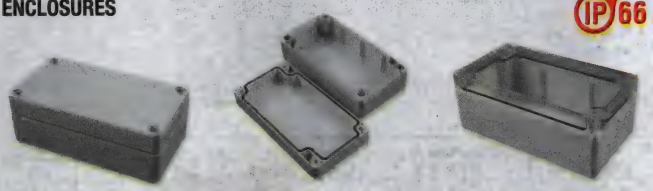
WATERTIGHT ABS PLASTIC AND POLYCARBONATE NEMA ENCLOSURES

NEMA

RoHS Compliant Available

HAMMOND MANUFACTURING

IP66



ABS Plastic w/ Solid Lid — Polycarbonate w/ Solid Lid — Polycarbonte w/ Clear Lid

- Suited for mounting PC boards or DIN rail mounted components
- Designed to meet IP66 and NEMA 4, 4X, 12 and 13 ratings
- Molded-in internal DIN rail mounting tabs (except **1554C series**)
- Molded-in vertical PC card guides (except **1554B series**)
- Light gray (RAL 7035) color

1554 series watertight NEMA enclosures feature gasketed lid with two-piece "tongue and groove" construction to provide protection against access of oil, dust and water. Gasket is factory-poured using a high-temperature, UL listed silicon material. Lid is secured with self-captivating M4 stainless steel machine screws (included), threaded into integral stainless steel bushings. Internal threaded (M3) integral brass inserts and standoffs (designed for M3.5 or #6 self-tapping screws) for PC board or inner panel mounting in all versions except **mfg. part no. 1554B** sizes. **Mfg. part no. 1554xGY** general-purpose ABS plastic enclosures carry a UL94HB flammability rating and not recommended for outdoor use. Polycarbonate enclosures carry a UL945V flammability rating and are recommended for outdoor use. **Mfg. part no. 1554x2GYCL** polycarbonate enclosures feature a clear lid that allows for maximum visibility of protected internal components.

ABS PLASTIC

Mfg. Part No.	Dimensions (in.) H x W x D	Lid	Stock No.	Price Each 1-4	5-9	10-24
1554BGY*	2.55 x 2.55 x 1.57	Solid	98H1100	9.80	9.01	8.49
1554CGY+	4.72 x 2.55 x 1.57	Solid	98H1103	10.79	9.92	9.37
1554DGY	4.72 x 2.55 x 2.36	Solid	98H1107	10.95	10.07	9.49
1554EGY	3.54 x 3.54 x 2.36	Solid	98H1110	12.02	11.05	10.43
1554FGY	4.72 x 3.54 x 2.36	Solid	98H1114	14.80	13.61	12.84
1554GGY	4.72 x 3.54 x 3.14	Solid	98H1118	15.09	13.87	13.08
1554JGY	6.29 x 3.54 x 2.36	Solid	98H1124	17.98	16.54	15.58
1554KGY	6.29 x 3.54 x 3.54	Solid	98H1128	19.72	18.13	17.10
1554NGY	4.72 x 4.72 x 2.36	Solid	98H1131	18.48	16.99	16.03
1554PGY	4.72 x 4.72 x 3.15	Solid	98H1135	19.72	18.13	17.10
1554HGY	7.08 x 4.72 x 2.36	Solid	98H1121	20.10	18.48	17.43
1554TGY	7.08 x 4.72 x 3.54	Solid	98H1145	20.65	19.00	17.92
1554UGY	7.87 x 4.72 x 3.54	Solid	98H1148	28.66	26.36	24.86
1554RGY	6.29 x 6.29 x 2.36	Solid	98H1138	26.56	24.42	23.04
1554SGY	6.29 x 6.29 x 3.54	Solid	98H1142	28.11	25.84	24.38
1554VGY	9.44 x 6.29 x 3.54	Solid	98H1152	35.81	32.93	31.05
POLYCARBONATE						
1554B2GY*	2.55 x 2.55 x 1.57	Solid	96H0479	10.50	10.19	9.61
1554C2GY+	4.72 x 2.55 x 1.57	Solid	98H1105	14.57	14.13	13.33
1554D2GY	4.72 x 2.55 x 2.36	Solid	98H1108	15.73	15.26	14.40
1554E2GY	3.54 x 3.54 x 2.36	Solid	98H1112	16.01	15.53	14.64
1554F2GY	4.72 x 3.54 x 2.36	Solid	98H1116	18.17	17.63	16.63
1554G2GY	4.72 x 3.54 x 3.14	Solid	98H1119	21.46	20.82	19.65
1554J2GY	6.29 x 3.54 x 2.36	Solid	98H1126	22.31	21.66	20.42

CONTINUED

WATERTIGHT ABS PLASTIC AND POLYCARBONATE NEMA ENCLOSURES (CONT.)

POLYCARBONATE

Mfg. Part No.	Dimensions (in.) H x W x D	Lid	Stock No.	Price Each 1-4	5-9	10-24
1554K2GY	6.29 x 3.54 x 3.54	Solid	98H1129	23.93	23.21	21.89
1554N2GY	4.72 x 4.72 x 2.36	Solid	98H1133	20.56	19.95	18.82
1554P2GY	4.72 x 4.72 x 3.15	Solid	98H1136	26.15	25.38	23.95
1554H2GY	7.08 x 4.72 x 2.36	Solid	96H0515	25.52	24.77	23.35
1554T2GY	7.08 x 4.72 x 3.54	Solid	98H1146	27.49	26.67	25.17
1554U2GY	7.87 x 4.72 x 3.54	Solid	98H1150	30.37	29.46	27.80
1554R2GY	6.29 x 6.29 x 2.36	Solid	98H1140	33.38	32.39	30.56
1554S2GY	6.29 x 6.29 x 3.54	Solid	98H1143	29.92	29.03	27.38
1554V2GY	9.44 x 6.29 x 3.54	Solid	98H1154	43.01	41.72	39.36
1554B2GYCL*	2.55 x 2.55 x 1.57	Clear	98H1102	11.47	11.13	10.50
1554C2GYCL+	4.72 x 2.55 x 1.57	Clear	98H1106	15.71	15.24	14.38
1554D2GYCL	4.72 x 2.55 x 2.36	Clear	98H1109	16.30	15.82	14.92
1554E2GYCL	3.54 x 3.54 x 2.36	Clear	98H1113	17.26	16.75	15.80
1554F2GYCL	4.72 x 3.54 x 2.36	Clear	98H1117	19.89	19.30	18.20
1554G2GYCL	4.72 x 3.54 x 3.14	Clear	98H1120	22.47	21.80	20.57
1554J2GYCL	6.29 x 3.54 x 2.36	Clear	98H1127	23.67	22.96	21.66
1554K2GYCL	6.29 x 3.54 x 3.54	Clear	98H1130	24.82	24.08	22.71
1554N2GYCL	4.72 x 4.72 x 2.36	Clear	98H1134	25.35	24.59	23.19
1554P2GYCL	4.72 x 4.72 x 3.15	Clear	98H1137	26.99	26.19	24.71
1554H2GYCL	7.08 x 4.72 x 2.36	Clear	98H1123	25.22	24.47	23.08
1554T2GYCL	7.08 x 4.72 x 3.54	Clear	98H1147	28.57	27.72	26.15
1554U2GYCL	7.87 x 4.72 x 3.54	Clear	98H1151	35.21	34.15	32.22
1554S2GYCL	6.29 x 6.29 x 3.54	Clear	98H1144	37.18	36.07	34.03
1554V2GYCL	9.44 x 6.29 x 3.54	Clear	98H1155	45.03	43.68	41.21

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-49	50-99
1554FT	Feet Kit (4 Feet, 4 Screws, 4 Nuts)	61K2259	7.80	6.44	6.23

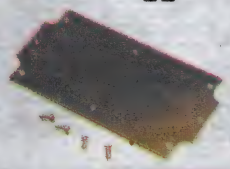
*No vertical PC card guides; +No internal DIN rail mounting tabs
(78698)

HEAVY-DUTY STEEL PANELS FOR 1554 SERIES WATERTIGHT ENCLOSURES

RoHS Compliant Available

HAMMOND MANUFACTURING

Ideally suited for mounting components in **1554 series** watertight ABS plastic and polycarbonate NEMA enclosures. Galvanized 14-gauge steel construction. Natural finish. Mounting hardware included.



Mfg. Part No.	Height (In.)	Width (In.)	For Use With	Stock No.	Price Each 1-4
1554BPL	2.2	2.2	"B" Size Enclosures	98H1101	5.26
1554CPL	4.4	2.1	"C", "D" Size Enclosures	98H1104	6.34
1554EPL	3.1	3.1	"E" Size Enclosures	98H1111	6.53
1554FPL	4.3	3.1	"F", "G" Size Enclosures	98H1115	6.73
1554HPL	6.6	4.2	"H", "T" Size Enclosures	98H1122	8.28
1554JPL	5.8	3	"J" Size Enclosures	98H1125	7.55
1554NPL	4.24	4.2	"N", "P" Size Enclosures	98H1132	7.38
1554RPL	5.94	5.8	"R", "S" Size Enclosures	98H1139	9.43
1554UPL	7.6	4.2	"U" Size Enclosures	98H1149	8.84
1554VPL	9.1	5.7	"V" Size Enclosures	98H1153	11.19

(78870)

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(212564)

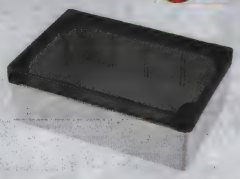
NEMA 4, 4X, 12 & 13 WATERTIGHT ENCLOSURES

RoHS Compliant Available

HAMMOND MANUFACTURING

IP66 NEMA

- Designed to meet IP66 and NEMA 4, 4X, 12 & 13 ratings
- Ideal for mounting PC boards or DIN rail mounted components
- Smoked transparent polycarbonate lid
- Constructed of light gray polycarbonate (UL94 5V flammability rating)
- Gasketed lid with two-piece "tongue and groove" construction
- Integral stainless steel bushings (for repetitive assembly & disassembly)
- All stainless steel hardware to avoid corrosion caused by dissimilar metals



Includes self-captivating M4 stainless steel machine screws to secure lid. Internal DIN rail mounting tabs are molded in (except **mfg. part no. 1554C2GYSL**). Threaded M3 integral brass inserts and/or standoffs (#6 self tapping screws) for PC board or inner panel mounting in all but the smallest size (**mfg. part no. 1554B2GYSL**). Vertical PC card guides (for 1.5 mm thick PC boards) are molded in all but the smallest size enclosure (**mfg. part no. 1554B2GYSL**).

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5-9	10-24
1554E2GYSL	2.4 x 3.5 x 3.5	05N0005	14.22	13.81	13.32
1554F2GYSL	2.4 x 3.5 x 4.7	05N0006	17.00	16.51	15.93
1554J2GYSL	2.4 x 3.5 x 6.3	05N0009	20.23	19.65	18.94
1554T2GYSL	3.5 x 4.7 x 7.1	05N0015	25.38	24.64	23.77
1554V2GYSL	3.5 x 6.3 x 9.4	52M9489	38.40	37.28	35.95

(116671)

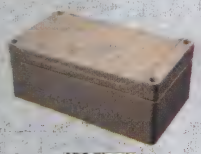
WATERTIGHT ABS PLASTIC AND POLYCARBONATE NEMA ENCLOSURES WITH STYLED LID

RoHS Compliant Available

HAMMOND MANUFACTURING

IP66 NEMA

- Suited for mounting PC boards or DIN rail mounted components
- Designed to meet IP66 and NEMA 4, 4X, 12 and 13 ratings
- Molded-in internal DIN rail mounting tabs
- Molded-in vertical PC card guides
- Popular light gray (RAL 7035) color



ABS Plastic

Polycarbonate

1555 series watertight NEMA enclosures feature "styled" lid with smooth recessed surface for membrane keypad or label. Standoffs are molded in the interior of the lid in all versions except **mfg. part no. 1555B** size. The lid gasketed is two-piece "tongue and groove" constructed to provide protection against access of oil, dust and water. Gasket is factory-poured using a high-temperature, UL listed silicon material. "Styled" lid is secured with self-captivating M4 stainless steel machine screws (included), threaded into integral stainless steel bushings. Internal threaded (M3) integral brass inserts and standoffs (designed for M3.5 or #6 self-tapping screws) for PC board or inner panel mounting. **Mfg. part no. 1555xGY** general-purpose ABS plastic enclosures carry a UL94HB flammability rating and not recommended for outdoor use. **Mfg. part no. 1555xB2GY** polycarbonate enclosures carry a UL945V flammability rating and are recommended for outdoor use.

ABS PLASTIC

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5-9	10-24
1555BGY	2.55 x 2.55 x 1.57	98H1156	9.43	8.07	7.52
1555CGY	4.72 x 2.55 x 1.57	98H1158	10.38	8.90	8.28
1555DGY	4.72 x 2.55 x 2.36	98H1160	10.53	9.03	8.41
1555EGY	3.54 x 3.54 x 2.36	98H1162	11.71	10.04	9.35
1555FGY	4.72 x 3.54 x 2.36	98H1164	13.56	11.63	10.83
1555JGY	6.29 x 3.54 x 2.36	98H1170	17.00	14.56	13.55
1555KGY	6.29 x 3.54 x 3.54	98H1172	18.07	15.49	14.42
1555PGY	4.72 x 4.72 x 3.15	98H1176	18.97	16.26	15.14
1555HGY	7.08 x 4.72 x 2.36	98H1168	19.34	16.58	15.44
1555TGY	7.08 x 4.72 x 3.54	98H1182	19.74	16.93	15.76
1555UGY	x x	98H1184	27.85	23.87	22.22
1555VGY	9.44 x 6.29 x 3.54	98H1186	34.44	29.52	27.49
POLYCARBONATE					
1555B2GY	x x	98H1157	10.08	9.50	8.98
1555E2GY	3.54 x 3.54 x 2.36	98H1163	15.55	14.66	13.85
1555J2GY	6.29 x 3.54 x 2.36	98H1171	21.29	20.08	18.96
1555P2GY	4.72 x 4.72 x 3.54	98H1177	25.22	23.78	22.47
1555H2GY	7.08 x 4.72 x 2.36	98H1169	24.80	23.38	22.09
1555T2GY	7.08 x 4.72 x 3.54	98H1183	26.00	24.51	23.16
1555U2GY	x x	98H1185	28.74	27.09	25.60
1555S2GY	6.29 x 6.29 x 3.54	98H1181	29.21	27.54	26.02
1555V2GY	9.44 x 6.29 x 3.54	98H1187	41.08	38.73	36.59

➤ CONTINUED ➤

WATERTIGHT ABS PLASTIC AND POLYCARBONATE NEMA ENCLOSURES WITH STYLED LID (CONT.)

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-49	50-99
1554FT	Feet Kit (4 Feet, 4 Screws, 4 Nuts)	61K2259	7.80	6.44	6.23

(78702)

WATERTIGHT FLANGED LID ENCLOSURES

NEMA

RoHS Compliant Available

HAMMOND MANUFACTURING

IP67

- Meet IP67 & NEMA 4, 4X, 12 & 13 ratings
- Ideal for mounting PC boards, panels or DIN rail mounted components
- Designed for wall mounting (interior is secure as lid screws are behind the lid)
- Light gray (RAL 7035) satin texture finish with smooth recessed surface on lid for a membrane keypad or label
- Standoffs molded in the interior of the lid and enclosure designed for #6 x ¼" self-tapping screws
- ABS plastic (UL flammability rating of UL94 HB) not recommended for outdoor use
- Polycarbonate (UL flammability rating of UL94 VO / 5VA @ 3mm) recommended for outdoor use
- Gasketed lid with two piece "tongue and groove" construction
- Flanged lid secured with self-captivating M4 stainless steel machine screws (included), threaded into integral stainless steel bushings
- Internal DIN rail mounting tabs molded into lid (except **mfg. part nos. 1555CF22 & 1555CF42**)

ENCLOSURES

Mfg. Part No.	Body Material	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5-9
1555FF17GY	Acrylonitrile Butadiene Styrene (ABS)	1.47 x 3.6 x 4.7	79R5342	13.83	12.96
1555JF17GY	Acrylonitrile Butadiene Styrene (ABS)	1.47 x 3.6 x 6.3	79R5345	16.04	15.04
1555CF22GY	Acrylonitrile Butadiene Styrene (ABS)	1.65 x 2.6 x 4.7	79R5338	13.62	12.77
1555FF42GY	Acrylonitrile Butadiene Styrene (ABS)	2.44 x 3.6 x 4.7	79R5343	15.46	14.49
1555JF42GY	Acrylonitrile Butadiene Styrene (ABS)	2.44 x 3.6 x 6.3	79R5346	16.89	15.83
1555F2F17GY	Polycarbonate	1.47 x 3.6 x 4.7	77R3924	16.73	15.68
1555J2F17GY	Polycarbonate	1.47 x 3.6 x 6.3	79R5347	18.60	17.43
1555C2F22GY	Polycarbonate	1.65 x 2.6 x 4.7	79R5340	15.84	14.85
1555F2F42GY	Polycarbonate	2.44 x 3.6 x 4.7	79R5344	18.56	17.40
1555J2F42GY	Polycarbonate	2.44 x 3.6 x 6.3	79R5348	20.35	19.07

(178863)

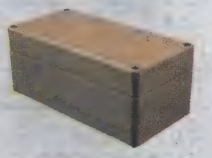
ROLEC® MODULAR DIE-CAST ALUMINUM ENCLOSURES

NEMA

RoHS Compliant Available

HAMMOND MANUFACTURING

- Meets NEMA 1, 2, 3, 3R, 4, 4X, 5, 12, 13
- Aluminum die-cast G Al Si 12/DIN 1775
- Captive stainless steel screws are standard
- Neoprene oil- and petrol-resistant gasket standard (–30°C to +100°C)
- Meets IEC enclosure IP65 classification
- Single-channel fastening system
- Trouble-free turning 90° to 90° with square enclosure by synchronous arrangement of channels
- External mounting feet can be turned through 90°
- Enclosures have inner blind holes
- RAL 7032 gray powder paint finish



Mfg. Part No.	H x W x D	Stock No.	Price Each 1-9	10-24	25-49	50+
R100-060-000	2 x 2.6 x 1.6	51F3545	28.42	26.84	25.90	25.12
R100-062-000	2.6 x 2.6 x 1.6	51F3546	31.73	29.98	28.93	28.05
R100-064-000	3.9 x 2.6 x 1.6	51F3547	39.33	37.16	35.85	34.78
R100-066-000	5.9 x 2.6 x 1.6	51F3548	51.74	48.88	47.16	45.73
R100-080-000	3.1 x 3.1 x 2.4	51F3549	46.48	43.92	42.38	41.09
R100-082-000	4.7 x 3.1 x 2.4	51F3550	62.67	59.21	57.13	55.41
R100-084-000	6.3 x 3.1 x 2.4	51F3551	72.40	68.40	66.00	64.01
R100-100-000	3.9 x 3.9 x 3.1	51F3552	73.73	69.65	67.21	65.17
R100-102-000	5.9 x 3.9 x 3.1	51F3553	88.82	83.92	80.98	78.52
R100-104-000	7.9 x 3.9 x 3.1	51F3554	104.54	98.76	95.29	92.41
R100-120-000	4.7 x 4.7 x 3.9	51F3555	110.12	104.03	100.39	97.35
R100-122-000	7.1 x 4.7 x 3.9	51F3556	126.32	119.34	115.15	111.67
R100-124-000	9.4 x 4.7 x 3.9	51F3557	138.54	130.89	126.29	122.46
R100-160-000	6.3 x 6.3 x 3.9	51F3558	145.67	137.62	132.79	128.76
R100-162-000	9.4 x 6.3 x 3.9	51F3559	183.68	173.55	167.45	162.38
R100-164-000	12.6 x 6.3 x 3.9	51F3560	216.30	204.35	197.18	191.21
R100-200-000	7.9 x 7.9 x 4.7	51F3562	323.45	305.59	294.86	285.93
R100-202-000	11.8 x 7.9 x 4.7	51F3563	347.74	328.53	317.00	307.39

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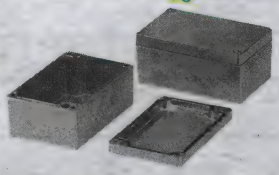
NEMA ENCLOSURES

WATERTIGHT NEMA DIECAST ALUMINUM ENCLOSURES

NEMA · RoHS Compliant Available · HAMMOND MANUFACTURING · IP65



Mfg. part no. 1590Z watertight aluminum diecast enclosures are designed to meet IP65 (dust and hose proof). These enclosures are perfect for housing sensitive electrical, pneumatic, hydraulic and electronic assemblies. They feature natural finish, a recessed silicon rubber gasket and captive, recessed stainless steel lid screws. Wall mountable using "through-box-blind hole" construction outside of gasket protection. North America Mark of Safety - cUL and UL listed. Certified to NEMA 4X standards (UL508)-file# E65324.

Mfg. Part No.	Dimensions (in.) H x W x D	Mounting Shelf	Stock No.	Price Each 1-4	5-9	10-24
● 1590Z100	2.94 x 3.14 x 1.57	Yes	83F8760	25.75	23.43	21.89
● 1590Z119	4.8 x 4.72 x 2.36	Yes	04C5277	56.16	51.11	47.74
● 1590Z120	4.92 x 3.15 x 1.75	Yes	87F2510	31.35	28.53	26.65
● 1590Z150	8.7 x 4.76 x 2.39	Yes	87F2512	67.98	61.86	57.78
● 1590Z160	6.3 x 6.3 x 2.76	Yes	88F2362	75.92	69.09	64.53
● 1590Z162	10.24 x 6.25 x 2.75	Yes	04C5280	101.97	92.79	86.67
● 1590Z231	7.88 x 9.05 x 3.63	Yes	04C5285	166.12	151.17	141.21
● 1590Z235	13.18 x 9.23 x 4.36	Yes	39P8014	219.46	199.71	186.54
● 1590Z063	1.42 x 2.51 x 5.89	No	04C5276	30.68	27.92	26.08
● 1590Z060	1.98 x 1.77 x 1.18	No	04C5271	14.00	12.74	11.90
● 1590Z061	2.51 x 2.29 x 1.42	No	04C5274	23.10	21.02	19.64
● 1590Z110	2.94 x 3.14 x 1.57	No	87F2509	25.75	23.43	21.89
● 1590Z062	3.86 x 2.52 x 1.42	No	04C5275	21.00	19.11	17.85
● 1590Z130	6.91 x 3.15 x 1.65	No	87F2511	36.00	32.76	30.60
● 1590Z135	6.91 x 3.15 x 2.44	No	83F8761	37.44	34.07	31.82

(6923)

TYPE 1 ENCLOSURES (HINGED COVER)

NEMA · RoHS Compliant Available · Hoffman · IP30 · SP · cULus

- NEMA 1
- Various sizes of easily removable concentric knockouts on all four sides suitable for a variety of applications
- Recessed, slotted flush latch for security
- Butt hinges
- Mounting holes on back of box
- Provision for grounding
- 16 or 14 gauge steel
- Interior and exterior are finished with ANSI 61 gray polyester paint

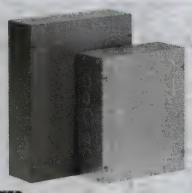
Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5+
● A-604NFAL	6 x 4 x 3	06B5911	215.28	203.18
● A-606NFAL	6 x 6 x 4	06B5938	226.67	...
● A1008NFAL	10 x 8 x 4	52F7175	294.47	278.20

(210091)

NEMA 1 SCREW COVER PULL BOXES

NEMA · RoHS Compliant Available · Hoffman · IP30 · UL · SP

- Steel with ANSI 61 gray polyester powder paint finish inside and out, galvanized steel with natural finish also available; *go online or call*
- UL listed 50 file no. E27525 Type 1, CSA certified file no. LL42184 Type 1, NEMA/EEMAC Type 1, IEC 60529 IP30
- Perforated panels for mounting components without drilling holes available online or call.



WITH KNOCKOUTS ON ALL 4 SIDES - PAINTED

WITHOUT KNOCKOUTS - PAINTED

Dim. (in.) H x W x D	Mfg. Part No.	Stock No.	Price Each 1-4
4 x 4 x 4	● ASE4X4X4NK	06B4877	12.75
6 x 6 x 4	● ASE6X6X4NK	19M8307	15.81
8 x 8 x 4	● ASE8X8X4NK	06B4886	21.66
10 x 8 x 4	● ASE10X8X4NK	06B4830	28.41
10 x 12 x 4	● A-SE12X10X4NK	06B4834	35.77
12 x 12 x 6	● ASE12X12X6NK	06B4840	42.65

Dim. (in.) H x W x D	Mfg. Part No.	Stock No.	Price Each 1-4
6 x 6 x 4	● ASE6X6X4	19M8306	15.26
6 x 6 x 6	● ASE6X6X6	19M8308	19.07
8 x 6 x 4	● ASE8X6X4	06B4883	21.36
8 x 8 x 4	● ASE8X8X4	06B4885	21.66
10 x 8 x 4	● ASE10X8X4	19M8301	28.13

➤ CONTINUED ➤

NEMA 1 SCREW COVER PULL BOXES (CONT.)

Dim. (in.) H x W x D	Mfg. Part No.	Stock No.	Price Each 1-4
12 x 12 x 4	● ASE12X12X4	06B4837	36.38
12 x 12 x 6	● ASE12X12X6	29M6873	42.24
18 x 18 x 6	● ASE18X18X6	06B4857	76.08

(72336)

TYPE 1 ENCLOSURES (HINGED COVER)

NEMA · RoHS Compliant Available · Hoffman · IP30 · SP · cULus

- NEMA 1
- Various sizes of easily removable concentric knockouts on all four sides suitable for a variety of applications
- Recessed, slotted flush latch for security
- Butt hinges
- Mounting holes on back of box
- Provision for grounding
- 16 or 14 gauge steel
- Interior and exterior are finished with ANSI 61 gray polyester paint

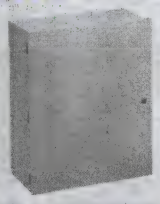
Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each Each	2-5	6-10
● AHE6X4X4	6 x 4 x 4	06B4669	22.89	21.72	21.09
● AHE6X6X4	6 x 6 x 4	19M8297	27.31	25.93	25.16
● AHE6X6X6	6 x 6 x 6	06B4671	33.08	31.40	30.49
● AHE8X6X4	8 x 6 x 4	06B4672	32.06	30.44	29.55
● AHE8X8X4	8 x 8 x 4	06B4673	37.46	35.57	34.54
● AHE8X8X6	8 x 8 x 6	06B4674	29.37	27.60	...
● AHE10X8X4	10 x 8 x 4	92F092	28.87	27.14	...
● AHE10X8X6	10 x 8 x 6	06B4653	34.48	32.41	...
● AHE10X10X4	10 x 10 x 4	06B4651	32.28	30.34	...
● AHE10X10X6	10 x 10 x 6	06B4652	38.20	35.90	...
● AHE12X8X4	12 x 8 x 4	06B4658	32.90	30.92	...
● AHE12X10X4	12 x 10 x 4	06B4654	37.52	35.27	...
● AHE12X10X6	12 x 10 x 6	06B4655	44.43	41.76	...
● AHE12X12X4	12 x 12 x 4	19M8296	44.21	41.45	...
● AHE12X12X6	12 x 12 x 6	06B4657	48.53	45.61	...
● AHE16X12X4	16 x 12 x 4	06B4659	50.01	47.00	...
● AHE16X12X6	16 x 12 x 6	92F126	60.01	56.40	...
● AHE16X16X6	16 x 16 x 6	06B4660	68.02	63.92	...
● AHE18X12X4	18 x 12 x 4	06B4661	57.40	53.94	...
● AHE18X12X6	18 x 12 x 6	06B4662	66.72	62.71	...
● AHE18X18X6	18 x 18 x 6	06B4663	86.62	81.41	...
● AHE24X18X6	24 x 18 x 6	06B4664	144.36	135.68	...
● AHE24X24X6	24 x 24 x 6	06B4665	175.40	164.85	...
● AHE30X24X6	30 x 24 x 6	06B4666	210.01	197.37	...
● AHE36X24X6	36 x 24 x 6	06B4667	244.56	229.84	...
● AHE36X24X8	36 x 24 x 8	06B4668	262.78	246.97	...

(194892)

NEMA 1 STEEL ENCLOSURES & ACCESSORIES

UL · RoHS Compliant Available · Hoffman · SP · NEMA · IP30

- Steel construction with ANSI 61 gray powder painted finish inside and out over phosphatized surfaces
- 6" thru 36" enclosure doors have slotted flush latches and butt hinges
- 42" enclosures have continuous hinge and door and body stiffeners for added rigidity
- Feature mounting holes and provisions for mounting optional panels
- *Order cylinder lock kit, T-handle latch kit and cutout template for conduit entry holes below*
- White panels are also available: *go online or call*



Dim. (in.) H x W x D	Enclosures Mfg. Part No.	Stk. No.	Price Each 1-4	Gray Perforated Panels Mfg. Part No.	Stk. No.	Price Each 1-4
12 x 12 x 4	● A12N124	19M8349	107.95	● A12N12PP	19M8348	20.91
12 x 12 x 6	● A12N126	19M8350	122.59	● A16N12MPP	19M8360	20.97
14 x 12 x 6	● A14N126	06B5141	135.51	● A14N12PP	19M8354	23.44
16 x 12 x 6	● A16N126	19M8362	147.87	● A16N12PP	74C6317	26.14
10 x 10 x 4	● A14N128	19M8337	152.55	● A14N12PP	19M8354	23.44
16x12x6.62	● A16N12ALP	19M8359	202.51	● A16N12MPP	19M8360	20.97
20x16x6.62	● A20N16ALP	19M8368	255.74	● A20N16MPP	19M8371	34.47
20x20x6.62	● A20N20ALP	19M8372	280.99	● A20N20MPP	19M8374	46.78
20x16x8.62	● A20N16BLP	19M8369	279.85	● A20N16MPP	19M8371	34.47
20x20x8.62	● A20N20BLP	19M8373	304.86	● A20N20MPP	19M8374	46.78
24x24x8.62	● A24N24BLP	19M8381	346.93	● A24N24MPP	19M8382	96.46

➤ CONTINUED ➤

NEMA 1 STEEL ENCLOSURES & ACCESSORIES (CONT.)

Dim. (in.) H x W x D	Enclosures: Mfg. Part No.	Enclosures: Stk. No.	Enclosures: Price Each 1-4	Gray Perforated Panels: Mfg. Part No.	Gray Perforated Panels: Stk. No.	Gray Perforated Panels: Price Each 1-4
36x24x8.62	A36N24BLP	19M8386	446.50	A36N24MPP	19M8387	131.30
42x30x9.25	A42N3009	06B5735	821.21	...	...	...

ACCESSORIES

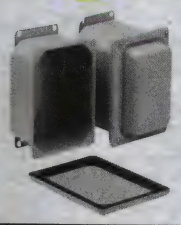
Mfg. part no. AL12AR cylinder lock kit includes cyclinder lock, cam, all hardware and complete installation instructions. **Mfg part no. AL7A** "T"-handle latch kit includes **mfg. part no. L7** "T"-handle all hardware and complete installation instructions. Both the lock and latch kits fit NEMA Type 1 steel enclosures; *order separately above.* To install, simply remove the standard slotted flush latch and insert the kit.

Mfg. Part No.	Description	Stock No.	Price 1-4
AL12AR	Cylinder Lock Kit	92F090	55.88
AL7A	"T"-Handle Latch Kit	06B4733	28.43

(6954)

SCREW COVER DSC ENCLOSURES

NEMA · RoHS Compliant Available · Hoffman · IP66 · UL · CSA



Units are designated for use as electrical junction boxes, terminal wiring boxes, and instrument housings, and are suitable for use with liquidtight flexible conduit. Meets NEMA enclosure type 4, 6, 12 and 13 and IEC 60529 enclosure IP66 classification. UL listed, CSA certified.

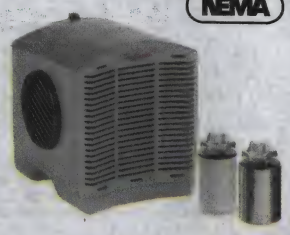
Mfg. Part No.	Int. Vol. (cubic in.)	Footprint (in.) Height	Footprint (in.) Width	Footprint (in.) Depth	Stock No.	Price 1-4
A402DSC	13.9	4	2	2	16F254	31.02
A403DSC	30.7	4.5	2.88	2.62	99F7976	40.30
A404DSC	38.2	4	4	2.62	06B5711	52.39
A443DSC	32.6	3.5	4	2.75	06B5764	67.45
A643DSC	55.9	5.75	4	2.75	16F255	77.09
A843DSC	79.4	8	4	2.75	16F256	83.98

(7024)

THERMOELECTRIC DEHUMIDIFIER & VENT DRAINS

RoHS Compliant Available · Hoffman · NEMA

- Removes 8 oz. of moisture in 24 hours
- Condenses moisture from internal enclosure air and standing liquids
- Built-in drain provision with plastic hose directs collected moisture to NEMA 4/4X vent drain
- Rotating side air vents direct recirculating air away from critical controls
- Mounts via DIN rail on internal panel or mounts directly onto the inside bottom of enclosure above the vent drain
- Vent drain installs in a ⅞-in. hole in the bottom of enclosure with provided nut or in a ½-in. NPT/NPS threaded conduit hub
- Vent drain has a one-way mechanical shut-off when pressure is equalized to prevent water and contaminants from entering the enclosure



For use with Hoffman enclosures beginning *on page 2308.*

DEHUMIDIFIER

Mfg. Part No.	Dimensions (in.) H x W x D	Operating Voltage (VDC)	Stock No.	Price Each 1-4	Price Each 5+
H2OMITTER	5.89 x 5.32 x 5.59	24	15R3394	751.42	706.34

VENT DRAINS

Mfg. Part No.	Dimensions (in.) Dia. x H	Material	Stock No.	Price Each 1-4	Price Each 5+
AVDR4NM	1.25 x 2	Polyester	15R3392	67.65	63.57
AVDR4SS4	1.38 x 2	Stainless Steel	15R3393	137.66	129.38

(152511)

CUSTOM ELECTRONIC ENCLOSURES

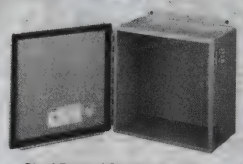
Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures

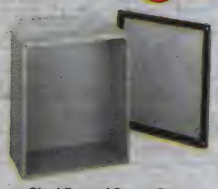
(212568)

WALL-MOUNT NEMA TYPE 12 AND 13 JUNCTION BOXES

NEMA · RoHS Compliant Available · Hoffman · IP65 · UL · CSA



Steel Box w/ Continuous Hinge



Steel Box w/ Screw Cover

- NEMA Type 12 and 13, IEC60529, IP65
- Designed for indoor use to protect electrical, electronics or pneumatic components from dust, dirt, oil and water
- Choice of **CH series** continuous hinge or **SC series** screw cover single-door designs
- Constructed of 14- or 16-gauge steel and coated with an ANSI 61 gray polyester powder finish inside and out
- All boxes have an oil-resistant gasket and feature continuously welded and ground smooth seams
- Weldnuts provided for mounting optional white 14-gauge steel panels which can be ordered separately; *go online or call*

Dimensions (in.) H x W x D	Steel Box w/ Continuous Hinge: Mfg. Part No.	Steel Box w/ Continuous Hinge: Stock No.	Steel Box w/ Continuous Hinge: Price 1-4	Steel Box w/ Screw Cover: Mfg. Part No.	Steel Box w/ Screw Cover: Stock No.	Steel Box w/ Screw Cover: Price Each 1-4
4 x 4 x 3	A404CH*	96F4671	58.32	A404SC*	19M8391	70.37
6 x 4 x 3	A604CH*	96F4672	66.83	A604SC*	16F249	80.94
8 x 6 x 3.5	A806CH	96F4676	80.39	A806SC	16F252	100.26
6 x 4 x 4	A6044CH*	96F4674	72.71	A6044SC*	16F248	85.57
6 x 6 x 4	A606CH*	19M8396	75.66	A606SC*	16F250	94.43
8 x 8 x 4	A808CH	96F4677	91.42	A808SC	16F253	114.17
10 x 8 x 4	A1008CH	19M8342	99.84	A1008SC	19M8344	124.97
12 x 10 x 5	A1210CH	19M8352	127.79	A1210SC	06B5117	168.19
8 x 6 x 6	A8066CH	96F4683	95.43	A8066SC	16F251	116.04
10 x 8 x 6	A10086CH	96F4684	112.60	A10086SC	19M8345	148.37
10 x 10 x 6	A10106CH	96F4685	124.25	A10106SC	06B5075	163.76
12 x 12 x 6	A1212CH	96F4686	148.73	A1212SC	06B5131	190.13
14 x 12 x 6	A1412CH	19M8356	161.57	A1412SC	92F094	212.64
16 x 14 x 6	A1614CH	19M8363	190.23	A1614SC	99F8911	249.77
12 x 10 x 8	A12108CH	96F4693	158.23	...	...	...
14 x 12 x 8	A14128CH	96F4694	185.19	...	...	...
16 x 14 x 8	A16148CH	96F4695	214.32	...	...	...
10 x 14 x 16	A161410CH	96F4696	239.36	...	...	...

*16-gauge steel

ACCESSORIES FOR JUNCTION BOXES

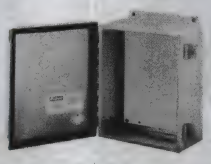
Mfg. part no. ACLJIC keylock kit and **mfg. part no. APLKJIC** plated steel padlock kit are designed for field installation in junction boxes. Helps to maintain a watertight and dust-tight seal. Both kits include Installation instructions.

Mfg. Part No.	Description	Stock No.	Price 1-9
APLKJIC	Plated Steel Padlock Kit	06B4774	18.34

(78731)

WALL-MOUNT NEMA TYPE 12 AND 13 JUNCTION BOXES

NEMA · RoHS Compliant Available · Hoffman · IP65 · UL · CSA



Aluminum Box w/ Continuous Hinge

3 Point Latch Kit, Key Lock, CCW

- NEMA Type 12 and 13, IEC60529, IP65
- Designed for indoor use to protect electrical, electronics or pneumatic components from dust, dirt, oil and water
- **CHAL series** aluminum, continuous hinge boxes have smooth, brushed finish and feature stainless steel screws and clamps that secure cover and assure watertight seal
- Constructed of 14- or 16-gauge steel and coated with an ANSI 61 gray polyester powder finish inside and out
- All boxes have an oil-resistant gasket and feature continuously welded and ground smooth seams
- Weldnuts provided for mounting optional white 14-gauge steel panels, *order separately below*

Dimensions (in.) H x W x D	Aluminum Box w/ Continuous Hinge: Mfg. Part No.	Aluminum Box w/ Continuous Hinge: Stock No.	Aluminum Box w/ Continuous Hinge: Price Each 1-2	Steel White Panels: Mfg. Part No.	Steel White Panels: Stock No.	Steel White Panels: Price Each 1-9
8 x 6 x 4	A8064CHAL	06B6158	255.73	A8P6	89F5422	7.87
6 x 6 x 4	A606CHAL	19M8397	243.50	A6P6	89F5421	7.03

CONTINUED

WALL-MOUNT NEMA TYPE 12 AND 13 JUNCTION BOXES (CONT.)

Dimensions (in.)	Aluminum Box w/ Continuous Hinge			Steel White Panels		
H x W x D	Mfg. Part No.	Stock No.	Price Each 1-2	Mfg. Part No.	Stock No.	Price Each 1-9
10 x 8 x 4	● A1008CHAL	88F2016	293.65	● A10P8	89F5423	10.72
12 x 12 x 6	● A12106CHAL	19M8353	378.41	● A12P12	96F4601	17.03
14 x 12 x 6	● A1412CHAL	19M8357	434.66	● A14P12	96F4602	18.93
16 x 14 x 6	● A1614CHAL	88F1096	500.39	● A16P14	96F4603	25.05

ACCESSORIES FOR JUNCTION BOXES
Mfg. part no. APLKJIC plated steel padlock kit are designed for field installation in junction boxes. Helps to maintain a watertight and dust-tight seal. Kit includes installation instructions.

Mfg. Part No.	Description	Stock No.	Price Each 1-9
● APLKJIC	Plated Steel Padlock Kit	06B4774	18.34
● A-L23	Plated Steel Clamp Assembly	06B4715	15.42
● AL16	Stainless Steel Clamp Kit	20H0750	69.71
● A-EK115	Electrical Interlocks	06B4569	307.95

LATCH KIT FOR ONE-DOOR TYPE 12 ENCLOSURES
Designed for field installation on most standard one-door Type 12 enclosures.

● A-L2A	1 Point Latch Kit, Key Lock, CW	06B4706	83.35
● A-L2ACCW	1 Point Latch Kit, Key Lock, CCW	06B4707	83.35
● A-L2DCCW	3 Point Latch Kit, Key Lock, CCW	06B4712	197.63
● A-L36A	1 Point Latch Kit, PadLock, CW or CCW	20C6400	164.51
● A-L31	Latch, Slotted Insert	06B4723	36.74

(162715)

ALUMINUM WALL-MOUNT ENCLOSURES

RoHS Compliant Available

Hoffman®

IP66 SP NEMA c UL us

- Type 5052 H-32 aluminum, 0.080-in. (2-mm) thick
- Seams continuously welded and ground smooth
- Stainless steel screws and clamps on four sides of cover
- Oil-resistant gasket
- Weldnuts provided for mounting optional panels

This lightweight enclosure protects components and controls in corrosive indoor or outdoor environments.

CLAMP-COVER, TYPE 4X

Mfg. Part No.	Dimensions (in.) H x W x D	UL Listed	Stock No.	Price Each 1-4	5+	5+
● A-604NFAL	6 x 4 x 3	508A	06B5911	215.28	203.18	...
● A-606NFAL	6 x 6 x 4	50, 50E	06B5938	226.67	...	...
● A1008NFAL	10 x 8 x 4	50, 50E	52F7175	294.47	278.20	...
● A-1210NFAL	12 x 10 x 5	50, 50E	06B5116	345.16	324.85	...
● A-1412NFAL	14 x 12 x 6	50, 50E	88F3617	436.43	412.32	...
● A-1614NFAL	16 x 14 x 6	50, 50E	88F1602	482.75	454.35	...

(210088)

TYPE 4 AND 12 ENCLOSURES (HINGED COVER)

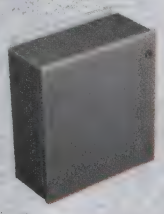
NEMA

RoHS Compliant Available

Hoffman®

IP66 SP c UL us

- NEMA 4 and 12
- Quarter-turn latch with screw-driver slot for easy access
- Seamless foam-in-place gasket
- Weldnuts provided for mounting optional panels and terminal block kits in size 6.00 x 4.00 in. (152 x 102 mm) and larger
- Easy install with external wall-mounting brackets
- Bonding provision on door
- 16 or 14 gauge steel
- RAL 7035 gray polyester powder paint inside and out.



Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5+
● A404CHFL	4 x 4 x 3	80K5614	82.71	77.90
● A4044CHFL	4 x 4 x 4	80K5615	87.73	82.62
● A6044CHFL	6 x 4 x 4	80K5647	101.62	95.71
● A604CHFL	6 x 4 x 3	80K5646	96.46	90.85
● A606CHFL	6 x 6 x 4	80K5648	108.52	102.21
● A10106CHFL	10 x 10 x 6	80K5569	172.78	163.24
● A1212CHFL	12 x 12 x 6	80K5578	227.92	217.97
● A8066CHFL	8 x 6 x 6	80K5681	130.56	122.96
● A806CHFL	8 x 6 x 3.5	80K5680	118.29	111.40
● A808CHFL	8 x 8 x 4	80K5682	128.47	121.00
● A1008CHFL	10 x 8 x 4	80K5567	139.69	131.56
● A10086CHFL	10 x 8 x 6	80K5568	165.14	155.53
● A12064CHFL	12 x 6 x 4	80K5575	127.55	120.13

➤ CONTINUED ➤

TYPE 4 AND 12 ENCLOSURES (HINGED COVER) (CONT.)

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5+
● A12108CHFL	12 x 10 x 8	80K5577	222.10	209.16
● A14086CHFL	14 x 8 x 6	80K5580	215.86	203.29
● A14128CHFL	14 x 12 x 8	80K5582	264.37	248.99
● A1412CHFL	14 x 12 x 6	80K5581	228.71	215.40
● A16106CHFL	16 x 10 x 6	80K5585	226.59	213.40
● A1614CHFL	16 x 14 x 6	80K5586	271.18	255.40
● A161410CHFL	16 x 14 x 10	80K5587	323.29	304.48

(210089)

WALL-MOUNT NEMA TYPE 4X STAINLESS STEEL & ALUMINUM ENCLOSURES

NEMA

RoHS Compliant Available

Hoffman®

IP66 UL SP

- Designed to provide protection in corrosive environments in both indoor and outdoor settings
- Gasketed with a continuous hinge
- Rolled flange around three sides of the door and all four sides of the enclosure opening to exclude liquids and other contaminants
- Include a data pocket and hasp and staple for padlocking
- NEMA 4X stainless steel enclosures manufactured from 14-gauge Type 304 stainless steel coated with a smooth #4 brushed natural finish; meet NEMA 3, 3R, 3RX, 4, 4X, 12 and 13 and IEC 60529 IP66
- NEMA 4X aluminum enclosures manufactured from Type 5052 H-32 aluminum with a smooth brushed natural finish; meet NEMA 3R, 4, 4X, 12 and 13 and IEC 60529 IP66
- *Order white steel panels separately online*

NEMA 4X Stainless Steel or Aluminum

Concept® wall-mount enclosures now offer a 90-degree body flange currently provided on stainless steel Concept® offerings. Benefits include larger gasket contact area for excellent seal, increased flange trough collar depth to divert liquid, internal hinge brackets have a gasket added similar to FUSION™ AND ZONEX™ and plastic sealing washer on hinge screws removed for improved and lower seating. The viewing area of window-door and deep-hinged window kits will be slightly reduced.

Dim. (in.) H x W x D	NEMA 4X Stainless Steel: Mfg. Part No.	Stock No.	Price Each 1-4	NEMA 4X Aluminum: Mfg. Part No.	Stock No.	Price Each 1-4
16 x 12 x 6	● A16H1206SSLP	06B5180	1008.19	● A16H1206ALLP	06B5179	826.72
16 x 12 x 8	● A16H1208SSLP	06B5182	1079.34	...	...	...
16 x 16 x 6	● A-16H1606SSLP	06B5185	1117.19	...	...	...
20 x 16 x 8	● A20H1608SSLP	88F1220	1316.25	● A-16H1608ALLP	06B5187	953.85
20 x 16 x 10	● A20H1610SSLP	06B5300	1406.32	● A20H1610ALLP	06B5298	1094.68
24 x 20 x 8	● A24H2008SSLP	06B5399	1596.31	...	...	...
24 x 20 x 10	● A24H2010SSLP	19M8378	1706.06	● A24H2010ALLP	88F3590	1293.37
24 x 24 x 8	● A24H2408SSLP	06B5413	1755.26	...	...	...
30 x 24 x 8	● A30H2408SSLP	06B5536	1994.44	...	...	...
24 x 24 x 12	● A24H2412SSLP	92C1080	1994.44	...	...	...
36 x 30 x 10	● A36H3010SSLP	06B5642	2715.76	...	...	...

DOOR STOP KIT
Mfg. part no. ADSTOPK door stop kit for NEMA Type 4 and 12 enclosures secure door in the open position. Can be installed at the top or bottom of door that opens horizontally. Door opening angle can be adjusted by means of a wing nut. Stop arm slides neatly out of the way when door is closed. All parts are zinc-plated steel. Mounting hardware included. **NOTE:** door stop kit should not be installed on enclosures configured with a swing-out panel or swing-out rack frame. Maintains UL/CSA Type 4 and 12 rating if properly installed. **Mfg. part no. ADSTOPKSS6** Type 316 stainless steel for corrosion protection and maintains an enclosure's Type 4X rating.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● ADSTOPK	Door Stop Kit for NEMA Type 4 and 12 Enclosures	06B4567	128.23
● ADSTOPKSS6	Door Stop Kit for NEMA Type 4X Enclosures	27M2069	283.94

(164498)

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Affordable, performance board level & box build components at newark.com/multicomp

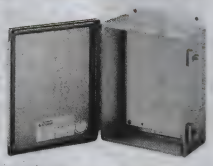
(212569)

WALL-MOUNT NEMA 4 & 4X JUNCTION BOXES

NEMA · RoHS Compliant Available · Hoffman® · IP66 · UL · CSA

- Single door with continuous hinge or clamp cover
- Steel: NEMA 4, 12 & 13, 14- or 16-gauge steel
- Stainless steel: NEMA 3R, 4, 4X, 12 & 13, 14- or 16 gauge type 3040r 316L stainelss steel
- ANSI 61 gray polyester powder finish inside and out or cover and sides of body have smooth #4 brushed finish
- Oil-resistant gasket
- Continuously welded seam
- Weldnuts provided for mounting optional white 14-gage steel panel; *order separately below*

Continuous Hinge with Clamps - Steel



Continuous Hinge with Clamps - Stainless Steel

CONTINUOUS HINGE WITH CLAMPS, TYPE 4, 4X

Dimensions (in.)	Steel Enclosures			Stainless Steel Enclosures		
H x W x D	Mfg. Part No.	Stock No.	Price 1-4	Mfg. Part No.	Stock No.	Price 1-4
6 x 4 x 3	A604CHNF*	06B5908	96.30	...	...	...
6 x 4 x 4	...	...	..	A6044CHNFSS	96F4697	290.51
8 x 6 x 3.5	A806CHNF	06B6156	118.31	...	...	...
8 x 6 x 4	...	...	...	A8064CHNFSS	96F4699	367.99
6 x 6 x 4	A606CHNF*	92F102	106.85	A606CHNFSS	96F4698	317.30
10 x 8 x 4	A1008CHNF	06B5066	140.70	A1008CHNFSS	96F4700	446.41
12 x 10 x 5	A1210CHNF	06B5114	180.07	A12106CHNFSS	96F4701	610.65
10 x 8 x 6	A10086CHNF	92F122	163.69	A-1008CHNFSS6	06B5067	555.37
14 x 12 x 6	A1412CHNF	19M8358	230.47	A1412CHNFSS	96F4703	758.10
16 x 14 x 6	A1614CHNF	06B5226	271.19	A1614CHNFSS	19M8364	877.75

CLAMP COVER, TYPE 4X

Dimensions (in.)	Stainless Steel Enclosures		
H x W x D	Mfg. Part No.	Stock No.	Price Each 1-4
4 x 4 x 3	A-404NFSS*	06B5713	253.54
6 x 4 x 4	A-6044NFSS*	06B5915	257.94
6 x 6 x 4	A-606NFSS*	06B5939	300.89
8 x 6 x 4	A-8064NFSS*	06B6161	344.46
12 x 10 x 6	A-12106NFSS*	06B5125	580.55
14 x 12 x 6	A-1412NFSS*	06B5157	714.44
16 x 14 x 6	A-1614NFSS*	06B5231	835.64

PANELS

Mfg. Part No.	Material	Dimensions (in.) H x W	Stock No.	Price Each 1-9	Price Each 10-24
A6P4	Painted Steel	4.88 x 2.88	16F257	5.86	5.52
A8P6	Painted Steel	6.75 x 4.88	89F5422	7.87	7.40
A6P6	Painted Steel	4.88 x 4.88	89F5421	7.03	6.62
A10P8	Painted Steel	8.75 x 6.88	89F5423	10.72	10.09
A-10P8G	Conductive Steel	8.75 x 6.88	20C6488	13.87	13.07
A12P10	Painted Steel	10.75 x 8.88	89F5424	18.08	17.04
A-12P10AL	Aluminum	10.75 x 8.88	06B5099	46.78	44.09
A-12P10G	Conductive Steel	10.75 x 8.88	20C6495	18.73	17.65
A12P12	Painted Steel	10.75 x 10.88	96F4601	17.03	16.03
A12P12G	Conductive Steel	10.75 x 10.88	80K5571	22.03	20.76
A14P12	Painted Steel	12.75 x 10.88	96F4602	18.93	17.82
A-14P12G	Conductive Steel	12.75 x 10.88	20C6502	24.21	22.82
A-16P12AL	Aluminum	13 x 9	06B5200	66.95	63.11
A16P14	Painted Steel	14.75 x 12.88	96F4603	25.05	23.57
A-16P14G	Conductive Steel	14.75 x 12.88	20C6506	32.21	30.36
A-20P16AL	Aluminum	17 x 13	06B5326	102.66	96.77

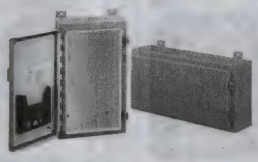
PADLOCK KITS

Mfg. Part No.	Material	Stock No.	Price Each 1-9	Price Each 10-24
APLKJIC	Plated Steel	06B4774	18.34	17.26

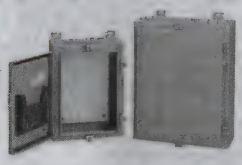
(78739)

WALL-MOUNT NEMA TYPE 12, 13, 4 STEEL ENCLOSURES

NEMA · RoHS Compliant Available · Hoffman® · IP65 · IP66 · UL · CSA



NEMA 12, 13 Painted Steel



NEMA 4 Painted Steel

- Type 12 and 13 made of mild steel coated white inside with ANSI 61gray finish outside
- Type 4 made of mild steel coated with ANSI 61gray finish inside and out
- Gasketed with a continuous hinge
- Rolled flange around three sides of the door and all four sides of the enclosure opening to exclude liquids and other contaminants
- Include a data pocket and hasp and staple for padlocking
- NEMA 12, 13 steel enclosures are designed for indoor use to protect components from dust, dirt, oil and water and meet IEC 60529 IP65
- NEMA 4 steel enclosures are designed for both indoor and outdoor use to protect components from dust, dirt, oil and hose-directed water and meet IEC 60529 IP66
- *Order white steel panels separately on page 2309*

Dim. (in.)	NEMA 12, 13 Painted Steel			NEMA 4 Painted Steel		
H x W x D	Mfg. Part No.	Stock No.	Price Each 1-4	Mfg. Part No.	Stock No.	Price Each 1-4
16 x 12 x 6	A161206LP	96F4614	357.15	A16H12ALP	06B5177	442.56
16 x 12 x 8	A161208LP	96F4631	446.70	A16H12BLP	06B5178	475.81
16 x 20 x 6	...	...	...	A16H20ALP	06B5188	631.14
16 x 20 x 6	A-162006LP	96F4616	509.25	...	...	...
20 x 16 x 6	A201606LP	96F4618	408.81	A20H16ALP	06B5289	510.76
20 x 16 x 8	A201608LP	96F4635	434.89	A20H16BLP	06B5290	538.84
20 x 16 x 10	A201610LP	19M8377	457.13	A20H16CLP	06B5291	566.70
20 x 16 x 12	A201612LP	92F113	497.99	...	...	...
20 x 20 x 6	A202006LP	96F4619	444.58	A20H20ALP	06B5304	551.03
20 x 20 x 8	A202008LP	96F4636	465.87	A20H20BLP	06B5305	582.44
20 x 20 x 8	...	...	...	A20H24BLP	06B5315	643.52
20 x 20 x 10	A202010LP	06B5358	490.64	...	...	...
24 x 20 x 6	A242006LP	96F4623	559.59	A24H20ALP	06B5391	608.70
24 x 20 x 8	A242008LP	96F4604	504.73	A24H20BLP	06B5392	625.43
30 x 24 x 12	A302412LP	19M8385	656.16	A30H24DLP	20C6521	834.11
24 x 16 x 8	A241608LP	96F4639	544.95	...	...	...
24 x 20 x 6	...	...	...	A24H20ALP	06B5391	608.70
24 x 20 x 8	A242008LP	96F4604	504.73	...	...	...
24 x 20 x 10	A242010LP	06B5469	519.77	A24H20CLP	06B5393	660.02
24 x 24 x 8	...	...	...	A24H24BLP	19M8379	675.08
24 x 24 x 10	A242410LP	92F099	561.09	...	...	...
24 x 24 x 16	A242416LP	06B5477	667.44	...	...	...
30 x 20 x 6	...	...	...	A30H20ALP	06B5525	670.69
30 x 24 x 8	A302408LP	96F4608	590.31	A30H24BLP	19M8291	1218.87
30 x 24 x 10	A302410LP	06B5594	623.61	...	...	...
30 x 24 x 12	A302412LP	19M8385	656.16	...	...	...
36 x 24 x 6	A362406LP	96F4628	630.20	A-36H24ALP	06B5627	781.66
36 x 30 x 10	A363010LP	06B5678	769.77	A36H30CLP	06B5635	979.43
36 x 30 x 12	...	...	...	A36H30DLP	06B5636	1031.66

DOOR STOP KIT

Door stop kit for NEMA Type 4 and 12 enclosures secure door in the open position. Can be installed at the top or bottom of door that opens horizontally. Door opening angle can be adjusted by means of a wing nut. Stop arm slides neatly out of the way when door is closed. All parts are zinc-plated steel. Mounting hardware included. **NOTE:** door stop kit should not be installed on enclosures configured with a swing-out panel or swing-out rack frame. Maintains UL/CSA Type 4 and 12 rating if properly installed.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
ADSTOPK	Door Stop Kit for NEMA Type 4 and 12 Enclosures	06B4567	128.23

(79214)

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TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

NEMA ENCLOSURES

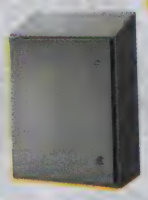
WATERSHED® NEMA 4X WALL-MOUNT ENCLOSURES

RoHS Compliant Available

Hoffman®

IP66 NEMA

- 14 gauge type 304 stainless steel
- Meets NEMA 4, 4X, 12 ratings
- IEC 60529, IP66, and cUL C22.2 No. 26 rated
- 20° sloped top facilitates runoff of water and cleaning solutions
- 170° door opening
- Slanted flange trough collar prohibits pooling of fluids
- Seamless foam-in-place one-piece gasket
- Self-grounding latch system with double seal
- Mounting holes in back of body



Padlocking Handle

Furnished hardware kit consists of panel mounting nuts, grounding hardware, and sealing washers for wall-mounting holes. Stainless steel quarter-turn latches furnished with flush slotted insert.

ENCLOSURES

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	Price Each 5+
● WS161208SS	16 x 12 x 8	22H3230	1363.94	1280.30
● WS242412SS	24 x 24 x 12	22H3238	2514.84	2360.63
● WS363612SS	36 x 36 x 12	22H3245	4083.51	3833.10

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-4	Price Each 5+
● WSHPL	Padlocking Handle Kit, Stainless Steel	89H1865	394.84	374.26

(110615)

HINGED COVER NEMA TYPE 3R SMALL AND MEDIUM ENCLOSURES

RoHS Compliant Available

Hoffman®

UL CSA NEMA

Single-door NEMA Type 3R wall-mount enclosures are designed for outdoor and indoor use to protect electrical and electronic controls, instruments, components and wiring. Provides outdoor protection against rain, sleet and snow, or indoors against dripping water. Tough galvanized steel construction with ANSI 61 gray polyester powder painted finish inside and out. Drip shield top and seamfree sides, front and back. Hinged cover has stainless steel pin. Provisions provided for padlocking and mounting optional panels; *order separately below*. Small enclosures feature knockouts on bottom.

Dim. (in.) H x W x D	Hinge Cover NEMA Type 3R Steel Enclosures: Mfg. Part No.	Stock No.	Price 1-4	Accepts Steel White Panels: Mfg. Part No.	Stock No.	Price Each 1-4
66 x 4 x	● A6R64HCR	19M8394	67.22	● A6N6P	19M8393	7.76
12 x 10 x 6	● A12R106HCR	19M8351	126.34	● A12N10P	06B5092	16.97
16 x 16 x 6	● A16R166HCR	06B5212	204.87	● A16P16	89F5427	52.28
24 x 24 x 8	● A24R248HCR	06B5462	434.73	● A24P24	96F4653	110.14

(78984)

INLINE ® WALL-MOUNT NEMA ENCLOSURES

NEMA

RoHS Compliant Available

Hoffman®

IP55 IP66 UL CSA DVE

- Solid door enclosures: NEMA 4 & 12, VDE & IP66
- Window door enclosures: NEMA 12, VDE & IP55
- Gasketed with body flange trough
- Can be direct mounted or mounted via included brackets
- 180 deg. Door opening, removable hinge pins
- Panel mounting screws, grounding hardware and sealing washers for mounting holes included
- 16-gauge steel with RAL 7035 textured light gray polyester powder painted finish
- Handles, padlock, data pockets, door stop and mounting bracket kits available *on page 2307*
- NEMA 4X & 12 stainless steel enclosures also available; *go online or call*

Inline® Enclosures

Dimensions (in.) H x W x D	NEMA 12/4 Painted Steel Enclosures: With Solid Door: Mfg. Part No.	Stock No.	Price Each 1-4	With Window: Mfg. Part No.	Stock No.	Price Each 1-4
5.9 x 5.9 x 4.7	● LHC151512	91F4820	74.76	...	...	...
7.9 x 5.9 x 4.7	● LHC201512	91F4821	91.48	...	...	...
9.84 x 7.87 x 5.91	● LHC252015	91F4822	107.95	● LWC252015	91F4826	166.01
11.81 x 9.84 x 5.91	● LHC302515	19M8445	122.59	● LWC302515	91F4827	188.43
13.8 x 11.8 x 7.9	● LHC353020	91F4824	172.51	...	...	...

CONTINUED

INLINE ® WALL-MOUNT NEMA ENCLOSURES (CONT.)

WHITE STEEL PANELS

Mfg. Part No.	Dimensions (in.) H x W	Stock No.	Price Each 1-4	Price Each 5+
● LP1515	5.16 x 5.16	91F4830	11.68	11.00
● LP2015	7.13 x 5.16	19M8446	14.38	13.55
● LP2520	9.09 x 7.13	91F4832	17.38	16.39
● LP3025	11.06 x 9.09	91F4833	19.44	18.32
● LP3530	13.03 x 11.06	91F4834	24.49	23.09

(6979)

CONCEPT® WALL-MOUNT NEMA ENCLOSURES

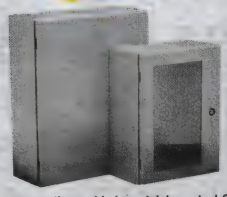
NEMA

RoHS Compliant Available

Hoffman®

IP66 UL CSA DVE

- Painted solid door enclosures: NEMA 4, 12 & 13, VDE & IP66
- Painted window door and stainless steel solid door enclosures also available; *go online or call*
- Can be direct mounted or mounted via included brackets
- Hardware kit with panel mounting nuts, panel grounding hardware and sealing washers
- 16-gauge steel with ANSI 61 gray polyester powder painted finish
- Handles, padlock, data pockets, door stop and mounting bracket kits available *on page 2307*



Concept® wall-mount enclosures now offer a 90-degree body flange currently provided on stainless steel Concept® offerings. Benefits include larger gasket contact area for excellent seal, increased flange trough collar depth to divert liquid, internal hinge brackets have a gasket added similar to FUSION™ AND ZONEX™ and plastic sealing washer on hinge screws removed for improved and lower seating. The viewing area of window-door and deep-hinged window kits will be slightly reduced.

Dimensions (in.) H x W x D	NEMA 12/4 Painted Steel Enclosures, With Solid Door: Mfg. Part No.	Stock No.	Price Each 1-4
12 x 12 x 6	● CSD12126	92F4955	314.76
16 x 12 x 6	● CSD16126	19M8405	343.99
16 x 12 x 8	● CSD16128	06B6671	352.21
16 x 16 x 6	● CSD16166	92F4957	370.32
16 x 16 x 8	● CSD16168	06B6680	380.32
20 x 16 x 6	● CSD20166	92F4958	396.99
20 x 16 x 8	● CSD20168	19M8407	414.96
20 x 16 x 10	● CSD201610	20C6769	418.80
20 x 20 x 8	● CSD20208	92F4962	448.75
20 x 20 x 12	● CSD202012	19M8408	502.61
24 x 16 x 6	● C-SD24166	06B6717	425.14
24 x 20 x 8	● CSD24208	19M8410	474.41
24 x 20 x 10	● CSD242010	19M8409	495.85
24 x 24 x 8	● CSD24248	19M8411	512.37
24 x 24 x 12	● CSD242412	88F1221	568.76
30 x 24 x 8	● CSD30248	06B6777	568.76
36 x 30 x 12	● CSD363012	06B6802	780.00
60 x 36 x 12	● CSD603612	06B6833	1207.45

WHITE STEEL PANELS

Mfg. Part No.	Dimensions (in.) H x W	Stock No.	Price Each 1-4
● CP1212	10.2 x 10.2	92F4965	22.99
● CP1612	14.2 x 10.2	19M8402	29.47
● CP1616	14.2 x 14.2	92F4967	57.10
● CP2016	18.2 x 14.2	92F4968	64.49
● C-P2016G*	18.2 x 14.2	20C6755	65.78
● CP2020	18.2 x 18.2	92F4969	77.38
● CP2416	22.2 x 14.2	92F4970	78.98
● CP2420	22.2 x 18.2	19M8403	100.83
● CP2424	22.2 x 22.2	92F4972	116.66
● CP3024	28.2 x 22.2	06B6636	140.82
● CP3030	28.2 x 28.2	06B6638	188.01
● CP3630	34.2 x 28.2	06B6643	217.57
● CP3636	34.2 x 34.2	06B6645	256.51
● CP6036	58.2 x 34.2	06B6651	405.17

ACCESSORY

● C-WKL	Wing Knobs for CONCEPT® Window Kits	06B6891	64.20

*Conductive

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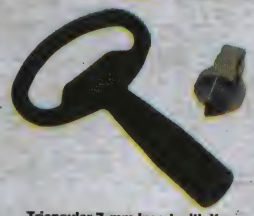
ACCESSORIES FOR INLINE® & CONCEPT® ENCLOSURES

RoHS Compliant Available

Hoffman®

NEMA



Triangular 7-mm Insert with Key

CWHNL, CWHK and **CWHPTO** handles replace the standard slotted insert on all Concept® wall-mount enclosures. A die-cast zinc keylock handle provides easy access and security. The zinc-plated padlock handle accommodates a padlock up to a 5/16" locking bar. All three latch systems feature black plastic handles and can be converted from clockwise to counter-clockwise opening. **ADP1** and **ADP2** data pockets provide convenient storage for documentation inside solid-door enclosures. Constructed of dark-gray, high-impact thermoplastic with cutout areas for easy access and visibility to contents. Each data pocket includes mounting hardware. **CMFK** and **CMFKSS** mounting bracket kits are field installable. Stainless steel brackets are rated to NEMA Type 4X. Each kit includes 4 brackets and hardware. **ADSTOPK** door stop kit for NEMA Type 12 enclosures secure door in the open position. Can be installed at the top or bottom of door that opens horizontally. Door opening angle can be adjusted by means of a wing nut. Stop arm slides neatly out of the way when door is closed. All parts are zinc-plated steel. Mounting hardware included. **NOTE:** door stop kit should not be installed on enclosures configured with a swing-out panel or swing-out rack frame.

Mfg. Part No.	Description	Stock No.	Price 1-4
CWHNL	Nonlocking Handle	92F084	59.39
CWHK	Keylock Handle	06B6883	90.88
CWHPTO	Padlock Handle	51M8725	163.87
ADP1	Data Pocket, Small 6H x 6"W	06B4565	30.81
ADP2	Data Pocket, Large 12H x 12"W	06B4566	48.19
CMFK	Zinc-Plated Steel Mounting Bracket Kit	19M8401	42.57
CMFKSS	Stainless Steel Mounting Bracket Kit	06B6619	111.89
ADSTOPK	Door Stop Kit for NEMA Type 4 and 12 Enclosures	06B4567	128.23
C-LKTM7	Triangular 7-mm Insert with Key	06B6608	34.70
A-GS816	Grounded Strap, Braided #8	06B4641	50.78
A-GS408	Grounded Strap, Braided #4	06B4638	65.51
A-VK84	Louver Plate Kit	06B5009	45.25

(157012)

CONCEPT™ TYPE 4X WALL MOUNT ENCLOSURES

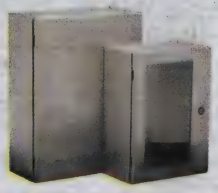
NEMA

RoHS Compliant Available

Hoffman®

IP66 UL

- Manufactured from Type 304 stainless steel
- Minimum-width body flange provides maximum body opening
- External formed 90-degree body flange
- Panel mounting studs fit optional CONCEPT panels and other accessories
- Mounting holes in back of body for direct mounting or for optional external mounting brackets
- Corner formed doors are interchangeable and easily removed by pulling clip-style hinge pins
- Quarter-turn latches furnished with flush slotted insert
- Seamless foam-in-place gasket
- Bonding provision on door; grounding stud on body
- Window doors have a clear polycarbonate window
- Door and body have smooth #4 brushed finish



For indoor or outdoor applications that require corrosion protection from chemicals and water. Furnished hardware kit consists of panel-mounting nuts, panelgrounding hardware and sealing washers for wall-mounting holes. Available in solid door models; *go online or call.*

ONE-DOOR

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	Price Each 5+
CSD12126SS	12 x 12 x 6	92F4945	817.59	770.87
CSD16126SS	16 x 12 x 6	30C1792	897.52	846.23
CSD16128SS	16 x 12 x 8	06B6673	947.76	893.60
CSD16166SS	16 x 16 x 6	92F4947	996.48	939.54
CSD16168SS	16 x 16 x 8	06B6682	1079.46	1017.77
CSD20168SS	20 x 16 x 8	92F4951	1171.57	1104.62
CSD20208SS	20 x 20 x 8	92F4952	1295.65	1221.61
CSD24248SS	24 x 24 x 8	06B6757	1561.33	1472.11
ONE-DOOR WITH WINDOW				
CSD16126WSS	16 x 12 x 6	06B6670	1249.76	1176.24
CSD20168WSS	20 x 16 x 8	06B6699	1660.64	1565.20
CSD20208WSS	20 x 20 x 8	06B6714	1831.70	1726.43

(210086)

NEMA FIBERGLASS WALL-MOUNT ENCLOSURES

NEMA

RoHS Compliant Available

Hoffman®

IP66 UL

- Meets NEMA Type 4, 4X, 12 and 13 and IEC 60529 IP66 requirements
- UL listed, CSA certified with a flammability rating per UL 508
- Designed for use as a junction box or instrument housing
- Light gray fiberglass polyester enclosures available with solid door or polycarbonate window and hinged cover
- Seamless foam in-place gasket and doors that fasten with either screws or quick-release latches

Hinged Window and Solid Door w/ Latches

Order white steel panels separately online or call.

Mfg. Part No.	Dimensions (in.) H x W x D	Cover Type	Stock No.	Price Each 1-4
A664CHSCFG	6 x 6 x 4	Solid Screw	88M1238	109.43
A864CHSCFG	8 x 6 x 4	Solid Screw	95F2768	114.50
A1086CHSCFG	10 x 8 x 6	Solid Screw	95F2769	132.81
A12106CHSCFG	12 x 10 x 6	Solid Screw	95F2770	161.85
A14128CHSCFG	14 x 12 x 8	Solid Screw	88M1237	215.05
A16148CHSCFG	16 x 14 x 8	Solid Screw	83F7196	255.94
A181610CHSCFG	18 x 16 x 10	Solid Screw	83F7197	310.16
A664CHQRFG	6 x 6 x 4	Solid w/ Quick-Release Latch	95F2771	139.34
A864CHQRFG	8 x 6 x 4	Solid w/ Quick-Release Latch	88M1239	145.29
A1086CHQRFG	10 x 8 x 6	Solid w/ Quick-Release Latch	95F2773	159.61
A12106CHQRFG	12 x 10 x 6	Solid w/ Quick-Release Latch	95F2774	188.16
A14128CHQRFG	14 x 12 x 8	Solid w/ Quick-Release Latch	83F7198	243.41
A16148CHQRFG	16 x 14 x 8	Solid w/ Quick-Release Latch	83F7199	278.00
A181610CHQRFG	18 x 16 x 10	Solid w/ Quick-Release Latch	83F7200	387.33
A664CHSCFGW	6 x 6 x 4	Window Screw	06B5965	157.91
A864CHSCFGW	8 x 6 x 4	Window Screw	06B6195	173.52
A1086CHSCFGW	10 x 8 x 6	Window Screw	06B5084	233.39
A12106CHSCFGW	12 x 10 x 6	Window Screw	06B5122	278.78
A14128CHSCFGW	14 x 12 x 8	Window Screw	06B5161	333.26
A664CHQRFGW	6 x 6 x 4	Window w/ Quick-Release Latch	95F2775	187.59
A864CHQRFGW	8 x 6 x 4	Window w/ Quick-Release Latch	88M1240	197.03
A1086CHQRFGW	10 x 8 x 6	Window w/ Quick-Release Latch	95F2777	255.78
A12106CHQRFGW	12 x 10 x 6	Window w/ Quick-Release Latch	95F2778	299.83
A14128CHQRFGW	14 x 12 x 8	Window w/ Quick-Release Latch	52F7174	356.40
A16148CHQRFGW	16 x 14 x 8	Window w/ Quick-Release Latch	92F128	412.73
A181610CHQRFGW	18 x 16 x 10	Window w/ Quick-Release Latch	92F127	537.39

(6876)

NEMA FIBERGLASS WALL-MOUNT ENCLOSURES

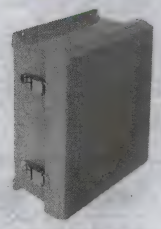
NEMA

RoHS Compliant Available

Hoffman®

IP66 UL

- Meets NEMA Type 3, 3R, 3RX, 4, 4X, 12 and 13 and IEC 60529 IP66 requirements
- UL listed, CSA certified with a flammability rating per UL 508
- Feature an overlapping door and integral mounting brackets that are often required in corrosive environments
- Constructed from corrosion-resistant, hot-compression-molded fiberglass reinforced RAL 7035 light gray polester material
- Enclosures are available with solid door or polycarbonate window
- Doors fasten with either screws or padlockable Type 316 stainless steel latches



Solid Door w/ Latches

Order white steel panels separately on page 2309.

Mfg. Part No.	Dimensions (in.) H x W x D	Cover Type	Stock No.	Price Each 1-4
HJ606HWLG	7.31 x 7.31 x 4.96	Solid Screw	67K9082	89.68
HJ1008HWLG	11.31 x 9.31 x 5.43	Solid Screw	79K6874	114.17
HJ1412HWLG	15.32 x 13.3 x 6.7	Solid Screw	79K6880	150.45
HJ1816HWLG	19.31 x 17.31 x 9.58	Solid Screw	79K6886	228.10
HJ806HWPL1LG	9.3 x 7.31 x 4.98	Solid w/ Quick-Release Latch	79K6892	115.83
HJ1008HWPL1LG	11.31 x 9.31 x 5.43	Solid w/ Quick-Release Latch	79K6875	127.16
HJ1210HWPL2LG	13.3 x 11.29 x 5.58	Solid w/ Quick-Release Latch	79K6878	141.65
HJ1412HWPL2LG	15.32 x 13.3 x 6.7	Solid w/ Quick-Release Latch	79K6881	178.97
HJ1614HWPL2LG	17.31 x 15.3 x 6.7	Solid w/ Quick-Release Latch	79K6884	194.48
HJ1816HWPL2LG	19.31 x 17.31 x 9.58	Solid w/ Quick-Release Latch	79K6887	252.19
HJB606HWPL1LG	7.31 x 7.31 x 4.96	Window w/ Quick-Release Latch	79K6872	156.02
HJB1008HWPL1LG	11.31 x 9.31 x 5.43	Window w/ Quick-Release Latch	79K6867	195.60
HJB1816HWPL2LG	19.31 x 17.31 x 9.58	Window w/ Quick-Release Latch	79K6871	401.11

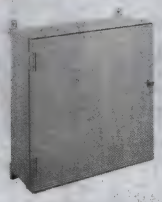
(164476)

NEMA ENCLOSURES

NEMA FIBERGLASS WALL-MOUNT ENCLOSURES

NEMA | RoHS Compliant Available | Hoffman® | IP66 | UL | CSA

- Meets NEMA Type 3, 3R, 3RX, 4, 4X, 12 and 13 and IEC 60529 IP66 requirements
- UL listed, CSA certified with a flammability rating per UL 508
- Features molded-in drip shields and DIN bosses
- Provide protection against atmosphere and marine corrosion
- Manufactured from molded fiberglass reinorced material that has temperature and chemical resistance qualities and is highly impact-resistant
- Exterior surface painted light gray acrylic enamel for enhanced UV protection
- Available with solid door (polycarbonate window available; *go online or call*)



Solid Door

ULTRX® Padlock Kit

Order white steel panels separately on page 2309.

Mfg. Part No.	Dimensions (in.) H x W x D	Cover Type	Stock No.	Price 1-4
● UU606020	20.18 x 24.11 x 8.64	Solid Door	95F2762	959.09
● UU606030	24.61 x 24.11 x 12.64	Solid Door	92F4981	1070.68

ACCESSORIES

Keylock and pushbutton-style padlock kits are easily inserted in latch hole to prevent unauthorized openings. Fully assembled for easy field installation. Maintains NEMA 4X rating. Constructed of tough Type 316 stainless steel.

Mfg. Part No.	Description	Stock No.	Price 1-4
● UUHPL	ULTRX® Padlock Kit	06B9934	99.11

(164481)

NEMA FIBERGLASS WALL-MOUNT ENCLOSURES

NEMA | RoHS Compliant Available | Hoffman® | IP66 | UL | CSA

- Meets NEMA Type 3, 3R, 3RX, 4, 4X, 12 and 13 and IEC 60529 IP66 requirements
- UL listed, CSA certified with a flammability rating per UL 508
- Designed to insulate and house electrical and electronic controls, instruments and components in highly-corrosive environments
- Gray molded fiberglass reinforced material has temperature and chemical resistance qualities
- Features flanged solid door, high-impact thermoplastic data pocket, quick release latches and hasp for padlocking

Order white steel panels separately on page 2309.

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price 1-4
A24H2006GQRLP	24 x 20 x 6	06B5395	1002.90
● A20H1608GQRLP	20 x 16 x 8	06B5296	889.36
A20H2008GQRLP	20 x 20 x 8	06B5310	989.27
A24H2008GQRLP	24 x 20 x 8	06B5398	1058.91
A24H2408GQRLP	24 x 24 x 8	06B5412	1114.16
A36H3008GQRLP	36 x 30 x 8	06B5639	1722.71
A20H1610GQRLP	20 x 16 x 10	06B5299	1020.31
A24H2010GQRLP	24 x 20 x 10	06B5401	1178.50
A30H2410GQRLP	30 x 24 x 10	06B5538	1335.18
A30H2412GQRLP	30 x 24 x 12	06B5541	1435.09

(164483)

POLYPRO® NEMA 4X POLYESTER ENCLOSURES

NEMA | RoHS Compliant Available | Hoffman® | IP66 | UL | CSA | POLYPRO ENCLOSURES

- Meets NEMA 4, 4X, 12 & 13
- Enclosure and window flammability evaluated per UL 508A
- IEC 60529, IP66, and CSA file no. 42186 rated
- Overlapping tongue-and-groove raised cover and seamless foam-in-place NEMA 4-rated gasket provide a secure seal
- Removable snap hinge cover allows acces to cover and body for modifications
- Molded layout grid on inside of body and solid covers assists with component mounting
- Internal rail system for panel height adjustment
- Embosses for rear panel mounting
- Light gray textured finish

Includes polyester mounting brackets and four adjustable panel blocks. Screw cover and padlockable non-metallic snap-down latch provisions provided as well.

ENCLOSURES

Mfg. Part No.	Dimensions (in.) H x W x D	Door	Stock No.	Price Each 1-4	Price Each 5+
● A664PHC	6.12 x 6.12 x 4.38	Solid	75M3812	99.45	93.84
● A864PHC	8.12 x 6.12 x 4.38	Solid	75M3815	100.91	95.22

CONTINUED

POLYPRO® NEMA 4X POLYESTER ENCLOSURES (CONT.)

Mfg. Part No.	Dimensions (in.) H x W x D	Door	Stock No.	Price Each 1-4	Price Each 5+
● A10106PHC	10.05 x 10.02 x 6.38	Solid	75M3789	131.30	123.90
● A10106PHCW	10.05 x 10.02 x 6.38	Window	75M3790	194.69	183.73
● A12106PHC	12.08 x 10.09 x 6.38	Solid	75M3795	141.58	133.60
● A12106PHCW	12.08 x 10.09 x 6.38	Window	75M3796	208.33	196.60
● A14128PHC	14.02 x 12.01 x 8.35	Solid	75M3799	191.20	180.42
● A16148PHC	16.02 x 14.01 x 8.35	Solid	75M3802	220.47	208.06
● A181610PHC	17.95 x 15.94 x 10.35	Solid	75M3805	263.79	248.93

ALUMINUM PANELS

Mfg. Part No.	Dimensions (in.) H x W	Stock No.	Price Each 1-4	Price Each 5+
● A-6P6AL	4.88 x 4.88	06B5835	21.04	19.70
● A8P6AL	6.75 x 4.88	94M5609	23.39	21.89
● A-18P16AL	16.75 x 14.88	06B5237	86.81	81.27

ACCESSORIES

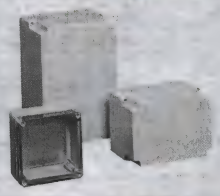
Mfg. Part No.	Description	Stock No.	Price Each 1-4	Price Each 5+
● APNLBLK	Adjustable Panel Block Kit	75M3768	27.45	25.81
● AHGCLP	POLYPRO Hinge Retainer	26R9940	10.60	10.00

(110612)

QLINE® E POLYCARBONATE NEMA ENCLOSURES

NEMA | RoHS Compliant Available | Hoffman® | IP67 | UL | CSA

- NEMA 4, 4X, 6, 12 and 13 & IP67, UL 508 flammability
- Contoured body with flush cover screws
- RAL 7035 light gray polycarbonate material
- Easily punched, drilled, filed or sawed
- Covers feature a molded-in hole for a wire lead
- Seamless foam-in-place gasket for water- and dust-tight seal
- Molded internal pads for mounting zinc-plated steel panels
- Mounting bracket and hinge kit available; order separately below



Dimensions (in.) H x W x D	Opaque Cover Mfg. Part No.	Opaque Cover Stock No.	Opaque Cover Price 1-4	Clear Cover Mfg. Part No.	Clear Cover Stock No.	Clear Cover Price 1-4
6.89 x 4.92 x 2.91	● Q18138PCE	93C9364	63.91	● Q18138PCECC	20M5711	63.29
6.89 x 4.92 x 3.9	● Q181310PCE	83F7191	64.61	● Q181310PCECC	83F7192	64.61
9.84 x 6.89 x 3.9	● Q251810PCE	51M8963	144.23	● Q251810PCECC	51M8964	144.23

ZINC-PLATED STEEL PANELS

Mfg. Part No.	Dimensions (in.) H x W	Stock No.	Price Each 1-4
● Q138PE	3.86 x 1.89	19M8453	11.39
● Q1813PE	5.83 x 3.86	06B9712	13.73
● Q2518PE	8.78 x 5.83	06B9799	17.35

ACCESSORIES

Field installable mounting bracket kits have 4 polycarbonate brackets and 4 self-tapping zinc-plated screws. Maintains listed rating for enclosure. Hinge kits include 2 polyamide hinges, 8 M4 self-tapping zinc-plated screws, 8 flat washers and drilling template.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● QEMFK	Mounting Bracket Kit for QLINE® E Enclosures	88F4334	9.45
● QDEHK	Hinge Kit for QLINE® E Enclosures	06B9614	34.25

(31687)

element14 COMMUNITY

Get inspired, collaborate, design, research, ask experts questions.

element14.com

(196546)

QLINE® I POLYCARBONATE NEMA ENCLOSURES

NEMA · RoHS Compliant Available · Hoffman® · IP66 · UL · CSA

- NEMA 4, 4X, 12 and 13 & IP66, UL 508 flammability
- Contoured body with flush cover screws
- RAL 7035 light gray polycarbonate material
- Easily punched, drilled, filed or sawed
- Covers feature a molded-in hole for a wire lead
- Seamless foam-in-place gasket for water- and dust-tight seal
- Molded internal pads for mounting zinc-plated steel panels
- Mounting bracket and hinge kit available; order separately below

Dimensions (in.) H x W x D	Opaque Cover			Clear Cover		
	Mfg. Part No.	Stock No.	Price 1-4	Mfg. Part No.	Stock No.	Price 1-4
7.87 x 7.87 x 4.84	Q202013PCI	19M8456	104.87	Q202013PCICC	91F2279	106.55
11.81 x 7.87 x 4.84	Q302013PCI	91F2274	132.67	Q302013PCICC	91F2280	134.79
11.81 x 11.81 x 4.84	Q303013PCI	91F2276	155.33	Q303013PCICC	19M8458	152.88
15.75 x 7.87 x 4.84	Q402013PCI	91F2275	150.64	Q402013PCICC	06B9863	166.01

ZINC-PLATED STEEL PANELS

Mfg. Part No.	Dimensions (in.) H x W	Stock No.	Price Each 1-4
Q2020PI	6.3 x 6.3	06B9777	17.59
Q3020PI	10.24 x 6.3	06B9821	20.44
Q4020PI	14.17 x 6.3	06B9860	25.00
Q4030PI	14.17 x 10.24	06B9874	31.77

ACCESSORIES

Field installable mounting bracket kits have 4 polycarbonate brackets and 4 self-tapping zinc-plated screws. Maintains listed rating for enclosure. Hinge kits include 2 polyamide hinges, 8 M4 self-tapping zinc-plated screws, 8 flat washers and drilling template.

Mfg. Part No.	Description	Stock No.	Price Each 1-4
QIMFK	Mounting Bracket Kit for QLINE® I Enclosures	06B9642	26.33
QIHK	Hinge Kit for QLINE® I Enclosures	06B9639	17.85

(157010)

HOL-TITE® OIL TIGHT HOLE SEALS

RoHS Compliant Available · Hoffman® · UL · CSA

Hole plugs seal unused pushbutton holes, conduit openings and knockout holes against dust, oil and water. Seals made of galvanized steel have oil-resistant gasket and are secured with a 10-32 x 5/8" threaded stud and plated wing nut. 16-gauge steel with ANSI 61 gray powder paint finish. Stainless seals have polished front surface, are made of series 300 stainless steel. 10-24 x 5/8 stainless stud with stainless wing nut. 16 gauge stainless steel backplate. Both have oil-resistant gaskets.

Description	Hole Seal Dia. (In.)	Max. Hole Dia. (In.)	NEMA Type 12, 3R, 4, Painted Steel			NEMA Type 4X, Stainless Steel		
			Mfg. Part No.	Stock No.	Price Each 1-4	Mfg. Part No.	Stock No.	Price Each 1-4
22.5mm Pushbutton	1.22	0.88	ASPBG	51M8648	12.17	ASPBGSS	19M8323	29.75
1/2" Conduit	1.38	0.88	AS050	99F5996	11.75	AS050SS	92F112	29.75
3/4" Conduit	1.56	1.06	AS075	19M8325	14.80	AS075SS	06B4965	38.02
30.5mm Pushbutton	1.75	1.25	ASPB	06B4958	16.29	ASPBSS	19M8324	41.88
1" Conduit	1.88	1.38	AS100	06B4966	20.94	AS100SS	19M8326	50.98
1-1/2" Conduit	2.50	2	AS150	19M8328	26.50	...	...	...
2" Conduit	3.00	2.5	AS200	19M8329	29.17	...	...	...
2-1/2" Conduit	3.50	3	AS250	19M8330	37.14	...	...	...
4" Conduit	5.12	4.62	AS400	19M8332	82.37	...	...	...

(79370)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

(212570)

WHITE STEEL PANELS

RoHS Compliant Available · Hoffman®

Steel panels are 14 or 12 gauge and have a painted white finish. Larger panels have flanges on two or four sides. Panel mounting hardware is furnished with all enclosures which accept these panels. For additional panel sizes and material options of Stainless Steel, Aluminum, Galvanized, or composite, *go online or call.*

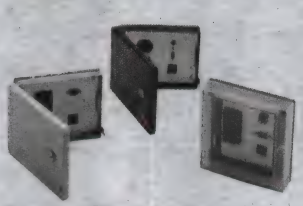
PANELS FOR JUNCTION BOXES

Mfg. Part No.	Panel H x W	Fits Box Footprint Size H x W	Stock No.	Price Each 1-9
A6P4	4.88 x 2.88	6.00 x 4.00"	16F257	5.86
A6P6	4.88 x 4.88	6.00 x 6.00"	89F5421	7.03
A8P6	6.75 x 4.88	8.00 x 6.00"	89F5422	7.87
A8P8	6.75 x 6.88	8.00 x 8.00"	96F4641	11.78
A10P8	8.75 x 6.88	10.00 x 8.00"	89F5423	10.72
A10P10	8.75 x 8.88	10.00 x 10.00"	96F4643	16.20
A12P10	10.75 x 8.88	12.00 x 10.00"	89F5424	18.08
A12P12	10.75 x 10.88	12.00 x 12.00"	96F4601	17.03
A14P12	12.75 x 10.88	14.00 x 12.00"	96F4602	18.93
A16P14	14.75 x 12.88	16.00 x 14.00"	96F4603	25.05
A18P16	16.75 x 14.88	18.00 x 16.00"	99F5957	44.76
PANELS FOR WALL MOUNT NEMA 12, 4, 4X ENCLOSURES				
A16P12	9 x 13	16.00 x 12.00"	89F5426	42.48
A20P16	13 x 17	20.00 x 16.00"	89F5428	61.52
A20P20	17 x 17	20.00 x 20.00"	89F5429	74.27
A24P16	21 x 13	24.00 x 16.00"	89F5430	72.16
A24P20	17 x 21	24.00 x 20.00"	89F5431	96.11
A24P24	21 x 21	24.00 x 24.00"	96F4653	110.14
A30P24	21 x 27	30.00 x 24.00"	19M8384	131.57
A36P30	27 x 33	36.00 x 30.00"	92F095	213.32
A36P36	33 x 33	36.00 x 36.00"	06B5667	252.01

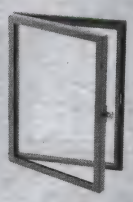
(6875)

ARC FLASH SAFETY SYSTEMS

c UL us · NEMA · RoHS Compliant Available · Hoffman®



Data Interface Ports

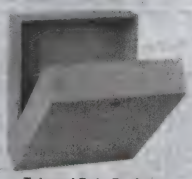


Type 12 Hinged Window Kit

Deep Hinged Window Kit

Folding Shelf

Keyboard Box



External Data Pocket

Arc flash events may happen when an electrical fault occurs within the confined space of an enclosure. Often triggered by opening doors to access controls, the resulting explosion can cause devastating personal injury and extensive equipment damage. Conventional compliance with safety standards specifies that only highly-trained personnel with fire retardant, protective gear and non-conductive wands may breach enclosures within a "flash protection boundary" established by NFPA 70E. This method is not only potentially hazardous, but entails considerable compliance costs and may require a production shutdown to monitor controls or initiate a simple programming change. The components of the Arc Flash Safety System isolate workers from energized equipment within the enclosure while meeting NFPA 70E safety standards.

INTERSAFE™ TYPE 4/4X/12 DATA INTERFACE PORTS

The INTERSAFE™ Data Interface Ports are a solution for the intersection of convenience and safety. Ports are mounted on an enclosure to allow access to the programming devices inside the enclosure without opening the enclosure door. Feature frame and door assembly with aluminum backplate. All standard configurations include a GFCI or standard duplex receptacle with a 5-amp circuit breaker for added safety. Door gasket (between the door and plate assemblies) and plate gasket (between the plate assembly and the enclosure) together provide a tight seal. Quarter-turn latch with screwdriver slot and padlock hasp on all configurations. Continuous hinges attach to the door frame to allow easy door removal. An important accessory for use with a broad range of enclosures, these ports maintain compliance with the NFPA 70E arc flash protection directive. 120 VAC receptacles and programming connectors are mounted to the plate in 75 standard configurations. Modifications and customization available to accommodate a wide variety of additional connectors, *go online or call.*

➤ CONTINUED ➤

NEMA ENCLOSURES

ARC FLASH SAFETY SYSTEMS (CONT.)

Mfg. Part No.	Protocol	Interface Configuration	NEMA Rating*	Stock No.	Price 1-4
● HDP5TMMCC+	Micro	DB9F	12/4/4X	79K6787	530.82
● HDP5TMMSS†	Micro	DB9F	12/4/4X	79K6788	614.53
● HGF58MDH‡	Data Highway	8-pin mini DIN, DB9F	12/4	79K6841	438.60
● HGF58MDHCC+	Data Highway	8-pin mini DIN, DB9F	12/4/4X	79K6842	633.31
● HGF58MDHSS†	Data Highway	8-pin mini DIN, DB9F	12/4/4X	79K6843	717.32
● HGF5CN‡	ControlNet	Shielded RJ45	12/4	79K6809	438.60
● HGF5CNCC+	ControlNet	Shielded RJ45	12/4/4X	79K6810	633.31
● HGF5CNSS†	ControlNet	Shielded RJ45	12/4/4X	79K6811	717.32
● HGF5DN5P‡	DeviceNet	5-pin Phoenix Style, 5-pin mini receptacle	12/4	79K6812	467.15
● HGF5DN5PCC+	DeviceNet	5-pin Phoenix Style, 5-pin mini receptacle	12/4/4X	79K6813	666.00
● HGF5DN5PSS†	DeviceNet	5-pin Phoenix Style, 5-pin mini receptacle	12/4/4X	79K6814	750.60
● HGF5ETH‡	Ethernet/ProfiNet	RJ45	12/4	79K6815	369.16
● HGF5ETHCC+	Ethernet/ProfiNet	RJ45	12/4/4X	79K6816	553.37
● HGF5ETHSS†	Ethernet/ProfiNet	RJ45	12/4/4X	79K6823	637.38
● HGF5ETHDH‡	DH+, ModBus Plus, Ethernet	RJ45	12/4	79K6817	632.65
● HGF5ETHDHCC+	DH+, ModBus Plus, Ethernet	RJ45	12/4/4X	79K6818	857.82
● HGF5ETHDHSS†	DH+, ModBus Plus, Ethernet	RJ45	12/4/4X	79K6819	941.39
● HGF5ETHETH‡	Ethernet	RJ45, RJ45	12/4	79K6820	458.20
● HGF5ETHETHCC+	Ethernet	RJ45, RJ45	12/4/4X	79K6821	655.72
● HGF5ETHETHSS†	Ethernet	RJ45, RJ45	12/4/4X	79K6822	740.24
● HGF5GEG‡	Genius	DB9	12/4	79K6824	489.92
● HGF5GEGCC+	Genius	DB9	12/4/4X	79K6825	692.32
● HGF5GEGSS†	Genius	DB9	12/4/4X	79K6826	776.48
● HGF5GESNP‡	SNP	DB15F	12/4	79K6827	438.60
● HGF5GESNPCC+	SNP	DB15F	12/4/4X	83K8391	620.59
● HGF5GESNPSS†	SNP	DB15F	12/4/4X	79K6828	717.32
● HGF5PB‡	Profibus	9-pin Profibus	12/4	79K6829	435.35
● HGF5PBSS†	Profibus	9-pin Profibus	12/4/4X	79K6831	713.55
● HGF5TMB‡	Modbus	DB9F	12/4	79K6832	438.60
● HGF5TMBCC+	Modbus	DB9F	12/4/4X	79K6833	633.31
● HGF5TMBSS†	Modbus	DB9F	12/4/4X	79K6834	717.32
● HGF5TMM‡	Micro	DB9F	12/4	79K6835	441.63
● HGF5USBUSB‡	USB	USB Type A, USB Type A	12/4	79K6838	509.52
● HGF5USBUSBCC+	USB	USB Type A, USB Type A	12/4/4X	79K6839	714.88
● HGF5USBUSBSS†	USB	USB Type A, USB Type A	12/4/4X	79K6840	799.40

*Rating applies when installed in an enclosure of equal NEMA rating; + Polycarbonate housing; † Stainless steel housing; ‡ Steel housing

STEEL AND STAINLESS STEEL WINDOW KITS

Provide visual control monitoring. Constructed of heavy gauge steel with a polyester powder finish and 6mm acrylic window, or Type 304 stainless steel with a brushed finish and 6mm polycarbonate window. Oil resistant gaskets provide a water-tight seal around the perimeter of the window and frame. Custom sizes available; *go online or call.*

Frame Size (inches)	Mild Steel			Stainless Steel		
	Mfg. Part No.	Stock No.	Price 1-4	Mfg. Part No.	Stock No.	Price 1-4
7.5 x 5.5	● APWK53NF	31M3531	178.59	● APWK53NFSS	31M3532	292.75
11.5 x 8.0	● APWK95NF	31M3533	215.88	● APWK95NFSS	31M3534	353.14
15.5 x 5.5	● APWK133NF	30M8772	196.00	...	...	...
15.5 x 10.5	● APWK138NF	31M3516	272.40	● APWK138NFSS	31M3517	446.57
19.5 x 8.0	● APWK175NF	31M3521	242.43	...	...	...
19.5 x 13.5	● APWK1711NF	31M3519	375.06	● APWK1711NFSS	31M3520	575.62
25.5 x 17.5	● APWK2315NF	31M3524	463.44	● APWK2315NFSS	31M3525	741.93
31.5 x 21.5	● APWK2919NF	31M3527	672.02	● APWK2919NFSS	31M3528	1104.11
37.5 x 25.5	● APWK3523NF	31M3530	887.76	...	...	...

TYPE 12 HINGED WINDOW KITS

Feature a 6mm clear acrylic window for easy component viewing and a continuous gasket for seal integrity. ANSI gray polyester powder finish.

12.0 x 12.0	● APWK1212H	31M3515	503.86	...	...	...
16.0 x 12.0	● APWK1612H	31M3518	530.65	...	...	...
20.0 x 16.0	● APWK2016H	31M3522	602.03	...	...	...
20.0 x 20.0	● APWK2020H	31M3523	646.45	...	...	...
24.0 x 20.0	● APWK2420H	31M3526	691.11	...	...	...
30.0 x 24.0	● APWK3024H	31M3529	826.16	...	...	...

DEEP HINGED WINDOW KITS

Protect controls with 2.5″ of clearance between the panel and window surface. Feature a quarter-turn latch for easy access, 6mm clear polycarbonate window, and a built-in gasket compression stop to facilitate flush mounting. Mounts right- or left-hinged.

14.19 x 8.14	● AWDH1612N4	88H5772	809.24	● AWDH1612N4SS	88H5773	2100.14
18.19 x 12.14	● AWDH2016N4	88H5774	967.34	● AWDH2016N4SS	88H5775	2510.17

➤ CONTINUED ➤

ARC FLASH SAFETY SYSTEMS (CONT.)

DEEP HINGED WINDOW KITS

Frame Size (inches)	Mild Steel			Stainless Steel		
	Mfg. Part No.	Stock No.	Price 1-4	Mfg. Part No.	Stock No.	Price 1-4
22.19 x 12.14	● AWDH2416N4	88H5776	1040.07	● AWDH2416N4SS	88H5777	2692.91
22.19 x 16.14	● AWDH2420N4	88H5778	1113.71	● AWDH2420N4SS	88H5779	2882.92
22.19 x 26.14	● AWDH2430N4	88H5780	1330.09	● AWDH2430N4SS	88H5781	3439.32
28.19 x 20.14	● AWDH3024N4	88H5782	1330.09	● AWDH3024N4SS	88H5783	3439.32
34.19 x 20.14	● AWDH3624N4	88H5784	1545.56	● AWDH3624N4SS	88H5785	3997.54

ACCESSORIES

Folding shelves provide a convenient location for mobile PCs, laptops and test equipment, and fold out of the way when not in use. Feature heavy gauge steel construction and automatic locking in raised position. External CONCEPT® Keyboard Box mounts to an enclosure to provide a self-contained Type 4 housing for connected keyboards. External Data Pockets enable operators to access system documentation without opening the enclosure door. NEMA Type 12/4 rated.

Mfg. Part No.	Description	Stock No.	Price 1-4
● AASHLF1218	Folding Shelf, 12 x 18″	31M3512	317.98
● AASHLF1818	Folding Shelf, 18 x 18″	31M3513	373.90
● AASHLF2424	Folding Shelf, 24 x 24″	31M3514	457.06
● CKBC24	External CONCEPT® Keyboard Box, 10 x 23.3 x 4.79″	31M3535	1243.10
● ADPX4A	External Data Pocket, 14 x 12 x 3.25″, ANSI 61 Gray	79K5547	211.23
● ADPX4ALG	External Data Pocket, 14 x 12 x 3.25″, RAL 7035 Light Gray	79K5548	216.30
● ADPX4B	External Data Pocket, 6 x 6 x 2.25″, ANSI 61 Gray	79K5549	133.22
● ADPX4BLG	External Data Pocket, 6 x 6 x 2.25″, RAL 7035 Light Gray	79K5550	133.22
● ADPX4C	External Data Pocket, 12 x 18 x 2.75″, ANSI 61 Gray	79K5551	472.25
● ADPX4CLG	External Data Pocket, 12 x 18 x 2.75″, RAL 7035 Light Gray	79K5552	472.25

(88606)

LED LIGHT KITS

IP 30 NEMA Hoffman®

LED Light Kits

LED Light Extension Connector/Cable Assembly

LED Light Input Connector/Cable Assembly

LED light kits provide interior enclosure lighting. These light kits are ideal for remote and darkened enclosure applications. The light can be mechanically fastened with included hardware to maintain enclosure UL listing (up to Type 4X), or can be magnetically attached to flat steel surfaces. The lights have auto-sensing circuitry (AC voltage 90 VAC to 260 VAC and DC voltage 20 VDC to 60 VDC). LED lights are light-weight and in a small form factor while providing 900 LM of 6500K light. Power consumption for all models is 5 watts.

Mfg. Part No.	Dimensions (in.) H x Dia. x D	Mounting Style	Power Source	Activation	Voltage	Stock No.	Price Each 1-4
LEDA1M35	1.34 x1.26 x 13.82	Magnetic	AC	On/off switch	90-260VAC	52W5227	154.88
LEDA1S35	1.42 x 2.05 x 13.82	Screw	AC	On/off switch	90-260VAC	27W5622	166.63
LEDA2M35	1.54 x 1.26 x 13.82	Magnetic	AC	IR Motion Sensor	90-260VAC	69W1097	245.93
LEDA2S35	1.63 x 2.05 x 13.82	Screw	AC	IR Motion Sensor	90-260VAC	69W1098	235.39
LEDD1M35	1.34 x1.26 x 13.82	Magnetic	DC	On/off switch	20-60VDC	69W1100	248.82
LEDD1S35	1.42 x 2.05 x 13.82	Screw	DC	On/off switch	20-60VDC	69W1101	248.82
LEDD2M35	1.54 x 1.26 x 13.82	Magnetic	DC	IR Motion Sensor	20-60VDC	69W1103	301.32
LEDD2S35	1.63 x 2.05 x 13.82	Screw	DC	IR Motion Sensor	20-60VDC	69W1104	329.43

LED Light Extension Connector/Cable Assembly

The extension connector/cable assembly is used to connect adjacent LED lights (daisy chain). Up to 10 LED lights can be ganged or connected in series. Pre-assembled connector/cable assembly with 39.4-in. (1000 mm) long cable between input and output connectors. Cables are constructed of 16 AWG copper wire.

Mfg. Part No.	Cable Length Between Input /Output Connectors (in.)	Power Source	Description	Stock No.	Price Each 1-4
LEDA10E	39.37	AC	AC LED Lights	52W5224	56.07
LEDD10E	39.37	DC	DC LED Lights	69W1102	56.07

➤ CONTINUED ➤

LED LIGHT KITS (CONT.)

Mfg. Part No.	Dimensions (in.) H x Dia. x D	Mounting Style	Power Source	Activation	Voltage	Stock No.	Price Each 1-4
The input connector/cable assembly is used to provide supply power to the LED light. Pre-assembled connector/cable assembly with 78.7-in. (2000 mm) long cable whip. Cables are constructed of 16 AWG copper wire.							
LEDA20C	78.74		AC	AC LED Lights		69W1099	43.20
LEDD20C	78.74		DC	DC LED Lights		69W1105	41.94

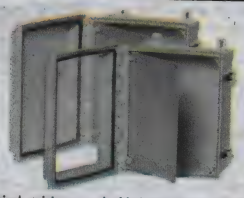
(210090)

ARCA JIC SIZED POLYCARBONATE ENCLOSURES

RoHS Compliant Available

FIBOX Enclosing Innovations

- All rated UL 4, 4X, 6, 6P, 12, 13
- Feature oversized PUR gasket
- Non-toxic and halogen-free
- Continuous temperature range: -40°F to +175°F (-40°C to +80°C)
- Impact resistance per UL 508/UL 50
- Flammability rating: UL508
- AR664, AR865, AR1086, AR12106: NEMA 6, 6P



Precision injection-molded enclosures feature superior chemical resistance and wide temperature utilization range of polycarbonate plastic. Cover features overlapping design and superior protection of the formed-in-place PUR gasket. Enclosures include 4 mounting feet. Panels are white-painted carbon steel, *order separately below.* 16 x 14 x 18″ and 18 x 16 x 10″ sizes also available, *go online or call.*

ENCLOSURES - OPAQUE COVER

Mfg. Part No.	Dimensions (in.) H x W x D	Cover	Latch	Stock No.	Price Each 1-4
AR865CHL	9.5 x 7.4 x 5.7	Hinge	Quick Release Plastic	53M6260	101.15
AR865CHSC	9.5 x 7.4 x 5.7	Hinge w/ Screw	None	53M6261	85.40
AR1086CHSC	11.5 x 9.3 x 6.7	Hinge w/ Screw	None	53M6249	99.09
AR12106CHL	13.5 x 11.4 x 6.7	Hinge	Quick Release Plastic	53M6251	119.30
AR12106CHSS	13.5 x 11.4 x 6.7	Hinge	Stainless Steel	53M6253	127.03
AR14127CHL	15.5 x 13.3 x 7.7	Hinge	Quick Release Plastic	53M6254	154.28
AR16148CHSC	17.8 x 15.5 x 8.7	Hinge w/ Screw	None	46P4392	153.54
AR181610CHL	19.8 x 17.5 x 10.7	Hinge	Quick Release Plastic	46P4394	223.24
AR181610CHSS	19.8 x 17.5 x 10.7	Hinge	Stainless Steel	46P4397	232.60
ENCLOSURES - CLEAR COVER					
AR865CHSCT	9.5 x 7.4 x 5.7	Hinge w/ Screw	None	96M7999	101.39
AR865CHSST	9.5 x 7.4 x 5.7	Hinge	Stainless Steel	96M8000	123.45
AR1086CHLT	11.5 x 9.3 x 6.7	Hinge	Quick Release Plastic	94M5436	125.81
AR1086CHSCT	11.5 x 9.3 x 6.7	Hinge w/ Screw	None	96M7987	119.13
AR1086CHSST	11.5 x 9.3 x 6.7	Hinge	Stainless Steel	96M7988	134.20
AR12106CHSSLT	13.5 x 11.4 x 6.7	Hinge	Stainless Steel	11N7519	157.70
AR14127CHSST	15.5 x 13.3 x 7.7	Hinge	Stainless Steel	96M7994	193.32

PANELS

Mfg. Part No.	Dimensions (in.) H x W	Stock No.	Price Each 1-4	5-9	10+
ABP86	6.7 x 4.9	53M6247	12.67	12.31	12.00
ABP108	8.9 x 6.9	53M6244	19.34	18.78	18.32
ABP1210	10.8 x 8.9	53M6245	24.21	23.51	22.93
ABP1412	12.8 x 10.8	51M8331	28.43	27.61	26.93
ABP1614	14.8 x 12.9	46P4389	31.80	30.88	30.12
ABP1816	16.7 x 14.9	46P4390	36.63	35.58	34.70

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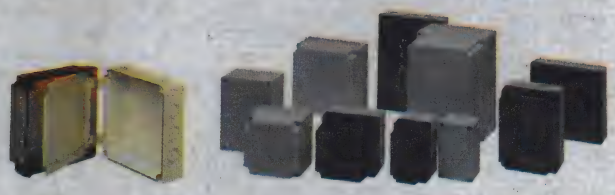
POLYCARBONATE ENCLOSURES

RoHS Compliant Available

FIBOX Enclosing Innovations

IP67



- NEMA 4, 4X, 6, 12, 13
- Metric size knockouts
- UL listed polycarbonate molded construction
- Light gray opaque or smoked transparent cover
- Protection: IP67 (IEC 529)
- UL94-V2 flame resistance

CONTINUED

POLYCARBONATE ENCLOSURES (CONT.)

Temperature range: -40°C to +120°C; in continuous use: max. 80°C. Enclosures include: enclosure cover with cover screws, wing heads for cover screws and base with mounting plate screws and gasket. Gasket injected during body molding process for superior protection. *Order mounting plates and mounting foot kit separately below.* FP A XXX/XXX aluminum front plates and MIV XX 35mm DIN rails, smooth-sided and ABS plastic version enclosures also available; *go online or call.*

LIGHT GRAY COVER

Mfg. Part No.	Dim. (in.) H x W x D	No. of Metric Knockouts Per Side: Long Side	Short Side	Stock No.	Price Each 1-49	50-99
PCM 100/75 G*	3 x 3.1 x 5.1	2x M32/M20	1x M25/M16	38K6480	16.61	15.01
UL PCM 125/125 G	4.9 x 5.1 x 5.1	2x M32/M20	2x M25/M16	39C9035	42.08	40.96
UL PCM 125/125 T	4.9 x 5.1 x 5.1	2x M32/M20	2x M25/M16	39C9036	42.81	41.67
UL PCM 150/100 T	3.9 x 5.1 x 7.1	3x M25/M16	2x M32/M20	39C9042	48.97	47.67
UL PCM 175/100 T	3.9 x 7.1 x 7.1	3x M32/M20	3x M25/M16	39C9050	61.61	59.98

MOUNTING PLATES

Mfg. Part No.	Dimensions (in.) H x W	Stock No.	Price Each 1-4	5-9	10+
MIV 100	3.9 x 1.9	35C3076	2.55	2.48	2.34
MIV 125	3.9 x 3.9	35C3077	3.34	3.26	3.08
MIV 150	5.8 x 3.9	35C3078	4.01	3.90	3.69
MIV 175	5.8 x 5.8	35C3079	4.64	4.52	4.27

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-4	5-9	10+
FP 22040	Mounting Foot Kit	39C7884	4.03	3.91	3.73
FP 22046	Mounting Foot Kit	35C2977	2.46	2.39	2.26

*Not UL listed

(69006)

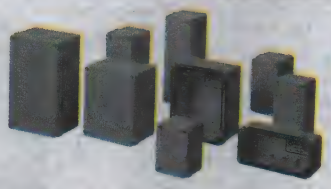
ABS PICCOLO ENCLOSURES

IP67

RoHS Compliant Available

FIBOX Enclosing Innovations

- NEMA 1, 4X, 6, 12, 13
- IP67 protection
- Light gray or transparent cover option
- Also available in UL/CSA approved polycarbonate plastic



Also available in pushbuttons; *go online or call.*

Mfg. Part No.	Dimensions (in.) H x W x D	Cover Color	Stock No.	Price Each 1-4	5-9	10+
ABS B 65 G	2.6 x 3.1 x 4.3	Light Gray	39C7365	14.35	13.97	13.21
ABS B 85 G	3.3 x 3.1 x 4.3	Light Gray	39C7367	15.95	15.53	14.68
ABS C 65 G	2.6 x 3.1 x 5.5	Light Gray	39C7369	15.52	15.11	14.28
ABS C 85 G	3.3 x 3.1 x 5.5	Light Gray	39C7371	18.10	17.62	16.66
ABS D 65 G	2.6 x 3.1 x 6.7	Light Gray	39C7373	17.40	16.93	16.01
ABS D 85 G	3.3 x 3.1 x 6.7	Light Gray	39C7375	18.90	18.40	17.39
ABS F 65 G	2.6 x 3.1 x 9.1	Light Gray	39C7377	19.87	19.34	18.29
ABS F 85 G	3.3 x 3.1 x 9.1	Light Gray	39C7379	22.20	21.61	20.44
ABS H 95 G	3.7 x 5.5 x 6.7	Light Gray	39C7381	26.16	25.46	24.08
ABS M 95 G	3.7 x 5.5 x 9.1	Light Gray	39C7383	31.56	30.72	29.05
ABS B 65 T	2.6 x 3.1 x 4.3	Transparent	39C7366	15.66	15.25	14.41
ABS C 65 T	2.6 x 3.1 x 5.5	Transparent	39C7370	16.87	16.43	15.53
ABS H 95 T	3.7 x 5.5 x 6.7	Transparent	39C7382	29.40	28.62	27.06

(73747)

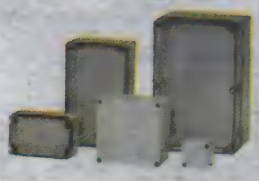
EURONORD POLYCARBONATE ENCLOSURES

IP67

RoHS Compliant Available

FIBOX Enclosing Innovations

- Ingress protection (EN 60529): IP 66/67
- Impact resistance (EN 50102): IK 08/07
- Electrical insulation: totally insulated
- NEMA type 1, 4, 4X, 12 and 13
- UV resistance: UL 508
- Flammability rating (UL 746 C 5): UL 94 5V



Includes base with screws for mounting plate/DIN-rail, cover with PUR gasket and stainless steel cover screws. Back panels, UL versions as well as fiberglass, polyester and aluminum enclosures also available; *go online or call*.

Mfg. Part No.	Dimensions (in.) H x W x D	Material	Cover	Stock No.	Price Each 1-4	5-9
PC 050504	2 x 2 x 1.6	Polycarbonate	Gray	39C8350	14.65	14.26
PC 050705	2.6 x 2 x 1.8	Polycarbonate	Gray	39C8351	21.03	20.47
PC 080806	3.2 x 3.1 x 2.1	Polycarbonate	Gray	93K7727	33.78	32.88
PC 080809	3.2 x 3.1 x 3.3	Polycarbonate	Gray	95M7025	34.34	33.43

CONTINUED

NEMA ENCLOSURES

EURONORD POLYCARBONATE ENCLOSURES (CONT.)

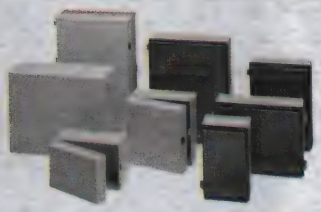
Mfg. Part No.	Dimensions (in.) H x W x D	Material	Cover	Stock No.	Price Each 1-4	Price Each 5-9
● PC 080810	3.2 x 3.1 x 3.7	Polycarbonate	Gray	93K7728	35.17	34.24
● PC 121207	4.8 x 4.7 x 2.6	Polycarbonate	Gray	39C8376	42.16	41.05
● PC 121211	4.8 x 4.7 x 4.1	Polycarbonate	Gray	48M5737	50.44	49.10
● PC 121609	6.3 x 4.7 x 3.5	Polycarbonate	Gray	39C8378	57.39	55.87
● PC 122008	7.9 x 4.7 x 3	Polycarbonate	Gray	39C8379	61.01	59.39
● PC 162509	9.8 x 6.3 x 3.5	Polycarbonate	Gray	39C8427	76.20	74.18
● PC 233009	11.8 x 9.1 x 3.4	Polycarbonate	Gray	39C8481	128.33	124.92
● PCT 050705	2.6 x 2 x 1.8	Polycarbonate	Transparent	39C8617	20.94	20.39
● PCT 121207	4.8 x 4.7 x 2.6	Polycarbonate	Transparent	39C8622	45.53	44.32
● PCT 121609	6.3 x 4.7 x 3.5	Polycarbonate	Transparent	39C8624	64.14	62.44

(69317)

NEMA WALL-MOUNT CABINETS

IP67 NEMA RoHS Compliant Available FIBOX Enclosing Innovations

- NEMA 1,4,4X,13; IP 66/67
- Constructed of corrosion and impact resistant Polycarbonate
- Light gray or smoked transparent cover option
- Padlockable
- Also available in UL/cUL approved polycarbonate plastic
- Also available with 3mm double bit lock/key instead of latches



CAB series wall mounting cabinets are designed especially for instrument builders to mount components at several different depths. A rigid internal door (swing door) can be mounted or hinged at different depths, with the mounting plate in the bottom or bus bars mounted. The Fibox® quick lock system allows easy access to the enclosure while still insuring tight sealing. Screw cover versions (CAB PCQ XXXXXX X) available in shallower sizes; *go online or call.*

Mfg. Part No.	Dimensions (in.) H x W x D	Cover	Stock No.	Price Each 1-4	Price Each 5-9
● CAB PC 302018 G	x x	Light Gray	39C7641	102.35	99.58
● CAB PC 303018 G	x x	Light Gray	39C7645	119.30	116.08
● CAB PC 403018 G	15.7 x 11.8 x 7.1	Light Gray	39C7651	150.90	146.82
● CAB PC 303018 T	x x	Smoked Transparent	39C7647	122.83	119.51
● CAB PC 403018 T	15.7 x 11.8 x 7.1	Smoked Transparent	39C7653	155.61	151.41
● CAB PC 504020 T	19.7 x 15.7 x 7.9	Smoked Transparent	39C7659	231.15	224.90
● CAB PC 604022 T	23.6 x 15.7 x 8.7	Smoked Transparent	39C7663	332.57	323.59

BACK PANELS

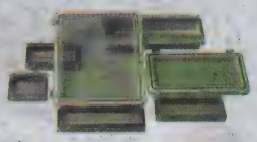
Mfg. Part No.	Dimensions (in.) W x D	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10+
● EKIV 23	10.63 x 6.69	39C7731	9.37	9.12	8.61
● EKIV 33	10.63 x 10.63	39C7734	11.51	11.20	10.57
● EKIV 43	10.63 x 14.57	39C7737	15.35	14.93	14.11
● EKIV 54	14.57 x 18.5	39C7740	21.96	21.37	20.18

(73748)

INSPECTION WINDOW KITS

NEMA RoHS Compliant Available FIBOX Enclosing Innovations IP65

- NEMA 4, 12; IP54 or IP65
- Add inspection window to any enclosure
- Maintain enclosure environmental ratings up to NEMA 4
- Temperature range: -40°F to +248°F (-40°C to +120°C)
- Resistant to UV radiation, non-hygroscopic
- Chemical resistance to concentrated mineral acids, organic acids, oxidants, deducing agents, neutral/acid salt solutions, grease, and oil



Inspection windows permit viewing and access to readouts and controls that are surface mounted on plastic or metal enclosures.

WITH CLEAR COVER, IP54 NEMA 12

Mfg. Part No.	Size (in.)	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10+
● L 02	2.4 x 3.0	35C3024	19.37	18.86	17.83
● L 04	3.8 x 3.0	35C3025	22.74	22.14	20.93
● L 06	5.1 x 3.0	35C3026	27.74	27.01	25.54
● L 10	7.8 x 3.0	35C3028	34.61	33.69	31.85
● L 12 II	9.8 x 5.0	35C3029	34.16	33.25	31.44
WITH SMOKED TRANSPARENT COVER, IP65 NEMA 4					
● L 12 II†	9.8 x 5.0	35C3029	34.16	33.25	31.44
● L 24 II†	9.8 x 8.6	35C3030	42.09	40.98	38.74
● L 43 II	13.0 x 10.9	35C3031	98.22	95.62	90.40
● L 44 II	14.9 x 13.0	35C3032	114.95	111.90	105.79

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INSPECTION WINDOW KITS (CONT.)

WITH CLEAR COVER, NEMA 4X

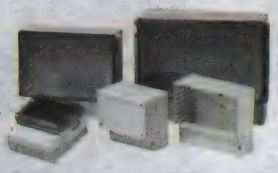
Mfg. Part No.	Size (in.)	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10+
● IPW 2819	11 x 7.5	39C8112	141.92	138.08	130.42
● IPW 2819-G	11 x 7.5	10M6590	136.40	132.71	125.34

† Extra deep (1.0") cover
(69005)

CARDMASTER NEMA POLYCARBONATE ENCLOSURES

NEMA RoHS Compliant Available FIBOX Enclosing Innovations IP65 cULus

- Feature PUR/EPDM gasket
- Non-toxic and halogen-free
- Continuous temperature range: -40°F to +175°F (-40°C to +80°C)
- Impact resistance (EN 50102): IK 08/07, UV resistant to UL 508
- Flammability rating: UL94-5V, protection: IP65
- UL/cUL listed



Enclosures feature built-in PC board or panel mounting area under transparent or gray cover and a separate terminal wiring area with solid cover. Includes 6 internal mounting screws. Color: light gray.

ENCLOSURES

Mfg. Part No.	Dimensions (in.) H x W x D	Cover	Stock No.	Price Each 1-4	Price Each 5-9
● PC 17/16-L3	4.2 x 6.3 x 6.5	Smoked Transparent Hinged	83K0382	63.67	61.98
● PC 17/16-3	x x	Smoked Transparent Hinged	67K3413	66.35	64.59
● PC 21/18-3	7.3 x 9.3 x 4.7	Smoked Transparent Hinged	49M0742	65.27	63.54
● PC 21/18-FC3	7.3 x 8.4 x 4	Light Gray Screw	83K0383	64.45	62.74
● PC 30/25-3	5.1 x 10.1 x 11.6	Smoked Transparent Hinged	23M7113	64.36	62.42
● PC 30/25-3 USA	5.1 x 10.1 x 11.6	Smoked Transparent Hinged	83K0384	139.19	135.49

BACK PANELS

Mfg. Part No.	H x W (in.)	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10+
● MP 17/16	5.4 x 5.2	39C8302	8.02	7.82	7.35

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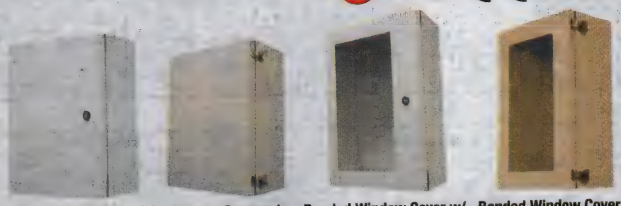
ARIA FIBERGLASS REINFORCED POLYESTER NEMA ENCLOSURES

RoHS Compliant Available vynckier ENCLOSURE SYSTEMS, INC. IP66 UL CE NEMA



Opaque Cover w/ ¼-Turn Handle | Opaque Cover w/ Padlockable Latch | Bonded Window Cover w/ ¼-Turn handle | Bonded Window Cover w/ Padlockable Latch

- UL Type 4X; NEMA 4X; IEC 529 rated IP66-9
- Made of beige (RAL 7035) hot molded fiberglass reinforced polyester that is self extinguishing and halogen-free
- Internal three-point closing system with one-point entry
- Integrated rain shield
- Furnished with four threaded studs and bolts for mounting plate or mounting frame installation
- Seamless, polyurethane gasket in molded door edge channel
- Temperature resistance: -58°F to +302°F (-50°C to +150°C), momentary +392°F (200°C)
- **KLC-SP** 3mm (.12") lock also available for use with **PLH-PS** handle

OPAQUE COVER

Mfg. Part No.	Dimensions (in.) H x W x D	Features	Stock No.	Price Each Each	Price Each 2-5	Price Each 6-10
● AN1208	12.4 x 8.46 x 6.69	1/4-Turn Handle	73P7109	184.38	178.24	174.73
● AN1612	16.34 x 12.4 x 6.69	1/4-Turn Handle	73P7111	258.72	250.10	245.17
● AN2016	20.28 x 16.34 x 9.06	1/4-Turn Handle	73P7113	381.41	368.69	361.43
● AN2416	24.21 x 16.34 x 9.06	1/4-Turn Handle	73P7115	429.45	415.14	406.96
● AN2820	28.94-x 21.06 x 10.63	1/4-Turn Handle	73P7117	621.56	600.84	589.00
● AN3325	32.87 x 25 x 11.81	1/4-Turn Handle	73P7119	714.80	690.98	677.36
● AN4032	40.75 x 32.87 x 11.81	1/4-Turn Handle	73P7121	943.64	912.18	894.21
● AN1208PL	12.4 x 8.46 x 6.69	Padlockable Latch	73P7110	184.38	178.24	174.73
● AN1612PL	16.34 x 12.4 x 6.69	Padlockable Latch	73P7112	268.03	259.10	254.00
● AN2016PL	20.28 x 16.34 x 9.06	Padlockable Latch	73P7114	365.64	353.44	346.48
● AN2416PL	24.21 x 16.34 x 9.06	Padlockable Latch	73P7116	429.45	415.14	406.96
● AN2820PL	28.94 x 21.06 x 10.63	Padlockable Latch	73P7118	621.56	600.84	589.00
● AN3325PL	32.87 x 25 x 11.81	Padlockable Latch	73P7120	714.80	690.98	677.36
● AN4032PL	40.75 x 32.87 x 11.81	Padlockable Latch	73P7122	973.84	941.37	922.82

➤CONTINUED➤

ARIA FIBERGLASS REINFORCED POLYESTER NEMA ENCLOSURES (CONT.)

CLEAR BONDED WINDOW COVER

Mfg. Part No.	Dimensions (in.) H x W x D	Features	Stock No.	Price Each Each	2-5	6-10
ANB1208	12.4 x 8.46 x 6.69	1/4-Turn Handle	73P7095	239.53	231.55	226.98
ANB1612	16.34 x 12.4 x 6.69	1/4-Turn Handle	73P7097	324.90	314.07	307.88
ANB2416	24.21 x 16.34 x 9.06	1/4-Turn Handle	73P7101	565.05	546.22	535.45
ANB2820	28.94 x 21.06 x 10.63	1/4-Turn Handle	73P7103	816.51	789.29	773.74
ANB3325	32.87 x 25 x 11.81	1/4-Turn Handle	73P7105	980.37	947.69	929.02
ANB4032	40.75 x 32.87 x 11.81	1/4-Turn Handle	73P7107	1347.68	1302.76	1277.09
ANB1208PL	12.4 x 8.46 x 6.69	Padlockable Latch	73P7096	228.84	221.21	216.85
ANB1612PL	16.34 x 12.4 x 6.69	Padlockable Latch	73P7098	324.90	314.07	307.88
ANB2016PL	20.28 x 16.34 x 9.06	Padlockable Latch	73P7100	505.73	488.87	479.24
ANB2416PL	24.21 x 16.34 x 9.06	Padlockable Latch	73P7102	565.05	546.22	535.45
ANB2820PL	28.94 x 21.06 x 10.63	Padlockable Latch	73P7104	816.51	789.29	773.74
ANB3325PL	32.87 x 25 x 11.81	Padlockable Latch	73P7106	1019.58	985.60	966.18
ANB4032PL	40.75 x 32.87 x 11.81	Padlockable Latch	73P7108	1347.68	1302.76	1277.09

ACCESSORIES

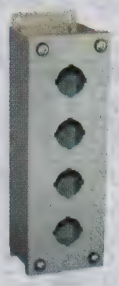
Mfg. Part No.	Description	Stock No.	Price Each Each	2-5	6-10
RDV	Round Air Vent, White, 1/4" Mounting Hole Dia.	73P7199	9.77	9.50	9.28
A-HKL	Keylock Handle	73P7091	68.61	66.53	65.15
AN-NMF	Mounting Feet, Polyamide, Set of 4	73P7094	9.84	9.53	9.33
AN-MFSS	Mounting Feet, Stainless Steel, Set of 4	73P7093	10.53	10.20	9.98
70000.261	Ventilation Louver, Includes 2 Grids and 4 Rivets	73P7202	38.16	36.97	36.18

(143743)

PUSH BUTTON BOXES

UL RoHS Compliant Available BUD Industries, Inc.

- Heavy duty 14 GA steel seam welded construction
- Cover screws thread into sealed nuts for additional sealing protection
- Cover has oil resistant die-cut gasket for reliable and lasting protection against dust, water and oil
- Cover supplied with 22.5-mm or 30.5-mm four-way pushbutton holes
- Welded ground nut inside body
- External flanges with holes for wall mounting
- Duarable ANSI 61 grey powder coating
- Complies with NEMA and UL-508A Type 12 and 13 rating
- UL listing pending



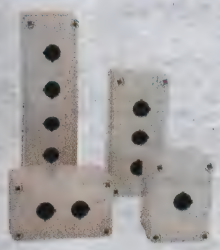
Number of Push Button Holes	Dimensions (in.) H	W	D	22.5mm Pushbutton Mfg. Part No.	Stock No.	Price Each 1-4	30.5mm Pushbutton Mfg. Part No.	Stock No.	Price Each 1-4
1	3.5	3.25	2.75	SPB-3901	40T8248	24.28	SPB-3921	40T8252	24.28
2	5.75	3.25	2.75	SPB-3902	40T8249	30.34	SPB-3922	40T8253	30.64
3	8	3.25	2.75	SPB-3903	40T8250	35.36	SPB-3923	40T8254	35.71
4	10.25	3.25	2.75	SPB-3904	40T8251	45.08	SPB-3924	40T8255	45.08

(195477)

HEAVY DUTY PLASTIC PUSH BUTTON BOXES

NEW RoHS Compliant Available BUD Industries, Inc. IP67 UL

- Suited for 22mm and 30mm push button
- Four way keyed
- Body made of gray Polycarbonate (PC) reinforced with 10% fiberglass
- Cover made of gray Polycarbonate (PC)
- High impact resistance
- IP-67 TUV rating to keep out dust and water in extreme conditions
- UL508 / NEMA type 4X and type 6 listed #E343339
- Non-chlorinated & non-brominated flame retardant With UL-94 V0 rating



No.of Push Button Holes	Dimensions (in.) H	W	D	22.5mm Pushbutton Mfg. Part No.	Stock No.	Price Each 1-49	30.5mm Pushbutton Mfg. Part No.	Stock No.	Price Each 1-49
1	4.331	3.15	3.346	PBB-11815-1	48X9584	19.44	PBB-11831-1	48X9588	19.44
2	5.118	3.15	3.346	PBB-11817-2	48X9585	22.28	PBB-11833-2	48X9589	22.28
3	7.087	3.15	3.346	PBB-11819-3	48X9586	23.87	PBB-11835-3	48X9590	23.87
4	9.84	3.15	3.35	PBB-11821-4	48X9587	29.24	PBB-11837-4	48X9591	29.24

(212294)

QLINE® D POLYCARBONATE NEMA 4X 22mm & 30mm ENCLOSURES

NEMA RoHS Compliant Available Hoffman® UL CSA IP67

Contoured bodies with flush cover screws for attractive, contemporary appearance. Designed to insulate and house 30.5mm or 22.5mm pushbuttons in wet, dusty, and corrosive environments. Constructed of high-impact polycarbonate material that's RAL 7035 light gray and easily punched, drilled, filed, or sawed. Cross-point captivated cover screws are zinc-plated stainless steel. Removable polycarbonate screw cover caps and mounting hardware included. Molded internal pads for mounting panels, rails and other components. Gasket provides a watertight and dust-tight seal. Flammability rated UL 508. Meet NEMA/EEMAC Types 4, 4X and 12 and IEC60529, IP67 requirements. UL listed, CSA certified. For use with switches *on pages 1760 and 1770.*

No. of Holes & Arrangement	For 22.5mm Pushbuttons Mfg. Part No.	Stock No.	Price Each 1-4	For 30.5mm Pushbuttons Mfg. Part No.	Stock No.	Price Each 1-4
1PB 1 x 1	Q1PBPCDM	91F2286	75.16	Q1PBPCD	91F2284	78.63
2PB 1 x 2	Q2PBPCDM	06B9761	81.54	Q2PBPCD	89F5378	91.64
3PB 1 x 3	Q3PBPCDM	06B9818	87.30	Q3PBPCD	19M8457	99.85
4PB 1 x 4	Q4PBPCDM	88F4686	99.14	...	...	...

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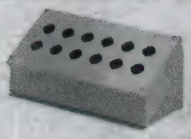
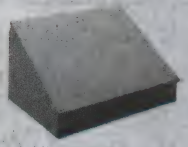
22.5mm & 30.5mm PUSHBUTTON ENCLOSURES

NEMA RoHS Compliant Available Hoffman® IP65 IP66 UL CSA

Pushbutton Enclosure



Sloping Front Pushbutton Enclosure



Consolet Enclosure

Pedestal and Base

These pushbutton and Consolet enclosures provide protection against water, oil, and dust. Captivated cover screws thread into sealed wells. Units come with grounding stud in body and oil-resistant gasket and adhesive. All are UL listed, CSA certified.

PUSHBUTTON ENCLOSURES

Pushbutton enclosures feature "4-way" holes designed to accept all brands of oiltight 22.5 or 30.5mm pushbuttons, switches, and pilot lights. Steel construction with ANSI 61 gray polyester powder painted finish meets NEMA 12, 13 and IEC 60529, IP65. Corrosion-resistant stainless steel with smooth #4 brushed natural finish meets NEMA 4X, 12, 13 and IEC 60529, IP66 (available online).

No. of Holes & Arrangement	Dimensions (in.) H	W	D	NEMA Type 12 and 13 Painted Steel 22.5mm Mfg. Part No.	Stock No.	Price 1-4	30.5mm Mfg. Part No.	Stock No.	Price 1-4
1 PB 1 x 1	3.5	3.25	2.75	E1PBG	89C5023	76.76	E1PB	92F087	76.71
2 PB 1 x 2	5.75	3.25	2.75	E2PBG	06B7375	87.67	E2PB	92C9080	90.42
3 PB 1 x 3	8	3.25	2.75	E3PBG	88F2944	98.54	E3PB	92C8996	101.54
5 PB 1 x 5	12.5	3.25	2.75	E5PBG	19M8438	120.78	E5PB	19M8437	121.57

SLOPING FRONT PUSHBUTTON ENCLOSURES

Sloping front pushbutton enclosures feature "4-way" holes designed to accept all brands of oiltight 22.5 or 30.5mm (available online) pushbuttons, switches, and pilot lights. Tough 14-gauge steel construction with ANSI 61 gray polyester powder painted finish. Meets NEMA 12, 13 and IEC 60529, IP65. Large enclosures with standard mounting brackets removed are ideally suited for mounting on pedestals; *order separately below.*

No. of Holes & Arrangement	22.5mm Mfg. Part No.	Stock No.	Price 1-4
8 PB 4 x 2	E8PBAM	20H6461	218.26

CONSOLET ENCLOSURES

Consolet sloping front enclosures designed to house a variety of electronic control and instrumentation devices. Feature control panel attached with continuous hinge along bottom edge. Flexible design allows for mounting on either of two sides, creating control surfaces of 30° or 60°. Can be mounted on desktops and other flat surfaces. Ideally suited for mounting on pedestals; *order separately below.* Steel construction with ANSI 61 gray polyester powder painted finish. Corrosion-resistant Type 304 stainless steel with smooth #4 brushed natural finish available online. Both meet NEMA 12 and IEC 60529, IP65.

Dimensions (in.) H	W	Painted Steel Mfg. Part No.	Stock No.	Price 1-4
8	8	C8C8	96F4662	220.80
8	12	C8C12	96F4663	244.87
8	16	C8C16	96F4664	274.79
12	12	C12C12	96F4666	284.63
12	16	C12C16	96F4667	316.59
12	20	C12C20	96F4668	366.11
12	24	C12C24	96F4669	401.32
16	16	C16C16	19M8414	376.67
16	20	C16C20	96F4655	416.09

➤CONTINUED➤

22.5mm & 30.5mm PUSHBUTTON ENCLOSURES (CONT.)

ACCESSORIES

Steel pedestal column and base have ANSI 61 gray polyester powder painted finish. Enable sloping front pushbutton and Consolet enclosures to be floor mounted. Pedestal column is 35" high with a 4x4" top and bottom flange and comes with screws, oil-resistant gaskets and box connector fitting to join enclosure to top of column. 18 x 18" base has leveling screws and holes for bolting to the floor.

Mfg. Part No.	Description	Stock No.	Price 1-4
● A44CCOL	Straight Pedestal Column, 4 x 4	0685760	347.59

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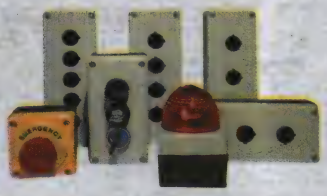
ENCLOSURES FOR CW, TW and XW SERIES 22mm SWITCHES AND PILOT DEVICES

NEMA · RoHS Compliant Available · IDEC · IP65 · CE · UL

- Easy installation: panel, wall or frame mountable
- Polycarbonate enclosure cover and base, stainless steel screws
- IP65 and NEMA Type 4X rated (when installed with IP65 or NEMA Type 4X unit)
- Class II electric shock protection (when installed with applicable unit)
- Ideal for high temperatures (-25 to 60°C) and corrosive environments
- For use with CW, TW and XW series switches, pilot devices & accessories; *go online or call*



Mfg. Part No.	Dimensions (mm)	Color	No. of Holes	Stock No.	Price Each 1-4	5-9	10-24	25+
● FB1W-111Y	76 x 76 x 59.5	Yellow	1	34M2032	21.15	19.99	18.96	18.21
● FB1W-111Z	76 x 76 x 59.5	Beige	1	34M2033	21.15	19.99	18.96	18.21
● FB2W-211Z	140 x 76 x 59.5	Beige	2	34M2034	31.05	29.35	27.81	26.72
● FB3W-311Z	200 x 76 x 59.5	Beige	3	34M2036	44.19	41.78	39.58	38.04

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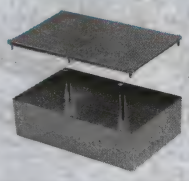
DIE-CAST ALUMINUM ECONOBOXES

RoHS Compliant Available · BUD Industries, Inc.



Economical, lightweight, easy-to-machine enclosures are ideal as instrument and meter cases, filter networks, junction boxes, switches, and audio and radio frequency distributors. Die-cast ADC-10 aluminum alloy construction offers excellent screening properties. Perfect for applications requiring a sturdier structure than sheet metal utility cabinets. Close-fitting flanged lids fasten to body with screws. Look for NEMA rated die cast boxes online. Modifications available, *go online or call.*

NATURAL ALUMINUM FINISH

Mfg. Part No.	Dimensions (in.) H x W x D	Thickness (in.)	Wt. (lbs.)	Stock No.	Price Each 1-4	5-9	10-24
● CU-123	1.21 x 1.5 x 3.62	0.06	0.5	93F689	7.42	6.20	5.53
● CU-124	1.21 x 2.37 x 4.37	0.06	0.5	91F1603	7.76	6.48	5.76
● CU-234	2.21 x 3.68 x 4.68	0.09	0.75	91F1604	12.48	10.43	9.29
● CU-247	2.21 x 4.7 x 7.39	0.09	1.25	91F1605	21.06	17.61	15.67
● CU-347	3.21 x 4.7 x 7.39	0.09	1.5	91F1606	24.72	20.65	18.38
● CU-470	1.25 x 2 x 2	0.06	0.25	24C9805	5.70	4.76	4.24
● CU-471	1.75 x 3.25 x 4.33	0.09	0.75	24C9807	9.03	7.54	6.71
● CU-472	2.33 x 3.15 x 4.75	0.09	0.75	24C9809	11.63	9.72	8.65
● CU-473	1.34 x 3.68 x 4.68	0.09	0.75	24C9814	9.73	8.14	7.24
● CU-474	2.33 x 4.75 x 4.75	0.09	1	24C9819	15.65	13.08	11.64
● CU-475	3.75 x 4.75 x 4.75	0.09	1.25	24C9824	19.22	16.07	14.31
● CU-476	2 x 3.25 x 6	0.09	1	24C9826	15.32	12.80	11.39
● CU-477	1.5 x 4.7 x 7.39	0.09	1	24C9864	17.71	14.80	13.19
● CU-478	2.62 x 7.5 x 7.5	0.09	2	24C9868	27.15	22.71	20.20
● CU-479	2.13 x 2.37 x 4.37	0.06	0.6	24C9870	10.21	8.53	7.59
GRAY FINISH							
● CU-123-G	1.21 x 1.5 x 3.62	0.06	0.5	24C9785	8.48	7.09	6.31
● CU-124-G	1.21 x 2.37 x 4.37	0.06	0.5	24C9797	10.21	8.53	7.59
● CU-234-G	2.21 x 3.68 x 4.68	0.09	0.75	24C9798	14.50	12.12	10.79
● CU-247-G	2.218 x 4.7 x 7.39	0.09	1.25	24C9800	26.02	21.74	19.35
● CU-347-G	3.21 x 4.7 x 7.39	0.09	1.5	24C9802	31.46	26.29	23.40
● CU-470-G	1.25 x 2 x 2	0.06	0.25	24C9806	8.80	7.36	6.55
● CU-471-G	1.75 x 3.25 x 4.33	0.09	0.75	24C9808	11.85	9.90	8.82
● CU-472-G	2.33 x 3.15 x 4.75	0.09	0.75	24C9812	14.50	12.12	10.79
● CU-474-G	2.33 x 4.75 x 4.75	0.09	1	24C9822	22.18	18.53	16.50
● CU-475-G	3.75 x 4.75 x 4.75	0.09	1.25	24C9825	27.46	22.94	20.43
● CU-476-G	2 x 3.25 x 6	0.09	1	24C9827	19.55	16.34	14.55
● CU-478-G	2.62 x 7.5 x 7.5	0.09	2	24C9869	35.74	29.87	26.59
● CU-479-G	2.13 x 2.37 x 4.37	0.06	0.6	24C9871	13.91	11.63	10.35

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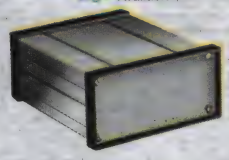
EXTRUDED ALUMINUM BOXES

RoHS Compliant Available · BUD Industries, Inc.



- 1-pc. extruded aluminum housing with smooth, silver-coated finish
- Individual aluminum end panels are removable
- Black ABS plastic panel bezels
- Internal PCB card guides
- Modifications available, visit us online

Mfg. Part No.	External Dimensions (In.) H	W	D	Weight (oz.)	Stock No.	Price Each 1-4
● EX-4500	3.15	2.91	1.34	4.1	97H5039	17.06
● EX-4501	4.72	2.91	1.34	5.4	97H5040	20.70
● EX-4521	4.72	5.91	2.95	6.9	97H5042	32.61
● EX-4522	6.3	5.91	2.95	8.5	66M8438	39.83
● EX-4523	8.66	5.91	2.95	10.9	97H5044	49.69
● EX-4541	4.72	3.54	3.54	11.2	97H5045	26.81

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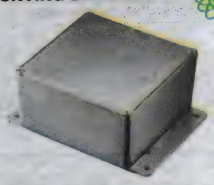
ECONOBOXES™ WITH MOUNTING BRACKET

RoHS Compliant Available · BUD Industries, Inc.



- ADC-10 aluminum alloy construction
- Excellent screening properties
- Close-fitting covers attach with #6-32 self-tapping screws
- Mounts to wall or panel
- Heavy-duty 0.09" thick external wall mounting bracket

Econoboxes™ are easily machined or modified to any application requirement. Mounts to wall or panel with #10 size screws (not included). Mounts at base to allow access to internal components without unmounting box. NEMA rated boxes available, *on pages 2292-2294.* Color: natural aluminum finish or smooth black powdercoat finish. Modifications available, visit us online.

NATURAL ALUMINUM FINISH

Mfg. Part No.	External Dimensions (In.) H	W	D	Body Ht.	Wall Thick. (In.)	Stock No.	Price Each 1-4	5-9	10-24
● CU-4123	1.21	1.5	3.62	1.06	0.06	97H5001	14.52	13.84	13.16
● CU-4234	2.21	3.68	4.68	2.06	0.09	97H5005	24.11	22.98	21.85
● CU-4247	2.21	4.7	7.39	2.06	0.09	97H5007	30.92	29.47	28.02
● CU-4347	3.21	4.7	7.39	3.06	0.09	97H5009	37.29	35.54	33.78
● CU-4474	2.33	4.75	4.75	2.17	0.09	97H5019	29.08	27.72	26.35
● CU-4475	3.75	4.75	4.75	3.59	0.09	97H5021	33.85	32.26	30.68
● CU-4478	2.62	7.5	7.5	2.46	0.09	97H5027	46.47	44.30	42.12
SMOOTH BLACK POWDERCOAT FINISH									
● CU-4123-B	1.21	1.5	3.62	1.06	0.06	97H5002	16.63	15.86	15.08
● CU-4124-B	1.21	2.37	4.37	1.06	0.06	97H5004	20.07	19.12	18.19
● CU-4234-B	2.21	3.68	4.68	2.06	0.09	97H5006	26.96	25.70	24.43
● CU-4347-B	3.21	4.7	7.39	3.06	0.09	97H5010	42.64	40.63	38.64
● CU-4473-B	1.34	3.68	4.68	1.18	0.09	97H5018	24.20	23.06	21.93
● CU-4475-B	3.75	4.75	4.75	3.59	0.09	97H5022	37.94	36.16	34.38
● CU-4476-B	2.00	3.25	6.00	1.84	0.09	97H5024	30.44	29.01	27.58
● CU-4477-B	1.5	4.7	7.39	1.34	0.09	97H5026	34.44	32.83	31.22
● CU-4478-B	2.62	7.5	7.5	2.46	0.09	97H5028	53.02	50.53	48.05
● CU-4479-B	2.13	2.37	4.37	1.98	0.06	97H5030	22.47	21.42	20.36

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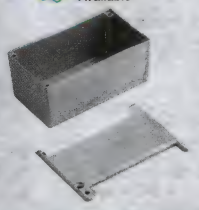
ECONOBOX WITH MOUNTING BRACKET COVER

RoHS Compliant Available · BUD Industries, Inc.



- External mounting brackets cast into the cover allow box to be mounted on wall or panel
- Rugged ADC-10 alloy die-cast aluminum box
- Close fitting flanged cover attaches with screws
- Mounting brackets accept up to #6 mounting screws (not included)
- Offers EMC protection
- NEMA rated die-cast boxes available *on pages 2292-2294*
- Modifications available, *go online or call*

NATURAL ALUMINUM FINISH

Mfg. Part No.	Dimensions (in.) H	W	D	Stock No.	Price Each 1-4	5-9	10-24
● CU-5123	1.21	1.5	3.62	56J7099	5.91	5.27	4.73
● CU-5124	1.21	2.37	4.37	56J7101	8.25	7.36	6.59
● CU-5476	2	3.25	6	56J7121	15.59	13.90	12.45
● CU-5234	2.21	3.68	4.68	56J7103	12.22	10.90	9.77
● CU-5478	2.62	7.5	7.5	56J7125	25.52	22.75	20.39
● CU-5347	3.21	4.7	7.39	56J7107	24.24	21.62	19.37

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ECONOBOX WITH MOUNTING BRACKET COVER (CONT.)

BLACK FINISH

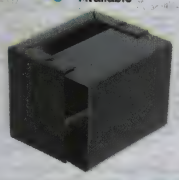
Mfg. Part No.	Dimensions (in.) H	W	D	Stock No.	Price Each 1-4	5-9	10-24
CU-5124-B	1.21	2.37	4.37	98J0021	11.37	10.15	9.09
CU-5476-B	2	3.25	6	98J0031	19.99	17.82	15.97

(83629)

MINIBOXES

RoHS Compliant Available

Bud Industries, Inc.



- Two-piece design
- 0.04″ aluminum alloy construction
- Flanged for proper shielding
- Built-in snap-lock or sheet metal screws included
- Modifications available, visit us online

SMOOTH GRAY FINISH

Mfg. Part No.	Dimensions (in.) H x W x D	Weight (lbs.)	Stock No.	Price Each 1-4	5-9	10-24
CU-2100-B	1.62 x 2.12 x 2.75	0.25	91F700	7.68	6.95	6.47
CU-2101-B	1.62 x 2.12 x 3.25	0.25	05M4052	8.47	7.68	7.15
CU-2102-B	1.62 x 2.12 x 4.00	0.25	05M4053	8.77	7.95	7.40
CU-2103-B	2.25 x 2.25 x 4.00	0.25	06M4528	9.25	8.37	7.81
CU-2104-B	2.25 x 2.25 x 5.00	0.25	05M4054	10.65	9.67	9.00
CU-2105-B	3.00 x 4.00 x 5.00	0.50	91F705	13.60	12.33	11.49
CU-2106-B	2.12 x 3.00 x 5.25	0.25	06M4529	12.08	10.95	10.19
CU-2107-B	4.00 x 5.00 x 6.00	0.75	05M4055	20.91	18.94	17.64
CU-2108-B	3.00 x 5.00 x 7.00	0.75	05M4056	20.08	18.20	16.95
CU-2109-B	3.50 x 6.00 x 8.00	1.00	06M4530	30.65	27.78	25.86
CU-2110-B	3.50 x 6.00 x 10.00	1.25	05M4057	33.02	29.92	27.86
CU-2111-B	4.00 x 7.00 x 12.00	1.75	06M4531	43.12	39.08	36.38
NATURAL ALUMINUM FINISH						
CU-3000-A	1.62 x 2.12x 2.75	0.25	06M4532	5.59	5.07	4.73
CU-3001-A	1.62 x 2.12 x 3.25	0.25	91F573	6.28	5.70	5.30
CU-3002-A	1.62 x 2.12 x 4.00	0.25	91F574	6.96	6.31	5.87
CU-3003-A	2.25 x 2.25 x 4.00	0.25	06M4533	7.38	6.68	6.23
CU-3004-A	2.25 x 2.25 x 5.00	0.25	05M4058	8.77	7.95	7.40
CU-3005-A	3.00 x 4.00 x 5.00	0.50	05M4059	10.06	9.12	8.50
CU-3006-A	2.12 x 3.00 x 5.25	0.25	91F578	8.07	7.31	6.82
CU-3007-A	4.00 x 5.00 x 6.00	0.75	05M4060	14.44	13.09	12.19
CU-3008-A	3.00 x 5.00 x 7.00	0.75	06M4534	13.05	11.83	11.02
CU-3009-A	3.50 x 6.00 x 8.00	1.00	05M4061	17.35	15.73	14.66
CU-3010-A	3.50 x 6.00 x 10.00	1.25	10M8413	21.52	19.51	18.16
CU-3011-A	4.00 x 7.00 x 12.00	1.75	05M4062	29.66	26.88	25.03

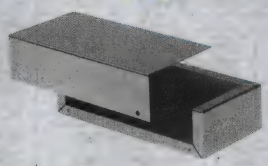
(6873)

CONVERTA-BOX SERIES ENCLOSURES

RoHS Compliant Available

Bud Industries, Inc.

Rugged 0.05″ aluminum construction with natural finish. Welded base. 2-sided cover fastens with self-tapping screws. Modifications available, go online or call.



Mfg. Part No.	Dimensions (in.) H × W × D	Weight (lbs.)	Stock No.	Price Each 1-4	5-9	10-24
CU-341-A	1.50 × 4.00 × 3.00	0.50	91F554	17.61	14.75	13.27
CU-452-A	2.00 × 5.00 × 4.00	0.75	05M4067	17.20	14.40	12.96
CU-482-A	2.00 × 8.00 × 4.00	1.25	06M4553	19.05	15.94	14.36
CU-592-A	2.50 × 9.50 × 5.00	1.75	05M4068	22.36	18.72	16.85
CU-622-A	2.50 × 12.00 × 6.00	2.25	06M4555	29.35	24.57	22.12
CU-712-A	2.50 × 15.00 × 7.00	3.00	05M4069	40.42	33.84	30.46

(6870)

NEW PRODUCTS ADDED DAILY

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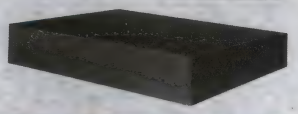
(196560)

ALUMINUM CHASSIS

RoHS Compliant Available

Bud Industries, Inc.

Welded at stress points for strength and rigidity. Sturdy aluminum alloy with natural finish. *Order chassis bottom plate separately on pages 2315-2316.* Order mounting brackets *on page 2340.* Modifications available, *go online or call.*



Mfg. Part No.	Dimensions (in.) H x W x D	Gauge (in.)	Stock No.	Price Each 1-4	5-9	10-24
AC-1402†	1.00 x 4.50 x 3.50	0.04	05M3876	11.23	9.40	8.42
AC-1404	2.00 x 5.00 x 4.00	0.04	05M3877	13.32	11.15	9.97
AC-1405	1.50 x 6.00 x 4.00	0.04	06M4370	12.03	10.07	9.01
AC-430	3.00 x 6.00 x 4.00	0.04	90F940	14.62	12.24	10.95
AC-431	2.00 x 6.00 x 4.00	0.04	90F941	12.23	10.23	9.15
AC-1407	1.50 x 8.00 x 4.50	0.04	06M4371	14.93	12.49	11.18
AC-402	2.00 x 7.00 x 5.00	0.04	90F943	13.21	11.06	9.89
AC-429	3.00 x 7.00 x 5.00	0.04	05M3891	16.56	13.86	12.40
AC-403	2.00 x 9.50 x 5.00	0.04	06M4381	15.96	13.36	11.96
AC-401	2.50 x 9.50 x 5.00	0.04	06M4380	17.16	14.36	12.85
AC-421	3.00 x 9.50 x 5.00	0.04	06M4386	20.25	16.96	15.18
AC-404	3.00 x 10.00 x 5.00	0.04	90F947	18.92	15.84	14.17
AC-1413	2.00 x 8.00 x 6.00	0.04	05M3878	15.20	12.72	11.38
AC-1414	3.00 x 14.00 x 6.00	0.05	06M4372	28.28	23.67	21.18
AC-433	3.00 x 17.00 x 6.00	0.05	05M3892	34.10	28.55	25.54
AC-405	2.00 x 7.00 x 7.00	0.04	05M3884	13.76	11.52	10.31
AC-406	2.00 x 9.00 x 7.00	0.04	05M3885	15.59	13.05	11.68
AC-407	2.00 x 11.00 x 7.00	0.04	06M4382	18.49	15.48	13.85
AC-408	3.00 x 12.00 x 7.00	0.04	06M4383	23.98	20.07	17.96
AC-409	2.00 x 13.00 x 7.00	0.04	05M3886	21.03	17.60	15.75
AC-411	3.00 x 15.00 x 7.00	0.05	05M3887	30.26	25.34	22.66
AC-1416	2.00 x 17.00 x 7.00	0.05	05M3879	33.89	28.37	25.38
AC-423	3.00 x 17.00 x 7.00	0.05	06M4387	34.55	28.92	25.87
AC-1418	2.50 x 10.00 x 8.00	0.04	05M3880	21.72	18.18	16.27
AC-1419	2.50 x 12.00 x 8.00	0.05	05M3881	27.42	22.95	20.53
AC-424	3.00 x 12.00 x 8.00	0.05	06M4388	27.31	22.86	20.45
AC-412*	3.00 x 17.00 x 8.00	0.05	05M3888	31.48	26.35	23.57
AC-1421	3.00 x 15.00 x 9.00	0.05	05M3882	34.65	29.01	25.95
AC-413	3.00 x 12.00 x 10.00	0.05	05M3889	34.62	28.98	25.93
AC-414	3.00 x 14.00 x 10.00	0.05	90F961	35.97	30.11	26.94
AC-415*	2.00 x 17.00 x 10.00	0.05	05M3890	32.33	27.07	24.22
AC-416*	3.00 x 17.00 x 10.00	0.05	06M4384	37.51	31.40	28.09
AC-427*	4.00 x 17.00 x 10.00	0.05	06M4389	53.95	45.17	40.40
AC-1422	5.00 x 17.00 x 10.00	0.05	06M4373	61.71	51.66	46.21
AC-1424	3.00 x 12.00 x 12.00	0.05	06M4374	37.52	31.41	28.10
AC-418*	3.00 x 17.00 x 12.00	0.05	90F966	38.81	32.49	29.06
AC-419*	2.00 x 17.00 x 13.00	0.05	90F967	40.58	33.97	30.39
AC-420*	3.00 x 17.00 x 13.00	0.05	06M4385	46.72	39.11	34.99
AC-428*	4.00 x 17.00 x 13.00	0.05	90F970	55.80	46.71	41.78
AC-1426	5.00 x 17.00 x 13.00	0.05	06M4375	72.59	60.77	54.37
AC-1427	3.00 x 17.00 x 14.00	0.05	06M4376	52.86	44.25	39.59
AC-1428	4.00 x 17.00 x 15.00	0.05	06M4377	71.72	60.04	53.70
AC-1429	6.00 x 17.00 x 15.00	0.05	06M4378	99.55	83.34	74.55
AC-1430	3.00 x 17.00 x 17.00	0.05	05M3883	60.31	50.49	45.16
AC-1431	4.00 x 17.00 x 17.00	0.05	06M4379	77.73	65.07	58.21

*Holes for mounting brackets provided; †Not welded

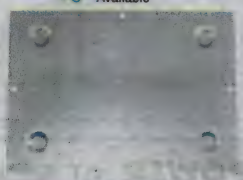
(6920)

CHASSIS BOTTOM PLATES

RoHS Compliant Available

Bud Industries, Inc.

Fit snugly and easily on the bottom of all **AC series** chassis, *ordered separately on this page.* Protect wiring and components. Constructed of 0.040″ thick aluminum with natural finish. Modifications available, *go online or call*.



Mfg. Part No.	Fits Chassis D x W (in.)	Stock No.	Price Each 1-4	5-9	10-24
BPA-1502	3.50 x 4.50	06M4466	4.83	4.07	3.82
BPA-1504	4.00 x 5.00	05M3939	4.83	4.07	3.82
BPA-1505	4.00 x 6.00	05M3940	5.53	4.66	4.38
BPA-1507	4.50 x 8.00	06M4467	7.50	6.32	5.94
BPA-1589	5.00 x 7.00	05M3946	5.43	4.57	4.29
BPA-1590	5.00 x 9.50	05M3947	5.53	4.66	4.38
BPA-1591	5.00 x 10.00	90F862	5.49	4.62	4.34

CONTINUED

METAL ENCLOSURES

CHASSIS BOTTOM PLATES (CONT.)

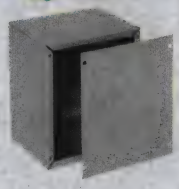
Mfg. Part No.	Fits Chassis D x W (in.)	Stock No.	Price Each 1-4	5-9	10-24
● BPA-1513	6.00 x 8.00	06M4468	7.85	6.63	6.22
● BPA-1514	6.00 x 14.00	06M4469	9.63	8.11	7.62
● BPA-1515	6.00 x 17.00	05M3941	11.42	9.62	9.04
● BPA-1592	7.00 x 7.00	06M4477	5.49	4.62	4.34
● BPA-1593	7.00 x 9.00	90F864	6.75	5.69	5.35
● BPA-1594	7.00 x 11.00	06M4478	7.06	5.95	5.58
● BPA-1595	7.00 x 12.00	06M4479	7.64	6.43	6.04
● BPA-1596	7.00 x 13.00	06M4480	9.29	7.83	7.36
● BPA-1516	7.00 x 15.00	05M3942	10.07	8.48	7.98
● BPA-1517	7.00 x 17.00	06M4470	10.07	8.48	7.98
● BPA-1518	8.00 x 10.00	06M4471	9.74	8.20	7.71
● BPA-1519	8.00 x 12.00	06M4472	11.84	9.97	9.37
● BPA-1520	8.00 x 17.00	91F1426	12.31	10.37	9.75
● BPA-1522	9.00 x 15.00	06M4473	15.10	12.73	11.97
● BPA-1523	10.00 x 12.00	05M3943	11.84	9.97	9.37
● BPA-1524	10.00 x 14.00	91F1430	11.98	10.09	9.48
● BPA-1597	10.00 x 17.00	05M3948	12.50	10.54	9.90
● BPA-1527	12.00 x 12.00	05M3944	12.83	10.81	10.16
● BPA-1528	12.00 x 17.00	06M4474	16.93	14.26	13.40
● BPA-1598	13.00 x 17.00	06M4481	17.48	14.73	13.83
● BPA-1529	14.00 x 17.00	06M4475	18.13	15.28	14.36
● BPA-1530	15.00 x 17.00	06M4476	22.46	18.92	17.78
● BPA-1531	17.00 x 17.00	05M3945	26.68	22.48	21.12

(6919)

ALUMINUM & STEEL UTILITY CABINETS

RoHS Compliant Available

Bud Industries, Inc.



AU Series is designed with:
- Sturdy, all-riveted 0.040" aluminum construction
- Removable front and back panels for easy accessibility
- Available in natural aluminum or metallic gray (MG) finish.
- Ideal for mounting amplifiers, meters and test instruments

CU Series is designed with:
- Constructed of 20-gauge steel with metallic-gray finish
- Sturdy, all-riveted body with removable front and back panels
- Ideal for electronic equipment, monitors and frequency meters

Modifications available, *go online or call*.

Mfg. Part No.	Dimensions (in.) H x W x D	Weight (lbs.)	Stock No.	Price Each 1-4	5-9	10-24
ALUMINUM WITH NATURAL FINISH						
● AU-1083	4 x 4 x 2	0.25	06M4423	14.20	11.89	10.64
● AU-1028	4 x 5 x 3	0.50	05M3899	15.70	13.14	11.76
● AU-1029	5 x 6 x 4	0.75	06M4418	20.48	17.14	15.34
● AU-1039	6 x 6 x 6	1.00	06M4420	31.45	26.33	23.56
● AU-1040	9 x 6 x 5	1.50	06M4421	33.11	27.72	24.80
ALUMINUM WITH METALLIC GRAY FINISH						
● AU-1083-MG	4 x 4 x 2	0.25	06M4424	19.27	16.13	14.43
● AU-1028-MG	4 x 5 x 3	0.50	06M4417	24.30	20.34	18.20
● AU-1029-MG	5 x 6 x 4	0.75	06M4419	29.23	24.47	21.90
AU-1039-MG	6 x 6 x 6	1.00	05M3900	43.74	36.62	32.75
● AU-1040-MG	9 x 6 x 5	1.50	06M4422	48.36	40.48	36.21
STEEL WITH METALLIC GRAY FINISH						
● CU-883	4 x 4 x 2	0.75	91F640	21.28	17.81	15.93
● CU-728	4 x 5 x 3	1.00	06M4558	22.58	18.90	16.91
● CU-729	5 x 6 x 4	1.75	06M4559	27.74	23.22	20.77
● CU-1098	6 x 6 x 6	2.25	06M4518	39.81	33.32	29.81
● CU-1099	9 x 6 x 5	3.00	05M4048	44.96	37.64	33.67
● CU-879	10 x 8 x 7	3.25	91F647	66.65	55.80	49.91
● CU-1124	12 x 7 x 6	5.00	06M4519	70.61	59.12	52.89
● CU-880	10 x 10 x 8	6.25	05M4071	84.93	71.10	63.60
● CU-881	12 x 11 x 8	8.50	06M4576	95.67	80.09	71.65
● CU-882	15 x 9 x 7	8.25	06M4577	97.55	81.67	73.05

(6948)

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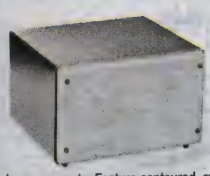
CONTOUR SERIES UTILITY CABINETS



RoHS Compliant Available

Bud Industries, Inc.

Ideal for meters and other electronic components. Feature contoured, rounded corners and edges, removable flange panels, and louvered rear panel. 20-gauge steel construction. Body has gray textured finish; panels are white textured. Includes 4 rubber feet. Modifications available, *go online or call*.

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5-9	10-24
● CU-465-GT	4.25 x 6.25 x 5.75	06M4552	81.94	72.64	67.76
● CU-585-GT	5.25 x 8.25 x 5.75	06M4554	93.37	82.77	77.22
● CU-587-GT	5.25 x 8.25 x 7.75	91F899	104.19	92.36	86.17
● CU-7125-GT	7.25 x 12.25 x 5.75	06M4556	113.66	100.76	94.00
● CU-7127-GT	7.25 x 12.25 x 7.75	06M4557	120.29	106.64	99.49

(6869)

DIE-CAST ALUMINUM ENCLOSURES

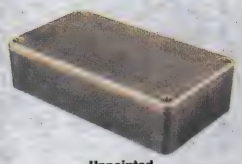
NEMA

RoHS Compliant Available

HAMMOND MANUFACTURING

IP54 IP66

- Lap joint construction protects against access of dust and splashing water and provides improved EMI/RFI shielding (watertight version comes with a self-adhesive, EVA foam gasket)
- Unpainted version is vibra finished for a smooth surface with no sharp edges
- Painted version has polyester powder paint applied to the exterior surface (black screws included to enhance appearance)
- Four M3.5 x 0.6 mm stainless steel, Philips head, machine screws secure lid into factory tapped holes
- No internal ribs for easy installation of connectors without interference or additional milling
- Low side wall draft angle (2 degrees or less) for easy PC board mounting



Unpainted

Mfg. Part No.	Dimensions (in.) L x W x D	Color	IP Rating	Stock No.	Price Each 1-4	5-9	10-24
NON-WATERTIGHT							
● 1550Q	2.36 x 2.17 x 1.18	Unpainted	IP54	51R4012	6.62	5.87	5.54
● 1550J	2.62 x 6.89 x 10.83	Unpainted	IP54	78R9171	31.81	29.15	27.08
● 1550P	3.15 x 2.17 x 0.99	Unpainted	IP54	51R4010	7.85	6.96	6.57
● 1550A	3.5 x 1.38 x 1.18	Unpainted	IP54	51R4005	6.81	6.05	5.70
● 1550B	4.51 x 2.52 x 1.18	Unpainted	IP54	51R4007	8.22	7.28	6.88
● 1550D	4.51 x 2.52 x 2.17	Unpainted	IP54	51R1553	10.08	8.94	8.43
● 1550C	2.17 x 3.54 x 4.53	Unpainted	IP54	51R4009	11.83	10.49	9.89
● 1550M	4.74 x 3.95 x 1.23	Unpainted	IP54	79R5474	11.55	10.24	9.66
● 1550E	6.73 x 4.76 x 2.17	Unpainted	IP54	57R3909	18.25	16.18	15.27
● 1550G	8.74 x 5.75 x 2.17	Unpainted	IP54	57R3912	25.87	22.93	21.64
● 1550H	8.74 x 5.75 x 4.14	Unpainted	IP54	57R3913	34.56	30.63	28.90
● 1550-N	9.85 x 9.85 x 3.82	Unpainted	IP54	65R6959	59.39	52.64	49.67
● 1550QBK	2.36 x 2.17 x 1.18	Black	IP54	51R4013	10.16	9.01	8.51
● 1550PBK	3.15 x 2.17 x 0.99	Black	IP54	51R4011	11.32	10.04	9.47
● 1550ABK	3.5 x 1.38 x 1.18	Black	IP54	51R4006	10.28	9.11	8.60
● 1550BBK	1.19 x 2.52 x 4.51	Black	IP54	51R4008	11.64	10.32	9.74
● 1550DBK	2.17 x 2.52 x 4.53	Black	IP54	51R1552	13.55	12.00	11.33
● 1550CBK	2.17 x 3.54 x 4.53	Black	IP54	25R1956	15.30	13.56	12.79
● 1550MBK	1.23 x 4.74 x 3.95	Black	IP54	05T6382	15.02	13.31	12.56
● 1550EBK	6.73 x 4.76 x 2.17	Black	IP54	57R3910	21.71	19.25	18.17
● 1550GBK	8.74 x 5.75 x 2.17	Black	IP54	53R1811	28.78	25.51	24.07
● 1550HBK	8.74 x 5.75 x 4.14	Black	IP54	57R3914	38.32	33.98	32.05
● 1550NBK	3.82 x 9.85 x 9.85	Black	IP54	05T6383	63.84	56.59	53.39
● 1550JBK	10.83 x 6.89 x 2.46	Black	IP54	85R4903	40.96	36.31	34.26
LIGHT DUTY WATERTIGHT							
● 1550WA	3.5 x 1.38 x 1.18	Unpainted	IP66	51R4014	7.28	6.46	6.09
● 1550WQ	2.36 x 2.17 x 1.18	Unpainted	IP66	51R4021	7.16	6.35	6.00
● 1550WB	4.51 x 2.52 x 1.18	Unpainted	IP66	51R4016	8.78	7.78	7.35
● 1550WD	4.51 x 2.52 x 2.17	Unpainted	IP66	26R3371	10.42	9.23	8.70
● 1550WC	4.53 x 3.54 x 2.17	Unpainted	IP66	51R4018	11.71	10.38	9.79
● 1550WE	6.73 x 4.76 x 2.17	Unpainted	IP66	57R3915	18.71	16.59	15.66
● 1550WG	8.74 x 5.75 x 2.17	Unpainted	IP66	57R3919	26.08	23.12	21.82
● 1550WH	8.74 x 5.75 x 4.14	Unpainted	IP66	57R3921	35.35	31.34	29.57
● 1550WQBK	2.36 x 2.17 x 1.18	Black	IP66	51R4022	10.63	9.42	8.89
● 1550WDBK	4.51 x 2.52 x 2.17	Black	IP66	51R4019	14.01	12.41	11.71
● 1550WCBK	4.53 x 3.54 x 2.17	Black	IP66	20R0395	15.01	13.30	12.55
● 1550WGBK	8.74 x 5.75 x 2.17	Black	IP66	57R3920	29.52	26.17	24.69
● 1550WFBK	6.73 x 4.76 x 4.14	Black	IP66	57R3918	27.34	24.24	22.87
● 1550WHBK	8.74 x 5.75 x 4.14	Black	IP66	57R3922	37.29	33.06	31.19

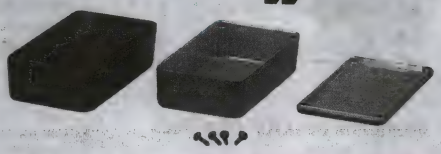
(164494)

DIE-CAST ALUMINUM ENCLOSURES

RoHS Compliant Available

HAMMOND MANUFACTURING

- Countersunk lid and tumbled surface for RF shielding capabilities, making them ideal for RF connectors
- Easy drilling and punching with the durability of metal
- #6-32 x 1/2" phillips machine screws
- 2 center posts to provide an RF seal (type suffixes D and E)



Mfg. Part No.	Dimensions (in.) H x W x D	Finish	Stock No.	Price Each 1-4	5-9	10-24
1590A	3.64 x 1.52 x 1.22	Unpainted	81F3790	7.67	6.91	6.40
1590B	4.39 x 2.34 x 1.22	Unpainted	81F3791	8.72	7.86	7.26
1590BB	4.67 x 3.68 x 1.34	Unpainted	81F3792	11.41	10.27	9.49
1590BBS	1.5 x 4.7 x 3.7	Unpainted	72W2812	13.22	12.13	11.10
1590BS	1.5 x 4.4 x 2.38	Unpainted	72W2814	10.24	9.40	8.60
1590C	4.72 x 3.7 x 2.26	Unpainted	81F3793	13.45	12.10	11.19
1590CE	2.53 x 3.95 x 4.74	Unpainted	45T1529	12.41	12.09	11.35
1590D	7.38 x 4.7 x 2.21	Unpainted	81F3794	23.40	21.06	19.46
1590DD	7.38 x 4.7 x 1.46	Unpainted	83F8748	20.44	18.41	17.01
1590DE	2.53 x 4.73 x 7.88	Unpainted	45T1531	20.66	20.11	18.89
1590E	7.38 x 4.7 x 3.23	Unpainted	81F3795	26.45	23.80	22.00
1590EE	3.33 x 4.73 x 7.88	Unpainted	45T1532	21.70	21.13	19.84
1590F	7.38 x 7.38 x 2.64	Unpainted	81F3796	32.80	29.51	27.27
1590G	3.94 x 1.97 x 0.99	Unpainted	84C9906	8.91	8.03	7.41
1590H	2.07 x 1.5 x 1.22	Unpainted	92B1772	7.54	6.78	6.27
1590J	5.71 x 3.74 x 1.93	Unpainted	93B3472	14.75	13.27	12.27
1590K	4.92 x 4.92 x 3.11	Unpainted	95B0570	24.00	21.59	19.96
1590KK	4.92 x 4.92 x 2.26	Unpainted	73J3615	22.39	20.15	18.63
1590LB	1.99 x 1.99 x 1.22	Unpainted	81F3797	7.42	6.68	6.17
1590LLB	1.97 x 1.97 x 0.99	Unpainted	73J3618	7.05	6.34	5.87
1590N1	4.77 x 2.6 x 1.55	Unpainted	95B0581	12.61	11.35	10.49
1590P1	6.01 x 3.24 x 1.97	Unpainted	84F142	14.85	13.36	12.35
1590Q	4.7 x 4.7 x 1.26	Unpainted	73J3622	14.04	12.64	11.68
1590R1	7.55 x 4.38 x 2.4	Unpainted	71C9009	27.31	24.58	22.72
1590S	4.35 x 3.21 x 1.73	Unpainted	87F2484	11.55	10.40	9.61
1590T	4.74 x 3.13 x 2.33	Unpainted	87F2485	11.98	10.79	9.98
1590U	4.7 x 4.7 x 2.33	Unpainted	87F2486	17.13	15.42	14.26
1590V	4.7 x 4.7 x 3.7	Unpainted	87F2487	24.17	21.77	20.13
1590X	5.72 x 4.77 x 2.22	Unpainted	05T6414	17.56	15.80	14.61
1590XX	5.72 x 4.77 x 1.55	Unpainted	78R3976	15.94	14.35	13.26
1590Y	3.62 x 3.62 x 1.66	Unpainted	73J3645	11.64	10.48	9.69
1590ABK	3.64 x 1.52 x 1.22	Black	95F2661	9.31	8.37	7.75
1590BBK	4.39 x 2.34 x 1.22	Black	95F2662	11.39	10.26	9.48
1590BBBK	4.67 x 3.68 x 1.34	Black	95F2663	14.27	12.84	11.87
1590BBSBK	1.5 x 4.7 x 3.7	Black	72W2813	17.12	15.71	14.38
1590BSBK	1.5 x 4.4 x 2.38	Black	43W5137	14.70	13.49	12.35
1590CBK	4.72 x 3.7 x 2.26	Black	94F4795	16.27	14.66	13.54
1590CEBK	2.53 x 3.95 x 4.74	Black	45T1530	13.69	13.33	12.52
1590DBK	7.38 x 4.7 x 2.21	Black	95F2664	28.90	26.02	24.05
1590DDBK	7.38 x 4.7 x 1.46	Black	83F8749	25.99	23.39	21.62
1590DEBK	2.5 x 4.7 x 7.88	Black	14T1441	24.59	23.93	22.48
1590EBK	7.38 x 4.7 x 3.23	Black	95F2665	33.44	30.10	27.81
1590EEBK	3.33 x 4.73 x 7.88	Black	45T1533	27.07	26.35	24.75
1590FBK	7.38 x 7.38 x 2.64	Black	95F2666	39.61	35.64	32.94
1590GBK	3.94 x 1.97 x 0.99	Black	84C9907	11.85	10.67	9.86
1590HBK	2.07 x 1.5 x 1.22	Black	95B0585	10.48	9.43	8.72
1590JBK	5.71 x 3.74 x 1.93	Black	93B3473	17.90	16.12	14.90
1590KBK	4.92 x 4.92 x 3.11	Black	95B0642	29.34	26.41	24.40
1590KKBK	4.92 x 4.92 x 2.26	Black	73J3616	26.43	23.78	21.98
1590LBBK	1.99 x 1.99 x 1.22	Black	94F1153	9.70	8.74	8.07
1590N1BK	4.77 x 2.6 x 1.55	Black	95B0643	18.13	16.32	15.09
1590P1BK	6.01 x 3.24 x 1.97	Black	83F8755	18.26	16.43	15.19
1590QBK	4.7 x 4.7 x 1.26	Black	73J3623	18.86	16.97	15.69
1590R1BK	7.55 x 4.38 x 2.4	Black	42H5395	33.29	29.96	27.70
1590SBK	4.35 x 3.21 x 1.73	Black	95F2667	13.23	11.92	11.01
1590TBK	4.74 x 3.13 x 2.33	Black	95F2668	14.04	12.64	11.68
1590UBK	4.7 x 4.7 x 2.33	Black	95F2669	20.54	18.49	17.09
1590VBK	4.7 x 4.7 x 3.7	Black	95F2670	29.67	26.70	24.68
1590XBK	5.72 x 4.77 x 2.22	Black	05T6415	19.63	17.67	16.33
1590XXBK	5.72 x 4.77 x 1.55	Black	77R3921	19.87	17.88	16.53
1590YBK	3.62 x 3.62 x 1.66	Black	44J9998	15.55	14.00	12.94

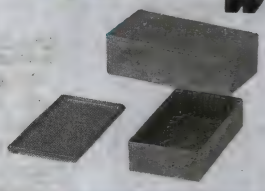
(6985)

DIE-CAST ALUMINUM PC CARD ENCLOSURES

RoHS Compliant Available

HAMMOND MANUFACTURING

- Internal slots on 0.2" centers hold 0.062"-thick PC cards or dividers
- 3mm slot head screws, countersunk into lid and threaded in tapped holes
- 600°C (1112°F) rating
- Lap joint construction



Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5-9	10-24
1590L	3.96 x 1.98 x 0.83	65F1782	8.09	6.76	6.25
1590M	4.48 x 2.49 x 1.06	65F1783	9.82	8.21	7.59
1590N	4.75 x 2.61 x 1.42	65F1784	11.87	9.93	9.18
1590P	6.01 x 3.24 x 1.81	65F1785	14.27	11.93	11.03
1590R	7.55 x 4.38 x 2.24	65F1786	18.70	15.64	14.45

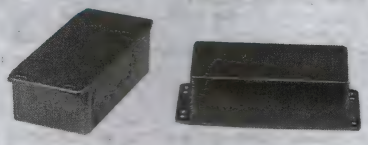
(7048)

FLANGED LID-DIE-CAST ALUMINUM ENCLOSURES

RoHS Compliant Available

HAMMOND MANUFACTURING

Mfg. part no. 1590 flanged lid die-cast enclosures allow for easy mounting to walls or shelves. These enclosures share the same body and features as the regular **mfg. part no. 1590** enclosures except the lid is extended and four countersunk holes are cast into the flanges. The flanged lid also allows for added security as the lid/enclosure screws are hidden against the wall or shelf.



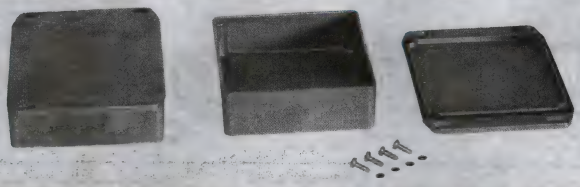
Mfg. Part No.	Dimensions (in.) L x W x D	Stock No.	Price Each 1-4	5-9	10-24
1590AFL	3.64 x 1.52 x 1.22	83F8744	7.62	6.87	6.34
1590BFL	4.39 x 2.34 x 1.22	83F8746	8.66	7.80	7.21
1590BSFL	4.39 x 2.37 x 1.5	44W6001	8.59	8.36	7.85
1590BBFL	4.67 x 3.68 x 1.34	83F8745	11.55	10.40	9.61
1590BBSFL	4.7 x 3.7 x 1.5	86W0159	11.09	10.78	10.14
1590CFL	4.72 x 3.7 x 2.23	83F8747	13.70	12.33	11.39
1590DFL	7.38 x 4.7 x 2.21	83F8751	23.40	19.57	19.46
1590DDFL	7.4 x 4.7 x 1.46	83F8750	20.44	17.10	17.01
1590EFL	7.38 x 4.7 x 3.23	83F8752	26.31	22.01	21.89
1590FFL	7.38 x 7.38 x 2.64	83F8753	32.80	27.43	27.27
1590GFL	3.94 x 1.97 x 0.99	34C4911	9.10	7.61	7.57
1590LBFL	1.99 x 1.99 x 1.22	83F8754	7.35	6.15	6.12
1590N1FL	4.77 x 2.6 x 1.55	12C2145	13.24	11.08	11.01
1590P1FL	6.01 x 3.24 x 1.97	84F143	14.84	13.35	12.35
1590QFL	4.7 x 4.7 x 1.26	73J3626	14.74	13.27	12.26
1590R1FL	7.55 x 4.38 x 2.4	84C9908	27.57	24.81	22.94
1590SFL	4.35 x 3.21 x 1.73	83F8756	11.41	10.27	9.49
1590TFL	4.74 x 3.13 x 2.33	83F8757	11.75	10.58	9.78
1590UFL	4.7 x 4.7 x 2.33	83F8758	17.12	15.41	14.24
1590XFL	5.72 x 4.77 x 2.06	05T6416	17.56	15.80	14.61
1590XXFL	5.72 x 4.77 x 1.39	05T6418	15.18	13.67	12.63

(34481)

DIECAST ALUMINUM ENCLOSURES—WATERTIGHT WITH FLANGED LID

RoHS Compliant Available

HAMMOND MANUFACTURING



Feature 2-piece lap-joint construction with a bead of rubber-like silicone around the perimeter to provide protection against dust accumulation and water. Designed to meet IP65 classification. Flanged lid permits easy mounting and extra security by hiding screws. Assembled with machine screws in threaded holes with individual neoprene "O" rings. Natural finish.

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5-9	10-24
1590WAFL	3.64 x 1.52 x 1.06	24B7710	9.46	7.92	7.31
1590WBFL	4.39 x 2.34 x 1.06	24B7717	10.45	8.74	8.08
1590WBBFL	4.67 x 3.68 x 1.18	94B9820	13.70	11.45	10.58
1590WCFL	4.72 x 3.7 x 2.07	24B7722	15.98	13.36	12.35

CONTINUED

METAL ENCLOSURES

DIECAST ALUMINUM ENCLOSURES—WATERTIGHT WITH FLANGED LID (CONT.)

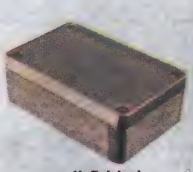
Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5-9	10-24
● 1590WDFL	2.21 x 4.7 x 7.38	24B7730	25.99	21.73	20.09
● 1590WEFL	7.38 x 4.7 x 3.07	24B7735	28.60	23.92	22.10
● 1590WFFL	7.38 x 7.38 x 2.48	24B7740	37.69	31.52	29.12
● 1590WN1FL	4.77 x 2.6 x 1.39	17C1331	15.55	13.01	12.02
● 1590WR1FL	7.55 x 4.38 x 2.24	84C9911	29.57	24.74	22.86
● 1590WSFL	4.35 x 3.21 x 1.57	24B7756	13.86	11.59	10.71
● 1590WTFL	4.74 x 3.13 x 2.17	24B7761	14.21	11.89	10.98

(60484)

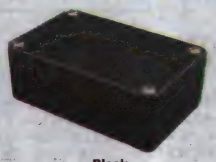
WATERTIGHT THICK WALL DIECAST ALUMINUM ENCLOSURES

NEMA — RoHS Compliant Available — HAMMOND MANUFACTURING — IP66

- Designed to meet IP66 (includes pre-formed, one-piece silicone rubber gasket)
- Two-piece "tongue and groove" construction for protection against access of dust and water
- Ideal for repetitive opening and closing
- Wall mount using "through box blind hole" construction, outside of gasket protection
- Unpainted version is vibra finished for a smooth surface with no sharp edges
- Painted version is painted with polyester powder paint (inside and out)
- Lid secured with stainless steel, Philips head, counter sunk, machine screws into factory tapped holes that are threaded with the first installation of self tapping lid screws
- Lid screws are outside the gasket protection area to eliminate the need for "O" rings
- Lid screws are self captivating on six sizes (**mfg. part nos. 1550Z107, 1550Z108, 1550Z116, 1550Z117, 1550Z137 & 1550Z139**)



Unfinished



Black

Rubber feet can be ordered separately *on page 2350.*

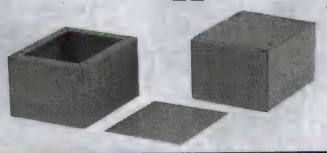
Mfg. Part No.	Color	Dimensions (in.) H x W x D	Stock No.	Price Each 1-9	10-24	25-49
● 1550Z101	Unfinished	1.98 x 1.78 x 1.19	68R0385	7.28	6.09	5.63
● 1550Z103	Unfinished	3.87 x 2.54 x 1.35	68R0389	10.34	8.65	7.99
● 1550Z104	Unfinished	2.54 x 2.3 x 1.4	68R0391	8.09	6.76	6.25
● 1550Z106	Unfinished	4.54 x 2.58 x 1.2	73R3604	10.40	8.69	8.03
● 1550Z107	Unfinished	4.94 x 3.17 x 1.6	73R3606	14.55	12.18	11.25
● 1550Z108	Unfinished	4.94 x 3.17 x 2.31	68R0393	17.32	14.49	13.39
● 1550Z109	Unfinished	5.91 x 2.53 x 1.43	73R3608	15.40	12.88	11.90
● 1550Z111	Unfinished	4.54 x 2.58 x 2.18	73R3610	13.28	11.11	10.27
● 1550Z113	Unfinished	55.4 x 90.4 x 115.4	68R0395	15.40	12.88	11.90
● 1550Z115	Unfinished	5.84 x 4.27 x 2.97	73R3612	27.46	22.96	21.22
● 1550Z124	Unfinished	8.76 x 5.77 x 2.17	73R3614	29.74	24.88	22.98
● 1550Z137	Unfinished	4.76 x 4.76 x 4	73R3616	30.80	25.76	23.80
● 1550Z139	Unfinished	6.28 x 6.28 x 4	73R3618	36.61	30.62	28.29
● 1550Z220	Unfinished	8.76 x 5.77 x 3.25	73R3620	36.61	30.62	28.29
● 1550Z111BK	Black	55.4 x 65.4 x 115.4	73R3611	19.80	16.56	15.30
● 1550Z113BK	Black	4.54 x 3.56 x 2.19	68R0396	26.31	22.01	20.33
● 1550Z117BK	Black	6.32 x 3.95 x 3.2	68R0400	40.70	34.04	31.45
● 1550Z124BK	Black	8.76 x 5.77 x 2.17	73R3615	42.90	35.88	33.16
● 1550Z220BK	Black	8.76 x 5.77 x 3.25	73R3621	52.62	44.01	40.66

(167456)

STEEL UTILITY ENCLOSURES

RoHS Compliant Available — HAMMOND MANUFACTURING

Fabricated from 20-gauge (0.036" thick) steel (sizes A to E) or 18-gauge (0.048" thick) steel (sizes F to J). Units are painted with an ASA 61 powder paint finish. Top and bottom panels are secured with 8 self-tapping screws (included).



Mfg. Part No.	Metal Thickness	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5-9	10-24
● 1415A	20 Gauge/0.036"	4 x 4 x 2	95F2595	20.41	18.57	17.36
● 1415B	20 Gauge/0.036"	4 x 5 x 3	95F2596	20.75	18.89	17.64
● 1415C	20 Gauge/0.036"	5 x 6 x 4	95F2597	26.10	23.76	22.19
● 1415D	20 Gauge/0.036"	6 x 6 x 6	94F822	37.80	34.40	32.14
● 1415E	20 Gauge/0.036"	6 x 9 x 5	95F2598	40.93	37.26	34.79
● 1415F	18 Gauge/0.048"	x x	95F2599	62.83	57.18	53.41
● 1415G	18 Gauge/0.048"	7 x 12 x 6	95F2600	62.19	56.60	52.86
● 1415H	18 Gauge/0.048"	x x	95F2601	80.50	73.26	68.42

CONTINUED

STEEL UTILITY ENCLOSURES (CONT.)

Mfg. Part No.	Metal Thickness	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5-9	10-24
● 1415I	18 Gauge/0.048"	11 x 12 x 8	95F2602	90.75	82.59	77.15
● 1415J	18 Gauge/0.048"	9 x 15 x 7	95F2603	87.36	79.50	74.26

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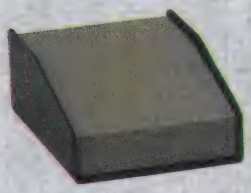
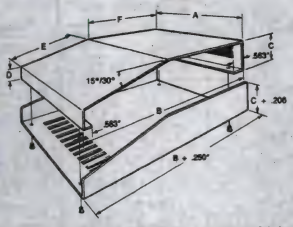
ALUMINUM DESKTOP CONSOLES

RoHS Compliant Available — HAMMOND MANUFACTURING





Mfg. part no. 1456 aluminum consoles are sold as complete units (top & bottom). The bottom section is fabricated from 0.081" thick aluminum and painted an off-white powder paint. The top sloped panel is 0.064" thick up to 14" wide models (0.081" thick over 14" wide) and is painted with a textured blue powder paint. Units include hardware and 4 self adhesive rubber feet.

Mfg. Part No.	Panel Slope	Console Dimensions (in.) A	B	C	D	E	F	Stock No.	Price Each Each	2-4
● 1456FE1WHBU	10°	6.5	5.5	2.5	1.5	...	...	90B3490	29.81	25.66
● 1456PH1WHBU	10°	14	8.3	3	1.5	...	...	90B3496	43.70	37.61
● 1456RL1WHBU	10°	17	11.3	3.5	1.5	...	...	94B9533	52.10	44.84
● 1456WL1WHBU	10°	20	11.3	3.5	1.5	...	...	90B9382	61.53	52.96
● 1456CE2WHBU	15°	4	5.5	2	1.1	3.3	2.2	87F2472	26.87	23.13
● 1456FE2WHBU	15°	6.5	5.5	2	1.1	3.3	2.2	83F8950	29.81	25.66
● 1456FH3WHBU	15°	6.5	8.3	3	1.3	...	...	50B9999	36.59	31.49
● 1456KH3WHBU	15°	10	8.3	3	1.3	6.3	2.2	87F2475	38.09	32.79
● 1456PL3WHBU	15°	14	11.3	3	1.3	6.3	5.2	83F8956	46.01	39.60
● 1456RL3WHBU	15°	17	11.3	3	1.3	...	...	20C3436	53.33	45.90
● 1456CE3WHBU	30°	4	5.5	3	1.1	...	...	92B2543	26.87	23.13
● 1456FE3WHBU	30°	6.5	5.5	3	1.1	3.7	2.2	87F2478	29.73	25.59
● 1456FG4WHBU	30°	6.5	7.2	4	1.1	5.7	2.2	83F8951	31.90	27.46
● 1456KE3WHBU	30°	10	5.5	3	1.1	3.7	2.2	83F8952	35.52	30.57
● 1456KG4WHBU	30°	10	7.2	4	1.1	5.7	2.2	83F8953	38.85	33.45
● 1456KK4WHBU	30°	10	10.2	4	1.1	5.7	5.2	83F8954	41.79	35.97
● 1456PK4WHBU	30°	14	10.2	4	1.1	5.7	5.2	83F8955	46.01	39.60
● 1456RK4WHBU	30°	17	10.2	4	1.1	5.7	5.2	83F8957	54.40	46.82
● 14-56WK4WHBU	30°	20	10.2	4	1.1	...	...	50B3852	61.53	52.96

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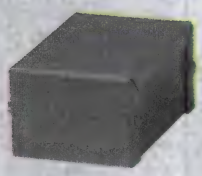
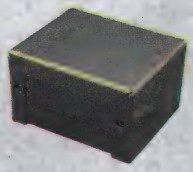
ALUMINUM UTILITY PAINTED AND UNPAINTED ENCLOSURES

RoHS Compliant Available — HAMMOND MANUFACTURING

- 0.040" (1.02") thick aluminum
- 4 Self-tapping screws included



Painted



Unpainted

Dimensions (Inches) L	W	H	Painted Aluminum Mfg. Part No.	Stock No.	Price Each 1-4	Unpainted Aluminum Mfg. Part No.	Stock No.	Price Each 1-4
2.7	2.2	1.6	● 1411B	95F2580	7.92	● 1411BU	83F8920	6.28
			● 1411D	95F2582	9.70	● 1411DU	83F8922	6.93
.0		.0	● 1411F	95F2583	10.05	● 1411FU	83F8923	8.55
4.0	2.2	1.6	● 1411G	94F180	9.93	● 1411GU	83F8924	7.62
4.0	2.2	2.2	● 1411H	95F6181	9.35	● 1411HU	83F8925	7.92
5.0	4.0	3.0	● 1411L	95F2585	13.86	● 1411LU	83F8927	10.84
.0	.0	.0	● 1411M	95F2586	18.26	● 1411MU	83F8928	13.86
5.0	3.0	2.2	● 1411N	95F2587	13.20	● 1411NU	83F8929	11.55
6.0	5.0	4.0	● 1411P	95F2588	20.54	● 1411PU	83F8930	14.84
.0	.0	.0	● 1411Q	95F6182	19.06	● 1411QU	83F8931	14.78
8.0	6.0	3.5	● 1411R	95F2589	27.38	● 1411RU	83F8932	18.48
.0	.0	.0	● 1411S	95F2590	25.58	● 1411SU	83F8933	18.60
10	2.2	1.6	● 1411T	95F2591	26.69	● 1411TU	83F8934	20.94
10	6.0	3.5	● 1411U	95F2592	29.70	● 1411UU	83F8935	24.26
12	7.0	4.0	● 1411X	94F821	39.66	● 1411XU	83F8937	32.79

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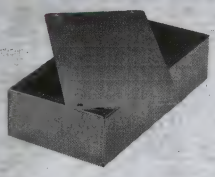
ALUMINUM UTILITY ENCLOSURES

RoHS Compliant Available

HAMMOND MANUFACTURING

- Sturdy, spot-welded construction
- Natural aluminum finish



Order aluminum cover plates separately on this page.

Mfg. Part No.	Dimensions (in.) Height	Width	Depth	Fits Cover	Gauge (in)	Stock No.	Price Each 1-4	2-4	5-9
1444-6	2	4	4	1434-6	0.04	95F2604	12.01	10.94	10.22
1444-45351	1	3.5	4.5	1434-4535	0.04	72W2880	10.00	9.10	8.50
1444-542	2	4	5	1434-54	0.04	72W2881	12.00	10.92	10.20
1444-6415	1.5	4	6	1434-8	0.04	72W2882	12.00	10.92	10.20
1444-8	2	4	6	1434-8	0.04	95F2605	12.45	11.33	10.58
1444-643	3	4	6	1434-8	0.04	72W2883	15.02	13.68	12.77
1444-12	2	5	7	1434-12	0.04	95F2608	13.45	12.24	11.43
1444-753	3	5	7	1434-12	0.04	72W2884	17.61	16.03	14.97
1444-772	2	7	7	1434-77	0.04	72W2885	14.50	13.20	12.33
1444-9	1	4	8	1434-10	0.04	95F2606	12.98	11.81	11.04
1444-10	2	4	8	1434-10	0.04	95F2607	13.49	12.27	11.46
1444-84515	1.5	4.5	8	1434-845	0.04	72W2886	15.00	13.65	12.75
1444-862	2	6	8	1434-86	0.04	66W2293	15.54	14.14	13.21
1444-14	2	5	9	1434-14	0.04	95F2609	16.60	15.11	14.11
1444-972	2	7	9	1434-97	0.04	72W2889	15.00	13.65	12.75
1444-9552	2	5	9.5	1434-955	0.04	53W3139	14.00	12.74	11.90
1444-95525	2.5	5	9.5	1434-955	0.04	72W2887	17.61	16.03	14.97
1444-9553	3	5	9.5	1434-955	0.04	72W2888	18.00	16.38	15.30
1444-1053	3	5	10	1434-105	0.04	72W2857	19.68	17.91	16.73
1444-15	1	6	10	1434-16	0.04	95F2610	14.70	13.38	12.50
1444-16	2	6	10	1434-16	0.04	95F2611	17.97	16.36	15.28
1444-10825	2.5	8	10	1434-108	0.04	72W2858	21.50	19.57	18.28
1444-1172	2	7	11	1434-117	0.04	72W2859	17.61	16.03	14.97
1444-1273	3	7	12	1434-127	0.04	72W2862	24.00	21.84	20.40
1444-22	2	8	12	1434-22	0.051	95F2614	29.87	27.18	25.39
1444-12825	2.5	8	12	1434-22	0.051	72W2863	27.00	24.57	22.95
1444-24	3	8	12	1434-22	0.051	95F2615	30.90	28.12	26.27
1444-29	2	10	12	1434-29	0.051	95F2618	31.20	28.39	26.52
1444-12103	3	10	12	1434-29	0.051	72W2860	29.87	27.18	25.39
1444-12123	3	12	12	1434-1212	0.051	72W2861	38.11	34.68	32.39
1444-1372	2	7	13	1434-137	0.04	72W2864	21.00	19.11	17.85
1444-18	2	5	13.5	1434-18	0.04	95F2612	19.00	17.29	16.15
1444-1463	3	6	14	1434-146	0.051	72W2866	28.00	25.48	23.80
1444-14103	3	10	14	1434-1410	0.051	72W2865	35.00	31.85	29.75
1444-1573	3	7	15	1434-157	0.051	72W2867	29.50	26.85	25.08
1444-1593	3	9	15	1434-159	0.051	72W2868	33.50	30.49	28.48
1444-26	2	8	16	1434-26	0.051	95F2616	31.00	28.21	26.35
1444-28	3	8	16	1434-26	0.051	95F2617	36.56	33.28	31.09
1444-20	3	4	17	1434-20	0.04	95F2613	31.20	28.39	26.52
1444-1763	3	6	17	1434-176	0.051	72W2878	32.00	29.12	27.20
1444-1773	3	7	17	1434-177	0.051	72W2879	33.00	30.03	28.05
1444-1783	3	8	17	1434-178	0.051	53W3138	31.93	29.06	27.14
1444-30	2	10	17	1434-30	0.051	95F2619	35.36	32.18	30.06
1444-32	3	10	17	1434-30	0.051	95F2620	41.61	37.87	35.37
1444-33	4	10	17	1434-30	0.051	95F2621	54.34	49.45	46.19
1444-17105	5	10	17	1434-30	0.051	72W2869	62.83	57.18	53.41
1444-17123	3	10	17	1434-1712	0.051	72W2870	38.50	35.04	32.73
1444-17132	2	13	17	1434-1713	0.051	72W2871	39.50	35.95	33.58
1444-17133	3	13	17	1434-1713	0.051	72W2872	46.87	42.65	39.84
1444-17134	4	13	17	1434-1713	0.051	72W2873	55.00	50.05	46.75
1444-17135	5	13	17	1434-1713	0.051	72W2874	72.10	65.61	61.29
1444-17143	3	14	17	1434-1714	0.051	72W2875	51.00	46.41	43.35
1444-17154	4	15	17	1434-1715	0.051	28W5354	71.07	64.67	60.41
1444-17156	6	15	17	1434-1715	0.051	28W5355	100.42	91.39	85.37
1444-17173	3	17	17	1434-1717	0.051	72W2876	59.50	54.15	50.58
1444-17174	4	17	17	1434-1717	0.051	72W2877	77.00	70.07	65.45

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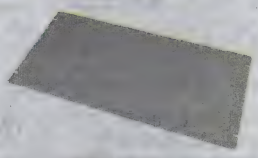
ALUMINUM UTILITY ENCLOSURE COVER PLATES

RoHS Compliant Available

HAMMOND MANUFACTURING

Aluminum plates fit **1444 series** aluminum utility enclosures. Pre-punched with 4 holes. Hardware available below. *Order* **1444 series** *aluminum utility enclosures separately on this page.*



Mfg. Part No.	Fits Chassis Type	Dim. (in.) W	D	Stock No.	Price Each 1-4	5-9
1434-6	1444-6	4	4	95F2622	5.06	4.55
1434-4535	1444-45351	4.5	3.5	72W2851	4.50	4.05
1434-54	1444-542	5	4	72W2852	4.50	4.05
1434-8	1444-6415, 1444-8, 1444-643	6	4	95F2623	5.78	5.20
1434-12	1444-12, 1444-753	7	5	95F2625	5.25	4.73
1434-77	1444-772	7	7	72W2853	5.70	5.13
1434-10	1444-9, 1444-10	8	4	95F2624	5.96	5.38
1434-845	1444-84515	8	4.5	72W2854	7.20	6.48
1434-86	1444-862	8	6	66W2294	7.77	6.99
1434-14	1444-14	9	5	95F2626	6.30	5.67
1434-97	1444-972	9	7	72W2856	6.50	5.85
1434-955	1444-9552, 1444-95525, 1444-9553	9.5	5	72W2855	5.50	4.95
1434-105	1444-1053	10	5	72W2834	5.00	4.50
1434-16	1444-15, 1444-16	10	6	95F2627	8.92	8.03
1434-108	1444-10825	10	8	72W2835	9.00	8.10
1434-117	1444-1172	11	7	72W2836	7.25	6.53
1434-127	1444-1273	12	7	72W2838	7.50	6.75
1434-22	1444-22, 1444-12825, 1444-24	12	8	95F2630	11.62	10.46
1434-29	1444-29, 1444-12103	12	10	95F2632	13.13	11.81
1434-1212	1444-12123	12	12	72W2837	12.43	11.19
1434-137	1444-1372	13	7	72W2839	9.00	8.10
1434-18	1444-18	13.5	5	95F2628	8.40	7.56
1434-146	1444-1463	14	6	72W2841	9.00	8.10
1434-1410	1444-14103	14	10	72W2840	11.50	10.35
1434-157	1444-1573	15	7	72W2842	9.50	8.55
1434-159	1444-1593	15	9	72W2843	14.50	13.05
1434-26	1444-26, 1444-28	16	8	95F2631	12.60	11.34
1434-20	1444-20	17	4	95F2629	10.00	9.00
1434-176	1444-1763	17	6	72W2848	11.00	9.90
1434-177	1444-1773	17	7	72W2849	9.50	8.55
1434-178	1444-1783	17	8	72W2850	11.91	10.72
1434-30	1444-30, 1444-32, 1444-33, 1444-17105	17	10	95F2633	13.07	11.77
1434-1712	1444-17123	17	12	72W2844	16.00	14.40
1434-1713	1444-17132, 1444-17133, 1444-17134, 1444-17135	17	13	72W2845	17.09	15.38
1434-1714	1444-17143	17	14	72W2846	17.50	15.75
1434-1715	1444-17154, 1444-17156	17	15	47W2288	18.65	16.78
1434-1717	1444-17173, 1444-17174	17	17	72W2847	20.00	18.00

HARDWARE

Replacement and accessory screws are self-tapping type for most metal case series.

Mfg. Part No.	Screw Size	Qty. Per Pkg.	Stock No.	Price Each Each	2-4	5-9
1421J6	6-32 Philips, Nickel-Plated	6	31C6867	4.95	4.76	4.61

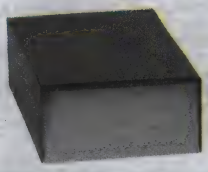
(6865)

MINIATURE SLOPE-FRONT METAL INSTRUMENT CASES

RoHS Compliant Available

HAMMOND MANUFACTURING

20-gauge steel instrument cases with choice of sloping or vertical front panels by reversing case. Panels are satin off-white with offsetting textured black covers. Each unit comes complete with 6-32 nickel-plated Phillips screws and self-adhesive rubber feet.



Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5-9	10-24
1454C	2 x 4 x 2.75	94F814	16.86	14.34	13.20
1454E	2 x 4 x 5.25	50F8524	21.64	18.40	16.94
1454F	3 x 4 x 6.25	94F4759	23.57	20.05	18.45
1454H	2.5 x 5 x 7.75	50F8526	25.45	21.65	19.92
1454J	4 x 4 x 3.25	94F815	20.89	17.76	16.35
1454K	2.5 x 8 x 3.75	50F8527	24.73	21.03	19.35
1454L	4 x 5 x 6	50F8528	25.16	21.40	19.69

CONTINUED

MINIATURE SLOPE-FRONT METAL INSTRUMENT CASES (CONT.)

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5-9	10-24
● 1454N	3 x 8 x 6	73J3543	26.04	22.13	20.37
● 1454P	3.5 x 10 x 5	94F4760	28.71	25.10	23.15

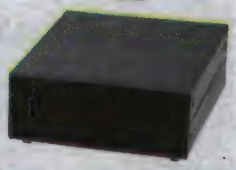
(6860)

LOW-PROFILE METAL INSTRUMENT CASES

RoHS Compliant Available

HAMMOND MANUFACTURING

Case is split into two equal halves, constructed of 18-gauge steel with choice of satin black or gulf-blue finish. Front and back panels are 0.064" thick aluminum (one satin black, the other satin off-white) for easy machining. Symmetrical design; either end can be front or rear. Each unit comes complete with hardware and rubber feet.



Black Mfg. Part No.	Black Stock No.	Blue Mfg. Part No.	Blue Stock No.	Dimensions (in.) H x W x D	Price Each 1-4	5-9
● 1458A3	94F4776	● 1458A3B	50F8531	3 x 4 x 4	43.58	40.09
● 1458C3	97F9413	● 1458C3B	94F4778	3 x 6 x 6	41.87	35.39
● 1458C4	97F9414	● 1458C4B	50F8533	4 x 6 x 6	43.92	37.12
● 1458D3	97F9415	● 1458D3B	94F820	3 x 8 x 8	50.59	42.78
● 1458D4	97F9416	● 1458D4B	94F4779	4 x 8 x 8	54.17	45.80
● 1458D5	24B6726	● 1458D5B	94F1144	5 x 8 x 8	57.58	48.67
● 1458E3	94F1145	● 1458E3B	50F8534	3 x 8 x 10	54.24	45.86
● 1458E4	94F4780	● 1458E4B	98F3483	4 x 8 x 10	56.23	47.53
● 1458E5	97F9403	● 1458E5B	94F4781	5 x 8 x 10	59.27	50.11

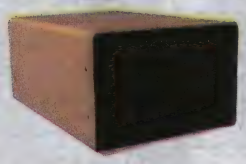
(6861)

STEEL VENTILATED INSTRUMENT CASES

RoHS Compliant Available

HAMMOND MANUFACTURING

Case and bottom are 18-gauge steel, finished in satin off-white paint. Front panel is satin black and rear vented panel matches case color; both are 0.064" thick aluminum for easy machining. Each unit comes complete with hardware and rubber feet.



Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5-9	10-24
● 1401AAA	x x	97F9446	58.05	52.39	49.28
● 1401AA	x x	96F5507	61.30	55.32	52.03
● 1401A	5 x 6 x 10	94F4836	67.00	60.47	56.87
● 1401C	x x	97F9447	78.91	71.21	66.98
● 1401E	8 x 8 x 8	94F176	72.23	65.18	61.30
● 1401G	x x	94F177	96.31	86.92	81.75
● 1401K	x x	96F5508	100.46	90.66	85.26
● 1401M	x x	97F9448	106.37	96.00	90.29
● 1401N	x x	94F178	96.42	91.06	85.16
● 1401P	x x	94F179	96.00	86.64	81.49

(6910)

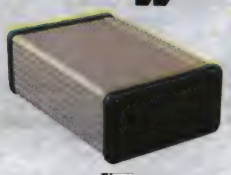
WATERTIGHT ALUMINUM INSTRUMENT CASES

RoHS Compliant Available

HAMMOND MANUFACTURING

- Designed to meet IP65 ratings
- Heavy duty extruded enclosures designed to house PC boards or for equipment interfacing
- Sized for standard Eurocards
- PC boards mount horizontally by sliding into internal slots extruded into the enclosure body
- Extruded aluminum body includes a recessed area for labels or membrane keypad
- End panels are diecast aluminum with full perimeter gaskets

IP65



Clear

Includes two diecast aluminum end panels painted in a black satin powder paint, two closed cell polyethylene foam end plate gaskets and rubber "O" rings for assembly screws All hardware and self-adhesive feet included as well.

WATERTIGHT EXTRUDED ALUMINUM - END PANELS - NO MOUNTING FLANGE

Mfg. Part No.	Dimensions (in.) H x W x D	Body Color	Stock No.	Price Each 1-4	5-9	10-24
● 1457C801	1.21 x 2.32 x 3.15	Clear	04N9975	25.47	23.48	22.49
● 1457K1201	x 0 x	Clear	04N9977	36.16	33.34	31.93
● 1457N1201	x x	Clear	04N9979	40.34	37.18	35.62
● 1457L1201	1.376 x 4.211 x 5.163	Clear	90W0328	34.32	31.45	29.21
● 1457J1601	1.239 x 3.424 x 6.738	Clear	90W0320	33.85	31.01	28.81
● 1457L1601	1.26 x 4.09 x 6.3	Clear	90W0336	38.59	35.37	32.85

CONTINUED

WATERTIGHT ALUMINUM INSTRUMENT CASES (CONT.)

Mfg. Part No.	Dimensions (in.) H x W x D	Body Color	Stock No.	Price Each 1-4	5-9	10-24
● 1457N1601	2.15 x 4.09 x 6.3	Clear	04N9981	44.30	40.85	39.12
● 1457C801BK	x x	Black	04N9976	25.47	23.48	22.49
● 1457J1201BK	1.12 x 3.3 x 4.73	Black	90W0313	31.18	28.57	26.54
● 1457L1201BK	1.26 x 4.09 x 4.73	Black	90W0329	35.69	32.71	30.38
● 1457J1601BK	1.239 x 3.424 x 6.738	Black	90W0321	33.85	31.01	28.81
● 1457L1601BK	1.26 x 4.09 x 6.3	Black	90W0337	38.59	35.37	32.85
● 1457K1201BK	x x	Black	78M5507	36.16	33.34	31.93
● 1457K1601BK	1.73 x 3.3 x 6.3	Black	84M8668	39.85	36.74	35.18
● 1457N1601BK	2.15 x 4.09 x 6.3	Black	85M2368	44.30	40.85	39.12
WATERTIGHT EXTRUDED ALUMINUM - END PANELS - FLANGED VERSION						
● 1457J1202	1.239 x 3.424 x 5.99	Clear	90W0316	30.34	27.98	26.79
● 1457L1202	1.26 x 4.09 x 4.73	Clear	90W0332	36.36	33.32	30.95
● 1457J1602	1.239 x 3.424 x 7.565	Clear	90W0324	34.55	31.66	29.41
● 1457L1602	1.373 x 4.208 x 7.542	Clear	90W0340	37.78	34.62	32.16
● 1457L1202BK	1.26 x 4.09 x 4.73	Black	90W0333	36.36	33.32	30.95
● 1457J1602BK	1.239 x 3.424 x 7.565	Black	90W0325	34.55	31.66	29.41
● 1457L1602BK	1.373 x 4.208 x 7.542	Black	90W0341	37.78	34.62	32.16
EXTRUDED ALUMINUM EMI/RFI PROTECTION - END PANELS - NO MOUNTING FLANGE						
● 1457L1201E	1.376 x 4.211 x 5.163	Clear	90W0330	46.18	42.31	39.30
● 1457J1601E	1.12 x 3.3 x 6.3	Clear	90W0322	46.31	42.43	39.42
● 1457L1601E	1.376 x 4.211 x 6.738	Clear	90W0338	53.11	48.66	45.21
● 1457J1201EBK	1.12 x 3.3 x 4.73	Black	90W0315	43.39	39.76	36.93
● 1457L1201EBK	1.376 x 4.211 x 5.163	Black	90W0331	44.40	40.68	37.79
● 1457J1601EBK	1.239 x 3.424 x 6.738	Black	90W0323	44.53	40.80	37.90
● 1457L1601EBK	1.376 x 4.211 x 6.738	Black	90W0339	53.11	48.66	45.21
EXTRUDED ALUMINUM EMI/RFI PROTECTION - END PANELS - FLANGED VERSION						
● 1457L1202E	1.26 x 4.09 x 4.73	Clear	90W0334	51.07	46.80	43.47
● 1457J1602E	1.239 x 3.424 x 7.565	Clear	90W0326	44.94	41.18	38.25
● 1457L1602E	1.373 x 4.208 x 7.542	Clear	90W0342	53.47	49.00	45.52
● 1457J1202EBK	1.239 x 3.424 x 5.99	Black	90W0319	43.76	40.09	37.24
● 1457J1602EBK	1.239 x 3.424 x 7.565	Black	90W0327	44.94	41.18	38.25
● 1457L1202EBK	1.26 x 4.09 x 4.73	Black	90W0335	51.07	46.80	43.47
● 1457L1602EBK	1.26 x 4.09 x 6.3	Black	90W0343	53.03	48.89	46.82

(116667)

VENTILATED LOW-PROFILE INSTRUMENT CASES

RoHS Compliant Available

HAMMOND MANUFACTURING

- 20-gauge steel case and bottom
- Front panel is satin black and rear panel matches case color
- 0.064" thick aluminum panels for easy machining
- Hardware and rubber feet included
- Rear panel and bottom are vented

Mfg. Part No.	Dimensions (in.) H x W x D	Color	Stock No.	Price Each 1-4	5-9	10-24
● 1426K	4 x 6 x 5	White	94F4757	58.68	53.10	49.30
● 1426M	4 x 8 x 6	White	94F4838	61.11	55.31	51.33
● 1426O	4 x 10 x 7	White	24B6404	67.77	61.34	56.94
● 1426Q	5.5 x 11 x 11.7	White	24B6405	68.54	62.03	57.57
● 1426V	4 x 12 x 8	White	95F2577	73.34	66.37	61.61
● 1426W	4 x 12 x 10	White	95F2578	78.23	70.80	65.72

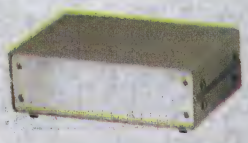
(6922)

ALUMINUM PC BOARD INSTRUMENT CASES

RoHS Compliant Available

HAMMOND MANUFACTURING

- Top and bottom halves fabricated from heavy 12-gauge aluminum
- Off-white powder paint finish
- Front and rear panels are easy-to-machine natural aluminum (paper-coated on one side)
- Hardware and 4 self-adhesive rubber feet included



For horizontal PC card mounting by sliding boards into side aluminum extrusions.

Mfg. Part No.	Dimensions (in.) H x W x D	Ventilated	Stock No.	Price Each 1-4	5-9	10-24
● 1402B	x x	No	83F8912	53.89	46.61	43.12
● 1402D	2.4 x 7.1 x 7.3	No	83F8913	58.07	50.23	46.46
● 1402F	x x	No	83F8915	70.16	60.70	56.13
● 1402H	3.9 x 10 x 7.3	No	83F8917	68.00	58.82	54.40
● 1402K	x x	No	83F8919	79.99	69.20	63.99
● 1402BV	x x	Yes	99F9604	55.45	47.98	44.37

CONTINUED

ALUMINUM PC BOARD INSTRUMENT CASES (CONT.)

Mfg. Part No.	Dimensions (in.) H x W x D	Ventilated	Stock No.	Price Each 1-4	5-9	10-24
1402DV	2.4 x 7.1 x 7.3	Yes	83F8914	59.95	51.86	47.96
1402FV	3.1 x 7.1 x 10.3	Yes	83F8916	72.76	62.94	58.21
1402HV	3.9 x 10 x 7.3	Yes	83F8918	70.58	61.05	56.46
1402KV	3.9 x 10 x 9.6	Yes	88F1817	83.77	72.47	67.02

(34477)

EXTRUDED ALUMINUM CASES

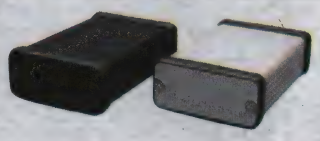
RoHS Compliant Available

HAMMOND MANUFACTURING

- Designed for horizontal mounting of PC boards
- Panels are one piece with integral bezel
- PC boards slide horizontally into internal guides extruded into walls
- Includes all hardware and rubber feet
- Clear or black anodized finish

Version 1 contains:
- 2 aluminum end panels and 2 plastic bezels, optionally installed to create a modern look

Version 2 contains:
- 2 easy to machine, solid plastic end panels



Mfg. Part No.	Dimensions (in.) H x W x D	Finish	Stock No.	Price Each 1-4	5-9	10-24
1455A802	0.47 x 2.76 x 3.15	Clear	84K8040	8.78	7.77	7.25
1455B802	x x	Clear	84K8043	9.39	8.32	7.75
1455B1202	x x	Clear	85K9489	10.38	9.18	8.56
1455C801	x 2.13 x	Clear	84C9884	14.94	13.23	12.33
1455C802	0.91 x 2.13 x 3.15	Clear	84C9886	11.50	10.18	9.49
1455C1201	0.91 x 2.13 x 4.72	Clear	84C9880	16.11	14.26	13.29
1455J1201	x x	Clear	89C9397	20.73	18.35	17.11
1455J1202	1.06 x 3.07 x 4.72	Clear	89C9399	15.81	14.00	13.05
1455L1201	x x	Clear	89C9410	24.19	21.41	19.96
1455L1202	1.2 x 4.06 x 4.72	Clear	89C9412	18.04	15.97	14.89
1455L1601	1.2 x 4.06 x 6.3	Clear	89C9414	26.69	23.62	22.02
1455L2201	1.2 x 4.06 x 8.66	Clear	89C9418	30.60	27.08	25.25
1455P1601	1.2 x 4.74 x 6.3	Clear	53K7804	26.24	23.23	21.66
1455R1601	1.2 x 6.3 x 6.3	Clear	98H4041	30.95	27.39	25.54
1455R1602	1.2 x 6.5 x 6.3	Clear	98H4043	23.30	20.62	19.23
1455R2201	1.2 x 6.3 x 8.66	Clear	98H4045	33.30	29.47	27.48
1455K1201	x x	Clear	84C9888	21.41	18.96	17.67
1455K1202	1.69 x 3.07 x 4.72	Clear	84C9889	16.51	14.62	13.62
1455K1601	1.69 x 3.07 x 6.3	Clear	84C9891	24.13	21.36	19.91
1455Q1601	2.03 x 4.74 x 6.3	Clear	53K7811	29.04	25.70	23.96
1455Q2201	2.03 x 4.74 x 8.66	Clear	53K7814	32.88	29.10	27.13
1455N1201	x x	Clear	84C9895	23.90	21.15	19.72
1455N1202	2.09 x 4.06 x 4.72	Clear	84C9897	18.94	16.77	15.63
1455N1601	x x	Clear	84C9899	26.48	23.45	21.85
1455N2201	2.09 x 4.06 x 8.66	Clear	84C9902	30.08	26.63	24.83
1455T1601	2.1 x 6.3 x 6.3	Clear	98H4049	31.43	27.82	25.94
1455T2201	2.1 x 6.3 x 8.66	Clear	98H4053	34.98	30.96	28.86
1455T2202	2.1 x 6.5 x 8.66	Clear	98H4055	27.62	24.45	22.79
1455A802BK	0.47 x 2.76 x 3.15	Black	84K7767	9.90	8.77	8.17
1455B802BK	0.75 x 2.82 x 3.15	Black	84K7762	11.03	9.77	9.10
1455C801BK	x 2.13 x	Black	84C9885	16.33	14.48	13.49
1455C802BK	0.91 x 2.13 x 3.15	Black	84C9887	14.15	12.53	11.68
1455C1201BK	0.91 x 2.13 x 4.72	Black	84C9881	17.43	15.44	14.38
1455C1202BK	0.91 x 2.13 x 4.72	Black	84C9883	12.60	11.16	10.40
1455J1201BK	x x	Black	89C9398	22.83	20.20	18.83
1455J1202BK	1.06 x 3.07 x 4.72	Black	89C9400	16.50	14.61	13.62
1455L1201BK	1.2 x 4.06 x 4.72	Black	89C9411	26.15	23.14	21.57
1455L1202BK	1.2 x 4.06 x 4.72	Black	89C9413	20.50	18.14	16.92
1455L1601BK	1.2 x 4.06 x 6.3	Black	89C9415	29.62	26.22	24.44
1455P1601BK	1.2 x 4.74 x 6.3	Black	53K7805	29.44	26.06	24.29
1455R1601BK	1.2 x 6.3 x 6.3	Black	98H4042	33.32	29.49	27.49
1455R1602BK	1.2 x 6.5 x 6.3	Black	98H4044	27.22	24.10	22.46
1455K1201BK	1.69 x 3.07 x 4.72	Black	77C5632	23.79	21.06	19.64
1455K1202BK	1.69 x 3.07 x 4.72	Black	84C9890	17.16	15.19	14.16
1455Q1601BK	2.03 x 4.74 x 6.3	Black	45K1120	34.17	30.25	28.19
1455Q2201BK	2.03 x 4.74 x 8.66	Black	53K7815	38.15	33.77	31.48
1455N1201BK	2.09 x 4.06 x 4.72	Black	84C9896	26.15	23.14	21.57
1455N1202BK	2.09 x 4.06 x 4.72	Black	84C9898	20.50	18.14	16.92
1455N1601BK	2.09 x 4.06 x 6.3	Black	72C8919	29.77	26.36	24.57
1455N1602BK	2.09 x 4.06 x 6.3	Black	84C9901	22.88	20.25	18.88
1455N2201BK	2.09 x 4.06 x 8.66	Black	84C9903	33.84	29.95	27.92
1455T1601BK	2.03 x 6.3 x 6.5	Black	98H4050	35.49	31.43	29.29
1455T2201BK	2.1 x 6.3 x 8.66	Black	98H4054	38.85	34.39	32.05
1455T2202BK	2.1 x 6.3 x 8.66	Black	98H4056	32.55	28.81	26.86

(72215)

DIECAST ALUMINUM RFI/EMI ENCLOSURES

RoHS Compliant Available

Pomona®

Shielded diecast aluminum enclosures fulfill requirements for EMI/RFI applications. Available with natural aluminum finish or blue baked enamel finish per federal standard 595 #25109 over primer wash per DOD-P-15328. Boxes include aluminum cover with clear anodized finish per MIL-A-8625 and cover screws. Select boxes feature component mounting capabilities. All rated 500VRMS, +150°C. *Order replacement covers and screws separately below.*

2391

1.13"H x 2.25"W x 0.88"D ENCLOSURES

Mfg. Part No.	Description	Stock No.	Price Each
2400	Natural Finish Enclosure	35F3502	8.95
2397	Blue Finish Enclosure	34F954	9.95
2390	BNC Female-to-BNC Female	34F952	32.95
2391	BNC Female-to-BNC Male	34F953	32.95
2392	Female BNC on Each End and on Bottom	35F3500	69.95
2393	BNC Female-to-BNC Male with Binding Posts	35F3501	64.95
2399	SMA Female-to-SMA Female	35F988	67.50
3728	Flange Mounting Cover	77B2406	10.95
2.64"H x 4.75"W x 1.71"D ENCLOSURES			
2906	Natural Finish Enclosure	35F3510	19.95
2901	Blue Finish Enclosure	35F3508	23.95
2902	BNC Female-to-BNC Female	34F966	46.95
1.38"H x 2.25"W x 1.13"D ENCLOSURES			
2428	Natural Finish Enclosure	35F3507	8.95
2417	Blue Finish Enclosure	34F955	9.95
3230	BNC Female-to-BNC Female	35F3503	29.95
3231	BNC Male-to-BNC Female	35F3504	33.95
3239	Isolated BNC Female-to-Isolated BNC Female	35F986	45.95
3232	BNC Female "T"	35F3505	69.95
3234	Cross Connectors	35F987	51.95
3.00"H x 2.63"W x 1.65"D ENCLOSURES			
3606	Natural Finish Enclosure	35F3514	16.95
3601	Blue Finish Enclosure	35F3511	17.95
3602	BNC Female-to-BNC Female	35F3512	39.95
3603	BNC Female-to-BNC Male	35F3513	42.95
1.50"H x 1.13"W x 0.88"D ENCLOSURES			
3754	Natural Finish Enclosure	34F1263	6.95
3753	Blue Finish Enclosure	34F1262	9.95
3751	BNC Female-to-BNC Female	34F1260	34.95
3752	BNC Female-to-BNC Male	34F1261	33.95
4.22"H x 8.32"W x 1.72"D ENCLOSURES			
5186	Natural Finish Enclosure	94F1056	54.95
4226	Blue Finish Enclosure	44F5357	59.95

(6925)

DIECAST ALUMINUM RFI/EMI PROTECTION ENCLOSURES

RoHS Compliant Available

Pomona®

Shielded enclosures fulfill requirements for RF applications. Available with blue baked enamel finish per federal standard 595 #25109 over primer wash per DOD-P-15328, or with no finish. Boxes include aluminum cover with clear anodized finish per MIL-A-8625 and cover screws. 3.00"H x 6.00"W x 1.67"D

4903

Mfg. Part No.	Description	Stock No.	Price Each Each
4903	Shielded Box, Size L, Blue Finish	50F1472	33.95
5203	Shielded Box, Size L, Natural	94F5426	34.95

(6926)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures

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METAL ENCLOSURES

EXTRUDED ALUMINUM RFI/EMI SHIELDED ENCLOSURES WITH CARD GUIDES

RoHS Compliant Available

Pomona®

3302 3311 3742

Slotted to accept .062″ circuit boards and shielding dividers. Provide excellent RFI/EMI protection. Available with blue baked enamel finish per federal standard 595 #25109 over primer wash per DOD-P-15328, or with no finish. Include covers with clear anodized finish per MIL-A-8625 and screws.

Mfg. Part No.	H	W	D	Description	Stock No.	Price Each
3301	4.13″	2.68″	1.66″	Blue Finish	34F947	42.95
3302	4.13″	2.68″	1.66″	BNC Female Each End, Blue Finish	35F3515	69.95
● 3306	4.13″	2.68″	1.66″	No Finish	35F3516	35.95
● 3311	4.13″	2.68″	3.16″	Blue Finish	35F3517	47.95
● 3316	4.13″	2.68″	3.16″	No Finish	35F3520	43.95
● 3742	4.13″	2.68″	6.16″	Blue Finish	44F5325	59.95
● 3743	4.13″	2.68″	6.16″	Natural	77B2409	52.95

ACCESSORIES

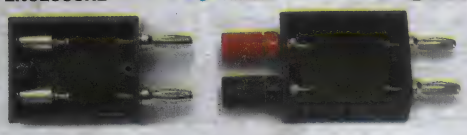
Mfg. Part No.	Description	Stock No.	Price Each
● 2352	Connector Screws With Solder Turret	77B2233	69.95

(6927)

NONSHIELDED PHENOLIC ENCLOSURE

RoHS Compliant Available

Pomona®



2098 2259

Create passive and active networks, voltage dividers, isolation networks or attenuators with these units. Include XP laminated paper base phenolic cover and screws. **Mfg. part no. 2259** rated 2500WVDC, 15 amps, +115°C. All others rated +150°C, with **mfg. part no. 2098** and **2224** also rated 5000WVDC and 15 amps.

Mfg. Part No.	H	W	D	Description	Stock No.	Price Each
● 2105	1.75″	1.44″	0.69″	Junior Size, Black	35F3529	11.95
● 2259	1.75″	1.44″	0.69″	Junior Size, Binding Posts to Double Banana Plug	44F5356	32.95
● 2098	1.75″	1.44″	0.69″	Junior Size, Double Banana Jack/Double Banana Plug	34F950	24.95
● 2096	1.75″	1.44″	0.69″	Junior Size, Black	77B1958	17.95
● 2103	2.25″	1.00″	1.00″	Queen Size, Black	35F3527	11.95
● 2099	2.25″	1.00″	1.00″	Queen Size, BNC Male and BNC Female each end	77B1961	59.95
● 2104	2.38″	1.53″	1.53″	King Size, Black	35F3528	9.30

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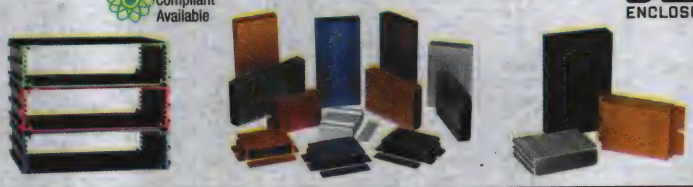
EXTRUDED ALUMINUM ENCLOSURES

RoHS Compliant Available

BOX ENCLOSURES, INC.

- 6 colors available
- Highest quality anodizing
- NEMA 4 sealing, optional
- Wall mounting kits, optional
- Custom lengths available
- Custom colors available
- Protective rubber end caps available

All enclosures include: 1 extruded case, 2 end plates and assembly screws. Mounting flanges and protective rubber end caps available *on this page*; NEMA 4 gasket kits and hardware sold separately. Replacement end plates also available, *go online or call*. High EMI/RFI protection. Durable finish provides extreme protection and great look and feel.



Dimensions H x W x D (In.)	Gold		Black		Silver		Red		Blue		Green		Price Each
	Mfg. Part No.	Stock No.	Mfg. Part No.	Stock No.	Mfg. Part No.	Stock No.	Mfg. Part No.	Stock No.	Mfg. Part No.	Stock No.	Mfg. Part No.	Stock No.	1-14
1.18 x 2.5 x 3.15	● B1-080GD	26K8990	● B1-080BK	26K8988	● B1-080SI	26K8993	● B1-080RD	26K8992	● B1-080BL	26K8989	● B1-080GR	26K8991	11.76
1.18 x 4.27 x 3.15	● B2-080GD	26K9021	● B2-080BK	26K9019	● B2-080SI	26K9024	● B2-080RD	26K9023	● B2-080BL	26K9020	● B2-080GR	26K9022	14.73
1.37 x 5.25 x 3.15	...	...	● B5-080BK	39M5412	● B5-080SI	39M5414	...	...	● B5-080BL	39M5413	...	...	14.44

(84657)

EXTRUDED ALUMINUM ENCLOSURE ACCESSORIES

RoHS Compliant Available

BOX ENCLOSURES, INC.

Sold in packages of 2. Colored mounting flanges available in packages of 50; *go online or call.*

Mounting Flanges Protective Rubber End Caps

COLORED MOUNTING FLANGES

Description	Gold		Black		Silver		Red		Blue		Green		Price Each
	Mfg. Part No.	Stock No.	Mfg. Part No.	Stock No.	Mfg. Part No.	Stock No.	Mfg. Part No.	Stock No.	Mfg. Part No.	Stock No.	Mfg. Part No.	Stock No.	1-14
80mm Mounting Flange	● MF80GD2	67R4407	● MF80BK2	67R4403	● MF80SI2	67R4413	● MF80RD2	67R4411	● MF80BL2	67R4405	● MF80GR2	67R4409	3.24

PROTECTIVE RUBBER END CAPS

For Use With	Black		Gray		Red		Blue		Green		Price Each
	Mfg. Part No.	Stock No.	Mfg. Part No.	Stock No.	Mfg. Part No.	Stock No.	Mfg. Part No.	Stock No.	Mfg. Part No.	Stock No.	1-9
B1 Enclosures	● EC1-BK	06R3311	● EC1-GY	06R3314	● EC1-RD	06R3315	● EC1-BL	06R3312	● EC1-GN	06R3313	5.52
B3 Enclosures	● EC3-BK	06R3321	● EC3-GY	06R3324	● EC3-RD	06R3325	● EC3-BL	06R3322	● EC3-GN	06R3323	14.17
B4 Enclosures	● EC4-BK	06R3326	● EC4-GY	06R3329	● EC4-RD	06R3330	● EC4-BL	06R3327	● EC4-GN	06R3328	16.15
B5 Enclosures	● EC5-BK	06R3331	● EC5-GY	06R3334	...	...	● EC5-BL	06R3332	● EC5-GN	06R3333	8.74

(84663)

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(196548)

RASPBERRY PI MICROCOMPUTER ENCLOSURES

RoHS Compliant Available

Bud Industries, Inc.

- Available in two styles — The PI Sandwich and The PI Plate
- Designed to accept current version of Raspberry PI microcomputer
- Accommodate changes in component relocation on the PCB and the potential addition of components
- Easy snap-in installation of PCB
- Made of durable and impact resistant ABS with attractive translucent raspberry color

PI Sandwich

PI Plate

Raspberry PI microcomputer enclosures provide protection, flexibility and ease of access to all components with quick snap-in installation. The round version has a twist-lock cover and a central wiring access hub with cable management. The rectangular version is open on all four sides for direct access.

Mfg. Part No.	External Dim. (in.) H	W	D	Internal Dim. (in.) H	W	D	Style	Stock No.	Price Each 1-9	10-99
PS-11591	2.52	3.35	5.12	2.36	3.19	4.96	PI Sandwich	92T3300	6.63	5.51
PP-11593	2.56	6.35	6.35	2.56	6.13	6.13	PI Plate	92T3299	12.50	10.39

(203582)

BOARD-GANIZER MULTI-DEVELOPMENT BOARD ENCLOSURE KIT

RoHS Compliant Available

Bud Industries, Inc.

- Made of aesthetically pleasing smoke colored ABS, the board-ganizer is a unique work space organizing platform designed to serve the rapidly growing community of electronics makers and developers
- As the cost of components keeps falling while capability is increasing, the board-ganizer allows the user to assemble 3 PCBs and shields in addition to a 600 tie points solder-less bread board
- The innovative enclosure lets the user combine and mix boards with no need of additional hardware; the boards are attached using specially developed adhesive backed rubber feet
- The fold and flatten feature makes it possible to work on a project with the boards side by side so they can be connected and wired. When the project is ready, it can be rolled up into a compact 5x5x3" enclosure – without the need of undoing any of the wiring.

Board-ganizer kit includes 4 side panels, 2 tops, package of adhesive backed rubber feet, 4 pins and instructions.

Mfg. Part No.	Description	External Dimensions L x W x H (in.)	Stock No.	Price Each 1-5
BG-32618	Board-ganizer Multi Development Board Enclosure Kit	5 x 3.5 x 5	88W3963	16.63
ACCESSORIES				
BB-32620	Solder less Bread Board, 600 Tie Points	3.4 x 3.2 x 0.33	88W3960	9.61
BB-32621	Solder less Bread Board, 300 Tie Points	2.08 x 3.2 x 0.33	88W3961	4.85
BC-32625	Jump Wire Bundle (65 ea.) for Solder less Bread Board	...	88W3962	5.45

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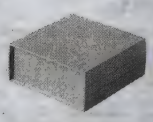
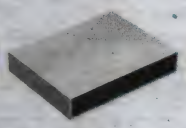
PLASTICASES™

RoHS Compliant Available

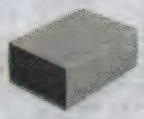
Bud Industries, Inc.



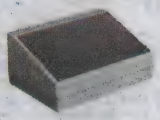
Style A and B



Style D

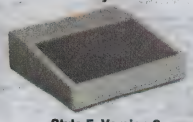


Style E



Style F, Version 1

- Styles **A** and **B** impact-resistant polystyrene
- Styles **C** and **F** impact-resistant ABS with aluminum panels
- Style **E** impact-resistant ABS
- Style **G** impact resistant, self-extinguishing ABS with UL94-5VA flammability rating



Style F, Version 2

Style G

Styles **A** and **B** have double-textured PC bone gray finish, molded-in card guides and include stainless steel screw and scratch-resistant rubber feet. Modifications to all styles available online or call.

Mfg. Part No.	Style	Dimensions (in.) H	W	D	Stock No.	Price Each 1-4	5-9	10-24
PC-11402	A	1.53	5.08	5.3	10M5238	15.69	13.19	11.74
PC-11403	A	1.53	7.06	5.3	06M4747	19.56	16.44	14.65
PC-11406	A	2.52	6.12	6.32	06M4748	20.45	17.20	15.33
PC-11408	A	2.52	8.1	6.32	06M4749	24.35	20.46	18.23
PC-11418	B	2.06	5.08	5.3	06M4752	17.39	14.62	13.02
PC-11410	B	3.3	6.12	6.32	06M4750	25.11	21.11	18.81
PC-11412	B	3.3	8.1	6.32	06M4751	28.75	24.16	21.53
PC-11414	B	4.04	6.12	6.32	87F290	26.16	22.00	19.59
PC-11416	B	4.04	8.1	6.32	87F291	30.58	25.70	22.89

CONTINUED

PLASTICASES™ (CONT.)

Mfg. Part No.	Style	Dimensions (in.) H	W	D	Stock No.	Price Each 1-4	5-9	10-24
Style **D** version 1 has dark gray ABS covers with light gray ABS end panels. Version 2 (**A suffix**) has dark gray ABS covers with natural finish aluminum end panels. Version 3 (**LG suffix**) has light gray ABS covers with black ABS end panels. Version 4 (**LGA suffix**) has light gray ABS covers with natural finish aluminium end panels. All versions have molded-in card guides and mounting bosses.								
PC-11480-A	D	1.38	5.51	4.33	66F3917	14.03	11.77	11.22
PC-11481-LG	D	1.57	8.86	6.5	66F3922	17.96	15.05	14.35
PC-11482	D	2.56	10.24	7.09	66F3924	26.52	22.24	21.20
Style **E** has textured light gray ABS top and bottom covers with dark gray ABS end panels and includes PC board mounting bosses, card guides, screws and press-in rubber feet.								
PC-11462	E	2.28	3.74	6.22	99B1481	9.46	7.95	7.09
PC-11467	E	2.4	5.51	7.48	99B1486	13.32	11.19	9.97
PC-11468	E	3.15	5.51	7.48	99B1487	14.68	12.34	10.99
PC-11471	E	3.15	7.87	11.02	99B1490	22.83	19.18	17.09
Style **F** version **1** has light gray ABS covers with rear-mounted dark gray ABS cable-access panel and natural finish aluminum sloped panel. Style **F** version **2** has light gray ABS covers with horizontal insert area in top cover, rear-mounted dark gray ABS cable-access panel and natural finish aluminum sloped panel. Both Style **F** versions feature molded-in PC board mounting bosses.								
PC-11491	F, Ver. 1	3.94	8.7	6.15	99B1491	18.96	16.92	15.54
PC-11493	F, Ver. 2				99B1492	22.05	19.65	18.07
Style **G** features molded-in PC board mounting bosses and offers contemporary styling with rounded corners and edges.								
PC-11535	G	1.5	3.8	5	10M5239	12.29	10.33	9.62
PC-11555	G	1.63	5.25	5.5	27K6579	13.77	11.58	10.78
PC-11565	G	1.63	6.25	6.75	27K6580	15.88	13.35	12.42

(6946)

DIN RAIL MOUNT PLASTIBOXES

RoHS Compliant Available

Bud Industries, Inc.

- Made from flame retardant black ABS plastic with UL94-5VA flammability rating
- Versatile clip snaps into DIN rail or may be screwed down for panel/wall mount
- (4) PC board mounting bosses in base
- Smooth labeling area on front surface
- Finish is textured matte black

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5-9	10-24
DPB-4760	1.25 x 3.5 x 4.5	89M4566	9.56	8.78	8.04

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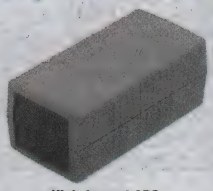
POLYSTYRENE MOLDED ENCLOSURES

IP54 NEMA

RoHS Compliant Available

Bud Industries, Inc.



High-Impact ABS

Molded plastic enclosures meet IEC 529 enclosure IP54 classification for instrumentation, telecommunications, and other applications from hand-held to desktop sizes. 2-part design with tongue-and-groove joint between top and bottom covers and end panels. Internal guide slots for vertical mounting of PC boards; internal bosses for horizontal PC board mounting. Scratch-resistant, lightly textured top and bottom covers. Four M-3 screws are countersunk in bottom cover, threaded into brass inserts in top cover. UL 94V-0 ABS top and bottom covers are dark gray with light gray end panels. High-impact ABS top and bottom covers are light gray with dark gray end panels. Modifications available online.

Mfg. Part No.	D x W x H	Weight (oz.)	Stock No.	Price Each 1-4	5-9	10-24
UL94V-0 ABS						
PI-1901	3.54 x 1.97 x 0.94"	1.75	95F970	3.71	3.12	2.96
PI-1902	3.54 x 1.97 x 1.26"	2.25	95F971	3.82	3.21	3.05
PI-1903	4.72 x 2.36 x 1.18"	2.75	95F972	5.86	4.92	4.67
PI-1904	4.72 x 2.36 x 1.57"	3.25	95F973	6.42	5.40	5.12
PI-1905	4.72 x 2.36 x 1.97"	4.00	95F974	8.05	6.76	6.42
PI-1908	5.91 x 3.15 x 2.36"	5.50	95F977	11.74	9.87	9.36
PI-1911	7.48 x 3.94 x 3.15"	10.50	95F968	16.96	14.26	13.52
HIGH-IMPACT ABS						
PI-1902-LG	3.54 x 1.97 x 1.26"	2.25	83F5577	3.45	2.90	2.75
PI-1904-LG	4.72 x 2.36 x 1.57"	3.25	83F5579	6.53	5.49	5.20
PI-1907-LG	5.91 x 3.15 x 1.77"	5.25	83F5582	8.59	7.23	6.85
PI-1908-LG	5.91 x 3.15 x 2.36"	5.50	83F5583	9.84	8.27	7.84
PI-1909-LG	7.48 x 3.94 x 1.57"	7.00	83F5584	10.98	9.23	8.75
PI-1911-LG	7.48 x 3.94 x 3.15"	10.50	83F5586	14.68	12.34	11.70

(29678)

NON-METALLIC ENCLOSURES

DIN RAIL MOUNT MULTI-BOARD PLASTIC BOXES AND ACCESSORIES

RoHS Compliant Available

Bud Industries, Inc.

- Durable UL94V-0 rated ABS/PC blend plastic housing
- Three levels of PC board mounting locations - PC boards not supplied
- Bottom level accepts PC board with modular type terminals on 0.2" centers
- Removable terminal guards have snap-off tabs to match number of terminals used
- Snap-fit design allows tool-less assembly of all parts including PC boards
- Snap-fit front cover is easily removable for machining or silk-screening
- Fits standard 35mm DIN rail
- Finish: Light Gray

Mfg. Part No.	No. of PCB Terminals*	Dimensions (in.) H	W	D	Stock No.	Price Each 1-99	100-249
● DMB-4769	6 (3/3)	3.55	0.67	2.25	47X4118	5.13	4.20
● DMB-4770	12 (6/6)	3.55	1.43	2.25	12T6235	8.92	7.46
● DMB-4771	18 (9/9)	3.55	2.1	2.25	12T6238	11.03	9.23
● DMB-4772	24 (12/12)	3.55	2.8	2.26	12T6241	13.48	11.28
● DMB-4773	36 (9x2)/(9x2)	3.55	4.18	2.26	12T6244	17.04	14.27
● DMB-4774	54 (9x3)/(9x3)	3.55	6.28	2.26	12T6247	20.02	16.76

ACCESSORIES

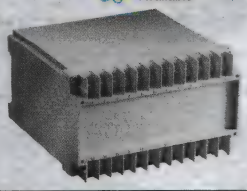
● DMB-4769-CB	PCB for DIN Rail Mount Box DMB-4769	47X4119	1.83	1.47
● DMB-4770-CB	PCB for DIN Rail Mount Box DMB-4770	53W3570	3.83	3.20
● DMB-4771-CB	PCB for DIN Rail Mount Box DMB-4771	55W6176	6.18	5.17
● DMB-4772-CB	PCB for DIN Rail Mount Box DMB-4772	55W6177	7.72	6.47
● DMB-4773-CB	PCB for DIN Rail Mount Box DMB-4773	55W6178	12.27	11.24
● DMB-4774-CB	PCB for DIN Rail Mount Box DMB-4774	55W6179	19.16	16.13
● DMB-4769-CC	Clear Front Cover for DMB-4770	47X4120	1.46	1.13
● DMB-4770-CC	Clear Front Cover for DMB-4770	12T6236	1.38	1.15
● DMB-4771-CC	Clear Front Cover for DMB-4771	12T6239	2.54	2.10
● DMB-4772-CC	Clear Front Cover for DMB-4772	12T6242	2.66	2.21
● DMB-4773-CC	Clear Front Cover for DMB-4773	12T6245	3.45	2.87
● DMB-4774-CC	Clear Front Cover for DMB-4774	12T6248	3.91	3.24
● DMB-4769-IRC	Infra Red Front Cover for DMB-4769	47X4121	1.46	1.13
● DMB-4770-IRC	Infra Red Front Cover for DMB-4770	12T6237	1.33	1.11
● DMB-4771-IRC	Infra Red Front Cover for DMB-4771	12T6240	2.44	2.02
● DMB-4772-IRC	Infra Red Front Cover for DMB-4772	12T6243	2.66	2.21
● DMB-4773-IRC	Infra Red Front Cover for DMB-4773	12T6246	3.32	2.76
● DMB-4774-IRC	Infra Red Front Cover for DMB-4774	12T6249	3.76	3.12
● DMB-4770-T3	Terminal Connector	55W6175	3.88	3.24
● DMB-4760-TG	Replacement Terminal Guards (Pair) DMB-4770	12T6231	1.33	1.11
● DMB-4761-TG	Replacement Terminal Guards (Pair) for DMB-4771, DMB-4773, DMB-4774	12T6232	2.21	1.84
● DMB-4762-TG	Replacement Terminal Guards (Pair) for DMB-4772	12T6233	1.55	1.29
● DMB-4769-TG	Replacement Terminal Guards (Pair) for DMB-4769	47X4122	1.46	1.13
● DMB-4764-MC	Replacement Mounting Clip	12T6234	0.89	0.74
● DNR-4790	Din Rail: Length: 1m, Height: 7.5mm, Width: 35mm	92T3387	6.27	5.85

*PCB and PCB terminals not supplied.
(192415)

DIN RAIL MOUNT ABS PLASTIC BOXES

RoHS Compliant Available

Bud Industries, Inc.



- Durable ABS plastic construction
- Divided contact areas
- Positive screw-down type contacts give a positive and secure connection
- Area for identifying labels and decals
- Flat and angled covers
- Light gray finish
- Modifications available, *go online or call*

WITH FLAT COVER

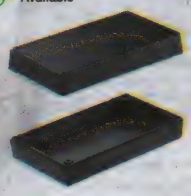
Mfg. Part No.	No. of Contacts	Dimensions (in.) H	W	D	Stock No.	Price Each 1-4	5-9	10-24
● DB-4701	12	2.76	2.57	4.42	97H5031	16.03	13.76	12.71
● DB-4702	16	2.76	3.23	4.42	66M8435	19.13	16.42	15.17
● DB-4704	24	2.76	4.61	4.42	66M8436	28.63	24.58	22.70
WITH FLAT COVER AND PANEL MOUNT OPTION								
● DB-4715	32	2.76	5.91	4.43	97H5036	28.36	24.34	22.48
WITH ANGLED COVER								
● DB-4754	12	3.23	0.89	3.90	29M7928	18.90	16.23	14.99
● DB-4751	24	3.23	1.72	3.90	66M8437	28.63	24.58	22.70

(78558)

PLASTIBOXES™ STYLE F

RoHS Compliant Available

Bud Industries, Inc.



- High impact ABS plastic, UL94-HB flammability rating
- Textured body with smooth top insert (**PS, PBS**) or textured top (**PT**)
- Scratch-resistant finish
- Horizontal and vertical guides to mount PC boards
- Suggested service temperature -40°C to +80°C

PBS series box has a 9-volt battery compartment. Modifications available, *go online or call.*

Mfg. Part No.	Color	Dimensions (in.) H	W	L	Stock No.	Price Each 1-4	5-9	10-24
● PS-11521-B	Black	1.01	2.25	3.62	48F1088	3.39	2.85	2.68
● PBS-11532-G	Grey	1.52	3.25	4.37	48F1091	5.59	4.70	4.43
● PS-11533-B	Black	1.52	3.25	4.37	48F1092	5.24	4.41	4.15
● PS-11543-B	Black	1.52	3.25	5.62	48F1094	5.91	4.97	4.68
● PS-11543-G	Grey	1.52	3.25	5.62	48F1095	5.70	4.79	4.51
● PS-11553-B	Black	1.52	4.87	6.87	48F1096	7.44	6.25	5.89
● PT-11557-B	Black	2.52	4.87	6.87	48F1098	7.74	6.50	6.13
● PT-11557-G	Grey	2.52	4.87	6.87	48F1099	7.46	6.27	5.91

(82464)

PLASTIBOX™ STYLE I

RoHS Compliant Available

Bud Industries, Inc.

- High impact ABS plastic with UL94-5VA flammability rating
- Textured top insert
- Internal PCB mounting bosses
- Optional display window, noted with **DW suffix**
- Optional mounting provisions, noted with **MP suffix**

Unique styling with rounded corners and edges. Base is securely attached to the cover with four color matched screws. Black finish. Modifications available, *go online or call.*

Mfg. Part No.	Color	Dimensions (in.) H	W	L	Stock No.	Price Each 1-4	5-9	10-24
● PT-11743	Black	1.38	4	3	06M4775	7.60	6.37	6.06
● PT-11754	Black	1.38	5.5	4	17M9932	10.25	8.58	8.17
● PT-11785	Black	1.75	5.5	5	10M5242	14.38	12.05	11.46
● PT-11785-MP	Black	1.75	7.5	5	34M2708	13.14	11.01	10.47
● PT-11754-DW	Black	1.38	5.5	4	05M4258	10.25	8.58	8.17

(84583)

GRABBERS HAND-HELD PLASTIC BOXES

RoHS Compliant Available

Bud Industries, Inc.

Style A Style B Style C

Ideal for portable hand-held equipment. Made of durable ABS plastic with a flammability rating of UL94V-0. **Style A** features a recessed top and a 9V/AA battery compartment. Available with or without a 2.84" x 1.38" LCD cutout in the display area. **Style B** features a recessed top. **Style C** is smaller and more ergonomically shaped. It includes a recessed top, 9V/AA battery compartment and removable end panel. Tilt stand **HH-3440-TS** available for styles A & B. Modifications available, *go online or call.*

Mfg. Part No.	Style	Features	Color	H (In.)	W (In.)	D (In.)	Stock No.	Price Each 1-4
● HH-3401-BC	A	Battery compartment and LCD cutout	Grey	1.57	3.94	7.09	23C6936	16.41
● HH-3420	B	...	Grey	1.71	5.16	9.33	29C4050	20.41
● HH-3421	B	LCD cutout	Grey	1.71	5.16	9.33	66F3893	20.11
● HH-3421-BC	B	Battery compartment and LCD cutout	Grey	1.71	5.16	9.33	24C5028	20.19
● HH-3431-BCB	C	Battery compartment	Black	1.04	2.95	4.13	27K6571	6.48

(77721)

multicomp AT NEWARK ELEMENT14

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(212569)

TABLET ENCLOSURES

RoHS Compliant Available

Bud Industries, Inc.

Features & Benefits:

- Molded in high impact ABS which is flame retardant to both UL94-V0 and UL94-HB
- Available in white (RAL9002, UL94-V0 of ABS) or black (RAL9005, UL94-HB of ABS)
- Ideal design for portable, desktop or wall mounted electronic application
- Space of the recessed area is designed for 4.3", 5.7", 7.0", 8.4" & 10.4" LCD module or touch screen use
- Lid & base incorporate a tongue and groove sealing design, optional EPDM gasket can be ordered and installed to meet IP65 rating of waterproof and dust
- Recommended working temperature -20°C to 80°C
- Add-on rubber feet are included
- Machine designers

Mfg. Part No.	Color	Dimensions L x W x H (in.)	Stock No.	Price Each 1-4
TB-32610-B	Black	5.512 x 3.937 x 1.181	85W8843	9.01
TB-32610-W	White	5.512 x 3.937 x 1.181	85W8845	9.40
TB-32611-B	Black	7.48 x 5.906 x 1.181	85W8846	16.15
TB-32611-W	White	7.48 x 5.906 x 1.181	85W8848	18.92
TB-32612-B	Black	8.701 x 6.339 x 1.181	85W8849	18.43
TB-32612-W	White	8.701 x 6.339 x 1.181	85W8851	18.10
TB-32613-B	Black	10.984 x 8.11 x 1.181	85W8852	26.29
TB-32613-W	White	10.984 x 8.11 x 1.181	85W8854	31.16
TB-32614-B	Black	12.677 x 9.134 x 1.181	85W8855	34.55
TB-32614-W	White	12.677 x 9.134 x 1.181	85W8857	41.39

ACCESSORIES

Mfg. Part No.	Description	Size	Stock No.	Price Each 1-4
TB-32610-GSK	1 pc. of Silicone Sponge Gasket for PL2943 Use	Ø2.3mm x 510mm	85W8844	0.78
TB-32611-GSK	1 pc. of Silicone Sponge Gasket for PL2957 Use	Ø2.3mm x 710mm	85W8847	1.05
TB-32612-GSK	1 pc. of Silicone Sponge Gasket for PL2970 Use	Ø2.3mm x 795mm	85W8850	1.10
TB-32613-GSK	1 pc. of Silicone Sponge Gasket for PL2984 Use	Ø2.3mm x 1000mm	85W8853	1.05
TB-32614-GSK	1 pc. of Silicone Sponge Gasket for PL29104 Use	Ø2.3mm x 1140mm	85W8856	2.99

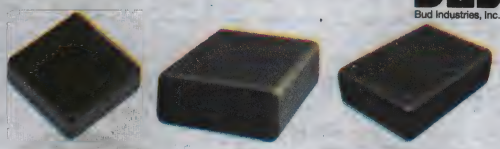
(209535)

HAND-HELD PLASTIC BOXES

RoHS Compliant Available

Bud Industries, Inc.

- Made from durable ABS plastic with UL94-HB flammability rating in black color
- Internal PCB mounting bosses
- Recessed top suitable for label or keypad



Style 1 Style 2 Style 3

Style 1 has molded-in holes for **HH-3595-BCB** belt clip and comes complete with top cover, bottom cover, and assembly hardware. **Style 2** and **Style 3** have removable end panels and come complete with top cover, bottom cover, end panels and assembly hardware. **Style 3** also comes with a battery door. Battery holders for **Style 3** can be ordered separately *on this page*.

Mfg. Part No.	Style	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5-9	10-24	25-49
HP-3649-B	1	1.1 x 2.6 x 2.62	09R4673	2.05	1.72	1.64	1.56
HP-3650-B	2	1.1 x 2.6 x 2.62	09R4674	2.62	2.20	2.09	1.99
HP-3652-B	2	0.99 x 2.95 x 4.38	09R4676	3.50	2.94	2.78	2.66
HP-3660-B	3	0.83 x 2.6 x 3.62	09R4679	3.10	2.59	2.47	2.34
HP-3663-B	3	1.1 x 2.6 x 4.41	09R4682	3.69	3.09	2.94	2.79

(148694)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

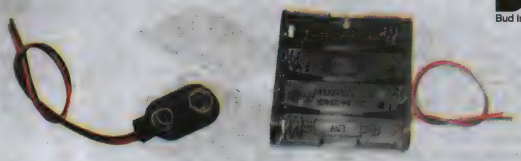
newark.com/custom-panel-meters

(212570)

PLASTIC BOX ACCESSORIES

RoHS Compliant Available

Bud Industries, Inc.



Clip Holder (4-AA)

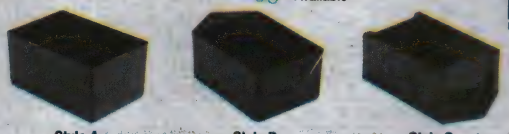
Mfg. Part No.	Description	Battery Size	Battery Capacity	Material	Stock No.	Price Each 1-4
HH-3449	Battery Clip	PP3 (9V)	1	Vinyl	34M2183	1.34
HH-3630	Battery Holder	AAA	2	Polypropylene Plastic	34M2184	1.86
HH-3631	Battery Holder	AAA	4	Polypropylene Plastic	34M2185	3.17
HH-3632	Battery Holder	AA	2	Polypropylene Plastic	34M2186	1.90
HH-3633	Battery Holder	AA	4	Polypropylene Plastic	34M2187	3.17
HH-3634	Battery Holder	PP3 (9V)	1	Polypropylene Plastic	46M3209	2.63

(90497)

POTTING BOXES

RoHS Compliant Available

Bud Industries, Inc.



Style A Style B Style C

- Black finish
- Tough, lightweight ABS thermoplastic
- Flammability rating: UL94V-0 @ 0.062" thickness
- Continuous use temperature at +70°C
- Modifications available, *go online or call*

Style A is plain (no flange). *Order close-fitting box covers separately below*. **Sold in packages of 10 or 25 as indicated.**

Mfg. Part No.	Pkg. Qty.	Style	Dimensions (in.) H x W x D	Stock No.	Price per Pkg. 1-4	5-9	10-24
PB-1560	25	A	0.51 x 0.79 x 0.79	12R2916	10.10	8.45	7.97
PB-1563	25	A	0.78 x 1.57 x 1.57	12R2919	11.81	9.89	9.33
PB-1579	10	A	0.80 x 1.5 x 1.250	83F6438	11.60	9.72	9.16
PB-1575	10	A	0.90 x 3.00 x 2.00	95F996	16.20	13.57	12.79
PB-1582	10	A	0.90 x 4.00 x 2.12	83F3641	33.65	28.18	26.57
PB-1562	25	A	0.97 x 0.97 x 0.97	12R2918	9.62	8.05	7.59
PB-1558	10	A	1.00 x 2.00 x 1.50	50F815	14.05	11.76	11.09
PB-1565	25	A	1.37 x 1.90 x 2.72	12R2921	15.05	12.60	11.88
PB-1574	10	A	1.50 x 2.00 x 2.00	95F994	17.45	14.62	13.78
PB-1559	10	A	1.50 x 3.00 x 2.00	50F819	20.41	17.09	16.12
PB-1576	10	A	1.50 x 3.00 x 3.00	95F998	22.17	18.56	17.50
PB-1581-TF	10	B	0.44 x 2.09 x 1.25	83F3640	9.72	8.21	8.06
PB-1577-TF	10	B	0.75 x 1.00 x 1.00	92F2528	7.84	6.62	6.50
PB-1579-TF	10	B	0.80 x 1.5 x 1.250	83F6439	11.60	9.80	9.62
PB-1575-TF	10	B	0.90 x 3.00 x 2.00	95F997	16.01	13.51	13.27
PB-1558-TF	10	B	1.00 x 2.00 x 1.50	50F816	14.45	12.20	11.98
PB-1574-TF	10	B	1.50 x 2.00 x 2.00	95F995	16.71	14.13	13.87
PB-1559-TF	10	B	1.50 x 3.00 x 2.00	50F820	20.75	17.52	17.21
PB-1576-TF	10	B	1.50 x 3.00 x 3.00	95F999	21.11	17.82	17.50
PB-1578-TF	10	B	2.00 x 4.00 x 2.12	92F2530	27.74	23.42	22.99
PB-1583-TF	10	B	2.00 x 4.37 x 3.12	83F3644	42.22	35.65	35.01
PB-1549-BF	10	C	0.80 x 3.00 x 3.00	85C2280	30.64	26.05	25.61
PB-1558-BF	10	C	1.00 x 2.00 x 1.50	50F817	15.21	12.94	12.72
PB-1554-BF	10	C	1.00 x 3.00 x 2.00	83F3634	23.05	19.59	19.26
PB-1559-BF	10	C	1.50 x 3.00 x 2.00	50F821	21.59	18.35	18.04

CLOSE-FITTING POTTING BOX COVERS

Mfg. Part No.	Pkg. Qty.	Description	Stock No.	Price per Pkg. 1-4	5-9	10-24
PBC-1558-C*	10	1558 Series Cover	50F818	8.04	7.58	7.27
PBC-1558-CN	10	1558 Series Cover	50B1168	8.04	7.58	7.27
PBC-1559-C*	10	1559 Series Cover	50F822	9.36	8.81	8.45
PBC-1560-C	25	1560 Series Cover	12R2922	6.74	6.35	6.09
PBC-1562-C	25	1562 Series Cover	12R2924	6.42	6.05	5.80
PBC-1563-C	25	1563 Series Cover	12R2925	9.53	8.97	8.61
PBC-1565-C	25	1565 Series Cover	12R2927	9.53	8.97	8.61
PBC-1575-C	10	1575 Series Cover	95F6370	9.03	8.50	8.15
PBC-1576-C	10	1576 Series Cover	95F6371	11.85	11.16	10.71
PBC-1578-C	10	1578 Series Cover	92F2532	11.85	11.16	10.71
PBC-1580-C	10	1580 Series Cover	83F6443	8.59	8.10	7.76

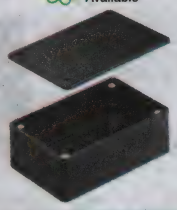
*For use with Style C boxes.
(6949)

NON-METALLIC ENCLOSURES

UTILIBOX™ STYLE A

RoHS Compliant Available

Bud Industries, Inc.



- ABS plastic with flammability rating of UL94V-0 at 0.080″ thickness
- Suggested service temperature of -20°C to +70°C
- Includes close-fitting interlocking lid and assembly hardware
- Black textured finish
- Modifications available, *go online or call*

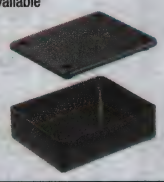
Mfg. Part No.	Dimensions (in.) Length	Width	Height	Stock No.	Price Each 1-4	5-9	10-24
● CU-3281	4.6	3.1	1.87	05M4064	8.18	6.87	6.41
● CU-3282	4.6	4.6	2.37	06M4542	9.19	7.74	7.20
● CU-3287	6.1	4.6	1.37	80K1023	11.41	9.60	8.94
● CU-3283	6.1	4.6	2.37	05M4065	10.61	8.93	8.31
● CU-3284	7.6	4.6	2.37	48F5463	12.80	10.77	10.03
● CU-3285	8.25	5.15	3.12	06M4545	19.81	16.64	15.50
● CU-3286	10.15	6.15	3.13	56J7097	25.26	21.25	19.79
WITH 0.010″ RECESSED AREA IN LID							
● CUR-3281	4.6	3.1	1.87	06M4578	8.69	7.31	6.80
● CUR-3282	4.6	4.6	2.37	06M4579	9.13	7.68	7.15
● CUR-3287	6.1	4.6	1.37	80K1025	11.41	9.60	8.94
● CUR-3283	6.1	4.6	2.37	06M4581	10.96	9.21	8.58
● CUR-3285	8.25	5.15	3.12	99B1212	20.41	17.15	15.97
● CUR-3286	10.15	6.15	3.13	06M4585	24.81	20.85	19.42
WITH MOLDED-IN MOUNTING BRACKETS							
● CU-3281-MB	4.6	3.1	1.87	06M4541	11.38	9.56	8.92
● CU-3282-MB	4.6	4.6	2.37	48F5465	12.70	10.67	9.93
● CU-3283-MB	6.1	4.6	2.37	06M4543	12.91	10.86	10.11
● CU-3284-MB	7.6	4.6	2.37	06M4544	16.41	13.80	12.85
● CU-3285-MB	8.25	5.15	3.12	06M4546	20.01	16.84	15.68
● CU-3286-MB	10.15	6.15	3.13	10M5144	25.26	21.25	19.79
WITH MOLDED-IN MOUNTING BRACKETS AND 0.010″ RECESSED AREA IN LID							
● CUR-3281-MB	4.6	3.1	1.87	52F6525	11.31	9.50	8.85
● CUR-3283-MB	6.1	4.6	2.37	06M4582	13.48	11.33	10.55
● CUR-3285-MB	8.25	5.15	3.12	06M4584	20.87	17.55	16.34
● CUR-3286-MB	10.15	6.15	3.13	06M4586	25.11	21.11	19.66

(82478)

UTILIBOX™ STYLE D

RoHS Compliant Available

Bud Industries, Inc.



- High impact polystyrene with UL94-HB flammability rating
- Includes close-fitting interlocking lid and assembly hardware
- Provisions for mounting horizontal PC board
- Standard finish, black
- Modifications available, *go online or call*

Utilibox™ series is the ultimate value in plastic utility boxes.

UTILIBOX™ STYLE D

Mfg. Part No.	Dimensions (in.) L	W	H	Stock No.	Price Each 1-4	5-9	10-24
● CU-741	1.51	2.26	0.78	06M4560	3.75	3.14	2.88
● CU-742	3	2.5	1	06M4562	7.52	6.32	5.78
● CU-743	5	2.5	1.02	06M4564	8.59	7.22	6.59
● CU-744	3	2.5	1.6	06M4565	8.75	7.37	6.73
● CU-745	5	2.5	1.62	48F1081	8.65	7.27	6.65
WITH MOLDED-IN MOUNTING BRACKETS							
● CU-741-MB	1.51	2.26	0.78	06M4561	3.71	3.12	2.86
● CU-742-MB	3	2.5	1	06M4563	7.72	6.49	5.93
● CU-744-MB	3	2.5	1.6	06M4566	8.06	6.77	6.19
● CU-745-MB	5	2.5	1.62	48F1082	9.02	7.59	6.93

(82480)

TECHNICAL SUPPORT HOTLINE

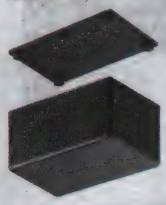
Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

UTILIBOX™ STYLE E

RoHS Compliant Available

Bud Industries, Inc.



- ABS plastic rated UL94V-0 at 0.070″ thickness
- Suggested service temperature -20°C to +70°C
- Includes close-fitting interlocking lid and assembly hardware
- Available with recessed tops
- Standard finish, black
- Modifications available, *go online or call*

UTILIBOX™ STYLE E

Mfg. Part No.	Dimensions (in.) Length	Width	Height	Stock No.	Price Each 1-4	5-9	10-24
● CU-789	3.05	2.05	0.9	06M4567	3.99	3.35	3.12
● CU-790	3.08	2.08	1.5	06M4569	4.18	3.51	3.27
● CU-791	3.08	3.08	1.5	91F3939	4.70	3.95	3.68
● CU-792	4.05	1.8	1	05M4070	4.15	3.49	3.25
● CU-793	4.1	2.23	2	06M4572	4.95	4.16	3.87
● CU-795	4.47	3.22	2	06M4575	7.77	6.53	6.08
WITH MOLDED-IN MOUNTING BRACKETS							
● CU-789-MB	3.05	2.05	0.9	06M4568	4.04	3.40	3.16
● CU-790-MB	3.08	2.08	1.5	06M4570	4.37	3.67	3.42
● CU-791-MB	3.08	3.08	1.5	06M4571	4.91	4.13	3.85
● CU-792-MB	1.8	4.05	1	91F3942	3.94	3.31	3.08
● CU-793-MB	4.1	2.23	2	06M4573	4.95	4.16	3.87
● CU-795-MB	4.47	3.22	2	83F3321	7.72	6.49	6.04
WITH MOLDED-IN MOUNTING BRACKETS AND 0.015″ RECESSED AREA IN LID							
● CUR-793-MB	4.1	2.23	2	06M4590	4.87	4.09	3.81

(82481)

UTILIBOX™ STYLE F

RoHS Compliant Available

Bud Industries, Inc.

- Impact resistant ABS plastic, with UL94-HB flammability rating
- Suggested service temperature -40°C to +80°C
- Includes close-fitting interlocking lid and assembly hardware
- Provisions for mounting horizontal and vertical PCB
- Modifications available, *go online or call*

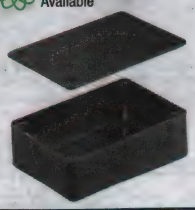
Mfg. Part No.	Dimensions (in.) Length	Width	Height	Color	Stock No.	Price Each 1-4	5-9	10-24
● CU-1872-B	1.88	3.73	1.48	Black	52F6530	2.42	2.04	1.92
● CU-1872-G	1.88	3.73	1.48	Grey	20C3666	2.40	2.02	1.91
● CU-1874-B	2.94	5.3	1.95	Black	52F6532	3.30	2.77	2.61
● CU-1874-G	2.94	5.3	1.95	Grey	52F6533	3.28	2.76	2.60

(82482)

UTILIBOX™ STYLE G

RoHS Compliant Available

Bud Industries, Inc.



- ABS plastic with flammability rating of UL94V-0 at 0.080″ thickness
- Suggested service temperature of
- -20°C to +70°C.
- Horizontal PCB mounting bosses
- Includes close-fitting interlocking lid and assembly hardware
- Standard finish, black
- Modifications available online

UTILIBOX™ STYLE G

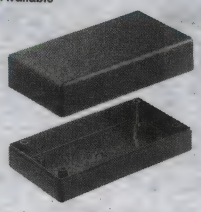
Mfg. Part No.	Dimensions (in.) Length	Width	Height	Stock No.	Price Each 1-4	5-9	10-24
● CU-387	5.59	4.34	1.84	06M4548	8.17	6.83	6.39
● CU-388	4.31	3.06	1.46	06M4550	6.56	5.48	5.14
● CU-389	5.07	3.57	1.59	05M4066	7.66	6.41	6.00
WITH MOLDED-IN MOUNTING BRACKETS							
● CU-387-MB	5.59	4.34	1.84	06M4549	8.27	6.91	6.47
● CU-388-MB	4.31	3.06	1.46	91F3932	6.74	5.64	5.28
● CU-389-MB	5.07	3.57	1.59	06M4551	7.63	6.38	5.98

(82483)

UTILIBOX™ STYLE H

RoHS Compliant Available

Bud Industries, Inc.



- ABS plastic with flammability rating of UL94V-0 at 0.080" thickness
- Suggested service temperature of
- -20°C to +70°C
- Horizontal PCB mounting bosses
- Includes close-fitting interlocking lid and assembly hardware
- Standard finish, black
- Modifications available online.

Utilibox™ series is the ultimate value in plastic utility boxes.

UTILIBOX™ STYLE H

Mfg. Part No.	Dimensions (in.) L	W	H	Stock No.	Price Each 1-4	5-9	10-24
CU-1470	3.07	2.1	1.49	06M4520	5.87	4.91	4.65
CU-1471	3.07	2.1	2.09	06M4521	6.31	5.27	5.00
CU-1472	3.07	3.1	2.09	06M4523	7.20	6.02	5.70
CU-1473	4.05	1.8	1.27	06M4525	5.59	4.68	4.43
CU-1474	4.1	2.25	1.49	05M4050	7.18	6.00	5.69
CU-1475	4.1	2.25	2.59	55M6995	8.16	6.82	6.46
CU-1476	4.47	3.25	2.7	05M4051	8.81	7.36	6.98
WITH MOLDED-IN MOUNTING BRACKETS							
CU-1470-MB	3.07	2.1	1.49	05M4049	5.87	4.91	4.65
CU-1471-MB	3.07	2.1	2.09	06M4522	6.31	5.27	5.00
CU-1472-MB	3.07	3.1	2.09	06M4524	6.94	5.80	5.50
CU-1474-MB	4.1	2.25	1.49	83F3313	7.18	6.00	5.69
CU-1476-MB	4.47	3.25	2.7	83F3317	8.81	7.36	6.98

(82484)

UTILIBOX™ STYLE I

RoHS Compliant Available

Bud Industries, Inc.

- ABS plastic with flammability rating of UL94V-0 at 0.080" thickness
- Suggested service temperature of -20°C to +70°C
- Insert in top for easy modification
- Flush mounted black colored screws
- Internal PCB mounting bosses
- Textured finish, black
- Modifications available online.

Utilibox™ series is the ultimate value in plastic utility boxes.

UTILIBOX™ STYLE I

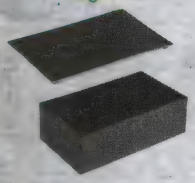
Mfg. Part No.	Dimensions (in.) L	W	H	Stock No.	Price Each 1-4	5-9	10-24
CU-3240	3.33	2.48	1.1	06M4535	5.75	4.77	4.54
CU-3241	2.54	2.54	1	99B1200	5.33	4.42	4.21
CU-3242	3.35	3.35	1.35	05M4063	6.48	5.38	5.12
CU-3243	4.21	2.85	1.1	06M4537	6.27	5.20	4.95
CU-3244	4.6	3.35	1.35	06M4539	7.33	6.08	5.79
CU-3245	5.6	3.85	1.35	99B1208	8.68	7.19	6.85
WITH MOLDED-IN MOUNTING BRACKETS							
CU-3240-MB	3.33	2.48	1.1	06M4536	5.68	4.71	4.48
CU-3241-MB	2.54	2.54	1	99B1201	5.27	4.37	4.16
CU-3242-MB	3.35	3.35	1.35	99B1203	6.41	5.31	5.05
CU-3243-MB	4.21	2.85	1.1	06M4538	6.20	5.14	4.89
CU-3244-MB	4.6	3.35	1.35	99B1207	7.33	6.08	5.79
CU-3245-MB	5.6	3.85	1.35	06M4540	8.73	7.24	6.89

(82485)

UTILIBOX™ STYLE J

RoHS Compliant Available

Bud Industries, Inc.



- ABS plastic with UL94-HB flammability rating
- Suggested service temperature -40°C to +80°C
- Internal PCB card guides accept both horizontal and vertical boards
- Grid pattern on underside of cover for modification reference points
- Standard finish, black
- Modifications available online.

Utilibox™ series is the ultimate value in plastic utility boxes.

UTILIBOX™ STYLE J

Mfg. Part No.	Dimensions (in.) L	W	H	Stock No.	Price Each 1-4	5-9	10-24
CU-1941	3.27	2.13	1.2	99B1194	2.27	1.89	1.80
CU-1943	5.12	2.68	1.71	99B1195	3.30	2.76	2.61
CU-1945	6.21	3.76	2.09	99B1196	5.27	4.41	4.18
CU-1947	7.77	4.45	2.48	99B1197	6.23	5.21	4.94

CONTINUED

UTILIBOX™ STYLE J (CONT.)

WITH MOLDED-IN MOUNTING BRACKETS

Mfg. Part No.	Dimensions (in.) L	W	H	Stock No.	Price Each 1-4	5-9	10-24
CU-1941-MB	3.27	2.13	1.2	86H5874	2.40	2.01	1.91
CU-1943-MB	5.12	2.68	1.71	86H5875	3.32	2.77	2.63
CU-1945-MB	6.21	3.76	2.09	86H5876	5.24	4.38	4.15
CU-1947-MB	7.77	4.45	2.48	86H5877	6.23	5.21	4.94

(82486)

UTILIBOX™ STYLE L

RoHS Compliant Available

Bud Industries, Inc.

- Molded-in wall mounting brackets
- Textured surface makes the box resistant to marring
- Interlocking screw-on cover with black assembly screws
- Durable UL 94V-0 rated ABS material in black color
- Horizontal PCB mounting bosses
- Easily modified with common machine shop tools

Mfg. Part No.	Dimensions (mm) H x W x D	Stock No.	Price Each 1-4	5-9	10-24	25-49
CU-1931-MB	79.2 x 53.3 x 27.4	74R5583	4.52	4.21	3.86	3.39
CU-1933-MB	79.2 x 54.1 x 40.1	74R5584	4.73	4.40	4.03	3.54
CU-1935-MB	79 x 78.7 x 24.1	74R5585	6.24	5.80	5.32	4.68
CU-1937-MB	79 x 79.5 x 36.6	74R5586	6.55	6.09	5.59	4.91

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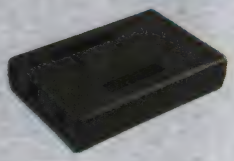
PLASTIC ENCLOSURES FOR DEVELOPMENT BOARDS

RoHS Compliant Available

HAMMOND MANUFACTURING

NEW



- Machined from our popular 1593 series plastic enclosures
- Machined to accept popular development boards - choose from the Arduino Uno, Arduino Due, Arduino Mega 2560, beaglebone, beaglebone black, freescale freedom KL-05Z, freescale freedom KL-02Z or freescale freedom KL-25Z
- Molded in a choice of black, grey or Translucent Blue general purpose ABS plastic with a satin texture
- Enclosure is machined to allow access to I/O connectors & often used controls and/or LEDS
- Enclosure is secured with self tapping screws
- Black & Translucent Blue plastic enclosures include black screws, grey plastic enclosures include nickel finish screws
- Includes four (4) self adhesive rubber feet & instruction sheet

Mfg. Part No.	Description	Color	Stock No.	Price Each 1-49
1593HAMUNOBK	0.99 x 2.95 x 4.38	Black	06X3928	11.85
1593HAMUNOGY	0.99 x 2.95 x 4.38	Gray	06X3929	11.85
1593HAMUNOTBU	0.99 x 2.95 x 4.38	Translucent Blue	06X3930	12.45
1593HAMDUEBK	0.99 x 2.95 x 4.38	Black	06X3916	14.22
1593HAMDUEGY	0.99 x 2.95 x 4.38	Gray	06X3917	14.22
1593HAMDUETBU	0.99 x 2.95 x 4.38	Translucent Blue	06X3918	15.41
1593HAMMEGABK	0.99 x 2.95 x 4.38	Black	06X3925	14.22
1593HAMMEGAGY	0.99 x 2.95 x 4.38	Gray	06X3926	14.22
1593HAMMEGATBU	0.99 x 2.95 x 4.38	Translucent Blue	06X3927	15.41
1593HAMDOGBK	1.18 x 3.04 x 3.75	Black	06X3913	8.28
1593HAMDOGGY	1.18 x 3.04 x 3.75	Gray	06X3914	7.89
1593HAMDOGTBU	1.18 x 3.04 x 3.75	Translucent Blue	06X3915	8.55
1593HAMBONEBK	1.18 x 3.04 x 3.75	Black	06X3910	8.28
1593HAMBONEGY	1.18 x 3.04 x 3.75	Gray	06X3911	8.28
1593HAMBONETBU	1.18 x 3.04 x 3.75	Translucent Blue	06X3912	8.98
1593HAMFREE1BK	1.1 x 2.6 x 3.6	Black	06X3919	10.52
1593HAMFREE1GY	1.1 x 2.6 x 3.6	Gray	06X3920	10.52
1593HAMFREE1TBU	1.1 x 2.6 x 3.6	Translucent Blue	06X3921	11.84
1593HAMFREE2BK	1.1 x 2.6 x 3.6	Black	06X3922	10.52
1593HAMFREE2GY	1.1 x 2.6 x 3.6	Gray	06X3923	10.52
1593HAMFREE2TBU	1.1 x 2.6 x 3.6	Translucent Blue	06X3924	11.84

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NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

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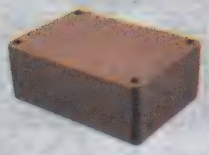
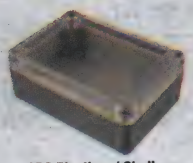
NON-METALLIC ENCLOSURES

WATERTIGHT ENCLOSURES

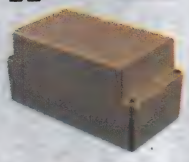
IP65 RoHS Compliant Available HAMMOND MANUFACTURING



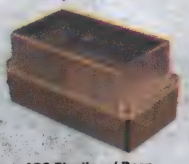
ABS Plastic w/ Shallow Lid (Opaque Cover)



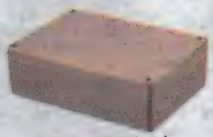
ABS Plastic w/ Shallow Lid (Clear Cover)



ABS Plastic w/ Deep Lid (Opaque Cover)



ABS Plastic w/ Deep Lid (Clear Cover)



Polycarbonate w/ Shallow Lid

- Designed to meet IP 65
- Ideally suited for mounting PC boards or DIN rail mounted components
- Flammability rating of UL94 HB
- Gasketed lid with two piece "tongue and groove" construction provides protection against oil, dust and water
- Rubber gasket is included and must be field installed
- Lid includes smooth recessed area for membrane, label or silkscreen (see chart below for recess size)
- Integral stainless steel bushings (for repetitive assembly and disassembly)
- Lid screws are self captivating (lid holes are threaded with the first installation of lid screws)
- Internal DIN rail mounting tabs are molded in

Lid is secured with self-captivating M3.5 stainless steel machine screws (included). All hardware is stainless steel to avoid corrosion caused by dissimilar metals.

Mfg. Part No.	Dimensions (in.) H x W x D	Body Color	Cover	Stock No.	Price Each 1-4	5-9	10-24
ABS PLASTIC WITH SHALLOW LID							
● RP1025	1.57 x 2.36 x 2.56	Grey	Opaque	04N9921	5.39	4.30	4.04
● RP1025C	1.57 x 2.36 x 2.56	Grey	Clear	04N9922	6.06	4.85	4.55
● RP1065	2.17 x 3.15 x 3.35	Grey	Opaque	04N9924	7.26	5.81	5.45
● RP1135	2.17 x 3.35 x 4.92	Grey	Opaque	04N9933	9.80	7.84	7.35
● RP1175C	2.17 x 3.35 x 6.50	Grey	Clear	04N9940	13.57	10.86	10.17
● RP1455	2.36 x 6.50 x 8.66	Grey	Opaque	04N9960	23.10	18.48	17.32
● RP1455C	2.36 x 6.50 x 8.66	Grey	Clear	04N9961	29.73	23.78	22.30
● RP1245	2.95 x 4.92 x 6.50	Grey	Opaque	04N9952	13.57	10.86	10.17
● RP1245C	2.95 x 4.92 x 6.50	Grey	Clear	04N9953	16.78	13.43	12.58
● RP1285	2.95 x 5.75 x 7.32	Grey	Opaque	04N9955	15.62	12.50	11.72
● RP1285C	2.95 x 5.75 x 7.32	Grey	Clear	04N9956	18.25	14.61	13.69
● RP1465	3.35 x 6.50 x 8.66	Grey	Opaque	04N9963	25.11	20.09	18.83
● RP1465C	3.35 x 6.50 x 8.66	Grey	Clear	04N9964	33.21	26.56	24.91
ABS PLASTIC WITH DEEP LID							
● RP1385	4.33 x 5.75 x 7.32	Grey	Opaque	88M9534	18.94	15.16	14.21
● RP1385C	4.33 x 5.75 x 7.32	Grey	Clear	04N9958	22.67	18.13	17.00
POLYCARBONATE WITH SHALLOW LID							
● RP1130	2.17 x 3.35 x 4.92	White	Opaque	04N9932	15.75	12.59	11.81
● RP1210	2.36 x 4.13 x 5.71	White	Opaque	04N9948	22.57	18.06	16.93
● RP1240	2.95 x 4.92 x 6.50	White	Opaque	04N9951	24.58	19.66	18.43
● RP1460	3.35 x 6.50 x 8.66	White	Opaque	04N9962	41.94	33.55	31.45

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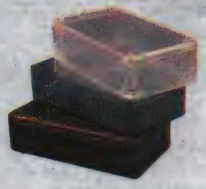
TRANSLUCENT POLYCARBONATE PLASTIC BOXES

RoHS Compliant Available HAMMOND MANUFACTURING



- Flame retardant ice blue, infrared or crystal clear translucent polycarbonate
- UL94V-0 flammability rating
- Lap joint construction provides protection against access of dust and splashing water
- 0.062" PC card guides
- Threaded brass inserts with M3 x 10mm Philips machine screws (ideal for frequent opening/closing)

Series	Dimensions (Inches) H	W	D
1591AT	3.93	1.97	0.82
1591BT	4.41	2.44	1.06
1591CT	4.72	2.55	1.41
1591DT	5.9	3.14	1.8
1591ET	7.47	4.33	2.24

Ice Blue Mfg. Part No.	Ice Blue Stock No.	IR Red Mfg. Part No.	IR Red Stock No.	Crystal Clear Mfg. Part No.	Crystal Clear Stock No.	Price Each 1-4
● 1591ATBU	84C9912	● 1591ATRD	84C9913	● 1591ATCL	50H6341	6.93
● 1591BTBU	84C9914	● 1591BTRD	84C9915	● 1591BTCL	50H6344	7.99
● 1591CTBU	29C1929	● 1591CTRD	39C9643	● 1591CTCL	50H6347	10.97

CONTINUED

TRANSLUCENT POLYCARBONATE PLASTIC BOXES (CONT.)

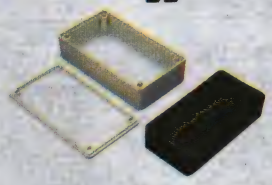
Ice Blue Mfg. Part No.	Ice Blue Stock No.	IR Red Mfg. Part No.	IR Red Stock No.	Crystal Clear Mfg. Part No.	Crystal Clear Stock No.	Price Each 1-4
● 1591DTBU	84C9916	● 1591DTRD	84C9917	● 1591DTCL	50H6350	13.86
● 1591ETBU	84C9918	● 1591ETRD	84C9919	● 1591ETCL	50H6352	19.25

(72214)

HIGH-IMPACT (FRABS) PLASTIC BOXES

RoHS Compliant Available HAMMOND MANUFACTURING

- Smooth thermaplastic/flame-retardant ABS (FRABS) plastic for easy drilling and punching
- UL94V-0 flammability rating at 1.477mm with 60°C continuous-use temperature
- Interlocking lid
- 0.062" PC card guides
- Threaded brass inserts with M3 x 0.5 x 10mm phillips machine screws (ideal for frequent opening/closing)



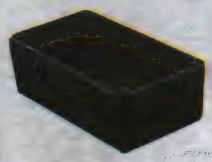
Series	Dimensions (Inches) H	W	D	Series	Dimensions (Inches) H	W	D
1591M	3.34	2.2	0.83	1591T	4.72	3.15	2.17
1591L	3.34	2.2	1.38	1591U	4.72	4.72	2.17
1591A	3.93	1.97	0.82	1591V	4.72	4.72	3.54
1591S	4.33	3.23	1.58	1591G	4.75	3.69	1.18
1591B	4.41	2.44	1.06	1591D	5.90	3.14	1.80
1591C	4.72	2.55	1.41	1591H	6.52	2.78	0.98
...	...	...	...	1591E	7.47	4.33	2.24

Black Mfg Part No.	Black Stock No.	Blue Mfg Part No.	Blue Stock No.	Gray Mfg Part No.	Gray Stock No.	Price Each 1-4
● 1591ABK	65F1758	● 1591ABU	65F1766	● 1591AGY	65F1774	5.15
● 1591SBK	87F4236	● 1591SBU	87F4240	● 1591SGY	95F2548	9.31
● 1591TBK	87F4237	● 1591TBU	87F4241	● 1591TGY	95F2549	10.04
● 1591UBK	87F4238	● 1591UBU	87F4242	● 1591UGY	95F2550	10.40
● 1591DBK	65F1761	● 1591DBU	65F1769	● 1591DGY	65F1777	9.70
● 1591HBK	90F8210	● 1591HBU	90F8211	● 1591HGY	95F2547	9.24
● 1591EBK	65F1762	● 1591EBU	65F1770	● 1591EGY	65F1778	12.55

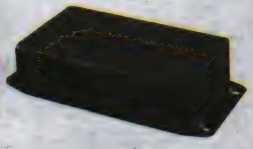
(6990)

MULTIPURPOSE FLAME RETARDANT ABS PLASTIC ENCLOSURES

RoHS Compliant Available HAMMOND MANUFACTURING IP54 NEMA



Standard Lid



Flanged Lid

- Ideally suited for mounting printed circuit boards horizontally
- Flanged lid is perfect for wall or shelf mounting and enclosure security
- Internal sides of enclosure are smooth for easy connector installation
- Tongue and groove lid to box construction provides protection against environmental elements
- Designed to meet IP54
- Lid and box both contain - four molded in PC board standoffs
- Molded from easy to machine, flame retardant ABS plastic
- ABS plastic material carries a UL flammability rating of 94V-0

Lid is secured with M3 x 10 mm Philips machine screws, threaded into integral brass bushings. Perfect for applications with repetitive assembly and disassembly are required. Stocked in satin texture black. Black enclosures include black screws.

Mfg. Part No.	Color	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5-9	10-24
● 1591XXABK	Black	0.8 x 2 x 3.9	74K2753	5.22	4.96	4.36
● 1591XXBBK	Black	1.1 x 2.5 x 4.4	74K2757	5.78	5.49	4.83
● 1591XXCBK	Black	1.4 x 2.6 x 4.7	74K2761	6.60	6.27	5.52
● 1591XXDBK	Black	1.8 x 3.2 x 6	74K2765	9.82	9.33	8.21
● 1591XXEBK	Black	2.2 x 4.4 x 7.6	74K2769	12.71	12.08	10.63
● 1591XXLBK	Black	1.4 x 2.2 x 3.4	74K2773	5.81	5.54	4.87
● 1591XXTBK	Black	2.2 x 3.2 x 4.8	74K2777	10.04	9.54	8.40
FLANGED LID						
● 1591XXAFLBK	Black	0.8 x 2 x 3.9	74K2754	5.22	4.65	4.40
● 1591XXBFLBK	Black	1.1 x 2.5 x 4.4	74K2758	5.78	5.15	4.86
● 1591XXCFLBK	Black	1.4 x 2.6 x 4.7	74K2762	6.93	6.17	5.83
● 1591XXDFLBK	Black	1.8 x 3.2 x 6	74K2766	9.35	8.33	7.87
● 1591XXEFLBK	Black	2.2 x 4.4 x 7.6	74K2770	12.71	11.32	10.69
● 1591XXLFLBK	Black	1.4 x 2.2 x 3.4	74K2774	5.71	5.08	4.80
● 1591XXTFLBK	Black	2.2 x 3.2 x 4.8	74K2778	10.16	9.06	8.55

*Economical version

(87081)

HAND HELD FLAME RETARDANT ABS PLASTIC ENCLOSURES

RoHS Compliant Available

HAMMOND MANUFACTURING

- Ergonomically designed for hand-held comfort
- Choice of two versions, with or without battery door
- For instrument or mobile data enclosures requiring a keypad and display or when repetitive assembly and disassembly are required
- Molded from flame retardant ABS plastic material carries a UL flammability rating of 94V-0
- Lap joint construction provides protection against access of dust and splashing water designed to meet IP54
- Battery door and compartment versions include 4 or 8 battery clips (for 2 or 4-AA batteries) and 1 or 2 9V (PP3) battery clip/s
- Choice of two enclosure colors, grey (RAL7035) or black (RAL9011), the soft side plastic material is dark grey (RAL7012)

"T" SOFT SIDED HAND HELD ENCLOSURES 1553T SERIES

Mfg. Part No.	Dimensions (in.) H x W x D	Color	Stock No.	Price Each 1-4	Price Each 5-9
1553TBK	1.26 x 3.94 x 8.27	Black	55W4850	22.79	18.23
1553TGY	1.26 x 3.94 x 8.27	Grey	55W4852	22.00	17.60
1553TTBK	0.89 x 3.15 x 6.5	Black	65W7442	16.50	14.85
1553TTGY	0.89 x 3.15 x 6.5	Grey	65W7444	16.50	14.85
BATTERY DOOR AND COMPARTMENT INCLUDED					
1553TBKBAT	1.26 x 3.94 x 8.27	Black	55W4851	23.25	22.63
1553TGYBAT	1.26 x 3.94 x 8.27	Grey	55W4853	22.44	21.84
1553TTBKBAT	0.89 x 3.15 x 6.5	Black	65W7443	19.80	16.56
1553TTGYBAT	0.89 x 3.15 x 6.5	Grey	65W7445	19.80	16.56

(209295)

FLAME RETARDANT ABS PLASTIC TABLET ENCLOSURES

NEW

HAMMOND MANUFACTURING

- Low profile and ergonomically designed
- Perfect for instrument or mobile data enclosures requiring a touch screen
- Molded from flame retardant ABS plastic UL flammability rating of 94V-0
- Choice of black (RAL 9011) or grey (RAL 7035)
- Enclosure is assembled with six (6) - M3-0.5 x 18 mm philips machine screws
- Integral brass bushings are factory inserted into the top half of the enclosure
- Lap joint construction designed to meet IP54.
- P.C. board standoffs are molded into case top & bottom halves
- Bottom half of enclosure includes a square molded inlay for labels

Mfg. Part No.	Description	Stock No.	Price Each 1-49
1599TABMBK	1.06 x 5.31 x 6.67	17X8008	16.59
1599TABMGY	1.06 x 5.31 x 6.67	17X8010	16.59
BATTERY DOOR & COMPARTMENT VERSION Includes 8 battery clips (for 4 AA batteries) and two 9 volt (PP3) battery clips, one end panel removable for easy modification. The bottom half of enclosure includes a square molded inlay for labels.			
1599TABMGYBAT	1.06 x 5.31 x 6.69	17X8011	21.33
1599TABMBKBAT	1.06 x 5.31 x 6.69	17X8009	21.33

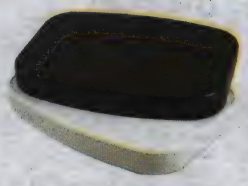
(212275)

HAND HELD FLAME RETARDANT ABS TABLET ENCLOSURES

RoHS Compliant Available

HAMMOND MANUFACTURING

- Low profile — ergonomically designed for a comfortable fit into the user's hands
- Perfect for instrument or mobile data enclosures requiring a touch screen
- Molded from flame retardant ABS plastic material carries a UL flammability rating of 94V-0
- Lap joint construction provides protection against access of dust and splashing water designed to meet IP54
- Battery door and compartment versions include 8 battery clips (for 4-AA batteries) and 2 9V (PP3) battery clips
- Choice of two enclosure colors, grey (RAL7035) or black (RAL9011)
- Contains one end panel — removable for easy modification



HAND HELD TABLET ENCLOSURES 1599TABL SERIES

Mfg. Part No.	Dimensions (in.) H x W x D	Color	Stock No.	Price Each 1-4	Price Each 5-9
1599TABLBK	1.18 x 7.48 x 9.45	Black	55W4855	18.23	16.16
1599TABLGY	1.18 x 7.48 x 9.45	Grey	55W4857	18.23	16.16
BATTERY DOOR AND COMPARTMENT INCLUDED					
1599TABLBKBAT	1.18 x 7.48 x 9.45	Black	55W4856	22.79	20.20
1599TABLGYBAT	1.18 x 7.48 x 9.45	Grey	55W4858	22.00	17.60

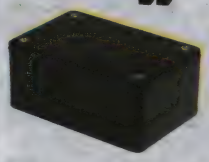
(209296)

GENERAL PURPOSE ABS PLASTIC BOXES

RoHS Compliant Available

HAMMOND MANUFACTURING

- Smooth black general purpose ABS plastic is ideal for labels, silk screens and decals
- interlocking lid
- 0.062" molded PC card guides
- Self-tapping #4 x ½" phillips screws
- 0.079" average wall thickness



Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-24
1591MSBK	3.34 x 2.20 x 0.83	83F8766	3.89	3.51	3.25
1591LSBK	3.34 x 2.20 x 1.38	87F2521	4.56	4.12	3.80
1591ASBK	3.93 x 1.97 x 0.82	87F2522	3.89	3.51	3.25
1591SSBK	4.33 x 3.23 x 1.58	87F2527	6.28	5.65	5.23
1591BSBK	4.41 x 2.44 x 1.06	87F2523	4.46	4.03	3.71
1591CSBK	4.72 x 2.55 x 1.41	87F2524	4.92	4.43	4.10
1591TSBK	4.72 x 3.15 x 2.17	87F2528	7.04	6.33	5.86
1591USBK	4.72 x 4.72 x 2.17	87F2529	7.42	6.68	6.17
1591VSBK	4.72 x 4.72 x 3.54	87F2530	8.86	7.98	7.37
1591GSBK	4.75 x 3.69 x 1.18	90F8206	6.35	5.72	5.29
1591DSBK	5.90 x 3.14 x 1.80	87F2525	6.85	6.16	5.70
1591HSBK	6.52 x 2.78 x 0.98	90F8209	6.35	5.72	5.29
1591ESBK	7.47 x 4.33 x 2.24	87F2526	8.75	7.87	7.27

(6991)

FLANGED LID (FRABS) PLASTIC BOXES

RoHS Compliant Available

HAMMOND MANUFACTURING

- Smooth, flame-retardant ABS (FRABS) plastic for easy drilling and punching
- UL94V-0 flammability rating at 1.477mm with 60°C continuous use temperature
- Interlocking flanged lid for easy wall or shelf mounting
- 0.062" PC card guides
- Threaded brass inserts with M3 x 0.5 x 10.4mm phillips machine screws (ideal for frequent opening/closing)

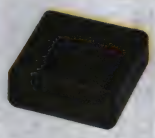
Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-24
1591MFLBK	3.34 x 2.20 x 0.83	18C3344	5.11	4.57	4.26
1591LFLBK	3.34 x 2.20 x 1.38	18C3305	5.96	5.33	4.97
1591SFLBK	4.33 x 3.23 x 1.58	18C3351	9.61	8.59	7.99
1591BFLBK	4.41 x 2.44 x 1.06	18C3314	5.89	5.27	4.91
1591CFLBK	4.72 x 2.55 x 1.41	18C3317	7.07	6.32	5.88
1591TFLBK	4.72 x 3.15 x 2.17	18C3354	10.36	9.28	8.63
1591VFLBK	4.72 x 4.72 x 3.54	23C2583	13.86	12.35	11.65
1591DFLBK	5.90 x 3.14 x 1.80	18C3319	10.13	9.06	8.44
1591HFLBK	6.52 x 2.78 x 0.98	27C7923	9.24	8.23	7.77
1591EFLBK	7.47 x 4.33 x 2.24	18C3338	13.11	11.73	10.92

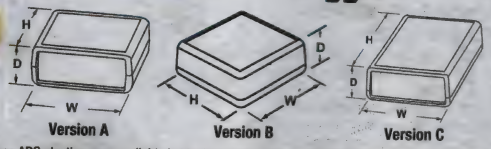
(59668)

HAND-HELD CASES

RoHS Compliant Available

HAMMOND MANUFACTURING





1593 series general-purpose ABS plastic cases available in black or gray. Feature self-tapping screws, lap-joint design and a recess for membrane. Version A: No battery compartment, open at both ends. Version B: No battery compartment, closed at both ends. Version C: Battery compartment, open front, closed rear.

Series	Battery Compartment	Front Open with Panel	Rear Open with Panel	H x W x D
1593K	N	Y	Y	2.6 x 2.6 x 1.1"
1593J	N	N	N	2.6 x 2.6 x 1.1"
1593S	Y*	Y	N	3.6 x 2.6 x 0.83"
1593P	Y	Y	N	3.6 x 2.6 x 1.1"
1593L	N	Y	Y	3.6 x 2.6 x 1.1"
1593N	N	Y	Y	4.3 x 2.9 x 1.0"
1593T	Y*	Y	N	4.4 x 2.6 x 0.83"
1593Q	Y	Y	N	4.4 x 2.6 x 1.1"
1593D	N	Y	Y	4.5 x 1.4 x 1.0"
1593Y	Y	Y	N	5.5 x 2.6 x 1.1"
1593X	N	Y	Y	5.5 x 2.6 x 1.1"

Version	Black Mfg. Part No.	Stock No.	Gray Mfg. Part No.	Stock No.	Price Each 1-24
A	1593KBK	24B7899	1593KGY	24B7900	3.17
B	1593JBK	95B0645	1593JGY	95B0644	2.86

CONTINUED

NON-METALLIC ENCLOSURES

HAND-HELD CASES (CONT.)

Version	Black Mfg. Part No.	Stock No.	Gray Mfg. Part No.	Stock No.	Price Each 1-24
C	● 1593SBK	83F8767	● 1593SGY	83F8768	4.23
C	● 1593PBK	24B7902	● 1593PGY	24B7903	4.79
A	● 1593LBK	50H6374	● 1593LGY	50H6375	4.79
A	● 1593NBK	86H8058	● 1593NGY	98H0403	4.94
C	● 1593TBK	83F8769	● 1593TGY	83F8770	4.80
C	● 1593QBK	24B7905	● 1593QGY	24B7906	5.60
A	● 1593DBK	84C9920	● 1593DGY	84C9921	4.87
C	● 1593YBK	95B0648	● 1593YGY	95B0647	5.90
A	● 1593XBK	95B0652	● 1593XGY	95B0649	6.12

*Due to their low profile design, the **1593S** and **1593T** models will not accept batteries larger than AAA
(13040)

HIGH-IMPACT (FRABS) PLASTIC HAND-HELD CASES

RoHS Compliant Available

HAMMOND MANUFACTURING

Molded in flame-retardant, high-impact ABS (FRABS) plastic, meets UL94V-0. Includes integral brass inserts and machine screws (M3 head) providing extra strength for repeated assembly and disassembly. Recessed top panel is ideal for membrane display; lap joint construction provides protection against dust and liquid. Extra-deep top and ultra-shallow base designed to enhance aesthetics and improve flexibility as a "hand-held" instrument. Twelve PCB bosses (six in both top and bottom) and vertical mounting slots (used with *optional* battery compartment dividers) are molded in. *Order battery dividers and belt clips separately; go online or call.*

BLACK

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5-9	10-24
● 1599BBK	5.12 x 2.56 x 0.98	96F6731	8.67	7.73	7.22
● 1599EBK	6.70 x 3.35 x 1.33	96F6734	10.74	9.58	8.94
● 1599HBK	8.66 x 4.33 x 1.73	96F6737	13.17	11.74	10.96
● 1599KBK	8.66 x 5.51 x 1.58	17C1245	13.42	11.96	11.17
GRAY					
● 1599EGY	6.70 x 3.35 x 1.33	96F6735	10.74	9.58	8.94
● 1599HGY	8.66 x 4.33 x 1.73	96F6738	13.17	11.74	10.96
● 1599KGY	8.66 x 5.51 x 1.58	18C1955	14.09	12.56	11.73

HIGH-IMPACT GENERAL PURPOSE ABS HAND-HELD CASES
Same features as above except molded-in gray general purpose ABS plastic with self-tapping #4 × ½ flathead screws. Perfect where economy is important and where repetitive assembly and disassembly is not vital. Available in gray only. *Order battery dividers and belt clips separately; go online or call.*

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5-9	10-24
● 1599ESGY	6.7 x 3.35 x 1.33	96F6736	7.41	6.59	6.18
● 1599HSGY	8.66 x 4.33 x 1.73	96F6739	8.55	7.60	7.13

BELT/POCKET CLIPS
Includes 2 nylon screws and mounting template.

Mfg. Part No.	Color	Stock No.	Price Each 1-4	5-9	10-24
● 1599CLIP	Black	97F9367	2.76	2.36	2.21
● 1599CLIPGY	Gray	98B0374	2.76	2.36	2.21

(6989)

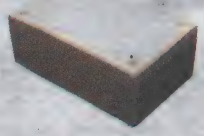
HEAVY-DUTY (FRABS) PLASTIC BOXES

RoHS Compliant Available

HAMMOND MANUFACTURING

- Matte textured, thermoplastic/flame retardant high-impact ABS (FRABS) for easy punching and drilling
- Also available in economical plastic
- UL94V-0 Flammability rating at 1.77mm with 60°C continuous temperature
- countersunk lid
- Threaded brass inserts with M3 x 0.5 x 18mm philips machine screws
- Average wall thickness: 0.124"
- Ideal for frequent opening/closing

Removable PC card guides and watertight versions also available; *go online or call.*



ABS PLASTIC

Mfg. Part No.	Color	Dimension (in.) H x W x D	Stock No.	Price Each 1-4	5-9	10-24
● 1594ABK	Black	2.17 x 2.17 x 1.10	90F8222	9.50	8.20	7.60
● 1594BBK	Black	3.15 x 2.17 x 1.10	90F8224	10.01	8.65	8.00
● 1594CBK	Black	4.13 x 2.56 x 1.30	90F8226	12.08	10.44	9.66
● 1594DBK	Black	5.12 x 2.56 x 1.70	90F8228	14.53	12.56	11.62
● 1594EBK	Black	6.50 x 4.13 x 2.09	90F8230	18.02	15.56	14.41
● 1594BGY	Grey	3.15 x 2.17 x 1.10	96F4818	9.93	8.58	7.95
● 1594DGY	Grey	5.12 x 2.56 x 1.70	96F4820	14.36	12.41	11.49
● 1594EGY	Grey	6.50 x 4.13 x 2.09	96F4821	17.69	15.28	14.15

CONTINUED

HEAVY-DUTY (FRABS) PLASTIC BOXES (CONT.)

ECONOMICAL PLASTIC

Mfg. Part No.	Color	Dimension (in.) H x W x D	Stock No.	Price Each 1-4	5-9	10-24
● 1594ASGY	Grey	2.2 x 2.2 x 1.57	97F9372	5.71	4.76	4.40
● 1594BSGY	Grey	3.2 x 2.2 x 1.57	97F9373	6.04	5.03	4.65
● 1594CSGY	Grey	1.77 x 2.6 x 4.13	97F9374	6.09	5.67	5.49
● 1594DSGY	Grey	2.17 x 2.6 x 5.16	97F9375	6.74	6.28	6.08
● 1594ESGY	Grey	6.6 x 4.2 x 2.57	97F9376	9.11	7.59	7.02

(6986)

MINI PLASTIC BOXES

RoHS Compliant Available

HAMMOND MANUFACTURING

Non-Flanged Lid

Flanged Lid

Mfg. part no. 1551 mini-boxes are molded from economical ABS plastic, featuring satin-textured finish, 2 PC board standoffs molded into interior, lap joint lid construction and assembled with 2 self-tapping Phillips screws.

NON-FLANGED LID

Dimensions (in.) H x W x D	Gray Mfg. Part No.	Gray Stock No.	Black Mfg. Part No.	Black Stock No.	Price Each 1-24	25-49
0.59 x 1.38 x 1.38	● 1551NGY	53K7865	● 1551NBK	53K7862	1.75	1.58
0.79 x 1.38 x 1.38	● 1551MGY	53K7861	● 1551MBK	53K7858	1.79	1.62
0.59 x 1.58 x 1.58	● 1551QGY	53K7873	● 1551QBK	53K7870	1.86	1.68
0.79 x 1.58 x 1.58	● 1551PGY	53K7869	● 1551PBK	53K7866	1.90	1.72
0.59 x 1.38 x 1.97	● 1551FGY	53K7850	● 1551FBK	53K7847	1.94	1.76
0.59 x 1.97 x 1.97	● 1551SGY	53K7881	● 1551SBK	53K7878	2.05	1.86
0.79 x 1.38 x 1.97	● 1551GGY	83F8733	● 1551GBK	83F8732	1.97	1.78
0.79 x 1.97 x 1.97	● 1551RGY	53K7877	● 1551RBK	53K7874	2.10	1.90
0.59 x 1.38 x 2.36	● 1551JGY	52K2685	● 1551JBK	53K7851	2.03	1.84
0.79 x 1.38 x 2.36	● 1551HGY	83F8737	● 1551HBK	83F8736	2.21	2.00
0.59 x 1.58 x 3.15	● 1551LGY	53K7857	● 1551LBK	53K7854	2.14	1.93
0.79 x 1.58 x 3.15	● 1551KGY	83F8741	● 1551KBK	83F8740	2.30	2.08
FLANGED LID						
0.59 x 1.38 x 1.38	● 1551NFLGY	53K7864	● 1551NFLBK	53K7863	1.66	1.50
0.79 x 1.38 x 1.38	● 1551MFLGY	53K7860	● 1551MFLBK	53K7859	1.70	1.53
0.59 x 1.38 x 1.97	● 1551FFLGY	53K7849	● 1551FFLBK	53K7848	1.86	1.67
0.79 x 1.38 x 1.97	● 1551GFLGY	61K2254	● 1551GFLBK	61K2253	1.99	1.80
0.79 x 1.38 x 2.36	● 1551LFLGY	53K7856	● 1551HFLBK	61K2255	2.09	1.75
0.59 x 1.58 x 3.15	● 1551LFLGY	53K7856	● 1551LFLBK	53K7855	2.03	1.83
0.79 x 1.58 x 3.15	● 1551KFLGY	61K2258	● 1551KFLBK	98K5866	2.18	1.97

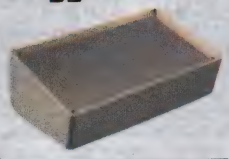
(34480)

PLASTIC (FRABS) INSTRUMENT CONSOLES

RoHS Compliant Available

HAMMOND MANUFACTURING

- Consoles molded in smooth ABS (FRABS) thermoplastic for easy drilling and punching
- Vertical 0.04" aluminum panel (paper-covered on 1 side)
- 0.062" PC card guides
- Threaded brass inserts with M3 x 0.5 x 8mm (0.31") philips pan head screws
- 4 rubber feet
- UL94V-0 rating
- Ideal for frequent opening/closing
- Suffix BK in Mfg. part no. indicates black; Suffix GY indicates gray



Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5-9	10-24
● 1595CBK	3.78 x 6.35 x 2.28	97F9445	14.57	13.04	12.12
● 1595CGY	3.78 x 6.35 x 2.28	98F553	14.74	13.20	12.26
● 1595EBK	5.12 x 8.47 x 2.95	97F9586	18.01	16.13	14.98
● 1595EGY	5.12 x 8.47 x 2.95	94F4797	18.23	16.33	15.16

(6914)

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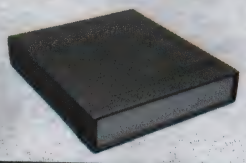
PLASTIC (FRABS) INSTRUMENT CASES WITH ALUMINUM PANEL

RoHS Compliant Available

HAMMOND MANUFACTURING



- Matte textured, thermoplastic flame-retardant ABS (FRABS) for easy punching and drilling
- UL94V-0 flammability rating at 1.77mm and 60°C continuous temperature
- 2-piece tongue-and-groove construction with 0.64" thick brushed aluminum panels at front and rear
- Molded-in PC board mounts on eurocard centers
- Threaded brass inserts with M3 x 0.5 x 10mm machine screws
- Ideal for repetitive assembly and disassembly

Mfg. Part No.	Color	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	Price Each 5-9
1598ABK	Black	1.42 x 3.7 x 6.18	87F2513	12.87	11.41
1598BBK	Black	1.96 x 5.31 x 5.28	87F2515	15.46	13.71
1598BBBK	Black	1.42 x 6.06 x 7.05	24B7989	15.88	14.07
1598CBK	Black	2.04 x 6.1 x 7.09	87F2517	18.26	16.19
1598DBK	Black	2.52 x 8.11 x 7.09	87F2519	21.67	19.21
1598EBK	Black	3.38 x 6.3 x 6.3	90F8212	22.09	19.58
1598FBK	Black	1.58 x 6.3 x 9.84	90F8214	24.26	21.50
1598GBK	Black	3 x 6.3 x 9.84	90F8216	27.19	24.10
1598HBK	Black	1.58 x 7.87 x 11.02	90F8218	28.12	24.93
1598JBK	Black	3 x 7.87 x 11.02	90F8220	31.72	28.12

(6983)

INSTRUMENT ENCLOSURES

NEMA

RoHS Compliant Available

HAMMOND MANUFACTURING

IP43

- Designed to house PC boards for instrument use
- Molded in light gray general purpose ABS plastic (flammability rating of UL94 HB)
- Two-part clam shell construction with bottom halves having molded-in PC board standoffs
- Front and rear panels are interchangeable and removable for modifications
- "Tongue and groove" construction provides protection against dust & water
- Designed to meet IP43
- Threaded integral brass bushings (for repetitive assembly and disassembly)

All units are secured with M3 Philips machine screws except **mfg. part nos. RM2015S and RM2055S** which use self-tapping Philips screws. Larger enclosures also include PC board standoffs on the top half (four short M3 screws included).

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-24
RM2015S	1.18 x 3.94 x 5.12	04N9913	4.93	4.48	4.13
RM2055M	1.97 x 5.51 x 7.48	04N9915	11.28	10.25	9.43
RM2095S	1.97 x 7.09 x 9.84	04N9919	16.20	14.72	13.55
RM2055L	2.76 x 5.51 x 7.48	04N9914	13.59	12.35	11.36
RM2095M	2.95 x 7.09 x 9.84	04N9918	17.61	16.00	14.72
RM2095L	3.94 x 7.09 x 9.84	04N9917	18.71	17.01	15.66

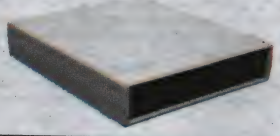
(116678)

GENERAL PURPOSE ABS INSTRUMENT CASES WITH PLASTIC PANEL

RoHS Compliant Available

HAMMOND MANUFACTURING

Mfg. part no. 1598 general purpose ABS enclosures are molded with the same features as the plastic (ABS) versions except in matte-textured general purpose ABS plastic. Units are assembled with self-tapping screws, perfect where economy is important and where repetitive assembly and disassembly are not vital. Color: Gray with black plastic end panels.



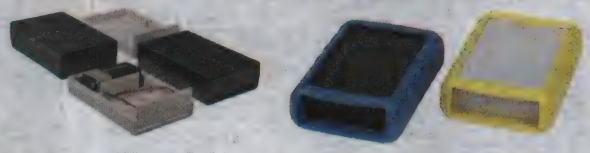
Mfg. Part No.	Dimension (in.) H x W x D	Stock No.	Price Each 1-4	Price Each 5-9
1598ASGYPBK	1.42 x 3.7 x 6.18	01F2243	9.93	8.85
1598BSGYPBK	1.96 x 5.31 x 5.28	01F2245	11.16	9.94
1598CSGYPBK	2.04 x 6.1 x 7.09	01F2246	13.08	11.65
1598DSGYPBK	2.52 x 8.11 x 7.09	01F2247	15.46	13.77
1598ESGYPBK	3.38 x 6.3 x 6.3	01F2248	15.59	13.89
1598FSGYPBK	1.58 x 6.3 x 9.84	01F2249	15.30	14.05
1598GSGYPBK	3 x 6.3 x 9.84	01F2250	17.86	15.91
1598HSGYPBK	1.58 x 7.87 x 11.02	83F8771	17.86	15.91
1598JSGYPBK	3 x 7.87 x 11.02	01F2252	20.82	18.54

(34679)

HAND-HELD ABS ENCLOSURES

RoHS Compliant Available

BOX ENCLOSURES, INC.



- Compact design
- Removable end panel
- Available with flush or recessed top
- Fine textured surface
- Choice of black or bone
- 2 AA, 1 9V or no battery options

Order protective boots separately on pages 2331-2332.

Mfg. Part No. (Black)	Stock No. (Black)	Accepts Battery Type	Price Each 1-14
RECESSED TOP — 3.80H x 2.40W x 1.00"D			
40-12-NO-R-BL	01J2423	...	5.91
40-12-9V-R-BL	01J2427	PP3 (9V)	7.27
FLUSH TOP — 3.80H x 2.40W x 1.00"D			
40-12-NO-F-BL	01J2421	...	4.75
40-12-9V-F-BL	01J2425	PP3 (9V)	5.59
FLUSH DEEP TOP — 3.80H x 2.40W x 1.50"D			
40-32-NO-F-BL	24K0695	...	5.28
RECESSED TOP — 4.60H x 2.75W x 1.00"D			
50-12-9V-R-BL	14N7746	PP3 (9V)	7.39
FLUSH TOP — 4.60H x 2.75W x 1.00"D			
50-12-NO-F-BL	01J2436	...	5.64
50-12-9V-F-BL	01J2444	PP3 (9V)	6.86
100-42-NO-R-BL	01J2393	...	11.53

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
CLP-BLK	Screw-On ABS Belt Clip, Black	22K8873	1.25
100-EXPBLK	100 Series 0.4" Height Expander, Black	54M5981	2.30

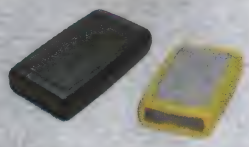
(78964)

HAND-HELD ABS ENCLOSURES

RoHS Compliant Available

BOX ENCLOSURES, INC.

- Available with recessed or deep top
- Removable end panel for transmitter applications
- Choice of black or gray
- Access compartment, 2 AA, 4 AA, 1 9V or no battery options



Order protective boots separately on pages 2331-2332.

DEEP TOP — 4.94H x 2.75W x 1.27"D

Black Mfg. Part No.	Black Stock No.	Gray Mfg. Part No.	Gray Stock No.	Accepts Battery Type	Price Each 1-14
55-32-4A-R-BL	26K5612	55-32-4A-R-GRY	26K5613	AA	10.15

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-9
CLP-BLK	Screw-On ABS Belt Clip, Black	22K8873	1.25

(78967)

RUBBER PROTECTIVE BOOTS

RoHS Compliant Available

BOX ENCLOSURES, INC.

- Provides added protection against enclosure damage
- Integrated tilt base/stand for optimum viewing angle
- Ergonomic grip for harsh environments
- Other colors available; *go online or call*

Mfg. Part No.	Use With Enclosure	Color	Stock No.	Price Each 1-14	Price Each 15-24
100-RBT-YEL	100 Series Shell Case	Yellow	01J2390	17.63	17.03
90-RBT-YEL	90, 91 Series	Yellow	01J2532	16.94	16.38
55-RBT-YEL	55 Series	Yellow	01J2453	9.50	9.04
100-RBT-LBL	100, 101 Series	Blue	01J2387	16.25	15.70
50-RBT-LBL	50 Series	Blue	01J2432	8.25	7.84

➤ CONTINUED ➤

NON-METALLIC ENCLOSURES • CABINETS & RACKS

RUBBER PROTECTIVE BOOTS (CONT.)

Mfg. Part No.	Use With Enclosure	Color	Stock No.	Price Each 1-14	Price Each 15-24
● 40-RBT-LBL	40 Series Shell Case with End Panel	Blue	01J2417	9.27	8.92
● 55-RBD-LBL	55-32 Deep Series	Blue	26K5657	10.17	9.67
● 100-RBT-BLK	100, 101 Series	Black	01J2385	17.63	17.03
● 90-RBT-BLK	90, 91 Series	Black	01J2527	14.61	14.12
● 50-RBT-BLK	50 Series	Black	01J2429	8.25	7.84
● 40-RBT-BLK	40 Series	Black	01J2415	9.47	9.11
● 55-RBD-BLK	55-32 Deep Series	Black	26K5655	13.22	12.59

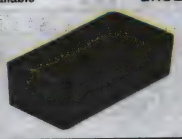
(78968)

MINIATURE ABS CASES

RoHS Compliant Available

BOX ENCLOSURES, INC.

- Great for remote monitoring and covert applications
- Rounded corners are "pocket friendly"
- Fine textured surface
- Screw-on or snap together bottom/top
- Black ABS, rated UL94HB



ENCLOSURES, SCREW TOGETHER

Mfg. Part No.	Dimensions (in.) H x W x D	Pkg. of	Stock No.	Price per Pkg. 1-24
● BMC-202-10	0.44 x 0.63 x 0.89	10	84R9800	28.17
● BMC-203-10	0.49 x 0.71 x 1	10	84R9801	29.04
● BMC-204-10	0.56 x 0.81 x 1.14	10	84R9803	27.63
● BMC-205-5	0.61 x 0.93 x 1.33	5	84R9805	14.14
● BMC-206-5	0.69 x 1.09 x 1.57	5	84R9807	16.07
● BMC-207-5	0.77 x 1.25 x 1.81	5	84R9810	15.21
● BMC-208-5	0.89 x 1.48 x 2.11	5	84R9813	18.34
● BMC-209-5	0.97 x 1.71 x 2.5	5	84R9815	21.43
● BMC-210-5	1.09 x 1.95 x 2.9	5	84R9817	20.87
● BMC-203L-10	0.5 x 0.71 x 1.44	10	84R9802	28.17
● BMC-204L-10	0.55 x 0.81 x 1.65	10	84R9804	31.02
● BMC-205L-5	0.63 x 0.93 x 1.91	5	84R9806	16.07
● BMC-206L-5	0.69 x 1.08 x 2.26	5	84R9809	17.18
● BMC-207L-5	0.78 x 1.24 x 2.62	5	84R9812	18.34
● BMC-205D-5	0.83 x 0.93 x 1.32	5	78R9440	17.10
● BMC-206D-5	0.95 x 1.08 x 1.56	5	84R9808	17.37
● BMC-207D-5	1.07 x 1.24 x 1.79	5	84R9811	18.50
● BMC-208D-5	1.25 x 1.48 x 2.11	5	84R9814	22.46
● BMC-209D-4	1.37 x 1.71 x 2.5	4	84R9816	18.52
ENCLOSURES, SNAP TOGETHER				
● BSF-100-4	1.1 x 1.62 x 2.13	4	84R9818	9.15
● BSF-200-3	1.27 x 1.88 x 2.19	3	84R9819	12.67
● BSF-300-4	0.98 x 1.65 x 2.44	4	84R9820	10.31
● BSF-400-3	1.54 x 1.65 x 2.44	3	84R9821	6.97
● BSF-500-5	0.92 x 1.95 x 2.8	5	84R9822	12.90
● BSF-600-3	1.52 x 2.17 x 3.28	3	84R9823	11.78

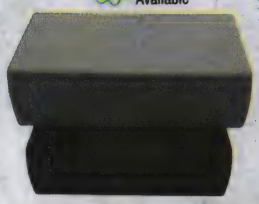
(78971)

LH SERIES DESKTOP ABS PLASTIC ENCLOSURES

RoHS Compliant Available

PACTEC®

Desktop enclosures ideal for communications, test and medical equipment. Material: Standard ABS 94HB



Black Mfg. Part No.	Black Stock No.	PC Bone Mfg. Part No.	PC Bone Stock No.	Dimensions (Inches) L	W	H	Price Each 1-9
● LH45-100-000-K	07H3015	● LH45-100-039-K	07H3016	4.7	4.1	1.25	8.75
● LH45-175-000-K	07H3017	● LH45-175-039-K	07H3018	4.7	4.1	1.7	9.51
● LH55-130-000-K	92F6497	● LH55-130-039-K	92F6498	5.1	5.5	1.5	11.28
● LH57-130-000-K	23C2193	● LH57-130-039-K	91F1774	7.2	5.5	1.5	13.17
● LH64-130-000-K	92F6501	● LH64-130-039-K	92F6502	4.2	6.1	1.5	12.07
...	...	● LH68-250-039-K	10J9266	7.8	6.3	2.5	17.99
● LH77-130-000-K	91F5291	● LH77-130-039-K	91F5292	7.3	7.1	1.5	14.08
● LH89-130-000-K	91F5295	...	...	9.5	8.1	1.5	21.49
● LH96-130-000-K	16F1919	● LH96-130-039-K	16F1924	6.2	9.1	1.5	16.53
● LH129-175-000-K	91F5299	● LH129-175-039-K	91F5300	9.3	11.1	1.7	23.11
● LH129-250-000-K	91F5301	● LH129-250-039-K	91F5302	9.3	11.1	2.2	25.76

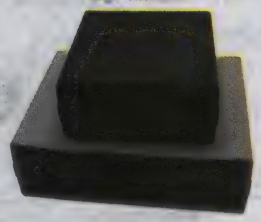
(7044)

CM SERIES ABS PLASTIC DESKTOP ENCLOSURES

RoHS Compliant Available

PACTEC®

Mid-size enclosures ideal for medical, scientific and communications equipment. Material: Standard ABS 94HB



Black Mfg. Part No.	Black Stock No.	PC Bone Mfg. Part No.	PC Bone Stock No.	Dimensions (Inches) L	W	H	Price Each 1-9
● CM3-100-000-K	92F6493	● CM3-100-039-K	92F6494	5.2	3.3	1.2	10.16
● CM3-150-000-K	89F4011	● CM3-150-039-K	89F4014	5.2	3.3	1.7	11.78
● CM5-125-000-K	89F4015	● CM5-125-039-K	89F4018	5.2	5.1	1.5	11.28
● CM5-200-000-K	89F4019	● CM5-200-039-K	89F4022	5.2	5.1	2.2	12.41
● CM6-150-000-K	92F6495	...	...	6.2	6.1	1.7	15.29
● CM69-120-000-K	89F4010	● CM69-120-039-K	89F3999	8.7	5.5	1.5	18.37
● CM69-240-000-K	89F3990	...	...	9.5	6.3	1.3	18.37
● CM69-180-000-K	07H2995	...	...	9.5	6.3	1.9	21.68
● CM86-175-000-K	93F9918	...	...	6.2	8.1	2.1	17.04
● CM86-225-000-K	89F3994	...	...	6.2	8.1	2.5	22.64

(7046)

EXTREME RX-SERIES CASES

RoHS Compliant Available

SERPAC

- Flame retardant
- Molded PVC plastic
- Automatic pressure purge system
- Molded-in padlock holes (fits standard size Masterlock®)

Optional multilayer protective cubed matrix Accuform Foam. Available with latches with keyed chrome metal locks or plastic non-corrosive locks. Available easy-to-install panel kits supplied with o-rings and screws. Custom machining available; *go online or call*. Available in black only.

Mfg. Part No.	Dimensions (in.) H	W	L	Stock No.	Price Each 1-9	10+
● SE120, BK	3.23	5.00	7.30	24K4734	22.18	18.48
● SE300, BK	4.00	7.42	9.60	24K4742	36.68	30.57
● SE720, BK	7.48	19.75	15.53	24K4770	92.06	76.71
WITH ACCUFORM FOAM						
● SE120F, BK	3.23	5.00	7.30	24K4738	27.09	22.46
● SE300F, BK	4.00	7.42	9.60	24K4746	44.98	37.28
● SE710F, BK	4.57	13.19	18.29	24K4766	108.99	90.35
● SE720F, BK	6.62	13.19	18.29	24K4778	130.88	108.49

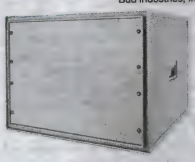
(84549)

CLASSIC II PORTABLE ALUMINUM CABINETS

RoHS Compliant Available

BUD Industries, Inc.

Portable, yet ideal for permanent installations. Frame constructed of 6063-T5 aluminum extrusions. Top, bottom and side panels: 0.050" aluminum. Shipped assembled with two 16-gauge vertically adjustable chassis supports. Panel mounting rails have #10-32 tapped holes on E.I.A spacing. Recessed brushed-chrome handles attached to steel flanges for extra support. Clear inside depth (panel-to-panel): 20.563"; overall depth: 21.44". Accept standard 19" panels; *ordered separately on pages 2340-2341*. Cabinet doors and modifications to enclosures available online.



GRAY TEXTURED

Mfg. Part No.	Outside Height (in.)	Panel Space (in.)	Weight (lbs.)	Stock No.	Price Each Each	2-4	5+
● AGC-9271-GT	14.063	12.25	34	06M4393	640.69	598.82	577.88
● AGC-9275-GT	21.063	19.25	39	06M4401	710.77	664.31	641.08
● AGC-9278-GT	26.313	24.50	42	06M4406	759.73	710.07	685.24
ROYAL BLUE TEXTURED							
● AGC-9274-RB	19.313	17.50	37	06M4400	694.32	648.94	626.25

ACCESSORIES

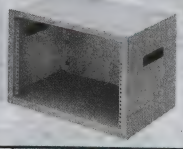
Mfg. Part No.	Description	Stock No.	Price Each 1-4
● 7346	10-32 x 0.62" Phillips, Truss Head, Steel Screw, Zinc Plate	06M4902	0.10
● RC-7758-PR	3.25" Ball Bearing Caster (1 pair)	06M4777	35.21

(7190)

ECONOCAB PORTABLE ENCLOSURES

RoHS Compliant Available

Bud Industries, Inc.



Economy cabinets constructed of 18-gauge welded steel. Stationary mounting rails accept 19" wide panels; *ordered separately on pages 2340-2341*. Include snap-in handles, feet, and panel-mounting hardware. Clear inside depth: 14.5" (368.30). Overall width: 21.063" (535). Overall depth: 15.5" (393.70). Available in black or sand textured finish. Modifications available online.

BLACK TEXTURED

Mfg. Part No.	Panel Space (in.)	Overall Height (in.)	Weight (lbs.)	Stock No.	Price Each 1-4	5-9	10+
EC-9902-BT	7.00	9.063	14.00	10M6153	237.17	211.71	188.93
EC-9904-BT	10.50	12.563	15.50	06M7262	247.77	221.17	197.38
EC-9905-BT	12.25	14.313	16.25	17M9926	258.69	230.93	206.08
EC-9906-BT	14.00	16.063	17.00	05M4103	262.41	234.24	209.04

SAND TEXTURED

EC-9902-S	7.00	9.063	14.00	06M4697	237.17	211.71	188.93
EC-9903-S	8.75	10.813	14.75	06M4699	241.61	215.67	192.47
EC-9905-S	12.25	14.313	16.25	06M4700	260.73	232.74	207.70
EC-9906-S	14.00	16.063	17.00	95F6408	262.41	234.24	209.04

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
295	10-32 Cage Nut, Zinc Plate	06M4898	0.74
7346	10-32 x 0.62" Phillips, Truss Head, Steel Screw, Zinc Plate	06M4902	0.10

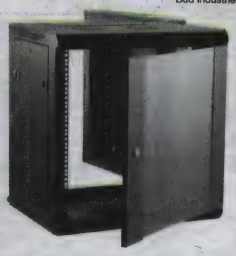
(7191)

WALL-MOUNT CABINETS -- EMPEROR SERIES

RoHS Compliant Available

Bud Industries, Inc.

- Steel construction
- EIA 310 compliant for 19" mount equipment
- Black textured powder finish



Furnished completely assembled with tempered glass front door and removable sides. Includes two pairs of fully adjustable panel mounting rails in center section, one fixed pair of mounting rails in the rear section, one ventilated shelf, and two fans installed in the top of the center section. Slots with readily removable covers are provided in the top and bottom of the rear section for easy cable installation. Sides are readily removable but come with key lock and with ventilation at top and bottom of cabinet. Four mounting slots provided in rear unit for rapid wall mounting.

Mfg. Part No.	Dimensions (in.) H x W x D	Rack U Height	Internal Depth (in.)	Stock No.	Price Each 1-4	5-9	10+
WM-5601	25.00 x 23.62 x 15.75	12	12	95M8565	346.23	328.70	317.75
WM-5611	25.00 x 23.62 x 21.65	12	17.9	95M8567	392.43	372.56	360.14
WM-5614	37.25 x 23.62 x 21.65	19	17.9	40T8343	487.57	462.88	447.45
WM-5616	51.34 x 23.62 x 21.65	27	17.9	95M8568	563.51	534.98	517.15

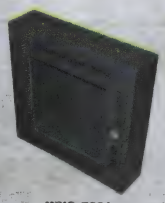
(112544)

WALL MOUNT NETWORK CABINETS

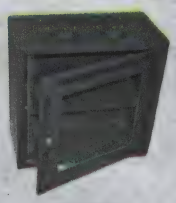
RoHS Compliant Available

Bud Industries, Inc.

- Sturdy and durable 16 GA steel construction.
- Furnished completely assembled with tempered glass front door with key lock and ventilation slots
- Front door can be mounted hinged left or right
- EIA 310D compliant for 19 inch rack-mount equipment
- Readily removable gland plate in the top and bottom for easy cable installation.
- Style A is supplied with one pair and Style B with two pairs of fully adjustable panel mounting rails
- Style B includes one ventilated and vertically adjustable shelf
- Style B includes two fans installed in the top
- 4 mounting slots provided in rear for rapid wall mounting



WNC-5631



WNC-5641

Wall mount network cabinet are high style and feature rich enclosures ideal for housing network and other electronic equipment.

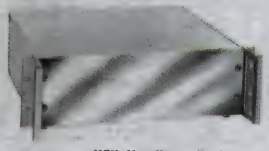
Mfg. Part No.	Style	Rack U Height	Dimensions (in.) H	W	D	Stock No.	Price Each 1-4	5-9
WNC-5631	A	12	23.62	23.62	3.66	64W0064	153.37	144.71
WNC-5641	B	12	23.62	23.62	4.76	64W0065	256.14	242.66

(209940)

VALULINE SERIES CABINETS

RoHS Compliant Available

Bud Industries, Inc.



With Handles

Without Handles

- Sides: .09" aluminum
- Front panel: 0.125" aluminum
- Base, rear, and top: 0.050" aluminum
- Handles: aluminum extrusions

Include 2 detachable 11 gauge steel rack mount brackets and rubber feet. Adhesive-backed paper protects panels and provides surface for laying out position for drilling or punching. Shipped unassembled. Modifications available, *contact*.

WITH HANDLES

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	5-9	10-24
HC-14097	1.75 x 17 x 8	52F6475	123.71	110.43	98.55
HC-14098	1.75 x 17 x 13	06M4715	138.38	123.54	110.24
HC-14099	3.5 x 17 x 8	06M4716	85.85	76.63	68.39
HC-14101	3.5 x 17 x 13	06M4718	167.18	149.24	133.18
HC-14102	5.25 x 12.75 x 13	06M4719	176.09	157.18	140.28
HC-14103	5.25 x 17 x 13	06M4720	172.31	153.82	137.27
HC-14104	7 x 17 x 13	99F1014	180.90	161.48	144.11
HC-14105	8.75 x 17 x 13	99F1015	189.57	169.22	151.02
HC-14106	10.5 x 17 x 13	06M4721	203.00	181.21	161.71
HC-14107	10.5 x 17 x 15	99F1017	212.05	189.29	168.92
HC-14108	12.25 x 17 x 15	06M4722	237.18	211.72	188.94
HC-14109	14 x 17 x 15	06M4723	250.02	223.18	199.17

WITHOUT HANDLES

NHC-14151	1.75 x 17 x 8	52F6474	89.33	79.74	71.16
NHC-14152	1.75 x 17 x 13	06M4736	105.12	93.84	83.74
NHC-14154	3.5 x 17 x 8	06M4738	89.57	79.95	71.35
NHC-14155	3.5 x 17 x 13	52F6482	115.14	102.78	91.72
NHC-14156	5.25 x 17 x 13	06M4739	135.41	120.87	107.87
NHC-14157	7 x 17 x 13	52F6486	164.30	146.67	130.89

BAIL

Bail is attached to specially designed front feet. In upright position tilts the cabinet and fits into clearance provided by feet when in retracted position. Necessary hardware included.

Mfg. Part No.	Width (in.)	For Use With	Stock No.	Price 1-4	5-9	10-24
BC-14215	15.5	17" Wide Cabinets	98F1909	20.27	17.73	16.16

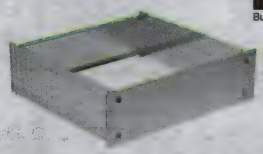
(7010)

RACK MOUNT CHASSIS

RoHS Compliant Available

Bud Industries, Inc.

- 19" width, 0.125" thick mill finish aluminum front panel with "Surface Shield" protection which provides surface for laying out drilling and punching positions
- 17.062" long, 0.090" thick aluminum side panels with mounting holes punched on 0.875" grid for flexibility in mounting components
- Adjustable 17" long, 0.090" thick aluminum rear panel



Order internal chassis and chassis covers separately below. Order handles listed in tables below separately online or call. Uses **mfg. part no. AS-5002-A** sliding mechanism and **mfg. part no. BAS-5106** mounting brackets; *ordered separately*. Modifications available, *go online or call*.

RACK MOUNT CHASSIS

Mfg. Part No.	Height (in.)	Depth (in.)	Handles	Stock No.	Price Each 1-4	5-9	10-24
RM-14212	5.25	17.19	H-9160-B	06M4780	65.17	59.92	53.18
RM-14213	7	17.19	H-9111-B	06M4781	74.56	68.56	60.85
RM-14214	8.75	17.19	H-9112-B	06M4782	89.53	82.32	73.06
RM-14215	10.5	17.19	H-9113-B	06M4783	105.71	97.20	86.27
RM-14222	5.25	22	H-9160-B	33C4158	73.35	67.44	59.86
RM-14223	7	22	H-9111-B	06M4784	86.05	79.12	70.22
RM-14224	8.75	22	H-9112-B	06M4785	104.75	96.32	85.49
RM-14225	10.47	22	H-9113-B	33C4161	124.85	114.80	101.89

INTERNAL CHASSIS

Mfg. Part No.	Height (in.)	Width (in.)	Weight (lb.)	Stock No.	Price Each 1-4	5-9	10-24
C-14242	4.281	16.812	0.75	06M4483	22.02	18.43	16.49
C-14243	7	16.812	1	05M4024	25.55	21.39	19.14
C-14244	8.75	16.812	1.5	06M4484	29.28	24.51	21.93
C-14245	10.5	16.812	1.75	05M6907	32.90	27.54	24.63

ACCESSORIES

Mfg. Part No.	Description	Chassis Depth (in.)	Stock No.	Price Each 1-4	5-9
TBC-14252	Solid Top or Bottom Cover	17.19	05M4430	31.68	26.50
TBC-14262	Ventilated Top or Bottom Cover	17.19	06M4876	35.42	29.63

CONTINUED

CABINETS & RACKS

RACK MOUNT CHASSIS (CONT.)

Mfg. Part No.	Description	Chassis Depth (in.)	Stock No.	Price Each 1-4	Price Each 5-9
● TBC-14253	Solid Top or Bottom Cover	22	05M4431	35.96	30.08
● TBC-14263	Ventilated Top or Bottom Cover	22	06M4877	37.99	31.78
● MB-14273	Rear Mounting Bracket Kit for Chassis	...	06M4732	34.43	28.67
● AS-5002-A	2-Piece Ball Bearing Slide	...	06M4415	37.59	33.81

(7033)

RACKMOUNT BOX

RoHS Compliant Available

Bud Industries, Inc.

- Made of black ABS plastic with a UL9-HB flammability rating
- Can be converted from a desktop configuration to a rack-mountable configuration
- Fully ventilated side panels
- Internal electonics can be mounted in either a horizontal position or on the front and/or rear panels

Applications include: computer, audio, test, communications and medical equipment. Modifications available online.

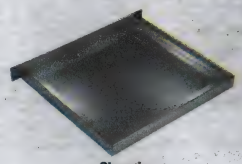
Mfg. Part No.	Dimensions (in.) H x W x D	Rack U Height	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-24
● PRM-14460	1.75 x 19 x 8	1U	77C5310	33.82	28.29	25.44
● PRM-14462	3.5 x 19 x 8	2U	77C5311	43.87	36.70	33.01
● PRM-14464	5.25 x 19 x 8	3U	77C5312	59.39	49.68	44.68

(72473)

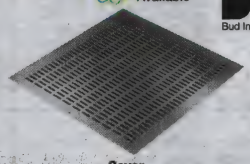
SMALL RACK MOUNT CHASSIS AND COVERS

RoHS Compliant Available

Bud Industries, Inc.



Chassis



Cover

Mfg. part no. CH-14400 thru **CH-14404** all-aluminum rack mount chassis available to fit standard 19″ wide cabinets. Natural finish. Chassis will accept **mfg. part no. AS-500X-A series** sliding mechanisms; *order separately on page 2340.* Modifications available online.

RACK MOUNT CHASSIS

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-24
● CH-14400	1.75 x 17 x 4	05M4042	39.99	35.95	33.32
● CH-14401	1.75 x 17 x 8	06M4498	47.43	42.64	39.52
● CH-14402	1.75 x 17 x 16	06M4499	69.21	62.22	57.67
● CH-14403	3.5 x 17 x 8	06M4500	66.83	60.08	55.69
● CH-14404	3.5 x 17 x 16	06M4501	85.84	77.17	71.53

VENTILATED CHASSIS COVERS

Mfg. Part No.	Dimensions (in.) W x D	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-24
● C-14430	17 x 4	05M4025	13.26	11.10	9.25
● C-14431	17 x 8	06M4485	21.50	18.00	15.00
● C-14432	17 x 16	06M4486	34.40	28.80	24.00

SOLID CHASSIS COVERS

● C-14440	17 x 4	06M4487	11.14	9.32	7.77
● C-14441	17 x 8	06M4488	17.40	14.56	12.13
● C-14442	17 x 16	05M4026	29.61	24.79	20.66

(6874)

SHOWCASE PORTABLE ENCLOSURES

RoHS Compliant Available

Bud Industries, Inc.

BB-1800-RB

Ideal as a portable enclosure or desktop instrument case in systems or racks. Lightweight, yet sturdy. Top, sides, and bottom constructed of 0.050″ aluminum; front panel 0.090″ aluminum. Rugged 0.050″ extruded aluminum frame. Side gussets provide added strength. Flexible recessed handle with ventilation slots beneath. Load from front or rear. Include front and rear panels and fold-away bail. All enclosures available in royal blue. Modifications available, *go online or call.*

BLACK TEXTURED FINISH WITH WHITE FRAME

Mfg. Part No.	Dimensions (in.) H x W x D	Weight (lbs.)	Stock No.	Price Each Each	Price Each 2-4	Price Each 5-9
● BB-1800-BT	6.44 x 5.50 x 11	3.75	06M4456	187.45	167.33	149.32
● BB-1801-BT	6.44 x 8.31 x 11	4.00	06M4458	198.72	177.38	158.30
● BB-1802-BT	8.19 x 5.50 x 11	3.75	06M4459	203.91	182.02	162.44

CONTINUED

SHOWCASE PORTABLE ENCLOSURES (CONT.)

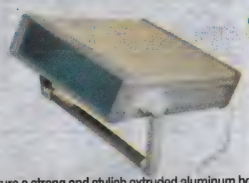
Mfg. Part No.	Dimensions (in.) H x W x D	Weight (lbs.)	Stock No.	Price Each Each	Price Each 2-4	Price Each 5-9
● BB-1803-BT	8.19 x 8.31 x 11	5.50	06M4460	207.26	185.02	165.11
● BB-1804-BT	8.19 x 11.06 x 11	5.75	93F676	224.34	200.26	178.71
● BB-1806-BT	9.94 x 8.31 x 11	5.25	93F679	218.13	194.72	173.77
● BB-1807-BT	9.94 x 8.31 x 15	6.25	06M4462	233.64	208.56	186.11
● BB-1809-BT	9.94 x 11.06 x 15	7.00	06M4464	235.41	210.14	187.53

ROYAL BLUE TEXTURED FINISH WITH WHITE FRAME

● BB-1800-RB	6.44 x 5.50 x 11	3.75	06M4457	191.95	171.35	152.90
● BB-1801-RB	6.44 x 8.31 x 11	4.00	10M5137	195.59	174.59	155.81
● BB-1803-RB	8.18 x 8.31 x 11	5.50	94F4924	205.64	183.57	163.82
● BB-1804-RB	8.19 x 11.06 x 11	5.75	06M4461	220.81	197.11	175.90
● BB-1807-RB	9.94 x 8.31 x 15	6.25	93F681	231.81	206.93	184.66
● BB-1809-RB	9.94 x 11.06 x 15	7.00	06M4465	241.06	215.18	192.03

(7184)

ALUMINUM INSTRUMENT CASES



RoHS Compliant Available

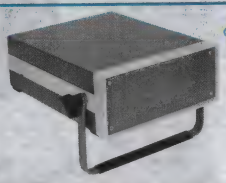
Bud Industries, Inc.

IA series instrument cases feature a strong and stylish extruded aluminum body in an earth tone finish with light brown plastic front and rear bezels. Removable front and rear natural aluminum panels with protective plastic film allow easy machining with protection from scratches. Extruded internal grooves for horizontal mounting of circuit board, chassis, or panel. Contains anti-skid feet and an adjustable locking handle in a light gray plastic and anodized aluminum finish.

Mfg. Part No.	Dimensions (in.) H	Dimensions (in.) W	Dimensions (in.) D	Stock No.	Price Each Each	Price Each 2-4	Price Each 5-9
● IA-6160	2.72	8.27	12.93	34M2358	115.80	86.71	77.76
● IA-6161	2.72	10.16	12.93	34M2359	134.74	100.90	90.48
● IA-6162	4.92	8.27	12.93	34M2360	141.70	106.11	95.16
● IA-6163	4.02	10.16	12.93	34M2361	174.75	130.85	117.34

(90495)

PORTABLE CABINETS



RoHS Compliant Available

Bud Industries, Inc.

For use as desktop instrument cases, in systems or as portable enclosures. Accommodate accessory chassis or 0.063″ thick PC boards. Top and bottom are 0.050″ aluminum; front panel 0.090″ aluminum. Removable top and bottom for access to dust-free interior. Carrying handle also a tilting bail. Royal blue textured body with white frame. Include 4 rubber feet. Modifications available, *go online or call.*

Mfg. Part No.	Dimensions (in.) H x W x D	Panel Space (in.) H x W	Stock No.	Price Each Each	Price Each 2-9
● TR-6100	3.5 x 8.31 x 10.75	3.25 × 8.05	25B6524	235.32	210.06
● TR-6101	5.25 x 8.31 x 13.25	5.00 × 8.05	86F920	247.98	221.36
● TR-6102	7 x 11.06 x 13.25	6.75 × 10.83	52M8831	290.72	259.52
● TR-6103	8 x 12 x 18.75	7.75 × 11.05	86F936	351.62	313.88

(7185)

PORTACAB ALUMINUM ENCLOSURES

RoHS Compliant Available

Bud Industries, Inc.

For bench or portable use. Front panel recessed 0.50″ and fits cabinet contour. Louvered sides. Welded back with opening. Reinforced, flexible handle recessed for stacking. Sturdy, lightweight 0.050″ aluminum body. Metallic-gray finish. Include 4 plastic feet. Modifications available online.

Mfg. Part No.	H × W × D (inches)	Rear Opening (inches)	Stock No.	Price Each 1-4
● WA-1540	8.00 × 6.12 × 8.00	2.00 × 4.50	06M4884	95.32
● WA-1541	9.00 × 8.12 × 12.00	2.00 × 6.50	06M4885	131.60
● WA-1542	8.00 × 10.12 × 8.00	2.00 × 8.50	06M4886	114.65
● WA-1543	11.00 × 11.12 × 18.00	2.00 × 9.50	06M4887	179.48

(7186)

SLOPE SERIES ENCLOSURES

RoHS Compliant Available

Bud Industries, Inc.

SC-12100 SC-12101

Sleek, contemporary design for excellent visibility of panel-mounted components. 2-piece construction: 0.090″ aluminum base with black textured finish and 0.050″ aluminum cover with smooth white finish. 20° front slope. **Mfg. part no. SC-12100** has single centered knockout in rear; **mfg. part no. SC-12101** has double knockout. Include 4 rubber feet. Modifications available online.

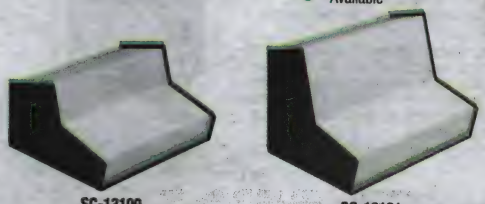
Mfg Part No.	Base H × W × D (inches)	Panel Space H × W × D (inches)	Stock No.	Price Each
SC-12100	4.25 × 4.94 × 5.00	4.13 × 4.75 × 3.06	06M4818	43.11
SC-12101	3.25 × 11.94 × 10.00	3.06 × 11.75 × 8.44	06M4819	77.47

(7181)

COMPUCAB SERIES ENCLOSURES

RoHS Compliant Available

Bud Industries, Inc.



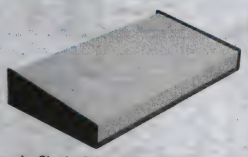
SC-13100 SC-13101

Standard dual-slope enclosures with keyboard styling are ideal for a variety of instruments. 120° middle, 90° top and bottom front slopes. Sturdy 0.090″ aluminum base and sides have black textured finish; 0.050″ aluminum back panel and cover have smooth white finish. Maximum visibility, no exposed screws on front panel area. Knockouts in louvered rear panel. 4 rubber feet included. Modifications available online.

Mfg. Part No.	Design	Base H x W x D (inches)	Panel Width Opening (inches)	Stock No.	Price Each
SC-13100	2-Piece	5.34 x 9.93 x 8.68	9.75	06M4820	75.35
SC-13101	3-Piece	9.95 x 13.93 x 10.75	13.75	06M4821	143.83

(7182)

KEYBOARD ENCLOSURES



RoHS Compliant Available

Bud Industries, Inc.

House the most popular keyboards. Sturdy, lightweight 0.090″ aluminum base with gray textured finish; 0.050″ aluminum cover with smooth white finish. Include 4 scratch-resistant rubber feet. **Mfg. part no. KB-13200** has two 0.50″ knockouts in rear; **mfg. part nos. KB-13201** and **KB-13202** have two 0.875″ rear knockouts. Modifications available, *go online or call.*

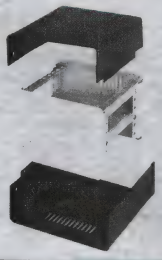
Mfg. Part No.	Top Angle	Dimensions (in.) H × W × D	Stock No.	Price Each 1-4	5-9	10-24
KB-13200	7° 46′	2.47 x 7.22 x 5.75	81F021	46.94	42.19	37.45
KB-13201	7° 40′	2.75 x 12.84 x 7	06M4727	86.33	77.60	68.88
KB-13202	7° 32′	3 x 17.47 x 9	81F019	104.89	94.28	83.68

(7070)

CHAMPION SERIES VENTILATED CABINETS

RoHS Compliant Available

Bud Industries, Inc.



Designed for maximum interior space. Top, bottom, front and rear panels constructed of 0.050″ aluminum; ventilation slots on rear and bottom panels. Removable top and bottom for easy access to components. 8 self-threading screws for easy assembly. No exposed screws on front or rear panels. Top and bottom have black textured finish; front and rear are smooth white. 4 rubber feet included. Modifications, as well as chassis kits and support angles, are also available, *go online or call.*

Mfg. Part No.	Dimensions (in.) H × W × D	Inside Width (In.)	Inside Depth (In.)	Stock No.	Price Each 1-4	5-9
CS-11202-BT	4 x 6 x 6	5.38	5.13	06M4508	82.16	68.67
CS-11204-BT	4 x 9 x 8	8.38	7.13	87F1784	100.82	84.25
CS-11206-BT	4 x 12 x 8	11.38	7.13	06M4509	106.00	88.59
CS-11208-BT	6 x 9 x 8	8.38	7.13	87F1786	109.91	91.85

CONTINUED

CHAMPION SERIES VENTILATED CABINETS (CONT.)

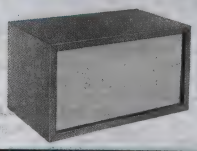
Mfg. Part No.	Dimensions (in.) H × W × D	Inside Width (In.)	Inside Depth (In.)	Stock No.	Price Each 1-4	5-9
CS-11210-BT	6 x 12 x 8	11.38	7.13	06M4510	114.63	95.78
CS-11212-BT	6 x 12 x 10	11.38	9.13	06M4511	122.28	102.18
CS-11214-BT	8 x 9 x 8	8.38	7.13	87F1789	119.14	99.56
CS-11216-BT	8 x 12 x 10	11.38	9.13	87F1790	131.85	110.19

(7069)

FUTURA SERIES STEEL CABINETS

RoHS Compliant Available

Bud Industries, Inc.



Versatile housing for small equipment and instruments. Straight front vertical panel. 1-piece, 18-gauge steel top and sides. Sides fit into flanges on base. Chassis may be attached to base, front or rear panels. Removable sides and top for easy access to interior. Royal blue textured finish body and rear panel; white textured finish front panel. Include 4 rubber feet. Modifications available, *go online or call.*

Mfg. Part No.	Dimensions (in.) H × W × D	Front Panel	Stock No.	Price Each 1-4	5-9	10-24
MD-1960	7 × 13 × 8″	Vertical	06M4733	87.31	78.48	69.66
MD-1961	8 × 14 × 9″	Vertical	06M4734	105.44	94.77	84.11
MD-1962	8 × 16 × 9″	Vertical	06M4735	114.76	103.14	91.54

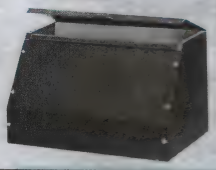
(7071)

SLOPING PANEL CABINETS

RoHS Compliant Available

Bud Industries, Inc.

- Removable front panel
- Hinged top for easy access to components
- Metallic-gray finish
- (8) #6-32 x ⅜″ screws and (4) F-3581 rubber feet are included



Order **AC series** *chassis separately on page 2315.* (8) #6-32 x ⅜″ screws and (4) F-3581 rubber feet are included. Additional rubber feet are available *on page 2341.* Modifications available, *go online or call.*

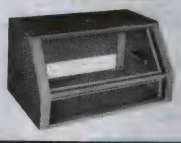
Mfg. Part No.	Dimensions (in.) H × W × D	Fits Chassis	Stock No.	Price Each Each	2-4	5-9
C-1584	6.5 x 7.06 x 7.31	AC-402	06M4490	76.02	57.10	50.69
C-1587	8 x 8.06 x 8	AC-405	06M4493	82.72	62.13	55.15
C-1585	6.5 x 9.06 x 7.31	AC-405	06M4491	73.28	55.04	48.85
C-1588	8 x 10.06 x 8	AC-406	91F794	91.03	68.38	60.69
C-1586	6.5 x 11.06 x 7.31	AC-1413	06M4492	83.39	62.64	55.60
C-1894	8 x 14.06 x 8	AC-409	06M4496	111.13	83.48	74.09
C-1892	8 x 13.06 x 8	AC-407	06M4494	118.96	89.36	79.31
C-1893	10 x 18.06 x 10.5	AC-415	06M4495	175.62	131.92	117.08

(7183)

SLOPING PANEL PRESTIGE CABINETS

RoHS Compliant Available

Bud Industries, Inc.



Rugged 16-gauge construction with safety-shielded slot handles. Perforated top opens completely. Install or remove 19″ panels by simply removing panel trim bar. 2.5 × 18″ rear opening for easy cable or control access. Metallic-gray finish. Modifications available, *go online or call.*

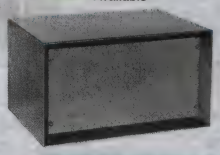
Mfg. Part No.	Dimensions (in.) H × W × D	Panel Space (in.) Vertical	Sloping	Stock No.	Price Each Each	2-4
C-1555	11.906 x 22 x 14.187	3.5	7.0	10M5140	347.73	310.41
C-1557	14.781 x 22 x 16.25	3.5	10.5	06M4489	385.78	344.37

(7187)

SHADOW SERIES CABINETS

RoHS Compliant Available

Bud Industries, Inc.



Extremely versatile—front, rear and bottom panels can be removed for installation or servicing. 1″ recessed front panel and beveled edges of cabinet body help prevent accidental movement of controls, knobs, and switches. 18-gauge steel top, sides, bottom; 16-gauge steel panels. Metallic-gray finish. Include 4 rubber feet. Aluminum chassis also available; *order separately on page 2315.* Modifications available, *go online or call.*

Mfg. Part No.	Dimensions (in.) H × W × D	Fits Chassis	Stock No.	Price Each Each	2-4	5-9
SB-2140	8 x 14.25 x 10	AC-424	91F892	115.55	103.15	92.05
SB-2141	7.5 x 13.25 x 9	AC-407	06M4816	100.84	90.02	80.33
SB-2142	9.5 x 17 x 11	AC-411	91F894	127.09	113.45	101.24
SB-2143	6 x 15.5 x 9	AC-409	06M4817	115.55	103.15	92.05

(7080)

CABINETS & RACKS

BUDRACK PROFESSIONAL SERIES CABINET RACKS

RoHS Compliant Available

Bud Industries, Inc.

- Steel construction
- EIA 310 compliant for 19" mount equipment
- Vented at top and bottom of sides
- Black textured powder finish
- Comes fully assembled in a wooden crate to eliminate freight damage

Furnished complete with ventilated tempered glass front door, locking rear door, removable sides. Includes two pairs of fully adjustable panel mounting rails, top mount fan box (two fans for 23" depth, four fans for 31" depth), ventilated shelves (one shelf in the 24U high cabinet, two shelves in the 40U and 45U cabinets), and casters. Large cutout in base comes covered by 2.5" deep metal cover plates. Two additional 13 x 2.5" cutouts in front and rear of the base also come with readily removable covers.

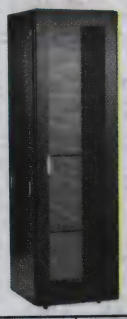
Mfg. Part No.	Dimensions (in.) H x W x D	Rack U Height	Internal Depth (in.)	Stock No.	Price Each 1-2	Price Each 3-4
● BRP-12202	49.40 x 23.62 x 23.62	24	20.88	95M8559	859.95	815.85
● BRP-12206	77.40 x 23.62 x 23.62	40	20.88	95M8560	956.60	907.54
● BRP-12208	86.15 x 23.62 x 23.62	45	20.88	95M8561	1029.45	976.66
● BRP-12212	49.40 x 23.62 x 31.50	24	28.75	95M8562	913.38	866.54
● BRP-12216	77.40 x 23.62 x 31.50	40	28.75	95M8563	1010.42	958.60
● BRP-12218	86.15 x 23.62 x 31.50	45	28.75	95M8564	1099.41	1043.03

(112543)

SERVER RACKS -- PROFESSIONAL SERIES

RoHS Compliant Available

Bud Industries, Inc.



- Welded construction with 1700 lb weight capacity
- Fully ventilated locking front door that can be mounted left or right
- Split rear door with solid triple point latching system
- Easily removable sides for quick assembly access
- Covered slot in top and open base for convenient cable access
- Vented at top and bottom of sides
- Comes fully assembled in a crate to eliminate freight damage
- Black finish

Includes two pairs of full adjustable panel mounting rails, fan box with four fans, casters, ventilated shelves (one with 27U cabinet and two with 42U cabinet), and six cable management brackets.

Mfg. Part No.	Dimensions (in.) H x W x D	Rack U Height	Internal Depth (in.)	Stock No.	Price Each 1-2	Price Each 3+
● SRP-8131	52.32 x 23.62 x 35.43	27	28.19	95M8974	887.49	841.98
● SRP-8141	52.32 x 23.62 x 43.30	27	36.06	95M8976	1111.89	1054.87
● SRP-8134	78.70 x 23.62 x 35.43	42	28.19	95M8975	1117.59	1060.28
● SRP-8144	78.70 x 23.62 x 43.30	42	36.06	95M8977	1240.83	1177.20
● SRP-8137	83.95 x 23.62 x 35.43	45	28.19	40T8261	1220.94	1158.33
● SRP-8147	83.95 x 23.62 x 43.30	45	36.06	40T8262	1354.08	1284.64

(112545)

SERVER CABINET SYSTEMS

RoHS Compliant Available

Bud Industries, Inc.

- Extra deep 36" and 43" cabinets accept most manufacturer's servers; panel space: 78.75 x 19"
- Front Econoglass door is ventilated; sides, top and rear door are perforated for maximum air flow
- Cable access ports in both top and bottom panels
- 2 pairs of fully-adjustable universal spacing mounting rails
- Welded frame
- Add-A-Rack system permits building a series of racks into one integral system

Cabinets are finished in textured black powder coat. Add-A-Rack units are available, identical to the main cabinet but allows the economical combination of 2 or more cabinets. Order one main cabinet; successive bays may be ordered as Add-A-Rack versions. Modifications available online.

CABINETS

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price 1-4
DC-8106	84.06 x 24 x 35.43	57J6240	4631.55

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-2
● FN-1282	Top Mount Exhaust Fan	52M8820	176.82
● RL-7767	Adjustable Stem Leveler	91F103	5.16
● RC-7758-PR	3.25" Ball Bearing Caster (1 pair)	06M4777	35.21

CONTINUED

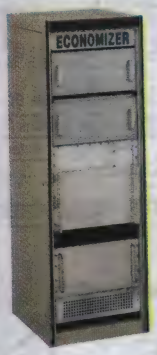
SERVER CABINET SYSTEMS (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each 1-2
● POS-194-S	Rack Mount Power Outlet Strip	99B1509	72.25
● 9260	12-24 x 0.5" Phillips, Steel Machine Screw, Zinc Plate	05M4607	0.35
● 9621	12-24 U-Type Steel Clip Nut, Black Finish	94F4893	0.63
● 307	12-24 Cage Nut, Zinc Plate	30C9829	2.03
● 851DLH	M6 Cage Nut, Zinc Plate	02P6324	1.88

(68995)

ECONOMIZER™ 19" UPRIGHT CABINET RACKS

Bud Industries, Inc.



- Rugged welded frame constructed of 14-gauge steel vertical rails
- Cabinet sides and door feature ventilating louvers
- Ventilated cabinet top has a perforated area to accept Bud **FN-1282** 10" exhaust fan; *go online or call*
- 16-gauge solid top and bottom rail supports
- 20-gauge steel side panels and rear door with key that opens 180° and can be hinged left or right
- Fully adjustable, 12-gauge steel panel mounting rails tapped 10-32 in front on E.I.A. universal spacing
- Bottom pierced for RC casters
- Four 1.109" knockouts and one 8.5" diameter hole provide cable access

24" versions also available. **RC series** casters and Economizer doors, *ordered separately online or call.* Turnkey cabinet assembly available. A sampling of suggested cabinet rack accessories are available online. For full line of accessories *go online or call* regarding above and additional modifications.

NON-VENTILATED RACKS

Mfg. Part No.	Dimensions (in.) Panel Size	H	D	W	Sand Textured Stock No. S	Royal Blue Textured Stock No. RB	Black Textured Stock No. BT	Price Each 1-4
ER-16502	42	47.31	18.5	17	89F1129	89F1099	25B5859	663.72
ER-16504	61.25	66.56	18.5	17	89F1131	89F1101	25B5861	783.69
ER-16515	70	75.31	25.5	24	89F1137	89F1107	25B5867	895.81
ER-16521	21	25.31	30.75	29.25	99B1289	99B1288	99B1287	747.15
ER-16522	42	47.31	30.75	29.25	89F1139	89F1109	25B5869	784.52
ER-16523	52.5	57.81	30.75	29.25	89F1140	89F1110	25B5870	820.84
ER-16524	61.25	66.56	30.75	29.25	89F1141	89F1111	25B5871	916.20

VENTILATED RACKS

Mfg. Part No.	Dimensions (in.) Panel Size	H	D	D	Sand Textured Stock No. S	Royal Blue Textured Stock No. RB	Black Textured Stock No. BT	Price Each 1-4
ER-16603	52.5	57.81	18.5	17	50F9644	50F9659	25B5930	772.90
ER-16612	42	47.31	25.5	24	50F9648	50F9663	25B5934	800.30
ER-16614	61.25	66.56	25.5	24	50F9650	50F9665	25B5936	904.65
ER-16615	70	75.31	25.5	24	50F9651	50F9666	91B6423	941.87
ER-16616	78.75	84.06	25.5	24	50F9652	50F9667	25B5937	993.28
ER-16622	42	47.31	30.75	29.25	50F9653	50F9668	25B5938	847.72
ER-16623	52.5	57.81	30.75	29.25	50F9654	50F9669	25B5939	884.11
ER-16624	61.25	66.56	30.75	29.25	50F9655	50F9670	25B5940	979.47
ER-16625	70	75.31	30.75	29.25	50F9656	50F9671	93B7076	1002.42
ER-16626	78.75	84.06	30.75	29.25	50F9657	50F9672	25B5941	1089.54

(82526)

CABINET RACK ACCESSORIES

RoHS Compliant Available

Bud Industries, Inc.

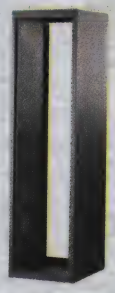
Mfg. Part No.	Description	Stock No.	Price Each 1-4
● RL-7767	Adjustable Stem Leveler	91F103	5.16
● FT-1170-WH	9-Position Fan Tray	06M4714	189.58
● PA-1101-MG	1.75" High Surface Shield Panel for 19" Racks	91F388	14.32
POS-66	6 Outlet Power Strip	81F4473	84.76
● FN-1282	Top Mount Exhaust Fan	52M8820	176.82
● SH-2392	Ventilated Sliding Shelf	06M4832	125.91
FC-1283	36" Power Cord for Axial Fans w/ 0.11" Wide Leads	99B1308	12.13

(82496)

VALURACK UPRIGHT CABINET RACK

RoHS Compliant Available

Bud Industries, Inc.



- Ready-to-use capability
- Welded together strength and sturdiness
- EIA-310 compliant
- Durable black texture powder-coated finish

VR series feature integral, full height, front panel mounting rails with EIA universal spaced mounting holes. Panel mounting rails are located in the front of the cabinet and are recessed 1". Welded-in supports allow for mounting additional adjustable panel mounting rails. Large 10" square hole in the bottom of the cabinet, along with 1.11" diameter knockouts provides cable access. Bottom of cabinet is pierced for use with casters or levelers. Top is perforated for use with 10" exhaust fan. Suggested 700# equipment load capacity and higher when used in conjunction with adjustable panel mounting rails for 4-point equipment mounting. A sampling of suggested cabinet rack accessories are available *on page 2336*. For full line of accessories, go online. Modifications available, *go online or call*.

22" EXTERNAL WIDTH, 26" EXTERNAL DEPTH

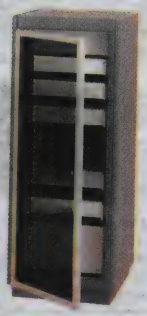
Mfg. Part No.	Dimensions (in.) Panel Space	Dimensions (in.) External Height	Optional Mounting Rails	Stock No.	Price Each 1-2
VR-8924	61.25 x 19	66.56	PMR-9452	45J0128	564.30
VR-8925	70 x 19	75.31	PMR-9453	45J0129	634.43
VR-8926	78.75 x 19	84.06	PMR-9454	45J0130	736.43

(82536)

UPRIGHT CABINET RACKS

RoHS Compliant Available

Bud Industries, Inc.



Racks are accessible from the front or rear. Construction: welded 14-gauge steel frame with "U" shaped 16-gauge panel mounting rail supports. Dimensions: 24 1/16" outside width. Racks with 22" outside depth (C) have an 18 5/16 x 17" opening at the top. Racks with 25 1/2" outside depth (C) have an 18 5/16 x 20 1/2" opening on top. 20-gauge door. 18-gauge sides and top. Front and rear panel mounting rails tapped #10-32 on E.I.A. Universal spacing. Accommodates 19" panels. 1.09" diameter knockout holes in base. One door and two pairs of fully adjustable mounting rails are included. 24" panel space upright rack available by special order; *go online or call*. Caster brackets pierced for **RC-7758** casters available *on page 2340*. Please see the most popular cabinet and accessories *on page 2336*. For full line of accessories, go online. Modifications available online.

CABINET RACKS - 22" OUTSIDE DEPTH; 20 1/2" INSIDE DEPTH

Gray Textured Mfg. Part No.	Gray Textured Stock No.	Royal Blue Textured Mfg. Part No.	Royal Blue Textured Stock No.	Dimensions (in.) Height	Dimensions (in.) Panel Space	Wgt. (lbs.)	Price Each
60-2300-GT	92F900	60-2300-RB	89F4228	29.62	21	112	1143.48
60-2301-GT	92F901	60-2301-RB	96F7128	40.12	31.5	137	1246.29
60-2302-GT	92F902	60-2302-RB	89F6076	50.62	42	162	1410.63
60-2304-GT	92F904	60-2304-RB	89F6078	69.87	61.25	215	1673.73
CABINET RACKS - 25 1/2" OUTSIDE DEPTH; 24" INSIDE DEPTH							
60-2307-GT	92F907	60-2307-RB	89F6081	29.62	21	123	1188.49
60-2310-GT	92F910	60-2310-RB	89F6083	61.12	52.5	202	1562.66
60-2312-GT	92F912	60-2312-RB	89F6085	78.62	70	231	1734.96

30 SERIES EXTRA DEEP UPRIGHT CABINET RACKS
Dimensions: 24 1/16" outside width; 30 3/4" outside depth; clear inside depth 29 1/4"; top opening 18 5/16" x 25 3/4".

Gray Textured Mfg. Part No.	Gray Textured Stock No.	Royal Blue Textured Mfg. Part No.	Royal Blue Textured Stock No.	Dimensions (in.) Height	Dimensions (in.) Panel Space	Wgt. (lbs.)	Price Each
30-2302-GT	99F1024	30-2302-RB	89F6070	50.62	42	202	1497.14
30-2303-GT	99F1025	30-2303-RB	89F6071	61.12	52.5	225	1644.09
30-2304-GT	98F4236	30-2304-RB	89F6072	69.87	61.25	245	1599.08
30-2504-GT	25B6555	30-2504-RB	25B6556	69.25	61.25	230	1364.54
30-2506-GT	25B6559	30-2506-RB	25B6560	86.75	78.75	269	1630.13

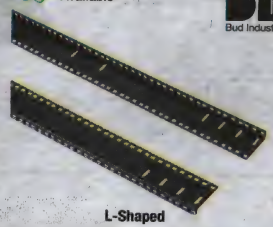
(7020)

MOUNTING RAILS FOR RACKS

RoHS Compliant Available

Bud Industries, Inc.

Standard



L-Shaped

12-gauge steel panel mounting rails for accessories that require 2 sets of rails. Standard panel mounting rails **sold in packages of 2**. L-shaped panel mounting rails **sold in packages of 4**. Modifications available, *go online or call*.

CONTINUED

MOUNTING RAILS FOR RACKS (CONT.)

STANDARD PANEL MOUNTING RAILS

Mfg. Part No.	Panel Space (in.)	Stock No.	Price per Pkg. 1-4	Price per Pkg. 5-9	Price per Pkg. 10-24
PMR-9448	21.00	06M4757	65.55	58.92	52.30
PMR-2331	24.50	95F6417	60.79	54.64	48.50
PMR-9449	31.50	06M4758	75.35	67.73	60.12
PMR-9450	42.00	06M4759	79.30	71.28	63.27
PMR-9451	52.50	17M9931	90.49	81.33	72.18
PMR-9452	61.25	06M4760	98.26	88.32	78.39
PMR-9453	70.00	06M4761	107.43	96.56	85.70
PMR-9454	78.75	06M4762	113.92	102.40	90.88
L-SHAPED PANEL MOUNTING RAILS					
PMR-9483	70.00	06M4763	184.92	166.22	147.52
PMR-9484	78.75	06M4764	195.77	175.96	156.17

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
307	12-24 Cage Nut, Zinc Plate	30C9829	2.03
851DLH	M6 Cage Nut, Zinc Plate	02P6324	1.88
9260	12-24 x 0.5" Phillips, Steel Machine Screw, Zinc Plate	05M4607	0.35

(6968)

ALUMINUM OPEN RELAY RACKS

RoHS Compliant Available

Bud Industries, Inc.

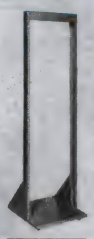
Ideal for installation where easy access to components is a top priority. Built for solid, trouble-free service, these aluminum racks are available in two heights: 42" and 77" with 19" and 23" wide panel spaces. Panel mounting holes are #12-24 tapped on E.I.A. universal spacing, on both front and rear flanges. Racks have been tested to 1000-lb. equipment load capacity. *Order shelves separately on page 2338*. Modifications available online.

77" PANEL SPACE HEIGHT

Mfg. Part No.	Panel Space H x W (in.)	Finish	Height (in.)	Wt. (lbs.)	Stock No.	Price Each 1-4	Price Each 5-9
ARR-1272-BT	77 x 19	Black	84.125	37	25B5648	280.88	235.62
ARR-1272-NF	77 x 19	Unfinished	84.125	37	05M3893	253.20	212.40
ARR-1294-BT	77 x 23	Black	84.125	40	91F3872	378.11	317.18
42" PANEL SPACE HEIGHT							
ARR-1276-BT	42 x 19	Black	50	27	06M4411	246.53	206.81
ARR-1276-NF	42 x 19	Unfinished	50	27	91F3862	226.87	190.31

(6961)

STEEL OPEN RELAY RACKS



RR-1263-MG

RoHS Compliant Available

Bud Industries, Inc.

Ideal for telecommunications installations where easy access to components is necessary. These ruggedly constructed chassis-type base and supporting angles. Rails tapped #10-32 on EIA universal spacing. 19 31/32"W x 22"D base drilled for **type RC** casters, *ordered separately below*. Racks are shipped unassembled. Modifications available, *go online or call*.

Mfg. Part No.	Color	Panel Space H x W (in.)	Height (in.)	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-24
RR-1363-MG	Grey	36.75 x 19	40.88	91F1743	231.10	216.73	206.28
RR-1264-MG	Grey	66.5 x 19	70.63	91F1741	260.92	244.70	232.91
RR-1364-MG	Grey	71.75 x 19	75.88	91F1744	266.71	250.13	238.08
RR-1263-BT	Black	31.5 x 19	35.63	93F4046	217.14	203.64	193.83
RR-1264-BT	Black	66.5 x 19	70.63	93F4047	260.92	244.70	232.91
RR-1364-BT	Black	71.75 x 19	75.63	93F4049	260.46	244.27	232.50
RR-1366-BT	Black	77 x 19	81.13	93F4050	266.12	249.59	237.56

SCREWS

Mfg. Part No.	Description	Stock No.	Price Each 1-4
7346	10-32 x 0.62" Phillips, Truss Head, Steel Screw, Zinc Plate	06M4902	0.10

CASTERS

Mfg. Part No.	Description	Stock No.	Price per Pkg. 1-9
RC-7758-PR	3.25" Ball Bearing Caster (1 pair)	06M4777	35.21

(79089)

CABINETS & RACKS

HEAVY-DUTY STEEL OPEN RELAY RACKS

RoHS Compliant Available

Bud Industries, Inc.

These heavy-duty racks are designed to be bolted to the floor. 20⅜"W x 12¾"D base. Panel mounting holes drilled and tapped #12-24. Black textured finish. Racks are shipped unassembled. Modifications available online.

Mfg. Part No.	Panel Space H x W (in.)	Height (in.)	Stock No.	Price Each 1-4
● RR-1265	x 19	72.25	25B6468	351.17

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● 9260	12-24 x 0.5" Phillips, Steel Machine Screw, Zinc Plate	05M4607	0.35

(79090)

EXTRA-STURDY STEEL OPEN RELAY RACKS

RoHS Compliant Available

Bud Industries, Inc.

These extra-sturdy racks constructed of 14- and 12-gauge steel with metallic-gray and black textured finish. 8"-deep welded "U" member and triangular brackets hold upright to 12-gauge steel, 20⅞"W x 26"D chassis-type base. Panel mounting rails tapped at #10-32 on E.I.A. universal spacing. Racks are shipped unassembled. Base drilled for **type RC** casters, *ordered separately on page 2340*. Modifications available online.

RR-1367-MG

Mfg. Part No.	Panel Space H x W (in.)	Finish	Height (in.)	Stock No.	Price Each 1-4	5-9	10-24
● RR-1367-BT	61.25 x 19	Black	64.63	93F642	463.74	413.96	398.24
● RR-1368-BT	7019 x	Black	73.37	94F4915	505.32	451.08	433.95
● RR-1369-BT	77 x 19	Black	80.45	70B9273	509.94	455.20	437.92
● RR-1367-MG	61.25 x 19	Grey	64.63	91F1746	463.74	413.96	398.24
● RR-1368-MG	70 x 19	Grey	73.37	91F1747	493.48	440.51	423.78
● RR-1369-MG	77 x 19	Grey	80.37	91F1748	509.94	455.20	437.92

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● 7346	10-32 x 0.62" Phillips, Truss Head, Steel Screw, Zinc Plate	06M4902	0.10
● RC-7758-PR	3.25" Ball Bearing Caster (1 pair)	06M4777	35.21

(79091)

TABLETOP RELAY RACKS

RoHS Compliant Available

Bud Industries, Inc.

Chassis-type base for mounting heavy components. Supporting angles provide steady support. Panel mounting rails are recessed so that standard 19" panel will fit flush with front; tapped #10-32 on EIA universal spacing. 20.375 x 12" base. *Order panels separately on pages 2340-2341.* Modifications available online.

BLACK TEXTURED

Mfg. Part No.	Panel Space H x W (inches)	Wt. (lbs.)	Stock No.	Price Each 1-14	15-24	25-34
● RR-1248-BT	21 x 19	14.25	91F030	140.36	125.29	111.81
● RR-1249-BT	28 x 19	16.75	05M4331	150.99	134.78	120.28

METALLIC GRAY

● RR-1248-MG	21 x 19	14.25	91F677	140.36	125.29	111.81
● RR-1249-MG	28 x 19	16.75	06M4786	154.61	138.01	123.17

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-4
● 7346	10-32 x 0.62" Phillips, Truss Head, Steel Screw, Zinc Plate	06M4902	0.10

(6962)

DOUBLE RACKS AND ACCESSORIES

RoHS Compliant Available

Bud Industries, Inc.

- Lightweight but sturdy aluminum and steel construction
- Panel space: standard 19" x 77" (44-U)
- 4-point mounting for heavier networking equipment
- 4-post construction with dual mounting surfaces, along with three universally usable and common depths, provides numerous equipment mounting possibilities
- Depth extenders provide wiring ladder and/or cableway mounting provisions
- Floor mounting holes provided for maximum sturdiness and security
- Optional **HW-8097** Add-A-Rack kit allows joining of multiple racks
- Assembles quickly and easily with one ⅝" wrench
- Durable black textured powder coat finish
- Meets EIA-310 standards
- 1100 lb. weight load capacity
- Modifications available, *go online or call*

DR-8092

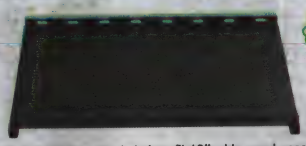
Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each
● DR-8092	84 x 20.25 x 24	06M4615	594.91
● DR-8093	84 x 20.25 x 30	06M4616	598.65

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each 1-2
● PMR-8088	Adjusting Panel Mounting Rails, Panel Space: 19" x 75.25"	10M6200	105.00
● SH-8096	Adjustable Shelf, Panel Width 19", Shelf Depth 24-36"	06M4835	102.65

(72475)

STATIONARY AND SLIDING SHELVES



RoHS Compliant Available

Bud Industries, Inc.

Ventilated and non-ventilated black textured shelves fit 19" wide panel spaces and all cabinet rack depths. All are 16-gauge steel and include necessary mounting hardware. Shelves allow sufficient room in rear for cables and power outlet strips. Sliding shelves are flanged on all four sides for added support. 24" wide panel available. Require 2 pairs of adjustable mounting rails in the cabinet to install. Modifications available, *go online or call.*

STATIONARY SHELVES

Mfg. Part No.	Dimensions (in.) W x D	Ventilated	Stock No.	Price Each 1-4	5-24	25-49
● SH-2383	17.91 x 14.25	Yes	06M4827	66.72	62.14	59.22
● SH-2384	17.91 x 17.75	Yes	91F9872	71.32	66.42	63.30
● SH-2385	17.91 x 21.25	Yes	91F9873	72.48	67.50	64.33
● SH-2386	17.91 x 26.5	Yes	17M9935	78.56	73.16	69.73
● SH-2379	17.9 x 14.25	No	06M4825	65.92	61.39	58.50
● 60-2380	17.9 x 19.25	No	05M4595	65.43	60.93	58.07
● 60-2381	17.9 x 22.75	No	06M4901	66.72	62.14	59.22
● SH-2382	17.9 x 26.5	No	06M4826	77.29	71.99	68.60

SLIDING SHELVES

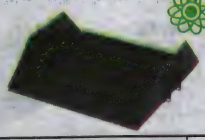
Mfg. Part No.	Dimensions (in.) W x D	Travel (in.)	Ventilated	Stock No.	Price Each 1-4	5-24	25-49
● SH-2391	17.9 x 14.25	8	Yes	06M4831	117.56	109.48	104.34
● SH-2392	17.91 x 17.75	12	Yes	06M4832	125.91	117.26	111.75
● SH-2393	17.91 x 21.25	15	Yes	06M4833	129.20	120.32	114.67
● SH-2394	17.91 x 26.5	19	Yes	05M4390	139.44	129.86	123.76
● SH-2387	17.91 x 14.25	8	No	06M4828	115.43	107.49	102.44
● SH-2388	17.91 x 17.75	12	No	06M4829	120.96	112.65	107.36
● SH-2389	17.91 x 21.25	15	No	06M4830	127.12	118.38	112.82
● SH-2390	17.91 x 26.5	19	No	17M9936	140.66	130.99	124.84

(6971)

CENTER-MOUNTED RELAY RACK SHELVES

RoHS Compliant Available

Bud Industries, Inc.



- Mounts between uprights on all standard 19" panel widths
- 16-gauge steel construction
- Dimensions: 19D x 5.25"H
- Modifications available online.

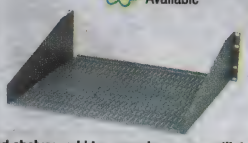
Black Textured Mfg. Part No.	Black Textured Stock No.	Metallic Gray Mfg. Part No.	Metallic Gray Stock No.	Description	Price Each 1-4
● SA-1765-BT	06M4809	● SA-1765-MG	06M4810	Nonventilated	85.78

(7013)

OPEN RELAY RACK SHELVES

RoHS Compliant Available

Bud Industries, Inc.



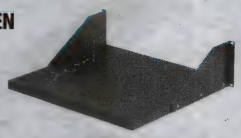
- One-piece, 16-gauge steel
- Shelves fit 19″ and 23″ wide panel spaces and 5.25″ panel heights
- Flanged for added support
- All mounting hardware included
- Modifications available online

NOTE: Even type numbers are nonventilated shelves; odd type numbers are ventilated shelves.

Metallic Gray Mfg. Part No.	Metallic Gray Stock No.	Black Textured Mfg. Part No.	Black Textured Stock No.	W x D (inches)	Price Each 1-4
SA-1749-MG	06M4798	SA-1749-BT	05M4352	17.62 x 10	58.30
SA-1750-MG	06M4800	SA-1750-BT	06M4799	17.62 x 15	70.18
SA-1751-MG	06M4802	SA-1751-BT	06M4801	17.62 x 15	75.12
SA-1752-MG	06M4804	SA-1752-BT	06M4803	17.62 x 20	82.24
SA-1753-MG	06M4806	SA-1753-BT	06M4805	17.62 x 20	89.18

(6964)

ADJUSTABLE OPEN RACK SHELVES



RoHS Compliant Available

Bud Industries, Inc.

16-gauge steel shelves fit in 19″ wide panel spaces. Adjustable for depth within rack and flanged for added support. Mounting brackets and hardware included. Supports 150lbs.

W x D (in.)	Weight (lbs.)	Metallic Gray Mfg. Part No.	Metallic Gray Stock No.	Price Each 1-4	Black Textured Mfg. Part No.	Black Textured Stock No.	Price Each 1-4
17.62 x 16	8.3	SA-1278-MG	98F1663	108.10	SA-1278-BT	06M4792	107.26
17.62 x 20	9.3	SA-1279-MG	94F4883	116.46	SA-1279-BT	06M4793	115.55

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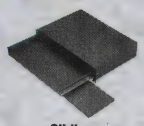
KEYBOARD/MOUSE SHELVES

RoHS Compliant Available

Bud Industries, Inc.

Stationary



Sliding

Stationary and sliding shelves are constructed of heavy-gauge steel. **Mfg. part no. SA-1775** stationary shelf features mouse pad that can be bolted onto either side of the shelf. Utilize 1U (1.75″) of panel space height. **Mfg. part nos. KS-1785** and **KS-1787** sliding shelves lock securely in the open position. Feature a small mouse pad that slides out in either the left- or right-hand position. Utilize 2U (3.50″) of panel space height. Available in 19″ and 23″ panel space widths in either black textured finish or metallic gray.

Black Textured Mfg. Part No.	Black Textured Stock No.	Metallic Gray Mfg. Part No.	Metallic Gray Stock No.	Panel/Max. Keyboard Widths	Price Each 1-4	Price Each 5-9	Price Each 10-24
SA-1775-BT	06M4814	SA-1775-MG	06M4815	19.0″/20.0″	82.42	74.08	65.74
KS-1785-BT	06M4728	KS-1785-MG	91F3891	19.0″/16.5″	179.44	160.17	142.94

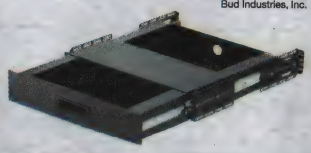
(12750)

SLIDING KEYBOARD SHELF

RoHS Compliant Available

Bud Industries, Inc.

Fits into any 19″ panel width cabinet or rack yet still accepts all standard PC and most custom keyboards up to 23″ wide. Ample storage space for keyboards, mouse and manuals. Convenient adjustable mouse and /or notepad panel. Black finish.



Mfg. Part No.	Width (in.)	Max. Keyboard Width (in.)	Stock No.	Price Each 1-2	Price Each 3-4	Price Each 5-9
KS-1788	19	23	06M4731	192.85	172.15	153.62

(79003)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures

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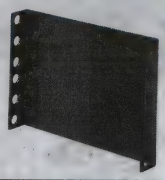
PANEL EXTENDERS



RoHS Compliant Available

Bud Industries, Inc.

- Heavy gauge steel brackets extend panels 5″ beyond normal panel mounting rails
- Panel mounting holes on EIA universal spacing
- Includes all mounting hardware
- Black finish

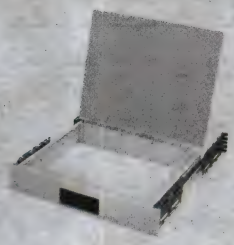
Mfg. Part No.	Height (in.)	Rack U Height	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-24	Price Each 25-49
PE-1600	3.5	2	06M4755	26.32	21.91	20.93	19.58
PE-1601	5.25	3	06M4756	28.51	23.74	22.67	21.22

(139082)

DESKTOPS AND DESKTOP DRAWERS

RoHS Compliant Available

Bud Industries, Inc.



DD-2363

60-2361

DT-17400

DD-2363 hinged drawer tops have plastic laminate bonded to aluminum. Front panel height 2U (3.5″), mount to panel mounting rails in cabinet. Inside size: 16.88 x 13.88 x 3″. Modifications available online.

Mfg. Part No.	Color	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-14
DD-2363-BT	Black	06M4614	269.45	250.69	240.46
DD-2363-WH	White	17M9924	271.58	252.66	242.35

60-2361 sliding desktops require only 1U (1.75″) panel space and 15.125 - 17.625″ inside. Working area: 11 x 17.375″. Supports 50 lbs. Laminated surface mounts to uprights in **60 series** cabinets without brackets. Modifications available, *contact*.

Mfg. Part No.	Color	Dimensions (in.) H x W x D	Stock No.	Price Each 1-2	Price Each 3-4	Price Each 5-9
60-2361-MG	Metallic Gray	1.75 x 15.75 x 15.37	06M4900	199.50	185.61	178.03
60-2361-WH	White	1.75 x 15.75 x 15.37	95F5528	199.50	185.61	178.03
60-2361-BT	Black	1.72 x 17.88 x 17	25B6569	194.82	181.26	173.86

DT-17400 supports 200 pounds. To install, bolt pre-slotted, adjustable support channels to cabinet racks mounting rails. Fits all cabinet depths. 18″ deep, plastic laminated top. Requires two pairs of panel mounting rails per cabinet rack.

Mfg. Part No.	Color	Dimensions (in.) H x W x D	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-14
DT-17400	White	2.25 x 22 x 18	06M4617	337.35	313.86	301.06

(6901)

ADAPTER MOUNTING BRACKETS

RoHS Compliant Available

Bud Industries, Inc.

- 16-gauge steel
- Used for mounting 19″ wide equipment into open relay racks with 23″ and 24″ wide panel spaces and enclosed cabinet racks with 24″ wide panel spaces
- Mounting holes conform to EIA-310-C (mounting hardware included)
- Black textured finish
- **Sold in packages of 2**
- Modifications available online

Mfg. Part No.	Panel Height	Weight (oz)	Stock No.	Price per Pkg. 1-9	Price per Pkg. 10-49	Price per Pkg. 50-99
AB-1851	1U (1.75″)	3	06M4366	17.93	14.93	13.34
AB-1852	2U (3.50″)	6	06M4367	17.53	14.59	13.04

(6969)

CABINETS & RACKS

HEAVY-DUTY CASTERS AND LEVELERS

RoHS Compliant Available

Bud Industries, Inc.

RL-7766

RC-7758-PR

RC-7761-PR

HEAVY-DUTY CASTERS
Designed to fit rack and cabinet enclosures. **Sold in package of 2.**

Mfg. Part No.	Wheel Description	Height (in.)	Load Rating (lbs.)	Stock No.	Price per Pkg. 1-9	10-49	50-99
● RC-7758-PR	Ball Bearing	3.25	200	**06M4777**	35.21	29.45	26.49
● RC-7762-PR	Hard Rubber	4	240	**05M4274**	71.36	59.63	53.60
● RC-7761-PR	Rubber w/ Brake	4.00	240	**06M4778**	82.54	68.98	62.00

ADJUSTABLE STEM LEVELERS
⅜-16 thread. **Mfg. part nos. RL-7766** and **RL-7767** include 2 height-adjusting nuts. 200 lbs. load rating.

Mfg. Part No.	Wheel Description	Height (in.)	Stock No.	Price Each 1-4	5-9	10-24
● RL-7771	¾″ Rubber Base	2.75	**95F6365**	5.53	4.61	4.13
● RL-7767	¾″ Nylon Base	3.75	**91F103**	5.16	4.30	3.85
● RL-7766	1″ Rubber Base	4.00	**06M4779**	7.50	6.25	5.59

LEVELER KIT
Kit includes **mfg. part no. RL-7767** stem leveler, 8 nuts, washers and bolts, and 2 mounting brackets. For use on Economizer™ racks; *order separately online ro call.*

Mfg. Part No.	Stock No.	Price Each 1-4	5-9	10-24
● RL-7770	**92F2538**	61.30	51.08	45.69

(7148)

SLIDING MECHANISMS

RoHS Compliant Available

Bud Industries, Inc.

AS-5000-A

BAS-5108

BAS-5106

BAS-5107

Zinc-plated, alloy steel telescoping and linear motion mechanisms with outer member, inner member, ball retainer and ball bearings. Stationary delrin guides for stabililzation in closed position. Front disconnect and positive stop. **Mfg. part nos. AS-5000-A** through **AS-5004-A** are 2-piece slides with a ¾″ extension and a max. chassis width of 2″ less than rack panel width when used with **mfg. part no. BAS-5106** or **BAS-5107** mounting bracket kits; *order separately below.* **AS-5042-A** is a 3-piece slide with full extension and a max. chassis width of 2¾″ less than rack panel width when used with **mfg. part no. BAS-5106** or **BAS-5107** mounting bracket kits and 2″ less than rack panel width when used with **mfg. part no. BAS-5108** mounting bracket kit; *order separately below.*

Mfg. Part No.	Slide Length (in.)	Travel (in.)	Load Rating (lbs)	Bracket Kit	Stock No.	Price per Pkg. 1-4	5-9	10-24
● AS-5000-A	12	8	140	BAS-5106 or BAS-5107	**06M4413**	28.12	25.30	22.46
● AS-5001-A	16	12	120		**06M4414**	36.61	32.93	29.25
● AS-5002-A	20	15	92		**06M4415**	37.59	33.81	30.03
● AS-5004-A	26	19	70		**50F9837**	42.36	38.11	33.84
● AS-5042-A	20	20.87	91	BAS-5106 or BAS-5107 or BAS-5108	**06M4416**	83.89	75.46	67.02

BRACKET KITS
All kits include the necessary mounting brackets and hardware to install one pair of slides.

Mfg. Part No.	Bracket Kits	Stock No.	Price Each Each	2-4	5-9
● BAS-5106	Universal Mounting Bracket Kit	**05M3902**	39.01	32.21	29.22
● BAS-5108	Recessed Mounting Bracket Kit	**96F9340**	64.39	53.16	48.22
● BAS-5107	Economy Bracket Kit	**99F3954**	29.05	23.98	21.75

(6898)

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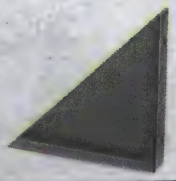
(212569)

TRIANGULAR MOUNTING BRACKETS

RoHS Compliant Available

Bud Industries, Inc.

- Heavy gauge steel
- 0.75″ flanges support chassis
- Sold in pairs



Mfg. Part No.	Dimensions H x W x D (in.)	Stock No.	Price Each 1-4	5-9	10-24	25-49
● MB-1266	5 x 0.75 x 5	**91F484**	20.95	18.52	15.88	14.97
● MB-1267	7 x 0.75 x 7	**91F485**	23.15	20.46	17.56	16.56
● MB1268	9 x 0.75 x 9	**46P3702**	26.92	23.80	20.42	19.24

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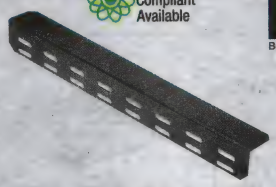
CHASSIS SUPPORT BRACKETS

RoHS Compliant Available

Bud Industries, Inc.

CSB-1351



CSB-1352

14-gauge steel, black. Support brackets come in pairs and include hardware.

Mfg. Part No.	Bracket	Length (in.)	Inside Depth (in.)	Stock No.	Price Each 1-9	10-49	50-99
● CSB-1351	Adapter	5	...	**05M4046**	29.75	24.89	22.38
● CSB-1352	Support	13	17.00	**06M4514**	33.40	27.93	25.13
● CSB-1353	Support	16	20.50	**92F2514**	35.10	29.36	26.41
● CSB-1354	Support	23	24.00	**06M4516**	37.99	31.78	28.58
● CSB-1355	Support	28	29.25	**06M4517**	41.73	34.91	31.40

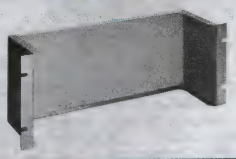
(6918)

PANEL CHASSIS

RoHS Compliant Available

Bud Industries, Inc.

Fasten to mounting rail in racks. Use as vertical chassis where depth is limited. 0.050″ thick aluminum alloy. Natural finish.



Mfg. Part No.	Height (in.)	Panel Depth (in.)	Stock No.	Price Each 1-4	5-9	10-24
● CB-1370	1.75	5.281	**91F493**	26.12	23.80	21.86
● CB-1371	3.50	5.281	**91F494**	27.40	24.97	22.92
● CB-1372	5.25	5.281	**91F495**	33.39	30.42	27.93
● CB-1373	7.00	5.281	**91F496**	38.31	34.91	32.05
● CB-1374	8.75	5.281	**91F497**	40.56	36.96	33.92
● CB-1375	10.50	5.281	**91F498**	44.20	40.27	36.97
● CB-1376	12.25	5.281	**91F499**	49.44	45.05	41.35
● CB-1377	14.00	5.281	**91F479**	55.77	50.83	46.65

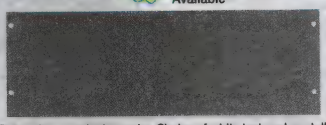
(6921)

ALUMINUM PANELS

RoHS Compliant Available

Bud Industries, Inc.

- 19″ wide without surface shield
- ⅛″ thick aluminum alloy
- Standard notching of 2 opposite edges



These 19″ wide aluminum panels fit telephone and relay racks. Choice of white textured, metallic-gray or black textured finish. 24″ wide aluminum panels are available; *go online or call.*

STANDARD ALUMINUM ALLOY (3003-HI14) — WHITE

Mfg. Part No.	Panel Height (in.)	Weight (lbs.)	Stock No.	Price Each 1-4	5-9	10-24
● PA-1101-WH	1.75	0.37	**91F1700**	13.98	11.70	10.47
● PA-1102-WH	3.50	0.75	**91F1702**	20.04	16.77	15.01
● PA-1103-WH	5.25	1.12	**91F1704**	27.42	22.95	20.53
● PA-1104-WH	7.00	1.75	**91F1706**	34.11	28.55	25.54
● PA-1105-WH	8.75	2.00	**91F1708**	41.23	34.52	30.88
● PA-1106-WH	10.50	2.50	**91F1710**	52.31	43.79	39.17
● PA-1107-WH	12.25	2.75	**91F1712**	57.35	48.01	42.95
● PA-1108-WH	14.00	3.25	**91F1714**	73.47	61.51	55.02

➤ CONTINUED ➤

ALUMINUM PANELS (CONT.)

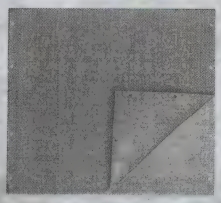
Mfg. Part No.	Panel Height (in.)	Weight (lbs.)	Stock No.	Price Each 1-4	5-9	10-24
PA-1109-WH	15.75	3.62	91F1716	82.49	69.06	61.78
PA-1110-WH	17.50	4.00	91F1718	98.77	82.69	73.96
PA-1111-WH	19.25	4.25	91F1720	103.74	86.85	77.69
PA-1112-WH	21.00	5.00	91F1722	120.10	100.55	89.94
STANDARD ALUMINUM ALLOY (3003-HI14) — METALLIC GRAY						
PA-1101-MG	1.75	0.37	91F388	14.32	11.98	10.72
PA-1102-MG	3.50	0.75	91F389	19.57	16.38	14.66
PA-1103-MG	5.25	1.12	91F390	26.88	22.50	20.13
PA-1104-MG	7.00	1.75	91F391	33.44	27.99	25.04
PA-1105-MG	8.75	2.00	91F392	40.42	33.84	30.27
PA-1106-MG	10.50	2.50	91F393	51.28	42.93	38.40
PA-1107-MG	12.25	2.75	91F394	56.23	47.07	42.11
PA-1108-MG	14.00	3.25	91F395	73.47	61.51	55.02
PA-1109-MG	15.75	3.62	91F396	82.49	69.06	61.78
PA-1110-MG	17.50	4.00	91F397	95.89	80.28	71.81
PA-1111-MG	19.25	4.25	91F398	103.74	86.85	77.69
PA-1112-MG	21.00	5.00	91F399	119.17	99.76	89.24
STANDARD ALUMINUM ALLOY (3003-HI14) — BLACK						
PA-1101-BT	1.75	0.37	25B6422	13.98	11.70	10.47
PA-1102-BT	3.50	0.75	90B2976	19.57	16.38	14.66
PA-1103-BT	5.25	1.12	90B2984	26.88	22.50	20.13
PA-1104-BT	7.00	1.75	25B6423	33.44	27.99	25.04
PA-1105-BT	8.75	2.00	25B6424	40.42	33.84	30.27
PA-1106-BT	10.50	2.50	25B6425	51.28	42.93	38.40
PA-1107-BT	12.25	2.75	25B6426	57.35	48.01	42.95
PA-1108-BT	14.00	3.25	50B1158	72.03	60.30	53.94
PA-1110-BT	17.50	4.00	25B6428	98.77	82.69	73.96
PA-1112-BT	21.00	5.00	25B6430	117.29	98.19	87.83
HARD ALUMINUM ALLOY (6061-T6) — WHITE						
PA-1133-WH	5.25	1.12	25B6433	37.20	31.15	27.86
PA-1134-WH	7.00	1.75	25B6434	48.83	40.88	36.56
PA-1135-WH	8.75	2.00	94F4875	58.48	48.96	43.80
PA-1136-WH	10.50	2.50	94F4876	73.86	61.83	55.31
PA-1138-WH	14.00	3.25	97H2163	92.99	77.85	69.64
PA-1139-WH	15.75	3.62	94F4932	106.75	89.37	79.94
PA-1140-WH	17.50	4.00	25B6436	120.43	100.82	90.18
PA-1142-WH	21.00	5.00	25B6439	143.22	119.90	107.24
HARD ALUMINUM ALLOY (6061-T6) — METALLIC GRAY						
PA-1131-MG	1.75	0.37	90F284	19.78	16.56	14.82
PA-1132-MG	3.50	0.75	90F285	25.62	21.45	19.19
PA-1133-MG	5.25	1.12	90F286	36.12	30.24	27.05
PA-1134-MG	7.00	1.75	90F287	48.83	40.88	36.56
PA-1135-MG	8.75	2.00	90F288	60.23	50.43	45.11
PA-1136-MG	10.50	2.50	90F289	73.86	61.83	55.31
PA-1138-MG	14.00	3.25	90F291	95.78	80.19	71.73
PA-1139-MG	15.75	3.62	90F292	109.31	91.51	81.86
PA-1140-MG	17.50	4.00	90F293	120.43	100.82	90.18
PA-1142-MG	21.00	5.00	25B6438	143.22	119.90	107.24

(6897)

"SURFACE SHIELD" STANDARD PANELS

RoHS Compliant Available

Bud Industries, Inc.



- Mill finish aluminum alloy
- White pressure-sensitive paper on one side
- Standard notching on 2 opposite edges
- Thickness: 0.125"

Mfg. Part No.	Dimensions (in.) H x W	Weight (lbs.)	Stock No.	Price Each 1-4	5-9	10-24
SFA-1831	1.75 x 19.00	0.375	91F265	10.47	8.76	7.83
SFA-1832	3.50 x 19.00	0.750	91F266	14.95	12.51	11.19
SFA-1833	5.25 x 19.00	1.125	91F267	19.60	16.40	14.67
SFA-1834	7.00 x 19.00	1.750	91F268	25.10	21.01	18.80
SFA-1835	8.75 x 19.00	2.000	91F269	26.88	22.50	20.13
SFA-1836	10.50 x 19.00	2.500	91F270	34.83	29.16	26.09
SFA-1837	12.25 x 19.00	2.750	91F271	41.13	34.42	30.79
SFA-1838	14.00 x 19.00	3.250	91F272	45.58	38.16	34.14
SFA-1839	15.75 x 19.00	3.625	91F273	52.93	44.31	39.63

➤ CONTINUED ➤

"SURFACE SHIELD" STANDARD PANELS (CONT.)

Mfg. Part No.	Dimensions (in.) H x W	Weight (lbs.)	Stock No.	Price Each 1-4	5-9	10-24
SFA-1840	17.50 x 19.00	4.000	91F274	58.25	48.76	43.62
SFA-1842	21.00 x 19.00	5.000	91F276	70.76	59.24	52.98

(6899)

CABLE CARRIER/ORGANIZER

RoHS Compliant Available

Bud Industries, Inc.

- Permits up to 30" of chassis extension
- Mounts to rear panel mounting rails
- Accommodates cabinet racks with 2 pairs of panel-mounting rails and 0.88" clearance at the rear of the cabinet when closed
- Ideal for ribbon or bundled cable

Mfg. Part No.	External Height (in.)	Rack U Height	Stock No.	Price Each 1-4	5-9	10-24	25-49
CC-5191	1.75	1	57J6239	73.34	65.92	62.21	58.50
CC-5190	3.5	2	95F6364	86.82	78.03	73.64	69.26

(68779)

RUBBER AND PLASTIC FEET

RoHS Compliant Available

Bud Industries, Inc.

F-8038 F-9653 F-7264-A F-3581

Mfg. Part No.	Description	Stock No.	Price Each 1-4
F-8038	Self Adhesive Sponge Rubber Pad Can Be Applied to Any Surface; 0.75" Diameter x 0.12" Thick	91F085	0.23
F-9653	Top-Grade Rubber Fits Into 0.43" Diameter Hole Press-Fit Holds it Firmly Into Place	94F4871	1.11
F-7264-A	Made of High-Grade Black Plastic Supplied with Mounting Hardware; Plastic Portion is 0.75" Diameter x 0.37" High	06M4710	0.67
F-7800-A	Same as **Mfg. part no.-7264**-A Except Plastic Portion is 0.87" Diameter x 0.50" High	06M4711	0.69
F-3581	Rubber Feet with Self-Adhesive Backing Can Be Applied to Any Surface; 0.50" Square x 0.21" High	94F4868	0.46
F-3599	Same as **Mfg. part no. F-3581** Except Size is 0.81" Square x 0.31" High	94F4869	0.67

(72470)

DIE-CAST ALUMINUM HANDLES

RoHS Compliant Available

Bud Industries, Inc.

H-9170-B H-9174-B H-9176-B H-9183-B

Clear anodized finish. Each comes with 2 #8-32 x ⅜" mounting screws except **mfg. part no. H-9170-B** which has 2 #8-32 x ⅝" screws.

Mfg. Part No.	Hand Clearance (in.)	Mounting Center (in.)	Stock No.	Price Each 1-4	5-9	10-24
H-9170-B	1.188	2.750	69F198	19.50	16.41	14.69
H-9174-B	1.094	4.000	69F199	12.03	10.13	9.06
H-9176-B	0.750	3.250	69F200	14.62	12.31	11.02
H-9183-B	1.094	4.563	69F205	26.47	22.28	19.94

(7146)

CHROME-PLATED BRASS AND STEEL HANDLES

RoHS Compliant Available

Bud Industries, Inc.

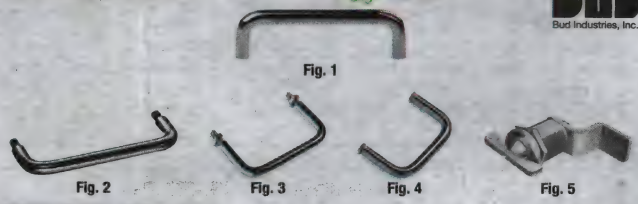


Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5

CHROME-PLATED STEEL — FIG. 1
Include 2 #10-32 x ⅜" screws.

➤ CONTINUED ➤

CABINETS & RACKS

CHROME-PLATED BRASS AND STEEL HANDLES (CONT.)

Mfg. Part No.	Hand Clearance (in.)	Mounting Center (in.)	Dia. (in.)	Stock No.	Price Each 1-4	5-9	10-24
● H-9110-B	1.250	6	0.375	**90F741**	9.19	7.70	6.89
● H-9111-B	0.938	4	0.375	**90F742**	6.92	5.80	5.19
● H-9112-B	0.938	6	0.375	**90F743**	8.43	7.06	6.32
● H-9113-B	0.938	8	0.375	**90F744**	11.45	9.60	8.59
● H-9114-B	1.500	8	0.500	**52M8822**	18.25	15.30	13.69
CHROME-PLATED STEEL — FIG. 2 Include 2 1/4″-28 mounting nuts.							
● H-9116-B	0.938	6	0.375	**90F732**	12.54	10.51	9.41
CHROME-PLATED STEEL — FIG. 3 Include 2 1/4″-28 hex mounting nuts.							
● H-9160-B	1.688	3.5	0.375	**90F733**	13.40	11.23	10.05
● H-9161-B	1.688	5.25	0.375	**90F734**	11.45	9.60	8.59
CHROME-PLATED BRASS — FIG. 4 Include 2 #6-32 x 3/8″ mounting screws.							
● H-9166-B	1	1.906	0.250	**90F739**	6.48	5.43	4.86
● H-9168-B	1	3	0.250	**90F740**	6.16	5.16	4.62
NON-LOCKING LATCH HANDLE — FIG. 5 Interchangeable with existing key lock used on **Series 60, Economizer, Classic II, Series 2000** doors.							
● LH-9358	...	...	...	**05M4186**	15.93	11.93	10.60

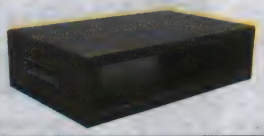
(7147)

LIGHT-DUTY TABLETOP RACKS

RoHS Compliant Available

HAMMOND MANUFACTURING

Light-duty 16-gauge steel economy 19″ table top rack. Rails are fixed both front and rear. Includes rubber feet, 2 lifting handles and 10-32 clip nuts. Overall width 21″, overall height 2″ over panel space. Finished with a rugged, textured black powder paint. Also available in textured light gray (RAL7035), *go online or call.*



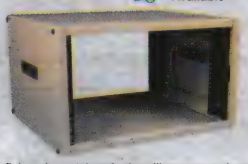
Mfg. Part No.	Panel Space (in.)	Dimensions (in.) W x H x D	Stock No.	Price Each Each	2-4	5-9
● RCBS1900313BK1	3.50	21 x 5.5 x 13	**83F9025**	126.92	122.17	116.74
● RCBS1900513BK1	5.25	21 x 7.25 x 13	**83F9026**	136.57	131.46	125.62
● RCBS1900713BK1	7.00	21 x 9 x 13	**83F9029**	147.70	142.17	135.85
● RCBS1900813BK1	8.75	21 x 10.75 x 13	**83F9032**	170.01	163.65	156.37
● RCBS1901013BK1	10.50	21 x 12.5 x 13	**83F9035**	175.04	168.48	161.00
● RCBS1901024BK1	10.50	21 x 12.5 x 24.5	**51R3567**	288.85	285.71	274.72
● RCBS1901213BK1	12.25	21 x 14.25 x 13	**83F9038**	194.96	187.66	179.32
● RCBS1901413BK1	14.00	21 x 16 x 13	**83F9041**	244.21	235.07	224.62
● RCBS1900517BK1	5.25	21 x 7.25 x 17.5	**83F9027**	166.10	159.88	152.78
● RCBS1900717BK1	7.00	21 x 9 x 17.5	**83F9030**	193.44	186.19	177.92
● RCBS1901017BK1	10.50	21 x 12.5 x 17.5	**83F9036**	244.26	235.11	224.67
● RCBS1901417BK1	14.00	21 x 16 x 17.5	**83F9042**	275.69	265.37	253.57

(7065)

HEAVY-DUTY TABLETOP RACKS

RoHS Compliant Available

HAMMOND MANUFACTURING



Supplied unassembled, shipped in a flat pack container for handling ease and protection. Simple assembly using one bolt in each corner to lock the sides to the top and bottom. Heavy-duty 16-gauge steel 19″ table top rack and an external width of 21″. Includes: 2 pairs of accessory rails (for rear support of heavier equipment), rubber feet, 2 lifting handles and 10-32 clip nuts. Overall height: 2″ larger than panel height. Finish: rugged textured powder paint. Ventilated version available *on this page.*

17.5″ DEPTH

Mfg. Part No.	Panel Height (in.)	Height (in.)	Weight (lbs.)	Color	Stock No.	Price Each Each	2-4
● RCHS1900817BK1	8.75	10.75	38	Black	**83F9044**	263.97	254.09
● RCHS1901017BK1	10.50	12.5	40	Black	**83F9046**	302.89	291.55
● RCHS1901417BK1	14.00	16	44	Black	**83F9050**	312.56	300.85
● RCHS1901717BK1	17.50	19.5	50	Black	**83F9054**	322.00	309.95
● RCHS1902217BK1	22.75	24.75	54	Black	**83F9058**	345.11	332.19
● RCHS1902817BK1	28.00	30	60	Black	**83F9061**	412.13	396.71
24.5″ DEPTH							
● RCHS1901024BK1	10.50	12.5	52	Black	**83F9048**	385.61	371.18
● RCHS1901424BK1	14.00	16	58	Black	**83F9052**	399.49	384.54
● RCHS1901424LG1	14.00	16	58	Light Gray	**09R3221**	399.49	384.54

CONTINUED

HEAVY-DUTY TABLETOP RACKS (CONT.)

24.5″ DEPTH

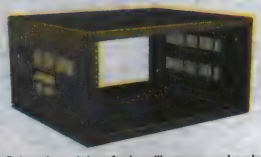
Mfg. Part No.	Panel Height (in.)	Height (in.)	Weight (lbs.)	Color	Stock No.	Price Each Each	2-4
● RCHS1901724BK1	17.50	19.5	62	Black	**83F9056**	412.83	397.37
● RCHS1902224BK1	22.75	24.75	70	Black	**83F9060**	426.14	410.19
● RCHS1902824BK1	28.00	30	78	Black	**83F9063**	443.87	427.25
● RCHS1902824LG1	28.00	30	78	Light Gray	**14R9964**	454.52	437.50
31.5″ DEPTH							
● RCHS1902831BK1	28.00	30	94	Black	**74K2698**	562.22	541.17
● RCHS1902831LG1	28.00	30	94	Light Gray	**50R8583**	562.22	541.17

(7066)

HEAVY-DUTY VENTILATED TABLETOP RACKS

RoHS Compliant Available

HAMMOND MANUFACTURING



Supplied unassembled, shipped in a flat pack container for handling ease and protection. Simple assembly using one bolt in each corner to lock the sides to the top and bottom. **RCHV Series** heavy-duty 16-gauge steel 19″ table top rack. Includes: 2 pair of accessory rails (for rear support of heavier equipment), rubber feet, 2 lifting handles and 10-32 clip nuts. Overall height: 2″ larger than panel height. Finish: rugged textured powder paint. Solid version available; *go online or call.*

17.5″ DEPTH

Mfg. Part No.	Panel Height (in.)	Weight (lbs.)	Color	Stock No.	Price Each
● RCHV1900817BK1	8.75	36	Black	**64K2550**	274.47
● RCHV1901017BK1	10.5	36	Black	**86K9163**	317.42
● RCHV1901417BK1	14	44	Black	**65K1501**	324.97
● RCHV1901717BK1	17.5	46	Black	**93K7286**	337.44
● RCHV1902217BK1	22.75	52	Black	**89K7808**	367.45
24.5″ DEPTH					
● RCHV1901024BK1	10.5	52	Black	**93K7280**	404.09
● RCHV1901424BK1	14	56	Black	**64K2360**	425.34
● RCHV1901724BK1	17.5	60	Black	**93K7288**	439.53
● RCHV1902224BK1	22.75	68	Black	**80K8265**	453.73
● RCHV1902824BK1	28	76	Black	**82K7665**	472.60
● RCHV1902824LG1	28	76	Grey	**71P8497**	472.60
31.5″ DEPTH					
● RCHV1901731BK1	17.5	72	Black	**93K7290**	546.55
● RCHV1902831BK1	28	92	Black	**79K1651**	598.61

(89368)

WALL-MOUNT VENTILATED RACK CABINETS

RoHS Compliant Available

HAMMOND MANUFACTURING

- 19″ wall mount rack cabinet
- Ventilated front and side slots
- Pre-punched top for optional fans
- Cable access panels on top and bottom
- Smoked, tempered glass door opens a full 180 degrees and comes complete with lock and key
- Recommended max. static load weight: 130 lbs
- Rugged black powder paint finish

Includes two pairs of mounting rails (square hole punched with starter pack of M6 screws and push-in nuts). Add 3/8″ to overall height for mounting hardware. Supplied unassembled, shipped in a flat pack container.

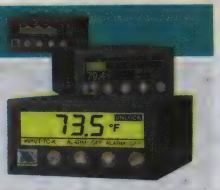
Mfg. Part No.	Dimensions (in.) H x W x D	Panel Space (in.)	Rack U Height	Stock No.	Price Each Each	2-4
● WMC1901023BK2	14.6 x 23.6 x 23.6	10.50	6	**84M8458**	273.33	256.34

(116865)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters



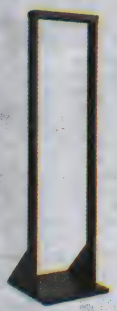
(212570)

WELDED OPEN RELAY RACKS

RoHS Compliant Available

HAMMOND MANUFACTURING

- Light (12-gauge steel) and heavy-duty (10-gauge steel) versions
- Front flange drilled and tapped (10-32) EIA 0.5-0.125″ spacing
- No assembly required
- Finished in rugged, textured black powder paint



Light Duty

Heavy Duty

For use as a single, free standing unit for sturdy support of standard 19″ rack mount devices.

Mfg. Part No.	Panel Space (in.)	Description	Weight (lbs.)	Stock No.	Price Each Each	Price Each 2-4
DNRR42LDW	42	Light-Duty	38	73C7270	234.20	225.42
DNRR70LDW	70	Light-Duty	42	95F2524	257.76	248.12
DNRR77LDW	77	Light-Duty	45	95F2525	269.08	259.01
DNRR63HDW	63	Heavy-Duty	77	83F8977	316.92	305.05
DNRR70HDW	70	Heavy-Duty	80	91F2181	321.82	309.77
DNRR77HDW	77	Heavy-Duty	82	84F040	325.80	313.60

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price Each Each	Price Each 2-4
1424T	Light-Duty Steel Dolly, Black	50B9998	321.31	309.28

(17752)

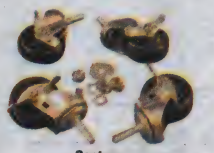
LIGHT DUTY KNOCKDOWN STEEL RACKS

RoHS Compliant Available

HAMMOND MANUFACTURING

- 19″ mounting rail posts (universal square-hole)
- Front flange is punched with square holes
- EIA unit space marking holes help you mount your equipment in the correct location
- Fabricated in 12-gauge steel construction with black powder paint finish
- Base can be lagged to floor or will accept casters & dollies
- Shipped knockdown in a flat pack container for easy handling and shipping protection

Rack



Casters

RACK

Mfg. Part No.	Panel Space (in.)	Weight (lbs.)	Stock No.	Price Each 1-9	Price Each 10+
DC2R44	77.13	85	51R2926	283.46	275.88

CASTERS

Mfg. Part No.	Wheel Diameter (in.)	Color	Stock No.	Price Each 1-4	Price Each 5-14	Price Each 15-24
RRLDCASTER	3	Black	57R3908	78.95	76.56	72.99

(164495)

LIGHT DUTY KNOCKDOWN STEEL RACKS

RoHS Compliant Available

HAMMOND MANUFACTURING

- Fabricated in 12-gauge steel
- Rugged textured black powder paint finish
- Base punched to accept 4 casters
- Front flange drilled and tapped (10-32) with universal EIA (⅝-5/8-1/2 in.) spacing
- Weight load tested (DNRR1984LDK) to 800 lbs

The **DNRR series** open frame relay racks are suitable for use as a single, free standing unit for sturdy support of standard 19″ rack mount devices. These knockdown racks are shipped in a flat pack container for easy handling and shipping protection.

CONTINUED

LIGHT DUTY KNOCKDOWN STEEL RACKS (CONT.)

Mfg. Part No.	Panel Space (in.)	Weight (lbs.)	Stock No.	Price Each Each	Price Each 2-4	Price Each 5-9
DNRR1942LDK	42	38	89C4370	218.30	210.12	200.79
DNRR1963LDK	63	41	89C4371	233.75	225.00	215.00
DNRR1970LDK	70	42	89C4373	247.02	237.77	227.21
DNRR1977LDK	77	45	89C4375	252.76	243.30	232.49

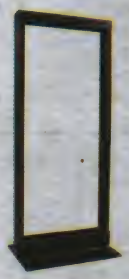
(90402)

HEAVY DUTY KNOCKDOWN STEEL RACKS

RoHS Compliant Available

HAMMOND MANUFACTURING

- Fabricated in 10-gauge steel
- Rugged black powder paint finish
- Front and rear flange drilled and tapped (10-32) with universal EIA (⅝-5/8-1/2 in.) spacing
- Recommended maximum weight (DNRR84HDKB tested) - 1,200 pounds



DNRR series open frame relay racks are suitable for use as a single, free standing unit for sturdy support of standard 19″ rack mount devices. These knockdown racks are shipped in a flat pack container for easy handling and shipping protection.

Mfg. Part No.	Panel Space (in.)	Weight (lbs.)	Stock No.	Price Each Each	Price Each 2-4	Price Each 5-9
DNRR70HDKB	70	80	50H3863	327.44	315.19	301.18
DNRR84HDKB	84	87	50H3866	351.56	338.40	323.36

(147118)

TABLE TOP OPEN RELAY RACK

RoHS Compliant Available

HAMMOND MANUFACTURING

- 14 gauge steel, heavy duty construction
- Supplied unassembled (4 pieces)
- Shipped in a flat pack container for protection and ease of handling
- Rails are round hole punched for 10-32 clip nuts
- Includes hardware, 4 rubber feet and 10-32 clip nuts
- Finished in textured black powder paint

Mfg. Part No.	Dimensions (in.) H x W x D	Stock No.	Price Each Each	Price Each 2-4	Price Each 5-9
RRTT1921BK1	21 x 19 x 12	84C9871	138.83	133.64	127.70
RRTT1928BK1	28 x 19 x 12	84C9872	153.88	148.12	141.54

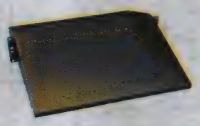
(72213)

RAIL-MOUNTED DUAL MODEM SHELF

RoHS Compliant Available

HAMMOND MANUFACTURING

Mfg. part no. DNDMS dual modem shelf permits front and rear access to modems on 19″ relay racks. Formed 16-gauge steel construction. Overall 19.5″ deep. Uses 3.5″ (2U) of vertical panel space. Rugged, textured black powder paint finish. Requires mounting hardware, *go online or call.*



Mfg. Part No.	Stock No.	Price Each
DNDMS19BK1	16F2884	76.46

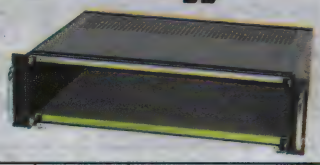
(17754)

RACK MOUNT INSTRUMENT CHASSIS

RoHS Compliant Available

HAMMOND MANUFACTURING

- Strong but lightweight aluminum construction: 0.125″ thick panel sides, 0.062″ thick top and bottom panel
- Features 17″ wide usable space
- Easy to assemble, hardware included
- Interchangeable front and rear panels, 1 white and 1 black



NON-VENTILATED

Mfg. Part No.	Dimensions (in.) H x D	Stock No.	Price Each Each	Price Each 2-4	Price Each 5-9
RMCS19018BK1	1.75 x 8	02C7231	77.25	74.89	74.89
RMCS190113BK1	1.75 x 13	02C7230	90.88	88.11	88.11

CONTINUED

CABINETS & RACKS

RACK MOUNT INSTRUMENT CHASSIS (CONT.)

Mfg. Part No.	Dimensions (in.) H x D	Stock No.	Price Each Each	2-4	5-9
● RMCS19038BK1	3.5 x 8	02C7232	86.33	83.70	83.70
● RMCS190313BK1	3.5 x 13	97B1350	109.05	105.72	105.72
● RMCS190513BK1	5.25 x 13	97B0932	124.96	121.15	121.15
● RMCS190713BK1	7 x 13	02C7233	145.42	140.98	140.98
● RMCS190813BK1	x	97B2504	172.66	167.40	167.40
● RMCS191015BK1	10.5 x 15	99B2644	191.57	185.73	185.73
VENTILATED TOP AND BOTTOM					
● RMCV19018BK1	1.75 x 8	02C7238	87.52	84.85	84.85
● RMCV190113BK1	1.75 x 13	02C7237	102.96	99.82	99.82
● RMCV19038BK1	3.5 x 8	02C7240	94.96	92.07	92.07
● RMCV190313BK1	3.5 x 13	02C7239	119.94	116.28	116.28
● RMCV190513BK1	5.25 x 13	97B0927	137.45	133.26	133.26
● RMCV190713BK1	7 x 13	02C7241	157.44	152.64	152.64
● RMCV190813BK1	8.75 x 13	02C7242	192.97	187.09	187.09
● RMCV191015BK1	10.5 x 15	02C7244	212.39	205.92	205.92
CHASSIS PANELS					
● RMP1908	16.7 x 5.98	02C7248	27.02	24.32	24.32
● RMP1913	16.7 x 10.98	97B0930	30.71	27.64	27.64
● RMP1915	16.7 x 12.98	02C7249	34.73	31.25	31.25
REPLACEMENT PANELS					
● RMCP1BK	1.75 x 16.76	89C7840	13.31	12.08	12.08
● RMCP3BK	3.5 x 16.76	89C7842	15.75	14.30	14.30
● RMCP3CG	3.5 x 16.76	81H3117	15.75	14.30	14.30
● RMCP5BK	5.25 x 16.76	89C7843	18.84	17.10	17.10
● RMCP5CG	5.25 x 16.76	81H3118	18.84	17.10	17.10
● RMCP7BK	7 x 16.76	89C7844	21.16	19.21	19.21

(60179)

ECONOMY CABINET RACKS

RoHS Compliant Available

HAMMOND MANUFACTURING

- Standard 19″ panel width (21.34″ overall)
- Four infinitely adjustable (front to back) combination rack mount rails, drilled and tapped for 10-32 screws (full EIA spacing) and four leveling feet
- Heavy-duty 16-gauge steel top, bottom and sides
- 10-gauge steel rails finished in zinc plating
- Rugged, textured light gray or black (RAL 7035) powder paint

Shipped in a flat pack container for damage-free receipt. Simple assembly using one bolt in each corner to lock the sides to the top and bottom. *Order* solid and louvered doors separately *on this page*. Order casters separately online or call.

LIGHT GRAY TEXTURED

Mfg. Part No.	Panel Space (in.)	Depth (in.)	Weight (lbs.)	Stock No.	Price Each Each	2-4	5-9
● REFK1903517LG1	35	17.5	86	51R3607	495.75	477.19	455.98
● REFK1903524LG1	35	24.5	103	51R3608	565.19	544.04	519.86
● REFK1903531LG1	35	31.5	135	08R4361	649.96	625.63	597.82
● REFK1904217LG1	42	17.5	104	51R3609	525.33	508.57	486.21
● REFK1904224LG1	42	24.5	111	25R4071	607.81	585.06	559.06
● REFK1904231LG1	42	31.5	160	34R2193	698.95	672.79	642.89
● REFK1904924LG1	49	24.5	126	51R3611	693.14	667.19	637.54
● REFK1904931LG1	49	31.5	170	35R2840	797.09	767.25	733.15
● REFK1907024LG1	70	24.5	160	50P9355	853.10	821.16	784.67
BLACK TEXTURED							
● REFK1903517BK1	35	17.5	86	50H5154	495.75	477.19	455.98
● REFK1903524BK1	35	24.5	103	48F3994	565.19	544.04	519.86
● REFK1903531BK1	35	31.5	135	25C3664	649.96	625.63	597.82
● REFK1904217BK1	42	17.5	104	73C6602	525.33	508.57	486.21
● REFK1904224BK1	42	24.5	111	48F3995	607.81	585.06	559.06
● REFK1904231BK1	42	31.5	160	09H1693	698.95	672.79	642.89
● REFK1904924BK1	49	24.5	126	48F3996	693.14	667.19	637.54
● REFK1904931BK1	49	31.5	170	50H5161	797.09	767.25	733.15
● REFK1905624BK1	56	24.5	136	48F3997	735.77	708.23	676.76
● REFK1906324BK1	63	24.5	145	48F3998	767.79	739.05	706.20
● REFK1907024BK1	70	24.5	160	48F3999	853.10	821.16	784.67
● REFK1907031BK1	70	31.5	176	50H5175	981.08	944.36	902.38
● REFK1907724BK1	77	24.5	185	98B5247	891.49	858.12	819.98

(18731)

RSDF SERIES SOLID DOORS

RoHS Compliant Available

HAMMOND MANUFACTURING

RSDF series are flush mount doors with reversible right or left opening (by inverting door). Features lockable latch, magnetic catch, and spring-loaded hinge pins for instant installation or removal. Allows full access to space between panel rails when open. Finish matches **REFK series** racks in the same rugged, textured black powder paint. Light gray textured powder paint (RAL 7035).

BLACK

Mfg. Part No.	Panel Space	Weight (lbs.)	Stock No.	Price Each
● RSDF19035BK1	35″	13	48F4000	130.24
● RSDF19042BK1	42″	18	48F4001	154.75
● RSDF19049BK1	49″	26	48F4002	167.56
● RSDF19056BK1	56″	30	48F4003	183.13
● RSDF19063BK1	63″	33	48F4004	198.81
● RSDF19070BK1	70″	37	48F4005	205.11
● RSDF19077BK1	77″	41	84C9873	221.60
LIGHT GRAY				
● RSDF19035LG1	35″	13	51R3643	131.27
● RSDF19042LG1	42″	18	51R3644	151.12
● RSDF19049LG1	49″	26	51R3645	171.58
● RSDF19070LG1	70″	37	50P9359	210.03

(18734)

LOUVERED DOORS

RoHS Compliant Available

HAMMOND MANUFACTURING

RSDL series are flush mount louvered doors, opening right-hand only with louvers facing down. Features lockable latch, magnetic catch, and spring-loaded hinge pins for instant installation or removal. Allows full access to space between panel rails when open. Finish matches **REFK series** racks in the same rugged, textured light gray or black (RAL 7035) powder paint.

LIGHT GRAY

Mfg. Part No.	Height (in.)	Weight (lbs.)	Stock No.	Price Each
● RSDL19035LG1	35	13	08R4722	148.83
● RSDL19042LG1	42	18	51R3651	170.07
● RSDL19049LG1	49	26	35R2841	191.40
● RSDL19070LG1	70	37	50P9362	237.31
BLACK				
● RSDL19035BK1	35	13	48F4006	148.83
● RSDL19042BK1	42	18	48F4007	170.07
● RSDL19049BK1	49	26	48F4008	186.91
● RSDL19056BK1	56	30	48F4009	209.60
● RSDL19063BK1	63	33	48F4010	227.82
● RSDL19070BK1	70	37	48F4011	237.31
● RSDL19077BK1	77	41	84C9874	258.22

(18735)

MEDIUM-DUTY CASTERS

RoHS Compliant Available

HAMMOND MANUFACTURING

Medium-duty casters feature ball-bearing swivel and 2″ diameter hard-composition gray wheels with a small footprint (2.125 x 15/16″ hole mounting pattern). 600-lb. capacity per set. For use with **REFK series** knockdown cabinet racks only; *order separately on this page*. **Sold in package of 4.**

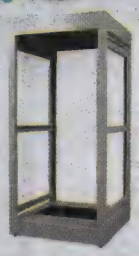
Mfg. Part No.	Description	Stock No.	Price per Pkg. Each	2-4	5-9
● 1425PHD	Medium-Duty Casters	78K5671	39.60	37.60	35.60

(78695)

WELDED RACK FRAMES

RoHS Compliant Available

HAMMOND MANUFACTURING



- Heavy-duty welded rack (1500lb even load rating)
- 14-gauge steel frame
- Standard 19" panel width (23" overall)
- Unit is shipped as welded frame only with four leveling feet
- Finished in rugged, textured powder paint

NOTE: panel rails are NOT included

BLACK

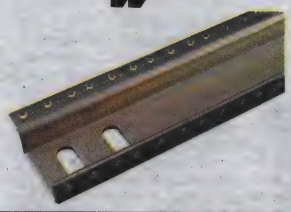
Mfg. Part No.	Panel Space (in.)	Rack U Height	Depth (in.)	Stock No.	Price Each	
					Each	2-4
C2F193523BK1	35.06	20	23.63	29C8368	531.70	511.80
C2F193531BK1	35.06	20	31.50	71C8961	565.77	544.59
C2F194223BK1	42.06	24	23.63	14C3475	544.23	523.86
C2F194231BK1	42.06	24	31.50	50H3654	577.16	555.56
C2F195623BK1	56.06	32	23.63	83C5905	559.98	539.01
C2F196323BK1	63.06	36	23.63	50H3665	564.87	543.73
C2F196331BK1	63.06	36	31.50	68C7169	600.20	577.73
C2F197023BK1	70.06	40	23.63	01C6952	600.69	578.20
C2F197031BK1	70.06	40	31.50	31C7021	621.69	598.41
C2F197036BK1	70.06	40	36.00	29C3627	683.84	658.25
C2F197823BK1	78.81	45	23.63	25C6362	612.24	589.32
C2F197831BK1	78.81	45	31.50	73C9125	643.27	619.19
C2F197836BK1	78.81	45	36.00	50H3669	707.59	681.11

(90392)

TAPPED RAILS

RoHS Compliant Available

HAMMOND MANUFACTURING



- Drilled and tapped (10-32)
- Heavy duty 10-gauge steel construction
- Full EIA hole centers (5/8 - 5/8 - 1/2 inch spacing)
- Bolts vertically into rack to amhal struts
- Strut mounting hardware for both rails included

Time saver rails are stamped and numbered in 1U (1.75") increments. Zinc plated finish. Rear of rail flanged for rear support or accessory mounting. **NOTE: Sold in pairs.**

Mfg. Part No.	Panel Height (in.)	Rack U Height	Stock No.	Price per Pair
				Each
CCR22TZPL	22.75	13	50H3518	71.74
CCR35TZPL	35	20	31M8376	87.05
CCR42TZPL	42	24	31M8377	92.52
CCR49TZPL	49	28	31M8378	98.67
CCR56TZPL	56	32	31M8379	105.06
CCR63TZPL	63	36	31M8380	107.50
CCR70TZPL	70	40	31M8381	117.58
CCR78TZPL	78.75	45	31M8382	124.69

(90398)

SIDE PANELS

RoHS Compliant Available

HAMMOND MANUFACTURING

- 16-gauge steel construction
- Panels fit flush with frame
- Finished in a rugged, textured powder paint

Feature quick release quarter turn fasteners (4 per side) with internal latching provision. **NOTE: Sold in pairs.**

BLACK

Mfg. Part No.	Panel Space (in.)	Rack U Height	Depth (in.)	Stock No.	Price per Pair
					Each
CSP3523BK1	35	20	23.63	31M1136	121.14
CSP3531BK1	35	20	31.50	31M1138	121.14
CSP4223BK1	42	24	23.63	14C3476	132.92
CSP4231BK1	42	24	31.50	31M1143	132.92

CONTINUED

SIDE PANELS (CONT.)

Mfg. Part No.	Panel Space (in.)	Rack U Height	Depth (in.)	Stock No.	Price per Pair
					Each
CSP5623BK1	56	32	23.63	31M1149	171.30
CSP6323BK1	63	36	23.63	31M1153	207.60
CSP6331BK1	63	36	31.50	31M1155	249.46
CSP7023BK1	70	40	23.63	31M1157	194.02
CSP7031BK1	70	40	31.50	31M1159	215.76
CSP7036BK1	70	40	36.00	31M1161	235.46
CSP7823BK1	78.75	45	23.63	31M1163	234.33
CSP7831BK1	78.75	45	31.50	31M1165	282.75
CSP7836BK1	78.75	45	36.00	31M1166	311.00

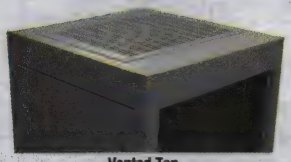
(90394)

RACK TOPS

RoHS Compliant Available

HAMMOND MANUFACTURING

Solid Top



Vented Top

- 14-gauge steel construction
- Supplied with mounting hardware
- Finish matches **C2 series** rack frames in the same rugged, textured powder paint

Used on racks where protection from dust or falling objects is required.

Mfg. Part No.	Top	Color	Fits Rack Depth (in.)	Stock No.	Price Each	
					Each	2-4
C2T1923SBK1	Solid	Black	23.63	01C6954	28.37	27.32
C2T1931SBK1	Solid	Black	31.50	98B6053	44.40	42.76
C2T1936SBK1	Solid	Black	36.00	50H3758	51.55	49.65
Provides a practical and economical solution for convection cooling requirements.						
C2T1923VBK1	Vented	Black	23.63	30C2478	42.52	40.94
C2T1931VBK1	Vented	Black	31.50	97B4201	67.26	64.78
C2T1936VBK1	Vented	Black	36.00	29C3590	77.34	74.48

(90389)

RACK 10" FAN TOPS

RoHS Compliant Available

HAMMOND MANUFACTURING

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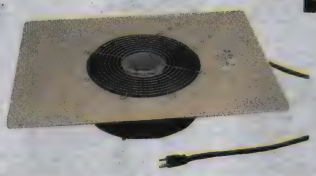


Includes 10 inch, 550CFM, 115V, 50/60HZ AC fan 35W thermal protected motor. Ball bearing construction with 3 plastic blades. Fans are pre-wired, installed and complete with 5-foot cord and plug. Top and bottom finger guards included. Airflow exhausts the rack out of the top.

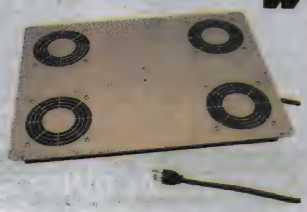
Mfg. Part No.	Color	Fits Rack Depth (in.)	Stock No.	Price Each
C2T1931F10BK1	Black	31.50	39C9129	205.06
C2T1936F10BK1	Black	36.00	50H3748	207.07
C2T1923F10BK1	Black	23.63	50H3730	201.30

(90396)

RACK 4.7" FAN TOPS

RoHS Compliant Available

HAMMOND MANUFACTURING



Includes 4 long life, ball bearing , 115V, 50/60Hz AC, 100CFM fans. Finger guards are punched into top panel and bottom of fan top. Fans are pre-wired, installed and complete with 3-foot cord and plug.

CONTINUED

CABINETS & RACKS

RACK 4.7″ FAN TOPS (CONT.)

Mfg. Part No.	Color	Fits Rack Depth (in.)	Stock No.	Price Each
● C2T1923F4BK1	Black	23.63	27C3661	225.46
● C2T1931F4BK1	Black	31.50	73C3888	231.90
● C2T1936F4BK1	Black	36.00	50H3752	238.87

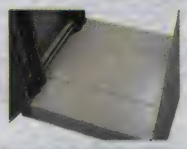
*With Built In - Adjustable Thermostat
(90395)

RACK BOTTOMS

RoHS Compliant Available

HAMMOND MANUFACTURING

- 14-gauge steel construction
- Supplied with mounting hardware
- Finish matches **C2 series** rack frames in the same, rugged textured powder paint



SOLID BOTTOM

Mfg. Part No.	Color	Fits Rack Depth (in.)	Stock No.	Price Each
● C2BPS1923BK1	Black	23.63	01C6956	37.40
● C2BPS1931BK1	Black	31.5 or 36	91B1307	50.99

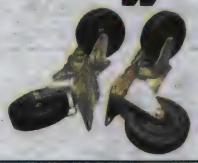
(90393)

INSIDE BASE CASTERS

RoHS Compliant Available

HAMMOND MANUFACTURING

No drilling required; mount into existing holes in racks, *order separately on this page*. Swivel, ball bearing units and hard composition type wheels. Add only 0.75″ to height of cabinet by fitting up inside base of rack. **Sold in package of 4.**



Mfg. Part No.	Capacity (lbs.)	Wheel Dia. (in.)	Stock No.	Price per Pkg. Each	2-4	5-9
● 1425B	360	3	94F4790	63.48	60.27	57.07
● 1425BM	700	3	66F8038	76.02	72.18	68.34
● 1425BH	1050	3	83F9206	141.95	134.78	127.61

(7198)

LOUVERED DOORS

RoHS Compliant Available

HAMMOND MANUFACTURING

Flush mount louvered doors, opening right-hand only with louvers facing down. Feature lockable latch, magnetic catch, and spring-loaded hinge pins for instant installation or removal. Allows full access to space between panel rails when open. Finish is rugged, textured powder paint.

Mfg. Part No.	Panel Space (in.)	Weight (lbs.)	Color	Stock No.	Price Each
● CDF1963LLG1	63	45	Light Gray	51R2535	339.83
● CDF1970LLG1	70	51	Light Gray	51R2536	359.16
● CDF1978LLG1	78	57	Light Gray	51R2540	363.21
● CDF1935LBK1	35	24	Black	50H3519	268.32
● CDF1942LBK1	42	28	Black	83F8969	276.79
● CDF1956LBK1	56	40	Black	50H3525	309.22
● CDF1963LBK1	63	45	Black	83F8973	339.83
● CDF1970LBK1	70	51	Black	83F8975	359.16
● CDF1978LBK1	78.75	57	Black	30C2477	363.21

(18128)

SOLID DOORS

RoHS Compliant Available

HAMMOND MANUFACTURING

Flush mount doors with reversible right or left opening (by inverting door). Features lockable latch, magnetic catch, and spring-loaded hinge pins for instant installation or removal. Allows full access to space between panel rails when open. Finish is rugged, textured powder paint.

Mfg. Part No.	Panel Space (in.)	Weight (lbs.)	Color	Stock No.	Price Each Each	2-4	5-9
● CDF1963SLG1	63	45	Light Gray	10R2060	283.20	272.60	260.47
● CDF1970SLG1	70	51	Light Gray	51R2537	299.32	288.11	275.31
● CDF1978SLG1	78,75	57	Light Gray	51R2541	309.92	298.32	285.07
● CDF1935SBK1	35	24	Black	50H3520	223.59	215.21	205.65
● CDF1942SBK1	42	28	Black	83F8971	227.02	218.52	208.81
● CDF1956SBK1	56	40	Black	50H3527	257.69	248.04	237.02
● CDF1963SBK1	63	45	Black	83F8974	283.20	272.60	260.47
● CDF1970SBK1	70	51	Black	83F8976	299.32	288.11	275.31
● CDF1978SBK1	78.75	57	Black	19C9844	302.66	291.33	278.39

(18127)

HEAVY-DUTY WELDED RACKS

RoHS Compliant Available

HAMMOND MANUFACTURING

- 1500 Lb. even load rating
- Standard 19″ panel width (23″ Overall)
- Removable side panels (¼-Turn Latches)
- Four infinitely adjustable, 10-gauge steel, zinc plated combination rack mount rails
- Drilled and tapped 10-32 (full EIA spacing)
- One solid flush mount door
- Solid top and four leveling feet
- Heavy-duty 14-gauge steel frame
- 16-gauge steel side panels
- Rugged, textured powder paint
- Shipped complete: no assembly required.

Light Gray

Mfg. Part No.	Panel Space (in.)	Depth (in.)	Weight (lbs.)	Stock No.	Price Each
BLACK					
● C2RR196323BK1	63	23.63	260	83F8965	1307.05
● C2RR196331BK1	63	31.5	280	83F8966	1383.74
● C2RR197031BK1	70	31.5	315	83F8968	1425.03
● C2RR197831BK1	78.75	31.5	355	50H3718	1543.56
LIGHT GRAY					
● C2RR196323LG1	63	23.63	260	05R6250	1307.05
● C2RR196331LG1	63	31.5	280	05R6251	1383.74
● C2RR197031LG1	70	31.5	315	05R6253	1425.03
● C2RR197831LG1	78.75	31.5	355	05R6255	1543.56

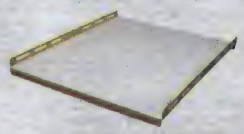
(7196)

VENTED AND UNVENTED FIXED SHELVES

RoHS Compliant Available

HAMMOND MANUFACTURING

RFVS and **RFUS series** shelves attach to both pairs of 19″ rack rails (on the accessory flange). **RFVS series** (vented style) provides a sturdy shelf without obstructing upward heat movement. Shelves are side slotted for easy adjustment with most rail locations. Includes mounting hardware. Finish: rugged textured powder paint. 14-gauge steel construction. Weight load tested to 350 lbs. Color: black.



Mfg. Part No.	Style	Depth (in.)	Stock No.	Price Each
● RFUS1918BK1	Unvented	18	84F063	50.30
● RFUS1921BK1	Unvented	21	84F064	53.31
● RFUS1926BK1	Unvented	26	84F065	57.67
● RFUS1931BK1	Unvented	31	73C7865	61.70
● RFVS1918BK1	Vented	18	84F061	50.30
● RFVS1921BK1	Vented	21	91F2190	52.26

➤CONTINUED➤

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196535)

VENTED AND UNVENTED FIXED SHELVES (CONT.)

Mfg. Part No.	Style	Depth (in.)	Stock No.	Price Each
RFVS1926BK1	Vented	26	84F062	57.11
RFVS1931BK1	Vented	31	27C9239	61.10

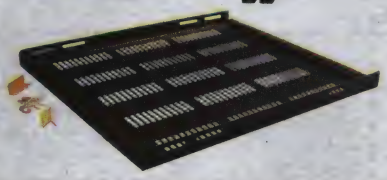
(6999)

"ZERO SPACE" FIXED VENTED SHELVES

RoHS Compliant Available

HAMMOND MANUFACTURING

- Rugged textured black powder paint finish
- No obstruction to front panel space or equipment
- Mounts on two pairs of panel rails (front and back)
- Includes all mounting hardware



The **RZVS series** are heavy duty, 14 gauge steel shelves which are vented to provide improved upward heat movement. Shelves require no front rail mounting or front rack space. Rear lip is covered with a rubber channel to avoid equipment scratching and cable chaffing. Rear lip also folds up for extra strength and acts as a rear equipment retainer. Sides are slotted for easy adjustment and fold up for easy hardware installation. Includes two equipment stops which can be fastened anywhere on the shelf.

Mfg. Part No.	Shelf Depth	Shelf Width	Stock No.	Price Each
RZVS1918BK1	18"	17.75"	34M4596	49.83
RZVS1921BK1	21"	17.75"	03M5409	53.78
RZVS1926BK1	26"	17.75"	01M6689	62.18
RZVS1931BK1	31"	17.75"	34M3118	64.70

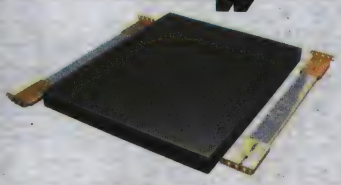
(90528)

UNVENTED & VENTED SLIDING SHELVES

RoHS Compliant Available

HAMMOND MANUFACTURING

Shelves include heavy-duty ball bearing slides that attach to the front and rear of both pairs of 19" rack rails. Vented shelves provides a sturdy shelf without obstructing upward heat movement. 14-gauge steel construction. Weight load tested to 120 lbs. Includes mounting hardware. Color: black.



Mfg. Part No.	Description	Depth (in.)	Stock No.	Price Each
RSUS1918BK1	Unvented	18	18C0606	127.96
RSUS1921BK1	Unvented	21	18C0610	136.34
RSUS1926BK1	Unvented	26	18C0613	142.63
RSUS1931BK1	Unvented	31	84C9875	232.77
RSVS1918BK1	Vented	18	18C0626	132.15
RSVS1921BK1	Vented	21	18C0644	138.44
RSVS1926BK1	Vented	26	18C0646	146.82
RSVS1931BK1	Vented	31	84C9876	240.56

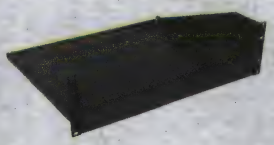
(59871)

RAIL-MOUNTED SHELVES

RoHS Compliant Available

HAMMOND MANUFACTURING

Features formed 14-gauge steel construction. Mounts to front rail either as an internal shelf or external shelf/work area. Shelves are 17.5" wide. Available in either vented or unvented. Finished in rugged, textured black powder paint. Requires mounting hardware, *go online or call.*



UNVENTED

Mfg. Part No.	Rack U Height	Panel Height (in.)	Depth (in.)	Stock No.	Price 1-5
RASU190107UBK1	1	1.75	7	62R9530	47.90
RASU190115BK1	1	1.75	15	93K6188	48.88
RASU190315BK1	2	3.5	15	93K6189	64.53
RASU190320BK1	2	3.5	20	93K6190	69.81
RASU190515BK1	3	5.25	15	91F2183	58.66
RASU190520BK1	3	5.25	20	89C7814	70.39
RASU190715BK1	4	7	15	93K6191	88.61
RASU190720BK1	4	7	20	84K7631	91.74
VENTED					
RASV190115BK1	1	1.75	15	93K6192	52.79
RASV190120BK1	1	1.75	20	85K9119	57.83
RASV190315BK1	2	3.5	15	93K6193	68.44
RASV190320BK1	2	3.5	20	93K6194	72.35

CONTINUED

RAIL-MOUNTED SHELVES (CONT.)

VENTED

Mfg. Part No.	Rack U Height	Panel Height (in.)	Depth (in.)	Stock No.	Price 1-5
RASV190515BK1	3	5.25	15	95F2528	87.62
RASV190520BK1	3	5.25	20	85C3125	90.19
RASV190715BK1	4	7	15	93K6195	92.64
RASV190720BK1	4	7	20	74K3069	95.73

(7068)

FIXED/PULL-OUT CHASSIS SHELVES

RoHS Compliant Available

HAMMOND MANUFACTURING

Can be used as a permanently mounted support shelf or as a pull-out chassis. Will also accept **RSLIDE** equipment slides *on page 2349* for pull-out applications. Mounts on two pairs of mounting rails (front and back). 18-gauge steel shelf and 14-gauge brackets. Shelf is 16.8" wide and 0.5" high. Finish: smooth white powder paint. Load capacity: 85 lbs.

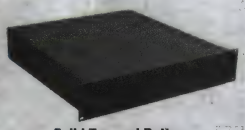
Mfg. Part No.	Shelf Depth	Bracket Depth	Stock No.	Price Each
RASC1916WH2	15.9"	14.9"	94F4831	79.97
RASC1922WH2	21.9"	20.9"	94F4832	92.08

(34281)

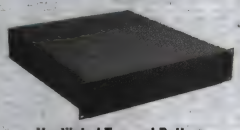
19" RACK MOUNT/TABLETOP INSTRUMENT ENCLOSURES

RoHS Compliant Available

HAMMOND MANUFACTURING



Solid Top and Bottom



Ventilated Top and Bottom

- Strong yet light weight construction
- Suitable for desk top or rack mountable
- Shipped knocked down to avoid shipping damage
- Easy assembly & disassembly
- Extruded aluminum side, front and rear panels; aluminum top and bottom panels
- Usable with or without rack mounting brackets (included)
- Front and rear panels are interchangeable
- Rugged, textured, black powder paint

Includes top, bottom, sides, feet, rack mount brackets and all assembly hardware. Pull handles & rear bracket kit are not included with unit. Shipped knocked down to avoid damage.

Mfg. Part No.	Dimensions (in.) H x W x D	Rack U Height	Top and Bottom	Stock No.	Price Each		
					Each	2-4	5-9
RM1U1908SBK	x x	1	Solid	06R2995	139.48	134.27	124.57
RM1U1913SBK	1.75 x 16.6 x 13	1	Solid	08P0839	164.00	157.86	146.46
RM1U1918SBK	1.75 x 16.6 x 18	1	Solid	01P0167	210.86	202.97	188.31
RM2U1908SBK	x x	2	Solid	01P1277	166.28	160.05	148.49
RM2U1913SBK	x x	2	Solid	14N7878	196.04	188.70	175.07
RM2U1918SBK	3.5 x 16.6 x 18	2	Solid	06R2996	248.15	238.86	221.61
RM3U1908SBK	5.25 x 16.6 x 8	3	Solid	06R2998	197.08	189.71	176.00
RM3U1913SBK	5.25 x 16.6 x 13	3	Solid	57P7311	232.39	223.69	207.53
RM3U1918SBK	5.25 x 16.6 x 18	3	Solid	06R3000	298.87	287.67	266.90
RM1U1908VBK	1.75 x 16.6 x 8	1	Ventilated	73P7276	146.09	140.63	130.47
RM1U1913VBK	1.75 x 16.6 x 13	1	Ventilated	14N7868	175.60	169.02	156.82
RM1U1918VBK	x x	1	Ventilated	40P2420	225.27	216.84	201.18
RM2U1913VBK	x x	2	Ventilated	14N2452	208.88	201.06	186.54
RM2U1918VBK	3.5 x 16.6 x 18	2	Ventilated	06R2997	266.80	256.82	238.27
RM3U1913VBK	5.25 x 16.6 x 13	3	Ventilated	08P0836	249.17	239.85	222.52
RM3U1918VBK	5.25 x 16.6 x 18	3	Ventilated	06R3001	308.87	297.31	275.84

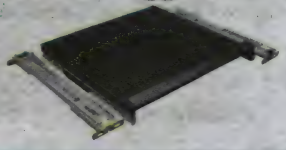
(147226)

KEYBOARD DRAWER

RoHS Compliant Available

HAMMOND MANUFACTURING

Mfg. Part No. RAKS drawer uses only 3.5" of rack space for keyboards. Unique design maximizes available space between rails. Mounts on two pairs of mounting rails, front and back. Slides and hardware included. Rugged textured black powder paint finish.



Mfg. Part No.	Stock No.	Price Each 1-2
RAKS19BK1	66F8077	91.34

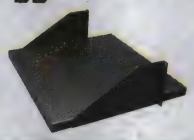
(7000)

CABINETS & RACKS

RAIL-MOUNTED ADJUSTABLE SHELVES

RoHS Compliant Available

HAMMOND MANUFACTURING



The **DNRMA series** adjustable shelves are constructed of 14 gauge steel. They mount to panel rails using 5.25″ (3U) of vertical panel space and 19″ of horizontal panel space. Movable side brackets allow mounting inside or outside of rack at four different depths. Suitable for open relay racks and racks where panel mounting is available. Finished in rugged black textured powder paint. *Mounting hardware required.*

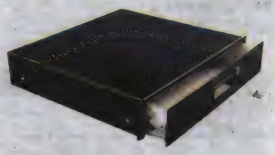
Mfg. Part No.	Depth (in.)	Width (in.)	Weight (lbs)	Stock No.	Price Each 1-2	3-5	6-11
● DNRMA1916BK1	16	17.56	8	89C4358	122.97	119.84	116.07
● DNRMA1920BK1	20	17.56	10	89C4359	132.49	129.11	125.05

(90518)

19″ STORAGE DRAWER KITS

RoHS Compliant Available

HAMMOND MANUFACTURING



Steel drawer kits mount in 19″ racks and come complete with slides, cam lock, and rear support brackets. Rugged, textured powder paint finish, drawer interior is smooth white. Mounts on two pairs of mounting rails (front and back).

BLACK

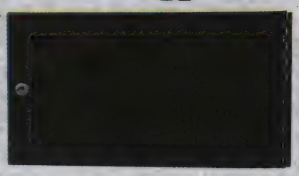
Mfg. Part No.	Drawer Height (in.)	Drawer Depth (in.)	Slide Travel (in.)	Stock No.	Price Each
● RDRW1900312BK1	3.50	12	12	40C1983	206.60
● RDRW1900812BK1	8.75	12	12	73C6167	322.73
● RDRW1900316BK1	3.50	16	16	83F9065	224.67
● RDRW1900516BK1	5.25	16	16	83F9066	274.50
● RDRW1900716BK1	7.00	16	16	83F9067	294.85
● RDRW1900816BK1	8.75	16	16	84C9862	327.95
● RDRW1900322BK1	3.50	22	22	84F068	231.30
● RDRW1900522BK1	5.25	22	22	84F069	277.06
● RDRW1900722BK1	7.00	22	22	84F070	302.15
● RDRW1900822BK1	8.75	22	22	24C5344	332.98
● RDRW1901222BK1	12.25	22	22	67C1095	380.35

(7002)

HINGED PANEL RAIL DOORS

RoHS Compliant Available

HAMMOND MANUFACTURING



RSDP series are standard 19″ rack mount doors with hinges bolted directly to the panel rail. Allows full access to space between panel rails when open. Folded on all four sides. Includes lock, hasp and 2 keys. Door depth: 0.63″. Smooth powdered paint matches standard panels.

BLACK

Mfg. Part No.	Panel Space (in.)	Weight (lbs.)	Stock No.	Price Each
● RSDP19010BK2	10.50	5	20C3994	120.58
● RSDP19012BK2	12.25	6	95B3929	122.46
● RSDP19014BK2	14.00	7	29C3594	124.47
● RSDP19017BK2	17.50	8	99B0925	127.12
● RSDP19022BK2	22.75	10	10C2955	133.62
● RSDP19028BK2	28.00	13	98B3018	137.95

(90380)

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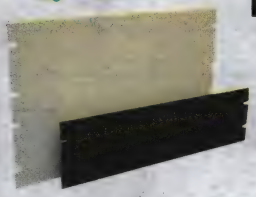
(196545)

ALUMINUM 19″ RACK PANELS

RoHS Compliant Available

HAMMOND MANUFACTURING



0.125″ thick. Standard punching on both ends. Mounting hardware not included. Painted versions are finished in smooth powder paint.

BLACK

Mfg. Part No.	Panel Height (in.)	Rack U Height	No. of Slots	Stock No.	Price Each
● PBPA19001BK2	1.75	1	4	97F9407	11.01
● PBPA19003BK2	3.50	2	4	94F4769	16.19
● PBPA19005BK2	5.25	3	4	50F8499	23.11
● PBPA19007BK2	7.00	4	4	94F4770	28.88
● PBPA19008BK2	8.75	5	4	50F8500	34.19
● PBPA19010BK2	10.50	6	8	50F8501	38.54
● PBPA19012BK2	12.25	7	8	50F8502	46.19
● PBPA19014BK2	14.00	8	8	50F8503	51.99
● PBPA19015BK2	15.75	9	8	84F089	56.98
● PBPA19017BK2	17.50	10	8	50F8504	63.60
● PBPA19019BK2	19.25	11	8	84F090	75.16
● PBPA19021BK2	21.00	12	8	16F2900	78.97
● PBPA19022BK2	22.75	13	8	50F8505	85.47
● PBPA19024BK2	24.50	14	10	84F091	94.26
● PBPA19026BK2	26.25	15	10	84F092	101.20
● PBPA19028BK2	28.00	16	12	50F8506	107.50
● PBPA19031BK2	31.50	18	12	84F094	115.42
LIGHT GRAY					
● PBPA19001LG2	1.75	1	4	51R3250	11.27
● PBPA19003LG2	3.50	2	4	51R3251	16.58
● PBPA19005LG2	5.25	3	4	51R3252	23.94
● PBPA19007LG2	7.00	4	4	24R5122	29.75
● PBPA19008LG2	8.75	5	4	51R3253	34.87
● PBPA19010LG2	10.50	6	8	51R3254	39.31
● PBPA19012LG2	12.25	7	8	51R3255	47.58
● PBPA19014LG2	14.00	8	8	51R3256	53.55
● PBPA19015LG2	15.75	9	8	51R3257	55.86
● PBPA19017LG2	17.50	10	8	51R3258	65.51
● PBPA19019LG2	19.25	11	8	51R3259	75.90
● PBPA19021LG2	21.00	12	8	51R3260	81.34
● PBPA19024LG2	24.50	14	10	51R3262	94.26
ASA61 GREY					
● PBPA19001GY2	1.75	1	4	96F5566	11.01
● PBPA19003GY2	3.50	2	4	50F8507	16.58
● PBPA19005GY2	5.25	3	4	50F8508	23.11
● PBPA19007GY2	7.00	4	4	94F4830	28.88
● PBPA19008GY2	8.75	5	4	50F8509	34.87
● PBPA19010GY2	10.50	6	8	50F8510	39.31
● PBPA19012GY2	12.25	7	8	94F4771	46.19
● PBPA19014GY2	14.00	8	8	50F8511	53.03
● PBPA19015GY2	15.75	9	8	84F095	57.54
● PBPA19017GY2	17.50	10	8	50F8512	65.51
● PBPA19022GY2	22.75	13	8	50F8513	86.30
UNFINISHED					
● PBPA19001UNF	1.75	1	4	97F9408	11.01
● PBPA19003UNF	3.50	2	4	97F9410	16.19
● PBPA19005UNF	5.25	3	4	97F9420	23.11
● PBPA19007UNF	7.00	4	4	88K1969	28.88
● PBPA19008UNF	8.75	5	4	97F9421	35.22
● PBPA19010UNF	10.50	6	8	97F9422	39.31
● PBPA19012UNF	12.25	7	8	97F9423	47.58
● PBPA19014UNF	14.00	8	8	97F9424	53.55
● PBPA19017UNF	17.50	10	8	97F9425	65.51
● PBPA19022UNF	22.75	13	8	97F9426	86.30
● PBPA19028UNF	28.00	16	12	97F9427	104.98
● PBPA19031UNF	31.50	18	12	84F109	115.42

(17756)

STEEL 19″ RACK PANELS

RoHS Compliant Available

HAMMOND MANUFACTURING

Economical, high strength 14-gauge, 0.075″ thick standard 19″ panels. Standard punching on both ends. Mounting hardware not included. Finished in smooth powder paint.

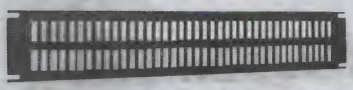
Mfg. Part No.	Panel Height (in.)	Rack U Height	No. of Slots	Stock No.	Price Each
BLACK					
PBPS19001BK2	1.75	1	4	99F8233	9.69
PBPS19003BK2	3.50	2	4	83F8985	10.80
PBPS19005BK2	5.25	3	4	83F8987	14.24
PBPS19007BK2	7.00	4	4	83F8989	17.26
PBPS19008BK2	8.75	5	4	83F8991	19.85
PBPS19010BK2	10.50	6	8	83F8993	23.15
PBPS19012BK2	12.25	7	8	83F8995	25.57
PBPS19014BK2	14.00	8	8	83F8997	35.18
PBPS19015BK2	15.75	9	8	83F8999	39.73
PBPS19017BK2	17.50	10	8	83F9001	43.49
LIGHT GRAY					
PBPS19001LG2	1.75	1	4	05R6256	10.04
PBPS19003LG2	3.50	2	4	05R6257	11.19
PBPS19005LG2	5.25	3	4	05R6258	14.75
PBPS19007LG2	7.00	4	4	05R6259	17.67
PBPS19008LG2	8.75	5	4	05R6260	20.08
PBPS19010LG2	10.50	9	8	05R6261	23.42
PBPS19012LG2	12.25	7	8	05R6262	25.87
PBPS19014LG2	14.00	8	8	05R6263	35.52
PBPS19015LG2	15.75	9	8	05R6264	39.73
PBPS19017LG2	17.50	10	8	05R6265	43.49

(90362)

SLOT VENTILATION PANELS

RoHS Compliant Available

HAMMOND MANUFACTURING



Slot panels are used for ventilation or exhaust panels. 1.75″ (1U) high panels have one row of slots, 3.5″ (2U) has 2 rows. Slots are 0.25 x 1″. Available in both lightweight aluminum or economical 14 gauge steel, in both smooth light gray or black powder paint. Panels are standard 19″ rack mount.

Mfg. Part No.	Panel Height (in.)	Description	Color	Stock No.	Price Each
PVSA19001BK2	1.75	Aluminum	Black	94B8070	27.73
PVSA19001LG2	1.75	Aluminum	Light Gray	05R6274	28.01
PVSA19003BK2	3.5	Aluminum	Black	03C3927	32.84
PVSA19003LG2	3.5	Aluminum	Light Gray	05R6275	33.83
PVSS19001BK2	1.75	Steel	Black	93B7120	17.40
PVSS19001LG2	1.75	Steel	Light Gray	05R6276	17.60
PVSS19003BK2	3.5	Steel	Black	93B7121	26.33
PVSS19003LG2	3.5	Steel	Light Gray	05R6277	26.58

(60078)

ADJUSTABLE RACK SUPPORT ANGLES

RoHS Compliant Available

HAMMOND MANUFACTURING

Support angles mount from front to back, on 19″ rack rail (on the accessory flange), to support heavy equipment and reduce load on equipment front panel. Slots allow up/down or front/back adjustments. Heavy duty, made of 14-gauge steel. Dimensions: 1.75 x 1.75″. Finish: textured black powder paint. Mounts on two pairs of mounting rails (front and back). **Sold in packages of 2.** *Order mounting hardware separately; go online or call.*

Mfg. Part No.	Length	Stock No.	Price per Pkg. Each	2-4	5-9
RASA16BK3	14.95″	93B7338	32.08	31.27	30.30
RASA22BK3	20.95″	93B7347	35.49	34.59	33.52
RASA28BK3	28.00″	25C1144	38.79	37.81	36.65

(6997)

EQUIPMENT SLIDES

RoHS Compliant Available

HAMMOND MANUFACTURING

Slides mount to the front and rear 19″ rack panel rails. Occupies 1U (1.75″) of panel height. Heavy-duty, ball-bearing type mechanism. Converts fixed shelves **mfg. part no. RASC** *on page 2347* to a pull-out shelf. **Sold in packages of 2.**

Mfg. Part No.	Panel Depth (in.)	Capacity (lbs.)	Stock No.	Price per Pkg. Each	2-4
RSLIDE12	12	120	99R3766	70.63	69.50
RSLIDE16	16	130	34C3341	71.46	70.33
RSLIDE22	22	120	99R3767	77.33	76.10

(7001)

MOUNTING HARDWARE

RoHS Compliant Available

HAMMOND MANUFACTURING

Sold in package quantities indicated.

SCREWS

Mfg. Part No.	Description	Pkg. of	Stock No.	Price per Pkg. Each
1421A	#10-32 × 0.625″ Phillips Slotted Oval Head Screw with Plastic Cup Washer	4	95F2558	3.99
1421A25B	Nickel-Plated #10-32 × 0.625″ Countersunk, Phillips Slotted Oval Head Screw	25	95F2554	6.22
1421A100B	Nickel-Plated #10-32 × 0.625″ Countersunk, Phillips Slotted Oval Head Screw	100	94F4837	22.82
1421ABK25	Black Oxide Finish #10-32 x 0.625″ Pan Head Screw w/ Black Nylon Washer	25	09K7557	6.85
1421ABK100	Black Oxide Finish #10-32 x 0.625″ Pan Head Screw w/ Black Nylon Washer	100	18K8534	21.01
H1032BK100	Black Oxide Finish #10-32 x 0.625″ Pan Head Phillips Screw w/ Integral Washer	100	01T1992	28.88
1421B	Nickel-Plated #10-32 x 0.5″ Thumb Screw w/ Nylon Washers for Panels up to 0.09″ Thick	4	96F5561	13.68
1421D	Zinc-Plated #10-32 x 0.5″ Pan Head Screw	25	96F5562	4.86
1421D100	Zinc-Plated #10-32 x 0.5″ Slotted Pan Head Screw	100	05T6352	16.27
1421F25	Nickel-Plated #10-32 x 1.25″ Phillips Oval Head Screw	25	05R6279	14.69
1421SN	0.25″ - 20 Strut Nut with 0.25″ - 20 x 0.5″ Bolt	8	80K7833	27.02
WASHERS				
1421E25W	Nickel-Plated Metal Cup Washer for Countersunk #10-32 Screws	25	95F2555	4.59
1421E100W	Nickel-Plated Metal Cup Washer for Countersunk #10-32 Screws	100	98F2139	17.63
1421A25W	Black Plastic Cup Washer for Countersunk #10-32 Screws	25	95F2556	11.40
1421A100W	Black Plastic Cup Washer for Countersunk #10-32 Screws	100	94F823	42.46
NUTS				
1421N25	#10-32 Clip Nuts for Panel Rails - Black	25	96F5563	17.67
1421N100	#10-32 Clip Nuts for Panel Rails - Black	100	94F824	68.94
1421NP25	Zinc-Plated #10-32 Clip Nuts for Round Punched Hole Rails	25	34M4615	19.92
1421NP100	Zinc-Plated #10-32 Clip Nuts for Round Punched Hole Rails	100	90B3674	75.77
1421CNA25	Zinc-Plated #10-32 Cage Nuts for Square Hole Punched Rails	25	83C8530	15.48
1421CNA100	Zinc-Plated #10-32 Cage Nuts for Square Hole Punched Rails	100	73C2824	47.05
1421CNB25	Zinc-Plated M6 Cage Nuts for Square Hole Punched Rails	25	34M4613	15.48
1421CNB100	Zinc-Plated M6 Cage Nuts for Square Hole Punched Rails	100	01H7820	47.99

(7219)

pro-**POWER** AT NEWARK ELEMENT14

Take control with quality, affordable Wire-Management Solutions.
newark.com/pro-power

(212564)

CABINETS & RACKS

RUBBER FEET

RoHS Compliant Available

HAMMOND MANUFACTURING

1421T2 1421T3 1421T4 1421T7 1421T8BK 1421T9BK

Rubber feet are self-adhesive, except **1421T7** which is screw-on. **Sold in packages of 24.**

Mfg. Part No.	Dimensions	Style	Color	Stock No.	Price per Pkg. 1-4	Price per Pkg. 5-9
● 1421T2	0.5″ x 0.14″	Flat Round	Black	83F8949	6.99	6.11
● 1421T2CL	0.5″ x 0.14″	Flat Round	Clear	05R6280	8.15	7.13
● 1421T3	0.5″ x 0.23″	Square	Black	50B9990	9.89	8.65
● 1421T4	0.81″ x 0.30″	Square	Black	94F825	14.09	12.32
● 1421T6CL	0.31″ x 0.09″	Round Flat	Clear	05R6281	8.06	7.04
● 1421T7	0.75″ x 0.51″	Round	Black	94F4789	24.22	21.18
● 1421T8BK	0.47″ x 0.12″	Square	Black	83F9204	7.80	6.82
● 1421T9BK	0.88″ x 0.40″	Round	Black	83F9205	27.95	24.44

(34479)

INSTRUMENT CASE HANDLES

RoHS Compliant Available

HAMMOND MANUFACTURING

Steel Handle

Aluminum Handle with Gray End Post

Accessory handles for instrument cases are available in chrome-plated steel, anodized aluminum, or heavy-duty extruded aluminum with black or gray end posts. These rugged end posts are constructed of Polyamide with 30% reinforced glass fiber and molded in brass inserts. Hardware included. **Sold individually.**

CHROME-PLATED STEEL

Mfg. Part No.	Dimensions Height	Dimensions Diameter	Dimensions Hole Centers	Stock No.	Price Each 1-4
● 1427B	0.625″	0.187″	1.25″	98H1240	4.64
● 1427B2	1″	0.187″	1.25″	98H1241	5.41
● 1427D	0.75″	0.187″	1.75″	98H1242	5.41
● 1427E	1″	0.187″	2″	98H1243	5.41
● 1427Q	0.95″	0.25″	2.3″	24B6430	6.01
● 1427P	1″	0.25″	2.8″	24B6429	5.94
● 1427G2	1″	0.187″	3″	66W5378	4.65
● 1427G3	1.5″	0.313″	3″	86W0209	5.07
● 1427G	1.75″	0.25″	3″	98H1244	6.01
● 1427N	1.2″	0.375″	3.5″	98F3692	6.61
● 1427N2	1.5″	0.25″	3.5″	98H1253	6.53
● 1427C1	1.3″	0.375″	4″	94F4829	5.41
● 1427S3	1.5″	0.313″	4″	86W0215	5.57
● 1427S	1.5″	0.25″	4″	98H1254	6.01
● 1427S2	1.75″	0.25″	4″	98H1257	6.01
● 1427U3	1.5″	0.313″	4.5″	85W8924	5.80
● 1427T3	1.5″	0.313″	5″	86W0217	6.04
● 1427T	1.5″	0.25″	5″	98H1258	6.61
● 1427T2	1.75″	0.25″	5″	98H1261	6.61
● 1427M	1.2″	0.375″	5.3″	94F836	5.80
● 1427W	1.5″	0.25″	6″	98H1262	6.61
● 1427W3	1.75″	0.313″	6″	86W0220	7.08
● 1427W2	1.75″	0.25″	6″	98H1265	6.61
● 1427L	1.3″	0.375″	7″	24B6424	7.13

BLACK E-COATING STEEL

Mfg. Part No.	Dimensions Length	Dimensions Height	Dimensions Diameter	Dimensions Hole Centers	Stock No.	Price Each 1-4
● 1427B2BK1	1.44″	1″	0.187″	1.25″	86W0205	4.39
● 1427E1BK-1	2.19″	1″	0.187″	2″	86W0207	4.23
● 1427P1BK-1	3.05″	1″	0.25″	2.8″	86W0214	5.46
● 1427G2BK	3.19″	1″	0.187″	3″	86W0208	5.22
● 1427G3BK	3.31″	1.5″	0.313″	3″	86W0210	5.46
● 1427N1BK	3.88″	1.2″	0.375″	3.5″	86W0213	5.48
● 1427C1BK	4.38″	1.3″	0.375″	4″	86W0206	6.04
● 1427S3BK	4.31″	1.5″	0.313″	4″	86W0216	6.15
● 1427U3BK	4.81″	1.5″	0.313″	4.5″	86W0219	6.38
● 1427T3BK	5.31″	1.5″	0.313″	5″	86W0218	6.62
● 1427M1BK	5.67″	1.2″	0.375″	5.3″	86W0212	5.80
● 1427W3BK	6.31″	1.75″	0.313″	6″	86W0221	7.66
● 1427L1BK	7.38″	1.3″	0.375″	7″	86W0211	6.85

➤ CONTINUED ➤

INSTRUMENT CASE HANDLES (CONT.)

EXTRUDED ALUMINUM

Dimensions (Inches) L	Ht.	W	Hole Centers	Gray End Posts Mfg. Part No.	Gray End Posts Stock No.	Black End Posts Mfg. Part No.	Black End Posts Stock No.	Price Each 1-24
7.75	1.64	0.52	7.00	● 1427LGC	98H1248	● 1427LBC	98H1247	15.38

ANODIZED ALUMINUM

Mfg. Part No.	Dimensions (Inches) Length	Height	Hole Centers	Thread Depth	Finish	Stock No.	Price Each 1-4
● 1427C5	4.20	1.30	4.00	0.438	Brushed	34M4583	6.90

(47771)

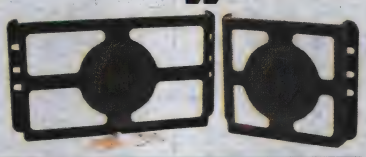
LITERATURE POCKET KIT

RoHS Compliant Available

HAMMOND MANUFACTURING

Kit Includes:
- Black plastic pocket
- High strength two-sided adhesive tape
- Surface preparation swab

The **PKT series** literature pocket kit is a handy storage product for holding literature such as reference manuals, etc. They are typically applied inside the door or side panels of a rack.



Mfg. Part No.	Dimensions Height	Dimensions Width	Stock No.	Price Each
● PKT66	6″	6″	83F9019	14.63
● PKT99			83F9020	14.54

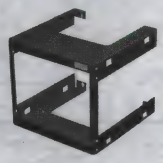
(90533)

ACCESS PLUS II® WALL-MOUNT DATACOM CABINETS, RACKS & ACCESSORIES

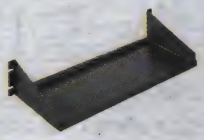
RoHS Compliant Available

Hoffman®

Wall-Mount Cabinet (Window Door)



Fixed Rack



Single-Sided Shelf

Power Distribution Unit

Double-hinged cabinets provide security, equipment access, cooling and support for network and other 19-in. rack-mount equipment. The cabinet has three components: front door, center section and wall section. Can be mounted to be left- or right-hinged and comes completely assembled and ready to mount. Constructed of quality welded 16 and 14 gauge steel coated with RAL 9005 black textured, low-gloss polyester powder paint.

CABINETS - WINDOW DOOR

Mfg. Part No.	Dimensions (in.) H	W	D	Rack U Height	Stock No.	Price Each 1-4	Price Each 5+
● EWMW242425	23.62	23.62	25.09	12	59P3357	741.77	695.68
● EWMW362425	36.02	23.62	25.09	19	59P3359	850.80	797.92
● EWMW482425	48.03	23.62	25.09	26	59P3361	960.90	901.18

FIXED RACKS

Mfg. Part No.	Dimensions (in.) H	W	D	Rack U Height	Stock No.	Price 1-4
● E19FWM12U20	23	20	20	12	74C6469	154.11

RACK MOUNT POWER DISTRIBUTION UNITS

Power distribution units (PDUs) provide power to equipment mounted in cabinets or on open frame racks. 6 ft power cord cable length. 120 VAC supply voltage. "M" suffix indicates PDU comes with an amp meter. "S" suffix indicates PDU offers 2000 J surge protection. "T" suffix indicates twist-lock plug.

Mfg. Part No.	Load Current (A)	No. of Outlets	Outlet Style	Stock No.	Price 1-4
● DP1N190615	15	6	NEMA 5-15R	27M2315	97.23
● DP1N191015S	15	10	NEMA 5-15R	27M2316	159.05
● DP1N191415	15	14	NEMA 5-15R	27M2320	131.82
● DP1N191415M	15	14	NEMA 5-15R	27M2321	327.70
● DP1N191020ST	20	10	NEMA 5-20R	27M2319	183.77
● DP1N191420	20	14	NEMA 5-20R	27M2322	157.40
● DP1N191420T	20	14	NEMA 5-20R	27M2323	175.98
● DP1N190430X	30	8		27M2314	327.70

COOLING FANS

Designed for use in enclosures where space is limited, these 117 mm diameter, ball-bearing style axial fans are powered by 115 VAC, 50/60 Hz single-phase motors with a 6 ft power cord with polarized plug for power connections. These fans are ideal for applications where compact and quiet service is desired.

➤ CONTINUED ➤

ACCESS PLUS II® WALL-MOUNT DATACOM CABINETS, RACKS & ACCESSORIES (CONT.)

Mfg. Part No.	Maximum Airflow (cfm)	Power (W)	Operating Current (mA)	Dimensions (mm) H	W	D	Stock No.	Price 1-4
A4AXFNGQ	49	5	80	119	119	38.6	88H5874	106.00
A4AXFNPG	100	15	210	119	119	38.6	85C2613	105.09

Mfg. Part No.	Maximum Airflow (cfm)	Power (W)	Operating Current (mA)	Dimensions (mm) Diameter	D	Stock No.	Price 1-4
A-4AXFN2	85	14	140	119	38.6	06B5693	126.95
A4AXFN24	118	8.4	350	4.69	1.52	15N0106	134.16
A6AXFNGQ	102	18	190	149	38.1	88H5911	219.02
A-6AXFN2	240	35	180	152	38	06B5828	280.28

ACCESSORIES

Mfg. Part No.	Description	Stock No.	Price 1-4
AS1032	Combo Head Screws, 10-32 x 5/8", Pkg. of 20	51M8649	24.19
AS1032250	Combo Head Screws, 10-32 x 5/8", Pkg. of 250	70M8757	171.75
DBPRA4U	Patch Panel Rack Angle, 45°, Pkg. of 2	16J2181	71.70
AFLTR4LD	Fan Filter and Finger Guard Kit	16J0988	32.10
AGLK2	Grounding Lug Kit, 2-14AWG	89C2545	15.18
CPMK24	2 Mounting Channels, 2 Straps, Mounting Hardware	70M8758	273.30
ECW12B	Cable Wrap, 12", Black	74C6432	43.89
ECW8B	Cable Wrap, 8", Black	74C6436	31.66
ESH1917	Single-Sided Steel Shelf, 17" Deep	70M8759	105.17
ESH198	Single-Sided Steel Shelf, 8" Deep	70M8760	76.50

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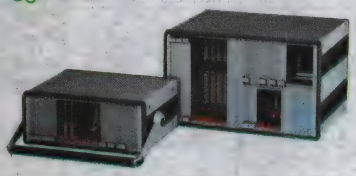
INSTRUMENT CASES AND ACCESSORIES

RoHS Compliant Available

Schroff™

RatiopacPro Case



CompacPro Cases

- Instrument cases for VME, VME64x, cPCI and general electronics
- Shielded and unshielded versions in various sizes
- Cases come standard in 84HP but can be customized to any size

RATIOPACPRO CASE
VME64x & cPCI shielded enclosure that can be used as a desktop or rack mount case. Requires card guides.

Mfg. Part No.	Description	Width	Height	Depth (mm)	Stock No.	Price Each 1-2	3-4
24572-054	Shielded	84HP	3U	315	64T7899	519.08	502.23
24572-055	Shielded	84HP	3U	375	64T7900	639.71	618.74
24572-056	Shielded	84HP	3U	435	64T7901	664.12	642.34

RATIOPACPRO ACCESSORIES

20603-002	Tip up feet	...	...	...	64T5890	15.36	14.80
20603-003	Stacking up brackets	...	...	...	64T5891	11.39	10.99
24571-301	3U Front handle(2)	...	...	...	64T7741	45.31	43.75
24571-295	3U 19" Mounting bracket (2)	...	...	...	64T7735	36.02	34.85
20848-636	Rear panel (Shielded)	84HP	3U	...	64T6726	52.55	50.15

COMPACPRO CASE
Unshielded enclosure for desktop application.

14575-163	Unshielded	84HP	3U	271	82T4352	186.39	179.32
14575-165	Unshielded	84HP	3U	331	82T4353	198.83	191.28
14575-167	Unshielded	84HP	3U	391	82T4354	215.91	207.71
14575-169	Unshielded	84HP	3U	451	82T4355	236.11	227.14
14575-171	Unshielded	84HP	3U	511	64T5855	256.31	246.57

COMPACPRO CASES WITH ACCESSORIES
VME unshielded desktop case with accessories (rear panel, card guides, feet and cover brackets)

14575-174	Unshielded	84HP	3U	271	27W9808	423.85	407.75
14575-175	Unshielded	84HP	3U	331	27W9809	445.02	428.12
14575-176	Unshielded	84HP	3U	391	27W9810	508.85	489.53
14575-178	Unshielded	84HP	3U	511	27W9814	487.29	468.78

COMPACPRO

30823-518	Rear Panel	84HP	3U	...	64T9052	44.48	42.85
30823-260	Front Panel	84HP	3U	...	86W5806	43.78	42.48
24575-177	Acrylic glass front door on hinges	84HP	3U	...	64T7944	102.79	99.45
24575-178	Tip Up carrying handle	84HP	3U	...	64T7945	84.72	82.04

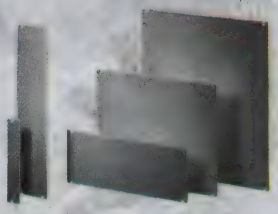
(202656)

FILLER PANELS

RoHS Compliant Available

Schroff™

- Unshielded and shieldable filler front panels for 1101.x applications such as VME, VME64x and cPCI
- Shieldable filler panels can be retroffited with shielding accessories



ALUMINIUM FILLER PANELS (REQUIRES SEPARATE HARDWARE)

Mfg. Part No.	Shielding	Width	Height	Stock No.	Price Each 1-24	25-49	50-99
30818-273	Unshielded	4HP	3U	28W2533	8.19	7.89	7.67
30818-275	Unshielded	6HP	3U	64T8509	9.15	8.80	8.57
30818-277	Unshielded	8HP	3U	52W9176	11.26	10.84	10.56
30818-279	Unshielded	10HP	3U	64T8511	11.73	11.29	11.00
30818-281	Unshielded	12HP	3U	64T8512	14.23	13.70	13.34
30818-518	Unshielded	4HP	6U	62W4168	14.81	14.26	13.89
30818-520	Unshielded	6HP	6U	64T8541	16.43	15.81	15.40
30818-522	Unshielded	8HP	6U	85W3535	16.57	15.94	15.53
30818-524	Unshielded	10HP	6U	64T8544	17.45	16.80	16.36
30818-526	Unshielded	12HP	6U	64T8545	25.34	24.39	23.76
30848-354	Shieldable	4HP	3U	64T9596	27.31	26.30	25.72
30848-380	Shieldable	6HP	3U	64T9603	25.13	24.20	23.68
30848-358	Shieldable	8HP	3U	55W5124	33.66	32.41	31.70
30848-357	Shieldable	12HP	3U	64T9599	33.52	32.27	31.57
30848-355	Shieldable	4HP	6U	64T9597	25.67	24.73	24.10
30848-381	Shieldable	6HP	6U	64T9604	26.72	25.73	25.17
30848-357	Shieldable	8HP	6U	64T9599	33.52	32.27	31.57
30848-359	Shieldable	12HP	6U	64T9600	35.54	34.22	33.47

ACCESSORIES

Mfg. Part No.	Type	Description	Pkg. Qty.	Stock No.	Price Each 1-9	10-24	25-49
21100-660	Hardware	Aluminum Filler Panel screw sleeves to be used with 21101-101	100	62W3902	114.42	111.02	108.30
21101-101	Hardware	Aluminum Filler Panel screws M2.5x12.3	100	28W4799	43.69	42.39	41.35
21101-853	3U EMC shielding	To use with Shieldable filler panels	10	90T1048	33.25	32.27	31.27
21101-855	6U EMC shielding	To use with Shieldable filler panels	10	90T1049	47.26	45.85	44.45

(202657)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196561)

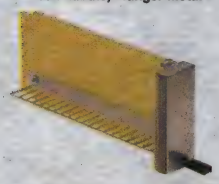
CABINETS & RACKS

FRONT PANEL KITS AND ACCESSORIES

RoHS Compliant Available

Schroff™

IEA Handle, Plunger Metal



AMC Filler Modules MS S

CompactPCI

Advanced MC Cover Leaf

- Front panels for VME, VME64x, cPCI, AdvancedTCA and MicroTCA applications
- Textile shilding on shielded front panels

VME64x and cPCI front panel solutions
VME64x and cPCI Shielded Front Panels Kits (Inlcludes Front Panel, Handle, Hardware and Gasketing)

Mfg. Part No.	Description	Height	Width	Stock No.	Price Each 1-9	Price Each 10-24
● 20848-585	Shielded	3U	4HP	64T6699	27.78	26.93
● 20848-587	Shielded	3U	6HP	64T6700	32.06	30.84
● 20848-589	Shielded	3U	8HP	64T6701	33.17	31.91
● 20848-590	Shielded	3U	10HP	64T6702	34.27	32.97
● 20848-591	Shielded	3U	12HP	64T6703	35.73	34.37
● 20848-592	Shielded	6U	4HP	64T6704	35.34	34.26
● 20848-594	Shielded	6U	6HP	64T6705	39.78	38.26
● 20848-596	Shielded	6U	8HP	64T6706	40.87	39.31
● 20848-597	Shielded	6U	10HP	64T6707	49.47	45.33
● 20848-598	Shielded	6U	12HP	64T6708	43.83	42.16

VME front panel solutions
VME Front Panel kits(front panel, handle, hardware)

● 20848-664	Shielded	4HP	3U	64T6736	30.83	29.66
● 20848-666	Shielded	6HP	3U	64T6738	32.81	31.57
● 20848-668	Shielded	8HP	3U	64T6740	35.82	34.46
● 20848-672	Shielded	4HP	6U	64T6744	38.51	37.05
● 20848-674	Shielded	6HP	6U	64T6746	42.85	41.22
20848-676	Shielded	8HP	6U	64T6748	53.62	49.13
● 20818-018	Unshielded	4HP	3U	64T6101	14.69	14.14
● 20818-020	Unshielded	6HP	3U	59M4799	17.26	16.43
● 20818-022	Unshielded	8HP	3U	64T6105	18.35	17.65
● 20818-025	Unshielded	4HP	6U	64T6108	22.45	21.60
● 20818-027	Unshielded	6HP	6U	64T6110	30.16	27.63
● 20818-028	Unshielded	8HP	6U	64T6111	31.13	29.95

AdvancedTCA and MicroTCA front panel solutions
AdvancedTCA and MircroTCA Filler Panels with Air Baffles and without. Stainless steel.

Mfg. Part No.	Description			Stock No.	Price Each 1-9	Price Each 10-24
● 21591-079	ATCA	8U 6HP 280mm	With air baffle	82T4370	44.17	42.85
● 21591-099	ATCA	8U 6HP 70mm	With air baffle	82T4371	37.75	36.63
● 21591-097	ATCA	8U 6HP	No air baffle	64T7322	33.01	32.03
● 20849-022	mTCA	Single Compact	With air baffle	64T6760	24.54	23.61
● 20849-106	mTCA	Single Mid-size	With air baffle	64T6777	26.36	25.36
● 20849-024	mTCA	Single Full-size	With air baffle	64T6762	25.66	24.69
20849-023	mTCA	Double Compact	With air baffle	64T6761	36.97	33.87
20849-107	mTCA	Double Mid-size	With air baffle	64T6778	37.38	34.25
● 20849-025	mTCA	Double Full-size	With air baffle	64T6763	25.66	24.69

AdvancedTCA heavy duty front panels with IEA handles and hardware
Stainless steel.

● 20818-160	8U 6HP	Plunger style	85W3345	90.24	86.80
● 20818-161	8U 6HP	Lever style	85W3346	74.90	71.47

AdvancedTCA front panels with IEA handles and hardware
Stainless steel.

● 21596324	8U 6HP	Plunger style	65W2306	84.97	82.37
● 21596-325	8U 6HP	Lever style	85W3352	62.79	60.92

MicroTCA Front panels AMC.0 ORC1.2
Stainless steel.

● 20849-127	Single Compact	64T6779	30.40	27.85
● 20849-129	Single Mid-size	64T6781	23.56	22.67

CONTINUED

FRONT PANEL KITS AND ACCESSORIES (CONT.)

MicroTCA Front panels AMC.0 ORC1.2

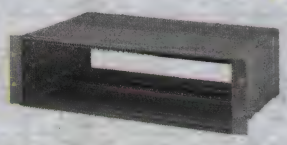
Mfg. Part No.	Description	Height	Width	Stock No.	Price Each 1-9	Price Each 10-24
● 20849-128	Single Full-size			64T6780	24.12	23.21
● 20849-130	Double Compact			64T6782	33.29	30.50
● 20849-132	Double Mid-size			64T6784	25.50	24.53
● 20849-131	Double Full-size			64T6783	24.77	23.83

(202658)

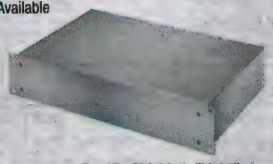
19″ CHASSIS AND SUBRACKS

RoHS Compliant Available

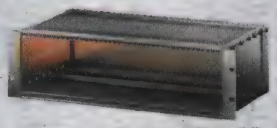
Schroff™



EuropacPro Kit, Shielded, For CompactPCI, For Backplane Mounting Without I/O



EuropacPro Kit, Shielded, "Light", For Backplane Mounting



EuropacPro Kit, Unshielded, "Heavy", For Backplane Mounting

- 19″ Chassis and Subracks for VME, VME64x and CompactPCI for rack mount installations
- Subracks come in 84HP width and 3U/6U height, but can be configured to various sizes
- Designed to withstand loads of up to 17 or 33 lbs of static loads
- Shielded and non shielded versions
- All preconfigured for installation of back plane with insulation

VME UNSHIELDED SUBRACKS FOR UP TO 17lbs. STATIC LOAD

Mfg. Part No.	Height	Depth (mm)	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10-24
● 24563-131	3U	175	64T7604	105.39	102.16	99.60
● 24563-132	3U	235	64T7605	106.56	102.69	100.11
● 24563-133	3U	295	64T7606	106.70	102.82	100.23
● 24563-134	3U	355	64T7607	110.04	106.04	103.37
● 24563-135	3U	415	64T7608	112.78	109.35	106.59
● 24563-136	3U	475	64T7609	116.08	112.54	109.71
● 24563-431	6U	175	64T7617	145.61	140.31	136.78
● 24563-432	6U	235	64T7618	151.89	146.37	142.69
● 24563-433	6U	295	64T7619	152.05	146.53	142.84
● 24563-434	6U	355	64T7620	163.66	158.67	154.68
● 24563-435	6U	415	64T7621	170.01	164.83	160.67
● 24563-436	6U	475	64T7622	169.59	164.42	160.29

VME UNSHIELDED SUBRACKS FOR UP TO 33lbs. STATIC LOAD

● 24563-161	3U	175	90T1050	126.22	122.42	119.37
● 24563-162	3U	235	90T1051	134.25	130.20	126.96
● 24563-163	3U	295	90T1052	139.72	135.50	132.14
● 24563-164	3U	355	90T1053	133.11	129.10	125.89
● 24563-461	6U	175	90T1058	189.54	183.83	179.26
● 24563-462	6U	235	90T1059	200.36	194.32	189.50
● 24563-463	6U	295	90T1060	213.75	207.31	202.16
● 24563-464	6U	355	90T1061	218.83	212.24	206.97

VME SHIELDED SUBRACKS FOR UP TO 17lbs. STATIC LOAD

● 24563-142	3U	235	64T7610	336.27	324.04	315.89
● 24563-143	3U	295	64T7611	346.60	334.00	325.59
● 24563-145	3U	415	64T7613	363.82	350.51	339.42
● 24563-146	3U	475	64T7614	378.80	364.95	353.40
● 24563-442	6U	235	64T7623	425.37	409.80	396.84
● 24563-443	6U	295	64T7624	435.09	419.26	408.71
● 24563-444	6U	355	64T7625	434.20	418.31	405.07
● 24563-445	6U	415	64T7626	467.56	450.45	436.20
● 24563-446	6U	475	64T7627	486.59	468.79	453.96

VME SHIELDED SUBRACKS FOR UP TO 33lbs. STATIC LOAD

● 24563-172	3U	235	90T1054	337.57	327.02	316.47
● 24563-173	3U	295	90T1055	353.94	342.88	331.82
● 24563-174	3U	355	90T1056	374.91	363.19	351.47
● 24563-472	6U	235	90T1062	450.38	436.31	422.24
● 24563-473	6U	295	90T1063	467.61	453.00	438.39
● 24563-474	6U	355	64T7629	388.88	376.73	364.58

VME64x AND CompactPCI SHIELDED SUBRACKS FOR UP TO 33lbs. STATIC LOAD (NO REAR I/O)

● 24563-152	3U	235	64T7615	224.37	216.22	210.77
● 24563-452	6U	235	64T7628	265.51	255.42	248.70

VME64x AND CompactPCI SHIELDED SUBRACKS FOR UP TO 33lbs. STATIC LOAD (WITH REAR I/O)

● 24563-157	3U	275	64T7616	225.94	217.36	211.64
● 24563-457	6U	275	90T1057	276.28	265.79	258.79

CONTINUED

19″ CHASSIS AND SUBRACKS (CONT.)

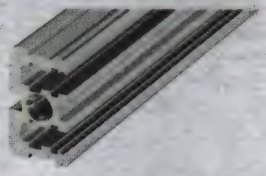
Mfg. Part No.	Height	Depth (mm)	Stock No.	Price Each 1-4	5-9	10-24
Clear anodized handles.						
10501-005	3U	...	64T5717	17.47	16.86	16.46
10501-008	6U	...	64T5720	25.79	24.90	24.30
Top and Bottom covers for 84HP Unshielded subracks						
24560-078	160mm board depth	175	64T7508	59.02	57.10	55.57
24560-079	220mm board depth	235	64T7509	65.08	62.97	61.28
EMC Stainless steel gasket between cover and horizontal rails						
24560-245	...	...	82T4770	5.03	4.88	4.76
1U and 2U chassis for rack mount application						
20860-120	1U	220	64T6925	92.17	89.40	87.17
20860-122	1U	340	64T6927	101.96	98.88	96.43
20860-127	2U	340	64T6929	112.09	108.72	106.02
Handles for 1 and 2 U chassis. **Sold in packages of 2.**						
20860-256	1U	...	74M6484	17.14	16.50	16.07
20860-257	2U	...	74M6485	35.21	33.36	31.91

(202659)

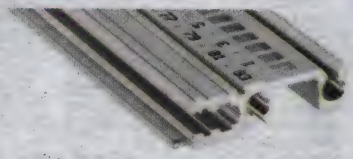
EUROPACPRO, RATIOPACPRO AND COMPACPRO ACCESSORIES

RoHS Compliant Available

Schroff™



Horizontal Rail, Standard



VME, Heavy Duty, Front

84HP Horizontal Rails for VME, VME64x and CompactPCI applications.

Mfg. Part No.	Description	Usable HP	Length (mm)	Stock No.	Price Each 1-9	10-24
34560-284	VME, Heavy Duty, Front	84	431.8	64T9787	15.89	15.32
34560-384	VME64x and cPCI, Heavy Duty, Front	84	431.8	64T9801	19.43	18.75
34560-584	VME, VME64x and cPCI, Heavy Duty, Rear	84	431.8	64T9826	15.67	15.11
34561-084	VME, VME64x and cPCI , Heavy Duty, Rear/Middle	84	431.3	64T9860	9.37	9.01
ACCESSORIES						
34561-384	Threaded Strip M2.5	84	431.3	64T9879	4.50	4.36
30837-619	Horizontal Rail, Standard	84	431.8	64T9335	21.27	20.45

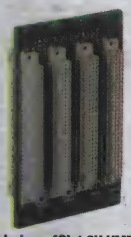
(202660)

VME / VME64x BACKPLANES

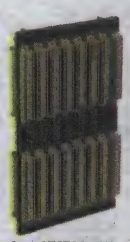
RoHS Compliant Available

Schroff™

- Mounting options: isolated or connected to chassis GND
- Power input with power bugs
- Shrouds on slot 1 J1 and on all slots in J2
- Inboard termination
- Electric automatic daisy chain



Backplane 4Slot 3U VME J1



Backplane VME64x 6U w/o P0

VME / VME64x backplanes are specially designed to achieve exellent power distribution, best signal integrity and virtually zero cross talk. The SMD components used on VME / VME64x backplanes lead to a much lower failure rate than conventional components. Schroff uses ceramic capacitors on the VME / VME64x backplanes to gain a better noise reduction at frequencies above 10MHz. This feature reduces the radiated and conducted noise caused by the processor clock signals. In addition, ceramic capacitors have no limitation in useful lifetime, as compared to aluminium capacitors that dry out after 5 to 10 years, and are unaware of the hazardous fire risks known from tantalum electrolytics. VME / VME64x backplanes are fully compliant to the latest VITA specifications.

Mfg. Part No.	Dimensions	Stock No.	Price Each 1-4	5-9
23001004	Backplane VME 3U 4Slot J1	85W2192	294.70	285.13
23001005	Backplane VME 3U 5Slot J1	85W2193	311.30	301.19
23001007	Backplane VME 3U 7Slot J1	85W2194	359.95	348.26
23001010	Backplane VME 3U 10Slot J1	85W2195	517.41	500.61
23001021	Backplane VME 3U 21Slot J1	85W2196	1113.73	1077.57
23001069	Backplane VME 6U 9Slot Monolithic	85W2197	882.12	853.48
23001508	Backplane VME64x 6U 5Slot P0	85W2198	1365.06	1320.74
23001535	Backplane VME64x 6U 8Slot P0	85W2199	1017.64	984.60
23001540	Backplane VME64x 6U 10Slot P0	85W2200	1777.78	1720.06
23001551	Backplane VME64x 6U 21Slot P0	85W2201	3369.52	3260.12

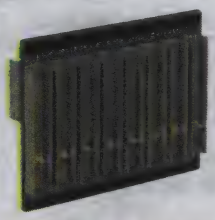
(209974)

CompactPCI BACKPLANES

RoHS Compliant Available

Schroff™

- Isolated Assembling / Connection to ChassisGND
- VI/O
- Stiffeners to reduce bending of the backplane
- Geographical Addressing (GA)
- Up to 5 Slots 66MHz operation
- Hot Swap



CompactPCI backplanes are specially designed to achieve exellent power distribution, best signal integrity, virtually zero cross talk, and minimum clock skew. The SMD components used on Schroff CompactPCI backplanes lead to a much lower failure rate than conventional components. Schroff uses ceramic capacitors on the CompactPCI backplanes to gain a better noise reduction at frequencies above 10MHz. This feature reduces the radiated and conducted noise caused by the processor and PCI clock signals. In addition, ceramic capacitors have no limitation in useful lifetime, as compared to aluminium capacitors that dry out after 5 to 10 years, and are unaware of the hazardous fire risks known from tantalum electrolytics. CompactPCI backplanes are fully compliant to the latest PICMG specifications.

Mfg. Part No.	Dimensions	Stock No.	Price Each 1-4	5-9
23006300	Backplane CPCI Right 8Slot 3U 32BIT 3.3V	85W2202	592.44	573.21
23006355	Backplane CPCI Right 5Slot 3U 64BIT 3.3V	85W2203	405.64	392.47
23006814	Backplane CPCI Right 4Slot 3U 32BIT 5V	85W2204	368.16	356.20
23006864	Backplane CPCI Right 4Slot 6U 64BIT 5V	85W2206	845.16	817.72
23006815	Backplane CPCI Right 5Slot 3U 32BIT 5V	85W2205	526.85	509.75
23006865	Backplane CPCI Right 5Slot 6U 64BIT 5V	85W2207	1064.45	1029.89

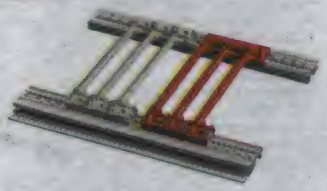
(209967)

GUIDE RAILS

RoHS Compliant Available

Schroff™

- Plastic guide rails compatible with VME, VEM64x and CompactPCI printed circuit boards
- 2MM plastic guide rails for Schroff subracks and cases designed to integrate into Schroff horizontal rails without any special tools or accessories



2MM CARD GUIDE RAILS FOR VME PCBs

Mfg. Part No.	Board Length (mm)	Material	Color	Stock No.	Price Each 1-24	25-49	50-99
24560-351	160	PBT, UL 94 V-0	Red	44W8824	10.30	9.99	9.73
24560-353	220	PBT, UL 94 V-0	Red	47W3182	11.73	11.38	11.09
2MM CARD GUIDE RAILS WITH CODING FOR VME64x AND CompactPCI PCBs							
64560-089	160	PBT, UL 94 V-0	Red	65T0303	1.58	1.53	1.49
64560-090	160	PBT, UL 94 V-0	Grey	65T0304	1.58	1.53	1.49
64560-086	70	PBT, UL 94 V-0	Grey	65T0302	1.39	1.34	1.31
64560-091	220	PBT, UL 94 V-0	Red	65T0305	1.63	1.58	1.54
64560-092	220	PBT, UL 94 V-0	Grey	65T0306	1.73	1.68	1.64
2MM CARD GUIDE RAILS FOR POWER SUPPLY UNITS IN ACCORDANCE WITH IEEE1101.10							
64560-071	160	PPE UL 94 V-0	Green	65T0293	1.96	1.89	1.85
64560-072	220	PPE UL 94 V-0	Green	65T0294	2.04	1.98	1.93

CODING PEGS FOR VME64x and CompactPCI CARD GUIDE RAILS

Mfg. Part No.	Qty.	Material	Color	Stock No.	Price Each 1-9	10-24	25-49
20817-501	100 pcs.	PPE UL 94 V-0	Black	27W9852	13.17	12.78	12.46

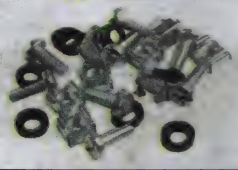
(202661)

HARDWARE

RoHS Compliant Available

Schroff™

Hardware designed for Schroff front panels, subrack and cases.



Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-24	25-49
21100-429	Countersunk Screw M2.5 x 8, St Nickel-Plated	64T7158	8.11	7.88	7.67
21100464	Plastic Sleeve, PA, Grey	64T7165	23.37	22.68	22.13
21100-591	Plastic Sleeves for Front Panels	64T7189	24.77	24.04	23.45
21100-660	Metal Sleeve, Brass, Nickel Plated	62W3902	114.42	111.02	108.30
21100-662	Metal Sleeve, Stainless Steel	64T7205	1.83	1.76	1.72
21100-748	Pozidrive/Slotted Collar Screw M2.5 × 11, St Nickel-Plated	64T7222	0.53	0.52	0.50
21101-847	Quarter Turn Fasteners for Front Panels	64T7304	200.09	194.14	189.37

CONTINUED

HARDWARE (CONT.)

Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-24	25-49
● 21101-848	Quarter-Turn Fastener with Slotted Head	90T1047	195.99	189.63	184.54
● 24560-141	Pan Head Screw w/ Torx, Self-Tapping, St Zinc-Plated	64T7519	19.05	18.48	18.04
● 30819-594	Threaded insert M 2.5, St Profile, Zinc-Plated	92B7328	7.27	7.01	6.84

(202662)

DOUBLE TEST SOCKET ∅ 2MM

RoHS Compliant Available

Schroff™

Features:
- Short type for mounting plane 1

Note:
- Dimensions of the connecting pin: 0.3 × 0.6mm
- Front panel hole required: ∅ 4mm

Mfg. Part No.	Description	Stock No.	Price Each 1-24	25-49	50-99	100-249
● 69004-131	Double Test Socket	65T0411	5.12	4.97	4.86	4.73

(202663)

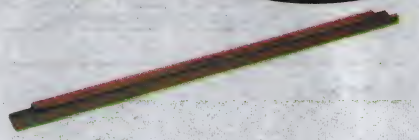
RETAINERS, PCB-TAINER™ SERIES 35-1, 35-2, 35-7

RoHS Compliant Available

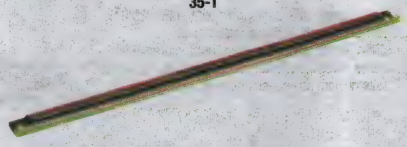
Birtcher

Features:
- Spring action card retention
- Zero entry force
- Support PCB board thickness of 0.063″ (1.59)
- Typically screw or rivet mounted to a sheet metal chassis.
- DSCC 85020 and 85021 (except series 35-2)

Applications:
- Designed for non-cold wall applications
- For moderate shock and vibration environments
- Low heat dissipation



35-1



35-7

Mfg. Part No.	Max Profile H x W x L in. (mm)	Material	Finish	Stock No.	Price Each 1-4
35-1B-2-6-3	0.156 (3.97) x 0.330 (8.39) x 3 (76.2)	Beryllium Copper	Cadmium	46W1511	11.28
35-1B-2-8-3	0.156 (3.97) x 0.330 (8.39) x 4 (101.60)	Beryllium Copper	Cadmium	46W1512	12.21
35-1B-2-10-3	0.156 (3.97) x 0.330 (8.39) x 5 (127)	Beryllium Copper	Cadmium	46W1509	14.20
35-1B-2-12-3	0.156 (3.97) x 0.330 (8.39) x 6 (152.4)	Beryllium Copper	Cadmium	46W1510	16.16
● 35-2CR-2-12	0.125 (3.18) x 0.320 (8.13) x 6 (152.4)	Stainless Steel	Silver Plate	46W1513	7.73
35-7B-2-4-3	0.125 (3.18) x 0.230 (5.85) x 2 (50.8)	Beryllium Copper	Cadmium	46W1514	9.52
35-7B-2-5-3	0.125 (3.18) x 0.230 (5.85) x 2.5 (63.5)	Beryllium Copper	Cadmium	46W1515	9.70
35-7B-2-6-3	0.125 (3.18) x 0.230 (5.85) x 3 (76.2)	Beryllium Copper	Cadmium	69W7450	10.57
35-7B-2-8-3	0.125 (3.18) x 0.230 (5.85) x 4 (101.60)	Beryllium Copper	Cadmium	69W7451	12.33

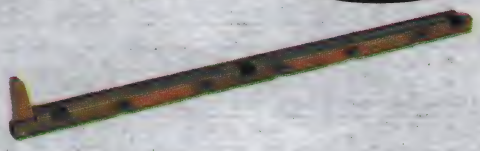
Beryllium copper (1/4H per ASTM-B-194)
Stainless steel (type 301 Cond 1/4H per AMS 5517)
Cadmium plate (QQ-P-416)
Silver plate (QQ-S-365, Type III, grade A)
(208212)

RETAINERS, LOK-TAINER™ SERIES 24

RoHS Compliant Available

Birtcher

Applications:
- Designed for non-cold wall applications
- For moderate shock and vibration environments
- Low heat dissipation



Features:
- Lever actuated
- Cam and lobe design
- No tools needed to engage/disengage PCB
- Zero entry force
- Typically screw or rivet mounted to a sheet metal chassis or to the PCB
- DSCC 84168

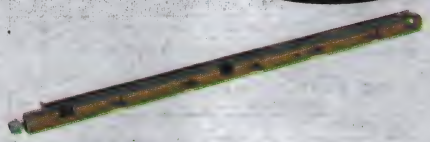
Mfg. Part No.	Length in. (mm)	Material	Finish	PC Board Thickness Max. in. (mm)	Lever Action	Stock No.	Price Each 1-4
24BX-2-10-3-L	5 (127)	Beryllium Copper	Cadmium	0.063 (1.60)	Left	46W1495	36.31
24BX-2-10-3-R	5 (127)	Beryllium Copper	Cadmium	0.063 (1.60)	Right	46W1496	36.31
24BX-2-11-3-L	5.5 (139.7)	Beryllium Copper	Cadmium	0.063 (1.60)	Left	46W1497	39.16
24BX-2-11-3-R	5.5 (139.7)	Beryllium Copper	Cadmium	0.063 (1.60)	Right	46W1498	36.07
24BX-2-12-3-L	6 (152.4)	Beryllium Copper	Cadmium	0.063 (1.60)	Left	46W1499	41.54
24BX-2-12-3-R	6 (152.4)	Beryllium Copper	Cadmium	0.063 (1.60)	Right	46W1500	44.03
24SX-3-11-3-L	5.5 (139.7)	Stainless Steel	Cadmium	0.094 (2.39)	Left	46W1501	35.11
24SX-3-11-3-R	5.5 (139.7)	Stainless Steel	Cadmium	0.094 (2.39)	Right	46W1502	35.11
24SX-3-12-3-L	6 (152.4)	Stainless Steel	Cadmium	0.094 (2.39)	Left	46W1503	37.80
24SX-3-12-3-R	6 (152.4)	Stainless Steel	Cadmium	0.094 (2.39)	Right	46W1504	37.80
● 24SX-3-16-6-L	8 (203.2)	Stainless Steel	Nickel	0.094 (2.39)	Left	46W1505	47.44
● 24SX-3-16-6-R	8 (203.2)	Stainless Steel	Nickel	0.094 (2.39)	Right	46W1506	47.44

Beryllium copper (1/4H per ASTM-B-194)
Stainless steel (type 301 Cond 1/4H per AMS 5517)
Cadmium plate (QQ-P-416)
Nickel plate (QQ-N_290, class 2, grade G, bright) finish
(208210)

CARD GUIDES, LOK-TAINER™ SERIES 127

Birtcher

Applications:
- Designed for non-cold wall applications
- For moderate shock and vibration environments
- Low heat dissipation

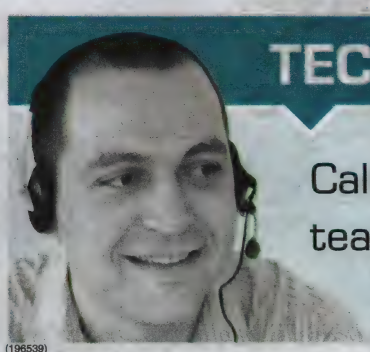


Features:
- Screw actuation
- Cam and lobe design
- Precise clamping force
- Support PCB board thickness from 0.025″ (0.64) to 0.070″ (1.78)
- Zero entry force
- Typically screw or rivet mounted to a sheet metal chassis or to the PCB
- Beryllium copper (QQ-C-553) with cadmium (QQ-P-416) finish
- DSCC 88052

Mfg. Part No.	Length in. (mm)	Screw Action	Stock No.	Price Each 1-4	5-9
127B-2-6-3-L	3 (76.2)	Left	48M6774	28.27	24.47
127B-2-6-3-R	3 (76.2)	Right	48M6775	29.97	25.94
127B-2-8-3-L	4 (101.6)	Left	72W4017	31.49	27.25
127B-2-8-3-R	4 (101.6)	Right	72W4018	31.49	27.25
127B-2-10-3-L	5 (127)	Left	46W1490	36.29	31.41
127B-2-10-3-R	5 (127)	Right	46W1491	36.29	31.41
127B-2-12-3-L	6 (152.4)	Left	72W4013	52.87	45.77
127B-2-12-3-R	6 (152.4)	Right	72W4014	52.87	45.77
127B-2-16-3-L	8 (2023.2)	Left	72W4015	65.58	56.76
127B-2-16-3-R	8 (2023.2)	Right	72W4016	65.58	56.76

(208209)

TECHNICAL SUPPORT HOTLINE



Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196539)

RETAINERS, WEDGE-TAINER™ SERIES 340

Birtcher

Applications:
- Designed for sheet metal / heat sink applications where the retainer is not mounted to the PCB, or where a machined cold wall slot is not available or, not desired to reduce costs
- For rugged, heavy shock and vibration environments
- High clamping force and heat dissipation

Features:
- Combines a chassis mounted housing with a three piece screw actuated wedge lok retainer
- Screw actuation
- Support PCB board thickness from 0.060″ (1.52) to 0.094″ (2.39)
- Zero entry force
- Screw mounted (#4 40 UNC 2B) to the cold wall
- Profile (w x h): 0.480″ (12.19) x 0.315″ (8.0)
- Aluminum alloy (6061-T6 per ASTM-B221 or QQ-A-220/8) with chem film (MIL-C-5541, Class 1A, Gold) finish

Mfg. Part No.	Length in. (mm)	Wedge Segments	Screw Action	Stock No.	Price Each 1-4
340L-100S-08C	4 (101.60)	3	Left	46W1507	44.39
340R-100S-08C	4 (101.60)	3	Right	46W1508	44.39
340L-100S-10C	5 (127.0)	3	Left	69W7365	45.61
340R-100S-10C	5 (127.0)	3	Right	69W7368	45.61
340L-100S-12C	6 (152.4)	5	Left	69W7366	57.05
340R-100S-12C	6 (152.4)	5	Right	69W7369	57.05
340L-100S-16C	8 (203.2)	5	Left	69W7367	59.53
340R-100S-16C	8 (203.2)	5	Right	69W7370	59.53

(208211)

RETAINERS, WEDGE-LOK® SERIES 40

Birtcher

Applications:
- Designed for cold wall applications
- For heavy shock and vibration environments
- High clamping force and heat dissipation

Features:
- Screw actuation
- Three wedge segments, shaftless
- Superior clamping force for various PCB thicknesses
- Profile (w x h relaxed, expanded): 0.225″ (5.72) x 0.260″ (6.60), 0.330″ (8.38)
- Zero entry force
- Can be disassembled before or after mounting
- Aluminum alloy (6061-T6 per ASTM-B221 or QQ-A-220/8) with chem film (MIL-C-5541, Class 1A, Gold) finish
- DSCC 84103 & CID 59590

Mfg. Part No.	Length in. (mm)	Included Option	Mounting Method	Stock No.	Price Each 1-4	Price Each 5-9
40-8-LF	4 (101.6)	Lock/Flat Washers	Rivet	72W0994	14.52	12.57
40-8-LF-LN	4 (101.6)	Lock/Flat Washers & Lock Nut	Rivet	72W0995	18.34	15.87
40-10-LF	5 (127)	Lock/Flat Washers	Rivet	46W1516	23.88	20.67
40-5-10-LF-LN	5 (127)	Lock/Flat Washers & Lock Nut	Rivet	46W1517	26.32	22.77
40-12-LF	6 (152.4)	Lock/Flat Washers	Rivet	72W0992	15.39	13.32
40-12-LF-LN	6 (152.4)	Lock/Flat Washers & Lock Nut	Rivet	72W0993	19.22	16.64
40-12-T	6 (152.4)	...	Tapped	46W1518	15.74	13.62

(208213)

EXTRACTORS, SERIES 71

Birtcher

Features:
- Lever ratio: 4.17
- Maximum extraction force per extractor obtained with 20 pounds of finger force is 50 pounds
- Aluminum alloy (5052-H32 per QQ-A-250/8) with chem film (MIL-C-5541, Class 1A, Gold) finish
- DSSC 84191

Applications:
- Designed for both sheet metal and cold wall applications
- Facilitates the insertion and extraction of PCB with high density backplane interconnects

Mfg. Part No.	PC Board Thickness in (mm)	Stock No.	Price Each 1-4	Price Each 5-9
71-2-L	0.063 (1.60)	87H6965	2.51	2.18
71-2-R	0.063 (1.60)	87H6971	2.51	2.18
71-3-R	0.094 (2.39)	46W1520	2.59	2.25
71-3-L	0.094 (2.39)	46W1519	2.59	2.25

(208214)

CONDUCTION COOLED KEYING KITS

Birtcher

Features:
- Complies with VITA 1.6 standard
- 6 configurations per coding bracket set, 36 configurations in a 6U conduction cooled applications, and 1296 configurations in a 6U non-conduction cooled application
- Thread type: 2.5mm x 0.45
- Each kit includes two pairs of keys and mounting hardware
- Aluminum alloy (5052-H32 per QQ-A-250/8) with chem film (MIL-C-5541, Class 1A, Gold) finish

Applications:
- IEEE 1101.10 applications without a front panel, but with keying requirements

Mfg. Part No.	Keying Configuration	Stock No.	Price Each 1-4	Price Each 5-9
CCK-KIT-AC	AC	46W1479	36.72	31.78
CCK-KIT-AD	AD	46W1480	38.92	33.69
CCK-KIT-CD	CD	46W1481	38.92	33.69
CCK-KIT-ZA	ZA	46W1482	36.72	31.78
CCK-KIT-ZC	ZC	46W1483	36.72	31.78
CCK-KIT-ZD	ZD	46W1484	36.72	31.78

(208215)

CARD GUIDES, SERIES 120

RoHS Compliant Available

CALMARK

Features:
- Extra deep guide
- Wide lead-in for easy card entry
- No mounting hardware required
- Narrow profile for excellent air flow
- Mid-span mounting point for greater stability
- Nylon, natural color (white)
- Suffix "-3" in **mfg. part no.** indicates for 2.4 (0.094) thick pcb
- Prefix "V0" in **mfg. part no.** indicates UL94V-0

Mfg. Part No.	Length in. (mm)	PC Board Thickness in (mm)	Stock No.	Price Each 1-4	Price Each 5-9
120-400	101.6 (4.00)	0.063 (1.6)	96W2370	0.88	0.76
120-400-3	101.6 (4.00)	0.094 (2.4)	96W2371	0.96	0.83
120-600	152.4 (6.00)	0.063 (1.6)	96W2372	0.98	0.85
120-600-3	152.4 (6.00)	0.094 (2.4)	96W2373	1.14	0.99
120-700	177.8 (7.00)	0.063 (1.6)	96W2374	1.08	0.94
120-700-3	177.8 (7.00)	0.094 (2.4)	96W2375	1.17	1.01
120-850	215.9 (8.50)	0.063 (1.6)	96W2376	1.17	1.01
120-850-3	215.9 (8.50)	0.094 (2.4)	96W2377	1.25	1.08
C120-400	101.6 (4.00)	0.063 (1.6)	96W2362	1.39	1.20
C120-400-3	101.6 (4.00)	0.094 (2.4)	96W2363	1.47	1.28
C120-600	152.4 (6.00)	0.063 (1.6)	96W2364	1.49	1.29
C120-600-3	152.4 (6.00)	0.094 (2.4)	96W2365	1.58	1.37
C120-700	177.8 (7.00)	0.063 (1.6)	96W2366	1.59	1.38
C120-700-3	177.8 (7.00)	0.094 (2.4)	96W2367	1.68	1.45
C120-850	215.9 (8.50)	0.063 (1.6)	96W2368	1.68	1.45
C120-850-3	215.9 (8.50)	0.094 (2.4)	96W2369	1.77	1.53
V0120-600	152.4 (6.00)	0.063 (1.6)	46W1487	1.15	0.99
V0120-600-3	152.4 (6.00)	0.094 (2.4)	46W1488	1.17	1.01

(208320)

RETAINERS, CARD-LOK SERIES 225

CALMARK

Applications:
- Designed for cold wall applications
- For heavy shock and vibration environments
- High clamping force and heat dissipation

Features:
- Screw actuation
- Three wedge segments, shaftless
- Superior clamping force for various PCB thicknesses
- Zero entry force
- 2-56 tapped hole for mounting
- Can be disassembled before or after mounting
- Profile (w x h, relaxed, expanded): 0.225″ (5.72) x 0.270″ (6.86), 0.325″ (8.26)
- Aluminum alloy (6061-T6 per ASTM-B221 or QQ-A-220/8) with chem film (MIL-DTL-5541, Class 1A, Gold) finish

CONTINUED

CABINETS & RACKS

RETAINERS, CARD-LOK SERIES 225 (CONT.)

Mfg. Part No.	Length in. (mm)	Stock No.	Price Each 1-4	Price Each 5-9
225-2.80T2	2.8 (71.12)	46W1492	15.91	13.77
225-3.80T2	3.80 (96.52)	46W1493	16.18	14.00
225-4.80T2	4.80 (121.9)	46W1494	17.60	15.24

(208317)

RETAINERS, CARD-LOK SERIES 260, 265, 280

RoHS Compliant Available

CALMARK

Applications:
- Designed for cold wall applications
- For heavy shock and vibration environments
- High clamping force and heat dissipation

Features:
- Screw actuation
- Five wedge segments, shafted
- Superior clamping force for various PCB thicknesses
- Zero entry force
- Can be disassembled before or after mounting
- Aluminum alloy (6061-T6 per ASTM-B221 or QQ-A-220/8) with black anodized (MIL-A-8626 Type 2, Class 2)

Mfg. Part No.	Profile (width x height relaxed, expanded) in. (mm)	Length in. (mm)	Mounting Method	Stock No.	Price Each 1-4
● A260-2.80T2	0.250 (6.35) x 0.270 (6.26), 0.325 (8.26)	2.8 (71.12)	2-56 tapped hole	46W1474	12.72
● A260-3.80T2	0.250 (6.35) x 0.270 (6.26), 0.325 (8.26)	3.8 (96.52)	2-56 tapped hole	46W1475	12.09
● A260-4.80T2	0.250 (6.35) x 0.270 (6.26), 0.325 (8.26)	4.8 (121.9)	2-56 tapped hole	46W1476	12.99
● A265-4.80ET2	0.225 (5.72) x 0.230 (5.84), 0.290 (7.37)	4.8 (121.9)	center mounting hole, 2-56 tapped hole	46W1477	13.42
● A280-4.80ET4	0.365 (9.27) x 0.380 (9.65), 0.460 (11.68)	5.8 (121.9)	center mounting hole, 4-40 tapped hole	46W1478	18.32

(208318)

RETAINERS, LEVER LOK SERIES L260

RoHS Compliant Available

CALMARK

Features:
- Lever actuated
- Visual indication of locked or unlocked status
- Five wedge segments, shafted
- Profile (w x h relaxed, expanded): 0.250" (6.35) x 0.270" (6.26), 0.325" (8.26)
- Clamping force consistently repeatable
- Zero entry force
- No tools needed to engage/disengage PCB
- Aluminum alloy (6061-T6 per ASTM-B221 or QQ-A-220/8) with black anodize (per MIL-A-8625, Type II, Class 2) finish

Applications:
- Designed for cold wall applications
- For heavy shock and vibration environments
- High clamping force and heat dissipation

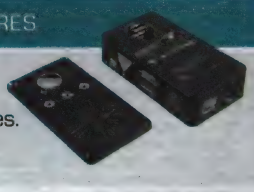
Mfg. Part No.	Length in. (mm)	Lever Direction	Stock No.	Price Each 1-4	Price Each 5-9
● L260-2.80-1	2.8 (71.12)	Wedges expand opposite as shown	72W1105	28.21	24.43
● L260-2.80-2	2.8 (71.12)	Wedges expand as shown	72W1106	28.21	24.43
● L260-3.80-1	3.8 (96.52)	Wedges expand opposite as shown	46W1485	26.91	23.31
● L260-3.80-2	3.8 (96.52)	Wedges expand as shown	46W1486	26.91	23.31
● L260-4.80-1	4.8 (121.9)	Wedges expand opposite as shown	72W1107	27.21	23.58
● L260-4.80-2	4.8 (121.9)	Wedges expand as shown	72W1108	27.21	23.58

(208319)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures

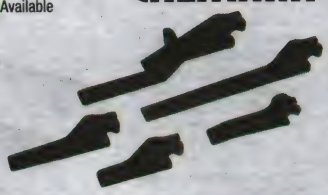


(212568)

INSERTER-EXTRACTOR SERIES 107

RoHS Compliant Available

CALMARK



Features:
- Actuates from a simple "U" channel
- no chamfer required on card
- Generous area for identification markings

Applications:
- Designed for both sheet metal and cold wall applications
- Facilitates the insertion and extraction of PCB with high density backplane interconnects

Mfg. Part No.	Feature	Board Thickness in. (mm)	Lever Ratio	Materials	Stock No.	Price Each 1-4
● 107	Insertion/Extraction	0.063 (1.6)	4.5:1	Nylon	46W1489	1.07
● 107-35	Insertion/Extraction	0.063 (1.6)	5.5:1	Aluminum alloy with gold chem film finish	72W0973	3.05
● 107-35-3	Insertion/Extraction	0.093 (2.4)	5.5:1		72W0974	3.32
● 107-50	Insertion/Extraction	0.063 (1.6)	4.5:1		72W0975	2.98
● 107-50-3	Insertion/Extraction	0.093 (2.4)	4.5:1		72W0976	3.02
● 107-51	Insertion/Extraction	0.063 (1.6)	3.3:1		72W0977	3.35
● 107-51-3	Insertion/Extraction	0.093 (2.4)	3.3:1		72W0978	2.50
● 107-55	Insertion/Extraction	0.063 (1.6)	8:01		72W0979	3.61
● 107-55-3	Insertion/Extraction	0.093 (2.4)	8:01		72W0980	3.56
● 107-73	Insertion/Extraction/Latching	0.063 (1.6)	4.2:1		72W0981	12.90
● 107-73-3	Insertion/Extraction/Latching	0.093 (2.4)	4.2:1		72W0982	12.90
● C107-35	Insertion/Extraction	0.063 (1.6)	5.5:1		72W0963	3.56
● C107-35-3	Insertion/Extraction	0.093 (2.4)	5.5:1		72W0964	3.68
● C107-50	Insertion/Extraction	0.063 (1.6)	4.5:1		72W0965	3.32
● C107-50-3	Insertion/Extraction	0.093 (2.4)	4.5:1		72W0966	3.32
● C107-51	Insertion/Extraction	0.063 (1.6)	3.3:1		72W0967	3.63
● C107-51-3	Insertion/Extraction	0.093 (2.4)	3.3:1		72W0968	3.01
● C107-55	Insertion/Extraction	0.063 (1.6)	8:01		72W0969	3.87
● C107-55-3	Insertion/Extraction	0.093 (2.4)	8:01		72W0970	3.87
● C107-73	Insertion/Extraction/Latching	0.063 (1.6)	4.2:1		72W0971	13.41
● C107-73-3	Insertion/Extraction/Latching	0.093 (2.4)	4.2:1		72W0972	13.41

C in mfg. part no. indicates Clear chemical film per Mil-5541 Cl 3 for a conductive finish

(208316)

CABINET RACKS - SMARTRACK SERIES

RoHS Compliant Available

TRIPP·LITE POWER PROTECTION

SR12UB

SR25UBSP1

SR42UBSP1

- 4 interior vertical posts with unthreaded square hole openings
- Ships fully assembled

Mfg. Part No.	Dimensions (in.) H x W x D	Cabinet Style	Stock No.	Price Each
12U				
● SR12UB	25 x 23.63 x 33.5	Free Stand	40T5348	810.00
25U				
● SR25UB	49 x 23.63 x 43	Rack Mount	53M2051	1575.00
● SR25UBSP1	49 x 23.63 x 43	Free Stand	53M2052	1841.40
42U				
● SR42UB	78.5 x 23.63 x 43	Rack Mount	53M2066	1704.60
● SR42UBCL	78.5 x 23.63 x 43	Free Stand	80R2269	2698.20
● SR42UBDP	78.5 x 23.63 x 47.3	Free Stand	01T0673	2338.20
● SR42UBDPWD	78.5 x 29.63 x 47.3	Free Stand	01T0674	2779.20
● SR42UBEIS	79.8 x 23.63 x 43	Free Stand	48T7575	3213.00
● SR42UBEXP	78.5 x 23.63 x 43	Free Stand	53M2067	1557.00
● SR42UBSP1	78.5 x 23.63 x 43	Free Stand	53M2068	2068.20
● SR42UBWD	78.5 x 29.53 x 43	Rack Mount	69R7151	2266.20
48U				
● SR48UBSP1	89 x 23.63 x 43	Free Stand	72R6450	2520.00
● SR48UBCL	89 x 23.63 x 43	Free Stand	80R2270	3666.60
● SR48UBEXP	89 x 23.63 x 43	Free Stand	80R2271	2025.00
● SR48UB	89 x 23.63 x 43	Rack Mount	52P6770	2194.20

➤CONTINUED➤

CABINET RACKS - SMARTRACK SERIES (CONT.)

ACCESSORIES

Mfg. Part No.	Description	Features	Stock No.	Price Each
SRCABLEDUCT1UHD	Cable Manager	1U Height	86T2492	79.20
SRCABLEDUCT2UHD	Cable Manager	2U Height	86T2493	108.00
SRFANWM	Wall-Mount Roof Fan Kit	Two 120V Fans, 3-ft. Cord	86T2494	106.20

(198772)

OPEN FRAME RACKS - SMARTRACK SERIES

RoHS Compliant Available

TRIPP·LITE POWER PROTECTION

SRW012US SR4POST25 N060-004

SmartRack open frame cabinets are perfect for network equipment in IT environments with limited floor space. The open frame rack is a heavy duty open frame rack designed for secure, high density servers and networking applications in IT environments.

42U 4-POST SMARTRACK PREMIUM OPEN FRAME RACK

SmartRack Premium open frame rack feature vendor-neutral square hole/cage nut mounting for guaranteed compatibility with all EIA-310-D compliant 19″ equipment. Premium open frame racks ship fully assembled for rapid deployment and roll into place on heavy-duty casters. 3000 lb stationary / 2250 lb rolling load capacity.

Mfg. Part No.	Dimensions (in.) H	W	D	Enclosure Material	Stock No.	Price Each
SR42UBEXPND	78.5	23.63	43	...	01T0675	1321.20

12U WALLL-MOUNT PIVOTING OPEN FRAME RACK

A sturdy hinge between the frame and the wall-mount bracket allows the frame to swing away from the wall for easy access to equipment and cabling. Pivoting frame allows for easy access from all locations.

SRW012US	30.45	19.76	20.35	Steel	40T5346	270.00

13U 4-POST, 25U 2-POST AND 4-POST, 45U 4-POST OPEN FRAME RACK

Supports up to 1000lbs. of rackmount equipment. SmartRack 2 post and 4 post open frame racks are ideal for space constrained or cost conscious 19-inch rack mount applications. Multiple units can be bolted together side by side.

SR4POST13	28	20.2	39	Steel	52P6768	430.20
SR2POST25	49	20.3	4.75*	Aluminium	52P6767	250.20
SR4POST25	49.3	20.2	39.3	Steel	40T5349	513.00
SR2POST	84	20.3	4.75*	Aluminium	53M2048	252.00
SR4POST	84.3	20.25	39.3	Steel	53M2065	568.80

4U HINGED WALLL-MOUNT PATCH PANEL BRACKET

Features laser cut 14-gauge steel results in smooth edges, keyholes on 16-inch centers plus through-the-wall cabling cut-out. Accepts any standard 19inch patch panels.

N060-004	7	19	6	Steel	53M1546	104.83

14″ total depth with support base
(201312)

WALL MOUNT RACK CABINETS- SMARTRACK SERIES

RoHS Compliant Available

TRIPP·LITE POWER PROTECTION

- Ideal for VoIP wiring closets and education venues that require security
- Adjustable front vertical rackmount rails
- Locking, reversible front door and locking, removable side panels
- Fully assembled for quick installation
- PCI-compliant—meets stringent physical security requirements
- 5 year warranty

Wall Mount Rack Enclosure Cabinet is designed to integrate wall-mounting, easy equipment access, and cable management in IT network applications with limited floor space. Ventilated front door and side panels allow generous airflow to keep equipment operating safely. Color: black.

Mfg. Part No.	Dimensions (in.) H	W	D	Stock No.	Price Each
SRW6U	14.5	23.63	17.5	01T0672	270.00
SRW10US	21.57	23.62	21.5	01T0667	540.00
SRW12US	25	23.63	21.6	53R1359	558.00
SRW12USG	25	23.63	21.6	01T0668	594.00
SRW18US	35.6	23.6	21.6	01T0670	855.00
SRW26US	49.7	23.63	21.6	01T0671	1152.00

➤CONTINUED➤

WALL MOUNT RACK CABINETS- SMARTRACK SERIES (CONT.)

Mfg. Part No.	Dimensions (in.) H	W	D	Stock No.	Price Each
Adjustable mounting depths from 3″ to 33″					
SRW12US33	25	23.63	33.5	01T0669	810.00

(201315)

DISTRIBUTION RACKS

RoHS Compliant Available

BELDEN SENDING ALL THE RIGHT SIGNALS

- EIA-310 compliant
- Mounting hardware included
- 2 post rack uprights are front and rear tapped
- Easy rack unit identification for faster install
- Groundng stud standard
- Color: black
- Rack unit:45U
- Material: Steel
- UL listing:UL & c-UL listed 60950-1

XDR series standard distribution racks are part of Belden's complete line of open racks and rack accessories from single rack applications to high-density, multi-rack patching and switching fields. Racks feature a 3″ channel with angled base.

STEEL KNOCKDOWN – 2 POST

Mfr. Part No.	Height (in.)	Width (in.)	Mounting/Style (in.)	Rail Tapping	Stock No.	Price Each 1-4	5-9
XDR8419-312N	84	19	19	#12-24	24W9335	231.59	222.22
XDR8419-312N1M	84	19	19	#12-24	24W9336	339.55	325.81
XDR8419-312N2M	84	19	19	#12-24	24W9337	448.77	430.61

ACCESSORIES

9011-1918-16	19″ Flush Mount Cantilevered Shelf (Vented) 18″ Depth, 25 lb Load Rating	42M9761	42.05	40.35
9414-0602	19″ Rack Mount 6 Outlet Strip (Rear) Surge Suppressor, 15 Amp/10' Power Cord	42M9792	129.45	124.21
9512-1902N	19″ 2U Rack Mount Cable Organizer, Front & Rear 3″ x 3″	24W9338	30.28	29.06
VCMFDR4X4	Vertical Cable Manager Black, 75″H x 4″W x4″D	28W2390	118.57	113.77

(207802)

CLIMATECAB CABINETS

NEMA

Black Box Corporation The World's Source for Connectivity

- Ideal for indoor use when you need to keep your servers outside a climate-controlled data center
- Digitally controlled air conditioners are available in 5000, 8000, and 12,000 BTUs (1465, 2344, and 3516 W) and in 120V or 230V (other models available upon request)
- NEMA 12 rated for protection against falling dirt; circulating dust, lint, and debris; and dripping or splashing liquids in indoor environments
- Fully gasketed openings, including a gland plate in the base, help to protect your devices from dust and other contaminants
- PLEXI-GLAS® window in front door
- Fully welded 12-gauge steel frame holds up to 1500 pounds (680 kg)
- Three-point locking handles on front and rear doors
- Feature standard 19″ rails
- Include casters and levelers for easy placement
- Rack angles are adjustable front to rear

The **ClimateCab** NEMA 12 Cabinet is your answer when you need to house servers or IT equipment but don't have a cooling infrastructure in place. In smaller installations, you can save thousands by using a **ClimateCab** cabinet instead of installing a complete data center with a custom cooling system and raised floors. **ClimateCab** is sealed against dripping water and dust, too. Sealed cable entries prevent air exchange. The digitally controlled air-conditioning unit (included) keeps your equipment comfortably cool. Just install your equipment, plug in the AC unit, and you have a complete, self-contained, self-supporting data center! The air-conditioning unit helps to control the temperature inside your ClimateCab by removing the heat buildup created by hot network devices. This unit uses closed-loop cooling in which the clean air inside the cabinet is kept separate from the ambient air to protect delicate components from humidity, dust, and other contaminants. The AC mounts in the side of the cabinet in minutes with eight bolts and can easily be installed by one or two people. Mounting hardware, gaskets, and instructions are included.

Mfg. Part No.	Rack U Height	Depth (in.)	Rail Type	AC Size (BTU)	Stock No.	Price Each
CC24U5000M631-23	24	31	M6	5000	93T4780	4245.90
CC24U5000M631	24	31.5	M6	5000	93T4779	4245.90
CC24U8000M631	24	31.5	M6	8000	93T4784	4748.95
CC24U368000M6	24	36	M6	8000	58T9118	4648.95
CC24U368000T	24	36	Tapped	8000	58T9119	4648.95
CC24U5000M640	24	40	M6	5000	93T4781	4245.90
CC24U5000M640-23	24	40	M6	5000	93T4782	4245.90
CC24U8000M640	24	40	M6	8000	93T4786	4748.95
CC24U425000M6	24	42	M6	5000	58T9120	4245.90
CC24U428000M6	24	42	M6	8000	58T9122	4748.95
CC24U425000T	24	42	Tapped	5000	58T9121	4245.90
CC24U428000T	24	42	Tapped	8000	58T9123	4748.95
CC42U365000M6	42	36	M6	5000	58T9126	4495.90
CC42U368000M6	42	36	M6	8000	58T9128	4998.95
CC42U3612000M6	42	36	M6	12000	58T9124	5898.95

➤CONTINUED➤

CABINETS & RACKS

CLIMATECAB CABINETS (CONT.)

Mfg. Part No.	Rack U Height	Depth (in.)	Rail Type	AC Size (BTU)	Stock No.	Price Each
CC42U365000T	42	36	Tapped	5000	58T9127	4495.90
CC42U368000T	42	36	Tapped	8000	58T9129	4998.95
CC42U3612000T	42	36	Tapped	12000	58T9125	5898.95
CC42U5000M6-230	42	40	M6	5000	93T4794	4495.90
CC42U8000M6-230	42	40	M6	8000	93T4798	4998.95
CC42U12000M6-230	42	40	M6	12000	93T4790	5898.95
CC42U5000T-230	42	40	Tapped	5000	93T4796	4495.90
CC42U8000T-230	42	40	Tapped	8000	93T4800	4998.95
CC42U12000T-230	42	40	Tapped	12000	93T4792	5898.95
CC42U425000M6	42	42	M6	5000	58T9132	4595.90
CC42U428000M6	42	42	M6	8000	58T9134	5098.95
CC42U5000M6	42	42	M6	5000	93T4793	4495.90
CC42U8000M6	42	42	M6	8000	93T4797	4998.95
CC42U12000M6	42	42	M6	12000	93T4789	5898.95
CC42U4212000M6	42	42	M6	12000	58T9130	5998.95
CC42U425000T	42	42	Tapped	5000	58T9133	4595.90
CC42U428000T	42	42	Tapped	8000	58T9135	5098.95
CC42U5000T	42	42	Tapped	5000	93T4795	4495.90
CC42U8000T	42	42	Tapped	8000	93T4799	4998.95
CC42U12000T	42	42	Tapped	12000	93T4791	5898.95
CC42U4212000T	42	42	Tapped	12000	58T9131	5998.95

(209580)

C-230 SERIES SOLID BEARING SLIDES

RoHS Compliant Available

GENERAL DEVICES Electronic Hardware Manufacturers

C-230-S Side and End View

Made of cold rolled steel, these 3-section, fully extendable slides fit standard rack or enclosure and provide high resistance to shock and vibration. They are well-suited for mobile applications. A quick disconnect stop latch permits instantaneous removal of the chassis. Slides are coated with Poxylube® dry film lubricant for smooth sliding action. To select overall slide length, determine cabinet mounting depth. **Sold in sets of 2.** *Up-and-down pivoting slides are also available; go online or call.*

C-230 STANDARD NONPIVOT SLIDES

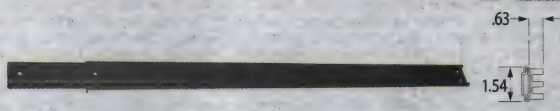
Mfg. Part No.	Slide Length (in.)	Extension Min./Max. (in.)	Setback Min./Max. (in.)	Load Cap. (lbs)	Stock No.	Price per Pkg. 1-4	Price per Pkg. 5-9
● C-230-S-116	16	16/18	0.38/0.38	135	50B3563	145.40	123.10
● C-230-S-118	18	22/22	4.38/4.38	135	51F4050	205.27	173.78
● C-230-S-120	20	20/22	0.50/2.50	130	51F4051	221.64	187.64
● C-230-S-122	22	26/26	4.50/4.50	130	51F4052	156.99	132.91
● C-230-S-124	24	24/26	4.50/6.50	125	51F4053	152.38	129.01

(7073)

C-874 SERIES TWO-SECTION SPACE-SAVING SLIDE, NON-PIVOTING

RoHS Compliant Available

GENERAL DEVICES Electronic Hardware Manufacturers



Ideal for commercial/military applications. Completely interchangeable and a minimum of deflection when slides are in the extended position. Poxylube® dry film lubricant for smooth sliding action. Designed to lock in an extended position and automatic release is available if lock-out is not desirable. **Sold in sets of 2.**

Mfg. Part No.	Dimensions (in.) Length	Dimensions (in.) Extension	Spaces	Holes	Load Cap.	Stock No.	Price per Pkg. 1-4	Price per Pkg. 5-9
● C-874-22	22″	16.5″	4	6	85 lbs	86H2629	64.78	61.73
● C-874-24	24″	18.0″	4	6	85 lbs	97F3101	66.08	62.96

(77844)

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Affordable, performance board level & box build components at

newark.com/multicomp

(212569)

C-300 SERIES SOLID BEARING SLIDES

RoHS Compliant Available

GENERAL DEVICES Electronic Hardware Manufacturers

Standard slides are ideal for commercial/military applications. It offers complete interchangeability and a minimum of deflection when slides are in the extended position. All slides are supplied with a quick disconnect feature which permits the entire chassis to be removed easily and replaced. A coating of Poxylube® dry film lubricant provides smooth sliding action. Up-and-down slides pivot up or down and lock in position with positive detent action. *Order* **B-308** *bracket kit online to mount in cabinets deeper than slide length.* To select overall length of slide, determine cabinet mounting depth. **Sold in sets of 2.** Mounting brackets included with slides. Optional mounting brackets available below.

STANDARD NONPIVOT SLIDES

Mfg. Part No.	Slide Length (in.)	Extension Min./Max. (in.)	Setback Min./Max. (in.)	Slide Mount	Load Cap. (lbs.)	Stock No.	Price per Pkg. 1-4
● C-300-S-110	10	11	0.13	Cabinet	95	93B6939	135.76
● C-300-S-112	12	11/13	0.13/2.13	Cabinet	95	93B6944	91.87
● C-300-S-114	14	15	0.13	Cabinet	90	93B6945	99.23
● C-300-S-116	16	15/17	0.13/2.13	Cabinet	90	93B6948	99.23
● C-300-S-118	18	15/19	0.13/4.13	Cabinet	90	93B6950	87.21
● C-300-S-120	20	21	0.13	Cabinet	85	93B6953	98.51
● C-300-S-122	22	21/23	0.13/2.13	Cabinet	85	93B6956	95.21
● C-300-S-422	22	21/23	0.13/2.13	Closed Slot	85	03H2860	111.62
● C-300-S-124	24	21/25	0.13/4.13	Cabinet	85	93B6957	95.21
● C-300-S-424	24	21/25	0.13/4.13	Closed Slot	85	91B0641	111.62
● C-300-S-126	26	27	0.13	Cabinet	80	93B6959	116.39
● C-300-S-128	28	27/29	0.13/2.13	Cabinet	80	93B6962	109.10
● C-300-S-130	30	27/31	0.13/4.13	Cabinet	80	97F7353	120.02

ADDITIONAL MOUNTING BRACKETS

Mfg. Part No.	Width (in.)	Height (in.)	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10+
● B-217	1.25	1.38	27C9412	8.71	7.82	6.70
● B-217-2	2	1.38	97F3011	7.87	7.08	6.06
● B-217-2.5	2.5	1.38	97F3012	8.12	7.29	6.25
● B-217-3	3	1.38	97F3013	8.12	7.29	6.25

(7074)

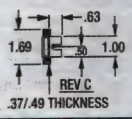
CENTER MOUNT NON-PIVOTING SLIDES

RoHS Compliant Available

GENERAL DEVICES Electronic Hardware Manufacturers

C-300-S Side and End View

REV C solid bearing slides are used for mounting 1U equipment within a 1.75 space. Slides are designed to lock in extended position, and quick-disconnect. Constructed of cold rolled steel. Includes rear mounting brackets and hardware. *Order* **mfg. part no. B309** *extension bracket kit online* to mount in cabinets up to 6″ deeper than slide length. **Sold in sets of 2.**



Mfg. Part No.	Slide Length (in.)	Extension Min./Max. (in.)	Setback Min./Max. (in.)	Slide Mount	Stock No.	Price per Pkg. 1-4
● C-300-S-118-RC	18	15/19	0.13/4.13	Cabinet	97F3077	99.23
● C-300-S-120-RC	20	21	0.13	Cabinet	97F3078	108.35
● C-300-S-120-RC-3S	20	21	0.13	Cabinet	23C6580	113.41
● C-300-S-420-RC-3S	20	21	0.13	Closed Slot	96B6670	111.62
● C-300-S-122-RC	22	21/23	0.13/2.13	Cabinet	97F3079	108.35
● C-300-S-422-RC-3S	22	21/23	0.13/2.13	Closed Slot	50B3570	105.05
● C-300-S-124-RC	24	21/25	0.13/4.13	Cabinet	97F3080	108.35
● C-300S-124-RC-3S	24	21/25	0.13/4.13	Cabinet	56P6882	105.05
● C-300-S-424-RC-3S	24	21/25	0.13/4.13	Closed Slot	99B2653	108.35
● C-300-S-126-RC	26	27	0.13	Cabinet	71C9710	123.64
● C-300-S-128-RC	28	27/29	0.13/2.13	Cabinet	05C0727	177.34

(68991)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

(212570)

SOLID BEARING SLIDES

RoHS Compliant Available

GENERAL DEVICES Electronic Hardware Manufacturers

2-slot style slides are ideal for mounting 1U equipment within a 1.75″ space. Chassis section has a maximum thickness of 0.2″. Designed to lock-out in extended position. Optional mounting brackets are available *on page 2358*.

Mfg. Part No.	Dimensions (in.) Slide Length	Dimensions (in.) Extension Min/Max	Load Capacity (lbs.)	Stock No.	Price Each 1-4	5-9	10-24	25+
C-3700-24	24.00	14.72/15.95	70	94B5793	80.05	63.98	58.09	51.40

(142194)

NONPIVOT SLIDES

RoHS Compliant Available

GENERAL DEVICES Electronic Hardware Manufacturers

CTS Side and End View

.37/.46 THICKNESS

CTHS Side and End View

.42/.54 THICKNESS

Full-extension slides fit any standard rack or enclosure. Automatic lockout and pushbutton lock release for easy chassis removal. Contains 1 pair of slides and all mounting hardware. *Order* **B-307-1 or 2** bracket kit separately, to mount **CTS** and **CTRS series** in cabinets deeper than the slide length. *Order* **B-810-1** bracket kit separately, to mount **CTHS** and **CTHRS series** in cabinets deeper than slide length. **CTRS series** slides are identical to **CTS series** slides but with stainless steel ball-bearing rollers. To select overall length of slide, determine cabinet mounting depth. *See How-to-Order information online or call.* **Sold in pairs of 2.**

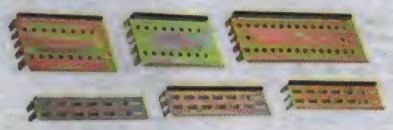
Mfg. Part No.	Slide Length (in.)	Extension Min./Max. (in.)	Setback Min./Max. (in.)	Load Capacity (lbs.)	Stock No.	Price per Pkg. 1-4	5-9
CTS-116	16″	15.75/19.63″	3.88	175	51F4077	196.81	175.99
CTS-118	18″	21.63/23.63″	2.00	175	51F4078	247.29	221.13
CTS-120	20″	23.63/27.63″	4.00	175	51F4079	186.44	166.71
CTS-124	24″	28.53/34.63″	1.63/8.00	175	51F4081	175.48	156.92
CTRS-120	20″	23.63/27.63″	4.00	175	51F4082	342.67	306.41
CTRS-124	24″	28.63/34.63″	1.63/8.00	175	51F4084	306.38	273.96
CTHS-122	22″	23.63/29.63″	6.00	275	97F3062	342.96	306.68
CTHRS-122	22″	23.63/29.63″	6.00	275	16F1909	461.65	412.81
CTHRS-124	24″	24.25/31.63″	0.63/8.00	275	16F1910	404.68	361.87

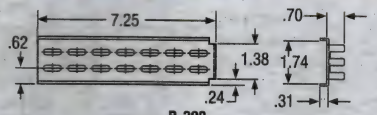
(7075)

SOLID BEARING EXTENSION BRACKET KITS

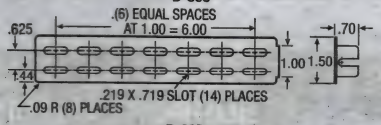
RoHS Compliant Available

GENERAL DEVICES Electronic Hardware Manufacturers

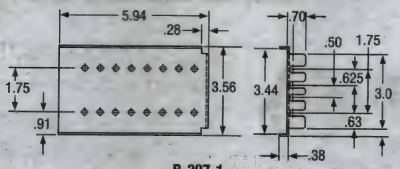




B-308



B-309



B-307-1

7.25″ (184.2) bracket allows 6″ (152.4) of slide adjustment. **Sold in pkgs. of 2.**

CONTINUED

SOLID BEARING EXTENSION BRACKET KITS (CONT.)

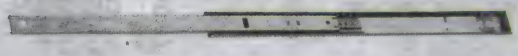
Mfg. Part No.	Description	Stock No.	Price per Pkg. 1-4	5-9
B-308	Extension Bracket Kit for C-300 Slides	51F4073	22.74	19.74
B-309	Extension Bracket Kit for C-300 Rev C Slides	97F3016	22.74	19.74
B-793	Closed Slot Extension Bracket Kit for C-300 Slides	88F1608	25.11	21.79
For mounting in cabinets deeper than slide length. **Sold in pkg. of 2.**				
B-131-2	1″ Extension for C-230 and CT Slides	92B0873	16.93	14.69
B-307-1	4″ Extension for C-230, CTS and CTRS Slides	51F4057	26.39	22.90
B-307-2	8″ Extension for C-230, CTS and CTRS Slides	51F4058	25.87	22.45
B-810-1	4″ Extension for CTHS and CTHRS Slides	16F1911	34.60	31.12
B-810-2	4″ Extension for CTHS and CTHRS Slides	16F1912	25.23	22.70

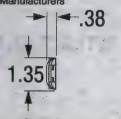
(72165)

CHASSIS TRAK® BALL BEARING SLIDES

RoHS Compliant Available

GENERAL DEVICES Electronic Hardware Manufacturers





Ball bearing slides provide quiet travel, quick-disconnect chassis removal and replacement, lockout for safe operation, and cushioned stop. Ideal for light to medium electronics applications. **Sold in pkg. of 2.** *For cabinet mounting, order extension brackets separately online or call.*

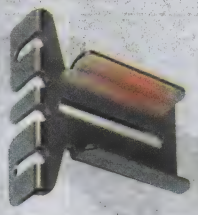
Mfg. Part No.	Dimensions Slide Length (in.)	Dimensions Extension (in.)	Load Capacity (lbs.)	Stock No.	Price per Pkg. 1-4	5-9	10+
CLB-203-14	14	11	130	29C3321	87.34	75.10	70.80
CLB-203-16	16	12	120	51F4094	67.69	58.21	54.87
CLB-203-20	20	15	95	51F4096	82.45	70.90	66.84
CLB-203-22	22	16	85	51F4097	79.01	67.94	64.05
CLB-203-24	24	17	80	51F4098	85.25	73.30	69.10

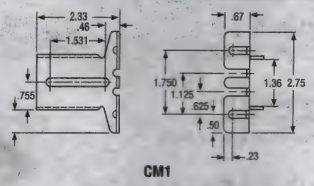
(7078)

EXTENSION BRACKETS FOR BALL BEARING SLIDES

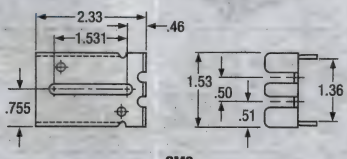
RoHS Compliant Available

GENERAL DEVICES Electronic Hardware Manufacturers

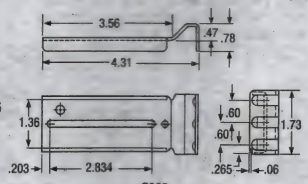




CM1

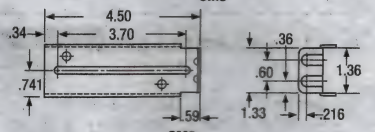


CM2



CM8

Extension brackets provide mounting flexibility and maximum slide extension. Contains brackets, bar nuts, and screws for mounting 1 pair of slides to a cabinet. **Sold in packages of 4.**



CM3

Mfg. Part No.	For Slide Types LBS-11, LBS-12, CLB-315	CLB-203, CLB-307	CLB-305	Stock No.	Price per Pkg. 1-4
CM1	1.00″ Ext.	1.36″ Ext.	...	83F6530	23.02
CM2	1.00″ Ext.	1.36″ Ext.	...	97F3042	22.09
CM3	3.16″ Ext.	3.53″ Ext.	...	16F1893	20.27
CM4	6.16″ Ext	6.53″ Ext.	...	61H8997	26.15
CM5	1.00″ Ext.	1.36″ Ext.	...	26H1967	20.76
CM8	...	...	1.77″ Ext.	16F1895	26.93
CM14	6.16″ Ext	6.16″ Ext	...	61H8604	20.75

(7221)

CABINETS & RACKS

ROLLER BEARING BOTTOM MOUNT SLIDES

RoHS Compliant Available

GENERAL DEVICES Electronic Hardware Manufacturers

C-938 Side and End View

Slide members of 12-gauge CRS, zinc-plated and clear chromate sealed. Listed load capacity has 100% static load safety factor at full extension. Not designed for operation with loads exceeding listed values. Dimensions: A: length and B: extension. Rollers lubricated with -65°F to +350°F grease. **LILO** indicates lock-in/lock-out feature. **Sold individually**. Other sizes available; *go online or call.*

Mfg. Part No.	Dimensions (in.) Length	Dimensions (in.) Extension	Load Cap. (lbs.)	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10+
● C-938-20	20	20.06	220	95F1037	245.95	220.58	193.01
● C-938-20-LI-LO	20	20.06	220	08C4788	184.55	165.51	144.82

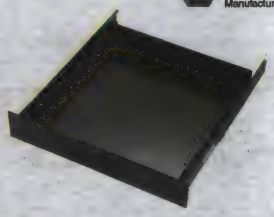
(7081)

RETRACTABLE STORAGE DRAWERS

RoHS Compliant Available

GENERAL DEVICES Electronic Hardware Manufacturers

16-gauge C.R.S. constructed storage drawers are designed for rack mount applications. Front panel is 12-gauge, cold rolled steel constructed. Includes **C-300-S-120** slide assembly and **B-308** extension brackets. Load capacity: 85 lbs. Finish: black semigloss.



Mfg. Part No.	Dimensions (in.) Panel Width	Dimensions (in.) Panel Height	Dimensions (in.) Shelf Width	Dimensions (in.) Shelf Height	Stock No.	Price Each 1-4	Price Each 5-9
● D-4100-3	19.0	3.47	17.0	3.00	97F3105	240.10	226.46
● D-4100-5	19.0	5.22	17.0	4.75	97F3106	214.35	202.18
● D-4100-7	19.0	6.97	17.0	6.50	16F1892	259.53	244.78

(7213)

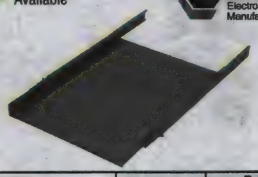
19″ WIDTH PANEL SLIDING SHELVES

RoHS Compliant Available

GENERAL DEVICES Electronic Hardware Manufacturers

- Load capacity: 60 lbs.
- Semi-gloss black finish
- Mounting hardward included

Mfg. Part No. D-4454 mounts in a 19″ rack mount cabinet and is ideal to set non-rackmountable equipment on.



Mfg. Part No.	Dimensions (in.) Mounting Center Width	Dimensions (in.) Shelf Width	Dimensions (in.) Shelf and Mounting Depth	Stock No.	Price Each 1-4	Price Each 5-9
● D-4454-19X20	18.31	17	20	48F5260	144.74	133.78
● D-4454-19X24	18.31	17	24	48F5262	163.12	150.76

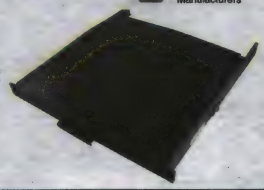
(78115)

RETRACTABLE WRITING SHELVES

RoHS Compliant Available

GENERAL DEVICES Electronic Hardware Manufacturers

Retractable writing surface with black powder coat finish. 19″ rack mount panel width. 17″ drawer width. 12-gauge front panel with formed push-pull handle. Electrical bushing in the rear to accommodate electrical cord. Load capacity: 85 lbs. Slide assemblies with rear mounting brackets and assembly hardware are as follows: **D-4080-1** uses **C-300-S-420-RC-3S** slide assembly and **B-389** rear bracket; **D-4080-3** an5 uses **C-300-S-120** slide assembly and **B-308** rear bracket, *order separately; go online or call.*



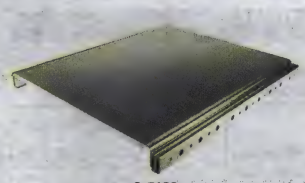
Mfg. Part No.	Dimensions (in.) Panel Height	Dimensions (in.) Drawer Height	Stock No.	Price Each 1-4	Price Each 5-9	Price Each 10+
● D-4080-1	1.72	1.42	85K9403	200.73	191.85	184.09

(7066)

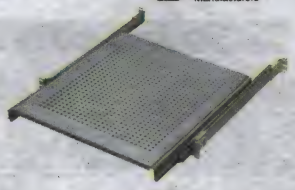
SLIDING SHELVES

RoHS Compliant Available

GENERAL DEVICES Electronic Hardware Manufacturers



C-7100



C-71307

The **C-7100 series** sliding platform/shelf is ideal for rack-mounting test equipment, consoles, and display monitors. 14-gauge CRS with zinc/bright chromate finish. Includes all mounting hardware. The **C-71307 series** perforated shelf aids airflow, keeping equipment cooler. Green Button® slides feature quick-disconnect to eliminate pinched fingers and clothing while accessing equipment. 19″ rack mount width. Load capacity: 100 lbs.

Mfg. Part No.	Dimensions (in.) Slide Length	Dimensions (in.) Extension	Stock No.	Price Each 1-4	Price Each 5-9
SLIDING SHELVES					
● C-7100-22-CM1	22	23	51F4099	173.43	163.91
● C-7100-24-CM1	24	25	51F4100	194.25	183.58
PERFORATED SLIDING SHELVES					
● C-71307-20-CM5	20	21	52F5540	254.42	239.45
● C-71307-22-CM5	22	23	52F5541	260.53	245.20
● C-71307-24-CM5	24	25	52F5542	278.76	262.37

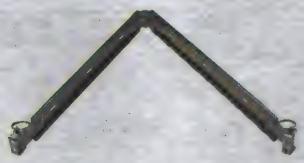
(7085)

CABLE CARRIERS AND RETRACTORS

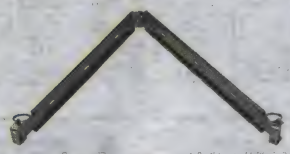
RoHS Compliant Available

GENERAL DEVICES Electronic Hardware Manufacturers

C-4555



D-329



C-990

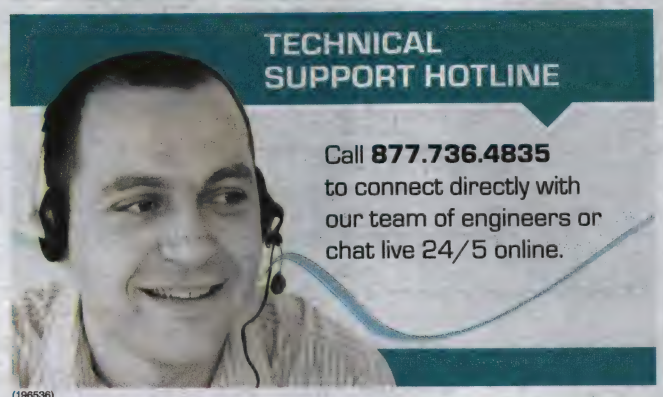
C-4017

Keep cables neat and orderly. Carriers, retractors, and roller guides help prevent damage such as pinched, tangled, cut, or bent cables.

Mfg. part no. C-4555 ribbon carrier extends up to 29″. 16-gauge steel construction, bright zinc-plated finish. **Mfg. part no. C990** cable carrier offers three mounting points for heavier cables and features quick-disconnect for easy installation. 14-gauge steel construction. Extends up to 30″. Bright zinc-plated finish. **Mfg. part no. D-329** cable carrier features heavy roll form steel construction. Bright zinc-plated finish. Two-point mount extends to 30″. **Mfg. part no. C-4017** cable roller guide is for use with other carriers and guides.

Mfg. Part No.	Description	Stock No.	Price Each 1-4	Price Each 5-9
● C-4555	Two-Point Mount Ribbon Carrier	51F4104	78.14	67.61
● D-329	Two-Point Mount Cable Carrier	51F4102	63.04	54.54
● C-990	Three-Point Mount Cable Carrier	51F4103	111.71	96.65
● C-4017	Cable Roller Guide	51F4105	31.03	26.85

(7083)

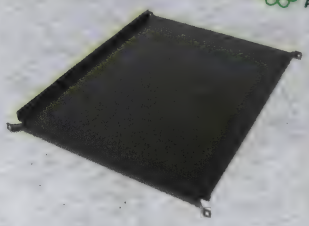


(196536)

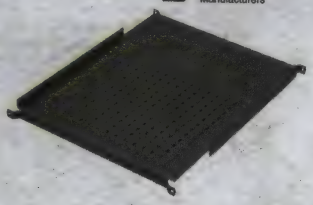
FIXED SHELVES

RoHS Compliant Available

GENERAL DEVICES Electronic Hardware Manufacturers



D-6064



D-4451

The **D-6064 and D-4451 series** are made of 14-gauge steel construction in a black semi-gloss finish. The **D-6064 series** fixed shelf provides a sturdy surface for equipment. Mounting hardware included. Shelf width is 17.88″. 50-lbs. load capacity. The **D-4451 series** adjustable fixed shelf is ideal for installing equipment that cannot be rack mounted. Adjusts to multiple mounting depths from 19 - 32″. Perforated for additional cooling. 75-lbs. load capacity. Fits 19″ panel width.

FIXED SHELVES

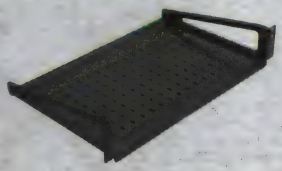
Mfg. Part No.	Dimensions (in.) External Width	Fixing Centers	External Depth	Shelf Depth	Stock No.	Price Each 1-4	5-9
D-6064-19X24	19.06	18.31	23.94	22.81	16F1891	90.94	87.18
ADJUSTABLE FIXED SHELVES							
D-4451	19.06	18.31	21-33	19-32	01F690	135.59	130.12

(7212)

ALL-IN-ONE SHELVES

RoHS Compliant Available

GENERAL DEVICES Electronic Hardware Manufacturers



Mount equipment on the inside or outside of standard 19″ enclosures and racks. Rugged 14-gauge steel construction. Perforated to help keep equipment cool. Black semigloss finish.

Mfg. Part No.	Height*	Load Cap. (lbs.)	Stock No.	Price Each 1-4	5-9
D-4455	1U	20	01F691	71.35	68.83
D-4456	2U	30	01F692	72.62	70.05

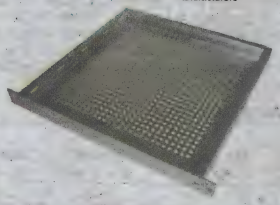
*1U = 1.75″
(17447)

CHASSIS KITS

RoHS Compliant Available

GENERAL DEVICES Electronic Hardware Manufacturers

Kits come unassembled and include a front panel (0.125″ thick), 2 side panels (0.06″ thick), chassis plate (0.09″ thick), rear panel (0.09″ thick), and assembly hardware. Material: Aluminum with clear chromate finish. 19″ front panel width. 17″ chassis width. Other sizes are available, *go online or call.*



1.75″ Chassis Shown

Mfg. Part No.	Panel Height	Chassis Depth	Stock No.	Price Each 1-4	5-9	10+
CHA-3X8	3.47	8.72	91B8076	137.13	129.11	124.01
CHA-3X17	3.47	17	98B3001	157.15	147.96	142.11
CHA-5X12	5.22	12.97	97F3036	168.66	158.79	152.51
CHA-5X17	5.22	17	90B4488	157.15	147.96	142.11
CHA-5X21	5.22	21.25	97F3037	181.41	170.79	164.04
CHA-7X12	6.97	12.75	50B9916	143.86	135.44	130.09
CHA-7X21	6.97	21.47	90B0980	178.55	168.10	161.45
CHA-10X17	10.47	17.22	11C1497	288.74	271.84	261.09

(77845)

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(196545)

1.75″ CHASSIS ACCESSORIES

RoHS Compliant Available

GENERAL DEVICES Electronic Hardware Manufacturers

Constructed of aluminum with a clear chromate conversion coating. Utility chassis available *on this page.*

VENTILATED COVER

Mfg. Part No.	Dimensions (in.) H x W	Thickness (in.)	Stock No.	Price Each 1-4	5-9	10-24	25+
PCA-8	16.94 x 8.44	0.06	91B8077	64.13	50.95	46.34	41.07
PCA-12	16.94 x 12.69	0.06	97F3132	73.50	58.40	53.11	47.07
PCA-17	16.94 x 16.94	0.06	97F3133	95.97	76.25	69.35	61.46
PCA-21	16.94 x 21.19	0.06	97F3135	112.69	89.53	81.43	72.17
SOLID COVER							
PCA-17-S	16.94 x 16.94	0.06	92B0997	117.00	92.97	84.55	74.94
PCA-8-S	16.94 x 8.44	0.06	50B9924	54.23	51.52	48.81	...

(142196)

CARD GUIDES

RoHS Compliant Available

pro-POWER

Fig. 1

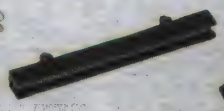


Fig. 2

Fig. 3

Carries a wide variety of PC boards. *See them online or call.*

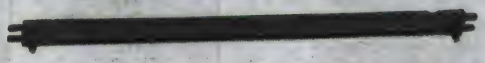
Mfg. Part No.	Fig.	Material	Dim. (mm) H x W x D	PC Board Thickness (mm)	Panel Thickness (mm)	Stock No.	Price Each 1-99	100-249
SPC23703	1	Nylon	4.8 x 6.4 x 76.2	1.6	1.6	01N3721	0.63	0.49
SPC23707	1	Nylon	4.8 x 6.4 x 101.6	1.6	1.6	01N3725	0.81	0.62
SPC23708	1	Nylon	4.8 x 6.4 x 152.4	1.6	1.6	01N3726	0.99	0.77
SPC23704	2	Nylon	4.45 x 6.1 x 76.2	1.6	1.6	01N3722	0.70	0.54
SPC23706	2	Nylon	4.45 x 6.1 x 127	1.6	1.6	01N3724	0.86	0.67
SPC23713	2	Nylon	6.4 x 6.4 x 63.5	2.0	1.2-2.3	01N3731	1.42	1.10
SPC23714	2	Nylon	6.4 x 6.4 x 152.4	2.6	1.2-2.3	01N3732	1.93	1.50
SPC23715	2	Nylon	6.4 x 6.4 x 203.2	2.6	1.2-2.3	01N3733	2.29	1.77
SPC23717	1	Nylon	3.2 x 7.9 x 127	1.9	1.2-2.3	01N3735	1.23	0.95
SPC23712	3	Polycarbonate	4.6 x 9.9 x 169.7	1.3-2.5	1.5-1.8	01N3730	2.10	1.62

(116497)

CARD GUIDES FOR EUROCARD SUBRACKS

RoHS Compliant Available

VECTOR ELECTRONICS & TECHNOLOGY, INC



CG1 series card guides are constructed of glass-filled Noryl and available in standard and custom sizes. **CG1-280** and longer are plastic ends with metal bridges. Both easily snap-in to EuroCard Subracks (DIN, VME, Sbus).

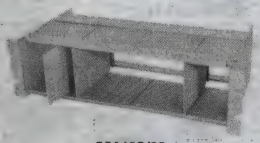
Mfg. Part No.	Description	Sold in Packs of	Stock No.	Price Each 1-4
CG1-160/12	Card Guide for 160mm Subrack	12	92F6693	24.50
CG1-220/12	Card Guie for 220mm Subrack	12	92F7016	29.38

(7124)

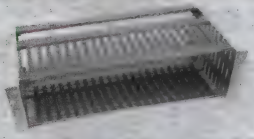
19″ VECTORPAK SUBRACKS, EIA RS-310

RoHS Compliant Available

VECTOR ELECTRONICS & TECHNOLOGY, INC

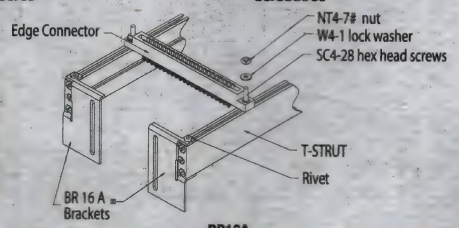


CCA13C/90



CCAXXX/90

Designed in accordance with EIA standard RS-310, Vector subracks offer maximum versatility within a 19″ rackmount format. All racks are adjustable in both height and depth offering standard product solutions for standard and custom requirements.



BR16A

➤ CONTINUED ➤

CABINETS & RACKS

19″ VECTORPAK SUBRACKS, EIA RS-310 (CONT.)

All subracks sizes are compatible with Vector prototyping boards *on pages 2361-2362* and will accommodate other sizes as well. Several card guide types are available: "C" = Continuous guide plate; "M" = Aluminum screw-in guides' "P" = Nylon screw-in; "S" = Nylon snap-in. "F" type does not include guides and must be purchased separately, *on this page*. Snap-in guides are adjustable horizontally in .250″ increments. Screw-in guides have variable horizontal positioning. HD34 T-strut connector mounting kit also available, *go online or call*.

KITTED CARD RACKS

VectorPak **CCK series** unassembled racks are flat-packed and include all Vector "T"-Struts, side plates and assembly hardware. "F" type racks are sold as frame only, all others include 21 pairs of snap-in or screw-in card guides.

Mfg. Part No.	Dimensions (in.) H x W x D	Max Card Size H x D (in.)	Stock No.	Price Each 1-4
● CCK13S/90	5.25 x 19 x 9	4.50 x 6.5	83F618	192.74
● CCK15S/90	7.00 x 19 x 12	6.25 x 9.6	29C2029	219.94

ASSEMBLED CARD RACKS

VectorPack CCA fully assembled racks have card guides installed on 0.75″ centers. "F" type racks are sold as frame only; *card guides sold separately*.

Mfg. Part No.	Dimensions (in.) H x W x D	Max Card Size H x D (in.)	Stock No.	Price Each 1-4
● CCA13S/90	5.25 x 19 x 9	4.50″ x 6.5	51F3490	210.13

ACCESSORIES

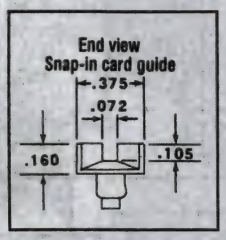
Mfg. Part No.	Description	Stock No.	Price Each 1-4
● TS169	T-Strut Aluminum Mounting Rail, 1″(W) x 16.850″(L)	81F9332	9.65
● TS169-6/90	T-Strut Aluminum Mounting Rail w/Depressions for Snap-In Guides	92F7653	20.20
● TS600	T-Strut Aluminum Mounting Rail, 1″ (W) x 30.0″ (L) 4 Each 60″ (L) in Pack	7785782	68.71
● BR16A	Bracket Kit Includes Right/Left Brackets and Hardware	92B3147	14.88

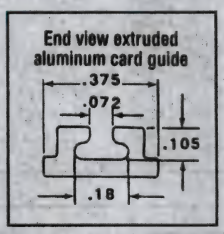
(7125)

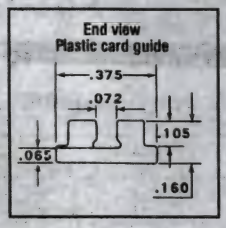
CARD GUIDES FOR EIA VECTORPAK CARD CAGES

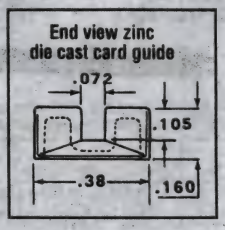
RoHS Compliant Available

VECTOR ELECTRONICS & TECHNOLOGY, INC









- Flame-retardant
- Feature tapered slots for easy insertion
- Snap-in models easy installation and removal and can be positioned at 0.25″ increments with TS169-6/90
- Screw-mounted models provide varible positioning along the entire length of strut

Holes for mounting guides to struts are based on center-to-center multiples of 0.75″ (19.05). *Other options available;* go online or call. *Order card cages separately on pages 2361-2362* **Sold in packages of 12.**

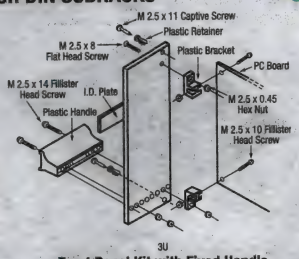
Mfg. Part No.	Material	Length (in.)	Centers (in.)	Card Length (in.)	Stock No.	Price per Pkg. 1-4
● CG2-45P	Plastic	2.89	2.25	4.50	98F2366	28.19
● CG2-45S	Nylon	3.17	2.25	4.50	94F9361	17.11
● CG2-50P	Plastic	4.36	3.75	5.00	94F9362	32.65
● CG2-65M	Metal	5.42	4.50	6.50	94F9357	63.76
● CG2-65P	Plastic	5.42	4.50	6.50	90F2828	28.06
● CG2-65S	Nylon	5.42	4.50	6.50	98F2871	15.91
● CG2-80P	Plastic	6.64	6.00	8.00	10C2368	28.54
● CG2-80S	Nylon	6.93	6.00	8.00	94F9359	23.70
● CG2-95M	Metal	8.14	7.50	9.50	01H9465	28.51
● CG2-95P	Plastic	8.14	7.50	9.50	98F2284	31.34
● CG2-95S	Nylon	8.43	7.50	9.50	94F9360	20.29
● CG2-135M	Metal	13.19	12.50	13.50	96H0316	47.57
CG2-135P	Plastic	13.19	12.50	13.50	16M4908	45.19

(7126)

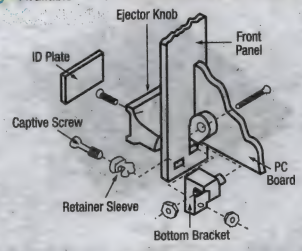
FRONT PANEL KITS, NON-EMC FOR DIN SUBRACKS

RoHS Compliant Available

VECTOR ELECTRONICS & TECHNOLOGY, INC



Front Panel Kit with Fixed Handle



Ejector Handle

Screw-mounted, DIN-based front panel kits include **V classic** pull-only fixed handle or **I VME64** VME64 ejector handle. Both include removable handle identification panels, aluminum front panel, and all mounting hardware including PCB board mounting support bracket hardware. Aluminum front panel have brushed grain finish and clear conductive irridite plating to match standard finish for Vector packaging products. Fits **mfg. part no. CCA-160, -220, -280, -340, -400** (mm) standard DIN 19″ subracks in sizes 3U and 6U.

FRONT PANEL KITS WITH V CLASSIC PULL-ONLY FIXED HANDLE

Mfg. Part No.	Rack Height (U)	Width (HP)	Width (mm)	Stock No.	Price Each 1-4
● FP08-3U	3	8	40	94F9364	27.56
● FP04-6U	6	4	20	94F9334	27.01
FRONT PANEL KITS WITH I VME EJECTOR HANDLE					
● FPE04-6U	6	4	20	91B8129	25.65

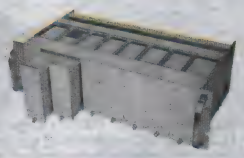
(79012)

MODULE SUBRACKS

RoHS Compliant Available

VECTOR ELECTRONICS & TECHNOLOGY, INC

Module card subracks for 4.5″ H (114.30mm) cards are factory assembled and designed for mounting modules *ordered separately on this page*. Fixed pairs of aluminum module mounting guides installed for 1.6″, 2.0″ and 3.0″ wide modules. Modules firmly attach to rack with SC10-3A captive jack screws.



Mfg. Part No.	Rack External Dimensions H x W x D (In.)	For Module Type	Max. No. of Modules	Stock No.	Price Each 1-4
● CMA13-20/90	5.25 x 19 x 9	EFP204A66	8	98F2935	236.40

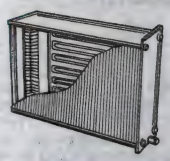
(7128)

CARD MODULES

RoHS Compliant Available

VECTOR ELECTRONICS & TECHNOLOGY, INC

For packaging circuit boards and insertion into Vector module subracks *(racks ordered separately)*. Securely mounts onto rack front rail with 10-32 jackscrew on front panel. Brushed aluminum finish. Easy to assemble kits use grooved frame-lock rails for card slots to support one or more 0.063″ thick (1.6mm) boards. Card stops are provided for securing boards of varying lengths. Mounting hardware and instructions included.



SOLID REAR PANELS

Mfr. Part No.	Module W × L (in.)	Max. Card H × L (in.)	Fits Rack	Stock No.	Price Each 1-4
● EFP204A66	2.0 x 6.69	4.5x 6.5	CMA13-20/90	38F1361	36.19
OPEN-FRAME REAR PANELS					
● EFP304A97F	3.0 x 9.8	4.5x 9.6	CMA14-30/90	99F3191	46.95

(7127)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196562)

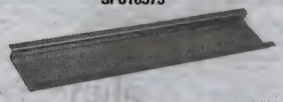
DIN RAILS AND MOUNTING ACCESSORIES

RoHS Compliant Available

multicomp

SPC10578

SPC10575



SPC10577

End Clip

DIN Rail Cutter

Slotted versions have a 25mm slot length x 5.3mm width and measure 36mm between slot centers. Rails are constructed of zinc chromate plated steel. The end clip fits on the end of the DIN rail. DIN rail cutter cuts 35x15mm, 35x7.5mm, and 15mm DIN rails and includes a 1m integrated measuring stick. CE compliant.

Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-24	25+
SPC23698	35mm x 7mm, Slotted, 1m	08N2972	15.01	12.33	11.43
SPC10575	35mm x 7.5mm Slotted, 2m	19C7294	15.63	13.45	12.65
SPC10576	35mm x 7.5mm Slotted, 1m	19C7295	8.71	7.50	7.05
SPC10577	35mm x 7.5mm Solid, 2m	19C7296	18.07	15.56	14.64
SPC10578	35mm x 15mm Slotted, 2m	19C7297	23.17	19.93	18.74
3270	35mm x 7.29 mm Slotted, 1m	92N4514	13.12	12.55	11.80
SMS-RC	Rail Spacer	46N7409	0.98	0.94	0.88
SMS-EC	End Clip	46N7410	1.82	1.74	1.64
SPC23699	DIN Rail Cutter	08N2973	2006.21	1931.90	1869.98

(66776)

DIN CLIP

RoHS Compliant Available

HAMMOND MANUFACTURING

- Designed for mounting enclosures to DIN rails
- Black glass filled nylon (UL94-V0 flammability rating)
- Units are 1.8″ long x 0.4″ wide
- Sold in packages of 2

Mfg. Part No.	Description	For Use With	Stock No.	Price Each 1-9
1427DINCLIP	DIN Clip	Hammond DIN Rail-Mounted Enclosures	50H5703	5.44

(90554)

HEAVY DUTY ALUMINUM DIN CLIPS

RoHS Compliant Available

HAMMOND MANUFACTURING

- Designed for mounting enclosures to 35 mm wide DIN rails
- Choice of three lengths
- Includes hardware
- Material is clear anodized aluminum with spring steel wire

Mfg. Part No.	Length (in.)	Stock No.	Price Each 1-9	10-24	25-49	50-99
1427DIN42M	1.65	72W3966	8.80	8.76	8.40	8.05
1427DIN75M	2.95	72W3967	10.22	10.17	9.76	9.34
1427DIN100M	3.94	72W3965	10.61	10.56	10.13	9.70

(210148)

pro-POWER AT NEWARK ELEMENT14

Take control with quality, affordable Wire-Management Solutions.

newark.com/pro-power

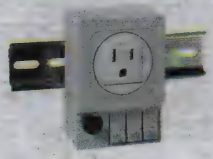
(212564)

RECEPTACLES

RoHS Compliant Available

STEGO INC. SIMPLY INNOVATIVE. BETTER FOR SURE.

SD 035 series DIN rail mountable receptacle is available fusible or unfused. The push terminals make them quick and cost effective to install.



DIMENSIONS: 3.63″ (90mm)H x 2.50″ (60mm)W x 1.83″ (48mm)D

Mfg. Part No.	Description	Stock No.	Price Each 1-24
03504.0-00	Receptacle for DIN rail, USA/Canada (Fused 6.3A/250VAC max.)	82K8793	91.15
03504.0-01	Receptacle for DIN rail, USA/Canada (no fuse 15A/125VAC)	82K8794	63.77

(88080)

ENCLOSURE AND CABINET LIGHTS

RoHS Compliant Available

STEGO INC. SIMPLY INNOVATIVE. BETTER FOR SURE.

- 11W power
- 120VAC receptacle voltage
- Designed for tight spaces in enclosures
- Screw mountable in a variety of positions
- Optional receptacle for power tools, etc.

The motion sensor was designed so it can be used in enclosures with glass doors and not be activated by movement outside the enclosure.

DIMENSIONS: 13.6″ (345mm)L x 3.6″ (91mm)W x 1.6″ (40mm)D

Mfg. Part No.	Description	Stock No.	Price Each 1-9	10-24
02524.0-01	Light with on/off switch, w/receptacle (USA/Canada)	82K8734	154.77	139.76
02524.0-04	Light with motion sensor, w/receptacle (USA/Canada)	82K8735	282.21	254.83
02527.0-10	Light with on/off switch, no receptacle	20M8411	121.48	109.70

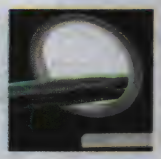
(87987)

GROMMET EDGING

RoHS Compliant Available

PANDUIT®

Grommet edging used where abrasion is a primary concern. **GEE series** is for irregularly shaped and round panel holes. **GES series** is for solid wall product on straight edges. **Sold in 100′ rolls or packages (strips) of quantities indicated in table below.**



Solid Wall

Slotted Wall

NATURAL COLOR CONTINUOUS ROLL POLYETHYLENE SLOTTED WALL AND SOLID WALL

Mfg. Part No.	For Panel Thickness	Roll Size (ft.)	Slotted Wall Stock No.	Slotted Wall Price per Roll	Solid Wall Mfg. Part No.	Solid Wall Stock No.	Solid Wall Price per Roll
GEE62F-C	0.036-0.062″	100	89F1909	54.67	GES62F-C	84F1830	40.52
GEE62F-C0†	0.036-0.062″	100	57J1814	60.18	GES62F-C0†	65H9593	44.56
GEE99F-C	0.062-0.099″	100	89F1910	68.13	...	...	...
GEE99F-C0†	0.062-0.099″	100	65H9586	76.22	...	...	...
GEE144F-C	0.099-0.144″	100	89F1897	74.87	GES144F-C	84F1832	57.47

NATURAL COLOR UL94V-0 FLAME RETARDANT POLYETHYLENE SLOTTED WALL AND SOLID WALL

Mfg. Part No.	For Panel Thickness	Roll Size (ft.)	Stock No.	Price per Roll	Mfg. Part No.	Stock No.	Price per Roll
GEE62FR-CY	0.036-0.062″	100	17T5462	72.50	...	...	...
GEE144FR-CY	0.099-0.144″	100	17T5461	111.97	...	...	...

NATURAL COLOR 12-3/4″ STRIPS FOR 4″ DIA. HOLES, NYLON SLOTTED WALL

Mfg. Part No.	For Panel Thickness	Pkg. of	Stock No.	Price per Pkg.	Mfg. Part No.	Stock No.	Price per Roll
GE85-C*	0.052-0.085″	100	89F1899	147.63	...	...	...
GE128-C*	0.085-0.128″	100	89F1900	159.83	...	...	...
GE192-L*	0.128-0.192″	50	89F1901	105.07	...	...	...
GE255-L*	0.192-0.255″	50	89F1902	163.90	...	...	...

CONTINUED

GROMMET EDGING (CONT.)

NATURAL COLOR ADHESIVE-LINED CONTINUOUS ROLL POLYETHYLENE SLOTTED AND SOLID WALL

Mfg. Part No.	For Panel Thickness	Roll Size (ft.)	Slotted Wall Stock No.	Slotted Wall Price per Roll	Solid Wall Mfg. Part No.	Solid Wall Stock No.	Solid Wall Price per Roll
● GEE62F-A-C	0.036-0.062″	100	91F7323	67.45	● GES62F-A-C	91F7326	49.11
● GEE62F-A-C0†	0.036-0.062″	100	83F7233	75.14	● GES62F-A-C0†	83F7237	52.50
● GEE99F-A-C	0.062-0.099″	100	91F7324	78.03	● GES99F-A-C	91F7327	61.50
● GEE99F-A-C0†	0.062-0.099″	100	83F7234	93.21	● GES99F-A-C0†	83F7238	66.60
● GEE144F-A-C	0.099-0.144″	100	91F7325	88.21	● GES144F-A-C†	91F7328	64.05
● GEE144F-A-C0†	0.099-0.144″	100	83F7232	96.59	● GES144F-A-C0†	83F7236	75.00

*Military Part No. MS21266-2N thru -5N; †Black Weather Resistant
(6458)

HIGH-CAPACITY EXHAUST FAN

RoHS Compliant Available

Bud Industries, Inc.

Lightweight fan mounts in top of ventilated Economizer™ cabinets *on page 2336*. 115VAC fan includes finger guard, 36″ power cord, and mounting hardware. Aluminum housing. Noise level: 6.2 Bels. UL recognized, CSA certified. *Order optional Tem-Stat temperature controllers separately on this page.*

Mfg. Part No.	Dim. (mm) Dia. x D	Power (W)	Bearing Style	Airflow (CFM)	Stock No.	Price Each 1-2	3-4	5-9
● FN-1282	254 x 88.9	51	Ball	535	52M8820	176.82	150.20	141.64

(7145)

TEM-STAT TEMPERATURE CONTROLS

RoHS Compliant Available

Bud Industries, Inc.

Tem-Stat controls react to gradual or sudden temperature changes in cabinets. Contacts are normally open and close on temperature rise. UL listed, CSA certified.

TS-16

Mfg. Part No.	Contacts	Mounting	Stock No.	Price Each 1-4	5-9	10-24
● TS-15-A	Open After 10°F Drop	Flange	09R6727	23.65	18.92	17.60
● TS-16	Open After 12.6°F Drop	DIN Rail	09R6728	32.90	26.32	24.48

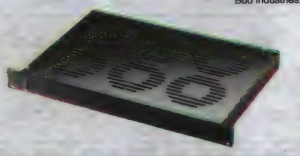
(7171)

AC FAN TRAYS

RoHS Compliant Available

Bud Industries, Inc.

- Standard EIA 19″ panel width and 1U (1.75″) height
- Illuminated on/off switch conveniently located on front panel
- 115VAC, 60Hz operation
- Black texture finish
- 7-ft. long power cord
- Shipped completely assembled
- Additional support brackets included with 6- and 9-fan versions



Mfg. Part No.	No. of Fans	Total Airflow (CFM)	Overall Size H x W x D (In.)	Stock No.	Price 1-4	5-9	10-24
● FT-1973	3	315	44.45 x 482.6 x 177.8	97H5048	181.85	167.17	160.39
● FT-1976	6	105	44.45 x 482.6 x 304.8	52M8821	284.13	261.19	250.61
● FT-1979	9	945	44.45 x 482.6 x 438.15	97H5050	366.84	337.22	323.55

(78556)

RACK MOUNT FAN TRAY W/ DIGITAL TEMPERATURE CONTROLLER

RoHS Compliant Available

Bud Industries, Inc.

- Standard EIA 19″ panel width with mounting brackets
- 110VAC, 60Hz operation
- Illuminated on/off switch located on front panel
- CE listed fans with sleeve bearing
- Detachable 5 ft. long power cord
- Digital temperature controller range: 0-50°C (32-122°F)
- Digital temperature controller accuracy: +/- 1°C (+/- 2°F)
- Temperature sensor with 9 ft. long cable
- Black textured powder coating

Mfg. Part No.	No. of Fans	Total Airflow (CFM)	Dimensions (in.) H x W x D	Rack U Height	Stock No.	Price Each 1-4	5-9	10-24
● FT-1986	6	540	1.75 x 19 x 18.63	1	74R3287	273.17	251.11	240.93

(177787)

AC AND DC FAN TRAYS

RoHS Compliant Available

ebmpapst

- 3 AC or 3 DC fans
- Fits 19″ cabinet rack or enclosure
- Sheet metal housing
- Power switch and fuse

48VDC and fan tray configurations that hold 6, 9 or 12 tubeaxial fans are available; *go online or call.*

DC FAN TRAYS - BALL BEARING

Mfg. Part No.	Dimensions (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
● FT-170-300-002	43 x 482.6 x 211	24	15	300	50	86K9734	318.08

AC FAN TRAYS - SLEEVE BEARING
Electrical connection: 6′ cord with 3-prong molded plug.

Mfg. Part No.	Dimensions (mm) H x W x D	Voltage (VAC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-4
● FT-170-318-001	43 x 482.6 x 211	115	54	318	56	86K9736	322.26
● FT-170-318-002	43 x 482.6 x 211	230	54	318	56	91F3982	335.22

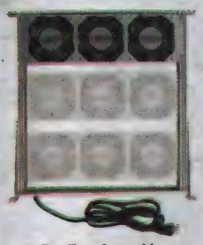
(17029)

MODULAR FAN TRAYS

RoHS Compliant Available

multicomp

Fan Tray Module



Fan Tray Assembly

- Fans and wiring is UL listed, CSA approved
- Modular design for fan positioning flexibility
- 1U height fits standard 19″ cabinet racks
- Single tray (3 fans), or add up to 2 additional modules
- 330 cfm, 45W per tray
- Heavy-duty precision steel
- Long life ball bearings
- 72″ NEMA 5-15 power cord
- Easy installation

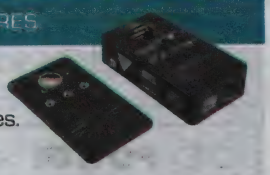
Mfg. Part No.	Operating Voltage (V)	Description	Stock No.	Price Each 1-2	3-9	10-24
● MC33039	80-120	Fan Tray Assembly Including Mounting Rails, Hardware and 72″ Power Cord	87P0761	179.63	170.40	161.88
● MC33040	80-120	Fan Tray Module	87P0762	116.33	110.35	104.83
● MC33042	160-260		87P0764	120.57	114.37	108.66

(145688)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures



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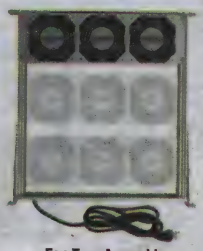
FAN TRAYS

RoHS Compliant Available

multicomp

Fan Tray Module



Fan Tray Assembly

- Rated voltage: 115 VAC, 50/60 Hz
- Ball bearings
- Operating voltage range: 90 VAC—125 VAC
- Thermostat: fan automatically turns on at 30°C (+/- 3°C), off at 24°C (+/- 3°C)
- Includes: fan, wire guard and thermostatically controlled fan cord
- Cord length: 72″

Mfg. Part No.	Description	Stock No.	Price Each 1-2	3-9	10-24
MC36461	Fan Tray Assembly with Thermostat, 3 Fans	40T4159	194.81	184.80	175.56
MC36462	Fan Tray Module with Thermostat, 3 Fans	40T4160	109.25	103.64	98.45

(195444)

FAN AND GRILL PANELS

RoHS Compliant Available

HAMMOND MANUFACTURING

Fan Type

Grill Type

Create 19″ rack-mount fans or filter fans with these panels. Accept standard square fans. Grill panel is punched with integral front finger guard. Finished in textured black powder paint. Fans and hardware not included.

Mfg. Part No.	Panel Type	Height (inches)	Fan Size (inches)	Fan Holes	Stock No.	Price Each
PPFP190802BK1	Fan	5.25	3.15	2	18C1857	16.09
PPFP190803BK1	Fan	5.25	3.15	3	18C1858	15.53
PPFP191202BK1	Fan	7.00	4.70	2	18C1859	19.52
PPGP191202BK1	Grill	5.25	4.70	2	18C1860	19.29
PPGPFPA	Fan	5.25	4.70	2	52M8739	135.82

(59782)

RACK COOLING FAN TRAYS

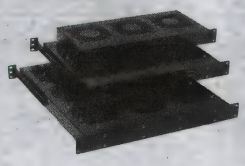
RoHS Compliant Available

HAMMOND MANUFACTURING

Features:

- 3 Fans per Row
- Ball Bearing Motors Rated up to 105 cfm per Fan
- Low Noise Level
- Removable Rear Support Brackets (On 2- and 3-Row Models)
- 115VAC Operation, 50/60 Hz
- Single Panel Space (1.75″)
- Optional On/Off Switch
- 6' 14/3 STJW Cord with Molded 3 Prong Plug Included

FT series fan trays deliver cooling air by localizing fan placement in the rack. Units mount in standard 19″ racks and are 17″ wide.



WITHOUT ON/OFF SWITCH

Mfg. Part No.	Rows of Fans	cfm	Amps	Watts	Depth	Weight (lbs.)	Stock No.	Price Each
FT300TA1BK	1	300	0.5	40	7.5″	11	93B7361	221.03
FT600TA1BK	2	600	1.0	80	13.0″	16	93B7363	338.94
FT900TA1BK	3	900	1.5	120	18.5″	22	93B7376	472.76
WITH A LIGHTED ON/OFF SWITCH								
FT300HA1BK	1	300	0.5	40	7.5″	11	91B3654	230.54
FT600HA1BK	2	600	1.0	80	13.0″	16	11C1231	343.09
FT900HA1BK	3	900	1.5	120	18.5″	22	96B2537	484.48

(60080)

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Affordable, performance board level & box build components at

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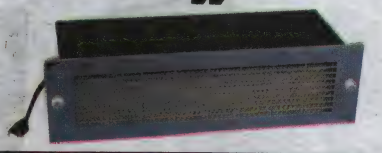
(212569)

RACK-COOLING BLOWERS

RoHS Compliant Available

HAMMOND MANUFACTURING

Mfg. part no. HB are packaged twin-intake blowers delivering air from more than 50% of their 17″ width. Each contains a quadruplex centrifugal blower powered by a single precision ball bearing motor. Operating temperature: -20°F to +250°F. Mount on standard 19″ panel rails. Feature attractive stainless steel grills, permanent filter and exhaust guard. 115VAC operation. 60Hz motor.



Mfg. Part No.	CFM	RPM	Panel Height (in.)	Depth (in.)	Weight (lbs.)	Stock No.	Price Each
HB2160A	160	1500	88.90	176.28	10	98H0401	420.00
HB3250A	300	3000	133.35	198.37	18	98H0402	484.50
HB4500A	470	3250	177.8.00	260.35	23	10J8538	546.00

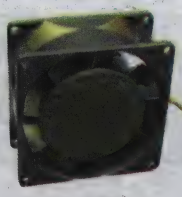
(34276)

AC TUBEAXIAL FANS

RoHS Compliant Available

HAMMOND MANUFACTURING

- Impedence protected motor
- Class-B insulated
- Ball bearings
- Metal blades
- 3.15″ fans have 11″ long lead wires
- 4.7″ fans have male plug terminations (requires fan cord)
- Mounting hardware included



FAN80

DNMF

Mfg. Part No.	Dimensions (mm) H x W x D	Voltage (VAC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each
LEAD WIRE CONNECTION							
FAN80AC115	80 x 80 x 38	115	10	32	34	31C6263	39.92
POWER CORD CONNECTION							
DNMF100AC115	120 x 120 x 38	115	22	100	50	24C9414	42.90
DNMF100AC230	120 x 120 x 38	230	22	100	50	50H3861	47.74

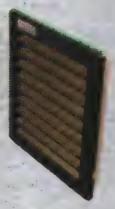
(90529)

FILTER FANS AND EXHAUST GRILLS

RoHS Compliant Available

HAMMOND MANUFACTURING

Filter fans provide protection against overheating of electrical/electronic components. Exhaust filters can be used with a fan or alone for passive ventilation. A screwless "click and fit" system reduces installation time significantly. A black fire-retardant plastic grill enhances the appearance of the enclosure. Fans are 115V/60Hz. CE compliant.



INTAKE FAN INCLUDING FILTERS

Fan Mfg. Part No.	Filter CFM*	Level %	dBA	Approx. Size	Stock No.	Price Each
PF1000	10	73	39	4″ × 4″	97F9449	155.68
PF2000	28	73	49	6″ × 6″	97F9450	215.74
PF3000	142	73	55	10″ × 10″	97F9451	308.75

*Data at normal voltage.

Filter Mfg. Part No.	Filter Level %	Approx. Grill Size	Stock No.	Price Each
PFA1000	73	4″ × 4″	97F9455	38.41
PFA2000	73	6″ × 6″	97F9456	43.41
PFA3000	73	10″ × 10″	97F9457	82.31

REPLACEMENT FILTERS

Made of self-extinguishing synthetic fibers, 100% resistant to humidity. Reusable up to 20 times. **Sold in packages of 5.**

Mfg. Part No.	Approx. Size	Use With Fan Type	Filter Density (G/M²)	Stock No.	Price per Pkg.
PFF1000	3.4 x 3.4″	PF1000	150	01C0526	13.73
PFF2000	4.5 x 4.5″	PF2000	350	01C0536	18.55
PFF3000	8.3 x 8.3″	PF3000	350	01C0539	20.73

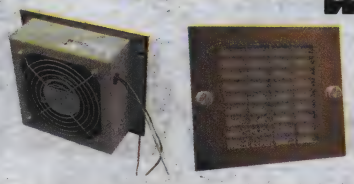
(7193)

ENVIRONMENTAL MANAGEMENT

FILTER FAN BOXES AND GRILLS

RoHS Compliant Available

HAMMOND MANUFACTURING



Filtered fan box pulls air into enclosure and the filter grill is used as an air outlet. Fan box includes ball bearing fan with UR/CE listing, 115VAC motor, 6″ wire leads, filter, and stainless steel grill. Filter is aluminum coated. Filter grills include grill and aluminum coated filter only.

FILTERED FAN BOX

Mfg. Part No.	cfm	Watts	H x W x D	Weight (lbs.)	Stock No.	Price Each
● XF4115	105	15	6.13 x 7.38 x 2.38″	5	24B5821	164.57
● XF6115	220	33	7.63 x 8.88 x 3.00″	6	24B5823	272.54
● XF10115	560	60	11.63 x 13.00 x 4.56″	12	24B5819	388.27

FILTER GRILLS

Mfg. Part No.	H x W	Stock No.	Price Each
● XFG4	6.13 x 7.38″	24B5817	74.89
● XFG6	7.63 x 8.88″	24B5818	80.71
● XFG10	11.63 x 13.00″	24B5816	104.11

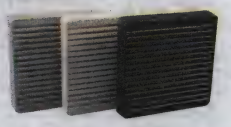
(52189)

ECONOMY PLASTIC FILTER FAN GRILLS AND FILTERS

RoHS Compliant Available

HAMMOND MANUFACTURING

Flame retardant ABS plastic grills and flame retardant synthetic filters. Mount easily with 4 screws using template and hardware included. Integral gasket seals against enclosure surface. For standard 3.15″ or 4.7″ fans (not included), or alone as exhaust grill. Colors: black, gray/beige (RAL7032) and ASA61 gray (RAL7011). *Order replacement filters separately online or call.*



Mfg. Part No.	Grill Size (Square)	For Fan Size	Color	Stock No.	Price Each 1-9
● XPFA80BK	4.14″	3.15″	Black	18C1939	9.02
● XPFA80LG	4.14″	3.15″	Light Gray	86W0167	9.34
● XPFA80GY	4.14″	3.15″	Gray	18C1941	9.02
● XPFA80LG	4.14″	3.15″	Light Gray	86W0167	9.34
● XPFA120BK	5.91″	4.7″	Black	18C1937	13.74
● XPFA120LG	5.91″	4.7″	Light Gray	08R4724	14.23
● XPFA120GY	5.91″	4.7″	Gray	31C1698	13.74
● XPFA254BK	12″	10″	Black	86W0164	42.92
● XPFA254GY	12″	10″	Gray	86W0165	42.92
● XPFA254LG	12″	10″	Light Gray	86W0166	41.67

(59780)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

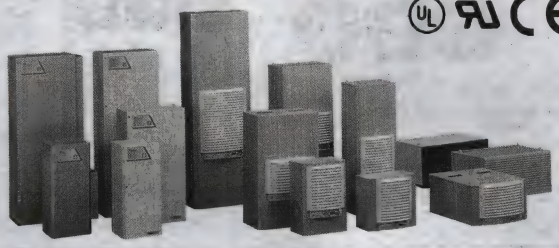
(196537)

MCLEAN SIDE- AND TOP-MOUNT AIR CONDITIONERS FOR ENCLOSURES

RoHS Compliant Available

Hoffman®

MCLEAN® IS NOW HOFFMAN COOLING



OUTDOOR AIR CONDITIONERS

T15 series subcompact single phase units are ideal for cooling smaller enclosures with 8″ or greater depth, making it easily installed in wall-mount enclosures or enclosures with narrow side walls. Each equipped with a thermostat control, EMI/RFI noise suppressor, condensate management system with base pan side drain and reusable/washable air filter. Feature high-performance, industrial-grade ball-bearing fans to provide maximum heat transfer. Max. ambient temperature: 125°F, 52°C. Popular RAL7035 smooth light gray polyester powder finish over steel cabinet body. Units include power cord with standard grounded outlet plug, built-in hanging brackets, mounting hardware and gasket, and instruction manual.

Mfg. Part No.	Dimensions (in.) H x W x D	Supply Voltage Max. (VAC)	Full Load (A)	BTU Cooling Rating Max. (BTU/hr)	Stock No.	Price Each 1-4
● T150126G100	15.75 x 6.3 x 6.3	230	1.5	900	27M2901	2486.25

SIDE-MOUNT AIR CONDITIONERS

Compact, mid-size and full-size single phase units are easily installed on door, side or front of enclosure with supplied hanging or mounting brackets. Each equipped with a thermostat control that offers convenient digital display of enclosure temperature and high-temperature alarm. Feature high-performance ball-bearing fans or centrifugal blowers. Max. ambient temperature: 125°F, 52°C. Popular RAL7042 smooth gray polyester powder finish on cabinet body and RAL 7035 light gray grille. Mounting gasket and instructions included.

Mfg. Part No.	Dimensions (in.) H x W x D	BTU Cooling Rating (BTU/hr)	Stock No.	Price Each 1-4
● M170216G009	17.65 x 12.00 x 8.68	1800	01C5608	2658.10

*UL recognized, cULrecognized

TOP-MOUNT AIR CONDITIONERS

Top-mount, single phase units are ideal for use where there is little or no clearance around the enclosure. Equipped with a thermostat control that offers convenient digital display of enclosure temperature and high-temperature alarm. High-performance CFM ball-bearing centrifugal blowers. Max. ambient temperature: 125°F, 52°C. Popular RAL7042 smooth gray polyester powder finish on cabinet body and RAL 7035 light gray grille. Mounting gasket and instructions included.

Mfg. Part No.	Dimensions (in.) H x W x D	BTU Cooling Rating (BTU/hr)	Stock No.	Price Each 1-4
MHB110216G306	10.25 x 17.00 x 21.08	2200	20C7121	3305.99

All air conditioner models operate at 115VAC, 50/60Hz, unless otherwise noted. Units use a CFC-free or environmentally-safe refrigerant. All models are UL/cUL Type 12 rated. 230VAC units are also available; *go online or call.*

(13037)

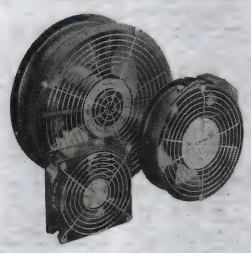
COMPACT COOLING FANS

RoHS Compliant Available

Hoffman®

MCLEAN® IS NOW HOFFMAN COOLING

For use in enclosures where space is limited and reliable cooling is required. Excellent for general air circulation. Powered by 115VAC, 60/50Hz single phase motors and available in three sizes with nominal airflows of 100, 240, and 560cfm. Fans have leadwires with ends stripped ½″ (12mm). Ideal for applications where compact and quiet service is desired. Fan bracket designed to provide easy mounting of cooling fans inside enclosure. One finger guard is furnished (an additional finger guard is recommended for maximum safety. All mounting hardware is included. 230V compact cooling fans available; *go online or call.*



Mfg. Part No.	Description	Stock No.	Price 1-4
● A4AXFN	4″ Fan, 115V	92F098	107.61
● A6AXFN	6″ Fan, 115V	92F089	228.45
● A10AXFN	10″ Fan, 115V	19M8336	313.11

ACCESSORIES

For Use With Fan	Finger Guards			Fan Brackets		
	Mfg. Part No.	Stock No.	Price 1-4	Mfg. Part No.	Stock No.	Price Each 1-4
Type A4AXFN	● AGARD4	88F3341	25.19	● ABRKT4	06B4534	38.86
Type A6AXFN	● AGARD6	06B4636	33.64	● ABRKT6	19M8292	48.65

(78997)

SIDE-MOUNT FILTER FANS

NEMA · RoHS Compliant Available · Hoffman® · MCLEAN® IS NOW HOFFMAN COOLING · IP54 · IP55

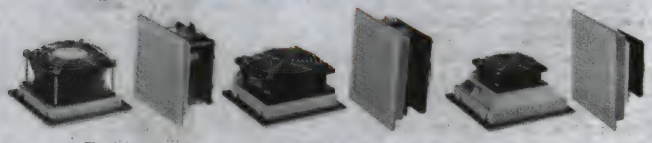


Fig. 1 Fig. 2 Fig. 3

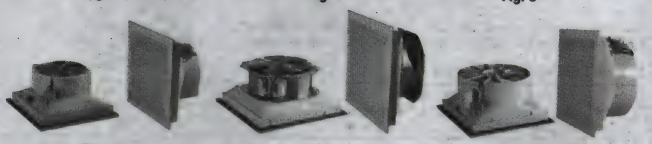


Fig. 4 Fig. 5 Fig. 6

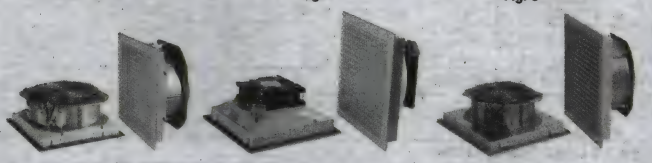


Fig. 7 Fig. 8 Fig. 9

- UL Type 12, IP54 or IP55 rated
- Click-fit design quickly installs into enclosure wall; no tools or screws required
- Enclosure side wall mounting
- UV-resistant plastic with light gray finish
- Standard foam-in-place gasket
- Similar cut-out sizes as other filter fan manufacturers
- Terminal wire connections
- Simple snap-open grille for easy filter replacement
- cULus recognized, CSA certified, CE compliant (fan motor only)

For use in enclosures where reliable filtered airflow is required. Parts that end with "3" are black and "4" are light gray. *Order exhaust grille kits separately below.*

FILTER FANS

Mfg. Part No.	Fig.	IP Rating	Dimensions (in.) H x W x D	Voltage	Motor RPM	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-4
SF0424414	1	54	4.13 x 4.13 x 2.17	24	3300	16	36	45T6809	108.91
SF0416414	1	54	4.13 x 4.13 x 2.17	115	2700/3200	16	30	45T6808	100.04
SF0524414	2	54	5.83 x 5.83 2.56	24	3050	39	42	45T6812	151.28
SF0516414	2	54	5.83 x 5.83 2.56	115	2650/3100	39	42	45T6810	137.48
SF0516514	2	55	5.83 x 5.83 2.56	115	2650/3100	36	42	45T6811	181.00
SF0526414	2	54	5.83 x 5.83 2.56	230	2650/3100	39	42	45T6813	140.78
SF0924414	3	54	8.03 x 8.03 3.54	24	3050	75	51	45T6816	172.91
SF0916414	3	54	8.03 x 8.03 3.54	115	2650/3100	75	51	45T6814	155.70
SF0916514	3	55	8.03 x 8.03 3.54	115	2650/3100	70	51	45T6815	207.20
SF0926414	3	54	8.03 x 8.03 3.54	230	2650/3100	75	51	45T6817	153.25
SF1048414	4	54	9.84 x 9.84 x 4.72	48	2950	162	52	45T6821	326.57
SF1016413	4	54	9.84 x 9.84 x 4.72	115	2760/3030	162	52	91T9688	285.99
SF1016414	4	54	9.84 x 9.84 x 4.72	115	2760/3030	162	52	45T6818	237.00
SF1016514	4	55	9.84 x 9.84 x 4.72	115	2760/3030	149	52	45T6819	279.89
SF1026414	4	54	9.84 x 9.84 x 4.72	230	2760/3030	162	52	45T6820	237.00
SF1348414	5	54	12.72 x 12.72 x 5.83	48	2950	375	60	45T6835	540.03
SF1316413	5	54	12.72 x 12.72 x 5.83	115	2550/2800	346	60	91T9700	360.53
SF1316414	5	54	12.72 x 12.72 x 5.83	115	2550/2800	375	60	45T6822	294.07
SF1316414R*	5	54	12.72 x 12.72 x 5.83	115	2550/2800	375	60	45T6823	297.68
SF1316514	5	55	12.72 x 12.72 x 5.83	115	2550/2800	346	60	45T6827	356.68
SF1326414	5	54	12.72 x 12.72 x 5.83	230	2550/2800	375	60	45T6830	301.13
SF1316424	6	54	12.72 x 12.72 x 6.38	115	2450/2650	473	70	45T6824	336.33
SF1316424R*	6	54	12.72 x 12.72 x 6.38	115	2450/2650	473	70	45T6825	347.54
SF1316524	6	55	12.72 x 12.72 x 6.38	115	2450/2650	436	70	45T6828	407.02
SF1326424	6	54	12.72 x 12.72 x 6.38	230	2550/2750	473	70	45T6831	331.03

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SIDE-MOUNT FILTER FANS (CONT.)

Mfg. Part No.	Fig.	IP Rating	Dimensions (in.) H x W x D	Voltage	Motor RPM	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-4
SF1340424	6	54	12.72 x 12.72 x 6.38	400	2650/2900	473	70	45T6833	395.07
SF1348434	7	54	12.72 x 12.72 x 5.51	48	2750	571	70	45T6836	735.44
SF1316434	7	54	12.72 x 12.72 x 5.51	115	2600/2850	571	70	45T6826	500.21
SF1316534	7	55	12.72 x 12.72 x 5.51	115	2600/2850	526	70	45T6829	522.51
SF1326434	7	54	12.72 x 12.72 x 5.51	230	2650/2950	571	69	45T6832	500.21
SF1346434	7	54	12.72 x 12.72 x 5.51	460	3050	571	72	45T6834	553.84
THIN-DEPTH FILTER FANS — TO MINIMIZE CABINET INTRUSION									
ST1024414	8	54	9.84 x 9.84 x 4.02	24	3150	100	46	45T6848	214.26
ST1016414	8	54	9.84 x 9.84 x 4.02	115	2750/3100	100	44	45T6846	167.75
ST1016514	8	55	9.84 x 9.84 x 4.02	115	2750/3100	92	44	45T6847	254.69
ST1026414	8	54	9.84 x 9.84 x 4.02	230	2750/3100	100	44	45T6849	163.82
ST1316414	9	54	9.84 x 9.84 x 4.02	115	2550/2800	303	60	45T6850	313.91
ST1316514	9	55	12.72 x 12.72 x 4.8	115	2550/2800	277	60	45T6851	385.72
ST1326414	9	54	12.72 x 12.72 x 4.8	230	2550/2800	303	60	45T6852	306.55

*Reverse airflow options available to push/pull air through enclosures with high static pressure

EXHAUST GRILLE KITS

Mfg Part No.	Size (in.)	IP Rating	Color	For Use With	Stock No.	Price Each 1-4
SG0400403	4	54	Black	All **SF04** IP54 Filter Fan Models	91T9748	36.04
SG0400404	4	54	Lt. Gray	All **SF04** IP54 Filter Fan Models	45T6837	36.93
SG-0500-002	5	54	Lt. Gray	All **SF05** IP54 Filter Fan Models	20C7639	72.42
SG0500403	5	54	Black	All **SF05** IP54 Filter Fan Models	91T9749	47.42
SG0500404	5	54	Lt. Gray	All **SF05** IP54 Filter Fan Models	45T6838	47.64
SG0500504	5	55	Lt. Gray	All **SF05** IP55 Filter Fan Models	45T6839	74.63
SG0900404	9	54	Lt. Gray	All **SF09** IP54 Filter Fan Models	45T6840	59.40
SG0900504	9	55	Lt. Gray	All **SF09** IP55 Filter Fan Models	45T6841	87.11
SG1000403	10	54	Black	All **SF10** IP54 Filter Fan Models	91T9753	62.02
SG1000404	10	54	Lt. Gray	All **SF10** IP54 Filter Fan Models	45T6842	64.17
SG1000504	10	55	Lt. Gray	All **SF10** IP55 Filter Fan Models	45T6843	99.58
SG1300403	13	54	Black	All **SF13** IP54 Filter Fan Models	91T9755	71.87
SG1300404	13	54	Lt. Gray	All **SF13** IP54 Filter Fan Models	45T6844	75.04
SG1300504	13	55	Lt. Gray	All **SF13** IP55 Filter Fan Models	45T6845	111.72
SF/ST REPLACEMENT FILTERS						
10100059H	...			SF04 Filter Fan Models	29T5605	11.56
10-1000-60	...			SF05 Series IP54 Fans	20C7693	8.82
10-1000-61	...			SF09 Series IP54 Fans	20C7694	13.37
10-1000-62	...			SF10 Filter Fan Models	68W7141	13.37
10-1000-63	...			SF13 Filter Fan Models	68W7142	17.78

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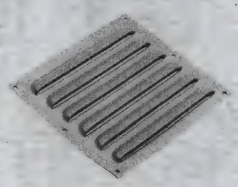
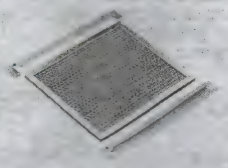
LOUVER PLATE KITS

RoHS Compliant Available · Hoffman® · MCLEAN® IS NOW HOFFMAN COOLING



Louver Plate Kit



Filter

Designed to provide ventilation in enclosures where excessive internal heat or excessive moisture is a problem. Gasketing or sealing the perimeter of the louver plate reduces problems associated with moisture intrusion. Made from 14 gauge steel with an ANSI gray polyester powder finish over phosphatized surfaces or 316 stainless steel. Aluminum air filters provide good arrestment of airborne dust and dirt. Hardware is furnished for mounting.

	Louver Plate Kits			Filter For Louver Plate Kits		
Dimensions (in.)	Mfg. Part No.	Stock No.	Price 1-4	Mfg. Part No.	Stock No.	Price Each 1-4
3.88 x 4.5	AVK33	19M8333	33.28	AFLT33	06B4625	42.35
4.75 x 4.5	AVK34	92F117	35.43	AFLT34	19M8293	42.96
3.84 x 4.25	...	...	...	A-FLT43	06B4627	44.29
5.62 x 5.5	AVK44	92F093	37.96	AFLT44	06B4628	44.75
5.62 x 7.5	AVK64	06B5003	42.24	AFLT64	06B4629	46.74
7.88 x 7.5	AVK66	06B5005	45.24	AFLT66	19M8294	47.80
4.64 x 8.25	...	...	...	A-FLT84	06B4631	54.88

➤CONTINUED➤

ENVIRONMENTAL MANAGEMENT

LOUVER PLATE KITS (CONT.)

	Louver Plate Kits			Filter For Louver Plate Kits		
Dimensions (in.)	Mfg. Part No.	Stock No.	Price 1-4	Mfg. Part No.	Stock No.	Price Each 1-4
7.02 x 8.25	...	...	...	● A-FLT86	06B4632	56.67
10.56 x 9.5	● AVK88	92F123	55.53	● AFLT88	06B4633	56.05
15.31 x 9.5	● AVK812	19M8334	65.67	● AFLT812	19M8295	56.70

(79001)

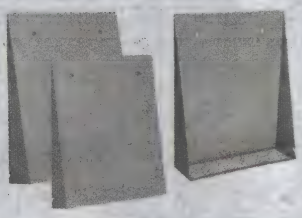
FILTER FAN SHROUDS

RoHS Compliant Available

Hoffman®

MCLEAN® IS NOW HOFFMAN COOLING

- Protects filter fan and exhaust grill from wind-driven rain and high-pressure hose water
- Does not impede air flow of filter fan and exhaust grill
- Easy one person installation with simple back panel mounting
- Easily accessed filter simplifies replacement
- Low profile design
- Stainless steel pest screen
- Provides Type 3R protections and maintains a Type 12 rating when used with an equivalent rated filter
- Finish: RAL 7035 polyester or gray polyester
- Material: **GS** in **mfg. part no.** indicates galvanized and **SS** stainless steel #304



Mfg. Part No.	Unit Dimensions (in.) H x W x D	Protection for Filter Fan Models	Protection for Exhaust Grille Models	Stock No.	Price Each 1-4
● SH05GS35001	10.25 x 8 x 2.25	SF04/SF05	SG04/SF05	68W3975	127.99
● SH05GS61001	10.25 x 8 x 2.25	SF04/SF05	SG04/SF05	68W3976	127.99
● SH05SS04001	10.25 x 8 x 2.25	SF04/SF05	SG04/SF05	68W3977	170.75
● SH09GS35001	12.75 x 10 x 3	SF09/TFP4	SG09/TFP4	68W3978	141.23
● SH09GS61001	12.75 x 10 x 3	SF09/TFP4	SG09/TFP4	68W3979	141.23
● SH09SS04001	12.75 x 10 x 3	SF09/TFP4	SG09/TFP4	68W3980	182.71
● SH10GS35001	14.74 x 12 x 3.5	SF10/ST10/ TFP6	SG10/TFP6	68W3981	148.80
● SH10GS61001	14.74 x 12 x 3.5	SF10/ST10/ TFP6	SG10/TFP6	68W3982	148.80
● SH10SS04001	14.74 x 12 x 3.5	SF10/ST10/ TFP6	SG10/TFP6	69W6052	182.69
● SH13GS61001	17.62 x 16 x 4.75	SF13/ST13/ TFP10	SG13/TFP10	68W3983	182.86
● SH13SS04001	17.62 x 16 x 4.75	SF13/ST13/ TFP10	SG13/TFP10	68W3984	211.69
● SH13GS35001	17.62 x 16 x 4.75	SF13/ST13/ TFP10	SG13/TFP10	06W1466	182.86

(209602)

SPECTRACOOL™ INDOOR AIR CONDITIONERS

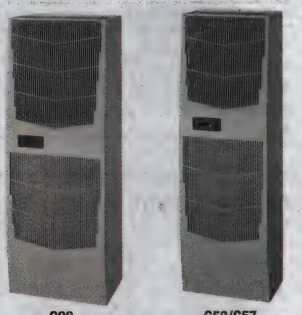
RoHS Compliant Available

Hoffman®

MCLEAN® IS NOW HOFFMAN COOLING

- Energy-efficient rotary compressor on most models
- R407c and R134a earth-friendly refrigerants
- 115, 230 and 400/460 VAC 3-phase power input on most models
- Exterior and partially recessed mounting options
- Attractive industrial design
- Reliable mechanical thermostat on enclosure side of the unit; digital display on ambient side
- Dual condenser-side air movers for performance redundancy on G52 and G57 models
- Easy-mount flanges for simple installation
- Dust-resistant condenser coil
- Cleanable, reusable aluminum mesh filter
- UL Listed

Mounting hardware, gaskets and user manual furnished with the unit. Finish: powder coat RAL 7035 light gray. Material: galvanized sheet metal.



G28 G52/G57

Mfg. Part No.	Rated Voltage (V)	Dimensions (in.) H x W x D	(BTU/hr.)	Stock No.	Price Each 1-4
G28 AIR CONDITIONERS, 50/60HZ					
● G280416G050	115	28.59 x 17.01 x 10.18	4000	29T4532	2775.44
● G280426G050	230	28.59 x 17.01 x 10.18	4000	29T4536	2910.23
● G280446G050	460	28.59 x 17.01 x 10.18	4000	29T4540	3317.73
● G280616G050	115	28.59 x 17.01 x 10.18	6000	29T4543	3817.26
● G280646G050	460	28.59 x 17.01 x 10.18	6000	29T4551	3771.19
G52 AIR CONDITIONERS, 50/60HZ					
● G520816G050	115	52.70 x 17.14 x 11.65	8000	85R6150	3901.36
● G520826G050	230	52.70 x 17.14 x 11.65	8000	63R9268	4487.88
G520846G050	115	52.70 x 17.14 x 11.65	8000	29T4563	4796.01
● G521216G050	115	52.70 x 17.14 x 11.65	12000	74R5661	4934.04
● G521226G050	230	52.70 x 17.14 x 11.65	12000	29T4569	5240.65
G521246G050	230	52.70 x 17.14 x 11.65	12000	29T4573	5581.04
G57 AIR CONDITIONERS, 50/60HZ					
● G572046G050	460	57.70 x 20.89 x 15.36	20000	29T4580	6092.54

(209590)

SPECTRACOOL™ NARROW INDOOR AIR CONDITIONERS

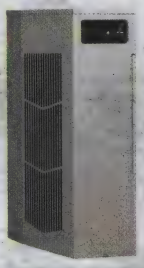
RoHS Compliant Available

Hoffman®

MCLEAN® IS NOW HOFFMAN COOLING

- Narrow design accommodates 12-in. (300-mm) deep cabinets
- Energy efficient rotary compressor
- R407c and R134a earth-friendly refrigerants
- Attractive industrial design
- Reliable mechanical thermostat on enclosure side of the unit; digital display on ambient side
- Easy-mount flanges for simple installation
- Dust-resistant condenser coil
- Cleanable, reusable aluminum mesh filter
- UL Listed

Mounting hardware, gaskets and user manual furnished with the unit. Finish: powder coat RAL 7035 light gray. Material: galvanized sheet metal.



Mfg. Part No.	Rated Voltage (V)	Dimensions (in.) H x W x D	(BTU/hr.)	Stock No.	Price Each 1-4
N17 AIR CONDITIONERS, 50/60HZ					
● N170116G010	115	17.64 x 12 x 8.4	1000	67W2935	2312.72
● N170146G010	460	22.14 x 12 x 8.4	1000	67W2936	2388.16
● N170216G010	115	17.64 x 12 x 8.4	2000	67W2937	2314.11
● N170246G010	460	22.14 x 12 x 8.4	2000	67W2938	2430.64
N28 AIR CONDITIONERS, 50/60HZ					
● N280416G050	115	28 x 11.5 x 14	4000	91T9284	2775.44
● N280426G050	230	28 x 11.5 x 14	4000	91T9296	2909.61
N36 AIR CONDITIONERS, 50/60HZ					
● N360616G050	115	36 x 11.5 x 14	6000	91T9302	3117.71
● N360646G050	460	36 x 11.5 x 14	6000	91T9314	4181.61
● N360816G050	115	36 x 11.5 x 14	8000	91T9318	4160.25
N43 AIR CONDITIONERS, 50/60HZ					
● N431216G050	115	43 x 11.5 x 14	11000	91T9336	4933.42
● N431226G050	230	43 x 11.5 x 14	11000	91T9342	5078.15
● N431246G050	460	43 x 11.5 x 14	11000	91T9348	5365.14

(209594)

FILTER FANS AND EXHAUST FILTERS

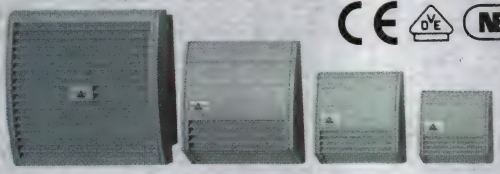
IP54

RoHS Compliant Available

STEGO INC.

SIMPLY INNOVATIVE. BETTER FOR SURE.

NEMA



The **018 series** filter fan and the **118 series** exhaust filter have been purposefully designed to provide more value than alternative products. Design features include: high-tech adhesive mounting or screw mount, high airflow, quiet operation, minimum ingress, protection against falling liquids or dust. **Mfg. part no. 01803.0-01** is a 4 fan design to provide redundancy. Rated NEMA 12. UL recognized type 12 with medium filter mat and IP55 with fine filter mat. Cutout template included for easy installation. Replacement filter media available online .

FILTER FAN

Mfg Part No.	Cut-out Dim. (mm)	Mounting Depth (mm)	Air Flow Free Blowing/Filtered (CFM)	Operating Voltage (VAC)	Stock No.	Price Each 1-9
● 01800.0-01	97 x 97	45	14/11	120	82K8669	165.70
● 01801.0-01	125 x 125	58	37/28	120	82K8671	187.38
● 01802.0-01	176 x 176	86	69/46	120	82K8673	203.73

EXHAUST FILTER

Mfg Part No.	Dimensions (mm) H x W	Stock No.	Price Each 1-9
● 11800.0-00	5.3 x 5.1	10M9739	38.01
● 11801.0-00	6.7 x 6.2	04M4697	41.21
● 11802.0-00	8.9 x 8.2	04M4698	52.86

(68058)

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Get inspired, collaborate, design, research, ask experts questions.

element14.com

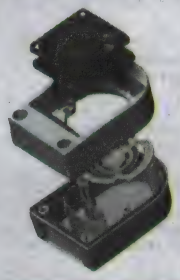
(196545)

ENCLOSURE VENTILATOR

RoHS Compliant Available

FIBOX Enclosing Innovations

- Molded in-place gasket to ensure tight seal
- For use with any enclosure, metallic or non-metallic
- Suitable for outdoor use
- UV resistant and splashproof



This device is used in pairs on opposing exterior sides to permit passive cross flow ventilation. Dimensions: 50 x 70 x 20mm. Includes hardware, drilling templates and mounting instructions. Easy installation. Can be used with any 40 x 40mm fan with maximum height of 15mm. *Order fan separately online or call.*

Mfg. Part No.	Description	Stock No.	Price Each 1-4	5-9	10+
MB 10564II	Ventilation Device	39C8206	13.65	13.29	12.57
MB 10858 II	Grille	04H1969	7.07	6.88	6.51
MB 10859 II	Fanholder	78H0067	14.12	13.74	12.99

(73749)

ENCLOSURE HEATERS

RoHS Compliant Available

Hoffman®

ELECTRIC HEATERS

Designed to protect sensitive mechanical, electrical and electronic component equipment from the harmful effects of condensation, corrosion and low temperatures. Thermostatically controlled fan-driven heaters maintain a stable temperature within enclosures. Adjustable from 0° to 100°F (-18°C to 38°C). Heated air is discharged through the top of anodized aluminum housing. Ball-bearing fan runs continuously for even temperature distribution. Terminal strip with clamp connector accepts both solid and stranded wire. Includes four 10-32x self-tapping screws. Additional 230V models are availalbe; *go online or call.* UL recognized, CSA certified, CE compliant.

Mfg. Part No.	Voltage (V)	Power (W)	Dimensions (in.)	Stock No.	Price 1-4
DAH1001A	115	100	5.50 x 4.00 x 4.00	19M8419	337.39
D-AH1002A	230	100	5.50 x 4.00 x 4.00	06B6940	345.49
DAH2001A	115	200	5.50 x 4.00 x 4.00	92F086	400.93
D-AH2002A	230	200	5.50 x 4.00 x 4.00	06B6942	400.93
DAH4001B	115	400	7.50 x 4.25 x 4.38	19M8420	463.53
DAH4002B	230	400	7.50 x 4.25 x 4.38	06B6944	474.65
DAH8001B	115	800	7.50 x 4.25 x 4.38	19M8421	526.92
D-AH8002B	230	800	7.5 x 4.25 x 4.38	06B6946	526.92
DAH13001C	115	1300	7.50 x 5.00 x 6.53	67W2301	559.39
DAH13002C	230	1300	7.50 x 5.00 x 6.53	69W6032	559.39

SEMICONDUCTOR HEATERS

Protect electronic, pneumatic, hydraulic and mechanical equipment from low temperatures, condensation and corrosion with this heater, which maintains a stable enclosure temperature. Mounting clip for 35-mm DIN rails EN 50022.cURus component recognized; File No. E150057, IEC IP54, CE compliant.

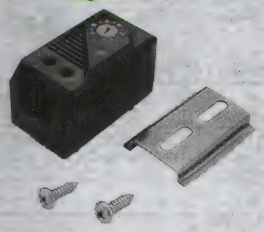
DAH601	110/250	60	5.50 x 2.80 x 2.00	79K6138	230.30

(79274)

TEMPERATURE CONTROL SWITCHES (THERMOSTATS)

RoHS Compliant Available

Hoffman®



These easy to install thermostats are designed to regulate and monitor air temperature in switch-gear enclosures that are set up to operate with heaters, fans, filter ventilators, heat exchangers, and/or signal transmitters. **Mfg. part no. A-TEMNC** (normally closed) is specifically designed for use with heaters while **mfg. part no.** (normally open) is designed to control fans, filter ventilators, or for switching signal transmitters in the event of overheating. Both models have a bimetallic adjustable set point range of 30° to 140°F. Connections consists of tubular screw terminals for 14 AWG (0.04 in^2). Plastic housing is rated UL94-V0. Dimensions: 2.37H x 1.31W x 1.55"D, Protection rating: IEC IP30, UL recognized CSA certified. **NOTE:** switching capacity information, in table below, applies to both **mfg. part no. ATEMNC** and **ATEMNO** switches.

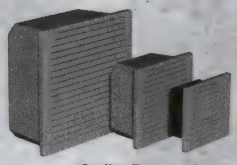
Mfg. Part No.	Switching Capacity Amp	Volts	Load	Stock No.	Price 1-4
ATEMNC	15 16	120VAC 250VAC	Resistive Resistive	51M8653	106.31
ATEMNO	1 10 1	120 - 250VAC 12 - 24VDC 12 - 24VDC	Inductive Resistive Inductive	92F8685	105.11

(72355)

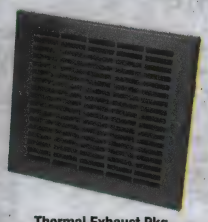
COOLING FAN AND EXHAUST PACKAGES

RoHS Compliant Available

Hoffman®



Cooling Fan



Thermal Exhaust Pkg.

For use in enclosures where space is limited and reliable filtered airflow is required. Powered by 115VAC, 50/60Hz single-phase motors. The fan package is designed to be the air inlet in cooling systems. Exhaust grille and filter provide air outlet. 230V fan packages available; *go online or call.*

UL 508 TYPE 1, COMPOSITE GRILLE

Description	Fan Package (Fan, 1 Grille and Filter) Mfg. Part No.	Stock No.	Price 1-2	Exhaust Grille (w/Filter) Mfg. Part No.	Stock No.	Price Each 1-9
4" Fan, 115V, Grille 6.29 x 7.37"	TFP41	19M8460	225.39	TEP4	85C1235	114.08
6" Fan, 115V, Grille 7.8 x 8.87"	TFP61	20C7668	381.89	TEP6	29C8123	119.10
6" Fan, 115V, Grille 7.8 x 8.87"	...	...	...	TEP6SS	22H1094	171.96
10" Fan, 115V, Grille 11.81 x 12.99"	TFP101	20C7658	533.02	TEP10	25C8193	155.38
10" Fan, 115V, Grille 11.81 x 12.99"	...	...	...	TEP10SS	22H1092	242.85
UL 508 TYPE 1, STAINLESS STEEL GRILLE						
4" Fan, 115V, Grille 6.29 x 7.37"	TFP41SS	22H1113	272.62	...	...	...

(6959)

120V SELF-CONTAINED PORTABLE AIR CONDITIONING UNIT

RoHS Compliant Available

TRIPP·LITE POWER PROTECTION

- Compact, portable, self-contained design reduces maintenance—no water collection tank or drain required
- Cool a 500 square foot room with 12,000 BTU of cooling power
- Offers both hot-spot and general room cooling with two exchangeable vent styles

Got a hot spot? Fix it and forget about it with the **SRCOOL12K** portable AC unit. It automatically evaporates condensation and safely removes it through the exhaust, so you won't have to install a drain or constantly empty a water tank. The **SRCOOL12K's** portable, no-maintenance design makes it the perfect choice for cooling network wiring closets, server rooms or anywhere with a hot spot. Supplemental cooling for confined server rooms where the facility HVAC is inadequate or unavailable.

Mfg. Part No.	Description	Stock No.	Price Each
SRCOOL12K	Includes SRCOOL12K cooling unit, Louvered front vent, Directional front vent, Cold Air directional delivery tube, Hot exhaust air removal tube, Dropped ceiling or window heat ventilation kit	80R2267	1098.00

(209632)

FLH SERIES 125-800 W FAN HEATERS WITH THERMOSTAT

RoHS Compliant Available

HAMMOND MANUFACTURING

- Designed to prevent condensation or maintain minimum temperature in enclosures
- Built in Thermostat (-18°C to +38°C) (0°F to +100°F)
- Fan Auto/On switch with pilot light for Heat On indication
- 20 CFM airflow
- High temperature safety protection
- Aluminum alloy outer casing
- Connection via terminal block

Mfg. Part No.	Watts	Volt.	Hz	Dimensions (in.) H x W x D	Ship Wt. (lbs.)	Stock No.	Price Each 1-4	5-9	10-24
FLHTF125A115	125	120	60	5.5 x 4 x 5.3	2.2	51R3185	267.55	264.65	254.47
FLHTF200A115	200	120	60	5.5 x 4 x 5.3	2.2	51R3187	325.61	313.43	299.49
FLHTF400A115	400	120	60	7.5 x 4 x 5.3	3	51R3189	367.80	354.03	338.29
FLHTF800A115	800	120	60	7.5 x 4 x 5.3	3	51R3191	418.87	395.97	368.51

(210149)

ENVIRONMENTAL MANAGEMENT

FLH SERIES 125-800 W FAN HEATERS WITH THERMOSTAT

NEW

HAMMOND MANUFACTURING

- Designed to prevent condensation or maintain minimum temperature in enclosures
- Built in Thermostat (-18°C to +38°C) (0°F to +100°F)
- Fan Auto/On switch with pilot light for Heat On indication
- 20 CFM airflow
- High temperature safety protection
- Aluminum alloy outer casing
- Connection via terminal block

Mfg. Part No.	Watts	Voltage	Hz	Dimensions (in.) H x W x D	Ship Wt. (lbs.)	Stock No.	Price Each 1-4	Price Each 5-9
● FLHTF125A115	125	120	60	5.5 x 4 x 5.3	2.2	51R3185	267.55	264.65
● FLHTF200A115	200	120	60	5.5 x 4 x 5.3	2.2	51R3187	325.61	313.43
● FLHTF400A115	400	120	60	7.5 x 4 x 5.3	3	51R3189	367.80	354.03
● FLHTF800A115	800	120	60	7.5 x 4 x 5.3	3	51R3191	418.87	395.97

(210367)

HEATERS, THERMOSTATS, & BREATHER KITS

RoHS Compliant Available

HAMMOND MANUFACTURING

SHG

SKT

Heaters protect against low temperatures, condensation and corrosion in electrical/electronic enclosures by maintaining a stable temperature environment. Heaters are 115V/50/60Hz. **SHGL** heater fans are similar to **SHG** heaters but have an axial fan for forced air circulation. **SKT** thermostats control and monitor air temperature. Mfg. part numbers with **suffix NC** (Normally Closed) for the control of heaters and heater fans. Mfg. part numbers with **suffix NO** (Normally Open) for the control of cooling units such as filter fans. All dimensions are 2.4H × 1.3W × 1.4"D. **SDA412** breather kit (pressure compensation plugs) provides for controlled pressure compensation due to temperature variations (e.g., night/day operations) and protect against dust and humidity. Two plugs per cabinet in opposite locations are recommended. 2.6" diameter × 1.2" height. IP45 protection. CE compliant.

HEATERS

Mfg. Part No.	Heating at 68°F	Stock No.	Price Each
● SHG14000	15W	01J1631	84.58
● SHG14001	30W	97H4218	87.54
● SHG14003	45W	01J1632	102.30
● SHG14005	60W	01J1633	124.71
● SHG14007	100W	98H1385	164.66
● SHGL04600	250W	97F9464	391.28

THERMOSTATS

Mfg. Part No.	Temp. Range	Switching Capacity	Stock No.	Price Each
● SKT011419NO	30°F-140°F	15A at 120VAC	97F9467	42.10
● SKT011409NC-C	2°C-60°C	15A at 120VAC	91B1623	42.10
● SKT011419NO-C	2°C-60°C	15A at 120VAC	26H7996	42.58

Mfg. Part No.	Description	Stock No.	Price Each
● SDA412	Breather Kit	66F8019	13.06

(7194)

COMPACT THERMOSTATS

RoHS Compliant Available

STEGO INC. SIMPLY INNOVATIVE. BETTER FOR SURE.

- Thermostatic bi-metal sensor element
- Switching difference: 12.6°F ± 5.4°F (7°C ± 3K)
- DIN rail mountable
- 2-pole terminal for AWG 14 max.
- Switching capacity: 10A resistive, 2A inductive (250VAC); 15A resistive, 2A inductive (120VAC); 30W DC

Normally closed thermostats open on temperature rise and come with a red temperature dial. Normally open thermostats close on temperature rise and come with a blue temperature dial.

Mfg. Part No.	Temp. Scale on Housing	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99
NORMALLY CLOSED					
● 01140.9-00	30 - 140°F	02P6313	35.39	29.36	26.29
● 01146.9-00	0 - 60°C	02P6315	35.39	29.36	26.29
NORMALLY OPEN					
● 01141.9-00	30 - 140°F	02P6314	31.88	26.44	23.69
● 01147.9-00	0 - 60°C	48P5191	31.88	26.44	23.69
● 01149.9-00	10 - 70°C	70M7764	33.54	30.28	27.02

(105832)

DUAL THERMOSTATS

RoHS Compliant Available

STEGO INC. SIMPLY INNOVATIVE. BETTER FOR SURE.

The **ZR 011 series** houses two separate thermostats, allowing the independent control of heating and cooling or other equipment. Both thermostats offer wide adjustment ranges and are color coded for easy function recognition. Product mounts on standard DIN rail. Switching capacity: NC-10A; NO-5A (2A inductive); 30W DC.

DIMENSIONS: 2.6" (67mm)H x 2.0" (50mm)W x 1.8" (46mm)D

Mfg. Part No.	Setting Range: Thermostat I Normally Closed (NC)	Setting Range: Thermostat II Normally Open (NO)	Stock No.	Price Each 1-24
● 01172.0-00	-20-80°C	-20-80°C	82K8635	93.24
● 01172.0-01	-20-80°C	-20-80°C	82K8636	93.24

(87980)

HYGROSTAT

RoHS Compliant Available

STEGO INC. SIMPLY INNOVATIVE. BETTER FOR SURE.

Designed to control the relative air humidity inside of enclosures. When connected to an enclosure heater/de-humidifier, it will turn the heater on at the set humidity level in order to raise the dew point. This helps prevent damage and malfunction of electronic components caused by condensation and corrosion. Can also be used to control cooling fans, warning lights or other devices. Product mounts on standard DIN rail. Switching capacity: 5A resistive (0.2A inductive); 20W DC.

DIMENSIONS: 2.64" (67mm)H x 1.97" (50mm)W x 1.5" (38mm)D

Mfg. Part No.	Description	Humidity Range	Switching Voltage	Stock No.	Price Each 1-9
● 01220.0-00	Humidity Control, change-over contact	35% to 95% Relative Humidity	20VDC-230VAC	01M9583	185.07

(87981)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196563)

PTC HEATERS

RoHS Compliant Available

STEGO INC. SIMPLY INNOVATIVE. BETTER FOR SURE.

Heaters come with integral fixed point thermostat and are encased in a double insulated plastic housing eliminating the need for a ground connection. Heaters have low surface temperatures and operate on a wide voltage range (120-240VAC).

Mfg. Part No.	Heating Capacity (W)	Inrush Current Max (A)	Switch-Off Temp.	Dimensions (in.) H	W	D	Weight (oz)	Stock No.	Price Each 1-24
06002.0-00	50	2.5	77°F (25°C)	4.3	2.4	3.5	10.6	39M5392	166.78
06011.0-00	100	4.5	59°F (15°C)	4.3	2.4	3.5	10.9	39M5394	229.13
06022.0-00		8	77°F (25°C)				15.5	39M5398	259.86

(90832)

PTC HEATERS

RoHS Compliant Available

STEGO INC. SIMPLY INNOVATIVE. BETTER FOR SURE.

- Self-regulating PTC resistor
- Anodized, extruded aluminum body
- DIN rail mountable
- Push-type terminals for stranded and solid wire (3 x AWG 20-16)

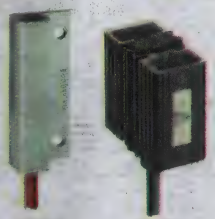
Mfg. Part No.	Heating Capacity (W)	Max. Inrush Current (A)	Dimensions (mm) H x W x D	Stock No.	Price Each 1-24	25-49	50-99
14005.0-00	60	4.5	184 x 70 x 60	82K8829	145.13	119.12	107.83
14007.0-00	100	4.5	140 x 70 x 50	02P6318	190.16	156.08	141.28
14008.0-00	150	4.5	264 x 70 x 60	82K8832	236.60	194.19	175.77

(105831)

SMALL PTC ENCLOSURE HEATERS

RoHS Compliant Available

STEGO INC. SIMPLY INNOVATIVE. BETTER FOR SURE.



RC 016 HGK 047

The **RC 016** and **HGK 047 series** heaters are designed to prevent condensation in small enclosures or to maintain minimum operating temperatures of electronic components in camera housings, actuators, valve and pump controls, telecom receivers/transmitters, and control boxes. PTC (Positive Temperature Coefficient) heating elements provide a "self-regulating" and "self-limiting" characteristic, making the heater safer and more energy efficient. The **RC 016** heater mounting flange dimension is 0.49" (12.5mm).

SMALL ENCLOSURE HEATERS

Mfg. Part No.	Power (W)	AC/DC Voltage (Min/Max)	H x W x D Inches (mm)	Stock No.	Price Each 1-24
01602.0-00	8	110-250V	1.2(30) x 0.49(12.5) x 0.49(12.5)	82K8658	39.57
01602.0-03	8	12-36V	1.2(30) x 0.49(12.5) x 0.49(12.5)	82K8659	42.41
01609.0-00	10	110-250V	1.97(50) x 0.49(12.5) x 0.49(12.5)	82K8660	46.06
01609.0-01	10	12-36V	1.97(50) x 0.49(12.5) x 0.49(12.5)	01M9588	39.50
01610.0-00	13	110-250V	2.36(60) x 0.49(12.5) x 0.49(12.5)	01M9589	42.99
01610.0-01	13	12-36V	2.36(60) x 0.49(12.5) x 0.49(12.5)	01M9590	43.45
ENCLOSURE HEATERS					
04701.9-00	20	110-120V	3.27(83) x 1.97(50) x 0.98(25)	01M9698	94.13
04702.9-00	30	110-120V	4.47(113) x 1.97(50) x 0.98(25)	82K8803	106.64

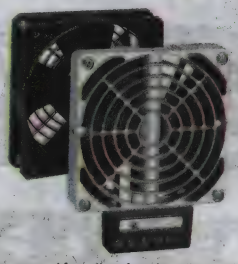
(88053)

SPACE SAVING FAN HEATERS

RoHS Compliant Available

STEGO INC. SIMPLY INNOVATIVE. BETTER FOR SURE.

- Compact size
- Flat design
- Built-in overheat protection
- Clip fixing
- 3-side DIN rail mountable
- Operating / Storage temperature: -49 to +158°F
- UL File No. E187294 (all), VDE (230VAC only)



Compact high-performance fan heaters prevent formation of condensation and frost and provides an evenly distributed interior air temperature in enclosures with electric / electronic components. **Important:** Heater must be operated together with a fan. Danger of overheating.

HEATER WITH FAN

Mfg Part No.	Heating Capacity	Voltage (VAC)	Min. Airflow (free blowing) (CFM)	Dimensions (H x W x D) (in.)	Stock No.	Price Each 1-9
03114.9-00	300	120	63	4.68 x 5.94 x 1.85	82K8780	302.34
HEATER WITHOUT FAN (FAN MOUNTING KIT INCLUDED)						
03112.9-00	400	120	20	3.15 x 4.41 x 0.87	82K8776	194.84
03112.0-00	400	230	20	3.15 x 4.41 x 0.87	82K8775	171.07

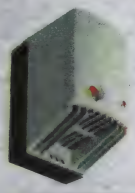
(202116)

FAN HEATERS

RoHS Compliant Available

STEGO INC. SIMPLY INNOVATIVE. BETTER FOR SURE.

The **CR 027 series** is a compact, high capacity PTC technology fan heater for large enclosure applications. Fan heaters are used to maintain minimum operating temperatures in enclosures. This helps prevent failure of electronic components caused by condensation and corrosion. PTC technology uniquely adjusts heating power to ambient temperature. The **CR 027 series** comes with an integral thermostat making it easy to install on standard DIN rail.



DIMENSIONS: 6.5" (165mm)H x 3.94" (100mm)W x 5.0" (128mm)D

Mfg. Part No.	Power (W)	Operating Voltage (VAC)	Operating Temperature	Description	Stock No.	Price Each 1-4
02700.9-00	550	120	32-140°F	Fan Heater w/adjustable thermostat	82K8756	234.18
02701.9-00	650	120	32-140°F	Fan Heater w/adjustable thermostat	82K8758	323.77

(87964)

HYGROTHERM

RoHS Compliant Available

STEGO INC. SIMPLY INNOVATIVE. BETTER FOR SURE.

The **ETF 012 series** senses the ambient temperature and relative air humidity. Depending on which contact combination is chosen, it then turns on or off a connected device if either the temperature is below, or the humidity above the set point. The integrated LED in each adjustment knob is lit indicating the active function. Product mounts on standard DIN rail. Switching capacity: 6A resistive (1A inductive). NC & NO relay output.

DIMENSIONS: 3.03" (77mm)H x 2.36" (60mm)W x 1.69" (43mm)D

Mfg. Part No.	Temperature Range	Humidity Range	Supply Voltage (VAC)	Stock No.	Price Each 1-9
01230.9-00	32-140°F	50% to 90% Relative Humidity	100-240	01M9584	206.25

(87982)

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(212564)

DC FANS

DC AXIAL FANS

IP68 UL RoHS Compliant Available ebmpapst

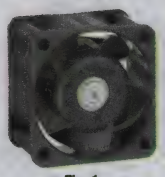


Fig. 1

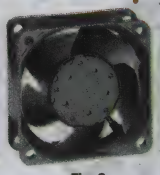


Fig. 2

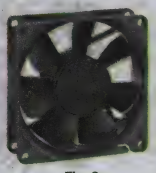


Fig. 3

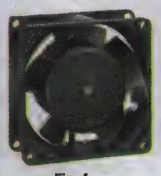


Fig. 4

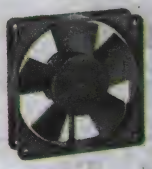


Fig. 5

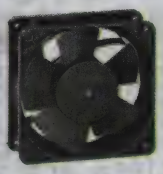


Fig. 6

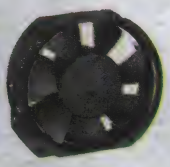


Fig. 7

- Ingress protection rating of IP68
- Material: Fiberglass-reinforced composite Impeller: PA Electronic housing: PBT or Aluminum
- Electrical connection via 22, 24, 26AWG or flat plugs 3 x 0.5 mm
- Air exhaust over struts
- Direction of rotation: clockwise or counter clockwise, seen on rotor

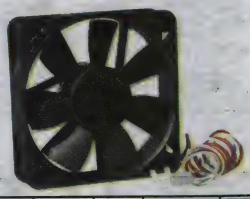
Mfg. Part No.	Fig.	Dimensions H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-24
412JHHU	1	40mm x 40mm x 25mm	12	3.3	14.1	46	55M6901	61.94
634NU-004	2	60mm x 60mm x 25mm	24	1.4	23.5	34	85W2580	52.84
8412NU	3	80mm x 80mm x 25mm	12	2	40.6	32	79R8979	50.51
8414NMU	3	80mm x 80mm x 25mm	24	1.4	34.1	27	85M2241	48.92
8314U	4	80mm x 80mm x 32mm	24	2.7	31.8	36	67H5276	67.62
3312U	4	92mm x 92mm x 32mm	12	2.4	47.1	37	67H5062	64.72
3314U	4	92mm x 92mm x 32mm	24	2.6	47.1	37	67H5063	62.68
4312U	5	119mm x 119mm x 38mm	12	5	100.1	45	67H5083	59.39
● 4314U	5	120mm x 120mm x 32mm	24	5	82.4	39	67H5088	60.43
4114NU	6	119mm x 119mm x 38mm	24	4.5	105.9	48.5	85W2570	70.63
6424U	7	172mm x 150mm x 51mm	24	18	241.3	57	73C9672	113.28

(210209)

DC AXIAL FANS WITH CONNECTORS

RoHS Compliant Available ebmpapst

- Electronic protection against reverse polarity
- Impedance protected against locked motor and overloading
- Made from fibreglass plastic - PBT housing, PA impeller
- Air exhaust over struts
- Rotation CCW looking at motor
- Fitted with 3-pin Molex connector (22-01-2035)
- Sensor signal for speed monitoring



Mfg. Part No.	Dimensions (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-24
● 412F/2H-038	40 x 40 x 10	12	0.8	5.3	29	58T2514	19.28
● 412/2-036	40 x 40 x 20	12	0.9	5.9	18	58T2513	20.73
● 512F/2-531	50 x 50 x 15	12	1	11.8	30	58T2538	24.25
● 612F/2-638	60 x 60 x 15	12	1	17.1	27	58T2546	25.06
● 612F/2L-640	60 x 60 x 15	12	0.4	9.9	16	58T2547	24.96
● 612N/2GML-096	60 x 60 x 25	12	0.7	14.7	19	58T2548	27.17
● 712F/2L-005	70 x 70 x 15.2	12	0.6	16.5	25	58T2672	27.60
● 8412N/2GLLE-451	80 x 80 x 25.4	12	0.35	11.9	11	58T2873	28.28
● 8412N/2GLE-256	80 x 80 x 25.4	12	0.5	19.4	12	58T2872	28.28
● 8412N/2GMLE-257	80 x 80 x 25.4	12	0.9	26.5	21	58T2875	28.28
● 8412N/2GME-258	80 x 80 x 25.4	12	1.4	34.1	26	58T2874	28.28
● 8412N/2G-185	80 x 80 x 25.4	12	2	40.6	32	58T2869	27.20
● 8412N/2GH-214	80 x 80 x 25.4	12	2.2	46.5	37	58T2870	29.52
● 3412N/2GLLE-453	92 x 92 x 25.4	12	0.42	20.85	12	58T2474	29.76
● 4412F/2GLL-515	120 x 120 x 25	12	0.75	42.5	26	58T2531	38.95
● 4412F/2M-504	120 x 120 x 25	12	3.2	82.4	38	58T2532	42.96

(197029)

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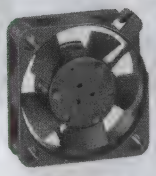
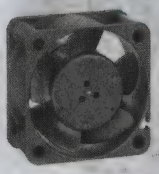
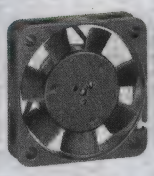
(196535)

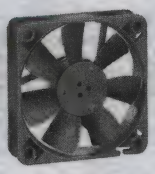
DC TUBEAXIAL FANS - SQUARE, LEAD WIRES

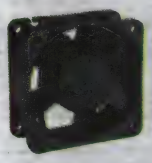
RoHS Compliant Available ebmpapst

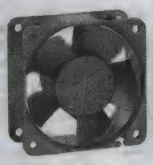

250 Series

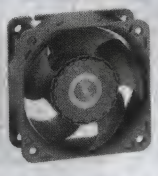

400 Series

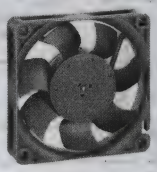

400F Series

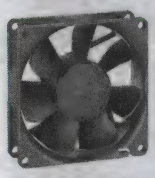

600F Series

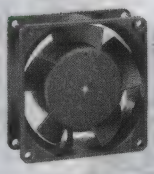

600N Series

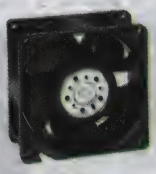

600NG, 4100N, 4200, 4300, 5200N Series

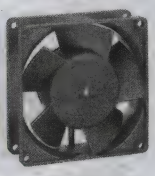

620 Series

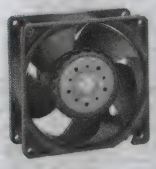

700F Series

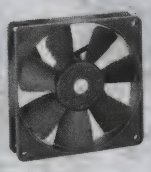

3400N, 8400N Series

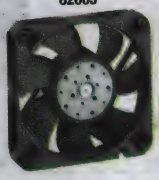

8300 Series


8200J


3300 Series

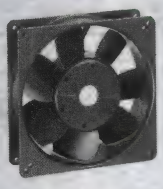

3200J Series


4400F Series


4400FN

4400

- Plastic housing and impeller
- **"/2"** in mfg. part no. indicates tachometer output
- **P suffix** in mfg. part no. indicates PWM


5100N Series

Maximum temperature rating from +50°C to +85°C *(please refer to datasheets for detailed breakdown). Order ebm-pabst fan accessories separately on pages 2394-2395.*

Mfg. Part No.	Dim. (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Bearing Type	Stock No.	Price Each 1-24
● 255N	25 x 25 x 8	5	0.4	1.9	15	Sleeve	20C8129	23.87
● 255H	25 x 25 x 8	5	0.6	3	28	Sleeve	86K9807	27.20
● 252N	25 x 25 x 8	12	0.5	2	15	Sleeve	86K9806	25.12
● 412F	40 x 40 x 10	12	0.7	4.7	22.1	Sleeve	86K9831	13.55
● 412FH	40 x 40 x 10	12	0.8	5	26	Sleeve	52F6779	13.77
● 414F	40 x 40 x 10	24	0.8	5	22	Sleeve	86K9835	13.99
● 414FH	40 x 40 x 10	24	0.9	5	26	Sleeve	33K8400	15.77
● 412	40 x 40 x 20	12	0.9	6	18	Sleeve	86K9830	13.99
● 414	40 x 40 x 20	24	1	6	18	Sleeve	86K9834	16.21
● 412J	40 x 40 x 25	12	2.4	11.3	39	Ball	86K9832	31.50
● 412JHH	40 x 40 x 25	12	3.9	14.2	46	Ball	86K9833	36.37
● 412J/2HH	40 x 40 x 25	12	3.3	14.1	46	Ball	25M3532	40.85
● 414J	40 x 40 x 25	24	2.4	11.3	39	Ball	86K9836	32.53
● 414JH	40 x 40 x 25	24	3	12.8	43	Ball	67H5069	35.64
● 414JHH	40 x 40 x 25	24	3.6	14.2	46	Ball	86K9837	36.63
● 512F	50 x 50 x 15	12	1	12	30	Sleeve	87K0197	16.77
● 514F	50 x 50 x 15	24	1	12	30	Sleeve	04M4744	16.77
● 612FL	60 x 60 x 15	12	0.4	11.2	16	Sleeve	20C8211	19.78
● 612F	60 x 60 x 15	12	1	17	27	Sleeve	86K9885	16.77
● 614F	60 x 60 x 15	24	1.1	17	27	Sleeve	86K9895	18.54
● 612NLE	60 x 60 x 25	12	0.4	12.4	16	Ball	59J6812	24.30
● 622L	60 x 60 x 25	12	0.53	12.4	22	Ball	86K9904	28.06
● 612NME	60 x 60 x 25	12	0.8	21	28	Ball	86K9892	24.11
● 612NN	60 x 60 x 25	12	1.6	25	35	Ball	86K9893	29.82

CONTINUED

DC TUBEAXIAL FANS - SQUARE, LEAD WIRES (CONT.)

Mfg. Part No.	Dim. (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Bearing Type	Stock No.	Price Each 1-24
612NH	60 x 60 x 25	12	2	27.1	38	Ball	39C5981	29.31
612NGN	60 x 60 x 25	12	2.1	25	35	Sleeve	86K9890	23.87
622H	60 x 60 x 25	12	2.3	27.1	39	Ball	86K9902	31.06
612NGH	60 x 60 x 25	12	2.6	27	38	Sleeve	93K6844	24.33
612NHH	60 x 60 x 25	12	3	33	43	Ball	10R6588	29.31
612NHH-118	60 x 60 x 25	12	3	33	43	Ball	86K9891	30.32
622HH	60 x 60 x 25	12	3.5	33	43	Ball	86K9903	30.31
614NM	60 x 60 x 25	24	1.4	21	28	Ball	86K9899	29.31
624M	60 x 60 x 25	24	1.46	17.7	29	Ball	86K9912	28.76
614NN	60 x 60 x 25	24	1.8	25	35	Ball	86K9900	29.31
614NGN	60 x 60 x 25	24	2.1	25	35	Sleeve	86K9898	24.33
624H	60 x 60 x 25	24	2.4	27.1	39	Ball	86K9909	30.53
614NGH	60 x 60 x 25	24	2.6	27.1	38	Sleeve	25M4870	27.44
614NHH	60 x 60 x 25	24	3	33	43	Ball	91C4425	27.31
614NHHR-137	60 x 60 x 25	24	3	33	41	Ball	85M2145	40.11
624HH	60 x 60 x 25	24	3.6	33	43	Ball	86K9910	30.53
614NGHH	60 x 60 x 25	24	3.8	33	43	Sleeve	86K9897	23.87
614JH	60 x 60 x 32	24	7.7	41	53	Ball	88K1462	61.94
712F	70 x 70 x 15	12	1.7	25.9	38	Sleeve	86K9921	31.62
714F	70 x 70 x 15	24	1.7	25.9	38	Sleeve	86K9922	28.98
8412NGMLV	80 x 80 x 25	12	1.5	26.5	19	Sleeve	99K0865	34.36
8412N	80 x 80 x 25	12	2	41	32	Ball	88K2750	27.53
8412NG	80 x 80 x 25	12	2	40.6	32	Sleeve	99K0861	26.56
8412NGLV	80 x 80 x 25	12	1.1	19.4	12	Sleeve	20C8230	29.57
8414N/2GL	80 x 80 x 25	24	0.7	19.4	12	Sleeve	99K0869	26.56
8414NM	80 x 80 x 25	24	1.4	34	27	Ball	86K9940	27.53
8414N/2G	80 x 80 x 25	24	2	40.6	32	Ball	83H3485	21.81
8414N	80 x 80 x 25	24	2	41	32	Ball	86K9939	27.53
8312M	80 x 80 x 32	12	1.8	28	34	Ball	86K9931	32.84
8312	80 x 80 x 32	12	2.2	32	36	Ball	86K9930	33.08
8312HL	80 x 80 x 32	12	4	39.4	43	Ball	90B3620	32.15
8314HL	80 x 80 x 32	24	1	18.8	43	Ball	08R0714	43.52
8314	80 x 80 x 32	24	2.5	32	36	Ball	86K9932	33.08
8314H	80 x 80 x 32	24	6	47	48	Ball	88K2196	34.30
8318	80 x 80 x 32	48	2.6	32	36	Ball	86K9933	33.08
8212JN*	80 x 80 x 38	12	10	78	55	Ball	86K9929	50.29
8214JN	80 x 80 x 38	24	10	78	55	Ball	33K8407	51.06
8214J/2H3	80 x 80 x 38	24	25	111.8	66	Ball	66M7933	87.62
8214J/2H4	80 x 80 x 38	24	37	130.7	71	Ball	66M7934	84.61
8218JN*	80 x 80 x 38	48	11	78	55	Ball	85M2235	50.32
8218J/2H4	80 x 80 x 38	48	27	130.7	71	Ball	01P0081	85.97
3412NME	92 x 92 x 25	12	1.1	42	28	Ball	86K9819	24.19
3412N	92 x 92 x 25	12	2.2	49	32	Ball	86K9817	28.98
3412NG	92 x 92 x 25	12	2.2	49.4	32	Sleeve	98K8834	28.91
3412NGHH	92 x 92 x 25	12	3.2	60	39	Sleeve	20C8139	24.08
3412NH	92 x 92 x 25	12	2.5	55	36	Ball	86K9818	29.49
3412NHH	92 x 92 x 25	12	3.2	60	39	Ball	95B5056	28.98
3414NM	92 x 92 x 25	24	1.8	42	28	Ball	86K9825	29.49
3414N	92 x 92 x 25	24	2.3	49	32	Ball	02M0144	28.98
3414NH	92 x 92 x 25	24	3	55	36	Ball	86K9823	29.53
3414NHH	92 x 92 x 25	24	3.2	60	39	Ball	86K9824	29.31
3312	92 x 92 x 32	12	2.4	47	37	Ball	86K9811	33.30
3314	92 x 92 x 32	24	2.6	47	37	Ball	86K9813	33.30
3318	92 x 92 x 32	48	2.7	47	37	Ball	86K9814	38.85
3212J/2N-301	92 x 92 x 38	12	7.5	76.5	51	Sleeve	86K9809	51.40
3212JN	92 x 92 x 38	12	7.5	77	51	Ball	10R6576	48.27
3212JH	92 x 92 x 38	12	9	86	55	Ball	85M1685	51.09
3212JH3	92 x 92 x 38	12	30	140	69	Ball	11P1235	60.86
3214JN	92 x 92 x 38	24	7.5	76.5	51	Ball	86K9810	49.84
3214JH3	92 x 92 x 38	24	30	140	69	Ball	85M1690	83.32
3214J/2H3F-191	...	24	28.3	...	...	Ball	62R9027	57.19
3214J/2H4P	92 x 92 x 38	24	50	164.8	73	Ball	10R6577	85.79
3214JH4	92 x 92 x 38	24	50	165	73	Ball	11P1239	66.32
3218JH3	92 x 92 x 38	48	30	140	69	Ball	85M1694	73.32
3218J/2H4P	92 x 92 x 38	48	50	164.8	73	Ball	10R6578	75.85
4412FM	119 x 119 x 25	12	3.2	82	38	Ball	15B5299	32.31
4412F/2	119 x 119 x 25	12	5.3	100	43	Ball	13J3413	36.58
4412F	119 x 119 x 25	12	5.3	100	43	Ball	94C1058	34.51
4412FNH	119 x 119 x 25	12	12	132.4	55	Sleeve	31M0725	56.53
4414FM	119 x 119 x 25	24	3.2	82	38	Ball	86K9855	33.30
4414F	119 x 119 x 25	24	5	100	43	Ball	86K9854	35.64
4414FNN	119 x 119 x 25	24	8.5	117.7	52	Ball	10R6581	52.61
4414FNH	119 x 119 x 25	24	12	132.4	55	Ball	31M0730	56.12
4312L	119 x 119 x 32	12	1.2	56	30	Ball	02M0245	33.80

➤ CONTINUED ➤

DC TUBEAXIAL FANS - SQUARE, LEAD WIRES (CONT.)

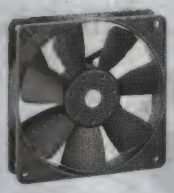
Mfg. Part No.	Dim. (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Bearing Type	Stock No.	Price Each 1-24
4312M	119 x 119 x 32	12	2.6	82	39	Ball	86K9847	33.22
4312	119 x 119 x 32	12	5	100	45	Ball	88K2735	34.41
4314L	119 x 119 x 32	24	1.2	56	30	Ball	86K9850	34.05
4314M	119 x 119 x 32	24	2.6	82	39	Ball	86K9851	33.22
4314	119 x 119 x 32	24	5	100	45	Ball	88K2736	34.30
4314R	119 x 119 x 32	24	5	100	45	Ball	98K9373	51.52
4314/2	119 x 119 x 32	24	5	100	45	Ball	62R9424	37.76
4318	119 x 119 x 32	48	5	100	45	Ball	86K9852	38.19
4212L	119 x 119 x 38	12	1.2	51	29	Ball	86K9843	44.96
4412M†	119 x 119 x 38	12	4.2	108.3	42	Ball	31M0728	37.08
4412N	119 x 119 x 38	12	5.5	120.7	46	Ball	31M0729	40.52
4412H	119 x 119 x 38	12	8.9	141.3	49	Ball	31M0726	39.89
4112NH3*	119 x 119 x 38	12	19.5	182.4	65	Ball	06M1009	71.95
4414L	119 x 119 x 38	24	2.5	88.3	37	Ball	31M0733	37.08
4414M†	119 x 119 x 38	24	4	108.3	42	Ball	31M0734	37.08
4414N†	119 x 119 x 38	24	5.2	120.7	46	Ball	31M0735	37.08
4414H	119 x 119 x 38	24	8.6	141.3	49	Ball	31M0732	43.52
4414HH	119 x 119 x 38	24	14	164.8	52	Ball	71P7616	43.52
4112NH4	119 x 119 x 38	12	32	208.9	67	Ball	60M3144	71.60
4114NHH*	119 x 119 x 38	24	15.5	152.9	60	Ball	83H9311	71.16
4114NH3*	119 x 119 x 38	24	19.5	182.4	65	Ball	41K9470	72.49
4114NH5*	119 x 119 x 38	24	45	229.5	70	Ball	85M2036	91.92
4114NH6*	119 x 119 x 38	24	60	259	73	Ball	78M7997	95.03
4114N/2H7P	119 x 119 x 38	24	90	294.2	76	Ball	12N3245	146.50
4114N/2H8P	119 x 119 x 38	24	120	335.5	78	Ball	14N2344	149.00
4418M*	119 x 119 x 38	48	4.2	108.3	42	Ball	10R6584	42.14
4418N*	119 x 119 x 38	48	5.2	120.7	46	Ball	10R6585	38.92
4418H*	119 x 119 x 38	48	8.6	141.3	49	Ball	10R6582	38.92
4118NH6*	119 x 119 x 38	48	55	259	73	Ball	64M6571	99.17
4118N/2H7P	119 x 119 x 38	48	90	294.2	76	Ball	01P0079	149.84
5212NN	127 x 127 x 38	12	6	127	46	Ball	86K9871	50.74
5212NH	127 x 127 x 38	12	9.8	148	51	Ball	86K9870	70.63
5214NM	127 x 127 x 38	24	4.6	110	43	Ball	86K9873	50.74
5214NH	127 x 127 x 38	24	9.8	148	51	Ball	86K9872	69.60
5112N*	135 x 135 x 38	12	9.5	147	48	Ball	86K9869	119.97
5114N*	135 x 135 x 38	24	9.5	147	48	Ball	97B2531	94.24

*Metal housing; †Metal housing and impeller
(68233)

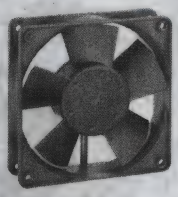
DC TUBEAXIAL FANS - SQUARE, TERMINAL CONNECTIONS

RoHS Compliant Available

ebmpapst



4400F Series



4300 Series

4100N Series

- Plastic housing and impeller
- Terminal connection

Maximum temperature rating from +55°C to +75°C *(please refer to datasheets for detailed breakdown). Order ebm-pabst fan accessories separately online or call.*

BALL BEARING

Mfg. Part No.	Dim. (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-24
4484F	119 x 119 x 25	24	5	100	43	88K2737	34.64
4394	119 x 119 x 32	24	5	100	45	86K9853	42.41
4182NX	119 x 119 x 38	12	4.5	106	49	86K9839	49.29
4182NXH	119 x 119 x 38	12	11	139.5	57	13J3411	66.98
4184NX	119 x 119 x 38	24	4.5	106	49	93K7639	56.95
4184NXH	119 x 119 x 38	24	11	139.5	57	50B6456	60.28
4188NXM	119 x 119 x 38	48	3.5	94	44	86K9841	56.95
W2G115-AE31-13	127 x 127 x 38	24	5.7	130	48	10R6570	75.25
W2G115-AG71-12	127 x 127 x 38	24	12	160	52	47M2382	93.02
SLEEVE BEARING							
4182NGX	119 x 119 x 38	12	3.5	94	44	86K9838	49.51
4184NGX	119 x 119 x 38	24	3.5	94	44	86K9840	51.84

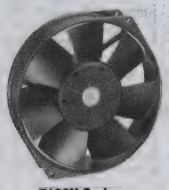
(106437)

DC FANS

DC TUBEAXIAL FANS - ROUND

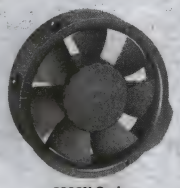
RoHS Compliant Available

ebmpapst



7100N Series

7200N Series

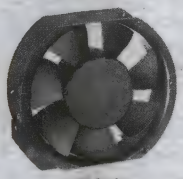


6200N Series

- Ball bearing
- Plastic housing and impeller

Maximum temperature rating from +55°C to +72°C *(please refer to datasheets for detailed breakdown). Order ebm-papst fan accessories separately on pages 2394-2395.*

6300 Series



6400 Series

ROUND FANS

Mfg. Part No.	Dim. (mm) Dia. x D	Connection Type	Voltage (VDC)	Power (W)	Max. Air-flow (cfm)	Noise (dBA)	Stock No.	Price Each 1-24
● 7112N*	150 x 38	Wire Leaded	12	12	212	55	86K9919	122.98
● 7114N*	150 x 38	Wire Leaded	24	12	212	55	88K2748	97.24
● 7214N*	150 x 55	Wire Leaded	24	12	212	50	86K9924	102.90
● 6212NM†	172 x 51	Terminals	12	12	206	50	86K9901	109.98
● 6312/2TDHP*	172 x 51	Terminals	12	41	353	64	85M2152	160.74
● 6224NM†	172 x 51	Terminals	24	12	206	50	86K9908	105.57
● 6224N†	172 x 51	Terminals	24	18	241	55	04M4755	100.90
● 6224NH†	172 x 51	Terminals	24	26	283	61	86K9907	106.23
● 6314/2TDHP*	172 x 51	Terminals	24	41	353	64	85M2154	155.30
● 6314/2TDHHP*	172 x 51	Terminals	24	67	418	69	85M2153	173.19
● 6248N†	172 x 51	Terminals	48	17	241	55	86K9914	91.47
● 6318/2TDH4P*	172 x 51	Terminals	48	150	559	75	85M2157	178.85

SEMI-ROUND FANS

Mfg. Part No.	Dim. (mm) Dia. x H x D	Connection Type	Voltage (VDC)	Power (W)	Max. Air-flow (cfm)	Noise (dBA)	Stock No.	Price Each 1-24
● 6424†	172 x 150 x 51	Terminals	24	18	241	57	86K9915	91.47
6424R-343*	172 x 150 x 51	Power Cord	24	17	241	57	65H8568	93.74
● 6424H†	172 x 150 x 51	Terminals	24	26	283	63	86K9916	109.78
● 6448†	172 x 150 x 51	Terminals	48	17	241	57	86K9917	91.47

*Metal housing; †Metal housing and impeller
(106438)

S-FORCE HIGH PERFORMANCE AXIAL FANS

RoHS Compliant Available

ebmpapst

- Ball bearing
- Lead wire connection (20 AWG)
- Fully integrated commutation electronics
- Standard with speed signal and PWM (**P suffix**) or 0-10VDC / PWM (**0 suffix**) speed control
- Aluminum housing, fiberglass reinforced PA impeller

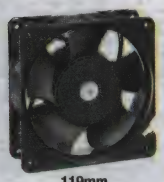
Mfg. Part No.	Dim. (mm) Dia. x D	Voltage (VDC)	Power (W)	Max. Airflow (CFM)	Noise (dBA)	Stock No.	Price Each 1-24
● 2214F/2TDH0	200 x 51	24	41	464.7	62	91R0149	156.32
● 2214F/2TDHH0	200 x 51	24	54	552.9	66	91R0148	200.39
● 2218F/2TDHH0	200 x 51	48	54	552.9	66	91R0150	200.39
● 2218F/2TDH4P	200 x 51	48	103	717.6	72	91R0152	252.02

(190004)

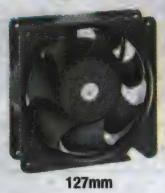
DC DIAGONAL FANS

RoHS Compliant Available

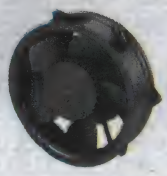
ebmpapst



119mm



127mm



172mm

➤ CONTINUED ➤

DC DIAGONAL FANS (CONT.)

- Ball bearings
- Lead wire connection
- Plastic housing and impeller
- Increased service life and lower noise due to digital motor management
- Divergent airflow increases flow rate 30% over standard tubeaxial fans
- Optimal variable speed control
- Software enables precise configuration of fan to any application
- Max. temp. rating: +65°C, +75°C (DV6400)

12V versions also available *; go online or call. Order fan accessories separately on pages 2394-2395.*

SQUARE FANS

Mfg. Part No.	Dimensions (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-24
● DV4114N	119 x 119 x 38	24	21	162	60	86K9723	93.53
● DV5214N	127 x 127 x 38	24	20	159	56	86K9729	95.89

ROUND FANS

Mfg. Part No.	Dimensions (mm) Dia. x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-24
● DV6224	172 x 51	24	40	318	63	20C8011	134.81

(77995)

DC HIGH POWER AXIAL FANS, R SERIES

NMB Minebea

- Motor protection: locked rotor,reverse polarity
- Insulation resistance:10M Ω measured with 500VDC between all leads shorted together and case
- Dielectric withstand voltage: AC 700V 1 min.
- Allowable ambient temperature range: -30°C ~ +70°C (operating)
- Dual NMB ball bearings
- Low noise

R150

R172

R series axial fans are ideal for routers and switches applications, base stations, storage and server rack systems, modular data systems, CT scanners, MRI, X-Ray and ultrasound machines among others.

Mfg. Part No.	Dimensions (mm) Dia. x Depth	Rated Voltage (V)	Power (W)	Max. Air Flow (CFM)	Noise (dB)	Stock No.	Price Each 1-9
R150A3-051-D0790	172 x 51	48	196.8	544	85	44W6160	266.76
R172A0-051-D0790	172 x 51	48	211.2	604	82	44W6161	266.76

(208181)

IP54 RATED DC AXIAL FANS

RoHS Compliant Available

NMB Minebea

1608VL

3610VL

4715VL

- Single phase motor technology
- Innovative casing
- Superior airflow
- IP54/oil and water resistant
- Motor protection: auto restart/polarity protection
- Insulation resistance: 10Mohms over with a DC500V megger
- Dielectric withstand voltage: AC 700V 1s
- Allowable ambient temperature range: -10°C ~ +70°C (Operating)

1608VL

Mfg. Part No.	Dimensions (mm) H x W x D	Rated Voltage (V)	Power (W)	Max. Air Flow (CFM)	Noise (dB)	Stock No.	Price Each 1-9
● 1608VL-04W-B40-B00	40 x 40 x 20	12	1.02	8.8	29	39T3065	14.75
● 1608VL-04W-B60-B00	40 x 40 x 20	12	1.56	11.3	34.6	39T3071	14.58
● 1608VL-05W-B40-B00	40 x 40 x 20	24	1.2	8.8	29	39T3074	13.32
● 1608VL-05W-B60-B00	40 x 40 x 20	24	2.4	11.3	34.6	39T3081	13.32

3610VL

● 3610VL-04W-B30-B00	92 x 92 x 25	12	2.88	61.1	38.5	39T3114	20.19
● 3610VL-04W-B30-E00	92 x 92 x 25	12	2.88	61.1	38.5	39T3115	19.49
● 3610VL-04W-B50-B00	92 x 92 x 25	12	4.8	77	45	39T3126	19.96
● 3610VL-04W-B50-E00	92 x 92 x 25	12	4.8	77	45	39T3127	19.96
● 3610VL-04W-B70-B00	92 x 92 x 25	12	8.64	96.4	51	39T3138	20.19
● 3610VL-04W-B70-E00	92 x 92 x 25	12	8.64	96.4	51	39T3139	19.96
● 3610VL-05W-B30-B00	92 x 92 x 25	24	3.36	61.1	38.5	39T3150	19.49

➤ CONTINUED ➤

IP54 RATED DC AXIAL FANS (CONT.)

3610VL

Mfg. Part No.	Dimensions (mm) H x W x D	Rated Voltage (V)	Power (W)	Max. Air Flow (CFM)	Noise (dB)	Stock No.	Price Each 1-9
3610VL-05W-B30-E00	92 x 92 x 25	24	3.36	61.1	38.5	39T3151	20.19
3610VL-05W-B50-B00	92 x 92 x 25	24	5.28	77	45	39T3162	19.96
3610VL-05W-B50-E00	92 x 92 x 25	24	5.28	77	45	39T3163	19.49
3610VL-05W-B70-B00	92 x 92 x 25	24	9.12	96.4	51	39T3174	19.96
3610VL-05W-B70-E00	92 x 92 x 25	24	9.12	96.4	51	39T3175	19.49
4715VL							
4715VL-05W-B80-E00	120 x 120 x 38	24	35.52	243.2	66	39T3303	42.06
4715VL-07W-B50-E00	120 x 120 x 38	48	17.8	182.5	55.5	55W8253	36.02
4715VL-07W-B60-E00	120 x 120 x 38	48	21.6	189.9	59.5	39T3306	44.04
4715VL-07W-B80-E00	120 x 120 x 38	48	38.4	243.2	66	39T3312	41.24

(195688)

DC AXIAL FANS

RoHS Compliant Available

NMB Minebea

2415RL

3115RL

3615RL

- Single phase motor technology
- Innovative casing
- Integral stationary blade
- Dual NMB ball bearings
- Motor protection: auto restart/polarity protection
- Insulation resistance: 10 Mohms or over with a DC500V megger
- Dielectric withstand voltage: AC 700V 1s

RL series cooling fans offer a single phase motor technology designed for low power consumption, low noise, high pressure and long life.

2415RL

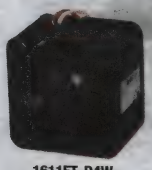
Mfg. Part No.	Dimensions (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Air Flow (CFM)	Noise (dBA)	Stock No.	Price Each 1-9
2415RL-04W-B70-E00	60 x 60 x 38	12	9.2	53	56	39T3084	27.27
3115RL							
3115RL-04W-B50-E00	80 x 80 x 38	12	4.9	61.8	46	39T3093	31.70
3115RL-04W-B70-E00	80 x 80 x 38	12	13.8	91.8	56	39T3099	31.70
3615RL							
3615RL-05W-B30-E00	92 x 92 x 38	24	9.6	103.8	52.5	39T3211	37.36
3615RL-05W-B70-E00	92 x 92 x 38	24	27.12	152.5	62.5	39T3235	37.36

(195696)

TURBOFAN DC AXIAL FANS

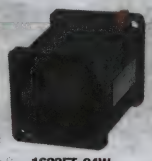
RoHS Compliant Available

NMB Minebea



1611FT-D4W-B86-B50

1619FT-04W-B86-B50



1622FT-04W-B86-E50

3122FT-D4W-B56-E50

- Integral stationary blade
- Single rotor/impeller design
- High speed bearing lubricant
- High performance
- Energy efficient
- Dual NMB ball bearings
- Motor Protection: auto restart/polarity protection
- Insulation resistance: 10 Mohms by DC500V megger
- Dielectric withstand voltage: AC 700V 1s
- Allowable ambient temperature range: -10°C ~ +60°C (Operating), except **1611FT** -10°C ~ +70°C

Mfg. Part No.	Dimensions (mm) H x W x D	Voltage (VDC)	Power (W)*	Max. Air Flow (CFM)*	Noise (dBA)*	Stock No.	Price Each 1-9
1611FT-D4W-B86-B50	40 x 40 x 28	12	11.4	29.3	60	46T4236	27.22
1619FT-04W-B86-B50	40 x 40 x 48	12	12.6	28.9	62	46T4237	34.35
1622FT-04W-B86-E50	40 x 40 x 56	12	12.6	30	60	46T4238	34.17
3122FT-D4W-B56-E50	80 x 80 x 56	12	46.8	138	65.5	46T4239	56.09

* Average values in free air

(195728)

DC TUBEAXIAL FANS - SQUARE

RoHS Compliant Available

- Dual ball bearings provide long-life and reliability
- Lead wire connection
- Low noise at various airflows
- Plastic housing and impeller

NMB Minebea

Mfg. Part No.	Dim. (mm) H x W x D	Volt. (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
1004KL-01W-B40-B00	25 x 25 x 10	5	0.425	1.6	22	58K2748	15.32
1004KL-04W-B30-B00	25 x 25 x 10	12	0.42	1.2	20	58K2749	17.46
1004KL-04W-B40-B00	25 x 25 x 10	12	0.54	1.6	22	58K7746	17.46
1004KL-04W-B50-B00	25 x 25 x 10	12	0.72	2	25	58K7747	16.15
1204KL-04W-B30-B00	30 x 30 x 10	12	0.72	2.7	21	58K2753	17.63
1204KL-04W-B50-B00	30 x 30 x 10	12	0.96	3.8	27	58K7753	16.13
1204KL-04W-B59-B00	30 x 30 x 10	12	0.96	3.8	27	33M1317	17.93
1404KL-04W-B30-B00	35 x 35 x 10	12	0.48	3	19	58K2755	17.21
1404KL-04W-B50-B00	35 x 35 x 10	12	0.96	5.6	27	58K2756	16.13
1604KL-01W-B40-B00	40 x 40 x 10	5	0.6	5.3	25	58K7802	13.47
1604KL-01W-B50-B00	40 x 40 x 10	5	0.775	6	29	64K2283	13.79
1604KL-04W-B30-B00	40 x 40 x 10	12	0.744	4.2	22	58K2770	13.47
1604KL-04W-B40-B00	40 x 40 x 10	12	0.876	5.3	25	58K7803	13.47
1604KL-04W-B50-B00	40 x 40 x 10	12	0.876	6	29	69K7662	12.24
1606KL-04W-B30-L00	40 x 40 x 15	12	0.804	6	28	58K7804	13.73
1606KL-04W-B40-L00	40 x 40 x 15	12	0.9	7	31	58K7805	13.73
1606KL-04W-B50-L00	x x 15	12	1.02		34	58K7806	12.48
1606KL-05W-B30-L00	x x 15	24	1.08		28	58K2771	12.48
1606KL-05W-B50-L00	x x 15	24	1.488		34	67K1460	12.48
1606KL-05W-B59-L00	40 x 40 x 15	24	1.488	8.1	34	64J8877	14.97
1608KL-01W-B40-L00	40 x 40 x 20	5	1.35	8.4	29	58K2772	14.48
1608KL-04W-B10-L00	40 x 40 x 20	12	0.48	4.9	20	58K2773	14.14
1608KL-04W-B30-L00	40 x 40 x 20	12	0.84	7.4	25.5	58K2774	14.14
1608KL-04W-B50-L00	40 x 40 x 20	12	1.32	9.5	33	58K7807	12.27
1608KL-05W-B40-L00	40 x 40 x 20	24	1.68	8.4	29	44J7492	11.69
1608KL-05W-B59-L00	40 x 40 x 20	24	1.92	9.5	33	82H1756	13.38
2004KL-04W-B30-B00	50 x 50 x 10	12	0.48	6.35	23	58K7815	15.35
2004KL-04W-B50-B00	50 x 50 x 10	12	1.2	10.2	34	58K7816	14.81
2106KL-04W-B30-L00	52 x 52 x 15	12	0.84	9.89	21	58K2892	14.26
2106KL-04W-B40-L00	x x 15	12	1.08		25.5	44J8738	14.26
2106KL-04W-B50-L00	52 x 52 x 15	12	1.56	14.1	30	70K9916	14.26
2404KL-04W-B50-B00	60 x 60 x 10	12	3.24	19	36	58K7836	13.35
2406KL-04W-B10-L00	60 x 60 x 15	12	0.48	6.7	19	62K3478	12.58
2406KL-04W-B30-L00	60 x 60 x 15	12	1.08	14.1	28	58K2912	13.44
2406KL-04W-B50-L00	60 x 60 x 15	12	1.92	18.3	34	58K7837	13.44
2406KL-05W-B10-L00	60 x 60 x 15	24	0.96	6.7	19	58K7838	12.58
2406KL-05W-B30-L00	60 x 60 x 15	24	1.44	14.1	28	65K1127	13.44
2406KL-05W-B50-L00	60 x 60 x 15	24	2.4	18.3	34	58K2913	12.22
2406KL-05W-B59-L00	60 x 60 x 15	24	2.4	18.3	34	19J7268	12.27
2408NL-04W-B10-L00	60 x 60 x 20	12	0.6	10.9	22.5	94C8416	14.23
2408NL-04W-B30-L00	60 x 60 x 20	12	0.96	14.8	27	65K1128	14.23
2408NL-04W-B50-L00	60 x 60 x 20	12	1.32	17.6	31.5	58K7840	13.73
2408NL-05W-B10-L00	60 x 60 x 20	24	0.96	10.9	22.5	58K2914	14.06
2408NL-05W-B30-L00	60 x 60 x 20	24	1.08	14.8	27	58K2915	14.06
2408NL-05W-B50-L00	60 x 60 x 20	24	1.32	17.6	31.5	58K2916	13.73
2408NL-05W-B50-P00	60 x 60 x 20	24	1.32	17.6	31.5	44J8751	14.23
2408NL-05W-B59-L00	60 x 60 x 20	24	1.32	17.6	31.5	33M2073	14.45
2410ML-04W-B10-B00+	60 x 60 x 25	12	0.9	13.7	23	58K2917	13.52
2410ML-04W-B40-B00+	60 x 60 x 25	12	2.04	21.5	33.5	58K7846	12.00
2410ML-04W-B50-B00+	60 x 60 x 25	12	2.4	23.3	35	58K7847	12.00
2410ML-04W-B60-B00+	60 x 60 x 25	12	3.6	25	36	15M2168	12.36
2410ML-04W-B80-B00+	60 x 60 x 25	12	6.2	37	46	58K2919	13.73
2410ML-04W-B89-E50	60 x 60 x 25	12	6.2	37	46	33M2103	15.36
2410ML-05W-B10-B00+	60 x 60 x 25	24	1.44	13.7	23	58K2920	12.36
2410ML-05W-B40-B00+	60 x 60 x 25	24	2.16	21.5	33.5	58K7850	12.00
2410ML-05W-B50-B00+	60 x 60 x 25	24	2.4	23.3	35	58K2922	12.00
2410ML-05W-B69-B00	60 x 60 x 25	24	3.12	25	36	33M2122	13.92
2410ML-05W-B80-B00+	60 x 60 x 25	24	6.24	37	46	58K2923	13.73
2410ML-05W-B80-E00+	x x 25	24	6.24	37	50	98K8347	14.64
2410SB-05W-B40-B00	60 x 60 x 25	24	1.44	19.8	26.5	55T9978	9.92
3106KL-04W-B50-B01	80 x 80 x 15	12	2.76	32.8	34	65T8059	11.93
3106KL-05W-B59-B00	80 x 80 x 15	24	2.76	32.8	34	33M2604	15.15
3108NL-04W-B10-P00	80 x 80 x 20	12	1.08	26.5	26	92C7484	13.18
3108NL-04W-B30-P00	80 x 80 x 20	12	1.68	34.6	32.5	68K1211	13.18
3108NL-04W-B50-P00	80 x 80 x 20	12	3.36	44	42	58K7880	12.80

➤ CONTINUED ➤

DC FANS

DC TUBEAXIAL FANS - SQUARE (CONT.)

Mfg. Part No.	Dim. (mm) H x W x D	Volt. (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
● 3108NL-05W-B10-P00	80 x 80 x 20	24	1.3	26.5	26	58K3028	13.18
● 3108NL-05W-B30-P00	80 x 80 x 20	24	1.68	34.6	32.5	92C7488	12.80
● 3110KL-04W-B30-D00	80 x 80 x 25	12	2.04	31.8	28	29M8108	12.20
● 3110KL-04W-B50-D00	80 x 80 x 25	12	2.76	38.8	34	29M8110	12.20
● 3110KL-05W-B40-D00	80 x 80 x 25	24	2.4	35.3	31	29M8112	12.56
● 3110KL-05W-B50-D00	80 x 80 x 25	24	2.88	38.8	34	78H3571	12.56
● 3110KL-05W-B50-P00	80 x 80 x 25	24	2.88	38.8	34	98K8714	13.99
● 2410ML-05W-B80-E00	x x 25	24	6.24	37	50	98K8347	14.64
● 3110KL-05W-B60-D00	80 x 80 x 25	24	3.36	40.2	35	29M8113	11.64
● 3110KL-05W-B69-D00	80 x 80 x 25	24	3.36	40.2	35	33M2694	14.14
● 3112KL-04W-B30-E00	80 x 80 x 32	12	2.04	38.1	32	58K3029	14.88
● 3112KL-04W-B50-E00	80 x 80 x 32	12	4.2	51.5	41	58K3030	14.88
● 3112KL-05W-B30-E00	80 x 80 x 32	24	2.4	38.1	32	58K3031	15.24
● 3112KL-05W-B50-E00	80 x 80 x 32	24	4.56	51.5	41	41J3289	13.95
● 3112KL-05W-B60-E00	80 x 80 x 32	24	5.04	58.6	44	58K3032	13.95
● 3610KL-04W-B10-D00	92 x 92 x 25	12	0.88	26.5	25	58K7902	15.73
● 3610KL-04W-B20-D00	92 x 92 x 25	12	1.32	33.5	29.5	58K3101	15.36
● 3610KL-04W-B30-D00	92 x 92 x 25	12	1.92	40.6	27	58K7903	15.73
● 3610KL-04W-B50-D00	92 x 92 x 25	12	3.78	54.7	41	58K7904	14.38
● 3610KL-05W-B20-D00	92 x 92 x 25	24	1.44	33.5	29.5	41J3304	15.36
● 3610KL-05W-B40-D00	92 x 92 x 25	24	2.88	47.6	37.5	58K7905	14.38
● 3610KL-05W-B60-D00	92 x 92 x 25	24	5.16	61.8	44.5	58K3102	15.36
● 3612KL-04W-B50-E00	92 x 92 x 32	12	5.64	69.9	43.5	70K9926	19.18
● 3612KL-05W-B30-E00	92 x 92 x 32	24	3.2	44	34	70K9927	19.87
● 3615KL-04W-B50-P00	92 x 92 x 38	12	5.52	76.2	46.5	58K3105	23.74
● 3615KL-05W-B30-P00	92 x 92 x 38	24	3.6	60.3	40.5	58K3106	24.60
● 3615KL-05W-B50-P00	92 x 92 x 38	24	5.76	76.2	46.5	67K3068	23.74
● 4710KL-04W-B10-E00	119 x 119 x 25	12	1.44	63.5	27	58K3144	19.01
● 4710KL-04W-B30-E00	x x 25	12	3.36		35	58K7922	17.81
● 4710KL-04W-B50-E00	119 x 119 x 25	12	6.6	114.7	41.5	10J8013	17.81
● 4710KL-05W-B10-E00	119 x 119 x 25	24	1.92	63.5	27	58K3145	17.81
● 4710KL-05W-B30-E00	x x 25	24	3.6		35	41J3423	19.01
● 4710KL-05W-B50-E00	x x 25	24	6.96		41.5	58K7923	17.28
● 4712KL-04W-B40-P00	119 x 119 x 32	12	8.28	112	47	58K7928	26.55
● 4712KL-04W-B50-P00	119 x 119 x 32	12	10.2	120	50.5	30C5572	26.55
● 4712KL-05W-B30-P00	x x 32	24	6.72		44	58K7929	27.08
● 4712KL-05W-B40-P00	119 x 119 x 32	24	8.16	112	47	74K4028	24.84
● 4712KL-07W-B30-P00	119 x 119 x 32	48	7.68	100	44	58K7930	26.55
● 4712KL-07W-B50-P00	119 x 119 x 32	48	11.52	120	50.5	92C7520	26.55
● 4715KL-04W-B10-E00	119 x 119 x 38.4	12	3.24	83.6	37	75T9269	23.52
● 4715KL-04W-B20-E00	119 x 119 x 38.4	12	4.8	97	41	75T9270	23.80
● 4715KL-04W-B30-E00	119 x 119 x 38.4	12	6.6	108	42.5	75T9271	21.51
● 4715KL-04W-B40-E00	119 x 119 x 38.4	12	8.4	118	46.5	75T9272	22.97
● 4715KL-04W-B50-E00	119 x 119 x 38.4	12	12	129.9	50	75T9273	23.52
● 4715KL-05T-B30P00	119 x 119 x 38	24	7.44	108	42.5	12P9410	22.97
● 4715KL-05W-B10-E00	119 x 119 x 38.4	24	7.44	83.6	37	75T9276	23.80
● 4715KL-05W-B20-E00	119 x 119 x 38.4	24	8.4	97	41	75T9277	22.97
● 4715KL-05W-B30-E00	119 x 119 x 38.4	24	12	108	42.5	75T9278	21.51
● 4715KL-05W-B39-E00	119 x 119 x 38.4	24	7.44	108	42.5	75T9279	22.18
● 4715KL-05W-B40-E00	119 x 119 x 38.4	24	8.4	118	46.5	75T9280	20.88
● 4715KL-05W-B50-E00	119 x 119 x 38.4	24	12	130	50	75T9281	22.97
● 4715KL-07W-B30-E00	119 x 119 x 38.4	48	7.68	108	42.5	75T9282	21.51
● 4715SL-05W-B70-D00†	119 x 119 x 38	24	36	201	62.3	01N4332	76.01
● 4715SL-07W-B70-D00†	119 x 119 x 38	48	39.84	201	62.3	19P1848	76.01
● 5015KL-04W-B50-E00*	127 x 127 x 38	12	24.48	199	60.5	05M2958	63.08

Temperature rating from -10°C to +40°C up to -10°C to 70°C *(please refer to datasheets for detailed breakdown). Order NMB Technologies fan accessories separately on pages 2395-2396.*

*Not CSA certified; +Not VDE approved

†Aluminum housing

(68228)

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(196545)

DC TUBEAXIAL FANS - ROUND

RoHS Compliant Available

NMB Minebea

- Dual ball bearings provide long-life and reliability
- Lead wire connection
- Low noise at various airflows
- Plastic housing and impeller
- Temp. rating: -10°C to +70°C

Order NMB Technologies fan accessories separately on pages 2395-2396.

SEMI-ROUND

ROUND

SEMI-ROUND FANS

Mfg. Part No.	Dim. (mm) Dia. x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
● 5920PL-04W-B40-D00	172 x 150 x 51	12	17.28	240	58	88K2182	91.67
● 5920PL-05W-B40-D00	172 x 150 x 51	24	15.84	240	58	93K7658	90.48

ROUND FANS

Mfg. Part No.	Dim. (mm) Dia. x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
● 6820PL-04W-B40-D00	172 x 51	12	17.28	240	58	93K7661	92.29
● 6820PL-05W-B40-D00	172 x 51	24	15.84	240	58	93K7663	90.48

(105999)

DC PANAFLO FANS

RoHS Compliant Available

NMB Minebea

Lead wire connection
Ball bearings

Order fan accessories separately on pages 2395-2396.

Mfg. Part No.	Dimensions (mm) H x W x D	Voltage (VDC)	Power (W)**	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
● 3110SB-04W-B40-E00*	25 x 80 x 80	12	108	36	26	52T7379	9.92
● 3110SB-04W-B50-E00*	80 x 80 x 25	12	1.68	41.3	30	56T0002	9.92
● 3110SB-05W-B20-E00*	80 x 80 x 25	24	0.96	26.1	19	56T0005	9.92
● 3110SB-05W-B40-E00*	80 x 80 x 25	24	1.44	36	26	56T0006	9.92
● 3110SB-05W-B50-E00*	80 x 80 x 25	24	1.92	41.3	30	56T0007	9.92
● 4715KL-05W-B30-E00*	119 x 119 x 38.4	24	7.44	108	42.5	75T9278	21.51

*With standard 2 leads (GND, PWR); ** Average Values in Free Air

(85035)

HIGH AIR FLOW LONG LIFE DC FANS

NEW

RoHS Compliant Available

SANYO DENKI

Fig. 1

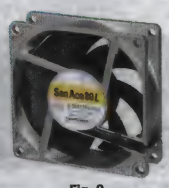


Fig. 2

Fig. 3

- Material - Frame: aluminum, Impeller: plastics (flammability: UL94V-1)
- Motor protection System: current blocking function and reverse polarity protection
- Dielectric strength: 50/60Hz, 500VAC, 1 minute (between lead conductor and frame)
- Storage temperature: -30°C to +70°C (non-condensing)
- Lead wire: +red, -black
- Sensor: yellow, Control: brown

The San Ace 60L, 80L, 92L 9LG, type has an expected life of 180,000 hours (approximately 20 years), 1.8 times that of our conventional long life fan,[1] making this fan ideal for equipment that must operate without maintenance for extended periods.

Mfg. Part No.	Fig.	Dimensions (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
● 9LG0612P4H001	1	60mm x 60mm x 25mm	12	2.04	27.5	35	01X2756	61.05
● 9LG0612P4J001	1	60mm x 60mm x 25mm	12	4.68	38.8	47	01X2757	64.69
● 9LG0612P4M001	1	60mm x 60mm x 25mm	12	1.08	18.7	24	01X2758	61.05

CONTINUED

HIGH AIR FLOW LONG LIFE DC FANS (CONT.)

Mfg. Part No.	Fig.	Dimensions (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
9LG0612P4S001	1	60mm x 60mm x 25mm	12	8.04	49.4	53	01X2759	68.32
9LG0624P4H001	1	60mm x 60mm x 25mm	24	1.92	27.5	35	01X2760	61.05
9LG0624P4J001	1	60mm x 60mm x 25mm	24	4.56	38.8	47	01X2761	64.69
9LG0624P4M001	1	60mm x 60mm x 25mm	24	0.96	18.7	24	01X2762	61.05
9LG0624P4S001	1	60mm x 60mm x 25mm	24	8.16	49.4	53	01X2763	68.32
9LG0648P4H001	1	60mm x 60mm x 25mm	48	2.88	27.5	35	01X2764	66.86
9LG0648P4J001	1	60mm x 60mm x 25mm	48	4.8	38.8	47	01X2765	70.51
9LG0648P4M001	1	60mm x 60mm x 25mm	48	1.92	18.7	24	01X2766	66.86
9LG0648P4S001	1	60mm x 60mm x 25mm	48	8.64	49.4	53	01X2767	74.13
9LG0812P4G001	2	80mm x 80mm x 25mm	12	3.6	54.3	43	01X2768	66.51
9LG0812P4H001	2	80mm x 80mm x 25mm	12	1.44	36.3	31	01X2769	62.87
9LG0812P4J001	2	80mm x 80mm x 25mm	12	7.2	73	49	01X2770	70.14
9LG0824P4G001	2	80mm x 80mm x 25mm	24	3.36	54.3	43	01X2771	66.51
9LG0824P4H001	2	80mm x 80mm x 25mm	24	1.2	36.3	31	01X2772	62.87
9LG0824P4J001	2	80mm x 80mm x 25mm	24	6.72	73	49	01X2773	70.14
9LG0912P4G001	3	92mm x 92mm x 25mm	12	3.6	68.2	40	01X2774	68.32
9LG0912P4H001	3	92mm x 92mm x 25mm	12	1.8	48.7	32	01X2775	64.69
9LG0912P4J001	3	92mm x 92mm x 25mm	12	5.04	77.7	44	01X2776	71.96
9LG0912P4S001	3	92mm x 92mm x 25mm	12	2.64	59.7	37	01X2777	64.69
9LG0924P4G001	3	92mm x 92mm x 25mm	24	3.6	68.2	40	01X2778	68.32
9LG0924P4H001	3	92mm x 92mm x 25mm	24	1.68	48.7	32	01X2779	64.69
9LG0924P4J001	3	92mm x 92mm x 25mm	24	5.04	77.7	44	01X2780	71.96
9LG0924P4S001	3	92mm x 92mm x 25mm	24	2.64	59.7	37	01X2781	64.69

*1: Specification of model no. 9LG0612P4S001. Conventional long life fan is 60 x 60 x 25 mm "San Ace 60L", model no. 109L0612G401, specification of model no. 9LG0812P4J001. Conventional long life fan is 80 x 80 x 25 mm "San Ace 80L", model no. 109L0812S401, specification of model no. 9LG0912P4J001. Conventional long life fan is 92 x 92 x 25 mm "San Ace 92L", model no. 109L0912S401.
(211489)

HIGH AIRFLOW COUNTER ROTATING FANS

NEW

SANYO DENKI

- Lead wire connection
- Frame: Plastics (Flammability: UL94V-0),
- Impeller: Plastics (Flammability: UL94V-1)
- Storage Temp.: -30°C to +70°C (Non-condensing)

San Ace 60 CRA type is a perfect cooling solution for power supplies, communications equipment, servers, and data storage systems.This product has the PWM control function, designed for controlling the rotational speed of the fan from the device side.

Mfg. Part No.	Dim. (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
9CRA0612P6G001	60mm x 60mm x 56mm	12	15.6	58.3	65	08X6938	51.78
9CRA0612P6J001	60mm x 60mm x 56mm	12	27.6	74.2	70	08X6939	51.78
9CRA0612P6K001	60mm x 60mm x 56mm	12	37.2	80.5	73	08X6940	57.05

(212160)

LONG LIFE COUNTER ROTATING FANS

RoHS Compliant Available

NEW

SANYO DENKI

- Lead wire connection
- Frame: Aluminum
- Impeller: Plastics (Flammability: UL94V-1)
- Storage Temp.: -30°C to +70°C (Non-condensing)

San Ace 60 CRL and 80 CRL has an expected life of 130,000 hours (approximately 15 years), about 3.3 times that of our conventional counter rotating fan,* making these fans ideal for equipment that must operate without maintenance for extended periods.

Mfg. Part No.	Dim. (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
9CRL0612P0G001	60mm x 60mm x 76mm	12	27.6	70.6	66	11X6749	104.17
9CRL0812P8G001	80mm x 80mm x 80mm	12	63.6	158.9	76	11X6750	122.32

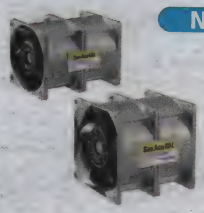
*Specification of model nos. 9CRL0612P0G001 and 9CRL0812P8G001.
Conventional counter rotating fans are model nos. 9CRA0612P0G001 and 9CRA0812P8G001.
(212161)

LOW POWER CONSUMPTION FANS

RoHS Compliant Available

SANYO DENKI

NEW



- Lead wire connection
- Frame, Impeller: Plastics (Flammability: UL94V-0)
- Storage Temp.: -30°C to +70°C (Non-condensing)

The San Ace 70 GA type is the first low power consumption model in 70mm square lineup a perfect solution for efficiently cooling 2U sized servers, power supplies, communications equipment, and data storage systems. This product has the PWM control function, designed for controlling the rotational speed of the fan from the device side.

Mfg. Part No.	Dim. (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stk. No.	Price Each 1-9
9GA0712P1G001	70mm x 70mm x 38mm	12	31.2	93.6	65	11X6751	34.08
9GA0712P1G0011	70mm x 70mm x 38mm	12	31.2	93.6	65	11X6752	34.08
9GA0712P1H001	70mm x 70mm x 38mm	12	13.2	67.8	57	11X6753	30.13
9GA0712P1H0011	70mm x 70mm x 38mm	12	13.2	67.8	57	11X6754	30.13
WITH PWM CONTROL FUNCTION — WITH PULSE SENSOR							
9GA0812P7G001	80mm x 80mm x 15mm	12	3.48	50.9	41	11X6756	24.33
9GA0812P7S001	80mm x 80mm x 15mm	12	2.04	41.7	37	11X6757	24.33
9GA0824P7G001	80mm x 80mm x 15mm	24	3.12	50.9	41	11X6759	24.33
9GA0824P7S001	80mm x 80mm x 15mm	24	1.92	41.7	37	11X6760	24.33
WITH PULSE SENSOR							
9GA0812H7001	80mm x 80mm x 15mm	12	1.08	31.4	29	11X6755	23.70
9GA0824H7001	80mm x 80mm x 15mm	24	1.2	31.4	29	11X6758	23.70

(212162)

HIGH STATIC PRESSURE DC FANS

RoHS Compliant Available

SANYO DENKI

NEW

- Lead wire connection
- Frame: Plastics (Flammability: UL94V-0),
- Impeller: Plastics (Flammability: UL94V-1)
- Storage Temp.: -30°C to +70°C (Non-condensing)

San Ace 92 9HV type is a perfect cooling solution for servers, data storage systems, communications equipment, and power supplies. This product has the PWM control function, designed for controlling the rotational speed of the fan from the device side.

Mfg. Part No.	Dim. (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
9HV0912P1G001	92mm x 92mm x 38mm	12	62.4	180	72	23X9977	59.72
9HV0948P1G001	92mm x 92mm x 38mm	48	57.6	180	72	23X9978	63.54

(212163)

IP68 SPLASH PROOF FANS

NEW

RoHS Compliant Available

SANYO DENKI

IP68

- Lead wire connection
- Frame: Aluminum (Black coating)
- Impeller: Plastics (Flammability: UL94V-1)
- Storage Temp.: -30°C to +70°C (Non-condensing)

These cooling fans deliver IP68 protection rating water and dust resistance with lifespan and high air flow. These fans are a perfect cooling solution for PV inverters, quick chargers for electric vehicles and LED panels. These products have the PWM control function, designed for controlling the rotational speed of the fan from the device side.

Mfg. Part No.	Dim. (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-2999
9WL0612P4H001	60mm x 60mm x 25mm	12	2.04	27.5	36	41X2978	123.74
9WL0612P4J001	60mm x 60mm x 25mm	12	4.68	38.8	47	41X2979	128.51
9WL0612P4S001	60mm x 60mm x 25mm	12	8.04	49.4	53	41X2980	133.28
9WL0624P4H001	60mm x 60mm x 25mm	24	1.92	27.5	36	41X2981	123.74
9WL0624P4J001	60mm x 60mm x 25mm	24	4.56	38.8	47	41X2982	128.51
9WL0624P4S001	60mm x 60mm x 25mm	24	8.16	49.4	53	41X2983	133.28
9WL0812P4G001	80mm x 80mm x 25mm	12	3.6	54.3	43	41X2984	133.52
9WL0812P4H001	80mm x 80mm x 25mm	12	1.44	36.3	31	41X2985	128.76
9WL0812P4J001	80mm x 80mm x 25mm	12	7.2	73	49	41X2986	138.29
9WL0824P4G001	80mm x 80mm x 25mm	24	3.36	54.3	43	41X2987	133.52
9WL0824P4H001	80mm x 80mm x 25mm	24	1.2	36.3	31	41X2988	128.76
9WL0824P4J001	80mm x 80mm x 25mm	24	6.72	73	49	41X2989	138.29
9WL0912P4G001	92mm x 92mm x 25mm	12	3.6	68.2	40	41X2990	138.29
9WL0912P4H001	92mm x 92mm x 25mm	12	1.8	48.7	32	41X2991	128.76
9WL0912P4J001	92mm x 92mm x 25mm	12	5.04	77.7	44	41X2992	143.06
9WL0912P4S001	92mm x 92mm x 25mm	12	2.64	59.7	37	41X2993	133.52

➤CONTINUED➤

DC FANS

IP68 SPLASH PROOF FANS (CONT.)

Mfg. Part No.	Dim. (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-2999
● 9WL0924P4H001	92mm x 92mm x 25mm	24	1.68	48.7	32	41X2994	128.76
● 9WL0924P4J001	92mm x 92mm x 25mm	24	5.04	77.7	44	41X2995	143.06
● 9WL0924P4S001	92mm x 92mm x 25mm	24	2.64	59.7	37	41X2996	133.52

(212164)

HIGH-PERFORMANCE DC FANS

RoHS Compliant Available

SANYO DENKI

TÜV Rheinland

Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6 Fig. 7 Fig. 8 Fig. 9 Fig. 10 Fig. 11 Fig. 12 Fig. 13 Fig. 14 Fig. 15

- Ball bearing
- Lead wire connection
- Plastic frame and impeller (semi-round fans have aluminum frame)
- Fans with **-01** suffix in mfg. part no. include tachometer
- Fans with **-011** suffix in mfg. part no. include tachometer and are ribless
- Fans with "**P**" after voltage in mfg. part no. include pulse width modulator
- Temp. range: -10°C to +60°C

"**GV**" fans have guide vanes molded into the outlet face of the frame. These flow conditioning tabs straighten the flow and reduce turbulent losses exiting the fan, thereby converting it to additional static pressure. "**SG**" fans ofer up to 260 CFM of airflow and have a 3-phase motor to improve efficiency and reduce switching noise. "**GE**" fans have a custom designed frame to reduce the magnitude and varations in vibration caused by the motor and rotating impeller. *Order Sanyo Denki finger guards separately online or call.*

SQUARE FANS

Mfg. Part No.	Fig.	Dim. (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
● 9GV3612G301	1	36 x 36 x 28	12	4.1	14.1	52	96M1736	17.11
● 9GV3612P3G03	1	36 x 36 x 28	12	4.1	14.1	52	96M1738	17.04
● 9GV3612J301	1	36 x 36 x 28	12	9	19.4	58.5	96M1737	17.04
● 9GV3612P3J03	1	36 x 36 x 28	12	9	19.4	58.5	96M1739	19.75
● 9GV0312G301	1	38 x 38 x 28	12	4.1	14.1	50	96M1720	15.45
● 9GV0312J301	1	38 x 38 x 28	12	9	19.4	54	96M1721	15.44
● 9GV0312J3011	1	38 x 38 x 28	12	7.2	20	54	40T8532	14.70
● 9GV0412G301	2	40 x 40 x 28	12	5.64	21.1	52	96M1723	15.30
● 9GA0412P3J01	2	40 x 40 x 28	12	5.88	23.7	54	15R7918	18.95
● 9GV0412J301	2	40 x 40 x 28	12	7.2	24	55	96M1724	15.12
● 9GV0412P3J03	2	40 x 40 x 28	12	7.2	24	55	96M1726	16.62
● 9GV0412K301	2	40 x 40 x 28	12	10.08	26.84	58	04R7268	18.12
● 9GV0412P3K03	2	40 x 40 x 28	12	10.08	26.9	58	96M1727	17.55
● 9GE0412P3G03	3	40 x 40 x 28	12	...	21.22	52	04R7267	24.58
● 9GE0412P3J03	4	40 x 40 x 28	12	7.8	24.4	56	96M1719	30.14

CONTINUED

HIGH-PERFORMANCE DC FANS (CONT.)

Mfg. Part No.	Fig.	Dim. (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
● 9GV0612P1H03	5	60 x 60 x 38	12	24	76	63	96M1729	22.19
● 9GV0612P1H031	5	60 x 60 x 38	12	24	76	63	40T8538	22.19
● 9GV0612P1G03	5	60 x 60 x 38	12	33.6	84	64	96M1728	25.62
● 9GV0612P1G031	5	60 x 60 x 38	12	33.6	84.18	66	04R7269	24.40
● 9GV0612P1M03	5	60 x 60 x 38	12	18	68	60	40T4180	23.30
● 9GV0612P1M031	5	60 x 60 x 38	12	18	68	60	08R3724	22.19
● 9GV0612G1011	...	60 x 60 x 38	12	...	84.18	66	03P9336	23.81
● 9GV0624P1G031	...	60 x 60 x 38	24	...	84	66	19T8940	25.32
● 9GV0812G101	...	80 x 80 x 38	12	...	137.71	65	03P9342	31.19
● 9GV0812P4J03	6	80 x 80 x 25	12	5.6	60.73	46	03P9351	26.94
● 9GV0812P4K03	6	80 x 80 x 25	12	10.4	74.86	52	03P9353	27.34
● 9GV0824P4K01	6	80 x 80 x 25	24	10.56	74.8	52	06W4771	27.45
● 9GV0848P4K03	6	80 x 80 x 25	48	10.56	74.8	52	19T8941	30.27
● 9GV0812P1H03	7	80 x 80 x 38	12	36	131	63	96M1731	30.42
● 9GV0812P1G03	7	80 x 80 x 38	12	45.6	138	65	96M1730	30.71
● 9GV0812P1F03	7	80 x 80 x 38	12	18	108	58	40T4181	32.02
● 9GV0812P1F031	7	80 x 80 x 38	12	18	108	58	40T4182	30.79
● 9GV0812P1M03	7	80 x 80 x 38	12	9	81	51	40T8542	30.79
● 9GV0812P1M031	7	80 x 80 x 38	12	9	81	51	40T8543	32.02
● 9SG1224H101	7	120 x 120 x 38	24	11.04	147	48	40T8547	48.24
● 9GA0912P4G03	8	92 x 92 x 25	12	3.36	68.2	39	15R7919	25.62
● 9GA0912P4J03	8	92 x 92 x 25	12	4.68	77.7	43	06R6378	25.32
● 9GA0924P4G03	8	92 x 92 x 25	24	3.6	68.2	39	15R7920	27.01
● 9GV0912P1H03	9	92 x 92 x 38	12	42	178	64	96M1733	38.29
● 9GV0912P1G03	9	92 x 92 x 38	12	49.2	189	68	96M1732	37.92
● 9GV0948P1H03	9	92 x 92 x 38	48	39.4	178	64	96M1734	38.30
● 9GV1212P4G01	10	120 x 120 x 25	12	20.16	171	58	03P9365	41.20
● 9GV1212P4G011	10	120 x 120 x 25	12	20.16	171	58	06R3004	41.90
● 9GV1224P4G01	10	120 x 120 x 25	24	20.16	171	58	25R0334	42.93
● 9GV1224G401*	10	120 x 120 x 25	24	20.16	171	58	86R0563	40.64
● 9GV1224G402	10	120 x 120 x 25	24	20.16	171	58	86R0564	40.32
● 9GV1248P4G011	10	120 x 120 x 25	48	20.16	168.11	58	04R7271	44.07
● 9GV1212P1J011	12	120 x 120 x 38	12	36	224	64	91R2494	39.54
● 9GV1212P1J01	12	120 x 120 x 38	12	36	224	64	96M1597	38.45
● 9GV1248P1J01	12	120 x 120 x 38	48	36	224	64	86R0567	43.19
● 9SG1212G101	11	120 x 120 x 38	12	48	260	64	96M1756	46.79
● 9SG1212P1G01	11	120 x 120 x 38	12	48	260	64	96M1757	50.00
● 9SG1224P1G01	11	120 x 120 x 38	24	48	260	64	96M1758	49.28
● 9GV1224P1H01	12	120 x 120 x 38	24	19.2	189	58	06W4772	47.54
● 9GV1224P1J01	12	120 x 120 x 38	24	36	224.3	64	06W4773	47.54
● 9SG1248P1G01	12	120 x 120 x 38	48	...	260.41	64	96M7576	45.97
● 9GV1512P5H03	13	150 x 150 x 50	12	...	301.55	61	04R7272	43.63

*With pulse sensor

SEMI-ROUND FANS

Mfg. Part No.	Fig.	Dim. (mm) Dia. x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
● 9GV5724H501	14	172 x 150 x 51	24	96	400	74	96M1740	93.67
● 9SG5724P5H61	15	172 x 150 x 51	24	67.2	410	71	20T1381	102.17
● 9SG5748P5H01	15	172 x 150 x 51	48	78	410	71	04R7275	107.85
● 9SG5748P5G01	15	172 x 150 x 51	48	140	546	78	04R7274	107.85

(134248)

LOW-POWER DC AXIAL FANS

RoHS Compliant Available

SANYO DENKI

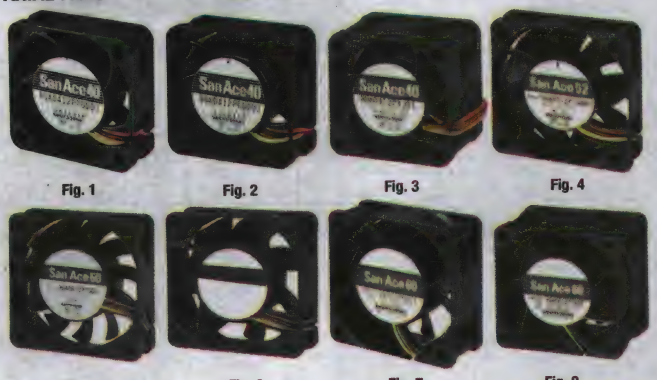


Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6 Fig. 7 Fig. 8

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LOW-POWER DC AXIAL FANS (CONT.)

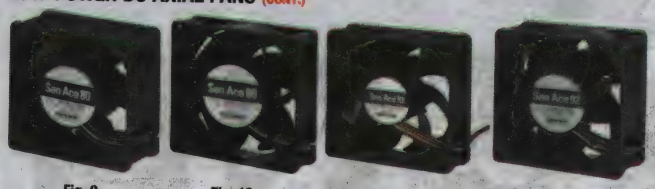

Fig. 9 Fig. 10 Fig. 11 Fig. 12

- Large air flow and high static pressure
- Low power consumption
- Reduced sound pressure levels

Order Sanyo Denki finger guards separately on page 2395.

Mfg. Part No.	Fig.	Dim. (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Static Pressure (inch H20)	Noise (dBA)	Stock No.	Price Each 1-9
9GA0312P3K001	3	38 x 38 x 28	12	7.4	21.2	3.21	59	60W2163	20.28
9GA0312P3J001	3	38 x 38 x 28	12	6.2	20.1	2.89	57.5	66W6375	20.41
9GA0312P3G001	3	38 x 38 x 28	12	4	15.9	1.85	53	66W6374	19.44
9GA0412G7001	1	40 x 40 x 15	12	2.04	12.7	0.77	42	67T2417	17.37
9GA0412H7001	1	40 x 40 x 15.2	12	0.72	7.1	0.24	28	67T2418	16.44
9GA0412P7G001	1	40 x 40 x 15.2	12	2.04	12.7	0.77	42	67T2419	17.04
9GA0405P6H001	2	40 x 40 x 20	5	1.75	11.65	0.77	40	45W6016	21.07
9GA0405P6F001	2	40 x 40 x 20	5	0.9	7.41	0.32	28	66W6376	21.07
9GA0412P6H001	2	40 x 40 x 20	12	1.68	11.7	0.77	14	29T6046	16.87
9GA0412P6G001	2	40 x 40 x 20	12	2.76	14.8	1.28	47	29T6044	16.87
9GA0424P6H001	3	40 x 40 x 20	24	1.92	11.7	0.77	40	66W6386	22.18
9GA0424P6F001	3	40 x 40 x 20	24	0.96	7.4	0.32	28	66W6385	22.18
9GA0412P3J01	3	40 x 40 x 28	12	5.88	23.7	2.15	54	15R7918	18.95
9GA0412P3K01	3	40 x 40 x 28	12	11.04	28.6	3.21	61	06W4766	23.04
9GA0424P3J001	3	40 x 40 x 28	24	6.48	23.7	2.15	54	66W6381	23.97
9GA0424P3J0011	3	40 x 40 x 28	24	6.48	23.7	2.15	54	66W6382	23.97
9GA0424P3G001	3	40 x 40 x 28	24	5.28	21.5	1.81	53	66W6377	23.97
9GA0424P3G0011	3	40 x 40 x 28	24	5.28	21.5	1.81	53	66W6378	23.97
9GA0424P3H001	3	40 x 40 x 28	24	3.84	19.1	1.39	50	66W6379	23.97
9GA0424P3H0011	3	40 x 40 x 28	24	3.84	19.1	1.39	50	66W6380	22.83
9GA0424P3M001	3	40 x 40 x 28	24	2.64	16.2	1.04	47	66W6383	23.97
9GA0424P3M0011	3	40 x 40 x 28	24	2.64	16.2	1.04	47	66W6384	23.97
9GA0512P7G001	4	52 x 52 x 15	12	1.56	17.7	0.367	38	65T9813	20.41
9GA0524P7G001	4	52 x 52 x 15	24	1.68	17.7	0.367	38	65T9814	21.96
9GA0612P7H01	5	60 x 60 x 15	12	1.2	19.7	0.223	34	73R4294	17.34
9GA0612P7G01	5	60 x 60 x 15	12	1.92	24	0.32	38	86R0536	16.51
9GA0612H6001	6	60 x 60 x 20	12	1.08	18.4	0.18	29	86R0532	18.45
9GA0612M6001	6	60 x 60 x 20	12	0.6	12	0.08	18	86R0533	17.57
9GA0612P6G001	6	60 x 60 x 20	12	2.88	31.1	0.5	43	86R0534	18.81
9GA0612P6S001	6	60 x 60 x 20	12	1.68	24.7	0.33	36	86R0535	19.04
9GA0624H6001	6	60 x 60 x 20	24	0.96	18.4	0.18	29	86R0537	20.73
9GA0624M6001	6	60 x 60 x 20	24	0.72	12	0.08	18	86R0538	20.73
9GA0624P6G001	6	60 x 60 x 20	24	0.12	31.1	0.5	43	86R0539	20.45
9GA0624P6S001	6	60 x 60 x 20	24	0.07	24.7	0.33	36	86R0540	20.45
9G0612P4H001	7	60 x 60 x 25	12	6	42.7	0.9	49	06W4774	28.25
9G0612P4H0011	7	60 x 60 x 25	12	6	42.7	0.9	49	06W4775	28.25
9G0612P4S001	7	60 x 60 x 25	12	8.04	49.4	1.2	...	58T8553	29.10
9G0624P4S001	7	60 x 60 x 25	24	8.16	49.4	1.2	53	65T9815	30.08
9G0648P4S001	7	60 x 60 x 25	48	8.64	49.4	1.22	53	65T9816	40.84
9GA0612P1H031	8	60 x 60 x 38	12	6.6	40	1.5	52	73R4291	25.84
9GA0612P1K601	8	60 x 60 x 38	12	11.4	53	2.7	59	73R4293	25.84
9GA0612P1J031	8	60 x 60 x 38	12	18	62	3.3	63	73R4292	26.44
9GA0612P1H03	8	60 x 60 x 38	12	6.6	40	1.5	52	19T8931	26.62
9GA0612P1J03	8	60 x 60 x 38	12	18	62	3.3	63	19T8932	26.44
9GA0612P1K03	8	60 x 60 x 38	12	11.4	53	2.4	59	19T8933	26.87
9GA0612P1K031	8	60 x 60 x 38	12	11.4	53	2.4	59	19T8934	25.84
9GA0812P2H001	9	80 x 80 x 32	12	7.08	77.7	1.18	54	19T8935	34.55
9GA0812P2S001	9	80 x 80 x 32	12	9.96	86.5	1.45	57	19T8936	33.22
9GA0824P2S001	9	80 x 80 x 32	24	10.1	85.6	1.45	57	19T8939	35.04
9GA0812P2M001	10	80 x 80 x 32	12	4.2	59.6	0.68	47	66W6388	39.97
9GA0812P2M0011	10	80 x 80 x 32	12	4.2	59.6	0.68	47	66W6389	39.97
9GA0812P1H61	10	80 x 80 x 38	12	7.2	79.4	1.53	55	73R4295	31.47
9GA0812P1S61	9	80 x 80 x 38	12	11.28	91.8	1.93	59	73R4296	33.35
9GA0824P1H61	9	80 x 80 x 38	24	7.2	79.4	1.53	55	19T8937	36.98
9GA0824P1S61	9	80 x 80 x 38	24	11.28	91.8	1.93	59	19T8938	37.22
9GA0812P6M001	10	80 x 80 x 20	12	0.72	29.68	0.44	26.5	06W4767	24.75
9GA0812P6G001	10	80 x 80 x 20	12	3.6	60.78	0.35	45	94T6100	24.75
9GA0824P6M001	10	80 x 80 x 20	24	0.72	29.68	1.53	26.5	06W4769	24.75
9GA0824P6G001	10	80 x 80 x 20	24	3.6	60.78	0.44	45	06W4768	24.75
9GA0812P4J001	10	80 x 80 x 25	12	7.2	73	0.7	48	66W6392	32.72

CONTINUED

LOW-POWER DC AXIAL FANS (CONT.)

Mfg. Part No.	Fig.	Dim. (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Static Pressure (inch H20)	Noise (dBA)	Stock No.	Price Each 1-9
9GA0812P4G001	10	80 x 80 x 25	12	5.76	67.4	0.6	45	66W6390	27.90
9GA0812P4H001	10	80 x 80 x 25	12	2.64	51.5	0.35	37	66W6391	25.75
9GA0824P4J001	10	80 x 80 x 25	24	7.2	73	0.7	48	66W6395	32.72
9GA0824P4G001	10	80 x 80 x 25	24	5.76	67.4	0.6	45	66W6393	27.90
9GA0824P4H001	10	80 x 80 x 25	24	2.64	51.5	0.35	37	66W6394	25.44
9GA0812P2S0011	10	80 x 80 x 32	12	9.96	86.5	1.45	57	40T4179	34.55
9GA0912P4G03	11	92 x 92 x 25	12	3.36	68.2	0.33	39	15R7919	25.62
9GA0912P4J03	11	92 x 92 x 25	12	4.68	77.7	0.42	43	06R6378	25.32
9GA0924P4G03	11	92 x 92 x 25	24	3.6	68.2	0.33	39	15R7920	27.01
9GA0912P1H03	12	92 x 92 x 38	12	25.2	141	2.01	63	73R4297	34.02
9GA0948P1H03	12	92 x 92 x 38	48	26.3	141	2.01	63	06W4770	43.32

(152526)

STANDARD DC FANS — ROUND

RoHS Compliant Available

SANYO DENKI

TÜV Rheinland

- Ball bearing
- Lead wire connection
- Plastic frame and impeller (side-cut fans have aluminum frame)
- Fans with **-01** suffix in mfg. part no. include tachometer (**-02** suffix indicates without)
- Temp. range: -10°C to +60°C

Order Sanyo Denki finger guards separately online or call.

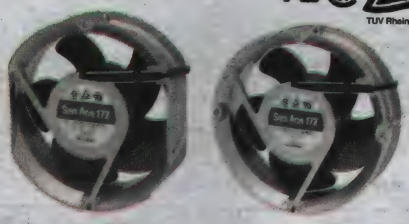

Fig. 1 Fig. 2

SIDE-CUT — FIG. 1

Mfg. Part No.	Dim. (mm) Dia. x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
109E5712K501	172 x 150 x 51	12	34.8	300.1	60	96M1669	76.40
109E5724H501	172 x 150 x 51	24	13.92	226	52	96M5142	84.41
109E5724K501	172 x 150 x 51	24	31.2	300	60	96M5146	66.52
109E5724C501	172 x 150 x 51	24	55.2	350	66	96M5137	80.76
109E5724C502	172 x 150 x 51	24	55.2	350	66	96M5138	67.59
109E5748C501	172 x 150 x 51	48	57.6	350	41	96M5153	101.32

ROUND — FIG. 2

Mfg. Part No.	Dim. (mm) Dia. x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
109E1712H501	172 x 51	12	14.4	226	47	96M5024	74.91
109E1712K501	172 x 51	12	34.8	300.14	55	96M5027	76.77
109E1724H501	172 x 51	24	13.92	226	47	96M5042	74.20
109E1724C501	172 x 51	24	55.2	350	60	96M5037	80.36
109E1748H501	172 x 51	48	13.44	226	47	96M5060	86.95

(176954)

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(196561)

DC FANS

STANDARD DC FANS — SQUARE

RoHS Compliant Available

TUV Rheinland

SANYO DENKI

Fig. 1

Fig. 2

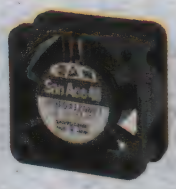


Fig. 3

Fig. 4

Fig. 5

Fig. 6

Fig. 7

Fig. 8

Fig. 9

Fig. 10

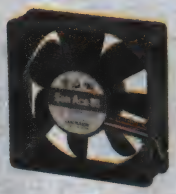


Fig. 11

Fig. 12

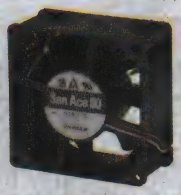


Fig. 13

Fig. 14

- Ball bearing
- Lead wire connection
- Plastic frame and impeller (semi-round fans have aluminum frame)
- Fans with **-01** suffix in mfg. part no. include tachometer (**-02** suffix indicates without)
- Fans with **-011** suffix in mfg. part no. include tachometer and are ribless (**-021** suffix indicates ribless without tachometer)
- Fans with "P" after voltage in mfg. part no. include pulse width modulator
- Temp. range: -10°C to +60°C

Fig. 15

Fig. 16

Fig. 17

Order Sanyo Denki finger guards separately on page 2395.

Mfg. Part No.	Fig.	Dim. (mm) H x W x D	Voltage (VDC)	Power	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
● 109P0405H901	1	40 x 40 x 10	5	800mW	5.3	25	96M1672	24.04
● 109P0412H901	1	40 x 40 x 10	12	840mW	5.3	25	96M1680	24.48
● 109P0412H902	1	40 x 40 x 10	12	840mW	5.3	25	96M5441	19.93
● 109P0412H701	2	40 x 40 x 15	12	1.56W	6.4	28	96M1679	14.01
● 109P0424H702	2	40 x 40 x 15	24	1.92W	6.4	28	96M1687	13.43
● 109P0405H601	3	40 x 40 x 20	5	1.6W	7.9	33	96M1671	16.10
● 109P0412D601	3	40 x 40 x 20	12	2.16W	10.9	42	96M5405	13.89
● 109P0412D602	3	40 x 40 x 20	12	2.16W	10.9	42	96M5406	13.55
● 109P0412G601	3	40 x 40 x 20	12	3.36W	12.4	44	96M1676	15.82
● 109P0424H602	3	40 x 40 x 20	24	1.68W	8.2	35	96M1686	17.42
● 109P0424H601	3	40 x 40 x 20	24	1.68W	8.23	35	96M5502	15.82
...	...	...	...	...	...	...	...	...
● 109P0424D601	3	40 x 40 x 20	24	3.12W	10.9	42	96M5477	14.15
● 109P0405H3013	4	40 x 40 x 28	5	3.4W	11.3	37	96M1670	15.58
● 109P0412F301	4	40 x 40 x 28	12	1.26W	8.6	30	96M1673	15.58
● 109P0412H3013	4	40 x 40 x 28	12	2.34W	11.3	37	96M1677	15.40
● 109P0412H302	4	40 x 40 x 28	12	2.34W	11.3	37	96M1678	15.01
● 109P0412H301	4	40 x 40 x 28	12	2.34W	11.3	37	96M5432	15.58
● 109P0412G3013	4	40 x 40 x 28	12	3.72W	14.8	42	96M1674	15.82
● 109P0412G3023	4	40 x 40 x 28	12	3.72W	14.8	42	96M1675	14.84
● 109P0412G301	4	40 x 40 x 28	12	3.72W	14.83	42	96M5424	15.80
● 109P0412J301	4	40 x 40 x 28	12	4.2W	16.3	44	96M1681	16.10
● 109P0412K301	4	40 x 40 x 28	12	6.6W	20.8	50	96M1682	16.79
● 109P0412K3023	4	40 x 40 x 28	12	6.6W	21	50	96M1684	16.38
● 9GE0412P3J03	5	40 x 40 x 28	12	7.8W	24.4	56	96M1719	30.14
● 109P0424H302	4	40 x 40 x 28	24	2.28W	11.3	37	96M1685	15.02
● 109P0424H3013	4	40 x 40 x 28	24	2.28W	11.3	37	96M5499	15.69
● 109P0424J3013	4	40 x 40 x 28	24	4.32W	16.2	44	96M1688	15.82
● 109P0512A702	5	52 x 52 x 15	12	2.52W	13.25	36	96M5513	14.63
● 109P0512A701	5	52 x 52 x 15	12	2.52W	13.25	36	96M5512	15.30
● 109P0612S701	6	60 x 60 x 15	12	1.8W	16.95	36	96M5562	15.48
● 109P0612S702	6	60 x 60 x 15	12	1.8W	17	36	96M5563	13.02
● 109P0612K701	6	60 x 60 x 15	12	3.12W	21.9	45	96M1689	15.53
● 109P0624H702	6	60 x 60 x 15	24	1.44W	14.1	32	96M5585	14.50
● 109P0612H602	6	60 x 60 x 20	12	1.56W	14.83	31	96M5548	14.40
● 109P0624H602	6	60 x 60 x 20	24	1.68W	14.8	31	96M1690	14.72
● 109R0605M402	7	60 x 60 x 25	5	650mW	12.7	20	96M5930	13.28
● 109R0605H402	7	60 x 60 x 25	5	1.7W	18.7	28	96M5927	11.78
● 109R0605H4021	7	60 x 60 x 25	5	1.7W	18.7	28	06W4332	13.63
● 109R0612M402	7	60 x 60 x 25	12	720mW	12.7	20	96M5969	11.78
● 109R0612H402	7	60 x 60 x 25	12	1.32W	18.7	28	96M5955	11.78
...	...	...	...	...	...	...	...	...
● 109R0612H4021	7	60 x 60 x 25	12	1.32W	18.7	28	96M5956	13.40

Mfg. Part No.	Fig.	Dim. (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
● 109R0812G4021	11	80 x 80 x 25	12	4.44	53	40	96M6066	14.14
● 109R0824M402	11	80 x 80 x 25	24	1.2	29.3	23	96M6138	13.57
● 9A0824H401	10	80 x 80 x 25	24	1.68	36.37	29	96M6947	12.13
● 109R0824H401	11	80 x 80 x 25	24	1.68	36.4	29	96M6124	12.48
● 109R0824H4011	11	80 x 80 x 25	24	1.68	36.4	29	96M6125	12.25
● 109R0824H402	11	80 x 80 x 25	24	1.68	36.4	29	96M6126	13.83
● 109R0824H4021	11	80 x 80 x 25	24	1.68	36.4	29	96M6127	11.91
● 9A0824S401	10	80 x 80 x 25	24	2.4	42.37	34	96M6965	12.13
● 109R0824S4011	11	80 x 80 x 25	24	2.4	42.4	34	96M6143	12.76
● 109R0824G4021	11	80 x 80 x 25	24	4.8	53	40	96M6121	14.16
● 109R0848S402	11	80 x 80 x 25	48	2.88	42.4	34	96M6156	13.77
● 109R0848S4021	11	80 x 80 x 25	48	2.88	42.4	34	06W4333	16.23
● 109P0812H2011	12	80 x 80 x 32	12	1.92	43.1	33	96M5615	29.04
● 109P0812H2021	12	80 x 80 x 32	12	1.92	43.1	33	96M5617	28.76
● 109P0812A2021	12	80 x 80 x 32	12	6.72	53.67	45	04R7259	33.56
● 109P0812A201	12	80 x 80 x 32	12	6.72	53.7	45	96M1691	37.28
● 109P0824H201	12	80 x 80 x 32	24	2.16	43.1	33	96M5657	30.20
● 109P0824H2021	12	80 x 80 x 32	24	2.16	43.1	33	96M5660	32.02
● 109P0824A201	12	80 x 80 x 32	24	6.96	53.7	45	96M5651	34.03
● 9G0812H101	13	80 x 80 x 38	12	10.8	80.5	49	96M1745	20.27
● 9G0812P1H03	13	80 x 80 x 38	12	10.8	80.5	49	96M1747	21.49
● 9G0812G101	13	80 x 80 x 38	12	13.2	90	51	96M1744	20.27
● 9G0812K101	13	80 x 80 x 38	12	21.6	107.3	58	96M1746	25.57
● 9G0824G101	13	80 x 80 x 38	24	13.4	90	51	96M1749	19.85
● 9G0848G101	13	80 x 80 x 38	48	13	90	51	96M1750	25.23
● 109P0912M401	14	92 x 92 x 25	12	1.2	36.7	27	96M5721	29.44
● 9A0912M4021	15	92 x 92 x 25	12	1.44	36.7	27	96M6997	11.13
● 109P0912F402	14	92 x 92 x 25	12	1.68	43.8	30	96M5697	32.49
● 109P0912H401	14	92 x 92 x 25	12	2.52	51.2	33	96M5704	32.78
● 109P0912H4021	14	92 x 92 x 25	12	2.52	51.2	33	96M5707	30.34
● 9A0912S402	15	92 x 92 x 25	12	3.24	58.6	39	96M7002	11.00
● 9A0912G4021	15	92 x 92 x 25	12	4.68	62.1	43	96M6979	12.50
● 9A0912G401	15	92 x 92 x 25	12	4.68	62.15	43	96M6976	12.85
● 9A0912G4011	15	92 x 92 x 25	12	4.68	62.15	43	96M6977	13.01
● 109P0912J401	14	92 x 92 x 25	12	6.72	71.7	47	96M1692	37.12
● 109P0924H4021	14	92 x 92 x 25	24	2.88	51.2	33	96M5761	32.49
● 9A0924S402	15	92 x 92 x 25	24	3.6	58.6	39	96M7035	11.21
● 109P0924S401	14	92 x 92 x 25	24		58.61	39	96M5779	32.97
...	...	...	...	...	...	...	...	...
● 9G0912H202	14	92 x 92 x 32	12	2.76	56.14	32	96M7213	18.75
● 9G0912G101	15	92 x 92 x 38	12	13.2	110	50.5	96M1752	22.24
9G1212H1011	16	119 x 119 x 38	12	4.56	99	39	96M7350	27.67
● 9G1212M402	16	120 x 120 x 25	12	1.68	58	29	96M7372	19.10

CONTINUED

STANDARD DC FANS — SQUARE (CONT.)

Mfg. Part No.	Fig.	Dim. (mm) H x W x D	Voltage (VDC)	Power	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
9A0612S401	7	60 x 60 x 25	12	2.04W	22.9	33	96M1698	11.69
9A0612S4011	7	60 x 60 x 25	12	2.04W	22.95	33	96M6866	10.89
9A0612S402	7	60 x 60 x 25	12	2.04W	23	33	96M6867	11.08
109R0612S401	7	60 x 60 x 25	12	2.04W	23	33	96M5975	12.32
9A0612G401	7	60 x 60 x 25	12	2.88W	27.5	39	96M1697	11.55
109R0612G401	7	60 x 60 x 25	12	2.88W	26.1	39	96M5945	12.32
109R0612G4011	7	60 x 60 x 25	12	2.88W	27.54	39	04R7260	14.53
109R0612G402	7	60 x 60 x 25	12	2.88W	27.6	39	96M1694	14.19
109R0612J401	7	60 x 60 x 25	12	5.64W	37.1	44	96M1695	15.95
109R0612P4J03	7	60 x 60 x 25	12	6.12W	37.43	44	04R7261	17.22
109R0612J4011	7	60 x 60 x 25	12	5.64W	37.43	44	96M5959	15.33
109R0624F4021	7	60 x 60 x 25	24	1.2W	15.5	24	96M5994	11.78
109R0624S401	7	60 x 60 x 25	24	1.92W	23	33	96M6019	13.77
9G0612G101	8	60 x 60 x 38	12	18.5W	65	58	96M1742	20.16
9G0612P1G03	8	60 x 60 x 38	12	20.4W	65	58	96M1743	22.28
9G0624G101	8	60 x 60 x 38	24	20.4W	64.97	58	96M7151	19.79
9G0624H101	8	60 x 60 x 38	24	13.68W	54.4	54	06W4776	19.02
109P0812M702	9	80 x 80 x 15	12	1.08W	20.1	21	96M5639	12.91
109P0824H701	9	80 x 80 x 15	24	2.4W	32.13	31	96M5665	16.01
109R0812M4021	11	80 x 80 x 25	12	1.08W	29.3	23	96M6091	11.91
109R0812F4021	11	80 x 80 x 25	12	1.32W	32.5	26	96M6061	12.54
9A0812H401	10	80 x 80 x 25	12	1.56W	36.37	29	96M6913	11.98
9A0812H4011	10	80 x 80 x 25	12	1.56W	36.37	29	96M6914	11.55
109R0812H4011	11	80 x 80 x 25	12	1.56W	36.4	29	96M6072	11.81
109R0812H402	11	80 x 80 x 25	12	1.56W	36.4	29	96M6073	11.91
109R0812H4021	11	80 x 80 x 25	12	1.56W	36.4	29	96M6074	12.05
9A0812S4011	10	80 x 80 x 25	12	2.16W	42.37	34	96M6932	12.13
109R0812S4011	11	80 x 80 x 25	12	2.16W	42.4	34	96M6099	13.00
109R0812G401	11	80 x 80 x 25	12	4.44W	53	40	96M1696	14.76
9A0812G401	10	80 x 80 x 25	12	4.56W	53	40	96M1699	13.02

(114915)

Mfg. Part No.	Fig.	Dim. (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
9G1212F401	16	120 x 120 x 25	12	2.28	70	35	96M7329	23.21
9G1212H401	16	120 x 120 x 25	12	3.72	88	40	96M7355	23.35
9G1212A4021	16	120 x 120 x 25	12	4.8	100	44	96M7308	23.12
9G1212P4G03	16	120 x 120 x 25	12	10.8	129.94	51	03P9398	27.04
9G1212G401	16	120 x 120 x 25	12	10.8	130	51	96M1754	26.39
9G1224M401	16	120 x 120 x 25	24	1.92	58	29	96M7437	20.14
9G1224F401	16	120 x 120 x 25	24	2.4	70	35	96M7400	22.10
9G1224H4011	16	120 x 120 x 25	24	4.08	88.3	40	96M7428	19.09
9G1224H402	16	120 x 120 x 25	24	4.08	88.3	40	96M7429	22.56
9G1224A401	16	120 x 120 x 25	24	5.04	99.93	44	96M7378	25.16
9G1224A4021	16	120 x 120 x 25	24	5.04	100	44	96M7381	21.38
9G1212M101	16	120 x 120 x 38	12	2.52	74	32	96M7364	21.88
9G1212H101	16	120 x 120 x 38	12	4.56	98.9	39	96M1755	26.23
9G1212E101	16	120 x 120 x 38	12	7.32	118	46	96M7313	23.54
9G1212G101	16	120 x 120 x 38	12	11.76	137	49	96M1753	27.44
9G1224M101	16	120 x 120 x 38	24	2.64	74	32	96M7431	21.88
...	...	...	...	...	...	...	...	...
9G1224M102	16	120 x 120 x 38	24	2.64	74	32	96M7433	21.60
9G1224E101	16	120 x 120 x 38	24	8.16	118	46	96M7384	26.59
9G1224E1011	16	120 x 120 x 38	24	8.16	118	46	96M7385	26.97
9G1224G101	16	120 x 120 x 38	24	12	137	49	96M7407	26.59
9G1224G102	16	120 x 120 x 38	24	12	137	49	96M7409	23.48
9G1224G1021	16	120 x 120 x 38	24	12	137	49	96M7410	23.20
9G1248E101	16	120 x 120 x 38	48	8.16	117.9	46	96M7451	25.60
9G1248E1021	16	120 x 120 x 38	48	8.16	117.9	46	96M7454	28.31
9G1248G101	16	120 x 120 x 38	48	12	137	49	96M7473	25.14
109P1312S101	17	127 x 127 x 38	12	15.6	148.3	47	96M1693	91.89
109E1312S101	...	127 x 127 x 38	12	14.4	154	49	96M5000	102.68
109E1324S101	...	127 x 127 x 38	24	12.7	154	49	96M5009	93.69
109E1324A102	...	127 x 127 x 38	24	16.8	170	52	96M5004	95.60

LONG LIFE DC FANS

RoHS Compliant Available

SANYO DENKI

TÜV Rheinland

40 x 40 x 28 mm

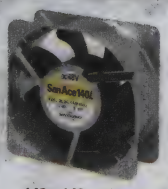
60 x 60 x 25 mm

80 x 80 x 25 mm

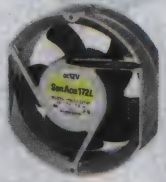
120 x 120 x 38 mm

- Up to 200,000 hour life expectancy depending on fan
- Ball bearing
- Lead wire connection
- Aluminum frame and plastic impeller
- Fans with **-01** suffix in mfg. part no. include tachometer
- Temp. range: -10°C to +60°C

Order Sanyo Denki finger guards separately online or call.



140 x 140 x 51 mm



172 x 150 x 51 mm

SQUARE FANS

Mfg. Part No.	Dim. (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
9L0412H301	40 x 40 x 28	12	1.8	13.06	40	96M7561	39.77
9L0412J301	40 x 40 x 28	12	3.72	18.4	48	96M1599	39.97
109L0612G401	60 x 60 x 25	12	2.88	27.54	39	03P6093	72.13
109L0648G401	60 x 60 x 25	48	3.36	27.54	39	96M5195	70.66
109L0812H401	80 x 80 x 25	12	2.16	37.43	32	96M5205	72.65
109L0812S401	80 x 80 x 25	12	3.12	42.37	37	96M5215	72.65
109L0824H401	80 x 80 x 25	24	2.16	37.43	32	96M5222	72.65
109L0824H402	80 x 80 x 25	24	2.16	37.43	32	96M5223	71.32
109L0848H401	80 x 80 x 25	48	2.88	38.84	34	96M5236	71.83
109L0924H402	92 x 92 x 25	24	2.88	48.73	33	96M5263	79.38
9LB1212H101	120 x 120 x 38	12	4.68	102.4	39	96M1598	92.99
9LB1424H501	140 x 140 x 51	24	14.4	208.33	49	96M7539	111.46
9LB1424S501	140 x 140 x 51	24	33.1	286.01	57	96M7546	109.37

CONTINUED

LONG LIFE DC FANS (CONT.)

SEMI-ROUND FANS

Mfg. Part No.	Dim. (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
109L5712H501	172 x 150 x 51	12	14.4	225.98	52	96M5335	118.27

(114916)

SILENT SERIES DC FANS

RoHS Compliant Available

SANYO DENKI

TÜV Rheinland

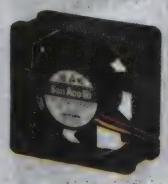


Fig. 1

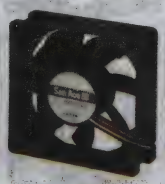


Fig. 2

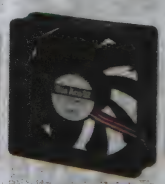


Fig. 3

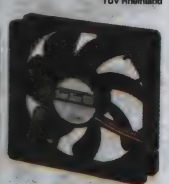


Fig. 4

- Extremely low noise
- Ball-bearing
- Lead wire connection
- Plastic frame and impeller
- Fans with **-01** suffix in mfg. part no. include tachometer
- Fans with **-011** suffix in mfg. part no. include tachometer and are ribless
- Voltage: 12 or 24 VDC
- Temp. range: -10°C to +70°C

Order Sanyo Denki finger guards separately on page 2395.

Mfg. Part No.	Fig.	Dimensions (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
9S0612M401	1	60 x 60 x 25	12	0.84	14.1	16	96M1761	17.58
9S0612H401	1	60 x 60 x 25	12	1.32	20.5	24	96M1760	17.58
9S0612H4021	1	60 x 60 x 25	12	...	20.48	25	06W4777	16.94
9S0812L401	2	80 x 80 x 25	12	0.60	23.3	16	96M1763	18.59
9S0812M401	2	80 x 80 x 25	12	0.96	29.3	22	96M1764	17.70
9S0812F401	2	80 x 80 x 25	12	1.32	32.8	24	96M1762	17.70
9S0824M401	2	25 x 80 x 80	24	1.44	29.3	22	40T8554	18.75
9S0824L401	2	80 x 80 x 25	24	0.96	23.3	16	40T8549	18.75
9S0812H4011	2	80 x 80 x 25	12	2.76	39.5	31	06W4780	17.70
9S0812H401	2	80 x 80 x 25	12	2.76	39.5	31	06W4779	17.70

CONTINUED

SILENT SERIES DC FANS (CONT.)

Mfg. Part No.	Fig.	Dimensions (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
● 9S0812L4021	2	80 x 80 x 25	12	...	23.3	16	06W4781	17.34
● 9S0812F4021	2	80 x 80 x 25	12	...	32.84	24	06W4778	17.34
● 9S0912L401	3	92 x 92 x 25	12	0.84	29.3	17	96M1766	18.34
● 9S0912M401	3	92 x 92 x 25	12	1.32	37.8	22	96M1767	18.56
● 9S0912F401	3	92 x 92 x 25	12	1.68	44.5	27	96M1765	17.68
● 9S0912F4011	3	92 x 92 x 25	12	1.68	44.5	27	03P9414	18.56
● 9S0924F4011	3	92 x 92 x 25	24	2.16	44.5	27	86R0593	17.68
● 9S0924L401	3	92 x 92 x 25	24	0.96	29.3	17	86R0595	18.56
● 9S0924M401	3	92 x 92 x 25	24	1.68	37.8	22	86R0598	18.56
● 9S1212P4M01	4	119 x 119 x 25	12	...	...	24	04X3346	28.54
● 9S1212P4M011	4	119 x 119 x 25	12	...	...	24	04X3347	28.54
● 9S1212M401	4	120 x 120 x 25	12	0.96	58.6	24	96M1770	27.93
● 9S1212L401	4	120 x 120 x 25	12	1.56	48.1	17	96M1769	27.67
● 9S1212F401	4	120 x 120 x 25	12	2.28	70.6	30	96M1768	27.93
● 9S1212M4011	4	120 x 120 x 25	12	1.56	58.6	24	03P9424	26.86
● 9S1212H401	4	120 x 120 x 25	12	...	86.51	36	04R7277	27.67

(114917)

WATERPROOF, SPLASHPROOF AND OILPROOF DC FANS

RoHS Compliant Available

SANYO DENKI

TÜV Rheinland

Fig. 1

Fig. 2

Fig. 3

Fig. 4

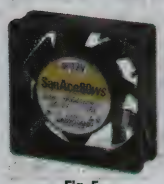


Fig. 5

Fig. 6

Fig. 7

Fig. 8

Fig. 9

Fig. 10

Fig. 11

Fig. 12

Fig. 13

Fig. 14

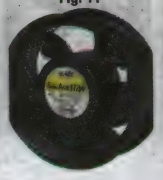


Fig. 16

Fig. 17

- IP55 rating for waterproof fans
- Oil resistant materials protect coils and electronic parts
- Ball bearing
- Lead wire connection
- Plastic frame and impeller
- Fans with **-01** suffix in mfg. part no. include tachometer
- Fans with **-011** suffix in mfg. part no. include tachometer and are ribless
- Temp. range: -10°C to +70°C

WB, WE, WG, WP and **WV** in mfg. part no. denotes IP55 splashproof. **WF** in mfg. part no. denotes oilproof. **WS** in mfg. part no. denotes IP54 waterproof. *Order Sanyo Denki finger guards separately online or call.*

SQUARE FANS

Mfg. Part No.	Fig.	Dimensions (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
● 9WF0424H701	1	40 x 40 x 15	24	2.04	6.9	38	52R8005	25.77
● 9WF0424F601	1	40 x 40 x 20	24	1.82	7.77	37	74R9529	26.98
● 9WF0424H601	1	40 x 40 x 20	24	2.64	9.18	42	96M8719	26.98
● 9WF0624H702	...	60 x 60 x 15	24	2.88	18.4	44	96M1773	26.81
● 9WF0624H601	2	60 x 60 x 20	24	3.6	24.3	42	73R4298	30.32

➤ CONTINUED ➤

WATERPROOF, SPLASHPROOF AND OILPROOF DC FANS (CONT.)

Mfg. Part No.	Fig.	Dimensions (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
● 9WP0612G4011	3	60 x 60 x 25	12	2.52	27.5	39	06W4783	31.01
● 9WP0612G401	3	60 x 60 x 25	12	2.52	27.5	39	06W4782	31.01
● 9WP0612H401	3	60 x 60 x 25	12	1.32	18.7	28	96M1774	31.94
● 9WP0624H401	3	60 x 60 x 25	24	1.44	18.7	28	96M1775	31.94
● 9WF0624H401	3	60 x 60 x 25	24	3.6	23.66	41	96M8722	31.23
● 9WP0648H402	3	60 x 60 x 25	48	1.92	18.7	28	96M7658	34.99
● 9WP0812G401	4	80 x 80 x 25	12	4.56	53	40	06W4784	33.52
● 9WP0812G4011	4	80 x 80 x 25	12	4.56	53	40	06W4785	33.52
● 9WP0812H401	4	80 x 80 x 25	12	1.56	36.4	29	96M1776	34.86
● 9WP0824H401	4	80 x 80 x 25	24	1.68	36.4	29	96M1777	34.86
● 9WS0824H401	5	80 x 80 x 25	24	2.16	33.19	32	96M7689	48.87
● 9WF0824S401	6	80 x 80 x 25	24	3.84	42.73	38	03P9994	30.73
● 9WV0848P1H001	7	80 x 80 x 38	48	36	131	63	46T5915	72.09
● 9WS0912H401	8	92 x 92 x 25	12	2.04	48.73	33	96M7699	54.83
● 9WP0912F401	9	92 x 92 x 25	12	1.68	43.8	30	06W4786	37.72
● 9WP0924H401	9	92 x 92 x 25	24	2.4	51.2	33	06W4787	37.72
● 9WF0924H401	9	92 x 92 x 25	24	3.12	51.2	42.5	52R8006	31.54
● 9WP0924S401	9	92 x 92 x 25	24	3.6	58.6	39	06W4788	37.72
● 9WF0924H201	10	92 x 92 x 32	24	8.4	86.5	56	73R4299	42.46
● 9WV0948P1H001	11	92 x 92 x 38	48	39.4	178	64	19T8942	75.62
● 9WG1212G101	13	120 x 120 x 38	12	11.76	137	49	96M7602	81.43
● 9WP1224H101	12	120 x 120 x 38	24	5.28	98.9	39	96M1780	55.78
● 9WS1224H1011	...	120 x 120 x 38	24	5.52	98.87	39	96M7723	66.08
● 9WG1224G101	13	120 x 120 x 38	24	12	137	49	96M7620	82.22
● 9WV1224P1H001	13	120 x 120 x 38	24	19.2	182	58	46T5916	103.47
● 9WV1248P1J001	14	120 x 120 x 38	48	31.2	224	64	40T7354	102.62

SEMI-ROUND FANS

Mfg. Part No.	Fig.	Dimensions (mm) Dia. x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
● 9WE1724K501	16	172 x 150 x 51	24	31.2	300.1	55	17W5805	132.32
● 9WE5724K501	16	172 x 150 x 51	24	31.2	300	60	96M1771	135.71
● 9WG5748P5G001	17	172 x 150 x 51	48	140	546	78	46T5913	220.04
● 9WG5748P5H001	17	172 x 150 x 51	48	78	410	71	46T5914	227.52

(114918)

COUNTER-ROTATING DC FANS

RoHS Compliant Available

SANYO DENKI

TÜV Rheinland

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6

Fig. 7

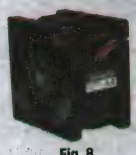


Fig. 8

- Provide large air volume and high static pressure
- Ball bearing
- Lead wire connection
- Plastic frame and impeller (**CRE** type has aluminum frame)
- Fans with **-01** suffix in mfg. part no. include tachometer
- Fans with **"P"** after voltage in mfg. part no. include pulse width modulator
- Voltage: 12 VDC
- Temp. range: -10°C to +60°C

Order Sanyo Denki finger guards separately on page 2395.

Mfg. Part No.	Fig.	Dim. (mm) H x W x D	Power (W)	Max. Airflow (cfm)	Inlet/Outlet Rotation (rpm)	Noise (dBA)	Stock No.	Price Each 1-9
● 9CRA0312P4J03	1	38 x 38 x 48	13.2	24.72	16000/13200	62	04R7265	33.27
● 9CRA0312P4K03	1	38 x 38 x 48	18	27.19	17600/14520	64	04R7266	34.02
● 9CRA0412P4J03	2	40 x 40 x 48	16.8	31.8	16200/10800	62	96M1702	33.97
● 9CRA0412P4K03	2	40 x 40 x 48	21.6	33.5	17500/11700	64	96M1703	33.39
● 9CR0412S501	3	40 x 40 x 56	13.2	24.7	15800/10600	57.5	96M1711	22.31
● 9CRB0412P5J201	4	40 x 40 x 56	8.64	25.1	17300/16000	61	65T9811	32.97
● 9CRB0412P5K001	4	40 x 40 x 56	10.56	26.83	19000/17000	62	65T9812	32.97
● 9CRE0412P5J03	5	40 x 40 x 56	16.8	31.8	15800/12200	62	96M1708	38.17

➤ CONTINUED ➤

COUNTER-ROTATING DC FANS (CONT.)

Mfg. Part No.	Fig.	Dim. (mm) H x W x D	Power (W)	Max. Air-flow (cfm)	Inlet/Outlet Rotation (rpm)	Noise (dBA)	Stock No.	Price Each 1-9
9CR0612P5G03	6	60 x 60 x 51	32.4	72.39	11500/9000	68	03P9330	48.37
9CR0612P0S03	6	60 x 60 x 76	38.4	79.8	11500/7000	66	96M1713	45.21
9CRA0612P0G001	6	60 x 60 x 76	27.6	70.6	6200/3800	66	06W4764	49.20
9CRA0612P0S001	6	60 x 60 x 76	18	60	6200/3800	63	06W4765	49.20
9CR0812P8H03	7	80 x 80 x 80	43.2	140.89	7000/4600	68	96M1714	44.42
9CR0812S801	7	80 x 80 x 80	66	160	8000/5300	71	96M1716	41.60
9CR0812P8S03	7	80 x 80 x 80	66	160	8000/5300	71	96M1715	44.42
9CRA0812P8G001	7	80 x 80 x 80	63.6	158.9	12000/11300	76	48T2843	66.65
9CRA0848P8G001	7	80 x 80 x 80	63.4	158.9	8000/5300	76	65T9810	92.42
9CR1212P0G03	8	120 x 120 x 76	86.4	300	6200/3800	70	96M1718	80.19

(114914)

DC FANS

RoHS Compliant Available

ADDA

- Ball bearings
- Lead wire connection
- Temp. rating: -10°C to +70°C

"70" versions are impedence protected while the "71" versions are IC protected. Order fan accessories separately; go online or call.

Mfg. Part No.	Dimensions (mm) H x W x D	Voltage (VDC)	Power	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
AD0205LB-G50GL	25 x 25 x 10	5	400mW	1.8	15.6	92P7586	18.11
AD0205MB-G50GL	25 x 25 x 10	5	500mW	2.1	23	45T0208	18.11
AD02125LB-G50GL	25 x 25 x 10	12	840mW	1.8	15.6	45T0210	19.17
AD0212LB-G50GL	25 x 25 x 10	12	840mW	1.8	15.6	92P7587	19.79
AD0212MB-G50GL	25 x 25 x 10	12	400mW	2.1	23	45T0209	19.17
AD0405DB-C50	40 x 40 x 20	5	450mW	4.489	17.5	58P0749	16.42
AD0405HB-C50	40 x 40 x 20	5	1.25W	8.802	36	58P0750	17.01
AD0405HB-G70	40 x 40 x 10	5	950mW	6.7	25	92P7588	16.95
AD0405LB-C50	40 x 40 x 20	5	700mW	6.999	30	58P0752	17.38
AD0405LB-G70	40 x 40 x 10	5	350mW	4.2	21	58P0753	16.00
AD0405MB-C50	40 x 40 x 20	5	800mW	7.741	33	58P0754	16.42
AD0405MB-G70	40 x 40 x 10	5	550mW	5.7	20	58P0755	16.00
AD0412DB-C50	40 x 40 x 20	12	480mW	4.489	17.5	58P0756	16.42
AD0412HB-C50	40 x 40 x 20	12	1.2W	8.97	31.9	58P0757	17.61
AD0412HB-C71GP	40 x 40 x 20	12	1.92W	9.4	30	08R6655	20.72

CONTINUED

DC FANS (CONT.)

Mfg. Part No.	Dimensions (mm) H x W x D	Voltage (VDC)	Power	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
AD0412HB-G70	40 x 40 x 10	12	1.2W	6.7	25	92P7589	16.73
AD0412HB-G76	40 x 40 x 10	12	1.08W	6.2	26	41T3655	18.49
AD0412LB-C50	40 x 40 x 20	12	840mW	6.99	25	58P0760	16.42
AD0412LB-C71GP	40 x 40 x 20	12	1.2W	6.4	19	08R6656	20.72
AD0412LB-G70	40 x 40 x 10	12	720mW	4.2	21	58P0762	16.94
AD0412MB-C50	40 x 40 x 20	12	960mW	7.741	33	58P0763	16.42
AD0412MB-C71GP	40 x 40 x 20	12	1.8W	8	26	08R6657	20.72
AD0412MB-G70	40 x 40 x 10	12	960mW	5.7	20	92P7590	16.73
AD0412UB-C50	40 x 40 x 20	12	1.68W	9.579	37.5	58P0766	16.42
AD0412XB-C71GP	40 x 40 x 20	12	3.6W	13	42	08R6659	20.72
AD0424HB-C50	40 x 40 x 20	24	2.16W	8.97	31.9	58P0769	17.17
AD0424HB-G70	40 x 40 x 10	24	1.44W	6.2	26	58P0770	17.15
AD0424LB-C50	40 x 40 x 20	24	1.2W	6.999	30	58P0771	17.17
AD0424LB-G70	40 x 40 x 10	24	720mW	4.2	21	58P0772	16.94
AD0424MB-C50	40 x 40 x 20	24	1.44W	7.741	33	58P0773	16.42
AD0424MB-G70	40 x 40 x 10	24	960mW	5	22	58P0774	17.15
AD5012HB-D71	52 x 52 x 15	12	1.2W	12	28.7	92P7591	18.37
AD0605HB-D71GL	60 x 60 x 15	5	1.85W	16.6	32.4	92P7592	17.66
AD0605LB-A70GL	60 x 60 x 25	5	500mW	13.2	18.1	58P0775	15.91
AD0605LB-D71GL	60 x 60 x 15	5	600mW	12.332	24.8	45T0211	17.66
AD0605MB-A70GL	60 x 60 x 25	5	950mW	18.18	28.6	58P0776	15.91
AD0612HB-A70GL	60 x 60 x 25	12	2.76W	23.2	32.3	92P7593	16.12
AD0612HB-A71GP	60 x 60 x 25	12	1.32W	21.59	35.3	58P0778	19.75
AD0612HB-D71GL	60 x 60 x 15	12	1.56W	16.6	32.4	92P7594	17.44
AD0612LB-A70GL	60 x 60 x 25	12	720mW	13.2	18.1	58P0779	15.71
AD0612LB-D71GL	60 x 60 x 15	12	840mW	12.332	24.8	45T0212	17.66
AD0612MB-A70GL	60 x 60 x 25	12	1.68W	18	24	92P7595	15.91
AD0612MB-A71GP	60 x 60 x 25	12	840mW	15.6	29.7	58P0782	19.75
AD0612UB-A70GL	60 x 60 x 25	12	3W	27	40	58P0783	15.91
AD0612UB-A71GP	60 x 60 x 25	12	2.52W	26.56	40.4	58P0784	19.75
AD0612XB-A71GP	60 x 60 x 25	12	3.6W	31.77	44.3	58P0786	20.91
AD0624HB-A70GL	60 x 60 x 25	24	3.6W	23.2	32.3	92P7596	15.71
AD0624HB-D71GL	60 x 60 x 15	24	2.16W	17	33.3	92P7597	17.66
AD0624MB-A70GL	60 x 60 x 25	24	1.92W	18	24	92P7598	15.71
AD0624UB-A70GL	60 x 60 x 25	24	3.36W	27	40	58P0789	15.71
AD0805HB-D71	80 x 80 x 15	5	1.1W	29.9	33.4	92P7599	16.55
AD0805MB-D71	80 x 80 x 15	5	650mW	21.805	24.9	45T0213	16.55
AD0812DB-A70GL	80 x 80 x 25	12	480mW	20.57	16.5	08R6660	17.78
AD0812HB-A70GL	80 x 80 x 25	12	3W	38.6	34.4	92P7600	17.79
AD0812HB-D71	80 x 80 x 15	12	1.32W	29.722	34.4	45T0214	16.76
AD0812LB-A70GL	80 x 80 x 25	12	1.44W	26.2	22.5	08R2502	16.80
AD0812LB-Y51	80 x 80 x 32	12	1.32W	39.2	33	58P0799	17.54
AD0812MB-A70GL	80 x 80 x 25	12	1.8W	31.4	28.3	92P7602	17.56
AD0812MB-D71	80 x 80 x 15	12	600mW	22.4	26	92P7603	15.83
AD0812UB-A70GL	80 x 80 x 25	12	3.12W	59	40	08R6665	17.56
AD0812UB-A71GL	80 x 80 x 25	12	5.4W	50	41	58P0803	22.78
AD0812UB-A71GP	80 x 80 x 25	12	3.24W	56	43.5	08R6666	21.52
AD0812UB-F71DS	80 x 80 x 38	12	9.72W	88	55	08R6667	22.39
AD0812UB-Y51	80 x 80 x 32	12	2.76W	54.5	43.8	58P0807	30.95
AD0812VB-A71GP	80 x 80 x 25	12	6.36W	72	49	08R6669	22.50
AD0812VB-F71DS	80 x 80 x 38	12	22.32W	110	60.5	08R6670	22.39
AD0812XB-A71GP	80 x 80 x 25	12	4.56W	67	46	08R6672	22.78
AD0812XB-F71DS	80 x 80 x 38	12	14.16W	97	57	08R6673	22.39
AD0824HB-A70GL	80 x 80 x 25	24	3.84W	38.6	34.4	92P7604	17.56
AD0824HB-A71GP	80 x 80 x 25	24	2.4W	50	38.5	08R6674	22.50
AD0824HB-D71	80 x 80 x 15	24	1.92W	29.722	34.4	45T0215	16.98
AD0824HB-F71DS	80 x 80 x 38	24	7.2W	75	50.5	08R6675	22.39
AD0824HB-Y51	80 x 80 x 32	24	2.88W	49.8	41	58P0816	17.54
AD0824LB-Y51	80 x 80 x 32	24	1.68W	39.1	33	58P0818	18.57
AD0824MB-A70GL	80 x 80 x 25	24	1.68W	32.384	29.4	08R6678	17.78
AD0824MB-D71	80 x 80 x 15	24	1.2W	21.805	24.9	45T0216	16.55
AD0824UB-A71GL	80 x 80 x 25	24	6.24W	50	41	58P0822	23.07
AD0824UB-A71GP	80 x 80 x 25	24	3.12W	52.494	40.8	08R6681	21.52
AD0824UB-F71DSM	80 x 80 x 38	24	10.08W	88	55	08R6682	22.39
AD0824UB-Y51	80 x 80 x 32	24	3.6W	54.5	43.8	58P0824	29.18
AD0824VB-A71GP	80 x 80 x 25	24	6.24W	72	49	08R6684	22.50
AD0824XB-A71GP	80 x 80 x 25	24	4.08W	67	46	08R6685	22.50
AD0848HB-F71DS	80 x 80 x 38	48	7.2W	75	50.5	08R6687	22.39
AD0848HB-Y51	80 x 80 x 32	48	3.84W	49.8	41	58P0828	17.54
AD0848LB-Y51	80 x 80 x 32	48	2.88W	39.2	33	58P0829	18.57
AD0848MB-Y51	80 x 80 x 32	48	3.36W	44.6	37	58P0830	18.57
AD0848UB-F71DS	80 x 80 x 38	48	9.6W	88	55	08R6692	22.39
AD0848UB-Y51	80 x 80 x 32	48	5.28W	54.5	43.8	58P0833	29.18
AD0912DB-A70GL	92 x 92 x 25	12	840mW	30.303	19.1	08R6695	20.02

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DC FANS

DC FANS (CONT.)

Mfg. Part No.	Dimensions (mm) H x W x D	Voltage (VDC)	Power	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
AD0912HB-A70GL	92 x 92 x 25	12	2.88W	52.5	35	08R0849	20.28
AD0912LB-A70GL	92 x 92 x 25	12	1.2W	40.689	29.2	08R6696	18.91
AD0912MB-A70GL	92 x 92 x 25	12	1.8W	44.655	31.2	08R6697	18.91
AD0912UB-A70GL	92 x 92 x 25	12	3.48W	60	39.4	08R6698	19.77
AD0912UB-A71GL	92 x 92 x 25	12	4.68W	60	39.4	58P0839	21.05
AD0924HB-A70GL	92 x 92 x 25	24	3.6W	56.069	37.5	08R6699	19.77
AD0924LB-A70GL	92 x 92 x 25	24	1.2W	40.689	29.2	08R6700	18.91
AD0924MB-A70GL	92 x 92 x 25	24	1.92W	44.655	31.2	08R6701	20.02
AD0924UB-A71GL	92 x 92 x 25	24	5.04W	60	39.4	58P0843	25.86
AD1212DB-A71GL	120 x 120 x 25	12	1.32W	57.205	27.2	58P0847	17.36
AD1212DB-F51	120 x 120 x 38	12	1.44W	57.292	28.4	58P0848	16.42
AD1212DB-Y51	120 x 120 x 32	12	960mW	59.461	26.9	58P0850	20.88
AD1212HB-A71GL	120 x 120 x 25	12	3.48W	85.2	39.1	58P0851	29.99
AD1212HB-F51	120 x 120 x 38	12	4.68W	105.461	46.7	58P0852	17.17
AD1212HB-Y51	120 x 120 x 32	12	3.84W	108	43.3	58P0854	36.46
AD1212LB-A71GL	120 x 120 x 25	12	1.8W	71.806	34.4	58P0855	18.38
AD1212LB-F51	120 x 120 x 38	12	2.64W	71.635	36.2	58P0856	16.42
AD1212LB-Y51	120 x 120 x 32	12	2.28W	82.981	36.2	58P0858	20.88
AD1212MB-A71GL	120 x 120 x 25	12	1.92W	80.5	38	58P0859	28.88
AD1212MB-F51	120 x 120 x 38	12	4.08W	96.3	45	58P0860	17.38
AD1212MB-Y51	120 x 120 x 32	12	3.12W	99.069	41.1	58P0862	20.88
AD1212UB-A71GL	120 x 120 x 25	12	4.68W	98.6	43.3	58P0863	28.88
AD1212UB-F51	120 x 120 x 38	12	7.44W	122	48	58P0864	28.38
AD1212UB-Y51	120 x 120 x 32	12	6.12W	130.8	48.4	58P0865	36.85
AD1224DB-A71GL	120 x 120 x 25	24	1.68W	57.205	27.2	58P0866	17.36
AD1224DB-F51	120 x 120 x 38	24	1.68W	57.292	28.4	58P0867	17.38
AD1224DB-Y51	120 x 120 x 32	24	1.2W	59.461	26.9	58P0869	22.10
AD1224HB-A71GL	120 x 120 x 25	24	3.12W	87.87	39.1	58P0870	18.15
AD1224HB-F51	120 x 120 x 38	24	6.24W	105.461	46.7	58P0871	17.17
AD1224HB-Y51	120 x 120 x 32	24	5.04W	108	43.3	58P0873	38.08
AD1224LB-A71GL	120 x 120 x 25	24	2.4W	71.806	34.4	58P0874	17.36
AD1224LB-F51	120 x 120 x 38	24	2.4W	71.635	36.2	58P0875	16.42
AD1224LB-Y51	120 x 120 x 32	24	2.4W	82.981	36.1	58P0877	20.88
AD1224MB-A71GL	120 x 120 x 25	24	3.12W	81.054	38	58P0878	18.38
AD1224MB-F51	120 x 120 x 38	24	4.8W	96.3	45	58P0879	17.38
AD1224MB-Y51	120 x 120 x 32	24	3.84W	99.069	41.1	58P0881	22.10
AD1224UB-A71GL	120 x 120 x 25	24	4.56W	98.965	43.3	58P0882	18.15
AD1224UB-F51	120 x 120 x 38	24	9.12W		48	58P0883	28.70
AD1224UB-Y51	120 x 120 x 32	24	7.68W	130.8	48.4	58P0885	36.08
AD1248HB-A71GL	120 x 120 x 25	48	4.8W	87.87	39.1	58P0887	18.38
AD1248HB-F51	120 x 120 x 38	48	8.64W	105.461	46.7	58P0888	16.42
AD1248HB-Y51	120 x 120 x 32	48	5.28W	108	43.3	58P0890	36.46
AD1248LB-F51	120 x 120 x 38	48	4.32W	71.635	36.2	58P0891	16.42
AD1248MB-F51	120 x 120 x 38	48	6.24W	96.3	45	58P0893	16.42
AD1248UB-A71GL	120 x 120 x 25	48	5.76W	98.965	43.3	58P0895	18.38
AD1248UB-F51	120 x 120 x 38	48	10.56W	122	48	58P0896	27.33
AD1248UB-Y51	120 x 120 x 32	48	7.2W	130.8	48.4	58P0898	34.74
AD1312HB-F51	127 x 127 x 38	12	7.8W	161.172	53	58P0899	35.89
AD1312LB-F51	127 x 127 x 38	12	3W	107.49	41	58P0900	34.84
AD1312MB-F51	127 x 127 x 38	12	4.56W	133.658	47.5	58P0901	34.84
AD1312XB-F51	127 x 127 x 38	12	23.4W	226.628	62	58P0903	34.84
AD1324HB-F51	127 x 127 x 38	24	8.64W	161.172	53	58P0904	34.84
AD1324LB-F51	127 x 127 x 38	24	3.6W	107.49	41	58P0905	34.84
AD1324MB-F51	127 x 127 x 38	24	5.28W	133.658	47.5	58P0906	36.18
AD1324UB-F51	127 x 127 x 38	24	12W	193	56	58P0907	60.87
AD1324VB-F51	127 x 127 x 38	24	26.4W	242.146	64.5	58P0908	36.56
AD1324XB-F51	127 x 127 x 38	24	22.56W	226.628	62	58P0909	34.84
AD1348HB-F51	127 x 127 x 38	48	10.08W	161.172	53	58P0910	34.84
AD1348LB-F51	127 x 127 x 38	48	5.28W	107.49	41	58P0911	34.84
AD1348MB-F51	127 x 127 x 38	48	7.2W	133.658	47.5	58P0912	34.84
AD1348UB-F51	127 x 127 x 38	48	14.88W	193.373	56	58P0913	34.84
AD1348VB-F51	127 x 127 x 38	48	30.72W	242.146	64.5	58P0914	34.84
AD1348XB-F51	127 x 127 x 38	48	24W	226.628	62	58P0915	36.56
AD17224HB-5151MO	172 x 150 x 51	24	48W	362	65.7	41T3662	53.19
AD17224LB-5151MO	172 x 150 x 51	24	26.4W	295	60.6	41T3663	56.23
AD17224MB-5151MO	172 x 150 x 51	24	34.8W	327	64	41T3664	54.19
AD5005HB-D70	50 x 50 x 15	5	1.05W	14.3	34	58P0916	18.32
AD5012HB-D70	50 x 50 x 15	12	1.44W	14.2	30.9	58P0917	18.10
AD5012LB-D70	50 x 50 x 15	12	840mW	11	24	58P0918	17.31
AD5012MB-D70	50 x 50 x 15	12	960mW	13	30	58P0919	17.31
AD5012UB-D70	50 x 50 x 15	12	1.68W	16.5	37.5	58P0920	18.10

(147082)

DC FANS

RoHS Compliant Available

ADDA

TÜV Rheinland

- Dual ball bearings
- Lead wire connection
- Plastic frame and impeller

Order fan accessories separately; *go online or call.*

Mfg. Part No.	Dimensions (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
AS12012LB25A100	120 x 120 x 25	12	7.92	125.817	51	58P0986	22.17
AS12012MB25A100	120 x 120 x 25	12	10.08	150.766	54.7	58P0987	23.47
AS12024HB25A100	120 x 120 x 25	24	13.2	161.505	57.8	58P0989	21.35
AS12024LB25A100	120 x 120 x 25	24	6.72	125.817	51	58P0990	20.17
AS12024MB25A100	120 x 120 x 25	24	10.32	150.766	54.7	58P0991	21.35
AS12024UB25A100	120 x 120 x 25	24	17.04	175.895	58.6	58P0992	20.17
AS12048HB25A100	120 x 120 x 25	48	14.4	161.505	57.8	58P0993	20.17
AS12048LB25A100	120 x 120 x 25	48	8.16	125.817	51	58P0994	20.17
AS12048MB25A100	120 x 120 x 25	48	11.04	150.766	54.7	58P0995	20.17
AS12048UB25A100	120 x 120 x 25	48	17.76	175.895	58.6	58P0996	20.17

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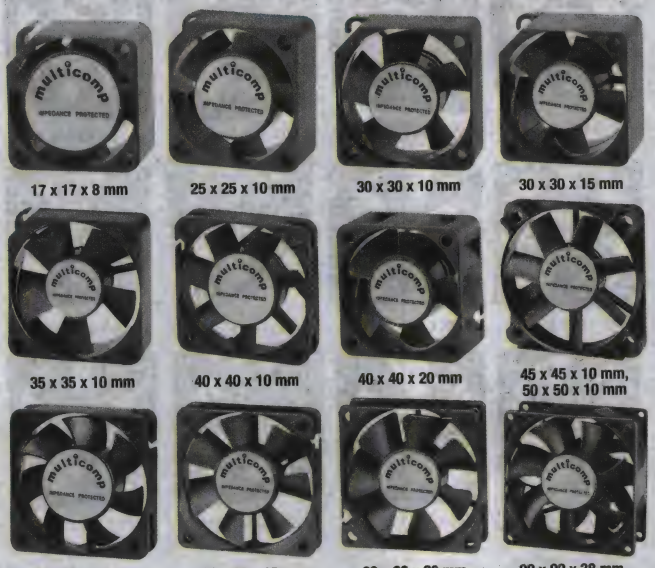
BRUSHLESS DC TUBEAXIAL FANS

RoHS Compliant Available

multicomp



17 x 17 x 8 mm | 25 x 25 x 10 mm | 30 x 30 x 10 mm | 30 x 30 x 15 mm | 35 x 35 x 10 mm | 40 x 40 x 10 mm | 40 x 40 x 20 mm | 45 x 45 x 10 mm, 50 x 50 x 10 mm | 50 x 50 x 15 mm | 60 x 60 x 15 mm | 60 x 60 x 20 mm | 92 x 92 x 38 mm

- Black thermoplastic housing and impeller, rated UL94V-0
- Brushless shaded-pole motor
- Lead wire connection
- Temperature rating: -10°C to +70°C

Order Multicomp fan accessories separately on pages 2392-2393. Power cords are also available *on page 2394.*

Mfg. Part No.	Dimensions (mm) H x W x D	Bearing Type	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
MC32901	17 x 17 x 8	Vapo	5	0.8	0.9	25	71P8678	25.75
MC36302	25 x 25 x 6	Vapo	5	0.4	2.2	23	23T0630	11.06
MC36301	25 x 25 x 6	Vapo	5	0.6	3	31	23T0629	10.94
MC36304	25 x 25 x 10	Vapo	5	0.4	3	16	23T0632	10.68
MC36303	25 x 25 x 10	Vapo	5	0.6	3.5	23	23T0631	10.94
MC36305	25 x 25 x 10	Vapo	12	0.5	3	16	23T0633	10.07
MC36307	30 x 30 x 6	Vapo	5	0.4	3.7	24	23T0635	10.94
MC36306	30 x 30 x 6	Vapo	5	0.7	4.9	28	23T0634	10.68
MC32900	30 x 30 x 10	Vapo	5	0.5	4.6	20	71P8677	12.25
MC36308	30 x 30 x 10	Vapo	5	0.7	5.5	23	23T0636	10.94
MC36311	30 x 30 x 10	Vapo	12	0.5	4.6	20	23T0639	10.68
MC36312	30 x 30 x 15	Vapo	5	0.5	4.8	20	23T0640	11.70
MC36310	30 x 30 x 10	Vapo	12	1	5.5	23	23T0638	12.19
MC36314	35 x 35 x 10	Vapo	5	0.75	7	28	23T0642	11.06
MC36317	35 x 35 x 10	Vapo	12	0.5	6.5	22	23T0645	11.90

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BRUSHLESS DC TUBEAXIAL FANS (CONT.)

Mfg. Part No.	Dimensions (mm) H x W x D	Bearing Type	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
MC36316	35 x 35 x 10	Vapo	12	1	7	28	23T0644	12.19
MC19658	40 x 40 x 6	Vapo	5	0.4	5.5	26	70K8541	13.33
MC19660	40 x 40 x 6	Vapo	5	0.5	5.9	32	70K8543	13.33
MC36281	40 x 40 x 10	Vapo	5	1.2	7	27	23T0609	5.53
MC36282	40 x 40 x 10	Vapo	12	1	7	27	23T0610	4.58
MC35162	40 x 40 x 10	Vapo	12	1.1	8	32	64R4867	4.70
MC32906	40 x 40 x 20	Ball	5	0.7	7.7	22	71P8684	16.25
MC36286	40 x 40 x 20	Vapo	12	0.4	6.3	18	23T0614	6.10
MC36284	40 x 40 x 20	Vapo	12	0.8	8.9	25.5	23T0612	6.10
MC36287	40 x 40 x 20	Vapo	12	1.4	10.8	27.5	23T0615	6.10
MC36289	40 x 40 x 20	Vapo	24	1.2	8.9	25.5	23T0617	6.41
MC21684	40 x 40 x 28	Ball	12	8.6	24	55.5	14M9040	26.61
MC36291	45 x 45 x 10	Vapo	12	1	9.2	27	23T0619	5.47
MC36319	45 x 45 x 10	Vapo	12	1.2	11.8	32.5	23T0647	5.47
MC36293	50 x 50 x 10	Vapo	12	1.1	11	26	23T0621	5.31
MC36265	50 x 50 x 10	Sleeve	12	1.4	12.5	29	23T0594	3.92
MC35357	50 x 50 x 15	Sleeve	12	2.01	18.6	40.1	75R9908	4.88
MC36323	60 x 60 x 15	Vapo	12	0.14	21.9	32.5	23T0651	6.87
MC35349	60 x 60 x 15	Vapo	12	2.21	25.2	36.2	75R9900	7.03
MC36324	60 x 60 x 15	Vapo	24	1.3	21.9	32.5	23T0652	7.75
MC36295	60 x 60 x 20	Vapo	12	0.8	19	29	23T0623	6.56
MC36262	60 x 60 x 20	Ball	12	1.1	19	29	23T0591	9.37
MC32914	80 x 80 x 25	Ball	12	1	33.1	28	71P8692	7.43
MC36294	60 x 60 x 20	Vapo	12	1.8	23	33.5	23T0622	6.72
MC36300	60 x 60 x 25	Vapo	24	1.2	19.3	29	23T0628	7.48
MC36297	60 x 60 x 25	Vapo	12	0.89	19.3	29	23T0625	6.87
MC36299	60 x 60 x 25	Vapo	24	1.9	23.5	33.5	23T0627	7.66
MC21688	60 x 60 x 25	Vapo	24	4.3	36	43	14M9044	11.90
MC23300	60 x 60 x 25	Ball	48	3.3	29	38	75M2188	26.36
MC21689	60 x 60 x 25	Ball	48	4.3	36	44	14M9045	16.02
MC21690	60 x 60 x 25	Vapo	48	4.8	36	43	14M9046	14.16
MC36325	80 x 80 x 20	Vapo	12	0.8	33	35	23T0653	6.26
MC35352	80 x 80 x 25	Sleeve	12	0.8	33	28	75R9903	6.10
MC32914	80 x 80 x 25	Ball	12	1	33.1	28	71P8692	7.43
MC35351	80 x 80 x 25	Sleeve	12	1.7	37	30	75R9902	5.49
MC35350	80 x 80 x 25	Sleeve	12	1.7	41	33	75R9901	6.10
MC36266	80 x 80 x 25	Ball	12	1.7	41	33	23T0595	7.43
MC32893	80 x 80 x 25	Sleeve	12	1.7	41	33	71P8670	3.29
MC36335	80 x 80 x 25	Ball	12	4.1	57	46	23T0663	12.20
MC36334	80 x 80 x 25	Ball	12	4.8	60	47.5	23T0662	12.20
MC36336	80 x 80 x 25	Vapo	12	5	60	46.5	23T0664	11.75
MC32896	80 x 80 x 25	Sleeve	24	1.2	33	28	71P8673	4.70
MC35346	80 x 80 x 25	Sleeve	24	1.4	37	30	75R9898	7.05
MC36268	80 x 80 x 25	Ball	24	1.6	41	33	23T0596	9.06
MC35354	80 x 80 x 25	Sleeve	24	1.8	41	33	75R9905	6.41
MC36328	80 x 80 x 25	Ball	24	5	60	47.5	23T0656	13.88
MC36329	80 x 80 x 25	Vapo	24	5.3	60	46.5	23T0657	12.97
MC36330	80 x 80 x 25	Ball	48	6.2	60	47.5	23T0658	17.18
MC21701	80 x 80 x 38	Ball	48	9.1	84.1	55.2	14M9057	20.90
MC35353	92 x 92 x 25	Sleeve	12	1.3	39.5	28	75R9904	6.32
MC35347	92 x 92 x 25	Sleeve	12	1.6	45	32	75R9899	6.00
MC36270	92 x 92 x 25	Ball	12	1.9	51.5	34	23T0598	7.64
MC36338	92 x 92 x 25	Ball	12	4.6	70	45	23T0666	12.97
MC36337	92 x 92 x 25	Ball	12	5.5	75	47	23T0665	13.28
MC36339	92 x 92 x 25	Vapo	12	5.6	75	46	23T0667	11.59
MC35355	92 x 92 x 25	Sleeve	24	1.3	39.5	28	75R9906	7.17
MC35348	92 x 92 x 25	Sleeve	24	1.6	45	32	46P4027	7.34
MC36331	92 x 92 x 25	Ball	24	5.8	75	47	23T0659	13.27
MC36332	92 x 92 x 25	Vapo	24	6	75	46	23T0660	12.66
MC36333	92 x 92 x 25	Ball	48	6.7	75	47	23T0661	17.18
MC21707	92 x 92 x 38	Ball	12	12.5	120.2	57.6	14M9063	18.21
MC21709	92 x 92 x 38	Ball	48	11.5	120.2	57.6	14M9065	34.19
MC35159	120 x 120 x 25	Ball	12	3.6	93	40.5	63R9294	16.79
MC23298	120 x 120 x 25	Ball	12	6.5	120	48	75M2186	21.05
MC36273	120 x 120 x 25	Ball	12	5.3	108.2	44.5	23T0601	16.47
MC36274	120 x 120 x 25	Ball	12	2	75	34	23T0602	16.47
MC36275	120 x 120 x 25	Ball	24	5	108.2	44.5	23T0603	17.24
MC36276	120 x 120 x 25	Ball	24	4.1	93	40.5	23T0604	17.24
MC36278	120 x 120 x 38	Ball	12	4.4	116	44	23T0606	16.47
MC36277	120 x 120 x 38	Ball	12	6.8	138	48	23T0605	16.87
MC21710	120 x 120 x 38	Ball	12	19.2	190	54	14M9066	24.77
MC36280	120 x 120 x 38	Ball	24	5.2	116	44	23T0608	17.24

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BRUSHLESS DC TUBEAXIAL FANS (CONT.)

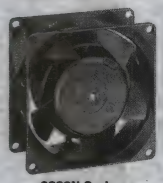
Mfg. Part No.	Dimensions (mm) H x W x D	Bearing Type	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
MC33868	120 x 120 x 38	Vapo	24	6.7	138	48	14R8254	16.17
MC36279	120 x 120 x 38	Ball	24	6.7	138	48	23T0607	17.39

(17527)

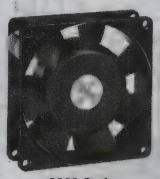
AC TUBEAXIAL FANS - SQUARE

RoHS Compliant Available

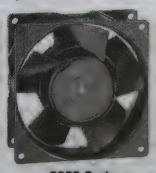
ebmpapst



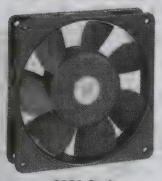
8000N Series



3900 Series

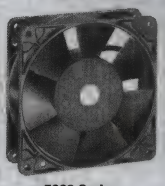


3000 Series

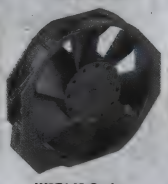


9900 Series

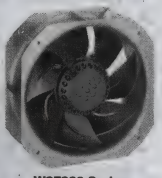
4000N, 4000Z Series



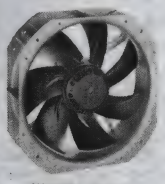
5900 Series



W2E142 Series



W2E200 Series



W2E250 Series

- Metal housing and impeller

Maximum temperature rating from +50°C to +85°C *(please refer to datasheets for detailed breakdown). Order ebm-papst fan accessories separately on pages 2394-2395.* Additional fan models are available; *go*

LEAD WIRES CONNECTION

Mfg. Part No.	Dim. (mm) H x W x D	Bearing Type	Voltage (VAC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-4
8830N	80 x 80 x 38	Sleeve	115	8	21	21	88K2752	41.51
8800N	80 x 80 x 38	Sleeve	115	11	28	28	86K9946	41.95
8500DP	80 x 80 x 38	Sleeve	115	11	36	34	86K9941	42.54
8500N	80 x 80 x 38	Sleeve	115	11	35.9	34	88K2751	37.55
8500V	80 x 80 x 38	Sleeve	115	11	36	34	15B5482	48.18
8506N	80 x 80 x 38	Ball	115	11	36	35	86K9942	44.71
8880N	80 x 80 x 38	Sleeve	230	9	17.6	18	99K1063	49.35
8560N	80 x 80 x 38	Sleeve	230	11	35.9	34	47M2990	42.75
8550N	80 x 80 x 38	Sleeve	230	12	29	30	86K9944	37.33
8850N	80 x 80 x 38	Sleeve	230	12.5	21.8	24	47M2992	42.49
8556N	80 x 80 x 38	Ball	230	12	29	31	86K9945	45.68
8556V	80 x 80 x 38	Ball	230	11	36	35	15B5494	51.72
3600	92 x 92 x 38	Sleeve	115	11	52.4	41	98K8888	50.70
3606	92 x 92 x 38	Ball	115	11	52	42	86K9826	49.70
4606ZW‡	119 x 119 x 38	Ball	115	18	106	45	06M1013	50.24
4656ZH	119 x 119 x 38	Ball	230	17	105.8	44	90B5155	76.50
5908W*	127 x 127 x 38	Ball	115	17	121.2	47	86K9879	51.98
5958W*	127 x 127 x 38	Ball	230	17	121	47	86K9883	50.78
TERMINAL CONNECTION								
3906L*	92 x 92 x 25	Ball	115	5	23	27	47M2586	41.51
3906M*	92 x 92 x 25	Ball	115	5	31	34	86K9828	40.80
3906*	92 x 92 x 25	Ball	115	9	41	40	87F3617	40.80
3956*	92 x 92 x 25	Ball	230	11	35	35	86K9829	40.80
9906L*	119 x 119 x 25	Ball	115	8	58.9	34.5	88K2753	43.95
9906*	119 x 119 x 25	Ball	115	12	80	42	87F3621	43.95
9956L*	119 x 119 x 25	Ball	230	9.5	50	30	86K9950	45.05
9956*	119 x 119 x 25	Ball	230	14	69	37	88K2225	43.95
4624N	119 x 119 x 38	Sleeve	24	18	105.9	50	50B6458	39.06
4800X	119 x 119 x 38	Sleeve	115	9	59	32	86K9865	43.51
4800Z	119 x 119 x 38	Sleeve	115	12	62	28	86K9866	43.51
4530Z†	119 x 119 x 38	Sleeve	115	12	71	33	86K9856	43.95
4600Z‡	119 x 119 x 38	Sleeve	115	18	106	45	86K9860	39.06
4606Z‡	119 x 119 x 38	Ball	115	18	106	45	86K9862	47.74
4600N†	119 x 119 x 38	Sleeve	115	18	106	50	86K9858	36.24
4606N†	119 x 119 x 38	Ball	115	18	106	51	88K2739	43.73
4600X‡	119 x 119 x 38	Sleeve	115	18	106	50	88K2738	37.33
4600XP‡	119 x 119 x 38	Sleeve	115	18	106	50	86K9859	50.46

CONTINUED

AC TUBEAXIAL FANS - SQUARE (CONT.)

TERMINAL CONNECTION

Mfg. Part No.	Dim. (mm) H x W x D	Bearing Type	Voltage (VAC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-4
● 4606X‡	119 x 119 x 38	Ball	115	18	106	51	88K2740	45.47
● 4850Z	119 x 119 x 38	Sleeve	230	13	59	26	86K9868	44.71
● 4580Z†	119 x 119 x 38	Sleeve	230	13	68	30	86K9857	43.95
● 4650Z‡	119 x 119 x 38	Sleeve	230	19	94	40	86K9864	39.72
● 4656Z‡	119 x 119 x 38	Ball	230	19	94	40	88K2743	47.96
● 4650N‡	119 x 119 x 38	Sleeve	230	19	94	46	88K2741	36.24
● 4650X‡	119 x 119 x 38	Sleeve	230	18	106	50	86K9863	38.85
● 4656X‡	119 x 119 x 38	Ball	230	18	106	51	88K2742	45.68
● 4660N‡	119 x 119 x 38	Sleeve	230	18	106	51	88K2744	49.15
● 5938*	127 x 127 x 38	Ball	115	12	95.3	39	86K9880	46.82
● 5900*	127 x 127 x 38	Sleeve	115	17	121.2	46	86K9878	46.98
● 5908*	127 x 127 x 38	Ball	115	17	121.2	47	27C9671	51.98
● 5958*	127 x 127 x 38	Ball	230	17	105.9	47	86K9882	50.46
● 5950*	127 x 127 x 38	Sleeve	230	17	105.9	46	86K9881	41.45
● 5606S**	138 x 138 x 38	Ball	115	26	159	50	92B7425	91.14
● 5656S**	138 x 138 x 38	Ball	230	30	138	46	86K9877	89.41
● W2E142-CC13-16	150 x 172 x 38	Ball	115	16	175	54	86K9791	120.00
● W2E142-BB05-01	150 x 172 x 38	Ball	115	24	230	57	88K1284	105.25
● W2E142-CC15-16	150 x 172 x 38	Ball	230	16	175	54	86K9792	117.94
● W2E142-BB01-01	150 x 172 x 38	Ball	230	28	230	57	88K2731	105.25
● W2E200-HH82-01	225 x 225 x 80	Ball	115	60	500	56	93K7604	206.59
● W2E200-HH86-01	225 x 225 x 80	Ball	115	80	607	61	86K9796	206.59
● W2E200-HK86-01+ **	225 x 225 x 80	Ball	115	80	606	61	01M9465	189.12
● W2E200-HH38-01	225 x 225 x 80	Ball	230	80	607	61	86K9795	206.59
● W2E200-HK38-01+ **	225 x 225 x 80	Ball	230	80	606	61	01M9464	189.12
● W2E250-HJ32-01	280 x 280 x 80	Ball	115	175	1100	73	86K9799	239.46
● W2E250-HJ28-01	280 x 280 x 80	Ball	230	200	1100	73	86K9798	245.65
W2E250-HL08-07	280 x 280 x 80	Ball	115	165	...	...	78M6469	406.70
● W2E300-CP02-71	300 Dia. x 80	Ball	230	350	2200	76	15B5126	314.48

*Plastic impeller; +Aluminum die-cast housing and steel impeller; †0.169″ Mounting hole; ‡ 0.146″ Mounting hole; ** Air Flow - Exhaust over struts
(68227)

AC TUBEAXIAL FANS - ROUND

RoHS Compliant Available

ebmpapst

- Ball bearings
- Metal housing and impeller

150 x 55mm

172 x 51mm

260 x 80mm

Maximum temperature rating from +40°C to +80°C *(please refer to datasheets for detailed breakdown). Order ebm-papst fan accessories separately online or call.* Additional fan models are available; *go online or call.*

LEAD WIRES CONNECTION

Mfg. Part No.	Dim. (mm) Dia. x D	Rated Voltage (VAC)	Power (W)	Maximum Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-4
● W2S130-AA25-01**	150 x 55	115	38	225	52	88K2733	87.89
● W2S130-BM15-01++	150 x 55	115	46	250	62	88K1285	88.00
● W2S130-AA03-01	150 x 55	230	39	224	53	88K2732	87.67
● W2S130-BM03-01++	150 x 55	230	46	250	60	88K2734	122.07
● W2S130-AA03-49**	150 x 55	230	38	225	52	86K9801	94.94
● W4E400-CP02-71++	400 x 80	230	240	2910	73	15B5167	409.99
TERMINAL CONNECTION							
● W2S130-AA25-44**	150 x 55	115	38	225	52	86K9802	85.18
W2S130-AA25-65**	150 x 55	115	...	224	53	91B9189	103.89
● W2S130-AA03-44**	150 x 55	230	38	225	52	86K9800	85.18
● W2E143-AA15-01**	172 x 51	115	26	260	58	93K7603	146.70
● W2E143-AB15-01	172 x 51	115	29	295	58	86K9794	146.70
● W2E143-AA09-01**	172 x 51	230	26	260	58	86K9793	146.70
● W2E143-AB09-01	172 x 51	230	29	295	58	88K2026	146.70
● W2E208-BA20-51	260 x 80	220	87	544	70	86K9797	244.13

** Air Flow - Exhaust over struts; ++ Air Flow - Intake over struts
(108790)

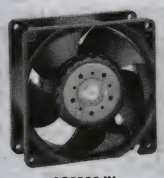
ACMAXX TUBEAXIAL FANS

RoHS Compliant Available

ebmpapst

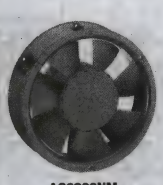
- Can be used from 85-265V, 50-60Hz
- Offer 75% lower power consumption over traditional AC tubeaxial fans
- Wide input voltage, high efficiency and reliability
- Plastic housing and impeller
- External rotor motor with completely integrated drive and control electronics
- Lead wire connection, ball bearings
- Max. temp. rating: +60°C, +70°C

Order fan accessories separately online or call.



AC3200JH

AC4300H



AC6200NM

SQUARE FANS

Mfg. Part No.	Dimensions (mm) H x W x D	Voltage (VAC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-4
● AC3200JH	92 x 92 x 38	115/230	11	86	55	87K1971	71.07
● AC4300H	119 x 119 x 32	115/230	11	120	51	87K1972	62.61

ROUND FANS

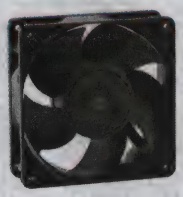
Mfg. Part No.	Dimensions (mm) Dia. x D	Voltage (VAC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-4
● AC6200NM	178 x 51	115/230	12	206	50	87K1973	120.33

(88860)

ACiMAXX TUBEAXIAL FANS

ebmpapst

- Efficient EC motor w/integrated electronics
- AC-line operated, speed is frequency independent
- 3dB or more moise reduction
- Electrical connection via 2 flat pins, 2.8mm x 0.5mm (0.11' x .020″)
- Fiberglass reinforced plastic; impellar PA, housing PBT
- Electronic locked rotor protection
- Ball bearings



Mfg. Part No.	Dimensions (mm) H x W x D	Voltage (VAC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-4
ACI4410HH	119 x 119 x 38	115	4.4	105.9	42	23T2148	75.61
ACI4420HH	119 x 119 x 38	230	4.4	105.9	42	23T2150	85.15
ACI4420H	119 x 119 x 38	230	3.3	94.1	39	23T2149	85.15

ENERGY SAVING AXIAL FANS

Mfg. Part No.	Frame Dimensions Dia. x D	Voltage (VAC)	Power (W)*	Speed/ rpm*	Max. Back Pressure* Pa	Stock No.	Price Each 1-4
W1G130-AA49-01	151mm x 38mm	115	24	3200	90	85W2452	149.71
W1G130-AA25-01	151mm x 38mm	230	24	3200	90	85W2451	147.14
W1G172-EC95-01	222mm x 78.5mm	115	21	2500	60	79R8705	158.44
W1G172-EC91-01	222mm x 78.5mm	230	22	2500	60	06X2603	158.44

* Nominal data in operating point with maximum load and 115 or 230 VAC
(197655)

AC FANS

RoHS Compliant Available

NMB™ Minebea

TÜV Rheinland

- Ball bearings
- Aluminum housing
- Plastic impeller
- Temp. rating: -10°C to +70°C

Additional voltage configurations are available; *go online or call. Order NMB Technologies fan accessories separately online or call.*

LEAD WIRES

Mfg. Part No.	Dim. (mm) H x W x D	Voltage (VAC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
● 2412PS-12W-B30-A00†	60 x 60 x 30	115	4	9.1	29	58K7852	17.81
● 3110PS-12W-B30-A00+	80 x 80 x 25	115	5	19.7	33	58K7889	18.65
● 3115PS-12W-B10-A00	80 x 80 x 38	115	4	19.4	25	26H7365	19.18
● 3115PS-12W-B20-A00	80 x 80 x 38	115	4.5	24	32	44J9125	19.87
● 3115FS-12W-B10-A00	80 x 80 x 38	115	6	22	36	58K3033	19.64
● 3115FS-12W-B20-A00	80 x 80 x 38	115	7	27	40	68K1212	19.18
● 3115 PS12WB30 A00	80 x 80 x 38	115	7	32	76	12P6312	19.18
● 3115FS-12W-B30-A00	80 x 80 x 38	115	8.5	32	44	58K7893	17.96

➤CONTINUED➤

AC FANS (CONT.)

Mfg. Part No.	Dim. (mm) H x W x D	Voltage (VAC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
3115FS-23W-B20-A00	80 x 80 x 38	230	7.5	28	40	58K7896	19.64
3115FS-23W-B30-A00	80 x 80 x 38	230	8	33	44	58K7897	17.96
3115PS-23W-B30-A00	80 x 80 x 38	230	8	32	38	44J9126	19.64
TERMINAL CONNECTION							
3115FS-12T-B00-A00	80 x 80 x 38	115	4	18	31	13M3913	19.64
3115FS-12T-B10-A00	80 x 80 x 38	115	6	22	36	70K9917	19.64
3115FS-12T-B20-A00	80 x 80 x 38	115	7	27	40	70K9918	19.18
3115FS-12T-B30-A00	80 x 80 x 38	115	8.5	32	44	70K9919	17.43
3115FS-23T-B10-A00	80 x 80 x 38	230	6.5	20	35	70K9920	19.87
3115FS-23T-B20-A00	80 x 80 x 38	230	7.5	28	40	70K9921	19.18
3115FS-23T-B30-A00	80 x 80 x 38	230	8	33	44	46F5093	17.96
3115PS-12T-B30A00	80 x 80 x 38	115	7	32	38	13M3914	17.96
3610PS-12T-B10-A00	92 x 92 x 25	115	6	20	25	70K9922	21.00
3610PS-12T-B20-A00	92 x 92 x 25	115	6	28	35	13M3929	21.00
3610PS-12T-B30-A00	92 x 92 x 25	115	9	34.5	38	70K9923	19.08
3610PS-23T-B10-A00	92 x 92 x 25	230	6	20	26	84K0268	21.76
3610PS-23T-B30-A00	92 x 92 x 25	230	10	34.5	39	70K9924	19.66
4710PS-12T-B20-A00†	119 x 119 x 25	115	7	53	30	70K9928	17.69
4710PS-12T-B30-A00†	119 x 119 x 25	115	11	70.6	38	70K9929	17.69
4710PS-23T-B20-A00†	119 x 119 x 25	230	8	53	30	70K9930	19.47
4710PS-23T-B30-A00†	119 x 119 x 25	230	11	70.6	38	93K7648	17.69
4715FS-12T-B00-D00+	119 x 119 x 38	115	7.5	60	31	13M3947	18.03
4715FS-12T-B10-D00+	119 x 119 x 38	115	10	70	33	70K9931	18.03
4715FS-12T-B20-D00+	119 x 119 x 38	115	9.8	80	36	13M3948	18.03
4715FS-12T-B30-D00+	119 x 119 x 38	115	14.5	90	39	70K9932	18.03
4715FS-12T-B40-D00+	119 x 119 x 38	115	14	100	42	13M3949	18.03
4715FS-12T-B50-D00+	119 x 119 x 38	115	14.4	110	45	70K9933	16.71
4715FS-23T-B10-D00+	119 x 119 x 38	230	9	70	70	88K2161	19.71
4715FS-23T-B10-D00+	119 x 119 x 38	230	9	70	70	88K2161	19.71
4715FS-23T-B30-D00+	119 x 119 x 38	230	12	90	90	70K9934	19.25
4715FS-23T-B40-D00+	119 x 119 x 38	230	14	100	100	13M3950	19.25
4715FS-23T-B50-D00+	119 x 119 x 38	230	14	110	45	70K9935	17.50
4715MS-12T-B30-A00	119 x 119 x 38	115	10	88.2	37	70K9936	18.03
4715MS-12T-B20-A00	119 x 119 x 38	115	7	67	30	13M3951	17.50
4715MS-12T-B50-A00	119 x 119 x 38	115	14.5	102	41	70K9511	17.50
4715MS-23T-B30-A00	119 x 119 x 38	230	11	88.2	37	73K4057	18.03
4715MS-23T-B40-A00	119 x 119 x 38	230	13	95	39	13M3952	19.71
4715MS-23T-B50-A00	119 x 119 x 38	230	14	102	41	70K9512	17.50
5915PC-12T-B10-A00†	172 x 150 x 38	115	18	102.3	38	70K9937	61.35
5915PC-12T-B20-A00†	172 x 150 x 38	115	22	166	50	73K4058	61.35
5915PC-12T-B30-A00†	172 x 150 x 38	115	32	212	56	70K9513	55.78
5915PC-23T-B10-A00†	172 x 150 x 38	230	18	102.3	38	70K9938	61.35
5915PC-23T-B20-A00†	172 x 150 x 38	230	26	166	50	70K9939	57.46
5915PC-23T-B30-A00†	172 x 150 x 38	230	35	212	56	70K9940	55.78

*Not CSA certified; +Not VDE approved; †Not TÜV approved
(68237)

AC WEATHER RESISTANT AXIAL FANS

RoHS Compliant Available

NMB™ Minebea

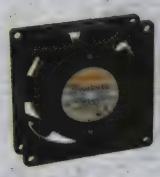


Fig. 1

Fig. 2

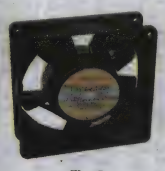


Fig. 3

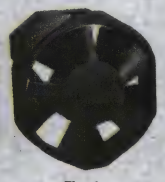


Fig. 4

- Weather resistant, oil and dust proof
- Ball bearings
- Terminal connection (except 80 x 80 x 25 mm fans)
- Aluminum housing
- Potted (**-AM0 and -SM0 suffix**) and without potting (**-A00 and -S00 suffix**)

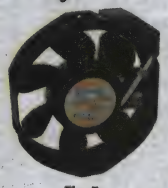


Fig. 5

SQUARE

CONTINUED

AC WEATHER RESISTANT AXIAL FANS (CONT.)

Mfg. Part No.	Fig.	Dim. (mm) H x W x D	Volt. (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dbA)	Stock No.	Price Each 1-9
3110MS-12W-B30-A00	1	80 x 80 x 25	115	6.5	24	31	34R2249	21.36
3110MS-12W-B30-AM0	1	80 x 80 x 25	115	6.5	24	31	34R2248	39.49
3110MS-23W-B30-A00	1	80 x 80 x 25	230	6.5	24	31	08P0793	21.88
3110MS-23W-B30-AM0	1	80 x 80 x 25	230	6.5	24	31	34R2250	32.96
4715HS-12T-B5A-A00	2	119 x 119 x 38	115	15.5	105.9	44	34R2251	19.94
4715HS-12T-B50-AM0	2	119 x 119 x 38	115	15.5	105.9	44	34R2252	36.92
4715TS-12T-B5A-A00	3	119 x 119 x 38	115	17	116.49	50	34R2255	34.94
4715TS-12T-B50-AM0	3	119 x 119 x 38	115	17	116.49	50	34R2256	51.67
4715MS-23T-B5A-A00	3	119 x 119 x 38	230	11	102	41	98K9488	24.59
4715HS-23T-B5A-A00	2	119 x 119 x 38	230	15.5	105.9	44	34R2253	23.23
4715HS-23T-B50-AM0	2	119 x 119 x 38	230	15.5	105.9	44	34R2254	38.02
4715TS-23T-B5A-A00	3	119 x 119 x 38	230	17	116.49	50	34R2257	34.94
4715TS-23T-B50-AM0	3	119 x 119 x 38	230	17	116.49	50	34R2258	50.16
ROUND								
Mfg. Part No.	**Fig.**	**Dim. (mm) H x W x D**	**Volt. (VDC)**	**Power (W)**	**Max. Airflow (cfm)**	**Noise (dbA)**	**Stock No.**	**Price Each 1-9**
5915PC-12T-B30-AM0	4	172 x 150 x 38	115	32	211.8	56	34R2259	78.75
5915PC-12T-B30-S00	5	172 x 150 x 38	115	38	222.39	53	34R2261	84.56
5915PC-12T-B30-SM0	5	172 x 150 x 38	115	38	222.39	53	34R2260	101.96
5915PC-23T-B30-AM0	4	172 x 150 x 38	230	35	211.8	56	34R2262	78.75
5915PC-23T-B30-S00	5	172 x 150 x 38	230	40	222.39	53	34R2263	84.56
5915PC-23T-B30-SM0	5	172 x 150 x 38	230	40	222.39	53	29R0296	101.96

(159797)

AC FANS

RoHS Compliant Available

SANYO DENKI

Fig. 1

Fig. 2

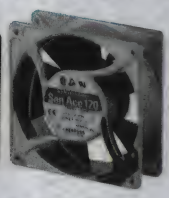


Fig. 3

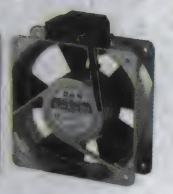


Fig. 4

- Ball bearing
- Aluminum frame
- Plastic impeller
- Temp. range: -30°C to +60°C

Order Sanyo Denki finger guards separately online or call.

Fig. 5

Fig. 6

SQUARE

Mfg. Part No.	Fig.	Dim. (mm) H x W x D	Connection Type	Voltage (VAC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
109-153	1	80 x 80 x 38	Terminals	115	8	37.1	39	96M4968	37.35
109-043UL	2	80 x 80 x 42	Terminals	115	9	35.3	44	96M4961	38.76
109-044UL	2	80 x 80 x 42	Terminals	230	9	35.3	44	96M4962	40.60
109S024UL	3	120 x 120 x 38	Terminals	115	12	95.4	43	96M6238	35.95
109S074UL	3	120 x 120 x 38	Terminals	115	16	102.5	45	96M6251	35.95
109S025UL	3	120 x 120 x 38	Terminals	230	12	95.4	43	96M6240	37.50
109-602	4	160 x 160 x 51	Wire Leaded	200	33	300.4	60	96M4987	90.15
SIDE-CUT									
109S304	5	172 x 150 x 51	Terminals	115	25	226.1	56	96M6275	76.69
109S303	5	172 x 150 x 51	Terminals	230	25	226.1	56	96M6274	90.32
ROUND									
109-314	6	172 x 51	Terminals	115	25	226.1	51	96M4977	77.66
109-313	6	172 x 51	Terminals	230	25	226.1	51	96M4976	92.33

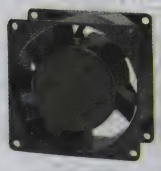
(163799)

AC FANS

SQUARE AC FANS

RoHS Compliant Available

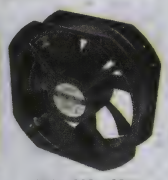
ADDA



80 x 80 x 38 mm

120 x 120 x 38 mm

180 x 180 x 65 mm



280 x 280 x 89mm

- Aluminum frame
- Plastic impeller
- Temp. rating: -10°C to +70°C
- Lead wire connection **-W** suffix or **-T** indicates terminal

Order fan accessories separately; *go online or call.*

Mfg. Part No.	Dim. (mm) H x W x D	Bearing Type	Voltage (VAC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
● AA8381MS-AT	80 x 80 x 38	Sleeve	115	6.5	24	26.2	58P0744	16.15
● AA8381HB-AT	80 x 80 x 38	Ball	115	7.8	29.6	31.6	58P0741	17.82
● AA8381HS-AT	80 x 80 x 38	Sleeve	115	7.8	29.6	31.6	58P0742	16.36
● AA8382HB-AT	80 x 80 x 38	Ball	230	6.5	29.6	31.6	58P0745	17.04
● AA8382HS-AT	80 x 80 x 38	Sleeve	230	6.5	29.6	31.6	58P0746	15.45
● AA8382MB-AT	80 x 80 x 38	Ball	230	5.7	25.1	26.2	58P0747	20.24
● AA8382MS-AT	80 x 80 x 38	Sleeve	230	5.7	25.1	26.2	58P0748	18.35
● AA1281HB-AT	120 x 120 x 38	Ball	115	14	94.5	44.5	58P0728	19.69
● AA1281HB-AW	120 x 120 x 38	Ball	115	16.5	99	47	58P0729	23.86
● AA1282MB-AT	120 x 120 x 38	Ball	230	16	87	43	45T0154	22.57
● AA1282UB-AW	120 x 120 x 38	Ball	230	25.3	107	48.1	41T3646	24.80
● AA1281HS-AT	120 x 120 x 38	Sleeve	115	14	92	43	58P0730	18.09
● AA1281HS-AW	120 x 120 x 38	Sleeve	115	19.6	102.5	47	58P0731	17.30
● AA1281LB-AT	120 x 120 x 38	Ball	115	10.8	68	37.9	58P0732	21.81
● AA1281LB-AW	120 x 120 x 38	Ball	115	10.8	68	37.9	58P0733	21.81
● AA1281LS-AT	120 x 120 x 38	Sleeve	115	10.8	68	37.9	58P0734	20.55
● AA1281LS-AW	120 x 120 x 38	Sleeve	115	10.8	68	37.9	58P0735	20.55
● AA1281MB-AT	120 x 120 x 38	Ball	115	16	87	43	58P0736	19.20
● AA1281MB-AW	120 x 120 x 38	Ball	115	16	87	43	58P0737	21.81
● AA1281MS-AT	120 x 120 x 38	Sleeve	115	16	87	43	58P0738	20.55
● AA1281MS-AW	120 x 120 x 38	Sleeve	115	16	87	43	58P0739	20.55
● AA1282HB-AT	120 x 120 x 38	Ball	230	23.5	94.5	44.5	58P0740	20.13
● AA1281UB-AW	120 x 120 x 38	Ball	115	27.6	107	48.1	41T3645	23.68
● AA1282LB-AT	120 x 120 x 38	Ball	230	6.6	68	37.9	45T0153	22.57
● AK1781HB-AT	176 x 176 x 89	Ball	115	52	380	72	58P0929	69.70
● AK1782HB-AT	176 x 176 x 89	Ball	230	49.5	380	70	58P0930	69.70
● AK1862HB-AW	180 x 180 x 65	Ball	230	51.1	410	72	58P0934	76.67
● AK1861HB-AT	180 x 180 x 65	Ball	115	55.2	410	72	58P0931	74.36
● AK1861HB-AW	180 x 180 x 65	Ball	115	55.2	410	72	58P0932	74.36
● AK1862HB-AT	180 x 180 x 65	Ball	240	51.1	382	72	58P0933	85.00
● AK2881MB	280 x 280 x 89	Ball	115	60	740	62	41T3669	209.45
● AK2881HB-AW	280 x 280 x 89	Ball	115	300	1200	78	41T3668	217.93
● AK2882MB	280 x 280 x 89	Ball	230	65	739	62	41T3671	209.45
● AK2882HB	280 x 280 x 89	Ball	230	290	1220	80	41T3670	209.45

(147943)

ROUND AC FANS

RoHS Compliant Available

ADDA

- Ball bearings
- Motor structure: capacitior-run induction motor
- Motor protection: thermal protect.
- Lead wire connection **-W** suffix or **-T** indicates terminal
- Aluminum alloy frame and plastic impeller
- Temp. rating: -10°C to +70°C

Order fan accessories separately; *go online or call.*

172 x 150 x 51 mm

254 x 89 mm

SEMI-ROUND FANS

Mfg. Part No.	Dimensions (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
● AA1751HB-AW	172 x 150 x 51	115	36.7	210	53	41T3647	44.66
● AA1752HB-AW	172 x 150 x 51	230	37.6	196	52.3	52R7858	53.47
● AK1751HB-AT	172 x 150 x 51	115	26.5	210	65	58P0921	57.58
● AK1751HB-AW	172 x 150 x 51	115	26.5	180	63	58P0922	57.57
● AK1751MB-AT	172 x 150 x 51	115	20.7	155	56.6	58P0923	54.85
● AK1751MB-AW	172 x 150 x 51	115	20.7	155	56.6	58P0924	54.85

➤CONTINUED➤

ROUND AC FANS (CONT.)

Mfg. Part No.	Dimensions (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
● AK1752HB-AT	172 x 150 x 51	230	27.6	210	65	58P0925	57.58
● AK1752HB-AW	172 x 150 x 51	230	27.6	180	63	58P0926	54.85
● AK1752MB-AW	172 x 150 x 51	230	20.7	155	56.6	58P0928	54.85

ROUND FANS

Mfg. Part No.	Dimensions (mm) Dia. x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
● AK2581HB-AT	254 x 89	115	67.8	630	62	58P0935	79.65
● AK2581HB-AW	254 x 89	115	67.8	630	62	58P0936	85.00
● AK2581MB-AT	254 x 89	115	26.5	450	55.6	58P0937	73.58
● AK2581MB-AW	254 x 89	115	26.5	530	57	58P0938	85.89
● AK2582HB-AT	254 x 89	230	62.8	630	62	58P0939	83.44
● AK2582HB-AW	254 x 89	230	62.8	680	66	58P0940	84.11
● AK2582MB-AT	254 x 89	230	28.8	530	57	58P0941	80.99
● AK2582MB-AW	254 x 89	230	28.8	530	57	58P0942	80.99

*Motor structure: shaded pole induction motor
†Motor protection: impedence protect.
(196191)

AC TUBEAXIAL FANS - SQUARE

RoHS Compliant Available

multicomp

80 x 80 x 25mm

92 x 92 x 25 mm

80 x 80 x 38 mm

120 x 120 x 38mm

- Black die-cast aluminum housing
- Thermoplastic impeller, rated UL94V-0
- Reliable shaded-pole motor
- All models are 50/60Hz

Order Multicomp fan accessories separately; *go online or call.*

LEAD WIRES

Mfg. Part No.	Dimensions (mm) H x W x D	Bearing Type	Voltage (VAC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-24
● MC21680	80 x 80 x 25	Vapo	115	3.6	41	33	14M9036	21.28
● MC32924	80 x 80 x 25	Sleeve	115	11	21	33	71P8702	15.77
● MC19701	80 x 80 x 25	Ball	115	11	22	34.5	70K8584	17.72
● MC21681	80 x 80 x 25	Vapo	240	3.6	41	33	14M9037	21.14
● MC19702	80 x 80 x 25	Ball	240	13.5	22	34.5	70K8585	17.72
● MC19700	80 x 80 x 38	Sleeve	115	12	30	35	70K8583	13.49
● MC23302	80 x 80 x 38	Ball	115	12	31	36.5	75M2190	17.72
● MC23303	80 x 80 x 38	Ball	240	16	31	36.5	75M2191	18.15
● MC21682	92 x 92 x 25	Vapo	115	3.6	54	32	14M9038	20.64
● MC19673	92 x 92 x 25	Sleeve	115	12	36	39	70K8556	14.79
● MC21683	92 x 92 x 25	Vapo	240	4.6	54	32	14M9039	20.64
● MC19674	92 x 92 x 25	Sleeve	240	14	36	39	70K8557	15.14
● MC19698	120 x 120 x 25	Ball	115	18	80	48	70K8581	19.34
● MC19699	120 x 120 x 25	Ball	240	19	80	48	70K8582	19.34
● MC19696	120 x 120 x 38	Sleeve	115	11	76	38	70K8579	15.12
● MC19694	120 x 120 x 38	Sleeve	115	18	105	48	70K8577	14.14
● MC32927	120 x 120 x 38	Sleeve	115	20	115	49	71P8705	15.48
● MC32926	120 x 120 x 38	Ball	115	20	117	50	71P8704	18.85
● MC19697	120 x 120 x 38	Sleeve	240	10	63	32	70K8580	15.97
● MC19695	120 x 120 x 38	Sleeve	240	19	105	48	70K8578	15.12
● MC24617	176 x 176 x 89	Vapo	115	30	335	66	03P9715	110.76
● MC25029	176 x 176 x 89	Vapo	240	30	335	66	31P7359	105.79

TERMINAL CONNECTION

● MC32925	92 x 92 x 25	Ball	115	6	28	33	71P8703	17.72
● MC23723	92 x 92 x 25	Ball	115	6	28	35	01N3747	17.72
● MC23722	92 x 92 x 25	Ball	115	9	34.5	38	01N3746	17.72
● MC19671	92 x 92 x 25	Sleeve	115	12	36	39	70K8554	13.49
● MC19687	92 x 92 x 25	Ball	115	12	37	40	70K8570	17.72
● MC23724	92 x 92 x 25	Ball	230	10	34.5	39	01N3748	18.15
● MC19672	92 x 92 x 25	Sleeve	240	14	36	39	70K8555	14.79
● MC23726	119 x 119 x 38	Ball	115	7.5	60	31	01N3750	18.85
● MC23725	119 x 119 x 38	Ball	115	9.8	80	36	01N3749	19.53
● MC23721	119 x 119 x 38	Ball	230	9	70	70	01N3745	18.85
● MC23327	120 x 120 x 25	Ball	115	11.5	54	40	75M2195	19.80
● MC19675	120 x 120 x 25	Ball	115	18	80	48	70K8558	19.34
● MC23329	120 x 120 x 25	Ball	240	13	54	40	75M2197	19.34
● MC19676	120 x 120 x 25	Ball	240	19	80	48	70K8559	19.34

➤CONTINUED➤

AC TUBEAXIAL FANS - SQUARE (CONT.)

TERMINAL CONNECTION

Mfg. Part No.	Dimensions (mm) H x W x D	Bearing Type	Voltage (VAC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-24
MC19677	119 x 119 x 38	Sleeve	115	11	76	38	70K8560	14.14
MC19679	120 x 120 x 38	Sleeve	115	18	105	48	70K8562	14.59
MC19680	120 x 120 x38	Ball	115	19	107	50	70K8563	18.45
MC19684	120 x 120 x 38	Sleeve	115	20	115	49	70K8567	14.59
MC19683	120 x 120 x 38	Ball	115	20	117	50	70K8566	17.88
MC19678	120 x 120 x 38	Sleeve	240	10	63	32	70K8561	15.48
MC19681	120 x 120 x 38	Sleeve	240	19	105	48	70K8564	15.12
MC19682	119 x 119 x 38.5	Ball	240	19	107	50	70K8565	17.72
MC19685	120 x 120 x 38	Sleeve	240	21	115	49	70K8568	15.60
MC19686	120 x 120 x 38	Ball	240	21	117	50	70K8569	19.46
MC25027	176 x 176 x 89	Vapo	115	30	335	66	31P7357	105.79
MC25028	176 x 176 x 89	Vapo	240	30	335	66	31P7358	105.79

(17526)

AC TUBEAXIAL FANS - ROUND

RoHS Compliant Available

multicomp

- Ball bearings
- Black die-cast aluminum housing
- Thermoplastic impeller, rated UL94V-0
- Reliable shaded-pole motor
- All models are 50/60Hz

Order Multicomp fan accessories separately; *go online or call.*

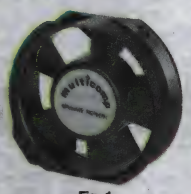


Fig. 1

Fig. 2

LEAD WIRES

Mfg. Part No.	Fig.	Dimensions (mm) Dia. x W x D	Voltage (VAC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-14
MC21670	1	172 x 151 x 51	115	27	239	58	14M9026	45.70
MC21672	1	171 x 151 x 51	230	26	239	58	14M9028	45.70
MC21674	2	171 x 51	115	27	239	58	14M9030	45.70
MC21676	2	171 x 51	230	26	239	58	14M9032	45.70
TERMINAL CONNECTION								
MC21671	1	172 x 151 x 51	115	27	239	58	14M9027	45.57
MC21673	1	171 x 151 x 51	230	26	239	58	14M9029	45.70
MC21675	2	171 x 51	115	27	239	58	14M9031	45.57
MC21677	2	171 x 51	230	26	239	58	14M9033	45.70
MC21678	2	254 x 89	115	23	665	52	14M9034	96.72
MC21679	2	254 x 89	230	72	665	52	14M9035	101.56
MC23266	2	254 x 89	240	60	770	60	75M2155	101.89

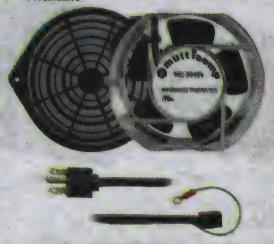
(105922)

FAN KITS

RoHS Compliant Available

multicomp

MC36429



MC36439

- Rated voltage: 115 or 220 VAC 50/60 Hz
- Fans: UL (for Canada and US) recognized
- Media: polyurethane foam UL 94HF-1 rated
- Material: plastic UL-94-0 rated for UV

Fan kits include: fan, wire guard or fan filter and cord. Plug: NEMA1-15P or NEMA6-15P, #8 ring terminal. Cord length: 72"

SQUARE FAN, WIRE GUARD AND CORD, 115VAC

Mfg. Part No.	Dim. (mm) H x W x D	Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-49	50-99	100-249
MC36422	80 x 80 x 38	31	27	40T4132	21.42	19.47	18.11
MC36424	120 x 120 x 38	80	34	40T4134	24.28	22.07	20.52
MC36426	120 x 120 x 38	103	39	40T4136	24.00	21.81	20.29
SQUARE FAN, FILTER AND CORD, 115VAC							
MC36423	80 x 80 x 38	31	27	40T4133	22.97	20.88	19.42
MC36425	120 x 120 x 38	80	34	40T4135	25.33	23.02	21.41
MC36427	120 x 120 x 38	103	39	40T4137	25.33	23.02	21.41

CONTINUED

FAN KITS (CONT.)

SEMI ROUND FAN, WIRE GUARD AND CORD, 115VAC

Mfg. Part No.	Dim. (mm) H x W x D	Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-49	50-99	100-249
MC36429	172 x 150 x 51	240	48	40T4139	37.75	34.31	31.91
SEMI ROUND FAN, FILTER AND CORD, 115VAC							
MC36430	172 x 150 x 51	240	48	40T4140	42.19	38.36	35.59
ROUND FAN, WIRE GUARD AND CORD, 115VAC							
MC36428	254 x 89	600	49	40T4138	115.88	109.92	104.43
SQUARE FAN, WIRE GUARD AND CORD, 220VAC							
MC36431	80 x 80 x 38	31	27	40T4141	28.98	26.34	24.50
MC36433	120 x 120 x 38	80	34	40T4143	31.00	28.17	26.20
MC36435	120 x 120 x 38	103	39	40T4145	31.00	28.17	26.20
SQUARE FAN, FILTER AND CORD, 220VAC							
MC36432	80 x 80 x 38	31	27	40T4142	29.99	27.26	25.35
MC36434	120 x 120 x 38	80	34	40T4144	32.01	29.09	27.06
MC36436	120 x 120 x 38	103	39	40T4146	32.01	29.09	27.06
SEMI ROUND FAN, WIRE GUARD AND CORD, 220VAC							
MC36438	172 x 150 x 51	240	48	40T4148	45.31	41.18	38.30
SEMI ROUND FAN, FILTER AND CORD, 220VAC							
MC36439	172 x 150 x 51	240	48	40T4149	46.62	42.37	39.41
ROUND FAN, WIRE GUARD AND CORD, 220VAC							

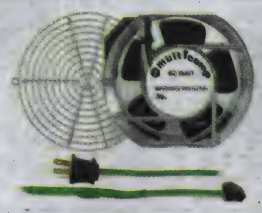
Mfg. Part No.	Dim. (mm) Dia. x D	Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-2	3-9	10-24
MC36437	254 x 89	600	49	40T4147	123.47	117.12	111.27

(195445)

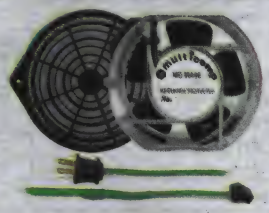
THERMOSTATICALLY CONTROLLED FAN KITS

RoHS Compliant Available

multicomp



MC36447



MC36448

- Rated voltage: 115 VAC 50/60 Hz
- Fans: UL (for Canada and US) recognized
- Media: polyurethane foam UL 94HF-1 rated
- Material: plastic UL-94-0 rated for UV
- Thermostat: fan automatically turns on at 30°C (+/- 3°C), off at 24°C (+/- 3°C)

Fan kits include: fan, wire guard or fan filter and thermostatically controlled fan cord. Cord length: 72"

SQUARE FAN, WIRE GUARD AND CORD, 115VAC

Mfg. Part No.	Dim. (mm) H x W x D	Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-49	50-99	100-249
MC36440	80 x 80 x 38	31	27	40T4150	33.68	30.60	28.47
MC36442	80 x 80 x 38	80	34	40T4152	36.61	33.26	30.94
MC36444	120 x 120 x 38	103	39	40T4154	35.54	32.29	30.04
SQUARE FAN, FILTER AND CORD, 115VAC							
MC36441	80 x 80 x 38	31	27	40T4151	35.54	32.29	30.03
MC36443	120 x 120 x 38	80	34	40T4153	38.13	34.65	32.23
MC36445	120 x 120 x 38	103	39	40T4155	37.76	34.31	31.92
SEMI ROUND FAN, WIRE GUARD AND CORD, 115VAC							
MC36447	172 x 150 x 51	240	48	40T4157	47.37	43.05	40.05
SEMI ROUND FAN, FILTER AND CORD, 115VAC							
MC36448	172 x 150 x 51	240	48	40T4158	47.58	43.24	40.22
ROUND FAN, WIRE GUARD AND CORD, 115VAC							

Mfg. Part No.	Dim. (mm) Dia. x D	Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-2	3-9	10-24
MC36446	254 x 89	600	49	40T4156	109.25	103.64	98.45

(195441)

BLOWERS & IMPELLERS

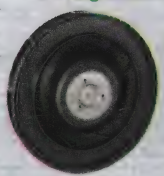
BACKWARD CURVED MOTORIZED IMPELLERS AND INLET RINGS

RoHS Compliant Available

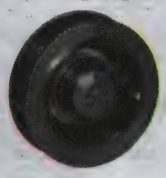
ebmpapst

- Plastic impeller
- 50/60Hz
- Horizontal or vertical mounting
- Ball bearings
- Lead wire connection

Impeller does not require a scroll housing, although an inlet ring is recommended; *order separately below.*



100mm



190mm

AC MOTORIZED IMPELLERS

Mfg. Part No.	Voltage (VAC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Dia. in (mm)	Stock No.	Price Each 1-4
● R2E133-BH72-13	115	30	203	66	5.24 (133)	86K9781	116.43
● R2E175-A079-12	115	75	320	67	6.89 (175)	86K9782	133.87
● R2E190-A050-16	115	75	365	64	7.48 (190)	86K9783	94.94
● R2E220AA4498	115	100	530	74	7.48 (220)	91B5571	118.48
● R2E220-AA44-23	115	100	530	74	8.66 (220)	86K9786	108.65
● R2E225-BE51-09	115	185	756	75	8.94 (225)	86K9788	199.59
● R2E225-BE51-13	115	185	756	75	8.94 (225)	26H0786	232.20
● R4E310-AE13-16	115	155	1265	68	12.52 (310)	86K9789	290.86
● R2E133-BH66-05	230	27	203	67	5.24 (133)	88K1162	141.38
● R2S133-AE17-05	230	34	153	55	5.24 (133)	97K9324	85.68
● R2E175-AC77-18	230	70	320	70	6.89 (175)	10R6566	152.18
R2E180-CB28-01	230	75	291.35	67	7.08 (180)	18J0532	141.81
● R2E190-A026-05	230	58	335	62	6.69 (170)	13M2854	124.65
● R2E190-A026-25	230	75	365	64	7.48 (190)	86K9784	94.94
● R2E220-AA40-23	230	100	530	74	8.66 (220)	86K9785	108.76
● R2E220-AA40-71	230	100	530	74	7.48 (220)	67C0652	132.74
● R2E225-BE47-09	230	185	756	75	8.94 (225)	86K9787	199.59
● R2E140-AS77-05	230	110	215	...	5.5 (140)	79K4125	146.97
R4E310-AE05-17	230	...	1260	71	12.52 (310)	67H5022	287.34
R2E175-AC91-05	400	70	245	...	6.89 (175)	34C9708	180.97

DC MOTORIZED IMPELLERS

Mfg. Part No.	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Dia. in (mm)	Stock No.	Price Each 1-4
REF100-11/12/2	12	7.5	50.6	6.3	3.94 (100)	94H7049	69.44
● REF100-11/14	24	7.5	50.6	66	3.94 (100)	67H4999	65.19
● R1G175-AB63-02	24	34	330	65	6.89 (175)	86K9778	206.79
● R1G220-AB35-52	24	106	621	76	8.66 (220)	17C6805	330.77

INLET RINGS

Mfg. Part No.	For Impeller Series	Stock No.	Price Each 1-9	Price Each 10-49
● 9566-2-4013	R1G133, R2E133	86K9948	8.16	7.74
● 9588-2-4013	R2G175, R2E175, R2E190, R4S190	86K9949	12.76	12.10
● 9597-2-4013	R1G225, R4E225, R2E225	93K7666	20.04	16.70
● 9609-2-4013	R1G220, R2E220	88K1506	21.23	20.13
● 96358-2-4013	R1G225, R2E225	01N4566	21.35	20.24

(9370)

AC CENTRIFUGAL BLOWERS

RoHS Compliant Available

ebmpapst

- Housing and impeller: galvanised sheet steel
- Rotor: partially cast in aluminium
- Ball bearings
- May be mounted in any position
- **Mfg. part no. D2E146-AP47-75** IP44 rated

AC dual inlet, forward curved centrifugal blowers offer the advantage of matched motor and impeller in a compact space saving design. Integrated external-rotor motor is mounted on one side of the housing using a bracket. All units supplied pre-wired into terminal block including motor start capacitors and outlet flange for easy mounting.

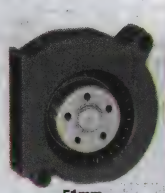
Mfg. Part No.	Dimensions (mm) H x W x D	Voltage (VAC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-4
● G2E120-AR54-43	190 x 174 x 115	115	105	152	62	47M1843	164.83
● D2E133-AM47-A7	180 x 171.5 x 254	230	200	300	56	57K9670	204.53
● D2E133-AM67-64	180 x 171.5 x 254	115	200	300	56	92B8033	261.71
● D2E146-AP47-75	219 x 206 x 270	230	330	570.92	68	96K8996	407.96
● D2E133-AM47-01	180 x 170 x 215	230	210	332.559	...	15B4808	301.57

(202120)

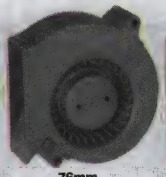
DC FLATPAKS™

RoHS Compliant Available

ebmpapst



51mm

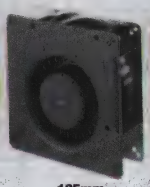


76mm

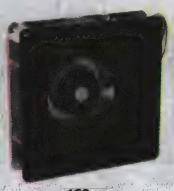
93.5 x 97mm

121mm

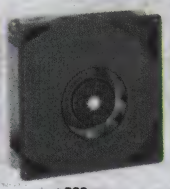
127mm



135mm



180mm



200mm

- Lead wire connection
- Ball bearings
- Shallow, compact design
- Excellent for spot cooling
- Plastic housing and impeller
- Max. temp. rating: +70°C (**RL48, RL65, RLF35, RG160**)
- Max. temp. rating: +75°C (**RL90, RLF100, RG90, RG125**)

DC radial blowers with electronically commutated external rotor motors and fully integrated commutation electronics. Electronic protection against reverse polarity and overloading. Blocking and overloading by PTC-resistor; partially impedance protected (**RL90DC series, RG90DC series,** and **RG160DC series**). Clockwise rotation viewed from rotor. Air enters through the center of impeller and exhausts through in housing. Mount in any position. Can be used for either pressurizing or evacuating. Electrical connection: 2 leads AWG 22 TR 64. Stripped and tinned ends.

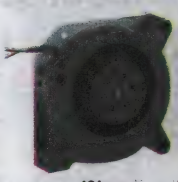
Mfg. Part No.	Dimensions (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-24
● RLF35-8/12N	51 x 51 x 15	12	3.5	5.7	...	84M9837	46.28
● RLF35-8/14N	51 x 51 x 15	24	4.3	5.7	...	84M9838	45.58
● RL48-19/12	76 x 76 x 27	12	5	16.5	51	01M8618	35.91
● RL-48-19/14	76 x 76 x 27	24	5	16.5	51	86K9766	35.91
● RL65-21/12/2	93.5 x 97 x 33	12	15.6	39	62	86K9770	55.65
● RL65-21/14H	93.5 x 97 x 33	24	18	35.8	69	06M0218	56.09
● RL90-18/14N*	121 x 121 x 37	24	5	24	58	86K9773	83.32
● RLF100-11/12	127 x 127 x 25	12	8	37.7	60	86K9767	77.51
● RG90-18/14N*	135 x 135 x 38	24	5.5	32	55	86K9763	73.10
● RG125-19/14N	180 x 180 x 40	24	5	52	58	15B4967	83.32
● RG160-28/12N*	220 x 220 x 56	12	21	123	66	15B4971	145.56
● RG160-28/14N*	220 x 220 x 56	24	20	123	66	86K9758	129.94
● RG160-28/14NTD*	220 x 220 x 56	24	64	181	...	53M9802	239.90

*Metal housing
(66382)

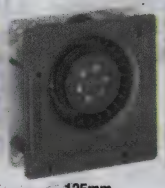
AC FLATPAKS™

RoHS Compliant Available

ebmpapst

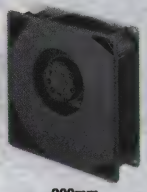


121mm



135mm

180mm



200mm

- Lead wire connection
- Shallow, compact design
- Suitable for spot cooling

AC radial blowers with external rotor shaded-pole motors. Impedance protected against overloading. Plastic housing on metal mounting plate and plastic impeller. Clockwise rotation viewed from rotor. Air enters through center of impeller and exhausts through port in housing. Mount in any position. Can be used for either pressurizing or evacuating. **RL90 series** has 22 AWG, TR 32 leads. **RG90** and **RG125 series** has 22 AWG leads. **RL160 series** has 18 AWG leads. Maximum temperature rating ranges from +50°C to +80°C *(please refer to datasheets for detailed breakdown).*

Mfg. Part No.	Dim. (mm) H x W x D	Bearing Type	Voltage (VAC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
● RL90-18/00	121 x 121 x 37	Sleeve	115	20	25	60	86K9771	56.68
● RL90-18/06	121 x 121 x 37	Ball	115	19.5	25	60	62R9348	77.40
● RL90-18/50	121 x 121 x 37	Sleeve	230	20	23.5	60	86K9774	64.64
● RG90-18/06	135 x 135 x 38	Ball	115	22	28	60	86K9761	65.50
● RG90-18/56	135 x 135 x 38	Ball	230	22	32	60	86K9765	62.89
● RG125-19/06	180 x 180 x 40	Ball	115	19	55	60	86K9753	79.67
● RG125-19/56	180 x 180 x 40	Ball	230	20	51	60	86K9756	72.14
● RG160-28/06S	200 x 220 x 56	Ball	115	50	131	69	86K9757	137.93
● RG160-28/56S	220 x 220 x 56	Ball	230	47	119	69	86K9760	133.41

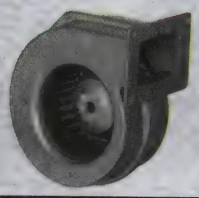
(9268)

CENTRIFUGAL BLOWERS

RoHS Compliant Available

ebmpapst

- Lead wire connection
- Ball bearings
- Metal housing
- Steel impeller
- Clockwise rotation as seen from suction side
- Max. temp. rating: +65°C (G2E185), +60°C (G2E120), +40°C (G2E140)



Single inlet, forward curved centrifugal blowers. Integrated external-rotor motor is mounted on one side of the housing using a bracket.

AC CENTRIFUGAL

Mfg. Part No.	Dimensions (mm) H x W x D	Voltage	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-4
G2E120-AR54-43	190 x 174 x 115	115VAC	105	152	62	47M1843	164.83
G2E140-AC13-42	261 x 226 x 130	115VAC	200	251	67	47M1844	275.50
DC CENTRIFUGAL							
G2G085-AB04-10	127 x 117 x 76	12VDC	10	47	52	20C8019	202.95

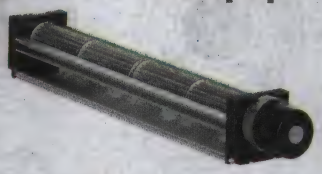
(90325)

DC CROSSFLOW BLOWERS

RoHS Compliant Available

ebmpapst

- ∅ 30mm impeller
- Lead wire connection
- Ball bearings
- Aluminum fan propeller and air duct housing
- Plastic housing ends
- Rotational direction clockwise looking at rotor
- Air exhaust through housing port
- Max. temp. rating: +60°C



DC blowers with electronically commutated external rotor motor. Fully integrated communication electronics with electronic protection against reverse polarity, blocking and overloading by PTC resistor; partially impedance protected.

Mfg. Part No.	Dimensions (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-24
QG030-148/12	47.5 x 148 x 50	12	6.2	44	49	53M6367	96.82
QG030-198/12	47.5 x 258 x 50	12	8	59	51	17C7341	95.72
QG030-303/12	47.5 x 303 x 50	12	8.7	82	51	53M6368	111.04
QG030-198/14	47.5 x 201 x 50	24	8	58.9	51	91B4358	92.68

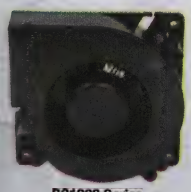
(90323)

DC BRUSHLESS BLOWERS (TORNADO SERIES)

RoHS Compliant Available

NMB™ Minebea

BG0703 Series



BG1203 Series

TORNADO SERIES

- Ball bearings
- Lead wire connection
- Plastic housing and impeller
- Operate efficiently in applications where pressure and impedance are major concerns
- Temp. rating: -10°C to +60°C (**BM4515, BM5125, BG0903, BG1203**), -10°C to +70°C (**BM5115, BG0702, BG0703**)

Mfg. Part No.	Dim. (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
BM4515-04W-B50-L00+	45 x 44 x 15	12	2.28	3.5	43	68K1095	13.44
BM4515-04W-B30-L00	45 x 44 x 33	12	1.08	2.6	35	96K7005	16.37
BM5115-04W-B50-L00	51 x 51 x 15	12	2.16	3.5	42	68K1096	13.44
BM5125-04W-B50-L00*	51 x 51 x 25	12	2.88	6.7	41	69K1649	15.14
BG0702-B045-000-00*†	76 x 76 x 25	12	3	9.5	43	43J2355	18.61
BG0703-B044-000-00	75 x 75 x 30	12	3.48	10.6	38.5	68K1090	17.84
BG0703-B054-000-00	75 x 75 x 30	24	3.6	10.6	38.5	68K1091	17.84
BG0903-B044-000-00†	93.5 x 97 x 33	12	12.4	28.6	54.5	68K1092	25.06
BG0903-B054-000-00†	93.5 x 97 x 33	24	11.8	28.6	54.5	68K1093	25.06
BG0903-B042-000-00	93.5 x 97 x 33	12	4.8	20.5	47.5	11J1992	25.56
BG0903-B047-000-00+†	93.5 x 97 x 33	12	19.2	38.1	...	28H8704	25.56
BG0903-B047-00S-00+†‡	93.5 x 97 x 33	12	19.2	38.1	...	31M8400	25.76
BG1203-B044-000-00	120 x 120 x 32	12	7.8	28.2	52	68K1094	27.36

➤ CONTINUED ➤

DC BRUSHLESS BLOWERS (TORNADO SERIES) (CONT.)

Mfg. Part No.	Dim. (mm) H x W x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
BG1203-B054-000-00	120 x 120 x 32	24	7.2	28.2	52	92C3773	27.36
BG1203-B055-000-00	120 x 120 x 32	24	11.52	33.2	54	61H7678	27.91

*Not UL recognized; +Not VDE approved; †Not CE certified ‡Sleeve bearing
(68235)

DC MOTORIZED IMPELLER, HIGH POWER, F SERIES

RoHS Compliant Available

NMB™ Minebea

F175 F225 F250 F280

- Motor protection: locked rotor, reverse polarity
- Insulation resistance: 10Mohms min measured with 500V DC between all leads shorted together and case
- Dielectric withstand voltage: AC 700V 1 min.
- Allowable ambient temperature range: -30°C ~ +70°C (Operating)
- Dual NMB ball bearings
- Low noise

F series high power cooling fans are designed with a new high efficiency 3 phase motor, NMB developed magnet materials, a microcontroller based drive for greater flexibility and a wide range of voltages, these new series offer high efficiency, high performance and total cooling solutions without compromise.

Mfg. Part No.	Dimensions (mm) Dia. x Depth	Rated Voltage (V)	Power (W)	Max. Air Flow (CFM)	Noise (dB)	Stock No.	Price Each 1-9
F175A1-062-D0750	175 x 69	48	117.6	551	78	44W6152	322.92
F175A3-062-D0550	175 x 69	24	92.4	505	77	44W6153	322.92
F225A2-092-D0730	225 x 99	48	201.6	763	79	44W6154	379.08
F2254A-092-D0530	225 x 99	24	163.2	763	79	44W6155	379.08
F250A3-072-D0730	250 x 99	48	163.2	862	81	44W6156	398.74
F250A5-072-D0520	250 x 99	24	145.2	806	78	44W6157	408.31
F280A1-113-D0720	280 x 129	48	225.6	1304	81	44W6158	418.40
F280A3-113-D0520	280 x 129	24	175.2	1166	66	44W6159	418.40

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DC BLOWERS

RoHS Compliant Available

SANYO DENKI

TÜV Rheinland

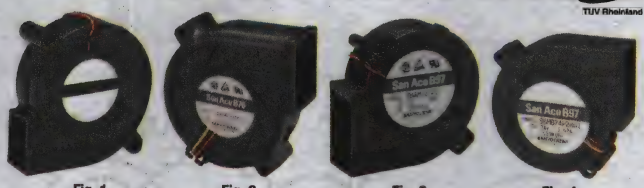


Fig. 1 Fig. 2 Fig. 3 Fig. 4

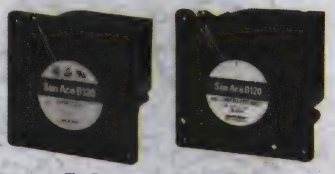


Fig. 5 Fig. 6

- Ball bearing
- Lead wire connection
- Plastic frame and impeller
- Temp. rating: -10°C to +60°C, -10°C to +70°C (**9BMBXXXXXXX**)

Mfg. Part No.	Fig.	Dimensions (mm) H x W x D	Volt. (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
109BC12GC7-1	1	52 x 52 x 15	12	2.3	4.41	43	85R9592	22.79
109BM12GC2-1	1	97 x 97 x 33	12	...	26.84	52	85R9642	26.41
109BD12HC2	2	76 x 76 x 30	12	4.44	12.71	41.5	04R7257	31.46
9BAM12GC2	3	95 x 97 x 33	12	22.2	48.37	62	15P4450	23.24
9BAM12P2J05	3	95 x 97 x 33	12	...	49.43	64	04R7262	26.80
9BMB12P2F01	4	95 x 97.1 x 33	12	10.8	36.7	56	06W4761	25.94
9BMB12P2K01	4	95 x 97 x 33	12	40.8	56.9	66	04R7263	29.76
9BMB24G201	4	95 x 97.1 x 33	24	19.9	47.3	61	54T9857	24.59
9BMB24P2G01	4	95 x 97 x 33	24	24	47.7	61	40T8526	26.72
9BMB24P2K01	4	95 x 97 x 33	24	38.88	56.9	66	04R7264	29.76

➤ CONTINUED ➤

DC BLOWERS (CONT.)

Mfg. Part No.	Fig.	Dimensions (mm) H x W x D	Volt. (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
● 9BMB12G201	4	95 x 97.1 x 33	12	21.6	47.3	61	06W4760	24.59
● 9BMB12S201	4	95 x 97.1 x 33	12	16.8	43.1	59	06W4762	24.44
● 9BMB24S201	4	95 x 97.1 x 33	24	16.8	43.1	59	06W4763	24.44
● 109BF12HC2	5	120 x 120 x 32	12	7.2	27.54	52	04R7258	30.56
● 9BFB12P2H003	6	120 x 120 x 32	12	27.6	56.5	62	19T8929	65.93
● 9BFB24P2H003	6	120 x 120 x 32	24	26.4	56.5	62	19T8930	73.51

(147141)

HIGH-PERFORMANCE DC IMPELLERS

RoHS Compliant Available

SANYO DENKI

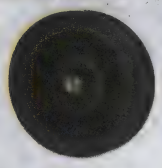


Fig. 1

Fig. 2

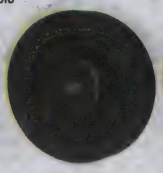


Fig. 3

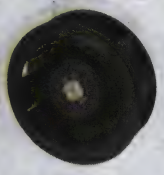


Fig. 4

- Aluminum frame, plastic impeller (flammability: UL94V-1)
- Large air flow and high static pressure
- Energy saving and low noise
- Current blocking function and reverse polarity protection
- Dielectric strength: 50/60 Hz, 500VAC, 1 min. (between lead conductor and frame)
- Temp. range: -10° C to 70° C

Fig. 5

STANDARD IMPELLERS

Mfg. Part No.	Fig.	Dim. (mm) Dia. x D	Voltage (VDC)	Power (W)	Max. Airflow (cfm)	Noise (dBA)	Stock No.	Price Each 1-9
● 9TJ24P0H61	2	133 x 91	24	28.8	226	61	17W5804	86.39
● 9TN24P1H01	3	150 x 35	24	14.9	135	59	52R8003	60.68
● 9TG24P0G01	3	175 x 69	24	93.6	494.7	73	20T0223	111.58
● 9TG48P0G01	4	175 x 69	48	93.6	494.7	73	15R7921	112.97
SPLASH PROOF IMPELLERS (IP54)								
● 9W1TM48P4G01	1	100 x 25	48	17.28	71.7	65	73R4302	94.70
● 9W1TJ48P0H61	2	133 x 91	48	26.4	225	61	73R4301	112.41
● 9W1TN48P1H01	3	150 x 35	48	15.4	135	59	73R4303	102.49
● 9W1TG48P0H61	4	175 x 69	48	31.2	318	64	73R4300	121.79

INLET NOZZLES

Mfg. Part No.	Fig.	For Use With	Stock No.	Price Each 1-9	Price Each 10-24
● 109-1081	5	150mm Impellers	52R8001	12.10	11.47
● 109-1073	5	175mm Impellers	15R7917	16.91	16.03

(152527)

WIRE FORM FAN GUARDS

RoHS Compliant Available

multicomp

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6

CONTINUED

WIRE FORM FAN GUARDS (CONT.)

Fig. 7

Fig. 8

Fig. 9

Fig. 10

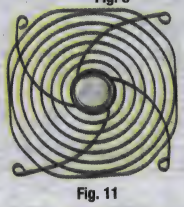


Fig. 11

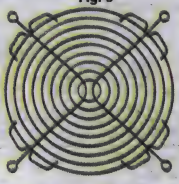


Fig. 12

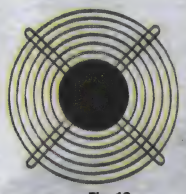


Fig. 13

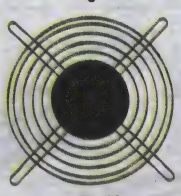


Fig. 14

Fig. 15

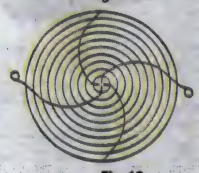


Fig. 16

Fig. 17

Fig. 18

Fig. 19

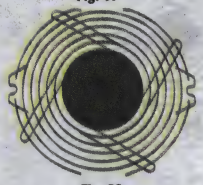


Fig. 20

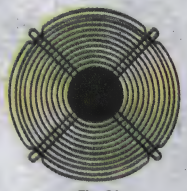


Fig. 21

Fan guards are constructed of C1008 steel and have a bright nickel chrome finish.

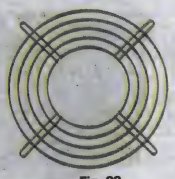


Fig. 22

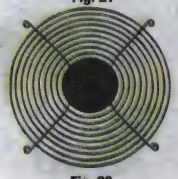


Fig. 23

SQUARE FANS

Mfg. Part No.	Fig.	Dimensions (mm) H x W x D	Fan Size (mm)	Fixing Centers (mm)	Stock No.	Price Each 1-99	Price Each 100-499	Price Each 500-999
● MC32682	1	28 x 28 x 2.5	25 x 25	23.3	56P2958	0.83	0.74	0.67
● MC32683	2	21.8 x 21.8 x 4.8	30 x 30	24	56P2959	0.83	0.74	0.67
● MC32684	2	25.8 x 25.8 x 4.8	35 x 35	29.5	56P2960	1.03	0.93	0.84
● MC32689	2	28.9 x 28.9 x 4.8	40 x 40	32	56P2965	0.89	0.80	0.73
● MC32690	3	42 x 42 x 4.8	50 x 50	42	56P2966	0.97	0.87	0.79
● MC32696	4	53.2 x 53.2 x 4.4	60 x 60	50	56P2972	0.86	0.77	0.70
● MC32704	5	76.5 x 76.5 x 5	80 x 80	71.5	56P2980	1.27	1.14	1.03
● MC32705	5	76.5 x 76.5 x 5.5	80 x 80	71.5	56P2981	0.99	0.89	0.81
● MC32794	5	76.5 x 76.5 x 5.5	80 x 80	71.5	56P2990	1.12	1.00	0.90
● MC32703	6	77.1 x 77.1 x 2.3	80 x 80	101.1	56P2979	1.44	1.30	1.17
● MC32711	7	90 x 90 x 5.5	92 x 92	82.5	56P2987	0.96	0.86	0.78
● MC32712	7	90 x 90 x 5.5	92 x 92	82.5	56P2988	0.91	0.82	0.74
● MC32663	6	109.5 x 109.5 x 4.83	120 x 120	104.8	56P2940	2.06	1.85	1.67
● MC32666	8	115.6 x 115.6 x 3.8	120 x 120	104.8	56P2943	1.27	1.14	1.02
● MC32793	8	115.6 x 115.6 x 5.5	120 x 120	104.8	56P2989	1.61	1.45	1.31
● MC33024	9	115.6 x 115.6 x 5.5	120 x 120	113.3	87P0757	1.96	1.76	1.59
● MC32665	9	115.6 x 115.6 x 5.66	120 x 120	104.8	56P2942	1.27	1.14	1.02
● MC32664	10	115.6 x 115.6 x 7.11	120 x 120	104.8	56P2941	1.78	1.60	1.45
● MC32669	11	117.3 x 117.3 x 5.2	120 x 120	104.8	56P2946	2.37	2.14	1.92
● MC32670	12	124.5 x 124.5 x 7.5	127 x 127	113.3	56P2947	2.64	2.37	2.14

CONTINUED

WIRE FORM FAN GUARDS (CONT.)

Mfg. Part No.	Fig.	Dimensions (mm) H x W x D	Fan Size (mm)	Fixing Centers (mm)	Stock No.	Price Each 1-99	100-499	500-999
MC34229	8	163.6 x 163.4 x 6.4	150 x 150	152.6	32R8497	2.14	1.71	1.57
MC32653	13	167.5 x 167.5 x 5	167.5 x 167.5	167.5	56P2930	2.92	2.62	2.37
MC32654	14	178 x 178 x 5	178 x 178	...	56P2931	3.09	2.77	2.50
MC32655	15	240 x 240 x 8.8	240 x 240	...	56P2932	5.54	4.98	4.50

ROUND FANS

Mfg. Part No.	Fig.	Dimensions (mm) H x D	Fan Size (mm)	Fixing Centers (mm)	Stock No.	Price Each 1-99	100-499	500-999
MC32678	16	143 x 6.35	162	162	56P2954	3.00	2.69	2.43
MC32796	17	153.4 x 6.5	162	162.1	56P2992	2.82	2.53	2.29
MC32681	18	156 x 6.5	162	162.1	56P2957	2.48	2.22	2.00
MC32679	19	158.8 x 6.1	162	161.9	56P2955	4.57	4.10	3.70
MC32680	20	158.8 x 6.1	162	161.9	56P2956	4.57	4.10	3.70
MC32656	21	158.9 x 3.5	162	162	56P2933	3.71	3.33	3.01
MC32671	6	160.48 x 17.8	162	216.4	56P2948	3.85	3.46	3.13
MC32652	22	209.5 x 8.35	254	173.99	56P2929	5.57	5.01	4.53
MC32651	23	222.3 x 6.4	254	174	56P2928	4.49	4.03	3.64

(142212)

PLASTIC FAN GUARDS

RoHS Compliant Available

multicomp

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Black plastic material is UL rated at 94V-0.

Fig. 5

Fig. 6

Fig. 7

SQUARE

Mfg. Part No.	Fig.	Dimensions (mm) H x W x D	Fan Size (mm)	Fixing Centers (mm)	Stock No.	Price Each 1-99	100-499	500-999
MC33018	1	40 x 40 x 6.4	40 x 40	32	87P0753	0.65	0.59	0.52
MC32693	2	60 x 60 x 6.3	60 x 60	50	56P2969	0.83	0.75	0.67
MC32699	4	80 x 80 x 6.4	80 x 80	71.4	56P2975	0.85	0.77	0.69
MC32708	3	92.2 x 92.2 x 6.3	92 x 92	82.5	56P2984	0.95	0.86	0.77
MC32662	5	120 x 120 x 2.5	120 x 120	104.8	56P2939	0.71	0.64	0.57
MC32659	6	120 x 120 x 7	120 x 120	104.8	56P2936	1.01	0.91	0.82

ROUND

Mfg. Part No.	Fig.	Dimensions (mm) H x D	Fan Size (mm)	Fixing Centers (mm)	Stock No.	Price Each 1-99	100-499	500-999
MC33047	7	179.3 x x 7.9	162	162	87P0765	2.01	1.82	1.63

(142210)

PLASTIC FAN GUARD & FILTER ASSEMBLIES

RoHS Compliant Available

multicomp

Fig. 1

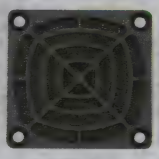


Fig. 2

Fig. 3

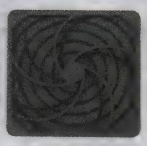


Fig. 4

Assemblies consist of a finger guard, foam filter and retainer. Guards and retainers are manufactured using high impact plastics which all meet UL94-VO flammability requirements. Foam filter is manufactured to meet UL94HF1 smoke generation requirements.

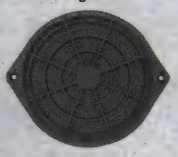


Fig. 5

SQUARE

CONTINUED

PLASTIC FAN GUARD & FILTER ASSEMBLIES (CONT.)

Mfg. Part No.	Fig.	Dimensions (mm) H x W x D	Fan Size (mm)	Efficiency (PPI)	Stock No.	Price Each 1-99	100-499	500-999
MC32687	1	40 x 40 x 6.1	40 x 40	30	56P2963	1.49	1.35	1.22
MC32688	1	40 x 40 x 6.1	40 x 40	45	56P2964	1.45	1.32	1.19
MC32694	2	60 x 60 x 6.6	60 x 60	30	56P2970	1.54	1.40	1.26
MC32695	2	60 x 60 x 6.6	60 x 60	45	56P2971	1.54	1.40	1.26
MC32700	3	80 x 80 x 6.6	80 x 80	30	56P2976	1.83	1.66	1.50
MC32701	3	80 x 80 x 6.6	80 x 80	45	56P2977	1.82	1.65	1.49
MC32709	4	92 x 92 x 10.2	92 x 92	30	56P2985	2.06	1.86	1.68
MC32710	4	92 x 92 x 10.2	92 x 92	45	56P2986	2.09	1.89	1.71
MC32660	4	122 x 122 x 11.2	120 x 120	30	56P2937	2.06	1.86	1.68
MC32661	4	122 x 122 x 11.2	120 x 120	45	56P2938	2.21	1.99	1.80

ROUND

Mfg. Part No.	Fig.	Dimensions (mm) H x D	Fan Size (mm)	Efficiency (PPI)	Stock No.	Price Each 1-99	100-499	500-999
MC32676	5	179.3 x 7.9	162	45	56P2952	3.70	3.35	3.03
MC32677	5	179.3 x 7.9	162	60	56P2953	3.70	3.35	3.03

(142211)

REPLACEMENT FAN FILTERS

RoHS Compliant Available

multicomp

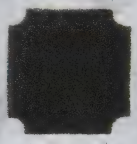


Fig. 1

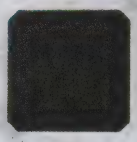


Fig. 2

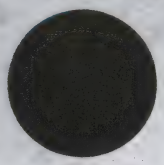


Fig. 3

Filters are constructed of polyurethane foam and meet UL94HF-1 smoke generation requirements.

SQUARE

Mfg. Part No.	Fig.	Dimensions (mm) H x W x D	Fan Size (mm)	Efficiency (PPI)	Stock No.	Price Each 1-99	100-499	500-999
MC32685	1	37.08 x 37.08 x 3.3	40 x 40	30	56P2961	0.87	0.79	0.72
MC32686	1	37.08 x 37.08 x 3.3	40 x 40	45	56P2962	0.87	0.79	0.72
MC32691	1	55.88 x 55.88 x 2.8	60 x 60	30	56P2967	0.96	0.88	0.79
MC32692	1	55.88 x 55.88 x 2.8	60 x 60	45	56P2968	0.95	0.87	0.78
MC32697	2	77.7 x 77.7 x 3.3	80 x 80	30	56P2973	1.22	1.11	1.00
MC32698	2	77.7 x 77.7 x 3.3	80 x 80	45	56P2974	1.18	1.08	0.98
MC32706	2	90.2 x 90.2 x 3.3	92 x 92	30	56P2982	1.70	1.55	1.40
MC32707	2	90.2 x 90.2 x 3.3	92 x 92	45	56P2983	1.75	1.59	1.44
MC32657	2	115.8 x 115.8 x 3.3	120 x 120	30	56P2934	2.02	1.84	1.66
MC32658	2	115.8 x 115.8 x 3.3	120 x 120	45	56P2935	2.07	1.88	1.70

ROUND

Mfg. Part No.	Fig.	Dimensions (mm) H x D	Fan Size (mm)	Efficiency (PPI)	Stock No.	Price Each 1-99	100-499	500-999
MC32673	3	150.9 x 3	162	45	56P2950	3.17	2.89	2.61
MC32674	3	150.9 x 3	162	60	56P2951	3.75	3.41	3.09

(142209)

EMI/RFI FAN FILTERS

RoHS Compliant Available

multicomp

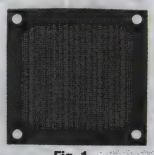


Fig. 1

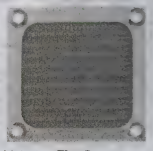


Fig. 2

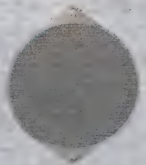


Fig. 3

Tightly woven stainless steel corrugated mesh screen offers shielding from EMI/RFI. Filters may be mounted directly onto the fan or to any other housing. Standard finishes include mill and electro black deposit.

SQUARE

Mfg. Part No.	Fig.	Dimensions (mm) H x W x D	Fan Size (mm)	Stock No.	Price Each 1-24	25-49	50-99
MC32637	1	60 x 60 x 4.3	60 x 60	56P2914	2.58	2.33	2.08
MC32638	2	60 x 60 x 4.3	60 x 60	56P2915	2.45	2.23	1.98
MC32639	1	80 x 80 x 4.5	80 x 80	56P2916	2.92	2.64	2.38
MC33016	2	80 x 80 x 4.5	80 x 80	87P0751	2.85	2.58	2.33
MC32640	1	92 x 92 x 4.3	92 x 92	56P2917	3.35	3.00	2.72
MC32641	2	92 x 92 x 4.3	92 x 92	56P2918	3.39	3.04	2.75

CONTINUED

FAN ACCESSORIES

EMI/RFI FAN FILTERS (CONT.)

Mfg. Part No.	Fig.	Dimensions (mm) H x W x D	Fan Size (mm)	Stock No.	Price Each 1-24	25-49	50-99
● MC32635	1	120 x 120 x 4.5	120 x 120	56P2912	3.76	3.39	3.04
● MC32636	2	120 x 120 x 4.5	120 x 120	56P2913	3.82	3.45	3.09

ROUND

Mfg. Part No.	Fig.	Dimensions (mm) H x D	Fan Size (mm)	Stock No.	Price Each 1-24	25-49	50-99
● MC32795	3	182 x 4.2	162	56P2991	8.00	7.22	6.48

(142213)

FAN CORDS

RoHS Compliant Available

multicomp

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6

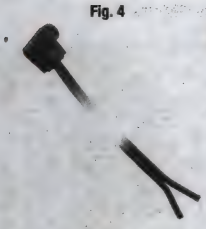


Fig. 7

Fig. 8

Fig. 9

Fig. 10

SPT1 wire rated at 105°C, 300V. Mfg. part no. MC32645 has a red striped wire.

Mfg. Part No.	Fig.	Connector: Fan Side	Connector: Equipment Side	Lgth. (in.)	Voltage (V)	Stock No.	Price Each 1-99	100-499
● MC32642	1	Straight Plug	Blunt Cut Wire Leads	24	300	56P2919	1.43	1.33
● MC32800	2	Straight Plug	NEMA 1-15P Plug	24	300	56P2996	2.75	2.57
● MC32643	1	Straight Plug	Blunt Cut Wire Leads	36	300	56P2920	1.84	1.71
● MC32801	2	Straight Plug	NEMA 1-15P Plug	36	300	56P2997	3.91	3.66
● MC33020	1	Straight Plug	Blunt Cut Wire Leads	48	300	87P0754	2.36	2.21
● MC32799	2	Straight Plug	NEMA 1-15P Plug	48	300	56P2995	4.39	4.09
● MC32644	3	T Plug	Blunt Cut Wire Leads	24	300	56P2921	1.66	1.55
● MC32645	4	T Plug	Blunt Cut Wire Leads	24	300	56P2922	2.09	1.95
● MC33031	6	Right Angle Plug	NEMA 1-15P Plug	12	300	87P0760	3.51	3.29
● MC32647	7	Right Angle Plug	Blunt Cut Wire Leads	24	300	56P2924	1.62	1.51
● MC32804	6	Right Angle Plug	NEMA 1-15P Plug	24	300	56P3000	2.75	2.57
● MC32648	7	Right Angle Plug	Blunt Cut Wire Leads	36	300	56P2925	1.94	1.81
● MC32805	6	Right Angle Plug	NEMA 1-15P Plug	36	300	56P3001	4.01	3.76
● MC33022	7	Right Angle Plug	Blunt Cut Wire Leads	72	300	87P0756	3.38	3.16
● MC32798	6	Right Angle Plug	NEMA 1-15P Plug	72	300	56P2994	5.50	5.15
● MC32649	8	45° Angle Plug	Blunt Cut Wire Leads	24	300	56P2926	1.62	1.51
● MC32802	9	45° Angle Plug	NEMA 1-15P Plug	24	300	56P2998	3.31	3.10
● MC32650	8	45° Angle Plug	Blunt Cut Wire Leads	36	300	56P2927	1.84	1.71
● MC32803	9	45° Angle Plug	NEMA 1-15P Plug	36	300	56P2999	3.03	2.83
● MC33048	10	45° Angle Plug	NEMA 6-15P Plug	36	230	87P0766	24.11	22.56

➤ CONTINUED ➤

FAN CORDS (CONT.)

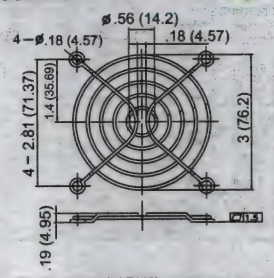
Mfg. Part No.	Fig.	Connector: Fan Side	Connector: Equipment Side	Lgth. (in.)	Voltage (V)	Stock No.	Price Each 1-99	100-499
● MC32797	9	45° Angle Plug	NEMA 1-15P Plug	72	300	56P2993	5.37	5.03
● MC33029	8	45° Angle Plug	Blunt Cut Wire Leads	120	300	87P0758	7.52	7.04

(142214)

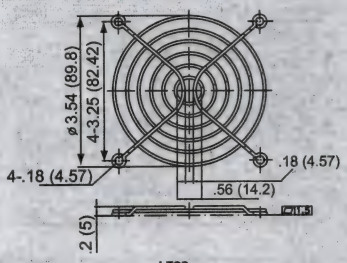
FAN FINGER GUARDS

RoHS Compliant Available

ebmpapst



LZ22N



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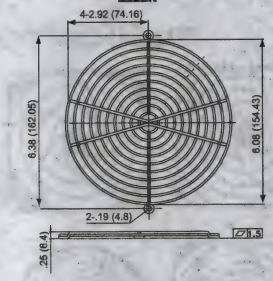

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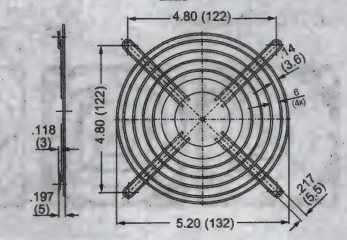

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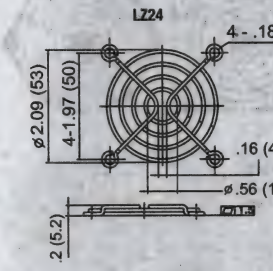

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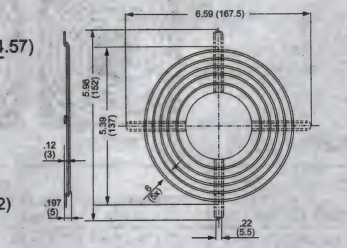

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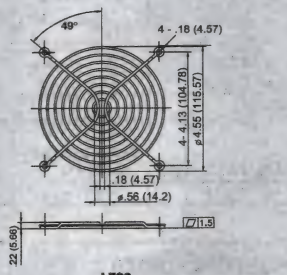


LZ30

Designed for use with ebm-papst AC and DC axial fans; *order separately on pages 2372-2373 and 2385-2386.*

SQUARE FANS

Mfg. Part No.	Dim. (mm) H x W	Fan Size (mm)	For Fan Series	Fixing Centers (mm)	Stock No.	Price Each 1-24
● LZ28	60 x 60	60 x 60	600	50	86K9742	4.11
● LZ22N	80 x 80	80 x 80	8000, 8300, 8400	71.37	86K9738	4.49
● LZ22K	80 x 80	80 x 80	8300, 8400, 8500, 8800	71.5	24M4212	1.48
● LZ32P	80 x 80	80 x 80	8000	71.32	16F7914	2.67
● LZ32-2	80 x 80	80 x 80	8000	71.5	05C3875	4.08
LZ32-3	80 x 80	80 x 80	8000	71.5	05C3874	6.00
● LZ23	92 x 92	92 x 92	3000	82.42	86K9739	5.23
LZ23-2	92.5 x 92.5	92 x 92	3000	82.5	26H2983	6.48
LZ23-3	92.5 x 92.5	92 x 92	3000	82.5	27C9577	6.48
● LZ23K	92 x 92	92 x 92	3000	82.5	11M2099	1.48
● LZ30	153.5 x 115	119 x 119	4000, 9000	104.8	86K9743	6.73
● LZ30K	120 x 120	119 x 119	4000, 9000	104.8	24M4217	1.74
● LZ30-6	119 x 119	119 x 119	4000, 9000	105	86K9744	7.72
LZ33-1	127 x 127	127 x 127	5200	113.5	67H4980	7.64
LZ33-2	127 x 127	127 x 127	5200	113.5	67H4981	7.15

➤ CONTINUED ➤

FAN FINGER GUARDS (CONT.)

Mfg. Part No.	Dim. (mm) H x W	Fan Size (mm)	For Fan Series	Fixing Centers (mm)	Stock No.	Price Each 1-24
LZ25	132 x 132	135 x 135	5100, 5600	122	88K2725	3.86
LZ53	183 x 183	140 x 140	5300	183	79R8107	3.21
ROUND FANS						
LZ24	154.43 x 154.53	150	7000	162.1	93K7590	6.35
LZ27	152 x 167.5	150	7000	...	86K9741	4.96
LZ36	162 x 150	150	7000	162	34M7200	7.99
9498-2-4039	154.43 x 154.53	150	W2G130, W2S130	162.1	86K9803	6.98
3749-2-4039	150 x 150	150 x 172	W2E142	162	86K9827	12.31
LZ26	167.5 x 167.5	172	6000	...	16F7913	6.14
LZ26K	172 x 172	172	6000	162	24M4214	7.03
LZ37	172 x 172	172	6200, DV6200, AC6200NM	122	10R8437	5.73
78128-2-4039	220 x 220	225	W1G200T, W2E200T	240	86K9926	26.15

(73332)

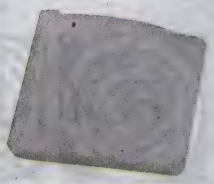
FAN FILTER ASSEMBLIES & REPLACEMENT MEDIA

RoHS Compliant Available

ebmpapst

Designed for use with ebm-papst AC and DC axial fans; *order separately on pages 2372-2373 and 2385-2386.*

Fan Filter Assembly



Replacement Media

Mfg. Part No.	Fan Size (mm)	For Fan Series	Description	Stock No.	Price Each 1-49
FILTER ASSEMBLIES					
PMFA 60L	60 x 60	...	Guard, Filter, Screen, Cover	18M1596	27.96
PMFA80T	80 x 80	8000	Guard, Filter, Screen, Cover	24M6138	5.22
PMFA120T	119 x 119	4000	Guard, Filter, Screen, Cover	02M5658	8.70
FAN SCREEN					
PRF60	60 x 60	...	Nickel Plated Steel Wire Mesh	93K7723	11.01
PRF80	80 x 80	...	Nickel Plated Steel Wire Mesh	02M8653	10.58
LZ40N	119 x 119	4000, 9000	Steel Wire Mesh	26M0491	13.91
REPLACEMENT MEDIA					
FP80	80 x 80	8000	White Polyester	25M9511	3.62
FP120	119 x 119	4000	White Synthetic Fiber	25M9508	3.96
FP120T	119 x 119	4000	White Polyester	24M2241	3.80
LZ60	120 x 120	4000, 4100, 4200, 4300, 4400, 4600, 9900	Aluminum Wire Mesh	86K9745	8.35

(194426)

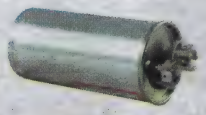
FAN MOTOR CAPACITORS

RoHS Compliant Available

ebmpapst

Plastic

Metal



Large Metal

Designed for use with ebm-papst AC and DC axial fans; *order separately on pages 2372-2373 and 2385-2386.*

Mfg. Part No.	Body Material	Size (µF)	Dimensions (mm) Dia. x L	Stock No.	Price Each 1-9
99284-4-7320	Plastic	4	28 x 55	47M3014	10.29
99282-4-7320	Plastic	10	40 x 70	15B5538	8.35
99287-4-7320	Plastic	10	40 x 70	93B3318	14.67
2161-4-7320	Metal	4	30 x 104	47M2400	17.52
2162-4-7320	Metal	5	35 x 104	15B5218	20.34
2163-4-7320	Metal	6	35 x 104	47M2401	23.06
2164-4-7320	Metal	7	40 x 101	47M2402	36.47
2165-4-7320	Metal	8	35 x 101	47M2403	25.73
2166-4-7320	Metal	10	35 x 99	47M2404	30.28
2168-4-7320	Metal	16	46 x 160	47M2405	47.80
2169-4-7320	Metal	20	46 x 160	91B1982	57.01

CONTINUED

FAN MOTOR CAPACITORS (CONT.)

Mfg. Part No.	Body Material	Size (µF)	Dimensions (mm) Dia. x L	Stock No.	Price Each 1-9
450-20-0027†	Metal	10	47.2 x 76.2	18C2371	17.21
450-20-0030†	Large Metal	20	47.2 x 101	47M2620	21.93

† UL, CSA and VDE approved.
(194433)

FINGER GUARDS

RoHS Compliant Available

SANYO DENKI

Fig. 1

Fig. 2

Fig. 3

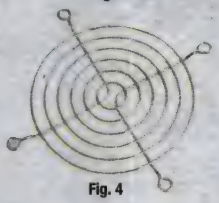


Fig. 4

Fig. 5

Fig. 6

Constructed of steel wire with 0.0005" plating thickness. Welded joints can withstand a minimum of 220lbs. of separation force. Designed for use with Sanyo Denki DC tubeaxial fans; *order separately on pages 2380-2382.*

Fig. 7

Mfg. Part No.	Fig.	For Use With	Stock No.	Price Each 1-9	10-24	25-49
KM40	1	40mm Axial Fans	96M1888	1.05	1.00	0.95
KM60	2	60mm Axial Fans	96M1889	1.10	1.04	0.99
KM80	3	80mm Axial Fans	96M1890	1.22	1.16	1.10
KM92	4	92mm Axial Fans	96M1891	1.35	1.28	1.22
KM120	5	120mm Axial Fans	96M1885	1.52	1.44	1.37
KM127	6	127mm Axial Fans	96M1886	2.11	2.00	1.90
KM172	7	172mm Axial Fans	96M1887	3.00	2.84	2.70

(114882)

FAN FINGER GUARDS

RoHS Compliant Available

NMB Minebea

Round Fan Guard

Octagon Fan Guard

- Comply with UL recognized, CSA certified, and VDE approved requirements
- Meets UL/CSA 0.250/6.35" spacing
- Wire base C1010 steel, bright nickel chrome plating, 0.0005" min. thickness
- Black electro deposite finish available; *go online or call*
- Weld joints withstand 230 lbs. separation force

Mfg. Part No.	Description	Fan Size (mm)	For Fan Model	Stock No.	Price Each 1-9
055010	Round Fan Guard	172, 172 x 150	5910PL, 5920PL, 6820PL, 5915PC	93K7616	4.01
055011	Round Fan Guard	172, 172 x 150	5910PL, 5920PL, 6820PL, 5915PC	12P6300	4.01
055013	Round Fan Guard	92 x 92	3610KL, 3612KL, 3615KL, 3610PS	93K7617	2.08

CONTINUED

FAN ACCESSORIES

FAN FINGER GUARDS (CONT.)

Mfg. Part No.	Description	Fan Size (mm)	For Fan Model	Stock No.	Price Each 1-9
● 055015	Round Fan Guard	120 x 120, 127 x 127	4710KL, 4712KL, 4715KL, 4715SL, 5015KL, 4710PS, 4715FS, 4715MS	93K7618	2.05
● 055018	Round Fan Guard	80 x 80	3108NL, 3110KL, 3112KL, 3110PS, 3115FS	93K7619	1.96
● 055019	Octagon Fan Guard	80 x 80	3108NL, 3110KL, 3112KL, 3110PS, 3115FS	88K2076	1.96
● 055023	Round Fan Guard	60 x 60	2406KL, 2408NL, 2410ML, 2412PS	88K2077	1.39
● 055025	Round Fan Guard	40 x 40	1604KL, 1606KL, 1608KL	93K7620	1.21
● 512020	Mounting Clip	80 x 80, 92 x 92	3115FS, 3610PS	93K7649	0.75

(72587)

WIRE FAN GUARDS

RoHS Compliant Available

Qualtek Electronics Corp.

Fig. 1

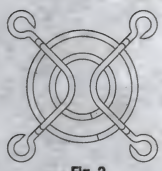


Fig. 2

Fig. 3

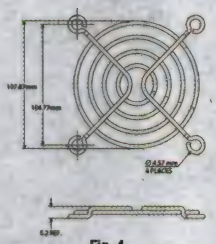


Fig. 4

Fig. 5

Fig. 6

Fig. 7

Fig. 8

Fig. 9

Fig. 10

Fig. 11

Fig. 12

Fig. 13

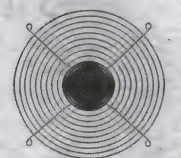


Fig. 14

Fig. 15

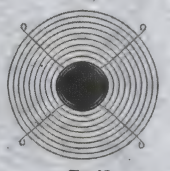


Fig. 16

For use with tubeaxial fan sizes 1.5″ (40) through 10″ (254). 0.250″ maximum ring spacing for compliance with domestic and international safety agency requirements. 6″ fan guard also available; *go online or call.*

Mfg. Part No.	Fig.	For Fan Size (mm)	For Fan Size (in.)	Mounting Hole Centers (mm)	No. of Rings	Thickness (mm)	Stock No.	Price Each 1-99	Price Each 100-499
● 08245	1	25	0.98	34.2	2	3	16M2616	1.13	1.05
● 08346	2	30	1.18	24	2	4.8	82K9338	1.71	1.60
● 08347	2	35	1.38	29	2	4	82K9339	1.65	1.54
● 08149	2	40	1.5	32	2	4.8	88K2085	1.48	1.38
● 08248	3	50	2	42	3	4.8	17B6473	2.29	2.14
● 08148	3	52	2	42	3	4.8	88K2084	1.54	1.44
● 08147	4	60	2.5	50	4	5.2	93K7624	1.51	1.41
● 08132+	5	80	3.125	71.37	5	4.95	88K2081	1.84	1.72

➤ CONTINUED ➤

WIRE FAN GUARDS (CONT.)

Mfg. Part No.	Fig.	For Fan Size (mm)	For Fan Size (in.)	Mounting Hole Centers (mm)	No. of Rings	Thickness (mm)	Stock No.	Price Each 1-99	Price Each 100-499
● 08172*	5	80	3.125	71.37	5	4.95	88K2086	1.56	1.46
● 08134+	6	92	3.625	82.55	6	4.95	88K2082	2.00	1.87
● 08174*	6	92	3.625	82.42	6	5	88K2087	1.74	1.62
● 08141	7	120	4.5	104.8	7	5.2	88K2083	3.94	3.67
● 08213	8	120	4.5	104.8	7	5.66	88K1302	2.26	2.11
● 08128	9	120	4.5	104.8	8	7.11	88K2079	3.37	3.14
● 08129	10	120	4.5	104.8	8	7.11	93K7623	2.21	2.06
● 08130	11	120	4.5	104.8	8	5.66	88K2080	1.14	0.74
● 08130	11	120	4.5	104.8	8	5.66	88K2080	1.14	0.74
● 08170	12	120	4.5	104.8	8	5.66	93K7625	2.07	1.94
● 08150	13	127	5	113.3	9	5.9	90F2316	5.66	5.29
● 08126	14	150	6	162.1	10	6.45	93K7621	4.36	4.07
● 08169	15	150	6	162.1	10	5	17B6456	5.29	4.93
● 08127	16	254	10	174	9	6.35	93K7622	9.01	8.40

*Ribs 0.063″ (1.60) dia.; +Ribs 0.071″ (1.80) dia.
(87093)

PLASTIC FAN GUARDS

RoHS Compliant Available

Qualtek Electronics Corp.

09325-G

09080-G

09362-G

09120-G

09121-G

09122-G

09450-G

09651-G

For use with tubeaxial fan sizes 40mm (1.57″) through 172mm (6.77″). 6.35mm (0.25″) maximum ring spacing for compliance with domestic and international safety requirements. 152mm (5.98″) fan guard also available; *go online or call.*

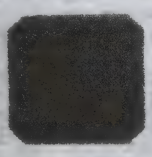
Mfg. Part No.	For Fan Size mm	For Fan Size in.	Thickness mm	Thickness in.	Stock No.	Price Each 1-99	Price Each 100-499	Price Each 500-999
● 09150-G	40	1.500	4.75	0.187	52F7184	0.83	0.76	0.71
● 09250-G	60	2.500	1.78	0.070	95F7336	0.99	0.91	0.85
● 09252-G	60	2.500	7	0.276	82K9384	1.53	1.40	1.31
● 09325-G	80	3.125	6.3	0.248	87F3921	1.33	1.21	1.13
● 09080-G	80	3.125	3	0.118	52F7185	1.04	0.95	0.89
● 09362-G	92	3.625	6.5	0.256	87F3911	1.47	1.34	1.25
● 09120-G	120	4.500	6.6	0.260	52F7186	1.84	1.68	1.58
● 09121-G	120	4.500	6.6	0.260	52F7187	2.05	1.87	1.75
● 09122-G	120	4.500	2.5	0.098	91F9620	1.79	1.64	1.53
● 09450-G	120	4.500	7.11	0.280	87F3915	1.98	1.81	1.70
● 09651-G	172∅	6.770∅	7	0.276	82K9386	4.56	4.16	3.90

(87094)

PLASTIC FAN FILTER ASSEMBLIES

RoHS Compliant Available

Qualtek Electronics Corp.

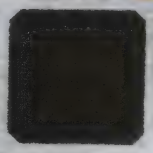


09325

09250

➤ CONTINUED ➤

PLASTIC FAN FILTER ASSEMBLIES (CONT.)



09450

Media

Assemblies consist of guard, polyurethane foam filter media, and media retainer for axial fans. Polyurethane foam media has high surface area for filtration of dust particles and is designed to produce minimal pressure drop.

GUARD, RETAINER, AND MEDIA

Mfg. Part No.	For Fan Size (mm)	Size (mm) Height	Depth	Mounting Hole Centers	PPI	Stock No.	Price Each 1-99	100-499	500-999
09150-F30	40	40	4.75	32	30	16F084	2.33	2.17	2.08
09150-F45	40	40	4.75	32	45	16F085	2.33	2.17	2.08
09250-F/30	60	60	6.3	50	30	95F7334	2.55	2.38	2.27
09250-F/45	60	60	6.3	50	45	95F7335	2.51	2.33	2.22
09325F/30	80	80	6.6	71.37	30	90F1254	2.72	2.53	2.42
09325-F/45	80	80	6.6	71.37	45	87F3920	2.68	2.50	2.39
09362-F/30	92	92.2	6.6	82.6	30	95F7339	3.13	2.91	2.79
09362-F/45	92	92.2	6.6	82.6	45	87F3924	3.19	2.99	2.84
09450F/30	120	118.3	7.11	104.7	30	90F1255	3.29	3.05	2.93
09450-F/45	120	118.3	7.11	104.7	45	87F3914	3.21	2.99	2.85

MEDIA ONLY — SOLD IN PACKAGES OF 5

Mfg. Part No.	For Fan Size (mm)	Size (mm) Height	Depth	Mounting Hole Centers	PPI	Stock No.	Price per Pkg. 1-99	100-499	500-999
09150-M30	40	32.76	2.29	...	30	16F086	1.97	1.83	1.74
09250-M/45	60	55.88	2.79	...	45	95F7338	2.06	1.92	1.84
09325-M/30	80	77.72	3.81	...	30	87F3922	11.06	10.31	9.84
09325-M/45	80	77.72	3.81	...	45	87F3923	2.22	2.07	1.97
09362-M/30	92	89.92	3.3	...	30	87F3912	2.34	2.18	2.09
09362-M/45	92	89.92	3.3	...	45	87F3913	2.38	2.22	2.12
09450-M/30	120	115.57	3.3	...	30	87F3916	2.71	2.53	2.41
09450-M/45	120	115.57	3.3	...	45	87F3917	2.92	2.72	2.60

PPI = pores per inch; M/C = mounting hole centers
(87096)

FAN VIBRATION SLEEVES, FINGER GUARDS & FILTER MEDIA

RoHS Compliant Available

Qualtek Electronics Corp.

- Reduce the transmission of vibrations to the panel housing reducing noise level up to 9dB
- Fan vibrations absorbed by the flexible sleeves reducing damage and increasing the lifespan of the fan
- Easy to attach to axial fans, no tools required
- Body material: TPE
- Fire resistance: UL94-V0
- Panel thickness (min. - max.) 0.75 - 1.25mm

Vibration Sleeve

Finger Guard

VIBRATION SLEEVES

Mfg. Part No.	For Fan Size (mm)	Dimensions (mm) H	W	D	Flange Thickness	Stock No.	Price Each 1-24	25-49
QLM-40-20-10	40	43	43	15	20	21M7149	5.70	4.76
QLM-60-30-10	60	64	64	18	30	21M7150	6.45	5.39
QLM-80-40-10	80	84	84	19	40	21M7151	7.79	6.51
QLM-92-40-10	92	97	97	20	40	21M7152	9.03	7.54
QLM-119-50-10	119	125	125	24	50	21M7148	11.88	9.92

PLASTIC FINGER GUARDS

Mfg. Part No.	For Fan Size (mm)	Dimensions (mm) H	W	D	Stock No.	Price Each 1-24	25-49
QSG-40-02	40	46	46	13	21M7160	2.59	2.17
QSG-60-02	60	66	66	15	21M7161	3.05	2.55
QSG-80-02	80	89	89	15	21M7162	3.38	2.83
QSG-92-02	92	101	101	15	21M7163	3.58	3.00
QSG-119-02	119	128	128	17	21M7159	5.08	4.24

FILTER MEDIA

QF-80-01	80	82	82	0.2	21M7146	1.45	1.22
QF-119-01	119	121	121	0.3	21M7143	1.59	1.34

CONTINUED

FAN VIBRATION SLEEVES, FINGER GUARDS & FILTER MEDIA (CONT.)

EMI FILTER SHIELDS

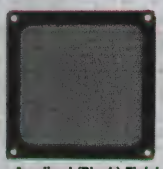
Mfg. Part No.	For Fan Size (mm)	Dimensions (mm) H	W	D	Stock No.	Price Each 1-24	25-49
QSB-40-01	40	40	40	5	21M7155	13.32	11.23
QSB-60-01	60	60	60	5	21M7156	16.87	14.23
QSB-80-01	80	80	80	5	21M7157	24.70	20.83

(89813)

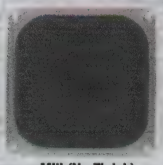
EMI/RFI FAN FILTERS

RoHS Compliant Available

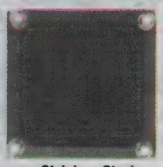
Qualtek Electronics Corp.



Anodized (Black) Finish



Mill (No Finish)



Stainless Steel

- Mill finish enhances EMI/RFI shielding
- Provide maximum airflow with effective filtering
- Tightly-woven corrugated mesh screen is encased in a formed aluminum frame built for ruggedness and durability
- All units are easily washed in a solvent or degreaser and can be mounted directly to the fan or to a panel

Designed to fit standard 2.5″ (60), 3.125″ (80), 3.625″ (92), and 4.5″ (120) tubeaxial fans. Suffix in mfg. part no. denotes finish: **B** = anodized (black), **M** = mill (no finish), **SS** = 30 x 30 stainless steel convoluted mesh with stainless steel frame. Also available in clear (irridite) - **C suffix**; *go on line or call.*

Mfg. Part No.	Fan Size (mm)	Dimensions (mm) Height (sq.)	Depth	Fixing Centers	Material	Stock No.	Price Each 1-24	25-49
06250-B	60	60	3.5	50	Aluminum	16M2612	3.73	3.56
06250-M	60	60	3.5	50	Aluminum	30C0383	3.56	3.39
06250-SS	60	60	3.5	50	Stainless Steel	94B7731	6.30	5.99
06325-B	80	83.82	3.5	71.37	Aluminum	87F3928	3.79	3.60
06325-M	80	83.82	3.5	71.37	Aluminum	87F3929	3.91	3.72
06325-SS	80	83.82	3.5	71.37	Stainless Steel	94B7732	7.07	6.72
06362-B	92	92	3.5	82.5	Aluminum	87F3930	4.12	3.92
06362-M	92	92	3.5	82.5	Aluminum	87F3931	4.07	3.87
06362-SS	92	92	3.5	82.5	Stainless Steel	94B7733	7.75	7.37
06450-B	120	118.7	3.5	104.8	Aluminum	87F3918	5.06	4.81
06450-M	120	118.7	3.5	104.8	Aluminum	87F3919	4.89	4.66
06450-SS	120	118.7	3.5	104.8	Stainless Steel	94B7734	9.89	9.41

(87086)

FAN POWER CORDS

RoHS Compliant Available

Qualtek Electronics Corp.

Fig. 1

Fig. 2

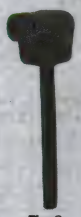


Fig. 3

Fig. 4

Tubeaxial fan cords with strain reliefs. Rated 7A at 300V. Body material: PVC. Terminals: Brass (nickel-plated). Cord is SPT-1 18AWG/2C. Additional cord lengths and styles available; *go online or call.*

Mfg. Part No.	Fig.	Plug Style	Cord Length (in.)	Stock No.	Price Each 1-99	100-499
07100-24	1	Straight	24	87F3907	1.79	1.67
0710036	1	Straight	36	90F1259	2.23	2.09
07145-24	2	45°	24	87F3908	1.79	1.67
07145-36	2	45°	36	90F1992	2.11	1.97
07190-24	3	90°	24	87F3909	1.76	1.65
07190-36	3	90°	36	90F1993	2.11	1.97
07199-24	4	T	24	87F3910	1.79	1.67
0719936	4	T	36	90F1256	2.19	2.04

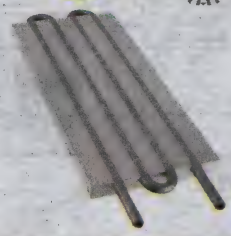
(87095)

COLD PLATES • PELTIER COOLERS • HEAT SINKS – PC BOARD

HI-CONTACT LIQUID COLD PLATE FOR POWER APPLICATIONS

RoHS Compliant Available

AAVID THERMALLOY



- Extruded base and continuous tube construction
- Joint free tube reduces chances for leaks
- Tube directly contacts the base of the device cooled improving thermal resistance
- Thin epoxy joint between tube and plate outperforms 'dry' joints
- Plate Material: Extrusion, aluminum
- Tube Material: Copper, 9.5 mm (0.375") O.D. x 1.24 mm (0.044") wall
- Unfinished standard

Hi-Contact™ cold plates feature a interlocking groove and tube geometry that improves mechanical robustness and thermal performance over conventional designs. Designed for medium power density applications.

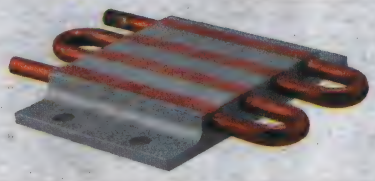
Mfg. Part No.	Configuration	Thermal Resistance (°C/W)	Dimension (mm) L	W	H	Stock No.	Price Each 1-24	25-49	50-99
● 416401U00000G	2-Pass	0.012	133.4	57.2	17.4	84K8690	459.58	428.25	415.72
● 416601U00000G	4-Pass	0.005	381.2	127	17.4	66K0415	120.59	112.37	109.08

(192427)

CP SERIES COLD PLATE FOUR PASS HEAT SINKS

RoHS Compliant Available

OHMITE



- Tubing: copper, 0.375" OD, nominal wall thickness of 0.050"
- Plate: Aluminum 6063-T5
- Thermal resistance 0.43 °C/W @ flow of 1.5 GPM
- Wt: 805g

CP4 series liquid coldplates are designed for Ohmite heatsinkable type resistors, such as TAP600, TAP800, TA1K0, TA2K0, and various SOT-227 resistor packages. The CP series provides maximum heat removal for SCRs, rectifiers, diodes, thyristors, and other high-power semiconductor devices.

Mfg. Part No.	Dimensions H	W	L	Ohmite Resistor Series	Stock No.	Price Each 1-4	5-9
● CP4-114A	19.1	152.4	114.3	...	05W6373	75.24	68.62
● CP4-114B	19.1	152.4	114.3	TAP600/TAP800	05W6374	76.44	69.72
● CP4-114C	19.1	152.4	114.3	TAP1K0/TAP2K0	05W6375	81.03	73.90

(207640)

PELTIER COOLER THERMOELECTRIC MODULES

RoHS Compliant Available

multicomp

- High cooling capacity from small surface and long life in power cycling applications with change of current polarity
- Operation temperaure operation up to 90°C for long life; up to 110°C for short periods
- With operation close to 0.5 Imax extremely high COP (coefficient of performance possible)
- Epoxy sealed for moisture protection

Mfg. Part No.	Power Rating (W)	Current DC Max. (A)	Voltage Input Max. (V)	Temp. Difference Max (°C)	Stock No.	Price Each 1-24	25-49
● MCHPE-071-10-08-E	32.1	6	8.9	69	08P1421	59.01	55.87
● MCHPE-127-10-08-E	56.7	6	15.7	69	08P1422	65.20	61.73
● MCHPE-127-14-06-E	150	15.4	15.7	68	08P1423	129.02	125.46
● MCHPE-128-10-05-E	88	9	15.8	68	08P1424	106.11	100.48
● MCHPE-200-14-06-E	232	15.4	24.8	68	08P1425	137.12	127.01
● MCHPE-288-10-05-E	196	9	35.9	68	08P1427	149.64	138.68
● MCHPE-288-14-06-E	340	15.4	35.8	68	08P1429	208.96	193.54

Operation temperature up to 90°C for long life; max. temp. for short time 110°C. Good reliability in ON-OFF mode. Recommended operating current not higher than 0.7 of Imax

● MCPE-031-10-13	8.5	3.9	3.8	72	08P1430	48.62	46.27
● MCPE-031-10-15	7.3	3.2	3.8	72	08P1431	48.62	46.27
● MCPE-071-10-13	18.5	3.9	8.8	72	08P1432	49.88	47.47
● MCPE-071-10-15	16.5	3.2	8.8	72	08P1433	50.84	48.39
● MCPE-071-14-16	31.7	6	8.8	72	08P1434	53.43	50.59
● MCPE-127-10-13	36	3.9	15.7	72	08P1435	52.86	50.05
● MCPE-127-10-25	19	2	15.7	73	08P1436	60.27	57.07
● MCPE-241-10-13	71.8	3.9	29.9	74	08P1437	103.42	97.92
● MCPE-241-14-15	112.7	6	29.8	74	08P1438	125.89	122.42

Operation temperature up to 150°C for long life; max. temp. for short time 200°C. ON/OFF cycling mode reliability at high temperature. Recommended operatingn current not higher than 0.7 of Imax.

● MCPF-031-10-25	4.4	2	3.8	73	08P1449	49.60	46.96
● MCPF-031-14-11	19	8.5	3.8	70	08P1450	44.29	41.96
● MCPF-071-14-11	44	8.5	8.8	70	08P1451	46.17	43.97
● MCPF-127-14-11-E	79	8.5	15.7	70	08P1452	87.02	82.40

➤CONTINUED➤

PELTIER COOLER THERMOELECTRIC MODULES (CONT.)

Mfg. Part No.	Power Rating (W)	Current DC Max. (A)	Voltage Input Max. (V)	Temp. Difference Max (°C)	Stock No.	Price Each 1-24	25-49
● MCPF-127-14-16-E	57	6	15.7	72	08P1453	83.88	79.43
● MCPF-127-14-25-E	37	3.9	15.7	73	08P1454	99.46	94.18
● MCPF-161-12-10-E	83	6.7	20	72	08P1455	74.10	70.20

PE1 and TE1 modules have specification of -40°C to +100°C operation, and are silicone sealed for moisture protection.

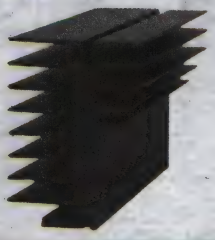
● MCPE1-01708NC-S	10.3	8.5	2.1	70	08P1439	38.26	36.22
● MCPE1-03108NC-S	18.8	8.5	3.8	70	08P1440	26.71	25.42
● MCPE1-07106NC-S	27.9	6	8.8	70	08P1441	34.18	32.37
● MCPE1-07107AC-S	31.1	6	8.8	70	08P1442	35.60	33.71
● MCPE1-07108AC-S	43.1	8.5	8.8	70	08P1443	35.60	33.71
● MCPE1-12704AC-S	35.2	3.9	15.7	70	08P1444	44.03	41.69
● MCPE1-12706AC-S	53.1	6	15.7	70	08P1445	39.42	37.35
● MCPE1-12707AC-S	55.6	6	15.7	70	08P1446	41.02	38.84
● MCPE1-12708AC-S	77.1	8.5	15.7	70	08P1447	40.23	38.09
● MCTE1-12712L-S	110	12	15.4	68	08P1463	40.69	38.53
● MCTE1-12715L-S	130	15	15.4	68	08P1464	41.07	38.91
● MCTE1-19908L-S	118	8.5	24.1	68	08P1465	53.78	50.92
● MCTE1-19913L-S	200	13	24.1	68	08P1466	52.85	50.04
● MCPK2-15828NC-S	8.7	2.8	15.7	95	08P1460	80.25	75.99
● MCPK2-19808AC-S	51.6	8.5	16.1	85	08P1461	82.29	77.92

(192326)

MAX CLIP SYSTEM EUROPEAN HEAT SINK EXTRUSIONS

RoHS Compliant Available

AAVID THERMALLOY



- High performance , low cost
- Eliminates need for screws, washers and holes
- Provides consistent mounting force
- Compatible with a wide range of Max Clips for different component styles and mounting pressures
- Attachment to board with self tapping screws or M3/M4 solderable standoffs
- Suffix B: black anodized, U: unfinished

Mfg. Part No.	Thermal Resistance	Dimension (mm) Height	Width	Length	Stock No.	Price Each 1-9	10-99	100-499
● OS509-140-U	1.21°C/W	60	60	140	51R7019	17.43	15.66	12.23
● OS512-100-B	2.76°C/W	40	40	100	51R7021	7.31	6.57	5.13
● OS515-100-B	3.03°C/W	45	30	100	51R7024	7.15	6.44	5.78
● OS515-150-B	2.33°C/W	45	30	150	51R7025	9.12	8.19	6.40
● OS518-100-B	2.22°C/W	54	38	100	51R7027	10.01	8.99	7.02
● OS518-150-B	1.71°C/W	54	38	150	51R7028	13.14	11.80	9.22
● OS520-100-B	3.24°C/W	60	30	100	51R7030	7.34	6.59	5.15
● OS520-50-B	5.23°C/W	60	30	150	51R7032	4.80	4.31	3.37
● OS533-100-B	5.36°C/W	28.5	22	100	51R7033	3.67	3.30	2.58

(202095)

EXTRUDED COLLAR STYLE HEAT SINKS FOR TO–5

RoHS Compliant Available

AAVID THERMALLOY

- Mounting hole or radial fins
- Black anodized finish

Mfg. Part No.	Thermal Resistance	Dimension (mm) Dia.	H	Stock No.	Price Each 1-9	10-99	100-499	500-999
● 323005B00000G	56°C/W	19.05	6.35	79K4102	3.29	2.93	2.29	2.02
● 325705B00000G	60°C/W	12.7	6.35	51M0971	1.70	1.53	1.21	1.01

(190783)

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(196535)

TO-5 & TO-39 PKG. HEAT SINKS

RoHS Compliant Available

AAVID THERMALLOY

Fig. 1

Fig. 2

Mfg. Part No.	Fig.	Package	Thermal Resistance	Dimensions (mm) Dia. x H	Stock No.	Price Each 1-9	Price Each 10-99
2227BG	1	TO-5	21°C/W	31.75 x 10.16	89M4413	21.22	18.87
321127B00000G	...	TO-5	54°C/W	15.88 x 6.88	89M4414	10.13	9.01
322605B00000G	2	TO-5	54°C/W	19.05 x 6	18M8046	2.79	2.51
322505B00000G	1	TO-5	56°C/W	19.05 x 10.16	89K0319	2.70	2.42
320105B00000G	...	TO-5	63°C/W	12.7 x 6.35	79K4100	1.60	1.43
311505B00000G	...	TO-5	90°C/W	9.52 x 10.16	18M8043	2.73	2.43
321527B00000G	...	TO-5, TO-39	35.2°C/W	19.05 x 5.33	18M8044	15.82	14.29

(110548)

TO-3 PKG. HEAT SINKS

RoHS Compliant Available

AAVID THERMALLOY

Fig. 1

Fig. 2

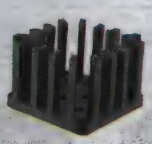


Fig. 3

Fig. 4

Heat sinks available in a variety of heights for low profile applications or higher power dissipation. Square baskets are made from 0.090″ thick aluminum for increased cooling capacity.

Mfg. Part No.	Fig.	Thermal Resistance	Dimension (mm) H x W x L	Features	Stock No.	Price Each 1-9	Price Each 10-99
501303B00000G	1	12°C/W	12.7 x 35.56 x 47.75	Low Profile	73K6785	1.06	0.95
501503B00000G	1	8.4°C/W	25.4 x 35.56 x 47.75	Mid Power	18M8143	4.90	4.37
501403B00000G	1	10°C/W	19.05 x 35.56 x 47.75	Mid Power	18M8142	4.67	4.17
500303B00000G	1	5.8°C/W	25 x 45.97 x 38.1	High Power	18M8137	7.49	6.69
501603B00000G	1	7.8°C/W	32 x 35.56 x 47.75	High Power	89K7787	4.96	4.43
505403B00000G	2	6°C/W	31.75 x 45.21 x 45.21	...	65K8882	4.82	4.42
506007B00000G	...	7°C/W	10 x 44.45 x 51	Low Profile	78K6649	2.41	2.21
552703B00000G	2	9.4°C/W	12 x 45.21 x 45	...	45M6089	6.05	5.55
568003B00000	3	8°C/W	12.7 x 45.97 x 45.97	...	16C0992	9.52	8.72
500403B00000G	4	5°C/W	31.97 x 45.97	...	56P5587	2.78	2.51

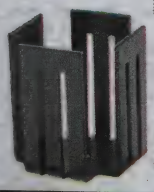
(4493)

SQUARE BASKET HEAT SINK FOR BRIDGE RECTIFIERS

RoHS Compliant Available

AAVID THERMALLOY

- Black anodized finish



Mfg. Part No.	Thermal Resistance	Dimension (mm) L	Dimension (mm) W	Dimension (mm) H	Stock No.	Price Each 1-9	Price Each 10-99	Price Each 100-499	Price Each 500-999
6222BG	9.4°C/W	26.92	26.92	31.75	16M1074	3.00	2.71	2.09	1.80

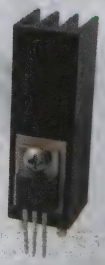
(190782)

TO-220 FLAT-BACK HEAT SINKS WITH SOLDERABLE FINS

RoHS Compliant Available

AAVID THERMALLOY

- Flat back extruded heat sink featuring solderable pins
- Constructed of black anodized aluminum



Mfg. Part No.	Thermal Resistance	Dimensions (mm) H x W x L	Stock No.	Price Each 1-9	Price Each 10-99	Price Each 100-499
581202B02500G	12.8°C/W	50.8 x 16.26 x 16.26	12P8488	2.44	2.18	1.72
581102B02500G	16.8°C/W	38 x 16.26 x 16.26	18M8202	9.63	8.69	6.71
581002B02500G	17.4°C/W	25.4 x 16.26 x 16.26	98K9891	2.51	2.26	2.06

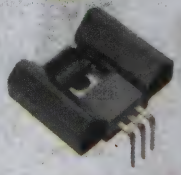
(110551)

TO-220 SNAP-DOWN HEAT SINKS

RoHS Compliant Available

AAVID THERMALLOY

- Dual side fins
- Black anodized finish



Mfg. Part No.	Thermal Resistance	Dimensions (mm) H x W x L	Stock No.	Price Each 1-9	Price Each 10-99	Price Each 100-499
575102B00000G	16.8°C/W	11.18 x 28.45 x 11.18	18M8193	0.56	0.51	0.40
579302B00000G	16.8°C/W	11.18 x 24.89 x 19.05	01P4648	2.33	2.11	1.63
575200B00000G	60°C/W	18.29 x 15.29	12N1434	2.18	1.97	1.52

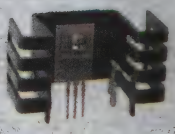
(110550)

CHANNEL STYLE HEATSINKS FOR TO-220 DEVICES

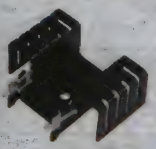
RoHS Compliant Available

AAVID THERMALLOY

- Folded back fins increase cooling surface area for increased performance with a narrow profile
- Black anodize finish



Rectangular Shape



T-Shape

Mfg. Part No.	Thermal Resistance	Dimensions (mm) L x W x H	Tabs	Stock No.	Price Each 1-9	Price Each 10-99
RECTANGULAR SHAPE						
7023BG	4.4°C/W	24.13 x 48.26 x 50	N	18M8225	2.56	2.31
7023B-MTG	4.4°C/W	24 x 48.26 x 50	Y	04M8067	1.72	1.55
7022B-MTG	6.5°C/W	9.52 x 50.44 x 49.99	Y	99R8258	3.15	2.85
7025B-MTG	6.8°C/W	24.13 x 48.26 x 29	N	18M8227	6.95	6.28
7021B-MTG	6.8°C/W	36.83 x 44.45 x 36.83	Y	99R8257	3.12	2.81
7020BG	8.7°C/W	36.83 x 33.02 x 37	N	18M8224	4.27	3.28
7020B-MTG	8.7°C/W	11.94 x 33.02 x 35.83	Y	18M8223	6.25	4.81
7019B-MTG	11°C/W	25.4 x 39.37 x 25	Y	18M8222	1.66	1.56
7019BG	11°C/W	25.4 x 39.37 x 25	N	45M6093	3.00	2.71
T-SHAPE						
7024B-MTG	5.6°C/W	19.05 x 50.8 x 41	N	18M8226	6.00	5.42

(82456)

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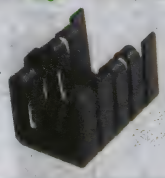
(196548)

HEAT SINKS – PC BOARD

PLUG-IN STYLE HEAT SINKS FOR TO-220/20 GAUGE BACKPLATE PKGS.

RoHS Compliant Available

AAVID THERMALLOY



- Feature four spring action clips
- Thermal resistance 27.3 °C/W
- Dimensions L x W x H:12.7 x 12.7 x 19.05mm
- Black anodized finish

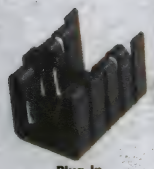
Mfg. Part No.	Stock No.	Price Each 1-9	10-99	100-499	500-999
● 572802B00000G	12T2661	2.74	2.25	1.68	1.44
● 572802B03100G	12T2662	5.16	4.22	3.15	2.72
● 572802B03900G	12T2663	2.83	2.32	1.73	1.49
● 572802B04000G	12T2664	3.30	3.03	2.79	2.65
● 572802B04100G	12T2665	6.52	5.33	3.98	3.44

(190766)

EASY TO ATTACH HEAT SINKS FOR TO-220 & TO-262 DEVICES

RoHS Compliant Available

AAVID THERMALLOY



Plug-In

Slide-On

Clip-On

PLUG-IN

Plug-in style aluminum heat sinks with black anodized finish eliminate need for additional mounting hardware. With or without board mounting tabs.

Mfg. Part No.	Thermal Resistance	Pkg.	Dimensions (mm) L x W x H	PC Mount Style	Stock No.	Price Each 1-9
● 576802B00000G	27.3°C/W	TO-220	19.05 x 12.7 x 12.7	Vert. no tabs	89K0438	1.95
● 576802B03100G	27.3°C/W	TO-220	19.05 x 12.7 x 12.7	Horiz. w/tab	80K7974	0.83
● 576802B04000G	27.3°C/W	TO-220	19.05 x 12.7 x 12.7	Vert. w/tabs	66K0258	0.81
● 576802B04100G	27.3°C/W	TO-220/ TO-262	19.05 x 12.7 x 12.7	Vert. w/tabs	18M8194	3.62
● 576802B03700G	27.3°C/W	TO-220/ TO-262	12.7 x 12.7 x 19	Vert. w/tab	08P5385	3.62
● 576802B03900G	27.3°C/W	TO-220/ TO-262	12.7 x 12.7 x 19.05	Vert. w/tab	88M2235	0.69
● 591202B00000G	26.8°C/W	TO-262	12.7 x 12.7 x 15.24	Vert. no tabs	35M4662	2.68
● 591202B03700G	26.8°C/W	TO-262	12.07 x 14.48 x 15.24	Vert. w/tab	99R8255	2.86
● 591302B02800G	26.8°C/W	TO-220/ TO-262	12.07 x 12.07 x 19.05	Vert. w/tab	99R8256	3.62
● 573902B00000G	18.8°C/W	TO-220	12.7 x 12.7 x 38.1	Vert. no tabs	99R8249	3.62
● 573902B04000G	18.8°C/W	TO-220	12.7 x 12.7 x 38.1	Vert. w/tabs	99R8250	3.62

SLIDE-ON

Easy-to-install slide-on style aluminum heat sinks with black anodized finish.

● 574902B03300G	16°C/W	TO-220	9.02 x 21.84 x 34.93	Vert. w/tab	18M8192	5.68
● 574502B03300G	21.2°C/W	TO-220	9.9 x 20.57 x 19.05	Vert. w/tab	05M6029	0.59
● 574102B00000G	23.2°C/W	TO-220	10.03 x 21.84 x 19.05	Vert. no tabs	89K0298	0.39
● 574402B03200G	23.2°C/W	TO-220	10.03 x 21.84 x 19.05	Vert. w/tabs	99R8251	1.05
● 574502B00000G	21.2°C/W	TO-220	10.03 x 21.84 x 19.05	Vert. no tabs	73K2033	2.17
● 574502B03200G	21.2°C/W	TO-220	10.03 x 21.84 x 19.05	Vert. w/tabs	01N5135	3.62
● 574502B03700G	21.2°C/W	TO-220	9.9 x 20.57 x 19.05	Vert. w/tabs	07R7286	3.62
● 574602B03300G	21.6°C/W	TO-220	10.03 x 21.84 x 17.53	Vert. w/tabs	61M3500	3.62
● 574602B03700G	21.6°C/W	TO-220	9.02 x 20.57 x 0.69	Vert. w/tabs	99R8252	2.67
● 574902B03700G	16°C/W	TO-220	10.03 x 21.84 x 34.93	Vert. w/tabs	29M8465	5.86
● 574902B04300G	16°C/W	TO-220	9.02 x 20.57 x 32.93	Vert. w/tabs	99R8253	7.24

CLIP-ON

Easy-to-install clip-on style aluminum heat sinks with pre-black anodized finish.

● 6043BG	23°C/W	TO-220	6.81 x 20.32 x 25	Vert. no tabs	50R9045	3.15

(70275)

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(212564)

CHANNEL STYLE HEAT SINKS WITH INTEGRATED MOUNTING CLIP FOR TO-220 PKG.

RoHS Compliant Available

AAVID THERMALLOY

- Solderable heat sinks for TO-220 devices
- Clip-on tabs for device retention
- Material: copper
- Vertical mount

Fig. 1

Fig. 2

Fig. 3

Mfg. Part No.	Fig.	Dimension (mm) L x W x H	Thermal Resistance	Stock No.	Price Each 1-9	10-99	100-499
● 7138DG	1	15.49 x 25.53 x 26.04	20°C/W	18M8247	2.91	2.72	2.49
● 7136DG	1	13.08 x 13.21 x 21.54	19.7°C/W	18M8246	2.88	2.70	2.48
● 7128DG	1	9.52 x 9.52 x 27.94	19.2°C/W	18M8245	4.44	4.16	3.82
● 7139DG	2	13.08 x 13.21 x 19.81	28.3°C/W	50M1595	2.71	2.54	2.33
● 7141DG	2	13.08 x 13.21 x 19.81	20.3°C/W	32M5735	1.25	1.21	1.10
● 7142DG	2	13.08 x 13.21 x 19.81	20.3°C/W	99R8260	2.71	2.54	2.33
● 6238B-MTG	3	15.49 x 25.53	13.6°C/W	21M6732	1.25	1.20	1.20

(4485)

TO-220 PKG. CHANNEL-STYLE HEAT SINKS

RoHS Compliant Available

AAVID THERMALLOY

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

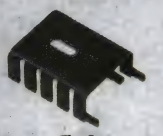

Fig. 6

Fig. 7

Fig. 8

Fig. 9

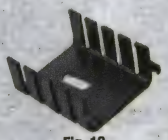

Fig. 10

Fig. 11

Mfg. Part No.	Fig.	Thermal Resistance (°C/W)	Dimensions (mm) L x W x H	Mounting Tabs	Stock No.	Price Each 1-9	10-99
● 504102B00000G	1	15.6°C/W	21.6 x 19.8 x 17.8	No	87K0022	5.27	4.29
● 530614B00000G	1	16.7°C/W	12.7 x 25.4 x 29.97	No	18M8175	3.86	3.15
● 530714B00000G	1	20.3°C/W	12.7 x 25.4 x 18.03	No	18M8176	0.47	0.39
● 507302B00000G	1	24°C/W	9.65 x 19.05 x 19.05	No	01M6666	0.36	0.29
● 504222B00000G	2	6.4°C/W	36.83 x 19.81 x 21.59	No	78K5503	0.75	0.61
● 530613B00000G	2	16.7°C/W	12.7 x 25.4 x 29.97	No	01M5324	3.68	3.00
● 577002B00000G	3	32°C/W	19.05 x 13.21 x 6.35	No	03M6023	1.38	1.13
● 577102B00000G	3	25.9°C/W	19.05 x 13.21 x 9.52	No	18M8196	0.66	0.54
● 577202B00000G	3	24.4°C/W	19.05 x 13.21 x 12.7	No	16M4743	0.37	0.32
● 577102B04000G	3	25.9°C/W	19.05 x 13.21 x 9.52	No	18M8197	3.57	2.56
● 577304B00000G	3	27.2°C/W	19.05 x 13.21 x 9.53	No	18M8199	1.79	1.28
● 577404B00000G	3	24°C/W	19.05 x 13.21 x 12.7	No	18M8200	1.12	0.80
● 6273B	3	21°C/W	9.52 x 19.05 x 19.05	No	46F4096	3.23	2.32
● 593002B03400G	4	13.4°C/W	12.7 x 23.93 x 30	Yes	18M8203	0.98	0.88
6230B-TT	5	12.5°C/W	12.7 x 25.4 x 29.97	Yes	13B7416	8.87	6.82
● 6021BG	6	12.5°C/W	12.7 x 24.38 x 29.97	Yes	18M8206	1.78	1.46
● 563002B00000G	6	13°C/W	12.7 x 25.4 x 29.97	Yes	18M8189	0.93	0.84
● 577002B04000G	7	32°C/W	6.35 x 13.21 x 19.05	Yes	18M8195	3.21	2.61
● 577202B04000G	7	24.4°C/W	12.7 x 13.21 x 19.05	Yes	18M8198	3.85	3.15
● 590102B03600G	8	10°C/W	25.4 x 25.4 x 42.54	Yes	31M9258	1.53	1.37
● 590302B03600G	9	11.2°C/W	25.4 x 25.4 x 42.54	Yes	33P9665	1.66	1.36
● 523002B00000G	10	13.6°C/W	12.7 x 25.4 x 29.97	Yes	18M8161	3.62	2.96
● 7173DG	11	25.8°C/W	9.52 x 19.05 x 19.05	Yes	51P3284	2.71	2.54

(4490)

CHANNEL STYLE HEAT SINKS FOR TO–220

RoHS Compliant Available

AAVID THERMALLOY

- Shur-lock tabs and device clip
- Thermal resistance 13.4 °C/W
- Dimensions L x W x H: 12.7 x 25.4 x 29.97mm
- Black anodized finish

Mfg. Part No.	Stock No.	Price Each 1-9
534202B02853G	99R8246	1.38
534202B03453G	77M9673	1.32

(190780)

TWISTED FIN HEAT SINKS

RoHS Compliant Available

AAVID THERMALLOY

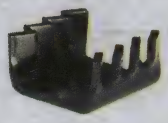

Fig. 1

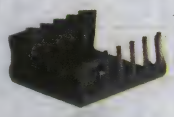

Fig. 2

Fig. 3

Mfg. Part No.	Fig.	Package	Thermal Resistance	Dim. (mm) H x W x L	Stock No.	Price Each 1-9
TV102	1	SOT-32 / TO-126	30°C/W	11 x 22 x 19	13B6242	9.75
TV1500	2	TO-220	14.2°C/W	30.2 x 30 x 12.7	10WX1049	1.03
530101B00150G	3	TO-218	6.3°C/W	44.45 x 12.45 x 12.45	56P3351	6.00
530102B00150G	3	TO-220	6.3°C/W	44.45 x 44.45 x 12.45	99R8245	2.03

(177540)

TO-220 PKG. HAT SECTION HEAT SINKS

RoHS Compliant Available

AAVID THERMALLOY

Fig. 1

Fig. 2

Fig. 3

- Low-profile cooling for TO-220 plastic power devices
- Designed for use on PC boards with 0.50" centering between boards
- **507102B00000G** has a notch and can be added to **507002B00000G** or **507222B00000G** for double-sided cooling of TO-220 devices
- **6237BG** has integrated clip

Mfg. Part No.	Fig.	Thermal Resistance (°C/W)	Dimensions (mm) H x W x L	Number of Devices	Stock No.	Price Each 1-9	Price Each 10-99
507002B00000G	1	15.6°C/W	9.52 x 44.45 x 17.78	Single	96K2979	2.23	1.82
507102B00000G	...	15.6°C/W	12.7 x 44.45 x 17.78	Single	05M3752	2.23	1.83
6237BG	2	25°C/W	9.52 x 22.86 x 17.78	Single	18M8219	0.47	0.41
7137DG	3	20.8°C/W	21.54 x 13.21 x 9.52	Single	99R8259	2.10	...
507222B00000G	...	9.6°C/W	9.52 x 44.45 x 37.34	Dual	05M3652	0.73	0.60

(4491)

SPACE SAVER HEAT SINKS FOR TO-220 DEVICES

RoHS Compliant Available

AAVID THERMALLOY

- Vertical mount heat sinks for TO-220 devices
- include solderable mounting tabs for easy installation

Mfg. Part No.	Thermal Resistance	Dimensions (mm) L x W x H	Finish	Stock No.	Price Each 1-9	Price Each 10-99
563202D00000G	9.4°C/W	12.7 x 35.05 x 50.8	Black Anodize	99R8248	5.35	4.37
593202B03500G	10.4°C/W	12.2 x 35.05 x 51	Black Anodize	45M6137	3.62	2.96
6225B-MTG	15°C/W	8 x 26.01 x 27.18	Black Anodize	02P9848	3.62	2.96
6022BG	16.7°C/W	6.35 x 22.23 x 30.73	Pre-Anodized Black	39M5068	6.41	5.24
6025DG	17.9°C/W	6.34 x 22.22 x 32	Copper w/ Tin Plate	45M6138	2.06	1.69
542502D00000G	24°C/W	6.35 x 22.22 x 31.75	Matte Tin	99R8247	3.62	2.96

(73830)

SLIM CHANNEL STYLE HEAT SINKS FOR TO–202

RoHS Compliant Available

AAVID THERMALLOY

- Low-profile, no tabs
- Black anodized finish

Mfg. Part No.	Thermal Resistance	Dimension (mm) H x W	Stock No.	Price Each 1-9	Price Each 10-99	Price Each 100-499
6273B	21°C/W	19.05 x 19.05	46F4096	3.23	2.32	1.95
577404B00000G	24°C/W	12.7 x 13.21	18M8200	1.12	0.80	0.68
577102B04000G	25.9°C/W	9.52 x 13.21	18M8197	3.57	2.56	2.15
577304B00000G	27.2°C/W	9.53 x 13.21	18M8199	1.79	1.28	1.08

(4489)

EXTRUDED HEAT SINK WITH RADIAL FINS FOR TO-220 AND TO-218

RoHS Compliant Available

AAVID THERMALLOY

- Extruded heat sinks for TO-218 and TO-220 devices
- Feature wave solderable pins
- Vertical PC mount
- Black anodized finish

Mfg. Part No.	Pkg.	Thermal Resistance	Dimensions (mm) L x W x H	Stock No.	Price Each 1-9	Price Each 10-99
530002B02500G		2.6°C/W	25.4 x 41.91 x 63.5	99K1617	2.65	2.16
529802B02500G	TO-220	3.7°C/W	38.1 x 41.91 x 38.1	18M8164	2.06	1.88
6398BG	TO-220	4.4°C/W	25.4 x 41.91 x 38.1	99K0084	3.17	2.87
529901B02500G	TO-218, TO-247	4.5°C/W	25.4 x 41.91 x 50.8	58P0549	3.19	2.88
529902B02500G	TO-220	4.5°C/W	50.8 x 41.91 x 50.8	18M8165	3.24	2.91
529801B02500G	TO-218, TO-247	5°C/W	38.1 x 41.91 x 38	18M8163	2.20	1.99
533422B02552G	TO-220	5°C/W	25.4 x 41.91 x 38.1	04M6872	4.50	4.07
529701B02500G	TO-218, TO-247	5.5°C/W	25.4 x 41.91 x 25.4	39P8085	3.00	2.71
532602B02500G	TO-220	5.5°C/W	25.4 x 41.91 x 38.1	54M3529	3.19	2.88
529702B02500G	TO-220	5.5°C/W	25.4 x 41.91 x 25	18M8162	2.14	1.93
6396BG	TO-218 / TO-220	5.6°C/W	25.4 x 41.91 x 25.4	99K0083	2.58	2.32
533702B02552G	TO-220	5.7°C/W	25.4 x 41.91 x 25.4	86K0322	11.52	9.41
531202B02500G	TO-202, TO-220	7.5°C/W	12.7 x 34.92 x 50.8	18M8179	6.65	5.98
530001B02500G	TO-218	8°C/W	25.4 x 41.91 x 63.5	10R6456	2.91	2.38
531302B02500G	TO-202, TO-220	8°C/W	12.07 x 34.92 x 63.5	58M1708	1.59	1.52
513202B02500G	TO-220 / TO-202	8.3°C/W	12.7 x 34.92 x 50.8	99R8244	3.00	2.71
531102B02500G	TO-220	10.4°C/W	38.1 x 34.92 x 12.7	18M8178	4.00	3.60
513102B02500G	TO-220	11°C/W	12.7 x 34.92 x 38.1	31M1090	4.25	3.85
531002B02500G	TO-220	13.4°C/W	25.4 x 34.92 x 12.7	73K3927	1.57	1.42
513002B02500G	TO-220	13.4°C/W	12.7 x 34.92 x 25.4	27M3968	4.00	3.62

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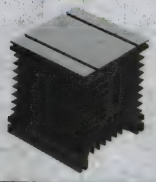
HEAT SINK EXTRUSIONS FOR 80MM POWER MODULES AND SOLID STATE RELAYS

RoHS Compliant Available

AAVID THERMALLOY



- Top suface skimmed
- Aluminum
- Black anodized finish

Mfg. Part No.	Thermal Resistance	Dimension (mm) L	Dimension (mm) W	Dimension (mm) H	Stock No.	Price Each 1-24	Price Each 25-49	Price Each 50-99	Price Each 100-249
DB120-20	0.41°C/W	120	125	135	10WX1014	90.54	85.78	82.03	79.31
D180-20	0.33°C/W	180	125	135	10WX1020	146.93	136.09	125.85	121.03

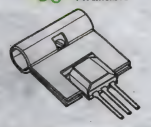
(192426)

HEAT SINKS – PC BOARD

COMPACT SLIDE-ON HEAT SINK FOR TO-202

RoHS Compliant Available AAVID THERMALLOY

- Economical, slide-on heat sink for TO-202 devices
- Easy installation with positive device catch to lock device into heatsink



Mfg. Part No.	Dimensions (mm) H x W	Thermal Resistance	Stock No.	Price Each 1-18	19-50	51-135
● 6047PBG	21.59 x 7.62	25°C/W	18M8213	2.64	2.12	1.51

(4483)

SURFACE MOUNT HEAT SINKS

RoHS Compliant Available AAVID THERMALLOY

- Pretinned, auto-insertable heat sinks for D-Pak packages
- Compatible with automated pick-and-place equipment
- Help maximize board space and minimize assembly costs
- Tape & Reel packaging also available

D-Pak

D2-Pak

Mfg. Part No.	Package	Thermal Resistance	Dimensions (mm) L x W x H	Stock No.	Price Each 1-9
● 7109DG	D2-PAK (TO-263)	11°C/W	25 x 19.38 x 11	21M5225	1.52
● 573400D00010G	D3-PAK (TO-268)	14°C/W	12.7 x 30.99 x 10.2	18M8191	2.49
● 573400D00000G	D3-PAK (TO-268)	14°C/W	31 x 12.7 x 10	80K7735	0.97
● 573100D00000G	D-PAK (TO-252)	15°C/W	8 x 22.86 x 10.16	12N1843	2.65
● 573100D00010G	D-PAK (TO-252)	15°C/W	8 x 22.86 x 10	83K8890	0.94
● 7106DG	D2-PAK (TO-263)	15°C/W	26 x 15 x 10	18M8244	1.76
● 573300D00000G	D2-PAK (TO-263)	18°C/W	12.7 x 26.16 x 10.16	30M2416	2.49
● 573300D00010G	D2-PAK (TO-263)	18°C/W	26.16 x 12.7 x 10.16	18M8190	1.03

(70279)

HEAT SINKS FOR BALL GRID ARRAYS

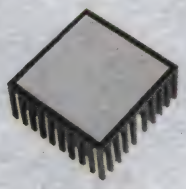
RoHS Compliant Available AAVID THERMALLOY

Pad Version

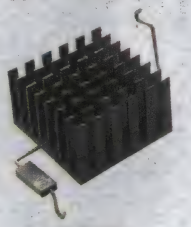
- Tape mounted versions eliminate the need for mounting holes in the PC Board
- Heat sinks can be used with metal BGA Package
- Heat sinks are compatible with Ther-a-grip tapes

Clip Version

- Clip design allows for easy removal in case of rework
- Minimal PC Board space is required for mounting
- Clip design compatible with solder anchor sold seperately; *go online or call*
- Each heat sink utilizes a phase change pad as the interface for optimal thermal performance



Pad Version



Clip Version

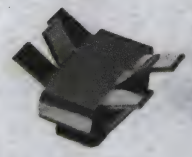
Configurations available for a wide range of BGA package sizes. Black anodize.

Mfg. Part No.	Thermal Resistance	Dimension (mm) L	W	H	Stock No.	Price Each 1-9	10-99	100-249	250-999
PAD VERSION									
● 375024B00032G	12.2°C/W	40	40	18	05M6208	8.78	8.26	7.69	7.15
● 374724B00032G	15.3°C/W	35	35	18	45M6207	5.21	4.68	...	...
● 374424B00032G	20.3°C/W	27	27	18	51R8103	1.62	1.48	1.30	1.16
● 374424B00035G	20.3°C/W	27	27	18	18M8052	8.16	7.46	6.53	5.83
● 374124B00032G	23.4°C/W	23	23	18	53R2166	1.43	1.31	1.15	1.03
● 374124B00035G	23.4°C/W	23	23	18	83K9811	7.77	7.11	6.22	5.55
● 374624B00032G	23.4°C/W	35	35	10	45M6206	5.09	4.57	...	...
● 335824B00034G	1.1°C/W	30	30	9	82K8189	7.71	7.05	6.17	5.51
● 374324B00035G	30.6°C/W	27	27	10	18M8051	8.13	7.44	6.51	5.81
● 371824B00032G	31.9°C/W	35	35	7	18M8050	9.15	8.36	7.32	6.54
● 374024B00032G	40°C/W	23	23	10	51R8097	1.26	1.15	1.01	0.90
● 374024B00035G	40°C/W	23	23	10	82K9207	3.55	3.29	3.29	3.29
CLIP DESIGN									
● 374124B60023G	23.4°C/W	23	23	18	51R8099	2.12	1.94	1.70	1.51
● 374324B60023G	30.6°C/W	27	27	10	32M7143	8.21	7.51	6.58	5.88

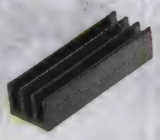
(192429)

HEAT SINKS FOR DIP DEVICES

RoHS Compliant Available AAVID THERMALLOY



Angled Fins



Straight Fins Along the Length

Straight Fins Along the Width

- Bond-on heat sinks for 14 or 16-pin DIPs require no additional PC board space
- Heat sink may be added after assembly
- Black anodized finish

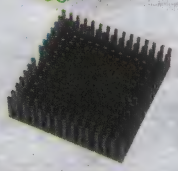
Mfg. Part No.	Thermal Resistance	Dimensions (mm) L x W x H	Fin Style	Stock No.	Price Each 1-9
● 580200B00000G	20°C/W	23 x 15.24 x 10	Angled	18M8201	2.54
● 580100B00000G	30°C/W	14.27 x 15.24 x 11.43	Angled	10M9671	2.90
● 501000B00000G	60°C/W	19.05 x 15.34 x 5.39	Angled	18M8138	2.18
● 501100B00000G	67°C/W	19.05 x 6.35 x 4.82	Straight (Length)	18M8140	0.60
● 501200B00000G	68°C/W	18.57 x 6.35 x 4.82	Straight (Width)	18M8141	0.63

(73829)

HEAT SINKS FOR BALL GRID ARRAYS

RoHS Compliant Available AAVID THERMALLOY

- Tape mounting eliminates the need for mounting holes in the PC board
- Available for a wide variety of BGA packages, both plastic and ceramic



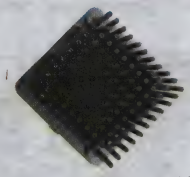
Mfg. Part No.	Thermal Resistance	Dimensions (mm) L x W x H	Material	Stock No.	Price Each 1-9	10-99
● 375024B00032G	12.2°C/W	40 x 40 x 18	Aluminium	05M6208	8.78	8.26
● 374724B00032G	15.3°C/W	35 x 35 x 18	Aluminium	45M6207	5.21	4.68
● 374424B00035G	20.3°C/W	27 x 27 x 18	Aluminium	18M8052	8.16	7.46
● 374124B00035G	23.4°C/W	23 x 23 x 18	Aluminium	83K9811	7.77	7.11
● 374624B00032G	23.4°C/W	35 x 35 x 10	Aluminium	45M6206	5.09	4.57
● 335824B00034G	1.1°C/W	30 x 30 x 9	Aluminium	82K8189	7.71	7.05
● 374324B00035G	30.6°C/W	27 x 27 x 10	Aluminium	18M8051	8.13	7.44
● 371824B00032G	31.9°C/W	35 x 35 x 7	Aluminium	18M8050	9.15	8.36
● 374024B00035G	40°C/W	23 x 23 x 10	Aluminium	82K9207	3.55	3.29

(73826)

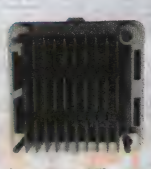
CHIPSET HEAT SINKS

NEW WAKEFIELD SOLUTIONS

- Material: AL 6063
- Finish: Black Anodize



Pin Fin



Eliptical Fin

Wakefield-Vette heat sink assembles onto chip set using the space that is between the PCB and the substrate of the solder balls. The solder balls provide a minimal gap of 0.5mm to 0.7mm. Attachment feature is below a 0.4mm thickness. The clipping system willnot interfere or damage chip. Contact area is the edge of chip. Heat sinks for chip set can match up to devices from Intel, Broadcom, Xilinx. TI, Motorola and more.

Mfg. Part No.	Thermal Resistance	Dimensions (mm) H	W	Stock No.	Price Each 1-9	10-49	50-99
PIN FIN WITH CLIP ASSEMBLY							
● 901-19-2-12-2-B-0	12.74°C/W	11.6	19	39X7225	4.21	4.11	3.78
● 901-19-2-23-2-B-0	10.55°C/W	22.6	19	39X7226	4.38	4.26	3.93
● 902-21-2-12-2-B-0	12.4°C/W	11.6	21	39X7229	4.21	4.11	3.78
● 902-21-2-23-2-B-0	10.27°C/W	22.6	21	39X7230	4.38	4.26	3.93
● 904-27-2-12-2-B-0	11.38°C/W	11.6	27	39X7233	4.58	4.46	4.11
● 904-27-2-23-2-B-0	9.44°C/W	22.6	27	39X7234	4.86	4.73	4.36
● 906-31-2-12-2-B-0	10.71°C/W	11.6	31	39X7237	4.86	4.73	4.36
● 906-31-2-23-2-B-0	8.88°C/W	22.6	31	39X7238	5.65	5.51	5.07
● 908-35-2-12-2-B-0	10.03°C/W	11.6	35	39X7241	5.55	5.41	4.98
● 908-35-2-23-2-B-0	8.32°C/W	22.6	35	39X7242	6.15	5.99	5.52
● 910-40-2-12-2-B-0	9.18°C/W	11.6	40	39X7245	6.11	5.95	5.48
● 910-40-2-23-2-B-0	7.63°C/W	22.6	40	39X7246	6.31	6.15	5.67
ELIPTICAL FIN WITH CLIP ASSEMBLY							
● 901-19-1-12-2-B-0	14.77°C/W	11.6	19	39X7223	4.21	4.11	3.78
● 901-19-1-23-2-B-0	11.98°C/W	22.6	19	39X7224	4.38	4.26	3.93

CONTINUED

CHIPSET HEAT SINKS (CONT.)

ELIPTICAL FIN WITH CLIP ASSEMBLY

Mfg. Part No.	Thermal Resistance	Dimensions (mm) H	Dimensions (mm) W	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99
902-21-1-12-2-B-0	14.31°C/W	11.6	21	39X7227	4.21	4.11	3.78
902-21-1-23-2-B-0	11.63°C/W	22.6	21	39X7228	4.38	4.26	3.93
904-27-1-12-2-B-0	12.93°C/W	11.6	27	39X7231	4.58	4.46	4.11
904-27-1-23-2-B-0	10.58°C/W	22.6	27	39X7232	4.86	4.73	4.36
906-31-1-12-2-B-0	12.02°C/W	11.6	31	39X7235	4.86	4.73	4.36
906-31-1-23-2-B-0	9.88°C/W	22.6	31	39X7236	5.65	5.51	5.07
908-35-1-12-2-B-0	11.1°C/W	11.6	35	39X7239	5.55	5.41	4.98
908-35-1-23-2-B-0	8.75°C/W	22.6	35	39X7240	6.15	5.99	5.52
910-40-1-12-2-B-0	9.95°C/W	11.6	40	39X7243	6.11	5.95	5.48
910-40-1-23-2-B-0	8.3°C/W	22.6	40	39X7244	6.31	6.15	5.67

(211982)

TO-220 CHANNEL-STYLE HEAT SINKS WITH TWISTED FINS

RoHS Compliant Available

AAVID THERMALLOY

- Solderable tabs
- Black anodized finish

Mfg. Part No.	Thermal Resistance (°C/W)	Dimensions (mm) H x W x L	Stock No.	Price Each 1-9	Price Each 10-99	Price Each 100-499
593002B03400G		30 x 23.93 x 12.7	18M8203	0.98	0.88	0.69

(110552)

DOUBLE SURFACE HEAT SINKS

RoHS Compliant Available

WAKEFIELD SOLUTIONS

For space-critical applications where high power is dissipated. Black anodized finish aluminum alloy. Mfg. part no. suffixes: **A** = one TO-3 semi-mounting hole; **K** = blank (no holes).

401 / 403 SERIES

Mfg. Part No.	Thermal Performance: Natural Convection (°C @ 30W)	Thermal Performance: Forced Convection (°C/W @ 250 LFM)	Dimensions (in.) W x L x H	Stock No.	Price Each 1-9
401K	80	1.5	4.75 x 1.50 x 1.250	58F502	14.96
403A	55	0.9	4.75 x 3.00 x 1.250	58F503	17.54
403K	55	0.9	4.75 x 3.00 x 1.250	58F505	13.59

421 / 423 SERIES

Mfg. Part No.	Thermal Performance: Natural Convection (°C @ 50W)	Thermal Performance: Forced Convection (°C/W @ 250 LFM)	Dimensions (in.) W x L x H	Stock No.	Price Each 1-9
421K	58	0.7	4.75 x 3.00 x 2.625	58F508	17.23
423K	47	0.5	4.75 x 5.00 x 2.625	58F511	25.87

(4575)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196561)

TO-220 PKG. CHANNEL-STYLE HEAT SINKS

RoHS Compliant Available

WAKEFIELD SOLUTIONS

270, 271, 272 | 273 | 274 | 287

- **272 series** accepts two devices
- Provide two-sided cooling by adding **271 series** heat sink to **270** or **272** heat sink on top of TO-220 device
- **273** and **274 series** heat sinks for plastic-case power SCRs and transistors
- **286, 287, 288 series** have wave-solderable pins
- Black anodized finish aluminum
- **E suffix** denotes RoHS compliant

288

Mfg. Part No.	Thermal Performance: Natural	Thermal Performance: Forced	Dimensions (mm) H x W x L	Stock No.	Price Each 1-9	Price Each 10-24
270-AB	70°C @ 4W	6.0°C/W @ 400LFM	9.4 x 17.8 x 44.5	81F042	0.33	0.32
271-AB	62°C @ 4W	5.1°C/W @ 400LFM	12.7 x 17.8 x 44.5	81F043	0.38	0.36
272-AB	42°C @ 4W	3.6°C/W @ 400LFM	9.4 x 36.8 x 44.5	81F044	0.46	0.44
273-AB	49°C @ 2W	7.2°C/W @ 400LFM	9.5 x 19.1 x 19.1	81F046	0.39	0.37
274-1AB	56°C @ 2W	8.0°C/W @ 400LFM	9.5 x 19.1 x 13.2	50B8304	0.26	0.25
274-2AB	50°C @ 2W	7.0°C/W @ 400LFM	12.7 x 46 x 13.2	81F048	0.26	0.25
274-3AB	62°C @ 2W	9.0°C/W @ 400LFM	6.4 x 13.2 x 19.1	52F6214	0.25	0.24
286-AB	58°C @ 4W	7.4°C/W @ 200LFM	30.2 x 12.7 x 25.4	46F7866	0.63	0.58
287-1ABE	65°C @ 4W	7.8°C/W @ 200LFM	30 x 12.7 x 25.4	42M0655	1.58	1.45
288-1ABE	85°C @ 4W	12°C/W @ 200LFM	31.8 x 22.2 x 22.2	42M0656	1.44	1.32

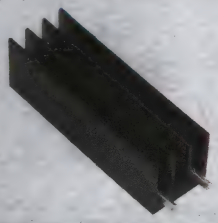
(4577)

BOARD LEVEL HEAT SINKS FOR TO-220 AND TO-218 COMPONENTS

RoHS Compliant Available

WAKEFIELD SOLUTIONS

Vertical mount, slim profile, unidirectional fin heat sinks offer wave solderable pins on 0.4" (10.2mm) centers for vertically mounting TO-220 and TO-218 components. Ideal for a variety of applications where quick assembly and space are considerations. Material: black anodized aluminum. Note: Thermal compound is assumed between device and heat sink. Tab temperature with **mfg. part no. 634-20ABPE** heat sink will typically be about 15% lower. Tab temperature with **mfg. part nos. 634-10ABP/10ABPE** heat sink will typically be about 25% higher. **E suffix** in mfg. part no. indicates RoHS compliant.



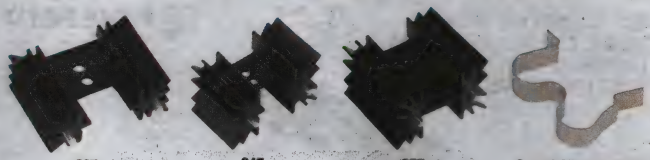
Mfg. Part No.	Dimensions (mm) H x W x L	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99
634-10ABP	25.4 x 16.26 x 16.26	91F3673	1.84	1.75	1.65
634-10ABPE	25.4 x 16.26 x 16.26	42M0657	1.80	1.71	1.62
634-15ABP	38.1 x 16.26 x 16.26	91F3674	1.93	1.84	1.74
634-15ABPE	38.1 x 16.26 x 16.26	08R0114	2.65	2.31	2.02
634-20ABPE	50.8 x 16.26 x 16.26	42M0658	2.04	1.94	1.83

(17826)

WAVE-SOLDERABLE HEAT SINKS

RoHS Compliant Available

WAKEFIELD SOLUTIONS



637 | 647 | 657 | Speed Clip (for 667)

- **626, 627, 634 series** for TO-218, TO-220 devices
- **637, 647, 667 series** for TO-220 devices
- **657, 677 series** for TO-218, TO-220, TO-247 devices
- **667 series** for TO-220 plastic-case devices
- Black anodized aluminum

NOTE: E suffix in mfg. part no. denotes RoHS compliant part. N suffix denotes notch at bottom of heat sink. Speed clips enable fast, vertical PC board mounting *; order separately below.*

Mfg. Part No.	Thermal Convection: Natural @ 6W	Thermal Convection: Forced @ 200 LFM	Dimensions (mm) L x W x H	Stock No.	Price Each 1-9	Price Each 10-99	Price Each 100-499
626-20ABEP	55°C	4.7°C/W	12.7 x 34.9 x 50.8	03P0727	2.91	2.54	2.23
627-20ABEP	55°C	4.7°C/W	12.7 x 34.9 x 50.8	03P0728	2.91	2.54	2.23
634-15ABPE	57°C	...	16.26 x 16.26 x 38.1	08R0114	2.65	2.31	2.02
637-10ABPE	76°C	5.8°C/W	12.7 x 34.9 x 25.4	93K7986	1.54	1.47	1.39
637-10ABP	76°C	5.8°C/W	12.7 x 34.9 x 25.4	81F055	1.57	1.50	1.41
637-10ABPE	76°C	5.8°C/W	12.7 x 34.9 x 25.4	93K7986	1.54	1.47	1.39
637-15ABPE	65°C	5.5°C/W	12.7 x 34.9 x 38.1	83K8262	1.58	1.51	1.43
637-15ABPE	65°C	5.5°C/W	12.7 x 34.9 x 38.1	83K8262	1.58	1.51	1.43
637-20ABP	55°C	4.7°C/W	12.7 x 34.9 x 50.8	81F057	1.89	1.80	1.70
647-10ABPE	42°C	3.8°C/W	25.4 x 41.9 x 25.4	42M0659	1.84	1.75	1.65

CONTINUED

HEAT SINKS – PC BOARD

WAVE-SOLDERABLE HEAT SINKS (CONT.)

Mfg. Part No.	Thermal Convection Natural @ 6W	Thermal Convection Forced @ 200 LFM	Dimensions (mm) L x W x H	Stock No.	Price Each 1-9	Price Each 10-99	Price Each 100-499
● 647-15ABPE	37°C	3.5°C/W	25.4 x 41.9 x 38.1	80K7229	2.01	1.92	1.81
● 647-15ABPE	37°C	3.5°C/W	25.4 x 41.9 x 38.1	80K7229	2.01	1.92	1.81
● 647-20ABPE	31°C	3.1°C/W	25.4 x 41.9 x 50.8	42M0660	2.42	2.37	2.14
● 647-25ABPE	25°C	2.8°C/W	25.4 x 41.9 x 63.5	42M0661	2.58	2.52	2.28
● 657-15ABPE	38°C	3.3°C/W	25.4 x 41.9 x 38.1	06M4224	1.63	1.55	1.46
● 657-15ABPE	38°C	3.3°C/W	25.4 x 41.9 x 38.1	06M4224	1.63	1.55	1.46
● 657-20ABPE	32°C	2.9°C/W	25.4 x 41.9 x 50.8	42M0662	2.86	2.49	2.18
● 657-20ABPE	32°C	2.9°C/W	25.4 x 41.9 x 50.8	42M0662	2.86	2.49	2.18
657-20ABPN	32°C	2.9°C/W	25.4 x 41.9 x 50.8	52F6226	4.21	3.02	2.10
● 657-25ABPE	25°C	2.7°C/W	25.4 x 41.9 x 63.5	42M0663	2.02	1.92	1.82
● 657-25ABPE	25°C	2.7°C/W	25.4 x 41.9 x 63.5	42M0663	2.02	1.92	1.82
● 667-10ABPPE	76°C	5.8°C/W	12.7 x 34.9 x 25.4	42M0664	2.88	2.52	2.21
● 667-15ABPPE	66°C	5.5°C/W	12.7 x 34.9 x 38.1	41M6814	2.56	2.50	2.26
● 677-10ABPE	52°C	3.1°C/W	41.9 x 25.4 x 25.4	08R0211	3.03	2.65	2.32
● 677-15ABPE	46°C	2.8°C/W	25.4 x 41.9 x 38.1	42M0666	2.60	2.55	2.30

SPEED CLIPS FOR 667 SERIES

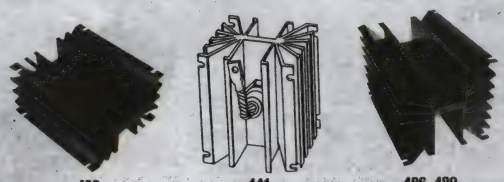
Mfg. Part No.	Material	Force (lbs.)	Stock No.	Price Each 1-9	Price Each 10-99	Price Each 100-499
● 330SC	Stainless Steel	4	90F1417	0.65	0.62	0.55
● 285SC	Spring Steel	10	46F7897	0.30	0.29	0.25

(4466)

HEAT SINKS FOR 30-100W METAL POWER SEMICONDUCTORS & HIGH-POWER HEX-TYPE RECTIFIERS & DIODES

RoHS Compliant Available

WAKEFIELD SOLUTIONS



433 441 486, 489

433 high-performance heat sink for minimum space. **441** high density heat sink for mounting on vertical surface (no brackets required) for better natural convection. **486** and **489** heat sink for mounting and efficient heat dissipation. Black anodized aluminum alloy. **"K" suffix** indicates blank semiconductor mounting hole pattern.

Mfg. Part No.	Thermal Performance	Dimensions (mm) H x W x L	Package	Stock No.	Price Each 1-99	Price Each 100-249
● 433K	42°C @ 50W	76.2 x 120.7 x 139.7	TO-3	58F334	37.50	29.46
● 441K	47°C @ 80W	114.3 x 120.7 x 139.7	1.75" (44.5) Hex-Type Devices	58F521	44.92	35.28
● 486K	24°C @ 50W 86°C @ 250W	158.8 x 158.8 x 152.4		58F425	118.56	113.33
● 489K	19°C @ 50W 75°C @ 250W	158.8 x 158.8 x 228.6		58F428	155.43	148.56

(4469)

621, 623 AND 641 SERIES SINGLE-CHANNEL HEAT SINKS FOR METAL-CASED SEMICONDUCTORS

RoHS Compliant Available

WAKEFIELD SOLUTIONS

621,623

Replace marginal flat plate dissipators. Fin design provides large surface area for maximum natural convection. Black anodized finish aluminum alloy. Type suffixes: **A** = 1 TO-3 semi mounting hole; **K** = blank (no holes).

Mfg. Part No.	Dimensions (mm) L x W x H	Stock No.	Price Each 1-9	Price Each 10-49	Price Each 50-99
● 621A	120.6 x 120.6 x 11.7	58F482	6.40	6.26	5.66
● 621K	120.6 x 120.6 x 11.7	58F538	6.28	6.14	5.56
● 623K	120.6 x 120.6 x 11.7	58F539	7.56	7.40	6.69
● 641A	76.2 x 104.8 x 25.4	58F467	14.26	13.95	12.62
● 641K	76.2 x 104.8 x 25.4	58F540	14.01	13.70	12.39

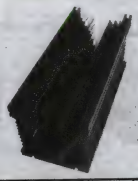
(4468)

HIGH-PERFORMANCE HEAT SINKS FOR POWER MODULES

RoHS Compliant Available

WAKEFIELD SOLUTIONS

392 series heat sinks are designed for effective cooling of single and multiple isolated power modules, IGBTs, relays, and rectifiers. Standardized 80mm mounting in both natural and forced convection. Base width: 4.921" (125.0). Height: 5.346" (135.8). Black anodized finish.



Mfg. Part No.	Length	Thermal Resistance (°CW) Natural Convection	Thermal Resistance (°CW) Forced Convection	Stock No.	Price Each 1-9	Price Each 10-24
● 392-120AB	4.725" (120mm)	0.50	0.16 @ 100 CFM	92F4663	123.35	117.74
● 392-180AB	7.087" (180mm)	0.43	0.11 @ 100 CFM	92F4664	124.49	118.72
● 392-300AB	11.811" (300mm)	0.33	0.08 @ 100 CFM	97F953	181.61	173.18

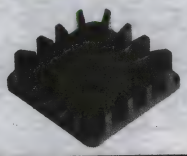
(4588)

TO-3 & TO-220 PKG. MAXIMUM EFFICIENCY OMNIDIRECTIONAL HEAT SINKS

RoHS Compliant Available

WAKEFIELD SOLUTIONS

- Black anodized aluminum alloy
- **"K" suffix** indicates blank mounting hole pattern (usable with one TO-3 device or two TO-220 devices)



Mfg. Part No.	Dimensions (mm) H x W x L	Thermal Performance @ Typ. Load Natural Convection	Thermal Performance @ Typ. Load Forced Convection	Stock No.	Price Each 1-9
● 680-5A	12.7 x 46 x 46	70°C @ 7.5W	3.0°C/W @ 400LFM	58F401	8.73
● 680-75A	19.1 x 46 x 46	58°C @ 7.5W	2.4°C/W @ 400LFM	58F398	12.56
● 680-10A	25.4 x 46 x 46	52°C @ 7.5W	2.0°C/W @ 400LFM	97F2148	11.72
● 680-125A	31.8 x 46 x 46	45°C @ 7.5W	1.5°C/W @ 400LFM	58F392	13.87
● 680-125K	31.8 x 46 x 46	45°C @ 7.5W	1.5°C/W @ 400LFM	01F7289	14.12

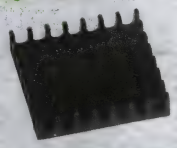
(4581)

OMNIDIRECTIONAL PIN FIN HEAT SINKS FOR BGAS

RoHS Compliant Available

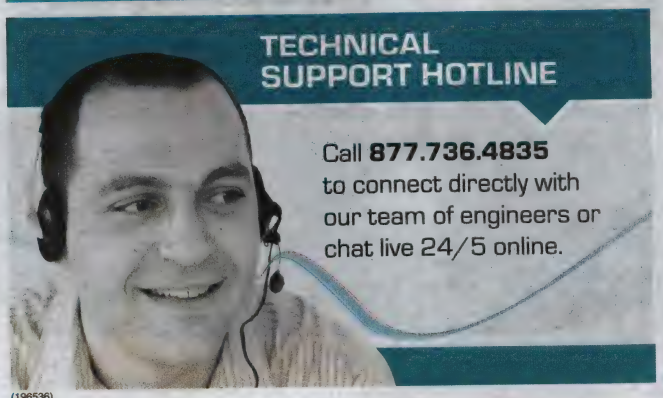
WAKEFIELD SOLUTIONS

- For both natural and forced-convection applications
- Material: aluminum, black anodized



Mfg. Part No.	Dimension (mm) L	Dimension (mm) W	Dimension (mm) H	Stock No.	Price Each 1-9	Price Each 10-99	Price Each 100-249	Price Each 250-999
● 628-20AB	43.2	44.5	5.1	92F4638	2.62	2.37	1.67	1.57
● 628-35AB	43.2	44.5	6.4	73H5094	2.87	2.60	1.83	1.73
● 628-40AB	44.5	43.2	10.2	95F3501	1.82	1.73	1.51	1.30
● 630-25AB	35	35	6.4	73H5103	1.36	1.30	1.23	1.16
● 630-35AB	35	35	8.9	73H5109	2.51	2.27	1.60	1.51
● 630-60AB	35	35	15.2	73H5121	1.84	1.76	1.66	1.57

(192428)

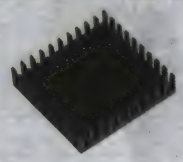


(196536)

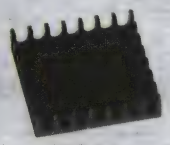
PENGUIN COOLER PIN FIN HEAT SINKS

RoHS Compliant Available

WAKEFIELD SOLUTIONS



628 Series



658 Series

624 series for adhesive attachment to 21×21mm BGAs. **625 series** for adhesive attachment to 25×25mm BGAs. **628 series** for adhesive attachment to 17×17mm ceramic PGAs. 630 series for adhesive attachment to 35×35mm BGAs. **658 series** designed for heat dissipation for Olin Corporation MQuad™ aluminum Quad flat packs and Amkor Power Quad thermally enhanced PQFPs. Aluminum sink material with black anodized finish.

THERMALLY ENHANCED PRESSURE SENSITIVE ADHESIVES

Suffix	Thermal Impedance (°C-in²/W)	Thickness (mm)	Semiconductor Surface
-T1	0.47	0.152	Metal/Ceramic
-T3	0.25	0.229	Metal/Ceramic
-T4	1.10	0.178	Plastic

Mfg. Part No.	Forced Convection @ 200 LFM (°C/W)	Height in. (mm)	Base Dim. in. (mm)	Stock No.	Price Each 1-9
624-25ABT3	24.0	0.25 (6.4)	0.827 (21) Sq.	08C3363	1.97
624-35AB	18.5	0.35 (8.9)	0.827 (21) Sq.	08C3365	2.31
624-45AB	16.0	0.45 (11.4)	0.827 (21) Sq.	08C3370	1.36
624-45ABT3	16.0	0.45 (11.4)	0.827 (21) Sq.	08C3373	2.37
624-60AB	11.5	0.60 (15.2)	0.827 (21) Sq.	08C3375	1.58
625-45AB	10.5	0.45 (11.4)	0.984 (25) Sq.	08C3390	1.56
628-65AB	3.25	0.65 (16.51)	1.75 (44.5) x 1.70 (43.2)	95F3502	1.89
630-45AB	5.50	0.45 (11.4)	1.378 (35) Sq.	73H5115	3.03
658-25AB	8.50	0.25 (6.35)	1.10 (27.9) Sq.	93F6542	1.92
658-25ABT3	8.50	0.25 (6.35)	1.10 (27.9) Sq.	08C3431	4.43
658-35ABT3	7.75	0.35 (8.9)	1.10 (27.9) Sq.	51B1423	2.64
658-45AB	6.00	0.45 (11.43)	1.10 (27.9) Sq.	93F6543	1.18
658-60AB	3.80	0.60 (15.24)	1.10 (27.9) Sq.	93F6544	1.27
658-60ABT1	3.80	0.60 (15.24)	1.10 (27.9) Sq.	08C3434	4.28
658-60ABT3	3.80	0.60 (15.24)	1.10 (27.9) Sq.	52F4988	4.80

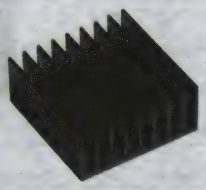
(4591)

BGA HEAT SINKS

RoHS Compliant Available

WAKEFIELD SOLUTIONS

Made for 40mm BGA applications. Material: black anodized aluminum. **659 series** heat sinks are for AMD and PowerPC™ devices. **655 series** heat sinks are for PowerPC™ 601 and PowerPC™ 603 devices. For thermal resistance graph; *go online or call.*



UNIDIRECTIONAL FIN HEAT SINK FOR BGAs

Mfg. Part No.	Length (mm)	Height (mm)	Stock No.	Price Each 1-9	10-49	50-99
659-65AB	36.8	16.5	93F6549	1.50	1.43	1.35
OMNIDIRECTIONAL PIN FIN HEAT SINKS FOR BGAs AND POWERPC™						
655-26AB	40.6	6.6	93F6540	2.38	2.32	2.10
655-53AB	40.6	13.3	93F6541	2.44	2.39	2.16

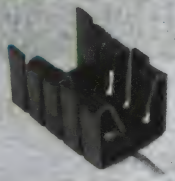
(70396)

HEAT SINK DB EXTRUSIONS

RoHS Compliant Available

WAKEFIELD SOLUTIONS

- For both natural and forced-convection applications
- Aluminum, black anodized



Mfg. Part No.	Thermal Resistance (°C/W)	Dimension (mm) H	W	Stock No.	Price Each 1-9	10-99	100-249
262-75ABE-05		13.4	14.5	78R1844	0.56	0.51	0.41
262-75ABE01		19.1	14.5	78R1845	0.40	0.38	0.36
262-75ABE375	80	19.05	14.478	78R1846	0.57	0.51	0.41

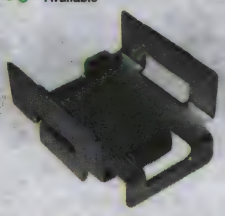
(194886)

SURFACE MOUNT HEAT SINKS

RoHS Compliant Available

WAKEFIELD SOLUTIONS

- No Interface Material Required
- Copper with Tin-Lead Plating for Improved Solderability and Assembly
- EIA Standards and ESD Protection are Specified
- For Use with Water-Soluble or No-Clean SMT Solder Creams or Other Pastes



Compatible with surface mount technology (SMT), these heat sinks allow greater packaging densities and reduction in PC-board area, increasing the power dissipation of surface mount devices (SMD) while maintaining manufacturer's component thermal specifications.

Mfg. Part No.	Thermal Performance at Typical Load: Natural Convection	Forced Convection	Stock No.	Price Each 1-9
217-36CTE6	55°C @ 1W	16.0°C/W @ 200 LFM	40K3868	0.44
217-36CTRE6	55°C @ 1W	16.0°C/W @ 200 LFM	43K2732	0.63

(70396)

TO-220 PKG. CHANNEL STYLE HEAT SINKS

RoHS Compliant Available

multicomp

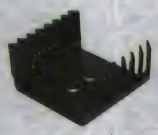


Fig. 1

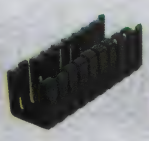


Fig. 2

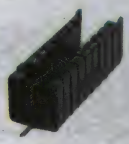


Fig. 3

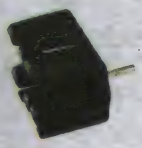


Fig. 4

- Clip-on assembly except for **mfg. part no. MC33278** which has twisted vane fins and accepts two devices
- Black anodized finish

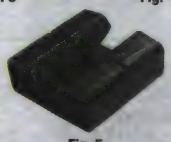


Fig. 5

Heat sink clips available online.

Mfg. Part No.	Fig.	Thermal Resistance	Dimensions (mm) H x W x L	Stock No.	Price Each 1-99	100-249	250-499
MC33279	1	7.1°C/W	25 x 42 x 38	09R3164	1.64	1.48	1.34
MC33282	2	21°C/W	19 x 12.8 x 12.7	09R3167	1.31	1.18	1.05
MC33280	3	21°C/W	19 x 12.8 x 12.7	09R3165	1.66	1.50	1.35

(148498)

TO-220 PKG. EXTRUDED HEAT SINKS

RoHS Compliant Available

multicomp

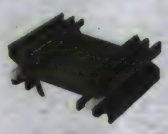


Fig. 1

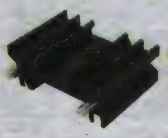


Fig. 2

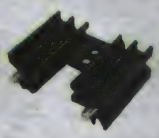


Fig. 3

Fig. 4

- Screw or clip mount
- Solderable mounting pins
- Black anodized finish

Heat sink clips available *on page 2406.*

Mfg. Part No.	Fig.	Thermal Resistance	Dimensions (mm) H x W x L	Use With Clip	Stock No.	Price Each 1-249	250-499	500-999
MC33285	1	11.4°C/W	25 x 34.5 x 12.5	MC33293	09R3170	1.73	1.55	1.39
MC33287	1	8.8°C/W	50 x 34.5 x 12.5	MC33293	09R3172	1.76	1.59	1.44
MC33286	1	10.2°C/W	38 x 34.5 x 12.5	MC33293	09R3171	1.59	1.43	1.30
MC33288	2	11.4°C/W	25 x 34.5 x 12.5	MC33293	09R3173	1.78	1.61	1.45
MC33290	2	8.8°C/W	50 x 34.5 x 12.5	MC33293	09R3175	2.29	2.07	1.87
MC33289	2	10.2°C/W	38 x 34.5 x 12.5	MC33293	09R3174	2.09	1.88	1.70
MC33291	3	11.4°C/W	25 x 34.5 x 12.5	MC33293	09R3176	1.75	1.57	1.41
MC33292	3	10.2°C/W	38 x 34.5 x 12.5	MC33293	09R3177	1.63	1.47	1.33
MC33264	4	10.4°C/W	38.1 x 34.9 x 12.7	MC33296	09R3149	1.84	1.66	1.50
MC33263	4	13.4°C/W	25.4 x 34.9 x 12.7	MC33296	09R3148	1.66	1.50	1.36

(148495)

HEAT SINKS – PC BOARD

T0-218/T0-220/T0-247 PKG. HEAT SINKS

RoHS Compliant Available

multicomp

- Screw or clip mount
- Solderable mounting pins or tabs
- Black anodized finish

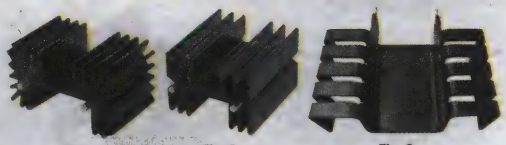


Fig. 1 Fig. 2 Fig. 3

Heat sink clips available online.

Mfg. Part No.	Fig.	Thermal Resistance	Dimensions (mm) H x W x L	Use With Clip	Stock No.	Price Each 1-99	100-249	250-499
● MC33271	1	2.7°C/W	63.5 x 42 x 25	MC33295	09R3156	3.67	3.29	3.01
● MC33269	1	4.4°C/W	38.1 x 42 x 25	MC33295	09R3154	2.87	2.59	2.34
● MC33270	1	3.3°C/W	50.8 x 42 x 25	MC33295	09R3155	3.17	2.84	2.60
● MC33268	1	5.6°C/W	25.4 x 42 x 25	MC33295	09R3153	2.40	2.16	1.95

(148497)

HEAT SINK CLIPS

RoHS Compliant Available

multicomp

Mfg. Part No.	For Use With	Stock No.	Price Each 1-249	250-499	500-999
● MC33293	Mfg. part nos. MC33285, MC33286, MC33287, MC33291, MC33292	09R3178	0.62	0.56	0.50
● MC33294	Mfg. part nos. MC33272, MC33273, MC33274, MC33275	09R3179	0.73	0.66	0.59
● MC33296	Mfg. part nos. MC33263, MC33264	09R3181	0.60	0.54	0.48
● MC33297	Mfg. part nos. MC33265, MC33266, MC33267	09R3182	0.56	0.51	0.45

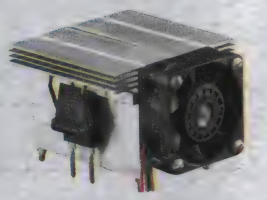
(148493)

C40 SERIES T0-247, T0-264 and SOT-227 PKG. HEAT SINKS

NEW

OHMITE

- Aluminum Alloy 6063-T5
- Spring clip: music wire, per ASTM A228 with bright nickel plating
- Solder foot: cold-rolled steel, per ASTM A-366 with pure tin over copper strike



C40 series heat sinks are ideal for high power density and small size (1U or 2U) electronic packaging with forced convection cooling.This compact, high performance heat sink with iwith an exchangeable cam clip system for T0-47, T0-264 and SOT-227 devices.This powerful heat sink can be thru-hole soldered in single or paired configurations. The paired unit has mounting holes to accomodate a 40mm x 40mm fan.

Mfg. Part No.	Dimensions (mm) H	W	L	Body Finish	Stock No.	Price Each 1-99
● C40-058-AE	43.8	32	58	Black Anodized	96W2041	6.13
● C40-058-VE	43.8	32	58	Degreased	96W2042	5.24

CLIPS

Mfg. Part No.	For Use With	Stock No.	Price Each 1-4
CLA-T247-21	T0-247	96W2039	1.17
CLA-T264-21	T0-264	96W2040	1.17

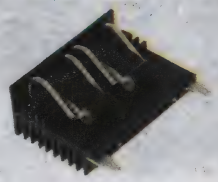
(212258)

C SERIES T0-126 PKG. HEAT SINKS

RoHS Compliant Available

OHMITE

- Aluminum Alloy 6063-T5
- Spring clip: music Wire, per ASTM A228 with bright nickel plating
- Solder foot: cold-rolled steel, per ASTM A-366 with pure tin over copper strike



2 Clip Style

C Series heat sinks are ideal for high power density and small size (1Uor 2U) electronic packaging with forced convection cooling.This compact, high performance heat sink with integrated camming clip system is also avaialbe for T0-247, T0-220 and T0-264 packages; *go online or call.*

Mfg. Part No.	Dimensions (mm) H	W	L	Body Finish	No. of Clips	Stock No.	Price Each 1-24	25-99	100-249	250-499
● C126-025-1AE	32.5	19.6	25	Black Anodized	1	05W6376	5.28	4.75	4.20	3.57
● C126-025-1VE	32.5	19.6	25	Degreased	1	05W6377	4.93	4.44	3.92	3.33

CONTINUED

C SERIES T0-126 PKG. HEAT SINKS (CONT.)

Mfg. Part No.	Dimensions (mm) H	W	L	Body Finish	No. of Clips	Stock No.	Price Each 1-24	25-99	100-249	250-499
● C126-040-2AE	32.5	19.6	40	Black Anodized	2	05W6378	7.70	6.93	6.13	5.21
● C126-040-2VE	32.5	19.6	40	Degreased	2	05W6379	7.18	6.46	5.72	4.85

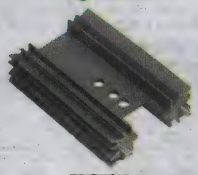
(207639)

T0-220, T0-218, T0-247 EXTRUDED HEAT SINKS

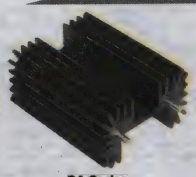
RoHS Compliant Available

OHMITE

- For vertical mounting with solderable pins
- Aluminum 6063-T5
- Black anodized
- 0.091" dia. pre-tinned pins
- Solder: 100% tin (Sn)



FA Series



RA Series

These devices are for use with Ohmite products. Visit us online.

Mfg. Part No.	Dimensions (mm) W	H	Thermal Resistance	Ohmite Resistor Series	Stock No.	Price Each 1-49
● FA-T220-25E	41.6	25.4	4.7°C/W	TBH25,TCH35	92R5223	1.68
● FA-T220-38E	41.6	38.1	3.8°C/W	TBH25,TCH35	92R5224	1.72
● FA-T220-51E	41.6	50.8	3.4°C/W	TBH25,TCH35	92R5225	2.08
● FA-T220-64E	41.6	63.5	3°C/W	TBH25,TCH35	92R5226	2.35
● RA-T2X-25E	42	25.4	4.8°C/W	TBH25,TCH35, TEH70, TEH100	92R5227	1.92
● RA-T2X-38E	42	38.1	3.9°C/W	TBH25,TCH35, TEH70, TEH100	92R5228	2.48
● RA-T2X-51E	42	50.8	3.5°C/W	TBH25,TCH35, TEH70, TEH100	92R5229	2.97
● RA-T2X-64E	42	63.5	3.1°C/W	TBH25,TCH35, TEH70, TEH100	92R5230	3.48

(194795)

T0-220 & T0-247 PKG. HEAT SINKS

RoHS Compliant Available

OHMITE

- Self-aligning extruded aluminum heat sink
- Solderable feet for vertical thru-hole mounting
- Integrated tin-plated, spring clip with 13.2 (lbf) of force

Fig. 1

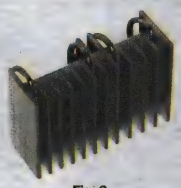


Fig. 2

Mfg. Part No.	Fig.	Package	Thermal Res.	Dim. (mm) H x W x L	Stock No.	Price Each 1-49
BLACK ANODIZED						
● WA-T220-101E	1	T0-220	12°C/W	30.5 x 18.3 x 16	67R4340	2.09
● WA-T247-101E	1	T0-247	11°C/W	32 x 23.4 x 16	67R4341	2.37
● WA-DT2-101E	2	T0-220, T0-247	7°C/W	32 x 43.4 x 16	82R5635	4.67
● WA-T264-101E	2	T0-264	11°C/W	32 x 16 x 23.4	84T1918	2.42
DEGREASED						
● WV-DT2-101E	2	T0-220, T0-247	8°C/W	32 x 43.4 x 16	82R5636	3.16
● WV-T264-101E	2	T0-264	12°C/W	32 x 16 x 23.4	84T1919	2.18

(167113)

element14 COMMUNITY

Get inspired, collaborate, design, research, ask experts questions.

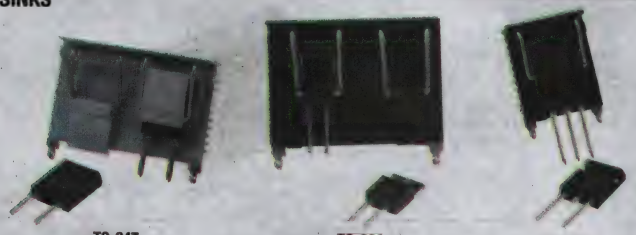
element14.com

(196546)

TO-247, TO-220, & TO-264 PKG. HEAT SINKS

RoHS Compliant Available

OHMITE



TO-247 TO-264 TO-220

- Constructed of aluminum alloy 6063-T5 or equivalent
- Heat sink includes integrated camming clip system
- Ideal for high power density and small size (1U or 2U) electronic packaging with forced convection cooling

Mfg. Part No.	Dimensions (mm) H x W x L	Body Finish	Stock No.	Price Each 1-24	25-99	100-249
TO-247						
C247-025-1AE	38 x 20.47 x 25	Black Anodized	41T0045	5.41	4.87	4.30
C247-025-1VE	38 x 20.47 x 25	Degreased	41T0046	4.68	4.21	3.73
C247-050-2AE	38 x 20.47 x 50	Black Anodized	41T0047	8.55	7.70	6.81
C247-050-2VE	38 x 20.47 x 50	Degreased	41T0048	7.40	6.66	5.89
C247-075-3AE	38 x 20.47 x 75	Black Anodized	41T0049	10.73	9.66	8.54
C247-075-3VE	38 x 20.47 x 75	Degreased	41T0050	10.38	9.34	8.26
TO-264						
C264-030-1AE	38 x 20.47 x 30	Black Anodized	65T4357	5.51	4.97	4.39
C264-030-1VE	38 x 20.47 x 30	Degreased	65T4358	5.14	4.62	4.08
C264-058-2AE	38 x 20.47 x 58	Black Anodized	65T4359	8.00	7.20	6.37
C264-058-2VE	38 x 20.47 x 58	Degreased	65T4360	7.48	6.73	5.95
C264-085-3AE	38 x 20.47 x 85	Black Anodized	65T4361	11.56	10.40	9.20
C264-085-3VE	38 x 20.47 x 85	Degreased	65T4362	10.45	9.41	8.32
TO-220						
C220-025-1AE	38 x 19.94 x 25	Black Anodized	65T4351	4.90	4.41	3.90
C220-025-1VE	38 x 19.94 x 25	Degreased	65T4352	4.20	3.78	3.35
C220-050-2AE	38 x 19.94 x 50	Black Anodized	65T4353	7.25	6.53	5.78
C220-050-2VE	38 x 19.94 x 50	Degreased	65T4354	6.75	6.08	5.38
C220-075-3AE	38 x 19.94 x 75	Black Anodized	65T4355	10.30	9.28	8.21
C220-075-3VE	38 x 19.94 x 75	Degreased	65T4356	9.23	8.31	7.35

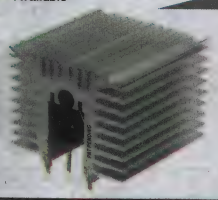
(195442)

TO-247 & TO-264 PKG. HEAT SINKS

RoHS Compliant Available

OHMITE

- Thermal resistance: 2 °C/W @ 200 LFM
- Constructed of aluminum alloy 6063-T5 or equivalent
- Heat sink comes with matrix clip system
- Ideal for high power density and small size (1U or 2U) electronic packaging with forced convection cooling



Mfg. Part No.	Dimensions (mm) H x W x L	Body Finish	Stock No.	Price Each 1-9	10-49	50-99
MA-101-27E	38.6 x 34.1 x 27	Black Anodized	84T1912	8.38	7.79	6.96
MV-101-27E	38.6 x 34.1 x 27	Degreased	84T1914	7.74	7.19	6.43
MA-102-55E	38.6 x 34.1 x 55	Black Anodized	72R6930	8.27	7.68	6.86
MV-102-55E	38.6 x 34.1 x 55	Degreased	72R6931	7.61	7.08	6.32
MA-301-27E	43.5 x 55.8 x 27	Black Anodized	84T1913	10.48	9.74	8.70
MV-301-27E	43.5 x 55.8 x 27	Degreased	84T1915	9.63	8.95	7.99
MA-302-55E	43.5 x 55.8 x 55	Black Anodized	30T2360	11.62	10.80	9.65
MV-302-55E	43.5 x 55.8 x 55	Degreased	30T2665	10.05	9.34	8.35

(176074)

CUSTOM ELECTRONIC ENCLOSURES

Standard modification or customization of electronic enclosures.

newark.com/custom-enclosures

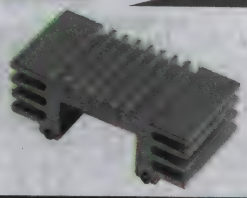
(212568)

TO-263 (D2), & TO-268 (D3) PKG. HEAT SINKS

RoHS Compliant Available

OHMITE

- Surface mount heat sink combines tin-plated, solderable rods with an aluminum extruded body
- Rods (or "rollers") are mated mechanically to the heatsink by forging to reduce the thermal resistance between the heatsink body and the solderable feet



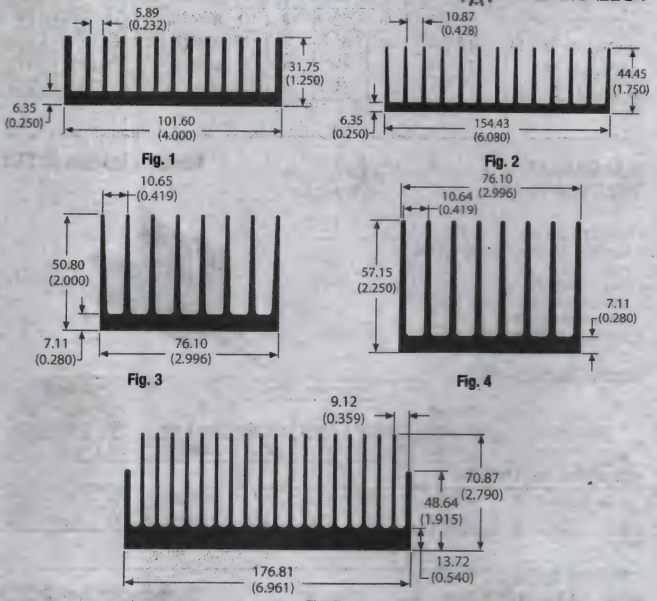
Mfg. Part No.	Package	Dimensions (mm) H x W x L	Body Finish	Stock No.	Price Each 1-24
DV-T263-101E	D2-PAK (TO-263)	10.16 x 25.91 x 12.7	Degreased	67R4338	2.18
DV-T263-101E-TR	D2-PAK (TO-263)	10.16 x 25.91 x 12.7	Degreased	72R3746	2.30
DA-T263-101E	D2-PAK (TO-263)	10.16 x 25.91 x 12.7	Black Anodized	67R4336	2.42
DA-T263-101E-TR	D2-PAK (TO-263)	10.16 x 25.91 x 12.7	Black Anodized	72R3744	2.75

(167114)

HEAT SINK EXTRUSIONS FOR LEDs

RoHS Compliant Available

AAVID THERMALLOY



Mfg. Part No.	Fig.	Dimensions (mm) H x W x L	Thermal Resistance @ 57.2CFM	Stock No.	Price Each 1-9	10-99
766203B04000	1	31.75 x 101.6 x 101.6	1.79°C/W	93H1727	22.55	20.22
601403B06000	2	44.45 x 154.43 x 154.43	1.39°C/W	93H3803	65.70	58.91
630203B12000G	3	50.8 x 76.1 x 304.8	0.95°C/W	86R9104	203.25	182.25
637303B03000	4	57.15 x x 76.2	1.88°C/W	93H2874	24.43	21.90
656053B07000G	5	70.87 x 176.81 x 177.8	0.47°C/W	86R9105	152.30	136.57

(189691)

ROUND PIN FIN LED HEAT SINKS FOR LED LIGHTING

RoHS Compliant Available

cooliance

- Diameters of 32mm to 80mm
- Aluminum

Mfg. Part No.	Thermal Resistance	Dimensions (mm) Dia.	Height	Base Thk. (mm)	No. of Pins	Stock No.	Price Each 1-9	10-24	25-49
CML3201-20-3-101	10.58°C/W	32	20	3	61	99R4678	11.52	10.56	9.72
CML3201-25-3-101	9.75°C/W	32	25	3	61	99R4681	10.95	10.04	9.23
CML3201-30-3-101	9.27°C/W	32	30	3	61	99R4683	11.29	10.36	9.52
CML3201-35-3-101	8.13°C/W	32	35	3	61	99R4684	12.45	11.42	10.50
CML3901-20-3-101	7.67°C/W	39	20	3	91	99R4686	11.80	10.82	9.94

➤ CONTINUED ➤

HEAT SINKS – LED

ROUND PIN FIN LED HEAT SINKS FOR LED LIGHTING (CONT.)

Mfg. Part No.	Thermal Resistance	Dimensions (mm) Dia.	Dimensions (mm) Height	Base Thk. (mm)	No. of Pins	Stock No.	Price Each 1-9	Price Each 10-24	Price Each 25-49
● CML3901-25-3-101	7.1°C/W	39	25	3	91	99R4687	12.14	11.13	10.23
● CML3901-30-3-101	6.61°C/W	39	30	3	91	99R4689	12.48	11.45	10.52
● CML3901-35-3-101	6.31°C/W	39	35	3	91	99R4691	13.01	11.93	10.97
● CML4001-52-6-101	6.7°C/W	40	52	6	38	99R4695	14.18	13.00	11.95
● CML4001-52-8-101	6.3°C/W	40	52	8	38	99R4696	15.76	14.45	13.28
● CML4001-52-10-101	5.9°C/W	40	52	10	38	99R4693	17.15	15.73	14.46
● CML4601-20-3-101	6.2°C/W	46	20	3	127	99R4698	13.92	12.77	11.74
● CML4601-25-3-101	5.52°C/W	46	25	3	127	99R4701	13.52	12.39	11.39
● CML4601-30-3-101	4.85°C/W	46	30	3	127	99R4704	14.04	12.88	11.83
● CML4601-35-3-101	4.61°C/W	46	35	3	127	99R4705	18.90	17.33	15.93
● CML5001-52-6-101	5.9°C/W	50	52	6	62	99R4709	16.49	15.12	13.90
● CML5001-52-8-101	5.5°C/W	50	52	8	62	99R4711	16.79	15.40	14.15
● CML5001-52-10-101	5.1°C/W	50	52	10	62	99R4707	18.29	16.77	15.41
● CML6001-52-6-101	5.2°C/W	60	52	6	92	99R4714	17.50	16.05	14.75
● CML6001-52-8-101	4.8°C/W	60	52	8	92	99R4716	17.96	16.47	15.14
● CML6001-52-10-101	4.4°C/W	60	52	10	92	99R4713	18.42	16.89	15.52
● CML7001-52-6-101	4.5°C/W	70	52	6	128	99R4719	18.58	17.04	15.66
● CML7001-52-8-101	4.1°C/W	70	52	8	128	99R4721	19.01	17.43	16.02
● CML7001-52-10-101	3.7°C/W	70	52	10	128	99R4718	19.47	17.85	16.41
● CML8001-52-6-101	3.8°C/W	80	52	6	170	99R4724	24.12	22.12	20.33
● CML8001-52-8-101	3.4°C/W	80	52	8	170	99R4726	24.57	22.54	20.71
● CML8001-52-10-101	3°C/W	80	52	10	170	99R4723	25.85	23.71	21.80

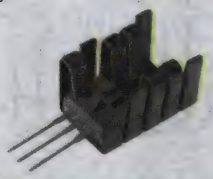
(190433)

CLIP ON HEAT SINKS FOR TO-220

RoHS Compliant Available

fischer elektronik

- Max. 14.5 mm wide
- Uses less PCB space than other heat sinks
- Simple assembly
- Effective heat emmision with horizontal and vertical mounting
- Black anodized aluminum



WITHOUT SOLDERING LUG

Mfg. Part No.	Thermal Resistance	Dimension (mm) Height	Dimension (mm) Width	Dimension (mm) Length	Stock No.	Price Each 1-99	Price Each 100-249	Price Each 250-499
● FK 237 SA 220 O	21°C/W	12.7	14.5	19.05	34M6211	1.81	1.63	1.47
WITH TINNED SOLDERING LUG								
● FK 237 SA 220 V	21°C/W	13.51	14.5	25.4	34M6212	1.83	1.65	1.50
● FK 237 SA220 H	21°C/W	16.75	14.5	19.05	21M9045	2.12	1.91	1.74

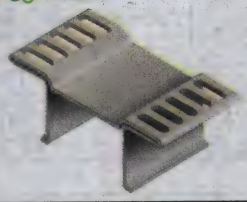
(202108)

HEAT SINKS FOR D PAK AND OTHERS

RoHS Compliant Available

fischer elektronik

- Material: Copper
- Direct assembly on the board by solderable surface
- Applicable for SMD cases like D PAK (TO252), D2 PAK (TO 263), D3 PAK (TO268), SO-8, SO-14, SO-16, Power SO-10 SOT 23 etc.



Mfg. Part No.	Thermal Resistance	Dimension (mm) Height	Dimension (mm) Width	Dimension (mm) Length	Stock No.	Price Each 1-99	Price Each 100-249	Price Each 250-499
● FK 244 13 D2 PAK	22.8°C/W	10	26	13	34M6223	1.88	1.69	1.54
● FK 244 13 D PAK	25°C/W	10	23	13	34M6222	1.84	1.66	1.51
● FK 244 08 D PAK	31.5°C/W	10	23	8	34M6220	1.78	1.61	1.45

(202107)

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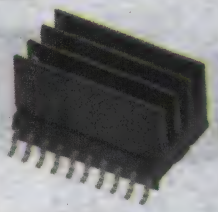
(212569)

HEAT SINKS FOR SMD PACKAGES

RoHS Compliant Available

fischer elektronik

- Especially for SMD packages
- Low size
- Reduced weight
- Effective heat transmission
- Bonding directly on IC package
- Black anodized aluminum



Mfg. Part No.	Thermal Resistance	Dimension (mm) Height	Dimension (mm) Width	Dimension (mm) Length	Stock No.	Price Each 1-99	Price Each 100-249	Price Each 250-499
● ICK SMD E 15 SA	27°C/W	8	15.3	15.3	34M6440	3.03	2.74	2.52
● ICK SMD F 17 SA	42°C/W	6	8	17	34M6445	1.63	1.47	1.33
● ICK SMD A 13 SA	63°C/W	4.8	6.3	13	34M6430	0.87	0.78	0.70
● ICK SMD F 10 SA	71°C/W	6	8	10	34M6444	1.41	1.27	1.15
● ICK SMD A 10 SA	75°C/W	4.8	6.3	10	34M6429	0.87	0.78	0.70

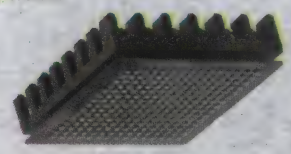
(202106)

HEAT SINKS FOR BGAs

RoHS Compliant Available

fischer elektronik

- For IC design BGAs and others
- Heat sink dimensions match the respective BGA-type
- Can be glued directly on the BGA component
- Black anodized aluminum



Mfg. Part No.	Thermal Resistance	Dimension (mm) Height	Dimension (mm) Width	Dimension (mm) Length	Stock No.	Price Each 1-49	Price Each 50-99	Price Each 100-249
● ICK BGA 27 X 27 X 22	13.5°C/W	22	27	27	17T5895	6.87	6.21	5.72
● ICK BGA 40 X 40 X 10	13.8°C/W	10	40	40	17T5898	2.59	2.34	2.15
● ICK BGA 35 X 35 X 10	15.7°C/W	10	35	35	17T5897	2.56	2.32	2.13
● ICK BGA 31 X 31 X 10	17°C/W	10	31	31	17T5896	2.58	2.32	2.11
● ICK BGA 27 X 27 X 10	18.5°C/W	10	27	27	17T5894	2.09	1.87	1.71
● ICK BGA 14 X 14 X 10	27.4°C/W	10	14	14	17T5893	1.81	1.63	1.47
● ICK BGA 10 X 10 X 10	28.5°C/W	10	10	10	17T5892	1.69	1.52	1.38

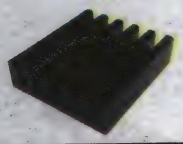
(192351)

EXTRUDED LED HEAT SINKS

RoHS Compliant Available

fischer elektronik

- For PCB mounting
- Black anodized aluminum



SQUARE

Mfg. Part No.	Thermal Resistance	Dimension (mm) Height	Dimension (mm) Width	Dimension (mm) Length	Stock No.	Price Each 1-9	Price Each 10-99	Price Each 100-499
● SK 46 10 SA	2.1°C/W	10	51.5	51.5	17T6988	4.02	3.63	3.33
● SK 46 37.5 SA	2.1°C/W	37.5	51.5	51.5	17T6990	5.90	5.33	4.91
● SK 508 100 SA	3.8°C/W	25	100	100	17T6992	15.68	14.19	13.00
● SK 400 37.5 SA	7.8°C/W	10	33	37.5	17T6983	2.19	1.96	1.79
● SK 454 100 SA	10.1°C/W	19	21.45	100	17T6985	4.04	3.65	3.36
● SK 454 50 SA	10.1°C/W	19	21.45	50	17T6986	2.69	2.42	2.20
● SK 454 75 SA	10.1°C/W	19	21.45	75	17T6987	3.77	3.41	3.14
● SK 452 37.5 SA	11.1°C/W	25	29	37.5	17T6984	2.42	2.18	1.98
● SK 470 100 SA	19°C/W	8	11.8	100	17T6991	2.54	2.28	2.08

ROUND

Mfg. Part No.	Thermal Resistance	Dimension (mm) Height	Dimension (mm) Dia.	Stock No.	Price Each 1-49	Price Each 50-99	Price Each 100-249
● SK 570 10 SA	2.05°C/W	10	70	17T6993	7.38	6.67	6.14
● SK 570 25 SA	2.05°C/W	25	70	17T6994	11.27	10.18	9.38
● SK 570 50 SA	2.05°C/W	50	70	17T6995	16.84	16.05	15.19
● SK 578 15 SA	2.1°C/W	15	60	17T7002	6.65	6.01	5.53
● SK 572 10 SA	2.25°C/W	10	85	17T6999	9.37	8.47	7.80
● SK 572 20 SA	2.25°C/W	20	85	17T7000	14.26	12.88	11.86
● SK 572 50 SA	2.25°C/W	50	85	17T7001	24.10	22.94	21.86
● SK 571 10 SA	2.28°C/W	10	70	17T6996	6.94	6.26	5.75

CONTINUED

EXTRUDED LED HEAT SINKS (CONT.)

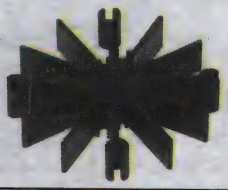
Mfg. Part No.	Thermal Resistance	Dimension (mm) Height	Dimension (mm) Dia.	Stock No.	Price Each 1-49	Price Each 50-99	Price Each 100-249
SK 571 25 SA	2.28°C/W	25	70	17T6997	10.28	9.29	8.55
SK 571 50 SA	2.28°C/W	50	70	17T6998	14.72	14.01	13.35

(192355)

LED HEAT SINKS

RoHS Compliant Available

OHMITE



- Aluminum alloy 6063-T5 or equivalent
- Mounting hardware: 1/4, #10,and #4 thread forming SS screws are preferred

BLACK ANODIZED

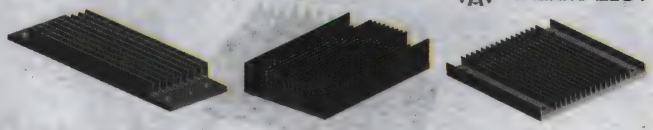
Mfg. Part No.	Thermal Resistance	Dimensions (mm) Dia.	Dimensions (mm) Height	Stock No.	Price Each 1-49	Price Each 50-99	Price Each 100-249
SA-LED-113E	5.33°C/W	69.8	12.7	23T0437	2.84	2.67	2.36
SA-LED-125E	4.27°C/W	69.8	25.4	23T0438	4.24	3.94	3.52
SA-LED-151E	3.2°C/W	69.8	50.8	23T0439	6.15	5.72	5.11
SA-LED-176E	2.49°C/W	69.8	76.2	23T0440	8.42	7.82	6.99
NO FINISH (DEGREASED)							
SV-LED-113E	6.67°C/W	69.8	12.7	23T0441	2.63	2.47	2.18
SV-LED-125E	5.33°C/W	69.8	25.4	23T0442	3.51	3.30	2.91
SV-LED-151E	4°C/W	69.8	50.8	23T0443	5.16	4.79	4.28
SV-LED-176E	3.11°C/W	69.8	76.2	23T0444	7.02	6.52	5.83
SV-LED-314E	9°C/W	21.6	14	53W7626	2.69	2.53	2.24
SV-LED-325E	5.6°C/W	21.6	25	53W7627	3.34	3.14	2.77

(194477)

HEAT SINKS FOR DC/DC CONVERTERS

RoHS Compliant Available

AAVID THERMALLOY



Eighth Brick — Quarter Brick — Half Brick

- Complete of-the-shelf cooling solution for industry standard DC-to-DC converters
- Thin film geometry for increased thermal performance and reduced pressure drop
- Factory-installed QPad3™ interface pas

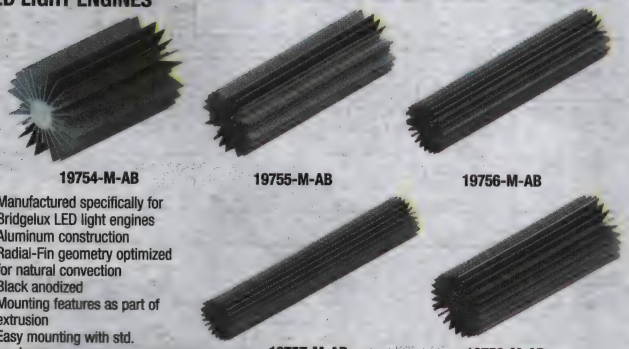
Mfg. Part No.	Approx. Thermal Resistance @ 300 LFM (°C/W)*	Fin Configuration	Dimensions (mm) H x W x L	Stock No.	Price Each 1-9	Price Each 10-99
FOR EIGHTH BRICK DC/DC CONVERTERS						
241802B91200G	6.60	Lengthwise	6.1 x 22.9 x 57.9	51M4836	16.85	15.48
241802B92200G	4.30	Crosswise	6.1 x 22.9 x 57.9	51M4837	3.37	3.10
FOR QUARTER BRICK DC/DC CONVERTERS						
241402B91200G	4.30	Lengthwise	6 x 37 x 58	51M4830	8.92	8.19
241404B91200G	2.30	Lengthwise	11.4 x 37 x 58	51M4832	8.92	8.19
241409B91200G	1.30	Lengthwise	22.9 x 37 x 58	51M4834	8.43	7.74
241402B92200G	2.60	Crosswise	6 x 37 x 58	51M4831	17.84	16.39
241404B92200G	1.50	Crosswise	11.4 x 37 x 58	51M4833	9.04	8.31
241409B92200G	1.80	Crosswise	22.9 x 37 x 58	51M4835	16.85	15.48
FOR HALF BRICK DC/DC CONVERTERS						
241202B91200G	2.90	Lengthwise	6.1 x 57.9 x 61	51M4824	8.43	7.74
241204B91200G	1.80	Lengthwise	11.4 x 57.9 x 61	51M4826	8.43	7.74
241214B91200G	0.90	Lengthwise	35.6 x 57.9 x 61	51M4828	8.43	7.74
241202B92200G	2.75	Crosswise	6.1 x 57.9 x 61	51M4825	16.85	15.48
241204B92200G	1.75	Crosswise	11.4 x 57.9 x 61	51M4827	4.68	4.29
241214B92200G	0.90	Crosswise	35.6 x 57.9 x 61	51M4829	8.43	7.74

*Approximate values listed in tables. See datasheets for thermal resistance curves. LFM = linear feet per minute.
(100268)

RADIAL-FIN HEAT SINKS FOR BRIDGELUX LED LIGHT ENGINES

RoHS Compliant Available

WAKEFIELD SOLUTIONS



19754-M-AB — 19755-M-AB — 19756-M-AB — 19757-M-AB — 19758-M-AB

- Manufactured specifically for Bridgelux LED light engines
- Aluminum construction
- Radial-Fin geometry optimized for natural convection
- Black anodized
- Mounting features as part of extrusion
- Easy mounting with std. hardware

Size and level of performance can be matched to specific LED requirements. Non-anodized versions and custom lengths available; *go online or call.*

Mfg. Part No.	Form Factor	Thermal Resistance (°C/W)	Dimensions L (mm)	Dimensions Dia. (mm)	Dimensions L (in.)	Dimensions Dia. (in.)	Stock No.	Price Each 1-9	Price Each 10-49
19754-M-AB	RS Rectangle	0.68	190.5	114.55	7.5	4.51	23T0729	33.61	31.52
19755-S-AB	Rectangle	2.2	69.85	63.5	2.75	2.5	23T0732	8.02	7.81
19755-M-AB	Rectangle	1.82	101.6	63.5	4	2.5	23T0731	14.30	13.24
19755-L-AB	Rectangle	1.49	152.4	63.5	6	2.5	23T0730	17.21	15.94
19755-XL-AB	Rectangle	1.29	203.2	63.5	8	2.5	23T0733	28.01	20.37
19755-XXL-AB	Rectangle	1.15	254	63.5	10	2.5	23T0734	32.59	23.69
19756-S-AB	Star	3.03	50.8	42.01	2	1.65	23T0737	8.31	7.49
19756-M-AB	Star	2.48	69.85	42.01	2.75	1.65	23T0736	9.19	8.28
19756-L-AB	Star	2.59	76.2	42.01	3	1.65	23T0735	7.95	7.74
19756-XL-AB	Star	2.38	82.55	42.01	3.25	1.65	23T0738	11.90	8.65
19757-S-AB	LS	3.55	69.85	32	2.75	1.26	23T0741	7.50	6.75
19757-M-AB	LS	3.4	76.2	32	3	1.26	23T0740	7.86	7.08
19757-L-AB	LS	3.27	82.55	32	3.25	1.26	23T0739	8.06	7.83
19758-M-AB	Helieon	1.15	177.8	65.99	7	2.6	23T0742	28.19	20.49
ACCESSORY									
C-12036-NEW	#6 Self-Tapping Stainless Steel Screw, 1" long						61T6406	0.16	0.13

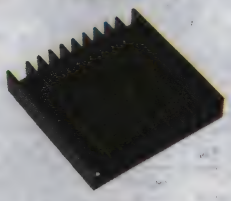
(196385)

HEAT SINKS FOR DC/DC CONVERTERS

RoHS Compliant Available

WAKEFIELD SOLUTIONS

Standard mounting hole pattern for "half-brick" mates with the majority of "half-brick" DC/DC converters. Standard mounting hole pattern for "full-brick" mates with Vicor DC/DC converters. Aluminum extruded fin construction keeps DC/DC converter modules cool in both forced and natural convection applications. Vertical and horizontal fin configurations are available in a variety of fin heights. **MS4 suffix** includes M3 x 8 Phillips head screws with captive washer and DeltaLink IV thermal interface pad. Material: black anodized aluminum.



Half Brick

Mfg. Part No.	Height (mm)	Footprint Dimensions (mm)	No. of Fins	Thermal Performance Natural Convection	Thermal Performance Forced Convection†	Stock No.	Price Each 1-9
FULL BRICK							
557-140AB	35.6	116.8 x 61.0	6	14W*	1.3°C/W	37K6011	6.68
558-75AB	19.1	61.0 x 116.8	16	12W*	1.8°C/W	21M6797	8.16
559-50AB	12.7	61.0 x 116.8	27	10W*	2.2°C/W	78M7610	12.25
HALF BRICK							
527-45AB	11.4	61.0 x 57.9	11	7W‡	3.2°C/W	91F3670	2.74
528-45AB	11.4	57.9 x 61.0	11	7W‡	3.2°C/W	91F3672	3.13

* @ 40°C. ‡ @ 60°C. † @ 300 LFM.
(17927)

NEW PRODUCTS ADDED DAILY

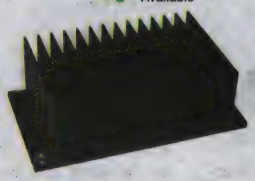
See the newest products, technologies and suppliers on our website.

(196562)

HEAT SINKS FOR AC-TO-DC POWER SUPPLIES

RoHS Compliant Available

TDK·Lambda
Innovating Reliable Power



For use with Lambda PFE300S, 500S, and 700S series and **mfr. part no. HAM-F10T** for use with PFE1000Fsingle output full brick AC-DC power supplies *on page 1537.*

Mfg. Part No.	Dimensions (mm) L	W	H	Thermal Resistance	Stock No.	Price Each
● HAF10L	116.8	61	25.4	2.2°C/W	96M0414	13.38
● HAF15L	116.8	61	38.1	1.9°C/W	96M0415	16.16
● HAF15T	116.8	61	38.1	1.5°C/W	96M0416	16.16
● HAMF10T	160	100	33.4	0.78°C/W	11R6932	38.38

(97517)

HEAT SINKS

RoHS Compliant Available

crydom™

HS-103DR HS-122DR HS-151DR

HS-202 HS-271DR HS-351DR

- Provides efficient heat dissipation
- Allows SSRs to operate close to their maximum ratings
- Includes mounting brackets drilled holes to mount relay

See also relay and heat sink assemblies online or call.

HEAT SINKS — DIN RAIL MOUNT

Mfg. Part No.	Thermal Resistance	For Use With	Dimensions [H x W x D] (mm)	Stock No.	Price Each 1-9
● HS103DR	1°C/W	Crydom One, Two, or Three SSRs or one Three Phase SSR	69.5 x 76.2 x 132.1	33R2105	80.45
● HS122DR	1.2°C/W	Crydom One or Two Single or Dual SSRs	86.5 x 97 x 90	50R4621	54.56
● HS151DR	1.5°C/W	Crydom One Single or Dual SSR	95 x 81 x 45	33R2124	36.81
● HS201DR	2°C/W	Crydom One Single or Dual SSR	86.5 x 45 x 97	50R4632	32.07
● HS202DR	2°C/W	Crydom One or Two Single or Dual SSRs	46.5 x 97 x 90	50R4637	39.96
● HS301DR	3°C/W	Crydom One Single or Dual SSR	46.5 x 45 x 97.8	50R4648	25.81
● HS501DR	5°C/W	Crydom One Single or Dual SSR	15.3 x 44.5 x 80	25R0422	14.43

HEAT SINKS — PANEL MOUNT

● HS053	0.5°C/W	Crydom One, Two, or Three Single or Dual SSRs or One 3 Phase SSR	88.9 x 152.4 x 152.4	50R4609	107.23
● HS072	0.7°C/W	Crydom One or Two Single or Dual SSRs	66.8 x 120.1 x 139.7	50R4613	39.17
● HS103	1°C/W	Crydom One, Two, or Three Single or Dual SSRs or One 3 Phase SSR	60.2 x 132.1 x 76.2	50R4616	65.99
● HS122	1.2°C/W	Crydom One or Two Single or Dual SSRs	80 x 81 x 90	50R4620	43.98
● HS172	1.7°C/W	Crydom One or Two Single or Dual SSRs	40.6 x 85.3 x 104.7	33R1781	19.60
● HS201	2°C/W	Crydom One Single or Dual SSR	80 x 45 x 81	50R4631	32.98
● HS202	2°C/W	Crydom One or Two Single or Dual SSRs	40 x 81 x 90	50R4636	29.74
● HS251	2.5°C/W	Crydom One Single or Dual SSR	40.6 x 85.3 x 52.3	50R4640	15.47
● HS301	3°C/W	Crydom One Single or Dual SSR	40 x 45 x 81	50R4647	23.35

THERMAL TRANSFER PADS

Mfg. Part No.	For Use With	Stock No.	Price Each 1-9
● HSP-1	Crouzet Single Phase Panel Mount SSRs	28C3420	1.16
● HSP-2		40T4805	1.30

➤CONTINUED➤

HEAT SINKS (CONT.)

Mfg. Part No.	For Use With	Stock No.	Price Each 1-9
● HSP-3	Crydom Three Phase Panel Mount SSRs	52R5911	7.75
● HSP-5		40T4806	8.22

SAFETY COVERS

● KS100	Crydom Single Phase Solid State Relays	95F2220	4.86
● KS-300	Crydom Three Phase Solid State Relays	95F6052	7.24

ACCESSORIES

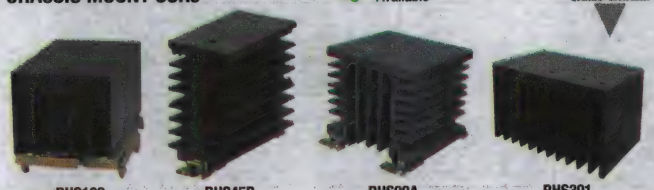
Mfg. Part No.	Description	Stock No.	Price Each 1-9
● DRK1	**DIN Rail Adapter**; For use with: 35mm DIN Rail; HS301, HS202, HS201, HS151, HS122, HS271, and HS351 heat sinks; Includes Two 6-32x1/4 mounting screws	50R4605	10.30
● TRM6	**Copper Lug Terminal**; For Use With: All Crydom screw terminal SSR's with 14-6AWG	50R4657	2.77
● HK1	**Screws**; Thread Size:8-32 x 3/8; Screw Head Style:Combo; For Use With:All Crydom heat sinks (Except HS501DR)	50R4607	0.70

(163661)

HEAT SINK KITS FOR CHASSIS MOUNT SSRs

RoHS Compliant Available

CARLO GAVAZZI



RHS100 RHS45B RHS90A RHS301

- For use with most hockey puck SSRs, regardless of manufacturer
- Single phase or Three phase SSRs
- Up to two single phase SSRs can be mounted on some heat sinks

- Popular DIN-rail mounting
- Some versions with cooling fans for higher amperage loads

Mfg. part no. RHS301 for DIN rail mounting only. Kits delivered with heat sink, DIN rail adapter, mounting hardware, thermally conductive compound, and all the neccessary hardware.

HEAT SINKS

Mfg. Part No.	For Use With	Max. °C/W	Stock No.	Price Each
● RHS100	1 Single-Phase SSR	3.0°	92F3115	47.00
● RHS45B	1 Single-Phase SSR, Optional 40 x 40mm fan may be mounted onto the heatsink	2.0°	16C5558	51.00
RHS90A	1 Single-Phase SSR or 1 Three-Phase SSR, Optional 60 x 60mm fan may be mounted onto heatsink	1.35°	71K9819	78.00
● RHS301	1 or 2 Single-Phase SSRs or 1 Three-Phase SSR Optional 60 x 60mm fan may be mounted onto heatsink	0.8°	92F3084	111.00

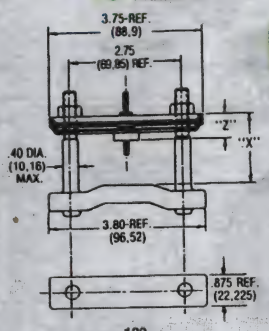
(2429)

MOUNTING CLAMPS

RoHS Compliant Available

WAKEFIELD SOLUTIONS

- **130 series** 2000 lbs. clamping force
- **130-1** has automotive-grade rust-resistant steel springs
- **130-5** has stainless steel springs with force indicator that reads in pounds per leaf
- **139 series** available 3000 or 5000 lbs. clamping force and has automotive-grade rust-resistant steel springs
- **144 series** available 1000 to 6000 lbs. clamping force
- 5000 VAC
- *Order cross bar and spring assembly separately*



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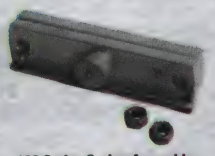


139 Series Spring Assembly

139 Series Cross Bar

130 SERIES CROSS BARS

Mfg. Part No.	X Minimum (mm)	X Maximum (mm)	Stock No.	Price Each 1-4	5-9	10-24
● 130-C	59.9	69.9	10F8017	50.22	46.36	39.32

130 SERIES SPRING ASSEMBLIES

Mfg. Part No.	Leaves	Z Dimension (mm)	Max. Force (lbs)	Stock No.	Price Each 1-4	5-9	10-24
130-1	2	22.9	2000	10F7991	47.17	43.46	36.69
130-5	5	21.1	2000	46F8610	57.67	53.13	44.86

➤CONTINUED➤

MOUNTING CLAMPS (CONT.)

139 SERIES CROSS BARS

Mfg. Part No.	Dimensions (mm) Length	Width	Height Min.	Height Max.	Stock No.	Price Each 1-4	5-9	10-24
139-5E	122.7	25.4	96.3	105.7	10F8001	97.08	89.43	75.50
139-5J	122.7	25.4	127.8	137.4	10F8005	101.33	93.54	79.33

139 SERIES SPRING ASSEMBLIES

Mfg. Part No.	Leaves	Height (mm)	Max. Force (lbs)	Stock No.	Price Each 1-4	5-9	10-24
139-2	2	31.8	5000	10F8014	84.95	78.41	66.50

144 SERIES SPRING ASSEMBLIES

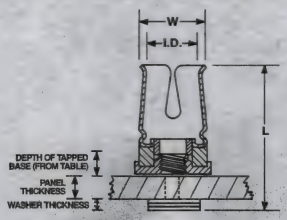
Mfg. Part No.	Height (mm)	Max. Force (lbs)	Stock No.	Price Each 1-4	5-9	10-24
144-2	31.8	6000	94F3359	76.51	70.64	59.90

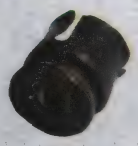
(4574)

CUP CLIPS FOR TO-5 DEVICES

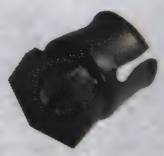
RoHS Compliant Available

WAKEFIELD SOLUTIONS





Tapped
260-4TSE



Tapped Hex
260-4TH5E

- Thread Size: #4-40 UNC
- Continuous Operating Temperature: 300°F Max.

Mfg. Part No.	Mounting Style	Depth of Tapped Base (in.)	Outline Dimensions L x W x Dia. (in.)	Stock No.	Price Each 1-24
260-4T5E	Tapped	0.093	0.37 x 0.38 x 0.29	65H6127	20.40
260-4TH5E	Tapped Hex	0.125	0.40 x 0.37 x 0.29	58F1058	14.29

(4478)

TRANSISTOR PADS

RoHS Compliant Available

multicomp

- **MPX02P** spreads to 0.1" (2.54mm) inline or 0.2" (5.08mm) PCB
- **MPX05GFNB** spreads to 0.2" (5.08mm) PCB
- **M1802D** PO Type 1B
- **M518-01N** spread TO-18 to TO-5

Sold in multiples of 100 pieces.

Mfg. Part No.	Package	Dimensions (mm) Height	Diameter	Stock No.	Price Each 1-249	250-499	500-999
MPX02P	TO-92	3.43	6.35	09WX0142	0.06	0.05	0.05
MPX05GFNB	TO-92	3.81	7.11	09WX0141	0.11	0.10	0.09
M1802D	TO-18	3.18	6.35	09WX0143	0.05	0.04	0.04
M518-01N	TO-5/TO-18	3.68	9.37	09WX0152	0.05	0.05	0.04

(116563)

TECHNICAL SUPPORT HOTLINE

Call **877.736.4835** to connect directly with our team of engineers or chat live 24/5 online.

(196537)

TRANSISTOR MOUNTING KITS

RoHS Compliant Available

multicomp

Sold in packages of 10.

Mfg. Part No.	For Package	Stock No.	Price per Pkg. 1-99	100-249	250-499
MK3304	TO-3/TO-66	50P9589	6.44	5.81	5.36
MK3311	TO-220/TO-126/SOT-93	50P9672	2.95	2.64	2.42

(116568)

SEMICONDUCTOR MOUNTING PADS

RoHS Compliant Available

AAVID THERMALLOY

Aligns device leads to facilitate board insertion.

TO-18

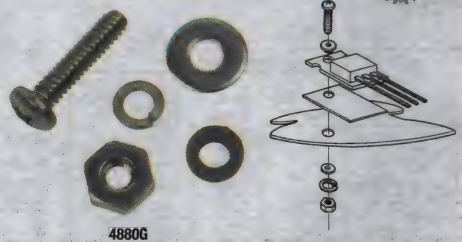
Mfg. Part No.	Pkg.	Leads	O.D. (in.)	Thickness (in.)	Stock No.	Price Each 1-4	5-9	10-24
7717-7NG	TO-18	4	0.25	3.18	18M8264	0.30	0.28	0.28
7717-178NG	TO-5	3	0.35	0.53	18M8263	0.28	0.27	0.26

(82452)

MOUNTING KITS

RoHS Compliant Available

AAVID THERMALLOY



4880G

Mounting kit for DO-4 devices contains 2 thermal insulators, 1 teflon bushing, 1 flat washer, 1 10-32 UNF-2B hex nut and 1 locking terminal. Also available with mica insulator; add **M suffix** to mfg. part no. number before "G". **488DG** mounting kit for TO-220 devices contains 1 thermal insulator, 1 shoulder washer, 1 flat washer, 1 hex nut, 1 4-40 UNCB x 0.50 long PPH screw and 1 lock washer. Also available with alternative insulator material; add **M suffix** to mfg. part no.for mica or **S suffix** for Thermalsil III silicon rubber.

Mfg. Part No.	Description	Stock No.	Price Each 1-99
4860	DO-4 w/Thermalfilm	97F6997	3.73
4880G	TO-220 w/Thermalfilm	82K6096	2.48
4880MG	TO-220 w/Mica Insulator	02M5407	1.73
4880SG	TO-220 w/Silicon Rubber	10M7230	2.08

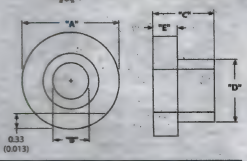
(4482)

INSULATING SHOULDER WASHERS FOR TO-220 PKG.

RoHS Compliant Available

AAVID THERMALLOY

- Fits the tab of a TO-220 to provide electrical isolation
- Maximum recommended service temperature of 260°C (500°F)
- Recommended torque of 0.452Nm (4 inch-pounds)



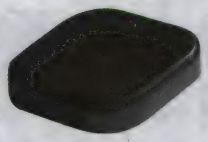
Mfg. Part No.	Outer Diameter "A" (mm)	Mounting Hole Dia. "D" (mm)	Stock No.	Price Each 1-24	25-49	50-99
7721-7PPSG	5.46	2.95	85K9469	0.26	0.20	0.17
7721-15NG	6.10	2.90	18M8265	0.21	0.16	0.13
7721-8PPSG	6.22	3.56	14M4330	0.49	0.46	0.42

(82453)

TO-3 INSULATING COVERS

RoHS Compliant Available

AAVID THERMALLOY



Insulating covers are designed to provide protection from accidental shock during field service or repair. Included are No.6 split washers as inserts to provide electrical connection of mounting screws to the TO-3 collector and an insulating snap-in cover for the screw heads. A test probe hole is provided in the top of the cover.

Mfg. Part No.	Color	Dimensions (mm) L x W x D	Stock No.	Price Each 1-18	19-50	51-135
● 8909NBG	Black	40.26 x 26.54 x 8.38	18M8294	0.81	0.65	0.46
● 8903VBG	Black	41.91 x 28.45 x 8.38	18M8293	5.14	4.11	2.93
● 8903NWG	White	41.91 x 28.45 x 8.38	18M8292	5.05	4.04	2.88

(82454)

TO-3 POWER TRANSISTOR SOCKETS

RoHS Compliant Available

KEYSTONE ELECTRONICS CORP.

- Top Plate: Molded Nylon
- Base: Phenolic

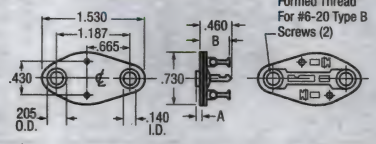


Fig. 1

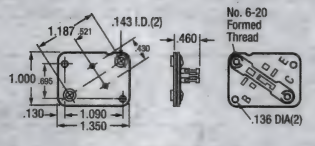


Fig. 2

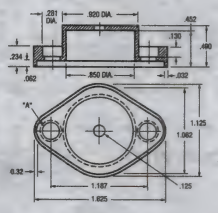


Fig. 3

Mfg. Part No.	Fig.	Thread Size	Dimensions (inches) Mounting Hole I.D.	Body Length	Body Width	Socket Height (A)	Stock No.	Price Each
● 4600	1	6-20	0.140	1.530	0.730	0.090	94F863	1.92
● 4602	1	6-20	0.140	1.530	0.730	0.045	35F1178	2.12
● 4601	1	6-20	0.140	1.530	0.730	0.090	35F1170	2.12
● 4606*	2	6-20	0.136	1.350	1.000	...	35F1176	1.81
● 4608	2	6-20	0.136	1.350	1.000	0.045	35F1172	2.16

* Top Plate: Phenolic

POWER TRANSISTOR COVERS FIG. 3

Molded nylon covers easily mount over and insulate the power transistor. Will withstand temperatures to approx. 300°F. Available with or without brass eyelets installed in mounting holes to assure proper electrical contact with collector/case.

Mfg. Part No.	For Use With	Eyelets Installed	Dimensions (inches) Mounting Hole I.D. (A)	Outer Diameter	Height	Stock No.	Price Each
● 4632	TO-3	None	0.21	0.92	0.49	97H7266	0.30
● 4634	TO-3	Two	0.14	0.92	0.49	97H7267	0.79

(78680)

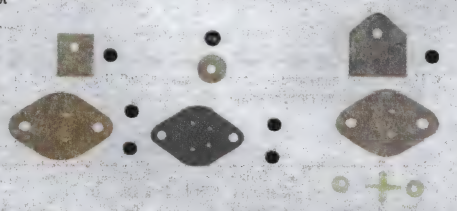
TRANSISTOR INSULATING KITS

RoHS Compliant Available

multicomp

- All kits offer 1kV isolation, except **MK3303** (2kV)
- **MK3301** and **MK3301/S** use 4.37mm high bushes, shank length 3.2mm
- **MK3301/51** uses 6.35mm high bushes, shank length 5.2mm
- Kits with silicone impregnated washer eliminate the need for heat sink compound
- Heat sink compound should be used with Mica washer kits

Sold in packages of 10.



KITS WITH MICA WASHER

Mfg. Part No.	Package	Stock No.	Price per Pkg. 1-99	100-249	250-499
● MK3301	TO-3 (4.37mm bush)	50P9585	3.82	3.43	3.13
● MK3301/51	TO-3 (6.35mm bush)	50P9587	3.90	3.50	3.20

➤ CONTINUED ➤

TRANSISTOR INSULATING KITS (CONT.)

Mfg. Part No.	Package	Stock No.	Price per Pkg. 1-99	100-249	250-499
● MK3303	TO-3 (2kV isolation)	09WX0125	0.44	0.40	0.36
● MK3305*	TO-3P/TO-218	50P9590	3.41	3.06	2.80
● MK3306	TO-220	50P9593	3.11	2.79	2.56
● MK3309	TO-126	50P9669	3.38	3.05	2.77

* Suitable for TO-218 devices

(116589)

TRANSISTOR MICA INSULATORS

RoHS Compliant Available

KEYSTONE ELECTRONICS CORP.

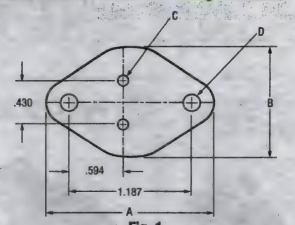


Fig. 1

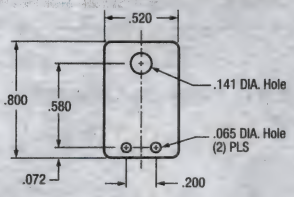


Fig. 2

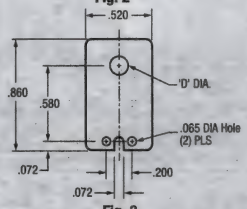


Fig. 3

- Material: .003" thick mica

These precision stamped mica insulators provide good thermal conductivity (.009 watts per square inch in thickness). Excellent thermal resistance 1100°F. Dielectric constant of 7 at 1000kHz.

Mfg. Part No.	Figure	Dimensions (inches) Width "A"	Length "B"	Mounting Hole Diameter "D"	Stock No.	Price Each 1-24
● 4651	1	1.625	1.093	4.2	97H7352	0.22
● 4662	1	1.594	1.141	3.6	92B7218	0.24
● 4667*	1	1.655	1.062	2.80	91B3239	0.22
● 4671	2	0.800	0.520	3.60	97H7353	0.12
● 4672	3	0.860	0.520	3.6	92B7630	0.09
● 4673	3	0.860	0.520	2.9	97H7354	0.09

***NOTE**: Dim. 0.594" in Fig. 1 is 0.521" for **mfg. part no. 4667**

(78690)

DELTAPAD® AND KAPTON® REINFORCED INSULATORS

RoHS Compliant Available

WAKEFIELD SOLUTIONS

Interface transistors to heat sinks and eliminate thermal grease, burr cut-through, and cracked or torn insulators.

TO-220

Specifications	DeltaPad® 173-7 Series	DeltaPad® 173-9 Series	Kapton® 175-6 Series
Thickness (mm)	0.178	0.229	0.152
Color	Gray	Gray	Gray
Tear Strength, Typ. (lb/in.)	100	100	100
Breakdown Voltage, Min. (V)	4000	5000	6000
Continuous Use Temp. (°C)	-60 to +200	-60 to +200	-60 to +200
Thermal Resistance (°C/W)	0.33	0.50	0.40

TO-3/TO-220

Mfg. Part No.	Pkg.	Dimensions (mm) Length	Width	Mounting Hole Dia.	Stock No.	Price Each 1-9
● 175-6-210P	TO-220	17.4	14.3	3.2	46F7846	0.62
● 175-6-220P	TO-220	18	12.7	3.6	46F7847	0.63
● 175-6-230P	TO-220	19.1	12.7	3.2	46F7848	0.68
● 175-6-240P	TO-220	19.1	12.7	3.7	46F7883	0.58
● 173-7-220P	TO-220	18	12.7	4.1	81F9768	0.46
● 173-7-240A	TO-220	19.05	12.7	3.7	81F9770	0.77
● 173-9-210P	TO-220	14.27	17.45	3.2	81F9782	0.42
● 173-9-230P	TO-220	19.1	12.7	4.8	81F9784	0.40
● 173-9-240P	TO-220	19.1	12.7	4.8	81F9785	0.72

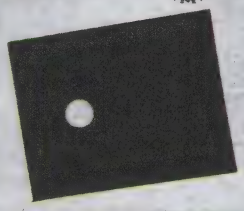
(4476)

INSULATORS

RoHS Compliant Available

AAVID THERMALLOY

Mica insulators provide high maximum operating temperatures (550°C) and excellent electrical properties. Aluminum oxide has unique thermal conductivity qualities and features low loss factors at high frequencies. It has high compressive strengths, high volume resistivity, low thermal expansion and it resists radiation.



Mfg. Part No.	Package	Material	Dimensions (mm) L x W x H	Stock No.	Price Each 1-24
4103G	TO-3	Aluminum Oxide Ceramic	39.7 x x	21M5216	5.44
4180G	TO-218, TO-247, TO-3P	Aluminium Oxide Ceramic	23.24 x 18.8 x 2.03	21M5217	1.07
53-02-103G	TO-218	Silicone Rubber	23.8 x 19.05 x 0.152	89M4417	0.88
4003G	TO-3	Beryllium Oxide Ceramic	39.65 x 26.67 x 1.57	89M4415	33.10
53-77-2G	TO-220	Silicone Rubber	17.5 x 14.27 x 0.152	24M0269	0.46
56-77-11G	TO-220	Mica	13.84 x 18.93 x 0.1	18M8187	0.27
56-77-8G	TO-220	Mica	13.84 x 18.93 x 0.1	18M8188	0.33

(82455)

THERMALFILM POLYIMIDE PLASTIC FILMS

UL

RoHS Compliant Available

AAVID THERMALLOY

Thermalfilm™ polymide plastic insulating films are designed to be an improved replacement for mica. Insulators have an extremely high resistance to flow or thin out under high compressive stresses, particularly at elevated temperatures. Physical, mechanical and electrical properties remain nearly constant over a wide range of temperatures and frequencies. They are radiation resistant, have no melting points, and have no known organic solvents. Thermalfilm is rated 94 V-0.

Mfg. Part No.	Package/Case	Dimensions (mm) L x W	Stock No.	Price Each 1-9	10-99	100-499
43-77-9G	TO-220	18.42 x 13.21	83K3539	0.47	0.42	0.32

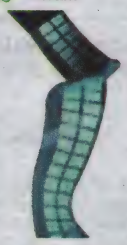
(110554)

THERMALLY CONDUCTIVE EPOXY ADHESIVE TRANSFER TAPES

RoHS Compliant Available

3M

- Tapes are pressure sensitive adhesives loaded with thermally conductive ceramic fillers
- Pressure is needed to form a bond and heat pressure on siome substrates
- The specialized acrylic chemistry of these tapes provide for good thermal stability of the base polymer
- Thermally conductive tapes are on a silicone treated polyester release liner for ease of handling and die cutting
- Tapes offer both good thermal conductivity and good electrical insulation properties
- Thermal conductivity (W/m-K): 0.60
- Color: grey



Thermally conductive adhesive transfer tapes are designed to provide a preferential heat transfer path between heat-generating components and heat sinks or other cooling devices (e.g., fans, heat spreaders or heat pipes). **Mfg. part nos. 9882, 9885, and 9890** provide best adhesion results when used with high surface energy substrates.

Mfg. Part No.	Width (in.)	Thickness (mm)	Roll of (yds.)	Stock No.	Price per Roll 1-4	5-9	10-24
9882 (1"X36YDS)	1	0.05	36	41T5550	119.14	110.58	102.03
9885 (1"X36YDS)	1	0.13	36	41T5551	125.35	116.35	107.35
9890 (1"X36YDS)	1	0.25	36	41T5552	142.21	132.01	121.79

(196390)

CUSTOM PANEL METERS

Standard modification or customization of analog or digital panel meters.

newark.com/custom-panel-meters

(212570)

THERMALLY CONDUCTIVE EPOXY ADHESIVE TRANSFER TAPES

RoHS Compliant Available

3M

- Tapes are tacky pressure sensitive adhesives loaded with thermally conductive ceramic fillers that do not require a heat cure cycle to form an excellent bond to many substrates
- Thermally conductive tapes are on a silicone treated polyester release liner for ease of handling and die cutting
- Tapes offer excellent adhesive performance with good wetting and flow onto many substrate surfaces
- Thermal conductivity (W/m-K): 0.60

Thermally conductive adhesive transfer tapes are designed to provide a preferential heat transfer path between heat-generating components and heat sinks or other cooling devices (e.g., fans, heat spreaders or heat pipes). The specialized chemistry of **mfg. part nos. 8810, 8815 and 8820** renders them modestly soft and able to wet to many surfaces, allowing them to conform well to non-flat substrates, provide high adhesion, and act as a good thermal interface.

Mfg. Part No.	Width (in.)	Thickness (mm)	Roll of (yds.)	Stock No.	Price per Roll 1-4	5-9	10-24
8810 2IN X 36YD	2	0.25	36	41T5547	301.62	272.90	254.95
8815 2IN X 36YD	2	0.375	36	41T5548	471.82	426.88	398.80
8820 2IN X 10YD	2	0.5	10	41T5549	187.72	169.85	158.66

(196392)

THERMALLY CONDUCTIVE INTERFACE PADS

RoHS Compliant Available

3M

- Applications requiring gap filling and superior thermal performance without bonding

Thermally conductive interface pad **mfg. part no. 5590H** consists of a non silicone, highly conformable slightly tacky acrylic elastomer sheet filled with conductive ceramic particles. **Mfg. part no. 5590H** is designed to provide a preferential heat transfer path between heat generating components like integrated circuit chip and heat spreaders.

ACRYLIC

Mfg. Part No.	Bulk Thermal Conductivity (W/m-K)	Width (mm)	Thickness (mm)	Roll of (m)	Stock No.	Price per Roll 1-4	5-9
5590H 0.5MM	3	240	1.5	20	41T5535	703.08	659.39
5590H 1.0MM	3	240	1	20	41T5536	946.47	887.65
5590H 1.5MM	3	240	1.5	20	41T5537	1126.73	1056.71

SILICONE BASED

Polyester film supported super soft, silicone elastomer with thermal conductivity of 1.0 W/mk. Conformable at low pressure to minimize stress on components and fill gaps. Good dielectric properties. Handles easily without crumbling. Color: white

Mfg. Part No.	Bulk Thermal Conductivity (W/m-K)	Width (mm)	Thickness (mm)	Sheet of (mm)	Stock No.	Price per Sheet 1-4	5-9
5591S 0.5MM	1	210	0.5	300	41T5538	19.28	18.08
5591S 1.0MM	1	210	1	300	41T5539	25.55	23.96
5591S 1.5MM	1	210	1.5	300	41T5540	31.51	29.55
5591S 2.0MM	1	210	2	300	41T5542	40.05	37.56
5591S 2.5MM	1	210	2.5	300	41T5543	45.32	42.50
5592 1.0MM	1.1	210	1	300	41T5544	25.08	23.53
5595 1.0 MM	1.6	210	1	300	41T5545	27.58	25.87
5595 2.0MM	1.6	210	2	300	41T5546	33.10	31.05

(196393)

THERMALLY CONDUCTIVE INTERFACE PAD SHEET

3M

- Soft silicone-elastomer
- Thermal conductivity: 4.3 W/m-K
- Color: White

Conformable at low pressure to minimize stress on components and fill gaps. Good dielectric properties. Handles easily without crumbling.

Mfg. Part No.	Width (mm)	Thickness (mm)	Sheet Length (mm)	Stock No.	Price per Sheet 1-4	5-9
5519 1.0MM	210	1	155	41T5531	52.43	49.17
5519 2.0MM	210	2	155	41T5532	72.03	63.93
5519S 0.5MM	210	0.5	155	41T5533	47.17	41.87
5519S 1.5MM	210	1.5	155	41T5534	67.25	59.69

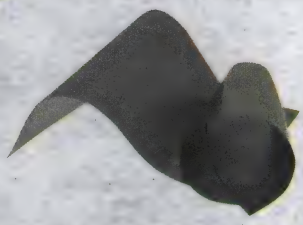
(196395)

THERMAL INTERFACE MATERIAL • THERMAL COMPOUNDS

PYROLYTIC GRAPHITE SHEETS

RoHS Compliant Available

Panasonic



- Excellent thermal conductivity (2 to 4 times as high as copper, 3 to 6 time as high as aluminum)
- Lightweight: Specific gravity: 0.85 to 1.9 g/cm^3 (1/4 to 1/10 of copper, 1/1.3 to 1/3 of aluminum in density)
- Flexible and easy to be cut or trimmed. (withstands repeated bending)
- Low thermal resistance
- EYG **S**: pure PGS versions, EYG **A** taping versions

PGS (Pyrolytic Graphite Sheet) is a thermal interface material which is very thin, synthetically made, has high thermal conductivity, and is made from a highly oriented graphite polymer film. Ideal for cell phones, DVC, DSC, PC and peripherals, semiconductor manufacturing equipment, and optical communications equipment. **S** type (PGS only), **A-A**, **A-M** types (Adhesive type), **A-PA**, **A-PM**, **A-SM** types (laminated type (insulation and adhesive), **A-RV**, **A-KV** types (high heat resistance type).

PGS PYROLYTIC GRAPHIC SHEET ONLY TYPE

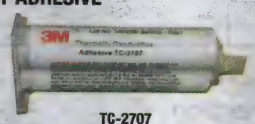
Mfg. Part No.	Thermal Resistance (°C/W)	Dimension (mm) L	W	Thickness	Stock No.	Price Each
● EYG-S091210	700	115	90	10	52W8389	33.51
● EYG-S091210DP	700	115	90	10	52W8390	24.24
● EYG-S091207	950	115	90	0.07	74R7610	30.96
● EYG-S121807	950	180	115	0.07	74R7612	65.64
● EYG-S121803	1700	180	115	0.025	74R7611	65.64
ADHESIVE TYPE — PGS WITH ACRYLIC ADHESIVE TAPE						
● EYG-A121807A	950	180	115	0.07	74R7601	58.11
● EYG-A091203A	1700	115	90	0.025	74R7578	28.25
● EYG-A121803A	1700	180	115	0.025	74R7594	53.28
● EYG-A091207M	950	115	90	0.07	74R7588	26.98
● EYG-A121807M	1000	180	115	0.07	74R7603	51.31
● EYG-A091203M	1700	115	90	0.025	74R7580	28.25
LAMINATED TYPE — PGS WITH PET INSULATION AND ACRYLIC ADHESIVE TAPE						
● EYG-A121807PA	950	180	115	0.07	74R7604	61.37
● EYG-A091203PA	1700	115	90	0.025	74R7581	30.84
● EYG-A121803PA	1700	180	115	0.025	74R7597	57.90
● EYG-A121807PM	950	180	115	0.07	74R7605	61.37
● EYG-A091203PM	1700	115	90	0.025	74R7582	30.84
● EYG-A091203SM	1700	115	90	0.025	74R7584	33.24
HIGH HEAT RESISTANCE TYPE						
● EYG-A091207V	950	115	90	0.07	74R7593	29.30
● EYG-A121807V	950	180	115	0.07	74R7608	58.61
● EYG-A121803V	1600	180	115	0.025	74R7600	61.35
● EYG-A091203V	1700	115	90	0.025	74R7585	31.06
● EYG-A121807RV	950	180	115	0.07	74R7606	91.00
● EYG-A121807KV	950	180	115	0.07	74R7602	97.17

(192424)

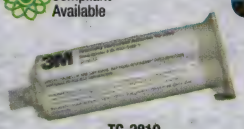
THERMALLY CONDUCTIVE EPOXY ADHESIVE

RoHS Compliant Available

3M



TC-2707



TC-2810

- Reworkable 2-part epoxies for high adhesion
- Low CL ion content and outgassing
- Minimal odor
- Dispense manually or on automated line

Thermally conductive epoxy adhesive **mfg. part no. TC-2707** is an aluminum metal filled, two-part, thermally conductive epoxy adhesive for high adhesion. **Mfg. part no. TC-2810** is a boron nitride filled, two-part, thermally conductive epoxy adhesive. Dispense manually or on automated line.

Mfg. Part No.	Thermal Conductivity W/m-°K	Color	Stock No.	Price Each 1-4
● TC-2707	0.72	Gray	41T5530	41.84
● TC-2810	1.0	...	21M6334	68.75

ACCESSORIES

Mfg. Part No.	For Use With	Stock No.	Price Each 1-4
● EPX APPLICATOR	Scotch-Weld EPX Adhesive Applicator	93F6943	96.60
● EPX NOZZLE BULK	Nozzle for Scotch-Weld EPX Adhesive Applicator	93F6944	1.68

(196389)

THERMAL ADHESIVES AND GREASES

RoHS Compliant Available

AAVID THERMALLOY

Ther-O-Bond thermally conductive adhesive offers excellent heat transfer high voltage isolation. Readily bonds to metal, ceramics and most plastics. Thermalcote is a silicone based thermally loaded grease for use with all heatsinks. Thermal conductivity: 0.765 W/m°C. Thermalcote II is a silicone free thermal grease. Thermal conductivity: 0.699 W/m°C.

Mfg. Part No.	Size	Description	Stock No.	Price Each 1-14
● 4949G	25g (0.875 oz) Tube	Thermalbond	14M4355	40.87
● 249G	28g (1 oz.)Tube	Thermalcote	45M6145	9.11
● 250G	57g (2 oz) Tube	Thermalcote	45M6146	12.44
● 4951G	100g (3.5 oz) Bag	Thermalbond	14M4317	51.21
● 251G	450g (15.9 oz) Can	Thermalcote	45M6147	47.00

(73828)

THERMLOW® T725 THERMAL INTERFACE TAPE

RoHS Compliant Available

WAKEFIELD SOLUTIONS

NEW

- Color : Pink
- Carrier: None - Free Film
- Standard Thincknesses, in (mm): 0.005 (0.125)
- "Operating Temperature Range, Deg F (Deg C): -67°F to +257°F (-55°C to +125°C)
- Volume Resistivity, ohm-cm: 1014
- Flammability Rating: V-0

Mfg. Part No.	Dimensions (in.)	Stock No.	Price Each 1-9
● PPIM00003	0.70" x 0.70"	47X2440	1.21
● PPIM00007	0.77" x 0.77"	47X2444	2.39
● PPIM00004	1.00" x 1.00"	47X2441	1.32
● PPIM00005	1.09" x 1.09"	47X2442	1.50
● PPIM00008	1.32" x 1.32"	47X2445	2.86
● PPIM00006	1.52" x 1.52"	47X2443	1.82

(212166)

122 SERIES HIGH PERFORMANCE THERMAL JOINT COMPOUND

RoHS Compliant Available

WAKEFIELD SOLUTIONS

Stable silicone based, thixotropic paste formulated to significantly reduce contact thermal resistance where power densities are concentrated in devices such as flip chip, reduced die size and "overlock" microprocessors. Compatible with automated or manual dispensing methods. Thermal conductivity: 2.5W/m°K. Thermal resistance: 0.02°Cin^2/W. Shelf life: 5 years.

Mfg. Part No.	Container Size	Stock No.	Price Each 1-9	10-99
● 122-10CC	10cc Syringe	28M8729	80.88	73.67

(90077)

NEW PRODUCTS ADDED DAILY

See the newest products, technologies and suppliers on our website.

(196561)

120/126 SERIES THERMAL JOINT COMPOUNDS

RoHS Compliant Available

WAKEFIELD SOLUTIONS

120 series silicone oil-based compound fills minute air gaps between major mating surfaces with grease-like material containing zinc oxide in silicone oil carrier. Thermal conductivity @ WC: 0.735W/(m)(K); 5.1 (Btu)(in.)/(hr)(ft²)(°F). Thermal resistance: 0.05°C/W for 0.001″ film. Operating temperature: -40°C to +200°C. Shelf life: 5 years. **126 series** is a non-toxic, synthetic, ester-based (non-silicone) compound with metal-oxide fillers. Thermal conductivity: 19.0 x 10⁴ cal/sec cm °C, min; 4.8 (Btu)(in.)/(hr)(ft²)(°F). Thermal resistance: 0.043°C/W for 0.008″ film. Operating temperature: -40°C to +200°C. Shelf life: 5 years. Western Electric approved, specification KS21343. Meets military specification MIL-C-47113.

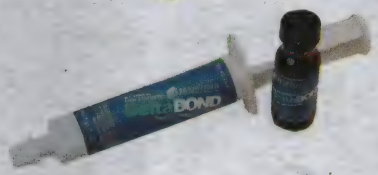
Mfg. Part No.	Size	Stock No.	Price Each 1-9	Price Each 10-99
120-SA	4 gm. Plastic Pack	00Z1244	3.99	3.63
120-2	2 oz. Jar	00Z1245	10.21	9.29
120-5	5 oz. Tube	00Z1246	21.60	19.67
120-8	8 oz. Jar	00Z1247	29.60	26.96
120-80	5 lb. Can	00Z1248	167.97	152.98
120-320	20 lb. Can	00Z754	412.63	375.82
126-2	2 oz. Jar	00Z1252	16.04	14.60
126-4	4 oz. Tube	00Z1253	23.64	21.53
126-4S	4 oz. Syringe	00Z1703	41.34	37.66

(4582)

150 SERIES THERMALLY CONDUCTIVE ADHESIVES

RoHS Compliant Available

WAKEFIELD SOLUTIONS



Delta Bond 152 thermally bonds components to chassis or heat sinks. **Mfg. Part Nos. 152-1A, 152-1B** and **152-KA** include resin and hardener. For **Mfg. Part Nos. 152-Q, 153-Q** and **154-Q** adhesives, order one bottle of **Mfg. Part no. A-4** or **B-4** hardener per one quart of resin. **Delta Bond 155** thixotropic paste offers high heat transfer, low shrinkage and a coefficient of thermal expansion comparable to copper and aluminum. Includes resin and hardener. **Delta Bond 156** is a modified acrylic adhesive for permanent mounting of components where heat must be effectively transmitted. Includes resin and hardener.

Mfg. Part No.	Description	Shelf Life (Years)	Stock No.	Price Each 1-4	Price Each 5+
152-1A	1 oz. Resin and (A-4) Hardener Bi-Pack	2	00Z745	26.85	25.03
152-1B	1 oz. Resin and (B-4) Hardener Bi-Pack	2	00Z1242	38.02	35.47
152-KA	7 oz. Resin, 0.5 oz. (A-4) Hardener	1	00Z746	101.91	95.04
152-Q	1 qt. Resin	2	00Z1243	131.18	122.34
153-Q	1 qt. Resin	2	00Z1255	122.16	113.92
154-Q	1 qt. Resin	2	00Z1256	110.32	102.90
155	3 oz. Resin, 3 oz. Hardener	1	00Z743	44.74	41.73
156-K	4.2 oz. Resin and Hardener Syringe and Brush	1	00Z1257	76.06	70.92
A-4	0.316 lb. Hardener	...	00Z1052	61.73	57.57
B-4 (HARDENER)	0.14 lb. Hardener	...	00Z860	36.31	33.87

(4479)

pro-POWER AT NEWARK ELEMENT14

Take control with quality, affordable Wire-Management Solutions.

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(212564)

HEAT SINK COMPOUNDS

RoHS Compliant Available

TECHSPRAY

- Prevents overheating
- Easy application

1977-DP

1978-DP

These heat sink compounds are suitable for use with power transistors and other devices that generate heat. Ideal for electronic applications, creates a thermal bond, to close the gap between CPU and mechanical heat sink. **Mfg. part no. 1977-DP** is a transistor silicone grease. **Mfg. part no. 1978-DP** is a silicone-free heat sink compound that will not harden, dry out, melt, or contaminate wave solder baths. Designed to eliminate the phenomenon of silicone migration.

Mfg. Part No.	Description	Tube Size	Stock No.	Price Each
1977-DP	Transistor Silicone Grease	4 oz.	69K8373	16.91
1978-DP	Silicone-Free Heat Sink Compound	4 oz.	68K7301	29.64

(79384)

CIRCUITWORKS® HEAT SINK GREASE

RoHS Compliant Available

ITW Chemtronics

- Excellent thermal conductivity and dielectric properties
- Will not dry out, harden or melt
- Noncorrosive and nonflammable
- Thermally stable from -40°F/-40°C to +342°F/+172°C
- Meets MIL-DTL-47113D Type 1

CircuitWorks® Heat Sink Grease tube dispenser precisely applies silicone compound to facilitate heat transfer away from electronics and electrical components. Weight: 142g (5 oz.).

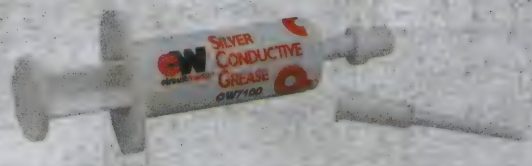
Mfg. Part No.	Stock No.	Price Each
CT40-5	00Z1880	22.59

(73262)

CIRCUITWORKS® SILVER CONDUCTIVE GREASE

RoHS Compliant Available

ITW Chemtronics



- Maximum Electrical and Thermal Conductivity
- Protects Against Moisture and Corrosion
- Thermally Stable Over a Wide Temperature Range
- Conductive Lubricant Containing Pure Silver
- Controls Static Discharge and Grounds Circuits

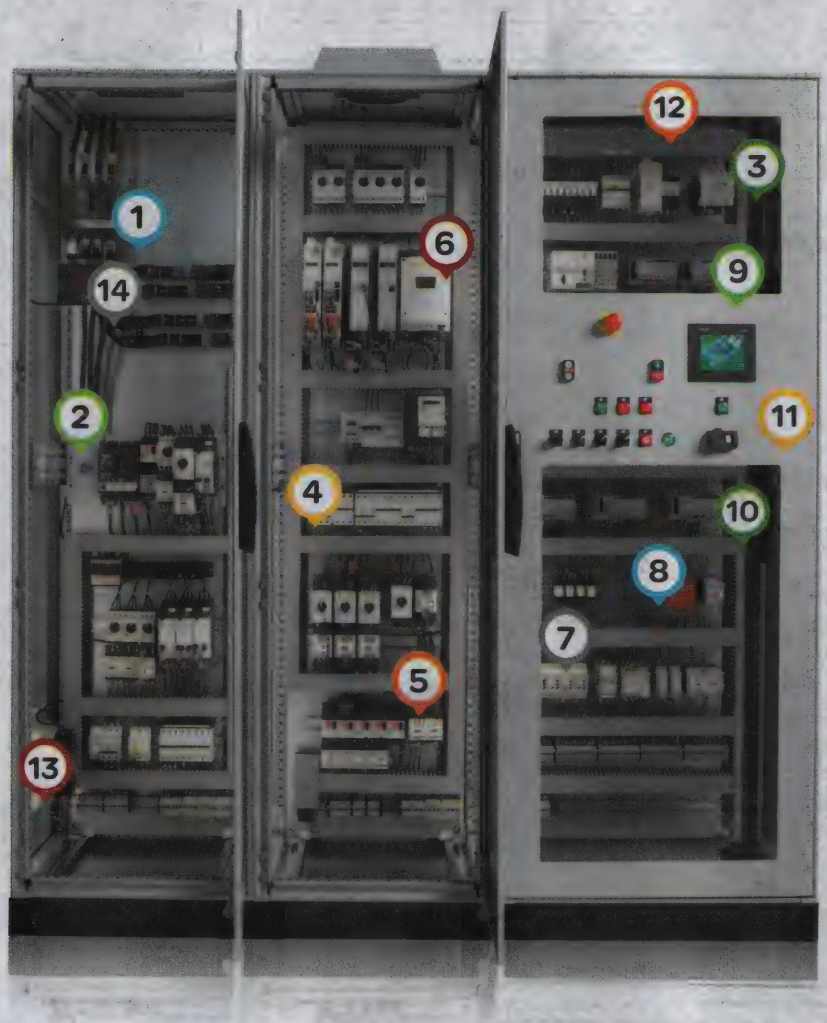
CircuitWorks® Conductive Grease is the syringe dispenser for precise application of grease to provide superior electrical and thermal conductivity, lubrication and protection. Weight: 6.5g.

Mfg. Part No.	Stock No.	Price Each
CW7100	00Z1500	44.10

(73260)

Schneider Electric and Newark element14

Provide the components you need to build and maintain your control panel.



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2. Power distribution systems
3. Power supplies and transformers
4. Circuit and load protection
5. Motor control
6. Motion and drives
7. Relays
8. Machine safety
9. Programmable controllers
10. Interface and Inputs/Outputs
11. Operator dialog
12. Enclosures
13. Thermal management
14. Power & Energy — Monitoring & Control

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Telemecanique Sensors

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13. INTELLECTUAL PROPERTY RIGHTS: The products offered for sale by the Company may be subject to patent, trademark, copyright, design and other rights of third parties. The Company shall in no event whatsoever be responsible or liable in the event of any claim of infringement of any such rights.

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14. FARS/DFARS: The Company agrees only to be subject to the "mandatory flow down" provisions found in FAR Section 52.244-6. The Company does not agree to be subject to any DFAR.

15. FORCE MAJEURE: The Company shall not be liable for loss or damage caused by any delay or failure to perform resulting in whole or in part from Acts of God, severe weather conditions, labor disruptions, governmental decrees or controls, insurrections, war, risks, shortages, inability to procure or ship product or obtain permits and licenses, insolvency or other inability to perform by the manufacturer, delay in transportation, any other commercial impracticability and/or any circumstances beyond the control of the Company in its business operations.

16. GOVERNING LAW: This Agreement and any sales hereunder shall be governed by the laws of the State of Illinois without regard to conflicts of law rules and venue shall be in the federal and state courts of Cook County, State of Illinois, United States of America. The parties expressly exclude the application of the 1980 United Nations Convention of Contracts for the International Sales of Goods, if otherwise applicable.

17. DISPUTE RESOLUTION: Actions by the Company for non–payment by the Customer of the purchase price of products sold by the Company, or for redress of other breaches by the Customer of these Terms and Conditions of Sale may be brought by the Company, at its option, before any U.S. or foreign judicial court of competent jurisdiction or at the Company's option, disputes between the Company and the Customer, including all claims for non–performance by the Company, shall be finally settled by arbitration in Chicago, Illinois, U.S.A. under the Commercial Rules of the American Arbitration Association, by a single arbitrator appointed in accordance with said Commercial Rules applying these Terms and Conditions of Sale and consistent provisions of the federal and state laws (except conflict of law rules) of the State of Illinois, U.S.A.

18. SEVERABILITY: If any provision or provisions of this Agreement shall be held to be invalid, illegal or unenforceable, such provision(s) shall be enforced to the fullest extent permitted by applicable law, and the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

19. WAIVER: The Company's failure to insist on performance of any term or condition contained in this Agreement, or failure to exercise any of the Company's rights hereunder, shall not constitute a waiver of any of the Company's rights or remedies under this Agreement.

20. NO THIRD PARTY BENEFIT: The provisions set forth in these Terms and Conditions of Sale are for the sole benefit of the parties hereto, and confer no rights, benefits or claims upon any person or entity not a party hereto.

UPDATED 06/14

For the most updated Terms & Conditions of Sale, visit newark.com/terms-and-conditions.